Appendix A – Test result

Test campaign report

Test Case ID	Sample		Date	Conf	Verdict	Observations
TP_A_EU868_ED_MAC_104_BV_000	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_001_A	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_001_B	**Device ID**	SAMR34-XPRO	2021-10-17	Yes	**PASS**	
	App ID	CertApp_EU_ABP				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_002	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_003	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_004	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_005	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_006	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_007	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_008	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				

	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_009	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_010	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_011	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_012_A	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_012_B	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_013	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_014	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_015_A	**Device ID**	SAMR34-XPRO	2021-10-18	No	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_015_B	**Device ID**	SAMR34-XPRO	2021-10-18	No	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_016	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_017	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_018	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_019_A	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				

	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_019_B	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_020	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_021	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				
TP_A_EU868_ED_MAC_104_BV_022	**Device ID**	SAMR34-XPRO	2021-10-18	Yes	**PASS**	
	App ID	CertApp_EU_OTAA				
	Sw ver	MLSv2.0.0				
	Hw ver	SAMR34J18B				

Test Case	TP_A_EU868_ED_MAC_104_BV_000	
Verdict	PASS	
Date	2021-10-18 13:00:55	
Comments	Activation Pre-test	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.010866	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_000
0:00:00.044831	LOG	==========
0:00:00.047828	LOG	Start Test Step: Device activation
0:00:00.057839	LOG	Over-The-Air Activation (OTAA) process starts
0:00:02.362518	LOG	PULL_DATA: 02 7cc2 02 aa555a0000240409
0:00:02.365516	LOG	PULL_ACK: 02 7cc2 04
0:00:08.202213	LOG	PUSH_ACK: 02 0002 01
0:00:08.209212	LOG	PUSH_DATA: Protocol version = 02, Token = 0002, Identifier = 00, JSON = {'rxpk': [{'tmst': 89863468, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -17, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIBAFQf6Gs='}]}
0:00:08.211209	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0001),MIC: 541fe86b)
0:00:08.212209	LOG	Server <---------- DUT
0:00:08.214207	LOG	DevNonce is greater than the previous in Join Request
0:00:08.216206	LOG	Previous DevNonce: 0
0:00:08.218207	LOG	Actual DevNonce: 1
0:00:08.220205	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 010000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: 4435ff08)

0:00:08.223203	LOG	PULL_RESP: Protocol version = 02, Token = 4955, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 95863468, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IJSRzzIPlSjAiL6aGo72f1I='}}
0:00:08.224201	LOG	Server ----------> DUT
0:00:08.227199	LOG	TX_ACK: 02 4955 05 aa555a0000240409
0:00:12.421940	LOG	PULL_DATA: 02 54f8 02 aa555a0000240409
0:00:12.423939	LOG	PULL_ACK: 02 54f8 04
0:00:16.593580	LOG	PUSH_ACK: 02 0004 01
0:00:16.596578	LOG	PUSH_DATA: Protocol version = 02, Token = 0004, Identifier = 00, JSON = {'rxpk': [{'tmst': 98240066, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAAABSczPDLHi'}]}
0:00:16.598577	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0000, MIC: cf0cb1e2)
0:00:16.602575	LOG	Server <---------- DUT
0:00:16.608572	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:00:16.611571	LOG	Activation process has finished successfully
0:00:16.614568	LOG	Data stored in the DUT after Activation:
0:00:16.616569	LOG	DevAddr: 20202020
0:00:16.619567	LOG	AppEUI: abcdabcdabcdabcd
0:00:16.622566	LOG	NwkSKey: 3bdf9cf21f1e001b2c6c1b5dffb03d7f
0:00:16.624565	LOG	AppSKey: a2c624d1710f3e6c6bd015a06ef6002d
0:00:16.627561	LOG	End Test Step: Device activation
0:00:16.631561	LOG	Partial Verdict: PASS
0:00:16.634559	LOG	==========
0:00:16.639556	LOG	==========
0:00:16.642552	LOG	Start Test Step: DUT Pre-condition settings
0:00:16.655546	LOG	DUT Pre-condition activation process starts
0:00:16.658544	LOG	Check FCntUp after reset process starts
0:00:16.663541	LOG	Check FCntUp after reset process complete
0:00:16.667539	LOG	Send Test Command DutResetReq process starts
0:00:16.670536	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0001, FOpts:), FPort: e0, FRMPayload: 01), MIC: b5ba488c)
0:00:16.673535	LOG	Frame command sent to the DUT
0:00:16.674536	LOG	PULL_RESP: Protocol version = 02, Token = d4df, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 100240066, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAAQDgN7W6SIw='}}
0:00:16.676533	LOG	Server ----------> DUT
0:00:16.679532	LOG	Send Test Command DutResetReq process completed
0:00:16.690527	LOG	Over-The-Air Activation (OTAA) process starts
0:00:22.552357	LOG	PULL_DATA: 02 1be8 02 aa555a0000240409
0:00:22.554357	LOG	PULL_ACK: 02 1be8 04
0:00:28.424037	LOG	PUSH_ACK: 02 0007 01
0:00:28.429034	LOG	PUSH_DATA: Protocol version = 02, Token = 0007, Identifier = 00, JSON = {'rxpk': [{'tmst': 110058566, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -11, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBICABFezD8='}]}
0:00:28.430033	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0002),MIC: 115ecc3f)
0:00:28.432050	LOG	Server <---------- DUT
0:00:28.434031	LOG	DevNonce is greater than the previous in Join Request
0:00:28.435031	LOG	Previous DevNonce: 1
0:00:28.437030	LOG	Actual DevNonce: 2

0:00:28.439029	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 020000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: c4632611)
0:00:28.442027	LOG	PULL_RESP: Protocol version = 02, Token = 25e2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 115058566, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IBJVOZCuXTyX4MJJ3H3tY0Q='}}
0:00:28.443024	LOG	Server ----------> DUT
0:00:28.446023	LOG	TX_ACK: 02 25e2 05 aa555a0000240409
0:00:32.641648	LOG	PULL_DATA: 02 e78d 02 aa555a0000240409
0:00:32.645646	LOG	PULL_ACK: 02 e78d 04
0:00:35.788868	LOG	PUSH_ACK: 02 0008 01
0:00:35.790869	LOG	PUSH_DATA: Protocol version = 02, Token = 0008, Identifier = 00, JSON = {'rxpk': [{'tmst': 117435217, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAAABrELIrUE6'}]}
0:00:35.791867	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0000, MIC: c8ad413a)
0:00:35.793866	LOG	Server <---------- DUT
0:00:35.798863	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:00:35.802860	LOG	Activation process has finished successfully
0:00:35.805859	LOG	Data stored in the DUT after Activation:
0:00:35.809857	LOG	DevAddr: 20202020
0:00:35.813854	LOG	AppEUI: abcdabcdabcdabcd
0:00:35.818853	LOG	NwkSKey: e17362e00c1d56af9fc3dabf717ed85a
0:00:35.821850	LOG	AppSKey: 37df364be125e48b2f22bf858ea0b0e2
0:00:35.834842	LOG	Check FCntUp after reset process starts
0:00:35.839839	LOG	Check FCntUp after reset process complete
0:00:35.848834	LOG	Send Test Command TxPeriodicityChange process starts
0:00:35.852832	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0002, FOpts:), FPort: e0, FRMPayload: 0601), MIC: a2a519ea)
0:00:35.856830	LOG	Frame command sent to the DUT
0:00:35.858829	LOG	PULL_RESP: Protocol version = 02, Token = 7c8e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 119435217, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAAgDg08CipRnq'}}
0:00:35.860828	LOG	Server ----------> DUT
0:00:35.864825	LOG	Send Test Command TxPeriodicityChange process completed
0:00:35.870822	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:42.791906	LOG	PULL_DATA: 02 765a 02 aa555a0000240409
0:00:42.793905	LOG	PULL_ACK: 02 765a 04
0:00:45.162564	LOG	PUSH_ACK: 02 000a 01
0:00:45.165563	LOG	PUSH_DATA: Protocol version = 02, Token = 000a, Identifier = 00, JSON = {'rxpk': [{'tmst': 126801133, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': 1, 'size': 15, 'data': 'QCAgICCAAQAByzhiwxzt'}]}
0:00:45.167562	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0001, MIC: 62c31ced)
0:00:45.168561	LOG	Server <---------- DUT
0:00:45.170560	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0003, FOpts:), FPort: e0, FRMPayload: 0701), MIC: bac24ef1)
0:00:45.173560	LOG	Frame command sent to the DUT
0:00:45.174559	LOG	PULL_RESP: Protocol version = 02, Token = 28a8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 128801133, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAAwDgJhK6wk7x'}}
0:00:45.175559	LOG	Server ----------> DUT

0:00:45.179555	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:45.184552	LOG	Check ADR bit process starts
0:00:50.148743	LOG	PUSH_ACK: 02 000b 01
0:00:50.150742	LOG	PUSH_DATA: Protocol version = 02, Token = 000b, Identifier = 00, JSON = {'rxpk': [{'tmst': 131803751, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAgABYiW9TRHd'}]}
0:00:50.152741	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 0002, MIC: bd4d11dd)
0:00:50.154740	LOG	Server <---------- DUT
0:00:50.159737	LOG	ADR bit in FCtrl field is set
0:00:50.168732	LOG	Send LinkADRReq process starts
0:00:52.942163	LOG	PULL_DATA: 02 2e63 02 aa555a0000240409
0:00:52.945166	LOG	PULL_ACK: 02 2e63 04
0:00:55.138920	LOG	PUSH_ACK: 02 000d 01
0:00:55.140919	LOG	PUSH_DATA: Protocol version = 02, Token = 000d, Identifier = 00, JSON = {'rxpk': [{'tmst': 136806375, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAAwABILSDXaT7'}]}
0:00:55.142918	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 835da4fb)
0:00:55.144917	LOG	Server <---------- DUT
0:00:55.146916	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0004, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: c0e0c6cc)
0:00:55.153911	LOG	PULL_RESP: Protocol version = 02, Token = e0aa, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 138806375, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAABAAAV3d0R3vA4MbM'}}
0:00:55.155910	LOG	Server ----------> DUT
0:00:55.160907	LOG	TX_ACK: 02 e0aa 05 aa555a0000240409
0:00:59.033716	LOG	PUSH_ACK: 02 000e 01
0:00:59.035717	LOG	PUSH_DATA: Protocol version = 02, Token = 000e, Identifier = 00, JSON = {'rxpk': [{'tmst': 140705496, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 17, 'data': 'QCAgICCCBAADBwH13rmRam0='}]}
0:00:59.036714	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0004, FOpts: 0307), FPort: 01, FRMPayload: 0002, MIC: b9916a6d)
0:00:59.037716	LOG	Server <---------- DUT
0:00:59.039713	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:59.040712	LOG	Command Answer: 0307
0:00:59.048708	LOG	MAC command communication completed
0:00:59.053705	LOG	Send Test Command DutVersionsReq process starts
0:01:03.132397	LOG	PULL_DATA: 02 339f 02 aa555a0000240409
0:01:03.137394	LOG	PULL_ACK: 02 339f 04
0:01:04.022893	LOG	PUSH_ACK: 02 000f 01
0:01:04.023892	LOG	PUSH_DATA: Protocol version = 02, Token = 000f, Identifier = 00, JSON = {'rxpk': [{'tmst': 145702976, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABQABWIrwRmv9'}]}
0:01:04.025891	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 0002, MIC: f0466bfd)
0:01:04.026891	LOG	Server <---------- DUT
0:01:04.027891	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0005, FOpts:), FPort: e0, FRMPayload: 7f), MIC: 65395016)
0:01:04.030889	LOG	Frame command sent to the DUT

0:01:04.032888	LOG	PULL_RESP: Protocol version = 02, Token = 8905, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 147702976, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAABQDg8GU5UBY='}}
0:01:04.034886	LOG	Server ----------> DUT
0:01:04.038884	LOG	TX_ACK: 02 8905 05 aa555a0000240409
0:01:09.050050	LOG	PUSH_ACK: 02 0010 01
0:01:09.053047	LOG	PUSH_DATA: Protocol version = 02, Token = 0010, Identifier = 00, JSON = {'rxpk': [{'tmst': 150725275, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 23, 'data': 'QCAgICCABgDgcxke3sIwxkx6aEBh91M='}]}
0:01:09.054046	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0006, FOpts:), FPort: e0, FRMPayload: 7f010004010004010004, MIC: 4061f753)
0:01:09.056045	LOG	Server <---------- DUT
0:01:09.058044	LOG	Answer in payload: 010004010004010004
0:01:09.059043	LOG	Frame Command Payload in the Answer: 7f010004010004010004
0:01:09.069038	LOG	DUT Version received: 010004010004010004
0:01:09.077033	LOG	Send Test Command DutVersionsReq completed
0:01:09.081032	LOG	DUT Pre-condition activation completed
0:01:09.085030	LOG	End Test Step: DUT Pre-condition settings
0:01:09.089027	LOG	Partial Verdict: PASS
0:01:09.093024	LOG	==========
0:01:09.101020	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_000
0:01:09.104018	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_001_A	
Verdict	PASS	
Date	2021-10-18 18:21:01	
Comments	Over the Air Activation	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Addition of a single channel frequency	867.700
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.013138	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_001_A
0:00:00.057115	LOG	==========
0:00:00.059113	LOG	Start Test Step: Device activation
0:00:00.072105	LOG	Over-The-Air Activation (OTAA) process starts
0:00:05.968747	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:10.010445	LOG	PULL_DATA: 02 2a6d 02 aa555a0000240409
0:00:10.014446	LOG	PULL_ACK: 02 2a6d 04
0:00:13.849257	LOG	PUSH_ACK: 02 1142 01
0:00:13.856253	LOG	PUSH_DATA: Protocol version = 02, Token = 1142, Identifier = 00, JSON = {'rxpk': [{'tmst': 2121256317, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 14.0, 'rssi': -27, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBICABFezD8='}]}
0:00:13.858251	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0002),MIC: 115ecc3f)

0:00:13.859251	LOG	Server <---------- DUT
0:00:13.861250	LOG	DevNonce is greater than the previous in Join Request
0:00:13.863249	LOG	Previous DevNonce: 0
0:00:13.865247	LOG	Actual DevNonce: 2
0:00:13.869247	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 010000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: 4435ff08)
0:00:13.872243	LOG	PULL_RESP: Protocol version = 02, Token = 771f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2127256317, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IJSRzzIPlSjAiL6aGo72f1I='}}
0:00:13.874243	LOG	Server ----------> DUT
0:00:13.878240	LOG	TX_ACK: 02 771f 05 aa555a0000240409
0:00:20.169656	LOG	PULL_DATA: 02 f2be 02 aa555a0000240409
0:00:20.171656	LOG	PULL_ACK: 02 f2be 04
0:00:22.230483	LOG	PUSH_ACK: 02 1143 01
0:00:22.233481	LOG	PUSH_DATA: Protocol version = 02, Token = 1143, Identifier = 00, JSON = {'rxpk': [{'tmst': 2129632985, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAAABAygJs+a6'}]}
0:00:22.235481	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0000, MIC: 09b3e6ba)
0:00:22.237479	LOG	Server <---------- DUT
0:00:22.265464	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:00:22.268461	LOG	Activation process has finished successfully
0:00:22.270460	LOG	Data stored in the DUT after Activation:
0:00:22.273460	LOG	DevAddr: 20202020
0:00:22.276456	LOG	AppEUI: abcdabcdabcdabcd
0:00:22.278458	LOG	NwkSKey: d48e676904b7cc9a59ca03263478dfc8
0:00:22.280456	LOG	AppSKey: f4468a9629d3307fa278886010ff5804
0:00:22.283454	LOG	End Test Step: Device activation
0:00:22.286451	LOG	Partial Verdict: PASS
0:00:22.291448	LOG	==========
0:00:22.296447	LOG	==========
0:00:22.299444	LOG	Start Test Step: DUT Pre-condition settings
0:00:22.312436	LOG	DUT Pre-condition activation process starts
0:00:22.316434	LOG	Check FCntUp after reset process starts
0:00:22.323432	LOG	Check FCntUp after reset process complete
0:00:22.329427	LOG	Send Test Command DutResetReq process starts
0:00:22.333424	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0001, FOpts:), FPort: e0, FRMPayload: 01), MIC: fa8bddc2)
0:00:22.335424	LOG	Frame command sent to the DUT
0:00:22.337423	LOG	PULL_RESP: Protocol version = 02, Token = 185b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2131632985, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAAQDgwfqL3cI='}}
0:00:22.339422	LOG	Server ----------> DUT
0:00:22.342419	LOG	Send Test Command DutResetReq process completed
0:00:22.350415	LOG	Over-The-Air Activation (OTAA) process starts
0:00:30.319874	LOG	PULL_DATA: 02 0ebc 02 aa555a0000240409
0:00:30.324872	LOG	PULL_ACK: 02 0ebc 04
0:00:34.057745	LOG	PUSH_ACK: 02 1145 01
0:00:34.059744	LOG	PUSH_DATA: Protocol version = 02, Token = 1145, Identifier = 00, JSON = {'rxpk': [{'tmst': 2141451429, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -27, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIDAO7oGBU='}]}

0:00:34.061743	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0003),MIC: eee81815)
0:00:34.063742	LOG	Server <---------- DUT
0:00:34.064742	LOG	DevNonce is greater than the previous in Join Request
0:00:34.066741	LOG	Previous DevNonce: 2
0:00:34.068740	LOG	Actual DevNonce: 3
0:00:34.072738	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 020000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: c4632611)
0:00:34.075735	LOG	PULL_RESP: Protocol version = 02, Token = 568f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2146451429, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IBJVOZCuXTyX4MJJ3H3tY0Q='}}
0:00:34.077734	LOG	Server ----------> DUT
0:00:34.081732	LOG	TX_ACK: 02 568f 05 aa555a0000240409
0:00:40.379146	LOG	PULL_DATA: 02 89e4 02 aa555a0000240409
0:00:40.381144	LOG	PULL_ACK: 02 89e4 04
0:00:41.424549	LOG	PUSH_ACK: 02 1147 01
0:00:41.427547	LOG	PUSH_DATA: Protocol version = 02, Token = 1147, Identifier = 00, JSON = {'rxpk': [{'tmst': 2148828072, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAAABKh32QD9c'}]}
0:00:41.429547	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0000, MIC: f6403f5c)
0:00:41.431545	LOG	Server <---------- DUT
0:00:41.437542	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:00:41.440540	LOG	Activation process has finished successfully
0:00:41.444539	LOG	Data stored in the DUT after Activation:
0:00:41.448536	LOG	DevAddr: 20202020
0:00:41.451534	LOG	AppEUI: abcdabcdabcdabcd
0:00:41.455532	LOG	NwkSKey: e1fd270065a9f0aa5a564cfb823c800a
0:00:41.459530	LOG	AppSKey: f5daca433769fa91d94cb415a713359b
0:00:41.473521	LOG	Check FCntUp after reset process starts
0:00:41.477519	LOG	Check FCntUp after reset process complete
0:00:41.486514	LOG	Send Test Command TxPeriodicityChange process starts
0:00:41.489512	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0002, FOpts:), FPort: e0, FRMPayload: 0601), MIC: 589bd86d)
0:00:41.492511	LOG	Frame command sent to the DUT
0:00:41.493512	LOG	PULL_RESP: Protocol version = 02, Token = 487b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2150828072, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAAgDgTPhYm9ht'}}
0:00:41.495510	LOG	Server ----------> DUT
0:00:41.498508	LOG	Send Test Command TxPeriodicityChange process completed
0:00:41.502506	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:50.529381	LOG	PULL_DATA: 02 046c 02 aa555a0000240409
0:00:50.531362	LOG	PULL_ACK: 02 046c 04
0:00:50.787216	LOG	PUSH_ACK: 02 1149 01
0:00:50.789216	LOG	PUSH_DATA: Protocol version = 02, Token = 1149, Identifier = 00, JSON = {'rxpk': [{'tmst': 2158194003, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAQABw7wZfe/+'}]}
0:00:50.790216	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0001, MIC: 197deffe)
0:00:50.791216	LOG	Server <---------- DUT
0:00:50.793213	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0003, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 778b935c)

0:00:50.796211	LOG	Frame command sent to the DUT
0:00:50.798210	LOG	PULL_RESP: Protocol version = 02, Token = f6c9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2160194003, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAAwDgeIV3i5Nc'}}
0:00:50.800210	LOG	Server ----------> DUT
0:00:50.804206	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:50.810203	LOG	Check ADR bit process starts
0:00:55.784558	LOG	PUSH_ACK: 02 114a 01
0:00:55.787556	LOG	PUSH_DATA: Protocol version = 02, Token = 114a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2163196676, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAgABICpgyD7t'}]}
0:00:55.788556	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 60c83eed)
0:00:55.790555	LOG	Server <---------- DUT
0:00:55.795552	LOG	ADR bit in FCtrl field is set
0:00:55.810543	LOG	Send LinkADRReq process starts
0:01:00.669775	LOG	PULL_DATA: 02 83ef 02 aa555a0000240409
0:01:00.672774	LOG	PULL_ACK: 02 83ef 04
0:01:00.773722	LOG	PUSH_ACK: 02 114b 01
0:01:00.777719	LOG	PUSH_DATA: Protocol version = 02, Token = 114b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2168199340, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAAwABkZHwyvdb'}]}
0:01:00.780714	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 0002, MIC: f0caf75b)
0:01:00.783716	LOG	Server <---------- DUT
0:01:00.787708	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0004, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 60925fc4)
0:01:00.790707	LOG	PULL_RESP: Protocol version = 02, Token = 2361, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2170199340, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAABAAAMTH6Qr1gkl/E'}}
0:01:00.791708	LOG	Server ----------> DUT
0:01:00.795706	LOG	TX_ACK: 02 2361 05 aa555a0000240409
0:01:04.668498	LOG	PUSH_ACK: 02 114c 01
0:01:04.670497	LOG	PUSH_DATA: Protocol version = 02, Token = 114c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2172098502, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCBAADBwH81jcEIHw='}]}
0:01:04.672496	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0004, FOpts: 0307), FPort: 01, FRMPayload: 0002, MIC: 3704207c)
0:01:04.673495	LOG	Server <---------- DUT
0:01:04.675494	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:04.677492	LOG	Command Answer: 0307
0:01:04.682490	LOG	MAC command communication completed
0:01:04.687487	LOG	Send Test Command DutVersionsReq process starts
0:01:09.665651	LOG	PUSH_ACK: 02 114e 01
0:01:09.671648	LOG	PUSH_DATA: Protocol version = 02, Token = 114e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2177096014, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCABQABbjSDEHEq'}]}
0:01:09.675645	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 8310712a)

0:01:09.678644	LOG	Server <---------- DUT
0:01:09.680643	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0005, FOpts:), FPort: e0, FRMPayload: 7f), MIC: 6419a666)
0:01:09.684641	LOG	Frame command sent to the DUT
0:01:09.688639	LOG	PULL_RESP: Protocol version = 02, Token = 44e1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2179096014, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAABQDg12QZpmY='}}
0:01:09.692636	LOG	Server ----------> DUT
0:01:09.698633	LOG	TX_ACK: 02 44e1 05 aa555a0000240409
0:01:10.739039	LOG	PULL_DATA: 02 a98d 02 aa555a0000240409
0:01:10.741039	LOG	PULL_ACK: 02 a98d 04
0:01:14.685792	LOG	PUSH_ACK: 02 114f 01
0:01:14.687790	LOG	PUSH_DATA: Protocol version = 02, Token = 114f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2182118336, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 23, 'data': 'QCAgICCABgDgj055eJ75buGpvQM79eY='}]}
0:01:14.689789	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0006, FOpts:), FPort: e0, FRMPayload: 7f010004010004010004, MIC: 033bf5e6)
0:01:14.690790	LOG	Server <---------- DUT
0:01:14.691790	LOG	Answer in payload: 010004010004010004
0:01:14.693787	LOG	Frame Command Payload in the Answer: 7f010004010004010004
0:01:14.698784	LOG	DUT Version received: 010004010004010004
0:01:14.701783	LOG	Send Test Command DutVersionsReq completed
0:01:14.705781	LOG	DUT Pre-condition activation completed
0:01:14.709779	LOG	End Test Step: DUT Pre-condition settings
0:01:14.713778	LOG	Partial Verdict: PASS
0:01:14.718791	LOG	==========
0:01:14.724770	LOG	==========
0:01:14.756753	LOG	Start Test Step: Pre-Join Behaviour for Dynamic Channel (DC) plan devices
0:01:14.772743	LOG	Send Test Command JoinReq process starts
0:01:20.804306	LOG	PUSH_ACK: 02 1150 01
0:01:20.806306	LOG	PUSH_DATA: Protocol version = 02, Token = 1150, Identifier = 00, JSON = {'rxpk': [{'tmst': 2188209945, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': 1, 'size': 15, 'data': 'QCAgICCABwABuBFnIOLR'}]}
0:01:20.808305	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0007, FOpts:), FPort: 01, FRMPayload: 0003, MIC: 6720e2d1)
0:01:20.810303	LOG	Server <---------- DUT
0:01:20.843284	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0006, FOpts:), FPort: e0, FRMPayload: 02), MIC: 35cac666)
0:01:20.845283	LOG	Frame command sent to the DUT
0:01:20.847282	LOG	PULL_RESP: Protocol version = 02, Token = 0dfa, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2190209945, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAABgDgTDXKxmY='}}
0:01:20.849281	LOG	Server ----------> DUT
0:01:20.878264	LOG	Send Test Command JoinReq process completed
0:01:20.881262	LOG	Expected frequencies to receive: {868.1, 868.3, 868.5}
0:01:25.491637	LOG	PUSH_ACK: 02 1151 01
0:01:25.493636	LOG	PUSH_DATA: Protocol version = 02, Token = 1151, Identifier = 00, JSON = {'rxpk': [{'tmst': 2192910365, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -27, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIEALnVq84='}]}
0:01:25.494637	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0004),MIC: b9d5abce)

0:01:25.495636	LOG	Server <---------- DUT
0:01:25.497633	LOG	Correct RFU and Major bits in MHDR field
0:01:25.498635	LOG	868.5 MHz has been added to the received frequencies list
0:01:25.500631	LOG	Actual list: {868.5}
0:01:25.501631	LOG	Expected frequencies to receive: {868.1, 868.3, 868.5}
0:01:25.502631	LOG	Attempt 1/9
0:01:30.929540	LOG	PULL_DATA: 02 88c7 02 aa555a0000240409
0:01:30.932539	LOG	PULL_ACK: 02 88c7 04
0:01:33.357157	LOG	PUSH_ACK: 02 1152 01
0:01:33.359155	LOG	PUSH_DATA: Protocol version = 02, Token = 1152, Identifier = 00, JSON = {'rxpk': [{'tmst': 2200789149, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -27, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIFAHa+Ic8='}]}
0:01:33.360154	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0005),MIC: 76be21cf)
0:01:33.362153	LOG	Server <---------- DUT
0:01:33.364152	LOG	Correct RFU and Major bits in MHDR field
0:01:33.365153	LOG	DevNonce is greater than the previous in Join Request
0:01:33.367153	LOG	Previous DevNonce: 4
0:01:33.368150	LOG	Actual DevNonce: 5
0:01:33.369150	LOG	868.3 MHz has been added to the received frequencies list
0:01:33.371148	LOG	Actual list: {868.3, 868.5}
0:01:33.372147	LOG	Expected frequencies to receive: {868.1, 868.3, 868.5}
0:01:33.374146	LOG	Attempt 2/9
0:01:41.008797	LOG	PULL_DATA: 02 9ea7 02 aa555a0000240409
0:01:41.010797	LOG	PULL_ACK: 02 9ea7 04
0:01:41.237668	LOG	PUSH_ACK: 02 1154 01
0:01:41.240665	LOG	PUSH_DATA: Protocol version = 02, Token = 1154, Identifier = 00, JSON = {'rxpk': [{'tmst': 2208667901, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -11, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIGALhMf3Q='}]}
0:01:41.241665	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0006),MIC: b84c7f74)
0:01:41.242664	LOG	Server <---------- DUT
0:01:41.244663	LOG	Correct RFU and Major bits in MHDR field
0:01:41.245663	LOG	DevNonce is greater than the previous in Join Request
0:01:41.246662	LOG	Previous DevNonce: 5
0:01:41.247661	LOG	Actual DevNonce: 6
0:01:41.248661	LOG	868.3 MHz has been added to the received frequencies list
0:01:41.250660	LOG	Actual list: {868.3, 868.5}
0:01:41.251659	LOG	Expected frequencies to receive: {868.1, 868.3, 868.5}
0:01:41.252659	LOG	Attempt 3/9
0:01:49.153821	LOG	PUSH_ACK: 02 1155 01
0:01:49.156847	LOG	PUSH_DATA: Protocol version = 02, Token = 1155, Identifier = 00, JSON = {'rxpk': [{'tmst': 2216546661, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': -11, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIHAHEFBfs='}]}
0:01:49.157851	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0007),MIC: 710505fb)
0:01:49.158850	LOG	Server <---------- DUT
0:01:49.159849	LOG	Correct RFU and Major bits in MHDR field
0:01:49.161848	LOG	DevNonce is greater than the previous in Join Request
0:01:49.162845	LOG	Previous DevNonce: 6
0:01:49.163843	LOG	Actual DevNonce: 7
0:01:49.164846	LOG	868.1 MHz has been added to the received frequencies list

0:01:49.166843	LOG	Actual list: {868.1, 868.3, 868.5}
0:01:49.167840	LOG	Expected frequencies to receive: {868.1, 868.3, 868.5}
0:01:49.169843	LOG	Attempt 4/9
0:01:49.170811	LOG	Data Rates saved from the valid Join Requests: {'packet_0': 'SF12BW125', 'packet_1': 'SF12BW125', 'packet_2': 'SF12BW125', 'packet_3': 'SF12BW125'}
0:01:49.181834	LOG	Over-The-Air Activation (OTAA) process starts
0:01:51.088747	LOG	PULL_DATA: 02 c988 02 aa555a0000240409
0:01:51.090717	LOG	PULL_ACK: 02 c988 04
0:01:57.020369	LOG	PUSH_ACK: 02 1156 01
0:01:57.021368	LOG	PUSH_DATA: Protocol version = 02, Token = 1156, Identifier = 00, JSON = {'rxpk': [{'tmst': 2224425445, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -13, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIIAN+KTvU='}]}
0:01:57.023367	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0008),MIC: df8a4ef5)
0:01:57.024366	LOG	Server <---------- DUT
0:01:57.025366	LOG	DevNonce is greater than the previous in Join Request
0:01:57.026364	LOG	Previous DevNonce: 7
0:01:57.028363	LOG	Actual DevNonce: 8
0:01:57.030364	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 030000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: 3eb5626c)
0:01:57.033360	LOG	PULL_RESP: Protocol version = 02, Token = 8739, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2229425445, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IIO2IT/t6ltlPE+PeCfQi/4='}}
0:01:57.034361	LOG	Server ----------> DUT
0:01:57.038357	LOG	TX_ACK: 02 8739 05 aa555a0000240409
0:02:01.228970	LOG	PULL_DATA: 02 ed7f 02 aa555a0000240409
0:02:01.232968	LOG	PULL_ACK: 02 ed7f 04
0:02:04.398165	LOG	PUSH_ACK: 02 1157 01
0:02:04.400164	LOG	PUSH_DATA: Protocol version = 02, Token = 1157, Identifier = 00, JSON = {'rxpk': [{'tmst': 2231802103, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAAABDOfMkMB+'}]}
0:02:04.401137	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0004, MIC: cc90c07e)
0:02:04.403162	LOG	Server <---------- DUT
0:02:04.409160	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:02:04.412130	LOG	Activation process has finished successfully
0:02:04.415156	LOG	Data stored in the DUT after Activation:
0:02:04.418143	LOG	DevAddr: 20202020
0:02:04.422121	LOG	AppEUI: abcdabcdabcdabcd
0:02:04.425120	LOG	NwkSKey: 981527773dbde4f6d774c50c4a2b86be
0:02:04.431116	LOG	AppSKey: 3bf8c0e83deadc96c66847333b7c75b4
0:02:04.435114	LOG	Check FCntUp after reset process starts
0:02:04.442110	LOG	Check FCntUp after reset process complete
0:02:04.453104	LOG	Send Test Command TxPeriodicityChange process starts
0:02:04.457102	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0007, FOpts:), FPort: e0, FRMPayload: 0601), MIC: b0550568)
0:02:04.460100	LOG	Frame command sent to the DUT
0:02:04.462100	LOG	PULL_RESP: Protocol version = 02, Token = 0f0e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2233802103, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAABwDgRduwVQVo'}}
0:02:04.463098	LOG	Server ----------> DUT
0:02:04.466097	LOG	Send Test Command TxPeriodicityChange process completed

0:02:04.471094	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:11.389214	LOG	PULL_DATA: 02 3085 02 aa555a0000240409
0:02:11.393212	LOG	PULL_ACK: 02 3085 04
0:02:13.724884	LOG	PUSH_ACK: 02 1159 01
0:02:13.729880	LOG	PUSH_DATA: Protocol version = 02, Token = 1159, Identifier = 00, JSON = {'rxpk': [{'tmst': 2241168032, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAAQABhRrll8G7'}]}
0:02:13.732880	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0005, MIC: e597c1bb)
0:02:13.735877	LOG	Server <---------- DUT
0:02:13.740875	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0008, FOpts:), FPort: e0, FRMPayload: 0701), MIC: d34b021f)
0:02:13.746872	LOG	Frame command sent to the DUT
0:02:13.748871	LOG	PULL_RESP: Protocol version = 02, Token = 57ee, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2243168032, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAACADgEg/TSwIf'}}
0:02:13.749870	LOG	Server ----------> DUT
0:02:13.752868	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:13.757864	LOG	Check ADR bit process starts
0:02:18.757066	LOG	PUSH_ACK: 02 115a 01
0:02:18.760064	LOG	PUSH_DATA: Protocol version = 02, Token = 115a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2246170595, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAgABtFwy026L'}]}
0:02:18.762064	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 0006, MIC: 32d36e8b)
0:02:18.764062	LOG	Server <---------- DUT
0:02:18.767061	LOG	ADR bit in FCtrl field is set
0:02:18.775056	LOG	Send LinkADRReq process starts
0:02:21.519494	LOG	PULL_DATA: 02 5193 02 aa555a0000240409
0:02:21.522493	LOG	PULL_ACK: 02 5193 04
0:02:23.746224	LOG	PUSH_ACK: 02 115b 01
0:02:23.748223	LOG	PUSH_DATA: Protocol version = 02, Token = 115b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2251173203, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAAwABoR/3h24O'}]}
0:02:23.751222	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 0006, MIC: f7876e0e)
0:02:23.752221	LOG	Server <---------- DUT
0:02:23.754219	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0009, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: c533a243)
0:02:23.757218	LOG	PULL_RESP: Protocol version = 02, Token = ef64, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2253173203, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAACQAA5SviHPnFM6JD'}}
0:02:23.760216	LOG	Server ----------> DUT
0:02:23.764214	LOG	TX_ACK: 02 ef64 05 aa555a0000240409
0:02:27.643006	LOG	PUSH_ACK: 02 115c 01
0:02:27.645003	LOG	PUSH_DATA: Protocol version = 02, Token = 115c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2255072315, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCBAADBwFkHbq50DU='}]}
0:02:27.646002	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0004, FOpts: 0307), FPort: 01, FRMPayload: 0006, MIC: bab9d035)

0:02:27.648002	LOG	Server <---------- DUT
0:02:27.649003	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:27.651000	LOG	Command Answer: 0307
0:02:27.656998	LOG	MAC command communication completed
0:02:27.662993	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:02:31.528791	LOG	PULL_DATA: 02 4468 02 aa555a0000240409
0:02:31.532790	LOG	PULL_ACK: 02 4468 04
0:02:32.631164	LOG	PUSH_ACK: 02 115d 01
0:02:32.633161	LOG	PUSH_DATA: Protocol version = 02, Token = 115d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2260069843, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCABQAB057QCl6p'}]}
0:02:32.634161	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 0006, MIC: d00a5ea9)
0:02:32.635180	LOG	Server <---------- DUT
0:02:32.637159	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000a, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 5858371e)
0:02:32.639159	LOG	Frame command sent to the DUT
0:02:32.641157	LOG	PULL_RESP: Protocol version = 02, Token = f686, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2262069843, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAACgDgY95YWDce'}}
0:02:32.642157	LOG	Server ----------> DUT
0:02:32.646155	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:02:32.649153	LOG	Send Test Command JoinReq process starts
0:02:37.621321	LOG	PUSH_ACK: 02 115f 01
0:02:37.624319	LOG	PUSH_DATA: Protocol version = 02, Token = 115f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2265072493, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABgABtflX5nD0'}]}
0:02:37.625318	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0006, FOpts:), FPort: 01, FRMPayload: 0007, MIC: 57e670f4)
0:02:37.626318	LOG	Server <---------- DUT
0:02:37.628317	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000b, FOpts:), FPort: e0, FRMPayload: 02), MIC: a4c6fa7b)
0:02:37.630316	LOG	Frame command sent to the DUT
0:02:37.632315	LOG	PULL_RESP: Protocol version = 02, Token = 49df, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2267072493, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAACwDgf6TG+ns='}}
0:02:37.633314	LOG	Server ----------> DUT
0:02:37.657300	LOG	Send Test Command JoinReq process completed
0:02:37.665296	LOG	Send Join Accept process starts
0:02:40.915444	LOG	PUSH_ACK: 02 1160 01
0:02:40.917445	LOG	PUSH_DATA: Protocol version = 02, Token = 1160, Identifier = 00, JSON = {'rxpk': [{'tmst': 2268351950, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIJANfAp44='}]}
0:02:40.918443	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0009),MIC: d7c0a78e)
0:02:40.920441	LOG	Server <---------- DUT
0:02:40.921441	LOG	DevNonce is greater than the previous in Join Request
0:02:40.923440	LOG	Previous DevNonce: 8
0:02:40.925439	LOG	Actual DevNonce: 9

0:02:40.928439	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 030000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: 3eb5626c)
0:02:40.930438	LOG	PULL_RESP: Protocol version = 02, Token = ffcc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2274351950, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IIO2IT/t6ltlPE+PeCfQi/4='}}
0:02:40.932436	LOG	Server ----------> DUT
0:02:40.935434	LOG	TX_ACK: 02 ffcc 05 aa555a0000240409
0:02:41.558079	LOG	PULL_DATA: 02 686f 02 aa555a0000240409
0:02:41.560078	LOG	PULL_ACK: 02 686f 04
0:02:48.143328	LOG	PUSH_ACK: 02 1161 01
0:02:48.145326	LOG	PUSH_DATA: Protocol version = 02, Token = 1161, Identifier = 00, JSON = {'rxpk': [{'tmst': 2275605231, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIKALZG1iE='}]}
0:02:48.146327	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 000a),MIC: b646d621)
0:02:48.148326	LOG	Server <---------- DUT
0:02:48.149324	LOG	DevNonce is greater than the previous in Join Request
0:02:48.151323	LOG	Previous DevNonce: 9
0:02:48.152324	LOG	Actual DevNonce: 10
0:02:48.162316	LOG	Send Join Accept process starts
0:02:51.638337	LOG	PULL_DATA: 02 d65a 02 aa555a0000240409
0:02:51.640336	LOG	PULL_ACK: 02 d65a 04
0:02:54.621639	LOG	PUSH_ACK: 02 1162 01
0:02:54.626637	LOG	PUSH_DATA: Protocol version = 02, Token = 1162, Identifier = 00, JSON = {'rxpk': [{'tmst': 2282062927, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBILAL2DcjI='}]}
0:02:54.630634	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 000b),MIC: bd837232)
0:02:54.635630	LOG	Server <---------- DUT
0:02:54.637628	LOG	DevNonce is greater than the previous in Join Request
0:02:54.638627	LOG	Previous DevNonce: 10
0:02:54.640626	LOG	Actual DevNonce: 11
0:02:54.643624	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 210000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: ae3214b8)
0:02:54.646623	LOG	PULL_RESP: Protocol version = 02, Token = 9984, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2288062927, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IBgsXqTaBTDSWL91TUXFssA='}}
0:02:54.648622	LOG	Server ----------> DUT
0:02:54.652619	LOG	TX_ACK: 02 9984 05 aa555a0000240409
0:03:01.788554	LOG	PULL_DATA: 02 2de4 02 aa555a0000240409
0:03:01.793552	LOG	PULL_ACK: 02 2de4 04
0:03:01.906488	LOG	PUSH_ACK: 02 1163 01
0:03:01.907487	LOG	PUSH_DATA: Protocol version = 02, Token = 1163, Identifier = 00, JSON = {'rxpk': [{'tmst': 2289330912, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAAABsQNIFqqE'}]}
0:03:01.909486	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0008, MIC: 4816aa84)
0:03:01.910485	LOG	Server <---------- DUT
0:03:01.913484	LOG	Join Accept message has been sent successfully
0:03:01.916482	LOG	Check FCntUp after reset process starts
0:03:01.920479	LOG	Check FCntUp after reset process complete

0:03:01.934471	LOG	Send Test Command TxPeriodicityChange process starts
0:03:01.937471	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000c, FOpts:), FPort: e0, FRMPayload: 0601), MIC: 8ee4320d)
0:03:01.938471	LOG	Frame command sent to the DUT
0:03:01.940469	LOG	PULL_RESP: Protocol version = 02, Token = d7f5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2291330912, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAADADgkpWO5DIN'}}
0:03:01.941467	LOG	Server ----------> DUT
0:03:01.944466	LOG	Send Test Command TxPeriodicityChange process completed
0:03:01.950462	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:10.127073	LOG	PUSH_ACK: 02 1165 01
0:03:10.129072	LOG	PUSH_DATA: Protocol version = 02, Token = 1165, Identifier = 00, JSON = {'rxpk': [{'tmst': 2297588275, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAQABDhTH/LV0'}]}
0:03:10.130073	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0009, MIC: c7fcb574)
0:03:10.132070	LOG	Server <---------- DUT
0:03:10.134068	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000d, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 3119b27f)
0:03:10.136067	LOG	Frame command sent to the DUT
0:03:10.138068	LOG	PULL_RESP: Protocol version = 02, Token = 9597, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2299588275, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAADQDgGXoxGbJ/'}}
0:03:10.139065	LOG	Server ----------> DUT
0:03:10.143063	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:10.148061	LOG	Check ADR bit process starts
0:03:11.818108	LOG	PULL_DATA: 02 16b7 02 aa555a0000240409
0:03:11.820108	LOG	PULL_ACK: 02 16b7 04
0:03:15.126225	LOG	PUSH_ACK: 02 1166 01
0:03:15.128223	LOG	PUSH_DATA: Protocol version = 02, Token = 1166, Identifier = 00, JSON = {'rxpk': [{'tmst': 2302590933, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAgABW4/EvRZo'}]}
0:03:15.129223	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 000a, MIC: c4bd1668)
0:03:15.131222	LOG	Server <---------- DUT
0:03:15.133222	LOG	ADR bit in FCtrl field is set
0:03:15.140217	LOG	Send LinkADRReq process starts
0:03:20.166354	LOG	PUSH_ACK: 02 1167 01
0:03:20.168353	LOG	PUSH_DATA: Protocol version = 02, Token = 1167, Identifier = 00, JSON = {'rxpk': [{'tmst': 2307593581, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAwABLAVbz9zC'}]}
0:03:20.170352	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 000a, MIC: 5bcfdcc2)
0:03:20.171353	LOG	Server <---------- DUT
0:03:20.173349	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000e, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: ac6f32ef)
0:03:20.176348	LOG	PULL_RESP: Protocol version = 02, Token = 0ac8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2309593581, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAADgAAH+dLwn+sbzLv'}}
0:03:20.178347	LOG	Server ----------> DUT

0:03:20.182345	LOG	TX_ACK: 02 0ac8 05 aa555a0000240409
0:03:21.858389	LOG	PULL_DATA: 02 c81a 02 aa555a0000240409
0:03:21.859389	LOG	PULL_ACK: 02 c81a 04
0:03:25.141520	LOG	PUSH_ACK: 02 1168 01
0:03:25.144518	LOG	PUSH_DATA: Protocol version = 02, Token = 1168, Identifier = 00, JSON = {'rxpk': [{'tmst': 2312601391, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCBAADBwGSeLP86y4='}]}
0:03:25.145517	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0004, FOpts: 0307), FPort: 01, FRMPayload: 000a, MIC: b3fceb2e)
0:03:25.147517	LOG	Server <---------- DUT
0:03:25.148516	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:25.150514	LOG	Command Answer: 0307
0:03:25.161508	LOG	MAC command communication completed
0:03:25.172502	LOG	End Test Step: Pre-Join Behaviour for Dynamic Channel (DC) plan devices
0:03:25.177499	LOG	Partial Verdict: PASS
0:03:25.183495	LOG	==========
0:03:25.189492	LOG	==========
0:03:25.193490	LOG	Start Test Step: LinkADRReq Join-Accept with DLSettings
0:03:25.205483	LOG	Send Test Command JoinReq process starts
0:03:30.130677	LOG	PUSH_ACK: 02 1169 01
0:03:30.132676	LOG	PUSH_DATA: Protocol version = 02, Token = 1169, Identifier = 00, JSON = {'rxpk': [{'tmst': 2317598903, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCABQABM2BzZm0m'}]}
0:03:30.133675	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 000a, MIC: 73666d26)
0:03:30.135674	LOG	Server <---------- DUT
0:03:30.136676	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000f, FOpts:), FPort: e0, FRMPayload: 02), MIC: bc8f8b85)
0:03:30.139672	LOG	Frame command sent to the DUT
0:03:30.141671	LOG	PULL_RESP: Protocol version = 02, Token = 0d08, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2319598903, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAADwDgR7yPi4U='}}
0:03:30.142671	LOG	Server ----------> DUT
0:03:30.170654	LOG	Send Test Command JoinReq process completed
0:03:30.176651	LOG	Over-The-Air Activation (OTAA) process starts
0:03:32.028596	LOG	PULL_DATA: 02 234b 02 aa555a0000240409
0:03:32.032593	LOG	PULL_ACK: 02 234b 04
0:03:33.440793	LOG	PUSH_ACK: 02 116a 01
0:03:33.442791	LOG	PUSH_DATA: Protocol version = 02, Token = 116a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2320878352, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIMACj5O98='}]}
0:03:33.443791	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 000c),MIC: 28f93bdf)
0:03:33.445791	LOG	Server <---------- DUT
0:03:33.447790	LOG	DevNonce is greater than the previous in Join Request
0:03:33.448789	LOG	Previous DevNonce: 11
0:03:33.449788	LOG	Actual DevNonce: 12
0:03:33.451787	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 220000, NetID: 000000, DevAddr: 20202020, DLSettings: 23, RxDelay: 01, CFList:), MIC: 96c6e378)
0:03:33.454784	LOG	PULL_RESP: Protocol version = 02, Token = b9d6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2326878352, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'INjB0pckM5Qb40FV3LVqjtY='}}
0:03:33.455783	LOG	Server ----------> DUT
0:03:33.459782	LOG	TX_ACK: 02 b9d6 05 aa555a0000240409
0:03:42.068284	LOG	PULL_DATA: 02 09cc 02 aa555a0000240409
0:03:42.070283	LOG	PULL_ACK: 02 09cc 04
0:03:45.705213	LOG	PUSH_ACK: 02 116d 01
0:03:45.707211	LOG	PUSH_DATA: Protocol version = 02, Token = 116d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2333148904, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAQAB8lmHQMuL'}]}
0:03:45.708212	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 000b, MIC: 8740cb8b)
0:03:45.710212	LOG	Server <---------- DUT
0:03:45.714207	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:03:45.716208	LOG	Activation process has finished successfully
0:03:45.719205	LOG	Data stored in the DUT after Activation:
0:03:45.722202	LOG	DevAddr: 20202020
0:03:45.725201	LOG	AppEUI: abcdabcdabcdabcd
0:03:45.728199	LOG	NwkSKey: c127afbecf2a96e1d7409a341892f589
0:03:45.731198	LOG	AppSKey: 89e8143140dc71d345b76346ab915294
0:03:45.735198	LOG	Check FCntUp after reset process starts
0:03:45.741192	LOG	Check FCntUp after reset process complete
0:03:45.754184	LOG	Send Test Command TxPeriodicityChange process starts
0:03:45.758182	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0010, FOpts:), FPort: e0, FRMPayload: 0601), MIC: 1550d1be)
0:03:45.761180	LOG	Frame command sent to the DUT
0:03:45.762180	LOG	PULL_RESP: Protocol version = 02, Token = b74f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2335148904, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAEADgp5oVUNG+'}}
0:03:45.763179	LOG	Server ----------> DUT
0:03:45.766177	LOG	Send Test Command TxPeriodicityChange process completed
0:03:45.769176	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:52.268472	LOG	PULL_DATA: 02 d8a2 02 aa555a0000240409
0:03:52.269471	LOG	PULL_ACK: 02 d8a2 04
0:03:52.934093	LOG	PUSH_ACK: 02 116e 01
0:03:52.937092	LOG	PUSH_DATA: Protocol version = 02, Token = 116e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2340391313, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAgABxY12lZT0'}]}
0:03:52.938091	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 000c, MIC: 769594f4)
0:03:52.940090	LOG	Server <---------- DUT
0:03:52.942089	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0011, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 70081523)
0:03:52.944088	LOG	Frame command sent to the DUT
0:03:52.946087	LOG	PULL_RESP: Protocol version = 02, Token = 73be, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2342391313, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAEQDgA8BwCBUj'}}
0:03:52.971073	LOG	Server ----------> DUT
0:03:52.975070	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:52.981067	LOG	Check ADR bit process starts
0:03:57.967226	LOG	PUSH_ACK: 02 116f 01

0:03:57.969225	LOG	PUSH_DATA: Protocol version = 02, Token = 116f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2345393963, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAwABy7EJd0Xw'}]}
0:03:57.970226	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 000d, MIC: 097745f0)
0:03:57.971226	LOG	Server <---------- DUT
0:03:57.974222	LOG	ADR bit in FCtrl field is set
0:03:57.982218	LOG	Send LinkADRReq process starts
0:04:02.417710	LOG	PULL_DATA: 02 4960 02 aa555a0000240409
0:04:02.421688	LOG	PULL_ACK: 02 4960 04
0:04:02.955385	LOG	PUSH_ACK: 02 1170 01
0:04:02.957383	LOG	PUSH_DATA: Protocol version = 02, Token = 1170, Identifier = 00, JSON = {'rxpk': [{'tmst': 2350396619, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABAABVQtVN9rF'}]}
0:04:02.959382	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0004, FOpts:), FPort: 01, FRMPayload: 000d, MIC: 5537dac5)
0:04:02.961382	LOG	Server <---------- DUT
0:04:02.963380	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0012, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: ac6e2f25)
0:04:02.965379	LOG	PULL_RESP: Protocol version = 02, Token = a26c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2352396619, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAEgAAMRr1Yr+sbi8l'}}
0:04:02.967378	LOG	Server ----------> DUT
0:04:02.971375	LOG	TX_ACK: 02 a26c 05 aa555a0000240409
0:04:07.938545	LOG	PUSH_ACK: 02 1173 01
0:04:07.942561	LOG	PUSH_DATA: Protocol version = 02, Token = 1173, Identifier = 00, JSON = {'rxpk': [{'tmst': 2355404380, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCBQADBwHf3Fcr8zQ='}]}
0:04:07.946540	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0005, FOpts: 0307), FPort: 01, FRMPayload: 000d, MIC: 572bf334)
0:04:07.949539	LOG	Server <---------- DUT
0:04:07.952540	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:07.956536	LOG	Command Answer: 0307
0:04:07.966529	LOG	MAC command communication completed
0:04:07.980521	LOG	Send Test Command EchoPayloadReq process starts
0:04:12.627959	LOG	PULL_DATA: 02 69e7 02 aa555a0000240409
0:04:12.629958	LOG	PULL_ACK: 02 69e7 04
0:04:12.979759	LOG	PUSH_ACK: 02 1174 01
0:04:12.981758	LOG	PUSH_DATA: Protocol version = 02, Token = 1174, Identifier = 00, JSON = {'rxpk': [{'tmst': 2360401892, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCABgABakpGnWUA'}]}
0:04:12.983756	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0006, FOpts:), FPort: 01, FRMPayload: 000d, MIC: 469d6500)
0:04:12.985756	LOG	Server <---------- DUT
0:04:12.987754	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0013, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: a0c0f6de)
0:04:12.990752	LOG	Frame command sent to the DUT
0:04:12.992752	LOG	PULL_RESP: Protocol version = 02, Token = 36cb, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2361401892, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF9BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAEwDgFko1u6DA9t4='}}
0:04:12.994750	LOG	Server ----------> DUT
0:04:12.998748	LOG	TX_ACK: 02 36cb 05 aa555a0000240409
0:04:17.952926	LOG	PUSH_ACK: 02 1175 01
0:04:17.953925	LOG	PUSH_DATA: Protocol version = 02, Token = 1175, Identifier = 00, JSON = {'rxpk': [{'tmst': 2365412779, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCABwDgc0rQABr9WL0='}]}
0:04:17.955924	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0007, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 1afd58bd)
0:04:17.956923	LOG	Server <---------- DUT
0:04:17.957922	LOG	Answer in payload: 020304
0:04:17.959923	LOG	Frame Command Payload in the Answer: 08020304
0:04:17.964919	LOG	Checking if the payload of the EchoPayloadAns is correct
0:04:17.969916	LOG	Send Test Command EchoPayloadReq process completed
0:04:17.977911	LOG	Send Test Command EchoPayloadReq process starts
0:04:22.658245	LOG	PULL_DATA: 02 0732 02 aa555a0000240409
0:04:22.660245	LOG	PULL_ACK: 02 0732 04
0:04:22.941083	LOG	PUSH_ACK: 02 1176 01
0:04:22.943082	LOG	PUSH_DATA: Protocol version = 02, Token = 1176, Identifier = 00, JSON = {'rxpk': [{'tmst': 2370407179, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCACAABW1/V+h5e'}]}
0:04:22.945082	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0008, FOpts:), FPort: 01, FRMPayload: 000e, MIC: d5fa1e5e)
0:04:22.946081	LOG	Server <---------- DUT
0:04:22.948080	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0014, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: 0274845a)
0:04:22.951078	LOG	Frame command sent to the DUT
0:04:22.952077	LOG	PULL_RESP: Protocol version = 02, Token = 3775, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2372407179, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAFADg9sDh7QJ0hFo='}}
0:04:22.954076	LOG	Server ----------> DUT
0:04:22.957074	LOG	TX_ACK: 02 3775 05 aa555a0000240409
0:04:27.982213	LOG	PUSH_ACK: 02 1177 01
0:04:27.987211	LOG	PUSH_DATA: Protocol version = 02, Token = 1177, Identifier = 00, JSON = {'rxpk': [{'tmst': 2375418084, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCACQDgk42wDw+kqQ4='}]}
0:04:27.991209	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0009, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: 0fa4a90e)
0:04:27.995206	LOG	Server <---------- DUT
0:04:27.998202	LOG	Answer in payload: 0b0c0d
0:04:28.000201	LOG	Frame Command Payload in the Answer: 080b0c0d
0:04:28.009197	LOG	Checking if the payload of the EchoPayloadAns is correct
0:04:28.014193	LOG	Send Test Command EchoPayloadReq process completed
0:04:28.018192	LOG	Send Test Command JoinReq process starts
0:04:32.817456	LOG	PULL_DATA: 02 6ff5 02 aa555a0000240409
0:04:32.822454	LOG	PULL_ACK: 02 6ff5 04
0:04:32.974369	LOG	PUSH_ACK: 02 1178 01
0:04:32.977367	LOG	PUSH_DATA: Protocol version = 02, Token = 1178, Identifier = 00, JSON = {'rxpk': [{'tmst': 2380412564, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCACgABcqDUH8jl'}]}

0:04:32.979365	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000a, FOpts:), FPort: 01, FRMPayload: 000f, MIC: d41fc8e5)
0:04:32.980364	LOG	Server <---------- DUT
0:04:32.982363	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0015, FOpts:), FPort: e0, FRMPayload: 02), MIC: a3ac4433)
0:04:32.984362	LOG	Frame command sent to the DUT
0:04:32.986361	LOG	PULL_RESP: Protocol version = 02, Token = 8a30, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2382412564, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAFQDgnaOsRDM='}}
0:04:32.987360	LOG	Server ----------> DUT
0:04:33.010347	LOG	Send Test Command JoinReq process completed
0:04:33.015344	LOG	Send Join Accept process starts
0:04:35.193105	LOG	PUSH_ACK: 02 1179 01
0:04:35.197102	LOG	PUSH_DATA: Protocol version = 02, Token = 1179, Identifier = 00, JSON = {'rxpk': [{'tmst': 2382656727, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBINADD1dkY='}]}
0:04:35.199100	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 000d),MIC: 30f57646)
0:04:35.200100	LOG	Server <---------- DUT
0:04:35.202098	LOG	DevNonce is greater than the previous in Join Request
0:04:35.203100	LOG	Previous DevNonce: 12
0:04:35.204099	LOG	Actual DevNonce: 13
0:04:35.207097	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 230000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: 572b1548)
0:04:35.209094	LOG	PULL_RESP: Protocol version = 02, Token = aaea, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2388656727, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'ICL7wkJgpmhy3KZ08hF2zGo='}}
0:04:35.211093	LOG	Server ----------> DUT
0:04:35.214093	LOG	TX_ACK: 02 aaea 05 aa555a0000240409
0:04:42.500075	LOG	PUSH_ACK: 02 117b 01
0:04:42.504072	LOG	PUSH_DATA: Protocol version = 02, Token = 117b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2389924744, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAAABoz6J003q'}]}
0:04:42.507070	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0010, MIC: 89d34dea)
0:04:42.510070	LOG	Server <---------- DUT
0:04:42.518063	LOG	Join Accept message has been sent successfully
0:04:42.530056	LOG	Send Test Command TxPeriodicityChange process starts
0:04:42.533054	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0016, FOpts:), FPort: e0, FRMPayload: 0601), MIC: b6bc72de)
0:04:42.535053	LOG	Frame command sent to the DUT
0:04:42.537052	LOG	PULL_RESP: Protocol version = 02, Token = 0ed0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2391924744, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAFgDglKC2vHLe'}}
0:04:42.538051	LOG	Server ----------> DUT
0:04:42.542050	LOG	Send Test Command TxPeriodicityChange process completed
0:04:42.546047	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:42.957841	LOG	PULL_DATA: 02 b19f 02 aa555a0000240409
0:04:42.961812	LOG	PULL_ACK: 02 b19f 04
0:04:50.752486	LOG	PUSH_ACK: 02 117c 01

0:04:50.754485	LOG	PUSH_DATA: Protocol version = 02, Token = 117c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2398182154, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAQAB03Emk8yS'}]}
0:04:50.755484	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0011, MIC: 2693cc92)
0:04:50.757483	LOG	Server <---------- DUT
0:04:50.759482	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0017, FOpts:), FPort: e0, FRMPayload: 0701), MIC: dd76904f)
0:04:50.762481	LOG	Frame command sent to the DUT
0:04:50.764479	LOG	PULL_RESP: Protocol version = 02, Token = f404, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2400182154, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAFwDgM7TddpBP'}}
0:04:50.765478	LOG	Server ----------> DUT
0:04:50.769476	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:50.779470	LOG	Check ADR bit process starts
0:04:53.078161	LOG	PULL_DATA: 02 7a02 02 aa555a0000240409
0:04:53.080160	LOG	PULL_ACK: 02 7a02 04
0:04:55.719655	LOG	PUSH_ACK: 02 117d 01
0:04:55.721655	LOG	PUSH_DATA: Protocol version = 02, Token = 117d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2403184812, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAgAB9x69tPDT'}]}
0:04:55.723656	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 0012, MIC: bdb4f0d3)
0:04:55.724655	LOG	Server <---------- DUT
0:04:55.728651	LOG	ADR bit in FCtrl field is set
0:04:55.735647	LOG	Send LinkADRReq process starts
0:05:00.761783	LOG	PUSH_ACK: 02 117e 01
0:05:00.763782	LOG	PUSH_DATA: Protocol version = 02, Token = 117e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2408187460, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAwABGAKn7i6T'}]}
0:05:00.765781	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 0012, MIC: a7ee2e93)
0:05:00.767780	LOG	Server <---------- DUT
0:05:00.769779	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0018, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 74a0e026)
0:05:00.772777	LOG	PULL_RESP: Protocol version = 02, Token = dc58, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2410187460, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAGAAAMNUe+Wl0oOAm'}}
0:05:00.774776	LOG	Server ----------> DUT
0:05:00.778774	LOG	TX_ACK: 02 dc58 05 aa555a0000240409
0:05:03.087459	LOG	PULL_DATA: 02 33be 02 aa555a0000240409
0:05:03.092456	LOG	PULL_ACK: 02 33be 04
0:05:05.733950	LOG	PUSH_ACK: 02 117f 01
0:05:05.735949	LOG	PUSH_DATA: Protocol version = 02, Token = 117f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2413195198, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCBAADBwEO3YSKcbE='}]}
0:05:05.737951	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0004, FOpts: 0307), FPort: 01, FRMPayload: 0012, MIC: 848a71b1)
0:05:05.738950	LOG	Server <---------- DUT

0:05:05.739949	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:05.741946	LOG	Command Answer: 0307
0:05:05.746943	LOG	MAC command communication completed
0:05:05.753940	LOG	End Test Step: LinkADRReq Join-Accept with DLSettings
0:05:05.758937	LOG	Partial Verdict: PASS
0:05:05.764933	LOG	==========
0:05:05.769930	LOG	==========
0:05:05.771929	LOG	Start Test Step: Join-Accept with Delay Settings
0:05:05.780924	LOG	Send Test Command JoinReq process starts
0:05:10.732093	LOG	PUSH_ACK: 02 1181 01
0:05:10.734075	LOG	PUSH_DATA: Protocol version = 02, Token = 1181, Identifier = 00, JSON = {'rxpk': [{'tmst': 2418192734, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABQABHTfM/Hsb'}]}
0:05:10.735076	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 0012, MIC: ccfc7b1b)
0:05:10.737075	LOG	Server <---------- DUT
0:05:10.738074	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0019, FOpts:), FPort: e0, FRMPayload: 02), MIC: 88e05f30)
0:05:10.740071	LOG	Frame command sent to the DUT
0:05:10.741073	LOG	PULL_RESP: Protocol version = 02, Token = a422, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2420192734, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAGQDg1YjgXzA='}}
0:05:10.743070	LOG	Server ----------> DUT
0:05:10.766056	LOG	Send Test Command JoinReq process completed
0:05:10.772053	LOG	Over-The-Air Activation (OTAA) process starts
0:05:13.257638	LOG	PULL_DATA: 02 6b9b 02 aa555a0000240409
0:05:13.259636	LOG	PULL_ACK: 02 6b9b 04
0:05:14.034238	LOG	PUSH_ACK: 02 1182 01
0:05:14.037236	LOG	PUSH_DATA: Protocol version = 02, Token = 1182, Identifier = 00, JSON = {'rxpk': [{'tmst': 2421472208, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIOAFZV+RI='}]}
0:05:14.038236	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 000e),MIC: 5655f912)
0:05:14.040235	LOG	Server <---------- DUT
0:05:14.041236	LOG	DevNonce is greater than the previous in Join Request
0:05:14.042235	LOG	Previous DevNonce: 13
0:05:14.043234	LOG	Actual DevNonce: 14
0:05:14.047231	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 240000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 02, CFList:), MIC: ba6bf292)
0:05:14.050229	LOG	PULL_RESP: Protocol version = 02, Token = 6f71, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2427472208, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'ICr1AQowbqH2gD0uFKU9MBE='}}
0:05:14.052228	LOG	Server ----------> DUT
0:05:14.056226	LOG	TX_ACK: 02 6f71 05 aa555a0000240409
0:05:21.314778	LOG	PUSH_ACK: 02 1183 01
0:05:21.316762	LOG	PUSH_DATA: Protocol version = 02, Token = 1183, Identifier = 00, JSON = {'rxpk': [{'tmst': 2428740210, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAAABmgvCAmKO'}]}
0:05:21.318760	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0013, MIC: c202628e)

0:05:21.319777	LOG	Server <---------- DUT
0:05:21.324755	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:05:21.328753	LOG	Activation process has finished successfully
0:05:21.331751	LOG	Data stored in the DUT after Activation:
0:05:21.334749	LOG	DevAddr: 20202020
0:05:21.338747	LOG	AppEUI: abcdabcdabcdabcd
0:05:21.341745	LOG	NwkSKey: 75c098d7c737264ea62f044bb071164d
0:05:21.343745	LOG	AppSKey: fd7251dd7d6c8c84ab9e82b03dbce179
0:05:21.346743	LOG	Check FCntUp after reset process starts
0:05:21.351740	LOG	Check FCntUp after reset process complete
0:05:21.361734	LOG	Send Test Command TxPeriodicityChange process starts
0:05:21.364733	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001a, FOpts:), FPort: e0, FRMPayload: 0601), MIC: 1b1c5ce7)
0:05:21.366732	LOG	Frame command sent to the DUT
0:05:21.367750	LOG	PULL_RESP: Protocol version = 02, Token = e9da, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2431740210, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAGgDgbdIbHFzn'}}
0:05:21.369731	LOG	Server ----------> DUT
0:05:21.371730	LOG	Send Test Command TxPeriodicityChange process completed
0:05:21.375746	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:23.467796	LOG	PULL_DATA: 02 2d41 02 aa555a0000240409
0:05:23.468796	LOG	PULL_ACK: 02 2d41 04
0:05:30.565752	LOG	PUSH_ACK: 02 1184 01
0:05:30.566751	LOG	PUSH_DATA: Protocol version = 02, Token = 1184, Identifier = 00, JSON = {'rxpk': [{'tmst': 2437997523, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAQABJJf19yzD'}]}
0:05:30.568752	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0014, MIC: f5f72cc3)
0:05:30.569752	LOG	Server <---------- DUT
0:05:30.570751	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001b, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 39241f82)
0:05:30.573749	LOG	Frame command sent to the DUT
0:05:30.574747	LOG	PULL_RESP: Protocol version = 02, Token = 74ba, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2440997523, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAGwDgmug5JB+C'}}
0:05:30.575748	LOG	Server ----------> DUT
0:05:30.579745	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:30.590739	LOG	Send Test Command EchoPayloadReq process starts
0:05:33.517071	LOG	PULL_DATA: 02 f65b 02 aa555a0000240409
0:05:33.522067	LOG	PULL_ACK: 02 f65b 04
0:05:35.558909	LOG	PUSH_ACK: 02 1185 01
0:05:35.560906	LOG	PUSH_DATA: Protocol version = 02, Token = 1185, Identifier = 00, JSON = {'rxpk': [{'tmst': 2443000139, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAgAB4Hdx0o/1'}]}
0:05:35.561907	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 0015, MIC: 71d28ff5)
0:05:35.563905	LOG	Server <---------- DUT
0:05:35.565904	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001c, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: b3ad5713)
0:05:35.567903	LOG	Frame command sent to the DUT
0:05:35.569901	LOG	PULL_RESP: Protocol version = 02, Token = 5669, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2445000139, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF7BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAHADgSuhKgLOtVxM='}}
0:05:35.570901	LOG	Server ----------> DUT
0:05:35.573899	LOG	TX_ACK: 02 5669 05 aa555a0000240409
0:05:40.576049	LOG	PUSH_ACK: 02 1187 01
0:05:40.578048	LOG	PUSH_DATA: Protocol version = 02, Token = 1187, Identifier = 00, JSON = {'rxpk': [{'tmst': 2448011020, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCAAwDgwTZeEptICvE='}]}
0:05:40.580050	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 9b480af1)
0:05:40.581048	LOG	Server <---------- DUT
0:05:40.582048	LOG	Answer in payload: 020304
0:05:40.584045	LOG	Frame Command Payload in the Answer: 08020304
0:05:40.589042	LOG	Checking if the payload of the EchoPayloadAns is correct
0:05:40.595057	LOG	Send Test Command EchoPayloadReq process completed
0:05:40.601035	LOG	Send Test Command EchoPayloadReq process starts
0:05:43.546890	LOG	PULL_DATA: 02 250c 02 aa555a0000240409
0:05:43.548889	LOG	PULL_ACK: 02 250c 04
0:05:45.563741	LOG	PUSH_ACK: 02 1188 01
0:05:45.565740	LOG	PUSH_DATA: Protocol version = 02, Token = 1188, Identifier = 00, JSON = {'rxpk': [{'tmst': 2453005428, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCABAABlZCAtiFo'}]}
0:05:45.567739	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0004, FOpts:), FPort: 01, FRMPayload: 0016, MIC: 80b62168)
0:05:45.568741	LOG	Server <---------- DUT
0:05:45.570738	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001d, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: 751d136a)
0:05:45.572737	LOG	Frame command sent to the DUT
0:05:45.574735	LOG	PULL_RESP: Protocol version = 02, Token = b674, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2456005428, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAHQDgcgcNw3UdE2o='}}
0:05:45.575736	LOG	Server ----------> DUT
0:05:45.578733	LOG	TX_ACK: 02 b674 05 aa555a0000240409
0:05:50.566891	LOG	PUSH_ACK: 02 1189 01
0:05:50.568890	LOG	PUSH_DATA: Protocol version = 02, Token = 1189, Identifier = 00, JSON = {'rxpk': [{'tmst': 2458016340, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCABQDg7SphP2XDmZY='}]}
0:05:50.570889	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: 65c39996)
0:05:50.572888	LOG	Server <---------- DUT
0:05:50.573887	LOG	Answer in payload: 0b0c0d
0:05:50.575886	LOG	Frame Command Payload in the Answer: 080b0c0d
0:05:50.580884	LOG	Checking if the payload of the EchoPayloadAns is correct
0:05:50.585880	LOG	Send Test Command EchoPayloadReq process completed
0:05:50.590878	LOG	Send Test Command JoinReq process starts
0:05:53.557187	LOG	PULL_DATA: 02 12ed 02 aa555a0000240409
0:05:53.562187	LOG	PULL_ACK: 02 12ed 04
0:05:55.555049	LOG	PUSH_ACK: 02 118a 01
0:05:55.558048	LOG	PUSH_DATA: Protocol version = 02, Token = 118a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2463010724, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCABgABdHqIOL+A'}]}

0:05:55.559047	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0006, FOpts:), FPort: 01, FRMPayload: 0017, MIC: 8838bf80)
0:05:55.560046	LOG	Server <---------- DUT
0:05:55.562045	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001e, FOpts:), FPort: e0, FRMPayload: 02), MIC: b3ce3618)
0:05:55.564044	LOG	Frame command sent to the DUT
0:05:55.566043	LOG	PULL_RESP: Protocol version = 02, Token = fb7a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2466010724, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAHgDgjrPONhg='}}
0:05:55.567043	LOG	Server ----------> DUT
0:05:55.592028	LOG	Send Test Command JoinReq process completed
0:05:55.596026	LOG	Send Join Accept process starts
0:05:59.852602	LOG	PUSH_ACK: 02 118b 01
0:05:59.854600	LOG	PUSH_DATA: Protocol version = 02, Token = 118b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2467290196, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -5, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIPACNCpdY='}]}
0:05:59.855600	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 000f),MIC: 2342a5d6)
0:05:59.857598	LOG	Server <---------- DUT
0:05:59.858617	LOG	DevNonce is greater than the previous in Join Request
0:05:59.859597	LOG	Previous DevNonce: 14
0:05:59.861596	LOG	Actual DevNonce: 15
0:05:59.864595	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 250000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: 8a5543d9)
0:05:59.867594	LOG	PULL_RESP: Protocol version = 02, Token = e58c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2473290196, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IAbIW0gabvfXsVDn3k4zwaU='}}
0:05:59.869591	LOG	Server ----------> DUT
0:05:59.872590	LOG	TX_ACK: 02 e58c 05 aa555a0000240409
0:06:03.646612	LOG	PULL_DATA: 02 2735 02 aa555a0000240409
0:06:03.650610	LOG	PULL_ACK: 02 2735 04
0:06:07.132627	LOG	PUSH_ACK: 02 118c 01
0:06:07.134626	LOG	PUSH_DATA: Protocol version = 02, Token = 118c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2474558207, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAAAB/t25YG1z'}]}
0:06:07.136625	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0018, MIC: b9606d73)
0:06:07.137624	LOG	Server <---------- DUT
0:06:07.141624	LOG	Join Accept message has been sent successfully
0:06:07.153615	LOG	Send Test Command TxPeriodicityChange process starts
0:06:07.157613	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001f, FOpts:), FPort: e0, FRMPayload: 0601), MIC: ba992b9b)
0:06:07.160611	LOG	Frame command sent to the DUT
0:06:07.162610	LOG	PULL_RESP: Protocol version = 02, Token = 9604, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2476558207, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAHwDgK7O6mSub'}}
0:06:07.164609	LOG	Server ----------> DUT
0:06:07.169606	LOG	Send Test Command TxPeriodicityChange process completed
0:06:07.177601	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:13.677023	LOG	PULL_DATA: 02 3830 02 aa555a0000240409
0:06:13.678023	LOG	PULL_ACK: 02 3830 04

0:06:15.384111	LOG	PUSH_ACK: 02 118e 01
0:06:15.386111	LOG	PUSH_DATA: Protocol version = 02, Token = 118e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2482815568, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAQABARdozb/D'}]}
0:06:15.387083	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0019, MIC: 68cdbfc3)
0:06:15.389109	LOG	Server <---------- DUT
0:06:15.391107	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0020, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 7244ffb8)
0:06:15.393105	LOG	Frame command sent to the DUT
0:06:15.394104	LOG	PULL_RESP: Protocol version = 02, Token = 9931, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2484815568, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAIADgpcNyRP+4'}}
0:06:15.396103	LOG	Server ----------> DUT
0:06:15.400103	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:15.406098	LOG	Check ADR bit process starts
0:06:20.352280	LOG	PUSH_ACK: 02 118f 01
0:06:20.355279	LOG	PUSH_DATA: Protocol version = 02, Token = 118f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2487818259, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAgABTWnnAaYe'}]}
0:06:20.356278	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 001a, MIC: e701a61e)
0:06:20.357277	LOG	Server <---------- DUT
0:06:20.360250	LOG	ADR bit in FCtrl field is set
0:06:20.366272	LOG	Send LinkADRReq process starts
0:06:23.797317	LOG	PULL_DATA: 02 0111 02 aa555a0000240409
0:06:23.799316	LOG	PULL_ACK: 02 0111 04
0:06:25.392411	LOG	PUSH_ACK: 02 1190 01
0:06:25.394409	LOG	PUSH_DATA: Protocol version = 02, Token = 1190, Identifier = 00, JSON = {'rxpk': [{'tmst': 2492820883, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAwABbQuYrYde'}]}
0:06:25.395408	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 001a, MIC: 98ad875e)
0:06:25.397406	LOG	Server <---------- DUT
0:06:25.399406	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0021, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: d9e6e803)
0:06:25.402405	LOG	PULL_RESP: Protocol version = 02, Token = d1c4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2494820883, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAIQAAIrIT4yPZ5ugD'}}
0:06:25.404403	LOG	Server ----------> DUT
0:06:25.408402	LOG	TX_ACK: 02 d1c4 05 aa555a0000240409
0:06:30.368574	LOG	PUSH_ACK: 02 1191 01
0:06:30.370574	LOG	PUSH_DATA: Protocol version = 02, Token = 1191, Identifier = 00, JSON = {'rxpk': [{'tmst': 2497828675, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCBAADBwHAPofHGc0='}]}
0:06:30.371573	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0004, FOpts: 0307), FPort: 01, FRMPayload: 001a, MIC: 87c719cd)
0:06:30.373548	LOG	Server <---------- DUT
0:06:30.375544	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field

0:06:30.377568	LOG	Command Answer: 0307
0:06:30.386564	LOG	MAC command communication completed
0:06:30.393560	LOG	End Test Step: Join-Accept with Delay Settings
0:06:30.397557	LOG	Partial Verdict: PASS
0:06:30.403528	LOG	==========
0:06:30.418544	LOG	==========
0:06:30.422544	LOG	Start Test Step: Join-Accept with CFList for Dynamic Channel (DC) plan
0:06:30.433509	LOG	Send Test Command JoinReq process starts
0:06:33.806615	LOG	PULL_DATA: 02 d24a 02 aa555a0000240409
0:06:33.811613	LOG	PULL_ACK: 02 d24a 04
0:06:35.356733	LOG	PUSH_ACK: 02 1192 01
0:06:35.358730	LOG	PUSH_DATA: Protocol version = 02, Token = 1192, Identifier = 00, JSON = {'rxpk': [{'tmst': 2502826195, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABQABtNTUKSbs'}]}
0:06:35.359730	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 001a, MIC: d42926ec)
0:06:35.361729	LOG	Server <---------- DUT
0:06:35.362730	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0022, FOpts:), FPort: e0, FRMPayload: 02), MIC: 2e723524)
0:06:35.365727	LOG	Frame command sent to the DUT
0:06:35.366727	LOG	PULL_RESP: Protocol version = 02, Token = b8d2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2504826195, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAIgDgXy5yNSQ='}}
0:06:35.368697	LOG	Server ----------> DUT
0:06:35.398678	LOG	Send Test Command JoinReq process completed
0:06:35.407692	LOG	Over-The-Air Activation (OTAA) process starts
0:06:38.679809	LOG	PUSH_ACK: 02 1194 01
0:06:38.685807	LOG	PUSH_DATA: Protocol version = 02, Token = 1194, Identifier = 00, JSON = {'rxpk': [{'tmst': 2506105653, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIQANAGQyk='}]}
0:06:38.688804	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0010),MIC: d0064329)
0:06:38.691807	LOG	Server <---------- DUT
0:06:38.695800	LOG	DevNonce is greater than the previous in Join Request
0:06:38.698799	LOG	Previous DevNonce: 15
0:06:38.702800	LOG	Actual DevNonce: 16
0:06:38.708793	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 260000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList: 886684000000000000000000000000), MIC: 57f21281)
0:06:38.711791	LOG	PULL_RESP: Protocol version = 02, Token = f747, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2512105653, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 33, 'data': 'IEShhao2FF0Jzn7pY4ycRaaIpRZsMR0TDi2xHh8pJX7X'}}
0:06:38.712789	LOG	Server ----------> DUT
0:06:38.717787	LOG	TX_ACK: 02 f747 05 aa555a0000240409
0:06:43.966860	LOG	PULL_DATA: 02 713b 02 aa555a0000240409
0:06:43.968858	LOG	PULL_ACK: 02 713b 04
0:06:46.603404	LOG	PUSH_ACK: 02 1195 01
0:06:46.605386	LOG	PUSH_DATA: Protocol version = 02, Token = 1195, Identifier = 00, JSON = {'rxpk': [{'tmst': 2514029181, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAAAB8ihPXk5k'}]}

0:06:46.606384	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 001b, MIC: 4f5e4e64)
0:06:46.607383	LOG	Server <---------- DUT
0:06:46.611381	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:06:46.616379	LOG	Activation process has finished successfully
0:06:46.619376	LOG	Data stored in the DUT after Activation:
0:06:46.621377	LOG	DevAddr: 20202020
0:06:46.624374	LOG	AppEUI: abcdabcdabcdabcd
0:06:46.627372	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:06:46.630370	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:06:46.635367	LOG	Check FCntUp after reset process starts
0:06:46.642363	LOG	Check FCntUp after reset process complete
0:06:46.653357	LOG	Send Test Command TxPeriodicityChange process starts
0:06:46.656355	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0023, FOpts:), FPort: e0, FRMPayload: 0601), MIC: 6744895c)
0:06:46.658354	LOG	Frame command sent to the DUT
0:06:46.659353	LOG	PULL_RESP: Protocol version = 02, Token = 12cc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2516029181, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAIwDgryZnRIlc'}}
0:06:46.660353	LOG	Server ----------> DUT
0:06:46.662352	LOG	Send Test Command TxPeriodicityChange process completed
0:06:46.667349	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:54.006324	LOG	PULL_DATA: 02 3179 02 aa555a0000240409
0:06:54.009323	LOG	PULL_ACK: 02 3179 04
0:06:54.854840	LOG	PUSH_ACK: 02 1196 01
0:06:54.856839	LOG	PUSH_DATA: Protocol version = 02, Token = 1196, Identifier = 00, JSON = {'rxpk': [{'tmst': 2522286543, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAQABL7TYo4y6'}]}
0:06:54.857838	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 001c, MIC: d8a38cba)
0:06:54.859837	LOG	Server <---------- DUT
0:06:54.860836	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0024, FOpts:), FPort: e0, FRMPayload: 0701), MIC: bbb9e4a0)
0:06:54.863814	LOG	Frame command sent to the DUT
0:06:54.865834	LOG	PULL_RESP: Protocol version = 02, Token = 44f3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2524286543, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAJADghay7ueSg'}}
0:06:54.867835	LOG	Server ----------> DUT
0:06:54.870831	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:54.877827	LOG	Receive frame on specific channels process starts
0:06:54.882794	LOG	Attempt 1/20
0:06:59.825282	LOG	PUSH_ACK: 02 1198 01
0:06:59.827281	LOG	PUSH_DATA: Protocol version = 02, Token = 1198, Identifier = 00, JSON = {'rxpk': [{'tmst': 2527289169, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAgABEK9E2vdy'}]}
0:06:59.828281	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 001d, MIC: 44daf772)
0:06:59.830281	LOG	Server <---------- DUT
0:06:59.831279	LOG	Attempt 2/20
0:07:04.106844	LOG	PULL_DATA: 02 6da1 02 aa555a0000240409
0:07:04.111840	LOG	PULL_ACK: 02 6da1 04
0:07:04.863412	LOG	PUSH_ACK: 02 1199 01

0:07:04.866410	LOG	PUSH_DATA: Protocol version = 02, Token = 1199, Identifier = 00, JSON = {'rxpk': [{'tmst': 2532291809, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAwAB8ztxdHDj'}]}
0:07:04.867411	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 001d, MIC: 717470e3)
0:07:04.869381	LOG	Server <---------- DUT
0:07:04.871407	LOG	Attempt 3/20
0:07:09.868561	LOG	PUSH_ACK: 02 119b 01
0:07:09.869562	LOG	PUSH_DATA: Protocol version = 02, Token = 119b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2537294482, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCABAABocbgRToS'}]}
0:07:09.871559	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0004, FOpts:), FPort: 01, FRMPayload: 001d, MIC: e0453a12)
0:07:09.872559	LOG	Server <---------- DUT
0:07:09.876557	LOG	Receive frame on specific channels process tested successfully
0:07:09.879554	LOG	Send Test Command JoinReq process starts
0:07:14.187100	LOG	PULL_DATA: 02 6e1f 02 aa555a0000240409
0:07:14.189100	LOG	PULL_ACK: 02 6e1f 04
0:07:14.855720	LOG	PUSH_ACK: 02 119c 01
0:07:14.857719	LOG	PUSH_DATA: Protocol version = 02, Token = 119c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2542297146, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCABQABzbaByJim'}]}
0:07:14.859718	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 001d, MIC: 81c898a6)
0:07:14.860717	LOG	Server <---------- DUT
0:07:14.862716	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0025, FOpts:), FPort: e0, FRMPayload: 02), MIC: 2805f645)
0:07:14.865715	LOG	Frame command sent to the DUT
0:07:14.867714	LOG	PULL_RESP: Protocol version = 02, Token = bb6a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2544297146, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAJQDgGCgF9kU='}}
0:07:14.869713	LOG	Server ----------> DUT
0:07:14.902664	LOG	Send Test Command JoinReq process completed
0:07:14.908678	LOG	Over-The-Air Activation (OTAA) process starts
0:07:18.137851	LOG	PUSH_ACK: 02 119d 01
0:07:18.139823	LOG	PUSH_DATA: Protocol version = 02, Token = 119d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2545576605, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIRAPMcoKo='}]}
0:07:18.141818	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0011),MIC: f31ca0aa)
0:07:18.142818	LOG	Server <---------- DUT
0:07:18.143822	LOG	DevNonce is greater than the previous in Join Request
0:07:18.145822	LOG	Previous DevNonce: 16
0:07:18.146820	LOG	Actual DevNonce: 17
0:07:18.149814	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 270000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList: 886684000000000000000000000000001), MIC: 8510801b)
0:07:18.151814	LOG	PULL_RESP: Protocol version = 02, Token = aa66, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2551576605, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 33, 'data': 'IEZ3FchWrNrmtb30HFGECwh2B4uPqZYqiK4ZJFPG7Pao'}}

0:07:18.153813	LOG	Server ----------> DUT
0:07:18.156811	LOG	TX_ACK: 02 aa66 05 aa555a0000240409
0:07:24.246526	LOG	PULL_DATA: 02 40e8 02 aa555a0000240409
0:07:24.247525	LOG	PULL_ACK: 02 40e8 04
0:07:26.073487	LOG	PUSH_ACK: 02 119e 01
0:07:26.077485	LOG	PUSH_DATA: Protocol version = 02, Token = 119e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2553499945, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAAABARfu9P/q'}]}
0:07:26.078482	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 001e, MIC: eef4ffea)
0:07:26.079482	LOG	Server <---------- DUT
0:07:26.084479	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:07:26.086479	LOG	Activation process has finished successfully
0:07:26.089477	LOG	Data stored in the DUT after Activation:
0:07:26.091477	LOG	DevAddr: 20202020
0:07:26.095473	LOG	AppEUI: abcdabcdabcdabcd
0:07:26.098472	LOG	NwkSKey: e1d61fa964026760c5229b45107c7ff4
0:07:26.102469	LOG	AppSKey: f3e4dcfb686322954cfe3ab5108f49d1
0:07:26.109464	LOG	Check FCntUp after reset process starts
0:07:26.113462	LOG	Check FCntUp after reset process complete
0:07:26.121457	LOG	Send Test Command TxPeriodicityChange process starts
0:07:26.124456	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0026, FOpts:), FPort: e0, FRMPayload: 0601), MIC: 25cc589b)
0:07:26.125455	LOG	Frame command sent to the DUT
0:07:26.126455	LOG	PULL_RESP: Protocol version = 02, Token = 145b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2555499945, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAJgDgdWAlzFib'}}
0:07:26.127454	LOG	Server ----------> DUT
0:07:26.130453	LOG	Send Test Command TxPeriodicityChange process completed
0:07:26.135450	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:34.316568	LOG	PULL_DATA: 02 2173 02 aa555a0000240409
0:07:34.321560	LOG	PULL_ACK: 02 2173 04
0:07:34.325576	LOG	PUSH_ACK: 02 119f 01
0:07:34.327557	LOG	PUSH_DATA: Protocol version = 02, Token = 119f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2561757323, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAQABW4BCBqRe'}]}
0:07:34.328575	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 001f, MIC: 4206a45e)
0:07:34.330556	LOG	Server <---------- DUT
0:07:34.332555	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0027, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 127bd639)
0:07:34.335552	LOG	Frame command sent to the DUT
0:07:34.337551	LOG	PULL_RESP: Protocol version = 02, Token = a271, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2563757323, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAJwDgiFISe9Y5'}}
0:07:34.338553	LOG	Server ----------> DUT
0:07:34.342548	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:34.349545	LOG	Receive frame on specific channels process starts
0:07:34.360538	LOG	Attempt 1/15
0:07:39.303644	LOG	PUSH_ACK: 02 11a1 01
0:07:39.305644	LOG	PUSH_DATA: Protocol version = 02, Token = 11a1, Identifier = 00, JSON = {'rxpk': [{'tmst': 2566759988, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAgABsfIfWIPC'}]}
0:07:39.306643	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 1f5883c2)
0:07:39.308644	LOG	Server <---------- DUT
0:07:39.310642	LOG	Attempt 2/15
0:07:44.290804	LOG	PUSH_ACK: 02 11a2 01
0:07:44.292804	LOG	PUSH_DATA: Protocol version = 02, Token = 11a2, Identifier = 00, JSON = {'rxpk': [{'tmst': 2571762644, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAwABPm2WhcR2'}]}
0:07:44.294802	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 9685c476)
0:07:44.296801	LOG	Server <---------- DUT
0:07:44.297800	LOG	Attempt 3/15
0:07:44.416732	LOG	PULL_DATA: 02 a68c 02 aa555a0000240409
0:07:44.418731	LOG	PULL_ACK: 02 a68c 04
0:07:49.329932	LOG	PUSH_ACK: 02 11a3 01
0:07:49.332931	LOG	PUSH_DATA: Protocol version = 02, Token = 11a3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2576765284, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABAAB/0VEGJte'}]}
0:07:49.333931	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0004, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 44189b5e)
0:07:49.335930	LOG	Server <---------- DUT
0:07:49.336928	LOG	Attempt 4/15
0:07:54.318808	LOG	PUSH_ACK: 02 11a4 01
0:07:54.320806	LOG	PUSH_DATA: Protocol version = 02, Token = 11a4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2581767908, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCABQAB22qC8pRt'}]}
0:07:54.321808	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 82f2946d)
0:07:54.323805	LOG	Server <---------- DUT
0:07:54.325804	LOG	Attempt 5/15
0:07:54.496027	LOG	PULL_DATA: 02 0fd4 02 aa555a0000240409
0:07:54.498029	LOG	PULL_ACK: 02 0fd4 04
0:07:59.307314	LOG	PUSH_ACK: 02 11a5 01
0:07:59.310312	LOG	PUSH_DATA: Protocol version = 02, Token = 11a5, Identifier = 00, JSON = {'rxpk': [{'tmst': 2586770508, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABgABcqxtgr9R'}]}
0:07:59.311312	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0006, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 6d82bf51)
0:07:59.313285	LOG	Server <---------- DUT
0:07:59.314312	LOG	Attempt 6/15
0:08:04.347467	LOG	PUSH_ACK: 02 11a6 01
0:08:04.350465	LOG	PUSH_DATA: Protocol version = 02, Token = 11a6, Identifier = 00, JSON = {'rxpk': [{'tmst': 2591773124, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABwABgT0Ncwsj'}]}
0:08:04.352466	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0007, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 0d730b23)
0:08:04.353466	LOG	Server <---------- DUT
0:08:04.354465	LOG	Attempt 7/15
0:08:04.576338	LOG	PULL_DATA: 02 cd05 02 aa555a0000240409

0:08:04.579337	LOG	PULL_ACK: 02 cd05 04
0:08:09.354702	LOG	PUSH_ACK: 02 11a8 01
0:08:09.356702	LOG	PUSH_DATA: Protocol version = 02, Token = 11a8, Identifier = 00, JSON = {'rxpk': [{'tmst': 2596775756, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCACAAB1ZQFEUE9'}]}
0:08:09.357702	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0008, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 0511413d)
0:08:09.359672	LOG	Server <---------- DUT
0:08:09.361671	LOG	Attempt 8/15
0:08:14.342860	LOG	PUSH_ACK: 02 11a9 01
0:08:14.345860	LOG	PUSH_DATA: Protocol version = 02, Token = 11a9, Identifier = 00, JSON = {'rxpk': [{'tmst': 2601778388, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCACQABcyg6W54B'}]}
0:08:14.346857	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0009, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 3a5b9e01)
0:08:14.348857	LOG	Server <---------- DUT
0:08:14.350828	LOG	Attempt 9/15
0:08:14.656653	LOG	PULL_DATA: 02 2ff2 02 aa555a0000240409
0:08:14.660651	LOG	PULL_ACK: 02 2ff2 04
0:08:19.332046	LOG	PUSH_ACK: 02 11aa 01
0:08:19.334045	LOG	PUSH_DATA: Protocol version = 02, Token = 11aa, Identifier = 00, JSON = {'rxpk': [{'tmst': 2606781116, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCACgABMoRaG8sp'}]}
0:08:19.335045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000a, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 5a1bcb29)
0:08:19.337043	LOG	Server <---------- DUT
0:08:19.338043	LOG	Attempt 10/15
0:08:24.320204	LOG	PUSH_ACK: 02 11ab 01
0:08:24.322203	LOG	PUSH_DATA: Protocol version = 02, Token = 11ab, Identifier = 00, JSON = {'rxpk': [{'tmst': 2611783732, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCACwABlYAAuSqn'}]}
0:08:24.324203	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000b, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 00b92aa7)
0:08:24.325202	LOG	Server <---------- DUT
0:08:24.327201	LOG	Attempt 11/15
0:08:24.735967	LOG	PULL_DATA: 02 1141 02 aa555a0000240409
0:08:24.737966	LOG	PULL_ACK: 02 1141 04
0:08:29.360333	LOG	PUSH_ACK: 02 11ac 01
0:08:29.362332	LOG	PUSH_DATA: Protocol version = 02, Token = 11ac, Identifier = 00, JSON = {'rxpk': [{'tmst': 2616786380, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCADAAB1y4I9Yh8'}]}
0:08:29.364331	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000c, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 08f5887c)
0:08:29.365330	LOG	Server <---------- DUT
0:08:29.368328	LOG	Attempt 12/15
0:08:34.348491	LOG	PUSH_ACK: 02 11ad 01
0:08:34.351489	LOG	PUSH_DATA: Protocol version = 02, Token = 11ad, Identifier = 00, JSON = {'rxpk': [{'tmst': 2621788996, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCADQABiJ1i16/u'}]}

0:08:34.352489	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000d, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 62d7afee)
0:08:34.354488	LOG	Server <---------- DUT
0:08:34.356486	LOG	Attempt 13/15
0:08:34.816224	LOG	PULL_DATA: 02 df38 02 aa555a0000240409
0:08:34.820222	LOG	PULL_ACK: 02 df38 04
0:08:39.354639	LOG	PUSH_ACK: 02 11af 01
0:08:39.356638	LOG	PUSH_DATA: Protocol version = 02, Token = 11af, Identifier = 00, JSON = {'rxpk': [{'tmst': 2626791612, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCADgABdgJJk662'}]}
0:08:39.358637	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000e, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 4993aeb6)
0:08:39.359636	LOG	Server <---------- DUT
0:08:39.361635	LOG	Attempt 14/15
0:08:44.344797	LOG	PUSH_ACK: 02 11b1 01
0:08:44.346795	LOG	PUSH_DATA: Protocol version = 02, Token = 11b1, Identifier = 00, JSON = {'rxpk': [{'tmst': 2631794228, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCADwABz/mFwMey'}]}
0:08:44.347794	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000f, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 85c0c7b2)
0:08:44.349793	LOG	Server <---------- DUT
0:08:44.350793	LOG	Attempt 15/15
0:08:44.906477	LOG	PULL_DATA: 02 7618 02 aa555a0000240409
0:08:44.907475	LOG	PULL_ACK: 02 7618 04
0:08:49.333954	LOG	PUSH_ACK: 02 11b2 01
0:08:49.335953	LOG	PUSH_DATA: Protocol version = 02, Token = 11b2, Identifier = 00, JSON = {'rxpk': [{'tmst': 2636796868, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAEAABmkgvKgnt'}]}
0:08:49.336952	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0010, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 2f2a09ed)
0:08:49.338951	LOG	Server <---------- DUT
0:08:49.345947	LOG	Receive frame on specific channels process tested successfully
0:08:49.354941	LOG	End Test Step: Join-Accept with CFList for Dynamic Channel (DC) plan
0:08:49.358941	LOG	Partial Verdict: PASS
0:08:49.362937	LOG	==========
0:08:49.368934	LOG	==========
0:08:49.372933	LOG	Start Test Step: Restore default parameters
0:08:49.387923	LOG	Send MAC command block process starts
0:08:54.372083	LOG	PUSH_ACK: 02 11b3 01
0:08:54.374083	LOG	PUSH_DATA: Protocol version = 02, Token = 11b3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2641799532, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAEQABl4tqOcOD'}]}
0:08:54.376081	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0011, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 6a39c383)
0:08:54.377080	LOG	Server <---------- DUT
0:08:54.379079	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0028, FOpts:), FPort: 00, FRMPayload: 03500700010500d2ad84), MIC: c6414a3a)
0:08:54.382078	LOG	PULL_RESP: Protocol version = 02, Token = 857f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2643799532, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAKAAAsB0YjcnASvZDFMZBSjo='}}

0:08:54.384077	LOG	Server ----------> DUT
0:08:54.387075	LOG	TX_ACK: 02 857f 05 aa555a0000240409
0:08:55.015717	LOG	PULL_DATA: 02 6977 02 aa555a0000240409
0:08:55.016717	LOG	PULL_ACK: 02 6977 04
0:08:59.355244	LOG	PUSH_ACK: 02 11b4 01
0:08:59.357244	LOG	PUSH_DATA: Protocol version = 02, Token = 11b4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2646807367, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 19, 'data': 'QCAgICCEEgADBwUHAftKM8tlew==''}]}
0:08:59.359242	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0012, FOpts: 03070507), FPort: 01, FRMPayload: 0020, MIC: 33cb657b)
0:08:59.360242	LOG	Server <---------- DUT
0:08:59.362240	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:59.364241	LOG	Command Answer: 03070507
0:08:59.429202	LOG	MAC command communication completed
0:08:59.436198	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:09:04.344402	LOG	PUSH_ACK: 02 11b5 01
0:09:04.346401	LOG	PUSH_DATA: Protocol version = 02, Token = 11b5, Identifier = 00, JSON = {'rxpk': [{'tmst': 2651810015, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCEwAFBwHxXlVWhyo='}]}
0:09:04.348400	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0013, FOpts: 0507), FPort: 01, FRMPayload: 0020, MIC: 5556872a)
0:09:04.349399	LOG	Server <---------- DUT
0:09:04.351398	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0029, FOpts:), FPort: e0, FRMPayload: 0501), MIC: c9b87730)
0:09:04.354397	LOG	Frame command sent to the DUT
0:09:04.356395	LOG	PULL_RESP: Protocol version = 02, Token = e4e7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2653810015, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAKQDg4/TJuHcw'}}
0:09:04.358396	LOG	Server ----------> DUT
0:09:04.361394	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:09:04.365390	LOG	End Test Step: Restore default parameters
0:09:04.370388	LOG	Partial Verdict: PASS
0:09:04.374387	LOG	==========
0:09:04.380383	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_001_A
0:09:04.382381	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_001_B	
Verdict	PASS	
Date	2021-10-17 23:18:15	
Comments	Activation by Personalization	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_ABP | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	RX2 Receive window frequency	868.525
	Conformance	TRUE

Time Stamp (ms)	Event	Summary

0:00:00.013232	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_001_B
0:00:00.051209	LOG	==========
0:00:00.053209	LOG	Start Test Step: Device activation
0:00:00.108177	LOG	Activation process has finished successfully
0:00:00.110176	LOG	Data stored in the DUT after Activation:
0:00:00.112175	LOG	DevAddr: 20202020
0:00:00.114174	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.117172	LOG	NwkSKey: abcdabcdabcdabcdabcdabcdabcdabcd
0:00:00.120170	LOG	AppSKey: 12345678123456781234567812345678
0:00:00.123170	LOG	End Test Step: Device activation
0:00:00.126169	LOG	Partial Verdict: PASS
0:00:00.131164	LOG	==========
0:00:00.136162	LOG	==========
0:00:00.138160	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.148154	LOG	DUT Pre-condition activation process starts
0:00:00.152152	LOG	Check FCntUp after reset process starts
0:00:00.156150	LOG	Check FCntUp after reset process complete
0:00:00.159148	LOG	Check minimum DR after reset (only ABP) process starts
0:00:00.163146	LOG	Check ADR bit process starts
0:00:07.860777	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:09.382914	LOG	PULL_DATA: 02 4847 02 aa555a0000240409
0:00:09.384913	LOG	PULL_ACK: 02 4847 04
0:00:09.385912	LOG	First PULL_DATA received
0:00:19.463198	LOG	PULL_DATA: 02 64bd 02 aa555a0000240409
0:00:19.464197	LOG	PULL_ACK: 02 64bd 04
0:00:29.542475	LOG	PULL_DATA: 02 1f23 02 aa555a0000240409
0:00:29.546473	LOG	PULL_ACK: 02 1f23 04
0:00:39.622756	LOG	PULL_DATA: 02 1ea8 02 aa555a0000240409
0:00:39.624755	LOG	PULL_ACK: 02 1ea8 04
0:00:49.703036	LOG	PULL_DATA: 02 1c7b 02 aa555a0000240409
0:00:49.705035	LOG	PULL_ACK: 02 1c7b 04
0:00:59.782316	LOG	PULL_DATA: 02 64c5 02 aa555a0000240409
0:00:59.786315	LOG	PULL_ACK: 02 64c5 04
0:01:09.862596	LOG	PULL_DATA: 02 1473 02 aa555a0000240409
0:01:09.864596	LOG	PULL_ACK: 02 1473 04
0:01:19.942877	LOG	PULL_DATA: 02 5ac5 02 aa555a0000240409
0:01:19.944876	LOG	PULL_ACK: 02 5ac5 04
0:01:30.022158	LOG	PULL_DATA: 02 5e4b 02 aa555a0000240409
0:01:30.027156	LOG	PULL_ACK: 02 5e4b 04
0:01:40.102438	LOG	PULL_DATA: 02 7963 02 aa555a0000240409
0:01:40.104438	LOG	PULL_ACK: 02 7963 04
0:01:50.182719	LOG	PULL_DATA: 02 3b70 02 aa555a0000240409
0:01:50.184718	LOG	PULL_ACK: 02 3b70 04
0:02:00.262002	LOG	PULL_DATA: 02 6424 02 aa555a0000240409
0:02:00.266000	LOG	PULL_ACK: 02 6424 04
0:02:07.896665	LOG	PUSH_ACK: 02 002d 01
0:02:07.899664	LOG	PUSH_DATA: Protocol version = 02, Token = 002d, Identifier = 00, JSON = {'rxpk': [{'tmst': 827871521, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -45, 'size': 15, 'data': 'QCAgICCADAABsKMEeGYh'}]}
0:02:07.901663	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000c, FOpts:), FPort: 01, FRMPayload: 0003, MIC: 04786621)
0:02:07.903661	LOG	Server <---------- DUT
0:02:07.908659	LOG	ADR bit in FCtrl field is set
0:02:07.913656	LOG	Check previous uplink data rate process starts

0:02:07.919652	LOG	Uplink received with expected Data Rate
0:02:07.923650	LOG	Check minimum DR after reset (only ABP) process complete
0:02:07.928647	LOG	Send Test Command DutResetReq process starts
0:02:07.931645	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0006, FOpts:), FPort: e0, FRMPayload: 01), MIC: 4fdfdd5a)
0:02:07.933645	LOG	Frame command sent to the DUT
0:02:07.935644	LOG	PULL_RESP: Protocol version = 02, Token = a0e3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 829871521, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAABgDga0/f3Vo='}}
0:02:07.937642	LOG	Server ----------> DUT
0:02:07.942639	LOG	Send Test Command DutResetReq process completed
0:02:07.962628	LOG	Check FCntUp after reset process starts
0:02:07.968624	LOG	Wait until a confirmed or unconfirmed uplink arrives process starts
0:02:10.452233	LOG	PULL_DATA: 02 119e 02 aa555a0000240409
0:02:10.454215	LOG	PULL_ACK: 02 119e 04
0:02:19.400138	LOG	PUSH_ACK: 02 002e 01
0:02:19.402136	LOG	PUSH_DATA: Protocol version = 02, Token = 002e, Identifier = 00, JSON = {'rxpk': [{'tmst': 839357029, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -43, 'size': 15, 'data': 'QCAgICCADQABQcCIhTWb'}]}
0:02:19.403134	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000d, FOpts:), FPort: 01, FRMPayload: 0000, MIC: 8885359b)
0:02:19.404136	LOG	Server <---------- DUT
0:02:19.407134	LOG	Wait until a confirmed or unconfirmed uplink arrives tested successfully
0:02:19.417126	LOG	Check FCntUp after reset process complete
0:02:19.421124	LOG	Check minimum DR after reset (only ABP) process starts
0:02:19.426121	LOG	Check ADR bit process starts
0:02:20.532492	LOG	PULL_DATA: 02 09dc 02 aa555a0000240409
0:02:20.534493	LOG	PULL_ACK: 02 09dc 04
0:02:30.611772	LOG	PULL_DATA: 02 aad4 02 aa555a0000240409
0:02:30.616769	LOG	PULL_ACK: 02 aad4 04
0:02:40.692050	LOG	PULL_DATA: 02 acf2 02 aa555a0000240409
0:02:40.694049	LOG	PULL_ACK: 02 acf2 04
0:02:50.772328	LOG	PULL_DATA: 02 1b10 02 aa555a0000240409
0:02:50.774328	LOG	PULL_ACK: 02 1b10 04
0:03:00.851609	LOG	PULL_DATA: 02 af3b 02 aa555a0000240409
0:03:00.856605	LOG	PULL_ACK: 02 af3b 04
0:03:10.931886	LOG	PULL_DATA: 02 33cd 02 aa555a0000240409
0:03:10.933885	LOG	PULL_ACK: 02 33cd 04
0:03:21.012164	LOG	PULL_DATA: 02 e350 02 aa555a0000240409
0:03:21.014163	LOG	PULL_ACK: 02 e350 04
0:03:31.092442	LOG	PULL_DATA: 02 4847 02 aa555a0000240409
0:03:31.096440	LOG	PULL_ACK: 02 4847 04
0:03:41.171722	LOG	PULL_DATA: 02 155c 02 aa555a0000240409
0:03:41.173720	LOG	PULL_ACK: 02 155c 04
0:03:51.252000	LOG	PULL_DATA: 02 bb6f 02 aa555a0000240409
0:03:51.252999	LOG	PULL_ACK: 02 bb6f 04
0:04:01.332277	LOG	PULL_DATA: 02 2219 02 aa555a0000240409
0:04:01.340273	LOG	PULL_ACK: 02 2219 04
0:04:11.421551	LOG	PULL_DATA: 02 ba9b 02 aa555a0000240409
0:04:11.424550	LOG	PULL_ACK: 02 ba9b 04
0:04:19.486974	LOG	PUSH_ACK: 02 0035 01
0:04:19.488971	LOG	PUSH_DATA: Protocol version = 02, Token = 0035, Identifier = 00, JSON = {'rxpk': [{'tmst': 959419101, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -46, 'size': 15, 'data': 'QCAgICCADgABf+t+Qv/j'}]}
0:04:19.489972	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000e, FOpts:), FPort: 01, FRMPayload: 0000, MIC: 7e42ffe3)
0:04:19.491970	LOG	Server <---------- DUT
0:04:19.494970	LOG	ADR bit in FCtrl field is set
0:04:19.498967	LOG	Check previous uplink data rate process starts
0:04:19.502965	LOG	Uplink received with expected Data Rate
0:04:19.504965	LOG	Check minimum DR after reset (only ABP) process complete
0:04:19.517955	LOG	Send Test Command TxPeriodicityChange process starts
0:04:19.520954	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0007, FOpts:), FPort: e0, FRMPayload: 0601), MIC: 5758a84e)
0:04:19.523952	LOG	Frame command sent to the DUT
0:04:19.525952	LOG	PULL_RESP: Protocol version = 02, Token = 035b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 961419101, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAABwDg+HFXWKhO'}}
0:04:19.527950	LOG	Server ----------> DUT
0:04:19.531947	LOG	Send Test Command TxPeriodicityChange process completed
0:04:19.537945	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:21.631756	LOG	PULL_DATA: 02 7df5 02 aa555a0000240409
0:04:21.633755	LOG	PULL_ACK: 02 7df5 04
0:04:31.712033	LOG	PULL_DATA: 02 0be1 02 aa555a0000240409
0:04:31.715031	LOG	PULL_ACK: 02 0be1 04
0:04:41.791313	LOG	PULL_DATA: 02 1a1c 02 aa555a0000240409
0:04:41.794311	LOG	PULL_ACK: 02 1a1c 04
0:04:51.891580	LOG	PULL_DATA: 02 7f23 02 aa555a0000240409
0:04:51.893579	LOG	PULL_ACK: 02 7f23 04
0:05:01.971858	LOG	PULL_DATA: 02 f829 02 aa555a0000240409
0:05:01.975855	LOG	PULL_ACK: 02 f829 04
0:05:12.051137	LOG	PULL_DATA: 02 f8a4 02 aa555a0000240409
0:05:12.053135	LOG	PULL_ACK: 02 f8a4 04
0:05:22.131414	LOG	PULL_DATA: 02 1b13 02 aa555a0000240409
0:05:22.133414	LOG	PULL_ACK: 02 1b13 04
0:05:32.211693	LOG	PULL_DATA: 02 b5ca 02 aa555a0000240409
0:05:32.214692	LOG	PULL_ACK: 02 b5ca 04
0:05:42.291338	LOG	PULL_DATA: 02 4ee8 02 aa555a0000240409
0:05:42.293337	LOG	PULL_ACK: 02 4ee8 04
0:05:52.371616	LOG	PULL_DATA: 02 9832 02 aa555a0000240409
0:05:52.375614	LOG	PULL_ACK: 02 9832 04
0:06:02.450982	LOG	PULL_DATA: 02 38e0 02 aa555a0000240409
0:06:02.454978	LOG	PULL_ACK: 02 38e0 04
0:06:12.531258	LOG	PULL_DATA: 02 794d 02 aa555a0000240409
0:06:12.533256	LOG	PULL_ACK: 02 794d 04
0:06:18.899643	LOG	PUSH_ACK: 02 003a 01
0:06:18.901642	LOG	PUSH_DATA: Protocol version = 02, Token = 003a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1078842064, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.0, 'rssi': -43, 'size': 15, 'data': 'QCAgICCADwABdeySDkKT'}]}
0:06:18.902642	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000f, FOpts:), FPort: 01, FRMPayload: 0001, MIC: 920e4293)
0:06:18.904642	LOG	Server <---------- DUT
0:06:18.906640	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0008, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 3c626f72)
0:06:18.908639	LOG	Frame command sent to the DUT

0:06:18.910639	LOG	PULL_RESP: Protocol version = 02, Token = 0bb7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1080842064, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAACADgwKU8Ym9y'}}
0:06:18.911638	LOG	Server ----------> DUT
0:06:18.916635	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:18.921631	LOG	Check ADR bit process starts
0:06:22.691490	LOG	PULL_DATA: 02 3d34 02 aa555a0000240409
0:06:22.693489	LOG	PULL_ACK: 02 3d34 04
0:06:32.771769	LOG	PULL_DATA: 02 bc5f 02 aa555a0000240409
0:06:32.779765	LOG	PULL_ACK: 02 bc5f 04
0:06:42.861060	LOG	PULL_DATA: 02 4e77 02 aa555a0000240409
0:06:42.862043	LOG	PULL_ACK: 02 4e77 04
0:06:52.941321	LOG	PULL_DATA: 02 facb 02 aa555a0000240409
0:06:52.942320	LOG	PULL_ACK: 02 facb 04
0:07:03.030591	LOG	PULL_DATA: 02 6c05 02 aa555a0000240409
0:07:03.035589	LOG	PULL_ACK: 02 6c05 04
0:07:13.110867	LOG	PULL_DATA: 02 ac86 02 aa555a0000240409
0:07:13.112867	LOG	PULL_ACK: 02 ac86 04
0:07:23.191146	LOG	PULL_DATA: 02 212b 02 aa555a0000240409
0:07:23.192146	LOG	PULL_ACK: 02 212b 04
0:07:33.270421	LOG	PULL_DATA: 02 aa1a 02 aa555a0000240409
0:07:33.274419	LOG	PULL_ACK: 02 aa1a 04
0:07:43.350697	LOG	PULL_DATA: 02 55a2 02 aa555a0000240409
0:07:43.355696	LOG	PULL_ACK: 02 55a2 04
0:07:53.430974	LOG	PULL_DATA: 02 be70 02 aa555a0000240409
0:07:53.432973	LOG	PULL_ACK: 02 be70 04
0:08:03.510312	LOG	PULL_DATA: 02 b573 02 aa555a0000240409
0:08:03.515308	LOG	PULL_ACK: 02 b573 04
0:08:13.590590	LOG	PULL_DATA: 02 3b04 02 aa555a0000240409
0:08:13.592587	LOG	PULL_ACK: 02 3b04 04
0:08:18.940658	LOG	PUSH_ACK: 02 0040 01
0:08:18.942657	LOG	PUSH_DATA: Protocol version = 02, Token = 0040, Identifier = 00, JSON = {'rxpk': [{'tmst': 1198904194, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.5, 'rssi': -43, 'size': 15, 'data': 'QCAgICCAEAAB4YKVFvEk'}]}
0:08:18.944656	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0010, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 9516f124)
0:08:18.945655	LOG	Server <---------- DUT
0:08:18.954650	LOG	ADR bit in FCtrl field is set
0:08:18.969642	LOG	Send LinkADRReq process starts
0:08:23.670973	LOG	PULL_DATA: 02 5cd3 02 aa555a0000240409
0:08:23.672972	LOG	PULL_ACK: 02 5cd3 04
0:08:33.750249	LOG	PULL_DATA: 02 3694 02 aa555a0000240409
0:08:33.755246	LOG	PULL_ACK: 02 3694 04
0:08:43.830525	LOG	PULL_DATA: 02 b3af 02 aa555a0000240409
0:08:43.832524	LOG	PULL_ACK: 02 b3af 04
0:08:53.909803	LOG	PULL_DATA: 02 e2f0 02 aa555a0000240409
0:08:53.912800	LOG	PULL_ACK: 02 e2f0 04
0:09:03.990078	LOG	PULL_DATA: 02 e49e 02 aa555a0000240409
0:09:03.995075	LOG	PULL_ACK: 02 e49e 04
0:09:14.070354	LOG	PULL_DATA: 02 4f32 02 aa555a0000240409
0:09:14.073352	LOG	PULL_ACK: 02 4f32 04
0:09:24.149631	LOG	PULL_DATA: 02 1549 02 aa555a0000240409
0:09:24.152630	LOG	PULL_ACK: 02 1549 04

0:09:34.229909	LOG	PULL_DATA: 02 fd82 02 aa555a0000240409
0:09:34.234905	LOG	PULL_ACK: 02 fd82 04
0:09:44.310184	LOG	PULL_DATA: 02 4ea9 02 aa555a0000240409
0:09:44.312183	LOG	PULL_ACK: 02 4ea9 04
0:09:54.390460	LOG	PULL_DATA: 02 0870 02 aa555a0000240409
0:09:54.393458	LOG	PULL_ACK: 02 0870 04
0:10:04.469741	LOG	PULL_DATA: 02 d4b2 02 aa555a0000240409
0:10:04.473737	LOG	PULL_ACK: 02 d4b2 04
0:10:14.550029	LOG	PULL_DATA: 02 8a29 02 aa555a0000240409
0:10:14.552012	LOG	PULL_ACK: 02 8a29 04
0:10:19.021475	LOG	PUSH_ACK: 02 0045 01
0:10:19.023473	LOG	PUSH_DATA: Protocol version = 02, Token = 0045, Identifier = 00, JSON = {'rxpk': [{'tmst': 1318966338, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.5, 'rssi': -43, 'size': 15, 'data': 'QCAgICCAEQABYPauqrSw'}]}
0:10:19.025472	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0011, FOpts:), FPort: 01, FRMPayload: 0002, MIC: aeaab4b0)
0:10:19.027471	LOG	Server <---------- DUT
0:10:19.029472	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0009, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 0abb00c8)
0:10:19.031471	LOG	PULL_RESP: Protocol version = 02, Token = f171, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1320966338, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAACQAAyjstKDwKuwDI'}}
0:10:19.033468	LOG	Server ----------> DUT
0:10:19.036466	LOG	TX_ACK: 02 f171 05 aa555a0000240409
0:10:24.700250	LOG	PULL_DATA: 02 5448 02 aa555a0000240409
0:10:24.702249	LOG	PULL_ACK: 02 5448 04
0:10:34.779528	LOG	PULL_DATA: 02 9a0a 02 aa555a0000240409
0:10:34.784524	LOG	PULL_ACK: 02 9a0a 04
0:10:44.859804	LOG	PULL_DATA: 02 bcd5 02 aa555a0000240409
0:10:44.861802	LOG	PULL_ACK: 02 bcd5 04
0:10:54.940079	LOG	PULL_DATA: 02 0e18 02 aa555a0000240409
0:10:54.942078	LOG	PULL_ACK: 02 0e18 04
0:11:05.019355	LOG	PULL_DATA: 02 a844 02 aa555a0000240409
0:11:05.024353	LOG	PULL_ACK: 02 a844 04
0:11:15.099632	LOG	PULL_DATA: 02 ac5b 02 aa555a0000240409
0:11:15.101631	LOG	PULL_ACK: 02 ac5b 04
0:11:25.179909	LOG	PULL_DATA: 02 f38e 02 aa555a0000240409
0:11:25.181908	LOG	PULL_ACK: 02 f38e 04
0:11:35.259185	LOG	PULL_DATA: 02 4cd7 02 aa555a0000240409
0:11:35.268181	LOG	PULL_ACK: 02 4cd7 04
0:11:45.349460	LOG	PULL_DATA: 02 2d9b 02 aa555a0000240409
0:11:45.353456	LOG	PULL_ACK: 02 2d9b 04
0:11:55.428809	LOG	PULL_DATA: 02 0942 02 aa555a0000240409
0:11:55.430808	LOG	PULL_ACK: 02 0942 04
0:12:05.509136	LOG	PULL_DATA: 02 e506 02 aa555a0000240409
0:12:05.514134	LOG	PULL_ACK: 02 e506 04
0:12:15.589413	LOG	PULL_DATA: 02 c433 02 aa555a0000240409
0:12:15.590412	LOG	PULL_ACK: 02 c433 04
0:12:17.941077	LOG	PUSH_ACK: 02 004b 01
0:12:17.943076	LOG	PUSH_DATA: Protocol version = 02, Token = 004b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1437924995, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -45, 'size': 17, 'data': 'QCAgICCCEgADBwEfN6JZMhc='}]}

0:12:17.945076	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0012, FOpts: 0307), FPort: 01, FRMPayload: 0002, MIC: a2593217)
0:12:17.946075	LOG	Server <---------- DUT
0:12:17.947075	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:12:17.948075	LOG	Command Answer: 0307
0:12:17.955071	LOG	MAC command communication completed
0:12:17.962065	LOG	Send Test Command DutVersionsReq process starts
0:12:25.669687	LOG	PULL_DATA: 02 afcd 02 aa555a0000240409
0:12:25.671687	LOG	PULL_ACK: 02 afcd 04
0:12:27.926406	LOG	PUSH_ACK: 02 004d 01
0:12:27.928405	LOG	PUSH_DATA: Protocol version = 02, Token = 004d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1447925003, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -44, 'size': 15, 'data': 'QCAgICCAEwABrpcvFOHA'}]}
0:12:27.930405	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0013, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 2f14e1c0)
0:12:27.931403	LOG	Server <---------- DUT
0:12:27.933404	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000a, FOpts:), FPort: e0, FRMPayload: 7f), MIC: 34a7b2b7)
0:12:27.935401	LOG	Frame command sent to the DUT
0:12:27.936400	LOG	PULL_RESP: Protocol version = 02, Token = 4f0d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1449925003, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAACgDgVDSnsrc='}}
0:12:27.937401	LOG	Server ----------> DUT
0:12:27.940398	LOG	TX_ACK: 02 4f0d 05 aa555a0000240409
0:12:32.976633	LOG	PUSH_ACK: 02 004e 01
0:12:32.980629	LOG	PUSH_DATA: Protocol version = 02, Token = 004e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1452947269, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -46, 'size': 23, 'data': 'QCAgICCAFADgACFRnga2yceCiHcELNo='}]}
0:12:32.981628	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0014, FOpts:), FPort: e0, FRMPayload: 7f010004010004010004, MIC: 77042cda)
0:12:32.982628	LOG	Server <---------- DUT
0:12:32.983627	LOG	Answer in payload: 010004010004010004
0:12:32.985626	LOG	Frame Command Payload in the Answer: 7f010004010004010004
0:12:32.988624	LOG	DUT Version received: 010004010004010004
0:12:32.990623	LOG	Send Test Command DutVersionsReq completed
0:12:32.994621	LOG	DUT Pre-condition activation completed
0:12:32.998619	LOG	End Test Step: DUT Pre-condition settings
0:12:33.009613	LOG	Partial Verdict: PASS
0:12:33.015609	LOG	==========
0:12:33.021605	LOG	==========
0:12:33.023605	LOG	Start Test Step: Test DUT Configuration after reset
0:12:33.036598	LOG	Send MAC command block process starts
0:12:35.709079	LOG	PULL_DATA: 02 a384 02 aa555a0000240409
0:12:35.713078	LOG	PULL_ACK: 02 a384 04
0:12:44.080325	LOG	PUSH_ACK: 02 004f 01
0:12:44.082324	LOG	PUSH_DATA: Protocol version = 02, Token = 004f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1464041374, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -42, 'size': 15, 'data': 'QCAgICCAFQABkjuTXO5W'}]}
0:12:44.084323	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0015, FOpts:), FPort: 01, FRMPayload: 0003, MIC: 935cee56)
0:12:44.121302	LOG	Server <---------- DUT

0:12:44.123302	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000b, FOpts:), FPort: 00, FRMPayload: 03570100010533c286840a00f87d840802), MIC: 1c31bbc5)
0:12:44.126299	LOG	PULL_RESP: Protocol version = 02, Token = fd17, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1466041374, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 30, 'data': 'YCAgICAACwAATWf/ytcvfZUBYKR+fbspbtEcMbvF'}}
0:12:44.128298	LOG	Server ----------> DUT
0:12:44.132296	LOG	TX_ACK: 02 fd17 05 aa555a0000240409
0:12:45.809343	LOG	PULL_DATA: 02 7f2d 02 aa555a0000240409
0:12:45.811343	LOG	PULL_ACK: 02 7f2d 04
0:12:55.888638	LOG	PULL_DATA: 02 add4 02 aa555a0000240409
0:12:55.890618	LOG	PULL_ACK: 02 add4 04
0:13:05.969038	LOG	PULL_DATA: 02 7647 02 aa555a0000240409
0:13:05.978033	LOG	PULL_ACK: 02 7647 04
0:13:16.058493	LOG	PULL_DATA: 02 de32 02 aa555a0000240409
0:13:16.061491	LOG	PULL_ACK: 02 de32 04
0:13:26.138768	LOG	PULL_DATA: 02 1cec 02 aa555a0000240409
0:13:26.140767	LOG	PULL_ACK: 02 1cec 04
0:13:36.218753	LOG	PULL_DATA: 02 4ac4 02 aa555a0000240409
0:13:36.222734	LOG	PULL_ACK: 02 4ac4 04
0:13:46.299011	LOG	PULL_DATA: 02 30f6 02 aa555a0000240409
0:13:46.301010	LOG	PULL_ACK: 02 30f6 04
0:13:56.378403	LOG	PULL_DATA: 02 2023 02 aa555a0000240409
0:13:56.380404	LOG	PULL_ACK: 02 2023 04
0:14:06.458741	LOG	PULL_DATA: 02 856c 02 aa555a0000240409
0:14:06.462720	LOG	PULL_ACK: 02 856c 04
0:14:16.538997	LOG	PULL_DATA: 02 fbb2 02 aa555a0000240409
0:14:16.540996	LOG	PULL_ACK: 02 fbb2 04
0:14:26.618272	LOG	PULL_DATA: 02 0704 02 aa555a0000240409
0:14:26.620272	LOG	PULL_ACK: 02 0704 04
0:14:36.698549	LOG	PULL_DATA: 02 f4ec 02 aa555a0000240409
0:14:36.703546	LOG	PULL_ACK: 02 f4ec 04
0:14:43.027967	LOG	PUSH_ACK: 02 0054 01
0:14:43.029952	LOG	PUSH_DATA: Protocol version = 02, Token = 0054, Identifier = 00, JSON = {'rxpk': [{'tmst': 1583005185, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -61, 'size': 22, 'data': 'QCAgICCHFgADBwUHCgMIASYhi6cJGw==\'}]}
0:14:43.031952	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 87, FCnt: 0016, FOpts: 030705070a0308), FPort: 01, FRMPayload: 0003, MIC: 8ba7091b)
0:14:43.032951	LOG	Server <---------- DUT
0:14:43.033950	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:14:43.035950	LOG	Command Answer: 030705070a0308
0:14:43.130695	LOG	MAC command communication completed
0:14:43.133693	LOG	Send Test Command DutResetReq process starts
0:14:46.778693	LOG	PULL_DATA: 02 0bb9 02 aa555a0000240409
0:14:46.780692	LOG	PULL_ACK: 02 0bb9 04
0:14:53.052168	LOG	PUSH_ACK: 02 0055 01
0:14:53.054166	LOG	PUSH_DATA: Protocol version = 02, Token = 0055, Identifier = 00, JSON = {'rxpk': [{'tmst': 1593010305, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -61, 'size': 20, 'data': 'QCAgICCFFwAFBwoDCAHFsbaW/fI=\'}]}
0:14:53.055164	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 85, FCnt: 0017, FOpts: 05070a0308), FPort: 01, FRMPayload: 0003, MIC: b696fdf2)
0:14:53.056166	LOG	Server <---------- DUT

0:14:53.058162	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000c, FOpts:), FPort: e0, FRMPayload: 01), MIC: 9f26f130)
0:14:53.061161	LOG	Frame command sent to the DUT
0:14:53.062160	LOG	PULL_RESP: Protocol version = 02, Token = 78ed, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1596010305, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 868.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAADADgjp8m8TA='}}
0:14:53.063162	LOG	Server ----------> DUT
0:14:53.067158	LOG	Send Test Command DutResetReq process completed
0:14:53.073155	LOG	Check minimum DR after reset (only ABP) process starts
0:14:53.080152	LOG	Check ADR bit process starts
0:14:56.839015	LOG	PULL_DATA: 02 20ba 02 aa555a0000240409
0:14:56.841014	LOG	PULL_ACK: 02 20ba 04
0:15:04.523653	LOG	PUSH_ACK: 02 0057 01
0:15:04.525652	LOG	PUSH_DATA: Protocol version = 02, Token = 0057, Identifier = 00, JSON = {'rxpk': [{'tmst': 1604460794, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': -59, 'size': 15, 'data': 'QCAgICCAGAAB2ZzvDYVU'}]}
0:15:04.526650	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0018, FOpts:), FPort: 01, FRMPayload: 0000, MIC: ef0d8554)
0:15:04.527651	LOG	Server <---------- DUT
0:15:04.530648	LOG	ADR bit in FCtrl field is set
0:15:04.535644	LOG	Check previous uplink data rate process starts
0:15:04.542641	LOG	Uplink received with expected Data Rate
0:15:04.546638	LOG	Check minimum DR after reset (only ABP) process complete
0:15:04.560630	LOG	Wait until a confirmed or unconfirmed uplink arrives process starts
0:15:06.918290	LOG	PULL_DATA: 02 86c3 02 aa555a0000240409
0:15:06.923289	LOG	PULL_ACK: 02 86c3 04
0:15:16.998566	LOG	PULL_DATA: 02 3e05 02 aa555a0000240409
0:15:17.000565	LOG	PULL_ACK: 02 3e05 04
0:15:27.077843	LOG	PULL_DATA: 02 f1ec 02 aa555a0000240409
0:15:27.079841	LOG	PULL_ACK: 02 f1ec 04
0:15:37.168112	LOG	PULL_DATA: 02 d967 02 aa555a0000240409
0:15:37.173109	LOG	PULL_ACK: 02 d967 04
0:15:47.248387	LOG	PULL_DATA: 02 33b7 02 aa555a0000240409
0:15:47.250386	LOG	PULL_ACK: 02 33b7 04
0:15:57.327999	LOG	PULL_DATA: 02 9950 02 aa555a0000240409
0:15:57.329998	LOG	PULL_ACK: 02 9950 04
0:16:07.408275	LOG	PULL_DATA: 02 a3e3 02 aa555a0000240409
0:16:07.416272	LOG	PULL_ACK: 02 a3e3 04
0:16:17.498543	LOG	PULL_DATA: 02 14d3 02 aa555a0000240409
0:16:17.500542	LOG	PULL_ACK: 02 14d3 04
0:16:27.577839	LOG	PULL_DATA: 02 d934 02 aa555a0000240409
0:16:27.579819	LOG	PULL_ACK: 02 d934 04
0:16:37.658095	LOG	PULL_DATA: 02 f75e 02 aa555a0000240409
0:16:37.663092	LOG	PULL_ACK: 02 f75e 04
0:16:47.737370	LOG	PULL_DATA: 02 a0f2 02 aa555a0000240409
0:16:47.740370	LOG	PULL_ACK: 02 a0f2 04
0:16:57.817645	LOG	PULL_DATA: 02 10a8 02 aa555a0000240409
0:16:57.819644	LOG	PULL_ACK: 02 10a8 04
0:17:04.550821	LOG	PUSH_ACK: 02 005c 01
0:17:04.553819	LOG	PUSH_DATA: Protocol version = 02, Token = 005c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1724522802, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': -58, 'size': 15, 'data': 'QCAgICCAGQABqYPPCI6C'}]}

0:17:04.554818	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0019, FOpts:), FPort: 01, FRMPayload: 0000, MIC: cf088e82)
0:17:04.556817	LOG	Server <---------- DUT
0:17:04.562814	LOG	Wait until a confirmed or unconfirmed uplink arrives tested successfully
0:17:04.569810	LOG	Send Test Command TxPeriodicityChange process starts
0:17:04.572808	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000d, FOpts:), FPort: e0, FRMPayload: 0601), MIC: cc2093d6)
0:17:04.575806	LOG	Frame command sent to the DUT
0:17:04.577806	LOG	PULL_RESP: Protocol version = 02, Token = bab8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1726522802, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAADQDg9gvMIJPW'}}
0:17:04.579805	LOG	Server ----------> DUT
0:17:04.583802	LOG	Send Test Command TxPeriodicityChange process completed
0:17:04.589798	LOG	Check ACK bit in next uplink starts
0:17:07.937897	LOG	PULL_DATA: 02 f605 02 aa555a0000240409
0:17:07.941895	LOG	PULL_ACK: 02 f605 04
0:17:18.018175	LOG	PULL_DATA: 02 9401 02 aa555a0000240409
0:17:18.019171	LOG	PULL_ACK: 02 9401 04
0:17:28.097443	LOG	PULL_DATA: 02 beb4 02 aa555a0000240409
0:17:28.099442	LOG	PULL_ACK: 02 beb4 04
0:17:38.177716	LOG	PULL_DATA: 02 bc44 02 aa555a0000240409
0:17:38.182714	LOG	PULL_ACK: 02 bc44 04
0:17:48.257990	LOG	PULL_DATA: 02 78fa 02 aa555a0000240409
0:17:48.259989	LOG	PULL_ACK: 02 78fa 04
0:17:58.337263	LOG	PULL_DATA: 02 4969 02 aa555a0000240409
0:17:58.339263	LOG	PULL_ACK: 02 4969 04
0:18:08.417537	LOG	PULL_DATA: 02 e623 02 aa555a0000240409
0:18:08.420535	LOG	PULL_ACK: 02 e623 04
0:18:18.496811	LOG	PULL_DATA: 02 d01a 02 aa555a0000240409
0:18:18.498809	LOG	PULL_ACK: 02 d01a 04
0:18:28.587096	LOG	PULL_DATA: 02 da69 02 aa555a0000240409
0:18:28.589077	LOG	PULL_ACK: 02 da69 04
0:18:38.667649	LOG	PULL_DATA: 02 6a7e 02 aa555a0000240409
0:18:38.672646	LOG	PULL_ACK: 02 6a7e 04
0:18:48.746923	LOG	PULL_DATA: 02 4c7e 02 aa555a0000240409
0:18:48.748922	LOG	PULL_ACK: 02 4c7e 04
0:18:58.827196	LOG	PULL_DATA: 02 5125 02 aa555a0000240409
0:18:58.828196	LOG	PULL_ACK: 02 5125 04
0:19:03.997259	LOG	PUSH_ACK: 02 0061 01
0:19:03.999258	LOG	PUSH_DATA: Protocol version = 02, Token = 0061, Identifier = 00, JSON = {'rxpk': [{'tmst': 1843945861, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -59, 'size': 15, 'data': 'QCAgICCgGgAB5EYIX0fj'}]}
0:19:04.001257	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 001a, FOpts:), FPort: 01, FRMPayload: 0001, MIC: 085f47e3)
0:19:04.003256	LOG	Server <---------- DUT
0:19:04.009252	LOG	Check ACK bit in next uplink tested successfully
0:19:04.029241	LOG	Send Test Command TxFramesCtrlReq process starts
0:19:08.907469	LOG	PULL_DATA: 02 b348 02 aa555a0000240409
0:19:08.910468	LOG	PULL_ACK: 02 b348 04
0:19:18.986744	LOG	PULL_DATA: 02 8453 02 aa555a0000240409
0:19:18.988742	LOG	PULL_ACK: 02 8453 04
0:19:29.066521	LOG	PULL_DATA: 02 3a94 02 aa555a0000240409
0:19:29.068502	LOG	PULL_ACK: 02 3a94 04

0:19:39.146776	LOG	PULL_DATA: 02 fb31 02 aa555a0000240409
0:19:39.151773	LOG	PULL_ACK: 02 fb31 04
0:19:49.227049	LOG	PULL_DATA: 02 9990 02 aa555a0000240409
0:19:49.229048	LOG	PULL_ACK: 02 9990 04
0:19:59.316316	LOG	PULL_DATA: 02 3257 02 aa555a0000240409
0:19:59.319315	LOG	PULL_ACK: 02 3257 04
0:20:09.396593	LOG	PULL_DATA: 02 44ee 02 aa555a0000240409
0:20:09.400590	LOG	PULL_ACK: 02 44ee 04
0:20:19.476976	LOG	PULL_DATA: 02 9bbc 02 aa555a0000240409
0:20:19.477975	LOG	PULL_ACK: 02 9bbc 04
0:20:29.556310	LOG	PULL_DATA: 02 e9e5 02 aa555a0000240409
0:20:29.558309	LOG	PULL_ACK: 02 e9e5 04
0:20:39.636583	LOG	PULL_DATA: 02 25cf 02 aa555a0000240409
0:20:39.641580	LOG	PULL_ACK: 02 25cf 04
0:20:49.716858	LOG	PULL_DATA: 02 08f5 02 aa555a0000240409
0:20:49.717857	LOG	PULL_ACK: 02 08f5 04
0:20:59.796129	LOG	PULL_DATA: 02 e9e2 02 aa555a0000240409
0:20:59.798129	LOG	PULL_ACK: 02 e9e2 04
0:21:04.026727	LOG	PUSH_ACK: 02 0068 01
0:21:04.028726	LOG	PUSH_DATA: Protocol version = 02, Token = 0068, Identifier = 00, JSON = {'rxpk': [{'tmst': 1964008005, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 6.0, 'rssi': -58, 'size': 15, 'data': 'QCAgICCAGwABhloPxaLU'}]}
0:21:04.030725	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001b, FOpts:), FPort: 01, FRMPayload: 0001, MIC: 0fc5a2d4)
0:21:04.031723	LOG	Server <---------- DUT
0:21:04.033722	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000e, FOpts:), FPort: e0, FRMPayload: 0701), MIC: b1cd393a)
0:21:04.035721	LOG	Frame command sent to the DUT
0:21:04.037720	LOG	PULL_RESP: Protocol version = 02, Token = 8210, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1967008005, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 868.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAADgDgwYexzTk6'}}
0:21:04.038720	LOG	Server ----------> DUT
0:21:04.042718	LOG	Send Test Command TxFramesCtrlReq process completed
0:21:04.049714	LOG	Check ADR bit process starts
0:21:09.916380	LOG	PULL_DATA: 02 5e53 02 aa555a0000240409
0:21:09.920378	LOG	PULL_ACK: 02 5e53 04
0:21:19.996654	LOG	PULL_DATA: 02 60aa 02 aa555a0000240409
0:21:19.997653	LOG	PULL_ACK: 02 60aa 04
0:21:30.075947	LOG	PULL_DATA: 02 d2b2 02 aa555a0000240409
0:21:30.077926	LOG	PULL_ACK: 02 d2b2 04
0:21:40.156218	LOG	PULL_DATA: 02 d085 02 aa555a0000240409
0:21:40.160198	LOG	PULL_ACK: 02 d085 04
0:21:50.236474	LOG	PULL_DATA: 02 fa54 02 aa555a0000240409
0:21:50.238473	LOG	PULL_ACK: 02 fa54 04
0:22:00.315747	LOG	PULL_DATA: 02 d835 02 aa555a0000240409
0:22:00.317746	LOG	PULL_ACK: 02 d835 04
0:22:10.396022	LOG	PULL_DATA: 02 e8d4 02 aa555a0000240409
0:22:10.405015	LOG	PULL_ACK: 02 e8d4 04
0:22:20.486285	LOG	PULL_DATA: 02 6682 02 aa555a0000240409
0:22:20.487284	LOG	PULL_ACK: 02 6682 04
0:22:30.565556	LOG	PULL_DATA: 02 6498 02 aa555a0000240409
0:22:30.568554	LOG	PULL_ACK: 02 6498 04
0:22:40.645827	LOG	PULL_DATA: 02 d9a8 02 aa555a0000240409

0:22:40.649824	LOG	PULL_ACK: 02 d9a8 04
0:22:50.736093	LOG	PULL_DATA: 02 8775 02 aa555a0000240409
0:22:50.739092	LOG	PULL_ACK: 02 8775 04
0:23:00.815298	LOG	PULL_DATA: 02 6570 02 aa555a0000240409
0:23:00.817295	LOG	PULL_ACK: 02 6570 04
0:23:04.112422	LOG	PUSH_ACK: 02 0070 01
0:23:04.114420	LOG	PUSH_DATA: Protocol version = 02, Token = 0070, Identifier = 00, JSON = {'rxpk': [{'tmst': 2084070294, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.5, 'rssi': -58, 'size': 15, 'data': 'QCAgICCAHAABd5aawK1W'}]}
0:23:04.116419	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001c, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 9ac0ad56)
0:23:04.118418	LOG	Server <---------- DUT
0:23:04.122415	LOG	ADR bit in FCtrl field is set
0:23:04.129412	LOG	Receive frame on specific channels process starts
0:23:04.140406	LOG	Attempt 1/15
0:23:10.895566	LOG	PULL_DATA: 02 5a8a 02 aa555a0000240409
0:23:10.899564	LOG	PULL_ACK: 02 5a8a 04
0:23:20.975839	LOG	PULL_DATA: 02 3f62 02 aa555a0000240409
0:23:20.976837	LOG	PULL_ACK: 02 3f62 04
0:23:31.055110	LOG	PULL_DATA: 02 8029 02 aa555a0000240409
0:23:31.057109	LOG	PULL_ACK: 02 8029 04
0:23:41.135380	LOG	PULL_DATA: 02 44de 02 aa555a0000240409
0:23:41.140378	LOG	PULL_ACK: 02 44de 04
0:23:51.215651	LOG	PULL_DATA: 02 7ca5 02 aa555a0000240409
0:23:51.217651	LOG	PULL_ACK: 02 7ca5 04
0:24:01.314932	LOG	PULL_DATA: 02 894e 02 aa555a0000240409
0:24:01.316911	LOG	PULL_ACK: 02 894e 04
0:24:11.395183	LOG	PULL_DATA: 02 5759 02 aa555a0000240409
0:24:11.404178	LOG	PULL_ACK: 02 5759 04
0:24:21.485448	LOG	PULL_DATA: 02 d351 02 aa555a0000240409
0:24:21.489448	LOG	PULL_ACK: 02 d351 04
0:24:31.565720	LOG	PULL_DATA: 02 adac 02 aa555a0000240409
0:24:31.567719	LOG	PULL_ACK: 02 adac 04
0:24:41.645997	LOG	PULL_DATA: 02 8695 02 aa555a0000240409
0:24:41.652989	LOG	PULL_ACK: 02 8695 04
0:24:51.735257	LOG	PULL_DATA: 02 80ec 02 aa555a0000240409
0:24:51.736256	LOG	PULL_ACK: 02 80ec 04
0:25:01.815665	LOG	PULL_DATA: 02 17e4 02 aa555a0000240409
0:25:01.818665	LOG	PULL_ACK: 02 17e4 04
0:25:04.149339	LOG	PUSH_ACK: 02 0075 01
0:25:04.152337	LOG	PUSH_DATA: Protocol version = 02, Token = 0075, Identifier = 00, JSON = {'rxpk': [{'tmst': 2204132550, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 6.8, 'rssi': -58, 'size': 15, 'data': 'QCAgICCAHQABaQ9GVWmV'}]}
0:25:04.154336	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001d, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 46556995)
0:25:04.155335	LOG	Server <---------- DUT
0:25:04.157334	LOG	Attempt 2/15
0:25:11.894955	LOG	PULL_DATA: 02 85f1 02 aa555a0000240409
0:25:11.898935	LOG	PULL_ACK: 02 85f1 04
0:25:21.975208	LOG	PULL_DATA: 02 8c0c 02 aa555a0000240409
0:25:21.977207	LOG	PULL_ACK: 02 8c0c 04
0:25:32.055485	LOG	PULL_DATA: 02 66f1 02 aa555a0000240409
0:25:32.058480	LOG	PULL_ACK: 02 66f1 04

0:25:42.134750	LOG	PULL_DATA: 02 7cc0 02 aa555a0000240409
0:25:42.139749	LOG	PULL_ACK: 02 7cc0 04
0:25:52.215022	LOG	PULL_DATA: 02 7cbb 02 aa555a0000240409
0:25:52.217021	LOG	PULL_ACK: 02 7cbb 04
0:26:02.294294	LOG	PULL_DATA: 02 22fc 02 aa555a0000240409
0:26:02.296293	LOG	PULL_ACK: 02 22fc 04
0:26:12.374597	LOG	PULL_DATA: 02 e466 02 aa555a0000240409
0:26:12.382563	LOG	PULL_ACK: 02 e466 04
0:26:22.464831	LOG	PULL_DATA: 02 da61 02 aa555a0000240409
0:26:22.466830	LOG	PULL_ACK: 02 da61 04
0:26:32.545107	LOG	PULL_DATA: 02 0b63 02 aa555a0000240409
0:26:32.547103	LOG	PULL_ACK: 02 0b63 04
0:26:42.634368	LOG	PULL_DATA: 02 af62 02 aa555a0000240409
0:26:42.639366	LOG	PULL_ACK: 02 af62 04
0:26:52.714639	LOG	PULL_DATA: 02 bc83 02 aa555a0000240409
0:26:52.716639	LOG	PULL_ACK: 02 bc83 04
0:27:02.793910	LOG	PULL_DATA: 02 b469 02 aa555a0000240409
0:27:02.795909	LOG	PULL_ACK: 02 b469 04
0:27:04.230094	LOG	PUSH_ACK: 02 007b 01
0:27:04.232095	LOG	PUSH_DATA: Protocol version = 02, Token = 007b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2324194734, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': -58, 'size': 15, 'data': 'QCAgICCAHgABGPtp9wp4'}]}
0:27:04.234092	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001e, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 69f70a78)
0:27:04.235091	LOG	Server <---------- DUT
0:27:04.238090	LOG	Attempt 3/15
0:27:12.874180	LOG	PULL_DATA: 02 2f3a 02 aa555a0000240409
0:27:12.879178	LOG	PULL_ACK: 02 2f3a 04
0:27:22.954451	LOG	PULL_DATA: 02 ffaf 02 aa555a0000240409
0:27:22.956450	LOG	PULL_ACK: 02 ffaf 04
0:27:33.033869	LOG	PULL_DATA: 02 2716 02 aa555a0000240409
0:27:33.035868	LOG	PULL_ACK: 02 2716 04
0:27:43.114139	LOG	PULL_DATA: 02 93ac 02 aa555a0000240409
0:27:43.117138	LOG	PULL_ACK: 02 93ac 04
0:27:53.194410	LOG	PULL_DATA: 02 071f 02 aa555a0000240409
0:27:53.195409	LOG	PULL_ACK: 02 071f 04
0:28:03.273680	LOG	PULL_DATA: 02 b86d 02 aa555a0000240409
0:28:03.275680	LOG	PULL_ACK: 02 b86d 04
0:28:13.353970	LOG	PULL_DATA: 02 1134 02 aa555a0000240409
0:28:13.357949	LOG	PULL_ACK: 02 1134 04
0:28:23.434221	LOG	PULL_DATA: 02 2d8d 02 aa555a0000240409
0:28:23.436220	LOG	PULL_ACK: 02 2d8d 04
0:28:33.513491	LOG	PULL_DATA: 02 ef4f 02 aa555a0000240409
0:28:33.515491	LOG	PULL_ACK: 02 ef4f 04
0:28:43.593924	LOG	PULL_DATA: 02 89d4 02 aa555a0000240409
0:28:43.598922	LOG	PULL_ACK: 02 89d4 04
0:28:53.673134	LOG	PULL_DATA: 02 b663 02 aa555a0000240409
0:28:53.675132	LOG	PULL_ACK: 02 b663 04
0:29:03.773392	LOG	PULL_DATA: 02 35c1 02 aa555a0000240409
0:29:03.775391	LOG	PULL_ACK: 02 35c1 04
0:29:04.311087	LOG	PUSH_ACK: 02 0080 01
0:29:04.313085	LOG	PUSH_DATA: Protocol version = 02, Token = 0080, Identifier = 00, JSON = {'rxpk': [{'tmst': 2444256886, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 6.8, 'rssi': -58, 'size': 15, 'data': 'QCAgICCAHwAB67akH+xz'}]}
0:29:04.314085	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001f, FOpts:), FPort: 01, FRMPayload: 0002, MIC: a41fec73)
0:29:04.315084	LOG	Server <---------- DUT
0:29:04.317084	LOG	Attempt 4/15
0:29:13.853775	LOG	PULL_DATA: 02 c7e4 02 aa555a0000240409
0:29:13.858772	LOG	PULL_ACK: 02 c7e4 04
0:29:23.934045	LOG	PULL_DATA: 02 2483 02 aa555a0000240409
0:29:23.936044	LOG	PULL_ACK: 02 2483 04
0:29:34.013315	LOG	PULL_DATA: 02 67d8 02 aa555a0000240409
0:29:34.015314	LOG	PULL_ACK: 02 67d8 04
0:29:44.093586	LOG	PULL_DATA: 02 ed96 02 aa555a0000240409
0:29:44.096585	LOG	PULL_ACK: 02 ed96 04
0:29:54.173856	LOG	PULL_DATA: 02 12ec 02 aa555a0000240409
0:29:54.175855	LOG	PULL_ACK: 02 12ec 04
0:30:04.253128	LOG	PULL_DATA: 02 4539 02 aa555a0000240409
0:30:04.255126	LOG	PULL_ACK: 02 4539 04
0:30:14.333397	LOG	PULL_DATA: 02 02d8 02 aa555a0000240409
0:30:14.338394	LOG	PULL_ACK: 02 02d8 04
0:30:24.413668	LOG	PULL_DATA: 02 e50a 02 aa555a0000240409
0:30:24.416666	LOG	PULL_ACK: 02 e50a 04
0:30:34.493937	LOG	PULL_DATA: 02 f89d 02 aa555a0000240409
0:30:34.496935	LOG	PULL_ACK: 02 f89d 04
0:30:44.573208	LOG	PULL_DATA: 02 7709 02 aa555a0000240409
0:30:44.578205	LOG	PULL_ACK: 02 7709 04
0:30:54.653569	LOG	PULL_DATA: 02 d1a5 02 aa555a0000240409
0:30:54.655569	LOG	PULL_ACK: 02 d1a5 04
0:31:04.343119	LOG	PUSH_ACK: 02 0088 01
0:31:04.344118	LOG	PUSH_DATA: Protocol version = 02, Token = 0088, Identifier = 00, JSON = {'rxpk': [{'tmst': 2564318982, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': -61, 'size': 15, 'data': 'QCAgICCAIAABRBKMwBPF'}]}
0:31:04.346118	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0020, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 8cc013c5)
0:31:04.347119	LOG	Server <---------- DUT
0:31:04.348118	LOG	Attempt 5/15
0:31:04.732897	LOG	PULL_DATA: 02 96c1 02 aa555a0000240409
0:31:04.734896	LOG	PULL_ACK: 02 96c1 04
0:31:14.813168	LOG	PULL_DATA: 02 f41f 02 aa555a0000240409
0:31:14.818166	LOG	PULL_ACK: 02 f41f 04
0:31:24.892440	LOG	PULL_DATA: 02 95aa 02 aa555a0000240409
0:31:24.894439	LOG	PULL_ACK: 02 95aa 04
0:31:34.972708	LOG	PULL_DATA: 02 82ca 02 aa555a0000240409
0:31:34.974708	LOG	PULL_ACK: 02 82ca 04
0:31:45.052979	LOG	PULL_DATA: 02 6c49 02 aa555a0000240409
0:31:45.057976	LOG	PULL_ACK: 02 6c49 04
0:31:55.132250	LOG	PULL_DATA: 02 ae90 02 aa555a0000240409
0:31:55.134249	LOG	PULL_ACK: 02 ae90 04
0:32:05.212519	LOG	PULL_DATA: 02 cd16 02 aa555a0000240409
0:32:05.214518	LOG	PULL_ACK: 02 cd16 04
0:32:15.292904	LOG	PULL_DATA: 02 68ba 02 aa555a0000240409
0:32:15.296901	LOG	PULL_ACK: 02 68ba 04
0:32:25.372218	LOG	PULL_DATA: 02 ac7a 02 aa555a0000240409
0:32:25.374218	LOG	PULL_ACK: 02 ac7a 04

0:32:35.452487	LOG	PULL_DATA: 02 a6f2 02 aa555a0000240409
0:32:35.454486	LOG	PULL_ACK: 02 a6f2 04
0:32:45.532757	LOG	PULL_DATA: 02 b4a8 02 aa555a0000240409
0:32:45.535755	LOG	PULL_ACK: 02 b4a8 04
0:32:55.612046	LOG	PULL_DATA: 02 ca99 02 aa555a0000240409
0:32:55.614026	LOG	PULL_ACK: 02 ca99 04
0:33:04.434029	LOG	PUSH_ACK: 02 008f 01
0:33:04.440026	LOG	PUSH_DATA: Protocol version = 02, Token = 008f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2684381150, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -58, 'size': 15, 'data': 'QCAgICCAIQABhmy+gxKl'}]}
0:33:04.443008	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0021, FOpts:), FPort: 01, FRMPayload: 0002, MIC: be8312a5)
0:33:04.447006	LOG	Server <---------- DUT
0:33:04.458997	LOG	Receive frame on specific channels process tested successfully
0:33:04.462997	LOG	End Test Step: Test DUT Configuration after reset
0:33:04.467992	LOG	Partial Verdict: PASS
0:33:04.473989	LOG	==========
0:33:04.480986	LOG	==========
0:33:04.483983	LOG	Start Test Step: Restore DUT Configuration
0:33:04.496975	LOG	Send MAC command block process starts
0:33:05.692458	LOG	PULL_DATA: 02 b2c2 02 aa555a0000240409
0:33:05.694457	LOG	PULL_ACK: 02 b2c2 04
0:33:15.772727	LOG	PULL_DATA: 02 372a 02 aa555a0000240409
0:33:15.776725	LOG	PULL_ACK: 02 372a 04
0:33:25.851996	LOG	PULL_DATA: 02 cb08 02 aa555a0000240409
0:33:25.853996	LOG	PULL_ACK: 02 cb08 04
0:33:35.932266	LOG	PULL_DATA: 02 cf61 02 aa555a0000240409
0:33:35.934265	LOG	PULL_ACK: 02 cf61 04
0:33:46.012535	LOG	PULL_DATA: 02 c9c3 02 aa555a0000240409
0:33:46.017533	LOG	PULL_ACK: 02 c9c3 04
0:33:56.091805	LOG	PULL_DATA: 02 805e 02 aa555a0000240409
0:33:56.093804	LOG	PULL_ACK: 02 805e 04
0:34:06.172074	LOG	PULL_DATA: 02 6e03 02 aa555a0000240409
0:34:06.174074	LOG	PULL_ACK: 02 6e03 04
0:34:16.252344	LOG	PULL_DATA: 02 28da 02 aa555a0000240409
0:34:16.256342	LOG	PULL_ACK: 02 28da 04
0:34:26.331615	LOG	PULL_DATA: 02 4cd7 02 aa555a0000240409
0:34:26.333613	LOG	PULL_ACK: 02 4cd7 04
0:34:36.411886	LOG	PULL_DATA: 02 6a19 02 aa555a0000240409
0:34:36.413883	LOG	PULL_ACK: 02 6a19 04
0:34:46.491153	LOG	PULL_DATA: 02 edd2 02 aa555a0000240409
0:34:46.495151	LOG	PULL_ACK: 02 edd2 04
0:34:56.571713	LOG	PULL_DATA: 02 d399 02 aa555a0000240409
0:34:56.573712	LOG	PULL_ACK: 02 d399 04
0:35:04.474222	LOG	PUSH_ACK: 02 0095 01
0:35:04.476221	LOG	PUSH_DATA: Protocol version = 02, Token = 0095, Identifier = 00, JSON = {'rxpk': [{'tmst': 2804443286, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -58, 'size': 15, 'data': 'QCAgICCAIgAB6Y301Oj0'}]}
0:35:04.477220	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0022, FOpts:), FPort: 01, FRMPayload: 0002, MIC: f4d4e8f4)
0:35:04.479223	LOG	Server <---------- DUT

0:35:04.481221	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000f, FOpts:), FPort: 00, FRMPayload: 0500d2ad840a0028768408010350000061), MIC: 4972407b)
0:35:04.484214	LOG	PULL_RESP: Protocol version = 02, Token = 453f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2807443286, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 868.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 30, 'data': 'YCAgICAADwAA73SdWrfFnXTdCYPYIWf21+tJckB7'}}
0:35:04.485214	LOG	Server ----------> DUT
0:35:04.489212	LOG	TX_ACK: 02 453f 05 aa555a0000240409
0:35:06.581560	LOG	PULL_DATA: 02 4c79 02 aa555a0000240409
0:35:06.583560	LOG	PULL_ACK: 02 4c79 04
0:35:16.661839	LOG	PULL_DATA: 02 8b00 02 aa555a0000240409
0:35:16.665837	LOG	PULL_ACK: 02 8b00 04
0:35:26.741108	LOG	PULL_DATA: 02 2256 02 aa555a0000240409
0:35:26.743108	LOG	PULL_ACK: 02 2256 04
0:35:36.831372	LOG	PULL_DATA: 02 9ad4 02 aa555a0000240409
0:35:36.833371	LOG	PULL_ACK: 02 9ad4 04
0:35:46.911642	LOG	PULL_DATA: 02 18d1 02 aa555a0000240409
0:35:46.915640	LOG	PULL_ACK: 02 18d1 04
0:35:56.991911	LOG	PULL_DATA: 02 fee4 02 aa555a0000240409
0:35:56.993910	LOG	PULL_ACK: 02 fee4 04
0:36:07.071181	LOG	PULL_DATA: 02 d9cd 02 aa555a0000240409
0:36:07.073180	LOG	PULL_ACK: 02 d9cd 04
0:36:17.151450	LOG	PULL_DATA: 02 45a3 02 aa555a0000240409
0:36:17.155448	LOG	PULL_ACK: 02 45a3 04
0:36:27.230719	LOG	PULL_DATA: 02 91c6 02 aa555a0000240409
0:36:27.232719	LOG	PULL_ACK: 02 91c6 04
0:36:37.320983	LOG	PULL_DATA: 02 01ff 02 aa555a0000240409
0:36:37.322982	LOG	PULL_ACK: 02 01ff 04
0:36:47.401253	LOG	PULL_DATA: 02 c92a 02 aa555a0000240409
0:36:47.409249	LOG	PULL_ACK: 02 c92a 04
0:36:57.491517	LOG	PULL_DATA: 02 d915 02 aa555a0000240409
0:36:57.493515	LOG	PULL_ACK: 02 d915 04
0:37:03.423218	LOG	PUSH_ACK: 02 009b 01
0:37:03.425218	LOG	PUSH_DATA: Protocol version = 02, Token = 009b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2923407103, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -45, 'size': 22, 'data': 'QCAgICCHIwAFBwoDCAMHAcdORQhONw==\'}]}
0:37:03.426217	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 87, FCnt: 0023, FOpts: 05070a03080307), FPort: 01, FRMPayload: 0002, MIC: 45084e37)
0:37:03.428218	LOG	Server <---------- DUT
0:37:03.429218	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:37:03.431216	LOG	Command Answer: 05070a03080307
0:37:03.528159	LOG	MAC command communication completed
0:37:03.531157	LOG	End Test Step: Restore DUT Configuration
0:37:03.534155	LOG	Partial Verdict: PASS
0:37:03.538153	LOG	==========
0:37:03.545149	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_001_B
0:37:03.548148	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_002
Verdict	PASS
Date	2021-10-18 13:09:42
Comments	Cryptography

Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.013192	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_002
0:00:00.053169	LOG	==========
0:00:00.055168	LOG	Start Test Step: Device activation
0:00:00.113135	LOG	Activation process has finished successfully
0:00:00.116133	LOG	Data stored in the DUT after Activation:
0:00:00.118133	LOG	DevAddr: 20202020
0:00:00.120131	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.123129	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.126128	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.129126	LOG	End Test Step: Device activation
0:00:00.133124	LOG	Partial Verdict: PASS
0:00:00.138121	LOG	==========
0:00:00.144117	LOG	==========
0:00:00.146117	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.159110	LOG	DUT Pre-condition activation process starts
0:00:00.162107	LOG	DUT Pre-condition activation completed
0:00:00.166105	LOG	End Test Step: DUT Pre-condition settings
0:00:00.170103	LOG	Partial Verdict: PASS
0:00:00.174100	LOG	==========
0:00:00.178098	LOG	==========
0:00:00.180097	LOG	Start Test Step: AES Encryption
0:00:00.193090	LOG	Send Test Command EchoPayloadReq process starts
0:00:01.559348	LOG	PULL_DATA: 02 a899 02 aa555a0000240409
0:00:01.561346	LOG	PULL_ACK: 02 a899 04
0:00:01.565316	LOG	First PULL_DATA received
0:00:01.708232	LOG	PUSH_ACK: 02 0076 01
0:00:01.714228	LOG	PUSH_DATA: Protocol version = 02, Token = 0076, Identifier = 00, JSON = {'rxpk': [{'tmst': 609484358, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAFAABY5V5u0iq'}]}
0:00:01.718226	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0014, FOpts:), FPort: 01, FRMPayload: 001c, MIC: 79bb48aa)
0:00:01.721224	LOG	Server <---------- DUT
0:00:01.722226	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0027, FOpts:), FPort: e0, FRMPayload: 0801), MIC: 190bbc90)
0:00:01.724223	LOG	Frame command sent to the DUT
0:00:01.726222	LOG	PULL_RESP: Protocol version = 02, Token = 0211, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 611484358, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAJwDgUm4ZC7yQ'}}
0:00:01.727223	LOG	Server ----------> DUT
0:00:01.732218	LOG	TX_ACK: 02 0211 05 aa555a0000240409
0:00:06.699473	LOG	PUSH_ACK: 02 0077 01
0:00:06.701454	LOG	PUSH_DATA: Protocol version = 02, Token = 0077, Identifier = 00, JSON = {'rxpk': [{'tmst': 614489752, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAFQDgbjdDgHNd'}]}
0:00:06.702453	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0015, FOpts:), FPort: e0, FRMPayload: 0802, MIC: 4380735d)
0:00:06.703455	LOG	Server <---------- DUT
0:00:06.705453	LOG	Answer in payload: 02
0:00:06.706451	LOG	Frame Command Payload in the Answer: 0802
0:00:06.710451	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:06.714447	LOG	Send Test Command EchoPayloadReq process completed
0:00:06.717445	LOG	Send Test Command EchoPayloadReq process starts
0:00:11.598735	LOG	PULL_DATA: 02 0f95 02 aa555a0000240409
0:00:11.600734	LOG	PULL_ACK: 02 0f95 04
0:00:11.742653	LOG	PUSH_ACK: 02 0078 01
0:00:11.747651	LOG	PUSH_DATA: Protocol version = 02, Token = 0078, Identifier = 00, JSON = {'rxpk': [{'tmst': 619489576, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAFgABwuymbe1D'}]}
0:00:11.749649	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0016, FOpts:), FPort: 01, FRMPayload: 001d, MIC: a66ded43)
0:00:11.750649	LOG	Server <---------- DUT
0:00:11.753647	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0028, FOpts:), FPort: e0, FRMPayload: 080f0f0f0f0f0f0f0f0f0f0f0f0f0f), MIC: fc278fff)
0:00:11.755648	LOG	Frame command sent to the DUT
0:00:11.757647	LOG	PULL_RESP: Protocol version = 02, Token = a139, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 621489576, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 29, 'data': 'YCAgICAAKADg1nFAoeEhQgxTzfjkavQGhPwnj/8='}}
0:00:11.758644	LOG	Server ----------> DUT
0:00:11.763641	LOG	TX_ACK: 02 a139 05 aa555a0000240409
0:00:16.733828	LOG	PUSH_ACK: 02 0079 01
0:00:16.735826	LOG	PUSH_DATA: Protocol version = 02, Token = 0079, Identifier = 00, JSON = {'rxpk': [{'tmst': 624518066, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 29, 'data': 'QCAgICCAFwDgFd1VucjDtu91qunNBtiQzchzOEE='}]}
0:00:16.737827	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0017, FOpts:), FPort: e0, FRMPayload: 08101010101010101010101010101010, MIC: c8733841)
0:00:16.738826	LOG	Server <---------- DUT
0:00:16.739824	LOG	Answer in payload: 10101010101010101010101010101010
0:00:16.740826	LOG	Frame Command Payload in the Answer: 08101010101010101010101010101010
0:00:16.744823	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:16.748822	LOG	Send Test Command EchoPayloadReq process completed
0:00:16.755815	LOG	Send Test Command EchoPayloadReq process starts
0:00:21.628075	LOG	PULL_DATA: 02 b1eb 02 aa555a0000240409
0:00:21.630056	LOG	PULL_ACK: 02 b1eb 04
0:00:26.726171	LOG	PUSH_ACK: 02 007b 01
0:00:26.730168	LOG	PUSH_DATA: Protocol version = 02, Token = 007b, Identifier = 00, JSON = {'rxpk': [{'tmst': 634497402, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAGAABtGRgG21a'}]}
0:00:26.734167	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0018, FOpts:), FPort: 01, FRMPayload: 001e, MIC: 601b6d5a)
0:00:26.737165	LOG	Server <---------- DUT

0:00:26.740165	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0029, FOpts:), FPort: e0, FRMPayload: 08202020202020202020202020202020202020202020), MIC: 9ae66da0)
0:00:26.745160	LOG	Frame command sent to the DUT
0:00:26.749158	LOG	PULL_RESP: Protocol version = 02, Token = f03a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 636497402, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 34, 'data': 'YCAgICAAKQDgu6tyXEHbwoZvJoXT1ubnNj2GnxjVmuZtoA=='}}
0:00:26.750157	LOG	Server ----------> DUT
0:00:26.753156	LOG	TX_ACK: 02 f03a 05 aa555a0000240409
0:00:31.751071	LOG	PUSH_ACK: 02 007c 01
0:00:31.755067	LOG	PUSH_DATA: Protocol version = 02, Token = 007c, Identifier = 00, JSON = {'rxpk': [{'tmst': 639537059, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 34, 'data': 'QCAgICCAGQDgrvXctqHN1i1hdQXEoIiIM31WEpx1nuGCUg=='}]}
0:00:31.756067	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0019, FOpts:), FPort: e0, FRMPayload: 08212121212121212121212121212121212121212121), MIC: 9ee18252)
0:00:31.757066	LOG	Server <---------- DUT
0:00:31.759065	LOG	Answer in payload: 212121212121212121212121212121212121212121
0:00:31.760065	LOG	Frame Command Payload in the Answer: 08212121212121212121212121212121212121212121
0:00:31.765062	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:31.770059	LOG	Send Test Command EchoPayloadReq process completed
0:00:31.775057	LOG	Send Test Command EchoPayloadReq process starts
0:00:31.789048	LOG	PULL_DATA: 02 f1b3 02 aa555a0000240409
0:00:31.790048	LOG	PULL_ACK: 02 f1b3 04
0:00:41.726462	LOG	PUSH_ACK: 02 007d 01
0:00:41.728466	LOG	PUSH_DATA: Protocol version = 02, Token = 007d, Identifier = 00, JSON = {'rxpk': [{'tmst': 649505227, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAGgAB5rXlS1qx'}]}
0:00:41.730459	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001a, FOpts:), FPort: 01, FRMPayload: 001f, MIC: e54b5ab1)
0:00:41.731458	LOG	Server <---------- DUT
0:00:41.734456	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002a, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 674581de)
0:00:41.737454	LOG	Frame command sent to the DUT
0:00:41.739453	LOG	PULL_RESP: Protocol version = 02, Token = 5156, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 651505227, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAKgDg92dZ3e4dq3jCBf6CTsNsZtLAYX0w0v2TdbjXyG8tZTAU/VXerjcYteN/uned4h5SvrD/Z0WB3g=='}}
0:00:41.740452	LOG	Server ----------> DUT
0:00:41.743450	LOG	TX_ACK: 02 5156 05 aa555a0000240409
0:00:41.948625	LOG	PULL_DATA: 02 05ef 02 aa555a0000240409
0:00:41.951622	LOG	PULL_ACK: 02 05ef 04
0:00:46.815896	LOG	PUSH_ACK: 02 007e 01
0:00:46.818895	LOG	PUSH_DATA: Protocol version = 02, Token = 007e, Identifier = 00, JSON = {'rxpk': [{'tmst': 654591357, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 64, 'data': 'QCAgICCAGwDgRw+T9PYld013UJh5hBEOuJIziutqUfvfcxNNke7RX5XyZExcLQj+C/vcE3fGgxgVv9S70NAU2Q=='}]}

0:00:46.819894	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001b, FOpts:), FPort: e0, FRMPayload: 080202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202, MIC: d0d014d9)
0:00:46.821894	LOG	Server <---------- DUT
0:00:46.822893	LOG	Answer in payload: 020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:46.824891	LOG	Frame Command Payload in the Answer: 080202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:46.829890	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:46.833886	LOG	Send Test Command EchoPayloadReq process completed
0:00:46.836885	LOG	End Test Step: AES Encryption
0:00:46.841883	LOG	Partial Verdict: PASS
0:00:46.847879	LOG	==========
0:00:46.854876	LOG	==========
0:00:46.857872	LOG	Start Test Step: Message Integrity Code
0:00:46.877861	LOG	Send Test Command EchoPayloadReq (with bad MIC) process starts
0:00:52.047934	LOG	PULL_DATA: 02 f700 02 aa555a0000240409
0:00:52.049933	LOG	PULL_ACK: 02 f700 04
0:01:01.738448	LOG	PUSH_ACK: 02 0080 01
0:01:01.741447	LOG	PUSH_DATA: Protocol version = 02, Token = 0080, Identifier = 00, JSON = {'rxpk': [{'tmst': 669515701, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAHAAByww1G1OL'}]}
0:01:01.742446	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001c, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 351b538b)
0:01:01.744445	LOG	Server <---------- DUT
0:01:01.746444	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002b, FOpts:), FPort: e0, FRMPayload: 0801), MIC: 8c29d5b8)
0:01:01.749442	LOG	Frame command sent to the DUT
0:01:01.751442	LOG	PULL_RESP: Protocol version = 02, Token = ee95, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 671515701, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAKwDgfimMKdW4'}}
0:01:01.753440	LOG	Server ----------> DUT
0:01:01.757438	LOG	TX_ACK: 02 ee95 05 aa555a0000240409
0:01:02.168205	LOG	PULL_DATA: 02 e9a1 02 aa555a0000240409
0:01:02.170204	LOG	PULL_ACK: 02 e9a1 04
0:01:06.730623	LOG	PUSH_ACK: 02 0081 01
0:01:06.732622	LOG	PUSH_DATA: Protocol version = 02, Token = 0081, Identifier = 00, JSON = {'rxpk': [{'tmst': 674518286, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAHQABGQSIt9jI'}]}
0:01:06.734621	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001d, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 88b7d8c8)
0:01:06.735620	LOG	Server <---------- DUT
0:01:06.737618	LOG	Command Sent header: 08
0:01:06.738618	LOG	Payload received from the DUT (bad MIC sent): 0020
0:01:06.739617	LOG	Payload sent by the DUT before send the command: 0020
0:01:06.740616	LOG	Echo with bad mic has been sent. DUT must ignore it
0:01:06.741616	LOG	Frame Command Payload in the Answer: 0020
0:01:06.745614	LOG	Checking if the payload of the EchoPayloadAns is not correct (bad MIC)
0:01:06.748612	LOG	Send Test Command EchoPayloadReq (with bad MIC) process completed
0:01:06.753609	LOG	Send Test Command EchoPayloadReq (with bad MIC) process starts

0:01:11.772004	LOG	PUSH_ACK: 02 0082 01
0:01:11.775001	LOG	PUSH_DATA: Protocol version = 02, Token = 0082, Identifier = 00, JSON = {'rxpk': [{'tmst': 679520886, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAHgABWmuyMjIi'}]}
0:01:11.776999	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001e, FOpts:), FPort: 01, FRMPayload: 0020, MIC: b2323222)
0:01:11.777998	LOG	Server <---------- DUT
0:01:11.780966	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002c, FOpts:), FPort: e0, FRMPayload: 080f0f0f0f0f0f0f0f0f0f0f0f0f0f), MIC: 96c19efd)
0:01:11.783964	LOG	Frame command sent to the DUT
0:01:11.785964	LOG	PULL_RESP: Protocol version = 02, Token = 192c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 681520886, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 29, 'data': 'YCAgICAALADg6Vrua86aFxdM3XON0XZE45bBnv0='}}
0:01:11.787962	LOG	Server ----------> DUT
0:01:11.792962	LOG	TX_ACK: 02 192c 05 aa555a0000240409
0:01:12.207756	LOG	PULL_DATA: 02 3ae5 02 aa555a0000240409
0:01:12.210753	LOG	PULL_ACK: 02 3ae5 04
0:01:16.764179	LOG	PUSH_ACK: 02 0083 01
0:01:16.767179	LOG	PUSH_DATA: Protocol version = 02, Token = 0083, Identifier = 00, JSON = {'rxpk': [{'tmst': 684523490, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAHwABbopQjNgu'}]}
0:01:16.768176	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001f, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 508cd82e)
0:01:16.769176	LOG	Server <---------- DUT
0:01:16.770175	LOG	Command Sent header: 08
0:01:16.772174	LOG	Payload received from the DUT (bad MIC sent): 0020
0:01:16.773174	LOG	Payload sent by the DUT before send the command: 0020
0:01:16.774173	LOG	Echo with bad mic has been sent. DUT must ignore it
0:01:16.775173	LOG	Frame Command Payload in the Answer: 0020
0:01:16.779170	LOG	Checking if the payload of the EchoPayloadAns is not correct (bad MIC)
0:01:16.782169	LOG	Send Test Command EchoPayloadReq (with bad MIC) process completed
0:01:16.785169	LOG	Send Test Command EchoPayloadReq (with bad MIC) process starts
0:01:21.756353	LOG	PUSH_ACK: 02 0084 01
0:01:21.758352	LOG	PUSH_DATA: Protocol version = 02, Token = 0084, Identifier = 00, JSON = {'rxpk': [{'tmst': 689526106, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAIAAB7eL8WK5b'}]}
0:01:21.760350	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0020, FOpts:), FPort: 01, FRMPayload: 0020, MIC: fc58ae5b)
0:01:21.762350	LOG	Server <---------- DUT
0:01:21.764349	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002d, FOpts:), FPort: e0, FRMPayload: 08202020202020202020202020202020202020202020), MIC: 2f18df44)
0:01:21.767347	LOG	Frame command sent to the DUT
0:01:21.768346	LOG	PULL_RESP: Protocol version = 02, Token = 4a4d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 691526106, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 34, 'data': 'YCAgICAALQDg9MKP9qPzj+c71MylCj2OOsv5jchdLxjfRA=='}}
0:01:21.771345	LOG	Server ----------> DUT
0:01:21.776341	LOG	TX_ACK: 02 4a4d 05 aa555a0000240409
0:01:22.397990	LOG	PULL_DATA: 02 ca0b 02 aa555a0000240409

0:01:22.399988	LOG	PULL_ACK: 02 ca0b 04
0:01:26.744530	LOG	PUSH_ACK: 02 0086 01
0:01:26.746528	LOG	PUSH_DATA: Protocol version = 02, Token = 0086, Identifier = 00, JSON = {'rxpk': [{'tmst': 694528707, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAIQABy8hBsHgc'}]}
0:01:26.748527	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0021, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 41b0781c)
0:01:26.749526	LOG	Server <---------- DUT
0:01:26.751525	LOG	Command Sent header: 08
0:01:26.752525	LOG	Payload received from the DUT (bad MIC sent): 0020
0:01:26.754524	LOG	Payload sent by the DUT before send the command: 0020
0:01:26.756522	LOG	Echo with bad mic has been sent. DUT must ignore it
0:01:26.758522	LOG	Frame Command Payload in the Answer: 0020
0:01:26.763518	LOG	Checking if the payload of the EchoPayloadAns is not correct (bad MIC)
0:01:26.766516	LOG	Send Test Command EchoPayloadReq (with bad MIC) process completed
0:01:26.771514	LOG	Send Test Command EchoPayloadReq (with bad MIC) process starts
0:01:31.786759	LOG	PUSH_ACK: 02 0087 01
0:01:31.791724	LOG	PUSH_DATA: Protocol version = 02, Token = 0087, Identifier = 00, JSON = {'rxpk': [{'tmst': 699531315, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAIgAB+JInHy6Y'}]}
0:01:31.792725	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0022, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 271f2e98)
0:01:31.793725	LOG	Server <---------- DUT
0:01:31.795724	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002e, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 30db780c)
0:01:31.797722	LOG	Frame command sent to the DUT
0:01:31.798720	LOG	PULL_RESP: Protocol version = 02, Token = 696b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 701531315, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAALgDgFH2SVt68/gwmq7hRCtpI91BcFc6j/ox3QJdDYnemGcBH/YEoUOe7NhRqF6Zf4elMEQAFMNt4DA=='}}
0:01:31.800721	LOG	Server ----------> DUT
0:01:31.805716	LOG	TX_ACK: 02 696b 05 aa555a0000240409
0:01:32.428383	LOG	PULL_DATA: 02 cbd0 02 aa555a0000240409
0:01:32.429365	LOG	PULL_ACK: 02 cbd0 04
0:01:41.776045	LOG	PUSH_ACK: 02 0088 01
0:01:41.778041	LOG	PUSH_DATA: Protocol version = 02, Token = 0088, Identifier = 00, JSON = {'rxpk': [{'tmst': 709536559, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAIwABYDv8FNVJ'}]}
0:01:41.780040	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0023, FOpts:), FPort: 01, FRMPayload: 0020, MIC: fc14d549)
0:01:41.781038	LOG	Server <---------- DUT
0:01:41.783037	LOG	Command Sent header: 08
0:01:41.784037	LOG	Payload received from the DUT (bad MIC sent): 0020
0:01:41.785039	LOG	Payload sent by the DUT before send the command: 0020
0:01:41.787035	LOG	Echo with bad mic has been sent. DUT must ignore it
0:01:41.788034	LOG	Frame Command Payload in the Answer: 0020
0:01:41.794032	LOG	Checking if the payload of the EchoPayloadAns is not correct (bad MIC)
0:01:41.797029	LOG	Send Test Command EchoPayloadReq (with bad MIC) process completed
0:01:41.801028	LOG	End Test Step: Message Integrity Code

0:01:41.807023	LOG	Partial Verdict: PASS
0:01:41.811021	LOG	==========
0:01:41.816020	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_002
0:01:41.818018	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_003	
Verdict	PASS	
Date	2021-10-18 13:11:27	
Comments	Downlink Sequence Number	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.012114	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_003
0:00:00.046094	LOG	==========
0:00:00.048091	LOG	Start Test Step: Device activation
0:00:00.108057	LOG	Activation process has finished successfully
0:00:00.110056	LOG	Data stored in the DUT after Activation:
0:00:00.113054	LOG	DevAddr: 20202020
0:00:00.115053	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.118051	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.120051	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.123049	LOG	End Test Step: Device activation
0:00:00.128046	LOG	Partial Verdict: PASS
0:00:00.134043	LOG	==========
0:00:00.139040	LOG	==========
0:00:00.142040	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.154031	LOG	DUT Pre-condition activation process starts
0:00:00.157030	LOG	DUT Pre-condition activation completed
0:00:00.161027	LOG	End Test Step: DUT Pre-condition settings
0:00:00.165026	LOG	Partial Verdict: PASS
0:00:00.169023	LOG	==========
0:00:00.173020	LOG	==========
0:00:00.175021	LOG	Start Test Step: Downlink Sequence Number
0:00:00.190012	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:02.175925	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:07.169101	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:07.995629	LOG	PULL_DATA: 02 64bd 02 aa555a0000240409
0:00:07.997628	LOG	PULL_ACK: 02 64bd 04
0:00:07.999627	LOG	First PULL_DATA received
0:00:12.182258	LOG	PUSH_ACK: 02 008c 01
0:00:12.184257	LOG	PUSH_DATA: Protocol version = 02, Token = 008c, Identifier = 00, JSON = {'rxpk': [{'tmst': 724544375, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAJgABsxXhjDxa'}]}
0:00:12.186257	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0026, FOpts:), FPort: 01, FRMPayload: 0020, MIC: e18c3c5a)
0:00:12.187258	LOG	Server <---------- DUT

0:00:12.189255	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0093, FOpts:), FPort: e0, FRMPayload: 0700), MIC: d2dd0eaa)
0:00:12.192253	LOG	Frame command sent to the DUT
0:00:12.193253	LOG	PULL_RESP: Protocol version = 02, Token = 6bf4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 726544375, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAkwDgQqbS3Q6q'}}
0:00:12.194252	LOG	Server ----------> DUT
0:00:12.199249	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:12.209244	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:17.164438	LOG	PUSH_ACK: 02 008d 01
0:00:17.166437	LOG	PUSH_DATA: Protocol version = 02, Token = 008d, Identifier = 00, JSON = {'rxpk': [{'tmst': 729546978, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAJwABaM6QZFmE'}]}
0:00:17.168436	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0027, FOpts:), FPort: 01, FRMPayload: 0021, MIC: 90645984)
0:00:17.169437	LOG	Server <---------- DUT
0:00:17.171434	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0092, FOpts:), FPort: e0, FRMPayload: 0702), MIC: 8b10798d)
0:00:17.174434	LOG	Frame command sent to the DUT
0:00:17.177431	LOG	PULL_RESP: Protocol version = 02, Token = f54e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 731546978, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAkgDgVq+LEHmN'}}
0:00:17.178430	LOG	Server ----------> DUT
0:00:17.182428	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:17.193422	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:18.015961	LOG	PULL_DATA: 02 1f23 02 aa555a0000240409
0:00:18.018961	LOG	PULL_ACK: 02 1f23 04
0:00:22.166646	LOG	PUSH_ACK: 02 008e 01
0:00:22.168646	LOG	PUSH_DATA: Protocol version = 02, Token = 008e, Identifier = 00, JSON = {'rxpk': [{'tmst': 734549588, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAKAABlaG2IHXi'}]}
0:00:22.170645	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0028, FOpts:), FPort: 01, FRMPayload: 0021, MIC: b62075e2)
0:00:22.171644	LOG	Server <---------- DUT
0:00:22.172643	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0091, FOpts:), FPort: e0, FRMPayload: 0702), MIC: 7938f81b)
0:00:22.174643	LOG	Frame command sent to the DUT
0:00:22.176639	LOG	PULL_RESP: Protocol version = 02, Token = abc0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 736549588, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAkQDgkm95OPgb'}}
0:00:22.178638	LOG	Server ----------> DUT
0:00:22.182636	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:22.193630	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:27.169843	LOG	PUSH_ACK: 02 008f 01
0:00:27.171842	LOG	PUSH_DATA: Protocol version = 02, Token = 008f, Identifier = 00, JSON = {'rxpk': [{'tmst': 739552198, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAKQABF41ClvUa'}]}
0:00:27.172840	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0029, FOpts:), FPort: 01, FRMPayload: 0021, MIC: 4296f51a)
0:00:27.173841	LOG	Server <---------- DUT

0:00:27.176839	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0090, FOpts:), FPort: e0, FRMPayload: 0702), MIC: 3519cad7)
0:00:27.179837	LOG	Frame command sent to the DUT
0:00:27.181837	LOG	PULL_RESP: Protocol version = 02, Token = 0fa4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 741552198, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAkADgOcc1GcrX'}}
0:00:27.183836	LOG	Server ----------> DUT
0:00:27.187802	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:27.196797	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:28.025333	LOG	PULL_DATA: 02 1ea8 02 aa555a0000240409
0:00:28.026357	LOG	PULL_ACK: 02 1ea8 04
0:00:32.171982	LOG	PUSH_ACK: 02 0090 01
0:00:32.175979	LOG	PUSH_DATA: Protocol version = 02, Token = 0090, Identifier = 00, JSON = {'rxpk': [{'tmst': 744554791, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAKgAB2GsAJ+jD'}]}
0:00:32.176978	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002a, FOpts:), FPort: 01, FRMPayload: 0021, MIC: 0027e8c3)
0:00:32.177978	LOG	Server <---------- DUT
0:00:32.179978	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 008f, FOpts:), FPort: e0, FRMPayload: 0702), MIC: b26ca940)
0:00:32.181976	LOG	Frame command sent to the DUT
0:00:32.182976	LOG	PULL_RESP: Protocol version = 02, Token = 7786, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 746554791, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAjwDg1KaybKlA'}}
0:00:32.183975	LOG	Server ----------> DUT
0:00:32.186973	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:32.223951	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:00:37.174235	LOG	PUSH_ACK: 02 0092 01
0:00:37.176233	LOG	PUSH_DATA: Protocol version = 02, Token = 0092, Identifier = 00, JSON = {'rxpk': [{'tmst': 749557391, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAKwABjtsvz+eU'}]}
0:00:37.177232	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002b, FOpts:), FPort: 01, FRMPayload: 0021, MIC: 2fcfe794)
0:00:37.179231	LOG	Server <---------- DUT
0:00:37.181230	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:00:37.189225	LOG	End Test Step: Downlink Sequence Number
0:00:37.192224	LOG	Partial Verdict: PASS
0:00:37.198220	LOG	==========
0:00:37.204218	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_003
0:00:37.207215	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_004
Verdict	PASS
Date	2021-10-18 13:12:06
Comments	Confirmed Frames
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1
Project	MLSv2.0.0
Project Creation Date	2021-10-17 22:25:22
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B

Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.012750	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_004
0:00:00.047731	LOG	==========
0:00:00.049730	LOG	Start Test Step: Device activation
0:00:00.107696	LOG	Activation process has finished successfully
0:00:00.110695	LOG	Data stored in the DUT after Activation:
0:00:00.113694	LOG	DevAddr: 20202020
0:00:00.115692	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.118692	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.121689	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.125688	LOG	End Test Step: Device activation
0:00:00.129684	LOG	Partial Verdict: PASS
0:00:00.132683	LOG	==========
0:00:00.136680	LOG	==========
0:00:00.139679	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.149673	LOG	DUT Pre-condition activation process starts
0:00:00.153673	LOG	DUT Pre-condition activation completed
0:00:00.157669	LOG	End Test Step: DUT Pre-condition settings
0:00:00.162666	LOG	Partial Verdict: PASS
0:00:00.165664	LOG	==========
0:00:00.170662	LOG	==========
0:00:00.173659	LOG	Start Test Step: Confirmed Uplinks
0:00:00.185653	LOG	Send Test Command RxAppCntReq process starts
0:00:01.928699	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:06.921873	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:07.889325	LOG	PULL_DATA: 02 64c5 02 aa555a0000240409
0:00:07.891324	LOG	PULL_ACK: 02 64c5 04
0:00:07.893323	LOG	First PULL_DATA received
0:00:11.921044	LOG	PUSH_ACK: 02 0096 01
0:00:11.927041	LOG	PUSH_DATA: Protocol version = 02, Token = 0096, Identifier = 00, JSON = {'rxpk': [{'tmst': 764565207, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCALgABbqcpiapg'}]}
0:00:11.931039	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002e, FOpts:), FPort: 01, FRMPayload: 0021, MIC: 2989aa60)
0:00:11.934038	LOG	Server <---------- DUT
0:00:11.939034	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0126, FOpts:), FPort: e0, FRMPayload: 09), MIC: d48f2018)
0:00:11.942033	LOG	Frame command sent to the DUT
0:00:11.944031	LOG	PULL_RESP: Protocol version = 02, Token = 334d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 766565207, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAJgHgvtSPIBg='}}
0:00:11.946030	LOG	Server ----------> DUT
0:00:11.950028	LOG	TX_ACK: 02 334d 05 aa555a0000240409
0:00:16.981179	LOG	PUSH_ACK: 02 0097 01
0:00:16.984194	LOG	PUSH_DATA: Protocol version = 02, Token = 0097, Identifier = 00, JSON = {'rxpk': [{'tmst': 769575889, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 16, 'data': 'QCAgICCALwDg6U3EldsqQw=='}]}
0:00:16.985195	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002f, FOpts:), FPort: e0, FRMPayload: 092200, MIC: 95db2a43)
0:00:16.987176	LOG	Server <---------- DUT

0:00:16.988175	LOG	Answer in payload: 2200
0:00:16.990173	LOG	Frame Command Payload in the Answer: 092200
0:00:16.994170	LOG	RX Count received by DUT: 34
0:00:16.996169	LOG	Send Test Command RxAppCntReq process completed
0:00:17.000168	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:18.039579	LOG	PULL_DATA: 02 1473 02 aa555a0000240409
0:00:18.041578	LOG	PULL_ACK: 02 1473 04
0:00:26.953532	LOG	PUSH_ACK: 02 0098 01
0:00:26.956531	LOG	PUSH_DATA: Protocol version = 02, Token = 0098, Identifier = 00, JSON = {'rxpk': [{'tmst': 779573033, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAMAAByre6hqwd'}]}
0:00:26.957530	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0030, FOpts:), FPort: 01, FRMPayload: 0022, MIC: ba86ac1d)
0:00:26.959529	LOG	Server <---------- DUT
0:00:26.961528	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0127, FOpts:), FPort: e0, FRMPayload: 0702), MIC: 0244b6cb)
0:00:26.965526	LOG	Frame command sent to the DUT
0:00:26.967525	LOG	PULL_RESP: Protocol version = 02, Token = 5147, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 781573033, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAJwHgSNYCRLbL'}}
0:00:26.969524	LOG	Server ----------> DUT
0:00:26.979518	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:26.984515	LOG	Wait Until Confirmed Uplink arrives process starts
0:00:28.238804	LOG	PULL_DATA: 02 5ac5 02 aa555a0000240409
0:00:28.241805	LOG	PULL_ACK: 02 5ac5 04
0:00:31.945121	LOG	PUSH_ACK: 02 009a 01
0:00:31.949120	LOG	PUSH_DATA: Protocol version = 02, Token = 009a, Identifier = 00, JSON = {'rxpk': [{'tmst': 784575466, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'gCAgICCAMQAB3KAIkJl2'}]}
0:00:31.950119	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0031, FOpts:), FPort: 01, FRMPayload: 0023, MIC: 08909976)
0:00:31.952118	LOG	Server <---------- DUT
0:00:31.955115	LOG	Wait Until Confirmed Uplink arrives tested successfully
0:00:31.960112	LOG	Send ACK to DUT process starts
0:00:31.963111	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 20, FCnt: 0128, FOpts:), FPort: , FRMPayload:), MIC: 73c7b23b)
0:00:31.967109	LOG	PULL_RESP: Protocol version = 02, Token = 6bd3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 786575466, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 12, 'data': 'YCAgICAgKAFzx7I7'}}
0:00:31.968108	LOG	Server ----------> DUT
0:00:31.979101	LOG	Send ACK to DUT tested successfully
0:00:31.985099	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:36.980307	LOG	PUSH_ACK: 02 009b 01
0:00:36.982305	LOG	PUSH_DATA: Protocol version = 02, Token = 009b, Identifier = 00, JSON = {'rxpk': [{'tmst': 789578084, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'gCAgICCAMgABaIjqLtnf'}]}
0:00:36.984305	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0032, FOpts:), FPort: 01, FRMPayload: 0024, MIC: ea2ed9df)
0:00:36.986305	LOG	Server <---------- DUT
0:00:36.988302	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 20, FCnt: 0129, FOpts:), FPort: e0, FRMPayload: 0700), MIC: cc9408d1)

0:00:36.991301	LOG	Frame command sent to the DUT
0:00:36.993300	LOG	PULL_RESP: Protocol version = 02, Token = fafd, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 791578084, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAgKQHgB8zMlAjR'}}
0:00:36.995299	LOG	Server ----------> DUT
0:00:36.999298	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:37.003294	LOG	Wait Until Confirmed Uplink arrives process starts
0:00:38.258752	LOG	PULL_DATA: 02 5e4b 02 aa555a0000240409
0:00:38.260751	LOG	PULL_ACK: 02 5e4b 04
0:00:41.941667	LOG	PUSH_ACK: 02 009c 01
0:00:41.943667	LOG	PUSH_DATA: Protocol version = 02, Token = 009c, Identifier = 00, JSON = {'rxpk': [{'tmst': 794580693, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'gCAgICCAMwAB9E/n458X'}]}
0:00:41.945665	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0033, FOpts:), FPort: 01, FRMPayload: 0025, MIC: e7e39f17)
0:00:41.946664	LOG	Server <---------- DUT
0:00:41.949663	LOG	Wait Until Confirmed Uplink arrives tested successfully
0:00:41.952662	LOG	Send Test Command RxAppCntReq process starts
0:00:46.982813	LOG	PUSH_ACK: 02 009d 01
0:00:46.984812	LOG	PUSH_DATA: Protocol version = 02, Token = 009d, Identifier = 00, JSON = {'rxpk': [{'tmst': 799583301, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'gCAgICCANAABNUjFKFht'}]}
0:00:46.985814	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0034, FOpts:), FPort: 01, FRMPayload: 0025, MIC: c528586d)
0:00:46.986813	LOG	Server <---------- DUT
0:00:46.988812	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 20, FCnt: 012a, FOpts:), FPort: e0, FRMPayload: 09), MIC: 8829fbf9)
0:00:46.991808	LOG	Frame command sent to the DUT
0:00:46.992808	LOG	PULL_RESP: Protocol version = 02, Token = 7b2d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 801583301, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAgKgHgm4gp+/k='}}
0:00:46.994807	LOG	Server ----------> DUT
0:00:46.997805	LOG	TX_ACK: 02 7b2d 05 aa555a0000240409
0:00:48.458978	LOG	PULL_DATA: 02 7963 02 aa555a0000240409
0:00:48.460977	LOG	PULL_ACK: 02 7963 04
0:00:51.998974	LOG	PUSH_ACK: 02 009e 01
0:00:52.000974	LOG	PUSH_DATA: Protocol version = 02, Token = 009e, Identifier = 00, JSON = {'rxpk': [{'tmst': 804593982, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 16, 'data': 'gCAgICCANQDgtf6ItdqmvA=='}]}
0:00:52.001972	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0035, FOpts:), FPort: e0, FRMPayload: 092600, MIC: b5daa6bc)
0:00:52.003971	LOG	Server <---------- DUT
0:00:52.004970	LOG	Answer in payload: 2600
0:00:52.006970	LOG	Frame Command Payload in the Answer: 092600
0:00:52.010967	LOG	RX Count received by DUT: 38
0:00:52.013965	LOG	Send Test Command RxAppCntReq process completed
0:00:52.020961	LOG	Wait Until Confirmed Uplink arrives process starts
0:00:58.539271	LOG	PULL_DATA: 02 3b70 02 aa555a0000240409
0:00:58.541270	LOG	PULL_ACK: 02 3b70 04
0:01:01.986322	LOG	PUSH_ACK: 02 00a0 01

0:01:01.989318	LOG	PUSH_DATA: Protocol version = 02, Token = 00a0, Identifier = 00, JSON = {'rxpk': [{'tmst': 814599206, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 16, 'data': 'gCAgICCANgDga6Cv18rS7w=='}]}
0:01:01.991319	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0036, FOpts:), FPort: e0, FRMPayload: 092600, MIC: d7cad2ef)
0:01:01.992316	LOG	Server <---------- DUT
0:01:01.994317	LOG	Wait Until Confirmed Uplink arrives tested successfully
0:01:01.999313	LOG	End Test Step: Confirmed Uplinks
0:01:02.002311	LOG	Partial Verdict: PASS
0:01:02.005309	LOG	==========
0:01:02.010306	LOG	==========
0:01:02.012306	LOG	Start Test Step: Restore unconfirmed frame in DUT
0:01:02.027297	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:08.618584	LOG	PULL_DATA: 02 6424 02 aa555a0000240409
0:01:08.620583	LOG	PULL_ACK: 02 6424 04
0:01:11.959674	LOG	PUSH_ACK: 02 00a1 01
0:01:11.961673	LOG	PUSH_DATA: Protocol version = 02, Token = 00a1, Identifier = 00, JSON = {'rxpk': [{'tmst': 824604430, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 16, 'data': 'gCAgICCANwDg4RRvU90ZgA=='}]}
0:01:11.962674	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0037, FOpts:), FPort: e0, FRMPayload: 092600, MIC: 53dd1980)
0:01:11.964672	LOG	Server <---------- DUT
0:01:11.965670	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 20, FCnt: 012b, FOpts:), FPort: e0, FRMPayload: 0701), MIC: c5892a02)
0:01:11.967671	LOG	Frame command sent to the DUT
0:01:11.968671	LOG	PULL_RESP: Protocol version = 02, Token = 2fde, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 826604430, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAgKwHgZ4jFiSoC'}}
0:01:11.969670	LOG	Server ----------> DUT
0:01:11.975665	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:11.978665	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:01:18.688989	LOG	PULL_DATA: 02 119e 02 aa555a0000240409
0:01:18.693981	LOG	PULL_ACK: 02 119e 04
0:01:22.003109	LOG	PUSH_ACK: 02 00a2 01
0:01:22.008106	LOG	PUSH_DATA: Protocol version = 02, Token = 00a2, Identifier = 00, JSON = {'rxpk': [{'tmst': 834609831, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 16, 'data': 'QCAgICCAOADgm/ndBfmWxw=='}]}
0:01:22.011104	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0038, FOpts:), FPort: e0, FRMPayload: 000000, MIC: 05f996c7)
0:01:22.014103	LOG	Server <---------- DUT
0:01:22.022097	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:01:22.025096	LOG	End Test Step: Restore unconfirmed frame in DUT
0:01:22.030093	LOG	Partial Verdict: PASS
0:01:22.036091	LOG	==========
0:01:22.059077	LOG	==========
0:01:22.062074	LOG	Start Test Step: Confirmed Downlinks
0:01:22.072069	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:28.779452	LOG	PULL_DATA: 02 09dc 02 aa555a0000240409
0:01:28.780450	LOG	PULL_ACK: 02 09dc 04
0:01:31.989637	LOG	PUSH_ACK: 02 00a5 01
0:01:31.991633	LOG	PUSH_DATA: Protocol version = 02, Token = 00a5, Identifier = 00, JSON = {'rxpk': [{'tmst': 844606983, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAOQABNUMhUMoz'}]}
0:01:31.992631	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0039, FOpts:), FPort: 01, FRMPayload: 0027, MIC: 2150ca33)
0:01:31.993630	LOG	Server <---------- DUT
0:01:31.995630	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 012c, FOpts:), FPort: e0, FRMPayload: 0702), MIC: 5adb76ab)
0:01:31.997628	LOG	Frame command sent to the DUT
0:01:31.998628	LOG	PULL_RESP: Protocol version = 02, Token = 6b1b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 846606983, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAALAHgAhVa23ar'}}
0:01:31.999627	LOG	Server ----------> DUT
0:01:32.004647	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:32.008623	LOG	Check ACK bit in next uplink starts
0:01:36.971904	LOG	PUSH_ACK: 02 00a6 01
0:01:36.973902	LOG	PUSH_DATA: Protocol version = 02, Token = 00a6, Identifier = 00, JSON = {'rxpk': [{'tmst': 849609404, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'gCAgICCgOgABbpSZRBzu'}]}
0:01:36.974904	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 003a, FOpts:), FPort: 01, FRMPayload: 0028, MIC: 99441cee)
0:01:36.976899	LOG	Server <---------- DUT
0:01:36.979897	LOG	Check ACK bit in next uplink tested successfully
0:01:36.982896	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:38.928792	LOG	PULL_DATA: 02 aad4 02 aa555a0000240409
0:01:38.930793	LOG	PULL_ACK: 02 aad4 04
0:01:42.011741	LOG	PUSH_ACK: 02 00a7 01
0:01:42.014739	LOG	PUSH_DATA: Protocol version = 02, Token = 00a7, Identifier = 00, JSON = {'rxpk': [{'tmst': 854612012, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'gCAgICCAOwABHlAH1ISo'}]}
0:01:42.015739	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 003b, FOpts:), FPort: 01, FRMPayload: 0028, MIC: 07d484a8)
0:01:42.017738	LOG	Server <---------- DUT
0:01:42.019736	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 20, FCnt: 012d, FOpts:), FPort: e0, FRMPayload: 0701), MIC: e644d90b)
0:01:42.022739	LOG	Frame command sent to the DUT
0:01:42.024734	LOG	PULL_RESP: Protocol version = 02, Token = e64f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 856612012, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAgLQHgurnmRNkL'}}
0:01:42.025733	LOG	Server ----------> DUT
0:01:42.049719	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:42.054717	LOG	Check ACK bit in next uplink starts
0:01:46.976948	LOG	PUSH_ACK: 02 00a8 01
0:01:46.978929	LOG	PUSH_DATA: Protocol version = 02, Token = 00a8, Identifier = 00, JSON = {'rxpk': [{'tmst': 859614788, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCgPAABqfTUK45F'}]}
0:01:46.979929	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 003c, FOpts:), FPort: 01, FRMPayload: 0029, MIC: d42b8e45)
0:01:46.980930	LOG	Server <---------- DUT
0:01:46.983928	LOG	Check ACK bit in next uplink tested successfully
0:01:46.986926	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:48.968802	LOG	PULL_DATA: 02 acf2 02 aa555a0000240409

0:01:48.970802	LOG	PULL_ACK: 02 acf2 04
0:01:52.016077	LOG	PUSH_ACK: 02 00a9 01
0:01:52.018078	LOG	PUSH_DATA: Protocol version = 02, Token = 00a9, Identifier = 00, JSON = {'rxpk': [{'tmst': 864617388, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAPQABkU8vsWGa'}]}
0:01:52.019077	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 003d, FOpts:), FPort: 01, FRMPayload: 0029, MIC: 2fb1619a)
0:01:52.020077	LOG	Server <---------- DUT
0:01:52.022075	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 012e, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 70fc1bc9)
0:01:52.047559	LOG	Frame command sent to the DUT
0:01:52.049528	LOG	PULL_RESP: Protocol version = 02, Token = fe1f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 866617388, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAALgHgvHtw/BvJ'}}
0:01:52.050556	LOG	Server ----------> DUT
0:01:52.056525	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:52.061550	LOG	Check ACK bit in next uplink starts
0:01:56.981836	LOG	PUSH_ACK: 02 00aa 01
0:01:56.983835	LOG	PUSH_DATA: Protocol version = 02, Token = 00aa, Identifier = 00, JSON = {'rxpk': [{'tmst': 869619982, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCgPgABbap1yUuj'}]}
0:01:56.985834	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 003e, FOpts:), FPort: 01, FRMPayload: 002a, MIC: 75c94ba3)
0:01:56.987833	LOG	Server <---------- DUT
0:01:56.995828	LOG	Check ACK bit in next uplink tested successfully
0:01:57.020814	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:58.978705	LOG	PULL_DATA: 02 1b10 02 aa555a0000240409
0:01:58.980705	LOG	PULL_ACK: 02 1b10 04
0:02:01.986003	LOG	PUSH_ACK: 02 00ac 01
0:02:01.988002	LOG	PUSH_DATA: Protocol version = 02, Token = 00ac, Identifier = 00, JSON = {'rxpk': [{'tmst': 874622598, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAPwABld85y4qW'}]}
0:02:01.992000	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 003f, FOpts:), FPort: 01, FRMPayload: 002a, MIC: 39cb8a96)
0:02:01.992999	LOG	Server <---------- DUT
0:02:01.994998	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 012e, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 70fc1bc9)
0:02:01.997998	LOG	Frame command sent to the DUT
0:02:01.998996	LOG	PULL_RESP: Protocol version = 02, Token = 8e3e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 876622598, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAALgHgvHtw/BvJ'}}
0:02:02.000995	LOG	Server ----------> DUT
0:02:02.004992	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:02.013987	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:06.987172	LOG	PUSH_ACK: 02 00ad 01
0:02:06.991169	LOG	PUSH_DATA: Protocol version = 02, Token = 00ad, Identifier = 00, JSON = {'rxpk': [{'tmst': 879625202, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAQAABY1aDmXO2'}]}
0:02:06.992169	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0040, FOpts:), FPort: 01, FRMPayload: 002b, MIC: 839973b6)

0:02:06.993168	LOG	Server <---------- DUT
0:02:06.995167	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 012e, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 70fc1bc9)
0:02:06.998166	LOG	Frame command sent to the DUT
0:02:06.999165	LOG	PULL_RESP: Protocol version = 02, Token = 5ab4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 881625202, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAALgHgvHtw/BvJ'}}
0:02:07.000164	LOG	Server ----------> DUT
0:02:07.003163	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:07.011159	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:09.098976	LOG	PULL_DATA: 02 af3b 02 aa555a0000240409
0:02:09.100975	LOG	PULL_ACK: 02 af3b 04
0:02:11.990370	LOG	PUSH_ACK: 02 00ae 01
0:02:11.992340	LOG	PUSH_DATA: Protocol version = 02, Token = 00ae, Identifier = 00, JSON = {'rxpk': [{'tmst': 884627804, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAQQABUkGlAok2'}]}
0:02:11.994339	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0041, FOpts:), FPort: 01, FRMPayload: 002c, MIC: a5028936)
0:02:11.995342	LOG	Server <---------- DUT
0:02:11.997337	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 012e, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 70fc1bc9)
0:02:12.000340	LOG	Frame command sent to the DUT
0:02:12.001339	LOG	PULL_RESP: Protocol version = 02, Token = 4561, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 886627804, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAALgHgvHtw/BvJ'}}
0:02:12.002333	LOG	Server ----------> DUT
0:02:12.006333	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:12.019323	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:16.992590	LOG	PUSH_ACK: 02 00af 01
0:02:16.994588	LOG	PUSH_DATA: Protocol version = 02, Token = 00af, Identifier = 00, JSON = {'rxpk': [{'tmst': 889630413, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAQgABgtPDC4b8'}]}
0:02:16.995589	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0042, FOpts:), FPort: 01, FRMPayload: 002d, MIC: c30b86fc)
0:02:16.996587	LOG	Server <---------- DUT
0:02:16.998588	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 012e, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 70fc1bc9)
0:02:17.000587	LOG	Frame command sent to the DUT
0:02:17.002584	LOG	PULL_RESP: Protocol version = 02, Token = 749d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 891630413, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAALgHgvHtw/BvJ'}}
0:02:17.004583	LOG	Server ----------> DUT
0:02:17.008581	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:17.012578	LOG	Check ACK bit in next uplink starts
0:02:19.108483	LOG	PULL_DATA: 02 33cd 02 aa555a0000240409
0:02:19.110481	LOG	PULL_ACK: 02 33cd 04
0:02:21.994848	LOG	PUSH_ACK: 02 00b0 01
0:02:21.996847	LOG	PUSH_DATA: Protocol version = 02, Token = 00b0, Identifier = 00, JSON = {'rxpk': [{'tmst': 894633015, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 6.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAQwAByeBUDZOJ'}]}

0:02:21.997847	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0043, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 540d9389)
0:02:21.998847	LOG	Server <---------- DUT
0:02:22.003844	LOG	End Test Step: Confirmed Downlinks
0:02:22.006843	LOG	Partial Verdict: PASS
0:02:22.012837	LOG	==========
0:02:22.017836	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_004
0:02:22.019834	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_005	
Verdict	PASS	
Date	2021-10-18 13:14:32	
Comments	DevStatusReq MAC command	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.014094	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_005
0:00:00.048073	LOG	==========
0:00:00.050074	LOG	Start Test Step: Device activation
0:00:00.105043	LOG	Activation process has finished successfully
0:00:00.107041	LOG	Data stored in the DUT after Activation:
0:00:00.110041	LOG	DevAddr: 20202020
0:00:00.112040	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.115036	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.117037	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.120035	LOG	End Test Step: Device activation
0:00:00.124031	LOG	Partial Verdict: PASS
0:00:00.130028	LOG	==========
0:00:00.135027	LOG	==========
0:00:00.138024	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.150018	LOG	DUT Pre-condition activation process starts
0:00:00.153017	LOG	DUT Pre-condition activation completed
0:00:00.157012	LOG	End Test Step: DUT Pre-condition settings
0:00:00.161011	LOG	Partial Verdict: PASS
0:00:00.165008	LOG	==========
0:00:00.169005	LOG	==========
0:00:00.171005	LOG	Start Test Step: DevStatusReq MAC command
0:00:00.180999	LOG	Send DevStatusReq process starts
0:00:02.182867	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:04.334646	LOG	PULL_DATA: 02 e350 02 aa555a0000240409
0:00:04.336646	LOG	PULL_ACK: 02 e350 04
0:00:04.338644	LOG	First PULL_DATA received
0:00:07.143058	LOG	PUSH_ACK: 02 00b3 01
0:00:07.145055	LOG	PUSH_DATA: Protocol version = 02, Token = 00b3, Identifier = 00, JSON = {'rxpk': [{'tmst': 904638223, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCARQABaNcu8aLm'}]}

0:00:07.147054	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0045, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 2ef1a2e6)
0:00:07.148054	LOG	Server <---------- DUT
0:00:07.150052	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 012f, FOpts:), FPort: 00, FRMPayload: 06), MIC: 02695dd4)
0:00:07.152051	LOG	PULL_RESP: Protocol version = 02, Token = 2dbb, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 906638223, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAALwEALwJpXdQ='}}
0:00:07.154051	LOG	Server ----------> DUT
0:00:07.157049	LOG	TX_ACK: 02 2dbb 05 aa555a0000240409
0:00:12.149222	LOG	PUSH_ACK: 02 00b4 01
0:00:12.154219	LOG	PUSH_DATA: Protocol version = 02, Token = 00b4, Identifier = 00, JSON = {'rxpk': [{'tmst': 909645968, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 18, 'data': 'QCAgICCDRgAGAAgBTMJbEr8h'}]}
0:00:12.158217	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 83, FCnt: 0046, FOpts: 060008), FPort: 01, FRMPayload: 002e, MIC: 5b12bf21)
0:00:12.160218	LOG	Server <---------- DUT
0:00:12.161217	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:12.163214	LOG	Command Answer: 060008
0:00:12.166213	LOG	Battery level (byte value) 00
0:00:12.168212	LOG	Radio Status (byte value) 08
0:00:12.170211	LOG	MAC command communication completed
0:00:12.173208	LOG	End Test Step: DevStatusReq MAC command
0:00:12.179205	LOG	Partial Verdict: PASS
0:00:12.183203	LOG	==========
0:00:12.187201	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_005
0:00:12.189201	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_006	
Verdict	PASS	
Date	2021-10-18 13:14:47	
Comments	NewChannelReq MAC command for Dynamic Channel plan devices only	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Addition of a single channel frequency	867.700
	Addition of a multiple channels frequencies	867.100;867.300;867.500;867.700;867.900;867.900;867.700;867.500;867.300;867.100;868.500;868.300;868.100
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.012678	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_006
0:00:00.048659	LOG	==========
0:00:00.050656	LOG	Start Test Step: Device activation
0:00:00.107624	LOG	Activation process has finished successfully

0:00:00.110623	LOG	Data stored in the DUT after Activation:
0:00:00.112621	LOG	DevAddr: 20202020
0:00:00.114620	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.129612	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.132610	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.136608	LOG	End Test Step: Device activation
0:00:00.140606	LOG	Partial Verdict: PASS
0:00:00.144603	LOG	==========
0:00:00.150600	LOG	==========
0:00:00.183581	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.222577	LOG	DUT Pre-condition activation process starts
0:00:00.225557	LOG	DUT Pre-condition activation completed
0:00:00.229556	LOG	End Test Step: DUT Pre-condition settings
0:00:00.234554	LOG	Partial Verdict: PASS
0:00:00.237552	LOG	==========
0:00:00.243548	LOG	==========
0:00:00.246547	LOG	Start Test Step: Read-only default channels
0:00:00.258556	LOG	Send MAC command block process starts
0:00:07.116692	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:09.522331	LOG	PULL_DATA: 02 155c 02 aa555a0000240409
0:00:09.524329	LOG	PULL_ACK: 02 155c 04
0:00:09.525328	LOG	First PULL_DATA received
0:00:12.103885	LOG	PUSH_ACK: 02 00b6 01
0:00:12.106867	LOG	PUSH_DATA: Protocol version = 02, Token = 00b6, Identifier = 00, JSON = {'rxpk': [{'tmst': 924648656, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCASAABssnAhiTg'}]}
0:00:12.107867	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0048, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c08624e0)
0:00:12.109866	LOG	Server <---------- DUT
0:00:12.112863	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0130, FOpts:), FPort: 00, FRMPayload: 0700184f84500701184f84500702184f8450), MIC: e36bdc9a)
0:00:12.115862	LOG	PULL_RESP: Protocol version = 02, Token = 5b5f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 926648656, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 31, 'data': 'YCAgICAAMAEAPG/mqqjuFEMVVCUlv766cOoI42vcmg=='}}
0:00:12.116861	LOG	Server ----------> DUT
0:00:12.119859	LOG	TX_ACK: 02 5b5f 05 aa555a0000240409
0:00:17.126025	LOG	PUSH_ACK: 02 00b7 01
0:00:17.128023	LOG	PUSH_DATA: Protocol version = 02, Token = 00b7, Identifier = 00, JSON = {'rxpk': [{'tmst': 929661577, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 21, 'data': 'QCAgICCGSQAHAAcABwABmdvJE9j1'}]}
0:00:17.129023	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 86, FCnt: 0049, FOpts: 070007000700), FPort: 01, FRMPayload: 002e, MIC: c913d8f5)
0:00:17.130022	LOG	Server <---------- DUT
0:00:17.132021	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:17.133021	LOG	Command Answer: 070007000700
0:00:17.203000	LOG	MAC command communication completed
0:00:17.205981	LOG	End Test Step: Read-only default channels
0:00:17.209977	LOG	Partial Verdict: PASS
0:00:17.215974	LOG	==========
0:00:17.221971	LOG	==========
0:00:17.235962	LOG	Start Test Step: Addition of a single channel

0:00:17.251953	LOG	Send NewChannelReq process starts
0:00:19.672583	LOG	PULL_DATA: 02 bb6f 02 aa555a0000240409
0:00:19.674583	LOG	PULL_ACK: 02 bb6f 04
0:00:27.114368	LOG	PUSH_ACK: 02 00b9 01
0:00:27.119366	LOG	PUSH_DATA: Protocol version = 02, Token = 00b9, Identifier = 00, JSON = {'rxpk': [{'tmst': 939656489, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCASgABpJE6WOL1'}]}
0:00:27.123364	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004a, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 3a58e2f5)
0:00:27.126362	LOG	Server <---------- DUT
0:00:27.131360	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0131, FOpts:), FPort: 00, FRMPayload: 070f88668450), MIC: bfaa7ea6)
0:00:27.134358	LOG	PULL_RESP: Protocol version = 02, Token = 840f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 941656489, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAMQEAGHTNtsaSv6p+pg=='}}
0:00:27.136358	LOG	Server ----------> DUT
0:00:27.141355	LOG	TX_ACK: 02 840f 05 aa555a0000240409
0:00:29.862813	LOG	PULL_DATA: 02 2219 02 aa555a0000240409
0:00:29.866811	LOG	PULL_ACK: 02 2219 04
0:00:32.114540	LOG	PUSH_ACK: 02 00ba 01
0:00:32.119537	LOG	PUSH_DATA: Protocol version = 02, Token = 00ba, Identifier = 00, JSON = {'rxpk': [{'tmst': 944664235, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCSwAHAwGP0mNUt2w='}]}
0:00:32.123539	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 004b, FOpts: 0703), FPort: 01, FRMPayload: 002e, MIC: 6354b76c)
0:00:32.126531	LOG	Server <---------- DUT
0:00:32.128532	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:32.130530	LOG	Command Answer: 0703
0:00:32.136526	LOG	MAC command communication completed
0:00:32.141523	LOG	Receive frame on specific channels process starts
0:00:32.154515	LOG	Attempt 1/20
0:00:39.942106	LOG	PULL_DATA: 02 ba9b 02 aa555a0000240409
0:00:39.945104	LOG	PULL_ACK: 02 ba9b 04
0:00:42.139861	LOG	PUSH_ACK: 02 00bb 01
0:00:42.141861	LOG	PUSH_DATA: Protocol version = 02, Token = 00bb, Identifier = 00, JSON = {'rxpk': [{'tmst': 954664323, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCATAABfoXGWOnB'}]}
0:00:42.143859	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004c, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c658e9c1)
0:00:42.144858	LOG	Server <---------- DUT
0:00:42.146859	LOG	Attempt 2/20
0:00:47.129037	LOG	PUSH_ACK: 02 00bc 01
0:00:47.131036	LOG	PUSH_DATA: Protocol version = 02, Token = 00bc, Identifier = 00, JSON = {'rxpk': [{'tmst': 959666923, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCATQAB+LIVabYK'}]}
0:00:47.133034	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004d, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 1569b60a)
0:00:47.134034	LOG	Server <---------- DUT
0:00:47.136033	LOG	Attempt 3/20
0:00:50.022398	LOG	PULL_DATA: 02 7df5 02 aa555a0000240409

0:00:50.024398	LOG	PULL_ACK: 02 7df5 04
0:00:52.132204	LOG	PUSH_ACK: 02 00be 01
0:00:52.134203	LOG	PUSH_DATA: Protocol version = 02, Token = 00be, Identifier = 00, JSON = {'rxpk': [{'tmst': 964669515, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCATgABfeFEZoGc'}]}
0:00:52.135202	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004e, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 4466819c)
0:00:52.136201	LOG	Server <---------- DUT
0:00:52.138200	LOG	Attempt 4/20
0:00:57.120505	LOG	PUSH_ACK: 02 00bf 01
0:00:57.122503	LOG	PUSH_DATA: Protocol version = 02, Token = 00bf, Identifier = 00, JSON = {'rxpk': [{'tmst': 969672115, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCATwABx71RQtSq'}]}
0:00:57.124503	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004f, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 5142d4aa)
0:00:57.125502	LOG	Server <---------- DUT
0:00:57.127500	LOG	Attempt 5/20
0:01:00.102818	LOG	PULL_DATA: 02 0be1 02 aa555a0000240409
0:01:00.105815	LOG	PULL_ACK: 02 0be1 04
0:01:02.160652	LOG	PUSH_ACK: 02 00c0 01
0:01:02.162649	LOG	PUSH_DATA: Protocol version = 02, Token = 00c0, Identifier = 00, JSON = {'rxpk': [{'tmst': 974674731, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAUAAB/ymVTqV1'}]}
0:01:02.164649	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0050, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 954ea575)
0:01:02.165650	LOG	Server <---------- DUT
0:01:02.166649	LOG	Attempt 6/20
0:01:07.149826	LOG	PUSH_ACK: 02 00c1 01
0:01:07.151826	LOG	PUSH_DATA: Protocol version = 02, Token = 00c1, Identifier = 00, JSON = {'rxpk': [{'tmst': 979677331, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAUQABShSulowo'}]}
0:01:07.152826	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0051, FOpts:), FPort: 01, FRMPayload: 002e, MIC: ae968c28)
0:01:07.154824	LOG	Server <---------- DUT
0:01:07.155822	LOG	Attempt 7/20
0:01:10.192102	LOG	PULL_DATA: 02 1a1c 02 aa555a0000240409
0:01:10.194104	LOG	PULL_ACK: 02 1a1c 04
0:01:12.138001	LOG	PUSH_ACK: 02 00c2 01
0:01:12.140002	LOG	PUSH_DATA: Protocol version = 02, Token = 00c2, Identifier = 00, JSON = {'rxpk': [{'tmst': 984679939, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAUgABQ2pg56Vh'}]}
0:01:12.141999	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0052, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 60e7a561)
0:01:12.172982	LOG	Server <---------- DUT
0:01:12.174980	LOG	Attempt 8/20
0:01:17.127178	LOG	PUSH_ACK: 02 00c3 01
0:01:17.129178	LOG	PUSH_DATA: Protocol version = 02, Token = 00c3, Identifier = 00, JSON = {'rxpk': [{'tmst': 989682555, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAUwABe+/VyBZ5'}]}

0:01:17.130176	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0053, FOpts:), FPort: 01, FRMPayload: 002e, MIC: d5c81679)
0:01:17.131174	LOG	Server <---------- DUT
0:01:17.133173	LOG	Attempt 9/20
0:01:20.282694	LOG	PULL_DATA: 02 7f23 02 aa555a0000240409
0:01:20.283693	LOG	PULL_ACK: 02 7f23 04
0:01:22.133646	LOG	PUSH_ACK: 02 00c5 01
0:01:22.134646	LOG	PUSH_DATA: Protocol version = 02, Token = 00c5, Identifier = 00, JSON = {'rxpk': [{'tmst': 994685155, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAVAABQtdUwWkM'}]}
0:01:22.136645	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0054, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 54c1690c)
0:01:22.137644	LOG	Server <---------- DUT
0:01:22.138643	LOG	Attempt 10/20
0:01:27.174793	LOG	PUSH_ACK: 02 00c6 01
0:01:27.176792	LOG	PUSH_DATA: Protocol version = 02, Token = 00c6, Identifier = 00, JSON = {'rxpk': [{'tmst': 999687764, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAVQAB5slu8uK0'}]}
0:01:27.178790	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0055, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 6ef2e2b4)
0:01:27.183787	LOG	Server <---------- DUT
0:01:27.198778	LOG	Receive frame on specific channels process tested successfully
0:01:27.204774	LOG	End Test Step: Addition of a single channel
0:01:27.210772	LOG	Partial Verdict: PASS
0:01:27.216768	LOG	==========
0:01:27.223764	LOG	==========
0:01:27.226763	LOG	Start Test Step: Removal of a single channel
0:01:27.239756	LOG	Send NewChannelReq process starts
0:01:30.381975	LOG	PULL_DATA: 02 f829 02 aa555a0000240409
0:01:30.386973	LOG	PULL_ACK: 02 f829 04
0:01:32.162967	LOG	PUSH_ACK: 02 00c7 01
0:01:32.164966	LOG	PUSH_DATA: Protocol version = 02, Token = 00c7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1004690371, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAVgABN6aTkcj+'}]}
0:01:32.166966	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0056, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 9391c8fe)
0:01:32.168964	LOG	Server <---------- DUT
0:01:32.169963	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0132, FOpts:), FPort: 00, FRMPayload: 070f00000050), MIC: 4760e0ae)
0:01:32.172962	LOG	PULL_RESP: Protocol version = 02, Token = 40f3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1006690371, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAMgEAWGyc/0vrR2Dgrg=='}}
0:01:32.173961	LOG	Server ----------> DUT
0:01:32.177959	LOG	TX_ACK: 02 40f3 05 aa555a0000240409
0:01:37.150143	LOG	PUSH_ACK: 02 00c8 01
0:01:37.153159	LOG	PUSH_DATA: Protocol version = 02, Token = 00c8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1009698092, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 17, 'data': 'QCAgICCCVwAHAwHaE2rZdZ8='}]}
0:01:37.154143	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0057, FOpts: 0703), FPort: 01, FRMPayload: 002e, MIC: 6ad9759f)
0:01:37.155143	LOG	Server <---------- DUT

0:01:37.156142	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:37.158140	LOG	Command Answer: 0703
0:01:37.162138	LOG	MAC command communication completed
0:01:37.166135	LOG	Receive frame on specific channels process starts
0:01:37.182125	LOG	Attempt 1/15
0:01:40.572205	LOG	PULL_DATA: 02 f8a4 02 aa555a0000240409
0:01:40.574205	LOG	PULL_ACK: 02 f8a4 04
0:01:47.175468	LOG	PUSH_ACK: 02 00c9 01
0:01:47.177466	LOG	PUSH_DATA: Protocol version = 02, Token = 00c9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1019698196, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAWAABKMbBztPG'}]}
0:01:47.179465	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0058, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c1ced3c6)
0:01:47.181464	LOG	Server <---------- DUT
0:01:47.182463	LOG	Attempt 2/15
0:01:50.652500	LOG	PULL_DATA: 02 1b13 02 aa555a0000240409
0:01:50.654500	LOG	PULL_ACK: 02 1b13 04
0:01:52.184632	LOG	PUSH_ACK: 02 00cb 01
0:01:52.186632	LOG	PUSH_DATA: Protocol version = 02, Token = 00cb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1024700812, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAWQABgF2GHw4u'}]}
0:01:52.187631	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0059, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 861f0e2e)
0:01:52.188628	LOG	Server <---------- DUT
0:01:52.189628	LOG	Attempt 3/15
0:01:57.175888	LOG	PUSH_ACK: 02 00cc 01
0:01:57.177888	LOG	PUSH_DATA: Protocol version = 02, Token = 00cc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1029703396, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAWgAB7I35dvLb'}]}
0:01:57.178887	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005a, FOpts:), FPort: 01, FRMPayload: 002e, MIC: f976f2db)
0:01:57.180889	LOG	Server <---------- DUT
0:01:57.182886	LOG	Attempt 4/15
0:02:00.732425	LOG	PULL_DATA: 02 b5ca 02 aa555a0000240409
0:02:00.737422	LOG	PULL_ACK: 02 b5ca 04
0:02:02.166631	LOG	PUSH_ACK: 02 00cd 01
0:02:02.168630	LOG	PUSH_DATA: Protocol version = 02, Token = 00cd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1034705996, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAWwAB+siZE+up'}]}
0:02:02.169632	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005b, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 9913eba9)
0:02:02.171630	LOG	Server <---------- DUT
0:02:02.172628	LOG	Attempt 5/15
0:02:07.156914	LOG	PUSH_ACK: 02 00ce 01
0:02:07.158913	LOG	PUSH_DATA: Protocol version = 02, Token = 00ce, Identifier = 00, JSON = {'rxpk': [{'tmst': 1039708604, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAXAABCG4zpfNv'}]}
0:02:07.159912	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005c, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 33a5f36f)
0:02:07.161911	LOG	Server <---------- DUT

0:02:07.163910	LOG	Attempt 6/15
0:02:10.812846	LOG	PULL_DATA: 02 4ee8 02 aa555a0000240409
0:02:10.815844	LOG	PULL_ACK: 02 4ee8 04
0:02:12.198061	LOG	PUSH_ACK: 02 00cf 01
0:02:12.201059	LOG	PUSH_DATA: Protocol version = 02, Token = 00cf, Identifier = 00, JSON = {'rxpk': [{'tmst': 1044711212, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAXQABiaQ+Dlzj'}]}
0:02:12.204059	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005d, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 3e0e5ce3)
0:02:12.205057	LOG	Server <---------- DUT
0:02:12.206056	LOG	Attempt 7/15
0:02:17.190235	LOG	PUSH_ACK: 02 00d0 01
0:02:17.195231	LOG	PUSH_DATA: Protocol version = 02, Token = 00d0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1049713812, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAXgABoRTkqhA0'}]}
0:02:17.197230	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005e, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e4aa1034)
0:02:17.198230	LOG	Server <---------- DUT
0:02:17.199229	LOG	Attempt 8/15
0:02:20.892137	LOG	PULL_DATA: 02 9832 02 aa555a0000240409
0:02:20.894136	LOG	PULL_ACK: 02 9832 04
0:02:22.192402	LOG	PUSH_ACK: 02 00d2 01
0:02:22.194401	LOG	PUSH_DATA: Protocol version = 02, Token = 00d2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1054716428, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAXwABTxvAgjPF'}]}
0:02:22.195401	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005f, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c08233c5)
0:02:22.197398	LOG	Server <---------- DUT
0:02:22.198397	LOG	Attempt 9/15
0:02:27.182575	LOG	PUSH_ACK: 02 00d3 01
0:02:27.184574	LOG	PUSH_DATA: Protocol version = 02, Token = 00d3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1059719036, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAYAABhu7lLpEQ'}]}
0:02:27.185573	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0060, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e52e9110)
0:02:27.186575	LOG	Server <---------- DUT
0:02:27.188574	LOG	Attempt 10/15
0:02:30.972429	LOG	PULL_DATA: 02 38e0 02 aa555a0000240409
0:02:30.976427	LOG	PULL_ACK: 02 38e0 04
0:02:32.173748	LOG	PUSH_ACK: 02 00d4 01
0:02:32.177747	LOG	PUSH_DATA: Protocol version = 02, Token = 00d4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1064721628, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAYQAB8Jy99Xjp'}]}
0:02:32.180746	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0061, FOpts:), FPort: 01, FRMPayload: 002e, MIC: bdf578e9)
0:02:32.183744	LOG	Server <---------- DUT
0:02:32.186742	LOG	Attempt 11/15
0:02:37.164923	LOG	PUSH_ACK: 02 00d5 01
0:02:37.166922	LOG	PUSH_DATA: Protocol version = 02, Token = 00d5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1069724220, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAYgABS/vmIhpb'}]}
0:02:37.167921	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0062, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e6221a5b)
0:02:37.168921	LOG	Server <---------- DUT
0:02:37.170920	LOG	Attempt 12/15
0:02:41.051847	LOG	PULL_DATA: 02 794d 02 aa555a0000240409
0:02:41.055845	LOG	PULL_ACK: 02 794d 04
0:02:42.206174	LOG	PUSH_ACK: 02 00d6 01
0:02:42.208173	LOG	PUSH_DATA: Protocol version = 02, Token = 00d6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1074726820, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAYwAB22ayfONH'}]}
0:02:42.210172	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0063, FOpts:), FPort: 01, FRMPayload: 002e, MIC: b27ce347)
0:02:42.211171	LOG	Server <---------- DUT
0:02:42.212172	LOG	Attempt 13/15
0:02:47.197350	LOG	PUSH_ACK: 02 00d7 01
0:02:47.199349	LOG	PUSH_DATA: Protocol version = 02, Token = 00d7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1079729516, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAZAABuDqxFWLd'}]}
0:02:47.200346	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0064, FOpts:), FPort: 01, FRMPayload: 002e, MIC: b11562dd)
0:02:47.202346	LOG	Server <---------- DUT
0:02:47.203345	LOG	Attempt 14/15
0:02:51.142115	LOG	PULL_DATA: 02 3d34 02 aa555a0000240409
0:02:51.143116	LOG	PULL_ACK: 02 3d34 04
0:02:52.203514	LOG	PUSH_ACK: 02 00da 01
0:02:52.205513	LOG	PUSH_DATA: Protocol version = 02, Token = 00da, Identifier = 00, JSON = {'rxpk': [{'tmst': 1084732116, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAZQAB0TWGC/P4'}]}
0:02:52.206512	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0065, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 860bf3f8)
0:02:52.208511	LOG	Server <---------- DUT
0:02:52.209510	LOG	Attempt 15/15
0:02:57.191689	LOG	PUSH_ACK: 02 00db 01
0:02:57.193688	LOG	PUSH_DATA: Protocol version = 02, Token = 00db, Identifier = 00, JSON = {'rxpk': [{'tmst': 1089734708, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAZgABUKU7VeLn'}]}
0:02:57.195687	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0066, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 3b55e2e7)
0:02:57.196686	LOG	Server <---------- DUT
0:02:57.204682	LOG	Receive frame on specific channels process tested successfully
0:02:57.208680	LOG	End Test Step: Removal of a single channel
0:02:57.213677	LOG	Partial Verdict: PASS
0:02:57.219673	LOG	==========
0:02:57.227669	LOG	==========
0:02:57.238663	LOG	Start Test Step: Adding multiple channels 1
0:02:57.251655	LOG	Send MAC command block process starts
0:03:01.221407	LOG	PULL_DATA: 02 bc5f 02 aa555a0000240409
0:03:01.226405	LOG	PULL_ACK: 02 bc5f 04
0:03:02.180864	LOG	PUSH_ACK: 02 00dc 01

0:03:02.182864	LOG	PUSH_DATA: Protocol version = 02, Token = 00dc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1094737324, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAZwAB/xlW6rpm'}]}
0:03:02.183862	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0067, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 56eaba66)
0:03:02.185863	LOG	Server <---------- DUT
0:03:02.186861	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0133, FOpts:), FPort: 00, FRMPayload: 0703184f84500704e85684500705b85e8450070688668450070758 6e8450), MIC: 0dd808ef)
0:03:02.189859	LOG	PULL_RESP: Protocol version = 02, Token = cd84, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1096737324, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 43, 'data': 'YCAgICAAMwEAcH7DPQnJdd4Kin5grmpaYc8MMto3tZtifzV6DhuKDdgI7w==' }}
0:03:02.190859	LOG	Server ----------> DUT
0:03:02.195063	LOG	TX_ACK: 02 cd84 05 aa555a0000240409
0:03:07.245203	LOG	PUSH_ACK: 02 00dd 01
0:03:07.248201	LOG	PUSH_DATA: Protocol version = 02, Token = 00dd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1099755383, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 25, 'data': 'QCAgICCKaAAHAwcDBwMHAwcDAfeL+Nv4ew=='}]}
0:03:07.249200	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 8a, FCnt: 0068, FOpts: 07030703070307030703), FPort: 01, FRMPayload: 002e, MIC: f8dbf87b)
0:03:07.250202	LOG	Server <---------- DUT
0:03:07.252198	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:07.253198	LOG	Command Answer: 07030703070307030703
0:03:07.364135	LOG	MAC command communication completed
0:03:07.366134	LOG	End Test Step: Adding multiple channels 1
0:03:07.370132	LOG	Partial Verdict: PASS
0:03:07.373130	LOG	==========
0:03:07.378127	LOG	==========
0:03:07.380126	LOG	Start Test Step: Adding multiple channels 2
0:03:07.396118	LOG	Send MAC command block process starts
0:03:11.431833	LOG	PULL_DATA: 02 4e77 02 aa555a0000240409
0:03:11.434830	LOG	PULL_ACK: 02 4e77 04
0:03:17.219605	LOG	PUSH_ACK: 02 00de 01
0:03:17.221604	LOG	PUSH_DATA: Protocol version = 02, Token = 00de, Identifier = 00, JSON = {'rxpk': [{'tmst': 1109745167, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAaQAB6tddbP0l'}]}
0:03:17.222603	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0069, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 5d6cfd25)
0:03:17.223602	LOG	Server <---------- DUT
0:03:17.225601	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0134, FOpts:), FPort: 00, FRMPayload: 0708586e8450070988668450070ab85e8450070be8568450070c184f8450), MIC: 8978910e)
0:03:17.227600	LOG	PULL_RESP: Protocol version = 02, Token = fda1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1111745167, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 43, 'data':

		'YCAgICAANAEAZyVLdo+Oj6OOUCgNndvvkn/3ZcNBnw2c7eGeaYpYiXiRDg==''}}
0:03:17.229599	LOG	Server ----------> DUT
0:03:17.233597	LOG	TX_ACK: 02 fda1 05 aa555a0000240409
0:03:21.642215	LOG	PULL_DATA: 02 facb 02 aa555a0000240409
0:03:21.645215	LOG	PULL_ACK: 02 facb 04
0:03:22.213892	LOG	PUSH_ACK: 02 00e0 01
0:03:22.214892	LOG	PUSH_DATA: Protocol version = 02, Token = 00e0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1114763226, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 25, 'data': 'QCAgICCKagAHAwcDBwMHAwcDARseNjQ/VQ==''}]}
0:03:22.216890	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 8a, FCnt: 006a, FOpts: 07030703070307030703), FPort: 01, FRMPayload: 002e, MIC: 36343f55)
0:03:22.218889	LOG	Server <---------- DUT
0:03:22.219895	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:22.221887	LOG	Command Answer: 07030703070307030703
0:03:22.331795	LOG	MAC command communication completed
0:03:22.333794	LOG	End Test Step: Adding multiple channels 2
0:03:22.336793	LOG	Partial Verdict: PASS
0:03:22.340790	LOG	==========
0:03:22.345788	LOG	==========
0:03:22.346787	LOG	Start Test Step: Adding multiple channels 3
0:03:22.357780	LOG	Send MAC command block process starts
0:03:31.721582	LOG	PULL_DATA: 02 6c05 02 aa555a0000240409
0:03:31.726580	LOG	PULL_ACK: 02 6c05 04
0:03:32.237291	LOG	PUSH_ACK: 02 00e1 01
0:03:32.239291	LOG	PUSH_DATA: Protocol version = 02, Token = 00e1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1124753009, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAawABeAN0Q3aM'}]}
0:03:32.240290	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006b, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 7443768c)
0:03:32.241290	LOG	Server <---------- DUT
0:03:32.243288	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0135, FOpts:), FPort: 00, FRMPayload: 070dc8858450070ef87d8450070f28768450), MIC: 97e8375a)
0:03:32.245288	LOG	PULL_RESP: Protocol version = 02, Token = ffb2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1126753009, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 31, 'data': 'YCAgICAANQEA9TLbHNFaFbkb0BlHY5MdcRy8l+g3Wg==''}}
0:03:32.246287	LOG	Server ----------> DUT
0:03:32.249283	LOG	TX_ACK: 02 ffb2 05 aa555a0000240409
0:03:37.230464	LOG	PUSH_ACK: 02 00e2 01
0:03:37.236460	LOG	PUSH_DATA: Protocol version = 02, Token = 00e2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1129765932, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 21, 'data': 'QCAgICCGbAAHAwcDBwMBM+Fya1MJ''}]}
0:03:37.237459	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 86, FCnt: 006c, FOpts: 070307030703), FPort: 01, FRMPayload: 002e, MIC: 726b5309)
0:03:37.238459	LOG	Server <---------- DUT
0:03:37.240458	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:37.241457	LOG	Command Answer: 070307030703
0:03:37.331425	LOG	MAC command communication completed

0:03:37.334404	LOG	End Test Step: Adding multiple channels 3
0:03:37.338402	LOG	Partial Verdict: PASS
0:03:37.341400	LOG	==========
0:03:37.346397	LOG	==========
0:03:37.347397	LOG	Start Test Step: Checking channel usage 12 to 15
0:03:37.357410	LOG	Send LinkADRReq process starts
0:03:41.901818	LOG	PULL_DATA: 02 ac86 02 aa555a0000240409
0:03:41.903817	LOG	PULL_ACK: 02 ac86 04
0:03:42.222639	LOG	PUSH_ACK: 02 00e3 01
0:03:42.223636	LOG	PUSH_DATA: Protocol version = 02, Token = 00e3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1134758252, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAbQABuQPKwUo6'}]}
0:03:42.225638	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006d, FOpts:), FPort: 01, FRMPayload: 002e, MIC: cac14a3a)
0:03:42.226636	LOG	Server <---------- DUT
0:03:42.228633	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0136, FOpts:), FPort: 00, FRMPayload: 035000f001), MIC: 8914fad5)
0:03:42.230634	LOG	PULL_RESP: Protocol version = 02, Token = 1eb9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1136758252, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAANgEAYwX7UFWJFPrV'}}
0:03:42.232631	LOG	Server ----------> DUT
0:03:42.235629	LOG	TX_ACK: 02 1eb9 05 aa555a0000240409
0:03:47.215810	LOG	PUSH_ACK: 02 00e4 01
0:03:47.217809	LOG	PUSH_DATA: Protocol version = 02, Token = 00e4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1139765965, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCbgADBwFXVSpGsjQ='}]}
0:03:47.218808	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 006e, FOpts: 0307), FPort: 01, FRMPayload: 002e, MIC: 2a46b234)
0:03:47.219807	LOG	Server <---------- DUT
0:03:47.220807	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:47.221806	LOG	Command Answer: 0307
0:03:47.233799	LOG	MAC command communication completed
0:03:47.238796	LOG	Receive frame on specific channels process starts
0:03:47.255787	LOG	Attempt 1/20
0:03:52.102043	LOG	PULL_DATA: 02 212b 02 aa555a0000240409
0:03:52.104042	LOG	PULL_ACK: 02 212b 04
0:03:52.221974	LOG	PUSH_ACK: 02 00e6 01
0:03:52.223974	LOG	PUSH_DATA: Protocol version = 02, Token = 00e6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1144763461, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAbwABNVPgaqU3'}]}
0:03:52.224975	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006f, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e06aa537)
0:03:52.226972	LOG	Server <---------- DUT
0:03:52.227972	LOG	Attempt 2/20
0:03:57.210150	LOG	PUSH_ACK: 02 00e7 01
0:03:57.212149	LOG	PUSH_DATA: Protocol version = 02, Token = 00e7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1149766061, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAcAABi0e8i0cP'}]}
0:03:57.214150	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0070, FOpts:), FPort: 01, FRMPayload: 002e, MIC: bc8b470f)

0:03:57.215148	LOG	Server <---------- DUT
0:03:57.216147	LOG	Attempt 3/20
0:04:02.181699	LOG	PULL_DATA: 02 aa1a 02 aa555a0000240409
0:04:02.186697	LOG	PULL_ACK: 02 aa1a 04
0:04:02.250660	LOG	PUSH_ACK: 02 00e8 01
0:04:02.252659	LOG	PUSH_DATA: Protocol version = 02, Token = 00e8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1154768661, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAcQABUszB6tMe'}]}
0:04:02.254658	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0071, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c1ead31e)
0:04:02.255658	LOG	Server <---------- DUT
0:04:02.256657	LOG	Attempt 4/20
0:04:07.238836	LOG	PUSH_ACK: 02 00e9 01
0:04:07.240835	LOG	PUSH_DATA: Protocol version = 02, Token = 00e9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1159771261, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAcgABUzVsAK8/'}]}
0:04:07.241834	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0072, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 6c00af3f)
0:04:07.243833	LOG	Server <---------- DUT
0:04:07.244832	LOG	Attempt 5/20
0:04:12.227011	LOG	PUSH_ACK: 02 00ea 01
0:04:12.230010	LOG	PUSH_DATA: Protocol version = 02, Token = 00ea, Identifier = 00, JSON = {'rxpk': [{'tmst': 1164773869, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAcwABF0PVJ4aD'}]}
0:04:12.231009	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0073, FOpts:), FPort: 01, FRMPayload: 002e, MIC: d5278683)
0:04:12.232008	LOG	Server <---------- DUT
0:04:12.234008	LOG	Attempt 6/20
0:04:12.261992	LOG	PULL_DATA: 02 55a2 02 aa555a0000240409
0:04:12.263990	LOG	PULL_ACK: 02 55a2 04
0:04:17.216303	LOG	PUSH_ACK: 02 00eb 01
0:04:17.218303	LOG	PUSH_DATA: Protocol version = 02, Token = 00eb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1169776469, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAdAABCN7o7vtn'}]}
0:04:17.220301	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0074, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e8eefb67)
0:04:17.223300	LOG	Server <---------- DUT
0:04:17.227298	LOG	Attempt 7/20
0:04:22.221471	LOG	PUSH_ACK: 02 00ed 01
0:04:22.223468	LOG	PUSH_DATA: Protocol version = 02, Token = 00ed, Identifier = 00, JSON = {'rxpk': [{'tmst': 1174779077, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAdQABsidMVQDE'}]}
0:04:22.225467	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0075, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 4c5500c4)
0:04:22.226467	LOG	Server <---------- DUT
0:04:22.228465	LOG	Attempt 8/20
0:04:22.361391	LOG	PULL_DATA: 02 be70 02 aa555a0000240409
0:04:22.365359	LOG	PULL_ACK: 02 be70 04
0:04:27.261617	LOG	PUSH_ACK: 02 00ee 01
0:04:27.263615	LOG	PUSH_DATA: Protocol version = 02, Token = 00ee, Identifier = 00, JSON = {'rxpk': [{'tmst': 1179781685, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAdgABlSXUslb5'}]}
0:04:27.264614	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0076, FOpts:), FPort: 01, FRMPayload: 002e, MIC: d4b256f9)
0:04:27.266612	LOG	Server <---------- DUT
0:04:27.268612	LOG	Attempt 9/20
0:04:32.250856	LOG	PUSH_ACK: 02 00ef 01
0:04:32.255853	LOG	PUSH_DATA: Protocol version = 02, Token = 00ef, Identifier = 00, JSON = {'rxpk': [{'tmst': 1184784285, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAdwABrDtrKVp7'}]}
0:04:32.257852	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0077, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 6b295a7b)
0:04:32.259851	LOG	Server <---------- DUT
0:04:32.261850	LOG	Attempt 10/20
0:04:32.441748	LOG	PULL_DATA: 02 b573 02 aa555a0000240409
0:04:32.443754	LOG	PULL_ACK: 02 b573 04
0:04:37.245028	LOG	PUSH_ACK: 02 00f0 01
0:04:37.247027	LOG	PUSH_DATA: Protocol version = 02, Token = 00f0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1189786893, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAeAAB6n/Sd01C'}]}
0:04:37.249026	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0078, FOpts:), FPort: 01, FRMPayload: 002e, MIC: d2774d42)
0:04:37.251025	LOG	Server <---------- DUT
0:04:37.253024	LOG	Attempt 11/20
0:04:42.235203	LOG	PUSH_ACK: 02 00f1 01
0:04:42.237203	LOG	PUSH_DATA: Protocol version = 02, Token = 00f1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1194789493, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAeQABpfATts8x'}]}
0:04:42.239200	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0079, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 13b6cf31)
0:04:42.240201	LOG	Server <---------- DUT
0:04:42.241200	LOG	Attempt 12/20
0:04:42.522044	LOG	PULL_DATA: 02 3b04 02 aa555a0000240409
0:04:42.525044	LOG	PULL_ACK: 02 3b04 04
0:04:47.277348	LOG	PUSH_ACK: 02 00f2 01
0:04:47.279346	LOG	PUSH_DATA: Protocol version = 02, Token = 00f2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1199792101, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAegABe5KCEoKl'}]}
0:04:47.280346	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007a, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 821282a5)
0:04:47.281346	LOG	Server <---------- DUT
0:04:47.283343	LOG	Attempt 13/20
0:04:52.283511	LOG	PUSH_ACK: 02 00f4 01
0:04:52.286510	LOG	PUSH_DATA: Protocol version = 02, Token = 00f4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1204794701, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAewAB4t7IvxXf'}]}
0:04:52.287509	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007b, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c8bf15df)
0:04:52.289508	LOG	Server <---------- DUT
0:04:52.290508	LOG	Attempt 14/20
0:04:52.621321	LOG	PULL_DATA: 02 5cd3 02 aa555a0000240409

0:04:52.623319	LOG	PULL_ACK: 02 5cd3 04
0:04:57.272686	LOG	PUSH_ACK: 02 00f5 01
0:04:57.275684	LOG	PUSH_DATA: Protocol version = 02, Token = 00f5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1209797309, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAfAAB8m+dBwp6'}]}
0:04:57.276684	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007c, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 9d070a7a)
0:04:57.278683	LOG	Server <---------- DUT
0:04:57.280682	LOG	Attempt 15/20
0:05:02.261861	LOG	PUSH_ACK: 02 00f6 01
0:05:02.266858	LOG	PUSH_DATA: Protocol version = 02, Token = 00f6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1214799909, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAfQABv5wbIxBv'}]}
0:05:02.268857	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007d, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 1b23106f)
0:05:02.272854	LOG	Server <---------- DUT
0:05:02.274853	LOG	Attempt 16/20
0:05:02.701611	LOG	PULL_DATA: 02 3694 02 aa555a0000240409
0:05:02.703611	LOG	PULL_ACK: 02 3694 04
0:05:07.252034	LOG	PUSH_ACK: 02 00f7 01
0:05:07.255033	LOG	PUSH_DATA: Protocol version = 02, Token = 00f7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1219802509, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAfgAB8E/JGpN8'}]}
0:05:07.257032	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007e, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c91a937c)
0:05:07.259031	LOG	Server <---------- DUT
0:05:07.262029	LOG	Attempt 17/20
0:05:12.293199	LOG	PUSH_ACK: 02 00f8 01
0:05:12.298180	LOG	PUSH_DATA: Protocol version = 02, Token = 00f8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1224805125, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAfwABDNJqwbEo'}]}
0:05:12.299180	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007f, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 6ac1b128)
0:05:12.302177	LOG	Server <---------- DUT
0:05:12.304175	LOG	Attempt 18/20
0:05:12.780903	LOG	PULL_DATA: 02 b3af 02 aa555a0000240409
0:05:12.782903	LOG	PULL_ACK: 02 b3af 04
0:05:17.284354	LOG	PUSH_ACK: 02 00f9 01
0:05:17.287352	LOG	PUSH_DATA: Protocol version = 02, Token = 00f9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1229807725, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAgAABhWqyzaAg'}]}
0:05:17.288353	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0080, FOpts:), FPort: 01, FRMPayload: 002e, MIC: b2cda020)
0:05:17.289352	LOG	Server <---------- DUT
0:05:17.291349	LOG	Attempt 19/20
0:05:22.283522	LOG	PUSH_ACK: 02 00fb 01
0:05:22.285521	LOG	PUSH_DATA: Protocol version = 02, Token = 00fb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1234810325, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAgQABLHas/5We'}]}

0:05:22.287520	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0081, FOpts:), FPort: 01, FRMPayload: 002e, MIC: acff959e)
0:05:22.288519	LOG	Server <---------- DUT
0:05:22.290518	LOG	Attempt 20/20
0:05:22.861195	LOG	PULL_DATA: 02 e2f0 02 aa555a0000240409
0:05:22.863194	LOG	PULL_ACK: 02 e2f0 04
0:05:27.271697	LOG	PUSH_ACK: 02 00fc 01
0:05:27.273696	LOG	PUSH_DATA: Protocol version = 02, Token = 00fc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1239812933, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAggABgfAWABIj'}]}
0:05:27.275695	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0082, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 16001223)
0:05:27.276694	LOG	Server <---------- DUT
0:05:27.282691	LOG	Receive frame on specific channels process tested successfully
0:05:27.285690	LOG	End Test Step: Checking channel usage 12 to 15
0:05:27.290686	LOG	Partial Verdict: PASS
0:05:27.294686	LOG	==========
0:05:27.300683	LOG	==========
0:05:27.303679	LOG	Start Test Step: Checking channel usage 8 to 11
0:05:27.314673	LOG	Send LinkADRReq process starts
0:05:32.260872	LOG	PUSH_ACK: 02 00fd 01
0:05:32.262871	LOG	PUSH_DATA: Protocol version = 02, Token = 00fd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1244815525, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAgwABt3whStvW'}]}
0:05:32.264870	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0083, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 214adbd6)
0:05:32.265871	LOG	Server <---------- DUT
0:05:32.266870	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0137, FOpts:), FPort: 00, FRMPayload: 0350000f01), MIC: bcdcd4b5)
0:05:32.269868	LOG	PULL_RESP: Protocol version = 02, Token = b586, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1246815525, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAANwEAUGN33vC83NS1'}}
0:05:32.270867	LOG	Server ----------> DUT
0:05:32.274864	LOG	TX_ACK: 02 b586 05 aa555a0000240409
0:05:32.901628	LOG	PULL_DATA: 02 e49e 02 aa555a0000240409
0:05:32.903627	LOG	PULL_ACK: 02 e49e 04
0:05:37.274170	LOG	PUSH_ACK: 02 00ff 01
0:05:37.276169	LOG	PUSH_DATA: Protocol version = 02, Token = 00ff, Identifier = 00, JSON = {'rxpk': [{'tmst': 1249823255, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 17, 'data': 'QCAgICCChAADBwGrECSTGZM='}]}
0:05:37.278167	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0084, FOpts: 0307), FPort: 01, FRMPayload: 002e, MIC: 24931993)
0:05:37.280166	LOG	Server <---------- DUT
0:05:37.282165	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:37.284164	LOG	Command Answer: 0307
0:05:37.292161	LOG	MAC command communication completed
0:05:37.300155	LOG	Receive frame on specific channels process starts
0:05:37.318145	LOG	Attempt 1/20
0:05:42.990950	LOG	PULL_DATA: 02 4f32 02 aa555a0000240409
0:05:42.992932	LOG	PULL_ACK: 02 4f32 04
0:05:47.297495	LOG	PUSH_ACK: 02 0100 01

0:05:47.299494	LOG	PUSH_DATA: Protocol version = 02, Token = 0100, Identifier = 00, JSON = {'rxpk': [{'tmst': 1259823343, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAhQABHU8KJCMo'}]}
0:05:47.302493	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0085, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 0a242328)
0:05:47.306490	LOG	Server <---------- DUT
0:05:47.309487	LOG	Attempt 2/20
0:05:52.294806	LOG	PUSH_ACK: 02 0102 01
0:05:52.296805	LOG	PUSH_DATA: Protocol version = 02, Token = 0102, Identifier = 00, JSON = {'rxpk': [{'tmst': 1264825935, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAhgABg/1HULDT'}]}
0:05:52.298804	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0086, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 4750b0d3)
0:05:52.300803	LOG	Server <---------- DUT
0:05:52.302801	LOG	Attempt 3/20
0:05:53.071367	LOG	PULL_DATA: 02 1549 02 aa555a0000240409
0:05:53.075364	LOG	PULL_ACK: 02 1549 04
0:05:57.282982	LOG	PUSH_ACK: 02 0103 01
0:05:57.284981	LOG	PUSH_DATA: Protocol version = 02, Token = 0103, Identifier = 00, JSON = {'rxpk': [{'tmst': 1269828535, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAhwAB5dZ/tE1m'}]}
0:05:57.286983	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0087, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 7fb44d66)
0:05:57.288980	LOG	Server <---------- DUT
0:05:57.293977	LOG	Attempt 4/20
0:06:02.272156	LOG	PUSH_ACK: 02 0104 01
0:06:02.274156	LOG	PUSH_DATA: Protocol version = 02, Token = 0104, Identifier = 00, JSON = {'rxpk': [{'tmst': 1274831135, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAiAABL4d/gO20'}]}
0:06:02.275155	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0088, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 7f80edb4)
0:06:02.277155	LOG	Server <---------- DUT
0:06:02.278154	LOG	Attempt 5/20
0:06:03.151657	LOG	PULL_DATA: 02 fd82 02 aa555a0000240409
0:06:03.155655	LOG	PULL_ACK: 02 fd82 04
0:06:07.312301	LOG	PUSH_ACK: 02 0105 01
0:06:07.314300	LOG	PUSH_DATA: Protocol version = 02, Token = 0105, Identifier = 00, JSON = {'rxpk': [{'tmst': 1279833743, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAiQABez7pdPgS'}]}
0:06:07.316299	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0089, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e974f812)
0:06:07.317298	LOG	Server <---------- DUT
0:06:07.319297	LOG	Attempt 6/20
0:06:12.300559	LOG	PUSH_ACK: 02 0106 01
0:06:12.302558	LOG	PUSH_DATA: Protocol version = 02, Token = 0106, Identifier = 00, JSON = {'rxpk': [{'tmst': 1284836343, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAigABECpPekUw'}]}
0:06:12.303558	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008a, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 4f7a4530)
0:06:12.305555	LOG	Server <---------- DUT

0:06:12.307527	LOG	Attempt 7/20
0:06:13.231032	LOG	PULL_DATA: 02 4ea9 02 aa555a0000240409
0:06:13.233031	LOG	PULL_ACK: 02 4ea9 04
0:06:17.288788	LOG	PUSH_ACK: 02 0107 01
0:06:17.290788	LOG	PUSH_DATA: Protocol version = 02, Token = 0107, Identifier = 00, JSON = {'rxpk': [{'tmst': 1289838943, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAiwABAYsGLiac'}]}
0:06:17.291787	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008b, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 062e269c)
0:06:17.293786	LOG	Server <---------- DUT
0:06:17.294785	LOG	Attempt 8/20
0:06:22.293954	LOG	PUSH_ACK: 02 010b 01
0:06:22.295952	LOG	PUSH_DATA: Protocol version = 02, Token = 010b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1294841535, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAjAABfzdRjaiw'}]}
0:06:22.297952	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008c, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 518da8b0)
0:06:22.298951	LOG	Server <---------- DUT
0:06:22.300950	LOG	Attempt 9/20
0:06:23.311377	LOG	PULL_DATA: 02 0870 02 aa555a0000240409
0:06:23.313377	LOG	PULL_ACK: 02 0870 04
0:06:27.333100	LOG	PUSH_ACK: 02 010c 01
0:06:27.335099	LOG	PUSH_DATA: Protocol version = 02, Token = 010c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1299844135, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAjQAB6ArXDD0e'}]}
0:06:27.336098	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008d, FOpts:), FPort: 01, FRMPayload: 002e, MIC: d70c3d1e)
0:06:27.338097	LOG	Server <---------- DUT
0:06:27.339096	LOG	Attempt 10/20
0:06:32.320276	LOG	PUSH_ACK: 02 010d 01
0:06:32.322275	LOG	PUSH_DATA: Protocol version = 02, Token = 010d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1304846735, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAjgABBdYDhSoy'}]}
0:06:32.324278	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008e, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 03852a32)
0:06:32.327275	LOG	Server <---------- DUT
0:06:32.331270	LOG	Attempt 11/20
0:06:33.391669	LOG	PULL_DATA: 02 d4b2 02 aa555a0000240409
0:06:33.395667	LOG	PULL_ACK: 02 d4b2 04
0:06:37.308451	LOG	PUSH_ACK: 02 010e 01
0:06:37.312449	LOG	PUSH_DATA: Protocol version = 02, Token = 010e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1309849327, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAjwABF+MkmZDM'}]}
0:06:37.315447	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008f, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 249990cc)
0:06:37.318445	LOG	Server <---------- DUT
0:06:37.319445	LOG	Attempt 12/20
0:06:42.297625	LOG	PUSH_ACK: 02 010f 01
0:06:42.299626	LOG	PUSH_DATA: Protocol version = 02, Token = 010f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1314851927, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAkAABxUvHoW4c'}]}
0:06:42.300625	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0090, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c7a16e1c)
0:06:42.302624	LOG	Server <---------- DUT
0:06:42.303622	LOG	Attempt 13/20
0:06:43.470960	LOG	PULL_DATA: 02 8a29 02 aa555a0000240409
0:06:43.472960	LOG	PULL_ACK: 02 8a29 04
0:06:47.338771	LOG	PUSH_ACK: 02 0111 01
0:06:47.340770	LOG	PUSH_DATA: Protocol version = 02, Token = 0111, Identifier = 00, JSON = {'rxpk': [{'tmst': 1319854535, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAkQABs/Rq04q3'}]}
0:06:47.342769	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0091, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 6ad38ab7)
0:06:47.343768	LOG	Server <---------- DUT
0:06:47.345767	LOG	Attempt 14/20
0:06:52.344935	LOG	PUSH_ACK: 02 0114 01
0:06:52.347934	LOG	PUSH_DATA: Protocol version = 02, Token = 0114, Identifier = 00, JSON = {'rxpk': [{'tmst': 1324857135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAkgABR93tIQq/'}]}
0:06:52.349934	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0092, FOpts:), FPort: 01, FRMPayload: 002e, MIC: ed210abf)
0:06:52.351933	LOG	Server <---------- DUT
0:06:52.352931	LOG	Attempt 15/20
0:06:53.551252	LOG	PULL_DATA: 02 5448 02 aa555a0000240409
0:06:53.553251	LOG	PULL_ACK: 02 5448 04
0:06:57.336109	LOG	PUSH_ACK: 02 0116 01
0:06:57.339108	LOG	PUSH_DATA: Protocol version = 02, Token = 0116, Identifier = 00, JSON = {'rxpk': [{'tmst': 1329859727, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAkwABJULbfXMb'}]}
0:06:57.340106	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0093, FOpts:), FPort: 01, FRMPayload: 002e, MIC: db7d731b)
0:06:57.342106	LOG	Server <---------- DUT
0:06:57.344104	LOG	Attempt 16/20
0:07:02.325285	LOG	PUSH_ACK: 02 0117 01
0:07:02.329286	LOG	PUSH_DATA: Protocol version = 02, Token = 0117, Identifier = 00, JSON = {'rxpk': [{'tmst': 1334862335, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAlAAB62dgiwDo'}]}
0:07:02.330283	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0094, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 608b00e8)
0:07:02.331282	LOG	Server <---------- DUT
0:07:02.333280	LOG	Attempt 17/20
0:07:03.631545	LOG	PULL_DATA: 02 9a0a 02 aa555a0000240409
0:07:03.639539	LOG	PULL_ACK: 02 9a0a 04
0:07:07.314459	LOG	PUSH_ACK: 02 0118 01
0:07:07.317457	LOG	PUSH_DATA: Protocol version = 02, Token = 0118, Identifier = 00, JSON = {'rxpk': [{'tmst': 1339864943, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAlQABiJbD/X/U'}]}
0:07:07.319456	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0095, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c3fd7fd4)
0:07:07.320455	LOG	Server <---------- DUT

0:07:07.322455	LOG	Attempt 18/20
0:07:12.354604	LOG	PUSH_ACK: 02 0119 01
0:07:12.356609	LOG	PUSH_DATA: Protocol version = 02, Token = 0119, Identifier = 00, JSON = {'rxpk': [{'tmst': 1344867535, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAlgABy6IHWSme'}]}
0:07:12.358602	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0096, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 0759299e)
0:07:12.359603	LOG	Server <---------- DUT
0:07:12.360602	LOG	Attempt 19/20
0:07:13.731585	LOG	PULL_DATA: 02 bcd5 02 aa555a0000240409
0:07:13.733585	LOG	PULL_ACK: 02 bcd5 04
0:07:17.343523	LOG	PUSH_ACK: 02 011a 01
0:07:17.345522	LOG	PUSH_DATA: Protocol version = 02, Token = 011a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1349870143, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAlwABynp48b8H'}]}
0:07:17.346522	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0097, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 78f1bf07)
0:07:17.347522	LOG	Server <---------- DUT
0:07:17.348521	LOG	Attempt 20/20
0:07:22.347727	LOG	PUSH_ACK: 02 011c 01
0:07:22.349720	LOG	PUSH_DATA: Protocol version = 02, Token = 011c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1354872735, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAmAABEx4vKZkC'}]}
0:07:22.350719	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0098, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 2f299902)
0:07:22.352718	LOG	Server <---------- DUT
0:07:22.360715	LOG	Receive frame on specific channels process tested successfully
0:07:22.365711	LOG	End Test Step: Checking channel usage 8 to 11
0:07:22.370708	LOG	Partial Verdict: PASS
0:07:22.376705	LOG	==========
0:07:22.383701	LOG	==========
0:07:22.386700	LOG	Start Test Step: Checking channel usage 4 to 7
0:07:22.398692	LOG	Send LinkADRReq process starts
0:07:23.810893	LOG	PULL_DATA: 02 0e18 02 aa555a0000240409
0:07:23.812891	LOG	PULL_ACK: 02 0e18 04
0:07:27.337895	LOG	PUSH_ACK: 02 011d 01
0:07:27.340893	LOG	PUSH_DATA: Protocol version = 02, Token = 011d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1359875335, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAmQAB6wFzlz9f'}]}
0:07:27.342892	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0099, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 73973f5f)
0:07:27.343891	LOG	Server <---------- DUT
0:07:27.346893	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0138, FOpts:), FPort: 00, FRMPayload: 0350f00001), MIC: a34b0ae7)
0:07:27.349888	LOG	PULL_RESP: Protocol version = 02, Token = a7b9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1361875335, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAOAEAxPJBqiKjSwrn'}}
0:07:27.350888	LOG	Server ----------> DUT
0:07:27.353886	LOG	TX_ACK: 02 a7b9 05 aa555a0000240409
0:07:32.334065	LOG	PUSH_ACK: 02 011e 01

0:07:32.336064	LOG	PUSH_DATA: Protocol version = 02, Token = 011e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1364883067, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCmgADBwHmeHmQYOE='}]}
0:07:32.338063	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 009a, FOpts: 0307), FPort: 01, FRMPayload: 002e, MIC: 799060e1)
0:07:32.339063	LOG	Server <---------- DUT
0:07:32.341061	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:07:32.342061	LOG	Command Answer: 0307
0:07:32.350056	LOG	MAC command communication completed
0:07:32.355054	LOG	Receive frame on specific channels process starts
0:07:32.369046	LOG	Attempt 1/20
0:07:33.861201	LOG	PULL_DATA: 02 a844 02 aa555a0000240409
0:07:33.865198	LOG	PULL_ACK: 02 a844 04
0:07:42.358388	LOG	PUSH_ACK: 02 0120 01
0:07:42.361387	LOG	PUSH_DATA: Protocol version = 02, Token = 0120, Identifier = 00, JSON = {'rxpk': [{'tmst': 1374883171, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAmwABlnIbZqDo'}]}
0:07:42.362388	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009b, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 1b66a0e8)
0:07:42.363387	LOG	Server <---------- DUT
0:07:42.365384	LOG	Attempt 2/20
0:07:43.940492	LOG	PULL_DATA: 02 ac5b 02 aa555a0000240409
0:07:43.942492	LOG	PULL_ACK: 02 ac5b 04
0:07:47.347565	LOG	PUSH_ACK: 02 0121 01
0:07:47.352566	LOG	PUSH_DATA: Protocol version = 02, Token = 0121, Identifier = 00, JSON = {'rxpk': [{'tmst': 1379885779, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAnAABgGy936LR'}]}
0:07:47.356560	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009c, FOpts:), FPort: 01, FRMPayload: 002e, MIC: bddfa2d1)
0:07:47.360557	LOG	Server <---------- DUT
0:07:47.364555	LOG	Attempt 3/20
0:07:52.355273	LOG	PUSH_ACK: 02 0123 01
0:07:52.357272	LOG	PUSH_DATA: Protocol version = 02, Token = 0123, Identifier = 00, JSON = {'rxpk': [{'tmst': 1384888387, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAnQABHumJuLjw'}]}
0:07:52.358271	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009d, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 89b8b8f0)
0:07:52.360270	LOG	Server <---------- DUT
0:07:52.362269	LOG	Attempt 4/20
0:07:54.030342	LOG	PULL_DATA: 02 f38e 02 aa555a0000240409
0:07:54.032323	LOG	PULL_ACK: 02 f38e 04
0:07:57.343561	LOG	PUSH_ACK: 02 0124 01
0:07:57.344560	LOG	PUSH_DATA: Protocol version = 02, Token = 0124, Identifier = 00, JSON = {'rxpk': [{'tmst': 1389890979, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAngABEtfH7PXT'}]}
0:07:57.346558	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009e, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c7ecf5d3)
0:07:57.347558	LOG	Server <---------- DUT
0:07:57.348556	LOG	Attempt 5/20
0:08:02.383780	LOG	PUSH_ACK: 02 0125 01

0:08:02.385779	LOG	PUSH_DATA: Protocol version = 02, Token = 0125, Identifier = 00, JSON = {'rxpk': [{'tmst': 1394893586, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAnwABjKg99yrK'}]}
0:08:02.386778	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009f, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 3df72aca)
0:08:02.387778	LOG	Server <---------- DUT
0:08:02.388777	LOG	Attempt 6/20
0:08:04.110802	LOG	PULL_DATA: 02 4cd7 02 aa555a0000240409
0:08:04.115799	LOG	PULL_ACK: 02 4cd7 04
0:08:07.371955	LOG	PUSH_ACK: 02 0126 01
0:08:07.373954	LOG	PUSH_DATA: Protocol version = 02, Token = 0126, Identifier = 00, JSON = {'rxpk': [{'tmst': 1399896195, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAoAABCIaxhCLz'}]}
0:08:07.374953	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a0, FOpts:), FPort: 01, FRMPayload: 002e, MIC: b18422f3)
0:08:07.375953	LOG	Server <---------- DUT
0:08:07.377952	LOG	Attempt 7/20
0:08:12.360237	LOG	PUSH_ACK: 02 0127 01
0:08:12.363235	LOG	PUSH_DATA: Protocol version = 02, Token = 0127, Identifier = 00, JSON = {'rxpk': [{'tmst': 1404898795, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 6.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAoQABG6m4DjQ4'}]}
0:08:12.364234	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a1, FOpts:), FPort: 01, FRMPayload: 002e, MIC: b80e3438)
0:08:12.365234	LOG	Server <---------- DUT
0:08:12.366234	LOG	Attempt 8/20
0:08:14.191256	LOG	PULL_DATA: 02 2d9b 02 aa555a0000240409
0:08:14.193254	LOG	PULL_ACK: 02 2d9b 04
0:08:17.349471	LOG	PUSH_ACK: 02 0128 01
0:08:17.351468	LOG	PUSH_DATA: Protocol version = 02, Token = 0128, Identifier = 00, JSON = {'rxpk': [{'tmst': 1409901394, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAogABgD5NNeTk'}]}
0:08:17.352471	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a2, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 4d35e4e4)
0:08:17.353470	LOG	Server <---------- DUT
0:08:17.355465	LOG	Attempt 9/20
0:08:22.354632	LOG	PUSH_ACK: 02 012a 01
0:08:22.356631	LOG	PUSH_DATA: Protocol version = 02, Token = 012a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1414903987, 'chan': 7, 'rfch': 0, 'freq': 867.9, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAowABoqpmQbs7'}]}
0:08:22.358648	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a3, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 6641bb3b)
0:08:22.359648	LOG	Server <---------- DUT
0:08:22.361628	LOG	Attempt 10/20
0:08:24.270548	LOG	PULL_DATA: 02 0942 02 aa555a0000240409
0:08:24.272546	LOG	PULL_ACK: 02 0942 04
0:08:27.395450	LOG	PUSH_ACK: 02 012b 01
0:08:27.396447	LOG	PUSH_DATA: Protocol version = 02, Token = 012b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1419906602, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCApAAByf165LTL'}]}

0:08:27.398445	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a4, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 7ae4b4cb)
0:08:27.399448	LOG	Server <---------- DUT
0:08:27.400443	LOG	Attempt 11/20
0:08:32.383620	LOG	PUSH_ACK: 02 012c 01
0:08:32.385619	LOG	PUSH_DATA: Protocol version = 02, Token = 012c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1424909195, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICCApQAB72XqPzKw'}]}
0:08:32.386620	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a5, FOpts:), FPort: 01, FRMPayload: 002e, MIC: ea3f32b0)
0:08:32.387620	LOG	Server <---------- DUT
0:08:32.388619	LOG	Attempt 12/20
0:08:34.350507	LOG	PULL_DATA: 02 e506 02 aa555a0000240409
0:08:34.355503	LOG	PULL_ACK: 02 e506 04
0:08:37.371795	LOG	PUSH_ACK: 02 012d 01
0:08:37.373794	LOG	PUSH_DATA: Protocol version = 02, Token = 012d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1429911803, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCApgABDtcMNP8o'}]}
0:08:37.374794	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a6, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 0c34ff28)
0:08:37.376792	LOG	Server <---------- DUT
0:08:37.377792	LOG	Attempt 13/20
0:08:42.360844	LOG	PUSH_ACK: 02 012e 01
0:08:42.362843	LOG	PUSH_DATA: Protocol version = 02, Token = 012e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1434914403, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCApwABUxZhvzn+'}]}
0:08:42.363844	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a7, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 61bf39fe)
0:08:42.364843	LOG	Server <---------- DUT
0:08:42.365843	LOG	Attempt 14/20
0:08:44.430672	LOG	PULL_DATA: 02 c433 02 aa555a0000240409
0:08:44.431671	LOG	PULL_ACK: 02 c433 04
0:08:47.400990	LOG	PUSH_ACK: 02 012f 01
0:08:47.402989	LOG	PUSH_DATA: Protocol version = 02, Token = 012f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1439917003, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': 1, 'size': 15, 'data': 'QCAgICCAqAABAbq7BHzc'}]}
0:08:47.404987	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a8, FOpts:), FPort: 01, FRMPayload: 002e, MIC: bb047cdc)
0:08:47.405989	LOG	Server <---------- DUT
0:08:47.407986	LOG	Attempt 15/20
0:08:52.407154	LOG	PUSH_ACK: 02 0131 01
0:08:52.410152	LOG	PUSH_DATA: Protocol version = 02, Token = 0131, Identifier = 00, JSON = {'rxpk': [{'tmst': 1444919611, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAqQABh4ZRWDe3'}]}
0:08:52.412152	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a9, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 515837b7)
0:08:52.413170	LOG	Server <---------- DUT
0:08:52.415152	LOG	Attempt 16/20
0:08:54.510963	LOG	PULL_DATA: 02 afcd 02 aa555a0000240409
0:08:54.511963	LOG	PULL_ACK: 02 afcd 04
0:08:57.398329	LOG	PUSH_ACK: 02 0132 01

0:08:57.401328	LOG	PUSH_DATA: Protocol version = 02, Token = 0132, Identifier = 00, JSON = {'rxpk': [{'tmst': 1449922211, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 6.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAqgABVn8aAlw8'}]}
0:08:57.402328	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00aa, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 1a025c3c)
0:08:57.404326	LOG	Server <---------- DUT
0:08:57.405326	LOG	Attempt 17/20
0:09:02.389502	LOG	PUSH_ACK: 02 0133 01
0:09:02.391503	LOG	PUSH_DATA: Protocol version = 02, Token = 0133, Identifier = 00, JSON = {'rxpk': [{'tmst': 1454924811, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 6.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAqwABZkbmhjlI'}]}
0:09:02.392502	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ab, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e6863948)
0:09:02.393504	LOG	Server <---------- DUT
0:09:02.395501	LOG	Attempt 18/20
0:09:04.590367	LOG	PULL_DATA: 02 a384 02 aa555a0000240409
0:09:04.595366	LOG	PULL_ACK: 02 a384 04
0:09:07.379798	LOG	PUSH_ACK: 02 0134 01
0:09:07.381796	LOG	PUSH_DATA: Protocol version = 02, Token = 0134, Identifier = 00, JSON = {'rxpk': [{'tmst': 1459927426, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCArAAB3mYvK5nb'}]}
0:09:07.382795	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ac, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 2f2b99db)
0:09:07.383794	LOG	Server <---------- DUT
0:09:07.385792	LOG	Attempt 19/20
0:09:12.420941	LOG	PUSH_ACK: 02 0135 01
0:09:12.422940	LOG	PUSH_DATA: Protocol version = 02, Token = 0135, Identifier = 00, JSON = {'rxpk': [{'tmst': 1464930019, 'chan': 5, 'rfch': 0, 'freq': 867.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCArQABknfeH1vy'}]}
0:09:12.423941	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ad, FOpts:), FPort: 01, FRMPayload: 002e, MIC: de1f5bf2)
0:09:12.425940	LOG	Server <---------- DUT
0:09:12.426939	LOG	Attempt 20/20
0:09:14.670667	LOG	PULL_DATA: 02 7f2d 02 aa555a0000240409
0:09:14.672666	LOG	PULL_ACK: 02 7f2d 04
0:09:17.412114	LOG	PUSH_ACK: 02 0136 01
0:09:17.414113	LOG	PUSH_DATA: Protocol version = 02, Token = 0136, Identifier = 00, JSON = {'rxpk': [{'tmst': 1469932626, 'chan': 4, 'rfch': 0, 'freq': 867.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCArgABcjsGkNt5'}]}
0:09:17.416112	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ae, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 0690db79)
0:09:17.418111	LOG	Server <---------- DUT
0:09:17.426106	LOG	Receive frame on specific channels process tested successfully
0:09:17.430104	LOG	End Test Step: Checking channel usage 4 to 7
0:09:17.434102	LOG	Partial Verdict: PASS
0:09:17.439099	LOG	==========
0:09:17.445095	LOG	==========
0:09:17.448094	LOG	Start Test Step: Checking channel usage 0 to 3
0:09:17.460087	LOG	Send LinkADRReq process starts
0:09:22.418280	LOG	PUSH_ACK: 02 0138 01

0:09:22.420278	LOG	PUSH_DATA: Protocol version = 02, Token = 0138, Identifier = 00, JSON = {'rxpk': [{'tmst': 1474935227, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCArwABHr7cl4Vn'}]}
0:09:22.422277	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00af, FOpts:), FPort: 01, FRMPayload: 002e, MIC: dc978567)
0:09:22.423295	LOG	Server <---------- DUT
0:09:22.425276	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0139, FOpts:), FPort: 00, FRMPayload: 03500f0001), MIC: a4994f96)
0:09:22.428274	LOG	PULL_RESP: Protocol version = 02, Token = 18ee, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1476935227, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAOQEAIwxrF1OkmU+W'}}
0:09:22.430274	LOG	Server ----------> DUT
0:09:22.435270	LOG	TX_ACK: 02 18ee 05 aa555a0000240409
0:09:24.739965	LOG	PULL_DATA: 02 add4 02 aa555a0000240409
0:09:24.741963	LOG	PULL_ACK: 02 add4 04
0:09:27.393462	LOG	PUSH_ACK: 02 0139 01
0:09:27.395461	LOG	PUSH_DATA: Protocol version = 02, Token = 0139, Identifier = 00, JSON = {'rxpk': [{'tmst': 1479942963, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCsAADBwEvUeRfYNg='}]}
0:09:27.396460	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00b0, FOpts: 0307), FPort: 01, FRMPayload: 002e, MIC: e45f60d8)
0:09:27.397461	LOG	Server <---------- DUT
0:09:27.398461	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:09:27.400459	LOG	Command Answer: 0307
0:09:27.408453	LOG	MAC command communication completed
0:09:27.412451	LOG	Receive frame on specific channels process starts
0:09:27.429441	LOG	Attempt 1/20
0:09:34.820275	LOG	PULL_DATA: 02 7647 02 aa555a0000240409
0:09:34.825255	LOG	PULL_ACK: 02 7647 04
0:09:37.417785	LOG	PUSH_ACK: 02 013a 01
0:09:37.419785	LOG	PUSH_DATA: Protocol version = 02, Token = 013a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1489943059, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAsQABxcq6JHon'}]}
0:09:37.420783	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b1, FOpts:), FPort: 01, FRMPayload: 002e, MIC: ba247a27)
0:09:37.421784	LOG	Server <---------- DUT
0:09:37.423782	LOG	Attempt 2/20
0:09:42.408077	LOG	PUSH_ACK: 02 013b 01
0:09:42.411076	LOG	PUSH_DATA: Protocol version = 02, Token = 013b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1494945667, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAsgABQ/DAkT6m'}]}
0:09:42.412075	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b2, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c0913ea6)
0:09:42.414074	LOG	Server <---------- DUT
0:09:42.415075	LOG	Attempt 3/20
0:09:44.900699	LOG	PULL_DATA: 02 de32 02 aa555a0000240409
0:09:44.901698	LOG	PULL_ACK: 02 de32 04
0:09:47.399289	LOG	PUSH_ACK: 02 013c 01
0:09:47.404281	LOG	PUSH_DATA: Protocol version = 02, Token = 013c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1499948267, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAswAB+pZztAF8'}]}
0:09:47.406281	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b3, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 73b4017c)
0:09:47.408279	LOG	Server <---------- DUT
0:09:47.410278	LOG	Attempt 4/20
0:09:52.408445	LOG	PUSH_ACK: 02 013e 01
0:09:52.410444	LOG	PUSH_DATA: Protocol version = 02, Token = 013e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1504950868, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAtAABXfa81ecx'}]}
0:09:52.412443	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b4, FOpts:), FPort: 01, FRMPayload: 002e, MIC: bcd5e731)
0:09:52.413443	LOG	Server <---------- DUT
0:09:52.414442	LOG	Attempt 5/20
0:09:54.979988	LOG	PULL_DATA: 02 1cec 02 aa555a0000240409
0:09:54.981987	LOG	PULL_ACK: 02 1cec 04
0:09:57.398791	LOG	PUSH_ACK: 02 013f 01
0:09:57.400790	LOG	PUSH_DATA: Protocol version = 02, Token = 013f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1509953467, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAtQABLaO6vL1L'}]}
0:09:57.402788	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b5, FOpts:), FPort: 01, FRMPayload: 002e, MIC: babcbd4b)
0:09:57.403788	LOG	Server <---------- DUT
0:09:57.405787	LOG	Attempt 6/20
0:10:02.442330	LOG	PUSH_ACK: 02 0141 01
0:10:02.444328	LOG	PUSH_DATA: Protocol version = 02, Token = 0141, Identifier = 00, JSON = {'rxpk': [{'tmst': 1514956051, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAtgABqGkto+6c'}]}
0:10:02.446327	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b6, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 2da3ee9c)
0:10:02.447326	LOG	Server <---------- DUT
0:10:02.449326	LOG	Attempt 7/20
0:10:05.059877	LOG	PULL_DATA: 02 4ac4 02 aa555a0000240409
0:10:05.064875	LOG	PULL_ACK: 02 4ac4 04
0:10:07.432502	LOG	PUSH_ACK: 02 0142 01
0:10:07.435501	LOG	PUSH_DATA: Protocol version = 02, Token = 0142, Identifier = 00, JSON = {'rxpk': [{'tmst': 1519958643, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAtwABthj8gadu'}]}
0:10:07.436500	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b7, FOpts:), FPort: 01, FRMPayload: 002e, MIC: fc81a76e)
0:10:07.437499	LOG	Server <---------- DUT
0:10:07.439498	LOG	Attempt 8/20
0:10:12.423728	LOG	PUSH_ACK: 02 0143 01
0:10:12.425727	LOG	PUSH_DATA: Protocol version = 02, Token = 0143, Identifier = 00, JSON = {'rxpk': [{'tmst': 1524961235, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAuAABATWtmGy1'}]}
0:10:12.426726	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b8, FOpts:), FPort: 01, FRMPayload: 002e, MIC: ad986cb5)
0:10:12.427727	LOG	Server <---------- DUT
0:10:12.429726	LOG	Attempt 9/20
0:10:15.139991	LOG	PULL_DATA: 02 30f6 02 aa555a0000240409

0:10:15.141989	LOG	PULL_ACK: 02 30f6 04
0:10:17.413672	LOG	PUSH_ACK: 02 0144 01
0:10:17.415671	LOG	PUSH_DATA: Protocol version = 02, Token = 0144, Identifier = 00, JSON = {'rxpk': [{'tmst': 1529963835, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAuQABEwJpi+MN'}]}
0:10:17.416670	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00b9, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 698be30d)
0:10:17.418669	LOG	Server <---------- DUT
0:10:17.419671	LOG	Attempt 10/20
0:10:22.418874	LOG	PUSH_ACK: 02 0146 01
0:10:22.424870	LOG	PUSH_DATA: Protocol version = 02, Token = 0146, Identifier = 00, JSON = {'rxpk': [{'tmst': 1534966435, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAugABNtMVmEzc'}]}
0:10:22.426869	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ba, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 15984cdc)
0:10:22.427869	LOG	Server <---------- DUT
0:10:22.429867	LOG	Attempt 11/20
0:10:25.220286	LOG	PULL_DATA: 02 2023 02 aa555a0000240409
0:10:25.222285	LOG	PULL_ACK: 02 2023 04
0:10:27.412045	LOG	PUSH_ACK: 02 0147 01
0:10:27.415044	LOG	PUSH_DATA: Protocol version = 02, Token = 0147, Identifier = 00, JSON = {'rxpk': [{'tmst': 1539969027, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAuwABJVbk1Wlb'}]}
0:10:27.417042	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00bb, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e4d5695b)
0:10:27.418042	LOG	Server <---------- DUT
0:10:27.420042	LOG	Attempt 12/20
0:10:32.454288	LOG	PUSH_ACK: 02 0148 01
0:10:32.456286	LOG	PUSH_DATA: Protocol version = 02, Token = 0148, Identifier = 00, JSON = {'rxpk': [{'tmst': 1544971627, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAvAABfdfeMt9d'}]}
0:10:32.457285	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00bc, FOpts:), FPort: 01, FRMPayload: 002e, MIC: de32df5d)
0:10:32.459285	LOG	Server <---------- DUT
0:10:32.460284	LOG	Attempt 13/20
0:10:35.300730	LOG	PULL_DATA: 02 856c 02 aa555a0000240409
0:10:35.303728	LOG	PULL_ACK: 02 856c 04
0:10:37.444515	LOG	PUSH_ACK: 02 0149 01
0:10:37.446514	LOG	PUSH_DATA: Protocol version = 02, Token = 0149, Identifier = 00, JSON = {'rxpk': [{'tmst': 1549974227, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAvQABLQw0cItC'}]}
0:10:37.447513	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00bd, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 34708b42)
0:10:37.449513	LOG	Server <---------- DUT
0:10:37.451511	LOG	Attempt 14/20
0:10:45.380019	LOG	PULL_DATA: 02 fbb2 02 aa555a0000240409
0:10:45.382019	LOG	PULL_ACK: 02 fbb2 04
0:10:47.470839	LOG	PUSH_ACK: 02 014b 01
0:10:47.472836	LOG	PUSH_DATA: Protocol version = 02, Token = 014b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1559979427, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAvwAB7N4AHkvs'}]}
0:10:47.473835	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00bf, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 001e4bec)
0:10:47.475865	LOG	Server <---------- DUT
0:10:47.477834	LOG	Attempt 15/20
0:10:52.425029	LOG	PUSH_ACK: 02 014d 01
0:10:52.427027	LOG	PUSH_DATA: Protocol version = 02, Token = 014d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1564982027, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAwAABREH9sowD'}]}
0:10:52.429026	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00c0, FOpts:), FPort: 01, FRMPayload: 002e, MIC: fdb28c03)
0:10:52.430026	LOG	Server <---------- DUT
0:10:52.431025	LOG	Attempt 16/20
0:10:55.459806	LOG	PULL_DATA: 02 0704 02 aa555a0000240409
0:10:55.461805	LOG	PULL_ACK: 02 0704 04
0:10:57.465670	LOG	PUSH_ACK: 02 014e 01
0:10:57.467669	LOG	PUSH_DATA: Protocol version = 02, Token = 014e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1569984627, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAwQABcAmQ5NKt'}]}
0:10:57.468669	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00c1, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 90e4d2ad)
0:10:57.469669	LOG	Server <---------- DUT
0:10:57.471668	LOG	Attempt 17/20
0:11:02.455843	LOG	PUSH_ACK: 02 014f 01
0:11:02.457842	LOG	PUSH_DATA: Protocol version = 02, Token = 014f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1574987227, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAwgABJDD72NnS'}]}
0:11:02.458842	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00c2, FOpts:), FPort: 01, FRMPayload: 002e, MIC: fbd8d9d2)
0:11:02.460840	LOG	Server <---------- DUT
0:11:02.461840	LOG	Attempt 18/20
0:11:05.540096	LOG	PULL_DATA: 02 f4ec 02 aa555a0000240409
0:11:05.543096	LOG	PULL_ACK: 02 f4ec 04
0:11:07.443018	LOG	PUSH_ACK: 02 0150 01
0:11:07.445016	LOG	PUSH_DATA: Protocol version = 02, Token = 0150, Identifier = 00, JSON = {'rxpk': [{'tmst': 1579989827, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAwwABluOu3Mak'}]}
0:11:07.447016	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00c3, FOpts:), FPort: 01, FRMPayload: 002e, MIC: aedcc6a4)
0:11:07.448015	LOG	Server <---------- DUT
0:11:07.449014	LOG	Attempt 19/20
0:11:12.431191	LOG	PUSH_ACK: 02 0151 01
0:11:12.434190	LOG	PUSH_DATA: Protocol version = 02, Token = 0151, Identifier = 00, JSON = {'rxpk': [{'tmst': 1584992427, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAxAABRzMRxnRS'}]}
0:11:12.435190	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00c4, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 11c67452)
0:11:12.436189	LOG	Server <---------- DUT
0:11:12.438188	LOG	Attempt 20/20
0:11:15.620385	LOG	PULL_DATA: 02 0bb9 02 aa555a0000240409

0:11:15.621385	LOG	PULL_ACK: 02 0bb9 04
0:11:17.472338	LOG	PUSH_ACK: 02 0152 01
0:11:17.473335	LOG	PUSH_DATA: Protocol version = 02, Token = 0152, Identifier = 00, JSON = {'rxpk': [{'tmst': 1589995027, 'chan': 3, 'rfch': 0, 'freq': 867.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAxQABscS/LE80'}]}
0:11:17.475335	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00c5, FOpts:), FPort: 01, FRMPayload: 002e, MIC: bf2c4f34)
0:11:17.476334	LOG	Server <---------- DUT
0:11:17.484329	LOG	Receive frame on specific channels process tested successfully
0:11:17.488327	LOG	End Test Step: Checking channel usage 0 to 3
0:11:17.492327	LOG	Partial Verdict: PASS
0:11:17.496324	LOG	==========
0:11:17.501321	LOG	==========
0:11:17.503319	LOG	Start Test Step: Removing multiple channels 1
0:11:17.513313	LOG	Send MAC command block process starts
0:11:22.477651	LOG	PUSH_ACK: 02 0154 01
0:11:22.479650	LOG	PUSH_DATA: Protocol version = 02, Token = 0154, Identifier = 00, JSON = {'rxpk': [{'tmst': 1594997627, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAxgABEjkDrpEh'}]}
0:11:22.480649	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00c6, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 03ae9121)
0:11:22.482648	LOG	Server <---------- DUT
0:11:22.484647	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 013a, FOpts:), FPort: 00, FRMPayload: 07030000005007040000005007050000005007060000005007070000005 0), MIC: a8751bd3)
0:11:22.487645	LOG	PULL_RESP: Protocol version = 02, Token = 4da0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1596997627, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 43, 'data': 'YCAgICAAOgEA3KIamM3Tmznl07HMlPUfI2Ev7fQUKOufNTrYk3/7qHUb0w=='}}
0:11:22.489644	LOG	Server ----------> DUT
0:11:22.492642	LOG	TX_ACK: 02 4da0 05 aa555a0000240409
0:11:25.639971	LOG	PULL_DATA: 02 20ba 02 aa555a0000240409
0:11:25.641969	LOG	PULL_ACK: 02 20ba 04
0:11:27.502962	LOG	PUSH_ACK: 02 0155 01
0:11:27.504960	LOG	PUSH_DATA: Protocol version = 02, Token = 0155, Identifier = 00, JSON = {'rxpk': [{'tmst': 1600015694, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 25, 'data': 'QCAgICCKxwAHAwcDBwMHAwcDAeRzexyVUw=='}]}
0:11:27.505958	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 8a, FCnt: 00c7, FOpts: 07030703070307030703), FPort: 01, FRMPayload: 002e, MIC: 7b1c9553)
0:11:27.506959	LOG	Server <---------- DUT
0:11:27.507959	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:11:27.509958	LOG	Command Answer: 07030703070307030703
0:11:27.632886	LOG	MAC command communication completed
0:11:27.636884	LOG	End Test Step: Removing multiple channels 1
0:11:27.640881	LOG	Partial Verdict: PASS
0:11:27.644879	LOG	==========
0:11:27.649877	LOG	==========
0:11:27.651876	LOG	Start Test Step: Removing multiple channels 2

0:11:27.661870	LOG	Send MAC command block process starts
0:11:35.720305	LOG	PULL_DATA: 02 86c3 02 aa555a0000240409
0:11:35.724321	LOG	PULL_ACK: 02 86c3 04
0:11:37.474311	LOG	PUSH_ACK: 02 0156 01
0:11:37.476310	LOG	PUSH_DATA: Protocol version = 02, Token = 0156, Identifier = 00, JSON = {'rxpk': [{'tmst': 1610005479, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAyAABps4pyOXG'}]}
0:11:37.477310	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00c8, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 29c8e5c6)
0:11:37.479308	LOG	Server <---------- DUT
0:11:37.480308	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 013b, FOpts:), FPort: 00, FRMPayload: 07080000005007090000050070a00000050070b00000050070c00000050), MIC: 501a7d34)
0:11:37.483306	LOG	PULL_RESP: Protocol version = 02, Token = 04cb, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1612005479, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 43, 'data': 'YCAgICAAOwEAt2X2tgea3O7e6IgbzXBy64tOGM1EcNcHnBiomeRhUBp9NA==='}}
0:11:37.485306	LOG	Server ----------> DUT
0:11:37.489303	LOG	TX_ACK: 02 04cb 05 aa555a0000240409
0:11:42.511459	LOG	PUSH_ACK: 02 0157 01
0:11:42.512459	LOG	PUSH_DATA: Protocol version = 02, Token = 0157, Identifier = 00, JSON = {'rxpk': [{'tmst': 1615023537, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 25, 'data': 'QCAgICCKyQAHAwcDBwMHAwcDAfdZD8qt0w==='}]}
0:11:42.514455	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 8a, FCnt: 00c9, FOpts: 07030703070307030703), FPort: 01, FRMPayload: 002e, MIC: 0fcaadd3)
0:11:42.515455	LOG	Server <---------- DUT
0:11:42.516456	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:11:42.518453	LOG	Command Answer: 07030703070307030703
0:11:42.635387	LOG	MAC command communication completed
0:11:42.639385	LOG	End Test Step: Removing multiple channels 2
0:11:42.644382	LOG	Partial Verdict: PASS
0:11:42.649379	LOG	==========
0:11:42.657375	LOG	==========
0:11:42.659374	LOG	Start Test Step: Removing multiple channels 3
0:11:42.670367	LOG	Send MAC command block process starts
0:11:45.879550	LOG	PULL_DATA: 02 3e05 02 aa555a0000240409
0:11:45.881548	LOG	PULL_ACK: 02 3e05 04
0:11:52.496802	LOG	PUSH_ACK: 02 0159 01
0:11:52.499804	LOG	PUSH_DATA: Protocol version = 02, Token = 0159, Identifier = 00, JSON = {'rxpk': [{'tmst': 1625013305, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAygAB1mn0fbYr'}]}
0:11:52.500799	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ca, FOpts:), FPort: 01, FRMPayload: 002e, MIC: f47db62b)
0:11:52.501798	LOG	Server <---------- DUT
0:11:52.503798	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 013c, FOpts:), FPort: 00, FRMPayload: 070d00000050070e00000050070f00000050), MIC: 84110737)

0:11:52.505797	LOG	PULL_RESP: Protocol version = 02, Token = f612, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1627013305, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 31, 'data': 'YCAgICAAPAEAwbyqS/Jvs1ET/jo5smEAwaouhBEHNw==''}}
0:11:52.506796	LOG	Server ----------> DUT
0:11:52.509795	LOG	TX_ACK: 02 f612 05 aa555a0000240409
0:11:56.069776	LOG	PULL_DATA: 02 f1ec 02 aa555a0000240409
0:11:56.071775	LOG	PULL_ACK: 02 f1ec 04
0:11:57.489972	LOG	PUSH_ACK: 02 015a 01
0:11:57.491971	LOG	PUSH_DATA: Protocol version = 02, Token = 015a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1630026226, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 21, 'data': 'QCAgICCGywAHAwcDBwMBX28PodD1'}]}
0:11:57.492970	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 86, FCnt: 00cb, FOpts: 070307030703), FPort: 01, FRMPayload: 002e, MIC: 0fa1d0f5)
0:11:57.494969	LOG	Server <---------- DUT
0:11:57.521954	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:11:57.523953	LOG	Command Answer: 070307030703
0:11:57.593913	LOG	MAC command communication completed
0:11:57.597913	LOG	End Test Step: Removing multiple channels 3
0:11:57.602909	LOG	Partial Verdict: PASS
0:11:57.607906	LOG	==========
0:11:57.614902	LOG	==========
0:11:57.616900	LOG	Start Test Step: Receive in default frequencies after remove
0:11:57.626894	LOG	Receive frame on specific channels process starts
0:11:57.636889	LOG	Attempt 1/15
0:12:06.150084	LOG	PULL_DATA: 02 d967 02 aa555a0000240409
0:12:06.153084	LOG	PULL_ACK: 02 d967 04
0:12:07.461341	LOG	PUSH_ACK: 02 015b 01
0:12:07.463340	LOG	PUSH_DATA: Protocol version = 02, Token = 015b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1640021146, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAzAABJjQ+6WE2'}]}
0:12:07.464340	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00cc, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 3ee96136)
0:12:07.465339	LOG	Server <---------- DUT
0:12:07.467338	LOG	Attempt 2/15
0:12:12.501486	LOG	PUSH_ACK: 02 015c 01
0:12:12.503485	LOG	PUSH_DATA: Protocol version = 02, Token = 015c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1645023730, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAzQAB3SB6foVW'}]}
0:12:12.504486	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00cd, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 7a7e8556)
0:12:12.505485	LOG	Server <---------- DUT
0:12:12.507483	LOG	Attempt 3/15
0:12:16.240114	LOG	PULL_DATA: 02 33b7 02 aa555a0000240409
0:12:16.242114	LOG	PULL_ACK: 02 33b7 04
0:12:17.488219	LOG	PUSH_ACK: 02 015d 01
0:12:17.490219	LOG	PUSH_DATA: Protocol version = 02, Token = 015d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1650026330, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAzgABxB/8EX6j'}]}
0:12:17.492217	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ce, FOpts:), FPort: 01, FRMPayload: 002e, MIC: fc117ea3)

0:12:17.493219	LOG	Server <---------- DUT
0:12:17.494216	LOG	Attempt 4/15
0:12:22.487387	LOG	PUSH_ACK: 02 015f 01
0:12:22.489388	LOG	PUSH_DATA: Protocol version = 02, Token = 015f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1655028938, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAzwABa4OJiPFK'}]}
0:12:22.490388	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00cf, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 8988f14a)
0:12:22.491387	LOG	Server <---------- DUT
0:12:22.493384	LOG	Attempt 5/15
0:12:26.320217	LOG	PULL_DATA: 02 9950 02 aa555a0000240409
0:12:26.322218	LOG	PULL_ACK: 02 9950 04
0:12:27.475561	LOG	PUSH_ACK: 02 0160 01
0:12:27.477560	LOG	PUSH_DATA: Protocol version = 02, Token = 0160, Identifier = 00, JSON = {'rxpk': [{'tmst': 1660031546, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCA0AAB8lYhjwRY'}]}
0:12:27.479559	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d0, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 218f0458)
0:12:27.480559	LOG	Server <---------- DUT
0:12:27.482558	LOG	Attempt 6/15
0:12:32.515826	LOG	PUSH_ACK: 02 0161 01
0:12:32.517823	LOG	PUSH_DATA: Protocol version = 02, Token = 0161, Identifier = 00, JSON = {'rxpk': [{'tmst': 1665034162, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA0QABeYbZWGuf'}]}
0:12:32.519824	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d1, FOpts:), FPort: 01, FRMPayload: 002e, MIC: d9586b9f)
0:12:32.522820	LOG	Server <---------- DUT
0:12:32.526818	LOG	Attempt 7/15
0:12:36.399863	LOG	PULL_DATA: 02 a3e3 02 aa555a0000240409
0:12:36.411856	LOG	PULL_ACK: 02 a3e3 04
0:12:37.505236	LOG	PUSH_ACK: 02 0162 01
0:12:37.509235	LOG	PUSH_DATA: Protocol version = 02, Token = 0162, Identifier = 00, JSON = {'rxpk': [{'tmst': 1670036762, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA0gAB6w9OgLIu'}]}
0:12:37.513232	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d2, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 4e80b22e)
0:12:37.516230	LOG	Server <---------- DUT
0:12:37.521227	LOG	Attempt 8/15
0:12:42.495408	LOG	PUSH_ACK: 02 0163 01
0:12:42.497408	LOG	PUSH_DATA: Protocol version = 02, Token = 0163, Identifier = 00, JSON = {'rxpk': [{'tmst': 1675039362, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA0wAB46s93kh5'}]}
0:12:42.498408	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d3, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 3dde4879)
0:12:42.499408	LOG	Server <---------- DUT
0:12:42.501407	LOG	Attempt 9/15
0:12:46.490147	LOG	PULL_DATA: 02 14d3 02 aa555a0000240409
0:12:46.491147	LOG	PULL_ACK: 02 14d3 04
0:12:47.484582	LOG	PUSH_ACK: 02 0164 01
0:12:47.486581	LOG	PUSH_DATA: Protocol version = 02, Token = 0164, Identifier = 00, JSON = {'rxpk': [{'tmst': 1680041970, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA1AAB6o6RY3yH'}]}
0:12:47.487581	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d4, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 91637c87)
0:12:47.489579	LOG	Server <---------- DUT
0:12:47.490598	LOG	Attempt 10/15
0:12:52.487826	LOG	PUSH_ACK: 02 0166 01
0:12:52.489824	LOG	PUSH_DATA: Protocol version = 02, Token = 0166, Identifier = 00, JSON = {'rxpk': [{'tmst': 1685044570, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA1QABKoImsjcH'}]}
0:12:52.490825	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d5, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 26b23707)
0:12:52.491825	LOG	Server <---------- DUT
0:12:52.492824	LOG	Attempt 11/15
0:12:56.569617	LOG	PULL_DATA: 02 d934 02 aa555a0000240409
0:12:56.571615	LOG	PULL_ACK: 02 d934 04
0:12:57.527075	LOG	PUSH_ACK: 02 0167 01
0:12:57.528074	LOG	PUSH_DATA: Protocol version = 02, Token = 0167, Identifier = 00, JSON = {'rxpk': [{'tmst': 1690047170, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA1gAB8BT2bTd1'}]}
0:12:57.530073	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d6, FOpts:), FPort: 01, FRMPayload: 002e, MIC: f66d3775)
0:12:57.531073	LOG	Server <---------- DUT
0:12:57.532073	LOG	Attempt 12/15
0:13:02.515349	LOG	PUSH_ACK: 02 0168 01
0:13:02.517347	LOG	PUSH_DATA: Protocol version = 02, Token = 0168, Identifier = 00, JSON = {'rxpk': [{'tmst': 1695049770, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA1wABoAatPQVv'}]}
0:13:02.518346	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d7, FOpts:), FPort: 01, FRMPayload: 002e, MIC: ad3d056f)
0:13:02.520346	LOG	Server <---------- DUT
0:13:02.522344	LOG	Attempt 13/15
0:13:06.649770	LOG	PULL_DATA: 02 f75e 02 aa555a0000240409
0:13:06.654768	LOG	PULL_ACK: 02 f75e 04
0:13:07.503287	LOG	PUSH_ACK: 02 0169 01
0:13:07.504286	LOG	PUSH_DATA: Protocol version = 02, Token = 0169, Identifier = 00, JSON = {'rxpk': [{'tmst': 1700052378, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA2AABYsllfrcw'}]}
0:13:07.506285	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d8, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 657eb730)
0:13:07.507285	LOG	Server <---------- DUT
0:13:07.509284	LOG	Attempt 14/15
0:13:12.542433	LOG	PUSH_ACK: 02 016a 01
0:13:12.544433	LOG	PUSH_DATA: Protocol version = 02, Token = 016a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1705054978, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA2QABgN4Oy5oA'}]}
0:13:12.546432	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00d9, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 0ecb9a00)
0:13:12.547431	LOG	Server <---------- DUT
0:13:12.548430	LOG	Attempt 15/15
0:13:16.729796	LOG	PULL_DATA: 02 a0f2 02 aa555a0000240409

0:13:16.731803	LOG	PULL_ACK: 02 a0f2 04
0:13:17.531143	LOG	PUSH_ACK: 02 016b 01
0:13:17.533149	LOG	PUSH_DATA: Protocol version = 02, Token = 016b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1710057578, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICCA2gABRJvxVglX'}]}
0:13:17.535142	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00da, FOpts:), FPort: 01, FRMPayload: 002e, MIC: f1560957)
0:13:17.539139	LOG	Server <---------- DUT
0:13:17.551130	LOG	Receive frame on specific channels process tested successfully
0:13:17.554129	LOG	End Test Step: Receive in default frequencies after remove
0:13:17.558127	LOG	Partial Verdict: PASS
0:13:17.564124	LOG	==========
0:13:17.575117	LOG	==========
0:13:17.579114	LOG	Start Test Step: Invalid command processing - Frequency
0:13:17.591108	LOG	Send NewChannelReq process starts
0:13:22.538344	LOG	PUSH_ACK: 02 016e 01
0:13:22.540343	LOG	PUSH_DATA: Protocol version = 02, Token = 016e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1715060186, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA2wAB1Knqv6OU'}]}
0:13:22.542342	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00db, FOpts:), FPort: 01, FRMPayload: 002e, MIC: eabfa394)
0:13:22.543341	LOG	Server <---------- DUT
0:13:22.544341	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 013d, FOpts:), FPort: 00, FRMPayload: 070398e68a50), MIC: dfa264c4)
0:13:22.547339	LOG	PULL_RESP: Protocol version = 02, Token = 9279, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1717060186, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAPQEAIEHHOiDU36JkxA=='}}
0:13:22.548339	LOG	Server ----------> DUT
0:13:22.552336	LOG	TX_ACK: 02 9279 05 aa555a0000240409
0:13:26.748959	LOG	PULL_DATA: 02 10a8 02 aa555a0000240409
0:13:26.750958	LOG	PULL_ACK: 02 10a8 04
0:13:27.516525	LOG	PUSH_ACK: 02 016f 01
0:13:27.519523	LOG	PUSH_DATA: Protocol version = 02, Token = 016f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1720067917, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC3AAHAgHHefHgcog='}]}
0:13:27.520522	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00dc, FOpts: 0702), FPort: 01, FRMPayload: 002e, MIC: f1e07288)
0:13:27.522522	LOG	Server <---------- DUT
0:13:27.524520	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:13:27.525519	LOG	Command Answer: 0702
0:13:27.531515	LOG	End Test Step: Invalid command processing - Frequency
0:13:27.535533	LOG	Partial Verdict: PASS
0:13:27.538512	LOG	==========
0:13:27.543510	LOG	==========
0:13:27.545508	LOG	Start Test Step: Invalid command processing - Data Rate
0:13:27.561498	LOG	Send NewChannelReq process starts
0:13:36.829248	LOG	PULL_DATA: 02 f605 02 aa555a0000240409
0:13:36.834246	LOG	PULL_ACK: 02 f605 04
0:13:37.540906	LOG	PUSH_ACK: 02 0170 01
0:13:37.545904	LOG	PUSH_DATA: Protocol version = 02, Token = 0170, Identifier = 00, JSON = {'rxpk': [{'tmst': 1730068021, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA3QAB2XDjw7+F'}]}
0:13:37.549900	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00dd, FOpts:), FPort: 01, FRMPayload: 002e, MIC: e3c3bf85)
0:13:37.553898	LOG	Server <---------- DUT
0:13:37.558894	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 013e, FOpts:), FPort: 00, FRMPayload: 070328768498), MIC: cc2311c6)
0:13:37.562893	LOG	PULL_RESP: Protocol version = 02, Token = 8566, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1732068021, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAPgEAvXV8i85BzCMRxg=='}}
0:13:37.563893	LOG	Server ----------> DUT
0:13:37.566891	LOG	TX_ACK: 02 8566 05 aa555a0000240409
0:13:42.525151	LOG	PUSH_ACK: 02 0171 01
0:13:42.527150	LOG	PUSH_DATA: Protocol version = 02, Token = 0171, Identifier = 00, JSON = {'rxpk': [{'tmst': 1735075767, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC3gAHAQGtqD1y5ok='}]}
0:13:42.530148	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00de, FOpts: 0701), FPort: 01, FRMPayload: 002e, MIC: 3d72e689)
0:13:42.534145	LOG	Server <---------- DUT
0:13:42.538144	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:13:42.540143	LOG	Command Answer: 0701
0:13:42.546139	LOG	End Test Step: Invalid command processing - Data Rate
0:13:42.550137	LOG	Partial Verdict: PASS
0:13:42.554134	LOG	==========
0:13:42.560131	LOG	==========
0:13:42.563129	LOG	Start Test Step: Removal of default channels - not allowed
0:13:42.579120	LOG	Send MAC command block process starts
0:13:47.009920	LOG	PULL_DATA: 02 9401 02 aa555a0000240409
0:13:47.011919	LOG	PULL_ACK: 02 9401 04
0:13:52.557778	LOG	PUSH_ACK: 02 0173 01
0:13:52.559778	LOG	PUSH_DATA: Protocol version = 02, Token = 0173, Identifier = 00, JSON = {'rxpk': [{'tmst': 1745075839, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA3wABPJqSCsWQ'}]}
0:13:52.561775	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00df, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 920ac590)
0:13:52.562792	LOG	Server <---------- DUT
0:13:52.564773	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 013f, FOpts:), FPort: 00, FRMPayload: 07000000005007010000005007020000005 0), MIC: c7533b4c)
0:13:52.567773	LOG	PULL_RESP: Protocol version = 02, Token = e640, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1747075839, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 31, 'data': 'YCAgICAAPwEAT/Zc4Xqe9ItW0EIiQuhL7eYdx1M7TA=='}}
0:13:52.569771	LOG	Server ----------> DUT
0:13:52.572770	LOG	TX_ACK: 02 e640 05 aa555a0000240409
0:13:57.189312	LOG	PULL_DATA: 02 beb4 02 aa555a0000240409
0:13:57.191312	LOG	PULL_ACK: 02 beb4 04
0:13:57.552107	LOG	PUSH_ACK: 02 0174 01
0:13:57.555105	LOG	PUSH_DATA: Protocol version = 02, Token = 0174, Identifier = 00, JSON = {'rxpk': [{'tmst': 1750088761, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 21, 'data': 'QCAgICCG4AAHAAcABwABUM+1LsxG'}]}

0:13:57.556105	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 86, FCnt: 00e0, FOpts: 070007000700), FPort: 01, FRMPayload: 002e, MIC: b52ecc46)
0:13:57.558104	LOG	Server <---------- DUT
0:13:57.560103	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:13:57.561102	LOG	Command Answer: 070007000700
0:13:57.692028	LOG	MAC command communication completed
0:13:57.696025	LOG	Receive frame on specific channels process starts
0:13:57.705021	LOG	Attempt 1/15
0:14:07.269603	LOG	PULL_DATA: 02 bc44 02 aa555a0000240409
0:14:07.273618	LOG	PULL_ACK: 02 bc44 04
0:14:07.524458	LOG	PUSH_ACK: 02 0175 01
0:14:07.525476	LOG	PUSH_DATA: Protocol version = 02, Token = 0175, Identifier = 00, JSON = {'rxpk': [{'tmst': 1760083689, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA4QABDGJ1QTVZ'}]}
0:14:07.526457	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e1, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 75413559)
0:14:07.527457	LOG	Server <---------- DUT
0:14:07.529455	LOG	Attempt 2/15
0:14:12.564330	LOG	PUSH_ACK: 02 0176 01
0:14:12.566329	LOG	PUSH_DATA: Protocol version = 02, Token = 0176, Identifier = 00, JSON = {'rxpk': [{'tmst': 1765086289, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA4gABruS5uqzA'}]}
0:14:12.567325	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e2, FOpts:), FPort: 01, FRMPayload: 002e, MIC: b9baacc0)
0:14:12.568325	LOG	Server <---------- DUT
0:14:12.570324	LOG	Attempt 3/15
0:14:17.359886	LOG	PULL_DATA: 02 78fa 02 aa555a0000240409
0:14:17.361885	LOG	PULL_ACK: 02 78fa 04
0:14:17.552778	LOG	PUSH_ACK: 02 0177 01
0:14:17.554777	LOG	PUSH_DATA: Protocol version = 02, Token = 0177, Identifier = 00, JSON = {'rxpk': [{'tmst': 1770088889, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA4wABT8acVPy3'}]}
0:14:17.555775	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e3, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 9c54fcb7)
0:14:17.557774	LOG	Server <---------- DUT
0:14:17.558775	LOG	Attempt 4/15
0:14:22.557942	LOG	PUSH_ACK: 02 0179 01
0:14:22.559939	LOG	PUSH_DATA: Protocol version = 02, Token = 0179, Identifier = 00, JSON = {'rxpk': [{'tmst': 1775091481, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA5AABeF9aWpcO'}]}
0:14:22.561943	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e4, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 5a5a970e)
0:14:22.562938	LOG	Server <---------- DUT
0:14:22.564938	LOG	Attempt 5/15
0:14:27.439176	LOG	PULL_DATA: 02 4969 02 aa555a0000240409
0:14:27.441175	LOG	PULL_ACK: 02 4969 04
0:14:27.546115	LOG	PUSH_ACK: 02 017a 01
0:14:27.548114	LOG	PUSH_DATA: Protocol version = 02, Token = 017a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1780094089, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA5QABWE7AfTtr'}]}

0:14:27.549113	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e5, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c07d3b6b)
0:14:27.550113	LOG	Server <---------- DUT
0:14:27.551112	LOG	Attempt 6/15
0:14:32.586264	LOG	PUSH_ACK: 02 017b 01
0:14:32.588260	LOG	PUSH_DATA: Protocol version = 02, Token = 017b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1785096681, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA5gABPwvO+eB+'}]}
0:14:32.590260	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e6, FOpts:), FPort: 01, FRMPayload: 002e, MIC: cef9e07e)
0:14:32.592258	LOG	Server <---------- DUT
0:14:32.593258	LOG	Attempt 7/15
0:14:37.519465	LOG	PULL_DATA: 02 e623 02 aa555a0000240409
0:14:37.522465	LOG	PULL_ACK: 02 e623 04
0:14:37.576433	LOG	PUSH_ACK: 02 017d 01
0:14:37.578432	LOG	PUSH_DATA: Protocol version = 02, Token = 017d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1790099289, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA5wABOL1MG7si'}]}
0:14:37.579431	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e7, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 4c1bbb22)
0:14:37.580431	LOG	Server <---------- DUT
0:14:37.582429	LOG	Attempt 8/15
0:14:42.565611	LOG	PUSH_ACK: 02 017e 01
0:14:42.569606	LOG	PUSH_DATA: Protocol version = 02, Token = 017e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1795101897, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA6AABC3hdNHoP'}]}
0:14:42.571603	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e8, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 5d347a0f)
0:14:42.572602	LOG	Server <---------- DUT
0:14:42.574601	LOG	Attempt 9/15
0:14:47.555783	LOG	PUSH_ACK: 02 017f 01
0:14:47.557779	LOG	PUSH_DATA: Protocol version = 02, Token = 017f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1800104497, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA6QABKCQqKq2p'}]}
0:14:47.561777	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00e9, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 2a2aada9)
0:14:47.564779	LOG	Server <---------- DUT
0:14:47.568773	LOG	Attempt 10/15
0:14:47.598756	LOG	PULL_DATA: 02 d01a 02 aa555a0000240409
0:14:47.600753	LOG	PULL_ACK: 02 d01a 04
0:14:52.557769	LOG	PUSH_ACK: 02 0181 01
0:14:52.559768	LOG	PUSH_DATA: Protocol version = 02, Token = 0181, Identifier = 00, JSON = {'rxpk': [{'tmst': 1805107097, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA6gABZgoH42V/'}]}
0:14:52.563767	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ea, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 07e3657f)
0:14:52.567764	LOG	Server <---------- DUT
0:14:52.571761	LOG	Attempt 11/15
0:14:57.596848	LOG	PUSH_ACK: 02 0182 01
0:14:57.598847	LOG	PUSH_DATA: Protocol version = 02, Token = 0182, Identifier = 00, JSON = {'rxpk': [{'tmst': 1810109689, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA6wABob5cZ556'}]}
0:14:57.599846	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00eb, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 5c679e7a)
0:14:57.601845	LOG	Server <---------- DUT
0:14:57.602847	LOG	Attempt 12/15
0:14:57.678821	LOG	PULL_DATA: 02 da69 02 aa555a0000240409
0:14:57.680801	LOG	PULL_ACK: 02 da69 04
0:15:02.584022	LOG	PUSH_ACK: 02 0183 01
0:15:02.586021	LOG	PUSH_DATA: Protocol version = 02, Token = 0183, Identifier = 00, JSON = {'rxpk': [{'tmst': 1815112305, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA7AAB+gXFVmDW'}]}
0:15:02.588020	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ec, FOpts:), FPort: 01, FRMPayload: 002e, MIC: c55660d6)
0:15:02.589020	LOG	Server <---------- DUT
0:15:02.590021	LOG	Attempt 13/15
0:15:07.575346	LOG	PUSH_ACK: 02 0185 01
0:15:07.580325	LOG	PUSH_DATA: Protocol version = 02, Token = 0185, Identifier = 00, JSON = {'rxpk': [{'tmst': 1820114913, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7QAB/l9mefNy'}]}
0:15:07.581324	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ed, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 6679f372)
0:15:07.582323	LOG	Server <---------- DUT
0:15:07.584322	LOG	Attempt 14/15
0:15:07.759223	LOG	PULL_DATA: 02 6a7e 02 aa555a0000240409
0:15:07.761222	LOG	PULL_ACK: 02 6a7e 04
0:15:12.565501	LOG	PUSH_ACK: 02 0186 01
0:15:12.568498	LOG	PUSH_DATA: Protocol version = 02, Token = 0186, Identifier = 00, JSON = {'rxpk': [{'tmst': 1825117529, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA7gABkK5+ftQq'}]}
0:15:12.569499	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ee, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 7e7ed42a)
0:15:12.570499	LOG	Server <---------- DUT
0:15:12.572496	LOG	Attempt 15/15
0:15:17.605947	LOG	PUSH_ACK: 02 0187 01
0:15:17.607946	LOG	PUSH_DATA: Protocol version = 02, Token = 0187, Identifier = 00, JSON = {'rxpk': [{'tmst': 1830120121, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA7wABGXocJ+r6'}]}
0:15:17.609944	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00ef, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 1c27eafa)
0:15:17.610945	LOG	Server <---------- DUT
0:15:17.616940	LOG	Receive frame on specific channels process tested successfully
0:15:17.619938	LOG	End Test Step: Removal of default channels - not allowed
0:15:17.623936	LOG	Partial Verdict: PASS
0:15:17.628934	LOG	==========
0:15:17.637929	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_006
0:15:17.639928	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_007
Verdict	PASS
Date	2021-10-18 13:30:08
Comments	DlChannelReq for Dynamic Channel plan devices only

Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.012808	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_007
0:00:00.055783	LOG	==========
0:00:00.057782	LOG	Start Test Step: Device activation
0:00:00.112751	LOG	Activation process has finished successfully
0:00:00.114750	LOG	Data stored in the DUT after Activation:
0:00:00.117749	LOG	DevAddr: 20202020
0:00:00.120747	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.123746	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.126743	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.130741	LOG	End Test Step: Device activation
0:00:00.133740	LOG	Partial Verdict: PASS
0:00:00.137737	LOG	==========
0:00:00.142735	LOG	==========
0:00:00.145733	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.157727	LOG	DUT Pre-condition activation process starts
0:00:00.160725	LOG	DUT Pre-condition activation completed
0:00:00.162723	LOG	End Test Step: DUT Pre-condition settings
0:00:00.166721	LOG	Partial Verdict: PASS
0:00:00.170719	LOG	==========
0:00:00.175716	LOG	==========
0:00:00.177715	LOG	Start Test Step: DlChannel Request
0:00:00.193706	LOG	Send DlChannelReq process starts
0:00:01.397024	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:06.389241	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:06.717056	LOG	PULL_DATA: 02 5125 02 aa555a0000240409
0:00:06.719054	LOG	PULL_ACK: 02 5125 04
0:00:06.721053	LOG	First PULL_DATA received
0:00:11.389409	LOG	PUSH_ACK: 02 018b 01
0:00:11.391408	LOG	PUSH_DATA: Protocol version = 02, Token = 018b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1845127937, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA8gABatNu8YWK'}]}
0:00:11.393406	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00f2, FOpts:), FPort: 01, FRMPayload: 002e, MIC: 6ef1858a)
0:00:11.394407	LOG	Server <---------- DUT
0:00:11.396405	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0140, FOpts:), FPort: 00, FRMPayload: 0a00f87d84), MIC: 61e2ebaa)
0:00:11.398405	LOG	PULL_RESP: Protocol version = 02, Token = 51db, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1846127937, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAQAEADNNnV+Jh4uuq'}}
0:00:11.399404	LOG	Server ----------> DUT
0:00:11.402400	LOG	TX_ACK: 02 51db 05 aa555a0000240409
0:00:16.375583	LOG	PUSH_ACK: 02 018c 01

0:00:16.377582	LOG	PUSH_DATA: Protocol version = 02, Token = 018c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1850135666, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC8wAKAwEVsaIxdDA='}]}
0:00:16.379581	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00f3, FOpts: 0a03), FPort: 01, FRMPayload: 002e, MIC: a2317430)
0:00:16.380580	LOG	Server <---------- DUT
0:00:16.381579	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:16.382580	LOG	Command Answer: 0a03
0:00:16.388577	LOG	MAC command communication completed
0:00:16.398572	LOG	End Test Step: DlChannel Request
0:00:16.402569	LOG	Partial Verdict: PASS
0:00:16.407564	LOG	==========
0:00:16.415560	LOG	==========
0:00:16.418561	LOG	Start Test Step: Test reply retransmission
0:00:16.433550	LOG	Expect a MAC answer retransmission
0:00:16.856404	LOG	PULL_DATA: 02 b348 02 aa555a0000240409
0:00:16.859434	LOG	PULL_ACK: 02 b348 04
0:00:26.399085	LOG	PUSH_ACK: 02 018d 01
0:00:26.401083	LOG	PUSH_DATA: Protocol version = 02, Token = 018d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1860140898, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCC9AAKAwEEowfQgmQ='}]}
0:00:26.403083	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00f4, FOpts: 0a03), FPort: 01, FRMPayload: 002e, MIC: 07d08264)
0:00:26.407079	LOG	Server <---------- DUT
0:00:26.410077	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:26.415074	LOG	MAC answer retransmission completed
0:00:26.418074	LOG	Expect a MAC answer retransmission
0:00:26.936778	LOG	PULL_DATA: 02 8453 02 aa555a0000240409
0:00:26.938777	LOG	PULL_ACK: 02 8453 04
0:00:36.432398	LOG	PUSH_ACK: 02 018f 01
0:00:36.436396	LOG	PUSH_DATA: Protocol version = 02, Token = 018f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1870146130, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC9QAKAwHs4HXWjJs='}]}
0:00:36.438397	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00f5, FOpts: 0a03), FPort: 01, FRMPayload: 002e, MIC: 75d68c9b)
0:00:36.439396	LOG	Server <---------- DUT
0:00:36.440394	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:36.446391	LOG	MAC answer retransmission completed
0:00:36.450388	LOG	Expect a MAC answer retransmission
0:00:37.017182	LOG	PULL_DATA: 02 3a94 02 aa555a0000240409
0:00:37.019182	LOG	PULL_ACK: 02 3a94 04
0:00:46.406914	LOG	PUSH_ACK: 02 0190 01
0:00:46.409913	LOG	PUSH_DATA: Protocol version = 02, Token = 0190, Identifier = 00, JSON = {'rxpk': [{'tmst': 1880151362, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 17, 'data': 'QCAgICCC9gAKAwEAkekbcXc='}]}
0:00:46.411912	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00f6, FOpts: 0a03), FPort: 01, FRMPayload: 002e, MIC: e91b7177)
0:00:46.413911	LOG	Server <---------- DUT

0:00:46.414910	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:46.419907	LOG	MAC answer retransmission completed
0:00:46.427902	LOG	Test EchoPayloadReq in default channels process starts
0:00:47.096523	LOG	PULL_DATA: 02 fb31 02 aa555a0000240409
0:00:47.099522	LOG	PULL_ACK: 02 fb31 04
0:00:56.431235	LOG	PUSH_ACK: 02 0191 01
0:00:56.433233	LOG	PUSH_DATA: Protocol version = 02, Token = 0191, Identifier = 00, JSON = {'rxpk': [{'tmst': 1890156586, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC9wAKAwEbCpPSBpI='}]}
0:00:56.435232	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00f7, FOpts: 0a03), FPort: 01, FRMPayload: 002e, MIC: 93d20692)
0:00:56.436232	LOG	Server <---------- DUT
0:00:56.437231	LOG	Attempt 0/15
0:00:56.439230	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0141, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: ad1f462f)
0:00:56.442229	LOG	PULL_RESP: Protocol version = 02, Token = e93c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1891156586, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAQQHgwZAO160fRi8='}}
0:00:56.444228	LOG	Server ----------> DUT
0:00:56.446226	LOG	Echo sent to the DUT
0:00:56.448225	LOG	TX_ACK: 02 e93c 05 aa555a0000240409
0:00:57.286750	LOG	PULL_DATA: 02 9990 02 aa555a0000240409
0:00:57.288749	LOG	PULL_ACK: 02 9990 04
0:01:06.402584	LOG	PUSH_ACK: 02 0193 01
0:01:06.408581	LOG	PUSH_DATA: Protocol version = 02, Token = 0193, Identifier = 00, JSON = {'rxpk': [{'tmst': 1900164916, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 17, 'data': 'QCAgICCA+ADg/xYHli7EqPY='}]}
0:01:06.412580	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00f8, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: 2ec4a8f6)
0:01:06.415577	LOG	Server <---------- DUT
0:01:06.419574	LOG	Echo Ans is correct: 0b0c0d
0:01:06.422573	LOG	Frequencies received: [868.5]
0:01:07.367039	LOG	PULL_DATA: 02 3257 02 aa555a0000240409
0:01:07.372035	LOG	PULL_ACK: 02 3257 04
0:01:16.431064	LOG	PUSH_ACK: 02 0194 01
0:01:16.433063	LOG	PUSH_DATA: Protocol version = 02, Token = 0194, Identifier = 00, JSON = {'rxpk': [{'tmst': 1910161908, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+QABvPy2YbNJ'}]}
0:01:16.434062	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00f9, FOpts:), FPort: 01, FRMPayload: 002f, MIC: b661b349)
0:01:16.435062	LOG	Server <---------- DUT
0:01:16.437061	LOG	Attempt 1/15
0:01:16.438060	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0142, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: dc50526e)
0:01:16.441058	LOG	PULL_RESP: Protocol version = 02, Token = c16e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1911161908, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAQgHg5ValltxQUm4='}}
0:01:16.442058	LOG	Server ----------> DUT
0:01:16.445056	LOG	Echo sent to the DUT
0:01:17.497461	LOG	PULL_DATA: 02 44ee 02 aa555a0000240409

0:01:17.499458	LOG	PULL_ACK: 02 44ee 04
0:01:21.457216	LOG	PUSH_ACK: 02 0195 01
0:01:21.459215	LOG	PUSH_DATA: Protocol version = 02, Token = 0195, Identifier = 00, JSON = {'rxpk': [{'tmst': 1915172767, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 17, 'data': 'QCAgICCA+gDgZVYzpUdum4M='}]}
0:01:21.460214	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00fa, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: 476e9b83)
0:01:21.461214	LOG	Server <---------- DUT
0:01:21.462213	LOG	Echo Ans is correct: 0b0c0d
0:01:21.464212	LOG	Frequencies received: [868.5, 868.1]
0:01:27.576748	LOG	PULL_DATA: 02 9bbc 02 aa555a0000240409
0:01:27.578765	LOG	PULL_ACK: 02 9bbc 04
0:01:31.438561	LOG	PUSH_ACK: 02 0197 01
0:01:31.440559	LOG	PUSH_DATA: Protocol version = 02, Token = 0197, Identifier = 00, JSON = {'rxpk': [{'tmst': 1925169735, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+wABzBx0H1FK'}]}
0:01:31.441558	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00fb, FOpts:), FPort: 01, FRMPayload: 0030, MIC: 741f514a)
0:01:31.443558	LOG	Server <---------- DUT
0:01:31.445557	LOG	Attempt 2/15
0:01:31.446556	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0143, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: 49231e9c)
0:01:31.449555	LOG	PULL_RESP: Protocol version = 02, Token = 64f9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1926169735, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAQwHgJ5k5fEkjHpw='}}
0:01:31.450554	LOG	Server ----------> DUT
0:01:31.452553	LOG	Echo sent to the DUT
0:01:36.464715	LOG	PUSH_ACK: 02 0198 01
0:01:36.469711	LOG	PUSH_DATA: Protocol version = 02, Token = 0198, Identifier = 00, JSON = {'rxpk': [{'tmst': 1930180592, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCA/ADgeeDZEohB6Hg='}]}
0:01:36.472709	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00fc, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: 8841e878)
0:01:36.476708	LOG	Server <---------- DUT
0:01:36.479706	LOG	Echo Ans is correct: 0b0c0d
0:01:36.481704	LOG	Frequencies received: [868.5, 868.1, 868.3]
0:01:36.486701	LOG	Test EchoPayloadReq in default channels process complete
0:01:36.491697	LOG	End Test Step: Test reply retransmission
0:01:36.497695	LOG	Partial Verdict: PASS
0:01:36.502691	LOG	==========
0:01:36.507688	LOG	==========
0:01:36.510687	LOG	Start Test Step: Restore default downlink parameters
0:01:36.521681	LOG	Send DlChannelReq process starts
0:01:37.746986	LOG	PULL_DATA: 02 e9e5 02 aa555a0000240409
0:01:37.751983	LOG	PULL_ACK: 02 e9e5 04
0:01:46.441060	LOG	PUSH_ACK: 02 019a 01
0:01:46.443059	LOG	PUSH_DATA: Protocol version = 02, Token = 019a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1940177568, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCA/QABtDJB+I8I'}]}
0:01:46.444058	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00fd, FOpts:), FPort: 01, FRMPayload: 0031, MIC: 41f88f08)

0:01:46.446057	LOG	Server <---------- DUT
0:01:46.447057	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0144, FOpts:), FPort: 00, FRMPayload: 0a00287684), MIC: 060f8fd6)
0:01:46.449055	LOG	PULL_RESP: Protocol version = 02, Token = cb44, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1942177568, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAARAEAj/h+fOAGD4/W'}}
0:01:46.451055	LOG	Server ----------> DUT
0:01:46.454052	LOG	TX_ACK: 02 cb44 05 aa555a0000240409
0:01:47.916337	LOG	PULL_DATA: 02 25cf 02 aa555a0000240409
0:01:47.918336	LOG	PULL_ACK: 02 25cf 04
0:01:51.432361	LOG	PUSH_ACK: 02 019b 01
0:01:51.434360	LOG	PUSH_DATA: Protocol version = 02, Token = 019b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1945185305, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCC/gAKAwHPrVzE/QM='}]}
0:01:51.435359	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00fe, FOpts: 0a03), FPort: 01, FRMPayload: 0031, MIC: 5cc4fd03)
0:01:51.436359	LOG	Server <---------- DUT
0:01:51.437358	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:51.439358	LOG	Command Answer: 0a03
0:01:51.446353	LOG	MAC command communication completed
0:01:51.454349	LOG	End Test Step: Restore default downlink parameters
0:01:51.459346	LOG	Partial Verdict: PASS
0:01:51.466342	LOG	==========
0:01:51.473338	LOG	==========
0:01:51.477336	LOG	Start Test Step: Test reply retransmission default
0:01:51.492327	LOG	Expect a MAC answer retransmission
0:01:58.006641	LOG	PULL_DATA: 02 08f5 02 aa555a0000240409
0:01:58.010636	LOG	PULL_ACK: 02 08f5 04
0:02:01.468680	LOG	PUSH_ACK: 02 019d 01
0:02:01.471673	LOG	PUSH_DATA: Protocol version = 02, Token = 019d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1955190545, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC/wAKAwFqmHZyf5Y='}]}
0:02:01.472672	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00ff, FOpts: 0a03), FPort: 01, FRMPayload: 0031, MIC: 76727f96)
0:02:01.473672	LOG	Server <---------- DUT
0:02:01.475670	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:01.478669	LOG	MAC answer retransmission completed
0:02:01.483666	LOG	Expect a MAC answer retransmission
0:02:08.086925	LOG	PULL_DATA: 02 e9e2 02 aa555a0000240409
0:02:08.090922	LOG	PULL_ACK: 02 e9e2 04
0:02:11.443023	LOG	PUSH_ACK: 02 019e 01
0:02:11.445022	LOG	PUSH_DATA: Protocol version = 02, Token = 019e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1965195785, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCAAEKAwEUsk7ljxw='}]}
0:02:11.447021	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0100, FOpts: 0a03), FPort: 01, FRMPayload: 0031, MIC: 4ee58f1c)
0:02:11.449019	LOG	Server <---------- DUT
0:02:11.450019	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:11.456016	LOG	MAC answer retransmission completed

0:02:11.465011	LOG	Expect a MAC answer retransmission
0:02:18.166214	LOG	PULL_DATA: 02 5e53 02 aa555a0000240409
0:02:18.168212	LOG	PULL_ACK: 02 5e53 04
0:02:21.468342	LOG	PUSH_ACK: 02 019f 01
0:02:21.470341	LOG	PUSH_DATA: Protocol version = 02, Token = 019f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1975201009, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCAQEKAwEEONfu1XU='}]}
0:02:21.472340	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0101, FOpts: 0a03), FPort: 01, FRMPayload: 0031, MIC: d7eed575)
0:02:21.476338	LOG	Server <---------- DUT
0:02:21.480337	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:21.489331	LOG	MAC answer retransmission completed
0:02:21.496326	LOG	Test EchoPayloadReq in default channels process starts
0:02:28.246626	LOG	PULL_DATA: 02 60aa 02 aa555a0000240409
0:02:28.248626	LOG	PULL_ACK: 02 60aa 04
0:02:31.459806	LOG	PUSH_ACK: 02 01a1 01
0:02:31.465804	LOG	PUSH_DATA: Protocol version = 02, Token = 01a1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1985206249, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCAgEKAwFthxYZEO8='}]}
0:02:31.468802	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0102, FOpts: 0a03), FPort: 01, FRMPayload: 0031, MIC: 161910ef)
0:02:31.471800	LOG	Server <---------- DUT
0:02:31.475798	LOG	Attempt 0/15
0:02:31.478796	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0145, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: 04b5106a)
0:02:31.482793	LOG	PULL_RESP: Protocol version = 02, Token = 7b57, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1986206249, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAARQHgoZUdEQS1EGo='}}
0:02:31.483794	LOG	Server ----------> DUT
0:02:31.485793	LOG	Echo sent to the DUT
0:02:38.416864	LOG	PULL_DATA: 02 d2b2 02 aa555a0000240409
0:02:38.420862	LOG	PULL_ACK: 02 d2b2 04
0:02:41.484131	LOG	PUSH_ACK: 02 01a2 01
0:02:41.486128	LOG	PUSH_DATA: Protocol version = 02, Token = 01a2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1995214556, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCAAwHgKRnVMA/MFLE='}]}
0:02:41.489129	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0103, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: 0fcc14b1)
0:02:41.492127	LOG	Server <---------- DUT
0:02:41.495125	LOG	Echo Ans is correct: 0b0c0d
0:02:41.498120	LOG	Frequencies received: [868.3]
0:02:48.496153	LOG	PULL_DATA: 02 d085 02 aa555a0000240409
0:02:48.498152	LOG	PULL_ACK: 02 d085 04
0:02:51.455476	LOG	PUSH_ACK: 02 01a3 01
0:02:51.457476	LOG	PUSH_DATA: Protocol version = 02, Token = 01a3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2005211532, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCABAEBqMNGC7KB'}]}
0:02:51.458474	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0104, FOpts:), FPort: 01, FRMPayload: 0032, MIC: 460bb281)
0:02:51.459476	LOG	Server <---------- DUT

0:02:51.461474	LOG	Attempt 1/15
0:02:51.463472	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0146, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: 057ba490)
0:02:51.476464	LOG	PULL_RESP: Protocol version = 02, Token = 2889, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2006211532, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAARgHgBfkcOQV7pJA='}}
0:02:51.478463	LOG	Server ----------> DUT
0:02:51.480463	LOG	Echo sent to the DUT
0:02:56.504615	LOG	PUSH_ACK: 02 01a4 01
0:02:56.506614	LOG	PUSH_DATA: Protocol version = 02, Token = 01a4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2010222388, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCABQHgbso3/eAtdZY='}]}
0:02:56.507615	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0105, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: e02d7596)
0:02:56.508615	LOG	Server <---------- DUT
0:02:56.510612	LOG	Echo Ans is correct: 0b0c0d
0:02:56.511612	LOG	Frequencies received: [868.3, 868.5]
0:02:58.616418	LOG	PULL_DATA: 02 fa54 02 aa555a0000240409
0:02:58.617420	LOG	PULL_ACK: 02 fa54 04
0:03:06.494955	LOG	PUSH_ACK: 02 01a7 01
0:03:06.495955	LOG	PUSH_DATA: Protocol version = 02, Token = 01a7, Identifier = 00, JSON = {'rxpk': [{'tmst': 2020219364, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCABgEBJ3j9nTDT'}]}
0:03:06.497953	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0106, FOpts:), FPort: 01, FRMPayload: 0033, MIC: fd9d30d3)
0:03:06.498954	LOG	Server <---------- DUT
0:03:06.500951	LOG	Attempt 2/15
0:03:06.501950	LOG	Uplink frequency currently checked. All received: [868.3, 868.5] Expected: [868.1, 868.3, 868.5]
0:03:08.695773	LOG	PULL_DATA: 02 d835 02 aa555a0000240409
0:03:08.699771	LOG	PULL_ACK: 02 d835 04
0:03:11.484193	LOG	PUSH_ACK: 02 01a9 01
0:03:11.487191	LOG	PUSH_DATA: Protocol version = 02, Token = 01a9, Identifier = 00, JSON = {'rxpk': [{'tmst': 2025221972, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCABwEBq3bs+7cR'}]}
0:03:11.488190	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0107, FOpts:), FPort: 01, FRMPayload: 0033, MIC: ecfbb711)
0:03:11.490189	LOG	Server <---------- DUT
0:03:11.492188	LOG	Attempt 3/15
0:03:11.494187	LOG	Uplink frequency currently checked. All received: [868.3, 868.5] Expected: [868.1, 868.3, 868.5]
0:03:16.472368	LOG	PUSH_ACK: 02 01aa 01
0:03:16.474367	LOG	PUSH_DATA: Protocol version = 02, Token = 01aa, Identifier = 00, JSON = {'rxpk': [{'tmst': 2030224572, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCACAEBe/BvCWUh'}]}
0:03:16.475367	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0108, FOpts:), FPort: 01, FRMPayload: 0033, MIC: 6f096521)
0:03:16.477364	LOG	Server <---------- DUT
0:03:16.478363	LOG	Attempt 4/15
0:03:16.479362	LOG	Uplink frequency currently checked. All received: [868.3, 868.5] Expected: [868.1, 868.3, 868.5]

0:03:18.776060	LOG	PULL_DATA: 02 e8d4 02 aa555a0000240409
0:03:18.778060	LOG	PULL_ACK: 02 e8d4 04
0:03:21.513510	LOG	PUSH_ACK: 02 01ab 01
0:03:21.519508	LOG	PUSH_DATA: Protocol version = 02, Token = 01ab, Identifier = 00, JSON = {'rxpk': [{'tmst': 2035227172, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCACQEBEX/FRQkB'}]}
0:03:21.520525	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0109, FOpts:), FPort: 01, FRMPayload: 0033, MIC: c5450901)
0:03:21.522507	LOG	Server <---------- DUT
0:03:21.523523	LOG	Attempt 5/15
0:03:21.524523	LOG	Uplink frequency currently checked. All received: [868.3, 868.5] Expected: [868.1, 868.3, 868.5]
0:03:26.504798	LOG	PUSH_ACK: 02 01ac 01
0:03:26.506797	LOG	PUSH_DATA: Protocol version = 02, Token = 01ac, Identifier = 00, JSON = {'rxpk': [{'tmst': 2040229780, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCACgEB3QIKgU1u'}]}
0:03:26.507796	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 010a, FOpts:), FPort: 01, FRMPayload: 0033, MIC: 0a814d6e)
0:03:26.508796	LOG	Server <---------- DUT
0:03:26.509795	LOG	Attempt 6/15
0:03:26.510795	LOG	Uplink frequency currently checked. All received: [868.3, 868.5] Expected: [868.1, 868.3, 868.5]
0:03:28.856549	LOG	PULL_DATA: 02 6682 02 aa555a0000240409
0:03:28.858548	LOG	PULL_ACK: 02 6682 04
0:03:31.510046	LOG	PUSH_ACK: 02 01ae 01
0:03:31.512044	LOG	PUSH_DATA: Protocol version = 02, Token = 01ae, Identifier = 00, JSON = {'rxpk': [{'tmst': 2045232380, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCACwEBbgpJKgjY'}]}
0:03:31.514043	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 010b, FOpts:), FPort: 01, FRMPayload: 0033, MIC: 492a08d8)
0:03:31.515042	LOG	Server <---------- DUT
0:03:31.517042	LOG	Attempt 7/15
0:03:31.518042	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0147, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: 5689b7c4)
0:03:31.521039	LOG	PULL_RESP: Protocol version = 02, Token = 85f9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2046232380, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAARwHgoKcPpFaJt8Q='}}
0:03:31.522039	LOG	Server ----------> DUT
0:03:31.524038	LOG	Echo sent to the DUT
0:03:36.526203	LOG	PUSH_ACK: 02 01af 01
0:03:36.528202	LOG	PUSH_DATA: Protocol version = 02, Token = 01af, Identifier = 00, JSON = {'rxpk': [{'tmst': 2050243247, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCADAHgtGMU0b9ZTh4='}]}
0:03:36.529203	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 010c, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: bf594e1e)
0:03:36.531202	LOG	Server <---------- DUT
0:03:36.532200	LOG	Echo Ans is correct: 0b0c0d
0:03:36.533201	LOG	Frequencies received: [868.3, 868.5, 868.1]
0:03:36.537199	LOG	Test EchoPayloadReq in default channels process complete
0:03:36.543194	LOG	End Test Step: Test reply retransmission default
0:03:36.547192	LOG	Partial Verdict: PASS

0:03:36.552190	LOG	==========
0:03:36.558185	LOG	==========
0:03:36.562183	LOG	Start Test Step: DlChannel Request with invalid parameters
0:03:36.579173	LOG	Send DlChannelReq process starts
0:03:38.875871	LOG	PULL_DATA: 02 6498 02 aa555a0000240409
0:03:38.881869	LOG	PULL_ACK: 02 6498 04
0:03:46.498556	LOG	PUSH_ACK: 02 01b0 01
0:03:46.500555	LOG	PUSH_DATA: Protocol version = 02, Token = 01b0, Identifier = 00, JSON = {'rxpk': [{'tmst': 2060240223, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCADQEBI4qbtVFU'}]}
0:03:46.501552	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 010d, FOpts:), FPort: 01, FRMPayload: 0034, MIC: 9bb55154)
0:03:46.503582	LOG	Server <---------- DUT
0:03:46.505551	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0148, FOpts:), FPort: 00, FRMPayload: 0a0098e68a), MIC: 736f03c9)
0:03:46.508551	LOG	PULL_RESP: Protocol version = 02, Token = 89b7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2062240223, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAASAEAfGn2XyRzbwPJ'}}
0:03:46.509578	LOG	Server ----------> DUT
0:03:46.513545	LOG	TX_ACK: 02 89b7 05 aa555a0000240409
0:03:49.026120	LOG	PULL_DATA: 02 d9a8 02 aa555a0000240409
0:03:49.028120	LOG	PULL_ACK: 02 d9a8 04
0:03:51.493722	LOG	PUSH_ACK: 02 01b1 01
0:03:51.495721	LOG	PUSH_DATA: Protocol version = 02, Token = 01b1, Identifier = 00, JSON = {'rxpk': [{'tmst': 2065247975, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCDgEKAgGxSMbVTO8='}]}
0:03:51.497721	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 010e, FOpts: 0a02), FPort: 01, FRMPayload: 0034, MIC: c6d54cef)
0:03:51.501718	LOG	Server <---------- DUT
0:03:51.506717	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:51.509716	LOG	Command Answer: 0a02
0:03:51.520707	LOG	MAC command communication completed
0:03:51.525705	LOG	Expect a MAC answer retransmission
0:03:59.106409	LOG	PULL_DATA: 02 8775 02 aa555a0000240409
0:03:59.108408	LOG	PULL_ACK: 02 8775 04
0:04:01.529036	LOG	PUSH_ACK: 02 01b3 01
0:04:01.532036	LOG	PUSH_DATA: Protocol version = 02, Token = 01b3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2075253207, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCDwEKAgFqcfliirg='}]}
0:04:01.533034	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 010f, FOpts: 0a02), FPort: 01, FRMPayload: 0034, MIC: f9628ab8)
0:04:01.534035	LOG	Server <---------- DUT
0:04:01.535035	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:01.539030	LOG	MAC answer retransmission completed
0:04:01.542029	LOG	Expect a MAC answer retransmission
0:04:09.185697	LOG	PULL_DATA: 02 6570 02 aa555a0000240409
0:04:09.190695	LOG	PULL_ACK: 02 6570 04
0:04:11.501387	LOG	PUSH_ACK: 02 01b4 01
0:04:11.504384	LOG	PUSH_DATA: Protocol version = 02, Token = 01b4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2085258439, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCEAEKAgF5aYbo0FM='}]}
0:04:11.505383	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0110, FOpts: 0a02), FPort: 01, FRMPayload: 0034, MIC: 86e8d053)
0:04:11.506383	LOG	Server <---------- DUT
0:04:11.507382	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:11.511380	LOG	MAC answer retransmission completed
0:04:11.515378	LOG	Expect a MAC answer retransmission
0:04:19.265985	LOG	PULL_DATA: 02 5a8a 02 aa555a0000240409
0:04:19.267985	LOG	PULL_ACK: 02 5a8a 04
0:04:21.526705	LOG	PUSH_ACK: 02 01b6 01
0:04:21.528704	LOG	PUSH_DATA: Protocol version = 02, Token = 01b6, Identifier = 00, JSON = {'rxpk': [{'tmst': 2095263663, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCEQEKAgHTx0qQOLE='}]}
0:04:21.529705	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0111, FOpts: 0a02), FPort: 01, FRMPayload: 0034, MIC: 4a9038b1)
0:04:21.530704	LOG	Server <---------- DUT
0:04:21.532703	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:21.537698	LOG	MAC answer retransmission completed
0:04:21.540697	LOG	Send DlChannelReq process starts
0:04:29.346440	LOG	PULL_DATA: 02 3f62 02 aa555a0000240409
0:04:29.348438	LOG	PULL_ACK: 02 3f62 04
0:04:31.508232	LOG	PUSH_ACK: 02 01b9 01
0:04:31.510213	LOG	PUSH_DATA: Protocol version = 02, Token = 01b9, Identifier = 00, JSON = {'rxpk': [{'tmst': 2105268887, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCEgEKAgGvOOpO8b0='}]}
0:04:31.512212	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0112, FOpts: 0a02), FPort: 01, FRMPayload: 0034, MIC: ea4ef1bd)
0:04:31.513230	LOG	Server <---------- DUT
0:04:31.516211	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0149, FOpts:), FPort: 00, FRMPayload: 0a04f87d84), MIC: a63ca6d1)
0:04:31.519209	LOG	PULL_RESP: Protocol version = 02, Token = e71b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2107268887, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAASQEA0PLFWZ2mPKbR'}}
0:04:31.521207	LOG	Server ----------> DUT
0:04:31.525205	LOG	TX_ACK: 02 e71b 05 aa555a0000240409
0:04:39.495689	LOG	PULL_DATA: 02 8029 02 aa555a0000240409
0:04:39.504684	LOG	PULL_ACK: 02 8029 04
0:04:41.558537	LOG	PUSH_ACK: 02 01ba 01
0:04:41.561519	LOG	PUSH_DATA: Protocol version = 02, Token = 01ba, Identifier = 00, JSON = {'rxpk': [{'tmst': 2115274120, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCEwEKAQGlyEVADVk='}]}
0:04:41.562517	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0113, FOpts: 0a01), FPort: 01, FRMPayload: 0034, MIC: 45400d59)
0:04:41.563516	LOG	Server <---------- DUT
0:04:41.564515	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:41.566518	LOG	Command Answer: 0a01
0:04:41.572510	LOG	MAC command communication completed
0:04:41.586503	LOG	Expect a MAC answer retransmission

0:04:49.585969	LOG	PULL_DATA: 02 44de 02 aa555a0000240409
0:04:49.587969	LOG	PULL_ACK: 02 44de 04
0:04:51.531867	LOG	PUSH_ACK: 02 01bc 01
0:04:51.534865	LOG	PUSH_DATA: Protocol version = 02, Token = 01bc, Identifier = 00, JSON = {'rxpk': [{'tmst': 2125279344, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCFAEKAQFCOoWUcag='}]}
0:04:51.540862	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0114, FOpts: 0a01), FPort: 01, FRMPayload: 0034, MIC: 859471a8)
0:04:51.542861	LOG	Server <---------- DUT
0:04:51.543860	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:51.555853	LOG	MAC answer retransmission completed
0:04:51.604825	LOG	Expect a MAC answer retransmission
0:04:59.666258	LOG	PULL_DATA: 02 7ca5 02 aa555a0000240409
0:04:59.670256	LOG	PULL_ACK: 02 7ca5 04
0:05:01.570183	LOG	PUSH_ACK: 02 01be 01
0:05:01.575177	LOG	PUSH_DATA: Protocol version = 02, Token = 01be, Identifier = 00, JSON = {'rxpk': [{'tmst': 2135284552, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCFQEKAQFZVJfWAIQ='}]}
0:05:01.579174	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0115, FOpts: 0a01), FPort: 01, FRMPayload: 0034, MIC: 97d60084)
0:05:01.583173	LOG	Server <---------- DUT
0:05:01.585171	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:01.589173	LOG	MAC answer retransmission completed
0:05:01.592171	LOG	Expect a MAC answer retransmission
0:05:09.776529	LOG	PULL_DATA: 02 894e 02 aa555a0000240409
0:05:09.788523	LOG	PULL_ACK: 02 894e 04
0:05:11.544937	LOG	PUSH_ACK: 02 01bf 01
0:05:11.546936	LOG	PUSH_DATA: Protocol version = 02, Token = 01bf, Identifier = 00, JSON = {'rxpk': [{'tmst': 2145289792, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCFgEKAQFS1UEUEeo='}]}
0:05:11.547936	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0116, FOpts: 0a01), FPort: 01, FRMPayload: 0034, MIC: 411411ea)
0:05:11.548935	LOG	Server <---------- DUT
0:05:11.549934	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:11.554931	LOG	MAC answer retransmission completed
0:05:11.560934	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:19.866254	LOG	PULL_DATA: 02 5759 02 aa555a0000240409
0:05:19.868253	LOG	PULL_ACK: 02 5759 04
0:05:21.568293	LOG	PUSH_ACK: 02 01c0 01
0:05:21.570290	LOG	PUSH_DATA: Protocol version = 02, Token = 01c0, Identifier = 00, JSON = {'rxpk': [{'tmst': 2155295008, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCFwEKAQHpaHMiPtg='}]}
0:05:21.571289	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0117, FOpts: 0a01), FPort: 01, FRMPayload: 0034, MIC: 73223ed8)
0:05:21.573291	LOG	Server <---------- DUT
0:05:21.574290	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 014a, FOpts:), FPort: e0, FRMPayload: 0700), MIC: f879d181)
0:05:21.576290	LOG	Frame command sent to the DUT

0:05:21.577290	LOG	PULL_RESP: Protocol version = 02, Token = a22a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2157295008, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAASgHg09v4edGB'}}
0:05:21.578289	LOG	Server ----------> DUT
0:05:21.581283	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:21.584280	LOG	End Test Step: DlChannel Request with invalid parameters
0:05:21.588278	LOG	Partial Verdict: PASS
0:05:21.592275	LOG	==========
0:05:21.597272	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_007
0:05:21.598272	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_008	
Verdict	PASS	
Date	2021-10-18 13:35:32	
Comments	RXParameterSetupReq MAC command	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	RX2 Receive window frequency	868.525
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.012253	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_008
0:00:00.047234	LOG	==========
0:00:00.050232	LOG	Start Test Step: Device activation
0:00:00.110198	LOG	Activation process has finished successfully
0:00:00.112199	LOG	Data stored in the DUT after Activation:
0:00:00.114197	LOG	DevAddr: 20202020
0:00:00.117194	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.119195	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.121193	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.124191	LOG	End Test Step: Device activation
0:00:00.127188	LOG	Partial Verdict: PASS
0:00:00.132186	LOG	==========
0:00:00.137183	LOG	==========
0:00:00.140181	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.149175	LOG	DUT Pre-condition activation process starts
0:00:00.152174	LOG	DUT Pre-condition activation completed
0:00:00.156174	LOG	End Test Step: DUT Pre-condition settings
0:00:00.160171	LOG	Partial Verdict: PASS
0:00:00.163169	LOG	==========
0:00:00.169166	LOG	==========
0:00:00.171165	LOG	Start Test Step: Modify RX1 and RX2 downlink parameters
0:00:00.184156	LOG	Send LinkADRReq process starts
0:00:05.320266	LOG	PULL_DATA: 02 d351 02 aa555a0000240409
0:00:05.322244	LOG	PULL_ACK: 02 d351 04
0:00:05.324243	LOG	First PULL_DATA received
0:00:06.885358	LOG	PUSH_ACK: 02 01c2 01

0:00:06.887357	LOG	PUSH_DATA: Protocol version = 02, Token = 01c2, Identifier = 00, JSON = {'rxpk': [{'tmst': 2165295114, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAGAEB8Y40mVgb'}]}
0:00:06.889358	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0118, FOpts:), FPort: 01, FRMPayload: 0035, MIC: 3499581b)
0:00:06.890357	LOG	Server <---------- DUT
0:00:06.892354	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 014b, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 3acaf91b)
0:00:06.894355	LOG	PULL_RESP: Protocol version = 02, Token = 3fde, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2167295114, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAASwEAGrSnrB06yvkb'}}
0:00:06.896353	LOG	Server ----------> DUT
0:00:06.901349	LOG	TX_ACK: 02 3fde 05 aa555a0000240409
0:00:11.894537	LOG	PUSH_ACK: 02 01c3 01
0:00:11.897519	LOG	PUSH_DATA: Protocol version = 02, Token = 01c3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2170302859, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCGQEDBwF1DnVSQBA='}]}
0:00:11.898518	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0119, FOpts: 0307), FPort: 01, FRMPayload: 0035, MIC: 75524010)
0:00:11.899517	LOG	Server <---------- DUT
0:00:11.901517	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:11.902516	LOG	Command Answer: 0307
0:00:11.908512	LOG	MAC command communication completed
0:00:11.911510	LOG	Check previous uplink data rate process starts
0:00:11.916507	LOG	Uplink received with expected Data Rate
0:00:11.923503	LOG	Send RXParamSetupReq process starts
0:00:15.510469	LOG	PULL_DATA: 02 adac 02 aa555a0000240409
0:00:15.512469	LOG	PULL_ACK: 02 adac 04
0:00:21.920839	LOG	PUSH_ACK: 02 01c4 01
0:00:21.922837	LOG	PUSH_DATA: Protocol version = 02, Token = 01c4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2180302939, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAGgEBsbsvl/4U'}]}
0:00:21.923835	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 011a, FOpts:), FPort: 01, FRMPayload: 0035, MIC: 2f97fe14)
0:00:21.924835	LOG	Server <---------- DUT
0:00:21.926834	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 014c, FOpts:), FPort: 00, FRMPayload: 0522c28684), MIC: bd837f95)
0:00:21.929833	LOG	PULL_RESP: Protocol version = 02, Token = 8b69, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2182302939, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAATAEABOvPdRO9g3+V'}}
0:00:21.931833	LOG	Server ----------> DUT
0:00:21.936828	LOG	TX_ACK: 02 8b69 05 aa555a0000240409
0:00:25.710689	LOG	PULL_DATA: 02 8695 02 aa555a0000240409
0:00:25.712689	LOG	PULL_ACK: 02 8695 04
0:00:26.904013	LOG	PUSH_ACK: 02 01c5 01
0:00:26.906012	LOG	PUSH_DATA: Protocol version = 02, Token = 01c5, Identifier = 00, JSON = {'rxpk': [{'tmst': 2185310688, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCGwEFBwECdmI0uNw='}]}

0:00:26.908011	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 011b, FOpts: 0507), FPort: 01, FRMPayload: 0035, MIC: 6234b8dc)
0:00:26.910010	LOG	Server <---------- DUT
0:00:26.912009	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:26.913009	LOG	Command Answer: 0507
0:00:26.941992	LOG	MAC command communication completed
0:00:26.955984	LOG	Expect a MAC answer retransmission
0:00:35.791088	LOG	PULL_DATA: 02 80ec 02 aa555a0000240409
0:00:35.795086	LOG	PULL_ACK: 02 80ec 04
0:00:36.945435	LOG	PUSH_ACK: 02 01c7 01
0:00:36.947433	LOG	PUSH_DATA: Protocol version = 02, Token = 01c7, Identifier = 00, JSON = {'rxpk': [{'tmst': 2195315896, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCHAEFBwFB/Y5pS/Q='}]}
0:00:36.948434	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 011c, FOpts: 0507), FPort: 01, FRMPayload: 0035, MIC: 8e694bf4)
0:00:36.950431	LOG	Server <---------- DUT
0:00:36.951430	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:36.955428	LOG	MAC answer retransmission completed
0:00:36.959428	LOG	Expect a MAC answer retransmission
0:00:45.871375	LOG	PULL_DATA: 02 17e4 02 aa555a0000240409
0:00:45.873374	LOG	PULL_ACK: 02 17e4 04
0:00:46.917782	LOG	PUSH_ACK: 02 01c8 01
0:00:46.919781	LOG	PUSH_DATA: Protocol version = 02, Token = 01c8, Identifier = 00, JSON = {'rxpk': [{'tmst': 2205321136, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCHQEFBwHj7TFj/+I='}]}
0:00:46.920783	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 011d, FOpts: 0507), FPort: 01, FRMPayload: 0035, MIC: 3163ffe2)
0:00:46.922782	LOG	Server <---------- DUT
0:00:46.923779	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:46.927778	LOG	MAC answer retransmission completed
0:00:46.931775	LOG	Expect a MAC answer retransmission
0:00:55.950663	LOG	PULL_DATA: 02 85f1 02 aa555a0000240409
0:00:55.952663	LOG	PULL_ACK: 02 85f1 04
0:00:56.941103	LOG	PUSH_ACK: 02 01c9 01
0:00:56.943102	LOG	PUSH_DATA: Protocol version = 02, Token = 01c9, Identifier = 00, JSON = {'rxpk': [{'tmst': 2215326360, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCHgEFBwEabOdT8mA='}]}
0:00:56.944100	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 011e, FOpts: 0507), FPort: 01, FRMPayload: 0035, MIC: e753f260)
0:00:56.946099	LOG	Server <---------- DUT
0:00:56.947099	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:56.952096	LOG	MAC answer retransmission completed
0:00:56.960091	LOG	Send Test Command EchoPayloadReq process starts
0:01:06.030951	LOG	PULL_DATA: 02 8c0c 02 aa555a0000240409
0:01:06.034949	LOG	PULL_ACK: 02 8c0c 04
0:01:06.927444	LOG	PUSH_ACK: 02 01cb 01
0:01:06.932441	LOG	PUSH_DATA: Protocol version = 02, Token = 01cb, Identifier = 00, JSON = {'rxpk': [{'tmst': 2225331592, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCHwEFBwExpqhnkNQ='}]}
0:01:06.935441	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 011f, FOpts: 0507), FPort: 01, FRMPayload: 0035, MIC: a86790d4)
0:01:06.939438	LOG	Server <---------- DUT
0:01:06.943435	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 014d, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: 240787e4)
0:01:06.947431	LOG	Frame command sent to the DUT
0:01:06.949432	LOG	PULL_RESP: Protocol version = 02, Token = 43df, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2226331592, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAATQHgaN7KFSQHh+Q='}}
0:01:06.950430	LOG	Server ----------> DUT
0:01:06.956427	LOG	TX_ACK: 02 43df 05 aa555a0000240409
0:01:16.200217	LOG	PULL_DATA: 02 66f1 02 aa555a0000240409
0:01:16.204191	LOG	PULL_ACK: 02 66f1 04
0:01:16.970751	LOG	PUSH_ACK: 02 01cc 01
0:01:16.972750	LOG	PUSH_DATA: Protocol version = 02, Token = 01cc, Identifier = 00, JSON = {'rxpk': [{'tmst': 2235339889, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCAIAHg0vWyzXvp0Ns='}]}
0:01:16.974749	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0120, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 7be9d0db)
0:01:16.976748	LOG	Server <---------- DUT
0:01:16.978747	LOG	Answer in payload: 020304
0:01:16.980746	LOG	Frame Command Payload in the Answer: 08020304
0:01:17.024721	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:17.029717	LOG	Send Test Command EchoPayloadReq process completed
0:01:17.035714	LOG	Send Test Command EchoPayloadReq process starts
0:01:26.290469	LOG	PULL_DATA: 02 7cc0 02 aa555a0000240409
0:01:26.292469	LOG	PULL_ACK: 02 7cc0 04
0:01:26.944100	LOG	PUSH_ACK: 02 01cd 01
0:01:26.947098	LOG	PUSH_DATA: Protocol version = 02, Token = 01cd, Identifier = 00, JSON = {'rxpk': [{'tmst': 2245336857, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAIQEBRR5EdA7O'}]}
0:01:26.948097	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0121, FOpts:), FPort: 01, FRMPayload: 0036, MIC: 44740ece)
0:01:26.949097	LOG	Server <---------- DUT
0:01:26.952094	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 014e, FOpts:), FPort: e0, FRMPayload: 08121314), MIC: 55e72628)
0:01:26.955094	LOG	Frame command sent to the DUT
0:01:26.956094	LOG	PULL_RESP: Protocol version = 02, Token = febf, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2247336857, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 868.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAATgHgpb3FHFXnJig='}}
0:01:26.957094	LOG	Server ----------> DUT
0:01:26.962089	LOG	TX_ACK: 02 febf 05 aa555a0000240409
0:01:31.976249	LOG	PUSH_ACK: 02 01cf 01
0:01:31.978248	LOG	PUSH_DATA: Protocol version = 02, Token = 01cf, Identifier = 00, JSON = {'rxpk': [{'tmst': 2250347714, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCAIgHga8KMO/k78pI='}]}
0:01:31.979247	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0122, FOpts:), FPort: e0, FRMPayload: 08131415, MIC: f93bf292)
0:01:31.980247	LOG	Server <---------- DUT

0:01:31.982244	LOG	Answer in payload: 131415
0:01:31.983244	LOG	Frame Command Payload in the Answer: 08131415
0:01:31.987241	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:31.991241	LOG	Send Test Command EchoPayloadReq process completed
0:01:31.996238	LOG	End Test Step: Modify RX1 and RX2 downlink parameters
0:01:32.001233	LOG	Partial Verdict: PASS
0:01:32.007230	LOG	==========
0:01:32.014226	LOG	==========
0:01:32.017225	LOG	Start Test Step: Restore default downlink parameters
0:01:32.031216	LOG	Send RXParamSetupReq process starts
0:01:36.409847	LOG	PULL_DATA: 02 7cbb 02 aa555a0000240409
0:01:36.414846	LOG	PULL_ACK: 02 7cbb 04
0:01:41.959761	LOG	PUSH_ACK: 02 01d1 01
0:01:41.964758	LOG	PUSH_DATA: Protocol version = 02, Token = 01d1, Identifier = 00, JSON = {'rxpk': [{'tmst': 2260344690, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAIwEBzpwUgwXr'}]}
0:01:41.969756	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0123, FOpts:), FPort: 01, FRMPayload: 0037, MIC: 148305eb)
0:01:41.974753	LOG	Server <---------- DUT
0:01:41.979754	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 014f, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: 2c2494f0)
0:01:41.985747	LOG	PULL_RESP: Protocol version = 02, Token = b222, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2262344690, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 868.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAATwEAP83I7iksJJTw'}}
0:01:41.987745	LOG	Server ----------> DUT
0:01:41.991743	LOG	TX_ACK: 02 b222 05 aa555a0000240409
0:01:46.610478	LOG	PULL_DATA: 02 22fc 02 aa555a0000240409
0:01:46.612477	LOG	PULL_ACK: 02 22fc 04
0:01:46.983267	LOG	PUSH_ACK: 02 01d3 01
0:01:46.986265	LOG	PUSH_DATA: Protocol version = 02, Token = 01d3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2265352436, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCJAEFBwEq1mu+IT8='}]}
0:01:46.987265	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0124, FOpts: 0507), FPort: 01, FRMPayload: 0037, MIC: 6bbe213f)
0:01:46.989264	LOG	Server <---------- DUT
0:01:46.990263	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:46.991262	LOG	Command Answer: 0507
0:01:47.005255	LOG	MAC command communication completed
0:01:47.009253	LOG	Send Test Command EchoPayloadReq process starts
0:01:56.690766	LOG	PULL_DATA: 02 e466 02 aa555a0000240409
0:01:56.692765	LOG	PULL_ACK: 02 e466 04
0:01:56.958615	LOG	PUSH_ACK: 02 01d4 01
0:01:56.963611	LOG	PUSH_DATA: Protocol version = 02, Token = 01d4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2275357644, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCJQEFBwG9s1N5hn8='}]}
0:01:56.966610	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0125, FOpts: 0507), FPort: 01, FRMPayload: 0037, MIC: 5379867f)
0:01:56.970608	LOG	Server <---------- DUT
0:01:56.972606	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0150, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: f02fc8b5)
0:01:56.977603	LOG	Frame command sent to the DUT

0:01:56.982600	LOG	PULL_RESP: Protocol version = 02, Token = 0bea, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2276357644, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAUAHgqbDlPfAvyLU='}}
0:01:56.985599	LOG	Server ----------> DUT
0:01:56.989596	LOG	TX_ACK: 02 0bea 05 aa555a0000240409
0:02:06.850008	LOG	PULL_DATA: 02 da61 02 aa555a0000240409
0:02:06.855006	LOG	PULL_ACK: 02 da61 04
0:02:06.995928	LOG	PUSH_ACK: 02 01d6 01
0:02:06.997926	LOG	PUSH_DATA: Protocol version = 02, Token = 01d6, Identifier = 00, JSON = {'rxpk': [{'tmst': 2285365961, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCAJgHg+MyYfnVNVFg='}]}
0:02:06.998924	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0126, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 754d5458)
0:02:06.999923	LOG	Server <---------- DUT
0:02:07.001922	LOG	Answer in payload: 020304
0:02:07.027908	LOG	Frame Command Payload in the Answer: 08020304
0:02:07.033904	LOG	Checking if the payload of the EchoPayloadAns is correct
0:02:07.039901	LOG	Send Test Command EchoPayloadReq process completed
0:02:07.049895	LOG	Send Test Command EchoPayloadReq process starts
0:02:16.930295	LOG	PULL_DATA: 02 0b63 02 aa555a0000240409
0:02:16.932295	LOG	PULL_ACK: 02 0b63 04
0:02:16.969273	LOG	PUSH_ACK: 02 01d7 01
0:02:16.972272	LOG	PUSH_DATA: Protocol version = 02, Token = 01d7, Identifier = 00, JSON = {'rxpk': [{'tmst': 2295362937, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAJwEBwgIp7VkK'}]}
0:02:16.973271	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0127, FOpts:), FPort: 01, FRMPayload: 0038, MIC: 29ed590a)
0:02:16.975270	LOG	Server <---------- DUT
0:02:16.977269	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0151, FOpts:), FPort: e0, FRMPayload: 08121314), MIC: 54560e91)
0:02:16.979268	LOG	Frame command sent to the DUT
0:02:16.981268	LOG	PULL_RESP: Protocol version = 02, Token = 82fd, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2297362937, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAUQHgaL66FFRWDpE='}}
0:02:16.982266	LOG	Server ----------> DUT
0:02:16.987265	LOG	TX_ACK: 02 82fd 05 aa555a0000240409
0:02:22.004422	LOG	PUSH_ACK: 02 01d8 01
0:02:22.005419	LOG	PUSH_DATA: Protocol version = 02, Token = 01d8, Identifier = 00, JSON = {'rxpk': [{'tmst': 2300373803, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 17, 'data': 'QCAgICCAKAHgC3jXxtF6So0='}]}
0:02:22.007419	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0128, FOpts:), FPort: e0, FRMPayload: 08131415, MIC: d17a4a8d)
0:02:22.008420	LOG	Server <---------- DUT
0:02:22.009420	LOG	Answer in payload: 131415
0:02:22.010419	LOG	Frame Command Payload in the Answer: 08131415
0:02:22.014432	LOG	Checking if the payload of the EchoPayloadAns is correct
0:02:22.018413	LOG	Send Test Command EchoPayloadReq process completed
0:02:22.022411	LOG	End Test Step: Restore default downlink parameters
0:02:22.028408	LOG	Partial Verdict: PASS
0:02:22.034403	LOG	==========
0:02:22.042401	LOG	==========

0:02:22.045397	LOG	Start Test Step: Verify that the DUT ignores wrong parameters
0:02:22.059389	LOG	Send RXParamSetupReq process starts
0:02:27.059670	LOG	PULL_DATA: 02 af62 02 aa555a0000240409
0:02:27.062666	LOG	PULL_ACK: 02 af62 04
0:02:31.976882	LOG	PUSH_ACK: 02 01d9 01
0:02:31.978880	LOG	PUSH_DATA: Protocol version = 02, Token = 01d9, Identifier = 00, JSON = {'rxpk': [{'tmst': 2310370779, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAKQEB7Xo2SrKk'}]}
0:02:31.980879	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0129, FOpts:), FPort: 01, FRMPayload: 0039, MIC: 364ab2a4)
0:02:31.981878	LOG	Server <---------- DUT
0:02:31.983878	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0152, FOpts:), FPort: 00, FRMPayload: 0560c28684), MIC: 3bf29933)
0:02:31.987876	LOG	PULL_RESP: Protocol version = 02, Token = ae36, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2312370779, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAUgEAAK1KI1E78pkz'}}
0:02:31.989875	LOG	Server ----------> DUT
0:02:31.993872	LOG	TX_ACK: 02 ae36 05 aa555a0000240409
0:02:36.984081	LOG	PUSH_ACK: 02 01db 01
0:02:36.989078	LOG	PUSH_DATA: Protocol version = 02, Token = 01db, Identifier = 00, JSON = {'rxpk': [{'tmst': 2315378534, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCKgEFAwF6VXwEIuM='}]}
0:02:36.990079	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 012a, FOpts: 0503), FPort: 01, FRMPayload: 0039, MIC: 7c0422e3)
0:02:36.992078	LOG	Server <---------- DUT
0:02:36.993076	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:36.994077	LOG	Command Answer: 0503
0:02:36.999074	LOG	MAC command communication completed
0:02:37.005071	LOG	Send RXParamSetupReq process starts
0:02:37.239936	LOG	PULL_DATA: 02 bc83 02 aa555a0000240409
0:02:37.240935	LOG	PULL_ACK: 02 bc83 04
0:02:47.009532	LOG	PUSH_ACK: 02 01dc 01
0:02:47.011532	LOG	PUSH_DATA: Protocol version = 02, Token = 01dc, Identifier = 00, JSON = {'rxpk': [{'tmst': 2325383750, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCKwEFAwF+JaG5cJs='}]}
0:02:47.012533	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 012b, FOpts: 0503), FPort: 01, FRMPayload: 0039, MIC: a1b9709b)
0:02:47.014531	LOG	Server <---------- DUT
0:02:47.015530	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0153, FOpts:), FPort: 00, FRMPayload: 0509c28684), MIC: 56b46aff)
0:02:47.018528	LOG	PULL_RESP: Protocol version = 02, Token = b4ee, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2327383750, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAUwEAsdoQSipWtGr/'}}
0:02:47.019528	LOG	Server ----------> DUT
0:02:47.023526	LOG	TX_ACK: 02 b4ee 05 aa555a0000240409
0:02:47.440288	LOG	PULL_DATA: 02 b469 02 aa555a0000240409
0:02:47.441287	LOG	PULL_ACK: 02 b469 04
0:02:57.016862	LOG	PUSH_ACK: 02 01dd 01
0:02:57.018862	LOG	PUSH_DATA: Protocol version = 02, Token = 01dd, Identifier = 00, JSON = {'rxpk': [{'tmst': 2335388999, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCLAEFBQFzlg51euc='}]}
0:02:57.019860	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 012c, FOpts: 0505), FPort: 01, FRMPayload: 0039, MIC: 0e757ae7)
0:02:57.020859	LOG	Server <---------- DUT
0:02:57.022858	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:57.023857	LOG	Command Answer: 0505
0:02:57.028855	LOG	MAC command communication completed
0:02:57.032852	LOG	Send RXParamSetupReq process starts
0:02:57.519576	LOG	PULL_DATA: 02 2f3a 02 aa555a0000240409
0:02:57.521575	LOG	PULL_ACK: 02 2f3a 04
0:03:07.008201	LOG	PUSH_ACK: 02 01df 01
0:03:07.017195	LOG	PUSH_DATA: Protocol version = 02, Token = 01df, Identifier = 00, JSON = {'rxpk': [{'tmst': 2345394231, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCLQEFBQH2ftVLakQ='}]}
0:03:07.019195	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 012d, FOpts: 0505), FPort: 01, FRMPayload: 0039, MIC: d54b6a44)
0:03:07.021193	LOG	Server <---------- DUT
0:03:07.023192	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0154, FOpts:), FPort: 00, FRMPayload: 0500f0018b), MIC: 5e1b6575)
0:03:07.026190	LOG	PULL_RESP: Protocol version = 02, Token = f1f3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2347394231, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAVAEA1mfLozheG2V1'}}
0:03:07.028190	LOG	Server ----------> DUT
0:03:07.032191	LOG	TX_ACK: 02 f1f3 05 aa555a0000240409
0:03:07.659849	LOG	PULL_DATA: 02 ffaf 02 aa555a0000240409
0:03:07.660829	LOG	PULL_ACK: 02 ffaf 04
0:03:17.029525	LOG	PUSH_ACK: 02 01e0 01
0:03:17.032519	LOG	PUSH_DATA: Protocol version = 02, Token = 01e0, Identifier = 00, JSON = {'rxpk': [{'tmst': 2355399458, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCLgEFBgHk63w6N7Q='}]}
0:03:17.033519	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 012e, FOpts: 0506), FPort: 01, FRMPayload: 0039, MIC: 7c3a37b4)
0:03:17.034522	LOG	Server <---------- DUT
0:03:17.036519	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:17.037518	LOG	Command Answer: 0506
0:03:17.043517	LOG	MAC command communication completed
0:03:17.051514	LOG	Send Test Command EchoPayloadReq process starts
0:03:17.740118	LOG	PULL_DATA: 02 2716 02 aa555a0000240409
0:03:17.742116	LOG	PULL_ACK: 02 2716 04
0:03:27.003867	LOG	PUSH_ACK: 02 01e1 01
0:03:27.006866	LOG	PUSH_DATA: Protocol version = 02, Token = 01e1, Identifier = 00, JSON = {'rxpk': [{'tmst': 2365404698, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCLwEFBgFisfGQ1Dc='}]}
0:03:27.007865	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 012f, FOpts: 0506), FPort: 01, FRMPayload: 0039, MIC: f190d437)
0:03:27.009864	LOG	Server <---------- DUT
0:03:27.010864	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0155, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: 894e3bb2)
0:03:27.012862	LOG	Frame command sent to the DUT

0:03:27.014861	LOG	PULL_RESP: Protocol version = 02, Token = f521, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2366404698, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAVQHgPC5Lg4lOO7I='}}
0:03:27.015861	LOG	Server ----------> DUT
0:03:27.019858	LOG	TX_ACK: 02 f521 05 aa555a0000240409
0:03:27.850387	LOG	PULL_DATA: 02 93ac 02 aa555a0000240409
0:03:27.852386	LOG	PULL_ACK: 02 93ac 04
0:03:37.038181	LOG	PUSH_ACK: 02 01e4 01
0:03:37.047176	LOG	PUSH_DATA: Protocol version = 02, Token = 01e4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2375413021, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 17, 'data': 'QCAgICCAMAHgv4bI25h6pR4='}]}
0:03:37.050174	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0130, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 987aa51e)
0:03:37.054172	LOG	Server <---------- DUT
0:03:37.058169	LOG	Answer in payload: 020304
0:03:37.059169	LOG	Frame Command Payload in the Answer: 08020304
0:03:37.064166	LOG	Checking if the payload of the EchoPayloadAns is correct
0:03:37.070163	LOG	Send Test Command EchoPayloadReq process completed
0:03:37.077159	LOG	Send Test Command EchoPayloadReq process starts
0:03:37.929675	LOG	PULL_DATA: 02 071f 02 aa555a0000240409
0:03:37.931674	LOG	PULL_ACK: 02 071f 04
0:03:47.017313	LOG	PUSH_ACK: 02 01e5 01
0:03:47.019312	LOG	PUSH_DATA: Protocol version = 02, Token = 01e5, Identifier = 00, JSON = {'rxpk': [{'tmst': 2385409997, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAMQEBlgcItLm6'}]}
0:03:47.020313	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0131, FOpts:), FPort: 01, FRMPayload: 003a, MIC: 08b4b9ba)
0:03:47.021313	LOG	Server <---------- DUT
0:03:47.023311	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0156, FOpts:), FPort: e0, FRMPayload: 08121314), MIC: a764b1f9)
0:03:47.025310	LOG	Frame command sent to the DUT
0:03:47.027309	LOG	PULL_RESP: Protocol version = 02, Token = e68d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2387409997, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAVgHgxN8zwadksfk='}}
0:03:47.028309	LOG	Server ----------> DUT
0:03:47.032304	LOG	TX_ACK: 02 e68d 05 aa555a0000240409
0:03:48.079710	LOG	PULL_DATA: 02 b86d 02 aa555a0000240409
0:03:48.084708	LOG	PULL_ACK: 02 b86d 04
0:03:52.052679	LOG	PUSH_ACK: 02 01e6 01
0:03:52.054678	LOG	PUSH_DATA: Protocol version = 02, Token = 01e6, Identifier = 00, JSON = {'rxpk': [{'tmst': 2390420862, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCAMgHguyHDRqGbHQk='}]}
0:03:52.055675	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0132, FOpts:), FPort: e0, FRMPayload: 08131415, MIC: a19b1d09)
0:03:52.056677	LOG	Server <---------- DUT
0:03:52.057676	LOG	Answer in payload: 131415
0:03:52.059675	LOG	Frame Command Payload in the Answer: 08131415
0:03:52.063671	LOG	Checking if the payload of the EchoPayloadAns is correct
0:03:52.066669	LOG	Send Test Command EchoPayloadReq process completed
0:03:52.068686	LOG	End Test Step: Verify that the DUT ignores wrong parameters
0:03:52.071667	LOG	Partial Verdict: PASS

0:03:52.076664	LOG	==========
0:03:52.083660	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_008
0:03:52.085658	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_009	
Verdict	PASS	
Date	2021-10-18 13:39:28	
Comments	RXTimingSetupReq MAC command	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.010914	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_009
0:00:00.046892	LOG	==========
0:00:00.048891	LOG	Start Test Step: Device activation
0:00:00.103860	LOG	Activation process has finished successfully
0:00:00.105859	LOG	Data stored in the DUT after Activation:
0:00:00.108858	LOG	DevAddr: 20202020
0:00:00.111856	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.115853	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.118851	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.121850	LOG	End Test Step: Device activation
0:00:00.124848	LOG	Partial Verdict: PASS
0:00:00.127847	LOG	==========
0:00:00.132844	LOG	==========
0:00:00.135842	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.143838	LOG	DUT Pre-condition activation process starts
0:00:00.146836	LOG	DUT Pre-condition activation completed
0:00:00.149834	LOG	End Test Step: DUT Pre-condition settings
0:00:00.153832	LOG	Partial Verdict: PASS
0:00:00.157829	LOG	==========
0:00:00.163826	LOG	==========
0:00:00.166825	LOG	Start Test Step: Modify RX1 and RX2 timing to X second delay
0:00:00.181816	LOG	Send RXTimingSetupReq process starts
0:00:03.260178	LOG	PULL_DATA: 02 1134 02 aa555a0000240409
0:00:03.262177	LOG	PULL_ACK: 02 1134 04
0:00:03.263176	LOG	First PULL_DATA received
0:00:07.119020	LOG	PUSH_ACK: 02 01e7 01
0:00:07.121991	LOG	PUSH_DATA: Protocol version = 02, Token = 01e7, Identifier = 00, JSON = {'rxpk': [{'tmst': 2400417854, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAMwEBDVR3Qi6K'}]}
0:00:07.125988	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0133, FOpts:), FPort: 01, FRMPayload: 003b, MIC: 77422e8a)
0:00:07.128986	LOG	Server <---------- DUT
0:00:07.131984	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0157, FOpts:), FPort: 00, FRMPayload: 0803), MIC: 96462153)
0:00:07.134983	LOG	PULL_RESP: Protocol version = 02, Token = 6773, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2402417854, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAVwEAo5iWRiFT'}}
0:00:07.135982	LOG	Server ----------> DUT
0:00:07.140979	LOG	TX_ACK: 02 6773 05 aa555a0000240409
0:00:12.106322	LOG	PUSH_ACK: 02 01ea 01
0:00:12.109320	LOG	PUSH_DATA: Protocol version = 02, Token = 01ea, Identifier = 00, JSON = {'rxpk': [{'tmst': 2405425608, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 16, 'data': 'QCAgICCBNAEIAdYWQ7RiCQ=='}]}
0:00:12.111320	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0134, FOpts: 08), FPort: 01, FRMPayload: 003b, MIC: 43b46209)
0:00:12.113318	LOG	Server <---------- DUT
0:00:12.114317	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:12.116318	LOG	Command Answer: 08
0:00:12.125311	LOG	MAC command communication completed
0:00:12.128310	LOG	Expect a MAC answer retransmission
0:00:13.439731	LOG	PULL_DATA: 02 2d8d 02 aa555a0000240409
0:00:13.441730	LOG	PULL_ACK: 02 2d8d 04
0:00:22.129805	LOG	PUSH_ACK: 02 01eb 01
0:00:22.132804	LOG	PUSH_DATA: Protocol version = 02, Token = 01eb, Identifier = 00, JSON = {'rxpk': [{'tmst': 2415430840, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBNQEIAeOaaMBwLA=='}]}
0:00:22.134802	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0135, FOpts: 08), FPort: 01, FRMPayload: 003b, MIC: 68c0702c)
0:00:22.136801	LOG	Server <---------- DUT
0:00:22.138800	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:22.147795	LOG	MAC answer retransmission completed
0:00:22.152793	LOG	Expect a MAC answer retransmission
0:00:23.520017	LOG	PULL_DATA: 02 ef4f 02 aa555a0000240409
0:00:23.521017	LOG	PULL_ACK: 02 ef4f 04
0:00:32.154124	LOG	PUSH_ACK: 02 01ec 01
0:00:32.166117	LOG	PUSH_DATA: Protocol version = 02, Token = 01ec, Identifier = 00, JSON = {'rxpk': [{'tmst': 2425436064, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 16, 'data': 'QCAgICCBNgEIARbpBVucLQ=='}]}
0:00:32.168116	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0136, FOpts: 08), FPort: 01, FRMPayload: 003b, MIC: 055b9c2d)
0:00:32.169114	LOG	Server <---------- DUT
0:00:32.171113	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:32.175112	LOG	MAC answer retransmission completed
0:00:32.179108	LOG	Expect a MAC answer retransmission
0:00:33.599303	LOG	PULL_DATA: 02 89d4 02 aa555a0000240409
0:00:33.601302	LOG	PULL_ACK: 02 89d4 04
0:00:42.146458	LOG	PUSH_ACK: 02 01ee 01
0:00:42.149456	LOG	PUSH_DATA: Protocol version = 02, Token = 01ee, Identifier = 00, JSON = {'rxpk': [{'tmst': 2435441296, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 16, 'data': 'QCAgICCBNwEIAUJMA1jEnA=='}]}
0:00:42.153453	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0137, FOpts: 08), FPort: 01, FRMPayload: 003b, MIC: 0358c49c)
0:00:42.156452	LOG	Server <---------- DUT

0:00:42.158451	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:42.162449	LOG	MAC answer retransmission completed
0:00:42.168445	LOG	Send Test Command EchoPayloadReq process starts
0:00:43.679588	LOG	PULL_DATA: 02 b663 02 aa555a0000240409
0:00:43.681588	LOG	PULL_ACK: 02 b663 04
0:00:52.120803	LOG	PUSH_ACK: 02 01f0 01
0:00:52.122802	LOG	PUSH_DATA: Protocol version = 02, Token = 01f0, Identifier = 00, JSON = {'rxpk': [{'tmst': 2445446528, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBOAEIAdAZmrs7dA=='}]}
0:00:52.124801	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0138, FOpts: 08), FPort: 01, FRMPayload: 003b, MIC: 9abb3b74)
0:00:52.127799	LOG	Server <---------- DUT
0:00:52.129798	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0158, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: b4393d06)
0:00:52.133796	LOG	Frame command sent to the DUT
0:00:52.135794	LOG	PULL_RESP: Protocol version = 02, Token = 5398, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2448446528, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAWAHgiGj5abQ5PQY='}}
0:00:52.137793	LOG	Server ----------> DUT
0:00:52.141791	LOG	TX_ACK: 02 5398 05 aa555a0000240409
0:00:53.819839	LOG	PULL_DATA: 02 35c1 02 aa555a0000240409
0:00:53.820839	LOG	PULL_ACK: 02 35c1 04
0:01:02.154115	LOG	PUSH_ACK: 02 01f1 01
0:01:02.156114	LOG	PUSH_DATA: Protocol version = 02, Token = 01f1, Identifier = 00, JSON = {'rxpk': [{'tmst': 2455454850, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCAOQHgYZmq2nVZhbY='}]}
0:01:02.157113	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0139, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 755985b6)
0:01:02.159112	LOG	Server <---------- DUT
0:01:02.161113	LOG	Answer in payload: 020304
0:01:02.162112	LOG	Frame Command Payload in the Answer: 08020304
0:01:02.167108	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:02.171106	LOG	Send Test Command EchoPayloadReq process completed
0:01:02.185097	LOG	Send Test Command EchoPayloadReq process starts
0:01:03.899125	LOG	PULL_DATA: 02 c7e4 02 aa555a0000240409
0:01:03.901124	LOG	PULL_ACK: 02 c7e4 04
0:01:12.136456	LOG	PUSH_ACK: 02 01f3 01
0:01:12.138455	LOG	PUSH_DATA: Protocol version = 02, Token = 01f3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2465451818, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAOgEBXCAz4eim'}]}
0:01:12.140454	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 013a, FOpts:), FPort: 01, FRMPayload: 003c, MIC: 33e1e8a6)
0:01:12.141453	LOG	Server <---------- DUT
0:01:12.142454	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0159, FOpts:), FPort: e0, FRMPayload: 08121314), MIC: 8431ce49)
0:01:12.145452	LOG	Frame command sent to the DUT
0:01:12.146451	LOG	PULL_RESP: Protocol version = 02, Token = e102, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2469451818, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAWQHgWKALm4Qxzkk='}}
0:01:12.148449	LOG	Server ----------> DUT

0:01:12.152447	LOG	TX_ACK: 02 e102 05 aa555a0000240409
0:01:14.039376	LOG	PULL_DATA: 02 2483 02 aa555a0000240409
0:01:14.041376	LOG	PULL_ACK: 02 2483 04
0:01:22.161774	LOG	PUSH_ACK: 02 01f4 01
0:01:22.163772	LOG	PUSH_DATA: Protocol version = 02, Token = 01f4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2475465298, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 17, 'data': 'QCAgICCAOwHg7H/gWyvGgz0='}]}
0:01:22.165771	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 013b, FOpts:), FPort: e0, FRMPayload: 08131415, MIC: 2bc6833d)
0:01:22.170769	LOG	Server <---------- DUT
0:01:22.174766	LOG	Answer in payload: 131415
0:01:22.176764	LOG	Frame Command Payload in the Answer: 08131415
0:01:22.182760	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:22.186758	LOG	Send Test Command EchoPayloadReq process completed
0:01:22.190756	LOG	End Test Step: Modify RX1 and RX2 timing to X second delay
0:01:22.195753	LOG	Partial Verdict: PASS
0:01:22.202749	LOG	==========
0:01:22.209746	LOG	==========
0:01:22.212743	LOG	Start Test Step: Modify RX1 and RX2 timing to 2 second delay
0:01:22.223737	LOG	Send RXTimingSetupReq process starts
0:01:24.119742	LOG	PULL_DATA: 02 67d8 02 aa555a0000240409
0:01:24.121741	LOG	PULL_ACK: 02 67d8 04
0:01:32.137197	LOG	PUSH_ACK: 02 01f6 01
0:01:32.139196	LOG	PUSH_DATA: Protocol version = 02, Token = 01f6, Identifier = 00, JSON = {'rxpk': [{'tmst': 2485462266, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAPAEB6L1xy30P'}]}
0:01:32.141194	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 013c, FOpts:), FPort: 01, FRMPayload: 003d, MIC: 71cb7d0f)
0:01:32.143193	LOG	Server <---------- DUT
0:01:32.145192	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 015a, FOpts:), FPort: 00, FRMPayload: 0802), MIC: b253a1a0)
0:01:32.148191	LOG	PULL_RESP: Protocol version = 02, Token = d0b2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2489462266, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAWgEA7duyU6Gg'}}
0:01:32.151189	LOG	Server ----------> DUT
0:01:32.156186	LOG	TX_ACK: 02 d0b2 05 aa555a0000240409
0:01:34.249000	LOG	PULL_DATA: 02 ed96 02 aa555a0000240409
0:01:34.252998	LOG	PULL_ACK: 02 ed96 04
0:01:42.189498	LOG	PUSH_ACK: 02 01f8 01
0:01:42.191498	LOG	PUSH_DATA: Protocol version = 02, Token = 01f8, Identifier = 00, JSON = {'rxpk': [{'tmst': 2495472636, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 16, 'data': 'QCAgICCBPQEIAeVGICovcw=='}]}
0:01:42.192496	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 013d, FOpts: 08), FPort: 01, FRMPayload: 003d, MIC: 202a2f73)
0:01:42.194497	LOG	Server <---------- DUT
0:01:42.195495	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:42.196496	LOG	Command Answer: 08
0:01:42.216483	LOG	MAC command communication completed
0:01:42.222479	LOG	Expect a MAC answer retransmission
0:01:44.329286	LOG	PULL_DATA: 02 12ec 02 aa555a0000240409
0:01:44.331283	LOG	PULL_ACK: 02 12ec 04

0:01:52.164842	LOG	PUSH_ACK: 02 01fa 01
0:01:52.167841	LOG	PUSH_DATA: Protocol version = 02, Token = 01fa, Identifier = 00, JSON = {'rxpk': [{'tmst': 2505477852, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 16, 'data': 'QCAgICCBPgEIAemyswxjOw=='}]}
0:01:52.169840	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 013e, FOpts: 08), FPort: 01, FRMPayload: 003d, MIC: b30c633b)
0:01:52.171838	LOG	Server <---------- DUT
0:01:52.173837	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:52.178835	LOG	MAC answer retransmission completed
0:01:52.181836	LOG	Expect a MAC answer retransmission
0:01:54.409575	LOG	PULL_DATA: 02 4539 02 aa555a0000240409
0:01:54.411571	LOG	PULL_ACK: 02 4539 04
0:02:02.191159	LOG	PUSH_ACK: 02 01fb 01
0:02:02.193157	LOG	PUSH_DATA: Protocol version = 02, Token = 01fb, Identifier = 00, JSON = {'rxpk': [{'tmst': 2515483076, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBPwEIATDtfLFmUw=='}]}
0:02:02.194157	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 013f, FOpts: 08), FPort: 01, FRMPayload: 003d, MIC: 7cb16653)
0:02:02.196156	LOG	Server <---------- DUT
0:02:02.197155	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:02.203152	LOG	MAC answer retransmission completed
0:02:02.207150	LOG	Expect a MAC answer retransmission
0:02:04.508844	LOG	PULL_DATA: 02 02d8 02 aa555a0000240409
0:02:04.513842	LOG	PULL_ACK: 02 02d8 04
0:02:12.177498	LOG	PUSH_ACK: 02 01fd 01
0:02:12.179498	LOG	PUSH_DATA: Protocol version = 02, Token = 01fd, Identifier = 00, JSON = {'rxpk': [{'tmst': 2525488308, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBQAEIAe5OTKMkGA=='}]}
0:02:12.182496	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0140, FOpts: 08), FPort: 01, FRMPayload: 003d, MIC: 4ca32418)
0:02:12.184495	LOG	Server <---------- DUT
0:02:12.186493	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:12.190491	LOG	MAC answer retransmission completed
0:02:12.195487	LOG	Send Test Command EchoPayloadReq process starts
0:02:14.589130	LOG	PULL_DATA: 02 e50a 02 aa555a0000240409
0:02:14.591129	LOG	PULL_ACK: 02 e50a 04
0:02:22.200815	LOG	PUSH_ACK: 02 01fe 01
0:02:22.202814	LOG	PUSH_DATA: Protocol version = 02, Token = 01fe, Identifier = 00, JSON = {'rxpk': [{'tmst': 2535493540, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBQQEIAdgFU/Lubg=='}]}
0:02:22.204812	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0141, FOpts: 08), FPort: 01, FRMPayload: 003d, MIC: 53f2ee6e)
0:02:22.205812	LOG	Server <---------- DUT
0:02:22.207813	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 015b, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: 4a969861)
0:02:22.209812	LOG	Frame command sent to the DUT
0:02:22.210811	LOG	PULL_RESP: Protocol version = 02, Token = 81c2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2537493540, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF7BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAWwHgGy3grEqWmGE='}}
0:02:22.211811	LOG	Server ----------> DUT
0:02:22.215267	LOG	TX_ACK: 02 81c2 05 aa555a0000240409
0:02:24.728403	LOG	PULL_DATA: 02 f89d 02 aa555a0000240409
0:02:24.731401	LOG	PULL_ACK: 02 f89d 04
0:02:32.176181	LOG	PUSH_ACK: 02 01ff 01
0:02:32.178180	LOG	PUSH_DATA: Protocol version = 02, Token = 01ff, Identifier = 00, JSON = {'rxpk': [{'tmst': 2545501863, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCAQgHghrMgOijq3VA='}]}
0:02:32.180179	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0142, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 28eadd50)
0:02:32.181177	LOG	Server <---------- DUT
0:02:32.184177	LOG	Answer in payload: 020304
0:02:32.186176	LOG	Frame Command Payload in the Answer: 08020304
0:02:32.191172	LOG	Checking if the payload of the EchoPayloadAns is correct
0:02:32.195170	LOG	Send Test Command EchoPayloadReq process completed
0:02:32.212161	LOG	Send Test Command EchoPayloadReq process starts
0:02:34.808689	LOG	PULL_DATA: 02 7709 02 aa555a0000240409
0:02:34.813686	LOG	PULL_ACK: 02 7709 04
0:02:42.207494	LOG	PUSH_ACK: 02 0201 01
0:02:42.209493	LOG	PUSH_DATA: Protocol version = 02, Token = 0201, Identifier = 00, JSON = {'rxpk': [{'tmst': 2555498839, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAQwEBcv60fTnf'}]}
0:02:42.210492	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0143, FOpts:), FPort: 01, FRMPayload: 003e, MIC: b47d39df)
0:02:42.211492	LOG	Server <---------- DUT
0:02:42.213491	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 015c, FOpts:), FPort: e0, FRMPayload: 08121314), MIC: 9a0306a7)
0:02:42.215490	LOG	Frame command sent to the DUT
0:02:42.216489	LOG	PULL_RESP: Protocol version = 02, Token = 795c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2558498839, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAXAHggZmRwJoDBqc='}}
0:02:42.218488	LOG	Server ----------> DUT
0:02:42.221486	LOG	TX_ACK: 02 795c 05 aa555a0000240409
0:02:44.948939	LOG	PULL_DATA: 02 d1a5 02 aa555a0000240409
0:02:44.950939	LOG	PULL_ACK: 02 d1a5 04
0:02:47.201663	LOG	PUSH_ACK: 02 0202 01
0:02:47.204661	LOG	PUSH_DATA: Protocol version = 02, Token = 0202, Identifier = 00, JSON = {'rxpk': [{'tmst': 2560509689, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCARAHgA0zkKVh9QCM='}]}
0:02:47.205660	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0144, FOpts:), FPort: e0, FRMPayload: 08131415, MIC: 587d4023)
0:02:47.207659	LOG	Server <---------- DUT
0:02:47.209658	LOG	Answer in payload: 131415
0:02:47.210657	LOG	Frame Command Payload in the Answer: 08131415
0:02:47.220652	LOG	Checking if the payload of the EchoPayloadAns is correct
0:02:47.228647	LOG	Send Test Command EchoPayloadReq process completed
0:02:47.232645	LOG	End Test Step: Modify RX1 and RX2 timing to 2 second delay
0:02:47.237643	LOG	Partial Verdict: PASS
0:02:47.243639	LOG	==========
0:02:47.255632	LOG	==========

0:02:47.257631	LOG	Start Test Step: Modify RX1 and RX2 timing to 15 second delay
0:02:47.270624	LOG	Send RXTimingSetupReq process starts
0:02:55.029297	LOG	PULL_DATA: 02 96c1 02 aa555a0000240409
0:02:55.031296	LOG	PULL_ACK: 02 96c1 04
0:02:57.224054	LOG	PUSH_ACK: 02 0203 01
0:02:57.226052	LOG	PUSH_DATA: Protocol version = 02, Token = 0203, Identifier = 00, JSON = {'rxpk': [{'tmst': 2570506657, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCARQEBJ5H6xyB1'}]}
0:02:57.228052	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0145, FOpts:), FPort: 01, FRMPayload: 003f, MIC: fac72075)
0:02:57.229069	LOG	Server <---------- DUT
0:02:57.231049	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 015d, FOpts:), FPort: 00, FRMPayload: 080f), MIC: 94beb8b4)
0:02:57.234048	LOG	PULL_RESP: Protocol version = 02, Token = 2628, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2573506657, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAXQEAJpuUvri0'}}
0:02:57.237046	LOG	Server ----------> DUT
0:02:57.241045	LOG	TX_ACK: 02 2628 05 aa555a0000240409
0:03:02.210243	LOG	PUSH_ACK: 02 0204 01
0:03:02.216240	LOG	PUSH_DATA: Protocol version = 02, Token = 0204, Identifier = 00, JSON = {'rxpk': [{'tmst': 2575514394, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 16, 'data': 'QCAgICCBRgEIAQqowPNKTA=='}]}
0:03:02.219223	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0146, FOpts: 08), FPort: 01, FRMPayload: 003f, MIC: c0f34a4c)
0:03:02.222220	LOG	Server <---------- DUT
0:03:02.225219	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:02.227217	LOG	Command Answer: 08
0:03:02.236214	LOG	MAC command communication completed
0:03:02.240209	LOG	Expect a MAC answer retransmission
0:03:05.218520	LOG	PULL_DATA: 02 f41f 02 aa555a0000240409
0:03:05.223518	LOG	PULL_ACK: 02 f41f 04
0:03:15.298824	LOG	PULL_DATA: 02 95aa 02 aa555a0000240409
0:03:15.299807	LOG	PULL_ACK: 02 95aa 04
0:03:22.215310	LOG	PUSH_ACK: 02 0206 01
0:03:22.217308	LOG	PUSH_DATA: Protocol version = 02, Token = 0206, Identifier = 00, JSON = {'rxpk': [{'tmst': 2595524890, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 16, 'data': 'QCAgICCBRwEIAeMbERP8ww=='}]}
0:03:22.219307	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0147, FOpts: 08), FPort: 01, FRMPayload: 003f, MIC: 1113fcc3)
0:03:22.220308	LOG	Server <---------- DUT
0:03:22.222306	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:22.227303	LOG	MAC answer retransmission completed
0:03:22.231300	LOG	Expect a MAC answer retransmission
0:03:25.379517	LOG	PULL_DATA: 02 82ca 02 aa555a0000240409
0:03:25.381516	LOG	PULL_ACK: 02 82ca 04
0:03:35.458965	LOG	PULL_DATA: 02 6c49 02 aa555a0000240409
0:03:35.461963	LOG	PULL_ACK: 02 6c49 04
0:03:42.217134	LOG	PUSH_ACK: 02 0208 01
0:03:42.220132	LOG	PUSH_DATA: Protocol version = 02, Token = 0208, Identifier = 00, JSON = {'rxpk': [{'tmst': 2615535370, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBSAEIAQtsuMlvtg=='}]}
0:03:42.221131	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0148, FOpts: 08), FPort: 01, FRMPayload: 003f, MIC: b8c96fb6)
0:03:42.222131	LOG	Server <---------- DUT
0:03:42.224130	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:42.230127	LOG	MAC answer retransmission completed
0:03:42.239121	LOG	Expect a MAC answer retransmission
0:03:45.538250	LOG	PULL_DATA: 02 ae90 02 aa555a0000240409
0:03:45.540250	LOG	PULL_ACK: 02 ae90 04
0:03:55.618536	LOG	PULL_DATA: 02 cd16 02 aa555a0000240409
0:03:55.620535	LOG	PULL_ACK: 02 cd16 04
0:04:02.258809	LOG	PUSH_ACK: 02 0209 01
0:04:02.260809	LOG	PUSH_DATA: Protocol version = 02, Token = 0209, Identifier = 00, JSON = {'rxpk': [{'tmst': 2635545826, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBSQEIAdQrO/WUVg=='}]}
0:04:02.263806	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0149, FOpts: 08), FPort: 01, FRMPayload: 003f, MIC: 3bf59456)
0:04:02.267803	LOG	Server <---------- DUT
0:04:02.271801	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:02.290789	LOG	MAC answer retransmission completed
0:04:02.299783	LOG	Send Test Command EchoPayloadReq process starts
0:04:05.698939	LOG	PULL_DATA: 02 68ba 02 aa555a0000240409
0:04:05.703937	LOG	PULL_ACK: 02 68ba 04
0:04:15.778241	LOG	PULL_DATA: 02 ac7a 02 aa555a0000240409
0:04:15.780241	LOG	PULL_ACK: 02 ac7a 04
0:04:22.268562	LOG	PUSH_ACK: 02 020b 01
0:04:22.270562	LOG	PUSH_DATA: Protocol version = 02, Token = 020b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2655556306, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 16, 'data': 'QCAgICCBSgEIAazeTsE/GQ=='}]}
0:04:22.272561	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 014a, FOpts: 08), FPort: 01, FRMPayload: 003f, MIC: 4ec13f19)
0:04:22.273561	LOG	Server <---------- DUT
0:04:22.275559	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 015e, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: 7bea129e)
0:04:22.277575	LOG	Frame command sent to the DUT
0:04:22.279561	LOG	PULL_RESP: Protocol version = 02, Token = 457d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2670556306, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAXgHgR6tGKXvqEp4='}}
0:04:22.280558	LOG	Server ----------> DUT
0:04:22.285552	LOG	TX_ACK: 02 457d 05 aa555a0000240409
0:04:25.848532	LOG	PULL_DATA: 02 a6f2 02 aa555a0000240409
0:04:25.850531	LOG	PULL_ACK: 02 a6f2 04
0:04:35.928818	LOG	PULL_DATA: 02 b4a8 02 aa555a0000240409
0:04:35.932816	LOG	PULL_ACK: 02 b4a8 04
0:04:42.281219	LOG	PUSH_ACK: 02 020f 01
0:04:42.283219	LOG	PUSH_DATA: Protocol version = 02, Token = 020f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2675569907, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 17, 'data': 'QCAgICCASwHgdaz3EFH6FZ4='}]}

0:04:42.284219	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 014b, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 51fa159e)
0:04:42.286216	LOG	Server <---------- DUT
0:04:42.289215	LOG	Answer in payload: 020304
0:04:42.290214	LOG	Frame Command Payload in the Answer: 08020304
0:04:42.301208	LOG	Checking if the payload of the EchoPayloadAns is correct
0:04:42.306204	LOG	Send Test Command EchoPayloadReq process completed
0:04:42.312201	LOG	Send Test Command EchoPayloadReq process starts
0:04:46.008103	LOG	PULL_DATA: 02 ca99 02 aa555a0000240409
0:04:46.011102	LOG	PULL_ACK: 02 ca99 04
0:04:56.088390	LOG	PULL_DATA: 02 b2c2 02 aa555a0000240409
0:04:56.090388	LOG	PULL_ACK: 02 b2c2 04
0:05:02.271243	LOG	PUSH_ACK: 02 0210 01
0:05:02.276242	LOG	PUSH_DATA: Protocol version = 02, Token = 0210, Identifier = 00, JSON = {'rxpk': [{'tmst': 2695572139, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCATAEBTGEGHPOU'}]}
0:05:02.279239	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 014c, FOpts:), FPort: 01, FRMPayload: 0040, MIC: 061cf394)
0:05:02.283238	LOG	Server <---------- DUT
0:05:02.287236	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 015f, FOpts:), FPort: e0, FRMPayload: 08121314), MIC: ad5f5618)
0:05:02.289235	LOG	Frame command sent to the DUT
0:05:02.291233	LOG	PULL_RESP: Protocol version = 02, Token = c43c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2711572139, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAXwHg/0bAzK1fVhg='}}
0:05:02.293230	LOG	Server ----------> DUT
0:05:02.297228	LOG	TX_ACK: 02 c43c 05 aa555a0000240409
0:05:06.277972	LOG	PULL_DATA: 02 372a 02 aa555a0000240409
0:05:06.281969	LOG	PULL_ACK: 02 372a 04
0:05:16.358255	LOG	PULL_DATA: 02 cb08 02 aa555a0000240409
0:05:16.362253	LOG	PULL_ACK: 02 cb08 04
0:05:22.278984	LOG	PUSH_ACK: 02 0212 01
0:05:22.283982	LOG	PUSH_DATA: Protocol version = 02, Token = 0212, Identifier = 00, JSON = {'rxpk': [{'tmst': 2715590868, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCATQHgOW7MTHcfTZg='}]}
0:05:22.287981	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 014d, FOpts:), FPort: e0, FRMPayload: 08131415, MIC: 771f4d98)
0:05:22.291977	LOG	Server <---------- DUT
0:05:22.294975	LOG	Answer in payload: 131415
0:05:22.296974	LOG	Frame Command Payload in the Answer: 08131415
0:05:22.302972	LOG	Checking if the payload of the EchoPayloadAns is correct
0:05:22.306969	LOG	Send Test Command EchoPayloadReq process completed
0:05:22.311966	LOG	End Test Step: Modify RX1 and RX2 timing to 15 second delay
0:05:22.315965	LOG	Partial Verdict: PASS
0:05:22.319963	LOG	==========
0:05:22.324959	LOG	==========
0:05:22.326958	LOG	Start Test Step: Restore default settings
0:05:22.337953	LOG	Send RXTimingSetupReq process starts
0:05:26.438625	LOG	PULL_DATA: 02 cf61 02 aa555a0000240409
0:05:26.440625	LOG	PULL_ACK: 02 cf61 04
0:05:36.517961	LOG	PULL_DATA: 02 c9c3 02 aa555a0000240409
0:05:36.522940	LOG	PULL_ACK: 02 c9c3 04

0:05:42.287672	LOG	PUSH_ACK: 02 0215 01
0:05:42.289676	LOG	PUSH_DATA: Protocol version = 02, Token = 0215, Identifier = 00, JSON = {'rxpk': [{'tmst': 2735593100, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCATgEB4G3WfKU9'}]}
0:05:42.291670	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 014e, FOpts:), FPort: 01, FRMPayload: 0041, MIC: d67ca53d)
0:05:42.293670	LOG	Server <---------- DUT
0:05:42.295668	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0160, FOpts:), FPort: 00, FRMPayload: 0800), MIC: 224dda68)
0:05:42.297667	LOG	PULL_RESP: Protocol version = 02, Token = de0c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2751593100, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAYAEAgSQiTdpo'}}
0:05:42.298666	LOG	Server ----------> DUT
0:05:42.302665	LOG	TX_ACK: 02 de0c 05 aa555a0000240409
0:05:46.708273	LOG	PULL_DATA: 02 805e 02 aa555a0000240409
0:05:46.710274	LOG	PULL_ACK: 02 805e 04
0:05:56.788583	LOG	PULL_DATA: 02 6e03 02 aa555a0000240409
0:05:56.790581	LOG	PULL_ACK: 02 6e03 04
0:06:02.299458	LOG	PUSH_ACK: 02 0216 01
0:06:02.301457	LOG	PUSH_DATA: Protocol version = 02, Token = 0216, Identifier = 00, JSON = {'rxpk': [{'tmst': 2755608704, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBTwEIAbnZSqRitQ=='}]}
0:06:02.302456	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 014f, FOpts: 08), FPort: 01, FRMPayload: 0041, MIC: 4aa462b5)
0:06:02.303455	LOG	Server <---------- DUT
0:06:02.305454	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:02.306454	LOG	Command Answer: 08
0:06:02.325445	LOG	MAC command communication completed
0:06:02.333439	LOG	Send Test Command EchoPayloadReq process starts
0:06:06.867997	LOG	PULL_DATA: 02 28da 02 aa555a0000240409
0:06:06.872995	LOG	PULL_ACK: 02 28da 04
0:06:12.288447	LOG	PUSH_ACK: 02 0218 01
0:06:12.290444	LOG	PUSH_DATA: Protocol version = 02, Token = 0218, Identifier = 00, JSON = {'rxpk': [{'tmst': 2765613928, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 16, 'data': 'QCAgICCBUAEIAW3h+iw1LA=='}]}
0:06:12.291444	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0150, FOpts: 08), FPort: 01, FRMPayload: 0041, MIC: fa2c352c)
0:06:12.293445	LOG	Server <---------- DUT
0:06:12.295442	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0161, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: bda2c6d2)
0:06:12.297441	LOG	Frame command sent to the DUT
0:06:12.298440	LOG	PULL_RESP: Protocol version = 02, Token = 276d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2766613928, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAYQHg0kCZjb2ixtI='}}
0:06:12.299439	LOG	Server ----------> DUT
0:06:12.303439	LOG	TX_ACK: 02 276d 05 aa555a0000240409
0:06:16.917820	LOG	PULL_DATA: 02 4cd7 02 aa555a0000240409
0:06:16.919819	LOG	PULL_ACK: 02 4cd7 04
0:06:22.324915	LOG	PUSH_ACK: 02 0219 01

0:06:22.326914	LOG	PUSH_DATA: Protocol version = 02, Token = 0219, Identifier = 00, JSON = {'rxpk': [{'tmst': 2775622244, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCAUQHg/DLBvJa68ic='}]}
0:06:22.328913	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0151, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: 96baf227)
0:06:22.329914	LOG	Server <---------- DUT
0:06:22.330913	LOG	Answer in payload: 020304
0:06:22.332911	LOG	Frame Command Payload in the Answer: 08020304
0:06:22.337907	LOG	Checking if the payload of the EchoPayloadAns is correct
0:06:22.340906	LOG	Send Test Command EchoPayloadReq process completed
0:06:22.347904	LOG	Send Test Command EchoPayloadReq process starts
0:06:27.008264	LOG	PULL_DATA: 02 6a19 02 aa555a0000240409
0:06:27.010260	LOG	PULL_ACK: 02 6a19 04
0:06:32.296261	LOG	PUSH_ACK: 02 021a 01
0:06:32.299259	LOG	PUSH_DATA: Protocol version = 02, Token = 021a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2785619228, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAUgEB7iIeR/mm'}]}
0:06:32.300259	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0152, FOpts:), FPort: 01, FRMPayload: 0042, MIC: 1e47f9a6)
0:06:32.325245	LOG	Server <---------- DUT
0:06:32.327244	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0162, FOpts:), FPort: e0, FRMPayload: 08121314), MIC: 34744949)
0:06:32.330242	LOG	Frame command sent to the DUT
0:06:32.332241	LOG	PULL_RESP: Protocol version = 02, Token = 9a81, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2787619228, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAYgHgCIbWNDR0SUk='}}
0:06:32.334240	LOG	Server ----------> DUT
0:06:32.337238	LOG	TX_ACK: 02 9a81 05 aa555a0000240409
0:06:37.157504	LOG	PULL_DATA: 02 edd2 02 aa555a0000240409
0:06:37.162502	LOG	PULL_ACK: 02 edd2 04
0:06:37.348397	LOG	PUSH_ACK: 02 021b 01
0:06:37.350395	LOG	PUSH_DATA: Protocol version = 02, Token = 021b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2790630083, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 17, 'data': 'QCAgICCAUwHga0E1+6wnHx4='}]}
0:06:37.352394	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0153, FOpts:), FPort: e0, FRMPayload: 08131415, MIC: ac271f1e)
0:06:37.353395	LOG	Server <---------- DUT
0:06:37.354395	LOG	Answer in payload: 131415
0:06:37.355394	LOG	Frame Command Payload in the Answer: 08131415
0:06:37.360389	LOG	Checking if the payload of the EchoPayloadAns is correct
0:06:37.364387	LOG	Send Test Command EchoPayloadReq process completed
0:06:37.368387	LOG	End Test Step: Restore default settings
0:06:37.371385	LOG	Partial Verdict: PASS
0:06:37.376381	LOG	==========
0:06:37.384376	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_009
0:06:37.387374	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_010
Verdict	PASS
Date	2021-10-18 13:46:08
Comments	TxParamSetupReq MAC Command
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0

Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.012515	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_010
0:00:00.047493	LOG	==========
0:00:00.049494	LOG	Start Test Step: Device activation
0:00:00.108459	LOG	Activation process has finished successfully
0:00:00.110457	LOG	Data stored in the DUT after Activation:
0:00:00.114455	LOG	DevAddr: 20202020
0:00:00.117453	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.119453	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.123450	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.127448	LOG	End Test Step: Device activation
0:00:00.131445	LOG	Partial Verdict: PASS
0:00:00.135443	LOG	==========
0:00:00.141439	LOG	==========
0:00:00.144438	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.155432	LOG	DUT Pre-condition activation process starts
0:00:00.158430	LOG	DUT Pre-condition activation completed
0:00:00.162428	LOG	End Test Step: DUT Pre-condition settings
0:00:00.167425	LOG	Partial Verdict: PASS
0:00:00.172422	LOG	==========
0:00:00.180417	LOG	==========
0:00:00.183416	LOG	Start Test Step: TxParamSetupReq Mac command
0:00:00.196408	LOG	Send TxParamSetupReq process starts
0:00:06.733702	LOG	PULL_DATA: 02 d399 02 aa555a0000240409
0:00:06.736700	LOG	PULL_ACK: 02 d399 04
0:00:06.739698	LOG	First PULL_DATA received
0:00:06.819652	LOG	PUSH_ACK: 02 021d 01
0:00:06.822651	LOG	PUSH_DATA: Protocol version = 02, Token = 021d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2800627043, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAVAEB+SSsYMh9'}]}
0:00:06.823652	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0154, FOpts:), FPort: 01, FRMPayload: 0043, MIC: ac60c87d)
0:00:06.825651	LOG	Server <---------- DUT
0:00:06.827650	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0163, FOpts:), FPort: 00, FRMPayload: 0905), MIC: c1facdaf)
0:00:06.830649	LOG	PULL_RESP: Protocol version = 02, Token = 1e0c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2802627043, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAYwEA/5/B+s2v'}}
0:00:06.832645	LOG	Server ----------> DUT
0:00:06.836644	LOG	TX_ACK: 02 1e0c 05 aa555a0000240409
0:00:11.799938	LOG	PUSH_ACK: 02 021e 01
0:00:11.801937	LOG	PUSH_DATA: Protocol version = 02, Token = 021e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2805629638, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAVQEBHX6gehYW'}]}

0:00:11.803935	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0155, FOpts:), FPort: 01, FRMPayload: 0043, MIC: a07a1616)
0:00:11.805934	LOG	Server <---------- DUT
0:00:11.807933	LOG	MAC command not received because FPort field is not set to 0 and FOpts field is empty
0:00:11.813930	LOG	End Test Step: TxParamSetupReq Mac command
0:00:11.819927	LOG	Partial Verdict: PASS
0:00:11.825923	LOG	==========
0:00:11.831921	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_010
0:00:11.833918	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_011	
Verdict	PASS	
Date	2021-10-18 13:46:23	
Comments	LinkCheckReq MAC Command	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.010993	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_011
0:00:00.043974	LOG	==========
0:00:00.045990	LOG	Start Test Step: Device activation
0:00:00.102940	LOG	Activation process has finished successfully
0:00:00.104941	LOG	Data stored in the DUT after Activation:
0:00:00.106940	LOG	DevAddr: 20202020
0:00:00.109938	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.111937	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.113937	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.116934	LOG	End Test Step: Device activation
0:00:00.119932	LOG	Partial Verdict: PASS
0:00:00.125927	LOG	==========
0:00:00.132924	LOG	==========
0:00:00.135921	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.147915	LOG	DUT Pre-condition activation process starts
0:00:00.151912	LOG	DUT Pre-condition activation completed
0:00:00.154910	LOG	End Test Step: DUT Pre-condition settings
0:00:00.158909	LOG	Partial Verdict: PASS
0:00:00.162908	LOG	==========
0:00:00.168905	LOG	==========
0:00:00.172901	LOG	Start Test Step: LinkCheckReq MAC command
0:00:00.184895	LOG	Send Test Command LinkCheckReq process starts
0:00:02.292730	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:02.361678	LOG	PULL_DATA: 02 4c79 02 aa555a0000240409
0:00:02.363676	LOG	PULL_ACK: 02 4c79 04
0:00:02.365657	LOG	First PULL_DATA received
0:00:07.285869	LOG	PUSH_ACK: 02 0220 01
0:00:07.291866	LOG	PUSH_DATA: Protocol version = 02, Token = 0220, Identifier = 00, JSON = {'rxpk': [{'tmst': 2815634854, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAVwEBjZDlF6MC'}]}
0:00:07.292863	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0157, FOpts:), FPort: 01, FRMPayload: 0043, MIC: e517a302)
0:00:07.293863	LOG	Server <---------- DUT
0:00:07.295862	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0164, FOpts:), FPort: e0, FRMPayload: 20), MIC: ccba090e)
0:00:07.297862	LOG	Frame command sent to the DUT
0:00:07.299861	LOG	PULL_RESP: Protocol version = 02, Token = b05c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2817634854, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAZAHg7My6CQ4='}}
0:00:07.300861	LOG	Server ----------> DUT
0:00:07.304857	LOG	Send Test Command LinkCheckReq process completed
0:00:07.308854	LOG	Wait a MAC command from the DUT process starts
0:00:12.258048	LOG	PUSH_ACK: 02 0221 01
0:00:12.261046	LOG	PUSH_DATA: Protocol version = 02, Token = 0221, Identifier = 00, JSON = {'rxpk': [{'tmst': 2820642598, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 16, 'data': 'QCAgICCBWAECAUFo0QuSbg=='}]}
0:00:12.263045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0158, FOpts: 02), FPort: 01, FRMPayload: 0044, MIC: d10b926e)
0:00:12.264045	LOG	Server <---------- DUT
0:00:12.266044	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:12.268043	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0165, FOpts:), FPort: 00, FRMPayload: 020401), MIC: ed822a26)
0:00:12.272040	LOG	PULL_RESP: Protocol version = 02, Token = 7dcc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2822642598, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 16, 'data': 'YCAgICAAZQEAvBYX7YIqJg=='}}
0:00:12.274039	LOG	Server ----------> DUT
0:00:12.279036	LOG	Wait a MAC command from the DUT process completed
0:00:12.282035	LOG	Send Test Command EchoPayloadReq process starts
0:00:12.481921	LOG	PULL_DATA: 02 8b00 02 aa555a0000240409
0:00:12.483920	LOG	PULL_ACK: 02 8b00 04
0:00:22.264374	LOG	PUSH_ACK: 02 0223 01
0:00:22.266374	LOG	PUSH_DATA: Protocol version = 02, Token = 0223, Identifier = 00, JSON = {'rxpk': [{'tmst': 2830642709, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAWQEBNQVAGqvK'}]}
0:00:22.268372	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0159, FOpts:), FPort: 01, FRMPayload: 0044, MIC: 401aabca)
0:00:22.269371	LOG	Server <---------- DUT
0:00:22.271371	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0166, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: cd2b3ae6)
0:00:22.274369	LOG	Frame command sent to the DUT
0:00:22.276368	LOG	PULL_RESP: Protocol version = 02, Token = c878, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2832642709, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAZgHgX+x8gs0rOuY='}}
0:00:22.277368	LOG	Server ----------> DUT
0:00:22.283364	LOG	TX_ACK: 02 c878 05 aa555a0000240409
0:00:22.491265	LOG	PULL_DATA: 02 2256 02 aa555a0000240409
0:00:22.493245	LOG	PULL_ACK: 02 2256 04
0:00:27.318510	LOG	PUSH_ACK: 02 0224 01

0:00:27.320509	LOG	PUSH_DATA: Protocol version = 02, Token = 0224, Identifier = 00, JSON = {'rxpk': [{'tmst': 2835653566, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCAWgHggR6c88oIzic='}]}
0:00:27.322507	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 015a, FOpts:), FPort: e0, FRMPayload: 08020304, MIC: ca08ce27)
0:00:27.323506	LOG	Server <---------- DUT
0:00:27.324505	LOG	Answer in payload: 020304
0:00:27.326504	LOG	Frame Command Payload in the Answer: 08020304
0:00:27.329502	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:27.332501	LOG	Send Test Command EchoPayloadReq process completed
0:00:27.336498	LOG	End Test Step: LinkCheckReq MAC command
0:00:27.341496	LOG	Partial Verdict: PASS
0:00:27.347493	LOG	==========
0:00:27.360485	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_011
0:00:27.363485	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_012_A	
Verdict	PASS	
Date	2021-10-18 13:46:53	
Comments	LinkADRReq MAC command (Part 1)	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Addition of a single channel frequency	867.700
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.011381	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_012_A
0:00:00.046362	LOG	==========
0:00:00.048361	LOG	Start Test Step: Device activation
0:00:00.107326	LOG	Activation process has finished successfully
0:00:00.110326	LOG	Data stored in the DUT after Activation:
0:00:00.112324	LOG	DevAddr: 20202020
0:00:00.115322	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.118320	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.121319	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.125316	LOG	End Test Step: Device activation
0:00:00.129316	LOG	Partial Verdict: PASS
0:00:00.134311	LOG	==========
0:00:00.142307	LOG	==========
0:00:00.144305	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.155299	LOG	DUT Pre-condition activation process starts
0:00:00.159299	LOG	DUT Pre-condition activation completed
0:00:00.162295	LOG	End Test Step: DUT Pre-condition settings
0:00:00.165293	LOG	Partial Verdict: PASS
0:00:00.169291	LOG	==========
0:00:00.174288	LOG	==========
0:00:00.176287	LOG	Start Test Step: Test TXPower
0:00:00.189279	LOG	Send LinkADRReq process starts

0:00:02.403024	LOG	PULL_DATA: 02 9ad4 02 aa555a0000240409
0:00:02.405023	LOG	PULL_ACK: 02 9ad4 04
0:00:02.407022	LOG	First PULL_DATA received
0:00:07.109356	LOG	PUSH_ACK: 02 0225 01
0:00:07.111356	LOG	PUSH_DATA: Protocol version = 02, Token = 0225, Identifier = 00, JSON = {'rxpk': [{'tmst': 2845650542, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAWwEBLbM6slTn'}]}
0:00:07.113372	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 015b, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 3ab254e7)
0:00:07.115354	LOG	Server <---------- DUT
0:00:07.117352	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0167, FOpts:), FPort: 00, FRMPayload: 0357070001), MIC: 1ecf873f)
0:00:07.120350	LOG	PULL_RESP: Protocol version = 02, Token = 4eae, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2847650542, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAZwEAt8IZLXQez4c/'}}
0:00:07.122349	LOG	Server ----------> DUT
0:00:07.127346	LOG	TX_ACK: 02 4eae 05 aa555a0000240409
0:00:12.094531	LOG	PUSH_ACK: 02 0226 01
0:00:12.096528	LOG	PUSH_DATA: Protocol version = 02, Token = 0226, Identifier = 00, JSON = {'rxpk': [{'tmst': 2850658294, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -19, 'size': 17, 'data': 'QCAgICCCXAEDBwFcVDr3qq4='}]}
0:00:12.098528	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 015c, FOpts: 0307), FPort: 01, FRMPayload: 0045, MIC: 3af7aaae)
0:00:12.100526	LOG	Server <---------- DUT
0:00:12.101527	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:12.103526	LOG	Command Answer: 0307
0:00:12.106524	LOG	MAC command communication completed
0:00:12.112521	LOG	DUT set the minimum TXPower
0:00:12.116517	LOG	Calculate RSSI average process starts
0:00:12.583254	LOG	PULL_DATA: 02 18d1 02 aa555a0000240409
0:00:12.585260	LOG	PULL_ACK: 02 18d1 04
0:00:22.129839	LOG	PUSH_ACK: 02 0229 01
0:00:22.132837	LOG	PUSH_DATA: Protocol version = 02, Token = 0229, Identifier = 00, JSON = {'rxpk': [{'tmst': 2860658390, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -20, 'size': 15, 'data': 'QCAgICCAXQEBtMXt8hHS'}]}
0:00:22.133837	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 015d, FOpts:), FPort: 01, FRMPayload: 0045, MIC: edf211d2)
0:00:22.135836	LOG	Server <---------- DUT
0:00:22.662538	LOG	PULL_DATA: 02 fee4 02 aa555a0000240409
0:00:22.664536	LOG	PULL_ACK: 02 fee4 04
0:00:27.119012	LOG	PUSH_ACK: 02 022a 01
0:00:27.121011	LOG	PUSH_DATA: Protocol version = 02, Token = 022a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2865660990, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -19, 'size': 15, 'data': 'QCAgICCAXgEBDrxQ1PNO'}]}
0:00:27.122009	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 015e, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 50d4f34e)
0:00:27.123010	LOG	Server <---------- DUT
0:00:32.107184	LOG	PUSH_ACK: 02 022b 01
0:00:32.111183	LOG	PUSH_DATA: Protocol version = 02, Token = 022b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2870663582, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -16, 'size': 15, 'data': 'QCAgICCAXwEB4mNulLvn'}]}
0:00:32.113187	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 015f, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 6e94bbe7)
0:00:32.114208	LOG	Server <---------- DUT
0:00:32.120177	LOG	Calculate RSSI average process completed
0:00:32.124174	LOG	Send LinkADRReq process starts
0:00:32.742823	LOG	PULL_DATA: 02 d9cd 02 aa555a0000240409
0:00:32.744821	LOG	PULL_ACK: 02 d9cd 04
0:00:37.097354	LOG	PUSH_ACK: 02 022c 01
0:00:37.099351	LOG	PUSH_DATA: Protocol version = 02, Token = 022c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2875666182, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -19, 'size': 15, 'data': 'QCAgICCAYAEBPYmHH9nI'}]}
0:00:37.101352	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0160, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 871fd9c8)
0:00:37.102350	LOG	Server <---------- DUT
0:00:37.103351	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0168, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: addc5275)
0:00:37.106348	LOG	PULL_RESP: Protocol version = 02, Token = 8ec6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2877666182, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAaAEA3A9XAWat3FJ1'}}
0:00:37.107349	LOG	Server ----------> DUT
0:00:37.110346	LOG	TX_ACK: 02 8ec6 05 aa555a0000240409
0:00:42.109511	LOG	PUSH_ACK: 02 022d 01
0:00:42.111509	LOG	PUSH_DATA: Protocol version = 02, Token = 022d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2880673919, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCYQEDBwGsNObY5UM='}]}
0:00:42.112510	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0161, FOpts: 0307), FPort: 01, FRMPayload: 0045, MIC: e6d8e543)
0:00:42.114508	LOG	Server <---------- DUT
0:00:42.115507	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:42.117507	LOG	Command Answer: 0307
0:00:42.124504	LOG	MAC command communication completed
0:00:42.128500	LOG	Calculate RSSI average process starts
0:00:42.773134	LOG	PULL_DATA: 02 45a3 02 aa555a0000240409
0:00:42.775133	LOG	PULL_ACK: 02 45a3 04
0:00:52.148823	LOG	PUSH_ACK: 02 022f 01
0:00:52.150819	LOG	PUSH_DATA: Protocol version = 02, Token = 022f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2890674007, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAYgEB0x+8nByc'}]}
0:00:52.152821	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0162, FOpts:), FPort: 01, FRMPayload: 0045, MIC: bc9c1c9c)
0:00:52.153820	LOG	Server <---------- DUT
0:00:52.852419	LOG	PULL_DATA: 02 91c6 02 aa555a0000240409
0:00:52.854418	LOG	PULL_ACK: 02 91c6 04
0:00:57.136989	LOG	PUSH_ACK: 02 0230 01
0:00:57.138989	LOG	PUSH_DATA: Protocol version = 02, Token = 0230, Identifier = 00, JSON = {'rxpk': [{'tmst': 2895676607, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAYwEBp1k3tg/j'}]}

0:00:57.139990	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0163, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 37b60fe3)
0:00:57.141989	LOG	Server <---------- DUT
0:01:02.125163	LOG	PUSH_ACK: 02 0231 01
0:01:02.128160	LOG	PUSH_DATA: Protocol version = 02, Token = 0231, Identifier = 00, JSON = {'rxpk': [{'tmst': 2900679207, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAZAEBp4v9jXLh'}]}
0:01:02.130160	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0164, FOpts:), FPort: 01, FRMPayload: 0045, MIC: fd8d72e1)
0:01:02.131158	LOG	Server <---------- DUT
0:01:02.135156	LOG	Calculate RSSI average process completed
0:01:02.140152	LOG	Send LinkADRReq process starts
0:01:02.932704	LOG	PULL_DATA: 02 01ff 02 aa555a0000240409
0:01:02.934703	LOG	PULL_ACK: 02 01ff 04
0:01:07.115333	LOG	PUSH_ACK: 02 0232 01
0:01:07.118330	LOG	PUSH_DATA: Protocol version = 02, Token = 0232, Identifier = 00, JSON = {'rxpk': [{'tmst': 2905681799, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAZQEBWwaocOm/'}]}
0:01:07.120329	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0165, FOpts:), FPort: 01, FRMPayload: 0045, MIC: a870e9bf)
0:01:07.121328	LOG	Server <---------- DUT
0:01:07.123327	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0169, FOpts:), FPort: 00, FRMPayload: 0358070001), MIC: 0f161af0)
0:01:07.126327	LOG	PULL_RESP: Protocol version = 02, Token = 83f1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2907681799, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAaQEADBDg7EYPFhrw'}}
0:01:07.127325	LOG	Server ----------> DUT
0:01:07.130323	LOG	TX_ACK: 02 83f1 05 aa555a0000240409
0:01:12.124491	LOG	PUSH_ACK: 02 0233 01
0:01:12.126490	LOG	PUSH_DATA: Protocol version = 02, Token = 0233, Identifier = 00, JSON = {'rxpk': [{'tmst': 2910689544, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCZgEDAwEHgqgI4AA='}]}
0:01:12.128489	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0166, FOpts: 0303), FPort: 01, FRMPayload: 0045, MIC: a808e000)
0:01:12.130488	LOG	Server <---------- DUT
0:01:12.133487	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:12.135486	LOG	Command Answer: 0303
0:01:12.143481	LOG	MAC command communication completed
0:01:12.155474	LOG	RFU tested. Answer: 03
0:01:12.161471	LOG	Send LinkADRReq process starts
0:01:13.002995	LOG	PULL_DATA: 02 c92a 02 aa555a0000240409
0:01:13.007995	LOG	PULL_ACK: 02 c92a 04
0:01:22.160801	LOG	PUSH_ACK: 02 0235 01
0:01:22.162799	LOG	PUSH_DATA: Protocol version = 02, Token = 0235, Identifier = 00, JSON = {'rxpk': [{'tmst': 2920689640, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAZwEBMq5g3z3S'}]}
0:01:22.163799	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0167, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 60df3dd2)
0:01:22.165801	LOG	Server <---------- DUT

0:01:22.167799	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 016a, FOpts:), FPort: 00, FRMPayload: 035f070001), MIC: 004e4277)
0:01:22.171795	LOG	PULL_RESP: Protocol version = 02, Token = d67d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2922689640, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAagEAfo7Grw8ATkJ3'}}
0:01:22.172796	LOG	Server ----------> DUT
0:01:22.175793	LOG	TX_ACK: 02 d67d 05 aa555a0000240409
0:01:23.012317	LOG	PULL_DATA: 02 d915 02 aa555a0000240409
0:01:23.014317	LOG	PULL_ACK: 02 d915 04
0:01:27.132981	LOG	PUSH_ACK: 02 0236 01
0:01:27.134981	LOG	PUSH_DATA: Protocol version = 02, Token = 0236, Identifier = 00, JSON = {'rxpk': [{'tmst': 2925697387, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCaAEDBwEgC5OgdZc='}]}
0:01:27.137979	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0168, FOpts: 0307), FPort: 01, FRMPayload: 0045, MIC: 93a07597)
0:01:27.142977	LOG	Server <---------- DUT
0:01:27.144975	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:27.145974	LOG	Command Answer: 0307
0:01:27.152970	LOG	MAC command communication completed
0:01:27.156968	LOG	Calculate RSSI average process starts
0:01:33.092602	LOG	PULL_DATA: 02 0143 02 aa555a0000240409
0:01:33.097599	LOG	PULL_ACK: 02 0143 04
0:01:37.157297	LOG	PUSH_ACK: 02 0237 01
0:01:37.159298	LOG	PUSH_DATA: Protocol version = 02, Token = 0237, Identifier = 00, JSON = {'rxpk': [{'tmst': 2935697483, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAaQEB3feogjxA'}]}
0:01:37.160296	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0169, FOpts:), FPort: 01, FRMPayload: 0045, MIC: a8823c40)
0:01:37.162296	LOG	Server <---------- DUT
0:01:42.147931	LOG	PUSH_ACK: 02 0238 01
0:01:42.149951	LOG	PUSH_DATA: Protocol version = 02, Token = 0238, Identifier = 00, JSON = {'rxpk': [{'tmst': 2940700075, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAagEBDvQUmSX+'}]}
0:01:42.151929	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 016a, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 149925fe)
0:01:42.152932	LOG	Server <---------- DUT
0:01:43.172349	LOG	PULL_DATA: 02 2fee 02 aa555a0000240409
0:01:43.174348	LOG	PULL_ACK: 02 2fee 04
0:01:47.154091	LOG	PUSH_ACK: 02 023a 01
0:01:47.157089	LOG	PUSH_DATA: Protocol version = 02, Token = 023a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2945702683, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAawEBWEpjQKQS'}]}
0:01:47.158089	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 016b, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 6340a412)
0:01:47.159088	LOG	Server <---------- DUT
0:01:47.162089	LOG	Calculate RSSI average process completed
0:01:47.169082	LOG	Send LinkADRReq process starts
0:01:52.145267	LOG	PUSH_ACK: 02 023b 01
0:01:52.149260	LOG	PUSH_DATA: Protocol version = 02, Token = 023b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2950705291, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAbAEBkaHH9xhj'}]}
0:01:52.151259	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 016c, FOpts:), FPort: 01, FRMPayload: 0045, MIC: c7f71863)
0:01:52.153258	LOG	Server <---------- DUT
0:01:52.155257	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 016b, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 554d04c6)
0:01:52.158255	LOG	PULL_RESP: Protocol version = 02, Token = 54fe, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2952705291, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAawEAiGK503NVTQTG'}}
0:01:52.160254	LOG	Server ----------> DUT
0:01:52.163255	LOG	TX_ACK: 02 54fe 05 aa555a0000240409
0:01:53.212656	LOG	PULL_DATA: 02 1502 02 aa555a0000240409
0:01:53.214655	LOG	PULL_ACK: 02 1502 04
0:01:57.149424	LOG	PUSH_ACK: 02 023c 01
0:01:57.150423	LOG	PUSH_DATA: Protocol version = 02, Token = 023c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2955713028, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCbQEDBwFxeAcbzqc='}]}
0:01:57.152422	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 016d, FOpts: 0307), FPort: 01, FRMPayload: 0045, MIC: 071bcea7)
0:01:57.153422	LOG	Server <---------- DUT
0:01:57.154421	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:57.156420	LOG	Command Answer: 0307
0:01:57.162416	LOG	MAC command communication completed
0:01:57.164415	LOG	End Test Step: Test TXPower
0:01:57.167414	LOG	Partial Verdict: PASS
0:01:57.171411	LOG	==========
0:01:57.178408	LOG	==========
0:01:57.182405	LOG	Start Test Step: Check unsupported data rates
0:01:57.205393	LOG	Send LinkADRReq process starts
0:02:03.292940	LOG	PULL_DATA: 02 8761 02 aa555a0000240409
0:02:03.295940	LOG	PULL_ACK: 02 8761 04
0:02:07.170742	LOG	PUSH_ACK: 02 023d 01
0:02:07.172740	LOG	PUSH_DATA: Protocol version = 02, Token = 023d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2965713116, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAbgEBP9/ZTMsc'}]}
0:02:07.174741	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 016e, FOpts:), FPort: 01, FRMPayload: 0045, MIC: d94ccb1c)
0:02:07.175738	LOG	Server <---------- DUT
0:02:07.176740	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 016c, FOpts:), FPort: 00, FRMPayload: 0380070001), MIC: c06ad93a)
0:02:07.179738	LOG	PULL_RESP: Protocol version = 02, Token = ae59, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2967713116, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAbAEAhhfP3qrAatk6'}}
0:02:07.180737	LOG	Server ----------> DUT
0:02:07.183734	LOG	TX_ACK: 02 ae59 05 aa555a0000240409
0:02:12.155915	LOG	PUSH_ACK: 02 023e 01
0:02:12.157914	LOG	PUSH_DATA: Protocol version = 02, Token = 023e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2970720861, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCbwEDBQGNwVDiNhU='}]}

0:02:12.158913	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 016f, FOpts: 0305), FPort: 01, FRMPayload: 0045, MIC: 50e23615)
0:02:12.159913	LOG	Server <---------- DUT
0:02:12.160912	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:12.161912	LOG	Command Answer: 0305
0:02:12.172904	LOG	MAC command communication completed
0:02:12.177902	LOG	Invalid DR tested. Answer: 05
0:02:12.182899	LOG	Send LinkADRReq process starts
0:02:13.482162	LOG	PULL_DATA: 02 7c13 02 aa555a0000240409
0:02:13.484163	LOG	PULL_ACK: 02 7c13 04
0:02:22.190225	LOG	PUSH_ACK: 02 0240 01
0:02:22.192224	LOG	PUSH_DATA: Protocol version = 02, Token = 0240, Identifier = 00, JSON = {'rxpk': [{'tmst': 2980720957, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAcAEBhDROXgWU'}]}
0:02:22.194223	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0170, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 4e5e0594)
0:02:22.196222	LOG	Server <---------- DUT
0:02:22.198221	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 016d, FOpts:), FPort: 00, FRMPayload: 0360070001), MIC: 44805961)
0:02:22.201219	LOG	PULL_RESP: Protocol version = 02, Token = 9eca, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2982720957, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAbQEABomVK/FEgFlh'}}
0:02:22.202219	LOG	Server ----------> DUT
0:02:23.672384	LOG	PULL_DATA: 02 629e 02 aa555a0000240409
0:02:23.674384	LOG	PULL_ACK: 02 629e 04
0:02:27.163405	LOG	PUSH_ACK: 02 0241 01
0:02:27.165404	LOG	PUSH_DATA: Protocol version = 02, Token = 0241, Identifier = 00, JSON = {'rxpk': [{'tmst': 2985728704, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCcQEDBQHlEObUt6Q='}]}
0:02:27.166403	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0171, FOpts: 0305), FPort: 01, FRMPayload: 0045, MIC: e6d4b7a4)
0:02:27.168402	LOG	Server <---------- DUT
0:02:27.169402	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:27.171401	LOG	Command Answer: 0305
0:02:27.176398	LOG	MAC command communication completed
0:02:27.179396	LOG	Optional SF7BW250 DR tested. Answer: 05
0:02:27.182394	LOG	Send LinkADRReq process starts
0:02:33.761663	LOG	PULL_DATA: 02 69fc 02 aa555a0000240409
0:02:33.766661	LOG	PULL_ACK: 02 69fc 04
0:02:37.185724	LOG	PUSH_ACK: 02 0242 01
0:02:37.187722	LOG	PUSH_DATA: Protocol version = 02, Token = 0242, Identifier = 00, JSON = {'rxpk': [{'tmst': 2995728792, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAcgEB11982DAA'}]}
0:02:37.188720	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0172, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 7cd83000)
0:02:37.189719	LOG	Server <---------- DUT
0:02:37.191718	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 016e, FOpts:), FPort: 00, FRMPayload: 0370070001), MIC: 31b075ec)
0:02:37.193717	LOG	PULL_RESP: Protocol version = 02, Token = 1204, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2997728792, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAbgEArNbVPL4xsHXs'}}
0:02:37.195716	LOG	Server ----------> DUT
0:02:37.198714	LOG	TX_ACK: 02 1204 05 aa555a0000240409
0:02:42.170895	LOG	PUSH_ACK: 02 0243 01
0:02:42.172894	LOG	PUSH_DATA: Protocol version = 02, Token = 0243, Identifier = 00, JSON = {'rxpk': [{'tmst': 3000736519, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCcwEDBQEYgGmGpfs='}]}
0:02:42.174896	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0173, FOpts: 0305), FPort: 01, FRMPayload: 0045, MIC: 6986a5fb)
0:02:42.175896	LOG	Server <---------- DUT
0:02:42.177892	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:42.178891	LOG	Command Answer: 0305
0:02:42.182889	LOG	MAC command communication completed
0:02:42.184892	LOG	Optional FSK DR tested. Answer: 05
0:02:42.188887	LOG	Send LinkADRReq process starts
0:02:43.911908	LOG	PULL_DATA: 02 7281 02 aa555a0000240409
0:02:43.913906	LOG	PULL_ACK: 02 7281 04
0:02:52.209202	LOG	PUSH_ACK: 02 0245 01
0:02:52.212200	LOG	PUSH_DATA: Protocol version = 02, Token = 0245, Identifier = 00, JSON = {'rxpk': [{'tmst': 3010736631, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAdAEBfoLh6zeG'}]}
0:02:52.214199	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0174, FOpts:), FPort: 01, FRMPayload: 0045, MIC: e1eb3786)
0:02:52.215198	LOG	Server <---------- DUT
0:02:52.218197	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 016f, FOpts:), FPort: 00, FRMPayload: 03f0070001), MIC: 2b74b95c)
0:02:52.223194	LOG	PULL_RESP: Protocol version = 02, Token = e367, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3012736631, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAbwEAfxZR12crdLlc'}}
0:02:52.225193	LOG	Server ----------> DUT
0:02:52.228191	LOG	TX_ACK: 02 e367 05 aa555a0000240409
0:02:54.112122	LOG	PULL_DATA: 02 cd71 02 aa555a0000240409
0:02:54.114121	LOG	PULL_ACK: 02 cd71 04
0:02:57.179383	LOG	PUSH_ACK: 02 0246 01
0:02:57.181382	LOG	PUSH_DATA: Protocol version = 02, Token = 0246, Identifier = 00, JSON = {'rxpk': [{'tmst': 3015744369, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCdQEDBwFXIEWAWYY='}]}
0:02:57.182381	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0175, FOpts: 0307), FPort: 01, FRMPayload: 0045, MIC: 45805986)
0:02:57.183383	LOG	Server <---------- DUT
0:02:57.185380	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:57.186379	LOG	Command Answer: 0307
0:02:57.196373	LOG	MAC command communication completed
0:02:57.204369	LOG	Check previous uplink data rate process starts
0:02:57.210365	LOG	Uplink received with expected Data Rate
0:02:57.213364	LOG	Send LinkADRReq process starts
0:03:04.192406	LOG	PULL_DATA: 02 65a6 02 aa555a0000240409
0:03:04.196403	LOG	PULL_ACK: 02 65a6 04
0:03:07.202698	LOG	PUSH_ACK: 02 0247 01

0:03:07.204698	LOG	PUSH_DATA: Protocol version = 02, Token = 0247, Identifier = 00, JSON = {'rxpk': [{'tmst': 3025744481, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAdgEBtRcx/M/C'}]}
0:03:07.205697	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0176, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 31fccfc2)
0:03:07.206697	LOG	Server <---------- DUT
0:03:07.208695	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0170, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 4859064d)
0:03:07.210694	LOG	PULL_RESP: Protocol version = 02, Token = 0e9b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3027744481, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAcAEACs+6aTFIWQZN'}}
0:03:07.211694	LOG	Server ----------> DUT
0:03:07.214692	LOG	TX_ACK: 02 0e9b 05 aa555a0000240409
0:03:12.186872	LOG	PUSH_ACK: 02 0248 01
0:03:12.188872	LOG	PUSH_DATA: Protocol version = 02, Token = 0248, Identifier = 00, JSON = {'rxpk': [{'tmst': 3030752219, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCdwEDBwHbHTfuErU='}]}
0:03:12.189871	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0177, FOpts: 0307), FPort: 01, FRMPayload: 0045, MIC: 37ee12b5)
0:03:12.191870	LOG	Server <---------- DUT
0:03:12.192869	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:12.194869	LOG	Command Answer: 0307
0:03:12.200866	LOG	MAC command communication completed
0:03:12.203863	LOG	End Test Step: Check unsupported data rates
0:03:12.207861	LOG	Partial Verdict: PASS
0:03:12.212857	LOG	==========
0:03:12.227849	LOG	==========
0:03:12.231847	LOG	Start Test Step: Test Channel mask functionality and disable all channels
0:03:12.245838	LOG	Send MAC command block process starts
0:03:14.351647	LOG	PULL_DATA: 02 3eab 02 aa555a0000240409
0:03:14.353647	LOG	PULL_ACK: 02 3eab 04
0:03:22.223199	LOG	PUSH_ACK: 02 024a 01
0:03:22.224180	LOG	PUSH_DATA: Protocol version = 02, Token = 024a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3040752315, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAeAEBTlVEzK/k'}]}
0:03:22.225179	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0178, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 44ccafe4)
0:03:22.227178	LOG	Server <---------- DUT
0:03:22.228178	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0171, FOpts:), FPort: 00, FRMPayload: 0703886684500350070001), MIC: 7d405016)
0:03:22.230178	LOG	PULL_RESP: Protocol version = 02, Token = f211, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3042752315, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 24, 'data': 'YCAgICAAcQEAmgfOvI6hqe8+6M99QFAW'}}
0:03:22.231194	LOG	Server ----------> DUT
0:03:22.236174	LOG	TX_ACK: 02 f211 05 aa555a0000240409
0:03:24.541868	LOG	PULL_DATA: 02 49cf 02 aa555a0000240409
0:03:24.542868	LOG	PULL_ACK: 02 49cf 04
0:03:27.204487	LOG	PUSH_ACK: 02 024b 01

0:03:27.206486	LOG	PUSH_DATA: Protocol version = 02, Token = 024b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3045760082, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 19, 'data': 'QCAgICCEeQEHAwMHAVdMnFa6Og=='}]}
0:03:27.207486	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0179, FOpts: 07030307), FPort: 01, FRMPayload: 0045, MIC: 9c56ba3a)
0:03:27.208489	LOG	Server <---------- DUT
0:03:27.210487	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:27.211488	LOG	Command Answer: 07030307
0:03:27.287439	LOG	MAC command communication completed
0:03:27.291437	LOG	Check previous uplink data rate process starts
0:03:27.296434	LOG	Uplink received with expected Data Rate
0:03:27.299432	LOG	Receive frame on specific channels process starts
0:03:27.306429	LOG	Attempt 1/20
0:03:34.622280	LOG	PULL_DATA: 02 714b 02 aa555a0000240409
0:03:34.634275	LOG	PULL_ACK: 02 714b 04
0:03:37.228801	LOG	PUSH_ACK: 02 024c 01
0:03:37.230800	LOG	PUSH_DATA: Protocol version = 02, Token = 024c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3055760170, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAegEBISP5YOOD'}]}
0:03:37.232799	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 017a, FOpts:), FPort: 01, FRMPayload: 0045, MIC: f960e383)
0:03:37.233798	LOG	Server <---------- DUT
0:03:37.234800	LOG	Attempt 2/20
0:03:42.219059	LOG	PUSH_ACK: 02 024d 01
0:03:42.222057	LOG	PUSH_DATA: Protocol version = 02, Token = 024d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3060762778, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAewEBenbkgKAH'}]}
0:03:42.223056	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 017b, FOpts:), FPort: 01, FRMPayload: 0045, MIC: e480a007)
0:03:42.225055	LOG	Server <---------- DUT
0:03:42.227054	LOG	Attempt 3/20
0:03:44.721640	LOG	PULL_DATA: 02 ce3a 02 aa555a0000240409
0:03:44.723638	LOG	PULL_ACK: 02 ce3a 04
0:03:47.225241	LOG	PUSH_ACK: 02 024f 01
0:03:47.227219	LOG	PUSH_DATA: Protocol version = 02, Token = 024f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3065765370, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAfAEBNqKQkK5L'}]}
0:03:47.229218	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 017c, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 9090ae4b)
0:03:47.230236	LOG	Server <---------- DUT
0:03:47.232217	LOG	Attempt 4/20
0:03:52.214390	LOG	PUSH_ACK: 02 0250 01
0:03:52.217388	LOG	PUSH_DATA: Protocol version = 02, Token = 0250, Identifier = 00, JSON = {'rxpk': [{'tmst': 3070767986, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAfQEB3d8lwjKM'}]}
0:03:52.218388	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 017d, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 25c2328c)
0:03:52.220386	LOG	Server <---------- DUT
0:03:52.222386	LOG	Attempt 5/20
0:03:54.811917	LOG	PULL_DATA: 02 75a7 02 aa555a0000240409

0:03:54.813916	LOG	PULL_ACK: 02 75a7 04
0:03:57.202560	LOG	PUSH_ACK: 02 0251 01
0:03:57.204560	LOG	PUSH_DATA: Protocol version = 02, Token = 0251, Identifier = 00, JSON = {'rxpk': [{'tmst': 3075770594, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAfgEBrukFvowm'}]}
0:03:57.206559	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 017e, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 05be8c26)
0:03:57.207559	LOG	Server <---------- DUT
0:03:57.208560	LOG	Attempt 6/20
0:04:02.243508	LOG	PUSH_ACK: 02 0252 01
0:04:02.245507	LOG	PUSH_DATA: Protocol version = 02, Token = 0252, Identifier = 00, JSON = {'rxpk': [{'tmst': 3080773194, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAfwEB+cYyjSnM'}]}
0:04:02.246506	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 017f, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 328d29cc)
0:04:02.248505	LOG	Server <---------- DUT
0:04:02.249504	LOG	Attempt 7/20
0:04:04.892005	LOG	PULL_DATA: 02 4f76 02 aa555a0000240409
0:04:04.896003	LOG	PULL_ACK: 02 4f76 04
0:04:07.231678	LOG	PUSH_ACK: 02 0253 01
0:04:07.234679	LOG	PUSH_DATA: Protocol version = 02, Token = 0253, Identifier = 00, JSON = {'rxpk': [{'tmst': 3085775802, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAgAEB/KHdKyP8'}]}
0:04:07.235678	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0180, FOpts:), FPort: 01, FRMPayload: 0045, MIC: dd2b23fc)
0:04:07.236678	LOG	Server <---------- DUT
0:04:07.237677	LOG	Attempt 8/20
0:04:12.220849	LOG	PUSH_ACK: 02 0254 01
0:04:12.222848	LOG	PUSH_DATA: Protocol version = 02, Token = 0254, Identifier = 00, JSON = {'rxpk': [{'tmst': 3090778402, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAgQEBJgppdlEI'}]}
0:04:12.224847	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0181, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 69765108)
0:04:12.225846	LOG	Server <---------- DUT
0:04:12.227845	LOG	Attempt 9/20
0:04:14.971647	LOG	PULL_DATA: 02 ea7e 02 aa555a0000240409
0:04:14.973647	LOG	PULL_ACK: 02 ea7e 04
0:04:17.226369	LOG	PUSH_ACK: 02 0256 01
0:04:17.228367	LOG	PUSH_DATA: Protocol version = 02, Token = 0256, Identifier = 00, JSON = {'rxpk': [{'tmst': 3095781002, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAggEBhzevgHzb'}]}
0:04:17.229368	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0182, FOpts:), FPort: 01, FRMPayload: 0045, MIC: af807cdb)
0:04:17.231367	LOG	Server <---------- DUT
0:04:17.232368	LOG	Attempt 10/20
0:04:22.214539	LOG	PUSH_ACK: 02 0257 01
0:04:22.216538	LOG	PUSH_DATA: Protocol version = 02, Token = 0257, Identifier = 00, JSON = {'rxpk': [{'tmst': 3100783610, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAgwEBC3KcGJMB'}]}

0:04:22.218537	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0183, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 9c189301)
0:04:22.219537	LOG	Server <---------- DUT
0:04:22.221536	LOG	Attempt 11/20
0:04:25.051931	LOG	PULL_DATA: 02 64ff 02 aa555a0000240409
0:04:25.053929	LOG	PULL_ACK: 02 64ff 04
0:04:27.255698	LOG	PUSH_ACK: 02 0258 01
0:04:27.257680	LOG	PUSH_DATA: Protocol version = 02, Token = 0258, Identifier = 00, JSON = {'rxpk': [{'tmst': 3105786210, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAhAEBbya6rJfc'}]}
0:04:27.259680	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0184, FOpts:), FPort: 01, FRMPayload: 0045, MIC: baac97dc)
0:04:27.260698	LOG	Server <---------- DUT
0:04:27.262677	LOG	Attempt 12/20
0:04:32.243852	LOG	PUSH_ACK: 02 0259 01
0:04:32.245851	LOG	PUSH_DATA: Protocol version = 02, Token = 0259, Identifier = 00, JSON = {'rxpk': [{'tmst': 3110788818, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAhQEBJriillz/'}]}
0:04:32.247850	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0185, FOpts:), FPort: 01, FRMPayload: 0045, MIC: a2965cff)
0:04:32.249848	LOG	Server <---------- DUT
0:04:32.251848	LOG	Attempt 13/20
0:04:35.141208	LOG	PULL_DATA: 02 81eb 02 aa555a0000240409
0:04:35.146206	LOG	PULL_ACK: 02 81eb 04
0:04:37.232023	LOG	PUSH_ACK: 02 025a 01
0:04:37.235021	LOG	PUSH_DATA: Protocol version = 02, Token = 025a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3115791426, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAhgEBZ4MZIGh7'}]}
0:04:37.236021	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0186, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 1920687b)
0:04:37.238020	LOG	Server <---------- DUT
0:04:37.240019	LOG	Attempt 14/20
0:04:42.220194	LOG	PUSH_ACK: 02 025b 01
0:04:42.223192	LOG	PUSH_DATA: Protocol version = 02, Token = 025b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3120794026, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAhwEBAEzrhVxi'}]}
0:04:42.224192	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0187, FOpts:), FPort: 01, FRMPayload: 0045, MIC: eb855c62)
0:04:42.226191	LOG	Server <---------- DUT
0:04:42.228190	LOG	Attempt 15/20
0:04:45.221531	LOG	PULL_DATA: 02 61fd 02 aa555a0000240409
0:04:45.223531	LOG	PULL_ACK: 02 61fd 04
0:04:47.226396	LOG	PUSH_ACK: 02 025d 01
0:04:47.228394	LOG	PUSH_DATA: Protocol version = 02, Token = 025d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3125796634, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAiAEBdlTyomV4'}]}
0:04:47.229396	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0188, FOpts:), FPort: 01, FRMPayload: 0045, MIC: f2a26578)
0:04:47.231393	LOG	Server <---------- DUT
0:04:47.232393	LOG	Attempt 16/20
0:04:52.268537	LOG	PUSH_ACK: 02 025e 01

0:04:52.270535	LOG	PUSH_DATA: Protocol version = 02, Token = 025e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3130799242, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAiQEBm63h3SoM'}]}
0:04:52.271535	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0189, FOpts:), FPort: 01, FRMPayload: 0045, MIC: e1dd2a0c)
0:04:52.272535	LOG	Server <---------- DUT
0:04:52.274533	LOG	Attempt 17/20
0:04:55.301816	LOG	PULL_DATA: 02 fec3 02 aa555a0000240409
0:04:55.303814	LOG	PULL_ACK: 02 fec3 04
0:04:57.258705	LOG	PUSH_ACK: 02 025f 01
0:04:57.260704	LOG	PUSH_DATA: Protocol version = 02, Token = 025f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3135801834, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAigEBGs8S5n8X'}]}
0:04:57.262704	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 018a, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 12e67f17)
0:04:57.263703	LOG	Server <---------- DUT
0:04:57.265702	LOG	Attempt 18/20
0:05:02.248875	LOG	PUSH_ACK: 02 0260 01
0:05:02.250875	LOG	PUSH_DATA: Protocol version = 02, Token = 0260, Identifier = 00, JSON = {'rxpk': [{'tmst': 3140804442, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAiwEB8h4vaEEk'}]}
0:05:02.252874	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 018b, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 2f684124)
0:05:02.253873	LOG	Server <---------- DUT
0:05:02.254872	LOG	Attempt 19/20
0:05:05.382098	LOG	PULL_DATA: 02 9b67 02 aa555a0000240409
0:05:05.385097	LOG	PULL_ACK: 02 9b67 04
0:05:07.239045	LOG	PUSH_ACK: 02 0261 01
0:05:07.241045	LOG	PUSH_DATA: Protocol version = 02, Token = 0261, Identifier = 00, JSON = {'rxpk': [{'tmst': 3145807050, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAjAEBaZLOOtIV'}]}
0:05:07.242046	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 018c, FOpts:), FPort: 01, FRMPayload: 0045, MIC: ce3ad215)
0:05:07.244043	LOG	Server <---------- DUT
0:05:07.245042	LOG	Attempt 20/20
0:05:12.281187	LOG	PUSH_ACK: 02 0262 01
0:05:12.285185	LOG	PUSH_DATA: Protocol version = 02, Token = 0262, Identifier = 00, JSON = {'rxpk': [{'tmst': 3150809650, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAjQEBlAJZkb+O'}]}
0:05:12.289183	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 018d, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 5991bf8e)
0:05:12.292181	LOG	Server <---------- DUT
0:05:12.312169	LOG	Send LinkADRReq process starts
0:05:15.461500	LOG	PULL_DATA: 02 bf0d 02 aa555a0000240409
0:05:15.462497	LOG	PULL_ACK: 02 bf0d 04
0:05:17.235492	LOG	PUSH_ACK: 02 0264 01
0:05:17.237489	LOG	PUSH_DATA: Protocol version = 02, Token = 0264, Identifier = 00, JSON = {'rxpk': [{'tmst': 3155812258, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAjgEBdX1cb7gD'}]}

0:05:17.238490	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 018e, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 5c6fb803)
0:05:17.240488	LOG	Server <---------- DUT
0:05:17.241463	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0172, FOpts:), FPort: 00, FRMPayload: 03500f0001), MIC: 0b792cc7)
0:05:17.245486	LOG	PULL_RESP: Protocol version = 02, Token = 14db, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3157812258, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAcgEAsy7eO3MLeSzH'}}
0:05:17.246486	LOG	Server ----------> DUT
0:05:17.250483	LOG	TX_ACK: 02 14db 05 aa555a0000240409
0:05:22.253646	LOG	PUSH_ACK: 02 0265 01
0:05:22.255645	LOG	PUSH_DATA: Protocol version = 02, Token = 0265, Identifier = 00, JSON = {'rxpk': [{'tmst': 3160819997, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCjwEDBwFgZuMhHFY='}]}
0:05:22.257644	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 018f, FOpts: 0307), FPort: 01, FRMPayload: 0045, MIC: e3211c56)
0:05:22.258642	LOG	Server <---------- DUT
0:05:22.260616	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:22.262640	LOG	Command Answer: 0307
0:05:22.270636	LOG	MAC command communication completed
0:05:22.274634	LOG	Receive frame on specific channels process starts
0:05:22.288595	LOG	Attempt 1/20
0:05:25.641698	LOG	PULL_DATA: 02 e98c 02 aa555a0000240409
0:05:25.643723	LOG	PULL_ACK: 02 e98c 04
0:05:32.278007	LOG	PUSH_ACK: 02 0266 01
0:05:32.280002	LOG	PUSH_DATA: Protocol version = 02, Token = 0266, Identifier = 00, JSON = {'rxpk': [{'tmst': 3170820094, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAkAEBvKY97Nlr'}]}
0:05:32.281001	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0190, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 3decd96b)
0:05:32.282001	LOG	Server <---------- DUT
0:05:32.283000	LOG	Attempt 2/20
0:05:35.721049	LOG	PULL_DATA: 02 7e4e 02 aa555a0000240409
0:05:35.726047	LOG	PULL_ACK: 02 7e4e 04
0:05:37.266173	LOG	PUSH_ACK: 02 0267 01
0:05:37.269171	LOG	PUSH_DATA: Protocol version = 02, Token = 0267, Identifier = 00, JSON = {'rxpk': [{'tmst': 3175822709, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAkQEBn7O71lVk'}]}
0:05:37.270170	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0191, FOpts:), FPort: 01, FRMPayload: 0045, MIC: bbd65564)
0:05:37.272169	LOG	Server <---------- DUT
0:05:37.274168	LOG	Attempt 3/20
0:05:42.255343	LOG	PUSH_ACK: 02 0268 01
0:05:42.257342	LOG	PUSH_DATA: Protocol version = 02, Token = 0268, Identifier = 00, JSON = {'rxpk': [{'tmst': 3180825317, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAkgEBZtJ6wngF'}]}
0:05:42.259341	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0192, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 7ac27805)
0:05:42.261340	LOG	Server <---------- DUT
0:05:42.263339	LOG	Attempt 4/20

0:05:45.801332	LOG	PULL_DATA: 02 32bd 02 aa555a0000240409
0:05:45.803331	LOG	PULL_ACK: 02 32bd 04
0:05:47.257508	LOG	PUSH_ACK: 02 026a 01
0:05:47.261506	LOG	PUSH_DATA: Protocol version = 02, Token = 026a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3185827917, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAkwEBd62HOS59'}]}
0:05:47.265504	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0193, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 87392e7d)
0:05:47.268500	LOG	Server <---------- DUT
0:05:47.272498	LOG	Attempt 5/20
0:05:52.302645	LOG	PUSH_ACK: 02 026c 01
0:05:52.304644	LOG	PUSH_DATA: Protocol version = 02, Token = 026c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3190830517, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAlAEBitQFIswr'}]}
0:05:52.306643	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0194, FOpts:), FPort: 01, FRMPayload: 0045, MIC: 0522cc2b)
0:05:52.307644	LOG	Server <---------- DUT
0:05:52.315638	LOG	Receive frame on specific channels process tested successfully
0:05:52.319638	LOG	Send NewChannelReq process starts
0:05:55.881615	LOG	PULL_DATA: 02 f97c 02 aa555a0000240409
0:05:55.883615	LOG	PULL_ACK: 02 f97c 04
0:05:57.293815	LOG	PUSH_ACK: 02 026d 01
0:05:57.296814	LOG	PUSH_DATA: Protocol version = 02, Token = 026d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3195833126, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAlQEB0Q66GJEI'}]}
0:05:57.298843	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0195, FOpts:), FPort: 01, FRMPayload: 0045, MIC: ba189108)
0:05:57.300841	LOG	Server <---------- DUT
0:05:57.302812	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0173, FOpts:), FPort: 00, FRMPayload: 070300000050), MIC: 95ea5efa)
0:05:57.305810	LOG	PULL_RESP: Protocol version = 02, Token = 9ffe, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3197833126, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAcwEAXXqpjEq8lepe+g=='}}
0:05:57.306813	LOG	Server ----------> DUT
0:05:57.312806	LOG	TX_ACK: 02 9ffe 05 aa555a0000240409
0:06:02.277147	LOG	PUSH_ACK: 02 026e 01
0:06:02.279145	LOG	PUSH_DATA: Protocol version = 02, Token = 026e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3200840863, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCClgEHAwGbjIrTWI4='}]}
0:06:02.280145	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0196, FOpts: 0703), FPort: 01, FRMPayload: 0045, MIC: 8ad3588e)
0:06:02.281145	LOG	Server <---------- DUT
0:06:02.282144	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:02.284143	LOG	Command Answer: 0703
0:06:02.288141	LOG	MAC command communication completed
0:06:02.294137	LOG	Send LinkADRReq process starts
0:06:05.921081	LOG	PULL_DATA: 02 8c6a 02 aa555a0000240409
0:06:05.925078	LOG	PULL_ACK: 02 8c6a 04
0:06:12.303461	LOG	PUSH_ACK: 02 0270 01

0:06:12.306459	LOG	PUSH_DATA: Protocol version = 02, Token = 0270, Identifier = 00, JSON = {'rxpk': [{'tmst': 3210840967, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAlwEBz3u+g+z+'}]}
0:06:12.308458	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0197, FOpts:), FPort: 01, FRMPayload: 0045, MIC: be83ecfe)
0:06:12.309457	LOG	Server <---------- DUT
0:06:12.311456	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0174, FOpts:), FPort: 00, FRMPayload: 0350000001), MIC: 6708d256)
0:06:12.314454	LOG	PULL_RESP: Protocol version = 02, Token = 9bc1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3212840967, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAdAEAdJtDFa9nCNJW'}}
0:06:12.315454	LOG	Server ----------> DUT
0:06:12.320451	LOG	TX_ACK: 02 9bc1 05 aa555a0000240409
0:06:16.091312	LOG	PULL_DATA: 02 c75b 02 aa555a0000240409
0:06:16.093311	LOG	PULL_ACK: 02 c75b 04
0:06:17.297628	LOG	PUSH_ACK: 02 0272 01
0:06:17.299628	LOG	PUSH_DATA: Protocol version = 02, Token = 0272, Identifier = 00, JSON = {'rxpk': [{'tmst': 3215848697, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCmAEDBAHmnLvvXG4='}]}
0:06:17.301626	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0198, FOpts: 0304), FPort: 01, FRMPayload: 0045, MIC: bbef5c6e)
0:06:17.303625	LOG	Server <---------- DUT
0:06:17.304624	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:17.306623	LOG	Command Answer: 0304
0:06:17.315619	LOG	MAC command communication completed
0:06:17.321615	LOG	LinkADRAns received: 04
0:06:17.325613	LOG	Send LinkADRReq process starts
0:06:26.171596	LOG	PULL_DATA: 02 a43c 02 aa555a0000240409
0:06:26.173595	LOG	PULL_ACK: 02 a43c 04
0:06:27.323961	LOG	PUSH_ACK: 02 0273 01
0:06:27.325942	LOG	PUSH_DATA: Protocol version = 02, Token = 0273, Identifier = 00, JSON = {'rxpk': [{'tmst': 3225848793, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAmQEBLGHe0DLM'}]}
0:06:27.327940	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0199, FOpts:), FPort: 01, FRMPayload: 0045, MIC: ded032cc)
0:06:27.328940	LOG	Server <---------- DUT
0:06:27.330940	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0175, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 0779b49a)
0:06:27.333938	LOG	PULL_RESP: Protocol version = 02, Token = f8f9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3227848793, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAdQEAUNqNWGIHebSa'}}
0:06:27.334938	LOG	Server ----------> DUT
0:06:27.338935	LOG	TX_ACK: 02 f8f9 05 aa555a0000240409
0:06:32.292213	LOG	PUSH_ACK: 02 0274 01
0:06:32.294212	LOG	PUSH_DATA: Protocol version = 02, Token = 0274, Identifier = 00, JSON = {'rxpk': [{'tmst': 3230856532, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCmgEDBwHoQYoJTWA='}]}
0:06:32.295211	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 019a, FOpts: 0307), FPort: 01, FRMPayload: 0045, MIC: 8a094d60)

0:06:32.296211	LOG	Server <---------- DUT
0:06:32.297210	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:32.299209	LOG	Command Answer: 0307
0:06:32.306205	LOG	MAC command communication completed
0:06:32.310205	LOG	End Test Step: Test Channel mask functionality and disable all channels
0:06:32.315200	LOG	Partial Verdict: PASS
0:06:32.320198	LOG	==========
0:06:32.334190	LOG	==========
0:06:32.338187	LOG	Start Test Step: Redundancy
0:06:32.350180	LOG	Send Test Command RxAppCntReq process starts
0:06:36.360907	LOG	PULL_DATA: 02 02f4 02 aa555a0000240409
0:06:36.365903	LOG	PULL_ACK: 02 02f4 04
0:06:42.316578	LOG	PUSH_ACK: 02 0275 01
0:06:42.318577	LOG	PUSH_DATA: Protocol version = 02, Token = 0275, Identifier = 00, JSON = {'rxpk': [{'tmst': 3240856628, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAmwEBW6Sv29+V'}]}
0:06:42.320575	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 019b, FOpts:), FPort: 01, FRMPayload: 0045, MIC: afdbdf95)
0:06:42.322574	LOG	Server <---------- DUT
0:06:42.324573	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0176, FOpts:), FPort: e0, FRMPayload: 09), MIC: 09d96b39)
0:06:42.327572	LOG	Frame command sent to the DUT
0:06:42.328571	LOG	PULL_RESP: Protocol version = 02, Token = 9cb9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3242856628, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAdgHgPgnZazk='}}
0:06:42.330570	LOG	Server ----------> DUT
0:06:42.334567	LOG	TX_ACK: 02 9cb9 05 aa555a0000240409
0:06:46.531256	LOG	PULL_DATA: 02 b2ed 02 aa555a0000240409
0:06:46.533254	LOG	PULL_ACK: 02 b2ed 04
0:06:47.301786	LOG	PUSH_ACK: 02 0277 01
0:06:47.304785	LOG	PUSH_DATA: Protocol version = 02, Token = 0277, Identifier = 00, JSON = {'rxpk': [{'tmst': 3245867295, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 16, 'data': 'QCAgICCAnAHgED1vg+75ug=='}]}
0:06:47.306786	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 019c, FOpts:), FPort: e0, FRMPayload: 094600, MIC: 83eef9ba)
0:06:47.307784	LOG	Server <---------- DUT
0:06:47.309783	LOG	Answer in payload: 4600
0:06:47.311782	LOG	Frame Command Payload in the Answer: 094600
0:06:47.316778	LOG	RX Count received by DUT: 70
0:06:47.318777	LOG	Send Test Command RxAppCntReq process completed
0:06:47.322777	LOG	Send LinkADRReq process starts
0:06:56.610548	LOG	PULL_DATA: 02 7216 02 aa555a0000240409
0:06:56.612547	LOG	PULL_ACK: 02 7216 04
0:06:57.328141	LOG	PUSH_ACK: 02 0278 01
0:06:57.330140	LOG	PUSH_DATA: Protocol version = 02, Token = 0278, Identifier = 00, JSON = {'rxpk': [{'tmst': 3255864463, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAnQEBWI6/HXsm'}]}
0:06:57.331140	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 019d, FOpts:), FPort: 01, FRMPayload: 0046, MIC: bf1d7b26)
0:06:57.332139	LOG	Server <---------- DUT

0:06:57.334139	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0177, FOpts:), FPort: 00, FRMPayload: 0350070002), MIC: 90a160b1)
0:06:57.336138	LOG	PULL_RESP: Protocol version = 02, Token = 89f9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3257864463, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAdwEAeSByu02QoWCx'}}
0:06:57.337138	LOG	Server ----------> DUT
0:06:57.342151	LOG	TX_ACK: 02 89f9 05 aa555a0000240409
0:07:02.308317	LOG	PUSH_ACK: 02 0279 01
0:07:02.310316	LOG	PUSH_DATA: Protocol version = 02, Token = 0279, Identifier = 00, JSON = {'rxpk': [{'tmst': 3260872201, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCngEDBwGE78vC1ts='}]}
0:07:02.311315	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 019e, FOpts: 0307), FPort: 01, FRMPayload: 0046, MIC: cbc2d6db)
0:07:02.313314	LOG	Server <---------- DUT
0:07:02.315313	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:07:02.316312	LOG	Command Answer: 0307
0:07:02.323309	LOG	MAC command communication completed
0:07:02.326307	LOG	Check number of uplinks repetitions process starts
0:07:06.790775	LOG	PULL_DATA: 02 ecf3 02 aa555a0000240409
0:07:06.795772	LOG	PULL_ACK: 02 ecf3 04
0:07:07.451506	LOG	PUSH_ACK: 02 027a 01
0:07:07.453504	LOG	PUSH_DATA: Protocol version = 02, Token = 027a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3265997297, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCngEDBwGE78vC1ts='}]}
0:07:07.455503	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 019e, FOpts: 0307), FPort: 01, FRMPayload: 0046, MIC: cbc2d6db)
0:07:07.457501	LOG	Server <---------- DUT
0:07:07.458500	LOG	FRMPayload is the same between retransmissions
0:07:07.460500	LOG	Original uplink: 0046
0:07:07.461498	LOG	Actual retransmission: 0046
0:07:07.463500	LOG	FOpts is the same between retransmissions
0:07:07.465497	LOG	Original uplink: 0307
0:07:07.466497	LOG	Actual retransmission: 0307
0:07:07.468495	LOG	FPort is the same between retransmissions
0:07:07.469494	LOG	Original uplink: 01
0:07:07.471494	LOG	Actual retransmission: 01
0:07:16.871232	LOG	PULL_DATA: 02 014d 02 aa555a0000240409
0:07:16.873230	LOG	PULL_ACK: 02 014d 04
0:07:17.337936	LOG	PUSH_ACK: 02 027c 01
0:07:17.339934	LOG	PUSH_DATA: Protocol version = 02, Token = 027c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3275874913, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAnwEBBbVYUZcw'}]}
0:07:17.341933	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 019f, FOpts:), FPort: 01, FRMPayload: 0046, MIC: 58519730)
0:07:17.342932	LOG	Server <---------- DUT
0:07:17.346931	LOG	Expected repetitions of uplink message have been received
0:07:17.350928	LOG	Check number of uplinks repetitions process starts
0:07:21.968355	LOG	PUSH_ACK: 02 027d 01
0:07:21.971353	LOG	PUSH_DATA: Protocol version = 02, Token = 027d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3280499609, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAnwEBBbVYUZcw'}]}
0:07:21.972352	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 019f, FOpts:), FPort: 01, FRMPayload: 0046, MIC: 58519730)
0:07:21.974351	LOG	Server <---------- DUT
0:07:21.975350	LOG	FRMPayload is the same between retransmissions
0:07:21.977349	LOG	Original uplink: 0046
0:07:21.978349	LOG	Actual retransmission: 0046
0:07:21.980348	LOG	FOpts is the same between retransmissions
0:07:21.981347	LOG	Original uplink:
0:07:21.983346	LOG	Actual retransmission:
0:07:21.984345	LOG	FPort is the same between retransmissions
0:07:21.985346	LOG	Original uplink: 01
0:07:21.987345	LOG	Actual retransmission: 01
0:07:26.950529	LOG	PULL_DATA: 02 f000 02 aa555a0000240409
0:07:26.952528	LOG	PULL_ACK: 02 f000 04
0:07:27.316321	LOG	PUSH_ACK: 02 027e 01
0:07:27.318321	LOG	PUSH_DATA: Protocol version = 02, Token = 027e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3285880137, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAoAEBfAu5KY8T'}]}
0:07:27.319321	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a0, FOpts:), FPort: 01, FRMPayload: 0046, MIC: b9298f13)
0:07:27.321319	LOG	Server <---------- DUT
0:07:27.324317	LOG	Expected repetitions of uplink message have been received
0:07:27.333312	LOG	Send Test Command RxAppCntReq process starts
0:07:27.337309	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0178, FOpts:), FPort: e0, FRMPayload: 09), MIC: 340d5582)
0:07:27.340309	LOG	Frame command sent to the DUT
0:07:27.341307	LOG	PULL_RESP: Protocol version = 02, Token = f12e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3286880137, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAeAHg2zQNVYI='}}
0:07:27.343306	LOG	Server ----------> DUT
0:07:27.347304	LOG	TX_ACK: 02 f12e 05 aa555a0000240409
0:07:32.356576	LOG	PUSH_ACK: 02 027f 01
0:07:32.358575	LOG	PUSH_DATA: Protocol version = 02, Token = 027f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3290890804, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 16, 'data': 'QCAgICCAoQHghXdjBD3JHQ=='}]}
0:07:32.359574	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a1, FOpts:), FPort: e0, FRMPayload: 094700, MIC: 043dc91d)
0:07:32.360573	LOG	Server <---------- DUT
0:07:32.362573	LOG	Answer in payload: 4700
0:07:32.363572	LOG	Frame Command Payload in the Answer: 094700
0:07:32.369568	LOG	RX Count received by DUT: 71
0:07:32.372567	LOG	Send Test Command RxAppCntReq process completed
0:07:32.378564	LOG	Check number of uplinks repetitions process starts
0:07:37.000973	LOG	PULL_DATA: 02 108b 02 aa555a0000240409
0:07:37.004971	LOG	PULL_ACK: 02 108b 04
0:07:37.447690	LOG	PUSH_ACK: 02 0280 01
0:07:37.452687	LOG	PUSH_DATA: Protocol version = 02, Token = 0280, Identifier = 00, JSON = {'rxpk': [{'tmst': 3296015900, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 16, 'data': 'QCAgICCAoQHghXdjBD3JHQ=='}]}

0:07:37.457684	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a1, FOpts:), FPort: e0, FRMPayload: 094700, MIC: 043dc91d)
0:07:37.461682	LOG	Server <---------- DUT
0:07:37.464680	LOG	FRMPayload is the same between retransmissions
0:07:37.466677	LOG	Original uplink: 094700
0:07:37.467677	LOG	Actual retransmission: 094700
0:07:37.468676	LOG	FOpts is the same between retransmissions
0:07:37.469676	LOG	Original uplink:
0:07:37.470675	LOG	Actual retransmission:
0:07:37.471675	LOG	FPort is the same between retransmissions
0:07:37.473673	LOG	Original uplink: e0
0:07:37.474673	LOG	Actual retransmission: e0
0:07:47.110187	LOG	PULL_DATA: 02 67cf 02 aa555a0000240409
0:07:47.112185	LOG	PULL_ACK: 02 67cf 04
0:07:47.337789	LOG	PUSH_ACK: 02 0282 01
0:07:47.339787	LOG	PUSH_DATA: Protocol version = 02, Token = 0282, Identifier = 00, JSON = {'rxpk': [{'tmst': 3305890596, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAogEBwGwloCI9'}]}
0:07:47.341787	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a2, FOpts:), FPort: 01, FRMPayload: 0047, MIC: 25a0223d)
0:07:47.342786	LOG	Server <---------- DUT
0:07:47.346785	LOG	Expected repetitions of uplink message have been received
0:07:47.358777	LOG	Send Test Command RxAppCntReq process starts
0:07:47.362774	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0179, FOpts:), FPort: e0, FRMPayload: 09), MIC: 064bd32a)
0:07:47.365772	LOG	Frame command sent to the DUT
0:07:47.367772	LOG	PULL_RESP: Protocol version = 02, Token = a857, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3307890596, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAeQHgVQZL0yo='}}
0:07:47.368771	LOG	Server ----------> DUT
0:07:47.372768	LOG	TX_ACK: 02 a857 05 aa555a0000240409
0:07:52.374933	LOG	PUSH_ACK: 02 0283 01
0:07:52.376930	LOG	PUSH_DATA: Protocol version = 02, Token = 0283, Identifier = 00, JSON = {'rxpk': [{'tmst': 3310901269, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 16, 'data': 'QCAgICCAowHght/AQLc21A=='}]}
0:07:52.377931	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a3, FOpts:), FPort: e0, FRMPayload: 094800, MIC: 40b736d4)
0:07:52.378931	LOG	Server <---------- DUT
0:07:52.381927	LOG	Answer in payload: 4800
0:07:52.383926	LOG	Frame Command Payload in the Answer: 094800
0:07:52.387924	LOG	RX Count received by DUT: 72
0:07:52.390922	LOG	Send Test Command RxAppCntReq process completed
0:07:52.395919	LOG	Check number of uplinks repetitions process starts
0:07:57.240172	LOG	PULL_DATA: 02 9950 02 aa555a0000240409
0:07:57.242171	LOG	PULL_ACK: 02 9950 04
0:07:57.467047	LOG	PUSH_ACK: 02 0284 01
0:07:57.471046	LOG	PUSH_DATA: Protocol version = 02, Token = 0284, Identifier = 00, JSON = {'rxpk': [{'tmst': 3316026341, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 16, 'data': 'QCAgICCAowHght/AQLc21A=='}]}
0:07:57.474045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a3, FOpts:), FPort: e0, FRMPayload: 094800, MIC: 40b736d4)
0:07:57.476040	LOG	Server <---------- DUT

0:07:57.477038	LOG	FRMPayload is the same between retransmissions
0:07:57.478039	LOG	Original uplink: 094800
0:07:57.479038	LOG	Actual retransmission: 094800
0:07:57.480038	LOG	FOpts is the same between retransmissions
0:07:57.482036	LOG	Original uplink:
0:07:57.483035	LOG	Actual retransmission:
0:07:57.484034	LOG	FPort is the same between retransmissions
0:07:57.485033	LOG	Original uplink: e0
0:07:57.486034	LOG	Actual retransmission: e0
0:08:07.330447	LOG	PULL_DATA: 02 5b17 02 aa555a0000240409
0:08:07.334446	LOG	PULL_ACK: 02 5b17 04
0:08:07.337445	LOG	PUSH_ACK: 02 0285 01
0:08:07.338444	LOG	PUSH_DATA: Protocol version = 02, Token = 0285, Identifier = 00, JSON = {'rxpk': [{'tmst': 3325901037, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCApAEBSgtMN1g8'}]}
0:08:07.339443	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a4, FOpts:), FPort: 01, FRMPayload: 0048, MIC: 4c37583c)
0:08:07.340443	LOG	Server <---------- DUT
0:08:07.343441	LOG	Expected repetitions of uplink message have been received
0:08:07.350437	LOG	Send LinkADRReq process starts
0:08:11.965340	LOG	PUSH_ACK: 02 0286 01
0:08:11.967338	LOG	PUSH_DATA: Protocol version = 02, Token = 0286, Identifier = 00, JSON = {'rxpk': [{'tmst': 3330525741, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCApAEBSgtMN1g8'}]}
0:08:11.969337	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a4, FOpts:), FPort: 01, FRMPayload: 0048, MIC: 4c37583c)
0:08:11.970336	LOG	Server <---------- DUT
0:08:11.972335	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 017a, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: a98c7c3a)
0:08:11.975334	LOG	PULL_RESP: Protocol version = 02, Token = 3e71, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3332525741, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAegEAKSk2W3mpjHw6'}}
0:08:11.976333	LOG	Server ----------> DUT
0:08:11.980333	LOG	TX_ACK: 02 3e71 05 aa555a0000240409
0:08:17.345322	LOG	PUSH_ACK: 02 0288 01
0:08:17.347321	LOG	PUSH_DATA: Protocol version = 02, Token = 0288, Identifier = 00, JSON = {'rxpk': [{'tmst': 3335911408, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCpQEDBwFHq/4j8uU='}]}
0:08:17.349320	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01a5, FOpts: 0307), FPort: 01, FRMPayload: 0048, MIC: fe23f2e5)
0:08:17.350319	LOG	Server <---------- DUT
0:08:17.352318	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:17.353318	LOG	Command Answer: 0307
0:08:17.359314	LOG	MAC command communication completed
0:08:17.362312	LOG	Check number of uplinks repetitions process starts
0:08:17.440268	LOG	PULL_DATA: 02 9f8e 02 aa555a0000240409
0:08:17.442267	LOG	PULL_ACK: 02 9f8e 04
0:08:27.370636	LOG	PUSH_ACK: 02 0289 01
0:08:27.373634	LOG	PUSH_DATA: Protocol version = 02, Token = 0289, Identifier = 00, JSON = {'rxpk': [{'tmst': 3345911504, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCApgEBnt7dtOIo'}]}
0:08:27.374633	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a6, FOpts:), FPort: 01, FRMPayload: 0048, MIC: ddb4e228)
0:08:27.376632	LOG	Server <---------- DUT
0:08:27.379631	LOG	Expected repetitions of uplink message have been received
0:08:27.383628	LOG	Check number of uplinks repetitions process starts
0:08:27.520552	LOG	PULL_DATA: 02 d498 02 aa555a0000240409
0:08:27.521550	LOG	PULL_ACK: 02 d498 04
0:08:32.361805	LOG	PUSH_ACK: 02 028a 01
0:08:32.363803	LOG	PUSH_DATA: Protocol version = 02, Token = 028a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3350914104, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCApwEBwxHessin'}]}
0:08:32.364803	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a7, FOpts:), FPort: 01, FRMPayload: 0048, MIC: deb2c8a7)
0:08:32.366802	LOG	Server <---------- DUT
0:08:32.368802	LOG	Expected repetitions of uplink message have been received
0:08:32.371799	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:37.352078	LOG	PUSH_ACK: 02 028b 01
0:08:37.356074	LOG	PUSH_DATA: Protocol version = 02, Token = 028b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3355916704, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAqAEBG8Q0pOik'}]}
0:08:37.357073	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a8, FOpts:), FPort: 01, FRMPayload: 0048, MIC: 34a4e8a4)
0:08:37.358075	LOG	Server <---------- DUT
0:08:37.360072	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 017b, FOpts:), FPort: e0, FRMPayload: 0702), MIC: 626eb2c9)
0:08:37.363071	LOG	Frame command sent to the DUT
0:08:37.365069	LOG	PULL_RESP: Protocol version = 02, Token = 00c2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3357916704, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAewHgnJxibrLJ'}}
0:08:37.367068	LOG	Server ----------> DUT
0:08:37.370066	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:37.374064	LOG	Send LinkADRReq process starts
0:08:37.580946	LOG	PULL_DATA: 02 0a61 02 aa555a0000240409
0:08:37.582945	LOG	PULL_ACK: 02 0a61 04
0:08:42.349907	LOG	PUSH_ACK: 02 028c 01
0:08:42.351907	LOG	PUSH_DATA: Protocol version = 02, Token = 028c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3360919121, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'gCAgICCAqQEBys4Cm/YB'}]}
0:08:42.353904	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01a9, FOpts:), FPort: 01, FRMPayload: 0049, MIC: 029bf601)
0:08:42.354904	LOG	Server <---------- DUT
0:08:42.355905	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 20, FCnt: 017c, FOpts:), FPort: 00, FRMPayload: 0350070003), MIC: 6e12b875)
0:08:42.358903	LOG	PULL_RESP: Protocol version = 02, Token = 1a54, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3362919121, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAgfAEAOaUVh+BuErh1'}}
0:08:42.359903	LOG	Server ----------> DUT
0:08:42.363900	LOG	TX_ACK: 02 1a54 05 aa555a0000240409
0:08:47.376623	LOG	PUSH_ACK: 02 028e 01

0:08:47.378622	LOG	PUSH_DATA: Protocol version = 02, Token = 028e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3365926866, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 17, 'data': 'gCAgICCCqgEDBwEFzfjHKpc='}]}
0:08:47.380620	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01aa, FOpts: 0307), FPort: 01, FRMPayload: 004a, MIC: f8c72a97)
0:08:47.381620	LOG	Server <---------- DUT
0:08:47.382619	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:47.384620	LOG	Command Answer: 0307
0:08:47.391616	LOG	MAC command communication completed
0:08:47.396612	LOG	Check number of uplinks repetitions process starts
0:08:47.610567	LOG	PULL_DATA: 02 03d1 02 aa555a0000240409
0:08:47.611567	LOG	PULL_ACK: 02 03d1 04
0:08:52.520782	LOG	PUSH_ACK: 02 028f 01
0:08:52.522782	LOG	PUSH_DATA: Protocol version = 02, Token = 028f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3371052018, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 17, 'data': 'gCAgICCCqgEDBwEFzfjHKpc='}]}
0:08:52.524780	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01aa, FOpts: 0307), FPort: 01, FRMPayload: 004a, MIC: f8c72a97)
0:08:52.525780	LOG	Server <---------- DUT
0:08:52.526779	LOG	FRMPayload is the same between retransmissions
0:08:52.527779	LOG	Original uplink: 004a
0:08:52.529778	LOG	Actual retransmission: 004a
0:08:52.530777	LOG	FOpts is the same between retransmissions
0:08:52.531777	LOG	Original uplink: 0307
0:08:52.533775	LOG	Actual retransmission: 0307
0:08:52.534775	LOG	FPort is the same between retransmissions
0:08:52.535774	LOG	Original uplink: 01
0:08:52.536774	LOG	Actual retransmission: 01
0:08:57.614238	LOG	PUSH_ACK: 02 0290 01
0:08:57.616237	LOG	PUSH_DATA: Protocol version = 02, Token = 0290, Identifier = 00, JSON = {'rxpk': [{'tmst': 3376177154, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 17, 'data': 'gCAgICCCqgEDBwEFzfjHKpc='}]}
0:08:57.618236	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01aa, FOpts: 0307), FPort: 01, FRMPayload: 004a, MIC: f8c72a97)
0:08:57.620235	LOG	Server <---------- DUT
0:08:57.622234	LOG	FRMPayload is the same between retransmissions
0:08:57.623233	LOG	Original uplink: 004a
0:08:57.625232	LOG	Actual retransmission: 004a
0:08:57.626231	LOG	FOpts is the same between retransmissions
0:08:57.628230	LOG	Original uplink: 0307
0:08:57.629230	LOG	Actual retransmission: 0307
0:08:57.631229	LOG	FPort is the same between retransmissions
0:08:57.633228	LOG	Original uplink: 01
0:08:57.634227	LOG	Actual retransmission: 01
0:08:57.690371	LOG	PULL_DATA: 02 bca7 02 aa555a0000240409
0:08:57.694368	LOG	PULL_ACK: 02 bca7 04
0:09:07.384299	LOG	PUSH_ACK: 02 0292 01
0:09:07.390295	LOG	PUSH_DATA: Protocol version = 02, Token = 0292, Identifier = 00, JSON = {'rxpk': [{'tmst': 3385932218, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'gCAgICCAqwEBan7YhAJK'}]}

0:09:07.391295	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ab, FOpts:), FPort: 01, FRMPayload: 004a, MIC: d884024a)
0:09:07.393293	LOG	Server <---------- DUT
0:09:07.398291	LOG	Expected repetitions of uplink message have been received
0:09:07.403288	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:07.770099	LOG	PULL_DATA: 02 0dbe 02 aa555a0000240409
0:09:07.772080	LOG	PULL_ACK: 02 0dbe 04
0:09:12.016671	LOG	PUSH_ACK: 02 0293 01
0:09:12.019670	LOG	PUSH_DATA: Protocol version = 02, Token = 0293, Identifier = 00, JSON = {'rxpk': [{'tmst': 3390556970, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'gCAgICCAqwEBan7YhAJK'}]}
0:09:12.020668	LOG	DATA: (MHDR: 80, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ab, FOpts:), FPort: 01, FRMPayload: 004a, MIC: d884024a)
0:09:12.021668	LOG	Server <---------- DUT
0:09:12.022667	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 20, FCnt: 017d, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 489c0cf5)
0:09:12.024666	LOG	Frame command sent to the DUT
0:09:12.026665	LOG	PULL_RESP: Protocol version = 02, Token = 40a8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3392556970, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAgfQHgmJ5InAz1'}}
0:09:12.027665	LOG	Server ----------> DUT
0:09:12.030663	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:12.033664	LOG	Send Test Command RxAppCntReq process starts
0:09:17.409069	LOG	PUSH_ACK: 02 0295 01
0:09:17.412068	LOG	PUSH_DATA: Protocol version = 02, Token = 0295, Identifier = 00, JSON = {'rxpk': [{'tmst': 3395937604, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCArAEBxtj6oRwz'}]}
0:09:17.413068	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ac, FOpts:), FPort: 01, FRMPayload: 004b, MIC: faa11c33)
0:09:17.415067	LOG	Server <---------- DUT
0:09:17.416067	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 017e, FOpts:), FPort: e0, FRMPayload: 09), MIC: 58788a47)
0:09:17.419067	LOG	Frame command sent to the DUT
0:09:17.421062	LOG	PULL_RESP: Protocol version = 02, Token = ffa4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3397937604, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAfgHgUVh4ikc='}}
0:09:17.422062	LOG	Server ----------> DUT
0:09:17.426061	LOG	TX_ACK: 02 ffa4 05 aa555a0000240409
0:09:17.839825	LOG	PULL_DATA: 02 9bbf 02 aa555a0000240409
0:09:17.841825	LOG	PULL_ACK: 02 9bbf 04
0:09:22.422227	LOG	PUSH_ACK: 02 0297 01
0:09:22.424225	LOG	PUSH_DATA: Protocol version = 02, Token = 0297, Identifier = 00, JSON = {'rxpk': [{'tmst': 3400948284, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 16, 'data': 'QCAgICCArQHgDuND7Lu+WA=='}]}
0:09:22.425224	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ad, FOpts:), FPort: e0, FRMPayload: 094c00, MIC: ecbbbe58)
0:09:22.426224	LOG	Server <---------- DUT
0:09:22.427224	LOG	Answer in payload: 4c00
0:09:22.429223	LOG	Frame Command Payload in the Answer: 094c00
0:09:22.433192	LOG	RX Count received by DUT: 76
0:09:22.437218	LOG	Send Test Command RxAppCntReq process completed

0:09:22.441215	LOG	Check number of uplinks repetitions process starts
0:09:27.514354	LOG	PUSH_ACK: 02 0298 01
0:09:27.516353	LOG	PUSH_DATA: Protocol version = 02, Token = 0298, Identifier = 00, JSON = {'rxpk': [{'tmst': 3406073348, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 16, 'data': 'QCAgICCArQHgDuND7Lu+WA=='}]}
0:09:27.518352	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ad, FOpts:), FPort: e0, FRMPayload: 094c00, MIC: ecbbbe58)
0:09:27.519351	LOG	Server <---------- DUT
0:09:27.520351	LOG	FRMPayload is the same between retransmissions
0:09:27.521350	LOG	Original uplink: 094c00
0:09:27.522350	LOG	Actual retransmission: 094c00
0:09:27.523349	LOG	FOpts is the same between retransmissions
0:09:27.525348	LOG	Original uplink:
0:09:27.526347	LOG	Actual retransmission:
0:09:27.528346	LOG	FPort is the same between retransmissions
0:09:27.529346	LOG	Original uplink: e0
0:09:27.531345	LOG	Actual retransmission: e0
0:09:27.929964	LOG	PULL_DATA: 02 ab0e 02 aa555a0000240409
0:09:27.931961	LOG	PULL_ACK: 02 ab0e 04
0:09:32.658341	LOG	PUSH_ACK: 02 0299 01
0:09:32.660338	LOG	PUSH_DATA: Protocol version = 02, Token = 0299, Identifier = 00, JSON = {'rxpk': [{'tmst': 3411198444, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 16, 'data': 'QCAgICCArQHgDuND7Lu+WA=='}]}
0:09:32.662337	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ad, FOpts:), FPort: e0, FRMPayload: 094c00, MIC: ecbbbe58)
0:09:32.663336	LOG	Server <---------- DUT
0:09:32.664336	LOG	FRMPayload is the same between retransmissions
0:09:32.665335	LOG	Original uplink: 094c00
0:09:32.666335	LOG	Actual retransmission: 094c00
0:09:32.668334	LOG	FOpts is the same between retransmissions
0:09:32.669333	LOG	Original uplink:
0:09:32.671333	LOG	Actual retransmission:
0:09:32.672331	LOG	FPort is the same between retransmissions
0:09:32.674332	LOG	Original uplink: e0
0:09:32.675330	LOG	Actual retransmission: e0
0:09:38.010348	LOG	PULL_DATA: 02 d598 02 aa555a0000240409
0:09:38.015346	LOG	PULL_ACK: 02 d598 04
0:09:42.426861	LOG	PUSH_ACK: 02 029a 01
0:09:42.428843	LOG	PUSH_DATA: Protocol version = 02, Token = 029a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3420950692, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCArgEBmnRKtvnb'}]}
0:09:42.429841	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ae, FOpts:), FPort: 01, FRMPayload: 004c, MIC: 4ab6f9db)
0:09:42.431842	LOG	Server <---------- DUT
0:09:42.435838	LOG	Expected repetitions of uplink message have been received
0:09:42.442836	LOG	Send LinkADRReq process starts
0:09:47.018598	LOG	PUSH_ACK: 02 029c 01
0:09:47.020597	LOG	PUSH_DATA: Protocol version = 02, Token = 029c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3425575388, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCArgEBmnRKtvnb'}]}
0:09:47.021597	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ae, FOpts:), FPort: 01, FRMPayload: 004c, MIC: 4ab6f9db)

0:09:47.022596	LOG	Server <---------- DUT
0:09:47.024594	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 017f, FOpts:), FPort: 00, FRMPayload: 0350070000), MIC: fa738427)
0:09:47.027592	LOG	PULL_RESP: Protocol version = 02, Token = 6d77, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3427575388, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAfwEAeOSJ94j6c4Qn'}}
0:09:47.028592	LOG	Server ----------> DUT
0:09:47.032589	LOG	TX_ACK: 02 6d77 05 aa555a0000240409
0:09:48.079994	LOG	PULL_DATA: 02 01d6 02 aa555a0000240409
0:09:48.081994	LOG	PULL_ACK: 02 01d6 04
0:09:52.427529	LOG	PUSH_ACK: 02 029d 01
0:09:52.430528	LOG	PUSH_DATA: Protocol version = 02, Token = 029d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3430961070, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCrwEDBwF9N+VOVRY='}]}
0:09:52.432526	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01af, FOpts: 0307), FPort: 01, FRMPayload: 004c, MIC: e54e5516)
0:09:52.433526	LOG	Server <---------- DUT
0:09:52.436524	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:09:52.437524	LOG	Command Answer: 0307
0:09:52.457512	LOG	MAC command communication completed
0:09:52.462510	LOG	Check number of uplinks repetitions process starts
0:09:58.170272	LOG	PULL_DATA: 02 e5f2 02 aa555a0000240409
0:09:58.172271	LOG	PULL_ACK: 02 e5f2 04
0:10:02.399873	LOG	PUSH_ACK: 02 029e 01
0:10:02.401872	LOG	PUSH_DATA: Protocol version = 02, Token = 029e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3440961150, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAsAEBYEz4JRAd'}]}
0:10:02.403872	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01b0, FOpts:), FPort: 01, FRMPayload: 004c, MIC: f825101d)
0:10:02.404872	LOG	Server <---------- DUT
0:10:02.406871	LOG	Expected repetitions of uplink message have been received
0:10:02.409869	LOG	Check number of uplinks repetitions process starts
0:10:07.389043	LOG	PUSH_ACK: 02 029f 01
0:10:07.391042	LOG	PUSH_DATA: Protocol version = 02, Token = 029f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3445963750, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAsQEBo7K757Fk'}]}
0:10:07.393041	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01b1, FOpts:), FPort: 01, FRMPayload: 004c, MIC: bbe7b164)
0:10:07.394040	LOG	Server <---------- DUT
0:10:07.398038	LOG	Expected repetitions of uplink message have been received
0:10:07.402035	LOG	Send LinkADRReq process starts
0:10:08.260548	LOG	PULL_DATA: 02 d6f6 02 aa555a0000240409
0:10:08.265546	LOG	PULL_ACK: 02 d6f6 04
0:10:12.430185	LOG	PUSH_ACK: 02 02a0 01
0:10:12.431184	LOG	PUSH_DATA: Protocol version = 02, Token = 02a0, Identifier = 00, JSON = {'rxpk': [{'tmst': 3450966358, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAsgEBCpfhb0vR'}]}
0:10:12.433182	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01b2, FOpts:), FPort: 01, FRMPayload: 004c, MIC: e16f4bd1)
0:10:12.434181	LOG	Server <---------- DUT

0:10:12.437180	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0180, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 9a327acb)
0:10:12.444176	LOG	PULL_RESP: Protocol version = 02, Token = e8ed, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3452966358, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAgAEAc4AJxvqaMnrL'}}
0:10:12.446174	LOG	Server ----------> DUT
0:10:12.449175	LOG	TX_ACK: 02 e8ed 05 aa555a0000240409
0:10:17.424350	LOG	PUSH_ACK: 02 02a2 01
0:10:17.428352	LOG	PUSH_DATA: Protocol version = 02, Token = 02a2, Identifier = 00, JSON = {'rxpk': [{'tmst': 3455974094, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCswEDBwHk7tDBCr4='}]}
0:10:17.429349	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01b3, FOpts: 0307), FPort: 01, FRMPayload: 004c, MIC: d0c10abe)
0:10:17.431373	LOG	Server <---------- DUT
0:10:17.432347	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:10:17.434351	LOG	Command Answer: 0307
0:10:17.443341	LOG	MAC command communication completed
0:10:17.446344	LOG	End Test Step: Redundancy
0:10:17.456333	LOG	Partial Verdict: PASS
0:10:17.460330	LOG	==========
0:10:17.466327	LOG	==========
0:10:17.474323	LOG	Start Test Step: Successful LinkADRReq commands block
0:10:17.490313	LOG	Send MAC command block process starts
0:10:18.319843	LOG	PULL_DATA: 02 7d3e 02 aa555a0000240409
0:10:18.321841	LOG	PULL_ACK: 02 7d3e 04
0:10:27.398693	LOG	PUSH_ACK: 02 02a3 01
0:10:27.401692	LOG	PUSH_DATA: Protocol version = 02, Token = 02a3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3465974190, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAtAEBz98IyZvS'}]}
0:10:27.402691	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01b4, FOpts:), FPort: 01, FRMPayload: 004c, MIC: 08c99bd2)
0:10:27.404690	LOG	Server <---------- DUT
0:10:27.406689	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0181, FOpts:), FPort: 00, FRMPayload: 03010000000344010000033100006 1), MIC: 324aac52)
0:10:27.409688	LOG	PULL_RESP: Protocol version = 02, Token = 12b4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3467974190, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 28, 'data': 'YCAgICAAgQEAdJ4q2htKnlDsQfa306V7MkqsUg=='}}
0:10:27.411686	LOG	Server ----------> DUT
0:10:27.415683	LOG	TX_ACK: 02 12b4 05 aa555a0000240409
0:10:28.460203	LOG	PULL_DATA: 02 c516 02 aa555a0000240409
0:10:28.462202	LOG	PULL_ACK: 02 c516 04
0:10:32.590865	LOG	PUSH_ACK: 02 02a4 01
0:10:32.594862	LOG	PUSH_DATA: Protocol version = 02, Token = 02a4, Identifier = 00, JSON = {'rxpk': [{'tmst': 3471115884, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 13.0, 'rssi': -7, 'size': 21, 'data': 'QCAgICCGtQEDBwMHAwcB1ZKQUA07'}]}
0:10:32.598860	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 86, FCnt: 01b5, FOpts: 030703070307), FPort: 01, FRMPayload: 004c, MIC: 90500d3b)
0:10:32.602858	LOG	Server <---------- DUT

0:10:32.606854	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:10:32.607853	LOG	Command Answer: 030703070307
0:10:32.693805	LOG	MAC command communication completed
0:10:32.696803	LOG	Receive frame on specific channels process starts
0:10:32.706797	LOG	Attempt 1/15
0:10:38.539488	LOG	PULL_DATA: 02 8e21 02 aa555a0000240409
0:10:38.544486	LOG	PULL_ACK: 02 8e21 04
0:10:48.619771	LOG	PULL_DATA: 02 2e2d 02 aa555a0000240409
0:10:48.620770	LOG	PULL_ACK: 02 2e2d 04
0:10:52.547543	LOG	PUSH_ACK: 02 02a6 01
0:10:52.548543	LOG	PUSH_DATA: Protocol version = 02, Token = 02a6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3491105812, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICCAtgEBksmbskYe'}]}
0:10:52.550541	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01b6, FOpts:), FPort: 01, FRMPayload: 004c, MIC: 9bb2461e)
0:10:52.551541	LOG	Server <---------- DUT
0:10:52.553540	LOG	Attempt 2/15
0:10:58.700057	LOG	PULL_DATA: 02 af02 02 aa555a0000240409
0:10:58.702053	LOG	PULL_ACK: 02 af02 04
0:11:08.779355	LOG	PULL_DATA: 02 c6b9 02 aa555a0000240409
0:11:08.783334	LOG	PULL_ACK: 02 c6b9 04
0:11:12.587176	LOG	PUSH_ACK: 02 02a7 01
0:11:12.589175	LOG	PUSH_DATA: Protocol version = 02, Token = 02a7, Identifier = 00, JSON = {'rxpk': [{'tmst': 3511116292, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAtwEB1H37awa3'}]}
0:11:12.591174	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01b7, FOpts:), FPort: 01, FRMPayload: 004c, MIC: fb6b06b7)
0:11:12.592174	LOG	Server <---------- DUT
0:11:12.594173	LOG	Attempt 3/15
0:11:18.860622	LOG	PULL_DATA: 02 63c9 02 aa555a0000240409
0:11:18.863621	LOG	PULL_ACK: 02 63c9 04
0:11:28.939901	LOG	PULL_DATA: 02 8a1f 02 aa555a0000240409
0:11:28.941900	LOG	PULL_ACK: 02 8a1f 04
0:11:32.596828	LOG	PUSH_ACK: 02 02aa 01
0:11:32.598828	LOG	PUSH_DATA: Protocol version = 02, Token = 02aa, Identifier = 00, JSON = {'rxpk': [{'tmst': 3531126764, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAuAEBD6qweIOB'}]}
0:11:32.600826	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01b8, FOpts:), FPort: 01, FRMPayload: 004c, MIC: b0788381)
0:11:32.601855	LOG	Server <---------- DUT
0:11:32.603830	LOG	Attempt 4/15
0:11:39.019184	LOG	PULL_DATA: 02 7097 02 aa555a0000240409
0:11:39.024181	LOG	PULL_ACK: 02 7097 04
0:11:49.099486	LOG	PULL_DATA: 02 de0c 02 aa555a0000240409
0:11:49.100468	LOG	PULL_ACK: 02 de0c 04
0:11:52.599483	LOG	PUSH_ACK: 02 02ad 01
0:11:52.605479	LOG	PUSH_DATA: Protocol version = 02, Token = 02ad, Identifier = 00, JSON = {'rxpk': [{'tmst': 3551137236, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAuQEB5+lU0Nxp'}]}
0:11:52.606482	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01b9, FOpts:), FPort: 01, FRMPayload: 004c, MIC: 54d0dc69)

0:11:52.607484	LOG	Server <---------- DUT
0:11:52.611476	LOG	Receive frame on specific channels process tested successfully
0:11:52.616473	LOG	Send LinkADRReq process starts
0:11:59.179749	LOG	PULL_DATA: 02 5689 02 aa555a0000240409
0:11:59.183748	LOG	PULL_ACK: 02 5689 04
0:12:09.259031	LOG	PULL_DATA: 02 1a2b 02 aa555a0000240409
0:12:09.264028	LOG	PULL_ACK: 02 1a2b 04
0:12:12.594139	LOG	PUSH_ACK: 02 02ae 01
0:12:12.596138	LOG	PUSH_DATA: Protocol version = 02, Token = 02ae, Identifier = 00, JSON = {'rxpk': [{'tmst': 3571147708, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAugEBBz8HSCDz'}]}
0:12:12.598137	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ba, FOpts:), FPort: 01, FRMPayload: 004c, MIC: 074820f3)
0:12:12.600138	LOG	Server <---------- DUT
0:12:12.602135	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0182, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 532ce996)
0:12:12.605134	LOG	PULL_RESP: Protocol version = 02, Token = 3434, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3573147708, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAggEAm9YTuURTLOmW'}}
0:12:12.607132	LOG	Server ----------> DUT
0:12:12.612130	LOG	TX_ACK: 02 3434 05 aa555a0000240409
0:12:19.329319	LOG	PULL_DATA: 02 211b 02 aa555a0000240409
0:12:19.330318	LOG	PULL_ACK: 02 211b 04
0:12:29.409602	LOG	PULL_DATA: 02 0107 02 aa555a0000240409
0:12:29.411600	LOG	PULL_ACK: 02 0107 04
0:12:32.506844	LOG	PUSH_ACK: 02 02b2 01
0:12:32.510842	LOG	PUSH_DATA: Protocol version = 02, Token = 02b2, Identifier = 00, JSON = {'rxpk': [{'tmst': 3591044787, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCuwEDBwHTEaGqHsk='}]}
0:12:32.513840	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01bb, FOpts: 0307), FPort: 01, FRMPayload: 004c, MIC: a1aa1ec9)
0:12:32.516839	LOG	Server <---------- DUT
0:12:32.518838	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:12:32.519838	LOG	Command Answer: 0307
0:12:32.528833	LOG	MAC command communication completed
0:12:32.533830	LOG	End Test Step: Successful LinkADRReq commands block
0:12:32.538826	LOG	Partial Verdict: PASS
0:12:32.545823	LOG	==========
0:12:32.551819	LOG	==========
0:12:32.553819	LOG	Start Test Step: Unsuccessful LinkADRReq commands block
0:12:32.565811	LOG	Send MAC command block process starts
0:12:39.489202	LOG	PULL_DATA: 02 0dd8 02 aa555a0000240409
0:12:39.494200	LOG	PULL_ACK: 02 0dd8 04
0:12:42.479508	LOG	PUSH_ACK: 02 02b3 01
0:12:42.484504	LOG	PUSH_DATA: Protocol version = 02, Token = 02b3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3601044883, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAvAEBd4S/I0z8'}]}
0:12:42.485505	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01bc, FOpts:), FPort: 01, FRMPayload: 004c, MIC: bf234cfc)
0:12:42.486504	LOG	Server <---------- DUT

0:12:42.488502	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0183, FOpts:), FPort: 00, FRMPayload: 034401000003310000610350000001), MIC: 2da71bd0)
0:12:42.493499	LOG	PULL_RESP: Protocol version = 02, Token = cb2c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3603044883, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 28, 'data': 'YCAgICAAgwEALpfzvAu+WcToEf0FPDemLacb0A=='}}
0:12:42.496497	LOG	Server ----------> DUT
0:12:42.499495	LOG	TX_ACK: 02 cb2c 05 aa555a0000240409
0:12:47.515774	LOG	PUSH_ACK: 02 02b5 01
0:12:47.517770	LOG	PUSH_DATA: Protocol version = 02, Token = 02b5, Identifier = 00, JSON = {'rxpk': [{'tmst': 3606057806, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 21, 'data': 'QCAgICCGvQEDBAMEAwQB8Cb5J5uZ'}]}
0:12:47.519769	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 86, FCnt: 01bd, FOpts: 030403040304), FPort: 01, FRMPayload: 004c, MIC: f9279b99)
0:12:47.520768	LOG	Server <---------- DUT
0:12:47.521766	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:12:47.522768	LOG	Command Answer: 030403040304
0:12:47.620710	LOG	MAC command communication completed
0:12:47.624708	LOG	End Test Step: Unsuccessful LinkADRReq commands block
0:12:47.629707	LOG	Partial Verdict: PASS
0:12:47.635703	LOG	==========
0:12:47.641700	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_012_A
0:12:47.643698	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_012_B	
Verdict	PASS	
Date	2021-10-18 13:59:43	
Comments	LinkADRReq MAC command (Part 2)	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	SF7BW250 Frequency	868.100
	FSK Frequency	868.100
	Addition of a single channel frequency	867.700
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.013950	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_012_B
0:00:00.047930	LOG	==========
0:00:00.049929	LOG	Start Test Step: Device activation
0:00:00.104898	LOG	Activation process has finished successfully
0:00:00.107896	LOG	Data stored in the DUT after Activation:
0:00:00.110894	LOG	DevAddr: 20202020
0:00:00.112894	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.115891	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.117891	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.121888	LOG	End Test Step: Device activation

0:00:00.126886	LOG	Partial Verdict: PASS
0:00:00.131883	LOG	==========
0:00:00.137879	LOG	==========
0:00:00.140878	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.153870	LOG	DUT Pre-condition activation process starts
0:00:00.157867	LOG	DUT Pre-condition activation completed
0:00:00.161866	LOG	End Test Step: DUT Pre-condition settings
0:00:00.165863	LOG	Partial Verdict: PASS
0:00:00.170860	LOG	==========
0:00:00.176857	LOG	==========
0:00:00.178856	LOG	Start Test Step: Data Rate Decay for all devices
0:00:00.187851	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:00:06.368344	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:08.596117	LOG	PULL_DATA: 02 16c2 02 aa555a0000240409
0:00:08.598115	LOG	PULL_ACK: 02 16c2 04
0:00:08.599114	LOG	First PULL_DATA received
0:00:11.358549	LOG	PUSH_ACK: 02 02b7 01
0:00:11.361547	LOG	PUSH_DATA: Protocol version = 02, Token = 02b7, Identifier = 00, JSON = {'rxpk': [{'tmst': 3621055318, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAvwEBLVp6QxZL'}]}
0:00:11.362547	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01bf, FOpts:), FPort: 01, FRMPayload: 004c, MIC: 7a43164b)
0:00:11.364546	LOG	Server <---------- DUT
0:00:11.366545	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0184, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 39037f5e)
0:00:11.368544	LOG	Frame command sent to the DUT
0:00:11.370542	LOG	PULL_RESP: Protocol version = 02, Token = a05e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3623055318, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAhAHg7vU5A39e'}}
0:00:11.371544	LOG	Server ----------> DUT
0:00:11.376539	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:00:11.380536	LOG	Send NewChannelReq process starts
0:00:16.363805	LOG	PUSH_ACK: 02 02b8 01
0:00:16.365804	LOG	PUSH_DATA: Protocol version = 02, Token = 02b8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3626057897, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAwAEB0QAZSFmc'}]}
0:00:16.366802	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c0, FOpts:), FPort: 01, FRMPayload: 004d, MIC: 1948599c)
0:00:16.367801	LOG	Server <---------- DUT
0:00:16.370800	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0185, FOpts:), FPort: 00, FRMPayload: 070388668450), MIC: d294f15b)
0:00:16.373799	LOG	PULL_RESP: Protocol version = 02, Token = 3aa9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3628057897, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAhQEAtGcnPCKr0pTxWw=='}}
0:00:16.374799	LOG	Server ----------> DUT
0:00:16.377795	LOG	TX_ACK: 02 3aa9 05 aa555a0000240409
0:00:18.686486	LOG	PULL_DATA: 02 a1a4 02 aa555a0000240409
0:00:18.688485	LOG	PULL_ACK: 02 a1a4 04
0:00:21.378004	LOG	PUSH_ACK: 02 02ba 01
0:00:21.381004	LOG	PUSH_DATA: Protocol version = 02, Token = 02ba, Identifier = 00, JSON = {'rxpk': [{'tmst': 3631065660, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCwQEHAwHzel/UGNk='}]}
0:00:21.382002	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01c1, FOpts: 0703), FPort: 01, FRMPayload: 004d, MIC: 5fd418d9)
0:00:21.384001	LOG	Server <---------- DUT
0:00:21.385001	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:21.387000	LOG	Command Answer: 0703
0:00:21.392998	LOG	MAC command communication completed
0:00:21.397993	LOG	Send LinkADRReq process starts
0:00:26.376169	LOG	PUSH_ACK: 02 02bc 01
0:00:26.379167	LOG	PUSH_DATA: Protocol version = 02, Token = 02bc, Identifier = 00, JSON = {'rxpk': [{'tmst': 3636063139, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAwgEBwnkwoLKh'}]}
0:00:26.381166	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c2, FOpts:), FPort: 01, FRMPayload: 004d, MIC: 30a0b2a1)
0:00:26.383166	LOG	Server <---------- DUT
0:00:26.385164	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0186, FOpts:), FPort: 00, FRMPayload: 0351080002), MIC: 3f73d5bb)
0:00:26.389162	LOG	PULL_RESP: Protocol version = 02, Token = 0914, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3638063139, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAhgEAKuWucUA/c9W7'}}
0:00:26.391160	LOG	Server ----------> DUT
0:00:26.394159	LOG	TX_ACK: 02 0914 05 aa555a0000240409
0:00:28.695852	LOG	PULL_DATA: 02 e3cf 02 aa555a0000240409
0:00:28.697852	LOG	PULL_ACK: 02 e3cf 04
0:00:31.381330	LOG	PUSH_ACK: 02 02bd 01
0:00:31.386327	LOG	PUSH_DATA: Protocol version = 02, Token = 02bd, Identifier = 00, JSON = {'rxpk': [{'tmst': 3641070892, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCwwEDBwGclDe8G04='}]}
0:00:31.388325	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01c3, FOpts: 0307), FPort: 01, FRMPayload: 004d, MIC: 37bc1b4e)
0:00:31.390324	LOG	Server <---------- DUT
0:00:31.392323	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:31.394322	LOG	Command Answer: 0307
0:00:31.404316	LOG	MAC command communication completed
0:00:31.409314	LOG	Check number of uplinks repetitions process starts
0:00:33.855926	LOG	PUSH_ACK: 02 02be 01
0:00:33.858924	LOG	PUSH_DATA: Protocol version = 02, Token = 02be, Identifier = 00, JSON = {'rxpk': [{'tmst': 3643509508, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCwwEDBwGclDe8G04='}]}
0:00:33.860923	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 01c3, FOpts: 0307), FPort: 01, FRMPayload: 004d, MIC: 37bc1b4e)
0:00:33.861922	LOG	Server <---------- DUT
0:00:33.863922	LOG	FRMPayload is the same between retransmissions
0:00:33.865920	LOG	Original uplink: 004d
0:00:33.866919	LOG	Actual retransmission: 004d
0:00:33.868918	LOG	FOpts is the same between retransmissions
0:00:33.870917	LOG	Original uplink: 0307
0:00:33.872916	LOG	Actual retransmission: 0307
0:00:33.874915	LOG	FPort is the same between retransmissions

0:00:33.875914	LOG	Original uplink: 01
0:00:33.877913	LOG	Actual retransmission: 01
0:00:36.379494	LOG	PUSH_ACK: 02 02bf 01
0:00:36.383492	LOG	PUSH_DATA: Protocol version = 02, Token = 02bf, Identifier = 00, JSON = {'rxpk': [{'tmst': 3646068372, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAxAEBbA/1/Jsu'}]}
0:00:36.384491	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c4, FOpts:), FPort: 01, FRMPayload: 004d, MIC: f5fc9b2e)
0:00:36.385491	LOG	Server <---------- DUT
0:00:36.389488	LOG	Expected repetitions of uplink message have been received
0:00:36.393486	LOG	Check previous uplink data rate process starts
0:00:36.397484	LOG	Uplink received with expected Data Rate
0:00:36.399483	LOG	Sending an EchoPayloadReq CP command to restart the ADRACKCnt in DUT
0:00:36.402481	LOG	Send Test Command EchoPayloadReq process starts
0:00:38.776135	LOG	PULL_DATA: 02 d292 02 aa555a0000240409
0:00:38.778134	LOG	PULL_ACK: 02 d292 04
0:00:38.803120	LOG	PUSH_ACK: 02 02c1 01
0:00:38.805118	LOG	PUSH_DATA: Protocol version = 02, Token = 02c1, Identifier = 00, JSON = {'rxpk': [{'tmst': 3648501828, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAxAEBbA/1/Jsu'}]}
0:00:38.806117	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c4, FOpts:), FPort: 01, FRMPayload: 004d, MIC: f5fc9b2e)
0:00:38.808116	LOG	Server <---------- DUT
0:00:38.810115	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0187, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: 925f534c)
0:00:38.813114	LOG	Frame command sent to the DUT
0:00:38.815113	LOG	PULL_RESP: Protocol version = 02, Token = 8298, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3650501828, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAhwHgS5nQNJJfU0w='}}
0:00:38.816112	LOG	Server ----------> DUT
0:00:38.820110	LOG	TX_ACK: 02 8298 05 aa555a0000240409
0:00:46.431791	LOG	PUSH_ACK: 02 02c3 01
0:00:46.433790	LOG	PUSH_DATA: Protocol version = 02, Token = 02c3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3656081839, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCAxQHgpnMtjS5vB0M='}]}
0:00:46.435789	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c5, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: 2e6f0743)
0:00:46.436789	LOG	Server <---------- DUT
0:00:46.438788	LOG	Answer in payload: 0b0c0d
0:00:46.440788	LOG	Frame Command Payload in the Answer: 080b0c0d
0:00:46.444803	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:46.447782	LOG	Send Test Command EchoPayloadReq process completed
0:00:46.452780	LOG	ADRACKReq bit is disabled
0:00:46.455778	LOG	ADRACKReq bit from DUT tested successfully
0:00:46.459775	LOG	Test adaptive data rate control in frame header process starts
0:00:48.851419	LOG	PUSH_ACK: 02 02c4 01
0:00:48.853417	LOG	PUSH_DATA: Protocol version = 02, Token = 02c4, Identifier = 00, JSON = {'rxpk': [{'tmst': 3658520455, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 17, 'data': 'QCAgICCAxQHgpnMtjS5vB0M='}]}
0:00:48.855416	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c5, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: 2e6f0743)

0:00:48.879403	LOG	Server <---------- DUT
0:00:48.881402	LOG	Repeated frame. It does not count
0:00:48.896393	LOG	PULL_DATA: 02 d298 02 aa555a0000240409
0:00:48.898392	LOG	PULL_ACK: 02 d298 04
0:00:51.426958	LOG	PUSH_ACK: 02 02c5 01
0:00:51.428956	LOG	PUSH_DATA: Protocol version = 02, Token = 02c5, Identifier = 00, JSON = {'rxpk': [{'tmst': 3661076207, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAxgEBTKMib+dL'}]}
0:00:51.430955	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 226fe74b)
0:00:51.431955	LOG	Server <---------- DUT
0:00:51.432954	LOG	Count = 2
0:00:53.849583	LOG	PUSH_ACK: 02 02c6 01
0:00:53.851582	LOG	PUSH_DATA: Protocol version = 02, Token = 02c6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3663509687, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAxgEBTKMib+dL'}]}
0:00:53.853581	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 226fe74b)
0:00:53.855580	LOG	Server <---------- DUT
0:00:53.856579	LOG	Repeated frame. It does not count
0:00:56.389144	LOG	PUSH_ACK: 02 02c8 01
0:00:56.391143	LOG	PUSH_DATA: Protocol version = 02, Token = 02c8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3666078831, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAxwEB6/UMZ1GF'}]}
0:00:56.392141	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0c675185)
0:00:56.394141	LOG	Server <---------- DUT
0:00:56.395140	LOG	Count = 3
0:00:58.861740	LOG	PUSH_ACK: 02 02c9 01
0:00:58.863739	LOG	PUSH_DATA: Protocol version = 02, Token = 02c9, Identifier = 00, JSON = {'rxpk': [{'tmst': 3668512335, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAxwEB6/UMZ1GF'}]}
0:00:58.865737	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0c675185)
0:00:58.867737	LOG	Server <---------- DUT
0:00:58.870735	LOG	Repeated frame. It does not count
0:00:58.975693	LOG	PULL_DATA: 02 4b35 02 aa555a0000240409
0:00:58.977691	LOG	PULL_ACK: 02 4b35 04
0:01:01.386307	LOG	PUSH_ACK: 02 02ca 01
0:01:01.388307	LOG	PUSH_DATA: Protocol version = 02, Token = 02ca, Identifier = 00, JSON = {'rxpk': [{'tmst': 3671081463, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAyAEB/jWZIqeq'}]}
0:01:01.390305	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9922a7aa)
0:01:01.391304	LOG	Server <---------- DUT
0:01:01.392304	LOG	Count = 4
0:01:03.859904	LOG	PUSH_ACK: 02 02cb 01
0:01:03.864901	LOG	PUSH_DATA: Protocol version = 02, Token = 02cb, Identifier = 00, JSON = {'rxpk': [{'tmst': 3673514959, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAyAEB/jWZIqeq'}]}

0:01:03.865901	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9922a7aa)
0:01:03.867899	LOG	Server <---------- DUT
0:01:03.869898	LOG	Repeated frame. It does not count
0:01:06.386471	LOG	PUSH_ACK: 02 02cc 01
0:01:06.389469	LOG	PUSH_DATA: Protocol version = 02, Token = 02cc, Identifier = 00, JSON = {'rxpk': [{'tmst': 3676084087, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAyQEBef93Q2iR'}]}
0:01:06.390468	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 77436891)
0:01:06.392467	LOG	Server <---------- DUT
0:01:06.393467	LOG	Count = 5
0:01:08.861067	LOG	PUSH_ACK: 02 02cd 01
0:01:08.863066	LOG	PUSH_DATA: Protocol version = 02, Token = 02cd, Identifier = 00, JSON = {'rxpk': [{'tmst': 3678517575, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAyQEBef93Q2iR'}]}
0:01:08.865064	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01c9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 77436891)
0:01:08.866064	LOG	Server <---------- DUT
0:01:08.868063	LOG	Repeated frame. It does not count
0:01:09.055956	LOG	PULL_DATA: 02 61d5 02 aa555a0000240409
0:01:09.057955	LOG	PULL_ACK: 02 61d5 04
0:01:11.437605	LOG	PUSH_ACK: 02 02ce 01
0:01:11.438604	LOG	PUSH_DATA: Protocol version = 02, Token = 02ce, Identifier = 00, JSON = {'rxpk': [{'tmst': 3681086711, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAygEBsaV+X/b/'}]}
0:01:11.440603	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ca, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7e5ff6ff)
0:01:11.441603	LOG	Server <---------- DUT
0:01:11.442602	LOG	Count = 6
0:01:13.857232	LOG	PUSH_ACK: 02 02cf 01
0:01:13.859231	LOG	PUSH_DATA: Protocol version = 02, Token = 02cf, Identifier = 00, JSON = {'rxpk': [{'tmst': 3683520199, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAygEBsaV+X/b/'}]}
0:01:13.861230	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ca, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7e5ff6ff)
0:01:13.863229	LOG	Server <---------- DUT
0:01:13.864228	LOG	Repeated frame. It does not count
0:01:16.433771	LOG	PUSH_ACK: 02 02d0 01
0:01:16.435769	LOG	PUSH_DATA: Protocol version = 02, Token = 02d0, Identifier = 00, JSON = {'rxpk': [{'tmst': 3686089335, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAywEBx3XyWEh0'}]}
0:01:16.436769	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01cb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f2584874)
0:01:16.438769	LOG	Server <---------- DUT
0:01:16.440767	LOG	Count = 7
0:01:18.854983	LOG	PUSH_ACK: 02 02d1 01
0:01:18.856982	LOG	PUSH_DATA: Protocol version = 02, Token = 02d1, Identifier = 00, JSON = {'rxpk': [{'tmst': 3688522815, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAywEBx3XyWEh0'}]}

0:01:18.858981	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01cb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f2584874)
0:01:18.860980	LOG	Server <---------- DUT
0:01:18.862979	LOG	Repeated frame. It does not count
0:01:19.145819	LOG	PULL_DATA: 02 55d1 02 aa555a0000240409
0:01:19.147817	LOG	PULL_ACK: 02 55d1 04
0:01:21.430523	LOG	PUSH_ACK: 02 02d2 01
0:01:21.432522	LOG	PUSH_DATA: Protocol version = 02, Token = 02d2, Identifier = 00, JSON = {'rxpk': [{'tmst': 3691091959, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAzAEBoemqBPfC'}]}
0:01:21.434520	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01cc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: aa04f7c2)
0:01:21.435520	LOG	Server <---------- DUT
0:01:21.436521	LOG	Count = 8
0:01:23.852149	LOG	PUSH_ACK: 02 02d3 01
0:01:23.854148	LOG	PUSH_DATA: Protocol version = 02, Token = 02d3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3693525471, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAzAEBoemqBPfC'}]}
0:01:23.856146	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01cc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: aa04f7c2)
0:01:23.857146	LOG	Server <---------- DUT
0:01:23.859145	LOG	Repeated frame. It does not count
0:01:26.436682	LOG	PUSH_ACK: 02 02d5 01
0:01:26.438681	LOG	PUSH_DATA: Protocol version = 02, Token = 02d5, Identifier = 00, JSON = {'rxpk': [{'tmst': 3696094591, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAzQEB0DGuejN6'}]}
0:01:26.439682	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01cd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ae7a337a)
0:01:26.440682	LOG	Server <---------- DUT
0:01:26.442679	LOG	Count = 9
0:01:28.855423	LOG	PUSH_ACK: 02 02d6 01
0:01:28.858422	LOG	PUSH_DATA: Protocol version = 02, Token = 02d6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3698528079, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAzQEB0DGuejN6'}]}
0:01:28.859420	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01cd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ae7a337a)
0:01:28.861418	LOG	Server <---------- DUT
0:01:28.863418	LOG	Repeated frame. It does not count
0:01:29.226213	LOG	PULL_DATA: 02 6c33 02 aa555a0000240409
0:01:29.228212	LOG	PULL_ACK: 02 6c33 04
0:01:31.429962	LOG	PUSH_ACK: 02 02d7 01
0:01:31.431961	LOG	PUSH_DATA: Protocol version = 02, Token = 02d7, Identifier = 00, JSON = {'rxpk': [{'tmst': 3701097215, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAzgEB0IEK7GI7'}]}
0:01:31.432959	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ce, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0aec623b)
0:01:31.434959	LOG	Server <---------- DUT
0:01:31.436957	LOG	Count = 10
0:01:33.849589	LOG	PUSH_ACK: 02 02d8 01
0:01:33.851587	LOG	PUSH_DATA: Protocol version = 02, Token = 02d8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3703530735, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAzgEB0IEK7GI7'}]}
0:01:33.855585	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ce, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0aec623b)
0:01:33.857584	LOG	Server <---------- DUT
0:01:33.859583	LOG	Repeated frame. It does not count
0:01:36.423170	LOG	PUSH_ACK: 02 02d9 01
0:01:36.428167	LOG	PUSH_DATA: Protocol version = 02, Token = 02d9, Identifier = 00, JSON = {'rxpk': [{'tmst': 3706099839, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAzwEB16TwFfrq'}]}
0:01:36.430166	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01cf, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f015faea)
0:01:36.432165	LOG	Server <---------- DUT
0:01:36.434163	LOG	Count = 11
0:01:38.845795	LOG	PUSH_ACK: 02 02da 01
0:01:38.848794	LOG	PUSH_DATA: Protocol version = 02, Token = 02da, Identifier = 00, JSON = {'rxpk': [{'tmst': 3708533327, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAzwEB16TwFfrq'}]}
0:01:38.849793	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01cf, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f015faea)
0:01:38.851792	LOG	Server <---------- DUT
0:01:38.854790	LOG	Repeated frame. It does not count
0:01:39.305534	LOG	PULL_DATA: 02 ddc2 02 aa555a0000240409
0:01:39.307533	LOG	PULL_ACK: 02 ddc2 04
0:01:41.419335	LOG	PUSH_ACK: 02 02db 01
0:01:41.422335	LOG	PUSH_DATA: Protocol version = 02, Token = 02db, Identifier = 00, JSON = {'rxpk': [{'tmst': 3711102463, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA0AEBE7PEAX82'}]}
0:01:41.423333	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c4017f36)
0:01:41.424332	LOG	Server <---------- DUT
0:01:41.425332	LOG	Count = 12
0:01:43.839962	LOG	PUSH_ACK: 02 02dc 01
0:01:43.841961	LOG	PUSH_DATA: Protocol version = 02, Token = 02dc, Identifier = 00, JSON = {'rxpk': [{'tmst': 3713535951, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA0AEBE7PEAX82'}]}
0:01:43.843960	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c4017f36)
0:01:43.845958	LOG	Server <---------- DUT
0:01:43.847958	LOG	Repeated frame. It does not count
0:01:46.413729	LOG	PUSH_ACK: 02 02dd 01
0:01:46.415728	LOG	PUSH_DATA: Protocol version = 02, Token = 02dd, Identifier = 00, JSON = {'rxpk': [{'tmst': 3716105079, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA0QEBhwbKiZyR'}]}
0:01:46.417726	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ca899c91)
0:01:46.419725	LOG	Server <---------- DUT
0:01:46.421725	LOG	Count = 13
0:01:48.885327	LOG	PUSH_ACK: 02 02de 01
0:01:48.888325	LOG	PUSH_DATA: Protocol version = 02, Token = 02de, Identifier = 00, JSON = {'rxpk': [{'tmst': 3718538559, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA0QEBhwbKiZyR'}]}
0:01:48.890324	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ca899c91)
0:01:48.891323	LOG	Server <---------- DUT
0:01:48.893322	LOG	Repeated frame. It does not count
0:01:49.386128	LOG	PULL_DATA: 02 bcf7 02 aa555a0000240409
0:01:49.388128	LOG	PULL_ACK: 02 bcf7 04
0:01:51.408950	LOG	PUSH_ACK: 02 02df 01
0:01:51.409949	LOG	PUSH_DATA: Protocol version = 02, Token = 02df, Identifier = 00, JSON = {'rxpk': [{'tmst': 3721107679, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA0gEBmsMt/UDw'}]}
0:01:51.411949	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2dfd40f0)
0:01:51.413948	LOG	Server <---------- DUT
0:01:51.414947	LOG	Count = 14
0:01:53.878579	LOG	PUSH_ACK: 02 02e0 01
0:01:53.881578	LOG	PUSH_DATA: Protocol version = 02, Token = 02e0, Identifier = 00, JSON = {'rxpk': [{'tmst': 3723541135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA0gEBmsMt/UDw'}]}
0:01:53.882577	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2dfd40f0)
0:01:53.884577	LOG	Server <---------- DUT
0:01:53.886575	LOG	Repeated frame. It does not count
0:01:56.416110	LOG	PUSH_ACK: 02 02e2 01
0:01:56.419108	LOG	PUSH_DATA: Protocol version = 02, Token = 02e2, Identifier = 00, JSON = {'rxpk': [{'tmst': 3726110303, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA0wEBTczYfmha'}]}
0:01:56.420108	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d87e685a)
0:01:56.422106	LOG	Server <---------- DUT
0:01:56.424105	LOG	Count = 15
0:01:58.887778	LOG	PUSH_ACK: 02 02e3 01
0:01:58.890777	LOG	PUSH_DATA: Protocol version = 02, Token = 02e3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3728543783, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA0wEBTczYfmha'}]}
0:01:58.892776	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d87e685a)
0:01:58.893775	LOG	Server <---------- DUT
0:01:58.895774	LOG	Repeated frame. It does not count
0:01:59.465450	LOG	PULL_DATA: 02 edde 02 aa555a0000240409
0:01:59.468449	LOG	PULL_ACK: 02 edde 04
0:02:01.461318	LOG	PUSH_ACK: 02 02e4 01
0:02:01.463324	LOG	PUSH_DATA: Protocol version = 02, Token = 02e4, Identifier = 00, JSON = {'rxpk': [{'tmst': 3731112911, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA1AEBwAiwnDSM'}]}
0:02:01.465316	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b09c348c)
0:02:01.466315	LOG	Server <---------- DUT
0:02:01.467315	LOG	Count = 16
0:02:03.883944	LOG	PUSH_ACK: 02 02e6 01

0:02:03.885943	LOG	PUSH_DATA: Protocol version = 02, Token = 02e6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3733546383, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA1AEBwAiwnDSM'}]}
0:02:03.888941	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b09c348c)
0:02:03.891940	LOG	Server <---------- DUT
0:02:03.892939	LOG	Repeated frame. It does not count
0:02:06.457484	LOG	PUSH_ACK: 02 02e7 01
0:02:06.462482	LOG	PUSH_DATA: Protocol version = 02, Token = 02e7, Identifier = 00, JSON = {'rxpk': [{'tmst': 3736115535, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA1QEByd1v4MfE'}]}
0:02:06.463482	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6fe0c7c4)
0:02:06.464482	LOG	Server <---------- DUT
0:02:06.465481	LOG	Count = 17
0:02:08.880110	LOG	PUSH_ACK: 02 02e8 01
0:02:08.882109	LOG	PUSH_DATA: Protocol version = 02, Token = 02e8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3738549023, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA1QEByd1v4MfE'}]}
0:02:08.884107	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6fe0c7c4)
0:02:08.886106	LOG	Server <---------- DUT
0:02:08.887105	LOG	Repeated frame. It does not count
0:02:09.545733	LOG	PULL_DATA: 02 13ef 02 aa555a0000240409
0:02:09.547731	LOG	PULL_ACK: 02 13ef 04
0:02:11.453650	LOG	PUSH_ACK: 02 02e9 01
0:02:11.456648	LOG	PUSH_DATA: Protocol version = 02, Token = 02e9, Identifier = 00, JSON = {'rxpk': [{'tmst': 3741118167, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA1gEBA5LiCka/'}]}
0:02:11.457648	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e20a46bf)
0:02:11.459646	LOG	Server <---------- DUT
0:02:11.460646	LOG	Count = 18
0:02:13.875276	LOG	PUSH_ACK: 02 02ea 01
0:02:13.877274	LOG	PUSH_DATA: Protocol version = 02, Token = 02ea, Identifier = 00, JSON = {'rxpk': [{'tmst': 3743551639, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA1gEBA5LiCka/'}]}
0:02:13.879273	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e20a46bf)
0:02:13.881272	LOG	Server <---------- DUT
0:02:13.883271	LOG	Repeated frame. It does not count
0:02:16.451814	LOG	PUSH_ACK: 02 02eb 01
0:02:16.453813	LOG	PUSH_DATA: Protocol version = 02, Token = 02eb, Identifier = 00, JSON = {'rxpk': [{'tmst': 3746120783, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA1wEBqQ10CyYA'}]}
0:02:16.455812	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 740b2600)
0:02:16.457811	LOG	Server <---------- DUT
0:02:16.459811	LOG	Count = 19
0:02:18.874440	LOG	PUSH_ACK: 02 02ec 01

0:02:18.876439	LOG	PUSH_DATA: Protocol version = 02, Token = 02ec, Identifier = 00, JSON = {'rxpk': [{'tmst': 3748554295, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA1wEBqQ10CyYA'}]}
0:02:18.878437	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 740b2600)
0:02:18.880436	LOG	Server <---------- DUT
0:02:18.882435	LOG	Repeated frame. It does not count
0:02:19.636008	LOG	PULL_DATA: 02 e520 02 aa555a0000240409
0:02:19.638007	LOG	PULL_ACK: 02 e520 04
0:02:21.450978	LOG	PUSH_ACK: 02 02ed 01
0:02:21.452977	LOG	PUSH_DATA: Protocol version = 02, Token = 02ed, Identifier = 00, JSON = {'rxpk': [{'tmst': 3751123407, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA2AEB2KoEpMvc'}]}
0:02:21.454976	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 04a4cbdc)
0:02:21.456974	LOG	Server <---------- DUT
0:02:21.458973	LOG	Count = 20
0:02:23.872604	LOG	PUSH_ACK: 02 02ee 01
0:02:23.875602	LOG	PUSH_DATA: Protocol version = 02, Token = 02ee, Identifier = 00, JSON = {'rxpk': [{'tmst': 3753556903, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA2AEB2KoEpMvc'}]}
0:02:23.877601	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 04a4cbdc)
0:02:23.878600	LOG	Server <---------- DUT
0:02:23.879600	LOG	Repeated frame. It does not count
0:02:26.459137	LOG	PUSH_ACK: 02 02f0 01
0:02:26.461135	LOG	PUSH_DATA: Protocol version = 02, Token = 02f0, Identifier = 00, JSON = {'rxpk': [{'tmst': 3756126023, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA2QEB503hb45N'}]}
0:02:26.462135	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e16f8e4d)
0:02:26.463134	LOG	Server <---------- DUT
0:02:26.465133	LOG	Count = 21
0:02:28.880851	LOG	PUSH_ACK: 02 02f1 01
0:02:28.882850	LOG	PUSH_DATA: Protocol version = 02, Token = 02f1, Identifier = 00, JSON = {'rxpk': [{'tmst': 3758559495, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA2QEB503hb45N'}]}
0:02:28.884848	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01d9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e16f8e4d)
0:02:28.886847	LOG	Server <---------- DUT
0:02:28.889845	LOG	Repeated frame. It does not count
0:02:29.715377	LOG	PULL_DATA: 02 c7e2 02 aa555a0000240409
0:02:29.717376	LOG	PULL_ACK: 02 c7e2 04
0:02:31.456390	LOG	PUSH_ACK: 02 02f2 01
0:02:31.458389	LOG	PUSH_DATA: Protocol version = 02, Token = 02f2, Identifier = 00, JSON = {'rxpk': [{'tmst': 3761128647, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA2gEBS8gILolP'}]}
0:02:31.460387	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01da, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 082e894f)
0:02:31.461387	LOG	Server <---------- DUT

0:02:31.463385	LOG	Count = 22
0:02:33.878016	LOG	PUSH_ACK: 02 02f3 01
0:02:33.881014	LOG	PUSH_DATA: Protocol version = 02, Token = 02f3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3763562135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA2gEBS8gILolP'}]}
0:02:33.883013	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01da, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 082e894f)
0:02:33.884012	LOG	Server <---------- DUT
0:02:33.886011	LOG	Repeated frame. It does not count
0:02:36.454554	LOG	PUSH_ACK: 02 02f4 01
0:02:36.456553	LOG	PUSH_DATA: Protocol version = 02, Token = 02f4, Identifier = 00, JSON = {'rxpk': [{'tmst': 3766131279, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA2wEB3xrjF9pv'}]}
0:02:36.458552	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01db, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e317da6f)
0:02:36.460551	LOG	Server <---------- DUT
0:02:36.461550	LOG	Count = 23
0:02:38.876180	LOG	PUSH_ACK: 02 02f5 01
0:02:38.881177	LOG	PUSH_DATA: Protocol version = 02, Token = 02f5, Identifier = 00, JSON = {'rxpk': [{'tmst': 3768564759, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA2wEB3xrjF9pv'}]}
0:02:38.883177	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01db, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e317da6f)
0:02:38.884175	LOG	Server <---------- DUT
0:02:38.886175	LOG	Repeated frame. It does not count
0:02:39.795663	LOG	PULL_DATA: 02 abdd 02 aa555a0000240409
0:02:39.797658	LOG	PULL_ACK: 02 abdd 04
0:02:41.454717	LOG	PUSH_ACK: 02 02f6 01
0:02:41.456716	LOG	PUSH_DATA: Protocol version = 02, Token = 02f6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3771133895, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA3AEBewd/lzij'}]}
0:02:41.458715	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01dc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7f9738a3)
0:02:41.460714	LOG	Server <---------- DUT
0:02:41.461713	LOG	Count = 24
0:02:43.877343	LOG	PUSH_ACK: 02 02f7 01
0:02:43.879342	LOG	PUSH_DATA: Protocol version = 02, Token = 02f7, Identifier = 00, JSON = {'rxpk': [{'tmst': 3773567375, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA3AEBewd/lzij'}]}
0:02:43.881340	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01dc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7f9738a3)
0:02:43.882340	LOG	Server <---------- DUT
0:02:43.884339	LOG	Repeated frame. It does not count
0:02:46.453886	LOG	PUSH_ACK: 02 02f8 01
0:02:46.458881	LOG	PUSH_DATA: Protocol version = 02, Token = 02f8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3776136511, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA3QEBgo0OfmjP'}]}
0:02:46.459909	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01dd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0e7e68cf)
0:02:46.460878	LOG	Server <---------- DUT

0:02:46.462877	LOG	Count = 25
0:02:48.877506	LOG	PUSH_ACK: 02 02f9 01
0:02:48.879505	LOG	PUSH_DATA: Protocol version = 02, Token = 02f9, Identifier = 00, JSON = {'rxpk': [{'tmst': 3778570007, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA3QEBgo0OfmjP'}]}
0:02:48.881504	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01dd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0e7e68cf)
0:02:48.883503	LOG	Server <---------- DUT
0:02:48.885502	LOG	Repeated frame. It does not count
0:02:49.875940	LOG	PULL_DATA: 02 a44d 02 aa555a0000240409
0:02:49.877939	LOG	PULL_ACK: 02 a44d 04
0:02:51.453046	LOG	PUSH_ACK: 02 02fa 01
0:02:51.455044	LOG	PUSH_DATA: Protocol version = 02, Token = 02fa, Identifier = 00, JSON = {'rxpk': [{'tmst': 3781139135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA3gEB0VPgM9j6'}]}
0:02:51.456045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01de, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e033d8fa)
0:02:51.458042	LOG	Server <---------- DUT
0:02:51.460041	LOG	Count = 26
0:02:53.874763	LOG	PUSH_ACK: 02 02fb 01
0:02:53.876763	LOG	PUSH_DATA: Protocol version = 02, Token = 02fb, Identifier = 00, JSON = {'rxpk': [{'tmst': 3783572607, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA3gEB0VPgM9j6'}]}
0:02:53.877763	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01de, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e033d8fa)
0:02:53.878762	LOG	Server <---------- DUT
0:02:53.879762	LOG	Repeated frame. It does not count
0:02:56.460295	LOG	PUSH_ACK: 02 02fd 01
0:02:56.464293	LOG	PUSH_DATA: Protocol version = 02, Token = 02fd, Identifier = 00, JSON = {'rxpk': [{'tmst': 3786141759, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA3wEBa2xG7Tmu'}]}
0:02:56.466293	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01df, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 46ed39ae)
0:02:56.467292	LOG	Server <---------- DUT
0:02:56.468293	LOG	Count = 27
0:02:58.883921	LOG	PUSH_ACK: 02 02fe 01
0:02:58.885920	LOG	PUSH_DATA: Protocol version = 02, Token = 02fe, Identifier = 00, JSON = {'rxpk': [{'tmst': 3788575223, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA3wEBa2xG7Tmu'}]}
0:02:58.887919	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01df, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 46ed39ae)
0:02:58.889918	LOG	Server <---------- DUT
0:02:58.892916	LOG	Repeated frame. It does not count
0:02:59.955313	LOG	PULL_DATA: 02 8188 02 aa555a0000240409
0:02:59.957312	LOG	PULL_ACK: 02 8188 04
0:03:01.459461	LOG	PUSH_ACK: 02 02ff 01
0:03:01.461459	LOG	PUSH_DATA: Protocol version = 02, Token = 02ff, Identifier = 00, JSON = {'rxpk': [{'tmst': 3791144383, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA4AEBF1TFCICU'}]}

0:03:01.463458	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c5088094)
0:03:01.464475	LOG	Server <---------- DUT
0:03:01.466458	LOG	Count = 28
0:03:03.881209	LOG	PUSH_ACK: 02 0300 01
0:03:03.883208	LOG	PUSH_DATA: Protocol version = 02, Token = 0300, Identifier = 00, JSON = {'rxpk': [{'tmst': 3793577895, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA4AEBF1TFCICU'}]}
0:03:03.885207	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c5088094)
0:03:03.887206	LOG	Server <---------- DUT
0:03:03.889205	LOG	Repeated frame. It does not count
0:03:06.457747	LOG	PUSH_ACK: 02 0301 01
0:03:06.459746	LOG	PUSH_DATA: Protocol version = 02, Token = 0301, Identifier = 00, JSON = {'rxpk': [{'tmst': 3796146999, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA4QEB29AIf7z3'}]}
0:03:06.461745	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 087fbcf7)
0:03:06.463744	LOG	Server <---------- DUT
0:03:06.465744	LOG	Count = 29
0:03:08.931344	LOG	PUSH_ACK: 02 0302 01
0:03:08.937340	LOG	PUSH_DATA: Protocol version = 02, Token = 0302, Identifier = 00, JSON = {'rxpk': [{'tmst': 3798580519, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA4QEB29AIf7z3'}]}
0:03:08.941339	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 087fbcf7)
0:03:08.945338	LOG	Server <---------- DUT
0:03:08.950333	LOG	Repeated frame. It does not count
0:03:10.035717	LOG	PULL_DATA: 02 1c53 02 aa555a0000240409
0:03:10.037716	LOG	PULL_ACK: 02 1c53 04
0:03:11.458910	LOG	PUSH_ACK: 02 0303 01
0:03:11.461909	LOG	PUSH_DATA: Protocol version = 02, Token = 0303, Identifier = 00, JSON = {'rxpk': [{'tmst': 3801149631, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA4gEBeI/1oqy/'}]}
0:03:11.463907	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f5a2acbf)
0:03:11.464907	LOG	Server <---------- DUT
0:03:11.466906	LOG	Count = 30
0:03:13.932507	LOG	PUSH_ACK: 02 0304 01
0:03:13.935505	LOG	PUSH_DATA: Protocol version = 02, Token = 0304, Identifier = 00, JSON = {'rxpk': [{'tmst': 3803583087, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA4gEBeI/1oqy/'}]}
0:03:13.937504	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f5a2acbf)
0:03:13.938503	LOG	Server <---------- DUT
0:03:13.940502	LOG	Repeated frame. It does not count
0:03:16.458074	LOG	PUSH_ACK: 02 0305 01
0:03:16.460073	LOG	PUSH_DATA: Protocol version = 02, Token = 0305, Identifier = 00, JSON = {'rxpk': [{'tmst': 3806152247, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA4wEBwxeup+Wp'}]}

0:03:16.461072	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: aea7e5a9)
0:03:16.462072	LOG	Server <---------- DUT
0:03:16.464071	LOG	Count = 31
0:03:18.931671	LOG	PUSH_ACK: 02 0306 01
0:03:18.933670	LOG	PUSH_DATA: Protocol version = 02, Token = 0306, Identifier = 00, JSON = {'rxpk': [{'tmst': 3808585751, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA4wEBwxeup+Wp'}]}
0:03:18.935669	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: aea7e5a9)
0:03:18.937667	LOG	Server <---------- DUT
0:03:18.939666	LOG	Repeated frame. It does not count
0:03:20.115000	LOG	PULL_DATA: 02 1aee 02 aa555a0000240409
0:03:20.116998	LOG	PULL_ACK: 02 1aee 04
0:03:21.457238	LOG	PUSH_ACK: 02 0307 01
0:03:21.459237	LOG	PUSH_DATA: Protocol version = 02, Token = 0307, Identifier = 00, JSON = {'rxpk': [{'tmst': 3811154871, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA5AEB3th9p7Gb'}]}
0:03:21.460236	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7da7b19b)
0:03:21.464234	LOG	Server <---------- DUT
0:03:21.468232	LOG	Count = 32
0:03:23.930835	LOG	PUSH_ACK: 02 0308 01
0:03:23.932834	LOG	PUSH_DATA: Protocol version = 02, Token = 0308, Identifier = 00, JSON = {'rxpk': [{'tmst': 3813588327, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA5AEB3th9p7Gb'}]}
0:03:23.934832	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7da7b19b)
0:03:23.936831	LOG	Server <---------- DUT
0:03:23.937831	LOG	Repeated frame. It does not count
0:03:26.470396	LOG	PUSH_ACK: 02 030a 01
0:03:26.475393	LOG	PUSH_DATA: Protocol version = 02, Token = 030a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3816157487, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA5QEB8C/Gp1k4'}]}
0:03:26.477394	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c6a75938)
0:03:26.478391	LOG	Server <---------- DUT
0:03:26.479390	LOG	Count = 33
0:03:28.895018	LOG	PUSH_ACK: 02 030b 01
0:03:28.898017	LOG	PUSH_DATA: Protocol version = 02, Token = 030b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3818590983, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA5QEB8C/Gp1k4'}]}
0:03:28.900016	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c6a75938)
0:03:28.901015	LOG	Server <---------- DUT
0:03:28.903014	LOG	Repeated frame. It does not count
0:03:30.195280	LOG	PULL_DATA: 02 eb66 02 aa555a0000240409
0:03:30.197280	LOG	PULL_ACK: 02 eb66 04
0:03:31.471557	LOG	PUSH_ACK: 02 030c 01
0:03:31.473556	LOG	PUSH_DATA: Protocol version = 02, Token = 030c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3821160111, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA5gEBWp+UNVTG'}]}
0:03:31.474555	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 943554c6)
0:03:31.477553	LOG	Server <---------- DUT
0:03:31.479554	LOG	Count = 34
0:03:33.944284	LOG	PUSH_ACK: 02 030d 01
0:03:33.947282	LOG	PUSH_DATA: Protocol version = 02, Token = 030d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3823593615, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA5gEBWp+UNVTG'}]}
0:03:33.951280	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 943554c6)
0:03:33.953279	LOG	Server <---------- DUT
0:03:33.955278	LOG	Repeated frame. It does not count
0:03:36.468852	LOG	PUSH_ACK: 02 030e 01
0:03:36.470852	LOG	PUSH_DATA: Protocol version = 02, Token = 030e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3826162743, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA5wEBu3dPpRle'}]}
0:03:36.471852	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4fa5195e)
0:03:36.473851	LOG	Server <---------- DUT
0:03:36.474849	LOG	Count = 35
0:03:38.941643	LOG	PUSH_ACK: 02 030f 01
0:03:38.944641	LOG	PUSH_DATA: Protocol version = 02, Token = 030f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3828596207, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA5wEBu3dPpRle'}]}
0:03:38.946640	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4fa5195e)
0:03:38.947640	LOG	Server <---------- DUT
0:03:38.952637	LOG	Repeated frame. It does not count
0:03:40.275886	LOG	PULL_DATA: 02 244c 02 aa555a0000240409
0:03:40.276885	LOG	PULL_ACK: 02 244c 04
0:03:41.467212	LOG	PUSH_ACK: 02 0310 01
0:03:41.469211	LOG	PUSH_DATA: Protocol version = 02, Token = 0310, Identifier = 00, JSON = {'rxpk': [{'tmst': 3831165359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA6AEBNlingFJi'}]}
0:03:41.470210	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a7805262)
0:03:41.471210	LOG	Server <---------- DUT
0:03:41.472209	LOG	Count = 36
0:03:43.939807	LOG	PUSH_ACK: 02 0311 01
0:03:43.941807	LOG	PUSH_DATA: Protocol version = 02, Token = 0311, Identifier = 00, JSON = {'rxpk': [{'tmst': 3833598823, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA6AEBNlingFJi'}]}
0:03:43.943805	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a7805262)
0:03:43.945804	LOG	Server <---------- DUT
0:03:43.947803	LOG	Repeated frame. It does not count
0:03:46.516345	LOG	PUSH_ACK: 02 0312 01
0:03:46.518344	LOG	PUSH_DATA: Protocol version = 02, Token = 0312, Identifier = 00, JSON = {'rxpk': [{'tmst': 3836167975, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA6QEBsMGgq+B5'}]}
0:03:46.519346	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a0abe079)
0:03:46.521343	LOG	Server <---------- DUT
0:03:46.522344	LOG	Count = 37
0:03:48.934973	LOG	PUSH_ACK: 02 0313 01
0:03:48.936972	LOG	PUSH_DATA: Protocol version = 02, Token = 0313, Identifier = 00, JSON = {'rxpk': [{'tmst': 3838601463, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA6QEBsMGgq+B5'}]}
0:03:48.938971	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01e9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a0abe079)
0:03:48.939971	LOG	Server <---------- DUT
0:03:48.941970	LOG	Repeated frame. It does not count
0:03:50.355167	LOG	PULL_DATA: 02 3b79 02 aa555a0000240409
0:03:50.357167	LOG	PULL_ACK: 02 3b79 04
0:03:51.510524	LOG	PUSH_ACK: 02 0314 01
0:03:51.513521	LOG	PUSH_DATA: Protocol version = 02, Token = 0314, Identifier = 00, JSON = {'rxpk': [{'tmst': 3841170583, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA6gEBScrO0rye'}]}
0:03:51.514522	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ea, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ced2bc9e)
0:03:51.515525	LOG	Server <---------- DUT
0:03:51.516524	LOG	Count = 38
0:03:53.933148	LOG	PUSH_ACK: 02 0315 01
0:03:53.935147	LOG	PUSH_DATA: Protocol version = 02, Token = 0315, Identifier = 00, JSON = {'rxpk': [{'tmst': 3843604071, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA6gEBScrO0rye'}]}
0:03:53.937146	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ea, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ced2bc9e)
0:03:53.938146	LOG	Server <---------- DUT
0:03:53.940145	LOG	Repeated frame. It does not count
0:03:56.520816	LOG	PUSH_ACK: 02 0317 01
0:03:56.523811	LOG	PUSH_DATA: Protocol version = 02, Token = 0317, Identifier = 00, JSON = {'rxpk': [{'tmst': 3846173223, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA6wEBw+QoGV/a'}]}
0:03:56.525810	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01eb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 28195fda)
0:03:56.527808	LOG	Server <---------- DUT
0:03:56.529807	LOG	Count = 39
0:03:58.943437	LOG	PUSH_ACK: 02 0318 01
0:03:58.949433	LOG	PUSH_DATA: Protocol version = 02, Token = 0318, Identifier = 00, JSON = {'rxpk': [{'tmst': 3848606695, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA6wEBw+QoGV/a'}]}
0:03:58.952431	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01eb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 28195fda)
0:03:58.956429	LOG	Server <---------- DUT
0:03:58.961426	LOG	Repeated frame. It does not count
0:04:00.435590	LOG	PULL_DATA: 02 1ea8 02 aa555a0000240409
0:04:00.436590	LOG	PULL_ACK: 02 1ea8 04
0:04:01.521974	LOG	PUSH_ACK: 02 0319 01

0:04:01.523972	LOG	PUSH_DATA: Protocol version = 02, Token = 0319, Identifier = 00, JSON = {'rxpk': [{'tmst': 3851175839, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7AEBLS043hIf'}]}
0:04:01.531968	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ec, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 38de121f)
0:04:01.533967	LOG	Server <---------- DUT
0:04:01.534966	LOG	Count = 40
0:04:03.943600	LOG	PUSH_ACK: 02 031a 01
0:04:03.945599	LOG	PUSH_DATA: Protocol version = 02, Token = 031a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3853609335, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA7AEBLS043hIf'}]}
0:04:03.946599	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ec, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 38de121f)
0:04:03.948600	LOG	Server <---------- DUT
0:04:03.950597	LOG	Repeated frame. It does not count
0:04:06.519139	LOG	PUSH_ACK: 02 031b 01
0:04:06.520138	LOG	PUSH_DATA: Protocol version = 02, Token = 031b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3856178479, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7QEBCG7pJYnq'}]}
0:04:06.522138	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ed, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e92589ea)
0:04:06.523138	LOG	Server <---------- DUT
0:04:06.524136	LOG	Count = 41
0:04:08.940766	LOG	PUSH_ACK: 02 031c 01
0:04:08.942764	LOG	PUSH_DATA: Protocol version = 02, Token = 031c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3858611959, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA7QEBCG7pJYnq'}]}
0:04:08.944762	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ed, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e92589ea)
0:04:08.971747	LOG	Server <---------- DUT
0:04:08.973746	LOG	Repeated frame. It does not count
0:04:10.515873	LOG	PULL_DATA: 02 acfb 02 aa555a0000240409
0:04:10.518871	LOG	PULL_ACK: 02 acfb 04
0:04:11.516303	LOG	PUSH_ACK: 02 031d 01
0:04:11.519302	LOG	PUSH_DATA: Protocol version = 02, Token = 031d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3861181103, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA7gEBI/KDZy92'}]}
0:04:11.520301	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ee, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 83672f76)
0:04:11.521301	LOG	Server <---------- DUT
0:04:11.523300	LOG	Count = 42
0:04:13.938929	LOG	PUSH_ACK: 02 031e 01
0:04:13.940929	LOG	PUSH_DATA: Protocol version = 02, Token = 031e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3863614623, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7gEBI/KDZy92'}]}
0:04:13.943927	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ee, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 83672f76)
0:04:13.944925	LOG	Server <---------- DUT
0:04:13.945925	LOG	Repeated frame. It does not count
0:04:16.515468	LOG	PUSH_ACK: 02 031f 01

0:04:16.517467	LOG	PUSH_DATA: Protocol version = 02, Token = 031f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3866183719, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7wEBtjIhMB1t'}]}
0:04:16.519465	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ef, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 21301d6d)
0:04:16.521464	LOG	Server <---------- DUT
0:04:16.522463	LOG	Count = 43
0:04:18.938093	LOG	PUSH_ACK: 02 0320 01
0:04:18.940092	LOG	PUSH_DATA: Protocol version = 02, Token = 0320, Identifier = 00, JSON = {'rxpk': [{'tmst': 3868617191, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7wEBtjIhMB1t'}]}
0:04:18.942092	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ef, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 21301d6d)
0:04:18.943090	LOG	Server <---------- DUT
0:04:18.945089	LOG	Repeated frame. It does not count
0:04:20.595153	LOG	PULL_DATA: 02 6a68 02 aa555a0000240409
0:04:20.597152	LOG	PULL_ACK: 02 6a68 04
0:04:21.514631	LOG	PUSH_ACK: 02 0321 01
0:04:21.516630	LOG	PUSH_DATA: Protocol version = 02, Token = 0321, Identifier = 00, JSON = {'rxpk': [{'tmst': 3871186335, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA8AEBgrEUhAlr'}]}
0:04:21.518629	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1484096b)
0:04:21.520628	LOG	Server <---------- DUT
0:04:21.521627	LOG	Count = 44
0:04:23.937257	LOG	PUSH_ACK: 02 0322 01
0:04:23.939256	LOG	PUSH_DATA: Protocol version = 02, Token = 0322, Identifier = 00, JSON = {'rxpk': [{'tmst': 3873619831, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA8AEBgrEUhAlr'}]}
0:04:23.941255	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1484096b)
0:04:23.942254	LOG	Server <---------- DUT
0:04:23.944253	LOG	Repeated frame. It does not count
0:04:26.530785	LOG	PUSH_ACK: 02 0324 01
0:04:26.533784	LOG	PUSH_DATA: Protocol version = 02, Token = 0324, Identifier = 00, JSON = {'rxpk': [{'tmst': 3876188951, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA8QEBc8unUUD3'}]}
0:04:26.535783	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a75140f7)
0:04:26.537782	LOG	Server <---------- DUT
0:04:26.539782	LOG	Count = 45
0:04:28.952466	LOG	PUSH_ACK: 02 0325 01
0:04:28.954465	LOG	PUSH_DATA: Protocol version = 02, Token = 0325, Identifier = 00, JSON = {'rxpk': [{'tmst': 3878622423, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA8QEBc8unUUD3'}]}
0:04:28.956465	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a75140f7)
0:04:28.959461	LOG	Server <---------- DUT
0:04:28.963459	LOG	Repeated frame. It does not count
0:04:30.675488	LOG	PULL_DATA: 02 f358 02 aa555a0000240409

0:04:30.676487	LOG	PULL_ACK: 02 f358 04
0:04:31.528035	LOG	PUSH_ACK: 02 0326 01
0:04:31.531033	LOG	PUSH_DATA: Protocol version = 02, Token = 0326, Identifier = 00, JSON = {'rxpk': [{'tmst': 3881191583, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA8gEB7PN+IVAw'}]}
0:04:31.533031	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7e215030)
0:04:31.535004	LOG	Server <---------- DUT
0:04:31.537030	LOG	Count = 46
0:04:33.950662	LOG	PUSH_ACK: 02 0327 01
0:04:33.952658	LOG	PUSH_DATA: Protocol version = 02, Token = 0327, Identifier = 00, JSON = {'rxpk': [{'tmst': 3883625071, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA8gEB7PN+IVAw'}]}
0:04:33.954657	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7e215030)
0:04:33.956657	LOG	Server <---------- DUT
0:04:33.957656	LOG	Repeated frame. It does not count
0:04:36.528198	LOG	PUSH_ACK: 02 0328 01
0:04:36.533174	LOG	PUSH_DATA: Protocol version = 02, Token = 0328, Identifier = 00, JSON = {'rxpk': [{'tmst': 3886194199, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA8wEBBrDvVJLV'}]}
0:04:36.535193	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ef5492d5)
0:04:36.537194	LOG	Server <---------- DUT
0:04:36.538193	LOG	Count = 47
0:04:38.953048	LOG	PUSH_ACK: 02 032a 01
0:04:38.956047	LOG	PUSH_DATA: Protocol version = 02, Token = 032a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3888627687, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA8wEBBrDvVJLV'}]}
0:04:38.958045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ef5492d5)
0:04:38.959045	LOG	Server <---------- DUT
0:04:38.962043	LOG	Repeated frame. It does not count
0:04:40.755030	LOG	PULL_DATA: 02 4606 02 aa555a0000240409
0:04:40.760025	LOG	PULL_ACK: 02 4606 04
0:04:41.530591	LOG	PUSH_ACK: 02 032b 01
0:04:41.535584	LOG	PUSH_DATA: Protocol version = 02, Token = 032b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3891196831, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA9AEBZhwzh0A9'}]}
0:04:41.539584	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3387403d)
0:04:41.542582	LOG	Server <---------- DUT
0:04:41.545578	LOG	Count = 48
0:04:43.954304	LOG	PUSH_ACK: 02 032c 01
0:04:43.957306	LOG	PUSH_DATA: Protocol version = 02, Token = 032c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3893630319, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA9AEBZhwzh0A9'}]}
0:04:43.959302	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3387403d)
0:04:43.960300	LOG	Server <---------- DUT

0:04:43.962303	LOG	Repeated frame. It does not count
0:04:46.530912	LOG	PUSH_ACK: 02 032d 01
0:04:46.533911	LOG	PUSH_DATA: Protocol version = 02, Token = 032d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3896199463, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA9QEByZtYeLN/'}]}
0:04:46.534910	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5878b37f)
0:04:46.536910	LOG	Server <---------- DUT
0:04:46.537910	LOG	Count = 49
0:04:48.953699	LOG	PUSH_ACK: 02 032e 01
0:04:48.956699	LOG	PUSH_DATA: Protocol version = 02, Token = 032e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3898632935, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA9QEByZtYeLN/'}]}
0:04:48.958702	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5878b37f)
0:04:48.959726	LOG	Server <---------- DUT
0:04:48.962696	LOG	Repeated frame. It does not count
0:04:50.835631	LOG	PULL_DATA: 02 472b 02 aa555a0000240409
0:04:50.838629	LOG	PULL_ACK: 02 472b 04
0:04:51.530237	LOG	PUSH_ACK: 02 032f 01
0:04:51.532236	LOG	PUSH_DATA: Protocol version = 02, Token = 032f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3901202087, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA9gEB+niL0nzs'}]}
0:04:51.534235	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8bd27cec)
0:04:51.536238	LOG	Server <---------- DUT
0:04:51.537253	LOG	Count = 50
0:04:53.953861	LOG	PUSH_ACK: 02 0331 01
0:04:53.956860	LOG	PUSH_DATA: Protocol version = 02, Token = 0331, Identifier = 00, JSON = {'rxpk': [{'tmst': 3903635575, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA9gEB+niL0nzs'}]}
0:04:53.958859	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8bd27cec)
0:04:53.959858	LOG	Server <---------- DUT
0:04:53.961857	LOG	Repeated frame. It does not count
0:04:56.540394	LOG	PUSH_ACK: 02 0333 01
0:04:56.542393	LOG	PUSH_DATA: Protocol version = 02, Token = 0333, Identifier = 00, JSON = {'rxpk': [{'tmst': 3906204711, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA9wEBgeyPtDzt'}]}
0:04:56.543392	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8fb43ced)
0:04:56.545391	LOG	Server <---------- DUT
0:04:56.546391	LOG	Count = 51
0:04:58.962020	LOG	PUSH_ACK: 02 0334 01
0:04:58.964019	LOG	PUSH_DATA: Protocol version = 02, Token = 0334, Identifier = 00, JSON = {'rxpk': [{'tmst': 3908638207, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA9wEBgeyPtDzt'}]}
0:04:58.966018	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8fb43ced)
0:04:58.968017	LOG	Server <---------- DUT

0:04:58.969016	LOG	Repeated frame. It does not count
0:05:00.914912	LOG	PULL_DATA: 02 260e 02 aa555a0000240409
0:05:00.917910	LOG	PULL_ACK: 02 260e 04
0:05:01.538560	LOG	PUSH_ACK: 02 0335 01
0:05:01.540558	LOG	PUSH_DATA: Protocol version = 02, Token = 0335, Identifier = 00, JSON = {'rxpk': [{'tmst': 3911207343, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA+AEByYV031Fa'}]}
0:05:01.542561	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 74df515a)
0:05:01.543585	LOG	Server <---------- DUT
0:05:01.545556	LOG	Count = 52
0:05:03.960230	LOG	PUSH_ACK: 02 0336 01
0:05:03.963227	LOG	PUSH_DATA: Protocol version = 02, Token = 0336, Identifier = 00, JSON = {'rxpk': [{'tmst': 3913640823, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA+AEByYV031Fa'}]}
0:05:03.965227	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 74df515a)
0:05:03.967227	LOG	Server <---------- DUT
0:05:03.968226	LOG	Repeated frame. It does not count
0:05:06.536823	LOG	PUSH_ACK: 02 0337 01
0:05:06.539822	LOG	PUSH_DATA: Protocol version = 02, Token = 0337, Identifier = 00, JSON = {'rxpk': [{'tmst': 3916209975, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA+QEBReNSUE2Y'}]}
0:05:06.540821	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 52504d98)
0:05:06.541820	LOG	Server <---------- DUT
0:05:06.543820	LOG	Count = 53
0:05:08.959449	LOG	PUSH_ACK: 02 0338 01
0:05:08.961448	LOG	PUSH_DATA: Protocol version = 02, Token = 0338, Identifier = 00, JSON = {'rxpk': [{'tmst': 3918643471, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA+QEBReNSUE2Y'}]}
0:05:08.963446	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01f9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 52504d98)
0:05:08.965445	LOG	Server <---------- DUT
0:05:08.967444	LOG	Repeated frame. It does not count
0:05:10.994610	LOG	PULL_DATA: 02 0dd2 02 aa555a0000240409
0:05:10.997606	LOG	PULL_ACK: 02 0dd2 04
0:05:11.537301	LOG	PUSH_ACK: 02 0339 01
0:05:11.542298	LOG	PUSH_DATA: Protocol version = 02, Token = 0339, Identifier = 00, JSON = {'rxpk': [{'tmst': 3921212599, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA+gEBW1m4ed/B'}]}
0:05:11.544297	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fa, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b879dfc1)
0:05:11.545296	LOG	Server <---------- DUT
0:05:11.547296	LOG	Count = 54
0:05:13.960926	LOG	PUSH_ACK: 02 033a 01
0:05:13.962924	LOG	PUSH_DATA: Protocol version = 02, Token = 033a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3923646087, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+gEBW1m4ed/B'}]}

0:05:13.964923	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fa, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b879dfc1)
0:05:13.966922	LOG	Server <---------- DUT
0:05:13.968921	LOG	Repeated frame. It does not count
0:05:16.537464	LOG	PUSH_ACK: 02 033b 01
0:05:16.539462	LOG	PUSH_DATA: Protocol version = 02, Token = 033b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3926215231, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+wEBGZo4vdek'}]}
0:05:16.541461	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 38bdd7a4)
0:05:16.543461	LOG	Server <---------- DUT
0:05:16.545459	LOG	Count = 55
0:05:18.960089	LOG	PUSH_ACK: 02 033c 01
0:05:18.962088	LOG	PUSH_DATA: Protocol version = 02, Token = 033c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3928648711, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA+wEBGZo4vdek'}]}
0:05:18.964086	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 38bdd7a4)
0:05:18.965086	LOG	Server <---------- DUT
0:05:18.967085	LOG	Repeated frame. It does not count
0:05:21.074890	LOG	PULL_DATA: 02 ebb2 02 aa555a0000240409
0:05:21.075888	LOG	PULL_ACK: 02 ebb2 04
0:05:21.535681	LOG	PUSH_ACK: 02 033d 01
0:05:21.537680	LOG	PUSH_DATA: Protocol version = 02, Token = 033d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3931217863, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA/AEBQZtYJ8pP'}]}
0:05:21.538679	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5827ca4f)
0:05:21.539678	LOG	Server <---------- DUT
0:05:21.541676	LOG	Count = 56
0:05:23.957355	LOG	PUSH_ACK: 02 033e 01
0:05:23.959354	LOG	PUSH_DATA: Protocol version = 02, Token = 033e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3933651351, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA/AEBQZtYJ8pP'}]}
0:05:23.961353	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5827ca4f)
0:05:23.963352	LOG	Server <---------- DUT
0:05:23.966350	LOG	Repeated frame. It does not count
0:05:26.549884	LOG	PUSH_ACK: 02 0340 01
0:05:26.552882	LOG	PUSH_DATA: Protocol version = 02, Token = 0340, Identifier = 00, JSON = {'rxpk': [{'tmst': 3936220479, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA/QEBZHo2JmDj'}]}
0:05:26.554881	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 362660e3)
0:05:26.555881	LOG	Server <---------- DUT
0:05:26.556880	LOG	Count = 57
0:05:28.972509	LOG	PUSH_ACK: 02 0341 01
0:05:28.974509	LOG	PUSH_DATA: Protocol version = 02, Token = 0341, Identifier = 00, JSON = {'rxpk': [{'tmst': 3938653967, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA/QEBZHo2JmDj'}]}

0:05:28.976507	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 362660e3)
0:05:28.979505	LOG	Server <---------- DUT
0:05:28.981504	LOG	Repeated frame. It does not count
0:05:31.154272	LOG	PULL_DATA: 02 1f6c 02 aa555a0000240409
0:05:31.156270	LOG	PULL_ACK: 02 1f6c 04
0:05:31.551046	LOG	PUSH_ACK: 02 0343 01
0:05:31.553045	LOG	PUSH_DATA: Protocol version = 02, Token = 0343, Identifier = 00, JSON = {'rxpk': [{'tmst': 3941223095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA/gEBRLD8sKf1'}]}
0:05:31.555046	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fe, FOpts:), FPort: 01, FRMPayload: 004e, MIC: fcb0a7f5)
0:05:31.556044	LOG	Server <---------- DUT
0:05:31.557043	LOG	Count = 58
0:05:33.972785	LOG	PUSH_ACK: 02 0344 01
0:05:33.975784	LOG	PUSH_DATA: Protocol version = 02, Token = 0344, Identifier = 00, JSON = {'rxpk': [{'tmst': 3943656591, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA/gEBRLD8sKf1'}]}
0:05:33.977784	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01fe, FOpts:), FPort: 01, FRMPayload: 004e, MIC: fcb0a7f5)
0:05:33.980781	LOG	Server <---------- DUT
0:05:33.982781	LOG	Repeated frame. It does not count
0:05:36.549367	LOG	PUSH_ACK: 02 0345 01
0:05:36.551366	LOG	PUSH_DATA: Protocol version = 02, Token = 0345, Identifier = 00, JSON = {'rxpk': [{'tmst': 3946225719, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA/wEBixDNfrpy'}]}
0:05:36.552366	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ff, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cd7eba72)
0:05:36.553365	LOG	Server <---------- DUT
0:05:36.555364	LOG	Count = 59
0:05:38.970993	LOG	PUSH_ACK: 02 0346 01
0:05:38.972992	LOG	PUSH_DATA: Protocol version = 02, Token = 0346, Identifier = 00, JSON = {'rxpk': [{'tmst': 3948659231, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA/wEBixDNfrpy'}]}
0:05:38.974991	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 01ff, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cd7eba72)
0:05:38.976990	LOG	Server <---------- DUT
0:05:38.977989	LOG	Repeated frame. It does not count
0:05:41.234710	LOG	PULL_DATA: 02 3a3b 02 aa555a0000240409
0:05:41.239707	LOG	PULL_ACK: 02 3a3b 04
0:05:41.549108	LOG	PUSH_ACK: 02 0348 01
0:05:41.553104	LOG	PUSH_DATA: Protocol version = 02, Token = 0348, Identifier = 00, JSON = {'rxpk': [{'tmst': 3951228351, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAAIBYe3Hk9MI'}]}
0:05:41.556104	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0200, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c793d308)
0:05:41.559102	LOG	Server <---------- DUT
0:05:41.561101	LOG	Count = 60
0:05:43.971727	LOG	PUSH_ACK: 02 0349 01
0:05:43.974725	LOG	PUSH_DATA: Protocol version = 02, Token = 0349, Identifier = 00, JSON = {'rxpk': [{'tmst': 3953661839, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAAIBYe3Hk9MI'}]}
0:05:43.976724	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0200, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c793d308)
0:05:43.977741	LOG	Server <---------- DUT
0:05:43.979723	LOG	Repeated frame. It does not count
0:05:46.548266	LOG	PUSH_ACK: 02 034a 01
0:05:46.550265	LOG	PUSH_DATA: Protocol version = 02, Token = 034a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3956230975, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAQIBGfacHurC'}]}
0:05:46.551265	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0201, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9c1eeac2)
0:05:46.552265	LOG	Server <---------- DUT
0:05:46.554263	LOG	Count = 61
0:05:48.969891	LOG	PUSH_ACK: 02 034b 01
0:05:48.971890	LOG	PUSH_DATA: Protocol version = 02, Token = 034b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3958664471, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAQIBGfacHurC'}]}
0:05:48.973889	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0201, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9c1eeac2)
0:05:48.975888	LOG	Server <---------- DUT
0:05:48.976887	LOG	Repeated frame. It does not count
0:05:51.314561	LOG	PULL_DATA: 02 c054 02 aa555a0000240409
0:05:51.316560	LOG	PULL_ACK: 02 c054 04
0:05:51.546447	LOG	PUSH_ACK: 02 034c 01
0:05:51.548429	LOG	PUSH_DATA: Protocol version = 02, Token = 034c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3961233599, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAgIB6CnscWuB'}]}
0:05:51.549427	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0202, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ec716b81)
0:05:51.550428	LOG	Server <---------- DUT
0:05:51.552428	LOG	Count = 62
0:05:53.969054	LOG	PUSH_ACK: 02 034d 01
0:05:53.971053	LOG	PUSH_DATA: Protocol version = 02, Token = 034d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3963667063, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAgIB6CnscWuB'}]}
0:05:53.973052	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0202, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ec716b81)
0:05:53.975051	LOG	Server <---------- DUT
0:05:53.976050	LOG	Repeated frame. It does not count
0:05:56.560584	LOG	PUSH_ACK: 02 034f 01
0:05:56.565581	LOG	PUSH_DATA: Protocol version = 02, Token = 034f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3966236231, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAwIB1SqHQLpw'}]}
0:05:56.571578	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0203, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8740ba70)
0:05:56.575576	LOG	Server <---------- DUT
0:05:56.577574	LOG	Count = 63
0:05:58.985208	LOG	PUSH_ACK: 02 0350 01
0:05:58.987207	LOG	PUSH_DATA: Protocol version = 02, Token = 0350, Identifier = 00, JSON = {'rxpk': [{'tmst': 3968669735, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAwIB1SqHQLpw'}]}
0:05:58.989206	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0203, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8740ba70)
0:05:58.991205	LOG	Server <---------- DUT
0:05:58.992204	LOG	Repeated frame. It does not count
0:06:01.394841	LOG	PULL_DATA: 02 2aab 02 aa555a0000240409
0:06:01.396840	LOG	PULL_ACK: 02 2aab 04
0:06:01.561295	LOG	PUSH_ACK: 02 0351 01
0:06:01.564293	LOG	PUSH_DATA: Protocol version = 02, Token = 0351, Identifier = 00, JSON = {'rxpk': [{'tmst': 3971238855, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDABAIB9qiHtewq'}]}
0:06:01.565292	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0204, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 87b5ec2a)
0:06:01.566292	LOG	Server <---------- DUT
0:06:01.568291	LOG	Count = 64
0:06:01.569290	LOG	Waiting for the retransmissions
0:06:03.983952	LOG	PUSH_ACK: 02 0352 01
0:06:03.985951	LOG	PUSH_DATA: Protocol version = 02, Token = 0352, Identifier = 00, JSON = {'rxpk': [{'tmst': 3973672343, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDABAIB9qiHtewq'}]}
0:06:03.987948	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0204, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 87b5ec2a)
0:06:03.989948	LOG	Server <---------- DUT
0:06:04.025896	LOG	Expected number of uplink messages have been received
0:06:04.034891	LOG	Test adaptive data rate control in frame header process starts
0:06:06.560495	LOG	PUSH_ACK: 02 0353 01
0:06:06.562494	LOG	PUSH_DATA: Protocol version = 02, Token = 0353, Identifier = 00, JSON = {'rxpk': [{'tmst': 3976241487, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDABQIBTVO4hGkt'}]}
0:06:06.565492	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0205, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b884692d)
0:06:06.566492	LOG	Server <---------- DUT
0:06:06.568491	LOG	Count = 2
0:06:08.983121	LOG	PUSH_ACK: 02 0354 01
0:06:08.988118	LOG	PUSH_DATA: Protocol version = 02, Token = 0354, Identifier = 00, JSON = {'rxpk': [{'tmst': 3978674991, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDABQIBTVO4hGkt'}]}
0:06:08.989119	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0205, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b884692d)
0:06:08.991118	LOG	Server <---------- DUT
0:06:08.992116	LOG	Repeated frame. It does not count
0:06:11.474707	LOG	PULL_DATA: 02 ba4e 02 aa555a0000240409
0:06:11.479704	LOG	PULL_ACK: 02 ba4e 04
0:06:11.562657	LOG	PUSH_ACK: 02 0355 01
0:06:11.564656	LOG	PUSH_DATA: Protocol version = 02, Token = 0355, Identifier = 00, JSON = {'rxpk': [{'tmst': 3981244119, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDABgIBknMAjQhz'}]}
0:06:11.566655	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0206, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 008d0873)
0:06:11.567672	LOG	Server <---------- DUT

0:06:11.569654	LOG	Count = 3
0:06:13.984459	LOG	PUSH_ACK: 02 0356 01
0:06:13.986458	LOG	PUSH_DATA: Protocol version = 02, Token = 0356, Identifier = 00, JSON = {'rxpk': [{'tmst': 3983677591, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDABgIBknMAjQhz'}]}
0:06:13.988457	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0206, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 008d0873)
0:06:13.989456	LOG	Server <---------- DUT
0:06:13.991455	LOG	Repeated frame. It does not count
0:06:16.561000	LOG	PUSH_ACK: 02 0357 01
0:06:16.562998	LOG	PUSH_DATA: Protocol version = 02, Token = 0357, Identifier = 00, JSON = {'rxpk': [{'tmst': 3986246727, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDABwIBfndmFipu'}]}
0:06:16.564997	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0207, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 66162a6e)
0:06:16.566000	LOG	Server <---------- DUT
0:06:16.566999	LOG	Count = 4
0:06:18.982710	LOG	PUSH_ACK: 02 0358 01
0:06:18.985708	LOG	PUSH_DATA: Protocol version = 02, Token = 0358, Identifier = 00, JSON = {'rxpk': [{'tmst': 3988680255, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDABwIBfndmFipu'}]}
0:06:18.987707	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0207, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 66162a6e)
0:06:18.988706	LOG	Server <---------- DUT
0:06:18.990705	LOG	Repeated frame. It does not count
0:06:21.554268	LOG	PULL_DATA: 02 f8f6 02 aa555a0000240409
0:06:21.556249	LOG	PULL_ACK: 02 f8f6 04
0:06:21.560248	LOG	PUSH_ACK: 02 0359 01
0:06:21.561248	LOG	PUSH_DATA: Protocol version = 02, Token = 0359, Identifier = 00, JSON = {'rxpk': [{'tmst': 3991249351, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDACAIBHhZc68im'}]}
0:06:21.563247	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0208, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5cebc8a6)
0:06:21.564245	LOG	Server <---------- DUT
0:06:21.566244	LOG	Count = 5
0:06:24.033850	LOG	PUSH_ACK: 02 035a 01
0:06:24.039841	LOG	PUSH_DATA: Protocol version = 02, Token = 035a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3993682855, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDACAIBHhZc68im'}]}
0:06:24.040841	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0208, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5cebc8a6)
0:06:24.041840	LOG	Server <---------- DUT
0:06:24.043839	LOG	Repeated frame. It does not count
0:06:26.572403	LOG	PUSH_ACK: 02 035c 01
0:06:26.574402	LOG	PUSH_DATA: Protocol version = 02, Token = 035c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3996251983, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDACQIBAUMCWDNj'}]}
0:06:26.576401	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0209, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 02583363)
0:06:26.577400	LOG	Server <---------- DUT

0:06:26.579399	LOG	Count = 6
0:06:28.994029	LOG	PUSH_ACK: 02 035d 01
0:06:28.997027	LOG	PUSH_DATA: Protocol version = 02, Token = 035d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3998685471, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDACQIBAUMCWDNj'}]}
0:06:28.999026	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0209, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 02583363)
0:06:29.001025	LOG	Server <---------- DUT
0:06:29.003024	LOG	Repeated frame. It does not count
0:06:31.570642	LOG	PUSH_ACK: 02 035e 01
0:06:31.572640	LOG	PUSH_DATA: Protocol version = 02, Token = 035e, Identifier = 00, JSON = {'rxpk': [{'tmst': 4001254607, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDACgIB5SAmtPC2'}]}
0:06:31.573641	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 26b4f0b6)
0:06:31.574640	LOG	Server <---------- DUT
0:06:31.576638	LOG	Count = 7
0:06:31.634605	LOG	PULL_DATA: 02 c716 02 aa555a0000240409
0:06:31.636604	LOG	PULL_ACK: 02 c716 04
0:06:33.992298	LOG	PUSH_ACK: 02 035f 01
0:06:33.994299	LOG	PUSH_DATA: Protocol version = 02, Token = 035f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4003688079, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDACgIB5SAmtPC2'}]}
0:06:33.996299	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 26b4f0b6)
0:06:33.997296	LOG	Server <---------- DUT
0:06:34.000293	LOG	Repeated frame. It does not count
0:06:36.567844	LOG	PUSH_ACK: 02 0360 01
0:06:36.569843	LOG	PUSH_DATA: Protocol version = 02, Token = 0360, Identifier = 00, JSON = {'rxpk': [{'tmst': 4006257231, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDACwIBdl0VRZPk'}]}
0:06:36.570844	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 154593e4)
0:06:36.572841	LOG	Server <---------- DUT
0:06:36.573840	LOG	Count = 8
0:06:39.040440	LOG	PUSH_ACK: 02 0361 01
0:06:39.043439	LOG	PUSH_DATA: Protocol version = 02, Token = 0361, Identifier = 00, JSON = {'rxpk': [{'tmst': 4008690703, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDACwIBdl0VRZPk'}]}
0:06:39.045438	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 154593e4)
0:06:39.046437	LOG	Server <---------- DUT
0:06:39.048436	LOG	Repeated frame. It does not count
0:06:41.566008	LOG	PUSH_ACK: 02 0362 01
0:06:41.570005	LOG	PUSH_DATA: Protocol version = 02, Token = 0362, Identifier = 00, JSON = {'rxpk': [{'tmst': 4011259863, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDADAIBBY9fdn4Y'}]}
0:06:41.571005	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5f767e18)
0:06:41.573003	LOG	Server <---------- DUT

0:06:41.574003	LOG	Count = 9
0:06:41.713941	LOG	PULL_DATA: 02 9e73 02 aa555a0000240409
0:06:41.715924	LOG	PULL_ACK: 02 9e73 04
0:06:44.040603	LOG	PUSH_ACK: 02 0363 01
0:06:44.042602	LOG	PUSH_DATA: Protocol version = 02, Token = 0363, Identifier = 00, JSON = {'rxpk': [{'tmst': 4013693351, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDADAIBBY9fdn4Y'}]}
0:06:44.043604	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5f767e18)
0:06:44.045601	LOG	Server <---------- DUT
0:06:44.046600	LOG	Repeated frame. It does not count
0:06:46.565079	LOG	PUSH_ACK: 02 0364 01
0:06:46.567078	LOG	PUSH_DATA: Protocol version = 02, Token = 0364, Identifier = 00, JSON = {'rxpk': [{'tmst': 4016262487, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDADQIB85bM58DP'}]}
0:06:46.569077	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cce7c0cf)
0:06:46.571076	LOG	Server <---------- DUT
0:06:46.572076	LOG	Count = 10
0:06:49.038676	LOG	PUSH_ACK: 02 0365 01
0:06:49.040675	LOG	PUSH_DATA: Protocol version = 02, Token = 0365, Identifier = 00, JSON = {'rxpk': [{'tmst': 4018695943, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDADQIB85bM58DP'}]}
0:06:49.042673	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cce7c0cf)
0:06:49.044672	LOG	Server <---------- DUT
0:06:49.046671	LOG	Repeated frame. It does not count
0:06:51.615214	LOG	PUSH_ACK: 02 0366 01
0:06:51.617214	LOG	PUSH_DATA: Protocol version = 02, Token = 0366, Identifier = 00, JSON = {'rxpk': [{'tmst': 4021265103, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDADgIBLNcCeqAH'}]}
0:06:51.619213	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 027aa007)
0:06:51.620211	LOG	Server <---------- DUT
0:06:51.621211	LOG	Count = 11
0:06:51.795111	LOG	PULL_DATA: 02 1108 02 aa555a0000240409
0:06:51.798109	LOG	PULL_ACK: 02 1108 04
0:06:54.036839	LOG	PUSH_ACK: 02 0367 01
0:06:54.039838	LOG	PUSH_DATA: Protocol version = 02, Token = 0367, Identifier = 00, JSON = {'rxpk': [{'tmst': 4023698583, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDADgIBLNcCeqAH'}]}
0:06:54.041838	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 027aa007)
0:06:54.042836	LOG	Server <---------- DUT
0:06:54.044835	LOG	Repeated frame. It does not count
0:06:56.580398	LOG	PUSH_ACK: 02 0369 01
0:06:56.582400	LOG	PUSH_DATA: Protocol version = 02, Token = 0369, Identifier = 00, JSON = {'rxpk': [{'tmst': 4026267735, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDADwIBYTCMiiAm'}]}

0:06:56.584395	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8c8a2026)
0:06:56.585394	LOG	Server <---------- DUT
0:06:56.587393	LOG	Count = 12
0:06:59.002022	LOG	PUSH_ACK: 02 036a 01
0:06:59.005021	LOG	PUSH_DATA: Protocol version = 02, Token = 036a, Identifier = 00, JSON = {'rxpk': [{'tmst': 4028701239, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDADwIBYTCMiiAm'}]}
0:06:59.007020	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 020f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8c8a2026)
0:06:59.008019	LOG	Server <---------- DUT
0:06:59.010018	LOG	Repeated frame. It does not count
0:07:01.579995	LOG	PUSH_ACK: 02 036b 01
0:07:01.583018	LOG	PUSH_DATA: Protocol version = 02, Token = 036b, Identifier = 00, JSON = {'rxpk': [{'tmst': 4031270359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAEAIBv25fNnZ+'}]}
0:07:01.584018	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0210, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5f36767e)
0:07:01.586005	LOG	Server <---------- DUT
0:07:01.587985	LOG	Count = 13
0:07:01.874824	LOG	PULL_DATA: 02 db04 02 aa555a0000240409
0:07:01.877825	LOG	PULL_ACK: 02 db04 04
0:07:04.053617	LOG	PUSH_ACK: 02 036c 01
0:07:04.056616	LOG	PUSH_DATA: Protocol version = 02, Token = 036c, Identifier = 00, JSON = {'rxpk': [{'tmst': 4033703847, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAEAIBv25fNnZ+'}]}
0:07:04.058615	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0210, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5f36767e)
0:07:04.059613	LOG	Server <---------- DUT
0:07:04.061613	LOG	Repeated frame. It does not count
0:07:06.579228	LOG	PUSH_ACK: 02 036d 01
0:07:06.580227	LOG	PUSH_DATA: Protocol version = 02, Token = 036d, Identifier = 00, JSON = {'rxpk': [{'tmst': 4036272975, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAEQIBgZSA4neq'}]}
0:07:06.582226	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0211, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 80e277aa)
0:07:06.583225	LOG	Server <---------- DUT
0:07:06.608332	LOG	Count = 14
0:07:09.050997	LOG	PUSH_ACK: 02 036e 01
0:07:09.053995	LOG	PUSH_DATA: Protocol version = 02, Token = 036e, Identifier = 00, JSON = {'rxpk': [{'tmst': 4038706455, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAEQIBgZSA4neq'}]}
0:07:09.054994	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0211, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 80e277aa)
0:07:09.056993	LOG	Server <---------- DUT
0:07:09.057993	LOG	Repeated frame. It does not count
0:07:11.576564	LOG	PUSH_ACK: 02 036f 01
0:07:11.580561	LOG	PUSH_DATA: Protocol version = 02, Token = 036f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4041275583, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAEgIBGPfgtbzC'}]}

0:07:11.582560	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0212, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e0b5bcc2)
0:07:11.583560	LOG	Server <---------- DUT
0:07:11.584559	LOG	Count = 15
0:07:11.954459	LOG	PULL_DATA: 02 6022 02 aa555a0000240409
0:07:11.956459	LOG	PULL_ACK: 02 6022 04
0:07:14.049835	LOG	PUSH_ACK: 02 0370 01
0:07:14.051834	LOG	PUSH_DATA: Protocol version = 02, Token = 0370, Identifier = 00, JSON = {'rxpk': [{'tmst': 4043709047, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAEgIBGPfgtbzC'}]}
0:07:14.052835	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0212, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e0b5bcc2)
0:07:14.053834	LOG	Server <---------- DUT
0:07:14.055831	LOG	Repeated frame. It does not count
0:07:16.623814	LOG	PUSH_ACK: 02 0371 01
0:07:16.625814	LOG	PUSH_DATA: Protocol version = 02, Token = 0371, Identifier = 00, JSON = {'rxpk': [{'tmst': 4046278199, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAEwIBPOGmtPA2'}]}
0:07:16.626814	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0213, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a6b4f036)
0:07:16.628811	LOG	Server <---------- DUT
0:07:16.629811	LOG	Count = 16
0:07:19.045440	LOG	PUSH_ACK: 02 0372 01
0:07:19.048438	LOG	PUSH_DATA: Protocol version = 02, Token = 0372, Identifier = 00, JSON = {'rxpk': [{'tmst': 4048711695, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAEwIBPOGmtPA2'}]}
0:07:19.050438	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0213, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a6b4f036)
0:07:19.051438	LOG	Server <---------- DUT
0:07:19.053437	LOG	Repeated frame. It does not count
0:07:21.621979	LOG	PUSH_ACK: 02 0373 01
0:07:21.623979	LOG	PUSH_DATA: Protocol version = 02, Token = 0373, Identifier = 00, JSON = {'rxpk': [{'tmst': 4051280831, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAFAIB306mCoPw'}]}
0:07:21.625976	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0214, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a60a83f0)
0:07:21.626975	LOG	Server <---------- DUT
0:07:21.627974	LOG	Count = 17
0:07:22.033744	LOG	PULL_DATA: 02 0aa7 02 aa555a0000240409
0:07:22.035743	LOG	PULL_ACK: 02 0aa7 04
0:07:24.044603	LOG	PUSH_ACK: 02 0374 01
0:07:24.046602	LOG	PUSH_DATA: Protocol version = 02, Token = 0374, Identifier = 00, JSON = {'rxpk': [{'tmst': 4053714335, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAFAIB306mCoPw'}]}
0:07:24.048601	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0214, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a60a83f0)
0:07:24.049601	LOG	Server <---------- DUT
0:07:24.051599	LOG	Repeated frame. It does not count
0:07:26.630136	LOG	PUSH_ACK: 02 0376 01
0:07:26.632136	LOG	PUSH_DATA: Protocol version = 02, Token = 0376, Identifier = 00, JSON = {'rxpk': [{'tmst': 4056283463, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAFQIB64IBliTn'}]}
0:07:26.633135	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0215, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 019624e7)
0:07:26.635134	LOG	Server <---------- DUT
0:07:26.636152	LOG	Count = 18
0:07:29.048764	LOG	PUSH_ACK: 02 0377 01
0:07:29.051762	LOG	PUSH_DATA: Protocol version = 02, Token = 0377, Identifier = 00, JSON = {'rxpk': [{'tmst': 4058716951, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAFQIB64IBliTn'}]}
0:07:29.053761	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0215, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 019624e7)
0:07:29.054761	LOG	Server <---------- DUT
0:07:29.056760	LOG	Repeated frame. It does not count
0:07:31.624302	LOG	PUSH_ACK: 02 0378 01
0:07:31.627301	LOG	PUSH_DATA: Protocol version = 02, Token = 0378, Identifier = 00, JSON = {'rxpk': [{'tmst': 4061286095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAFgIBaTE1kXLL'}]}
0:07:31.629300	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0216, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 359172cb)
0:07:31.630299	LOG	Server <---------- DUT
0:07:31.634297	LOG	Count = 19
0:07:32.114024	LOG	PULL_DATA: 02 4d31 02 aa555a0000240409
0:07:32.116023	LOG	PULL_ACK: 02 4d31 04
0:07:34.046617	LOG	PUSH_ACK: 02 0379 01
0:07:34.049616	LOG	PUSH_DATA: Protocol version = 02, Token = 0379, Identifier = 00, JSON = {'rxpk': [{'tmst': 4063719567, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAFgIBaTE1kXLL'}]}
0:07:34.051614	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0216, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 359172cb)
0:07:34.053613	LOG	Server <---------- DUT
0:07:34.054613	LOG	Repeated frame. It does not count
0:07:36.623155	LOG	PUSH_ACK: 02 037a 01
0:07:36.625154	LOG	PUSH_DATA: Protocol version = 02, Token = 037a, Identifier = 00, JSON = {'rxpk': [{'tmst': 4066288711, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAFwIBM6AHpaud'}]}
0:07:36.627153	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0217, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 07a5ab9d)
0:07:36.628152	LOG	Server <---------- DUT
0:07:36.629152	LOG	Count = 20
0:07:39.045781	LOG	PUSH_ACK: 02 037b 01
0:07:39.048779	LOG	PUSH_DATA: Protocol version = 02, Token = 037b, Identifier = 00, JSON = {'rxpk': [{'tmst': 4068722175, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAFwIBM6AHpaud'}]}
0:07:39.049780	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0217, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 07a5ab9d)
0:07:39.051777	LOG	Server <---------- DUT
0:07:39.053776	LOG	Repeated frame. It does not count
0:07:41.623508	LOG	PUSH_ACK: 02 037c 01
0:07:41.634502	LOG	PUSH_DATA: Protocol version = 02, Token = 037c, Identifier = 00, JSON = {'rxpk': [{'tmst': 4071291327, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAGAIBpruZMCuu'}]}
0:07:41.636501	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0218, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 99302bae)
0:07:41.637499	LOG	Server <---------- DUT
0:07:41.638501	LOG	Count = 21
0:07:42.194501	LOG	PULL_DATA: 02 b55b 02 aa555a0000240409
0:07:42.196500	LOG	PULL_ACK: 02 b55b 04
0:07:44.055446	LOG	PUSH_ACK: 02 037d 01
0:07:44.057444	LOG	PUSH_DATA: Protocol version = 02, Token = 037d, Identifier = 00, JSON = {'rxpk': [{'tmst': 4073724815, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAGAIBpruZMCuu'}]}
0:07:44.059443	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0218, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 99302bae)
0:07:44.061442	LOG	Server <---------- DUT
0:07:44.062441	LOG	Repeated frame. It does not count
0:07:46.630984	LOG	PUSH_ACK: 02 037e 01
0:07:46.632984	LOG	PUSH_DATA: Protocol version = 02, Token = 037e, Identifier = 00, JSON = {'rxpk': [{'tmst': 4076293959, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAGQIB9A+lr3tg'}]}
0:07:46.633982	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0219, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a5af7b60)
0:07:46.635981	LOG	Server <---------- DUT
0:07:46.669962	LOG	Count = 22
0:07:49.051767	LOG	PUSH_ACK: 02 037f 01
0:07:49.054765	LOG	PUSH_DATA: Protocol version = 02, Token = 037f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4078727455, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAGQIB9A+lr3tg'}]}
0:07:49.056762	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0219, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a5af7b60)
0:07:49.058761	LOG	Server <---------- DUT
0:07:49.060760	LOG	Repeated frame. It does not count
0:07:51.629337	LOG	PUSH_ACK: 02 0380 01
0:07:51.631307	LOG	PUSH_DATA: Protocol version = 02, Token = 0380, Identifier = 00, JSON = {'rxpk': [{'tmst': 4081296583, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAGgIBL3zX7v1h'}]}
0:07:51.632306	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d7eefd61)
0:07:51.633311	LOG	Server <---------- DUT
0:07:51.634308	LOG	Count = 23
0:07:52.273941	LOG	PULL_DATA: 02 03a0 02 aa555a0000240409
0:07:52.275940	LOG	PULL_ACK: 02 03a0 04
0:07:54.050932	LOG	PUSH_ACK: 02 0381 01
0:07:54.053931	LOG	PUSH_DATA: Protocol version = 02, Token = 0381, Identifier = 00, JSON = {'rxpk': [{'tmst': 4083730087, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAGgIBL3zX7v1h'}]}
0:07:54.055930	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d7eefd61)
0:07:54.057928	LOG	Server <---------- DUT
0:07:54.058928	LOG	Repeated frame. It does not count
0:07:56.642462	LOG	PUSH_ACK: 02 0383 01

0:07:56.644462	LOG	PUSH_DATA: Protocol version = 02, Token = 0383, Identifier = 00, JSON = {'rxpk': [{'tmst': 4086299199, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAGwIBSs+MbvR0'}]}
0:07:56.645462	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8c6ef474)
0:07:56.646462	LOG	Server <---------- DUT
0:07:56.647461	LOG	Count = 24
0:07:59.063511	LOG	PUSH_ACK: 02 0384 01
0:07:59.066511	LOG	PUSH_DATA: Protocol version = 02, Token = 0384, Identifier = 00, JSON = {'rxpk': [{'tmst': 4088732703, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAGwIBSs+MbvR0'}]}
0:07:59.067510	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8c6ef474)
0:07:59.068510	LOG	Server <---------- DUT
0:07:59.069509	LOG	Repeated frame. It does not count
0:08:01.640210	LOG	PUSH_ACK: 02 0385 01
0:08:01.642209	LOG	PUSH_DATA: Protocol version = 02, Token = 0385, Identifier = 00, JSON = {'rxpk': [{'tmst': 4091301815, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAHAIBI9t9z+3o'}]}
0:08:01.644209	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7dcfede8)
0:08:01.646209	LOG	Server <---------- DUT
0:08:01.648205	LOG	Count = 25
0:08:02.353805	LOG	PULL_DATA: 02 0d22 02 aa555a0000240409
0:08:02.355805	LOG	PULL_ACK: 02 0d22 04
0:08:04.062837	LOG	PUSH_ACK: 02 0386 01
0:08:04.064835	LOG	PUSH_DATA: Protocol version = 02, Token = 0386, Identifier = 00, JSON = {'rxpk': [{'tmst': 4093735295, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAHAIBI9t9z+3o'}]}
0:08:04.067834	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7dcfede8)
0:08:04.069833	LOG	Server <---------- DUT
0:08:04.070831	LOG	Repeated frame. It does not count
0:08:06.640375	LOG	PUSH_ACK: 02 0387 01
0:08:06.645374	LOG	PUSH_DATA: Protocol version = 02, Token = 0387, Identifier = 00, JSON = {'rxpk': [{'tmst': 4096304439, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAHQIBDnu1vOoF'}]}
0:08:06.647372	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b5bcea05)
0:08:06.649371	LOG	Server <---------- DUT
0:08:06.650367	LOG	Count = 26
0:08:09.066055	LOG	PUSH_ACK: 02 0389 01
0:08:09.068054	LOG	PUSH_DATA: Protocol version = 02, Token = 0389, Identifier = 00, JSON = {'rxpk': [{'tmst': 4098737951, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAHQIBDnu1vOoF'}]}
0:08:09.070053	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b5bcea05)
0:08:09.071052	LOG	Server <---------- DUT
0:08:09.073051	LOG	Repeated frame. It does not count
0:08:11.641596	LOG	PUSH_ACK: 02 038a 01

0:08:11.645591	LOG	PUSH_DATA: Protocol version = 02, Token = 038a, Identifier = 00, JSON = {'rxpk': [{'tmst': 4101307063, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAHgIBhloyCE6Y'}]}
0:08:11.646591	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 32084e98)
0:08:11.648591	LOG	Server <---------- DUT
0:08:11.649589	LOG	Count = 27
0:08:12.444138	LOG	PULL_DATA: 02 0d47 02 aa555a0000240409
0:08:12.446137	LOG	PULL_ACK: 02 0d47 04
0:08:14.066081	LOG	PUSH_ACK: 02 038b 01
0:08:14.068081	LOG	PUSH_DATA: Protocol version = 02, Token = 038b, Identifier = 00, JSON = {'rxpk': [{'tmst': 4103740559, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAHgIBhloyCE6Y'}]}
0:08:14.070080	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 32084e98)
0:08:14.072079	LOG	Server <---------- DUT
0:08:14.074078	LOG	Repeated frame. It does not count
0:08:16.642588	LOG	PUSH_ACK: 02 038c 01
0:08:16.644587	LOG	PUSH_DATA: Protocol version = 02, Token = 038c, Identifier = 00, JSON = {'rxpk': [{'tmst': 4106309695, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAHwIBENd8LiV6'}]}
0:08:16.645587	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7c2e257a)
0:08:16.646587	LOG	Server <---------- DUT
0:08:16.647586	LOG	Count = 28
0:08:19.064245	LOG	PUSH_ACK: 02 038d 01
0:08:19.067243	LOG	PUSH_DATA: Protocol version = 02, Token = 038d, Identifier = 00, JSON = {'rxpk': [{'tmst': 4108743215, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAHwIBENd8LiV6'}]}
0:08:19.097196	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 021f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7c2e257a)
0:08:19.098196	LOG	Server <---------- DUT
0:08:19.100195	LOG	Repeated frame. It does not count
0:08:21.641102	LOG	PUSH_ACK: 02 038e 01
0:08:21.644100	LOG	PUSH_DATA: Protocol version = 02, Token = 038e, Identifier = 00, JSON = {'rxpk': [{'tmst': 4111312327, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAIAIB3EUJ5ZQU'}]}
0:08:21.645100	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0220, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 09e59414)
0:08:21.647098	LOG	Server <---------- DUT
0:08:21.648117	LOG	Count = 29
0:08:22.524602	LOG	PULL_DATA: 02 5dcd 02 aa555a0000240409
0:08:22.526599	LOG	PULL_ACK: 02 5dcd 04
0:08:24.063727	LOG	PUSH_ACK: 02 038f 01
0:08:24.065726	LOG	PUSH_DATA: Protocol version = 02, Token = 038f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4113745815, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAIAIB3EUJ5ZQU'}]}
0:08:24.069724	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0220, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 09e59414)
0:08:24.071723	LOG	Server <---------- DUT

0:08:24.072722	LOG	Repeated frame. It does not count
0:08:26.652258	LOG	PUSH_ACK: 02 0391 01
0:08:26.654258	LOG	PUSH_DATA: Protocol version = 02, Token = 0391, Identifier = 00, JSON = {'rxpk': [{'tmst': 4116314951, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAIQIBQldExZH8'}]}
0:08:26.655257	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0221, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 44c591fc)
0:08:26.657256	LOG	Server <---------- DUT
0:08:26.658273	LOG	Count = 30
0:08:29.073908	LOG	PUSH_ACK: 02 0392 01
0:08:29.075907	LOG	PUSH_DATA: Protocol version = 02, Token = 0392, Identifier = 00, JSON = {'rxpk': [{'tmst': 4118748455, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAIQIBQldExZH8'}]}
0:08:29.077906	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0221, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 44c591fc)
0:08:29.078906	LOG	Server <---------- DUT
0:08:29.080904	LOG	Repeated frame. It does not count
0:08:31.649600	LOG	PUSH_ACK: 02 0393 01
0:08:31.652597	LOG	PUSH_DATA: Protocol version = 02, Token = 0393, Identifier = 00, JSON = {'rxpk': [{'tmst': 4121317575, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAIgIBaho+fYQ6'}]}
0:08:31.654595	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0222, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3e7d843a)
0:08:31.657596	LOG	Server <---------- DUT
0:08:31.661590	LOG	Count = 31
0:08:32.604053	LOG	PULL_DATA: 02 9b87 02 aa555a0000240409
0:08:32.606053	LOG	PULL_ACK: 02 9b87 04
0:08:34.072220	LOG	PUSH_ACK: 02 0394 01
0:08:34.075219	LOG	PUSH_DATA: Protocol version = 02, Token = 0394, Identifier = 00, JSON = {'rxpk': [{'tmst': 4123751071, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAIgIBaho+fYQ6'}]}
0:08:34.077218	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0222, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3e7d843a)
0:08:34.078217	LOG	Server <---------- DUT
0:08:34.080216	LOG	Repeated frame. It does not count
0:08:36.648760	LOG	PUSH_ACK: 02 0395 01
0:08:36.650759	LOG	PUSH_DATA: Protocol version = 02, Token = 0395, Identifier = 00, JSON = {'rxpk': [{'tmst': 4126320191, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAIwIBeXhgJ1ng'}]}
0:08:36.651758	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0223, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 602759e0)
0:08:36.652762	LOG	Server <---------- DUT
0:08:36.653760	LOG	Count = 32
0:08:39.070403	LOG	PUSH_ACK: 02 0396 01
0:08:39.072402	LOG	PUSH_DATA: Protocol version = 02, Token = 0396, Identifier = 00, JSON = {'rxpk': [{'tmst': 4128753671, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAIwIBeXhgJ1ng'}]}
0:08:39.074400	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0223, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 602759e0)
0:08:39.076399	LOG	Server <---------- DUT

0:08:39.077398	LOG	Repeated frame. It does not count
0:08:41.645942	LOG	PUSH_ACK: 02 0397 01
0:08:41.647940	LOG	PUSH_DATA: Protocol version = 02, Token = 0397, Identifier = 00, JSON = {'rxpk': [{'tmst': 4131322815, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAJAIBOz7KDyqK'}]}
0:08:41.648941	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0224, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ca0f2a8a)
0:08:41.650939	LOG	Server <---------- DUT
0:08:41.651938	LOG	Count = 33
0:08:42.684405	LOG	PULL_DATA: 02 7856 02 aa555a0000240409
0:08:42.685404	LOG	PULL_ACK: 02 7856 04
0:08:44.067619	LOG	PUSH_ACK: 02 0398 01
0:08:44.069618	LOG	PUSH_DATA: Protocol version = 02, Token = 0398, Identifier = 00, JSON = {'rxpk': [{'tmst': 4133756311, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAJAIBOz7KDyqK'}]}
0:08:44.071617	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0224, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ca0f2a8a)
0:08:44.073616	LOG	Server <---------- DUT
0:08:44.075615	LOG	Repeated frame. It does not count
0:08:46.644159	LOG	PUSH_ACK: 02 0399 01
0:08:46.646158	LOG	PUSH_DATA: Protocol version = 02, Token = 0399, Identifier = 00, JSON = {'rxpk': [{'tmst': 4136325439, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAJQIBW04L4mcd'}]}
0:08:46.647156	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0225, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0be2671d)
0:08:46.649155	LOG	Server <---------- DUT
0:08:46.650173	LOG	Count = 34
0:08:49.064783	LOG	PUSH_ACK: 02 039a 01
0:08:49.067782	LOG	PUSH_DATA: Protocol version = 02, Token = 039a, Identifier = 00, JSON = {'rxpk': [{'tmst': 4138758911, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAJQIBW04L4mcd'}]}
0:08:49.069781	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0225, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0be2671d)
0:08:49.070780	LOG	Server <---------- DUT
0:08:49.072779	LOG	Repeated frame. It does not count
0:08:51.641322	LOG	PUSH_ACK: 02 039b 01
0:08:51.643320	LOG	PUSH_DATA: Protocol version = 02, Token = 039b, Identifier = 00, JSON = {'rxpk': [{'tmst': 4141328063, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAJgIBMkWXKgNB'}]}
0:08:51.645321	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0226, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 972a0341)
0:08:51.646319	LOG	Server <---------- DUT
0:08:51.647318	LOG	Count = 35
0:08:52.763684	LOG	PULL_DATA: 02 d570 02 aa555a0000240409
0:08:52.765685	LOG	PULL_ACK: 02 d570 04
0:08:54.063720	LOG	PUSH_ACK: 02 039c 01
0:08:54.066719	LOG	PUSH_DATA: Protocol version = 02, Token = 039c, Identifier = 00, JSON = {'rxpk': [{'tmst': 4143761559, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAJgIBMkWXKgNB'}]}

0:08:54.067718	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0226, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 972a0341)
0:08:54.069717	LOG	Server <---------- DUT
0:08:54.071716	LOG	Repeated frame. It does not count
0:08:56.651252	LOG	PUSH_ACK: 02 039e 01
0:08:56.653251	LOG	PUSH_DATA: Protocol version = 02, Token = 039e, Identifier = 00, JSON = {'rxpk': [{'tmst': 4146330671, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAJwIBnccZTRoo'}]}
0:08:56.654250	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0227, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 194d1a28)
0:08:56.656250	LOG	Server <---------- DUT
0:08:56.657249	LOG	Count = 36
0:08:59.072878	LOG	PUSH_ACK: 02 039f 01
0:08:59.074877	LOG	PUSH_DATA: Protocol version = 02, Token = 039f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4148764159, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAJwIBnccZTRoo'}]}
0:08:59.076876	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0227, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 194d1a28)
0:08:59.078875	LOG	Server <---------- DUT
0:08:59.079874	LOG	Repeated frame. It does not count
0:09:01.649416	LOG	PUSH_ACK: 02 03a0 01
0:09:01.651415	LOG	PUSH_DATA: Protocol version = 02, Token = 03a0, Identifier = 00, JSON = {'rxpk': [{'tmst': 4151333295, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAKAIBg2Q+3jtF'}]}
0:09:01.653415	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0228, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3ede3b45)
0:09:01.654413	LOG	Server <---------- DUT
0:09:01.655413	LOG	Count = 37
0:09:02.843840	LOG	PULL_DATA: 02 4c9c 02 aa555a0000240409
0:09:02.845841	LOG	PULL_ACK: 02 4c9c 04
0:09:04.071427	LOG	PUSH_ACK: 02 03a1 01
0:09:04.074425	LOG	PUSH_DATA: Protocol version = 02, Token = 03a1, Identifier = 00, JSON = {'rxpk': [{'tmst': 4153766775, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAKAIBg2Q+3jtF'}]}
0:09:04.076424	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0228, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3ede3b45)
0:09:04.077424	LOG	Server <---------- DUT
0:09:04.079422	LOG	Repeated frame. It does not count
0:09:06.649115	LOG	PUSH_ACK: 02 03a3 01
0:09:06.651114	LOG	PUSH_DATA: Protocol version = 02, Token = 03a3, Identifier = 00, JSON = {'rxpk': [{'tmst': 4156335911, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAKQIBW0b38miV'}]}
0:09:06.653113	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0229, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f7f26895)
0:09:06.654113	LOG	Server <---------- DUT
0:09:06.656111	LOG	Count = 38
0:09:09.070674	LOG	PUSH_ACK: 02 03a4 01
0:09:09.073672	LOG	PUSH_DATA: Protocol version = 02, Token = 03a4, Identifier = 00, JSON = {'rxpk': [{'tmst': 4158769407, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAKQIBW0b38miV'}]}

0:09:09.074671	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0229, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f7f26895)
0:09:09.076670	LOG	Server <---------- DUT
0:09:09.078669	LOG	Repeated frame. It does not count
0:09:11.647213	LOG	PUSH_ACK: 02 03a5 01
0:09:11.650214	LOG	PUSH_DATA: Protocol version = 02, Token = 03a5, Identifier = 00, JSON = {'rxpk': [{'tmst': 4161338543, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAKgIB8ocp5nXz'}]}
0:09:11.651211	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 29e675f3)
0:09:11.652214	LOG	Server <---------- DUT
0:09:11.654208	LOG	Count = 39
0:09:12.923609	LOG	PULL_DATA: 02 86ea 02 aa555a0000240409
0:09:12.928607	LOG	PULL_ACK: 02 86ea 04
0:09:14.120956	LOG	PUSH_ACK: 02 03a6 01
0:09:14.123955	LOG	PUSH_DATA: Protocol version = 02, Token = 03a6, Identifier = 00, JSON = {'rxpk': [{'tmst': 4163772023, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAKgIB8ocp5nXz'}]}
0:09:14.124954	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 29e675f3)
0:09:14.126953	LOG	Server <---------- DUT
0:09:14.127953	LOG	Repeated frame. It does not count
0:09:16.647523	LOG	PUSH_ACK: 02 03a8 01
0:09:16.649521	LOG	PUSH_DATA: Protocol version = 02, Token = 03a8, Identifier = 00, JSON = {'rxpk': [{'tmst': 4166341167, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAKwIBk9Mu1MEk'}]}
0:09:16.650522	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2ed4c124)
0:09:16.651522	LOG	Server <---------- DUT
0:09:16.654519	LOG	Count = 40
0:09:19.120120	LOG	PUSH_ACK: 02 03a9 01
0:09:19.123118	LOG	PUSH_DATA: Protocol version = 02, Token = 03a9, Identifier = 00, JSON = {'rxpk': [{'tmst': 4168774647, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAKwIBk9Mu1MEk'}]}
0:09:19.124117	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2ed4c124)
0:09:19.126117	LOG	Server <---------- DUT
0:09:19.128115	LOG	Repeated frame. It does not count
0:09:21.645688	LOG	PUSH_ACK: 02 03aa 01
0:09:21.646688	LOG	PUSH_DATA: Protocol version = 02, Token = 03aa, Identifier = 00, JSON = {'rxpk': [{'tmst': 4171343791, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDALAIB4kbooe+C'}]}
0:09:21.648686	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e8a1ef82)
0:09:21.649685	LOG	Server <---------- DUT
0:09:21.650686	LOG	Count = 41
0:09:23.003916	LOG	PULL_DATA: 02 0f98 02 aa555a0000240409
0:09:23.005915	LOG	PULL_ACK: 02 0f98 04
0:09:24.118284	LOG	PUSH_ACK: 02 03ab 01
0:09:24.121282	LOG	PUSH_DATA: Protocol version = 02, Token = 03ab, Identifier = 00, JSON = {'rxpk': [{'tmst': 4173777271, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDALAIB4kbooe+C'}], 'stat': {'time': '2021-05-14 18:07:03 GMT', 'rxnb': 13, 'rxok': 11, 'rxfw': 11, 'ackr': 91.7, 'dwnb': 0, 'txnb': 0}}
0:09:24.122281	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e8a1ef82)
0:09:24.124280	LOG	Server <---------- DUT
0:09:24.126279	LOG	Repeated frame. It does not count
0:09:26.693823	LOG	PUSH_ACK: 02 03ac 01
0:09:26.696825	LOG	PUSH_DATA: Protocol version = 02, Token = 03ac, Identifier = 00, JSON = {'rxpk': [{'tmst': 4176346415, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDALQIBUqiS057j'}]}
0:09:26.698823	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 92d39ee3)
0:09:26.700823	LOG	Server <---------- DUT
0:09:26.701849	LOG	Count = 42
0:09:29.116573	LOG	PUSH_ACK: 02 03ad 01
0:09:29.118572	LOG	PUSH_DATA: Protocol version = 02, Token = 03ad, Identifier = 00, JSON = {'rxpk': [{'tmst': 4178779919, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDALQIBUqiS057j'}]}
0:09:29.120570	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 92d39ee3)
0:09:29.122569	LOG	Server <---------- DUT
0:09:29.123569	LOG	Repeated frame. It does not count
0:09:31.693111	LOG	PUSH_ACK: 02 03ae 01
0:09:31.695111	LOG	PUSH_DATA: Protocol version = 02, Token = 03ae, Identifier = 00, JSON = {'rxpk': [{'tmst': 4181349031, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDALgIB0Jm0iwI6'}]}
0:09:31.696110	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b48b023a)
0:09:31.697110	LOG	Server <---------- DUT
0:09:31.698110	LOG	Count = 43
0:09:33.083321	LOG	PULL_DATA: 02 f2eb 02 aa555a0000240409
0:09:33.085320	LOG	PULL_ACK: 02 f2eb 04
0:09:34.114737	LOG	PUSH_ACK: 02 03af 01
0:09:34.116735	LOG	PUSH_DATA: Protocol version = 02, Token = 03af, Identifier = 00, JSON = {'rxpk': [{'tmst': 4183782535, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDALgIB0Jm0iwI6'}]}
0:09:34.118734	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b48b023a)
0:09:34.119734	LOG	Server <---------- DUT
0:09:34.121733	LOG	Repeated frame. It does not count
0:09:36.691304	LOG	PUSH_ACK: 02 03b0 01
0:09:36.693275	LOG	PUSH_DATA: Protocol version = 02, Token = 03b0, Identifier = 00, JSON = {'rxpk': [{'tmst': 4186351655, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDALwIB+hsSUKve'}]}
0:09:36.694274	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1250abde)
0:09:36.695274	LOG	Server <---------- DUT
0:09:36.696273	LOG	Count = 44
0:09:39.113223	LOG	PUSH_ACK: 02 03b1 01

0:09:39.116221	LOG	PUSH_DATA: Protocol version = 02, Token = 03b1, Identifier = 00, JSON = {'rxpk': [{'tmst': 4188785167, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDALwIB+hsSUKve'}]}
0:09:39.118221	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 022f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1250abde)
0:09:39.120220	LOG	Server <---------- DUT
0:09:39.122218	LOG	Repeated frame. It does not count
0:09:41.690775	LOG	PUSH_ACK: 02 03b2 01
0:09:41.692773	LOG	PUSH_DATA: Protocol version = 02, Token = 03b2, Identifier = 00, JSON = {'rxpk': [{'tmst': 4191354279, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAMAIBPZ2OKZGS'}]}
0:09:41.693773	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0230, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8e299192)
0:09:41.694773	LOG	Server <---------- DUT
0:09:41.695772	LOG	Count = 45
0:09:43.183927	LOG	PULL_DATA: 02 9c53 02 aa555a0000240409
0:09:43.187925	LOG	PULL_ACK: 02 9c53 04
0:09:44.112400	LOG	PUSH_ACK: 02 03b3 01
0:09:44.114399	LOG	PUSH_DATA: Protocol version = 02, Token = 03b3, Identifier = 00, JSON = {'rxpk': [{'tmst': 4193787783, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAMAIBPZ2OKZGS'}]}
0:09:44.116398	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0230, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8e299192)
0:09:44.118397	LOG	Server <---------- DUT
0:09:44.119396	LOG	Repeated frame. It does not count
0:09:46.687938	LOG	PUSH_ACK: 02 03b4 01
0:09:46.689938	LOG	PUSH_DATA: Protocol version = 02, Token = 03b4, Identifier = 00, JSON = {'rxpk': [{'tmst': 4196356903, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAMQIB0qFFobCV'}]}
0:09:46.691936	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0231, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 45a1b095)
0:09:46.692936	LOG	Server <---------- DUT
0:09:46.694935	LOG	Count = 46
0:09:49.109564	LOG	PUSH_ACK: 02 03b5 01
0:09:49.111563	LOG	PUSH_DATA: Protocol version = 02, Token = 03b5, Identifier = 00, JSON = {'rxpk': [{'tmst': 4198790383, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAMQIB0qFFobCV'}]}
0:09:49.112562	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0231, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 45a1b095)
0:09:49.113562	LOG	Server <---------- DUT
0:09:49.115561	LOG	Repeated frame. It does not count
0:09:51.684205	LOG	PUSH_ACK: 02 03b6 01
0:09:51.686203	LOG	PUSH_DATA: Protocol version = 02, Token = 03b6, Identifier = 00, JSON = {'rxpk': [{'tmst': 4201359519, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAMgIBm3+b0fvt'}]}
0:09:51.688203	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0232, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9bd1fbed)
0:09:51.689202	LOG	Server <---------- DUT
0:09:51.690202	LOG	Count = 47
0:09:53.273302	LOG	PULL_DATA: 02 0da7 02 aa555a0000240409

0:09:53.275302	LOG	PULL_ACK: 02 0da7 04
0:09:54.104831	LOG	PUSH_ACK: 02 03b7 01
0:09:54.106829	LOG	PUSH_DATA: Protocol version = 02, Token = 03b7, Identifier = 00, JSON = {'rxpk': [{'tmst': 4203793023, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAMgIBm3+b0fvt'}], 'stat': {'time': '2021-05-14 18:07:33 GMT', 'rxnb': 12, 'rxok': 12, 'rxfw': 12, 'ackr': 100.0, 'dwnb': 0, 'txnb': 0}}
0:09:54.108828	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0232, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9bd1fbed)
0:09:54.109827	LOG	Server <---------- DUT
0:09:54.111826	LOG	Repeated frame. It does not count
0:09:56.678426	LOG	PUSH_ACK: 02 03b8 01
0:09:56.680425	LOG	PUSH_DATA: Protocol version = 02, Token = 03b8, Identifier = 00, JSON = {'rxpk': [{'tmst': 4206362143, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAMwIB5uf2JpNH'}]}
0:09:56.682424	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0233, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f6269347)
0:09:56.683442	LOG	Server <---------- DUT
0:09:56.685422	LOG	Count = 48
0:09:59.099976	LOG	PUSH_ACK: 02 03b9 01
0:09:59.101975	LOG	PUSH_DATA: Protocol version = 02, Token = 03b9, Identifier = 00, JSON = {'rxpk': [{'tmst': 4208795639, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAMwIB5uf2JpNH'}]}
0:09:59.103974	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0233, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f6269347)
0:09:59.105973	LOG	Server <---------- DUT
0:09:59.106972	LOG	Repeated frame. It does not count
0:10:01.676615	LOG	PUSH_ACK: 02 03ba 01
0:10:01.678613	LOG	PUSH_DATA: Protocol version = 02, Token = 03ba, Identifier = 00, JSON = {'rxpk': [{'tmst': 4211364775, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDANAIBt5rZGFRi'}]}
0:10:01.680614	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0234, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d9185462)
0:10:01.681611	LOG	Server <---------- DUT
0:10:01.683610	LOG	Count = 49
0:10:03.353664	LOG	PULL_DATA: 02 fa5a 02 aa555a0000240409
0:10:03.355661	LOG	PULL_ACK: 02 fa5a 04
0:10:04.098288	LOG	PUSH_ACK: 02 03bb 01
0:10:04.101287	LOG	PUSH_DATA: Protocol version = 02, Token = 03bb, Identifier = 00, JSON = {'rxpk': [{'tmst': 4213798239, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDANAIBt5rZGFRi'}]}
0:10:04.103285	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0234, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d9185462)
0:10:04.104285	LOG	Server <---------- DUT
0:10:04.106287	LOG	Repeated frame. It does not count
0:10:06.674826	LOG	PUSH_ACK: 02 03bc 01
0:10:06.676826	LOG	PUSH_DATA: Protocol version = 02, Token = 03bc, Identifier = 00, JSON = {'rxpk': [{'tmst': 4216367399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDANQIBWUUQ6MCZ'}]}
0:10:06.678825	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0235, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 10e8c099)

0:10:06.679824	LOG	Server <---------- DUT
0:10:06.680824	LOG	Count = 50
0:10:09.147422	LOG	PUSH_ACK: 02 03bd 01
0:10:09.150421	LOG	PUSH_DATA: Protocol version = 02, Token = 03bd, Identifier = 00, JSON = {'rxpk': [{'tmst': 4218800879, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDANQIBWUUQ6MCZ'}]}
0:10:09.152420	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0235, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 10e8c099)
0:10:09.153419	LOG	Server <---------- DUT
0:10:09.155418	LOG	Repeated frame. It does not count
0:10:11.672990	LOG	PUSH_ACK: 02 03be 01
0:10:11.674990	LOG	PUSH_DATA: Protocol version = 02, Token = 03be, Identifier = 00, JSON = {'rxpk': [{'tmst': 4221370015, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDANgIBWQr4+tYj'}]}
0:10:11.676987	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0236, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f8fad623)
0:10:11.677988	LOG	Server <---------- DUT
0:10:11.679986	LOG	Count = 51
0:10:13.433678	LOG	PULL_DATA: 02 d8b0 02 aa555a0000240409
0:10:13.437676	LOG	PULL_ACK: 02 d8b0 04
0:10:14.146273	LOG	PUSH_ACK: 02 03bf 01
0:10:14.149271	LOG	PUSH_DATA: Protocol version = 02, Token = 03bf, Identifier = 00, JSON = {'rxpk': [{'tmst': 4223803527, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDANgIBWQr4+tYj'}]}
0:10:14.151271	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0236, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f8fad623)
0:10:14.152270	LOG	Server <---------- DUT
0:10:14.155268	LOG	Repeated frame. It does not count
0:10:16.722957	LOG	PUSH_ACK: 02 03c0 01
0:10:16.725956	LOG	PUSH_DATA: Protocol version = 02, Token = 03c0, Identifier = 00, JSON = {'rxpk': [{'tmst': 4226372639, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDANwIBZIYewMLs'}]}
0:10:16.726955	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0237, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1ec0c2ec)
0:10:16.728953	LOG	Server <---------- DUT
0:10:16.730952	LOG	Count = 52
0:10:19.145582	LOG	PUSH_ACK: 02 03c1 01
0:10:19.147581	LOG	PUSH_DATA: Protocol version = 02, Token = 03c1, Identifier = 00, JSON = {'rxpk': [{'tmst': 4228806119, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDANwIBZIYewMLs'}]}
0:10:19.149580	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0237, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1ec0c2ec)
0:10:19.151579	LOG	Server <---------- DUT
0:10:19.152578	LOG	Repeated frame. It does not count
0:10:21.722124	LOG	PUSH_ACK: 02 03c2 01
0:10:21.723122	LOG	PUSH_DATA: Protocol version = 02, Token = 03c2, Identifier = 00, JSON = {'rxpk': [{'tmst': 4231375271, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAOAIB+XzAjEuj'}]}
0:10:21.725121	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0238, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c08c4ba3)

0:10:21.726123	LOG	Server <---------- DUT
0:10:21.727122	LOG	Count = 53
0:10:23.513104	LOG	PULL_DATA: 02 b5db 02 aa555a0000240409
0:10:23.515102	LOG	PULL_ACK: 02 b5db 04
0:10:24.206710	LOG	PUSH_ACK: 02 03c4 01
0:10:24.208709	LOG	PUSH_DATA: Protocol version = 02, Token = 03c4, Identifier = 00, JSON = {'rxpk': [{'tmst': 4233808759, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAOAIB+XzAjEuj'}]}
0:10:24.210708	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0238, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c08c4ba3)
0:10:24.212707	LOG	Server <---------- DUT
0:10:24.213706	LOG	Repeated frame. It does not count
0:10:26.680104	LOG	PUSH_ACK: 02 03c5 01
0:10:26.682103	LOG	PUSH_DATA: Protocol version = 02, Token = 03c5, Identifier = 00, JSON = {'rxpk': [{'tmst': 4236377895, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAOQIB1zUB4Cb/'}]}
0:10:26.683102	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0239, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 01e026ff)
0:10:26.685101	LOG	Server <---------- DUT
0:10:26.686100	LOG	Count = 54
0:10:29.152701	LOG	PUSH_ACK: 02 03c6 01
0:10:29.155699	LOG	PUSH_DATA: Protocol version = 02, Token = 03c6, Identifier = 00, JSON = {'rxpk': [{'tmst': 4238811375, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAOQIB1zUB4Cb/'}]}
0:10:29.157698	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0239, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 01e026ff)
0:10:29.158697	LOG	Server <---------- DUT
0:10:29.160697	LOG	Repeated frame. It does not count
0:10:31.730256	LOG	PUSH_ACK: 02 03c7 01
0:10:31.732238	LOG	PUSH_DATA: Protocol version = 02, Token = 03c7, Identifier = 00, JSON = {'rxpk': [{'tmst': 4241380527, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAOgIBg1h3zX7s'}]}
0:10:31.733236	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 77cd7eec)
0:10:31.735235	LOG	Server <---------- DUT
0:10:31.736235	LOG	Count = 55
0:10:33.593181	LOG	PULL_DATA: 02 50c2 02 aa555a0000240409
0:10:33.595180	LOG	PULL_ACK: 02 50c2 04
0:10:34.150865	LOG	PUSH_ACK: 02 03c8 01
0:10:34.152863	LOG	PUSH_DATA: Protocol version = 02, Token = 03c8, Identifier = 00, JSON = {'rxpk': [{'tmst': 4243813991, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAOgIBg1h3zX7s'}]}
0:10:34.154862	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 77cd7eec)
0:10:34.156861	LOG	Server <---------- DUT
0:10:34.157860	LOG	Repeated frame. It does not count
0:10:36.724404	LOG	PUSH_ACK: 02 03c9 01
0:10:36.726403	LOG	PUSH_DATA: Protocol version = 02, Token = 03c9, Identifier = 00, JSON = {'rxpk': [{'tmst': 4246383151, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAOwIBeTNpZ37u'}]}

0:10:36.727402	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 69677eee)
0:10:36.728401	LOG	Server <---------- DUT
0:10:36.729401	LOG	Count = 56
0:10:39.146030	LOG	PUSH_ACK: 02 03cb 01
0:10:39.148029	LOG	PUSH_DATA: Protocol version = 02, Token = 03cb, Identifier = 00, JSON = {'rxpk': [{'tmst': 4248816615, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAOwIBeTNpZ37u'}]}
0:10:39.150027	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 69677eee)
0:10:39.152026	LOG	Server <---------- DUT
0:10:39.153025	LOG	Repeated frame. It does not count
0:10:41.719569	LOG	PUSH_ACK: 02 03cc 01
0:10:41.721567	LOG	PUSH_DATA: Protocol version = 02, Token = 03cc, Identifier = 00, JSON = {'rxpk': [{'tmst': 4251385775, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAPAIBLPT0w7RY'}]}
0:10:41.722567	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f4c3b458)
0:10:41.723567	LOG	Server <---------- DUT
0:10:41.725566	LOG	Count = 57
0:10:43.673460	LOG	PULL_DATA: 02 fd5d 02 aa555a0000240409
0:10:43.677458	LOG	PULL_ACK: 02 fd5d 04
0:10:44.140195	LOG	PUSH_ACK: 02 03cd 01
0:10:44.142194	LOG	PUSH_DATA: Protocol version = 02, Token = 03cd, Identifier = 00, JSON = {'rxpk': [{'tmst': 4253819263, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAPAIBLPT0w7RY'}]}
0:10:44.144193	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f4c3b458)
0:10:44.146192	LOG	Server <---------- DUT
0:10:44.147191	LOG	Repeated frame. It does not count
0:10:46.716735	LOG	PUSH_ACK: 02 03ce 01
0:10:46.718733	LOG	PUSH_DATA: Protocol version = 02, Token = 03ce, Identifier = 00, JSON = {'rxpk': [{'tmst': 4256388399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAPQIBDFAwVe0d'}]}
0:10:46.719731	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3055ed1d)
0:10:46.720731	LOG	Server <---------- DUT
0:10:46.721730	LOG	Count = 58
0:10:49.137359	LOG	PUSH_ACK: 02 03cf 01
0:10:49.140358	LOG	PUSH_DATA: Protocol version = 02, Token = 03cf, Identifier = 00, JSON = {'rxpk': [{'tmst': 4258821887, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAPQIBDFAwVe0d'}]}
0:10:49.142356	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3055ed1d)
0:10:49.143356	LOG	Server <---------- DUT
0:10:49.145355	LOG	Repeated frame. It does not count
0:10:51.713897	LOG	PUSH_ACK: 02 03d0 01
0:10:51.715896	LOG	PUSH_DATA: Protocol version = 02, Token = 03d0, Identifier = 00, JSON = {'rxpk': [{'tmst': 4261391031, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAPgIBLYTXn9cW'}]}

0:10:51.716895	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d79fd716)
0:10:51.718895	LOG	Server <---------- DUT
0:10:51.720893	LOG	Count = 59
0:10:53.752821	LOG	PULL_DATA: 02 095a 02 aa555a0000240409
0:10:53.754820	LOG	PULL_ACK: 02 095a 04
0:10:54.194567	LOG	PUSH_ACK: 02 03d2 01
0:10:54.196567	LOG	PUSH_DATA: Protocol version = 02, Token = 03d2, Identifier = 00, JSON = {'rxpk': [{'tmst': 4263824527, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAPgIBLYTXn9cW'}]}
0:10:54.197566	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d79fd716)
0:10:54.198566	LOG	Server <---------- DUT
0:10:54.199566	LOG	Repeated frame. It does not count
0:10:56.716135	LOG	PUSH_ACK: 02 03d3 01
0:10:56.719134	LOG	PUSH_DATA: Protocol version = 02, Token = 03d3, Identifier = 00, JSON = {'rxpk': [{'tmst': 4266393647, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAPwIBNqWjNRyM'}]}
0:10:56.721133	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a3351c8c)
0:10:56.722132	LOG	Server <---------- DUT
0:10:56.725130	LOG	Count = 60
0:10:59.135762	LOG	PUSH_ACK: 02 03d4 01
0:10:59.138760	LOG	PUSH_DATA: Protocol version = 02, Token = 03d4, Identifier = 00, JSON = {'rxpk': [{'tmst': 4268827135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAPwIBNqWjNRyM'}]}
0:10:59.140760	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 023f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a3351c8c)
0:10:59.141759	LOG	Server <---------- DUT
0:10:59.143758	LOG	Repeated frame. It does not count
0:11:01.711300	LOG	PUSH_ACK: 02 03d5 01
0:11:01.713300	LOG	PUSH_DATA: Protocol version = 02, Token = 03d5, Identifier = 00, JSON = {'rxpk': [{'tmst': 4271396271, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAQAIBiiUq25RE'}]}
0:11:01.715299	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0240, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2adb9444)
0:11:01.716298	LOG	Server <---------- DUT
0:11:01.717299	LOG	Count = 61
0:11:03.833474	LOG	PULL_DATA: 02 2aa5 02 aa555a0000240409
0:11:03.834474	LOG	PULL_ACK: 02 2aa5 04
0:11:04.133304	LOG	PUSH_ACK: 02 03d6 01
0:11:04.135304	LOG	PUSH_DATA: Protocol version = 02, Token = 03d6, Identifier = 00, JSON = {'rxpk': [{'tmst': 4273829767, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAQAIBiiUq25RE'}]}
0:11:04.136302	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0240, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2adb9444)
0:11:04.138302	LOG	Server <---------- DUT
0:11:04.139301	LOG	Repeated frame. It does not count
0:11:06.709478	LOG	PUSH_ACK: 02 03d7 01
0:11:06.712477	LOG	PUSH_DATA: Protocol version = 02, Token = 03d7, Identifier = 00, JSON = {'rxpk': [{'tmst': 4276398895, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAQQIBVKfKkSNG'}]}
0:11:06.713476	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0241, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ca912346)
0:11:06.716476	LOG	Server <---------- DUT
0:11:06.720472	LOG	Count = 62
0:11:09.184074	LOG	PUSH_ACK: 02 03d8 01
0:11:09.186073	LOG	PUSH_DATA: Protocol version = 02, Token = 03d8, Identifier = 00, JSON = {'rxpk': [{'tmst': 4278832399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAQQIBVKfKkSNG'}]}
0:11:09.188071	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0241, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ca912346)
0:11:09.191070	LOG	Server <---------- DUT
0:11:09.194068	LOG	Repeated frame. It does not count
0:11:11.707757	LOG	PUSH_ACK: 02 03d9 01
0:11:11.709757	LOG	PUSH_DATA: Protocol version = 02, Token = 03d9, Identifier = 00, JSON = {'rxpk': [{'tmst': 4281401527, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAQgIBjFFvkese'}]}
0:11:11.710758	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0242, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6f91eb1e)
0:11:11.712755	LOG	Server <---------- DUT
0:11:11.713754	LOG	Count = 63
0:11:13.913506	LOG	PULL_DATA: 02 e2a3 02 aa555a0000240409
0:11:13.917504	LOG	PULL_ACK: 02 e2a3 04
0:11:14.180359	LOG	PUSH_ACK: 02 03da 01
0:11:14.183358	LOG	PUSH_DATA: Protocol version = 02, Token = 03da, Identifier = 00, JSON = {'rxpk': [{'tmst': 4283835039, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAQgIBjFFvkese'}]}
0:11:14.184353	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0242, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6f91eb1e)
0:11:14.186352	LOG	Server <---------- DUT
0:11:14.190349	LOG	Repeated frame. It does not count
0:11:16.705922	LOG	PUSH_ACK: 02 03db 01
0:11:16.707921	LOG	PUSH_DATA: Protocol version = 02, Token = 03db, Identifier = 00, JSON = {'rxpk': [{'tmst': 4286404151, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAQwIBFGknHjyT'}]}
0:11:16.709919	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0243, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 271e3c93)
0:11:16.712917	LOG	Server <---------- DUT
0:11:16.716915	LOG	Count = 64
0:11:19.178518	LOG	PUSH_ACK: 02 03dc 01
0:11:19.180517	LOG	PUSH_DATA: Protocol version = 02, Token = 03dc, Identifier = 00, JSON = {'rxpk': [{'tmst': 4288837647, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAQwIBFGknHjyT'}]}
0:11:19.182515	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0243, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 271e3c93)
0:11:19.184515	LOG	Server <---------- DUT
0:11:19.185514	LOG	Repeated frame. It does not count
0:11:21.754664	LOG	PUSH_ACK: 02 03dd 01
0:11:21.757663	LOG	PUSH_DATA: Protocol version = 02, Token = 03dd, Identifier = 00, JSON = {'rxpk': [{'tmst': 4291406791, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDARAIBfleg2jSO'}]}
0:11:21.759661	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0244, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a0da348e)
0:11:21.760661	LOG	Server <---------- DUT
0:11:21.762660	LOG	Count = 65
0:11:23.993394	LOG	PULL_DATA: 02 fbb7 02 aa555a0000240409
0:11:23.995393	LOG	PULL_ACK: 02 fbb7 04
0:11:24.247250	LOG	PUSH_ACK: 02 03df 01
0:11:24.249248	LOG	PUSH_DATA: Protocol version = 02, Token = 03df, Identifier = 00, JSON = {'rxpk': [{'tmst': 4293886615, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDARAIBfleg2jSO'}]}
0:11:24.250248	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0244, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a0da348e)
0:11:24.251248	LOG	Server <---------- DUT
0:11:24.252247	LOG	Repeated frame. It does not count
0:11:26.771331	LOG	PUSH_ACK: 02 03e0 01
0:11:26.773330	LOG	PUSH_DATA: Protocol version = 02, Token = 03e0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1488431, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDARQIBl9g9RcvU'}]}
0:11:26.774329	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0245, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3d45cbd4)
0:11:26.775330	LOG	Server <---------- DUT
0:11:26.777329	LOG	Count = 66
0:11:26.778328	LOG	Waiting for the retransmissions
0:11:29.244222	LOG	PUSH_ACK: 02 03e1 01
0:11:29.246220	LOG	PUSH_DATA: Protocol version = 02, Token = 03e1, Identifier = 00, JSON = {'rxpk': [{'tmst': 3968255, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDARQIBl9g9RcvU'}]}
0:11:29.248219	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0245, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3d45cbd4)
0:11:29.249219	LOG	Server <---------- DUT
0:11:29.285199	LOG	Expected number of uplink messages have been received
0:11:29.289196	LOG	Test adaptive data rate control in frame header process starts
0:11:31.768789	LOG	PUSH_ACK: 02 03e2 01
0:11:31.770790	LOG	PUSH_DATA: Protocol version = 02, Token = 03e2, Identifier = 00, JSON = {'rxpk': [{'tmst': 6491047, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDARgIBBTXS6l/k'}]}
0:11:31.772787	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0246, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d2ea5fe4)
0:11:31.773788	LOG	Server <---------- DUT
0:11:31.775785	LOG	Count = 2
0:11:34.073481	LOG	PULL_DATA: 02 1347 02 aa555a0000240409
0:11:34.075480	LOG	PULL_ACK: 02 1347 04
0:11:34.243386	LOG	PUSH_ACK: 02 03e4 01
0:11:34.245386	LOG	PUSH_DATA: Protocol version = 02, Token = 03e4, Identifier = 00, JSON = {'rxpk': [{'tmst': 8970863, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDARgIBBTXS6l/k'}]}
0:11:34.247384	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0246, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d2ea5fe4)
0:11:34.248384	LOG	Server <---------- DUT

0:11:34.250383	LOG	Repeated frame. It does not count
0:11:36.767953	LOG	PUSH_ACK: 02 03e5 01
0:11:36.769951	LOG	PUSH_DATA: Protocol version = 02, Token = 03e5, Identifier = 00, JSON = {'rxpk': [{'tmst': 11493671, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDARwIBLQPNTtNK'}]}
0:11:36.770951	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0247, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cd4ed34a)
0:11:36.772949	LOG	Server <---------- DUT
0:11:36.774948	LOG	Count = 3
0:11:39.292519	LOG	PUSH_ACK: 02 03e6 01
0:11:39.294518	LOG	PUSH_DATA: Protocol version = 02, Token = 03e6, Identifier = 00, JSON = {'rxpk': [{'tmst': 13973487, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDARwIBLQPNTtNK'}]}
0:11:39.296517	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0247, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cd4ed34a)
0:11:39.297516	LOG	Server <---------- DUT
0:11:39.299515	LOG	Repeated frame. It does not count
0:11:41.766137	LOG	PUSH_ACK: 02 03e7 01
0:11:41.768116	LOG	PUSH_DATA: Protocol version = 02, Token = 03e7, Identifier = 00, JSON = {'rxpk': [{'tmst': 16496287, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDASAIB1CN5+Zgt'}]}
0:11:41.770114	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0248, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 79f9982d)
0:11:41.771114	LOG	Server <---------- DUT
0:11:41.773113	LOG	Count = 4
0:11:44.152760	LOG	PULL_DATA: 02 549a 02 aa555a0000240409
0:11:44.157758	LOG	PULL_ACK: 02 549a 04
0:11:44.290682	LOG	PUSH_ACK: 02 03e8 01
0:11:44.292681	LOG	PUSH_DATA: Protocol version = 02, Token = 03e8, Identifier = 00, JSON = {'rxpk': [{'tmst': 18976127, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDASAIB1CN5+Zgt'}]}
0:11:44.294680	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0248, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 79f9982d)
0:11:44.295680	LOG	Server <---------- DUT
0:11:44.296679	LOG	Repeated frame. It does not count
0:11:46.815932	LOG	PUSH_ACK: 02 03e9 01
0:11:46.817931	LOG	PUSH_DATA: Protocol version = 02, Token = 03e9, Identifier = 00, JSON = {'rxpk': [{'tmst': 21498903, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDASQIBNjkTbSRq'}]}
0:11:46.818930	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0249, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 136d246a)
0:11:46.819930	LOG	Server <---------- DUT
0:11:46.821929	LOG	Count = 5
0:11:49.288560	LOG	PUSH_ACK: 02 03ea 01
0:11:49.291560	LOG	PUSH_DATA: Protocol version = 02, Token = 03ea, Identifier = 00, JSON = {'rxpk': [{'tmst': 23978703, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDASQIBNjkTbSRq'}]}
0:11:49.293557	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0249, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 136d246a)
0:11:49.294558	LOG	Server <---------- DUT

0:11:49.296555	LOG	Repeated frame. It does not count
0:11:51.814147	LOG	PUSH_ACK: 02 03eb 01
0:11:51.816145	LOG	PUSH_DATA: Protocol version = 02, Token = 03eb, Identifier = 00, JSON = {'rxpk': [{'tmst': 26501527, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDASgIBLZ8sXW0s'}]}
0:11:51.817145	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2c5d6d2c)
0:11:51.820144	LOG	Server <---------- DUT
0:11:51.824143	LOG	Count = 6
0:11:54.232774	LOG	PULL_DATA: 02 3163 02 aa555a0000240409
0:11:54.234774	LOG	PULL_ACK: 02 3163 04
0:11:54.295739	LOG	PUSH_ACK: 02 03ed 01
0:11:54.297737	LOG	PUSH_DATA: Protocol version = 02, Token = 03ed, Identifier = 00, JSON = {'rxpk': [{'tmst': 28981343, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDASgIBLZ8sXW0s'}]}
0:11:54.298737	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2c5d6d2c)
0:11:54.299736	LOG	Server <---------- DUT
0:11:54.300736	LOG	Repeated frame. It does not count
0:11:56.817308	LOG	PUSH_ACK: 02 03ee 01
0:11:56.819307	LOG	PUSH_DATA: Protocol version = 02, Token = 03ee, Identifier = 00, JSON = {'rxpk': [{'tmst': 31504151, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDASwIBybRdAI0z'}]}
0:11:56.821305	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5d008d33)
0:11:56.823304	LOG	Server <---------- DUT
0:11:56.824304	LOG	Count = 7
0:11:59.288905	LOG	PUSH_ACK: 02 03ef 01
0:11:59.290904	LOG	PUSH_DATA: Protocol version = 02, Token = 03ef, Identifier = 00, JSON = {'rxpk': [{'tmst': 33983975, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDASwIBybRdAI0z'}]}
0:11:59.291904	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5d008d33)
0:11:59.292904	LOG	Server <---------- DUT
0:11:59.294903	LOG	Repeated frame. It does not count
0:12:01.810474	LOG	PUSH_ACK: 02 03f0 01
0:12:01.813474	LOG	PUSH_DATA: Protocol version = 02, Token = 03f0, Identifier = 00, JSON = {'rxpk': [{'tmst': 36506775, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDATAIBgAMqlxZP'}]}
0:12:01.814473	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2a97164f)
0:12:01.816471	LOG	Server <---------- DUT
0:12:01.817488	LOG	Count = 8
0:12:04.282071	LOG	PUSH_ACK: 02 03f1 01
0:12:04.285070	LOG	PUSH_DATA: Protocol version = 02, Token = 03f1, Identifier = 00, JSON = {'rxpk': [{'tmst': 38986623, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDATAIBgAMqlxZP'}]}
0:12:04.287069	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2a97164f)
0:12:04.288068	LOG	Server <---------- DUT

0:12:04.290067	LOG	Repeated frame. It does not count
0:12:04.313054	LOG	PULL_DATA: 02 3223 02 aa555a0000240409
0:12:04.315053	LOG	PULL_ACK: 02 3223 04
0:12:06.805645	LOG	PUSH_ACK: 02 03f2 01
0:12:06.807638	LOG	PUSH_DATA: Protocol version = 02, Token = 03f2, Identifier = 00, JSON = {'rxpk': [{'tmst': 41509399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDATQIBCH6/imVX'}]}
0:12:06.808639	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bf8a6557)
0:12:06.810637	LOG	Server <---------- DUT
0:12:06.811635	LOG	Count = 9
0:12:09.276335	LOG	PUSH_ACK: 02 03f3 01
0:12:09.278334	LOG	PUSH_DATA: Protocol version = 02, Token = 03f3, Identifier = 00, JSON = {'rxpk': [{'tmst': 43989231, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDATQIBCH6/imVX'}]}
0:12:09.280333	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bf8a6557)
0:12:09.281333	LOG	Server <---------- DUT
0:12:09.283331	LOG	Repeated frame. It does not count
0:12:11.798904	LOG	PUSH_ACK: 02 03f4 01
0:12:11.800903	LOG	PUSH_DATA: Protocol version = 02, Token = 03f4, Identifier = 00, JSON = {'rxpk': [{'tmst': 46512023, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDATgIBnptaMjJy'}]}
0:12:11.801902	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5a323272)
0:12:11.802901	LOG	Server <---------- DUT
0:12:11.804900	LOG	Count = 10
0:12:14.269190	LOG	PUSH_ACK: 02 03f5 01
0:12:14.274188	LOG	PUSH_DATA: Protocol version = 02, Token = 03f5, Identifier = 00, JSON = {'rxpk': [{'tmst': 48991847, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDATgIBnptaMjJy'}]}
0:12:14.276185	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5a323272)
0:12:14.277154	LOG	Server <---------- DUT
0:12:14.279153	LOG	Repeated frame. It does not count
0:12:14.392386	LOG	PULL_DATA: 02 4ece 02 aa555a0000240409
0:12:14.394385	LOG	PULL_ACK: 02 4ece 04
0:12:16.794024	LOG	PUSH_ACK: 02 03f6 01
0:12:16.796022	LOG	PUSH_DATA: Protocol version = 02, Token = 03f6, Identifier = 00, JSON = {'rxpk': [{'tmst': 51514639, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDATwIBWjFnxRpn'}]}
0:12:16.797023	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 67c51a67)
0:12:16.798023	LOG	Server <---------- DUT
0:12:16.799022	LOG	Count = 11
0:12:19.263654	LOG	PUSH_ACK: 02 03f7 01
0:12:19.266651	LOG	PUSH_DATA: Protocol version = 02, Token = 03f7, Identifier = 00, JSON = {'rxpk': [{'tmst': 53994471, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDATwIBWjFnxRpn'}]}

0:12:19.268650	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 024f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 67c51a67)
0:12:19.269649	LOG	Server <---------- DUT
0:12:19.271646	LOG	Repeated frame. It does not count
0:12:21.786235	LOG	PUSH_ACK: 02 03f8 01
0:12:21.788234	LOG	PUSH_DATA: Protocol version = 02, Token = 03f8, Identifier = 00, JSON = {'rxpk': [{'tmst': 56517271, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAUAIBeYvJhV0G'}]}
0:12:21.789233	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0250, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c9855d06)
0:12:21.790235	LOG	Server <---------- DUT
0:12:21.792233	LOG	Count = 12
0:12:24.265828	LOG	PUSH_ACK: 02 03fa 01
0:12:24.268826	LOG	PUSH_DATA: Protocol version = 02, Token = 03fa, Identifier = 00, JSON = {'rxpk': [{'tmst': 58997071, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAUAIBeYvJhV0G'}]}
0:12:24.270825	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0250, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c9855d06)
0:12:24.271824	LOG	Server <---------- DUT
0:12:24.273823	LOG	Repeated frame. It does not count
0:12:24.472711	LOG	PULL_DATA: 02 765b 02 aa555a0000240409
0:12:24.475709	LOG	PULL_ACK: 02 765b 04
0:12:26.789397	LOG	PUSH_ACK: 02 03fb 01
0:12:26.791396	LOG	PUSH_DATA: Protocol version = 02, Token = 03fb, Identifier = 00, JSON = {'rxpk': [{'tmst': 61519879, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAUQIB6oQ706PY'}]}
0:12:26.792398	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0251, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3bd3a3d8)
0:12:26.793394	LOG	Server <---------- DUT
0:12:26.795394	LOG	Count = 13
0:12:29.312148	LOG	PUSH_ACK: 02 03fc 01
0:12:29.314147	LOG	PUSH_DATA: Protocol version = 02, Token = 03fc, Identifier = 00, JSON = {'rxpk': [{'tmst': 63999703, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAUQIB6oQ706PY'}]}
0:12:29.316146	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0251, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3bd3a3d8)
0:12:29.318145	LOG	Server <---------- DUT
0:12:29.319144	LOG	Repeated frame. It does not count
0:12:31.834719	LOG	PUSH_ACK: 02 03fd 01
0:12:31.836720	LOG	PUSH_DATA: Protocol version = 02, Token = 03fd, Identifier = 00, JSON = {'rxpk': [{'tmst': 66522495, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAUgIBfTNPSYCX'}]}
0:12:31.837715	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0252, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4f498097)
0:12:31.839717	LOG	Server <---------- DUT
0:12:31.840717	LOG	Count = 14
0:12:34.305503	LOG	PUSH_ACK: 02 03fe 01
0:12:34.307504	LOG	PUSH_DATA: Protocol version = 02, Token = 03fe, Identifier = 00, JSON = {'rxpk': [{'tmst': 69002295, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAUgIBfTNPSYCX'}]}

0:12:34.309501	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0252, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4f498097)
0:12:34.310500	LOG	Server <---------- DUT
0:12:34.312500	LOG	Repeated frame. It does not count
0:12:34.552332	LOG	PULL_DATA: 02 7571 02 aa555a0000240409
0:12:34.554332	LOG	PULL_ACK: 02 7571 04
0:12:36.828110	LOG	PUSH_ACK: 02 03ff 01
0:12:36.830109	LOG	PUSH_DATA: Protocol version = 02, Token = 03ff, Identifier = 00, JSON = {'rxpk': [{'tmst': 71525111, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAUwIBztxaJhmG'}]}
0:12:36.831108	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0253, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5a261986)
0:12:36.832108	LOG	Server <---------- DUT
0:12:36.833107	LOG	Count = 15
0:12:39.298942	LOG	PUSH_ACK: 02 0400 01
0:12:39.301941	LOG	PUSH_DATA: Protocol version = 02, Token = 0400, Identifier = 00, JSON = {'rxpk': [{'tmst': 74004935, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAUwIBztxaJhmG'}]}
0:12:39.303940	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0253, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5a261986)
0:12:39.304939	LOG	Server <---------- DUT
0:12:39.306938	LOG	Repeated frame. It does not count
0:12:41.822510	LOG	PUSH_ACK: 02 0401 01
0:12:41.824509	LOG	PUSH_DATA: Protocol version = 02, Token = 0401, Identifier = 00, JSON = {'rxpk': [{'tmst': 76527719, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAVAIBj+6lm0Rq'}]}
0:12:41.825508	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0254, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a59b446a)
0:12:41.827508	LOG	Server <---------- DUT
0:12:41.828507	LOG	Count = 16
0:12:44.294183	LOG	PUSH_ACK: 02 0402 01
0:12:44.303178	LOG	PUSH_DATA: Protocol version = 02, Token = 0402, Identifier = 00, JSON = {'rxpk': [{'tmst': 79007551, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAVAIBj+6lm0Rq'}]}
0:12:44.306172	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0254, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a59b446a)
0:12:44.308169	LOG	Server <---------- DUT
0:12:44.309168	LOG	Repeated frame. It does not count
0:12:44.632768	LOG	PULL_DATA: 02 b64d 02 aa555a0000240409
0:12:44.635767	LOG	PULL_ACK: 02 b64d 04
0:12:46.822494	LOG	PUSH_ACK: 02 0403 01
0:12:46.826491	LOG	PUSH_DATA: Protocol version = 02, Token = 0403, Identifier = 00, JSON = {'rxpk': [{'tmst': 81530351, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAVQIBSO8xHbv9'}]}
0:12:46.828490	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0255, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 311dbbfd)
0:12:46.829488	LOG	Server <---------- DUT
0:12:46.830489	LOG	Count = 17
0:12:49.296235	LOG	PUSH_ACK: 02 0404 01
0:12:49.298235	LOG	PUSH_DATA: Protocol version = 02, Token = 0404, Identifier = 00, JSON = {'rxpk': [{'tmst': 84010159, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA',

		'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAVQIBSO8xHbv9'}]}
0:12:49.300232	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0255, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 311dbbfd)
0:12:49.302231	LOG	Server <---------- DUT
0:12:49.303231	LOG	Repeated frame. It does not count
0:12:51.818814	LOG	PUSH_ACK: 02 0405 01
0:12:51.824810	LOG	PUSH_DATA: Protocol version = 02, Token = 0405, Identifier = 00, JSON = {'rxpk': [{'tmst': 86532967, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAVgIBXyVORj9K'}]}
0:12:51.828808	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0256, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4e463f4a)
0:12:51.832807	LOG	Server <---------- DUT
0:12:51.835805	LOG	Count = 18
0:12:54.305402	LOG	PUSH_ACK: 02 0407 01
0:12:54.307401	LOG	PUSH_DATA: Protocol version = 02, Token = 0407, Identifier = 00, JSON = {'rxpk': [{'tmst': 89012775, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAVgIBXyVORj9K'}]}
0:12:54.309400	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0256, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4e463f4a)
0:12:54.311399	LOG	Server <---------- DUT
0:12:54.313397	LOG	Repeated frame. It does not count
0:12:54.712172	LOG	PULL_DATA: 02 216b 02 aa555a0000240409
0:12:54.714170	LOG	PULL_ACK: 02 216b 04
0:12:56.827970	LOG	PUSH_ACK: 02 0408 01
0:12:56.829970	LOG	PUSH_DATA: Protocol version = 02, Token = 0408, Identifier = 00, JSON = {'rxpk': [{'tmst': 91535583, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAVwIBSgHD+8bz'}]}
0:12:56.830969	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0257, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c3fbc6f3)
0:12:56.832968	LOG	Server <---------- DUT
0:12:56.833967	LOG	Count = 19
0:12:59.298568	LOG	PUSH_ACK: 02 0409 01
0:12:59.300567	LOG	PUSH_DATA: Protocol version = 02, Token = 0409, Identifier = 00, JSON = {'rxpk': [{'tmst': 94015383, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAVwIBSgHD+8bz'}]}
0:12:59.302566	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0257, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c3fbc6f3)
0:12:59.303566	LOG	Server <---------- DUT
0:12:59.305564	LOG	Repeated frame. It does not count
0:13:01.821141	LOG	PUSH_ACK: 02 040a 01
0:13:01.823137	LOG	PUSH_DATA: Protocol version = 02, Token = 040a, Identifier = 00, JSON = {'rxpk': [{'tmst': 96538199, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAWAIBHd3FHKvY'}]}
0:13:01.824145	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0258, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c51cabd8)
0:13:01.826137	LOG	Server <---------- DUT
0:13:01.827133	LOG	Count = 20
0:13:04.293283	LOG	PUSH_ACK: 02 040b 01
0:13:04.295282	LOG	PUSH_DATA: Protocol version = 02, Token = 040b, Identifier = 00, JSON = {'rxpk': [{'tmst': 99018023, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA',

		'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAWAIBHd3FHKvY'}]}
0:13:04.297280	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0258, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c51cabd8)
0:13:04.299279	LOG	Server <---------- DUT
0:13:04.300278	LOG	Repeated frame. It does not count
0:13:04.802994	LOG	PULL_DATA: 02 2871 02 aa555a0000240409
0:13:04.804992	LOG	PULL_ACK: 02 2871 04
0:13:06.816188	LOG	PUSH_ACK: 02 040c 01
0:13:06.818189	LOG	PUSH_DATA: Protocol version = 02, Token = 040c, Identifier = 00, JSON = {'rxpk': [{'tmst': 101540831, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAWQIBWur2yVJd'}]}
0:13:06.821186	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0259, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f6c9525d)
0:13:06.824185	LOG	Server <---------- DUT
0:13:06.829154	LOG	Count = 21
0:13:09.287787	LOG	PUSH_ACK: 02 040d 01
0:13:09.289785	LOG	PUSH_DATA: Protocol version = 02, Token = 040d, Identifier = 00, JSON = {'rxpk': [{'tmst': 104020663, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAWQIBWur2yVJd'}]}
0:13:09.291784	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0259, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f6c9525d)
0:13:09.292783	LOG	Server <---------- DUT
0:13:09.294784	LOG	Repeated frame. It does not count
0:13:11.809411	LOG	PUSH_ACK: 02 040e 01
0:13:11.811410	LOG	PUSH_DATA: Protocol version = 02, Token = 040e, Identifier = 00, JSON = {'rxpk': [{'tmst': 106543447, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAWgIB/APvVcWq'}]}
0:13:11.813410	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ef55c5aa)
0:13:11.814408	LOG	Server <---------- DUT
0:13:11.816407	LOG	Count = 22
0:13:14.331074	LOG	PUSH_ACK: 02 040f 01
0:13:14.336071	LOG	PUSH_DATA: Protocol version = 02, Token = 040f, Identifier = 00, JSON = {'rxpk': [{'tmst': 109023271, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAWgIB/APvVcWq'}]}
0:13:14.338071	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ef55c5aa)
0:13:14.339069	LOG	Server <---------- DUT
0:13:14.340070	LOG	Repeated frame. It does not count
0:13:14.882760	LOG	PULL_DATA: 02 2e25 02 aa555a0000240409
0:13:14.887759	LOG	PULL_ACK: 02 2e25 04
0:13:16.856684	LOG	PUSH_ACK: 02 0410 01
0:13:16.858684	LOG	PUSH_DATA: Protocol version = 02, Token = 0410, Identifier = 00, JSON = {'rxpk': [{'tmst': 111546071, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAWwIB6GYSFVZD'}]}
0:13:16.859684	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 12155643)
0:13:16.860713	LOG	Server <---------- DUT
0:13:16.862682	LOG	Count = 23
0:13:19.329392	LOG	PUSH_ACK: 02 0411 01

0:13:19.331391	LOG	PUSH_DATA: Protocol version = 02, Token = 0411, Identifier = 00, JSON = {'rxpk': [{'tmst': 114025911, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAWwIB6GYSFVZD'}]}
0:13:19.333392	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 12155643)
0:13:19.335389	LOG	Server <---------- DUT
0:13:19.336389	LOG	Repeated frame. It does not count
0:13:21.854959	LOG	PUSH_ACK: 02 0412 01
0:13:21.856958	LOG	PUSH_DATA: Protocol version = 02, Token = 0412, Identifier = 00, JSON = {'rxpk': [{'tmst': 116548695, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAXAIBma11fs8u'}]}
0:13:21.857957	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 757ecf2e)
0:13:21.858957	LOG	Server <---------- DUT
0:13:21.860957	LOG	Count = 24
0:13:24.336596	LOG	PUSH_ACK: 02 0414 01
0:13:24.338594	LOG	PUSH_DATA: Protocol version = 02, Token = 0414, Identifier = 00, JSON = {'rxpk': [{'tmst': 119028495, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAXAIBma11fs8u'}]}
0:13:24.340592	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 757ecf2e)
0:13:24.341592	LOG	Server <---------- DUT
0:13:24.343594	LOG	Repeated frame. It does not count
0:13:24.982556	LOG	PULL_DATA: 02 cf37 02 aa555a0000240409
0:13:24.984555	LOG	PULL_ACK: 02 cf37 04
0:13:26.859289	LOG	PUSH_ACK: 02 0415 01
0:13:26.860286	LOG	PUSH_DATA: Protocol version = 02, Token = 0415, Identifier = 00, JSON = {'rxpk': [{'tmst': 121551311, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAXQIB9mRPQnUr'}]}
0:13:26.862287	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4f42752b)
0:13:26.863284	LOG	Server <---------- DUT
0:13:26.864284	LOG	Count = 25
0:13:29.328885	LOG	PUSH_ACK: 02 0416 01
0:13:29.331884	LOG	PUSH_DATA: Protocol version = 02, Token = 0416, Identifier = 00, JSON = {'rxpk': [{'tmst': 124031151, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAXQIB9mRPQnUr'}]}
0:13:29.333883	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4f42752b)
0:13:29.334882	LOG	Server <---------- DUT
0:13:29.336881	LOG	Repeated frame. It does not count
0:13:31.852787	LOG	PUSH_ACK: 02 0417 01
0:13:31.854786	LOG	PUSH_DATA: Protocol version = 02, Token = 0417, Identifier = 00, JSON = {'rxpk': [{'tmst': 126553935, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAXgIBw214XwOt'}]}
0:13:31.855785	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 785f03ad)
0:13:31.856783	LOG	Server <---------- DUT
0:13:31.857784	LOG	Count = 26
0:13:34.323383	LOG	PUSH_ACK: 02 0418 01

0:13:34.326381	LOG	PUSH_DATA: Protocol version = 02, Token = 0418, Identifier = 00, JSON = {'rxpk': [{'tmst': 129033743, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAXgIBw214XwOt'}]}
0:13:34.328380	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 785f03ad)
0:13:34.329380	LOG	Server <---------- DUT
0:13:34.331378	LOG	Repeated frame. It does not count
0:13:35.062644	LOG	PULL_DATA: 02 80f9 02 aa555a0000240409
0:13:35.063644	LOG	PULL_ACK: 02 80f9 04
0:13:36.846582	LOG	PUSH_ACK: 02 0419 01
0:13:36.848582	LOG	PUSH_DATA: Protocol version = 02, Token = 0419, Identifier = 00, JSON = {'rxpk': [{'tmst': 131556559, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAXwIBEpJZWz/7'}]}
0:13:36.849581	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 595b3ffb)
0:13:36.850580	LOG	Server <---------- DUT
0:13:36.852579	LOG	Count = 27
0:13:39.318227	LOG	PUSH_ACK: 02 041a 01
0:13:39.321225	LOG	PUSH_DATA: Protocol version = 02, Token = 041a, Identifier = 00, JSON = {'rxpk': [{'tmst': 134036359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAXwIBEpJZWz/7'}]}
0:13:39.322224	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 025f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 595b3ffb)
0:13:39.324223	LOG	Server <---------- DUT
0:13:39.325223	LOG	Repeated frame. It does not count
0:13:41.841896	LOG	PUSH_ACK: 02 041b 01
0:13:41.843895	LOG	PUSH_DATA: Protocol version = 02, Token = 041b, Identifier = 00, JSON = {'rxpk': [{'tmst': 136559175, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAYAIBqVzJwDr6'}]}
0:13:41.844896	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0260, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c9c03afa)
0:13:41.846894	LOG	Server <---------- DUT
0:13:41.847893	LOG	Count = 28
0:13:44.315492	LOG	PUSH_ACK: 02 041c 01
0:13:44.317490	LOG	PUSH_DATA: Protocol version = 02, Token = 041c, Identifier = 00, JSON = {'rxpk': [{'tmst': 139039007, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAYAIBqVzJwDr6'}]}
0:13:44.319489	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0260, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c9c03afa)
0:13:44.321488	LOG	Server <---------- DUT
0:13:44.322487	LOG	Repeated frame. It does not count
0:13:45.142107	LOG	PULL_DATA: 02 dc62 02 aa555a0000240409
0:13:45.147102	LOG	PULL_ACK: 02 dc62 04
0:13:46.841142	LOG	PUSH_ACK: 02 041e 01
0:13:46.843139	LOG	PUSH_DATA: Protocol version = 02, Token = 041e, Identifier = 00, JSON = {'rxpk': [{'tmst': 141561799, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAYQIBwG9Gmxvu'}]}
0:13:46.845140	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0261, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 469b1bee)
0:13:46.846139	LOG	Server <---------- DUT

0:13:46.847139	LOG	Count = 29
0:13:49.313739	LOG	PUSH_ACK: 02 041f 01
0:13:49.316736	LOG	PUSH_DATA: Protocol version = 02, Token = 041f, Identifier = 00, JSON = {'rxpk': [{'tmst': 144041639, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAYQIBwG9Gmxvu'}]}
0:13:49.318735	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0261, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 469b1bee)
0:13:49.319734	LOG	Server <---------- DUT
0:13:49.321733	LOG	Repeated frame. It does not count
0:13:51.838448	LOG	PUSH_ACK: 02 0420 01
0:13:51.840448	LOG	PUSH_DATA: Protocol version = 02, Token = 0420, Identifier = 00, JSON = {'rxpk': [{'tmst': 146564423, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAYgIBgMLRaZ6v'}]}
0:13:51.842447	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0262, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d1699eaf)
0:13:51.843446	LOG	Server <---------- DUT
0:13:51.844446	LOG	Count = 30
0:13:54.329035	LOG	PUSH_ACK: 02 0422 01
0:13:54.331034	LOG	PUSH_DATA: Protocol version = 02, Token = 0422, Identifier = 00, JSON = {'rxpk': [{'tmst': 149044231, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAYgIBgMLRaZ6v'}]}
0:13:54.333033	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0262, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d1699eaf)
0:13:54.335032	LOG	Server <---------- DUT
0:13:54.336031	LOG	Repeated frame. It does not count
0:13:55.222528	LOG	PULL_DATA: 02 9cd7 02 aa555a0000240409
0:13:55.223528	LOG	PULL_ACK: 02 9cd7 04
0:13:56.852603	LOG	PUSH_ACK: 02 0423 01
0:13:56.855602	LOG	PUSH_DATA: Protocol version = 02, Token = 0423, Identifier = 00, JSON = {'rxpk': [{'tmst': 151567039, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAYwIBH1yR2hHF'}]}
0:13:56.856601	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0263, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 91da11c5)
0:13:56.858600	LOG	Server <---------- DUT
0:13:56.860599	LOG	Count = 31
0:13:59.323201	LOG	PUSH_ACK: 02 0424 01
0:13:59.326199	LOG	PUSH_DATA: Protocol version = 02, Token = 0424, Identifier = 00, JSON = {'rxpk': [{'tmst': 154046879, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAYwIBH1yR2hHF'}]}
0:13:59.328198	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0263, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 91da11c5)
0:13:59.329197	LOG	Server <---------- DUT
0:13:59.331197	LOG	Repeated frame. It does not count
0:14:01.847770	LOG	PUSH_ACK: 02 0425 01
0:14:01.848768	LOG	PUSH_DATA: Protocol version = 02, Token = 0425, Identifier = 00, JSON = {'rxpk': [{'tmst': 156569679, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAZAIBhRRFYMQx'}]}
0:14:01.850768	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0264, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4560c431)
0:14:01.851766	LOG	Server <---------- DUT

0:14:01.852766	LOG	Count = 32
0:14:04.422008	LOG	PUSH_ACK: 02 0426 01
0:14:04.424007	LOG	PUSH_DATA: Protocol version = 02, Token = 0426, Identifier = 00, JSON = {'rxpk': [{'tmst': 159121687, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAZAIBhRRFYMQx'}]}
0:14:04.426006	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0264, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4560c431)
0:14:04.427005	LOG	Server <---------- DUT
0:14:04.429004	LOG	Repeated frame. It does not count
0:14:05.302508	LOG	PULL_DATA: 02 19b0 02 aa555a0000240409
0:14:05.304507	LOG	PULL_ACK: 02 19b0 04
0:14:11.927749	LOG	PUSH_ACK: 02 0427 01
0:14:11.929747	LOG	PUSH_DATA: Protocol version = 02, Token = 0427, Identifier = 00, JSON = {'rxpk': [{'tmst': 166647103, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAZQIB9qd9Zzjt'}]}
0:14:11.931746	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0265, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7d6738ed)
0:14:11.932745	LOG	Server <---------- DUT
0:14:11.933745	LOG	Count = 33
0:14:11.935743	LOG	Waiting for the retransmissions
0:14:14.501288	LOG	PUSH_ACK: 02 0428 01
0:14:14.503287	LOG	PUSH_DATA: Protocol version = 02, Token = 0428, Identifier = 00, JSON = {'rxpk': [{'tmst': 169199095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAZQIB9qd9Zzjt'}]}
0:14:14.505287	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0265, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 7d6738ed)
0:14:14.506285	LOG	Server <---------- DUT
0:14:14.520277	LOG	Expected number of uplink messages have been received
0:14:14.523275	LOG	Test adaptive data rate control in frame header process starts
0:14:15.381789	LOG	PULL_DATA: 02 1e6d 02 aa555a0000240409
0:14:15.386785	LOG	PULL_ACK: 02 1e6d 04
0:14:21.956344	LOG	PUSH_ACK: 02 0429 01
0:14:21.958342	LOG	PUSH_DATA: Protocol version = 02, Token = 0429, Identifier = 00, JSON = {'rxpk': [{'tmst': 176652351, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAZgIBHhYvhcGj'}]}
0:14:21.961341	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0266, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2f85c1a3)
0:14:21.965337	LOG	Server <---------- DUT
0:14:21.968337	LOG	Count = 2
0:14:24.490904	LOG	PUSH_ACK: 02 042b 01
0:14:24.493902	LOG	PUSH_DATA: Protocol version = 02, Token = 042b, Identifier = 00, JSON = {'rxpk': [{'tmst': 179204367, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAZgIBHhYvhcGj'}]}
0:14:24.494902	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0266, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2f85c1a3)
0:14:24.496901	LOG	Server <---------- DUT
0:14:24.498900	LOG	Repeated frame. It does not count
0:14:25.462352	LOG	PULL_DATA: 02 4a4f 02 aa555a0000240409
0:14:25.464352	LOG	PULL_ACK: 02 4a4f 04
0:14:31.945673	LOG	PUSH_ACK: 02 042c 01

0:14:31.948673	LOG	PUSH_DATA: Protocol version = 02, Token = 042c, Identifier = 00, JSON = {'rxpk': [{'tmst': 186657599, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAZwIBjNBi+10d'}]}
0:14:31.950676	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0267, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 62fb5d1d)
0:14:31.951676	LOG	Server <---------- DUT
0:14:31.953670	LOG	Count = 3
0:14:34.521212	LOG	PUSH_ACK: 02 042d 01
0:14:34.523211	LOG	PUSH_DATA: Protocol version = 02, Token = 042d, Identifier = 00, JSON = {'rxpk': [{'tmst': 189209647, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAZwIBjNBi+10d'}]}
0:14:34.525209	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0267, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 62fb5d1d)
0:14:34.527208	LOG	Server <---------- DUT
0:14:34.528208	LOG	Repeated frame. It does not count
0:14:35.542211	LOG	PULL_DATA: 02 d17c 02 aa555a0000240409
0:14:35.543210	LOG	PULL_ACK: 02 d17c 04
0:14:41.975560	LOG	PUSH_ACK: 02 042e 01
0:14:41.977559	LOG	PUSH_DATA: Protocol version = 02, Token = 042e, Identifier = 00, JSON = {'rxpk': [{'tmst': 196662847, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAaAIB7i4iBrLK'}]}
0:14:41.978558	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0268, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2206b2ca)
0:14:41.979557	LOG	Server <---------- DUT
0:14:41.981557	LOG	Count = 4
0:14:44.498443	LOG	PUSH_ACK: 02 042f 01
0:14:44.500443	LOG	PUSH_DATA: Protocol version = 02, Token = 042f, Identifier = 00, JSON = {'rxpk': [{'tmst': 199214871, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAaAIB7i4iBrLK'}]}
0:14:44.502441	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0268, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2206b2ca)
0:14:44.503441	LOG	Server <---------- DUT
0:14:44.505439	LOG	Repeated frame. It does not count
0:14:45.621841	LOG	PULL_DATA: 02 731f 02 aa555a0000240409
0:14:45.626839	LOG	PULL_ACK: 02 731f 04
0:14:51.953250	LOG	PUSH_ACK: 02 0430 01
0:14:51.954247	LOG	PUSH_DATA: Protocol version = 02, Token = 0430, Identifier = 00, JSON = {'rxpk': [{'tmst': 206668095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAaQIBtUavzH4v'}]}
0:14:51.956246	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0269, FOpts:), FPort: 01, FRMPayload: 004e, MIC: afcc7e2f)
0:14:51.957245	LOG	Server <---------- DUT
0:14:51.958245	LOG	Count = 5
0:14:54.491534	LOG	PUSH_ACK: 02 0432 01
0:14:54.493535	LOG	PUSH_DATA: Protocol version = 02, Token = 0432, Identifier = 00, JSON = {'rxpk': [{'tmst': 209220103, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAaQIBtUavzH4v'}]}
0:14:54.495531	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0269, FOpts:), FPort: 01, FRMPayload: 004e, MIC: afcc7e2f)
0:14:54.496530	LOG	Server <---------- DUT

0:14:54.498529	LOG	Repeated frame. It does not count
0:14:55.701846	LOG	PULL_DATA: 02 4ae9 02 aa555a0000240409
0:14:55.703846	LOG	PULL_ACK: 02 4ae9 04
0:15:01.946509	LOG	PUSH_ACK: 02 0433 01
0:15:01.948508	LOG	PUSH_DATA: Protocol version = 02, Token = 0433, Identifier = 00, JSON = {'rxpk': [{'tmst': 216673351, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAagIBCYyLcxev'}]}
0:15:01.950508	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8b7317af)
0:15:01.951507	LOG	Server <---------- DUT
0:15:01.953506	LOG	Count = 6
0:15:04.525263	LOG	PUSH_ACK: 02 0434 01
0:15:04.527262	LOG	PUSH_DATA: Protocol version = 02, Token = 0434, Identifier = 00, JSON = {'rxpk': [{'tmst': 219225343, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAagIBCYyLcxev'}]}
0:15:04.529261	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8b7317af)
0:15:04.531259	LOG	Server <---------- DUT
0:15:04.532258	LOG	Repeated frame. It does not count
0:15:05.792544	LOG	PULL_DATA: 02 7bc0 02 aa555a0000240409
0:15:05.794543	LOG	PULL_ACK: 02 7bc0 04
0:15:11.980034	LOG	PUSH_ACK: 02 0435 01
0:15:11.982033	LOG	PUSH_DATA: Protocol version = 02, Token = 0435, Identifier = 00, JSON = {'rxpk': [{'tmst': 226678583, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAawIBLHQ6RDPj'}]}
0:15:11.983032	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3a4433e3)
0:15:11.985031	LOG	Server <---------- DUT
0:15:11.986032	LOG	Count = 7
0:15:14.502603	LOG	PUSH_ACK: 02 0436 01
0:15:14.504607	LOG	PUSH_DATA: Protocol version = 02, Token = 0436, Identifier = 00, JSON = {'rxpk': [{'tmst': 229230591, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAawIBLHQ6RDPj'}]}
0:15:14.506603	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3a4433e3)
0:15:14.509600	LOG	Server <---------- DUT
0:15:14.513597	LOG	Repeated frame. It does not count
0:15:15.871429	LOG	PULL_DATA: 02 5a31 02 aa555a0000240409
0:15:15.876426	LOG	PULL_ACK: 02 5a31 04
0:15:21.956976	LOG	PUSH_ACK: 02 0437 01
0:15:21.958975	LOG	PUSH_DATA: Protocol version = 02, Token = 0437, Identifier = 00, JSON = {'rxpk': [{'tmst': 236683807, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAbAIB5rPvWh4Y'}]}
0:15:21.959975	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ef5a1e18)
0:15:21.960972	LOG	Server <---------- DUT
0:15:21.961972	LOG	Count = 8
0:15:24.541508	LOG	PUSH_ACK: 02 0439 01
0:15:24.544507	LOG	PUSH_DATA: Protocol version = 02, Token = 0439, Identifier = 00, JSON = {'rxpk': [{'tmst': 239235823, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 13.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAbAIB5rPvWh4Y'}]}
0:15:24.546505	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ef5a1e18)
0:15:24.547505	LOG	Server <---------- DUT
0:15:24.549504	LOG	Repeated frame. It does not count
0:15:25.951708	LOG	PULL_DATA: 02 0d7b 02 aa555a0000240409
0:15:25.953706	LOG	PULL_ACK: 02 0d7b 04
0:15:31.996276	LOG	PUSH_ACK: 02 043a 01
0:15:31.998275	LOG	PUSH_DATA: Protocol version = 02, Token = 043a, Identifier = 00, JSON = {'rxpk': [{'tmst': 246689039, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAbQIBwdyXcL1y'}]}
0:15:32.000275	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9770bd72)
0:15:32.001274	LOG	Server <---------- DUT
0:15:32.003273	LOG	Count = 9
0:15:34.517845	LOG	PUSH_ACK: 02 043b 01
0:15:34.520843	LOG	PUSH_DATA: Protocol version = 02, Token = 043b, Identifier = 00, JSON = {'rxpk': [{'tmst': 249241055, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAbQIBwdyXcL1y'}]}
0:15:34.522843	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9770bd72)
0:15:34.523842	LOG	Server <---------- DUT
0:15:34.525841	LOG	Repeated frame. It does not count
0:15:36.031985	LOG	PULL_DATA: 02 9c36 02 aa555a0000240409
0:15:36.035983	LOG	PULL_ACK: 02 9c36 04
0:15:41.972615	LOG	PUSH_ACK: 02 043c 01
0:15:41.974614	LOG	PUSH_DATA: Protocol version = 02, Token = 043c, Identifier = 00, JSON = {'rxpk': [{'tmst': 256694279, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAbgIBfPiU12Yw'}]}
0:15:41.976613	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 94d76630)
0:15:41.977641	LOG	Server <---------- DUT
0:15:41.979611	LOG	Count = 10
0:15:44.547152	LOG	PUSH_ACK: 02 043d 01
0:15:44.549151	LOG	PUSH_DATA: Protocol version = 02, Token = 043d, Identifier = 00, JSON = {'rxpk': [{'tmst': 259246287, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAbgIBfPiU12Yw'}]}
0:15:44.550150	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 94d76630)
0:15:44.552149	LOG	Server <---------- DUT
0:15:44.554149	LOG	Repeated frame. It does not count
0:15:46.142309	LOG	PULL_DATA: 02 edca 02 aa555a0000240409
0:15:46.147306	LOG	PULL_ACK: 02 edca 04
0:15:52.003017	LOG	PUSH_ACK: 02 043f 01
0:15:52.005017	LOG	PUSH_DATA: Protocol version = 02, Token = 043f, Identifier = 00, JSON = {'rxpk': [{'tmst': 266699527, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAbwIB4f5pLk6c'}]}
0:15:52.007014	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 692e4e9c)
0:15:52.008013	LOG	Server <---------- DUT

0:15:52.009013	LOG	Count = 11
0:15:54.541575	LOG	PUSH_ACK: 02 0441 01
0:15:54.544574	LOG	PUSH_DATA: Protocol version = 02, Token = 0441, Identifier = 00, JSON = {'rxpk': [{'tmst': 269251567, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAbwIB4f5pLk6c'}]}
0:15:54.546573	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 026f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 692e4e9c)
0:15:54.547572	LOG	Server <---------- DUT
0:15:54.549571	LOG	Repeated frame. It does not count
0:15:56.221621	LOG	PULL_DATA: 02 5bbc 02 aa555a0000240409
0:15:56.223621	LOG	PULL_ACK: 02 5bbc 04
0:16:01.997343	LOG	PUSH_ACK: 02 0442 01
0:16:01.999342	LOG	PUSH_DATA: Protocol version = 02, Token = 0442, Identifier = 00, JSON = {'rxpk': [{'tmst': 276704759, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAcAIBVIO1Snag'}]}
0:16:02.001341	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0270, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b54a76a0)
0:16:02.002341	LOG	Server <---------- DUT
0:16:02.004340	LOG	Count = 12
0:16:04.572002	LOG	PUSH_ACK: 02 0443 01
0:16:04.574001	LOG	PUSH_DATA: Protocol version = 02, Token = 0443, Identifier = 00, JSON = {'rxpk': [{'tmst': 279256767, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAcAIBVIO1Snag'}]}
0:16:04.576000	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0270, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b54a76a0)
0:16:04.576999	LOG	Server <---------- DUT
0:16:04.578998	LOG	Repeated frame. It does not count
0:16:06.301548	LOG	PULL_DATA: 02 02db 02 aa555a0000240409
0:16:06.303547	LOG	PULL_ACK: 02 02db 04
0:16:12.026301	LOG	PUSH_ACK: 02 0444 01
0:16:12.027300	LOG	PUSH_DATA: Protocol version = 02, Token = 0444, Identifier = 00, JSON = {'rxpk': [{'tmst': 286709991, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAcQIBkVFOFFVl'}]}
0:16:12.029298	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0271, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4e145565)
0:16:12.030297	LOG	Server <---------- DUT
0:16:12.031296	LOG	Count = 13
0:16:14.549223	LOG	PUSH_ACK: 02 0445 01
0:16:14.551222	LOG	PUSH_DATA: Protocol version = 02, Token = 0445, Identifier = 00, JSON = {'rxpk': [{'tmst': 289262015, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAcQIBkVFOFFVl'}]}
0:16:14.553221	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0271, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4e145565)
0:16:14.554220	LOG	Server <---------- DUT
0:16:14.556219	LOG	Repeated frame. It does not count
0:16:16.381182	LOG	PULL_DATA: 02 b5de 02 aa555a0000240409
0:16:16.386180	LOG	PULL_ACK: 02 b5de 04
0:16:22.003993	LOG	PUSH_ACK: 02 0446 01
0:16:22.009989	LOG	PUSH_DATA: Protocol version = 02, Token = 0446, Identifier = 00, JSON = {'rxpk': [{'tmst': 296715247, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAcgIBQmGKDdoo'}]}
0:16:22.013988	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0272, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8a0dda28)
0:16:22.016985	LOG	Server <---------- DUT
0:16:22.018983	LOG	Count = 14
0:16:24.541842	LOG	PUSH_ACK: 02 0448 01
0:16:24.543841	LOG	PUSH_DATA: Protocol version = 02, Token = 0448, Identifier = 00, JSON = {'rxpk': [{'tmst': 299267279, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAcgIBQmGKDdoo'}]}
0:16:24.545839	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0272, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8a0dda28)
0:16:24.546839	LOG	Server <---------- DUT
0:16:24.548838	LOG	Repeated frame. It does not count
0:16:26.461751	LOG	PULL_DATA: 02 3d52 02 aa555a0000240409
0:16:26.463751	LOG	PULL_ACK: 02 3d52 04
0:16:31.998610	LOG	PUSH_ACK: 02 044a 01
0:16:32.002608	LOG	PUSH_DATA: Protocol version = 02, Token = 044a, Identifier = 00, JSON = {'rxpk': [{'tmst': 306720495, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAcwIBis4Rlffl'}]}
0:16:32.006606	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0273, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1195f7e5)
0:16:32.007605	LOG	Server <---------- DUT
0:16:32.009604	LOG	Count = 15
0:16:34.573147	LOG	PUSH_ACK: 02 044b 01
0:16:34.576146	LOG	PUSH_DATA: Protocol version = 02, Token = 044b, Identifier = 00, JSON = {'rxpk': [{'tmst': 309272519, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAcwIBis4Rlffl'}]}
0:16:34.578145	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0273, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1195f7e5)
0:16:34.579145	LOG	Server <---------- DUT
0:16:34.581143	LOG	Repeated frame. It does not count
0:16:36.541143	LOG	PULL_DATA: 02 b657 02 aa555a0000240409
0:16:36.543143	LOG	PULL_ACK: 02 b657 04
0:16:42.028029	LOG	PUSH_ACK: 02 044c 01
0:16:42.030029	LOG	PUSH_DATA: Protocol version = 02, Token = 044c, Identifier = 00, JSON = {'rxpk': [{'tmst': 316725751, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAdAIBD0lKtEuA'}]}
0:16:42.031027	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0274, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4ab44b80)
0:16:42.033026	LOG	Server <---------- DUT
0:16:42.035025	LOG	Count = 16
0:16:44.550598	LOG	PUSH_ACK: 02 044d 01
0:16:44.553596	LOG	PUSH_DATA: Protocol version = 02, Token = 044d, Identifier = 00, JSON = {'rxpk': [{'tmst': 319277751, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAdAIBD0lKtEuA'}]}
0:16:44.554596	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0274, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4ab44b80)
0:16:44.556595	LOG	Server <---------- DUT
0:16:44.557593	LOG	Repeated frame. It does not count
0:16:46.621457	LOG	PULL_DATA: 02 02d4 02 aa555a0000240409

0:16:46.626455	LOG	PULL_ACK: 02 02d4 04
0:16:52.005403	LOG	PUSH_ACK: 02 044e 01
0:16:52.007408	LOG	PUSH_DATA: Protocol version = 02, Token = 044e, Identifier = 00, JSON = {'rxpk': [{'tmst': 326730983, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAdQIB+S7QFRZf'}]}
0:16:52.009401	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0275, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d015165f)
0:16:52.010431	LOG	Server <---------- DUT
0:16:52.012400	LOG	Count = 17
0:16:54.592935	LOG	PUSH_ACK: 02 0450 01
0:16:54.594932	LOG	PUSH_DATA: Protocol version = 02, Token = 0450, Identifier = 00, JSON = {'rxpk': [{'tmst': 329282999, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAdQIB+S7QFRZf'}]}
0:16:54.595932	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0275, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d015165f)
0:16:54.597930	LOG	Server <---------- DUT
0:16:54.598931	LOG	Repeated frame. It does not count
0:16:56.701736	LOG	PULL_DATA: 02 c44c 02 aa555a0000240409
0:16:56.703735	LOG	PULL_ACK: 02 c44c 04
0:17:02.045702	LOG	PUSH_ACK: 02 0451 01
0:17:02.047702	LOG	PUSH_DATA: Protocol version = 02, Token = 0451, Identifier = 00, JSON = {'rxpk': [{'tmst': 336736215, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAdgIBsJpzMYxJ'}]}
0:17:02.049701	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0276, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 73318c49)
0:17:02.050700	LOG	Server <---------- DUT
0:17:02.051699	LOG	Count = 18
0:17:04.568612	LOG	PUSH_ACK: 02 0452 01
0:17:04.571611	LOG	PUSH_DATA: Protocol version = 02, Token = 0452, Identifier = 00, JSON = {'rxpk': [{'tmst': 339288255, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAdgIBsJpzMYxJ'}]}
0:17:04.573610	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0276, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 73318c49)
0:17:04.574609	LOG	Server <---------- DUT
0:17:04.576608	LOG	Repeated frame. It does not count
0:17:06.781356	LOG	PULL_DATA: 02 2495 02 aa555a0000240409
0:17:06.783355	LOG	PULL_ACK: 02 2495 04
0:17:12.023381	LOG	PUSH_ACK: 02 0453 01
0:17:12.025380	LOG	PUSH_DATA: Protocol version = 02, Token = 0453, Identifier = 00, JSON = {'rxpk': [{'tmst': 346741471, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAdwIBnmZFDE2N'}]}
0:17:12.027380	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0277, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 450c4d8d)
0:17:12.028378	LOG	Server <---------- DUT
0:17:12.030377	LOG	Count = 19
0:17:14.597917	LOG	PUSH_ACK: 02 0454 01
0:17:14.599915	LOG	PUSH_DATA: Protocol version = 02, Token = 0454, Identifier = 00, JSON = {'rxpk': [{'tmst': 349293479, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAdwIBnmZFDE2N'}]}

0:17:14.601915	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0277, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 450c4d8d)
0:17:14.602915	LOG	Server <---------- DUT
0:17:14.603913	LOG	Repeated frame. It does not count
0:17:16.861632	LOG	PULL_DATA: 02 c897 02 aa555a0000240409
0:17:16.865659	LOG	PULL_ACK: 02 c897 04
0:17:22.052686	LOG	PUSH_ACK: 02 0455 01
0:17:22.054687	LOG	PUSH_DATA: Protocol version = 02, Token = 0455, Identifier = 00, JSON = {'rxpk': [{'tmst': 356746719, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAeAIBd2mgwsTh'}]}
0:17:22.055687	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0278, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a0c2c4e1)
0:17:22.056688	LOG	Server <---------- DUT
0:17:22.057687	LOG	Count = 20
0:17:24.592749	LOG	PUSH_ACK: 02 0457 01
0:17:24.595749	LOG	PUSH_DATA: Protocol version = 02, Token = 0457, Identifier = 00, JSON = {'rxpk': [{'tmst': 359298735, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAeAIBd2mgwsTh'}]}
0:17:24.597747	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0278, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a0c2c4e1)
0:17:24.599746	LOG	Server <---------- DUT
0:17:24.600745	LOG	Repeated frame. It does not count
0:17:26.941422	LOG	PULL_DATA: 02 b512 02 aa555a0000240409
0:17:26.942424	LOG	PULL_ACK: 02 b512 04
0:17:32.047523	LOG	PUSH_ACK: 02 0458 01
0:17:32.049523	LOG	PUSH_DATA: Protocol version = 02, Token = 0458, Identifier = 00, JSON = {'rxpk': [{'tmst': 366751959, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAeQIBsQH6zEFb'}]}
0:17:32.051523	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0279, FOpts:), FPort: 01, FRMPayload: 004e, MIC: facc415b)
0:17:32.052540	LOG	Server <---------- DUT
0:17:32.054520	LOG	Count = 21
0:17:34.571092	LOG	PUSH_ACK: 02 0459 01
0:17:34.573091	LOG	PUSH_DATA: Protocol version = 02, Token = 0459, Identifier = 00, JSON = {'rxpk': [{'tmst': 369303951, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAeQIBsQH6zEFb'}]}
0:17:34.575089	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0279, FOpts:), FPort: 01, FRMPayload: 004e, MIC: facc415b)
0:17:34.576089	LOG	Server <---------- DUT
0:17:34.578088	LOG	Repeated frame. It does not count
0:17:37.020701	LOG	PULL_DATA: 02 8030 02 aa555a0000240409
0:17:37.022700	LOG	PULL_ACK: 02 8030 04
0:17:42.024861	LOG	PUSH_ACK: 02 045a 01
0:17:42.026859	LOG	PUSH_DATA: Protocol version = 02, Token = 045a, Identifier = 00, JSON = {'rxpk': [{'tmst': 376757207, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAegIB4UoPp9LG'}]}
0:17:42.028859	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0fa7d2c6)
0:17:42.029858	LOG	Server <---------- DUT
0:17:42.030859	LOG	Count = 22
0:17:44.599042	LOG	PUSH_ACK: 02 045b 01

0:17:44.602040	LOG	PUSH_DATA: Protocol version = 02, Token = 045b, Identifier = 00, JSON = {'rxpk': [{'tmst': 379309231, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAegIB4UoPp9LG'}]}
0:17:44.604038	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0fa7d2c6)
0:17:44.605038	LOG	Server <---------- DUT
0:17:44.608036	LOG	Repeated frame. It does not count
0:17:47.100739	LOG	PULL_DATA: 02 d2db 02 aa555a0000240409
0:17:47.105737	LOG	PULL_ACK: 02 d2db 04
0:17:52.053929	LOG	PUSH_ACK: 02 045c 01
0:17:52.055927	LOG	PUSH_DATA: Protocol version = 02, Token = 045c, Identifier = 00, JSON = {'rxpk': [{'tmst': 386762471, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAewIBeJAv+QIA'}]}
0:17:52.056926	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2ff90200)
0:17:52.057928	LOG	Server <---------- DUT
0:17:52.059925	LOG	Count = 23
0:17:54.592487	LOG	PUSH_ACK: 02 045e 01
0:17:54.594486	LOG	PUSH_DATA: Protocol version = 02, Token = 045e, Identifier = 00, JSON = {'rxpk': [{'tmst': 389314495, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAewIBeJAv+QIA'}]}
0:17:54.596485	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2ff90200)
0:17:54.597484	LOG	Server <---------- DUT
0:17:54.599483	LOG	Repeated frame. It does not count
0:17:57.181017	LOG	PULL_DATA: 02 61e0 02 aa555a0000240409
0:17:57.183017	LOG	PULL_ACK: 02 61e0 04
0:18:02.047256	LOG	PUSH_ACK: 02 045f 01
0:18:02.049255	LOG	PUSH_DATA: Protocol version = 02, Token = 045f, Identifier = 00, JSON = {'rxpk': [{'tmst': 396767711, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAfAIBfUjvzSYf'}]}
0:18:02.050256	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: efcd261f)
0:18:02.052253	LOG	Server <---------- DUT
0:18:02.054252	LOG	Count = 24
0:18:04.623357	LOG	PUSH_ACK: 02 0460 01
0:18:04.625355	LOG	PUSH_DATA: Protocol version = 02, Token = 0460, Identifier = 00, JSON = {'rxpk': [{'tmst': 399319735, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAfAIBfUjvzSYf'}]}
0:18:04.627354	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: efcd261f)
0:18:04.629353	LOG	Server <---------- DUT
0:18:04.630351	LOG	Repeated frame. It does not count
0:18:07.261013	LOG	PULL_DATA: 02 56fd 02 aa555a0000240409
0:18:07.263012	LOG	PULL_ACK: 02 56fd 04
0:18:12.079278	LOG	PUSH_ACK: 02 0461 01
0:18:12.081277	LOG	PUSH_DATA: Protocol version = 02, Token = 0461, Identifier = 00, JSON = {'rxpk': [{'tmst': 406772951, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAfQIB7UNZ7y5n'}]}

0:18:12.083276	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 59ef2e67)
0:18:12.084276	LOG	Server <---------- DUT
0:18:12.085275	LOG	Count = 25
0:18:14.603846	LOG	PUSH_ACK: 02 0462 01
0:18:14.605844	LOG	PUSH_DATA: Protocol version = 02, Token = 0462, Identifier = 00, JSON = {'rxpk': [{'tmst': 409324999, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAfQIB7UNZ7y5n'}]}
0:18:14.607843	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 59ef2e67)
0:18:14.609842	LOG	Server <---------- DUT
0:18:14.610841	LOG	Repeated frame. It does not count
0:18:17.341292	LOG	PULL_DATA: 02 1643 02 aa555a0000240409
0:18:17.345289	LOG	PULL_ACK: 02 1643 04
0:18:22.060613	LOG	PUSH_ACK: 02 0463 01
0:18:22.062611	LOG	PUSH_DATA: Protocol version = 02, Token = 0463, Identifier = 00, JSON = {'rxpk': [{'tmst': 416778199, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAfgIBZ1lipzuR'}]}
0:18:22.064611	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 62a73b91)
0:18:22.065610	LOG	Server <---------- DUT
0:18:22.066609	LOG	Count = 26
0:18:24.644034	LOG	PUSH_ACK: 02 0465 01
0:18:24.647032	LOG	PUSH_DATA: Protocol version = 02, Token = 0465, Identifier = 00, JSON = {'rxpk': [{'tmst': 419330215, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAfgIBZ1lipzuR'}]}
0:18:24.648031	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 62a73b91)
0:18:24.650031	LOG	Server <---------- DUT
0:18:24.652029	LOG	Repeated frame. It does not count
0:18:27.421457	LOG	PULL_DATA: 02 c871 02 aa555a0000240409
0:18:27.423456	LOG	PULL_ACK: 02 c871 04
0:18:32.100801	LOG	PUSH_ACK: 02 0467 01
0:18:32.101801	LOG	PUSH_DATA: Protocol version = 02, Token = 0467, Identifier = 00, JSON = {'rxpk': [{'tmst': 426783431, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAfwIBZVXE691D'}]}
0:18:32.103799	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c4ebdd43)
0:18:32.105798	LOG	Server <---------- DUT
0:18:32.106798	LOG	Count = 27
0:18:34.623369	LOG	PUSH_ACK: 02 0468 01
0:18:34.625368	LOG	PUSH_DATA: Protocol version = 02, Token = 0468, Identifier = 00, JSON = {'rxpk': [{'tmst': 429335439, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAfwIBZVXE691D'}]}
0:18:34.627367	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 027f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c4ebdd43)
0:18:34.628367	LOG	Server <---------- DUT
0:18:34.630365	LOG	Repeated frame. It does not count
0:18:37.500736	LOG	PULL_DATA: 02 ffca 02 aa555a0000240409
0:18:37.502735	LOG	PULL_ACK: 02 ffca 04
0:18:42.077138	LOG	PUSH_ACK: 02 0469 01

0:18:42.080137	LOG	PUSH_DATA: Protocol version = 02, Token = 0469, Identifier = 00, JSON = {'rxpk': [{'tmst': 436788679, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAgAIBsWYIbb40'}]}
0:18:42.081137	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0280, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 086dbe34)
0:18:42.083136	LOG	Server <---------- DUT
0:18:42.084152	LOG	Count = 28
0:18:44.651677	LOG	PUSH_ACK: 02 046a 01
0:18:44.653676	LOG	PUSH_DATA: Protocol version = 02, Token = 046a, Identifier = 00, JSON = {'rxpk': [{'tmst': 439340703, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAgAIBsWYIbb40'}]}
0:18:44.655675	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0280, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 086dbe34)
0:18:44.657674	LOG	Server <---------- DUT
0:18:44.658674	LOG	Repeated frame. It does not count
0:18:47.581015	LOG	PULL_DATA: 02 4db5 02 aa555a0000240409
0:18:47.586012	LOG	PULL_ACK: 02 4db5 04
0:18:52.106448	LOG	PUSH_ACK: 02 046b 01
0:18:52.109445	LOG	PUSH_DATA: Protocol version = 02, Token = 046b, Identifier = 00, JSON = {'rxpk': [{'tmst': 446793911, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAgQIBrMNS5Q/k'}]}
0:18:52.110445	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0281, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 52e50fe4)
0:18:52.111445	LOG	Server <---------- DUT
0:18:52.112444	LOG	Count = 29
0:18:54.643007	LOG	PUSH_ACK: 02 046d 01
0:18:54.646004	LOG	PUSH_DATA: Protocol version = 02, Token = 046d, Identifier = 00, JSON = {'rxpk': [{'tmst': 449345919, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAgQIBrMNS5Q/k'}]}
0:18:54.648003	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0281, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 52e50fe4)
0:18:54.649003	LOG	Server <---------- DUT
0:18:54.651002	LOG	Repeated frame. It does not count
0:18:57.660957	LOG	PULL_DATA: 02 a88a 02 aa555a0000240409
0:18:57.662956	LOG	PULL_ACK: 02 a88a 04
0:19:02.097995	LOG	PUSH_ACK: 02 046e 01
0:19:02.099994	LOG	PUSH_DATA: Protocol version = 02, Token = 046e, Identifier = 00, JSON = {'rxpk': [{'tmst': 456799159, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAggIBB9nfsF3l'}]}
0:19:02.100995	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0282, FOpts:), FPort: 01, FRMPayload: 004e, MIC: dfb05de5)
0:19:02.102992	LOG	Server <---------- DUT
0:19:02.104991	LOG	Count = 30
0:19:04.620070	LOG	PUSH_ACK: 02 046f 01
0:19:04.622071	LOG	PUSH_DATA: Protocol version = 02, Token = 046f, Identifier = 00, JSON = {'rxpk': [{'tmst': 459351175, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAggIBB9nfsF3l'}]}
0:19:04.624069	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0282, FOpts:), FPort: 01, FRMPayload: 004e, MIC: dfb05de5)
0:19:04.626067	LOG	Server <---------- DUT

0:19:04.627068	LOG	Repeated frame. It does not count
0:19:07.740306	LOG	PULL_DATA: 02 075e 02 aa555a0000240409
0:19:07.742306	LOG	PULL_ACK: 02 075e 04
0:19:12.076514	LOG	PUSH_ACK: 02 0471 01
0:19:12.078495	LOG	PUSH_DATA: Protocol version = 02, Token = 0471, Identifier = 00, JSON = {'rxpk': [{'tmst': 466804399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAgwIBJBozDx26'}]}
0:19:12.079495	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0283, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 330f1dba)
0:19:12.081494	LOG	Server <---------- DUT
0:19:12.082493	LOG	Count = 31
0:19:14.650446	LOG	PUSH_ACK: 02 0472 01
0:19:14.652447	LOG	PUSH_DATA: Protocol version = 02, Token = 0472, Identifier = 00, JSON = {'rxpk': [{'tmst': 469356399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAgwIBJBozDx26'}]}
0:19:14.654444	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0283, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 330f1dba)
0:19:14.655445	LOG	Server <---------- DUT
0:19:14.657443	LOG	Repeated frame. It does not count
0:19:17.820649	LOG	PULL_DATA: 02 e109 02 aa555a0000240409
0:19:17.825644	LOG	PULL_ACK: 02 e109 04
0:19:22.104185	LOG	PUSH_ACK: 02 0473 01
0:19:22.106184	LOG	PUSH_DATA: Protocol version = 02, Token = 0473, Identifier = 00, JSON = {'rxpk': [{'tmst': 476809639, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAhAIBTpXrzMyd'}]}
0:19:22.107184	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0284, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ebcccc9d)
0:19:22.109182	LOG	Server <---------- DUT
0:19:22.110182	LOG	Count = 32
0:19:24.797443	LOG	PUSH_ACK: 02 0475 01
0:19:24.799442	LOG	PUSH_DATA: Protocol version = 02, Token = 0475, Identifier = 00, JSON = {'rxpk': [{'tmst': 479526535, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAhAIBTpXrzMyd'}]}
0:19:24.801441	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0284, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ebcccc9d)
0:19:24.802439	LOG	Server <---------- DUT
0:19:24.804439	LOG	Repeated frame. It does not count
0:19:27.900754	LOG	PULL_DATA: 02 33a6 02 aa555a0000240409
0:19:27.901755	LOG	PULL_ACK: 02 33a6 04
0:19:32.254285	LOG	PUSH_ACK: 02 0476 01
0:19:32.256282	LOG	PUSH_DATA: Protocol version = 02, Token = 0476, Identifier = 00, JSON = {'rxpk': [{'tmst': 486979655, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAhQIBMIlqmgKz'}]}
0:19:32.258282	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0285, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6a9a02b3)
0:19:32.260281	LOG	Server <---------- DUT
0:19:32.261280	LOG	Count = 33
0:19:32.263280	LOG	Waiting for the retransmissions
0:19:34.985791	LOG	PUSH_ACK: 02 0478 01
0:19:34.987791	LOG	PUSH_DATA: Protocol version = 02, Token = 0478, Identifier = 00, JSON = {'rxpk': [{'tmst': 489696519, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAhQIBMIlqmgKz'}]}
0:19:34.988789	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0285, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6a9a02b3)
0:19:34.989791	LOG	Server <---------- DUT
0:19:35.003782	LOG	Expected number of uplink messages have been received
0:19:35.006779	LOG	Test adaptive data rate control in frame header process starts
0:19:37.980092	LOG	PULL_DATA: 02 5557 02 aa555a0000240409
0:19:37.982091	LOG	PULL_ACK: 02 5557 04
0:19:42.287738	LOG	PUSH_ACK: 02 0479 01
0:19:42.289737	LOG	PUSH_DATA: Protocol version = 02, Token = 0479, Identifier = 00, JSON = {'rxpk': [{'tmst': 496984919, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAhgIB+ueCMXtf'}]}
0:19:42.291735	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0286, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 82317b5f)
0:19:42.293734	LOG	Server <---------- DUT
0:19:42.294734	LOG	Count = 2
0:19:45.018188	LOG	PUSH_ACK: 02 047a 01
0:19:45.020186	LOG	PUSH_DATA: Protocol version = 02, Token = 047a, Identifier = 00, JSON = {'rxpk': [{'tmst': 499701791, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAhgIB+ueCMXtf'}]}
0:19:45.022185	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0286, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 82317b5f)
0:19:45.023184	LOG	Server <---------- DUT
0:19:45.025183	LOG	Repeated frame. It does not count
0:19:48.060575	LOG	PULL_DATA: 02 3b1d 02 aa555a0000240409
0:19:48.069568	LOG	PULL_ACK: 02 3b1d 04
0:19:52.270233	LOG	PUSH_ACK: 02 047b 01
0:19:52.272232	LOG	PUSH_DATA: Protocol version = 02, Token = 047b, Identifier = 00, JSON = {'rxpk': [{'tmst': 506990175, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAhwIBnoasls2U'}]}
0:19:52.275231	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0287, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ac96cd94)
0:19:52.277229	LOG	Server <---------- DUT
0:19:52.278229	LOG	Count = 3
0:19:55.012677	LOG	PUSH_ACK: 02 047d 01
0:19:55.017673	LOG	PUSH_DATA: Protocol version = 02, Token = 047d, Identifier = 00, JSON = {'rxpk': [{'tmst': 509707063, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAhwIBnoasls2U'}]}
0:19:55.018673	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0287, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ac96cd94)
0:19:55.020672	LOG	Server <---------- DUT
0:19:55.021671	LOG	Repeated frame. It does not count
0:19:58.150923	LOG	PULL_DATA: 02 eef0 02 aa555a0000240409
0:19:58.152920	LOG	PULL_ACK: 02 eef0 04
0:20:02.314556	LOG	PUSH_ACK: 02 047e 01
0:20:02.316555	LOG	PUSH_DATA: Protocol version = 02, Token = 047e, Identifier = 00, JSON = {'rxpk': [{'tmst': 516995407, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAiAIBqeD9A8DV'}]}
0:20:02.318554	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0288, FOpts:), FPort: 01, FRMPayload: 004e, MIC: fd03c0d5)

0:20:02.319553	LOG	Server <---------- DUT
0:20:02.321552	LOG	Count = 4
0:20:04.992055	LOG	PUSH_ACK: 02 047f 01
0:20:04.997034	LOG	PUSH_DATA: Protocol version = 02, Token = 047f, Identifier = 00, JSON = {'rxpk': [{'tmst': 519712287, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAiAIBqeD9A8DV'}]}
0:20:05.001032	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0288, FOpts:), FPort: 01, FRMPayload: 004e, MIC: fd03c0d5)
0:20:05.005029	LOG	Server <---------- DUT
0:20:05.009027	LOG	Repeated frame. It does not count
0:20:08.230198	LOG	PULL_DATA: 02 2f6e 02 aa555a0000240409
0:20:08.232196	LOG	PULL_ACK: 02 2f6e 04
0:20:12.294890	LOG	PUSH_ACK: 02 0480 01
0:20:12.297889	LOG	PUSH_DATA: Protocol version = 02, Token = 0480, Identifier = 00, JSON = {'rxpk': [{'tmst': 527000655, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAiQIBEA0VM7cf'}]}
0:20:12.299887	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0289, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1533b71f)
0:20:12.300887	LOG	Server <---------- DUT
0:20:12.302885	LOG	Count = 5
0:20:15.023342	LOG	PUSH_ACK: 02 0481 01
0:20:15.025340	LOG	PUSH_DATA: Protocol version = 02, Token = 0481, Identifier = 00, JSON = {'rxpk': [{'tmst': 529717543, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAiQIBEA0VM7cf'}]}
0:20:15.027340	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0289, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1533b71f)
0:20:15.029339	LOG	Server <---------- DUT
0:20:15.030337	LOG	Repeated frame. It does not count
0:20:18.310475	LOG	PULL_DATA: 02 2002 02 aa555a0000240409
0:20:18.315472	LOG	PULL_ACK: 02 2002 04
0:20:22.326195	LOG	PUSH_ACK: 02 0482 01
0:20:22.327196	LOG	PUSH_DATA: Protocol version = 02, Token = 0482, Identifier = 00, JSON = {'rxpk': [{'tmst': 537005895, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAigIBnz+MX2+X'}]}
0:20:22.330194	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8c5f6f97)
0:20:22.335190	LOG	Server <---------- DUT
0:20:22.339188	LOG	Count = 6
0:20:25.012670	LOG	PUSH_ACK: 02 0484 01
0:20:25.014669	LOG	PUSH_DATA: Protocol version = 02, Token = 0484, Identifier = 00, JSON = {'rxpk': [{'tmst': 539722783, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAigIBnz+MX2+X'}]}
0:20:25.016669	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8c5f6f97)
0:20:25.017667	LOG	Server <---------- DUT
0:20:25.018668	LOG	Repeated frame. It does not count
0:20:28.390752	LOG	PULL_DATA: 02 4981 02 aa555a0000240409
0:20:28.395749	LOG	PULL_ACK: 02 4981 04
0:20:32.315525	LOG	PUSH_ACK: 02 0486 01
0:20:32.317523	LOG	PUSH_DATA: Protocol version = 02, Token = 0486, Identifier = 00, JSON = {'rxpk': [{'tmst': 547011167, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAiwIBqpkzkzp7'}]}
0:20:32.319522	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 33933a7b)
0:20:32.321520	LOG	Server <---------- DUT
0:20:32.322520	LOG	Count = 7
0:20:35.043077	LOG	PUSH_ACK: 02 0487 01
0:20:35.045076	LOG	PUSH_DATA: Protocol version = 02, Token = 0487, Identifier = 00, JSON = {'rxpk': [{'tmst': 549728047, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAiwIBqpkzkzp7'}]}
0:20:35.046075	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 33933a7b)
0:20:35.047075	LOG	Server <---------- DUT
0:20:35.049074	LOG	Repeated frame. It does not count
0:20:38.480129	LOG	PULL_DATA: 02 e2a0 02 aa555a0000240409
0:20:38.484125	LOG	PULL_ACK: 02 e2a0 04
0:20:42.292485	LOG	PUSH_ACK: 02 0488 01
0:20:42.294484	LOG	PUSH_DATA: Protocol version = 02, Token = 0488, Identifier = 00, JSON = {'rxpk': [{'tmst': 557016423, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAjAIBkTgb3/U4'}]}
0:20:42.296481	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1bdff538)
0:20:42.298481	LOG	Server <---------- DUT
0:20:42.300480	LOG	Count = 8
0:20:45.019942	LOG	PUSH_ACK: 02 0489 01
0:20:45.021940	LOG	PUSH_DATA: Protocol version = 02, Token = 0489, Identifier = 00, JSON = {'rxpk': [{'tmst': 559733271, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAjAIBkTgb3/U4'}]}
0:20:45.023941	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1bdff538)
0:20:45.024958	LOG	Server <---------- DUT
0:20:45.026938	LOG	Repeated frame. It does not count
0:20:48.559974	LOG	PULL_DATA: 02 7ff8 02 aa555a0000240409
0:20:48.563970	LOG	PULL_ACK: 02 7ff8 04
0:20:52.319838	LOG	PUSH_ACK: 02 048a 01
0:20:52.321836	LOG	PUSH_DATA: Protocol version = 02, Token = 048a, Identifier = 00, JSON = {'rxpk': [{'tmst': 567021679, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAjQIB0FRmhrx/'}]}
0:20:52.323835	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6686bc7f)
0:20:52.325834	LOG	Server <---------- DUT
0:20:52.327833	LOG	Count = 9
0:20:55.013308	LOG	PUSH_ACK: 02 048c 01
0:20:55.017306	LOG	PUSH_DATA: Protocol version = 02, Token = 048c, Identifier = 00, JSON = {'rxpk': [{'tmst': 569738567, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAjQIB0FRmhrx/'}]}
0:20:55.019306	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6686bc7f)
0:20:55.021307	LOG	Server <---------- DUT
0:20:55.022323	LOG	Repeated frame. It does not count
0:20:58.640249	LOG	PULL_DATA: 02 e347 02 aa555a0000240409

0:20:58.642251	LOG	PULL_ACK: 02 e347 04
0:21:02.316163	LOG	PUSH_ACK: 02 048d 01
0:21:02.318162	LOG	PUSH_DATA: Protocol version = 02, Token = 048d, Identifier = 00, JSON = {'rxpk': [{'tmst': 577026927, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAjgIBb3vF9eZL'}]}
0:21:02.320161	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c5f5e64b)
0:21:02.321160	LOG	Server <---------- DUT
0:21:02.323159	LOG	Count = 10
0:21:05.046937	LOG	PUSH_ACK: 02 048e 01
0:21:05.048935	LOG	PUSH_DATA: Protocol version = 02, Token = 048e, Identifier = 00, JSON = {'rxpk': [{'tmst': 579743815, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAjgIBb3vF9eZL'}]}
0:21:05.049935	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c5f5e64b)
0:21:05.051933	LOG	Server <---------- DUT
0:21:05.052934	LOG	Repeated frame. It does not count
0:21:08.739858	LOG	PULL_DATA: 02 69e3 02 aa555a0000240409
0:21:08.741839	LOG	PULL_ACK: 02 69e3 04
0:21:12.349790	LOG	PUSH_ACK: 02 048f 01
0:21:12.351789	LOG	PUSH_DATA: Protocol version = 02, Token = 048f, Identifier = 00, JSON = {'rxpk': [{'tmst': 587032159, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAjwIBcZ73oB+t'}]}
0:21:12.352788	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f7a01fad)
0:21:12.354786	LOG	Server <---------- DUT
0:21:12.355786	LOG	Count = 11
0:21:15.027517	LOG	PUSH_ACK: 02 0490 01
0:21:15.029516	LOG	PUSH_DATA: Protocol version = 02, Token = 0490, Identifier = 00, JSON = {'rxpk': [{'tmst': 589749031, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAjwIBcZ73oB+t'}]}
0:21:15.030514	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 028f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f7a01fad)
0:21:15.031514	LOG	Server <---------- DUT
0:21:15.033513	LOG	Repeated frame. It does not count
0:21:18.820477	LOG	PULL_DATA: 02 11b6 02 aa555a0000240409
0:21:18.824475	LOG	PULL_ACK: 02 11b6 04
0:21:22.329485	LOG	PUSH_ACK: 02 0491 01
0:21:22.331484	LOG	PUSH_DATA: Protocol version = 02, Token = 0491, Identifier = 00, JSON = {'rxpk': [{'tmst': 597037415, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAkAIBDA3NcUA6'}]}
0:21:22.333483	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0290, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cd71403a)
0:21:22.335482	LOG	Server <---------- DUT
0:21:22.337481	LOG	Count = 12
0:21:25.071928	LOG	PUSH_ACK: 02 0494 01
0:21:25.074927	LOG	PUSH_DATA: Protocol version = 02, Token = 0494, Identifier = 00, JSON = {'rxpk': [{'tmst': 599754295, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAkAIBDA3NcUA6'}]}

0:21:25.076926	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0290, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cd71403a)
0:21:25.077925	LOG	Server <---------- DUT
0:21:25.079925	LOG	Repeated frame. It does not count
0:21:28.899755	LOG	PULL_DATA: 02 98b9 02 aa555a0000240409
0:21:28.901754	LOG	PULL_ACK: 02 98b9 04
0:21:32.321813	LOG	PUSH_ACK: 02 0495 01
0:21:32.323812	LOG	PUSH_DATA: Protocol version = 02, Token = 0495, Identifier = 00, JSON = {'rxpk': [{'tmst': 607042663, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAkQIB3r7/H8Iw'}]}
0:21:32.325810	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0291, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ff1fc230)
0:21:32.327809	LOG	Server <---------- DUT
0:21:32.329808	LOG	Count = 13
0:21:35.049264	LOG	PUSH_ACK: 02 0496 01
0:21:35.051263	LOG	PUSH_DATA: Protocol version = 02, Token = 0496, Identifier = 00, JSON = {'rxpk': [{'tmst': 609759527, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAkQIB3r7/H8Iw'}]}
0:21:35.053262	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0291, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ff1fc230)
0:21:35.054261	LOG	Server <---------- DUT
0:21:35.055261	LOG	Repeated frame. It does not count
0:21:38.979647	LOG	PULL_DATA: 02 419f 02 aa555a0000240409
0:21:38.981646	LOG	PULL_ACK: 02 419f 04
0:21:42.349733	LOG	PUSH_ACK: 02 0497 01
0:21:42.352732	LOG	PUSH_DATA: Protocol version = 02, Token = 0497, Identifier = 00, JSON = {'rxpk': [{'tmst': 617047903, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAkgIBmFc3o0Ox'}]}
0:21:42.354731	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0292, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 37a343b1)
0:21:42.356730	LOG	Server <---------- DUT
0:21:42.357729	LOG	Count = 14
0:21:45.078184	LOG	PUSH_ACK: 02 0498 01
0:21:45.080184	LOG	PUSH_DATA: Protocol version = 02, Token = 0498, Identifier = 00, JSON = {'rxpk': [{'tmst': 619764807, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAkgIBmFc3o0Ox'}]}
0:21:45.082182	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0292, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 37a343b1)
0:21:45.083183	LOG	Server <---------- DUT
0:21:45.085182	LOG	Repeated frame. It does not count
0:21:49.079914	LOG	PULL_DATA: 02 1822 02 aa555a0000240409
0:21:49.084912	LOG	PULL_ACK: 02 1822 04
0:21:52.327001	LOG	PUSH_ACK: 02 0499 01
0:21:52.329998	LOG	PUSH_DATA: Protocol version = 02, Token = 0499, Identifier = 00, JSON = {'rxpk': [{'tmst': 627053159, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAkwIB4mTY3NpG'}]}
0:21:52.331998	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0293, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d8dcda46)
0:21:52.332997	LOG	Server <---------- DUT
0:21:52.334996	LOG	Count = 15
0:21:55.072440	LOG	PUSH_ACK: 02 049b 01

0:21:55.074440	LOG	PUSH_DATA: Protocol version = 02, Token = 049b, Identifier = 00, JSON = {'rxpk': [{'tmst': 629770055, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAkwIB4mTY3NpG'}]}
0:21:55.075443	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0293, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d8dcda46)
0:21:55.077438	LOG	Server <---------- DUT
0:21:55.078437	LOG	Repeated frame. It does not count
0:21:59.160180	LOG	PULL_DATA: 02 a84b 02 aa555a0000240409
0:21:59.162179	LOG	PULL_ACK: 02 a84b 04
0:22:02.372357	LOG	PUSH_ACK: 02 049c 01
0:22:02.374355	LOG	PUSH_DATA: Protocol version = 02, Token = 049c, Identifier = 00, JSON = {'rxpk': [{'tmst': 637058415, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAlAIB64VUtZkM'}]}
0:22:02.376354	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0294, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 54b5990c)
0:22:02.377353	LOG	Server <---------- DUT
0:22:02.379352	LOG	Count = 16
0:22:05.048837	LOG	PUSH_ACK: 02 049d 01
0:22:05.050836	LOG	PUSH_DATA: Protocol version = 02, Token = 049d, Identifier = 00, JSON = {'rxpk': [{'tmst': 639775303, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAlAIB64VUtZkM'}]}
0:22:05.052835	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0294, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 54b5990c)
0:22:05.053834	LOG	Server <---------- DUT
0:22:05.055833	LOG	Repeated frame. It does not count
0:22:09.239463	LOG	PULL_DATA: 02 c8fd 02 aa555a0000240409
0:22:09.241488	LOG	PULL_ACK: 02 c8fd 04
0:22:12.349227	LOG	PUSH_ACK: 02 049e 01
0:22:12.352226	LOG	PUSH_DATA: Protocol version = 02, Token = 049e, Identifier = 00, JSON = {'rxpk': [{'tmst': 647063663, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAlQIB298uimZC'}]}
0:22:12.354225	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0295, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2e8a6642)
0:22:12.355224	LOG	Server <---------- DUT
0:22:12.357223	LOG	Count = 17
0:22:15.077679	LOG	PUSH_ACK: 02 049f 01
0:22:15.080677	LOG	PUSH_DATA: Protocol version = 02, Token = 049f, Identifier = 00, JSON = {'rxpk': [{'tmst': 649780559, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAlQIB298uimZC'}]}
0:22:15.081676	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0295, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2e8a6642)
0:22:15.083675	LOG	Server <---------- DUT
0:22:15.084675	LOG	Repeated frame. It does not count
0:22:19.319270	LOG	PULL_DATA: 02 a204 02 aa555a0000240409
0:22:19.324268	LOG	PULL_ACK: 02 a204 04
0:22:22.378534	LOG	PUSH_ACK: 02 04a0 01
0:22:22.380533	LOG	PUSH_DATA: Protocol version = 02, Token = 04a0, Identifier = 00, JSON = {'rxpk': [{'tmst': 657068911, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAlgIBZ7b+Z5rn'}]}

0:22:22.382531	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0296, FOpts:), FPort: 01, FRMPayload: 004e, MIC: fe679ae7)
0:22:22.383531	LOG	Server <---------- DUT
0:22:22.385530	LOG	Count = 18
0:22:25.072005	LOG	PUSH_ACK: 02 04a2 01
0:22:25.074004	LOG	PUSH_DATA: Protocol version = 02, Token = 04a2, Identifier = 00, JSON = {'rxpk': [{'tmst': 659785791, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAlgIBZ7b+Z5rn'}]}
0:22:25.076002	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0296, FOpts:), FPort: 01, FRMPayload: 004e, MIC: fe679ae7)
0:22:25.078001	LOG	Server <---------- DUT
0:22:25.079001	LOG	Repeated frame. It does not count
0:22:29.399439	LOG	PULL_DATA: 02 1a90 02 aa555a0000240409
0:22:29.401438	LOG	PULL_ACK: 02 1a90 04
0:22:32.372751	LOG	PUSH_ACK: 02 04a3 01
0:22:32.374750	LOG	PUSH_DATA: Protocol version = 02, Token = 04a3, Identifier = 00, JSON = {'rxpk': [{'tmst': 667074143, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAlwIB5xc7Nw5G'}]}
0:22:32.376749	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0297, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3b370e46)
0:22:32.378748	LOG	Server <---------- DUT
0:22:32.379748	LOG	Count = 19
0:22:35.100370	LOG	PUSH_ACK: 02 04a4 01
0:22:35.103368	LOG	PUSH_DATA: Protocol version = 02, Token = 04a4, Identifier = 00, JSON = {'rxpk': [{'tmst': 669791023, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAlwIB5xc7Nw5G'}]}
0:22:35.104367	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0297, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3b370e46)
0:22:35.106367	LOG	Server <---------- DUT
0:22:35.107366	LOG	Repeated frame. It does not count
0:22:39.479882	LOG	PULL_DATA: 02 f449 02 aa555a0000240409
0:22:39.481881	LOG	PULL_ACK: 02 f449 04
0:22:42.350253	LOG	PUSH_ACK: 02 04a5 01
0:22:42.352251	LOG	PUSH_DATA: Protocol version = 02, Token = 04a5, Identifier = 00, JSON = {'rxpk': [{'tmst': 677079383, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAmAIBVW3JntNT'}]}
0:22:42.354250	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0298, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c99ed353)
0:22:42.355249	LOG	Server <---------- DUT
0:22:42.357248	LOG	Count = 20
0:22:45.077704	LOG	PUSH_ACK: 02 04a6 01
0:22:45.080702	LOG	PUSH_DATA: Protocol version = 02, Token = 04a6, Identifier = 00, JSON = {'rxpk': [{'tmst': 679796287, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAmAIBVW3JntNT'}]}
0:22:45.081704	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0298, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c99ed353)
0:22:45.082703	LOG	Server <---------- DUT
0:22:45.084700	LOG	Repeated frame. It does not count
0:22:49.569153	LOG	PULL_DATA: 02 fe15 02 aa555a0000240409
0:22:49.573152	LOG	PULL_ACK: 02 fe15 04
0:22:52.379559	LOG	PUSH_ACK: 02 04a8 01

0:22:52.381557	LOG	PUSH_DATA: Protocol version = 02, Token = 04a8, Identifier = 00, JSON = {'rxpk': [{'tmst': 687084631, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAmQIBXRUSxrm1'}]}
0:22:52.382557	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0299, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 12c6b9b5)
0:22:52.383556	LOG	Server <---------- DUT
0:22:52.385555	LOG	Count = 21
0:22:55.072115	LOG	PUSH_ACK: 02 04aa 01
0:22:55.075113	LOG	PUSH_DATA: Protocol version = 02, Token = 04aa, Identifier = 00, JSON = {'rxpk': [{'tmst': 689801511, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAmQIBXRUSxrm1'}]}
0:22:55.077112	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0299, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 12c6b9b5)
0:22:55.078111	LOG	Server <---------- DUT
0:22:55.080111	LOG	Repeated frame. It does not count
0:22:59.649554	LOG	PULL_DATA: 02 4b48 02 aa555a0000240409
0:22:59.651553	LOG	PULL_ACK: 02 4b48 04
0:23:02.373224	LOG	PUSH_ACK: 02 04ab 01
0:23:02.376222	LOG	PUSH_DATA: Protocol version = 02, Token = 04ab, Identifier = 00, JSON = {'rxpk': [{'tmst': 697089895, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAmgIBJi72Hfhc'}]}
0:23:02.377222	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f61df85c)
0:23:02.379221	LOG	Server <---------- DUT
0:23:02.381220	LOG	Count = 22
0:23:05.101675	LOG	PUSH_ACK: 02 04ac 01
0:23:05.103675	LOG	PUSH_DATA: Protocol version = 02, Token = 04ac, Identifier = 00, JSON = {'rxpk': [{'tmst': 699806775, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAmgIBJi72Hfhc'}]}
0:23:05.104674	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029a, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f61df85c)
0:23:05.106673	LOG	Server <---------- DUT
0:23:05.107672	LOG	Repeated frame. It does not count
0:23:09.739508	LOG	PULL_DATA: 02 962d 02 aa555a0000240409
0:23:09.741508	LOG	PULL_ACK: 02 962d 04
0:23:12.401996	LOG	PUSH_ACK: 02 04ad 01
0:23:12.403996	LOG	PUSH_DATA: Protocol version = 02, Token = 04ad, Identifier = 00, JSON = {'rxpk': [{'tmst': 707095151, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAmwIBpTypy56c'}]}
0:23:12.405993	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a9cb9e9c)
0:23:12.407992	LOG	Server <---------- DUT
0:23:12.408991	LOG	Count = 23
0:23:15.129418	LOG	PUSH_ACK: 02 04ae 01
0:23:15.131416	LOG	PUSH_DATA: Protocol version = 02, Token = 04ae, Identifier = 00, JSON = {'rxpk': [{'tmst': 709812047, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAmwIBpTypy56c'}]}
0:23:15.133415	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029b, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a9cb9e9c)
0:23:15.134414	LOG	Server <---------- DUT

0:23:15.135414	LOG	Repeated frame. It does not count
0:23:19.819788	LOG	PULL_DATA: 02 e815 02 aa555a0000240409
0:23:19.823784	LOG	PULL_ACK: 02 e815 04
0:23:22.378399	LOG	PUSH_ACK: 02 04af 01
0:23:22.380398	LOG	PUSH_DATA: Protocol version = 02, Token = 04af, Identifier = 00, JSON = {'rxpk': [{'tmst': 717100399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAnAIBQoT/py7T'}]}
0:23:22.382398	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ffa72ed3)
0:23:22.383415	LOG	Server <---------- DUT
0:23:22.385396	LOG	Count = 24
0:23:25.122841	LOG	PUSH_ACK: 02 04b1 01
0:23:25.127839	LOG	PUSH_DATA: Protocol version = 02, Token = 04b1, Identifier = 00, JSON = {'rxpk': [{'tmst': 719817319, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAnAIBQoT/py7T'}]}
0:23:25.130837	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029c, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ffa72ed3)
0:23:25.135834	LOG	Server <---------- DUT
0:23:25.169814	LOG	Repeated frame. It does not count
0:23:29.899130	LOG	PULL_DATA: 02 25cb 02 aa555a0000240409
0:23:29.901129	LOG	PULL_ACK: 02 25cb 04
0:23:32.424696	LOG	PUSH_ACK: 02 04b2 01
0:23:32.427694	LOG	PUSH_DATA: Protocol version = 02, Token = 04b2, Identifier = 00, JSON = {'rxpk': [{'tmst': 727105655, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAnQIBdeC79uMd'}]}
0:23:32.429693	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bbf6e31d)
0:23:32.430692	LOG	Server <---------- DUT
0:23:32.432691	LOG	Count = 25
0:23:35.101177	LOG	PUSH_ACK: 02 04b3 01
0:23:35.103175	LOG	PUSH_DATA: Protocol version = 02, Token = 04b3, Identifier = 00, JSON = {'rxpk': [{'tmst': 729822535, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAnQIBdeC79uMd'}]}
0:23:35.105174	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bbf6e31d)
0:23:35.107172	LOG	Server <---------- DUT
0:23:35.108172	LOG	Repeated frame. It does not count
0:23:39.979406	LOG	PULL_DATA: 02 5c8f 02 aa555a0000240409
0:23:39.981406	LOG	PULL_ACK: 02 5c8f 04
0:23:42.401032	LOG	PUSH_ACK: 02 04b4 01
0:23:42.403031	LOG	PUSH_DATA: Protocol version = 02, Token = 04b4, Identifier = 00, JSON = {'rxpk': [{'tmst': 737110919, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAngIBq/hx57PH'}]}
0:23:42.405030	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 71e7b3c7)
0:23:42.407029	LOG	Server <---------- DUT
0:23:42.409027	LOG	Count = 26
0:23:45.129484	LOG	PUSH_ACK: 02 04b5 01
0:23:45.131486	LOG	PUSH_DATA: Protocol version = 02, Token = 04b5, Identifier = 00, JSON = {'rxpk': [{'tmst': 739827815, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAngIBq/hx57PH'}]}
0:23:45.132482	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029e, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 71e7b3c7)
0:23:45.133486	LOG	Server <---------- DUT
0:23:45.135486	LOG	Repeated frame. It does not count
0:23:50.068818	LOG	PULL_DATA: 02 ae6d 02 aa555a0000240409
0:23:50.073816	LOG	PULL_ACK: 02 ae6d 04
0:23:52.429480	LOG	PUSH_ACK: 02 04b6 01
0:23:52.431479	LOG	PUSH_DATA: Protocol version = 02, Token = 04b6, Identifier = 00, JSON = {'rxpk': [{'tmst': 747116183, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAnwIBAA7Ig/jk'}]}
0:23:52.432477	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c883f8e4)
0:23:52.433478	LOG	Server <---------- DUT
0:23:52.434477	LOG	Count = 27
0:23:55.123696	LOG	PUSH_ACK: 02 04b8 01
0:23:55.128693	LOG	PUSH_DATA: Protocol version = 02, Token = 04b8, Identifier = 00, JSON = {'rxpk': [{'tmst': 749833063, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAnwIBAA7Ig/jk'}]}
0:23:55.132664	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 029f, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c883f8e4)
0:23:55.137689	LOG	Server <---------- DUT
0:23:55.139687	LOG	Repeated frame. It does not count
0:24:00.148890	LOG	PULL_DATA: 02 4546 02 aa555a0000240409
0:24:00.150890	LOG	PULL_ACK: 02 4546 04
0:24:02.426598	LOG	PUSH_ACK: 02 04b9 01
0:24:02.429596	LOG	PUSH_DATA: Protocol version = 02, Token = 04b9, Identifier = 00, JSON = {'rxpk': [{'tmst': 757121423, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAoAIBtO3ZUc3j'}]}
0:24:02.431595	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d951cde3)
0:24:02.432595	LOG	Server <---------- DUT
0:24:02.434593	LOG	Count = 28
0:24:05.155051	LOG	PUSH_ACK: 02 04ba 01
0:24:05.156049	LOG	PUSH_DATA: Protocol version = 02, Token = 04ba, Identifier = 00, JSON = {'rxpk': [{'tmst': 759838311, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAoAIBtO3ZUc3j'}]}
0:24:05.158047	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d951cde3)
0:24:05.159049	LOG	Server <---------- DUT
0:24:05.161047	LOG	Repeated frame. It does not count
0:24:10.229367	LOG	PULL_DATA: 02 2786 02 aa555a0000240409
0:24:10.230367	LOG	PULL_ACK: 02 2786 04
0:24:12.403135	LOG	PUSH_ACK: 02 04bb 01
0:24:12.405133	LOG	PUSH_DATA: Protocol version = 02, Token = 04bb, Identifier = 00, JSON = {'rxpk': [{'tmst': 767126671, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAoQIBY6Cf4xLl'}]}
0:24:12.407131	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9fe312e5)
0:24:12.409133	LOG	Server <---------- DUT

0:24:12.410129	LOG	Count = 29
0:24:15.130643	LOG	PUSH_ACK: 02 04bc 01
0:24:15.133642	LOG	PUSH_DATA: Protocol version = 02, Token = 04bc, Identifier = 00, JSON = {'rxpk': [{'tmst': 769843559, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAoQIBY6Cf4xLl'}]}
0:24:15.135640	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9fe312e5)
0:24:15.136640	LOG	Server <---------- DUT
0:24:15.138639	LOG	Repeated frame. It does not count
0:24:20.308723	LOG	PULL_DATA: 02 e53f 02 aa555a0000240409
0:24:20.313703	LOG	PULL_ACK: 02 e53f 04
0:24:22.431096	LOG	PUSH_ACK: 02 04bd 01
0:24:22.433095	LOG	PUSH_DATA: Protocol version = 02, Token = 04bd, Identifier = 00, JSON = {'rxpk': [{'tmst': 777131943, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAogIBcWvdkvis'}]}
0:24:22.435094	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: dd92f8ac)
0:24:22.437092	LOG	Server <---------- DUT
0:24:22.438091	LOG	Count = 30
0:24:25.122568	LOG	PUSH_ACK: 02 04bf 01
0:24:25.125566	LOG	PUSH_DATA: Protocol version = 02, Token = 04bf, Identifier = 00, JSON = {'rxpk': [{'tmst': 779848823, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAogIBcWvdkvis'}]}
0:24:25.126565	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: dd92f8ac)
0:24:25.128564	LOG	Server <---------- DUT
0:24:25.129564	LOG	Repeated frame. It does not count
0:24:30.389247	LOG	PULL_DATA: 02 a98d 02 aa555a0000240409
0:24:30.391247	LOG	PULL_ACK: 02 a98d 04
0:24:32.423681	LOG	PUSH_ACK: 02 04c0 01
0:24:32.425680	LOG	PUSH_DATA: Protocol version = 02, Token = 04c0, Identifier = 00, JSON = {'rxpk': [{'tmst': 787137199, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAowIB3luysUC1'}]}
0:24:32.427679	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b2b140b5)
0:24:32.429678	LOG	Server <---------- DUT
0:24:32.430677	LOG	Count = 31
0:24:35.152132	LOG	PUSH_ACK: 02 04c1 01
0:24:35.154131	LOG	PUSH_DATA: Protocol version = 02, Token = 04c1, Identifier = 00, JSON = {'rxpk': [{'tmst': 789854095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAowIB3luysUC1'}]}
0:24:35.156129	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: b2b140b5)
0:24:35.158128	LOG	Server <---------- DUT
0:24:35.160127	LOG	Repeated frame. It does not count
0:24:40.469113	LOG	PULL_DATA: 02 8a71 02 aa555a0000240409
0:24:40.471112	LOG	PULL_ACK: 02 8a71 04
0:24:42.453986	LOG	PUSH_ACK: 02 04c3 01
0:24:42.455985	LOG	PUSH_DATA: Protocol version = 02, Token = 04c3, Identifier = 00, JSON = {'rxpk': [{'tmst': 797142471, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDApAIBKboqNrQF'}]}
0:24:42.457984	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2a36b405)
0:24:42.458984	LOG	Server <---------- DUT
0:24:42.460982	LOG	Count = 32
0:24:45.489738	LOG	PUSH_ACK: 02 04c4 01
0:24:45.492736	LOG	PUSH_DATA: Protocol version = 02, Token = 04c4, Identifier = 00, JSON = {'rxpk': [{'tmst': 800189095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDApAIBKboqNrQF'}]}
0:24:45.494735	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2a36b405)
0:24:45.495734	LOG	Server <---------- DUT
0:24:45.497733	LOG	Repeated frame. It does not count
0:24:50.548864	LOG	PULL_DATA: 02 8a2c 02 aa555a0000240409
0:24:50.553862	LOG	PULL_ACK: 02 8a2c 04
0:24:52.791592	LOG	PUSH_ACK: 02 04c6 01
0:24:52.794590	LOG	PUSH_DATA: Protocol version = 02, Token = 04c6, Identifier = 00, JSON = {'rxpk': [{'tmst': 807477447, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDApQIBHEYNtyS+'}]}
0:24:52.795589	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0db724be)
0:24:52.797588	LOG	Server <---------- DUT
0:24:52.799588	LOG	Count = 33
0:24:52.800586	LOG	Waiting for the retransmissions
0:24:55.842859	LOG	PUSH_ACK: 02 04c8 01
0:24:55.845858	LOG	PUSH_DATA: Protocol version = 02, Token = 04c8, Identifier = 00, JSON = {'rxpk': [{'tmst': 810524071, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 13.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDApQIBHEYNtyS+'}]}
0:24:55.846857	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0db724be)
0:24:55.847856	LOG	Server <---------- DUT
0:24:55.865846	LOG	Expected number of uplink messages have been received
0:24:55.869844	LOG	Test adaptive data rate control in frame header process starts
0:25:00.629141	LOG	PULL_DATA: 02 75a4 02 aa555a0000240409
0:25:00.631141	LOG	PULL_ACK: 02 75a4 04
0:25:02.783918	LOG	PUSH_ACK: 02 04c9 01
0:25:02.786916	LOG	PUSH_DATA: Protocol version = 02, Token = 04c9, Identifier = 00, JSON = {'rxpk': [{'tmst': 817482687, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -7, 'size': 15, 'data': 'QCAgICDApgIBXaSIgnIV'}]}
0:25:02.787916	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 88827215)
0:25:02.789915	LOG	Server <---------- DUT
0:25:02.790914	LOG	Count = 2
0:25:05.820194	LOG	PUSH_ACK: 02 04ca 01
0:25:05.823192	LOG	PUSH_DATA: Protocol version = 02, Token = 04ca, Identifier = 00, JSON = {'rxpk': [{'tmst': 820529287, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -7, 'size': 15, 'data': 'QCAgICDApgIBXaSIgnIV'}]}
0:25:05.824191	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 88827215)
0:25:05.826190	LOG	Server <---------- DUT

0:25:05.828190	LOG	Repeated frame. It does not count
0:25:10.708419	LOG	PULL_DATA: 02 bc6a 02 aa555a0000240409
0:25:10.710417	LOG	PULL_ACK: 02 bc6a 04
0:25:12.812224	LOG	PUSH_ACK: 02 04cb 01
0:25:12.815222	LOG	PUSH_DATA: Protocol version = 02, Token = 04cb, Identifier = 00, JSON = {'rxpk': [{'tmst': 827487935, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDApwIBvrkfSMHU'}]}
0:25:12.817221	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1f48c1d4)
0:25:12.818221	LOG	Server <---------- DUT
0:25:12.820219	LOG	Count = 3
0:25:15.848595	LOG	PUSH_ACK: 02 04cc 01
0:25:15.851593	LOG	PUSH_DATA: Protocol version = 02, Token = 04cc, Identifier = 00, JSON = {'rxpk': [{'tmst': 830534535, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDApwIBvrkfSMHU'}]}
0:25:15.853592	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1f48c1d4)
0:25:15.854592	LOG	Server <---------- DUT
0:25:15.856590	LOG	Repeated frame. It does not count
0:25:20.788779	LOG	PULL_DATA: 02 eeba 02 aa555a0000240409
0:25:20.793775	LOG	PULL_ACK: 02 eeba 04
0:25:22.789642	LOG	PUSH_ACK: 02 04cd 01
0:25:22.792641	LOG	PUSH_DATA: Protocol version = 02, Token = 04cd, Identifier = 00, JSON = {'rxpk': [{'tmst': 837493183, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAqAIBIAUS+PNe'}]}
0:25:22.793639	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 12f8f35e)
0:25:22.795638	LOG	Server <---------- DUT
0:25:22.796638	LOG	Count = 4
0:25:25.841923	LOG	PUSH_ACK: 02 04cf 01
0:25:25.844922	LOG	PUSH_DATA: Protocol version = 02, Token = 04cf, Identifier = 00, JSON = {'rxpk': [{'tmst': 840539783, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAqAIBIAUS+PNe'}]}
0:25:25.846921	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 12f8f35e)
0:25:25.848919	LOG	Server <---------- DUT
0:25:25.850919	LOG	Repeated frame. It does not count
0:25:30.869069	LOG	PULL_DATA: 02 7f39 02 aa555a0000240409
0:25:30.871068	LOG	PULL_ACK: 02 7f39 04
0:25:32.782987	LOG	PUSH_ACK: 02 04d0 01
0:25:32.784983	LOG	PUSH_DATA: Protocol version = 02, Token = 04d0, Identifier = 00, JSON = {'rxpk': [{'tmst': 847498423, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAqQIBYAWPR/ZK'}]}
0:25:32.785982	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8f47f64a)
0:25:32.786986	LOG	Server <---------- DUT
0:25:32.788980	LOG	Count = 5
0:25:35.869230	LOG	PUSH_ACK: 02 04d1 01
0:25:35.872228	LOG	PUSH_DATA: Protocol version = 02, Token = 04d1, Identifier = 00, JSON = {'rxpk': [{'tmst': 850545023, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAqQIBYAWPR/ZK'}]}
0:25:35.874227	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02a9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8f47f64a)
0:25:35.875226	LOG	Server <---------- DUT
0:25:35.877225	LOG	Repeated frame. It does not count
0:25:40.958548	LOG	PULL_DATA: 02 0215 02 aa555a0000240409
0:25:40.960547	LOG	PULL_ACK: 02 0215 04
0:25:42.810543	LOG	PUSH_ACK: 02 04d2 01
0:25:42.812542	LOG	PUSH_DATA: Protocol version = 02, Token = 04d2, Identifier = 00, JSON = {'rxpk': [{'tmst': 857503671, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 13.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAqgIBu7tNh5Yj'}]}
0:25:42.814541	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02aa, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4d879623)
0:25:42.815541	LOG	Server <---------- DUT
0:25:42.817539	LOG	Count = 6
0:25:45.846912	LOG	PUSH_ACK: 02 04d3 01
0:25:45.848911	LOG	PUSH_DATA: Protocol version = 02, Token = 04d3, Identifier = 00, JSON = {'rxpk': [{'tmst': 860550279, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAqgIBu7tNh5Yj'}]}
0:25:45.850910	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02aa, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4d879623)
0:25:45.852908	LOG	Server <---------- DUT
0:25:45.854908	LOG	Repeated frame. It does not count
0:25:51.038964	LOG	PULL_DATA: 02 67ea 02 aa555a0000240409
0:25:51.042962	LOG	PULL_ACK: 02 67ea 04
0:25:52.787978	LOG	PUSH_ACK: 02 04d4 01
0:25:52.789977	LOG	PUSH_DATA: Protocol version = 02, Token = 04d4, Identifier = 00, JSON = {'rxpk': [{'tmst': 867508927, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAqwIBTBCLd1Ro'}]}
0:25:52.791976	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ab, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8b775468)
0:25:52.792975	LOG	Server <---------- DUT
0:25:52.794974	LOG	Count = 7
0:25:55.844400	LOG	PUSH_ACK: 02 04d7 01
0:25:55.846400	LOG	PUSH_DATA: Protocol version = 02, Token = 04d7, Identifier = 00, JSON = {'rxpk': [{'tmst': 870555551, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAqwIBTBCLd1Ro'}]}
0:25:55.848398	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ab, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8b775468)
0:25:55.850397	LOG	Server <---------- DUT
0:25:55.851397	LOG	Repeated frame. It does not count
0:26:01.118502	LOG	PULL_DATA: 02 2b8c 02 aa555a0000240409
0:26:01.120502	LOG	PULL_ACK: 02 2b8c 04
0:26:02.836528	LOG	PUSH_ACK: 02 04d8 01
0:26:02.838526	LOG	PUSH_DATA: Protocol version = 02, Token = 04d8, Identifier = 00, JSON = {'rxpk': [{'tmst': 877514159, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDArAIBLrl55C9V'}]}
0:26:02.840527	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ac, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 79e42f55)
0:26:02.841525	LOG	Server <---------- DUT

0:26:02.842524	LOG	Count = 8
0:26:05.872952	LOG	PUSH_ACK: 02 04d9 01
0:26:05.874951	LOG	PUSH_DATA: Protocol version = 02, Token = 04d9, Identifier = 00, JSON = {'rxpk': [{'tmst': 880560767, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -7, 'size': 15, 'data': 'QCAgICDArAIBLrl55C9V'}]}
0:26:05.876948	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ac, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 79e42f55)
0:26:05.878948	LOG	Server <---------- DUT
0:26:05.879934	LOG	Repeated frame. It does not count
0:26:11.198947	LOG	PULL_DATA: 02 b687 02 aa555a0000240409
0:26:11.200946	LOG	PULL_ACK: 02 b687 04
0:26:12.814030	LOG	PUSH_ACK: 02 04da 01
0:26:12.817029	LOG	PUSH_DATA: Protocol version = 02, Token = 04da, Identifier = 00, JSON = {'rxpk': [{'tmst': 887519423, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDArQIBP8vaSNPI'}]}
0:26:12.819027	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ad, FOpts:), FPort: 01, FRMPayload: 004e, MIC: da48d3c8)
0:26:12.820027	LOG	Server <---------- DUT
0:26:12.822026	LOG	Count = 9
0:26:15.850306	LOG	PUSH_ACK: 02 04db 01
0:26:15.852305	LOG	PUSH_DATA: Protocol version = 02, Token = 04db, Identifier = 00, JSON = {'rxpk': [{'tmst': 890566047, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDArQIBP8vaSNPI'}]}
0:26:15.853304	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ad, FOpts:), FPort: 01, FRMPayload: 004e, MIC: da48d3c8)
0:26:15.854304	LOG	Server <---------- DUT
0:26:15.856303	LOG	Repeated frame. It does not count
0:26:21.278223	LOG	PULL_DATA: 02 1b64 02 aa555a0000240409
0:26:21.283221	LOG	PULL_ACK: 02 1b64 04
0:26:22.841337	LOG	PUSH_ACK: 02 04dc 01
0:26:22.843335	LOG	PUSH_DATA: Protocol version = 02, Token = 04dc, Identifier = 00, JSON = {'rxpk': [{'tmst': 897524663, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDArgIB/KBaiBGJ'}]}
0:26:22.845334	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ae, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5a881189)
0:26:22.847333	LOG	Server <---------- DUT
0:26:22.848333	LOG	Count = 10
0:26:25.892604	LOG	PUSH_ACK: 02 04de 01
0:26:25.894603	LOG	PUSH_DATA: Protocol version = 02, Token = 04de, Identifier = 00, JSON = {'rxpk': [{'tmst': 900571271, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDArgIB/KBaiBGJ'}]}
0:26:25.896601	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ae, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5a881189)
0:26:25.898600	LOG	Server <---------- DUT
0:26:25.899600	LOG	Repeated frame. It does not count
0:26:31.358500	LOG	PULL_DATA: 02 f561 02 aa555a0000240409
0:26:31.360499	LOG	PULL_ACK: 02 f561 04
0:26:32.834662	LOG	PUSH_ACK: 02 04df 01
0:26:32.839659	LOG	PUSH_DATA: Protocol version = 02, Token = 04df, Identifier = 00, JSON = {'rxpk': [{'tmst': 907529919, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDArwIBU8zVHonj'}]}
0:26:32.843657	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02af, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d51e89e3)
0:26:32.846655	LOG	Server <---------- DUT
0:26:32.849654	LOG	Count = 11
0:26:35.873937	LOG	PUSH_ACK: 02 04e0 01
0:26:35.875935	LOG	PUSH_DATA: Protocol version = 02, Token = 04e0, Identifier = 00, JSON = {'rxpk': [{'tmst': 910576527, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDArwIBU8zVHonj'}]}
0:26:35.877934	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02af, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d51e89e3)
0:26:35.879933	LOG	Server <---------- DUT
0:26:35.880932	LOG	Repeated frame. It does not count
0:26:41.438757	LOG	PULL_DATA: 02 ab1c 02 aa555a0000240409
0:26:41.440755	LOG	PULL_ACK: 02 ab1c 04
0:26:42.813975	LOG	PUSH_ACK: 02 04e1 01
0:26:42.815975	LOG	PUSH_DATA: Protocol version = 02, Token = 04e1, Identifier = 00, JSON = {'rxpk': [{'tmst': 917535159, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAsAIBzkQwSy9u'}]}
0:26:42.817974	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 304b2f6e)
0:26:42.818975	LOG	Server <---------- DUT
0:26:42.819972	LOG	Count = 12
0:26:45.902222	LOG	PUSH_ACK: 02 04e2 01
0:26:45.904221	LOG	PUSH_DATA: Protocol version = 02, Token = 04e2, Identifier = 00, JSON = {'rxpk': [{'tmst': 920581775, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAsAIBzkQwSy9u'}]}
0:26:45.906220	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 304b2f6e)
0:26:45.908219	LOG	Server <---------- DUT
0:26:45.909218	LOG	Repeated frame. It does not count
0:26:51.518033	LOG	PULL_DATA: 02 e790 02 aa555a0000240409
0:26:51.524030	LOG	PULL_ACK: 02 e790 04
0:26:52.843281	LOG	PUSH_ACK: 02 04e3 01
0:26:52.845280	LOG	PUSH_DATA: Protocol version = 02, Token = 04e3, Identifier = 00, JSON = {'rxpk': [{'tmst': 927540431, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAsQIBd6bYyqTq'}]}
0:26:52.847278	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d8caa4ea)
0:26:52.849278	LOG	Server <---------- DUT
0:26:52.850277	LOG	Count = 13
0:26:55.892549	LOG	PUSH_ACK: 02 04e5 01
0:26:55.895548	LOG	PUSH_DATA: Protocol version = 02, Token = 04e5, Identifier = 00, JSON = {'rxpk': [{'tmst': 930587079, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 13.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAsQIBd6bYyqTq'}]}
0:26:55.896547	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d8caa4ea)
0:26:55.898546	LOG	Server <---------- DUT
0:26:55.899546	LOG	Repeated frame. It does not count
0:27:01.598310	LOG	PULL_DATA: 02 5b90 02 aa555a0000240409

0:27:01.600309	LOG	PULL_ACK: 02 5b90 04
0:27:02.833608	LOG	PUSH_ACK: 02 04e6 01
0:27:02.836607	LOG	PUSH_DATA: Protocol version = 02, Token = 04e6, Identifier = 00, JSON = {'rxpk': [{'tmst': 937545711, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAsgIB8awkvTFY'}]}
0:27:02.838605	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 24bd3158)
0:27:02.839605	LOG	Server <---------- DUT
0:27:02.841604	LOG	Count = 14
0:27:05.870402	LOG	PUSH_ACK: 02 04e7 01
0:27:05.872400	LOG	PUSH_DATA: Protocol version = 02, Token = 04e7, Identifier = 00, JSON = {'rxpk': [{'tmst': 940592303, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAsgIB8awkvTFY'}]}
0:27:05.874399	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 24bd3158)
0:27:05.876398	LOG	Server <---------- DUT
0:27:05.877398	LOG	Repeated frame. It does not count
0:27:11.678104	LOG	PULL_DATA: 02 1ee5 02 aa555a0000240409
0:27:11.680103	LOG	PULL_ACK: 02 1ee5 04
0:27:12.862431	LOG	PUSH_ACK: 02 04e8 01
0:27:12.865430	LOG	PUSH_DATA: Protocol version = 02, Token = 04e8, Identifier = 00, JSON = {'rxpk': [{'tmst': 947550983, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAswIBPdcW5HTk'}]}
0:27:12.866429	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 16e474e4)
0:27:12.868428	LOG	Server <---------- DUT
0:27:12.869428	LOG	Count = 15
0:27:15.898707	LOG	PUSH_ACK: 02 04e9 01
0:27:15.900708	LOG	PUSH_DATA: Protocol version = 02, Token = 04e9, Identifier = 00, JSON = {'rxpk': [{'tmst': 950597591, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAswIBPdcW5HTk'}]}
0:27:15.902706	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 16e474e4)
0:27:15.903723	LOG	Server <---------- DUT
0:27:15.905704	LOG	Repeated frame. It does not count
0:27:21.758530	LOG	PULL_DATA: 02 02a8 02 aa555a0000240409
0:27:21.762527	LOG	PULL_ACK: 02 02a8 04
0:27:22.839915	LOG	PUSH_ACK: 02 04ea 01
0:27:22.841914	LOG	PUSH_DATA: Protocol version = 02, Token = 04ea, Identifier = 00, JSON = {'rxpk': [{'tmst': 957556231, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAtAIBeZ42qKro'}]}
0:27:22.843913	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 36a8aae8)
0:27:22.845912	LOG	Server <---------- DUT
0:27:22.846912	LOG	Count = 16
0:27:25.892212	LOG	PUSH_ACK: 02 04ec 01
0:27:25.894211	LOG	PUSH_DATA: Protocol version = 02, Token = 04ec, Identifier = 00, JSON = {'rxpk': [{'tmst': 960602879, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAtAIBeZ42qKro'}]}

0:27:25.896209	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 36a8aae8)
0:27:25.897208	LOG	Server <---------- DUT
0:27:25.899206	LOG	Repeated frame. It does not count
0:27:31.837853	LOG	PULL_DATA: 02 1177 02 aa555a0000240409
0:27:31.839852	LOG	PULL_ACK: 02 1177 04
0:27:32.886258	LOG	PUSH_ACK: 02 04ee 01
0:27:32.888257	LOG	PUSH_DATA: Protocol version = 02, Token = 04ee, Identifier = 00, JSON = {'rxpk': [{'tmst': 967561495, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAtQIBoJxKcpzc'}]}
0:27:32.890256	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4a729cdc)
0:27:32.892255	LOG	Server <---------- DUT
0:27:32.893254	LOG	Count = 17
0:27:35.922534	LOG	PUSH_ACK: 02 04ef 01
0:27:35.924533	LOG	PUSH_DATA: Protocol version = 02, Token = 04ef, Identifier = 00, JSON = {'rxpk': [{'tmst': 970608095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAtQIBoJxKcpzc'}]}
0:27:35.926532	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4a729cdc)
0:27:35.927531	LOG	Server <---------- DUT
0:27:35.929530	LOG	Repeated frame. It does not count
0:27:41.917585	LOG	PULL_DATA: 02 4dcd 02 aa555a0000240409
0:27:41.919585	LOG	PULL_ACK: 02 4dcd 04
0:27:42.865048	LOG	PUSH_ACK: 02 04f1 01
0:27:42.867047	LOG	PUSH_DATA: Protocol version = 02, Token = 04f1, Identifier = 00, JSON = {'rxpk': [{'tmst': 977566743, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAtgIBqx12CWq2'}]}
0:27:42.869045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 76096ab6)
0:27:42.871045	LOG	Server <---------- DUT
0:27:42.872044	LOG	Count = 18
0:27:45.901325	LOG	PUSH_ACK: 02 04f2 01
0:27:45.903324	LOG	PUSH_DATA: Protocol version = 02, Token = 04f2, Identifier = 00, JSON = {'rxpk': [{'tmst': 980613359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAtgIBqx12CWq2'}]}
0:27:45.904324	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 76096ab6)
0:27:45.905327	LOG	Server <---------- DUT
0:27:45.906327	LOG	Repeated frame. It does not count
0:27:51.997863	LOG	PULL_DATA: 02 e13b 02 aa555a0000240409
0:27:52.002859	LOG	PULL_ACK: 02 e13b 04
0:27:52.895353	LOG	PUSH_ACK: 02 04f4 01
0:27:52.897352	LOG	PUSH_DATA: Protocol version = 02, Token = 04f4, Identifier = 00, JSON = {'rxpk': [{'tmst': 987572007, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAtwIBFS6YcII+'}]}
0:27:52.899350	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9870823e)
0:27:52.901349	LOG	Server <---------- DUT
0:27:52.902348	LOG	Count = 19
0:27:55.943621	LOG	PUSH_ACK: 02 04f6 01

0:27:55.946620	LOG	PUSH_DATA: Protocol version = 02, Token = 04f6, Identifier = 00, JSON = {'rxpk': [{'tmst': 990618615, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAtwIBFS6YcII+'}]}
0:27:55.949618	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9870823e)
0:27:55.951617	LOG	Server <---------- DUT
0:27:55.952618	LOG	Repeated frame. It does not count
0:28:02.078061	LOG	PULL_DATA: 02 8760 02 aa555a0000240409
0:28:02.080061	LOG	PULL_ACK: 02 8760 04
0:28:02.884574	LOG	PUSH_ACK: 02 04f7 01
0:28:02.886573	LOG	PUSH_DATA: Protocol version = 02, Token = 04f7, Identifier = 00, JSON = {'rxpk': [{'tmst': 997577255, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAuAIB2IdV5Ui0'}]}
0:28:02.887572	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 55e548b4)
0:28:02.888574	LOG	Server <---------- DUT
0:28:02.890572	LOG	Count = 20
0:28:05.923424	LOG	PUSH_ACK: 02 04f9 01
0:28:05.926422	LOG	PUSH_DATA: Protocol version = 02, Token = 04f9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1000623847, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAuAIB2IdV5Ui0'}]}
0:28:05.928420	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 55e548b4)
0:28:05.929421	LOG	Server <---------- DUT
0:28:05.931419	LOG	Repeated frame. It does not count
0:28:12.157883	LOG	PULL_DATA: 02 748a 02 aa555a0000240409
0:28:12.159882	LOG	PULL_ACK: 02 748a 04
0:28:12.866483	LOG	PUSH_ACK: 02 04fa 01
0:28:12.870479	LOG	PUSH_DATA: Protocol version = 02, Token = 04fa, Identifier = 00, JSON = {'rxpk': [{'tmst': 1007582503, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAuQIBDO0IYcbm'}]}
0:28:12.871478	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0861c6e6)
0:28:12.872478	LOG	Server <---------- DUT
0:28:12.874477	LOG	Count = 21
0:28:15.903757	LOG	PUSH_ACK: 02 04fb 01
0:28:15.905755	LOG	PUSH_DATA: Protocol version = 02, Token = 04fb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1010629119, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAuQIBDO0IYcbm'}]}
0:28:15.907754	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02b9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0861c6e6)
0:28:15.909754	LOG	Server <---------- DUT
0:28:15.910753	LOG	Repeated frame. It does not count
0:28:22.238160	LOG	PULL_DATA: 02 76db 02 aa555a0000240409
0:28:22.241158	LOG	PULL_ACK: 02 76db 04
0:28:22.896786	LOG	PUSH_ACK: 02 04fc 01
0:28:22.898784	LOG	PUSH_DATA: Protocol version = 02, Token = 04fc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1017587759, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAugIBtTJWa/Zu'}]}

0:28:22.900784	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ba, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 566bf66e)
0:28:22.901783	LOG	Server <---------- DUT
0:28:22.903782	LOG	Count = 22
0:28:25.943056	LOG	PUSH_ACK: 02 04fe 01
0:28:25.946054	LOG	PUSH_DATA: Protocol version = 02, Token = 04fe, Identifier = 00, JSON = {'rxpk': [{'tmst': 1020634359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAugIBtTJWa/Zu'}]}
0:28:25.948053	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ba, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 566bf66e)
0:28:25.949052	LOG	Server <---------- DUT
0:28:25.951051	LOG	Repeated frame. It does not count
0:28:32.318439	LOG	PULL_DATA: 02 74a1 02 aa555a0000240409
0:28:32.320436	LOG	PULL_ACK: 02 74a1 04
0:28:32.886114	LOG	PUSH_ACK: 02 04ff 01
0:28:32.888112	LOG	PUSH_DATA: Protocol version = 02, Token = 04ff, Identifier = 00, JSON = {'rxpk': [{'tmst': 1027592991, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAuwIB5te94sUt'}]}
0:28:32.890111	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02bb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bde2c52d)
0:28:32.892110	LOG	Server <---------- DUT
0:28:32.894109	LOG	Count = 23
0:28:35.924388	LOG	PUSH_ACK: 02 0500 01
0:28:35.927387	LOG	PUSH_DATA: Protocol version = 02, Token = 0500, Identifier = 00, JSON = {'rxpk': [{'tmst': 1030639599, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAuwIB5te94sUt'}]}
0:28:35.929386	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02bb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bde2c52d)
0:28:35.930385	LOG	Server <---------- DUT
0:28:35.932384	LOG	Repeated frame. It does not count
0:28:42.398417	LOG	PULL_DATA: 02 682a 02 aa555a0000240409
0:28:42.399443	LOG	PULL_ACK: 02 682a 04
0:28:42.920118	LOG	PUSH_ACK: 02 0501 01
0:28:42.922117	LOG	PUSH_DATA: Protocol version = 02, Token = 0501, Identifier = 00, JSON = {'rxpk': [{'tmst': 1037598239, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAvAIBrwVKhgvq'}]}
0:28:42.924115	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02bc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4a860bea)
0:28:42.925115	LOG	Server <---------- DUT
0:28:42.927114	LOG	Count = 24
0:28:45.958392	LOG	PUSH_ACK: 02 0502 01
0:28:45.960391	LOG	PUSH_DATA: Protocol version = 02, Token = 0502, Identifier = 00, JSON = {'rxpk': [{'tmst': 1040644855, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAvAIBrwVKhgvq'}]}
0:28:45.962390	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02bc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4a860bea)
0:28:45.963389	LOG	Server <---------- DUT
0:28:45.964389	LOG	Repeated frame. It does not count
0:28:52.477861	LOG	PULL_DATA: 02 2883 02 aa555a0000240409
0:28:52.481858	LOG	PULL_ACK: 02 2883 04
0:28:52.901620	LOG	PUSH_ACK: 02 0503 01

0:28:52.904619	LOG	PUSH_DATA: Protocol version = 02, Token = 0503, Identifier = 00, JSON = {'rxpk': [{'tmst': 1047603487, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAvQIB+2iiG5Lh'}]}
0:28:52.906618	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02bd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a21b92e1)
0:28:52.907617	LOG	Server <---------- DUT
0:28:52.909616	LOG	Count = 25
0:28:55.955893	LOG	PUSH_ACK: 02 0506 01
0:28:55.957887	LOG	PUSH_DATA: Protocol version = 02, Token = 0506, Identifier = 00, JSON = {'rxpk': [{'tmst': 1050650095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAvQIB+2iiG5Lh'}]}
0:28:55.958885	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02bd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a21b92e1)
0:28:55.960885	LOG	Server <---------- DUT
0:28:55.961888	LOG	Repeated frame. It does not count
0:29:02.557137	LOG	PULL_DATA: 02 8f1d 02 aa555a0000240409
0:29:02.560136	LOG	PULL_ACK: 02 8f1d 04
0:29:02.899943	LOG	PUSH_ACK: 02 0508 01
0:29:02.901942	LOG	PUSH_DATA: Protocol version = 02, Token = 0508, Identifier = 00, JSON = {'rxpk': [{'tmst': 1057608743, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAvgIBRqmLmfJh'}]}
0:29:02.903941	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02be, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8b99f261)
0:29:02.904941	LOG	Server <---------- DUT
0:29:02.906939	LOG	Count = 26
0:29:05.938217	LOG	PUSH_ACK: 02 0509 01
0:29:05.941218	LOG	PUSH_DATA: Protocol version = 02, Token = 0509, Identifier = 00, JSON = {'rxpk': [{'tmst': 1060655359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 13.5, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAvgIBRqmLmfJh'}]}
0:29:05.942217	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02be, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8b99f261)
0:29:05.944214	LOG	Server <---------- DUT
0:29:05.945214	LOG	Repeated frame. It does not count
0:29:12.637415	LOG	PULL_DATA: 02 e43a 02 aa555a0000240409
0:29:12.639413	LOG	PULL_ACK: 02 e43a 04
0:29:12.933247	LOG	PUSH_ACK: 02 050a 01
0:29:12.935246	LOG	PUSH_DATA: Protocol version = 02, Token = 050a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1067613991, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAvwIBH/XNyV38'}]}
0:29:12.937243	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02bf, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cdc95dfc)
0:29:12.938243	LOG	Server <---------- DUT
0:29:12.939242	LOG	Count = 27
0:29:15.973519	LOG	PUSH_ACK: 02 050c 01
0:29:15.975520	LOG	PUSH_DATA: Protocol version = 02, Token = 050c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1070660599, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAvwIBH/XNyV38'}]}
0:29:15.977519	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02bf, FOpts:), FPort: 01, FRMPayload: 004e, MIC: cdc95dfc)
0:29:15.981515	LOG	Server <---------- DUT

0:29:15.985513	LOG	Repeated frame. It does not count
0:29:22.717690	LOG	PULL_DATA: 02 39cc 02 aa555a0000240409
0:29:22.728685	LOG	PULL_ACK: 02 39cc 04
0:29:22.914584	LOG	PUSH_ACK: 02 050d 01
0:29:22.918581	LOG	PUSH_DATA: Protocol version = 02, Token = 050d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1077619239, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAwAIBssZwjxRa'}]}
0:29:22.920577	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 708f145a)
0:29:22.921576	LOG	Server <---------- DUT
0:29:22.922576	LOG	Count = 28
0:29:25.963848	LOG	PUSH_ACK: 02 050f 01
0:29:25.968844	LOG	PUSH_DATA: Protocol version = 02, Token = 050f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1080665855, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAwAIBssZwjxRa'}]}
0:29:25.972842	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 708f145a)
0:29:25.975840	LOG	Server <---------- DUT
0:29:25.978839	LOG	Repeated frame. It does not count
0:29:32.807961	LOG	PULL_DATA: 02 ca94 02 aa555a0000240409
0:29:32.809960	LOG	PULL_ACK: 02 ca94 04
0:29:32.905997	LOG	PUSH_ACK: 02 0510 01
0:29:32.908996	LOG	PUSH_DATA: Protocol version = 02, Token = 0510, Identifier = 00, JSON = {'rxpk': [{'tmst': 1087624503, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAwQIBnLyDP7Hh'}]}
0:29:32.909995	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 833fb1e1)
0:29:32.911994	LOG	Server <---------- DUT
0:29:32.912993	LOG	Count = 29
0:29:35.994276	LOG	PUSH_ACK: 02 0511 01
0:29:35.996275	LOG	PUSH_DATA: Protocol version = 02, Token = 0511, Identifier = 00, JSON = {'rxpk': [{'tmst': 1090671111, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAwQIBnLyDP7Hh'}]}
0:29:35.998274	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 833fb1e1)
0:29:36.000272	LOG	Server <---------- DUT
0:29:36.001240	LOG	Repeated frame. It does not count
0:29:42.886963	LOG	PULL_DATA: 02 5ce8 02 aa555a0000240409
0:29:42.889962	LOG	PULL_ACK: 02 5ce8 04
0:29:42.934937	LOG	PUSH_ACK: 02 0512 01
0:29:42.936936	LOG	PUSH_DATA: Protocol version = 02, Token = 0512, Identifier = 00, JSON = {'rxpk': [{'tmst': 1097629743, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICDAwgIBB4TwPICz'}]}
0:29:42.938935	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f03c80b3)
0:29:42.939934	LOG	Server <---------- DUT
0:29:42.941933	LOG	Count = 30
0:29:45.971213	LOG	PUSH_ACK: 02 0513 01
0:29:45.974212	LOG	PUSH_DATA: Protocol version = 02, Token = 0513, Identifier = 00, JSON = {'rxpk': [{'tmst': 1100676367, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -7, 'size': 15, 'data': 'QCAgICDAwgIBB4TwPICz'}]}
0:29:45.975210	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f03c80b3)
0:29:45.977209	LOG	Server <---------- DUT
0:29:45.979208	LOG	Repeated frame. It does not count
0:29:52.912272	LOG	PUSH_ACK: 02 0514 01
0:29:52.917269	LOG	PUSH_DATA: Protocol version = 02, Token = 0514, Identifier = 00, JSON = {'rxpk': [{'tmst': 1107635007, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAwwIB9EEJuG8a'}]}
0:29:52.919267	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 09b86f1a)
0:29:52.921267	LOG	Server <---------- DUT
0:29:52.922266	LOG	Count = 31
0:29:52.967240	LOG	PULL_DATA: 02 795e 02 aa555a0000240409
0:29:52.969239	LOG	PULL_ACK: 02 795e 04
0:29:55.964328	LOG	PUSH_ACK: 02 0517 01
0:29:55.967324	LOG	PUSH_DATA: Protocol version = 02, Token = 0517, Identifier = 00, JSON = {'rxpk': [{'tmst': 1110681615, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAwwIB9EEJuG8a'}]}
0:29:55.969323	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 09b86f1a)
0:29:55.970322	LOG	Server <---------- DUT
0:29:55.972321	LOG	Repeated frame. It does not count
0:30:02.957355	LOG	PUSH_ACK: 02 0518 01
0:30:02.960353	LOG	PUSH_DATA: Protocol version = 02, Token = 0518, Identifier = 00, JSON = {'rxpk': [{'tmst': 1117640271, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAxAIB5DG91Bt5'}]}
0:30:02.961353	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bdd41b79)
0:30:02.963351	LOG	Server <---------- DUT
0:30:02.965351	LOG	Count = 32
0:30:03.047304	LOG	PULL_DATA: 02 918a 02 aa555a0000240409
0:30:03.048303	LOG	PULL_ACK: 02 918a 04
0:30:06.507247	LOG	PUSH_ACK: 02 0519 01
0:30:06.509245	LOG	PUSH_DATA: Protocol version = 02, Token = 0519, Identifier = 00, JSON = {'rxpk': [{'tmst': 1121182503, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAxAIB5DG91Bt5'}]}
0:30:06.510244	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bdd41b79)
0:30:06.511244	LOG	Server <---------- DUT
0:30:06.513243	LOG	Repeated frame. It does not count
0:30:13.126919	LOG	PULL_DATA: 02 d6de 02 aa555a0000240409
0:30:13.128918	LOG	PULL_ACK: 02 d6de 04
0:30:13.448737	LOG	PUSH_ACK: 02 051a 01
0:30:13.450736	LOG	PUSH_DATA: Protocol version = 02, Token = 051a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1128141127, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAxQIBcdZNPkNK'}]}
0:30:13.452734	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4d3e434a)
0:30:13.453734	LOG	Server <---------- DUT

0:30:13.455733	LOG	Count = 33
0:30:13.457732	LOG	Waiting for the retransmissions
0:30:16.998721	LOG	PUSH_ACK: 02 051b 01
0:30:17.000720	LOG	PUSH_DATA: Protocol version = 02, Token = 051b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1131683359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAxQIBcdZNPkNK'}]}
0:30:17.002719	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4d3e434a)
0:30:17.004718	LOG	Server <---------- DUT
0:30:17.019709	LOG	Expected number of uplink messages have been received
0:30:17.030703	LOG	Test adaptive data rate control in frame header process starts
0:30:23.207196	LOG	PULL_DATA: 02 57b7 02 aa555a0000240409
0:30:23.212193	LOG	PULL_ACK: 02 57b7 04
0:30:23.477043	LOG	PUSH_ACK: 02 051c 01
0:30:23.479042	LOG	PUSH_DATA: Protocol version = 02, Token = 051c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1138146367, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAxgIBc/Sb0atP'}]}
0:30:23.480041	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9bd1ab4f)
0:30:23.481040	LOG	Server <---------- DUT
0:30:23.482039	LOG	Count = 2
0:30:26.992032	LOG	PUSH_ACK: 02 051f 01
0:30:26.993031	LOG	PUSH_DATA: Protocol version = 02, Token = 051f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1141688623, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAxgIBc/Sb0atP'}]}
0:30:26.995030	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9bd1ab4f)
0:30:26.996029	LOG	Server <---------- DUT
0:30:26.998029	LOG	Repeated frame. It does not count
0:30:33.287457	LOG	PULL_DATA: 02 19df 02 aa555a0000240409
0:30:33.289456	LOG	PULL_ACK: 02 19df 04
0:30:33.469806	LOG	PUSH_ACK: 02 0520 01
0:30:33.471805	LOG	PUSH_DATA: Protocol version = 02, Token = 0520, Identifier = 00, JSON = {'rxpk': [{'tmst': 1148151623, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAxwIBCv7d7jLk'}]}
0:30:33.473804	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ddee32e4)
0:30:33.474805	LOG	Server <---------- DUT
0:30:33.476802	LOG	Count = 3
0:30:37.019836	LOG	PUSH_ACK: 02 0521 01
0:30:37.021836	LOG	PUSH_DATA: Protocol version = 02, Token = 0521, Identifier = 00, JSON = {'rxpk': [{'tmst': 1151693879, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAxwIBCv7d7jLk'}]}
0:30:37.023834	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ddee32e4)
0:30:37.025833	LOG	Server <---------- DUT
0:30:37.026832	LOG	Repeated frame. It does not count
0:30:43.377227	LOG	PULL_DATA: 02 188d 02 aa555a0000240409
0:30:43.380224	LOG	PULL_ACK: 02 188d 04
0:30:43.446188	LOG	PUSH_ACK: 02 0522 01

0:30:43.449186	LOG	PUSH_DATA: Protocol version = 02, Token = 0522, Identifier = 00, JSON = {'rxpk': [{'tmst': 1158156887, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAyAIBfambsntx'}]}
0:30:43.450185	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9bb27b71)
0:30:43.451184	LOG	Server <---------- DUT
0:30:43.452184	LOG	Count = 4
0:30:46.997171	LOG	PUSH_ACK: 02 0523 01
0:30:46.999170	LOG	PUSH_DATA: Protocol version = 02, Token = 0523, Identifier = 00, JSON = {'rxpk': [{'tmst': 1161699135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAyAIBfambsntx'}]}
0:30:47.001169	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9bb27b71)
0:30:47.003168	LOG	Server <---------- DUT
0:30:47.004167	LOG	Repeated frame. It does not count
0:30:53.457503	LOG	PULL_DATA: 02 698e 02 aa555a0000240409
0:30:53.460501	LOG	PULL_ACK: 02 698e 04
0:30:53.475493	LOG	PUSH_ACK: 02 0524 01
0:30:53.477493	LOG	PUSH_DATA: Protocol version = 02, Token = 0524, Identifier = 00, JSON = {'rxpk': [{'tmst': 1168162151, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAyQIB6HLT+89q'}]}
0:30:53.479492	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d3fbcf6a)
0:30:53.480491	LOG	Server <---------- DUT
0:30:53.482488	LOG	Count = 5
0:30:57.041468	LOG	PUSH_ACK: 02 0526 01
0:30:57.043467	LOG	PUSH_DATA: Protocol version = 02, Token = 0526, Identifier = 00, JSON = {'rxpk': [{'tmst': 1171704399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAyQIB6HLT+89q'}]}
0:30:57.045466	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02c9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d3fbcf6a)
0:30:57.046465	LOG	Server <---------- DUT
0:30:57.047464	LOG	Repeated frame. It does not count
0:31:03.468819	LOG	PUSH_ACK: 02 0527 01
0:31:03.470817	LOG	PUSH_DATA: Protocol version = 02, Token = 0527, Identifier = 00, JSON = {'rxpk': [{'tmst': 1178167423, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAygIBVL1LXnuE'}]}
0:31:03.471816	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ca, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4b5e7b84)
0:31:03.473816	LOG	Server <---------- DUT
0:31:03.474815	LOG	Count = 6
0:31:03.536779	LOG	PULL_DATA: 02 69dd 02 aa555a0000240409
0:31:03.538780	LOG	PULL_ACK: 02 69dd 04
0:31:07.018803	LOG	PUSH_ACK: 02 0528 01
0:31:07.021801	LOG	PUSH_DATA: Protocol version = 02, Token = 0528, Identifier = 00, JSON = {'rxpk': [{'tmst': 1181709631, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAygIBVL1LXnuE'}]}
0:31:07.023800	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ca, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4b5e7b84)
0:31:07.025798	LOG	Server <---------- DUT

0:31:07.026798	LOG	Repeated frame. It does not count
0:31:13.498123	LOG	PUSH_ACK: 02 0529 01
0:31:13.500123	LOG	PUSH_DATA: Protocol version = 02, Token = 0529, Identifier = 00, JSON = {'rxpk': [{'tmst': 1188172679, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAywIBSIAyeYjW'}]}
0:31:13.501122	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02cb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 327988d6)
0:31:13.502121	LOG	Server <---------- DUT
0:31:13.504120	LOG	Count = 7
0:31:13.617056	LOG	PULL_DATA: 02 2fd1 02 aa555a0000240409
0:31:13.619055	LOG	PULL_ACK: 02 2fd1 04
0:31:17.048304	LOG	PUSH_ACK: 02 052a 01
0:31:17.051304	LOG	PUSH_DATA: Protocol version = 02, Token = 052a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1191714919, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAywIBSIAyeYjW'}]}
0:31:17.053301	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02cb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 327988d6)
0:31:17.055302	LOG	Server <---------- DUT
0:31:17.057300	LOG	Repeated frame. It does not count
0:31:23.475673	LOG	PUSH_ACK: 02 052b 01
0:31:23.478671	LOG	PUSH_DATA: Protocol version = 02, Token = 052b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1198177903, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAzAIBv8mLVe3c'}]}
0:31:23.480670	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02cc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8b55eddc)
0:31:23.482669	LOG	Server <---------- DUT
0:31:23.483668	LOG	Count = 8
0:31:23.696548	LOG	PULL_DATA: 02 0857 02 aa555a0000240409
0:31:23.698547	LOG	PULL_ACK: 02 0857 04
0:31:27.041765	LOG	PUSH_ACK: 02 052d 01
0:31:27.043763	LOG	PUSH_DATA: Protocol version = 02, Token = 052d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1201720135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAzAIBv8mLVe3c'}]}
0:31:27.045763	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02cc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 8b55eddc)
0:31:27.047759	LOG	Server <---------- DUT
0:31:27.049762	LOG	Repeated frame. It does not count
0:31:33.520087	LOG	PUSH_ACK: 02 052e 01
0:31:33.523084	LOG	PUSH_DATA: Protocol version = 02, Token = 052e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1208183167, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAzQIBq2pcq0N0'}]}
0:31:33.525082	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02cd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5cab4374)
0:31:33.526083	LOG	Server <---------- DUT
0:31:33.528080	LOG	Count = 9
0:31:33.776821	LOG	PULL_DATA: 02 5497 02 aa555a0000240409
0:31:33.778821	LOG	PULL_ACK: 02 5497 04
0:31:37.021010	LOG	PUSH_ACK: 02 0530 01
0:31:37.024009	LOG	PUSH_DATA: Protocol version = 02, Token = 0530, Identifier = 00, JSON = {'rxpk': [{'tmst': 1211725407, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAzQIBq2pcq0N0'}]}
0:31:37.026009	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02cd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5cab4374)
0:31:37.027008	LOG	Server <---------- DUT
0:31:37.029007	LOG	Repeated frame. It does not count
0:31:43.499352	LOG	PUSH_ACK: 02 0531 01
0:31:43.501351	LOG	PUSH_DATA: Protocol version = 02, Token = 0531, Identifier = 00, JSON = {'rxpk': [{'tmst': 1218188415, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAzgIBoOImuTdE'}]}
0:31:43.503350	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ce, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 26b93744)
0:31:43.504349	LOG	Server <---------- DUT
0:31:43.506348	LOG	Count = 10
0:31:43.857149	LOG	PULL_DATA: 02 7539 02 aa555a0000240409
0:31:43.860147	LOG	PULL_ACK: 02 7539 04
0:31:47.049368	LOG	PUSH_ACK: 02 0532 01
0:31:47.051368	LOG	PUSH_DATA: Protocol version = 02, Token = 0532, Identifier = 00, JSON = {'rxpk': [{'tmst': 1221730647, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDAzgIBoOImuTdE'}]}
0:31:47.052366	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ce, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 26b93744)
0:31:47.053366	LOG	Server <---------- DUT
0:31:47.055365	LOG	Repeated frame. It does not count
0:31:53.526690	LOG	PUSH_ACK: 02 0533 01
0:31:53.530690	LOG	PUSH_DATA: Protocol version = 02, Token = 0533, Identifier = 00, JSON = {'rxpk': [{'tmst': 1228193655, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAzwIBNyFoWejO'}]}
0:31:53.531688	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02cf, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6859e8ce)
0:31:53.532689	LOG	Server <---------- DUT
0:31:53.534687	LOG	Count = 11
0:31:53.936801	LOG	PULL_DATA: 02 d1ae 02 aa555a0000240409
0:31:53.938801	LOG	PULL_ACK: 02 d1ae 04
0:31:57.041038	LOG	PUSH_ACK: 02 0535 01
0:31:57.043038	LOG	PUSH_DATA: Protocol version = 02, Token = 0535, Identifier = 00, JSON = {'rxpk': [{'tmst': 1231735871, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDAzwIBNyFoWejO'}]}
0:31:57.045037	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02cf, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6859e8ce)
0:31:57.046038	LOG	Server <---------- DUT
0:31:57.048035	LOG	Repeated frame. It does not count
0:32:03.518469	LOG	PUSH_ACK: 02 0536 01
0:32:03.520469	LOG	PUSH_DATA: Protocol version = 02, Token = 0536, Identifier = 00, JSON = {'rxpk': [{'tmst': 1238198903, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA0AIB+9YzwFG1'}]}
0:32:03.522467	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 33c051b5)
0:32:03.523467	LOG	Server <---------- DUT
0:32:03.524468	LOG	Count = 12
0:32:04.016277	LOG	PULL_DATA: 02 059b 02 aa555a0000240409

0:32:04.018275	LOG	PULL_ACK: 02 059b 04
0:32:07.069543	LOG	PUSH_ACK: 02 0537 01
0:32:07.071542	LOG	PUSH_DATA: Protocol version = 02, Token = 0537, Identifier = 00, JSON = {'rxpk': [{'tmst': 1241741135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA0AIB+9YzwFG1'}]}
0:32:07.073541	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 33c051b5)
0:32:07.075539	LOG	Server <---------- DUT
0:32:07.076540	LOG	Repeated frame. It does not count
0:32:13.496351	LOG	PUSH_ACK: 02 0538 01
0:32:13.498350	LOG	PUSH_DATA: Protocol version = 02, Token = 0538, Identifier = 00, JSON = {'rxpk': [{'tmst': 1248204143, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA0QIBS3IqLFWu'}]}
0:32:13.499350	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2a2c55ae)
0:32:13.500351	LOG	Server <---------- DUT
0:32:13.502348	LOG	Count = 13
0:32:14.097010	LOG	PULL_DATA: 02 4361 02 aa555a0000240409
0:32:14.098010	LOG	PULL_ACK: 02 4361 04
0:32:17.046336	LOG	PUSH_ACK: 02 0539 01
0:32:17.049334	LOG	PUSH_DATA: Protocol version = 02, Token = 0539, Identifier = 00, JSON = {'rxpk': [{'tmst': 1251746383, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA0QIBS3IqLFWu'}]}
0:32:17.050333	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2a2c55ae)
0:32:17.052332	LOG	Server <---------- DUT
0:32:17.054331	LOG	Repeated frame. It does not count
0:32:23.524657	LOG	PUSH_ACK: 02 053a 01
0:32:23.527656	LOG	PUSH_DATA: Protocol version = 02, Token = 053a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1258209399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA0gIBZZA8nGzr'}]}
0:32:23.529654	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3c9c6ceb)
0:32:23.530654	LOG	Server <---------- DUT
0:32:23.532653	LOG	Count = 14
0:32:24.176287	LOG	PULL_DATA: 02 84bc 02 aa555a0000240409
0:32:24.178286	LOG	PULL_ACK: 02 84bc 04
0:32:27.040661	LOG	PUSH_ACK: 02 053c 01
0:32:27.042659	LOG	PUSH_DATA: Protocol version = 02, Token = 053c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1261751615, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA0gIBZZA8nGzr'}]}
0:32:27.043659	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3c9c6ceb)
0:32:27.044659	LOG	Server <---------- DUT
0:32:27.046658	LOG	Repeated frame. It does not count
0:32:33.517983	LOG	PUSH_ACK: 02 053d 01
0:32:33.519982	LOG	PUSH_DATA: Protocol version = 02, Token = 053d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1268214623, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA0wIBDURLAFtp'}]}

0:32:33.520981	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4b005b69)
0:32:33.521982	LOG	Server <---------- DUT
0:32:33.523980	LOG	Count = 15
0:32:34.256705	LOG	PULL_DATA: 02 c015 02 aa555a0000240409
0:32:34.258705	LOG	PULL_ACK: 02 c015 04
0:32:37.068109	LOG	PUSH_ACK: 02 053f 01
0:32:37.071108	LOG	PUSH_DATA: Protocol version = 02, Token = 053f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1271756847, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA0wIBDURLAFtp'}]}
0:32:37.073107	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4b005b69)
0:32:37.074106	LOG	Server <---------- DUT
0:32:37.076105	LOG	Repeated frame. It does not count
0:32:43.548432	LOG	PUSH_ACK: 02 0540 01
0:32:43.550428	LOG	PUSH_DATA: Protocol version = 02, Token = 0540, Identifier = 00, JSON = {'rxpk': [{'tmst': 1278219879, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA1AIBDdyFRD44'}]}
0:32:43.551430	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 85443e38)
0:32:43.553427	LOG	Server <---------- DUT
0:32:43.554426	LOG	Count = 16
0:32:44.336373	LOG	PULL_DATA: 02 4796 02 aa555a0000240409
0:32:44.338373	LOG	PULL_ACK: 02 4796 04
0:32:47.098806	LOG	PUSH_ACK: 02 0541 01
0:32:47.101804	LOG	PUSH_DATA: Protocol version = 02, Token = 0541, Identifier = 00, JSON = {'rxpk': [{'tmst': 1281762111, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA1AIBDdyFRD44'}]}
0:32:47.103803	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 85443e38)
0:32:47.104802	LOG	Server <---------- DUT
0:32:47.106801	LOG	Repeated frame. It does not count
0:32:53.526156	LOG	PUSH_ACK: 02 0542 01
0:32:53.528155	LOG	PUSH_DATA: Protocol version = 02, Token = 0542, Identifier = 00, JSON = {'rxpk': [{'tmst': 1288225135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA1QIBNKDny59C'}]}
0:32:53.530155	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e7cb9f42)
0:32:53.531153	LOG	Server <---------- DUT
0:32:53.532152	LOG	Count = 17
0:32:54.416650	LOG	PULL_DATA: 02 f39e 02 aa555a0000240409
0:32:54.421648	LOG	PULL_ACK: 02 f39e 04
0:32:57.092150	LOG	PUSH_ACK: 02 0544 01
0:32:57.094130	LOG	PUSH_DATA: Protocol version = 02, Token = 0544, Identifier = 00, JSON = {'rxpk': [{'tmst': 1291767359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA1QIBNKDny59C'}]}
0:32:57.096129	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e7cb9f42)
0:32:57.097128	LOG	Server <---------- DUT
0:32:57.098128	LOG	Repeated frame. It does not count
0:33:03.570496	LOG	PUSH_ACK: 02 0545 01

0:33:03.573494	LOG	PUSH_DATA: Protocol version = 02, Token = 0545, Identifier = 00, JSON = {'rxpk': [{'tmst': 1298230399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDA1gIBRrn0mmwC'}]}
0:33:03.575494	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f49a6c02)
0:33:03.577492	LOG	Server <---------- DUT
0:33:03.578492	LOG	Count = 18
0:33:04.495988	LOG	PULL_DATA: 02 4d0c 02 aa555a0000240409
0:33:04.497987	LOG	PULL_ACK: 02 4d0c 04
0:33:07.070100	LOG	PUSH_ACK: 02 0546 01
0:33:07.073099	LOG	PUSH_DATA: Protocol version = 02, Token = 0546, Identifier = 00, JSON = {'rxpk': [{'tmst': 1301772623, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA1gIBRrn0mmwC'}]}
0:33:07.075098	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f49a6c02)
0:33:07.076097	LOG	Server <---------- DUT
0:33:07.078096	LOG	Repeated frame. It does not count
0:33:13.548548	LOG	PUSH_ACK: 02 0547 01
0:33:13.550546	LOG	PUSH_DATA: Protocol version = 02, Token = 0547, Identifier = 00, JSON = {'rxpk': [{'tmst': 1308235655, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA1wIBAvxFi+Ol'}]}
0:33:13.552545	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 458be3a5)
0:33:13.553545	LOG	Server <---------- DUT
0:33:13.555544	LOG	Count = 19
0:33:14.575964	LOG	PULL_DATA: 02 7d65 02 aa555a0000240409
0:33:14.577963	LOG	PULL_ACK: 02 7d65 04
0:33:17.097532	LOG	PUSH_ACK: 02 0548 01
0:33:17.100531	LOG	PUSH_DATA: Protocol version = 02, Token = 0548, Identifier = 00, JSON = {'rxpk': [{'tmst': 1311777879, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA1wIBAvxFi+Ol'}]}
0:33:17.102530	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 458be3a5)
0:33:17.103529	LOG	Server <---------- DUT
0:33:17.105528	LOG	Repeated frame. It does not count
0:33:23.575854	LOG	PUSH_ACK: 02 0549 01
0:33:23.578852	LOG	PUSH_DATA: Protocol version = 02, Token = 0549, Identifier = 00, JSON = {'rxpk': [{'tmst': 1318240903, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA2AIBRzudZ7uu'}]}
0:33:23.579852	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9d67bbae)
0:33:23.581850	LOG	Server <---------- DUT
0:33:23.582850	LOG	Count = 20
0:33:24.656240	LOG	PULL_DATA: 02 99e6 02 aa555a0000240409
0:33:24.662237	LOG	PULL_ACK: 02 99e6 04
0:33:27.091858	LOG	PUSH_ACK: 02 054b 01
0:33:27.093856	LOG	PUSH_DATA: Protocol version = 02, Token = 054b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1321783095, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA2AIBRzudZ7uu'}]}

0:33:27.095855	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9d67bbae)
0:33:27.096855	LOG	Server <---------- DUT
0:33:27.097854	LOG	Repeated frame. It does not count
0:33:33.569304	LOG	PUSH_ACK: 02 054c 01
0:33:33.572303	LOG	PUSH_DATA: Protocol version = 02, Token = 054c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1328246143, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA2QIBDaUSXl0o'}]}
0:33:33.573303	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 125e5d28)
0:33:33.575318	LOG	Server <---------- DUT
0:33:33.577298	LOG	Count = 21
0:33:34.736405	LOG	PULL_DATA: 02 f302 02 aa555a0000240409
0:33:34.738404	LOG	PULL_ACK: 02 f302 04
0:33:37.120051	LOG	PUSH_ACK: 02 054d 01
0:33:37.122050	LOG	PUSH_DATA: Protocol version = 02, Token = 054d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1331788375, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA2QIBDaUSXl0o'}]}
0:33:37.124049	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02d9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 125e5d28)
0:33:37.126048	LOG	Server <---------- DUT
0:33:37.127048	LOG	Repeated frame. It does not count
0:33:43.546570	LOG	PUSH_ACK: 02 054e 01
0:33:43.548568	LOG	PUSH_DATA: Protocol version = 02, Token = 054e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1338251399, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICDA2gIBGyst1BKG'}]}
0:33:43.550565	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02da, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2dd41286)
0:33:43.552537	LOG	Server <---------- DUT
0:33:43.553536	LOG	Count = 22
0:33:44.815894	LOG	PULL_DATA: 02 c422 02 aa555a0000240409
0:33:44.817893	LOG	PULL_ACK: 02 c422 04
0:33:47.096599	LOG	PUSH_ACK: 02 054f 01
0:33:47.099597	LOG	PUSH_DATA: Protocol version = 02, Token = 054f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1341793639, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA2gIBGyst1BKG'}]}
0:33:47.101596	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02da, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2dd41286)
0:33:47.102596	LOG	Server <---------- DUT
0:33:47.103595	LOG	Repeated frame. It does not count
0:33:53.576251	LOG	PUSH_ACK: 02 0550 01
0:33:53.580248	LOG	PUSH_DATA: Protocol version = 02, Token = 0550, Identifier = 00, JSON = {'rxpk': [{'tmst': 1348256647, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA2wIB1oDr2cAK'}]}
0:33:53.582245	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02db, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ebd9c00a)
0:33:53.584244	LOG	Server <---------- DUT
0:33:53.585244	LOG	Count = 23
0:33:54.896722	LOG	PULL_DATA: 02 d3cc 02 aa555a0000240409
0:33:54.900719	LOG	PULL_ACK: 02 d3cc 04
0:33:57.092444	LOG	PUSH_ACK: 02 0552 01

0:33:57.094444	LOG	PUSH_DATA: Protocol version = 02, Token = 0552, Identifier = 00, JSON = {'rxpk': [{'tmst': 1351798863, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA2wIB1oDr2cAK'}]}
0:33:57.095442	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02db, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ebd9c00a)
0:33:57.096442	LOG	Server <---------- DUT
0:33:57.098441	LOG	Repeated frame. It does not count
0:34:03.570255	LOG	PUSH_ACK: 02 0553 01
0:34:03.572254	LOG	PUSH_DATA: Protocol version = 02, Token = 0553, Identifier = 00, JSON = {'rxpk': [{'tmst': 1358261895, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 6.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDA3AIBdgsMmDk5'}]}
0:34:03.574252	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02dc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0c983939)
0:34:03.576251	LOG	Server <---------- DUT
0:34:03.577251	LOG	Count = 24
0:34:04.976570	LOG	PULL_DATA: 02 7a28 02 aa555a0000240409
0:34:04.978568	LOG	PULL_ACK: 02 7a28 04
0:34:07.120394	LOG	PUSH_ACK: 02 0554 01
0:34:07.122393	LOG	PUSH_DATA: Protocol version = 02, Token = 0554, Identifier = 00, JSON = {'rxpk': [{'tmst': 1361804119, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDA3AIBdgsMmDk5'}]}
0:34:07.124392	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02dc, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0c983939)
0:34:07.125391	LOG	Server <---------- DUT
0:34:07.127390	LOG	Repeated frame. It does not count
0:34:13.598720	LOG	PUSH_ACK: 02 0555 01
0:34:13.603714	LOG	PUSH_DATA: Protocol version = 02, Token = 0555, Identifier = 00, JSON = {'rxpk': [{'tmst': 1368267135, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA3QIBPs8uIiSQ'}]}
0:34:13.605714	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02dd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2e222490)
0:34:13.606716	LOG	Server <---------- DUT
0:34:13.608711	LOG	Count = 25
0:34:15.056063	LOG	PULL_DATA: 02 63ef 02 aa555a0000240409
0:34:15.058061	LOG	PULL_ACK: 02 63ef 04
0:34:17.099903	LOG	PUSH_ACK: 02 0556 01
0:34:17.101901	LOG	PUSH_DATA: Protocol version = 02, Token = 0556, Identifier = 00, JSON = {'rxpk': [{'tmst': 1371809375, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA3QIBPs8uIiSQ'}]}
0:34:17.103900	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02dd, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2e222490)
0:34:17.105899	LOG	Server <---------- DUT
0:34:17.106898	LOG	Repeated frame. It does not count
0:34:23.578225	LOG	PUSH_ACK: 02 0557 01
0:34:23.580223	LOG	PUSH_DATA: Protocol version = 02, Token = 0557, Identifier = 00, JSON = {'rxpk': [{'tmst': 1378272367, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDA3gIBsWu8Zd06'}]}
0:34:23.581222	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02de, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bc65dd3a)
0:34:23.582221	LOG	Server <---------- DUT

0:34:23.584221	LOG	Count = 26
0:34:25.166322	LOG	PULL_DATA: 02 6134 02 aa555a0000240409
0:34:25.170320	LOG	PULL_ACK: 02 6134 04
0:34:27.144199	LOG	PUSH_ACK: 02 0559 01
0:34:27.146198	LOG	PUSH_DATA: Protocol version = 02, Token = 0559, Identifier = 00, JSON = {'rxpk': [{'tmst': 1381814591, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA3gIBsWu8Zd06'}]}
0:34:27.147197	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02de, FOpts:), FPort: 01, FRMPayload: 004e, MIC: bc65dd3a)
0:34:27.149198	LOG	Server <---------- DUT
0:34:27.150195	LOG	Repeated frame. It does not count
0:34:33.572551	LOG	PUSH_ACK: 02 055b 01
0:34:33.577548	LOG	PUSH_DATA: Protocol version = 02, Token = 055b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1388277607, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA3wIB57+JfhEK'}]}
0:34:33.581546	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02df, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 897e110a)
0:34:33.585543	LOG	Server <---------- DUT
0:34:33.588542	LOG	Count = 27
0:34:35.256593	LOG	PULL_DATA: 02 9d66 02 aa555a0000240409
0:34:35.258591	LOG	PULL_ACK: 02 9d66 04
0:34:37.124532	LOG	PUSH_ACK: 02 055c 01
0:34:37.127530	LOG	PUSH_DATA: Protocol version = 02, Token = 055c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1391819847, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA3wIB57+JfhEK'}]}
0:34:37.128530	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02df, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 897e110a)
0:34:37.130529	LOG	Server <---------- DUT
0:34:37.132528	LOG	Repeated frame. It does not count
0:34:43.604991	LOG	PUSH_ACK: 02 055d 01
0:34:43.605991	LOG	PUSH_DATA: Protocol version = 02, Token = 055d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1398282855, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDA4AIBsmLDgity'}]}
0:34:43.607990	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c3822b72)
0:34:43.608989	LOG	Server <---------- DUT
0:34:43.609988	LOG	Count = 28
0:34:45.336008	LOG	PULL_DATA: 02 cfe0 02 aa555a0000240409
0:34:45.337007	LOG	PULL_ACK: 02 cfe0 04
0:34:47.156047	LOG	PUSH_ACK: 02 055e 01
0:34:47.158046	LOG	PUSH_DATA: Protocol version = 02, Token = 055e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1401825103, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDA4AIBsmLDgity'}]}
0:34:47.160045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: c3822b72)
0:34:47.162044	LOG	Server <---------- DUT
0:34:47.163043	LOG	Repeated frame. It does not count
0:34:53.585209	LOG	PUSH_ACK: 02 055f 01
0:34:53.588208	LOG	PUSH_DATA: Protocol version = 02, Token = 055f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1408288103, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA4QIBVglN8z49'}]}
0:34:53.589206	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4df33e3d)
0:34:53.590206	LOG	Server <---------- DUT
0:34:53.592204	LOG	Count = 29
0:34:55.415321	LOG	PULL_DATA: 02 c753 02 aa555a0000240409
0:34:55.420318	LOG	PULL_ACK: 02 c753 04
0:34:57.152354	LOG	PUSH_ACK: 02 0561 01
0:34:57.154334	LOG	PUSH_DATA: Protocol version = 02, Token = 0561, Identifier = 00, JSON = {'rxpk': [{'tmst': 1411830335, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA4QIBVglN8z49'}]}
0:34:57.156333	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 4df33e3d)
0:34:57.157332	LOG	Server <---------- DUT
0:34:57.159331	LOG	Repeated frame. It does not count
0:35:03.631655	LOG	PUSH_ACK: 02 0562 01
0:35:03.633654	LOG	PUSH_DATA: Protocol version = 02, Token = 0562, Identifier = 00, JSON = {'rxpk': [{'tmst': 1418293359, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICDA4gIBAAAw5ZTU'}]}
0:35:03.635654	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 30e594d4)
0:35:03.636653	LOG	Server <---------- DUT
0:35:03.638651	LOG	Count = 30
0:35:05.495596	LOG	PULL_DATA: 02 9d87 02 aa555a0000240409
0:35:05.497596	LOG	PULL_ACK: 02 9d87 04
0:35:07.130668	LOG	PUSH_ACK: 02 0563 01
0:35:07.132667	LOG	PUSH_DATA: Protocol version = 02, Token = 0563, Identifier = 00, JSON = {'rxpk': [{'tmst': 1421835567, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDA4gIBAAAw5ZTU'}]}
0:35:07.134666	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 30e594d4)
0:35:07.136665	LOG	Server <---------- DUT
0:35:07.139664	LOG	Repeated frame. It does not count
0:35:13.608989	LOG	PUSH_ACK: 02 0564 01
0:35:13.610988	LOG	PUSH_DATA: Protocol version = 02, Token = 0564, Identifier = 00, JSON = {'rxpk': [{'tmst': 1428298615, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA4wIBn+yVTf+t'}]}
0:35:13.612986	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 954dffad)
0:35:13.613986	LOG	Server <---------- DUT
0:35:13.614987	LOG	Count = 31
0:35:15.575872	LOG	PULL_DATA: 02 68e4 02 aa555a0000240409
0:35:15.576873	LOG	PULL_ACK: 02 68e4 04
0:35:17.158973	LOG	PUSH_ACK: 02 0565 01
0:35:17.160972	LOG	PUSH_DATA: Protocol version = 02, Token = 0565, Identifier = 00, JSON = {'rxpk': [{'tmst': 1431840839, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA4wIBn+yVTf+t'}]}
0:35:17.162970	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 954dffad)
0:35:17.164969	LOG	Server <---------- DUT

0:35:17.165969	LOG	Repeated frame. It does not count
0:35:23.637294	LOG	PUSH_ACK: 02 0566 01
0:35:23.639293	LOG	PUSH_DATA: Protocol version = 02, Token = 0566, Identifier = 00, JSON = {'rxpk': [{'tmst': 1438303975, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDA5AIBPZ2Iak9d'}]}
0:35:23.641291	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e4, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 886a4f5d)
0:35:23.642292	LOG	Server <---------- DUT
0:35:23.644290	LOG	Count = 32
0:35:25.656147	LOG	PULL_DATA: 02 1d5b 02 aa555a0000240409
0:35:25.660145	LOG	PULL_ACK: 02 1d5b 04
0:35:28.643451	LOG	PUSH_ACK: 02 0568 01
0:35:28.645449	LOG	PUSH_DATA: Protocol version = 02, Token = 0568, Identifier = 00, JSON = {'rxpk': [{'tmst': 1443306503, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA5QIBXC3ZpoB5'}]}
0:35:28.647449	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: d9a68079)
0:35:28.649447	LOG	Server <---------- DUT
0:35:28.650447	LOG	Count = 33
0:35:28.652446	LOG	Checked last FCnt Up. Last retransmission received inside bounds
0:35:28.676432	LOG	Expected number of uplink messages have been received
0:35:28.682428	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:35:33.631217	LOG	PUSH_ACK: 02 0569 01
0:35:33.634216	LOG	PUSH_DATA: Protocol version = 02, Token = 0569, Identifier = 00, JSON = {'rxpk': [{'tmst': 1448309143, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA5gIB+/Orgnn0'}]}
0:35:33.635216	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e6, FOpts:), FPort: 01, FRMPayload: 004e, MIC: ab8279f4)
0:35:33.637214	LOG	Server <---------- DUT
0:35:33.641212	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:35:33.645210	LOG	ADRACKReq bit is activated
0:35:33.647209	LOG	ADRACKReq bit from DUT tested successfully
0:35:33.649208	LOG	Check previous uplink data rate process starts
0:35:33.653206	LOG	Uplink received with expected Data Rate
0:35:33.658203	LOG	Check number of uplinks repetitions process starts
0:35:35.735679	LOG	PULL_DATA: 02 826b 02 aa555a0000240409
0:35:35.737678	LOG	PULL_ACK: 02 826b 04
0:35:38.620040	LOG	PUSH_ACK: 02 056a 01
0:35:38.623011	LOG	PUSH_DATA: Protocol version = 02, Token = 056a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1453311759, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA5wIBG7YuoV+3'}]}
0:35:38.625038	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e7, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 2ea15fb7)
0:35:38.626036	LOG	Server <---------- DUT
0:35:38.630035	LOG	Expected repetitions of uplink message have been received
0:35:38.634034	LOG	Check number of uplinks repetitions process starts
0:35:43.609262	LOG	PUSH_ACK: 02 056b 01
0:35:43.611261	LOG	PUSH_DATA: Protocol version = 02, Token = 056b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1458314351, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA6AIBmO8zt7vG'}]}

0:35:43.612262	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e8, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 33b7bbc6)
0:35:43.613260	LOG	Server <---------- DUT
0:35:43.616258	LOG	Expected repetitions of uplink message have been received
0:35:43.619257	LOG	Receive frame on specific channels process starts
0:35:43.632249	LOG	Attempt 1/20
0:35:45.815009	LOG	PULL_DATA: 02 6700 02 aa555a0000240409
0:35:45.817008	LOG	PULL_ACK: 02 6700 04
0:35:48.649225	LOG	PUSH_ACK: 02 056c 01
0:35:48.651225	LOG	PUSH_DATA: Protocol version = 02, Token = 056c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1463316975, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDA6QIBm58d2KTC'}]}
0:35:48.653223	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02e9, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 1dd8a4c2)
0:35:48.655222	LOG	Server <---------- DUT
0:35:48.656221	LOG	Attempt 2/20
0:35:53.637394	LOG	PUSH_ACK: 02 056d 01
0:35:53.639393	LOG	PUSH_DATA: Protocol version = 02, Token = 056d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1468319599, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICDA6gIBFn9yyIzU'}]}
0:35:53.641392	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ea, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 72c88cd4)
0:35:53.642391	LOG	Server <---------- DUT
0:35:53.643389	LOG	Attempt 3/20
0:35:55.896148	LOG	PULL_DATA: 02 d001 02 aa555a0000240409
0:35:55.906141	LOG	PULL_ACK: 02 d001 04
0:35:58.643589	LOG	PUSH_ACK: 02 056f 01
0:35:58.644588	LOG	PUSH_DATA: Protocol version = 02, Token = 056f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1473322223, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICDA6wIB/A+fu+xQ'}]}
0:35:58.646585	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02eb, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 9fbbec50)
0:35:58.647585	LOG	Server <---------- DUT
0:35:58.648584	LOG	Attempt 4/20
0:36:03.633754	LOG	PUSH_ACK: 02 0570 01
0:36:03.635752	LOG	PUSH_DATA: Protocol version = 02, Token = 0570, Identifier = 00, JSON = {'rxpk': [{'tmst': 1478324839, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA7AIBqI2qr4aZ'}]}
0:36:03.637752	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ec, FOpts:), FPort: 01, FRMPayload: 004e, MIC: aaaf8699)
0:36:03.638750	LOG	Server <---------- DUT
0:36:03.639750	LOG	Attempt 5/20
0:36:05.985417	LOG	PULL_DATA: 02 e6c4 02 aa555a0000240409
0:36:05.987417	LOG	PULL_ACK: 02 e6c4 04
0:36:08.623919	LOG	PUSH_ACK: 02 0571 01
0:36:08.625918	LOG	PUSH_DATA: Protocol version = 02, Token = 0571, Identifier = 00, JSON = {'rxpk': [{'tmst': 1483327471, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA7QIBRZr4ORG8'}]}
0:36:08.626918	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ed, FOpts:), FPort: 01, FRMPayload: 004e, MIC: f83911bc)
0:36:08.627918	LOG	Server <---------- DUT

0:36:08.629917	LOG	Attempt 6/20
0:36:13.665408	LOG	PUSH_ACK: 02 0572 01
0:36:13.667392	LOG	PUSH_DATA: Protocol version = 02, Token = 0572, Identifier = 00, JSON = {'rxpk': [{'tmst': 1488330103, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDA7gIB7j2nOWeD'}]}
0:36:13.669391	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ee, FOpts:), FPort: 01, FRMPayload: 004e, MIC: a7396783)
0:36:13.670390	LOG	Server <---------- DUT
0:36:13.672388	LOG	Attempt 7/20
0:36:16.095012	LOG	PULL_DATA: 02 03aa 02 aa555a0000240409
0:36:16.097010	LOG	PULL_ACK: 02 03aa 04
0:36:18.657557	LOG	PUSH_ACK: 02 0574 01
0:36:18.660556	LOG	PUSH_DATA: Protocol version = 02, Token = 0574, Identifier = 00, JSON = {'rxpk': [{'tmst': 1493332735, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA7wIB58WWohdG'}]}
0:36:18.662553	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02ef, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 96a21746)
0:36:18.663552	LOG	Server <---------- DUT
0:36:18.665551	LOG	Attempt 8/20
0:36:23.648450	LOG	PUSH_ACK: 02 0575 01
0:36:23.651448	LOG	PUSH_DATA: Protocol version = 02, Token = 0575, Identifier = 00, JSON = {'rxpk': [{'tmst': 1498335343, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICDA8AIBaoo7Ut2J'}]}
0:36:23.653447	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02f0, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 3b52dd89)
0:36:23.655446	LOG	Server <---------- DUT
0:36:23.656446	LOG	Attempt 9/20
0:36:26.175537	LOG	PULL_DATA: 02 e6d7 02 aa555a0000240409
0:36:26.179553	LOG	PULL_ACK: 02 e6d7 04
0:36:28.657168	LOG	PUSH_ACK: 02 0578 01
0:36:28.661165	LOG	PUSH_DATA: Protocol version = 02, Token = 0578, Identifier = 00, JSON = {'rxpk': [{'tmst': 1503337967, 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA8QIByclu6jU4'}]}
0:36:28.663167	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02f1, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 6eea3538)
0:36:28.664192	LOG	Server <---------- DUT
0:36:28.666168	LOG	Attempt 10/20
0:36:33.650332	LOG	PUSH_ACK: 02 0579 01
0:36:33.652331	LOG	PUSH_DATA: Protocol version = 02, Token = 0579, Identifier = 00, JSON = {'rxpk': [{'tmst': 1508340591, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICDA8gIBNxFnASrL'}]}
0:36:33.653329	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02f2, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 67012acb)
0:36:33.654330	LOG	Server <---------- DUT
0:36:33.660325	LOG	Receive frame on specific channels process tested successfully
0:36:33.663323	LOG	Send LinkADRReq process starts
0:36:36.256068	LOG	PULL_DATA: 02 7660 02 aa555a0000240409
0:36:36.260070	LOG	PULL_ACK: 02 7660 04
0:36:38.639713	LOG	PUSH_ACK: 02 057a 01
0:36:38.642712	LOG	PUSH_DATA: Protocol version = 02, Token = 057a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1513343207, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICDA8wIB2k3lP5om'}]}
0:36:38.643712	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 02f3, FOpts:), FPort: 01, FRMPayload: 004e, MIC: e53f9a26)
0:36:38.644710	LOG	Server <---------- DUT
0:36:38.646708	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0188, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 64b3d349)
0:36:38.649708	LOG	PULL_RESP: Protocol version = 02, Token = 7949, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1515343207, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAiAEA3of8dSFks9NJ'}}
0:36:38.651706	LOG	Server ----------> DUT
0:36:38.656703	LOG	TX_ACK: 02 7949 05 aa555a0000240409
0:36:42.545750	LOG	PUSH_ACK: 02 057b 01
0:36:42.548752	LOG	PUSH_DATA: Protocol version = 02, Token = 057b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1517242329, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC9AIDBwGsb+33kB8='}]}
0:36:42.549747	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 02f4, FOpts: 0307), FPort: 01, FRMPayload: 004e, MIC: edf7901f)
0:36:42.551748	LOG	Server <---------- DUT
0:36:42.552775	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:36:42.554746	LOG	Command Answer: 0307
0:36:42.565739	LOG	MAC command communication completed
0:36:42.572733	LOG	Check previous uplink data rate process starts
0:36:42.576732	LOG	Uplink received with expected Data Rate
0:36:42.579731	LOG	ADRACKReq bit is disabled
0:36:42.581729	LOG	ADRACKReq bit from DUT tested successfully
0:36:42.584726	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:36:46.425226	LOG	PULL_DATA: 02 ffd9 02 aa555a0000240409
0:36:46.427229	LOG	PULL_ACK: 02 ffd9 04
0:36:47.537563	LOG	PUSH_ACK: 02 057c 01
0:36:47.539562	LOG	PUSH_DATA: Protocol version = 02, Token = 057c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1522239817, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA9QIBKJ1dzlLw'}]}
0:36:47.541561	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 02f5, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 5dce52f0)
0:36:47.542560	LOG	Server <---------- DUT
0:36:47.544559	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0189, FOpts:), FPort: e0, FRMPayload: 0501), MIC: be8083e3)
0:36:47.546560	LOG	Frame command sent to the DUT
0:36:47.547560	LOG	PULL_RESP: Protocol version = 02, Token = 026f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1524239817, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAiQHgGIy+gIPj'}}
0:36:47.548559	LOG	Server ----------> DUT
0:36:47.552555	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:36:47.556554	LOG	Send NewChannelReq process starts
0:36:52.511303	LOG	PUSH_ACK: 02 057d 01
0:36:52.513302	LOG	PUSH_DATA: Protocol version = 02, Token = 057d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1527242425, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA9gIBJSI1poem'}]}

0:36:52.515302	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 02f6, FOpts:), FPort: 01, FRMPayload: 004f, MIC: 35a687a6)
0:36:52.516300	LOG	Server <---------- DUT
0:36:52.518299	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 018a, FOpts:), FPort: 00, FRMPayload: 070300000050), MIC: 3a1e60cb)
0:36:52.520298	LOG	PULL_RESP: Protocol version = 02, Token = ac07, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1529242425, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAigEAkNjwYu4zOh5gyw=='}}
0:36:52.521297	LOG	Server ----------> DUT
0:36:52.525973	LOG	TX_ACK: 02 ac07 05 aa555a0000240409
0:36:56.514953	LOG	PULL_DATA: 02 4f60 02 aa555a0000240409
0:36:56.517934	LOG	PULL_ACK: 02 4f60 04
0:36:57.523363	LOG	PUSH_ACK: 02 057f 01
0:36:57.527359	LOG	PUSH_DATA: Protocol version = 02, Token = 057f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1532250180, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC9wIHAwG5uvD3ibY='}]}
0:36:57.531357	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 02f7, FOpts: 0703), FPort: 01, FRMPayload: 004f, MIC: f0f789b6)
0:36:57.535355	LOG	Server <---------- DUT
0:36:57.539353	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:36:57.542351	LOG	Command Answer: 0703
0:36:57.548348	LOG	MAC command communication completed
0:36:57.552345	LOG	End Test Step: Data Rate Decay for all devices
0:36:57.555344	LOG	Partial Verdict: PASS
0:36:57.560341	LOG	==========
0:36:57.568336	LOG	==========
0:36:57.571334	LOG	Start Test Step: Data Rate Decay for optional data rates
0:36:57.582329	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:37:06.595210	LOG	PULL_DATA: 02 0ded 02 aa555a0000240409
0:37:06.597209	LOG	PULL_ACK: 02 0ded 04
0:37:07.548670	LOG	PUSH_ACK: 02 0580 01
0:37:07.554670	LOG	PUSH_DATA: Protocol version = 02, Token = 0580, Identifier = 00, JSON = {'rxpk': [{'tmst': 1542250292, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA+AIBzhidqg0c'}]}
0:37:07.557665	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 02f8, FOpts:), FPort: 01, FRMPayload: 004f, MIC: 9daa0d1c)
0:37:07.561663	LOG	Server <---------- DUT
0:37:07.563662	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 018b, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 3141d0e7)
0:37:07.566659	LOG	Frame command sent to the DUT
0:37:07.567658	LOG	PULL_RESP: Protocol version = 02, Token = 0f46, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1544250292, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAiwHgOHMxQdDn'}}
0:37:07.569658	LOG	Server ----------> DUT
0:37:07.572655	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:37:07.578651	LOG	Send NewChannelReq process starts
0:37:12.520844	LOG	PUSH_ACK: 02 0581 01
0:37:12.522844	LOG	PUSH_DATA: Protocol version = 02, Token = 0581, Identifier = 00, JSON = {'rxpk': [{'tmst': 1547252877, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+QIBIWQisOEM'}]}

0:37:12.523844	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 02f9, FOpts:), FPort: 01, FRMPayload: 0050, MIC: 22b0e10c)
0:37:12.525842	LOG	Server <---------- DUT
0:37:12.527840	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 018c, FOpts:), FPort: 00, FRMPayload: 070328768466), MIC: bd4fc928)
0:37:12.529841	LOG	PULL_RESP: Protocol version = 02, Token = a0b7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1549252877, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAjAEAOnpyDt5yvU/JKA=='}}
0:37:12.531839	LOG	Server ----------> DUT
0:37:12.534836	LOG	TX_ACK: 02 a0b7 05 aa555a0000240409
0:37:16.734641	LOG	PULL_DATA: 02 c6dd 02 aa555a0000240409
0:37:16.737639	LOG	PULL_ACK: 02 c6dd 04
0:37:17.532187	LOG	PUSH_ACK: 02 0583 01
0:37:17.534186	LOG	PUSH_DATA: Protocol version = 02, Token = 0583, Identifier = 00, JSON = {'rxpk': [{'tmst': 1552260646, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC+gIHAwE2aiZpjQ4='}]}
0:37:17.536187	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 02fa, FOpts: 0703), FPort: 01, FRMPayload: 0050, MIC: 26698d0e)
0:37:17.537185	LOG	Server <---------- DUT
0:37:17.538186	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:37:17.539185	LOG	Command Answer: 0703
0:37:17.545180	LOG	MAC command communication completed
0:37:17.549197	LOG	Send NewChannelReq process starts
0:37:22.521435	LOG	PUSH_ACK: 02 0584 01
0:37:22.523433	LOG	PUSH_DATA: Protocol version = 02, Token = 0584, Identifier = 00, JSON = {'rxpk': [{'tmst': 1557258150, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA+wIBJ6Ha+rhH'}]}
0:37:22.524432	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 02fb, FOpts:), FPort: 01, FRMPayload: 0050, MIC: dafab847)
0:37:22.525432	LOG	Server <---------- DUT
0:37:22.527431	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 018d, FOpts:), FPort: 00, FRMPayload: 070428768477), MIC: ffd956e7)
0:37:22.530429	LOG	PULL_RESP: Protocol version = 02, Token = b866, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1559258150, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAjQEALJxnjxYl/9lW5w=='}}
0:37:22.532428	LOG	Server ----------> DUT
0:37:22.535426	LOG	TX_ACK: 02 b866 05 aa555a0000240409
0:37:26.944921	LOG	PULL_DATA: 02 cd8d 02 aa555a0000240409
0:37:26.947920	LOG	PULL_ACK: 02 cd8d 04
0:37:27.550197	LOG	PUSH_ACK: 02 0586 01
0:37:27.551196	LOG	PUSH_DATA: Protocol version = 02, Token = 0586, Identifier = 00, JSON = {'rxpk': [{'tmst': 1562265919, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC/AIHAwGBkOaNKrQ='}]}
0:37:27.553196	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 02fc, FOpts: 0703), FPort: 01, FRMPayload: 0050, MIC: e68d2ab4)
0:37:27.554196	LOG	Server <---------- DUT
0:37:27.555196	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:37:27.557193	LOG	Command Answer: 0703
0:37:27.563189	LOG	MAC command communication completed

0:37:27.573183	LOG	Send LinkADRReq process starts
0:37:32.536723	LOG	PUSH_ACK: 02 0587 01
0:37:32.538720	LOG	PUSH_DATA: Protocol version = 02, Token = 0587, Identifier = 00, JSON = {'rxpk': [{'tmst': 1567263399, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA/QIBrE/Dqdos'}]}
0:37:32.540719	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 02fd, FOpts:), FPort: 01, FRMPayload: 0050, MIC: c3a9da2c)
0:37:32.541718	LOG	Server <---------- DUT
0:37:32.543717	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 018e, FOpts:), FPort: 00, FRMPayload: 0371180001), MIC: 6708b905)
0:37:32.546715	LOG	PULL_RESP: Protocol version = 02, Token = 2ab6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1569263399, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAjgEAs3F+taFnCLkF'}}
0:37:32.547714	LOG	Server ----------> DUT
0:37:32.551712	LOG	TX_ACK: 02 2ab6 05 aa555a0000240409
0:37:36.954539	LOG	PULL_DATA: 02 306a 02 aa555a0000240409
0:37:36.956537	LOG	PULL_ACK: 02 306a 04
0:37:37.492234	LOG	PUSH_ACK: 02 0589 01
0:37:37.498231	LOG	PUSH_DATA: Protocol version = 02, Token = 0589, Identifier = 00, JSON = {'rxpk': [{'tmst': 1572223745, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 17, 'data': 'QCAgICCC/gIDBwFG7mee3ww='}]}
0:37:37.501227	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 02fe, FOpts: 0307), FPort: 01, FRMPayload: 0050, MIC: 679edf0c)
0:37:37.503227	LOG	Server <---------- DUT
0:37:37.504225	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:37:37.505225	LOG	Command Answer: 0307
0:37:37.513194	LOG	MAC command communication completed
0:37:37.516191	LOG	Check previous uplink data rate process starts
0:37:37.521217	LOG	Uplink received with expected Data Rate
0:37:37.525216	LOG	Sending an EchoPayloadReq CP command to restart the ADRACKCnt in DUT
0:37:37.529213	LOG	Send Test Command EchoPayloadReq process starts
0:37:42.533803	LOG	PUSH_ACK: 02 058a 01
0:37:42.536803	LOG	PUSH_DATA: Protocol version = 02, Token = 058a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1577226017, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCA/wIBYXTrTflK'}]}
0:37:42.537803	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 02ff, FOpts:), FPort: 01, FRMPayload: 0050, MIC: eb4df94a)
0:37:42.538802	LOG	Server <---------- DUT
0:37:42.540800	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 018f, FOpts:), FPort: e0, FRMPayload: 080a0b0c), MIC: 2ad65578)
0:37:42.542800	LOG	Frame command sent to the DUT
0:37:42.544797	LOG	PULL_RESP: Protocol version = 02, Token = b579, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1579226017, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAAjwHg/N+rACrWVXg='}}
0:37:42.546796	LOG	Server ----------> DUT
0:37:42.549814	LOG	TX_ACK: 02 b579 05 aa555a0000240409
0:37:47.165173	LOG	PULL_DATA: 02 1599 02 aa555a0000240409
0:37:47.167172	LOG	PULL_ACK: 02 1599 04
0:37:47.495985	LOG	PUSH_ACK: 02 058b 01
0:37:47.497984	LOG	PUSH_DATA: Protocol version = 02, Token = 058b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1582232074, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 17, 'data': 'QCAgICCAAAPg6D7ysPd/cQM='}]}

0:37:47.498985	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0300, FOpts:), FPort: e0, FRMPayload: 080b0c0d, MIC: f77f7103)
0:37:47.500983	LOG	Server <---------- DUT
0:37:47.501982	LOG	Answer in payload: 0b0c0d
0:37:47.502981	LOG	Frame Command Payload in the Answer: 080b0c0d
0:37:47.506979	LOG	Checking if the payload of the EchoPayloadAns is correct
0:37:47.509978	LOG	Send Test Command EchoPayloadReq process completed
0:37:47.514975	LOG	Test adaptive data rate control in frame header process starts
0:37:52.536209	LOG	PUSH_ACK: 02 058c 01
0:37:52.538206	LOG	PUSH_DATA: Protocol version = 02, Token = 058c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1587231242, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAAQMB6lZqWUXH'}]}
0:37:52.541204	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0301, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 6a5945c7)
0:37:52.544203	LOG	Server <---------- DUT
0:37:52.549199	LOG	Count = 2
0:37:57.244531	LOG	PULL_DATA: 02 4e32 02 aa555a0000240409
0:37:57.248530	LOG	PULL_ACK: 02 4e32 04
0:37:57.533057	LOG	PUSH_ACK: 02 058e 01
0:37:57.537056	LOG	PUSH_DATA: Protocol version = 02, Token = 058e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1592233860, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAAgMBvaYOEgzE'}]}
0:37:57.540053	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0302, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 0e120cc4)
0:37:57.542071	LOG	Server <---------- DUT
0:37:57.546050	LOG	Count = 3
0:38:02.522378	LOG	PUSH_ACK: 02 058f 01
0:38:02.525376	LOG	PUSH_DATA: Protocol version = 02, Token = 058f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1597236479, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAAwMBUZbBo53V'}]}
0:38:02.526376	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0303, FOpts:), FPort: 01, FRMPayload: 0051, MIC: c1a39dd5)
0:38:02.527375	LOG	Server <---------- DUT
0:38:02.529374	LOG	Count = 4
0:38:07.324859	LOG	PULL_DATA: 02 f4d1 02 aa555a0000240409
0:38:07.326859	LOG	PULL_ACK: 02 f4d1 04
0:38:07.511754	LOG	PUSH_ACK: 02 0590 01
0:38:07.514753	LOG	PUSH_DATA: Protocol version = 02, Token = 0590, Identifier = 00, JSON = {'rxpk': [{'tmst': 1602239095, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCABAMB/rn/qbNZ'}]}
0:38:07.515757	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0304, FOpts:), FPort: 01, FRMPayload: 0051, MIC: ffa9b359)
0:38:07.516756	LOG	Server <---------- DUT
0:38:07.517754	LOG	Count = 5
0:38:12.550892	LOG	PUSH_ACK: 02 0591 01
0:38:12.552890	LOG	PUSH_DATA: Protocol version = 02, Token = 0591, Identifier = 00, JSON = {'rxpk': [{'tmst': 1607241699, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCABQMBIlUecVWk'}]}
0:38:12.554889	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0305, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 1e7155a4)
0:38:12.555888	LOG	Server <---------- DUT
0:38:12.556887	LOG	Count = 6
0:38:17.404243	LOG	PULL_DATA: 02 9d5c 02 aa555a0000240409
0:38:17.406241	LOG	PULL_ACK: 02 9d5c 04
0:38:17.538168	LOG	PUSH_ACK: 02 0592 01

0:38:17.540165	LOG	PUSH_DATA: Protocol version = 02, Token = 0592, Identifier = 00, JSON = {'rxpk': [{'tmst': 1612244326, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCABgMBoBJzj0hC'}]}
0:38:17.542165	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0306, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 738f4842)
0:38:17.543183	LOG	Server <---------- DUT
0:38:17.545163	LOG	Count = 7
0:38:22.527870	LOG	PUSH_ACK: 02 0594 01
0:38:22.530840	LOG	PUSH_DATA: Protocol version = 02, Token = 0594, Identifier = 00, JSON = {'rxpk': [{'tmst': 1617246954, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCABwMBPekkyIJA'}]}
0:38:22.531869	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0307, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 24c88240)
0:38:22.533867	LOG	Server <---------- DUT
0:38:22.534867	LOG	Count = 8
0:38:27.485115	LOG	PULL_DATA: 02 d16e 02 aa555a0000240409
0:38:27.489111	LOG	PULL_ACK: 02 d16e 04
0:38:27.533055	LOG	PUSH_ACK: 02 0596 01
0:38:27.535054	LOG	PUSH_DATA: Protocol version = 02, Token = 0596, Identifier = 00, JSON = {'rxpk': [{'tmst': 1622249563, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCACAMBlu7dLTFH'}]}
0:38:27.536053	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0308, FOpts:), FPort: 01, FRMPayload: 0051, MIC: dd2d3147)
0:38:27.538052	LOG	Server <---------- DUT
0:38:27.539051	LOG	Count = 9
0:38:32.522264	LOG	PUSH_ACK: 02 0597 01
0:38:32.524263	LOG	PUSH_DATA: Protocol version = 02, Token = 0597, Identifier = 00, JSON = {'rxpk': [{'tmst': 1627252173, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCACQMBZRXARXj6'}]}
0:38:32.526262	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0309, FOpts:), FPort: 01, FRMPayload: 0051, MIC: c04578fa)
0:38:32.527263	LOG	Server <---------- DUT
0:38:32.528262	LOG	Count = 10
0:38:37.564928	LOG	PUSH_ACK: 02 0598 01
0:38:37.569926	LOG	PUSH_DATA: Protocol version = 02, Token = 0598, Identifier = 00, JSON = {'rxpk': [{'tmst': 1632254788, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCACgMBUwejCykT'}]}
0:38:37.572924	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 030a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: a30b2913)
0:38:37.575923	LOG	Server <---------- DUT
0:38:37.579922	LOG	Count = 11
0:38:42.556802	LOG	PUSH_ACK: 02 0599 01
0:38:42.558801	LOG	PUSH_DATA: Protocol version = 02, Token = 0599, Identifier = 00, JSON = {'rxpk': [{'tmst': 1637257393, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCACwMBbcafLMcp'}]}
0:38:42.559799	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 030b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9f2cc729)
0:38:42.560817	LOG	Server <---------- DUT
0:38:42.562799	LOG	Count = 12
0:38:47.545967	LOG	PUSH_ACK: 02 059a 01
0:38:47.547966	LOG	PUSH_DATA: Protocol version = 02, Token = 059a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1642260016, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCADAMBlp+S0Kjs'}]}
0:38:47.549965	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 030c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 92d0a8ec)
0:38:47.550964	LOG	Server <---------- DUT

0:38:47.552963	LOG	Count = 13
0:38:47.644911	LOG	PULL_DATA: 02 3260 02 aa555a0000240409
0:38:47.646910	LOG	PULL_ACK: 02 3260 04
0:38:52.536134	LOG	PUSH_ACK: 02 059b 01
0:38:52.539133	LOG	PUSH_DATA: Protocol version = 02, Token = 059b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1647262629, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCADQMBCzPjE5da'}]}
0:38:52.540131	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 030d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e313975a)
0:38:52.541132	LOG	Server <---------- DUT
0:38:52.543131	LOG	Count = 14
0:38:57.544290	LOG	PUSH_ACK: 02 059d 01
0:38:57.549286	LOG	PUSH_DATA: Protocol version = 02, Token = 059d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1652265237, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCADgMB+H1ROzg3'}]}
0:38:57.550286	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 030e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 513b3837)
0:38:57.552286	LOG	Server <---------- DUT
0:38:57.553284	LOG	Count = 15
0:38:57.724465	LOG	PULL_DATA: 02 6218 02 aa555a0000240409
0:38:57.725484	LOG	PULL_ACK: 02 6218 04
0:39:02.537552	LOG	PUSH_ACK: 02 059e 01
0:39:02.539551	LOG	PUSH_DATA: Protocol version = 02, Token = 059e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1657267843, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCADwMBJqAZywPK'}]}
0:39:02.540552	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 030f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 19cb03ca)
0:39:02.541550	LOG	Server <---------- DUT
0:39:02.543549	LOG	Count = 16
0:39:07.577688	LOG	PUSH_ACK: 02 05a0 01
0:39:07.579687	LOG	PUSH_DATA: Protocol version = 02, Token = 05a0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1662270463, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAEAMBH4VyKskF'}]}
0:39:07.581686	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0310, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 722ac905)
0:39:07.582687	LOG	Server <---------- DUT
0:39:07.583686	LOG	Count = 17
0:39:07.804559	LOG	PULL_DATA: 02 37d8 02 aa555a0000240409
0:39:07.805559	LOG	PULL_ACK: 02 37d8 04
0:39:12.567856	LOG	PUSH_ACK: 02 05a1 01
0:39:12.568854	LOG	PUSH_DATA: Protocol version = 02, Token = 05a1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1667273089, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAEQMBfKE6KJZ3'}]}
0:39:12.570852	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0311, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 3a289677)
0:39:12.571852	LOG	Server <---------- DUT
0:39:12.573851	LOG	Count = 18
0:39:17.557109	LOG	PUSH_ACK: 02 05a2 01
0:39:17.559108	LOG	PUSH_DATA: Protocol version = 02, Token = 05a2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1672275713, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAEgMBc9XkuuUx'}]}
0:39:17.561108	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0312, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e4bae531)
0:39:17.563107	LOG	Server <---------- DUT
0:39:17.564106	LOG	Count = 19
0:39:17.884924	LOG	PULL_DATA: 02 7936 02 aa555a0000240409

0:39:17.887923	LOG	PULL_ACK: 02 7936 04
0:39:22.547311	LOG	PUSH_ACK: 02 05a3 01
0:39:22.549310	LOG	PUSH_DATA: Protocol version = 02, Token = 05a3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1677278339, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAEwMB50+OvttU'}]}
0:39:22.551309	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0313, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 8ebedb54)
0:39:22.552308	LOG	Server <---------- DUT
0:39:22.554308	LOG	Count = 20
0:39:27.552469	LOG	PUSH_ACK: 02 05a5 01
0:39:27.556467	LOG	PUSH_DATA: Protocol version = 02, Token = 05a5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1682280970, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAFAMBDoFZzkut'}]}
0:39:27.557466	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0314, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 59ce4bad)
0:39:27.558471	LOG	Server <---------- DUT
0:39:27.560465	LOG	Count = 21
0:39:27.964599	LOG	PULL_DATA: 02 b2c8 02 aa555a0000240409
0:39:27.965601	LOG	PULL_ACK: 02 b2c8 04
0:39:32.595899	LOG	PUSH_ACK: 02 05a6 01
0:39:32.596899	LOG	PUSH_DATA: Protocol version = 02, Token = 05a6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1687283587, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAFQMBh/FdwJiz'}]}
0:39:32.598896	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0315, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 5dc098b3)
0:39:32.599897	LOG	Server <---------- DUT
0:39:32.600896	LOG	Count = 22
0:39:37.585064	LOG	PUSH_ACK: 02 05a7 01
0:39:37.587063	LOG	PUSH_DATA: Protocol version = 02, Token = 05a7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1692286216, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAFgMBn0ydHtHE'}]}
0:39:37.589062	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0316, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9d1ed1c4)
0:39:37.590063	LOG	Server <---------- DUT
0:39:37.591062	LOG	Count = 23
0:39:38.043803	LOG	PULL_DATA: 02 96bf 02 aa555a0000240409
0:39:38.045802	LOG	PULL_ACK: 02 96bf 04
0:39:42.575230	LOG	PUSH_ACK: 02 05a8 01
0:39:42.577229	LOG	PUSH_DATA: Protocol version = 02, Token = 05a8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1697288833, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAFwMB9hejY4yW'}]}
0:39:42.578229	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0317, FOpts:), FPort: 01, FRMPayload: 0051, MIC: a3638c96)
0:39:42.579229	LOG	Server <---------- DUT
0:39:42.581227	LOG	Count = 24
0:39:47.566166	LOG	PUSH_ACK: 02 05a9 01
0:39:47.568165	LOG	PUSH_DATA: Protocol version = 02, Token = 05a9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1702291457, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAGAMBZSCdWMKo'}]}
0:39:47.570164	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0318, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9d58c2a8)
0:39:47.571164	LOG	Server <---------- DUT
0:39:47.573162	LOG	Count = 25
0:39:48.123850	LOG	PULL_DATA: 02 b55c 02 aa555a0000240409
0:39:48.125848	LOG	PULL_ACK: 02 b55c 04
0:39:52.556333	LOG	PUSH_ACK: 02 05aa 01

0:39:52.558332	LOG	PUSH_DATA: Protocol version = 02, Token = 05aa, Identifier = 00, JSON = {'rxpk': [{'tmst': 1707294082, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAGQMBJpJi4RRK'}]}
0:39:52.560334	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0319, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 62e1144a)
0:39:52.561330	LOG	Server <---------- DUT
0:39:52.562330	LOG	Count = 26
0:39:57.563602	LOG	PUSH_ACK: 02 05ad 01
0:39:57.565572	LOG	PUSH_DATA: Protocol version = 02, Token = 05ad, Identifier = 00, JSON = {'rxpk': [{'tmst': 1712296713, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAGgMBo2h1pw25'}]}
0:39:57.570596	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 031a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 75a70db9)
0:39:57.571598	LOG	Server <---------- DUT
0:39:57.573595	LOG	Count = 27
0:39:58.204236	LOG	PULL_DATA: 02 9c83 02 aa555a0000240409
0:39:58.206237	LOG	PULL_ACK: 02 9c83 04
0:40:02.605782	LOG	PUSH_ACK: 02 05ae 01
0:40:02.606782	LOG	PUSH_DATA: Protocol version = 02, Token = 05ae, Identifier = 00, JSON = {'rxpk': [{'tmst': 1717299339, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAGwMBA5j+20dX'}]}
0:40:02.608779	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 031b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: fedb4757)
0:40:02.609780	LOG	Server <---------- DUT
0:40:02.611779	LOG	Count = 28
0:40:07.595063	LOG	PUSH_ACK: 02 05af 01
0:40:07.597062	LOG	PUSH_DATA: Protocol version = 02, Token = 05af, Identifier = 00, JSON = {'rxpk': [{'tmst': 1722301966, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAHAMB4qqD1Rpz'}]}
0:40:07.599061	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 031c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 83d51a73)
0:40:07.600060	LOG	Server <---------- DUT
0:40:07.602059	LOG	Count = 29
0:40:08.283673	LOG	PULL_DATA: 02 eacd 02 aa555a0000240409
0:40:08.285671	LOG	PULL_ACK: 02 eacd 04
0:40:12.586659	LOG	PUSH_ACK: 02 05b0 01
0:40:12.588658	LOG	PUSH_DATA: Protocol version = 02, Token = 05b0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1727304583, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAHQMBI0zFuNkH'}]}
0:40:12.590657	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 031d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: c5b8d907)
0:40:12.591657	LOG	Server <---------- DUT
0:40:12.592657	LOG	Count = 30
0:40:17.576869	LOG	PUSH_ACK: 02 05b1 01
0:40:17.578868	LOG	PUSH_DATA: Protocol version = 02, Token = 05b1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1732307212, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAHgMBNfTqX8HF'}]}
0:40:17.580867	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 031e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: ea5fc1c5)
0:40:17.581867	LOG	Server <---------- DUT
0:40:17.582866	LOG	Count = 31
0:40:18.364422	LOG	PULL_DATA: 02 edff 02 aa555a0000240409
0:40:18.366421	LOG	PULL_ACK: 02 edff 04
0:40:22.619007	LOG	PUSH_ACK: 02 05b2 01

0:40:22.621006	LOG	PUSH_DATA: Protocol version = 02, Token = 05b2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1737309826, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAHwMBfyLLGduO'}]}
0:40:22.623003	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 031f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: cb19db8e)
0:40:22.627003	LOG	Server <---------- DUT
0:40:22.631015	LOG	Count = 32
0:40:27.573953	LOG	PUSH_ACK: 02 05b4 01
0:40:27.575952	LOG	PUSH_DATA: Protocol version = 02, Token = 05b4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1742312451, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAIAMB9HaBnIUG'}]}
0:40:27.577951	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0320, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 819c8506)
0:40:27.578950	LOG	Server <---------- DUT
0:40:27.579952	LOG	Count = 33
0:40:28.444459	LOG	PULL_DATA: 02 663c 02 aa555a0000240409
0:40:28.448457	LOG	PULL_ACK: 02 663c 04
0:40:32.616089	LOG	PUSH_ACK: 02 05b5 01
0:40:32.617089	LOG	PUSH_DATA: Protocol version = 02, Token = 05b5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1747315056, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAIQMBZB2iFOjs'}]}
0:40:32.619088	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0321, FOpts:), FPort: 01, FRMPayload: 0051, MIC: a214e8ec)
0:40:32.620089	LOG	Server <---------- DUT
0:40:32.621088	LOG	Count = 34
0:40:37.605594	LOG	PUSH_ACK: 02 05b6 01
0:40:37.607593	LOG	PUSH_DATA: Protocol version = 02, Token = 05b6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1752317670, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAIgMBeM3owXLW'}]}
0:40:37.609592	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0322, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e8c172d6)
0:40:37.610591	LOG	Server <---------- DUT
0:40:37.611591	LOG	Count = 35
0:40:38.524072	LOG	PULL_DATA: 02 315a 02 aa555a0000240409
0:40:38.526072	LOG	PULL_ACK: 02 315a 04
0:40:42.596761	LOG	PUSH_ACK: 02 05b7 01
0:40:42.598759	LOG	PUSH_DATA: Protocol version = 02, Token = 05b7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1757320297, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAIwMBN0wffXBI'}]}
0:40:42.600759	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0323, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 1f7d7048)
0:40:42.601758	LOG	Server <---------- DUT
0:40:42.603756	LOG	Count = 36
0:40:47.586082	LOG	PUSH_ACK: 02 05b8 01
0:40:47.588081	LOG	PUSH_DATA: Protocol version = 02, Token = 05b8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1762322916, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAJAMB9Yfnnbna'}]}
0:40:47.589083	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0324, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e79db9da)
0:40:47.591082	LOG	Server <---------- DUT
0:40:47.592079	LOG	Count = 37
0:40:48.604140	LOG	PULL_DATA: 02 0dcf 02 aa555a0000240409
0:40:48.606136	LOG	PULL_ACK: 02 0dcf 04
0:40:52.628854	LOG	PUSH_ACK: 02 05b9 01

0:40:52.633852	LOG	PUSH_DATA: Protocol version = 02, Token = 05b9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1767325532, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAJQMBJvTb9rrE'}]}
0:40:52.636848	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0325, FOpts:), FPort: 01, FRMPayload: 0051, MIC: dbf6bac4)
0:40:52.639847	LOG	Server <---------- DUT
0:40:52.642846	LOG	Count = 38
0:40:57.633236	LOG	PUSH_ACK: 02 05bb 01
0:40:57.638232	LOG	PUSH_DATA: Protocol version = 02, Token = 05bb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1772328149, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAJgMBGbNyeWfG'}]}
0:40:57.642233	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0326, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 727967c6)
0:40:57.646228	LOG	Server <---------- DUT
0:40:57.650228	LOG	Count = 39
0:40:58.684320	LOG	PULL_DATA: 02 b6de 02 aa555a0000240409
0:40:58.688319	LOG	PULL_ACK: 02 b6de 04
0:41:02.625119	LOG	PUSH_ACK: 02 05bc 01
0:41:02.626119	LOG	PUSH_DATA: Protocol version = 02, Token = 05bc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1777330772, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAJwMB9Ug8/W9E'}]}
0:41:02.628118	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0327, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 3cfd6f44)
0:41:02.629117	LOG	Server <---------- DUT
0:41:02.630117	LOG	Count = 40
0:41:07.615283	LOG	PUSH_ACK: 02 05bd 01
0:41:07.617282	LOG	PUSH_DATA: Protocol version = 02, Token = 05bd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1782333406, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAKAMBWfRhNH26'}]}
0:41:07.620281	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0328, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 61347dba)
0:41:07.621280	LOG	Server <---------- DUT
0:41:07.623279	LOG	Count = 41
0:41:08.763632	LOG	PULL_DATA: 02 3d13 02 aa555a0000240409
0:41:08.765630	LOG	PULL_ACK: 02 3d13 04
0:41:12.606449	LOG	PUSH_ACK: 02 05be 01
0:41:12.608447	LOG	PUSH_DATA: Protocol version = 02, Token = 05be, Identifier = 00, JSON = {'rxpk': [{'tmst': 1787336023, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAKQMBWasu7Srs'}]}
0:41:12.609446	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0329, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 2eed2aec)
0:41:12.611446	LOG	Server <---------- DUT
0:41:12.612446	LOG	Count = 42
0:41:17.648586	LOG	PUSH_ACK: 02 05bf 01
0:41:17.650583	LOG	PUSH_DATA: Protocol version = 02, Token = 05bf, Identifier = 00, JSON = {'rxpk': [{'tmst': 1792338658, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAKgMBXNuZ0JY6'}]}
0:41:17.651583	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 032a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 99d0963a)
0:41:17.653581	LOG	Server <---------- DUT
0:41:17.655580	LOG	Count = 43
0:41:18.843905	LOG	PULL_DATA: 02 956f 02 aa555a0000240409
0:41:18.844906	LOG	PULL_ACK: 02 956f 04
0:41:22.639749	LOG	PUSH_ACK: 02 05c1 01

0:41:22.641749	LOG	PUSH_DATA: Protocol version = 02, Token = 05c1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1797341282, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAKwMBlNFeH29Q'}]}
0:41:22.642747	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 032b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 5e1f6f50)
0:41:22.643749	LOG	Server <---------- DUT
0:41:22.645747	LOG	Count = 44
0:41:27.644908	LOG	PUSH_ACK: 02 05c3 01
0:41:27.645907	LOG	PUSH_DATA: Protocol version = 02, Token = 05c3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1802343908, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCALAMBnNmZMGDX'}]}
0:41:27.647905	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 032c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 993060d7)
0:41:27.648906	LOG	Server <---------- DUT
0:41:27.649905	LOG	Count = 45
0:41:28.923181	LOG	PULL_DATA: 02 74f7 02 aa555a0000240409
0:41:28.928177	LOG	PULL_ACK: 02 74f7 04
0:41:32.635072	LOG	PUSH_ACK: 02 05c4 01
0:41:32.637070	LOG	PUSH_DATA: Protocol version = 02, Token = 05c4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1807346522, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCALQMBklUjzsRL'}]}
0:41:32.639070	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 032d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 23cec44b)
0:41:32.640087	LOG	Server <---------- DUT
0:41:32.642068	LOG	Count = 46
0:41:37.625237	LOG	PUSH_ACK: 02 05c5 01
0:41:37.627237	LOG	PUSH_DATA: Protocol version = 02, Token = 05c5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1812349150, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCALgMBIn54uzyP'}]}
0:41:37.629235	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 032e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 78bb3c8f)
0:41:37.630234	LOG	Server <---------- DUT
0:41:37.632234	LOG	Count = 47
0:41:39.003454	LOG	PULL_DATA: 02 87ab 02 aa555a0000240409
0:41:39.005453	LOG	PULL_ACK: 02 87ab 04
0:41:42.615403	LOG	PUSH_ACK: 02 05c6 01
0:41:42.617402	LOG	PUSH_DATA: Protocol version = 02, Token = 05c6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1817351768, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCALwMBg65KLqR3'}]}
0:41:42.618401	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 032f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 4a2ea477)
0:41:42.620400	LOG	Server <---------- DUT
0:41:42.621401	LOG	Count = 48
0:41:47.656539	LOG	PUSH_ACK: 02 05c7 01
0:41:47.658540	LOG	PUSH_DATA: Protocol version = 02, Token = 05c7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1822354388, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAMAMBn0mgqNe3'}]}
0:41:47.659539	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0330, FOpts:), FPort: 01, FRMPayload: 0051, MIC: a0a8d7b7)
0:41:47.660539	LOG	Server <---------- DUT
0:41:47.662538	LOG	Count = 49
0:41:49.083444	LOG	PULL_DATA: 02 d000 02 aa555a0000240409
0:41:49.085443	LOG	PULL_ACK: 02 d000 04
0:41:52.646421	LOG	PUSH_ACK: 02 05c8 01

0:41:52.648420	LOG	PUSH_DATA: Protocol version = 02, Token = 05c8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1827357012, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAMQMBPq6XAOjZ'}]}
0:41:52.649419	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0331, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9700e8d9)
0:41:52.651418	LOG	Server <---------- DUT
0:41:52.653417	LOG	Count = 50
0:41:57.645586	LOG	PUSH_ACK: 02 05ca 01
0:41:57.647586	LOG	PUSH_DATA: Protocol version = 02, Token = 05ca, Identifier = 00, JSON = {'rxpk': [{'tmst': 1832359643, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAMgMBv47CqfuQ'}]}
0:41:57.649585	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0332, FOpts:), FPort: 01, FRMPayload: 0051, MIC: c2a9fb90)
0:41:57.650586	LOG	Server <---------- DUT
0:41:57.652584	LOG	Count = 51
0:41:59.163724	LOG	PULL_DATA: 02 e282 02 aa555a0000240409
0:41:59.168722	LOG	PULL_ACK: 02 e282 04
0:42:02.636752	LOG	PUSH_ACK: 02 05cb 01
0:42:02.638751	LOG	PUSH_DATA: Protocol version = 02, Token = 05cb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1837362260, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAMwMBXkGD1Q9/'}]}
0:42:02.640749	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0333, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 83d50f7f)
0:42:02.641749	LOG	Server <---------- DUT
0:42:02.643748	LOG	Count = 52
0:42:07.627917	LOG	PUSH_ACK: 02 05cc 01
0:42:07.629916	LOG	PUSH_DATA: Protocol version = 02, Token = 05cc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1842364869, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCANAMBQD+a4kal'}]}
0:42:07.631915	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0334, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9ae246a5)
0:42:07.632914	LOG	Server <---------- DUT
0:42:07.634913	LOG	Count = 53
0:42:09.243089	LOG	PULL_DATA: 02 c978 02 aa555a0000240409
0:42:09.246087	LOG	PULL_ACK: 02 c978 04
0:42:12.670177	LOG	PUSH_ACK: 02 05cd 01
0:42:12.672176	LOG	PUSH_DATA: Protocol version = 02, Token = 05cd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1847367507, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCANQMB/B7yC7DO'}]}
0:42:12.674175	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0335, FOpts:), FPort: 01, FRMPayload: 0051, MIC: f20bb0ce)
0:42:12.676174	LOG	Server <---------- DUT
0:42:12.677174	LOG	Count = 54
0:42:17.661473	LOG	PUSH_ACK: 02 05ce 01
0:42:17.662472	LOG	PUSH_DATA: Protocol version = 02, Token = 05ce, Identifier = 00, JSON = {'rxpk': [{'tmst': 1852370109, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCANgMBo6boNcdy'}]}
0:42:17.664471	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0336, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e835c772)
0:42:17.665470	LOG	Server <---------- DUT
0:42:17.667469	LOG	Count = 55
0:42:19.323528	LOG	PULL_DATA: 02 417e 02 aa555a0000240409
0:42:19.325528	LOG	PULL_ACK: 02 417e 04
0:42:22.650639	LOG	PUSH_ACK: 02 05cf 01

0:42:22.652637	LOG	PUSH_DATA: Protocol version = 02, Token = 05cf, Identifier = 00, JSON = {'rxpk': [{'tmst': 1857372717, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCANwMBuhaFadK9'}]}
0:42:22.653637	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0337, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 8569d2bd)
0:42:22.655636	LOG	Server <---------- DUT
0:42:22.657635	LOG	Count = 56
0:42:27.655246	LOG	PUSH_ACK: 02 05d1 01
0:42:27.657245	LOG	PUSH_DATA: Protocol version = 02, Token = 05d1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1862375337, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAOAMBRFq+4u4x'}]}
0:42:27.659244	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0338, FOpts:), FPort: 01, FRMPayload: 0051, MIC: bee2ee31)
0:42:27.661243	LOG	Server <---------- DUT
0:42:27.662242	LOG	Count = 57
0:42:29.413362	LOG	PULL_DATA: 02 d5de 02 aa555a0000240409
0:42:29.418356	LOG	PULL_ACK: 02 d5de 04
0:42:32.644538	LOG	PUSH_ACK: 02 05d2 01
0:42:32.646537	LOG	PUSH_DATA: Protocol version = 02, Token = 05d2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1867377953, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAOQMBjbUf0Och'}]}
0:42:32.648536	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0339, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 1fd0e721)
0:42:32.650535	LOG	Server <---------- DUT
0:42:32.651534	LOG	Count = 58
0:42:37.683676	LOG	PUSH_ACK: 02 05d3 01
0:42:37.685675	LOG	PUSH_DATA: Protocol version = 02, Token = 05d3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1872380571, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAOgMBr7yWJwMx'}]}
0:42:37.686674	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 033a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 96270331)
0:42:37.687674	LOG	Server <---------- DUT
0:42:37.688673	LOG	Count = 59
0:42:39.493214	LOG	PULL_DATA: 02 01bf 02 aa555a0000240409
0:42:39.495213	LOG	PULL_ACK: 02 01bf 04
0:42:42.672409	LOG	PUSH_ACK: 02 05d4 01
0:42:42.674407	LOG	PUSH_DATA: Protocol version = 02, Token = 05d4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1877383185, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAOwMB+g1wAHu1'}]}
0:42:42.675425	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 033b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 70007bb5)
0:42:42.677406	LOG	Server <---------- DUT
0:42:42.678425	LOG	Count = 60
0:42:47.659576	LOG	PUSH_ACK: 02 05d5 01
0:42:47.662575	LOG	PUSH_DATA: Protocol version = 02, Token = 05d5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1882385803, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAPAMBR4p532SF'}]}
0:42:47.664573	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 033c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 79df6485)
0:42:47.665572	LOG	Server <---------- DUT
0:42:47.667571	LOG	Count = 61
0:42:49.573489	LOG	PULL_DATA: 02 abef 02 aa555a0000240409
0:42:49.574488	LOG	PULL_ACK: 02 abef 04
0:42:52.648742	LOG	PUSH_ACK: 02 05d6 01

0:42:52.650741	LOG	PUSH_DATA: Protocol version = 02, Token = 05d6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1887388445, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAPQMBdTSqs7os'}]}
0:42:52.652740	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 033d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: aab3ba2c)
0:42:52.654739	LOG	Server <---------- DUT
0:42:52.656737	LOG	Count = 62
0:42:57.652901	LOG	PUSH_ACK: 02 05d8 01
0:42:57.655899	LOG	PUSH_DATA: Protocol version = 02, Token = 05d8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1892391078, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICCAPgMB1cjjRhp6'}]}
0:42:57.656899	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 033e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e3461a7a)
0:42:57.658905	LOG	Server <---------- DUT
0:42:57.659926	LOG	Count = 63
0:42:59.652783	LOG	PULL_DATA: 02 be11 02 aa555a0000240409
0:42:59.656762	LOG	PULL_ACK: 02 be11 04
0:43:02.693148	LOG	PUSH_ACK: 02 05d9 01
0:43:02.695149	LOG	PUSH_DATA: Protocol version = 02, Token = 05d9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1897393700, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAPwMBgaTr2W7r'}]}
0:43:02.696148	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 033f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: ebd96eeb)
0:43:02.697147	LOG	Server <---------- DUT
0:43:02.698146	LOG	Count = 64
0:43:02.712138	LOG	Expected number of uplink messages have been received
0:43:02.715137	LOG	Test adaptive data rate control in frame header process starts
0:43:07.680277	LOG	PUSH_ACK: 02 05da 01
0:43:07.683275	LOG	PUSH_DATA: Protocol version = 02, Token = 05da, Identifier = 00, JSON = {'rxpk': [{'tmst': 1902396310, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAQAMBq2lT05GE'}]}
0:43:07.685274	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0340, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 53d39184)
0:43:07.687273	LOG	Server <---------- DUT
0:43:07.689272	LOG	Count = 2
0:43:09.733567	LOG	PULL_DATA: 02 2bef 02 aa555a0000240409
0:43:09.735566	LOG	PULL_ACK: 02 2bef 04
0:43:12.668899	LOG	PUSH_ACK: 02 05db 01
0:43:12.672897	LOG	PUSH_DATA: Protocol version = 02, Token = 05db, Identifier = 00, JSON = {'rxpk': [{'tmst': 1907398919, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAQQMBA8GO2U2I'}]}
0:43:12.677894	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0341, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 8ed94d88)
0:43:12.680892	LOG	Server <---------- DUT
0:43:12.684890	LOG	Count = 3
0:43:17.710202	LOG	PUSH_ACK: 02 05dc 01
0:43:17.713200	LOG	PUSH_DATA: Protocol version = 02, Token = 05dc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1912401540, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAQgMBCn6RVgz+'}]}
0:43:17.715199	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0342, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 91560cfe)
0:43:17.717197	LOG	Server <---------- DUT
0:43:17.720196	LOG	Count = 4
0:43:19.813006	LOG	PULL_DATA: 02 6b38 02 aa555a0000240409
0:43:19.815006	LOG	PULL_ACK: 02 6b38 04
0:43:22.700367	LOG	PUSH_ACK: 02 05de 01

0:43:22.703365	LOG	PUSH_DATA: Protocol version = 02, Token = 05de, Identifier = 00, JSON = {'rxpk': [{'tmst': 1917404150, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAQwMBhHUKyA99'}]}
0:43:22.705365	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0343, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 0ac80f7d)
0:43:22.706366	LOG	Server <---------- DUT
0:43:22.708363	LOG	Count = 5
0:43:27.705524	LOG	PUSH_ACK: 02 05e0 01
0:43:27.707523	LOG	PUSH_DATA: Protocol version = 02, Token = 05e0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1922406766, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDARAMB2tNIebvy'}]}
0:43:27.708522	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0344, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 4879bbf2)
0:43:27.710522	LOG	Server <---------- DUT
0:43:27.711521	LOG	Count = 6
0:43:29.893281	LOG	PULL_DATA: 02 be22 02 aa555a0000240409
0:43:29.898278	LOG	PULL_ACK: 02 be22 04
0:43:32.695738	LOG	PUSH_ACK: 02 05e1 01
0:43:32.697737	LOG	PUSH_DATA: Protocol version = 02, Token = 05e1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1927409379, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDARQMBZeKafrqr'}]}
0:43:32.699735	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0345, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9a7ebaab)
0:43:32.700735	LOG	Server <---------- DUT
0:43:32.702734	LOG	Count = 7
0:43:37.687182	LOG	PUSH_ACK: 02 05e2 01
0:43:37.690180	LOG	PUSH_DATA: Protocol version = 02, Token = 05e2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1932412001, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDARgMBWCIgTEMf'}]}
0:43:37.692179	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0346, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 204c431f)
0:43:37.693178	LOG	Server <---------- DUT
0:43:37.695178	LOG	Count = 8
0:43:39.972883	LOG	PULL_DATA: 02 16fb 02 aa555a0000240409
0:43:39.974882	LOG	PULL_ACK: 02 16fb 04
0:43:42.679346	LOG	PUSH_ACK: 02 05e3 01
0:43:42.684343	LOG	PUSH_DATA: Protocol version = 02, Token = 05e3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1937414610, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDARwMB0a+rC0/0'}]}
0:43:42.688341	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0347, FOpts:), FPort: 01, FRMPayload: 0051, MIC: ab0b4ff4)
0:43:42.692339	LOG	Server <---------- DUT
0:43:42.695337	LOG	Count = 9
0:43:47.724481	LOG	PUSH_ACK: 02 05e4 01
0:43:47.726481	LOG	PUSH_DATA: Protocol version = 02, Token = 05e4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1942417224, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDASAMBf7rlkBBr'}]}
0:43:47.727478	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0348, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e590106b)
0:43:47.728478	LOG	Server <---------- DUT
0:43:47.730478	LOG	Count = 10
0:43:50.053158	LOG	PULL_DATA: 02 35ab 02 aa555a0000240409
0:43:50.055156	LOG	PULL_ACK: 02 35ab 04
0:43:52.713646	LOG	PUSH_ACK: 02 05e5 01

0:43:52.715645	LOG	PUSH_DATA: Protocol version = 02, Token = 05e5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1947419855, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDASQMBfzWoI4SM'}]}
0:43:52.717644	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0349, FOpts:), FPort: 01, FRMPayload: 0051, MIC: a823848c)
0:43:52.718644	LOG	Server <---------- DUT
0:43:52.719643	LOG	Count = 11
0:43:57.714806	LOG	PUSH_ACK: 02 05e7 01
0:43:57.716805	LOG	PUSH_DATA: Protocol version = 02, Token = 05e7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1952422488, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDASgMB2l9OfWUa'}]}
0:43:57.718805	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 034a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 4e7d651a)
0:43:57.719803	LOG	Server <---------- DUT
0:43:57.720802	LOG	Count = 12
0:44:00.133433	LOG	PULL_DATA: 02 6aa9 02 aa555a0000240409
0:44:00.136430	LOG	PULL_ACK: 02 6aa9 04
0:44:02.705062	LOG	PUSH_ACK: 02 05e8 01
0:44:02.708061	LOG	PUSH_DATA: Protocol version = 02, Token = 05e8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1957425099, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDASwMBV8b+1DDV'}]}
0:44:02.710060	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 034b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: fed430d5)
0:44:02.711059	LOG	Server <---------- DUT
0:44:02.713058	LOG	Count = 13
0:44:07.696227	LOG	PUSH_ACK: 02 05e9 01
0:44:07.698226	LOG	PUSH_DATA: Protocol version = 02, Token = 05e9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1962427719, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDATAMBnbjB0DBZ'}]}
0:44:07.699226	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 034c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: c1d03059)
0:44:07.700225	LOG	Server <---------- DUT
0:44:07.702224	LOG	Count = 14
0:44:10.212982	LOG	PULL_DATA: 02 a3f2 02 aa555a0000240409
0:44:10.213981	LOG	PULL_ACK: 02 a3f2 04
0:44:12.737555	LOG	PUSH_ACK: 02 05ea 01
0:44:12.739555	LOG	PUSH_DATA: Protocol version = 02, Token = 05ea, Identifier = 00, JSON = {'rxpk': [{'tmst': 1967430330, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDATQMBYYZ4ixSH'}]}
0:44:12.740554	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 034d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 788b1487)
0:44:12.742553	LOG	Server <---------- DUT
0:44:12.743552	LOG	Count = 15
0:44:17.728721	LOG	PUSH_ACK: 02 05ec 01
0:44:17.730719	LOG	PUSH_DATA: Protocol version = 02, Token = 05ec, Identifier = 00, JSON = {'rxpk': [{'tmst': 1972432952, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDATgMBfUFJPnar'}]}
0:44:17.732718	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 034e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 493e76ab)
0:44:17.733718	LOG	Server <---------- DUT
0:44:17.734717	LOG	Count = 16
0:44:20.292302	LOG	PULL_DATA: 02 5573 02 aa555a0000240409
0:44:20.294301	LOG	PULL_ACK: 02 5573 04
0:44:22.718924	LOG	PUSH_ACK: 02 05ed 01

0:44:22.720922	LOG	PUSH_DATA: Protocol version = 02, Token = 05ed, Identifier = 00, JSON = {'rxpk': [{'tmst': 1977435569, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDATwMBVgSq8jeV'}]}
0:44:22.722921	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 034f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: aaf23795)
0:44:22.723921	LOG	Server <---------- DUT
0:44:22.725921	LOG	Count = 17
0:44:27.722651	LOG	PUSH_ACK: 02 05ef 01
0:44:27.725630	LOG	PUSH_DATA: Protocol version = 02, Token = 05ef, Identifier = 00, JSON = {'rxpk': [{'tmst': 1982438185, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAUAMB2kMr+Xyy'}]}
0:44:27.726629	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0350, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 2bf97cb2)
0:44:27.728647	LOG	Server <---------- DUT
0:44:27.730627	LOG	Count = 18
0:44:30.383121	LOG	PULL_DATA: 02 f237 02 aa555a0000240409
0:44:30.386119	LOG	PULL_ACK: 02 f237 04
0:44:32.713322	LOG	PUSH_ACK: 02 05f0 01
0:44:32.715321	LOG	PUSH_DATA: Protocol version = 02, Token = 05f0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1987440790, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAUQMBE/UBWKff'}]}
0:44:32.717321	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0351, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 0158a7df)
0:44:32.718320	LOG	Server <---------- DUT
0:44:32.719319	LOG	Count = 19
0:44:37.705487	LOG	PUSH_ACK: 02 05f2 01
0:44:37.706486	LOG	PUSH_DATA: Protocol version = 02, Token = 05f2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1992443399, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAUgMBxDP3kMnX'}]}
0:44:37.708485	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0352, FOpts:), FPort: 01, FRMPayload: 0051, MIC: f790c9d7)
0:44:37.710485	LOG	Server <---------- DUT
0:44:37.711484	LOG	Count = 20
0:44:40.462921	LOG	PULL_DATA: 02 f5bb 02 aa555a0000240409
0:44:40.464920	LOG	PULL_ACK: 02 f5bb 04
0:44:42.746641	LOG	PUSH_ACK: 02 05f3 01
0:44:42.748622	LOG	PUSH_DATA: Protocol version = 02, Token = 05f3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1997446004, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAUwMBE/um7Auq'}]}
0:44:42.750621	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0353, FOpts:), FPort: 01, FRMPayload: 0051, MIC: a6ec0baa)
0:44:42.751620	LOG	Server <---------- DUT
0:44:42.753620	LOG	Count = 21
0:44:47.735789	LOG	PUSH_ACK: 02 05f4 01
0:44:47.737788	LOG	PUSH_DATA: Protocol version = 02, Token = 05f4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2002448609, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAVAMBV+gPsq/C'}]}
0:44:47.739787	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0354, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 0fb2afc2)
0:44:47.740786	LOG	Server <---------- DUT
0:44:47.742785	LOG	Count = 22
0:44:50.542441	LOG	PULL_DATA: 02 af36 02 aa555a0000240409
0:44:50.544441	LOG	PULL_ACK: 02 af36 04
0:44:52.726201	LOG	PUSH_ACK: 02 05f5 01

0:44:52.728201	LOG	PUSH_DATA: Protocol version = 02, Token = 05f5, Identifier = 00, JSON = {'rxpk': [{'tmst': 2007451221, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAVQMBZ4FSB5aQ'}]}
0:44:52.730199	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0355, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 52079690)
0:44:52.731198	LOG	Server <---------- DUT
0:44:52.732197	LOG	Count = 23
0:44:57.725506	LOG	PUSH_ACK: 02 05f7 01
0:44:57.727505	LOG	PUSH_DATA: Protocol version = 02, Token = 05f7, Identifier = 00, JSON = {'rxpk': [{'tmst': 2012453822, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAVgMBh/Dl78de'}]}
0:44:57.729504	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0356, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e5efc75e)
0:44:57.730503	LOG	Server <---------- DUT
0:44:57.732502	LOG	Count = 24
0:45:00.621982	LOG	PULL_DATA: 02 3a84 02 aa555a0000240409
0:45:00.625980	LOG	PULL_ACK: 02 3a84 04
0:45:02.765765	LOG	PUSH_ACK: 02 05f8 01
0:45:02.770762	LOG	PUSH_DATA: Protocol version = 02, Token = 05f8, Identifier = 00, JSON = {'rxpk': [{'tmst': 2017456453, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAVwMBhRzUGYhW'}]}
0:45:02.775760	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0357, FOpts:), FPort: 01, FRMPayload: 0051, MIC: d4198856)
0:45:02.777758	LOG	Server <---------- DUT
0:45:02.779757	LOG	Count = 25
0:45:07.756041	LOG	PUSH_ACK: 02 05f9 01
0:45:07.759039	LOG	PUSH_DATA: Protocol version = 02, Token = 05f9, Identifier = 00, JSON = {'rxpk': [{'tmst': 2022459076, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAWAMBJ5jg5t24'}]}
0:45:07.761038	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0358, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e0e6ddb8)
0:45:07.762039	LOG	Server <---------- DUT
0:45:07.764038	LOG	Count = 26
0:45:10.702418	LOG	PULL_DATA: 02 143b 02 aa555a0000240409
0:45:10.704418	LOG	PULL_ACK: 02 143b 04
0:45:12.745260	LOG	PUSH_ACK: 02 05fa 01
0:45:12.747259	LOG	PUSH_DATA: Protocol version = 02, Token = 05fa, Identifier = 00, JSON = {'rxpk': [{'tmst': 2027461692, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAWQMBWdUOzI2D'}]}
0:45:12.749255	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0359, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 0ecc8d83)
0:45:12.750254	LOG	Server <---------- DUT
0:45:12.752254	LOG	Count = 27
0:45:17.733395	LOG	PUSH_ACK: 02 05fb 01
0:45:17.736422	LOG	PUSH_DATA: Protocol version = 02, Token = 05fb, Identifier = 00, JSON = {'rxpk': [{'tmst': 2032464314, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAWgMBLOcnF5y1'}]}
0:45:17.737422	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 035a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 27179cb5)
0:45:17.738420	LOG	Server <---------- DUT
0:45:17.739419	LOG	Count = 28
0:45:20.782754	LOG	PULL_DATA: 02 43bf 02 aa555a0000240409
0:45:20.784754	LOG	PULL_ACK: 02 43bf 04
0:45:22.773582	LOG	PUSH_ACK: 02 05fc 01

0:45:22.778585	LOG	PUSH_DATA: Protocol version = 02, Token = 05fc, Identifier = 00, JSON = {'rxpk': [{'tmst': 2037466937, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAWwMB6cTrzrpZ'}]}
0:45:22.781580	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 035b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: ebceba59)
0:45:22.784578	LOG	Server <---------- DUT
0:45:22.788575	LOG	Count = 29
0:45:27.777740	LOG	PUSH_ACK: 02 05ff 01
0:45:27.779738	LOG	PUSH_DATA: Protocol version = 02, Token = 05ff, Identifier = 00, JSON = {'rxpk': [{'tmst': 2042469562, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAXAMBnB4FhyQ2'}]}
0:45:27.780737	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 035c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 05872436)
0:45:27.782736	LOG	Server <---------- DUT
0:45:27.783736	LOG	Count = 30
0:45:30.862595	LOG	PULL_DATA: 02 2a01 02 aa555a0000240409
0:45:30.866592	LOG	PULL_ACK: 02 2a01 04
0:45:32.767512	LOG	PUSH_ACK: 02 0600 01
0:45:32.769512	LOG	PUSH_DATA: Protocol version = 02, Token = 0600, Identifier = 00, JSON = {'rxpk': [{'tmst': 2047472182, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAXQMB9UpI0wi3'}]}
0:45:32.771510	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 035d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 48d308b7)
0:45:32.772512	LOG	Server <---------- DUT
0:45:32.773511	LOG	Count = 31
0:45:37.757677	LOG	PUSH_ACK: 02 0601 01
0:45:37.759677	LOG	PUSH_DATA: Protocol version = 02, Token = 0601, Identifier = 00, JSON = {'rxpk': [{'tmst': 2052474820, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAXgMBhm7aUb5d'}]}
0:45:37.762675	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 035e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: da51be5d)
0:45:37.764674	LOG	Server <---------- DUT
0:45:37.765673	LOG	Count = 32
0:45:40.941868	LOG	PULL_DATA: 02 d055 02 aa555a0000240409
0:45:40.943867	LOG	PULL_ACK: 02 d055 04
0:45:42.747843	LOG	PUSH_ACK: 02 0602 01
0:45:42.749842	LOG	PUSH_DATA: Protocol version = 02, Token = 0602, Identifier = 00, JSON = {'rxpk': [{'tmst': 2057477446, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAXwMBrt21kRfq'}]}
0:45:42.751841	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 035f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: b59117ea)
0:45:42.753839	LOG	Server <---------- DUT
0:45:42.754840	LOG	Count = 33
0:45:47.789855	LOG	PUSH_ACK: 02 0603 01
0:45:47.792854	LOG	PUSH_DATA: Protocol version = 02, Token = 0603, Identifier = 00, JSON = {'rxpk': [{'tmst': 2062480061, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAYAMBCdZtcYE7'}]}
0:45:47.794853	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0360, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 6d71813b)
0:45:47.795851	LOG	Server <---------- DUT
0:45:47.797850	LOG	Count = 34
0:45:51.022311	LOG	PULL_DATA: 02 f13c 02 aa555a0000240409
0:45:51.024310	LOG	PULL_ACK: 02 f13c 04
0:45:52.782312	LOG	PUSH_ACK: 02 0605 01

0:45:52.784310	LOG	PUSH_DATA: Protocol version = 02, Token = 0605, Identifier = 00, JSON = {'rxpk': [{'tmst': 2067482675, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAYQMBT+bxPyIC'}]}
0:45:52.785309	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0361, FOpts:), FPort: 01, FRMPayload: 0051, MIC: f13f2202)
0:45:52.787309	LOG	Server <---------- DUT
0:45:52.788308	LOG	Count = 35
0:45:57.785469	LOG	PUSH_ACK: 02 0607 01
0:45:57.787468	LOG	PUSH_DATA: Protocol version = 02, Token = 0607, Identifier = 00, JSON = {'rxpk': [{'tmst': 2072485297, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAYgMByZENVBOL'}]}
0:45:57.788468	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0362, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 0d54138b)
0:45:57.789467	LOG	Server <---------- DUT
0:45:57.791466	LOG	Count = 36
0:46:01.102585	LOG	PULL_DATA: 02 8daf 02 aa555a0000240409
0:46:01.106582	LOG	PULL_ACK: 02 8daf 04
0:46:02.775634	LOG	PUSH_ACK: 02 0609 01
0:46:02.777633	LOG	PUSH_DATA: Protocol version = 02, Token = 0609, Identifier = 00, JSON = {'rxpk': [{'tmst': 2077487912, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAYwMBX1u7O733'}]}
0:46:02.779632	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0363, FOpts:), FPort: 01, FRMPayload: 0051, MIC: bb3bbdf7)
0:46:02.780631	LOG	Server <---------- DUT
0:46:02.781631	LOG	Count = 37
0:46:07.765749	LOG	PUSH_ACK: 02 060a 01
0:46:07.767753	LOG	PUSH_DATA: Protocol version = 02, Token = 060a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2082490528, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAZAMBsOs57gWN'}]}
0:46:07.768780	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0364, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 39ee058d)
0:46:07.769781	LOG	Server <---------- DUT
0:46:07.771753	LOG	Count = 38
0:46:11.183217	LOG	PULL_DATA: 02 5ea3 02 aa555a0000240409
0:46:11.192212	LOG	PULL_ACK: 02 5ea3 04
0:46:12.756626	LOG	PUSH_ACK: 02 060b 01
0:46:12.760627	LOG	PUSH_DATA: Protocol version = 02, Token = 060b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2087493144, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAZQMBpc3rkbp8'}]}
0:46:12.764619	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0365, FOpts:), FPort: 01, FRMPayload: 0051, MIC: eb91ba7c)
0:46:12.768647	LOG	Server <---------- DUT
0:46:12.771644	LOG	Count = 39
0:46:17.801751	LOG	PUSH_ACK: 02 060c 01
0:46:17.807748	LOG	PUSH_DATA: Protocol version = 02, Token = 060c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2092495767, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAZgMBwUyblkts'}]}
0:46:17.812745	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0366, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9b964b6c)
0:46:17.816742	LOG	Server <---------- DUT
0:46:17.819740	LOG	Count = 40
0:46:21.272538	LOG	PULL_DATA: 02 ab93 02 aa555a0000240409
0:46:21.274539	LOG	PULL_ACK: 02 ab93 04
0:46:22.796389	LOG	PUSH_ACK: 02 060d 01

0:46:22.801366	LOG	PUSH_DATA: Protocol version = 02, Token = 060d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2097498386, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAZwMBRgMnhVWH'}]}
0:46:22.805366	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0367, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 27855587)
0:46:22.810363	LOG	Server <---------- DUT
0:46:22.815360	LOG	Count = 41
0:46:27.806640	LOG	PUSH_ACK: 02 060f 01
0:46:27.811637	LOG	PUSH_DATA: Protocol version = 02, Token = 060f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2102501020, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAaAMBl2X/n3eM'}]}
0:46:27.814630	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0368, FOpts:), FPort: 01, FRMPayload: 0051, MIC: ff9f778c)
0:46:27.817629	LOG	Server <---------- DUT
0:46:27.821631	LOG	Count = 42
0:46:31.352046	LOG	PULL_DATA: 02 4f15 02 aa555a0000240409
0:46:31.357043	LOG	PULL_ACK: 02 4f15 04
0:46:32.797236	LOG	PUSH_ACK: 02 0610 01
0:46:32.799235	LOG	PUSH_DATA: Protocol version = 02, Token = 0610, Identifier = 00, JSON = {'rxpk': [{'tmst': 2107503624, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAaQMBkNVlDVmQ'}]}
0:46:32.801235	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0369, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 650d5990)
0:46:32.802234	LOG	Server <---------- DUT
0:46:32.803233	LOG	Count = 43
0:46:37.785403	LOG	PUSH_ACK: 02 0611 01
0:46:37.787403	LOG	PUSH_DATA: Protocol version = 02, Token = 0611, Identifier = 00, JSON = {'rxpk': [{'tmst': 2112506231, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAagMBPItnd3Q4'}]}
0:46:37.789401	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 036a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 67777438)
0:46:37.790402	LOG	Server <---------- DUT
0:46:37.791401	LOG	Count = 44
0:46:41.432331	LOG	PULL_DATA: 02 3df2 02 aa555a0000240409
0:46:41.434329	LOG	PULL_ACK: 02 3df2 04
0:46:42.776568	LOG	PUSH_ACK: 02 0612 01
0:46:42.777566	LOG	PUSH_DATA: Protocol version = 02, Token = 0612, Identifier = 00, JSON = {'rxpk': [{'tmst': 2117508831, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAawMB4HKU6e5S'}]}
0:46:42.779565	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 036b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 94e9ee52)
0:46:42.781564	LOG	Server <---------- DUT
0:46:42.782564	LOG	Count = 45
0:46:47.817707	LOG	PUSH_ACK: 02 0613 01
0:46:47.819705	LOG	PUSH_DATA: Protocol version = 02, Token = 0613, Identifier = 00, JSON = {'rxpk': [{'tmst': 2122511455, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAbAMBE6VneMEm'}]}
0:46:47.820702	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 036c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 6778c126)
0:46:47.821706	LOG	Server <---------- DUT
0:46:47.823701	LOG	Count = 46
0:46:51.531686	LOG	PULL_DATA: 02 0792 02 aa555a0000240409
0:46:51.533658	LOG	PULL_ACK: 02 0792 04
0:46:52.806997	LOG	PUSH_ACK: 02 0614 01

0:46:52.808997	LOG	PUSH_DATA: Protocol version = 02, Token = 0614, Identifier = 00, JSON = {'rxpk': [{'tmst': 2127514058, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAbQMB+QZ96Yde'}]}
0:46:52.809997	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 036d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 7de9875e)
0:46:52.810996	LOG	Server <---------- DUT
0:46:52.812993	LOG	Count = 47
0:46:57.806158	LOG	PUSH_ACK: 02 0616 01
0:46:57.811155	LOG	PUSH_DATA: Protocol version = 02, Token = 0616, Identifier = 00, JSON = {'rxpk': [{'tmst': 2132516681, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAbgMBPnVT/2DH'}]}
0:46:57.814156	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 036e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 53ff60c7)
0:46:57.815170	LOG	Server <---------- DUT
0:46:57.817151	LOG	Count = 48
0:47:01.611994	LOG	PULL_DATA: 02 65fa 02 aa555a0000240409
0:47:01.616992	LOG	PULL_ACK: 02 65fa 04
0:47:02.796322	LOG	PUSH_ACK: 02 0617 01
0:47:02.799322	LOG	PUSH_DATA: Protocol version = 02, Token = 0617, Identifier = 00, JSON = {'rxpk': [{'tmst': 2137519308, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAbwMBjkFFd+Ha'}]}
0:47:02.800320	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 036f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 4577e1da)
0:47:02.801321	LOG	Server <---------- DUT
0:47:02.803318	LOG	Count = 49
0:47:07.786922	LOG	PUSH_ACK: 02 0619 01
0:47:07.789921	LOG	PUSH_DATA: Protocol version = 02, Token = 0619, Identifier = 00, JSON = {'rxpk': [{'tmst': 2142521941, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAcAMBvxItBsI0'}]}
0:47:07.790920	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0370, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 2d06c234)
0:47:07.792919	LOG	Server <---------- DUT
0:47:07.794918	LOG	Count = 50
0:47:11.691704	LOG	PULL_DATA: 02 c95a 02 aa555a0000240409
0:47:11.695703	LOG	PULL_ACK: 02 c95a 04
0:47:12.826113	LOG	PUSH_ACK: 02 061a 01
0:47:12.828112	LOG	PUSH_DATA: Protocol version = 02, Token = 061a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2147524565, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAcQMBlbPowuoR'}]}
0:47:12.830111	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0371, FOpts:), FPort: 01, FRMPayload: 0051, MIC: e8c2ea11)
0:47:12.831110	LOG	Server <---------- DUT
0:47:12.833109	LOG	Count = 51
0:47:17.815376	LOG	PUSH_ACK: 02 061b 01
0:47:17.817375	LOG	PUSH_DATA: Protocol version = 02, Token = 061b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2152527180, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAcgMBatLPp+T2'}]}
0:47:17.819374	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0372, FOpts:), FPort: 01, FRMPayload: 0051, MIC: cfa7e4f6)
0:47:17.820373	LOG	Server <---------- DUT
0:47:17.822372	LOG	Count = 52
0:47:21.771394	LOG	PULL_DATA: 02 b578 02 aa555a0000240409
0:47:21.773394	LOG	PULL_ACK: 02 b578 04
0:47:22.803809	LOG	PUSH_ACK: 02 061c 01

0:47:22.806807	LOG	PUSH_DATA: Protocol version = 02, Token = 061c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2157529787, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAcwMBJH4HGzLO'}]}
0:47:22.807806	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0373, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 071b32ce)
0:47:22.809804	LOG	Server <---------- DUT
0:47:22.810806	LOG	Count = 53
0:47:27.806966	LOG	PUSH_ACK: 02 061e 01
0:47:27.809964	LOG	PUSH_DATA: Protocol version = 02, Token = 061e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2162532406, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAdAMBM+W/jesW'}]}
0:47:27.811963	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0374, FOpts:), FPort: 01, FRMPayload: 0051, MIC: bf8deb16)
0:47:27.812963	LOG	Server <---------- DUT
0:47:27.815961	LOG	Count = 54
0:47:31.852669	LOG	PULL_DATA: 02 90ef 02 aa555a0000240409
0:47:31.863663	LOG	PULL_ACK: 02 90ef 04
0:47:32.798987	LOG	PUSH_ACK: 02 061f 01
0:47:32.800985	LOG	PUSH_DATA: Protocol version = 02, Token = 061f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2167535022, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAdQMBpL9bpxxl'}]}
0:47:32.802984	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0375, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 5ba71c65)
0:47:32.803983	LOG	Server <---------- DUT
0:47:32.804983	LOG	Count = 55
0:47:37.841195	LOG	PUSH_ACK: 02 0620 01
0:47:37.843193	LOG	PUSH_DATA: Protocol version = 02, Token = 0620, Identifier = 00, JSON = {'rxpk': [{'tmst': 2172537650, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAdgMBOqnQu8EF'}]}
0:47:37.844191	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0376, FOpts:), FPort: 01, FRMPayload: 0051, MIC: d0bbc105)
0:47:37.845193	LOG	Server <---------- DUT
0:47:37.847190	LOG	Count = 56
0:47:41.951859	LOG	PULL_DATA: 02 fda5 02 aa555a0000240409
0:47:41.952859	LOG	PULL_ACK: 02 fda5 04
0:47:42.829361	LOG	PUSH_ACK: 02 0621 01
0:47:42.831359	LOG	PUSH_DATA: Protocol version = 02, Token = 0621, Identifier = 00, JSON = {'rxpk': [{'tmst': 2177540265, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAdwMBSyQZ0GnM'}]}
0:47:42.832359	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0377, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 19d069cc)
0:47:42.834358	LOG	Server <---------- DUT
0:47:42.835356	LOG	Count = 57
0:47:47.819525	LOG	PUSH_ACK: 02 0622 01
0:47:47.821523	LOG	PUSH_DATA: Protocol version = 02, Token = 0622, Identifier = 00, JSON = {'rxpk': [{'tmst': 2182542878, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAeAMBE5Md1eqh'}]}
0:47:47.822524	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0378, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 1dd5eaa1)
0:47:47.823524	LOG	Server <---------- DUT
0:47:47.825523	LOG	Count = 58
0:47:52.031895	LOG	PULL_DATA: 02 2b40 02 aa555a0000240409
0:47:52.033894	LOG	PULL_ACK: 02 2b40 04
0:47:52.807455	LOG	PUSH_ACK: 02 0623 01

0:47:52.809454	LOG	PUSH_DATA: Protocol version = 02, Token = 0623, Identifier = 00, JSON = {'rxpk': [{'tmst': 2187545492, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAeQMBfUvBEbID'}]}
0:47:52.810455	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0379, FOpts:), FPort: 01, FRMPayload: 0051, MIC: c111b203)
0:47:52.812454	LOG	Server <---------- DUT
0:47:52.813453	LOG	Count = 59
0:47:57.855587	LOG	PUSH_ACK: 02 0625 01
0:47:57.858587	LOG	PUSH_DATA: Protocol version = 02, Token = 0625, Identifier = 00, JSON = {'rxpk': [{'tmst': 2192548110, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAegMBwXGBOGfg'}]}
0:47:57.860585	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 037a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 813867e0)
0:47:57.861602	LOG	Server <---------- DUT
0:47:57.863583	LOG	Count = 60
0:48:02.122164	LOG	PULL_DATA: 02 6455 02 aa555a0000240409
0:48:02.126178	LOG	PULL_ACK: 02 6455 04
0:48:02.845772	LOG	PUSH_ACK: 02 0626 01
0:48:02.847750	LOG	PUSH_DATA: Protocol version = 02, Token = 0626, Identifier = 00, JSON = {'rxpk': [{'tmst': 2197550731, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAewMBFNHZtlos'}]}
0:48:02.849751	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 037b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: d9b65a2c)
0:48:02.850749	LOG	Server <---------- DUT
0:48:02.851749	LOG	Count = 61
0:48:07.836918	LOG	PUSH_ACK: 02 0627 01
0:48:07.837917	LOG	PUSH_DATA: Protocol version = 02, Token = 0627, Identifier = 00, JSON = {'rxpk': [{'tmst': 2202553339, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAfAMBhI95SsR6'}]}
0:48:07.839916	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 037c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 794ac47a)
0:48:07.840916	LOG	Server <---------- DUT
0:48:07.841915	LOG	Count = 62
0:48:12.201522	LOG	PULL_DATA: 02 4235 02 aa555a0000240409
0:48:12.203522	LOG	PULL_ACK: 02 4235 04
0:48:12.828166	LOG	PUSH_ACK: 02 0629 01
0:48:12.830166	LOG	PUSH_DATA: Protocol version = 02, Token = 0629, Identifier = 00, JSON = {'rxpk': [{'tmst': 2207555970, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAfQMBXtyCZRDk'}]}
0:48:12.831165	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 037d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 826510e4)
0:48:12.833164	LOG	Server <---------- DUT
0:48:12.835162	LOG	Count = 63
0:48:17.869302	LOG	PUSH_ACK: 02 062a 01
0:48:17.871302	LOG	PUSH_DATA: Protocol version = 02, Token = 062a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2212558588, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAfgMB8+UA9T5t'}]}
0:48:17.872302	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 037e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 00f53e6d)
0:48:17.874300	LOG	Server <---------- DUT
0:48:17.875299	LOG	Count = 64
0:48:22.280842	LOG	PULL_DATA: 02 ab33 02 aa555a0000240409
0:48:22.282841	LOG	PULL_ACK: 02 ab33 04
0:48:22.859513	LOG	PUSH_ACK: 02 062b 01

0:48:22.861512	LOG	PUSH_DATA: Protocol version = 02, Token = 062b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2217561199, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 3, 'size': 15, 'data': 'QCAgICDAfwMB0TdRFxc+'}]}
0:48:22.862512	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 037f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 5117173e)
0:48:22.863511	LOG	Server <---------- DUT
0:48:22.864511	LOG	Count = 65
0:48:27.855675	LOG	PUSH_ACK: 02 062d 01
0:48:27.857675	LOG	PUSH_DATA: Protocol version = 02, Token = 062d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2222583285, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAgAMBxlUNj9Mq'}]}
0:48:27.859673	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0380, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 0d8fd32a)
0:48:27.860674	LOG	Server <---------- DUT
0:48:27.862672	LOG	Count = 66
0:48:27.876663	LOG	Expected number of uplink messages have been received
0:48:27.882659	LOG	Test adaptive data rate control in frame header process starts
0:48:32.361115	LOG	PULL_DATA: 02 7138 02 aa555a0000240409
0:48:32.366112	LOG	PULL_ACK: 02 7138 04
0:48:32.894812	LOG	PUSH_ACK: 02 062e 01
0:48:32.896811	LOG	PUSH_DATA: Protocol version = 02, Token = 062e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2227585913, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAgQMBBzqf0jQr'}]}
0:48:32.897810	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0381, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9fd2342b)
0:48:32.899809	LOG	Server <---------- DUT
0:48:32.900809	LOG	Count = 2
0:48:37.886978	LOG	PUSH_ACK: 02 0630 01
0:48:37.888976	LOG	PUSH_DATA: Protocol version = 02, Token = 0630, Identifier = 00, JSON = {'rxpk': [{'tmst': 2232588537, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAggMBNUOT68gS'}]}
0:48:37.889976	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0382, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 93ebc812)
0:48:37.890976	LOG	Server <---------- DUT
0:48:37.891975	LOG	Count = 3
0:48:42.441388	LOG	PULL_DATA: 02 e2cf 02 aa555a0000240409
0:48:42.443389	LOG	PULL_ACK: 02 e2cf 04
0:48:42.876141	LOG	PUSH_ACK: 02 0631 01
0:48:42.878142	LOG	PUSH_DATA: Protocol version = 02, Token = 0631, Identifier = 00, JSON = {'rxpk': [{'tmst': 2237591161, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAgwMBJtdg2ztc'}]}
0:48:42.879141	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0383, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 60db3b5c)
0:48:42.881140	LOG	Server <---------- DUT
0:48:42.882140	LOG	Count = 4
0:48:47.866179	LOG	PUSH_ACK: 02 0632 01
0:48:47.868179	LOG	PUSH_DATA: Protocol version = 02, Token = 0632, Identifier = 00, JSON = {'rxpk': [{'tmst': 2242593777, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAhAMBbCRWIZ0R'}]}
0:48:47.870177	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0384, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 56219d11)

0:48:47.871177	LOG	Server <---------- DUT
0:48:47.873176	LOG	Count = 5
0:48:52.521536	LOG	PULL_DATA: 02 dc8d 02 aa555a0000240409
0:48:52.522534	LOG	PULL_ACK: 02 dc8d 04
0:48:52.905316	LOG	PUSH_ACK: 02 0633 01
0:48:52.908315	LOG	PUSH_DATA: Protocol version = 02, Token = 0633, Identifier = 00, JSON = {'rxpk': [{'tmst': 2247596389, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAhQMBFJdVV1/w'}]}
0:48:52.910314	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0385, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 55575ff0)
0:48:52.911313	LOG	Server <---------- DUT
0:48:52.913312	LOG	Count = 6
0:48:57.909474	LOG	PUSH_ACK: 02 0635 01
0:48:57.911473	LOG	PUSH_DATA: Protocol version = 02, Token = 0635, Identifier = 00, JSON = {'rxpk': [{'tmst': 2252599021, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAhgMBbIjcaexv'}]}
0:48:57.912472	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0386, FOpts:), FPort: 01, FRMPayload: 0051, MIC: dc69ec6f)
0:48:57.914471	LOG	Server <---------- DUT
0:48:57.915471	LOG	Count = 7
0:49:02.600809	LOG	PULL_DATA: 02 622b 02 aa555a0000240409
0:49:02.604808	LOG	PULL_ACK: 02 622b 04
0:49:02.899639	LOG	PUSH_ACK: 02 0636 01
0:49:02.901639	LOG	PUSH_DATA: Protocol version = 02, Token = 0636, Identifier = 00, JSON = {'rxpk': [{'tmst': 2257601641, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAhwMB1qQAKHo4'}]}
0:49:02.902637	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0387, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 00287a38)
0:49:02.903639	LOG	Server <---------- DUT
0:49:02.905636	LOG	Count = 8
0:49:07.889804	LOG	PUSH_ACK: 02 0637 01
0:49:07.891804	LOG	PUSH_DATA: Protocol version = 02, Token = 0637, Identifier = 00, JSON = {'rxpk': [{'tmst': 2262604265, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAiAMB2QLH+GkK'}]}
0:49:07.892803	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0388, FOpts:), FPort: 01, FRMPayload: 0051, MIC: c7f8690a)
0:49:07.893803	LOG	Server <---------- DUT
0:49:07.894803	LOG	Count = 9
0:49:12.681083	LOG	PULL_DATA: 02 a39f 02 aa555a0000240409
0:49:12.683081	LOG	PULL_ACK: 02 a39f 04
0:49:12.879986	LOG	PUSH_ACK: 02 0638 01
0:49:12.883968	LOG	PUSH_DATA: Protocol version = 02, Token = 0638, Identifier = 00, JSON = {'rxpk': [{'tmst': 2267606889, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAiQMB7HXz00jj'}]}
0:49:12.886966	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0389, FOpts:), FPort: 01, FRMPayload: 0051, MIC: f3d348e3)
0:49:12.889964	LOG	Server <---------- DUT
0:49:12.893961	LOG	Count = 10
0:49:17.872134	LOG	PUSH_ACK: 02 0639 01
0:49:17.874131	LOG	PUSH_DATA: Protocol version = 02, Token = 0639, Identifier = 00, JSON = {'rxpk': [{'tmst': 2272609509, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAigMBLq+aQt6p'}]}
0:49:17.875131	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 038a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9a42dea9)
0:49:17.877130	LOG	Server <---------- DUT
0:49:17.878131	LOG	Count = 11
0:49:22.761355	LOG	PULL_DATA: 02 1daa 02 aa555a0000240409
0:49:22.763354	LOG	PULL_ACK: 02 1daa 04
0:49:22.913269	LOG	PUSH_ACK: 02 063a 01
0:49:22.915268	LOG	PUSH_DATA: Protocol version = 02, Token = 063a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2277612141, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAiwMB5rNXSm9c'}]}
0:49:22.917268	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 038b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 574a6f5c)
0:49:22.919265	LOG	Server <---------- DUT
0:49:22.920265	LOG	Count = 12
0:49:27.918924	LOG	PUSH_ACK: 02 063c 01
0:49:27.923920	LOG	PUSH_DATA: Protocol version = 02, Token = 063c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2282614769, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAjAMBePvP1DzS'}]}
0:49:27.927919	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 038c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: cfd43cd2)
0:49:27.930917	LOG	Server <---------- DUT
0:49:27.933914	LOG	Count = 13
0:49:32.841126	LOG	PULL_DATA: 02 3182 02 aa555a0000240409
0:49:32.845124	LOG	PULL_ACK: 02 3182 04
0:49:32.910878	LOG	PUSH_ACK: 02 063d 01
0:49:32.912875	LOG	PUSH_DATA: Protocol version = 02, Token = 063d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2287617389, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAjQMBAclR8A+2'}]}
0:49:32.914874	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 038d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 51f00fb6)
0:49:32.916873	LOG	Server <---------- DUT
0:49:32.918872	LOG	Count = 14
0:49:37.901162	LOG	PUSH_ACK: 02 063e 01
0:49:37.904161	LOG	PUSH_DATA: Protocol version = 02, Token = 063e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2292620017, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAjgMBdfJKIb+S'}]}
0:49:37.905160	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 038e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 4a21bf92)
0:49:37.907159	LOG	Server <---------- DUT
0:49:37.909158	LOG	Count = 15
0:49:42.892327	LOG	PUSH_ACK: 02 063f 01
0:49:42.894327	LOG	PUSH_DATA: Protocol version = 02, Token = 063f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2297622645, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAjwMB/0YCruBl'}]}
0:49:42.896325	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 038f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 02aee065)
0:49:42.897324	LOG	Server <---------- DUT
0:49:42.898324	LOG	Count = 16
0:49:42.921311	LOG	PULL_DATA: 02 a4fa 02 aa555a0000240409

0:49:42.923310	LOG	PULL_ACK: 02 a4fa 04
0:49:47.933547	LOG	PUSH_ACK: 02 0640 01
0:49:47.935546	LOG	PUSH_DATA: Protocol version = 02, Token = 0640, Identifier = 00, JSON = {'rxpk': [{'tmst': 2302625265, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAkAMBUMVeuO9C'}]}
0:49:47.937544	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0390, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 5eb8ef42)
0:49:47.939544	LOG	Server <---------- DUT
0:49:47.940543	LOG	Count = 17
0:49:52.924711	LOG	PUSH_ACK: 02 0641 01
0:49:52.926710	LOG	PUSH_DATA: Protocol version = 02, Token = 0641, Identifier = 00, JSON = {'rxpk': [{'tmst': 2307627889, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAkQMBTyiyQS0n'}]}
0:49:52.927709	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0391, FOpts:), FPort: 01, FRMPayload: 0051, MIC: b2412d27)
0:49:52.928710	LOG	Server <---------- DUT
0:49:52.930708	LOG	Count = 18
0:49:53.000654	LOG	PULL_DATA: 02 dc5a 02 aa555a0000240409
0:49:53.002636	LOG	PULL_ACK: 02 dc5a 04
0:49:57.928932	LOG	PUSH_ACK: 02 0643 01
0:49:57.930930	LOG	PUSH_DATA: Protocol version = 02, Token = 0643, Identifier = 00, JSON = {'rxpk': [{'tmst': 2312630513, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAkgMBCu5XIHlO'}]}
0:49:57.931931	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0392, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 5720794e)
0:49:57.933929	LOG	Server <---------- DUT
0:49:57.934928	LOG	Count = 19
0:50:02.919658	LOG	PUSH_ACK: 02 0644 01
0:50:02.922656	LOG	PUSH_DATA: Protocol version = 02, Token = 0644, Identifier = 00, JSON = {'rxpk': [{'tmst': 2317633137, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAkwMBRUdA4YF5'}]}
0:50:02.924657	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0393, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 40e18179)
0:50:02.925657	LOG	Server <---------- DUT
0:50:02.926656	LOG	Count = 20
0:50:03.080567	LOG	PULL_DATA: 02 736c 02 aa555a0000240409
0:50:03.082566	LOG	PULL_ACK: 02 736c 04
0:50:07.913310	LOG	PUSH_ACK: 02 0646 01
0:50:07.916308	LOG	PUSH_DATA: Protocol version = 02, Token = 0646, Identifier = 00, JSON = {'rxpk': [{'tmst': 2322635757, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAlAMBXh5gTX5F'}]}
0:50:07.917308	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0394, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 604d7e45)
0:50:07.918307	LOG	Server <---------- DUT
0:50:07.920306	LOG	Count = 21
0:50:12.904341	LOG	PUSH_ACK: 02 0647 01
0:50:12.906342	LOG	PUSH_DATA: Protocol version = 02, Token = 0647, Identifier = 00, JSON = {'rxpk': [{'tmst': 2327638385, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAlQMBADYKpDZm'}]}

0:50:12.908340	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0395, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 0aa43666)
0:50:12.909338	LOG	Server <---------- DUT
0:50:12.910338	LOG	Count = 22
0:50:13.160196	LOG	PULL_DATA: 02 4970 02 aa555a0000240409
0:50:13.162194	LOG	PULL_ACK: 02 4970 04
0:50:17.945479	LOG	PUSH_ACK: 02 0648 01
0:50:17.947476	LOG	PUSH_DATA: Protocol version = 02, Token = 0648, Identifier = 00, JSON = {'rxpk': [{'tmst': 2332641005, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAlgMBTqrqgTCK'}]}
0:50:17.949475	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0396, FOpts:), FPort: 01, FRMPayload: 0051, MIC: ea81308a)
0:50:17.950474	LOG	Server <---------- DUT
0:50:17.952473	LOG	Count = 23
0:50:22.935743	LOG	PUSH_ACK: 02 0649 01
0:50:22.937742	LOG	PUSH_DATA: Protocol version = 02, Token = 0649, Identifier = 00, JSON = {'rxpk': [{'tmst': 2337643625, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAlwMBNttZ0nLL'}]}
0:50:22.939742	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0397, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 59d272cb)
0:50:22.940742	LOG	Server <---------- DUT
0:50:22.942741	LOG	Count = 24
0:50:23.240570	LOG	PULL_DATA: 02 1174 02 aa555a0000240409
0:50:23.243575	LOG	PULL_ACK: 02 1174 04
0:50:27.938902	LOG	PUSH_ACK: 02 064b 01
0:50:27.940901	LOG	PUSH_DATA: Protocol version = 02, Token = 064b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2342646237, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAmAMB+XA9GbaY'}]}
0:50:27.941901	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0398, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 3d19b698)
0:50:27.942900	LOG	Server <---------- DUT
0:50:27.944899	LOG	Count = 25
0:50:32.929066	LOG	PUSH_ACK: 02 064c 01
0:50:32.934064	LOG	PUSH_DATA: Protocol version = 02, Token = 064c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2347648857, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAmQMBrWfrCLTi'}]}
0:50:32.936062	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 0399, FOpts:), FPort: 01, FRMPayload: 0051, MIC: eb08b4e2)
0:50:32.937061	LOG	Server <---------- DUT
0:50:32.939060	LOG	Count = 26
0:50:33.320844	LOG	PULL_DATA: 02 b076 02 aa555a0000240409
0:50:33.323848	LOG	PULL_ACK: 02 b076 04
0:50:37.922229	LOG	PUSH_ACK: 02 064d 01
0:50:37.925229	LOG	PUSH_DATA: Protocol version = 02, Token = 064d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2352651481, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAmgMBKXu2vcRf'}]}
0:50:37.926227	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 039a, FOpts:), FPort: 01, FRMPayload: 0051, MIC: b6bdc45f)
0:50:37.927228	LOG	Server <---------- DUT
0:50:37.929225	LOG	Count = 27
0:50:42.964725	LOG	PUSH_ACK: 02 064e 01

0:50:42.967723	LOG	PUSH_DATA: Protocol version = 02, Token = 064e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2357654105, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAmwMBU4x5V6BY'}]}
0:50:42.969722	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 039b, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 7957a058)
0:50:42.970721	LOG	Server <---------- DUT
0:50:42.972720	LOG	Count = 28
0:50:43.400478	LOG	PULL_DATA: 02 caf2 02 aa555a0000240409
0:50:43.402476	LOG	PULL_ACK: 02 caf2 04
0:50:47.955890	LOG	PUSH_ACK: 02 064f 01
0:50:47.957889	LOG	PUSH_DATA: Protocol version = 02, Token = 064f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2362656729, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAnAMBPz6LXHrr'}]}
0:50:47.959887	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 039c, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 8b5c7aeb)
0:50:47.960886	LOG	Server <---------- DUT
0:50:47.962885	LOG	Count = 29
0:50:52.946186	LOG	PUSH_ACK: 02 0650 01
0:50:52.948185	LOG	PUSH_DATA: Protocol version = 02, Token = 0650, Identifier = 00, JSON = {'rxpk': [{'tmst': 2367659345, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAnQMBKicYvdpL'}]}
0:50:52.949184	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 039d, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 18bdda4b)
0:50:52.950184	LOG	Server <---------- DUT
0:50:52.952183	LOG	Count = 30
0:50:53.480882	LOG	PULL_DATA: 02 ab75 02 aa555a0000240409
0:50:53.482881	LOG	PULL_ACK: 02 ab75 04
0:50:57.949315	LOG	PUSH_ACK: 02 0652 01
0:50:57.951314	LOG	PUSH_DATA: Protocol version = 02, Token = 0652, Identifier = 00, JSON = {'rxpk': [{'tmst': 2372661977, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAngMBQnIT5khz'}]}
0:50:57.953313	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 039e, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 13e64873)
0:50:57.954313	LOG	Server <---------- DUT
0:50:57.956311	LOG	Count = 31
0:51:02.939481	LOG	PUSH_ACK: 02 0653 01
0:51:02.942479	LOG	PUSH_DATA: Protocol version = 02, Token = 0653, Identifier = 00, JSON = {'rxpk': [{'tmst': 2377664697, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 15, 'data': 'QCAgICDAnwMBvrfFT3EQ'}]}
0:51:02.946495	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 039f, FOpts:), FPort: 01, FRMPayload: 0051, MIC: c54f7110)
0:51:02.948475	LOG	Server <---------- DUT
0:51:02.950474	LOG	Count = 32
0:51:03.560127	LOG	PULL_DATA: 02 251c 02 aa555a0000240409
0:51:03.563126	LOG	PULL_ACK: 02 251c 04
0:51:07.981616	LOG	PUSH_ACK: 02 0654 01
0:51:07.983615	LOG	PUSH_DATA: Protocol version = 02, Token = 0654, Identifier = 00, JSON = {'rxpk': [{'tmst': 2382690388, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAoAMBqAFHdAFZ'}]}

0:51:07.985613	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 03a0, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 47740159)
0:51:07.986613	LOG	Server <---------- DUT
0:51:07.987612	LOG	Count = 33
0:51:07.997607	LOG	Expected number of uplink messages have been received
0:51:08.000605	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:51:12.971889	LOG	PUSH_ACK: 02 0655 01
0:51:12.973888	LOG	PUSH_DATA: Protocol version = 02, Token = 0655, Identifier = 00, JSON = {'rxpk': [{'tmst': 2387693004, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICDAoQMBNX1+kbPP'}]}
0:51:12.974887	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 03a1, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 7e91b3cf)
0:51:12.975887	LOG	Server <---------- DUT
0:51:12.978885	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:51:12.982881	LOG	ADRACKReq bit is activated
0:51:12.985880	LOG	ADRACKReq bit from DUT tested successfully
0:51:12.988878	LOG	Check previous uplink data rate process starts
0:51:12.992877	LOG	Uplink received with expected Data Rate
0:51:12.995874	LOG	Receive frame on specific channels process starts
0:51:13.006867	LOG	Attempt 1/15
0:51:13.640573	LOG	PULL_DATA: 02 ad08 02 aa555a0000240409
0:51:13.642571	LOG	PULL_ACK: 02 ad08 04
0:51:17.962174	LOG	PUSH_ACK: 02 0656 01
0:51:17.964152	LOG	PUSH_DATA: Protocol version = 02, Token = 0656, Identifier = 00, JSON = {'rxpk': [{'tmst': 2392695628, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDAogMBh3cVvx3H'}]}
0:51:17.966152	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 03a2, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 15bf1dc7)
0:51:17.968150	LOG	Server <---------- DUT
0:51:17.969149	LOG	Attempt 2/15
0:51:23.004164	LOG	PUSH_ACK: 02 0657 01
0:51:23.006162	LOG	PUSH_DATA: Protocol version = 02, Token = 0657, Identifier = 00, JSON = {'rxpk': [{'tmst': 2397698260, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICDAowMBFuVMGkYV'}]}
0:51:23.007166	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 03a3, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 4c1a4615)
0:51:23.008162	LOG	Server <---------- DUT
0:51:23.010165	LOG	Attempt 3/15
0:51:23.720755	LOG	PULL_DATA: 02 eb89 02 aa555a0000240409
0:51:23.722754	LOG	PULL_ACK: 02 eb89 04
0:51:28.011318	LOG	PUSH_ACK: 02 0659 01
0:51:28.013317	LOG	PUSH_DATA: Protocol version = 02, Token = 0659, Identifier = 00, JSON = {'rxpk': [{'tmst': 2402700884, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICDApAMBkN9FD4hc'}]}
0:51:28.015316	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 03a4, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 450f885c)
0:51:28.016315	LOG	Server <---------- DUT
0:51:28.018314	LOG	Attempt 4/15
0:51:33.002111	LOG	PUSH_ACK: 02 065a 01
0:51:33.008109	LOG	PUSH_DATA: Protocol version = 02, Token = 065a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2407703516, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDApQMBRi9UdO+J'}]}
0:51:33.010106	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 03a5, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 5474ef89)
0:51:33.011105	LOG	Server <---------- DUT
0:51:33.013106	LOG	Attempt 5/15
0:51:33.800184	LOG	PULL_DATA: 02 954d 02 aa555a0000240409
0:51:33.802183	LOG	PULL_ACK: 02 954d 04
0:51:37.995936	LOG	PUSH_ACK: 02 065b 01
0:51:37.997935	LOG	PUSH_DATA: Protocol version = 02, Token = 065b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2412706132, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICDApgMBoyX9thq6'}]}
0:51:37.998933	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 03a6, FOpts:), FPort: 01, FRMPayload: 0051, MIC: fdb61aba)
0:51:38.000932	LOG	Server <---------- DUT
0:51:38.003932	LOG	Receive frame on specific channels process tested successfully
0:51:38.008928	LOG	Send LinkADRReq process starts
0:51:42.986099	LOG	PUSH_ACK: 02 065c 01
0:51:42.988099	LOG	PUSH_DATA: Protocol version = 02, Token = 065c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2417708756, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICDApwMBHjdgINQI'}]}
0:51:42.990097	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: c0, FCnt: 03a7, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 6020d408)
0:51:42.992096	LOG	Server <---------- DUT
0:51:42.994095	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0190, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 1e2257a9)
0:51:42.996096	LOG	PULL_RESP: Protocol version = 02, Token = 0ce3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2419708756, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAkAEArfbunHMeIlep'}}
0:51:42.997095	LOG	Server ----------> DUT
0:51:43.002090	LOG	TX_ACK: 02 0ce3 05 aa555a0000240409
0:51:43.839543	LOG	PULL_DATA: 02 b438 02 aa555a0000240409
0:51:43.841542	LOG	PULL_ACK: 02 b438 04
0:51:47.987984	LOG	PUSH_ACK: 02 065d 01
0:51:47.990982	LOG	PUSH_DATA: Protocol version = 02, Token = 065d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2422716526, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCqAMDBwGUntZjYK0='}]}
0:51:47.991981	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 03a8, FOpts: 0307), FPort: 01, FRMPayload: 0051, MIC: d66360ad)
0:51:47.993980	LOG	Server <---------- DUT
0:51:47.995979	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:51:47.996978	LOG	Command Answer: 0307
0:51:48.004974	LOG	MAC command communication completed
0:51:48.008972	LOG	Check previous uplink data rate process starts
0:51:48.012969	LOG	Uplink received with expected Data Rate
0:51:48.014968	LOG	ADRACKReq bit is disabled
0:51:48.016967	LOG	ADRACKReq bit from DUT tested successfully
0:51:48.019965	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:51:52.978968	LOG	PUSH_ACK: 02 065e 01
0:51:52.981969	LOG	PUSH_DATA: Protocol version = 02, Token = 065e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2427714030, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAqQMBAMOQSM7L'}]}
0:51:52.982966	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03a9, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 9048cecb)
0:51:52.984964	LOG	Server <---------- DUT
0:51:52.985962	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0191, FOpts:), FPort: e0, FRMPayload: 0501), MIC: d0a43eb5)
0:51:52.988960	LOG	Frame command sent to the DUT
0:51:52.990960	LOG	PULL_RESP: Protocol version = 02, Token = 1f39, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2429714030, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAkQHgrFHQpD61'}}
0:51:52.992958	LOG	Server ----------> DUT
0:51:52.995957	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:51:53.000971	LOG	Send NewChannelReq process starts
0:51:54.040297	LOG	PULL_DATA: 02 edd1 02 aa555a0000240409
0:51:54.042296	LOG	PULL_ACK: 02 edd1 04
0:51:57.983057	LOG	PUSH_ACK: 02 0660 01
0:51:57.986055	LOG	PUSH_DATA: Protocol version = 02, Token = 0660, Identifier = 00, JSON = {'rxpk': [{'tmst': 2432716638, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAqgMBJ3caqURN'}]}
0:51:57.988054	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03aa, FOpts:), FPort: 01, FRMPayload: 0052, MIC: 1aa9444d)
0:51:57.990053	LOG	Server <---------- DUT
0:51:57.992052	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0192, FOpts:), FPort: 00, FRMPayload: 070300000050), MIC: be898df3)
0:51:57.995050	LOG	PULL_RESP: Protocol version = 02, Token = fb71, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2434716638, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAkgEA0kIn25lRvomN8w=='}}
0:51:57.996050	LOG	Server ----------> DUT
0:51:58.001047	LOG	TX_ACK: 02 fb71 05 aa555a0000240409
0:52:02.995210	LOG	PUSH_ACK: 02 0661 01
0:52:02.998208	LOG	PUSH_DATA: Protocol version = 02, Token = 0661, Identifier = 00, JSON = {'rxpk': [{'tmst': 2437724391, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCqwMHAwFeGlQM4p4='}]}
0:52:02.999207	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 03ab, FOpts: 0703), FPort: 01, FRMPayload: 0052, MIC: 540ce29e)
0:52:03.001206	LOG	Server <---------- DUT
0:52:03.003205	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:52:03.004205	LOG	Command Answer: 0703
0:52:03.010203	LOG	MAC command communication completed
0:52:03.014202	LOG	Send NewChannelReq process starts
0:52:04.090587	LOG	PULL_DATA: 02 e31e 02 aa555a0000240409
0:52:04.094585	LOG	PULL_ACK: 02 e31e 04
0:52:13.021533	LOG	PUSH_ACK: 02 0662 01
0:52:13.023513	LOG	PUSH_DATA: Protocol version = 02, Token = 0662, Identifier = 00, JSON = {'rxpk': [{'tmst': 2447724503, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCArAMB5BMOcZmc'}]}
0:52:13.025512	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03ac, FOpts:), FPort: 01, FRMPayload: 0052, MIC: 0e71999c)
0:52:13.026512	LOG	Server <---------- DUT

0:52:13.028509	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0193, FOpts:), FPort: 00, FRMPayload: 070400000050), MIC: e31f924b)
0:52:13.031509	LOG	PULL_RESP: Protocol version = 02, Token = 5a05, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2449724503, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAkwEAZeGgyHU64x+SSw==''}}
0:52:13.032507	LOG	Server ----------> DUT
0:52:13.037504	LOG	TX_ACK: 02 5a05 05 aa555a0000240409
0:52:14.289794	LOG	PULL_DATA: 02 5387 02 aa555a0000240409
0:52:14.291792	LOG	PULL_ACK: 02 5387 04
0:52:18.003684	LOG	PUSH_ACK: 02 0663 01
0:52:18.005682	LOG	PUSH_DATA: Protocol version = 02, Token = 0663, Identifier = 00, JSON = {'rxpk': [{'tmst': 2452732239, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCrQMHAwEp1z3nJkU=''}]}
0:52:18.006681	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 03ad, FOpts: 0703), FPort: 01, FRMPayload: 0052, MIC: 3de72645)
0:52:18.008680	LOG	Server <---------- DUT
0:52:18.010679	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:52:18.012678	LOG	Command Answer: 0703
0:52:18.018675	LOG	MAC command communication completed
0:52:18.022672	LOG	End Test Step: Data Rate Decay for optional data rates
0:52:18.027672	LOG	Partial Verdict: PASS
0:52:18.033667	LOG	==========
0:52:18.037664	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_012_B
0:52:18.040662	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_013	
Verdict	PASS	
Date	2021-10-18 14:52:05	
Comments	DutyCycleReq MAC Command	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.011209	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_013
0:00:00.048188	LOG	==========
0:00:00.050187	LOG	Start Test Step: Device activation
0:00:00.111152	LOG	Activation process has finished successfully
0:00:00.114150	LOG	Data stored in the DUT after Activation:
0:00:00.117149	LOG	DevAddr: 20202020
0:00:00.120147	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.122146	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.126144	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.129142	LOG	End Test Step: Device activation
0:00:00.134139	LOG	Partial Verdict: PASS
0:00:00.138137	LOG	==========
0:00:00.144135	LOG	==========

0:00:00.148131	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.161124	LOG	DUT Pre-condition activation process starts
0:00:00.164122	LOG	DUT Pre-condition activation completed
0:00:00.167121	LOG	End Test Step: DUT Pre-condition settings
0:00:00.171120	LOG	Partial Verdict: PASS
0:00:00.174117	LOG	==========
0:00:00.180113	LOG	==========
0:00:00.182113	LOG	Start Test Step: Test DutyCycleReq MAC Command
0:00:00.192106	LOG	Send LinkADRReq process starts
0:00:02.804656	LOG	PULL_DATA: 02 192f 02 aa555a0000240409
0:00:02.806655	LOG	PULL_ACK: 02 192f 04
0:00:02.807655	LOG	First PULL_DATA received
0:00:06.478569	LOG	PUSH_ACK: 02 0665 01
0:00:06.481567	LOG	PUSH_DATA: Protocol version = 02, Token = 0665, Identifier = 00, JSON = {'rxpk': [{'tmst': 2462732327, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCArgMBmdijeH0p'}]}
0:00:06.483566	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03ae, FOpts:), FPort: 01, FRMPayload: 0052, MIC: a3787d29)
0:00:06.484566	LOG	Server <---------- DUT
0:00:06.487564	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0194, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: cbd61ad2)
0:00:06.490562	LOG	PULL_RESP: Protocol version = 02, Token = 4ff4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2464732327, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAlAEANno/Vq/L1hrS'}}
0:00:06.492561	LOG	Server ----------> DUT
0:00:06.497558	LOG	TX_ACK: 02 4ff4 05 aa555a0000240409
0:00:11.445747	LOG	PUSH_ACK: 02 0666 01
0:00:11.447746	LOG	PUSH_DATA: Protocol version = 02, Token = 0666, Identifier = 00, JSON = {'rxpk': [{'tmst': 2467740065, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCrwMDBwGJD+DatrQ='}]}
0:00:11.449745	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 03af, FOpts: 0307), FPort: 01, FRMPayload: 0052, MIC: e0dab6b4)
0:00:11.451744	LOG	Server <---------- DUT
0:00:11.453742	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:11.484726	LOG	Command Answer: 0307
0:00:11.490721	LOG	MAC command communication completed
0:00:11.494719	LOG	Send DutyCycleReq process starts
0:00:13.004861	LOG	PULL_DATA: 02 e18c 02 aa555a0000240409
0:00:13.006860	LOG	PULL_ACK: 02 e18c 04
0:00:21.471052	LOG	PUSH_ACK: 02 0667 01
0:00:21.474050	LOG	PUSH_DATA: Protocol version = 02, Token = 0667, Identifier = 00, JSON = {'rxpk': [{'tmst': 2477740145, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAsAMBCp9PfNYZ'}]}
0:00:21.477048	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03b0, FOpts:), FPort: 01, FRMPayload: 0052, MIC: 4f7cd619)
0:00:21.479047	LOG	Server <---------- DUT
0:00:21.481046	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0195, FOpts:), FPort: 00, FRMPayload: 0407), MIC: 161f23d0)
0:00:21.484044	LOG	PULL_RESP: Protocol version = 02, Token = 97a9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2479740145, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAlQEA3RsWHyPQ'}}
0:00:21.486043	LOG	Server ----------> DUT
0:00:21.490294	LOG	TX_ACK: 02 97a9 05 aa555a0000240409
0:00:23.165100	LOG	PULL_DATA: 02 9c2b 02 aa555a0000240409
0:00:23.167099	LOG	PULL_ACK: 02 9c2b 04
0:00:26.444256	LOG	PUSH_ACK: 02 0668 01
0:00:26.446237	LOG	PUSH_DATA: Protocol version = 02, Token = 0668, Identifier = 00, JSON = {'rxpk': [{'tmst': 2482747882, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 16, 'data': 'QCAgICCBsQMEAd85R4H//A=='}]}
0:00:26.448236	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 03b1, FOpts: 04), FPort: 01, FRMPayload: 0052, MIC: 4781fffc)
0:00:26.449253	LOG	Server <---------- DUT
0:00:26.451235	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:26.453241	LOG	Command Answer: 04
0:00:26.457232	LOG	MAC command communication completed
0:00:26.464226	LOG	Calculated Time on air for previous uplink (in seconds): 0.051456
0:00:26.466225	LOG	Calculated Toff for previous uplink (in seconds): 6.535
0:00:26.471222	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:00:33.244517	LOG	PULL_DATA: 02 fcad 02 aa555a0000240409
0:00:33.248516	LOG	PULL_ACK: 02 fcad 04
0:00:36.484677	LOG	PUSH_ACK: 02 066a 01
0:00:36.486676	LOG	PUSH_DATA: Protocol version = 02, Token = 066a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2492747970, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAsgMBAfmf+ByN'}]}
0:00:36.488675	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03b2, FOpts:), FPort: 01, FRMPayload: 0052, MIC: 9ff81c8d)
0:00:36.490674	LOG	Server <---------- DUT
0:00:36.493672	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:00:36.500669	LOG	Calculated Time on air for previous uplink (in seconds): 0.046335999999999995
0:00:36.502668	LOG	Calculated Toff for previous uplink (in seconds): 5.885
0:00:36.514660	LOG	Send Test Command EchoPayloadReq process starts
0:00:43.324793	LOG	PULL_DATA: 02 9fac 02 aa555a0000240409
0:00:43.326790	LOG	PULL_ACK: 02 9fac 04
0:00:46.456012	LOG	PUSH_ACK: 02 066b 01
0:00:46.459011	LOG	PUSH_DATA: Protocol version = 02, Token = 066b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2502753202, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAswMBTortp9zJ'}]}
0:00:46.461010	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03b3, FOpts:), FPort: 01, FRMPayload: 0052, MIC: eda7dcc9)
0:00:46.462009	LOG	Server <---------- DUT
0:00:46.465007	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0196, FOpts:), FPort: e0, FRMPayload: 0801010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b34fa030)
0:00:46.468006	LOG	Frame command sent to the DUT
0:00:46.470005	LOG	PULL_RESP: Protocol version = 02, Token = 6e0f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2504753202, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 53, 'data': 'YCAgICAAlgHgFT40t93zavEIuP0rzuAe2Syhu0JwyDbVdAUbTbZayIlLzP7FdE9zcbNPoDA='}}

0:00:46.471004	LOG	Server ----------> DUT
0:00:46.478001	LOG	TX_ACK: 02 6e0f 05 aa555a0000240409
0:00:53.404064	LOG	PULL_DATA: 02 2369 02 aa555a0000240409
0:00:53.406064	LOG	PULL_ACK: 02 2369 04
0:00:56.569267	LOG	PUSH_ACK: 02 066c 01
0:00:56.572265	LOG	PUSH_DATA: Protocol version = 02, Token = 066c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2512824589, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 53, 'data': 'QCAgICCAtAPgknbsMKgzRaesquYC0/yz272tWHGnpUU+kdAnimSq3s56TQqL1o6s55L90Sg='}]}
0:00:56.574264	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03b4, FOpts:), FPort: e0, FRMPayload: 08020202020202020202020202020202020202020202020202020202020202020202020202020202, MIC: 92fdd128)
0:00:56.575263	LOG	Server <---------- DUT
0:00:56.577262	LOG	Answer in payload: 02020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:56.578262	LOG	Frame Command Payload in the Answer: 08020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:56.590255	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:56.602248	LOG	Send Test Command EchoPayloadReq process completed
0:00:56.617240	LOG	Calculated Time on air for previous uplink (in seconds): 0.10265600000000001
0:00:56.619239	LOG	Calculated Toff for previous uplink (in seconds): 13.037
0:00:56.633231	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:01:03.484338	LOG	PULL_DATA: 02 9fce 02 aa555a0000240409
0:01:03.489336	LOG	PULL_ACK: 02 9fce 04
0:01:11.490791	LOG	PUSH_ACK: 02 066e 01
0:01:11.493788	LOG	PUSH_DATA: Protocol version = 02, Token = 066e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2527766277, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAtQMBVdPEmOxo'}]}
0:01:11.494789	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03b5, FOpts:), FPort: 01, FRMPayload: 0053, MIC: c498ec68)
0:01:11.496788	LOG	Server <---------- DUT
0:01:11.500786	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:01:11.511778	LOG	End Test Step: Test DutyCycleReq MAC Command
0:01:11.515776	LOG	Partial Verdict: PASS
0:01:11.520773	LOG	==========
0:01:11.529768	LOG	==========
0:01:11.532766	LOG	Start Test Step: Restore default DutyCycle
0:01:11.543759	LOG	Send DutyCycleReq process starts
0:01:13.564611	LOG	PULL_DATA: 02 dec4 02 aa555a0000240409
0:01:13.566611	LOG	PULL_ACK: 02 dec4 04
0:01:21.517094	LOG	PUSH_ACK: 02 066f 01
0:01:21.519093	LOG	PUSH_DATA: Protocol version = 02, Token = 066f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2537771509, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAtgMBiCn70fyl'}]}
0:01:21.521093	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03b6, FOpts:), FPort: 01, FRMPayload: 0053, MIC: fbd1fca5)
0:01:21.522091	LOG	Server <---------- DUT
0:01:21.523090	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0197, FOpts:), FPort: 00, FRMPayload: 0400), MIC: 7a152dfb)

0:01:21.525091	LOG	PULL_RESP: Protocol version = 02, Token = d3fd, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2539771509, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAlwEAc7p6FS37'}}
0:01:21.527090	LOG	Server ----------> DUT
0:01:21.531086	LOG	TX_ACK: 02 d3fd 05 aa555a0000240409
0:01:23.623897	LOG	PULL_DATA: 02 ea8c 02 aa555a0000240409
0:01:23.625896	LOG	PULL_ACK: 02 ea8c 04
0:01:31.510416	LOG	PUSH_ACK: 02 0670 01
0:01:31.512415	LOG	PUSH_DATA: Protocol version = 02, Token = 0670, Identifier = 00, JSON = {'rxpk': [{'tmst': 2547781870, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBtwMEATkr9gGHlQ=='}]}
0:01:31.514414	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 03b7, FOpts: 04), FPort: 01, FRMPayload: 0053, MIC: f6018795)
0:01:31.515413	LOG	Server <---------- DUT
0:01:31.517412	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:31.519412	LOG	Command Answer: 04
0:01:31.523411	LOG	MAC command communication completed
0:01:31.525410	LOG	End Test Step: Restore default DutyCycle
0:01:31.530405	LOG	Partial Verdict: PASS
0:01:31.536402	LOG	==========
0:01:31.567384	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_013
0:01:31.570383	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_014	
Verdict	PASS	
Date	2021-10-18 14:53:40	
Comments	DeviceTimeReq MAC Command	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.027184	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_014
0:00:00.069162	LOG	==========
0:00:00.071158	LOG	Start Test Step: Device activation
0:00:00.131126	LOG	Activation process has finished successfully
0:00:00.133125	LOG	Data stored in the DUT after Activation:
0:00:00.135124	LOG	DevAddr: 20202020
0:00:00.138121	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.141119	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.144117	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.148115	LOG	End Test Step: Device activation
0:00:00.153113	LOG	Partial Verdict: PASS
0:00:00.158109	LOG	==========
0:00:00.165105	LOG	==========
0:00:00.168104	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.179097	LOG	DUT Pre-condition activation process starts

0:00:00.182096	LOG	DUT Pre-condition activation completed
0:00:00.185094	LOG	End Test Step: DUT Pre-condition settings
0:00:00.189092	LOG	Partial Verdict: PASS
0:00:00.193089	LOG	==========
0:00:00.198086	LOG	==========
0:00:00.200086	LOG	Start Test Step: Test DeviceTimeReq MAC Command
0:00:00.209080	LOG	Send Test Command DeviceTimeReq process starts
0:00:07.007217	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:09.298917	LOG	PULL_DATA: 02 1562 02 aa555a0000240409
0:00:09.301915	LOG	PULL_ACK: 02 1562 04
0:00:09.303913	LOG	First PULL_DATA received
0:00:12.002380	LOG	PUSH_ACK: 02 0673 01
0:00:12.009396	LOG	PUSH_DATA: Protocol version = 02, Token = 0673, Identifier = 00, JSON = {'rxpk': [{'tmst': 2562784558, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAuQMBpukIJcbg'}]}
0:00:12.014374	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 03b9, FOpts:), FPort: 01, FRMPayload: 0053, MIC: 0825c6e0)
0:00:12.018372	LOG	Server <---------- DUT
0:00:12.022369	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0198, FOpts:), FPort: e0, FRMPayload: 21), MIC: dc24f0b8)
0:00:12.026367	LOG	Frame command sent to the DUT
0:00:12.028366	LOG	PULL_RESP: Protocol version = 02, Token = 34b5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2564784558, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAmAHggtwk8Lg='}}
0:00:12.030365	LOG	Server ----------> DUT
0:00:12.035362	LOG	Send Test Command DeviceTimeReq process completed
0:00:12.039361	LOG	Wait a MAC command from the DUT process starts
0:00:17.002545	LOG	PUSH_ACK: 02 0674 01
0:00:17.005538	LOG	PUSH_DATA: Protocol version = 02, Token = 0674, Identifier = 00, JSON = {'rxpk': [{'tmst': 2567792279, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBugMNATcfcVpDRg=='}]}
0:00:17.006538	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 03ba, FOpts: 0d), FPort: 01, FRMPayload: 0054, MIC: 715a4346)
0:00:17.008537	LOG	Server <---------- DUT
0:00:17.009537	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:17.011535	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0199, FOpts:), FPort: 00, FRMPayload: 0d87d61200e3), MIC: d5df018a)
0:00:17.014533	LOG	PULL_RESP: Protocol version = 02, Token = 7fa2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2569792279, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAmQEAP7kj+VWD1d8Big=='}}
0:00:17.016534	LOG	Server ----------> DUT
0:00:17.019531	LOG	Wait a MAC command from the DUT process completed
0:00:17.022531	LOG	End Test Step: Test DeviceTimeReq MAC Command
0:00:17.026528	LOG	Partial Verdict: PASS
0:00:17.031523	LOG	==========
0:00:17.036521	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_014
0:00:17.039521	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_015_A
Verdict	PASS
Date	2021-10-18 18:36:27

Comments	RX1 Window Test (Part 1)	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	SF7BW250 Frequency	868.100
	FSK Frequency	868.100
	Data Rates to be measured	SF12BW125
	Conformance	False

Time Stamp (ms)	Event	Summary
0:00:00.013588	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_015_A
0:00:00.049567	LOG	WARN:TEST CASE CONFIGURATION NON CONFORMANCE
0:00:00.054564	LOG	==========
0:00:00.056565	LOG	Start Test Step: Device activation
0:00:00.067557	LOG	Over-The-Air Activation (OTAA) process starts
0:00:05.350548	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:09.018459	LOG	PULL_DATA: 01 ec18 02 fffeb827eb59d368
0:00:09.022456	LOG	PULL_ACK: 01 ec18 04 fffeb827eb59d368
0:00:13.229089	LOG	PUSH_ACK: 01 db5c 01 fffeb827eb59d368
0:00:13.236055	LOG	PUSH_DATA: Protocol version = 01, Token = db5c, Identifier = 00, JSON = {'rxpk': [{'tmst': 179812220, 'time': '2021-10-08T10:00:31.343141Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -25, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBICABFezD8='}]}
0:00:13.237054	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0002),MIC: 115ecc3f)
0:00:13.239053	LOG	Server <---------- DUT
0:00:13.241054	LOG	DevNonce is greater than the previous in Join Request
0:00:13.243052	LOG	Previous DevNonce: 0
0:00:13.244050	LOG	Actual DevNonce: 2
0:00:13.246049	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 010000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: 4435ff08)
0:00:13.248049	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 185812220, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IJSRzzIPlSjAiL6aGo72f1I='}}
0:00:13.250047	LOG	Server ----------> DUT
0:00:19.047744	LOG	PULL_DATA: 01 021a 02 fffeb827eb59d368
0:00:19.049742	LOG	PULL_ACK: 01 021a 04 fffeb827eb59d368
0:00:21.605288	LOG	PUSH_ACK: 01 fe43 01 fffeb827eb59d368
0:00:21.607285	LOG	PUSH_DATA: Protocol version = 01, Token = fe43, Identifier = 00, JSON = {'rxpk': [{'tmst': 188188876, 'time': '2021-10-08T10:00:39.718461Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAAAABAygJs+a6'}]}
0:00:21.608285	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0000, MIC: 09b3e6ba)
0:00:21.609286	LOG	Server <---------- DUT
0:00:21.615281	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:00:21.619279	LOG	Activation process has finished successfully
0:00:21.623276	LOG	Data stored in the DUT after Activation:
0:00:21.626274	LOG	DevAddr: 20202020

0:00:21.628275	LOG	AppEUI: abcdabcdabcdabcd
0:00:21.630273	LOG	NwkSKey: d48e676904b7cc9a59ca03263478dfc8
0:00:21.633270	LOG	AppSKey: f4468a9629d3307fa278886010ff5804
0:00:21.636269	LOG	End Test Step: Device activation
0:00:21.640268	LOG	Partial Verdict: PASS
0:00:21.645264	LOG	==========
0:00:21.650261	LOG	==========
0:00:21.653260	LOG	Start Test Step: DUT Pre-condition settings
0:00:21.668252	LOG	DUT Pre-condition activation process starts
0:00:21.674247	LOG	Check FCntUp after reset process starts
0:00:21.681243	LOG	Check FCntUp after reset process complete
0:00:21.688239	LOG	Send Test Command DutResetReq process starts
0:00:21.691237	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0001, FOpts:), FPort: e0, FRMPayload: 01), MIC: fa8bddc2)
0:00:21.693236	LOG	Frame command sent to the DUT
0:00:21.694235	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 190188876, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAAQDgwfqL3cI='}}
0:00:21.696234	LOG	Server ----------> DUT
0:00:21.698234	LOG	Send Test Command DutResetReq process completed
0:00:21.710226	LOG	Over-The-Air Activation (OTAA) process starts
0:00:29.097020	LOG	PULL_DATA: 01 aa3a 02 fffeb827eb59d368
0:00:29.099017	LOG	PULL_ACK: 01 aa3a 04 fffeb827eb59d368
0:00:33.419556	LOG	PUSH_ACK: 01 fb29 01 fffeb827eb59d368
0:00:33.423554	LOG	PUSH_DATA: Protocol version = 01, Token = fb29, Identifier = 00, JSON = {'rxpk': [{'tmst': 200007124, 'time': '2021-10-08T10:00:51.533648Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -27, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIDAO7oGBU='}]}
0:00:33.425553	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0003),MIC: eee81815)
0:00:33.426553	LOG	Server <---------- DUT
0:00:33.427553	LOG	DevNonce is greater than the previous in Join Request
0:00:33.429550	LOG	Previous DevNonce: 2
0:00:33.430549	LOG	Actual DevNonce: 3
0:00:33.432550	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 020000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: c4632611)
0:00:33.435547	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 205007124, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IBJVOZCuXTyX4MJJ3H3tY0Q='}}
0:00:33.471526	LOG	Server ----------> DUT
0:00:39.267225	LOG	PULL_DATA: 01 d1e6 02 fffeb827eb59d368
0:00:39.269223	LOG	PULL_ACK: 01 d1e6 04 fffeb827eb59d368
0:00:40.799351	LOG	PUSH_ACK: 01 053c 01 fffeb827eb59d368
0:00:40.801350	LOG	PUSH_DATA: Protocol version = 01, Token = 053c, Identifier = 00, JSON = {'rxpk': [{'tmst': 207383780, 'time': '2021-10-08T10:00:58.913183Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAAAABKh32QD9c'}]}
0:00:40.803349	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0000, MIC: f6403f5c)
0:00:40.804348	LOG	Server <---------- DUT
0:00:40.808346	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:00:40.811346	LOG	Activation process has finished successfully
0:00:40.813344	LOG	Data stored in the DUT after Activation:

0:00:40.816341	LOG	DevAddr: 20202020
0:00:40.819340	LOG	AppEUI: abcdabcdabcdabcd
0:00:40.823337	LOG	NwkSKey: e1fd270065a9f0aa5a564cfb823c800a
0:00:40.827336	LOG	AppSKey: f5daca433769fa91d94cb415a713359b
0:00:40.841327	LOG	Check FCntUp after reset process starts
0:00:40.847324	LOG	Check FCntUp after reset process complete
0:00:40.856319	LOG	Send Test Command TxPeriodicityChange process starts
0:00:40.860317	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0002, FOpts:), FPort: e0, FRMPayload: 0601), MIC: 589bd86d)
0:00:40.862316	LOG	Frame command sent to the DUT
0:00:40.864315	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 209383780, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAAgDgTPhYm9ht'}}
0:00:40.865313	LOG	Server ----------> DUT
0:00:40.869311	LOG	Send Test Command TxPeriodicityChange process completed
0:00:40.875308	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:49.467413	LOG	PULL_DATA: 01 7c94 02 fffeb827eb59d368
0:00:49.469412	LOG	PULL_ACK: 01 7c94 04 fffeb827eb59d368
0:00:50.166016	LOG	PUSH_ACK: 01 75d8 01 fffeb827eb59d368
0:00:50.168015	LOG	PUSH_DATA: Protocol version = 01, Token = 75d8, Identifier = 00, JSON = {'rxpk': [{'tmst': 216749700, 'time': '2021-10-08T10:01:08.279426Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAAQABw7wZfe/+'}]}
0:00:50.170013	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0001, MIC: 197deffe)
0:00:50.171031	LOG	Server <---------- DUT
0:00:50.173013	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0003, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 778b935c)
0:00:50.175012	LOG	Frame command sent to the DUT
0:00:50.176011	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 218749700, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAAwDgeIV3i5Nc'}}
0:00:50.178009	LOG	Server ----------> DUT
0:00:50.181006	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:50.185004	LOG	Check ADR bit process starts
0:00:55.163185	LOG	PUSH_ACK: 01 be61 01 fffeb827eb59d368
0:00:55.165168	LOG	PUSH_DATA: Protocol version = 01, Token = be61, Identifier = 00, JSON = {'rxpk': [{'tmst': 221752284, 'time': '2021-10-08T10:01:13.276346Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAAgABICpgyD7t'}]}
0:00:55.166166	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 60c83eed)
0:00:55.167166	LOG	Server <---------- DUT
0:00:55.170164	LOG	ADR bit in FCtrl field is set
0:00:55.175161	LOG	Send LinkADRReq process starts
0:00:59.576654	LOG	PULL_DATA: 01 89f9 02 fffeb827eb59d368
0:00:59.578654	LOG	PULL_ACK: 01 89f9 04 fffeb827eb59d368
0:01:00.171315	LOG	PUSH_ACK: 01 5cbb 01 fffeb827eb59d368
0:01:00.173314	LOG	PUSH_DATA: Protocol version = 01, Token = 5cbb, Identifier = 00, JSON = {'rxpk': [{'tmst': 226754860, 'time': '2021-10-08T10:01:18.284950Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAAwABkZHwyvdb'}]}
0:01:00.175312	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 0002, MIC: f0caf75b)

0:01:00.176312	LOG	Server <---------- DUT
0:01:00.177311	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0004, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 60925fc4)
0:01:00.180310	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 228754860, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAABAAAMTH6Qr1gkl/E'}}
0:01:00.182308	LOG	Server ----------> DUT
0:01:04.044108	LOG	PUSH_ACK: 01 a899 01 fffeb827eb59d368
0:01:04.048106	LOG	PUSH_DATA: Protocol version = 01, Token = a899, Identifier = 00, JSON = {'rxpk': [{'tmst': 230653931, 'time': '2021-10-08T10:01:22.157581Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -15, 'size': 17, 'data': 'QCAgICCCBAADBwH81jcEIHw='}]}
0:01:04.049107	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0004, FOpts: 0307), FPort: 01, FRMPayload: 0002, MIC: 3704207c)
0:01:04.050107	LOG	Server <---------- DUT
0:01:04.052104	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:04.054103	LOG	Command Answer: 0307
0:01:04.063099	LOG	MAC command communication completed
0:01:04.073092	LOG	Send Test Command DutVersionsReq process starts
0:01:09.033268	LOG	PUSH_ACK: 01 0f95 01 fffeb827eb59d368
0:01:09.035266	LOG	PUSH_DATA: Protocol version = 01, Token = 0f95, Identifier = 00, JSON = {'rxpk': [{'tmst': 235651379, 'time': '2021-10-08T10:01:27.146648Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCABQABbjSDEHEq'}]}
0:01:09.036264	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0005, FOpts:), FPort: 01, FRMPayload: 0002, MIC: 8310712a)
0:01:09.037266	LOG	Server <---------- DUT
0:01:09.039263	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0005, FOpts:), FPort: e0, FRMPayload: 7f), MIC: 6419a666)
0:01:09.042263	LOG	Frame command sent to the DUT
0:01:09.043260	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 237651379, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAABQDg12QZpmY='}}
0:01:09.044259	LOG	Server ----------> DUT
0:01:09.646916	LOG	PULL_DATA: 01 b1eb 02 fffeb827eb59d368
0:01:09.648915	LOG	PULL_ACK: 01 b1eb 04 fffeb827eb59d368
0:01:14.060402	LOG	PUSH_ACK: 01 f1b3 01 fffeb827eb59d368
0:01:14.062400	LOG	PUSH_DATA: Protocol version = 01, Token = f1b3, Identifier = 00, JSON = {'rxpk': [{'tmst': 240673651, 'time': '2021-10-08T10:01:32.173519Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -15, 'size': 23, 'data': 'QCAgICCABgDgj055eJ75buGpvQM79eY='}]}
0:01:14.063400	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0006, FOpts:), FPort: e0, FRMPayload: 7f010004010004010004, MIC: 033bf5e6)
0:01:14.065399	LOG	Server <---------- DUT
0:01:14.066399	LOG	Answer in payload: 010004010004010004
0:01:14.068398	LOG	Frame Command Payload in the Answer: 7f010004010004010004
0:01:14.074394	LOG	DUT Version received: 010004010004010004
0:01:14.078392	LOG	Send Test Command DutVersionsReq completed
0:01:14.082390	LOG	DUT Pre-condition activation completed
0:01:14.086387	LOG	End Test Step: DUT Pre-condition settings
0:01:14.092384	LOG	Partial Verdict: PASS
0:01:14.099380	LOG	==========
0:01:14.106376	LOG	==========

0:01:14.109374	LOG	Start Test Step: Initial settings for the test
0:01:14.118369	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:19.847104	LOG	PULL_DATA: 01 05ef 02 fffeb827eb59d368
0:01:19.848106	LOG	PULL_ACK: 01 05ef 04 fffeb827eb59d368
0:01:20.181916	LOG	PUSH_ACK: 01 f700 01 fffeb827eb59d368
0:01:20.183914	LOG	PUSH_DATA: Protocol version = 01, Token = f700, Identifier = 00, JSON = {'rxpk': [{'tmst': 246765228, 'time': '2021-10-08T10:01:38.295631Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -11, 'size': 15, 'data': 'QCAgICCABwABuBFnIOLR'}]}
0:01:20.185912	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0007, FOpts:), FPort: 01, FRMPayload: 0003, MIC: 6720e2d1)
0:01:20.186912	LOG	Server <---------- DUT
0:01:20.188912	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0006, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 644bb7af)
0:01:20.190909	LOG	Frame command sent to the DUT
0:01:20.191926	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 248765228, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAABgDgSexkS7ev'}}
0:01:20.192926	LOG	Server ----------> DUT
0:01:20.195925	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:20.198905	LOG	End Test Step: Initial settings for the test
0:01:20.202903	LOG	Partial Verdict: PASS
0:01:20.207901	LOG	==========
0:01:20.212899	LOG	==========
0:01:20.215895	LOG	Start Test Step: Test packet error rate for SF12BW125 using RX1 window
0:01:20.230887	LOG	Send LinkADRReq process starts
0:01:25.178068	LOG	PUSH_ACK: 01 e9a1 01 fffeb827eb59d368
0:01:25.181066	LOG	PUSH_DATA: Protocol version = 01, Token = e9a1, Identifier = 00, JSON = {'rxpk': [{'tmst': 251767796, 'time': '2021-10-08T10:01:43.291757Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -12, 'size': 15, 'data': 'QCAgICCACAAB/GbpUd1o'}]}
0:01:25.183065	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0008, FOpts:), FPort: 01, FRMPayload: 0004, MIC: e951dd68)
0:01:25.184065	LOG	Server <---------- DUT
0:01:25.186064	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0007, FOpts:), FPort: 00, FRMPayload: 0300070001), MIC: f6ad08af)
0:01:25.190061	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 253767796, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAABwAArRWD2+D2rQiv'}}
0:01:25.192060	LOG	Server ----------> DUT
0:01:29.987328	LOG	PULL_DATA: 01 3ae5 02 fffeb827eb59d368
0:01:29.988329	LOG	PULL_ACK: 01 3ae5 04 fffeb827eb59d368
0:01:30.348124	LOG	PUSH_ACK: 01 ca0b 01 fffeb827eb59d368
0:01:30.350121	LOG	PUSH_DATA: Protocol version = 01, Token = ca0b, Identifier = 00, JSON = {'rxpk': [{'tmst': 256934276, 'time': '2021-10-08T10:01:48.461612Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -11, 'size': 17, 'data': 'QCAgICCCCQADBwHtzjgFcOw='}]}
0:01:30.352120	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0009, FOpts: 0307), FPort: 01, FRMPayload: 0004, MIC: 380570ec)
0:01:30.354120	LOG	Server <---------- DUT
0:01:30.355119	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:30.357117	LOG	Command Answer: 0307
0:01:30.363114	LOG	MAC command communication completed

0:01:30.368111	LOG	Send RXParamSetupReq process starts
0:01:35.182387	LOG	PUSH_ACK: 01 cbd0 01 fffeb827eb59d368
0:01:35.191364	LOG	PUSH_DATA: Protocol version = 01, Token = cbd0, Identifier = 00, JSON = {'rxpk': [{'tmst': 261773076, 'time': '2021-10-08T10:01:53.295057Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -15, 'size': 15, 'data': 'QCAgICCACgABuKzzx+E+'}]}
0:01:35.192363	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000a, FOpts:), FPort: 01, FRMPayload: 0004, MIC: f3c7e13e)
0:01:35.194363	LOG	Server <---------- DUT
0:01:35.195361	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0008, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: ed5a118e)
0:01:35.198359	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 263773076, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAACAAAkov77aDtWhGO'}}
0:01:35.199360	LOG	Server ----------> DUT
0:01:39.996625	LOG	PULL_DATA: 01 4847 02 fffeb827eb59d368
0:01:39.998625	LOG	PULL_ACK: 01 4847 04 fffeb827eb59d368
0:01:40.348443	LOG	PUSH_ACK: 01 64bd 01 fffeb827eb59d368
0:01:40.350424	LOG	PUSH_DATA: Protocol version = 01, Token = 64bd, Identifier = 00, JSON = {'rxpk': [{'tmst': 266939500, 'time': '2021-10-08T10:01:58.461931Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -11, 'size': 17, 'data': 'QCAgICCCCwAFBwH47vDV1+M='}]}
0:01:40.351425	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 000b, FOpts: 0507), FPort: 01, FRMPayload: 0004, MIC: f0d5d7e3)
0:01:40.352423	LOG	Server <---------- DUT
0:01:40.354422	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:40.355421	LOG	Command Answer: 0507
0:01:40.374410	LOG	MAC command communication completed
0:01:40.378408	LOG	Send Test Command RxAppCntReq process starts
0:01:45.355573	LOG	PUSH_ACK: 01 1f23 01 fffeb827eb59d368
0:01:45.357573	LOG	PUSH_DATA: Protocol version = 01, Token = 1f23, Identifier = 00, JSON = {'rxpk': [{'tmst': 271942076, 'time': '2021-10-08T10:02:03.469031Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -15, 'size': 17, 'data': 'QCAgICCCDAAFBwE2EgpGMbw='}]}
0:01:45.358572	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 000c, FOpts: 0507), FPort: 01, FRMPayload: 0004, MIC: 0a4631bc)
0:01:45.360570	LOG	Server <---------- DUT
0:01:45.361571	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0009, FOpts:), FPort: e0, FRMPayload: 09), MIC: 2487a596)
0:01:45.363570	LOG	Frame command sent to the DUT
0:01:45.365569	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 273942076, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAACQDgSCSHpZY='}}
0:01:45.366567	LOG	Server ----------> DUT
0:01:50.166849	LOG	PULL_DATA: 01 1ea8 02 fffeb827eb59d368
0:01:50.168830	LOG	PULL_ACK: 01 1ea8 04 fffeb827eb59d368
0:01:50.362720	LOG	PUSH_ACK: 01 1c7b 01 fffeb827eb59d368
0:01:50.364718	LOG	PUSH_DATA: Protocol version = 01, Token = 1c7b, Identifier = 00, JSON = {'rxpk': [{'tmst': 276947580, 'time': '2021-10-08T10:02:08.476083Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -13, 'size': 16, 'data': 'QCAgICCADQDgOcNj2l4FsA=='}]}
0:01:50.365719	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000d, FOpts:), FPort: e0, FRMPayload: 090500, MIC: da5e05b0)

0:01:50.367717	LOG	Server <---------- DUT
0:01:50.368717	LOG	Answer in payload: 0500
0:01:50.370715	LOG	Frame Command Payload in the Answer: 090500
0:01:50.375712	LOG	RX Count received by DUT: 5
0:01:50.378711	LOG	Send Test Command RxAppCntReq process completed
0:01:50.380710	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:01:55.191969	LOG	PUSH_ACK: 01 64c5 01 fffeb827eb59d368
0:01:55.193968	LOG	PUSH_DATA: Protocol version = 01, Token = 64c5, Identifier = 00, JSON = {'rxpk': [{'tmst': 281783372, 'time': '2021-10-08T10:02:13.305644Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -15, 'size': 15, 'data': 'QCAgICCADgABPBSN7HEv'}]}
0:01:55.194967	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000e, FOpts:), FPort: 01, FRMPayload: 0005, MIC: 8dec712f)
0:01:55.196966	LOG	Server <---------- DUT
0:01:55.197965	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000a, FOpts:), FPort: e0, FRMPayload: 0500), MIC: ce4c9795)
0:01:55.200963	LOG	Frame command sent to the DUT
0:01:55.202963	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 283783372, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAACgDgmfrOTJeV'}}
0:01:55.204961	LOG	Server ----------> DUT
0:01:55.208959	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:01:55.217954	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:00.197136	LOG	PUSH_ACK: 01 1473 01 fffeb827eb59d368
0:02:00.199116	LOG	PUSH_DATA: Protocol version = 01, Token = 1473, Identifier = 00, JSON = {'rxpk': [{'tmst': 286785956, 'time': '2021-10-08T10:02:18.311587Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -11, 'size': 15, 'data': 'QCAgICCADwABerxg/mNe'}]}
0:02:00.201115	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 000f, FOpts:), FPort: 01, FRMPayload: 0006, MIC: 60fe635e)
0:02:00.202116	LOG	Server <---------- DUT
0:02:00.204113	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000b, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 25d408b1)
0:02:00.207112	LOG	Frame command sent to the DUT
0:02:00.209112	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 287785956, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAACwDgggwl1Aix'}}
0:02:00.210109	LOG	Server ----------> DUT
0:02:00.214107	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:00.217106	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:05.196269	LOG	PUSH_ACK: 01 5e4b 01 fffeb827eb59d368
0:02:05.198268	LOG	PUSH_DATA: Protocol version = 01, Token = 5e4b, Identifier = 00, JSON = {'rxpk': [{'tmst': 291788508, 'time': '2021-10-08T10:02:23.310306Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAEAABuj9k7wMU'}]}
0:02:05.199267	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0010, FOpts:), FPort: 01, FRMPayload: 0007, MIC: 64ef0314)
0:02:05.201266	LOG	Server <---------- DUT
0:02:05.202266	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000c, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 482927bb)
0:02:05.209261	LOG	Frame command sent to the DUT
0:02:05.211260	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 292788508, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAADADgcI5IKSe7'}}
0:02:05.212260	LOG	Server ----------> DUT
0:02:05.215258	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:05.220255	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:10.201418	LOG	PUSH_ACK: 01 7963 01 fffeb827eb59d368
0:02:10.203416	LOG	PUSH_DATA: Protocol version = 01, Token = 7963, Identifier = 00, JSON = {'rxpk': [{'tmst': 296791084, 'time': '2021-10-08T10:02:28.315886Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAEQABDVFVVcUu'}]}
0:02:10.205416	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0011, FOpts:), FPort: 01, FRMPayload: 0008, MIC: 5555c52e)
0:02:10.206414	LOG	Server <---------- DUT
0:02:10.208413	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000d, FOpts:), FPort: e0, FRMPayload: 0700), MIC: e1a34c4b)
0:02:10.211412	LOG	Frame command sent to the DUT
0:02:10.212412	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 297791084, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAADQDgVpXho0xL'}}
0:02:10.214410	LOG	Server ----------> DUT
0:02:10.217408	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:10.220407	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:15.201569	LOG	PUSH_ACK: 01 6424 01 fffeb827eb59d368
0:02:15.203568	LOG	PUSH_DATA: Protocol version = 01, Token = 6424, Identifier = 00, JSON = {'rxpk': [{'tmst': 301793644, 'time': '2021-10-08T10:02:33.315186Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAEgABXCgvKllb'}]}
0:02:15.205567	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0012, FOpts:), FPort: 01, FRMPayload: 0009, MIC: 2f2a595b)
0:02:15.206566	LOG	Server <---------- DUT
0:02:15.208566	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000e, FOpts:), FPort: e0, FRMPayload: 0700), MIC: d01b5aa3)
0:02:15.210565	LOG	Frame command sent to the DUT
0:02:15.211565	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 302793644, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAADgDg367QG1qj'}}
0:02:15.213562	LOG	Server ----------> DUT
0:02:15.215562	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:15.224556	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:20.210714	LOG	PUSH_ACK: 01 119e 01 fffeb827eb59d368
0:02:20.216712	LOG	PUSH_DATA: Protocol version = 01, Token = 119e, Identifier = 00, JSON = {'rxpk': [{'tmst': 306796196, 'time': '2021-10-08T10:02:38.324006Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAEwABDKKZb5Nm'}]}
0:02:20.220709	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0013, FOpts:), FPort: 01, FRMPayload: 000a, MIC: 996f9366)
0:02:20.222710	LOG	Server <---------- DUT
0:02:20.225706	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 000f, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8b1b3141)
0:02:20.228705	LOG	Frame command sent to the DUT
0:02:20.230704	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 307796196, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'oCAgICAADwDgoIkXMiannpjfGp9a9gEg6TypPwQLDdVVHp6kcdE+UsSsqp2GKbnCBkGxWeiXewoT4caaixsxQQ==''}}
0:02:20.232704	LOG	Server ----------> DUT
0:02:20.236700	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:20.240698	LOG	Check previous uplink data rate process starts
0:02:20.271681	LOG	Uplink received with expected Data Rate
0:02:20.274678	LOG	Check ACK bit in next uplink starts
0:02:25.225859	LOG	PUSH_ACK: 01 aad4 01 fffeb827eb59d368
0:02:25.227858	LOG	PUSH_DATA: Protocol version = 01, Token = aad4, Identifier = 00, JSON = {'rxpk': [{'tmst': 311812732, 'time': '2021-10-08T10:02:43.339203Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -13, 'size': 15, 'data': 'QCAgICCgFAABAv9otYbC'}]}
0:02:25.229856	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 0014, FOpts:), FPort: 01, FRMPayload: 000b, MIC: 68b586c2)
0:02:25.230855	LOG	Server <---------- DUT
0:02:25.233855	LOG	Check ACK bit in next uplink tested successfully
0:02:25.238852	LOG	Send Test Command RxAppCntReq process starts
0:02:30.226008	LOG	PUSH_ACK: 01 acf2 01 fffeb827eb59d368
0:02:30.227008	LOG	PUSH_DATA: Protocol version = 01, Token = acf2, Identifier = 00, JSON = {'rxpk': [{'tmst': 316815308, 'time': '2021-10-08T10:02:48.339679Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAFQABxpHG0Hmj'}]}
0:02:30.229009	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0015, FOpts:), FPort: 01, FRMPayload: 000b, MIC: c6d079a3)
0:02:30.230009	LOG	Server <---------- DUT
0:02:30.231025	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0010, FOpts:), FPort: e0, FRMPayload: 09), MIC: a51c2965)
0:02:30.233024	LOG	Frame command sent to the DUT
0:02:30.234005	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 318815308, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAEADg2qUcKWU='}}
0:02:30.235004	LOG	Server ----------> DUT
0:02:35.391818	LOG	PUSH_ACK: 01 af3b 01 fffeb827eb59d368
0:02:35.396817	LOG	PUSH_DATA: Protocol version = 01, Token = af3b, Identifier = 00, JSON = {'rxpk': [{'tmst': 321984716, 'time': '2021-10-08T10:02:53.505896Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -12, 'size': 16, 'data': 'QCAgICCAFgDgUOmRPDRj9g==''}]}
0:02:35.397817	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0016, FOpts:), FPort: e0, FRMPayload: 090c00, MIC: 3c3463f6)
0:02:35.399815	LOG	Server <---------- DUT
0:02:35.400814	LOG	Answer in payload: 0c00
0:02:35.402814	LOG	Frame Command Payload in the Answer: 090c00
0:02:35.408810	LOG	RX Count received by DUT: 12
0:02:35.411780	LOG	Send Test Command RxAppCntReq process completed
0:02:35.418804	LOG	Send RXParamSetupReq process starts
0:02:40.238089	LOG	PUSH_ACK: 01 33cd 01 fffeb827eb59d368
0:02:40.240086	LOG	PUSH_DATA: Protocol version = 01, Token = 33cd, Identifier = 00, JSON = {'rxpk': [{'tmst': 326820508, 'time': '2021-10-08T10:02:58.351776Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAFwABaooNqS79'}]}
0:02:40.242086	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0017, FOpts:), FPort: 01, FRMPayload: 000c, MIC: 0da92efd)
0:02:40.243085	LOG	Server <---------- DUT

0:02:40.245085	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0011, FOpts:), FPort: 00, FRMPayload: 0510d2ad84), MIC: fe1fb038)
0:02:40.248085	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 328820508, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAEQAA+9Pk/vH+H7A4'}}
0:02:40.249083	LOG	Server ----------> DUT
0:02:40.253079	LOG	PULL_DATA: 01 e350 02 fffeb827eb59d368
0:02:40.254078	LOG	PULL_ACK: 01 e350 04 fffeb827eb59d368
0:02:45.399147	LOG	PUSH_ACK: 01 4847 01 fffeb827eb59d368
0:02:45.401146	LOG	PUSH_DATA: Protocol version = 01, Token = 4847, Identifier = 00, JSON = {'rxpk': [{'tmst': 331986972, 'time': '2021-10-08T10:03:03.513170Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -14, 'size': 17, 'data': 'QCAgICCCGAAFBwG9c95jV4c='}]}
0:02:45.403145	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0018, FOpts: 0507), FPort: 01, FRMPayload: 000c, MIC: de635787)
0:02:45.404146	LOG	Server <---------- DUT
0:02:45.406144	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:45.408143	LOG	Command Answer: 0507
0:02:45.425134	LOG	MAC command communication completed
0:02:45.428133	LOG	Send Test Command RxAppCntReq process starts
0:02:50.256380	LOG	PULL_DATA: 01 155c 02 fffeb827eb59d368
0:02:50.258379	LOG	PULL_ACK: 01 155c 04 fffeb827eb59d368
0:02:50.398299	LOG	PUSH_ACK: 01 bb6f 01 fffeb827eb59d368
0:02:50.400298	LOG	PUSH_DATA: Protocol version = 01, Token = bb6f, Identifier = 00, JSON = {'rxpk': [{'tmst': 336989588, 'time': '2021-10-08T10:03:08.512391Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -11, 'size': 17, 'data': 'QCAgICCCGQAFBwFTKuLEcN4='}]}
0:02:50.402297	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0019, FOpts: 0507), FPort: 01, FRMPayload: 000c, MIC: e2c470de)
0:02:50.404296	LOG	Server <---------- DUT
0:02:50.406296	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0012, FOpts:), FPort: e0, FRMPayload: 09), MIC: 5786fc05)
0:02:50.409293	LOG	Frame command sent to the DUT
0:02:50.411292	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 338989588, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAEgDgm1eG/AU='}}
0:02:50.412292	LOG	Server ----------> DUT
0:02:55.404468	LOG	PUSH_ACK: 01 2219 01 fffeb827eb59d368
0:02:55.406467	LOG	PUSH_DATA: Protocol version = 01, Token = 2219, Identifier = 00, JSON = {'rxpk': [{'tmst': 341995132, 'time': '2021-10-08T10:03:13.518540Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -13, 'size': 16, 'data': 'QCAgICCAGgDg/LKfr5dqFw=='}]}
0:02:55.408466	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001a, FOpts:), FPort: e0, FRMPayload: 090d00, MIC: af976a17)
0:02:55.409465	LOG	Server <---------- DUT
0:02:55.410464	LOG	Answer in payload: 0d00
0:02:55.412463	LOG	Frame Command Payload in the Answer: 090d00
0:02:55.416461	LOG	RX Count received by DUT: 13
0:02:55.419459	LOG	Send Test Command RxAppCntReq process completed
0:02:55.422458	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:03:00.247751	LOG	PUSH_ACK: 01 ba9b 01 fffeb827eb59d368
0:03:00.249750	LOG	PUSH_DATA: Protocol version = 01, Token = ba9b, Identifier = 00, JSON = {'rxpk': [{'tmst': 346830940, 'time': '2021-10-08T10:03:18.361720Z', 'chan': 2,

		'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAGwABmG5m6ZOC'}]}
0:03:00.250750	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001b, FOpts:), FPort: 01, FRMPayload: 000d, MIC: 66e99382)
0:03:00.252747	LOG	Server <---------- DUT
0:03:00.253746	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0013, FOpts:), FPort: e0, FRMPayload: 0500), MIC: dd43fc5a)
0:03:00.256745	LOG	Frame command sent to the DUT
0:03:00.258744	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 348830940, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAEwDgUrTdQ/xa'}}
0:03:00.260743	LOG	Server ----------> DUT
0:03:00.263741	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:03:00.269739	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:05.242904	LOG	PUSH_ACK: 01 0be1 01 fffeb827eb59d368
0:03:05.244903	LOG	PUSH_DATA: Protocol version = 01, Token = 0be1, Identifier = 00, JSON = {'rxpk': [{'tmst': 351833572, 'time': '2021-10-08T10:03:23.357279Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAHAABebrGDJB3'}]}
0:03:05.246902	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001c, FOpts:), FPort: 01, FRMPayload: 000e, MIC: c60c9077)
0:03:05.247901	LOG	Server <---------- DUT
0:03:05.249900	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0014, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 3411613d)
0:03:05.251899	LOG	Frame command sent to the DUT
0:03:05.252898	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 352833572, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAFADgAd80EWE9'}}
0:03:05.253898	LOG	Server ----------> DUT
0:03:05.257896	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:05.261893	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:10.250053	LOG	PUSH_ACK: 01 1a1c 01 fffeb827eb59d368
0:03:10.254051	LOG	PUSH_DATA: Protocol version = 01, Token = 1a1c, Identifier = 00, JSON = {'rxpk': [{'tmst': 356836188, 'time': '2021-10-08T10:03:28.363688Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAHQABnQlS3Hvt'}]}
0:03:10.255049	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001d, FOpts:), FPort: 01, FRMPayload: 000f, MIC: 52dc7bed)
0:03:10.257048	LOG	Server <---------- DUT
0:03:10.259047	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0015, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 29956e56)
0:03:10.261045	LOG	Frame command sent to the DUT
0:03:10.262045	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 357836188, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAFQDg6MAplW5W'}}
0:03:10.264045	LOG	Server ----------> DUT
0:03:10.267042	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:10.270040	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:15.247205	LOG	PUSH_ACK: 01 f829 01 fffeb827eb59d368
0:03:15.249203	LOG	PUSH_DATA: Protocol version = 01, Token = f829, Identifier = 00, JSON = {'rxpk': [{'tmst': 361838828, 'time': '2021-10-08T10:03:33.361639Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAHgABZb4T09r9'}]}

0:03:15.251203	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001e, FOpts:), FPort: 01, FRMPayload: 0010, MIC: 13d3dafd)
0:03:15.252202	LOG	Server <---------- DUT
0:03:15.253201	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0016, FOpts:), FPort: e0, FRMPayload: 0700), MIC: cca65d32)
0:03:15.256200	LOG	Frame command sent to the DUT
0:03:15.258199	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 362838828, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAFgDgFqrMpl0y'}}
0:03:15.260198	LOG	Server ----------> DUT
0:03:15.263195	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:15.267193	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:20.254353	LOG	PUSH_ACK: 01 f8a4 01 fffeb827eb59d368
0:03:20.256352	LOG	PUSH_DATA: Protocol version = 01, Token = f8a4, Identifier = 00, JSON = {'rxpk': [{'tmst': 366841420, 'time': '2021-10-08T10:03:38.367952Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAHwABY+iV6ReB'}]}
0:03:20.257351	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 001f, FOpts:), FPort: 01, FRMPayload: 0011, MIC: 95e91781)
0:03:20.259349	LOG	Server <---------- DUT
0:03:20.261349	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0017, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 2938bfaf)
0:03:20.263347	LOG	Frame command sent to the DUT
0:03:20.265347	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 367841420, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAFwDgLikpOL+v'}}
0:03:20.266347	LOG	Server ----------> DUT
0:03:20.269343	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:20.283336	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:25.259500	LOG	PUSH_ACK: 01 b5ca 01 fffeb827eb59d368
0:03:25.261499	LOG	PUSH_DATA: Protocol version = 01, Token = b5ca, Identifier = 00, JSON = {'rxpk': [{'tmst': 371844020, 'time': '2021-10-08T10:03:43.373834Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAIAABatuncg0z'}]}
0:03:25.262500	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0020, FOpts:), FPort: 01, FRMPayload: 0012, MIC: a7720d33)
0:03:25.263500	LOG	Server <---------- DUT
0:03:25.265499	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0018, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 0281c793)
0:03:25.267497	LOG	Frame command sent to the DUT
0:03:25.268497	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 372844020, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'oCAgICAAGADgcmWeMEkEbwFF0Bc/HzVN1ov0XVfq+ozqPqmy+AEYryXGQOP1JXabFhmA7oKXv/gcYmfwAoHHkw=='}}
0:03:25.270496	LOG	Server ----------> DUT
0:03:25.273493	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:25.277490	LOG	Check previous uplink data rate process starts
0:03:25.285486	LOG	Uplink received with expected Data Rate
0:03:25.289483	LOG	Check ACK bit in next uplink starts
0:03:30.274798	LOG	PUSH_ACK: 01 4ee8 01 fffeb827eb59d368

0:03:30.277797	LOG	PUSH_DATA: Protocol version = 01, Token = 4ee8, Identifier = 00, JSON = {'rxpk': [{'tmst': 376860564, 'time': '2021-10-08T10:03:48.389343Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCgIQABC7pZuq1/'}]}
0:03:30.278798	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 0021, FOpts:), FPort: 01, FRMPayload: 0013, MIC: 59baad7f)
0:03:30.280796	LOG	Server <---------- DUT
0:03:30.282794	LOG	Check ACK bit in next uplink tested successfully
0:03:30.287794	LOG	Send Test Command RxAppCntReq process starts
0:03:30.466690	LOG	PULL_DATA: 01 9832 02 fffeb827eb59d368
0:03:30.468689	LOG	PULL_ACK: 01 9832 04 fffeb827eb59d368
0:03:35.270954	LOG	PUSH_ACK: 01 38e0 01 fffeb827eb59d368
0:03:35.272951	LOG	PUSH_DATA: Protocol version = 01, Token = 38e0, Identifier = 00, JSON = {'rxpk': [{'tmst': 381863124, 'time': '2021-10-08T10:03:53.385193Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAIgABSRKq5xRX'}]}
0:03:35.273951	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0022, FOpts:), FPort: 01, FRMPayload: 0013, MIC: aae71457)
0:03:35.275952	LOG	Server <---------- DUT
0:03:35.277949	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0019, FOpts:), FPort: e0, FRMPayload: 09), MIC: afaaa916)
0:03:35.280948	LOG	Frame command sent to the DUT
0:03:35.282963	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 383863124, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAGQDgS6+qqRY='}}
0:03:35.283963	LOG	Server ----------> DUT
0:03:40.443006	LOG	PUSH_ACK: 01 794d 01 fffeb827eb59d368
0:03:40.447004	LOG	PUSH_DATA: Protocol version = 01, Token = 794d, Identifier = 00, JSON = {'rxpk': [{'tmst': 387032556, 'time': '2021-10-08T10:03:58.557312Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -11, 'size': 16, 'data': 'QCAgICCAIwDgWE8puMemQw=='}]}
0:03:40.448004	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0023, FOpts:), FPort: e0, FRMPayload: 091400, MIC: b8c7a643)
0:03:40.450003	LOG	Server <---------- DUT
0:03:40.451002	LOG	Answer in payload: 1400
0:03:40.453001	LOG	Frame Command Payload in the Answer: 091400
0:03:40.460996	LOG	RX Count received by DUT: 20
0:03:40.463994	LOG	Send Test Command RxAppCntReq process completed
0:03:40.472989	LOG	Send RXParamSetupReq process starts
0:03:40.485982	LOG	PULL_DATA: 01 3d34 02 fffeb827eb59d368
0:03:40.487980	LOG	PULL_ACK: 01 3d34 04 fffeb827eb59d368
0:03:45.278104	LOG	PUSH_ACK: 01 bc5f 01 fffeb827eb59d368
0:03:45.280103	LOG	PUSH_DATA: Protocol version = 01, Token = bc5f, Identifier = 00, JSON = {'rxpk': [{'tmst': 391868420, 'time': '2021-10-08T10:04:03.392345Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAJAABDZvwD/n+'}]}
0:03:45.282102	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0024, FOpts:), FPort: 01, FRMPayload: 0014, MIC: f00ff9fe)
0:03:45.283103	LOG	Server <---------- DUT
0:03:45.285101	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001a, FOpts:), FPort: 00, FRMPayload: 0520d2ad84), MIC: 53138fec)
0:03:45.287101	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 393868420, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAGgAA+waizvdTE4/s'}}

0:03:45.288098	LOG	Server ----------> DUT
0:03:50.448158	LOG	PUSH_ACK: 01 4e77 01 fffeb827eb59d368
0:03:50.450157	LOG	PUSH_DATA: Protocol version = 01, Token = 4e77, Identifier = 00, JSON = {'rxpk': [{'tmst': 397034932, 'time': '2021-10-08T10:04:08.563021Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -13, 'size': 17, 'data': 'QCAgICCCJQAFBwFkYjfYNR8='}]}
0:03:50.451157	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0025, FOpts: 0507), FPort: 01, FRMPayload: 0014, MIC: 37d8351f)
0:03:50.453156	LOG	Server <---------- DUT
0:03:50.454155	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:50.455154	LOG	Command Answer: 0507
0:03:50.480140	LOG	MAC command communication completed
0:03:50.485138	LOG	Send Test Command RxAppCntReq process starts
0:03:50.686023	LOG	PULL_DATA: 01 facb 02 fffeb827eb59d368
0:03:50.688021	LOG	PULL_ACK: 01 facb 04 fffeb827eb59d368
0:03:55.450309	LOG	PUSH_ACK: 01 6c05 01 fffeb827eb59d368
0:03:55.452308	LOG	PUSH_DATA: Protocol version = 01, Token = 6c05, Identifier = 00, JSON = {'rxpk': [{'tmst': 402037572, 'time': '2021-10-08T10:04:13.564329Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -14, 'size': 17, 'data': 'QCAgICCCJgAFBwF4fQSw2UU='}]}
0:03:55.453307	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0026, FOpts: 0507), FPort: 01, FRMPayload: 0014, MIC: 04b0d945)
0:03:55.455306	LOG	Server <---------- DUT
0:03:55.457305	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001b, FOpts:), FPort: e0, FRMPayload: 09), MIC: 5a8efca6)
0:03:55.460303	LOG	Frame command sent to the DUT
0:03:55.462302	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 404037572, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAGwDgX1qO/KY='}}
0:03:55.463301	LOG	Server ----------> DUT
0:04:00.454457	LOG	PUSH_ACK: 01 ac86 01 fffeb827eb59d368
0:04:00.456456	LOG	PUSH_DATA: Protocol version = 01, Token = ac86, Identifier = 00, JSON = {'rxpk': [{'tmst': 407043172, 'time': '2021-10-08T10:04:18.569074Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -12, 'size': 16, 'data': 'QCAgICCAJwDgpnxttMSsRA=='}]}
0:04:00.458456	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0027, FOpts:), FPort: e0, FRMPayload: 091500, MIC: b4c4ac44)
0:04:00.459455	LOG	Server <---------- DUT
0:04:00.461454	LOG	Answer in payload: 1500
0:04:00.462453	LOG	Frame Command Payload in the Answer: 091500
0:04:00.466451	LOG	RX Count received by DUT: 21
0:04:00.468450	LOG	Send Test Command RxAppCntReq process completed
0:04:00.471448	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:04:00.866223	LOG	PULL_DATA: 01 212b 02 fffeb827eb59d368
0:04:00.868223	LOG	PULL_ACK: 01 212b 04 fffeb827eb59d368
0:04:05.288703	LOG	PUSH_ACK: 01 55a2 01 fffeb827eb59d368
0:04:05.290703	LOG	PUSH_DATA: Protocol version = 01, Token = 55a2, Identifier = 00, JSON = {'rxpk': [{'tmst': 411879020, 'time': '2021-10-08T10:04:23.403274Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAKAABsJm9Z+wv'}]}
0:04:05.292703	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0028, FOpts:), FPort: 01, FRMPayload: 0015, MIC: bd67ec2f)
0:04:05.293703	LOG	Server <---------- DUT

0:04:05.295700	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001c, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 0e37d948)
0:04:05.297701	LOG	Frame command sent to the DUT
0:04:05.298700	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 413879020, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAHADgM5AON9lI'}}
0:04:05.299700	LOG	Server ----------> DUT
0:04:05.303696	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:04:05.312690	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:10.295639	LOG	PUSH_ACK: 01 be70 01 fffeb827eb59d368
0:04:10.297636	LOG	PUSH_DATA: Protocol version = 01, Token = be70, Identifier = 00, JSON = {'rxpk': [{'tmst': 416881676, 'time': '2021-10-08T10:04:28.410286Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAKQAB+vGNkrt8'}]}
0:04:10.298637	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0029, FOpts:), FPort: 01, FRMPayload: 0016, MIC: 8d92bb7c)
0:04:10.300636	LOG	Server <---------- DUT
0:04:10.302635	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001d, FOpts:), FPort: e0, FRMPayload: 0700), MIC: b6218af1)
0:04:10.304633	LOG	Frame command sent to the DUT
0:04:10.306632	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 417881676, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAHQDgQve2IYrx'}}
0:04:10.307632	LOG	Server ----------> DUT
0:04:10.311630	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:10.315626	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:10.906202	LOG	PULL_DATA: 01 b573 02 fffeb827eb59d368
0:04:10.910201	LOG	PULL_ACK: 01 b573 04 fffeb827eb59d368
0:04:15.291705	LOG	PUSH_ACK: 01 3b04 01 fffeb827eb59d368
0:04:15.293704	LOG	PUSH_DATA: Protocol version = 01, Token = 3b04, Identifier = 00, JSON = {'rxpk': [{'tmst': 421884300, 'time': '2021-10-08T10:04:33.406097Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAKgABMv7whQek'}]}
0:04:15.294703	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002a, FOpts:), FPort: 01, FRMPayload: 0017, MIC: f08507a4)
0:04:15.295703	LOG	Server <---------- DUT
0:04:15.297702	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001e, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 204dbfd5)
0:04:15.299701	LOG	Frame command sent to the DUT
0:04:15.301698	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 422884300, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAHgDgY6EgTb/V'}}
0:04:15.302699	LOG	Server ----------> DUT
0:04:15.306695	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:15.311692	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:20.297511	LOG	PUSH_ACK: 01 5cd3 01 fffeb827eb59d368
0:04:20.299508	LOG	PUSH_DATA: Protocol version = 01, Token = 5cd3, Identifier = 00, JSON = {'rxpk': [{'tmst': 426886908, 'time': '2021-10-08T10:04:38.411937Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAKwAB7Gql82er'}]}
0:04:20.301508	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002b, FOpts:), FPort: 01, FRMPayload: 0018, MIC: a5f367ab)
0:04:20.303506	LOG	Server <---------- DUT

0:04:20.305505	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 001f, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 5250a7b9)
0:04:20.308503	LOG	Frame command sent to the DUT
0:04:20.310502	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 427886908, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAHwDgQoRSUKe5'}}
0:04:20.312501	LOG	Server ----------> DUT
0:04:20.316498	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:20.321496	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:20.916158	LOG	PULL_DATA: 01 3694 02 fffeb827eb59d368
0:04:20.918155	LOG	PULL_ACK: 01 3694 04 fffeb827eb59d368
0:04:25.296754	LOG	PUSH_ACK: 01 b3af 01 fffeb827eb59d368
0:04:25.299754	LOG	PUSH_DATA: Protocol version = 01, Token = b3af, Identifier = 00, JSON = {'rxpk': [{'tmst': 431889516, 'time': '2021-10-08T10:04:43.411436Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -15, 'size': 15, 'data': 'QCAgICCALAABRCFd+8p9'}]}
0:04:25.300754	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002c, FOpts:), FPort: 01, FRMPayload: 0019, MIC: 5dfbca7d)
0:04:25.301753	LOG	Server <---------- DUT
0:04:25.303753	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0020, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 91a18729)
0:04:25.304751	LOG	Frame command sent to the DUT
0:04:25.306751	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 432889516, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAIADg72uRoYcp'}}
0:04:25.307750	LOG	Server ----------> DUT
0:04:25.310747	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:25.321742	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:30.303471	LOG	PUSH_ACK: 01 e2f0 01 fffeb827eb59d368
0:04:30.307470	LOG	PUSH_DATA: Protocol version = 01, Token = e2f0, Identifier = 00, JSON = {'rxpk': [{'tmst': 436892124, 'time': '2021-10-08T10:04:48.417682Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCALQAByFJuqA7g'}]}
0:04:30.310468	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002d, FOpts:), FPort: 01, FRMPayload: 001a, MIC: 6ea80ee0)
0:04:30.313466	LOG	Server <---------- DUT
0:04:30.317464	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0021, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f69c51d7)
0:04:30.321461	LOG	Frame command sent to the DUT
0:04:30.325460	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 437892124, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'oCAgICAAIQDgmzCBU3N7bycI6piB39cLqeK63QTj7VwBcHUZlQhqyxRZDPhj4bOZoc2E2f9GXo5pihQB9pxR1w=='}}
0:04:30.327458	LOG	Server ----------> DUT
0:04:30.332456	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:30.335454	LOG	Check previous uplink data rate process starts
0:04:30.339451	LOG	Uplink received with expected Data Rate
0:04:30.342449	LOG	Check ACK bit in next uplink starts
0:04:30.926380	LOG	PULL_DATA: 01 e49e 02 fffeb827eb59d368
0:04:30.927382	LOG	PULL_ACK: 01 e49e 04 fffeb827eb59d368

0:04:35.321876	LOG	PUSH_ACK: 01 4f32 01 fffeb827eb59d368
0:04:35.324876	LOG	PUSH_DATA: Protocol version = 01, Token = 4f32, Identifier = 00, JSON = {'rxpk': [{'tmst': 441908660, 'time': '2021-10-08T10:04:53.436639Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCgLgAB8umK8cXp'}]}
0:04:35.325875	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 002e, FOpts:), FPort: 01, FRMPayload: 001b, MIC: 8af1c5e9)
0:04:35.326892	LOG	Server <---------- DUT
0:04:35.328890	LOG	Check ACK bit in next uplink tested successfully
0:04:35.333871	LOG	Send Test Command RxAppCntReq process starts
0:04:40.324530	LOG	PUSH_ACK: 01 1549 01 fffeb827eb59d368
0:04:40.329527	LOG	PUSH_DATA: Protocol version = 01, Token = 1549, Identifier = 00, JSON = {'rxpk': [{'tmst': 446911188, 'time': '2021-10-08T10:04:58.437912Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCALwAByFsEHyw0'}]}
0:04:40.332526	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 002f, FOpts:), FPort: 01, FRMPayload: 001b, MIC: 041f2c34)
0:04:40.333528	LOG	Server <---------- DUT
0:04:40.335524	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0022, FOpts:), FPort: e0, FRMPayload: 09), MIC: 379b50a8)
0:04:40.337524	LOG	Frame command sent to the DUT
0:04:40.339522	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 448911188, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAIgDgPDebUKg='}}
0:04:40.340521	LOG	Server ----------> DUT
0:04:40.936181	LOG	PULL_DATA: 01 fd82 02 fffeb827eb59d368
0:04:40.940180	LOG	PULL_ACK: 01 fd82 04 fffeb827eb59d368
0:04:45.489587	LOG	PUSH_ACK: 01 4ea9 01 fffeb827eb59d368
0:04:45.492587	LOG	PUSH_DATA: Protocol version = 01, Token = 4ea9, Identifier = 00, JSON = {'rxpk': [{'tmst': 452080580, 'time': '2021-10-08T10:05:03.604670Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -13, 'size': 16, 'data': 'QCAgICCAMADgUWp1D/ZVfA=='}]}
0:04:45.493586	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0030, FOpts:), FPort: e0, FRMPayload: 091c00, MIC: 0ff6557c)
0:04:45.494585	LOG	Server <---------- DUT
0:04:45.495585	LOG	Answer in payload: 1c00
0:04:45.497583	LOG	Frame Command Payload in the Answer: 091c00
0:04:45.501581	LOG	RX Count received by DUT: 28
0:04:45.504579	LOG	Send Test Command RxAppCntReq process completed
0:04:45.511576	LOG	Send RXParamSetupReq process starts
0:04:50.322835	LOG	PUSH_ACK: 01 0870 01 fffeb827eb59d368
0:04:50.324834	LOG	PUSH_DATA: Protocol version = 01, Token = 0870, Identifier = 00, JSON = {'rxpk': [{'tmst': 456916404, 'time': '2021-10-08T10:05:08.437507Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAMQABu5SsYQ8U'}]}
0:04:50.325832	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0031, FOpts:), FPort: 01, FRMPayload: 001c, MIC: ac610f14)
0:04:50.326832	LOG	Server <---------- DUT
0:04:50.328831	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0023, FOpts:), FPort: 00, FRMPayload: 0530d2ad84), MIC: 14ae5d33)
0:04:50.330830	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 458916404, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAIwAA5PBfVT8Url0z'}}
0:04:50.331831	LOG	Server ----------> DUT

0:04:51.126377	LOG	PULL_DATA: 01 d4b2 02 fffeb827eb59d368
0:04:51.128375	LOG	PULL_ACK: 01 d4b2 04 fffeb827eb59d368
0:04:55.494889	LOG	PUSH_ACK: 01 8a29 01 fffeb827eb59d368
0:04:55.496887	LOG	PUSH_DATA: Protocol version = 01, Token = 8a29, Identifier = 00, JSON = {'rxpk': [{'tmst': 462082852, 'time': '2021-10-08T10:05:13.609473Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -13, 'size': 17, 'data': 'QCAgICCCMgAFBwFndrabizk='}]}
0:04:55.497886	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0032, FOpts: 0507), FPort: 01, FRMPayload: 001c, MIC: b69b8b39)
0:04:55.498885	LOG	Server <---------- DUT
0:04:55.500884	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:55.501884	LOG	Command Answer: 0507
0:04:55.518875	LOG	MAC command communication completed
0:04:55.522872	LOG	Send Test Command RxAppCntReq process starts
0:05:00.501036	LOG	PUSH_ACK: 01 5448 01 fffeb827eb59d368
0:05:00.503036	LOG	PUSH_DATA: Protocol version = 01, Token = 5448, Identifier = 00, JSON = {'rxpk': [{'tmst': 467085460, 'time': '2021-10-08T10:05:18.615500Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -11, 'size': 17, 'data': 'QCAgICCCMwAFBwHE0wLrdHQ='}]}
0:05:00.504033	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0033, FOpts: 0507), FPort: 01, FRMPayload: 001c, MIC: 02eb7474)
0:05:00.506032	LOG	Server <---------- DUT
0:05:00.507032	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0024, FOpts:), FPort: e0, FRMPayload: 09), MIC: 01b293ae)
0:05:00.510030	LOG	Frame command sent to the DUT
0:05:00.512030	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 469085460, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAJADgpgGyk64='}}
0:05:00.514028	LOG	Server ----------> DUT
0:05:01.316571	LOG	PULL_DATA: 01 9a0a 02 fffeb827eb59d368
0:05:01.317571	LOG	PULL_ACK: 01 9a0a 04 fffeb827eb59d368
0:05:05.507185	LOG	PUSH_ACK: 01 bcd5 01 fffeb827eb59d368
0:05:05.509182	LOG	PUSH_DATA: Protocol version = 01, Token = bcd5, Identifier = 00, JSON = {'rxpk': [{'tmst': 472091012, 'time': '2021-10-08T10:05:23.620891Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -12, 'size': 16, 'data': 'QCAgICCANADgEapnH5sfrQ=='}]}
0:05:05.510181	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0034, FOpts:), FPort: e0, FRMPayload: 091d00, MIC: 1f9b1fad)
0:05:05.511181	LOG	Server <---------- DUT
0:05:05.512180	LOG	Answer in payload: 1d00
0:05:05.514179	LOG	Frame Command Payload in the Answer: 091d00
0:05:05.519176	LOG	RX Count received by DUT: 29
0:05:05.521175	LOG	Send Test Command RxAppCntReq process completed
0:05:05.525173	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:05:10.340603	LOG	PUSH_ACK: 01 0e18 01 fffeb827eb59d368
0:05:10.345600	LOG	PUSH_DATA: Protocol version = 01, Token = 0e18, Identifier = 00, JSON = {'rxpk': [{'tmst': 476926836, 'time': '2021-10-08T10:05:28.454935Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -11, 'size': 15, 'data': 'QCAgICCANQAB2kCbosm0'}]}
0:05:10.348598	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0035, FOpts:), FPort: 01, FRMPayload: 001d, MIC: 9ba2c9b4)
0:05:10.351593	LOG	Server <---------- DUT
0:05:10.353592	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0025, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 93a6ec34)

0:05:10.355591	LOG	Frame command sent to the DUT
0:05:10.356591	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 478926836, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAJQDg2bKTpuw0'}}
0:05:10.358588	LOG	Server ----------> DUT
0:05:10.361586	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:05:10.367583	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:11.356644	LOG	PULL_DATA: 01 a844 02 fffeb827eb59d368
0:05:11.359642	LOG	PULL_ACK: 01 a844 04 fffeb827eb59d368
0:05:15.339391	LOG	PUSH_ACK: 01 ac5b 01 fffeb827eb59d368
0:05:15.341372	LOG	PUSH_DATA: Protocol version = 01, Token = ac5b, Identifier = 00, JSON = {'rxpk': [{'tmst': 481929460, 'time': '2021-10-08T10:05:33.453651Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -14, 'size': 15, 'data': 'QCAgICCANgAB7Vg+9+9s'}]}
0:05:15.342372	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0036, FOpts:), FPort: 01, FRMPayload: 001e, MIC: 3ef7ef6c)
0:05:15.344371	LOG	Server <---------- DUT
0:05:15.346370	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0026, FOpts:), FPort: e0, FRMPayload: 0700), MIC: e27cfdcb)
0:05:15.348369	LOG	Frame command sent to the DUT
0:05:15.349368	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 482929460, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAJgDgVuPifP3L'}}
0:05:15.350367	LOG	Server ----------> DUT
0:05:15.353366	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:15.357364	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:20.345523	LOG	PUSH_ACK: 01 f38e 01 fffeb827eb59d368
0:05:20.347521	LOG	PUSH_DATA: Protocol version = 01, Token = f38e, Identifier = 00, JSON = {'rxpk': [{'tmst': 486932068, 'time': '2021-10-08T10:05:38.459720Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -11, 'size': 15, 'data': 'QCAgICCANwAB/HIj5FlV'}]}
0:05:20.348520	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0037, FOpts:), FPort: 01, FRMPayload: 001f, MIC: 23e45955)
0:05:20.349520	LOG	Server <---------- DUT
0:05:20.351519	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0027, FOpts:), FPort: e0, FRMPayload: 0700), MIC: ec1c8627)
0:05:20.353518	LOG	Frame command sent to the DUT
0:05:20.355516	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 487932068, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAJwDgQyzsHIYn'}}
0:05:20.356516	LOG	Server ----------> DUT
0:05:20.359514	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:20.363512	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:21.555831	LOG	PULL_DATA: 01 4cd7 02 fffeb827eb59d368
0:05:21.557831	LOG	PULL_ACK: 01 4cd7 04 fffeb827eb59d368
0:05:25.342675	LOG	PUSH_ACK: 01 2d9b 01 fffeb827eb59d368
0:05:25.344674	LOG	PUSH_DATA: Protocol version = 01, Token = 2d9b, Identifier = 00, JSON = {'rxpk': [{'tmst': 491934708, 'time': '2021-10-08T10:05:43.456802Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAOAABJQ+cU6or'}]}
0:05:25.345673	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0038, FOpts:), FPort: 01, FRMPayload: 0020, MIC: 9c53aa2b)
0:05:25.346672	LOG	Server <---------- DUT

0:05:25.348671	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0028, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 7ea62abf)
0:05:25.350670	LOG	Frame command sent to the DUT
0:05:25.351669	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 492934708, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAKADgeHZ+piq/'}}
0:05:25.353668	LOG	Server ----------> DUT
0:05:25.357668	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:25.360665	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:30.346052	LOG	PUSH_ACK: 01 0942 01 fffeb827eb59d368
0:05:30.348051	LOG	PUSH_DATA: Protocol version = 01, Token = 0942, Identifier = 00, JSON = {'rxpk': [{'tmst': 496937316, 'time': '2021-10-08T10:05:48.460703Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAOQABROUZC95A'}]}
0:05:30.349050	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0039, FOpts:), FPort: 01, FRMPayload: 0021, MIC: 190bde40)
0:05:30.350050	LOG	Server <---------- DUT
0:05:30.352049	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0029, FOpts:), FPort: e0, FRMPayload: 0700), MIC: fede0005)
0:05:30.355047	LOG	Frame command sent to the DUT
0:05:30.356047	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 497937316, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAKQDggbn+3gAF'}}
0:05:30.358046	LOG	Server ----------> DUT
0:05:30.362043	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:30.372038	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:31.556136	LOG	PULL_DATA: 01 e506 02 fffeb827eb59d368
0:05:31.558135	LOG	PULL_ACK: 01 e506 04 fffeb827eb59d368
0:05:35.349976	LOG	PUSH_ACK: 01 c433 01 fffeb827eb59d368
0:05:35.352979	LOG	PUSH_DATA: Protocol version = 01, Token = c433, Identifier = 00, JSON = {'rxpk': [{'tmst': 501939900, 'time': '2021-10-08T10:05:53.464497Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAOgABedldBTGw'}]}
0:05:35.353974	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 003a, FOpts:), FPort: 01, FRMPayload: 0022, MIC: 5d0531b0)
0:05:35.354973	LOG	Server <---------- DUT
0:05:35.356972	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 5c7e78e7)
0:05:35.358971	LOG	Frame command sent to the DUT
0:05:35.359970	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 502939900, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'oCAgICAAKgDgXEyIQNrChDhRy/RqpQADDeNtIXqShVM9KWIk1PWCdtMX833KOV8WWJgwOLxpx5BNpdCcXH545w=='}}
0:05:35.360969	LOG	Server ----------> DUT
0:05:35.364968	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:35.367965	LOG	Check previous uplink data rate process starts
0:05:35.372962	LOG	Uplink received with expected Data Rate
0:05:35.376960	LOG	Check ACK bit in next uplink starts
0:05:40.370434	LOG	PUSH_ACK: 01 afcd 01 fffeb827eb59d368

0:05:40.372432	LOG	PUSH_DATA: Protocol version = 01, Token = afcd, Identifier = 00, JSON = {'rxpk': [{'tmst': 506956428, 'time': '2021-10-08T10:05:58.485056Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCgOwABtrEs83Q9'}]}
0:05:40.374430	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 003b, FOpts:), FPort: 01, FRMPayload: 0023, MIC: 2cf3743d)
0:05:40.376429	LOG	Server <---------- DUT
0:05:40.379428	LOG	Check ACK bit in next uplink tested successfully
0:05:40.385424	LOG	Send Test Command RxAppCntReq process starts
0:05:41.565491	LOG	PULL_DATA: 01 a384 02 fffeb827eb59d368
0:05:41.570487	LOG	PULL_ACK: 01 a384 04 fffeb827eb59d368
0:05:45.368354	LOG	PUSH_ACK: 01 7f2d 01 fffeb827eb59d368
0:05:45.370324	LOG	PUSH_DATA: Protocol version = 01, Token = 7f2d, Identifier = 00, JSON = {'rxpk': [{'tmst': 511959004, 'time': '2021-10-08T10:06:03.483621Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAPAABe0fHdyxk'}]}
0:05:45.371323	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 003c, FOpts:), FPort: 01, FRMPayload: 0023, MIC: c7772c64)
0:05:45.373324	LOG	Server <---------- DUT
0:05:45.374321	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002b, FOpts:), FPort: e0, FRMPayload: 09), MIC: 2d1e1147)
0:05:45.376321	LOG	Frame command sent to the DUT
0:05:45.379319	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 513959004, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAKwDg1C0eEUc='}}
0:05:45.380318	LOG	Server ----------> DUT
0:05:50.539379	LOG	PUSH_ACK: 01 add4 01 fffeb827eb59d368
0:05:50.541377	LOG	PUSH_DATA: Protocol version = 01, Token = add4, Identifier = 00, JSON = {'rxpk': [{'tmst': 517128460, 'time': '2021-10-08T10:06:08.653918Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -11, 'size': 16, 'data': 'QCAgICCAPQDgdLH9hGZWpg=='}]}
0:05:50.542376	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 003d, FOpts:), FPort: e0, FRMPayload: 092400, MIC: 846656a6)
0:05:50.544375	LOG	Server <---------- DUT
0:05:50.546374	LOG	Answer in payload: 2400
0:05:50.547374	LOG	Frame Command Payload in the Answer: 092400
0:05:50.552370	LOG	RX Count received by DUT: 36
0:05:50.555369	LOG	Send Test Command RxAppCntReq process completed
0:05:50.561366	LOG	Send RXParamSetupReq process starts
0:05:51.576170	LOG	PULL_DATA: 01 7647 02 fffeb827eb59d368
0:05:51.579169	LOG	PULL_ACK: 01 7647 04 fffeb827eb59d368
0:05:55.376003	LOG	PUSH_ACK: 01 de32 01 fffeb827eb59d368
0:05:55.378002	LOG	PUSH_DATA: Protocol version = 01, Token = de32, Identifier = 00, JSON = {'rxpk': [{'tmst': 521964284, 'time': '2021-10-08T10:06:13.490341Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAPgABfeMH7+9v'}]}
0:05:55.379002	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 003e, FOpts:), FPort: 01, FRMPayload: 0024, MIC: 07efef6f)
0:05:55.380002	LOG	Server <---------- DUT
0:05:55.382000	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002c, FOpts:), FPort: 00, FRMPayload: 0540d2ad84), MIC: 054fa5d9)
0:05:55.383999	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 523964284, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAALAAAtcpRY40FT6XZ'}}

0:05:55.384998	LOG	Server ----------> DUT
0:06:00.539092	LOG	PUSH_ACK: 01 1cec 01 fffeb827eb59d368
0:06:00.541091	LOG	PUSH_DATA: Protocol version = 01, Token = 1cec, Identifier = 00, JSON = {'rxpk': [{'tmst': 527130780, 'time': '2021-10-08T10:06:18.653472Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -13, 'size': 17, 'data': 'QCAgICCCPwAFBwF5SCHBT3U='}]}
0:06:00.542091	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 003f, FOpts: 0507), FPort: 01, FRMPayload: 0024, MIC: 21c14f75)
0:06:00.544060	LOG	Server <---------- DUT
0:06:00.546058	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:00.548057	LOG	Command Answer: 0507
0:06:00.570045	LOG	MAC command communication completed
0:06:00.574042	LOG	Send Test Command RxAppCntReq process starts
0:06:01.586222	LOG	PULL_DATA: 01 4ac4 02 fffeb827eb59d368
0:06:01.588221	LOG	PULL_ACK: 01 4ac4 04 fffeb827eb59d368
0:06:05.544967	LOG	PUSH_ACK: 01 30f6 01 fffeb827eb59d368
0:06:05.546967	LOG	PUSH_DATA: Protocol version = 01, Token = 30f6, Identifier = 00, JSON = {'rxpk': [{'tmst': 532133404, 'time': '2021-10-08T10:06:23.660108Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -11, 'size': 17, 'data': 'QCAgICCCQAAFBwFCIXzpRUs='}]}
0:06:05.548965	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0040, FOpts: 0507), FPort: 01, FRMPayload: 0024, MIC: 7ce9454b)
0:06:05.549964	LOG	Server <---------- DUT
0:06:05.552962	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002d, FOpts:), FPort: e0, FRMPayload: 09), MIC: daa7f9b3)
0:06:05.554961	LOG	Frame command sent to the DUT
0:06:05.556962	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 534133404, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAALQDg/9qn+bM='}}
0:06:05.557959	LOG	Server ----------> DUT
0:06:10.546118	LOG	PUSH_ACK: 01 2023 01 fffeb827eb59d368
0:06:10.548117	LOG	PUSH_DATA: Protocol version = 01, Token = 2023, Identifier = 00, JSON = {'rxpk': [{'tmst': 537138948, 'time': '2021-10-08T10:06:28.661092Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -12, 'size': 16, 'data': 'QCAgICCAQQDgEzIYQZ9/hQ=='}]}
0:06:10.550115	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0041, FOpts:), FPort: e0, FRMPayload: 092500, MIC: 419f7f85)
0:06:10.551115	LOG	Server <---------- DUT
0:06:10.552114	LOG	Answer in payload: 2500
0:06:10.553114	LOG	Frame Command Payload in the Answer: 092500
0:06:10.558111	LOG	RX Count received by DUT: 37
0:06:10.561110	LOG	Send Test Command RxAppCntReq process completed
0:06:10.566106	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:06:11.755949	LOG	PULL_DATA: 01 856c 02 fffeb827eb59d368
0:06:11.759948	LOG	PULL_ACK: 01 856c 04 fffeb827eb59d368
0:06:15.389849	LOG	PUSH_ACK: 01 fbb2 01 fffeb827eb59d368
0:06:15.391847	LOG	PUSH_DATA: Protocol version = 01, Token = fbb2, Identifier = 00, JSON = {'rxpk': [{'tmst': 541974748, 'time': '2021-10-08T10:06:33.504819Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAQgAB9lneoO4P'}]}
0:06:15.393847	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0042, FOpts:), FPort: 01, FRMPayload: 0025, MIC: dea0ee0f)
0:06:15.394846	LOG	Server <---------- DUT

0:06:15.396845	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002e, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 500515c6)
0:06:15.398844	LOG	Frame command sent to the DUT
0:06:15.399843	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 543974748, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAALgDgr5BQBRXG'}}
0:06:15.400842	LOG	Server ----------> DUT
0:06:15.403841	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:06:15.411838	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:20.387093	LOG	PUSH_ACK: 01 0704 01 fffeb827eb59d368
0:06:20.389093	LOG	PUSH_DATA: Protocol version = 01, Token = 0704, Identifier = 00, JSON = {'rxpk': [{'tmst': 546977324, 'time': '2021-10-08T10:06:38.502021Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAQwAB1SZ1zxD2'}]}
0:06:20.391092	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0043, FOpts:), FPort: 01, FRMPayload: 0026, MIC: 75cf10f6)
0:06:20.392091	LOG	Server <---------- DUT
0:06:20.394089	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 002f, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 2e631326)
0:06:20.396089	LOG	Frame command sent to the DUT
0:06:20.397087	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 547977324, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAALwDggxcuYxMm'}}
0:06:20.399088	LOG	Server ----------> DUT
0:06:20.403084	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:20.406083	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:21.796151	LOG	PULL_DATA: 01 f4ec 02 fffeb827eb59d368
0:06:21.798152	LOG	PULL_ACK: 01 f4ec 04 fffeb827eb59d368
0:06:25.388134	LOG	PUSH_ACK: 01 0bb9 01 fffeb827eb59d368
0:06:25.390105	LOG	PUSH_DATA: Protocol version = 01, Token = 0bb9, Identifier = 00, JSON = {'rxpk': [{'tmst': 551979428, 'time': '2021-10-08T10:06:43.502191Z', 'chan': 6, 'rfch': 0, 'freq': 867.7, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': -19.0, 'rssi': -83, 'size': 15, 'data': 'QCAgICCARAAB2W29ZC0d'}, {'tmst': 551979932, 'time': '2021-10-08T10:06:43.502191Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCARAAB2W29ZC0d'}]}
0:06:25.391108	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0044, FOpts:), FPort: 01, FRMPayload: 0027, MIC: bd642d1d)
0:06:25.392107	LOG	Server <---------- DUT
0:06:25.394102	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0030, FOpts:), FPort: e0, FRMPayload: 0700), MIC: d16a149c)
0:06:25.396101	LOG	Frame command sent to the DUT
0:06:25.398100	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 552979932, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAMADgzlzRahSc'}}
0:06:25.399099	LOG	Server ----------> DUT
0:06:25.403097	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:25.407097	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:30.394761	LOG	PUSH_ACK: 01 20ba 01 fffeb827eb59d368
0:06:30.396760	LOG	PUSH_DATA: Protocol version = 01, Token = 20ba, Identifier = 00, JSON = {'rxpk': [{'tmst': 556982564, 'time': '2021-10-08T10:06:48.509718Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -12, 'size': 15, 'data': 'QCAgICCARQABqF0SL4M8'}]}

0:06:30.397760	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0045, FOpts:), FPort: 01, FRMPayload: 0028, MIC: 122f833c)
0:06:30.398759	LOG	Server <---------- DUT
0:06:30.400756	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0031, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 94cb6c7e)
0:06:30.403755	LOG	Frame command sent to the DUT
0:06:30.404755	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 557982564, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAMQDgeryUy2x+'}}
0:06:30.406753	LOG	Server ----------> DUT
0:06:30.410751	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:30.415748	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:31.805956	LOG	PULL_DATA: 01 86c3 02 fffeb827eb59d368
0:06:31.806957	LOG	PULL_ACK: 01 86c3 04 fffeb827eb59d368
0:06:35.390913	LOG	PUSH_ACK: 01 3e05 01 fffeb827eb59d368
0:06:35.392914	LOG	PUSH_DATA: Protocol version = 01, Token = 3e05, Identifier = 00, JSON = {'rxpk': [{'tmst': 561985172, 'time': '2021-10-08T10:06:53.506243Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -13, 'size': 15, 'data': 'QCAgICCARgABI0wYBDtB'}]}
0:06:35.393913	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0046, FOpts:), FPort: 01, FRMPayload: 0029, MIC: 18043b41)
0:06:35.394913	LOG	Server <---------- DUT
0:06:35.396912	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0032, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 9e36798f)
0:06:35.398910	LOG	Frame command sent to the DUT
0:06:35.400908	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 562985172, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAMgDgx26eNnmP'}}
0:06:35.401909	LOG	Server ----------> DUT
0:06:35.405905	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:35.416899	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:40.400061	LOG	PUSH_ACK: 01 f1ec 01 fffeb827eb59d368
0:06:40.402058	LOG	PUSH_DATA: Protocol version = 01, Token = f1ec, Identifier = 00, JSON = {'rxpk': [{'tmst': 566987812, 'time': '2021-10-08T10:06:58.514873Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -11, 'size': 15, 'data': 'QCAgICCARwABmJEI6+CL'}]}
0:06:40.404059	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0047, FOpts:), FPort: 01, FRMPayload: 002a, MIC: 08ebe08b)
0:06:40.407058	LOG	Server <---------- DUT
0:06:40.411055	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0033, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 094cb63d)
0:06:40.415051	LOG	Frame command sent to the DUT
0:06:40.417050	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 567987812, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'oCAgICAAMwDgcURICQvsKHLRsd2EwM9LZiGktz7OQs4SChLo0O43klAw7NXup2If/DErff+HiqzpDcgnCUy2PQ==''}}
0:06:40.419050	LOG	Server ----------> DUT
0:06:40.423047	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:40.425046	LOG	Check previous uplink data rate process starts
0:06:40.430043	LOG	Uplink received with expected Data Rate

0:06:40.434040	LOG	Check ACK bit in next uplink starts
0:06:41.815785	LOG	PULL_DATA: 01 d967 02 fffeb827eb59d368
0:06:41.819782	LOG	PULL_ACK: 01 d967 04 fffeb827eb59d368
0:06:45.417704	LOG	PUSH_ACK: 01 33b7 01 fffeb827eb59d368
0:06:45.419702	LOG	PUSH_DATA: Protocol version = 01, Token = 33b7, Identifier = 00, JSON = {'rxpk': [{'tmst': 572004332, 'time': '2021-10-08T10:07:03.533156Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCgSAAB6puaWCNr'}]}
0:06:45.420703	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 0048, FOpts:), FPort: 01, FRMPayload: 002b, MIC: 9a58236b)
0:06:45.421703	LOG	Server <---------- DUT
0:06:45.425699	LOG	Check ACK bit in next uplink tested successfully
0:06:45.432694	LOG	Send Test Command RxAppCntReq process starts
0:06:50.414266	LOG	PUSH_ACK: 01 9950 01 fffeb827eb59d368
0:06:50.416264	LOG	PUSH_DATA: Protocol version = 01, Token = 9950, Identifier = 00, JSON = {'rxpk': [{'tmst': 577006956, 'time': '2021-10-08T10:07:08.529270Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -11, 'size': 15, 'data': 'QCAgICCASQABpvgwLhZj'}]}
0:06:50.417263	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0049, FOpts:), FPort: 01, FRMPayload: 002b, MIC: 302e1663)
0:06:50.419262	LOG	Server <---------- DUT
0:06:50.420262	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0034, FOpts:), FPort: e0, FRMPayload: 09), MIC: ac33fad1)
0:06:50.422261	LOG	Frame command sent to the DUT
0:06:50.424260	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 579006956, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAANADggqwz+tE='}}
0:06:50.426259	LOG	Server ----------> DUT
0:06:51.825236	LOG	PULL_DATA: 01 a3e3 02 fffeb827eb59d368
0:06:51.827234	LOG	PULL_ACK: 01 a3e3 04 fffeb827eb59d368
0:06:55.585092	LOG	PUSH_ACK: 01 14d3 01 fffeb827eb59d368
0:06:55.587091	LOG	PUSH_DATA: Protocol version = 01, Token = 14d3, Identifier = 00, JSON = {'rxpk': [{'tmst': 582176412, 'time': '2021-10-08T10:07:13.700090Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -16, 'size': 16, 'data': 'QCAgICCASgDgI3UmmuaKOA=='}]}
0:06:55.589091	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004a, FOpts:), FPort: e0, FRMPayload: 092c00, MIC: 9ae68a38)
0:06:55.590089	LOG	Server <---------- DUT
0:06:55.592088	LOG	Answer in payload: 2c00
0:06:55.593088	LOG	Frame Command Payload in the Answer: 092c00
0:06:55.600084	LOG	RX Count received by DUT: 44
0:06:55.603082	LOG	Send Test Command RxAppCntReq process completed
0:06:55.616074	LOG	Send RXParamSetupReq process starts
0:07:00.419612	LOG	PUSH_ACK: 01 f75e 01 fffeb827eb59d368
0:07:00.421607	LOG	PUSH_DATA: Protocol version = 01, Token = f75e, Identifier = 00, JSON = {'rxpk': [{'tmst': 587012252, 'time': '2021-10-08T10:07:18.534481Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCASwABmJmzyZ/2'}]}
0:07:00.423607	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004b, FOpts:), FPort: 01, FRMPayload: 002c, MIC: b3c99ff6)
0:07:00.424605	LOG	Server <---------- DUT
0:07:00.425605	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0035, FOpts:), FPort: 00, FRMPayload: 0550d2ad84), MIC: 85949c1e)
0:07:00.427604	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 589012252, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAANQAAxYyqzvOFlJwe'}}
0:07:00.428603	LOG	Server ----------> DUT
0:07:02.025416	LOG	PULL_DATA: 01 a0f2 02 fffeb827eb59d368
0:07:02.027413	LOG	PULL_ACK: 01 a0f2 04 fffeb827eb59d368
0:07:05.590384	LOG	PUSH_ACK: 01 10a8 01 fffeb827eb59d368
0:07:05.592383	LOG	PUSH_DATA: Protocol version = 01, Token = 10a8, Identifier = 00, JSON = {'rxpk': [{'tmst': 592178756, 'time': '2021-10-08T10:07:23.705895Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -11, 'size': 17, 'data': 'QCAgICCCTAAFBwEr/nQiwSE='}]}
0:07:05.594381	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 004c, FOpts: 0507), FPort: 01, FRMPayload: 002c, MIC: 7422c121)
0:07:05.596381	LOG	Server <---------- DUT
0:07:05.597380	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:07:05.599379	LOG	Command Answer: 0507
0:07:05.618370	LOG	MAC command communication completed
0:07:05.621368	LOG	Send Test Command RxAppCntReq process starts
0:07:10.587693	LOG	PUSH_ACK: 01 f605 01 fffeb827eb59d368
0:07:10.589692	LOG	PUSH_DATA: Protocol version = 01, Token = f605, Identifier = 00, JSON = {'rxpk': [{'tmst': 597181404, 'time': '2021-10-08T10:07:28.702693Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -12, 'size': 17, 'data': 'QCAgICCCTQAFBwGX3lAxGU0='}]}
0:07:10.591691	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 004d, FOpts: 0507), FPort: 01, FRMPayload: 002c, MIC: 5031194d)
0:07:10.592692	LOG	Server <---------- DUT
0:07:10.594691	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0036, FOpts:), FPort: e0, FRMPayload: 09), MIC: 8b636ebc)
0:07:10.596688	LOG	Frame command sent to the DUT
0:07:10.598687	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 599181404, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAANgDgHotjbrw='}}
0:07:10.600686	LOG	Server ----------> DUT
0:07:12.196060	LOG	PULL_DATA: 01 9401 02 fffeb827eb59d368
0:07:12.200058	LOG	PULL_ACK: 01 9401 04 fffeb827eb59d368
0:07:15.600149	LOG	PUSH_ACK: 01 beb4 01 fffeb827eb59d368
0:07:15.602147	LOG	PUSH_DATA: Protocol version = 01, Token = beb4, Identifier = 00, JSON = {'rxpk': [{'tmst': 602186972, 'time': '2021-10-08T10:07:33.715091Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -13, 'size': 16, 'data': 'QCAgICCATgDgBSpiZnlU5g=='}]}
0:07:15.603149	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004e, FOpts:), FPort: e0, FRMPayload: 092d00, MIC: 667954e6)
0:07:15.605118	LOG	Server <---------- DUT
0:07:15.606148	LOG	Answer in payload: 2d00
0:07:15.608148	LOG	Frame Command Payload in the Answer: 092d00
0:07:15.614141	LOG	RX Count received by DUT: 45
0:07:15.617112	LOG	Send Test Command RxAppCntReq process completed
0:07:15.621110	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:07:20.435303	LOG	PUSH_ACK: 01 bc44 01 fffeb827eb59d368
0:07:20.437302	LOG	PUSH_DATA: Protocol version = 01, Token = bc44, Identifier = 00, JSON = {'rxpk': [{'tmst': 607022836, 'time': '2021-10-08T10:07:38.550396Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -12, 'size': 15, 'data': 'QCAgICCATwABvU58r9XN'}]}
0:07:20.438303	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 004f, FOpts:), FPort: 01, FRMPayload: 002d, MIC: 7cafd5cd)

0:07:20.439303	LOG	Server <---------- DUT
0:07:20.441301	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0037, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 4bca1e9a)
0:07:20.443300	LOG	Frame command sent to the DUT
0:07:20.444300	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 609022836, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAANwDgov5Lyh6a'}}
0:07:20.446297	LOG	Server ----------> DUT
0:07:20.451294	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:07:20.460289	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:22.245364	LOG	PULL_DATA: 01 78fa 02 fffeb827eb59d368
0:07:22.247363	LOG	PULL_ACK: 01 78fa 04 fffeb827eb59d368
0:07:25.432548	LOG	PUSH_ACK: 01 4969 01 fffeb827eb59d368
0:07:25.434548	LOG	PUSH_DATA: Protocol version = 01, Token = 4969, Identifier = 00, JSON = {'rxpk': [{'tmst': 612025404, 'time': '2021-10-08T10:07:43.548283Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAUAABywO03XyP'}]}
0:07:25.436546	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0050, FOpts:), FPort: 01, FRMPayload: 002e, MIC: b4dd7c8f)
0:07:25.437546	LOG	Server <---------- DUT
0:07:25.438545	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0038, FOpts:), FPort: e0, FRMPayload: 0700), MIC: e180b551)
0:07:25.441543	LOG	Frame command sent to the DUT
0:07:25.442543	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 613025404, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAOADgiTPhgLVR'}}
0:07:25.444542	LOG	Server ----------> DUT
0:07:25.447540	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:25.451538	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:30.438835	LOG	PUSH_ACK: 01 e623 01 fffeb827eb59d368
0:07:30.440834	LOG	PUSH_DATA: Protocol version = 01, Token = e623, Identifier = 00, JSON = {'rxpk': [{'tmst': 617027964, 'time': '2021-10-08T10:07:48.553974Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAUQAB9g6+2jt1'}]}
0:07:30.442833	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0051, FOpts:), FPort: 01, FRMPayload: 002f, MIC: beda3b75)
0:07:30.444831	LOG	Server <---------- DUT
0:07:30.446831	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0039, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 0a3a6591)
0:07:30.449829	LOG	Frame command sent to the DUT
0:07:30.451828	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 618027964, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAOQDgxDIKOmWR'}}
0:07:30.453826	LOG	Server ----------> DUT
0:07:30.458824	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:30.463821	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:32.255314	LOG	PULL_DATA: 01 d01a 02 fffeb827eb59d368
0:07:32.257295	LOG	PULL_ACK: 01 d01a 04 fffeb827eb59d368
0:07:35.439481	LOG	PUSH_ACK: 01 da69 01 fffeb827eb59d368
0:07:35.442480	LOG	PUSH_DATA: Protocol version = 01, Token = da69, Identifier = 00, JSON = {'rxpk': [{'tmst': 622030508, 'time': '2021-10-08T10:07:53.555144Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAUgABjM/2/60O'}]}

0:07:35.443479	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0052, FOpts:), FPort: 01, FRMPayload: 0030, MIC: f6ffad0e)
0:07:35.445478	LOG	Server <---------- DUT
0:07:35.447477	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 003a, FOpts:), FPort: e0, FRMPayload: 0700), MIC: b6bd5b45)
0:07:35.449477	LOG	Frame command sent to the DUT
0:07:35.450476	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 623030508, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAOgDg4TO2vVtF'}}
0:07:35.452475	LOG	Server ----------> DUT
0:07:35.455473	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:35.459470	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:40.443232	LOG	PUSH_ACK: 01 5125 01 fffeb827eb59d368
0:07:45.180514	LOG	PUSH_DATA: Protocol version = 01, Token = 5125, Identifier = 00, JSON = {'rxpk': [{'tmst': 627033060, 'time': '2021-10-08T10:07:58.559056Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAUwABZ7onktmD'}]}
0:07:45.182513	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0053, FOpts:), FPort: 01, FRMPayload: 0031, MIC: 2792d983)
0:07:45.184512	LOG	Server <---------- DUT
0:07:45.186510	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 003b, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 17112e73)
0:07:45.189509	LOG	Frame command sent to the DUT
0:07:45.190508	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 628033060, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAOwDgdxYXES5z'}}
0:07:45.192507	LOG	Server ----------> DUT
0:07:45.209497	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:45.252473	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:45.447279	LOG	PUSH_ACK: 01 8453 01 fffeb827eb59d368
0:07:45.450277	LOG	PUSH_DATA: Protocol version = 01, Token = 8453, Identifier = 00, JSON = {'rxpk': [{'tmst': 632035644, 'time': '2021-10-08T10:08:03.562979Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAVAABj+WEZYqB'}]}
0:07:45.451276	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0054, FOpts:), FPort: 01, FRMPayload: 0031, MIC: 84658a81)
0:07:45.453274	LOG	Server <---------- DUT
0:07:45.455274	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 003c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e87068c1)
0:07:45.491254	LOG	Frame command sent to the DUT
0:07:45.493253	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 633035644, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'oCAgICAAPADgZc4ppf8tVTce6ZMrutpLSRS5acP+qKjH2hiF1jcABlzMPux5729HkE1b00WDy9kYIJkX6HBowQ=='}}
0:07:45.495251	LOG	Server ----------> DUT
0:07:45.499249	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:45.503246	LOG	Check previous uplink data rate process starts
0:07:45.508245	LOG	Uplink received with expected Data Rate
0:07:45.511243	LOG	Check ACK bit in next uplink starts
0:07:50.465990	LOG	PUSH_ACK: 01 3a94 01 fffeb827eb59d368

0:07:50.467971	LOG	PUSH_DATA: Protocol version = 01, Token = 3a94, Identifier = 00, JSON = {'rxpk': [{'tmst': 637052172, 'time': '2021-10-08T10:08:08.580874Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCgVQABWZWTzu4v'}]}
0:07:50.468970	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: a0, FCnt: 0055, FOpts:), FPort: 01, FRMPayload: 0032, MIC: 93ceee2f)
0:07:50.470969	LOG	Server <---------- DUT
0:07:50.473966	LOG	Check ACK bit in next uplink tested successfully
0:07:50.478963	LOG	Send Test Command RxAppCntReq process starts
0:07:52.495769	LOG	PULL_DATA: 01 fb31 02 fffeb827eb59d368
0:07:52.496770	LOG	PULL_ACK: 01 fb31 04 fffeb827eb59d368
0:07:55.469076	LOG	PUSH_ACK: 01 9990 01 fffeb827eb59d368
0:07:55.471074	LOG	PUSH_DATA: Protocol version = 01, Token = 9990, Identifier = 00, JSON = {'rxpk': [{'tmst': 642054748, 'time': '2021-10-08T10:08:13.585019Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAVgABfsPQSjJ9'}]}
0:07:55.475072	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0056, FOpts:), FPort: 01, FRMPayload: 0032, MIC: d04a327d)
0:07:55.478070	LOG	Server <---------- DUT
0:07:55.483068	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 003d, FOpts:), FPort: e0, FRMPayload: 09), MIC: 7ef94060)
0:07:55.489065	LOG	Frame command sent to the DUT
0:07:55.493062	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 644054748, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAPQDgV375QGA='}}
0:07:55.497060	LOG	Server ----------> DUT
0:08:00.630972	LOG	PUSH_ACK: 01 3257 01 fffeb827eb59d368
0:08:00.632971	LOG	PUSH_DATA: Protocol version = 01, Token = 3257, Identifier = 00, JSON = {'rxpk': [{'tmst': 647224148, 'time': '2021-10-08T10:08:18.746045Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -12, 'size': 16, 'data': 'QCAgICCAVwDgylsjYkP/RA=='}]}
0:08:00.634971	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0057, FOpts:), FPort: e0, FRMPayload: 093300, MIC: 6243ff44)
0:08:00.635971	LOG	Server <---------- DUT
0:08:00.636969	LOG	Answer in payload: 3300
0:08:00.637968	LOG	Frame Command Payload in the Answer: 093300
0:08:00.643965	LOG	RX Count received by DUT: 51
0:08:00.648962	LOG	Send Test Command RxAppCntReq process completed
0:08:00.655959	LOG	End Test Step: Test packet error rate for SF12BW125 using RX1 window
0:08:00.661954	LOG	Partial Verdict: PASS
0:08:00.666951	LOG	==========
0:08:00.674947	LOG	==========
0:08:00.677945	LOG	Start Test Step: Test packet error rate for SF11BW125 using RX1 window
0:08:00.691937	LOG	End Test Step: Test packet error rate for SF11BW125 using RX1 window
0:08:00.694936	LOG	TEST STEP NOT APPLICABLE
0:08:00.698934	LOG	==========
0:08:00.706929	LOG	==========
0:08:00.709928	LOG	Start Test Step: Test packet error rate for SF10BW125 using RX1 window
0:08:00.727917	LOG	End Test Step: Test packet error rate for SF10BW125 using RX1 window
0:08:00.729916	LOG	TEST STEP NOT APPLICABLE
0:08:00.732913	LOG	==========
0:08:00.737911	LOG	==========
0:08:00.739910	LOG	Start Test Step: Test packet error rate for SF9BW125 using RX1 window
0:08:00.752902	LOG	End Test Step: Test packet error rate for SF9BW125 using RX1 window
0:08:00.755901	LOG	TEST STEP NOT APPLICABLE

0:08:00.758899	LOG	==========
0:08:00.763897	LOG	==========
0:08:00.765895	LOG	Start Test Step: Test packet error rate for SF8BW125 using RX1 window
0:08:00.777888	LOG	End Test Step: Test packet error rate for SF8BW125 using RX1 window
0:08:00.780886	LOG	TEST STEP NOT APPLICABLE
0:08:00.783885	LOG	==========
0:08:00.789882	LOG	==========
0:08:00.792881	LOG	Start Test Step: Test packet error rate for SF7BW125 using RX1 window
0:08:00.808871	LOG	End Test Step: Test packet error rate for SF7BW125 using RX1 window
0:08:00.810870	LOG	TEST STEP NOT APPLICABLE
0:08:00.813868	LOG	==========
0:08:00.818865	LOG	==========
0:08:00.820864	LOG	Start Test Step: Test packet error rate for SF7BW250 using RX1 window
0:08:00.832857	LOG	End Test Step: Test packet error rate for SF7BW250 using RX1 window
0:08:00.835856	LOG	TEST STEP NOT APPLICABLE
0:08:00.839853	LOG	==========
0:08:00.844850	LOG	==========
0:08:00.846849	LOG	Start Test Step: Test packet error rate for FSK50 using RX1 window
0:08:00.863857	LOG	End Test Step: Test packet error rate for FSK50 using RX1 window
0:08:00.866838	LOG	TEST STEP NOT APPLICABLE
0:08:00.869836	LOG	==========
0:08:00.874833	LOG	==========
0:08:00.877832	LOG	Start Test Step: Restore default settings
0:08:00.891823	LOG	Send LinkADRReq process starts
0:08:02.695227	LOG	PULL_DATA: 01 44ee 02 fffeb827eb59d368
0:08:02.697197	LOG	PULL_ACK: 01 44ee 04 fffeb827eb59d368
0:08:05.474642	LOG	PUSH_ACK: 01 9bbc 01 fffeb827eb59d368
0:08:05.476643	LOG	PUSH_DATA: Protocol version = 01, Token = 9bbc, Identifier = 00, JSON = {'rxpk': [{'tmst': 652059924, 'time': '2021-10-08T10:08:23.589571Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAWAABNpRSM8/2'}]}
0:08:05.477641	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0058, FOpts:), FPort: 01, FRMPayload: 0033, MIC: 5233cff6)
0:08:05.479639	LOG	Server <---------- DUT
0:08:05.480640	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 003e, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 09b64e34)
0:08:05.482637	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 654059924, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAPgAAyTnmtXMJtk40'}}
0:08:05.484638	LOG	Server ----------> DUT
0:08:09.339414	LOG	PUSH_ACK: 01 e9e5 01 fffeb827eb59d368
0:08:09.341412	LOG	PUSH_DATA: Protocol version = 01, Token = e9e5, Identifier = 00, JSON = {'rxpk': [{'tmst': 655958987, 'time': '2021-10-08T10:08:27.454687Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -15, 'size': 17, 'data': 'QCAgICCCWQADBwGMkoH4kVI='}]}
0:08:09.343412	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0059, FOpts: 0307), FPort: 01, FRMPayload: 0033, MIC: 81f89152)
0:08:09.345410	LOG	Server <---------- DUT
0:08:09.346410	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:09.348409	LOG	Command Answer: 0307
0:08:09.358403	LOG	MAC command communication completed
0:08:09.362401	LOG	Send RXParamSetupReq process starts
0:08:12.885420	LOG	PULL_DATA: 01 25cf 02 fffeb827eb59d368

0:08:12.887419	LOG	PULL_ACK: 01 25cf 04 fffeb827eb59d368
0:08:14.337569	LOG	PUSH_ACK: 01 08f5 01 fffeb827eb59d368
0:08:14.339565	LOG	PUSH_DATA: Protocol version = 01, Token = 08f5, Identifier = 00, JSON = {'rxpk': [{'tmst': 660956419, 'time': '2021-10-08T10:08:32.452769Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAWgABPVlAMviZ'}]}
0:08:14.341565	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005a, FOpts:), FPort: 01, FRMPayload: 0033, MIC: 4032f899)
0:08:14.342564	LOG	Server <---------- DUT
0:08:14.345564	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 003f, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: ebea6c24)
0:08:14.348560	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 662956419, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAPwAAjqhD9Kjr6mwk'}}
0:08:14.349561	LOG	Server ----------> DUT
0:08:19.344713	LOG	PUSH_ACK: 01 e9e2 01 fffeb827eb59d368
0:08:19.348712	LOG	PUSH_DATA: Protocol version = 01, Token = e9e2, Identifier = 00, JSON = {'rxpk': [{'tmst': 665964147, 'time': '2021-10-08T10:08:37.459718Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -15, 'size': 17, 'data': 'QCAgICCCWwAFBwFFUiUAHoc='}]}
0:08:19.350711	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 005b, FOpts: 0507), FPort: 01, FRMPayload: 0033, MIC: 25001e87)
0:08:19.352710	LOG	Server <---------- DUT
0:08:19.353709	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:19.355708	LOG	Command Answer: 0507
0:08:19.371697	LOG	MAC command communication completed
0:08:19.375725	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:08:22.945687	LOG	PULL_DATA: 01 5e53 02 fffeb827eb59d368
0:08:22.946687	LOG	PULL_ACK: 01 5e53 04 fffeb827eb59d368
0:08:24.353883	LOG	PUSH_ACK: 01 60aa 01 fffeb827eb59d368
0:08:24.355882	LOG	PUSH_DATA: Protocol version = 01, Token = 60aa, Identifier = 00, JSON = {'rxpk': [{'tmst': 670966731, 'time': '2021-10-08T10:08:42.469445Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -16, 'size': 17, 'data': 'QCAgICCCXAAFBwFm1dCta8g='}]}
0:08:24.357882	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 005c, FOpts: 0507), FPort: 01, FRMPayload: 0033, MIC: d0ad6bc8)
0:08:24.358882	LOG	Server <---------- DUT
0:08:24.361879	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0040, FOpts:), FPort: e0, FRMPayload: 0501), MIC: a7636c5b)
0:08:24.363877	LOG	Frame command sent to the DUT
0:08:24.365877	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 672966731, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAQADgxNSnY2xb'}}
0:08:24.367875	LOG	Server ----------> DUT
0:08:24.371873	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:08:24.375871	LOG	End Test Step: Restore default settings
0:08:24.379869	LOG	Partial Verdict: PASS
0:08:24.384866	LOG	==========
0:08:24.389862	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_015_A
0:08:24.391863	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_015_B
Verdict	PASS

Date	2021-10-18 18:44:55	
Comments	RX1 Window Test (Part 2)	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	SF7BW250 Frequency	868.100
	FSK Frequency	868.100
	Data Rates to be measured	SF12BW125
	Conformance	False

Time Stamp (ms)	Event	Summary
0:00:00.011454	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_015_B
0:00:00.040438	LOG	WARN:TEST CASE CONFIGURATION NON CONFORMANCE
0:00:00.045437	LOG	==========
0:00:00.047436	LOG	Start Test Step: Device activation
0:00:00.111398	LOG	Activation process has finished successfully
0:00:00.113399	LOG	Data stored in the DUT after Activation:
0:00:00.115397	LOG	DevAddr: 20202020
0:00:00.118396	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.121392	LOG	NwkSKey: e1fd270065a9f0aa5a564cfb823c800a
0:00:00.124392	LOG	AppSKey: f5daca433769fa91d94cb415a713359b
0:00:00.127390	LOG	End Test Step: Device activation
0:00:00.131387	LOG	Partial Verdict: PASS
0:00:00.134384	LOG	==========
0:00:00.139381	LOG	==========
0:00:00.142382	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.151375	LOG	DUT Pre-condition activation process starts
0:00:00.154373	LOG	DUT Pre-condition activation completed
0:00:00.159370	LOG	End Test Step: DUT Pre-condition settings
0:00:00.164368	LOG	Partial Verdict: PASS
0:00:00.168365	LOG	==========
0:00:00.174362	LOG	==========
0:00:00.176361	LOG	Start Test Step: Initial settings for the test
0:00:00.189353	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:00:01.683504	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:05.301441	LOG	PULL_DATA: 01 d085 02 fffeb827eb59d368
0:00:05.303440	LOG	PULL_ACK: 01 d085 04 fffeb827eb59d368
0:00:05.304441	LOG	First PULL_DATA received
0:00:06.682655	LOG	PUSH_ACK: 01 fa54 01 fffeb827eb59d368
0:00:06.685653	LOG	PUSH_DATA: Protocol version = 01, Token = fa54, Identifier = 00, JSON = {'rxpk': [{'tmst': 680966811, 'time': '2021-10-08T10:08:52.462408Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAXgABVZQZMGZ3'}]}
0:00:06.687651	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005e, FOpts:), FPort: 01, FRMPayload: 0034, MIC: 19306677)
0:00:06.689650	LOG	Server <---------- DUT
0:00:06.691649	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0041, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 00264afd)
0:00:06.694648	LOG	Frame command sent to the DUT
0:00:06.696646	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 682966811, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAQQDga4gAJkr9'}}
0:00:06.697645	LOG	Server ----------> DUT
0:00:06.704641	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:00:06.709638	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:11.689801	LOG	PUSH_ACK: 01 d835 01 fffeb827eb59d368
0:00:11.691800	LOG	PUSH_DATA: Protocol version = 01, Token = d835, Identifier = 00, JSON = {'rxpk': [{'tmst': 685969427, 'time': '2021-10-08T10:08:57.468851Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAXwABLe0UNOlG'}]}
0:00:11.693799	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 005f, FOpts:), FPort: 01, FRMPayload: 0035, MIC: 1434e946)
0:00:11.694818	LOG	Server <---------- DUT
0:00:11.696797	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0042, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 96f9db34)
0:00:11.700795	LOG	Frame command sent to the DUT
0:00:11.702794	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 687969427, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAQgDgLAKW+ds0'}}
0:00:11.703793	LOG	Server ----------> DUT
0:00:11.708790	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:11.712788	LOG	End Test Step: Initial settings for the test
0:00:11.717785	LOG	Partial Verdict: PASS
0:00:11.723782	LOG	==========
0:00:11.730779	LOG	==========
0:00:11.732779	LOG	Start Test Step: Test packet error rate for SF7BW125 using RX1 window
0:00:11.748769	LOG	End Test Step: Test packet error rate for SF7BW125 using RX1 window
0:00:11.751766	LOG	TEST STEP NOT APPLICABLE
0:00:11.755764	LOG	==========
0:00:11.761762	LOG	==========
0:00:11.764760	LOG	Start Test Step: Test packet error rate for SF8BW125 using RX1 window
0:00:11.779750	LOG	End Test Step: Test packet error rate for SF8BW125 using RX1 window
0:00:11.782748	LOG	TEST STEP NOT APPLICABLE
0:00:11.785747	LOG	==========
0:00:11.791743	LOG	==========
0:00:11.794741	LOG	Start Test Step: Test packet error rate for SF9BW125 using RX1 window
0:00:11.807733	LOG	End Test Step: Test packet error rate for SF9BW125 using RX1 window
0:00:11.810734	LOG	TEST STEP NOT APPLICABLE
0:00:11.814749	LOG	==========
0:00:11.818731	LOG	==========
0:00:11.821726	LOG	Start Test Step: Test packet error rate for SF10BW125 using RX1 window
0:00:11.836717	LOG	End Test Step: Test packet error rate for SF10BW125 using RX1 window
0:00:11.839715	LOG	TEST STEP NOT APPLICABLE
0:00:11.843713	LOG	==========
0:00:11.874697	LOG	==========
0:00:11.876698	LOG	Start Test Step: Test packet error rate for SF11BW125 using RX1 window
0:00:11.891687	LOG	End Test Step: Test packet error rate for SF11BW125 using RX1 window
0:00:11.894686	LOG	TEST STEP NOT APPLICABLE
0:00:11.897683	LOG	==========
0:00:11.904679	LOG	==========
0:00:11.906679	LOG	Start Test Step: Test packet error rate for SF12BW125 using RX1 window
0:00:11.918689	LOG	Send LinkADRReq process starts
0:00:15.500694	LOG	PULL_DATA: 01 e8d4 02 fffeb827eb59d368
0:00:15.502692	LOG	PULL_ACK: 01 e8d4 04 fffeb827eb59d368

0:00:16.692015	LOG	PUSH_ACK: 01 6682 01 fffeb827eb59d368
0:00:16.694013	LOG	PUSH_DATA: Protocol version = 01, Token = 6682, Identifier = 00, JSON = {'rxpk': [{'tmst': 690972043, 'time': '2021-10-08T10:09:02.471388Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAYAABN8tHQgqs'}]}
0:00:16.695013	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0060, FOpts:), FPort: 01, FRMPayload: 0036, MIC: 47420aac)
0:00:16.697012	LOG	Server <---------- DUT
0:00:16.699011	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0043, FOpts:), FPort: 00, FRMPayload: 0300070001), MIC: 948365ef)
0:00:16.702009	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 692972043, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAQwAAzPeD1xqUg2Xv'}}
0:00:16.704008	LOG	Server ----------> DUT
0:00:22.998423	LOG	PUSH_ACK: 01 6498 01 fffeb827eb59d368
0:00:23.000422	LOG	PUSH_DATA: Protocol version = 01, Token = 6498, Identifier = 00, JSON = {'rxpk': [{'tmst': 697247164, 'time': '2021-10-08T10:09:08.777834Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -12, 'size': 17, 'data': 'QCAgICCCYQADBwFW9UiUTGo='}]}
0:00:23.001420	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0061, FOpts: 0307), FPort: 01, FRMPayload: 0036, MIC: 48944c6a)
0:00:23.003419	LOG	Server <---------- DUT
0:00:23.005418	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:23.006418	LOG	Command Answer: 0307
0:00:23.012416	LOG	MAC command communication completed
0:00:23.016413	LOG	Send RXParamSetupReq process starts
0:00:25.700882	LOG	PULL_DATA: 01 d9a8 02 fffeb827eb59d368
0:00:25.703880	LOG	PULL_ACK: 01 d9a8 04 fffeb827eb59d368
0:00:27.832668	LOG	PUSH_ACK: 01 8775 01 fffeb827eb59d368
0:00:27.834667	LOG	PUSH_DATA: Protocol version = 01, Token = 8775, Identifier = 00, JSON = {'rxpk': [{'tmst': 702085876, 'time': '2021-10-08T10:09:13.611930Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAYgABNY6Kb4Ok'}]}
0:00:27.835666	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0062, FOpts:), FPort: 01, FRMPayload: 0036, MIC: 8a6f83a4)
0:00:27.836665	LOG	Server <---------- DUT
0:00:27.838665	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0044, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: 4951a71f)
0:00:27.840663	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 704085876, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAARAAA7ovilN1JUacf'}}
0:00:27.842662	LOG	Server ----------> DUT
0:00:32.993763	LOG	PUSH_ACK: 01 6570 01 fffeb827eb59d368
0:00:32.997761	LOG	PUSH_DATA: Protocol version = 01, Token = 6570, Identifier = 00, JSON = {'rxpk': [{'tmst': 707252308, 'time': '2021-10-08T10:09:18.773176Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -12, 'size': 17, 'data': 'QCAgICCCYwAFBwEjTkbJyUw='}]}
0:00:32.998760	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0063, FOpts: 0507), FPort: 01, FRMPayload: 0036, MIC: 46c9c94c)
0:00:32.999758	LOG	Server <---------- DUT
0:00:33.001757	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:33.003757	LOG	Command Answer: 0507

0:00:33.017748	LOG	MAC command communication completed
0:00:33.032739	LOG	Send Test Command RxAppCntReq process starts
0:00:35.841140	LOG	PULL_DATA: 01 5a8a 02 fffeb827eb59d368
0:00:35.843139	LOG	PULL_ACK: 01 5a8a 04 fffeb827eb59d368
0:00:38.004907	LOG	PUSH_ACK: 01 3f62 01 fffeb827eb59d368
0:00:38.005945	LOG	PUSH_DATA: Protocol version = 01, Token = 3f62, Identifier = 00, JSON = {'rxpk': [{'tmst': 712254948, 'time': '2021-10-08T10:09:23.784255Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -15, 'size': 17, 'data': 'QCAgICCCZAAFBwHluODXF84='}]}
0:00:38.007905	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0064, FOpts: 0507), FPort: 01, FRMPayload: 0036, MIC: e0d717ce)
0:00:38.008904	LOG	Server <---------- DUT
0:00:38.010906	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0045, FOpts:), FPort: e0, FRMPayload: 09), MIC: 43e279df)
0:00:38.012902	LOG	Frame command sent to the DUT
0:00:38.013902	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 713254948, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAARQDgrUPied8='}}
0:00:38.015901	LOG	Server ----------> DUT
0:00:43.010055	LOG	PUSH_ACK: 01 8029 01 fffeb827eb59d368
0:00:43.012054	LOG	PUSH_DATA: Protocol version = 01, Token = 8029, Identifier = 00, JSON = {'rxpk': [{'tmst': 717260460, 'time': '2021-10-08T10:09:28.789733Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -12, 'size': 16, 'data': 'QCAgICCAZQDgNt940X6y6Q=='}]}
0:00:43.013053	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0065, FOpts:), FPort: e0, FRMPayload: 093700, MIC: d17eb2e9)
0:00:43.014053	LOG	Server <---------- DUT
0:00:43.015052	LOG	Answer in payload: 3700
0:00:43.017051	LOG	Frame Command Payload in the Answer: 093700
0:00:43.021049	LOG	RX Count received by DUT: 55
0:00:43.025047	LOG	Send Test Command RxAppCntReq process completed
0:00:43.030045	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:46.011346	LOG	PULL_DATA: 01 44de 02 fffeb827eb59d368
0:00:46.015345	LOG	PULL_ACK: 01 44de 04 fffeb827eb59d368
0:00:47.840304	LOG	PUSH_ACK: 01 7ca5 01 fffeb827eb59d368
0:00:47.843302	LOG	PUSH_DATA: Protocol version = 01, Token = 7ca5, Identifier = 00, JSON = {'rxpk': [{'tmst': 722096268, 'time': '2021-10-08T10:09:33.620270Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAZgABLGsEMufP'}]}
0:00:47.844301	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0066, FOpts:), FPort: 01, FRMPayload: 0037, MIC: 0432e7cf)
0:00:47.845300	LOG	Server <---------- DUT
0:00:47.847300	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0046, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a4e2a6cb)
0:00:47.848299	LOG	Frame command sent to the DUT
0:00:47.850297	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 723096268, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAARgDgeZBRmb1x2mT6xe9DjQ2j4prjo+KNZ+ZsoTPBF8Yxj84EGEDgqiwmLJIeBFfDIeToyOIppOKmyw=='}}
0:00:47.851297	LOG	Server ----------> DUT
0:00:47.854295	LOG	Send Test Command TxFramesCtrlReq process completed

0:00:47.857293	LOG	Check previous uplink data rate process starts
0:00:47.861291	LOG	Uplink received with expected Data Rate
0:00:47.864290	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:52.854447	LOG	PUSH_ACK: 01 894e 01 fffeb827eb59d368
0:00:52.856446	LOG	PUSH_DATA: Protocol version = 01, Token = 894e, Identifier = 00, JSON = {'rxpk': [{'tmst': 727112884, 'time': '2021-10-08T10:09:38.634053Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAZwABvzdUPi/D'}]}
0:00:52.857445	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0067, FOpts:), FPort: 01, FRMPayload: 0038, MIC: 543e2fc3)
0:00:52.860443	LOG	Server <---------- DUT
0:00:52.864442	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0047, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d411c04e)
0:00:52.870439	LOG	Frame command sent to the DUT
0:00:52.875435	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 728112884, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAARwDgO9eBTbkGxY0BeV/u/pzukPlmOU4tsTiMSfz3RGIYVFs1biCGP9w/XiIiHwpOT6CnLVma1BHATg=='}}
0:00:52.879433	LOG	Server ----------> DUT
0:00:52.885429	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:52.890426	LOG	Check previous uplink data rate process starts
0:00:52.893424	LOG	Uplink received with expected Data Rate
0:00:52.896423	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:56.080608	LOG	PULL_DATA: 01 5759 02 fffeb827eb59d368
0:00:56.082608	LOG	PULL_ACK: 01 5759 04 fffeb827eb59d368
0:00:57.871589	LOG	PUSH_ACK: 01 d351 01 fffeb827eb59d368
0:00:57.873587	LOG	PUSH_DATA: Protocol version = 01, Token = d351, Identifier = 00, JSON = {'rxpk': [{'tmst': 732129508, 'time': '2021-10-08T10:09:43.650839Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAaAABhDmbzteJ'}]}
0:00:57.874587	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0068, FOpts:), FPort: 01, FRMPayload: 0039, MIC: 9bced789)
0:00:57.875586	LOG	Server <---------- DUT
0:00:57.877585	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0048, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b64847ea)
0:00:57.879584	LOG	Frame command sent to the DUT
0:00:57.880583	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 733129508, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAASADgfgNrbQJhD/u/3OGILTRR6SWHibgalu5/txf8bwO46UEqsK/8xRpTGDZPB4/y4dWzUMcDtkhH6g=='}}
0:00:57.882583	LOG	Server ----------> DUT
0:00:57.885581	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:57.889580	LOG	Check previous uplink data rate process starts
0:00:57.895575	LOG	Uplink received with expected Data Rate
0:00:57.898574	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:02.889748	LOG	PUSH_ACK: 01 adac 01 fffeb827eb59d368
0:01:02.891729	LOG	PUSH_DATA: Protocol version = 01, Token = adac, Identifier = 00, JSON = {'rxpk': [{'tmst': 737146124, 'time': '2021-10-08T10:09:48.670058Z', 'chan': 0,

		'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAaQAB1szkPzpm'}]}
0:01:02.892730	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0069, FOpts:), FPort: 01, FRMPayload: 003a, MIC: e43f3a66)
0:01:02.894728	LOG	Server <---------- DUT
0:01:02.895726	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0049, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8cf9d26b)
0:01:02.897727	LOG	Frame command sent to the DUT
0:01:02.899726	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 738146124, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAASQDg1kfE2uHhwS42WrHHmKlGJsguwCt7FW7Hn5ujxtfPq9Uk/rKkLbGpEZC8JSPDuCEyXcKhjPnSaw=='}}
0:01:02.900725	LOG	Server ----------> DUT
0:01:02.903722	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:02.906720	LOG	Check previous uplink data rate process starts
0:01:02.911717	LOG	Uplink received with expected Data Rate
0:01:02.914715	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:06.100900	LOG	PULL_DATA: 01 8695 02 fffeb827eb59d368
0:01:06.104898	LOG	PULL_ACK: 01 8695 04 fffeb827eb59d368
0:01:07.910870	LOG	PUSH_ACK: 01 80ec 01 fffeb827eb59d368
0:01:07.912869	LOG	PUSH_DATA: Protocol version = 01, Token = 80ec, Identifier = 00, JSON = {'rxpk': [{'tmst': 742162756, 'time': '2021-10-08T10:09:53.690906Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAagABqGbVqvb4'}]}
0:01:07.913868	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006a, FOpts:), FPort: 01, FRMPayload: 003b, MIC: d5aaf6f8)
0:01:07.914867	LOG	Server <---------- DUT
0:01:07.916865	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 004a, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b6fb33e4)
0:01:07.919864	LOG	Frame command sent to the DUT
0:01:07.921864	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 743162756, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAASgDgcmEOiR2pO3ceR3nchuil6X542eWE07UeOVg6rvkHyGwhk/mpqMhepiD1cfY9j+2Jast2tvsz5A=='}}
0:01:07.922862	LOG	Server ----------> DUT
0:01:07.926860	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:07.929859	LOG	Check previous uplink data rate process starts
0:01:07.934855	LOG	Uplink received with expected Data Rate
0:01:07.937854	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:12.928011	LOG	PUSH_ACK: 01 17e4 01 fffeb827eb59d368
0:01:12.930010	LOG	PUSH_DATA: Protocol version = 01, Token = 17e4, Identifier = 00, JSON = {'rxpk': [{'tmst': 747179396, 'time': '2021-10-08T10:09:58.707388Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAawABZQ4YQKKU'}]}
0:01:12.931010	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006b, FOpts:), FPort: 01, FRMPayload: 003c, MIC: 1840a294)
0:01:12.933009	LOG	Server <---------- DUT
0:01:12.934008	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 004b, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 3149a0dd)
0:01:12.936006	LOG	Frame command sent to the DUT
0:01:12.937005	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 748179396, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAASwDg+FZnj203Mvn3gDX9j8v4Kh/7PjkkWJem1zrtGfit5ihd41UwQ/qug4Y9Qbaet1Q9l9eiMUmg3Q=='}}
0:01:12.938006	LOG	Server ----------> DUT
0:01:12.941003	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:12.944001	LOG	Check previous uplink data rate process starts
0:01:12.948000	LOG	Uplink received with expected Data Rate
0:01:12.951997	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:16.141180	LOG	PULL_DATA: 01 85f1 02 fffeb827eb59d368
0:01:16.143179	LOG	PULL_ACK: 01 85f1 04 fffeb827eb59d368
0:01:17.944152	LOG	PUSH_ACK: 01 8c0c 01 fffeb827eb59d368
0:01:17.947152	LOG	PUSH_DATA: Protocol version = 01, Token = 8c0c, Identifier = 00, JSON = {'rxpk': [{'tmst': 752196020, 'time': '2021-10-08T10:10:03.724437Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAbAAB8S12T+hw'}]}
0:01:17.948150	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006c, FOpts:), FPort: 01, FRMPayload: 003d, MIC: 764fe870)
0:01:17.949152	LOG	Server <---------- DUT
0:01:17.951151	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 004c, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: aafd4d34)
0:01:17.953150	LOG	Frame command sent to the DUT
0:01:17.954149	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 753196020, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAATADg+qPWyuOedqW6n9ntFm1pg4wc4ylJ56x+EDLaPYwIXRWIF/1mpQ6bILnQDgBtQF8Korguqv1NNA=='}}
0:01:17.956148	LOG	Server ----------> DUT
0:01:17.962143	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:17.969138	LOG	Check previous uplink data rate process starts
0:01:17.975135	LOG	Uplink received with expected Data Rate
0:01:17.979133	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:22.963295	LOG	PUSH_ACK: 01 66f1 01 fffeb827eb59d368
0:01:22.965294	LOG	PUSH_DATA: Protocol version = 01, Token = 66f1, Identifier = 00, JSON = {'rxpk': [{'tmst': 757212652, 'time': '2021-10-08T10:10:08.743223Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAbQABYjl2kY7d'}]}
0:01:22.967292	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006d, FOpts:), FPort: 01, FRMPayload: 003e, MIC: 76918edd)
0:01:22.968296	LOG	Server <---------- DUT
0:01:22.969295	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 004d, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a0b71e89)
0:01:22.972290	LOG	Frame command sent to the DUT
0:01:22.973291	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 758212652, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data':

		'YCAgICAATQDg5NZmK/w2ElRgC1NwhMAUOo1EuBj4UFUGFIALKnX31iRaRUNFIljYai6bZQOLfyaW48w7oLceiQ=='}}
0:01:22.974289	LOG	Server ----------> DUT
0:01:22.977286	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:22.980284	LOG	Check previous uplink data rate process starts
0:01:22.984282	LOG	Uplink received with expected Data Rate
0:01:22.989278	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:26.170465	LOG	PULL_DATA: 01 7cc0 02 fffeb827eb59d368
0:01:26.172465	LOG	PULL_ACK: 01 7cc0 04 fffeb827eb59d368
0:01:27.974585	LOG	PUSH_ACK: 01 7cbb 01 fffeb827eb59d368
0:01:27.976565	LOG	PUSH_DATA: Protocol version = 01, Token = 7cbb, Identifier = 00, JSON = {'rxpk': [{'tmst': 762229276, 'time': '2021-10-08T10:10:13.754197Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAbgABBhVw57Tw'}]}
0:01:27.977565	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006e, FOpts:), FPort: 01, FRMPayload: 003f, MIC: 70e7b4f0)
0:01:27.978582	LOG	Server <---------- DUT
0:01:27.980563	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 004e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1cf40f2f)
0:01:27.982562	LOG	Frame command sent to the DUT
0:01:27.983563	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 763229276, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAATgDgnmxDCY9RHPczdC5S41LofBmcfLsiMm6RdNWtL7A1D2Luhr4cnJaUhzmB652NFkO/i8mDHPQPLw=='}}
0:01:27.985562	LOG	Server ----------> DUT
0:01:27.988560	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:27.991557	LOG	Check previous uplink data rate process starts
0:01:27.996573	LOG	Uplink received with expected Data Rate
0:01:27.999553	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:32.992707	LOG	PUSH_ACK: 01 22fc 01 fffeb827eb59d368
0:01:32.994706	LOG	PUSH_DATA: Protocol version = 01, Token = 22fc, Identifier = 00, JSON = {'rxpk': [{'tmst': 767245908, 'time': '2021-10-08T10:10:18.772820Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAbwABDo/HCjzY'}]}
0:01:32.996706	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 006f, FOpts:), FPort: 01, FRMPayload: 0040, MIC: c70a3cd8)
0:01:32.997705	LOG	Server <---------- DUT
0:01:32.999704	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 004f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 826b262a)
0:01:33.001702	LOG	Frame command sent to the DUT
0:01:33.003701	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 768245908, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAATwDgmExCmOpXFG63WjyuUODB95skfu909NjqzkscGmnfqYeCX3x0T43xH0rPGFNjcBM+vuXQgmsmKg=='}}
0:01:33.004701	LOG	Server ----------> DUT
0:01:33.009698	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:33.012696	LOG	Check previous uplink data rate process starts
0:01:33.017694	LOG	Uplink received with expected Data Rate

0:01:33.027687	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:36.200916	LOG	PULL_DATA: 01 e466 02 fffeb827eb59d368
0:01:36.204914	LOG	PULL_ACK: 01 e466 04 fffeb827eb59d368
0:01:38.003889	LOG	PUSH_ACK: 01 da61 01 fffeb827eb59d368
0:01:38.005889	LOG	PUSH_DATA: Protocol version = 01, Token = da61, Identifier = 00, JSON = {'rxpk': [{'tmst': 772262532, 'time': '2021-10-08T10:10:23.783497Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAcAABVvd+YYFr'}]}
0:01:38.006889	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0070, FOpts:), FPort: 01, FRMPayload: 0041, MIC: 7e61816b)
0:01:38.008887	LOG	Server <---------- DUT
0:01:38.010885	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0050, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d7bb9ab5)
0:01:38.012884	LOG	Frame command sent to the DUT
0:01:38.014883	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 773262532, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAUADgKyl5XTYR/kMNqPG8w0KLipPdfC2ArwxXiudge6jINd+SX3uQw5VgMRVQW6yzWK5PsGGu17uatQ=='}}
0:01:38.015882	LOG	Server ----------> DUT
0:01:38.018881	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:38.022878	LOG	Check previous uplink data rate process starts
0:01:38.027875	LOG	Uplink received with expected Data Rate
0:01:38.034872	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:43.023030	LOG	PUSH_ACK: 01 0b63 01 fffeb827eb59d368
0:01:43.025028	LOG	PUSH_DATA: Protocol version = 01, Token = 0b63, Identifier = 00, JSON = {'rxpk': [{'tmst': 777279140, 'time': '2021-10-08T10:10:28.803108Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAcQAB8nD1y0M8'}]}
0:01:43.026030	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0071, FOpts:), FPort: 01, FRMPayload: 0042, MIC: f5cb433c)
0:01:43.028027	LOG	Server <---------- DUT
0:01:43.029026	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0051, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: deff2f9a)
0:01:43.031027	LOG	Frame command sent to the DUT
0:01:43.033026	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 778279140, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAUQDgcG496GpArEW2Fjlsbn254OmQUf3zns7ClW95qYIGWkCxJ6UXWm5QDdh8vtC4t3ISqgwi3v8vmg=='}}
0:01:43.034023	LOG	Server ----------> DUT
0:01:43.037021	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:43.041020	LOG	Check previous uplink data rate process starts
0:01:43.046016	LOG	Uplink received with expected Data Rate
0:01:43.050014	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:46.230279	LOG	PULL_DATA: 01 af62 02 fffeb827eb59d368
0:01:46.232278	LOG	PULL_ACK: 01 af62 04 fffeb827eb59d368
0:01:48.042267	LOG	PUSH_ACK: 01 bc83 01 fffeb827eb59d368
0:01:48.044248	LOG	PUSH_DATA: Protocol version = 01, Token = bc83, Identifier = 00, JSON = {'rxpk': [{'tmst': 782295756, 'time': '2021-10-08T10:10:33.822847Z', 'chan': 2,

		'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAcgABaLvf7hhP'}]}
0:01:48.046245	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0072, FOpts:), FPort: 01, FRMPayload: 0043, MIC: dfee184f)
0:01:48.048244	LOG	Server <---------- DUT
0:01:48.050243	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0052, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: aae503c4)
0:01:48.052241	LOG	Frame command sent to the DUT
0:01:48.053241	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 783295756, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAUgDgb6cAp0pEWEtNHSA2/Xpg8kku8sNy+sRT6EP3wChLOvhLHVeyrViZPq1GfKXzFn1ckYXLquUDxA=='}}
0:01:48.055240	LOG	Server ----------> DUT
0:01:48.060237	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:48.063235	LOG	Check previous uplink data rate process starts
0:01:48.067233	LOG	Uplink received with expected Data Rate
0:01:48.069232	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:53.060388	LOG	PUSH_ACK: 01 2f3a 01 fffeb827eb59d368
0:01:53.062387	LOG	PUSH_DATA: Protocol version = 01, Token = 2f3a, Identifier = 00, JSON = {'rxpk': [{'tmst': 787312388, 'time': '2021-10-08T10:10:38.840636Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAcwABCSOPNVmz'}]}
0:01:53.064386	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0073, FOpts:), FPort: 01, FRMPayload: 0044, MIC: 8f3559b3)
0:01:53.066385	LOG	Server <---------- DUT
0:01:53.068386	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0053, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: bd74b5c7)
0:01:53.070384	LOG	Frame command sent to the DUT
0:01:53.071382	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 788312388, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAUwDgtZuTLO6auFs2g+gFg6qoE8WsQnV1bvTwhuQTkye+B4NbCMfrY3xdklDtUjDtZCg5WmkcvXS1xw=='}}
0:01:53.072383	LOG	Server ----------> DUT
0:01:53.076379	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:53.080378	LOG	Check previous uplink data rate process starts
0:01:53.085375	LOG	Uplink received with expected Data Rate
0:01:53.095368	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:56.270560	LOG	PULL_DATA: 01 ffaf 02 fffeb827eb59d368
0:01:56.272558	LOG	PULL_ACK: 01 ffaf 04 fffeb827eb59d368
0:01:58.077530	LOG	PUSH_ACK: 01 2716 01 fffeb827eb59d368
0:01:58.079529	LOG	PUSH_DATA: Protocol version = 01, Token = 2716, Identifier = 00, JSON = {'rxpk': [{'tmst': 792329004, 'time': '2021-10-08T10:10:43.857907Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAdAAB4G3Ohf/d'}]}
0:01:58.081528	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0074, FOpts:), FPort: 01, FRMPayload: 0045, MIC: ce85ffdd)
0:01:58.083527	LOG	Server <---------- DUT
0:01:58.113510	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0054, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a7c8d293)
0:01:58.116508	LOG	Frame command sent to the DUT
0:01:58.117507	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 793329004, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAVADg8+jFKvufCKyhRbUxrUHLJ0DbZLX5PqB7roMB01d3Z+Fkbzwiu3B+McMpGmF3VYxd6p5Wp8jSkw=='}}
0:01:58.119506	LOG	Server ----------> DUT
0:01:58.123504	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:58.128501	LOG	Check previous uplink data rate process starts
0:01:58.133500	LOG	Uplink received with expected Data Rate
0:01:58.136498	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:03.094517	LOG	PUSH_ACK: 01 93ac 01 fffeb827eb59d368
0:02:03.096516	LOG	PUSH_DATA: Protocol version = 01, Token = 93ac, Identifier = 00, JSON = {'rxpk': [{'tmst': 797345628, 'time': '2021-10-08T10:10:48.874425Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAdQABy9cefp+V'}]}
0:02:03.097515	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0075, FOpts:), FPort: 01, FRMPayload: 0046, MIC: 1e7e9f95)
0:02:03.098515	LOG	Server <---------- DUT
0:02:03.100514	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0055, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 10b95448)
0:02:03.102513	LOG	Frame command sent to the DUT
0:02:03.103513	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 798345628, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAVQDgu/B35D2Edig6N2itU7GPxI41oSf67nxB7oHBwsPieWZP6+34nXmCBaOIke/aNNWAgNsjELlUSA=='}}
0:02:03.105512	LOG	Server ----------> DUT
0:02:03.109509	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:03.114506	LOG	Check previous uplink data rate process starts
0:02:03.120503	LOG	Uplink received with expected Data Rate
0:02:03.124502	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:06.300691	LOG	PULL_DATA: 01 071f 02 fffeb827eb59d368
0:02:06.304690	LOG	PULL_ACK: 01 071f 04 fffeb827eb59d368
0:02:08.104663	LOG	PUSH_ACK: 01 b86d 01 fffeb827eb59d368
0:02:08.106663	LOG	PUSH_DATA: Protocol version = 01, Token = b86d, Identifier = 00, JSON = {'rxpk': [{'tmst': 802362252, 'time': '2021-10-08T10:10:53.884328Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAdgAB5v/PJVnv'}]}
0:02:08.107663	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0076, FOpts:), FPort: 01, FRMPayload: 0047, MIC: cf2559ef)
0:02:08.109661	LOG	Server <---------- DUT
0:02:08.111660	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0056, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8b3c5f44)
0:02:08.114658	LOG	Frame command sent to the DUT
0:02:08.116657	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 803362252, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data':

		'YCAgICAAVgDgpNBHRg+XfQ73UEay/wL4NtTReq0+RnSSWM2AXB9CtEr+aJIAXqX/AbVY54Rmnbp4ySNbizxfRA=='}}
0:02:08.117657	LOG	Server ----------> DUT
0:02:08.120654	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:08.124652	LOG	Check previous uplink data rate process starts
0:02:08.130649	LOG	Uplink received with expected Data Rate
0:02:08.134646	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:13.121805	LOG	PUSH_ACK: 01 1134 01 fffeb827eb59d368
0:02:13.123804	LOG	PUSH_DATA: Protocol version = 01, Token = 1134, Identifier = 00, JSON = {'rxpk': [{'tmst': 807378892, 'time': '2021-10-08T10:10:58.901379Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAdwABgLO5Nz95'}]}
0:02:13.124803	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0077, FOpts:), FPort: 01, FRMPayload: 0048, MIC: b9373f79)
0:02:13.126802	LOG	Server <---------- DUT
0:02:13.128801	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0057, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e90c8935)
0:02:13.131799	LOG	Frame command sent to the DUT
0:02:13.133799	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 808378892, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAVwDg69FuAMSiep5zfIlkYcvsJtoI0GOl4Z/ZAKIRskI38bbwZBYQg8TAfltfSwECuIx5nxqa6QyJNQ=='}}
0:02:13.134797	LOG	Server ----------> DUT
0:02:13.138795	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:13.142811	LOG	Check previous uplink data rate process starts
0:02:13.146791	LOG	Uplink received with expected Data Rate
0:02:13.149790	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:16.330976	LOG	PULL_DATA: 01 2d8d 02 fffeb827eb59d368
0:02:16.331975	LOG	PULL_ACK: 01 2d8d 04 fffeb827eb59d368
0:02:18.136948	LOG	PUSH_ACK: 01 ef4f 01 fffeb827eb59d368
0:02:18.139946	LOG	PUSH_DATA: Protocol version = 01, Token = ef4f, Identifier = 00, JSON = {'rxpk': [{'tmst': 812395524, 'time': '2021-10-08T10:11:03.917466Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAeAAB53Ga7Z91'}]}
0:02:18.140945	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0078, FOpts:), FPort: 01, FRMPayload: 0049, MIC: 9aed9f75)
0:02:18.142944	LOG	Server <---------- DUT
0:02:18.144943	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0058, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 04b0a7af)
0:02:18.146942	LOG	Frame command sent to the DUT
0:02:18.147941	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 813395524, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAWADgNTZH540ug8Yg9mLlhaLY5miLQW+BGqe+YO1FxOm4Vswd7HVo5FqK1uev6xy1zxWRcfCQBLCnrw=='}}
0:02:18.148941	LOG	Server ----------> DUT
0:02:18.151958	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:18.153956	LOG	Check previous uplink data rate process starts
0:02:18.158935	LOG	Uplink received with expected Data Rate

0:02:18.162933	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:23.161504	LOG	PUSH_ACK: 01 89d4 01 fffeb827eb59d368
0:02:23.163502	LOG	PUSH_DATA: Protocol version = 01, Token = 89d4, Identifier = 00, JSON = {'rxpk': [{'tmst': 817412140, 'time': '2021-10-08T10:11:08.941724Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAeQABF3DfkXVR'}]}
0:02:23.165501	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0079, FOpts:), FPort: 01, FRMPayload: 004a, MIC: df917551)
0:02:23.166500	LOG	Server <---------- DUT
0:02:23.169500	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0059, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b40a50bf)
0:02:23.171499	LOG	Frame command sent to the DUT
0:02:23.173497	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 818412140, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAWQDgYu/KSE7RCwbPPoHRRztdVqsLeY23NtprzTeaQKpZibgIll69Yav2hHidJAzl1ItBZJZGtApQvw=='}}
0:02:23.175497	LOG	Server ----------> DUT
0:02:23.179493	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:23.183491	LOG	Check previous uplink data rate process starts
0:02:23.188488	LOG	Uplink received with expected Data Rate
0:02:23.190487	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:26.370627	LOG	PULL_DATA: 01 b663 02 fffeb827eb59d368
0:02:26.372626	LOG	PULL_ACK: 01 b663 04 fffeb827eb59d368
0:02:28.178660	LOG	PUSH_ACK: 01 35c1 01 fffeb827eb59d368
0:02:28.180658	LOG	PUSH_DATA: Protocol version = 01, Token = 35c1, Identifier = 00, JSON = {'rxpk': [{'tmst': 822428748, 'time': '2021-10-08T10:11:13.958799Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAegABM0UMQfyL'}]}
0:02:28.181657	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007a, FOpts:), FPort: 01, FRMPayload: 004b, MIC: 0c41fc8b)
0:02:28.183656	LOG	Server <---------- DUT
0:02:28.184655	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 005a, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b89051ac)
0:02:28.187653	LOG	Frame command sent to the DUT
0:02:28.188653	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 823428748, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAWgDgTokp5YvWhUfNc2aQr6lUWrDPnpMDrCxFVwzCDtbjT2xKOPxPRc0xmsdpZedA3mvk0AOcuJBRrA=='}}
0:02:28.189652	LOG	Server ----------> DUT
0:02:28.193651	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:28.197648	LOG	Check previous uplink data rate process starts
0:02:28.203644	LOG	Uplink received with expected Data Rate
0:02:28.207642	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:33.193801	LOG	PUSH_ACK: 01 c7e4 01 fffeb827eb59d368
0:02:33.195800	LOG	PUSH_DATA: Protocol version = 01, Token = c7e4, Identifier = 00, JSON = {'rxpk': [{'tmst': 827445372, 'time': '2021-10-08T10:11:18.973501Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAewABb1N25N6s'}]}

0:02:33.197800	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007b, FOpts:), FPort: 01, FRMPayload: 004c, MIC: 76e4deac)
0:02:33.198799	LOG	Server <---------- DUT
0:02:33.201797	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 005b, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 5a8067aa)
0:02:33.203796	LOG	Frame command sent to the DUT
0:02:33.205795	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 828445372, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAWwDg8sVhAjUA6XFxlaRpW2A+ekm+kvEfY7l6Z74FM2FdU0/M4vK1gp2dl2nkJ9iKiHb3cIW7WoBnqg==''}}
0:02:33.207794	LOG	Server ----------> DUT
0:02:33.211791	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:33.215789	LOG	Check previous uplink data rate process starts
0:02:33.221786	LOG	Uplink received with expected Data Rate
0:02:33.225784	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:36.409987	LOG	PULL_DATA: 01 2483 02 fffeb827eb59d368
0:02:36.413967	LOG	PULL_ACK: 01 2483 04 fffeb827eb59d368
0:02:38.204947	LOG	PUSH_ACK: 01 67d8 01 fffeb827eb59d368
0:02:38.206946	LOG	PUSH_DATA: Protocol version = 01, Token = 67d8, Identifier = 00, JSON = {'rxpk': [{'tmst': 832461988, 'time': '2021-10-08T10:11:23.984991Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAfAABv7F/PUoM'}]}
0:02:38.207945	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007c, FOpts:), FPort: 01, FRMPayload: 004d, MIC: 7f3d4a0c)
0:02:38.208944	LOG	Server <---------- DUT
0:02:38.210943	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 005c, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 7db8bcd7)
0:02:38.212942	LOG	Frame command sent to the DUT
0:02:38.214941	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 833461988, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAXADg35jEqlyvSbfGjlVlg+47A/2q3EKkKcusZE+kCX0w3y7wxnLFQtvsfU4P9HVlxOgpLAiqfbi81w==''}}
0:02:38.216940	LOG	Server ----------> DUT
0:02:38.219938	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:38.222936	LOG	Check previous uplink data rate process starts
0:02:38.227933	LOG	Uplink received with expected Data Rate
0:02:38.230932	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:43.226137	LOG	PUSH_ACK: 01 ed96 01 fffeb827eb59d368
0:02:43.228134	LOG	PUSH_DATA: Protocol version = 01, Token = ed96, Identifier = 00, JSON = {'rxpk': [{'tmst': 837478620, 'time': '2021-10-08T10:11:29.006753Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAfQABuVMOLKwA'}]}
0:02:43.230133	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007d, FOpts:), FPort: 01, FRMPayload: 004e, MIC: 0e2cac00)
0:02:43.231133	LOG	Server <---------- DUT
0:02:43.233131	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 005d, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 58c8a39a)

0:02:43.236130	LOG	Frame command sent to the DUT
0:02:43.238129	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 838478620, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAXQDgc1+1Ukk5c6PWaSc3/Bpnpm+DfBx/Mn4YLGdM8cO7rudtyDCT95OtNWFMpxNOsMD0o06qWMijmg=='}}
0:02:43.239128	LOG	Server ----------> DUT
0:02:43.243126	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:43.247125	LOG	Check previous uplink data rate process starts
0:02:43.253121	LOG	Uplink received with expected Data Rate
0:02:43.258117	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:46.440306	LOG	PULL_DATA: 01 12ec 02 fffeb827eb59d368
0:02:46.442302	LOG	PULL_ACK: 01 12ec 04 fffeb827eb59d368
0:02:48.237280	LOG	PUSH_ACK: 01 4539 01 fffeb827eb59d368
0:02:48.239279	LOG	PUSH_DATA: Protocol version = 01, Token = 4539, Identifier = 00, JSON = {'rxpk': [{'tmst': 842495244, 'time': '2021-10-08T10:11:34.016999Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAfgABzVHoh9I/'}]}
0:02:48.241278	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007e, FOpts:), FPort: 01, FRMPayload: 004f, MIC: e887d23f)
0:02:48.243277	LOG	Server <---------- DUT
0:02:48.245276	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 005e, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b004e2d3)
0:02:48.247275	LOG	Frame command sent to the DUT
0:02:48.249274	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 843495244, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAXgDgSLt7smQt/TMHGLDRN3NV8XDIa6EGW/YLDM9Fxm06Eq44Sryv45g9/A9dkEpCDSERsLV0sATi0w=='}}
0:02:48.251273	LOG	Server ----------> DUT
0:02:48.254271	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:48.259268	LOG	Check previous uplink data rate process starts
0:02:48.266264	LOG	Uplink received with expected Data Rate
0:02:48.270262	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:53.256421	LOG	PUSH_ACK: 01 02d8 01 fffeb827eb59d368
0:02:53.259419	LOG	PUSH_DATA: Protocol version = 01, Token = 02d8, Identifier = 00, JSON = {'rxpk': [{'tmst': 847511876, 'time': '2021-10-08T10:11:39.036867Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAfwABVmU2DPIy'}]}
0:02:53.260419	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 007f, FOpts:), FPort: 01, FRMPayload: 0050, MIC: 360cf232)
0:02:53.261418	LOG	Server <---------- DUT
0:02:53.263417	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 005f, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 50687133)
0:02:53.266417	LOG	Frame command sent to the DUT
0:02:53.267415	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 848511876, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAXwDgJEQjtNHq71PXtdlxL4z2H/Jr0JQjfOM+VsQXwYe8kaUEva+eGJv5F6D9a8ALYxKwcGYiUGhxMw=='}}

0:02:53.269415	LOG	Server ----------> DUT
0:02:53.272412	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:53.278408	LOG	Check previous uplink data rate process starts
0:02:53.283406	LOG	Uplink received with expected Data Rate
0:02:53.287404	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:56.470589	LOG	PULL_DATA: 01 e50a 02 fffeb827eb59d368
0:02:56.472588	LOG	PULL_ACK: 01 e50a 04 fffeb827eb59d368
0:02:58.275561	LOG	PUSH_ACK: 01 f89d 01 fffeb827eb59d368
0:02:58.277560	LOG	PUSH_DATA: Protocol version = 01, Token = f89d, Identifier = 00, JSON = {'rxpk': [{'tmst': 852528516, 'time': '2021-10-08T10:11:44.056107Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAgAABHXcBmX3Y'}]}
0:02:58.279561	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0080, FOpts:), FPort: 01, FRMPayload: 0051, MIC: 01997dd8)
0:02:58.281558	LOG	Server <---------- DUT
0:02:58.283557	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0060, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4c0c4f2d)
0:02:58.286555	LOG	Frame command sent to the DUT
0:02:58.287555	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 853528516, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAYADgbK/+VPbGw1qgq+T7PlDlp2GV7alDwXlUp2LVH2TgLWfsEvK0OOfdnG51H/kN5ziomQDeTAxPLQ=='}}
0:02:58.289553	LOG	Server ----------> DUT
0:02:58.293551	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:58.297549	LOG	Check previous uplink data rate process starts
0:02:58.304545	LOG	Uplink received with expected Data Rate
0:02:58.308543	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:03.294108	LOG	PUSH_ACK: 01 7709 01 fffeb827eb59d368
0:03:03.296105	LOG	PUSH_DATA: Protocol version = 01, Token = 7709, Identifier = 00, JSON = {'rxpk': [{'tmst': 857545132, 'time': '2021-10-08T10:11:49.074283Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAgQABlPMTC/8H'}]}
0:03:03.297104	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0081, FOpts:), FPort: 01, FRMPayload: 0052, MIC: 130bff07)
0:03:03.299103	LOG	Server <---------- DUT
0:03:03.301102	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0061, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 0611c578)
0:03:03.304100	LOG	Frame command sent to the DUT
0:03:03.306099	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 858545132, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAYQDg3ToC3v+DnA/ZQI0KaZdH35W0xFzM1e6IXY2/cLFkXM19YHM+nAzpmHfgI6s6g+2JCqIvBhHFeA=='}}
0:03:03.307099	LOG	Server ----------> DUT
0:03:03.312096	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:03.316094	LOG	Check previous uplink data rate process starts
0:03:03.321091	LOG	Uplink received with expected Data Rate
0:03:03.325088	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:06.510624	LOG	PULL_DATA: 01 d1a5 02 fffeb827eb59d368

0:03:06.513623	LOG	PULL_ACK: 01 d1a5 04 fffeb827eb59d368
0:03:08.309599	LOG	PUSH_ACK: 01 96c1 01 fffeb827eb59d368
0:03:08.311599	LOG	PUSH_DATA: Protocol version = 01, Token = 96c1, Identifier = 00, JSON = {'rxpk': [{'tmst': 862561748, 'time': '2021-10-08T10:11:54.090207Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAggABuyUWpbGm'}]}
0:03:08.313597	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0082, FOpts:), FPort: 01, FRMPayload: 0053, MIC: 16a5b1a6)
0:03:08.314596	LOG	Server <---------- DUT
0:03:08.316596	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0062, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a08e5fe9)
0:03:08.318596	LOG	Frame command sent to the DUT
0:03:08.320594	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 863561748, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAYgDgrb+CPZnct/aPjKi42qgCwlbksRXa51fUGCBqibznUjOHfOOFlZsl+a1dN8Ed0+5GEbcPoI5f6Q=='}}
0:03:08.321592	LOG	Server ----------> DUT
0:03:08.325592	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:08.329588	LOG	Check previous uplink data rate process starts
0:03:08.334585	LOG	Uplink received with expected Data Rate
0:03:08.337583	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:13.328800	LOG	PUSH_ACK: 01 f41f 01 fffeb827eb59d368
0:03:13.330775	LOG	PUSH_DATA: Protocol version = 01, Token = f41f, Identifier = 00, JSON = {'rxpk': [{'tmst': 867578380, 'time': '2021-10-08T10:11:59.108788Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAgwAB6vq2KxXk'}]}
0:03:13.331799	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0083, FOpts:), FPort: 01, FRMPayload: 0054, MIC: b62b15e4)
0:03:13.333798	LOG	Server <---------- DUT
0:03:13.335801	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0063, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 11b19982)
0:03:13.338798	LOG	Frame command sent to the DUT
0:03:13.340794	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 868578380, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAYwDgwxj78V90CHKgaOa+3JS5i8TqKt6UOGOB2il8/kvGaTeSwWFwoCymIBhQQnxwpgItBgfaEbGZgg=='}}
0:03:13.342793	LOG	Server ----------> DUT
0:03:13.346793	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:13.350791	LOG	Check previous uplink data rate process starts
0:03:13.355786	LOG	Uplink received with expected Data Rate
0:03:13.359787	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:16.539999	LOG	PULL_DATA: 01 95aa 02 fffeb827eb59d368
0:03:16.542996	LOG	PULL_ACK: 01 95aa 04 fffeb827eb59d368
0:03:18.345053	LOG	PUSH_ACK: 01 82ca 01 fffeb827eb59d368
0:03:18.347052	LOG	PUSH_DATA: Protocol version = 01, Token = 82ca, Identifier = 00, JSON = {'rxpk': [{'tmst': 872594996, 'time': '2021-10-08T10:12:04.125092Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 13.8, 'rssi': -16, 'size': 15, 'data': 'QCAgICCAhAAB5JFRnOwT'}]}

0:03:18.349053	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0084, FOpts:), FPort: 01, FRMPayload: 0055, MIC: 519cec13)
0:03:18.350067	LOG	Server <---------- DUT
0:03:18.352052	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0064, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 47ab12d7)
0:03:18.355048	LOG	Frame command sent to the DUT
0:03:18.356046	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 873594996, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAZADgZl5zu84LyIOHoaAanl2TqveP055gUtcNT36dVdmGcdrJ2xo9XX6GqFSVKdFY7e3qHAcrR6sS1w=='}}
0:03:18.358045	LOG	Server ----------> DUT
0:03:18.361043	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:18.366040	LOG	Check previous uplink data rate process starts
0:03:18.371038	LOG	Uplink received with expected Data Rate
0:03:18.374036	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:23.352252	LOG	PUSH_ACK: 01 6c49 01 fffeb827eb59d368
0:03:23.355250	LOG	PUSH_DATA: Protocol version = 01, Token = 6c49, Identifier = 00, JSON = {'rxpk': [{'tmst': 877611708, 'time': '2021-10-08T10:12:09.132794Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAhQABHWRKtO6e'}]}
0:03:23.356250	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0085, FOpts:), FPort: 01, FRMPayload: 0056, MIC: 4ab4ee9e)
0:03:23.358249	LOG	Server <---------- DUT
0:03:23.361219	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0065, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 54e3aa93)
0:03:23.363246	LOG	Frame command sent to the DUT
0:03:23.365216	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 878611708, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAZQDgNlH+bdDPawXXtGLDV7n/rHOr7iKJi4ajQWk7QOzmD0mZXlo4lj71cbBbZA6MhprqoZlRVOOqkw=='}}
0:03:23.367244	LOG	Server ----------> DUT
0:03:23.370241	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:23.378209	LOG	Check previous uplink data rate process starts
0:03:23.384205	LOG	Uplink received with expected Data Rate
0:03:23.388230	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:26.570245	LOG	PULL_DATA: 01 ae90 02 fffeb827eb59d368
0:03:26.572244	LOG	PULL_ACK: 01 ae90 04 fffeb827eb59d368
0:03:28.370219	LOG	PUSH_ACK: 01 cd16 01 fffeb827eb59d368
0:03:28.372218	LOG	PUSH_DATA: Protocol version = 01, Token = cd16, Identifier = 00, JSON = {'rxpk': [{'tmst': 882628412, 'time': '2021-10-08T10:12:14.150491Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAhgAB+iye3q01'}]}
0:03:28.374217	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0086, FOpts:), FPort: 01, FRMPayload: 0057, MIC: 9edead35)
0:03:28.376217	LOG	Server <---------- DUT
0:03:28.378215	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0066, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2f9eecdd)

0:03:28.381213	LOG	Frame command sent to the DUT
0:03:28.382213	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 883628412, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAZgDgMwc3pe1zQTLDs4Kbz1CWLuuns/ESWmpgV25rCxmTSJr1eUISUY+1w9NYD7DFP1BjTACjL57s3Q=='}}
0:03:28.384211	LOG	Server ----------> DUT
0:03:28.387210	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:28.390208	LOG	Check previous uplink data rate process starts
0:03:28.398203	LOG	Uplink received with expected Data Rate
0:03:28.403201	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:33.388362	LOG	PUSH_ACK: 01 68ba 01 fffeb827eb59d368
0:03:33.390361	LOG	PUSH_DATA: Protocol version = 01, Token = 68ba, Identifier = 00, JSON = {'rxpk': [{'tmst': 887645116, 'time': '2021-10-08T10:12:19.168612Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAhwABBAdlAVgh'}]}
0:03:33.392359	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0087, FOpts:), FPort: 01, FRMPayload: 0058, MIC: 65015821)
0:03:33.394358	LOG	Server <---------- DUT
0:03:33.396358	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0067, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 34fadce1)
0:03:33.398374	LOG	Frame command sent to the DUT
0:03:33.400353	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 888645116, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAZwDg4Om8t57THwqhIw+nnwaFU3bRTvIbsScvkd+gxh0Y8TKuTQWLUyimmCNPGxwv4acVLjyoNPrc4Q=='}}
0:03:33.402353	LOG	Server ----------> DUT
0:03:33.405351	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:33.407368	LOG	Check previous uplink data rate process starts
0:03:33.411347	LOG	Uplink received with expected Data Rate
0:03:33.415345	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:36.600556	LOG	PULL_DATA: 01 ac7a 02 fffeb827eb59d368
0:03:36.604553	LOG	PULL_ACK: 01 ac7a 04 fffeb827eb59d368
0:03:38.404529	LOG	PUSH_ACK: 01 a6f2 01 fffeb827eb59d368
0:03:38.407526	LOG	PUSH_DATA: Protocol version = 01, Token = a6f2, Identifier = 00, JSON = {'rxpk': [{'tmst': 892661812, 'time': '2021-10-08T10:12:24.185248Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAiAABmXElZ4RA'}]}
0:03:38.409526	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0088, FOpts:), FPort: 01, FRMPayload: 0059, MIC: 25678440)
0:03:38.410524	LOG	Server <---------- DUT
0:03:38.412524	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0068, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e49f1061)
0:03:38.415522	LOG	Frame command sent to the DUT
0:03:38.417521	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 893661812, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAaADg9lcjwD1RIIPYdbktrrPcrFi+Np1RT+/9bgtrYp/FvjkAsGvkGsbMaVhLkCSNVblfg3qw5J8QYQ=='}}

0:03:38.418520	LOG	Server ----------> DUT
0:03:38.422519	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:38.427515	LOG	Check previous uplink data rate process starts
0:03:38.431513	LOG	Uplink received with expected Data Rate
0:03:38.434510	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:43.424668	LOG	PUSH_ACK: 01 b4a8 01 fffeb827eb59d368
0:03:43.426666	LOG	PUSH_DATA: Protocol version = 01, Token = b4a8, Identifier = 00, JSON = {'rxpk': [{'tmst': 897678532, 'time': '2021-10-08T10:12:29.205211Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAiQABnVpFuiW2'}]}
0:03:43.428666	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0089, FOpts:), FPort: 01, FRMPayload: 005a, MIC: 45ba25b6)
0:03:43.429665	LOG	Server <---------- DUT
0:03:43.431664	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0069, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9cc137d1)
0:03:43.433663	LOG	Frame command sent to the DUT
0:03:43.434663	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 898678532, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAaQDgW/LEouEK4VGiTQBFiYnQwjEI/AJN1GktfuX3P8JwbVqD5XUKIwdysJxRxEoNzLxUk2u5nME30Q=='}}
0:03:43.436662	LOG	Server ----------> DUT
0:03:43.440659	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:43.445656	LOG	Check previous uplink data rate process starts
0:03:43.450653	LOG	Uplink received with expected Data Rate
0:03:43.455650	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:46.640462	LOG	PULL_DATA: 01 ca99 02 fffeb827eb59d368
0:03:46.642461	LOG	PULL_ACK: 01 ca99 04 fffeb827eb59d368
0:03:48.442436	LOG	PUSH_ACK: 01 b2c2 01 fffeb827eb59d368
0:03:48.445434	LOG	PUSH_DATA: Protocol version = 01, Token = b2c2, Identifier = 00, JSON = {'rxpk': [{'tmst': 902695252, 'time': '2021-10-08T10:12:34.223376Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAigABoWSPUuNb'}]}
0:03:48.446433	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008a, FOpts:), FPort: 01, FRMPayload: 005b, MIC: 8f52e35b)
0:03:48.448432	LOG	Server <---------- DUT
0:03:48.450431	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 006a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: efb684cd)
0:03:48.453429	LOG	Frame command sent to the DUT
0:03:48.454429	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 903695252, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAagDgc9FyDiaSk8qvp90ZlupbEB85aeR4qLiVzMnRsw75zRa0MnBLQZZNKHGsIytvR8v1HGyN77aEzQ=='}}
0:03:48.455428	LOG	Server ----------> DUT
0:03:48.461425	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:48.465422	LOG	Check previous uplink data rate process starts
0:03:48.470420	LOG	Uplink received with expected Data Rate
0:03:48.474417	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:53.457369	LOG	PUSH_ACK: 01 372a 01 fffeb827eb59d368

0:03:53.460367	LOG	PUSH_DATA: Protocol version = 01, Token = 372a, Identifier = 00, JSON = {'rxpk': [{'tmst': 907711972, 'time': '2021-10-08T10:12:39.238319Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 13.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAiwABK0tAEKne'}]}
0:03:53.461366	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008b, FOpts:), FPort: 01, FRMPayload: 005c, MIC: 4010a9de)
0:03:53.463365	LOG	Server <---------- DUT
0:03:53.464365	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 006b, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 5d993e5f)
0:03:53.467363	LOG	Frame command sent to the DUT
0:03:53.469362	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 908711972, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAawDg+DMhPaFA2R3EExFNSlqAE5AhwqDJSY5miuy+mZV3suU2c/Upl9+Pi/hNwWHfa88MCz2ZXZk+Xw==''}}
0:03:53.470361	LOG	Server ----------> DUT
0:03:53.477357	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:53.482354	LOG	Check previous uplink data rate process starts
0:03:53.486352	LOG	Uplink received with expected Data Rate
0:03:53.490350	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:56.670538	LOG	PULL_DATA: 01 cb08 02 fffeb827eb59d368
0:03:56.672537	LOG	PULL_ACK: 01 cb08 04 fffeb827eb59d368
0:03:58.475510	LOG	PUSH_ACK: 01 cf61 01 fffeb827eb59d368
0:03:58.477509	LOG	PUSH_DATA: Protocol version = 01, Token = cf61, Identifier = 00, JSON = {'rxpk': [{'tmst': 912728692, 'time': '2021-10-08T10:12:44.256226Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAjAABZ7VkuZ5s'}]}
0:03:58.478510	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008c, FOpts:), FPort: 01, FRMPayload: 005d, MIC: 64b99e6c)
0:03:58.479509	LOG	Server <---------- DUT
0:03:58.481507	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 006c, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a867f427)
0:03:58.483507	LOG	Frame command sent to the DUT
0:03:58.484506	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 913728692, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAbADgZSD/3FDFh1cqK60C8GvCHF+FLsg2TerTtYYNN0nIJhvUgGhjpreC+osEdJ1dUQzSbSwhqGf0Jw==''}}
0:03:58.485506	LOG	Server ----------> DUT
0:03:58.488503	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:58.491500	LOG	Check previous uplink data rate process starts
0:03:58.495498	LOG	Uplink received with expected Data Rate
0:03:58.498498	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:03.485714	LOG	PUSH_ACK: 01 c9c3 01 fffeb827eb59d368
0:04:03.487713	LOG	PUSH_DATA: Protocol version = 01, Token = c9c3, Identifier = 00, JSON = {'rxpk': [{'tmst': 917745396, 'time': '2021-10-08T10:12:49.266237Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAjQAB7B+MBPW1'}]}
0:04:03.489711	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008d, FOpts:), FPort: 01, FRMPayload: 005e, MIC: 8c04f5b5)
0:04:03.491710	LOG	Server <---------- DUT

0:04:03.493710	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 006d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 559715ca)
0:04:03.496707	LOG	Frame command sent to the DUT
0:04:03.498706	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 918745396, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAbQDgZUbiWgQ4ZDUjWN+/CphQBsNdXnP0W2oj/McOvNNQjNAzqqfETGt9Bq5WzOaXQkg/pqkuVZcVyg=='}}
0:04:03.500706	LOG	Server ----------> DUT
0:04:03.505702	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:03.510699	LOG	Check previous uplink data rate process starts
0:04:03.515696	LOG	Uplink received with expected Data Rate
0:04:03.517695	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:06.699900	LOG	PULL_DATA: 01 805e 02 fffeb827eb59d368
0:04:06.704899	LOG	PULL_ACK: 01 805e 04 fffeb827eb59d368
0:04:08.505877	LOG	PUSH_ACK: 01 6e03 01 fffeb827eb59d368
0:04:08.507877	LOG	PUSH_DATA: Protocol version = 01, Token = 6e03, Identifier = 00, JSON = {'rxpk': [{'tmst': 922762116, 'time': '2021-10-08T10:12:54.286725Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 13.2, 'rssi': -16, 'size': 15, 'data': 'QCAgICCAjgAB/MIl6K3e'}]}
0:04:08.510875	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008e, FOpts:), FPort: 01, FRMPayload: 005f, MIC: 25e8adde)
0:04:08.511874	LOG	Server <---------- DUT
0:04:08.514872	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 006e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: beed6ef3)
0:04:08.517872	LOG	Frame command sent to the DUT
0:04:08.518870	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 923762116, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAbgDgUrayU3CxUYnlydd6pm0oFl2Hz/QlZRdKcq/dsonT+xX+y2PCilCUWN00JqrOncdyx4+ivu1u8w=='}}
0:04:08.519870	LOG	Server ----------> DUT
0:04:08.523867	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:08.527865	LOG	Check previous uplink data rate process starts
0:04:08.532862	LOG	Uplink received with expected Data Rate
0:04:08.536860	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:13.523696	LOG	PUSH_ACK: 01 28da 01 fffeb827eb59d368
0:04:13.525693	LOG	PUSH_DATA: Protocol version = 01, Token = 28da, Identifier = 00, JSON = {'rxpk': [{'tmst': 927778828, 'time': '2021-10-08T10:12:59.304051Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAjwAB3xivwymV'}]}
0:04:13.527692	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 008f, FOpts:), FPort: 01, FRMPayload: 0060, MIC: afc32995)
0:04:13.528692	LOG	Server <---------- DUT
0:04:13.531690	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 006f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 6585ef84)
0:04:13.533689	LOG	Frame command sent to the DUT
0:04:13.534688	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 928778828, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAbwDgKYSzOvjXbd8xPXVsd8/+K/pLQx6H7m0nrIMXvpg/5cOwnSo6+57AwkI8jIUuNmP/DCjcZYXvhA==''}}
0:04:13.536687	LOG	Server ----------> DUT
0:04:13.540684	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:13.544683	LOG	Check previous uplink data rate process starts
0:04:13.548681	LOG	Uplink received with expected Data Rate
0:04:13.551678	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:16.739880	LOG	PULL_DATA: 01 4cd7 02 fffeb827eb59d368
0:04:16.741861	LOG	PULL_ACK: 01 4cd7 04 fffeb827eb59d368
0:04:18.541835	LOG	PUSH_ACK: 01 6a19 01 fffeb827eb59d368
0:04:18.543834	LOG	PUSH_DATA: Protocol version = 01, Token = 6a19, Identifier = 00, JSON = {'rxpk': [{'tmst': 932795548, 'time': '2021-10-08T10:13:04.322222Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAkAAB9sDQpGi+'}]}
0:04:18.544833	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0090, FOpts:), FPort: 01, FRMPayload: 0061, MIC: d0a468be)
0:04:18.546832	LOG	Server <---------- DUT
0:04:18.548831	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0070, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 6cccb467)
0:04:18.551830	LOG	Frame command sent to the DUT
0:04:18.553828	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 933795548, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAcADg53xVO3476yYB9Uv2q+qxQ/JXTAR5L+xKnxIv0ZTnwk8CdIL846dR++Yu8SXMBdB3CrW4bMy0Zw==''}}
0:04:18.554828	LOG	Server ----------> DUT
0:04:18.559825	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:18.562823	LOG	Check previous uplink data rate process starts
0:04:18.567821	LOG	Uplink received with expected Data Rate
0:04:18.571818	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:23.557905	LOG	PUSH_ACK: 01 edd2 01 fffeb827eb59d368
0:04:23.559905	LOG	PUSH_DATA: Protocol version = 01, Token = edd2, Identifier = 00, JSON = {'rxpk': [{'tmst': 937812276, 'time': '2021-10-08T10:13:09.338745Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAkQABnP87ifAm'}]}
0:04:23.561904	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0091, FOpts:), FPort: 01, FRMPayload: 0062, MIC: 3b89f026)
0:04:23.562904	LOG	Server <---------- DUT
0:04:23.564903	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0071, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d593222d)
0:04:23.566901	LOG	Frame command sent to the DUT
0:04:23.567899	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 938812276, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAcQDg+t5UWvyOwajIAr1VdUUL2f08gzcy8k+Z8uJhiIDvRy5laav9zuqxTkqR6+t41fiKvOoM1ZMiLQ==''}}
0:04:23.568899	LOG	Server ----------> DUT
0:04:23.572897	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:23.576894	LOG	Check previous uplink data rate process starts

0:04:23.581861	LOG	Uplink received with expected Data Rate
0:04:23.584860	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:26.770213	LOG	PULL_DATA: 01 4c79 02 fffeb827eb59d368
0:04:26.771212	LOG	PULL_ACK: 01 4c79 04 fffeb827eb59d368
0:04:28.577184	LOG	PUSH_ACK: 01 8b00 01 fffeb827eb59d368
0:04:28.579184	LOG	PUSH_DATA: Protocol version = 01, Token = 8b00, Identifier = 00, JSON = {'rxpk': [{'tmst': 942828988, 'time': '2021-10-08T10:13:14.357655Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAkgABo3UQMiwJ'}]}
0:04:28.581183	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0092, FOpts:), FPort: 01, FRMPayload: 0063, MIC: 10322c09)
0:04:28.582183	LOG	Server <---------- DUT
0:04:28.583182	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0072, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 48417f03)
0:04:28.585181	LOG	Frame command sent to the DUT
0:04:28.587180	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 943828988, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAcgDgsPOIxEe9E0rTS1l54aSD4w2zTPS7X1NqY16Ie/Zbfgkf1iXtcaSBHszEVAYaD7JppFqOSEF/Aw=='}}
0:04:28.589177	LOG	Server ----------> DUT
0:04:28.593175	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:28.597173	LOG	Check previous uplink data rate process starts
0:04:28.602171	LOG	Uplink received with expected Data Rate
0:04:28.608166	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:33.592755	LOG	PUSH_ACK: 01 2256 01 fffeb827eb59d368
0:04:33.594752	LOG	PUSH_DATA: Protocol version = 01, Token = 2256, Identifier = 00, JSON = {'rxpk': [{'tmst': 947845716, 'time': '2021-10-08T10:13:19.373584Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAkwAB+95mp1ac'}]}
0:04:33.595752	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0093, FOpts:), FPort: 01, FRMPayload: 0064, MIC: 66a7569c)
0:04:33.596753	LOG	Server <---------- DUT
0:04:33.598751	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0073, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e5f34736)
0:04:33.600749	LOG	Frame command sent to the DUT
0:04:33.602749	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 948845716, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAcwDg3Py+rCE9G+XyoyiHgx+CYSUjhtGb4V4SKnZfNgjQT3PeS6hOvjQcwV0aGdCmLLO0Lrwd5fNHNg=='}}
0:04:33.603747	LOG	Server ----------> DUT
0:04:33.607745	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:33.611742	LOG	Check previous uplink data rate process starts
0:04:33.616741	LOG	Uplink received with expected Data Rate
0:04:33.619739	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:36.809956	LOG	PULL_DATA: 01 9ad4 02 fffeb827eb59d368
0:04:36.813936	LOG	PULL_ACK: 01 9ad4 04 fffeb827eb59d368
0:04:38.611910	LOG	PUSH_ACK: 01 18d1 01 fffeb827eb59d368

0:04:38.614908	LOG	PUSH_DATA: Protocol version = 01, Token = 18d1, Identifier = 00, JSON = {'rxpk': [{'tmst': 952862428, 'time': '2021-10-08T10:13:24.393018Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -12, 'size': 15, 'data': 'QCAgICCAlAABNTCf9LLn'}]}
0:04:38.615907	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0094, FOpts:), FPort: 01, FRMPayload: 0065, MIC: 9ff4b2e7)
0:04:38.617906	LOG	Server <---------- DUT
0:04:38.618905	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0074, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ffd4f177)
0:04:38.621904	LOG	Frame command sent to the DUT
0:04:38.623903	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 953862428, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAdADgmBh9OMLr4AupcUCw8qfhyuHQ7BoKDY4Sx9hM8tzUrCeUuRIi4L5HoJLauibjmuOCv800/9Txdw==''}}
0:04:38.624902	LOG	Server ----------> DUT
0:04:38.628900	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:38.632897	LOG	Check previous uplink data rate process starts
0:04:38.636897	LOG	Uplink received with expected Data Rate
0:04:38.639893	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:43.621572	LOG	PUSH_ACK: 01 fee4 01 fffeb827eb59d368
0:04:43.622571	LOG	PUSH_DATA: Protocol version = 01, Token = fee4, Identifier = 00, JSON = {'rxpk': [{'tmst': 957879140, 'time': '2021-10-08T10:13:29.401864Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAlQAB+QWicQqJ'}]}
0:04:43.624571	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0095, FOpts:), FPort: 01, FRMPayload: 0066, MIC: a2710a89)
0:04:43.625569	LOG	Server <---------- DUT
0:04:43.627569	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0075, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9ca6ee1b)
0:04:43.630567	LOG	Frame command sent to the DUT
0:04:43.632566	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 958879140, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAdQDgwNZ1DnWtdUTMxiMu5jxfD/hpFSmUNuK2k9kRLYgE2y9VdgCdGJUSKLme07gEmKaX2moznKbuGw==''}}
0:04:43.634565	LOG	Server ----------> DUT
0:04:43.638562	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:43.642560	LOG	Check previous uplink data rate process starts
0:04:43.649556	LOG	Uplink received with expected Data Rate
0:04:43.654553	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:46.829857	LOG	PULL_DATA: 01 d9cd 02 fffeb827eb59d368
0:04:46.831883	LOG	PULL_ACK: 01 d9cd 04 fffeb827eb59d368
0:04:48.641866	LOG	PUSH_ACK: 01 45a3 01 fffeb827eb59d368
0:04:48.643864	LOG	PUSH_DATA: Protocol version = 01, Token = 45a3, Identifier = 00, JSON = {'rxpk': [{'tmst': 962895860, 'time': '2021-10-08T10:13:34.422297Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -14, 'size': 15, 'data': 'QCAgICCAlgABtjcNPEHm'}]}
0:04:48.645864	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0096, FOpts:), FPort: 01, FRMPayload: 0067, MIC: 0d3c41e6)
0:04:48.646863	LOG	Server <---------- DUT

0:04:48.648861	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0076, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e72f5f92)
0:04:48.651860	LOG	Frame command sent to the DUT
0:04:48.652859	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 963895860, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAdgDgpbOLAYRfd0OITvr1GVfhSxnZcynRFzH02P9wLfDmZl/mfA8oH/6pfZfcsKO2mw4RewDJ5y9fkg=='}}
0:04:48.654858	LOG	Server ----------> DUT
0:04:48.658856	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:48.662854	LOG	Check previous uplink data rate process starts
0:04:48.666851	LOG	Uplink received with expected Data Rate
0:04:48.670850	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:53.659007	LOG	PUSH_ACK: 01 91c6 01 fffeb827eb59d368
0:04:53.662005	LOG	PUSH_DATA: Protocol version = 01, Token = 91c6, Identifier = 00, JSON = {'rxpk': [{'tmst': 967912556, 'time': '2021-10-08T10:13:39.439952Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAlwABkrgTfOpE'}]}
0:04:53.664004	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0097, FOpts:), FPort: 01, FRMPayload: 0068, MIC: 137cea44)
0:04:53.665004	LOG	Server <---------- DUT
0:04:53.667003	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0077, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2c3e3c8e)
0:04:53.669002	LOG	Frame command sent to the DUT
0:04:53.671001	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 968912556, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAdwDgl/ibC9tx1eyiLL3vd8u/FZUIlxy57QPlDedrvab2r/223EDU2y2SjQLYmXNDTEQw33fgLD48jg=='}}
0:04:53.672000	LOG	Server ----------> DUT
0:04:53.675997	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:53.679996	LOG	Check previous uplink data rate process starts
0:04:53.686993	LOG	Uplink received with expected Data Rate
0:04:53.689989	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:56.870341	LOG	PULL_DATA: 01 01ff 02 fffeb827eb59d368
0:04:56.871340	LOG	PULL_ACK: 01 01ff 04 fffeb827eb59d368
0:04:58.671315	LOG	PUSH_ACK: 01 c92a 01 fffeb827eb59d368
0:04:58.673314	LOG	PUSH_DATA: Protocol version = 01, Token = c92a, Identifier = 00, JSON = {'rxpk': [{'tmst': 972929260, 'time': '2021-10-08T10:13:44.452121Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAmAAB4vtyhKYl'}]}
0:04:58.675313	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0098, FOpts:), FPort: 01, FRMPayload: 0069, MIC: 7284a625)
0:04:58.676312	LOG	Server <---------- DUT
0:04:58.679311	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0078, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 28d683b1)
0:04:58.682309	LOG	Frame command sent to the DUT
0:04:58.684309	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 973929260, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAeADghQZiFunIc7w4JGZRD7iM9moj44VycH5EEn4M553u53sDjk9zuSKiQ1XwRg9e3Ex+GdnUKNaDsQ=='}}
0:04:58.685308	LOG	Server ----------> DUT
0:04:58.691304	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:58.701298	LOG	Check previous uplink data rate process starts
0:04:58.706296	LOG	Uplink received with expected Data Rate
0:04:58.709294	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:03.688457	LOG	PUSH_ACK: 01 d915 01 fffeb827eb59d368
0:05:03.689457	LOG	PUSH_DATA: Protocol version = 01, Token = d915, Identifier = 00, JSON = {'rxpk': [{'tmst': 977945972, 'time': '2021-10-08T10:13:49.468912Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAmQAB7QtQ3101'}]}
0:05:03.691455	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0099, FOpts:), FPort: 01, FRMPayload: 006a, MIC: 50df5d35)
0:05:03.692455	LOG	Server <---------- DUT
0:05:03.694454	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0079, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 857075d6)
0:05:03.697452	LOG	Frame command sent to the DUT
0:05:03.699451	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 978945972, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAeQDgiJLzkqOAvVWmO8c+5QjGCy6FyBppM8GMtHbxXpQzTTqYBWg3lfGmV/daNoWqQls+qmqFhXB11g=='}}
0:05:03.701450	LOG	Server ----------> DUT
0:05:03.706447	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:03.711444	LOG	Check previous uplink data rate process starts
0:05:03.718440	LOG	Uplink received with expected Data Rate
0:05:03.721438	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:06.900255	LOG	PULL_DATA: 01 0143 02 fffeb827eb59d368
0:05:06.904252	LOG	PULL_ACK: 01 0143 04 fffeb827eb59d368
0:05:08.706228	LOG	PUSH_ACK: 01 2fee 01 fffeb827eb59d368
0:05:08.707225	LOG	PUSH_DATA: Protocol version = 01, Token = 2fee, Identifier = 00, JSON = {'rxpk': [{'tmst': 982962692, 'time': '2021-10-08T10:13:54.486602Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAmgABqjaLDkiu'}]}
0:05:08.709224	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009a, FOpts:), FPort: 01, FRMPayload: 006b, MIC: 8b0e48ae)
0:05:08.711223	LOG	Server <---------- DUT
0:05:08.713222	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 007a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 6ff5c4dc)
0:05:08.716220	LOG	Frame command sent to the DUT
0:05:08.718219	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 983962692, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAegDgQYy9Z0PjXTcTi5/Qz2GSbkqg5Dz1sWC23YWmE98bdEl/0b7Nsg2kuPnvJEFaIH3nHQKSb/XE3A=='}}
0:05:08.719220	LOG	Server ----------> DUT
0:05:08.724216	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:08.728213	LOG	Check previous uplink data rate process starts

0:05:08.733211	LOG	Uplink received with expected Data Rate
0:05:08.738207	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:13.722676	LOG	PUSH_ACK: 01 1502 01 fffeb827eb59d368
0:05:13.724675	LOG	PUSH_DATA: Protocol version = 01, Token = 1502, Identifier = 00, JSON = {'rxpk': [{'tmst': 987979404, 'time': '2021-10-08T10:13:59.503453Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAmwABpumzXiWo'}]}
0:05:13.726674	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009b, FOpts:), FPort: 01, FRMPayload: 006c, MIC: b35e25a8)
0:05:13.727673	LOG	Server <---------- DUT
0:05:13.729672	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 007b, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b8f4ee19)
0:05:13.731671	LOG	Frame command sent to the DUT
0:05:13.732670	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 988979404, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAewDgNovhQoO6ZaKCi+GiNdmkwEeQhXoXoOwwIBxYF/V811Y6wFHrvZ5kVt0AVRSgDp3WfgoNuPTuGQ=='}}
0:05:13.733669	LOG	Server ----------> DUT
0:05:13.736669	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:13.739666	LOG	Check previous uplink data rate process starts
0:05:13.743664	LOG	Uplink received with expected Data Rate
0:05:13.746662	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:16.929990	LOG	PULL_DATA: 01 8761 02 fffeb827eb59d368
0:05:16.933983	LOG	PULL_ACK: 01 8761 04 fffeb827eb59d368
0:05:18.738955	LOG	PUSH_ACK: 01 7c13 01 fffeb827eb59d368
0:05:18.740982	LOG	PUSH_DATA: Protocol version = 01, Token = 7c13, Identifier = 00, JSON = {'rxpk': [{'tmst': 992996116, 'time': '2021-10-08T10:14:04.519594Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAnAABsotlt5vr'}]}
0:05:18.741981	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009c, FOpts:), FPort: 01, FRMPayload: 006d, MIC: 65b79beb)
0:05:18.743953	LOG	Server <---------- DUT
0:05:18.745980	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 007c, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 22035187)
0:05:18.748950	LOG	Frame command sent to the DUT
0:05:18.749977	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 993996116, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAfADgMGkHY+gDjJ7SGexTgOOUjEDVY/iSO/IiH1JSxfVrGAoYd+zds66hMNgl0eMVcW5CCr00IgNRhw=='}}
0:05:18.751947	LOG	Server ----------> DUT
0:05:18.755947	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:18.759970	LOG	Check previous uplink data rate process starts
0:05:18.770937	LOG	Uplink received with expected Data Rate
0:05:18.775961	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:23.754253	LOG	PUSH_ACK: 01 629e 01 fffeb827eb59d368
0:05:23.756254	LOG	PUSH_DATA: Protocol version = 01, Token = 629e, Identifier = 00, JSON = {'rxpk': [{'tmst': 998012820, 'time': '2021-10-08T10:14:09.534979Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAnQABZTAakcMM'}]}

0:05:23.758250	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009d, FOpts:), FPort: 01, FRMPayload: 006e, MIC: 1a91c30c)
0:05:23.760252	LOG	Server <---------- DUT
0:05:23.762252	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 007d, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 21192cfe)
0:05:23.765247	LOG	Frame command sent to the DUT
0:05:23.766248	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 999012820, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAfQDgQmmKu8i6QoIVtqyve3FpQ/9bm0asMa7oe71jn/0V8l26C+lVir4ddsNVXsOGOD6Q43eYIRks/g=='}}
0:05:23.768216	LOG	Server ----------> DUT
0:05:23.773243	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:23.782237	LOG	Check previous uplink data rate process starts
0:05:23.787233	LOG	Uplink received with expected Data Rate
0:05:23.791202	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:26.970389	LOG	PULL_DATA: 01 69fc 02 fffeb827eb59d368
0:05:26.971389	LOG	PULL_ACK: 01 69fc 04 fffeb827eb59d368
0:05:28.775392	LOG	PUSH_ACK: 01 7281 01 fffeb827eb59d368
0:05:28.778391	LOG	PUSH_DATA: Protocol version = 01, Token = 7281, Identifier = 00, JSON = {'rxpk': [{'tmst': 1003029532, 'time': '2021-10-08T10:14:14.556612Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAngABwlEW07ri'}]}
0:05:28.779391	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009e, FOpts:), FPort: 01, FRMPayload: 006f, MIC: 16d3bae2)
0:05:28.781361	LOG	Server <---------- DUT
0:05:28.782389	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 007e, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9202bb6e)
0:05:28.785386	LOG	Frame command sent to the DUT
0:05:28.787387	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1004029532, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAfgDgkALyL2YWLLFGAdqHhkTv73vjHSUb0npy1lpNAJJZUI4PWU4+t9rf8o2gA6ZhDMwGXNy1kgK7bg=='}}
0:05:28.788384	LOG	Server ----------> DUT
0:05:28.793382	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:28.798379	LOG	Check previous uplink data rate process starts
0:05:28.803377	LOG	Uplink received with expected Data Rate
0:05:28.807374	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:33.788537	LOG	PUSH_ACK: 01 cd71 01 fffeb827eb59d368
0:05:33.790534	LOG	PUSH_DATA: Protocol version = 01, Token = cd71, Identifier = 00, JSON = {'rxpk': [{'tmst': 1008046252, 'time': '2021-10-08T10:14:19.569146Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -11, 'size': 15, 'data': 'QCAgICCAnwABIbQJb6oa'}]}
0:05:33.791533	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 009f, FOpts:), FPort: 01, FRMPayload: 0070, MIC: 096faa1a)
0:05:33.792535	LOG	Server <---------- DUT
0:05:33.795533	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 007f, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b1e55b53)

0:05:33.798502	LOG	Frame command sent to the DUT
0:05:33.800529	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1009046252, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAfwDg1xKgZ8jCTOZi+Pb3wqPWEp5B0DVW8p7BwDXj+yyj95KXqHTdlnf0roG6tZo623zfQyDmseVbUw=='}}
0:05:33.801531	LOG	Server ----------> DUT
0:05:33.805528	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:33.809495	LOG	Check previous uplink data rate process starts
0:05:33.815490	LOG	Uplink received with expected Data Rate
0:05:33.820487	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:36.999675	LOG	PULL_DATA: 01 65a6 02 fffeb827eb59d368
0:05:37.002673	LOG	PULL_ACK: 01 65a6 04 fffeb827eb59d368
0:05:38.806676	LOG	PUSH_ACK: 01 3eab 01 fffeb827eb59d368
0:05:38.809676	LOG	PUSH_DATA: Protocol version = 01, Token = 3eab, Identifier = 00, JSON = {'rxpk': [{'tmst': 1013062964, 'time': '2021-10-08T10:14:24.587454Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAoAABGy0xd8w8'}]}
0:05:38.811646	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a0, FOpts:), FPort: 01, FRMPayload: 0071, MIC: 3177cc3c)
0:05:38.813643	LOG	Server <---------- DUT
0:05:38.816641	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0080, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f8981aec)
0:05:38.820639	LOG	Frame command sent to the DUT
0:05:38.822637	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1014062964, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAgADgB42zFkzK4p6my0iaun2gKOdp6nhKPxZsvffm9YkHfzggRgbpriHCRXG8HW2btps05tT1+Jga7A=='}}
0:05:38.824636	LOG	Server ----------> DUT
0:05:38.828634	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:38.834630	LOG	Check previous uplink data rate process starts
0:05:38.838630	LOG	Uplink received with expected Data Rate
0:05:38.842627	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:43.825787	LOG	PUSH_ACK: 01 49cf 01 fffeb827eb59d368
0:05:43.827786	LOG	PUSH_DATA: Protocol version = 01, Token = 49cf, Identifier = 00, JSON = {'rxpk': [{'tmst': 1018079676, 'time': '2021-10-08T10:14:29.606210Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -13, 'size': 15, 'data': 'QCAgICCAoQABd1vJ4BY9'}]}
0:05:43.829785	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a1, FOpts:), FPort: 01, FRMPayload: 0072, MIC: c9e0163d)
0:05:43.830784	LOG	Server <---------- DUT
0:05:43.832783	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0081, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 967409c7)
0:05:43.834782	LOG	Frame command sent to the DUT
0:05:43.836781	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1019079676, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAgQDgSA/08Gk4QfpyDVCrkNGaQvIP5gcXJeJv1wNqp2T9gAxtm5XX371LkwapPfoR3c9AOH1elnQJxw=='}}

0:05:43.837780	LOG	Server ----------> DUT
0:05:43.841778	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:43.843777	LOG	Check previous uplink data rate process starts
0:05:43.848773	LOG	Uplink received with expected Data Rate
0:05:43.850772	LOG	Send Test Command RxAppCntReq process starts
0:05:47.039993	LOG	PULL_DATA: 01 714b 02 fffeb827eb59d368
0:05:47.041988	LOG	PULL_ACK: 01 714b 04 fffeb827eb59d368
0:05:48.839963	LOG	PUSH_ACK: 01 ce3a 01 fffeb827eb59d368
0:05:48.842961	LOG	PUSH_DATA: Protocol version = 01, Token = ce3a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1023096380, 'time': '2021-10-08T10:14:34.620946Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -15, 'size': 15, 'data': 'QCAgICCAogABt9dKbTRg'}]}
0:05:48.843960	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a2, FOpts:), FPort: 01, FRMPayload: 0073, MIC: 4a6d3460)
0:05:48.845959	LOG	Server <---------- DUT
0:05:48.848957	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0082, FOpts:), FPort: e0, FRMPayload: 09), MIC: 900b7464)
0:05:48.851956	LOG	Frame command sent to the DUT
0:05:48.853955	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1024096380, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAggDgWZALdGQ='}}
0:05:48.855954	LOG	Server ----------> DUT
0:05:54.006188	LOG	PUSH_ACK: 01 75a7 01 fffeb827eb59d368
0:05:54.008187	LOG	PUSH_DATA: Protocol version = 01, Token = 75a7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1028265700, 'time': '2021-10-08T10:14:39.787006Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -12, 'size': 16, 'data': 'QCAgICCAowDgnd/Ues3teA=='}]}
0:05:54.009186	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a3, FOpts:), FPort: e0, FRMPayload: 097400, MIC: 7acded78)
0:05:54.010186	LOG	Server <---------- DUT
0:05:54.012183	LOG	Answer in payload: 7400
0:05:54.013184	LOG	Frame Command Payload in the Answer: 097400
0:05:54.018181	LOG	RX Count received by DUT: 116
0:05:54.021178	LOG	Send Test Command RxAppCntReq process completed
0:05:54.034171	LOG	End Test Step: Test packet error rate for SF12BW125 using RX1 window
0:05:54.038169	LOG	Partial Verdict: PASS
0:05:54.042168	LOG	==========
0:05:54.047163	LOG	==========
0:05:54.049162	LOG	Start Test Step: Test packet error rate for SF7BW250 using RX1 window
0:05:54.064154	LOG	End Test Step: Test packet error rate for SF7BW250 using RX1 window
0:05:54.068151	LOG	TEST STEP NOT APPLICABLE
0:05:54.071149	LOG	==========
0:05:54.076146	LOG	==========
0:05:54.077146	LOG	Start Test Step: Test packet error rate for FSK50 using RX1 window
0:05:54.093138	LOG	End Test Step: Test packet error rate for FSK50 using RX1 window
0:05:54.096135	LOG	TEST STEP NOT APPLICABLE
0:05:54.100134	LOG	==========
0:05:54.105130	LOG	==========
0:05:54.107129	LOG	Start Test Step: Restore default settings
0:05:54.117987	LOG	Send LinkADRReq process starts
0:05:57.059477	LOG	PULL_DATA: 01 4f76 02 fffeb827eb59d368
0:05:57.061477	LOG	PULL_ACK: 01 4f76 04 fffeb827eb59d368
0:05:58.842553	LOG	PUSH_ACK: 01 ea7e 01 fffeb827eb59d368

0:05:58.844552	LOG	PUSH_DATA: Protocol version = 01, Token = ea7e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1033101492, 'time': '2021-10-08T10:14:44.623367Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -15, 'size': 15, 'data': 'QCAgICCApAABClKTQGx5'}]}
0:05:58.846551	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a4, FOpts:), FPort: 01, FRMPayload: 0074, MIC: 93406c79)
0:05:58.847550	LOG	Server <---------- DUT
0:05:58.849549	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0083, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 3f7c7cc1)
0:05:58.852547	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1035101492, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAgwAAUXAn/bE/fHzB'}}
0:05:58.853547	LOG	Server ----------> DUT
0:06:02.721343	LOG	PUSH_ACK: 01 64ff 01 fffeb827eb59d368
0:06:02.724341	LOG	PUSH_DATA: Protocol version = 01, Token = 64ff, Identifier = 00, JSON = {'rxpk': [{'tmst': 1037000587, 'time': '2021-10-08T10:14:48.502144Z', 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -16, 'size': 17, 'data': 'QCAgICCCpQADBwFe1sU5LSM='}]}
0:06:02.726340	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00a5, FOpts: 0307), FPort: 01, FRMPayload: 0074, MIC: c5392d23)
0:06:02.728340	LOG	Server <---------- DUT
0:06:02.729339	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:02.731337	LOG	Command Answer: 0307
0:06:02.756323	LOG	MAC command communication completed
0:06:02.760321	LOG	Send RXParamSetupReq process starts
0:06:07.249763	LOG	PULL_DATA: 01 81eb 02 fffeb827eb59d368
0:06:07.253761	LOG	PULL_ACK: 01 81eb 04 fffeb827eb59d368
0:06:07.710500	LOG	PUSH_ACK: 01 61fd 01 fffeb827eb59d368
0:06:07.713499	LOG	PUSH_DATA: Protocol version = 01, Token = 61fd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1041998019, 'time': '2021-10-08T10:14:53.491830Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -15, 'size': 15, 'data': 'QCAgICCApgABSNbldGXV'}]}
0:06:07.714498	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 00a6, FOpts:), FPort: 01, FRMPayload: 0074, MIC: e57465d5)
0:06:07.716498	LOG	Server <---------- DUT
0:06:07.718496	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0084, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: 955ce431)
0:06:07.720495	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1043998019, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAhAAAlMZBm/KVXOQx'}}
0:06:07.722494	LOG	Server ----------> DUT
0:06:12.725275	LOG	PUSH_ACK: 01 fec3 01 fffeb827eb59d368
0:06:12.727245	LOG	PUSH_DATA: Protocol version = 01, Token = fec3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1047005723, 'time': '2021-10-08T10:14:58.505747Z', 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -14, 'size': 17, 'data': 'QCAgICCCpwAFBwEbm6MJjcM='}]}
0:06:12.728243	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00a7, FOpts: 0507), FPort: 01, FRMPayload: 0074, MIC: a3098dc3)
0:06:12.730244	LOG	Server <---------- DUT
0:06:12.731242	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:12.732242	LOG	Command Answer: 0507
0:06:12.744234	LOG	MAC command communication completed

0:06:12.747233	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:06:17.319656	LOG	PULL_DATA: 01 9b67 02 fffeb827eb59d368
0:06:17.321656	LOG	PULL_ACK: 01 9b67 04 fffeb827eb59d368
0:06:22.724578	LOG	PUSH_ACK: 01 e98c 01 fffeb827eb59d368
0:06:22.726577	LOG	PUSH_DATA: Protocol version = 01, Token = e98c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1057010883, 'time': '2021-10-08T10:15:08.505619Z', 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -16, 'size': 17, 'data': 'QCAgICCCqQAFBwHNrzB4bs4='}]}
0:06:22.728579	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 00a9, FOpts: 0507), FPort: 01, FRMPayload: 0074, MIC: 30786ece)
0:06:22.729550	LOG	Server <---------- DUT
0:06:22.732574	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0085, FOpts:), FPort: e0, FRMPayload: 0501), MIC: 410e1c51)
0:06:22.734572	LOG	Frame command sent to the DUT
0:06:22.737545	LOG	PULL_RESP: Protocol version = 01, Token = 0000, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1059010883, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAhQDgbeZBDhxR'}}
0:06:22.738572	LOG	Server ----------> DUT
0:06:22.742538	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:06:22.745554	LOG	End Test Step: Restore default settings
0:06:22.752532	LOG	Partial Verdict: PASS
0:06:22.757530	LOG	==========
0:06:22.762526	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_015_B
0:06:22.764526	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_016	
Verdict	PASS	
Date	2021-10-18 16:47:31	
Comments	RX2 Receive Window Test	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Data Rates to be measured	ALL
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.010677	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_016
0:00:00.044658	LOG	==========
0:00:00.047656	LOG	Start Test Step: Device activation
0:00:00.113619	LOG	Activation process has finished successfully
0:00:00.116618	LOG	Data stored in the DUT after Activation:
0:00:00.118616	LOG	DevAddr: 20202020
0:00:00.120615	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.123613	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.125612	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.128610	LOG	End Test Step: Device activation
0:00:00.131608	LOG	Partial Verdict: PASS
0:00:00.135606	LOG	==========
0:00:00.141603	LOG	==========
0:00:00.143602	LOG	Start Test Step: DUT Pre-condition settings

0:00:00.152597	LOG	DUT Pre-condition activation process starts
0:00:00.156594	LOG	DUT Pre-condition activation completed
0:00:00.158612	LOG	End Test Step: DUT Pre-condition settings
0:00:00.161611	LOG	Partial Verdict: PASS
0:00:00.165607	LOG	==========
0:00:00.170586	LOG	==========
0:00:00.173586	LOG	Start Test Step: Initial settings for the test
0:00:00.182582	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:00:04.625052	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:04.926879	LOG	PULL_DATA: 02 4a3c 02 aa555a0000240409
0:00:04.929877	LOG	PULL_ACK: 02 4a3c 04
0:00:04.931876	LOG	First PULL_DATA received
0:00:09.584228	LOG	PUSH_ACK: 02 0c5a 01
0:00:09.587228	LOG	PUSH_DATA: Protocol version = 02, Token = 0c5a, Identifier = 00, JSON = {'rxpk': [{'tmst': 802160563, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAdwgBjO2/faFS'}]}
0:00:09.588227	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0877, FOpts:), FPort: 01, FRMPayload: 03ac, MIC: bf7da152)
0:00:09.589227	LOG	Server <---------- DUT
0:00:09.591226	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 055d, FOpts:), FPort: e0, FRMPayload: 0500), MIC: e2256d29)
0:00:09.593223	LOG	Frame command sent to the DUT
0:00:09.595222	LOG	PULL_RESP: Protocol version = 02, Token = 1c9d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 804160563, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAXQXgs9niJW0p'}}
0:00:09.596221	LOG	Server ----------> DUT
0:00:09.599220	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:00:09.603217	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:14.586381	LOG	PUSH_ACK: 02 0c5b 01
0:00:14.591378	LOG	PUSH_DATA: Protocol version = 02, Token = 0c5b, Identifier = 00, JSON = {'rxpk': [{'tmst': 807163180, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAeAgBBFvKIdIm'}]}
0:00:14.596375	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0878, FOpts:), FPort: 01, FRMPayload: 03ad, MIC: ca21d226)
0:00:14.599374	LOG	Server <---------- DUT
0:00:14.604370	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 055e, FOpts:), FPort: e0, FRMPayload: 0701), MIC: 377bda2c)
0:00:14.611366	LOG	Frame command sent to the DUT
0:00:14.613365	LOG	PULL_RESP: Protocol version = 02, Token = 948a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 809163180, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAXgXgWsA3e9os'}}
0:00:14.615365	LOG	Server ----------> DUT
0:00:14.618363	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:14.623360	LOG	End Test Step: Initial settings for the test
0:00:14.627359	LOG	Partial Verdict: PASS
0:00:14.631357	LOG	==========
0:00:14.638352	LOG	==========
0:00:14.642349	LOG	Start Test Step: Test packet error rate for SF12BW125 using RX2 window
0:00:14.655343	LOG	Send RXParamSetupReq process starts
0:00:15.037124	LOG	PULL_DATA: 02 63e7 02 aa555a0000240409
0:00:15.039125	LOG	PULL_ACK: 02 63e7 04
0:00:19.588535	LOG	PUSH_ACK: 02 0c5c 01

0:00:19.590533	LOG	PUSH_DATA: Protocol version = 02, Token = 0c5c, Identifier = 00, JSON = {'rxpk': [{'tmst': 812165788, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAeQgBLmpdwybX'}]}
0:00:19.591533	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0879, FOpts:), FPort: 01, FRMPayload: 03ae, MIC: 5dc326d7)
0:00:19.593531	LOG	Server <---------- DUT
0:00:19.595531	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 055f, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: 2a244830)
0:00:19.597530	LOG	PULL_RESP: Protocol version = 02, Token = 2cca, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 814165788, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAXwUAA5NtTzcqJEgw'}}
0:00:19.598530	LOG	Server ----------> DUT
0:00:19.602526	LOG	TX_ACK: 02 2cca 05 aa555a0000240409
0:00:24.601681	LOG	PUSH_ACK: 02 0c5d 01
0:00:24.603678	LOG	PUSH_DATA: Protocol version = 02, Token = 0c5d, Identifier = 00, JSON = {'rxpk': [{'tmst': 817173565, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCeggFBwFUUZ8zNts='}]}
0:00:24.605678	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 087a, FOpts: 0507), FPort: 01, FRMPayload: 03ae, MIC: 9f3336db)
0:00:24.607678	LOG	Server <---------- DUT
0:00:24.608677	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:24.610676	LOG	Command Answer: 0507
0:00:24.624667	LOG	MAC command communication completed
0:00:24.636660	LOG	Send Test Command RxAppCntReq process starts
0:00:25.057420	LOG	PULL_DATA: 02 df3d 02 aa555a0000240409
0:00:25.059420	LOG	PULL_ACK: 02 df3d 04
0:00:29.641813	LOG	PUSH_ACK: 02 0c5e 01
0:00:29.646809	LOG	PUSH_DATA: Protocol version = 02, Token = 0c5e, Identifier = 00, JSON = {'rxpk': [{'tmst': 822176181, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 17, 'data': 'QCAgICCCewgFBwEk5sGhKPU='}]}
0:00:29.648807	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 087b, FOpts: 0507), FPort: 01, FRMPayload: 03ae, MIC: c1a128f5)
0:00:29.649806	LOG	Server <---------- DUT
0:00:29.651806	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0560, FOpts:), FPort: e0, FRMPayload: 09), MIC: f1d61a49)
0:00:29.653805	LOG	Frame command sent to the DUT
0:00:29.655803	LOG	PULL_RESP: Protocol version = 02, Token = 5aec, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 824176181, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAYAXgwfHWGkk='}}
0:00:29.657802	LOG	Server ----------> DUT
0:00:29.661800	LOG	TX_ACK: 02 5aec 05 aa555a0000240409
0:00:34.600988	LOG	PUSH_ACK: 02 0c5f 01
0:00:34.603988	LOG	PUSH_DATA: Protocol version = 02, Token = 0c5f, Identifier = 00, JSON = {'rxpk': [{'tmst': 827181750, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 16, 'data': 'QCAgICCAfAjgy+ri8UWZww=='}]}
0:00:34.604986	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 087c, FOpts:), FPort: e0, FRMPayload: 09af03, MIC: f14599c3)
0:00:34.605985	LOG	Server <---------- DUT
0:00:34.606985	LOG	Answer in payload: af03

0:00:34.608984	LOG	Frame Command Payload in the Answer: 09af03
0:00:34.612982	LOG	RX Count received by DUT: 943
0:00:34.614982	LOG	Send Test Command RxAppCntReq process completed
0:00:34.619978	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:35.116695	LOG	PULL_DATA: 02 3972 02 aa555a0000240409
0:00:35.118694	LOG	PULL_ACK: 02 3972 04
0:00:39.605139	LOG	PUSH_ACK: 02 0c62 01
0:00:39.607138	LOG	PUSH_DATA: Protocol version = 02, Token = 0c62, Identifier = 00, JSON = {'rxpk': [{'tmst': 832176294, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAfQgBUr6fHMSD'}]}
0:00:39.608137	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 087d, FOpts:), FPort: 01, FRMPayload: 03af, MIC: 9f1cc483)
0:00:39.610137	LOG	Server <---------- DUT
0:00:39.611136	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0561, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ee45249e)
0:00:39.614134	LOG	Frame command sent to the DUT
0:00:39.615135	LOG	PULL_RESP: Protocol version = 02, Token = 50d1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 834176294, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAYQXgc1hGyBM7z1d3OlL7LmSsGfJs3aeh0/xttuetffa5FtIyiHlKAJ8SK0+fPSxYhDU3MBjM7kUkng=='}}
0:00:39.616133	LOG	Server ----------> DUT
0:00:39.621131	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:39.626127	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:44.596299	LOG	PUSH_ACK: 02 0c63 01
0:00:44.598298	LOG	PUSH_DATA: Protocol version = 02, Token = 0c63, Identifier = 00, JSON = {'rxpk': [{'tmst': 837178920, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAfggBQQZWG7w6'}]}
0:00:44.600298	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 087e, FOpts:), FPort: 01, FRMPayload: 03b0, MIC: 561bbc3a)
0:00:44.601295	LOG	Server <---------- DUT
0:00:44.604294	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0562, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2005e2a9)
0:00:44.606293	LOG	Frame command sent to the DUT
0:00:44.608293	LOG	PULL_RESP: Protocol version = 02, Token = d821, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 839178920, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAYgXgfPei7B+YE9wPDeWL1XSzXQC3gCARmLNhLvLtIjW/gdNZkLn6E0eh1r17FjGe5y+8e9QDIAXiqQ=='}}
0:00:44.609293	LOG	Server ----------> DUT
0:00:44.612291	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:44.616289	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:45.237935	LOG	PULL_DATA: 02 34d3 02 aa555a0000240409
0:00:45.240931	LOG	PULL_ACK: 02 34d3 04
0:00:49.599451	LOG	PUSH_ACK: 02 0c64 01
0:00:49.602449	LOG	PUSH_DATA: Protocol version = 02, Token = 0c64, Identifier = 00, JSON = {'rxpk': [{'tmst': 842181530, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAfwgBA3hFf/2l'}]}

0:00:49.603450	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 087f, FOpts:), FPort: 01, FRMPayload: 03b1, MIC: 457ffda5)
0:00:49.604450	LOG	Server <---------- DUT
0:00:49.606449	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0563, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 414043d4)
0:00:49.608447	LOG	Frame command sent to the DUT
0:00:49.610446	LOG	PULL_RESP: Protocol version = 02, Token = fede, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 844181530, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAYwXglVUhxv81tHk+LYaiiTZ0GZjSocaxXcb0bTiGjp3uJkPeXY/MlBZDgjzjwJDhhn0Iae2VQUBD1A=='}}
0:00:49.611446	LOG	Server ----------> DUT
0:00:49.615441	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:49.619441	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:54.601603	LOG	PUSH_ACK: 02 0c65 01
0:00:54.603602	LOG	PUSH_DATA: Protocol version = 02, Token = 0c65, Identifier = 00, JSON = {'rxpk': [{'tmst': 847184158, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAgAgBiTXZ8Oqt'}]}
0:00:54.605603	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0880, FOpts:), FPort: 01, FRMPayload: 03b2, MIC: d9f0eaad)
0:00:54.606601	LOG	Server <---------- DUT
0:00:54.607601	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0564, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 281e64e8)
0:00:54.609601	LOG	Frame command sent to the DUT
0:00:54.611599	LOG	PULL_RESP: Protocol version = 02, Token = 8a1d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 849184158, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAZAXg21M93oKu5eWBXb/h14FyMR1GsvejVmMEuG20Om5R5d9nGLIgUDnEJRbqwtp3uziclNaUKB5k6A=='}}
0:00:54.612599	LOG	Server ----------> DUT
0:00:54.615595	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:54.619594	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:55.247237	LOG	PULL_DATA: 02 84e8 02 aa555a0000240409
0:00:55.248237	LOG	PULL_ACK: 02 84e8 04
0:00:59.603758	LOG	PUSH_ACK: 02 0c66 01
0:00:59.605757	LOG	PUSH_DATA: Protocol version = 02, Token = 0c66, Identifier = 00, JSON = {'rxpk': [{'tmst': 852186766, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAgQgBgVgE2rhJ'}]}
0:00:59.606754	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0881, FOpts:), FPort: 01, FRMPayload: 03b3, MIC: 04dab849)
0:00:59.607756	LOG	Server <---------- DUT
0:00:59.609753	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0565, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b98ec6f5)
0:00:59.611752	LOG	Frame command sent to the DUT
0:00:59.612753	LOG	PULL_RESP: Protocol version = 02, Token = 3151, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 854186766, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAAZQXgu6u6fFLpLec5g/0wJJrQi8FCiTe12NmsvCa0j8JNltD2lT80qI6jYBoQvUiYaLtrM75XuY7G9Q=='}}
0:00:59.613753	LOG	Server ----------> DUT
0:00:59.617749	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:59.621748	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:04.606908	LOG	PUSH_ACK: 02 0c67 01
0:01:04.610906	LOG	PUSH_DATA: Protocol version = 02, Token = 0c67, Identifier = 00, JSON = {'rxpk': [{'tmst': 857189391, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAgggBHo8pSg7e'}]}
0:01:04.611905	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0882, FOpts:), FPort: 01, FRMPayload: 03b4, MIC: 294a0ede)
0:01:04.613904	LOG	Server <---------- DUT
0:01:04.614904	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0566, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b332df5c)
0:01:04.616903	LOG	Frame command sent to the DUT
0:01:04.618902	LOG	PULL_RESP: Protocol version = 02, Token = 5572, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 859189391, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAZgXg/dnz1Ab3aDA8myKBQq8UviI+P/bz3+YrHjbwUHOIjHK5gmfQ1pU6fPbunch/wYQfRc/RszLfXA=='}}
0:01:04.619901	LOG	Server ----------> DUT
0:01:04.623898	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:04.629895	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:05.457424	LOG	PULL_DATA: 02 8046 02 aa555a0000240409
0:01:05.459423	LOG	PULL_ACK: 02 8046 04
0:01:09.621248	LOG	PUSH_ACK: 02 0c69 01
0:01:09.623247	LOG	PUSH_DATA: Protocol version = 02, Token = 0c69, Identifier = 00, JSON = {'rxpk': [{'tmst': 862192018, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAgwgBxq4Q6UiI'}]}
0:01:09.624246	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0883, FOpts:), FPort: 01, FRMPayload: 03b5, MIC: 10e94888)
0:01:09.626244	LOG	Server <---------- DUT
0:01:09.628242	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0567, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f025bc2c)
0:01:09.631241	LOG	Frame command sent to the DUT
0:01:09.632239	LOG	PULL_RESP: Protocol version = 02, Token = 2a14, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 864192018, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAZwXgi4DgVKA3l89Ek2X6TMgzZwrH8kCUxk1Oa72lhzyBBr4xlic8zpILsqR25RbmOzHQV+um8CW8LA=='}}
0:01:09.633239	LOG	Server ----------> DUT
0:01:09.637237	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:09.641234	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:14.613721	LOG	PUSH_ACK: 02 0c6a 01
0:01:14.615722	LOG	PUSH_DATA: Protocol version = 02, Token = 0c6a, Identifier = 00, JSON = {'rxpk': [{'tmst': 867194644, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAhAgBKxcp0eyi'}]}

0:01:14.616719	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0884, FOpts:), FPort: 01, FRMPayload: 03b6, MIC: 29d1eca2)
0:01:14.617719	LOG	Server <---------- DUT
0:01:14.620717	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0568, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f4ca80e4)
0:01:14.623716	LOG	Frame command sent to the DUT
0:01:14.624715	LOG	PULL_RESP: Protocol version = 02, Token = 1fee, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 869194644, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAaAXgQ7tmW4J+3KslIj7m98N0IWJEswmjCezLiiRPJvMrfaz0FxN6tJkyVaDRaAk9jLACf2p09MqA5A=='}}
0:01:14.626715	LOG	Server ----------> DUT
0:01:14.629713	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:14.634709	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:15.467265	LOG	PULL_DATA: 02 fde1 02 aa555a0000240409
0:01:15.469264	LOG	PULL_ACK: 02 fde1 04
0:01:19.614923	LOG	PUSH_ACK: 02 0c6b 01
0:01:19.616922	LOG	PUSH_DATA: Protocol version = 02, Token = 0c6b, Identifier = 00, JSON = {'rxpk': [{'tmst': 872197300, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAhQgB9ADQbeHt'}]}
0:01:19.618923	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0885, FOpts:), FPort: 01, FRMPayload: 03b7, MIC: d06de1ed)
0:01:19.619921	LOG	Server <---------- DUT
0:01:19.621921	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0569, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b3784147)
0:01:19.623918	LOG	Frame command sent to the DUT
0:01:19.625917	LOG	PULL_RESP: Protocol version = 02, Token = 6193, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 874197300, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAaQXgZ8Xu+25Q4pgfpPgX8IWL0bxoaUJLMjR+aJsQ8jmTx1lOqTCMMSXQUjAcGVGGPOzTAAK1s3hBRw=='}}
0:01:19.626918	LOG	Server ----------> DUT
0:01:19.629915	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:19.631932	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:24.616930	LOG	PUSH_ACK: 02 0c6c 01
0:01:24.618929	LOG	PUSH_DATA: Protocol version = 02, Token = 0c6c, Identifier = 00, JSON = {'rxpk': [{'tmst': 877199934, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAhggBAHHKBtO5'}]}
0:01:24.620927	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0886, FOpts:), FPort: 01, FRMPayload: 03b8, MIC: ca06d3b9)
0:01:24.621927	LOG	Server <---------- DUT
0:01:24.623926	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 056a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 20632dd3)
0:01:24.625924	LOG	Frame command sent to the DUT
0:01:24.626924	LOG	PULL_RESP: Protocol version = 02, Token = 5b19, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 879199934, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAAagXgWK7nl8fgVsPt4foiK8SwSuNbQ6xl6SNzSIqTbCy1D7KrsA5sAee5or/0wNT0aorFtcIdIGMt0w=='}}
0:01:24.627941	LOG	Server ----------> DUT
0:01:24.630923	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:24.632921	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:25.676328	LOG	PULL_DATA: 02 5527 02 aa555a0000240409
0:01:25.678325	LOG	PULL_ACK: 02 5527 04
0:01:29.619082	LOG	PUSH_ACK: 02 0c6d 01
0:01:29.621082	LOG	PUSH_DATA: Protocol version = 02, Token = 0c6d, Identifier = 00, JSON = {'rxpk': [{'tmst': 882202574, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAhwgBFUC51BXL'}]}
0:01:29.622082	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0887, FOpts:), FPort: 01, FRMPayload: 03b9, MIC: b9d415cb)
0:01:29.624079	LOG	Server <---------- DUT
0:01:29.627078	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 056b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f127a8dd)
0:01:29.630076	LOG	Frame command sent to the DUT
0:01:29.631077	LOG	PULL_RESP: Protocol version = 02, Token = 69c2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 884202574, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAawXgOzWYLutEsQIXVtZjis1OdXd4M22uiUCakYZ8+YYXUEZEMs4SgZnX5Voikk5p2MORVcaH8Seo3Q=='}}
0:01:29.632077	LOG	Server ----------> DUT
0:01:29.635075	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:29.639072	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:34.622252	LOG	PUSH_ACK: 02 0c6e 01
0:01:34.626231	LOG	PUSH_DATA: Protocol version = 02, Token = 0c6e, Identifier = 00, JSON = {'rxpk': [{'tmst': 887205192, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAiAgBfXbGofI6'}]}
0:01:34.628231	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0888, FOpts:), FPort: 01, FRMPayload: 03ba, MIC: c6a1f23a)
0:01:34.629248	LOG	Server <---------- DUT
0:01:34.630248	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 056c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2d093245)
0:01:34.632229	LOG	Frame command sent to the DUT
0:01:34.633229	LOG	PULL_RESP: Protocol version = 02, Token = 1d91, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 889205192, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAbAXgJr726ISzQNTYS0Lt7ZRnkRJMisbDtHORVft5bkhsIqT76M46poeg87K7EIr2T1eoUZlALQkyRQ=='}}
0:01:34.635227	LOG	Server ----------> DUT
0:01:34.638225	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:34.640243	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:35.687114	LOG	PULL_DATA: 02 0f33 02 aa555a0000240409
0:01:35.689113	LOG	PULL_ACK: 02 0f33 04
0:01:39.640863	LOG	PUSH_ACK: 02 0c70 01
0:01:39.642877	LOG	PUSH_DATA: Protocol version = 02, Token = 0c70, Identifier = 00, JSON = {'rxpk': [{'tmst': 892207832, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAiQgBHSGZ4Oiv'}]}
0:01:39.644863	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0889, FOpts:), FPort: 01, FRMPayload: 03bb, MIC: 99e0e8af)
0:01:39.645863	LOG	Server <---------- DUT
0:01:39.647861	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 056d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 597de4ec)
0:01:39.649860	LOG	Frame command sent to the DUT
0:01:39.650858	LOG	PULL_RESP: Protocol version = 02, Token = bbc9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 894207832, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAbQXge9KZg3TuChjOpAxT5hMoO2zQnMpapelNG8pCw6sMup0X7Oa90XGH4lPwPaq25H+yeNuCWX3k7A=='}}
0:01:39.651875	LOG	Server ----------> DUT
0:01:39.654856	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:39.657871	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:44.628026	LOG	PUSH_ACK: 02 0c71 01
0:01:44.630025	LOG	PUSH_DATA: Protocol version = 02, Token = 0c71, Identifier = 00, JSON = {'rxpk': [{'tmst': 897210434, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAiggBqQDGEdTf'}]}
0:01:44.631024	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 088a, FOpts:), FPort: 01, FRMPayload: 03bc, MIC: c611d4df)
0:01:44.632024	LOG	Server <---------- DUT
0:01:44.634023	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 056e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 829161b1)
0:01:44.636022	LOG	Frame command sent to the DUT
0:01:44.638020	LOG	PULL_RESP: Protocol version = 02, Token = b087, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 899210434, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAbgXgKef25aQDJukte6kEQkJltzHD2ZpqlUKD9a1NNHMWmygzr//tZ7ttwirY+2sN1KOxSI9AgpFhsQ=='}}
0:01:44.639019	LOG	Server ----------> DUT
0:01:44.643016	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:44.646014	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:45.896303	LOG	PULL_DATA: 02 954a 02 aa555a0000240409
0:01:45.899301	LOG	PULL_ACK: 02 954a 04
0:01:49.630177	LOG	PUSH_ACK: 02 0c72 01
0:01:49.632176	LOG	PUSH_DATA: Protocol version = 02, Token = 0c72, Identifier = 00, JSON = {'rxpk': [{'tmst': 902213067, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAiwgBcyVaYurc'}]}
0:01:49.634175	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 088b, FOpts:), FPort: 01, FRMPayload: 03bd, MIC: 5a62eadc)
0:01:49.635174	LOG	Server <---------- DUT
0:01:49.637173	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 056f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ac4ee829)
0:01:49.640172	LOG	Frame command sent to the DUT

0:01:49.641171	LOG	PULL_RESP: Protocol version = 02, Token = e112, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 904213067, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAbwXgPNZzswrr4lMMbZZIo1yac2/WY/JXCxphlbu7euj1d1zcLMpGV7l8HcxZQF429YV0SoebrE7oKQ==''}}
0:01:49.643170	LOG	Server ----------> DUT
0:01:49.646168	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:49.649168	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:54.632148	LOG	PUSH_ACK: 02 0c73 01
0:01:54.634129	LOG	PUSH_DATA: Protocol version = 02, Token = 0c73, Identifier = 00, JSON = {'rxpk': [{'tmst': 907215668, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAjAgBB7JqI4/G'}]}
0:01:54.636129	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 088c, FOpts:), FPort: 01, FRMPayload: 03be, MIC: 6a238fc6)
0:01:54.637129	LOG	Server <---------- DUT
0:01:54.639128	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0570, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 72111939)
0:01:54.642125	LOG	Frame command sent to the DUT
0:01:54.643124	LOG	PULL_RESP: Protocol version = 02, Token = f4a5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 909215668, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAcAXgqhL+w3vAp/CsC7LqsL60zv0qG24nlhs/552/hrEISCcTLA0DDAiAKa2f4DleNPnXHplbchEZOQ==''}}
0:01:54.645123	LOG	Server ----------> DUT
0:01:54.648123	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:54.652138	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:55.906987	LOG	PULL_DATA: 02 0317 02 aa555a0000240409
0:01:55.908986	LOG	PULL_ACK: 02 0317 04
0:01:59.634866	LOG	PUSH_ACK: 02 0c74 01
0:01:59.636865	LOG	PUSH_DATA: Protocol version = 02, Token = 0c74, Identifier = 00, JSON = {'rxpk': [{'tmst': 912218286, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAjQgBgyuShDkx'}]}
0:01:59.637863	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 088d, FOpts:), FPort: 01, FRMPayload: 03bf, MIC: 92843931)
0:01:59.638864	LOG	Server <---------- DUT
0:01:59.640862	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0571, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9ec882c8)
0:01:59.642861	LOG	Frame command sent to the DUT
0:01:59.643861	LOG	PULL_RESP: Protocol version = 02, Token = 26f1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 914218286, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAcQXgsnk6eewvZwC2HEeeZo0TQJgzxKTX4LafGNWPCQHMN2n4OP9gBzsAyOIZjWa6WMR8V/05nsiCyA==''}}
0:01:59.645859	LOG	Server ----------> DUT
0:01:59.648858	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:59.650875	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:04.638185	LOG	PUSH_ACK: 02 0c75 01

0:02:04.642184	LOG	PUSH_DATA: Protocol version = 02, Token = 0c75, Identifier = 00, JSON = {'rxpk': [{'tmst': 917220923, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAjggBE2lpcJuk'}]}
0:02:04.643182	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 088e, FOpts:), FPort: 01, FRMPayload: 03c0, MIC: 69709ba4)
0:02:04.644182	LOG	Server <---------- DUT
0:02:04.646181	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0572, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 501e9b4c)
0:02:04.648181	LOG	Frame command sent to the DUT
0:02:04.650180	LOG	PULL_RESP: Protocol version = 02, Token = abe9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 919220923, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAcgXg/dPDzn9eAwYoYNANniGaAn8kr/K0lxwrRqefm37guh7RivqpqDGUf8glWh3dwAVmmlxrUB6bTA==''}}
0:02:04.651178	LOG	Server ----------> DUT
0:02:04.654176	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:04.659173	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:06.116362	LOG	PULL_DATA: 02 89ee 02 aa555a0000240409
0:02:06.119342	LOG	PULL_ACK: 02 89ee 04
0:02:09.651332	LOG	PUSH_ACK: 02 0c77 01
0:02:09.653330	LOG	PUSH_DATA: Protocol version = 02, Token = 0c77, Identifier = 00, JSON = {'rxpk': [{'tmst': 922223564, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAjwgB0OUjgATg'}]}
0:02:09.655329	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 088f, FOpts:), FPort: 01, FRMPayload: 03c1, MIC: 238004e0)
0:02:09.656330	LOG	Server <---------- DUT
0:02:09.658328	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0573, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ae0df32b)
0:02:09.660326	LOG	Frame command sent to the DUT
0:02:09.661327	LOG	PULL_RESP: Protocol version = 02, Token = 1128, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 924223564, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAcwXgi1JlTcae8P5w45HsM2xY6iK36FPC9iSlvJfw3K+D14yu0gV442mU7zN8aziOP4jMCXM6rg3zKw==''}}
0:02:09.662327	LOG	Server ----------> DUT
0:02:09.665325	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:09.668323	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:14.644488	LOG	PUSH_ACK: 02 0c78 01
0:02:14.646487	LOG	PUSH_DATA: Protocol version = 02, Token = 0c78, Identifier = 00, JSON = {'rxpk': [{'tmst': 927226198, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAkAgBm/imxHQN'}]}
0:02:14.647487	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0890, FOpts:), FPort: 01, FRMPayload: 03c2, MIC: a6c4740d)
0:02:14.649485	LOG	Server <---------- DUT
0:02:14.650485	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0574, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 56b17cc8)

0:02:14.652484	LOG	Frame command sent to the DUT
0:02:14.654483	LOG	PULL_RESP: Protocol version = 02, Token = a730, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 929226198, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAdAXgaaj74HmtHQe4jEFyFHKdWz2LkSKIrNdmLTf7BnmvE2R9PcvTBioD/IRqisv4+tJQFCbsVrF8yA=='}}
0:02:14.656482	LOG	Server ----------> DUT
0:02:14.660481	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:14.664479	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:16.126644	LOG	PULL_DATA: 02 f672 02 aa555a0000240409
0:02:16.128643	LOG	PULL_ACK: 02 f672 04
0:02:19.645641	LOG	PUSH_ACK: 02 0c7a 01
0:02:19.647641	LOG	PUSH_DATA: Protocol version = 02, Token = 0c7a, Identifier = 00, JSON = {'rxpk': [{'tmst': 932228855, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAkQgBrkczOnnE'}]}
0:02:19.649640	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0891, FOpts:), FPort: 01, FRMPayload: 03c3, MIC: 333a79c4)
0:02:19.650638	LOG	Server <---------- DUT
0:02:19.651638	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0575, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 53fe6a0c)
0:02:19.653638	LOG	Frame command sent to the DUT
0:02:19.655636	LOG	PULL_RESP: Protocol version = 02, Token = 254c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 934228855, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAdQXgMK4NmabS1WjQp55Z7RWioDOH7ZKeXbjlvudAQrRPcKNbHWQDaLcjsO7uaBvdemgwDB1oU/5qDA=='}}
0:02:19.657634	LOG	Server ----------> DUT
0:02:19.661632	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:19.666629	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:24.648326	LOG	PUSH_ACK: 02 0c7b 01
0:02:24.650326	LOG	PUSH_DATA: Protocol version = 02, Token = 0c7b, Identifier = 00, JSON = {'rxpk': [{'tmst': 937231472, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAkggBUhqfEw5L'}]}
0:02:24.651324	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0892, FOpts:), FPort: 01, FRMPayload: 03c4, MIC: 9f130e4b)
0:02:24.652325	LOG	Server <---------- DUT
0:02:24.654323	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0576, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8d366f66)
0:02:24.657321	LOG	Frame command sent to the DUT
0:02:24.659320	LOG	PULL_RESP: Protocol version = 02, Token = d00a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 939231472, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAdgXgi5YsJNrDe45Irx8qEIs9e+xXruh5I1NYz0OB7qVqt/15vXgQ6FDrw6VeVn5D2tT4RvuMjTZvZg=='}}
0:02:24.661320	LOG	Server ----------> DUT
0:02:24.664317	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:24.668316	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:26.336365	LOG	PULL_DATA: 02 e611 02 aa555a0000240409

0:02:26.337366	LOG	PULL_ACK: 02 e611 04
0:02:29.650479	LOG	PUSH_ACK: 02 0c7c 01
0:02:29.652479	LOG	PUSH_DATA: Protocol version = 02, Token = 0c7c, Identifier = 00, JSON = {'rxpk': [{'tmst': 942234092, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAkwgBd+98sj2v'}]}
0:02:29.653478	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0893, FOpts:), FPort: 01, FRMPayload: 03c5, MIC: 7cb23daf)
0:02:29.654478	LOG	Server <---------- DUT
0:02:29.656475	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0577, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 5d00eb33)
0:02:29.658474	LOG	Frame command sent to the DUT
0:02:29.660474	LOG	PULL_RESP: Protocol version = 02, Token = fea8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 944234092, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAdwXgiGoeLNyu/stQV6TSodpHJfidAHNQZ0E8mvxk95qgUgsdKpbZSpnnU/vYCHpsRMe4zsrEXQDrMw==''}}
0:02:29.661472	LOG	Server ----------> DUT
0:02:29.664471	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:29.667488	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:34.654630	LOG	PUSH_ACK: 02 0c7d 01
0:02:34.658628	LOG	PUSH_DATA: Protocol version = 02, Token = 0c7d, Identifier = 00, JSON = {'rxpk': [{'tmst': 947236717, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAlAgBbBZ4sbtO'}]}
0:02:34.659628	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0894, FOpts:), FPort: 01, FRMPayload: 03c6, MIC: 78b1bb4e)
0:02:34.660628	LOG	Server <---------- DUT
0:02:34.662626	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0578, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 7021f06d)
0:02:34.664624	LOG	Frame command sent to the DUT
0:02:34.665623	LOG	PULL_RESP: Protocol version = 02, Token = 18ea, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 949236717, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAeAXg2Nr44clGbUKZUHfPdlqZBz1n8CQYslZ9OAXyaDDwFNleRYkMmlwt+/PEyHUbbzf8YljzcCHwbQ==''}}
0:02:34.666623	LOG	Server ----------> DUT
0:02:34.669621	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:34.672621	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:36.346167	LOG	PULL_DATA: 02 bd31 02 aa555a0000240409
0:02:36.348169	LOG	PULL_ACK: 02 bd31 04
0:02:39.671293	LOG	PUSH_ACK: 02 0c7f 01
0:02:39.673290	LOG	PUSH_DATA: Protocol version = 02, Token = 0c7f, Identifier = 00, JSON = {'rxpk': [{'tmst': 952239312, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAlQgB11LobaYC'}]}
0:02:39.674288	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0895, FOpts:), FPort: 01, FRMPayload: 03c7, MIC: e86da602)
0:02:39.675288	LOG	Server <---------- DUT
0:02:39.677286	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0579, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 314d02b4)
0:02:39.679286	LOG	Frame command sent to the DUT
0:02:39.681285	LOG	PULL_RESP: Protocol version = 02, Token = de40, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 954239312, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAeQXgZ/MW4rbLcGobrvTh1UWRTH25ZAKDMCwgKlV7JJlMieReYulWNKU5Fc877GfunQbCZLxrMU0CtA=='}}
0:02:39.682283	LOG	Server ----------> DUT
0:02:39.686282	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:39.690280	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:44.659562	LOG	PUSH_ACK: 02 0c80 01
0:02:44.661561	LOG	PUSH_DATA: Protocol version = 02, Token = 0c80, Identifier = 00, JSON = {'rxpk': [{'tmst': 957241955, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAlggBLMpMOzjY'}]}
0:02:44.663560	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0896, FOpts:), FPort: 01, FRMPayload: 03c8, MIC: 4c3b38d8)
0:02:44.665558	LOG	Server <---------- DUT
0:02:44.666559	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 057a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 0f6b8951)
0:02:44.668557	LOG	Frame command sent to the DUT
0:02:44.670557	LOG	PULL_RESP: Protocol version = 02, Token = 2015, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 959241955, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAegXgsSsEmsJUp9pXNuUF68uG8+fpylFsosOfmn0s7BGVS2+Gb5z9s8S1sbJlGKp09EKuZ7dZD2uJUQ=='}}
0:02:44.671556	LOG	Server ----------> DUT
0:02:44.675554	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:44.682549	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:46.356653	LOG	PULL_DATA: 02 4d20 02 aa555a0000240409
0:02:46.358652	LOG	PULL_ACK: 02 4d20 04
0:02:49.660772	LOG	PUSH_ACK: 02 0c81 01
0:02:49.662771	LOG	PUSH_DATA: Protocol version = 02, Token = 0c81, Identifier = 00, JSON = {'rxpk': [{'tmst': 962244573, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAlwgBY/QwwnXH'}]}
0:02:49.664770	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0897, FOpts:), FPort: 01, FRMPayload: 03c9, MIC: 30c275c7)
0:02:49.665770	LOG	Server <---------- DUT
0:02:49.666768	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 057b, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 213033af)
0:02:49.668767	LOG	Frame command sent to the DUT
0:02:49.670767	LOG	PULL_RESP: Protocol version = 02, Token = bcba, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 964244573, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAewXg5kIp0AqUmJMNR5MXIw5A4yfMmGB+399GT8/iC1F0mj8+Tte9jwEDPxTHTeakscm3zC4+ITAzrw=='}}
0:02:49.671766	LOG	Server ----------> DUT
0:02:49.675764	LOG	Send Test Command TxFramesCtrlReq process completed

0:02:49.679762	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:54.664007	LOG	PUSH_ACK: 02 0c82 01
0:02:54.666006	LOG	PUSH_DATA: Protocol version = 02, Token = 0c82, Identifier = 00, JSON = {'rxpk': [{'tmst': 967247198, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAmAgB03f4I3Wo'}]}
0:02:54.668005	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0898, FOpts:), FPort: 01, FRMPayload: 03ca, MIC: f82375a8)
0:02:54.669005	LOG	Server <---------- DUT
0:02:54.670004	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 057c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 6bd26bd6)
0:02:54.673002	LOG	Frame command sent to the DUT
0:02:54.675001	LOG	PULL_RESP: Protocol version = 02, Token = 123b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 969247198, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAfAXgojKIROqKj5UUPmuf0vFrYonE7kzicdCOTlnLjChJ3VhfzXsEgi2wD8+wRE0PMlXzC+oga9Jr1g==''}}
0:02:54.677000	LOG	Server ----------> DUT
0:02:54.679998	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:54.684995	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:56.565924	LOG	PULL_DATA: 02 182d 02 aa555a0000240409
0:02:56.568923	LOG	PULL_ACK: 02 182d 04
0:02:59.667159	LOG	PUSH_ACK: 02 0c83 01
0:02:59.669158	LOG	PUSH_DATA: Protocol version = 02, Token = 0c83, Identifier = 00, JSON = {'rxpk': [{'tmst': 972249808, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAmQgBczc3UKrG'}]}
0:02:59.670157	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0899, FOpts:), FPort: 01, FRMPayload: 03cb, MIC: 3750aac6)
0:02:59.671156	LOG	Server <---------- DUT
0:02:59.673156	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 057d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ee8230e7)
0:02:59.676154	LOG	Frame command sent to the DUT
0:02:59.678153	LOG	PULL_RESP: Protocol version = 02, Token = 7731, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 974249808, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAfQXg7yqeaqInPpQ0KxGPghI2rybe9wTLz2k4ZVvI2MmmteaEW/XkAI75Pcq9RrU3Xr5J4mYC7oIw5w==''}}
0:02:59.679152	LOG	Server ----------> DUT
0:02:59.683149	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:59.686149	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:04.668365	LOG	PUSH_ACK: 02 0c84 01
0:03:04.672361	LOG	PUSH_DATA: Protocol version = 02, Token = 0c84, Identifier = 00, JSON = {'rxpk': [{'tmst': 977252419, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAmggBzo6unIoi'}]}
0:03:04.673361	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 089a, FOpts:), FPort: 01, FRMPayload: 03cc, MIC: ae9c8a22)
0:03:04.675359	LOG	Server <---------- DUT
0:03:04.677359	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 057e, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4815c69b)
0:03:04.680357	LOG	Frame command sent to the DUT
0:03:04.681356	LOG	PULL_RESP: Protocol version = 02, Token = 8dcf, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 979252419, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAfgXgxUlMwTXRv3Dky/sdmPVZl8v63MxjbpYFbgzcUmFafLK+zkfmLRagKfXFdliRRALQdC7uSBXGmw==''}}
0:03:04.683355	LOG	Server ----------> DUT
0:03:04.686353	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:04.688353	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:06.575465	LOG	PULL_DATA: 02 5e52 02 aa555a0000240409
0:03:06.578462	LOG	PULL_ACK: 02 5e52 04
0:03:09.681697	LOG	PUSH_ACK: 02 0c86 01
0:03:09.686694	LOG	PUSH_DATA: Protocol version = 02, Token = 0c86, Identifier = 00, JSON = {'rxpk': [{'tmst': 982255037, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAmwgB9ZUZxtac''}]}
0:03:09.690691	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 089b, FOpts:), FPort: 01, FRMPayload: 03cd, MIC: 19c6d69c)
0:03:09.694694	LOG	Server <---------- DUT
0:03:09.696689	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 057f, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a0192871)
0:03:09.698686	LOG	Frame command sent to the DUT
0:03:09.699685	LOG	PULL_RESP: Protocol version = 02, Token = cbdb, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 984255037, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAfwXgx9B2TL5o3kUipq6DvCLanCEUaz8NUYRsLhbtqem7j894Qs7OqVKZEn0odHh2w0AFU5pIoBkocQ==''}}
0:03:09.701684	LOG	Server ----------> DUT
0:03:09.705682	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:09.709680	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:14.675954	LOG	PUSH_ACK: 02 0c87 01
0:03:14.677953	LOG	PUSH_DATA: Protocol version = 02, Token = 0c87, Identifier = 00, JSON = {'rxpk': [{'tmst': 987257671, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAnAgBCyTkKs4g''}]}
0:03:14.679952	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 089c, FOpts:), FPort: 01, FRMPayload: 03ce, MIC: e42ace20)
0:03:14.680951	LOG	Server <---------- DUT
0:03:14.682950	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0580, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a9280f2a)
0:03:14.685948	LOG	Frame command sent to the DUT
0:03:14.687947	LOG	PULL_RESP: Protocol version = 02, Token = 0994, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 989257671, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAgAXgZxb9nEtXoMWx7S5Mqn4bTQbDtW4fey46behrcnoV1ej7JFkkzUgkeHWMKLWHQ5PmGzrFqSgPKg==''}}
0:03:14.688947	LOG	Server ----------> DUT
0:03:14.693944	LOG	Send Test Command TxFramesCtrlReq process completed

0:03:14.703938	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:16.786099	LOG	PULL_DATA: 02 9f92 02 aa555a0000240409
0:03:16.788097	LOG	PULL_ACK: 02 9f92 04
0:03:19.679528	LOG	PUSH_ACK: 02 0c88 01
0:03:19.681526	LOG	PUSH_DATA: Protocol version = 02, Token = 0c88, Identifier = 00, JSON = {'rxpk': [{'tmst': 992260289, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAnQgBmurjiwc1'}]}
0:03:19.682524	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 089d, FOpts:), FPort: 01, FRMPayload: 03cf, MIC: e38b0735)
0:03:19.684523	LOG	Server <---------- DUT
0:03:19.686522	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0581, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 08969b24)
0:03:19.688521	LOG	Frame command sent to the DUT
0:03:19.690520	LOG	PULL_RESP: Protocol version = 02, Token = 0dba, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 994260289, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAgQXgTFvz8JaSkgzYcEfMeKVGJf+5gaSm7xwMo1JRVxXkAMqCcctUr8ZtPM0x39l68ulFA+mKCJabJA=='}}
0:03:19.692519	LOG	Server ----------> DUT
0:03:19.696518	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:19.700516	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:24.680679	LOG	PUSH_ACK: 02 0c89 01
0:03:24.682678	LOG	PUSH_DATA: Protocol version = 02, Token = 0c89, Identifier = 00, JSON = {'rxpk': [{'tmst': 997262914, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAnggB/JtXKz5G'}]}
0:03:24.684677	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 089e, FOpts:), FPort: 01, FRMPayload: 03d0, MIC: 572b3e46)
0:03:24.686677	LOG	Server <---------- DUT
0:03:24.688676	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0582, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b909cba5)
0:03:24.691674	LOG	Frame command sent to the DUT
0:03:24.693671	LOG	PULL_RESP: Protocol version = 02, Token = 2434, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 999262914, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAggXg0SaJmAxGeFX9RmNQv/5pfFZl51yb8eIK/mnGaPH8QgbQk9efLeCvvSCN0TShbV4voqOVuQnLpQ=='}}
0:03:24.694671	LOG	Server ----------> DUT
0:03:24.698668	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:24.702666	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:26.795476	LOG	PULL_DATA: 02 2523 02 aa555a0000240409
0:03:26.797491	LOG	PULL_ACK: 02 2523 04
0:03:29.682833	LOG	PUSH_ACK: 02 0c8a 01
0:03:29.684831	LOG	PUSH_DATA: Protocol version = 02, Token = 0c8a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1002265524, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAnwgBwtCqG0Gy'}]}
0:03:29.685829	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 089f, FOpts:), FPort: 01, FRMPayload: 03d1, MIC: aa1b41b2)
0:03:29.686831	LOG	Server <---------- DUT

0:03:29.688828	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0583, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 032ea5d7)
0:03:29.691827	LOG	Frame command sent to the DUT
0:03:29.693825	LOG	PULL_RESP: Protocol version = 02, Token = acb5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1004265524, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAgwXgQQVttgJNH3Nigm0BylhyspR5MbdE9/w50OZ0bkXlvupzdtiSgKFOkH8o+Y8REa4htIFmAy6l1w==''}}
0:03:29.695824	LOG	Server ----------> DUT
0:03:29.699822	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:29.703821	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:34.685983	LOG	PUSH_ACK: 02 0c8b 01
0:03:34.690982	LOG	PUSH_DATA: Protocol version = 02, Token = 0c8b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1007268148, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAoAgBdJbQftB2'}]}
0:03:34.691979	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a0, FOpts:), FPort: 01, FRMPayload: 03d2, MIC: d07ed076)
0:03:34.692980	LOG	Server <---------- DUT
0:03:34.694979	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0584, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b37fb4e1)
0:03:34.696977	LOG	Frame command sent to the DUT
0:03:34.698976	LOG	PULL_RESP: Protocol version = 02, Token = 2f4b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1009268148, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAhAXgbqkhLxhbUqyT9t3LX1sPVAVKnTFKRX5liCb4h4CAY5QRXtAUTCdEchrpeJ3nPYiCYMods3+04Q==''}}
0:03:34.699977	LOG	Server ----------> DUT
0:03:34.702974	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:34.705972	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:37.006126	LOG	PULL_DATA: 02 7aa5 02 aa555a0000240409
0:03:37.007127	LOG	PULL_ACK: 02 7aa5 04
0:03:39.700594	LOG	PUSH_ACK: 02 0c8d 01
0:03:39.703591	LOG	PUSH_DATA: Protocol version = 02, Token = 0c8d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1012270784, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAoQgBYE+vqRPy'}]}
0:03:39.704592	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a1, FOpts:), FPort: 01, FRMPayload: 03d3, MIC: afa913f2)
0:03:39.705595	LOG	Server <---------- DUT
0:03:39.707590	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0585, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 5c0725b7)
0:03:39.709589	LOG	Frame command sent to the DUT
0:03:39.711588	LOG	PULL_RESP: Protocol version = 02, Token = cb90, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1014270784, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAhQXgx9nsbLIV1EU2z8J2wRPieCRdKtZ+7jG/5hG4VdtiAnLua1O5l2F1/cattCSZGObwz+mKXAcltw==''}}

0:03:39.713586	LOG	Server ----------> DUT
0:03:39.717587	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:39.723580	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:44.690076	LOG	PUSH_ACK: 02 0c8e 01
0:03:44.693075	LOG	PUSH_DATA: Protocol version = 02, Token = 0c8e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1017273410, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAoggB2ROwx8Ze'}]}
0:03:44.694074	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a2, FOpts:), FPort: 01, FRMPayload: 03d4, MIC: b0c7c65e)
0:03:44.696073	LOG	Server <---------- DUT
0:03:44.698072	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0586, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 287cf57b)
0:03:44.700073	LOG	Frame command sent to the DUT
0:03:44.701072	LOG	PULL_RESP: Protocol version = 02, Token = 50b3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1019273410, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAhgXg+el46GBbLkLcv3clzWS+NFWq+nVsfKM7y7iyVTVoDShBZIkVEfJOcYwXEoTeDRom68wlKHz1ew==\'}}
0:03:44.703070	LOG	Server ----------> DUT
0:03:44.706067	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:44.711065	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:47.015769	LOG	PULL_DATA: 02 6977 02 aa555a0000240409
0:03:47.017768	LOG	PULL_ACK: 02 6977 04
0:03:49.692736	LOG	PUSH_ACK: 02 0c8f 01
0:03:49.694734	LOG	PUSH_DATA: Protocol version = 02, Token = 0c8f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1022276039, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAowgBZRH732kk'}]}
0:03:49.695735	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a3, FOpts:), FPort: 01, FRMPayload: 03d5, MIC: fbdf6924)
0:03:49.696733	LOG	Server <---------- DUT
0:03:49.698732	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0587, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f1ecdda7)
0:03:49.700731	LOG	Frame command sent to the DUT
0:03:49.701730	LOG	PULL_RESP: Protocol version = 02, Token = 4b1d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1024276039, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAhwXgcm9/lFhVblsuAy5MQb+Vg9CG5Ca0JB9ETH0T61ou8ObtIg/+87HISg010CA/67Zg2qMv8ezdpw==\'}}
0:03:49.703729	LOG	Server ----------> DUT
0:03:49.706727	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:49.711724	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:54.695969	LOG	PUSH_ACK: 02 0c90 01
0:03:54.697968	LOG	PUSH_DATA: Protocol version = 02, Token = 0c90, Identifier = 00, JSON = {'rxpk': [{'tmst': 1027278650, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCApAgBzoKTH6RS'}]}
0:03:54.698967	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a4, FOpts:), FPort: 01, FRMPayload: 03d6, MIC: 931fa452)
0:03:54.699967	LOG	Server <---------- DUT

0:03:54.700966	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0588, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c94b4529)
0:03:54.703963	LOG	Frame command sent to the DUT
0:03:54.705962	LOG	PULL_RESP: Protocol version = 02, Token = fc8b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1029278650, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAiAXgIY4Jnj/eXDc90s+PhW89aijm3MligYlk3H9XgC4M/bCZjPhqBpvI6BCBktciZ0u/nLFdyUtFKQ=='}}
0:03:54.706961	LOG	Server ----------> DUT
0:03:54.710959	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:54.714956	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:57.225528	LOG	PULL_DATA: 02 86be 02 aa555a0000240409
0:03:57.228526	LOG	PULL_ACK: 02 86be 04
0:03:59.698135	LOG	PUSH_ACK: 02 0c91 01
0:03:59.700134	LOG	PUSH_DATA: Protocol version = 02, Token = 0c91, Identifier = 00, JSON = {'rxpk': [{'tmst': 1032281276, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCApQgBznC81FAT'}]}
0:03:59.701135	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a5, FOpts:), FPort: 01, FRMPayload: 03d7, MIC: bcd45013)
0:03:59.703134	LOG	Server <---------- DUT
0:03:59.704132	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0589, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 60988eb6)
0:03:59.706132	LOG	Frame command sent to the DUT
0:03:59.708130	LOG	PULL_RESP: Protocol version = 02, Token = b73a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1034281276, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAiQXgKPErZ7JsB9hSMw/A/bcSZA4QTRG4XuaVOV9Fzn2Q0Nj5L58Cis8ryhSAn4byPg3tESQwYJiOtg=='}}
0:03:59.709130	LOG	Server ----------> DUT
0:03:59.714126	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:59.718124	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:04.700288	LOG	PUSH_ACK: 02 0c92 01
0:04:04.705285	LOG	PUSH_DATA: Protocol version = 02, Token = 0c92, Identifier = 00, JSON = {'rxpk': [{'tmst': 1037283886, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCApggBnL1VYmpt'}]}
0:04:04.706285	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a6, FOpts:), FPort: 01, FRMPayload: 03d8, MIC: 55626a6d)
0:04:04.707285	LOG	Server <---------- DUT
0:04:04.709282	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 058a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f5684cdd)
0:04:04.712281	LOG	Frame command sent to the DUT
0:04:04.714280	LOG	PULL_RESP: Protocol version = 02, Token = 30d5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1039283886, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAigXg0FYe9A1SPtvtIW4Wl2akhREouBa4AkaQYduGAwhLy5XBGe0QN1hP2x5tO2t4H5jDDM0b9WhM3Q=='}}

0:04:04.715297	LOG	Server ----------> DUT
0:04:04.719276	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:04.723274	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:07.235844	LOG	PULL_DATA: 02 9f96 02 aa555a0000240409
0:04:07.237844	LOG	PULL_ACK: 02 9f96 04
0:04:09.720430	LOG	PUSH_ACK: 02 0c94 01
0:04:09.722428	LOG	PUSH_DATA: Protocol version = 02, Token = 0c94, Identifier = 00, JSON = {'rxpk': [{'tmst': 1042286513, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCApwgBj/p+ROjS'}]}
0:04:09.723427	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a7, FOpts:), FPort: 01, FRMPayload: 03d9, MIC: 7e44e8d2)
0:04:09.724429	LOG	Server <---------- DUT
0:04:09.727427	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 058b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 41f61291)
0:04:09.729424	LOG	Frame command sent to the DUT
0:04:09.730425	LOG	PULL_RESP: Protocol version = 02, Token = 84b7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1044286513, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAiwXgDFgYStZXhpaC9gyOEwL2Xt2Ze80/TxnQbdwNVuFn3QW3iD2KNRmLRCouHGUvCjO4uuZoQfYSkQ=='}}
0:04:09.731425	LOG	Server ----------> DUT
0:04:09.735421	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:09.739418	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:14.706507	LOG	PUSH_ACK: 02 0c95 01
0:04:14.708506	LOG	PUSH_DATA: Protocol version = 02, Token = 0c95, Identifier = 00, JSON = {'rxpk': [{'tmst': 1047289123, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAqAgBVwHvK2wI'}]}
0:04:14.709505	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a8, FOpts:), FPort: 01, FRMPayload: 03da, MIC: ef2b6c08)
0:04:14.710505	LOG	Server <---------- DUT
0:04:14.712504	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 058c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c2503f10)
0:04:14.714503	LOG	Frame command sent to the DUT
0:04:14.716501	LOG	PULL_RESP: Protocol version = 02, Token = 6160, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1049289123, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAjAXgtz8ACEamkeEB5f1CPa7JSGmqh5KhpsSnnIvO5gX/o9jcKDftbBXioL0M/oFkrDcUpRPlwlA/EA=='}}
0:04:14.717501	LOG	Server ----------> DUT
0:04:14.721498	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:14.725497	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:17.445997	LOG	PULL_DATA: 02 f134 02 aa555a0000240409
0:04:17.446997	LOG	PULL_ACK: 02 f134 04
0:04:19.708708	LOG	PUSH_ACK: 02 0c96 01
0:04:19.710707	LOG	PUSH_DATA: Protocol version = 02, Token = 0c96, Identifier = 00, JSON = {'rxpk': [{'tmst': 1052291740, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAqQgBhQIu7TO/'}]}

0:04:19.711707	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08a9, FOpts:), FPort: 01, FRMPayload: 03db, MIC: 2eed33bf)
0:04:19.712706	LOG	Server <---------- DUT
0:04:19.714705	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 058d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: aa274bac)
0:04:19.716704	LOG	Frame command sent to the DUT
0:04:19.717703	LOG	PULL_RESP: Protocol version = 02, Token = 3fb1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1054291740, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAjQXgSXrf2a+sOVqmLQHFGWetvrZXEqV29d2OejjXCKhRhPu5IJ3cd6iITU8axQ9yo9f7N2Q7qidLrA=='}}
0:04:19.719702	LOG	Server ----------> DUT
0:04:19.722699	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:19.726697	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:24.711072	LOG	PUSH_ACK: 02 0c97 01
0:04:24.713071	LOG	PUSH_DATA: Protocol version = 02, Token = 0c97, Identifier = 00, JSON = {'rxpk': [{'tmst': 1057294361, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAqggBgFbNt7oK'}]}
0:04:24.715069	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08aa, FOpts:), FPort: 01, FRMPayload: 03dc, MIC: cdb7ba0a)
0:04:24.717068	LOG	Server <---------- DUT
0:04:24.719067	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 058e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c98f9ff8)
0:04:24.721066	LOG	Frame command sent to the DUT
0:04:24.723065	LOG	PULL_RESP: Protocol version = 02, Token = accc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1059294361, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAjgXgTvhqhEfZE4Va7CenUYpqkQH+zeBDzmReASWKdJC6GraB64GFrtLEHHgdCbsedO0njzJ3yY+f+A=='}}
0:04:24.725064	LOG	Server ----------> DUT
0:04:24.730061	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:24.734058	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:27.454987	LOG	PULL_DATA: 02 e0f5 02 aa555a0000240409
0:04:27.456985	LOG	PULL_ACK: 02 e0f5 04
0:04:29.712701	LOG	PUSH_ACK: 02 0c98 01
0:04:29.714701	LOG	PUSH_DATA: Protocol version = 02, Token = 0c98, Identifier = 00, JSON = {'rxpk': [{'tmst': 1062296979, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAqwgBAgSMKEjB'}]}
0:04:29.715700	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ab, FOpts:), FPort: 01, FRMPayload: 03dd, MIC: 8c2848c1)
0:04:29.717698	LOG	Server <---------- DUT
0:04:29.719697	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 058f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2df423c7)
0:04:29.721695	LOG	Frame command sent to the DUT
0:04:29.722695	LOG	PULL_RESP: Protocol version = 02, Token = 7961, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1064296979, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAAjwXgRZoRhkTIOF25Kfzp6f5c3Ttd8HbSDmJhasO3hQFLjcNR2cRN7gvQ7Ff0CijDsTbFXx6ILfQjxw=='}}
0:04:29.724694	LOG	Server ----------> DUT
0:04:29.728692	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:29.732689	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:34.715929	LOG	PUSH_ACK: 02 0c99 01
0:04:34.719928	LOG	PUSH_DATA: Protocol version = 02, Token = 0c99, Identifier = 00, JSON = {'rxpk': [{'tmst': 1067299603, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCArAgBbqIiCFhq'}]}
0:04:34.721927	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ac, FOpts:), FPort: 01, FRMPayload: 03de, MIC: 2208586a)
0:04:34.722926	LOG	Server <---------- DUT
0:04:34.724925	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0590, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 931ca34b)
0:04:34.727923	LOG	Frame command sent to the DUT
0:04:34.730922	LOG	PULL_RESP: Protocol version = 02, Token = b529, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1069299603, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAkAXgQ8lSeFObS4VPRDoUYJKjYgoF/Bro2YCNFwowDeo3Jkt+/XYa75L+MxDI4QEGkm/AOKqOkxyjSw=='}}
0:04:34.731921	LOG	Server ----------> DUT
0:04:34.735918	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:34.740916	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:37.465094	LOG	PULL_DATA: 02 4c6a 02 aa555a0000240409
0:04:37.467093	LOG	PULL_ACK: 02 4c6a 04
0:04:39.728823	LOG	PUSH_ACK: 02 0c9b 01
0:04:39.730805	LOG	PUSH_DATA: Protocol version = 02, Token = 0c9b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1072302221, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCArQgBRPEk3XaJ'}]}
0:04:39.732803	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ad, FOpts:), FPort: 01, FRMPayload: 03df, MIC: 24dd7689)
0:04:39.733803	LOG	Server <---------- DUT
0:04:39.734802	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0591, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 189c4c22)
0:04:39.737801	LOG	Frame command sent to the DUT
0:04:39.738801	LOG	PULL_RESP: Protocol version = 02, Token = 84d6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1074302221, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAkQXgXSkmmlSXbcYCzdAlMLQozCn03ZXneDkADT96zuxuhmeJ+8YU2As21XvncbI6R8ubhuH4GJxMIg=='}}
0:04:39.739799	LOG	Server ----------> DUT
0:04:39.743797	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:39.747795	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:44.721963	LOG	PUSH_ACK: 02 0c9c 01
0:04:44.723962	LOG	PUSH_DATA: Protocol version = 02, Token = 0c9c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1077304864, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCArggBWJmKtkgV'}]}

0:04:44.725961	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ae, FOpts:), FPort: 01, FRMPayload: 03e0, MIC: 8ab64815)
0:04:44.726960	LOG	Server <---------- DUT
0:04:44.728959	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0592, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1bb81955)
0:04:44.731958	LOG	Frame command sent to the DUT
0:04:44.733956	LOG	PULL_RESP: Protocol version = 02, Token = 6e51, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1079304864, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAkgXgUk2S/OUFLKVtafcsYkDiv+zn0AXMXrVRhJAnyJu2a6STi5YLS/vYxKLYyVUWrw2DpsSSG7gZVQ==''}}
0:04:44.734974	LOG	Server ----------> DUT
0:04:44.738953	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:44.741952	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:47.675383	LOG	PULL_DATA: 02 e342 02 aa555a0000240409
0:04:47.677383	LOG	PULL_ACK: 02 e342 04
0:04:49.723219	LOG	PUSH_ACK: 02 0c9d 01
0:04:49.725218	LOG	PUSH_DATA: Protocol version = 02, Token = 0c9d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1082307490, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCArwgBBj32OkSp'}]}
0:04:49.726218	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08af, FOpts:), FPort: 01, FRMPayload: 03e1, MIC: f63a44a9)
0:04:49.728217	LOG	Server <---------- DUT
0:04:49.729216	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0593, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4f4b80ad)
0:04:49.731215	LOG	Frame command sent to the DUT
0:04:49.733212	LOG	PULL_RESP: Protocol version = 02, Token = 1537, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1084307490, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAkwXgsnX0qngWt4wd1XE46uvGnCKFOc+dOuogsReyHKKQXZCVtLa/bpriYgVdHg4hzaA9snxKT0uArQ==''}}
0:04:49.734212	LOG	Server ----------> DUT
0:04:49.737210	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:49.739209	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:54.725174	LOG	PUSH_ACK: 02 0c9e 01
0:04:54.727173	LOG	PUSH_DATA: Protocol version = 02, Token = 0c9e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1087310097, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAsAgBIoTAutyi'}]}
0:04:54.729172	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b0, FOpts:), FPort: 01, FRMPayload: 03e2, MIC: c0badca2)
0:04:54.730173	LOG	Server <---------- DUT
0:04:54.731172	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0594, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 15d7dedb)
0:04:54.734170	LOG	Frame command sent to the DUT
0:04:54.735170	LOG	PULL_RESP: Protocol version = 02, Token = 5e42, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1089310097, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAAlAXgtGPm4Y6aMF+iPPuVELj8J3KyBxV6pjh6O9rLsDULPum1JR8/Ag4XwCfZc8N79WA0mNK5Fdfe2w=='}}
0:04:54.737167	LOG	Server ----------> DUT
0:04:54.740166	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:54.744163	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:57.885579	LOG	PULL_DATA: 02 dcca 02 aa555a0000240409
0:04:57.888577	LOG	PULL_ACK: 02 dcca 04
0:04:59.729529	LOG	PUSH_ACK: 02 0c9f 01
0:04:59.731529	LOG	PUSH_DATA: Protocol version = 02, Token = 0c9f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1092312715, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAsQgBQj7z5shv'}]}
0:04:59.733527	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b1, FOpts:), FPort: 01, FRMPayload: 03e3, MIC: f3e6c86f)
0:04:59.734527	LOG	Server <---------- DUT
0:04:59.736525	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0595, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 063fbbda)
0:04:59.738525	LOG	Frame command sent to the DUT
0:04:59.739526	LOG	PULL_RESP: Protocol version = 02, Token = 6956, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1094312715, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAlQXg/uY77LQgIlNii/JCGZj/DlLwF42pWhqxtYgjdJyUYNOYnO2WVO6egshcsJbuat6gUNSFBj+72g=='}}
0:04:59.740525	LOG	Server ----------> DUT
0:04:59.744521	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:59.753517	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:04.731861	LOG	PUSH_ACK: 02 0ca0 01
0:05:04.744854	LOG	PUSH_DATA: Protocol version = 02, Token = 0ca0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1097315324, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAsggB44rdCsvh'}]}
0:05:04.745851	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b2, FOpts:), FPort: 01, FRMPayload: 03e4, MIC: dd0acbe1)
0:05:04.747851	LOG	Server <---------- DUT
0:05:04.749850	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0596, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 55df8e05)
0:05:04.751848	LOG	Frame command sent to the DUT
0:05:04.753847	LOG	PULL_RESP: Protocol version = 02, Token = ec86, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1099315324, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAlgXgmhWGEBicERUewP3Y0xKfK8Kl8u0kENmvm6kxmd/Osih8mKKc8ph1Va6hDUbVcMhr97P+Vd+OBQ=='}}
0:05:04.754846	LOG	Server ----------> DUT
0:05:04.758844	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:04.762842	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:07.905281	LOG	PULL_DATA: 02 539a 02 aa555a0000240409
0:05:07.907280	LOG	PULL_ACK: 02 539a 04
0:05:09.749231	LOG	PUSH_ACK: 02 0ca3 01
0:05:09.752231	LOG	PUSH_DATA: Protocol version = 02, Token = 0ca3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1102317942, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAswgB88kSqV5c'}]}
0:05:09.753229	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b3, FOpts:), FPort: 01, FRMPayload: 03e5, MIC: 12a95e5c)
0:05:09.754230	LOG	Server <---------- DUT
0:05:09.756227	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0597, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8fea9ed7)
0:05:09.758226	LOG	Frame command sent to the DUT
0:05:09.759227	LOG	PULL_RESP: Protocol version = 02, Token = 803c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1104317942, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAlwXg0op8SaxFBEmv3D9fXjK4vpRuc2J9HQooKIF8CJ/+teQq/f2NZJw+OFJ5o1aaDs8sXy6zj+qe1w==''}}
0:05:09.761225	LOG	Server ----------> DUT
0:05:09.765222	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:09.770219	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:14.738392	LOG	PUSH_ACK: 02 0ca4 01
0:05:14.740391	LOG	PUSH_DATA: Protocol version = 02, Token = 0ca4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1107320568, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAtAgB5LPkXixv'}]}
0:05:14.741391	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b4, FOpts:), FPort: 01, FRMPayload: 03e6, MIC: e45e2c6f)
0:05:14.742391	LOG	Server <---------- DUT
0:05:14.744388	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0598, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 3283e491)
0:05:14.746388	LOG	Frame command sent to the DUT
0:05:14.748386	LOG	PULL_RESP: Protocol version = 02, Token = fee9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1109320568, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAmAXgmI08mi21HzOnzVRiXBECbyJiBWpZC8CSGINu6we+mQo46YhmS/ZXrALchSLD36g51D22MoPkkQ==''}}
0:05:14.750391	LOG	Server ----------> DUT
0:05:14.753384	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:14.755383	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:18.105574	LOG	PULL_DATA: 02 fba1 02 aa555a0000240409
0:05:18.107573	LOG	PULL_ACK: 02 fba1 04
0:05:19.739644	LOG	PUSH_ACK: 02 0ca5 01
0:05:19.741643	LOG	PUSH_DATA: Protocol version = 02, Token = 0ca5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1112323218, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAtQgBWga+8o44'}]}
0:05:19.743641	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b5, FOpts:), FPort: 01, FRMPayload: 03e7, MIC: bef28e38)
0:05:19.744641	LOG	Server <---------- DUT
0:05:19.746609	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0599, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 050e4faa)
0:05:19.748607	LOG	Frame command sent to the DUT

0:05:19.750606	LOG	PULL_RESP: Protocol version = 02, Token = aa6d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1114323218, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAmQXgxbWI723hjsjBzWvg1y9AsY8qQKGdjzxhvZGwqyq7ItvW1cQx40/Oz3fg5DA/a/fwBIqBBQ5Pqg=='}}
0:05:19.751606	LOG	Server ----------> DUT
0:05:19.754605	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:19.757603	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:24.742818	LOG	PUSH_ACK: 02 0ca6 01
0:05:24.744816	LOG	PUSH_DATA: Protocol version = 02, Token = 0ca6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1117325844, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAtggBJ2mK29uT'}]}
0:05:24.745814	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b6, FOpts:), FPort: 01, FRMPayload: 03e8, MIC: 8adbdb93)
0:05:24.746816	LOG	Server <---------- DUT
0:05:24.748814	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 059a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c4f7e8c3)
0:05:24.750813	LOG	Frame command sent to the DUT
0:05:24.751811	LOG	PULL_RESP: Protocol version = 02, Token = c3af, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1119325844, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAmgXghhfUDFO+kVZX4jaKTUh5LaAswlByV0otmJn/Q/Qdh0WXDsI5hiFaNfQI/HZTP1rEbfpMxPfoww=='}}
0:05:24.752812	LOG	Server ----------> DUT
0:05:24.756808	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:24.759806	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:28.114610	LOG	PULL_DATA: 02 ba13 02 aa555a0000240409
0:05:28.117609	LOG	PULL_ACK: 02 ba13 04
0:05:29.744650	LOG	PUSH_ACK: 02 0ca7 01
0:05:29.746649	LOG	PUSH_DATA: Protocol version = 02, Token = 0ca7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1122328478, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAtwgBMlMT3sft'}]}
0:05:29.747650	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b7, FOpts:), FPort: 01, FRMPayload: 03e9, MIC: 13dec7ed)
0:05:29.748650	LOG	Server <---------- DUT
0:05:29.750648	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 059b, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 32e7a996)
0:05:29.752647	LOG	Frame command sent to the DUT
0:05:29.754645	LOG	PULL_RESP: Protocol version = 02, Token = 5080, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1124328478, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAmwXgtpD5Ss7uOqA24Hol/KmXF3242nUmxQzKFEYaJ34/zioQcQkpI1S+2AUQi7QREdbzLxN5Mueplg=='}}
0:05:29.755644	LOG	Server ----------> DUT
0:05:29.759642	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:29.764639	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:34.746833	LOG	PUSH_ACK: 02 0ca8 01

0:05:34.752829	LOG	PUSH_DATA: Protocol version = 02, Token = 0ca8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1127331111, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAuAgBCnxR+tg2'}]}
0:05:34.753830	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b8, FOpts:), FPort: 01, FRMPayload: 03ea, MIC: 51fad836)
0:05:34.755829	LOG	Server <---------- DUT
0:05:34.757827	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 059c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: aac7ddc4)
0:05:34.760826	LOG	Frame command sent to the DUT
0:05:34.762825	LOG	PULL_RESP: Protocol version = 02, Token = 03a1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1129331111, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAnAXgU1M3KLCY4jEQaoYSS3SaMbDVd8j8H6BFYk2ie+Nyx2SUIie1y0lYkmBMIDg2bUVmRDXpqsfdxA==''}}
0:05:34.763824	LOG	Server ----------> DUT
0:05:34.770819	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:34.774817	LOG	Send Test Command RxAppCntReq process starts
0:05:38.124813	LOG	PULL_DATA: 02 ce18 02 aa555a0000240409
0:05:38.126812	LOG	PULL_ACK: 02 ce18 04
0:05:39.760882	LOG	PUSH_ACK: 02 0caa 01
0:05:39.762881	LOG	PUSH_DATA: Protocol version = 02, Token = 0caa, Identifier = 00, JSON = {'rxpk': [{'tmst': 1132333713, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAuQgBycnsOjpD'}]}
0:05:39.763880	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08b9, FOpts:), FPort: 01, FRMPayload: 03eb, MIC: ec3a3a43)
0:05:39.765878	LOG	Server <---------- DUT
0:05:39.766878	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 059d, FOpts:), FPort: e0, FRMPayload: 09), MIC: 4ef56ede)
0:05:39.768896	LOG	Frame command sent to the DUT
0:05:39.770877	LOG	PULL_RESP: Protocol version = 02, Token = 504c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1134333713, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAnQXg7U71bt4='}}
0:05:39.771875	LOG	Server ----------> DUT
0:05:39.775874	LOG	TX_ACK: 02 504c 05 aa555a0000240409
0:05:44.811881	LOG	PUSH_ACK: 02 0cab 01
0:05:44.813880	LOG	PUSH_DATA: Protocol version = 02, Token = 0cab, Identifier = 00, JSON = {'rxpk': [{'tmst': 1137344404, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 16, 'data': 'QCAgICCAugjgj08FEa5G5g=='}]}
0:05:44.814878	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ba, FOpts:), FPort: e0, FRMPayload: 09ec03, MIC: 11ae46e6)
0:05:44.815879	LOG	Server <---------- DUT
0:05:44.816879	LOG	Answer in payload: ec03
0:05:44.818876	LOG	Frame Command Payload in the Answer: 09ec03
0:05:44.822875	LOG	RX Count received by DUT: 1004
0:05:44.824872	LOG	Send Test Command RxAppCntReq process completed
0:05:44.833867	LOG	End Test Step: Test packet error rate for SF12BW125 using RX2 window
0:05:44.837866	LOG	Partial Verdict: PASS
0:05:44.842864	LOG	==========
0:05:44.852856	LOG	==========

0:05:44.855855	LOG	Start Test Step: Test packet error rate for SF11BW125 using RX2 window
0:05:44.865849	LOG	Send RXParamSetupReq process starts
0:05:48.174867	LOG	PULL_DATA: 02 656d 02 aa555a0000240409
0:05:48.176868	LOG	PULL_ACK: 02 656d 04
0:05:49.801941	LOG	PUSH_ACK: 02 0cac 01
0:05:49.805941	LOG	PUSH_DATA: Protocol version = 02, Token = 0cac, Identifier = 00, JSON = {'rxpk': [{'tmst': 1142338948, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAuwgBYpZUmTBF'}]}
0:05:49.806939	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08bb, FOpts:), FPort: 01, FRMPayload: 03ec, MIC: 54993045)
0:05:49.808938	LOG	Server <---------- DUT
0:05:49.809937	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 059e, FOpts:), FPort: 00, FRMPayload: 0501d2ad84), MIC: 4c093eda)
0:05:49.812910	LOG	PULL_RESP: Protocol version = 02, Token = 534f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1144338948, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAngUA73/O6pVMCT7a'}}
0:05:49.814933	LOG	Server ----------> DUT
0:05:49.819930	LOG	TX_ACK: 02 534f 05 aa555a0000240409
0:05:54.774580	LOG	PUSH_ACK: 02 0cad 01
0:05:54.777579	LOG	PUSH_DATA: Protocol version = 02, Token = 0cad, Identifier = 00, JSON = {'rxpk': [{'tmst': 1147346741, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCvAgFBwHx1s2iI4g='}]}
0:05:54.778579	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 08bc, FOpts: 0507), FPort: 01, FRMPayload: 03ec, MIC: cda22388)
0:05:54.779579	LOG	Server <---------- DUT
0:05:54.781577	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:54.782577	LOG	Command Answer: 0507
0:05:54.795569	LOG	MAC command communication completed
0:05:54.805563	LOG	Send Test Command RxAppCntReq process starts
0:05:58.215281	LOG	PULL_DATA: 02 aa8a 02 aa555a0000240409
0:05:58.217280	LOG	PULL_ACK: 02 aa8a 04
0:05:59.817369	LOG	PUSH_ACK: 02 0cae 01
0:05:59.818368	LOG	PUSH_DATA: Protocol version = 02, Token = 0cae, Identifier = 00, JSON = {'rxpk': [{'tmst': 1152349373, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCvQgFBwGx5UEcOn0='}]}
0:05:59.820367	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 08bd, FOpts: 0507), FPort: 01, FRMPayload: 03ec, MIC: 411c3a7d)
0:05:59.821366	LOG	Server <---------- DUT
0:05:59.823365	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 059f, FOpts:), FPort: e0, FRMPayload: 09), MIC: 0078ca8a)
0:05:59.825364	LOG	Frame command sent to the DUT
0:05:59.826363	LOG	PULL_RESP: Protocol version = 02, Token = 5205, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1154349373, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAnwXg8gB4yoo='}}
0:05:59.828362	LOG	Server ----------> DUT
0:05:59.832361	LOG	TX_ACK: 02 5205 05 aa555a0000240409
0:06:04.814772	LOG	PUSH_ACK: 02 0caf 01
0:06:04.819769	LOG	PUSH_DATA: Protocol version = 02, Token = 0caf, Identifier = 00, JSON = {'rxpk': [{'tmst': 1157354936, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 16, 'data': 'QCAgICCAvgjgmiNeGanpbw=='}]}
0:06:04.820768	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08be, FOpts:), FPort: e0, FRMPayload: 09ed03, MIC: 19a9e96f)
0:06:04.822767	LOG	Server <---------- DUT
0:06:04.823767	LOG	Answer in payload: ed03
0:06:04.824766	LOG	Frame Command Payload in the Answer: 09ed03
0:06:04.828764	LOG	RX Count received by DUT: 1005
0:06:04.830763	LOG	Send Test Command RxAppCntReq process completed
0:06:04.833763	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:08.224797	LOG	PULL_DATA: 02 9025 02 aa555a0000240409
0:06:08.226796	LOG	PULL_ACK: 02 9025 04
0:06:09.765920	LOG	PUSH_ACK: 02 0cb2 01
0:06:09.768918	LOG	PUSH_DATA: Protocol version = 02, Token = 0cb2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1162349480, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAvwgBwdk7TFIK'}]}
0:06:09.769918	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08bf, FOpts:), FPort: 01, FRMPayload: 03ed, MIC: 3b4c520a)
0:06:09.771916	LOG	Server <---------- DUT
0:06:09.772916	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a0, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b100158e)
0:06:09.775914	LOG	Frame command sent to the DUT
0:06:09.776913	LOG	PULL_RESP: Protocol version = 02, Token = 9042, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1164349480, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAoAXgqtOpx9nUMX1ZjqGzpCuluOwyIc/buw/VfYKYjc7JTn+iGYYqu2EsxUfKnOc4/8JGlgKzsQAVjg=='}}
0:06:09.778912	LOG	Server ----------> DUT
0:06:09.782910	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:09.785910	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:14.789809	LOG	PUSH_ACK: 02 0cb3 01
0:06:14.791808	LOG	PUSH_DATA: Protocol version = 02, Token = 0cb3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1167352105, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAwAgB42trc35E'}]}
0:06:14.793807	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c0, FOpts:), FPort: 01, FRMPayload: 03ee, MIC: 6b737e44)
0:06:14.795805	LOG	Server <---------- DUT
0:06:14.796804	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a1, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 167a356c)
0:06:14.798803	LOG	Frame command sent to the DUT
0:06:14.800803	LOG	PULL_RESP: Protocol version = 02, Token = cada, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1169352105, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAoQXggTXRYkYi1gUWEGCUUZ0UCqHAABDtTagCOdlslQ6MRsK9jMHwxu+f1NCDiu/GLG0z0VtfFno1bA=='}}
0:06:14.801802	LOG	Server ----------> DUT
0:06:14.805801	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:14.807800	LOG	Send Test Command TxFramesCtrlReq process starts

0:06:18.374485	LOG	PULL_DATA: 02 30f9 02 aa555a0000240409
0:06:18.378484	LOG	PULL_ACK: 02 30f9 04
0:06:19.791757	LOG	PUSH_ACK: 02 0cb4 01
0:06:19.793756	LOG	PUSH_DATA: Protocol version = 02, Token = 0cb4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1172354730, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAwQgBynwfISuJ'}]}
0:06:19.795755	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c1, FOpts:), FPort: 01, FRMPayload: 03ef, MIC: 1f212b89)
0:06:19.797753	LOG	Server <---------- DUT
0:06:19.799753	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2629baf9)
0:06:19.802751	LOG	Frame command sent to the DUT
0:06:19.803750	LOG	PULL_RESP: Protocol version = 02, Token = 55b4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1174354730, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAogXg264jkgc+oEA/CzI6tf9TPdg2P7epJ7NTUKOvPs+39+eLuJEi8LWkviUI98pHd0Q6E4HnJim6+Q=='}}
0:06:19.805749	LOG	Server ----------> DUT
0:06:19.809747	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:19.813744	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:24.795485	LOG	PUSH_ACK: 02 0cb5 01
0:06:24.797485	LOG	PUSH_DATA: Protocol version = 02, Token = 0cb5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1177357364, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAwggBHv1wTgje'}]}
0:06:24.798484	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c2, FOpts:), FPort: 01, FRMPayload: 03f0, MIC: 704e08de)
0:06:24.799485	LOG	Server <---------- DUT
0:06:24.801482	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 25adaf32)
0:06:24.803483	LOG	Frame command sent to the DUT
0:06:24.805480	LOG	PULL_RESP: Protocol version = 02, Token = a929, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1179357364, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAowXgqfstsg4Tkf0HNxEZa7w2VeFGsROsIWwez29T4xJjMrGJawOOqhCCRNZB7Qv6b1qhW7RNJa2vMg=='}}
0:06:24.806481	LOG	Server ----------> DUT
0:06:24.809478	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:24.813476	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:28.584659	LOG	PULL_DATA: 02 9cb6 02 aa555a0000240409
0:06:28.588657	LOG	PULL_ACK: 02 9cb6 04
0:06:29.797003	LOG	PUSH_ACK: 02 0cb6 01
0:06:29.799008	LOG	PUSH_DATA: Protocol version = 02, Token = 0cb6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1182359983, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAwwgBmZdW7+Gs'}]}
0:06:29.800998	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c3, FOpts:), FPort: 01, FRMPayload: 03f1, MIC: 56efe1ac)
0:06:29.801988	LOG	Server <---------- DUT

0:06:29.803984	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a4, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: afeb4dc1)
0:06:29.806996	LOG	Frame command sent to the DUT
0:06:29.807982	LOG	PULL_RESP: Protocol version = 02, Token = 9fa7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1184359983, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAApAXgsECaxH5anPkeWuPLN0NPve19oYEr+88rjdFEPZeCjX401cUFeiX2zfJJETXyDDiH+CYYr+tNwQ=='}}
0:06:29.809982	LOG	Server ----------> DUT
0:06:29.814992	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:29.820988	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:34.799522	LOG	PUSH_ACK: 02 0cb7 01
0:06:34.801522	LOG	PUSH_DATA: Protocol version = 02, Token = 0cb7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1187362609, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAxAgBii9ZneBz'}]}
0:06:34.802520	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c4, FOpts:), FPort: 01, FRMPayload: 03f2, MIC: 599de073)
0:06:34.803521	LOG	Server <---------- DUT
0:06:34.805519	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a5, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a6c98e78)
0:06:34.807519	LOG	Frame command sent to the DUT
0:06:34.808517	LOG	PULL_RESP: Protocol version = 02, Token = 5cb0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1189362609, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAApQXg7+Gwvs4dvcb91GgLLfxTngg8nP7QxeVRn84sc8UcEzN/468WATPeVVpQBoHlQHrpM4sEpsmOeA=='}}
0:06:34.810515	LOG	Server ----------> DUT
0:06:34.813515	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:34.817530	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:38.594486	LOG	PULL_DATA: 02 b83b 02 aa555a0000240409
0:06:38.600483	LOG	PULL_ACK: 02 b83b 04
0:06:39.814791	LOG	PUSH_ACK: 02 0cb9 01
0:06:39.817790	LOG	PUSH_DATA: Protocol version = 02, Token = 0cb9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1192365242, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAxQgB+AaAQVDc'}]}
0:06:39.819789	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c5, FOpts:), FPort: 01, FRMPayload: 03f3, MIC: 804150dc)
0:06:39.821787	LOG	Server <---------- DUT
0:06:39.824786	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a6, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 04cd82c4)
0:06:39.826786	LOG	Frame command sent to the DUT
0:06:39.828785	LOG	PULL_RESP: Protocol version = 02, Token = 0e50, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1194365242, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAApgXg/Bxy2BHUPjnaYfOfHe0Caw8O3PBV5B0vbjVb9wzlUvgXlk8rYOHFFOixiGORKyGIuKmlBM2CxA=='}}

0:06:39.830783	LOG	Server ----------> DUT
0:06:39.834780	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:39.841776	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:44.805950	LOG	PUSH_ACK: 02 0cba 01
0:06:44.807949	LOG	PUSH_DATA: Protocol version = 02, Token = 0cba, Identifier = 00, JSON = {'rxpk': [{'tmst': 1197367860, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAxggBIqgUxa7q'}]}
0:06:44.809948	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c6, FOpts:), FPort: 01, FRMPayload: 03f4, MIC: 14c5aeea)
0:06:44.810947	LOG	Server <---------- DUT
0:06:44.812946	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1dd5e992)
0:06:44.814945	LOG	Frame command sent to the DUT
0:06:44.815944	LOG	PULL_RESP: Protocol version = 02, Token = 8a1f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1199367860, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAApwXgyGLGWW4OjLKOP4PKJONeA/1qG2+qAPzbQ65dJl9TzilqETQZdxw63IJPgdmpLI+cQe/XHdXpkg=='}}
0:06:44.817943	LOG	Server ----------> DUT
0:06:44.822941	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:44.827937	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:48.804341	LOG	PULL_DATA: 02 4ca9 02 aa555a0000240409
0:06:48.806340	LOG	PULL_ACK: 02 4ca9 04
0:06:49.806770	LOG	PUSH_ACK: 02 0cbb 01
0:06:49.808769	LOG	PUSH_DATA: Protocol version = 02, Token = 0cbb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1202370488, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAxwgBuA/FFANw'}]}
0:06:49.810768	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c7, FOpts:), FPort: 01, FRMPayload: 03f5, MIC: c5140370)
0:06:49.811768	LOG	Server <---------- DUT
0:06:49.813766	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a8, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c5e176a3)
0:06:49.816765	LOG	Frame command sent to the DUT
0:06:49.817764	LOG	PULL_RESP: Protocol version = 02, Token = 64e5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1204370488, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAqAXgVn5zKSLf3S39v8W5FcDDZtmZZlntMSUzH4Z3EENWHfy2nw9XfiebrRliy3xUgaRQ/eFkxeF2ow=='}}
0:06:49.818765	LOG	Server ----------> DUT
0:06:49.821763	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:49.825761	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:54.808923	LOG	PUSH_ACK: 02 0cbc 01
0:06:54.810921	LOG	PUSH_DATA: Protocol version = 02, Token = 0cbc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1207373097, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAyAgBWyNJkTG0'}]}
0:06:54.811921	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c8, FOpts:), FPort: 01, FRMPayload: 03f6, MIC: 499131b4)
0:06:54.813920	LOG	Server <---------- DUT

0:06:54.815919	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05a9, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 53871c19)
0:06:54.817917	LOG	Frame command sent to the DUT
0:06:54.819916	LOG	PULL_RESP: Protocol version = 02, Token = a838, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1209373097, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAqQXgH0Uc8r7HOLJqFga/XZwlN4s1ovVI/plWdZBMQUjLRM0OPR2hq1xsfnIFIb7rXyNJ1arZU4ccGQ=='}}
0:06:54.820915	LOG	Server ----------> DUT
0:06:54.823914	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:54.827912	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:58.814450	LOG	PULL_DATA: 02 702d 02 aa555a0000240409
0:06:58.816450	LOG	PULL_ACK: 02 702d 04
0:06:59.811882	LOG	PUSH_ACK: 02 0cbd 01
0:06:59.814881	LOG	PUSH_DATA: Protocol version = 02, Token = 0cbd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1212375722, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAyQgBEObllT3O'}]}
0:06:59.816880	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08c9, FOpts:), FPort: 01, FRMPayload: 03f7, MIC: e5953dce)
0:06:59.817879	LOG	Server <---------- DUT
0:06:59.819878	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05aa, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 17921e11)
0:06:59.822877	LOG	Frame command sent to the DUT
0:06:59.824876	LOG	PULL_RESP: Protocol version = 02, Token = b662, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1214375722, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAqgXgrx1ZWLhjYxSNUUo02QzkTILCmnsJGC1S3rIF2DEIHL02Fsh2Un4+DYkL6nf5SMTcwgmLF5IeEQ=='}}
0:06:59.826875	LOG	Server ----------> DUT
0:06:59.829874	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:59.833871	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:04.815191	LOG	PUSH_ACK: 02 0cbe 01
0:07:04.817190	LOG	PUSH_DATA: Protocol version = 02, Token = 0cbe, Identifier = 00, JSON = {'rxpk': [{'tmst': 1217378340, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAyggBVYvk0DsB'}]}
0:07:04.818189	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ca, FOpts:), FPort: 01, FRMPayload: 03f8, MIC: e4d03b01)
0:07:04.819188	LOG	Server <---------- DUT
0:07:04.821188	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ab, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: fa909bc5)
0:07:04.823187	LOG	Frame command sent to the DUT
0:07:04.824187	LOG	PULL_RESP: Protocol version = 02, Token = 8274, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1219378340, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAqwXgLYQ0gBRiUhRpm7/8zT4le88XFNdGBJDiZgL5Uwe6wYLdvhY/W0bkckU4mF32Etkom1zG+pCbxQ=='}}

0:07:04.826185	LOG	Server ----------> DUT
0:07:04.830182	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:04.833181	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:09.025038	LOG	PULL_DATA: 02 9ebc 02 aa555a0000240409
0:07:09.029063	LOG	PULL_ACK: 02 9ebc 04
0:07:09.833574	LOG	PUSH_ACK: 02 0cc0 01
0:07:09.835573	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1222380967, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAywgBezK9YXvI'}]}
0:07:09.837573	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08cb, FOpts:), FPort: 01, FRMPayload: 03f9, MIC: bd617bc8)
0:07:09.838571	LOG	Server <---------- DUT
0:07:09.839573	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ac, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 0a470d6a)
0:07:09.842570	LOG	Frame command sent to the DUT
0:07:09.843570	LOG	PULL_RESP: Protocol version = 02, Token = 139b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1224380967, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAArAXgfFCmb1CblqfG3rfavx4lQkkfmu4i0ovTyxxL6SXMwr+ZhZmw2kTP22eucozZQTp7lDIJCkcNag==''}}
0:07:09.845567	LOG	Server ----------> DUT
0:07:09.849565	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:09.852565	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:14.819494	LOG	PUSH_ACK: 02 0cc1 01
0:07:14.821495	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1227383599, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAzAgBTClAYyHH'}]}
0:07:14.823493	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08cc, FOpts:), FPort: 01, FRMPayload: 03fa, MIC: 406321c7)
0:07:14.824509	LOG	Server <---------- DUT
0:07:14.826492	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ad, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9ffa54cb)
0:07:14.828490	LOG	Frame command sent to the DUT
0:07:14.830489	LOG	PULL_RESP: Protocol version = 02, Token = 198d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1229383599, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAArQXgIULAF6LX+FuCj+diuon1IqnCj1D0DalEafd5KB4aUGU2Mszl2exXzXQMGK03yQeo/Jtfn/pUyw==''}}
0:07:14.832488	LOG	Server ----------> DUT
0:07:14.836485	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:14.840482	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:19.034473	LOG	PULL_DATA: 02 9782 02 aa555a0000240409
0:07:19.036468	LOG	PULL_ACK: 02 9782 04
0:07:19.822082	LOG	PUSH_ACK: 02 0cc2 01
0:07:19.824081	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1232386208, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAzQgB16dlqbYa'}]}

0:07:19.826080	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08cd, FOpts:), FPort: 01, FRMPayload: 03fb, MIC: 65a9b61a)
0:07:19.827080	LOG	Server <---------- DUT
0:07:19.830078	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ae, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e9cbb787)
0:07:19.833076	LOG	Frame command sent to the DUT
0:07:19.835075	LOG	PULL_RESP: Protocol version = 02, Token = 45e6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1234386208, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAArgXgVV6HLryFtNXnKTdG9VBL5lK1NJ10rmzzItCjlhD3/Vb6b309f8crhju0/UaL1wFQhKUR6cu3hw==''}}
0:07:19.836074	LOG	Server ----------> DUT
0:07:19.840072	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:19.845069	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:24.825750	LOG	PUSH_ACK: 02 0cc3 01
0:07:24.827749	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1237388834, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAzggBZ3w3nV+Q'}]}
0:07:24.828749	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ce, FOpts:), FPort: 01, FRMPayload: 03fc, MIC: 379d5f90)
0:07:24.829749	LOG	Server <---------- DUT
0:07:24.831746	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05af, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: bd0e247f)
0:07:24.835745	LOG	Frame command sent to the DUT
0:07:24.837743	LOG	PULL_RESP: Protocol version = 02, Token = 8278, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1239388834, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAArwXgtgtY9kXv117VlFUzHQFSGEu0wt8bNvVCPN+S9oT3Udlvl81lL9pR4kVqN01iV6oxS2i1vQ4kfw==''}}
0:07:24.838743	LOG	Server ----------> DUT
0:07:24.842741	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:24.846738	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:29.244233	LOG	PULL_DATA: 02 fe73 02 aa555a0000240409
0:07:29.246233	LOG	PULL_ACK: 02 fe73 04
0:07:29.827902	LOG	PUSH_ACK: 02 0cc4 01
0:07:29.829901	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1242391467, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAzwgB5yTYERKv'}]}
0:07:29.830902	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08cf, FOpts:), FPort: 01, FRMPayload: 03fd, MIC: d81112af)
0:07:29.832899	LOG	Server <---------- DUT
0:07:29.834897	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b0, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 57a83397)
0:07:29.836898	LOG	Frame command sent to the DUT
0:07:29.838897	LOG	PULL_RESP: Protocol version = 02, Token = 850a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1244391467, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAAsAXgawecfjTDGjpSM5otsFtYClrwHqLkaK/DatrkqjNhkrFCp7/srnIQ5S5olV6uS92YvziFV6gzlw=='}}
0:07:29.839895	LOG	Server ----------> DUT
0:07:29.842894	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:29.846891	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:34.830576	LOG	PUSH_ACK: 02 0cc5 01
0:07:34.833574	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1247394086, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA0AgBFIBP44+M'}]}
0:07:34.834574	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d0, FOpts:), FPort: 01, FRMPayload: 03fe, MIC: 4fe38f8c)
0:07:34.835573	LOG	Server <---------- DUT
0:07:34.837572	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b1, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 7d6ee063)
0:07:34.839571	LOG	Frame command sent to the DUT
0:07:34.841569	LOG	PULL_RESP: Protocol version = 02, Token = d2f2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1249394086, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAsQXgqvV4dKGJCXsOftLrWr4s+cOtkTUEm5ZG+L3MsvgHATrOOPE5TNSLmBY0N1AvypiXs84HfW7gYw=='}}
0:07:34.842570	LOG	Server ----------> DUT
0:07:34.846567	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:34.849565	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:39.253840	LOG	PULL_DATA: 02 4c51 02 aa555a0000240409
0:07:39.258836	LOG	PULL_ACK: 02 4c51 04
0:07:39.844507	LOG	PUSH_ACK: 02 0cc7 01
0:07:39.846501	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1252396704, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA0QgBNcqzkEbd'}]}
0:07:39.848501	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d1, FOpts:), FPort: 01, FRMPayload: 03ff, MIC: b39046dd)
0:07:39.850500	LOG	Server <---------- DUT
0:07:39.853498	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f4c6b56f)
0:07:39.856496	LOG	Frame command sent to the DUT
0:07:39.857495	LOG	PULL_RESP: Protocol version = 02, Token = 9f09, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1254396704, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAsgXgZioxCly/0kAogHV+GcjlouuALbOGvR0oZMC0IKD1wHEdWNJzi/RsI+GRN4NIkR0yjkCT9Ma1bw=='}}
0:07:39.859494	LOG	Server ----------> DUT
0:07:39.863492	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:39.869488	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:44.835265	LOG	PUSH_ACK: 02 0cc8 01
0:07:44.837263	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1257399321, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA0ggBCLtCxsI4'}]}

0:07:44.838263	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d2, FOpts:), FPort: 01, FRMPayload: 0400, MIC: 42c6c238)
0:07:44.840261	LOG	Server <---------- DUT
0:07:44.841262	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1982216b)
0:07:44.843261	LOG	Frame command sent to the DUT
0:07:44.845258	LOG	PULL_RESP: Protocol version = 02, Token = 627e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1259399321, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAswXgdA7AyVUZNTiUUhlH2BKSdlBH2dWGL6lErtrH8xcACE5ZOqfFVjZHpr26q0ARBzHylm/4GYIhaw=='}}
0:07:44.847258	LOG	Server ----------> DUT
0:07:44.850255	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:44.854252	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:49.463780	LOG	PULL_DATA: 02 0d47 02 aa555a0000240409
0:07:49.466779	LOG	PULL_ACK: 02 0d47 04
0:07:49.838568	LOG	PUSH_ACK: 02 0cc9 01
0:07:49.843566	LOG	PUSH_DATA: Protocol version = 02, Token = 0cc9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1262401947, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA0wgB/orYimAr'}]}
0:07:49.847563	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d3, FOpts:), FPort: 01, FRMPayload: 0401, MIC: d88a602b)
0:07:49.850562	LOG	Server <---------- DUT
0:07:49.852561	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b4, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 96b62d01)
0:07:49.854560	LOG	Frame command sent to the DUT
0:07:49.856558	LOG	PULL_RESP: Protocol version = 02, Token = bfac, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1264401947, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAtAXgnzMORpRc1XJjW+GUB12Kz8XFBh9bDCH2SoD5B11/of0qz/qVpVR/iqN2BLclzv7DAciSlrYtAQ=='}}
0:07:49.857557	LOG	Server ----------> DUT
0:07:49.860560	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:49.864554	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:54.840825	LOG	PUSH_ACK: 02 0cca 01
0:07:54.842825	LOG	PUSH_DATA: Protocol version = 02, Token = 0cca, Identifier = 00, JSON = {'rxpk': [{'tmst': 1267404573, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA1AgBJZF5x5tw'}]}
0:07:54.843825	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d4, FOpts:), FPort: 01, FRMPayload: 0402, MIC: 79c79b70)
0:07:54.845823	LOG	Server <---------- DUT
0:07:54.847822	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b5, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 6e57c906)
0:07:54.849820	LOG	Frame command sent to the DUT
0:07:54.851819	LOG	PULL_RESP: Protocol version = 02, Token = d2e3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1269404573, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAAtQXgDNIb2ZFbZVKXcJ8KKBxbddySNmrnHvpasFpg7j1SDYTj6A/ib+w17AnNtRE+zxGciIWFblfJBg=='}}
0:07:54.852819	LOG	Server ----------> DUT
0:07:54.857816	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:54.860814	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:59.474374	LOG	PULL_DATA: 02 f2c8 02 aa555a0000240409
0:07:59.475374	LOG	PULL_ACK: 02 f2c8 04
0:07:59.844169	LOG	PUSH_ACK: 02 0ccb 01
0:07:59.849167	LOG	PUSH_DATA: Protocol version = 02, Token = 0ccb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1272407191, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA1QgBwC1F27jB'}]}
0:07:59.852161	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d5, FOpts:), FPort: 01, FRMPayload: 0403, MIC: 45dbb8c1)
0:07:59.855163	LOG	Server <---------- DUT
0:07:59.857157	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b6, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 0267cdfc)
0:07:59.859158	LOG	Frame command sent to the DUT
0:07:59.861155	LOG	PULL_RESP: Protocol version = 02, Token = bf62, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1274407191, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAtgXgpSLGuUWGX7wdD7+MTUy7FkzVsrl/J7MVuvQdVAhIQFVu9kiutx6ByBO07LQshBZ1RsjkAmfN/A=='}}
0:07:59.862154	LOG	Server ----------> DUT
0:07:59.866152	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:59.871149	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:04.847004	LOG	PUSH_ACK: 02 0ccc 01
0:08:04.849003	LOG	PUSH_DATA: Protocol version = 02, Token = 0ccc, Identifier = 00, JSON = {'rxpk': [{'tmst': 1277409823, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA1ggBeBauqnSv'}]}
0:08:04.850002	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d6, FOpts:), FPort: 01, FRMPayload: 0404, MIC: aeaa74af)
0:08:04.851002	LOG	Server <---------- DUT
0:08:04.852001	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8b801e88)
0:08:04.854000	LOG	Frame command sent to the DUT
0:08:04.855999	LOG	PULL_RESP: Protocol version = 02, Token = 815d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1279409823, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAtwXgp3U3vQD+LBiUjDiiemgQt9tlDwf3crs4RptGQ1obPfHd108iD49y1Fg1GoA26KS50X07i4AeiA=='}}
0:08:04.856998	LOG	Server ----------> DUT
0:08:04.859997	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:04.866993	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:09.683684	LOG	PULL_DATA: 02 5ac0 02 aa555a0000240409
0:08:09.688682	LOG	PULL_ACK: 02 5ac0 04
0:08:09.864295	LOG	PUSH_ACK: 02 0cce 01
0:08:09.866292	LOG	PUSH_DATA: Protocol version = 02, Token = 0cce, Identifier = 00, JSON = {'rxpk': [{'tmst': 1282412442, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA1wgBsrQeRXXD'}]}
0:08:09.867292	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d7, FOpts:), FPort: 01, FRMPayload: 0405, MIC: 1e4575c3)
0:08:09.868291	LOG	Server <---------- DUT
0:08:09.870290	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b8, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 40e4315a)
0:08:09.872289	LOG	Frame command sent to the DUT
0:08:09.874289	LOG	PULL_RESP: Protocol version = 02, Token = d3c2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1284412442, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAuAXgEGkpvmDnCjU+fsr4DkvPoJam8wp+uUHcqHsC9aY3adsoUsKtrKYmulkEJIgdyTPPdFK+QOQxWg==''}}
0:08:09.875288	LOG	Server ----------> DUT
0:08:09.878287	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:09.881286	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:14.851495	LOG	PUSH_ACK: 02 0ccf 01
0:08:14.853494	LOG	PUSH_DATA: Protocol version = 02, Token = 0ccf, Identifier = 00, JSON = {'rxpk': [{'tmst': 1287415050, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA2AgBPCTxmHvf'}]}
0:08:14.855492	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d8, FOpts:), FPort: 01, FRMPayload: 0406, MIC: f1987bdf)
0:08:14.856492	LOG	Server <---------- DUT
0:08:14.858491	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05b9, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 02c9a9b4)
0:08:14.861489	LOG	Frame command sent to the DUT
0:08:14.863490	LOG	PULL_RESP: Protocol version = 02, Token = 3659, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1289415050, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAuQXggo1cnKAm2jzGy1WoCMhuTY18ffxGLEk+cyn49C0ENS+F/7ZbDfxw9NVhCXk11u2Fc8SEAsmptA==''}}
0:08:14.864489	LOG	Server ----------> DUT
0:08:14.867485	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:14.871483	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:19.693898	LOG	PULL_DATA: 02 e0c0 02 aa555a0000240409
0:08:19.695897	LOG	PULL_ACK: 02 e0c0 04
0:08:19.853777	LOG	PUSH_ACK: 02 0cd0 01
0:08:19.855776	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1292417678, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA2QgBrywgBfja'}]}
0:08:19.857775	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08d9, FOpts:), FPort: 01, FRMPayload: 0407, MIC: 2005f8da)
0:08:19.858776	LOG	Server <---------- DUT
0:08:19.859774	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ba, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d7787c76)
0:08:19.862773	LOG	Frame command sent to the DUT

0:08:19.863772	LOG	PULL_RESP: Protocol version = 02, Token = a4e6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1294417678, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAugXgbQA5vip/5E5N1wEzigv0hYhQhpXKjjmRgeMrpWkbLf462tamFsUNAG9OE5ygqkQrT2U413h8dg=='}}
0:08:19.865769	LOG	Server ----------> DUT
0:08:19.869767	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:19.873766	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:24.857771	LOG	PUSH_ACK: 02 0cd1 01
0:08:24.859767	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1297420294, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA2ggBlIAWe/QM'}]}
0:08:24.860766	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08da, FOpts:), FPort: 01, FRMPayload: 0408, MIC: 167bf40c)
0:08:24.862770	LOG	Server <---------- DUT
0:08:24.864768	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05bb, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 646e1855)
0:08:24.866764	LOG	Frame command sent to the DUT
0:08:24.868762	LOG	PULL_RESP: Protocol version = 02, Token = 1a87, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1299420294, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAuwXgggcoBJHWBFdClQTLfpT+Gwpl8LvdmNaHpv4K0kN8Jlbqdx0gYqlt42ForX+6qEZAGY1rZG4YVQ=='}}
0:08:24.870762	LOG	Server ----------> DUT
0:08:24.874758	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:24.878774	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:29.703967	LOG	PULL_DATA: 02 2d8b 02 aa555a0000240409
0:08:29.704965	LOG	PULL_ACK: 02 2d8b 04
0:08:29.858879	LOG	PUSH_ACK: 02 0cd2 01
0:08:29.860878	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1302422920, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA2wgBzNTNHqRC'}]}
0:08:29.862875	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08db, FOpts:), FPort: 01, FRMPayload: 0409, MIC: cd1ea442)
0:08:29.864874	LOG	Server <---------- DUT
0:08:29.866874	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05bc, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: dd365bbe)
0:08:29.869873	LOG	Frame command sent to the DUT
0:08:29.870872	LOG	PULL_RESP: Protocol version = 02, Token = e742, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1304422920, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAvAXgzHa9NE45GHLsTnyXeRVbSVTGwbkI9RkrmWmc3FEoO4r14HHy0p0h/jfp/srWalTbNGbI3TZbvg=='}}
0:08:29.872872	LOG	Server ----------> DUT
0:08:29.878868	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:29.887861	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:34.861278	LOG	PUSH_ACK: 02 0cd3 01

0:08:34.864277	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1307425545, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA3AgBK6EpaAQf'}]}
0:08:34.865277	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08dc, FOpts:), FPort: 01, FRMPayload: 040a, MIC: 2968041f)
0:08:34.867275	LOG	Server <---------- DUT
0:08:34.869274	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05bd, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: afcc5c9c)
0:08:34.871290	LOG	Frame command sent to the DUT
0:08:34.873272	LOG	PULL_RESP: Protocol version = 02, Token = fc72, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1309425545, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAvQXgYFMOM0iH+r6b8SOBy7mw4pCn0PfQXYLdtQk/1xPpvwyVXHZJPC5/8t+AuxaW/nR1IM9br8xcnA=='}}
0:08:34.875272	LOG	Server ----------> DUT
0:08:34.878269	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:34.881269	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:39.876054	LOG	PUSH_ACK: 02 0cd5 01
0:08:39.880051	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1312428171, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA3QgBxWPI0Rx2'}]}
0:08:39.882050	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08dd, FOpts:), FPort: 01, FRMPayload: 040b, MIC: c8d11c76)
0:08:39.884049	LOG	Server <---------- DUT
0:08:39.887048	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05be, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 6831046a)
0:08:39.889047	LOG	Frame command sent to the DUT
0:08:39.891045	LOG	PULL_RESP: Protocol version = 02, Token = f44e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1314428171, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAvgXgHd4G7uEdp7rwz3zrqTedIxY4nRpBJujN8qFsj9XVGHEak+pyVaDh3P3h1Rsv0JntxfXjaDEEag=='}}
0:08:39.893044	LOG	Server ----------> DUT
0:08:39.896042	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:39.900040	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:44.869213	LOG	PUSH_ACK: 02 0cd6 01
0:08:44.871212	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1317430799, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA3ggBofIsU6Te'}]}
0:08:44.872209	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08de, FOpts:), FPort: 01, FRMPayload: 040c, MIC: 2c53a4de)
0:08:44.873211	LOG	Server <---------- DUT
0:08:44.875209	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05bf, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: cea06ab8)
0:08:44.877209	LOG	Frame command sent to the DUT

0:08:44.878208	LOG	PULL_RESP: Protocol version = 02, Token = efcc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1319430799, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAvwXgIWVqtzO5+ICG87ftNK91KVB0DVquBGI6MvLowvlTB8DvX8Rbh0jvwxPQw58rr3JHqsUczqBquA=='}}
0:08:44.880205	LOG	Server ----------> DUT
0:08:44.883203	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:44.888200	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:49.871719	LOG	PUSH_ACK: 02 0cd7 01
0:08:49.873718	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1322433418, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA3wgB9BpUSAJu'}]}
0:08:49.874718	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08df, FOpts:), FPort: 01, FRMPayload: 040d, MIC: 5448026e)
0:08:49.876716	LOG	Server <---------- DUT
0:08:49.878717	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c0, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 905ebc06)
0:08:49.880714	LOG	Frame command sent to the DUT
0:08:49.881713	LOG	PULL_RESP: Protocol version = 02, Token = 81f0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1324433418, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAwAXgq+Ks9pavBGL+3oGGD8mvyD776KJJxCifgm0MfjfUtwG7xaQZxA1CtLE8qkA882pAv0i/kF68Bg=='}}
0:08:49.882714	LOG	Server ----------> DUT
0:08:49.886710	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:49.892707	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:50.093506	LOG	PULL_DATA: 02 b07a 02 aa555a0000240409
0:08:50.095504	LOG	PULL_ACK: 02 b07a 04
0:08:54.874784	LOG	PUSH_ACK: 02 0cd8 01
0:08:54.875783	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1327436050, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICCA4AgB7t93iXKa'}]}
0:08:54.877781	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e0, FOpts:), FPort: 01, FRMPayload: 040e, MIC: 7789729a)
0:08:54.879780	LOG	Server <---------- DUT
0:08:54.884776	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c1, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4800effe)
0:08:54.890775	LOG	Frame command sent to the DUT
0:08:54.894772	LOG	PULL_RESP: Protocol version = 02, Token = 7c8f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1329436050, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAwQXg1WnorzP0xIYm95nIhia46MKKZWT5W7xi+IIiI+DH+lGV63P5bmbQHjdAOj5zjZTJsN+gSADv/g=='}}
0:08:54.898770	LOG	Server ----------> DUT
0:08:54.905764	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:54.909762	LOG	Send Test Command TxFramesCtrlReq process starts
0:08:59.875934	LOG	PUSH_ACK: 02 0cd9 01

0:08:59.877934	LOG	PUSH_DATA: Protocol version = 02, Token = 0cd9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1332438676, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA4QgBe4QSOkjF'}]}
0:08:59.878933	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e1, FOpts:), FPort: 01, FRMPayload: 040f, MIC: 123a48c5)
0:08:59.879934	LOG	Server <---------- DUT
0:08:59.881933	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f232f72a)
0:08:59.883930	LOG	Frame command sent to the DUT
0:08:59.885929	LOG	PULL_RESP: Protocol version = 02, Token = c8cd, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1334438676, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAwgXgidy/bpp3Vtj4ZcT0X3jJKnSB6gteNio7wklGTVhQkmlUlrUDWk9DHlA8fgH90T1g8OUe8jL3Kg=='}}
0:08:59.886931	LOG	Server ----------> DUT
0:08:59.890926	LOG	Send Test Command TxFramesCtrlReq process completed
0:08:59.894924	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:00.303440	LOG	PULL_DATA: 02 b74c 02 aa555a0000240409
0:09:00.305437	LOG	PULL_ACK: 02 b74c 04
0:09:04.880898	LOG	PUSH_ACK: 02 0cdb 01
0:09:04.881895	LOG	PUSH_DATA: Protocol version = 02, Token = 0cdb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1337441300, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA4ggBQLNpSJsi'}]}
0:09:04.883895	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e2, FOpts:), FPort: 01, FRMPayload: 0410, MIC: 69489b22)
0:09:04.884894	LOG	Server <---------- DUT
0:09:04.886893	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d444dbfb)
0:09:04.888893	LOG	Frame command sent to the DUT
0:09:04.889893	LOG	PULL_RESP: Protocol version = 02, Token = 6695, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1339441300, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAwwXgWLnFv6EsEnlV4SMFPa4Nu6ORH4EU3MZpnB+uEbBRdjn1sNzVHxSOzYcAsy60GvsKrqS91ETb+w=='}}
0:09:04.891891	LOG	Server ----------> DUT
0:09:04.894888	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:04.898887	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:09.895368	LOG	PUSH_ACK: 02 0cdd 01
0:09:09.900364	LOG	PUSH_DATA: Protocol version = 02, Token = 0cdd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1342443911, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA4wgBtrZ1jdAu'}]}
0:09:09.901361	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e3, FOpts:), FPort: 01, FRMPayload: 0411, MIC: 758dd02e)
0:09:09.905360	LOG	Server <---------- DUT
0:09:09.907357	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c4, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ee6221bf)

0:09:09.910355	LOG	Frame command sent to the DUT
0:09:09.912354	LOG	PULL_RESP: Protocol version = 02, Token = 835f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1344443911, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAxAXgfrNvMWUJ/adhl3JXZDytjPpZbNNCF0T8B7/j+ooN0up2xsfGatt3SNn2t2G3TAk9/o9C7mIhvw=='}}
0:09:09.914352	LOG	Server ----------> DUT
0:09:09.917353	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:09.922348	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:10.333892	LOG	PULL_DATA: 02 316f 02 aa555a0000240409
0:09:10.335891	LOG	PULL_ACK: 02 316f 04
0:09:14.885301	LOG	PUSH_ACK: 02 0cdf 01
0:09:14.888299	LOG	PUSH_DATA: Protocol version = 02, Token = 0cdf, Identifier = 00, JSON = {'rxpk': [{'tmst': 1347446536, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA5AgBKCe2v5OX'}]}
0:09:14.889299	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e4, FOpts:), FPort: 01, FRMPayload: 0412, MIC: b6bf9397)
0:09:14.890299	LOG	Server <---------- DUT
0:09:14.893297	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c5, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d42f32a3)
0:09:14.895296	LOG	Frame command sent to the DUT
0:09:14.897294	LOG	PULL_RESP: Protocol version = 02, Token = e578, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1349446536, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAxQXgVA/cmpLtq3yUHMvULV0ysTpysYTmDj3viFLLiJ3xLJHLlH7fJGh2oBMDggj9V6g7vsxm1C8yow=='}}
0:09:14.898293	LOG	Server ----------> DUT
0:09:14.902292	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:14.907289	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:19.887359	LOG	PUSH_ACK: 02 0ce0 01
0:09:19.889358	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1352449171, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA5QgBaefa2EJD'}]}
0:09:19.891357	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e5, FOpts:), FPort: 01, FRMPayload: 0413, MIC: dad84243)
0:09:19.893356	LOG	Server <---------- DUT
0:09:19.895355	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c6, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: df2f7422)
0:09:19.897353	LOG	Frame command sent to the DUT
0:09:19.898353	LOG	PULL_RESP: Protocol version = 02, Token = 2892, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1354449171, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAxgXgRkWdhB6gZhsKlIiYMeBzeTk6MeuZs0rSgaH+2dJW8OoOHkYKTfVUDeHnYCtHxDxpkvZY3y90Ig=='}}
0:09:19.899354	LOG	Server ----------> DUT
0:09:19.904349	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:19.914343	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:20.533993	LOG	PULL_DATA: 02 887d 02 aa555a0000240409

0:09:20.534991	LOG	PULL_ACK: 02 887d 04
0:09:24.889153	LOG	PUSH_ACK: 02 0ce1 01
0:09:24.892151	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1357451797, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA5ggBR7w+gaAN'}]}
0:09:24.896150	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e6, FOpts:), FPort: 01, FRMPayload: 0414, MIC: 3e81a00d)
0:09:24.899148	LOG	Server <---------- DUT
0:09:24.904143	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: de7e603b)
0:09:24.907143	LOG	Frame command sent to the DUT
0:09:24.909141	LOG	PULL_RESP: Protocol version = 02, Token = 6208, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1359451797, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAxwXgYAy+M3grpf3T4bowNnWy3icaFSvxSL2J983vssLb6eBMmYAmU19TGNwHsPGDgIE506C23n5gOw=='}}
0:09:24.911140	LOG	Server ----------> DUT
0:09:24.915137	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:24.919135	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:29.891298	LOG	PUSH_ACK: 02 0ce2 01
0:09:29.893297	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce2, Identifier = 00, JSON = {'rxpk': [{'tmst': 1362454430, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICCA5wgBtFQsEWsy'}]}
0:09:29.894296	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e7, FOpts:), FPort: 01, FRMPayload: 0415, MIC: 2c116b32)
0:09:29.896296	LOG	Server <---------- DUT
0:09:29.897295	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c8, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a32c1c57)
0:09:29.899294	LOG	Frame command sent to the DUT
0:09:29.901292	LOG	PULL_RESP: Protocol version = 02, Token = fed5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1364454430, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAyAXgQQMHSrR57W6pS+V+xlZXWwP5ENiB+lRCU0NqqZhuxuDVaEr9TYNqz0IvAphchvd+ThL1oywcVw=='}}
0:09:29.903290	LOG	Server ----------> DUT
0:09:29.907288	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:29.911305	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:30.743605	LOG	PULL_DATA: 02 18f8 02 aa555a0000240409
0:09:30.745604	LOG	PULL_ACK: 02 18f8 04
0:09:34.892246	LOG	PUSH_ACK: 02 0ce3 01
0:09:34.895245	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1367457056, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA6AgB3BSbCpEc'}]}
0:09:34.897244	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e8, FOpts:), FPort: 01, FRMPayload: 0416, MIC: 9b0a911c)
0:09:34.898243	LOG	Server <---------- DUT
0:09:34.900242	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05c9, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 49cf9f77)
0:09:34.903240	LOG	Frame command sent to the DUT
0:09:34.905239	LOG	PULL_RESP: Protocol version = 02, Token = ff14, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1369457056, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAyQXgrrUiH1u7QMPOFoUHEBSI+r2S4X12bCE327zCAcCHIZRYPoiLLNsdmENNH+hKpXZCx9CFSc+fdw=='}}
0:09:34.906239	LOG	Server ----------> DUT
0:09:34.913234	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:34.918232	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:39.913925	LOG	PUSH_ACK: 02 0ce5 01
0:09:39.918922	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1372459680, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA6QgBRN/I6zAy'}]}
0:09:39.920921	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08e9, FOpts:), FPort: 01, FRMPayload: 0417, MIC: c8eb3032)
0:09:39.921920	LOG	Server <---------- DUT
0:09:39.923919	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ca, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 06cf8d42)
0:09:39.926917	LOG	Frame command sent to the DUT
0:09:39.928917	LOG	PULL_RESP: Protocol version = 02, Token = e330, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1374459680, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAygXgAnqsjDz2PNNaf2mCjAKLO0rAkyfodiim5KzMBc9uBbmG79PLPxZ4efmABIUegkwaMqWVBs+NQg=='}}
0:09:39.929916	LOG	Server ----------> DUT
0:09:39.937911	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:39.953902	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:40.773549	LOG	PULL_DATA: 02 aab7 02 aa555a0000240409
0:09:40.775550	LOG	PULL_ACK: 02 aab7 04
0:09:44.899532	LOG	PUSH_ACK: 02 0ce6 01
0:09:44.901530	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1377462307, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA6ggBYI0GqoyC'}]}
0:09:44.903530	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ea, FOpts:), FPort: 01, FRMPayload: 0418, MIC: 06aa8c82)
0:09:44.904529	LOG	Server <---------- DUT
0:09:44.907527	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05cb, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 617e2a85)
0:09:44.909526	LOG	Frame command sent to the DUT
0:09:44.911527	LOG	PULL_RESP: Protocol version = 02, Token = 4bc1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1379462307, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAywXgbCW9Sbs8Zme4djC9QxL7dteXGaqqg/JF8mZrD8pmEoI13/lO6TUuL+SOG8qtd9s9KpVCYX4qhQ=='}}
0:09:44.912524	LOG	Server ----------> DUT
0:09:44.916524	LOG	Send Test Command TxFramesCtrlReq process completed

0:09:44.921520	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:49.901684	LOG	PUSH_ACK: 02 0ce7 01
0:09:49.903683	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1382464925, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA6wgBihb+nxDp'}]}
0:09:49.905682	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08eb, FOpts:), FPort: 01, FRMPayload: 0419, MIC: fe9f10e9)
0:09:49.906681	LOG	Server <---------- DUT
0:09:49.908680	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05cc, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 3084eab2)
0:09:49.911678	LOG	Frame command sent to the DUT
0:09:49.913677	LOG	PULL_RESP: Protocol version = 02, Token = 641d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1384464925, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAzAXgXboCBg/Nf3Yj4BC5Kn157/CETOfmzfSjkcgpkPAODB3EdgqkxT0GCBa/S9sySehAOnqZMITqsg=='}}
0:09:49.914677	LOG	Server ----------> DUT
0:09:49.922672	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:49.927669	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:50.963616	LOG	PULL_DATA: 02 b441 02 aa555a0000240409
0:09:50.965615	LOG	PULL_ACK: 02 b441 04
0:09:54.904372	LOG	PUSH_ACK: 02 0ce8 01
0:09:54.906371	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1387467550, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7AgBLIbCnjkw'}]}
0:09:54.908370	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ec, FOpts:), FPort: 01, FRMPayload: 041a, MIC: c29e3930)
0:09:54.909370	LOG	Server <---------- DUT
0:09:54.911369	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05cd, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9ba70950)
0:09:54.914367	LOG	Frame command sent to the DUT
0:09:54.916366	LOG	PULL_RESP: Protocol version = 02, Token = 26fa, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1389467550, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAzQXgSpvRlAxNBlcOct6TV6s1pkff/TEolEcEeCf/zVjd7SLeCf3x922UUK1ZcoSGlPBlWDnkm6cJUA=='}}
0:09:54.917365	LOG	Server ----------> DUT
0:09:54.924361	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:54.928359	LOG	Send Test Command TxFramesCtrlReq process starts
0:09:59.905652	LOG	PUSH_ACK: 02 0ce9 01
0:09:59.907651	LOG	PUSH_DATA: Protocol version = 02, Token = 0ce9, Identifier = 00, JSON = {'rxpk': [{'tmst': 1392470168, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7QgBOzfFh/Qb'}]}
0:09:59.909650	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ed, FOpts:), FPort: 01, FRMPayload: 041b, MIC: c587f41b)
0:09:59.911649	LOG	Server <---------- DUT
0:09:59.913648	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ce, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 99bfa9ae)
0:09:59.917645	LOG	Frame command sent to the DUT
0:09:59.921643	LOG	PULL_RESP: Protocol version = 02, Token = b88f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1394470168, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAzgXgp01vfoJ2oIvW6ampJ7KNh4HXvSqZjvHBk3hy0OVXVSSSHAxD2S0DaoEy/7ezxzaZ5YSJmb+prg=='}}
0:09:59.925640	LOG	Server ----------> DUT
0:09:59.934635	LOG	Send Test Command TxFramesCtrlReq process completed
0:09:59.941631	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:00.983636	LOG	PULL_DATA: 02 39b2 02 aa555a0000240409
0:10:00.985635	LOG	PULL_ACK: 02 39b2 04
0:10:04.909402	LOG	PUSH_ACK: 02 0cea 01
0:10:04.914404	LOG	PUSH_DATA: Protocol version = 02, Token = 0cea, Identifier = 00, JSON = {'rxpk': [{'tmst': 1397472803, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA7ggBYEvg7a+T'}]}
0:10:04.917399	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ee, FOpts:), FPort: 01, FRMPayload: 041c, MIC: e0edaf93)
0:10:04.922395	LOG	Server <---------- DUT
0:10:04.926392	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05cf, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 360160ba)
0:10:04.929390	LOG	Frame command sent to the DUT
0:10:04.930389	LOG	PULL_RESP: Protocol version = 02, Token = d4ce, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1399472803, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAzwXgGeTgW+dsl4yrem3EHoNkk92Wxs5oBdPMNy/H2WrsHMePa/izbgR0fsa7G5TZwUr8IckbNgFgug=='}}
0:10:04.932389	LOG	Server ----------> DUT
0:10:04.935386	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:04.940384	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:09.923349	LOG	PUSH_ACK: 02 0cec 01
0:10:09.925349	LOG	PUSH_DATA: Protocol version = 02, Token = 0cec, Identifier = 00, JSON = {'rxpk': [{'tmst': 1402475429, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCA7wgBTJCtcq98'}]}
0:10:09.927347	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08ef, FOpts:), FPort: 01, FRMPayload: 041d, MIC: ad72af7c)
0:10:09.928347	LOG	Server <---------- DUT
0:10:09.929345	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d0, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4a8a3647)
0:10:09.931345	LOG	Frame command sent to the DUT
0:10:09.935343	LOG	PULL_RESP: Protocol version = 02, Token = ad7a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1404475429, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA0AXgI2UtQqui0GUBMobluN5zPl7l18cAwvvnFqzMy6KLDoLaOHUEBv2/Slj4MJgcC2dbE1erSoo2Rw=='}}
0:10:09.937341	LOG	Server ----------> DUT
0:10:09.940340	LOG	Send Test Command TxFramesCtrlReq process completed

0:10:09.944338	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:11.192876	LOG	PULL_DATA: 02 b585 02 aa555a0000240409
0:10:11.194877	LOG	PULL_ACK: 02 b585 04
0:10:14.914739	LOG	PUSH_ACK: 02 0ced 01
0:10:14.916739	LOG	PUSH_DATA: Protocol version = 02, Token = 0ced, Identifier = 00, JSON = {'rxpk': [{'tmst': 1407478049, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA8AgBEamD6WPM'}]}
0:10:14.918738	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f0, FOpts:), FPort: 01, FRMPayload: 041e, MIC: 83e963cc)
0:10:14.919738	LOG	Server <---------- DUT
0:10:14.920735	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d1, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a01d9315)
0:10:14.922734	LOG	Frame command sent to the DUT
0:10:14.924735	LOG	PULL_RESP: Protocol version = 02, Token = 58ec, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1409478049, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA0QXgySnAzcLNb+k3heSiaf2QnmsGJYTUCVlNHLDpAiCl5f81Cp/nYRLHBaW7KwboBVC+n3BSoB2TFQ==''}}
0:10:14.925733	LOG	Server ----------> DUT
0:10:14.928730	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:14.932728	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:19.918020	LOG	PUSH_ACK: 02 0cee 01
0:10:19.920019	LOG	PUSH_DATA: Protocol version = 02, Token = 0cee, Identifier = 00, JSON = {'rxpk': [{'tmst': 1412480664, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA8QgBrdrpxoJ4'}]}
0:10:19.922020	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f1, FOpts:), FPort: 01, FRMPayload: 041f, MIC: e9c68278)
0:10:19.923018	LOG	Server <---------- DUT
0:10:19.924020	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e1e69e60)
0:10:19.926017	LOG	Frame command sent to the DUT
0:10:19.927017	LOG	PULL_RESP: Protocol version = 02, Token = b5fa, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1414480664, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA0gXg8DHp3/LqJhZ3cU1SRfpi28ATeD+K2h5gpstE9yJel0KCurWQvjnHtWpsazM31/X2MYP14eaeYA==''}}
0:10:19.929016	LOG	Server ----------> DUT
0:10:19.932012	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:19.935011	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:21.402805	LOG	PULL_DATA: 02 03c2 02 aa555a0000240409
0:10:21.404803	LOG	PULL_ACK: 02 03c2 04
0:10:24.921846	LOG	PUSH_ACK: 02 0cef 01
0:10:24.923845	LOG	PUSH_DATA: Protocol version = 02, Token = 0cef, Identifier = 00, JSON = {'rxpk': [{'tmst': 1417483291, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA8ggBRFdoknaf'}]}
0:10:24.925844	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f2, FOpts:), FPort: 01, FRMPayload: 0420, MIC: 6892769f)
0:10:24.926844	LOG	Server <---------- DUT

0:10:24.928842	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9c061e1f)
0:10:24.931841	LOG	Frame command sent to the DUT
0:10:24.932840	LOG	PULL_RESP: Protocol version = 02, Token = d24f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1419483291, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA0wXga/b/DFLDAochFy56vxibZLoFspQu9wCUBRHbIuzAIMJ6jO1reLiUyHTVmBaExv9QJ3MsnAYeHw=='}}
0:10:24.934839	LOG	Server ----------> DUT
0:10:24.938836	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:24.941835	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:29.923001	LOG	PUSH_ACK: 02 0cf0 01
0:10:29.927998	LOG	PUSH_DATA: Protocol version = 02, Token = 0cf0, Identifier = 00, JSON = {'rxpk': [{'tmst': 1422485915, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA8wgB17cVn9wq'}]}
0:10:29.930996	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f3, FOpts:), FPort: 01, FRMPayload: 0421, MIC: 159fdc2a)
0:10:29.934998	LOG	Server <---------- DUT
0:10:29.939995	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d4, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 31185091)
0:10:29.941993	LOG	Frame command sent to the DUT
0:10:29.942993	LOG	PULL_RESP: Protocol version = 02, Token = 39a8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1424485915, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA1AXg3Hqp+YhKC3mzCtWBlRL2LM0xyPe3J8bcwPpgL3GwUdKCqrccVh1G7opghmCEM5DEDepOMRhQkQ=='}}
0:10:29.943992	LOG	Server ----------> DUT
0:10:29.947985	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:29.950984	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:31.413150	LOG	PULL_DATA: 02 ccf6 02 aa555a0000240409
0:10:31.415150	LOG	PULL_ACK: 02 ccf6 04
0:10:34.926152	LOG	PUSH_ACK: 02 0cf1 01
0:10:34.928151	LOG	PUSH_DATA: Protocol version = 02, Token = 0cf1, Identifier = 00, JSON = {'rxpk': [{'tmst': 1427488549, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA9AgBO1F/K5gw'}]}
0:10:34.929148	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f4, FOpts:), FPort: 01, FRMPayload: 0422, MIC: 7f2b9830)
0:10:34.930150	LOG	Server <---------- DUT
0:10:34.932149	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d5, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 098aa687)
0:10:34.934147	LOG	Frame command sent to the DUT
0:10:34.935146	LOG	PULL_RESP: Protocol version = 02, Token = d057, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1429488549, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA1QXgGJU+7SDuoeosX6vN49GXwD12Zq8J1U+CNkjVsuno6aAYk7TREq682bIcJH0FNMPQrxkxCYqmhw=='}}

0:10:34.937145	LOG	Server ----------> DUT
0:10:34.940143	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:34.944140	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:39.943016	LOG	PUSH_ACK: 02 0cf3 01
0:10:39.945015	LOG	PUSH_DATA: Protocol version = 02, Token = 0cf3, Identifier = 00, JSON = {'rxpk': [{'tmst': 1432491174, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA9QgB+uZ3exAW'}]}
0:10:39.947014	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f5, FOpts:), FPort: 01, FRMPayload: 0423, MIC: 777b1016)
0:10:39.952011	LOG	Server <---------- DUT
0:10:39.955009	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d6, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c29aab1a)
0:10:39.958008	LOG	Frame command sent to the DUT
0:10:39.959007	LOG	PULL_RESP: Protocol version = 02, Token = 34d9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1434491174, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA1gXgNreg7/oCBbKDK8xwPH0I5xMOedwIySz4AQ3L0OgsfGp9YQbhYNQqGsLcFa8a7k3tUWfzwpqrGg=='}}
0:10:39.961006	LOG	Server ----------> DUT
0:10:39.968002	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:39.974998	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:41.433405	LOG	PULL_DATA: 02 8a26 02 aa555a0000240409
0:10:41.435405	LOG	PULL_ACK: 02 8a26 04
0:10:44.929342	LOG	PUSH_ACK: 02 0cf4 01
0:10:44.932341	LOG	PUSH_DATA: Protocol version = 02, Token = 0cf4, Identifier = 00, JSON = {'rxpk': [{'tmst': 1437493801, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA9ggBFJU+K6CS'}]}
0:10:44.933340	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f6, FOpts:), FPort: 01, FRMPayload: 0424, MIC: 3e2ba092)
0:10:44.934339	LOG	Server <---------- DUT
0:10:44.935339	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a15d12bb)
0:10:44.938337	LOG	Frame command sent to the DUT
0:10:44.939337	LOG	PULL_RESP: Protocol version = 02, Token = ab83, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1439493801, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA1wXgG/JJz7bPI6gabhmVDwti6Dw9NBDENq/4pr45O5h/LugzDPLTXEJxAr7Pb5pl03l+wetIoV0Suw=='}}
0:10:44.941336	LOG	Server ----------> DUT
0:10:44.944336	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:44.947332	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:49.933414	LOG	PUSH_ACK: 02 0cf5 01
0:10:49.935383	LOG	PUSH_DATA: Protocol version = 02, Token = 0cf5, Identifier = 00, JSON = {'rxpk': [{'tmst': 1442496427, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCA9wgBVXWV7mA4'}]}
0:10:49.936382	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f7, FOpts:), FPort: 01, FRMPayload: 0425, MIC: 95ee6038)
0:10:49.938383	LOG	Server <---------- DUT

0:10:49.939381	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d8, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 3d39c97f)
0:10:49.966364	LOG	Frame command sent to the DUT
0:10:49.968363	LOG	PULL_RESP: Protocol version = 02, Token = e93d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1444496427, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA2AXg82Go6Ba4LlK1uLYtrQVd5j5O5hoxTTInWA5ZV27HVtHfw2uWnr5RaLrUoRe4JUtPlYrLPTnJfw=='}}
0:10:49.970362	LOG	Server ----------> DUT
0:10:49.975359	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:49.980356	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:51.442523	LOG	PULL_DATA: 02 b66b 02 aa555a0000240409
0:10:51.445522	LOG	PULL_ACK: 02 b66b 04
0:10:54.933847	LOG	PUSH_ACK: 02 0cf6 01
0:10:54.935847	LOG	PUSH_DATA: Protocol version = 02, Token = 0cf6, Identifier = 00, JSON = {'rxpk': [{'tmst': 1447499052, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+AgBNJ66Ez+q'}]}
0:10:54.936846	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f8, FOpts:), FPort: 01, FRMPayload: 0426, MIC: ba133faa)
0:10:54.938845	LOG	Server <---------- DUT
0:10:54.939844	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05d9, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c546fe66)
0:10:54.941843	LOG	Frame command sent to the DUT
0:10:54.942843	LOG	PULL_RESP: Protocol version = 02, Token = 5b8a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1449499052, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA2QXgVp4JuYxFLfv9ItHSHbQ5cYBqVKYXVeMHB9LdgEm4xONTdq3k92Cg4hMdHgypx0/RUR6hxUb+Zg=='}}
0:10:54.944841	LOG	Server ----------> DUT
0:10:54.949838	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:54.958833	LOG	Send Test Command TxFramesCtrlReq process starts
0:10:59.937439	LOG	PUSH_ACK: 02 0cf7 01
0:10:59.939440	LOG	PUSH_DATA: Protocol version = 02, Token = 0cf7, Identifier = 00, JSON = {'rxpk': [{'tmst': 1452501676, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA+QgBSxWWGKVe'}]}
0:10:59.940438	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08f9, FOpts:), FPort: 01, FRMPayload: 0427, MIC: 9618a55e)
0:10:59.942437	LOG	Server <---------- DUT
0:10:59.943438	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05da, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8977ca3d)
0:10:59.946436	LOG	Frame command sent to the DUT
0:10:59.947434	LOG	PULL_RESP: Protocol version = 02, Token = 4ab6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1454501676, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA2gXgEGU53vJqtAnUG8G6W8XocugFXyk/Ij/xsVHWx4wbOM9/T9yYB+uFNInQOVROYJRKEtGaiXfKPQ=='}}

0:10:59.948433	LOG	Server ----------> DUT
0:10:59.952432	LOG	Send Test Command TxFramesCtrlReq process completed
0:10:59.956429	LOG	Send Test Command TxFramesCtrlReq process starts
0:11:01.632755	LOG	PULL_DATA: 02 e6e4 02 aa555a0000240409
0:11:01.634755	LOG	PULL_ACK: 02 e6e4 04
0:11:04.939892	LOG	PUSH_ACK: 02 0cf8 01
0:11:04.941891	LOG	PUSH_DATA: Protocol version = 02, Token = 0cf8, Identifier = 00, JSON = {'rxpk': [{'tmst': 1457504292, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA+ggBDLNbNk9u'}]}
0:11:04.942890	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08fa, FOpts:), FPort: 01, FRMPayload: 0428, MIC: 5b364f6e)
0:11:04.943890	LOG	Server <---------- DUT
0:11:04.945889	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05db, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e0408d3c)
0:11:04.947888	LOG	Frame command sent to the DUT
0:11:04.948887	LOG	PULL_RESP: Protocol version = 02, Token = 4fed, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1459504292, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA2wXglZJMlCYlfIF61WARAlE1sH7ZbnkftjYopKC9+7s1iHWkAms5+gQXioeiELLsQ85zbHe34ECNPA=='}}
0:11:04.950886	LOG	Server ----------> DUT
0:11:04.953885	LOG	Send Test Command TxFramesCtrlReq process completed
0:11:04.957882	LOG	Send Test Command RxAppCntReq process starts
0:11:09.952508	LOG	PUSH_ACK: 02 0cfa 01
0:11:09.957504	LOG	PUSH_DATA: Protocol version = 02, Token = 0cfa, Identifier = 00, JSON = {'rxpk': [{'tmst': 1462506917, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+wgBlyzBPbgL'}]}
0:11:09.961501	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08fb, FOpts:), FPort: 01, FRMPayload: 0429, MIC: c13db80b)
0:11:09.964500	LOG	Server <---------- DUT
0:11:09.970515	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05dc, FOpts:), FPort: e0, FRMPayload: 09), MIC: d0a74a41)
0:11:09.972498	LOG	Frame command sent to the DUT
0:11:09.975494	LOG	PULL_RESP: Protocol version = 02, Token = 7efc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1464506917, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAA3AXgcNCnSkE='}}
0:11:09.976493	LOG	Server ----------> DUT
0:11:09.980490	LOG	TX_ACK: 02 7efc 05 aa555a0000240409
0:11:11.652499	LOG	PULL_DATA: 02 f631 02 aa555a0000240409
0:11:11.654497	LOG	PULL_ACK: 02 f631 04
0:11:14.969611	LOG	PUSH_ACK: 02 0cfb 01
0:11:14.974612	LOG	PUSH_DATA: Protocol version = 02, Token = 0cfb, Identifier = 00, JSON = {'rxpk': [{'tmst': 1467517617, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 16, 'data': 'QCAgICCA/AjgEjd16gZwbw=='}]}
0:11:14.976606	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08fc, FOpts:), FPort: e0, FRMPayload: 092a04, MIC: ea06706f)
0:11:14.977607	LOG	Server <---------- DUT
0:11:14.978606	LOG	Answer in payload: 2a04
0:11:14.980604	LOG	Frame Command Payload in the Answer: 092a04

0:11:14.985601	LOG	RX Count received by DUT: 1066
0:11:14.988599	LOG	Send Test Command RxAppCntReq process completed
0:11:15.000592	LOG	End Test Step: Test packet error rate for SF11BW125 using RX2 window
0:11:15.004590	LOG	Partial Verdict: PASS
0:11:15.009587	LOG	==========
0:11:15.015584	LOG	==========
0:11:15.018581	LOG	Start Test Step: Test packet error rate for SF10BW125 using RX2 window
0:11:15.028576	LOG	Send RXParamSetupReq process starts
0:11:19.962147	LOG	PUSH_ACK: 02 0cfd 01
0:11:19.964146	LOG	PUSH_DATA: Protocol version = 02, Token = 0cfd, Identifier = 00, JSON = {'rxpk': [{'tmst': 1472512169, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA/QgBbvNB6x5s'}]}
0:11:19.966148	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 08fd, FOpts:), FPort: 01, FRMPayload: 042a, MIC: 41eb1e6c)
0:11:19.967174	LOG	Server <---------- DUT
0:11:19.969146	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05dd, FOpts:), FPort: 00, FRMPayload: 0502d2ad84), MIC: 644da696)
0:11:19.972142	LOG	PULL_RESP: Protocol version = 02, Token = ab6c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1474512169, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAA3QUAG3t9olpkTaaW'}}
0:11:19.974141	LOG	Server ----------> DUT
0:11:19.978139	LOG	TX_ACK: 02 ab6c 05 aa555a0000240409
0:11:21.862178	LOG	PULL_DATA: 02 a1a6 02 aa555a0000240409
0:11:21.864158	LOG	PULL_ACK: 02 a1a6 04
0:11:24.953400	LOG	PUSH_ACK: 02 0cff 01
0:11:24.956399	LOG	PUSH_DATA: Protocol version = 02, Token = 0cff, Identifier = 00, JSON = {'rxpk': [{'tmst': 1477519939, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC/ggFBwHsl8niHkk='}]}
0:11:24.957399	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 08fe, FOpts: 0507), FPort: 01, FRMPayload: 042a, MIC: c9e21e49)
0:11:24.958398	LOG	Server <---------- DUT
0:11:24.960397	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:11:24.961397	LOG	Command Answer: 0507
0:11:24.975387	LOG	MAC command communication completed
0:11:24.984384	LOG	Send Test Command RxAppCntReq process starts
0:11:29.942559	LOG	PUSH_ACK: 02 0d00 01
0:11:29.944558	LOG	PUSH_DATA: Protocol version = 02, Token = 0d00, Identifier = 00, JSON = {'rxpk': [{'tmst': 1482522563, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC/wgFBwFroTK3uog='}]}
0:11:29.945557	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 08ff, FOpts: 0507), FPort: 01, FRMPayload: 042a, MIC: 32b7ba88)
0:11:29.947556	LOG	Server <---------- DUT
0:11:29.949555	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05de, FOpts:), FPort: e0, FRMPayload: 09), MIC: 5ce4c5e5)
0:11:29.951554	LOG	Frame command sent to the DUT
0:11:29.953553	LOG	PULL_RESP: Protocol version = 02, Token = 981b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1484522563, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAA3gXgzVzkxeU='}}
0:11:29.954552	LOG	Server ----------> DUT
0:11:29.958550	LOG	TX_ACK: 02 981b 05 aa555a0000240409

0:11:32.051964	LOG	PULL_DATA: 02 ab58 02 aa555a0000240409
0:11:32.053963	LOG	PULL_ACK: 02 ab58 04
0:11:34.952723	LOG	PUSH_ACK: 02 0d01 01
0:11:34.954722	LOG	PUSH_DATA: Protocol version = 02, Token = 0d01, Identifier = 00, JSON = {'rxpk': [{'tmst': 1487528126, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 16, 'data': 'QCAgICCAAAng5Y/3iM4Rkw=='}]}
0:11:34.955721	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0900, FOpts:), FPort: e0, FRMPayload: 092b04, MIC: 88ce1193)
0:11:34.957720	LOG	Server <---------- DUT
0:11:34.958720	LOG	Answer in payload: 2b04
0:11:34.960719	LOG	Frame Command Payload in the Answer: 092b04
0:11:34.964717	LOG	RX Count received by DUT: 1067
0:11:34.967714	LOG	Send Test Command RxAppCntReq process completed
0:11:34.971713	LOG	Send Test Command TxFramesCtrlReq process starts
0:11:39.958873	LOG	PUSH_ACK: 02 0d03 01
0:11:39.960872	LOG	PUSH_DATA: Protocol version = 02, Token = 0d03, Identifier = 00, JSON = {'rxpk': [{'tmst': 1492522670, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAQkB6mwA5s00'}]}
0:11:39.962870	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0901, FOpts:), FPort: 01, FRMPayload: 042b, MIC: 00e6cd34)
0:11:39.963870	LOG	Server <---------- DUT
0:11:39.965869	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05df, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 515ec673)
0:11:39.968867	LOG	Frame command sent to the DUT
0:11:39.969867	LOG	PULL_RESP: Protocol version = 02, Token = 154c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1494522670, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA3wXga91tgSk3ltLFpYDnpW9ZnjUuw8qh6bH7wl24qIW8QGqiV/la0bx2AhPszOHRZergBDCRUV7Gcw=='}}
0:11:39.970866	LOG	Server ----------> DUT
0:11:39.974864	LOG	Send Test Command TxFramesCtrlReq process completed
0:11:39.978862	LOG	Send Test Command TxFramesCtrlReq process starts
0:11:42.073176	LOG	PULL_DATA: 02 f2dc 02 aa555a0000240409
0:11:42.075176	LOG	PULL_ACK: 02 f2dc 04
0:11:44.950751	LOG	PUSH_ACK: 02 0d04 01
0:11:44.952749	LOG	PUSH_DATA: Protocol version = 02, Token = 0d04, Identifier = 00, JSON = {'rxpk': [{'tmst': 1497525287, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAAgkB/RtPB+QB'}]}
0:11:44.953750	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0902, FOpts:), FPort: 01, FRMPayload: 042c, MIC: 4f07e401)
0:11:44.954750	LOG	Server <---------- DUT
0:11:44.956747	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e0, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 954a5380)
0:11:44.958748	LOG	Frame command sent to the DUT
0:11:44.960745	LOG	PULL_RESP: Protocol version = 02, Token = 5522, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1499525287, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data':

		'YCAgICAA4AXgGE5z2H3stxf/gk06PjoCXLC463bWgb2QvSMRQxnT5ugGKiak9PORk7HIqthivadF+70ylUpTgA=='}}
0:11:44.961744	LOG	Server ----------> DUT
0:11:44.964742	LOG	Send Test Command TxFramesCtrlReq process completed
0:11:44.968740	LOG	Send Test Command TxFramesCtrlReq process starts
0:11:49.955009	LOG	PUSH_ACK: 02 0d05 01
0:11:49.957007	LOG	PUSH_DATA: Protocol version = 02, Token = 0d05, Identifier = 00, JSON = {'rxpk': [{'tmst': 1502527921, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAwkBzckDbWEh'}]}
0:11:49.958008	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0903, FOpts:), FPort: 01, FRMPayload: 042d, MIC: 036d6121)
0:11:49.960007	LOG	Server <---------- DUT
0:11:49.961005	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e1, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8b553312)
0:11:49.963006	LOG	Frame command sent to the DUT
0:11:49.964005	LOG	PULL_RESP: Protocol version = 02, Token = cbaa, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1504527921, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA4QXgmDbZrgsOHxRcBFK66wNZS2olCQBPGRL7DVW77UbRufrs0jkcxAHr2M/TPHxH4E7fzaX3i1UzEg=='}}
0:11:49.966004	LOG	Server ----------> DUT
0:11:49.969000	LOG	Send Test Command TxFramesCtrlReq process completed
0:11:49.972999	LOG	Send Test Command TxFramesCtrlReq process starts
0:11:52.272876	LOG	PULL_DATA: 02 c77a 02 aa555a0000240409
0:11:52.274875	LOG	PULL_ACK: 02 c77a 04
0:11:54.958353	LOG	PUSH_ACK: 02 0d06 01
0:11:54.960352	LOG	PUSH_DATA: Protocol version = 02, Token = 0d06, Identifier = 00, JSON = {'rxpk': [{'tmst': 1507530545, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCABAkBJ6vcUL7i'}]}
0:11:54.961350	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0904, FOpts:), FPort: 01, FRMPayload: 042e, MIC: dc50bee2)
0:11:54.963349	LOG	Server <---------- DUT
0:11:54.965348	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1800ec4f)
0:11:54.968346	LOG	Frame command sent to the DUT
0:11:54.969346	LOG	PULL_RESP: Protocol version = 02, Token = 0c1e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1509530545, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA4gXgxGdGAYcEA62JP2RFKRdZs+5euH4O3J9cPJ4jnfFaXoK63TnrPQBGiYbXj10gmapow9fxGADsTw=='}}
0:11:54.971344	LOG	Server ----------> DUT
0:11:54.975342	LOG	Send Test Command TxFramesCtrlReq process completed
0:11:54.979339	LOG	Send Test Command TxFramesCtrlReq process starts
0:11:59.960504	LOG	PUSH_ACK: 02 0d07 01
0:11:59.962503	LOG	PUSH_DATA: Protocol version = 02, Token = 0d07, Identifier = 00, JSON = {'rxpk': [{'tmst': 1512533163, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABQkBkYK+DtbM'}]}

0:11:59.963503	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0905, FOpts:), FPort: 01, FRMPayload: 042f, MIC: be0ed6cc)
0:11:59.964503	LOG	Server <---------- DUT
0:11:59.966500	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f266de29)
0:11:59.969499	LOG	Frame command sent to the DUT
0:11:59.970498	LOG	PULL_RESP: Protocol version = 02, Token = f0e6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1514533163, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA4wXgshc9/rNEoFi4Wy/W+FB0gxZO/PTzhO0pnTMSQ4tUutocgTjmld9n2cUSnKG1V0HhjPzq8mbeKQ==''}}
0:11:59.971499	LOG	Server ----------> DUT
0:11:59.975495	LOG	Send Test Command TxFramesCtrlReq process completed
0:11:59.978495	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:02.282673	LOG	PULL_DATA: 02 5ae0 02 aa555a0000240409
0:12:02.284673	LOG	PULL_ACK: 02 5ae0 04
0:12:04.963148	LOG	PUSH_ACK: 02 0d08 01
0:12:04.965148	LOG	PUSH_DATA: Protocol version = 02, Token = 0d08, Identifier = 00, JSON = {'rxpk': [{'tmst': 1517535782, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCABgkBqFDAM58x'}]}
0:12:04.967145	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0906, FOpts:), FPort: 01, FRMPayload: 0430, MIC: c0339f31)
0:12:04.968144	LOG	Server <---------- DUT
0:12:04.971143	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e4, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 6d4abfca)
0:12:04.973141	LOG	Frame command sent to the DUT
0:12:04.975143	LOG	PULL_RESP: Protocol version = 02, Token = a0c6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1519535782, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA5AXgyuGG8M2CEauMU2aWKLUpLCmGJjgAQ0okrFozhQ73wjaaYH6CE6TIcntFlQM+Ui8UrkkPbUq/yg==''}}
0:12:04.976159	LOG	Server ----------> DUT
0:12:04.980137	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:04.984135	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:09.974190	LOG	PUSH_ACK: 02 0d0a 01
0:12:09.976189	LOG	PUSH_DATA: Protocol version = 02, Token = 0d0a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1522538392, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABwkBHhA/28eV'}]}
0:12:09.977188	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0907, FOpts:), FPort: 01, FRMPayload: 0431, MIC: 3fdbc795)
0:12:09.979187	LOG	Server <---------- DUT
0:12:09.981185	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e5, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b60d818f)
0:12:09.983203	LOG	Frame command sent to the DUT
0:12:09.985184	LOG	PULL_RESP: Protocol version = 02, Token = 63d0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1524538392, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAA5QXg0ictZKuNGY7D9eU1+ExleJqTrAM62KX6XDX+fpy+qQUNhPlF3KEFl5edLudfDoj08k0+tg2Bjw==''}}
0:12:09.986201	LOG	Server ----------> DUT
0:12:09.989181	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:09.992198	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:12.292228	LOG	PULL_DATA: 02 7204 02 aa555a0000240409
0:12:12.297225	LOG	PULL_ACK: 02 7204 04
0:12:14.967704	LOG	PUSH_ACK: 02 0d0b 01
0:12:14.969703	LOG	PUSH_DATA: Protocol version = 02, Token = 0d0b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1527541024, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCACAkBG947I2S+'}]}
0:12:14.971702	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0908, FOpts:), FPort: 01, FRMPayload: 0432, MIC: 3b2364be)
0:12:14.972702	LOG	Server <---------- DUT
0:12:14.975700	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e6, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b11798f2)
0:12:14.977699	LOG	Frame command sent to the DUT
0:12:14.978700	LOG	PULL_RESP: Protocol version = 02, Token = a77f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1529541024, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA5gXgvKg4G1yBFGQzwbj+eK8yI9qfGbjw5tND1LE5NOMzSD8fa9HTZdoqgSReJz7n8BIRrENBsReY8g==''}}
0:12:14.979700	LOG	Server ----------> DUT
0:12:14.982698	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:14.986696	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:19.968576	LOG	PUSH_ACK: 02 0d0c 01
0:12:19.971576	LOG	PUSH_DATA: Protocol version = 02, Token = 0d0c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1532543640, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCACQkB3mW5OpeV'}]}
0:12:19.972575	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0909, FOpts:), FPort: 01, FRMPayload: 0433, MIC: b93a9795)
0:12:19.973575	LOG	Server <---------- DUT
0:12:19.975572	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 99e4cba9)
0:12:19.978572	LOG	Frame command sent to the DUT
0:12:19.979572	LOG	PULL_RESP: Protocol version = 02, Token = dbd3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1534543640, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA5wXgDmR+7v1eZGcz9W/gzoASoFVqYgi+4FHBau5jelZ/X3VsWugti/ipgg8DdZMLicLCJrqRmeTLqQ==''}}
0:12:19.980571	LOG	Server ----------> DUT
0:12:19.983567	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:19.987565	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:22.501927	LOG	PULL_DATA: 02 9726 02 aa555a0000240409
0:12:22.503926	LOG	PULL_ACK: 02 9726 04
0:12:24.971521	LOG	PUSH_ACK: 02 0d0d 01
0:12:24.972520	LOG	PUSH_DATA: Protocol version = 02, Token = 0d0d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1537546265, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCACgkB0tq6DNv+'}]}
0:12:24.974519	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 090a, FOpts:), FPort: 01, FRMPayload: 0434, MIC: ba0cdbfe)
0:12:24.975519	LOG	Server <---------- DUT
0:12:24.977517	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e8, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4c29df7f)
0:12:24.979516	LOG	Frame command sent to the DUT
0:12:24.981516	LOG	PULL_RESP: Protocol version = 02, Token = 0f18, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1539546265, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA6AXggArKWt737JgSPRXyXRhKpIMD/XxZ5zPniM9rhCVWZrg0Ass+kN7xZnGYxs6i4JcB5F4DTCnffw=='}}
0:12:24.982515	LOG	Server ----------> DUT
0:12:24.986512	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:24.990510	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:29.974743	LOG	PUSH_ACK: 02 0d0e 01
0:12:29.976742	LOG	PUSH_DATA: Protocol version = 02, Token = 0d0e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1542548882, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCACwkBOsl26h3x'}]}
0:12:29.978741	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 090b, FOpts:), FPort: 01, FRMPayload: 0435, MIC: 76ea1df1)
0:12:29.979740	LOG	Server <---------- DUT
0:12:29.980739	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05e9, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e33b06c2)
0:12:29.982738	LOG	Frame command sent to the DUT
0:12:29.984737	LOG	PULL_RESP: Protocol version = 02, Token = 6025, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1544548882, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA6QXgFNtB0BGVVP7x6HTr7iOuK92UPE+meoyDdYlxxdHjVg7XFRtfVtm7ScFVfqH2jOmrolRU4zsGwg=='}}
0:12:29.985737	LOG	Server ----------> DUT
0:12:29.988735	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:29.993732	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:32.711878	LOG	PULL_DATA: 02 46d0 02 aa555a0000240409
0:12:32.713878	LOG	PULL_ACK: 02 46d0 04
0:12:34.976590	LOG	PUSH_ACK: 02 0d0f 01
0:12:34.978589	LOG	PUSH_DATA: Protocol version = 02, Token = 0d0f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1547551515, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCADAkBD3NvHP6D'}]}
0:12:34.980586	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 090c, FOpts:), FPort: 01, FRMPayload: 0436, MIC: 6f1cfe83)
0:12:34.981587	LOG	Server <---------- DUT
0:12:34.983587	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ea, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ec8cbcaa)
0:12:34.986584	LOG	Frame command sent to the DUT

0:12:34.987584	LOG	PULL_RESP: Protocol version = 02, Token = b4b7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1549551515, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA6gXguarvR8BGZSnQC/I3uXxQ0z337abD6FpL/vM7TLURM3+e/0H1FS6sk2OCYkSMpz9HOuhD7Iy8qg=='}}
0:12:34.989584	LOG	Server ----------> DUT
0:12:34.992580	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:34.997551	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:39.993337	LOG	PUSH_ACK: 02 0d11 01
0:12:39.995308	LOG	PUSH_DATA: Protocol version = 02, Token = 0d11, Identifier = 00, JSON = {'rxpk': [{'tmst': 1552554139, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICCADQkBoMhE06Bv'}]}
0:12:39.996305	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 090d, FOpts:), FPort: 01, FRMPayload: 0437, MIC: 44d3a06f)
0:12:39.997305	LOG	Server <---------- DUT
0:12:39.999302	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05eb, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 340eb82c)
0:12:40.002301	LOG	Frame command sent to the DUT
0:12:40.004301	LOG	PULL_RESP: Protocol version = 02, Token = 1ec2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1554554139, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA6wXgslaUB8X1kO72YPSP+BVakyi/ttoGlI5MwdOg/+hnn3lzjhDgbo1Qn8zCJvcvWlEotL/sNA64LA=='}}
0:12:40.005300	LOG	Server ----------> DUT
0:12:40.009296	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:40.013294	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:42.732129	LOG	PULL_DATA: 02 d8fb 02 aa555a0000240409
0:12:42.737127	LOG	PULL_ACK: 02 d8fb 04
0:12:44.984853	LOG	PUSH_ACK: 02 0d12 01
0:12:44.989846	LOG	PUSH_DATA: Protocol version = 02, Token = 0d12, Identifier = 00, JSON = {'rxpk': [{'tmst': 1557556774, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCADgkBzcKB5PrC'}]}
0:12:44.990845	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 090e, FOpts:), FPort: 01, FRMPayload: 0438, MIC: 81e4fac2)
0:12:44.991849	LOG	Server <---------- DUT
0:12:44.993844	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ec, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 62a6c0fb)
0:12:44.996842	LOG	Frame command sent to the DUT
0:12:44.997845	LOG	PULL_RESP: Protocol version = 02, Token = d30a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1559556774, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA7AXgJ9z+szyOJi+Hew1arHtBEHhdLKMco7S4MoS1qBKJK8bX4mtvAJGIKQVBA5iuyDZMgtRUYqbA+w=='}}
0:12:44.999843	LOG	Server ----------> DUT
0:12:45.003838	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:45.006834	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:49.986460	LOG	PUSH_ACK: 02 0d13 01

0:12:49.988462	LOG	PUSH_DATA: Protocol version = 02, Token = 0d13, Identifier = 00, JSON = {'rxpk': [{'tmst': 1562559384, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCADwkBpqA2FKEB'}]}
0:12:49.990458	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 090f, FOpts:), FPort: 01, FRMPayload: 0439, MIC: 3614a101)
0:12:49.991457	LOG	Server <---------- DUT
0:12:49.993457	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ed, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 45ef7f0f)
0:12:49.995455	LOG	Frame command sent to the DUT
0:12:49.997454	LOG	PULL_RESP: Protocol version = 02, Token = 4315, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1564559384, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA7QXgKd4BJMcyE5qMccmGjoZJFpE8mbSfGz9U9LcgTWDdNox2cJ+d4x1HdDWxhi7Mv8k72i9RRe9/Dw==''}}
0:12:49.998453	LOG	Server ----------> DUT
0:12:50.001453	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:50.005449	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:52.941700	LOG	PULL_DATA: 02 55dc 02 aa555a0000240409
0:12:52.943699	LOG	PULL_ACK: 02 55dc 04
0:12:54.988535	LOG	PUSH_ACK: 02 0d14 01
0:12:54.990534	LOG	PUSH_DATA: Protocol version = 02, Token = 0d14, Identifier = 00, JSON = {'rxpk': [{'tmst': 1567562004, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAEAkB3QtNVj32'}]}
0:12:54.991536	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0910, FOpts:), FPort: 01, FRMPayload: 043a, MIC: 4d563df6)
0:12:54.992535	LOG	Server <---------- DUT
0:12:54.994532	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ee, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: cb737ac3)
0:12:54.996533	LOG	Frame command sent to the DUT
0:12:54.997532	LOG	PULL_RESP: Protocol version = 02, Token = 154b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1569562004, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA7gXgZdy2NcIKR474y4YRXdsP4cT9hYt4EIdmPSGMIVDSR00f50gpHp72ESChMLsHoaIJp72ry3N6ww==''}}
0:12:54.999529	LOG	Server ----------> DUT
0:12:55.002527	LOG	Send Test Command TxFramesCtrlReq process completed
0:12:55.007524	LOG	Send Test Command TxFramesCtrlReq process starts
0:12:59.992240	LOG	PUSH_ACK: 02 0d15 01
0:12:59.994239	LOG	PUSH_DATA: Protocol version = 02, Token = 0d15, Identifier = 00, JSON = {'rxpk': [{'tmst': 1572564629, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAEQkBdR1/bpCK'}]}
0:12:59.996238	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0911, FOpts:), FPort: 01, FRMPayload: 043b, MIC: 7f6e908a)
0:12:59.997237	LOG	Server <---------- DUT
0:12:59.998237	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ef, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 53787681)

0:13:00.000236	LOG	Frame command sent to the DUT
0:13:00.002235	LOG	PULL_RESP: Protocol version = 02, Token = c385, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1574564629, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA7wXgSJpFo3ERwY4yF5R1mr2HnxCdtpHdLtESzx4maLVlNdODSsq6yE32QzcuQHEriBS5+nykU3h2gQ=='}}
0:13:00.003234	LOG	Server ----------> DUT
0:13:00.006232	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:00.010230	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:03.151542	LOG	PULL_DATA: 02 bd21 02 aa555a0000240409
0:13:03.153542	LOG	PULL_ACK: 02 bd21 04
0:13:04.994494	LOG	PUSH_ACK: 02 0d16 01
0:13:04.996492	LOG	PUSH_DATA: Protocol version = 02, Token = 0d16, Identifier = 00, JSON = {'rxpk': [{'tmst': 1577567247, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAEgkBPpMB1pdw'}]}
0:13:04.997490	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0912, FOpts:), FPort: 01, FRMPayload: 043c, MIC: 01d69770)
0:13:04.998490	LOG	Server <---------- DUT
0:13:05.000489	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f0, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: bc905d0a)
0:13:05.003489	LOG	Frame command sent to the DUT
0:13:05.004488	LOG	PULL_RESP: Protocol version = 02, Token = c372, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1579567247, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA8AXgH1A7NplAdm1fwlktFJjvwXCp32ESjMNtEbXc7jyZuH6ELaPSv9U2jYQ1y+P/mj2YZebsvJBdCg=='}}
0:13:05.005488	LOG	Server ----------> DUT
0:13:05.010483	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:05.013483	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:10.013364	LOG	PUSH_ACK: 02 0d18 01
0:13:10.015365	LOG	PUSH_DATA: Protocol version = 02, Token = 0d18, Identifier = 00, JSON = {'rxpk': [{'tmst': 1582569864, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAEwkBRg87sQ+2'}]}
0:13:10.017363	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0913, FOpts:), FPort: 01, FRMPayload: 043d, MIC: 3bb10fb6)
0:13:10.018362	LOG	Server <---------- DUT
0:13:10.020361	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f1, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 959eac30)
0:13:10.023361	LOG	Frame command sent to the DUT
0:13:10.024360	LOG	PULL_RESP: Protocol version = 02, Token = 137e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1584569864, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA8QXgx7tImfSQcuPEzMeNnLYgg7omgdO2za5eigKd82wsb5khbQt30NG5POcoyxyMFPCveOSLlZ6sMA=='}}
0:13:10.026357	LOG	Server ----------> DUT
0:13:10.029356	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:10.033354	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:13.171947	LOG	PULL_DATA: 02 d248 02 aa555a0000240409

0:13:13.176944	LOG	PULL_ACK: 02 d248 04
0:13:14.998925	LOG	PUSH_ACK: 02 0d19 01
0:13:15.000925	LOG	PUSH_DATA: Protocol version = 02, Token = 0d19, Identifier = 00, JSON = {'rxpk': [{'tmst': 1587572489, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAFAkBO4N/ORpL'}]}
0:13:15.001926	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0914, FOpts:), FPort: 01, FRMPayload: 043e, MIC: 7f391a4b)
0:13:15.003923	LOG	Server <---------- DUT
0:13:15.004923	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1b6feaba)
0:13:15.007921	LOG	Frame command sent to the DUT
0:13:15.009920	LOG	PULL_RESP: Protocol version = 02, Token = ff6b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1589572489, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA8gXgmA73J9a0h8rwAtI4ig4VcNIQVO+FITXpT9rNt4dTW3/lbvZ8+cA/tVoJAi/rkeWnTzIwG2/qug=='}}
0:13:15.010919	LOG	Server ----------> DUT
0:13:15.014918	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:15.017915	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:20.000806	LOG	PUSH_ACK: 02 0d1a 01
0:13:20.002803	LOG	PUSH_DATA: Protocol version = 02, Token = 0d1a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1592575116, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAFQkB1ygV79NP'}]}
0:13:20.004803	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0915, FOpts:), FPort: 01, FRMPayload: 043f, MIC: 15efd34f)
0:13:20.005801	LOG	Server <---------- DUT
0:13:20.007801	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 488f9848)
0:13:20.009801	LOG	Frame command sent to the DUT
0:13:20.011798	LOG	PULL_RESP: Protocol version = 02, Token = 8327, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1594575116, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA8wXgPbF/xbWEDpakmApxLCfaXPiCdk11ewUzkfJkFKkbefUU8iEI/jRYZniSGWLzzj171bynSI+YSA=='}}
0:13:20.012798	LOG	Server ----------> DUT
0:13:20.015795	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:20.019768	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:23.371870	LOG	PULL_DATA: 02 4788 02 aa555a0000240409
0:13:23.373871	LOG	PULL_ACK: 02 4788 04
0:13:25.002940	LOG	PUSH_ACK: 02 0d1b 01
0:13:25.004939	LOG	PUSH_DATA: Protocol version = 02, Token = 0d1b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1597577742, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAFgkB+EvSYZKQ'}]}
0:13:25.006940	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0916, FOpts:), FPort: 01, FRMPayload: 0440, MIC: d2619290)
0:13:25.007937	LOG	Server <---------- DUT
0:13:25.008937	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f4, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c7b7303f)
0:13:25.015934	LOG	Frame command sent to the DUT
0:13:25.019931	LOG	PULL_RESP: Protocol version = 02, Token = 3284, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1599577742, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA9AXgSfH4HfPrZDCdALo31uflZcTsdqu8Zr7JXZb//AAXHWA6NC2bK29hXFsOI9TE1AXUrXlXx7cwPw=='}}
0:13:25.023929	LOG	Server ----------> DUT
0:13:25.028925	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:25.032923	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:30.005453	LOG	PUSH_ACK: 02 0d1c 01
0:13:30.006450	LOG	PUSH_DATA: Protocol version = 02, Token = 0d1c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1602580363, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAFwkB2nYPN9aL'}]}
0:13:30.008451	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0917, FOpts:), FPort: 01, FRMPayload: 0441, MIC: 0f37d68b)
0:13:30.009449	LOG	Server <---------- DUT
0:13:30.012449	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f5, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: b49b6b60)
0:13:30.014449	LOG	Frame command sent to the DUT
0:13:30.016445	LOG	PULL_RESP: Protocol version = 02, Token = 9a9b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1604580363, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA9QXgiuxd2fuVtp+M5V0hdC46vs0p8FrR+b6MHNeyCu3N6dkXw/vPONf9PD8CQBPTZFYpaM8HtJtrYA=='}}
0:13:30.017444	LOG	Server ----------> DUT
0:13:30.020443	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:30.024442	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:33.381719	LOG	PULL_DATA: 02 b32e 02 aa555a0000240409
0:13:33.383729	LOG	PULL_ACK: 02 b32e 04
0:13:35.008791	LOG	PUSH_ACK: 02 0d1d 01
0:13:35.010792	LOG	PUSH_DATA: Protocol version = 02, Token = 0d1d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1607582987, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAGAkBTO8lPTPM'}]}
0:13:35.011790	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0918, FOpts:), FPort: 01, FRMPayload: 0442, MIC: 253d33cc)
0:13:35.013790	LOG	Server <---------- DUT
0:13:35.015788	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f6, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 3a0514ce)
0:13:35.017788	LOG	Frame command sent to the DUT
0:13:35.019785	LOG	PULL_RESP: Protocol version = 02, Token = 8f76, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1609582987, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA9gXgBfFkG6/HNgQJxsxPb7Q2CUngAgKZ+D2wgD1DO199Yy0ixLbaZ9XwwyGlxXgXhG3ytVESOgUUzg=='}}
0:13:35.020786	LOG	Server ----------> DUT
0:13:35.024782	LOG	Send Test Command TxFramesCtrlReq process completed

0:13:35.028780	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:40.024650	LOG	PUSH_ACK: 02 0d1f 01
0:13:40.026650	LOG	PUSH_DATA: Protocol version = 02, Token = 0d1f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1612585603, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAGQkBp3oqD42z'}]}
0:13:40.027648	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0919, FOpts:), FPort: 01, FRMPayload: 0443, MIC: 2a0f8db3)
0:13:40.029647	LOG	Server <---------- DUT
0:13:40.031647	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ccbf6971)
0:13:40.033646	LOG	Frame command sent to the DUT
0:13:40.035645	LOG	PULL_RESP: Protocol version = 02, Token = d1e0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1614585603, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA9wXgFz0dss0U/jz3pdKPZfoMllojJTRkyw5e517HST967jfDzjFGyaPoMThwq3GoLsKKpPRrzL9pcQ=='}}
0:13:40.036643	LOG	Server ----------> DUT
0:13:40.039641	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:40.044613	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:43.401318	LOG	PULL_DATA: 02 6ca9 02 aa555a0000240409
0:13:43.406315	LOG	PULL_ACK: 02 6ca9 04
0:13:45.012401	LOG	PUSH_ACK: 02 0d20 01
0:13:45.015399	LOG	PUSH_DATA: Protocol version = 02, Token = 0d20, Identifier = 00, JSON = {'rxpk': [{'tmst': 1617588221, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAGgkBGr5HnHdk'}]}
0:13:45.017399	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 091a, FOpts:), FPort: 01, FRMPayload: 0444, MIC: 479c7764)
0:13:45.018398	LOG	Server <---------- DUT
0:13:45.020397	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f8, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e40d30cd)
0:13:45.023395	LOG	Frame command sent to the DUT
0:13:45.024395	LOG	PULL_RESP: Protocol version = 02, Token = 2b0c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1619588221, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA+AXgdofMWwKBT/Aybtupw5U1xFdeVwtd/YZrIp8QpxBVZow06lDUvgILcwpFm4PrDpCWb1PN5A0wzQ=='}}
0:13:45.026393	LOG	Server ----------> DUT
0:13:45.035388	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:45.038387	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:50.018437	LOG	PUSH_ACK: 02 0d21 01
0:13:50.020434	LOG	PUSH_DATA: Protocol version = 02, Token = 0d21, Identifier = 00, JSON = {'rxpk': [{'tmst': 1622590856, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAGwkBFE80czK6'}]}
0:13:50.021433	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 091b, FOpts:), FPort: 01, FRMPayload: 0445, MIC: 347332ba)
0:13:50.022434	LOG	Server <---------- DUT
0:13:50.024433	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05f9, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a16ad2a9)
0:13:50.026432	LOG	Frame command sent to the DUT
0:13:50.028429	LOG	PULL_RESP: Protocol version = 02, Token = e507, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1624590856, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA+QXgRIXEPjdehVNJjzcaM6pK9jSYGCDdm637zeWD0aQ2toNq08mnG/MJETsDDLxyCzB2qWEQoWrSqQ=='}}
0:13:50.029431	LOG	Server ----------> DUT
0:13:50.032427	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:50.036426	LOG	Send Test Command TxFramesCtrlReq process starts
0:13:53.602060	LOG	PULL_DATA: 02 5f0e 02 aa555a0000240409
0:13:53.606059	LOG	PULL_ACK: 02 5f0e 04
0:13:55.020254	LOG	PUSH_ACK: 02 0d22 01
0:13:55.022254	LOG	PUSH_DATA: Protocol version = 02, Token = 0d22, Identifier = 00, JSON = {'rxpk': [{'tmst': 1627593465, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAHAkBBJ4Zok2g'}]}
0:13:55.023252	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 091c, FOpts:), FPort: 01, FRMPayload: 0446, MIC: 19a24da0)
0:13:55.024253	LOG	Server <---------- DUT
0:13:55.026252	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05fa, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1d47ffd5)
0:13:55.028250	LOG	Frame command sent to the DUT
0:13:55.031248	LOG	PULL_RESP: Protocol version = 02, Token = 9d15, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1629593465, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA+gXgHFYOZOYFJACHfi8SjMD6mauO7mkJMhz5lOJze58JNQG6fwzo2ThKvjHOrHk4qFJ0AQ0iHUf/1Q=='}}
0:13:55.032247	LOG	Server ----------> DUT
0:13:55.036244	LOG	Send Test Command TxFramesCtrlReq process completed
0:13:55.040242	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:00.022358	LOG	PUSH_ACK: 02 0d23 01
0:14:00.025356	LOG	PUSH_DATA: Protocol version = 02, Token = 0d23, Identifier = 00, JSON = {'rxpk': [{'tmst': 1632596082, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAHQkBvzxf1yV1'}]}
0:14:00.027355	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 091d, FOpts:), FPort: 01, FRMPayload: 0447, MIC: 5fd72575)
0:14:00.028355	LOG	Server <---------- DUT
0:14:00.030352	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05fb, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 77c52fe2)
0:14:00.033350	LOG	Frame command sent to the DUT
0:14:00.035349	LOG	PULL_RESP: Protocol version = 02, Token = 4f83, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1634596082, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA+wXgCC6hsgXBO7/kl/uO5695tgQ9fYx9m+Yut2f/8eREgkpGz2xSe5XOSo8wPW6s1cZQnvbHd8Uv4g=='}}
0:14:00.036350	LOG	Server ----------> DUT
0:14:00.041346	LOG	Send Test Command TxFramesCtrlReq process completed

0:14:00.049341	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:03.611316	LOG	PULL_DATA: 02 4f0a 02 aa555a0000240409
0:14:03.613316	LOG	PULL_ACK: 02 4f0a 04
0:14:05.026509	LOG	PUSH_ACK: 02 0d24 01
0:14:05.028509	LOG	PUSH_DATA: Protocol version = 02, Token = 0d24, Identifier = 00, JSON = {'rxpk': [{'tmst': 1637598699, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAHgkBKl56h8zj'}]}
0:14:05.030480	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 091e, FOpts:), FPort: 01, FRMPayload: 0448, MIC: 7a87cce3)
0:14:05.031478	LOG	Server <---------- DUT
0:14:05.033506	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05fc, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: dff8c201)
0:14:05.036502	LOG	Frame command sent to the DUT
0:14:05.038501	LOG	PULL_RESP: Protocol version = 02, Token = 1fcb, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1639598699, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA/AXgW4BSpxalfDLwV9XboS8+wnRhOOc86vb5M7xuC4rW3rJLEYQOSGwSqfDJPYGdiVUO7S243/jCAQ=='}}
0:14:05.039500	LOG	Server ----------> DUT
0:14:05.043500	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:05.048470	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:10.042619	LOG	PUSH_ACK: 02 0d26 01
0:14:10.044618	LOG	PUSH_DATA: Protocol version = 02, Token = 0d26, Identifier = 00, JSON = {'rxpk': [{'tmst': 1642601317, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAHwkB7KLvv/nv'}]}
0:14:10.045617	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 091f, FOpts:), FPort: 01, FRMPayload: 0449, MIC: efbff9ef)
0:14:10.046616	LOG	Server <---------- DUT
0:14:10.048616	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05fd, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 32d77734)
0:14:10.050614	LOG	Frame command sent to the DUT
0:14:10.051614	LOG	PULL_RESP: Protocol version = 02, Token = d5c7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1644601317, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA/QXgj1yu46P59kJCX8h8su9iHGbqJCvj3pPWSfjtv18/kjaYmxF/X2nSkqnwFwEikJysXYkVMtd3NA=='}}
0:14:10.053613	LOG	Server ----------> DUT
0:14:10.056611	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:10.060608	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:13.622110	LOG	PULL_DATA: 02 6641 02 aa555a0000240409
0:14:13.626109	LOG	PULL_ACK: 02 6641 04
0:14:15.028311	LOG	PUSH_ACK: 02 0d27 01
0:14:15.030310	LOG	PUSH_DATA: Protocol version = 02, Token = 0d27, Identifier = 00, JSON = {'rxpk': [{'tmst': 1647603949, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAIAkBbRTAR1py'}]}
0:14:15.032309	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0920, FOpts:), FPort: 01, FRMPayload: 044a, MIC: c0475a72)
0:14:15.033309	LOG	Server <---------- DUT

0:14:15.035306	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05fe, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 223a88af)
0:14:15.038304	LOG	Frame command sent to the DUT
0:14:15.039305	LOG	PULL_RESP: Protocol version = 02, Token = 843f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1649603949, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA/gXguKMOXbiDuwaG3e5L2ZuAu4x1ilXHTC+66IhbxtRzQ9f/jc0lG8NWxE/mG7FQNo/hxkcjIjqIrw==''}}
0:14:15.041304	LOG	Server ----------> DUT
0:14:15.044302	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:15.047301	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:20.032370	LOG	PUSH_ACK: 02 0d28 01
0:14:20.034369	LOG	PUSH_DATA: Protocol version = 02, Token = 0d28, Identifier = 00, JSON = {'rxpk': [{'tmst': 1652606567, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAIQkBzPDwz/AK'}]}
0:14:20.036367	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0921, FOpts:), FPort: 01, FRMPayload: 044b, MIC: f0cff00a)
0:14:20.037366	LOG	Server <---------- DUT
0:14:20.039366	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 05ff, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: fc218184)
0:14:20.041364	LOG	Frame command sent to the DUT
0:14:20.042365	LOG	PULL_RESP: Protocol version = 02, Token = 45ee, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1654606567, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAA/wXg7N5OhirKWetm3jN/46j4dT7proadxB045Fm0Ihqh1YLZTzhiHQJUqraMliOwUX/FAdvq/CGBhA==''}}
0:14:20.043364	LOG	Server ----------> DUT
0:14:20.047360	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:20.051359	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:23.821544	LOG	PULL_DATA: 02 e72e 02 aa555a0000240409
0:14:23.823543	LOG	PULL_ACK: 02 e72e 04
0:14:25.034853	LOG	PUSH_ACK: 02 0d29 01
0:14:25.036853	LOG	PUSH_DATA: Protocol version = 02, Token = 0d29, Identifier = 00, JSON = {'rxpk': [{'tmst': 1657609194, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAIgkBlKZ5nwDn'}]}
0:14:25.037852	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0922, FOpts:), FPort: 01, FRMPayload: 044c, MIC: 799f00e7)
0:14:25.038851	LOG	Server <---------- DUT
0:14:25.040850	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0600, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 8291b59b)
0:14:25.043848	LOG	Frame command sent to the DUT
0:14:25.045847	LOG	PULL_RESP: Protocol version = 02, Token = c0c2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1659609194, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAAAbg+vc1zH8sHXBHdoJXnW4lBtnAcO3/uTtBtDCG9NjIrsOAEedEwZlKdquITFnuCVRA5NQrgpG1mw==''}}

0:14:25.046848	LOG	Server ----------> DUT
0:14:25.050844	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:25.053842	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:30.036184	LOG	PUSH_ACK: 02 0d2a 01
0:14:30.038183	LOG	PUSH_DATA: Protocol version = 02, Token = 0d2a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1662611814, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAIwkBc5A8zTSJ'}]}
0:14:30.040182	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0923, FOpts:), FPort: 01, FRMPayload: 044d, MIC: 3ccd3489)
0:14:30.041182	LOG	Server <---------- DUT
0:14:30.042182	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0601, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9cb9777f)
0:14:30.045179	LOG	Frame command sent to the DUT
0:14:30.046178	LOG	PULL_RESP: Protocol version = 02, Token = 9d29, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1664611814, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAAQbg9pX/0efhd0I2FPzHDc6EkTA6imzbH/nG5OjchahjWprVDmvpA8fNwhI8is6ytF84oOVynLl3fw=='}}
0:14:30.048178	LOG	Server ----------> DUT
0:14:30.050195	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:30.053175	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:33.830916	LOG	PULL_DATA: 02 bc41 02 aa555a0000240409
0:14:33.832916	LOG	PULL_ACK: 02 bc41 04
0:14:35.040228	LOG	PUSH_ACK: 02 0d2b 01
0:14:35.042227	LOG	PUSH_DATA: Protocol version = 02, Token = 0d2b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1667614439, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAJAkBjta1SZsG'}]}
0:14:35.044228	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0924, FOpts:), FPort: 01, FRMPayload: 044e, MIC: b5499b06)
0:14:35.046225	LOG	Server <---------- DUT
0:14:35.048224	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0602, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 320d0312)
0:14:35.050224	LOG	Frame command sent to the DUT
0:14:35.052223	LOG	PULL_RESP: Protocol version = 02, Token = 1f63, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1669614439, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAAgbgyKoHXlpFh4oHItH+Mz+DSSi7s4oQN5S3wa98RBBjuA+t4WNdYw9IKQub6aRmSS2YHQzmMg0DEg=='}}
0:14:35.053222	LOG	Server ----------> DUT
0:14:35.056219	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:35.060217	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:40.051502	LOG	PUSH_ACK: 02 0d2d 01
0:14:40.053500	LOG	PUSH_DATA: Protocol version = 02, Token = 0d2d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1672617065, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAJQkB+MwATzs2'}]}
0:14:40.055499	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0925, FOpts:), FPort: 01, FRMPayload: 044f, MIC: 004f3b36)
0:14:40.057500	LOG	Server <---------- DUT

0:14:40.058498	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0603, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1f6605f5)
0:14:40.060499	LOG	Frame command sent to the DUT
0:14:40.062496	LOG	PULL_RESP: Protocol version = 02, Token = ab2a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1674617065, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAAwbgw97wDd0gxhdoHSZwc9vSrXMyuNU3UOJwZCmuZhMHVMcMAUVvXdoDlSrsqql4f6qiCzN0H2YF9Q==''}}
0:14:40.064495	LOG	Server ----------> DUT
0:14:40.067494	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:40.071492	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:43.841237	LOG	PULL_DATA: 02 0e2e 02 aa555a0000240409
0:14:43.847232	LOG	PULL_ACK: 02 0e2e 04
0:14:45.044600	LOG	PUSH_ACK: 02 0d2e 01
0:14:45.046598	LOG	PUSH_DATA: Protocol version = 02, Token = 0d2e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1677619683, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAJgkBqJ9mdzud'}]}
0:14:45.047597	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0926, FOpts:), FPort: 01, FRMPayload: 0450, MIC: 66773b9d)
0:14:45.049596	LOG	Server <---------- DUT
0:14:45.050596	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0604, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e8b9cd1c)
0:14:45.052596	LOG	Frame command sent to the DUT
0:14:45.054595	LOG	PULL_RESP: Protocol version = 02, Token = 3f04, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1679619683, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAABAbguwEImiPIzbpcwJGdnyRGiNLRhz92O/UGpiPjqfRs+7lAxN7VjecRhu4uYrOjVP/YpVMT6LnNHA==''}}
0:14:45.055594	LOG	Server ----------> DUT
0:14:45.058592	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:45.062589	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:50.047701	LOG	PUSH_ACK: 02 0d2f 01
0:14:50.049700	LOG	PUSH_DATA: Protocol version = 02, Token = 0d2f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1682622315, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAJwkBs0k0ANLr'}]}
0:14:50.051699	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0927, FOpts:), FPort: 01, FRMPayload: 0451, MIC: 3400d2eb)
0:14:50.052699	LOG	Server <---------- DUT
0:14:50.054697	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0605, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 5db9bebc)
0:14:50.056697	LOG	Frame command sent to the DUT
0:14:50.057696	LOG	PULL_RESP: Protocol version = 02, Token = d4bd, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1684622315, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAABQbgwTblVf5uJXB7ZdpHWIeomvQG+VpbncqHUEcJTLBrKeQVUOOIwSRnDUUhcWQT4fWKcvsTXbm+vA==''}}

0:14:50.058697	LOG	Server ----------> DUT
0:14:50.062693	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:50.066691	LOG	Send Test Command TxFramesCtrlReq process starts
0:14:54.050972	LOG	PULL_DATA: 02 45a5 02 aa555a0000240409
0:14:54.052971	LOG	PULL_ACK: 02 45a5 04
0:14:55.050403	LOG	PUSH_ACK: 02 0d30 01
0:14:55.052402	LOG	PUSH_DATA: Protocol version = 02, Token = 0d30, Identifier = 00, JSON = {'rxpk': [{'tmst': 1687624938, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAKAkBBZK0RZCf'}]}
0:14:55.054402	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0928, FOpts:), FPort: 01, FRMPayload: 0452, MIC: b445909f)
0:14:55.055401	LOG	Server <---------- DUT
0:14:55.057399	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0606, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1d07da19)
0:14:55.059398	LOG	Frame command sent to the DUT
0:14:55.060400	LOG	PULL_RESP: Protocol version = 02, Token = f568, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1689624938, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAABgbgu1ERqDpCO5aHaUD3h6HvYvuEoPmrCfJo/CC3l6izJwWGJY8EBcsGp8HaHwBz094LXOk8HQfaGQ=='}}
0:14:55.062397	LOG	Server ----------> DUT
0:14:55.065395	LOG	Send Test Command TxFramesCtrlReq process completed
0:14:55.069394	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:00.053764	LOG	PUSH_ACK: 02 0d31 01
0:15:00.058761	LOG	PUSH_DATA: Protocol version = 02, Token = 0d31, Identifier = 00, JSON = {'rxpk': [{'tmst': 1692627564, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAKQkBd/yoVmnH'}]}
0:15:00.062759	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0929, FOpts:), FPort: 01, FRMPayload: 0453, MIC: a85669c7)
0:15:00.066757	LOG	Server <---------- DUT
0:15:00.067757	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0607, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: cf936ed4)
0:15:00.069755	LOG	Frame command sent to the DUT
0:15:00.071754	LOG	PULL_RESP: Protocol version = 02, Token = db24, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1694627564, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAABwbgkxH8yEpwiIYxwNm0OBkFsDWuRmW9mMI5JX2no5bxi7JWQfF2g0hpgYd8fy4In67glfrlz5Nu1A=='}}
0:15:00.072754	LOG	Server ----------> DUT
0:15:00.080749	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:00.084747	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:04.061731	LOG	PULL_DATA: 02 558b 02 aa555a0000240409
0:15:04.063730	LOG	PULL_ACK: 02 558b 04
0:15:05.054166	LOG	PUSH_ACK: 02 0d32 01
0:15:05.057164	LOG	PUSH_DATA: Protocol version = 02, Token = 0d32, Identifier = 00, JSON = {'rxpk': [{'tmst': 1697630191, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAKgkBScqxnv1d'}]}

0:15:05.058164	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 092a, FOpts:), FPort: 01, FRMPayload: 0454, MIC: b19efd5d)
0:15:05.059163	LOG	Server <---------- DUT
0:15:05.061162	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0608, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 7a9fb2f0)
0:15:05.063161	LOG	Frame command sent to the DUT
0:15:05.065160	LOG	PULL_RESP: Protocol version = 02, Token = df4d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1699630191, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAACAbgEVdUCN0OPBmGinpoi6macuaTU1AjlQzchV4Ry3Gh0PDWkGXJPj551zmHi7xNe3L26VDyep+y8A=='}}
0:15:05.066159	LOG	Server ----------> DUT
0:15:05.069158	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:05.074155	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:10.072569	LOG	PUSH_ACK: 02 0d34 01
0:15:10.074568	LOG	PUSH_DATA: Protocol version = 02, Token = 0d34, Identifier = 00, JSON = {'rxpk': [{'tmst': 1702632810, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAKwkBwR6z2b7N'}]}
0:15:10.076569	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 092b, FOpts:), FPort: 01, FRMPayload: 0455, MIC: b3d9becd)
0:15:10.077566	LOG	Server <---------- DUT
0:15:10.078566	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0609, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c7d37f98)
0:15:10.081564	LOG	Frame command sent to the DUT
0:15:10.082564	LOG	PULL_RESP: Protocol version = 02, Token = ed54, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1704632810, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAACQbgGFbjo3KGtmD6cpx8vb/87Y4sNfmNtrivlh1wWbNmb5CPQAlr0ZN0zpwj1ZDRmt9hTxlOx9N/mA=='}}
0:15:10.084563	LOG	Server ----------> DUT
0:15:10.088560	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:10.091558	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:14.070862	LOG	PULL_DATA: 02 752d 02 aa555a0000240409
0:15:14.074842	LOG	PULL_ACK: 02 752d 04
0:15:15.062280	LOG	PUSH_ACK: 02 0d35 01
0:15:15.064279	LOG	PUSH_DATA: Protocol version = 02, Token = 0d35, Identifier = 00, JSON = {'rxpk': [{'tmst': 1707635435, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCALAkBxM3HVSAK'}]}
0:15:15.065278	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 092c, FOpts:), FPort: 01, FRMPayload: 0456, MIC: c755200a)
0:15:15.066278	LOG	Server <---------- DUT
0:15:15.068276	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 060a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9e1e8586)
0:15:15.070275	LOG	Frame command sent to the DUT
0:15:15.072274	LOG	PULL_RESP: Protocol version = 02, Token = e2b2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1709635435, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAACgbg/TF4sUrJUJqItxYOBW1opWWI0t+bWve4jJxOz6HPY7M66FAmO8CLCA5khXHHn3p0HgGBnh6Fhg==''}}
0:15:15.073273	LOG	Server ----------> DUT
0:15:15.076273	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:15.080270	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:20.063901	LOG	PUSH_ACK: 02 0d36 01
0:15:20.065901	LOG	PUSH_DATA: Protocol version = 02, Token = 0d36, Identifier = 00, JSON = {'rxpk': [{'tmst': 1712638061, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCALQkBu5CunOGl'}]}
0:15:20.067898	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 092d, FOpts:), FPort: 01, FRMPayload: 0457, MIC: ae9ce1a5)
0:15:20.069898	LOG	Server <---------- DUT
0:15:20.071898	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 060b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2302824f)
0:15:20.073897	LOG	Frame command sent to the DUT
0:15:20.075896	LOG	PULL_RESP: Protocol version = 02, Token = 52e5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1714638061, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAACwbgL3dPvme3i6uU5lR545VU/DYc2sahzDn7f5XEK18JHHF4OKm8UjHBCLqcqptf0XV2uMw3IwKCTw==''}}
0:15:20.076894	LOG	Server ----------> DUT
0:15:20.079892	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:20.084889	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:24.281375	LOG	PULL_DATA: 02 86ca 02 aa555a0000240409
0:15:24.283375	LOG	PULL_ACK: 02 86ca 04
0:15:25.067944	LOG	PUSH_ACK: 02 0d37 01
0:15:25.069926	LOG	PUSH_DATA: Protocol version = 02, Token = 0d37, Identifier = 00, JSON = {'rxpk': [{'tmst': 1717640685, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCALgkBq+9RwLY8'}]}
0:15:25.071924	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 092e, FOpts:), FPort: 01, FRMPayload: 0458, MIC: 51c0b63c)
0:15:25.072924	LOG	Server <---------- DUT
0:15:25.074923	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 060c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d6e2544b)
0:15:25.076921	LOG	Frame command sent to the DUT
0:15:25.078920	LOG	PULL_RESP: Protocol version = 02, Token = 7874, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1719640685, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAADAbg/Wtye1t9gNlJGhb7jz2zq9LPaSx5A9n6ypynLvmF7P6IYqU7xCwZcCqM0v+FAhJxXJFI1uJUSw==''}}
0:15:25.080919	LOG	Server ----------> DUT
0:15:25.084918	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:25.088914	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:30.068599	LOG	PUSH_ACK: 02 0d38 01
0:15:30.073596	LOG	PUSH_DATA: Protocol version = 02, Token = 0d38, Identifier = 00, JSON = {'rxpk': [{'tmst': 1722643316, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCALwkBNPypQ5FF'}]}

0:15:30.076591	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 092f, FOpts:), FPort: 01, FRMPayload: 0459, MIC: a9439145)
0:15:30.080588	LOG	Server <---------- DUT
0:15:30.082588	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 060d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e8e4565c)
0:15:30.085589	LOG	Frame command sent to the DUT
0:15:30.087588	LOG	PULL_RESP: Protocol version = 02, Token = 29b8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1724643316, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAADQbgBF+OpfyQAsCUwWnUrGUq/QP8qlv1nvnGmPNnsi1o0hecOWQ3oPWyFMbBse1VjiDQKYX16ORWXA=='}}
0:15:30.088586	LOG	Server ----------> DUT
0:15:30.092581	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:30.099576	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:34.290481	LOG	PULL_DATA: 02 0944 02 aa555a0000240409
0:15:34.293475	LOG	PULL_ACK: 02 0944 04
0:15:35.070001	LOG	PUSH_ACK: 02 0d39 01
0:15:35.072000	LOG	PUSH_DATA: Protocol version = 02, Token = 0d39, Identifier = 00, JSON = {'rxpk': [{'tmst': 1727645935, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAMAkB7yudcGFR'}]}
0:15:35.073999	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0930, FOpts:), FPort: 01, FRMPayload: 045a, MIC: 9d706151)
0:15:35.074998	LOG	Server <---------- DUT
0:15:35.076997	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 060e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4e6cc2a8)
0:15:35.079996	LOG	Frame command sent to the DUT
0:15:35.080995	LOG	PULL_RESP: Protocol version = 02, Token = 52ed, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1729645935, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAADgbgoY+LJrMCFXYAehhWx/v0SP2HLhvDRBMJlBvFUJwSB+pR90FHG1fONou+i6q4p25VU+ikTmzCqA=='}}
0:15:35.082994	LOG	Server ----------> DUT
0:15:35.085992	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:35.090989	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:40.092161	LOG	PUSH_ACK: 02 0d3b 01
0:15:40.094160	LOG	PUSH_DATA: Protocol version = 02, Token = 0d3b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1732648576, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAMQkBt6YmKmLn'}]}
0:15:40.095160	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0931, FOpts:), FPort: 01, FRMPayload: 045b, MIC: 262a62e7)
0:15:40.097159	LOG	Server <---------- DUT
0:15:40.099157	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 060f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 7a05ab16)
0:15:40.101156	LOG	Frame command sent to the DUT
0:15:40.103155	LOG	PULL_RESP: Protocol version = 02, Token = 37d9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1734648576, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True,

		'size': 64, 'data': 'YCAgICAADwbgC2dxUrUCDoBDFM9KP9YJkcgtYCxqVyN2jdgjFYSV8CGcN+oTKtGjsvgLx41Bsca6k9OoegWrFg=='}}
0:15:40.104155	LOG	Server ----------> DUT
0:15:40.108152	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:40.111151	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:44.301483	LOG	PULL_DATA: 02 ebdb 02 aa555a0000240409
0:15:44.306480	LOG	PULL_ACK: 02 ebdb 04
0:15:45.078044	LOG	PUSH_ACK: 02 0d3c 01
0:15:45.080041	LOG	PUSH_DATA: Protocol version = 02, Token = 0d3c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1737651187, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAMgkBocJCEIwh'}]}
0:15:45.082042	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0932, FOpts:), FPort: 01, FRMPayload: 045c, MIC: 42108c21)
0:15:45.083039	LOG	Server <---------- DUT
0:15:45.085038	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0610, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4edc8778)
0:15:45.088036	LOG	Frame command sent to the DUT
0:15:45.089039	LOG	PULL_RESP: Protocol version = 02, Token = b7b3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1739651187, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAEAbgSLbW+Rr1CHDXMOtDGQuo5GZG1GYqnRPtAs1ceiaIPlbLxgRxzRIGXLzTrieWCdhzXTx6TtyHeA=='}}
0:15:45.090039	LOG	Server ----------> DUT
0:15:45.093036	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:45.096035	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:50.080060	LOG	PUSH_ACK: 02 0d3e 01
0:15:50.082060	LOG	PUSH_DATA: Protocol version = 02, Token = 0d3e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1742653813, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAMwkBpY0sdUPp'}]}
0:15:50.084058	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0933, FOpts:), FPort: 01, FRMPayload: 045d, MIC: 2c7543e9)
0:15:50.085058	LOG	Server <---------- DUT
0:15:50.087056	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0611, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 937a5c3b)
0:15:50.089055	LOG	Frame command sent to the DUT
0:15:50.091054	LOG	PULL_RESP: Protocol version = 02, Token = 4387, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1744653813, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAEQbgFJUNwk/yTIaIdiQrqD5jP+XLRIm8y+8hT+yXvKGgPWCv4MD2wMGDpm+WaeBotVrmOUKIk3pcOw=='}}
0:15:50.092054	LOG	Server ----------> DUT
0:15:50.096053	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:50.101048	LOG	Send Test Command TxFramesCtrlReq process starts
0:15:54.500597	LOG	PULL_DATA: 02 8c32 02 aa555a0000240409
0:15:54.502595	LOG	PULL_ACK: 02 8c32 04
0:15:55.082266	LOG	PUSH_ACK: 02 0d3f 01
0:15:55.084264	LOG	PUSH_DATA: Protocol version = 02, Token = 0d3f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1747656430, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCANAkBl/s6z3Br'}]}
0:15:55.086265	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0934, FOpts:), FPort: 01, FRMPayload: 045e, MIC: 3acf706b)
0:15:55.087262	LOG	Server <---------- DUT
0:15:55.088262	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0612, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 63b5844a)
0:15:55.090261	LOG	Frame command sent to the DUT
0:15:55.092259	LOG	PULL_RESP: Protocol version = 02, Token = 0e69, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1749656430, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAEgbg2uhKhCH8sVA/C9qC92SW9ZBaGVQ4rEibhUfLMQhMFaPIBEwS2+VLaIV1sqJ2AbYL5DniY7WESg=='}}
0:15:55.093259	LOG	Server ----------> DUT
0:15:55.097257	LOG	Send Test Command TxFramesCtrlReq process completed
0:15:55.101254	LOG	Send Test Command TxFramesCtrlReq process starts
0:16:00.084878	LOG	PUSH_ACK: 02 0d40 01
0:16:00.086876	LOG	PUSH_DATA: Protocol version = 02, Token = 0d40, Identifier = 00, JSON = {'rxpk': [{'tmst': 1752659055, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCANQkB/w7Brc4a'}]}
0:16:00.088876	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0935, FOpts:), FPort: 01, FRMPayload: 045f, MIC: c1adce1a)
0:16:00.089875	LOG	Server <---------- DUT
0:16:00.091874	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0613, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2671e93b)
0:16:00.094872	LOG	Frame command sent to the DUT
0:16:00.095871	LOG	PULL_RESP: Protocol version = 02, Token = 99ce, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1754659055, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAEwbgTcIHCcAf2VzFLKx5czA/cTQ9tdApphJMnR9Q3wOIyYgqmgWOyklxjgWzQSyUURzJy4onJnHpOw=='}}
0:16:00.096871	LOG	Server ----------> DUT
0:16:00.100869	LOG	Send Test Command TxFramesCtrlReq process completed
0:16:00.103869	LOG	Send Test Command TxFramesCtrlReq process starts
0:16:04.510940	LOG	PULL_DATA: 02 643f 02 aa555a0000240409
0:16:04.512939	LOG	PULL_ACK: 02 643f 04
0:16:05.088613	LOG	PUSH_ACK: 02 0d41 01
0:16:05.090611	LOG	PUSH_DATA: Protocol version = 02, Token = 0d41, Identifier = 00, JSON = {'rxpk': [{'tmst': 1757661662, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCANgkBiWCSdUIE'}]}
0:16:05.092609	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0936, FOpts:), FPort: 01, FRMPayload: 0460, MIC: 92754204)
0:16:05.093609	LOG	Server <---------- DUT
0:16:05.095608	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0614, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 22d02ef8)
0:16:05.097607	LOG	Frame command sent to the DUT

0:16:05.099605	LOG	PULL_RESP: Protocol version = 02, Token = d7f0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1759661662, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAFAbggUp01xyi3Se2g/GAS2rW7p1ljaYA1XnLez178LbVyBtFztaUuJ5EKEBoN72j5xc4rj/0ItAu+A=='}}
0:16:05.101604	LOG	Server ----------> DUT
0:16:05.104602	LOG	Send Test Command TxFramesCtrlReq process completed
0:16:05.107603	LOG	Send Test Command TxFramesCtrlReq process starts
0:16:10.101154	LOG	PUSH_ACK: 02 0d43 01
0:16:10.103153	LOG	PUSH_DATA: Protocol version = 02, Token = 0d43, Identifier = 00, JSON = {'rxpk': [{'tmst': 1762664280, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICCANwkBLFLJzi5V'}]}
0:16:10.105151	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0937, FOpts:), FPort: 01, FRMPayload: 0461, MIC: c9ce2e55)
0:16:10.106152	LOG	Server <---------- DUT
0:16:10.108150	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0615, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 3400b118)
0:16:10.111148	LOG	Frame command sent to the DUT
0:16:10.112152	LOG	PULL_RESP: Protocol version = 02, Token = a2f1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1764664280, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAFQbgRVPdckB9BjzDETvJQ6kyP1tANz356Xs2n+zhqw04nbD0bW4+Yt68++dZvwmQAYjBvo5aNACxGA=='}}
0:16:10.114150	LOG	Server ----------> DUT
0:16:10.117144	LOG	Send Test Command TxFramesCtrlReq process completed
0:16:10.120161	LOG	Send Test Command TxFramesCtrlReq process starts
0:16:14.530465	LOG	PULL_DATA: 02 60d0 02 aa555a0000240409
0:16:14.535463	LOG	PULL_ACK: 02 60d0 04
0:16:15.091147	LOG	PUSH_ACK: 02 0d44 01
0:16:15.093145	LOG	PUSH_DATA: Protocol version = 02, Token = 0d44, Identifier = 00, JSON = {'rxpk': [{'tmst': 1767666907, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAOAkBLbwGRQ+7'}]}
0:16:15.094145	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0938, FOpts:), FPort: 01, FRMPayload: 0462, MIC: 06450fbb)
0:16:15.095144	LOG	Server <---------- DUT
0:16:15.097144	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0616, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: bffed7ed)
0:16:15.099142	LOG	Frame command sent to the DUT
0:16:15.101141	LOG	PULL_RESP: Protocol version = 02, Token = 4367, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1769666907, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAFgbg4uNCVnHDfz/P92bDRH3tIULSIfuYzYaUH0Z6sLIGYw8CpA5m3o4gGpbe1y1YrEc25KDkv/7X7Q=='}}
0:16:15.102141	LOG	Server ----------> DUT
0:16:15.105141	LOG	Send Test Command TxFramesCtrlReq process completed
0:16:15.109138	LOG	Send Test Command TxFramesCtrlReq process starts
0:16:20.095847	LOG	PUSH_ACK: 02 0d45 01

0:16:20.098844	LOG	PUSH_DATA: Protocol version = 02, Token = 0d45, Identifier = 00, JSON = {'rxpk': [{'tmst': 1772669533, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAOQkBqiKV+ya5'}]}
0:16:20.099843	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0939, FOpts:), FPort: 01, FRMPayload: 0463, MIC: 95fb26b9)
0:16:20.100843	LOG	Server <---------- DUT
0:16:20.102842	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0617, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 96209fb9)
0:16:20.104841	LOG	Frame command sent to the DUT
0:16:20.105840	LOG	PULL_RESP: Protocol version = 02, Token = f739, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1774669533, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAFwbgU2frRFZoR3/7URHurBKDLSl2/YVPcrZ4gZo5r+UhHLI5kulVfOVp7+gefSgShIzituVkliCfuQ=='}}
0:16:20.107839	LOG	Server ----------> DUT
0:16:20.110837	LOG	Send Test Command TxFramesCtrlReq process completed
0:16:20.114835	LOG	Send Test Command TxFramesCtrlReq process starts
0:16:24.730322	LOG	PULL_DATA: 02 e8bf 02 aa555a0000240409
0:16:24.732322	LOG	PULL_ACK: 02 e8bf 04
0:16:25.097114	LOG	PUSH_ACK: 02 0d46 01
0:16:25.099113	LOG	PUSH_DATA: Protocol version = 02, Token = 0d46, Identifier = 00, JSON = {'rxpk': [{'tmst': 1777672149, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAOgkBFaIrsEzh'}]}
0:16:25.101112	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 093a, FOpts:), FPort: 01, FRMPayload: 0464, MIC: 2bb04ce1)
0:16:25.102111	LOG	Server <---------- DUT
0:16:25.104110	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0618, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: aa87818f)
0:16:25.107108	LOG	Frame command sent to the DUT
0:16:25.108108	LOG	PULL_RESP: Protocol version = 02, Token = f518, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1779672149, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAGAbgtHoUJDmmnH1m2mbxwh93zs4f5lQX7zg1l8ZaW/u3p9lfqJQcmA1Rdv8jqpiUfn9xl7rnqoeBjw=='}}
0:16:25.110107	LOG	Server ----------> DUT
0:16:25.118102	LOG	Send Test Command TxFramesCtrlReq process completed
0:16:25.124099	LOG	Send Test Command TxFramesCtrlReq process starts
0:16:30.101165	LOG	PUSH_ACK: 02 0d47 01
0:16:30.103164	LOG	PUSH_DATA: Protocol version = 02, Token = 0d47, Identifier = 00, JSON = {'rxpk': [{'tmst': 1782674782, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAOwkBWiqY3RHj'}]}
0:16:30.104164	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 093b, FOpts:), FPort: 01, FRMPayload: 0465, MIC: 98dd11e3)
0:16:30.106162	LOG	Server <---------- DUT
0:16:30.108161	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0619, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 576ad62f)

0:16:30.110160	LOG	Frame command sent to the DUT
0:16:30.112159	LOG	PULL_RESP: Protocol version = 02, Token = ac36, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1784674782, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAGQbg73HsOJbz0NuwcKeGqxacwN8VP66eTCNxnu1+khTUosuiDlUrMxUWIasBhHqEan+T2HLOV2rWLw==''}}
0:16:30.114158	LOG	Server ----------> DUT
0:16:30.118156	LOG	Send Test Command TxFramesCtrlReq process completed
0:16:30.122153	LOG	Send Test Command TxFramesCtrlReq process starts
0:16:34.940411	LOG	PULL_DATA: 02 de37 02 aa555a0000240409
0:16:34.942409	LOG	PULL_ACK: 02 de37 04
0:16:35.101319	LOG	PUSH_ACK: 02 0d48 01
0:16:35.103319	LOG	PUSH_DATA: Protocol version = 02, Token = 0d48, Identifier = 00, JSON = {'rxpk': [{'tmst': 1787677415, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAPAkBMmyc2b7X''}]}
0:16:35.104318	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 093c, FOpts:), FPort: 01, FRMPayload: 0466, MIC: 9cd9bed7)
0:16:35.105318	LOG	Server <---------- DUT
0:16:35.107315	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 061a, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 29b8e67f)
0:16:35.109314	LOG	Frame command sent to the DUT
0:16:35.110315	LOG	PULL_RESP: Protocol version = 02, Token = 5e3e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1789677415, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAGgbgTUYNheXE1hhopp61SRsC+wLj2f+W1lHDdZV8wHnrRWGbP4+0/y7+rKTXssNM9U9zcLuLKbjmfw==''}}
0:16:35.112314	LOG	Server ----------> DUT
0:16:35.115310	LOG	Send Test Command TxFramesCtrlReq process completed
0:16:35.118328	LOG	Send Test Command RxAppCntReq process starts
0:16:40.120940	LOG	PUSH_ACK: 02 0d4a 01
0:16:40.124938	LOG	PUSH_DATA: Protocol version = 02, Token = 0d4a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1792680027, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAPQkBjoxK+hYo''}]}
0:16:40.127937	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 093d, FOpts:), FPort: 01, FRMPayload: 0467, MIC: 4afa1628)
0:16:40.130937	LOG	Server <---------- DUT
0:16:40.134933	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 061b, FOpts:), FPort: e0, FRMPayload: 09), MIC: 7b06e235)
0:16:40.139930	LOG	Frame command sent to the DUT
0:16:40.142947	LOG	PULL_RESP: Protocol version = 02, Token = 5506, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1794680027, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAGwbgJHsG4jU=''}}
0:16:40.144945	LOG	Server ----------> DUT
0:16:40.148926	LOG	TX_ACK: 02 5506 05 aa555a0000240409
0:16:44.970590	LOG	PULL_DATA: 02 ca45 02 aa555a0000240409
0:16:44.975587	LOG	PULL_ACK: 02 ca45 04
0:16:45.107875	LOG	PUSH_ACK: 02 0d4b 01
0:16:45.109874	LOG	PUSH_DATA: Protocol version = 02, Token = 0d4b, Identifier = 00, JSON = {'rxpk': [{'tmst': 1797690748, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 16, 'data': 'QCAgICCAPgngP9WO5IsXSQ=='}]}
0:16:45.110874	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 093e, FOpts:), FPort: e0, FRMPayload: 096804, MIC: e48b1749)
0:16:45.111874	LOG	Server <---------- DUT
0:16:45.112874	LOG	Answer in payload: 6804
0:16:45.114871	LOG	Frame Command Payload in the Answer: 096804
0:16:45.119868	LOG	RX Count received by DUT: 1128
0:16:45.121867	LOG	Send Test Command RxAppCntReq process completed
0:16:45.129863	LOG	End Test Step: Test packet error rate for SF10BW125 using RX2 window
0:16:45.133860	LOG	Partial Verdict: PASS
0:16:45.136859	LOG	==========
0:16:45.141856	LOG	==========
0:16:45.144854	LOG	Start Test Step: Test packet error rate for SF9BW125 using RX2 window
0:16:45.158846	LOG	Send RXParamSetupReq process starts
0:16:50.147818	LOG	PUSH_ACK: 02 0d4c 01
0:16:50.149817	LOG	PUSH_DATA: Protocol version = 02, Token = 0d4c, Identifier = 00, JSON = {'rxpk': [{'tmst': 1802685292, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAPwkBTnADb0fB'}]}
0:16:50.150816	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 093f, FOpts:), FPort: 01, FRMPayload: 0468, MIC: 036f47c1)
0:16:50.152815	LOG	Server <---------- DUT
0:16:50.153815	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 061c, FOpts:), FPort: 00, FRMPayload: 0503d2ad84), MIC: 07820b7e)
0:16:50.156813	LOG	PULL_RESP: Protocol version = 02, Token = 5d77, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1804685292, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAHAYAutbMpzMHggt+'}}
0:16:50.157812	LOG	Server ----------> DUT
0:16:50.161810	LOG	TX_ACK: 02 5d77 05 aa555a0000240409
0:16:54.990220	LOG	PULL_DATA: 02 78b1 02 aa555a0000240409
0:16:54.992219	LOG	PULL_ACK: 02 78b1 04
0:16:55.155127	LOG	PUSH_ACK: 02 0d4d 01
0:16:55.156126	LOG	PUSH_DATA: Protocol version = 02, Token = 0d4d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1807693058, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCQAkFBwElymuSjt4='}]}
0:16:55.158125	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0940, FOpts: 0507), FPort: 01, FRMPayload: 0468, MIC: 6b928ede)
0:16:55.159125	LOG	Server <---------- DUT
0:16:55.160125	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:16:55.161124	LOG	Command Answer: 0507
0:16:55.178114	LOG	MAC command communication completed
0:16:55.187108	LOG	Send Test Command RxAppCntReq process starts
0:17:00.143704	LOG	PUSH_ACK: 02 0d4e 01
0:17:00.146698	LOG	PUSH_DATA: Protocol version = 02, Token = 0d4e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1812695682, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 17, 'data': 'QCAgICCCQQkFBwEWaRS55F8='}]}
0:17:00.147698	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0941, FOpts: 0507), FPort: 01, FRMPayload: 0468, MIC: 14b9e45f)
0:17:00.149697	LOG	Server <---------- DUT
0:17:00.150701	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 061d, FOpts:), FPort: e0, FRMPayload: 09), MIC: 471fac79)

0:17:00.152699	LOG	Frame command sent to the DUT
0:17:00.153698	LOG	PULL_RESP: Protocol version = 02, Token = 085d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1814695682, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAHQbg70cfrHk='}}
0:17:00.154699	LOG	Server ----------> DUT
0:17:00.158691	LOG	TX_ACK: 02 085d 05 aa555a0000240409
0:17:05.134722	LOG	PUSH_ACK: 02 0d4f 01
0:17:05.136721	LOG	PUSH_DATA: Protocol version = 02, Token = 0d4f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1817701244, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 16, 'data': 'QCAgICCAQgng21PZughAUg=='}]}
0:17:05.137721	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0942, FOpts:), FPort: e0, FRMPayload: 096904, MIC: ba084052)
0:17:05.139719	LOG	Server <---------- DUT
0:17:05.140719	LOG	Answer in payload: 6904
0:17:05.142717	LOG	Frame Command Payload in the Answer: 096904
0:17:05.147715	LOG	RX Count received by DUT: 1129
0:17:05.151712	LOG	Send Test Command RxAppCntReq process completed
0:17:05.161726	LOG	Send Test Command TxFramesCtrlReq process starts
0:17:05.190692	LOG	PULL_DATA: 02 7334 02 aa555a0000240409
0:17:05.191690	LOG	PULL_ACK: 02 7334 04
0:17:10.130983	LOG	PUSH_ACK: 02 0d51 01
0:17:10.132982	LOG	PUSH_DATA: Protocol version = 02, Token = 0d51, Identifier = 00, JSON = {'rxpk': [{'tmst': 1822695796, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAQwkBxbY2Rh7U'}]}
0:17:10.134981	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0943, FOpts:), FPort: 01, FRMPayload: 0469, MIC: 36461ed4)
0:17:10.135980	LOG	Server <---------- DUT
0:17:10.137979	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 061e, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

		07000101010101010101010

0:17:25.170175	LOG	PULL_RESP: Protocol version = 02, Token = 2c88, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1839703663, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAAIQbglybkAScWHPcj90L967Y4Dz72dtK4901pfZ0Y40H18IKa0w1c3dBaW0vaQBHE7/Wz38Snjv/OhLlGRSuWXZprokxSD8oJxf4Gq2ZlcfL84yz1pFWJEIXfc4W8fInzRzbxIWbE1ez29klCBEsz4cFXReu2CLUlHXs='}}
0:17:25.171175	LOG	Server ----------> DUT
0:17:25.175173	LOG	Send Test Command TxFramesCtrlReq process completed
0:17:25.179171	LOG	Send Test Command TxFramesCtrlReq process starts
0:17:25.590438	LOG	PULL_DATA: 02 6337 02 aa555a0000240409
0:17:25.593434	LOG	PULL_ACK: 02 6337 04
0:17:30.161920	LOG	PUSH_ACK: 02 0d55 01
0:17:30.163919	LOG	PUSH_DATA: Protocol version = 02, Token = 0d55, Identifier = 00, JSON = {'rxpk': [{'tmst': 1842706288, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCARwkBuJvS/aK/'}]}
0:17:30.165918	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0947, FOpts:), FPort: 01, FRMPayload: 046d, MIC: d2fda2bf)
0:17:30.167916	LOG	Server <---------- DUT
0:17:30.169915	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0622, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		G31viljdsEUYrOgi/gGHjvEdHsGawyRnKlALrg/eqjXtPaKvOzi/VOC1gBSMoqsXWv60xhz72O4o9u3xJOR2KybDVNyVkqU7AJtuvr+Ubq5Mcg='}}
0:17:35.175919	LOG	Server ----------> DUT
0:17:35.178917	LOG	Send Test Command TxFramesCtrlReq process completed
0:17:35.181915	LOG	Send Test Command TxFramesCtrlReq process starts
0:17:35.599911	LOG	PULL_DATA: 02 26b8 02 aa555a0000240409
0:17:35.601908	LOG	PULL_ACK: 02 26b8 04
0:17:40.165372	LOG	PUSH_ACK: 02 0d58 01
0:17:40.168365	LOG	PUSH_DATA: Protocol version = 02, Token = 0d58, Identifier = 00, JSON = {'rxpk': [{'tmst': 1852711526, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCASQkBS4sxCeMy'}]}
0:17:40.169367	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0949, FOpts:), FPort: 01, FRMPayload: 046f, MIC: 3109e332)
0:17:40.170392	LOG	Server <---------- DUT
0:17:40.173362	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0624, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

0:17:45.600545	LOG	PULL_DATA: 02 c39b 02 aa555a0000240409
0:17:45.601563	LOG	PULL_ACK: 02 c39b 04
0:17:50.171068	LOG	PUSH_ACK: 02 0d5a 01
0:17:50.172066	LOG	PUSH_DATA: Protocol version = 02, Token = 0d5a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1862716772, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCASwkBuGDCE2WG'}]}
0:17:50.174065	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 094b, FOpts:), FPort: 01, FRMPayload: 0471, MIC: c2136586)
0:17:50.175064	LOG	Server <---------- DUT
0:17:50.177063	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0626, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCATQkBuJpj4Qwa'}]}
0:18:00.181147	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 094d, FOpts:), FPort: 01, FRMPayload: 0473, MIC: 63e10c1a)
0:18:00.183146	LOG	Server <---------- DUT
0:18:00.185145	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0628, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:18:10.188317	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 062a, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2f70a928)
0:18:20.202052	LOG	Frame command sent to the DUT
0:18:20.204050	LOG	PULL_RESP: Protocol version = 02, Token = 9db4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1894732528, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAALAbga07fqhNsfVeIjseDbiu1XpyOqEnl8/CKFImQrnssWwHJ0ZktuXnYS5NYBblH+f/HkfgLvEO1YYFoyMESUzVqI1jE+wlWhQLXv0UqdPzQ/+e3lPCZM9zzGJYba9b2EEx7FuxusNro8UYjffEXEpMD2MtnnS9wqSg='}}
0:18:20.205052	LOG	Server ----------> DUT
0:18:20.208048	LOG	Send Test Command TxFramesCtrlReq process completed
0:18:20.211048	LOG	Send Test Command TxFramesCtrlReq process starts
0:18:25.190662	LOG	PUSH_ACK: 02 0d62 01
0:18:25.191660	LOG	PUSH_DATA: Protocol version = 02, Token = 0d62, Identifier = 00, JSON = {'rxpk': [{'tmst': 1897735145, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAUgkBhwOgwLgn'}]}
0:18:25.193659	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0952, FOpts:), FPort: 01, FRMPayload: 0478, MIC: a0c0b827)
0:18:25.194660	LOG	Server <---------- DUT
0:18:25.196659	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 062d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101

		'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAALgbglY5DQ9yNkKq1nfZxkCEslFXz1t11w0ppaeNXY3tZk/0f2aZnsnAD+IuTq4bmPPVOn84FjM68uA2xjfqfoHrVg89D7Aa+RK51DhXSfsvlaNtA+TrMRn/Zdy+22v1DUwpYJMgygzpfT4rn49+rumcoiPAmsutCr9M='}}
0:18:30.207346	LOG	Server ----------> DUT
0:18:30.215341	LOG	Send Test Command TxFramesCtrlReq process completed
0:18:30.220338	LOG	Send Test Command TxFramesCtrlReq process starts
0:18:35.196518	LOG	PUSH_ACK: 02 0d64 01
0:18:35.198513	LOG	PUSH_DATA: Protocol version = 02, Token = 0d64, Identifier = 00, JSON = {'rxpk': [{'tmst': 1907740395, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAVAkBbuD+BQUX'}]}
0:18:35.200512	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0954, FOpts:), FPort: 01, FRMPayload: 047a, MIC: fe050517)
0:18:35.201531	LOG	Server <---------- DUT
0:18:35.204510	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 062f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:18:40.209668	LOG	Server ----------> DUT
0:18:40.212667	LOG	Send Test Command TxFramesCtrlReq process completed
0:18:40.215664	LOG	Send Test Command TxFramesCtrlReq process starts
0:18:45.199312	LOG	PUSH_ACK: 02 0d67 01
0:18:45.202308	LOG	PUSH_DATA: Protocol version = 02, Token = 0d67, Identifier = 00, JSON = {'rxpk': [{'tmst': 1917745654, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAVgkBCb1dMqKK'}]}
0:18:45.204307	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0956, FOpts:), FPort: 01, FRMPayload: 047c, MIC: 5d32a28a)
0:18:45.205309	LOG	Server <---------- DUT
0:18:45.207306	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0631, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:18:55.207626	LOG	PUSH_DATA: Protocol version = 02, Token = 0d69, Identifier = 00, JSON = {'rxpk': [{'tmst': 1927750915, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAWAkBegwoZeQs'}]}
0:18:55.208627	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0958, FOpts:), FPort: 01, FRMPayload: 047e, MIC: 2865e42c)
0:18:55.209627	LOG	Server <---------- DUT
0:18:55.211624	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0633, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAWwkBudN5wWFD'}]}
0:19:10.216355	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 095b, FOpts:), FPort: 01, FRMPayload: 0480, MIC: 79c16143)
0:19:10.217354	LOG	Server <---------- DUT
0:19:10.219354	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0635, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:19:20.224577	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0637, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c3c17368)
0:19:30.231002	LOG	Frame command sent to the DUT
0:19:30.233001	LOG	PULL_RESP: Protocol version = 02, Token = 116a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1964769262, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAAOQbgRCA8K5rEZwINwF+0mvX+LH5mIWaDAHqlaXhVzMA621SjqyNw7xbfnN+VVBrCZGE630rPPSXql2hov86sRpUwwQj8mYUe9SsvMBTKuGoUMqNkPit2BcR+3cGjluOtr1GBImBM/27/7Q9VoRFjGltHAuCTIMPBc2g='}}
0:19:30.233999	LOG	Server ----------> DUT
0:19:30.236996	LOG	Send Test Command TxFramesCtrlReq process completed
0:19:30.239996	LOG	Send Test Command TxFramesCtrlReq process starts
0:19:35.225140	LOG	PUSH_ACK: 02 0d72 01
0:19:35.228138	LOG	PUSH_DATA: Protocol version = 02, Token = 0d72, Identifier = 00, JSON = {'rxpk': [{'tmst': 1967771886, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAYAkBHWp7vzMx'}]}
0:19:35.229137	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0960, FOpts:), FPort: 01, FRMPayload: 0485, MIC: 7bbf3331)
0:19:35.230137	LOG	Server <---------- DUT
0:19:35.233136	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 063a, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101

		'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAAOwbgtq1xuakiNHidTwHxvKfMIKcPceLQhcrS55R2vbhecNLX/cL6S4oTwFCyon3U5y6Y64ZLYfce+LdnfUK5Xi6aShZz9/dHyeS+ZMMVx0gtdPGmM+ulNBY+krG6Tvw4cKArUsOS8xCAKDGOWUtnriw7QCDvkM15Src='}}
0:19:40.239221	LOG	Server ----------> DUT
0:19:40.242219	LOG	Send Test Command TxFramesCtrlReq process completed
0:19:40.247215	LOG	Send Test Command TxFramesCtrlReq process starts
0:19:45.232057	LOG	PUSH_ACK: 02 0d75 01
0:19:45.241051	LOG	PUSH_DATA: Protocol version = 02, Token = 0d75, Identifier = 00, JSON = {'rxpk': [{'tmst': 1977777146, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAYgkBd29IpRti'}]}
0:19:45.244046	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0962, FOpts:), FPort: 01, FRMPayload: 0487, MIC: 48a51b62)
0:19:45.247043	LOG	Server <---------- DUT
0:19:45.248042	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 063c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:19:50.246953	LOG	Server ----------> DUT
0:19:50.249950	LOG	Send Test Command TxFramesCtrlReq process completed
0:19:50.252950	LOG	Send Test Command TxFramesCtrlReq process starts
0:19:55.235441	LOG	PUSH_ACK: 02 0d77 01
0:19:55.237441	LOG	PUSH_DATA: Protocol version = 02, Token = 0d77, Identifier = 00, JSON = {'rxpk': [{'tmst': 1987782399, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAZAkBCvrdrJD8'}]}
0:19:55.239440	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0964, FOpts:), FPort: 01, FRMPayload: 0489, MIC: ddac90fc)
0:19:55.241438	LOG	Server <---------- DUT
0:19:55.243438	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 063e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:20:05.247991	LOG	PUSH_DATA: Protocol version = 02, Token = 0d7a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1997787650, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAZgkBVOLK9j2K'}]}
0:20:05.250990	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0966, FOpts:), FPort: 01, FRMPayload: 048b, MIC: caf63d8a)
0:20:05.253988	LOG	Server <---------- DUT
0:20:05.257988	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0640, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:20:15.253448	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0968, FOpts:), FPort: 01, FRMPayload: 048d, MIC: 999e2acc)
0:20:15.254448	LOG	Server <---------- DUT
0:20:15.256447	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0642, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

		07000101010101010101010

0:20:35.269558	LOG	PULL_RESP: Protocol version = 02, Token = b41c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2029803381, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAARgbgvWDoSC9SCl7PefV6ID1aPdDd/WDAmne/EpgOK2ZTkiNM6DvLltHS85abr1rtZn7AbueaGmwx8C43BCFzXp7RvqyR9AP9QPGOLVfDv14hHp676aGC2ITSpZx5GLZKPt3SHRygTVgCu/FD81FSGkxbUWnYJ8MF1IM='}}
0:20:35.271556	LOG	Server ----------> DUT
0:20:35.279530	LOG	Send Test Command TxFramesCtrlReq process completed
0:20:35.284547	LOG	Send Test Command TxFramesCtrlReq process starts
0:20:37.369253	LOG	PULL_DATA: 02 533c 02 aa555a0000240409
0:20:37.371251	LOG	PULL_ACK: 02 533c 04
0:20:40.259608	LOG	PUSH_ACK: 02 0d84 01
0:20:40.261609	LOG	PUSH_DATA: Protocol version = 02, Token = 0d84, Identifier = 00, JSON = {'rxpk': [{'tmst': 2032806006, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAbQkBtlDirbrF'}]}
0:20:40.262606	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 096d, FOpts:), FPort: 01, FRMPayload: 0492, MIC: e2adbac5)
0:20:40.264606	LOG	Server <---------- DUT
0:20:40.266604	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0647, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		+97nijX4AilDxN+sGMiDzAgn/kZPbL0b1QVqrReUHkoTi17jK5lhqKOzIGsmxqZqsbriPEogz7HJxk0MAKir3ygkE/VhEOfYqxDe39ZJQcQVIDEtQM='}}
0:20:45.277449	LOG	Server ----------> DUT
0:20:45.280447	LOG	Send Test Command TxFramesCtrlReq process completed
0:20:45.283445	LOG	Send Test Command TxFramesCtrlReq process starts
0:20:47.379274	LOG	PULL_DATA: 02 14e1 02 aa555a0000240409
0:20:47.380274	LOG	PULL_ACK: 02 14e1 04
0:20:50.264616	LOG	PUSH_ACK: 02 0d86 01
0:20:50.269614	LOG	PUSH_DATA: Protocol version = 02, Token = 0d86, Identifier = 00, JSON = {'rxpk': [{'tmst': 2042811258, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAbwkBt1HlMz5R'}]}
0:20:50.273612	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 096f, FOpts:), FPort: 01, FRMPayload: 0494, MIC: e5333e51)
0:20:50.277611	LOG	Server <---------- DUT
0:20:50.282624	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0649, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

0:20:57.589112	LOG	PULL_DATA: 02 8cde 02 aa555a0000240409
0:20:57.591111	LOG	PULL_ACK: 02 8cde 04
0:21:00.270587	LOG	PUSH_ACK: 02 0d88 01
0:21:00.272585	LOG	PUSH_DATA: Protocol version = 02, Token = 0d88, Identifier = 00, JSON = {'rxpk': [{'tmst': 2052816518, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAcQkBpqtPs3ma'}]}
0:21:00.274584	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0971, FOpts:), FPort: 01, FRMPayload: 0496, MIC: 4fb3799a)
0:21:00.275584	LOG	Server <---------- DUT
0:21:00.276587	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 064b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAcwkBl6Pve+sJ'}]}
0:21:10.277854	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0973, FOpts:), FPort: 01, FRMPayload: 0498, MIC: ef7beb09)
0:21:10.279853	LOG	Server <---------- DUT
0:21:10.281852	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 064d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:21:20.286419	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 064f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 02150111)
0:21:30.295659	LOG	Frame command sent to the DUT
0:21:30.296658	LOG	PULL_RESP: Protocol version = 02, Token = fbfb, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2084832253, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAAUQbgOrV83FGxC42Q4hHF1E5eBKB+L0yMnABQJDfw1RkHwRrAGOCXeSiXOxortFfDehw5D8Rze4Oq+TF2TN16CmKCb4nSOqXxVL83+aItyZy9/JYNScKzv8vlBT2rJZ9JwecNqWAQZDCx3KRQnBlTdcLlH9M4sgIVARE='}}
0:21:30.297658	LOG	Server ----------> DUT
0:21:30.301655	LOG	Send Test Command TxFramesCtrlReq process completed
0:21:30.304653	LOG	Send Test Command TxFramesCtrlReq process starts
0:21:35.287565	LOG	PUSH_ACK: 02 0d90 01
0:21:35.290564	LOG	PUSH_DATA: Protocol version = 02, Token = 0d90, Identifier = 00, JSON = {'rxpk': [{'tmst': 2087834871, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAeAkBfFEcXkSI'}]}
0:21:35.291563	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0978, FOpts:), FPort: 01, FRMPayload: 049d, MIC: 1c5e4488)
0:21:35.292562	LOG	Server <---------- DUT
0:21:35.294562	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0652, FOpts:), FPort: e0, FRMPayload: 070001), MIC: aab2f09e)
0:21:35.296560	LOG	Frame command sent to the DUT
0:21:35.297560	LOG	PULL_RESP: Protocol version = 02, Token = 0e3f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2089834871, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAAUgbgmvrL4C3X9kOLylUBTtczP495dGOV4QjFwiG2w3mss1ewyhAnozM1ZOFznniIQjZuNQg5XBKg3lpPCzJOIFB2BN78mkAovTaK8BNHVvwhcea2ibrYXWtCufZEUbdH3YIu+F8GqKZBVOXgmCMbOUxPeCS2qqqy8J4='}}
0:21:35.298559	LOG	Server ----------> DUT
0:21:35.301557	LOG	Send Test Command TxFramesCtrlReq process completed
0:21:35.306555	LOG	Send Test Command TxFramesCtrlReq process starts
0:21:38.028399	LOG	PULL_DATA: 02 9394 02 aa555a0000240409
0:21:38.030398	LOG	PULL_ACK: 02 9394 04
0:21:40.291142	LOG	PUSH_ACK: 02 0d93 01
0:21:40.294141	LOG	PUSH_DATA: Protocol version = 02, Token = 0d93, Identifier = 00, JSON = {'rxpk': [{'tmst': 2092837497, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAeQkBpj//LVae'}]}
0:21:40.296140	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0979, FOpts:), FPort: 01, FRMPayload: 049e, MIC: ff2d569e)
0:21:40.297111	LOG	Server <---------- DUT
0:21:40.299109	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0653, FOpts:), FPort: e0, FRMPayload: 070001), MIC: 26f2c1c5)
0:21:40.300107	LOG	Frame command sent to the DUT
0:21:40.302106	LOG	PULL_RESP: Protocol version = 02, Token = af89, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2094837497, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 128, 'data': 'YCAgICAAUwbggWYoj1PGRfYM7QTCtOrx2nuEXFvzTVjNqvGe9w8iHeIqYCaqCA9e7FOgfmaDRtYvJ8B7VQpPqfrIM7vZmhFMlTXxBI5CBfN0C+hEJ6CGLaIU/beKPG67ud51W8V8IIrGEY2T9bBnXjfj32BSH4Mj94PO3ibywcU='}}
0:21:40.303105	LOG	Server ----------> DUT
0:21:40.306103	LOG	Send Test Command TxFramesCtrlReq process completed
0:21:40.310101	LOG	Send Test Command TxFramesCtrlReq process starts
0:21:45.293815	LOG	PUSH_ACK: 02 0d94 01
0:21:45.297815	LOG	PUSH_DATA: Protocol version = 02, Token = 0d94, Identifier = 00, JSON = {'rxpk': [{'tmst': 2097840123, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAegkB/12+1hWb'}]}
0:21:45.298814	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 097a, FOpts:), FPort: 01, FRMPayload: 049f, MIC: bed6159b)
0:21:45.300813	LOG	Server <---------- DUT
0:21:45.301811	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0654, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:21:50.307587	LOG	Server ----------> DUT
0:21:50.311583	LOG	Send Test Command TxFramesCtrlReq process completed
0:21:50.318578	LOG	Send Test Command TxFramesCtrlReq process starts
0:21:55.298913	LOG	PUSH_ACK: 02 0d96 01
0:21:55.300912	LOG	PUSH_DATA: Protocol version = 02, Token = 0d96, Identifier = 00, JSON = {'rxpk': [{'tmst': 2107845369, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAfAkBOOJpuYvd'}]}
0:21:55.301911	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 097c, FOpts:), FPort: 01, FRMPayload: 04a1, MIC: 69b98bdd)
0:21:55.302911	LOG	Server <---------- DUT
0:21:55.304910	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0656, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:22:05.304643	LOG	PUSH_DATA: Protocol version = 02, Token = 0d98, Identifier = 00, JSON = {'rxpk': [{'tmst': 2117850622, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAfgkB1OfyGOMC'}]}
0:22:05.306643	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 097e, FOpts:), FPort: 01, FRMPayload: 04a3, MIC: f218e302)
0:22:05.307641	LOG	Server <---------- DUT
0:22:05.308640	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0658, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:22:15.322432	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0980, FOpts:), FPort: 01, FRMPayload: 04a5, MIC: cf67c279)
0:22:15.325431	LOG	Server <---------- DUT
0:22:15.331427	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 065a, FOpts:), FPort: e0, FRMPayload: 09), MIC: 77799eef)
0:22:15.333426	LOG	Frame command sent to the DUT
0:22:15.335425	LOG	PULL_RESP: Protocol version = 02, Token = 8ff2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2129855851, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAWgbgTHd5nu8='}}
0:22:15.337422	LOG	Server ----------> DUT
0:22:15.340420	LOG	TX_ACK: 02 8ff2 05 aa555a0000240409
0:22:18.487904	LOG	PULL_DATA: 02 a11f 02 aa555a0000240409
0:22:18.489904	LOG	PULL_ACK: 02 a11f 04
0:22:20.293877	LOG	PUSH_ACK: 02 0d9d 01
0:22:20.295875	LOG	PUSH_DATA: Protocol version = 02, Token = 0d9d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2132866547, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 16, 'data': 'QCAgICCAgQngLq17dR1d9g=='}]}
0:22:20.297875	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0981, FOpts:), FPort: e0, FRMPayload: 09a604, MIC: 751d5df6)
0:22:20.299873	LOG	Server <---------- DUT
0:22:20.300872	LOG	Answer in payload: a604
0:22:20.302872	LOG	Frame Command Payload in the Answer: 09a604
0:22:20.310867	LOG	RX Count received by DUT: 1190
0:22:20.314864	LOG	Send Test Command RxAppCntReq process completed
0:22:20.329856	LOG	End Test Step: Test packet error rate for SF9BW125 using RX2 window
0:22:20.334853	LOG	Partial Verdict: PASS
0:22:20.340850	LOG	==========
0:22:20.348845	LOG	==========
0:22:20.369833	LOG	Start Test Step: Test packet error rate for SF8BW125 using RX2 window
0:22:20.386823	LOG	Send RXParamSetupReq process starts
0:22:25.281747	LOG	PUSH_ACK: 02 0d9e 01
0:22:25.283745	LOG	PUSH_DATA: Protocol version = 02, Token = 0d9e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2137861091, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAggkBQsaHhRmK'}]}
0:22:25.284745	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0982, FOpts:), FPort: 01, FRMPayload: 04a6, MIC: 8785198a)
0:22:25.285744	LOG	Server <---------- DUT
0:22:25.287743	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 065b, FOpts:), FPort: 00, FRMPayload: 0504d2ad84), MIC: 405b9830)
0:22:25.289742	LOG	PULL_RESP: Protocol version = 02, Token = e781, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2139861091, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAWwYAMIVLgDJAW5gw'}}
0:22:25.291741	LOG	Server ----------> DUT
0:22:25.294739	LOG	TX_ACK: 02 e781 05 aa555a0000240409
0:22:28.648437	LOG	PULL_DATA: 02 2eb8 02 aa555a0000240409
0:22:28.650436	LOG	PULL_ACK: 02 2eb8 04
0:22:30.318487	LOG	PUSH_ACK: 02 0d9f 01
0:22:30.320485	LOG	PUSH_DATA: Protocol version = 02, Token = 0d9f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2142868861, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCgwkFBwHQWkxts5I='}]}

0:22:30.321485	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0983, FOpts: 0507), FPort: 01, FRMPayload: 04a6, MIC: 4c6db392)
0:22:30.323484	LOG	Server <---------- DUT
0:22:30.325483	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:22:30.326482	LOG	Command Answer: 0507
0:22:30.339474	LOG	MAC command communication completed
0:22:30.348470	LOG	Send Test Command RxAppCntReq process starts
0:22:35.305861	LOG	PUSH_ACK: 02 0da0 01
0:22:35.307855	LOG	PUSH_DATA: Protocol version = 02, Token = 0da0, Identifier = 00, JSON = {'rxpk': [{'tmst': 2147871493, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 17, 'data': 'QCAgICCChAkFBwGOpBlEBdQ='}]}
0:22:35.309856	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0984, FOpts: 0507), FPort: 01, FRMPayload: 04a6, MIC: 194405d4)
0:22:35.310856	LOG	Server <---------- DUT
0:22:35.312854	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 065c, FOpts:), FPort: e0, FRMPayload: 09), MIC: d4cd6d7b)
0:22:35.314852	LOG	Frame command sent to the DUT
0:22:35.316853	LOG	PULL_RESP: Protocol version = 02, Token = 79b9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2149871493, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAXAbgSdTNbXs='}}
0:22:35.317851	LOG	Server ----------> DUT
0:22:35.321848	LOG	TX_ACK: 02 79b9 05 aa555a0000240409
0:22:38.677610	LOG	PULL_DATA: 02 a775 02 aa555a0000240409
0:22:38.679609	LOG	PULL_ACK: 02 a775 04
0:22:40.297688	LOG	PUSH_ACK: 02 0da2 01
0:22:40.299687	LOG	PUSH_DATA: Protocol version = 02, Token = 0da2, Identifier = 00, JSON = {'rxpk': [{'tmst': 2152877052, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 16, 'data': 'QCAgICCAhQngfxJO+25Kiw=='}]}
0:22:40.300688	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0985, FOpts:), FPort: e0, FRMPayload: 09a704, MIC: fb6e4a8b)
0:22:40.301704	LOG	Server <---------- DUT
0:22:40.303685	LOG	Answer in payload: a704
0:22:40.304686	LOG	Frame Command Payload in the Answer: 09a704
0:22:40.309681	LOG	RX Count received by DUT: 1191
0:22:40.312679	LOG	Send Test Command RxAppCntReq process completed
0:22:40.316677	LOG	Send Test Command TxFramesCtrlReq process starts
0:22:45.285905	LOG	PUSH_ACK: 02 0da3 01
0:22:45.287906	LOG	PUSH_DATA: Protocol version = 02, Token = 0da3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2157871604, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAhgkBv6npWuPx'}]}
0:22:45.289903	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0986, FOpts:), FPort: 01, FRMPayload: 04a7, MIC: e95ae3f1)
0:22:45.290903	LOG	Server <---------- DUT
0:22:45.292903	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 065d, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4b45834c)
0:22:45.294900	LOG	Frame command sent to the DUT
0:22:45.296901	LOG	PULL_RESP: Protocol version = 02, Token = 1435, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2159871604, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAXQbgXkF6HqQjzVoxLgvyCI235Uwk9Q0BgxOlUdRWea3SWvI/Hr1yXjzzjJWxPrldRlN5NiHYQcj2G33lRcb8mrsD51TvSddPbyNVYenU/Xs9GLtShuZL8mQKRI4q7emehieagOkWC39PqwC/oUFQrko7hyRe8z/ckvXMfMvBu3ULNH1WG2jadRgI8g+HZh7lvOKtT08tZXpMvy87nX2AIeuXPXujQBCmhk4nkkDSAFUNAUt4UFSOv9oCOveusCNhva1ReG6lH9XL23K3r6Tcdo1BVbllXvOz5j5PZXUfCQUTd1/X6QpijNHT65FFO60fV2NIoz1LRYNM'}}
0:22:45.297899	LOG	Server ----------> DUT
0:22:45.300897	LOG	Send Test Command TxFramesCtrlReq process completed
0:22:45.303895	LOG	Send Test Command TxFramesCtrlReq process starts
0:22:48.868116	LOG	PULL_DATA: 02 f4e6 02 aa555a0000240409
0:22:48.873114	LOG	PULL_ACK: 02 f4e6 04
0:22:50.296305	LOG	PUSH_ACK: 02 0da4 01
0:22:50.297303	LOG	PUSH_DATA: Protocol version = 02, Token = 0da4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2162874231, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAhwkBwZgkvM3r'}]}
0:22:50.299302	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0987, FOpts:), FPort: 01, FRMPayload: 04a8, MIC: 24bccdeb)
0:22:50.300301	LOG	Server <---------- DUT
0:22:50.302300	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 065e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:22:55.304469	LOG	Server <---------- DUT
0:22:55.305467	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 065f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:23:00.318612	LOG	Send Test Command TxFramesCtrlReq process starts
0:23:05.303459	LOG	PUSH_ACK: 02 0da7 01
0:23:05.305458	LOG	PUSH_DATA: Protocol version = 02, Token = 0da7, Identifier = 00, JSON = {'rxpk': [{'tmst': 2177882077, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAigkBorqNJ4d4'}]}
0:23:05.306459	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 098a, FOpts:), FPort: 01, FRMPayload: 04ab, MIC: 8d278778)
0:23:05.307458	LOG	Server <---------- DUT
0:23:05.309457	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0661, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'size': 255, 'data': 'YCAgICAAYgbgP7nPtEUtV6Nmg4X6KoPLSsbSX8Nj3I+bgCS1/U0WtGrTRgCqtHzmOGvDYFcutPBWMBpDg2KF2vuRzVJEbvUX83nM+2ZdX4a7CeScQieFVAOP3PpgYrsAWyMaXp1zELy5irnnUYfVr65JORMKVGIrbrCAJeueErlKtEwI85Cri3qNm+4u5ipf+5QN0uUXFHUL493vucUcOCY97qHyv7vvipzd2T+I5IsW0jV8bpwR8zER8Iu8iz3lAynca8qIjNpOOos9uKNi9+xMsOfS7frqdMV0x2oJzeTXG/AXOQ1kU1lWoXI6Jp4Bv15gU4u71R7L3zlwYCxM'}}
0:23:10.317921	LOG	Server ----------> DUT
0:23:10.320919	LOG	Send Test Command TxFramesCtrlReq process completed
0:23:10.325917	LOG	Send Test Command TxFramesCtrlReq process starts
0:23:15.309146	LOG	PUSH_ACK: 02 0daa 01
0:23:15.311145	LOG	PUSH_DATA: Protocol version = 02, Token = 0daa, Identifier = 00, JSON = {'rxpk': [{'tmst': 2187887337, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAjAkBhuQZt6mi'}]}
0:23:15.312146	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 098c, FOpts:), FPort: 01, FRMPayload: 04ad, MIC: 19b7a9a2)
0:23:15.314145	LOG	Server <---------- DUT
0:23:15.315143	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0663, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101). MIC: a4278b65)
0:23:20.321984	LOG	Frame command sent to the DUT
0:23:20.323983	LOG	PULL_RESP: Protocol version = 02, Token = 05f3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2194889956, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAZAbgH2w6XdfVEzo76vXanfopXrq8ej1t/UN+E/D88sVYmE/rIslNfsW8N38XMm049d+jqSsq6HcIDmDz24D+5oC1+fSVDY5DZ9XNP876WSOwzFDMamzIZ9R0UTSxgbwzSGpgfejKdMb2kMNO1h5HRlndko3Sk2ZgFidu7WT7NmOIWJOR37y9cQsLlp5+IfIvQ38+lPwUEwUcsnE95gwtaZLzOlP1fI0r23jerCTo/kcCs/MAHIvz8icbf00JztG1PXwwW0otxn8K3Y9mUhKFfzaMXdibq/hXj6oOoO98WLhFWpj29aw23Gmsdu9xVbB4iiOoYdCkJ4tl'}}
0:23:20.324982	LOG	Server ----------> DUT
0:23:20.328980	LOG	Send Test Command TxFramesCtrlReq process completed
0:23:20.332978	LOG	Send Test Command TxFramesCtrlReq process starts
0:23:25.315323	LOG	PUSH_ACK: 02 0dac 01
0:23:25.317322	LOG	PUSH_DATA: Protocol version = 02, Token = 0dac, Identifier = 00, JSON = {'rxpk': [{'tmst': 2197892581, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAjgkBV+fU43tt'}]}
0:23:25.318323	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 098e, FOpts:), FPort: 01, FRMPayload: 04af, MIC: d4e37b6d)
0:23:25.320322	LOG	Server <---------- DUT
0:23:25.321320	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0665, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101). MIC: a6cea821)
0:23:25.324319	LOG	Frame command sent to the DUT
0:23:25.326319	LOG	PULL_RESP: Protocol version = 02, Token = 88e3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2199892581, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAZQbgT4B2p/MJ4PQuRlSp38JjAnKdiAeFe5qENoE35qndJwjGNJuh1LN56y6oMEu9ei99T+07rFn1TEZsOD5d3i5iXOTnXeIBzJx5JwEVWlzKuRovZ1hD2VSVGkFF+z9Hq2nx2ro9ZP1RLsP7puoRqnC/FUIHl29F/Ekl+ZSB93vkzn/e03paBdUmPQt5Cow/rvGDtMw55ZDf6G9DA5TNn3Y3iOPzFJBa+2jtCEM+WSB42tt7T2EsOiVmVR6EsVlQ0/jo68/FUd/LS2lHElWH+VlHJ8LfhLjuuY2UrYqLCsMNUps7xGCOH0ZN/0bIyXRbYpkYl7emzqgh'}}
0:23:25.327334	LOG	Server ----------> DUT
0:23:25.331314	LOG	Send Test Command TxFramesCtrlReq process completed
0:23:25.334315	LOG	Send Test Command TxFramesCtrlReq process starts
0:23:29.107891	LOG	PULL_DATA: 02 b395 02 aa555a0000240409
0:23:29.109890	LOG	PULL_ACK: 02 b395 04
0:23:30.318205	LOG	PUSH_ACK: 02 0dad 01
0:23:30.320203	LOG	PUSH_DATA: Protocol version = 02, Token = 0dad, Identifier = 00, JSON = {'rxpk': [{'tmst': 2202895225, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAjwkBDP6VY9gW'}]}
0:23:30.322202	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 098f, FOpts:), FPort: 01, FRMPayload: 04b0, MIC: 9563d816)
0:23:30.323200	LOG	Server <---------- DUT
0:23:30.326199	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0666, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:23:35.335738	LOG	Server ----------> DUT
0:23:35.338737	LOG	Send Test Command TxFramesCtrlReq process completed
0:23:35.346732	LOG	Send Test Command TxFramesCtrlReq process starts
0:23:39.117769	LOG	PULL_DATA: 02 feae 02 aa555a0000240409
0:23:39.119769	LOG	PULL_ACK: 02 feae 04
0:23:40.321084	LOG	PUSH_ACK: 02 0db0 01
0:23:40.323084	LOG	PUSH_DATA: Protocol version = 02, Token = 0db0, Identifier = 00, JSON = {'rxpk': [{'tmst': 2212900464, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAkQkBwnssfyi8'}]}
0:23:40.325082	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0991, FOpts:), FPort: 01, FRMPayload: 04b2, MIC: 2c7f28bc)
0:23:40.326082	LOG	Server <---------- DUT
0:23:40.328081	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0668, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:23:45.336426	LOG	PULL_RESP: Protocol version = 02, Token = 0f56, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2219903105, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAaQbg4E/wXIpJp0WCPz+VvheF8dkeoZlaNll/aDZFXTLOfFj7NcKZqEjo5CuwXGeAzVeFvmKdJhFRng+y2mnNlan60hKYTcKH1u8zRhKDjIg5uChQy/vzw3dR+yxdz8agg1rz9dM+020yo29joYcZ2dYhvPDEEv0A6EGCtpEpjnwUNhOSZ1tufhrIMPt0ZP39bDnHXt3R2NCLB+bB9bJDrvcVitBh8MrYAL8wMHrmHmSs3v5zGhVaLZNfO2nUT5IROOxjKi7roQ/qKYI6p/LdR5fkrTnfrg1XqPj/p+4V+rcIBg8/DsAE7yM1UKThMiRD4Gv/UbIqMatf'}}
0:23:45.337425	LOG	Server ----------> DUT
0:23:45.340422	LOG	Send Test Command TxFramesCtrlReq process completed
0:23:45.345418	LOG	Send Test Command TxFramesCtrlReq process starts
0:23:49.327675	LOG	PULL_DATA: 02 a40b 02 aa555a0000240409
0:23:49.331674	LOG	PULL_ACK: 02 a40b 04
0:23:50.329106	LOG	PUSH_ACK: 02 0db2 01
0:23:50.331106	LOG	PUSH_DATA: Protocol version = 02, Token = 0db2, Identifier = 00, JSON = {'rxpk': [{'tmst': 2222905722, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAkwkBFf4qGNpu'}]}
0:23:50.332105	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0993, FOpts:), FPort: 01, FRMPayload: 04b4, MIC: 2a18da6e)
0:23:50.333105	LOG	Server <---------- DUT
0:23:50.335103	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 066a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

		0700010101010101010101

0:24:05.337941	LOG	PUSH_DATA: Protocol version = 02, Token = 0db5, Identifier = 00, JSON = {'rxpk': [{'tmst': 2237913608, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAlgkBi0pOtNVh'}]}
0:24:05.338940	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0996, FOpts:), FPort: 01, FRMPayload: 04b7, MIC: 4eb4d561)
0:24:05.339939	LOG	Server <---------- DUT
0:24:05.341938	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 066d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		SMTgQr2IAIHqFm5OBabP2eVCYgVM8hQwhSJ2c28jgjWDwBSXaWaERLNzFMInskorudu9avX0xhNmsrE1tDEVslEdQkHvnzFNaeFZ42gm/ksmglwVLaU7M7tq9jOSbq6RwEGGZdZ8HSSfsdvXzDNxcMWY9ZsXYdMRhlUR4HJEnK5FMCCJyUf6mWiWZL4EUQvSK7MJgkGQdbC4fX61twAr8A+Q2DYfGxnP'}}
0:24:10.351350	LOG	Server ----------> DUT
0:24:10.354348	LOG	Send Test Command TxFramesCtrlReq process completed
0:24:10.358346	LOG	Send Test Command TxFramesCtrlReq process starts
0:24:15.341171	LOG	PUSH_ACK: 02 0db8 01
0:24:15.343169	LOG	PUSH_DATA: Protocol version = 02, Token = 0db8, Identifier = 00, JSON = {'rxpk': [{'tmst': 2247918852, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAmAkBWVU99ga9'}]}
0:24:15.345168	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0998, FOpts:), FPort: 01, FRMPayload: 04b9, MIC: 3df606bd)
0:24:15.346168	LOG	Server <---------- DUT
0:24:15.348167	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 066f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4f7f4298)
0:24:20.353709	LOG	Frame command sent to the DUT
0:24:20.354706	LOG	PULL_RESP: Protocol version = 02, Token = 5a34, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2254921486, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAcAbgvj+AaPIKY4CBMsT1/XW2AiU2oDozcFsIp/ovngKRm73b/3NuMbKxb5ohB7oXxi2Effg+jczrB+byFsvTfU2qcepMypUeyYtdN6/HmWbbpqJK/wu+PhKWDnzzDFxTcgxVE69ljfsCYkAZEVDq4AQ/Ngo4CKSQ5oSwxYX1IqMb40+Zz1Wdn/0BigWU5vjMd/sEU2pLGOfvSSdnfGsjZIG4rkc7MpAvfmu0Qbfj85ewPEaXCs1G9CIclj7/2549GfTKL6gT5/wEiFrr0XOs9/W/aoplMUTcJY5PoS6ypxcPUX9ZfLDuWY/nDIksaYVb/nQ7Gh5Pf0KY'}}
0:24:20.355707	LOG	Server ----------> DUT
0:24:20.359705	LOG	Send Test Command TxFramesCtrlReq process completed
0:24:20.362702	LOG	Send Test Command TxFramesCtrlReq process starts
0:24:25.345674	LOG	PUSH_ACK: 02 0dba 01
0:24:25.347671	LOG	PUSH_DATA: Protocol version = 02, Token = 0dba, Identifier = 00, JSON = {'rxpk': [{'tmst': 2257924103, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAmgkByJLSJ3c6'}]}
0:24:25.348670	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 099a, FOpts:), FPort: 01, FRMPayload: 04bb, MIC: d227773a)
0:24:25.349672	LOG	Server <---------- DUT
0:24:25.351669	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0671, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:24:30.352146	LOG	Server <---------- DUT
0:24:30.355144	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0672, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:24:39.779249	LOG	PULL_ACK: 02 0c9a 04
0:24:40.353922	LOG	PUSH_ACK: 02 0dbe 01
0:24:40.355920	LOG	PUSH_DATA: Protocol version = 02, Token = 0dbe, Identifier = 00, JSON = {'rxpk': [{'tmst': 2272931958, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAnQkBpIvIjlab'}]}
0:24:40.357920	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 099d, FOpts:), FPort: 01, FRMPayload: 04be, MIC: c88e569b)
0:24:40.358919	LOG	Server <---------- DUT
0:24:40.360917	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0674, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		A3HVJdwZBOG3CFtvOuP+t6utAmSKnOkwlrNNKIkNWp8osHHoJ6M1TIqQNyB85Rif3EyW2oQ9jKJBRUh0yQFHXUm/pjyTXZpvJK+5rZ03UPolzFh/ybeFCebjqxA6rKQJMOn2+TRp8yHxacn6/eNA8bX0y5cQM+aXi0aG+anWHAKTjcfKhWlBV1wvC1YMJ8kPkQSS61D96O0UE4uPc/lsw2mavK'}}
0:24:45.368383	LOG	Server ----------> DUT
0:24:45.371380	LOG	Send Test Command TxFramesCtrlReq process completed
0:24:45.375379	LOG	Send Test Command TxFramesCtrlReq process starts
0:24:49.787171	LOG	PULL_DATA: 02 4aae 02 aa555a0000240409
0:24:49.792168	LOG	PULL_ACK: 02 4aae 04
0:24:50.358845	LOG	PUSH_ACK: 02 0dc0 01
0:24:50.360845	LOG	PUSH_DATA: Protocol version = 02, Token = 0dc0, Identifier = 00, JSON = {'rxpk': [{'tmst': 2282937193, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAnwkBswii5Oxl'}]}
0:24:50.362843	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 099f, FOpts:), FPort: 01, FRMPayload: 04c0, MIC: a2e4ec65)
0:24:50.363842	LOG	Server <---------- DUT
0:24:50.365841	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0676, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 15efd46c)
0:24:55.373217	LOG	Frame command sent to the DUT
0:24:55.374216	LOG	PULL_RESP: Protocol version = 02, Token = 6de6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2289939811, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAdwbgGnJ2hsBJGNYcFVGqObW/IAko7VzAtEtLJAEPxRPQDCSw0aBYmD1p9+/mXbT9UixJozb+HrJs6fIqyVNpgCxUKoRs7C2AYOUw/F5X/z9Fs2HYGlK0NxTswY0pcI1e8wce1QEJiU3lltS9i2CA2sKUq28wzxPEJaHNmr/DyIsP/5TpX0B+R3ZBMYQtYerjyeMi2wofLJWHYQeXAQu96kWqrXoEZ0+4eDo45MTyPO5ibyXFKqCwxVBZhGspFBPXf50it2pW7M//t6ShdTOgdnS5hohQR2oAGnWhvn4Vu1jVAqZjnbIOtyezkxbuQFamQ4YwyTcV79Rs'}}
0:24:55.376215	LOG	Server ----------> DUT
0:24:55.380213	LOG	Send Test Command TxFramesCtrlReq process completed
0:24:55.383211	LOG	Send Test Command TxFramesCtrlReq process starts
0:24:59.997392	LOG	PULL_DATA: 02 ba78 02 aa555a0000240409
0:24:59.999391	LOG	PULL_ACK: 02 ba78 04
0:25:00.365007	LOG	PUSH_ACK: 02 0dc2 01
0:25:00.367006	LOG	PUSH_DATA: Protocol version = 02, Token = 0dc2, Identifier = 00, JSON = {'rxpk': [{'tmst': 2292942421, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAoQkBHne9GFsx'}]}
0:25:00.369005	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09a1, FOpts:), FPort: 01, FRMPayload: 04c2, MIC: bd185b31)
0:25:00.370007	LOG	Server <---------- DUT
0:25:00.372004	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0678, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:25:05.373707	LOG	Server <---------- DUT
0:25:05.375706	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0679, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:25:10.392564	LOG	Send Test Command TxFramesCtrlReq process starts
0:25:15.371384	LOG	PUSH_ACK: 02 0dc6 01
0:25:15.373382	LOG	PUSH_DATA: Protocol version = 02, Token = 0dc6, Identifier = 00, JSON = {'rxpk': [{'tmst': 2307950273, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCApAkBb075Hqsd'}]}
0:25:15.375381	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09a4, FOpts:), FPort: 01, FRMPayload: 04c5, MIC: f91eab1d)
0:25:15.376381	LOG	Server <---------- DUT
0:25:15.378380	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 067b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'size': 255, 'data': 'YCAgICAAfAbgnQVNGMk5vE583cDMniAtYSJApt9jnZir2XaZcRIRaOSCmwT5K3hCYwLig0D2Np2jrnpZiGe61RlIvTM1Fy60P9ul32YbB01caDd/OmzXeMbzQt+vgb03T/Ye4xsRYDc55Nxj9yYHpQN5Yb1Q2QwOEXJGUl7TsfuvNALllFbluplFVpoLSoeErLWJO/aggi3lFrJnWXLh7F9pMpwNKm2xWX9+wlve5K+cFaA8JNe9gMa9jJEY0h3HIQvmjFWiVLjYcRRrRzj+uMNKAMeV0j3DZ7ww+mbFtjSyFVUK4l0k1LdPisIAjwVw+89jBrQBMAOVRPbaLns3'}}
0:25:20.386574	LOG	Server ----------> DUT
0:25:20.389574	LOG	Send Test Command TxFramesCtrlReq process completed
0:25:20.392570	LOG	Send Test Command TxFramesCtrlReq process starts
0:25:25.375244	LOG	PUSH_ACK: 02 0dc8 01
0:25:25.377244	LOG	PUSH_DATA: Protocol version = 02, Token = 0dc8, Identifier = 00, JSON = {'rxpk': [{'tmst': 2317955526, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCApgkBAKJ7hKZ/'}]}
0:25:25.379242	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09a6, FOpts:), FPort: 01, FRMPayload: 04c7, MIC: 7b84a67f)
0:25:25.380242	LOG	Server <---------- DUT
0:25:25.382241	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 067d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9fa765da)
0:25:30.387853	LOG	Frame command sent to the DUT
0:25:30.388850	LOG	PULL_RESP: Protocol version = 02, Token = 2177, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2324958151, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAfgbgL/hThor/3fNikneAdP1M5eM2NMvBvSzVniNDPgVEotAmAV/QniggY6iZJymzEd/qBk3mfkgvHk4xRnnsAlb5LXHzuZvU6cb7g1XThY49s3VwYsNwG1AcF1gUKfg4C6IOzvnc/IUHNjcIYSTThpu0oeandxTq0p6m/zzxE7W1bx/vXhxIfNrOWOHD+32qJysk8A0KEwZRjMP0Zd0hHMC5rPdPj+ghLqEOD3mCAL5Q8PLijSrAcVgGH46ej8mW+KNJ/htDYqZ+nNgXwttFk/cAup6ysOqIp2St7t5pWoqduvEiXU30MR6PeW+bIa8Ueq7hbsqfp2Xa'}}
0:25:30.389851	LOG	Server ----------> DUT
0:25:30.392848	LOG	Send Test Command TxFramesCtrlReq process completed
0:25:30.395863	LOG	Send Test Command TxFramesCtrlReq process starts
0:25:35.381317	LOG	PUSH_ACK: 02 0dca 01
0:25:35.383316	LOG	PUSH_DATA: Protocol version = 02, Token = 0dca, Identifier = 00, JSON = {'rxpk': [{'tmst': 2327960775, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAqAkBYT47Afcx'}]}
0:25:35.385316	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09a8, FOpts:), FPort: 01, FRMPayload: 04c9, MIC: 3b01f731)
0:25:35.386315	LOG	Server <---------- DUT
0:25:35.388313	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 067f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101

0:25:40.390752	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0680, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:25:50.396435	LOG	PUSH_DATA: Protocol version = 02, Token = 0dcf, Identifier = 00, JSON = {'rxpk': [{'tmst': 2342968654, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAqwkB7NAInjUl'}]}
0:25:50.397434	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09ab, FOpts:), FPort: 01, FRMPayload: 04cc, MIC: 089e3525)
0:25:50.398434	LOG	Server <---------- DUT
0:25:50.400431	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0682, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		AHfVSo7xLs5J5sM63rKzPKO5eaKUuuZPoJsRUzhUnC0D1VMnJ4OSvMUbWPelB55pEuYYNef+DnsbtvCEHQWQlnSeLnacS31KmHlu'}}
0:25:55.404494	LOG	Server ----------> DUT
0:25:55.407491	LOG	Send Test Command TxFramesCtrlReq process completed
0:25:55.411490	LOG	Send Test Command TxFramesCtrlReq process starts
0:26:00.395056	LOG	PUSH_ACK: 02 0dd1 01
0:26:00.398056	LOG	PUSH_DATA: Protocol version = 02, Token = 0dd1, Identifier = 00, JSON = {'rxpk': [{'tmst': 2352973906, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCArQkBgng8yTgE'}]}
0:26:00.402054	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09ad, FOpts:), FPort: 01, FRMPayload: 04ce, MIC: 3cc93804)
0:26:00.406051	LOG	Server <---------- DUT
0:26:00.412048	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0684, FOpts:), FPort: e0, FRMPayload: 070001010101010101010101

0:26:05.409551	LOG	PULL_RESP: Protocol version = 02, Token = d24a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2359976531, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAhQbgBGlFspOvijqOSTxSzJ+SyJLs3x2+WEglvJQaBwKdJ7LRstY1xna6yJLxM2FPiGsC0PqjvRZMPc2Xl/nke2N7h5y0cXmP9r2ROdSGLJs8MZtku6RBbOKkEoFgSPldf7QQWF7rf5VA/Ux15QLcGxD4Rv7AH3NI1/761MzzdTviDFJGTqjGJX7JAxLLsw+NpXlAGpgvbI2KrRta54dVqoZi+l0xcCmiHStwp5BgtqGUJMyEx4lOnlU8ZHjunyx17mB/9c1mXxlh+4gHW3ilT4iIo68pWli1cVlv7N2Uz69V29anowXpnBu/0XEuL5pqlruQaeryNCSv'}}
0:26:05.411549	LOG	Server ----------> DUT
0:26:05.414547	LOG	Send Test Command TxFramesCtrlReq process completed
0:26:05.418544	LOG	Send Test Command TxFramesCtrlReq process starts
0:26:10.401000	LOG	PUSH_ACK: 02 0dd4 01
0:26:10.402998	LOG	PUSH_DATA: Protocol version = 02, Token = 0dd4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2362979150, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCArwkBVSFSNrj+'}]}
0:26:10.403996	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09af, FOpts:), FPort: 01, FRMPayload: 04d0, MIC: 5236b8fe)
0:26:10.404997	LOG	Server <---------- DUT
0:26:10.406995	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0686, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		07000101010101010101010

0:26:25.411096	LOG	PUSH_DATA: Protocol version = 02, Token = 0dd7, Identifier = 00, JSON = {'rxpk': [{'tmst': 2377987043, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAsgkBpKZx43tY'}]}
0:26:25.412096	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09b2, FOpts:), FPort: 01, FRMPayload: 04d3, MIC: 71e37b58)
0:26:25.414094	LOG	Server <---------- DUT
0:26:25.415094	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0689, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		MBpZwZPlTfdBYL2ChM1aT2V2fJLpgoWe6E3lLZqXd+l1bVnnKnWlhvoUw+qhHu9WLvGN7MuLI0trxXPmW01/uCHioSFn'}}
0:26:30.424505	LOG	Server ----------> DUT
0:26:30.427504	LOG	Send Test Command TxFramesCtrlReq process completed
0:26:30.431502	LOG	Send Test Command TxFramesCtrlReq process starts
0:26:30.846610	LOG	PULL_DATA: 02 7ba1 02 aa555a0000240409
0:26:30.848608	LOG	PULL_ACK: 02 7ba1 04
0:26:35.415043	LOG	PUSH_ACK: 02 0dd9 01
0:26:35.417041	LOG	PUSH_DATA: Protocol version = 02, Token = 0dd9, Identifier = 00, JSON = {'rxpk': [{'tmst': 2387992301, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAtAkBOD+m0mol'}]}
0:26:35.418040	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09b4, FOpts:), FPort: 01, FRMPayload: 04d5, MIC: a6d26a25)
0:26:35.419041	LOG	Server <---------- DUT
0:26:35.421038	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 068b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:26:40.426061	LOG	Frame command sent to the DUT
0:26:40.428060	LOG	PULL_RESP: Protocol version = 02, Token = 1074, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2394994919, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAjAbgbcWlvw+vLogPPIIYBid8dGeZyiZbz73Rx/Wk310CuP+bd9/F18MbXKqO1XcR8C02N5xU25uSw4Yhh9rHB+sxSWbWKvpHOyMvczpkaPnOQO0M13KPAuVrJcxFoP+TUDJqulNBr6hRSbY3O8PrYZPnizBDjTdoQfBIoBbce9nhq2qsT7YTAy+C5MbjUr9tnybJY/rQSgiwaZ4QmEtUm8xuU+ZdIiPthz4JjpJpPNlLpFvHT5UMADYvB0vc60jSfncvAAuBWx+d1e289GxscmGYwaGLq72OjdDBt1ajpceObVakCHySZ6w8PHuStTY6I5mkPZKjN1EB'}}
0:26:40.429059	LOG	Server ----------> DUT
0:26:40.433057	LOG	Send Test Command TxFramesCtrlReq process completed
0:26:40.437055	LOG	Send Test Command TxFramesCtrlReq process starts
0:26:41.056646	LOG	PULL_DATA: 02 fe92 02 aa555a0000240409
0:26:41.058645	LOG	PULL_ACK: 02 fe92 04
0:26:45.419135	LOG	PUSH_ACK: 02 0ddc 01
0:26:45.421133	LOG	PUSH_DATA: Protocol version = 02, Token = 0ddc, Identifier = 00, JSON = {'rxpk': [{'tmst': 2397997553, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAtgkBcztut3C7'}]}
0:26:45.422132	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09b6, FOpts:), FPort: 01, FRMPayload: 04d7, MIC: 6eb770bb)
0:26:45.424131	LOG	Server <---------- DUT
0:26:45.425131	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 068d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:26:50.431436	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 068e, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

0:27:00.427020	LOG	PUSH_ACK: 02 0ddf 01
0:27:00.429019	LOG	PUSH_DATA: Protocol version = 02, Token = 0ddf, Identifier = 00, JSON = {'rxpk': [{'tmst': 2413005438, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAuQkBak8BrKGM'}]}
0:27:00.431018	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09b9, FOpts:), FPort: 01, FRMPayload: 04da, MIC: 01aca18c)
0:27:00.432017	LOG	Server <---------- DUT
0:27:00.434018	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0690, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		wCXYghcCbnpDzuO/HyS/uw6Dm8+hJzo/uyv7yRvLdupsK7YH7/sY65XI80CLxE+LPXhakpB6uCNCUoynv18o5bGTWTUvOpX8k5vacXBSY/+tsoPo1Q3I+bZiU72AYwDX7+LOzbnbUHX/06O9iiBRZOlL8s3PdzSYLgMm9vpf59xuAs1Ta6K1JJu7HesBKQmXD7sHPw020z1u3DxNMXt0D0oM7sJ05ovd+GEu3vfHC3tZ+94h6TLbKdv3FEZlCgVxk20V5K8A1GCFuIkLFwArio2cF'}}
0:27:05.443164	LOG	Server ----------> DUT
0:27:05.447161	LOG	Send Test Command TxFramesCtrlReq process completed
0:27:05.451159	LOG	Send Test Command TxFramesCtrlReq process starts
0:27:10.432199	LOG	PUSH_ACK: 02 0de2 01
0:27:10.434198	LOG	PUSH_DATA: Protocol version = 02, Token = 0de2, Identifier = 00, JSON = {'rxpk': [{'tmst': 2423010681, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAuwkBqCc6uzD4'}]}
0:27:10.435198	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09bb, FOpts:), FPort: 01, FRMPayload: 04dc, MIC: 3abb30f8)
0:27:10.437196	LOG	Server <---------- DUT
0:27:10.438196	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0692, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 96df1b84)
0:27:15.442656	LOG	Frame command sent to the DUT
0:27:15.443656	LOG	PULL_RESP: Protocol version = 02, Token = a13a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2430013306, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAkwbgrIsv3D9nyyrCZrS4LK1psbQ7gw/p4dmOa4/9zhEfuj7gEOZWIOokoi268dacTqFOl6rt9LLYmXov0a1L1iduS1IZlOMsJW8d1LoCulLYpJthmPRFEE3BfXmr/GJqLuNOKeIqrJvg0+NrK1V6naIeb+4dpAS3imPRiwaMLgZIgAJYCQt2z5NVnS95zPPxCQxEHUashGT4Al+neuemGK6FmyiuNHtPiWAO1+UpNw/cwT1pX1ZDt3ZG5hLEjuEOR1O823b8rpxqgHZQhHnf4A9+OkrnvuV06P4U5zSy85OZr3XbksN79ZIRQ9PR+uqSbcOiYJqW3xuE'}}
0:27:15.444655	LOG	Server ----------> DUT
0:27:15.448653	LOG	Send Test Command TxFramesCtrlReq process completed
0:27:15.452650	LOG	Send Test Command TxFramesCtrlReq process starts
0:27:20.438812	LOG	PUSH_ACK: 02 0de4 01
0:27:20.442810	LOG	PUSH_DATA: Protocol version = 02, Token = 0de4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2433015931, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAvQkBogJXHoSX'}]}
0:27:20.444808	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09bd, FOpts:), FPort: 01, FRMPayload: 04de, MIC: 571e8497)
0:27:20.445808	LOG	Server <---------- DUT
0:27:20.447807	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0694, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101)
0:27:20.450806	LOG	Frame command sent to the DUT
0:27:20.452804	LOG	PULL_RESP: Protocol version = 02, Token = a80d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2435015931, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAlAbgykvwJ5gVwyo7Kz1HbfVxNTBOCHABEjy/HTDLsWULUiOTVRxufue2bKMu2tfg60h6FrDpeszoqQhlbF0jW3dV/jkmCDg5vCbniCydaR3dGGo9cX/Mo7ZQ4uz29p5E9woU3ICT/r6Jkig5Vtp2RjCFWVWjsiMc67H7fGFU+xYWWW+9oDJkcz0Jp22Etja0BF+xk9f4JxzYWJAEluquzsEjVttTUnbxIN2yG8sUSeuMCjgo70EXU5zh715IWmltoQM5oYcWv4ltJ8PiZN3SXDntdGtzdis7OGQgRdNYD4FC1oq1kiXgEdj3YLmco0p1UQrA88a57FWJ'}}
0:27:20.453803	LOG	Server ----------> DUT
0:27:20.457800	LOG	Send Test Command TxFramesCtrlReq process completed
0:27:20.460800	LOG	Send Test Command TxFramesCtrlReq process starts
0:27:21.296264	LOG	PULL_DATA: 02 6f9e 02 aa555a0000240409
0:27:21.298263	LOG	PULL_ACK: 02 6f9e 04
0:27:25.440906	LOG	PUSH_ACK: 02 0de5 01
0:27:25.442905	LOG	PUSH_DATA: Protocol version = 02, Token = 0de5, Identifier = 00, JSON = {'rxpk': [{'tmst': 2438018556, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAvgkBXY5VoSie'}]}

0:27:25.443904	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09be, FOpts:), FPort: 01, FRMPayload: 04df, MIC: 55a1289e)
0:27:25.444904	LOG	Server <---------- DUT
0:27:25.446901	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0695, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:27:30.465357	LOG	Send Test Command TxFramesCtrlReq process starts
0:27:31.505768	LOG	PULL_DATA: 02 4d29 02 aa555a0000240409
0:27:31.508763	LOG	PULL_ACK: 02 4d29 04
0:27:35.445523	LOG	PUSH_ACK: 02 0de7 01
0:27:35.447522	LOG	PUSH_DATA: Protocol version = 02, Token = 0de7, Identifier = 00, JSON = {'rxpk': [{'tmst': 2448023815, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAwAkBbVlm8htE'}]}
0:27:35.448520	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09c0, FOpts:), FPort: 01, FRMPayload: 04e1, MIC: 66f21b44)
0:27:35.450521	LOG	Server <---------- DUT
0:27:35.451518	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0697, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'size': 255, 'data': 'YCAgICAAmAbgc31LJREV9rt3CA15r2Q+N+fs1gbZO9S6xPr6+ifT30nM0jRcXm2jLP/VyxxR42jCf8rsKmOhuWww9W78/fvil54KcNkyqY69AeLx7oCq0rXr6MzhbWkM+Q6ap8L7HWNsVhayyHgVnkLFzJAvVya77QG6TpYTnuQte+XeC7WYtAennWKZ209mxsv5gTJ79oucuehV4M0tvohARFLnulOMbXl1f5cx9zx2nuqybwXc+KvIu88lwlzHIhd3qCBrKCEluBYYt584mwz9llMnUOFlSCGbx0Ghj//0Oq5mxkTT0PBitEM733iOXIDRKhzimrC6BMDzceTW'}}
0:27:40.461521	LOG	Server ----------> DUT
0:27:40.490502	LOG	Send Test Command TxFramesCtrlReq process completed
0:27:40.493500	LOG	Send Test Command RxAppCntReq process starts
0:27:41.536079	LOG	PULL_DATA: 02 16b3 02 aa555a0000240409
0:27:41.538079	LOG	PULL_ACK: 02 16b3 04
0:27:45.450851	LOG	PUSH_ACK: 02 0dea 01
0:27:45.452850	LOG	PUSH_DATA: Protocol version = 02, Token = 0dea, Identifier = 00, JSON = {'rxpk': [{'tmst': 2458029077, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAwgkBwmrooE0N'}]}
0:27:45.454848	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09c2, FOpts:), FPort: 01, FRMPayload: 04e3, MIC: e8a04d0d)
0:27:45.455848	LOG	Server <---------- DUT
0:27:45.457847	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0699, FOpts:), FPort: e0, FRMPayload: 09), MIC: c6739ad8)
0:27:45.460845	LOG	Frame command sent to the DUT
0:27:45.462843	LOG	PULL_RESP: Protocol version = 02, Token = 9c28, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2460029077, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAmQbgisZzmtg='}}
0:27:45.463861	LOG	Server ----------> DUT
0:27:45.468840	LOG	TX_ACK: 02 9c28 05 aa555a0000240409
0:27:50.456019	LOG	PUSH_ACK: 02 0deb 01
0:27:50.460017	LOG	PUSH_DATA: Protocol version = 02, Token = 0deb, Identifier = 00, JSON = {'rxpk': [{'tmst': 2463039775, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 16, 'data': 'QCAgICCAwwngtWpOHze18g=='}]}
0:27:50.462016	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09c3, FOpts:), FPort: e0, FRMPayload: 09e404, MIC: 1f37b5f2)
0:27:50.463015	LOG	Server <---------- DUT
0:27:50.464015	LOG	Answer in payload: e404
0:27:50.466013	LOG	Frame Command Payload in the Answer: 09e404
0:27:50.470012	LOG	RX Count received by DUT: 1252
0:27:50.473010	LOG	Send Test Command RxAppCntReq process completed
0:27:50.480007	LOG	End Test Step: Test packet error rate for SF8BW125 using RX2 window
0:27:50.485003	LOG	Partial Verdict: PASS
0:27:50.490000	LOG	==========
0:27:50.496996	LOG	==========
0:27:50.498994	LOG	Start Test Step: Test packet error rate for SF7BW125 using RX2 window
0:27:50.508989	LOG	Send RXParamSetupReq process starts
0:27:51.555852	LOG	PULL_DATA: 02 8a03 02 aa555a0000240409
0:27:51.557849	LOG	PULL_ACK: 02 8a03 04
0:27:55.449704	LOG	PUSH_ACK: 02 0dec 01
0:27:55.451685	LOG	PUSH_DATA: Protocol version = 02, Token = 0dec, Identifier = 00, JSON = {'rxpk': [{'tmst': 2468034311, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAxAkBrQIvCKG6'}]}
0:27:55.452686	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09c4, FOpts:), FPort: 01, FRMPayload: 04e4, MIC: 2f08a1ba)

0:27:55.454684	LOG	Server <---------- DUT
0:27:55.456683	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 069a, FOpts:), FPort: 00, FRMPayload: 0505d2ad84), MIC: 2f0fdb6c)
0:27:55.458683	LOG	PULL_RESP: Protocol version = 02, Token = 76c0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2470034311, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAmgYAKoIxFT0vD9ts'}}
0:27:55.460681	LOG	Server ----------> DUT
0:27:55.464679	LOG	TX_ACK: 02 76c0 05 aa555a0000240409
0:28:00.471765	LOG	PUSH_ACK: 02 0ded 01
0:28:00.475762	LOG	PUSH_DATA: Protocol version = 02, Token = 0ded, Identifier = 00, JSON = {'rxpk': [{'tmst': 2473042083, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCxQkFBwF6/27WPD8='}]}
0:28:00.479761	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 09c5, FOpts: 0507), FPort: 01, FRMPayload: 04e4, MIC: 6ed63c3f)
0:28:00.483754	LOG	Server <---------- DUT
0:28:00.487752	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:28:00.488751	LOG	Command Answer: 0507
0:28:00.502742	LOG	MAC command communication completed
0:28:00.515736	LOG	Send Test Command RxAppCntReq process starts
0:28:01.755639	LOG	PULL_DATA: 02 0ed2 02 aa555a0000240409
0:28:01.757624	LOG	PULL_ACK: 02 0ed2 04
0:28:05.464205	LOG	PUSH_ACK: 02 0dee 01
0:28:05.466203	LOG	PUSH_DATA: Protocol version = 02, Token = 0dee, Identifier = 00, JSON = {'rxpk': [{'tmst': 2478044699, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCxgkFBwEFWY41mEg='}]}
0:28:05.467202	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 09c6, FOpts: 0507), FPort: 01, FRMPayload: 04e4, MIC: 8e359848)
0:28:05.469201	LOG	Server <---------- DUT
0:28:05.470200	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 069b, FOpts:), FPort: e0, FRMPayload: 09), MIC: fe164ba4)
0:28:05.473200	LOG	Frame command sent to the DUT
0:28:05.475197	LOG	PULL_RESP: Protocol version = 02, Token = 0acd, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2480044699, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAmwbgF/4WS6Q='}}
0:28:05.476196	LOG	Server ----------> DUT
0:28:05.481194	LOG	TX_ACK: 02 0acd 05 aa555a0000240409
0:28:10.481510	LOG	PUSH_ACK: 02 0df0 01
0:28:10.483509	LOG	PUSH_DATA: Protocol version = 02, Token = 0df0, Identifier = 00, JSON = {'rxpk': [{'tmst': 2483050259, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 16, 'data': 'QCAgICCAxwngcGKgnGWSEg=='}]}
0:28:10.484508	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09c7, FOpts:), FPort: e0, FRMPayload: 09e504, MIC: 9c659212)
0:28:10.486508	LOG	Server <---------- DUT
0:28:10.488506	LOG	Answer in payload: e504
0:28:10.489506	LOG	Frame Command Payload in the Answer: 09e504
0:28:10.493503	LOG	RX Count received by DUT: 1253
0:28:10.495502	LOG	Send Test Command RxAppCntReq process completed
0:28:10.498500	LOG	Send Test Command TxFramesCtrlReq process starts
0:28:11.775896	LOG	PULL_DATA: 02 6f34 02 aa555a0000240409
0:28:11.777895	LOG	PULL_ACK: 02 6f34 04

0:28:15.470470	LOG	PUSH_ACK: 02 0df1 01
0:28:15.473470	LOG	PUSH_DATA: Protocol version = 02, Token = 0df1, Identifier = 00, JSON = {'rxpk': [{'tmst': 2488044795, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAyAkBW+059Ysj'}]}
0:28:15.474469	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09c8, FOpts:), FPort: 01, FRMPayload: 04e5, MIC: 39f58b23)
0:28:15.475469	LOG	Server <---------- DUT
0:28:15.478466	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 069c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		BsHF2ciVc+KPXoMcDK+0KZ703q0M0h6De18LZJJrWz/c6ZDLgUGPmNEwNt EMRWvu1CPVbL6E7ee8ushf2HPGrxYrcR5h/PKHcZjP1PXEsdRKqZ0Zd44V+C FBC9jwDFOT/ULE5fvLkG7xhiXi0xW+Ww++UjTy5fam'}}
0:28:20.487240	LOG	Server ----------> DUT
0:28:20.490239	LOG	Send Test Command TxFramesCtrlReq process completed
0:28:20.494237	LOG	Send Test Command TxFramesCtrlReq process starts
0:28:21.955957	LOG	PULL_DATA: 02 25ad 02 aa555a0000240409
0:28:21.957957	LOG	PULL_ACK: 02 25ad 04
0:28:25.475988	LOG	PUSH_ACK: 02 0df3 01
0:28:25.477986	LOG	PUSH_DATA: Protocol version = 02, Token = 0df3, Identifier = 00, JSON = {'rxpk': [{'tmst': 2498050047, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAygkBtOWUtcTJ'}]}
0:28:25.478984	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09ca, FOpts:), FPort: 01, FRMPayload: 04e6, MIC: 94b5c4c9)
0:28:25.479986	LOG	Server <---------- DUT
0:28:25.481984	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 069e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101) , MIC: e491ab84)
0:28:25.483983	LOG	Frame command sent to the DUT
0:28:25.484983	LOG	PULL_RESP: Protocol version = 02, Token = 67ca, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2500050047, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAngbgN3dIQmCedsS31jPSUVF822BAodPq1bbqnqpxycAh1GPFIXm8 TjWNR/oPyDITG9V4TFEIG6TIsaP9yvgbQlSuyljIhwavPIv0vgjXkyqXR/ETnnGK RIHr6iA1Qy7IA3sexYv2hKOORDAgpqvjhJbMHF5gt3sqq6qSSeR5dG7g8JTs8Fb TUjx2k1QrEMsasqf6TYhJs8T98z00RFyBF9jEyBKXA1tqDrv3ZDLPFpGcWwBv MtFsEfUEwP4CIqfHWMtBrK59oJlZtQuFQ1TqP/PSTvkCFP/vx87nyKd5BN6i6bp m6zcoGJFJmoUub0N3FEq6X2nkkauE'}}
0:28:25.485982	LOG	Server ----------> DUT
0:28:25.490977	LOG	Send Test Command TxFramesCtrlReq process completed
0:28:25.495975	LOG	Send Test Command TxFramesCtrlReq process starts
0:28:30.478421	LOG	PUSH_ACK: 02 0df4 01
0:28:30.481419	LOG	PUSH_DATA: Protocol version = 02, Token = 0df4, Identifier = 00, JSON = {'rxpk': [{'tmst': 2503052664, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAywkBGfV1A3Kg'}]}
0:28:30.483418	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09cb, FOpts:), FPort: 01, FRMPayload: 04e7, MIC: 750372a0)
0:28:30.484418	LOG	Server <---------- DUT
0:28:30.487416	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 069f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 941d678d)
0:28:30.490414	LOG	Frame command sent to the DUT
0:28:30.492414	LOG	PULL_RESP: Protocol version = 02, Token = 163f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2505052664, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAnwbgjdCDayFBVn0h51vmiA3o7taAnOB9KTf8a56r9hkNgZq6rhBmWKRA2IUZvBmLJQThcMwrO06HhbyTszzosvf9RSR+g7c4lw9/0n1iRpuL5C6AclgzSNvHFDaCcZA9zPZvo3vWPrH28HZwI4fSLARqkl1KABYKPgXjdaE+5AyInGDh0HgScnJPzqOy3oxh1C2aWUTPctlqvbUbjqMfMi+st7dFOhEVDnA1Ly8WdWrhWm4iGA9JRFHpZ5ArG6ewDT2Wn/jzdidfjZNVzGokC6mQlLOX+o8D6gckc+xb8LXb6SUKwwChuck3zqux/wKCacwyNVSUHWeN'}}
0:28:30.493413	LOG	Server ----------> DUT
0:28:30.497410	LOG	Send Test Command TxFramesCtrlReq process completed
0:28:30.502407	LOG	Send Test Command TxFramesCtrlReq process starts
0:28:31.965393	LOG	PULL_DATA: 02 6397 02 aa555a0000240409
0:28:31.967393	LOG	PULL_ACK: 02 6397 04
0:28:35.481392	LOG	PUSH_ACK: 02 0df6 01
0:28:35.483391	LOG	PUSH_DATA: Protocol version = 02, Token = 0df6, Identifier = 00, JSON = {'rxpk': [{'tmst': 2508055291, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAzAkBtUd6PAX6'}]}
0:28:35.485390	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09cc, FOpts:), FPort: 01, FRMPayload: 04e8, MIC: 7a3c05fa)
0:28:35.487388	LOG	Server <---------- DUT
0:28:35.489387	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06a0, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:28:40.490405	LOG	Server <---------- DUT
0:28:40.492404	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06a1, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:28:45.515555	LOG	Send Test Command TxFramesCtrlReq process starts
0:28:50.488745	LOG	PUSH_ACK: 02 0dfa 01
0:28:50.491743	LOG	PUSH_DATA: Protocol version = 02, Token = 0dfa, Identifier = 00, JSON = {'rxpk': [{'tmst': 2523063165, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAzwkB/wmROlyu'}]}
0:28:50.493741	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09cf, FOpts:), FPort: 01, FRMPayload: 04eb, MIC: 913a5cae)
0:28:50.494741	LOG	Server <---------- DUT
0:28:50.496740	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06a3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'size': 255, 'data': 'YCAgICAApAbg9nPDv5/d9Jm5ixbqF922+/v6RwAxtdO2wxUdqH1sVrU6jYSuL7l0WSVMtmfF1YvAXuOFg1p23NmVOOtbpnKLUtZoc45u/1JfFHiYooOOzq2G/q0Ikv4XkCn3YQ0V4TZ3mpaEoBcFjYJac0rlpwoGmCo6dsglPzskUcVMkosWx47G+6R2hSQs2JCLOpLtJJzv1ZppRQntOTQgG5qP0UYSDPxin3O1v1XXaBLNLwnK4C+Pk2+tOEF5Y0TMoGf6RJVuWyW/FK+8e7I302hJ1r325r9S8Lww6OOXTsgcVR/WlNC4+xVsRMhB2G7TAdul+8znGUL7BmES'}}
0:28:55.505395	LOG	Server ----------> DUT
0:28:55.509374	LOG	Send Test Command TxFramesCtrlReq process completed
0:28:55.512372	LOG	Send Test Command TxFramesCtrlReq process starts
0:29:00.494831	LOG	PUSH_ACK: 02 0dfc 01
0:29:00.495830	LOG	PUSH_DATA: Protocol version = 02, Token = 0dfc, Identifier = 00, JSON = {'rxpk': [{'tmst': 2533068409, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA0QkB4jA6ekjX'}]}
0:29:00.497827	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09d1, FOpts:), FPort: 01, FRMPayload: 04ed, MIC: 3a7a48d7)
0:29:00.498829	LOG	Server <---------- DUT
0:29:00.500827	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06a5, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 1e8f1752)
0:29:05.507569	LOG	Frame command sent to the DUT
0:29:05.509568	LOG	PULL_RESP: Protocol version = 02, Token = 0da9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2540071037, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAApgbg+fYSn02gw0VKYCKuZPtif67xe08O2RUo2iKlAImiTNriisXcD1m/0C4Va/RadxU+vNabyrrUdMgx9gQicq5fOH1r+neTQLOpT5y7YmDji0ITtxoXEqBkm7tireOnd9QqBZdjuzJgyQKGSfkaLvargVmduN+envc0NvX2yPEd8E1tpccSyb7JynwSbzmX4K4wS+qZ2U2VY7n8wLbE/o/TZVbunNvV5ZiLjkemSSkP8iBboNFTusODOMR+OnCrA/Qow3+sssKS0L82/M0DGSy3Y0ru/UZ7+J4mdCslTR6fcjjwQwpebBc/TsqfLnkgja4ybk0ejxdS'}}
0:29:05.510567	LOG	Server ----------> DUT
0:29:05.515564	LOG	Send Test Command TxFramesCtrlReq process completed
0:29:05.527557	LOG	Send Test Command TxFramesCtrlReq process starts
0:29:10.498516	LOG	PUSH_ACK: 02 0dff 01
0:29:10.501513	LOG	PUSH_DATA: Protocol version = 02, Token = 0dff, Identifier = 00, JSON = {'rxpk': [{'tmst': 2543073656, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA0wkBcP3mtz/T'}]}
0:29:10.503514	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09d3, FOpts:), FPort: 01, FRMPayload: 04ef, MIC: e6b73fd3)
0:29:10.505511	LOG	Server <---------- DUT
0:29:10.508480	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06a7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 016e93dc)
0:29:10.510477	LOG	Frame command sent to the DUT
0:29:10.511477	LOG	PULL_RESP: Protocol version = 02, Token = 2d42, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2545073656, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAApwbgRb91BTnUHFZ3Nv+zpLCHuWd4N/vAa7gXfFfu4NMI1urGJkXBMYqLIXJtsmU5Z64yBdY3RK9YapfrilRrFEItV7akHO8xw5Ure/fV34AVt2hgcAHMVfW5ENEq5ZCd4fEH6g/iExvdRxOjxgeGRGwL99sF43Jud3lsz/Umn32Q0DHW+XQ1PLiJHu1KwjQ/bSt43fw7Xnyl4EgnGvnMFKTNmuxT7ggQEqQAI60bcmK5PxsBnJ4HrIH11pZ3mZk18Sw22fsS5pb85LslWb+USvWd0I/cmgPeYzZ6RfQMQhCpBqqVyJaI13r4SvucarlEh6+hBb0BbpPc'}}
0:29:10.513476	LOG	Server ----------> DUT
0:29:10.516474	LOG	Send Test Command TxFramesCtrlReq process completed
0:29:10.519472	LOG	Send Test Command TxFramesCtrlReq process starts
0:29:12.405259	LOG	PULL_DATA: 02 e08d 02 aa555a0000240409
0:29:12.407259	LOG	PULL_ACK: 02 e08d 04
0:29:15.502497	LOG	PUSH_ACK: 02 0e00 01
0:29:15.504495	LOG	PUSH_DATA: Protocol version = 02, Token = 0e00, Identifier = 00, JSON = {'rxpk': [{'tmst': 2548076288, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA1AkBUdQDwkuZ'}]}
0:29:15.506494	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09d4, FOpts:), FPort: 01, FRMPayload: 04f0, MIC: 03c24b99)
0:29:15.508493	LOG	Server <---------- DUT
0:29:15.510492	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06a8, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:29:20.519471	LOG	Server ----------> DUT
0:29:20.523468	LOG	Send Test Command TxFramesCtrlReq process completed
0:29:20.529463	LOG	Send Test Command TxFramesCtrlReq process starts
0:29:22.615820	LOG	PULL_DATA: 02 1616 02 aa555a0000240409
0:29:22.617819	LOG	PULL_ACK: 02 1616 04
0:29:25.507170	LOG	PUSH_ACK: 02 0e03 01
0:29:25.509169	LOG	PUSH_DATA: Protocol version = 02, Token = 0e03, Identifier = 00, JSON = {'rxpk': [{'tmst': 2558081547, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA1gkBjbTYH2XV'}]}
0:29:25.511168	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09d6, FOpts:), FPort: 01, FRMPayload: 04f2, MIC: d81f65d5)
0:29:25.512169	LOG	Server <---------- DUT
0:29:25.514166	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06aa, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:29:30.520925	LOG	PULL_RESP: Protocol version = 02, Token = e718, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2565084183, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAqwbgXgXIFsMXfE6a3kNHgSaq1fMZAIwSBVfj+hDxtTIzW3uOFtNMVOQOugdQglDx35u77vid+yVK3neh9LztwTqSRg4tQPJO8FcTvy7bXTG+aqExEIdN+2K9C7YspJjBo3J7cri7mURG6deuhl8AcGb1ISwNL3eCmE/3db8JkvoetvGcrGnVcJZ3iu1iiQNi0txQHE7ppBrGpR/URayV6tVfXb8bGySXgu7lgBm5HOmPOnHHnngReawy+Zkw0H+6lLXHczNmzJYKApLEQc4hah/RvohbjrsQuKNA3z9ZY32ApLScPnuLajUAYQG0TmE3rXQ8eQZ/LQOk'}}
0:29:30.521925	LOG	Server ----------> DUT
0:29:30.524923	LOG	Send Test Command TxFramesCtrlReq process completed
0:29:30.527921	LOG	Send Test Command TxFramesCtrlReq process starts
0:29:32.624690	LOG	PULL_DATA: 02 b6a9 02 aa555a0000240409
0:29:32.626689	LOG	PULL_ACK: 02 b6a9 04
0:29:35.512046	LOG	PUSH_ACK: 02 0e05 01
0:29:35.514045	LOG	PUSH_DATA: Protocol version = 02, Token = 0e05, Identifier = 00, JSON = {'rxpk': [{'tmst': 2568086800, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA2AkBvLYu6b3J'}]}
0:29:35.516062	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09d8, FOpts:), FPort: 01, FRMPayload: 04f4, MIC: 2ee9bdc9)
0:29:35.518043	LOG	Server <---------- DUT
0:29:35.520041	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06ac, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

		0700010101010101010101

0:29:52.889334	LOG	PULL_ACK: 02 485a 04
0:29:55.554816	LOG	PUSH_ACK: 02 0e09 01
0:29:55.556815	LOG	PUSH_DATA: Protocol version = 02, Token = 0e09, Identifier = 00, JSON = {'rxpk': [{'tmst': 2588097310, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA3AkBjHCo0cWN'}]}
0:29:55.558815	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09dc, FOpts:), FPort: 01, FRMPayload: 04f6, MIC: a8d1c58d)
0:29:55.560813	LOG	Server <---------- DUT
0:29:55.562812	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06af, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		RwZnWuXUk/c4Zqt/PrGhCFnO/4tlMTnObMPCAirFr4xCz/cJYD8KKcZmX3TbF18o2j9ymJGY+2gi8ZKbgxIUHR+lf0Uz4jjY2uKnZZpA4oF+Fg0kV+jROCJ/xUffMTnxgCxpLVX39TEPdwG/3QzBiEWuNFNrKkG2Lij3Ssg4apy0XlN5WVy8LpPbJm/PIaWRaHo3u87jqp5HFLAQjA/zSa3PWCg7'}}
0:30:00.537612	LOG	Server ----------> DUT
0:30:00.541609	LOG	Send Test Command TxFramesCtrlReq process completed
0:30:00.545609	LOG	Send Test Command TxFramesCtrlReq process starts
0:30:03.055063	LOG	PULL_DATA: 02 a896 02 aa555a0000240409
0:30:03.056065	LOG	PULL_ACK: 02 a896 04
0:30:05.528655	LOG	PUSH_ACK: 02 0e0b 01
0:30:05.530654	LOG	PUSH_DATA: Protocol version = 02, Token = 0e0b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2598102550, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA3gkBqFXAvkCa'}]}
0:30:05.532653	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09de, FOpts:), FPort: 01, FRMPayload: 04f8, MIC: c0be409a)
0:30:05.533652	LOG	Server <---------- DUT
0:30:05.536651	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06b1, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 73b854ea)
0:30:10.538443	LOG	Frame command sent to the DUT
0:30:10.540442	LOG	PULL_RESP: Protocol version = 02, Token = e222, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2605105175, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAsgbgHkagrZiZqc+xeSYHltWkEFrV/35gYfkKj9n8OAVLHUlxFjaFHHYEZEG+1yKTHgut6Tm5g2UPU/hia095y30G1eOMLhh6fvHVO9qMKSfoFkTAU51+/zpVTR2ffQS6liqoRz1kSlfmL0mD8HxFg/qE4uw4aBEYYP0RV+6TYTloUXGX0bFG2sttGt+kZjpAASZ0selsOVURHB5pnngBNvP+vPBUAgUFtslsLu3dyMw8MDdxNnvTJBwRz0sBUJ2o/JZhLJ8PfWdLQfY1xxX9ukaGJZzix/XlBMfl9ZRW9uf7hortDrexOH6xTEIa05L6TbYwmyRzuFTq'}}
0:30:10.541440	LOG	Server ----------> DUT
0:30:10.545437	LOG	Send Test Command TxFramesCtrlReq process completed
0:30:10.548436	LOG	Send Test Command TxFramesCtrlReq process starts
0:30:13.064676	LOG	PULL_DATA: 02 84be 02 aa555a0000240409
0:30:13.066675	LOG	PULL_ACK: 02 84be 04
0:30:15.533271	LOG	PUSH_ACK: 02 0e0e 01
0:30:15.535270	LOG	PUSH_DATA: Protocol version = 02, Token = 0e0e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2608107792, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA4AkByUxaHD45'}]}
0:30:15.537268	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09e0, FOpts:), FPort: 01, FRMPayload: 04fa, MIC: 5a1c3e39)
0:30:15.538268	LOG	Server <---------- DUT
0:30:15.540267	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06b3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:30:20.548586	LOG	Server <---------- DUT
0:30:20.553586	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06b4, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:30:25.567725	LOG	Send Test Command TxFramesCtrlReq process starts
0:30:30.541547	LOG	PUSH_ACK: 02 0e11 01
0:30:30.543546	LOG	PUSH_DATA: Protocol version = 02, Token = 0e11, Identifier = 00, JSON = {'rxpk': [{'tmst': 2623115671, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA4wkBXHauhtOb'}]}
0:30:30.544547	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09e3, FOpts:), FPort: 01, FRMPayload: 04fd, MIC: ae86d39b)
0:30:30.546544	LOG	Server <---------- DUT
0:30:30.548543	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06b6, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'size': 255, 'data': 'YCAgICAAtwbg9bVx5bQZZFvgrrWZADwUFOWowwFB60puQxZVxUI2yG14Ld8JjpMw+IiZXoZ8gWl+wadyit3dik4CNOjh0I1bvSkdkgZn6dKMVKAR0awz3kj2eFrdppLOvoPZJxnvhzMdaljrT8uE+dTDgmQ+0n7ug/ngUKLuNPnZ//HGGtUvaQAj1EsQX9qqsrpuKapNO8mXiZrxYs2caLVxszKDyBMkbvW45VCKFYHR0R09n+rY+fLFTdu3FIEJ8m9JjOnbADZfyQSvFxDoe2sULvj6wX8xTRYymatlY7UD84U0XF47SCTOl6w2iQy/RyQXyfY03LU+ixy4tI6x'}}
0:30:35.555039	LOG	Server ----------> DUT
0:30:35.559036	LOG	Send Test Command TxFramesCtrlReq process completed
0:30:35.562035	LOG	Send Test Command TxFramesCtrlReq process starts
0:30:40.545673	LOG	PUSH_ACK: 02 0e14 01
0:30:40.547673	LOG	PUSH_DATA: Protocol version = 02, Token = 0e14, Identifier = 00, JSON = {'rxpk': [{'tmst': 2633120908, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA5QkBw48MDhM9'}]}
0:30:40.549673	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09e5, FOpts:), FPort: 01, FRMPayload: 04ff, MIC: 0c0e133d)
0:30:40.550670	LOG	Server <---------- DUT
0:30:40.552671	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06b8, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCA6AkBMID/fi3B'}]}
0:30:55.557874	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09e8, FOpts:), FPort: 01, FRMPayload: 0502, MIC: ff7e2dc1)
0:30:55.558873	LOG	Server <---------- DUT
0:30:55.561871	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06bb, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:31:00.578101	LOG	Server ----------> DUT
0:31:00.582096	LOG	Send Test Command TxFramesCtrlReq process completed
0:31:00.585112	LOG	Send Test Command TxFramesCtrlReq process starts
0:31:03.514494	LOG	PULL_DATA: 02 ddef 02 aa555a0000240409
0:31:03.516494	LOG	PULL_ACK: 02 ddef 04
0:31:05.560332	LOG	PUSH_ACK: 02 0e19 01
0:31:05.565328	LOG	PUSH_DATA: Protocol version = 02, Token = 0e19, Identifier = 00, JSON = {'rxpk': [{'tmst': 2658134034, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA6gkBo++Og7mq'}]}
0:31:05.569326	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09ea, FOpts:), FPort: 01, FRMPayload: 0504, MIC: 8e83b9aa)
0:31:05.573323	LOG	Server <---------- DUT
0:31:05.580321	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06bd, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:31:10.572330	LOG	PULL_RESP: Protocol version = 02, Token = c758, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2665136658, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAvgbg8lE9g3N+caxE9vFd/XgLPumcP7xgP5TyFcugFJ6vwg2rkzXEgmh68KrTKVaztJ6MYpebAxfgrT8EQFOqmg9InO6GeAnHTamU8vFBX6+JvB6sI/0qyjGG77DhE9Zu9ymZ73MKfz+KKbBPcWmggEKMQkPpe3DMAC3HhN35nZCXHk0P4ExEledcNY32fCMPu3qLVP9hWml6XFHD527z8sXKgjHvaMXQbUDD9ICkJVinuCj1euEf3YNsuMw5KvS1LjOL4r5hukRYIx2Q3Djpisp+axETmYAVBzr2iuuA5ovHmdpHMcP8NPclEiOZW1nX78eaQ24eeh4/'}}
0:31:10.573329	LOG	Server ----------> DUT
0:31:10.575329	LOG	Send Test Command TxFramesCtrlReq process completed
0:31:10.580326	LOG	Send Test Command TxFramesCtrlReq process starts
0:31:13.724802	LOG	PULL_DATA: 02 9d7d 02 aa555a0000240409
0:31:13.725803	LOG	PULL_ACK: 02 9d7d 04
0:31:15.564580	LOG	PUSH_ACK: 02 0e1c 01
0:31:15.566581	LOG	PUSH_DATA: Protocol version = 02, Token = 0e1c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2668139284, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA7AkBt5N9lFU/'}]}
0:31:15.567578	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09ec, FOpts:), FPort: 01, FRMPayload: 0506, MIC: 7d94553f)
0:31:15.569579	LOG	Server <---------- DUT
0:31:15.571576	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06bf, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		07000101010101010101010

0:31:30.574676	LOG	PUSH_DATA: Protocol version = 02, Token = 0e1f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2683147151, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA7wkBpQF2CwjF'}]}
0:31:30.576675	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09ef, FOpts:), FPort: 01, FRMPayload: 0509, MIC: 760b08c5)
0:31:30.577674	LOG	Server <---------- DUT
0:31:30.579673	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06c2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		aL8BotDvSF9GNjucxW5V73sX71IlnVWoYxlyqBQsYEOer8RuqMRBH9jpGK8WaEUScjvSHPuoKkQdwSfVZyDW5kiuJVbQ2+Bu01EnTHwhtHep/ce7ArUN8IZ5KR/hjzcBNAJNtMQ6VFgD352gy+yIaZkvK+80lKSaiqRNDJjuSwijTxebia6tofSg/qSkH5X784Fptc1MPUPaUjwKlbuhDjzrx'}}
0:31:35.587162	LOG	Server ----------> DUT
0:31:35.590160	LOG	Send Test Command TxFramesCtrlReq process completed
0:31:35.593158	LOG	Send Test Command TxFramesCtrlReq process starts
0:31:40.576250	LOG	PUSH_ACK: 02 0e23 01
0:31:40.578249	LOG	PUSH_DATA: Protocol version = 02, Token = 0e23, Identifier = 00, JSON = {'rxpk': [{'tmst': 2693152417, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA8QkBBuHMDuNU'}]}
0:31:40.580248	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09f1, FOpts:), FPort: 01, FRMPayload: 050b, MIC: cc0ee354)
0:31:40.581247	LOG	Server <---------- DUT
0:31:40.583246	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06c4, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 9ddae0fb)
0:31:45.590216	LOG	Frame command sent to the DUT
0:31:45.592215	LOG	PULL_RESP: Protocol version = 02, Token = 9225, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2700155036, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAxQbg4zSZbWWOI5IHTdwf/R7yJ5JcegNjc6tzy61l1vxAak5CTEX3JbKMbe1LZeFuEgNAeoa15i3OfTwYznsjhtNwToP0JsHd9bE1/vvEOAtw7qHDcmey0xuP8rvxg0IWn1zG7uYVG34GjMhNtpnr9Ee0hSIaSKK7sf/pO3r88gzvLai8WJ86kSEksGuSWYCZ0VzMds2OVt9SgfCyR4RR4rOHII6v7+URsDjKE1zLtRTbSCsUHfZpc/apEK14+rFRvH68JKhkKbG17o1yhCdirAsb6qTOE30C3aGlkxWsFU71Qifjcrl UZm0p5VB9vmDgx1ti4c+d2uD7'}}
0:31:45.593214	LOG	Server ----------> DUT
0:31:45.596211	LOG	Send Test Command TxFramesCtrlReq process completed
0:31:45.598211	LOG	Send Test Command TxFramesCtrlReq process starts
0:31:50.582627	LOG	PUSH_ACK: 02 0e25 01
0:31:50.585626	LOG	PUSH_DATA: Protocol version = 02, Token = 0e25, Identifier = 00, JSON = {'rxpk': [{'tmst': 2703157661, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA8wkB5eBM0Cva'}]}
0:31:50.587625	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09f3, FOpts:), FPort: 01, FRMPayload: 050d, MIC: 4cd02bda)
0:31:50.588624	LOG	Server <---------- DUT
0:31:50.590623	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06c6, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:31:55.589969	LOG	Server <---------- DUT
0:31:55.591967	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06c7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:32:04.376581	LOG	PULL_ACK: 02 b3ea 04
0:32:05.590758	LOG	PUSH_ACK: 02 0e28 01
0:32:05.592757	LOG	PUSH_DATA: Protocol version = 02, Token = 0e28, Identifier = 00, JSON = {'rxpk': [{'tmst': 2718165547, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA9gkBX2Bngh08'}]}
0:32:05.594756	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09f6, FOpts:), FPort: 01, FRMPayload: 0510, MIC: 67821d3c)
0:32:05.596755	LOG	Server <---------- DUT
0:32:05.598754	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06c9, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		ykpjS1YXRhBfl9i3FiH4qJwWgwGDoeorr8nbg7CM7kmo/9MP7jATeTo7XET9Y TqtyQtNgu6vq/AktZFbMMpcIED/EIBtiGI9QJrNtMVh5XKoqtYKyZIaBt+U8VFG yyShFjUMVlglfG8b5m3jVJLFQ7VpK9rqoR4pwrU1S4hs5iCCo9kR0BtqEdxRl6v 2a8TT+IAHfnqvc5AjM/CV6CpqHD1hv'}}
0:32:10.605536	LOG	Server ----------> DUT
0:32:10.608535	LOG	Send Test Command TxFramesCtrlReq process completed
0:32:10.612530	LOG	Send Test Command TxFramesCtrlReq process starts
0:32:14.384176	LOG	PULL_DATA: 02 e79e 02 aa555a0000240409
0:32:14.386176	LOG	PULL_ACK: 02 e79e 04
0:32:15.596238	LOG	PUSH_ACK: 02 0e2b 01
0:32:15.600235	LOG	PUSH_DATA: Protocol version = 02, Token = 0e2b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2728170795, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+AkBHVmZhUDO'}]}
0:32:15.604234	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09f8, FOpts:), FPort: 01, FRMPayload: 0512, MIC: 998540ce)
0:32:15.607232	LOG	Server <---------- DUT
0:32:15.610225	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06cb, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 101010101010101), MIC: 6b083816)
0:32:15.612223	LOG	Frame command sent to the DUT
0:32:15.614222	LOG	PULL_RESP: Protocol version = 02, Token = 4334, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2730170795, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAywbgCXdXTfekWYmUwzXzQYWgSjnFUHRhvalfquu4v02xcs68SQ sSRj/2juJToQexQ60yCESmtx9V64oEiPlEp5H6mD4CsuJ5VFijuStrPhOlNGtw6B2 IPwYYU+7K30k+Czb24xqx+xGbqTLUwZ5Arz4zNGdifVdWostkzjnlvMY6LaJij wfIsZD77j1wH1U2BHO+w9faADqoTJy8PjARXWKtsUKcYseoggSZWTNETss9r FuhyU0G6nn3vZJx1IswIGdqbx/TvWwbdqiOAu1UEoC3j7m7lLTiC+Rk4S6Ij86aR NxzWp31CIMGftuGJMUZfUf1LlZrCDgW'}}
0:32:15.615224	LOG	Server ----------> DUT
0:32:15.618222	LOG	Send Test Command TxFramesCtrlReq process completed
0:32:15.621220	LOG	Send Test Command TxFramesCtrlReq process starts
0:32:20.600137	LOG	PUSH_ACK: 02 0e2c 01
0:32:20.601135	LOG	PUSH_DATA: Protocol version = 02, Token = 0e2c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2733173423, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+QkBD6H4z9nF'}]}
0:32:20.603134	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09f9, FOpts:), FPort: 01, FRMPayload: 0513, MIC: f8cfd9c5)
0:32:20.604133	LOG	Server <---------- DUT
0:32:20.606133	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06cc, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: fc5ccda0)
0:32:20.609131	LOG	Frame command sent to the DUT
0:32:20.610132	LOG	PULL_RESP: Protocol version = 02, Token = cd85, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2735173423, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAzAbgJj8zT/+poGhq6yqOpQIsmdi9sqRrk+en8/v+xucxv+PCjc52ELP5yAZdl6gb94iFJp5AfR/3PK4VJkn2xobOQ15FTLyIctyrcy4yjRlBV4ockpaT5+WEtk2G/P8XA18+JwV//UXjo/ja9gcy59Hb07ZdDOuG/0YszDP8wofqu2iztzViYBbmu9uxpliA4oGzyGXSMqFvQiZpX4IjqVxsk7njNVmjJekweR770rHPTNGMy+cJ6b/prRl0z8ZmvrkKQap6NqWy3NG9Rd9kXwkJAXTWqt3nmQJufqPU54R7COmEyMBpsgVNwlM2EVBvLjhy7AT8XM2g'}}
0:32:20.611132	LOG	Server ----------> DUT
0:32:20.615129	LOG	Send Test Command TxFramesCtrlReq process completed
0:32:20.618126	LOG	Send Test Command TxFramesCtrlReq process starts
0:32:24.394216	LOG	PULL_DATA: 02 f430 02 aa555a0000240409
0:32:24.399215	LOG	PULL_ACK: 02 f430 04
0:32:25.602529	LOG	PUSH_ACK: 02 0e2d 01
0:32:25.604529	LOG	PUSH_DATA: Protocol version = 02, Token = 0e2d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2738176055, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+gkBUayu1P/U'}]}
0:32:25.605527	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09fa, FOpts:), FPort: 01, FRMPayload: 0514, MIC: aed4ffd4)
0:32:25.607526	LOG	Server <---------- DUT
0:32:25.609527	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06cd, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:32:30.609785	LOG	Server <---------- DUT
0:32:30.611783	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06ce, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:32:35.636537	LOG	Send Test Command TxFramesCtrlReq process starts
0:32:40.609848	LOG	PUSH_ACK: 02 0e31 01
0:32:40.612847	LOG	PUSH_DATA: Protocol version = 02, Token = 0e31, Identifier = 00, JSON = {'rxpk': [{'tmst': 2753183932, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA/QkB2NGhxfQ5'}]}
0:32:40.614847	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09fd, FOpts:), FPort: 01, FRMPayload: 0517, MIC: a1c5f439)
0:32:40.616845	LOG	Server <---------- DUT
0:32:40.618844	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06d0, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'size': 255, 'data': 'YCAgICAA0QbgkBSfGWfiF+E6XOdMwPOrT7/ZWWliTn96NsNDIlNO1Qb03L9w4n0BaTSChLSyGPr7Q99O8FgiG33SpKCL3lQLjjTw1TQ3i5fdUoG5RWyd1lGrCztxXMpqGOhgyUlvlB/qslHTnwjGARJWIQoWcoA4vin6vW/5zRKWUgBDfx2eXVmbt71qtUEs31u6PtgE05ms3c2VrOB7m+dCD+M/Cv/DiYlAKxmmngGAVbHU7iyYap9Eg7JRSMOPpAJB79Ska0hUr8Mb2CCTPndLzQwRu9oc7V+F6eSbblQwDF6k2isIjxX7AA+YU5lIrTt2exFm1ZekiUiDlRfL'}}
0:32:45.623919	LOG	Server ----------> DUT
0:32:45.627916	LOG	Send Test Command TxFramesCtrlReq process completed
0:32:45.631915	LOG	Send Test Command TxFramesCtrlReq process starts
0:32:50.614990	LOG	PUSH_ACK: 02 0e33 01
0:32:50.616989	LOG	PUSH_DATA: Protocol version = 02, Token = 0e33, Identifier = 00, JSON = {'rxpk': [{'tmst': 2763189176, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA/wkBlRALQxiR'}]}
0:32:50.617988	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 09ff, FOpts:), FPort: 01, FRMPayload: 0519, MIC: 0b431891)
0:32:50.619987	LOG	Server <---------- DUT
0:32:50.621986	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06d2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 93e2fdc7)
0:32:55.627861	LOG	Frame command sent to the DUT
0:32:55.628861	LOG	PULL_RESP: Protocol version = 02, Token = f558, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2770191801, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA0wbgs0RRRJDvQ2q+mOd1CMUiftC7I1XOubvV+F5fD/8IYeUXPU LqlwSfGOQ6k+XOcdksyPV5ifT42ZUVEfp1d0wU/Fdjptk62IbQGuB+xmGjPz+to T8YDQL1egwhpGPglz2Rqimt4+x2NZPmy+jEl2LDzcygyzg3Y9iBeMjcYPqmLXk Os8jOR/y67/B76rMrZ2SUznnyaCfViqhij0ramLUGgwSgyefmgB0RsMaQunsR/m5 lsGDJE7LJLsYw4Q4jvkTXuuSJ+Ac7nO6FayDsw25MaZlOVkL1Nsz4EiNr+KBm 1i1oUPK8Zrsbnrd74uKtBDAU/hqT4v3H'}}
0:32:55.630860	LOG	Server ----------> DUT
0:32:55.633860	LOG	Send Test Command TxFramesCtrlReq process completed
0:32:55.637858	LOG	Send Test Command TxFramesCtrlReq process starts
0:33:00.620558	LOG	PUSH_ACK: 02 0e35 01
0:33:00.622558	LOG	PUSH_DATA: Protocol version = 02, Token = 0e35, Identifier = 00, JSON = {'rxpk': [{'tmst': 2773194427, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAAQoBImiSEkNK'}]}
0:33:00.624556	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a01, FOpts:), FPort: 01, FRMPayload: 051b, MIC: 9212434a)
0:33:00.625555	LOG	Server <---------- DUT
0:33:00.627555	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06d4, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: d14d4e38)
0:33:00.630553	LOG	Frame command sent to the DUT
0:33:00.632552	LOG	PULL_RESP: Protocol version = 02, Token = cf93, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2775194427, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA1AbgNDbnR7f46dua2tTYcsO4vOP86mMRYtfErD63AJ7Dc+br0dW WmF/KsNShff/lLMHfnRhjLQF+NjnzDpGhOp0aa51HD+yprg25Xdc0Cbahu3uQq 0o0kW6QI/plToAvKYXhPjTx1HBgBZScU6B076KIXbKbD7/RPLrrrkn1XIcW/o MSh3HdDoMGkI+sYycLx+cL1sNdbEeR4+1rk4jpNkfhcdeisbZ1YPZkd910Nmfgg rn5/kZyneSJZZMNENK9PsB5+88lhgOj4REwndUgaaRds/QdIj4GLYISgGJD1GH btlAoniuzljoG7X5/c70b1qiFKm3RTU44'}}
0:33:00.633551	LOG	Server ----------> DUT
0:33:00.636549	LOG	Send Test Command TxFramesCtrlReq process completed
0:33:00.640547	LOG	Send Test Command TxFramesCtrlReq process starts
0:33:04.833830	LOG	PULL_DATA: 02 8b1b 02 aa555a0000240409
0:33:04.835830	LOG	PULL_ACK: 02 8b1b 04
0:33:05.623139	LOG	PUSH_ACK: 02 0e37 01
0:33:05.624138	LOG	PUSH_DATA: Protocol version = 02, Token = 0e37, Identifier = 00, JSON = {'rxpk': [{'tmst': 2778197036, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAgoB48KPCKta'}]}
0:33:05.626137	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a02, FOpts:), FPort: 01, FRMPayload: 051c, MIC: 8f08ab5a)
0:33:05.628136	LOG	Server <---------- DUT
0:33:05.629135	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06d5, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:33:10.639666	LOG	Server ----------> DUT
0:33:10.642665	LOG	Send Test Command TxFramesCtrlReq process completed
0:33:10.647662	LOG	Send Test Command TxFramesCtrlReq process starts
0:33:14.843954	LOG	PULL_DATA: 02 676b 02 aa555a0000240409
0:33:14.845953	LOG	PULL_ACK: 02 676b 04
0:33:15.628028	LOG	PUSH_ACK: 02 0e3a 01
0:33:15.631027	LOG	PUSH_DATA: Protocol version = 02, Token = 0e3a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2788202281, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABAoBeNzN/JUX'}]}
0:33:15.632026	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a04, FOpts:), FPort: 01, FRMPayload: 051e, MIC: cdfc9517)
0:33:15.634025	LOG	Server <---------- DUT
0:33:15.636024	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06d7, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

0:33:25.641422	LOG	PUSH_DATA: Protocol version = 02, Token = 0e3c, Identifier = 00, JSON = {'rxpk': [{'tmst': 2798215600, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 16, 'data': 'QCAgICCABgrgTd827CZ9CA=='}]}
0:33:25.642421	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a06, FOpts:), FPort: e0, FRMPayload: 092005, MIC: ec267d08)
0:33:25.643421	LOG	Server <---------- DUT
0:33:25.645420	LOG	Answer in payload: 2005
0:33:25.646419	LOG	Frame Command Payload in the Answer: 092005
0:33:25.651416	LOG	RX Count received by DUT: 1312
0:33:25.653417	LOG	Send Test Command RxAppCntReq process completed
0:33:25.660431	LOG	End Test Step: Test packet error rate for SF7BW125 using RX2 window
0:33:25.664410	LOG	Partial Verdict: PASS
0:33:25.668426	LOG	==========
0:33:25.673405	LOG	==========
0:33:25.676404	LOG	Start Test Step: Test packet error rate for SF7BW250 using RX2 window
0:33:25.691393	LOG	Send RXParamSetupReq process starts
0:33:30.629453	LOG	PUSH_ACK: 02 0e3d 01
0:33:30.631451	LOG	PUSH_DATA: Protocol version = 02, Token = 0e3d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2803210152, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCABwoB07ZLqW0g'}]}
0:33:30.632450	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a07, FOpts:), FPort: 01, FRMPayload: 0520, MIC: 4ba96d20)
0:33:30.633450	LOG	Server <---------- DUT
0:33:30.635449	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06d9, FOpts:), FPort: 00, FRMPayload: 0506d2ad84), MIC: 589aa129)
0:33:30.637448	LOG	PULL_RESP: Protocol version = 02, Token = 2254, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2805210152, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAA2QYADf4tDKlYmqEp'}}
0:33:30.639447	LOG	Server ----------> DUT
0:33:30.643445	LOG	TX_ACK: 02 2254 05 aa555a0000240409
0:33:35.263725	LOG	PULL_DATA: 02 7128 02 aa555a0000240409
0:33:35.265723	LOG	PULL_ACK: 02 7128 04
0:33:35.655500	LOG	PUSH_ACK: 02 0e3e 01
0:33:35.657501	LOG	PUSH_DATA: Protocol version = 02, Token = 0e3e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2808217907, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCCAoFBwFoxxOx0mY='}]}
0:33:35.659501	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0a08, FOpts: 0507), FPort: 01, FRMPayload: 0520, MIC: 13b1d266)
0:33:35.660498	LOG	Server <---------- DUT
0:33:35.662498	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:33:35.663496	LOG	Command Answer: 0507
0:33:35.676490	LOG	MAC command communication completed
0:33:35.685487	LOG	Send Test Command RxAppCntReq process starts
0:33:40.657305	LOG	PUSH_ACK: 02 0e40 01
0:33:40.660304	LOG	PUSH_DATA: Protocol version = 02, Token = 0e40, Identifier = 00, JSON = {'rxpk': [{'tmst': 2813220547, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCCQoFBwEQe3fn5ZA='}]}
0:33:40.662303	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0a09, FOpts: 0507), FPort: 01, FRMPayload: 0520, MIC: 77e7e590)
0:33:40.663302	LOG	Server <---------- DUT

0:33:40.665301	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06da, FOpts:), FPort: e0, FRMPayload: 09), MIC: bb1e2e09)
0:33:40.667300	LOG	Frame command sent to the DUT
0:33:40.669299	LOG	PULL_RESP: Protocol version = 02, Token = b695, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2815220547, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAA2gbgs7seLgk='}}
0:33:40.670298	LOG	Server ----------> DUT
0:33:40.673296	LOG	TX_ACK: 02 b695 05 aa555a0000240409
0:33:45.303673	LOG	PULL_DATA: 02 e20e 02 aa555a0000240409
0:33:45.305672	LOG	PULL_ACK: 02 e20e 04
0:33:45.685455	LOG	PUSH_ACK: 02 0e41 01
0:33:45.687454	LOG	PUSH_DATA: Protocol version = 02, Token = 0e41, Identifier = 00, JSON = {'rxpk': [{'tmst': 2818226096, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 16, 'data': 'QCAgICCACgrgSZD55DCO5A=='}]}
0:33:45.689453	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a0a, FOpts:), FPort: e0, FRMPayload: 092105, MIC: e4308ee4)
0:33:45.690453	LOG	Server <---------- DUT
0:33:45.692451	LOG	Answer in payload: 2105
0:33:45.694450	LOG	Frame Command Payload in the Answer: 092105
0:33:45.701446	LOG	RX Count received by DUT: 1313
0:33:45.705444	LOG	Send Test Command RxAppCntReq process completed
0:33:45.715438	LOG	Send Test Command TxFramesCtrlReq process starts
0:33:50.674049	LOG	PUSH_ACK: 02 0e42 01
0:33:50.676049	LOG	PUSH_DATA: Protocol version = 02, Token = 0e42, Identifier = 00, JSON = {'rxpk': [{'tmst': 2823220648, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCACwoBb6LSzTxp'}]}
0:33:50.677048	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a0b, FOpts:), FPort: 01, FRMPayload: 0521, MIC: d2cd3c69)
0:33:50.679047	LOG	Server <---------- DUT
0:33:50.681049	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06db, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:33:55.517967	LOG	PULL_ACK: 02 a5f9 04
0:33:55.655858	LOG	PUSH_ACK: 02 0e43 01
0:33:55.657858	LOG	PUSH_DATA: Protocol version = 02, Token = 0e43, Identifier = 00, JSON = {'rxpk': [{'tmst': 2828223277, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCADAoBPx1UCPHA'}]}
0:33:55.659855	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a0c, FOpts:), FPort: 01, FRMPayload: 0522, MIC: 5408f1c0)
0:33:55.660855	LOG	Server <---------- DUT
0:33:55.663853	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06dc, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		BCEDi7v9r3Z7XMtGMhJXZbVH29pgTbrHwhGQPotHSE9ShPqw0nL0fPg/6e8PwAL9Y62pIIEh/MCkUWy05aE/FO38bTZ4OpjBh/88aJRtFLf8MimqYXLmJc0KD55SqykA2efSfq1Cy+O+iLVFrgoNF1KmFu1gm0xX+2VBZxCS9EUNT9HczDy3l5cFyXmgKAKZ/Gn9XyDmF2wIZz7nYL/JKYYI08b'}}
0:34:00.672684	LOG	Server ----------> DUT
0:34:00.677681	LOG	Send Test Command TxFramesCtrlReq process completed
0:34:00.680682	LOG	Send Test Command TxFramesCtrlReq process starts
0:34:05.661714	LOG	PUSH_ACK: 02 0e45 01
0:34:05.664713	LOG	PUSH_DATA: Protocol version = 02, Token = 0e45, Identifier = 00, JSON = {'rxpk': [{'tmst': 2838228529, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCADgoB4agUWTLV'}]}
0:34:05.667711	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a0e, FOpts:), FPort: 01, FRMPayload: 0524, MIC: 145932d5)
0:34:05.668710	LOG	Server <---------- DUT
0:34:05.670710	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06de, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:34:10.685527	LOG	Frame command sent to the DUT
0:34:10.688521	LOG	PULL_RESP: Protocol version = 02, Token = 3840, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2845231153, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA3wbgYa3kY5+rUUDNkzGiJ4ZyDieUVIrKrfy4xST9VtQEhA6JyHw5N+cEDV6hzl5TorIGelux77Havi788lEZFbGJhfmTp5GqZlTEsu3gYr7ThYom+IPXdtvO2c581Qt4yPenqZLG56Kvt+0aRW0Fya7y2uzZXxgjqEOEpFAQMobvpwTpwIC/TnxOIxKMZrzNeiOdsRsT2mCdd62/UCISQPpJyg3sdgjQRDDseMrapkjWWavnhJ7a2uUxL397XLuQgxRr66gjwOrux2UgfVWDNKPtvqqo7IeZPfk635w90m+cU3ZeHLv3BckOv+fwYWleB+zMCpobM7FZ'}}
0:34:10.689521	LOG	Server ----------> DUT
0:34:10.693516	LOG	Send Test Command TxFramesCtrlReq process completed
0:34:10.696515	LOG	Send Test Command TxFramesCtrlReq process starts
0:34:15.665961	LOG	PUSH_ACK: 02 0e48 01
0:34:15.667959	LOG	PUSH_DATA: Protocol version = 02, Token = 0e48, Identifier = 00, JSON = {'rxpk': [{'tmst': 2848233773, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAEAoByhlK+3AQ'}]}
0:34:15.668958	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a10, FOpts:), FPort: 01, FRMPayload: 0526, MIC: 4afb7010)
0:34:15.670957	LOG	Server <---------- DUT
0:34:15.672957	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06e0, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 35c96b41)
0:34:20.680002	LOG	Frame command sent to the DUT
0:34:20.682001	LOG	PULL_RESP: Protocol version = 02, Token = 62a2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2855236410, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA4Qbg/n3u/J+0iyuGSm2IMvTnzHkiuP+YYAVpCZlVQ/Bwyv5BGI2ChsP2Wr7juFmZTkcKWLP6h0A/io6aJksXFHpC/Qmj8peqVZD5V6rlAKbNOW3HnnWnJNWED1QojC0zdYb4ai7qKfaZJU0ZAAHEj2Rkq7gUK9N/igQAuw7ly3ebN7u0c4A9lh10rKgK+wBBI9YN5HpSYhZpmpYkq+oCdLwVEEkhVfEMFZ1M+Ymx+wG21weGnYkhcBYQgBhQbqTswQjhNhonNX8wH/SxLEBsr2QGtJaE4ankJIleFrfg+qh1BmExVo9q3N61pWq9Z7DYuTrzA0c1yWtB'}}
0:34:20.683000	LOG	Server ----------> DUT
0:34:20.686998	LOG	Send Test Command TxFramesCtrlReq process completed
0:34:20.690996	LOG	Send Test Command TxFramesCtrlReq process starts
0:34:25.671585	LOG	PUSH_ACK: 02 0e4a 01
0:34:25.675583	LOG	PUSH_DATA: Protocol version = 02, Token = 0e4a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2858239030, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAEgoBojUkJQQj'}]}
0:34:25.677582	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a12, FOpts:), FPort: 01, FRMPayload: 0528, MIC: 24250423)
0:34:25.678581	LOG	Server <---------- DUT
0:34:25.680580	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06e2, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 0d1580be)
0:34:25.682580	LOG	Frame command sent to the DUT
0:34:25.684578	LOG	PULL_RESP: Protocol version = 02, Token = 66d8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2860239030, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA4gbghw2HLqbNm9tTLLUa7ZAqHbS04isNuUWuJ2fecTka4Q7PvWlwPcAOr6aBK0GjU/wIKb5NerXbh2JOT6wXwjizxqcoiNFvzK3f2KONG1M1ZCAI/HLifqMc+DdQ9kRsQilqSYNjQSuDg9CJJSZ5AcmrGCVf43eCbBivx26OuXo5J5+lNDJqSTbRkPkVxodDBgrDDGhYqux7890zW/9cmXf++ovIu7mcpkAvS4wwfraWiilO6bU1+OCNCbXNNyk86pcXp1odX/PcRGwKF3VhYbIxXyoJLz4cZKZTBoYPJDJ8F20RqMJ6wBfDUnMwfnbBgYpl9UcNFYC+'}}
0:34:25.685577	LOG	Server ----------> DUT
0:34:25.688577	LOG	Send Test Command TxFramesCtrlReq process completed
0:34:25.692573	LOG	Send Test Command TxFramesCtrlReq process starts
0:34:30.674339	LOG	PUSH_ACK: 02 0e4b 01
0:34:30.676338	LOG	PUSH_DATA: Protocol version = 02, Token = 0e4b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2863241660, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAEwoByafyUDxz'}]}

0:34:30.678337	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a13, FOpts:), FPort: 01, FRMPayload: 0529, MIC: f2503c73)
0:34:30.679336	LOG	Server <---------- DUT
0:34:30.681335	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06e3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:34:35.713971	LOG	Send Test Command TxFramesCtrlReq process starts
0:34:40.679543	LOG	PUSH_ACK: 02 0e4e 01
0:34:40.684539	LOG	PUSH_DATA: Protocol version = 02, Token = 0e4e, Identifier = 00, JSON = {'rxpk': [{'tmst': 2873246910, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAFQoBd8n4OQB1'}]}
0:34:40.688538	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a15, FOpts:), FPort: 01, FRMPayload: 052b, MIC: f8390075)
0:34:40.689537	LOG	Server <---------- DUT
0:34:40.691537	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06e5, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		QoKF8XYHcMideUdDKQGQyK24HhCWDSxAGwBMnYtYTMoIcfkqvNXzWE0PMQZNyRLP5ZDoQXxw7I05T6fYBa5aMIlvhDlALAK3pvxu78Ig6214IUOcBAy5L7AhQwpMVs46s+YGqGHGhmMKgVaLUUe4L6Jn1A99vI4vrqPVfu1DbX/uuahoy7mXbhguXEYhkR/uKZv3Fe8kuYADXzyhc2JPl6ldQNcdXNCTX'}}
0:34:45.693692	LOG	Server ----------> DUT
0:34:45.696689	LOG	Send Test Command TxFramesCtrlReq process completed
0:34:45.698689	LOG	Send Test Command TxFramesCtrlReq process starts
0:34:45.902747	LOG	PULL_DATA: 02 be01 02 aa555a0000240409
0:34:45.904745	LOG	PULL_ACK: 02 be01 04
0:34:50.684016	LOG	PUSH_ACK: 02 0e50 01
0:34:50.686014	LOG	PUSH_DATA: Protocol version = 02, Token = 0e50, Identifier = 00, JSON = {'rxpk': [{'tmst': 2883252150, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAFwoBw1SFBSu+'}]}
0:34:50.688013	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a17, FOpts:), FPort: 01, FRMPayload: 052d, MIC: 85052bbe)
0:34:50.689013	LOG	Server <---------- DUT
0:34:50.691012	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06e7, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 08454149)
0:34:55.698276	LOG	Frame command sent to the DUT
0:34:55.700275	LOG	PULL_RESP: Protocol version = 02, Token = 1e83, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2890254789, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA6Abg2heRAuuXKq49TEzM5OGZ3CoCAIZhS7gwDJo+EV845un+/GJNHNgayuNJlPXcs5Z5TbRc7y7DnY/yK3WuF8Pv07T4MISeYAqZxZfoEOGlOIEncJTbsxdfgKPAEmQRP4lAUsnvSg1fy+lgNC1dGJzq2X9jBMRBhdyQW5HWnd0Lw2Pb28pEtmY9wX8ZKAufbs94tSOrPm6LWCV4WB1AON0z4XUUv4dmKyQhNtZ//S5S0nlrbAFPgGrjQkWZEGkgzgUi61Vdma7pS+2J9+kvZa6Y3HQ8+ai98P5QOOLWArhvfH+pyoymzDKBPyX2w1aD9Agv51sIRUFJ'}}
0:34:55.701276	LOG	Server ----------> DUT
0:34:55.709270	LOG	Send Test Command TxFramesCtrlReq process completed
0:34:55.712268	LOG	Send Test Command TxFramesCtrlReq process starts
0:34:55.913007	LOG	PULL_DATA: 02 50b2 02 aa555a0000240409
0:34:55.915006	LOG	PULL_ACK: 02 50b2 04
0:35:00.689484	LOG	PUSH_ACK: 02 0e53 01
0:35:00.691484	LOG	PUSH_DATA: Protocol version = 02, Token = 0e53, Identifier = 00, JSON = {'rxpk': [{'tmst': 2893257418, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAGQoBAVqV/ifC'}]}
0:35:00.693482	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a19, FOpts:), FPort: 01, FRMPayload: 052f, MIC: 95fe27c2)
0:35:00.695481	LOG	Server <---------- DUT
0:35:00.697481	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06e9, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:35:05.698164	LOG	Server <---------- DUT
0:35:05.701163	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06ea, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:35:10.712306	LOG	Send Test Command TxFramesCtrlReq process starts
0:35:15.697314	LOG	PUSH_ACK: 02 0e57 01
0:35:15.699313	LOG	PUSH_DATA: Protocol version = 02, Token = 0e57, Identifier = 00, JSON = {'rxpk': [{'tmst': 2908265303, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAHAoBzp5EVAi9'}]}
0:35:15.701311	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a1c, FOpts:), FPort: 01, FRMPayload: 0532, MIC: 445408bd)
0:35:15.702311	LOG	Server <---------- DUT
0:35:15.704310	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06ec, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'size': 255, 'data': 'YCAgICAA7QbgDMOaCY9Ue2L47XzEGMk3pUqpvUMsKwHOkqkQoR4pQ/xBjUde2jxrv3O5R0HXDho8xW7KZqOviwd4sT2iRRoW7QAzNE8cOXORjMRgIAzLr3Jm0qGwYb+H7WosD0rDqi2giYmSWSLMY0OszqzoMdX0y3OQiLN4K6FKjeHaI9hB9HEXErkn9w/125nR25H4Qpn4iVaMrojWasLFJXte94F6aRy7eG/FoCL6dFnK5Jo67RlFMToEStlANCZ1j6jroRl78ShgjBQKCYANZb1YySCt0apjEVqkOxFrDo/QUglFe5r2C1yWnpADGJVl3z5+l46UPLngP0T4'}}
0:35:20.712626	LOG	Server ----------> DUT
0:35:20.715607	LOG	Send Test Command TxFramesCtrlReq process completed
0:35:20.719604	LOG	Send Test Command TxFramesCtrlReq process starts
0:35:25.702139	LOG	PUSH_ACK: 02 0e59 01
0:35:25.706136	LOG	PUSH_DATA: Protocol version = 02, Token = 0e59, Identifier = 00, JSON = {'rxpk': [{'tmst': 2918270553, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAHgoBSOym7vCF'}]}
0:35:25.707135	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a1e, FOpts:), FPort: 01, FRMPayload: 0534, MIC: a6eef085)
0:35:25.708137	LOG	Server <---------- DUT
0:35:25.710134	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06ee, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 4bf0c39e)
0:35:30.716307	LOG	Frame command sent to the DUT
0:35:30.718306	LOG	PULL_RESP: Protocol version = 02, Token = b261, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2925273168, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA7wbgEdgs8mZ+h4WShcCjsUowYOI6mvCdpWMpoWvwT+iAtfU35w4IQ3irE9aRe1QMskHZtpOcyC33okUTFzz6Ys2ggiZFDgBcj9/vspgvsgrm5YXoBrnveXqbmfofaz2EEf9yJNF+GLas0hv4LTpDhW5+4OkAf6jS7f1B5MDiocy3oBXc/ha0cesbqHw9+4pSyfDFfXmP0kmjy7LPQHiJaDRYGVL1U1ewA9VT+Xk1xC1y/Hl4dn6IekNWZxaEBIBkkc2P/HO1CyuALSHqqTqIIGZDXboJa/gjxnIFvolRLMxQLVA6meUkm0fjj+inYbVxQbaw/QlL8MOe'}}
0:35:30.720305	LOG	Server ----------> DUT
0:35:30.728301	LOG	Send Test Command TxFramesCtrlReq process completed
0:35:30.740294	LOG	Send Test Command TxFramesCtrlReq process starts
0:35:35.708379	LOG	PUSH_ACK: 02 0e5b 01
0:35:35.710361	LOG	PUSH_DATA: Protocol version = 02, Token = 0e5b, Identifier = 00, JSON = {'rxpk': [{'tmst': 2928275780, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAIAoB4clpvf/I'}]}
0:35:35.712365	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a20, FOpts:), FPort: 01, FRMPayload: 0536, MIC: 69bdffc8)
0:35:35.713363	LOG	Server <---------- DUT
0:35:35.715359	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06f0, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 0b67a492)
0:35:35.717357	LOG	Frame command sent to the DUT
0:35:35.718356	LOG	PULL_RESP: Protocol version = 02, Token = a9bf, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2930275780, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA8AbgdeJnRwccLMLY8q078QxPymHDyA6Hjy1RiJahPgmucbojqRfKoEPlXKOUBHlF/02Nhmlbm+HcN/v+1+YfNq44xX4oi1OkGguh8fKpjaEwUB8gBJYokj1XTav2FPHf61A4hlL1AJMpljvtKy4jektQaGBRejw0rNEO9hBgtnuKP8FTAy2s6EhYT3IdANfO0ABpHLpni3IfhYZy64t/wL0vC3tWX+Jcd6Std3Wimm1ViS52cAPKhVo/ZS2JFyjH73++dF6qhwYWjTHQomYUN4wCSQW0kdM7Ty30oW1SQcr0r52Ab6xr1kquCeuMaQfQ05rENyALZ6SS'}}
0:35:35.720356	LOG	Server ----------> DUT
0:35:35.723355	LOG	Send Test Command TxFramesCtrlReq process completed
0:35:35.727355	LOG	Send Test Command TxFramesCtrlReq process starts
0:35:36.352994	LOG	PULL_DATA: 02 0750 02 aa555a0000240409
0:35:36.354993	LOG	PULL_ACK: 02 0750 04
0:35:40.710514	LOG	PUSH_ACK: 02 0e5d 01
0:35:40.714511	LOG	PUSH_DATA: Protocol version = 02, Token = 0e5d, Identifier = 00, JSON = {'rxpk': [{'tmst': 2933278410, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAIQoB3EJRB3Ry'}]}
0:35:40.718508	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a21, FOpts:), FPort: 01, FRMPayload: 0537, MIC: 51077472)
0:35:40.720508	LOG	Server <---------- DUT
0:35:40.722527	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06f1, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:35:45.734062	LOG	Server ----------> DUT
0:35:45.738058	LOG	Send Test Command TxFramesCtrlReq process completed
0:35:45.742056	LOG	Send Test Command TxFramesCtrlReq process starts
0:35:46.362645	LOG	PULL_DATA: 02 c36e 02 aa555a0000240409
0:35:46.364644	LOG	PULL_ACK: 02 c36e 04
0:35:50.715167	LOG	PUSH_ACK: 02 0e5f 01
0:35:50.717166	LOG	PUSH_DATA: Protocol version = 02, Token = 0e5f, Identifier = 00, JSON = {'rxpk': [{'tmst': 2943283653, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAIwoBAVtyT7vt'}]}
0:35:50.719165	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a23, FOpts:), FPort: 01, FRMPayload: 0539, MIC: 724fbbed)
0:35:50.720164	LOG	Server <---------- DUT
0:35:50.722163	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06f3, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:35:55.730393	LOG	PULL_RESP: Protocol version = 02, Token = bb06, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2950286282, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA9AbgbxhTrZFldp6dh1spghosowsW37m+rtzqWVmmax5+ndCEhjl5d7P9kPmCr1HdVq00GrN0bltHd5ntIyA7G/BSdKaHIDiv4rdlqsjJdWe7CbfhhI6WVqm79MjVP+6V1djU+Y/SBmMKxUkduFGeyKIupmwI0PxJEarquTErt9cDx0uUH8R8g5+MFzjnQBaPOxGR1r+Gc3pFxjvnANHrZ2P2sL+86UDL4Erx87K9pxuYjJjMyOSOYf2X/3obLZmRfjSwSgm1kJDbUBzyJSxuwOvqgPP2sWU1n+F+4TVwlghQ3CG3TXy34ZvGThrbB03LNGna7AkJCO4J'}}
0:35:55.732392	LOG	Server ----------> DUT
0:35:55.735390	LOG	Send Test Command TxFramesCtrlReq process completed
0:35:55.738390	LOG	Send Test Command TxFramesCtrlReq process starts
0:35:56.572891	LOG	PULL_DATA: 02 bb0e 02 aa555a0000240409
0:35:56.574889	LOG	PULL_ACK: 02 bb0e 04
0:36:00.720530	LOG	PUSH_ACK: 02 0e62 01
0:36:00.722529	LOG	PUSH_DATA: Protocol version = 02, Token = 0e62, Identifier = 00, JSON = {'rxpk': [{'tmst': 2953288905, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAJQoBy93OvEeQ'}]}
0:36:00.723527	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a25, FOpts:), FPort: 01, FRMPayload: 053b, MIC: cebc4790)
0:36:00.725528	LOG	Server <---------- DUT
0:36:00.726526	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06f5, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

		07000101010101010101010

0:36:15.732428	LOG	PUSH_DATA: Protocol version = 02, Token = 0e66, Identifier = 00, JSON = {'rxpk': [{'tmst': 2968296769, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAKAoBY8wdshOM'}]}
0:36:15.736425	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a28, FOpts:), FPort: 01, FRMPayload: 053e, MIC: 1db2138c)
0:36:15.741422	LOG	Server <---------- DUT
0:36:15.745438	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06f8, FOpts:), FPort: e0, FRMPayload: 070001010101010101010101

		QetS0ijmWNJYvCcZ5IhhCNOk+pMGXfMmIgLI4/yQdBL0+VwNxKuWgEIt+dZ8OCuYMgWkUx+S/N81S5QFu5Zm0eUxkq+b6PffNTC47N4xVvjLjLCRHKzUqHV3bJJ54JkaV2Y5Ygcy+QUbTNJ3I5xEe8mtQGRJH/OsA0NB3LvjMliXpSry7B8e8sk0FLh3JTPcRQ0ZUGYBA1zIH6y1DEqJX5h3Req+pe6PMhI'}}
0:36:20.745270	LOG	Server ----------> DUT
0:36:20.748268	LOG	Send Test Command TxFramesCtrlReq process completed
0:36:20.753266	LOG	Send Test Command TxFramesCtrlReq process starts
0:36:25.733413	LOG	PUSH_ACK: 02 0e68 01
0:36:25.737410	LOG	PUSH_DATA: Protocol version = 02, Token = 0e68, Identifier = 00, JSON = {'rxpk': [{'tmst': 2978302013, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAKgoBES9qyKJC'}]}
0:36:25.739409	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a2a, FOpts:), FPort: 01, FRMPayload: 0540, MIC: 6ac8a242)
0:36:25.740409	LOG	Server <---------- DUT
0:36:25.742408	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06fa, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 7510481e)
0:36:30.745162	LOG	Frame command sent to the DUT
0:36:30.746162	LOG	PULL_RESP: Protocol version = 02, Token = fd8f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 2985304640, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAA+wbgtXMfgsk3nrD15DHHdIH4WXEVXRqSVFy5YRTK84k4aH5vfKwX3xTV3uQA4RyWoRHz3hKGD8csppyrn3xgW1aiS8sXVzhDa9/yOHGxbBqdNtfdDEyv8oTzLwxOePxxzweWXEQohbXdHIIXHK8Q/cJe+QGG9diu6YL29Mp1FNs6FrCHdYKRIUIUWfJ+VhIqM1H++48zpbM2hgCWKPD7sH908fsK5E9TSPH8/F6yqpiHi0BFTEggWadkQJksPVqe/FC62tvagKJvsMMcafo1vUXWi8ML/vSV+9raf7/OlskD0aO29vwNKG66fVi64dEOBOy/phB1EEge'}}
0:36:30.748161	LOG	Server ----------> DUT
0:36:30.751159	LOG	Send Test Command TxFramesCtrlReq process completed
0:36:30.754159	LOG	Send Test Command TxFramesCtrlReq process starts
0:36:35.740056	LOG	PUSH_ACK: 02 0e6a 01
0:36:35.742054	LOG	PUSH_DATA: Protocol version = 02, Token = 0e6a, Identifier = 00, JSON = {'rxpk': [{'tmst': 2988307270, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCALAoBbuI6CyLu'}]}
0:36:35.744054	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a2c, FOpts:), FPort: 01, FRMPayload: 0542, MIC: 3a0b22ee)
0:36:35.745057	LOG	Server <---------- DUT
0:36:35.747052	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06fc, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101

0:36:40.747561	LOG	Server <---------- DUT
0:36:40.749560	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06fd, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:36:47.223972	LOG	PULL_ACK: 02 3edd 04
0:36:50.747967	LOG	PUSH_ACK: 02 0e6e 01
0:36:50.751965	LOG	PUSH_DATA: Protocol version = 02, Token = 0e6e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3003315144, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCALwoBZe6q/pdM'}]}
0:36:50.755963	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a2f, FOpts:), FPort: 01, FRMPayload: 0545, MIC: aafe974c)
0:36:50.758961	LOG	Server <---------- DUT
0:36:50.764962	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 06ff, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		LdFGDWKv94lbr9WPdIgL5ryECR7XZsjZwiwH8vM6ml41k7VyarkTkYUMGWc3J+PrfO9+obwN/VwNF8A2OVsMpQLtRD/MlbUk+3l71lUjE/wpTV2F/J23sPqHTP1DJV6Y3p35opjc3SiiGacMcsFAmzzcgCQFzv6cvJIxKkbKHoVmkXvabKwr2njAPMkXxSbnB4H+FCoDci4c2dgRT8wLG0MH'}}
0:36:55.766331	LOG	Server ----------> DUT
0:36:55.772328	LOG	Send Test Command TxFramesCtrlReq process completed
0:36:55.782323	LOG	Send Test Command TxFramesCtrlReq process starts
0:36:57.232032	LOG	PULL_DATA: 02 c93d 02 aa555a0000240409
0:36:57.234012	LOG	PULL_ACK: 02 c93d 04
0:37:00.751956	LOG	PUSH_ACK: 02 0e70 01
0:37:00.753955	LOG	PUSH_DATA: Protocol version = 02, Token = 0e70, Identifier = 00, JSON = {'rxpk': [{'tmst': 3013320395, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAMQoB/LMu53rG'}]}
0:37:00.754954	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a31, FOpts:), FPort: 01, FRMPayload: 0547, MIC: 2ee77ac6)
0:37:00.755954	LOG	Server <---------- DUT
0:37:00.757952	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0701, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1ed8cc77)
0:37:05.764106	LOG	Frame command sent to the DUT
0:37:05.765106	LOG	PULL_RESP: Protocol version = 02, Token = a744, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3020323014, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAAgfg/bqRk0SnjZY5nrkyq/am8UvFD7UR0WVYD+TQH0dQ4OxPSg5yaOALAdip/8BHuAPmb6YE6l8gbY+DWK7Mi8brmO5jni4gSmgx9+zBuMcB6UOZZPMhPqdR0/Ck7ZzbfALpEZ8j0y3AR2A9PRETKOq7Lcps9YtXYY/E3bSji2bZ/AMyFyNK4cuQQ6NKAT0Uyl3Bu1Eedt06wS/i4NhwVN+Ld5Kt1yhA+5z6mS/RkbBo9F/BKQmRoI0MVBkFtwHyISNiLkGFCM/xYfx4XIwc47T+DPf6+gbJPn3p5RakayiRDN70a2V9nIkpibGLsSWODWsJ4nQe2Mx3'}}
0:37:05.766105	LOG	Server ----------> DUT
0:37:05.769104	LOG	Send Test Command TxFramesCtrlReq process completed
0:37:05.771102	LOG	Send Test Command TxFramesCtrlReq process starts
0:37:07.442199	LOG	PULL_DATA: 02 b1e3 02 aa555a0000240409
0:37:07.444197	LOG	PULL_ACK: 02 b1e3 04
0:37:10.759308	LOG	PUSH_ACK: 02 0e73 01
0:37:10.763308	LOG	PUSH_DATA: Protocol version = 02, Token = 0e73, Identifier = 00, JSON = {'rxpk': [{'tmst': 3023325635, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAMwoBmZtt3eja'}]}
0:37:10.765306	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a33, FOpts:), FPort: 01, FRMPayload: 0549, MIC: 6ddde8da)
0:37:10.766305	LOG	Server <---------- DUT
0:37:10.768303	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0703, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:37:15.764413	LOG	Server <---------- DUT
0:37:15.766413	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0704, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:37:20.782331	LOG	Send Test Command TxFramesCtrlReq process starts
0:37:25.766031	LOG	PUSH_ACK: 02 0e76 01
0:37:25.771028	LOG	PUSH_DATA: Protocol version = 02, Token = 0e76, Identifier = 00, JSON = {'rxpk': [{'tmst': 3038333516, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCANgoB4Q8/9td0'}]}
0:37:25.773027	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a36, FOpts:), FPort: 01, FRMPayload: 054c, MIC: 3ff6d774)
0:37:25.774027	LOG	Server <---------- DUT
0:37:25.776025	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0706, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'size': 255, 'data': 'YCAgICAABwfga6do5jc+kZEhUA49QDeA5vv1NxiWbWsMxbSI/hSgkMt3AV6ccgvJgWImq4w8MKzQDDfLKNJgN5QRH95IXDsMSTbGqScjQ27pm9XE1sSA48vj2+rlw20r/dZFqv3aAPmAWNCeqmfzMxUXGlUlNfSfIFvgW1BZpHI3U8retq2pZjkps0rsMgqPoIWqwbNjk7XeYdCJT5l1JchlDY+f9s74kaw8YKxVyG2dYP23vV1IRzZyjfVLXKUKF01iuDkYpH0ixTcG/9kMY3Kriw95BfP65JnUruELNER6sWFvgKc9wSmawGx0xGzEP9hChoiuk/yyqvcg291w'}}
0:37:30.780550	LOG	Server ----------> DUT
0:37:30.783549	LOG	Send Test Command TxFramesCtrlReq process completed
0:37:30.786546	LOG	Send Test Command TxFramesCtrlReq process starts
0:37:35.769634	LOG	PUSH_ACK: 02 0e78 01
0:37:35.771632	LOG	PUSH_DATA: Protocol version = 02, Token = 0e78, Identifier = 00, JSON = {'rxpk': [{'tmst': 3048338765, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAOAoB3/qHWVpX'}]}
0:37:35.773630	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a38, FOpts:), FPort: 01, FRMPayload: 054e, MIC: 87595a57)
0:37:35.774632	LOG	Server <---------- DUT
0:37:35.776629	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0708, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 67b1157e)
0:37:40.786448	LOG	Frame command sent to the DUT
0:37:40.788447	LOG	PULL_RESP: Protocol version = 02, Token = ec35, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3055341387, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAACQfgLz2yavibQRhw5o1lQy7zVHdCyNSXdqL0h3WB6XRJ13NFXnrohfofJmnsTilhrfZkY/xWwr/uVqd34yyNqg0fPqOeL4d1aIUInuuuxnJPZc+2g0nTcEspfNkQ+W4oudjT+9Fq+a7gO9PceOgEY//br2rfm//w+f9S+yvIhR4U/x0heNGvSdDXbtd1y1dpPsuUsLouafe/yWvFIk8Hm3eBDlIhZq3viGTRgk8HExhytYcxOm+5fuFwwCLyhCgZE/In1SiTe8P4T+pj75zNkC7cmiLkAbFQPCh/9SUkljVKgy68ww4CH3BJM2yQ8/3wpXYgxwRnsRV+'}}
0:37:40.790446	LOG	Server ----------> DUT
0:37:40.793444	LOG	Send Test Command TxFramesCtrlReq process completed
0:37:40.796443	LOG	Send Test Command TxFramesCtrlReq process starts
0:37:45.775358	LOG	PUSH_ACK: 02 0e7b 01
0:37:45.777357	LOG	PUSH_DATA: Protocol version = 02, Token = 0e7b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3058344008, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAOgoBoQS4v8Sk'}]}
0:37:45.779356	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a3a, FOpts:), FPort: 01, FRMPayload: 0550, MIC: b8bfc4a4)
0:37:45.780355	LOG	Server <---------- DUT
0:37:45.782356	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 070a, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 775ab05b)
0:37:45.784355	LOG	Frame command sent to the DUT
0:37:45.785354	LOG	PULL_RESP: Protocol version = 02, Token = 0cb4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3060344008, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAACgfgbw1kUQKa62hf8lF60BNNBjKmHHw8D30xvMlBxOagcrpllu2AH8qSm3NTkglg8r6tS5uIbaHQLrPPx7d+XLLVdlNGlUZ/XtCpW0Jzbg7d5So95jlhJrw1JJi/QvbXRak0gwgaHbRvF+JjWLW2eWSDilGpVtCrtgkYqFO4AgxwWlQJ9jfkecm9JJWk7bt8KWhDH5F6t3QhqmzpCluDPE23BizondHY9WVWIYwSPuY6viVRUhuU2ZIlUbMxeI+kULtE+6MOugxE/s2c11+tvHl/lOzwBMoTvOkQaV55M3atg3rk82lT3BlI4C8/CkK8KygALAl3WrBb'}}
0:37:45.786354	LOG	Server ----------> DUT
0:37:45.790350	LOG	Send Test Command TxFramesCtrlReq process completed
0:37:45.794348	LOG	Send Test Command TxFramesCtrlReq process starts
0:37:47.881341	LOG	PULL_DATA: 02 876f 02 aa555a0000240409
0:37:47.883340	LOG	PULL_ACK: 02 876f 04
0:37:50.777762	LOG	PUSH_ACK: 02 0e7c 01
0:37:50.780759	LOG	PUSH_DATA: Protocol version = 02, Token = 0e7c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3063346637, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAOwoBaEnYuvJY'}]}
0:37:50.781759	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a3b, FOpts:), FPort: 01, FRMPayload: 0551, MIC: d8baf258)
0:37:50.783758	LOG	Server <---------- DUT
0:37:50.785771	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 070b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:37:55.798137	LOG	Server ----------> DUT
0:37:55.804134	LOG	Send Test Command TxFramesCtrlReq process completed
0:37:55.814128	LOG	Send Test Command TxFramesCtrlReq process starts
0:37:57.901135	LOG	PULL_DATA: 02 0d4c 02 aa555a0000240409
0:37:57.903135	LOG	PULL_ACK: 02 0d4c 04
0:38:00.783468	LOG	PUSH_ACK: 02 0e7e 01
0:38:00.785467	LOG	PUSH_DATA: Protocol version = 02, Token = 0e7e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3073351891, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAPQoBBpMJR6NQ'}]}
0:38:00.786468	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a3d, FOpts:), FPort: 01, FRMPayload: 0553, MIC: 0947a350)
0:38:00.787468	LOG	Server <---------- DUT
0:38:00.790465	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 070d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:38:05.797413	LOG	PULL_RESP: Protocol version = 02, Token = c02c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3080354528, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAADgfg6vyvagZy2bDv7Li9oOnCSp6Prs59GaYtI67kJe2a8qV8X6jQA1E2V5AlmKzb8bcViA5x9J1noQ1urCdwJxc7/Uv1VPEe1rGtVhJrIkFmohnwcqSINJUkjrEmGO0/to3VLUEk6Xl59LkzLj8dLOXkDPxGRXFy8gHvHvnf3xtjJcUJUPyr5iGQ/6oMU5gUfx5Ujjh5UbM9zaX+fIJRCGBf5aOuVa9ROxiDSHMr3r68jO67SMmSYQlZY7mgDfekBS+TrpLuh3Gm8+UIu+Ojxm2EgnQ/dLp3QYy65erPI7z1FBEEEcyjTRVQSly31o+wogzD643vTfUO'}}
0:38:05.798412	LOG	Server ----------> DUT
0:38:05.801411	LOG	Send Test Command TxFramesCtrlReq process completed
0:38:05.805408	LOG	Send Test Command TxFramesCtrlReq process starts
0:38:08.111891	LOG	PULL_DATA: 02 1714 02 aa555a0000240409
0:38:08.112890	LOG	PULL_ACK: 02 1714 04
0:38:10.789073	LOG	PUSH_ACK: 02 0e81 01
0:38:10.791072	LOG	PUSH_DATA: Protocol version = 02, Token = 0e81, Identifier = 00, JSON = {'rxpk': [{'tmst': 3083357148, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAPwoBfvKEmN97'}]}
0:38:10.792072	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a3f, FOpts:), FPort: 01, FRMPayload: 0555, MIC: 8498df7b)
0:38:10.793071	LOG	Server <---------- DUT
0:38:10.795070	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 070f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		07000101010101010101010

0:38:25.800668	LOG	PUSH_DATA: Protocol version = 02, Token = 0e84, Identifier = 00, JSON = {'rxpk': [{'tmst': 3098365021, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAQgoBMWelDsqH'}]}
0:38:25.802666	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a42, FOpts:), FPort: 01, FRMPayload: 0558, MIC: a50eca87)
0:38:25.804665	LOG	Server <---------- DUT
0:38:25.806664	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0712, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		IyBtWD0mzmHweyLGxlplZx0/tROj4cYpWFQWFbSgdJwiqYL7In4Kj7FONT02Dzd/MyjkV0MQCIA2BAk+athgbPkauzd3leO7hJpnM5uWJvrkCNy1J213m5Wf56f5lQRgmKXfJyblM0eYzG1HXlBJ5HWsP7B9p7ZWavrk390nttFsD/kv9OT104YwKIseFuy2z3ybyeTC6TDJmpKdZZXfF+FUO369l8Q'}}
0:38:30.812602	LOG	Server ----------> DUT
0:38:30.815581	LOG	Send Test Command TxFramesCtrlReq process completed
0:38:30.818582	LOG	Send Test Command TxFramesCtrlReq process starts
0:38:35.802376	LOG	PUSH_ACK: 02 0e86 01
0:38:35.806374	LOG	PUSH_DATA: Protocol version = 02, Token = 0e86, Identifier = 00, JSON = {'rxpk': [{'tmst': 3108370280, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCARAoBhSfn1+f+'}]}
0:38:35.810371	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a44, FOpts:), FPort: 01, FRMPayload: 055a, MIC: e7d7e7fe)
0:38:35.814369	LOG	Server <---------- DUT
0:38:35.819366	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0714, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 7fad8bfb)
0:38:40.813200	LOG	Frame command sent to the DUT
0:38:40.815198	LOG	PULL_RESP: Protocol version = 02, Token = 1105, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3115372902, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAFQfg79t5NjUxEmosw3cEytgheHlBnCo0uyPsSImCskZOM5/gT6+9gGrFA+oATfpMvEjV9GjM2JrYyypVOlE+KmDUP+ldbLYzojtAgSJ4fcz6/Dje9zBWiqGpTsnOwtRb8IotrpYU8NoEVJKQZfZcMWW+lNbvjnvGrNjFV42Gqcwj+hws5O84itA2Ib205slkoGShPg+UhMf5ERJ1lt097JYf5dt/P7YJrWRRL37Qi+ih1okG+m9aMMBLdJxlDcxGB1RBT/qMDnmownZ/81htX3l9H2y0FUkZC2mi9DcqRs+CoqOGH+insUuuR2wUy+wWOV9If2J/rYv7'}}
0:38:40.816197	LOG	Server ----------> DUT
0:38:40.819195	LOG	Send Test Command TxFramesCtrlReq process completed
0:38:40.823191	LOG	Send Test Command TxFramesCtrlReq process starts
0:38:45.806851	LOG	PUSH_ACK: 02 0e89 01
0:38:45.808850	LOG	PUSH_DATA: Protocol version = 02, Token = 0e89, Identifier = 00, JSON = {'rxpk': [{'tmst': 3118375532, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCARgoBC3ogAZzA'}]}
0:38:45.810849	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a46, FOpts:), FPort: 01, FRMPayload: 055c, MIC: 20019cc0)
0:38:45.811848	LOG	Server <---------- DUT
0:38:45.813847	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0716, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101

0:38:50.821975	LOG	Server <---------- DUT
0:38:50.825973	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0717, FOpts:), FPort: e0, FRMPayload: 09), MIC: 167ad784)
0:38:50.830970	LOG	Frame command sent to the DUT
0:38:50.832970	LOG	PULL_RESP: Protocol version = 02, Token = a574, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3125378160, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAAFwfgFRZ614Q='}}
0:38:50.833970	LOG	Server ----------> DUT
0:38:50.837968	LOG	TX_ACK: 02 a574 05 aa555a0000240409
0:38:55.841156	LOG	PUSH_ACK: 02 0e8b 01
0:38:55.845155	LOG	PUSH_DATA: Protocol version = 02, Token = 0e8b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3128388862, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 16, 'data': 'QCAgICCASArgI6Wx7YdmMA=='}]}
0:38:55.846155	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a48, FOpts:), FPort: e0, FRMPayload: 095e05, MIC: ed876630)
0:38:55.848152	LOG	Server <---------- DUT
0:38:55.849153	LOG	Answer in payload: 5e05
0:38:55.851150	LOG	Frame Command Payload in the Answer: 095e05
0:38:55.856149	LOG	RX Count received by DUT: 1374
0:38:55.859146	LOG	Send Test Command RxAppCntReq process completed
0:38:55.867141	LOG	End Test Step: Test packet error rate for SF7BW250 using RX2 window
0:38:55.872138	LOG	Partial Verdict: PASS
0:38:55.876137	LOG	==========
0:38:55.883132	LOG	==========
0:38:55.886131	LOG	Start Test Step: Test packet error rate for FSK50 using RX2 window
0:38:55.900122	LOG	Send RXParamSetupReq process starts
0:38:58.600805	LOG	PULL_DATA: 02 27bf 02 aa555a0000240409
0:38:58.602804	LOG	PULL_ACK: 02 27bf 04
0:39:00.831329	LOG	PUSH_ACK: 02 0e8c 01
0:39:00.833327	LOG	PUSH_DATA: Protocol version = 02, Token = 0e8c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3133383422, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCASQoBD/Lq7XoX'}]}
0:39:00.835330	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a49, FOpts:), FPort: 01, FRMPayload: 055e, MIC: eaed7a17)
0:39:00.836330	LOG	Server <---------- DUT
0:39:00.838324	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0718, FOpts:), FPort: 00, FRMPayload: 0507d2ad84), MIC: 1f210e36)
0:39:00.840323	LOG	PULL_RESP: Protocol version = 02, Token = 2fdc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3135383422, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAGAcAYvjO3hgfIQ42'}}
0:39:00.841322	LOG	Server ----------> DUT
0:39:00.845320	LOG	TX_ACK: 02 2fdc 05 aa555a0000240409
0:39:05.799318	LOG	PUSH_ACK: 02 0e8d 01
0:39:05.802315	LOG	PUSH_DATA: Protocol version = 02, Token = 0e8d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3138391195, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCSgoFBwEVzIJHr98='}]}
0:39:05.803315	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0a4a, FOpts: 0507), FPort: 01, FRMPayload: 055e, MIC: 8247afdf)
0:39:05.805316	LOG	Server <---------- DUT
0:39:05.807313	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field

0:39:05.808335	LOG	Command Answer: 0507
0:39:05.822323	LOG	MAC command communication completed
0:39:05.833298	LOG	Send Test Command RxAppCntReq process starts
0:39:08.611202	LOG	PULL_DATA: 02 fa64 02 aa555a0000240409
0:39:08.613201	LOG	PULL_ACK: 02 fa64 04
0:39:10.800956	LOG	PUSH_ACK: 02 0e90 01
0:39:10.802954	LOG	PUSH_DATA: Protocol version = 02, Token = 0e90, Identifier = 00, JSON = {'rxpk': [{'tmst': 3143393811, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCSwoFBwFuLRaJOkw='}]}
0:39:10.804956	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0a4b, FOpts: 0507), FPort: 01, FRMPayload: 055e, MIC: 16893a4c)
0:39:10.805954	LOG	Server <---------- DUT
0:39:10.807951	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0719, FOpts:), FPort: e0, FRMPayload: 09), MIC: fc9ca3c2)
0:39:10.810950	LOG	Frame command sent to the DUT
0:39:10.811968	LOG	PULL_RESP: Protocol version = 02, Token = 41af, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3145393811, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 14, 'data': 'YCAgICAAGQfglfyco8I='}}
0:39:10.813948	LOG	Server ----------> DUT
0:39:10.816947	LOG	TX_ACK: 02 41af 05 aa555a0000240409
0:39:15.842597	LOG	PUSH_ACK: 02 0e91 01
0:39:15.847591	LOG	PUSH_DATA: Protocol version = 02, Token = 0e91, Identifier = 00, JSON = {'rxpk': [{'tmst': 3148399350, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 16, 'data': 'QCAgICCATArgrP427lXrAQ=='}]}
0:39:15.849588	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a4c, FOpts:), FPort: e0, FRMPayload: 095f05, MIC: ee55eb01)
0:39:15.850590	LOG	Server <---------- DUT
0:39:15.851589	LOG	Answer in payload: 5f05
0:39:15.853586	LOG	Frame Command Payload in the Answer: 095f05
0:39:15.856585	LOG	RX Count received by DUT: 1375
0:39:15.859584	LOG	Send Test Command RxAppCntReq process completed
0:39:15.862581	LOG	Send Test Command TxFramesCtrlReq process starts
0:39:18.790974	LOG	PULL_DATA: 02 ac38 02 aa555a0000240409
0:39:18.792974	LOG	PULL_ACK: 02 ac38 04
0:39:20.832814	LOG	PUSH_ACK: 02 0e92 01
0:39:20.834811	LOG	PUSH_DATA: Protocol version = 02, Token = 0e92, Identifier = 00, JSON = {'rxpk': [{'tmst': 3153393878, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCATQoB5jYMDC7A'}]}
0:39:20.836810	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a4d, FOpts:), FPort: 01, FRMPayload: 055f, MIC: 0c0c2ec0)
0:39:20.837810	LOG	Server <---------- DUT
0:39:20.840808	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 071a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

0:39:20.844806	LOG	PULL_RESP: Protocol version = 02, Token = 284d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3155393878, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAAGgfgSySSwqCSXzqVo2ysWdMKuzImGupY0dnwmWD+cdKZaL71QSvARayc9lYP1E3UWghHgZzajpZAGK4j32+2XcjlogSSKiNqAkDkEvtj21Yeo7qlNvGAgxveV44+dw5jVe/nafSnUGpDKeB6u+2mC8vSZZYRiKhYAGPsmHUbm6yOGmCI1jQIDvp8ZpEy3F55adKL0fJFCzgruWp3qjTRyrlgSFIfGQNt6X/x5A1BjTVp2iSed5sgL3hygfreRAS6+d3Kgt2VtVAZqf2yJ3HGjXe93sBbEiItHVi4t6GSVWWPqnW4zjoQNtcTV/2ixhfCv+jNTk0/9KZ3'}}
0:39:20.845807	LOG	Server ----------> DUT
0:39:20.848805	LOG	Send Test Command TxFramesCtrlReq process completed
0:39:20.851802	LOG	Send Test Command TxFramesCtrlReq process starts
0:39:25.827853	LOG	PUSH_ACK: 02 0e93 01
0:39:25.829854	LOG	PUSH_DATA: Protocol version = 02, Token = 0e93, Identifier = 00, JSON = {'rxpk': [{'tmst': 3158396474, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCATgoBarZ17Cw9'}]}
0:39:25.831851	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a4e, FOpts:), FPort: 01, FRMPayload: 0560, MIC: 75ec2c3d)
0:39:25.833849	LOG	Server <---------- DUT
0:39:25.835849	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 071b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

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0:39:40.838402	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a51, FOpts:), FPort: 01, FRMPayload: 0563, MIC: a79a6ae3)
0:39:40.839403	LOG	Server <---------- DUT
0:39:40.841400	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 071e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:39:49.212549	LOG	PULL_ACK: 02 5864 04
0:39:50.840382	LOG	PUSH_ACK: 02 0e99 01
0:39:50.842383	LOG	PUSH_DATA: Protocol version = 02, Token = 0e99, Identifier = 00, JSON = {'rxpk': [{'tmst': 3183409503, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAUwoBsvQZ/TZK'}]}
0:39:50.843380	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a53, FOpts:), FPort: 01, FRMPayload: 0565, MIC: 19fd364a)
0:39:50.845380	LOG	Server <---------- DUT
0:39:50.847379	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0720, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		mSxqufGqvSJomMuziwsA3RNfOfRKA7ub3rQVDtAOh/V8EVIQAooPZ1IBLrS3Dfy4Bt02OMSICUTkAFOaiiwPL1LkIvBP+3ZQ1'}}
0:39:55.853668	LOG	Server ----------> DUT
0:39:55.856666	LOG	Send Test Command TxFramesCtrlReq process completed
0:39:55.859665	LOG	Send Test Command TxFramesCtrlReq process starts
0:39:59.420397	LOG	PULL_DATA: 02 613d 02 aa555a0000240409
0:39:59.425379	LOG	PULL_ACK: 02 613d 04
0:40:00.845190	LOG	PUSH_ACK: 02 0e9b 01
0:40:00.847189	LOG	PUSH_DATA: Protocol version = 02, Token = 0e9b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3193414717, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAVQoB9rqlt8FA'}]}
0:40:00.849187	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a55, FOpts:), FPort: 01, FRMPayload: 0567, MIC: a5b7c140)
0:40:00.851187	LOG	Server <---------- DUT
0:40:00.853185	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0722, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:40:05.858693	LOG	PULL_RESP: Protocol version = 02, Token = 9a88, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3200417319, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAAIwfgFvUUP465RdcRbu7FZu9P/IJv/Tmp1FQwMtp/y8PodpuJC/z1JlgaAjlnahdqc9sbD1CMM6ywTUcJs9rJn5ApjQDZcyXoupDMKZNUqNmT+oN6BFQ8HJ7b0wzJvkwBnsxVFrKWe6tqxoBCBnOKDnlEtPHxbmNU6Yda+FYjBz4UfRVo8Y86yqbGaAqimguZzaAaG6iqDEBIfwmAJ+r799/6mt/4oRK1mBCaa7th3xXTehbkhy0kl0dq6+bOpzrrfb9+Yp6xL1zsNpPiG5t57BglUGhqEv/rAs0XVMEG3MJ1QD6iRVNynL8tGmdkY9akAzGZPNc4LHTn'}}
0:40:05.860691	LOG	Server ----------> DUT
0:40:05.864688	LOG	Send Test Command TxFramesCtrlReq process completed
0:40:05.866707	LOG	Send Test Command TxFramesCtrlReq process starts
0:40:09.431316	LOG	PULL_DATA: 02 a382 02 aa555a0000240409
0:40:09.433314	LOG	PULL_ACK: 02 a382 04
0:40:10.850703	LOG	PUSH_ACK: 02 0e9e 01
0:40:10.852701	LOG	PUSH_DATA: Protocol version = 02, Token = 0e9e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3203419921, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAVwoB3nB70tiv'}]}
0:40:10.854702	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a57, FOpts:), FPort: 01, FRMPayload: 0569, MIC: 7bd2d8af)
0:40:10.855701	LOG	Server <---------- DUT
0:40:10.857698	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0724, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101). MIC: e35fff68)
0:40:15.872980	LOG	Frame command sent to the DUT
0:40:15.874978	LOG	PULL_RESP: Protocol version = 02, Token = 92cc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3210422532, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAAJQfgONPEsNolkGkhV7OE9+mLW+zoSpRLJeoperovHmOV+7WJRlt6s7e0tvqE68FGwVim7epFQurMUtqmPso8/qo9cxak1tsPnG7WwwZhmeduGoSoDqEqosWkNkNYTWg+29GnEysnojP5qVP0nB3GqMU87hr7Pek3Zeztn+bknoAHyro7C2bRynQEpzzhIZorZWx5Mv1i3s8UEHFVhceuxcz69tuJ24M9Y7dY3WRGoMTx4RqQANOo3nmV7TVHKOo8qLeDtbzG8ZfeRg1AFCmbw2RsfPLoyDHn9fvGb02HQJxCiKnyGadkb3zyS9/Yhfe9p3aRS1bjX/9o'}}
0:40:15.875981	LOG	Server ----------> DUT
0:40:15.878976	LOG	Send Test Command TxFramesCtrlReq process completed
0:40:15.883974	LOG	Send Test Command TxFramesCtrlReq process starts
0:40:19.441280	LOG	PULL_DATA: 02 532b 02 aa555a0000240409
0:40:19.443280	LOG	PULL_ACK: 02 532b 04
0:40:20.856174	LOG	PUSH_ACK: 02 0ea0 01
0:40:20.858174	LOG	PUSH_DATA: Protocol version = 02, Token = 0ea0, Identifier = 00, JSON = {'rxpk': [{'tmst': 3213425128, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAWQoBqTbERHEE'}]}
0:40:20.860178	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a59, FOpts:), FPort: 01, FRMPayload: 056b, MIC: c4447104)
0:40:20.863172	LOG	Server <---------- DUT
0:40:20.869168	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0726, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101). MIC: 75960f4a)
0:40:20.876164	LOG	Frame command sent to the DUT
0:40:20.881161	LOG	PULL_RESP: Protocol version = 02, Token = d8cf, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3215425128, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAAJgfgf1qaL5hYUp4hWqqGuhmcFkbSl6jzvcElwMBZCjrV0CfZe19idCHuwtZb5HFVPQqXbCox9PuNCYRjKxci/rRrDt97FlkDuo0o/Li1EXgaaKjYPVrG/64T5eInTS2UQwA/EN1+cNNlblI4uibN1CVKRKjhYJehTM10nC3zAutmC5FdpmZoJRLpg7KmcMD0ngPie8vmXxHM/7u+SEyJxJEyo3Fd52m2B0jNQEWxe9Omtir3AHF53wPxhfCRdot0ifC+OQTfuKH4ygAd0Oq1qGoroOo5CYJBS6YA3bQ1WceySDw7fLejZhd78IyAmPQ9lFuFsdN1lg9K'}}
0:40:20.884161	LOG	Server ----------> DUT
0:40:20.890156	LOG	Send Test Command TxFramesCtrlReq process completed
0:40:20.893155	LOG	Send Test Command TxFramesCtrlReq process starts
0:40:25.858336	LOG	PUSH_ACK: 02 0ea1 01
0:40:25.860336	LOG	PUSH_DATA: Protocol version = 02, Token = 0ea1, Identifier = 00, JSON = {'rxpk': [{'tmst': 3218427742, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAWgoB7T9LF78T'}]}

0:40:25.862335	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a5a, FOpts:), FPort: 01, FRMPayload: 056c, MIC: 4b17bf13)
0:40:25.863334	LOG	Server <---------- DUT
0:40:25.865333	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0727, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:40:30.880683	LOG	Send Test Command TxFramesCtrlReq process starts
0:40:35.862770	LOG	PUSH_ACK: 02 0ea3 01
0:40:35.864769	LOG	PUSH_DATA: Protocol version = 02, Token = 0ea3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3228432955, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAXAoB7Jeuk9c8'}]}
0:40:35.865769	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a5c, FOpts:), FPort: 01, FRMPayload: 056e, MIC: ae93d73c)
0:40:35.866770	LOG	Server <---------- DUT
0:40:35.868766	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0729, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		uqPB727zRom+ZaOMiVBsaajnljvawDaKWlgsBV2i5dSZCTYSe6F/fCDZNN/rED9MZmKinR5To04aGpkSafQmMaj16r8ooyKTKpEzuX/AOn2pjjZfBQ/TnMrXEpPFLIQy5gFd4hIf3kDk0nQZPv7rkANUVBEissofO1o6f8dz3yHk1WpUVN6kZr+R12K7EKtMjibNgeJDA3DlahuMvCs3rcNzntqxOz+Vvbcn4Drtd6bkUnfk7xWR44fJL/KxvXn5C2McPLxPWD9H+nAYEO8F7sTLIJ'}}
0:40:40.881287	LOG	Server ----------> DUT
0:40:40.883286	LOG	Send Test Command TxFramesCtrlReq process completed
0:40:40.886284	LOG	Send Test Command TxFramesCtrlReq process starts
0:40:45.869207	LOG	PUSH_ACK: 02 0ea6 01
0:40:45.872206	LOG	PUSH_DATA: Protocol version = 02, Token = 0ea6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3238438165, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAXgoBsM5C4zis'}]}
0:40:45.874205	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a5e, FOpts:), FPort: 01, FRMPayload: 0570, MIC: 42e338ac)
0:40:45.875204	LOG	Server <---------- DUT
0:40:45.878202	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 072b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 4a563717)
0:40:50.882395	LOG	Frame command sent to the DUT
0:40:50.884394	LOG	PULL_RESP: Protocol version = 02, Token = f0d7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3245440785, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAALAfg5D4jK3rhTfXxMo4FqQjFoKjrCvNzNoMJmiX0Gghdybz6aZQX/aM0xCHsbpG2ZWt+ASARfRhB8+komHIcVvZxqvZFr7ZyVU1ak8Jc2PZj5ZyvziEqc6EEaHTDnvPpnCXww1HeG8ydgqmSZA/nS27dkai5Eyg8H2medUfBSLcTFJQBdngus4uSeOMW7bpAYerGkqnrpLqB/5h0+N0Wuhx3jgMAE5Fe4o0ZoiHkYZgRcs7hbkxapF0Rdk3kP9dtrkrorvzli4+LF0ZeMm73kmyletct+jAt0OHeUW/VgWpL7VmOpEb2BmESbHVE/4TX4AveTLpKVjcX'}}
0:40:50.886392	LOG	Server ----------> DUT
0:40:50.889391	LOG	Send Test Command TxFramesCtrlReq process completed
0:40:50.893388	LOG	Send Test Command TxFramesCtrlReq process starts
0:40:55.874866	LOG	PUSH_ACK: 02 0ea8 01
0:40:55.876865	LOG	PUSH_DATA: Protocol version = 02, Token = 0ea8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3248443371, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAYAoBPrPTFOlr'}]}
0:40:55.878864	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a60, FOpts:), FPort: 01, FRMPayload: 0572, MIC: d314e96b)
0:40:55.879864	LOG	Server <---------- DUT
0:40:55.882862	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 072d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101

0:41:00.883391	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 072e, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:41:10.885979	LOG	PUSH_DATA: Protocol version = 02, Token = 0eac, Identifier = 00, JSON = {'rxpk': [{'tmst': 3263451187, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAYwoB9gQw3HCQ'}]}
0:41:10.889977	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a63, FOpts:), FPort: 01, FRMPayload: 0575, MIC: 30dc7090)
0:41:10.893979	LOG	Server <---------- DUT
0:41:10.898976	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0730, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:41:15.911854	LOG	Server ----------> DUT
0:41:15.914852	LOG	Send Test Command TxFramesCtrlReq process completed
0:41:15.918849	LOG	Send Test Command TxFramesCtrlReq process starts
0:41:20.110573	LOG	PULL_DATA: 02 dbf0 02 aa555a0000240409
0:41:20.112572	LOG	PULL_ACK: 02 dbf0 04
0:41:20.886927	LOG	PUSH_ACK: 02 0eae 01
0:41:20.889925	LOG	PUSH_DATA: Protocol version = 02, Token = 0eae, Identifier = 00, JSON = {'rxpk': [{'tmst': 3273456385, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAZQoBM/ttgxeG'}]}
0:41:20.890925	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a65, FOpts:), FPort: 01, FRMPayload: 0577, MIC: 6d831786)
0:41:20.891925	LOG	Server <---------- DUT
0:41:20.893923	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0732, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAAMwfgGb0nnR0GmJETMpt5GdU8vy95aF6RZpXAjXOexhtSSUFchyPc08R0LXKNh3iVTbyzjWo0CodYRyGnz7ji5zXI7B2EOI2h9MNbXMAidFslAm9V8bVuS7tp1bW9CNJ2MXSJ0EWeEwYTSohthtGhNZ9JwA4SbHI1NRFYia3EtTG282R4Os/9WrZoct1EvQoZ2rYty2v+Gl/Cyk5ZqQB+vItcKJevWJYuhE1ovkjmqK1806P2UmBAK08Oirs6qgQzaOKwKRKFt7l60zuiR+WLwpzOimyMyADVT6b+Ie0kNYGHe10XchqRDsoPe6JfENhMis43jtrESE4u'}}
0:41:25.903966	LOG	Server ----------> DUT
0:41:25.907964	LOG	Send Test Command TxFramesCtrlReq process completed
0:41:25.913960	LOG	Send Test Command TxFramesCtrlReq process starts
0:41:30.310304	LOG	PULL_DATA: 02 e802 02 aa555a0000240409
0:41:30.315301	LOG	PULL_ACK: 02 e802 04
0:41:30.892004	LOG	PUSH_ACK: 02 0eb0 01
0:41:30.895973	LOG	PUSH_DATA: Protocol version = 02, Token = 0eb0, Identifier = 00, JSON = {'rxpk': [{'tmst': 3283461599, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAZwoBiIQXO6oC'}]}
0:41:30.898970	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a67, FOpts:), FPort: 01, FRMPayload: 0579, MIC: 173baa02)
0:41:30.901973	LOG	Server <---------- DUT
0:41:30.905970	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0734, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101.
0:41:35.903839	LOG	Frame command sent to the DUT
0:41:35.904840	LOG	PULL_RESP: Protocol version = 02, Token = bd1a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3290464200, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAANQfgObxY27afo++C91apq7dlxaOoznRBBt3qu1U+hRa378u6SJoWf ZmQ7WTAfRnpYhP+8wMQhlbimww1JDxspkakwSlkONTfKbtLJg+vuxVS0Qxn NjugTgbwMgEBNPYNi9hr48gDSZ16eil9C/YTx9zSxaZSo3ubhyUcWtFTIxglWc8 KhiwhJvoo4zhD0l4QRA5oadLXieDc4gJ3Zw4q/+2iCRfP4wQAEftgsh9/gvLgqsg2 mdsQkSFZ+k2hGd9irkwO7TE8fQiHMKce2t/dX4AO8YlPPrTA89RstTLVEKEOx refC3LnORLLM7mtstVbK2GN+fw1CKBs'}}
0:41:35.905839	LOG	Server ----------> DUT
0:41:35.908838	LOG	Send Test Command TxFramesCtrlReq process completed
0:41:35.911836	LOG	Send Test Command TxFramesCtrlReq process starts
0:41:40.320520	LOG	PULL_DATA: 02 afe3 02 aa555a0000240409
0:41:40.322519	LOG	PULL_ACK: 02 afe3 04
0:41:40.896731	LOG	PUSH_ACK: 02 0eb3 01
0:41:40.898729	LOG	PUSH_DATA: Protocol version = 02, Token = 0eb3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3293466812, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAaQoBq52VMbLx'}]}
0:41:40.899729	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a69, FOpts:), FPort: 01, FRMPayload: 057b, MIC: 9531b2f1)
0:41:40.901727	LOG	Server <---------- DUT
0:41:40.903728	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0736, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101.
0:41:40.905725	LOG	Frame command sent to the DUT
0:41:40.906725	LOG	PULL_RESP: Protocol version = 02, Token = 71a7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3295466812, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAANgfg2e1Tz10lYJe8kctt2eULsO1bE2b0/ILx9VmdxlRIRZ76XG9Av+ Nmljw9jWp/f7k6BfJ8POZu9Y46PzPq2tDgv/rBKvYEFKaJazHHBG4ddBBGaqYa IsIT8tpkHUrfdN7xlnunpa+Tizw1hJ1J0X3iALcPWmCKVTpfysUJMb/dtdufTnm7 NmGqvNFAX3QWkPzlWeF/LY1VqlmkatIdvhZFL2jeWfYUZTxv9Hv0Szw53ZtO o794PcQgbk34prB2CFgwlpInIyhGk61carrUYPB0ThFfOi+6pJdK5njK0YwvkZo0o iaGti0uV2N9PJZZv5Iodf1WQ0+W'}}
0:41:40.907726	LOG	Server ----------> DUT
0:41:40.911721	LOG	Send Test Command TxFramesCtrlReq process completed
0:41:40.914721	LOG	Send Test Command TxFramesCtrlReq process starts
0:41:45.898971	LOG	PUSH_ACK: 02 0eb4 01
0:41:45.900970	LOG	PUSH_DATA: Protocol version = 02, Token = 0eb4, Identifier = 00, JSON = {'rxpk': [{'tmst': 3298469407, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAagoBz2w6h078'}]}
0:41:45.902969	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a6a, FOpts:), FPort: 01, FRMPayload: 057c, MIC: 3a874efc)

0:41:45.903968	LOG	Server <---------- DUT
0:41:45.905967	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0737, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:41:55.904677	LOG	PUSH_ACK: 02 0eb6 01
0:41:55.905675	LOG	PUSH_DATA: Protocol version = 02, Token = 0eb6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3308474620, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAbAoBbKiwhsv5'}]}
0:41:55.907674	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a6c, FOpts:), FPort: 01, FRMPayload: 057e, MIC: b086cbf9)
0:41:55.908673	LOG	Server <---------- DUT
0:41:55.911672	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0739, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		v+JjIKJAre74elMGgDcVj9toTETfWGxYvk4H4N+el5GeBTw6+Sa5EEoSGCnvx1jc6EwqCF47yPfLJh3OzchcURnzb/EWavTdbNhab+HtWmRVCc1we9I9URszyXsoiQG0lr840/DjNgmshxmXHD1OaYaytqF'}}
0:42:00.936684	LOG	Server ----------> DUT
0:42:00.940682	LOG	Send Test Command TxFramesCtrlReq process completed
0:42:00.943680	LOG	Send Test Command TxFramesCtrlReq process starts
0:42:05.909325	LOG	PUSH_ACK: 02 0eb8 01
0:42:05.911324	LOG	PUSH_DATA: Protocol version = 02, Token = 0eb8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3318479826, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAbgoBt0R5KdZY'}]}
0:42:05.912324	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a6e, FOpts:), FPort: 01, FRMPayload: 0580, MIC: 7929d658)
0:42:05.914322	LOG	Server <---------- DUT
0:42:05.916322	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 073b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:42:10.923636	LOG	Frame command sent to the DUT
0:42:10.924635	LOG	PULL_RESP: Protocol version = 02, Token = c140, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3325482435, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAAPAfg9T2OsUlzaeK1aSdQk8H6x+UilQeEEl7ihAGFM+XLit2nLci/mIh5xLXDoDGj9BF74/OpAYqZDA/64kP4gX7TdKrMjVNCyLuAWGgL/uijbDUvEiruhjfqO73bS6/ceQlOFKVJMHtqWtM+ac1lGemlqaISLB1uRhyKQ8UfB+Jg2TT7NPsVs8rHcUza8rovz0iQY6lixMl82XmYiJ4Ie5wNT5dkUiVbWsKSUz35XC8obEi2H53h7Z/mhqIySG7BbEequUGuIHyuh7a7PjnL5x30L8PfnldFnxaxCJjOrm7Y+ntV7LnTW1/+qXMQvQlQMNKzSslIROnu'}}
0:42:10.925634	LOG	Server ----------> DUT
0:42:10.928632	LOG	Send Test Command TxFramesCtrlReq process completed
0:42:10.931633	LOG	Send Test Command TxFramesCtrlReq process starts
0:42:15.913927	LOG	PUSH_ACK: 02 0ebc 01
0:42:15.916926	LOG	PUSH_DATA: Protocol version = 02, Token = 0ebc, Identifier = 00, JSON = {'rxpk': [{'tmst': 3328485032, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAcAoBW3nBZaif'}]}
0:42:15.917924	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a70, FOpts:), FPort: 01, FRMPayload: 0582, MIC: c165a89f)
0:42:15.918924	LOG	Server <---------- DUT
0:42:15.920922	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 073d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 6aec835a)
0:42:20.925039	LOG	Frame command sent to the DUT
0:42:20.926038	LOG	PULL_RESP: Protocol version = 02, Token = 8f8d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3335487644, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAAPgfgbq0IFR5QT83s5LPfs2dciD9sU+yFqbNdHqrYWsA9Elld8Zi+jlOVt3JHAWzwXAKWXBKITacVCDmy6F4+N3w6S+8pNipZFv3nGHpfZjYCd7zGa7YwTGhTZws38fLUR7RsP++pkcnhd58zsfNsmsRUKsliDoDyfGc0m1QlR39ZIm3A4KEmIqGkiu410dQGL4ZX6ij/dDAWOpDIb2f8UNNFZAYk8fav+hAa1g25eg5Gev+5EcXN4+X4Nw90dGpacLykKagu/1BxybjZpNJ0D+QVK4dqveC1cqDhhfUKeni6xok09mjbqT4CKzmd6ik9RqSq9l1q7INa'}}
0:42:20.927038	LOG	Server ----------> DUT
0:42:20.931033	LOG	Send Test Command TxFramesCtrlReq process completed
0:42:20.934032	LOG	Send Test Command TxFramesCtrlReq process starts
0:42:25.920025	LOG	PUSH_ACK: 02 0ebe 01
0:42:25.922024	LOG	PUSH_DATA: Protocol version = 02, Token = 0ebe, Identifier = 00, JSON = {'rxpk': [{'tmst': 3338490256, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAcgoB/fT1f6iV'}]}
0:42:25.923022	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a72, FOpts:), FPort: 01, FRMPayload: 0584, MIC: f57fa895)
0:42:25.924023	LOG	Server <---------- DUT
0:42:25.926020	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 073f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101), MIC: 9e720e03)
0:42:25.929018	LOG	Frame command sent to the DUT
0:42:25.930018	LOG	PULL_RESP: Protocol version = 02, Token = 0056, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3340490256, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAAPwfgacGLGOSg7GZn55pO1CiCLERWLrCnJNocZ+4g+/+NW8Jm7PaRjmEr6LaOJ5o1OaJm6TIwr9ov6AVzF5XTZBh+Z3e5JovdP67tVf7N0p1dsQrV1pnvbqToCQSjSjZ3/Xf/xSKaksI5sSeVmPLA3io5lAKuXDQwe6W5fITWCYlbrL++egK4pM7yIPnYbG4DbIlQEh59RQwjbhlJ71IR3XUDWuu3Q1SecGgYAaPxfIEwzJbOQAofmnWgjoP6kwIdwUflHKXvJmoa2KZtxWdd54ZeD7zdgzvRRFnMgKcndOicxFdMsG2CFY81s/DdEfenEOxEa0Oecg4D'}}
0:42:25.932016	LOG	Server ----------> DUT
0:42:25.935016	LOG	Send Test Command TxFramesCtrlReq process completed
0:42:25.938015	LOG	Send Test Command TxFramesCtrlReq process starts
0:42:30.922174	LOG	PUSH_ACK: 02 0ebf 01
0:42:30.926172	LOG	PUSH_DATA: Protocol version = 02, Token = 0ebf, Identifier = 00, JSON = {'rxpk': [{'tmst': 3343492851, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAcwoBZRVwOI+h'}]}
0:42:30.927172	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a73, FOpts:), FPort: 01, FRMPayload: 0585, MIC: 70388fa1)

0:42:30.929171	LOG	Server <---------- DUT
0:42:30.931171	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0740, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAdQoBHFukfa3q'}]}
0:42:40.935163	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a75, FOpts:), FPort: 01, FRMPayload: 0587, MIC: a47dadea)
0:42:40.939160	LOG	Server <---------- DUT
0:42:40.944157	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0742, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:42:45.947635	LOG	Send Test Command TxFramesCtrlReq process starts
0:42:50.932559	LOG	PUSH_ACK: 02 0ec5 01
0:42:50.934558	LOG	PUSH_DATA: Protocol version = 02, Token = 0ec5, Identifier = 00, JSON = {'rxpk': [{'tmst': 3363503281, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAdwoBQeRJYzvz'}]}
0:42:50.936557	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a77, FOpts:), FPort: 01, FRMPayload: 0589, MIC: 49633bf3)
0:42:50.937559	LOG	Server <---------- DUT
0:42:50.939555	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0744, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		GgsJpI7zYU2qo0MvT2X/JhrtaIe+0tM76GtwIwAq8o7g7WGskklU7QcT1wh8Hmb/RZBmA2wDTaX/RqmMpkTsHSATh/PLUl42V5bO5Ym6GRCBR9ITdSHJcbCFvdAlrZJeS62FLbk55Q4sKhe6kN5pV5B6gDrgTXi80OcKTkVZLKoVi8iddDgjVsi4m9FCsnqxRwWrlMqQpfut99uo2XGWVRiKkfnx63xodsSV8lQ8yV0HovG66tEWN+lhOinnNCSIuVw9wZuZPM9nX+NgWF2s5Tm+e3'}}
0:42:55.946468	LOG	Server ----------> DUT
0:42:55.949467	LOG	Send Test Command TxFramesCtrlReq process completed
0:42:55.953465	LOG	Send Test Command TxFramesCtrlReq process starts
0:43:00.938147	LOG	PUSH_ACK: 02 0ec7 01
0:43:00.942146	LOG	PUSH_DATA: Protocol version = 02, Token = 0ec7, Identifier = 00, JSON = {'rxpk': [{'tmst': 3373508486, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAeQoBdL9tMwOg'}]}
0:43:00.943145	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a79, FOpts:), FPort: 01, FRMPayload: 058b, MIC: 6d3303a0)
0:43:00.945142	LOG	Server <---------- DUT
0:43:00.948141	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0746, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: c9ef2cea)
0:43:05.950142	LOG	Frame command sent to the DUT
0:43:05.952141	LOG	PULL_RESP: Protocol version = 02, Token = 9cc2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3380511088, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAARwfgOqMk3SOJn3rRmDOnYQerBNofMe0mPddLhr4YTQGeYrFi5qFHjzWDVgsoNXKjdqKriaB65itEdWNK5WDQgq+PVyxDF215ML/sHyCIvHAYp2drcQnXvvmwoWNqpPO20YFABU0eZSFLVlxgwuNeXMxcqmSo8Lki5eEhhGOiCBtDD8a9DWToVVUdq6iqmZP5p+8gYKgZACbgG9DfeeqAxyzmyN8RsxGnyR5XWXsn4vgUoPJRLOhf+0IxuCbwZDNUPIKx1x3IV24v7GlFjjxcXEoAEQ5N7EbIiNegC1H2v+S8PFApySEc9M6zGHbH3hdbYKZnTQvJ7yzq'}}
0:43:05.953140	LOG	Server ----------> DUT
0:43:05.956140	LOG	Send Test Command TxFramesCtrlReq process completed
0:43:05.960138	LOG	Send Test Command TxFramesCtrlReq process starts
0:43:10.942440	LOG	PUSH_ACK: 02 0eca 01
0:43:10.944439	LOG	PUSH_DATA: Protocol version = 02, Token = 0eca, Identifier = 00, JSON = {'rxpk': [{'tmst': 3383513707, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAewoBhErfBUVx'}]}
0:43:10.946439	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a7b, FOpts:), FPort: 01, FRMPayload: 058d, MIC: df054571)
0:43:10.947438	LOG	Server <---------- DUT
0:43:10.949437	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0748, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101

0:43:15.951561	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0749, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:43:25.952931	LOG	PUSH_DATA: Protocol version = 02, Token = 0ecd, Identifier = 00, JSON = {'rxpk': [{'tmst': 3398521525, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAfgoBdyosVYvR'}]}
0:43:25.954931	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a7e, FOpts:), FPort: 01, FRMPayload: 0590, MIC: 2c558bd1)
0:43:25.955930	LOG	Server <---------- DUT
0:43:25.957929	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 074b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:43:30.969123	LOG	Server ----------> DUT
0:43:30.974119	LOG	Send Test Command TxFramesCtrlReq process completed
0:43:30.978136	LOG	Send Test Command TxFramesCtrlReq process starts
0:43:31.599335	LOG	PULL_DATA: 02 4f57 02 aa555a0000240409
0:43:31.601336	LOG	PULL_ACK: 02 4f57 04
0:43:35.956931	LOG	PUSH_ACK: 02 0ecf 01
0:43:35.961924	LOG	PUSH_DATA: Protocol version = 02, Token = 0ecf, Identifier = 00, JSON = {'rxpk': [{'tmst': 3408526748, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAgAoBNhyYui5e'}]}
0:43:35.965927	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a80, FOpts:), FPort: 01, FRMPayload: 0592, MIC: 98ba2e5e)
0:43:35.969920	LOG	Server <---------- DUT
0:43:35.974921	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 074d, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 255, 'data': 'YCAgICAATgfgOM3oNDhOrJlsO+dz15Wt20ouzNTPqFnMXwikqTg3ZBcWgg6ufDDgVEXZEw+lRW7t+1XO6vGAknaMn1XLz8CYxfI6Uu3ZzQMb1YTA+q5bGztUUwX1iukoq0NVMDKBc791NXxDOeLx7a2KTFbrJcbsZCTQMS5h1H+FtMMOzIXMrMBSUI/mM1ssyqoIiUZ0Rdn7NjmXQsL33WFOR0VDz9QYynEscPr+JGajH9o8hMkKF4M+BCtnLfMr/QLdV3qMfihsHr7EMWeRUhPktU60d3SyQs9/dYcoJXWT0A41OhPy+aZBZPkMZNun3bL/PvCgKxZWjrZ9Pj7C'}}
0:43:40.971600	LOG	Server ----------> DUT
0:43:40.975594	LOG	Send Test Command TxFramesCtrlReq process completed
0:43:40.984588	LOG	Send Test Command TxFramesCtrlReq process starts
0:43:41.809718	LOG	PULL_DATA: 02 87bb 02 aa555a0000240409
0:43:41.810718	LOG	PULL_ACK: 02 87bb 04
0:43:45.961474	LOG	PUSH_ACK: 02 0ed2 01
0:43:45.963473	LOG	PUSH_DATA: Protocol version = 02, Token = 0ed2, Identifier = 00, JSON = {'rxpk': [{'tmst': 3418531963, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAggoBL4QjGaqg'}]}
0:43:45.964473	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a82, FOpts:), FPort: 01, FRMPayload: 0594, MIC: 2319aaa0)
0:43:45.966472	LOG	Server <---------- DUT
0:43:45.968471	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 074f, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010

0:44:00.976139	LOG	Server <---------- DUT
0:44:00.978137	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0752, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:44:10.974411	LOG	PUSH_ACK: 02 0ed8 01
0:44:10.976410	LOG	PUSH_DATA: Protocol version = 02, Token = 0ed8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3443544985, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAhwoB5LZ9Y1Y6'}]}
0:44:10.977409	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a87, FOpts:), FPort: 01, FRMPayload: 0599, MIC: 7d63563a)
0:44:10.979408	LOG	Server <---------- DUT
0:44:10.981408	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0754, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		1Gl/iaqFd++bu0yBVkuJH9OOMqa2cwcAP25Gclu5Qs2Oye3yl16sgTmP9FOBH2TCZgGHXuJ4J6UUEbR10LRvBbkxb1B5KvrhrdeetLwfKTUst5yq00mx8MCZC/27CaylznCwdfzB2wH/x48nkaPW7rctxiCFG0+0'}}
0:44:16.003261	LOG	Server ----------> DUT
0:44:16.007259	LOG	Send Test Command TxFramesCtrlReq process completed
0:44:16.009258	LOG	Send Test Command RxAppCntReq process starts
0:44:20.978717	LOG	PUSH_ACK: 02 0edb 01
0:44:20.980719	LOG	PUSH_DATA: Protocol version = 02, Token = 0edb, Identifier = 00, JSON = {'rxpk': [{'tmst': 3453550191, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAiQoBT7XtvAlp'}]}
0:44:20.982714	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a89, FOpts:), FPort: 01, FRMPayload: 059b, MIC: edbc0969)
0:44:20.983719	LOG	Server <---------- DUT
0:44:20.985712	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0756, FOpts:), FPort: e0, FRMPayload: 09), MIC: e31e289e)
0:44:20.987712	LOG	Frame command sent to the DUT
0:44:20.988711	LOG	PULL_RESP: Protocol version = 02, Token = 21a6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3455550191, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 14, 'data': 'YCAgICAAVgfgV+MeKJ4='}}
0:44:20.990710	LOG	Server ----------> DUT
0:44:20.993709	LOG	TX_ACK: 02 21a6 05 aa555a0000240409
0:44:22.249513	LOG	PULL_DATA: 02 ecca 02 aa555a0000240409
0:44:22.251512	LOG	PULL_ACK: 02 ecca 04
0:44:25.996381	LOG	PUSH_ACK: 02 0edc 01
0:44:26.000379	LOG	PUSH_DATA: Protocol version = 02, Token = 0edc, Identifier = 00, JSON = {'rxpk': [{'tmst': 3458560868, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 16, 'data': 'QCAgICCAigrgNQCGx1c2IA=='}]}
0:44:26.003378	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a8a, FOpts:), FPort: e0, FRMPayload: 099c05, MIC: c7573620)
0:44:26.007376	LOG	Server <---------- DUT
0:44:26.010373	LOG	Answer in payload: 9c05
0:44:26.013371	LOG	Frame Command Payload in the Answer: 099c05
0:44:26.021365	LOG	RX Count received by DUT: 1436
0:44:26.023366	LOG	Send Test Command RxAppCntReq process completed
0:44:26.030380	LOG	End Test Step: Test packet error rate for FSK50 using RX2 window
0:44:26.033378	LOG	Partial Verdict: PASS
0:44:26.037374	LOG	==========
0:44:26.042373	LOG	==========
0:44:26.044354	LOG	Start Test Step: Restore default settings
0:44:26.054347	LOG	Send RXParamSetupReq process starts
0:44:30.986496	LOG	PUSH_ACK: 02 0edd 01
0:44:30.991494	LOG	PUSH_DATA: Protocol version = 02, Token = 0edd, Identifier = 00, JSON = {'rxpk': [{'tmst': 3463555404, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAiwoB2BCKDF01'}]}
0:44:30.993492	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a8b, FOpts:), FPort: 01, FRMPayload: 059c, MIC: 8a0c5d35)
0:44:30.995491	LOG	Server <---------- DUT
0:44:30.997490	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0757, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: b8803203)
0:44:31.000489	LOG	PULL_RESP: Protocol version = 02, Token = b76a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3465555404, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000,

		'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 18, 'data': 'YCAgICAAVwcAOdVyq+24gDID'}}
0:44:31.001490	LOG	Server ----------> DUT
0:44:31.005486	LOG	TX_ACK: 02 b76a 05 aa555a0000240409
0:44:32.258327	LOG	PULL_DATA: 02 b708 02 aa555a0000240409
0:44:32.260325	LOG	PULL_ACK: 02 b708 04
0:44:36.001163	LOG	PUSH_ACK: 02 0ede 01
0:44:36.003161	LOG	PUSH_DATA: Protocol version = 02, Token = 0ede, Identifier = 00, JSON = {'rxpk': [{'tmst': 3468563160, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCjAoFBwFZHW872Ec='}]}
0:44:36.005161	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0a8c, FOpts: 0507), FPort: 01, FRMPayload: 059c, MIC: 6f3bd847)
0:44:36.007159	LOG	Server <---------- DUT
0:44:36.009158	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:44:36.010158	LOG	Command Answer: 0507
0:44:36.023149	LOG	MAC command communication completed
0:44:36.026148	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:44:41.001449	LOG	PUSH_ACK: 02 0ee0 01
0:44:41.003448	LOG	PUSH_DATA: Protocol version = 02, Token = 0ee0, Identifier = 00, JSON = {'rxpk': [{'tmst': 3473565776, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCjQoFBwEN8E575Fg='}]}
0:44:41.005447	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0a8d, FOpts: 0507), FPort: 01, FRMPayload: 059c, MIC: 4e7be458)
0:44:41.007446	LOG	Server <---------- DUT
0:44:41.009445	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0758, FOpts:), FPort: e0, FRMPayload: 0501), MIC: 0748b154)
0:44:41.011444	LOG	Frame command sent to the DUT
0:44:41.013443	LOG	PULL_RESP: Protocol version = 02, Token = d5dc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3475565776, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAWAfgCEQHSLFU'}}
0:44:41.015442	LOG	Server ----------> DUT
0:44:41.021438	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:44:41.026435	LOG	End Test Step: Restore default settings
0:44:41.030433	LOG	Partial Verdict: PASS
0:44:41.036430	LOG	==========
0:44:41.043425	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_016
0:44:41.046424	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_017	
Verdict	PASS	
Date	2021-10-18 17:32:17	
Comments	RX1 and RX2 simultaneous frames	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.014825	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_017
0:00:00.052803	LOG	==========
0:00:00.055801	LOG	Start Test Step: Device activation
0:00:00.112769	LOG	Activation process has finished successfully
0:00:00.115769	LOG	Data stored in the DUT after Activation:
0:00:00.117768	LOG	DevAddr: 20202020
0:00:00.120765	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.126762	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.128760	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.131760	LOG	End Test Step: Device activation
0:00:00.136755	LOG	Partial Verdict: PASS
0:00:00.141752	LOG	==========
0:00:00.146750	LOG	==========
0:00:00.148749	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.159742	LOG	DUT Pre-condition activation process starts
0:00:00.162740	LOG	DUT Pre-condition activation completed
0:00:00.165739	LOG	End Test Step: DUT Pre-condition settings
0:00:00.170736	LOG	Partial Verdict: PASS
0:00:00.174734	LOG	==========
0:00:00.179730	LOG	==========
0:00:00.181730	LOG	Start Test Step: RX1 and RX2 simultaneous frames
0:00:00.196721	LOG	Send Frames in both windows and test behaviour process starts
0:00:00.381634	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:05.379770	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:06.757984	LOG	PULL_DATA: 02 990a 02 aa555a0000240409
0:00:06.759983	LOG	PULL_ACK: 02 990a 04
0:00:06.760983	LOG	First PULL_DATA received
0:00:10.380921	LOG	PUSH_ACK: 02 0ee3 01
0:00:10.383920	LOG	PUSH_DATA: Protocol version = 02, Token = 0ee3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3488568481, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAkAoB7Rn6/fOT'}]}
0:00:10.385919	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a90, FOpts:), FPort: 01, FRMPayload: 059d, MIC: fafdf393)
0:00:10.387917	LOG	Server <---------- DUT
0:00:10.390915	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0759, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 086fe3c9)
0:00:10.393913	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 075a, FOpts:), FPort: e0, FRMPayload: 0700), MIC: ac5580da)
0:00:10.395912	LOG	PULL_RESP: Protocol version = 02, Token = 706f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3489568481, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAWgfg+j+sVYDa'}}
0:00:10.396912	LOG	Server ----------> DUT
0:00:10.398911	LOG	PULL_RESP: Protocol version = 02, Token = e963, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3490568481, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAAWQfgeK4Ib+PJ'}}
0:00:10.399910	LOG	Server ----------> DUT
0:00:10.401909	LOG	Sent txpk for both windows (RX1 and RX2): [{'imme': False, 'tmst': 3489568481, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAWgfg+j+sVYDa'}, {'imme': False, 'tmst': 3490568481, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAAWQfgeK4Ib+PJ'}]
0:00:15.381073	LOG	PUSH_ACK: 02 0ee5 01
0:00:15.383074	LOG	PUSH_DATA: Protocol version = 02, Token = 0ee5, Identifier = 00, JSON = {'rxpk': [{'tmst': 3493571106, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAkQoBBg4MsWHd'}]}
0:00:15.384072	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a91, FOpts:), FPort: 01, FRMPayload: 059e, MIC: 0cb161dd)
0:00:15.386071	LOG	Server <---------- DUT
0:00:15.388070	LOG	ACK bit is set to 0, so RX2 downlink is ignored
0:00:15.390068	LOG	Send Frames in both windows and test behaviour tested successfully
0:00:15.397064	LOG	Send Frames in both windows and test behaviour process starts
0:00:16.908205	LOG	PULL_DATA: 02 b38e 02 aa555a0000240409
0:00:16.909203	LOG	PULL_ACK: 02 b38e 04
0:00:20.421203	LOG	PUSH_ACK: 02 0ee6 01
0:00:20.424201	LOG	PUSH_DATA: Protocol version = 02, Token = 0ee6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3498573722, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAkgoBqzbDvwfk'}]}
0:00:20.425201	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a92, FOpts:), FPort: 01, FRMPayload: 059e, MIC: c3bf07e4)
0:00:20.427199	LOG	Server <---------- DUT
0:00:20.430198	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 075b, FOpts:), FPort: e0, FRMPayload: 0700), MIC: bc0e9732)
0:00:20.434195	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 075c, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 8f227752)
0:00:20.437195	LOG	PULL_RESP: Protocol version = 02, Token = df79, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3499573722, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAXAfg45yPIndS'}}
0:00:20.438196	LOG	Server ----------> DUT
0:00:20.441192	LOG	PULL_RESP: Protocol version = 02, Token = db19, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3500573722, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAAWwfgHAu8Dpcy'}}
0:00:20.442191	LOG	Server ----------> DUT
0:00:20.444191	LOG	Sent txpk for both windows (RX1 and RX2): [{'imme': False, 'tmst': 3499573722, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAXAfg45yPIndS'}, {'imme': False, 'tmst': 3500573722, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAAWwfgHAu8Dpcy'}]
0:00:25.386394	LOG	PUSH_ACK: 02 0ee8 01
0:00:25.388375	LOG	PUSH_DATA: Protocol version = 02, Token = 0ee8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3503576326, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAkwoB8GdRzKaP'}]}
0:00:25.390375	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a93, FOpts:), FPort: 01, FRMPayload: 059f, MIC: 51cca68f)
0:00:25.391375	LOG	Server <---------- DUT
0:00:25.393371	LOG	ACK bit is set to 0, so RX2 downlink is ignored
0:00:25.395370	LOG	Send Frames in both windows and test behaviour tested successfully
0:00:25.403366	LOG	Send Frames in both windows and test behaviour process starts
0:00:26.947487	LOG	PULL_DATA: 02 041a 02 aa555a0000240409
0:00:26.949485	LOG	PULL_ACK: 02 041a 04

0:00:30.426511	LOG	PUSH_ACK: 02 0ee9 01
0:00:30.431502	LOG	PUSH_DATA: Protocol version = 02, Token = 0ee9, Identifier = 00, JSON = {'rxpk': [{'tmst': 3508578934, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAlAoBS8QaR1Io'}]}
0:00:30.432503	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a94, FOpts:), FPort: 01, FRMPayload: 059f, MIC: 1a475228)
0:00:30.433503	LOG	Server <---------- DUT
0:00:30.436500	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 075d, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 989cd886)
0:00:30.439498	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 075e, FOpts:), FPort: e0, FRMPayload: 0700), MIC: b3407e3a)
0:00:30.443496	LOG	PULL_RESP: Protocol version = 02, Token = ab03, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3509578934, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAXgfgYYOzQH46'}}
0:00:30.445496	LOG	Server ----------> DUT
0:00:30.446495	LOG	PULL_RESP: Protocol version = 02, Token = 447d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3510578934, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAAXQfg+JSYnNiG'}}
0:00:30.448492	LOG	Server ----------> DUT
0:00:30.450493	LOG	Sent txpk for both windows (RX1 and RX2): [{'imme': False, 'tmst': 3509578934, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAXgfgYYOzQH46'}, {'imme': False, 'tmst': 3510578934, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAAXQfg+JSYnNiG'}]
0:00:35.391678	LOG	PUSH_ACK: 02 0eea 01
0:00:35.393677	LOG	PUSH_DATA: Protocol version = 02, Token = 0eea, Identifier = 00, JSON = {'rxpk': [{'tmst': 3513581535, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAlQoBKtjv/Ko6'}]}
0:00:35.395676	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a95, FOpts:), FPort: 01, FRMPayload: 05a0, MIC: effcaa3a)
0:00:35.396676	LOG	Server <---------- DUT
0:00:35.397675	LOG	ACK bit is set to 0, so RX2 downlink is ignored
0:00:35.400673	LOG	Send Frames in both windows and test behaviour tested successfully
0:00:35.408667	LOG	Send Frames in both windows and test behaviour process starts
0:00:36.967779	LOG	PULL_DATA: 02 2780 02 aa555a0000240409
0:00:36.969779	LOG	PULL_ACK: 02 2780 04
0:00:40.431808	LOG	PUSH_ACK: 02 0eeb 01
0:00:40.434807	LOG	PUSH_DATA: Protocol version = 02, Token = 0eeb, Identifier = 00, JSON = {'rxpk': [{'tmst': 3518584151, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAlgoBc9SdS94Q'}]}
0:00:40.435806	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a96, FOpts:), FPort: 01, FRMPayload: 05a0, MIC: 9d4bde10)
0:00:40.436806	LOG	Server <---------- DUT
0:00:40.439802	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 075f, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 355d7c52)
0:00:40.442800	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0760, FOpts:), FPort: e0, FRMPayload: 0700), MIC: 1465d2c4)
0:00:40.444799	LOG	PULL_RESP: Protocol version = 02, Token = 3cff, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3519584151, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAYAfgkuUUZdLE'}}

0:00:40.445799	LOG	Server ----------> DUT
0:00:40.447797	LOG	PULL_RESP: Protocol version = 02, Token = 0aa3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3520584151, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAAXwfg/j41XXxS'}}
0:00:40.449797	LOG	Server ----------> DUT
0:00:40.451798	LOG	Sent txpk for both windows (RX1 and RX2): [{'imme': False, 'tmst': 3519584151, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAYAfgkuUUZdLE'}, {'imme': False, 'tmst': 3520584151, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'oCAgICAAXwfg/j41XXxS'}]
0:00:45.397110	LOG	PUSH_ACK: 02 0eec 01
0:00:45.399109	LOG	PUSH_DATA: Protocol version = 02, Token = 0eec, Identifier = 00, JSON = {'rxpk': [{'tmst': 3523586760, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAlwoB0zu34tlf'}]}
0:00:45.400108	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a97, FOpts:), FPort: 01, FRMPayload: 05a1, MIC: b7e2d95f)
0:00:45.401108	LOG	Server <---------- DUT
0:00:45.403107	LOG	ACK bit is set to 0, so RX2 downlink is ignored
0:00:45.407104	LOG	Send Frames in both windows and test behaviour tested successfully
0:00:45.416099	LOG	End Test Step: RX1 and RX2 simultaneous frames
0:00:45.420097	LOG	Partial Verdict: PASS
0:00:45.426093	LOG	==========
0:00:45.430091	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_017
0:00:45.432090	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_018	
Verdict	PASS	
Date	2021-10-18 17:33:05	
Comments	RX Oversized Payload	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	SF7BW250 Frequency	868.100
	FSK Frequency	868.100
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.013179	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_018
0:00:00.053156	LOG	==========
0:00:00.055155	LOG	Start Test Step: Device activation
0:00:00.115121	LOG	Activation process has finished successfully
0:00:00.117119	LOG	Data stored in the DUT after Activation:
0:00:00.120118	LOG	DevAddr: 20202020
0:00:00.122117	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.278028	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.281026	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.285024	LOG	End Test Step: Device activation
0:00:00.290021	LOG	Partial Verdict: PASS

0:00:00.294021	LOG	==========
0:00:00.301017	LOG	==========
0:00:00.304013	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.315006	LOG	DUT Pre-condition activation process starts
0:00:00.319005	LOG	DUT Pre-condition activation completed
0:00:00.323002	LOG	End Test Step: DUT Pre-condition settings
0:00:00.327000	LOG	Partial Verdict: PASS
0:00:00.332997	LOG	==========
0:00:00.339993	LOG	==========
0:00:00.341993	LOG	Start Test Step: Initial settings for the test
0:00:00.353984	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:00:01.984120	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:06.985272	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:08.791659	LOG	PULL_DATA: 02 edee 02 aa555a0000240409
0:00:08.794658	LOG	PULL_ACK: 02 edee 04
0:00:08.796656	LOG	First PULL_DATA received
0:00:11.983848	LOG	PUSH_ACK: 02 0ef0 01
0:00:11.985847	LOG	PUSH_DATA: Protocol version = 02, Token = 0ef0, Identifier = 00, JSON = {'rxpk': [{'tmst': 3538594584, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAmgoBwctK5W1A'}]}
0:00:11.987845	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a9a, FOpts:), FPort: 01, FRMPayload: 05a1, MIC: 4ae56d40)
0:00:11.988844	LOG	Server <---------- DUT
0:00:11.990845	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0761, FOpts:), FPort: e0, FRMPayload: 0500), MIC: a9fb3081)
0:00:11.992842	LOG	Frame command sent to the DUT
0:00:11.994841	LOG	PULL_RESP: Protocol version = 02, Token = 765f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3540594584, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAYQfgcQmp+zCB'}}
0:00:11.995840	LOG	Server ----------> DUT
0:00:11.999838	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:00:12.003836	LOG	End Test Step: Initial settings for the test
0:00:12.009850	LOG	Partial Verdict: PASS
0:00:12.013830	LOG	==========
0:00:12.020826	LOG	==========
0:00:12.023825	LOG	Start Test Step: Oversized downlink for datarate SF12BW125
0:00:12.034818	LOG	Send MAC command block process starts
0:00:16.952035	LOG	PUSH_ACK: 02 0ef1 01
0:00:16.957015	LOG	PUSH_DATA: Protocol version = 02, Token = 0ef1, Identifier = 00, JSON = {'rxpk': [{'tmst': 3543597192, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAmwoBHA6lv4dZ'}]}
0:00:16.960013	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a9b, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: a5bf8759)
0:00:16.964011	LOG	Server <---------- DUT
0:00:16.968009	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0762, FOpts:), FPort: 00, FRMPayload: 03000700010500d2ad84), MIC: 38048734)
0:00:16.986998	LOG	PULL_RESP: Protocol version = 02, Token = 0176, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3545597192, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAYgcAYhZGYTciHwRfyDgEhzQ='}}
0:00:16.988997	LOG	Server ----------> DUT
0:00:16.991995	LOG	TX_ACK: 02 0176 05 aa555a0000240409

0:00:18.880920	LOG	PULL_DATA: 02 2762 02 aa555a0000240409
0:00:18.882918	LOG	PULL_ACK: 02 2762 04
0:00:23.257427	LOG	PUSH_ACK: 02 0ef2 01
0:00:23.259426	LOG	PUSH_DATA: Protocol version = 02, Token = 0ef2, Identifier = 00, JSON = {'rxpk': [{'tmst': 3549872331, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 1, 'size': 19, 'data': 'QCAgICCEnAoDBwUHAbThejK2Yg==\'}]}
0:00:23.261424	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0a9c, FOpts: 03070507), FPort: 01, FRMPayload: 05a2, MIC: 7a32b662)
0:00:23.263424	LOG	Server <---------- DUT
0:00:23.266422	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:23.268421	LOG	Command Answer: 03070507
0:00:23.345377	LOG	MAC command communication completed
0:00:23.358369	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:28.297556	LOG	PUSH_ACK: 02 0ef3 01
0:00:28.299555	LOG	PUSH_DATA: Protocol version = 02, Token = 0ef3, Identifier = 00, JSON = {'rxpk': [{'tmst': 3554874955, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': 1, 'size': 17, 'data': 'QCAgICCCnQoFBwFENGrSCN8=\'}]}
0:00:28.302553	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0a9d, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 6ad208df)
0:00:28.303553	LOG	Server <---------- DUT
0:00:28.306551	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0763, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: fbd1975c)
0:00:28.309549	LOG	Frame command sent to the DUT
0:00:28.310549	LOG	PULL_RESP: Protocol version = 02, Token = 6ad8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3555874955, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAYwfgrKbaDfwHHIEyfyTsKJVFCNR+fr3D+w5NWcHqZ/L0EWjqLO8jiDFf2Pqhr4fIZQeSLwho8vvRl1w=\'}}
0:00:28.312548	LOG	Server ----------> DUT
0:00:28.319544	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:28.324541	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:00:28.941209	LOG	PULL_DATA: 02 7e76 02 aa555a0000240409
0:00:28.943188	LOG	PULL_ACK: 02 7e76 04
0:00:38.093976	LOG	PUSH_ACK: 02 0ef5 01
0:00:38.097976	LOG	PUSH_DATA: Protocol version = 02, Token = 0ef5, Identifier = 00, JSON = {'rxpk': [{'tmst': 3564716316, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAngoBFRgqSJC8'}]}
0:00:38.099983	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a9e, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 2a4890bc)
0:00:38.100975	LOG	Server <---------- DUT
0:00:38.103971	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:00:38.113965	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:39.021448	LOG	PULL_DATA: 02 b905 02 aa555a0000240409
0:00:39.023449	LOG	PULL_ACK: 02 b905 04
0:00:43.136106	LOG	PUSH_ACK: 02 0ef6 01
0:00:43.138104	LOG	PUSH_DATA: Protocol version = 02, Token = 0ef6, Identifier = 00, JSON = {'rxpk': [{'tmst': 3569718932, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAnwoBZM0RYSxV'}]}

0:00:43.139105	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0a9f, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 11612c55)
0:00:43.140105	LOG	Server <---------- DUT
0:00:43.142104	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0764, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e2066ea7)
0:00:43.144101	LOG	Frame command sent to the DUT
0:00:43.145102	LOG	PULL_RESP: Protocol version = 02, Token = 71ed, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3571718932, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAZAfgnUBS9ZEKS8opW3HmNT7PYyX2/5V0VXoSe+2TsCxzKWRKObMzbOhXy81T8jPQgAUo9McxpuIGbqc='}}
0:00:43.146102	LOG	Server ----------> DUT
0:00:43.150098	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:43.154095	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:00:49.231634	LOG	PULL_DATA: 02 32da 02 aa555a0000240409
0:00:49.232633	LOG	PULL_ACK: 02 32da 04
0:00:53.104433	LOG	PUSH_ACK: 02 0ef8 01
0:00:53.106431	LOG	PUSH_DATA: Protocol version = 02, Token = 0ef8, Identifier = 00, JSON = {'rxpk': [{'tmst': 3579724182, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 7.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAoAoBFCKtfMEf'}]}
0:00:53.107430	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aa0, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: ad7cc11f)
0:00:53.109427	LOG	Server <---------- DUT
0:00:53.112427	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:00:53.137409	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:58.143558	LOG	PUSH_ACK: 02 0ef9 01
0:00:58.145557	LOG	PUSH_DATA: Protocol version = 02, Token = 0ef9, Identifier = 00, JSON = {'rxpk': [{'tmst': 3584726790, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 1, 'size': 15, 'data': 'QCAgICCAoQoBRgYMJ8/W'}]}
0:00:58.147557	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aa1, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 0c27cfd6)
0:00:58.149555	LOG	Server <---------- DUT
0:00:58.151554	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0765, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: f78b8ff9)
0:00:58.153554	LOG	Frame command sent to the DUT
0:00:58.155553	LOG	PULL_RESP: Protocol version = 02, Token = 95f9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3585726790, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'oCAgICAAZQfgvUNo+I6QmDdM/ySpbYTAIb4h7owPkVK1u5gkiFvqqy+KNnODEY21Wa0Rsw+a33IXndON5veLj/k='}}
0:00:58.156551	LOG	Server ----------> DUT
0:00:58.159549	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:58.161550	LOG	Check ACK bit in next uplink starts
0:00:59.410836	LOG	PULL_DATA: 02 67de 02 aa555a0000240409
0:00:59.412854	LOG	PULL_ACK: 02 67de 04
0:01:08.155857	LOG	PUSH_ACK: 02 0efb 01
0:01:08.160854	LOG	PUSH_DATA: Protocol version = 02, Token = 0efb, Identifier = 00, JSON = {'rxpk': [{'tmst': 3594731208, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAogoBqt1U/mTl'}]}
0:01:08.162853	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aa2, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 54fe64e5)
0:01:08.164852	LOG	Server <---------- DUT
0:01:08.165851	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:01:08.169848	LOG	Check ACK bit in next uplink tested successfully
0:01:08.184840	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:09.491096	LOG	PULL_DATA: 02 e3cb 02 aa555a0000240409
0:01:09.493095	LOG	PULL_ACK: 02 e3cb 04
0:01:13.147015	LOG	PUSH_ACK: 02 0efc 01
0:01:13.149014	LOG	PUSH_DATA: Protocol version = 02, Token = 0efc, Identifier = 00, JSON = {'rxpk': [{'tmst': 3599733840, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 1, 'size': 15, 'data': 'QCAgICCAowoBPiI1TsdJ'}]}
0:01:13.150013	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aa3, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 354ec749)
0:01:13.151012	LOG	Server <---------- DUT
0:01:13.153010	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0766, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: df032dd1)
0:01:13.156011	LOG	Frame command sent to the DUT
0:01:13.157010	LOG	PULL_RESP: Protocol version = 02, Token = eb11, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3601733840, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'oCAgICAAZgfga2MEwe3opv8M4zIn4tnJ9kOcBtZH64uqm9wtNfJu757omuLuabMEs9JxItMl6dUxAVsAhd8DLdE='}}
0:01:13.159009	LOG	Server ----------> DUT
0:01:13.162006	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:13.166003	LOG	Check ACK bit in next uplink starts
0:01:19.671349	LOG	PULL_DATA: 02 39d0 02 aa555a0000240409
0:01:19.673348	LOG	PULL_ACK: 02 39d0 04
0:01:23.121384	LOG	PUSH_ACK: 02 0efd 01
0:01:23.126381	LOG	PUSH_DATA: Protocol version = 02, Token = 0efd, Identifier = 00, JSON = {'rxpk': [{'tmst': 3609739085, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCApAoBoGb8FPCt'}]}
0:01:23.130378	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aa4, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: fc14f0ad)
0:01:23.133377	LOG	Server <---------- DUT
0:01:23.134377	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:01:23.137375	LOG	Check ACK bit in next uplink tested successfully
0:01:23.141373	LOG	End Test Step: Oversized downlink for datarate SF12BW125
0:01:23.146369	LOG	Partial Verdict: PASS
0:01:23.151367	LOG	==========
0:01:23.159362	LOG	==========
0:01:23.162361	LOG	Start Test Step: Oversized downlink for datarate SF11BW125
0:01:23.171357	LOG	Send MAC command block process starts
0:01:28.163512	LOG	PUSH_ACK: 02 0efe 01
0:01:28.165511	LOG	PUSH_DATA: Protocol version = 02, Token = 0efe, Identifier = 00, JSON = {'rxpk': [{'tmst': 3614741709, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 1, 'size': 15, 'data': 'QCAgICCApQoBsSySdjAp'}]}

0:01:28.166511	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aa5, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 92763029)
0:01:28.168510	LOG	Server <---------- DUT
0:01:28.170508	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0767, FOpts:), FPort: 00, FRMPayload: 03100700010501d2ad84), MIC: 584938a2)
0:01:28.173507	LOG	PULL_RESP: Protocol version = 02, Token = 5c17, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3616741709, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAZwcAHFoJu9+Ug9eORVhJOKI='}}
0:01:28.174506	LOG	Server ----------> DUT
0:01:28.177507	LOG	TX_ACK: 02 5c17 05 aa555a0000240409
0:01:29.850764	LOG	PULL_DATA: 02 95f1 02 aa555a0000240409
0:01:29.852764	LOG	PULL_ACK: 02 95f1 04
0:01:32.706138	LOG	PUSH_ACK: 02 0eff 01
0:01:32.709136	LOG	PUSH_DATA: Protocol version = 02, Token = 0eff, Identifier = 00, JSON = {'rxpk': [{'tmst': 3619330689, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 13.2, 'rssi': 0, 'size': 19, 'data': 'QCAgICCEpgoDBwUHAUUwBD/jPw=='}]}
0:01:32.711135	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0aa6, FOpts: 03070507), FPort: 01, FRMPayload: 05a2, MIC: 043fe33f)
0:01:32.712135	LOG	Server <---------- DUT
0:01:32.714134	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:32.716133	LOG	Command Answer: 03070507
0:01:32.791090	LOG	MAC command communication completed
0:01:32.802084	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:37.652321	LOG	PUSH_ACK: 02 0f01 01
0:01:37.654320	LOG	PUSH_DATA: Protocol version = 02, Token = 0f01, Identifier = 00, JSON = {'rxpk': [{'tmst': 3624251369, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': 1, 'size': 17, 'data': 'QCAgICCCpwoFBwGRLc4ndgM='}]}
0:01:37.656319	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0aa7, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: ce277603)
0:01:37.658318	LOG	Server <---------- DUT
0:01:37.660317	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0768, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 3b171183)
0:01:37.663315	LOG	Frame command sent to the DUT
0:01:37.664315	LOG	PULL_RESP: Protocol version = 02, Token = 09ca, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3625251369, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAaAfgCNY0TP2InmbzQ/oo+ZVct3H23gLThxMsQy7QDVCnXSbDFjzDv6onMG7bYXuMYZxZ76zIeTsXEYM='}}
0:01:37.666313	LOG	Server ----------> DUT
0:01:37.675309	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:37.680305	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:01:39.980995	LOG	PULL_DATA: 02 d806 02 aa555a0000240409
0:01:39.983994	LOG	PULL_ACK: 02 d806 04
0:01:42.650476	LOG	PUSH_ACK: 02 0f02 01
0:01:42.652476	LOG	PUSH_DATA: Protocol version = 02, Token = 0f02, Identifier = 00, JSON = {'rxpk': [{'tmst': 3629253955, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICCAqAoB3XJNtSs3'}]}

0:01:42.653474	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aa8, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 4db52b37)
0:01:42.655503	LOG	Server <---------- DUT
0:01:42.658471	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:01:42.669464	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:47.638634	LOG	PUSH_ACK: 02 0f03 01
0:01:47.641632	LOG	PUSH_DATA: Protocol version = 02, Token = 0f03, Identifier = 00, JSON = {'rxpk': [{'tmst': 3634256579, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': 1, 'size': 15, 'data': 'QCAgICCAqQoBrpBSufu8'}]}
0:01:47.642632	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aa9, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 52b9fbbc)
0:01:47.644631	LOG	Server <---------- DUT
0:01:47.646631	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0769, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d20fa10b)
0:01:47.648630	LOG	Frame command sent to the DUT
0:01:47.649629	LOG	PULL_RESP: Protocol version = 02, Token = 7fe7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3636256579, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAaQfgQyVV8wbj9JhTKwqQVqGuY5zU1UDKRFDdv9wK84DMAAbWmIYAk+iKNGcngUXcYw2ZH9HOJNIPoQs='}}
0:01:47.651627	LOG	Server ----------> DUT
0:01:47.655624	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:47.658625	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:01:50.171193	LOG	PULL_DATA: 02 7a71 02 aa555a0000240409
0:01:50.176191	LOG	PULL_ACK: 02 7a71 04
0:01:52.629791	LOG	PUSH_ACK: 02 0f04 01
0:01:52.631790	LOG	PUSH_DATA: Protocol version = 02, Token = 0f04, Identifier = 00, JSON = {'rxpk': [{'tmst': 3639259205, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICCAqgoBcqegZNfX'}]}
0:01:52.633789	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aaa, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: a064d7d7)
0:01:52.635788	LOG	Server <---------- DUT
0:01:52.640785	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:01:52.657776	LOG	Send Test Command TxFramesCtrlReq process starts
0:01:57.671920	LOG	PUSH_ACK: 02 0f05 01
0:01:57.674918	LOG	PUSH_DATA: Protocol version = 02, Token = 0f05, Identifier = 00, JSON = {'rxpk': [{'tmst': 3644261821, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': 1, 'size': 15, 'data': 'QCAgICCAqwoBPgtkA3Ie'}]}
0:01:57.676917	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aab, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 6403721e)
0:01:57.677916	LOG	Server <---------- DUT
0:01:57.680915	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 076a, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 5238d6e9)
0:01:57.682914	LOG	Frame command sent to the DUT
0:01:57.684913	LOG	PULL_RESP: Protocol version = 02, Token = ab59, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3645261821, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data':

		'oCAgICAAagfgUDy3iR9oJSeMvBwR+rjjxSWosz54lXiNLD9A9qpAcgO5wLIMawvGz5IBI0MKeEi3xRBvk1I41uk='}}
0:01:57.686912	LOG	Server ----------> DUT
0:01:57.693907	LOG	Send Test Command TxFramesCtrlReq process completed
0:01:57.697906	LOG	Check ACK bit in next uplink starts
0:02:00.210505	LOG	PULL_DATA: 02 102d 02 aa555a0000240409
0:02:00.213473	LOG	PULL_ACK: 02 102d 04
0:02:02.662078	LOG	PUSH_ACK: 02 0f06 01
0:02:02.665076	LOG	PUSH_DATA: Protocol version = 02, Token = 0f06, Identifier = 00, JSON = {'rxpk': [{'tmst': 3649264448, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 13.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICCArAoBM653WAqb'}]}
0:02:02.667075	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aac, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 77580a9b)
0:02:02.668075	LOG	Server <---------- DUT
0:02:02.670073	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:02:02.673072	LOG	Check ACK bit in next uplink tested successfully
0:02:02.684067	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:07.663229	LOG	PUSH_ACK: 02 0f08 01
0:02:07.665229	LOG	PUSH_DATA: Protocol version = 02, Token = 0f08, Identifier = 00, JSON = {'rxpk': [{'tmst': 3654267072, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': 1, 'size': 15, 'data': 'QCAgICCArQoBAsutXAXY'}]}
0:02:07.667229	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aad, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: ad5c05d8)
0:02:07.668228	LOG	Server <---------- DUT
0:02:07.671225	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 076b, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 25b99859)
0:02:07.673242	LOG	Frame command sent to the DUT
0:02:07.675242	LOG	PULL_RESP: Protocol version = 02, Token = aafe, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3656267072, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'oCAgICAAawfgFU3kq//bROsqnagS7QYxw83icyXXWTUPEjTpgZa/RsahLq/Hf/mGEJXpzRqzznvxiYtZoCW5mFk='}}
0:02:07.677223	LOG	Server ----------> DUT
0:02:07.681221	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:07.684218	LOG	Check ACK bit in next uplink starts
0:02:10.410666	LOG	PULL_DATA: 02 ff14 02 aa555a0000240409
0:02:10.413665	LOG	PULL_ACK: 02 ff14 04
0:02:12.640395	LOG	PUSH_ACK: 02 0f09 01
0:02:12.642394	LOG	PUSH_DATA: Protocol version = 02, Token = 0f09, Identifier = 00, JSON = {'rxpk': [{'tmst': 3659269690, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICCArgoBLGe/KObt'}]}
0:02:12.644393	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aae, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: bf28e6ed)
0:02:12.645392	LOG	Server <---------- DUT
0:02:12.647391	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:02:12.651389	LOG	Check ACK bit in next uplink tested successfully
0:02:12.656386	LOG	End Test Step: Oversized downlink for datarate SF11BW125
0:02:12.661383	LOG	Partial Verdict: PASS
0:02:12.665383	LOG	==========
0:02:12.670378	LOG	==========

0:02:12.672377	LOG	Start Test Step: Oversized downlink for datarate SF10BW125
0:02:12.683371	LOG	Send MAC command block process starts
0:02:17.682524	LOG	PUSH_ACK: 02 0f0a 01
0:02:17.684523	LOG	PUSH_DATA: Protocol version = 02, Token = 0f0a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3664272306, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': 1, 'size': 15, 'data': 'QCAgICCArwoBlGdbnv+X'}]}
0:02:17.686521	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0aaf, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 5b9eff97)
0:02:17.688520	LOG	Server <---------- DUT
0:02:17.690519	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 076c, FOpts:), FPort: 00, FRMPayload: 03200700010502d2ad84), MIC: b60b5952)
0:02:17.693517	LOG	PULL_RESP: Protocol version = 02, Token = 0883, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3666272306, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAbAcAZAZKwg1fAvKZabYLWVI='}}
0:02:17.694517	LOG	Server ----------> DUT
0:02:17.699514	LOG	TX_ACK: 02 0883 05 aa555a0000240409
0:02:20.419983	LOG	PULL_DATA: 02 4727 02 aa555a0000240409
0:02:20.421964	LOG	PULL_ACK: 02 4727 04
0:02:22.319883	LOG	PUSH_ACK: 02 0f0b 01
0:02:22.321882	LOG	PUSH_DATA: Protocol version = 02, Token = 0f0b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3668945235, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -1, 'size': 19, 'data': 'QCAgICCEsAoDBwUHAZTj3dc6oQ=='}]}
0:02:22.323880	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0ab0, FOpts: 03070507), FPort: 01, FRMPayload: 05a2, MIC: ddd73aa1)
0:02:22.325879	LOG	Server <---------- DUT
0:02:22.326879	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:22.328877	LOG	Command Answer: 03070507
0:02:22.409831	LOG	MAC command communication completed
0:02:22.422824	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:27.311040	LOG	PUSH_ACK: 02 0f0c 01
0:02:27.313039	LOG	PUSH_DATA: Protocol version = 02, Token = 0f0c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3673947827, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCsQoFBwEuMxk3rTg='}]}
0:02:27.314040	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ab1, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 1937ad38)
0:02:27.315038	LOG	Server <---------- DUT
0:02:27.317037	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 076d, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 39b9829e)
0:02:27.319036	LOG	Frame command sent to the DUT
0:02:27.321035	LOG	PULL_RESP: Protocol version = 02, Token = 6e47, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3674947827, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAbQfgygvg0fNpu/hoGTItrDy1vljT2Ep88PN2cLkgHNZ85nNvWMqen5C0uEE+V4BvGkKplaK1Tjm5gp4='}}
0:02:27.322034	LOG	Server ----------> DUT
0:02:27.326031	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:27.333027	LOG	Wait Until Unconfirmed Uplink arrives process starts

0:02:30.470391	LOG	PULL_DATA: 02 941b 02 aa555a0000240409
0:02:30.472389	LOG	PULL_ACK: 02 941b 04
0:02:32.338326	LOG	PUSH_ACK: 02 0f0d 01
0:02:32.340325	LOG	PUSH_DATA: Protocol version = 02, Token = 0f0d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3678950417, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': 1, 'size': 15, 'data': 'QCAgICCAsgoBfkbUaDJ9'}]}
0:02:32.342324	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ab2, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: d468327d)
0:02:32.344323	LOG	Server <---------- DUT
0:02:32.348320	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:02:32.380302	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:37.345481	LOG	PUSH_ACK: 02 0f0f 01
0:02:37.349476	LOG	PUSH_DATA: Protocol version = 02, Token = 0f0f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3683953041, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAswoBQeasep3k'}]}
0:02:37.353471	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ab3, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: ac7a9de4)
0:02:37.354470	LOG	Server <---------- DUT
0:02:37.356468	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 076e, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 58e9ba56)
0:02:37.359467	LOG	Frame command sent to the DUT
0:02:37.361466	LOG	PULL_RESP: Protocol version = 02, Token = 2bb3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3685953041, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAbgfg4wAbJuekbLVwBQRibvbOwICtPt/A5vjTdOnAgM3iNenoJmJS6HrzrgVv7OTjxF5jObblAljpulY='}}
0:02:37.363464	LOG	Server ----------> DUT
0:02:37.367463	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:37.373458	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:02:40.510674	LOG	PULL_DATA: 02 1281 02 aa555a0000240409
0:02:40.514689	LOG	PULL_ACK: 02 1281 04
0:02:42.316644	LOG	PUSH_ACK: 02 0f10 01
0:02:42.318642	LOG	PUSH_DATA: Protocol version = 02, Token = 0f10, Identifier = 00, JSON = {'rxpk': [{'tmst': 3688955660, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAtAoBqmaAGOCp'}]}
0:02:42.320641	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ab4, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 8018e0a9)
0:02:42.322640	LOG	Server <---------- DUT
0:02:42.326638	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:02:42.338631	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:47.358772	LOG	PUSH_ACK: 02 0f11 01
0:02:47.361770	LOG	PUSH_DATA: Protocol version = 02, Token = 0f11, Identifier = 00, JSON = {'rxpk': [{'tmst': 3693958284, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAtQoBCt8Fq4ly'}]}
0:02:47.363769	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ab5, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 05ab8972)
0:02:47.364768	LOG	Server <---------- DUT
0:02:47.366768	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 076f, FOpts:), FPort: e0, FRMPayload:

		07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 57db41bd)
0:02:47.369766	LOG	Frame command sent to the DUT
0:02:47.371765	LOG	PULL_RESP: Protocol version = 02, Token = 597a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3694958284, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'oCAgICAAbwfglL4kVCSayqPjb1eH5ccfLyWSVzaRn4jrHyVNwCvVOg1hzRseNQXZL6wAKS1m9zMLVD+Mk1fbQb0='}}
0:02:47.373764	LOG	Server ----------> DUT
0:02:47.377761	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:47.380762	LOG	Check ACK bit in next uplink starts
0:02:50.520541	LOG	PULL_DATA: 02 0939 02 aa555a0000240409
0:02:50.521542	LOG	PULL_ACK: 02 0939 04
0:02:52.348500	LOG	PUSH_ACK: 02 0f12 01
0:02:52.351498	LOG	PUSH_DATA: Protocol version = 02, Token = 0f12, Identifier = 00, JSON = {'rxpk': [{'tmst': 3698960911, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAtgoBWwiXJOia'}]}
0:02:52.353497	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ab6, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 9724e89a)
0:02:52.354496	LOG	Server <---------- DUT
0:02:52.356495	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:02:52.360493	LOG	Check ACK bit in next uplink tested successfully
0:02:52.385479	LOG	Send Test Command TxFramesCtrlReq process starts
0:02:57.339657	LOG	PUSH_ACK: 02 0f13 01
0:02:57.342656	LOG	PUSH_DATA: Protocol version = 02, Token = 0f13, Identifier = 00, JSON = {'rxpk': [{'tmst': 3703963535, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAtwoBIRPnvIQW'}]}
0:02:57.343655	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ab7, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: e7bc8416)
0:02:57.345654	LOG	Server <---------- DUT
0:02:57.347653	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0770, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: a1356099)
0:02:57.350651	LOG	Frame command sent to the DUT
0:02:57.352650	LOG	PULL_RESP: Protocol version = 02, Token = e70d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3705963535, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'oCAgICAAcAfgw1M6gofhAxl/24N41U430LRHHncGzXUUT8j1IQe94ENfBh821MPUQE+IecQp/anhqHDIX6E1YJk='}}
0:02:57.354649	LOG	Server ----------> DUT
0:02:57.359646	LOG	Send Test Command TxFramesCtrlReq process completed
0:02:57.363644	LOG	Check ACK bit in next uplink starts
0:03:00.719733	LOG	PULL_DATA: 02 e387 02 aa555a0000240409
0:03:00.721731	LOG	PULL_ACK: 02 e387 04
0:03:02.326817	LOG	PUSH_ACK: 02 0f14 01
0:03:02.329815	LOG	PUSH_DATA: Protocol version = 02, Token = 0f14, Identifier = 00, JSON = {'rxpk': [{'tmst': 3708966153, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAuAoB5593Bq1v'}]}
0:03:02.330815	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ab8, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 7706ad6f)

0:03:02.332814	LOG	Server <---------- DUT
0:03:02.334813	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:03:02.340810	LOG	Check ACK bit in next uplink tested successfully
0:03:02.344807	LOG	End Test Step: Oversized downlink for datarate SF10BW125
0:03:02.350804	LOG	Partial Verdict: PASS
0:03:02.358799	LOG	==========
0:03:02.372792	LOG	==========
0:03:02.375789	LOG	Start Test Step: Oversized downlink for datarate SF9BW125
0:03:02.386783	LOG	Send MAC command block process starts
0:03:07.335290	LOG	PUSH_ACK: 02 0f16 01
0:03:07.337289	LOG	PUSH_DATA: Protocol version = 02, Token = 0f16, Identifier = 00, JSON = {'rxpk': [{'tmst': 3713968777, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAuQoBbQbflT1g'}]}
0:03:07.339288	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ab9, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: df953d60)
0:03:07.340287	LOG	Server <---------- DUT
0:03:07.342288	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0771, FOpts:), FPort: 00, FRMPayload: 03300700010503d2ad84), MIC: e276a374)
0:03:07.344286	LOG	PULL_RESP: Protocol version = 02, Token = a738, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3715968777, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAcQcAIqw5gg6jDWYBgeJ2o3Q='}}
0:03:07.345286	LOG	Server ----------> DUT
0:03:07.350282	LOG	TX_ACK: 02 a738 05 aa555a0000240409
0:03:10.910253	LOG	PULL_DATA: 02 b09c 02 aa555a0000240409
0:03:10.913252	LOG	PULL_ACK: 02 b09c 04
0:03:12.209514	LOG	PUSH_ACK: 02 0f17 01
0:03:12.211513	LOG	PUSH_DATA: Protocol version = 02, Token = 0f17, Identifier = 00, JSON = {'rxpk': [{'tmst': 3718827139, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': -3, 'size': 19, 'data': 'QCAgICCEugoDBwUHAW4kkAeKxA=='}]}
0:03:12.213512	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0aba, FOpts: 03070507), FPort: 01, FRMPayload: 05a2, MIC: 90078ac4)
0:03:12.215511	LOG	Server <---------- DUT
0:03:12.216510	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:12.218509	LOG	Command Answer: 03070507
0:03:12.312456	LOG	MAC command communication completed
0:03:12.324449	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:17.200672	LOG	PUSH_ACK: 02 0f18 01
0:03:17.202670	LOG	PUSH_DATA: Protocol version = 02, Token = 0f18, Identifier = 00, JSON = {'rxpk': [{'tmst': 3723809267, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCuwoFBwEdMxlY7do='}]}
0:03:17.204669	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0abb, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 1958edda)
0:03:17.206668	LOG	Server <---------- DUT
0:03:17.208667	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0772, FOpts:), FPort: e0, FRMPayload: 0702010101010101010101

0:03:17.213664	LOG	PULL_RESP: Protocol version = 02, Token = 27d7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3724809267, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 129, 'data': 'YCAgICAAcgfgwXtmqYayjml5rJg4GzKbHb5zAGxVXemAIJfPGkzJKvnp08G7mtK1mNwibz6A7ec1REXjJx5apJU273VU4DD4CYrm1uRi1ha1ZzO52QzTElZJ6ijC542z0/+V8Qu8UuIglMsSg/h/hTCpxnYB7TKF2DIkHB9B/VLb'}}
0:03:17.214664	LOG	Server ----------> DUT
0:03:17.221660	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:17.225658	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:03:21.000509	LOG	PULL_DATA: 02 8ce2 02 aa555a0000240409
0:03:21.001507	LOG	PULL_ACK: 02 8ce2 04
0:03:22.178836	LOG	PUSH_ACK: 02 0f19 01
0:03:22.181835	LOG	PUSH_DATA: Protocol version = 02, Token = 0f19, Identifier = 00, JSON = {'rxpk': [{'tmst': 3728811847, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -5, 'size': 15, 'data': 'QCAgICCAvAoBovmVPSWt'}]}
0:03:22.182834	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0abc, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 953d25ad)
0:03:22.184833	LOG	Server <---------- DUT
0:03:22.190830	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:03:22.203823	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:27.169995	LOG	PUSH_ACK: 02 0f1a 01
0:03:27.172993	LOG	PUSH_DATA: Protocol version = 02, Token = 0f1a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3733814479, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAvQoB4hYvOeN6'}]}
0:03:27.173996	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0abd, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 2f39e37a)
0:03:27.175021	LOG	Server <---------- DUT
0:03:27.176997	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0773, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010

0:03:32.216120	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:03:32.231112	LOG	Send Test Command TxFramesCtrlReq process starts
0:03:37.210277	LOG	PUSH_ACK: 02 0f1d 01
0:03:37.212276	LOG	PUSH_DATA: Protocol version = 02, Token = 0f1d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3743819728, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAvwoB257vj0K0'}]}
0:03:37.214274	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0abf, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: ef8f42b4)
0:03:37.215273	LOG	Server <---------- DUT
0:03:37.216273	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0774, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 129, 'data': 'oCAgICAAdQfg2tTwyNRw6bKyfWJAhEwxutWlUL4LVbMILvUTj+0GwCAyzZVh5gGriVH6fAf4y0xAnP0vupdWeINPG4C4yNPKQ+wSpOMC3gbY2SKfuPDQU9hX2S311Susy1Q0LCrqjrLQzI+Xf61k0tQIrprKcZ50sQMpNftvyegW'}}
0:03:47.192941	LOG	Server ----------> DUT
0:03:47.195939	LOG	Send Test Command TxFramesCtrlReq process completed
0:03:47.199937	LOG	Check ACK bit in next uplink starts
0:03:51.389550	LOG	PULL_DATA: 02 bef9 02 aa555a0000240409
0:03:51.391549	LOG	PULL_ACK: 02 bef9 04
0:03:52.218079	LOG	PUSH_ACK: 02 0f20 01
0:03:52.221077	LOG	PUSH_DATA: Protocol version = 02, Token = 0f20, Identifier = 00, JSON = {'rxpk': [{'tmst': 3758827623, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -5, 'size': 15, 'data': 'QCAgICCAwgoBSwpI8e92'}]}
0:03:52.222077	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ac2, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 48f1ef76)
0:03:52.224075	LOG	Server <---------- DUT
0:03:52.226074	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:03:52.229073	LOG	Check ACK bit in next uplink tested successfully
0:03:52.233070	LOG	End Test Step: Oversized downlink for datarate SF9BW125
0:03:52.237068	LOG	Partial Verdict: PASS
0:03:52.243064	LOG	==========
0:03:52.251060	LOG	==========
0:03:52.255058	LOG	Start Test Step: Oversized downlink for datarate SF8BW125
0:03:52.281043	LOG	Send MAC command block process starts
0:03:57.209095	LOG	PUSH_ACK: 02 0f21 01
0:03:57.211094	LOG	PUSH_DATA: Protocol version = 02, Token = 0f21, Identifier = 00, JSON = {'rxpk': [{'tmst': 3763830255, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAwwoBBzUqolQn'}]}
0:03:57.213093	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ac3, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 2aa25427)
0:03:57.214092	LOG	Server <---------- DUT
0:03:57.216092	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0776, FOpts:), FPort: 00, FRMPayload: 03400700010504d2ad84), MIC: 8cd1ada5)
0:03:57.219090	LOG	PULL_RESP: Protocol version = 02, Token = 520c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3765830255, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF9BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAdgcAIom9P3V9EV9fNIzRraU='}}
0:03:57.221089	LOG	Server ----------> DUT
0:03:57.226085	LOG	TX_ACK: 02 520c 05 aa555a0000240409
0:04:01.419751	LOG	PULL_DATA: 02 2953 02 aa555a0000240409
0:04:01.421750	LOG	PULL_ACK: 02 2953 04
0:04:02.142339	LOG	PUSH_ACK: 02 0f22 01
0:04:02.144339	LOG	PUSH_DATA: Protocol version = 02, Token = 0f22, Identifier = 00, JSON = {'rxpk': [{'tmst': 3768770963, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 19, 'data': 'QCAgICCExAoDBwUHAQuFRPe6/w=='}]}
0:04:02.145339	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0ac4, FOpts: 03070507), FPort: 01, FRMPayload: 05a2, MIC: 44f7baff)
0:04:02.146338	LOG	Server <---------- DUT
0:04:02.148336	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:02.149336	LOG	Command Answer: 03070507

0:04:02.211301	LOG	MAC command communication completed
0:04:02.225293	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:07.147489	LOG	PUSH_ACK: 02 0f24 01
0:04:07.149488	LOG	PUSH_DATA: Protocol version = 02, Token = 0f24, Identifier = 00, JSON = {'rxpk': [{'tmst': 3773763339, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCxQoFBwGEAv/bp6I='}]}
0:04:07.151493	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ac5, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: ffdba7a2)
0:04:07.152487	LOG	Server <---------- DUT
0:04:07.154485	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0777, FOpts:), FPort: e0, FRMPayload: 0702010101010101010101

		1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 10101010101010101), MIC: 292886c0)
0:04:17.134873	LOG	Frame command sent to the DUT
0:04:17.136872	LOG	PULL_RESP: Protocol version = 02, Token = 7de2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3785768603, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 256, 'data': 'YCAgICAAeAfgB9ey2IPmUedjQ0bz0Taw9nAM1D1ZlA97gNrZwCPsaFlXr+txLmTDXAnPncVNA7WIaiUqO+NCz7aoCb8Oi59SB/l40eqCHoGlyXSLBCtaFo+rsx8/6LRPAuLIQckYZAmGRRk1yYzeIuQxhnO/r0k+83Ws1ZvnMpOFn9J/VRcNCFnKwL6o0vlzXs/ySptuJbY23Zu9cDSxSuNNv3AlLgAf3LyNANGh5Y5fyJ5/sw+m4srQ8gtBGupSqKOQAuvcXeeMTEKy8TapRkAN8FpgVwtzrK/AfXKuGBoWNLXr7Td/6gjAkb1oDpMip6OrMO11hdQD4enKKSiGwA=='}}
0:04:17.137872	LOG	Server ----------> DUT
0:04:17.141870	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:17.145867	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:04:21.760041	LOG	PULL_DATA: 02 5964 02 aa555a0000240409
0:04:21.762041	LOG	PULL_ACK: 02 5964 04
0:04:22.166811	LOG	PUSH_ACK: 02 0f27 01
0:04:22.168809	LOG	PUSH_DATA: Protocol version = 02, Token = 0f27, Identifier = 00, JSON = {'rxpk': [{'tmst': 3788771235, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCyAoFBwEbKCCICv0='}]}
0:04:22.169809	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ac8, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 20880afd)
0:04:22.171813	LOG	Server <---------- DUT
0:04:22.174807	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:04:22.186817	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:27.160983	LOG	PUSH_ACK: 02 0f2a 01
0:04:27.162966	LOG	PUSH_DATA: Protocol version = 02, Token = 0f2a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3793773851, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCyQoFBwGZr8bYbdU='}]}
0:04:27.163963	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ac9, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: c6d86dd5)
0:04:27.165964	LOG	Server <---------- DUT
0:04:27.166964	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0779, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 10101010101010101), MIC: ba5ace5d)
0:04:27.169966	LOG	Frame command sent to the DUT
0:04:27.171977	LOG	PULL_RESP: Protocol version = 02, Token = 7945, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3794773851, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 256, 'data': 'oCAgICAAeQfgL/ZJIJW/Kv+7IpQ3QEOlkVMol656wkr4xxhashaneGOPzodevvO

		j3iNKz4zs0DJKJgvxZUR1vluZHZFaliM0uKle2iZTfMZjfdNkMpnfGvPT3kBviyYkJo/A4Edm1f9GSzc5KIN8nvos+qyW90FHLfE9TFpB4sNV35WU/GoZt6MTgVCpPnB/zdHtpd6K8rak1jo+VC8c7xmuc6A7Ase/St5m+QKLemGregeAP84BNIVuO1NcRGbKqrp6sB8OlJOWTd4GKxHMPPjaHcIVA8OpbcUwe6QdAyO0AkcHoO0QDu6X3EDCvTB8ujN6zqpI7lg8+cAnulrOXQ=='}}
0:04:27.172960	LOG	Server ----------> DUT
0:04:27.176957	LOG	Send Test Command TxFramesCtrlReq process completed
0:04:27.180954	LOG	Check ACK bit in next uplink starts
0:04:31.789329	LOG	PULL_DATA: 02 7269 02 aa555a0000240409
0:04:31.791328	LOG	PULL_ACK: 02 7269 04
0:04:32.149124	LOG	PUSH_ACK: 02 0f2b 01
0:04:32.152123	LOG	PUSH_DATA: Protocol version = 02, Token = 0f2b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3798776475, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCygoFBwEZpTUI9ek='}]}
0:04:32.153122	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0aca, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 3508f5e9)
0:04:32.155121	LOG	Server <---------- DUT
0:04:32.157120	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:04:32.162117	LOG	Check ACK bit in next uplink tested successfully
0:04:32.184105	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:37.147278	LOG	PUSH_ACK: 02 0f2d 01
0:04:37.149278	LOG	PUSH_DATA: Protocol version = 02, Token = 0f2d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3803779107, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCywoFBwGPyuZGmQw='}]}
0:04:37.150276	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0acb, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: e646990c)
0:04:37.152278	LOG	Server <---------- DUT
0:04:37.154274	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 077a, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:04:42.140491	LOG	PUSH_DATA: Protocol version = 02, Token = 0f2e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3808781731, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCzAoFBwFTLhiCN4k='}]}
0:04:42.143490	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0acc, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 18823789)
0:04:42.147488	LOG	Server <---------- DUT
0:04:42.150486	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:04:42.154482	LOG	Check ACK bit in next uplink tested successfully
0:04:42.156480	LOG	End Test Step: Oversized downlink for datarate SF8BW125
0:04:42.160478	LOG	Partial Verdict: PASS
0:04:42.164477	LOG	==========
0:04:42.169473	LOG	==========
0:04:42.172472	LOG	Start Test Step: Oversized downlink for datarate SF7BW125
0:04:42.186463	LOG	Send MAC command block process starts
0:04:47.178031	LOG	PUSH_ACK: 02 0f2f 01
0:04:47.180029	LOG	PUSH_DATA: Protocol version = 02, Token = 0f2f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3813784363, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCzQoFBwGgy+NXOkA='}]}
0:04:47.181027	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0acd, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: e3573a40)
0:04:47.183026	LOG	Server <---------- DUT
0:04:47.184025	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 077b, FOpts:), FPort: 00, FRMPayload: 03500700010505d2ad84), MIC: 896122b5)
0:04:47.187024	LOG	PULL_RESP: Protocol version = 02, Token = 467f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3815784363, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF8BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAewcAI7gKSBXYJRhl/IlhIrU='}}
0:04:47.189022	LOG	Server ----------> DUT
0:04:47.193020	LOG	TX_ACK: 02 467f 05 aa555a0000240409
0:04:52.018913	LOG	PULL_DATA: 02 7dd8 02 aa555a0000240409
0:04:52.020882	LOG	PULL_ACK: 02 7dd8 04
0:04:52.114829	LOG	PUSH_ACK: 02 0f30 01
0:04:52.116829	LOG	PUSH_DATA: Protocol version = 02, Token = 0f30, Identifier = 00, JSON = {'rxpk': [{'tmst': 3818745782, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 19, 'data': 'QCAgICCEzgoDBwUHAby/sZZ/JA=='}]}
0:04:52.118826	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0ace, FOpts: 03070507), FPort: 01, FRMPayload: 05a2, MIC: b1967f24)
0:04:52.119826	LOG	Server <---------- DUT
0:04:52.120827	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:52.121826	LOG	Command Answer: 03070507
0:04:52.193783	LOG	MAC command communication completed
0:04:52.204778	LOG	Send Test Command TxFramesCtrlReq process starts
0:04:57.103987	LOG	PUSH_ACK: 02 0f31 01
0:04:57.105986	LOG	PUSH_DATA: Protocol version = 02, Token = 0f31, Identifier = 00, JSON = {'rxpk': [{'tmst': 3823748390, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCzwoFBwHnng+4ors='}]}
0:04:57.106985	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0acf, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 0fb8a2bb)
0:04:57.107985	LOG	Server <---------- DUT

0:04:57.109984	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 077c, FOpts:), FPort: e0, FRMPayload: 0702010101010101010101

		XL9Z0aIMq26GQ/8aJ0HPtCv9NzmmWu2Vix+0/n/qYEvdXNGzUtEk6o7Uehdzif nl0dZw1uTu1lJU0BH9zV5aPE7cHkHuHwL8i0Np0qMD5ewPbcV0M9WYbE0IV xbnzQelbHF/dgORV5EE3r1QZWxEsDa1R1NqWiKNSXK4cBzvikZfm1elY6Jcnc PR9Q0Hq1M1h05xRfktOjBTBOptgXvsZfVD6fre+Es0jRZq0sv8czyNsN4LvsDWh fpfqBbh1cqCVTiW/8Ee/XYsU8GxGYehWXNUAQNw=='}}
0:05:07.160925	LOG	Server ----------> DUT
0:05:07.164922	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:07.168920	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:05:12.140092	LOG	PUSH_ACK: 02 0f35 01
0:05:12.145087	LOG	PUSH_DATA: Protocol version = 02, Token = 0f35, Identifier = 00, JSON = {'rxpk': [{'tmst': 3838756262, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC0goFBwHiLZX8VwI='}]}
0:05:12.146086	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ad2, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 95fc5702)
0:05:12.147085	LOG	Server <---------- DUT
0:05:12.150083	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:05:12.164075	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:12.199084	LOG	PULL_DATA: 02 f3ab 02 aa555a0000240409
0:05:12.201054	LOG	PULL_ACK: 02 f3ab 04
0:05:17.133398	LOG	PUSH_ACK: 02 0f36 01
0:05:17.135395	LOG	PUSH_DATA: Protocol version = 02, Token = 0f36, Identifier = 00, JSON = {'rxpk': [{'tmst': 3843758894, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC0woFBwFeClj/U9Y='}]}
0:05:17.137394	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ad3, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 58ff53d6)
0:05:17.138393	LOG	Server <---------- DUT
0:05:17.141392	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 077e, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010101010101010101010101010101010101010101010101 01010101010101010101010101010101010101010101010101010101010101010101 01010101010101010101010101010101010101010101010101010101010101010101 01010101010101010101010101010101010101010101010101010101010101010101 01010101010101010101010101010101010101010101010101010101010101010101 01010101010101010101010101010101010101010101010101010101010101010101 01010101010101010101010101010101010101010101010101010101010101010101 01010101010101010101010101010101010101010101010101010101010101010101 10101010101010101), MIC: 177f5444)
0:05:17.144390	LOG	Frame command sent to the DUT
0:05:17.146389	LOG	PULL_RESP: Protocol version = 02, Token = 1f68, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3844758894, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 256, 'data': 'oCAgICAAfgfgX/ZlTIvk6rCYA6KoZ+oD6WtyqJ0lf64BP1hgoyyZP9URRozkHit YuB627Ru0qvc96F6gQm5IMjhqS5yudE82vtn3P0Lgp6kDVLxTHoUZaTkXa5fiW lODdEnKmMGKHArsPE3hRAokWvmz6lXNYJzmmoCOrSV2XShUfn7NM4Zss0 67ufBgOvuuHX2vW6fQio1Wm8EywEfh0cRMVo1UGw7lAHFlalyo11vFUVABV MiFsPeiqFHcaSlddsSPyFInyGERRwzsvjiH9JgBoADGxrx5WOAyeNnXoOtXOxs cwMw52TVPSAlf9frs8e8kFQDWfUNWaETOF39URA=='}}
0:05:17.147388	LOG	Server ----------> DUT
0:05:17.152385	LOG	Send Test Command TxFramesCtrlReq process completed
0:05:17.160381	LOG	Check ACK bit in next uplink starts
0:05:22.124559	LOG	PUSH_ACK: 02 0f37 01
0:05:22.126555	LOG	PUSH_DATA: Protocol version = 02, Token = 0f37, Identifier = 00, JSON = {'rxpk': [{'tmst': 3848761526, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC1AoFBwEX0Mv2qJU='}]}

0:05:22.128556	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ad4, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: cbf6a895)
0:05:22.129552	LOG	Server <---------- DUT
0:05:22.130555	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:05:22.134552	LOG	Check ACK bit in next uplink tested successfully
0:05:22.154538	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:22.399397	LOG	PULL_DATA: 02 92fd 02 aa555a0000240409
0:05:22.401396	LOG	PULL_ACK: 02 92fd 04
0:05:27.112713	LOG	PUSH_ACK: 02 0f38 01
0:05:27.115711	LOG	PUSH_DATA: Protocol version = 02, Token = 0f38, Identifier = 00, JSON = {'rxpk': [{'tmst': 3853764142, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC1QoFBwEIOkzh5LU='}]}
0:05:27.116710	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ad5, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 4ce1e4b5)
0:05:27.118709	LOG	Server <---------- DUT
0:05:27.120708	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 077f, FOpts:), FPort: e0, FRMPayload: 07000101010101010101010

0:05:32.591222	LOG	PULL_ACK: 02 e575 04
0:05:37.158621	LOG	PUSH_ACK: 02 0f3c 01
0:05:37.160620	LOG	PUSH_DATA: Protocol version = 02, Token = 0f3c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3863769406, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 17, 'data': 'QCAgICCC1woFBwGrVXLd2WY='}]}
0:05:37.161619	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ad7, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 72ddd966)
0:05:37.162619	LOG	Server <---------- DUT
0:05:37.164618	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0780, FOpts:), FPort: 00, FRMPayload: 070328768466), MIC: e25998f3)
0:05:37.166617	LOG	PULL_RESP: Protocol version = 02, Token = 8bcd, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3865769406, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAgAcAmmHDQU/84lmY8w=='}}
0:05:37.167616	LOG	Server ----------> DUT
0:05:37.172613	LOG	TX_ACK: 02 8bcd 05 aa555a0000240409
0:05:42.152233	LOG	PUSH_ACK: 02 0f3d 01
0:05:42.157229	LOG	PUSH_DATA: Protocol version = 02, Token = 0f3d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3868772022, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC2AoHAwFanHhiiAs='}]}
0:05:42.159229	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ad8, FOpts: 0703), FPort: 01, FRMPayload: 05a2, MIC: 7862880b)
0:05:42.160245	LOG	Server <---------- DUT
0:05:42.162226	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:42.163227	LOG	Command Answer: 0703
0:05:42.167242	LOG	MAC command communication completed
0:05:42.170239	LOG	Send MAC command block process starts
0:05:42.628815	LOG	PULL_DATA: 02 8495 02 aa555a0000240409
0:05:42.630813	LOG	PULL_ACK: 02 8495 04
0:05:47.143245	LOG	PUSH_ACK: 02 0f3e 01
0:05:47.145244	LOG	PUSH_DATA: Protocol version = 02, Token = 0f3e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3873769518, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA2QoBFqQ5/qoI'}]}
0:05:47.146248	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ad9, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 39feaa08)
0:05:47.148242	LOG	Server <---------- DUT
0:05:47.149241	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0781, FOpts:), FPort: 00, FRMPayload: 03600f00010506d2ad84), MIC: e657f943)
0:05:47.151240	LOG	PULL_RESP: Protocol version = 02, Token = a7e0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3875769518, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAgQcAQzecQPiM4Uw+F+ZX+UM='}}
0:05:47.153239	LOG	Server ----------> DUT
0:05:47.156237	LOG	TX_ACK: 02 a7e0 05 aa555a0000240409
0:05:52.104494	LOG	PUSH_ACK: 02 0f3f 01
0:05:52.107493	LOG	PUSH_DATA: Protocol version = 02, Token = 0f3f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3878751562, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -8, 'size': 19, 'data': 'QCAgICCE2goDBwUHAWuYM5EJaA=='}]}
0:05:52.109493	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0ada, FOpts: 03070507), FPort: 01, FRMPayload: 05a2, MIC: 33910968)

0:05:52.110491	LOG	Server <---------- DUT
0:05:52.112490	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:52.113490	LOG	Command Answer: 03070507
0:05:52.186448	LOG	MAC command communication completed
0:05:52.197442	LOG	Send Test Command TxFramesCtrlReq process starts
0:05:52.819087	LOG	PULL_DATA: 02 1111 02 aa555a0000240409
0:05:52.821086	LOG	PULL_ACK: 02 1111 04
0:05:57.144625	LOG	PUSH_ACK: 02 0f40 01
0:05:57.146624	LOG	PUSH_DATA: Protocol version = 02, Token = 0f40, Identifier = 00, JSON = {'rxpk': [{'tmst': 3883754182, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 17, 'data': 'QCAgICCC2woFBwFBiInk8yo='}]}
0:05:57.147622	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0adb, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 89e4f32a)
0:05:57.149621	LOG	Server <---------- DUT
0:05:57.151620	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0782, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010

0:06:07.140933	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0add, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 82fff221)
0:06:07.141936	LOG	Server <---------- DUT
0:06:07.143929	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0783, FOpts:), FPort: e0, FRMPayload: 0702010101010101010101

0:06:17.121326	LOG	Frame command sent to the DUT
0:06:17.123324	LOG	PULL_RESP: Protocol version = 02, Token = 2e04, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3904764682, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 256, 'data': 'oCAgICAAhAfgGjnPuYGwvrwyxQ48XXY5CSZCaZsXlxJYlAd/bD92TiAgOMfeM9EreUg8NChfw3UwGByJAmFSZP4Wt7ZSWhRlLx2PhduilvjDFXGXCvUUleL4FhirmnnxnBnj4ELU5sZjOsN4UoSf494ZuM1/7tT8z510dEvCeYKonAd7X/cNVDqoP7qzMvKqGfMckeSZu6jCkPtoqiqA81OKwtSLNckSNI6DQBLsAMcbGNj+hnH6Qks0fYgHZhkVDQs64grovM+Ka1P5ErfXS8FaroBHzmjqWTok/Y3bmgwsSNAgBrsbb+Wxzmeuib1BRdubUpx/p+riczWzD+tLVw==''}}
0:06:17.124322	LOG	Server ----------> DUT
0:06:17.128320	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:17.132319	LOG	Check ACK bit in next uplink starts
0:06:22.152942	LOG	PUSH_ACK: 02 0f46 01
0:06:22.154941	LOG	PUSH_DATA: Protocol version = 02, Token = 0f46, Identifier = 00, JSON = {'rxpk': [{'tmst': 3908767302, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -6, 'size': 17, 'data': 'QCAgICCC4AoFBwFp45rSNMg='}]}
0:06:22.156940	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ae0, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 9ad234c8)
0:06:22.157939	LOG	Server <---------- DUT
0:06:22.159938	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:06:22.161938	LOG	Check ACK bit in next uplink tested successfully
0:06:22.174931	LOG	Send Test Command TxFramesCtrlReq process starts
0:06:23.208836	LOG	PULL_DATA: 02 e1c3 02 aa555a0000240409
0:06:23.210817	LOG	PULL_ACK: 02 e1c3 04
0:06:27.141578	LOG	PUSH_ACK: 02 0f47 01
0:06:27.143577	LOG	PUSH_DATA: Protocol version = 02, Token = 0f47, Identifier = 00, JSON = {'rxpk': [{'tmst': 3913769930, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -6, 'size': 17, 'data': 'QCAgICCC4QoFBwHihTxZ87U='}]}
0:06:27.144577	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ae1, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 3c59f3b5)
0:06:27.146575	LOG	Server <---------- DUT
0:06:27.147574	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0785, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

0:06:27.155569	LOG	Send Test Command TxFramesCtrlReq process completed
0:06:27.158568	LOG	Check ACK bit in next uplink starts
0:06:32.129478	LOG	PUSH_ACK: 02 0f48 01
0:06:32.131478	LOG	PUSH_DATA: Protocol version = 02, Token = 0f48, Identifier = 00, JSON = {'rxpk': [{'tmst': 3918772550, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -8, 'size': 17, 'data': 'QCAgICCC4goFBwEgricRU4Y='}]}
0:06:32.133482	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ae2, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 27115386)
0:06:32.134495	LOG	Server <---------- DUT
0:06:32.136475	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:06:32.139474	LOG	Check ACK bit in next uplink tested successfully
0:06:32.142471	LOG	Send LinkADRReq process starts
0:06:33.238793	LOG	PULL_DATA: 02 300a 02 aa555a0000240409
0:06:33.240791	LOG	PULL_ACK: 02 300a 04
0:06:37.125579	LOG	PUSH_ACK: 02 0f4a 01
0:06:37.127578	LOG	PUSH_DATA: Protocol version = 02, Token = 0f4a, Identifier = 00, JSON = {'rxpk': [{'tmst': 3923775178, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 17, 'data': 'QCAgICCC4woFBwEVqQezk1w='}]}
0:06:37.129577	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ae3, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 07b3935c)
0:06:37.130578	LOG	Server <---------- DUT
0:06:37.132576	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0786, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: dc2bf37d)
0:06:37.134576	LOG	PULL_RESP: Protocol version = 02, Token = 33f9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3925775178, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAhgcAoIwlo3/cK/N9'}}
0:06:37.136573	LOG	Server ----------> DUT
0:06:37.140570	LOG	TX_ACK: 02 33f9 05 aa555a0000240409
0:06:42.182700	LOG	PUSH_ACK: 02 0f4b 01
0:06:42.184698	LOG	PUSH_DATA: Protocol version = 02, Token = 0f4b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3928803520, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC5AoDBwEgSXlbwdk='}]}
0:06:42.185698	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ae4, FOpts: 0307), FPort: 01, FRMPayload: 05a2, MIC: 795bc1d9)
0:06:42.187696	LOG	Server <---------- DUT
0:06:42.188695	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:42.190694	LOG	Command Answer: 0307
0:06:42.202687	LOG	MAC command communication completed
0:06:42.206686	LOG	Send NewChannelReq process starts
0:06:43.439095	LOG	PULL_DATA: 02 161b 02 aa555a0000240409
0:06:43.445091	LOG	PULL_ACK: 02 161b 04
0:06:47.170969	LOG	PUSH_ACK: 02 0f4c 01
0:06:47.173968	LOG	PUSH_DATA: Protocol version = 02, Token = 0f4c, Identifier = 00, JSON = {'rxpk': [{'tmst': 3933801024, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA5QoBj5IJV2N/'}]}
0:06:47.174967	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ae5, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 0957637f)
0:06:47.175966	LOG	Server <---------- DUT
0:06:47.177966	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0787, FOpts:), FPort: 00, FRMPayload: 070300000050), MIC: ae9d5527)

0:06:47.180964	LOG	PULL_RESP: Protocol version = 02, Token = f98c, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3935801024, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAhwcAPNPfucaKrp1VJw=='}}
0:06:47.182963	LOG	Server ----------> DUT
0:06:47.185961	LOG	TX_ACK: 02 f98c 05 aa555a0000240409
0:06:52.157262	LOG	PUSH_ACK: 02 0f4d 01
0:06:52.159261	LOG	PUSH_DATA: Protocol version = 02, Token = 0f4d, Identifier = 00, JSON = {'rxpk': [{'tmst': 3938808782, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCC5goHAwFz9w/pBok='}]}
0:06:52.161262	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ae6, FOpts: 0703), FPort: 01, FRMPayload: 05a2, MIC: 0fe90689)
0:06:52.162260	LOG	Server <---------- DUT
0:06:52.163259	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:52.164261	LOG	Command Answer: 0703
0:06:52.170255	LOG	MAC command communication completed
0:06:52.174253	LOG	End Test Step: Oversized downlink for optional datarate SF7BW250
0:06:52.177251	LOG	Partial Verdict: PASS
0:06:52.181249	LOG	==========
0:06:52.186247	LOG	==========
0:06:52.188245	LOG	Start Test Step: Oversized downlink for optional datarate FSK
0:06:52.205235	LOG	Send NewChannelReq process starts
0:06:53.478368	LOG	PULL_DATA: 02 0c70 02 aa555a0000240409
0:06:53.480368	LOG	PULL_ACK: 02 0c70 04
0:06:57.198250	LOG	PUSH_ACK: 02 0f4e 01
0:06:57.204247	LOG	PUSH_DATA: Protocol version = 02, Token = 0f4e, Identifier = 00, JSON = {'rxpk': [{'tmst': 3943806270, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA5woBqShduGTt'}]}
0:06:57.205246	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ae7, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 5db864ed)
0:06:57.206246	LOG	Server <---------- DUT
0:06:57.208245	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0788, FOpts:), FPort: 00, FRMPayload: 070428768477), MIC: 9f785782)
0:06:57.210243	LOG	PULL_RESP: Protocol version = 02, Token = 6833, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3945806270, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAiAcAf8cYAC53n3hXgg=='}}
0:06:57.212243	LOG	Server ----------> DUT
0:06:57.216240	LOG	TX_ACK: 02 6833 05 aa555a0000240409
0:07:02.162655	LOG	PUSH_ACK: 02 0f4f 01
0:07:02.165653	LOG	PUSH_DATA: Protocol version = 02, Token = 0f4f, Identifier = 00, JSON = {'rxpk': [{'tmst': 3948814035, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 17, 'data': 'QCAgICCC6AoHAwEvHiXQFCg='}]}
0:07:02.169652	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ae8, FOpts: 0703), FPort: 01, FRMPayload: 05a2, MIC: 25d01428)
0:07:02.173650	LOG	Server <---------- DUT
0:07:02.177647	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:07:02.181644	LOG	Command Answer: 0703
0:07:02.194637	LOG	MAC command communication completed
0:07:02.201633	LOG	Send MAC command block process starts
0:07:03.508888	LOG	PULL_DATA: 02 7f7e 02 aa555a0000240409

0:07:03.510887	LOG	PULL_ACK: 02 7f7e 04
0:07:07.165807	LOG	PUSH_ACK: 02 0f51 01
0:07:07.167804	LOG	PUSH_DATA: Protocol version = 02, Token = 0f51, Identifier = 00, JSON = {'rxpk': [{'tmst': 3953811515, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA6QoB4U4jhMYl'}]}
0:07:07.169805	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ae9, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 2384c625)
0:07:07.170804	LOG	Server <---------- DUT
0:07:07.172802	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0789, FOpts:), FPort: 00, FRMPayload: 03701700010507d2ad84), MIC: ef5b64ed)
0:07:07.174801	LOG	PULL_RESP: Protocol version = 02, Token = efa9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3955811515, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW250', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAiQcAaA9LWMG1fxQcT+9bZO0='}}
0:07:07.175800	LOG	Server ----------> DUT
0:07:07.179798	LOG	TX_ACK: 02 efa9 05 aa555a0000240409
0:07:12.119119	LOG	PUSH_ACK: 02 0f52 01
0:07:12.121115	LOG	PUSH_DATA: Protocol version = 02, Token = 0f52, Identifier = 00, JSON = {'rxpk': [{'tmst': 3958772175, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 19, 'data': 'QCAgICCE6goDBwUHAT3PVonR+g=='}]}
0:07:12.122114	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0aea, FOpts: 03070507), FPort: 01, FRMPayload: 05a2, MIC: 5689d1fa)
0:07:12.124112	LOG	Server <---------- DUT
0:07:12.126111	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:07:12.127112	LOG	Command Answer: 03070507
0:07:12.193073	LOG	MAC command communication completed
0:07:12.202068	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:13.688221	LOG	PULL_DATA: 02 d911 02 aa555a0000240409
0:07:13.693219	LOG	PULL_ACK: 02 d911 04
0:07:17.158245	LOG	PUSH_ACK: 02 0f53 01
0:07:17.160244	LOG	PUSH_DATA: Protocol version = 02, Token = 0f53, Identifier = 00, JSON = {'rxpk': [{'tmst': 3963774407, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCC6woFBwH2TgKUeZs='}]}
0:07:17.161244	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0aeb, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 0294799b)
0:07:17.163242	LOG	Server <---------- DUT
0:07:17.165242	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 078a, FOpts:), FPort: e0, FRMPayload: 0702010101010101010101

		ostubxz81Y/meVloyCSWMfc3VsF6KTywmJL3VcvYXRsVi2tpKfwsKyRkg6WH8QKkmSTMvRcHZdHOUYWzOt8k37sY+hG5enHQQ=='}}
0:07:17.170238	LOG	Server ----------> DUT
0:07:17.174236	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:17.177234	LOG	Wait Until Unconfirmed Uplink arrives process starts
0:07:22.145583	LOG	PUSH_ACK: 02 0f54 01
0:07:22.147582	LOG	PUSH_DATA: Protocol version = 02, Token = 0f54, Identifier = 00, JSON = {'rxpk': [{'tmst': 3968777008, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCC7AoFBwFrbPcFn/0='}]}
0:07:22.149581	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0aec, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: f7059ffd)
0:07:22.151579	LOG	Server <---------- DUT
0:07:22.154578	LOG	Wait Until Unconfirmed Uplink arrives tested successfully
0:07:22.166588	LOG	Send Test Command TxFramesCtrlReq process starts
0:07:23.888610	LOG	PULL_DATA: 02 f057 02 aa555a0000240409
0:07:23.889611	LOG	PULL_ACK: 02 f057 04
0:07:27.135760	LOG	PUSH_ACK: 02 0f55 01
0:07:27.137759	LOG	PUSH_DATA: Protocol version = 02, Token = 0f55, Identifier = 00, JSON = {'rxpk': [{'tmst': 3973779615, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCC7QoFBwHBi/fMnqg='}]}
0:07:27.139758	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0aed, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: f7cc9ea8)
0:07:27.141757	LOG	Server <---------- DUT
0:07:27.143756	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 078b, FOpts:), FPort: e0, FRMPayload: 07020101010101010101010

0:07:37.177047	LOG	PUSH_ACK: 02 0f58 01
0:07:37.179045	LOG	PUSH_DATA: Protocol version = 02, Token = 0f58, Identifier = 00, JSON = {'rxpk': [{'tmst': 3983784809, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCC7woFBwFGlvPpxHU='}]}
0:07:37.180045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0aef, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: f3e9c475)
0:07:37.182044	LOG	Server <---------- DUT
0:07:37.183043	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 078c, FOpts:), FPort: e0, FRMPayload: 0700010101010101010101

		0101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d2ae1e85)
0:07:47.165504	LOG	Frame command sent to the DUT
0:07:47.167501	LOG	PULL_RESP: Protocol version = 02, Token = 1011, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 3995790008, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 256, 'data': 'oCAgICAAjQfgdJS7axtzRC59UaFyIyiN7XQF0z143X8bAHQvqikSYKeLxE6oMSHUBkwyxsbkEElZTd5ZAcdVsI6SoEwqFi+HqhdjxAjy/qh7h+TeHt+bwSDYn9fNXsOET/mxEWKnNKMKNxD7EozmhtUP0QcdG2cubovS9h9uMLOdFnSf0R1rrUjok9yI1xBwy3w4Xnz02MlHNlw281tJkAR2opFW+UpQLNKL01BGeicVc/DE9es9yWeYhVKw3iJvt0fX2RM6t/MOn+Zl3qqHWUWpP/SiDkMNDGI8b9q2TVjezD3/RoOE8V5EbokToRF8I23gayviVNQwy0yH0q4ehQ==''}}
0:07:47.168502	LOG	Server ----------> DUT
0:07:47.171501	LOG	Send Test Command TxFramesCtrlReq process completed
0:07:47.174498	LOG	Check ACK bit in next uplink starts
0:07:52.143024	LOG	PUSH_ACK: 02 0f5b 01
0:07:52.145024	LOG	PUSH_DATA: Protocol version = 02, Token = 0f5b, Identifier = 00, JSON = {'rxpk': [{'tmst': 3998792617, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCC8goFBwHMDHFBXDc='}]}
0:07:52.147021	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0af2, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 71415c37)
0:07:52.148023	LOG	Server <---------- DUT
0:07:52.149022	LOG	Oversized frame was sent. ACK bit received in uplink is set to 0
0:07:52.152019	LOG	Check ACK bit in next uplink tested successfully
0:07:52.156017	LOG	Send LinkADRReq process starts
0:07:54.307671	LOG	PULL_DATA: 02 35fb 02 aa555a0000240409
0:07:54.309652	LOG	PULL_ACK: 02 35fb 04
0:07:57.182015	LOG	PUSH_ACK: 02 0f5c 01
0:07:57.185014	LOG	PUSH_DATA: Protocol version = 02, Token = 0f5c, Identifier = 00, JSON = {'rxpk': [{'tmst': 4003795226, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCC8woFBwEA/t0YKEc='}]}
0:07:57.186013	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0af3, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: dd182847)
0:07:57.187012	LOG	Server <---------- DUT
0:07:57.189011	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 078e, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 661020da)
0:07:57.192010	LOG	PULL_RESP: Protocol version = 02, Token = 34f9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4005795226, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 18, 'data': 'YCAgICAAjgcAmdvMKjJmECDa'}}
0:07:57.193010	LOG	Server ----------> DUT
0:07:57.197008	LOG	TX_ACK: 02 34f9 05 aa555a0000240409
0:08:02.232141	LOG	PUSH_ACK: 02 0f5d 01
0:08:02.234138	LOG	PUSH_DATA: Protocol version = 02, Token = 0f5d, Identifier = 00, JSON = {'rxpk': [{'tmst': 4008845286, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 17, 'data': 'QCAgICCC9AoDBwG70tIWQaI='}]}
0:08:02.236137	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0af4, FOpts: 0307), FPort: 01, FRMPayload: 05a2, MIC: d21641a2)
0:08:02.237136	LOG	Server <---------- DUT
0:08:02.238135	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:02.239135	LOG	Command Answer: 0307
0:08:02.246132	LOG	MAC command communication completed
0:08:02.250131	LOG	Send NewChannelReq process starts
0:08:04.328365	LOG	PULL_DATA: 02 da1a 02 aa555a0000240409

0:08:04.330364	LOG	PULL_ACK: 02 da1a 04
0:08:07.239234	LOG	PUSH_ACK: 02 0f5f 01
0:08:07.244230	LOG	PUSH_DATA: Protocol version = 02, Token = 0f5f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4013842758, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA9QoBWEtbBD+z'}]}
0:08:07.247229	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0af5, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 5b043fb3)
0:08:07.250228	LOG	Server <---------- DUT
0:08:07.255224	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 078f, FOpts:), FPort: 00, FRMPayload: 070400000050), MIC: b8d9d3af)
0:08:07.261221	LOG	PULL_RESP: Protocol version = 02, Token = 1f09, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4015842758, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 19, 'data': 'YCAgICAAjwcAUggVdE1QuNnTrw=='}}
0:08:07.263220	LOG	Server ----------> DUT
0:08:07.266218	LOG	TX_ACK: 02 1f09 05 aa555a0000240409
0:08:12.228244	LOG	PUSH_ACK: 02 0f60 01
0:08:12.230243	LOG	PUSH_DATA: Protocol version = 02, Token = 0f60, Identifier = 00, JSON = {'rxpk': [{'tmst': 4018850497, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC9goHAwFzFnYEtZg='}]}
0:08:12.232242	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0af6, FOpts: 0703), FPort: 01, FRMPayload: 05a2, MIC: 7604b598)
0:08:12.233241	LOG	Server <---------- DUT
0:08:12.234241	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:12.235240	LOG	Command Answer: 0703
0:08:12.239239	LOG	MAC command communication completed
0:08:12.242237	LOG	End Test Step: Oversized downlink for optional datarate FSK
0:08:12.246235	LOG	Partial Verdict: PASS
0:08:12.250232	LOG	==========
0:08:12.255229	LOG	==========
0:08:12.257228	LOG	Start Test Step: Restore default settings
0:08:12.269221	LOG	Send LinkADRReq process starts
0:08:14.398463	LOG	PULL_DATA: 02 705e 02 aa555a0000240409
0:08:14.404458	LOG	PULL_ACK: 02 705e 04
0:08:17.215857	LOG	PUSH_ACK: 02 0f61 01
0:08:17.217857	LOG	PUSH_DATA: Protocol version = 02, Token = 0f61, Identifier = 00, JSON = {'rxpk': [{'tmst': 4023847969, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCA9woBv5NNXa2Q'}]}
0:08:17.218855	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0af7, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 4d5dad90)
0:08:17.219856	LOG	Server <---------- DUT
0:08:17.221853	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0790, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 76b74cb1)
0:08:17.223852	LOG	PULL_RESP: Protocol version = 02, Token = 7bfe, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4025847969, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 18, 'data': 'YCAgICAAkAcA3l3jTj12t0yx'}}
0:08:17.224853	LOG	Server ----------> DUT
0:08:17.228849	LOG	TX_ACK: 02 7bfe 05 aa555a0000240409
0:08:22.233863	LOG	PUSH_ACK: 02 0f62 01
0:08:22.236862	LOG	PUSH_DATA: Protocol version = 02, Token = 0f62, Identifier = 00, JSON = {'rxpk': [{'tmst': 4028855700, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCC+AoDBwE72da//NM='}]}
0:08:22.238861	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0af8, FOpts: 0307), FPort: 01, FRMPayload: 05a2, MIC: d6bffcd3)
0:08:22.239860	LOG	Server <---------- DUT
0:08:22.241859	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:22.242858	LOG	Command Answer: 0307
0:08:22.255851	LOG	MAC command communication completed
0:08:22.258849	LOG	Send RXParamSetupReq process starts
0:08:24.578528	LOG	PULL_DATA: 02 af82 02 aa555a0000240409
0:08:24.579528	LOG	PULL_ACK: 02 af82 04
0:08:27.222022	LOG	PUSH_ACK: 02 0f63 01
0:08:27.225021	LOG	PUSH_DATA: Protocol version = 02, Token = 0f63, Identifier = 00, JSON = {'rxpk': [{'tmst': 4033853172, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA+QoBPIOGTMxo'}]}
0:08:27.226021	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0af9, FOpts:), FPort: 01, FRMPayload: 05a2, MIC: 864ccc68)
0:08:27.228019	LOG	Server <---------- DUT
0:08:27.229019	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0791, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: 1763c36a)
0:08:27.232017	LOG	PULL_RESP: Protocol version = 02, Token = 6285, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4035853172, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 50000, 'freq': 869.525, 'modu': 'FSK', 'prea': 5, 'fdev': 25000, 'size': 18, 'data': 'YCAgICAAkQcAZ/03FewXY8Nq'}}
0:08:27.234016	LOG	Server ----------> DUT
0:08:27.238013	LOG	TX_ACK: 02 6285 05 aa555a0000240409
0:08:32.239517	LOG	PUSH_ACK: 02 0f64 01
0:08:32.244514	LOG	PUSH_DATA: Protocol version = 02, Token = 0f64, Identifier = 00, JSON = {'rxpk': [{'tmst': 4038860921, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCC+goFBwE5fg5lAjg='}]}
0:08:32.247513	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0afa, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: 0e650238)
0:08:32.251510	LOG	Server <---------- DUT
0:08:32.254508	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:08:32.256507	LOG	Command Answer: 0507
0:08:32.270500	LOG	MAC command communication completed
0:08:32.274497	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:08:34.587699	LOG	PULL_DATA: 02 6f26 02 aa555a0000240409
0:08:34.590697	LOG	PULL_ACK: 02 6f26 04
0:08:37.248183	LOG	PUSH_ACK: 02 0f66 01
0:08:37.250182	LOG	PUSH_DATA: Protocol version = 02, Token = 0f66, Identifier = 00, JSON = {'rxpk': [{'tmst': 4043863529, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': 0, 'size': 17, 'data': 'QCAgICCC+woFBwHeA+Hdfhs='}]}
0:08:37.252181	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0afb, FOpts: 0507), FPort: 01, FRMPayload: 05a2, MIC: e1dd7e1b)
0:08:37.253182	LOG	Server <---------- DUT
0:08:37.255179	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0792, FOpts:), FPort: e0, FRMPayload: 0501), MIC: 584452d3)
0:08:37.257180	LOG	Frame command sent to the DUT
0:08:37.259185	LOG	PULL_RESP: Protocol version = 02, Token = 9ea4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4045863529, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAkgfgkYVYRFLT'}}
0:08:37.260178	LOG	Server ----------> DUT
0:08:37.263175	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:08:37.267172	LOG	End Test Step: Restore default settings
0:08:37.270172	LOG	Partial Verdict: PASS
0:08:37.274169	LOG	==========
0:08:37.279165	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_018
0:08:37.280165	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_019_A	
Verdict	PASS	
Date	2021-10-18 17:41:46	
Comments	Maximum Allowed Payload (Part 1)	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	SF7BW250 Frequency	868.100
	FSK Frequency	868.100
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.011302	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_019_A
0:00:00.052278	LOG	==========
0:00:00.054277	LOG	Start Test Step: Device activation
0:00:00.113243	LOG	Activation process has finished successfully
0:00:00.115243	LOG	Data stored in the DUT after Activation:
0:00:00.118240	LOG	DevAddr: 20202020
0:00:00.120239	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.124237	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.127235	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.130234	LOG	End Test Step: Device activation
0:00:00.133232	LOG	Partial Verdict: PASS
0:00:00.136230	LOG	==========
0:00:00.143226	LOG	==========
0:00:00.146225	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.157218	LOG	DUT Pre-condition activation process starts
0:00:00.161216	LOG	DUT Pre-condition activation completed
0:00:00.165214	LOG	End Test Step: DUT Pre-condition settings
0:00:00.169212	LOG	Partial Verdict: PASS
0:00:00.173209	LOG	==========
0:00:00.179205	LOG	==========
0:00:00.181205	LOG	Start Test Step: Initial settings for the test
0:00:00.191198	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:00:01.543428	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:03.930069	LOG	PULL_DATA: 02 0974 02 aa555a0000240409
0:00:03.931068	LOG	PULL_ACK: 02 0974 04
0:00:03.933068	LOG	First PULL_DATA received
0:00:06.542581	LOG	PUSH_ACK: 02 0f68 01

0:00:06.545581	LOG	PUSH_DATA: Protocol version = 02, Token = 0f68, Identifier = 00, JSON = {'rxpk': [{'tmst': 4053863618, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCA/QoBPl9H6fS3'}]}
0:00:06.546581	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0afd, FOpts:), FPort: 01, FRMPayload: 05a3, MIC: 47e9f4b7)
0:00:06.547578	LOG	Server <---------- DUT
0:00:06.549577	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0793, FOpts:), FPort: e0, FRMPayload: 0500), MIC: f7c67f90)
0:00:06.551576	LOG	Frame command sent to the DUT
0:00:06.553575	LOG	PULL_RESP: Protocol version = 02, Token = bb9a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4055863618, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAkwfguz33xn+Q'}}
0:00:06.555575	LOG	Server ----------> DUT
0:00:06.559572	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:00:06.564587	LOG	End Test Step: Initial settings for the test
0:00:06.568586	LOG	Partial Verdict: PASS
0:00:06.573564	LOG	==========
0:00:06.578563	LOG	==========
0:00:06.581560	LOG	Start Test Step: Uplink - Max Payload via Echo for datarate SF12BW125
0:00:06.595551	LOG	Send MAC command block process starts
0:00:11.540809	LOG	PUSH_ACK: 02 0f69 01
0:00:11.542806	LOG	PUSH_DATA: Protocol version = 02, Token = 0f69, Identifier = 00, JSON = {'rxpk': [{'tmst': 4058866212, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCA/goBb+Unodsr'}]}
0:00:11.544804	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0afe, FOpts:), FPort: 01, FRMPayload: 05a4, MIC: 27a1db2b)
0:00:11.545804	LOG	Server <---------- DUT
0:00:11.546803	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0794, FOpts:), FPort: 00, FRMPayload: 03000700010505d2ad84), MIC: 6957fee4)
0:00:11.550805	LOG	PULL_RESP: Protocol version = 02, Token = 3253, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4060866212, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAlAcA+mOcFQ4arSy2r2lX/uQ='}}
0:00:11.555800	LOG	Server ----------> DUT
0:00:11.559794	LOG	TX_ACK: 02 3253 05 aa555a0000240409
0:00:14.079453	LOG	PULL_DATA: 02 5dea 02 aa555a0000240409
0:00:14.081452	LOG	PULL_ACK: 02 5dea 04
0:00:17.846157	LOG	PUSH_ACK: 02 0f6a 01
0:00:17.849155	LOG	PUSH_DATA: Protocol version = 02, Token = 0f6a, Identifier = 00, JSON = {'rxpk': [{'tmst': 4065141374, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': 0, 'size': 19, 'data': 'QCAgICCE/woDBwUHATn/NAMHRQ=='}]}
0:00:17.850155	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0aff, FOpts: 03070507), FPort: 01, FRMPayload: 05a4, MIC: 34030745)
0:00:17.851155	LOG	Server <---------- DUT
0:00:17.853152	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:17.855152	LOG	Command Answer: 03070507
0:00:17.917115	LOG	MAC command communication completed
0:00:17.926110	LOG	Send Test Command EchoPayloadReq process starts
0:00:22.849306	LOG	PUSH_ACK: 02 0f6c 01

0:00:22.852305	LOG	PUSH_DATA: Protocol version = 02, Token = 0f6c, Identifier = 00, JSON = {'rxpk': [{'tmst': 4070143974, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCAAsFBwFokIvwsDc='}]}
0:00:22.854303	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b00, FOpts: 0507), FPort: 01, FRMPayload: 05a4, MIC: 8bf0b037)
0:00:22.855303	LOG	Server <---------- DUT
0:00:22.858301	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0795, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 980bb011)
0:00:22.860300	LOG	Frame command sent to the DUT
0:00:22.862299	LOG	PULL_RESP: Protocol version = 02, Token = 19b1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4071143974, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 868.1, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAlQfgJc1GyRmczizNkYWbdjNhS1bCkducYhqNpfhO2V2ei9FTQYYxdVhs9GPRF2rlxMG9fzSomAuwEQ=='}}
0:00:22.864298	LOG	Server ----------> DUT
0:00:22.868296	LOG	TX_ACK: 02 19b1 05 aa555a0000240409
0:00:24.119582	LOG	PULL_DATA: 02 378d 02 aa555a0000240409
0:00:24.121582	LOG	PULL_ACK: 02 378d 04
0:00:34.199842	LOG	PULL_DATA: 02 f54d 02 aa555a0000240409
0:00:34.204839	LOG	PULL_ACK: 02 f54d 04
0:00:34.367752	LOG	PUSH_ACK: 02 0f6d 01
0:00:34.371752	LOG	PUSH_DATA: Protocol version = 02, Token = 0f6d, Identifier = 00, JSON = {'rxpk': [{'tmst': 4081635577, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 13.0, 'rssi': -17, 'size': 64, 'data': 'QCAgICCAAQvgxWFZW1+9QhRQPeJNycZQB+pRi1C/jEQG//J25YxHAD8XQhiHPIJGzfQz7KSNwOYT8PuBq56y+g=='}]}
0:00:34.374748	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b01, FOpts:), FPort: e0, FRMPayload: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202), MIC: ab9eb2fa)
0:00:34.378742	LOG	Server <---------- DUT
0:00:34.383739	LOG	Answer in payload: 02020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:34.386736	LOG	Frame Command Payload in the Answer: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:34.391732	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:34.396730	LOG	Send Test Command EchoPayloadReq process completed
0:00:34.401727	LOG	Send Test Command EchoPayloadReq process starts
0:00:37.713841	LOG	PUSH_ACK: 02 0f6e 01
0:00:37.715839	LOG	PUSH_DATA: Protocol version = 02, Token = 0f6e, Identifier = 00, JSON = {'rxpk': [{'tmst': 4084987969, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICCAAgsBw5Lgdq97'}]}
0:00:37.717839	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b02, FOpts:), FPort: 01, FRMPayload: 05a5, MIC: e076af7b)
0:00:37.718838	LOG	Server <---------- DUT
0:00:37.721836	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0796, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e0abc545)
0:00:37.724834	LOG	Frame command sent to the DUT

0:00:37.726833	LOG	PULL_RESP: Protocol version = 02, Token = 2024, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4086987969, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAlgfgLiBwlzG/BKM66tlmtWN5jzpmx9CNDuaGnX/HU2VnYWYq1z1NJCG7MaRcew+OS488ZNBw4KvFRQ=='}}
0:00:37.727833	LOG	Server ----------> DUT
0:00:37.731832	LOG	TX_ACK: 02 2024 05 aa555a0000240409
0:00:44.239125	LOG	PULL_DATA: 02 a801 02 aa555a0000240409
0:00:44.241123	LOG	PULL_ACK: 02 a801 04
0:00:44.350062	LOG	PUSH_ACK: 02 0f6f 01
0:00:44.352062	LOG	PUSH_DATA: Protocol version = 02, Token = 0f6f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4091640837, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -10, 'size': 64, 'data': 'QCAgICCAAwvgZmxA2BuBIHFieSJR1nSDnyM+ASnBpmIqtfQEkpn0EQJ5VMAMtEfD7FPrRUf2skw8V3lblIiSnA=='}]}
0:00:44.354059	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b03, FOpts:), FPort: e0, FRMPayload: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202, MIC: 9488929c)
0:00:44.355058	LOG	Server <---------- DUT
0:00:44.357057	LOG	Answer in payload: 02020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:44.358058	LOG	Frame Command Payload in the Answer: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:44.362055	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:44.365055	LOG	Send Test Command EchoPayloadReq process completed
0:00:44.368068	LOG	End Test Step: Uplink - Max Payload via Echo for datarate SF12BW125
0:00:44.371049	LOG	Partial Verdict: PASS
0:00:44.375066	LOG	==========
0:00:44.381044	LOG	==========
0:00:44.383043	LOG	Start Test Step: Uplink - Max Payload via Echo for datarate SF11BW125
0:00:44.397034	LOG	Send MAC command block process starts
0:00:47.694158	LOG	PUSH_ACK: 02 0f70 01
0:00:47.696155	LOG	PUSH_DATA: Protocol version = 02, Token = 0f70, Identifier = 00, JSON = {'rxpk': [{'tmst': 4094993237, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -5, 'size': 15, 'data': 'QCAgICCABAsBmMR7HCTl'}]}
0:00:47.697155	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b04, FOpts:), FPort: 01, FRMPayload: 05a6, MIC: 7b1c24e5)
0:00:47.699155	LOG	Server <---------- DUT
0:00:47.700153	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0797, FOpts:), FPort: 00, FRMPayload: 03100700010505d2ad84), MIC: ba5f89b5)
0:00:47.702171	LOG	PULL_RESP: Protocol version = 02, Token = b2f1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4096993237, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAlwcAGf9mNQVzXTOeI7pfibU='}}
0:00:47.703151	LOG	Server ----------> DUT
0:00:47.707149	LOG	TX_ACK: 02 b2f1 05 aa555a0000240409
0:00:52.291373	LOG	PUSH_ACK: 02 0f71 01
0:00:52.294372	LOG	PUSH_DATA: Protocol version = 02, Token = 0f71, Identifier = 00, JSON = {'rxpk': [{'tmst': 4099582191, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': 0, 'size': 19, 'data': 'QCAgICCEBQsDBwUHAXvxfRJnaw=='}]}

0:00:52.295371	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b05, FOpts: 03070507), FPort: 01, FRMPayload: 05a6, MIC: 7d12676b)
0:00:52.297370	LOG	Server <---------- DUT
0:00:52.299368	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:52.301367	LOG	Command Answer: 03070507
0:00:52.383320	LOG	MAC command communication completed
0:00:52.395315	LOG	Send Test Command EchoPayloadReq process starts
0:00:54.419161	LOG	PULL_DATA: 02 bd28 02 aa555a0000240409
0:00:54.421161	LOG	PULL_ACK: 02 bd28 04
0:00:57.186585	LOG	PUSH_ACK: 02 0f73 01
0:00:57.189584	LOG	PUSH_DATA: Protocol version = 02, Token = 0f73, Identifier = 00, JSON = {'rxpk': [{'tmst': 4104502887, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -5, 'size': 17, 'data': 'QCAgICCCBgsFBwHz5iuEoWQ='}]}
0:00:57.190583	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b06, FOpts: 0507), FPort: 01, FRMPayload: 05a6, MIC: 2b84a164)
0:00:57.192582	LOG	Server <---------- DUT
0:00:57.194581	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0798, FOpts:), FPort: e0, FRMPayload: 0801010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 2696bd37)
0:00:57.197579	LOG	Frame command sent to the DUT
0:00:57.199578	LOG	PULL_RESP: Protocol version = 02, Token = 442e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4105502887, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF11BW125', 'freq': 868.3, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAmAfg6U/CeuSdHDVkIDw1hvWW0PwBhzhEGWor3sJozAWsB7n+Ug5HTUWdIneBKv2GTN5pI5YFJpa9Nw=='}}
0:00:57.200577	LOG	Server ----------> DUT
0:00:57.204575	LOG	TX_ACK: 02 442e 05 aa555a0000240409
0:01:03.147191	LOG	PUSH_ACK: 02 0f74 01
0:01:03.149190	LOG	PUSH_DATA: Protocol version = 02, Token = 0f74, Identifier = 00, JSON = {'rxpk': [{'tmst': 4110418449, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': 0, 'size': 64, 'data': 'QCAgICCABwvgoxli6EgnOL20gEFmPjrS2VhTyYBqwrhwMyxERfZRYLzmt2Juch6f/NPd5fznSdvhS0WYJdF6Tw=='}]}
0:01:03.151188	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b07, FOpts:), FPort: e0, FRMPayload: 0802020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202), MIC: 25d17a4f)
0:01:03.153187	LOG	Server <---------- DUT
0:01:03.154187	LOG	Answer in payload: 0202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:03.156186	LOG	Frame Command Payload in the Answer: 0802020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:03.160184	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:03.163182	LOG	Send Test Command EchoPayloadReq process completed
0:01:03.168180	LOG	Send Test Command EchoPayloadReq process starts
0:01:04.549392	LOG	PULL_DATA: 02 7f97 02 aa555a0000240409
0:01:04.554389	LOG	PULL_ACK: 02 7f97 04
0:01:07.210876	LOG	PUSH_ACK: 02 0f75 01
0:01:07.213874	LOG	PUSH_DATA: Protocol version = 02, Token = 0f75, Identifier = 00, JSON = {'rxpk': [{'tmst': 4114508097, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICCACAsBWRiIabQY'}]}
0:01:07.214874	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b08, FOpts:), FPort: 01, FRMPayload: 05a7, MIC: 8869b418)
0:01:07.216873	LOG	Server <---------- DUT
0:01:07.218872	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 0799, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: ef9f99cd)
0:01:07.221870	LOG	Frame command sent to the DUT
0:01:07.223870	LOG	PULL_RESP: Protocol version = 02, Token = 7c00, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4116508097, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAmQfgzM8V7+poJ/HQ2UNUhlfkERYBKEObqmMLIsWKBv0kFDt3CSffecyuOvGU+oysNuKCgkRG75+ZzQ=='}}
0:01:07.225867	LOG	Server ----------> DUT
0:01:07.229866	LOG	TX_ACK: 02 7c00 05 aa555a0000240409
0:01:13.150494	LOG	PUSH_ACK: 02 0f76 01
0:01:13.152492	LOG	PUSH_DATA: Protocol version = 02, Token = 0f76, Identifier = 00, JSON = {'rxpk': [{'tmst': 4120423685, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': 1, 'size': 64, 'data': 'QCAgICCACQvgRdxD9lBnQrF7cwDLuFJt3IGGtmD+6zAWt/05XlwYTzTZ+r/kTLEp/ThnhzsbGaEkykIpz6ec7A=='}]}
0:01:13.153491	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b09, FOpts:), FPort: e0, FRMPayload: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202), MIC: cfa79cec)
0:01:13.155491	LOG	Server <---------- DUT
0:01:13.157490	LOG	Answer in payload: 02020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:13.159489	LOG	Frame Command Payload in the Answer: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:13.165485	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:13.173481	LOG	Send Test Command EchoPayloadReq process completed
0:01:13.178478	LOG	End Test Step: Uplink - Max Payload via Echo for datarate SF11BW125
0:01:13.183475	LOG	Partial Verdict: PASS
0:01:13.188473	LOG	==========
0:01:13.197467	LOG	==========
0:01:13.201465	LOG	Start Test Step: Uplink - Max Payload via Echo for datarate SF10BW125
0:01:13.216456	LOG	Send MAC command block process starts
0:01:14.579679	LOG	PULL_DATA: 02 3970 02 aa555a0000240409
0:01:14.582677	LOG	PULL_ACK: 02 3970 04
0:01:17.215178	LOG	PUSH_ACK: 02 0f77 01
0:01:17.220176	LOG	PUSH_DATA: Protocol version = 02, Token = 0f77, Identifier = 00, JSON = {'rxpk': [{'tmst': 4124513349, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': 1, 'size': 15, 'data': 'QCAgICCACgsBXHNA/3Sd'}]}
0:01:17.222175	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b0a, FOpts:), FPort: 01, FRMPayload: 05a8, MIC: 40ff749d)
0:01:17.223176	LOG	Server <---------- DUT
0:01:17.224175	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 079a, FOpts:), FPort: 00, FRMPayload: 03200700010505d2ad84), MIC: b6d19eab)

0:01:17.227173	LOG	PULL_RESP: Protocol version = 02, Token = c7db, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4126513349, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAmgcAj/5zvqEzdTeh9rbRnqs='}}
0:01:17.228172	LOG	Server ----------> DUT
0:01:17.231170	LOG	TX_ACK: 02 c7db 05 aa555a0000240409
0:01:21.861532	LOG	PUSH_ACK: 02 0f78 01
0:01:21.863531	LOG	PUSH_DATA: Protocol version = 02, Token = 0f78, Identifier = 00, JSON = {'rxpk': [{'tmst': 4129186286, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.2, 'rssi': -1, 'size': 19, 'data': 'QCAgICCECwsDBwUHAaHq1159IA=='}]}
0:01:21.865530	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b0b, FOpts: 03070507), FPort: 01, FRMPayload: 05a8, MIC: d75e7d20)
0:01:21.866529	LOG	Server <---------- DUT
0:01:21.868528	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:21.870528	LOG	Command Answer: 03070507
0:01:21.968471	LOG	MAC command communication completed
0:01:21.980464	LOG	Send Test Command EchoPayloadReq process starts
0:01:24.589979	LOG	PULL_DATA: 02 ee22 02 aa555a0000240409
0:01:24.591978	LOG	PULL_ACK: 02 ee22 04
0:01:26.868681	LOG	PUSH_ACK: 02 0f7a 01
0:01:26.870680	LOG	PUSH_DATA: Protocol version = 02, Token = 0f7a, Identifier = 00, JSON = {'rxpk': [{'tmst': 4134188886, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCDAsFBwFvhoqP6co='}]}
0:01:26.872679	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b0c, FOpts: 0507), FPort: 01, FRMPayload: 05a8, MIC: 8a8fe9ca)
0:01:26.873678	LOG	Server <---------- DUT
0:01:26.876676	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 079b, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: eefe9002)
0:01:26.878675	LOG	Frame command sent to the DUT
0:01:26.880674	LOG	PULL_RESP: Protocol version = 02, Token = a90e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4135188886, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 868.5, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAmwfgwpbyRH3PFrE3qOVDI2T92NS94ioR5EOkmqleCOiWVob0neUD+bAOoJk0QCpOzykz7Z+t7v6QAg=='}}
0:01:26.882673	LOG	Server ----------> DUT
0:01:26.885671	LOG	TX_ACK: 02 a90e 05 aa555a0000240409
0:01:32.257612	LOG	PUSH_ACK: 02 0f7b 01
0:01:32.260610	LOG	PUSH_DATA: Protocol version = 02, Token = 0f7b, Identifier = 00, JSON = {'rxpk': [{'tmst': 4139571953, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -1, 'size': 64, 'data': 'QCAgICCADQvglgEU66T3JG6Rs0LoiDiIyc/28AMX0AOr2SCa19LzJ7+LYz2uE2gP81yt2405dpicyWsHkLBBuA=='}]}
0:01:32.262609	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b0d, FOpts:), FPort: e0, FRMPayload: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202), MIC: 90b041b8)
0:01:32.263608	LOG	Server <---------- DUT
0:01:32.265607	LOG	Answer in payload: 02020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202

0:01:32.267606	LOG	Frame Command Payload in the Answer: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:32.278600	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:32.286595	LOG	Send Test Command EchoPayloadReq process completed
0:01:32.294593	LOG	Send Test Command EchoPayloadReq process starts
0:01:34.649250	LOG	PULL_DATA: 02 f956 02 aa555a0000240409
0:01:34.654247	LOG	PULL_ACK: 02 f956 04
0:01:36.886975	LOG	PUSH_ACK: 02 0f7c 01
0:01:36.888974	LOG	PUSH_DATA: Protocol version = 02, Token = 0f7c, Identifier = 00, JSON = {'rxpk': [{'tmst': 4144194097, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCADgsBEUZC4/+k'}]}
0:01:36.890973	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b0e, FOpts:), FPort: 01, FRMPayload: 05a9, MIC: 42e3ffa4)
0:01:36.892972	LOG	Server <---------- DUT
0:01:36.894971	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 079c, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: e78a7fab)
0:01:36.897969	LOG	Frame command sent to the DUT
0:01:36.899968	LOG	PULL_RESP: Protocol version = 02, Token = ad2d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4146194097, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 64, 'data': 'YCAgICAAnAfgKKFo0wtb7e7SbMZeMIU0CWGfiuJWpZuzAnUJfY6goNXMaiTDH14eKtY8dHElLonetLfZ54p/qw=='}}
0:01:36.900967	LOG	Server ----------> DUT
0:01:36.904965	LOG	TX_ACK: 02 ad2d 05 aa555a0000240409
0:01:42.271908	LOG	PUSH_ACK: 02 0f7d 01
0:01:42.273907	LOG	PUSH_DATA: Protocol version = 02, Token = 0f7d, Identifier = 00, JSON = {'rxpk': [{'tmst': 4149577211, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -1, 'size': 64, 'data': 'QCAgICCADwvgCWnjtyOuI0uXVtfd6b5EimrLGoE5Toe/J9KyNSbnyn0IrLQDtN5GdrmS2gPlxVdu9Y6Pn96dbg=='}]}
0:01:42.275906	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b0f, FOpts:), FPort: e0, FRMPayload: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202, MIC: 9fde9d6e)
0:01:42.276906	LOG	Server <---------- DUT
0:01:42.278905	LOG	Answer in payload: 02020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:42.280903	LOG	Frame Command Payload in the Answer: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:42.284901	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:42.287900	LOG	Send Test Command EchoPayloadReq process completed
0:01:42.291897	LOG	End Test Step: Uplink - Max Payload via Echo for datarate SF10BW125
0:01:42.296894	LOG	Partial Verdict: PASS
0:01:42.302891	LOG	==========
0:01:42.310886	LOG	==========
0:01:42.313885	LOG	Start Test Step: Uplink - Max Payload via Echo for datarate SF9BW125
0:01:42.323880	LOG	Send MAC command block process starts
0:01:44.669543	LOG	PULL_DATA: 02 ff2e 02 aa555a0000240409
0:01:44.671542	LOG	PULL_ACK: 02 ff2e 04

0:01:46.900273	LOG	PUSH_ACK: 02 0f7e 01
0:01:46.903271	LOG	PUSH_DATA: Protocol version = 02, Token = 0f7e, Identifier = 00, JSON = {'rxpk': [{'tmst': 4154199339, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAEAsBGxjfWXHy'}]}
0:01:46.904270	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b10, FOpts:), FPort: 01, FRMPayload: 05aa, MIC: df5971f2)
0:01:46.906270	LOG	Server <---------- DUT
0:01:46.908268	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 079d, FOpts:), FPort: 00, FRMPayload: 03300700010505d2ad84), MIC: ffd48eb7)
0:01:46.911267	LOG	PULL_RESP: Protocol version = 02, Token = 6c34, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4156199339, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAnQcA9/1coumA5RDNY//Ujrc='}}
0:01:46.913265	LOG	Server ----------> DUT
0:01:46.916263	LOG	TX_ACK: 02 6c34 05 aa555a0000240409
0:01:51.752510	LOG	PUSH_ACK: 02 0f7f 01
0:01:51.754508	LOG	PUSH_DATA: Protocol version = 02, Token = 0f7f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4159057709, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -5, 'size': 19, 'data': 'QCAgICCEEQsDBwUHAQEFcg2P6w=='}]}
0:01:51.756507	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b11, FOpts: 03070507), FPort: 01, FRMPayload: 05aa, MIC: 720d8feb)
0:01:51.757506	LOG	Server <---------- DUT
0:01:51.759505	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:51.760505	LOG	Command Answer: 03070507
0:01:51.823488	LOG	MAC command communication completed
0:01:51.835481	LOG	Send Test Command EchoPayloadReq process starts
0:01:54.678842	LOG	PULL_DATA: 02 51d9 02 aa555a0000240409
0:01:54.680841	LOG	PULL_ACK: 02 51d9 04
0:01:56.752680	LOG	PUSH_ACK: 02 0f81 01
0:01:56.754661	LOG	PUSH_DATA: Protocol version = 02, Token = 0f81, Identifier = 00, JSON = {'rxpk': [{'tmst': 4164039837, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCEgsFBwGqUXeqOT8='}]}
0:01:56.756660	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b12, FOpts: 0507), FPort: 01, FRMPayload: 05aa, MIC: 77aa393f)
0:01:56.757658	LOG	Server <---------- DUT
0:01:56.759659	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 079e, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:02:02.294505	LOG	PUSH_DATA: Protocol version = 02, Token = 0f82, Identifier = 00, JSON = {'rxpk': [{'tmst': 4169578103, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 12.8, 'rssi': -2, 'size': 128, 'data': 'QCAgICCAEwvg7QBIc9favtHQ/HR/D/6/Gh2R4emg5o6NzqqjPqbr6DteMt/SCxXhSR5NDJ+pVV78RXKVyKwGAO8+zeX/Z5sjk5gcxULkU6rhOOF35Zn3KykXGRSMVApmHYPqF36M0xNBPGFe9dd2NsX6KkaAkayVAsY7Fr6CiKA='}]}
0:02:02.296504	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b13, FOpts:), FPort: e0, FRMPayload: 0802, MIC: be8288a0)
0:02:02.298503	LOG	Server <---------- DUT
0:02:02.299503	LOG	Answer in payload: 02
0:02:02.301501	LOG	Frame Command Payload in the Answer: 0802
0:02:02.312495	LOG	Checking if the payload of the EchoPayloadAns is correct
0:02:02.318492	LOG	Send Test Command EchoPayloadReq process completed
0:02:02.326487	LOG	Send Test Command EchoPayloadReq process starts
0:02:04.749107	LOG	PULL_DATA: 02 48c2 02 aa555a0000240409
0:02:04.752107	LOG	PULL_ACK: 02 48c2 04
0:02:06.715989	LOG	PUSH_ACK: 02 0f83 01
0:02:06.716987	LOG	PUSH_DATA: Protocol version = 02, Token = 0f83, Identifier = 00, JSON = {'rxpk': [{'tmst': 4174045055, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -5, 'size': 15, 'data': 'QCAgICCAFAsB0Zp8Koaw'}]}
0:02:06.718987	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b14, FOpts:), FPort: 01, FRMPayload: 05ab, MIC: 7c2a86b0)
0:02:06.719985	LOG	Server <---------- DUT
0:02:06.720986	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 079f, FOpts:), FPort: e0, FRMPayload: 080101010101010101010

		f40Rn9yNf6KM5+Yx9CetBxMilcRNz5YTAen6m3+fdr5QYERFJNEkUA4hL3ONWgGEb/zA12Jq7ZAbchf3wKz/hTGESBKIYhbeP+yPgz9G36e/xnuY='}]}
0:02:12.269824	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b15, FOpts:), FPort: e0, FRMPayload: 0802, MIC: eff19ee6)
0:02:12.271823	LOG	Server <---------- DUT
0:02:12.273823	LOG	Answer in payload: 02
0:02:12.275821	LOG	Frame Command Payload in the Answer: 0802
0:02:12.280818	LOG	Checking if the payload of the EchoPayloadAns is correct
0:02:12.283816	LOG	Send Test Command EchoPayloadReq process completed
0:02:12.286815	LOG	End Test Step: Uplink - Max Payload via Echo for datarate SF9BW125
0:02:12.289813	LOG	Partial Verdict: PASS
0:02:12.293811	LOG	==========
0:02:12.298808	LOG	==========
0:02:12.301806	LOG	Start Test Step: Uplink - Max Payload via Echo for datarate SF8BW125
0:02:12.314799	LOG	Send MAC command block process starts
0:02:14.919315	LOG	PULL_DATA: 02 38f7 02 aa555a0000240409
0:02:14.921314	LOG	PULL_ACK: 02 38f7 04
0:02:16.740278	LOG	PUSH_ACK: 02 0f85 01
0:02:16.742279	LOG	PUSH_DATA: Protocol version = 02, Token = 0f85, Identifier = 00, JSON = {'rxpk': [{'tmst': 4184050299, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAFgsBOqWcY2x2'}]}
0:02:16.743277	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b16, FOpts:), FPort: 01, FRMPayload: 05ac, MIC: 9c636c76)
0:02:16.744278	LOG	Server <---------- DUT
0:02:16.746275	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07a0, FOpts:), FPort: 00, FRMPayload: 03400700010505d2ad84), MIC: 9451e028)
0:02:16.748276	LOG	PULL_RESP: Protocol version = 02, Token = 93ab, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4186050299, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAoAcALUILIsNQ5AuqMZRR4Cg='}}
0:02:16.749275	LOG	Server ----------> DUT
0:02:16.752272	LOG	TX_ACK: 02 93ab 05 aa555a0000240409
0:02:21.707449	LOG	PUSH_ACK: 02 0f86 01
0:02:21.711447	LOG	PUSH_DATA: Protocol version = 02, Token = 0f86, Identifier = 00, JSON = {'rxpk': [{'tmst': 4188991012, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 19, 'data': 'QCAgICCEFwsDBwUHAc10lUvw3Q=='}]}
0:02:21.715445	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b17, FOpts: 03070507), FPort: 01, FRMPayload: 05ac, MIC: 954bf0dd)
0:02:21.719443	LOG	Server <---------- DUT
0:02:21.724440	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:21.726438	LOG	Command Answer: 03070507

0:02:21.789402	LOG	MAC command communication completed
0:02:21.799396	LOG	Send Test Command EchoPayloadReq process starts
0:02:24.938639	LOG	PULL_DATA: 02 44a7 02 aa555a0000240409
0:02:24.940609	LOG	PULL_ACK: 02 44a7 04
0:02:26.662628	LOG	PUSH_ACK: 02 0f88 01
0:02:26.664628	LOG	PUSH_DATA: Protocol version = 02, Token = 0f88, Identifier = 00, JSON = {'rxpk': [{'tmst': 4193983388, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCGAsFBwF9f8Vlb+g='}]}
0:02:26.665628	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b18, FOpts: 0507), FPort: 01, FRMPayload: 05ac, MIC: c5656fe8)
0:02:26.667626	LOG	Server <---------- DUT
0:02:26.669625	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07a1, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

		2020202020202020202020202020202020202020202020202020202020202020202 0202020202020202020202020202020202020202020202020202020202020202020 2020202020202020202020202020202020202020202020202020202020202020202 0202020202020202020202020202020202020202020202020202020202020202020 2020202020202020202020202020202020202020202020202020202020202020202 0202020202020202020202020202020202020202020202020202020202020202020 2020202020202020202
0:02:32.370377	LOG	Frame Command Payload in the Answer: 0802020202020202020202020202020202020202020202020202020202020202020 2020202020202020202020202020202020202020202020202020202020202020202 0202020202020202020202020202020202020202020202020202020202020202020 2020202020202020202020202020202020202020202020202020202020202020202 0202020202020202020202020202020202020202020202020202020202020202020 2020202020202020202020202020202020202020202020202020202020202020202 0202020202020202020202020202020202020202020202020202020202020202020 202020202020202
0:02:32.376374	LOG	Checking if the payload of the EchoPayloadAns is correct
0:02:32.381370	LOG	Send Test Command EchoPayloadReq process completed
0:02:32.388366	LOG	Send Test Command EchoPayloadReq process starts
0:02:35.068840	LOG	PULL_DATA: 02 1d4d 02 aa555a0000240409
0:02:35.073837	LOG	PULL_ACK: 02 1d4d 04
0:02:36.680923	LOG	PUSH_ACK: 02 0f8a 01
0:02:36.682921	LOG	PUSH_DATA: Protocol version = 02, Token = 0f8a, Identifier = 00, JSON = {'rxpk': [{'tmst': 4203988593, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAGgsBttDN2Kur'}]}
0:02:36.683921	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b1a, FOpts:), FPort: 01, FRMPayload: 05ad, MIC: cdd8abab)
0:02:36.684921	LOG	Server <---------- DUT
0:02:36.686920	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07a2, FOpts:), FPort: e0, FRMPayload: 0801010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 1010101010101010101010101010101010101010101010101010101010101010101 0101010101010101010101010101010101010101010101010101010101010101010 101010101010101
0:02:36.688919	LOG	Frame command sent to the DUT
0:02:36.690917	LOG	PULL_RESP: Protocol version = 02, Token = 160e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4205988593, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAAogfgI69Mt3JoET6xJEzq4T71efroM6iehexZkPlNvGcMWRRKrWF05MuPkHQj1s16WOMyP1CSQH5m8O21VgHSlI67TjfxuiJnjhkQk62FsR3WQ5rhPsQDJp40WQK8ip+vsMhnhUksjj6UNMn+BPjSV2RRItgzu1jhFO+QYf5RsY4rtJDbrRaVJXHeIhQybeM4cSMMYo8yONDzkYSHGfm/riZ5+6YW0G4Ol3WUfuNYw80ekFlE4ew7GhVbRK0E/lVWjWhMJWvzgsqDYf7lPn4K6TDs8wXXOv/2hlRRGSoH4HWqk8QYQ9XW/s3IvoMkupdBF8TmRu8f3HwX'}}
0:02:36.691916	LOG	Server ----------> DUT
0:02:36.695917	LOG	TX_ACK: 02 160e 05 aa555a0000240409
0:02:42.344698	LOG	PUSH_ACK: 02 0f8b 01
0:02:42.345696	LOG	PUSH_DATA: Protocol version = 02, Token = 0f8b, Identifier = 00, JSON = {'rxpk': [{'tmst': 4209652601, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 255, 'data': 'QCAgICCAGwvg2qfjLnDr8DGJ96LSvQ/e5Tqwc/yUYtE7B2hTcJY6G+PufEtYoe6SkcdZzN9J1+hR4Ofm8RpKzlsNRLcoDopEkk68oOe9W/aUxHMjeDd+PhE88gL

		91vHBSUMS0eO5YjBWcljL6DArXQ6hnCKKmVvDQY6Zcs64fsZ+FjmSkdIVm5o10jcFIw5Vb+bnh1G+6rTY4iOrD4Qz4YGGPgk7U7SOF1mHinmYNo4nofjex0tAXiZsgPd7QqzYljnO7H3VEa1hDkqgLCeOU15orZrQnpwYnhWjZ9BApaxqjeY3P6Ii7HtD6Kjhuqi/GxMyq163Wu80ldjIf3RM'}]}
0:02:42.347694	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b1b, FOpts:), FPort: e0, FRMPayload: 080202020202020202020

		'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAowcADWm8ZApxXa8oVMg6zko='}}
0:02:46.674231	LOG	Server ----------> DUT
0:02:46.677228	LOG	TX_ACK: 02 b691 05 aa555a0000240409
0:02:51.649397	LOG	PUSH_ACK: 02 0f8d 01
0:02:51.652395	LOG	PUSH_DATA: Protocol version = 02, Token = 0f8d, Identifier = 00, JSON = {'rxpk': [{'tmst': 4218955300, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 19, 'data': 'QCAgICCEHQsDBwUHAVeuCMRxpQ=='}]}
0:02:51.654394	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b1d, FOpts: 03070507), FPort: 01, FRMPayload: 05ae, MIC: 08c471a5)
0:02:51.655393	LOG	Server <---------- DUT
0:02:51.657393	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:51.659391	LOG	Command Answer: 03070507
0:02:51.735350	LOG	MAC command communication completed
0:02:51.749341	LOG	Send Test Command EchoPayloadReq process starts
0:02:55.278330	LOG	PULL_DATA: 02 3852 02 aa555a0000240409
0:02:55.280329	LOG	PULL_ACK: 02 3852 04
0:02:56.650550	LOG	PUSH_ACK: 02 0f8f 01
0:02:56.652547	LOG	PUSH_DATA: Protocol version = 02, Token = 0f8f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4223957916, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCHgsFBwHIIBzONvY='}]}
0:02:56.654546	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b1e, FOpts: 0507), FPort: 01, FRMPayload: 05ae, MIC: 1cce36f6)
0:02:56.655547	LOG	Server <---------- DUT
0:02:56.658544	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07a4, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

		97/vdhX1n+SE2Ue3gdhrKOsmfQtdsGfz4ggZG3bDGY2HbY5ckeN2O4IrBH3BGiBTejR1gj8F/M9rwy5K2rsdlS4zYpL3sXB8DHGhQ+6FcUdA6rgJkvfHcHwdnOJjo9pCWSN8CKTqdAo3Qt3GMY0q+k1nZ+8yKCZz'}]}
0:03:02.037111	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b1f, FOpts:), FPort: e0, FRMPayload: 080202020202020202020

		'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 255, 'data': 'YCAgICAApQfgpiAxyjSGWKYyu3KAlrfsekxDnHtK/TdSNQ0U6yNaSyCJEakOLYdqoNkojyPjlIiC6/gSmMWycb4jhD2FQSlKsQe6FX1eH8nIJfDKIHBZRHnQ4wZqLac/b63lGWm8Js8S9DwO+IpzDEfrI/2P+H7PDDsQ4OLfWcaLA4aRcziH83HejebtbBICm4SZGHC6RlI/XKchsEPEB9Hfjh3bPoaxFn5njK1hUT8jPDya9LoddTy3phrSf5pt8LaxozuSTqz51L56vqA+HdABV7OWIZf/u8wuRqPwMQJchx7s9wm62gt6RMzx1BO+o5VDgNHXx79Dvxdlm+sz'}}
0:03:06.674488	LOG	Server ----------> DUT
0:03:06.677469	LOG	TX_ACK: 02 2aa0 05 aa555a0000240409
0:03:12.057077	LOG	PUSH_ACK: 02 0f92 01
0:03:12.059076	LOG	PUSH_DATA: Protocol version = 02, Token = 0f92, Identifier = 00, JSON = {'rxpk': [{'tmst': 4239360879, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 255, 'data': 'QCAgICCAIQvgZIoekRjT6Og9SEgZCgYRbGPt2rR7ovpZEh+rwH49d+NxKh77oIzBmfX8W4RDhHATJ/F/eXzHhh/ddjZQ3VZ55YRoL8Vziqn3EUtNxiXlOACvSa0ihs2LvyoADLhcaOtY2k5CLX5T4IENZrDNPYItk6USalIrLoTgPjFkfroWiUZf8MleaBxEHrIu5xuJOz+DnIdUkNlC7/4lmUVYyZa5MbL8azk8v5DOLzdVtdoNNaht6yFMDnX2we16yhrdKxg+qP8HgFz0/bM9fzOzYdWqb9vxgE4+ajex+4GX2tOIrR4bUW13eG0dVYSe+DD98XKsdlmiNrZa'}]}
0:03:12.061074	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b21, FOpts:), FPort: e0, FRMPayload: 080202020202020202020

0:03:15.700002	LOG	PULL_ACK: 02 a0b0 04
0:03:16.634470	LOG	PUSH_ACK: 02 0f93 01
0:03:16.636469	LOG	PUSH_DATA: Protocol version = 02, Token = 0f93, Identifier = 00, JSON = {'rxpk': [{'tmst': 4243963247, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAIgsBNEMwjDR0'}]}
0:03:16.637468	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b22, FOpts:), FPort: 01, FRMPayload: 05b0, MIC: 308c3474)
0:03:16.639467	LOG	Server <---------- DUT
0:03:16.641466	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07a6, FOpts:), FPort: 00, FRMPayload: 070328768466), MIC: a279fbe9)
0:03:16.644465	LOG	PULL_RESP: Protocol version = 02, Token = 70b4, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4245963247, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAApgcAMWW+uO5lonn76Q=='}}
0:03:16.645464	LOG	Server ----------> DUT
0:03:16.649462	LOG	TX_ACK: 02 70b4 05 aa555a0000240409
0:03:21.665604	LOG	PUSH_ACK: 02 0f94 01
0:03:21.668605	LOG	PUSH_DATA: Protocol version = 02, Token = 0f94, Identifier = 00, JSON = {'rxpk': [{'tmst': 4248971025, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCIwsHAwHURbGzZY4='}]}
0:03:21.669603	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b23, FOpts: 0703), FPort: 01, FRMPayload: 05b0, MIC: b1b3658e)
0:03:21.671603	LOG	Server <---------- DUT
0:03:21.672633	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:21.674632	LOG	Command Answer: 0703
0:03:21.681597	LOG	MAC command communication completed
0:03:21.696587	LOG	Send MAC command block process starts
0:03:25.888201	LOG	PULL_DATA: 02 2e5d 02 aa555a0000240409
0:03:25.890200	LOG	PULL_ACK: 02 2e5d 04
0:03:26.671754	LOG	PUSH_ACK: 02 0f96 01
0:03:26.673752	LOG	PUSH_DATA: Protocol version = 02, Token = 0f96, Identifier = 00, JSON = {'rxpk': [{'tmst': 4253968521, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAJAsB8myuU5Ug'}]}
0:03:26.675751	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b24, FOpts:), FPort: 01, FRMPayload: 05b0, MIC: ae539520)
0:03:26.677750	LOG	Server <---------- DUT
0:03:26.679749	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07a7, FOpts:), FPort: 00, FRMPayload: 03600f00010505d2ad84), MIC: 9df6edf8)
0:03:26.681748	LOG	PULL_RESP: Protocol version = 02, Token = be24, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 4255968521, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAApwcAKaPn9SZQoVPaNZ327fg='}}
0:03:26.683746	LOG	Server ----------> DUT
0:03:26.686745	LOG	TX_ACK: 02 be24 05 aa555a0000240409
0:03:31.624932	LOG	PUSH_ACK: 02 0f98 01
0:03:31.626932	LOG	PUSH_DATA: Protocol version = 02, Token = 0f98, Identifier = 00, JSON = {'rxpk': [{'tmst': 4258950576, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -8, 'size': 19, 'data': 'QCAgICCEJQsDBwUHAXKPHbdKIQ=='}]}
0:03:31.627931	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b25, FOpts: 03070507), FPort: 01, FRMPayload: 05b0, MIC: 1db74a21)

0:03:31.629930	LOG	Server <---------- DUT
0:03:31.630929	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:31.631928	LOG	Command Answer: 03070507
0:03:31.708884	LOG	MAC command communication completed
0:03:31.719878	LOG	Send Test Command EchoPayloadReq process starts
0:03:35.918620	LOG	PULL_DATA: 02 d8ad 02 aa555a0000240409
0:03:35.923617	LOG	PULL_ACK: 02 d8ad 04
0:03:36.664526	LOG	PUSH_ACK: 02 0f99 01
0:03:36.667523	LOG	PUSH_DATA: Protocol version = 02, Token = 0f99, Identifier = 00, JSON = {'rxpk': [{'tmst': 4263953184, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 17, 'data': 'QCAgICCCJgsFBwHo68dVMkY='}]}
0:03:36.668522	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b26, FOpts: 0507), FPort: 01, FRMPayload: 05b0, MIC: c7553246)
0:03:36.670521	LOG	Server <---------- DUT
0:03:36.672520	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07a8, FOpts:), FPort: e0, FRMPayload: 0801010101010101010101

		0202020202020202020202020202020202020202020202020202020202020202020202020202020202020202, MIC: 0b89ae74)
0:03:41.886551	LOG	Server <---------- DUT
0:03:41.887551	LOG	Answer in payload: 0202020202020202020202020202020202020202020202020202020202020202020202020202020202020

0:03:51.902076	LOG	PUSH_DATA: Protocol version = 02, Token = 0f9c, Identifier = 00, JSON = {'rxpk': [{'tmst': 4279182080, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -8, 'size': 255, 'data': 'QCAgICCAKQvgY+XrRyiQ0u7H/tG8dy8rZsch6HosV164i/H0KmekI7mfCvgHZaGvdslcsNnS6kk+1FY+4QMMWN3ZOQrQ1xcytbFC5Jh/gBF8Qvh7KsOz+PXrNr8f5Iz96MR/KwnBtM37gV5+MhUq0hywGo0tLUyG30GCUnsjdMLPOi74M8ZPNlIzW6EvxZSZd3TwopON3fu1zkwquPf7+07dZ6Ek/qYHCh/cW+8n3xgL2Nx8C/LDddjucpwomHXLQeX/CGx4xqH6qXIvVuVmXG1P2MxZPqLVowV9ZYn7zWdvoeK+ysqKrlM0/1w4HB+n9y8DsYiJ7OOxUnUEBIBa'}]}
0:03:51.904075	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b29, FOpts:), FPort: e0, FRMPayload: 080202020202020202020

0:03:56.665483	LOG	TX_ACK: 02 9cd5 05 aa555a0000240409
0:04:01.663637	LOG	PUSH_ACK: 02 0f9f 01
0:04:01.665634	LOG	PUSH_DATA: Protocol version = 02, Token = 0f9f, Identifier = 00, JSON = {'rxpk': [{'tmst': 4288992040, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCKwsDBwHILpkCkfM='}]}
0:04:01.666633	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b2b, FOpts: 0307), FPort: 01, FRMPayload: 05b2, MIC: 990291f3)
0:04:01.667634	LOG	Server <---------- DUT
0:04:01.669632	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:01.670632	LOG	Command Answer: 0307
0:04:01.677629	LOG	MAC command communication completed
0:04:01.680626	LOG	Send NewChannelReq process starts
0:04:06.528172	LOG	PULL_DATA: 02 3417 02 aa555a0000240409
0:04:06.536167	LOG	PULL_ACK: 02 3417 04
0:04:06.703072	LOG	PUSH_ACK: 02 0fa0 01
0:04:06.705073	LOG	PUSH_DATA: Protocol version = 02, Token = 0fa0, Identifier = 00, JSON = {'rxpk': [{'tmst': 4293989544, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCALAsBuoqGM5v/'}]}
0:04:06.706071	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b2c, FOpts:), FPort: 01, FRMPayload: 05b2, MIC: 86339bff)
0:04:06.707070	LOG	Server <---------- DUT
0:04:06.709071	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ab, FOpts:), FPort: 00, FRMPayload: 070300000050), MIC: 8c6e0975)
0:04:06.711068	LOG	PULL_RESP: Protocol version = 02, Token = df26, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1022248, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAqwcA/uOvllm0jG4JdQ=='}}
0:04:06.713067	LOG	Server ----------> DUT
0:04:06.717040	LOG	TX_ACK: 02 df26 05 aa555a0000240409
0:04:11.692799	LOG	PUSH_ACK: 02 0fa1 01
0:04:11.696797	LOG	PUSH_DATA: Protocol version = 02, Token = 0fa1, Identifier = 00, JSON = {'rxpk': [{'tmst': 4030016, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCLQsHAwGf+1PMKKE='}]}
0:04:11.700795	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b2d, FOpts: 0703), FPort: 01, FRMPayload: 05b2, MIC: 53cc28a1)
0:04:11.704794	LOG	Server <---------- DUT
0:04:11.706791	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:11.707791	LOG	Command Answer: 0703
0:04:11.712788	LOG	MAC command communication completed
0:04:11.715788	LOG	End Test Step: Uplink - Max Payload via Echo for optional datarate SF7BW250
0:04:11.718785	LOG	Partial Verdict: PASS
0:04:11.724781	LOG	==========
0:04:11.735775	LOG	==========
0:04:11.738773	LOG	Start Test Step: Uplink - Max Payload via Echo for optional datarate FSK
0:04:11.750767	LOG	Send NewChannelReq process starts
0:04:16.578066	LOG	PULL_DATA: 02 3933 02 aa555a0000240409
0:04:16.582066	LOG	PULL_ACK: 02 3933 04
0:04:16.684005	LOG	PUSH_ACK: 02 0fa2 01
0:04:16.687001	LOG	PUSH_DATA: Protocol version = 02, Token = 0fa2, Identifier = 00, JSON = {'rxpk': [{'tmst': 9027504, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA',

		'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCALgsBrM3fXxz/'}]}
0:04:16.688000	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b2e, FOpts:), FPort: 01, FRMPayload: 05b2, MIC: df5f1cff)
0:04:16.689000	LOG	Server <---------- DUT
0:04:16.690998	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ac, FOpts:), FPort: 00, FRMPayload: 070428768477), MIC: 261f7463)
0:04:16.692998	LOG	PULL_RESP: Protocol version = 02, Token = 0d96, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 11027504, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAArAcARXfxafgbJh90Yw=='}}
0:04:16.693998	LOG	Server ----------> DUT
0:04:16.697994	LOG	TX_ACK: 02 0d96 05 aa555a0000240409
0:04:21.697258	LOG	PUSH_ACK: 02 0fa3 01
0:04:21.699258	LOG	PUSH_DATA: Protocol version = 02, Token = 0fa3, Identifier = 00, JSON = {'rxpk': [{'tmst': 14035258, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCLwsHAwHHDEOrqn4='}]}
0:04:21.701256	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b2f, FOpts: 0703), FPort: 01, FRMPayload: 05b2, MIC: 43abaa7e)
0:04:21.702256	LOG	Server <---------- DUT
0:04:21.703254	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:21.704255	LOG	Command Answer: 0703
0:04:21.710251	LOG	MAC command communication completed
0:04:21.715249	LOG	Send MAC command block process starts
0:04:26.701473	LOG	PUSH_ACK: 02 0fa5 01
0:04:26.703471	LOG	PUSH_DATA: Protocol version = 02, Token = 0fa5, Identifier = 00, JSON = {'rxpk': [{'tmst': 19032754, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAMAsBKhYlOEhg'}]}
0:04:26.704471	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b30, FOpts:), FPort: 01, FRMPayload: 05b2, MIC: 25384860)
0:04:26.705470	LOG	Server <---------- DUT
0:04:26.707469	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ad, FOpts:), FPort: 00, FRMPayload: 03701700010505d2ad84), MIC: ef356e25)
0:04:26.709468	LOG	PULL_RESP: Protocol version = 02, Token = f03f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 21032754, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAArQcAcJdJxNtS+lO45O81biU='}}
0:04:26.711467	LOG	Server ----------> DUT
0:04:26.715465	LOG	TX_ACK: 02 f03f 05 aa555a0000240409
0:04:26.717463	LOG	PULL_DATA: 02 458a 02 aa555a0000240409
0:04:26.719465	LOG	PULL_ACK: 02 458a 04
0:04:31.655651	LOG	PUSH_ACK: 02 0fa6 01
0:04:31.657650	LOG	PUSH_DATA: Protocol version = 02, Token = 0fa6, Identifier = 00, JSON = {'rxpk': [{'tmst': 23993426, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 19, 'data': 'QCAgICCEMQsDBwUHATFEHvoHDA=='}]}
0:04:31.658650	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b31, FOpts: 03070507), FPort: 01, FRMPayload: 05b2, MIC: 1efa070c)
0:04:31.659648	LOG	Server <---------- DUT
0:04:31.660648	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:31.662647	LOG	Command Answer: 03070507

0:04:31.725611	LOG	MAC command communication completed
0:04:31.738604	LOG	Send Test Command EchoPayloadReq process starts
0:04:36.642811	LOG	PUSH_ACK: 02 0fa7 01
0:04:36.646809	LOG	PUSH_DATA: Protocol version = 02, Token = 0fa7, Identifier = 00, JSON = {'rxpk': [{'tmst': 28995725, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCCMgsFBwELP1DNS6M='}]}
0:04:36.648807	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b32, FOpts: 0507), FPort: 01, FRMPayload: 05b2, MIC: 50cd4ba3)
0:04:36.649807	LOG	Server <---------- DUT
0:04:36.651806	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ae, FOpts:), FPort: e0, FRMPayload: 0801010101010101010101

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		2INKNtShJSarWsGNIIV3D84oU5DVISC2xX1ax8zcfbw6A8PteTtfZ++j4QJQ5X MRokVjqFsUa4O9MLJtv+rZcP3aayelXVcxYkjMVz'}]}
0:04:51.759908	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b35, FOpts:), FPort: e0, FRMPayload: 080202020202020202020

0:05:01.730903	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b37, FOpts: 0307), FPort: 01, FRMPayload: 05b4, MIC: 1fe546dd)
0:05:01.731902	LOG	Server <---------- DUT
0:05:01.732902	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:01.734901	LOG	Command Answer: 0307
0:05:01.740899	LOG	MAC command communication completed
0:05:01.743898	LOG	Send NewChannelReq process starts
0:05:06.715143	LOG	PUSH_ACK: 02 0fae 01
0:05:06.720140	LOG	PUSH_DATA: Protocol version = 02, Token = 0fae, Identifier = 00, JSON = {'rxpk': [{'tmst': 59053729, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAOAsBICcg7e4M'}]}
0:05:06.722139	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b38, FOpts:), FPort: 01, FRMPayload: 05b4, MIC: 20edee0c)
0:05:06.723138	LOG	Server <---------- DUT
0:05:06.724138	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b1, FOpts:), FPort: 00, FRMPayload: 070400000050), MIC: 8d836115)
0:05:06.727136	LOG	PULL_RESP: Protocol version = 02, Token = ef86, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 61053729, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAsQcAMnfdMNbjjYNhFQ=='}}
0:05:06.728135	LOG	Server ----------> DUT
0:05:06.733132	LOG	TX_ACK: 02 ef86 05 aa555a0000240409
0:05:07.147421	LOG	PULL_DATA: 02 eca3 02 aa555a0000240409
0:05:07.149419	LOG	PULL_ACK: 02 eca3 04
0:05:11.722831	LOG	PUSH_ACK: 02 0faf 01
0:05:11.724829	LOG	PUSH_DATA: Protocol version = 02, Token = 0faf, Identifier = 00, JSON = {'rxpk': [{'tmst': 64061482, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCOQsHAwGR+3hJ5lA='}]}
0:05:11.726828	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b39, FOpts: 0703), FPort: 01, FRMPayload: 05b4, MIC: 7849e650)
0:05:11.727830	LOG	Server <---------- DUT
0:05:11.728829	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:11.729827	LOG	Command Answer: 0703
0:05:11.735823	LOG	MAC command communication completed
0:05:11.739819	LOG	End Test Step: Uplink - Max Payload via Echo for optional datarate FSK
0:05:11.742819	LOG	Partial Verdict: PASS
0:05:11.746818	LOG	==========
0:05:11.751814	LOG	==========
0:05:11.753812	LOG	Start Test Step: Restore default settings
0:05:11.772803	LOG	Send LinkADRReq process starts
0:05:16.711714	LOG	PUSH_ACK: 02 0fb0 01
0:05:16.713713	LOG	PUSH_DATA: Protocol version = 02, Token = 0fb0, Identifier = 00, JSON = {'rxpk': [{'tmst': 69058970, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAOgsBuWAc5gcU'}]}
0:05:16.714712	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b3a, FOpts:), FPort: 01, FRMPayload: 05b4, MIC: 1ce60714)
0:05:16.716712	LOG	Server <---------- DUT
0:05:16.717711	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b2, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 87384370)
0:05:16.719710	LOG	PULL_RESP: Protocol version = 02, Token = f795, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 71058970, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAsgcADtjAzf6HOENw'}}
0:05:16.721709	LOG	Server ----------> DUT
0:05:16.724706	LOG	TX_ACK: 02 f795 05 aa555a0000240409
0:05:17.347966	LOG	PULL_DATA: 02 de08 02 aa555a0000240409
0:05:17.349965	LOG	PULL_ACK: 02 de08 04
0:05:21.727537	LOG	PUSH_ACK: 02 0fb1 01
0:05:21.730536	LOG	PUSH_DATA: Protocol version = 02, Token = 0fb1, Identifier = 00, JSON = {'rxpk': [{'tmst': 74066726, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCOwsDBwFvy+WHjt0='}]}
0:05:21.731534	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b3b, FOpts: 0307), FPort: 01, FRMPayload: 05b4, MIC: e5878edd)
0:05:21.732534	LOG	Server <---------- DUT
0:05:21.733533	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:21.735532	LOG	Command Answer: 0307
0:05:21.742529	LOG	MAC command communication completed
0:05:21.745546	LOG	Send RXParamSetupReq process starts
0:05:26.731896	LOG	PUSH_ACK: 02 0fb3 01
0:05:26.733895	LOG	PUSH_DATA: Protocol version = 02, Token = 0fb3, Identifier = 00, JSON = {'rxpk': [{'tmst': 79064222, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAPAsBPSRqPzOr'}]}
0:05:26.735894	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b3c, FOpts:), FPort: 01, FRMPayload: 05b4, MIC: 6a3f33ab)
0:05:26.736894	LOG	Server <---------- DUT
0:05:26.738892	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b3, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: eea49851)
0:05:26.741891	LOG	PULL_RESP: Protocol version = 02, Token = 87e1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 81064222, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAswcABrAsGsvupJhR'}}
0:05:26.743890	LOG	Server ----------> DUT
0:05:26.747888	LOG	TX_ACK: 02 87e1 05 aa555a0000240409
0:05:27.367399	LOG	PULL_DATA: 02 1d16 02 aa555a0000240409
0:05:27.368399	LOG	PULL_ACK: 02 1d16 04
0:05:31.732244	LOG	PUSH_ACK: 02 0fb4 01
0:05:31.735243	LOG	PUSH_DATA: Protocol version = 02, Token = 0fb4, Identifier = 00, JSON = {'rxpk': [{'tmst': 84071985, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCPQsFBwGftWaLfXs='}]}
0:05:31.736242	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b3d, FOpts: 0507), FPort: 01, FRMPayload: 05b4, MIC: 668b7d7b)
0:05:31.737242	LOG	Server <---------- DUT
0:05:31.738241	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:31.739241	LOG	Command Answer: 0507
0:05:31.752233	LOG	MAC command communication completed
0:05:31.755233	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:05:36.721224	LOG	PUSH_ACK: 02 0fb5 01
0:05:36.723223	LOG	PUSH_DATA: Protocol version = 02, Token = 0fb5, Identifier = 00, JSON = {'rxpk': [{'tmst': 89074617, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCPgsFBwG8hMq3Gro='}]}

0:05:36.725222	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b3e, FOpts: 0507), FPort: 01, FRMPayload: 05b4, MIC: cab71aba)
0:05:36.726221	LOG	Server <---------- DUT
0:05:36.728220	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b4, FOpts:), FPort: e0, FRMPayload: 0501), MIC: 32b0ce88)
0:05:36.731218	LOG	Frame command sent to the DUT
0:05:36.733218	LOG	PULL_RESP: Protocol version = 02, Token = 0b7d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 91074617, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAtAfgUN8ysM6I'}}
0:05:36.737215	LOG	Server ----------> DUT
0:05:36.740213	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:05:36.743211	LOG	End Test Step: Restore default settings
0:05:36.773194	LOG	Partial Verdict: PASS
0:05:36.803890	LOG	==========
0:05:36.808887	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_019_A
0:05:36.810886	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_019_B	
Verdict	PASS	
Date	2021-10-18 17:47:26	
Comments	Maximum Allowed Payload (Part 2)	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	SF7BW250 Frequency	868.100
	FSK Frequency	868.100
	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.011335	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_019_B
0:00:00.049312	LOG	==========
0:00:00.051313	LOG	Start Test Step: Device activation
0:00:00.107280	LOG	Activation process has finished successfully
0:00:00.109280	LOG	Data stored in the DUT after Activation:
0:00:00.113275	LOG	DevAddr: 20202020
0:00:00.115275	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.122272	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.125271	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.129268	LOG	End Test Step: Device activation
0:00:00.133264	LOG	Partial Verdict: PASS
0:00:00.138261	LOG	==========
0:00:00.145257	LOG	==========
0:00:00.149255	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.160248	LOG	DUT Pre-condition activation process starts
0:00:00.163247	LOG	DUT Pre-condition activation completed
0:00:00.167246	LOG	End Test Step: DUT Pre-condition settings
0:00:00.171243	LOG	Partial Verdict: PASS
0:00:00.176239	LOG	==========
0:00:00.183237	LOG	==========
0:00:00.186234	LOG	Start Test Step: Initial settings for the test

0:00:00.198227	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:00:01.633409	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:06.624603	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:07.572063	LOG	PULL_DATA: 02 43fa 02 aa555a0000240409
0:00:07.575062	LOG	PULL_ACK: 02 43fa 04
0:00:07.576061	LOG	First PULL_DATA received
0:00:11.675728	LOG	PUSH_ACK: 02 0fb9 01
0:00:11.678726	LOG	PUSH_DATA: Protocol version = 02, Token = 0fb9, Identifier = 00, JSON = {'rxpk': [{'tmst': 104077317, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAQQsBRZvZmTlU'}]}
0:00:11.679725	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b41, FOpts:), FPort: 01, FRMPayload: 05b5, MIC: d9993954)
0:00:11.680725	LOG	Server <---------- DUT
0:00:11.683722	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b5, FOpts:), FPort: e0, FRMPayload: 0500), MIC: 3ca121f3)
0:00:11.685722	LOG	Frame command sent to the DUT
0:00:11.688720	LOG	PULL_RESP: Protocol version = 02, Token = d8f9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 106077317, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAAtQfgPtU8oSHz'}}
0:00:11.689720	LOG	Server ----------> DUT
0:00:11.693717	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:00:11.697714	LOG	End Test Step: Initial settings for the test
0:00:11.702711	LOG	Partial Verdict: PASS
0:00:11.707709	LOG	==========
0:00:11.712708	LOG	==========
0:00:11.715706	LOG	Start Test Step: Uplink - Oversized Payload via Echo for datarate SF12BW125
0:00:11.725699	LOG	Send MAC command block process starts
0:00:16.633903	LOG	PUSH_ACK: 02 0fbb 01
0:00:16.635903	LOG	PUSH_DATA: Protocol version = 02, Token = 0fbb, Identifier = 00, JSON = {'rxpk': [{'tmst': 109079919, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAQgsBhvOu7lId'}]}
0:00:16.636903	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b42, FOpts:), FPort: 01, FRMPayload: 05b6, MIC: aeee521d)
0:00:16.638902	LOG	Server <---------- DUT
0:00:16.639901	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b6, FOpts:), FPort: 00, FRMPayload: 03000700010505d2ad84), MIC: 41683c28)
0:00:16.642900	LOG	PULL_RESP: Protocol version = 02, Token = b4c6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 111079919, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAtgcA0AABiMnVWcsoJ0FoPCg='}}
0:00:16.644898	LOG	Server ----------> DUT
0:00:16.647896	LOG	TX_ACK: 02 b4c6 05 aa555a0000240409
0:00:17.692430	LOG	PULL_DATA: 02 d671 02 aa555a0000240409
0:00:17.694430	LOG	PULL_ACK: 02 d671 04
0:00:22.943453	LOG	PUSH_ACK: 02 0fbc 01
0:00:22.946451	LOG	PUSH_DATA: Protocol version = 02, Token = 0fbc, Identifier = 00, JSON = {'rxpk': [{'tmst': 115355081, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -17, 'size': 19, 'data': 'QCAgICCEQwsDBwUHAYR1dUnNiQ=='}]}
0:00:22.948450	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b43, FOpts: 03070507), FPort: 01, FRMPayload: 05b6, MIC: 7549cd89)
0:00:22.949449	LOG	Server <---------- DUT

0:00:22.951448	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:22.953447	LOG	Command Answer: 03070507
0:00:23.023407	LOG	MAC command communication completed
0:00:23.037399	LOG	Send Test Command EchoPayloadReq process starts
0:00:27.782697	LOG	PULL_DATA: 02 58ae 02 aa555a0000240409
0:00:27.784696	LOG	PULL_ACK: 02 58ae 04
0:00:27.983582	LOG	PUSH_ACK: 02 0fbd 01
0:00:27.985582	LOG	PUSH_DATA: Protocol version = 02, Token = 0fbd, Identifier = 00, JSON = {'rxpk': [{'tmst': 120357681, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCRAsFBwFuCrP5hPI='}]}
0:00:27.986582	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b44, FOpts: 0507), FPort: 01, FRMPayload: 05b6, MIC: b3f984f2)
0:00:27.988582	LOG	Server <---------- DUT
0:00:27.989581	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b7, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 19889979)
0:00:27.991580	LOG	Frame command sent to the DUT
0:00:27.993579	LOG	PULL_RESP: Protocol version = 02, Token = ce55, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 122357681, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAtwfgIfLOVYm/UrgxF9qbxdS6kxpzsVVocltZBH566Z4rTLtBxTBePlmTsSIvsulDrBMvG+KJZxmImXk='}}
0:00:27.994576	LOG	Server ----------> DUT
0:00:27.998574	LOG	TX_ACK: 02 ce55 05 aa555a0000240409
0:00:34.446902	LOG	PUSH_ACK: 02 0fbe 01
0:00:34.449900	LOG	PUSH_DATA: Protocol version = 02, Token = 0fbe, Identifier = 00, JSON = {'rxpk': [{'tmst': 126846693, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -13, 'size': 64, 'data': 'QCAgICCARQvgTThJEUgyuJPu25mu1MZUrzKaxFb1xeqnKGULyBktisabcwmZ1upe4LYBH2fRXaWXoEVQ84Vuwg=='}]}
0:00:34.451898	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b45, FOpts:), FPort: e0, FRMPayload: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202, MIC: f3856ec2)
0:00:34.452898	LOG	Server <---------- DUT
0:00:34.453897	LOG	Answer in payload: 02020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:34.455896	LOG	Frame Command Payload in the Answer: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:00:34.460893	LOG	Checking if the payload of the EchoPayloadAns is correct
0:00:34.466890	LOG	End Test Step: Uplink - Oversized Payload via Echo for datarate SF12BW125
0:00:34.471888	LOG	Partial Verdict: PASS
0:00:34.477884	LOG	==========
0:00:34.485879	LOG	==========
0:00:34.488878	LOG	Start Test Step: Uplink - Oversized Payload via Echo for datarate SF11BW125
0:00:34.504870	LOG	Send MAC command block process starts
0:00:37.791996	LOG	PUSH_ACK: 02 0fbf 01
0:00:37.794995	LOG	PUSH_DATA: Protocol version = 02, Token = 0fbf, Identifier = 00, JSON = {'rxpk': [{'tmst': 130199061, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCARgsBd647wDM0'}]}

0:00:37.796994	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b46, FOpts:), FPort: 01, FRMPayload: 05b7, MIC: 3bc03334)
0:00:37.797993	LOG	Server <---------- DUT
0:00:37.799992	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b8, FOpts:), FPort: 00, FRMPayload: 03100700010505d2ad84), MIC: 262b51fb)
0:00:37.802990	LOG	PULL_RESP: Protocol version = 02, Token = 2b06, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 132199061, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAuAcAcIB8RhGZLcamVyYrUfs='}}
0:00:37.804989	LOG	Server ----------> DUT
0:00:37.808987	LOG	TX_ACK: 02 2b06 05 aa555a0000240409
0:00:37.809988	LOG	PULL_DATA: 02 1e4c 02 aa555a0000240409
0:00:37.811987	LOG	PULL_ACK: 02 1e4c 04
0:00:42.444347	LOG	PUSH_ACK: 02 0fc1 01
0:00:42.446346	LOG	PUSH_DATA: Protocol version = 02, Token = 0fc1, Identifier = 00, JSON = {'rxpk': [{'tmst': 134788039, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': 0, 'size': 19, 'data': 'QCAgICCERwsDBwUHAbnsyuRFyA=='}]}
0:00:42.448344	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b47, FOpts: 03070507), FPort: 01, FRMPayload: 05b7, MIC: cae445c8)
0:00:42.450344	LOG	Server <---------- DUT
0:00:42.451343	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:42.453342	LOG	Command Answer: 03070507
0:00:42.515306	LOG	MAC command communication completed
0:00:42.530298	LOG	Send Test Command EchoPayloadReq process starts
0:00:47.278593	LOG	PUSH_ACK: 02 0fc2 01
0:00:47.281593	LOG	PUSH_DATA: Protocol version = 02, Token = 0fc2, Identifier = 00, JSON = {'rxpk': [{'tmst': 139708719, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCSAsFBwGjBOljTl0='}]}
0:00:47.282591	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b48, FOpts: 0507), FPort: 01, FRMPayload: 05b7, MIC: e9634e5d)
0:00:47.283591	LOG	Server <---------- DUT
0:00:47.285590	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07b9, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 1a412e6a)
0:00:47.287588	LOG	Frame command sent to the DUT
0:00:47.289588	LOG	PULL_RESP: Protocol version = 02, Token = bb75, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 141708719, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAuQfgs6+ocXTnYcfBhyQg+wyINx6PoAcS69F+S+RXvEDT0iivx6pe2ayVfXW1DcvmfCenWbzmrxpBLmo='}}
0:00:47.290587	LOG	Server ----------> DUT
0:00:47.293587	LOG	TX_ACK: 02 bb75 05 aa555a0000240409
0:00:47.922228	LOG	PULL_DATA: 02 c03c 02 aa555a0000240409
0:00:47.926226	LOG	PULL_ACK: 02 c03c 04
0:00:52.307729	LOG	PUSH_ACK: 02 0fc3 01
0:00:52.310728	LOG	PUSH_DATA: Protocol version = 02, Token = 0fc3, Identifier = 00, JSON = {'rxpk': [{'tmst': 144711314, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': 0, 'size': 15, 'data': 'QCAgICCASQsBebkrWmfw'}]}
0:00:52.312727	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b49, FOpts:), FPort: 01, FRMPayload: 05b7, MIC: 2b5a67f0)

0:00:52.314725	LOG	Server <---------- DUT
0:00:52.315725	LOG	Packet received from unexpected FPort 01
0:00:57.296888	LOG	PUSH_ACK: 02 0fc4 01
0:00:57.298887	LOG	PUSH_DATA: Protocol version = 02, Token = 0fc4, Identifier = 00, JSON = {'rxpk': [{'tmst': 149713938, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -5, 'size': 15, 'data': 'QCAgICCASgsBME1vDhYb'}]}
0:00:57.300886	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b4a, FOpts:), FPort: 01, FRMPayload: 05b7, MIC: 6f0e161b)
0:00:57.301885	LOG	Server <---------- DUT
0:00:57.303884	LOG	Resend the Frame command. May the DUT did not listen
0:00:57.304884	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ba, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: 70605c43)
0:00:57.306882	LOG	Frame command sent to the DUT
0:00:57.307882	LOG	PULL_RESP: Protocol version = 02, Token = 4de3, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 151713938, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAugfgX/1L9tom84JaoR/lXZZpgUaipT4/FEXK4aaD2npe918OihXOKocNbKJTbrCQr8kUYD+HqnBgXEM='}}
0:00:57.309881	LOG	Server ----------> DUT
0:00:57.312676	LOG	TX_ACK: 02 4de3 05 aa555a0000240409
0:00:57.942352	LOG	PULL_DATA: 02 2ff4 02 aa555a0000240409
0:00:57.944349	LOG	PULL_ACK: 02 2ff4 04
0:01:03.237305	LOG	PUSH_ACK: 02 0fc5 01
0:01:03.239303	LOG	PUSH_DATA: Protocol version = 02, Token = 0fc5, Identifier = 00, JSON = {'rxpk': [{'tmst': 155629526, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': 0, 'size': 64, 'data': 'QCAgICCASwvg0O8bxsPXb/nBMaLwxSj2mTU248lFBWGvmTw0zJ+rmkHO8G+oM5dDz33DDWBedOl+QRBm7+e+bA=='}]}
0:01:03.241303	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b4b, FOpts:), FPort: e0, FRMPayload: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202), MIC: efe7be6c)
0:01:03.242302	LOG	Server <---------- DUT
0:01:03.243301	LOG	Answer in payload: 02020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:03.245300	LOG	Frame Command Payload in the Answer: 08020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:03.251299	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:03.257294	LOG	End Test Step: Uplink - Oversized Payload via Echo for datarate SF11BW125
0:01:03.262291	LOG	Partial Verdict: PASS
0:01:03.269287	LOG	==========
0:01:03.275283	LOG	==========
0:01:03.277282	LOG	Start Test Step: Uplink - Oversized Payload via Echo for datarate SF10BW125
0:01:03.287277	LOG	Send MAC command block process starts
0:01:07.301024	LOG	PUSH_ACK: 02 0fc6 01
0:01:07.306022	LOG	PUSH_DATA: Protocol version = 02, Token = 0fc6, Identifier = 00, JSON = {'rxpk': [{'tmst': 159719158, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF11BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCATAsBJlVCvJZj'}]}
0:01:07.308022	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b4c, FOpts:), FPort: 01, FRMPayload: 05b8, MIC: 42bc9663)

0:01:07.309020	LOG	Server <---------- DUT
0:01:07.310021	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07bb, FOpts:), FPort: 00, FRMPayload: 03200700010505d2ad84), MIC: 062116b0)
0:01:07.313018	LOG	PULL_RESP: Protocol version = 02, Token = b70d, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 161719158, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAuwcAe4VwPE2blo/S4QYhFrA='}}
0:01:07.314017	LOG	Server ----------> DUT
0:01:07.318016	LOG	TX_ACK: 02 b70d 05 aa555a0000240409
0:01:08.151540	LOG	PULL_DATA: 02 5368 02 aa555a0000240409
0:01:08.153540	LOG	PULL_ACK: 02 5368 04
0:01:11.948378	LOG	PUSH_ACK: 02 0fc7 01
0:01:11.951376	LOG	PUSH_DATA: Protocol version = 02, Token = 0fc7, Identifier = 00, JSON = {'rxpk': [{'tmst': 164392106, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -2, 'size': 19, 'data': 'QCAgICCETQsDBwUHARKzVkm5tw=='}]}
0:01:11.953375	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b4d, FOpts: 03070507), FPort: 01, FRMPayload: 05b8, MIC: 5649b9b7)
0:01:11.954374	LOG	Server <---------- DUT
0:01:11.956373	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:11.958372	LOG	Command Answer: 03070507
0:01:12.045322	LOG	MAC command communication completed
0:01:12.057315	LOG	Send Test Command EchoPayloadReq process starts
0:01:16.954527	LOG	PUSH_ACK: 02 0fc9 01
0:01:16.956526	LOG	PUSH_DATA: Protocol version = 02, Token = 0fc9, Identifier = 00, JSON = {'rxpk': [{'tmst': 169394706, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCTgsFBwE1mOc+lVc='}]}
0:01:16.958524	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b4e, FOpts: 0507), FPort: 01, FRMPayload: 05b8, MIC: e73e9557)
0:01:16.960523	LOG	Server <---------- DUT
0:01:16.962522	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07bc, FOpts:), FPort: e0, FRMPayload: 08010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101010101), MIC: d5db4840)
0:01:16.969518	LOG	Frame command sent to the DUT
0:01:16.971517	LOG	PULL_RESP: Protocol version = 02, Token = c30a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 171394706, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 65, 'data': 'YCAgICAAvAfgnHYC5lsHIuJHWzQR4e74HRepn2y8HdadZch9PEor46/nHlkrNIUVOs0FCLX/mj7EBPhnYNXbSEA='}}
0:01:16.973516	LOG	Server ----------> DUT
0:01:16.977514	LOG	TX_ACK: 02 c30a 05 aa555a0000240409
0:01:18.231799	LOG	PULL_DATA: 02 2798 02 aa555a0000240409
0:01:18.233798	LOG	PULL_ACK: 02 2798 04
0:01:22.355451	LOG	PUSH_ACK: 02 0fca 01
0:01:22.357449	LOG	PUSH_DATA: Protocol version = 02, Token = 0fca, Identifier = 00, JSON = {'rxpk': [{'tmst': 174777798, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -2, 'size': 64, 'data': 'QCAgICCATwvgCkH6GDqOXteiyq2C86JiTXO8zJQXhM5I+RJ78TP3j47oW+NdBUf09BhlSudDoTC6P3wuK2kJfw=='}]}
0:01:22.359448	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b4f, FOpts:), FPort: e0, FRMPayload:

		0802020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202, MIC: 2b69097f)
0:01:22.360448	LOG	Server <---------- DUT
0:01:22.362447	LOG	Answer in payload: 0202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:22.364446	LOG	Frame Command Payload in the Answer: 0802020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202020202
0:01:22.371442	LOG	Checking if the payload of the EchoPayloadAns is correct
0:01:22.385433	LOG	End Test Step: Uplink - Oversized Payload via Echo for datarate SF10BW125
0:01:22.389431	LOG	Partial Verdict: PASS
0:01:22.395428	LOG	==========
0:01:22.402424	LOG	==========
0:01:22.404423	LOG	Start Test Step: Uplink - Oversized Payload via Echo for datarate SF9BW125
0:01:22.414417	LOG	Send MAC command block process starts
0:01:26.983815	LOG	PUSH_ACK: 02 0fcb 01
0:01:26.986813	LOG	PUSH_DATA: Protocol version = 02, Token = 0fcb, Identifier = 00, JSON = {'rxpk': [{'tmst': 179399942, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF10BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAUAsB3qfT8TYG'}]}
0:01:26.988812	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b50, FOpts:), FPort: 01, FRMPayload: 05b9, MIC: d3f13606)
0:01:26.989811	LOG	Server <---------- DUT
0:01:26.991810	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07bd, FOpts:), FPort: 00, FRMPayload: 03300700010505d2ad84), MIC: b270521d)
0:01:26.994809	LOG	PULL_RESP: Protocol version = 02, Token = 1916, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 181399942, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAvQcAcFnz3qUc2qV5DrJwUh0='}}
0:01:26.996808	LOG	Server ----------> DUT
0:01:27.000805	LOG	TX_ACK: 02 1916 05 aa555a0000240409
0:01:28.252094	LOG	PULL_DATA: 02 f234 02 aa555a0000240409
0:01:28.253094	LOG	PULL_ACK: 02 f234 04
0:01:31.834345	LOG	PUSH_ACK: 02 0fcc 01
0:01:31.836345	LOG	PUSH_DATA: Protocol version = 02, Token = 0fcc, Identifier = 00, JSON = {'rxpk': [{'tmst': 184258297, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.8, 'rssi': -3, 'size': 19, 'data': 'QCAgICCEUQsDBwUHASJXT2tlYw=='}]}
0:01:31.837346	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b51, FOpts: 03070507), FPort: 01, FRMPayload: 05b9, MIC: 4f6b6563)
0:01:31.839345	LOG	Server <---------- DUT
0:01:31.840343	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:31.841344	LOG	Command Answer: 03070507
0:01:31.910302	LOG	MAC command communication completed
0:01:31.926294	LOG	Send Test Command EchoPayloadReq process starts
0:01:36.822506	LOG	PUSH_ACK: 02 0fcd 01
0:01:36.823505	LOG	PUSH_DATA: Protocol version = 02, Token = 0fcd, Identifier = 00, JSON = {'rxpk': [{'tmst': 189240425, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF9BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCUgsFBwGlY7JPF+s='}]}
0:01:36.825503	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b52, FOpts: 0507), FPort: 01, FRMPayload: 05b9, MIC: b24f17eb)
0:01:36.826503	LOG	Server <---------- DUT

0:01:36.828502	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07be, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:01:46.821811	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b54, FOpts:), FPort: 01, FRMPayload: 05ba, MIC: 3f02675b)
0:01:46.822811	LOG	Server <---------- DUT
0:01:46.824810	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07bf, FOpts:), FPort: 00, FRMPayload: 03400700010505d2ad84), MIC: 477c2154)
0:01:46.826808	LOG	PULL_RESP: Protocol version = 02, Token = dbff, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 201245650, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAvwcAX4lRTUzhrzLw70d8IVQ='}}
0:01:46.827809	LOG	Server ----------> DUT
0:01:46.830805	LOG	TX_ACK: 02 dbff 05 aa555a0000240409
0:01:48.501853	LOG	PULL_DATA: 02 79ac 02 aa555a0000240409
0:01:48.503852	LOG	PULL_ACK: 02 79ac 04
0:01:51.782986	LOG	PUSH_ACK: 02 0fd0 01
0:01:51.784984	LOG	PUSH_DATA: Protocol version = 02, Token = 0fd0, Identifier = 00, JSON = {'rxpk': [{'tmst': 204186355, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 19, 'data': 'QCAgICCEVQsDBwUHAdU4d3GjQg=='}]}
0:01:51.785983	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b55, FOpts: 03070507), FPort: 01, FRMPayload: 05ba, MIC: 7771a342)
0:01:51.786983	LOG	Server <---------- DUT
0:01:51.788981	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:51.789981	LOG	Command Answer: 03070507
0:01:51.852945	LOG	MAC command communication completed
0:01:51.864939	LOG	Send Test Command EchoPayloadReq process starts
0:01:56.773143	LOG	PUSH_ACK: 02 0fd1 01
0:01:56.775142	LOG	PUSH_DATA: Protocol version = 02, Token = 0fd1, Identifier = 00, JSON = {'rxpk': [{'tmst': 209178723, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCVgsFBwE+f7cW/KE='}]}
0:01:56.776143	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b56, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: b716fca1)
0:01:56.778142	LOG	Server <---------- DUT
0:01:56.780139	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c0, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:01:56.792150	LOG	TX_ACK: 02 7aae 05 aa555a0000240409
0:01:58.691050	LOG	PULL_DATA: 02 cf66 02 aa555a0000240409
0:01:58.694049	LOG	PULL_ACK: 02 cf66 04
0:02:01.764319	LOG	PUSH_ACK: 02 0fd3 01
0:02:01.766299	LOG	PUSH_DATA: Protocol version = 02, Token = 0fd3, Identifier = 00, JSON = {'rxpk': [{'tmst': 214181339, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCVwsFBwEBFoU7EPY='}]}
0:02:01.767301	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b57, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 853b10f6)
0:02:01.769299	LOG	Server <---------- DUT
0:02:01.770298	LOG	Packet received from unexpected FPort 01
0:02:06.754461	LOG	PUSH_ACK: 02 0fd4 01
0:02:06.756458	LOG	PUSH_DATA: Protocol version = 02, Token = 0fd4, Identifier = 00, JSON = {'rxpk': [{'tmst': 219183955, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 12.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCWAsFBwFS9hNHZsI='}]}
0:02:06.758458	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b58, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 134766c2)
0:02:06.759461	LOG	Server <---------- DUT
0:02:06.760460	LOG	Resend the Frame command. May the DUT did not listen
0:02:06.762459	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c1, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:02:16.752757	LOG	PUSH_DATA: Protocol version = 02, Token = 0fd7, Identifier = 00, JSON = {'rxpk': [{'tmst': 229189195, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCWgsFBwEmi+LGDTs='}]}
0:02:16.753757	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b5a, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: e2c60d3b)
0:02:16.754756	LOG	Server <---------- DUT
0:02:16.755756	LOG	Resend the Frame command. May the DUT did not listen
0:02:16.757753	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c2, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

		'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCXQsFBwFX8k9dPP0='}]}
0:02:31.775351	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b5d, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 4f5d3cfd)
0:02:31.776350	LOG	Server <---------- DUT
0:02:31.777350	LOG	Packet received from unexpected FPort 01
0:02:36.761226	LOG	PUSH_ACK: 02 0fdb 01
0:02:36.763226	LOG	PUSH_DATA: Protocol version = 02, Token = 0fdb, Identifier = 00, JSON = {'rxpk': [{'tmst': 249199691, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.5, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCXgsFBwGgOZZfjFA='}]}
0:02:36.765226	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b5e, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 965f8c50)
0:02:36.766224	LOG	Server <---------- DUT
0:02:36.767226	LOG	Packet received from unexpected FPort 01
0:02:39.240815	LOG	PULL_DATA: 02 9206 02 aa555a0000240409
0:02:39.245812	LOG	PULL_ACK: 02 9206 04
0:02:41.801357	LOG	PUSH_ACK: 02 0fdc 01
0:02:41.803356	LOG	PUSH_DATA: Protocol version = 02, Token = 0fdc, Identifier = 00, JSON = {'rxpk': [{'tmst': 254202307, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCXwsFBwE7yBrQWug='}]}
0:02:41.804360	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b5f, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 1ad05ae8)
0:02:41.806355	LOG	Server <---------- DUT
0:02:41.807359	LOG	Packet received from unexpected FPort 01
0:02:41.815353	LOG	End Test Step: Uplink - Oversized Payload via Echo for datarate SF8BW125
0:02:41.819347	LOG	Partial Verdict: PASS
0:02:41.824343	LOG	==========
0:02:41.830339	LOG	==========
0:02:41.833338	LOG	Start Test Step: Uplink - Oversized Payload via Echo for datarate SF7BW125
0:02:41.844334	LOG	Send MAC command block process starts
0:02:46.799511	LOG	PUSH_ACK: 02 0fde 01
0:02:46.802509	LOG	PUSH_DATA: Protocol version = 02, Token = 0fde, Identifier = 00, JSON = {'rxpk': [{'tmst': 259204931, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF8BW125', 'codr': '4/5', 'lsnr': 11.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCYAsFBwGevsgk/o0='}]}
0:02:46.806506	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b60, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: c824fe8d)
0:02:46.809510	LOG	Server <---------- DUT
0:02:46.812507	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c3, FOpts:), FPort: 00, FRMPayload: 03500700010505d2ad84), MIC: 15d52461)
0:02:46.818505	LOG	PULL_RESP: Protocol version = 02, Token = 10c0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 261204931, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAwwcAadxVE8ha3uczIxXVJGE='}}
0:02:46.821499	LOG	Server ----------> DUT
0:02:46.827495	LOG	TX_ACK: 02 10c0 05 aa555a0000240409
0:02:49.341112	LOG	PULL_DATA: 02 c368 02 aa555a0000240409
0:02:49.343112	LOG	PULL_ACK: 02 c368 04
0:02:51.740747	LOG	PUSH_ACK: 02 0fdf 01
0:02:51.742745	LOG	PUSH_DATA: Protocol version = 02, Token = 0fdf, Identifier = 00, JSON = {'rxpk': [{'tmst': 264166357, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 19, 'data': 'QCAgICCEYQsDBwUHAXO7IdAs5Q=='}]}

0:02:51.743744	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b61, FOpts: 03070507), FPort: 01, FRMPayload: 05ba, MIC: 21d02ce5)
0:02:51.745743	LOG	Server <---------- DUT
0:02:51.746742	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:51.747742	LOG	Command Answer: 03070507
0:02:51.810705	LOG	MAC command communication completed
0:02:51.824698	LOG	Send Test Command EchoPayloadReq process starts
0:02:56.728905	LOG	PUSH_ACK: 02 0fe0 01
0:02:56.730906	LOG	PUSH_DATA: Protocol version = 02, Token = 0fe0, Identifier = 00, JSON = {'rxpk': [{'tmst': 269168957, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 17, 'data': 'QCAgICCCYgsFBwE9Vrg4XSA='}]}
0:02:56.731903	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b62, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: b8385d20)
0:02:56.732905	LOG	Server <---------- DUT
0:02:56.735902	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c4, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:03:06.760691	LOG	Server <---------- DUT
0:03:06.761690	LOG	Resend the Frame command. May the DUT did not listen
0:03:06.763689	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c5, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:03:16.759996	LOG	PULL_RESP: Protocol version = 02, Token = 4ad9, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 291179445, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 256, 'data': 'YCAgICAAxgfgxdI/3ghLHZQVI5XUPpVwaA7aeu4jQnKcKCiHO7ROo2HRIzeZMTfzwggrRitf3XRiCHj3wMv0+2ODEviZ5R3Jbxy0LreG5wFDsSU/Y+xU+fK0QsmILmp0JW5SXWFNrzlNtKcOiQs0Ane/YTkGpVgy2PXYohzTAH0Zf0Hqu7r9NOuV4UN0FuxssYAh9pTKGuYvkHdTwbfvMwFcVcjQtsDwr+1Cs7vtJYeWNHKqpSF3Uszw1yG4xEXzyrrxj0Z5peMgJ5hgcMz48Zh+QSFCDM3Jzm0+7gSZwgaYtrpqtfoMlyNW5gomqIyh0qR+Km+rgJhkcvJhKPvPRA=='}}
0:03:16.760997	LOG	Server ----------> DUT
0:03:16.763995	LOG	TX_ACK: 02 4ad9 05 aa555a0000240409
0:03:19.701320	LOG	PULL_DATA: 02 67d6 02 aa555a0000240409
0:03:19.702320	LOG	PULL_ACK: 02 67d6 04
0:03:21.735163	LOG	PUSH_ACK: 02 0fe6 01
0:03:21.737162	LOG	PUSH_DATA: Protocol version = 02, Token = 0fe6, Identifier = 00, JSON = {'rxpk': [{'tmst': 294182053, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': 0, 'size': 17, 'data': 'QCAgICCCZwsFBwEVAZtcn3w='}]}
0:03:21.739160	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b67, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 9b5c9f7c)
0:03:21.740159	LOG	Server <---------- DUT
0:03:21.741161	LOG	Packet received from unexpected FPort 01
0:03:26.776989	LOG	PUSH_ACK: 02 0fe7 01
0:03:26.781986	LOG	PUSH_DATA: Protocol version = 02, Token = 0fe7, Identifier = 00, JSON = {'rxpk': [{'tmst': 299184677, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCaAsFBwEGXp8P/9o='}]}
0:03:26.785983	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b68, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 9f0fffda)
0:03:26.789981	LOG	Server <---------- DUT
0:03:26.791978	LOG	Packet received from unexpected FPort 01
0:03:29.781311	LOG	PULL_DATA: 02 d296 02 aa555a0000240409
0:03:29.783309	LOG	PULL_ACK: 02 d296 04
0:03:31.770184	LOG	PUSH_ACK: 02 0fe8 01
0:03:31.772177	LOG	PUSH_DATA: Protocol version = 02, Token = 0fe8, Identifier = 00, JSON = {'rxpk': [{'tmst': 304187301, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 17, 'data': 'QCAgICCCaQsFBwFEHH4R2c4='}]}
0:03:31.774178	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b69, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 7e11d9ce)
0:03:31.775177	LOG	Server <---------- DUT
0:03:31.777176	LOG	Packet received from unexpected FPort 01
0:03:36.759396	LOG	PUSH_ACK: 02 0fe9 01
0:03:36.761395	LOG	PUSH_DATA: Protocol version = 02, Token = 0fe9, Identifier = 00, JSON = {'rxpk': [{'tmst': 309189917, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCagsFBwG04h5/6MQ='}]}
0:03:36.763394	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b6a, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 1e7fe8c4)
0:03:36.764393	LOG	Server <---------- DUT
0:03:36.766392	LOG	Packet received from unexpected FPort 01
0:03:39.860629	LOG	PULL_DATA: 02 ca25 02 aa555a0000240409
0:03:39.864628	LOG	PULL_ACK: 02 ca25 04
0:03:41.747555	LOG	PUSH_ACK: 02 0fea 01

0:03:41.749554	LOG	PUSH_DATA: Protocol version = 02, Token = 0fea, Identifier = 00, JSON = {'rxpk': [{'tmst': 314192533, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 17, 'data': 'QCAgICCCawsFBwHGd6xJoRI='}]}
0:03:41.751554	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b6b, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: ac49a112)
0:03:41.752552	LOG	Server <---------- DUT
0:03:41.753553	LOG	Packet received from unexpected FPort 01
0:03:41.759550	LOG	End Test Step: Uplink - Oversized Payload via Echo for datarate SF7BW125
0:03:41.762546	LOG	Partial Verdict: PASS
0:03:41.767544	LOG	==========
0:03:41.774539	LOG	==========
0:03:41.777538	LOG	Start Test Step: Uplink - Oversized Payload via Echo for datarate SF7BW250
0:03:41.793531	LOG	Send NewChannelReq process starts
0:03:46.746796	LOG	PUSH_ACK: 02 0fec 01
0:03:46.749795	LOG	PUSH_DATA: Protocol version = 02, Token = 0fec, Identifier = 00, JSON = {'rxpk': [{'tmst': 319195165, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCbAsFBwEKLxrydVU='}]}
0:03:46.750793	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b6c, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 1af27555)
0:03:46.751793	LOG	Server <---------- DUT
0:03:46.756790	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c7, FOpts:), FPort: 00, FRMPayload: 070328768466), MIC: 17ee2229)
0:03:46.763786	LOG	PULL_RESP: Protocol version = 02, Token = b15f, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 321195165, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAxwcAvuk8fTaHF+4iKQ=='}}
0:03:46.767784	LOG	Server ----------> DUT
0:03:46.773780	LOG	TX_ACK: 02 b15f 05 aa555a0000240409
0:03:49.921034	LOG	PULL_DATA: 02 fef2 02 aa555a0000240409
0:03:49.923033	LOG	PULL_ACK: 02 fef2 04
0:03:51.777976	LOG	PUSH_ACK: 02 0fed 01
0:03:51.780976	LOG	PUSH_DATA: Protocol version = 02, Token = 0fed, Identifier = 00, JSON = {'rxpk': [{'tmst': 324197774, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCbQsHAwFPPPFAuJ8='}]}
0:03:51.781976	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b6d, FOpts: 0703), FPort: 01, FRMPayload: 05ba, MIC: f140b89f)
0:03:51.782976	LOG	Server <---------- DUT
0:03:51.783975	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:03:51.785972	LOG	Command Answer: 0703
0:03:51.791968	LOG	MAC command communication completed
0:03:51.797965	LOG	Send MAC command block process starts
0:03:56.767281	LOG	PUSH_ACK: 02 0fee 01
0:03:56.772282	LOG	PUSH_DATA: Protocol version = 02, Token = 0fee, Identifier = 00, JSON = {'rxpk': [{'tmst': 329195262, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAbgsBWTlCYV2t'}]}
0:03:56.775277	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b6e, FOpts:), FPort: 01, FRMPayload: 05ba, MIC: 42615dad)
0:03:56.779274	LOG	Server <---------- DUT
0:03:56.784273	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c8, FOpts:), FPort: 00, FRMPayload: 03600f00010505d2ad84), MIC: b2bad1d6)

0:03:56.792266	LOG	PULL_RESP: Protocol version = 02, Token = eb13, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 331195262, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAyAcAD0Jo+Tv8Rzr/kbK60dY='}}
0:03:56.793267	LOG	Server ----------> DUT
0:03:56.797263	LOG	TX_ACK: 02 eb13 05 aa555a0000240409
0:03:59.940473	LOG	PULL_DATA: 02 bdf1 02 aa555a0000240409
0:03:59.942471	LOG	PULL_ACK: 02 bdf1 04
0:04:01.732452	LOG	PUSH_ACK: 02 0fef 01
0:04:01.733451	LOG	PUSH_DATA: Protocol version = 02, Token = 0fef, Identifier = 00, JSON = {'rxpk': [{'tmst': 334177315, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -6, 'size': 19, 'data': 'QCAgICCEbwsDBwUHATsmhDIspw=='}]}
0:04:01.735452	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b6f, FOpts: 03070507), FPort: 01, FRMPayload: 05ba, MIC: 84322ca7)
0:04:01.736450	LOG	Server <---------- DUT
0:04:01.737449	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:01.739450	LOG	Command Answer: 03070507
0:04:01.801414	LOG	MAC command communication completed
0:04:01.814424	LOG	Send Test Command EchoPayloadReq process starts
0:04:06.771582	LOG	PUSH_ACK: 02 0ff0 01
0:04:06.773581	LOG	PUSH_DATA: Protocol version = 02, Token = 0ff0, Identifier = 00, JSON = {'rxpk': [{'tmst': 339179931, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -8, 'size': 17, 'data': 'QCAgICCCcAsFBwFUEMLqELc='}]}
0:04:06.774582	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b70, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: c2ea10b7)
0:04:06.776581	LOG	Server <---------- DUT
0:04:06.777579	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07c9, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

		'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 17, 'data': 'QCAgICCCcQsFBwGRvmd3yPU='}]}
0:04:11.762741	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b71, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 6777c8f5)
0:04:11.763741	LOG	Server <---------- DUT
0:04:11.765739	LOG	Packet received from unexpected FPort 01
0:04:16.758163	LOG	PUSH_ACK: 02 0ff3 01
0:04:16.759162	LOG	PUSH_DATA: Protocol version = 02, Token = 0ff3, Identifier = 00, JSON = {'rxpk': [{'tmst': 349185183, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -6, 'size': 17, 'data': 'QCAgICCCcgsFBwHBg2cPF58='}]}
0:04:16.761162	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b72, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 670f179f)
0:04:16.762161	LOG	Server <---------- DUT
0:04:16.764161	LOG	Resend the Frame command. May the DUT did not listen
0:04:16.766159	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ca, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:04:26.792449	LOG	Resend the Frame command. May the DUT did not listen
0:04:26.794448	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07cb, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:04:46.758802	LOG	PUSH_DATA: Protocol version = 02, Token = 0ffa, Identifier = 00, JSON = {'rxpk': [{'tmst': 379200895, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -6, 'size': 17, 'data': 'QCAgICCCeAsFBwGZj8MwlSQ='}]}
0:04:46.759801	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b78, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: c3309524)
0:04:46.761801	LOG	Server <---------- DUT
0:04:46.762800	LOG	Packet received from unexpected FPort 01
0:04:50.530756	LOG	PULL_DATA: 02 ad74 02 aa555a0000240409
0:04:50.532755	LOG	PULL_ACK: 02 ad74 04
0:04:51.797036	LOG	PUSH_ACK: 02 0ffb 01
0:04:51.799035	LOG	PUSH_DATA: Protocol version = 02, Token = 0ffb, Identifier = 00, JSON = {'rxpk': [{'tmst': 384203515, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -6, 'size': 17, 'data': 'QCAgICCCeQsFBwHjdtWzrpQ='}]}
0:04:51.801034	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b79, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: d5b3ae94)
0:04:51.802033	LOG	Server <---------- DUT
0:04:51.803033	LOG	Packet received from unexpected FPort 01
0:04:51.810029	LOG	Send LinkADRReq process starts
0:04:56.785425	LOG	PUSH_ACK: 02 0ffc 01
0:04:56.787424	LOG	PUSH_DATA: Protocol version = 02, Token = 0ffc, Identifier = 00, JSON = {'rxpk': [{'tmst': 389206135, 'chan': 8, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW250', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -8, 'size': 17, 'data': 'QCAgICCCegsFBwHUYNGsSs8='}]}
0:04:56.788424	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b7a, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: d1ac4acf)
0:04:56.790441	LOG	Server <---------- DUT
0:04:56.792421	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07cc, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 7c9e4dfd)
0:04:56.794421	LOG	PULL_RESP: Protocol version = 02, Token = 8eac, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 391206135, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAAzAcAOx/QoxB8nk39'}}
0:04:56.796419	LOG	Server ----------> DUT
0:04:56.799416	LOG	TX_ACK: 02 8eac 05 aa555a0000240409
0:05:00.570028	LOG	PULL_DATA: 02 4b70 02 aa555a0000240409
0:05:00.573026	LOG	PULL_ACK: 02 4b70 04
0:05:01.789334	LOG	PUSH_ACK: 02 0ffd 01
0:05:01.791332	LOG	PUSH_DATA: Protocol version = 02, Token = 0ffd, Identifier = 00, JSON = {'rxpk': [{'tmst': 394234475, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCewsDBwEVGE91COo='}]}
0:05:01.792332	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b7b, FOpts: 0307), FPort: 01, FRMPayload: 05ba, MIC: 4f7508ea)
0:05:01.793331	LOG	Server <---------- DUT
0:05:01.795330	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:01.796329	LOG	Command Answer: 0307
0:05:01.803327	LOG	MAC command communication completed
0:05:01.806324	LOG	Send NewChannelReq process starts
0:05:06.829463	LOG	PUSH_ACK: 02 0fff 01
0:05:06.831462	LOG	PUSH_DATA: Protocol version = 02, Token = 0fff, Identifier = 00, JSON = {'rxpk': [{'tmst': 399231971, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAfAsBiCM6amSr'}]}

0:05:06.832461	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b7c, FOpts:), FPort: 01, FRMPayload: 05ba, MIC: 3a6a64ab)
0:05:06.833461	LOG	Server <---------- DUT
0:05:06.835459	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07cd, FOpts:), FPort: 00, FRMPayload: 070300000050), MIC: 1475a304)
0:05:06.837458	LOG	PULL_RESP: Protocol version = 02, Token = 8c1a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 401231971, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAzQcAfygmlhebFHWjBA=='}}
0:05:06.839457	LOG	Server ----------> DUT
0:05:06.842455	LOG	TX_ACK: 02 8c1a 05 aa555a0000240409
0:05:10.620566	LOG	PULL_DATA: 02 3cdd 02 aa555a0000240409
0:05:10.624564	LOG	PULL_ACK: 02 3cdd 04
0:05:11.814886	LOG	PUSH_ACK: 02 1000 01
0:05:11.816886	LOG	PUSH_DATA: Protocol version = 02, Token = 1000, Identifier = 00, JSON = {'rxpk': [{'tmst': 404239716, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCfQsHAwEVNcrCOOQ='}]}
0:05:11.818885	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b7d, FOpts: 0703), FPort: 01, FRMPayload: 05ba, MIC: cac238e4)
0:05:11.819883	LOG	Server <---------- DUT
0:05:11.820884	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:11.822882	LOG	Command Answer: 0703
0:05:11.829877	LOG	MAC command communication completed
0:05:11.832894	LOG	End Test Step: Uplink - Oversized Payload via Echo for datarate SF7BW250
0:05:11.835905	LOG	Partial Verdict: PASS
0:05:11.838875	LOG	==========
0:05:11.844868	LOG	==========
0:05:11.846868	LOG	Start Test Step: Uplink - Oversized Payload via Echo for datarate FSK
0:05:11.861859	LOG	Send NewChannelReq process starts
0:05:16.819274	LOG	PUSH_ACK: 02 1002 01
0:05:16.821273	LOG	PUSH_DATA: Protocol version = 02, Token = 1002, Identifier = 00, JSON = {'rxpk': [{'tmst': 409237204, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAfgsBWLCEAJLn'}]}
0:05:16.823272	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b7e, FOpts:), FPort: 01, FRMPayload: 05ba, MIC: 840092e7)
0:05:16.824272	LOG	Server <---------- DUT
0:05:16.826271	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ce, FOpts:), FPort: 00, FRMPayload: 070428768477), MIC: 4c38fa93)
0:05:16.829268	LOG	PULL_RESP: Protocol version = 02, Token = 19c6, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 411237204, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAAzgcA+iNhWDRbTDj6kw=='}}
0:05:16.831267	LOG	Server ----------> DUT
0:05:16.834266	LOG	TX_ACK: 02 19c6 05 aa555a0000240409
0:05:20.819997	LOG	PULL_DATA: 02 77ff 02 aa555a0000240409
0:05:20.821995	LOG	PULL_ACK: 02 77ff 04
0:05:21.819428	LOG	PUSH_ACK: 02 1003 01
0:05:21.820426	LOG	PUSH_DATA: Protocol version = 02, Token = 1003, Identifier = 00, JSON = {'rxpk': [{'tmst': 414244965, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCfwsHAwE3kWobrbs='}]}
0:05:21.822425	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b7f, FOpts: 0703), FPort: 01, FRMPayload: 05ba, MIC: 6a1badbb)

0:05:21.823424	LOG	Server <---------- DUT
0:05:21.824426	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:21.826422	LOG	Command Answer: 0703
0:05:21.831419	LOG	MAC command communication completed
0:05:21.835436	LOG	Send MAC command block process starts
0:05:26.806619	LOG	PUSH_ACK: 02 1004 01
0:05:26.809618	LOG	PUSH_DATA: Protocol version = 02, Token = 1004, Identifier = 00, JSON = {'rxpk': [{'tmst': 419242445, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAgAsBWapvckKi'}]}
0:05:26.811617	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b80, FOpts:), FPort: 01, FRMPayload: 05ba, MIC: 6f7242a2)
0:05:26.812616	LOG	Server <---------- DUT
0:05:26.814615	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07cf, FOpts:), FPort: 00, FRMPayload: 03701700010505d2ad84), MIC: 89640262)
0:05:26.817614	LOG	PULL_RESP: Protocol version = 02, Token = b789, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 421242445, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAAzwcAEDmebbkgvrfKfIlkAmI='}}
0:05:26.819613	LOG	Server ----------> DUT
0:05:26.822611	LOG	TX_ACK: 02 b789 05 aa555a0000240409
0:05:31.020220	LOG	PULL_DATA: 02 45ee 02 aa555a0000240409
0:05:31.022220	LOG	PULL_ACK: 02 45ee 04
0:05:31.777788	LOG	PUSH_ACK: 02 1005 01
0:05:31.780787	LOG	PUSH_DATA: Protocol version = 02, Token = 1005, Identifier = 00, JSON = {'rxpk': [{'tmst': 424203107, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 19, 'data': 'QCAgICCEgQsDBwUHAZcoQE2q0A=='}]}
0:05:31.781786	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0b81, FOpts: 03070507), FPort: 01, FRMPayload: 05ba, MIC: 404daad0)
0:05:31.783785	LOG	Server <---------- DUT
0:05:31.785784	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:05:31.786783	LOG	Command Answer: 03070507
0:05:31.864739	LOG	MAC command communication completed
0:05:31.879730	LOG	Send Test Command EchoPayloadReq process starts
0:05:36.765948	LOG	PUSH_ACK: 02 1006 01
0:05:36.767948	LOG	PUSH_DATA: Protocol version = 02, Token = 1006, Identifier = 00, JSON = {'rxpk': [{'tmst': 429205388, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCCggsFBwFnADgN3i8='}]}
0:05:36.769947	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b82, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 380dde2f)
0:05:36.771945	LOG	Server <---------- DUT
0:05:36.773943	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d0, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:05:36.778940	LOG	PULL_RESP: Protocol version = 02, Token = dede, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 431205388, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 256, 'data': 'YCAgICAA0Afg7WMDFfLGJE1LyX6BHuCYTe9GHGZFIjRbsXd/R5mJd8ZAbtBZ7GhrPyh2iqdYp/uGQwKBrK7O24Y80AT4MG41wJLYBzXam84XYjttsetdYgY0sWHxBO2jiF8Mj1V0KxdmNe1PTzotykAfsi4DK6wBs1pDHghr5EE9WZ0Z6sEBl+wbK9oTVyZExvE8AHKUyLGegrxnLTh8vWjcaqI6fb68515pY2+P7P3m6U7ww07uPUBjPcuq0RKaKSHjqFSaC0r1bFWgSd0M4T1TP4sGE7YUmhOvMYcwS5HYmFuSyOZ8SI+YZbg8HVQsUQQSICu0uM/ehNuRBmcEHg==''}}
0:05:36.780940	LOG	Server ----------> DUT
0:05:36.784937	LOG	TX_ACK: 02 dede 05 aa555a0000240409
0:05:41.189918	LOG	PULL_DATA: 02 1a5c 02 aa555a0000240409
0:05:41.194918	LOG	PULL_ACK: 02 1a5c 04
0:05:41.804047	LOG	PUSH_ACK: 02 1007 01
0:05:41.807046	LOG	PUSH_DATA: Protocol version = 02, Token = 1007, Identifier = 00, JSON = {'rxpk': [{'tmst': 434208017, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCCgwsFBwFS4pMj2i0='}]}
0:05:41.808045	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b83, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 9323da2d)
0:05:41.810044	LOG	Server <---------- DUT
0:05:41.811043	LOG	Packet received from unexpected FPort 01
0:05:46.757227	LOG	PUSH_ACK: 02 1009 01
0:05:46.760225	LOG	PUSH_DATA: Protocol version = 02, Token = 1009, Identifier = 00, JSON = {'rxpk': [{'tmst': 439210609, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCChAsFBwF9EI3Aqb0='}]}
0:05:46.762224	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b84, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 8dc0a9bd)
0:05:46.763225	LOG	Server <---------- DUT
0:05:46.765225	LOG	Resend the Frame command. May the DUT did not listen
0:05:46.766223	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d1, FOpts:), FPort: e0, FRMPayload: 08010101010101010101

0:05:51.799133	LOG	PUSH_DATA: Protocol version = 02, Token = 100a, Identifier = 00, JSON = {'rxpk': [{'tmst': 444213224, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCChQsFBwFW1bPl3Wk='}]}
0:05:51.801131	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b85, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: b3e5dd69)
0:05:51.803130	LOG	Server <---------- DUT
0:05:51.804130	LOG	Packet received from unexpected FPort 01
0:05:56.785293	LOG	PUSH_ACK: 02 100b 01
0:05:56.788291	LOG	PUSH_DATA: Protocol version = 02, Token = 100b, Identifier = 00, JSON = {'rxpk': [{'tmst': 449215835, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCChgsFBwE4EJT+Osk='}]}
0:05:56.790291	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b86, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 94fe3ac9)
0:05:56.792289	LOG	Server <---------- DUT
0:05:56.793288	LOG	Resend the Frame command. May the DUT did not listen
0:05:56.796287	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d2, FOpts:), FPort: e0, FRMPayload: 0801010101010101010101

0:06:11.504955	LOG	PULL_ACK: 02 18fd 04
0:06:11.802784	LOG	PUSH_ACK: 02 100f 01
0:06:11.805784	LOG	PUSH_DATA: Protocol version = 02, Token = 100f, Identifier = 00, JSON = {'rxpk': [{'tmst': 464223722, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCCiQsFBwHJVp4HC/o='}]}
0:06:11.806782	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b89, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 9e070bfa)
0:06:11.808781	LOG	Server <---------- DUT
0:06:11.809781	LOG	Packet received from unexpected FPort 01
0:06:16.806051	LOG	PUSH_ACK: 02 1011 01
0:06:16.808055	LOG	PUSH_DATA: Protocol version = 02, Token = 1011, Identifier = 00, JSON = {'rxpk': [{'tmst': 469226358, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCCigsFBwFtsfSje6w='}]}
0:06:16.810067	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b8a, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: f4a37bac)
0:06:16.811049	LOG	Server <---------- DUT
0:06:16.813048	LOG	Packet received from unexpected FPort 01
0:06:21.580333	LOG	PULL_DATA: 02 7b17 02 aa555a0000240409
0:06:21.582332	LOG	PULL_ACK: 02 7b17 04
0:06:21.795211	LOG	PUSH_ACK: 02 1012 01
0:06:21.797210	LOG	PUSH_DATA: Protocol version = 02, Token = 1012, Identifier = 00, JSON = {'rxpk': [{'tmst': 474228976, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCCiwsFBwG/38EPhRs='}]}
0:06:21.799208	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b8b, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: c10f851b)
0:06:21.801209	LOG	Server <---------- DUT
0:06:21.803208	LOG	Packet received from unexpected FPort 01
0:06:21.811201	LOG	Send LinkADRReq process starts
0:06:26.784566	LOG	PUSH_ACK: 02 1013 01
0:06:26.786564	LOG	PUSH_DATA: Protocol version = 02, Token = 1013, Identifier = 00, JSON = {'rxpk': [{'tmst': 479231608, 'chan': 9, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'FSK', 'datr': 50000, 'rssi': 5, 'size': 17, 'data': 'QCAgICCCjAsFBwGasLtFS3I='}]}
0:06:26.788563	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b8c, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: bb454b72)
0:06:26.790561	LOG	Server <---------- DUT
0:06:26.792529	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d3, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 95122126)
0:06:26.795528	LOG	PULL_RESP: Protocol version = 02, Token = a70b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 481231608, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAA0wcA0ftNDraVEiEm'}}
0:06:26.797528	LOG	Server ----------> DUT
0:06:26.800525	LOG	TX_ACK: 02 a70b 05 aa555a0000240409
0:06:31.629809	LOG	PULL_DATA: 02 ef39 02 aa555a0000240409
0:06:31.631808	LOG	PULL_ACK: 02 ef39 04
0:06:31.865674	LOG	PUSH_ACK: 02 1014 01
0:06:31.867673	LOG	PUSH_DATA: Protocol version = 02, Token = 1014, Identifier = 00, JSON = {'rxpk': [{'tmst': 484281642, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCjQsDBwE+kcjeef4='}]}
0:06:31.868672	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b8d, FOpts: 0307), FPort: 01, FRMPayload: 05ba, MIC: c8de79fe)
0:06:31.869672	LOG	Server <---------- DUT
0:06:31.870671	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:31.872671	LOG	Command Answer: 0307

0:06:31.879666	LOG	MAC command communication completed
0:06:31.882666	LOG	Send NewChannelReq process starts
0:06:36.853833	LOG	PUSH_ACK: 02 1015 01
0:06:36.855832	LOG	PUSH_DATA: Protocol version = 02, Token = 1015, Identifier = 00, JSON = {'rxpk': [{'tmst': 489279138, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAjgsBOfvLeysM'}]}
0:06:36.857831	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b8e, FOpts:), FPort: 01, FRMPayload: 05ba, MIC: cb7b2b0c)
0:06:36.858831	LOG	Server <---------- DUT
0:06:36.860830	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d4, FOpts:), FPort: 00, FRMPayload: 070400000050), MIC: 542e24ba)
0:06:36.862829	LOG	PULL_RESP: Protocol version = 02, Token = 5ab0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 491279138, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 19, 'data': 'YCAgICAA1AcA1ez4f1llVC4kug=='}}
0:06:36.863828	LOG	Server ----------> DUT
0:06:36.866836	LOG	TX_ACK: 02 5ab0 05 aa555a0000240409
0:06:41.689080	LOG	PULL_DATA: 02 0815 02 aa555a0000240409
0:06:41.694077	LOG	PULL_ACK: 02 0815 04
0:06:41.861983	LOG	PUSH_ACK: 02 1016 01
0:06:41.866980	LOG	PUSH_DATA: Protocol version = 02, Token = 1016, Identifier = 00, JSON = {'rxpk': [{'tmst': 494286893, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 17, 'data': 'QCAgICCCjwsHAwFHAGOocJE='}]}
0:06:41.870978	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b8f, FOpts: 0703), FPort: 01, FRMPayload: 05ba, MIC: 63a87091)
0:06:41.874975	LOG	Server <---------- DUT
0:06:41.878973	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:41.881972	LOG	Command Answer: 0703
0:06:41.886967	LOG	MAC command communication completed
0:06:41.889966	LOG	End Test Step: Uplink - Oversized Payload via Echo for datarate FSK
0:06:41.892964	LOG	Partial Verdict: PASS
0:06:41.896963	LOG	==========
0:06:41.900978	LOG	==========
0:06:41.902959	LOG	Start Test Step: Restore default settings
0:06:41.918970	LOG	Send LinkADRReq process starts
0:06:46.869798	LOG	PUSH_ACK: 02 1018 01
0:06:46.872796	LOG	PUSH_DATA: Protocol version = 02, Token = 1018, Identifier = 00, JSON = {'rxpk': [{'tmst': 499284397, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAkAsBN1fQFBCm'}]}
0:06:46.873795	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b90, FOpts:), FPort: 01, FRMPayload: 05ba, MIC: d01410a6)
0:06:46.874795	LOG	Server <---------- DUT
0:06:46.876794	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d5, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: 5071103e)
0:06:46.879792	LOG	PULL_RESP: Protocol version = 02, Token = d080, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 501284397, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAA1QcAWZj+36pQcRA+'}}
0:06:46.880792	LOG	Server ----------> DUT
0:06:46.884789	LOG	TX_ACK: 02 d080 05 aa555a0000240409
0:06:51.709093	LOG	PULL_DATA: 02 1d38 02 aa555a0000240409
0:06:51.712093	LOG	PULL_ACK: 02 1d38 04

0:06:51.866005	LOG	PUSH_ACK: 02 1019 01
0:06:51.868004	LOG	PUSH_DATA: Protocol version = 02, Token = 1019, Identifier = 00, JSON = {'rxpk': [{'tmst': 504292149, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCkQsDBwGN4t4eOIA='}]}
0:06:51.869003	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b91, FOpts: 0307), FPort: 01, FRMPayload: 05ba, MIC: de1e3880)
0:06:51.870003	LOG	Server <---------- DUT
0:06:51.872001	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:06:51.874001	LOG	Command Answer: 0307
0:06:51.879997	LOG	MAC command communication completed
0:06:51.883995	LOG	Send RXParamSetupReq process starts
0:06:56.853306	LOG	PUSH_ACK: 02 101a 01
0:06:56.855306	LOG	PUSH_DATA: Protocol version = 02, Token = 101a, Identifier = 00, JSON = {'rxpk': [{'tmst': 509289645, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAkgsBE8VJfwam'}]}
0:06:56.856307	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b92, FOpts:), FPort: 01, FRMPayload: 05ba, MIC: 497f06a6)
0:06:56.858304	LOG	Server <---------- DUT
0:06:56.860303	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d6, FOpts:), FPort: 00, FRMPayload: 0500d2ad84), MIC: 48fd2550)
0:06:56.862301	LOG	PULL_RESP: Protocol version = 02, Token = af81, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 511289645, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF7BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAA1gcALF+lKhVI/SVQ'}}
0:06:56.864302	LOG	Server ----------> DUT
0:06:56.867300	LOG	TX_ACK: 02 af81 05 aa555a0000240409
0:07:01.871448	LOG	PUSH_ACK: 02 101b 01
0:07:01.873447	LOG	PUSH_DATA: Protocol version = 02, Token = 101b, Identifier = 00, JSON = {'rxpk': [{'tmst': 514297384, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCkwsFBwHmklq7XOw='}]}
0:07:01.874448	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b93, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: 5abb5cec)
0:07:01.876446	LOG	Server <---------- DUT
0:07:01.908445	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:07:01.910444	LOG	Command Answer: 0507
0:07:01.926454	LOG	MAC command communication completed
0:07:01.929433	LOG	Send Test Command RegionalDutyCycleCtrlReq process starts
0:07:06.859644	LOG	PUSH_ACK: 02 101c 01
0:07:06.861643	LOG	PUSH_DATA: Protocol version = 02, Token = 101c, Identifier = 00, JSON = {'rxpk': [{'tmst': 519299992, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 17, 'data': 'QCAgICCClAsFBwGSpvsf6J0='}]}
0:07:06.862640	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0b94, FOpts: 0507), FPort: 01, FRMPayload: 05ba, MIC: fb1fe89d)
0:07:06.864639	LOG	Server <---------- DUT
0:07:06.866642	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d7, FOpts:), FPort: e0, FRMPayload: 0501), MIC: 1e014fb8)
0:07:06.868637	LOG	Frame command sent to the DUT
0:07:06.870637	LOG	PULL_RESP: Protocol version = 02, Token = b635, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 521299992, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAA1wfgQuEeAU+4'}}
0:07:06.872639	LOG	Server ----------> DUT
0:07:06.875636	LOG	Send Test Command RegionalDutyCycleCtrlReq process completed
0:07:06.878632	LOG	End Test Step: Restore default settings
0:07:06.883629	LOG	Partial Verdict: PASS
0:07:06.887626	LOG	==========
0:07:06.891625	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_019_B
0:07:06.893597	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_020	
Verdict	PASS	
Date	2021-10-18 17:54:36	
Comments	MAC Command(s) in App-Payload and/or Frame Options	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.010703	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_020
0:00:00.043669	LOG	==========
0:00:00.045667	LOG	Start Test Step: Device activation
0:00:00.097636	LOG	Activation process has finished successfully
0:00:00.099634	LOG	Data stored in the DUT after Activation:
0:00:00.101634	LOG	DevAddr: 20202020
0:00:00.104633	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.107631	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.109649	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.112630	LOG	End Test Step: Device activation
0:00:00.115627	LOG	Partial Verdict: PASS
0:00:00.119625	LOG	==========
0:00:00.124621	LOG	==========
0:00:00.126620	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.137630	LOG	DUT Pre-condition activation process starts
0:00:00.140612	LOG	DUT Pre-condition activation completed
0:00:00.143610	LOG	End Test Step: DUT Pre-condition settings
0:00:00.147627	LOG	Partial Verdict: PASS
0:00:00.153606	LOG	==========
0:00:00.158602	LOG	==========
0:00:00.160600	LOG	Start Test Step: MAC Commands in App-Payload (FRMPayload) only (FPort = 0)
0:00:00.171594	LOG	Send MAC command block process starts
0:00:01.745697	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:01.796668	LOG	PULL_DATA: 02 37bb 02 aa555a0000240409
0:00:01.797667	LOG	PULL_ACK: 02 37bb 04
0:00:01.799666	LOG	First PULL_DATA received
0:00:06.755844	LOG	PUSH_ACK: 02 101f 01
0:00:06.758843	LOG	PUSH_DATA: Protocol version = 02, Token = 101f, Identifier = 00, JSON = {'rxpk': [{'tmst': 529300081, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAlgsBIY2erdjj'}]}
0:00:06.760841	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b96, FOpts:), FPort: 01, FRMPayload: 05bb, MIC: 9eadd8e3)
0:00:06.761841	LOG	Server <---------- DUT
0:00:06.762841	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d8, FOpts:), FPort: 00, FRMPayload: 060502d2ad8408010350000061), MIC: 245b459d)
0:00:06.765839	LOG	PULL_RESP: Protocol version = 02, Token = 57f8, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 531300081, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 26, 'data': 'YCAgICAA2AcAjtq0ZBDom5+82euBEyRbRZ0='}}
0:00:06.767838	LOG	Server ----------> DUT
0:00:06.771835	LOG	TX_ACK: 02 57f8 05 aa555a0000240409
0:00:11.762992	LOG	PUSH_ACK: 02 1020 01
0:00:11.765992	LOG	PUSH_DATA: Protocol version = 02, Token = 1020, Identifier = 00, JSON = {'rxpk': [{'tmst': 534318139, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 23, 'data': 'QCAgICCIlwsGAAgFBwgDBwHsZEo9HS8='}]}
0:00:11.766994	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 88, FCnt: 0b97, FOpts: 0600080507080307), FPort: 01, FRMPayload: 05bb, MIC: 4a3d1d2f)
0:00:11.767994	LOG	Server <---------- DUT
0:00:11.769989	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:11.770992	LOG	Command Answer: 0600080507080307
0:00:11.858936	LOG	MAC command communication completed
0:00:11.860935	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:21.786283	LOG	PUSH_ACK: 02 1021 01
0:00:21.788282	LOG	PUSH_DATA: Protocol version = 02, Token = 1021, Identifier = 00, JSON = {'rxpk': [{'tmst': 544313059, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 18, 'data': 'QCAgICCDmAsFBwgBz3qI4s1o'}]}
0:00:21.789281	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 83, FCnt: 0b98, FOpts: 050708), FPort: 01, FRMPayload: 05bb, MIC: 88e2cd68)
0:00:21.791281	LOG	Server <---------- DUT
0:00:21.793278	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07d9, FOpts:), FPort: e0, FRMPayload: 0700), MIC: d4dd07d0)
0:00:21.796276	LOG	Frame command sent to the DUT
0:00:21.798276	LOG	PULL_RESP: Protocol version = 02, Token = 2691, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 546313059, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAA2QfgynjU3QfQ'}}
0:00:21.800275	LOG	Server ----------> DUT
0:00:21.803272	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:21.807270	LOG	End Test Step: MAC Commands in App-Payload (FRMPayload) only (FPort = 0)
0:00:21.810268	LOG	Partial Verdict: PASS
0:00:21.815265	LOG	==========
0:00:21.825260	LOG	==========
0:00:21.827258	LOG	Start Test Step: MAC Commands in Frame Options (FOpts) only (FPort != 0)
0:00:21.839251	LOG	Send MAC command block process starts
0:00:22.006159	LOG	PULL_DATA: 02 2fd7 02 aa555a0000240409
0:00:22.007156	LOG	PULL_ACK: 02 2fd7 04
0:00:31.797579	LOG	PUSH_ACK: 02 1022 01
0:00:31.801577	LOG	PUSH_DATA: Protocol version = 02, Token = 1022, Identifier = 00, JSON = {'rxpk': [{'tmst': 554313132, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAmQsB1N1PlDeB'}]}
0:00:31.803576	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b99, FOpts:), FPort: 01, FRMPayload: 05bc, MIC: 4f943781)
0:00:31.804576	LOG	Server <---------- DUT
0:00:31.806574	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 0d, FCnt: 07da, FOpts: 060502d2ad8408010350000061), FPort: , FRMPayload:), MIC: ef2d9cfa)
0:00:31.808573	LOG	PULL_RESP: Protocol version = 02, Token = 9bf2, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 556313132, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 25, 'data': 'YCAgICAN2gcGBQLSrYQIAQNQAABh7y2c+g=='}}
0:00:31.809572	LOG	Server ----------> DUT
0:00:31.813570	LOG	TX_ACK: 02 9bf2 05 aa555a0000240409
0:00:32.015456	LOG	PULL_DATA: 02 556c 02 aa555a0000240409
0:00:32.018453	LOG	PULL_ACK: 02 556c 04
0:00:36.791734	LOG	PUSH_ACK: 02 1024 01
0:00:36.794734	LOG	PUSH_DATA: Protocol version = 02, Token = 1024, Identifier = 00, JSON = {'rxpk': [{'tmst': 559331189, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 23, 'data': 'QCAgICCImgsGAAgFBwgDBwHQrR6AS/g='}]}
0:00:36.795733	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 88, FCnt: 0b9a, FOpts: 0600080507080307), FPort: 01, FRMPayload: 05bc, MIC: 1e804bf8)
0:00:36.797731	LOG	Server <---------- DUT
0:00:36.799731	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:36.800749	LOG	Command Answer: 0600080507080307
0:00:36.884700	LOG	MAC command communication completed
0:00:36.887681	LOG	Send Test Command TxFramesCtrlReq process starts
0:00:42.095713	LOG	PULL_DATA: 02 b5cc 02 aa555a0000240409
0:00:42.098711	LOG	PULL_ACK: 02 b5cc 04
0:00:46.764117	LOG	PUSH_ACK: 02 1025 01
0:00:46.766116	LOG	PUSH_DATA: Protocol version = 02, Token = 1025, Identifier = 00, JSON = {'rxpk': [{'tmst': 569326109, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 18, 'data': 'QCAgICCDmwsFBwgBWfrm96+d'}]}
0:00:46.767115	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 83, FCnt: 0b9b, FOpts: 050708), FPort: 01, FRMPayload: 05bc, MIC: e6f7af9d)
0:00:46.769114	LOG	Server <---------- DUT
0:00:46.770113	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07db, FOpts:), FPort: e0, FRMPayload: 0700), MIC: ce3c14e2)
0:00:46.772112	LOG	Frame command sent to the DUT
0:00:46.774112	LOG	PULL_RESP: Protocol version = 02, Token = c4c1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 571326109, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAA2wfg8dPOPBTi'}}
0:00:46.775111	LOG	Server ----------> DUT
0:00:46.778109	LOG	Send Test Command TxFramesCtrlReq process completed
0:00:46.780108	LOG	End Test Step: MAC Commands in Frame Options (FOpts) only (FPort != 0)
0:00:46.784106	LOG	Partial Verdict: PASS
0:00:46.788104	LOG	==========
0:00:46.794100	LOG	==========
0:00:46.796099	LOG	Start Test Step: MAC Commands in App-Payload (FRMPayload) and FOpts
0:00:46.809091	LOG	Send Test Command RxAppCntReq process starts
0:00:52.236000	LOG	PULL_DATA: 02 6bfa 02 aa555a0000240409
0:00:52.237999	LOG	PULL_ACK: 02 6bfa 04

0:00:56.810395	LOG	PUSH_ACK: 02 1026 01
0:00:56.811394	LOG	PUSH_DATA: Protocol version = 02, Token = 1026, Identifier = 00, JSON = {'rxpk': [{'tmst': 579326181, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAnAsB90Nuz7yL'}]}
0:00:56.813393	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b9c, FOpts:), FPort: 01, FRMPayload: 05bd, MIC: 6ecfbc8b)
0:00:56.814392	LOG	Server <---------- DUT
0:00:56.816391	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07dc, FOpts:), FPort: e0, FRMPayload: 09), MIC: 46084795)
0:00:56.819389	LOG	Frame command sent to the DUT
0:00:56.821389	LOG	PULL_RESP: Protocol version = 02, Token = 3bbe, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 581326181, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAA3AfgLEYIR5U='}}
0:00:56.822388	LOG	Server ----------> DUT
0:00:56.826385	LOG	TX_ACK: 02 3bbe 05 aa555a0000240409
0:01:01.775571	LOG	PUSH_ACK: 02 1027 01
0:01:01.777569	LOG	PUSH_DATA: Protocol version = 02, Token = 1027, Identifier = 00, JSON = {'rxpk': [{'tmst': 584336847, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 16, 'data': 'QCAgICCAnQvgIV8mqfYWcw=='}]}
0:01:01.778568	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b9d, FOpts:), FPort: e0, FRMPayload: 09be05, MIC: a9f61673)
0:01:01.779594	LOG	Server <---------- DUT
0:01:01.781565	LOG	Answer in payload: be05
0:01:01.782565	LOG	Frame Command Payload in the Answer: 09be05
0:01:01.786566	LOG	RX Count received by DUT: 1470
0:01:01.789560	LOG	Send Test Command RxAppCntReq process completed
0:01:01.792558	LOG	Send MAC command block in FOpts and FRMPayload process starts
0:01:02.286275	LOG	PULL_DATA: 02 ba86 02 aa555a0000240409
0:01:02.290273	LOG	PULL_ACK: 02 ba86 04
0:01:11.810852	LOG	PUSH_ACK: 02 1029 01
0:01:11.812851	LOG	PUSH_DATA: Protocol version = 02, Token = 1029, Identifier = 00, JSON = {'rxpk': [{'tmst': 594333999, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAngsBW09MxPmy'}]}
0:01:11.814848	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b9e, FOpts:), FPort: 01, FRMPayload: 05be, MIC: 4cc4f9b2)
0:01:11.815847	LOG	Server <---------- DUT
0:01:11.817846	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 0f, FCnt: 07dd, FOpts: 03000000610300000061050 2d2ad84), FPort: 00, FRMPayload: 0350000061080106), MIC: 88498098)
0:01:11.819845	LOG	PULL_RESP: Protocol version = 02, Token = d9d0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 596333999, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 36, 'data': 'YCAgICAP3QcDAAAAYQMAAABhBQLSrYQA1Yb6RTEzRvKISYCY'}}
0:01:11.821844	LOG	Server ----------> DUT
0:01:11.824842	LOG	TX_ACK: 02 d9d0 05 aa555a0000240409
0:01:12.445488	LOG	PULL_DATA: 02 563f 02 aa555a0000240409
0:01:12.448487	LOG	PULL_ACK: 02 563f 04
0:01:16.435216	LOG	PUSH_ACK: 02 102a 01
0:01:16.436215	LOG	PUSH_DATA: Protocol version = 02, Token = 102a, Identifier = 00, JSON = {'rxpk': [{'tmst': 598958320, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAngsBW09MxPmy'}]}
0:01:16.438214	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0b9e, FOpts:), FPort: 01, FRMPayload: 05be, MIC: 4cc4f9b2)
0:01:16.439214	LOG	Server <---------- DUT
0:01:16.440213	LOG	MAC command not received because FPort field is not set to 0 and FOpts field is empty
0:01:16.444213	LOG	MAC command communication completed
0:01:16.448209	LOG	Send MAC command block in FOpts and FRMPayload process starts
0:01:21.784404	LOG	PUSH_ACK: 02 102b 01
0:01:21.786404	LOG	PUSH_DATA: Protocol version = 02, Token = 102b, Identifier = 00, JSON = {'rxpk': [{'tmst': 604339216, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAoAsBQBwaN8W5'}]}
0:01:21.787403	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba0, FOpts:), FPort: 01, FRMPayload: 05be, MIC: 1a37c5b9)
0:01:21.788403	LOG	Server <---------- DUT
0:01:21.790402	LOG	PHYPayload: (MHDR: a0, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 0f, FCnt: 07de, FOpts: 03000000610300000061050 2d2ad84), FPort: 00, FRMPayload: 0350000061080106), MIC: e0f8f0ec)
0:01:21.792401	LOG	PULL_RESP: Protocol version = 02, Token = cfbc, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 606339216, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 36, 'data': 'oCAgICAP3gcDAAAAYQMAAABhBQLSrYQAKPR40X2LTiLg+PDs'}}
0:01:21.793400	LOG	Server ----------> DUT
0:01:21.798397	LOG	TX_ACK: 02 cfbc 05 aa555a0000240409
0:01:22.635920	LOG	PULL_DATA: 02 0889 02 aa555a0000240409
0:01:22.637919	LOG	PULL_ACK: 02 0889 04
0:01:26.440753	LOG	PUSH_ACK: 02 102c 01
0:01:26.442751	LOG	PUSH_DATA: Protocol version = 02, Token = 102c, Identifier = 00, JSON = {'rxpk': [{'tmst': 608963571, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAoAsBQBwaN8W5'}]}
0:01:26.444752	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba0, FOpts:), FPort: 01, FRMPayload: 05be, MIC: 1a37c5b9)
0:01:26.445750	LOG	Server <---------- DUT
0:01:26.446749	LOG	MAC command not received because FPort field is not set to 0 and FOpts field is empty
0:01:26.447750	LOG	Confirmed wrong MAC Command. MAC Command answer received with ACK bit to 0
0:01:26.451746	LOG	MAC command communication completed
0:01:26.454744	LOG	Send Test Command RxAppCntReq process starts
0:01:31.790705	LOG	PUSH_ACK: 02 102d 01
0:01:31.792704	LOG	PUSH_DATA: Protocol version = 02, Token = 102d, Identifier = 00, JSON = {'rxpk': [{'tmst': 614344451, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAogsB8WjbnFI8'}]}
0:01:31.794703	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba2, FOpts:), FPort: 01, FRMPayload: 05be, MIC: db9c523c)
0:01:31.795702	LOG	Server <---------- DUT
0:01:31.797701	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07df, FOpts:), FPort: e0, FRMPayload: 09), MIC: b169e71c)
0:01:31.800700	LOG	Frame command sent to the DUT
0:01:31.801699	LOG	PULL_RESP: Protocol version = 02, Token = 2ada, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 616344451, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr':

		'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAA3wfgWrFp5xw='}}
0:01:31.803698	LOG	Server ----------> DUT
0:01:31.808695	LOG	TX_ACK: 02 2ada 05 aa555a0000240409
0:01:32.645217	LOG	PULL_DATA: 02 9520 02 aa555a0000240409
0:01:32.650215	LOG	PULL_ACK: 02 9520 04
0:01:36.794854	LOG	PUSH_ACK: 02 102f 01
0:01:36.796854	LOG	PUSH_DATA: Protocol version = 02, Token = 102f, Identifier = 00, JSON = {'rxpk': [{'tmst': 619355125, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 16, 'data': 'QCAgICCAowvgscp/vR7Y9A=='}]}
0:01:36.797853	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba3, FOpts:), FPort: e0, FRMPayload: 09bf05, MIC: bd1ed8f4)
0:01:36.799852	LOG	Server <---------- DUT
0:01:36.800851	LOG	Answer in payload: bf05
0:01:36.802851	LOG	Frame Command Payload in the Answer: 09bf05
0:01:36.806848	LOG	RX Count received by DUT: 1471
0:01:36.808846	LOG	Send Test Command RxAppCntReq process completed
0:01:36.813844	LOG	End Test Step: MAC Commands in App-Payload (FRMPayload) and FOpts
0:01:36.816843	LOG	Partial Verdict: PASS
0:01:36.820840	LOG	==========
0:01:36.827836	LOG	==========
0:01:36.830834	LOG	Start Test Step: Incorrect MAC Commands
0:01:36.845827	LOG	Send LinkADRReq process starts
0:01:42.726476	LOG	PULL_DATA: 02 8611 02 aa555a0000240409
0:01:42.727476	LOG	PULL_ACK: 02 8611 04
0:01:46.820152	LOG	PUSH_ACK: 02 1030 01
0:01:46.822149	LOG	PUSH_DATA: Protocol version = 02, Token = 1030, Identifier = 00, JSON = {'rxpk': [{'tmst': 629352269, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 15, 'data': 'QCAgICCApAsBFwyjRQ3y'}]}
0:01:46.823143	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba4, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: a3450df2)
0:01:46.825150	LOG	Server <---------- DUT
0:01:46.827143	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e0, FOpts:), FPort: 00, FRMPayload: 0380000000), MIC: 88227867)
0:01:46.829140	LOG	PULL_RESP: Protocol version = 02, Token = 8321, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 631352269, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAA4AcAMr7kz1uIInhn'}}
0:01:46.830138	LOG	Server ----------> DUT
0:01:46.835135	LOG	TX_ACK: 02 8321 05 aa555a0000240409
0:01:51.845433	LOG	PUSH_ACK: 02 1031 01
0:01:51.850431	LOG	PUSH_DATA: Protocol version = 02, Token = 1031, Identifier = 00, JSON = {'rxpk': [{'tmst': 634360013, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCpQsDBAH4DfxBn5w='}]}
0:01:51.853410	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0ba5, FOpts: 0304), FPort: 01, FRMPayload: 05bf, MIC: fc419f9c)
0:01:51.857407	LOG	Server <---------- DUT
0:01:51.859406	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:01:51.860405	LOG	Command Answer: 0304
0:01:51.865404	LOG	MAC command communication completed
0:01:51.870399	LOG	Answer received from DUT: 04
0:01:51.874399	LOG	Send LinkADRReq process starts

0:01:52.916336	LOG	PULL_DATA: 02 3775 02 aa555a0000240409
0:01:52.919335	LOG	PULL_ACK: 02 3775 04
0:02:01.821263	LOG	PUSH_ACK: 02 1032 01
0:02:01.823262	LOG	PUSH_DATA: Protocol version = 02, Token = 1032, Identifier = 00, JSON = {'rxpk': [{'tmst': 644360085, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCApgsBQId3Jtys'}]}
0:02:01.824262	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba6, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 7726dcac)
0:02:01.826262	LOG	Server <---------- DUT
0:02:01.828260	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e1, FOpts:), FPort: 00, FRMPayload: 03010000), MIC: 6109b625)
0:02:01.831259	LOG	PULL_RESP: Protocol version = 02, Token = 6c6e, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 646360085, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAA4QcAnhAjwmEJtiU='}}
0:02:01.832257	LOG	Server ----------> DUT
0:02:01.837254	LOG	TX_ACK: 02 6c6e 05 aa555a0000240409
0:02:03.095536	LOG	PULL_DATA: 02 4a3f 02 aa555a0000240409
0:02:03.100534	LOG	PULL_ACK: 02 4a3f 04
0:02:06.798091	LOG	PUSH_ACK: 02 1034 01
0:02:06.800089	LOG	PUSH_DATA: Protocol version = 02, Token = 1034, Identifier = 00, JSON = {'rxpk': [{'tmst': 649362689, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': 0, 'size': 15, 'data': 'QCAgICCApwsBoq/2W2ul'}]}
0:02:06.802089	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba7, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: f65b6ba5)
0:02:06.803089	LOG	Server <---------- DUT
0:02:06.805088	LOG	MAC command not received because FPort field is not set to 0 and FOpts field is empty
0:02:11.837221	LOG	PUSH_ACK: 02 1035 01
0:02:11.839221	LOG	PUSH_DATA: Protocol version = 02, Token = 1035, Identifier = 00, JSON = {'rxpk': [{'tmst': 654365281, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAqAsBEPSYL90i'}]}
0:02:11.840219	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba8, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 982fdd22)
0:02:11.841220	LOG	Server <---------- DUT
0:02:11.843219	LOG	Resend the MAC command. May the DUT did not listen
0:02:11.844219	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e2, FOpts:), FPort: 00, FRMPayload: 03010000), MIC: e5fe9fb9)
0:02:11.846217	LOG	PULL_RESP: Protocol version = 02, Token = 759b, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 656365281, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAA4gcAiXw39OX+n7k='}}
0:02:11.848216	LOG	Server ----------> DUT
0:02:11.851214	LOG	TX_ACK: 02 759b 05 aa555a0000240409
0:02:13.105498	LOG	PULL_DATA: 02 8a67 02 aa555a0000240409
0:02:13.107497	LOG	PULL_ACK: 02 8a67 04
0:02:16.804391	LOG	PUSH_ACK: 02 1036 01
0:02:16.807390	LOG	PUSH_DATA: Protocol version = 02, Token = 1036, Identifier = 00, JSON = {'rxpk': [{'tmst': 659367875, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAqQsBDgGVpTGY'}]}
0:02:16.809389	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0ba9, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 95a53198)

0:02:16.810388	LOG	Server <---------- DUT
0:02:16.846367	LOG	MAC command not received because FPort field is not set to 0 and FOpts field is empty
0:02:21.847520	LOG	PUSH_ACK: 02 1037 01
0:02:21.849519	LOG	PUSH_DATA: Protocol version = 02, Token = 1037, Identifier = 00, JSON = {'rxpk': [{'tmst': 664370467, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAqgsByPrkPVl+'}]}
0:02:21.850518	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0baa, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: e43d597e)
0:02:21.851518	LOG	Server <---------- DUT
0:02:21.852518	LOG	Resend the MAC command. May the DUT did not listen
0:02:21.854517	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e3, FOpts:), FPort: 00, FRMPayload: 03010000), MIC: a8b07234)
0:02:21.856515	LOG	PULL_RESP: Protocol version = 02, Token = 3422, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 666370467, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAA4wcAWz4tB6iwcjQ='}}
0:02:21.857515	LOG	Server ----------> DUT
0:02:21.863512	LOG	Send Unknown command process starts
0:02:23.115222	LOG	PULL_DATA: 02 7740 02 aa555a0000240409
0:02:23.117223	LOG	PULL_ACK: 02 7740 04
0:02:26.810088	LOG	PUSH_ACK: 02 1038 01
0:02:26.812088	LOG	PUSH_DATA: Protocol version = 02, Token = 1038, Identifier = 00, JSON = {'rxpk': [{'tmst': 669373092, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAqwsBZu/7W6To'}]}
0:02:26.813087	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bab, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: fb5ba4e8)
0:02:26.814086	LOG	Server <---------- DUT
0:02:26.816085	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e4, FOpts:), FPort: 00, FRMPayload: 7f), MIC: 2d147792)
0:02:26.819083	LOG	PULL_RESP: Protocol version = 02, Token = 7c38, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 671373092, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAA5AcAES0Ud5I='}}
0:02:26.820083	LOG	Server ----------> DUT
0:02:26.826079	LOG	TX_ACK: 02 7c38 05 aa555a0000240409
0:02:31.823233	LOG	PUSH_ACK: 02 1039 01
0:02:31.826231	LOG	PUSH_DATA: Protocol version = 02, Token = 1039, Identifier = 00, JSON = {'rxpk': [{'tmst': 674375687, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCArAsBVBLL0lQU'}]}
0:02:31.827230	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bac, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: cbd25414)
0:02:31.828230	LOG	Server <---------- DUT
0:02:31.830228	LOG	MAC command not received because FPort field is not set to 0 and FOpts field is empty
0:02:31.833227	LOG	Send MAC command block process starts
0:02:33.125529	LOG	PULL_DATA: 02 14af 02 aa555a0000240409
0:02:33.130526	LOG	PULL_ACK: 02 14af 04
0:02:36.828419	LOG	PUSH_ACK: 02 103b 01
0:02:36.829418	LOG	PUSH_DATA: Protocol version = 02, Token = 103b, Identifier = 00, JSON = {'rxpk': [{'tmst': 679378287, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCArQsBq3rTxn9f'}]}

0:02:36.831418	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bad, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: d3c67f5f)
0:02:36.832418	LOG	Server <---------- DUT
0:02:36.834416	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e5, FOpts:), FPort: 00, FRMPayload: 0603010000), MIC: ec851e90)
0:02:36.837415	LOG	PULL_RESP: Protocol version = 02, Token = 2373, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 681378287, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAA5QcAtO3qedHshR6Q'}}
0:02:36.839414	LOG	Server ----------> DUT
0:02:36.844411	LOG	TX_ACK: 02 2373 05 aa555a0000240409
0:02:41.868550	LOG	PUSH_ACK: 02 103c 01
0:02:41.871549	LOG	PUSH_DATA: Protocol version = 02, Token = 103c, Identifier = 00, JSON = {'rxpk': [{'tmst': 684386041, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 18, 'data': 'QCAgICCDrgsGAAgBsBSTW7eQ'}]}
0:02:41.872546	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 83, FCnt: 0bae, FOpts: 060008), FPort: 01, FRMPayload: 05bf, MIC: 935bb790)
0:02:41.874546	LOG	Server <---------- DUT
0:02:41.875546	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:41.877545	LOG	Command Answer: 060008
0:02:41.920519	LOG	MAC command communication completed
0:02:41.923519	LOG	Send MAC command block process starts
0:02:43.135827	LOG	PULL_DATA: 02 fba0 02 aa555a0000240409
0:02:43.137826	LOG	PULL_ACK: 02 fba0 04
0:02:51.843867	LOG	PUSH_ACK: 02 103d 01
0:02:51.845865	LOG	PUSH_DATA: Protocol version = 02, Token = 103d, Identifier = 00, JSON = {'rxpk': [{'tmst': 694386121, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCArwsBeMTzCDH2'}]}
0:02:51.846865	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0baf, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: f30831f6)
0:02:51.847864	LOG	Server <---------- DUT
0:02:51.849863	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e6, FOpts:), FPort: 00, FRMPayload: 03500000617f06), MIC: bc304800)
0:02:51.851862	LOG	PULL_RESP: Protocol version = 02, Token = 7958, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 696386121, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 20, 'data': 'YCAgICAA5gcADYtGArN0frwwSAA='}}
0:02:51.853861	LOG	Server ----------> DUT
0:02:51.857859	LOG	TX_ACK: 02 7958 05 aa555a0000240409
0:02:53.325207	LOG	PULL_DATA: 02 932b 02 aa555a0000240409
0:02:53.326207	LOG	PULL_ACK: 02 932b 04
0:02:56.878185	LOG	PUSH_ACK: 02 103e 01
0:02:56.880183	LOG	PUSH_DATA: Protocol version = 02, Token = 103e, Identifier = 00, JSON = {'rxpk': [{'tmst': 699393850, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCsAsDBwGnss62CQs='}]}
0:02:56.882181	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0bb0, FOpts: 0307), FPort: 01, FRMPayload: 05bf, MIC: ceb6090b)
0:02:56.883180	LOG	Server <---------- DUT
0:02:56.884180	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:02:56.886179	LOG	Command Answer: 0307
0:02:56.930154	LOG	MAC command communication completed

0:02:56.933152	LOG	Receive frame on specific channels process starts
0:02:56.943147	LOG	Attempt 1/15
0:03:03.405465	LOG	PULL_DATA: 02 77e8 02 aa555a0000240409
0:03:03.409481	LOG	PULL_ACK: 02 77e8 04
0:03:06.869494	LOG	PUSH_ACK: 02 1041 01
0:03:06.871492	LOG	PUSH_DATA: Protocol version = 02, Token = 1041, Identifier = 00, JSON = {'rxpk': [{'tmst': 709393938, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAsQsBG18HQyu9'}]}
0:03:06.873491	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb1, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 07432bbd)
0:03:06.875490	LOG	Server <---------- DUT
0:03:06.876488	LOG	Attempt 2/15
0:03:11.858127	LOG	PUSH_ACK: 02 1042 01
0:03:11.860125	LOG	PUSH_DATA: Protocol version = 02, Token = 1042, Identifier = 00, JSON = {'rxpk': [{'tmst': 714396530, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAsgsBRJfiiWk1'}]}
0:03:11.861125	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb2, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: e2896935)
0:03:11.862125	LOG	Server <---------- DUT
0:03:11.863124	LOG	Attempt 3/15
0:03:13.485198	LOG	PULL_DATA: 02 972c 02 aa555a0000240409
0:03:13.487197	LOG	PULL_ACK: 02 972c 04
0:03:16.848846	LOG	PUSH_ACK: 02 1043 01
0:03:16.850845	LOG	PUSH_DATA: Protocol version = 02, Token = 1043, Identifier = 00, JSON = {'rxpk': [{'tmst': 719399130, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAswsB6PFSpb4m'}]}
0:03:16.851843	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb3, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 52a5be26)
0:03:16.852844	LOG	Server <---------- DUT
0:03:16.854842	LOG	Attempt 4/15
0:03:21.840001	LOG	PUSH_ACK: 02 1045 01
0:03:21.842001	LOG	PUSH_DATA: Protocol version = 02, Token = 1045, Identifier = 00, JSON = {'rxpk': [{'tmst': 724401722, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAtAsBlXuck9+A'}]}
0:03:21.843002	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb4, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 9c93df80)
0:03:21.844001	LOG	Server <---------- DUT
0:03:21.845998	LOG	Attempt 5/15
0:03:23.565195	LOG	PULL_DATA: 02 b402 02 aa555a0000240409
0:03:23.566196	LOG	PULL_ACK: 02 b402 04
0:03:26.881909	LOG	PUSH_ACK: 02 1046 01
0:03:26.883906	LOG	PUSH_DATA: Protocol version = 02, Token = 1046, Identifier = 00, JSON = {'rxpk': [{'tmst': 729404306, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAtQsB9Xcl+yKi'}]}
0:03:26.885905	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb5, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 25fb22a2)
0:03:26.886905	LOG	Server <---------- DUT
0:03:26.888904	LOG	Attempt 6/15
0:03:31.873064	LOG	PUSH_ACK: 02 1047 01
0:03:31.875064	LOG	PUSH_DATA: Protocol version = 02, Token = 1047, Identifier = 00, JSON = {'rxpk': [{'tmst': 734406906, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAtgsBJlVlb6+2'}]}
0:03:31.876063	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb6, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 656fafb6)
0:03:31.878064	LOG	Server <---------- DUT
0:03:31.879061	LOG	Attempt 7/15
0:03:33.645055	LOG	PULL_DATA: 02 276f 02 aa555a0000240409
0:03:33.649053	LOG	PULL_ACK: 02 276f 04
0:03:36.879213	LOG	PUSH_ACK: 02 1049 01
0:03:36.881212	LOG	PUSH_DATA: Protocol version = 02, Token = 1049, Identifier = 00, JSON = {'rxpk': [{'tmst': 739409514, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -4, 'size': 15, 'data': 'QCAgICCAtwsBIvdkeSDl'}]}
0:03:36.883211	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb7, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 647920e5)
0:03:36.884210	LOG	Server <---------- DUT
0:03:36.886209	LOG	Attempt 8/15
0:03:41.869371	LOG	PUSH_ACK: 02 104a 01
0:03:41.871370	LOG	PUSH_DATA: Protocol version = 02, Token = 104a, Identifier = 00, JSON = {'rxpk': [{'tmst': 744412114, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAuAsBbu1KCUMp'}]}
0:03:41.872369	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb8, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 4a094329)
0:03:41.874368	LOG	Server <---------- DUT
0:03:41.875367	LOG	Attempt 9/15
0:03:43.724315	LOG	PULL_DATA: 02 887d 02 aa555a0000240409
0:03:43.726313	LOG	PULL_ACK: 02 887d 04
0:03:46.859528	LOG	PUSH_ACK: 02 104b 01
0:03:46.861527	LOG	PUSH_DATA: Protocol version = 02, Token = 104b, Identifier = 00, JSON = {'rxpk': [{'tmst': 749414706, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAuQsBWhwjSpjI'}]}
0:03:46.862526	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bb9, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 234a98c8)
0:03:46.863526	LOG	Server <---------- DUT
0:03:46.865525	LOG	Attempt 10/15
0:03:51.900658	LOG	PUSH_ACK: 02 104c 01
0:03:51.902657	LOG	PUSH_DATA: Protocol version = 02, Token = 104c, Identifier = 00, JSON = {'rxpk': [{'tmst': 754417306, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -3, 'size': 15, 'data': 'QCAgICCAugsBtFJKsVzj'}]}
0:03:51.903656	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bba, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 4ab15ce3)
0:03:51.904654	LOG	Server <---------- DUT
0:03:51.906654	LOG	Attempt 11/15
0:03:53.804565	LOG	PULL_DATA: 02 ae90 02 aa555a0000240409
0:03:53.806562	LOG	PULL_ACK: 02 ae90 04
0:03:56.891807	LOG	PUSH_ACK: 02 104d 01
0:03:56.895804	LOG	PUSH_DATA: Protocol version = 02, Token = 104d, Identifier = 00, JSON = {'rxpk': [{'tmst': 759419890, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAuwsByK4sk4Yg'}]}
0:03:56.899802	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bbb, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 2c938620)
0:03:56.902800	LOG	Server <---------- DUT

0:03:56.907797	LOG	Attempt 12/15
0:04:01.883961	LOG	PUSH_ACK: 02 104e 01
0:04:01.885960	LOG	PUSH_DATA: Protocol version = 02, Token = 104e, Identifier = 00, JSON = {'rxpk': [{'tmst': 764422506, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAvAsBXvFp55xw'}]}
0:04:01.887959	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bbc, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 69e79c70)
0:04:01.888960	LOG	Server <---------- DUT
0:04:01.889960	LOG	Attempt 13/15
0:04:03.884821	LOG	PULL_DATA: 02 0643 02 aa555a0000240409
0:04:03.889819	LOG	PULL_ACK: 02 0643 04
0:04:06.888112	LOG	PUSH_ACK: 02 1050 01
0:04:06.891109	LOG	PUSH_DATA: Protocol version = 02, Token = 1050, Identifier = 00, JSON = {'rxpk': [{'tmst': 769425090, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAvQsBn/RyKYAJ'}]}
0:04:06.892110	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bbd, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 72298009)
0:04:06.894107	LOG	Server <---------- DUT
0:04:06.896106	LOG	Attempt 14/15
0:04:11.878268	LOG	PUSH_ACK: 02 1051 01
0:04:11.880267	LOG	PUSH_DATA: Protocol version = 02, Token = 1051, Identifier = 00, JSON = {'rxpk': [{'tmst': 774427682, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAvgsBoJWhsFOo'}]}
0:04:11.882267	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bbe, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: a1b053a8)
0:04:11.883265	LOG	Server <---------- DUT
0:04:11.885265	LOG	Attempt 15/15
0:04:13.965079	LOG	PULL_DATA: 02 b18c 02 aa555a0000240409
0:04:13.966079	LOG	PULL_ACK: 02 b18c 04
0:04:16.868426	LOG	PUSH_ACK: 02 1052 01
0:04:16.870424	LOG	PUSH_DATA: Protocol version = 02, Token = 1052, Identifier = 00, JSON = {'rxpk': [{'tmst': 779430266, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': 0, 'size': 15, 'data': 'QCAgICCAvwsBozia+lZJ'}]}
0:04:16.872425	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bbf, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 9afa5649)
0:04:16.873425	LOG	Server <---------- DUT
0:04:16.879420	LOG	Receive frame on specific channels process tested successfully
0:04:16.884417	LOG	End Test Step: Incorrect MAC Commands
0:04:16.889414	LOG	Partial Verdict: PASS
0:04:16.893412	LOG	==========
0:04:16.898409	LOG	==========
0:04:16.900407	LOG	Start Test Step: Restore default settings
0:04:16.909403	LOG	Send RXTimingSetupReq process starts
0:04:21.909612	LOG	PUSH_ACK: 02 1053 01
0:04:21.911611	LOG	PUSH_DATA: Protocol version = 02, Token = 1053, Identifier = 00, JSON = {'rxpk': [{'tmst': 784432866, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAwAsBy/h0Tj+M'}]}
0:04:21.913610	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bc0, FOpts:), FPort: 01, FRMPayload: 05bf, MIC: 744e3f8c)
0:04:21.914609	LOG	Server <---------- DUT

0:04:21.915608	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e7, FOpts:), FPort: 00, FRMPayload: 0800), MIC: 355f7133)
0:04:21.918607	LOG	PULL_RESP: Protocol version = 02, Token = 1264, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 786432866, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAA5wcAScE1X3Ez'}}
0:04:21.919606	LOG	Server ----------> DUT
0:04:21.924603	LOG	TX_ACK: 02 1264 05 aa555a0000240409
0:04:24.014413	LOG	PULL_DATA: 02 54e8 02 aa555a0000240409
0:04:24.016412	LOG	PULL_ACK: 02 54e8 04
0:04:26.882779	LOG	PUSH_ACK: 02 1054 01
0:04:39.058881	LOG	PUSH_DATA: Protocol version = 02, Token = 1054, Identifier = 00, JSON = {'rxpk': [{'tmst': 789440599, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -4, 'size': 16, 'data': 'QCAgICCBwQsIAUDG7bzt+w=='}]}
0:04:39.060879	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0bc1, FOpts: 08), FPort: 01, FRMPayload: 05bf, MIC: edbcedfb)
0:04:39.062878	LOG	Server <---------- DUT
0:04:39.063880	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:39.065876	LOG	Command Answer: 08
0:04:39.079868	LOG	MAC command communication completed
0:04:39.086865	LOG	Send MAC command block process starts
0:04:44.173967	LOG	PULL_DATA: 02 288c 02 aa555a0000240409
0:04:44.375852	LOG	PULL_ACK: 02 288c 04
0:04:46.911712	LOG	PUSH_ACK: 02 1058 01
0:04:46.913711	LOG	PUSH_DATA: Protocol version = 02, Token = 1058, Identifier = 00, JSON = {'rxpk': [{'tmst': 809451039, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -3, 'size': 16, 'data': 'QCAgICCBwwsIAfx2vSixiQ=='}]}
0:04:46.915710	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 81, FCnt: 0bc3, FOpts: 08), FPort: 01, FRMPayload: 05bf, MIC: bd28b189)
0:04:46.916711	LOG	Server <---------- DUT
0:04:46.918709	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07e8, FOpts:), FPort: 00, FRMPayload: 03500700010500d2ad84), MIC: 63e061e1)
0:04:46.921707	LOG	PULL_RESP: Protocol version = 02, Token = f1c1, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 811451039, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF10BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 23, 'data': 'YCAgICAA6AcAByO0+gLy+60C02PgYeE='}}
0:04:46.923706	LOG	Server ----------> DUT
0:04:46.928703	LOG	TX_ACK: 02 f1c1 05 aa555a0000240409
0:04:54.274519	LOG	PULL_DATA: 02 059f 02 aa555a0000240409
0:04:54.375462	LOG	PULL_ACK: 02 059f 04
0:04:56.916014	LOG	PUSH_ACK: 02 105a 01
0:04:56.918012	LOG	PUSH_DATA: Protocol version = 02, Token = 105a, Identifier = 00, JSON = {'rxpk': [{'tmst': 819456272, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.8, 'rssi': -3, 'size': 19, 'data': 'QCAgICCExAsDBwUHAeqU8D2fTA=='}]}
0:04:56.920015	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 84, FCnt: 0bc4, FOpts: 03070507), FPort: 01, FRMPayload: 05bf, MIC: f03d9f4c)
0:04:56.921011	LOG	Server <---------- DUT
0:04:56.922010	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:04:56.924010	LOG	Command Answer: 03070507
0:04:56.992971	LOG	MAC command communication completed

0:04:57.001965	LOG	End Test Step: Restore default settings
0:04:57.006964	LOG	Partial Verdict: PASS
0:04:57.011959	LOG	==========
0:04:57.015975	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_020
0:04:57.017957	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_021	
Verdict	PASS	
Date	2021-10-18 17:59:37	
Comments	Multiple MAC commands prioritization	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.026620	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_021
0:00:00.070593	LOG	==========
0:00:00.072594	LOG	Start Test Step: Device activation
0:00:00.128561	LOG	Activation process has finished successfully
0:00:00.130561	LOG	Data stored in the DUT after Activation:
0:00:00.132560	LOG	DevAddr: 20202020
0:00:00.135558	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.138557	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.141555	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.144554	LOG	End Test Step: Device activation
0:00:00.147568	LOG	Partial Verdict: PASS
0:00:00.151566	LOG	==========
0:00:00.156545	LOG	==========
0:00:00.158545	LOG	Start Test Step: DUT Pre-condition settings
0:00:00.169555	LOG	DUT Pre-condition activation process starts
0:00:00.172536	LOG	DUT Pre-condition activation completed
0:00:00.175533	LOG	End Test Step: DUT Pre-condition settings
0:00:00.179531	LOG	Partial Verdict: PASS
0:00:00.183529	LOG	==========
0:00:00.187529	LOG	==========
0:00:00.190527	LOG	Start Test Step: Test MAC Command priorization
0:00:00.202518	LOG	Send MAC command block process starts
0:00:03.151838	LOG	PULL_DATA: 02 cc19 02 aa555a0000240409
0:00:03.153838	LOG	PULL_ACK: 02 cc19 04
0:00:03.155836	LOG	First PULL_DATA received
0:00:05.602442	LOG	PUSH_ACK: 02 105d 01
0:00:05.604443	LOG	PUSH_DATA: Protocol version = 02, Token = 105d, Identifier = 00, JSON = {'rxpk': [{'tmst': 829461480, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 17, 'data': 'QCAgICCCxQsFBwHLI0NGoOk='}]}
0:00:05.606441	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0bc5, FOpts: 0507), FPort: 01, FRMPayload: 05bf, MIC: 4346a0e9)
0:00:05.607441	LOG	Server <---------- DUT
0:00:05.609440	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 06, FCnt: 07e9, FOpts: 060350070001), FPort: e0, FRMPayload: 20), MIC: 7664608b)

0:00:05.611439	LOG	PULL_RESP: Protocol version = 02, Token = aeb5, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 831461480, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 20, 'data': 'YCAgICAG6QcGA1AHAAHgWXZkYIs='}}
0:00:05.612438	LOG	Server ----------> DUT
0:00:05.617435	LOG	TX_ACK: 02 aeb5 05 aa555a0000240409
0:00:13.182124	LOG	PULL_DATA: 02 4ec7 02 aa555a0000240409
0:00:13.183123	LOG	PULL_ACK: 02 4ec7 04
0:00:15.646721	LOG	PUSH_ACK: 02 105e 01
0:00:15.648720	LOG	PUSH_DATA: Protocol version = 02, Token = 105e, Identifier = 00, JSON = {'rxpk': [{'tmst': 839471889, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 8.8, 'rssi': -3, 'size': 21, 'data': 'QCAgICCGxgsGAAcDBwIBXBVM9InL'}]}
0:00:15.649719	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 86, FCnt: 0bc6, FOpts: 060007030702), FPort: 01, FRMPayload: 05c0, MIC: 4cf489cb)
0:00:15.651718	LOG	Server <---------- DUT
0:00:15.652718	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:15.653717	LOG	Command Answer: 060007030702
0:00:15.654718	LOG	Sending LinkCheckAns to DUT: 020301
0:00:15.656716	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ea, FOpts:), FPort: 00, FRMPayload: 020301), MIC: 3a7da8a2)
0:00:15.659713	LOG	PULL_RESP: Protocol version = 02, Token = e347, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 841471889, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 16, 'data': 'YCAgICAA6gcACybnOn2oog=='}}
0:00:15.660713	LOG	Server ----------> DUT
0:00:15.710684	LOG	MAC command communication completed
0:00:15.713683	LOG	End Test Step: Test MAC Command priorization
0:00:15.717680	LOG	Partial Verdict: PASS
0:00:15.720679	LOG	==========
0:00:15.727675	LOG	==========
0:00:15.730673	LOG	Start Test Step: Test MAC Command payload truncation
0:00:15.742668	LOG	Send LinkADRReq process starts
0:00:23.222405	LOG	PULL_DATA: 02 b9e2 02 aa555a0000240409
0:00:23.261383	LOG	PULL_ACK: 02 b9e2 04
0:00:25.647025	LOG	PUSH_ACK: 02 105f 01
0:00:25.649025	LOG	PUSH_DATA: Protocol version = 02, Token = 105f, Identifier = 00, JSON = {'rxpk': [{'tmst': 849466778, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAxwsBhUJL2hxp'}]}
0:00:25.651022	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bc7, FOpts:), FPort: 01, FRMPayload: 05c0, MIC: 4bda1c69)
0:00:25.652022	LOG	Server <---------- DUT
0:00:25.654021	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07eb, FOpts:), FPort: 00, FRMPayload: 0350070001), MIC: d927ec82)
0:00:25.657020	LOG	PULL_RESP: Protocol version = 02, Token = 1732, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 851466778, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 18, 'data': 'YCAgICAA6wcA3iLg59DZJ+yC'}}
0:00:25.659018	LOG	Server ----------> DUT
0:00:25.664015	LOG	TX_ACK: 02 1732 05 aa555a0000240409
0:00:30.617193	LOG	PUSH_ACK: 02 1060 01
0:00:30.621191	LOG	PUSH_DATA: Protocol version = 02, Token = 1060, Identifier = 00, JSON = {'rxpk': [{'tmst': 854474513, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu':

		'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -3, 'size': 17, 'data': 'QCAgICCCyAsDBwG7dOphNks='}]}
0:00:30.623191	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0bc8, FOpts: 0307), FPort: 01, FRMPayload: 05c0, MIC: ea61364b)
0:00:30.624191	LOG	Server <---------- DUT
0:00:30.625191	LOG	FRMPayload field and FOpts field are present. MAC command shall be present in FOpts field
0:00:30.627190	LOG	Command Answer: 0307
0:00:30.635183	LOG	MAC command communication completed
0:00:30.640180	LOG	Send MAC command block process starts
0:00:33.431590	LOG	PULL_DATA: 02 f231 02 aa555a0000240409
0:00:33.433607	LOG	PULL_ACK: 02 f231 04
0:00:40.610584	LOG	PUSH_ACK: 02 1062 01
0:00:40.612582	LOG	PUSH_DATA: Protocol version = 02, Token = 1062, Identifier = 00, JSON = {'rxpk': [{'tmst': 864474593, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAyQsBaiyDpqzY'}]}
0:00:40.614580	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bc9, FOpts:), FPort: 01, FRMPayload: 05c0, MIC: 83a6acd8)
0:00:40.615580	LOG	Server <---------- DUT
0:00:40.617578	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ec, FOpts:), FPort: 00, FRMPayload: 060500d2ad840606060606060606060606060606060300070001), MIC: 96277689)
0:00:40.619579	LOG	PULL_RESP: Protocol version = 02, Token = 2b63, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 866474593, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 39, 'data': 'YCAgICAA7AcAqkiVmox9oJrDCO362rDbF5sF+2dBcYRrnR+WJ3aJ'}}
0:00:40.620579	LOG	Server ----------> DUT
0:00:40.626574	LOG	TX_ACK: 02 2b63 05 aa555a0000240409
0:00:43.561901	LOG	PULL_DATA: 02 ca89 02 aa555a0000240409
0:00:43.563901	LOG	PULL_ACK: 02 ca89 04
0:00:48.386455	LOG	PUSH_ACK: 02 1063 01
0:00:48.412438	LOG	PUSH_DATA: Protocol version = 02, Token = 1063, Identifier = 00, JSON = {'rxpk': [{'tmst': 872212869, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -1, 'size': 63, 'data': 'QCAgICCAygsAoyUGND8WX5nICSNEsX93j0/wkvXVU56Geh3WAQWaPi7h8/q22XfKVW5HWilqpybFUY367AvH'}]}
0:00:48.414437	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bca, FOpts:), FPort: 00, FRMPayload: 06000905070600090600090600090600090600090600090600090600090600090600090600090600090600090600009060009060009060009060009060009060009, MIC: faec0bc7)
0:00:48.415436	LOG	Server <---------- DUT
0:00:48.417436	LOG	Command Answer: 06000905070600090600090600090600090600090600090600090600090600090600090600090600090600090600009060009060009060009060009060009060009
0:00:48.552359	LOG	MAC command communication completed
0:00:48.681387	LOG	Check previous uplink data rate process starts
0:00:48.686385	LOG	Uplink received with expected Data Rate
0:00:48.689384	LOG	End Test Step: Test MAC Command payload truncation
0:00:48.693382	LOG	Partial Verdict: PASS
0:00:48.699378	LOG	==========
0:00:48.704375	LOG	==========
0:00:48.707373	LOG	Start Test Step: Test MAC Command payload without truncation
0:00:48.721365	LOG	Send MAC command block process starts
0:00:53.641562	LOG	PULL_DATA: 02 5d7f 02 aa555a0000240409

0:00:53.643562	LOG	PULL_ACK: 02 5d7f 04
0:01:03.721821	LOG	PULL_DATA: 02 8c84 02 aa555a0000240409
0:01:03.724819	LOG	PULL_ACK: 02 8c84 04
0:01:13.811187	LOG	PULL_DATA: 02 ee14 02 aa555a0000240409
0:01:13.813184	LOG	PULL_ACK: 02 ee14 04
0:01:23.891444	LOG	PULL_DATA: 02 029c 02 aa555a0000240409
0:01:23.893442	LOG	PULL_ACK: 02 029c 04
0:01:33.971701	LOG	PULL_DATA: 02 a508 02 aa555a0000240409
0:01:33.974699	LOG	PULL_ACK: 02 a508 04
0:01:44.050960	LOG	PULL_DATA: 02 df56 02 aa555a0000240409
0:01:44.052959	LOG	PULL_ACK: 02 df56 04
0:01:54.131219	LOG	PULL_DATA: 02 9534 02 aa555a0000240409
0:01:54.133217	LOG	PULL_ACK: 02 9534 04
0:02:04.211476	LOG	PULL_DATA: 02 3e96 02 aa555a0000240409
0:02:04.215474	LOG	PULL_ACK: 02 3e96 04
0:02:14.290753	LOG	PULL_DATA: 02 d266 02 aa555a0000240409
0:02:14.292734	LOG	PULL_ACK: 02 d266 04
0:02:24.371043	LOG	PULL_DATA: 02 22d8 02 aa555a0000240409
0:02:24.373042	LOG	PULL_ACK: 02 22d8 04
0:02:34.451301	LOG	PULL_DATA: 02 06ee 02 aa555a0000240409
0:02:34.455299	LOG	PULL_ACK: 02 06ee 04
0:02:44.530639	LOG	PULL_DATA: 02 f154 02 aa555a0000240409
0:02:44.532639	LOG	PULL_ACK: 02 f154 04
0:02:54.610898	LOG	PULL_DATA: 02 b6ab 02 aa555a0000240409
0:02:54.612897	LOG	PULL_ACK: 02 b6ab 04
0:03:04.691156	LOG	PULL_DATA: 02 36a8 02 aa555a0000240409
0:03:04.695154	LOG	PULL_ACK: 02 36a8 04
0:03:14.770414	LOG	PULL_DATA: 02 dc01 02 aa555a0000240409
0:03:14.772414	LOG	PULL_ACK: 02 dc01 04
0:03:24.850672	LOG	PULL_DATA: 02 3239 02 aa555a0000240409
0:03:24.851672	LOG	PULL_ACK: 02 3239 04
0:03:34.930005	LOG	PULL_DATA: 02 80be 02 aa555a0000240409
0:03:34.933985	LOG	PULL_ACK: 02 80be 04
0:03:45.010246	LOG	PULL_DATA: 02 be6e 02 aa555a0000240409
0:03:45.012245	LOG	PULL_ACK: 02 be6e 04
0:03:55.090039	LOG	PULL_DATA: 02 d2c0 02 aa555a0000240409
0:03:55.092037	LOG	PULL_ACK: 02 d2c0 04
0:04:05.170269	LOG	PULL_DATA: 02 0a77 02 aa555a0000240409
0:04:05.175294	LOG	PULL_ACK: 02 0a77 04
0:04:15.250555	LOG	PULL_DATA: 02 c8e9 02 aa555a0000240409
0:04:15.252552	LOG	PULL_ACK: 02 c8e9 04
0:04:25.329814	LOG	PULL_DATA: 02 cd5d 02 aa555a0000240409
0:04:25.331812	LOG	PULL_ACK: 02 cd5d 04
0:04:35.410071	LOG	PULL_DATA: 02 1d0c 02 aa555a0000240409
0:04:35.413070	LOG	PULL_ACK: 02 1d0c 04
0:04:45.490328	LOG	PULL_DATA: 02 f4f0 02 aa555a0000240409
0:04:45.491329	LOG	PULL_ACK: 02 f4f0 04
0:04:55.569851	LOG	PULL_DATA: 02 7216 02 aa555a0000240409
0:04:55.571851	LOG	PULL_ACK: 02 7216 04
0:05:05.650110	LOG	PULL_DATA: 02 c878 02 aa555a0000240409
0:05:05.654109	LOG	PULL_ACK: 02 c878 04
0:05:15.729368	LOG	PULL_DATA: 02 05b9 02 aa555a0000240409
0:05:15.731367	LOG	PULL_ACK: 02 05b9 04
0:05:25.809657	LOG	PULL_DATA: 02 cdbb 02 aa555a0000240409

0:05:25.813626	LOG	PULL_ACK: 02 cdbb 04
0:05:27.071909	LOG	PUSH_ACK: 02 1074 01
0:05:27.074907	LOG	PUSH_DATA: Protocol version = 02, Token = 1074, Identifier = 00, JSON = {'rxpk': [{'tmst': 1150896197, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF12BW125', 'codr': '4/5', 'lsnr': 8.0, 'rssi': -8, 'size': 17, 'data': 'QCAgICCCywsFBwFomOzvrGk='}]}
0:05:27.075905	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0bcb, FOpts: 0507), FPort: 01, FRMPayload: 05c0, MIC: ecefac69)
0:05:27.076905	LOG	Server <---------- DUT
0:05:27.078905	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ed, FOpts:), FPort: 00, FRMPayload: 060500d2ad840606060606060606060606060606060350070001), MIC: b4d1696a)
0:05:27.081903	LOG	PULL_RESP: Protocol version = 02, Token = 103a, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1152896197, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 39, 'data': 'YCAgICAA7QcA6GFlWXLZt4JkClnZmiFaRIOg6kGXIxNm0Dy00Wlq'}}
0:05:27.083901	LOG	Server ----------> DUT
0:05:27.087900	LOG	TX_ACK: 02 103a 05 aa555a0000240409
0:05:35.899879	LOG	PULL_DATA: 02 6403 02 aa555a0000240409
0:05:35.902878	LOG	PULL_ACK: 02 6403 04
0:05:45.979155	LOG	PULL_DATA: 02 6340 02 aa555a0000240409
0:05:45.981137	LOG	PULL_ACK: 02 6340 04
0:05:56.059395	LOG	PULL_DATA: 02 0495 02 aa555a0000240409
0:05:56.061395	LOG	PULL_ACK: 02 0495 04
0:06:06.139654	LOG	PULL_DATA: 02 7a84 02 aa555a0000240409
0:06:06.143652	LOG	PULL_ACK: 02 7a84 04
0:06:16.218932	LOG	PULL_DATA: 02 5338 02 aa555a0000240409
0:06:16.221911	LOG	PULL_ACK: 02 5338 04
0:06:26.299170	LOG	PULL_DATA: 02 f226 02 aa555a0000240409
0:06:26.301170	LOG	PULL_ACK: 02 f226 04
0:06:36.379430	LOG	PULL_DATA: 02 f8fc 02 aa555a0000240409
0:06:36.382427	LOG	PULL_ACK: 02 f8fc 04
0:06:46.458687	LOG	PULL_DATA: 02 9dc0 02 aa555a0000240409
0:06:46.461686	LOG	PULL_ACK: 02 9dc0 04
0:06:56.538976	LOG	PULL_DATA: 02 e66b 02 aa555a0000240409
0:06:56.542946	LOG	PULL_ACK: 02 e66b 04
0:07:06.619205	LOG	PULL_DATA: 02 1e03 02 aa555a0000240409
0:07:06.622202	LOG	PULL_ACK: 02 1e03 04
0:07:16.698464	LOG	PULL_DATA: 02 7712 02 aa555a0000240409
0:07:16.700461	LOG	PULL_ACK: 02 7712 04
0:07:26.778720	LOG	PULL_DATA: 02 f3e9 02 aa555a0000240409
0:07:26.782718	LOG	PULL_ACK: 02 f3e9 04
0:07:36.858978	LOG	PULL_DATA: 02 28bb 02 aa555a0000240409
0:07:36.863976	LOG	PULL_ACK: 02 28bb 04
0:07:40.912670	LOG	PUSH_ACK: 02 107a 01
0:07:40.913670	LOG	PUSH_DATA: Protocol version = 02, Token = 107a, Identifier = 00, JSON = {'rxpk': [{'tmst': 1284759600, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 65, 'data': 'QCAgICCAzAsAhkbuHpXR9Dr9nuxk79ArEn0CmSbqqaBA8gOh0bDAyz1Rn85Eq4pOPQhagA5pfjKJPE/4q33jXNA='}]}
0:07:40.915670	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0bcc, FOpts:), FPort: 00, FRMPayload: 060007050706000706000706000

0:07:40.917667	LOG	Command Answer: 06000705070600070307
0:07:41.050592	LOG	MAC command communication completed
0:07:41.053591	LOG	Check previous uplink data rate process starts
0:07:41.056588	LOG	Uplink received with expected Data Rate
0:07:41.059604	LOG	End Test Step: Test MAC Command payload without truncation
0:07:41.063586	LOG	Partial Verdict: PASS
0:07:41.066584	LOG	==========
0:07:41.070582	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_021
0:07:41.072579	LOG	Final Verdict: PASS

Test Case	TP_A_EU868_ED_MAC_104_BV_022	
Verdict	PASS	
Date	2021-10-18 18:07:22	
Comments	FPort 224 Deactivation	
Technology Version	LCTT v3.1.0_D1 | GUI v1.10.0	
Core Version	LoRaWAN_L2v1.0.4/RP2_v1.0.1	
Test Specs Version	USv1.5.1/EUv1.6/KRv1.2.1/ASv1.1.1/INv1.1.1/ALLv1.1	
Project	MLSv2.0.0	
Project Creation Date	2021-10-17 22:25:22	
Sample	DevID:SAMR34-XPRO | AppID:CertApp_EU_OTAA | SW:MLSv2.0.0 | HW:SAMR34J18B	
Parameters	Conformance	TRUE

Time Stamp (ms)	Event	Summary
0:00:00.017415	LOG	Start Test Case: TP_A_EU868_ED_MAC_104_BV_022
0:00:00.054363	LOG	==========
0:00:00.056361	LOG	Start Test Step: Device activation
0:00:00.116326	LOG	Activation process has finished successfully
0:00:00.118327	LOG	Data stored in the DUT after Activation:
0:00:00.120324	LOG	DevAddr: 20202020
0:00:00.123325	LOG	AppEUI: abcdabcdabcdabcd
0:00:00.125340	LOG	NwkSKey: 711c231ad0dd5c71263994b85a0c3f30
0:00:00.127320	LOG	AppSKey: f4a9a14278f03facf15686dd3197922b
0:00:00.130318	LOG	End Test Step: Device activation
0:00:00.133317	LOG	Partial Verdict: PASS
0:00:00.138314	LOG	==========
0:00:00.145310	LOG	==========
0:00:00.147309	LOG	Start Test Step: FPort 224 Deactivation
0:00:04.435866	LOG	FPort 224 Deactivation process starts
0:00:11.501872	LOG	PUSH_DATA received while waiting first PULL_DATA
0:00:12.662211	LOG	PULL_DATA: 02 752f 02 aa555a0000240409
0:00:12.664210	LOG	PULL_ACK: 02 752f 04
0:00:12.665208	LOG	First PULL_DATA received
0:00:21.490235	LOG	PUSH_ACK: 02 107d 01
0:00:21.493233	LOG	PUSH_DATA: Protocol version = 02, Token = 107d, Identifier = 00, JSON = {'rxpk': [{'tmst': 1309712424, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -1, 'size': 17, 'data': 'QCAgICCCzgsFBwE3XtAN0LA='}]}
0:00:21.494234	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 82, FCnt: 0bce, FOpts: 0507), FPort: 01, FRMPayload: 05c0, MIC: d00dd0b0)
0:00:21.496232	LOG	Server <---------- DUT
0:00:21.497231	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ee, FOpts:), FPort: e0, FRMPayload: 7e), MIC: ba8e9840)

0:00:21.500229	LOG	Frame command sent to the DUT
0:00:21.501228	LOG	PULL_RESP: Protocol version = 02, Token = bcd0, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1311712424, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 14, 'data': 'YCAgICAA7gfgzbqOmEA='}}
0:00:21.502228	LOG	Server ----------> DUT
0:00:21.512223	LOG	Over-The-Air Activation (OTAA) process starts
0:00:22.761512	LOG	PULL_DATA: 02 e8d9 02 aa555a0000240409
0:00:22.763510	LOG	PULL_ACK: 02 e8d9 04
0:00:31.877318	LOG	PUSH_ACK: 02 107e 01
0:00:31.883316	LOG	PUSH_DATA: Protocol version = 02, Token = 107e, Identifier = 00, JSON = {'rxpk': [{'tmst': 1320110346, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 10.0, 'rssi': -4, 'size': 23, 'data': 'AM2rzavNq82reFY0EnhWNBIRAPMcoKo='}]}
0:00:31.884314	LOG	DATA: (MHDR: 00, Join-Request: (AppEUI: abcdabcdabcdabcd, DevEUI: 1234567812345678, DevNonce: 0011),MIC: f31ca0aa)
0:00:31.886313	LOG	Server <---------- DUT
0:00:31.888312	LOG	DevNonce is greater than the previous in Join Request
0:00:31.889311	LOG	Previous DevNonce: 16
0:00:31.890310	LOG	Actual DevNonce: 17
0:00:31.893310	LOG	PHYPayload: (MHDR: 20, Join-Response: (JoinNonce: 270000, NetID: 000000, DevAddr: 20202020, DLSettings: 00, RxDelay: 01, CFList:), MIC: 2bb2a0b2)
0:00:31.905303	LOG	PULL_RESP: Protocol version = 02, Token = 5446, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1326110346, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'IAcm9pQHVNykuFvp3dkxWy0='}}
0:00:31.907303	LOG	Server ----------> DUT
0:00:31.911299	LOG	TX_ACK: 02 5446 05 aa555a0000240409
0:00:32.951723	LOG	PULL_DATA: 02 324c 02 aa555a0000240409
0:00:32.953705	LOG	PULL_ACK: 02 324c 04
0:00:39.184156	LOG	PUSH_ACK: 02 107f 01
0:00:39.187154	LOG	PUSH_DATA: Protocol version = 02, Token = 107f, Identifier = 00, JSON = {'rxpk': [{'tmst': 1327378358, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.5, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAAABAQnHsh+I'}]}
0:00:39.188172	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0000, FOpts:), FPort: 01, FRMPayload: 0000, MIC: c7b21f88)
0:00:39.189172	LOG	Server <---------- DUT
0:00:39.193151	LOG	Over-The-Air Activation (OTAA) process has finished successfully
0:00:39.196150	LOG	Activation process has finished successfully
0:00:39.198148	LOG	Data stored in the DUT after Activation:
0:00:39.201147	LOG	DevAddr: 20202020
0:00:39.204144	LOG	AppEUI: abcdabcdabcdabcd
0:00:39.207143	LOG	NwkSKey: e1d61fa964026760c5229b45107c7ff4
0:00:39.210141	LOG	AppSKey: f3e4dcfb686322954cfe3ab5108f49d1
0:00:39.250118	LOG	Send Test Command TxPeriodicityChange process starts
0:00:43.031964	LOG	PULL_DATA: 02 1a37 02 aa555a0000240409
0:00:43.033963	LOG	PULL_ACK: 02 1a37 04
0:00:44.173315	LOG	PUSH_ACK: 02 1080 01
0:00:44.175314	LOG	PUSH_DATA: Protocol version = 02, Token = 1080, Identifier = 00, JSON = {'rxpk': [{'tmst': 1332380894, 'chan': 0, 'rfch': 1, 'freq': 868.1, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.2, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAQABW59qGvUo'}]}
0:00:44.176312	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0001, FOpts:), FPort: 01, FRMPayload: 0000, MIC: 6a1af528)
0:00:44.177314	LOG	Server <---------- DUT

0:00:44.179310	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07ef, FOpts:), FPort: e0, FRMPayload: 0601), MIC: f03f0933)
0:00:44.181310	LOG	Frame command sent to the DUT
0:00:44.183309	LOG	PULL_RESP: Protocol version = 02, Token = bc01, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1334380894, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 15, 'data': 'YCAgICAA7wfgmSHwPwkz'}}
0:00:44.184310	LOG	Server ----------> DUT
0:00:44.189305	LOG	Send Test Command TxPeriodicityChange process completed
0:00:44.194302	LOG	Check if last uplink FPort is not 224 process starts
0:00:44.201298	LOG	Check if last uplink FPort is not 224 process complete
0:00:44.206296	LOG	Wait Until FPort 224 is disabled process starts
0:00:52.448600	LOG	PUSH_ACK: 02 1083 01
0:00:52.450599	LOG	PUSH_DATA: Protocol version = 02, Token = 1083, Identifier = 00, JSON = {'rxpk': [{'tmst': 1340638376, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -2, 'size': 15, 'data': 'QCAgICCAAgABsdMPxwQQ'}]}
0:00:52.452598	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0002, FOpts:), FPort: 01, FRMPayload: 0001, MIC: 0fc70410)
0:00:52.454597	LOG	Server <---------- DUT
0:00:52.456595	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07f0, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: 499e29a1)
0:00:52.459594	LOG	PULL_RESP: Protocol version = 02, Token = fd52, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1342638376, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAA8AfgE5/mXUmeKaE='}}
0:00:52.460593	LOG	Server ----------> DUT
0:00:52.462592	LOG	Echo in FPort 224 sent to the DUT
0:00:53.092235	LOG	PULL_DATA: 02 e194 02 aa555a0000240409
0:00:53.093234	LOG	PULL_ACK: 02 e194 04
0:00:57.407775	LOG	PUSH_ACK: 02 1084 01
0:00:57.409774	LOG	PUSH_DATA: Protocol version = 02, Token = 1084, Identifier = 00, JSON = {'rxpk': [{'tmst': 1345640994, 'chan': 1, 'rfch': 1, 'freq': 868.3, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.0, 'rssi': -1, 'size': 15, 'data': 'QCAgICCAAwABPk/+z4ta'}]}
0:00:57.410773	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0003, FOpts:), FPort: 01, FRMPayload: 0002, MIC: fecf8b5a)
0:00:57.411773	LOG	Server <---------- DUT
0:00:57.413772	LOG	PHYPayload: (MHDR: 60, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 00, FCnt: 07f1, FOpts:), FPort: e0, FRMPayload: 08010203), MIC: 4f28472c)
0:00:57.415771	LOG	PULL_RESP: Protocol version = 02, Token = 95d7, Identifier = 03, JSON = {'txpk': {'imme': False, 'tmst': 1347640994, 'rfch': 0, 'powe': 14, 'ipol': True, 'datr': 'SF12BW125', 'freq': 869.525, 'modu': 'LORA', 'codr': '4/5', 'prea': 8, 'ncrc': True, 'size': 17, 'data': 'YCAgICAA8QfgcChcKU8oRyw='}}
0:00:57.442756	LOG	Server ----------> DUT
0:00:57.444755	LOG	Echo in FPort 224 sent to the DUT
0:01:02.409926	LOG	PUSH_ACK: 02 1085 01
0:01:02.414923	LOG	PUSH_DATA: Protocol version = 02, Token = 1085, Identifier = 00, JSON = {'rxpk': [{'tmst': 1350643605, 'chan': 2, 'rfch': 1, 'freq': 868.5, 'stat': 1, 'modu': 'LORA', 'datr': 'SF7BW125', 'codr': '4/5', 'lsnr': 9.8, 'rssi': -3, 'size': 15, 'data': 'QCAgICCABAAB/2Yjwh3w'}]}
0:01:02.416923	LOG	DATA: (MHDR: 40, MACPayload: (FHDR: (DevAddr: 20202020, FCtrl: 80, FCnt: 0004, FOpts:), FPort: 01, FRMPayload: 0003, MIC: 23c21df0)
0:01:02.417922	LOG	Server <---------- DUT
0:01:02.420920	LOG	Wait Until FPort 224 is disabled process starts
0:01:02.424918	LOG	FPort 224 Deactivation process completed successfully

0:01:02.428918	LOG	End Test Step: FPort 224 Deactivation
0:01:02.433912	LOG	Partial Verdict: PASS
0:01:02.440908	LOG	==========
0:01:02.446905	LOG	End Test Case: TP_A_EU868_ED_MAC_104_BV_022
0:01:02.449903	LOG	Final Verdict: PASS

Appendix B – ICS

NAME	VALUE
DUT is a Class A Device (All End Devices)	TRUE
DUT works in USA 915MHz ISM Band	TRUE
DUT supports Over-The-Air Activation (OTAA) mechanism	TRUE
DUT supports Adaptive Data Rate (ADR) feature	TRUE
DUT supports Trigger Join Request command in Test Mode	TRUE
DUT supports LinkADRReq block	TRUE
DUT supports the Lorawan-1.0.x-join-synch-issues-remedies-v1.0.0	TRUE
DUT implements LoRaWAN v1.0.4 certification requirements	TRUE
DUT supports uplink re-transmissions for Confirmed frames	TRUE

Appendix C – IXIT

NAME	VALUE
Minimum transmission power	0
Maximum transmission power	0
End-device identifier (DevEUI)	'1234567812345678'O
End-device Address asigned during activation (DevAddr)	'20202020'O
Maximum number of uplinks re-transmission	1
Frame counter size	32
Application session key (AppSKey)	'12345678123456781234567812345678'O
Network session key (NwkSKey)	'ABCDABCDABCDABCDABCDABCDABCDABCD'O
Application key (AppKey)	'1234567812345678ABCDABCDABCDABCD'O
Application identifier (AppEUI)	'ABCDABCDABCDABCD'O
End-device Address (DevAddr)	'20202020'O

Appendix D – General Parameters

NAME	VALUE
Gateway IP Address	10.40.56.137
Gateway socket port	1780
Default Tx Power (dBm)	14
Default Tx Antenna	0
EU868 RECEIVE_DELAY1 (s)	1.0
EU868 RECEIVE_DELAY2 (s)	2.0
EU868 JOIN_ACCEPT_DELAY1 (s)	5.0
EU868 JOIN_ACCEPT_DELAY2(s)	6.0
EU868 RX2 Receive window frequency	869.525
EU868 RX2 Receive window DR	SF12BW125
US915 RECEIVE_DELAY1 (s)	1.0
US915 RECEIVE_DELAY2 (s)	2.0
US915 JOIN_ACCEPT_DELAY1(s)	5.0
US915 JOIN_ACCEPT_DELAY2(s)	6.0
US915 RX2 Receive window frequency	923.3
General frequency offset applied that defines the AS923 country	0
Number of supported channels in Gateway	8
RU864 RECEIVE_DELAY1 (s)	1.0
RU864 RECEIVE_DELAY2 (s)	2.0
RU864 JOIN_ACCEPT_DELAY1 (s)	5.0
RU864 JOIN_ACCEPT_DELAY2(s)	6.0
RU864 RX2 Receive window frequency	869.1
RU864 RX2 Receive window DR	SF12BW125
AU915 RECEIVE_DELAY1 (s)	1.0
AU915 RECEIVE_DELAY2 (s)	2.0
AU915 JOIN_ACCEPT_DELAY1(s)	5.0
AU915 JOIN_ACCEPT_DELAY2(s)	6.0
AU915 RX2 Receive window frequency	923.3
AU915 RX2 Receive window DR	SF12BW500
EU868 pingSlot DR	SF9BW125
AS923 pingSlot DR	SF9BW125
US915 Beacon DR	SF12BW500
US915 Beacon default frequency	923.3
US915 Class B default pingSlot frequency	923.3
US915 pingSlot DR	SF12BW500
KR920 Beacon DR	SF9BW125
KR920 Beacon default frequency	923.1
KR920 Class B default pingSlot frequency	923.1
KR920 pingSlot DR	SF9BW125
IN865 Beacon DR	SF8BW125
IN865 Beacon default frequency	866.550
IN865 Class B default pingSlot frequency	866.550
IN865 pingSlot DR	SF8BW125
RU864 Beacon DR	SF9BW125
RU864 Beacon default frequency	869.1
RU864 Class B default pingSlot frequency	868.9

RU864 pingSlot DR	SF9BW125
AU915 Beacon DR	SF12BW500
AU915 Beacon default frequency	923.3
AU915 Class B default pingSlot frequency	923.3
AU915 pingSlot DR	SF12BW500
EU868 Class B default pingSlot frequency	869.525
AS923 Beacon DR	SF9BW125
AS923 Beacon default frequency	923.4
AS923 Class B default pingSlot frequency	923.4
US915 RX2 Receive window DR	SF12BW500
General Timer	90
KR920 RECEIVE_DELAY1 (s)	1.0
KR920 RECEIVE_DELAY2 (s)	2.0
KR920 JOIN_ACCEPT_DELAY1(s)	5.0
KR920 JOIN_ACCEPT_DELAY2(s)	6.0
KR920 RX2 Receive window frequency	921.9
Gateway model	Semtech
IN865 RECEIVE_DELAY1 (s)	1.0
IN865 RECEIVE_DELAY2 (s)	2.0
IN865 JOIN_ACCEPT_DELAY1 (s)	5.0
IN865 JOIN_ACCEPT_DELAY2 (s)	6.0
IN865 RX2 Receive window DR	SF10BW125
IN865 RX2 Receive window frequency	866.550
Verbosity level for Logs	TRUE
EU868 Beacon DR	SF9BW125
EU868 Beacon default frequency	869.525
KR920 RX2 Receive window DR	SF12BW125
AS923 RECEIVE_DELAY1 (s)	1.0
AS923 RECEIVE_DELAY2 (s)	2.0
AS923 JOIN_ACCEPT_DELAY1 (s)	5.0
AS923 JOIN_ACCEPT_DELAY2 (s)	6.0
AS923 RX2 Receive window DR	SF10BW125
AS923 RX2 Receive window frequency	923.2
Network Server IP Address	10.40.56.41

Appendix E – Photographs