No.: SRTC2019-9004(F)-19032001(C) FCC ID: 2ADOBHLTE223E

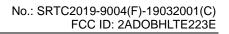
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# APPENDIX A – TEST DATA OF CONDUCTED EMISSION

# LTE Band 5

# 1 RF Power Output Antenna Gain=-2.2dBi

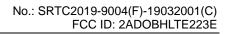
Antenna Ga						Conducted power
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	(dBm)
				1	0	22.63
	824.7	20407		1	5	22.63
	824.7	20407		3	2	22.46
				6	0	22.44
				1	0	22.50
ODCK	926 F	20525	4.4	1	5	22.50
QPSK	836.5	20525	1.4	3	2	22.41
				6	0	22.36
				1	0	22.52
	040.0	20042		1	5	22.52
	848.3	20643		3	2	22.42
				6	0	22.34
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power
	1 , , ,					(dBm)
				1	0	22.02
	824.7	20407		1	5	22.02
	<b>5</b>			3	2	21.41
				6	0	21.03
				1	0	22.19
16QAM	836.5	20525	1.4	1	5	22.19
100,111		20323		3	2	21.21
				6	0	21.09
				1	0	22.07
	848.3	20643		1	5	22.07
	040.5	20043		3	2	21.28
				6	0	21.14
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
				1	0	22.02
				1	5	22.02
	824.7	20407		3	2	21.34
				6	0	21.00
				1	0	22.19
				1	5	22.19
64QAM	836.5	20525	1.4	3	2	21.11
				6	0	21.00
				1	0	22.06
				1	5	22.06
	848.3	20643		3	2	21.20
	0.10.10	200.0		6	0	21.07
			l	l 0	U	21.01



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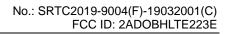
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
				1	0	22.60
	005.5	20445		1	14	22.60
	825.5	20415		8	4	22.43
				15	0	22.41
				1	0	22.47
ODCK	936.5	20525	3	1	14	22.47
QPSK	836.5	20525	3	8	4	22.40
				15	0	22.31
				1	0	22.47
	847.5	20635		1	14	22.47
	647.5	20033		8	4	22.40
				15	0	22.32
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power
Modulation	Carrier frequency (MHz)	OL Channel	DVV	KD SIZE	Kb Oliset	(dBm)
				1	0	22.00
	825.5	20415		1	14	22.00
	625.5	20415		8	4	21.39
				15	0	21.01
<u> </u>				1	0	22.17
16QAM	836.5	20525	3	1	14	22.17
IOQAW		20525	3	8	4	21.19
				15	0	21.07
				1	0	22.09
	847.5	20635		1	14	22.07
	047.5	20033		8	4	21.27
				15	0	21.13
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
				1	0	22.01
	825.5	20415		1	14	22.01
	825.5	20415		8	4	21.33
				15	0	20.99
				1	0	22.18
64QAM	836.5	20525	3	1	14	22.18
	630.5	20020	3	8	4	21.14
				15	0	21.03
				1	0	22.06
	947 5	20625		1	14	22.06
	847.5	20635		8	4	21.20
				15	0	21.07



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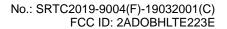
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power
	comment modernos, (mm.z.)					(dBm)
				1	0	22.62
	826.5	20425		1	24	22.62
				12	6	22.45
				25	0	22.43
				1	0	22.49
QPSK	836.5	20525	5	1	24	22.49
				12	6	22.40
				25	0	22.35
				1	0	22.50
	846.5	20625		1	24	22.50
	0.0.0			12	6	22.43
				25	0	22.35
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power
Modulation	Carrier frequency (Wif 12)	OL Onamici	D * * *	TO 0120	TED Officer	(dBm)
				1	0	22.03
	826.5	20425		1	24	22.03
	020.5	20423		12	6	21.42
			1	25	0	21.04
				1	0	22.20
16QAM	836.5	20525	5	1	24	22.20
IOQAW		20525	J	12	6	21.22
				25	0	21.10
				1	0	22.07
	846.5	20625		1	24	22.07
	646.5	20025		12	6	21.27
				25	0	21.13
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
				1	0	22.01
				1	24	22.01
	826.5	20425		12	6	21.33
				25	0	20.99
				1	0	22.21
64QAM				1	24	22.21
	836.5	20525	5	12	6	21.17
				25	0	21.06
				1	0	22.12
				1	24	22.12
	846.5	20625		12	6	21.26
	0 10.0			25	0	21.13
		<u> </u>	L	20	U	21.10



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Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
				1	0	22.65
				1	49	22.65
	829	20450		24	12	22.48
				50	0	22.46
				1	0	22.52
				1	49	22.52
QPSK	836.5	20525	10	24	12	22.43
				50	0	22.38
				1	0	22.54
				1	49	22.54
	844	20600		24	12	22.47
				50	0	22.39
Madulation	Comica from (MIII)	III Channal	DW	DD 0:	DD 0#554	Conducted power
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	(dBm)
				1	0	22.07
	820	20450		1	49	22.07
	829	20450		24	12	21.46
				50	0	21.08
				1	0	22.24
16QAM	836.5	20525	10	1	49	22.24
IOQAW	636.3	20525	10	24	12	21.26
				50	0	21.14
				1	0	22.12
	844	20600		1	49	22.12
	044	20000		24	12	21.32
				50	0	21.18
Modulation	Carrier frequency (MHz)	UL Channel	BW	RB Size	RB Offset	Conducted power (dBm)
				1	0	22.06
	829	20450		1	49	22.06
	629	20450		24	12	21.38
				50	0	21.04
				1	0	22.23
64QAM	836.5	20525	10	1	49	22.23
	000.0	20020	10	24	12	21.19
				50	0	21.08
			-	1	0	22.14
	844	20600		1	49	22.14
	U <del>111</del>	20600		24	12	21.28
				50	0	21.15



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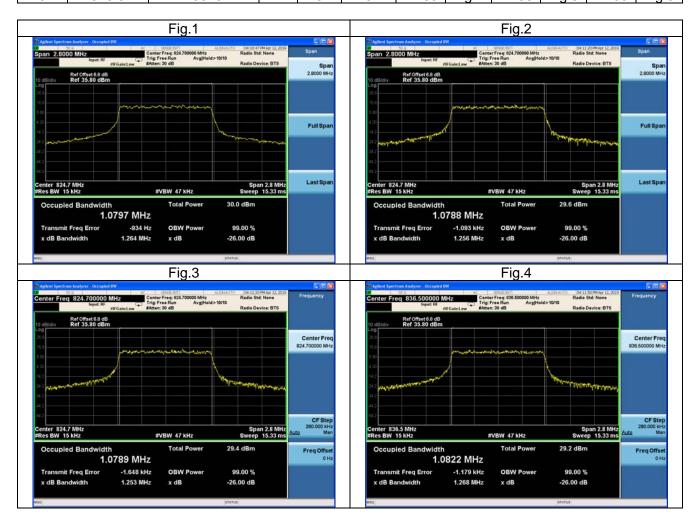


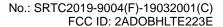
## 2 Occupied Bandwidth

#### Test result

Band fi	Carrier	Channel(Low)	BW	RB	RB		Bandwi	dth of 999	% Powe	r (MHz)	
Danu	frequency (MHz)	Charmer(Low)	DVV	Size	Offset			16-Q	AM	64-QAN	
5	824.7	20407	1.4	6	0	1.0797	Fig.1	1.0788	Fig.2	1.0789	Fig.3
5	836.5	20525	1.4	6	0	1.0822 Fig.4		1.0804	Fig.5	1.0794	Fig.6
5	848.3	20643	1.4	6	0	1.0777 Fig.7		1.0777	Fig.8	1.0786	Fig.9

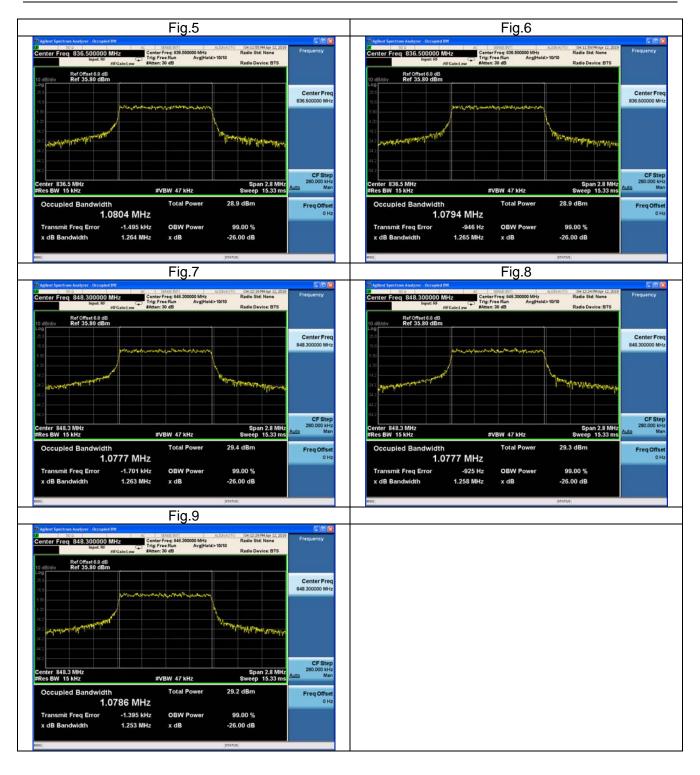
Band	Carrier	Channel(Low)	BW	RB	RB	Bar	ndwidth	of -26dE (MF		nitter po	wer
Danu	frequency (MHz)	Chamer(Low)	DVV	Size	Offset	QPSK		16-QAM		64-QAM	
5	824.7	20407	1.4	6	0	1.264	Fig.1	1.256	Fig.2	1.253	Fig.3
5	836.5	20525	1.4	6	0	1.268	Fig.4	1.264	Fig.5	1.265	Fig.6
5	848.3	20643	1.4	6	0	1.263 Fig.7		1.258	Fig.8	1.253	Fig.9

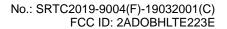




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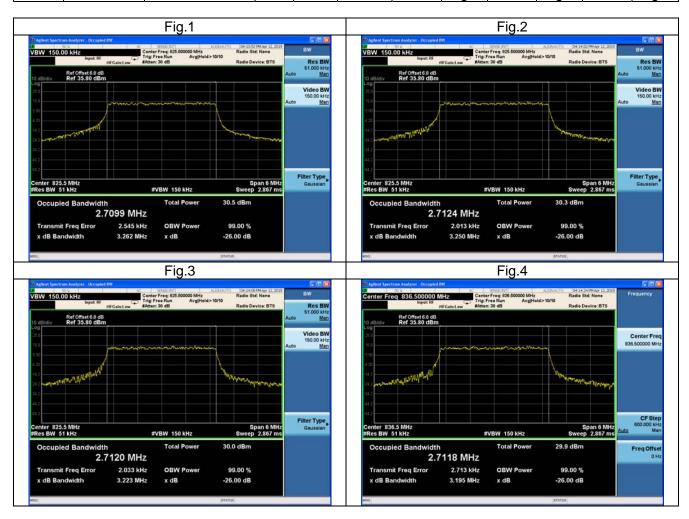


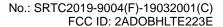
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Band fi	Carrier	Channel(Low)	BW	RB	RB		Bandwi	dth of 99%	% Powe	er (MHz)	
Danu	frequency (MHz)	Charmer(Low)	DVV	Size	Offset	QPSK		16-QAM		64-QAM	
5	825.5	20415	3	15	0	2.7099	Fig.1	2.7124	Fig.2	2.7120	Fig.3
5	836.5	20525	3	15	0	2.7118 Fig.4		2.7097	Fig.5	2.7103	Fig.6
5	847.5	20635	3	15	0	2.7089 Fig.7		2.7089	Fig.8	2.7106	Fig.9

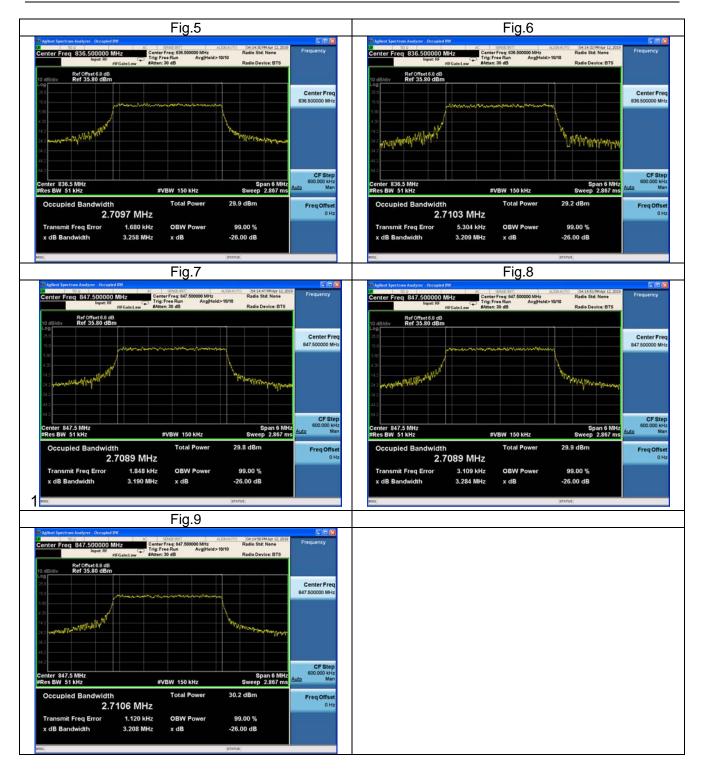
Band	Carrier	Channel(Low)	BW	RB	RB	Bar	ndwidth	of -26dE (MI		nitter po	wer
Danu	frequency (MHz)	Channel(Low)	DVV	Size	Offset	QPSK		16-QAM		64-QAM	
5	825.5	20415	3	15	0	3.262	Fig.1	3.250	Fig.2	3.233	Fig.3
5	836.5	20525	3	15	0	3.195	Fig.4	3.258	Fig.5	3.209	Fig.6
5	847.5	20635	3	15	0	3.190	Fig.7	3.284	Fig.8	3.208	Fig.9

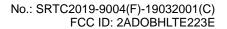




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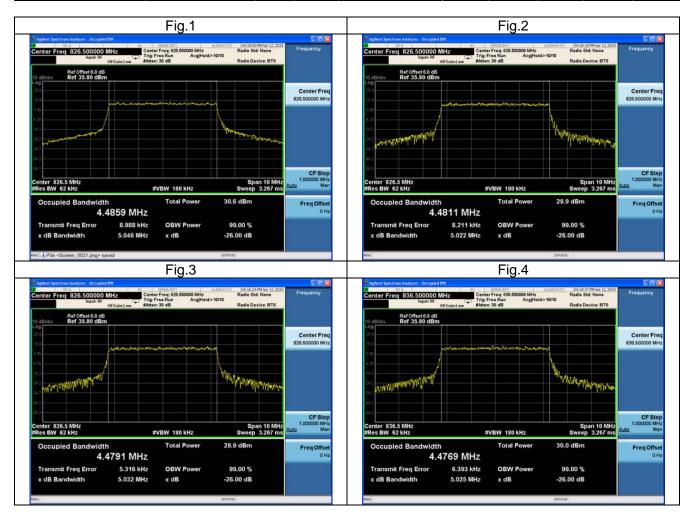


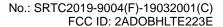
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Band	Carrier	Channel(Low)	BW	RB	RB		Bandwi	dth of 99%	% Powe	er (MHz)	
Danu	frequency (MHz)	Charmer(Low)	DVV	Size	Offset	QPSK 16-Q		AM	64-Q	AM	
5	826.5	20425	5	25	0	4.4859	Fig.1	4.4811	Fig.2	4.4791	Fig.3
5	836.5	20525	5	25	0	4.4769	Fig.4	4.4843	Fig.5	4.4828	Fig.6
5	846.5	20625	5	25	0	4.4746 Fig.7		4.4759	Fig.8	4.4792	Fig.9

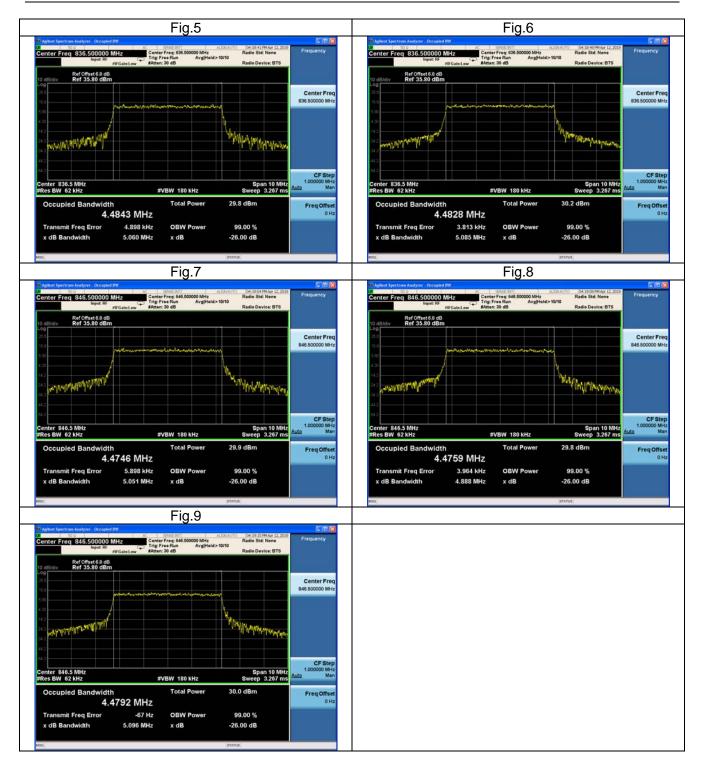
Pand	Carrier	Channel(Low)	BW	RB	RB	Bar	ndwidth	of -26dE (Ml		nitter po	wer
Band	frequency (MHz)	Channel(Low)	DVV	Size	Offset	QPSK		16-QAM		64-QAM	
5	826.5	20425	5	25	0	5.046	Fig.1	5.022	Fig.2	5.032	Fig.3
5	836.5	20525	5	25	0	5.025	Fig.4	5.060	Fig.5	5.085	Fig.6
5	846.5	20625	5	25	0	5.051	Fig.7	4.888	Fig.8	5.096	Fig.9

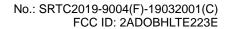




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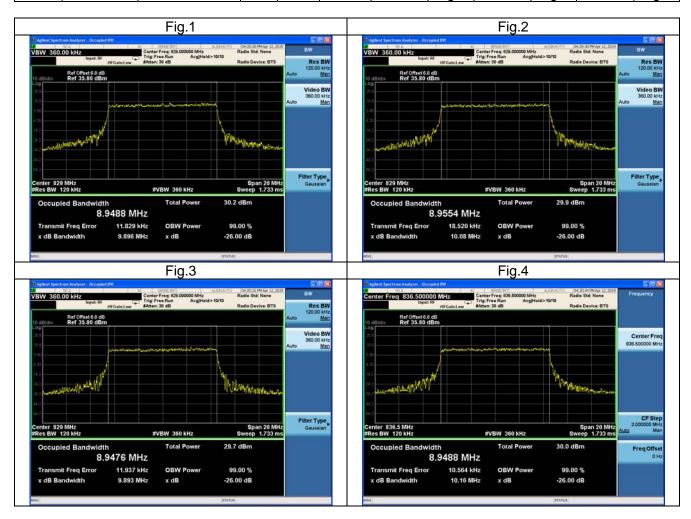


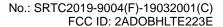
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Band	Carrier			RB	RB		Bandwi	dth of 99%	% Powe	er (MHz)	
Danu	frequency (MHz)	Charmer(Low)	BW	Size	Offset	QPSK		16-QAM		64-QAM	
5	829	20450	10	50	0	8.9488	Fig.1	8.9554	Fig.2	8.9476	Fig.3
5	836.5	20525	10	50	0	8.9488	Fig.4	8.9395	Fig.5	8.9473	Fig.6
5	844	20600	10	50	0	8.9618 Fig.7		8.9516	Fig.8	8.9518	Fig.9

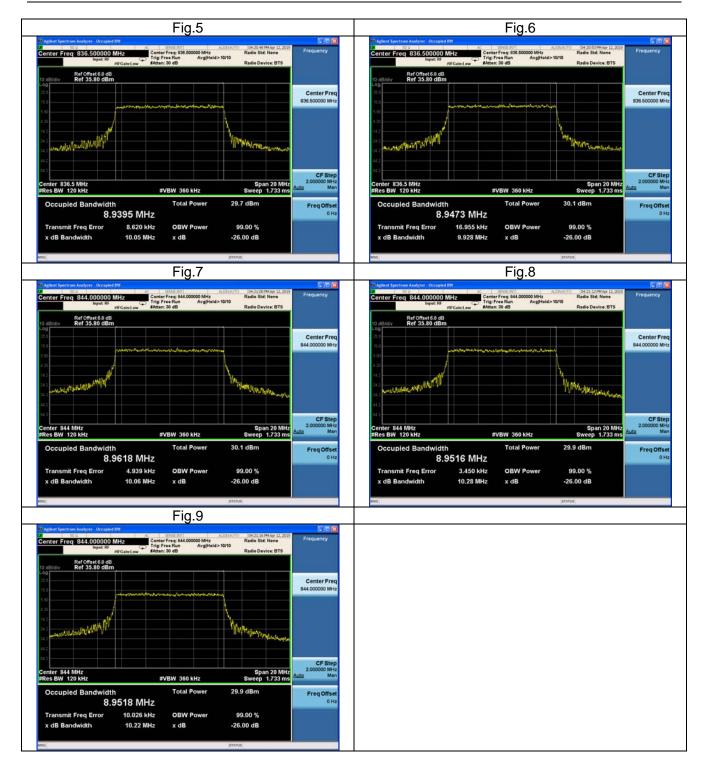
Band f	Carrier	Channel(Low)	BW	RB	RB	Bandw	idth of	-26dB tra	nsmitte	r power (N	MHz)
Danu	frequency (MHz)	Charmer(Low)	DVV	Size	Offset	QPSK 16-Q		AM	64-Q	AM	
5	829	20450	10	50	0	9.896	Fig.1	10.080	Fig.2	9.893	Fig.3
5	836.5	20525	10	50	0	10.160 Fig.4		10.050	Fig.5	9.928	Fig.6
5	844	20600	10	50	0	10.060 Fig.7		10.280	Fig.8	10.220	Fig.9

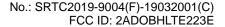




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#### 3 Peak-Average Ratio

#### Test result:



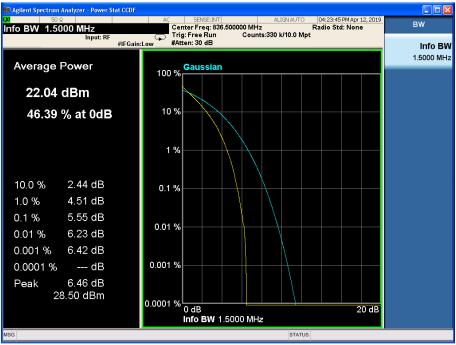
Peak-Average Ratio Plot(1.4MHz BW,QPSK,Band 5-mid Channel)



Peak-Average Ratio Plot(1.4MHz BW,16QAM,Band 5-mid Channel)

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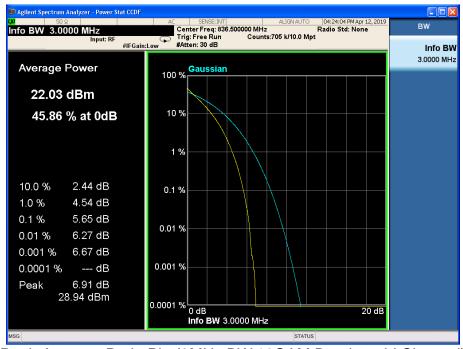
Peak-Average Ratio Plot(1.4MHz BW,64QAM,Band 5-mid Channel)



Peak-Average Ratio Plot(3MHz BW,QPSK,Band 5-mid Channel)

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Peak-Average Ratio Plot(3MHz BW,16QAM,Band 5-mid Channel)



Peak-Average Ratio Plot(3MHz BW,64QAM,Band 5-mid Channel)

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Peak-Average Ratio Plot(5MHz BW,QPSK,Band 5-mid Channel)



Peak-Average Ratio Plot(5MHz BW,16QAM,Band 5-mid Channel)

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Peak-Average Ratio Plot(5MHz BW,64QAM,Band 5-mid Channel)



Peak-Average Ratio Plot(10MHz BW,QPSK,Band 5-mid Channel)

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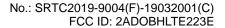




Peak-Average Ratio Plot(10MHz BW,16QAM,Band 5-mid Channel)



Peak-Average Ratio Plot(10MHz BW,64QAM,Band 5-mid Channel)





## 4 Spurious Emissions at antenna terminal

#### Test result

Band	Carrier frequency (MHz)	Channel (Low) BW	BW	RB Size	RB Offset	Conducted Spurious Plot
						QPSK
5	829	20450	10	1	0	Fig.1



Fig.1

Band	Carrier frequency	Channel	BW	RB Size	RB Offset	Conducted Spurious Plot	
Dana	(MHz)	(Mid)				QPSK	
5	836.5	20525	10	1	0	Fig.1	

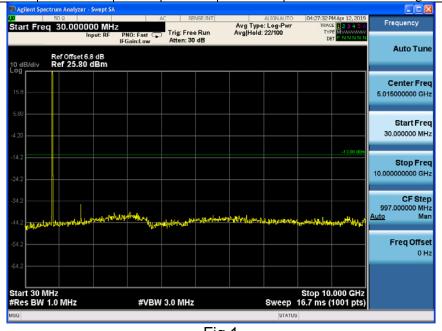
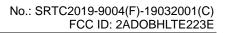


Fig.1



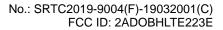


Band	Carrier frequency (MHz)	Channel	BW	RB	RB	Conducted Spurious Plot
Dallu		(High)	DVV	Size	Offset	QPSK
5	844	20600	10	1	0	Fig.1



Fig.1

Fax:86-10-57996388





## **5 Band Edges Compliance**

#### Test result

	Band	Carrier	Channel	DW	BW RB RB		Band EdgesPlot
	Danu	frequency (MHz)	(Low)	DVV	Size	Offset	QPSK
Ī	_	924.7	20407	1.4	1	0	Fig.1
	J	824.7	20407		6	0	Fig.4

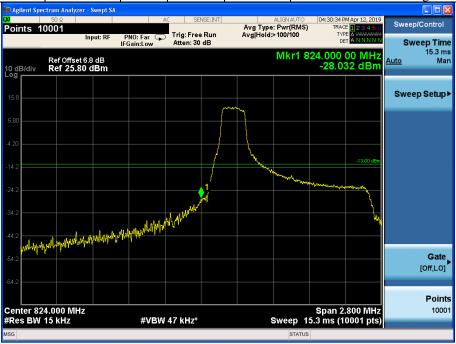
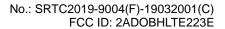


Fig.4

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	Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot
	Dallu						QPSK
ĺ	5	848.3	20642	1.4	1	5	Fig.1
	3	848.3	20643	1.4	6	0	Fig.4

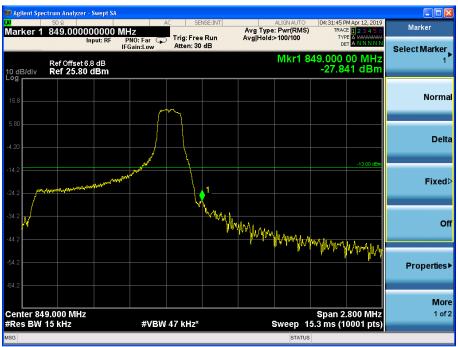
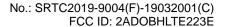


Fig.1

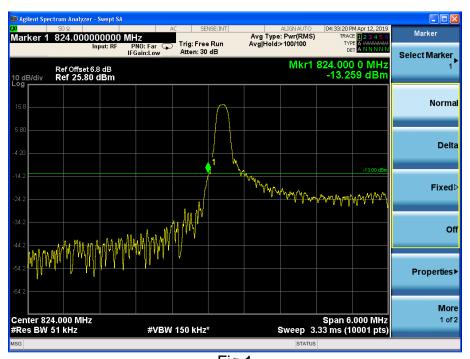


Fig.4





Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot	
Danu						QPSK	
_	925.5	20415	2	1	0	Fig.1	
3	825.5	20415	3	15	0	Fig.4	



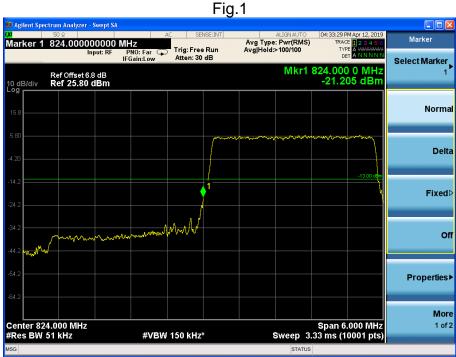
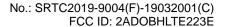


Fig.4

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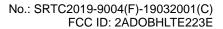
	Band	Carrier	Channel	BW RB RB		RB	Band EdgesPlot
	Dariu	frequency (MHz)	(High)	DVV	Size	Offset	QPSK
Ī	5	017 5	20625	3	1	14	Fig.1
	S	847.5	20635		15	0	Fig.4





Fig.4

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	Band	Carrier	Channel BW F		RB	RB RB	Band EdgesPlot	
	Dallu	frequency (MHz)	(Low)	БVV	Size	Offset	QPSK	
ĺ	_	926.5	20425	_	1	0	Fig.1	
	5	826.5	20425	3	25	0	Fig.4	

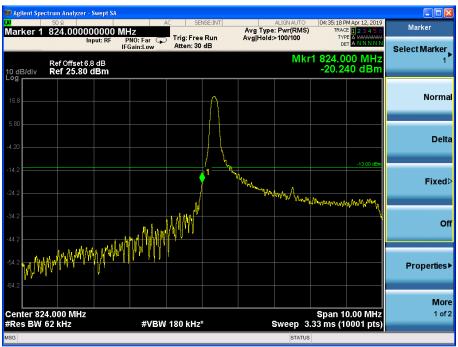
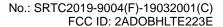


Fig.1



Fig.4





	Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot	
							QPSK	
Ī	5	016 5	20625	5	1	24	Fig.1	
	5	846.5	20625		25	0	Fig.4	

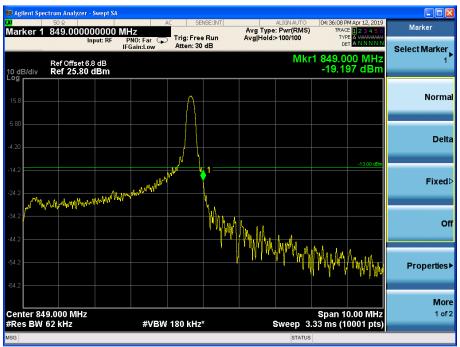
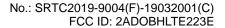


Fig.1



Fig.4





	Band	Carrier frequency (MHz)	Channel (Low)	BW	RB Size	RB Offset	Band EdgesPlot	
	Dallu						QPSK	
ĺ	5	829	20450	10	1	49	Fig.1	
	5	829	20450	10	50	0	Fig.4	

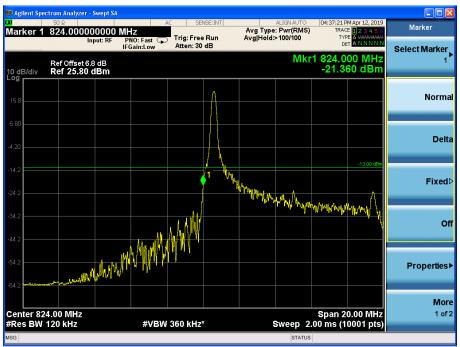
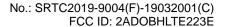


Fig.1



Fig.4





Band	Carrier frequency (MHz)	Channel (High)	BW	RB Size	RB Offset	Band EdgesPlot	
Danu						QPSK	
_	944	20600	10	1	49	Fig.1	
3	844	20600		50	0	Fig.4	



Fig.1



Fig.4

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# **6 Frequency Stability**

# Test result:

Tomporaturo(°C)	Voltago	Test Result (ppm) Band5 Low Channel							
Temperature(°C)	Voltage	1.4M	3M	5M	10M				
0	NV	0.005	-0.002	0.005	-0.012				
+10	NV	-0.014	0.013	0.006	0.003				
+20	NV	0.019	-0.008	0.008	0.000				
+30	NV	-0.013	0.012	-0.009	0.006				
+40	NV	0.021	0.009	0.013	-0.008				
+50	NV	0.016	-0.009	0.001	-0.008				
+55	NV	0.012	0.008	-0.001	-0.007				
+20	LV	-0.001	-0.011	-0.009	-0.012				
+20	HV	0.013	0.012	-0.003	-0.003				

Temperature(°C)	Voltage	Test Result (ppm) Band5 High Channel			
		1.4M	3M	5M	10M
0	NV	0.018	-0.010	0.018	0.001
+10	NV	-0.019	-0.013	-0.001	0.006
+20	NV	0.009	0.009	-0.006	0.003
+30	NV	-0.008	-0.012	0.007	-0.002
+40	NV	0.009	0.006	-0.006	0.010
+50	NV	0.019	0.014	0.012	-0.014
+55	NV	0.002	-0.004	0.005	0.007
+20	LV	0.018	0.006	0.010	-0.003
+20	HV	0.024	0.006	-0.007	-0.010