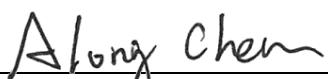


FCC Test Report

FCC ID : 2AD8UFTHJ01
Equipment : Nokia Dual Band UE Relay
Model No. : FTHJ
Brand Name : Nokia
Applicant : Nokia Solutions and Networks, OY
Address : 2000 W. Lucent Lane, Naperville, Illinois,
United States. 60563
Standard : 47 CFR FCC Part 24 Subpart E
Received Date : Dec. 12, 2017
Tested Date : Jan. 02 ~ Mar. 06, 2018

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:



Along Chen / Assistant Manager

Approved by:



Gary Chang / Manager



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Release Record

Report No.	Version	Description	Issued Date
FG7D1203P24	Rev. 01	Initial issue	May 10, 2018

Summary of Test Results

FCC Rules	Test Items	Worst Case Measured	Limit	Result
2.1046 / 24.232(c)	Equivalent Isotropically Radiated Power	Max EIRP [dBm]: 31.44	2 Watts(33dBm)	Pass
2.1053 / 24.238(a)	Radiated Emissions	-16.05 dBm	-13 dBm	Pass
2.1051 / 24.238(a)	Conducted Emissions	-32.39 dBm	-13 dBm	Pass
2.1051 / 24.238(a)	Band Edge	-15.08 dBm	-13 dBm	Pass
2.1049 / 24.238(b)	Occupied Bandwidth	17.85 MHz	N/A	Pass
2.1051 / 24.232(d)	Peak to average ratio	7.04 dB	Not exceed 13 dB.	Pass
2.1055 / 24.235	Frequency Stability	0.19 ppm	Fundamental emission stays within the authorized frequency block.	Pass

1 General Description

1.1 Information

The device includes one LTE module. The hardware supports B25, B41-L, B41-H in the same module. It includes filter and duplexer to separate B41-L or B41-H frequency automatically. It will operate on the certain frequency based on Base station assign.

1.1.1 Specification of the Equipment under Test (EUT)

Operating Frequency (MHz)	LTE Band 25: Channel Bandwidth: 5MHz: 1852.5 ~ 1912.5 Channel Bandwidth: 10MHz: 1855.0 ~ 1910.0 Channel Bandwidth: 15MHz: 1857.5 ~ 1907.5 Channel Bandwidth: 20MHz: 1860.0 ~ 1905.0
Modulation Type	Uplink: QPSK, 16QAM, 64QAM Downlink: QPSK, 16QAM, 64QAM, 256QAM
Duplex Mode	FDD
Category	DL Cat 12 (2CA with 4X4 + 64QAM) DL Cat 12 (2CA/3CA with 2x2 + 256QAM) UL Cat 13 (2CA + 64QAM)
Release Version	12
H/W Version	Mother board: WLTGG-124_MB_V02 daughter board: WLTGG-124_Module_V01A
S/W Version	01.02.01.013
TX/RX function	2TX / 8RX

1.1.2 Antenna Details

Ant. No.	Type	Connector	Gain (dBi)	Antenna polarization
1	Sector	MMCX	7	+45 degree
2	Sector	MMCX	7	+45 degree

1.1.3 EUT Operational Condition

Power Supply Type	56Vdc from POE (support unit only.) Brand: GOSPELL Model: G0883-560-045 Power Rating: I/P: 100-240Vac, 50/60Hz, 0.75A MAX O/P: 56Vdc, 0.45A		
Operational Climatic	<input checked="" type="checkbox"/> Tnom (20°C)	<input checked="" type="checkbox"/> Tmax (60°C)	<input checked="" type="checkbox"/> Tmin (-40°C)

1.1.4 Accessories

N/A

1.1.5 Maximum Conducted Power and Emission Designator

CDD Mode			
Channel Bandwidth (MHz)	Modulation	Maximum EIRP (W)	Emission Designator
5	QPSK	1.393	4M41G7D
5	16QAM	1.186	4M40W7D
5	64QAM	1.140	4M40W7D
10	QPSK	1.318	8M88G7D
10	16QAM	1.222	8M82W7D
10	64QAM	0.998	8M82W7D
15	QPSK	1.327	13M5G7D
15	16QAM	1.189	13M5W7D
15	64QAM	0.883	13M5W7D
20	QPSK	1.312	17M8G7D
20	16QAM	1.062	17M8W7D
20	64QAM	0.839	17M8W7D

CA Mode			
Channel Bandwidth (MHz)	Modulation	Maximum EIRP (W)	Emission Designator
5+5	QPSK	0.750	8M98G7D
5+5	16QAM	0.718	8M97W7D
5+5	64QAM	0.735	8M99W7D
5+10	QPSK	0.612	13M5G7D
5+10	16QAM	0.587	13M4W7D
5+10	64QAM	0.560	13M5W7D
10+5	QPSK	0.594	13M4G7D
10+5	16QAM	0.504	13M4W7D
10+5	64QAM	0.586	13M4W7D

1.1.6 Operating Channel List

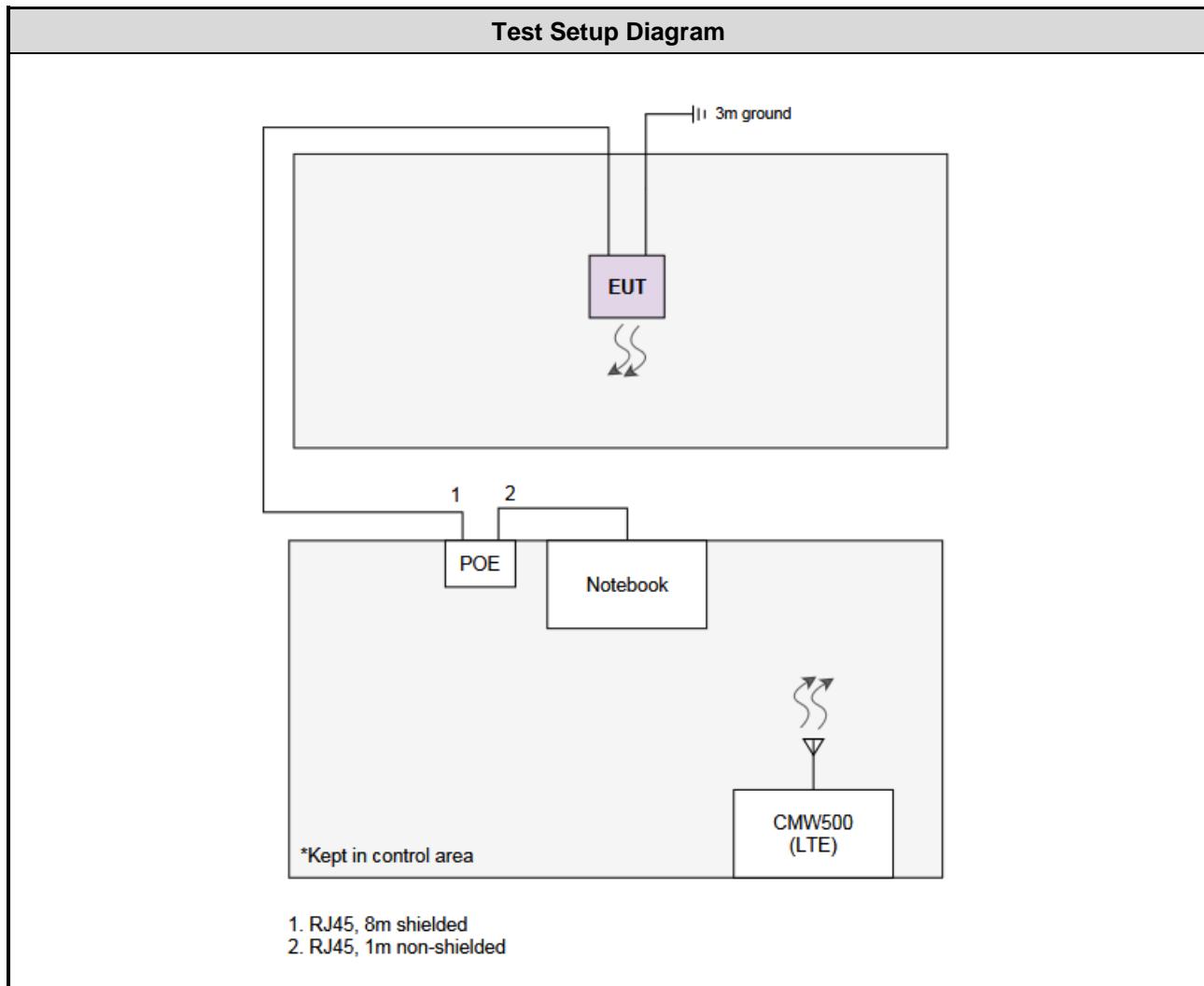
CDD Mode		
Channel Bandwidth (MHz)	Channel	Frequency (MHz)
5	26065	1852.5
5	26365	1882.5
5	26665	1912.5
10	26090	1855.0
10	26365	1882.5
10	26640	1910.0
15	26115	1857.5
15	26365	1882.5
15	26615	1907.5
20	26140	1860.0
20	26365	1882.5
20	26590	1905.0

CA Mode		
Channel Bandwidth (MHz)	PCC Frequency (MHz)	SCC Frequency (MHz)
5+5	1852.5	1912.5
5+10	1852.5	1910.0
10+5	1855.0	1912.5

1.2 Local Support Equipment List

Support Equipment List						
No.	Equipment	Brand	Model	S/N	FCC ID	Signal cable / Length (m)
1	Notebook	DELL	Latitude E6430	9ZFB4X1	DoC	RJ45, 1m non-shielded.
2	POE	GOSPELL	G0883-56 0-045	---	---	RJ45, 8m shielded.

1.3 Test Setup Chart



1.4 The Equipment List

Test Item	Radiated Emission				
Test Site	966 chamber1 / (03CH01-WS)				
Tested Date	Feb. 19 ~ Mar. 06, 2018				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Wideband Radio Communication Tester	R&S	CMW500	106070	Feb. 12, 2018	Feb. 11, 2019
Spectrum Analyzer	R&S	FSV40	101498	Dec. 04, 2017	Dec. 03, 2018
Receiver	R&S	ESR3	101658	Nov. 20, 2017	Nov. 19, 2018
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-522	Jul. 25, 2017	Jul. 24, 2018
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1096	Dec. 20, 2017	Dec. 19, 2018
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Nov. 23, 2017	Nov. 22, 2018
Loop Antenna	R&S	HFH2-Z2	100330	Nov. 13, 2017	Nov. 12, 2018
Loop Antenna Cable	KOAX KABEL	101354-BW	101354-BW	Dec. 07, 2017	Dec. 06, 2018
Preamplifier	EMC	EMC02325	980225	Jul. 28, 2017	Jul. 27, 2018
Preamplifier	Agilent	83017A	MY39501308	Oct. 06, 2017	Oct. 05, 2018
Preamplifier	EMC	EMC184045B	980192	Aug. 22, 2017	Aug. 21, 2018
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16014/4	Dec. 07, 2017	Dec. 06, 2018
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16019/4	Dec. 07, 2017	Dec. 06, 2018
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16139/4	Dec. 07, 2017	Dec. 06, 2018
LF cable 1M	EMC	EMCCFD400-NM-N M-1000	16052	Dec. 07, 2017	Dec. 06, 2018
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-001	Dec. 07, 2017	Dec. 06, 2018
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-002	Dec. 07, 2017	Dec. 06, 2018
Measurement Software	AUDIX	e3	6.120210g	NA	NA

Note: Calibration Interval of instruments listed above is one year.

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Jan. 02 ~ Feb. 19, 2018				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Mar. 15, 2017	Mar. 14, 2018
Spectrum Analyzer	Agilent	N9010A	MY54200247	Sep. 28, 2017	Sep. 27, 2018
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 27, 2017	Nov. 26, 2018
Power Meter	Anritsu	ML2495A	1241002	Oct. 16, 2017	Oct. 15, 2018
Power Sensor	Anritsu	MA2411B	1207366	Oct. 16, 2017	Oct. 15, 2018
Wideband Radio Communication Tester	R&S	CMW500	106070	Feb. 21, 2017	Feb. 20, 2018
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 01, 2017	Nov. 30, 2018
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA

Note: Calibration Interval of instruments listed above is one year.

Test Item	RF Conducted				
Test Site	(TH01-WS)				
Tested Date	Feb. 19 ~ Mar. 05, 2018				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101063	Mar. 15, 2017	Mar. 14, 2018
Spectrum Analyzer	Agilent	N9010A	MY54200247	Sep. 28, 2017	Sep. 27, 2018
TEMP&HUMIDITY CHAMBER	GIANT FORCE	GCT-225-40-SP-SD	MAF1212-002	Nov. 27, 2017	Nov. 26, 2018
Power Meter	Anritsu	ML2495A	1241002	Oct. 16, 2017	Oct. 15, 2018
Power Sensor	Anritsu	MA2411B	1207366	Oct. 16, 2017	Oct. 15, 2018
Wideband Radio Communication Tester	R&S	CMW500	106070	Feb. 12, 2018	Feb. 11, 2019
AC POWER SOURCE	APC	AFC-500W	F312060012	Dec. 01, 2017	Nov. 30, 2018
Measurement Software	Sporton	Sporton_1	1.3.30	NA	NA

Note: Calibration Interval of instruments listed above is one year.

1.5 Test Standards

According to the specification of EUT, the EUT must comply with following standards.

47 CFR FCC Part 24 Subpart E

ANSI C63.4-2014

ANSI C63.26-2015

FCC KDB 971168 D01 Power Meas License Digital Systems v03

FCC KDB 412172 D01 Determining ERP and EIRP v01r01

FCC KDB 442401 ERP/EIRP measurement procedures for licensed radio service devices

1.6 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty	
Parameters	Uncertainty
Bandwidth	±34.134 Hz
Conducted power	±0.808 dB
Frequency error	±34.134 Hz
Conducted emission	±2.670 dB
Radiated emission ≤ 1GHz	±3.66 dB
Radiated emission > 1GHz	±5.63 dB
Temperature	±0.6 °C

2 Test Configuration

2.1 Testing Condition and Location Information

Test Item	Test Site	Ambient Condition	Tested By
RF conducted	TH01-WS	22°C / 64%	Brad Wu
Radiated Emissions	03CH01-WS	22°C / 63%	Roger Lu

- FCC Designation No.: TW2732
- FCC site registration No.: 181692
- IC site registration No.: 10807A-1

2.2 The Worst Test Modes and Channel Details

CDD Mode			
Test item	Channel Bandwidth	Modulation	Test channel
E.I.R.P. Conducted Emissions Occupied Bandwidth Peak to Average Ratio	5 MHz 10 MHz 15 MHz 20 MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	1852.5 / 1882.5 / 1912.5 1855.0 / 1882.5 / 1910.0 1857.5 / 1882.5 / 1907.5 1860.0 / 1882.5 / 1905.0
Radiated Emission ≤ 1GHz	5 MHz 10 MHz 15 MHz 20 MHz	QPSK QPSK QPSK QPSK	1852.5 1855.0 1857.5 1860.0
Radiated Emission > 1GHz	5 MHz 10 MHz 15 MHz 20 MHz	QPSK QPSK QPSK QPSK	1852.5 / 1882.5 / 1912.5 1855.0 / 1882.5 / 1910.0 1857.5 / 1882.5 / 1907.5 1860.0 / 1882.5 / 1905.0
Band Edge	5 MHz 10 MHz 15 MHz 20 MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	1852.5 / 1912.5 1855.0 / 1910.0 1857.5 / 1907.5 1860.0 / 1905.0
Frequency Stability	5 MHz 10 MHz 15 MHz 20 MHz	QPSK QPSK QPSK QPSK	1882.5 1882.5 1882.5 1882.5

CA Mode			
Test item	Channel Bandwidth	Modulation	Test channel
E.I.R.P. Conducted Emissions Occupied Bandwidth Peak to Average Ratio Radiated Emission ≤ 1GHz Radiated Emission > 1GHz Band Edge Frequency Stability	5 MHz + 5 MHz 5 MHz + 10 MHz 10 MHz + 5 MHz	QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM QPSK / 16QAM / 64QAM	1852.5 / 1912.5 1852.5 / 1910.0 1855.0 / 1912.5

3 Test Results

3.1 Equivalent Isotropically Radiated Power

3.1.1 Limit of Equivalent Isotropically Radiated Power

Mobile and portable stations are limited to 2 watts EIRP.

3.1.2 Test Procedures

For E.I.R.P measurement

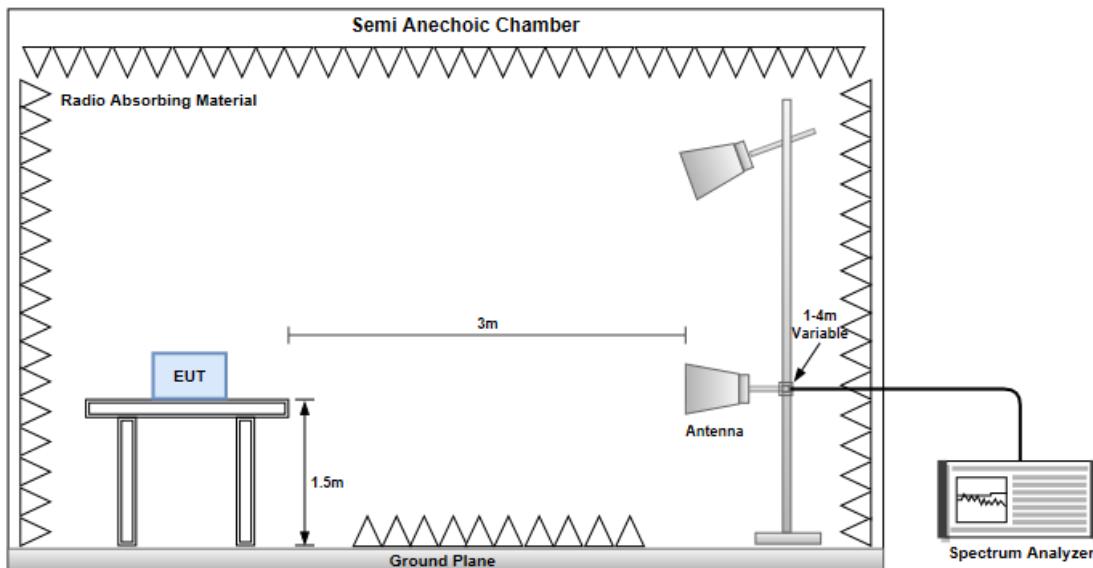
1. The EUT links up with simulator and is set to maximum output power level at low / middle / high channel. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 1.5 m test table above the ground plane.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable.

For Conducted power measurement

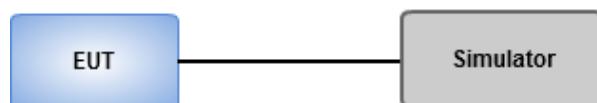
1. The EUT links up with simulator and is set to maximum output power level at low / middle / high channel.
2. Measure the output power of low / middle / high channel of the EUT

3.1.3 Test Setup

Equivalent Isotropically Radiated Power Measurement



Conducted Power Measurement



3.1.4 Test Result of Conducted power (dBm) _ CDD mode

Band / Channel Bandwidth			LTE Band 25 / CB: 5MHz			
Channel			26065	26365	26665	
Frequency (MHz)			1852.5	1882.5	1912.5	
Mode	RB	RB Offset	Maximum AV Power (dBm)			
QPSK	1	0	25.73	25.64	25.45	
	1	12	25.61	25.55	25.43	
	1	24	25.64	25.45	25.38	
	12	0	25.17	24.98	24.78	
	12	6	24.29	24.52	25.22	
	12	11	25.37	25.46	24.27	
	25	0	24.16	24.39	24.21	
16QAM	1	0	24.77	24.79	24.34	
	1	12	24.68	24.70	24.34	
	1	24	24.72	24.66	24.41	
	12	0	23.69	24.06	23.91	
	12	6	23.44	23.56	23.08	
	12	11	23.48	23.56	22.83	
	25	0	23.55	23.42	22.97	
64QAM	1	0	24.45	23.92	23.23	
	1	12	23.39	23.64	23.16	
	1	24	23.81	23.63	23.17	
	12	0	23.14	23.14	22.86	
	12	6	22.94	22.81	22.51	
	12	11	22.96	22.78	22.34	
	25	0	22.67	22.63	22.15	

Band / Channel Bandwidth			LTE Band 25 / CB: 10MHz		
Channel			26090	26365	26640
Frequency (MHz)			1855	1882.5	1910
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	25.96	26.13	25.86
	1	24	25.88	25.54	25.37
	1	49	25.80	26.04	25.34
	25	0	25.04	24.55	24.13
	25	12	24.50	24.55	24.24
	25	24	24.65	24.64	24.40
	50	0	24.51	24.64	24.23
16QAM	1	0	25.44	25.36	25.19
	1	24	24.72	24.83	24.36
	1	49	25.41	25.33	25.21
	25	0	23.69	23.77	23.07
	25	12	23.66	23.70	22.90
	25	24	23.87	23.70	23.26
	50	0	23.73	23.63	23.12
64QAM	1	0	23.88	24.06	23.88
	1	24	24.20	23.75	23.09
	1	49	24.08	23.83	23.55
	25	0	22.80	22.70	22.17
	25	12	22.85	22.76	22.15
	25	24	22.71	22.63	22.29
	50	0	22.65	22.78	22.08

Band / Channel Bandwidth			LTE Band 25 / CB: 15MHz		
Channel			26115	26365	26615
Frequency (MHz)			1857.5	1882.5	1907.5
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	26.35	26.25	26.56
	1	37	26.04	25.84	25.49
	1	74	26.15	26.23	25.65
	36	0	24.73	24.64	24.88
	36	18	24.80	24.66	24.56
	36	37	24.46	24.82	24.36
	75	0	24.90	24.73	24.57
16QAM	1	0	25.40	25.36	25.34
	1	37	25.37	25.18	24.75
	1	74	25.26	25.33	25.05
	36	0	23.84	23.68	23.77
	36	18	23.71	23.70	23.34
	36	37	23.71	23.79	23.06
	75	0	23.51	23.72	23.47
64QAM	1	0	24.27	24.12	24.39
	1	37	23.89	23.87	23.65
	1	74	24.44	24.61	23.94
	36	0	23.08	22.87	22.53
	36	18	22.89	22.86	22.45
	36	37	22.80	22.91	22.15
	75	0	22.64	22.85	22.35

Band / Channel Bandwidth			LTE Band 25 / CB: 20MHz		
Channel			26140	26365	26590
Frequency (MHz)			1860	1882.5	1905
Mode	RB	RB Offset	Maximum AV Power (dBm)		
QPSK	1	0	26.19	26.12	26.43
	1	49	25.39	25.71	25.71
	1	99	25.54	26.11	25.81
	50	0	24.73	24.51	24.78
	50	24	24.37	24.54	24.54
	50	49	24.47	24.77	24.25
	100	0	24.75	24.77	24.58
16QAM	1	0	25.29	25.09	25.52
	1	49	24.66	24.89	24.95
	1	99	25.08	25.57	24.71
	50	0	23.90	23.63	23.88
	50	24	23.64	23.60	23.42
	50	49	23.49	23.80	23.25
	100	0	23.19	23.60	23.60
64QAM	1	0	24.19	24.19	25.40
	1	49	23.87	23.89	24.82
	1	99	23.93	24.22	24.57
	50	0	23.52	22.55	23.84
	50	24	22.68	22.73	23.43
	50	49	22.53	22.86	23.24
	100	0	22.65	22.73	23.64

3.1.5 Test Result of Conducted power (dBm)_CA mode

Channel Bandwidth (MHz)	PCC Freq. (MHz)	SCC Freq. (MHz)	Modulation	PCC RB (size)	PCC RB (offset)	SCC RB (size)	SCC RB (offset)	Total Conducted Power (dBm)	Conducted Power (W)
5+5	1852.5	1912.5	QPSK	1	0	1	0	25.45	0.351
				1	0	1	24	25.53	0.357
				1	0	25	0	25.45	0.351
				1	12	1	12	25.94	0.393
				1	24	1	0	25.66	0.368
				1	24	1	24	25.56	0.360
				1	24	25	0	25.64	0.366
				25	0	25	0	25.66	0.368
				25	0	1	24	25.53	0.357
			16QAM	1	0	1	0	25.40	0.347
				1	0	1	24	25.40	0.347
				1	0	25	0	25.46	0.352
				1	12	1	12	25.87	0.386
				1	24	1	0	25.63	0.366
				1	24	1	24	25.52	0.356
				1	24	25	0	25.63	0.366
				25	0	25	0	25.60	0.363
				25	0	1	24	25.47	0.352
			64QAM	1	0	1	0	25.46	0.352
				1	0	1	24	25.43	0.349
				1	0	25	0	25.48	0.353
				1	12	1	12	25.93	0.392
				1	24	1	0	25.68	0.370
				1	24	1	24	25.58	0.361
				1	24	25	0	25.64	0.366
				25	0	25	0	25.54	0.358
				25	0	1	24	25.52	0.356

Channel Bandwidth (MHz)	PCC Freq. (MHz)	SCC Freq. (MHz)	Modulation	PCC RB (size)	PCC RB (offset)	SCC RB (size)	SCC RB (offset)	Total Conducted Power (dBm)	Conducted Power (W)
5+10	1852.5	1910.0	QPSK	1	0	1	0	25.82	0.382
				1	0	1	49	25.77	0.378
				1	0	50	0	25.60	0.363
				1	12	1	24	26.27	0.424
				1	24	1	0	25.99	0.397
				1	24	1	49	25.92	0.391
				1	24	50	0	25.80	0.380
				25	0	50	0	25.81	0.381
				25	0	1	49	25.91	0.390
			16QAM	1	0	1	0	25.98	0.396
				1	0	1	49	25.88	0.387
				1	0	50	0	25.72	0.373
				1	12	1	24	26.25	0.422
				1	24	1	0	26.18	0.415
				1	24	1	49	26.00	0.398
				1	24	50	0	25.92	0.391
				25	0	50	0	25.80	0.380
				25	0	1	49	25.96	0.394
			64QAM	1	0	1	0	25.89	0.388
				1	0	1	49	25.75	0.376
				1	0	50	0	25.70	0.372
				1	12	1	24	26.06	0.404
				1	24	1	0	26.02	0.400
				1	24	1	49	26.01	0.399
				1	24	50	0	25.81	0.381
				25	0	50	0	25.76	0.377
				25	0	1	49	25.84	0.384

Channel Bandwidth (MHz)	PCC Freq. (MHz)	SCC Freq. (MHz)	Modulation	PCC RB (size)	PCC RB (offset)	SCC RB (size)	SCC RB (offset)	Total Conducted Power (dBm)	Conducted Power (W)
10+5	1855.0	1912.5	QPSK	1	0	1	0	25.70	0.372
				1	0	1	24	25.74	0.375
				1	0	25	0	25.65	0.367
				1	24	1	12	25.99	0.397
				1	49	1	0	25.84	0.384
				1	49	1	24	25.70	0.372
				1	49	25	0	25.84	0.384
				50	0	25	0	25.84	0.384
				50	0	1	24	25.70	0.372
			16QAM	1	0	1	0	25.67	0.369
				1	0	1	24	25.60	0.363
				1	0	25	0	25.78	0.378
				1	24	1	12	25.93	0.392
				1	49	1	0	25.91	0.390
				1	49	1	24	25.77	0.378
				1	49	25	0	25.85	0.385
				50	0	25	0	25.73	0.374
				50	0	1	24	25.64	0.366
			64QAM	1	0	1	0	25.57	0.361
				1	0	1	24	25.58	0.361
				1	0	25	0	25.63	0.366
				1	24	1	12	25.97	0.395
				1	49	1	0	25.80	0.380
				1	49	1	24	25.94	0.393
				1	49	25	0	25.85	0.385
				50	0	25	0	25.79	0.379
				50	0	1	24	25.65	0.367

3.1.6 Test Result of Equivalent Isotropically Radiated Power (dBm) _ CDD mode

LTE Band 25, CB: 5MHz

Mode	LTE Band 25, QPSK, CB: 5MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065	1852.5	30.59	33	-2.41	-9.98	25.25	5.34
26365	1882.5	30.79	33	-2.21	-10.02	25.35	5.44
26665	1912.5	31.44	33	-1.56	-9.62	25.9	5.54

Mode	LTE Band 25, 16QAM, CB: 5MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065	1852.5	29.61	33	-3.39	-10.96	24.27	5.34
26365	1882.5	29.89	33	-3.11	-10.92	24.45	5.44
26665	1912.5	30.74	33	-2.26	-10.32	25.2	5.54

Mode	LTE Band 25, 64QAM, CB: 5MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065	1852.5	29.31	33	-3.69	-11.26	23.97	5.34
26365	1882.5	29.66	33	-3.34	-11.15	24.22	5.44
26665	1912.5	30.57	33	-2.43	-10.49	25.03	5.54

Note: EIRP = S.G Power value + Correction factor.

LTE Band 25, CB: 10MHz

Mode	LTE Band 25, QPSK, CB: 10MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26090	1855.0	30.81	33	-2.19	-9.78	25.46	5.35
26365	1882.5	30.95	33	-2.05	-9.86	25.51	5.44
26640	1910.0	31.20	33	-1.8	-9.84	25.67	5.53

Mode	LTE Band 25, 16QAM, CB: 10MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26090	1855.0	30.41	33	-2.59	-10.18	25.06	5.35
26365	1882.5	30.57	33	-2.43	-10.24	25.13	5.44
26640	1910.0	30.87	33	-2.13	-1017	25.34	5.53

Mode	LTE Band 25, 64QAM, CB: 10MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26090	1855.0	29.12	33	-3.88	-11.47	23.77	5.35
26365	1882.5	29.36	33	-3.64	-11.45	23.92	5.44
26640	1910.0	29.99	33	-3.01	-11.05	24.46	5.53

Note: EIRP = S.G Power value + Correction factor.

LTE Band 25, CB: 15MHz

Mode	LTE Band 25, QPSK, CB: 15MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26115	1857.5	30.70	33	-2.3	-9.91	25.34	5.36
26365	1882.5	31.05	33	-1.95	-9.76	25.61	5.44
26615	1907.5	31.23	33	-1.77	-9.79	25.71	5.52

Mode	LTE Band 25, 16QAM, CB: 15MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26115	1857.5	29.88	33	-3.12	-10.73	24.52	5.36
26365	1882.5	30.75	33	-2.25	-10.06	25.31	5.44
26615	1907.5	30.36	33	-2.64	-10.66	24.84	5.52

Mode	LTE Band 25, 64QAM, CB: 15MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26115	1857.5	28.78	33	-4.22	-11.83	23.42	5.36
26365	1882.5	29.21	33	-3.79	-11.6	23.77	5.44
26615	1907.5	29.46	33	-3.54	-11.56	23.94	5.52

Note: EIRP = S.G Power value + Correction factor.

LTE Band 25, CB: 20MHz

Mode	LTE Band 25, QPSK, CB: 20MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26140	1860.0	30.64	33	-2.36	-9.99	25.27	5.37
26365	1882.5	31.10	33	-1.9	-9.71	25.66	5.44
26590	1905.0	31.18	33	-1.82	-9.82	25.66	5.52

Mode	LTE Band 25, 16QAM, CB: 20MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26140	1860.0	29.89	33	-3.11	-10.74	24.52	5.37
26365	1882.5	30.23	33	-2.77	-10.58	24.79	5.44
26590	1905.0	30.26	33	-2.74	-10.74	24.74	5.52

Mode	LTE Band 25, 64QAM, CB: 20MHz, 1RB, Offset 0						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26140	1860.0	28.85	33	-4.15	-11.78	23.48	5.37
26365	1882.5	29.23	33	-3.77	-11.58	23.79	5.44
26590	1905.0	29.24	33	-3.76	-11.76	23.72	5.52

Note: EIRP = S.G Power value + Correction factor.

3.1.7 Test Result of Equivalent Isotropically Radiated Power (dBm)_CA mode

LTE Band 25, CB: 5MHz+5MHz

Mode	LTE Band 25, QPSK, CB:5MHz, 1RB, Offset 12, Channel:26065 + CB:5MHz, 1RB, Offset 12, Channel:26665						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065+26665	1852.5+1912.5	28.75	33	-4.25	-12.14	23.31	5.44

Mode	LTE Band 25, 16QAM, CB:5MHz, 1RB, Offset 12, Channel:26065 + CB:5MHz, 1RB, Offset 12, Channel:26665						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065+26665	1852.5+1912.5	28.56	33	-4.44	-12.33	23.12	5.44

Mode	LTE Band 25, 64QAM, CB:5MHz, 1RB, Offset 12, Channel:26065 + CB:5MHz, 1RB, Offset 12, Channel:26665						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065+26665	1852.5+1912.5	28.66	33	-4.34	-12.23	23.22	5.44

Note: EIRP = S.G Power value + Correction factor.

LTE Band 25, CB: 5MHz+10MHz

Mode	LTE Band 25, QPSK, CB:5MHz, 1RB, Offset 12, Channel:26065 + CB:10MHz, 1RB, Offset 24, Channel:26640						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065+26640	1852.5+1910.0	27.87	33	-5.13	-13.12	22.38	5.49

Mode	LTE Band 25, 16QAM, CB:5MHz, 1RB, Offset 12, Channel:26065 + CB:10MHz, 1RB, Offset 24, Channel:26640						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065+26640	1852.5+1910.0	27.69	33	-5.31	-13.3	22.2	5.49

Mode	LTE Band 25, 64QAM, CB:5MHz, 1RB, Offset 12, Channel:26065 + CB:10MHz, 1RB, Offset 24, Channel:26640						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26065+26640	1852.5+1910.0	27.48	33	-5.52	-13.51	21.99	5.49

Note: EIRP = S.G Power value + Correction factor.

LTE Band 25, CB: 10MHz+5MHz

Mode	LTE Band 25, QPSK, CB:10MHz, 1RB, Offset 24, Channel:26090 + CB:5MHz, 1RB, Offset 12, Channel:26665						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26090+26665	1855+1912.5	27.74	33	-5.26	-13.09	22.29	5.45

Mode	LTE Band 25, 16QAM, CB:10MHz, 1RB, Offset 24, Channel:26090 + CB:5MHz, 1RB, Offset 12, Channel:26665						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26090+26665	1855+1912.5	27.02	33	-5.98	-13.81	21.57	5.45

Mode	LTE Band 25, 64QAM, CB:10MHz, 1RB, Offset 24, Channel:26090 + CB:5MHz, 1RB, Offset 12, Channel:26665						
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SA Reading (dBm)	SG Power Value (dBm)	Correction Factor (dB)
26090+26665	1855+1912.5	27.68	33	-5.32	-13.15	22.23	5.45

Note: EIRP = S.G Power value + Correction factor.

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

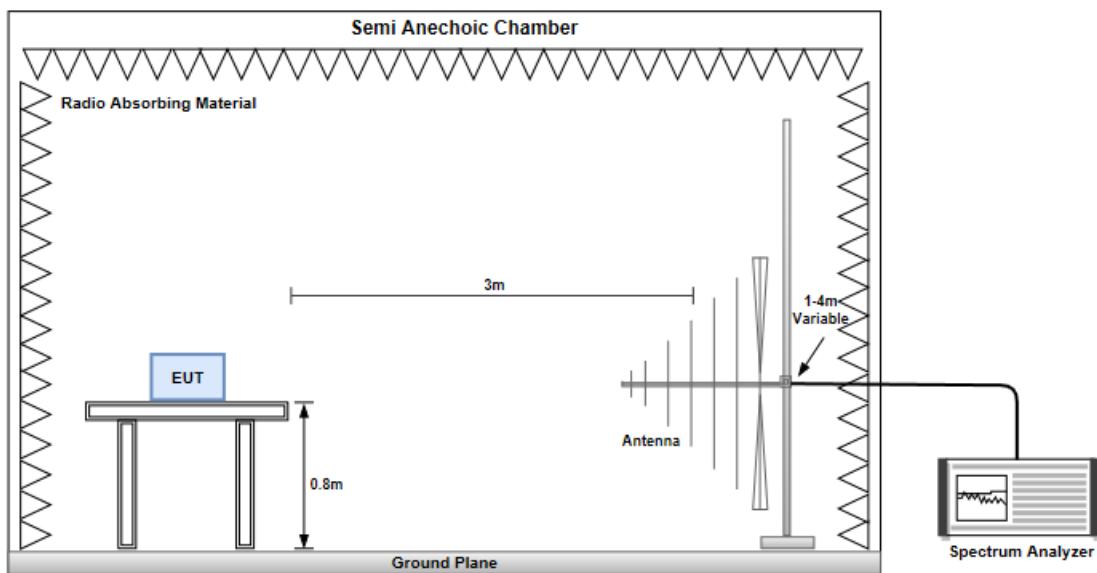
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

3.2.2 Test Procedures

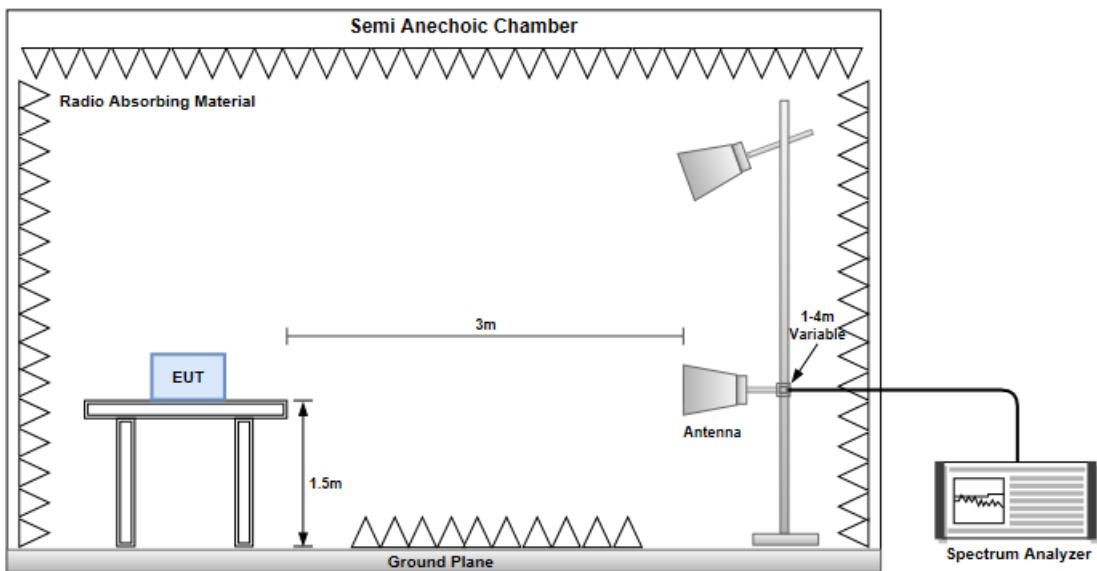
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. For emissions testing at or below 1 GHz, the table height is 80 cm above the reference ground plane. For emission measurements above 1 GHz, the table height is 1.5 m
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.
4. After finding the max radiated emission, substitution method will be used for getting effective radiated power. EUT will be removed and substitution antenna will be placed at same position. Signal generator will output CW signal to substitution antenna through a RF cable. Rotate turntable and move antenna to find maximum radiated emission. Adjust output power of signal generator to let the maximum radiated emission is same as step 3. Record the output power level.
5. E.I.R.P = output power of step 4 + gain of substitution antenna – cable loss of RF cable.

3.2.3 Test Setup

Radiated Emissions below 1 GHz



Radiated Emissions above 1 GHz



CDD mode

3.2.4 Test Result of Radiated Emissions below 1GHz

Mode	LTE Band 25 , CB:5MHz, 1RB, Offset 0, Channel:26065						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
85.29	H	-56.08	-13.00	-43.08	-52.46	-55.27	-0.81
174.47	H	-59.74	-13.00	-46.74	-58.21	-61.06	1.32
374.35	H	-52.48	-13.00	-39.48	-54.38	-56.51	4.03
499.48	H	-55.46	-13.00	-42.46	-59.12	-59.34	3.88
749.74	H	-59.10	-13.00	-46.10	-67.65	-62.08	2.98
955.38	H	-60.16	-13.00	-47.16	-70.69	-62.60	2.44
85.35	V	-49.99	-13.00	-36.99	-47.29	-48.72	-1.27
176.47	V	-55.43	-13.00	-42.43	-57.32	-56.75	1.32
374.35	V	-53.32	-13.00	-40.32	-55.42	-57.35	4.03
499.48	V	-48.68	-13.00	-35.68	-52.69	-52.56	3.88
749.74	V	-53.85	-13.00	-40.85	-63.01	-56.83	2.98
955.38	V	-57.03	-13.00	-44.03	-68.47	-59.47	2.44

Note: EIRP = S.G Power value + Correction factor.

Mode	LTE Band 25 , CB:10MHz, 1RB, Offset 0, Channel:26090						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
83.35	H	-56.04	-13.00	-43.04	-52.69	-54.77	-1.27
179.38	H	-61.23	-13.00	-48.23	-59.57	-62.94	1.71
374.35	H	-53.28	-13.00	-40.28	-55.18	-57.31	4.03
499.48	H	-55.30	-13.00	-42.30	-59.39	-59.18	3.88
749.74	H	-59.47	-13.00	-46.47	-68.02	-62.45	2.98
874.87	H	-62.80	-13.00	-49.80	-72.66	-65.58	2.78
83.35	V	-49.48	-13.00	-36.48	-47.28	-48.21	-1.27
174.53	V	-55.15	-13.00	-42.15	-57.07	-56.22	1.07
374.35	V	-54.10	-13.00	-41.10	-56.20	-55.13	1.03
499.48	V	-48.79	-13.00	-35.79	-52.80	-52.67	3.88
749.74	V	-54.20	-13.00	-41.20	-63.36	-57.18	2.98
955.38	V	-56.24	-13.00	-43.24	-67.68	-58.68	2.44

Note: EIRP = S.G Power value + Correction factor.

Mode	LTE Band 25 , CB:15MHz, 1RB, Offset 0, Channel:26115						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
85.29	H	-55.98	-13.00	-42.98	-52.36	-55.17	-0.81
176.47	H	-59.82	-13.00	-46.82	-58.29	-61.14	1.32
374.35	H	-52.32	-13.00	-39.32	-54.22	-56.35	4.03
499.48	H	-55.94	-13.00	-42.94	-59.60	-59.82	3.88
749.74	H	-69.96	-13.00	-56.96	-68.51	-72.94	2.98
955.38	H	-62.00	-13.00	-49.00	-72.53	-64.44	2.44
85.29	V	-49.81	-13.00	-36.81	-46.91	-49.00	-0.81
176.47	V	-55.25	-13.00	-42.25	-57.14	-56.57	1.32
374.35	V	-53.61	-13.00	-40.61	-55.71	-57.64	4.03
499.48	V	-49.28	-13.00	-36.28	-53.29	-53.16	3.88
749.74	V	-55.95	-13.00	-42.95	-65.11	-58.93	2.98
955.38	V	-56.33	-13.00	-43.33	-67.77	-58.77	2.44

Note: EIRP = S.G Power value + Correction factor.

Mode	LTE Band 25 , CB:20MHz, 1RB, Offset 0, Channel:26140						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
85.29	H	-56.00	-13.00	-43.00	-52.38	-55.19	-0.81
176.47	H	-61.35	-13.00	-48.35	-59.82	-62.67	1.32
374.35	H	-54.06	-13.00	-41.06	-55.96	-58.09	4.03
499.48	H	-55.96	-13.00	-42.96	-69.62	-59.84	3.88
749.74	H	-60.20	-13.00	-47.20	-68.75	-63.18	2.98
874.87	H	-63.34	-13.00	-50.34	-73.20	-66.12	2.78
83.35	V	-51.79	-13.00	-38.79	-49.09	-50.52	-1.27
179.38	V	-55.33	-13.00	-42.33	-57.19	-57.04	1.71
374.35	V	-54.17	-13.00	-41.17	-56.27	-58.20	4.03
499.48	V	-49.35	-13.00	-36.35	-53.36	-53.23	3.88
749.74	V	-56.16	-13.00	-43.16	-65.32	-59.14	2.98
955.38	V	-55.99	-13.00	-42.99	-67.43	-58.43	2.44

Note: EIRP = S.G Power value + Correction factor.

3.2.5 Test Result of Radiated Emissions above 1GHz

Mode	LTE Band 25 , CB:5MHz, 1RB, Offset 0, Channel:26065						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7401.00	H	-21.18	-13.00	-8.18	-40.80	-24.54	3.36
11101.50	H	-32.80	-13.00	-19.80	-55.18	-33.47	0.67
12951.75	H	-16.81	-13.00	-3.81	-42.41	-18.86	2.05
7401.00	V	-19.55	-13.00	-6.55	-39.46	-22.91	3.36
11101.50	V	-25.79	-13.00	-12.79	-48.35	-26.46	0.67
12951.75	V	-16.65	-13.00	-3.65	-42.02	-18.70	2.05

Mode	LTE Band 25 , CB:5MHz, 1RB, Offset 0, Channel:26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7521.00	H	-20.03	-13.00	-7.03	-38.99	-23.25	3.22
11281.50	H	-31.02	-13.00	-18.02	-53.69	-31.82	0.80
13161.75	H	-31.13	-13.00	-18.13	-56.88	-32.87	1.74
7521.00	V	-19.12	-13.00	-6.12	-38.27	-22.34	3.22
11281.50	V	-27.43	-13.00	-14.43	-50.51	-28.23	0.80
13161.75	V	-28.53	-13.00	-15.53	-53.73	-30.27	1.74

Mode	LTE Band 25 , CB:5MHz, 1RB, Offset 0, Channel:26665						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7641.00	H	-20.45	-13.00	-7.45	-38.92	-23.47	3.02
11461.50	H	-31.96	-13.00	-18.96	-54.95	-32.91	0.95
13371.75	H	-23.20	-13.00	-10.20	-49.05	-24.61	1.41
7641.00	V	-18.98	-13.00	-5.98	-37.76	-22.00	3.02
11461.50	V	-30.23	-13.00	-17.23	-53.87	-31.18	0.95
13371.75	V	-29.86	-13.00	-16.86	-54.81	-31.27	1.41

Note: EIRP = S.G Power value + Correction factor.

Mode	LTE Band 25 , CB:10MHz, 1RB, Offset 0, Channel:26090						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7402.16	H	-21.00	-13.00	-8.00	-40.67	-24.37	3.37
11103.24	H	-32.62	-13.00	-19.62	-54.68	-33.27	0.65
12953.78	H	-18.02	-13.00	-5.02	.43.58	-20.10	2.08
7402.16	V	-19.36	-13.00	-6.36	-39.33	-22.73	3.37
11103.24	V	-27.74	-13.00	-14.74	-50.26	-28.39	0.65
12953.78	V	-17.34	-13.00	-4.34	-42.69	-19.42	2.08

Mode	LTE Band 25 , CB:10MHz, 1RB, Offset 0, Channel:26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7512.16	H	-20.25	-13.00	-7.25	-39.21	-23.47	3.22
11268.24	H	-31.88	-13.00	-18.88	-54.55	-32.68	0.80
13146.28	H	-31.00	-13.00	-18.00	-56.75	-32.74	1.74
7512.16	V	-20.23	-13.00	-7.23	-39.38	-23.45	3.22
11268.24	V	-26.51	-13.00	-13.51	-49.59	-27.31	0.80
13146.28	V	-29.36	-13.00	-16.36	-54.56	-31.10	1.74

Mode	LTE Band 25 , CB:10MHz, 1RB, Offset 0, Channel:26640						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7622.16	H	-21.19	-13.00	-8.19	-39.68	-24.26	3.07
11433.24	H	-31.60	-13.00	-18.60	-54.54	-32.53	0.93
13338.78	H	-26.73	-13.00	-13.73	-52.57	-28.19	1.46
7622.16	V	-20.62	-13.00	-7.62	-39.34	-23.69	3.07
11433.24	V	-29.68	-13.00	-16.68	-53.23	-30.61	0.93
13338.78	V	-29.53	-13.00	-16.53	-54.52	-30.99	1.46

Note: EIRP = S.G Power value + Correction factor.

Mode	LTE Band 25 , CB:15MHz, 1RB, Offset 0, Channel:26115						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7403.28	H	-19.90	-13.00	-6.90	-39.56	-23.27	3.37
11104.92	H	-31.90	-13.00	-18.90	-54.27	-32.56	0.66
12955.74	H	-19.59	-13.00	-6.59	-45.16	-21.66	2.07
7403.28	V	-20.29	-13.00	-7.29	-40.25	-23.66	3.37
11104.92	V	-26.98	-13.00	-13.98	-49.51	-27.64	0.66
12955.74	V	-18.22	-13.00	-5.22	-53.58	-20.29	2.07

Mode	LTE Band 25 , CB:15MHz, 1RB, Offset 0, Channel:26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7503.28	H	-20.35	-13.00	-7.35	-39.31	-23.57	3.22
11254.92	H	-30.81	-13.00	-17.81	-53.48	-31.61	0.80
13130.74	H	-31.41	-13.00	-18.41	-57.16	-33.15	1.74
7503.28	V	-20.11	-13.00	-7.11	-39.26	-23.33	3.22
11254.92	V	-26.38	-13.00	-13.38	-49.46	-27.18	0.80
13130.74	V	-28.91	-13.00	-15.91	-54.11	-30.65	1.74

Mode	LTE Band 25 , CB:15MHz, 1RB, Offset 0, Channel:26615						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7603.28	H	-20.91	-13.00	-7.91	-39.42	-24.03	3.12
11404.92	H	-31.00	-13.00	-18.00	-53.89	-31.90	0.90
13305.74	H	-25.47	-13.00	-12.47	-51.28	-26.98	1.51
7603.28	V	-20.90	-13.00	-7.90	-39.55	-24.02	3.12
11404.92	V	-30.53	-13.00	-17.53	-53.99	-31.43	0.90
13305.74	V	-30.09	-13.00	-17.09	-55.12	-31.60	1.51

Note: EIRP = S.G Power value + Correction factor.

Mode	LTE Band 25 , CB:20MHz, 1RB, Offset 0, Channel:26140						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7404.56	H	-20.18	-13.00	-7.18	-39.67	-23.51	3.33
11106.84	H	-31.82	-13.00	-18.82	-54.25	-32.51	0.69
12957.98	H	-19.02	-13.00	-6.02	-44.69	-21.00	1.98
7404.56	V	-18.54	-13.00	-5.54	-38.31	-21.87	3.33
11106.84	V	-26.55	-13.00	-13.55	-49.20	-27.24	0.69
12957.98	V	-19.83	-13.00	-6.83	-45.21	-21.81	1.98

Mode	LTE Band 25 , CB:20MHz, 1RB, Offset 0, Channel:26365						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7494.56	H	-19.85	-13.00	-6.85	-38.81	-23.07	3.22
11241.84	H	-29.88	-13.00	-16.88	-52.55	-30.68	0.80
13115.48	H	-31.51	-13.00	-18.51	-57.26	-33.25	1.74
7494.56	V	-19.06	-13.00	-6.06	-38.21	-22.28	3.22
11241.84	V	-28.08	-13.00	-15.08	-51.16	-28.88	0.80
13115.48	V	-28.27	-13.00	-15.27	-53.47	-30.01	1.74

Mode	LTE Band 25 , CB:20MHz, 1RB, Offset 0, Channel:26590						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
7584.56	H	-19.52	-13.00	-6.52	-38.12	-22.67	3.15
11376.84	H	-31.33	-13.00	-18.33	-54.16	-32.21	0.88
13272.98	H	-27.16	-13.00	-14.16	-52.96	-28.73	1.57
7584.56	V	-19.85	-13.00	-6.85	-38.60	-23.00	3.15
11376.84	V	-29.19	-13.00	-16.19	-52.56	-30.07	0.88
13272.98	V	-28.52	-13.00	-15.52	-53.59	-30.09	1.57

Note: EIRP = S.G Power value + Correction factor.

CA mode

3.2.6 Test Result of Radiated Emissions below 1GHz

Mode	LTE Band 25 , CB:5MHz, 1RB, Offset 12, Channel:26065+CB:5MHz, 1RB, Offset 12, Channel:26665						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
85.29	H	-56.54	-13.00	-43.54	-52.92	-55.73	-0.81
176.47	H	-61.45	-13.00	-48.45	-59.92	-62.77	1.32
374.35	H	-52.87	-13.00	-39.87	-54.77	-56.90	4.03
499.48	H	-56.02	-13.00	-43.02	-59.68	-59.90	3.88
749.74	H	-60.23	-13.00	-47.23	-68.78	-63.21	2.98
955.38	H	-63.04	-13.00	-50.04	-73.57	-65.48	2.44
83.35	V	-50.65	-13.00	-37.65	-47.95	-49.38	-1.27
176.47	V	-55.22	-13.00	-42.22	-57.11	-56.54	1.32
374.35	V	-53.63	-13.00	-40.63	-55.73	-57.66	4.03
499.48	V	-49.55	-13.00	-36.55	-53.56	-53.43	3.88
749.74	V	-56.17	-13.00	-43.17	-65.33	-59.15	2.98
955.38	V	-55.83	-13.00	-42.83	-67.27	-58.27	2.44

Note: EIRP = S.G Power value + Correction factor.

Mode	LTE Band 25 , CB:5MHz, 1RB, Offset 12, Channel:26065+CB:10MHz, 1RB, Offset 24, Channel:26640						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Vaule (dBm)	Correction Factor (dB)
83.35	H	-55.16	-13.00	-42.16	-51.81	-53.89	-1.27
177.44	H	-61.76	-13.00	-48.76	-60.18	-63.21	1.45
374.35	H	-53.12	-13.00	-40.12	-55.02	-57.15	4.03
499.48	H	-55.94	-13.00	-42.94	-59.60	-59.82	3.88
749.74	H	-59.65	-13.00	-46.65	-68.20	-62.63	2.98
955.38	H	-62.32	-13.00	-49.32	-72.85	-64.76	2.44
85.29	V	-50.50	-13.00	-37.50	-47.60	-49.69	-0.81
174.53	V	-55.83	-13.00	-42.83	-57.75	-56.90	1.07
374.35	V	-53.81	-13.00	-40.81	-55.91	-57.84	4.03
499.48	V	-49.15	-13.00	-36.15	-53.16	-53.03	3.88
749.74	V	-56.16	-13.00	-43.16	-65.62	-59.14	2.98
955.38	V	-56.93	-13.00	-43.93	-68.37	-59.37	2.44

Note: EIRP = S.G Power value + Correction factor.

Mode	LTE Band 25 , CB:10MHz, 1RB, Offset 24, Channel:26090+CB:5MHz, 1RB, Offset 12, Channel:26665						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
83.35	H	-55.42	-13.00	-42.42	-52.07	-54.15	-1.27
174.53	H	-61.51	-13.00	-48.51	-60.07	-62.58	1.07
374.35	H	-53.72	-13.00	-40.72	-55.62	-57.75	4.03
499.48	H	-55.94	-13.00	-42.94	-59.60	-59.82	3.88
749.74	H	-59.54	-13.00	-46.54	-68.09	-62.52	2.98
955.38	H	-62.53	-13.00	-49.53	-73.06	-64.97	2.44
83.35	V	-50.77	-13.00	-37.77	-48.07	-49.50	-1.27
173.56	V	-55.24	-13.00	-42.24	-57.17	-56.18	0.94
374.35	V	-54.03	-13.00	-41.03	-56.13	-58.06	4.03
499.48	V	-49.17	-13.00	-36.17	-53.18	-53.05	3.88
749.74	V	-56.00	-13.00	-43.00	-65.16	-58.98	2.98
955.38	V	-56.71	-13.00	-43.71	-68.15	-59.15	2.44

Note: EIRP = S.G Power value + Correction factor.

3.2.7 Test Result of Radiated Emissions above 1GHz

Mode	LTE Band 25 , CB:5MHz, 1RB, Offset 12, Channel:26065+CB:5MHz, 1RB, Offset 12, Channel:26665						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
5557.50	H	-32.25	-13.00	-19.25	-48.72	-38.31	6.06
7410.00	H	-27.46	-13.00	-14.46	-47.09	-30.82	3.36
9262.50	H	-31.75	-13.00	-18.75	-54.53	-34.03	2.28
5557.50	V	-31.11	-13.00	-18.11	-48.06	-37.17	6.06
7410.00	V	-25.49	-13.00	-12.49	-45.41	-28.85	3.36
9262.50	V	-31.61	-13.00	-18.61	-53.01	-33.89	2.28

Mode	LTE Band 25 , CB:5MHz, 1RB, Offset 12, Channel:26065+CB:10MHz, 1RB, Offset 24, Channel:26640						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
5557.50	H	-32.22	-13.00	-19.22	-48.69	-38.28	6.06
7410.00	H	-27.27	-13.00	-14.27	-46.90	-30.63	3.36
9262.50	H	-31.58	-13.00	-18.58	-54.36	-33.86	2.28
5557.50	V	-30.93	-13.00	-17.93	-47.88	-36.99	6.06
7410.00	V	-25.65	-13.00	-12.65	-45.57	-29.01	3.36
9262.50	V	-31.66	-13.00	-18.66	-53.06	-33.94	2.28

Mode	LTE Band 25 , CB:10MHz, 1RB, Offset 24, Channel:26090+CB:5MHz, 1RB, Offset 12, Channel:26665						
Frequency (MHz)	Antenna Polarity	E.I.R.P (dBm)	Limit (dBm)	Margin (dB)	S.A Reading (dBm)	S.G Power Value (dBm)	Correction Factor (dB)
5565.00	H	-32.94	-13.00	-19.94	-49.42	-39.00	6.06
7420.00	H	-27.43	-13.00	-14.43	-46.99	-30.78	3.35
9275.00	H	-32.20	-13.00	-19.20	-54.98	-34.46	2.26
5565.00	V	-31.14	-13.00	-18.14	-48.10	-37.20	6.06
7420.00	V	-25.63	-13.00	-12.63	-45.48	-28.98	3.35
9275.00	V	-32.26	-13.00	-19.26	-53.61	-34.52	2.26

Note: EIRP = S.G Power value + Correction factor.

3.3 Conducted Emissions

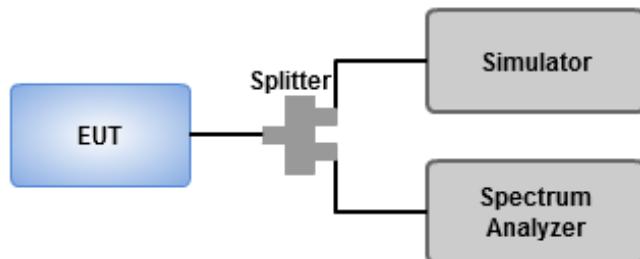
3.3.1 Limit of Conducted Emissions

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

3.3.2 Test Procedures

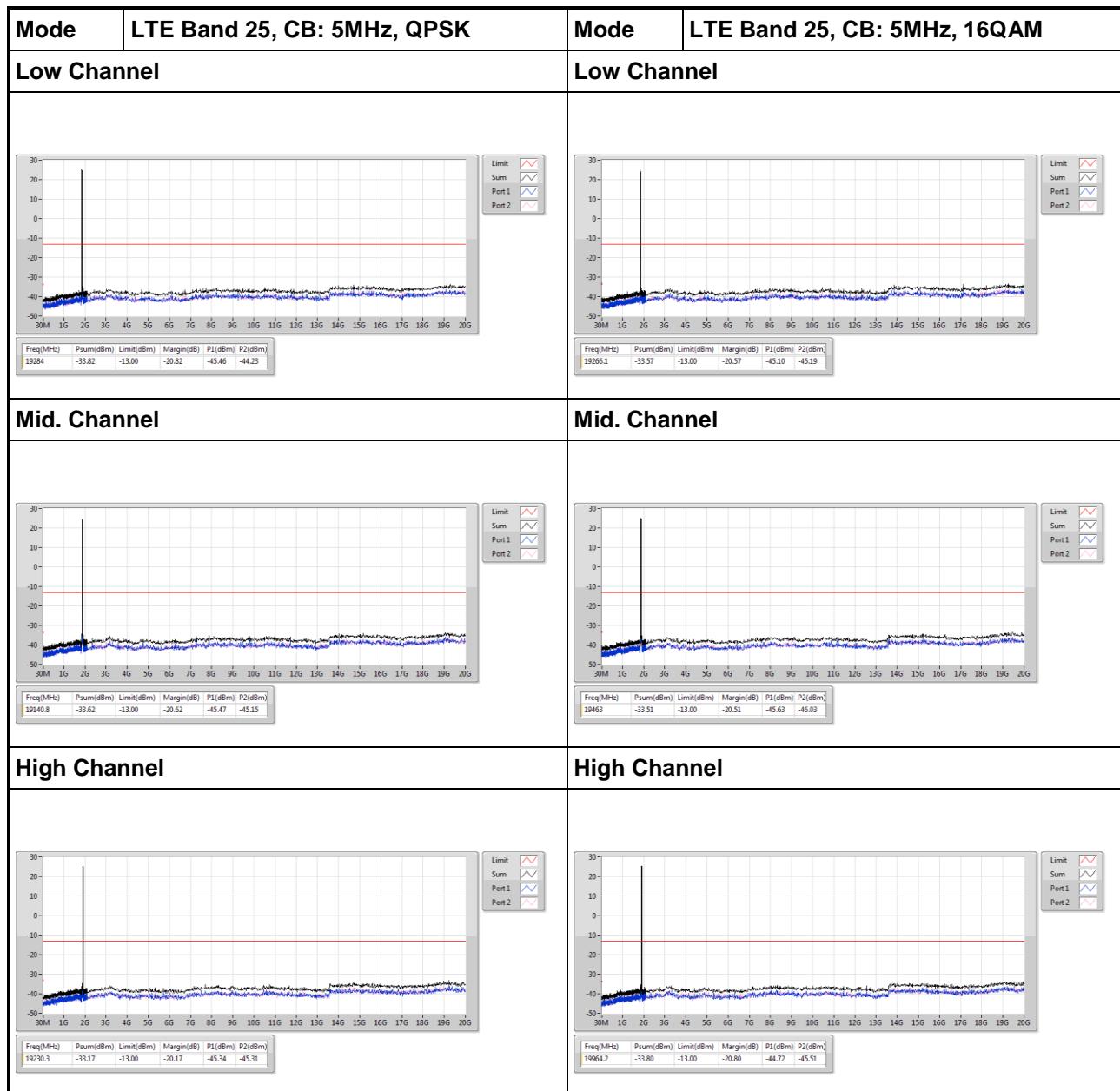
1. Lowest, middle and highest operating channels are tested for this item.
2. Scan frequency range is from 30MHz ~ 20GHz.
3. Set RBW = 1MHz, VBW = 3MHz, detector = rms, sweep time = auto.
4. Record the max trace value and capture the test plot of each sub frequency band.

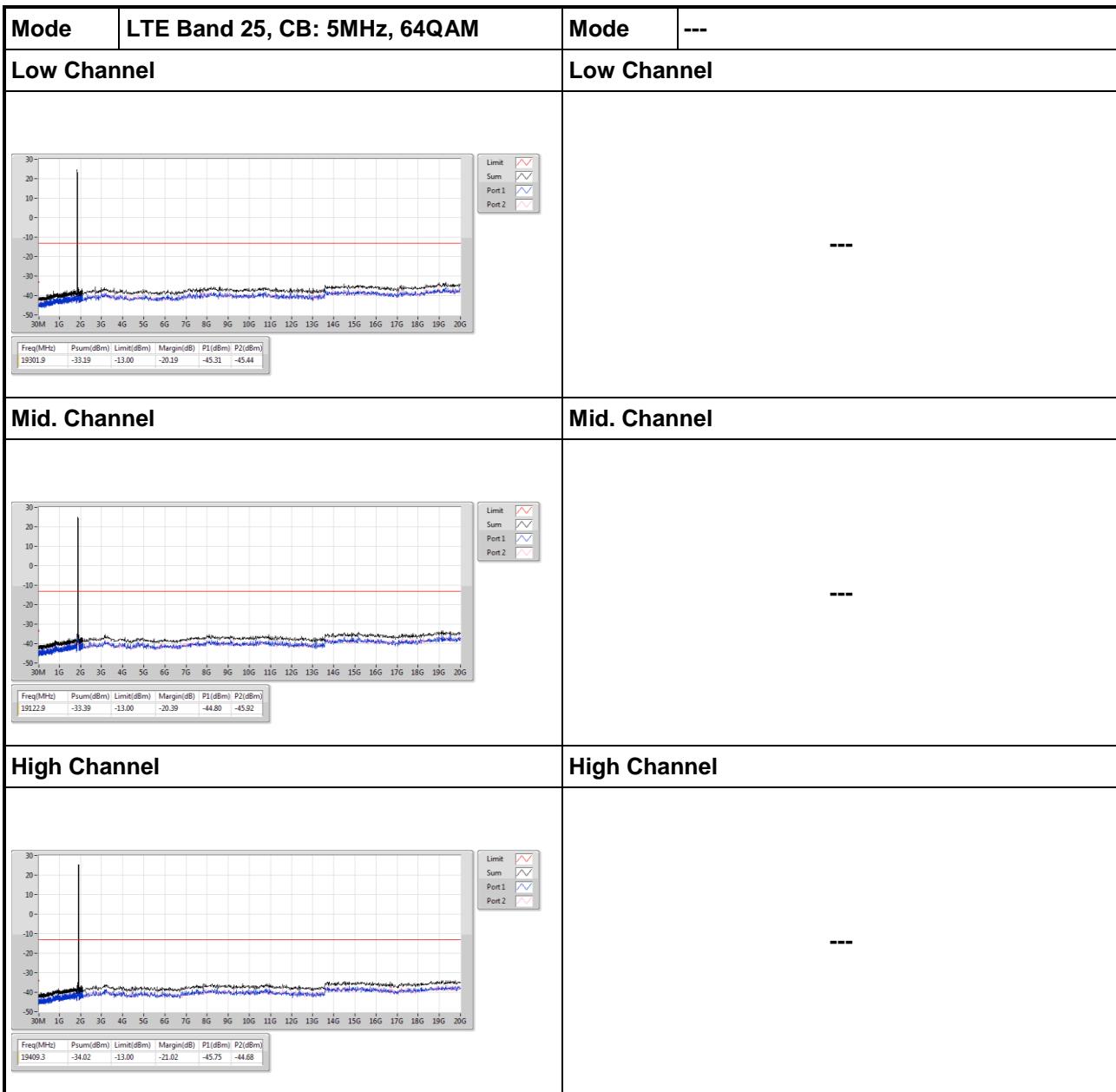
3.3.3 Test Setup



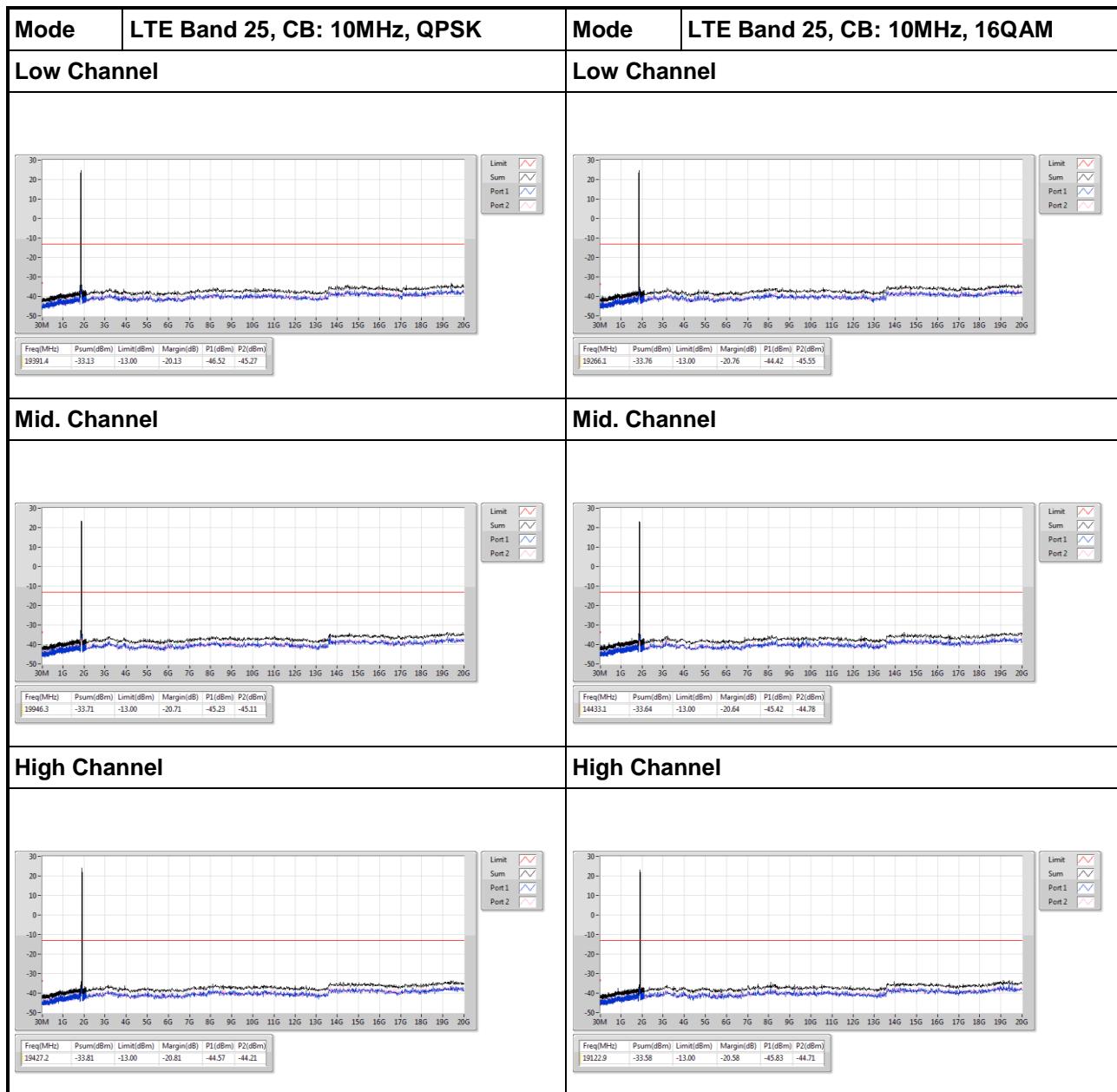
3.3.4 Test Result of Conducted Emissions_CDD mode

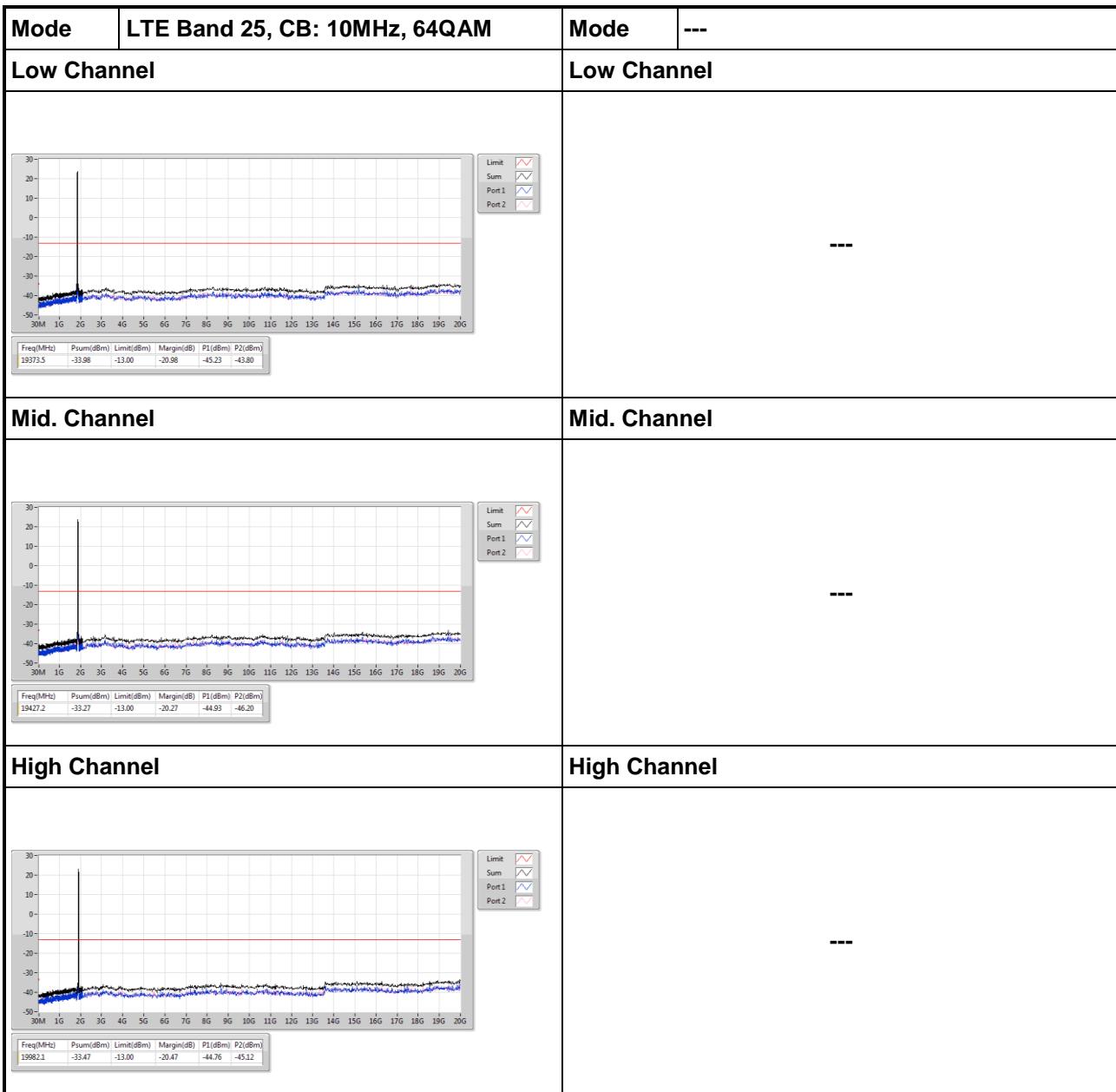
LTE Band 25, CB: 5MHz



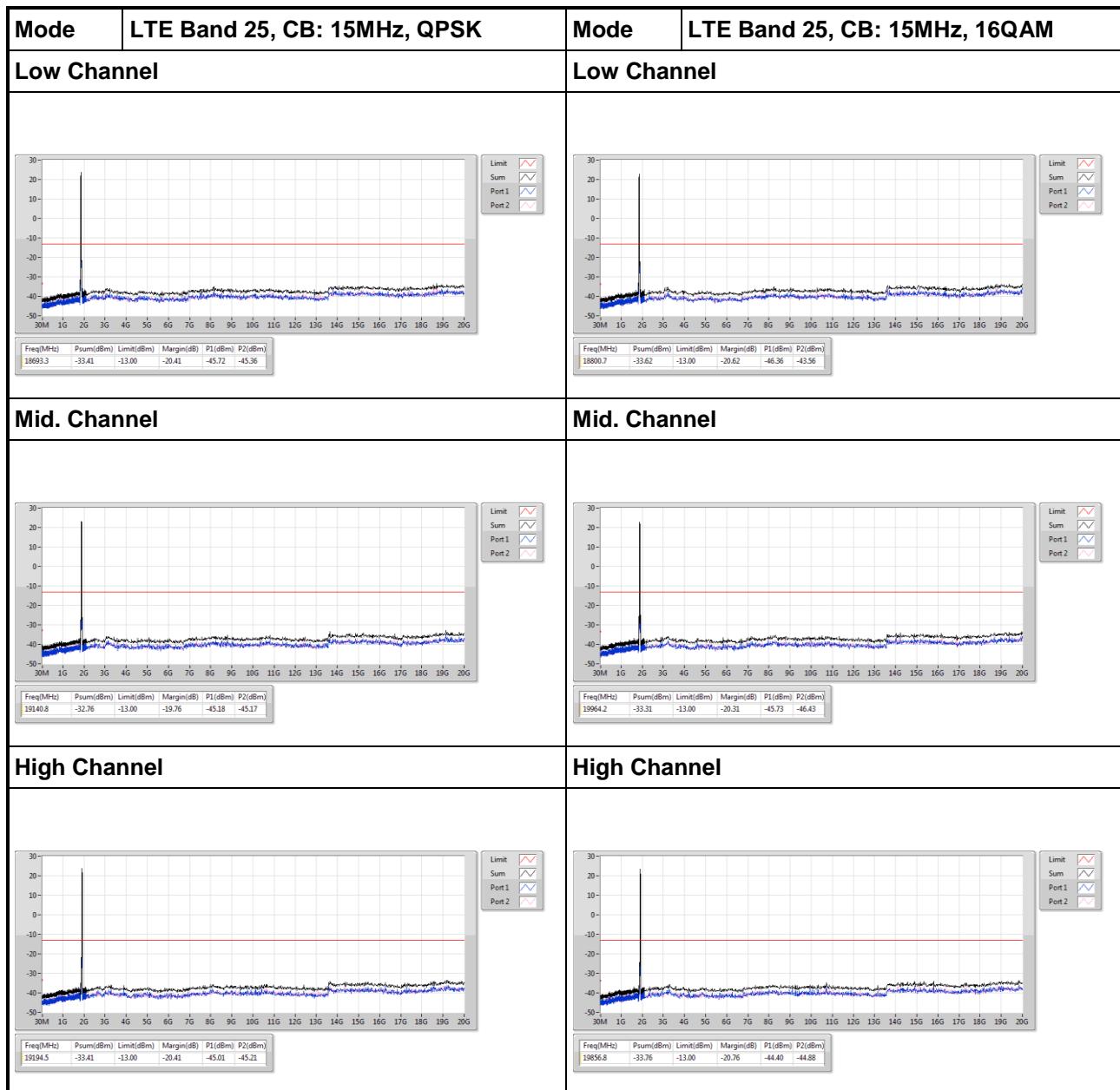


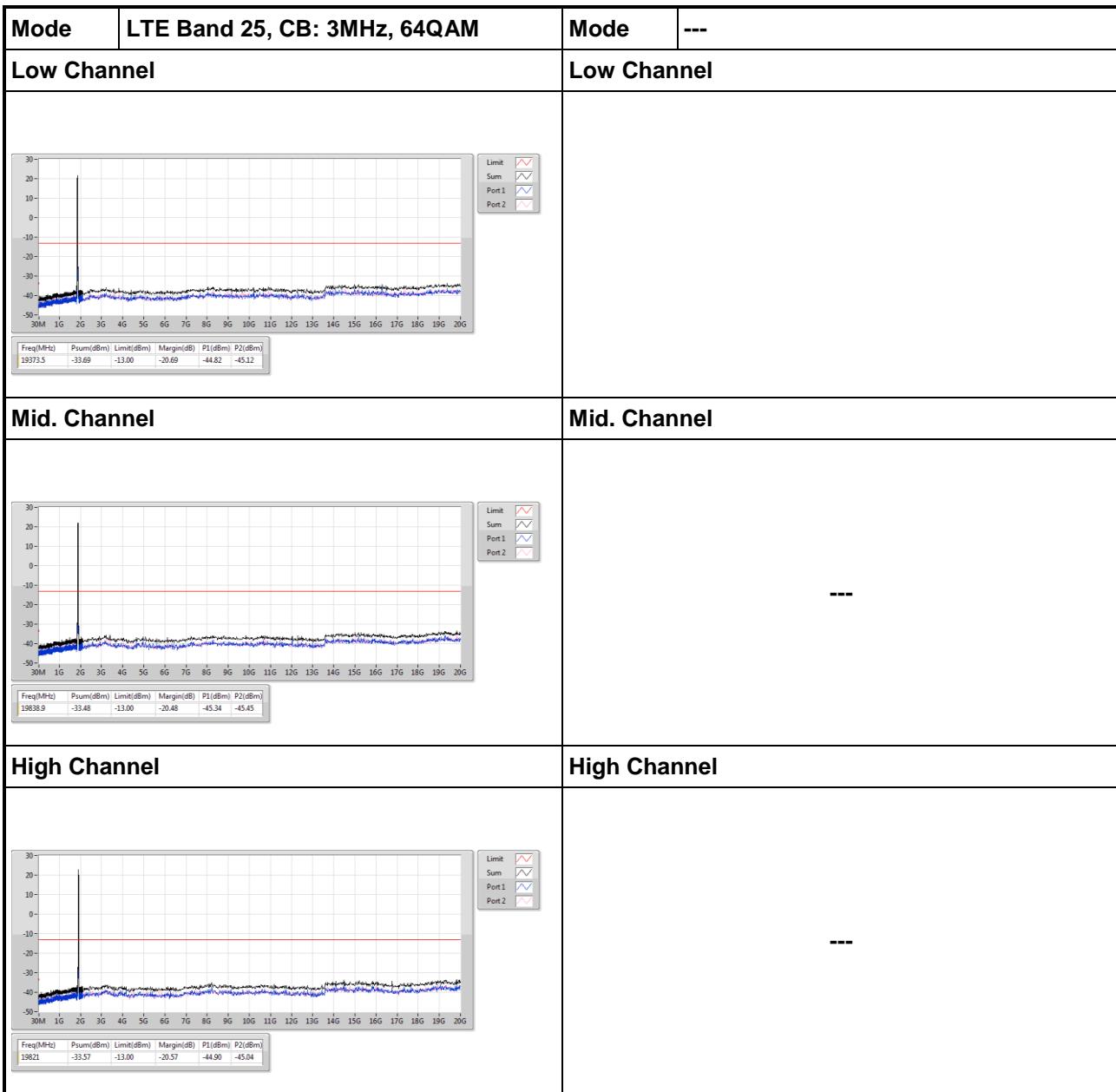
LTE Band 25, CB: 10MHz



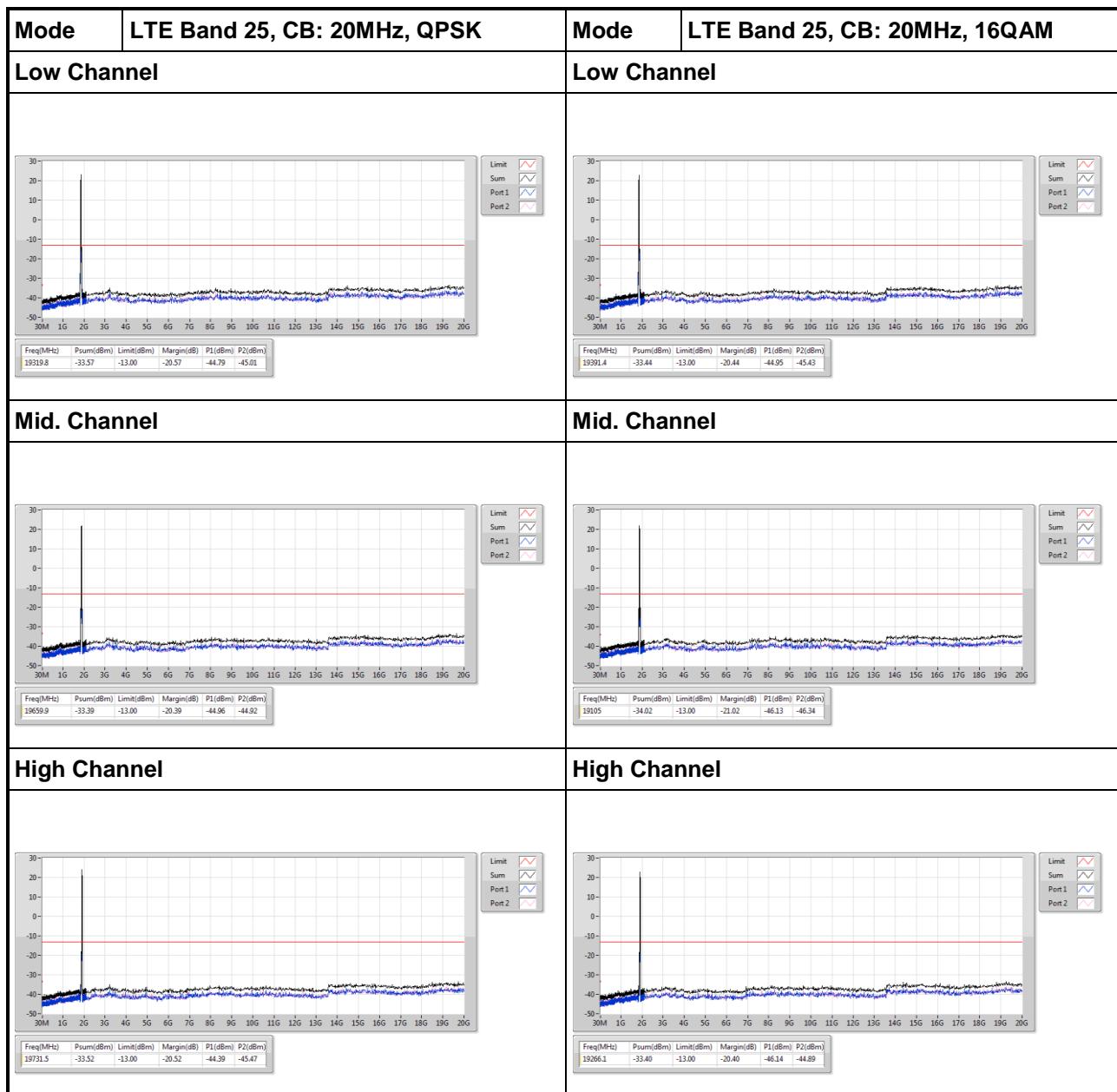


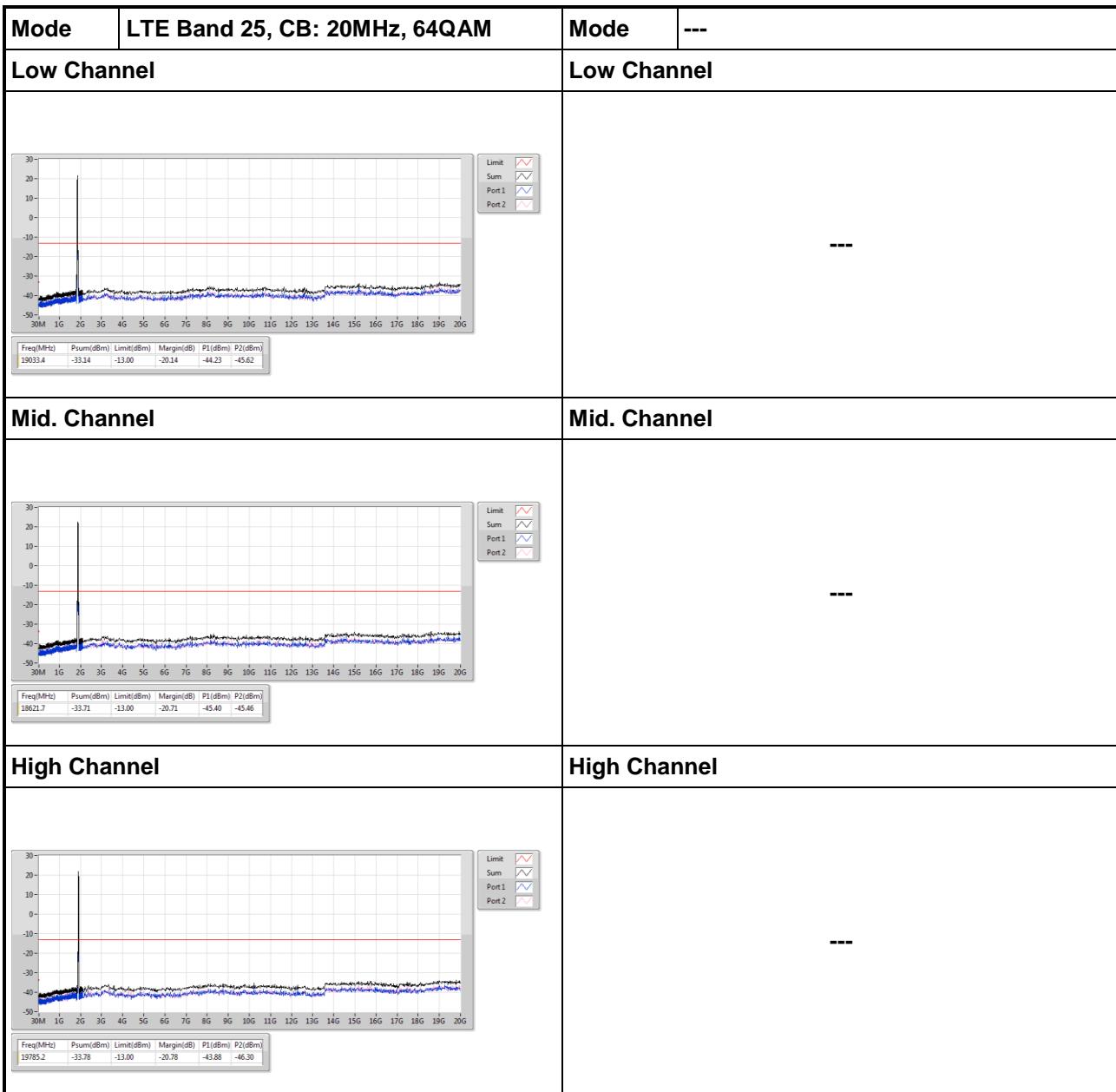
LTE Band 25, CB: 15MHz





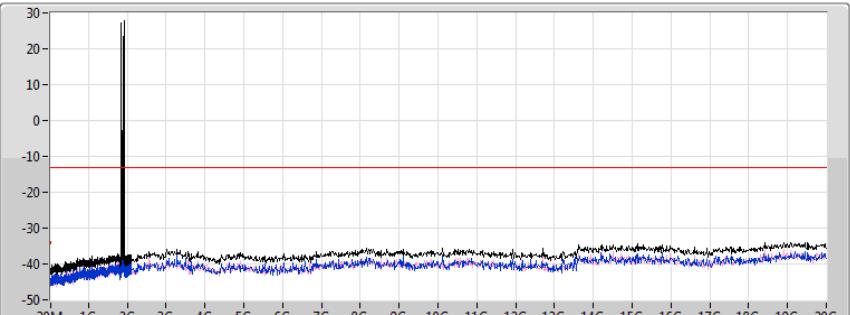
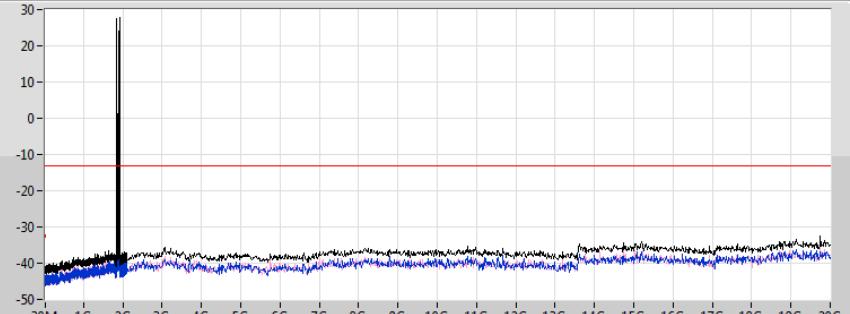
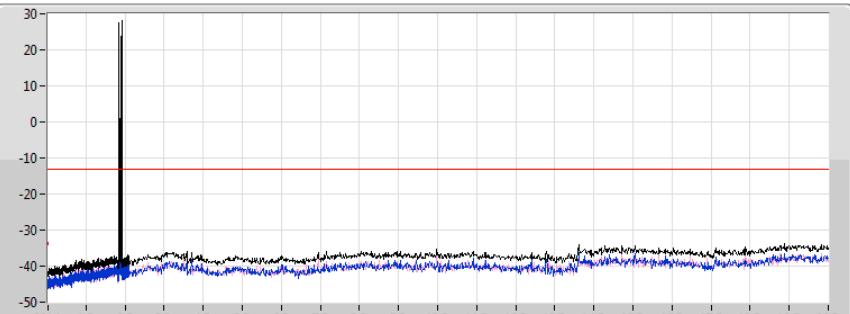
LTE Band 25, CB: 20MHz



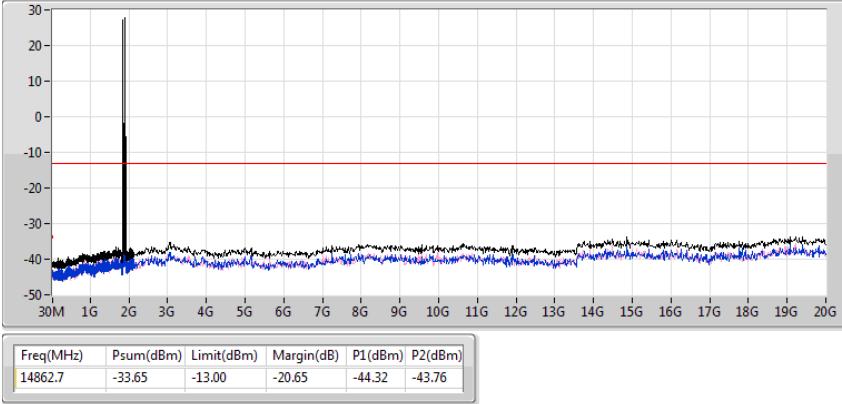
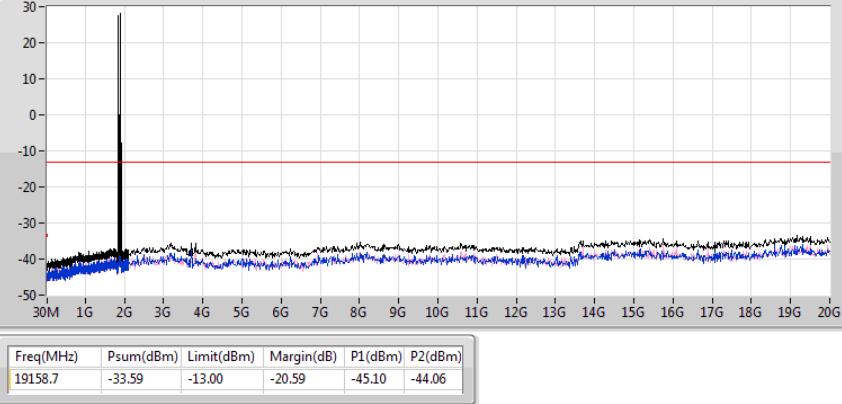
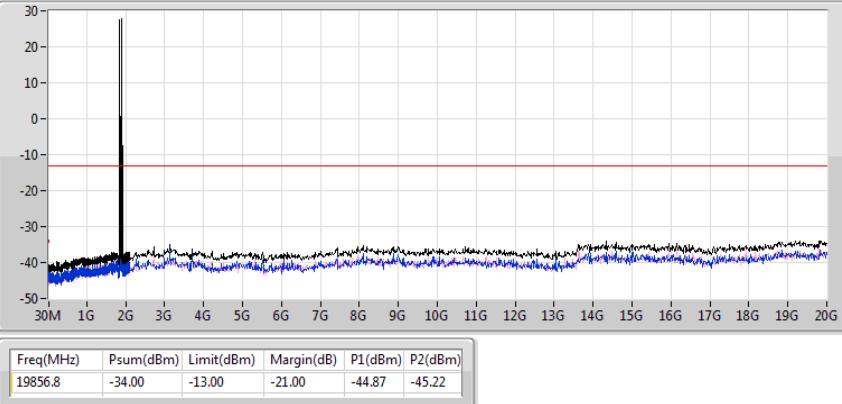


3.3.5 Test Result of Conducted Emissions_CA mode

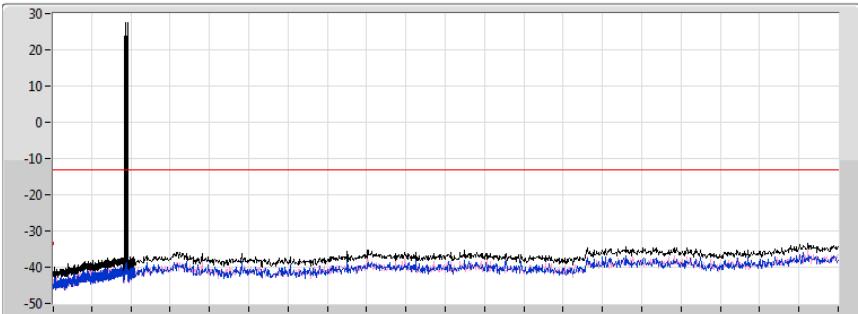
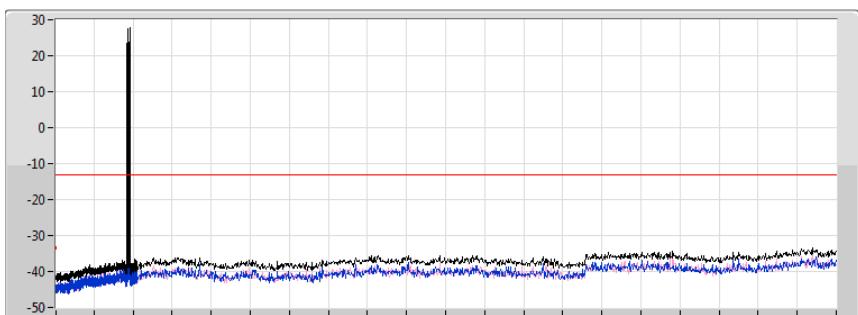
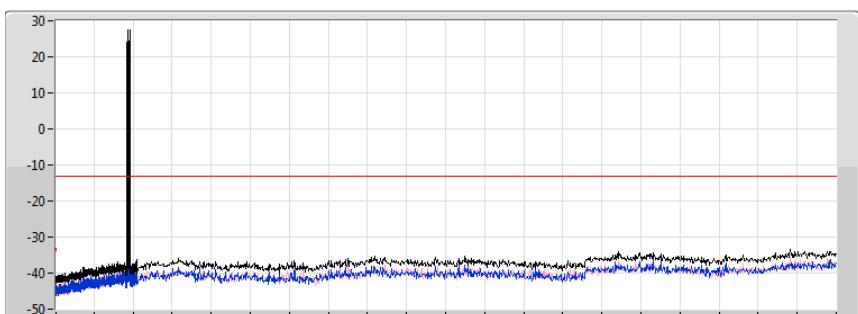
LTE Band 25, CB: 5MHz+5MHz

Mode	LTE Band 25, CB: 5MHz+5MHz, QPSK-1852.5+1912.5MHz																	
	 <p>Limit: <input checked="" type="checkbox"/> Sum: <input checked="" type="checkbox"/> Port 1: <input checked="" type="checkbox"/> Port 2: <input checked="" type="checkbox"/></p> <table border="1"> <thead> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> </thead> <tbody> <tr> <td>19087.1</td> <td>-34.05</td> <td>-13.00</td> <td>-21.05</td> <td>-46.02</td> <td>-44.87</td> </tr> </tbody> </table>						Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	19087.1	-34.05	-13.00	-21.05	-46.02	-44.87
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)													
19087.1	-34.05	-13.00	-21.05	-46.02	-44.87													
Mode	LTE Band 25, CB: 5MHz+5MHz, 16QAM-1852.5+1912.5MHz																	
	 <p>Limit: <input checked="" type="checkbox"/> Sum: <input checked="" type="checkbox"/> Port 1: <input checked="" type="checkbox"/> Port 2: <input checked="" type="checkbox"/></p> <table border="1"> <thead> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> </thead> <tbody> <tr> <td>19749.4</td> <td>-32.39</td> <td>-13.00</td> <td>-19.39</td> <td>-44.96</td> <td>-45.54</td> </tr> </tbody> </table>						Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	19749.4	-32.39	-13.00	-19.39	-44.96	-45.54
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)													
19749.4	-32.39	-13.00	-19.39	-44.96	-45.54													
Mode	LTE Band 25, CB: 5MHz+5MHz, 64QAM -1852.5+1912.5MHz																	
	 <p>Limit: <input checked="" type="checkbox"/> Sum: <input checked="" type="checkbox"/> Port 1: <input checked="" type="checkbox"/> Port 2: <input checked="" type="checkbox"/></p> <table border="1"> <thead> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> </thead> <tbody> <tr> <td>18890.2</td> <td>-33.88</td> <td>-13.00</td> <td>-20.88</td> <td>-44.95</td> <td>-44.16</td> </tr> </tbody> </table>						Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	18890.2	-33.88	-13.00	-20.88	-44.95	-44.16
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)													
18890.2	-33.88	-13.00	-20.88	-44.95	-44.16													

LTE Band 25, CB: 5MHz+10MHz

Mode	LTE Band 25, CB: 5MHz+10MHz, QPSK- 1852.5+1910.0MHz																
 <table border="1"> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> <tr> <td>14862.7</td> <td>-33.65</td> <td>-13.00</td> <td>-20.65</td> <td>-44.32</td> <td>-43.76</td> </tr> </table>						Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	14862.7	-33.65	-13.00	-20.65	-44.32	-43.76
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)												
14862.7	-33.65	-13.00	-20.65	-44.32	-43.76												
Mode	LTE Band 25, CB: 5MHz+10MHz, 16QAM - 1852.5+1910.0MHz																
 <table border="1"> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> <tr> <td>19158.7</td> <td>-33.59</td> <td>-13.00</td> <td>-20.59</td> <td>-45.10</td> <td>-44.06</td> </tr> </table>						Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	19158.7	-33.59	-13.00	-20.59	-45.10	-44.06
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)												
19158.7	-33.59	-13.00	-20.59	-45.10	-44.06												
Mode	LTE Band 25, CB: 5MHz+10MHz, 64QAM - 1852.5+1910.0MHz																
 <table border="1"> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> <tr> <td>19856.8</td> <td>-34.00</td> <td>-13.00</td> <td>-21.00</td> <td>-44.87</td> <td>-45.22</td> </tr> </table>						Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	19856.8	-34.00	-13.00	-21.00	-44.87	-45.22
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)												
19856.8	-34.00	-13.00	-21.00	-44.87	-45.22												

LTE Band 25, CB: 10MHz+5MHz

Mode	LTE Band 25, CB: 10MHz+5MHz, QPSK- 1855.0+1912.5MHz																	
 <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <table border="1"> <thead> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> </thead> <tbody> <tr> <td>19230.3</td> <td>-33.39</td> <td>-13.00</td> <td>-20.39</td> <td>-45.24</td> <td>-44.45</td> </tr> </tbody> </table> </div>						Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	19230.3	-33.39	-13.00	-20.39	-45.24	-44.45	
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)													
19230.3	-33.39	-13.00	-20.39	-45.24	-44.45													
 <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <table border="1"> <thead> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> </thead> <tbody> <tr> <td>19391.4</td> <td>-33.56</td> <td>-13.00</td> <td>-20.56</td> <td>-44.48</td> <td>-45.73</td> </tr> </tbody> </table> </div>							Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	19391.4	-33.56	-13.00	-20.56	-44.48	-45.73
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)													
19391.4	-33.56	-13.00	-20.56	-44.48	-45.73													
 <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <table border="1"> <thead> <tr> <th>Freq(MHz)</th> <th>Psum(dBm)</th> <th>Limit(dBm)</th> <th>Margin(dB)</th> <th>P1(dBm)</th> <th>P2(dBm)</th> </tr> </thead> <tbody> <tr> <td>18818.6</td> <td>-33.41</td> <td>-13.00</td> <td>-20.41</td> <td>-45.08</td> <td>-42.85</td> </tr> </tbody> </table> </div>							Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)	18818.6	-33.41	-13.00	-20.41	-45.08	-42.85
Freq(MHz)	Psum(dBm)	Limit(dBm)	Margin(dB)	P1(dBm)	P2(dBm)													
18818.6	-33.41	-13.00	-20.41	-45.08	-42.85													

3.4 Band Edge

3.4.1 Limit of Band Edge

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB equal to -13dBm.

3.4.2 Test Procedures

CDD Mode

For frequency range: 1849 ~ 1875 MHz / 1890 ~ 1916 MHz

1. Lowest and highest operating channels are tested for this item.
2. Set as below setting

Bandwidth	RB configuration	RBW	VBW	Detector	Sweep time
5	1RB	5.1KHz	16KHz	rms	Auto
5	100%RB	56KHz	180KHz	rms	Auto
10	1RB	5.1KHz	16KHz	rms	Auto
10	100%RB	100KHz	300KHz	rms	Auto
15	1RB	5.1KHz	16KHz	rms	Auto
15	100%RB	150KHz	470KHz	rms	Auto
20	1RB	5.1KHz	16KHz	rms	Auto
20	100%RB	200KHz	620KHz	rms	Auto

3. Record the max trace value and capture the test plot.

For frequency range: 1750 ~ 1844 MHz / 1921 ~ 2050 MHz

1. Lowest and highest operating channels are tested for this item.
2. Set RBW = 1MHz , VBW = 3MHz, Detector = rms, sweep time = Auto
3. Record the max trace value and capture the test plot.

For frequency range: 1844 ~ 1849 MHz / 1916 ~ 1921 MHz

1. Lowest and highest operating channels are tested for this item.
2. Set as below setting for LTE mode

Bandwidth	RB configuration	RBW	VBW	Detector	Sweep time
5	1RB	5.1KHz	16KHz	rms	Auto
5	100%RB	56KHz	180KHz	rms	Auto
10	1RB	5.1KHz	16KHz	rms	Auto
10	100%RB	100KHz	300KHz	rms	Auto
15	1RB	5.1KHz	16KHz	rms	Auto
15	100%RB	150KHz	470KHz	rms	Auto
20	1RB	5.1KHz	16KHz	rms	Auto
20	100%RB	200KHz	620KHz	rms	Auto

3. Using channel power function to integrate 1MHz energy.
4. Record the max trace value and capture the test plot.

CA Mode

For frequency range: 1849 ~ 1875 MHz / 1890 ~ 1916 MHz

4. Lowest and highest operating channels are tested for this item.
5. Set as below setting

Bandwidth	RB configuration	RBW	VBW	Detector	Sweep time
5+5	1RB	11KHz	33KHz	rms	Auto
5+5	100%RB	110KHz	330KHz	rms	Auto
5+10	1RB	11KHz	33KHz	rms	Auto
5+10	100%RB	150KHz	470KHz	rms	Auto
10+5	1RB	11KHz	33KHz	rms	Auto
10+5	100%RB	150KHz	470KHz	rms	Auto

6. Record the max trace value and capture the test plot.

For frequency range: 1750 ~ 1844 MHz / 1921 ~ 2050 MHz

2. Lowest and highest operating channels are tested for this item.
2. Set RBW= 1MHz , VBW = 3MHz, Detector = rms, sweep time = Auto
3. Record the max trace value and capture the test plot.

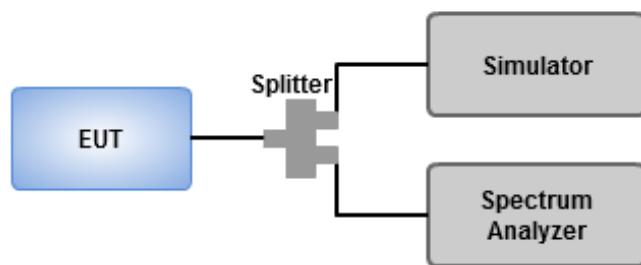
For frequency range: 1844 ~ 1849 MHz / 1916 ~ 1921 MHz

1. Lowest and highest operating channels are tested for this item.
2. Set as below setting for LTE mode

Bandwidth	RB configuration	RBW	VBW	Detector	Sweep time
5+5	1RB	11KHz	33KHz	rms	Auto
5+5	100%RB	110KHz	330KHz	rms	Auto
5+10	1RB	11KHz	33KHz	rms	Auto
5+10	100%RB	150KHz	470KHz	rms	Auto
10+5	1RB	11KHz	33KHz	rms	Auto
10+5	100%RB	150KHz	470KHz	rms	Auto

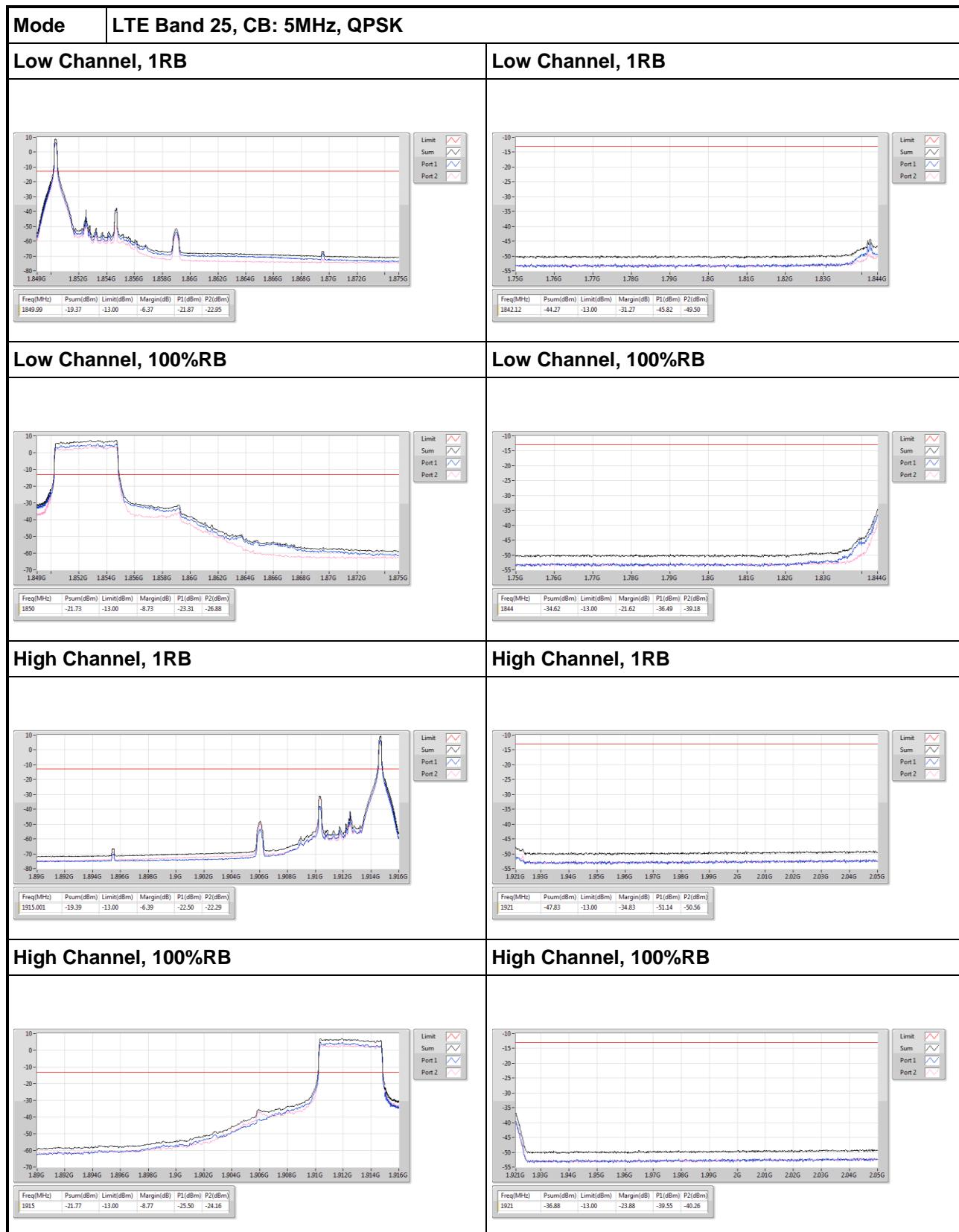
3. Using channel power function to integrate 1MHz energy.
4. Record the max trace value and capture the test plot.

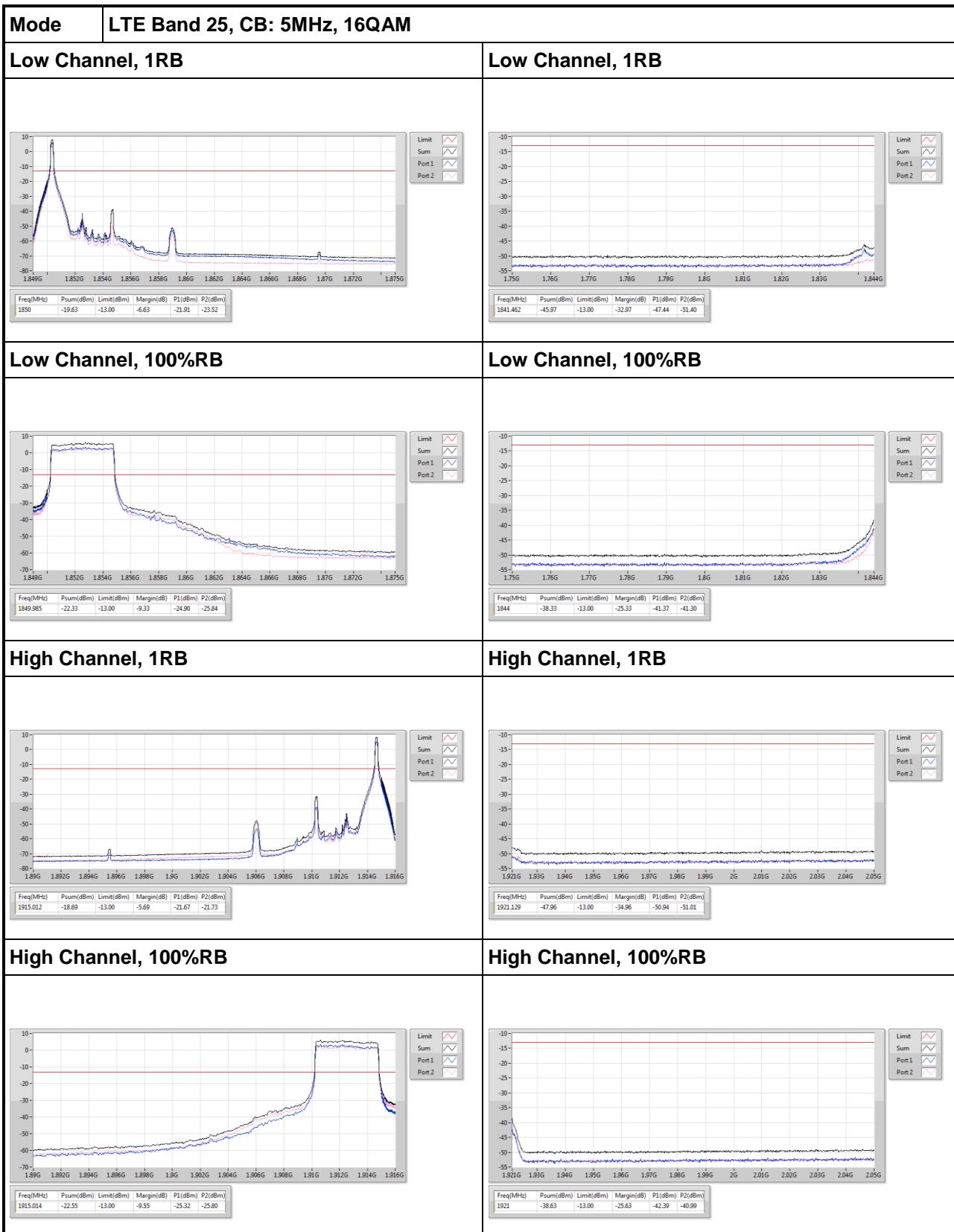
3.4.3 Test Setup

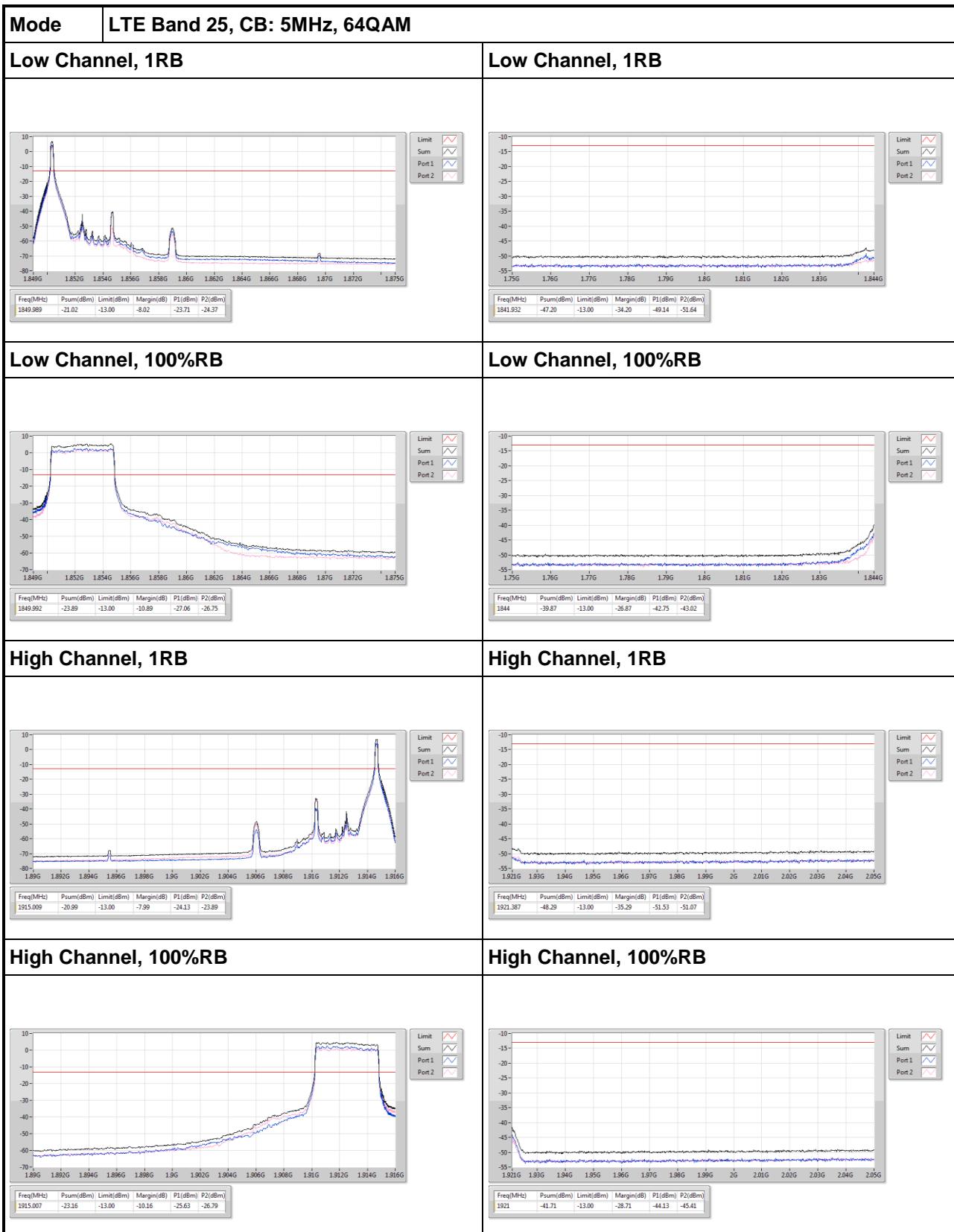


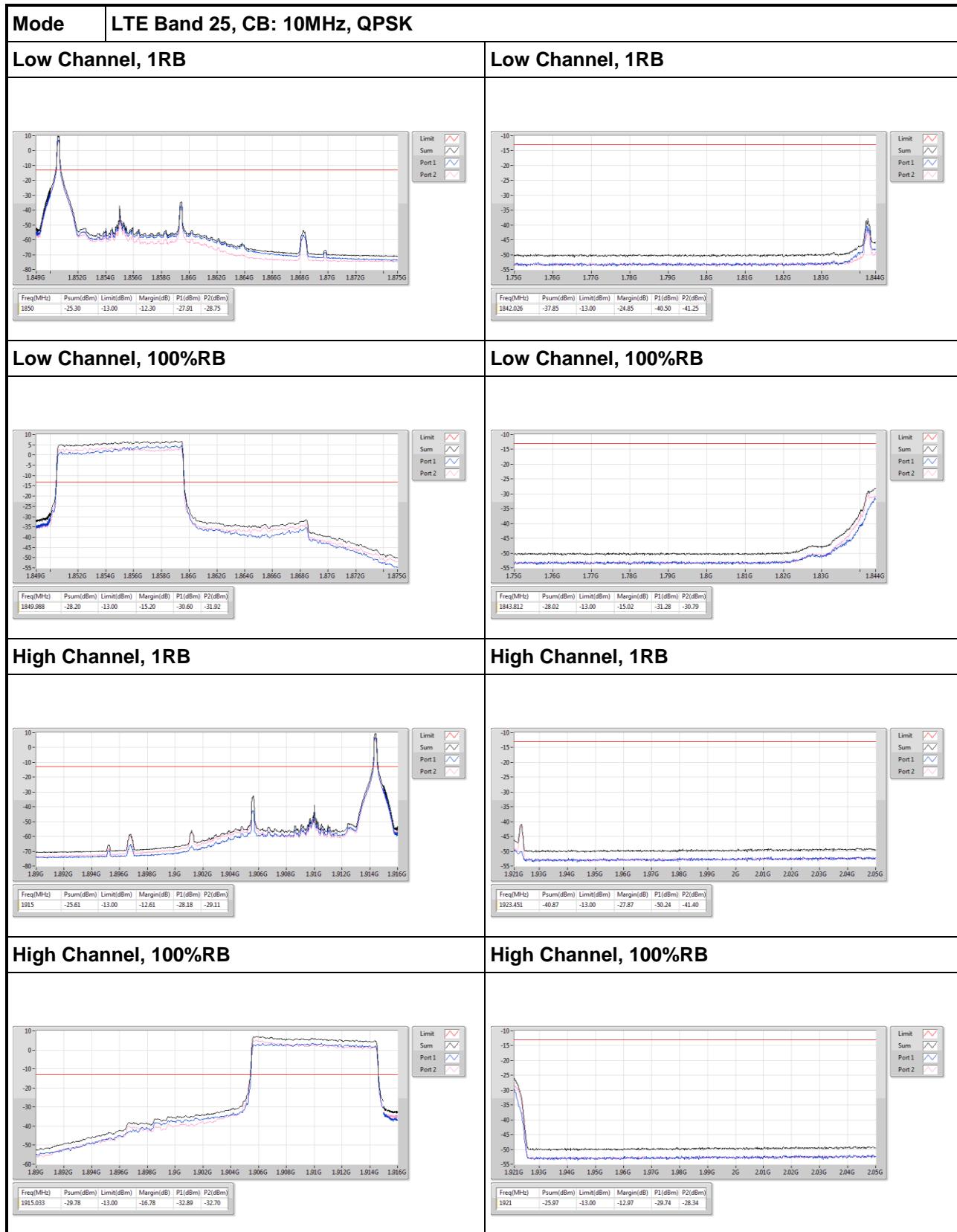
3.4.4 Test Result of Band Edge_CDD mode

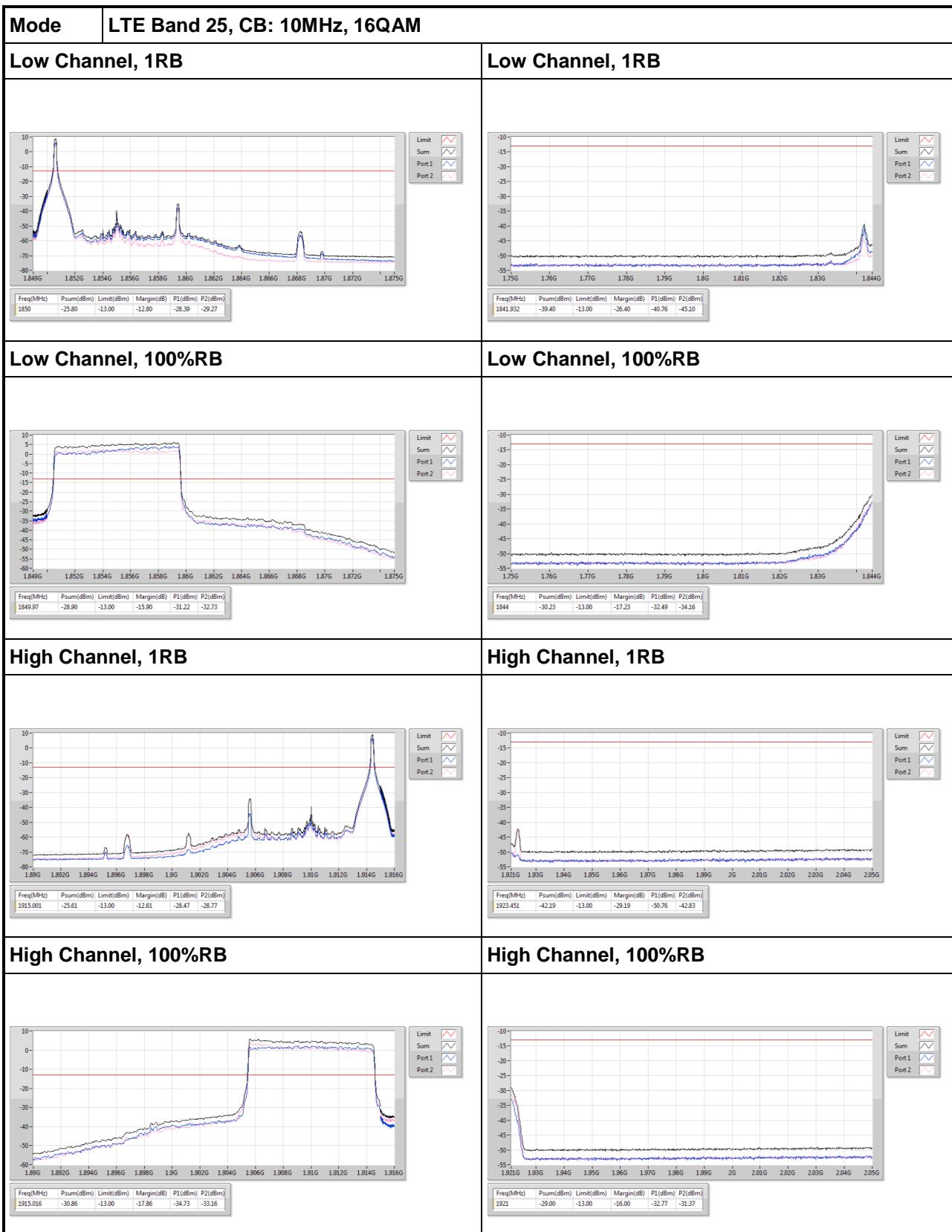
LTE Band 25, CB: 5MHz

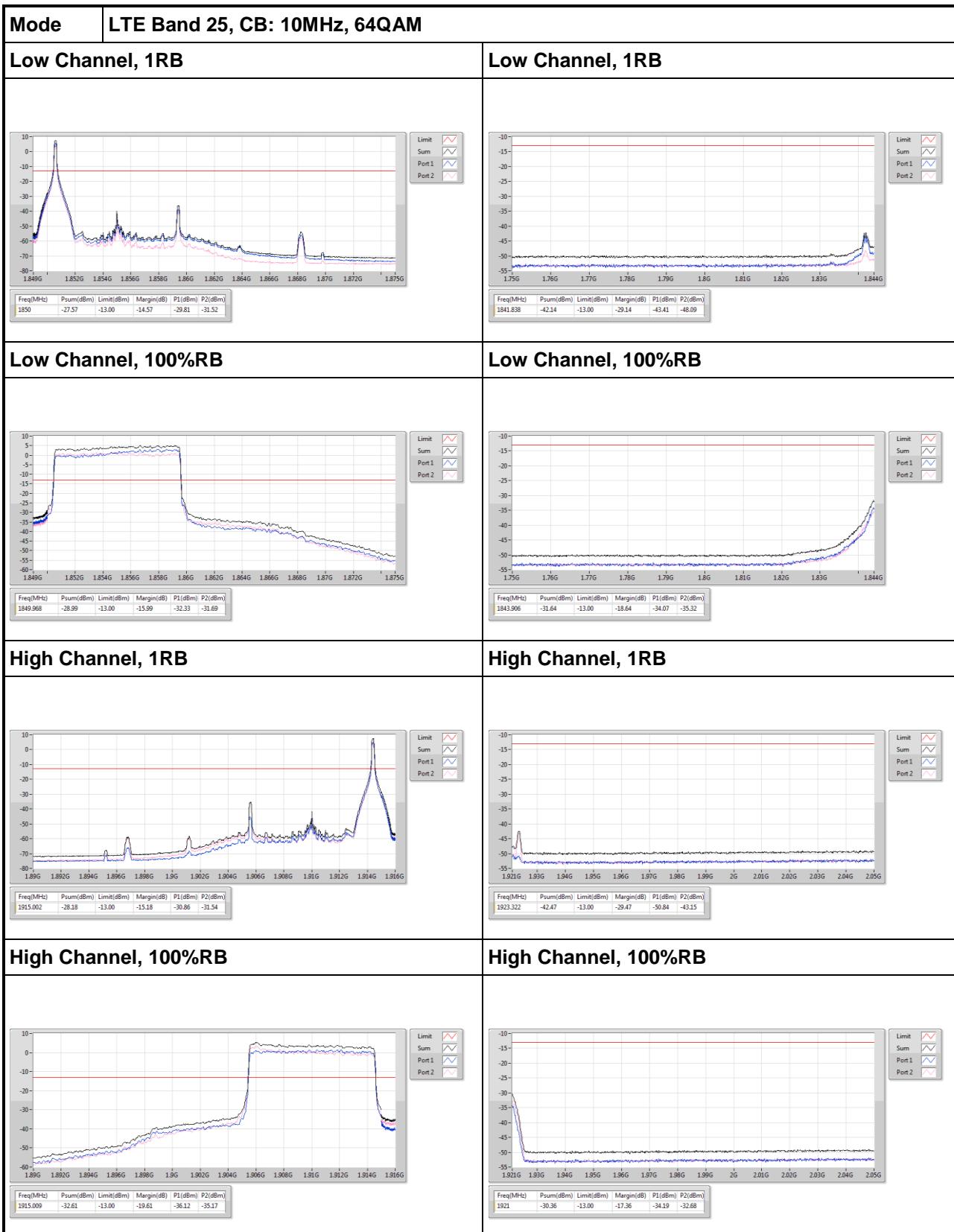


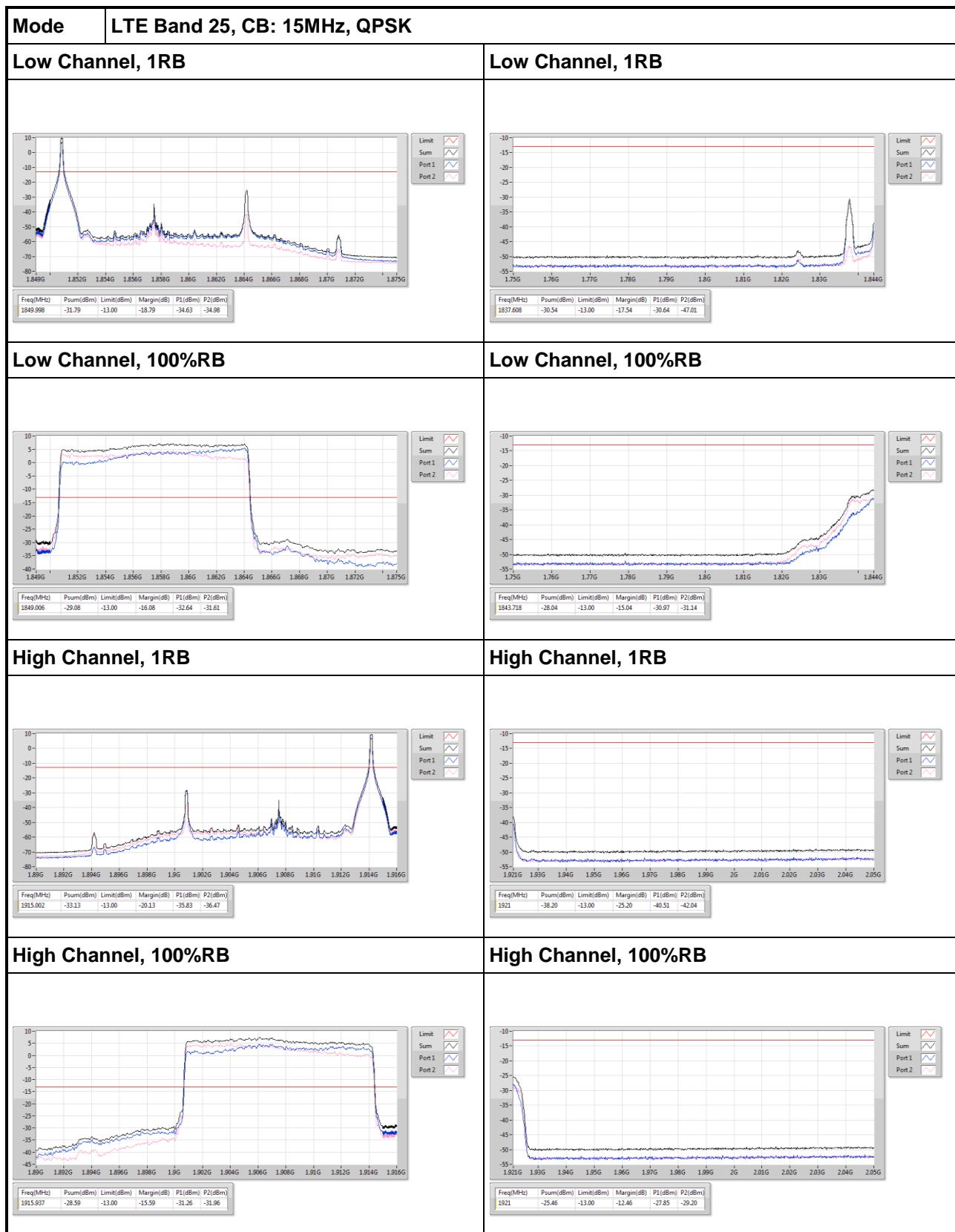


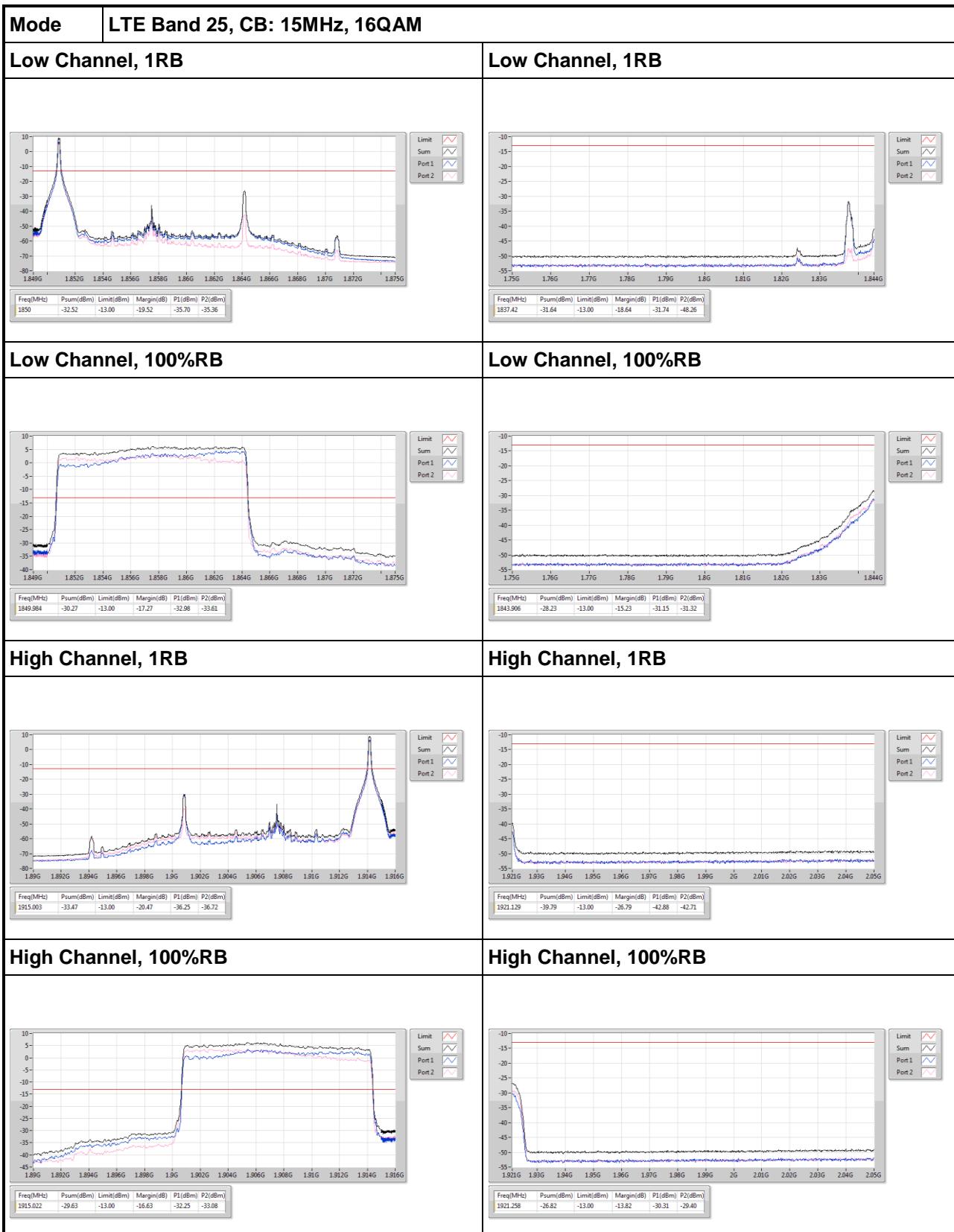


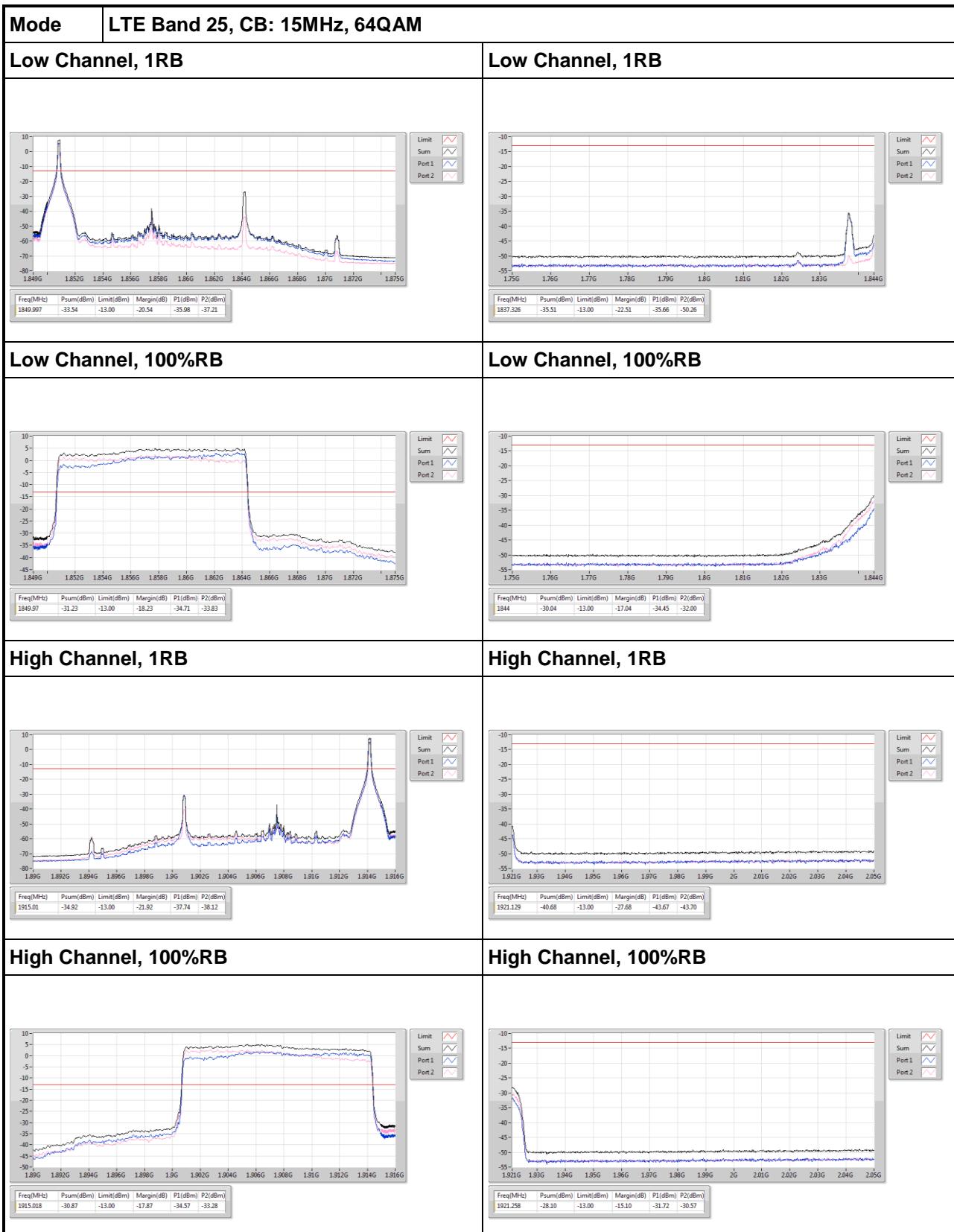
LTE Band 25, CB: 10MHz






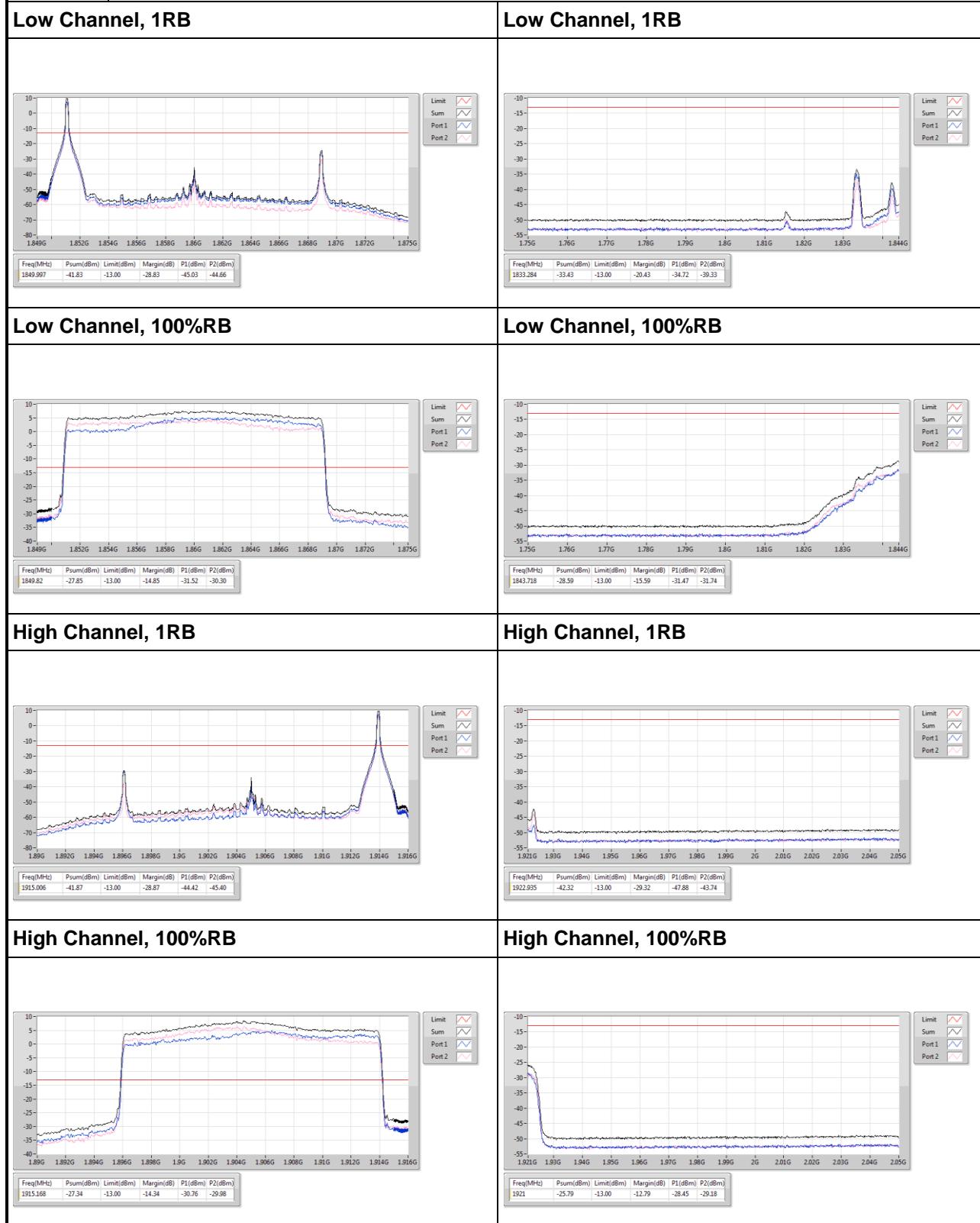
LTE Band 25, CB: 15MHz


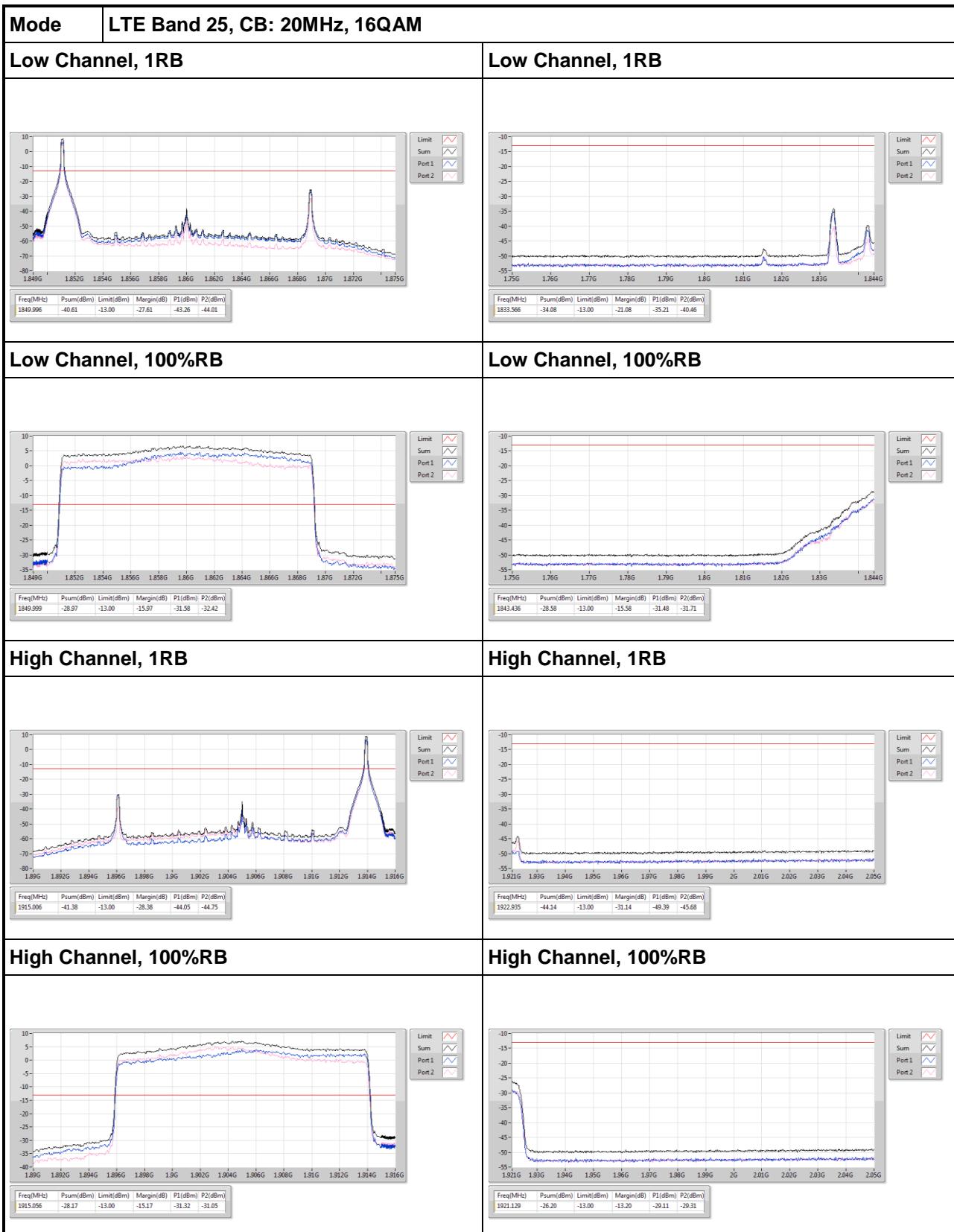


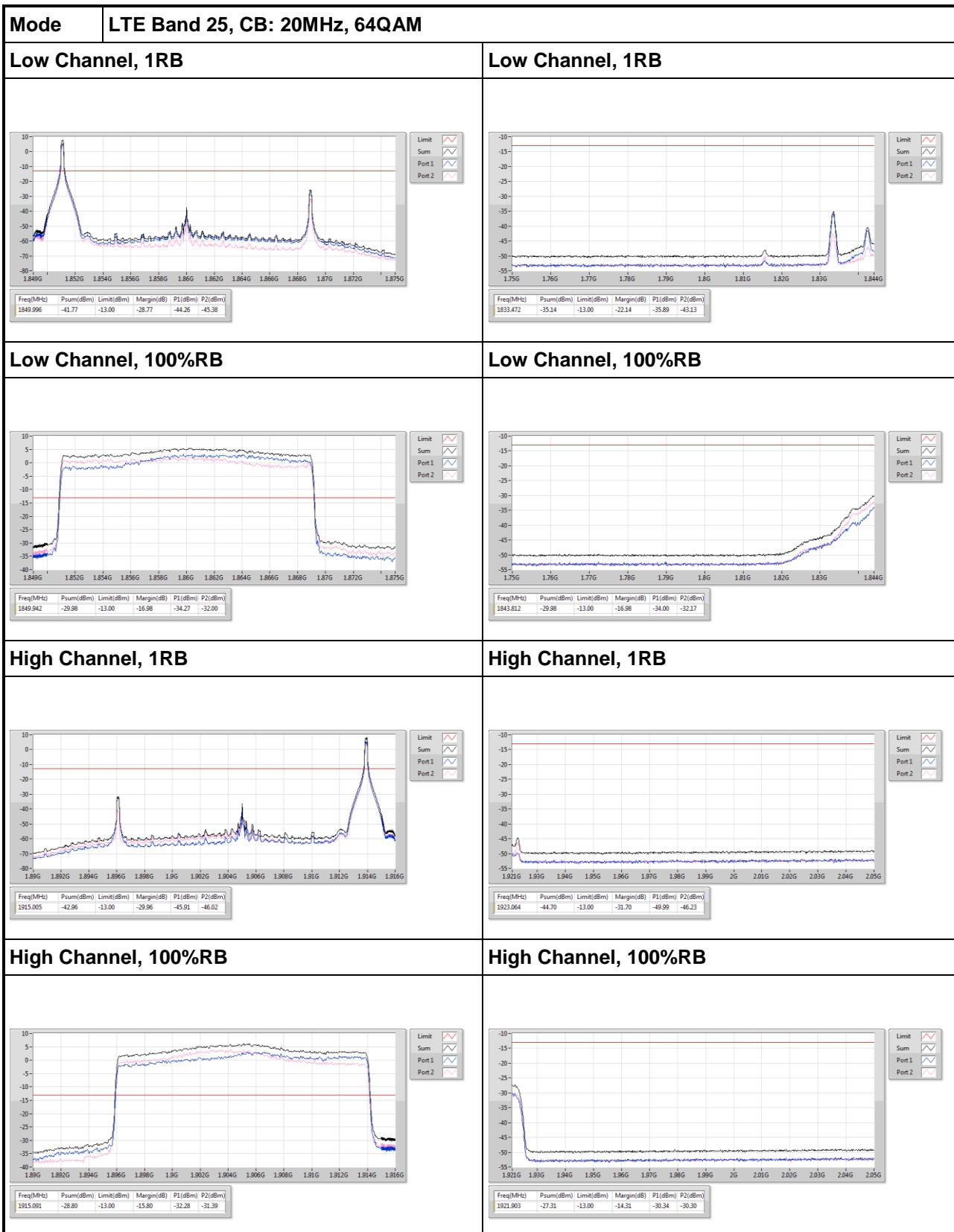


LTE Band 25, CB: 20MHz

Mode	LTE Band 25, CB: 20MHz, QPSK
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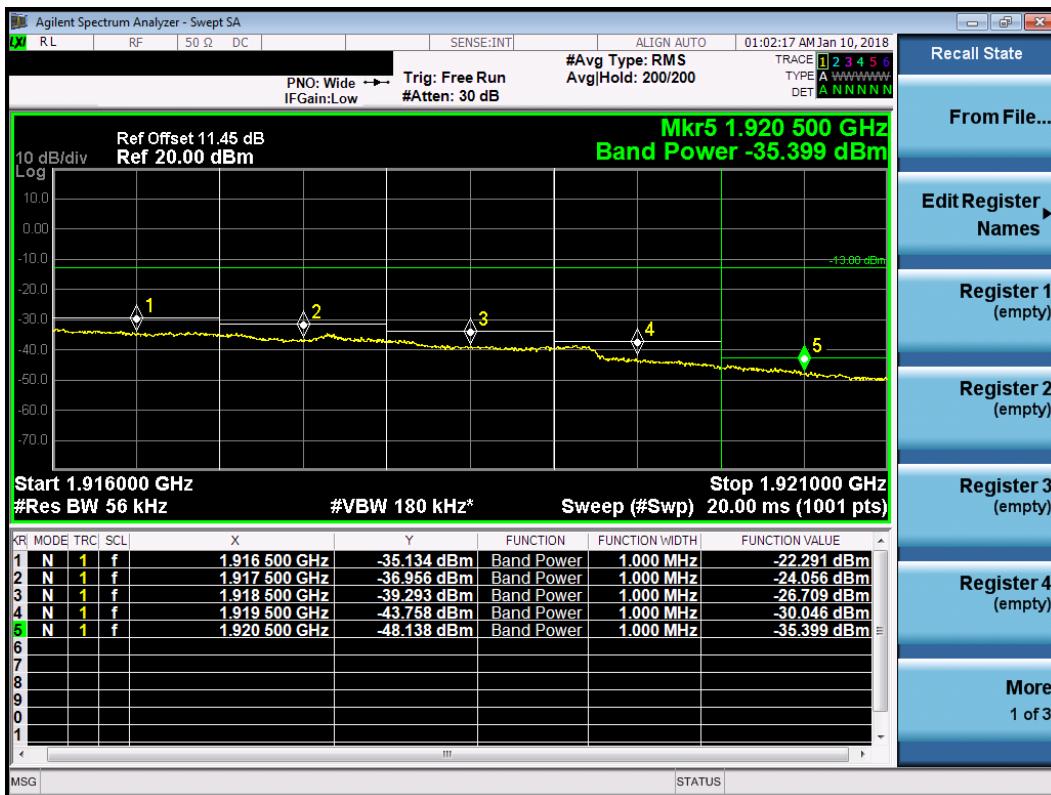
3.4.5 Measured Band Edge Result

Measured Band Edge Result									
Channel Bandwidth (MHz)	Modulation	Freq. (MHz)	RB Size	RB offset	Range (MHz)	ANT 0 (dBm)	ANT 2 (dBm)	Total (dBm)	Limit (dBm)
5	QPSK	1852.5	1	0	1849~1848	-37.255	-38.260	-34.72	-13.00
					1848~1847	-43.818	-44.343	-41.06	-13.00
					1847~1846	-43.107	-46.078	-41.33	-13.00
					1846~1845	-44.158	-47.298	-42.44	-13.00
					1845~1844	-48.020	-48.918	-45.44	-13.00
5	QPSK	1852.5	25	0	1849~1848	-21.619	-26.564	-20.41	-13.00
					1848~1847	-22.822	-27.852	-21.64	-13.00
					1847~1846	-24.464	-28.444	-23.00	-13.00
					1846~1845	-27.078	-30.189	-25.35	-13.00
					1845~1844	-32.574	-35.344	-30.73	-13.00
5	QPSK	1912.5	1	24	1916~1917	-39.439	-38.705	-36.05	-13.00
					1917~1918	-45.002	-44.262	-41.61	-13.00
					1918~1919	-42.173	-39.419	-37.57	-13.00
					1919~1920	-42.720	-40.069	-38.18	-13.00
					1920~1921	-49.104	-48.576	-45.82	-13.00
5	QPSK	1912.5	25	0	1916~1917	-22.601	-22.291	-19.43	-13.00
					1917~1918	-24.774	-24.056	-21.39	-13.00
					1918~1919	-27.288	-26.709	-23.98	-13.00
					1919~1920	-29.869	-30.046	-26.95	-13.00
					1920~1921	-34.832	-35.399	-32.10	-13.00

Worst Plot of QPSK, Low Channel



Worst Plot of QPSK, High Channel

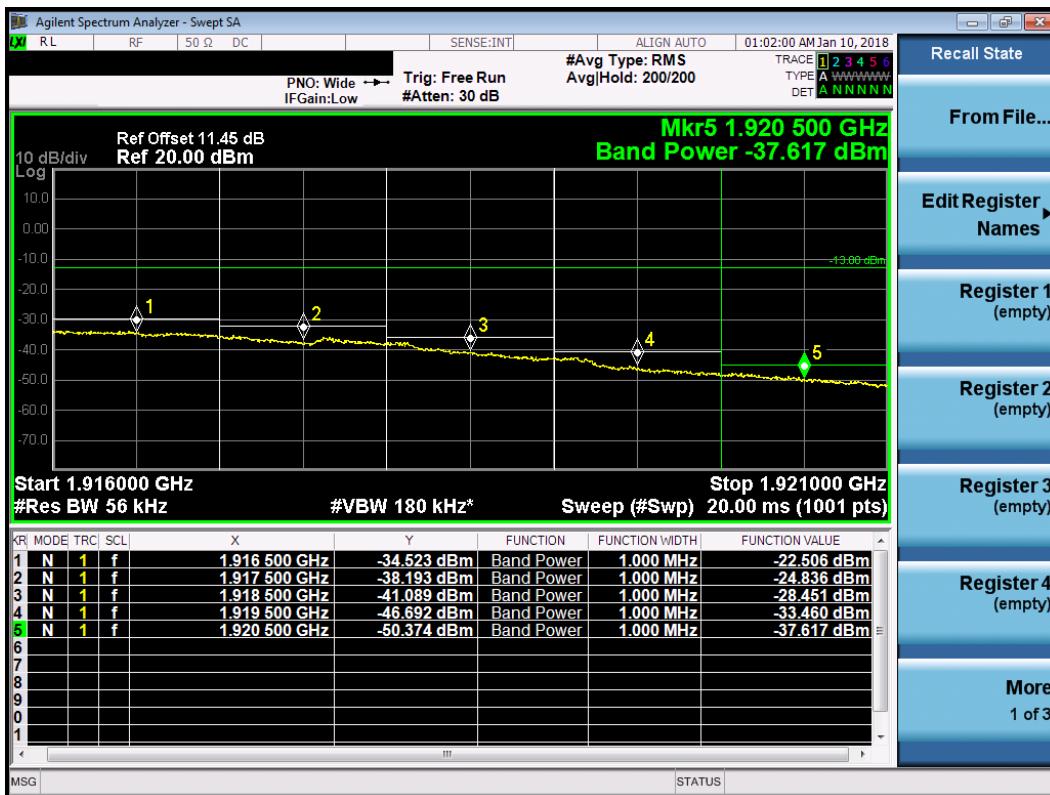


Measured Band Edge Result									
Channel Bandwidth (MHz)	Modulation	Freq. (MHz)	RB Size	RB offset	Range (MHz)	ANT 0 (dBm)	ANT 2 (dBm)	Total (dBm)	Limit (dBm)
5	16QAM	1852.5	1	0	1849~1848	-37.813	-39.852	-35.70	-13.00
					1848~1847	-44.385	-45.722	-41.99	-13.00
					1847~1846	-44.219	-47.625	-42.59	-13.00
					1846~1845	-44.969	-48.737	-43.45	-13.00
					1845~1844	-48.321	-49.857	-46.01	-13.00
5	16QAM	1852.5	25	0	1849~1848	-24.212	-26.151	-22.06	-13.00
					1848~1847	-26.472	-27.915	-24.12	-13.00
					1847~1846	-29.803	-30.310	-27.04	-13.00
					1846~1845	-33.643	-33.663	-30.64	-13.00
					1845~1844	-37.507	-37.691	-34.59	-13.00
5	16QAM	1912.5	1	24	1916~1917	-40.090	-39.078	-36.54	-13.00
					1917~1918	-45.870	-45.072	-42.44	-13.00
					1918~1919	-44.108	-41.073	-39.32	-13.00
					1919~1920	-45.062	-42.047	-40.29	-13.00
					1920~1921	-49.855	-49.487	-46.66	-13.00
5	16QAM	1912.5	25	0	1916~1917	-23.909	-22.506	-20.14	-13.00
					1917~1918	-26.617	-24.836	-22.63	-13.00
					1918~1919	-29.817	-28.451	-26.07	-13.00
					1919~1920	-33.674	-33.460	-30.56	-13.00
					1920~1921	-37.471	-37.617	-34.53	-13.00

Worst Plot of 16QAM, Low Channel



Worst Plot of 16QAM, High Channel



Measured Band Edge Result									
Channel Bandwidth (MHz)	Modulation	Freq. (MHz)	RB Size	RB offset	Range (MHz)	ANT 0 (dBm)	ANT 2 (dBm)	Total (dBm)	Limit (dBm)
5	64QAM	1852.5	1	0	1849~1848	-40.054	-40.754	-37.38	-13.00
					1848~1847	-45.853	-46.276	-43.05	-13.00
					1847~1846	-46.852	-48.083	-44.41	-13.00
					1846~1845	-47.729	-49.160	-45.38	-13.00
					1845~1844	-49.436	-50.018	-46.71	-13.00
5	64QAM	1852.5	25	0	1849~1848	-24.878	-26.930	-22.77	-13.00
					1848~1847	-27.632	-29.071	-25.28	-13.00
					1847~1846	-31.229	-31.871	-28.53	-13.00
					1846~1845	-35.773	-35.860	-32.81	-13.00
					1845~1844	-39.355	-39.701	-36.51	-13.00
5	64QAM	1912.5	1	24	1916~1917	-41.599	-40.521	-38.02	-13.00
					1917~1918	-46.700	-45.824	-43.23	-13.00
					1918~1919	-46.006	-42.900	-41.17	-13.00
					1919~1920	-46.707	-43.799	-42.00	-13.00
					1920~1921	-50.071	-49.739	-46.89	-13.00
5	64QAM	1912.5	25	0	1916~1917	-28.527	-26.133	-24.16	-13.00
					1917~1918	-31.571	-28.771	-26.94	-13.00
					1918~1919	-35.124	-32.977	-30.91	-13.00
					1919~1920	-39.196	-38.660	-35.91	-13.00
					1920~1921	-41.818	-42.373	-39.08	-13.00

Worst Plot of 64QAM, Low Channel



Worst Plot of 64QAM, High Channel

