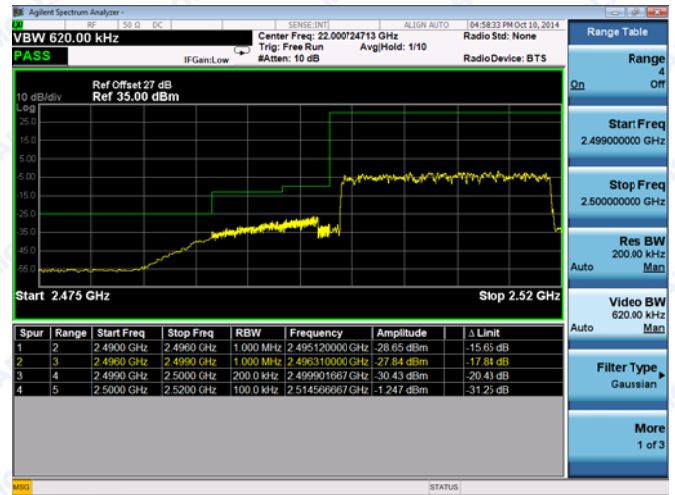
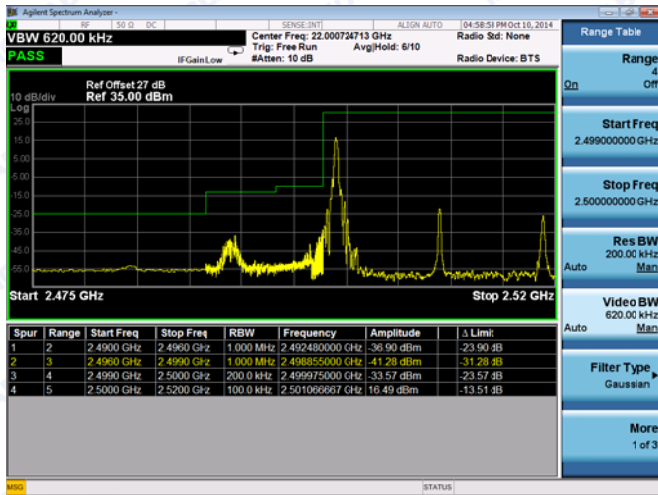


Channel Bandwidth: 20MHz

Channel 20850 RB Size 1 RB Offset 0

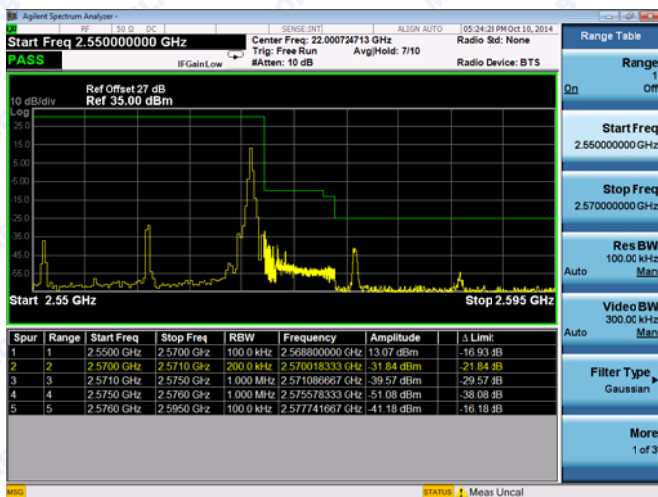
Channel 20850 RB Size 100 RB Offset 0



Channel Bandwidth: 20MHz

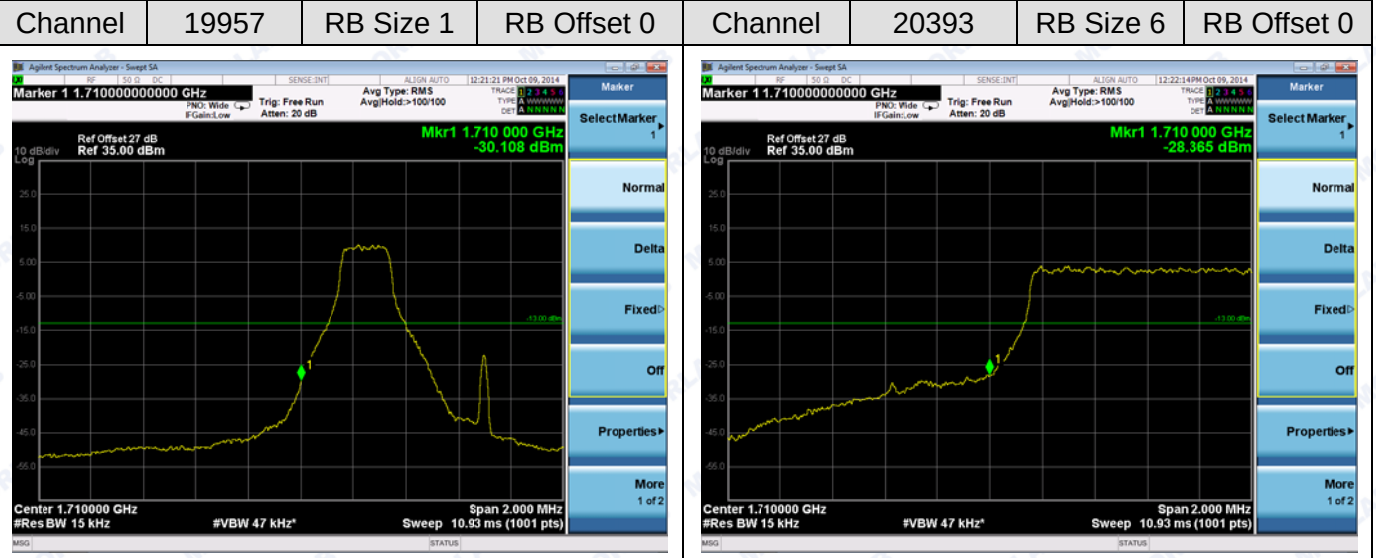
Channel 21350 RB Size 1 RB Offset 99

Channel 21350 RB Size 100 RB Offset 0

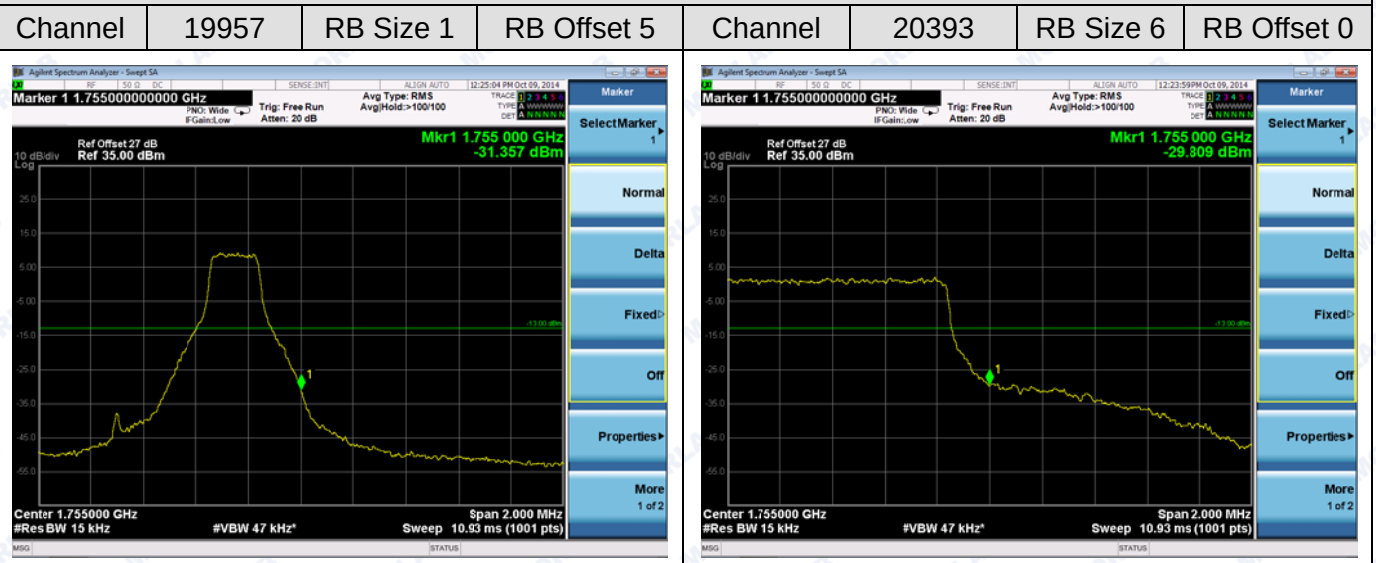


LTE Band 4:

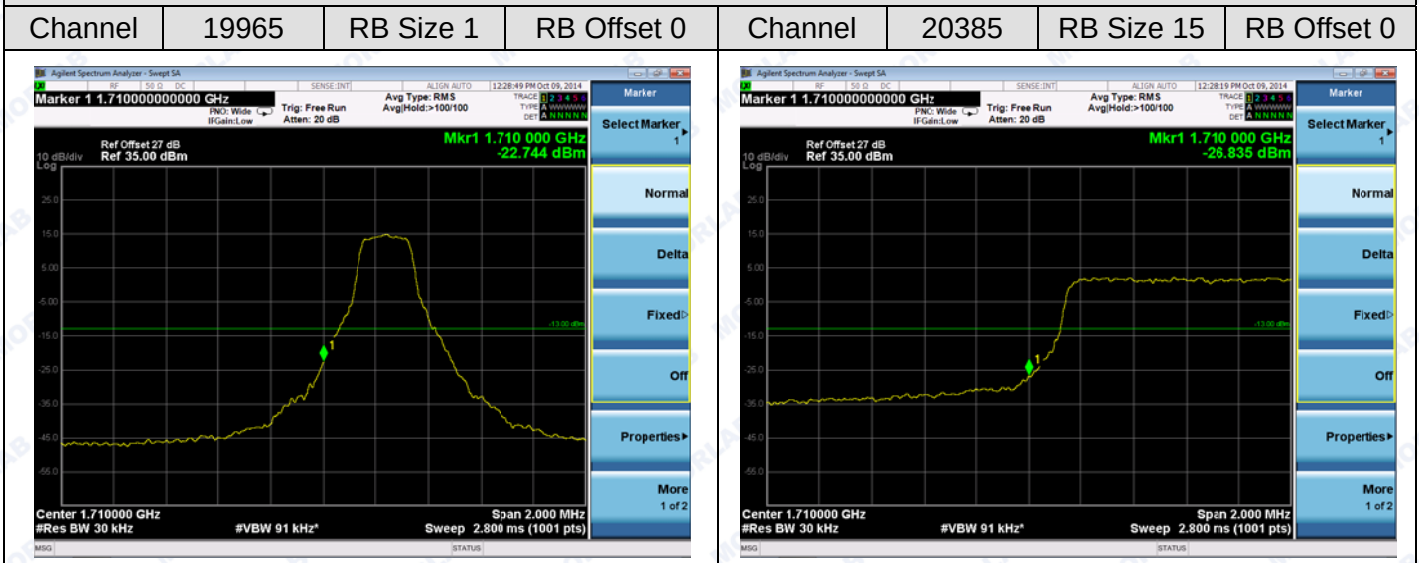
Channel Bandwidth: 1.4MHz



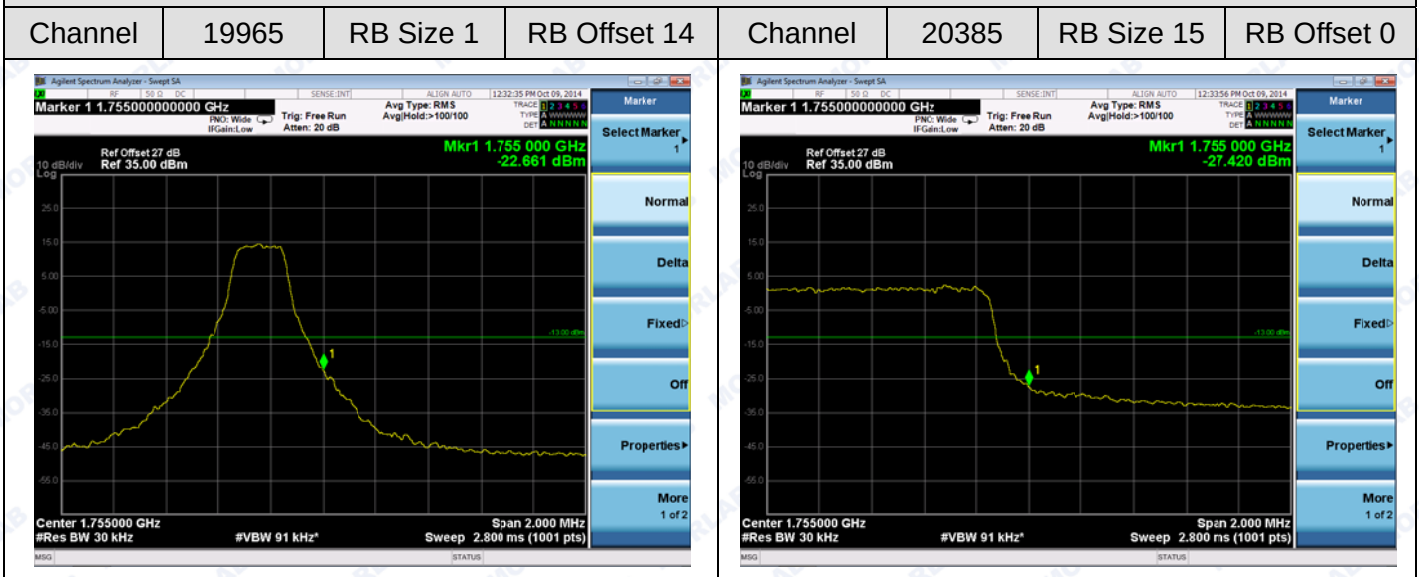
Channel Bandwidth: 1.4MHz



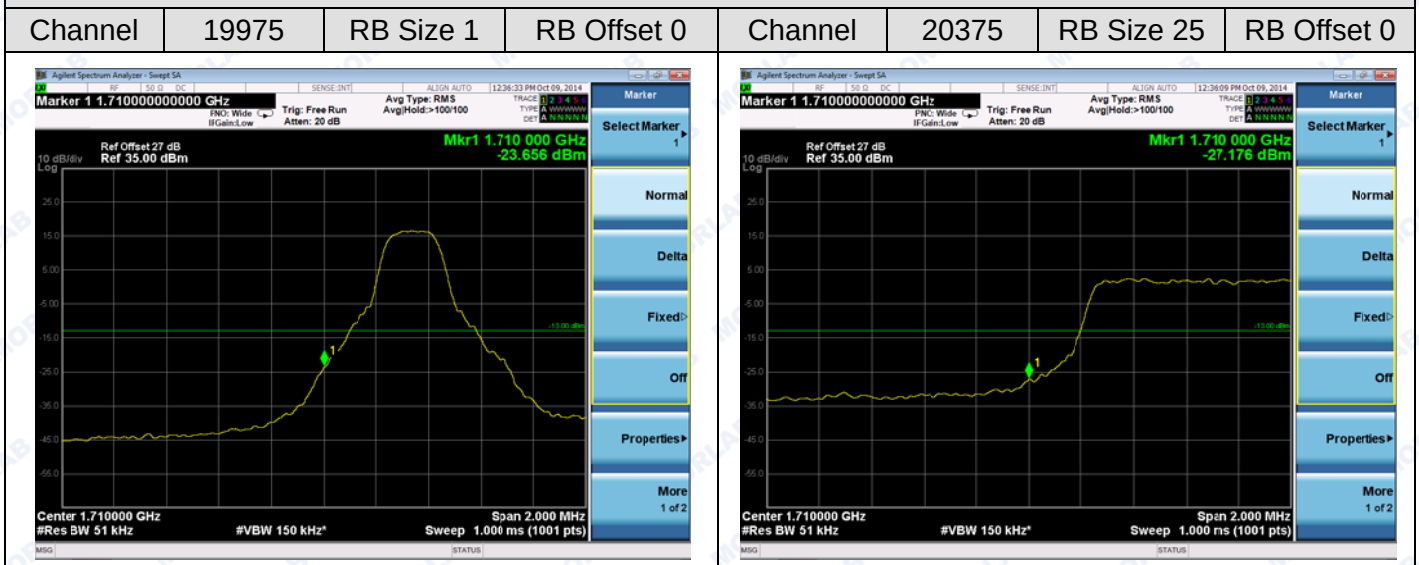
Channel Bandwidth: 3MHz



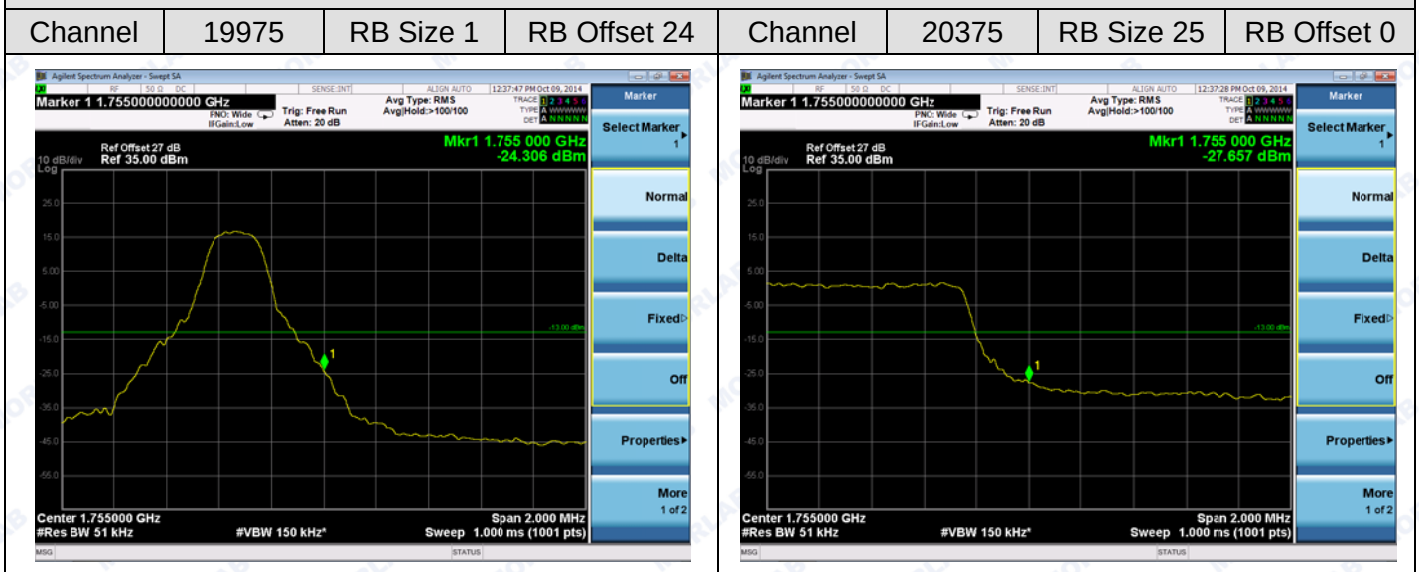
Channel Bandwidth: 3MHz



Channel Bandwidth: 5MHz

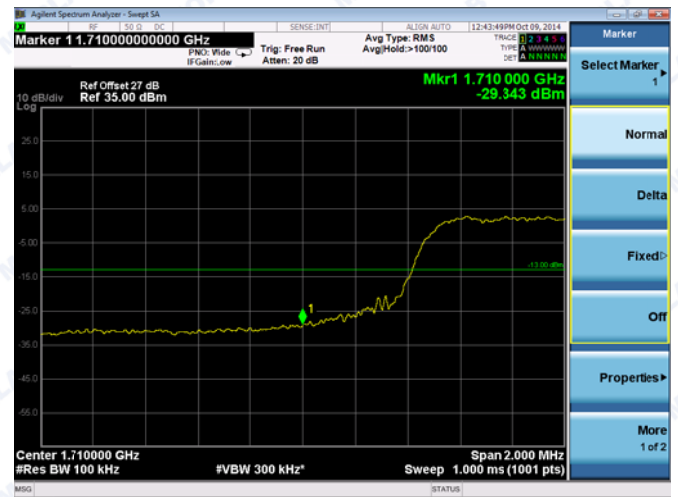
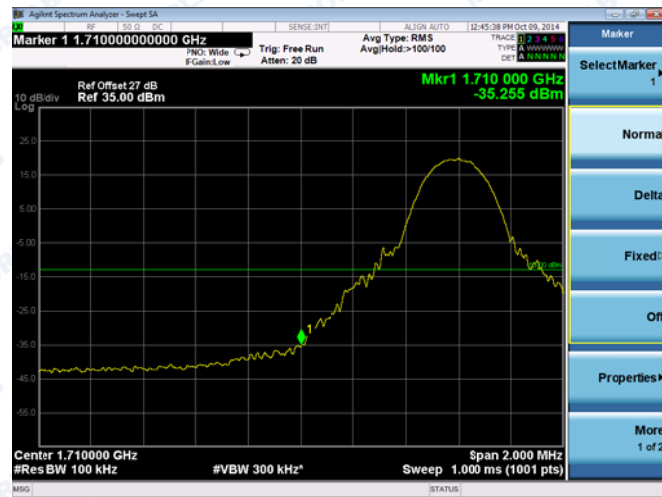


Channel Bandwidth: 5MHz



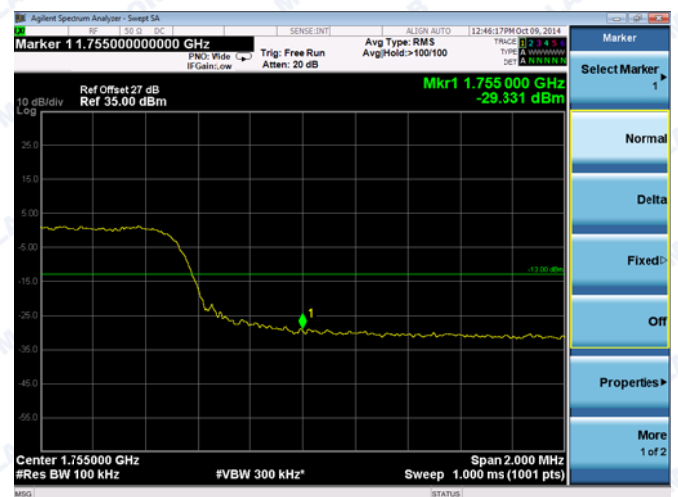
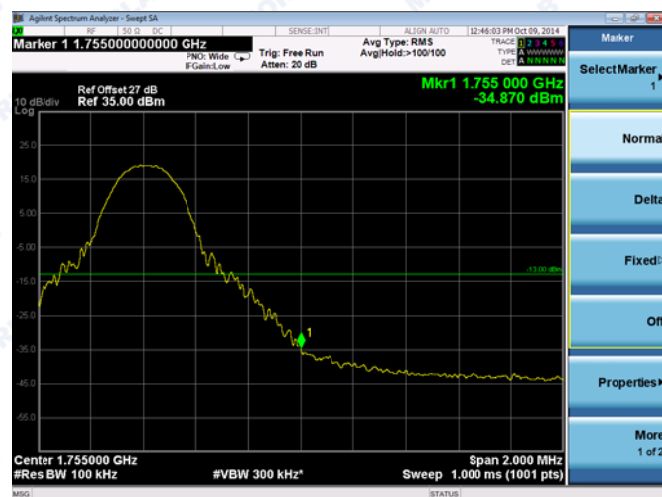
Channel Bandwidth: 10MHz

Channel	20000	RB Size 1	RB Offset 0	Channel	20350	RB Size 50	RB Offset 0
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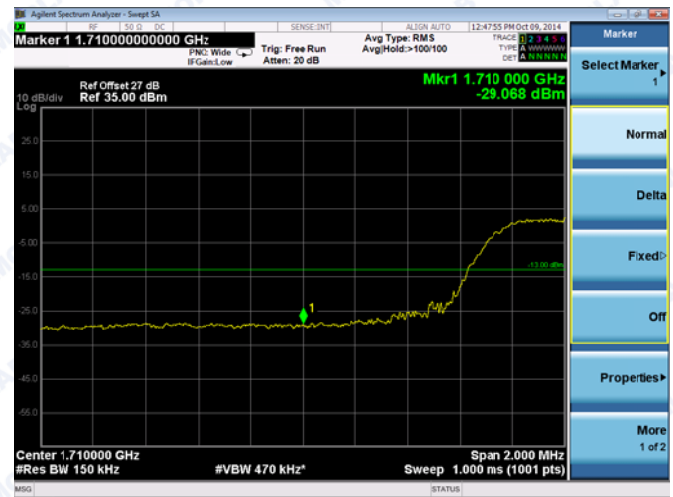
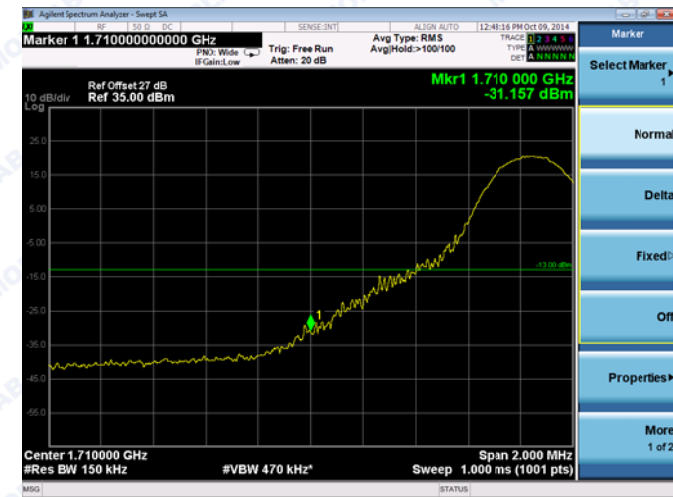
Channel Bandwidth: 10MHz

Channel	20000	RB Size 1	RB Offset 49	Channel	20350	RB Size 50	RB Offset 0
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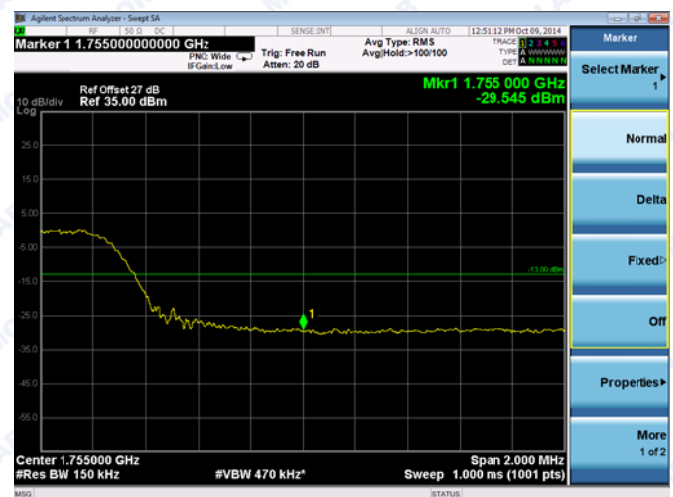
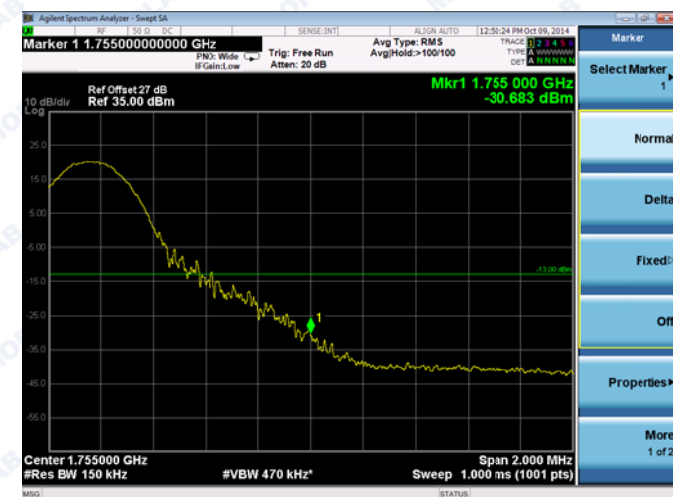
Channel Bandwidth: 15MHz

Channel	20025	RB Size 1	RB Offset 0	Channel	20325	RB Size 75	RB Offset 0
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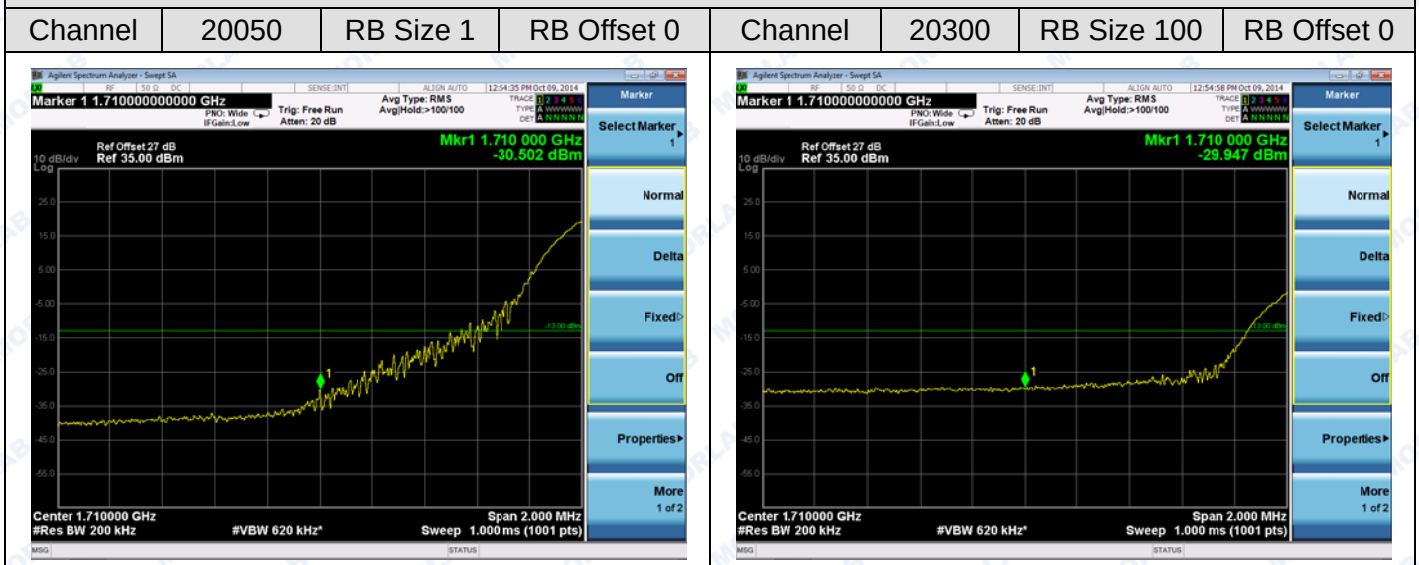


Channel Bandwidth: 15MHz

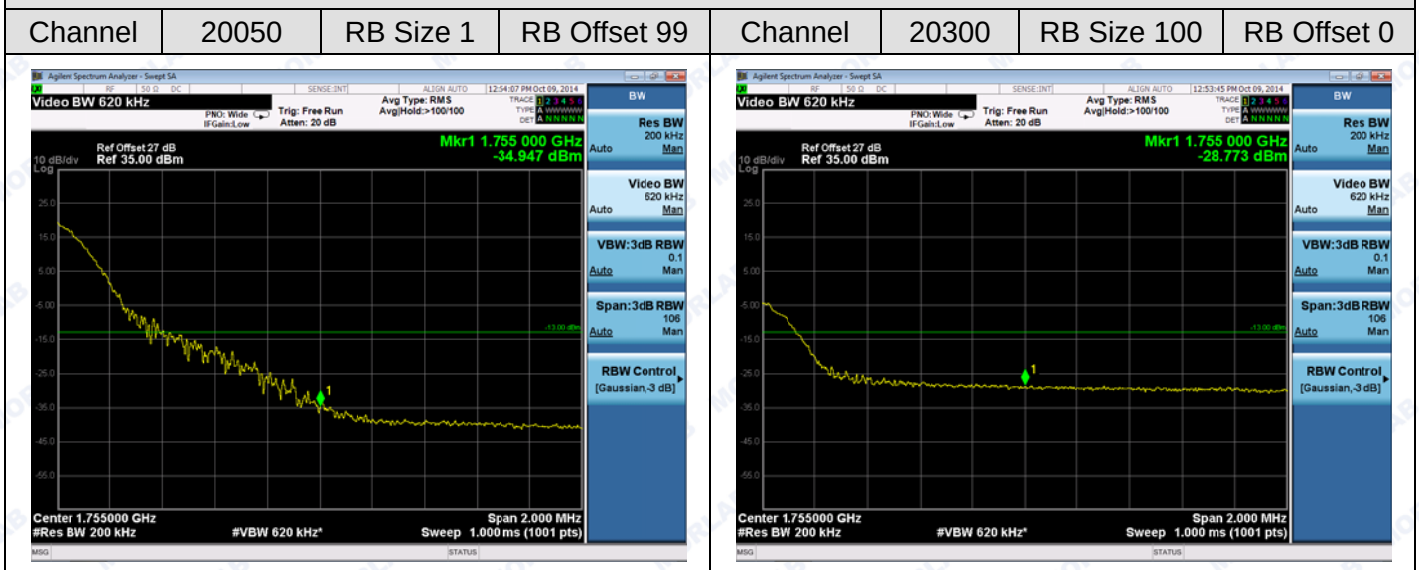
Channel	20025	RB Size 1	RB Offset 74	Channel	20325	RB Size 75	RB Offset 0
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Channel Bandwidth: 20MHz



Channel Bandwidth: 20MHz



2.7. Transmitter Radiated Power (EIRP/ERP)

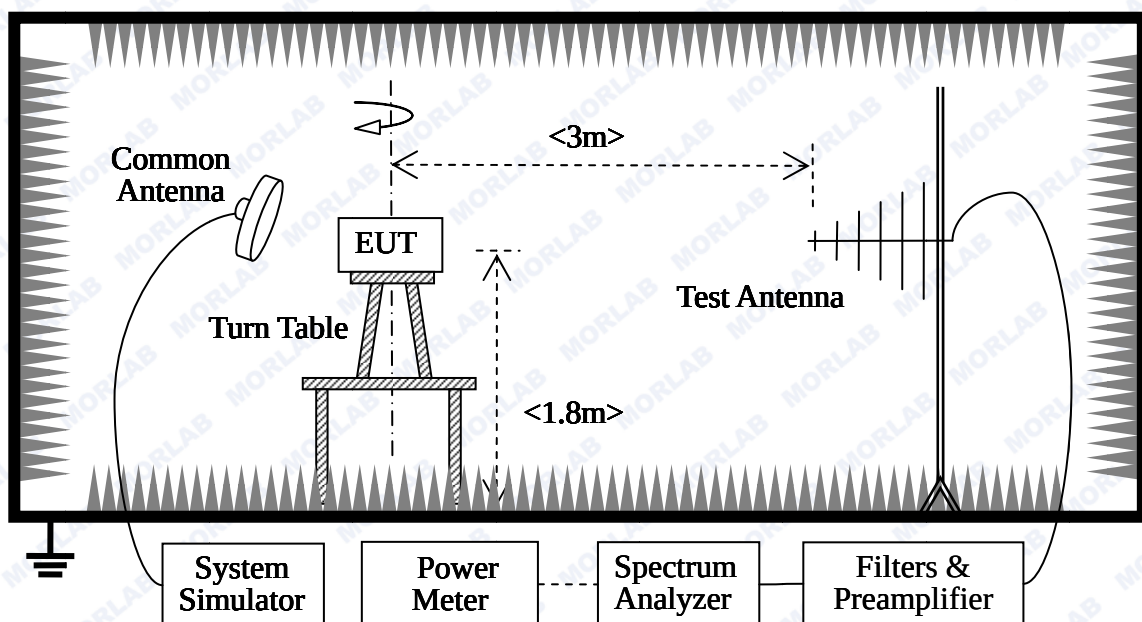
2.7.1. Requirement

According to FCC section 27.50 (d), fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat EIRP.

Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts ERP.

2.7.2. Test Description

1. Test Setup:



The EUT, which is powered by the PC, is located in a 3m Full-Anechoic Chamber; the cable loss, air loss and so on of the site as factors are pre-calibrated using the "Substitution" method, and calculated to correct the reading.

A call is established between the EUT and the SS via a Common Antenna. The EUT is commanded by the SS to operate at the maximum and minimum output power, and only the test result of the maximum output power was recorded.

The Test Antenna is a Bi-Log one (used for 30MHz to 1GHz) or a Horn one (used for above 3GHz), and it's located at the same height as the EUT. The Filters consists of Notch Filters and High Pass Filter.

2. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Rohde&Schwarz	CMW500	1201.0002k50/124534/wk	2014.02.26	2015.02.25
Spectrum Analyzer	Rohde&Schwarz	FSL	10246	2014.02.26	2015.02.25
Spectrum Analyzer	Agilent	E4445A	MY44200685	2014.02.26	2015.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2014.02.26	2015.02.25
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2014.02.26	2015.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2014.02.26	2015.02.25
Test Antenna - Horn	Schwarzbeck	UG -596A/U	A0902607	2014.02.26	2015.02.25

2.7.3. Test Result

The EUT was verified under all configurations (RB size and offset) and the worst case radiated power reported for each modulation/channel bandwidth.

The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. The lowest, middle and highest channels are tested.

The substitution corrections are obtained as described below:

$$A_{\text{SUBST}} = P_{\text{SUBST_TX}} - P_{\text{SUBST_RX}} - L_{\text{SUBST_CABLES}} + G_{\text{SUBST_TX_ANT}}$$

$$A_{\text{TOT}} = L_{\text{CABLES}} + A_{\text{SUBST}}$$

Where A_{SUBST} is the final substitution correction including receive antenna gain.

$P_{\text{SUBST_TX}}$ is signal generator level,

$P_{\text{SUBST_RX}}$ is receiver level,

$L_{\text{SUBST_CABLES}}$ is cable losses including TX cable,

$G_{\text{SUBST_TX_ANT}}$ is substitution antenna gain.

A_{TOT} is total correction factor including cable loss and substitution correction

During the test, the data of A_{TOT} was added in the Test Spectrum Analyze, so Spectrum Analyze reading is the final values which contain the data of A_{TOT} .

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
LTE Band 4	20MHz	L 20050	1720	QPSK	1	0	24.61
					1	49	24.13
					1	99	24.72
					50	0	22.89
					50	25	23.78
					50	49	24.32
					100	0	24.09
				16-QAM	1	0	23.87
					1	49	23.78
					1	99	24.68
					50	0	24.52
					50	25	24.14
					50	49	24.12
					100	0	23.46
		M 20175	1732.5	QPSK	1	0	24.81
					1	49	24.92
					1	99	24.94
					50	0	24.04
					50	25	23.12
					50	49	24.76
					100	0	23.49
				16-QAM	1	0	23.34
					1	49	24.42
					1	99	24.69
					50	0	24.41
					50	25	24.17
					50	49	24.56
					100	0	24.41
		H 20300	1745	QPSK	1	0	23.53
					1	49	23.34
					1	99	24.08
					50	0	24.61
					50	25	24.12
					50	49	23.34

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
				16-QAM	100	0	24.41
					1	0	23.98
					1	49	24.12
					1	99	23.83
					50	0	23.32
					50	25	23.12
					50	49	23.44
					100	0	24.67
	15MHz	L 20025	1717.5	QPSK	1	0	24.84
					1	37	24.12
					1	74	24.35
					36	0	24.14
					36	18	24.26
					36	35	23.34
					75	0	23.62
				16-QAM	1	0	23.26
					1	37	23.23
					1	74	23.67
					36	0	23.54
					36	18	24.98
					36	35	24.12
					75	0	24.51
		M 20175	1732.5	QPSK	1	0	24.78
					1	37	24.21
					1	74	24.64
					36	0	24.89
					36	18	23.76
					36	35	24.23
					75	0	23.62
				16-QAM	1	0	23.94
					1	37	24.78
					1	74	24.31
					36	0	23.98
					36	18	23.65

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
		H 20325	1747.5	QPSK	36	35	23.34
					75	0	24.35
					1	0	24.41
					1	37	24.76
					1	74	24.81
					36	0	24.34
					36	18	24.13
					36	35	23.87
					75	0	23.38
				16-QAM	1	0	24.84
					1	37	23.43
					1	74	24.19
					36	0	23.46
					36	18	24.32
					36	35	23.34
					75	0	23.82
	10MHz	L 20000	1715	QPSK	1	0	24.03
					1	24	24.08
					1	49	24.51
					25	0	24.03
					25	12	23.12
					25	24	23.65
					50	0	24.85
				16-QAM	1	0	24.64
					1	24	24.01
					1	49	24.38
					25	0	24.34
					25	12	24.54
					25	24	24.87
					50	0	23.83
		M 20175	1732.5	QPSK	1	0	24.06
					1	24	24.05
					1	49	23.66
					25	0	23.54

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
					25	12	24.34
					25	24	23.64
					50	0	24.32
					1	0	24.05
					1	24	24.03
					1	49	24.44
					25	0	23.43
					25	12	23.64
					25	24	24.75
					50	0	23.03
		H 20350	1750	QPSK	1	0	23.84
					1	24	23.67
					1	49	23.96
					25	0	23.34
					25	12	23.78
					25	24	24.54
					50	0	23.05
				16-QAM	1	0	24.88
					1	24	23.65
					1	49	23.21
					25	0	23.34
					25	12	24.85
					25	24	23.43
					50	0	23.69
	5MHz	L 19975	1712.5	QPSK	1	0	24.63
					1	12	24.53
					1	24	24.54
					12	0	24.87
					12	6	23.64
					12	11	24.42
					25	0	23.51
				16-QAM	1	0	23.33
					1	12	24.64
					1	24	24.04

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
					12	0	23.74
					12	6	23.53
					12	11	23.24
					25	0	23.33
		M 20175	1732.5	QPSK	1	0	24.65
					1	12	24.23
					1	24	24.44
					12	0	24.43
					12	6	24.68
					12	11	24.43
					25	0	23.25
				16-QAM	1	0	23.38
					1	12	23.18
					1	24	23.94
					12	0	23.89
					12	6	24.43
					12	11	23.43
					25	0	23.88
		H 20375	1752.5	QPSK	1	0	23.09
					1	12	23.37
					1	24	23.27
					12	0	23.87
					12	6	23.67
					12	11	24.23
					25	0	23.07
				16-QAM	1	0	24.46
					1	12	24.74
					1	24	24.83
					12	0	24.34
					12	6	23.36
					12	11	23.57
					25	0	23.46
	3MHz	L 19965	1711.5	QPSK	1	0	24.69
					1	7	24.34

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
					1	14	24.84
					8	0	24.65
					8	4	24.85
					8	7	24.45
					15	0	23.35
				16-QAM	1	0	24.39
					1	7	23.65
					1	14	23.95
					8	0	24.54
					8	4	23.45
					8	7	23.56
					15	0	24.63
		M 20175	1732.5	QPSK	1	0	24.81
					1	7	24.05
					1	14	23.34
					8	0	23.54
					8	4	23.76
					8	7	23.54
					15	0	24.88
				16-QAM	1	0	24.06
					1	7	24.43
					1	14	23.21
					8	0	23.23
					8	4	23.76
					8	7	23.65
					15	0	23.35
		H 20385	1753.5	QPSK	1	0	24.66
					1	7	24.78
					1	14	24.64
					8	0	23.43
					8	4	23.56
					8	7	23.74
					15	0	23.09
				16-QAM	1	0	24.81

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
	1.4MHz	L 19957	1710.7		1	7	24.65
					1	14	24.45
					8	0	23.89
					8	4	23.21
					8	7	23.78
					15	0	24.66
				QPSK	1	0	24.26
					1	2	24.58
					1	5	24.51
					3	0	23.92
					3	1	23.62
					3	2	24.34
					6	0	23.39
				16-QAM	1	0	23.22
					1	2	23.34
					1	5	23.13
					3	0	23.74
					3	1	23.83
					3	2	23.76
					6	0	23.55
		M 20175	1732.5	QPSK	1	0	23.88
					1	2	24.98
					1	5	24.11
					3	0	23.34
					3	1	24.45
					3	2	24.85
					6	0	23.16
				16-QAM	1	0	23.98
					1	2	24.09
					1	5	23.55
					3	0	23.77
					3	2	23.34
					3	5	23.48
					6	0	23.51

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
		H 20393	1754.5	QPSK	1	0	23.85
					1	2	23.48
					1	5	24.77
					3	0	24.38
					3	1	24.74
					3	2	24.98
					6	0	23.53
				16-QAM	1	0	24.32
					1	2	24.68
					1	5	23.93
					3	0	24.38
					3	1	24.73
					3	2	24.98
					6	0	24.85

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
LTE Band 7	20MHz	L 20850	2510	QPSK	1	0	24.61
					1	49	24.13
					1	99	24.72
					50	0	22.89
					50	25	23.78
					50	49	24.32
					100	0	24.09
				16-QAM	1	0	23.87
					1	49	23.78
					1	99	24.68
					50	0	24.52
					50	25	24.14
					50	49	24.12
					100	0	23.46
		M 21100	2535	QPSK	1	0	24.81
					1	49	24.92

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
					1	99	24.94
					50	0	24.04
					50	25	23.12
					50	49	24.76
					100	0	23.49
				16-QAM	1	0	23.34
					1	49	24.42
					1	99	24.69
					50	0	24.41
					50	25	24.17
					50	49	24.56
					100	0	24.41
		H 21350	2560	QPSK	1	0	23.53
					1	49	23.34
					1	99	24.08
					50	0	24.61
					50	25	24.12
					50	49	23.34
					100	0	24.41
				16-QAM	1	0	23.98
					1	49	24.12
					1	99	23.83
					50	0	23.32
					50	25	23.12
					50	49	23.44
					100	0	24.67
	15MHz	L 20825	2507.5	QPSK	1	0	24.84
					1	37	24.12
					1	74	24.35
					36	0	24.14
					36	18	24.26
					36	35	23.34
					75	0	23.62
				16-QAM	1	0	23.26

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
					1	37	23.23
					1	74	23.67
					36	0	23.54
					36	18	24.98
					36	35	24.12
					75	0	24.51
		M 21100	2535	QPSK	1	0	24.78
					1	37	24.21
					1	74	24.64
					36	0	24.89
					36	18	23.76
					36	35	24.23
					75	0	23.62
				16-QAM	1	0	23.94
					1	37	24.78
					1	74	24.31
					36	0	23.98
					36	18	23.65
					36	35	23.34
					75	0	24.35
		H 21375	2562.5	QPSK	1	0	24.41
					1	37	24.76
					1	74	24.81
					36	0	24.34
					36	18	24.13
					36	35	23.87
					75	0	23.38
				16-QAM	1	0	24.84
					1	37	23.43
					1	74	24.19
					36	0	23.46
					36	18	24.32
					36	35	23.34
					75	0	23.82

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
	10MHz	L 20800	2505	QPSK	1	0	24.03
					1	24	24.08
					1	49	24.51
					25	0	24.03
					25	12	23.12
					25	24	23.65
					50	0	24.85
				16-QAM	1	0	24.64
					1	24	24.01
					1	49	24.38
					25	0	24.34
					25	12	24.54
					25	24	24.87
					50	0	23.83
		M 21100	2535	QPSK	1	0	24.06
					1	24	24.05
					1	49	23.66
					25	0	23.54
					25	12	24.34
					25	24	23.64
					50	0	24.32
				16-QAM	1	0	24.05
					1	24	24.03
					1	49	24.44
					25	0	23.43
					25	12	23.64
					25	24	24.75
					50	0	23.03
		H 21400	2565	QPSK	1	0	23.84
					1	24	23.67
					1	49	23.96
					25	0	23.34
					25	12	23.78
					25	24	24.54

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
				16-QAM	50	0	23.05
					1	0	24.88
					1	24	23.65
					1	49	23.21
					25	0	23.34
					25	12	24.85
					25	24	23.43
					50	0	23.69
	5MHz	L 20755	2502.5	QPSK	1	0	24.63
					1	12	24.53
					1	24	24.54
					12	0	24.87
					12	6	23.64
					12	11	24.42
					25	0	23.51
				16-QAM	1	0	23.33
					1	12	24.64
					1	24	24.04
					12	0	23.74
					12	6	23.53
					12	11	23.24
					25	0	23.33
		M 21100	2535	QPSK	1	0	24.65
					1	12	24.23
					1	24	24.44
					12	0	24.43
					12	6	24.68
					12	11	24.43
					25	0	23.25
				16-QAM	1	0	23.38
					1	12	23.18
					1	24	23.94
					12	0	23.89
					12	6	24.43

Band	Band Width	Channel	Frequency (MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
					12	11	23.43
					25	0	23.88
		H 21350	2560	QPSK	1	0	23.09
					1	12	23.37
					1	24	23.27
					12	0	23.87
					12	6	23.67
					12	11	24.23
					25	0	23.07
				16-QAM	1	0	24.46
					1	12	24.74
					1	24	24.83
					12	0	24.34
					12	6	23.36
					12	11	23.57
					25	0	23.46

2.8. Radiated Spurious Emissions

2.8.1. Requirement

According to FCC section 2.1053 and section 27.53(g), 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. This calculated to be -13dBm.

2.8.2. Test Description

See section 2.7.2 of this report.

Note: when doing measurements above 1GHz, the EUT has been within the 3dB cone width of the horn antenna during horizontal antenna.

2.8.3. Test Result

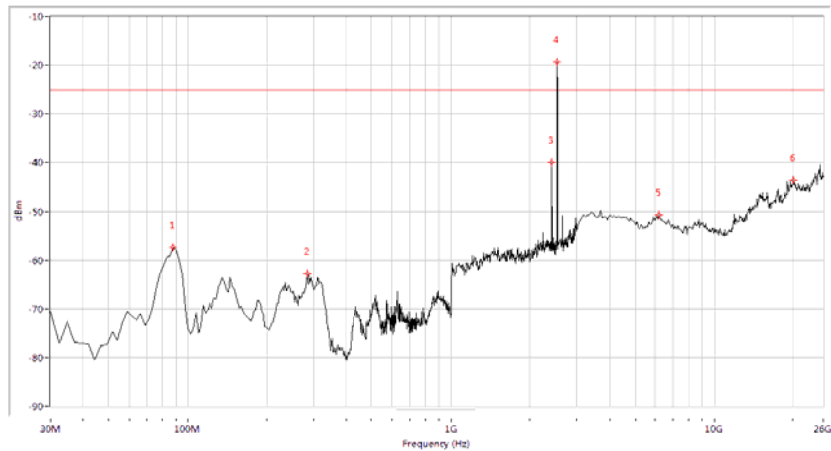
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified. Only the worst RB size/offset presented.

Test Plots for the Whole Measurement Frequency Range:

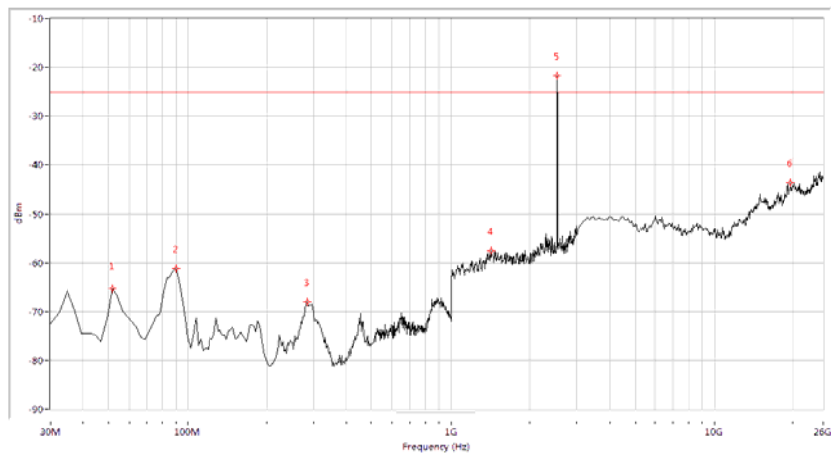
Note1: the power of the EUT transmitting frequency should be ignored.

Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

LTE Band 7 5MHz BW, Mid Channel, QPSK

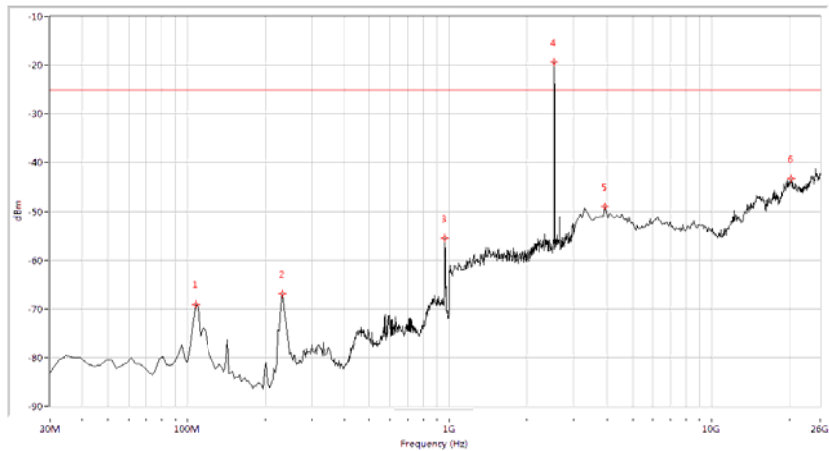


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
88.055	-57.39	-25.0	32.4	23.5	Horizontal	PASS
283.990	-62.68	-25.0	37.7	181.6	Horizontal	PASS
2416.459	-39.96	-25.0	15.0	360.0	Horizontal	PASS
2531.172	-19.28	-25.0	-5.7	305.3	Horizontal	N.A
6211.970	-50.67	-25.0	25.7	360.0	Horizontal	PASS
20149.626	-43.53	-25.0	18.5	248.3	Horizontal	PASS

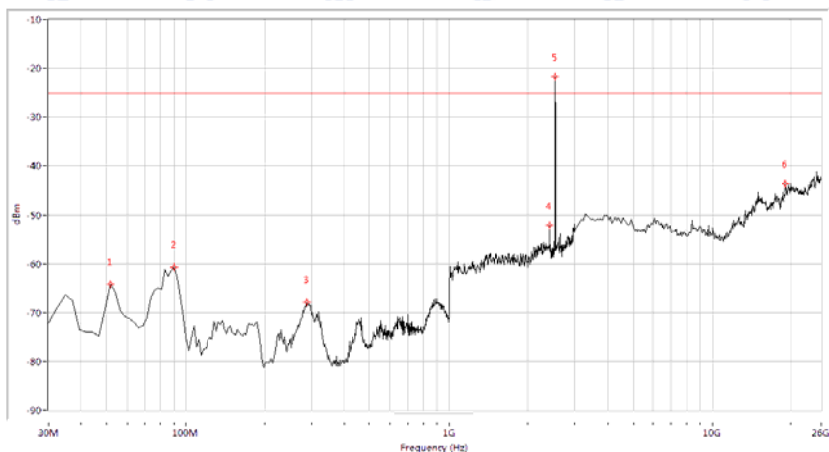


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
51.771	-65.30	-25.0	40.3	303.6	Vertical	PASS
90.474	-61.17	-25.0	36.2	332.2	Vertical	PASS
283.990	-67.97	-25.0	43.0	125.7	Vertical	PASS
1408.978	-57.56	-25.0	32.6	241.9	Vertical	PASS
2531.172	-21.73	-25.0	-3.3	311.2	Vertical	N.A
19576.060	-43.60	-25.0	18.6	360.0	Vertical	PASS

LTE Band 7 5MHz BW, Mid Channel, 16QAM

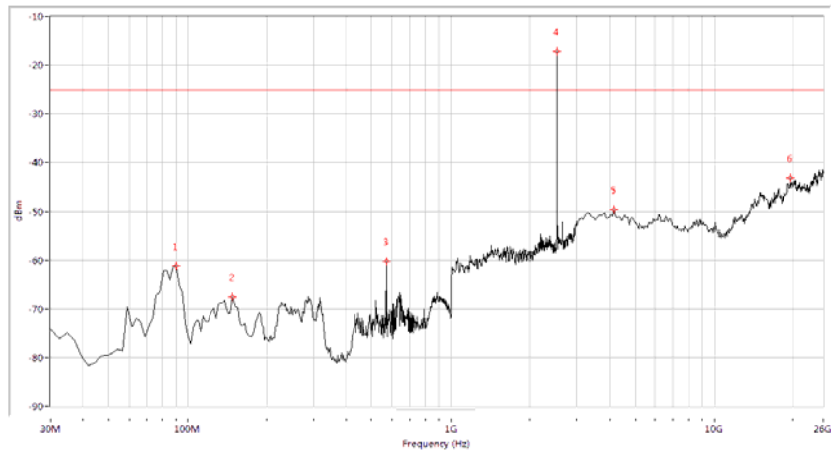


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-69.06	-25.0	44.1	157.5	Horizontal	PASS
233.192	-66.84	-25.0	41.8	28.4	Horizontal	PASS
963.716	-55.41	-25.0	30.4	291.4	Horizontal	PASS
2531.172	-19.30	-25.0	-5.7	291.4	Horizontal	N.A
3917.706	-48.96	-25.0	24.0	31.4	Horizontal	PASS
20264.339	-43.23	-25.0	18.2	77.1	Horizontal	PASS

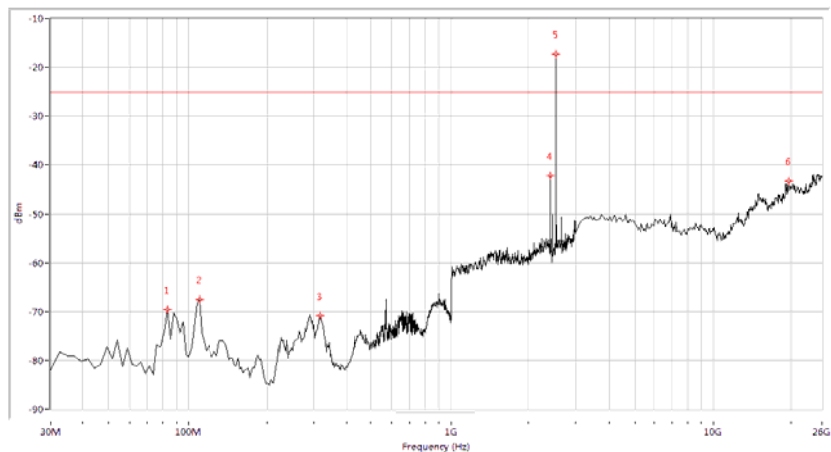


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
51.771	-64.16	-25.0	39.2	109.9	Vertical	PASS
90.474	-60.68	-25.0	35.7	329.0	Vertical	PASS
288.828	-67.76	-25.0	42.8	137.4	Vertical	PASS
2411.471	-52.08	-25.0	27.1	308.1	Vertical	PASS
2531.172	-21.66	-25.0	-3.3	270.6	Vertical	N.A
19117.207	-43.62	-25.0	18.6	0.8	Vertical	PASS

LTE Band 7 10MHz BW, Mid Channel, QPSK

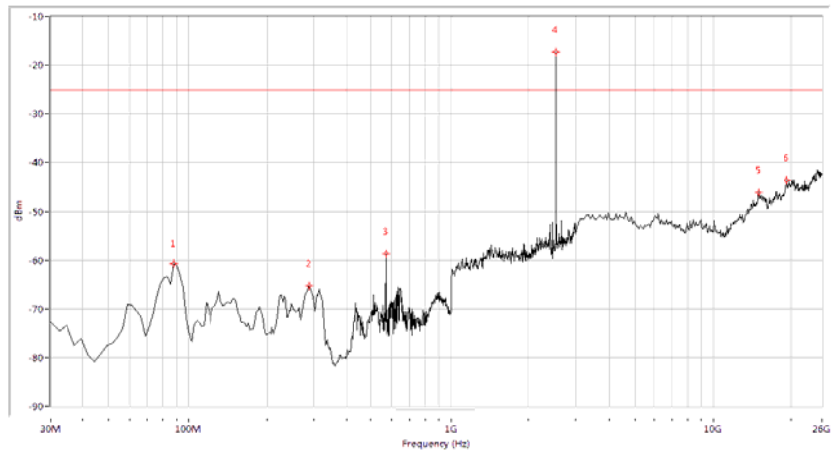


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-61.16	-25.0	36.2	26.8	Horizontal	PASS
148.529	-67.48	-25.0	42.5	90.1	Horizontal	PASS
569.426	-60.21	-25.0	35.2	227.8	Horizontal	PASS
2526.185	-17.06	-25.0	-7.9	287.0	Horizontal	N.A
4147.132	-49.57	-25.0	24.6	-0.0	Horizontal	PASS
19633.416	-43.17	-25.0	18.2	-0.0	Horizontal	PASS

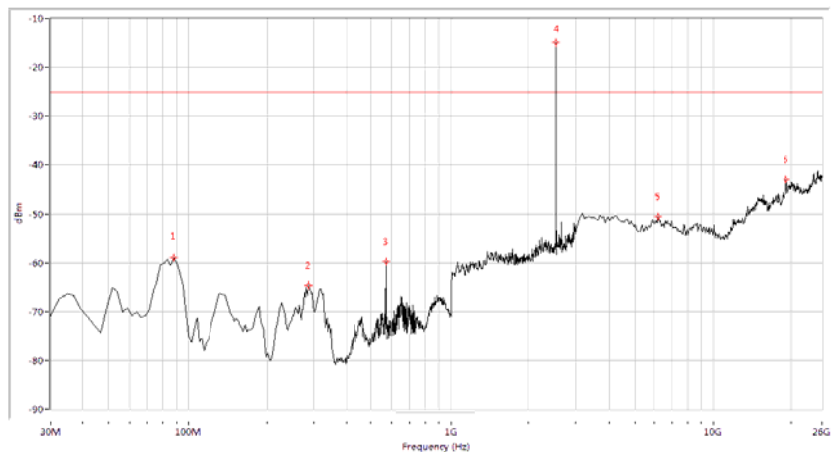


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
83.217	-69.59	-25.0	44.6	330.8	Vertical	PASS
109.825	-67.52	-25.0	42.5	116.1	Vertical	PASS
317.855	-70.82	-25.0	45.8	20.5	Vertical	PASS
2411.471	-42.20	-25.0	17.2	249.8	Vertical	PASS
2526.185	-17.27	-25.0	-7.7	317.9	Vertical	N.A
19518.703	-43.32	-25.0	18.3	318.9	Vertical	PASS

LTE Band 7 10MHz BW, Mid Channel, 16QAM

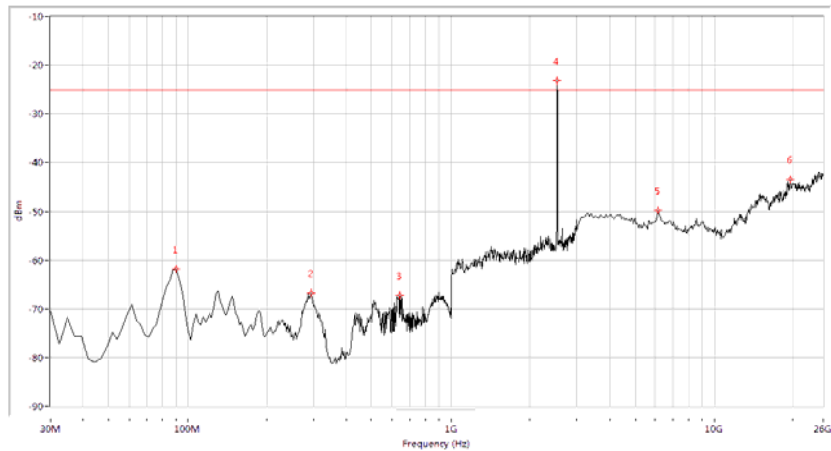


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
88.055	-60.62	-25.0	35.6	6.4	Horizontal	PASS
288.828	-65.26	-25.0	40.3	297.8	Horizontal	PASS
569.426	-58.64	-25.0	33.6	250.9	Horizontal	PASS
2526.185	-17.25	-25.0	-7.8	285.9	Horizontal	N.A
14815.461	-46.09	-25.0	21.1	360.0	Horizontal	PASS
19231.920	-43.59	-25.0	18.6	305.8	Horizontal	PASS

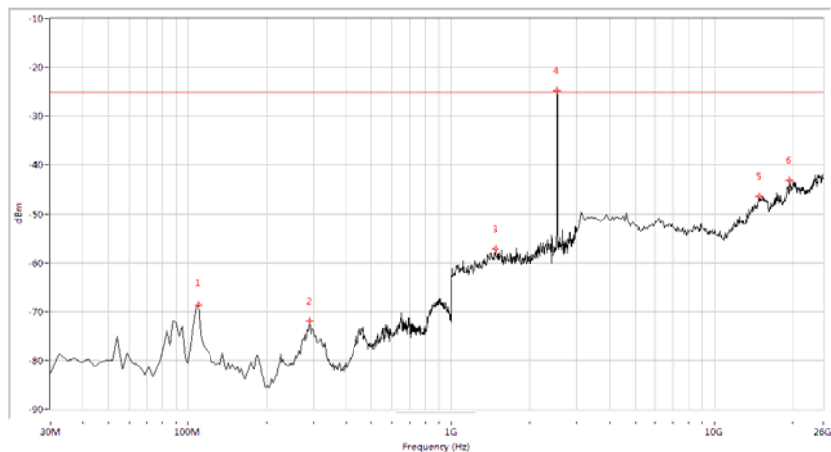


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
88.055	-58.97	-25.0	34.0	359.4	Vertical	PASS
286.409	-64.60	-25.0	39.6	136.2	Vertical	PASS
569.426	-59.66	-25.0	34.7	130.3	Vertical	PASS
2526.185	-14.93	-25.0	-10.1	297.3	Vertical	N.A
6211.970	-50.56	-25.0	25.6	246.4	Vertical	PASS
19117.207	-42.90	-25.0	17.9	302.6	Vertical	PASS

LTE Band 7 15MHz BW, Mid Channel, QPSK

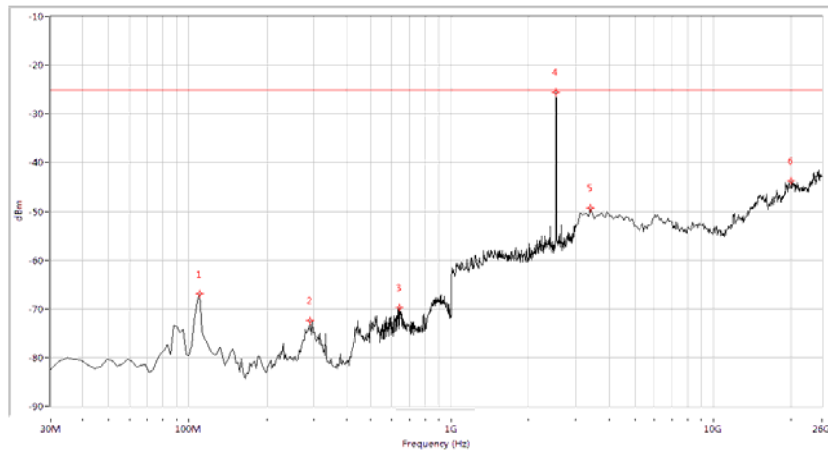


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-61.74	-25.0	36.7	11.9	Horizontal	PASS
293.666	-66.69	-25.0	41.7	323.4	Horizontal	PASS
639.576	-67.21	-25.0	42.2	360.0	Horizontal	PASS
2531.172	-23.16	-25.0	-1.8	309.6	Horizontal	N.A
6154.613	-49.82	-25.0	24.8	322.3	Horizontal	PASS
19633.416	-43.46	-25.0	18.5	211.4	Horizontal	PASS

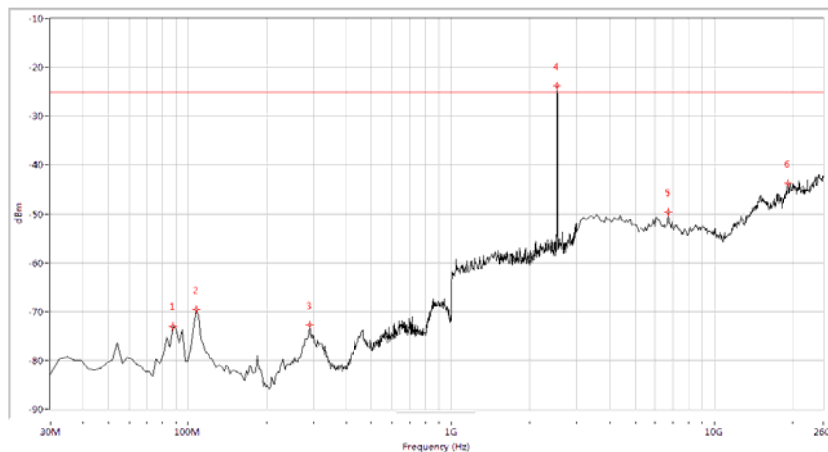


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-68.57	-25.0	43.6	156.4	Vertical	PASS
291.247	-71.87	-25.0	46.9	151.1	Vertical	PASS
1468.828	-57.23	-25.0	32.2	176.8	Vertical	PASS
2531.172	-24.73	-25.0	-0.3	303.7	Vertical	N.A
14758.105	-46.50	-25.0	21.5	38.0	Vertical	PASS
19461.347	-43.05	-25.0	18.0	360.0	Vertical	PASS

LTE Band 7 15MHz BW, Mid Channel, 16QAM

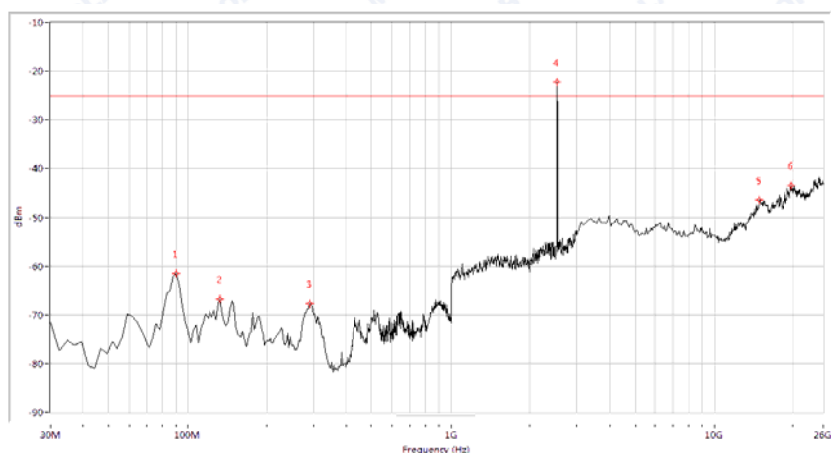


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-66.88	-25.0	41.9	212.1	Horizontal	PASS
291.247	-72.39	-25.0	47.4	333.8	Horizontal	PASS
641.995	-69.80	-25.0	44.8	345.3	Horizontal	PASS
2531.172	-25.56	-25.0	0.6	273.6	Horizontal	N.A
3401.496	-49.22	-25.0	24.2	47.7	Horizontal	PASS
20034.913	-43.74	-25.0	18.7	168.6	Horizontal	PASS

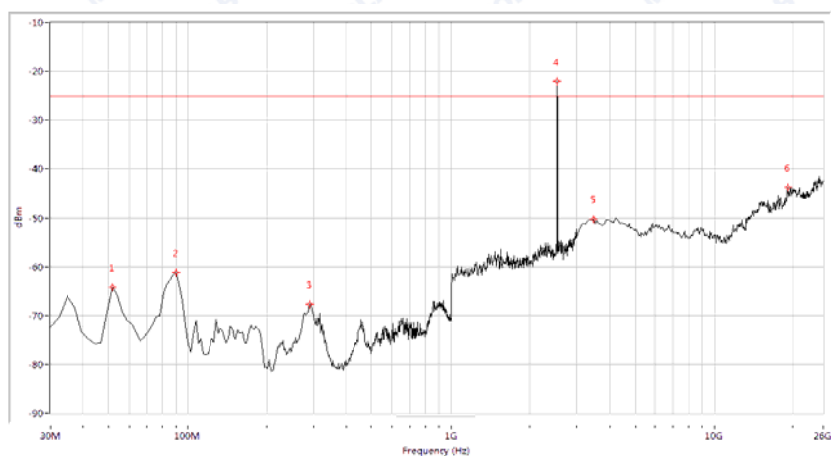


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
88.055	-73.10	-25.0	48.1	360.0	Vertical	PASS
107.406	-69.52	-25.0	44.5	236.0	Vertical	PASS
291.247	-72.80	-25.0	47.8	176.8	Vertical	PASS
2531.172	-23.86	-25.0	-1.1	311.4	Vertical	N.A
6728.180	-49.61	-25.0	24.6	187.6	Vertical	PASS
19231.920	-43.72	-25.0	18.7	255.0	Vertical	PASS

LTE Band 7 20MHz BW, Mid Channel, QPSK

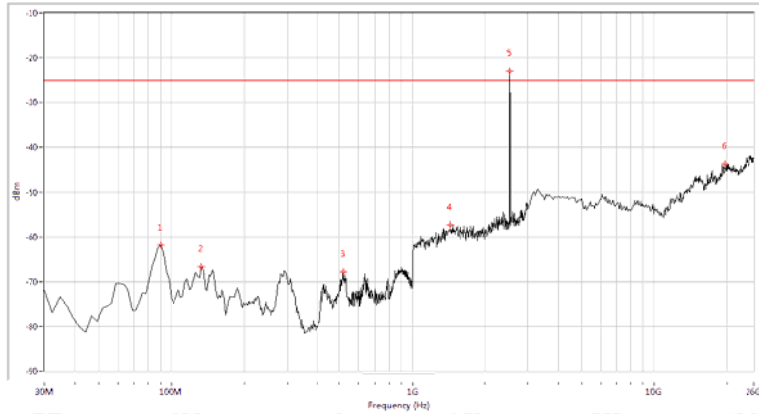


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-61.56	-25.0	36.6	25.0	Horizontal	PASS
134.015	-66.64	-25.0	41.6	41.3	Horizontal	PASS
291.247	-67.59	-25.0	42.6	316.7	Horizontal	PASS
2531.172	-22.24	-25.0	-2.8	259.4	Horizontal	N.A
14758.105	-46.46	-25.0	21.5	353.9	Horizontal	PASS
19690.773	-43.37	-25.0	18.4	346.0	Horizontal	PASS

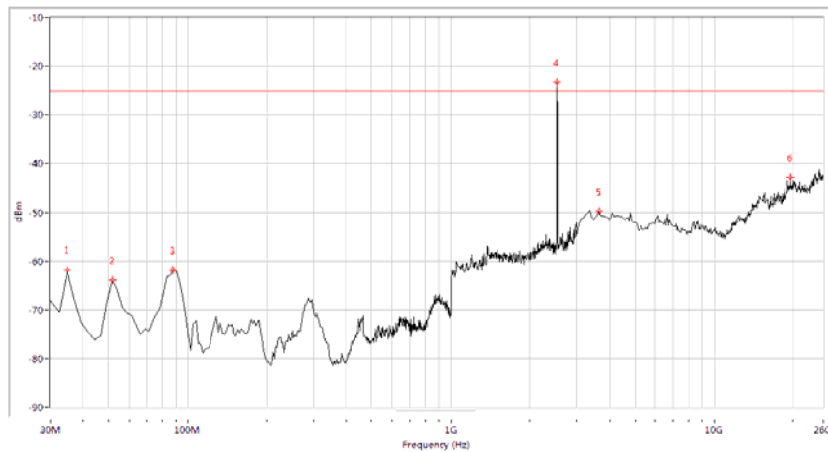


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
51.771	-64.18	-25.0	39.2	360.0	Vertical	PASS
90.474	-61.19	-25.0	36.2	345.8	Vertical	PASS
291.247	-67.59	-25.0	42.6	163.8	Vertical	PASS
2531.172	-22.08	-25.0	-2.9	273.1	Vertical	N.A
3458.853	-50.16	-25.0	25.2	61.7	Vertical	PASS
19231.920	-43.77	-25.0	18.8	116.8	Vertical	PASS

LTE Band 7 20MHz BW, Mid Channel, 16QAM

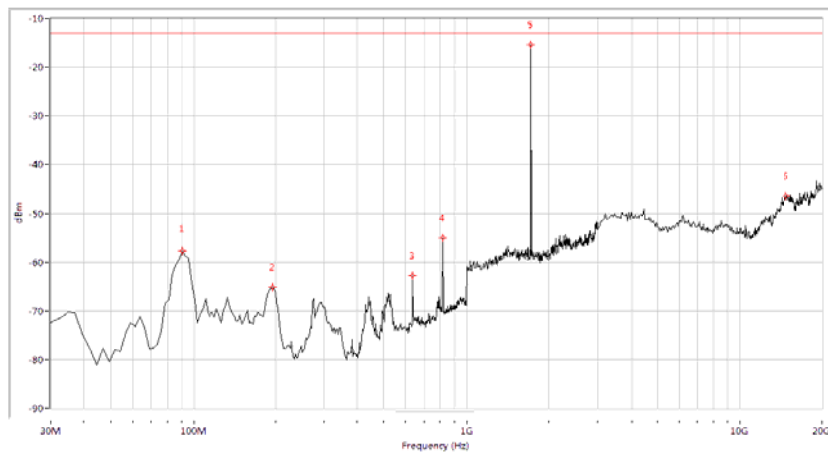


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-61.81	-25.0	36.8	36.4	Horizontal	PASS
134.015	-66.66	-25.0	41.7	327.9	Horizontal	PASS
518.628	-67.90	-25.0	42.9	51.7	Horizontal	PASS
1423.940	-57.44	-25.0	32.4	54.8	Horizontal	PASS
2531.172	-23.01	-25.0	-2.0	313.3	Horizontal	N.A
19518.703	-43.73	-25.0	18.7	14.5	Horizontal	PASS

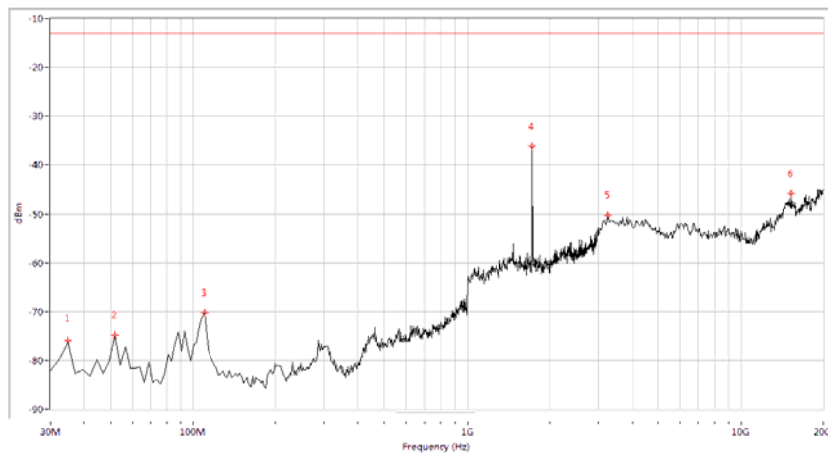


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-61.74	-25.0	36.7	217.8	Vertical	PASS
51.771	-63.80	-25.0	38.8	102.8	Vertical	PASS
88.055	-61.79	-25.0	36.8	316.0	Vertical	PASS
2531.172	-23.29	-25.0	-1.7	278.4	Vertical	N.A
3630.923	-49.83	-25.0	24.8	307.8	Vertical	PASS
19576.060	-42.77	-25.0	17.8	360.0	Vertical	PASS

LTE Band 4 1.4MHz BW, Mid Channel, QPSK

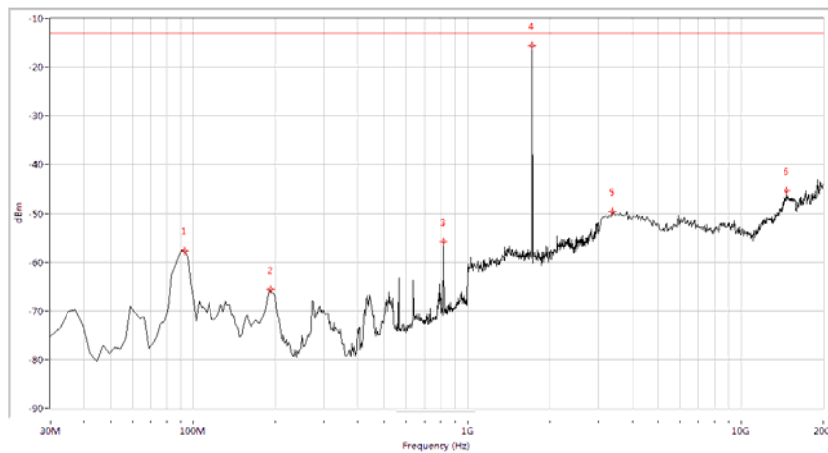


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-57.68	-13.0	44.7	60.0	Horizontal	PASS
194.489	-65.20	-13.0	52.2	81.5	Horizontal	PASS
637.157	-62.73	-13.0	49.7	-0.0	Horizontal	PASS
816.160	-54.97	-13.0	42.0	2.4	Horizontal	PASS
1733.167	-15.39	-13.0	2.4	2.0	Horizontal	N.A
14827.930	-46.39	-13.0	33.4	262.9	Horizontal	PASS

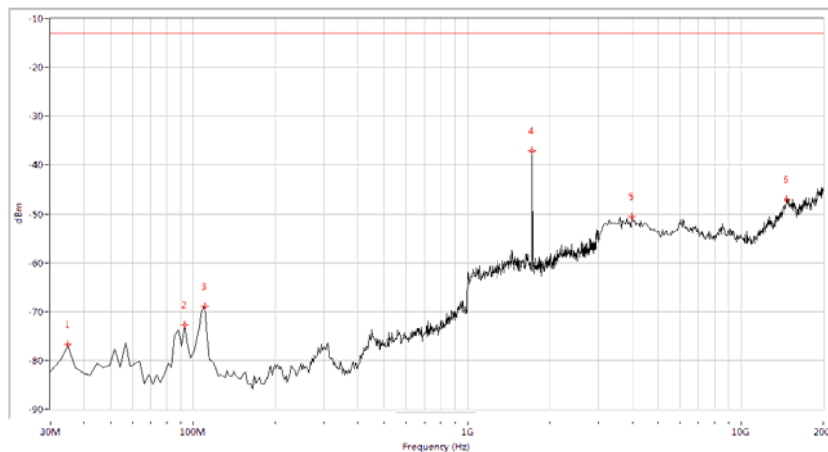


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-75.83	-13.0	62.8	132.2	Vertical	PASS
51.771	-74.84	-13.0	61.8	267.6	Vertical	PASS
109.825	-70.16	-13.0	57.2	51.8	Vertical	PASS
1733.167	-36.13	-13.0	23.1	306.2	Vertical	N.A
3254.364	-50.18	-13.0	37.2	98.4	Vertical	PASS
15336.658	-45.79	-13.0	32.8	275.9	Vertical	PASS

LTE Band 4 1.4MHz BW, Mid Channel, 16QAM

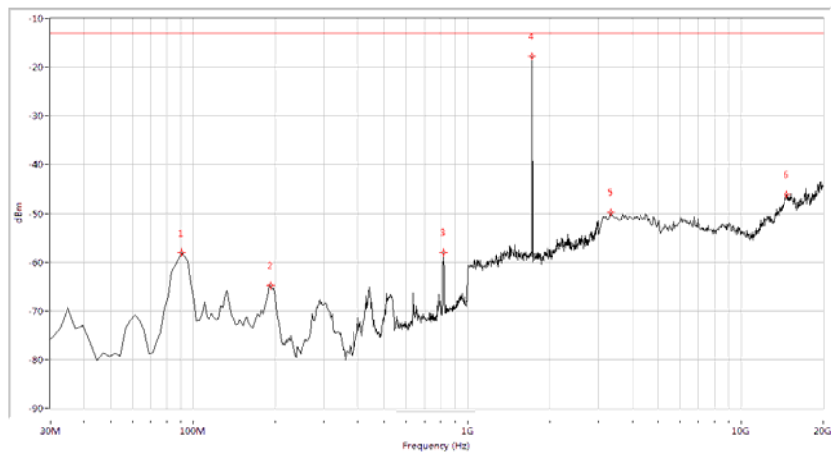


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
92.893	-57.73	-13.0	44.7	56.0	Horizontal	PASS
192.070	-65.67	-13.0	52.7	69.9	Horizontal	PASS
818.579	-55.71	-13.0	42.7	359.3	Horizontal	PASS
1733.167	-15.57	-13.0	2.6	-0.0	Horizontal	N.A
3381.546	-49.64	-13.0	36.6	174.6	Horizontal	PASS
14743.142	-45.31	-13.0	32.3	62.7	Horizontal	PASS

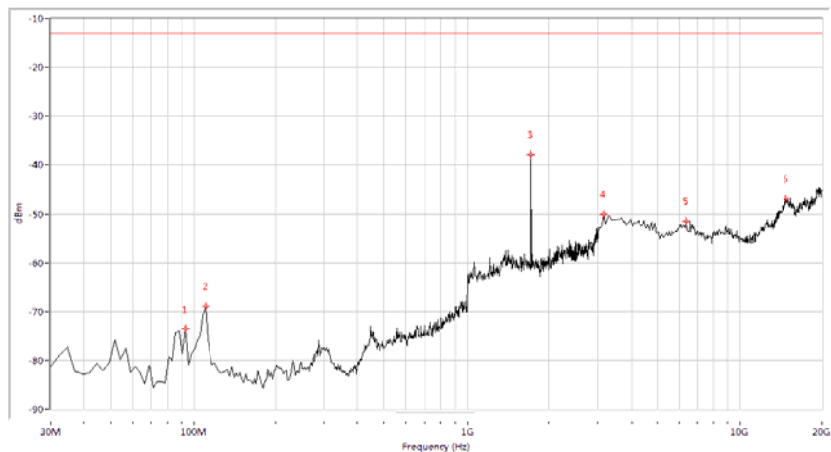


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-76.73	-13.0	63.7	196.1	Vertical	PASS
92.893	-72.77	-13.0	59.8	18.3	Vertical	PASS
109.825	-68.86	-13.0	55.9	108.5	Vertical	PASS
1733.167	-37.10	-13.0	24.1	112.2	Vertical	N.A
3975.062	-50.60	-13.0	37.6	360.0	Vertical	PASS
14743.142	-47.15	-13.0	34.1	196.1	Vertical	PASS

LTE Band 4 3MHz BW, Mid Channel, QPSK

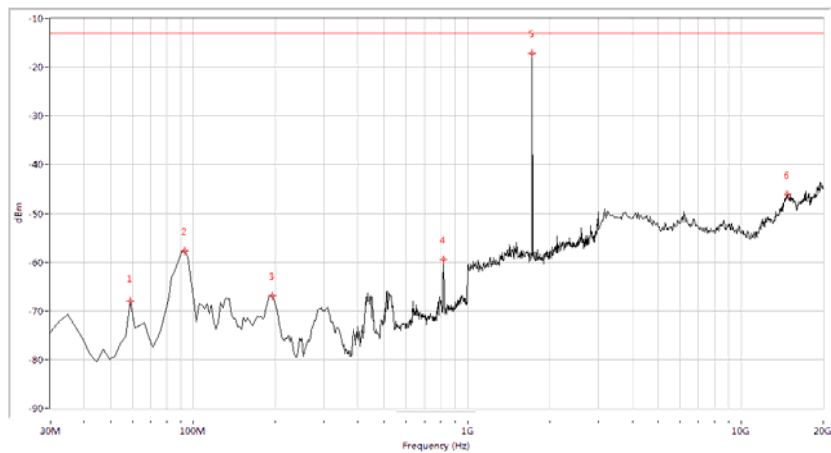


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
90.474	-58.04	-13.0	45.0	64.4	Horizontal	PASS
192.070	-64.75	-13.0	51.7	92.6	Horizontal	PASS
818.579	-58.00	-13.0	45.0	-0.0	Horizontal	PASS
1728.180	-17.84	-13.0	4.8	-0.0	Horizontal	N.A
3339.152	-49.81	-13.0	36.8	87.2	Horizontal	PASS
14785.536	-46.05	-13.0	33.1	98.6	Horizontal	PASS

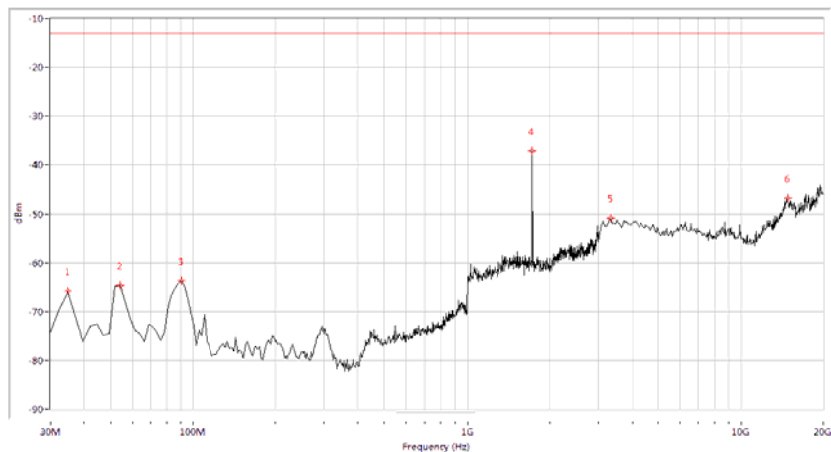


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
92.893	-73.51	-13.0	60.5	186.7	Vertical	PASS
109.825	-68.94	-13.0	55.9	80.7	Vertical	PASS
1733.167	-37.84	-13.0	24.8	259.2	Vertical	N.A
3169.576	-50.02	-13.0	37.0	266.2	Vertical	PASS
6391.521	-51.47	-13.0	38.5	-0.0	Vertical	PASS
14870.324	-46.95	-13.0	34.0	186.7	Vertical	PASS

LTE Band 4 3MHz BW, Mid Channel, 16QAM

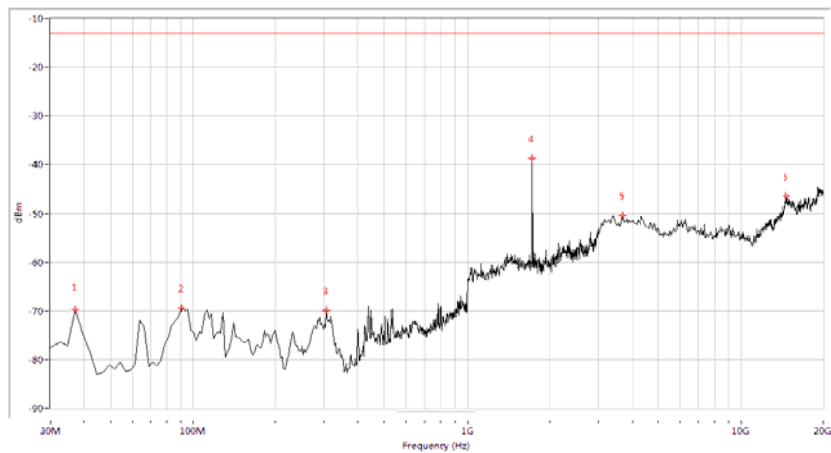


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
59.027	-67.92	-13.0	54.9	293.2	Horizontal	PASS
92.893	-57.62	-13.0	44.6	23.4	Horizontal	PASS
194.489	-66.86	-13.0	53.9	69.6	Horizontal	PASS
818.579	-59.35	-13.0	46.3	360.0	Horizontal	PASS
1733.167	-17.07	-13.0	4.1	44.1	Horizontal	N.A
14870.324	-46.17	-13.0	33.2	76.8	Horizontal	PASS

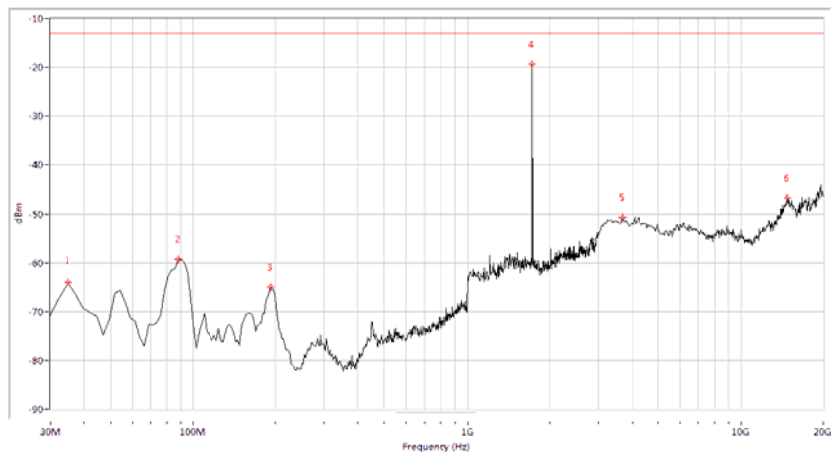


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-65.72	-13.0	52.7	57.1	Vertical	PASS
54.190	-64.61	-13.0	51.6	307.1	Vertical	PASS
90.474	-63.74	-13.0	50.7	97.1	Vertical	PASS
1728.180	-37.15	-13.0	24.2	59.2	Vertical	N.A
3339.152	-50.87	-13.0	37.9	133.3	Vertical	PASS
14955.112	-46.83	-13.0	33.8	57.1	Vertical	PASS

LTE Band 4 5MHz BW, Mid Channel, QPSK



Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
37.257	-69.71	-13.0	56.7	56.2	Horizontal	PASS
90.474	-69.36	-13.0	56.4	199.4	Horizontal	PASS
305.761	-69.92	-13.0	56.9	335.7	Horizontal	PASS
1733.167	-38.66	-13.0	25.7	263.5	Horizontal	N.A
3678.304	-50.32	-13.0	37.3	166.6	Horizontal	PASS
14615.960	-46.49	-13.0	33.5	74.8	Horizontal	PASS

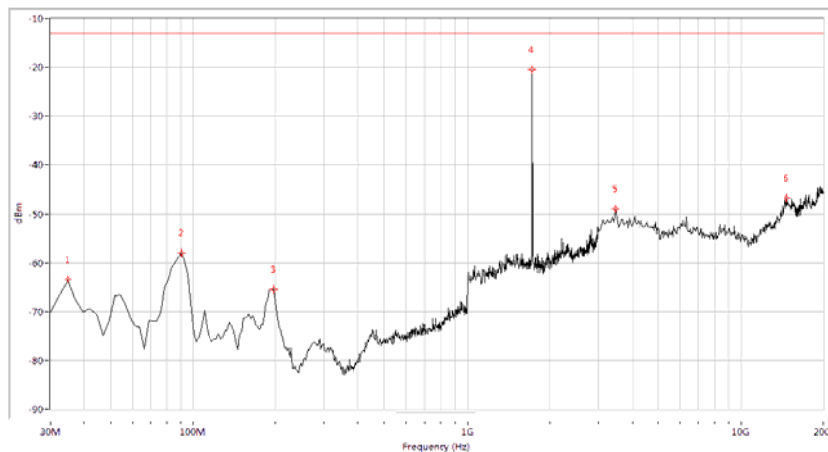


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-63.95	-13.0	50.9	312.6	Vertical	PASS
88.055	-59.29	-13.0	46.3	21.3	Vertical	PASS
192.070	-64.89	-13.0	51.9	229.9	Vertical	PASS
1733.167	-19.40	-13.0	6.4	87.5	Vertical	N.A
3678.304	-50.64	-13.0	37.6	19.6	Vertical	PASS
14827.930	-46.70	-13.0	33.7	312.6	Vertical	PASS

LTE Band 4 5MHz BW, Mid Channel, 16QAM

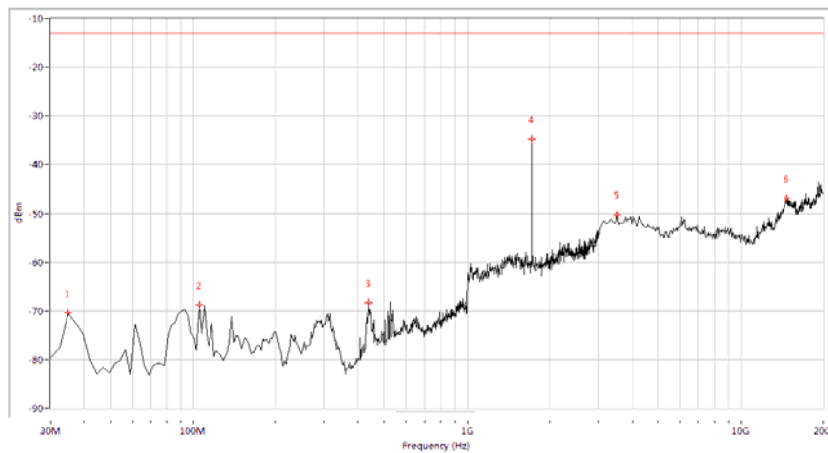


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
109.825	-68.57	-13.0	55.6	174.4	Horizontal	PASS
448.479	-70.22	-13.0	57.2	94.1	Horizontal	PASS
523.466	-70.28	-13.0	57.3	275.9	Horizontal	PASS
1733.167	-38.76	-13.0	25.8	354.1	Horizontal	N.A
3381.546	-50.54	-13.0	37.5	33.2	Horizontal	PASS
15124.688	-46.43	-13.0	33.4	81.1	Horizontal	PASS

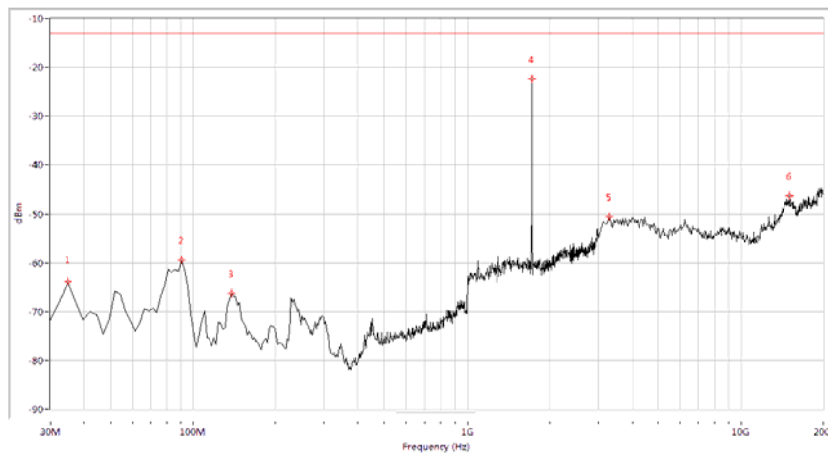


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-63.45	-13.0	50.4	346.6	Vertical	PASS
90.474	-57.93	-13.0	44.9	262.6	Vertical	PASS
196.908	-65.38	-13.0	52.4	343.2	Vertical	PASS
1733.167	-20.53	-13.0	7.5	360.0	Vertical	N.A
3466.334	-48.90	-13.0	35.9	131.4	Vertical	PASS
14785.536	-46.77	-13.0	33.8	346.6	Vertical	PASS

LTE Band 4 10MHz BW, Mid Channel, QPSK

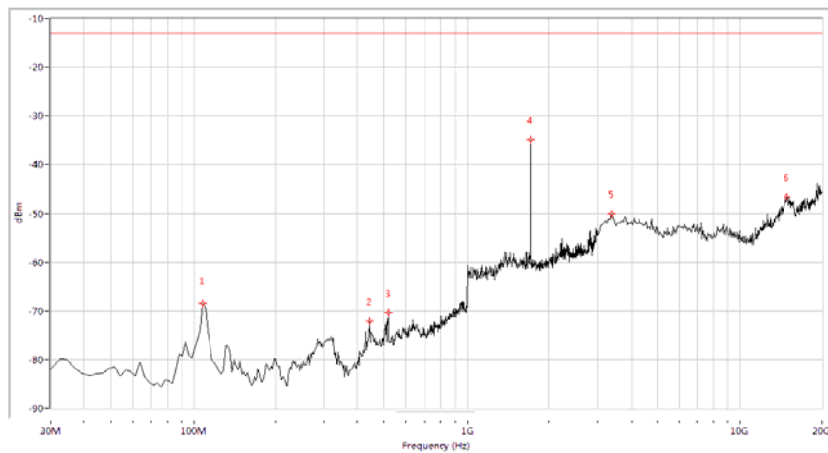


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-70.28	-13.0	57.3	105.7	Horizontal	PASS
104.988	-68.72	-13.0	55.7	350.1	Horizontal	PASS
438.803	-68.37	-13.0	55.4	330.9	Horizontal	PASS
1728.180	-34.64	-13.0	21.6	47.1	Horizontal	N.A
3508.728	-50.30	-13.0	37.3	330.3	Horizontal	PASS
14785.536	-46.99	-13.0	34.0	91.9	Horizontal	PASS

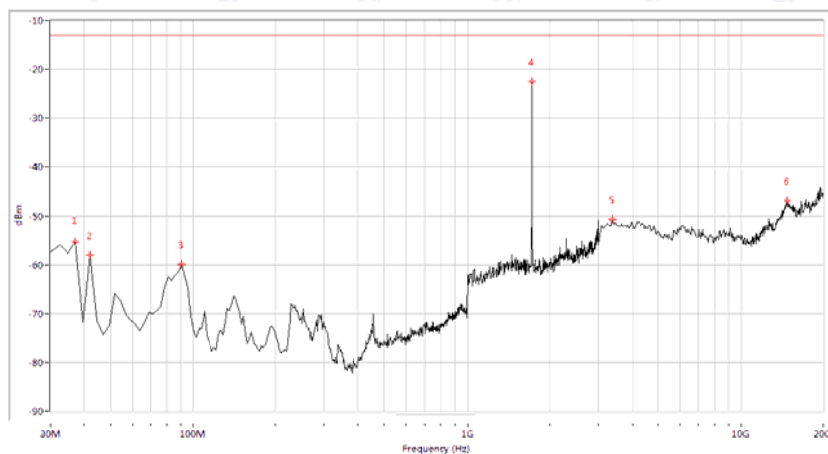


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-63.92	-13.0	50.9	197.1	Vertical	PASS
90.474	-59.44	-13.0	46.4	208.3	Vertical	PASS
138.853	-66.16	-13.0	53.2	230.8	Vertical	PASS
1728.180	-22.39	-13.0	9.4	316.0	Vertical	N.A
3296.758	-50.56	-13.0	37.6	32.1	Vertical	PASS
15124.688	-46.22	-13.0	33.2	197.1	Vertical	PASS

LTE Band 4 10MHz BW, Mid Channel, 16QAM

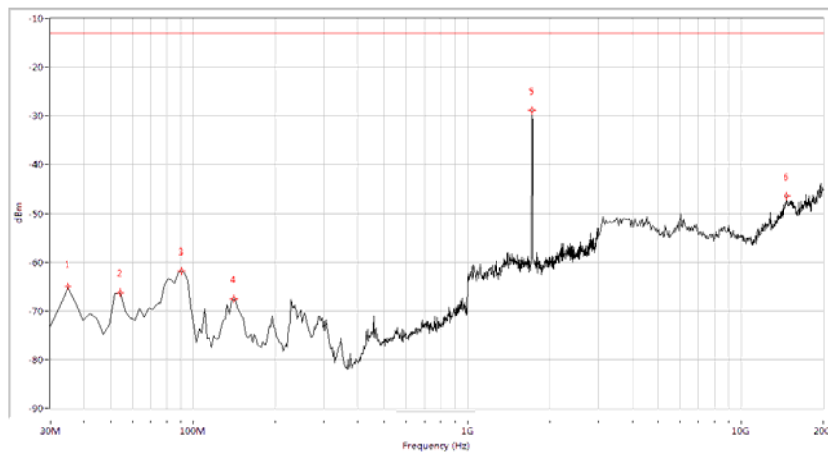


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
107.406	-68.45	-13.0	55.5	57.2	Horizontal	PASS
443.641	-72.02	-13.0	59.0	190.4	Horizontal	PASS
518.628	-70.43	-13.0	57.4	0.4	Horizontal	PASS
1728.180	-34.88	-13.0	21.9	110.5	Horizontal	N.A
3381.546	-50.14	-13.0	37.1	99.2	Horizontal	PASS
14955.112	-46.52	-13.0	33.5	333.9	Horizontal	PASS

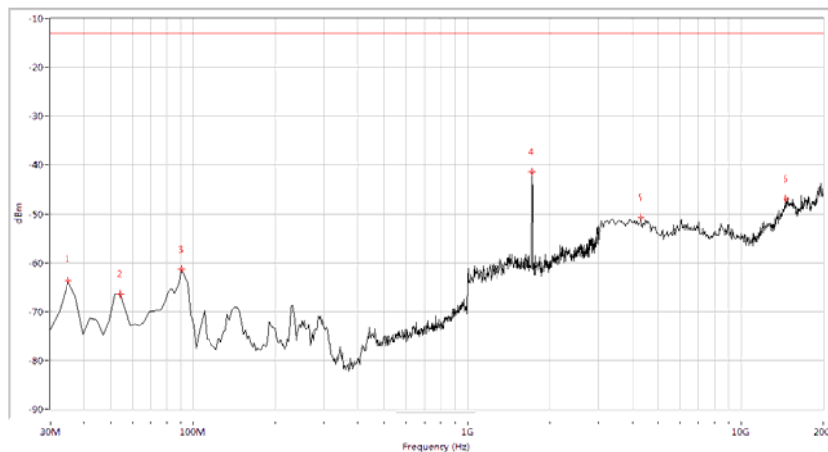


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
37.257	-55.37	-13.0	42.4	-0.0	Vertical	PASS
42.095	-57.98	-13.0	45.0	262.8	Vertical	PASS
90.474	-59.96	-13.0	47.0	108.6	Vertical	PASS
1728.180	-22.48	-13.0	9.5	184.9	Vertical	N.A
3381.546	-50.77	-13.0	37.8	83.1	Vertical	PASS
14870.324	-46.92	-13.0	33.9	-0.0	Vertical	PASS

LTE Band 4 15MHz BW, Mid Channel, QPSK

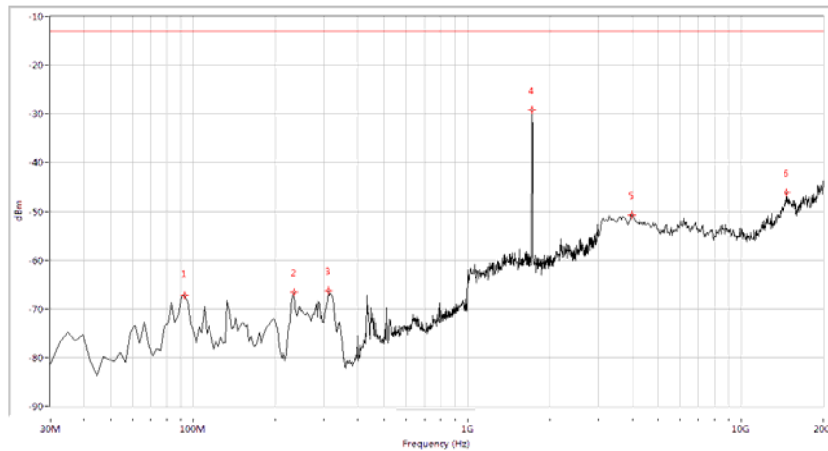


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-64.94	-13.0	51.9	210.7	Horizontal	PASS
54.190	-66.26	-13.0	53.3	-0.0	Horizontal	PASS
90.474	-61.84	-13.0	48.8	253.4	Horizontal	PASS
141.272	-67.46	-13.0	54.5	350.1	Horizontal	PASS
1733.167	-28.91	-13.0	15.9	142.3	Horizontal	N.A
14743.142	-46.44	-13.0	33.4	142.3	Horizontal	PASS

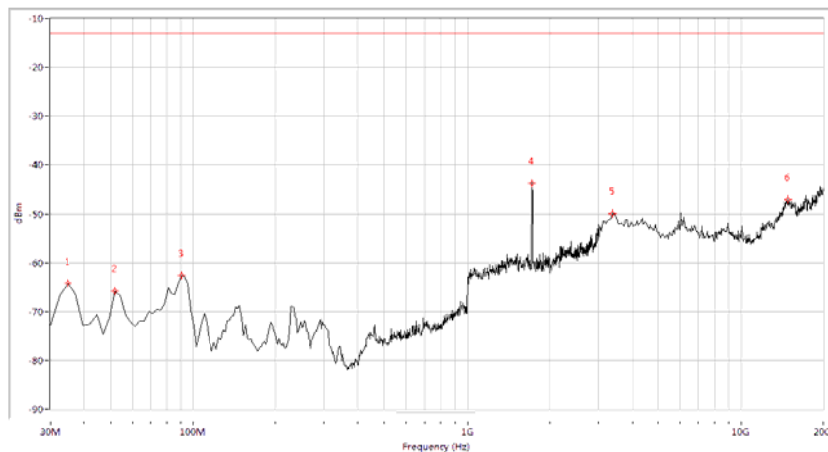


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-63.67	-13.0	50.7	152.2	Vertical	PASS
54.190	-66.33	-13.0	53.3	274.5	Vertical	PASS
90.474	-61.26	-13.0	48.3	97.6	Vertical	PASS
1733.167	-41.43	-13.0	28.4	21.0	Vertical	N.A
4314.214	-50.76	-13.0	37.8	130.3	Vertical	PASS
14658.354	-46.91	-13.0	33.9	152.2	Vertical	PASS

LTE Band 4 15MHz BW, Mid Channel, 16QAM

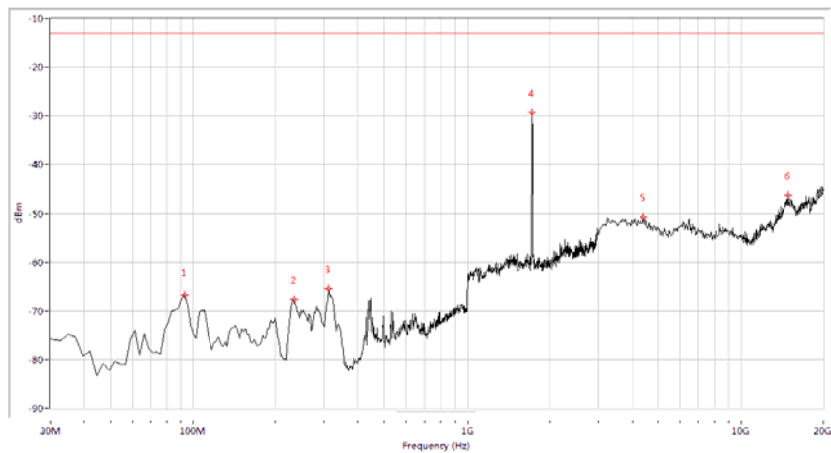


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
92.893	-67.23	-13.0	54.2	158.7	Horizontal	PASS
233.192	-66.63	-13.0	53.6	47.2	Horizontal	PASS
310.599	-66.21	-13.0	53.2	0.4	Horizontal	PASS
1728.180	-29.10	-13.0	16.1	250.6	Horizontal	N.A
3975.062	-50.78	-13.0	37.8	260.6	Horizontal	PASS
14785.536	-46.12	-13.0	33.1	105.6	Horizontal	PASS

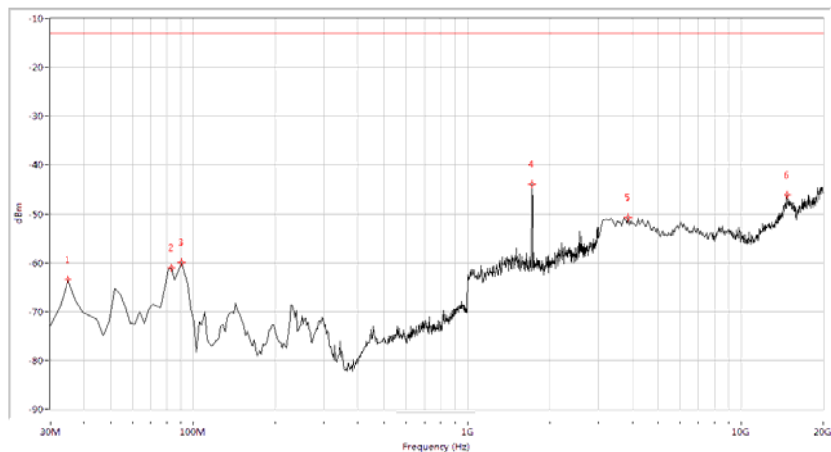


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-64.22	-13.0	51.2	82.4	Vertical	PASS
51.771	-65.79	-13.0	52.8	173.9	Vertical	PASS
90.474	-62.53	-13.0	49.5	232.0	Vertical	PASS
1728.180	-43.72	-13.0	30.7	333.2	Vertical	N.A
3381.546	-49.97	-13.0	37.0	16.2	Vertical	PASS
14912.718	-47.02	-13.0	34.0	82.4	Vertical	PASS

LTE Band 4 20MHz BW, Mid Channel, QPSK

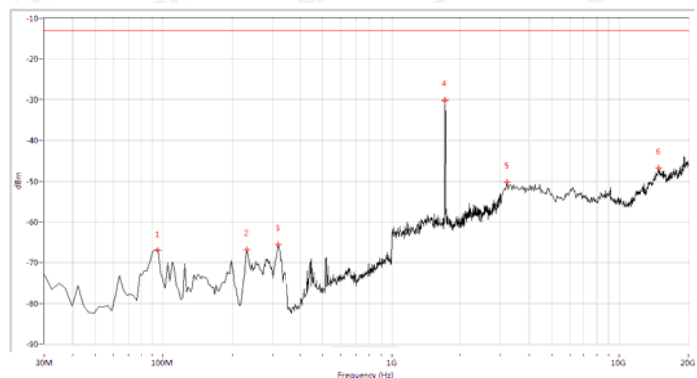


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
92.893	-66.69	-13.0	53.7	78.0	Horizontal	PASS
233.192	-67.63	-13.0	54.6	245.0	Horizontal	PASS
310.599	-65.40	-13.0	52.4	0.3	Horizontal	PASS
1733.167	-29.40	-13.0	16.4	-0.0	Horizontal	N.A
4441.397	-50.66	-13.0	37.7	276.6	Horizontal	PASS
14912.718	-46.28	-13.0	33.3	130.0	Horizontal	PASS

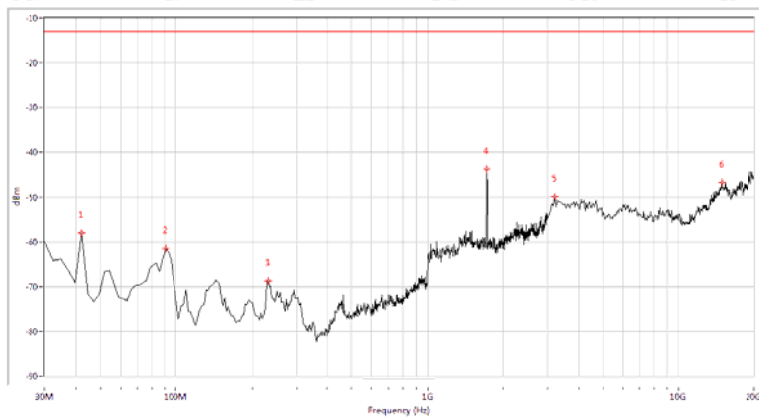


Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
34.838	-63.31	-13.0	50.3	269.2	Vertical	PASS
83.217	-60.99	-13.0	48.0	248.0	Vertical	PASS
90.474	-59.85	-13.0	46.8	131.7	Vertical	PASS
1733.167	-43.89	-13.0	30.9	4.9	Vertical	N.A
3847.880	-50.74	-13.0	37.7	196.2	Vertical	PASS
14827.930	-46.09	-13.0	33.1	269.2	Vertical	PASS

LTE Band 4 20MHz BW, Mid Channel, 16QAM



Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
95.312	-67.02	-13.0	54.0	60.3	Horizontal	PASS
230.773	-66.91	-13.0	53.9	27.9	Horizontal	PASS
315.436	-65.53	-13.0	52.5	-0.0	Horizontal	PASS
1728.180	-30.20	-13.0	17.2	145.7	Horizontal	N.A
3211.970	-50.31	-13.0	37.3	9.1	Horizontal	PASS
14870.324	-46.79	-13.0	33.8	360.0	Horizontal	PASS



Fre. (MHz)	Peak	Limit(PK)	Margin	Degree	Antenna	Verdict
42.095	-58.07	-13.0	45.1	1.9	Vertical	PASS
90.474	-61.53	-13.0	48.5	47.6	Vertical	PASS
230.773	-68.82	-13.0	55.8	108.8	Vertical	PASS
1733.167	-43.72	-13.0	30.7	291.8	Vertical	N.A
3211.970	-50.00	-13.0	37.0	301.2	Vertical	PASS
14827.930	-46.68	-13.0	33.7	1.9	Vertical	PASS

***** END OF REPORT *****