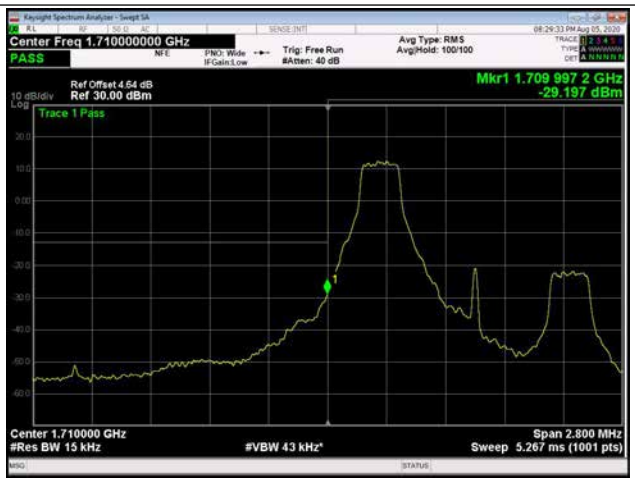
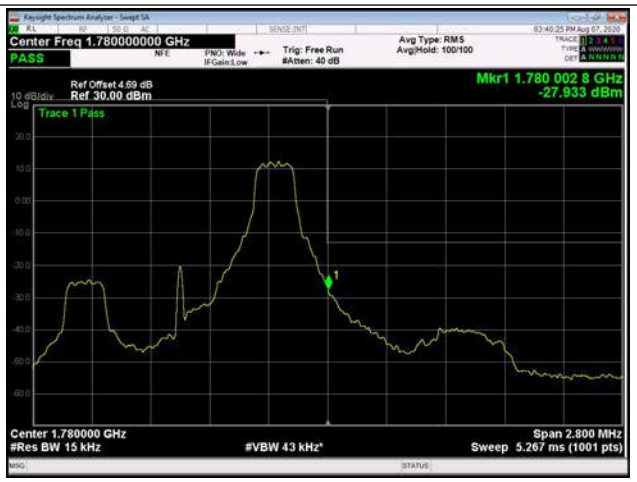
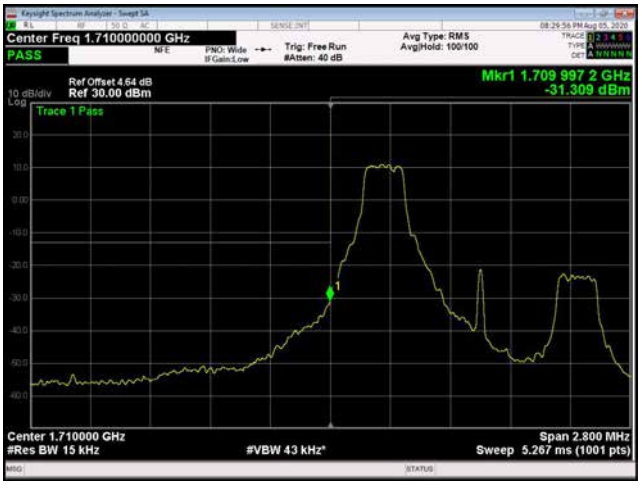
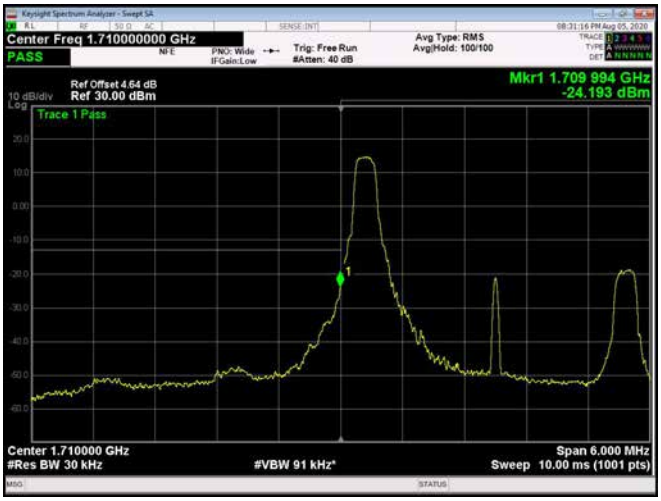
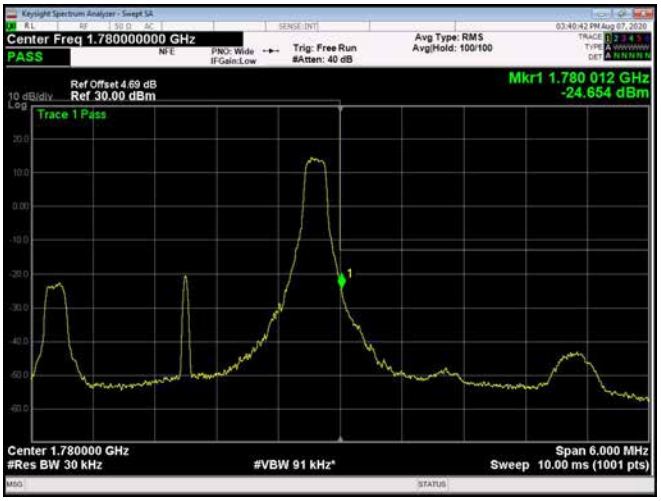
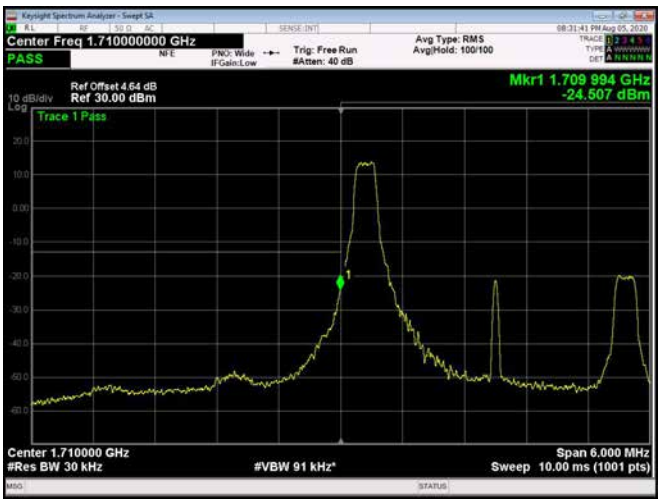
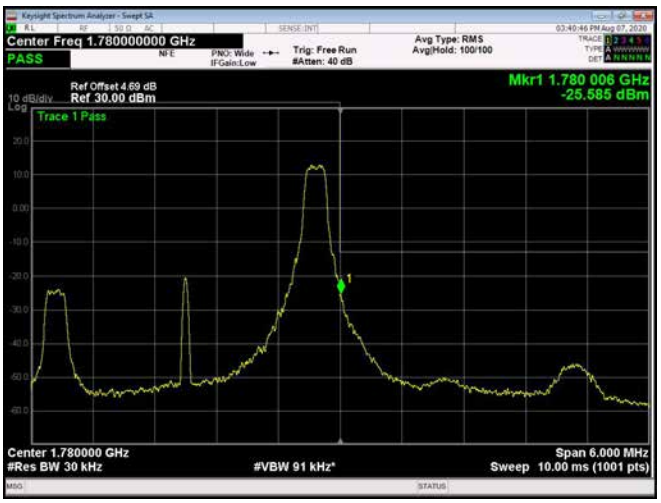
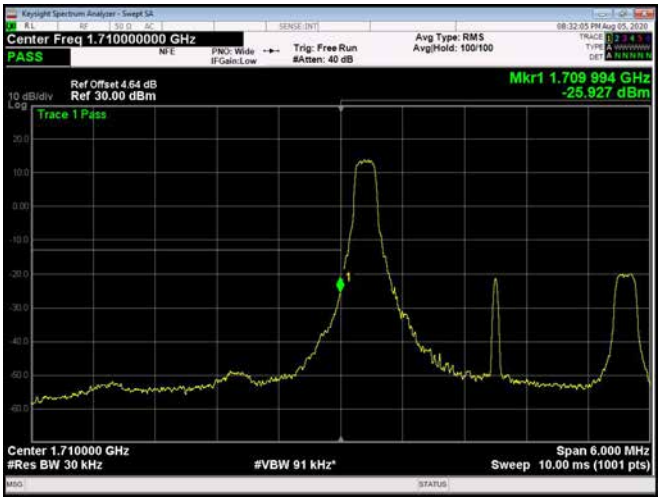
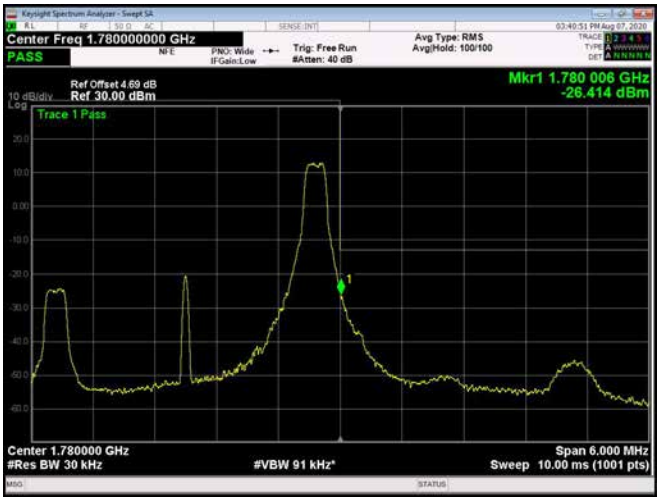
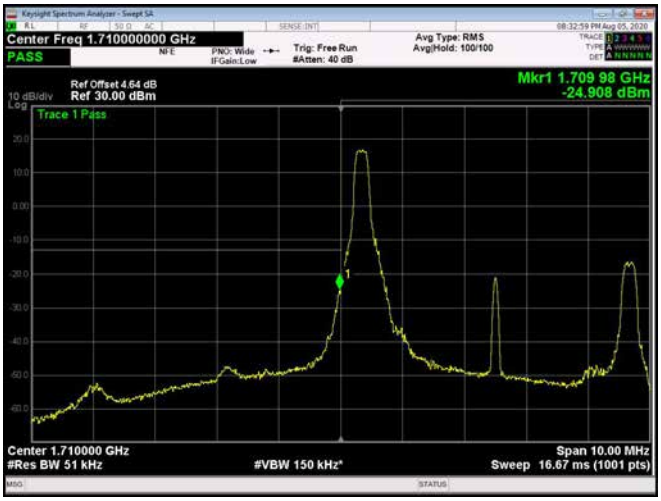
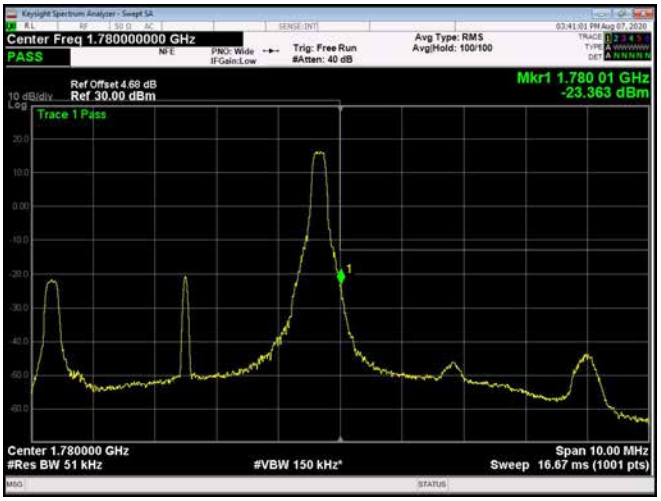
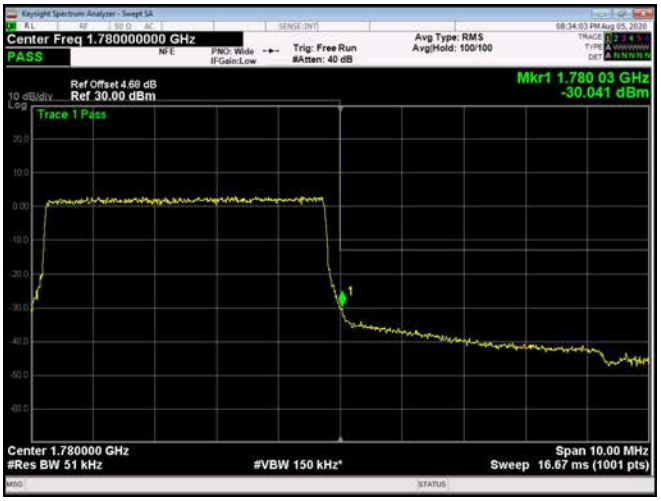
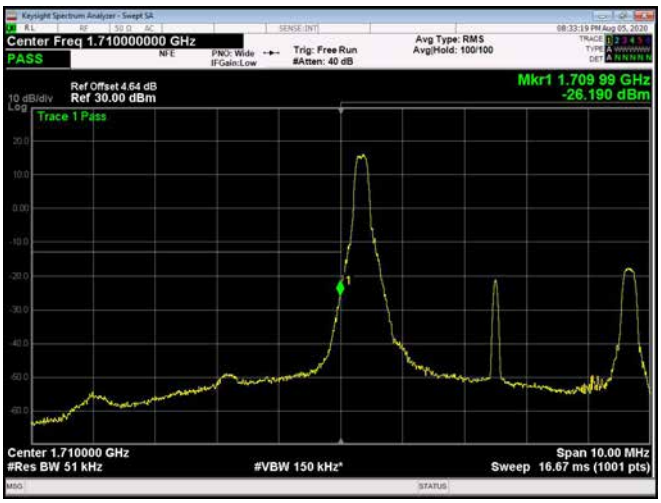
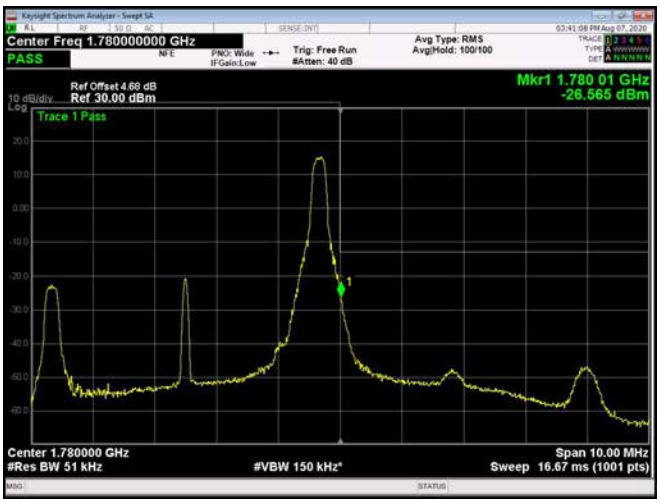
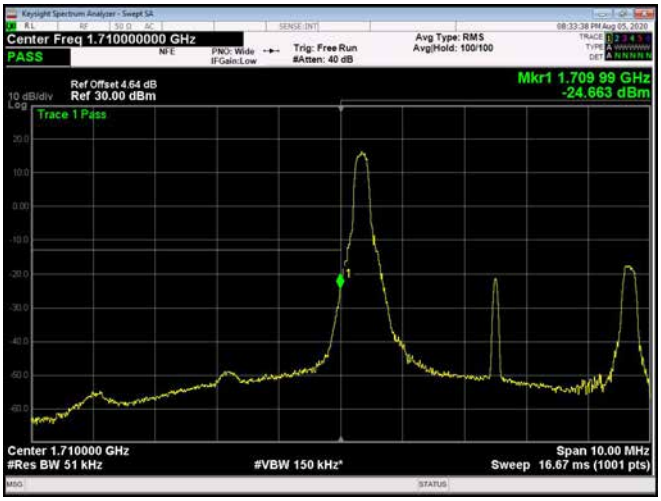
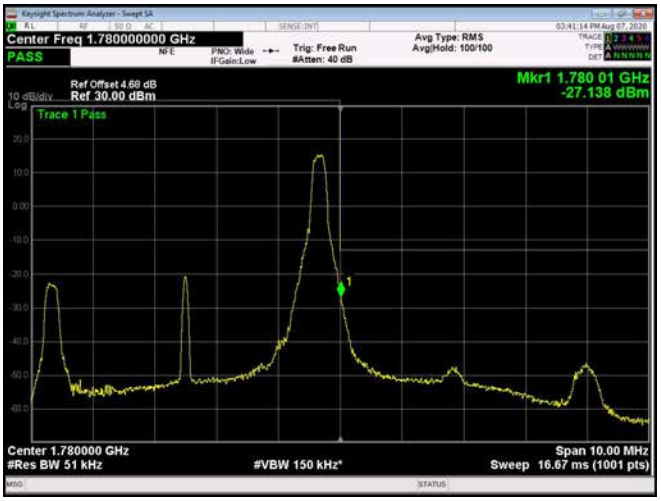
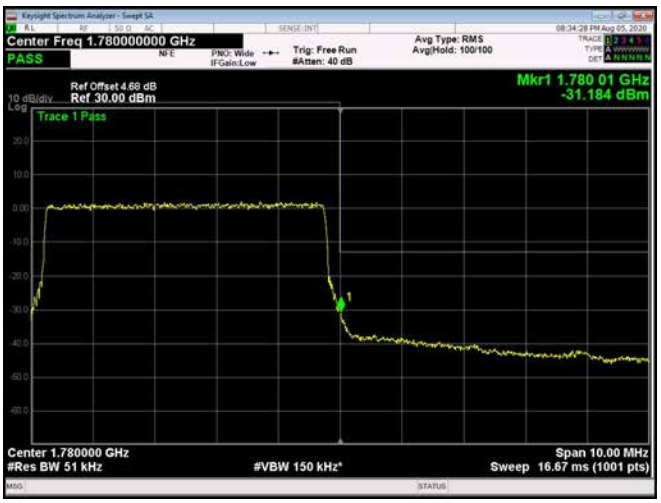
LTE Band 66	
1.4MHz / QPSK / Low Channel / 1RB	**1.4MHz / QPSK / High Channel / 1 RB**
	
1.4MHz / QPSK / Low Channel / Full RB	**1.4MHz / QPSK / High Channel / Full RB**
	
1.4MHz / 16QAM / Low Channel / 1RB	**1.4MHz / 16QAM / High Channel / 1 RB**
	

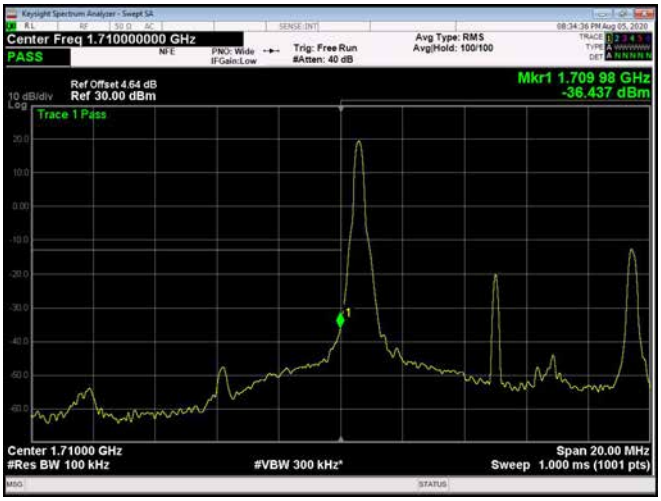
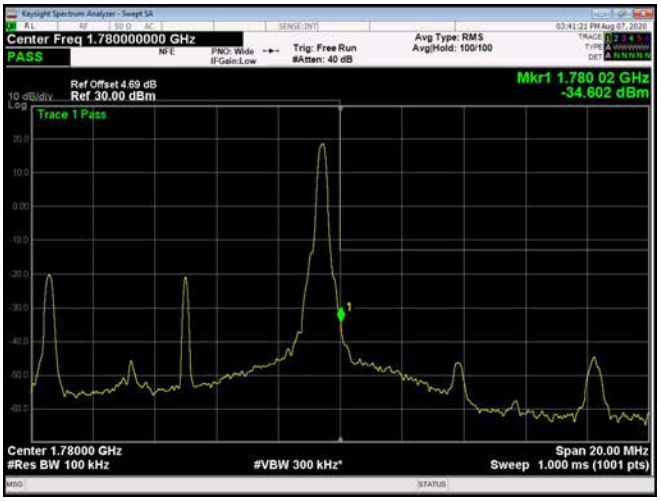
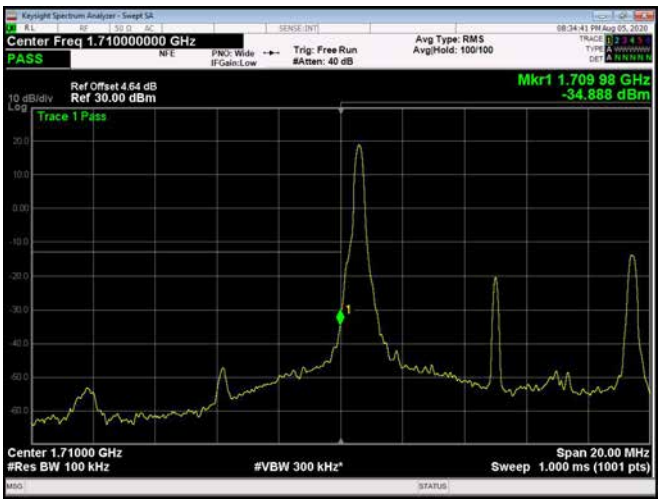
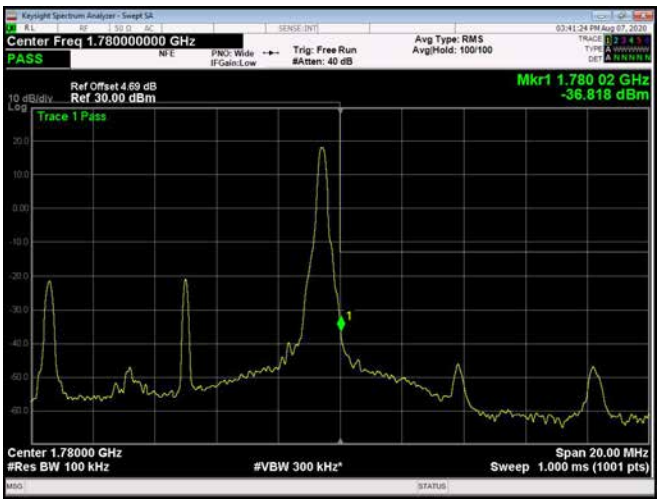
1.4MHz / 16QAM / Low Channel / Full RB	1.4MHz / 16QAM / High Channel / Full RB
	
1.4MHz / 64QAM / Low Channel / 1RB	**1.4MHz / 64QAM / High Channel / 1 RB**
	
1.4MHz / 64QAM / Low Channel / Full RB	**1.4MHz / 64QAM / High Channel / Full RB**
	

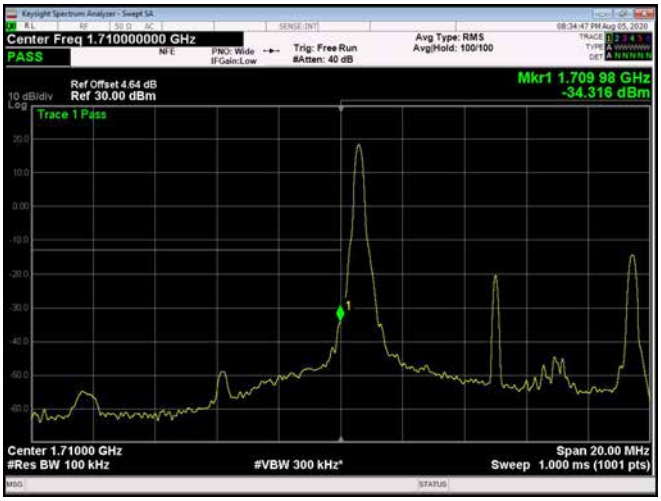
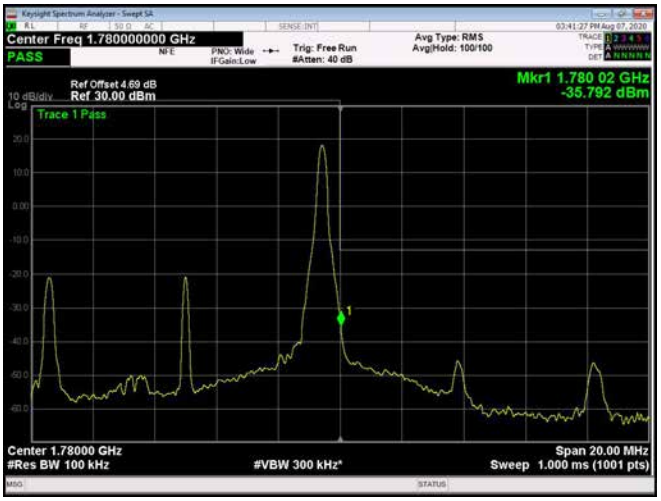
3MHz / QPSK / Low Channel / 1RB	3MHz / QPSK / High Channel / 1 RB
	
3MHz / QPSK / Low Channel / Full RB	**3MHz / QPSK / High Channel / Full RB**
	
3MHz / 16QAM / Low Channel / 1RB	**3MHz / 16QAM / High Channel / 1 RB**
	

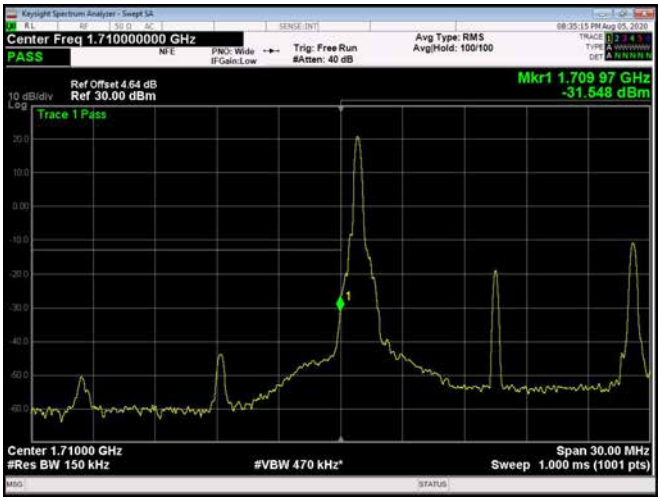
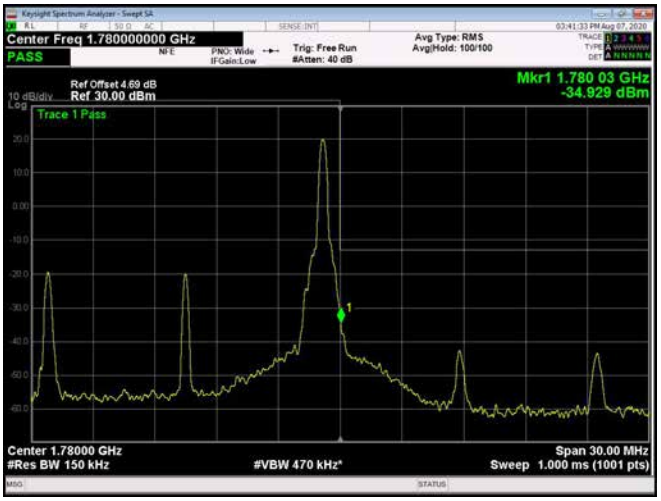
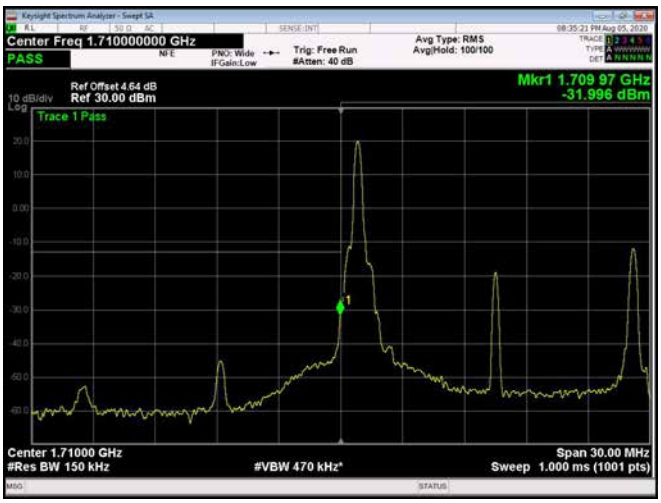
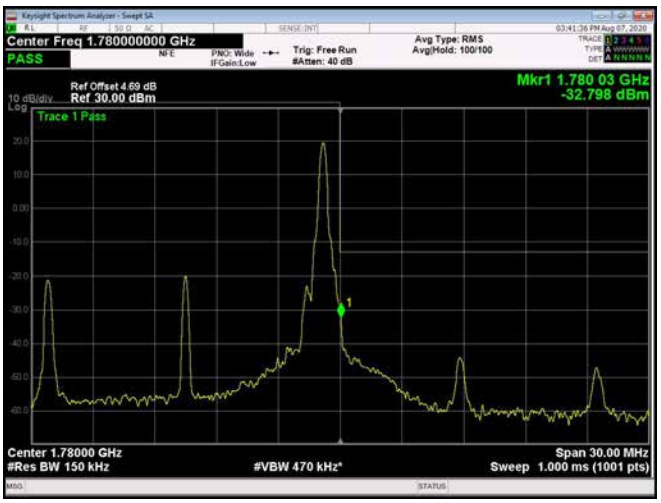
3MHz / 16QAM / Low Channel / Full RB	3MHz / 16QAM / High Channel / Full RB
	
3MHz / 64QAM / Low Channel / 1RB	**3MHz / 64QAM / High Channel / 1 RB**
	
3MHz / 64QAM / Low Channel / Full RB	**3MHz / 64QAM / High Channel / Full RB**
	

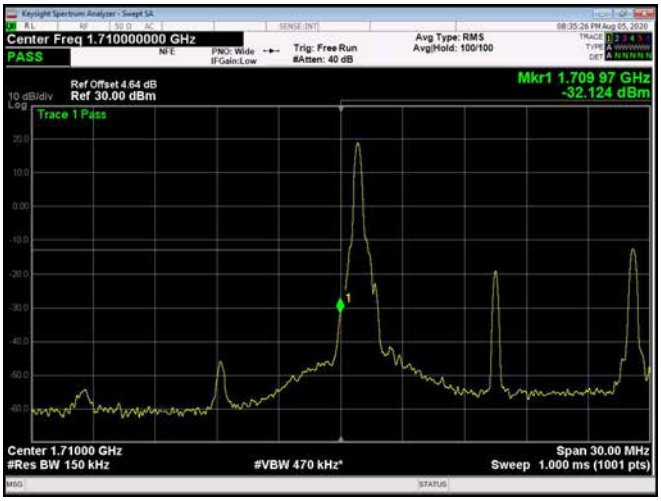
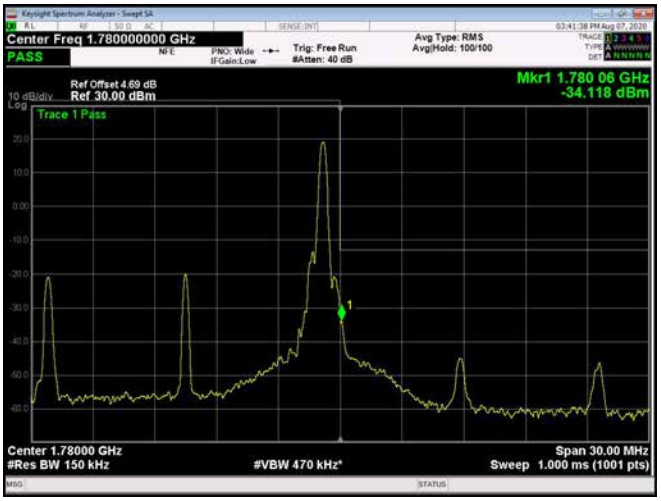
5MHz / QPSK / Low Channel / 1RB	5MHz / QPSK / High Channel / 1 RB
	
5MHz / QPSK / Low Channel / Full RB	**5MHz / QPSK / High Channel / Full RB**
	
5MHz / 16QAM / Low Channel / 1RB	**5MHz / 16QAM / High Channel / 1 RB**
	

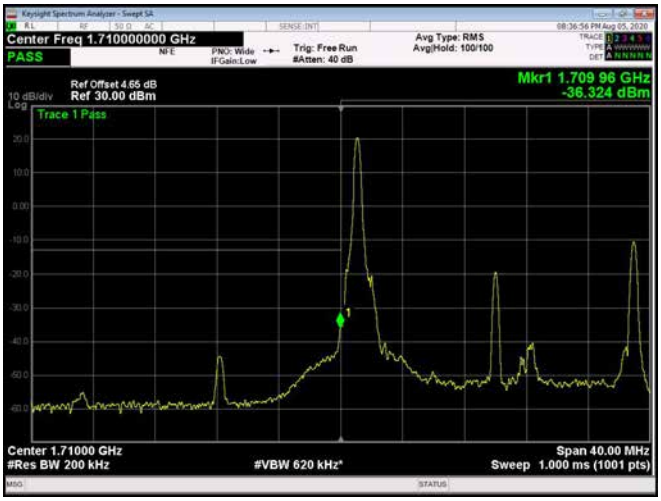
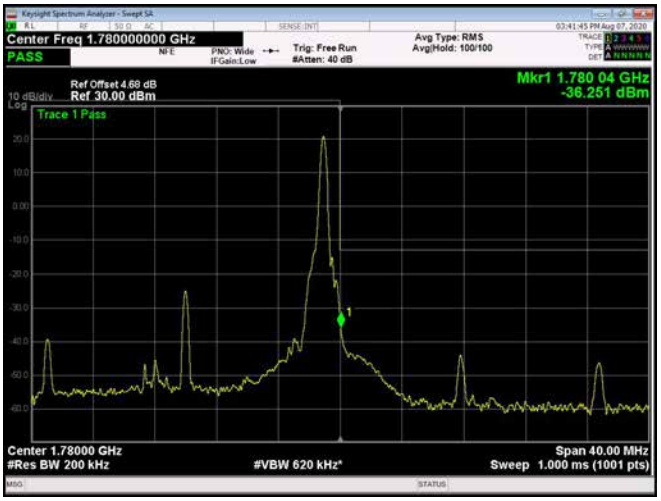
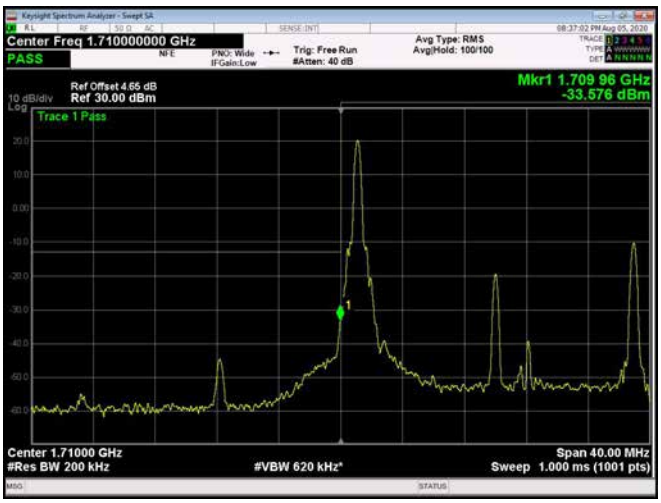
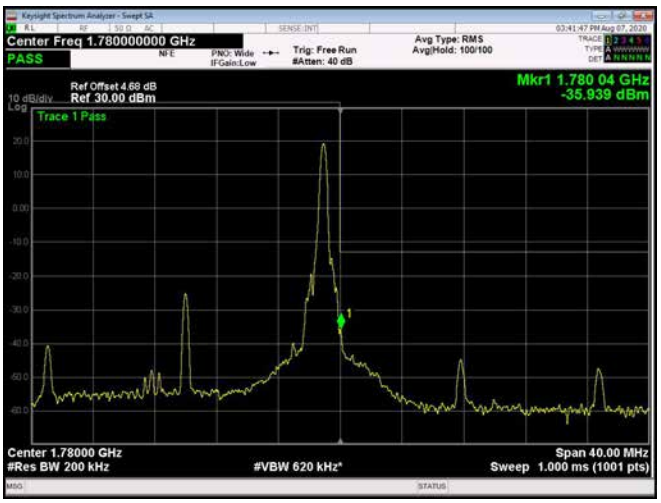
5MHz / 16QAM / Low Channel / Full RB	5MHz / 16QAM / High Channel / Full RB
	
5MHz / 64QAM / Low Channel / 1RB	**5MHz / 64QAM / High Channel / 1 RB**
	
5MHz / 64QAM / Low Channel / Full RB	**5MHz / 64QAM / High Channel / Full RB**
	

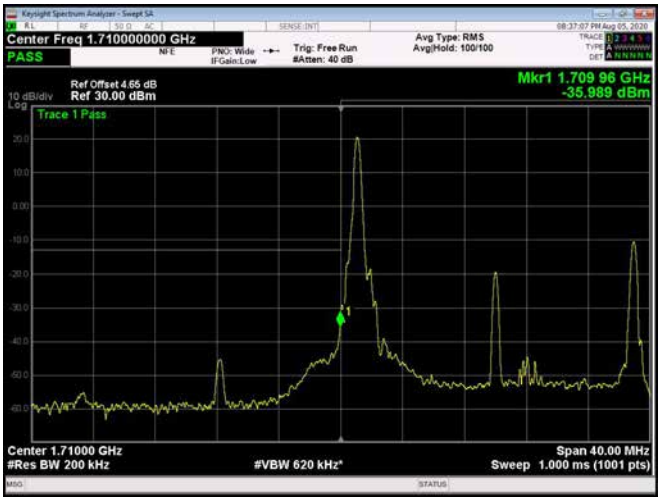
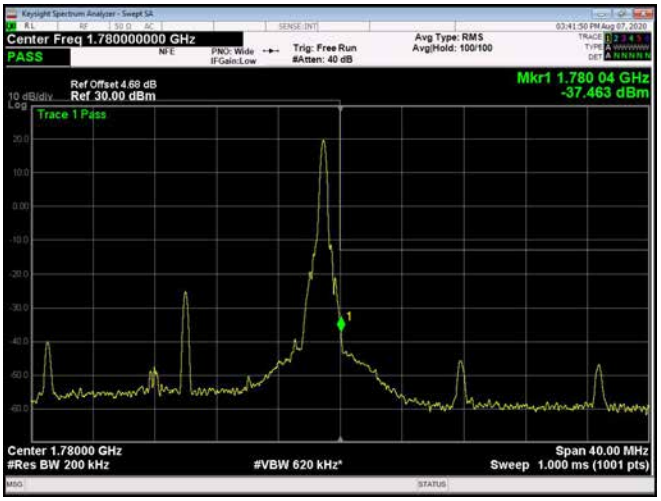
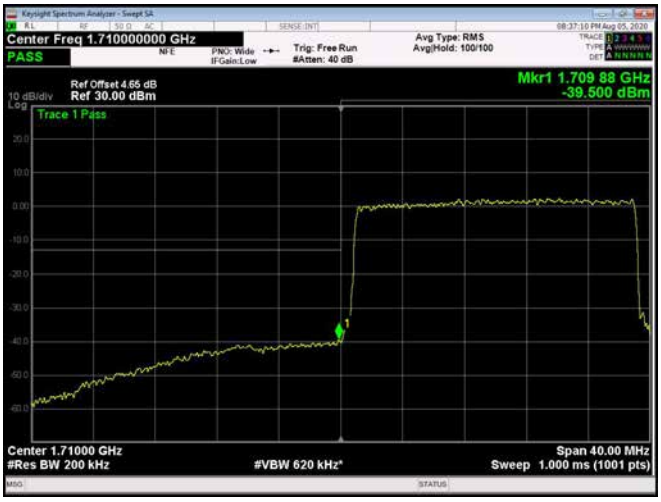
10MHz / QPSK / Low Channel / 1RB	10MHz / QPSK / High Channel / 1 RB
	
10MHz / QPSK / Low Channel / Full RB	**10MHz / QPSK / High Channel / Full RB**
	
10MHz / 16QAM / Low Channel / 1RB	**10MHz / 16QAM / High Channel / 1 RB**
	

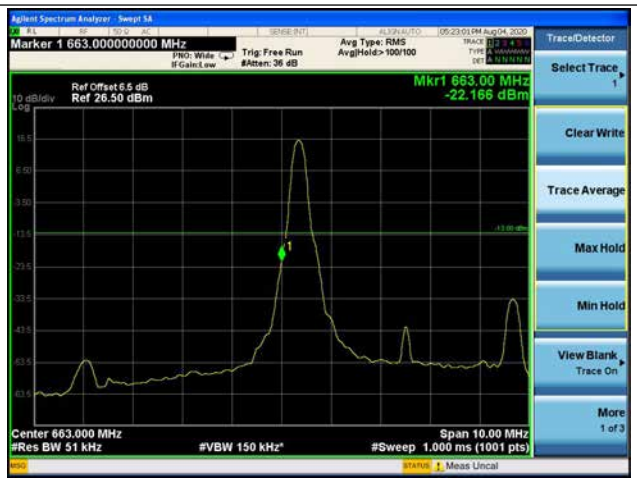
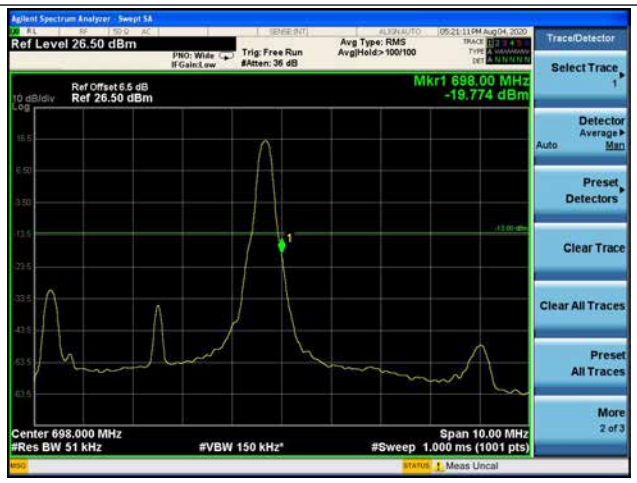
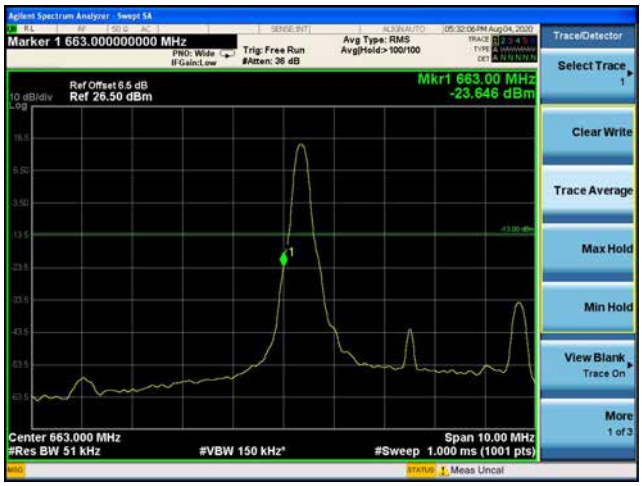
10MHz / 16QAM / Low Channel / Full RB	10MHz / 16QAM / High Channel / Full RB
	
10MHz / 64QAM / Low Channel / 1RB	**10MHz / 64QAM / High Channel / 1 RB**
	
10MHz / 64QAM / Low Channel / Full RB	**10MHz / 64QAM / High Channel / Full RB**
	

15MHz / QPSK / Low Channel / 1RB	15MHz / QPSK / High Channel / 1 RB
	
15MHz / QPSK / Low Channel / Full RB	**15MHz / QPSK / High Channel / Full RB**
	
15MHz / 16QAM / Low Channel / 1RB	**15MHz / 16QAM / High Channel / 1 RB**
	

15MHz / 16QAM / Low Channel / Full RB	15MHz / 16QAM / High Channel / Full RB
	
15MHz / 64QAM / Low Channel / 1RB	**15MHz / 64QAM / High Channel / 1 RB**
	
15MHz / 64QAM / Low Channel / Full RB	**15MHz / 64QAM / High Channel / Full RB**
	

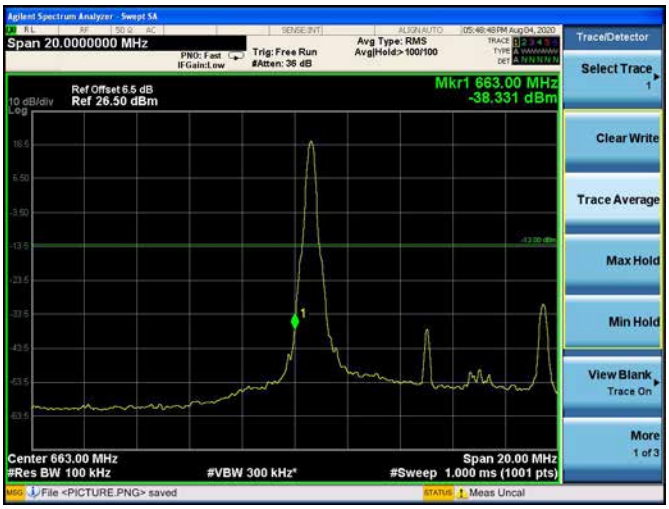
20MHz / QPSK / Low Channel / 1RB	20MHz / QPSK / High Channel / 1 RB
	
20MHz / QPSK / Low Channel / Full RB	**20MHz / QPSK / High Channel / Full RB**
	
20MHz / 16QAM / Low Channel / 1RB	**20MHz / 16QAM / High Channel / 1 RB**
	

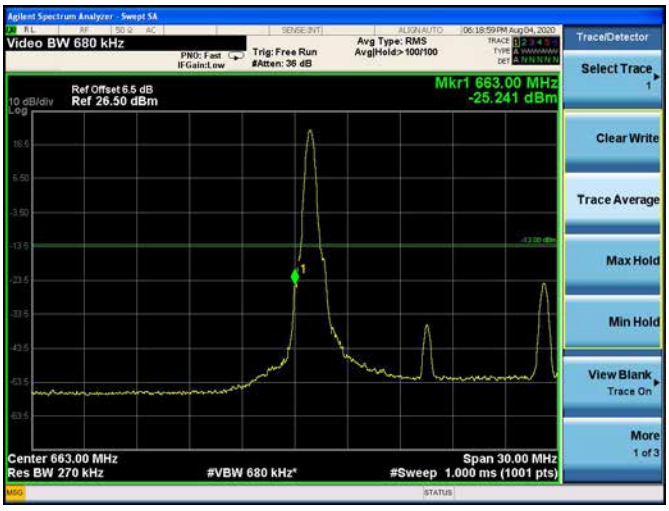
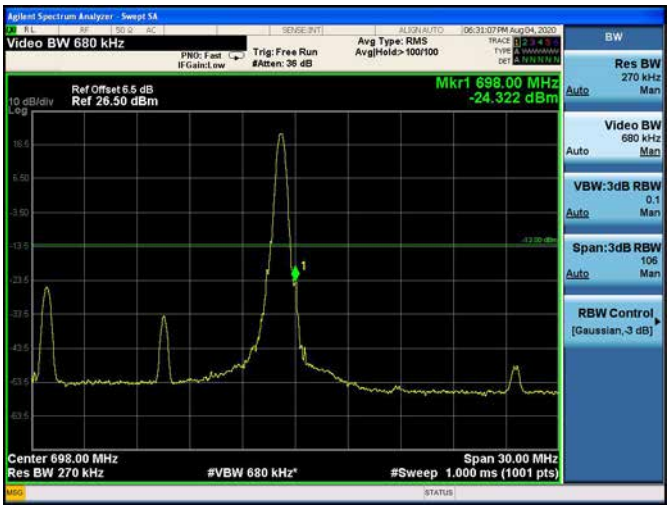
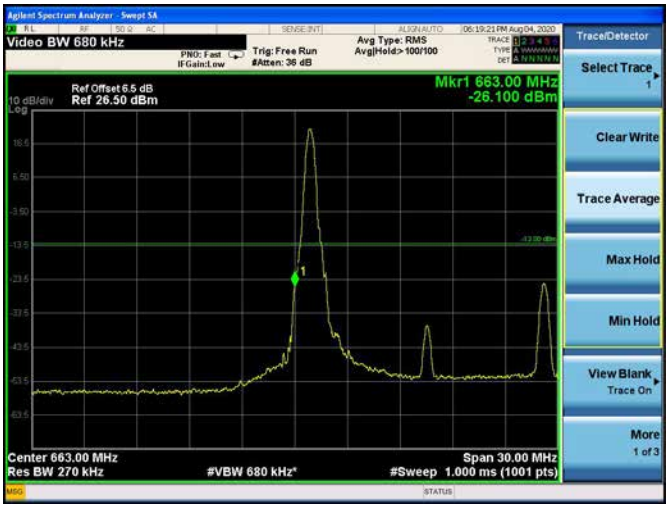
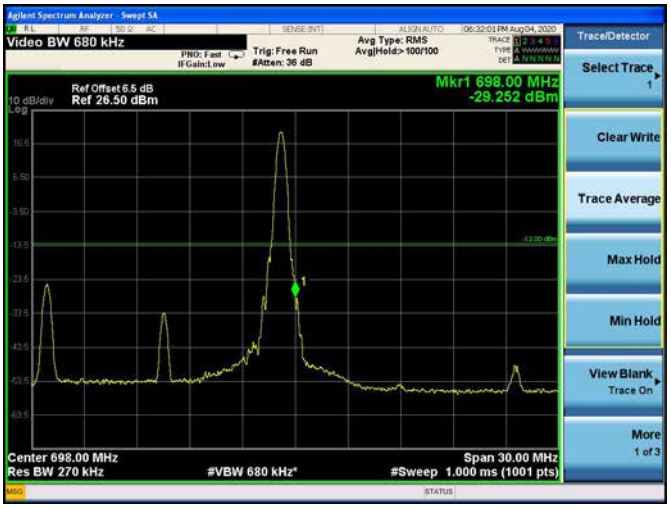
20MHz / 16QAM / Low Channel / Full RB	20MHz / 16QAM / High Channel / Full RB
	
20MHz / 64QAM / Low Channel / 1RB	**20MHz / 64QAM / High Channel / 1 RB**
	
20MHz / 64QAM / Low Channel / Full RB	**20MHz / 64QAM / High Channel / Full RB**
	

LTE Band 71	
5MHz / QPSK / Low Channel / 1RB	**5MHz / QPSK / High Channel / 1 RB**
	
5MHz / QPSK / Low Channel / Full RB	**5MHz / QPSK / High Channel / Full RB**
	
5MHz / 16QAM / Low Channel / 1RB	**5MHz / 16QAM / High Channel / 1 RB**
	

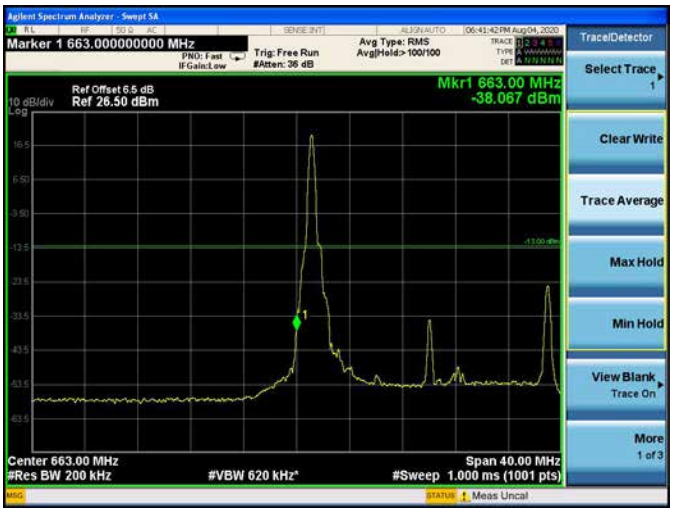
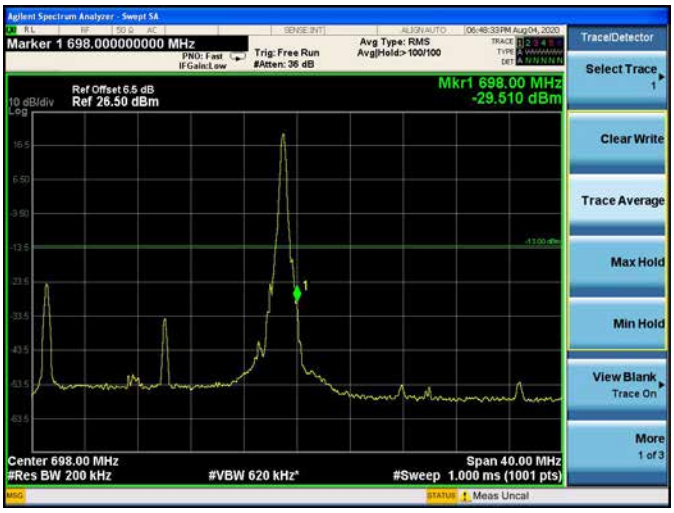
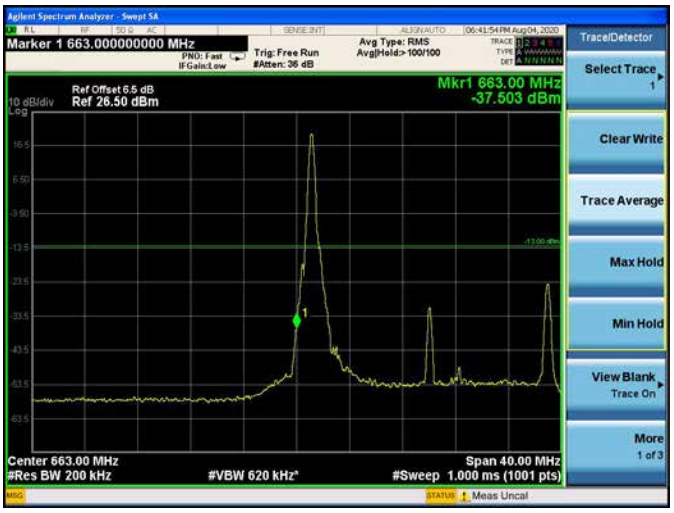
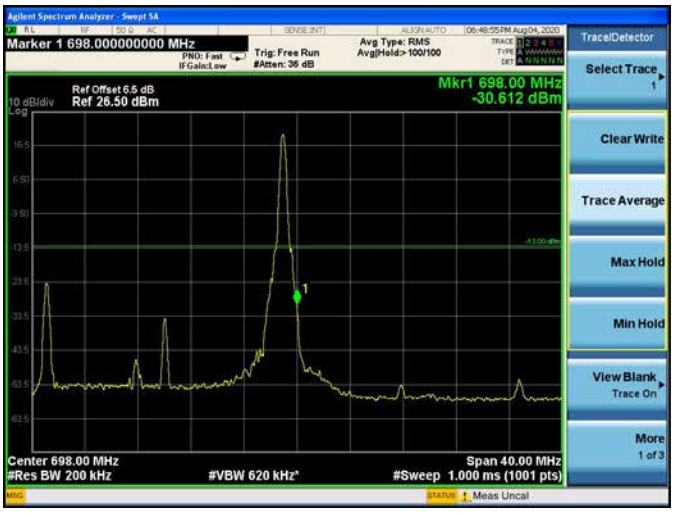
5MHz / 16QAM / Low Channel / Full RB	5MHz / 16QAM / High Channel / Full RB
	
5MHz / 64QAM / Low Channel / 1RB	**5MHz / 64QAM / High Channel / 1 RB**
	
5MHz / 64QAM / Low Channel / Full RB	**5MHz / 64QAM / High Channel / Full RB**
	

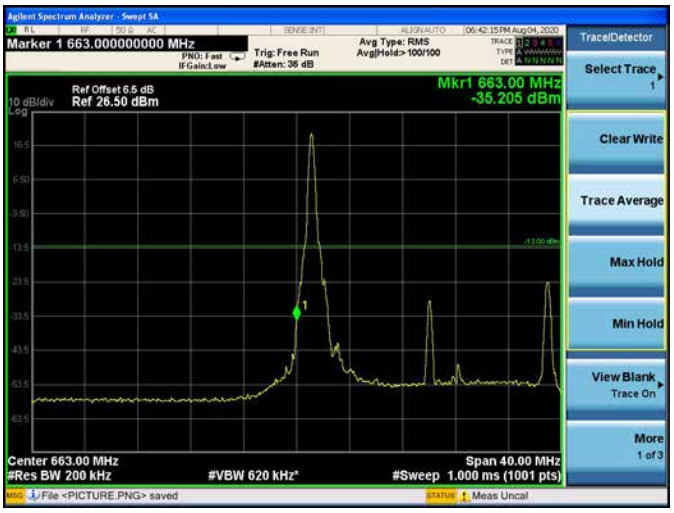
10MHz / QPSK / Low Channel / 1RB	10MHz / QPSK / High Channel / 1 RB
	
10MHz / QPSK / Low Channel / Full RB	**10MHz / QPSK / High Channel / Full RB**
	
10MHz / 16QAM / Low Channel / 1RB	**10MHz / 16QAM / High Channel / 1 RB**
	

10MHz / 16QAM / Low Channel / Full RB	10MHz / 16QAM / High Channel / Full RB
	
10MHz / 64QAM / Low Channel / 1RB	**10MHz / 64QAM / High Channel / 1 RB**
	
10MHz / 64QAM / Low Channel / Full RB	**10MHz / 64QAM / High Channel / Full RB**
	

15MHz / QPSK / Low Channel / 1RB	15MHz / QPSK / High Channel / 1 RB
	
15MHz / QPSK / Low Channel / Full RB	**15MHz / QPSK / High Channel / Full RB**
	
15MHz / 16QAM / Low Channel / 1RB	**15MHz / 16QAM / High Channel / 1 RB**
	

15MHz / 16QAM / Low Channel / Full RB	15MHz / 16QAM / High Channel / Full RB
	
15MHz / 64QAM / Low Channel / 1RB	**15MHz / 64QAM / High Channel / 1 RB**
	
15MHz / 64QAM / Low Channel / Full RB	**15MHz / 64QAM / High Channel / Full RB**
	

20MHz / QPSK / Low Channel / 1RB	20MHz / QPSK / High Channel / 1 RB
	
20MHz / QPSK / Low Channel / Full RB	**20MHz / QPSK / High Channel / Full RB**
	
20MHz / 16QAM / Low Channel / 1RB	**20MHz / 16QAM / High Channel / 1 RB**
	

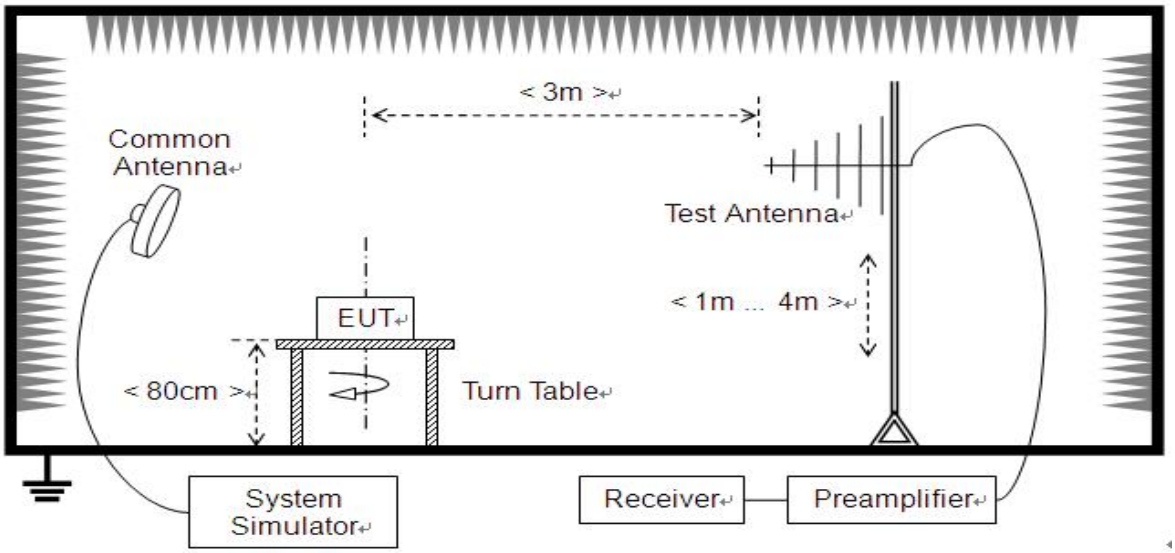
20MHz / 16QAM / Low Channel / Full RB	20MHz / 16QAM / High Channel / Full RB
	
20MHz / 64QAM / Low Channel / 1RB	**20MHz / 64QAM / High Channel / 1 RB**
	
20MHz / 64QAM / Low Channel / Full RB	**20MHz / 64QAM / High Channel / Full RB**
	

2.7. Transmitter Radiated Power (EIRP/ERP)

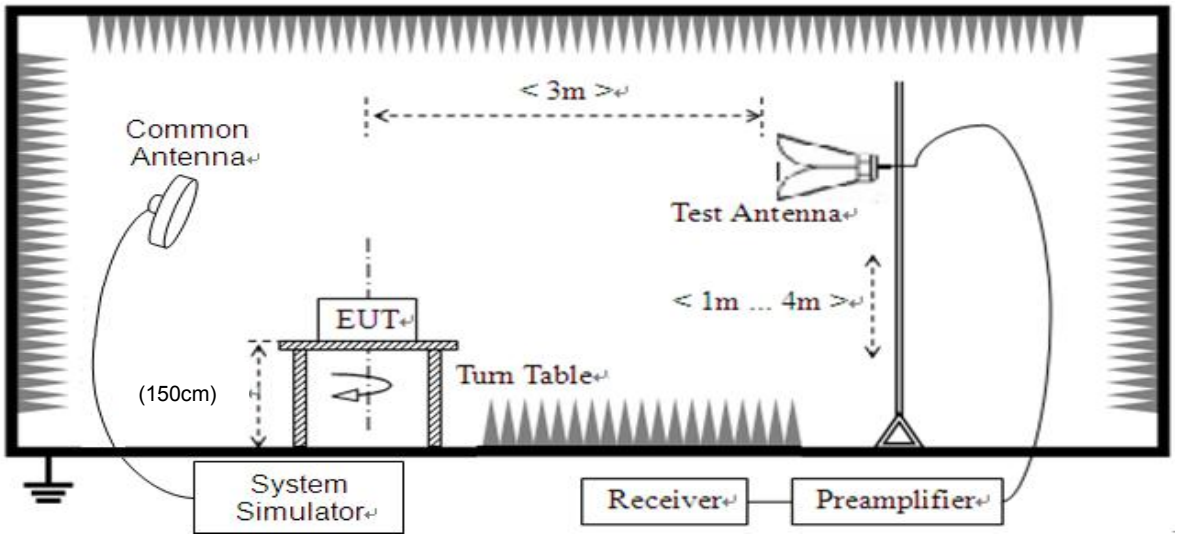
2.7.1. Requirement

1. According to FCC section22.913 (a.2) for LTE Band 5/26, the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.
2. According to FCC section 24.232 (c) for LTE Band 2/25, Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.
3. According to FCC section 27.50 (b) for LTE Band 13, Portable stations (hand-held devices) operating in the 775-788MHz band are limited to 3watts ERP.
4. According to FCC section 27.50 (c) for LTE Band 12/17, Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts ERP.
5. According to FCC section 27.50 (d) for LTE Band 4/66, fixed, mobile and portable (hand-held) stations in the 1710-1780MHz band are limited to 1wat EIRP.
6. According to FCC section 27.50 (h) for LTE Band 7/41, Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2 watts transmitter output power.

2.7.2. Test Description



(For the test frequency from 30MHz to1GHz)



(For the test frequency above 1GHz)

The testing follows FCC KDB 971168 v03r01 and ANSI/TIA-603-E (2016).

a) Connect the equipment as illustrated. Mount the equipment with the manufacturer specified antenna in a vertical orientation on a manufacturer specified mounting surface located on a 3m Full-Anechoic Chamber.

b) Key the transmitter, then rotate the EUT 360°azimuthally and record spectrum analyzer power level (LVL) measurements at angular increments that are sufficiently small to permit resolution of all peaks. If a standard radiation test site is used, raise and lower the test antenna to obtain a maximum reading at each angular increment. (Note: several batteries may be needed to offset the effect of battery voltage droop, which should not exceed 5% of the manufactured specified battery voltage during transmission).

c) Replace the transmitter under test with a vertically polarized half-wave dipole (or an antenna whose gain is known relative to an ideal half-wave dipole). The center of the antenna should be at the same location as the center of the antenna under test.

d) Connect the antenna to a signal generator with a known output power and record the path loss (in dB) as LOSS. If a standard radiation test site is used, raise and lower the test antenna to obtain a maximum reading. LOSS = Generator Output Power (dBm) – Analyzer reading (dBm)

e) Determine the effective radiated output power at each angular position from the readings in steps b) and d) using the following equation:

ERP (dBm) = LVL (dBm) + LOSS (dB)

f) The maximum ERP is the maximum value determined in the preceding step.

g) When calculating ERP, in addition to knowing the antenna radiation and matching characteristics, it is necessary to know the loss values of all elements (e.g. transmission line attenuation, mismatches, filters, combiners) interposed between the point where transmitter output power is measured, and the point where power is applied to the antenna. ERP can then be

calculated as follows:
EIRP (dBm) = Output Power (dBm) - Losses (dB) + Antenna Gain (dBi)
ERP (dBm) = EIRP (dBm) - 2.15 (dB).

2.7.3. Test Result

Note: Both horizontal and vertical polarizations of the test antenna are evaluated respectively, only the worst data (horizontal) were recorded in this report.

Band	Maximum ERP/EIRP		Limit		Result
	dBm	W	dBm	W	
LTE Band 2	23.28	0.21	33	2	PASS
LTE Band 4	22.96	0.20	30	1	PASS
LTE Band 5	21.20	0.13	38.45	7	PASS
LTE Band 12	20.10	0.10	34.77	3	PASS
LTE Band 13	20.10	0.10	34.77	3	PASS
LTE Band 25	23.48	0.22	33	2	PASS
LTE Band 26	20.35	0.11	38.45	7	PASS
LTE Band 41	23.45	0.22	33	2	PASS
LTE Band 66	22.79	0.19	30	1	PASS
LTE Band 71	19.08	0.08	34.77	3	PASS

LTE Band 2						
Bandwidth	Modulation	RB	RB	Low Channel	Middle Channel	High Channel
MHz		Size	Offset	dBm	dBm	dBm
1.4	QPSK	1	0	22.76	22.99	23.04
		1	3	22.89	22.93	23.35
		1	5	22.79	22.82	23.13
		3	0	22.82	22.93	22.87
		3	1	22.92	22.92	22.92
		3	3	22.92	22.88	22.90
		6	0	21.81	21.96	22.06
	16-QAM	1	0	22.22	22.04	22.19
		1	3	22.36	21.89	22.42
		1	5	22.29	21.62	22.31
		3	0	21.72	22.00	21.89
		3	1	21.88	21.81	21.82
		3	3	21.97	21.89	21.85
		6	0	20.87	20.95	21.19
	64-QAM	1	0	22.56	22.27	22.97
		1	3	22.49	22.34	22.84
		1	5	22.42	22.36	22.59
		3	0	22.17	22.61	22.72
		3	1	22.40	22.46	22.41
		3	3	22.23	22.56	22.50
		6	0	21.19	21.49	21.51
3	QPSK	1	0	22.74	23.03	23.20
		1	8	22.78	23.04	22.93
		1	14	22.81	22.84	22.98
		8	0	21.95	22.14	22.12
		8	4	22.04	22.05	22.02
		8	7	22.01	22.04	22.03
		15	0	21.89	22.02	22.14
	16-QAM	1	0	21.91	22.52	21.65
		1	8	21.83	22.68	21.46
		1	14	21.72	22.74	21.54
		8	0	21.04	21.20	21.13
		8	4	21.03	21.16	21.01
		8	7	21.04	21.05	20.92
		15	0	20.87	20.93	20.98

	64-QAM	1	0	22.14	22.67	22.88
		1	8	22.18	22.63	22.36
		1	14	22.18	22.73	22.49
		8	0	22.15	22.33	22.78
		8	4	22.77	22.41	22.35
		8	7	22.25	22.64	22.46
		15	0	21.27	21.44	21.58
5	QPSK	1	0	22.76	23.02	22.97
		1	12	22.73	22.96	22.95
		1	24	22.66	22.75	22.88
		12	0	21.92	22.11	22.05
		12	7	21.95	22.10	22.09
		12	13	21.89	22.12	21.95
		50	0	21.97	22.09	22.08
	16-QAM	1	0	21.82	22.26	21.81
		1	12	21.62	22.23	22.05
		1	24	21.47	22.45	21.81
		12	0	20.93	20.87	21.01
		12	7	20.93	20.97	20.80
		12	13	20.91	20.89	20.79
		50	0	21.06	20.95	20.89
	64-QAM	1	0	22.28	22.29	22.60
		1	12	22.30	22.32	22.50
		1	24	22.17	22.38	22.45
		12	0	21.25	21.47	21.64
		12	7	21.38	21.47	21.45
		12	13	21.29	21.57	21.34
		50	0	21.27	21.52	21.58
10	QPSK	1	0	22.78	23.04	22.97
		1	24	22.76	23.16	22.92
		1	49	22.77	22.77	22.91
		25	0	21.84	21.97	22.03
		25	12	22.00	21.90	22.00
		25	25	21.88	22.00	21.93
		50	0	21.80	21.98	22.03
	16-QAM	1	0	21.82	22.56	22.04
		1	24	22.37	23.06	21.82
		1	49	21.75	22.72	21.43

		25	0	21.00	21.09	21.17
		25	12	21.07	21.06	21.24
		25	25	20.96	21.24	21.12
		50	0	20.75	20.90	20.98
	64-QAM	1	0	21.03	22.45	22.85
		1	24	21.56	22.81	22.82
		1	49	21.21	22.49	22.37
		25	0	21.33	21.37	21.58
		25	12	21.35	21.43	21.48
		25	25	21.34	21.58	21.43
		50	0	21.32	21.48	21.55
15	QPSK	1	0	22.77	22.88	22.78
		1	37	22.63	22.95	22.76
		1	74	22.64	22.71	22.67
		36	0	21.75	22.10	22.12
		36	20	22.11	21.90	21.86
		36	39	21.85	22.08	21.96
		75	0	21.69	21.99	22.00
	16-QAM	1	0	21.99	22.72	21.85
		1	37	21.84	22.90	21.56
		1	74	21.64	22.37	21.26
		36	0	20.68	20.87	21.14
		36	20	21.15	20.87	20.71
		36	39	20.87	21.19	20.86
		75	0	20.73	20.87	20.99
	64-QAM	1	0	20.86	22.40	22.32
		1	37	21.37	22.48	22.50
		1	74	21.16	22.32	22.33
		36	0	21.01	21.40	21.53
		36	20	21.34	21.27	21.09
		36	39	21.24	21.59	21.48
		75	0	21.14	21.43	21.48
20	QPSK	1	0	22.71	23.10	22.99
		1	49	22.95	23.28	23.06
		1	99	22.66	22.86	22.63
		50	0	21.81	22.04	22.11
		50	24	22.11	21.88	21.91
		50	50	21.93	21.99	21.93

		100	0	21.77	22.01	22.04
	16-QAM	1	0	21.85	21.46	21.82
		1	49	22.24	21.60	22.44
		1	99	21.97	21.42	21.68
		50	0	20.83	21.01	20.93
		50	24	20.90	20.96	20.86
		50	50	20.94	21.06	20.77
		100	0	20.85	21.03	21.03
	64-QAM	1	0	21.06	22.32	22.40
		1	49	21.79	22.67	22.66
		1	99	21.49	22.35	22.29
		50	0	21.13	21.33	21.47
		50	24	21.43	21.37	21.31
		50	50	21.31	21.42	21.56
		100	0	21.22	21.39	21.52

LTE Band 4						
Bandwidth	Modulation	RB	RB	Low Channel	Middle Channel	High Channel
MHz		Size	Offset	dBm	dBm	dBm
1.4	QPSK	1	0	22.63	22.74	22.42
		1	3	22.70	22.79	22.39
		1	5	22.61	22.68	22.35
		3	0	22.42	22.61	22.39
		3	1	22.48	22.44	22.59
		3	3	22.42	22.57	22.39
		6	0	21.42	21.59	21.32
	16-QAM	1	0	21.55	22.11	21.12
		1	3	21.76	22.07	21.22
		1	5	21.47	22.24	21.15
		3	0	21.57	21.75	21.37
		3	1	21.49	21.70	21.46
		3	3	21.60	21.84	21.31
		6	0	20.26	20.77	20.19
	64-QAM	1	0	22.07	22.18	21.91
		1	3	22.06	22.24	21.94
		1	5	22.07	21.94	21.73
		3	0	21.93	22.06	21.79
		3	1	21.93	22.00	22.01
		3	3	21.95	22.03	21.80
		6	0	20.93	21.28	20.81
3	QPSK	1	0	22.34	22.96	22.41
		1	8	22.26	22.55	22.55
		1	14	22.41	22.51	22.64
		8	0	21.41	21.74	21.34
		8	4	21.53	21.42	21.43
		8	7	21.39	21.68	21.36
		15	0	21.36	21.69	21.39
	16-QAM	1	0	21.74	21.82	20.82
		1	8	21.75	21.94	20.86
		1	14	21.83	21.79	20.82
		8	0	20.44	20.55	20.26
		8	4	20.16	20.22	20.20
		8	7	20.50	20.50	20.15
		15	0	20.32	20.50	20.19

	64-QAM	1	0	21.93	22.17	21.74
		1	8	21.85	22.10	20.81
		1	14	21.81	21.99	21.74
		8	0	21.89	22.14	20.81
		8	4	22.00	21.74	21.32
		8	7	21.79	22.31	21.74
		15	0	20.77	21.21	20.81
5	QPSK	1	0	22.27	22.68	22.31
		1	12	22.26	22.37	22.36
		1	24	22.36	22.26	22.24
		12	0	21.34	21.76	21.38
		12	7	21.48	21.75	21.72
		12	13	21.45	21.65	21.39
		50	0	21.48	21.69	21.34
	16-QAM	1	0	21.09	21.88	21.19
		1	12	21.09	21.99	21.10
		1	24	21.01	22.01	21.35
		12	0	20.34	20.43	20.23
		12	7	20.52	20.42	20.51
		12	13	20.35	20.54	20.24
		50	0	20.41	20.79	20.29
	64-QAM	1	0	21.72	22.05	22.05
		1	12	21.70	21.97	22.00
		1	24	21.81	21.91	21.91
		12	0	20.96	21.05	20.93
		12	7	21.09	20.96	20.83
		12	13	20.81	21.10	20.79
		50	0	20.81	21.26	20.90
10	QPSK	1	0	22.31	22.78	22.39
		1	24	22.54	22.94	22.85
		1	49	22.42	22.55	22.34
		25	0	21.56	21.69	21.48
		25	12	21.65	21.59	21.62
		25	25	21.57	21.61	21.40
		50	0	21.51	21.71	21.33
	16-QAM	1	0	21.57	22.36	21.07
		1	24	22.24	22.76	21.19
		1	49	21.39	22.02	20.87

		25	0	20.73	20.73	20.49
		25	12	20.60	20.63	20.52
		25	25	20.55	20.71	20.43
		50	0	20.51	20.58	20.26
	64-QAM	1	0	21.84	22.12	21.85
		1	24	22.11	22.20	22.24
		1	49	21.82	21.90	21.80
		25	0	20.88	21.15	20.84
		25	12	21.00	20.80	21.05
		25	25	20.94	21.16	20.76
		50	0	20.84	21.11	20.83
15	QPSK	1	0	22.42	22.70	22.49
		1	37	22.58	22.66	22.47
		1	74	22.50	22.39	22.22
		36	0	21.40	21.72	21.47
		36	20	21.70	21.55	21.65
		36	39	21.52	21.57	21.49
		75	0	21.47	21.70	21.33
	16-QAM	1	0	21.53	22.26	21.37
		1	37	21.53	22.81	21.06
		1	74	21.58	21.92	20.11
		36	0	20.42	20.59	20.36
		36	20	20.66	20.62	20.47
		36	39	20.42	20.71	20.33
		75	0	20.58	20.67	20.36
	64-QAM	1	0	21.95	22.06	21.94
		1	37	21.96	22.17	21.79
		1	74	22.11	21.94	21.70
		36	0	20.95	21.08	20.87
		36	20	20.86	20.85	20.95
		36	39	20.99	21.13	20.79
		75	0	20.94	21.11	20.88
20	QPSK	1	0	22.70	22.74	22.76
		1	49	22.59	22.70	22.50
		1	99	22.39	22.40	22.68
		50	0	21.50	21.60	21.64
		50	24	21.60	21.36	21.34
		50	50	21.61	21.53	21.28

		100	0	21.67	21.55	21.48
	16-QAM	1	0	21.88	21.23	21.60
		1	49	22.02	21.26	21.91
		1	99	21.19	20.85	21.39
		50	0	20.51	20.49	20.48
		50	24	20.50	20.45	20.40
		50	50	20.52	20.52	20.33
		100	0	20.56	20.59	20.40
	64-QAM	1	0	21.66	22.20	22.01
		1	49	22.16	22.39	22.11
		1	99	21.91	22.14	21.66
		50	0	20.93	21.07	20.98
		50	24	20.91	20.94	20.97
		50	50	21.05	21.15	20.90
		100	0	21.02	21.15	20.96

LTE Band 5						
Bandwidth	Modulation	RB	RB	Low Channel	Middle Channel	High Channel
MHz		Size	Offset	dBm	dBm	dBm
1.4	QPSK	1	0	20.79	20.82	21.02
		1	3	20.92	20.84	21.20
		1	5	20.65	20.72	21.14
		3	0	20.83	20.76	20.74
		3	1	20.74	20.71	20.79
		3	3	20.76	20.70	20.70
		6	0	19.91	19.83	19.80
	16-QAM	1	0	20.29	19.64	19.91
		1	3	20.42	19.51	20.04
		1	5	20.28	19.36	19.95
		3	0	19.99	19.77	19.93
		3	1	19.84	19.91	20.00
		3	3	20.03	19.73	19.93
		6	0	18.91	18.90	18.70
	64-QAM	1	0	20.66	20.41	20.35
		1	3	20.79	20.48	20.48
		1	5	20.70	20.27	20.40
		3	0	20.53	20.49	20.29
		3	1	20.39	20.38	20.46
		3	3	20.43	20.38	20.38
		6	0	19.45	19.44	19.46
3	QPSK	1	0	20.79	20.65	20.40
		1	8	20.68	20.71	20.65
		1	14	20.58	20.56	20.64
		8	0	19.89	19.85	19.67
		8	4	19.70	19.84	19.71
		8	7	19.83	19.90	19.75
		15	0	19.81	19.81	19.76
	16-QAM	1	0	19.93	20.30	19.50
		1	8	19.72	20.35	19.63
		1	14	19.63	20.08	19.38
		8	0	18.67	18.59	18.81
		8	4	18.64	18.73	18.66
		8	7	18.80	18.74	18.90
		15	0	18.66	18.57	18.81

	64-QAM	1	0	20.38	20.39	20.19
		1	8	20.39	20.46	20.50
		1	14	20.32	20.32	20.50
		8	0	20.43	20.37	20.38
		8	4	20.49	20.32	20.39
		8	7	20.42	20.32	20.56
		15	0	19.55	19.41	19.37
5	QPSK	1	0	20.66	20.77	20.55
		1	12	20.58	20.78	20.62
		1	24	20.61	20.57	20.67
		12	0	19.88	19.80	19.75
		12	7	19.79	19.82	19.74
		12	13	19.74	19.81	19.89
		50	0	19.80	19.73	19.77
	16-QAM	1	0	19.87	19.95	19.64
		1	12	19.62	19.87	19.67
		1	24	19.37	19.80	19.77
		12	0	18.72	18.60	18.66
		12	7	18.63	18.76	18.60
		12	13	18.65	18.51	18.80
		50	0	18.67	18.55	18.65
	64-QAM	1	0	20.25	20.20	20.40
		1	12	20.37	20.27	20.44
		1	24	20.34	20.15	20.43
		12	0	19.52	19.45	19.23
		12	7	19.25	19.26	19.47
		12	13	19.54	19.39	19.43
		50	0	19.52	19.43	19.27
10	QPSK	1	0	20.85	20.96	20.67
		1	24	20.85	21.05	21.14
		1	49	20.67	20.59	20.77
		25	0	19.92	19.88	19.98
		25	12	19.97	19.79	19.90
		25	25	19.83	19.81	19.76
		50	0	19.91	19.89	19.79
	16-QAM	1	0	19.86	20.52	19.46
		1	24	20.45	20.92	19.45
		1	49	19.65	20.25	19.18

		25	0	19.01	19.02	18.87
		25	12	18.97	18.86	18.95
		25	25	18.93	18.85	18.80
		50	0	18.86	18.72	18.77
	64-QAM	1	0	20.31	20.44	20.40
		1	24	20.70	20.64	20.77
		1	49	20.29	20.33	20.24
		25	0	19.52	19.49	19.49
		25	12	19.43	19.31	19.43
		25	25	19.53	19.47	19.24
		50	0	19.53	19.44	19.41

LTE Band 12						
Bandwidth	Modulation	RB	RB	Low Channel	Middle Channel	High Channel
MHz		Size	Offset	dBm	dBm	dBm
1.4	QPSK	1	0	19.27	19.64	19.67
		1	3	19.36	19.90	19.79
		1	5	19.31	19.81	19.58
		3	0	19.49	19.56	19.38
		3	1	19.36	19.40	19.50
		3	3	19.45	19.53	19.36
		6	0	18.64	18.54	18.52
	16-QAM	1	0	18.91	18.26	18.62
		1	3	19.09	18.44	18.87
		1	5	18.97	18.20	18.67
		3	0	18.79	18.61	18.64
		3	1	18.70	18.73	18.81
		3	3	18.89	18.74	18.66
		6	0	17.85	17.83	17.68
	64-QAM	1	0	18.99	18.94	18.90
		1	3	19.03	18.88	19.02
		1	5	18.96	18.80	18.86
		3	0	18.91	19.04	18.89
		3	1	18.82	18.91	18.90
		3	3	18.81	18.98	18.75
		6	0	17.70	17.97	17.87
3	QPSK	1	0	19.22	19.64	19.52
		1	8	19.48	19.52	19.34
		1	14	19.23	19.40	19.40
		8	0	18.57	18.60	18.64
		8	4	18.67	18.65	18.58
		8	7	18.58	18.67	18.58
		15	0	18.53	18.62	18.64
	16-QAM	1	0	18.57	19.28	18.19
		1	8	18.55	19.25	18.29
		1	14	18.25	19.27	18.22
		8	0	17.48	17.79	17.65
		8	4	17.71	17.65	17.51
		8	7	17.77	17.66	17.69
		15	0	17.50	17.51	17.67

	64-QAM	1	0	18.77	18.97	18.74
		1	8	18.84	18.94	18.78
		1	14	18.72	18.76	18.68
		8	0	18.75	18.74	18.73
		8	4	18.81	18.80	18.81
		8	7	18.71	18.86	18.78
		15	0	17.87	18.09	17.90
5	QPSK	1	0	19.21	19.56	19.48
		1	12	19.30	19.34	19.68
		1	24	19.35	19.21	19.31
		12	0	18.72	18.61	18.51
		12	7	18.59	18.63	18.65
		12	13	18.58	18.68	18.52
		50	0	18.65	18.62	18.55
	16-QAM	1	0	18.48	18.73	18.64
		1	12	18.42	18.85	18.60
		1	24	18.26	18.62	18.47
		12	0	17.62	17.47	17.56
		12	7	17.40	17.40	17.53
		12	13	17.58	17.38	17.66
		50	0	17.67	17.62	17.69
	64-QAM	1	0	18.65	18.84	18.88
		1	12	18.79	18.94	18.89
		1	24	18.72	18.68	18.47
		12	0	17.90	17.99	17.80
		12	7	17.98	17.84	17.88
		12	13	17.86	17.97	17.86
		50	0	17.85	17.93	17.88
10	QPSK	1	0	19.33	19.55	19.38
		1	24	19.67	19.92	20.10
		1	49	19.33	19.39	19.29
		25	0	18.59	18.64	18.78
		25	12	18.66	18.77	18.63
		25	25	18.56	18.67	18.61
		50	0	18.66	18.66	18.66
	16-QAM	1	0	18.66	19.20	18.12
		1	24	19.34	19.69	18.40
		1	49	18.62	19.23	17.87

		25	0	17.78	17.77	17.78
		25	12	17.74	17.66	17.72
		25	25	17.74	17.69	17.64
		50	0	17.66	17.62	17.67
	64-QAM	1	0	18.52	18.70	18.86
		1	24	18.88	19.20	19.22
		1	49	18.74	18.67	18.61
		25	0	17.85	18.00	18.05
		25	12	17.92	17.99	17.94
		25	25	17.94	17.93	17.93
		50	0	17.83	17.92	18.01

LTE Band 13						
Bandwidth	Modulation	RB	RB	Measured ERP		
				Low Channel	Middle Channel	High Channel
MHz		Size	Offset	dBm	dBm	dBm
5	QPSK	1	0	19.98	19.60	19.66
		1	12	19.70	19.70	19.67
		1	24	19.77	19.50	19.66
		12	0	19.01	18.85	18.97
		12	7	18.98	18.91	18.98
		12	13	18.96	18.97	18.84
		50	0	19.01	18.90	18.98
	16-QAM	1	0	19.05	18.74	18.80
		1	12	19.17	18.79	18.80
		1	24	19.09	18.70	18.54
		12	0	17.85	17.91	17.87
		12	7	17.84	17.79	17.82
		12	13	17.85	17.92	17.74
		50	0	17.89	17.82	18.04
	64QAM	1	0	18.96	19.21	19.17
		1	12	19.12	19.34	19.16
		1	24	19.06	19.03	19.19
		12	0	18.27	18.29	18.47
		12	7	18.38	18.44	18.39
		12	13	18.31	18.35	18.36
		50	0	18.25	18.27	18.42
10	QPSK	1	0	/	19.92	/
		1	24	/	20.10	/
		1	49	/	19.64	/
		25	0	/	19.02	/
		25	12	/	18.96	/
		25	25	/	18.93	/
		50	0	/	18.97	/
	16-QAM	1	0	/	18.95	/
		1	24	/	19.38	/
		1	49	/	18.75	/
		25	0	/	18.12	/
		25	12	/	18.12	/
		25	25	/	18.12	/

		50	0	/	17.99	/
	64QAM	1	0	/	18.94	/
		1	24	/	19.46	/
		1	49	/	19.20	/
		25	0	/	18.28	/
		25	12	/	18.31	/
		25	25	/	18.33	/
		50	0	/	18.35	/

LTE Band 25						
Bandwidth	**Modulation**	**RB**	**RB**	**Low Channel**	**Middle Channel**	**High Channel**
MHz		**Size**	**Offset**	**dBm**	**dBm**	**dBm**
1.4	QPSK	1	0	23.03	23.20	22.74
		1	3	23.11	23.25	22.63
		1	5	23.00	23.15	22.52
		3	0	22.77	23.03	22.67
		3	1	22.49	22.54	23.08
		3	3	22.87	23.14	22.48
		6	0	21.71	21.92	21.41
	16-QAM	1	0	21.86	22.39	21.56
		1	3	22.00	22.57	21.26
		1	5	21.89	22.49	21.13
		3	0	21.75	22.24	21.46
		3	1	22.12	21.78	21.69
		3	3	21.89	22.22	21.31
		6	0	20.66	20.91	20.40
	64-QAM	1	0	21.93	21.66	22.23
		1	3	21.98	21.95	22.25
		1	5	21.93	21.82	22.23
		3	0	21.42	21.83	21.80
		3	1	21.44	21.80	21.52
		3	3	21.48	21.84	21.73
		6	0	20.54	20.90	20.76

3	QPSK	1	0	22.76	23.06	22.76
		1	8	22.73	22.83	22.70
		1	14	22.82	22.72	22.72
		8	0	21.66	21.97	21.85
		8	4	21.67	22.00	21.61
		8	7	21.78	22.03	21.57
		15	0	21.69	22.03	21.69
	16-QAM	1	0	21.68	22.69	21.79
		1	8	21.60	22.92	21.28
		1	14	21.49	22.80	21.12
		8	0	20.52	21.18	20.68
		8	4	20.97	20.73	20.90
		8	7	20.74	21.26	20.50
		15	0	20.61	21.16	20.62
	64-QAM	1	0	21.68	21.78	22.28
		1	8	21.55	22.02	22.08
		1	14	21.47	21.76	21.85
		8	0	21.57	21.78	22.12
		8	4	21.50	21.82	21.76
		8	7	21.38	21.85	21.93
		15	0	20.57	20.90	21.11
5	QPSK	1	0	22.62	23.17	22.58
		1	12	22.75	22.87	22.72
		1	24	22.59	22.68	22.78
		12	0	21.66	21.97	21.73
		12	7	21.62	21.69	21.90
		12	13	21.79	22.10	21.56
		50	0	21.59	22.01	21.73
	16-QAM	1	0	21.63	22.25	21.59
		1	12	21.61	22.09	21.61
		1	24	21.44	22.30	21.42
		12	0	20.50	20.67	20.79
		12	7	20.51	20.44	20.44
		12	13	20.65	20.82	20.42
		50	0	20.65	20.81	20.65
	64-QAM	1	0	21.36	21.69	21.82
		1	12	21.46	21.94	21.77
		1	24	21.71	21.64	21.79

		12	0	20.38	20.82	20.94
		12	7	20.59	20.40	20.43
		12	13	20.61	20.87	21.04
		50	0	20.42	20.89	20.89
10	QPSK	1	0	22.97	22.87	23.01
		1	24	22.74	23.32	22.96
		1	49	22.59	22.68	23.02
		25	0	21.77	21.85	21.80
		25	12	22.00	21.82	21.84
		25	25	21.74	22.02	21.64
		50	0	21.61	21.98	21.76
	16-QAM	1	0	21.85	21.95	21.83
		1	24	22.21	23.08	21.49
		1	49	21.73	22.17	21.04
		25	0	20.67	20.90	20.85
		25	12	20.79	20.98	20.77
		25	25	20.81	21.07	20.67
		50	0	20.54	20.82	20.88
	64-QAM	1	0	21.52	21.54	21.99
		1	24	21.79	22.06	21.94
		1	49	21.38	21.83	22.42
		25	0	20.43	20.80	20.79
		25	12	20.49	20.67	20.46
		25	25	20.53	20.98	20.84
		50	0	20.35	20.91	20.98
15	QPSK	1	0	22.75	22.74	22.82
		1	37	22.67	23.17	22.85
		1	74	22.61	22.59	22.53
		36	0	21.63	21.90	21.95
		36	20	21.79	21.73	21.83
		36	39	21.61	21.74	21.66
		75	0	21.56	21.78	21.80
	16-QAM	1	0	21.86	22.30	21.59
		1	37	22.43	23.13	21.49
		1	74	21.64	22.21	20.66
		36	0	20.59	20.82	20.70
		36	20	20.63	20.72	20.64
		36	39	20.66	20.78	20.61

		75	0	20.62	20.81	20.82
	64-QAM	1	0	21.46	21.51	21.95
		1	37	21.57	21.98	21.85
		1	74	21.51	21.64	21.95
		36	0	20.44	20.87	20.99
		36	20	20.58	20.78	20.47
		36	39	20.42	20.94	20.82
		75	0	20.44	20.88	21.01
20	QPSK	1	0	22.76	22.88	23.18
		1	49	22.97	23.48	22.64
		1	99	22.43	23.16	22.49
		50	0	21.62	21.82	21.76
		50	24	21.84	21.66	21.67
		50	50	21.86	21.86	21.54
		100	0	21.70	21.66	21.80
	16-QAM	1	0	21.76	21.66	21.93
		1	49	22.45	21.72	21.62
		1	99	21.34	20.83	21.12
		50	0	20.75	20.89	20.92
		50	24	20.79	20.68	20.87
		50	50	20.93	20.86	20.51
		100	0	20.61	20.78	20.82
	64-QAM	1	0	21.34	21.76	22.20
		1	49	21.88	22.28	21.58
		1	99	21.38	21.92	22.10
		50	0	20.55	20.76	20.95
		50	24	20.66	20.57	20.94
		50	50	20.56	20.93	20.78
		100	0	20.53	20.92	20.80

LTE Band 26						
Bandwidth	Modulation	RB	RB	Low Channel	Middle Channel	High Channel
MHz		Size	Offset	dBm	dBm	dBm
1.4	QPSK	1	0	20.37	20.22	19.94
		1	3	20.43	20.33	20.06
		1	5	20.32	20.29	19.97
		3	0	20.41	20.13	20.07
		3	1	20.30	20.20	20.25
		3	3	20.28	20.15	20.14
		6	0	19.33	19.10	19.25
	16-QAM	1	0	19.45	19.39	19.72
		1	3	19.11	19.63	19.95
		1	5	18.96	19.50	19.89
		3	0	19.35	19.32	19.22
		3	1	19.32	19.28	19.25
		3	3	19.33	19.37	19.22
		6	0	18.18	17.99	18.36
	64-QAM	1	0	19.84	19.54	19.68
		1	3	19.93	19.57	19.79
		1	5	19.82	19.43	19.71
		3	0	19.65	19.52	19.59
		3	1	19.61	19.53	19.54
		3	3	19.65	19.54	19.56
		6	0	18.75	18.75	18.66
3	QPSK	1	0	20.12	20.08	20.05
		1	8	20.29	20.18	19.97
		1	14	20.20	20.10	20.08
		8	0	19.39	19.34	19.34
		8	4	19.32	19.29	19.26
		8	7	19.35	19.31	19.21
		15	0	19.36	19.27	19.30
	16-QAM	1	0	19.40	19.67	19.05
		1	8	19.30	19.78	18.72
		1	14	19.24	19.88	18.70
		8	0	18.45	18.45	18.18
		8	4	18.34	18.23	18.28
		8	7	18.41	18.43	18.16
		15	0	18.30	18.22	18.29

	64-QAM	1	0	19.54	19.68	19.64
		1	8	19.65	19.78	19.49
		1	14	19.47	19.73	19.47
		8	0	19.53	19.66	19.75
		8	4	19.75	19.47	19.50
		8	7	19.71	19.59	19.42
		15	0	18.78	18.71	18.68
5	QPSK	1	0	20.19	20.02	20.13
		1	12	20.34	20.20	20.08
		1	24	20.31	20.00	19.94
		12	0	19.43	19.22	19.35
		12	7	19.43	19.40	19.35
		12	13	19.38	19.30	19.14
		50	0	19.39	19.19	19.31
	16-QAM	1	0	19.22	19.31	19.05
		1	12	19.27	19.41	19.04
		1	24	18.94	19.34	19.01
		12	0	18.34	18.03	18.35
		12	7	18.05	18.24	18.24
		12	13	18.19	18.12	18.01
		50	0	18.45	18.12	18.28
	64-QAM	1	0	19.44	19.46	19.51
		1	12	19.54	19.48	19.43
		1	24	19.52	19.34	19.36
		12	0	18.73	18.70	18.74
		12	7	18.71	18.76	18.69
		12	13	18.79	18.73	18.59
		50	0	18.80	18.75	18.69
10	QPSK	1	0	20.23	20.28	20.05
		1	24	20.44	20.33	20.34
		1	49	20.12	20.17	20.23
		25	0	19.41	19.33	19.45
		25	12	19.24	19.33	19.27
		25	25	19.36	19.35	19.22
		50	0	19.47	19.24	19.36
	16-QAM	1	0	19.41	19.87	19.13
		1	24	20.04	20.31	19.78
		1	49	19.23	19.83	18.84

		25	0	18.49	18.38	18.38
		25	12	18.15	18.49	18.12
		25	25	18.46	18.40	18.11
		50	0	18.29	18.26	18.32
	64-QAM	1	0	19.50	19.49	19.43
		1	24	19.78	19.86	19.85
		1	49	19.51	19.51	19.55
		25	0	18.76	18.68	18.81
		25	12	18.84	18.79	18.70
		25	25	18.84	18.68	18.62
		50	0	18.78	18.69	18.72
15	QPSK	1	0	20.23	20.20	20.14
		1	37	20.23	20.27	20.30
		1	74	20.07	19.99	20.04
		36	0	19.44	19.32	19.36
		36	20	19.32	19.28	19.07
		36	39	19.32	19.41	19.06
		75	0	19.23	19.35	19.21
	16-QAM	1	0	19.50	19.67	19.04
		1	37	20.10	20.33	18.82
		1	74	19.20	19.71	18.21
		36	0	18.41	18.27	18.25
		36	20	18.15	18.36	18.12
		36	39	18.30	18.25	18.03
		75	0	18.29	18.32	18.17
	64-QAM	1	0	19.51	19.30	19.35
		1	37	19.74	19.79	19.59
		1	74	19.42	19.39	19.40
		36	0	18.62	18.71	18.73
		36	20	18.67	18.65	18.69
		36	39	18.69	18.79	18.66
		75	0	18.61	18.76	18.68

LTE Band 41						
Bandwidth	Modulation	RB	RB	Low Channel	Middle Channel	High Channel
MHz		Size	Offset	dBm	dBm	dBm
5	QPSK	1	0	23.00	23.28	22.99
		1	12	23.18	23.28	23.02
		1	24	23.18	23.03	22.99
		12	0	22.22	22.41	22.44
		12	7	22.21	22.33	22.37
		12	13	22.38	22.20	22.29
		50	0	22.30	22.35	22.06
	16-QAM	1	0	22.47	22.62	22.03
		1	12	22.57	22.66	21.98
		1	24	22.58	22.29	21.80
		12	0	21.07	21.17	21.29
		12	7	20.96	21.07	21.14
		12	13	21.15	21.06	20.85
		50	0	21.13	21.31	21.02
	64-QAM	1	0	22.17	22.66	22.85
		1	12	22.12	22.67	22.96
		1	24	22.02	22.49	22.88
		12	0	21.99	22.66	22.73
		12	7	21.89	22.57	22.69
		12	13	22.05	22.55	23.04
		50	0	21.25	21.86	21.87
10	QPSK	1	0	23.24	23.45	23.15
		1	24	23.36	23.40	23.01
		1	49	23.18	23.29	22.91
		25	0	22.38	22.47	22.10
		25	12	22.27	22.40	22.00
		25	25	22.33	22.33	22.20
		50	0	22.46	22.35	22.07
	16-QAM	1	0	22.13	22.88	22.28
		1	24	22.65	23.19	22.53
		1	49	22.40	22.85	22.25
		25	0	21.19	21.50	21.32
		25	12	21.04	21.47	21.26
		25	25	21.29	21.36	21.23
		50	0	21.22	21.24	21.09

	64-QAM	1	0	22.18	22.85	23.07
		1	24	22.36	23.02	22.97
		1	49	22.43	22.69	22.99
		25	0	21.25	21.88	21.94
		25	12	21.14	21.78	21.87
		25	25	21.43	21.83	22.19
		50	0	21.32	21.93	22.00
15	QPSK	1	0	23.06	23.07	23.16
		1	37	23.28	23.36	23.21
		1	74	23.13	23.22	22.84
		36	0	22.19	22.42	22.15
		36	20	22.06	22.37	22.05
		36	39	22.27	22.23	22.09
		75	0	22.11	22.33	22.04
	16-QAM	1	0	22.16	22.58	22.05
		1	37	22.12	22.43	21.84
		1	74	22.11	23.00	21.84
		36	0	21.11	21.43	20.98
		36	20	21.04	21.40	20.82
		36	39	21.21	21.36	21.12
		75	0	21.15	21.35	21.17
	64-QAM	1	0	21.96	22.90	22.91
		1	37	22.29	22.89	22.80
		1	74	22.23	22.52	23.02
		36	0	21.08	21.95	21.89
		36	20	20.97	21.84	21.89
		36	39	21.24	21.82	21.93
		75	0	21.20	21.89	21.90
20	QPSK	1	0	22.76	23.39	22.99
		1	49	23.14	23.40	23.34
		1	99	22.92	23.39	23.18
		50	0	22.18	22.45	22.48
		50	24	22.13	22.24	22.38
		50	50	22.28	22.34	22.03
		100	0	22.11	22.39	22.00
	16-QAM	1	0	22.45	22.14	21.97
		1	49	22.68	22.15	22.12
		1	99	22.21	22.07	21.82

		50	0	21.46	21.43	21.06
		50	24	21.37	21.24	21.34
		50	50	21.32	21.23	21.00
		100	0	21.32	21.32	21.06
	64-QAM	1	0	21.83	22.82	23.33
		1	49	22.49	23.26	23.15
		1	99	21.97	22.61	23.06
		50	0	21.13	21.91	21.93
		50	24	21.04	21.81	21.90
		50	50	21.32	21.83	21.99
		100	0	21.17	21.85	21.96

LTE Band 66						
Bandwidth	Modulation	RB	RB	Low Channel	Middle Channel	High Channel
MHz		Size	Offset	dBm	dBm	dBm
1.4	QPSK	1	0	22.72	22.33	22.22
		1	3	22.79	22.30	22.20
		1	5	22.68	22.26	22.16
		3	0	22.40	22.32	22.24
		3	1	22.26	22.35	22.38
		3	3	22.40	22.46	22.26
		6	0	21.46	21.47	21.25
	16-QAM	1	0	21.32	22.10	21.14
		1	3	21.54	22.15	21.13
		1	5	21.46	22.03	20.84
		3	0	21.56	21.74	21.42
		3	1	21.24	21.66	21.55
		3	3	21.59	21.71	21.16
		6	0	20.31	20.63	20.00
	64-QAM	1	0	21.79	21.52	21.66
		1	3	21.88	21.64	21.75
		1	5	21.87	21.51	21.71
		3	0	21.64	21.62	21.68
		3	1	21.67	21.66	21.63
		3	3	21.62	21.62	21.58
		6	0	20.71	20.74	20.65
3	QPSK	1	0	22.27	22.50	22.09
		1	8	22.37	22.45	22.35
		1	14	22.32	22.39	22.18
		8	0	21.39	21.56	21.20
		8	4	21.39	21.44	21.35
		8	7	21.44	21.47	21.35
		15	0	21.41	21.49	21.26
	16-QAM	1	0	21.53	21.88	21.06
		1	8	21.34	21.85	21.07
		1	14	21.31	21.86	21.14
		8	0	20.21	20.78	20.32
		8	4	20.32	20.66	20.49
		8	7	20.52	20.62	20.35
		15	0	20.38	20.31	20.26

	64-QAM	1	0	21.54	21.61	21.69
		1	8	21.56	21.62	21.41
		1	14	21.46	21.56	21.51
		8	0	21.53	21.51	21.70
		8	4	21.54	21.63	21.44
		8	7	21.48	21.43	21.43
		15	0	20.70	20.63	20.70
5	QPSK	1	0	22.31	22.53	22.19
		1	12	22.27	22.47	22.32
		1	24	22.28	22.29	22.32
		12	0	21.40	21.56	21.15
		12	7	21.17	21.53	21.41
		12	13	21.51	21.41	21.25
		50	0	21.44	21.47	21.24
	16-QAM	1	0	20.97	21.59	21.19
		1	12	21.03	21.60	21.15
		1	24	21.03	21.52	21.20
		12	0	20.41	20.37	20.29
		12	7	20.40	20.43	20.30
		12	13	20.51	20.21	20.40
		50	0	20.35	20.41	20.24
	64-QAM	1	0	21.48	21.36	21.49
		1	12	21.53	21.54	21.40
		1	24	21.52	21.38	21.35
		12	0	20.66	20.69	20.71
		12	7	20.72	20.71	20.55
		12	13	20.73	20.67	20.54
		50	0	20.73	20.69	20.63
10	QPSK	1	0	22.40	22.63	22.35
		1	24	22.54	22.64	22.71
		1	49	22.40	22.40	22.28
		25	0	21.38	21.59	21.30
		25	12	21.51	21.32	21.43
		25	25	21.53	21.38	21.31
		50	0	21.44	21.54	21.25
	16-QAM	1	0	21.55	22.11	20.93
		1	24	22.13	22.65	21.54
		1	49	21.60	22.12	21.10

		25	0	20.44	20.73	20.37
		25	12	20.44	20.42	20.54
		25	25	20.70	20.42	20.50
		50	0	20.53	20.53	20.33
	64-QAM	1	0	21.49	21.56	21.41
		1	24	21.73	21.94	21.89
		1	49	21.47	21.44	21.58
		25	0	20.70	20.67	20.70
		25	12	20.79	20.77	20.64
		25	25	20.81	20.65	20.55
		50	0	20.75	20.76	20.67
15	QPSK	1	0	22.40	22.61	22.27
		1	37	22.46	22.58	22.24
		1	74	22.47	22.34	22.09
		36	0	21.43	21.56	21.33
		36	20	21.60	21.49	21.36
		36	39	21.62	21.41	21.35
		75	0	21.40	21.57	21.28
	16-QAM	1	0	21.68	22.16	21.21
		1	37	22.35	21.96	21.10
		1	74	21.66	21.97	20.54
		36	0	20.42	20.62	20.31
		36	20	20.59	20.46	20.52
		36	39	20.53	20.21	20.33
		75	0	20.38	20.49	20.38
	64-QAM	1	0	21.54	21.39	21.38
		1	37	21.84	21.68	21.56
		1	74	21.39	21.33	21.31
		36	0	20.59	20.67	20.78
		36	20	20.76	20.76	20.64
		36	39	20.66	20.73	20.62
		75	0	20.58	20.72	20.65
20	QPSK	1	0	22.10	22.69	22.51
		1	49	22.77	22.77	22.58
		1	99	22.15	22.62	22.10
		50	0	21.43	21.53	21.41
		50	24	21.33	21.53	21.52
		50	50	21.60	21.43	21.32

		100	0	21.47	21.59	21.29
	16-QAM	1	0	21.69	21.26	21.32
		1	49	22.12	21.09	21.87
		1	99	21.66	20.89	21.06
		50	0	20.54	20.68	20.40
		50	24	20.61	20.60	20.55
		50	50	20.65	20.41	20.34
		100	0	20.47	20.62	20.30
	64-QAM	1	0	21.64	21.49	21.48
		1	49	21.94	21.78	21.66
		1	99	21.49	21.43	21.41
		50	0	20.69	20.77	20.88
		50	24	20.83	20.73	20.78
		50	50	20.76	20.83	20.72
		100	0	20.68	20.82	20.75

LTE Band 71						
Bandwidth	**Modulation**	**RB**	**RB**	**Low Channel**	**Middle Channel**	**High Channel**
MHz		**Size**	**Offset**	**dBm**	**dBm**	**dBm**
5	QPSK	1	0	18.80	18.87	18.74
		1	12	18.84	18.85	18.82
		1	24	18.58	18.64	18.72
		12	0	17.69	17.80	17.76
		12	7	17.81	17.75	17.74
		12	13	17.73	17.85	17.77
		50	0	17.57	17.81	17.75
	16-QAM	1	0	18.67	18.78	18.65
		1	12	18.64	18.69	18.59
		1	24	18.45	18.48	18.53
		12	0	17.65	17.77	17.68
		12	7	17.71	17.70	17.72
		12	13	17.73	17.75	17.67
		50	0	17.58	17.67	17.46
	64-QAM	1	0	18.27	18.50	18.54
		1	12	18.18	18.42	18.53
		1	24	18.03	18.44	18.53
		12	0	17.30	17.86	17.66
		12	7	17.50	17.31	17.81

		12	13	17.67	17.69	17.62
		50	0	17.53	17.41	18.01
10	QPSK	1	0	19.06	19.08	18.99
		1	24	18.99	19.00	18.93
		1	49	18.58	18.71	18.90
		25	0	17.88	17.97	18.01
		25	12	18.03	18.01	18.06
		25	25	17.89	17.80	18.09
		50	0	17.48	17.97	17.96
	16-QAM	1	0	18.59	18.97	18.88
		1	24	18.68	18.91	18.85
		1	49	17.97	18.77	18.81
		25	0	17.35	17.94	17.90
		25	12	17.69	17.54	17.65
		25	25	17.51	17.91	17.93
		50	0	17.77	17.98	18.01
	64-QAM	1	0	17.99	18.17	17.90
		1	24	18.34	18.72	18.37
		1	49	18.47	18.66	18.33
		25	0	17.37	17.93	17.71
		25	12	17.32	17.38	17.29
		25	25	17.34	17.44	17.99
		50	0	17.69	17.66	17.77
15	QPSK	1	0	18.58	18.70	18.11
		1	37	18.53	18.84	18.23
		1	74	18.66	18.62	18.14
		36	0	17.90	18.01	17.90
		36	20	17.85	17.95	18.01
		36	39	17.77	17.82	17.79
		75	0	17.82	17.91	17.98
	16-QAM	1	0	18.01	18.55	17.96
		1	37	17.88	18.59	18.00
		1	74	17.90	18.78	18.02
		36	0	17.49	18.08	17.57
		36	20	17.83	17.62	17.91
		36	39	17.44	17.67	17.59
		75	0	17.74	17.79	17.27
	64-QAM	1	0	18.45	18.59	18.29

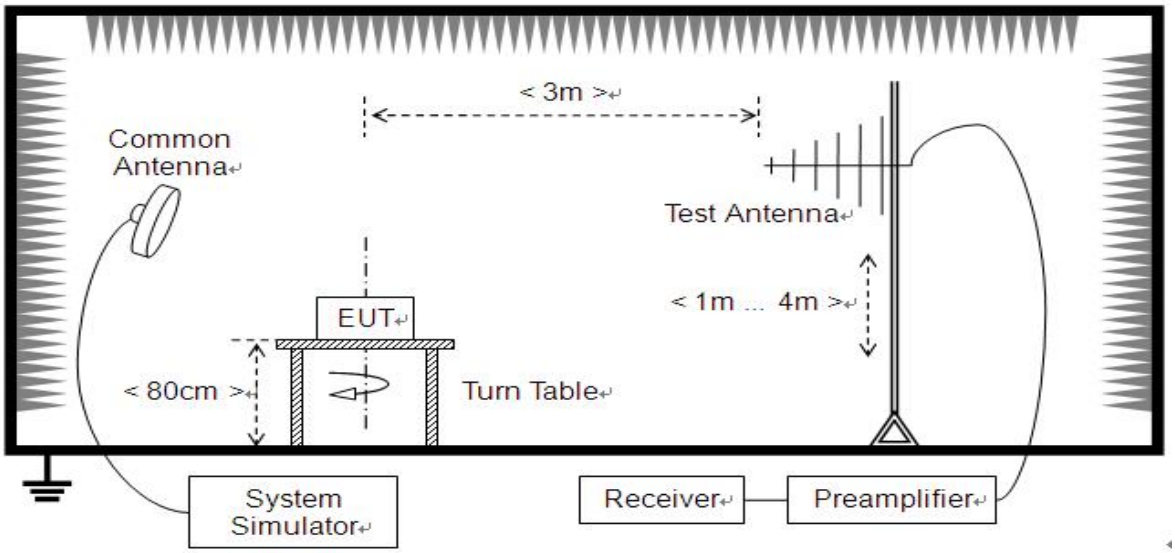
		1	37	18.15	18.14	18.72
		1	74	18.09	17.96	18.15
		36	0	17.87	18.02	17.39
		36	20	17.98	17.31	17.31
		36	39	17.67	18.02	17.58
		75	0	17.43	18.06	17.56
20	QPSK	1	0	18.59	18.70	18.63
		1	49	18.98	19.06	18.88
		1	99	18.40	18.51	18.67
		50	0	17.79	17.86	17.79
		50	24	17.84	17.70	17.72
		50	50	17.84	17.89	17.57
		100	0	17.81	17.90	17.93
	16-QAM	1	0	18.49	18.55	18.51
		1	49	18.20	18.10	17.98
		1	99	17.91	17.70	17.59
		50	0	16.89	16.97	16.98
		50	24	16.87	16.88	16.92
		50	50	16.78	16.93	16.81
		100	0	16.87	16.90	16.85
	64-QAM	1	0	18.16	18.29	17.85
		1	49	18.34	17.30	17.81
		1	99	17.95	17.48	17.56
		50	0	16.82	16.96	16.97
		50	24	16.81	16.81	16.80
		50	50	16.85	16.85	16.96
		100	0	16.86	16.93	16.96

2.8. Radiated Spurious Emissions

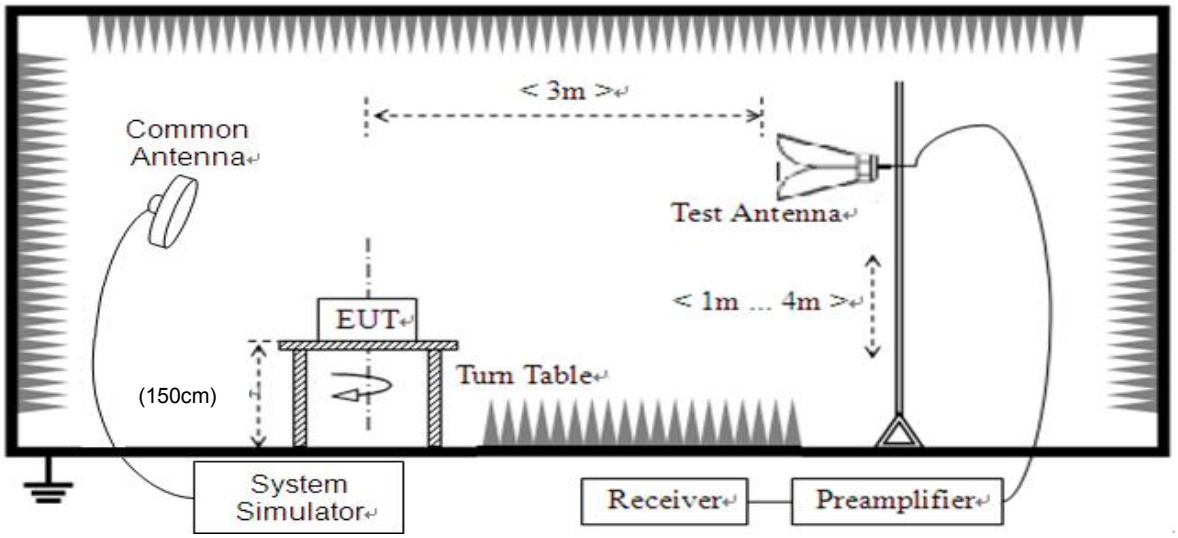
2.8.1. Requirement

According to FCC section 2.1051, 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.
Additional requirement for LTE Band 7 / 38 / 41:
The power of any emission outside of the authorized operating frequency ranges must beattenuated below the transmitting power (P) by a factor of at least 55 + 10 log(P) dB. This calculated to be -25dBm.
Additional requirement for LTE Band 30 / 40:
The power of any emission outside of the authorized operating frequency ranges must be attenuatedbelow the transmitter power (P) by a factor of at least 70 + 10 log (P) dB.This calculated to be -40dBm.

2.8.2. Test Description



(For the test frequency from 30MHz to1GHz)



(For the test frequency above 1GHz)

The EUT 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.
In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground and the Turn Table is actuated to turn from 0° to 360°to determine the maximum value of the radiated power. The emission levels at both horizontal and vertical polarizations should be tested. The Filters consists of Notch Filters and High Pass Filter.

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 procedure

KDB 971168 D01 v03r01 Section 5.8 and ANSI/TIA-603-E-2016.

2.8.4. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. Test Antenna height is varied from 1m to 4m above the ground, and the Turn Table is actuated to turn from 0° to 360°, 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.

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

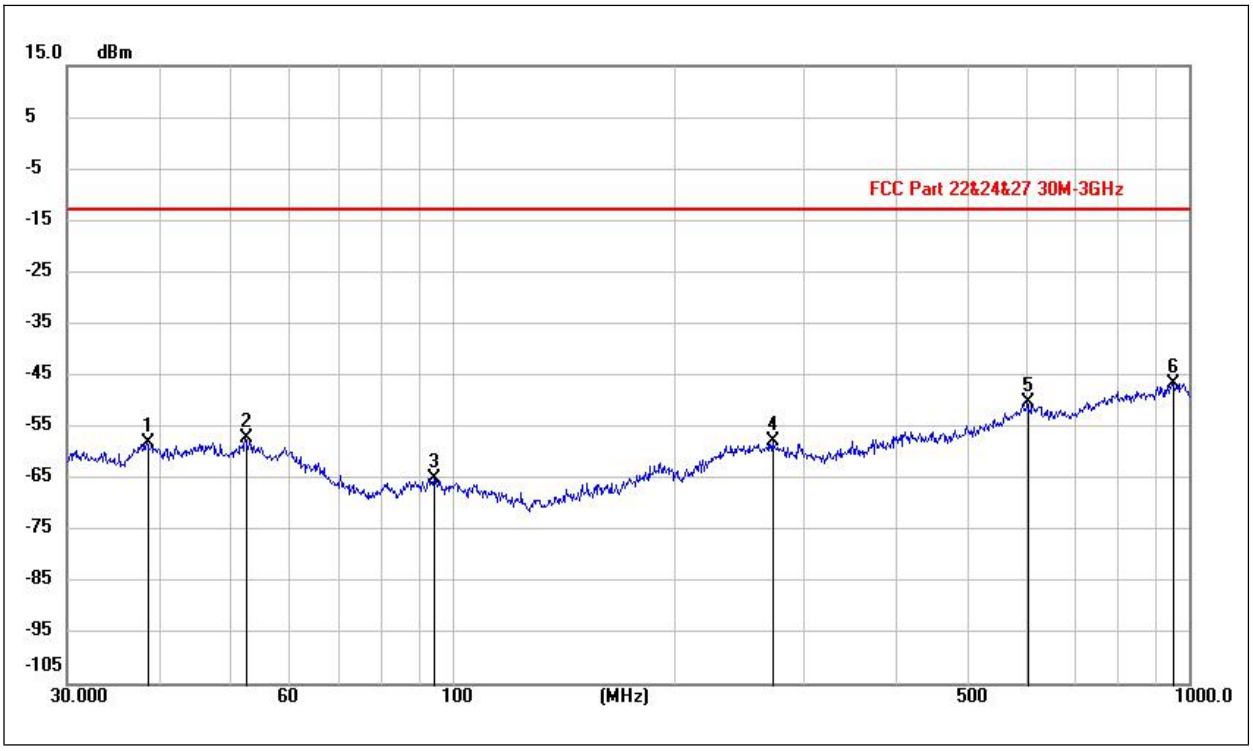
Note2: All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis Y axis test condition was recorded in this test report.

Note3: All bandwidth and test channel were considered and evaluated respectively by performing full test for each band, only the worst cases were recorded in this test report.

Note4: All modulation including QPSK, 16-QAM, 64-QAM were considered and evaluated respectively by performing full test for each band, only the worst cases QPSK were recorded in this test report.

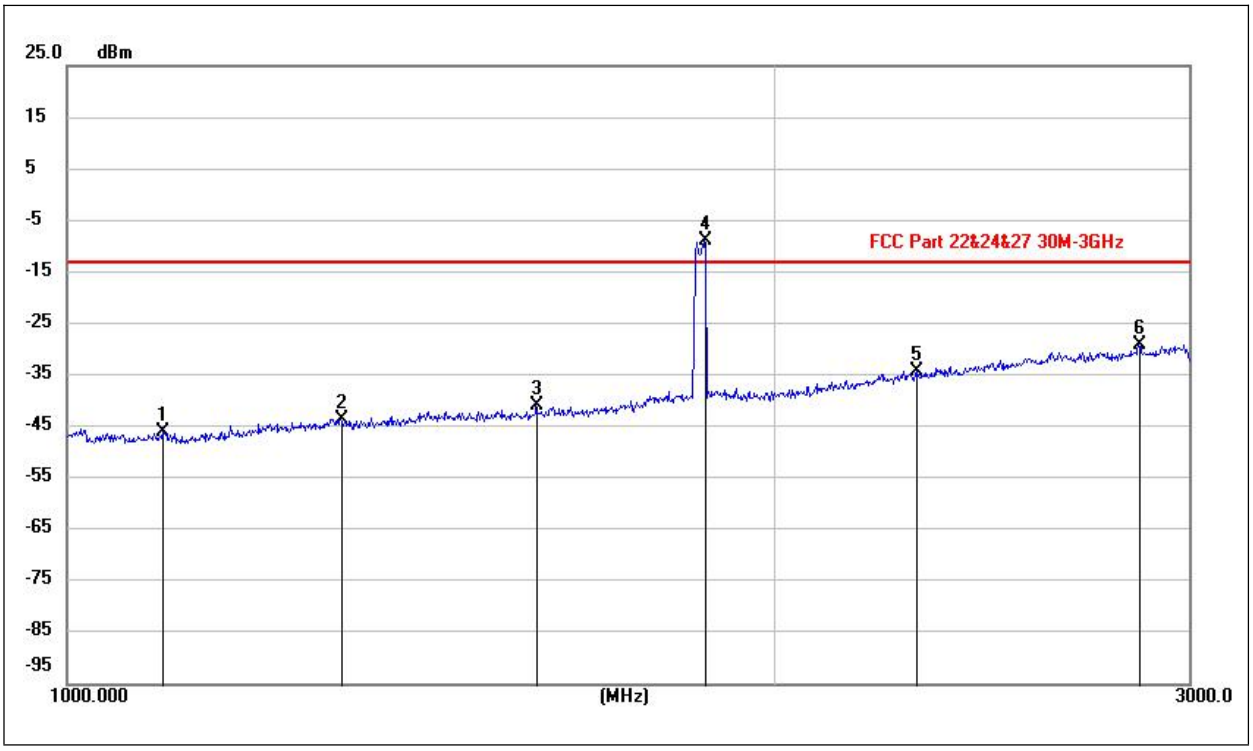
Note5: For the frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 10dB lower than the limit was not recorded.

Note6: N/A means the frequency is the basic frequency or the base station frequency, they are no need to verdict.



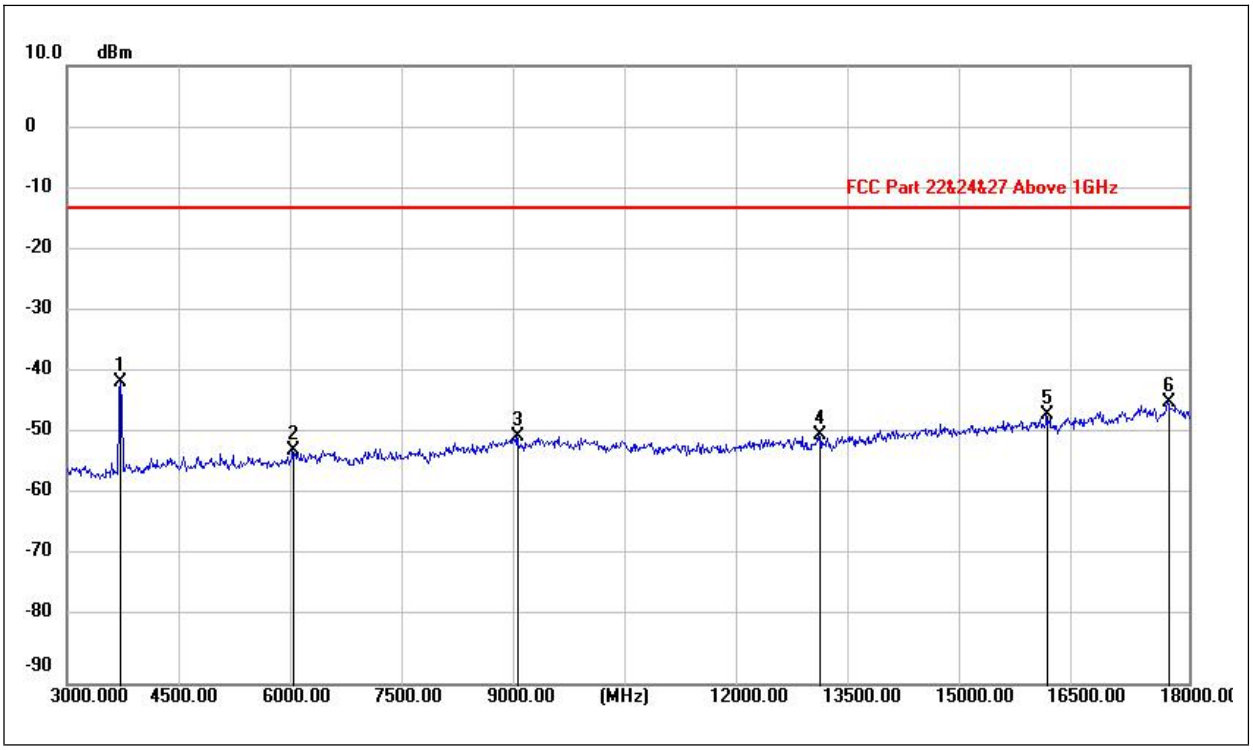
(LTE Band 2_QPSK _ Low Channel _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
38.5755	-87.86	29.66	-58.20	-13.00	-45.20	peak	PASS
52.4648	-87.07	29.93	-57.14	-13.00	-44.14	peak	PASS
94.6439	-87.77	22.78	-64.99	-13.00	-51.99	peak	PASS
272.9947	-86.75	28.92	-57.83	-13.00	-44.83	peak	PASS
605.0224	-85.61	35.37	-50.24	-13.00	-37.24	peak	PASS
951.0927	-85.56	38.97	-46.59	-13.00	-33.59	peak	PASS



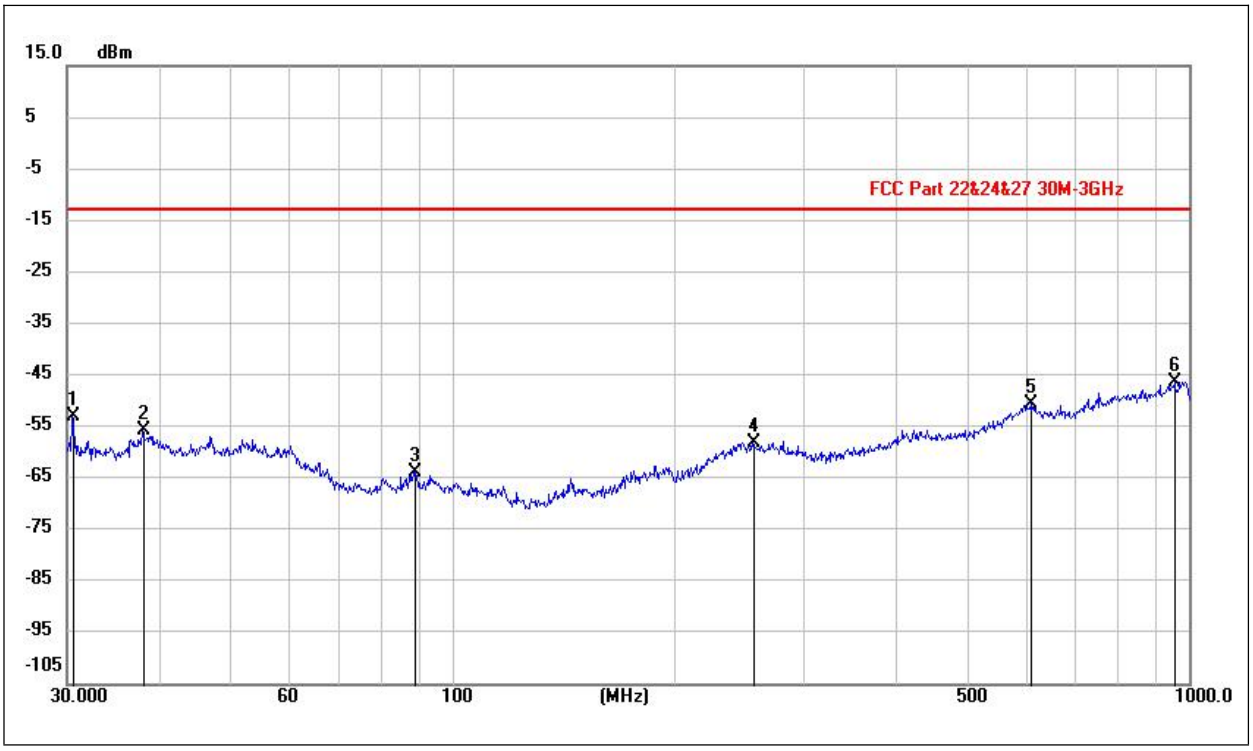
(LTE Band 2 _QPSK _ Low Channel _ 1GHz to 3GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1098.484	-86.17	40.22	-45.95	-13.00	-32.95	peak	PASS
1307.499	-85.83	42.22	-43.61	-13.00	-30.61	peak	PASS
1582.926	-85.03	44.24	-40.79	-13.00	-27.79	peak	PASS
1868.144	-55.75	46.69	-9.06	-13.00	N/A	peak	N/A
2297.609	-84.72	50.57	-34.15	-13.00	-21.15	peak	PASS
2856.706	-83.92	54.88	-29.04	-13.00	-16.04	peak	PASS



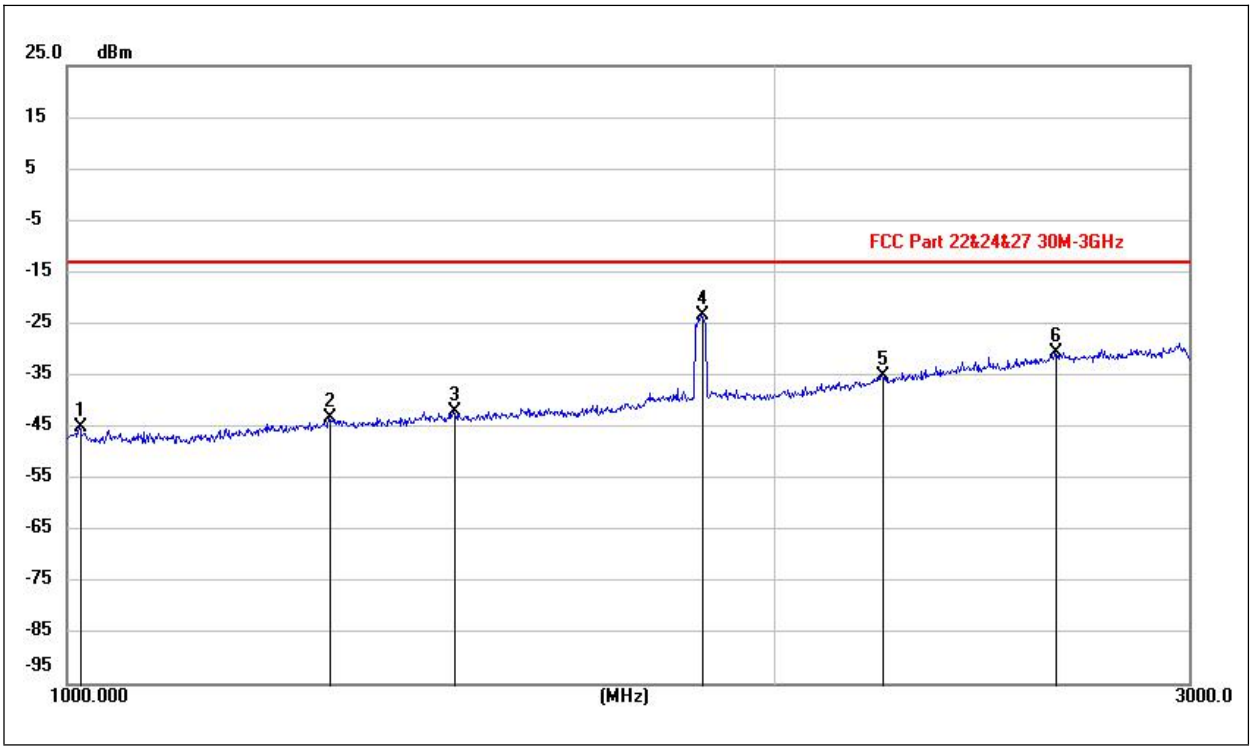
(LTE Band 2 _QPSK _ Low Channel _ 3GHz to 18GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3720.000	-48.89	7.72	-41.17	-13.00	-28.17	peak	PASS
6021.000	-63.21	10.95	-52.26	-13.00	-39.26	peak	PASS
9025.500	-63.58	13.65	-49.93	-13.00	-36.93	peak	PASS
13053.000	-67.31	17.55	-49.76	-13.00	-36.76	peak	PASS
16096.500	-68.56	22.23	-46.33	-13.00	-33.33	peak	PASS
17724.000	-70.10	25.68	-44.42	-13.00	-31.42	peak	PASS



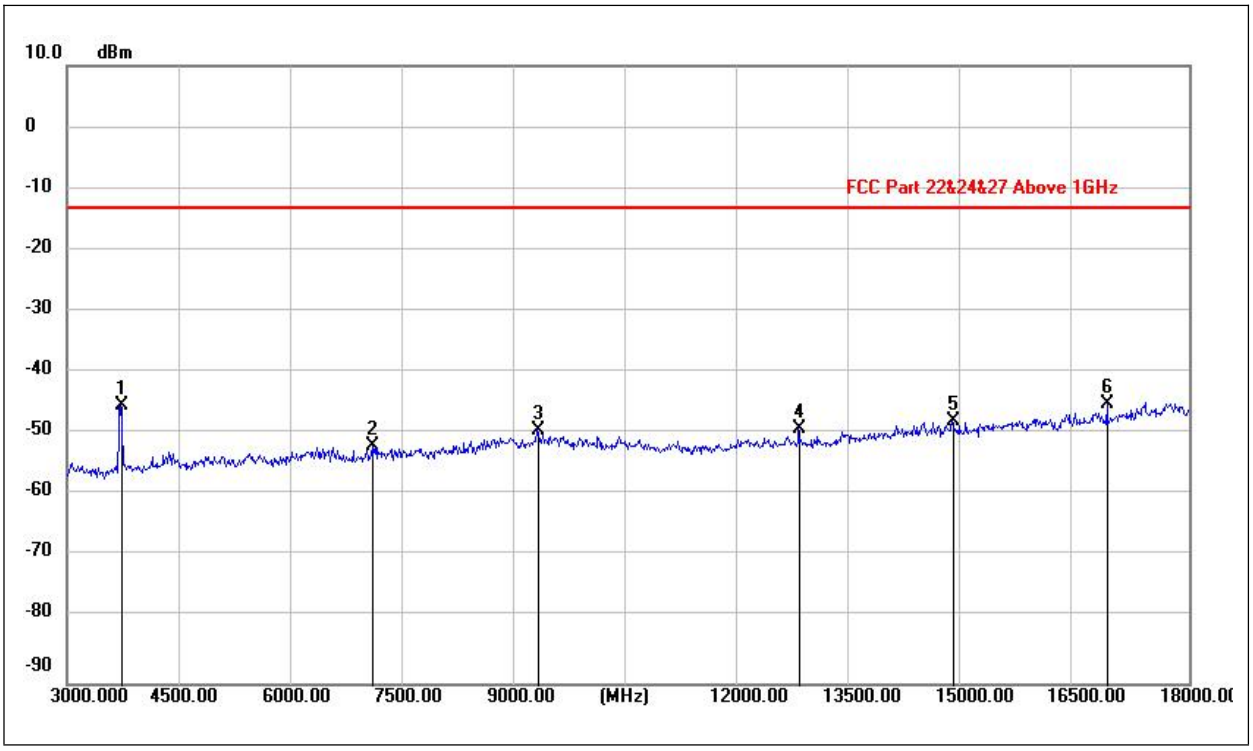
(LTE Band 2_QPSK _ Low Channel _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
30.5467	-72.62	19.71	-52.91	-13.00	-39.91	peak	PASS
37.9649	-77.04	21.34	-55.70	-13.00	-42.70	peak	PASS
89.1669	-87.92	24.04	-63.88	-13.00	-50.88	peak	PASS
256.0268	-83.49	25.27	-58.22	-13.00	-45.22	peak	PASS
610.9920	-84.85	34.40	-50.45	-13.00	-37.45	peak	PASS
957.1148	-84.76	38.55	-46.21	-13.00	-33.21	peak	PASS



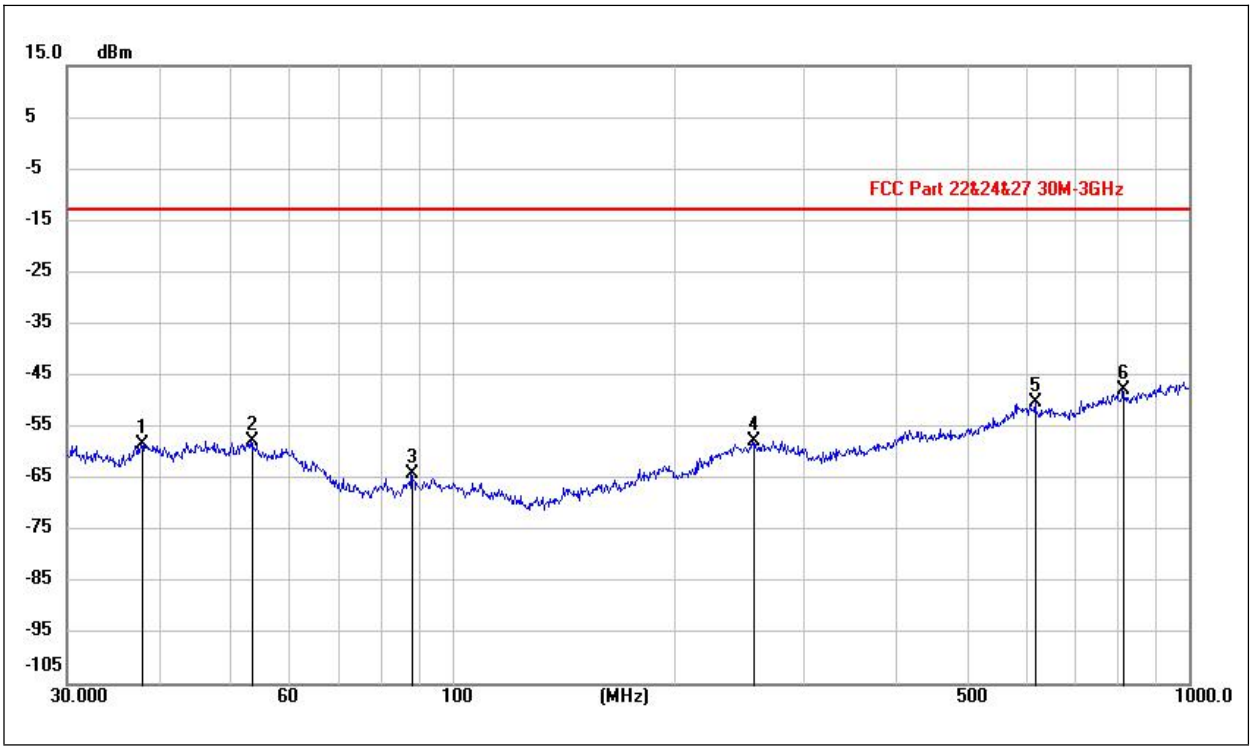
(LTE Band 2 _QPSK _ Low Channel _ 1GHz to 3GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1012.881	-83.58	38.42	-45.16	-13.00	-32.16	peak	PASS
1292.148	-85.39	42.16	-43.23	-13.00	-30.23	peak	PASS
1462.380	-85.96	43.81	-42.15	-13.00	-29.15	peak	PASS
1864.044	-70.01	46.54	-23.47	-13.00	N/A	peak	N/A
2220.921	-85.47	50.21	-35.26	-13.00	-22.26	peak	PASS
2632.640	-84.28	53.69	-30.59	-13.00	-17.59	peak	PASS



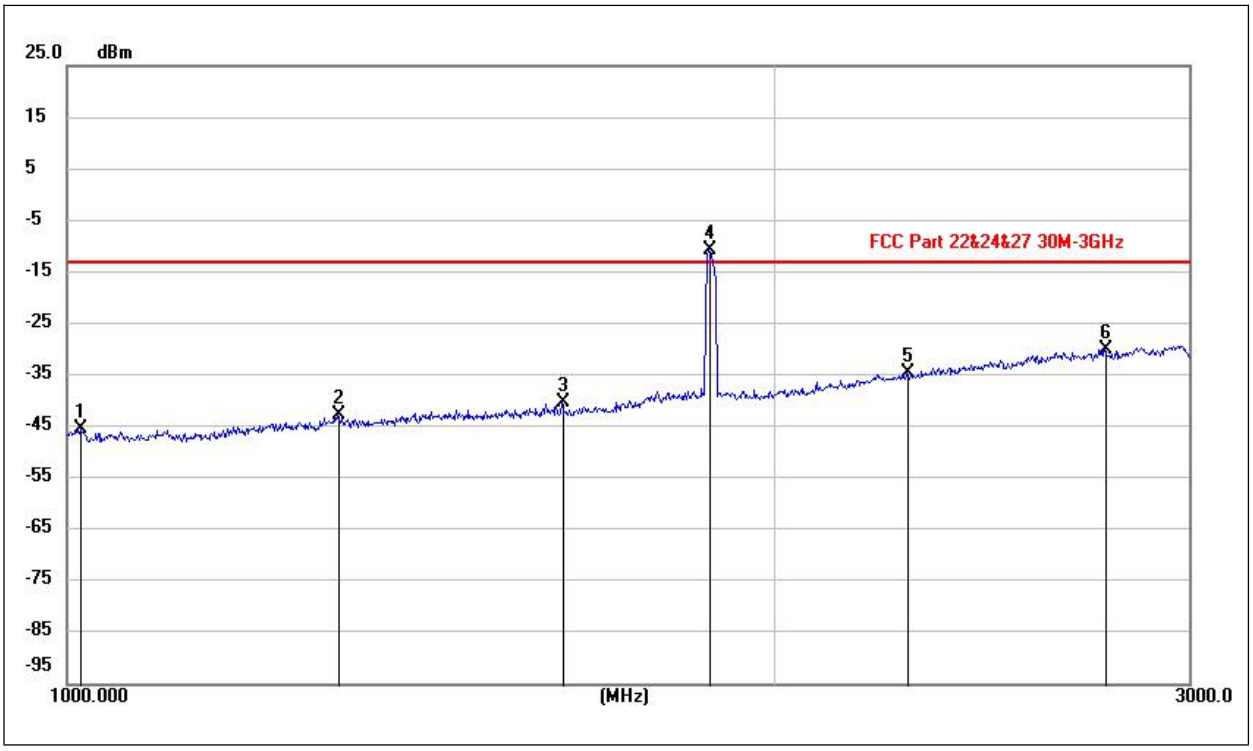
(LTE Band 2 _QPSK _ Low Channel _ 3GHz to 18GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3729.750	-52.45	7.63	-44.82	-13.00	-31.82	peak	PASS
7093.500	-62.72	11.27	-51.45	-13.00	-38.45	peak	PASS
9291.000	-63.54	14.72	-48.82	-13.00	-35.82	peak	PASS
12787.500	-65.58	16.84	-48.74	-13.00	-35.74	peak	PASS
14843.250	-67.33	19.97	-47.36	-13.00	-34.36	peak	PASS
16908.750	-67.70	23.00	-44.70	-13.00	-31.70	peak	PASS



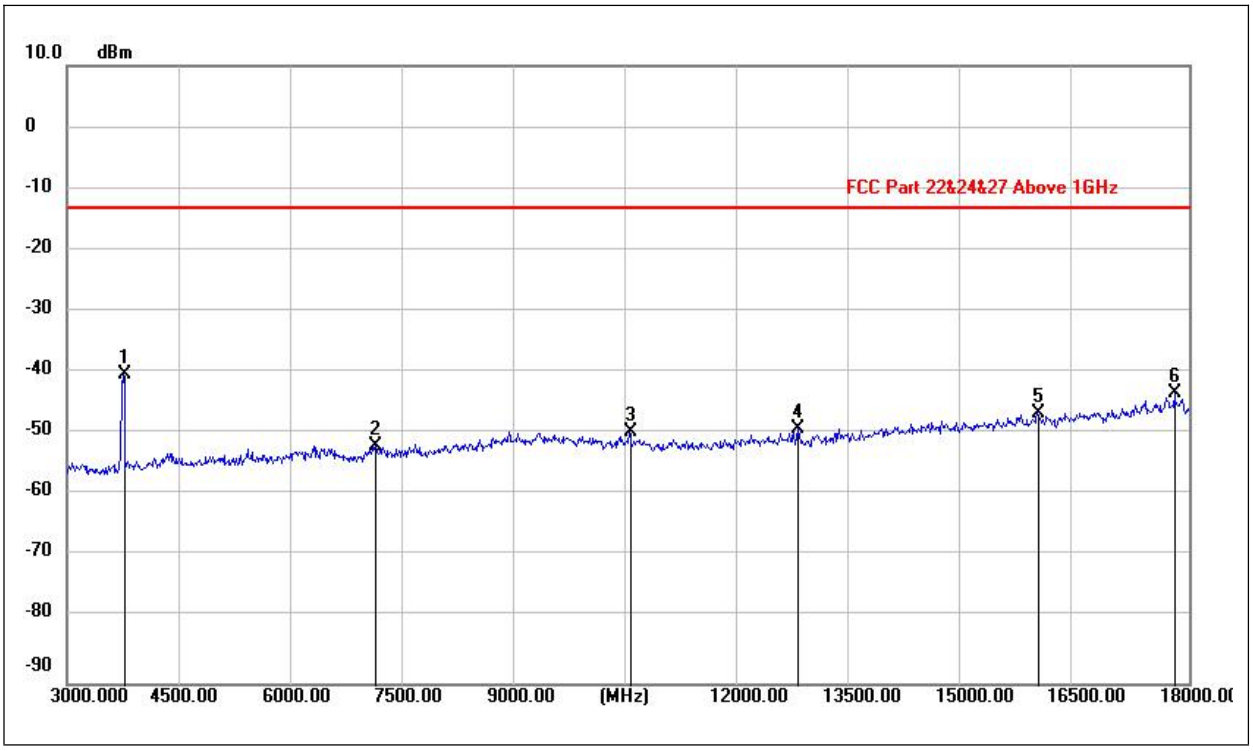
(LTE Band 2 _QPSK _Middle Channel _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
37.8586	-87.77	29.37	-58.40	-13.00	-45.40	peak	PASS
53.4021	-87.93	29.98	-57.95	-13.00	-44.95	peak	PASS
88.0638	-86.26	22.06	-64.20	-13.00	-51.20	peak	PASS
255.8922	-86.65	28.92	-57.73	-13.00	-44.73	peak	PASS
619.8396	-85.63	35.34	-50.29	-13.00	-37.29	peak	PASS
814.5385	-85.13	37.22	-47.91	-13.00	-34.91	peak	PASS



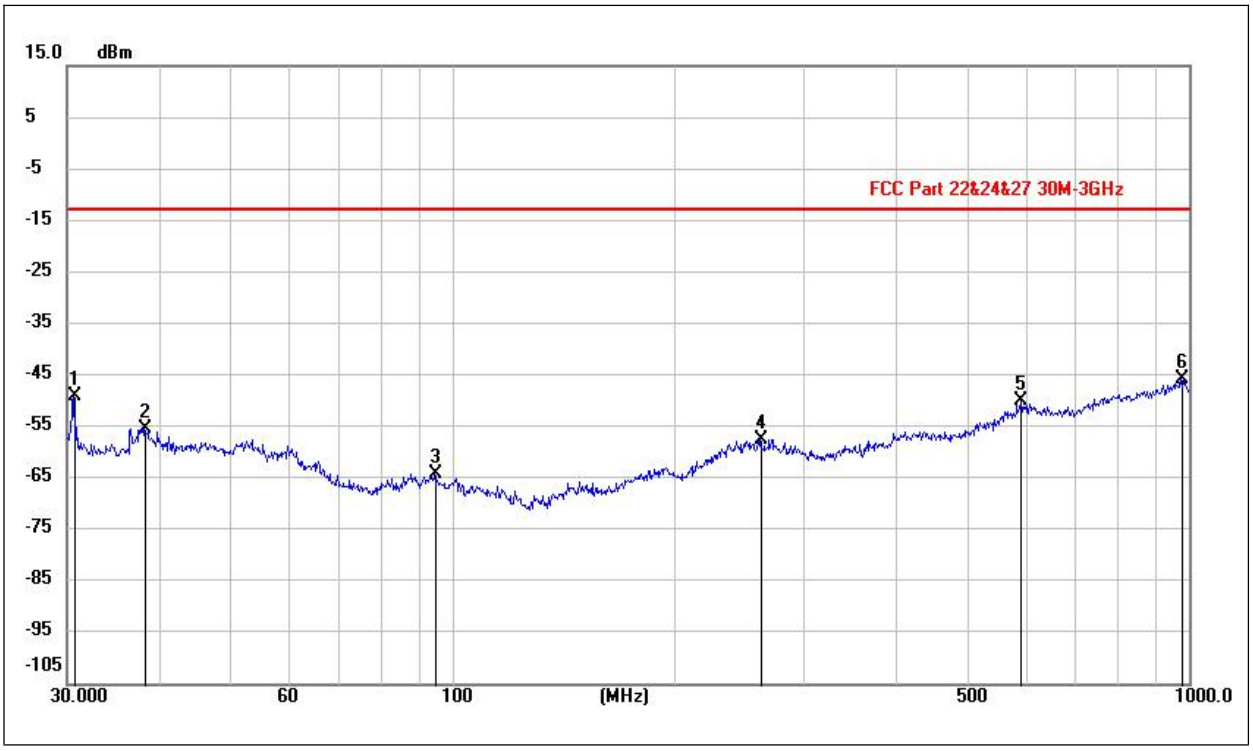
(LTE Band 2 _QPSK _Middle Channel _ 1GHz to 3GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1013.660	-84.27	38.80	-45.47	-13.00	-32.47	peak	PASS
1303.197	-84.98	42.22	-42.76	-13.00	-29.76	peak	PASS
1624.950	-84.58	44.18	-40.40	-13.00	-27.40	peak	PASS
1875.135	-57.64	46.78	-10.86	-13.00	N/A	peak	N/A
2279.382	-84.70	50.24	-34.46	-13.00	-21.46	peak	PASS
2764.999	-84.20	54.17	-30.03	-13.00	-17.03	peak	PASS



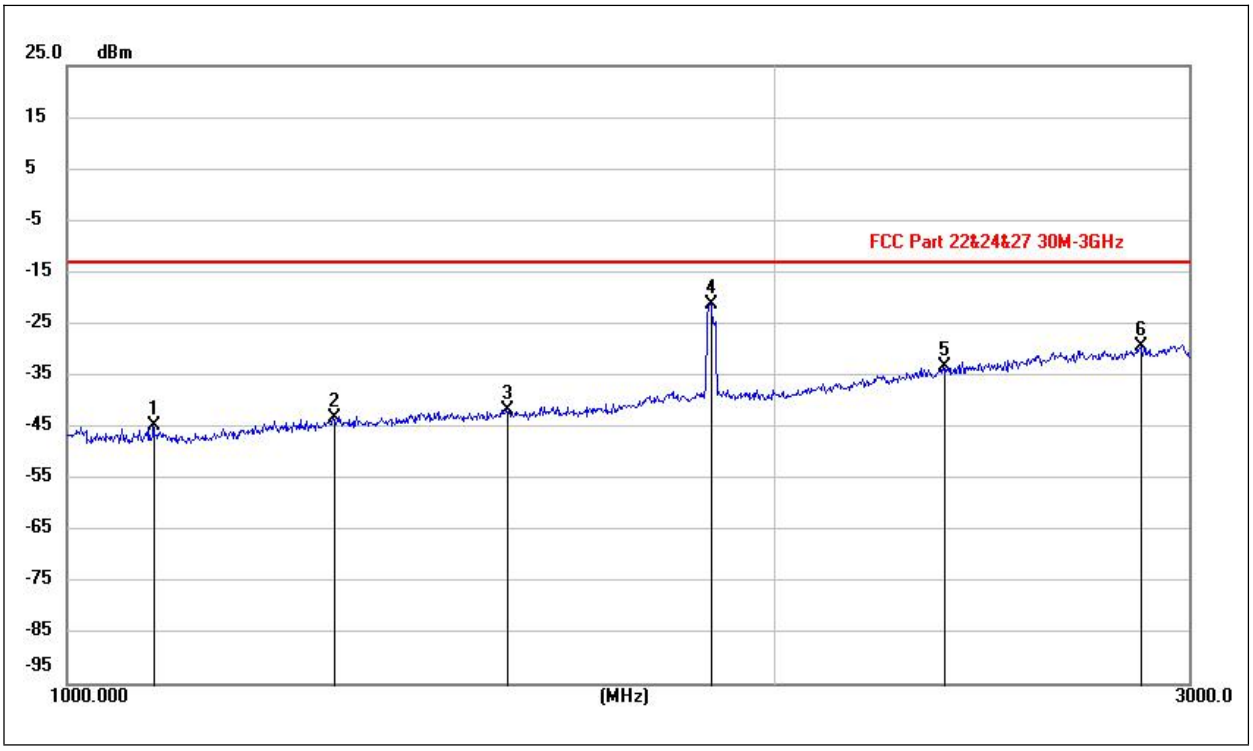
(LTE Band 2 _QPSK _ Middle Channel _ 3GHz to 18GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3759.750	-47.89	8.05	-39.84	-13.00	-26.84	peak	PASS
7125.000	-62.80	11.46	-51.34	-13.00	-38.34	peak	PASS
10516.500	-63.24	14.13	-49.11	-13.00	-36.11	peak	PASS
12768.750	-65.71	17.03	-48.68	-13.00	-35.68	peak	PASS
15979.500	-68.11	22.07	-46.04	-13.00	-33.04	peak	PASS
17816.250	-68.39	25.50	-42.89	-13.00	-29.89	peak	PASS



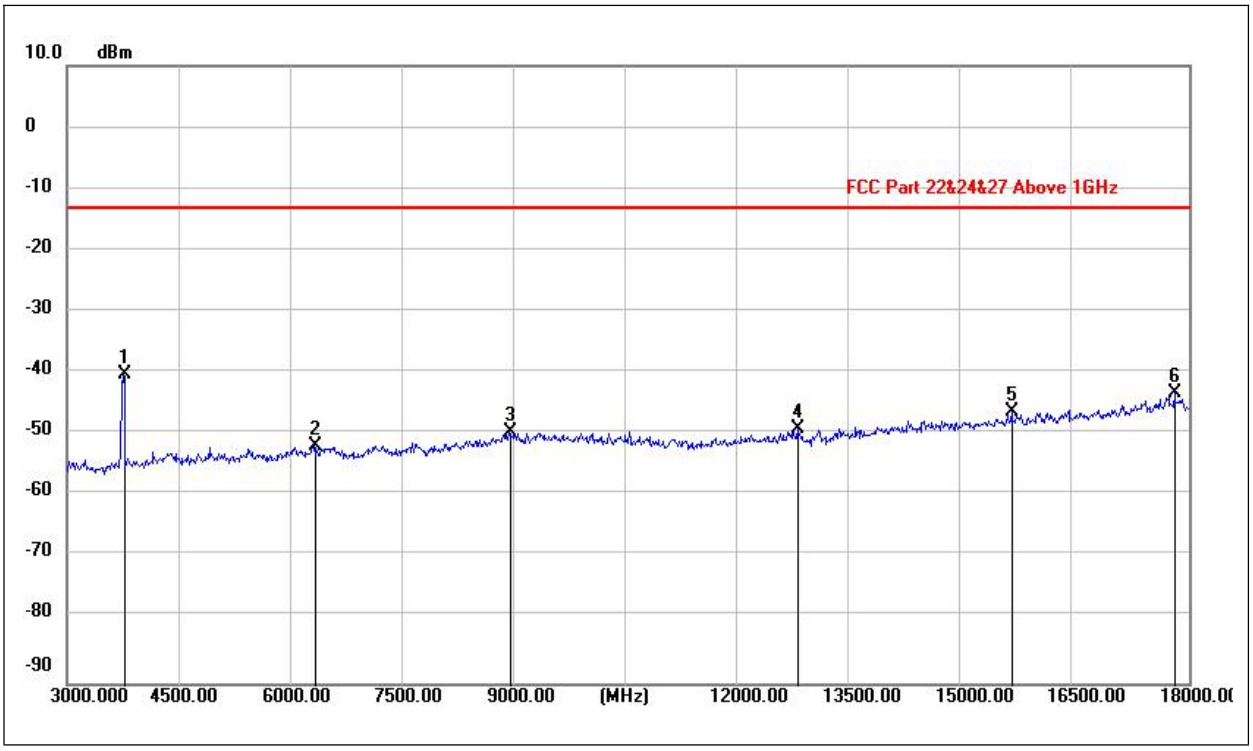
(LTE Band 2 _QPSK _ Middle Channel _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
30.6647	-68.91	19.72	-49.19	-13.00	-36.19	peak	PASS
38.2791	-76.84	21.56	-55.28	-13.00	-42.28	peak	PASS
95.0596	-91.48	27.25	-64.23	-13.00	-51.23	peak	PASS
262.3890	-83.05	25.61	-57.44	-13.00	-44.44	peak	PASS
590.9737	-84.40	34.32	-50.08	-13.00	-37.08	peak	PASS
977.9794	-84.66	38.91	-45.75	-13.00	-32.75	peak	PASS



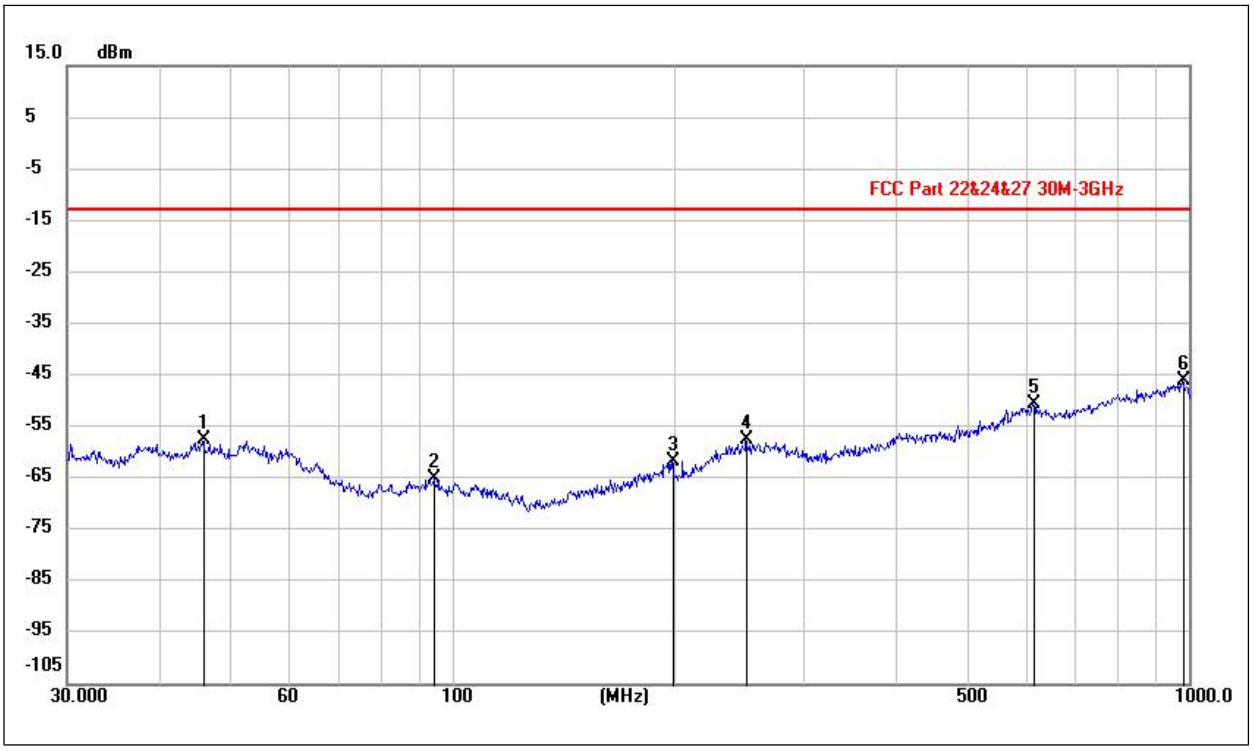
(LTE Band 2_QPSK _ Middle Channel _ 1GHz to 3GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1089.351	-84.61	39.79	-44.82	-13.00	-31.82	1089.351	PASS
1297.839	-85.26	42.00	-43.26	-13.00	-30.26	1297.839	PASS
1539.196	-85.88	44.19	-41.69	-13.00	-28.69	1539.196	PASS
1877.300	-67.95	46.70	-21.25	-13.00	N/A	1877.300	N/A
2358.866	-84.22	50.91	-33.31	-13.00	-20.31	2358.866	PASS
2863.147	-84.39	54.88	-29.51	-13.00	-16.51	2863.147	PASS



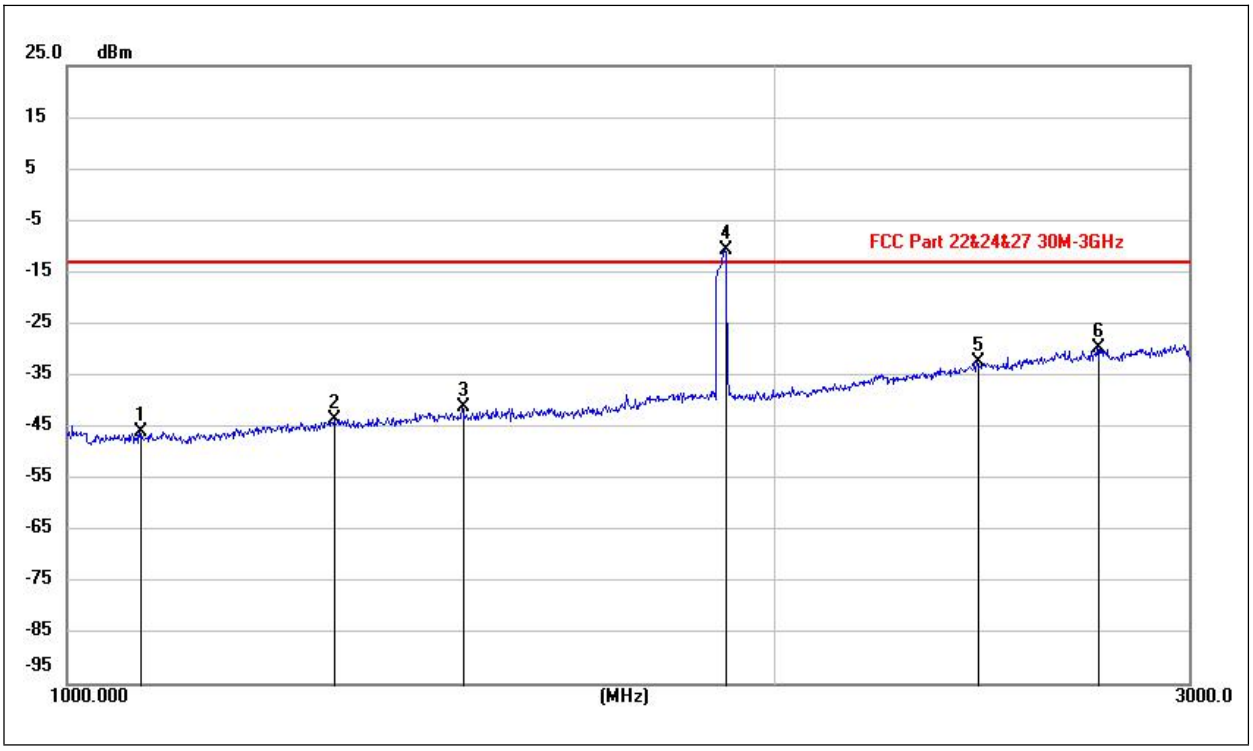
(LTE Band 2 _QPSK _ Middle Channel _ 3GHz to 18GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3759.750	-47.82	7.98	-39.84	-13.00	-26.84	peak	PASS
6303.750	-62.31	10.89	-51.42	-13.00	-38.42	peak	PASS
8919.750	-63.59	14.41	-49.18	-13.00	-36.18	peak	PASS
12768.750	-65.61	16.93	-48.68	-13.00	-35.68	peak	PASS
15642.750	-67.48	21.47	-46.01	-13.00	-33.01	peak	PASS
17816.250	-67.11	24.22	-42.89	-13.00	-29.89	peak	PASS



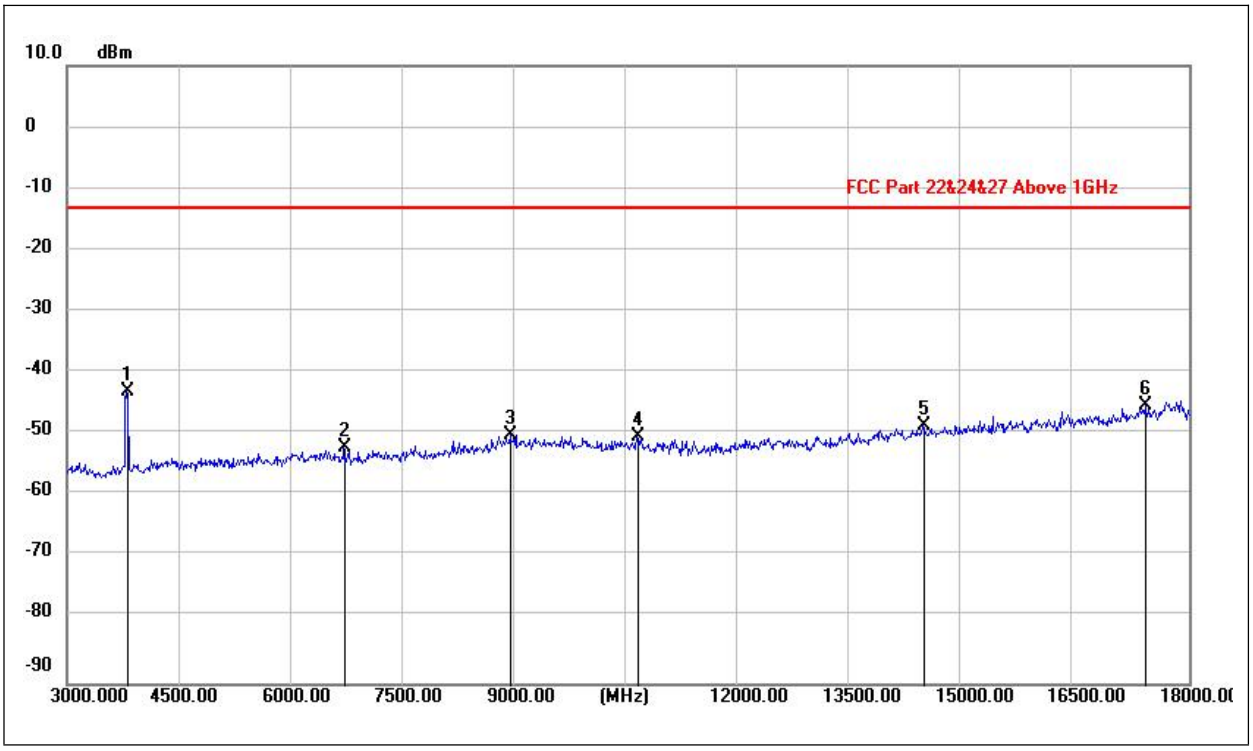
(LTE Band 2 _QPSK _ High Channel _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
45.9841	-87.35	29.69	-57.66	-13.00	-44.66	peak	PASS
94.5941	-87.93	22.77	-65.16	-13.00	-52.16	peak	PASS
199.0062	-85.56	23.97	-61.59	-13.00	-48.59	peak	PASS
250.4768	-86.58	29.02	-57.56	-13.00	-44.56	peak	PASS
614.7529	-86.15	35.44	-50.71	-13.00	-37.71	peak	PASS
981.7590	-85.50	39.39	-46.11	-13.00	-33.11	peak	PASS



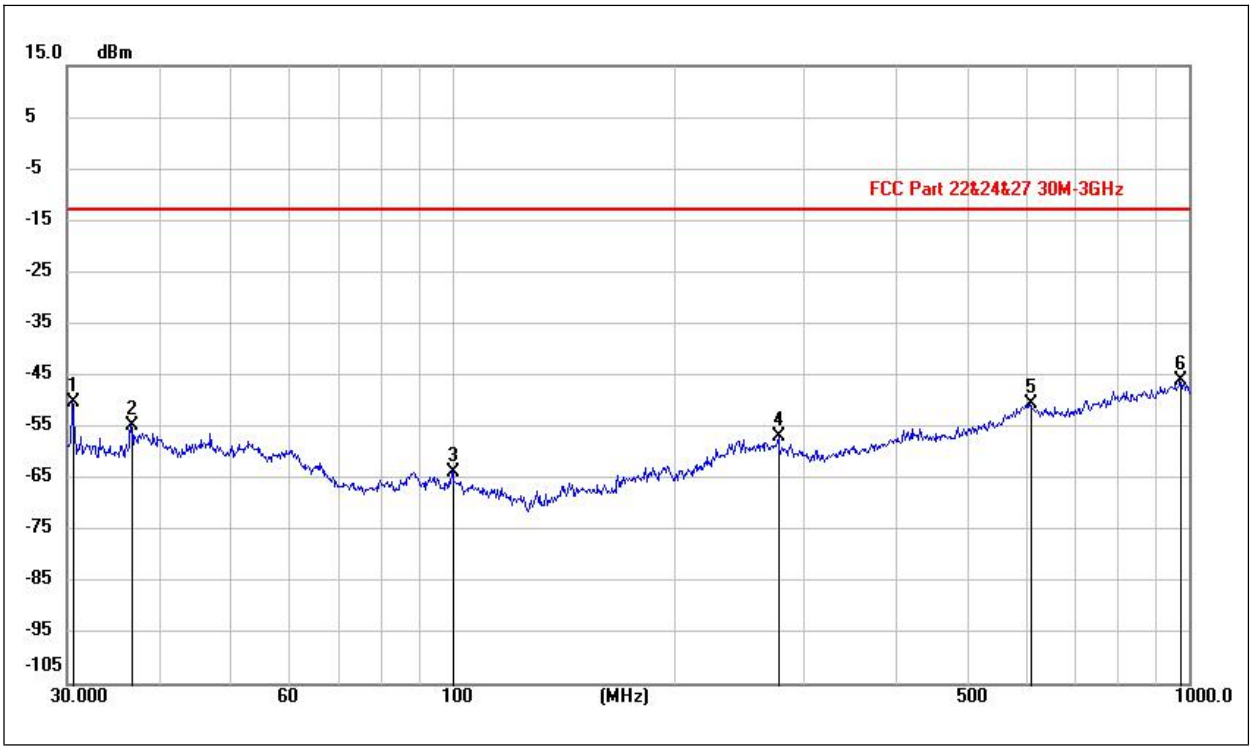
(LTE Band 2 _QPSK _ High Channel _ 1GHz to 3GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1074.966	-85.70	39.84	-45.86	-13.00	-32.86	peak	PASS
1299.194	-85.92	42.21	-43.71	-13.00	-30.71	peak	PASS
1472.860	-84.61	43.36	-41.25	-13.00	-28.25	peak	PASS
1905.559	-57.75	47.12	-10.63	-13.00	N/A	peak	N/A
2438.709	-84.07	51.58	-32.49	-13.00	-19.49	peak	PASS
2741.858	-83.55	53.91	-29.64	-13.00	-16.64	peak	PASS



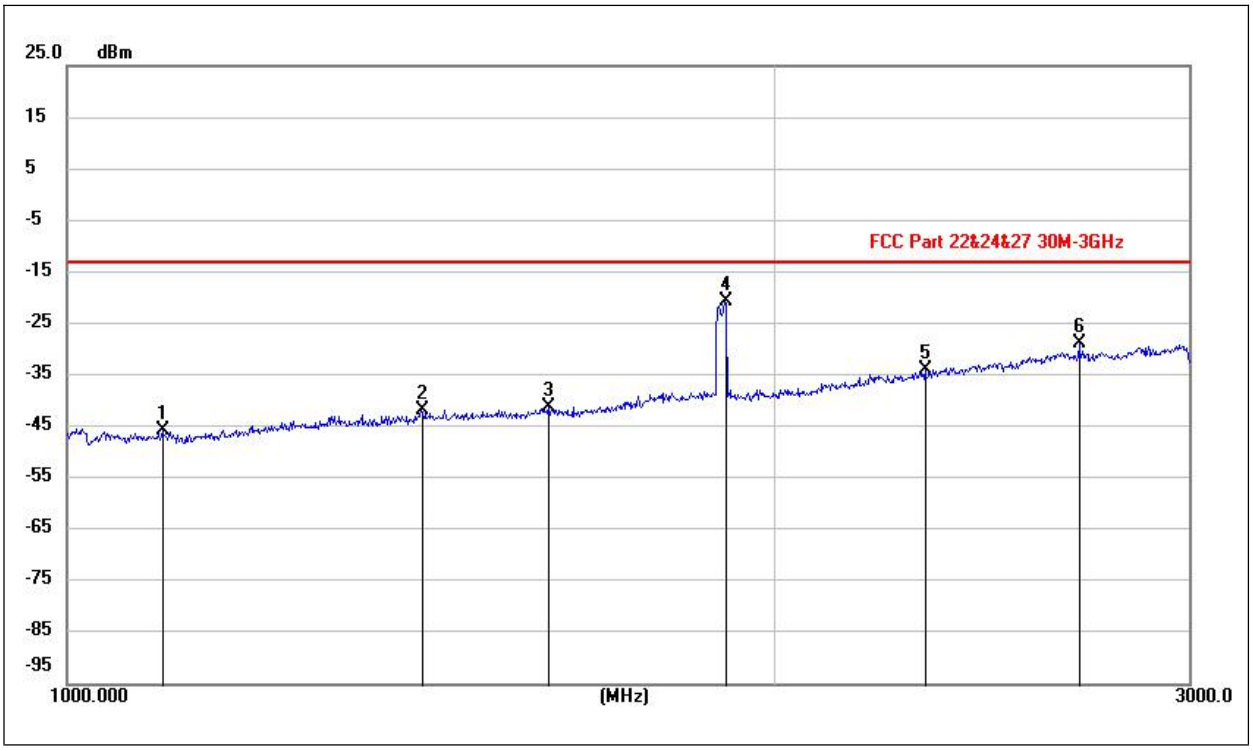
(LTE Band 2 _QPSK _ High Channel _ 3GHz to 18GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3800.250	-50.37	7.78	-42.59	-13.00	-29.59	peak	PASS
6706.500	-62.56	10.85	-51.71	-13.00	-38.71	peak	PASS
8932.500	-64.05	14.43	-49.62	-13.00	-36.62	peak	PASS
10623.750	-64.38	14.41	-49.97	-13.00	-36.97	peak	PASS
14457.750	-67.94	19.75	-48.19	-13.00	-35.19	peak	PASS
17427.750	-69.51	24.52	-44.99	-13.00	-31.99	peak	PASS



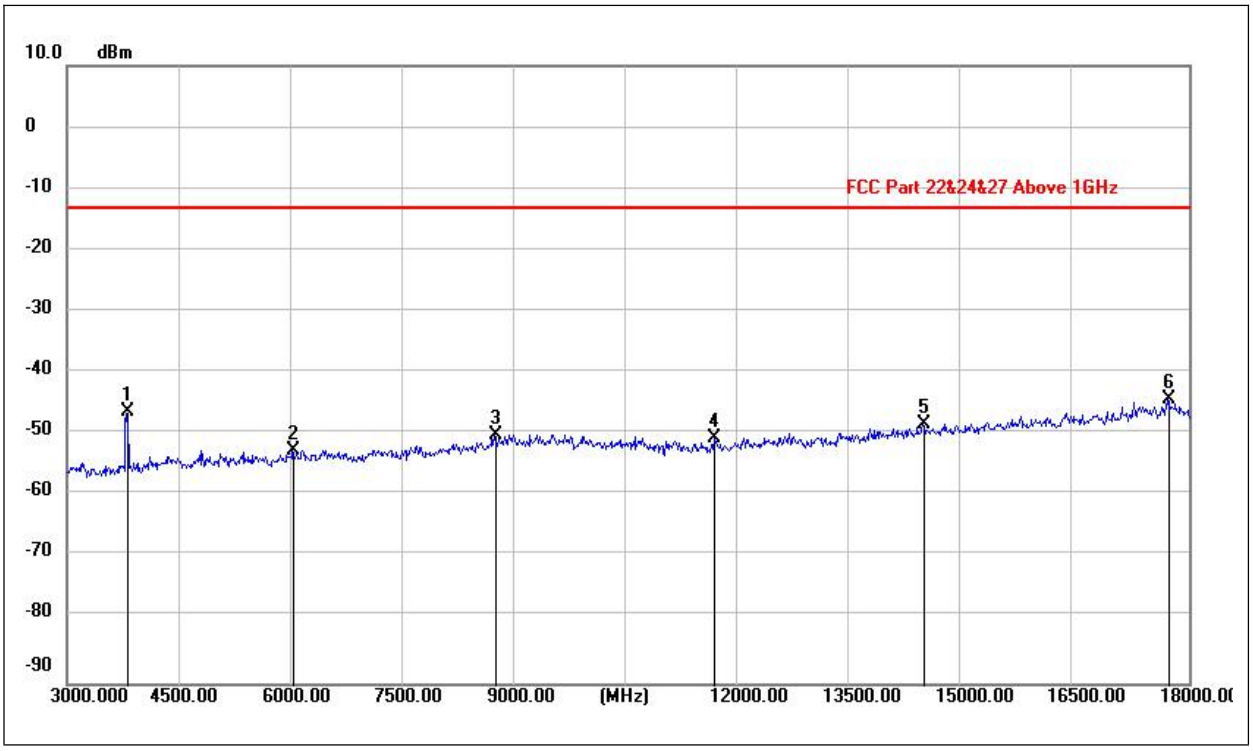
(LTE Band 2 _QPSK _ High Channel _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
30.5413	-70.05	19.70	-50.35	-13.00	-37.35	peak	PASS
36.6567	-74.41	19.47	-54.94	-13.00	-41.94	peak	PASS
100.2286	-94.10	30.17	-63.93	-13.00	-50.93	peak	PASS
277.1421	-83.43	26.49	-56.94	-13.00	-43.94	peak	PASS
609.1736	-85.00	34.36	-50.64	-13.00	-37.64	peak	PASS
974.5561	-84.57	38.64	-45.93	-13.00	-32.93	peak	PASS



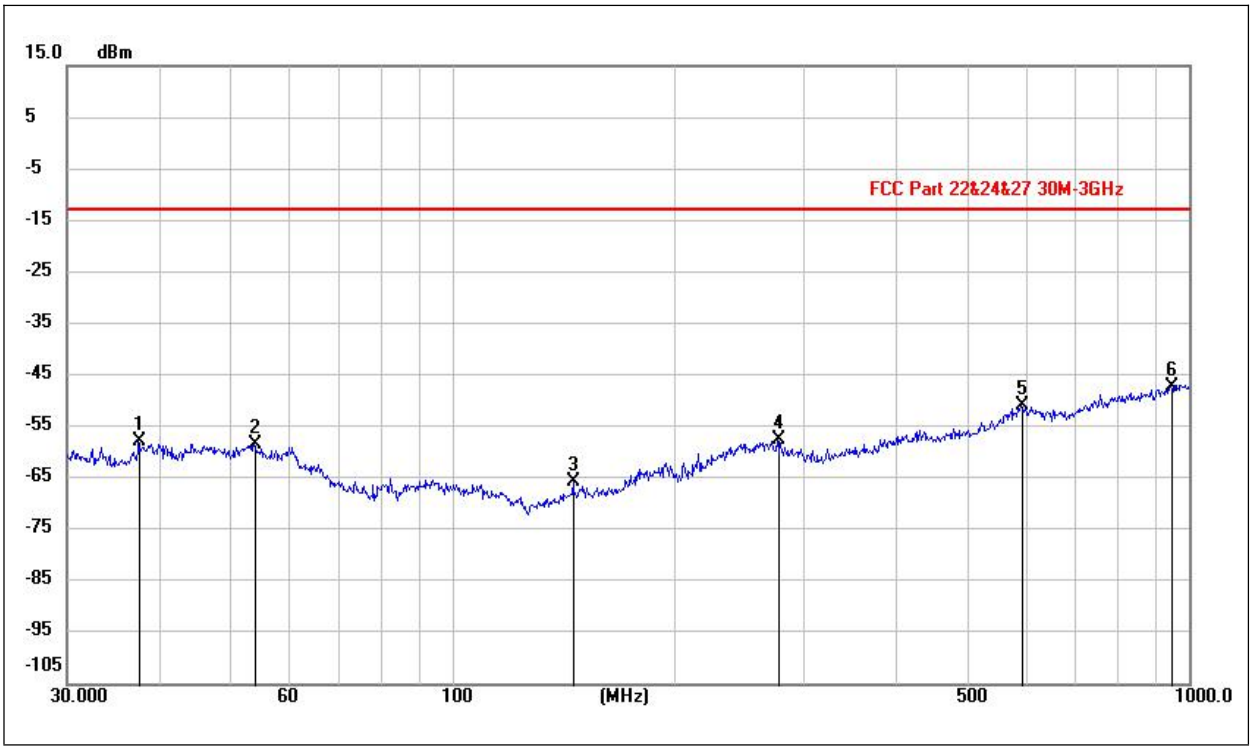
(LTE Band 2 _QPSK _ High Channel _ 1GHz to 3GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1098.062	-85.57	39.81	-45.76	-13.00	-32.76	peak	PASS
1416.367	-84.20	42.40	-41.80	-13.00	-28.80	peak	PASS
1602.259	-85.21	43.92	-41.29	-13.00	-28.29	peak	PASS
1905.245	-68.03	47.31	-20.72	-13.00	N/A	peak	N/A
2318.147	-84.65	50.82	-33.83	-13.00	-20.83	peak	PASS
2694.676	-82.31	53.51	-28.80	-13.00	-15.80	peak	PASS



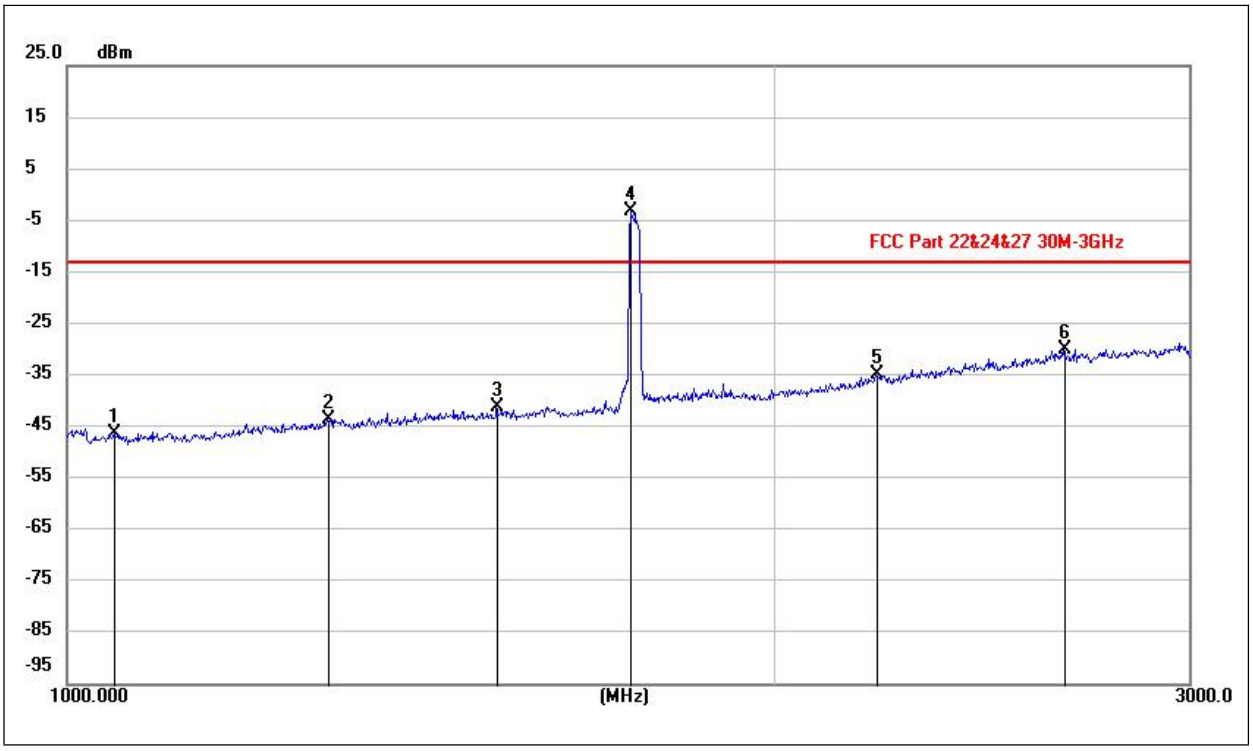
(LTE Band 2_QPSK _ High Channel _ 3GHz to 18GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3799.500	-54.00	7.97	-46.03	-13.00	-33.03	peak	PASS
6018.750	-63.01	10.82	-52.19	-13.00	-39.19	peak	PASS
8724.750	-63.39	13.71	-49.68	-13.00	-36.68	peak	PASS
11655.000	-64.92	14.64	-50.28	-13.00	-37.28	peak	PASS
14454.750	-67.66	19.67	-47.99	-13.00	-34.99	peak	PASS
17716.500	-68.38	24.42	-43.96	-13.00	-30.96	peak	PASS



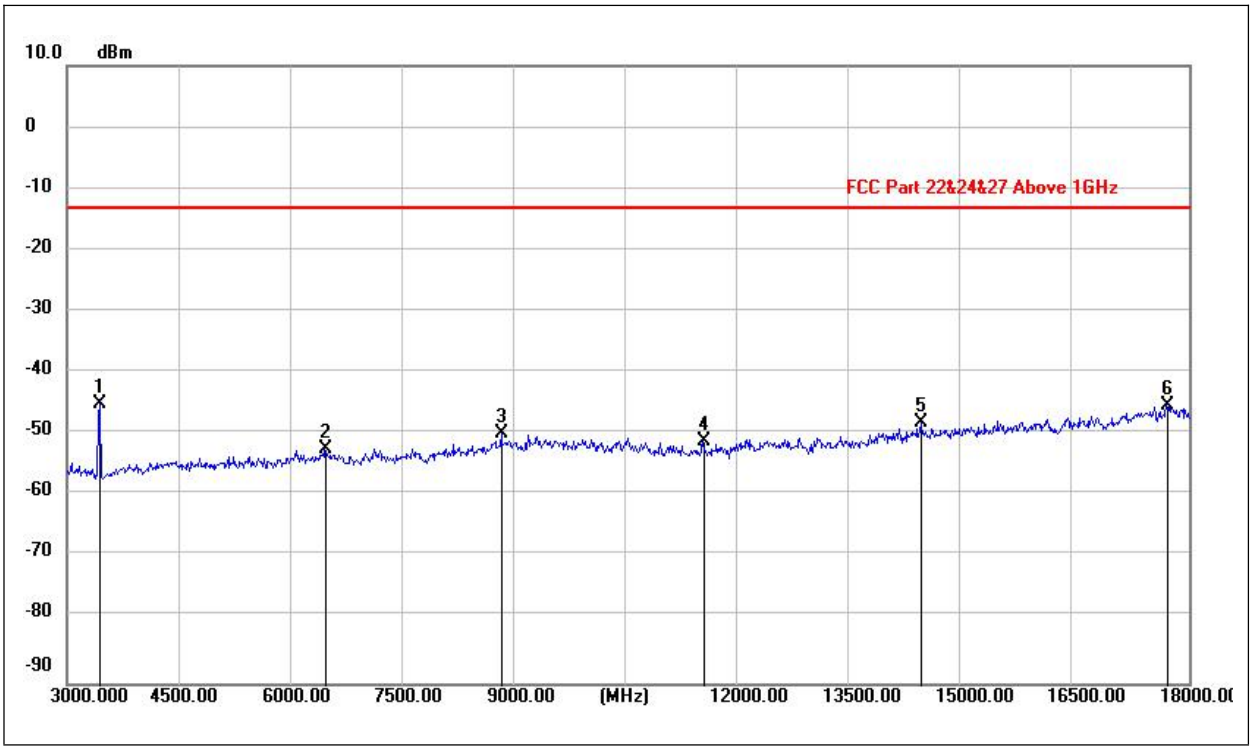
(LTE Band 4_QPSK _ Low Channel _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
37.6006	-87.00	29.10	-57.90	-13.00	-44.90	peak	PASS
53.9763	-88.26	29.78	-58.48	-13.00	-45.48	peak	PASS
146.3478	-85.37	19.65	-65.72	-13.00	-52.72	peak	PASS
276.8507	-86.56	28.99	-57.57	-13.00	-44.57	peak	PASS
592.1146	-86.29	35.32	-50.97	-13.00	-37.97	peak	PASS
947.4312	-86.22	38.95	-47.27	-13.00	-34.27	peak	PASS



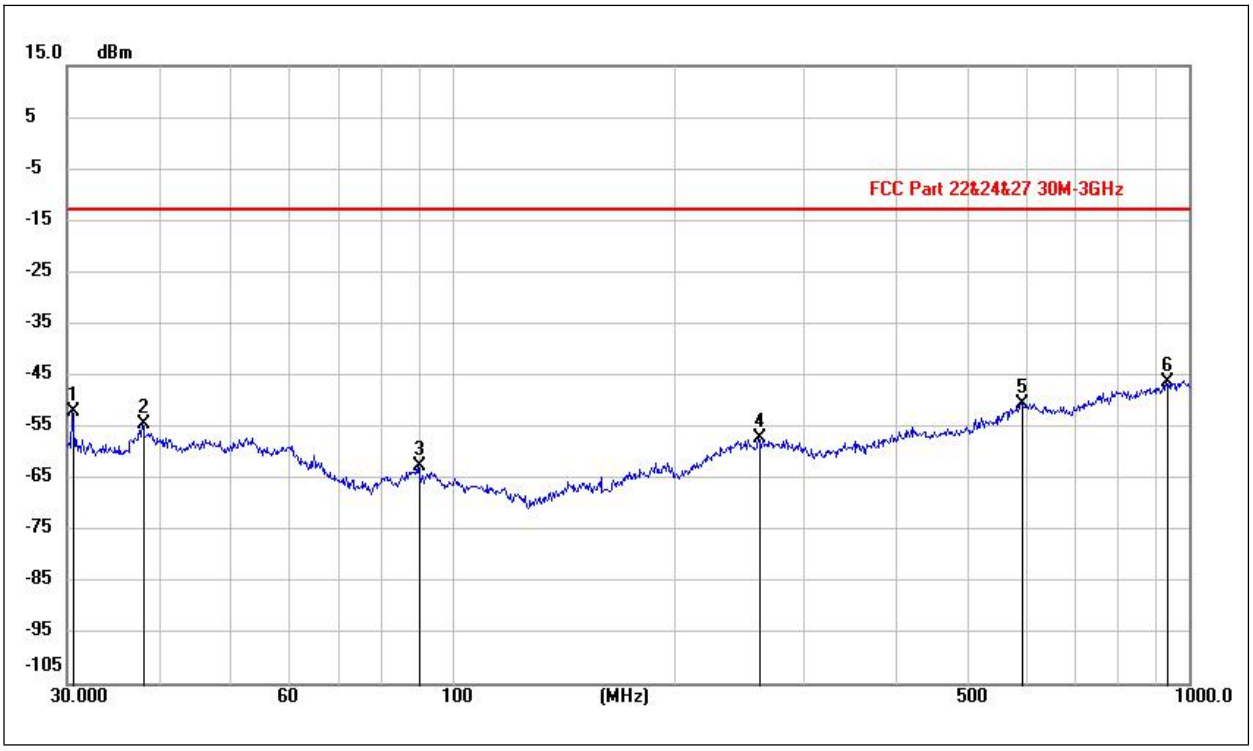
(LTE Band 4 _QPSK _ Low Channel _ 1GHz to 3GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1047.223	-86.05	39.77	-46.28	-13.00	-33.28	peak	PASS
1290.375	-85.53	41.90	-43.63	-13.00	-30.63	peak	PASS
1524.052	-84.88	43.75	-41.13	-13.00	-28.13	peak	PASS
1736.433	-48.56	45.29	-3.27	-13.00	N/A	peak	N/A
2210.333	-84.81	50.08	-34.73	-13.00	-21.73	peak	PASS
2652.673	-83.93	53.90	-30.03	-13.00	-17.03	peak	PASS



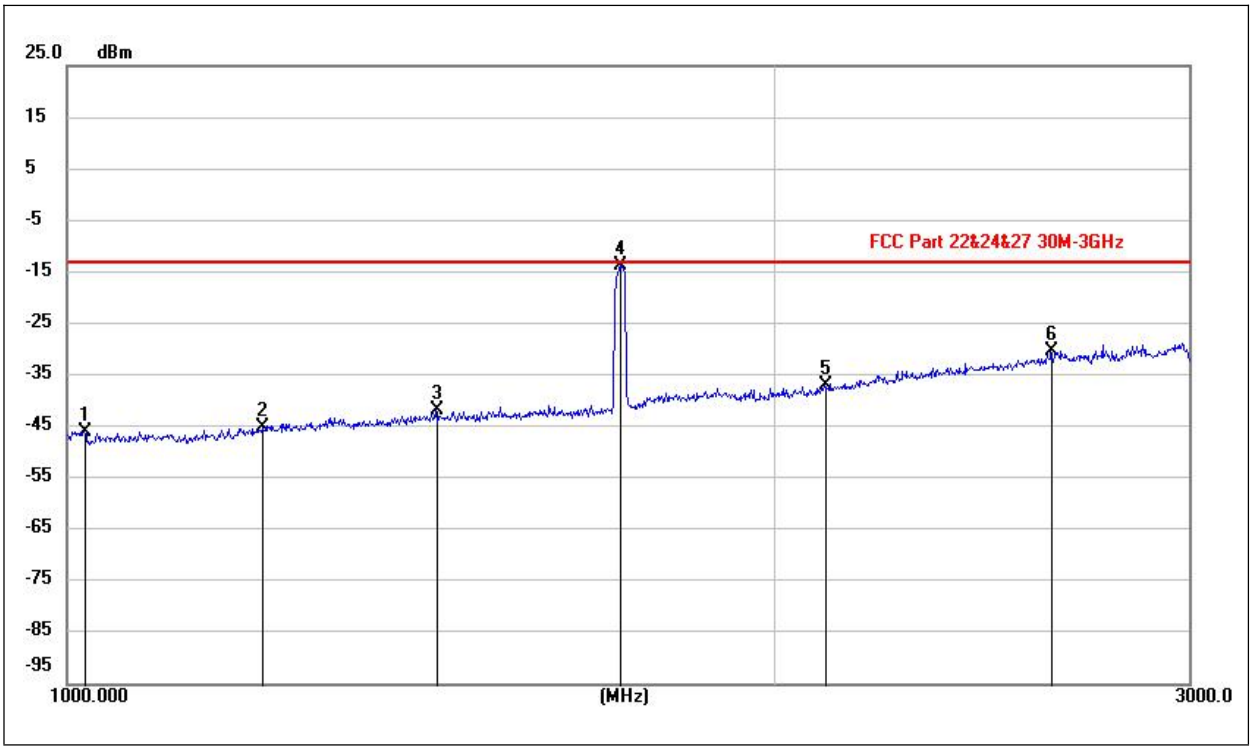
(LTE Band 4 _QPSK _ Low Channel _ 3GHz to 18GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3448.500	-51.43	6.89	-44.54	-13.00	-31.54	peak	PASS
6453.000	-63.21	11.18	-52.03	-13.00	-39.03	peak	PASS
8814.750	-63.48	14.05	-49.43	-13.00	-36.43	peak	PASS
11509.500	-65.34	14.62	-50.72	-13.00	-37.72	peak	PASS
14422.500	-67.87	20.28	-47.59	-13.00	-34.59	peak	PASS
17714.250	-70.49	25.50	-44.99	-13.00	-31.99	peak	PASS



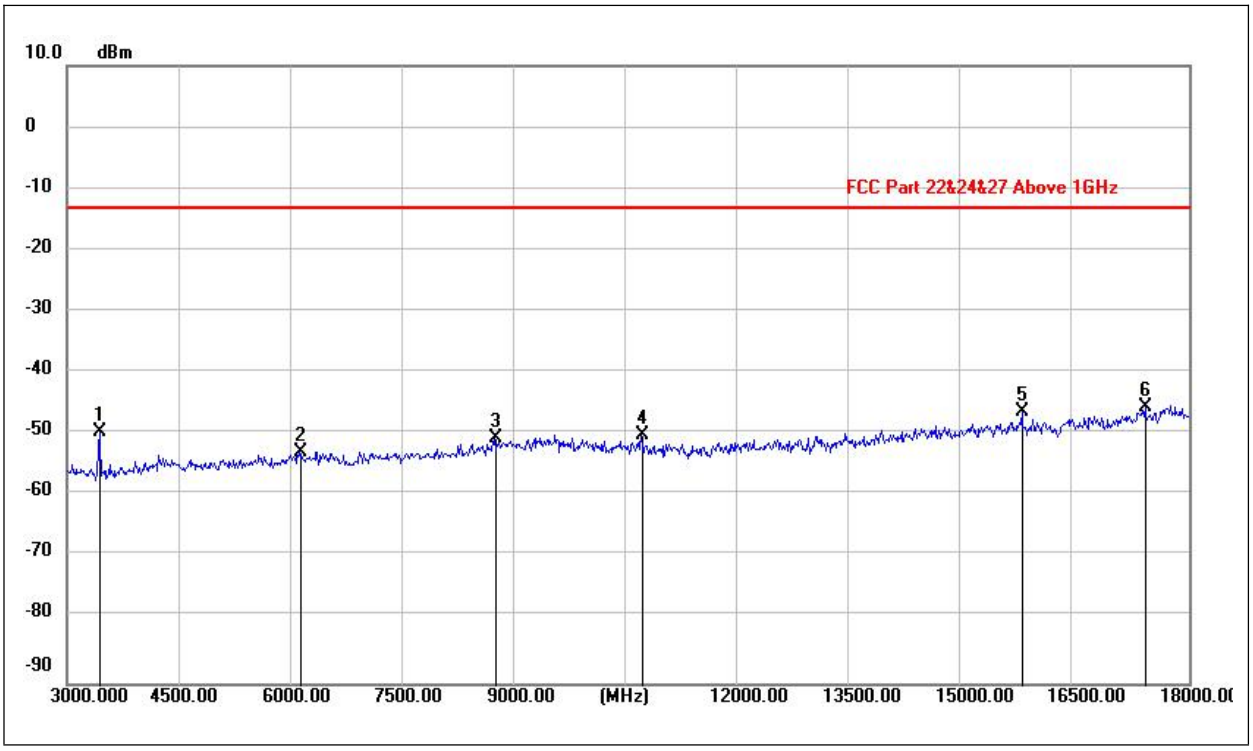
(LTE Band 4 _ QPSK _ Low Channel _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
30.5788	-71.81	19.72	-52.09	-13.00	-39.09	peak	PASS
37.9583	-75.92	21.32	-54.60	-13.00	-41.60	peak	PASS
90.0309	-86.82	24.05	-62.77	-13.00	-49.77	peak	PASS
260.9667	-82.82	25.59	-57.23	-13.00	-44.23	peak	PASS
594.6114	-85.03	34.56	-50.47	-13.00	-37.47	peak	PASS
934.2350	-84.74	38.35	-46.39	-13.00	-33.39	peak	PASS



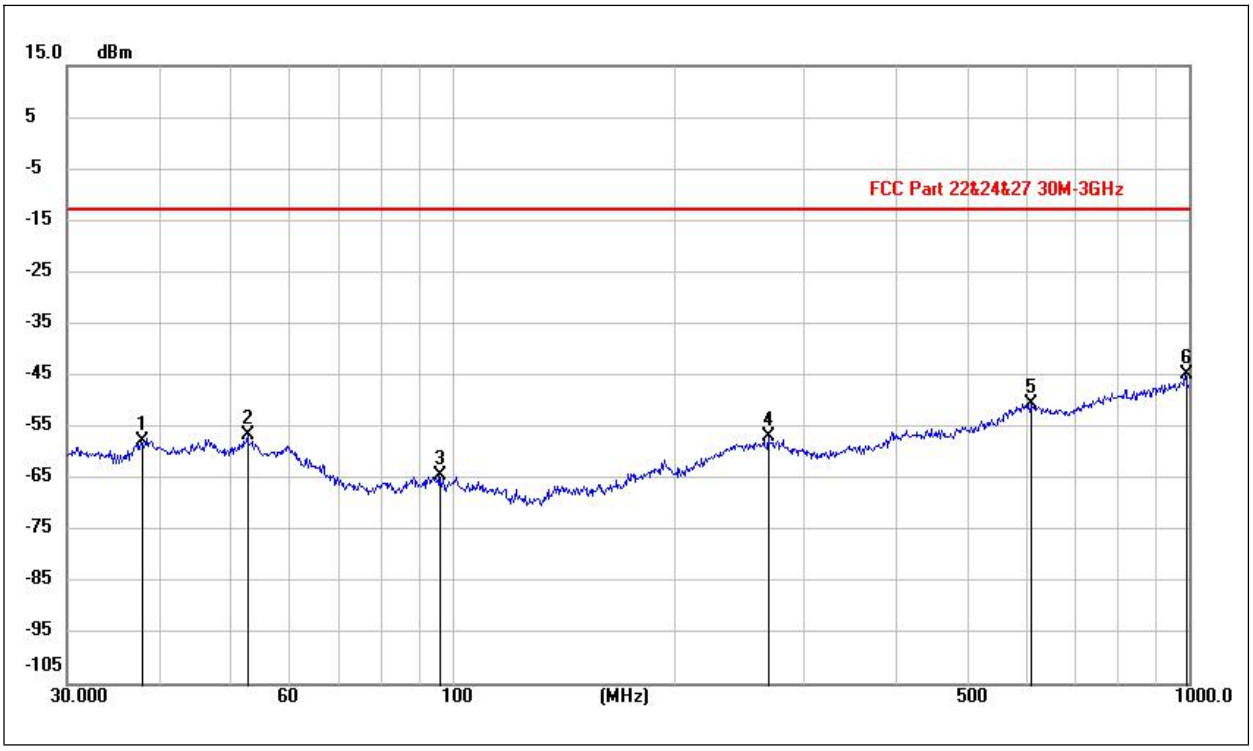
(LTE Band 4 _ QPSK _ Low Channel _ 1GHz to 3GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1017.007	-84.22	38.28	-45.94	-13.00	-32.94	peak	PASS
1211.450	-86.10	40.87	-45.23	-13.00	-32.23	peak	PASS
1436.267	-84.59	42.86	-41.73	-13.00	-28.73	peak	PASS
1719.915	-58.48	44.85	-13.63	-13.00	N/A	peak	N/A
2100.830	-85.18	48.13	-37.05	-13.00	-24.05	peak	PASS
2622.825	-83.89	53.51	-30.38	-13.00	-17.38	peak	PASS



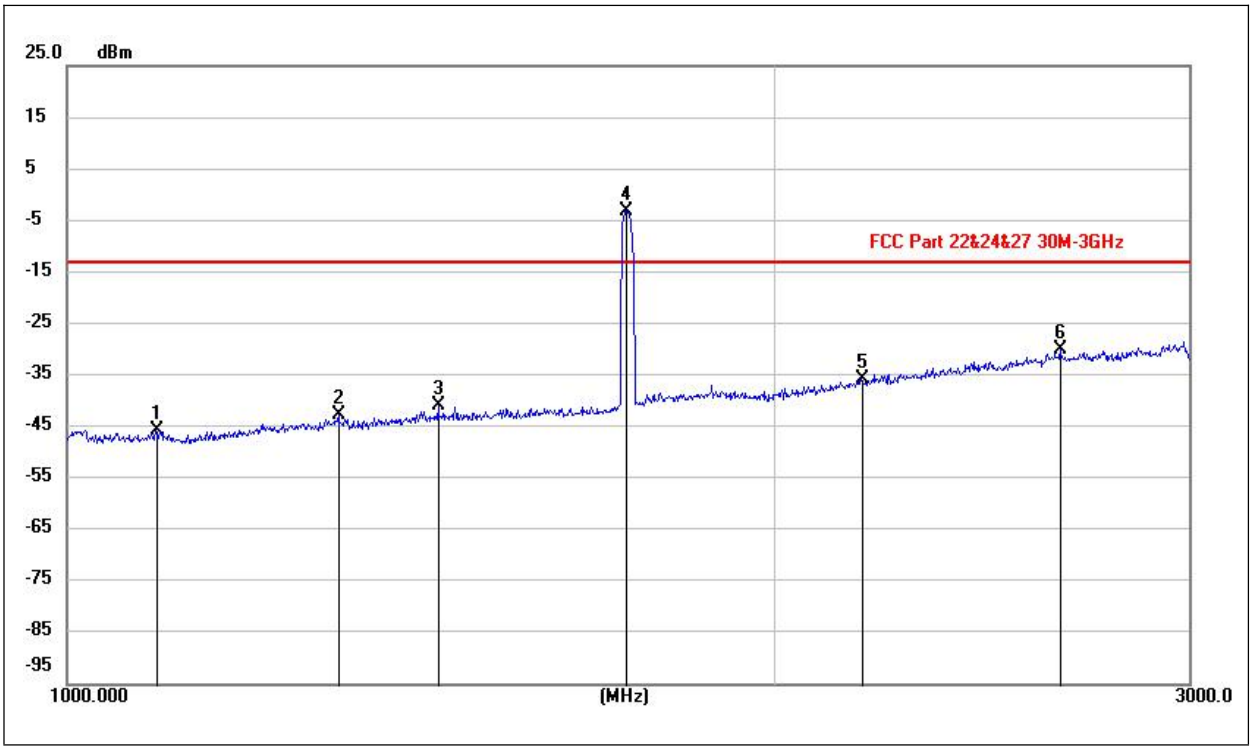
(LTE Band 4 _ QPSK _ Low Channel _ 3GHz to 18GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3439.500	-56.08	6.79	-49.29	-13.00	-36.29	peak	PASS
6119.250	-63.20	10.79	-52.41	-13.00	-39.41	peak	PASS
8727.000	-64.03	13.73	-50.30	-13.00	-37.30	peak	PASS
10693.500	-64.40	14.69	-49.71	-13.00	-36.71	peak	PASS
15765.750	-67.61	21.74	-45.87	-13.00	-32.87	peak	PASS
17427.750	-68.72	23.47	-45.25	-13.00	-32.25	peak	PASS



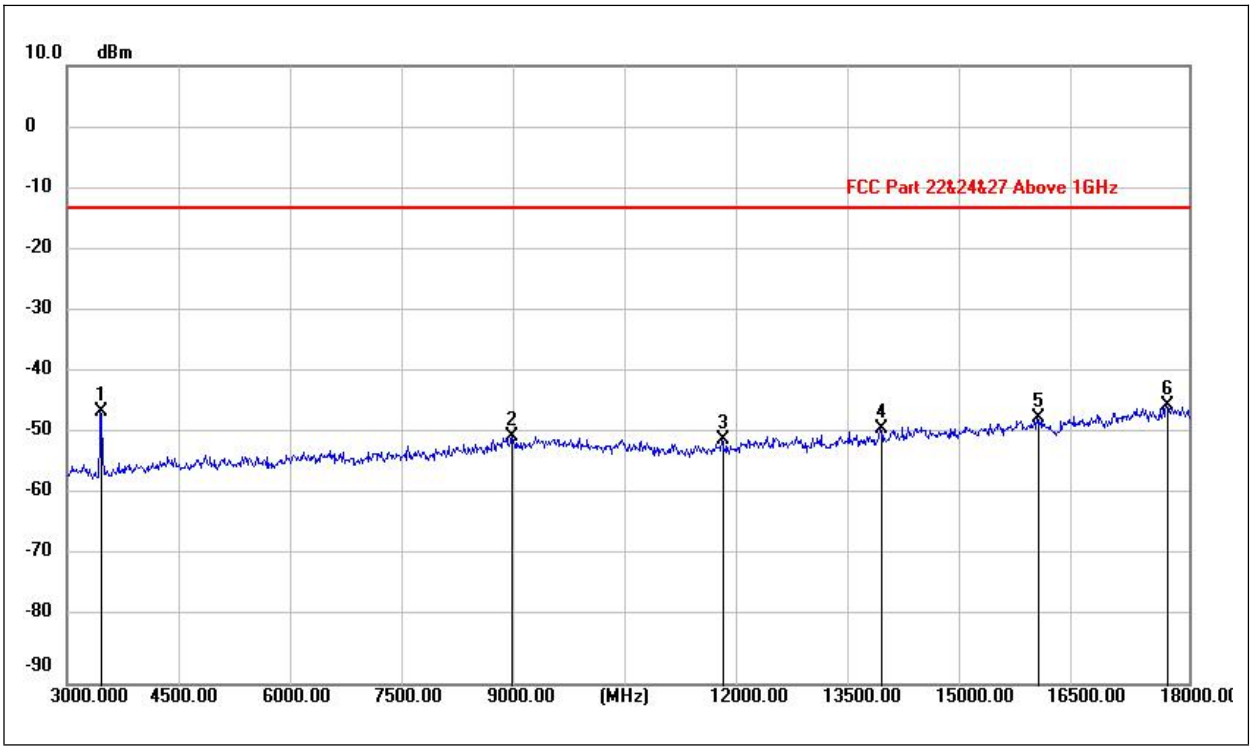
(LTE Band 4 _ QPSK_Middle Channel _ 30MHz to 1GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
37.8918	-87.29	29.40	-57.89	-13.00	-44.89	peak	PASS
52.8804	-86.72	30.07	-56.65	-13.00	-43.65	peak	PASS
96.2672	-86.77	22.26	-64.51	-13.00	-51.51	peak	PASS
268.8150	-85.78	28.98	-56.80	-13.00	-43.80	peak	PASS
610.8849	-86.18	35.50	-50.68	-13.00	-37.68	peak	PASS
991.7934	-83.82	39.12	-44.70	-13.00	-31.70	peak	PASS



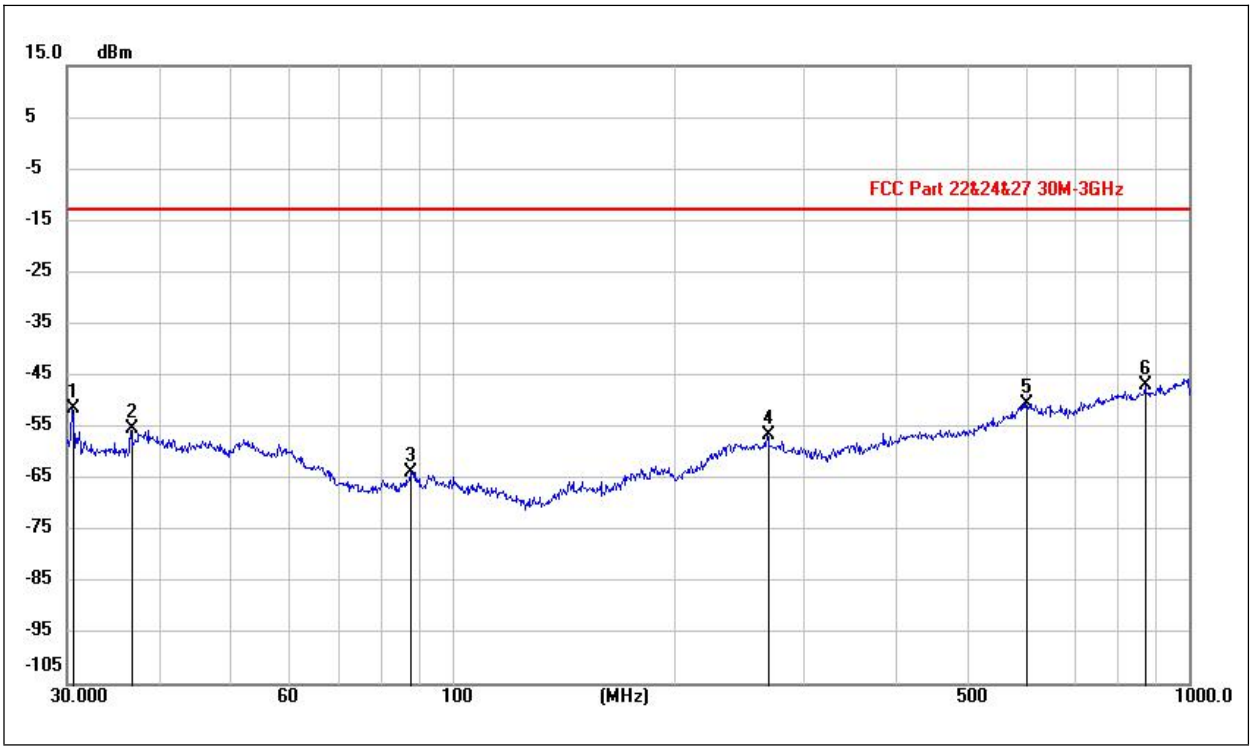
(LTE Band 4 _ QPSK_Middle Channel _ 1GHz to 3GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1090.968	-85.98	40.14	-45.84	-13.00	-32.84	peak	PASS
1305.275	-84.90	42.23	-42.67	-13.00	-29.67	peak	PASS
1440.138	-84.15	43.28	-40.87	-13.00	-27.87	peak	PASS
1729.009	-48.42	45.34	-3.08	-13.00	N/A	peak	N/A
2178.630	-85.02	49.27	-35.75	-13.00	-22.75	peak	PASS
2646.705	-84.10	53.98	-30.12	-13.00	-17.12	peak	PASS



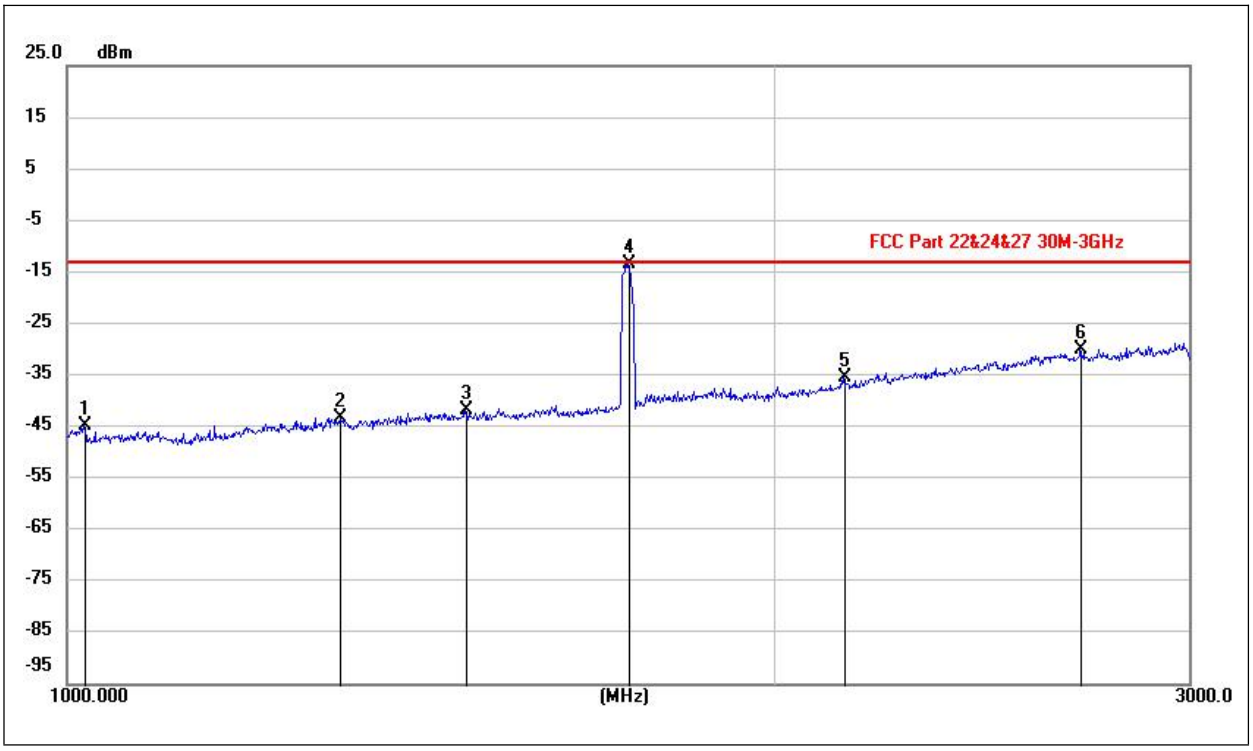
(LTE Band 4 _QPSK_ Middle Channel _ 3GHz to 18GHz _ Horizontal)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3456.750	-52.67	6.89	-45.78	-13.00	-32.78	peak	PASS
8955.000	-64.46	14.62	-49.84	-13.00	-36.84	peak	PASS
11762.250	-65.39	15.05	-50.34	-13.00	-37.34	peak	PASS
13887.750	-67.44	18.69	-48.75	-13.00	-35.75	peak	PASS
15988.500	-69.03	22.15	-46.88	-13.00	-33.88	peak	PASS
17702.250	-70.27	25.27	-45.00	-13.00	-32.00	peak	PASS



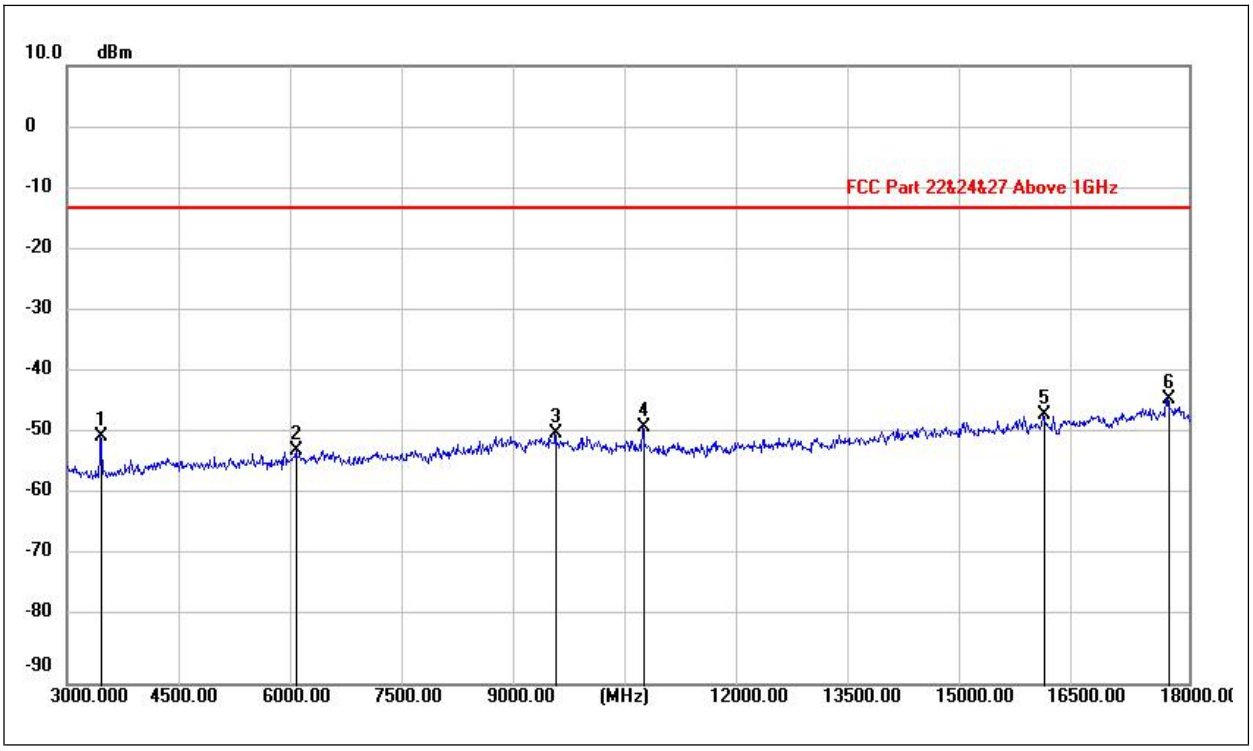
(LTE Band 4 _QPSK_ Middle Channel _ 30MHz to 1GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
30.5467	-71.05	19.71	-51.34	-13.00	-38.34	peak	PASS
36.6889	-75.08	19.53	-55.55	-13.00	-42.55	peak	PASS
88.0020	-87.62	23.87	-63.75	-13.00	-50.75	peak	PASS
267.7332	-82.50	25.86	-56.64	-13.00	-43.64	peak	PASS
600.5835	-84.86	34.36	-50.50	-13.00	-37.50	peak	PASS
873.5606	-84.64	37.69	-46.95	-13.00	-33.95	peak	PASS



(LTE Band 4 _QPSK_ Middle Channel _ 1GHz to 3GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
1017.007	-83.08	38.28	-44.80	-13.00	-31.80	peak	PASS
1307.427	-84.84	41.65	-43.19	-13.00	-30.19	peak	PASS
1477.154	-85.42	43.74	-41.68	-13.00	-28.68	peak	PASS
1732.146	-58.64	45.30	-13.34	-13.00	N/A	peak	N/A
2140.905	-84.32	48.79	-35.53	-13.00	-22.53	peak	PASS
2698.823	-83.49	53.52	-29.97	-13.00	-16.97	peak	PASS



(LTE Band 4 _QPSK_ Middle Channel _ 3GHz to 18GHz _ Vertical)

Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Det.	Verdict
3455.250	-56.78	6.80	-49.98	-13.00	-36.98	peak	PASS
6065.250	-63.53	11.30	-52.23	-13.00	-39.23	peak	PASS
9526.500	-64.11	14.60	-49.51	-13.00	-36.51	peak	PASS
10698.750	-63.10	14.68	-48.42	-13.00	-35.42	peak	PASS
16052.250	-68.52	22.15	-46.37	-13.00	-33.37	peak	PASS
17723.250	-68.33	24.56	-43.77	-13.00	-30.77	peak	PASS