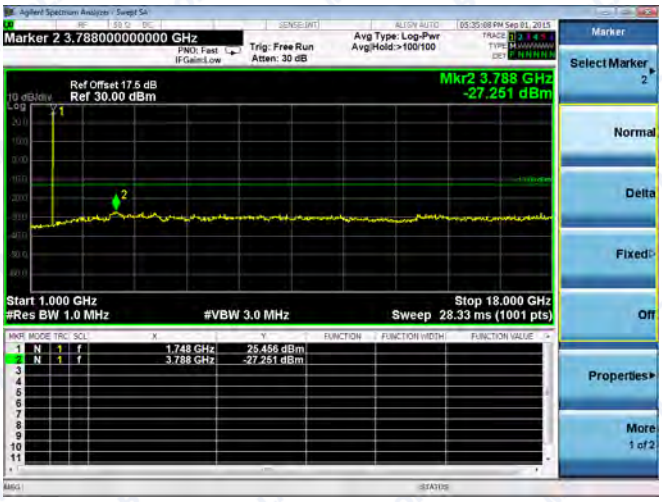
LTE Band 4 15MHz BW High Channel
QPSK
 
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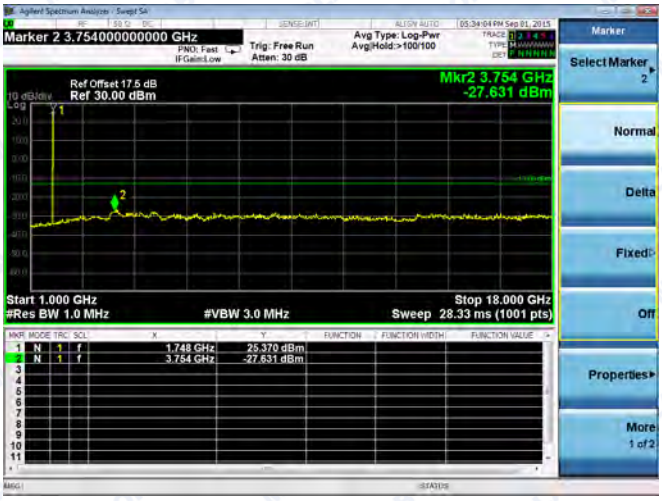
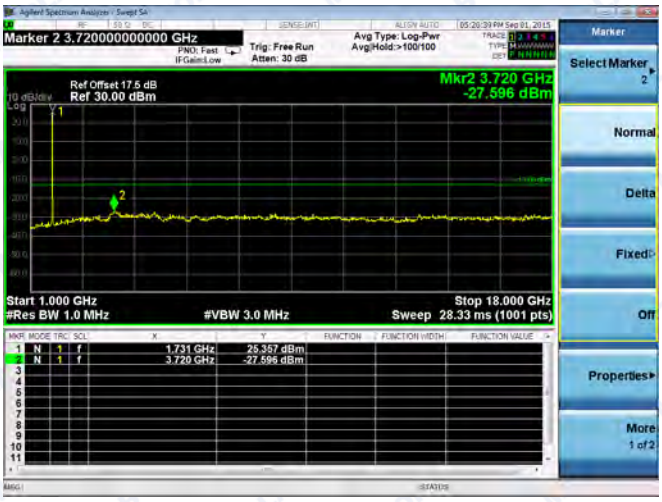
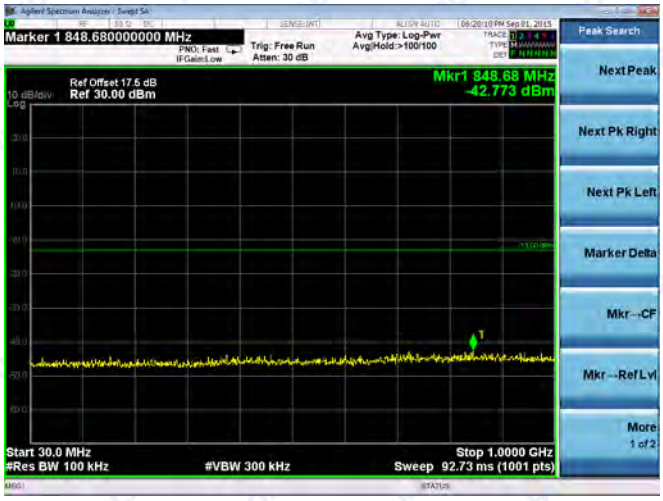
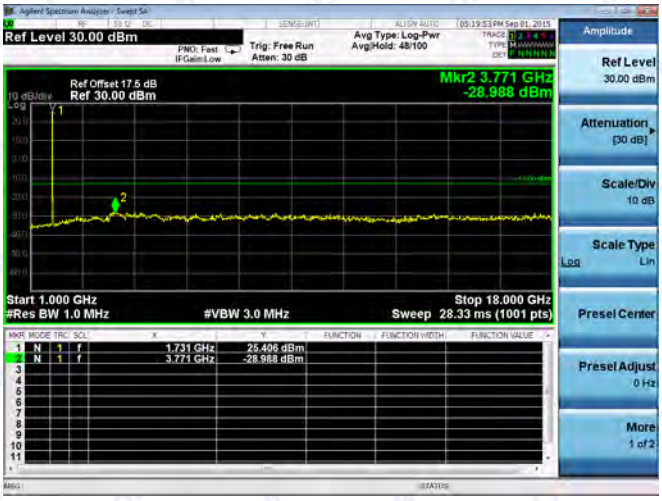
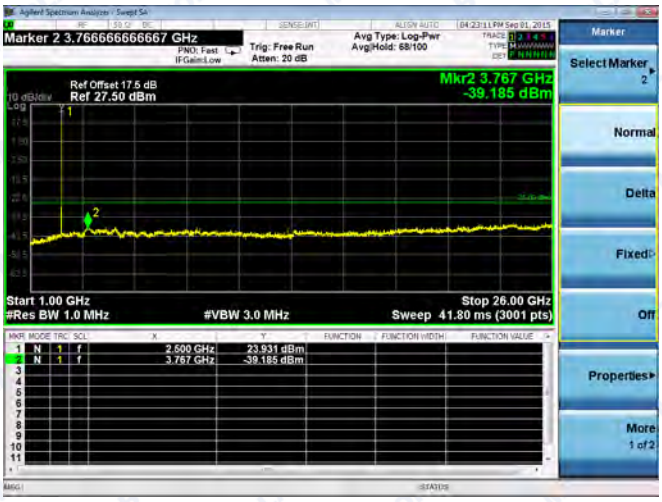
 

LTE Band 4 20MHz BW High Channel	
QPSK	
	
16QAM	
	

LTE Band 7 5MHz BW Low Channel	
QPSK	
	
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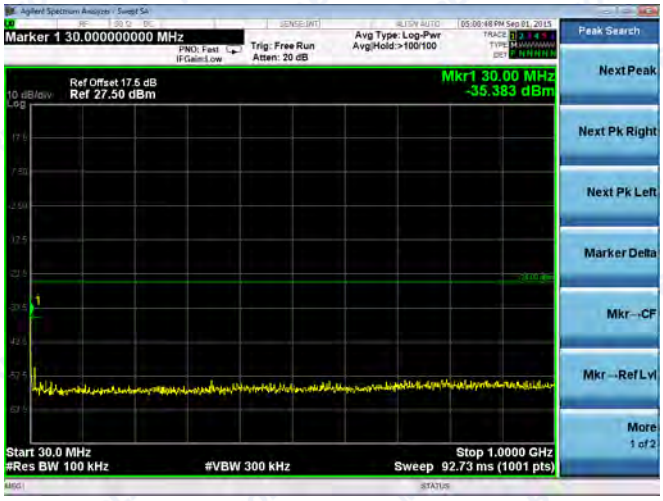
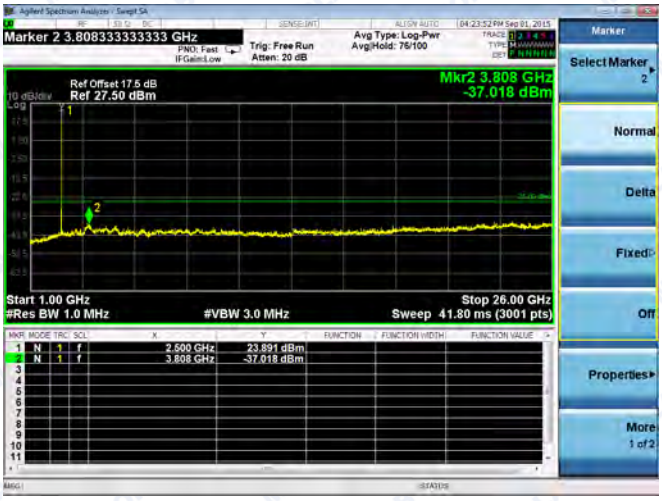
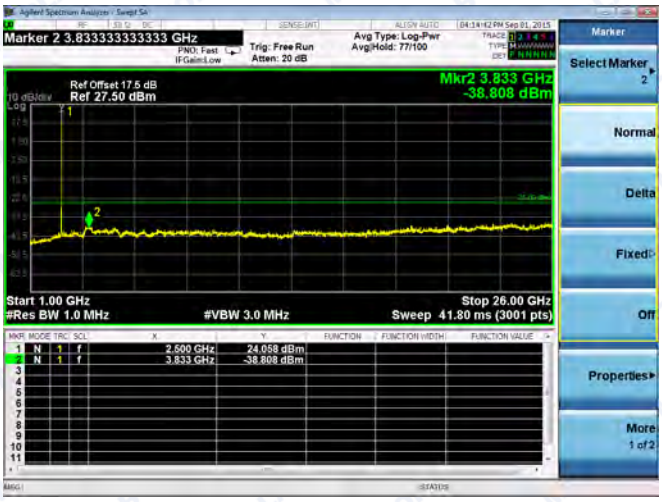
	

LTE Band 7 10MHz BW Low Channel	
QPSK	
	
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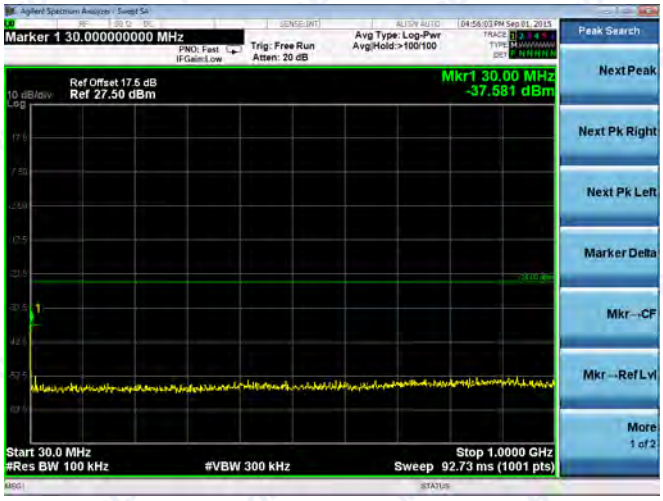
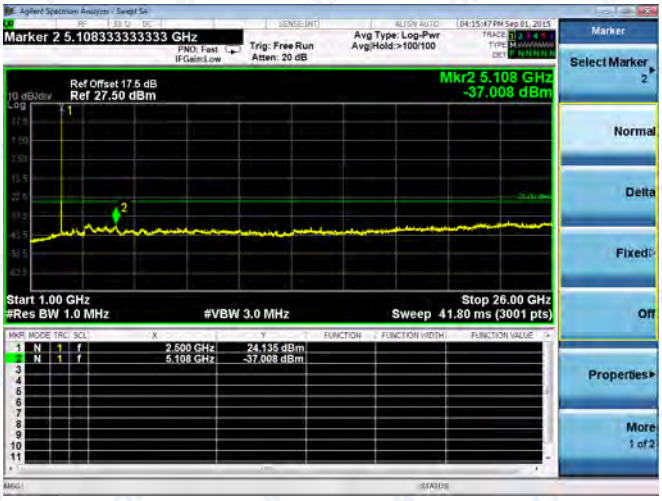
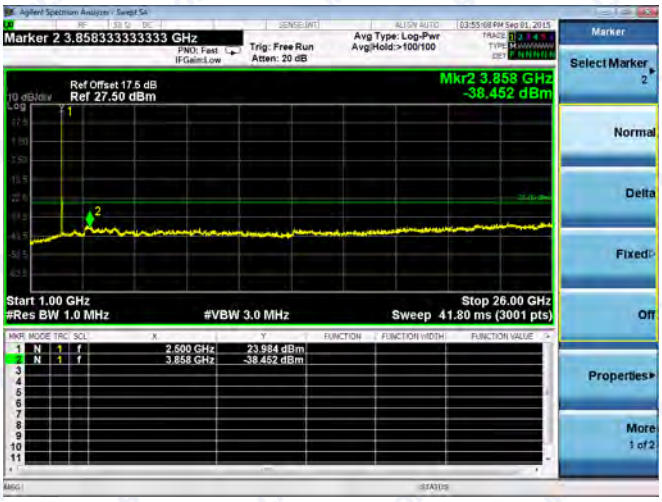
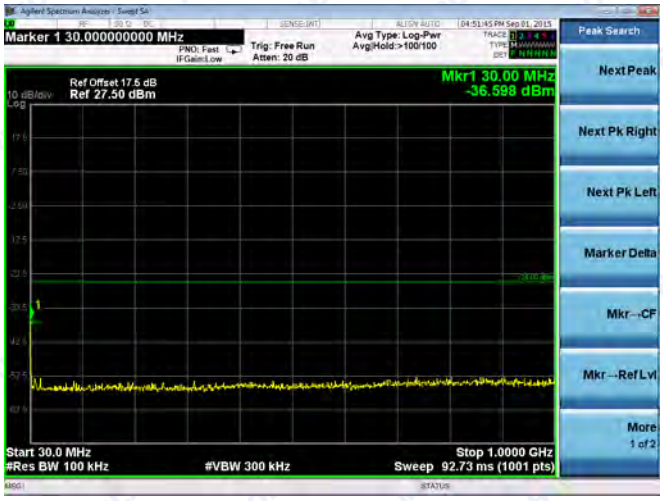
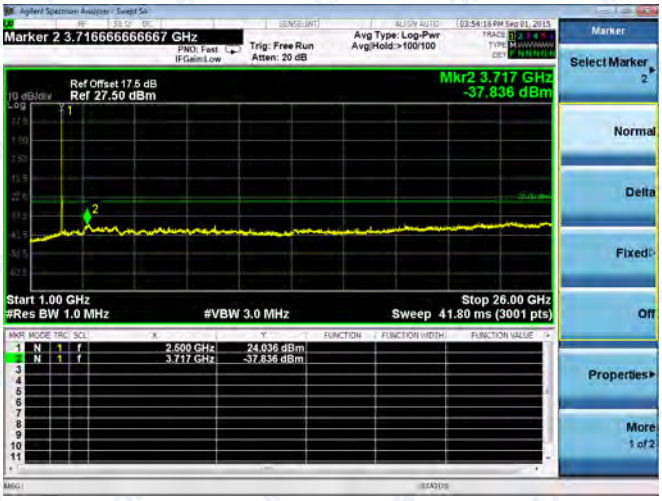
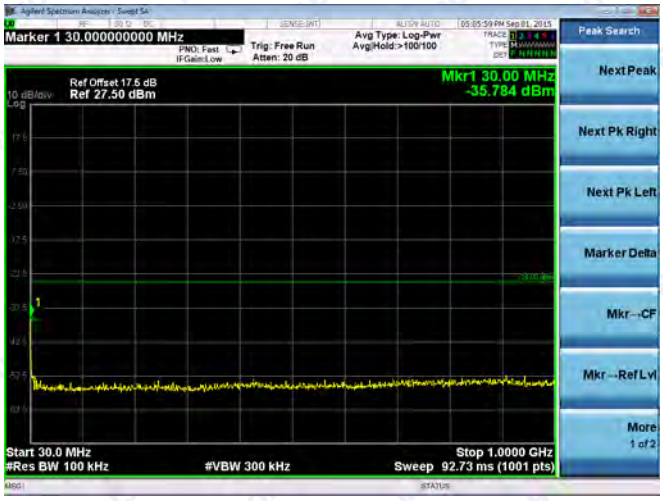
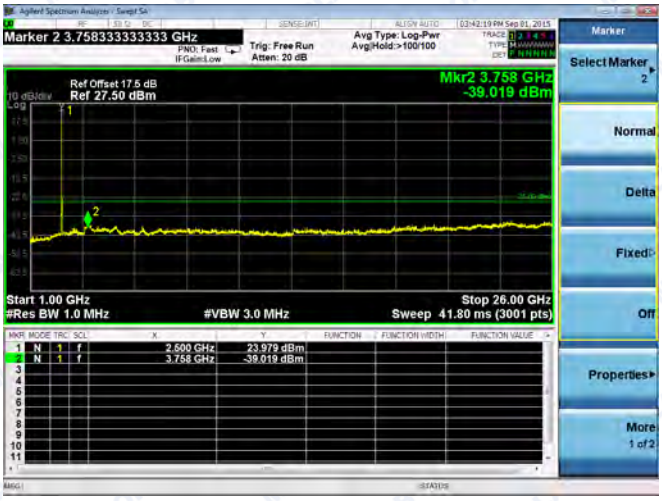
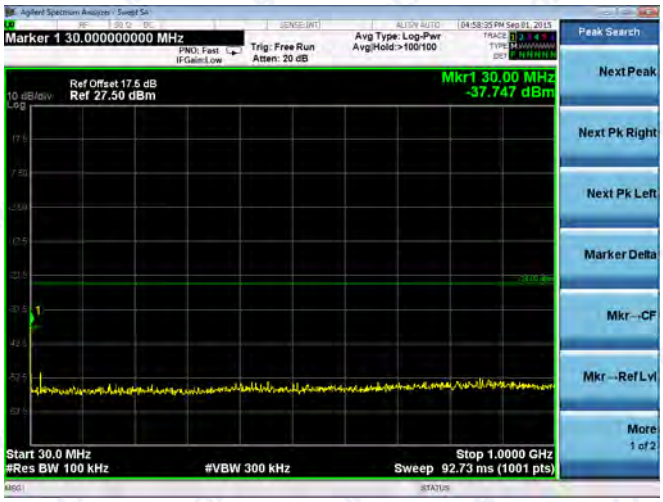
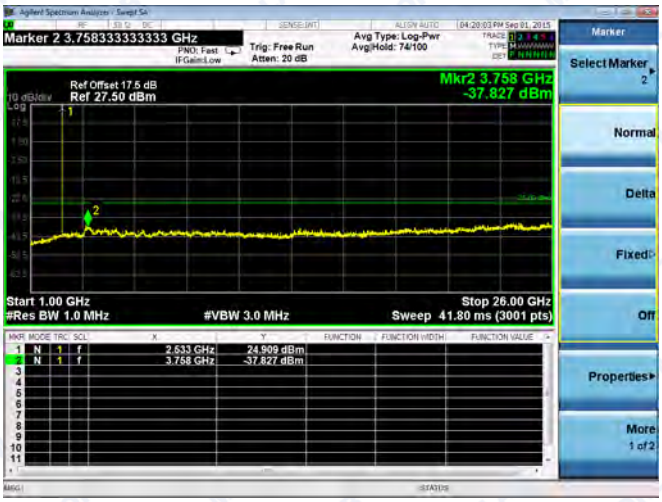
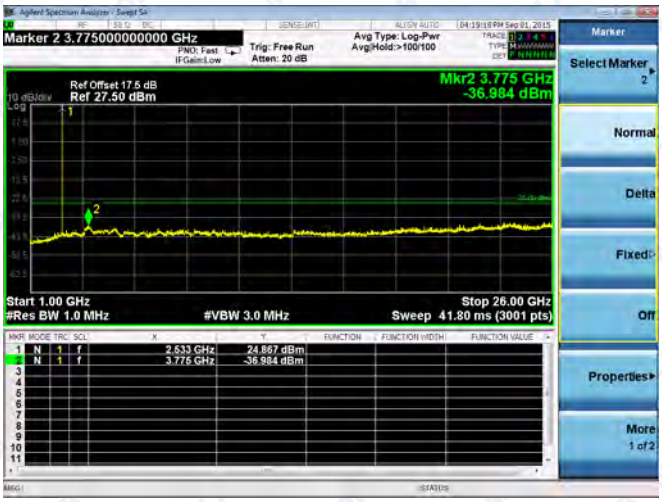
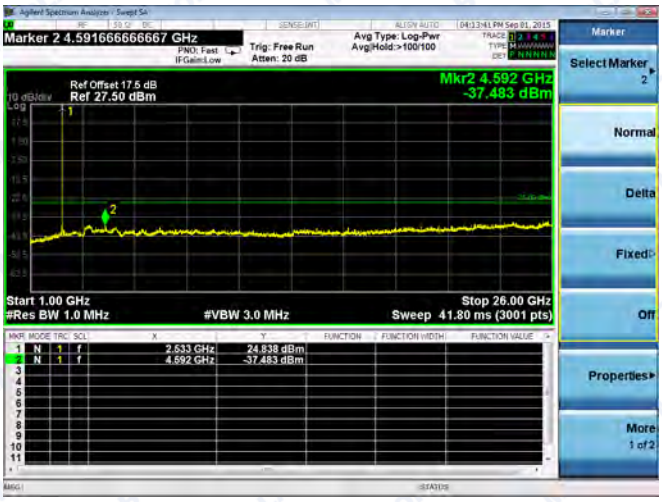
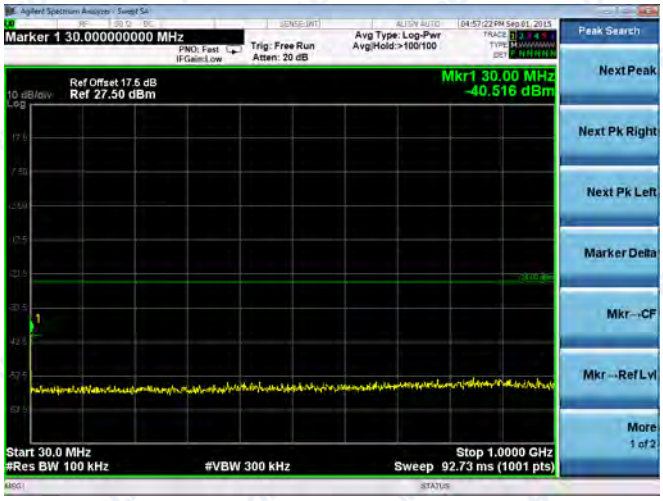
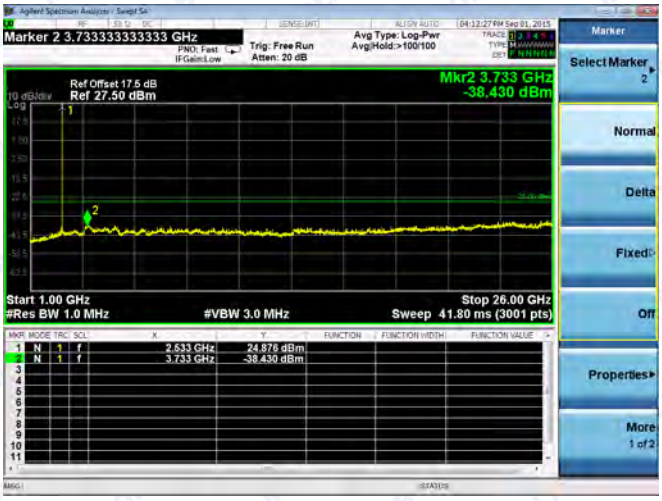
	

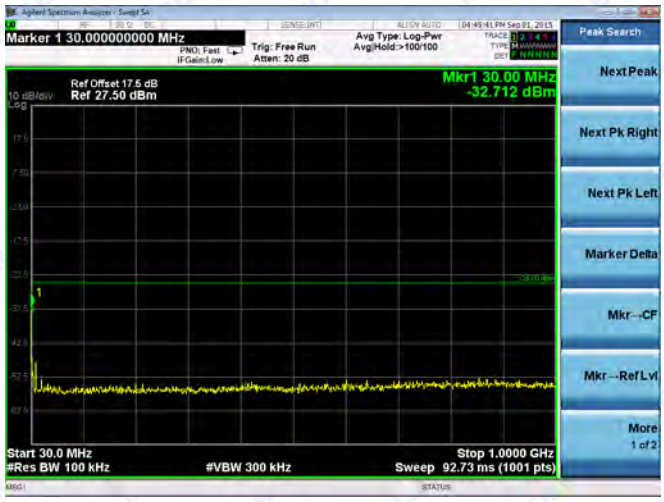
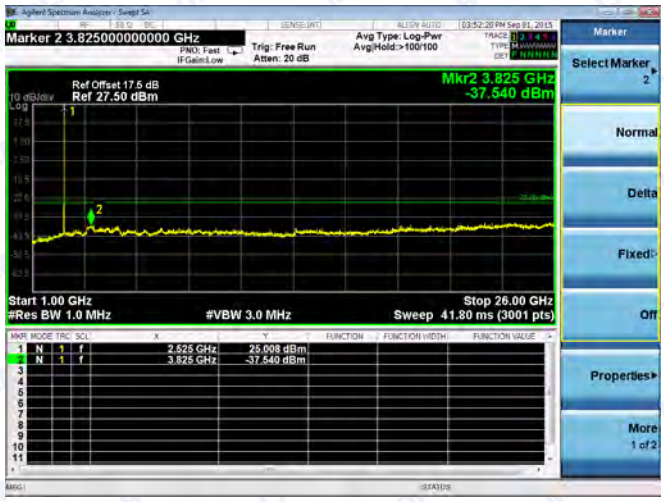
LTE Band 7 15MHz BW Low Channel	
QPSK	
	
16QAM	
	

LTE Band 7 20MHz BW Low Channel	
QPSK	
	
16QAM	
	

Middle channel:

LTE Band 7 5MHz BW Mid Channel	
QPSK	
	
16QAM	
	

LTE Band 7 10MHz BW Mid Channel	
QPSK	
	
16QAM	
	

LTE Band 7 15MHz BW Mid Channel	
QPSK	
	
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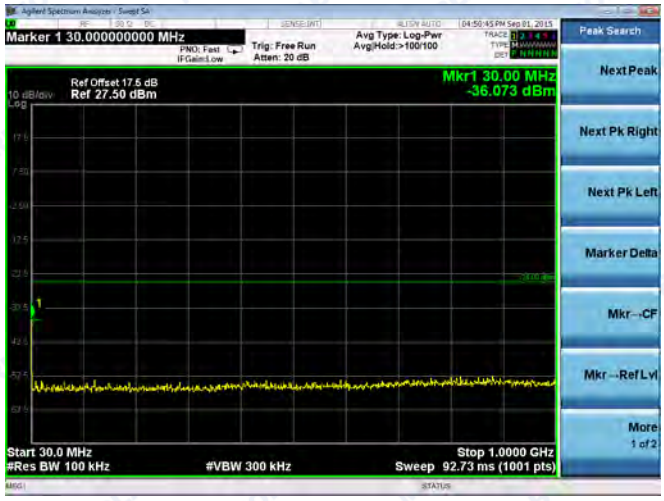
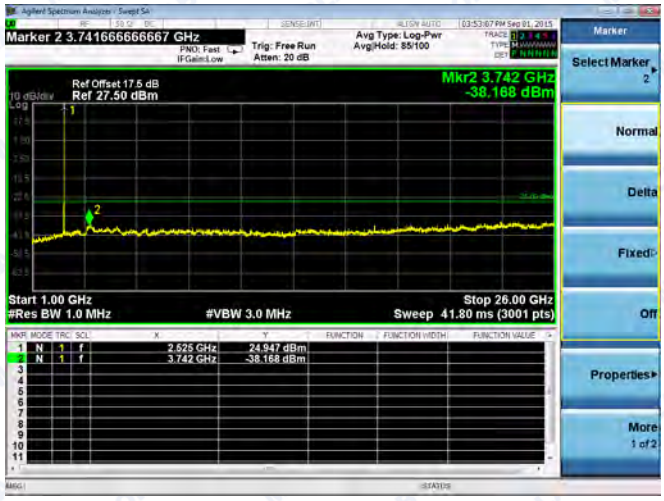
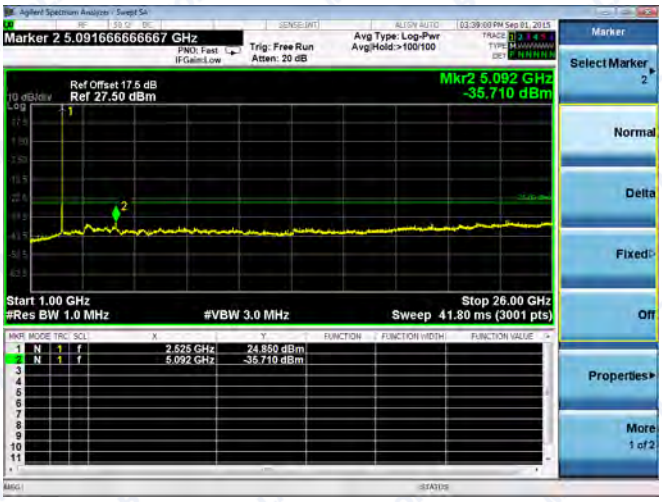
	

LTE Band 7 20MHz BW Mid Channel	
QPSK	
	
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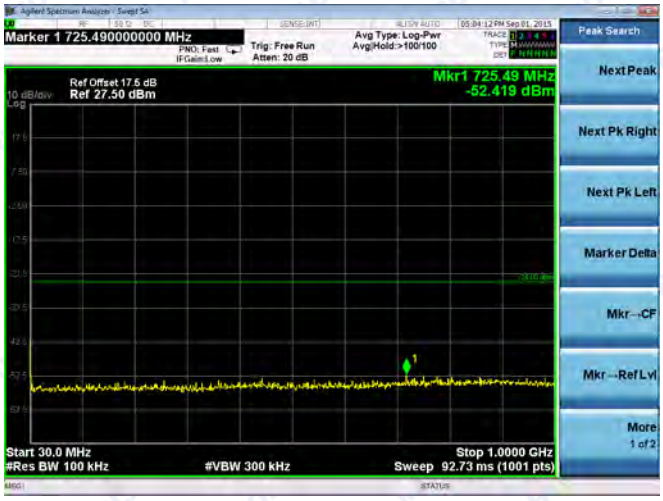
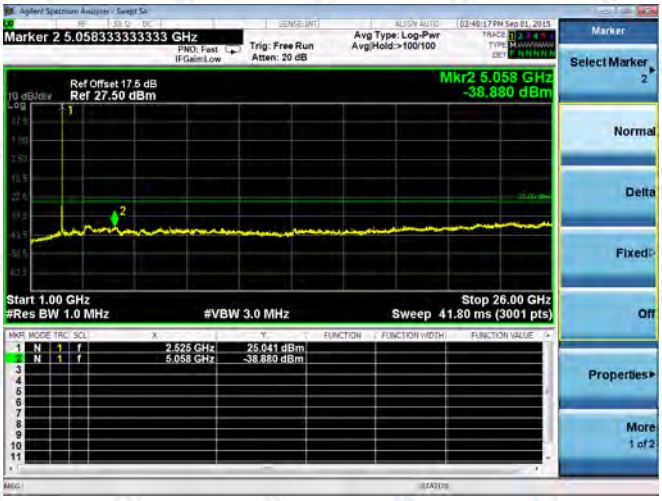
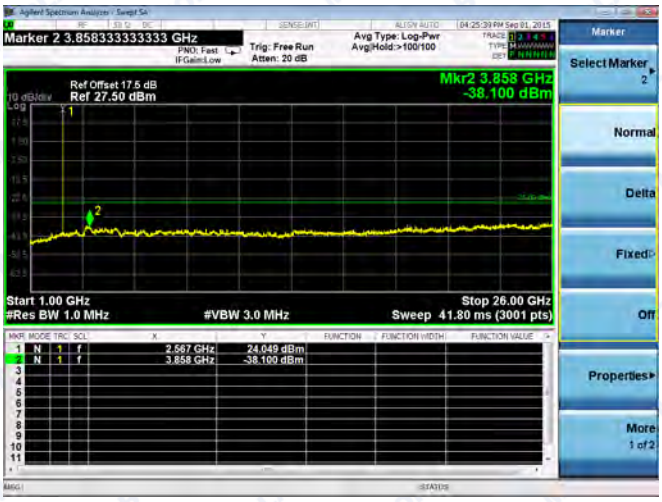
	

LTE Band 7 5MHz BW High Channel	
QPSK	
	
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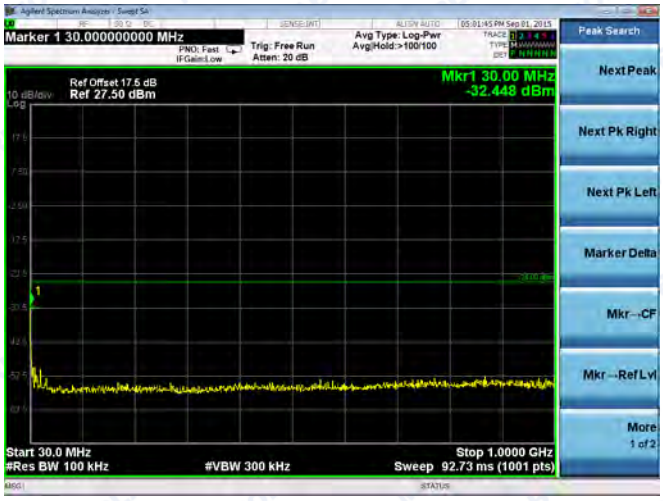
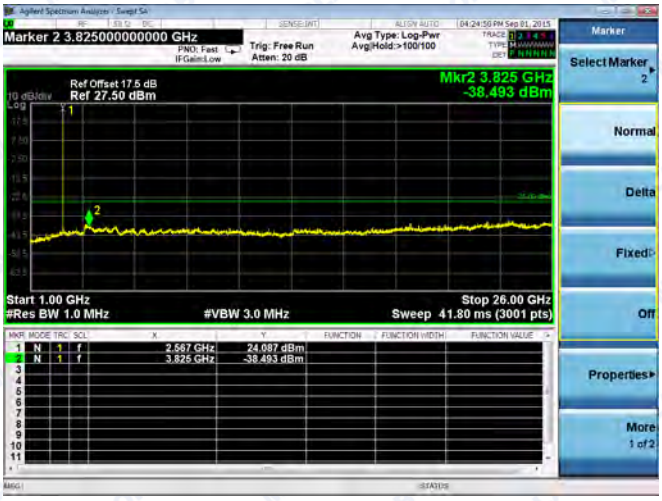
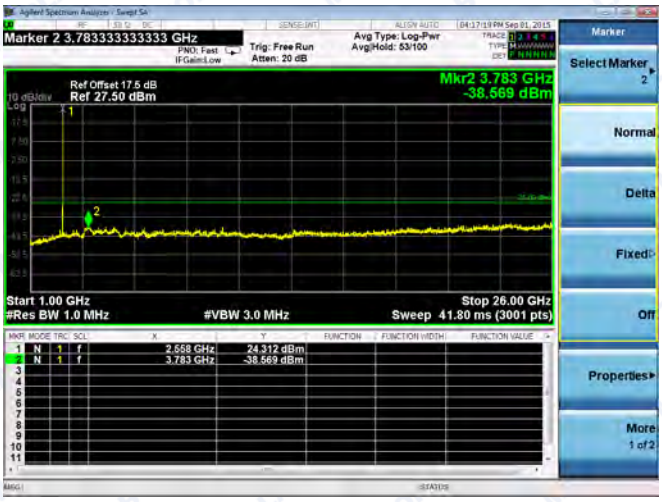
	

LTE Band 7 10MHz BW High Channel
QPSK
 
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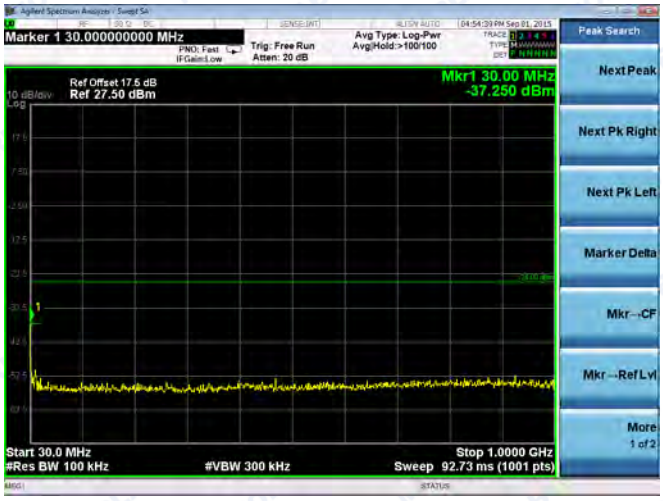
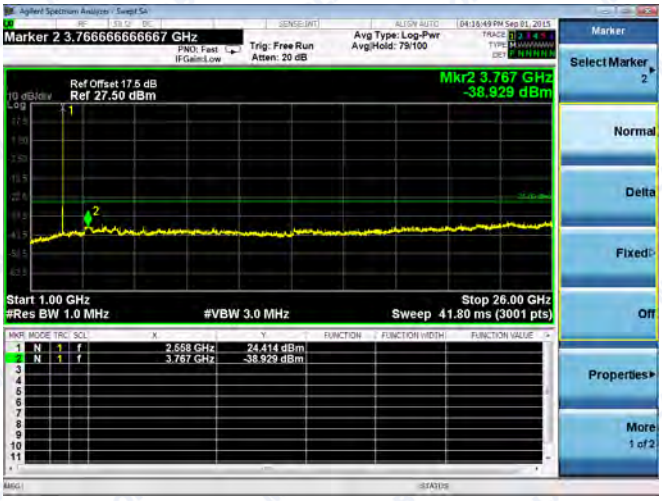
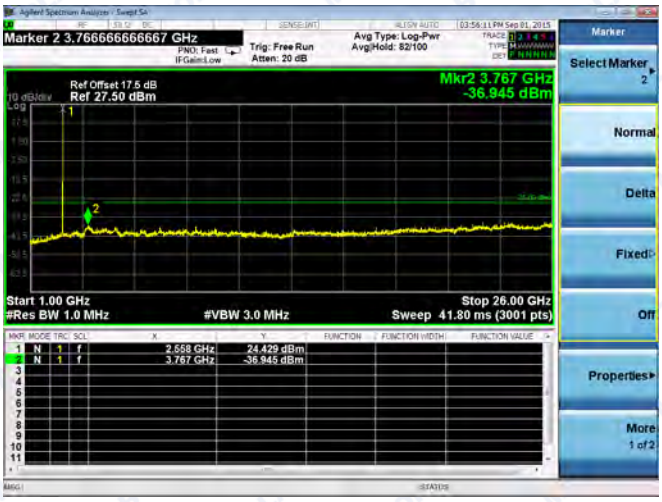
 

LTE Band 7 15MHz BW High Channel	
QPSK	
	
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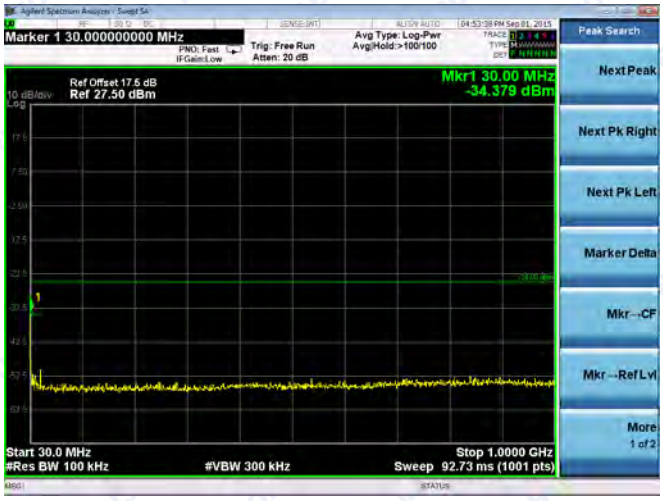
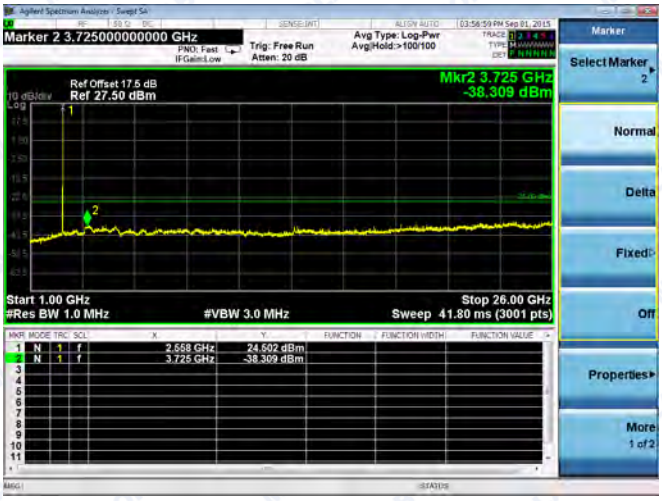
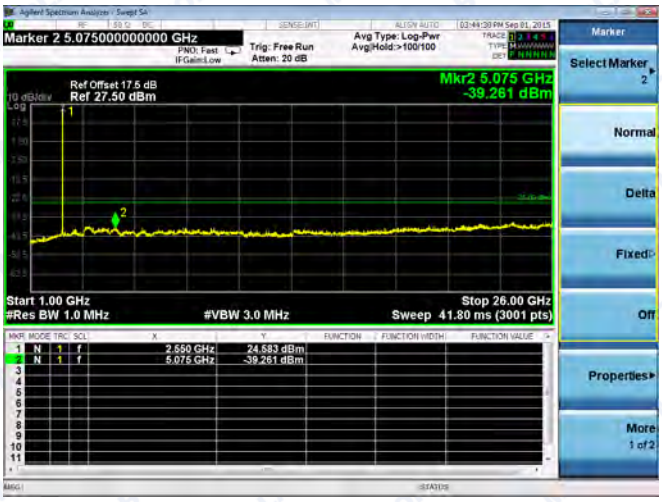
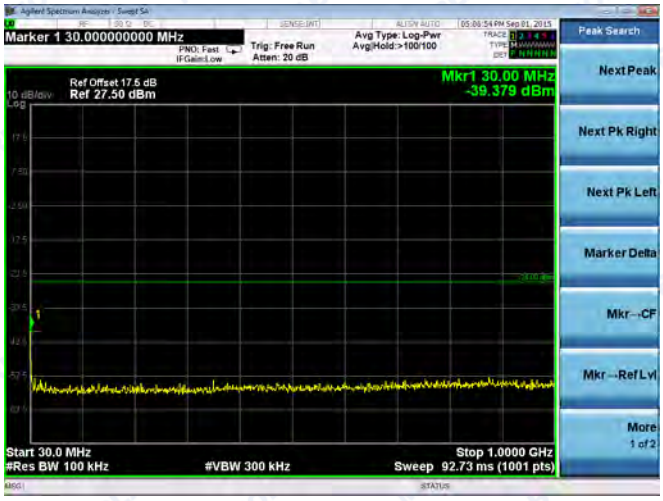
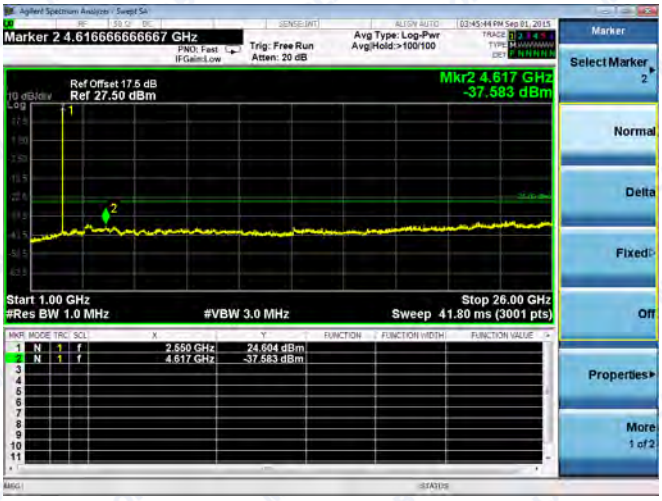
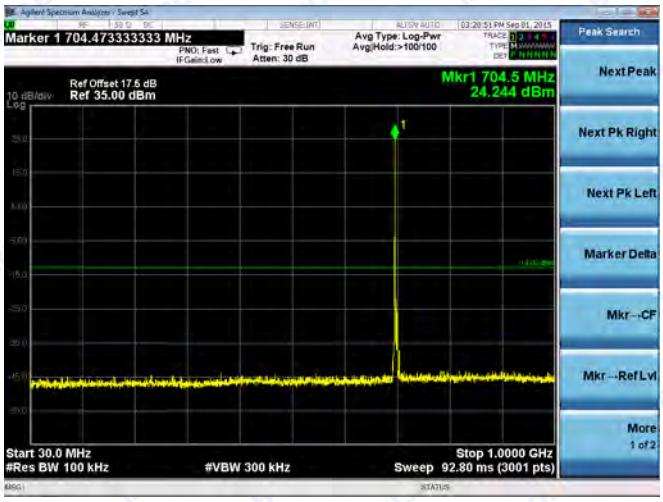
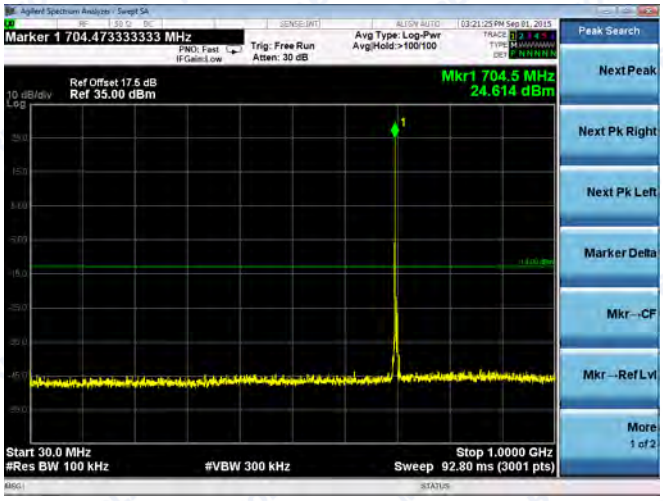
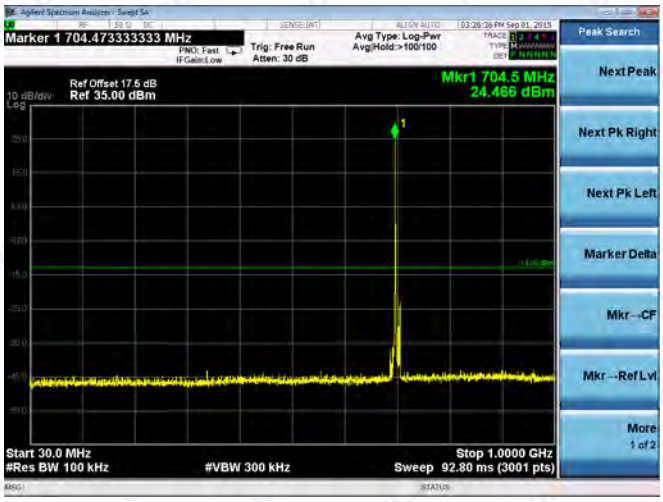
	

LTE Band 7 20MHz BW High Channel	
QPSK	
	
16QAM	
	

LTE Band 17 5MHz BW Low Channel	
QPSK	
	
16QAM	
	

LTE Band 17 10MHz BW Low Channel	
QPSK	
	
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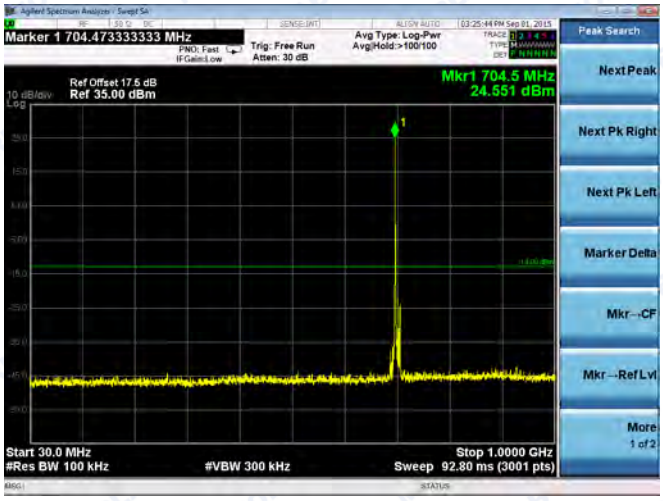
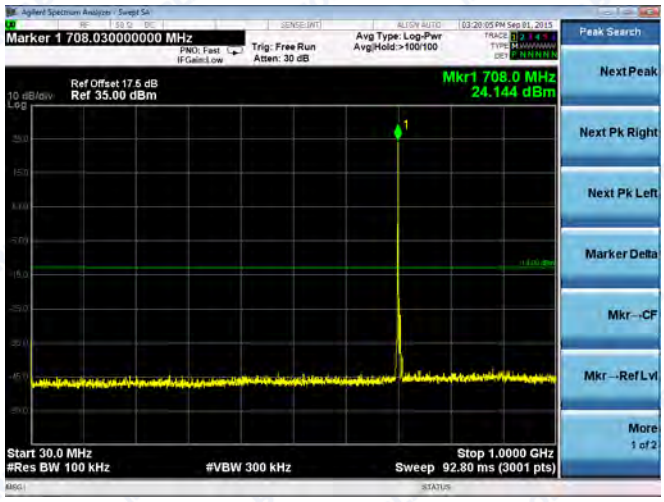
	

LTE Band 17 5MHz BW Mid Channel	
QPSK	
	
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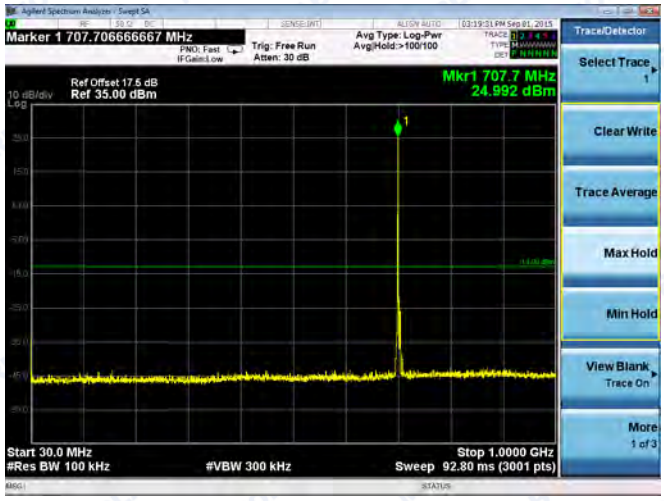
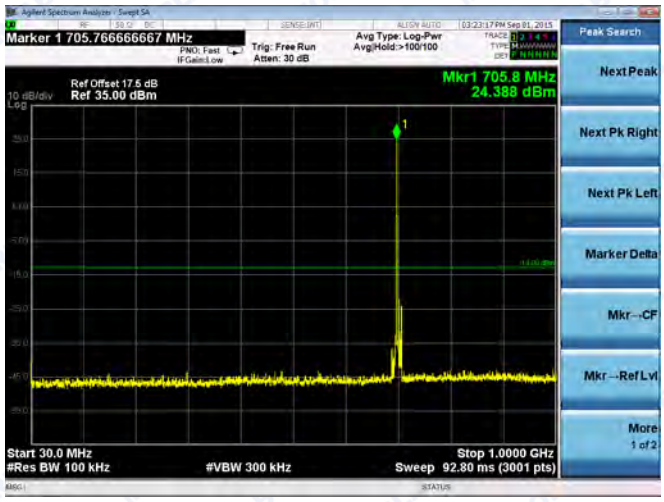
	

LTE Band 17 10MHz BW Mid Channel	
QPSK	
	
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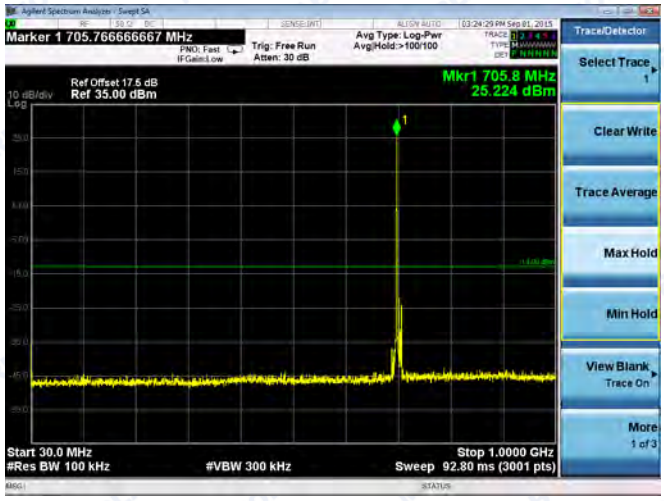
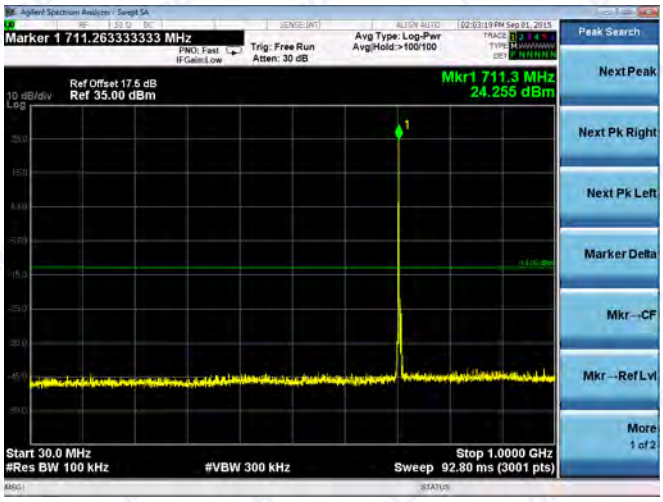
	

LTE Band 17 5MHz BW High Channel	
QPSK	
	
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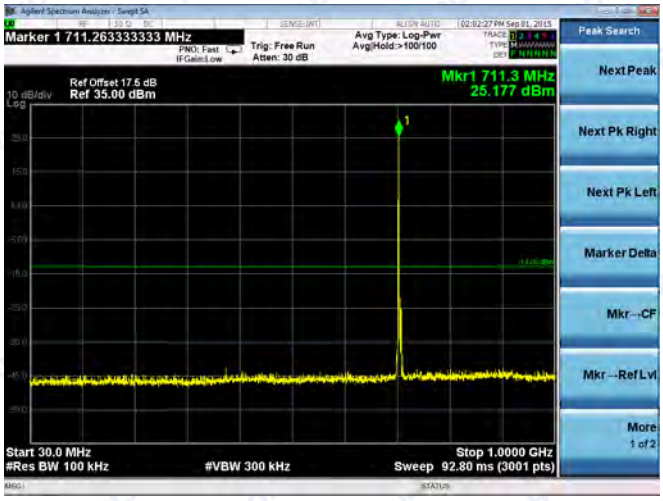
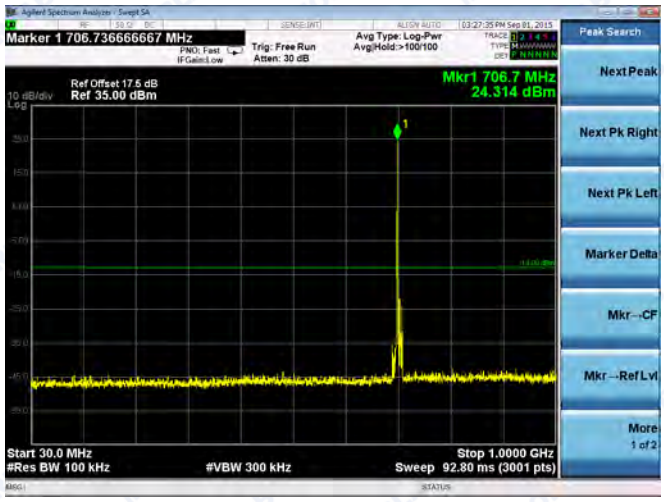
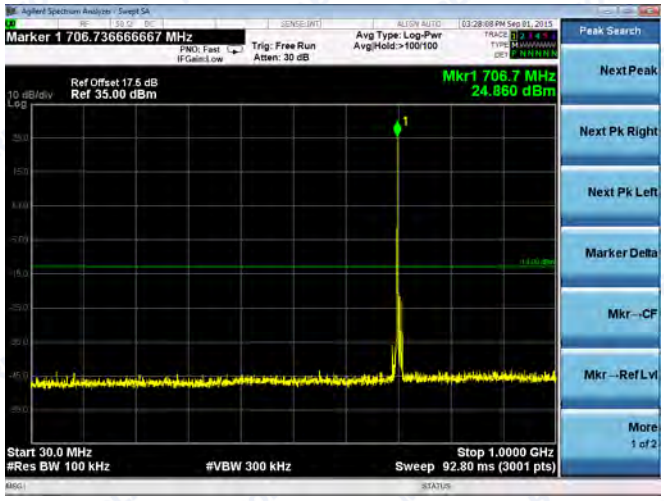
	

LTE Band 17 10MHz BW High Channel
QPSK



16QAM



2.6 Band Edge

2.6.1 Requirement

According to FCC section 27.53(g) (h), (g) For operations in the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

(h) For operations in the 1710–1755 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 + 10 log10(P) dB.

According to FCC section 27.53(m) (4), (m) (4) For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees

2.6.2 Test Description

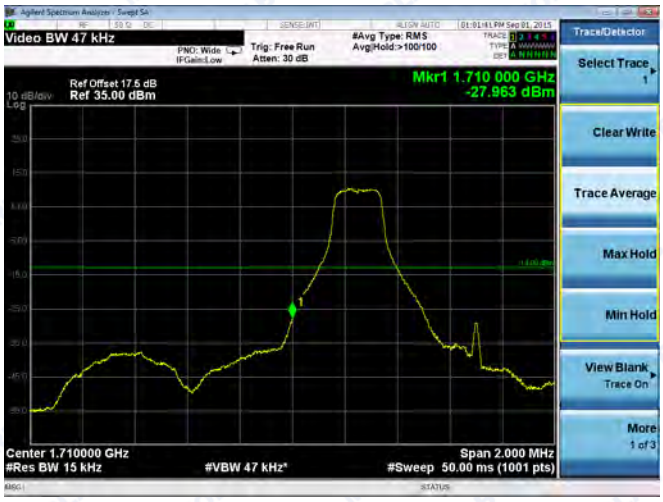
See section 2.1.2 of this report.

2.6.3 Test Result

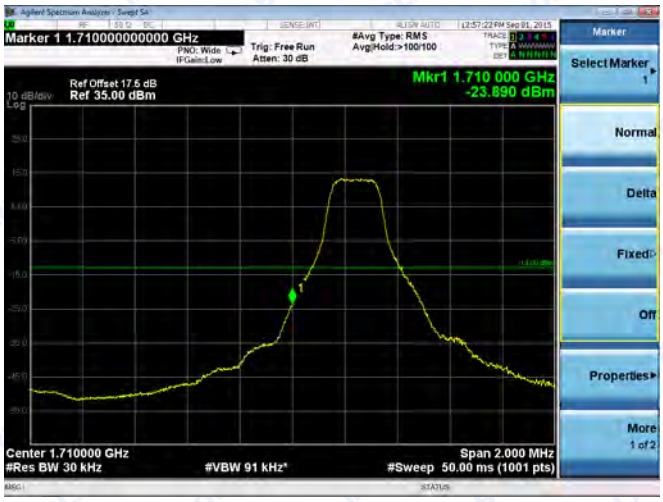
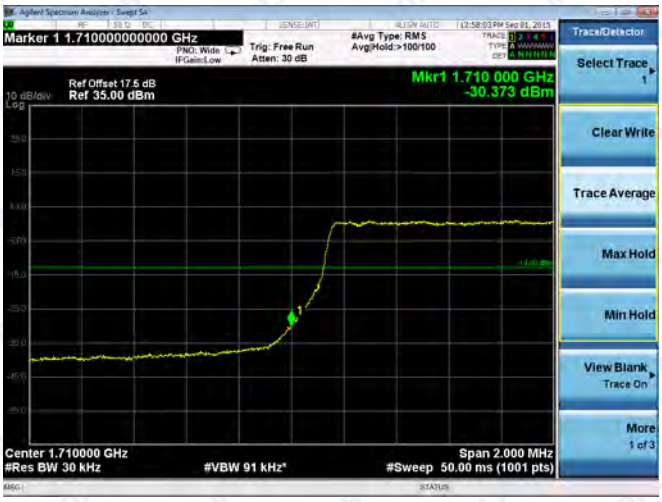
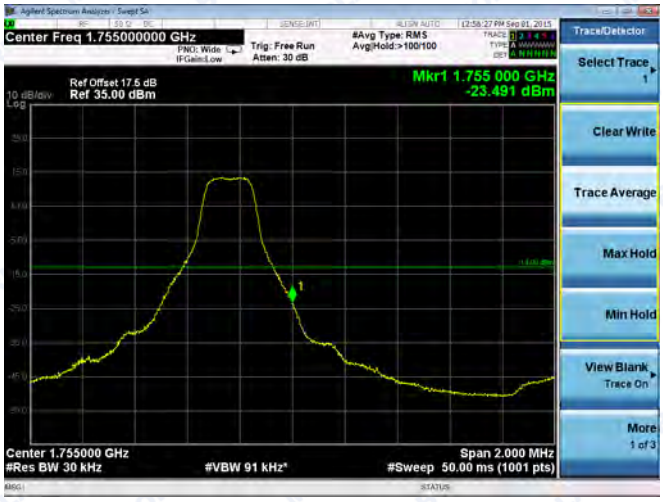
The center frequency of spectrum is the band edge frequency and span is 2MHz, Record the max trace into the test report.

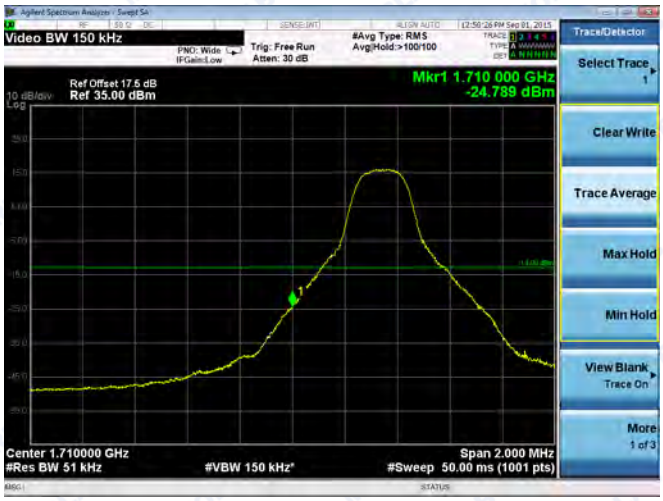
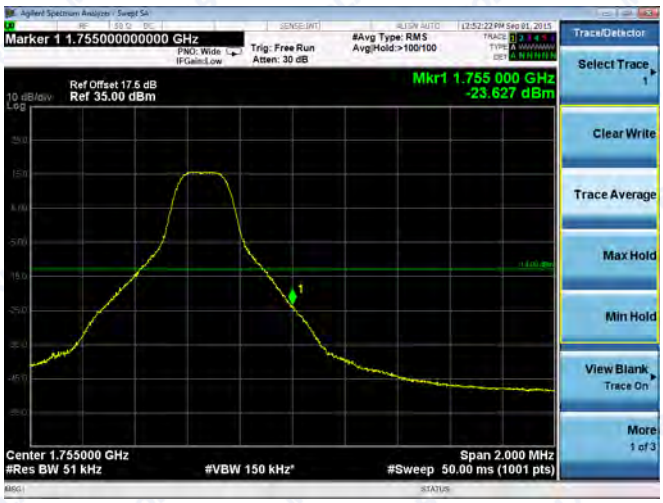
PASS. See the attached plots.

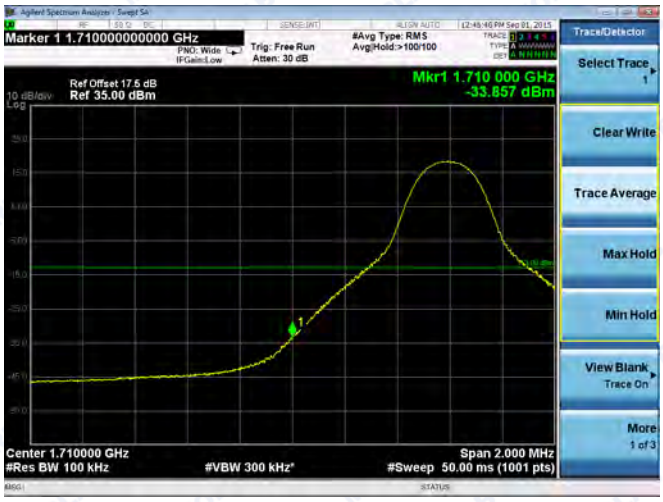
LTE Band 4							
Channel Bandwidth: 1.4MHz							
Channel	19957	RB Size 1	RB Offset 0	Channel	20393	RB Size 6	RB Offset 0

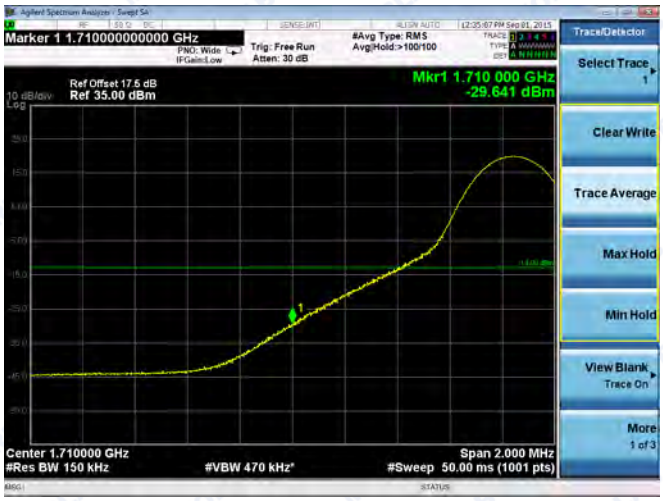
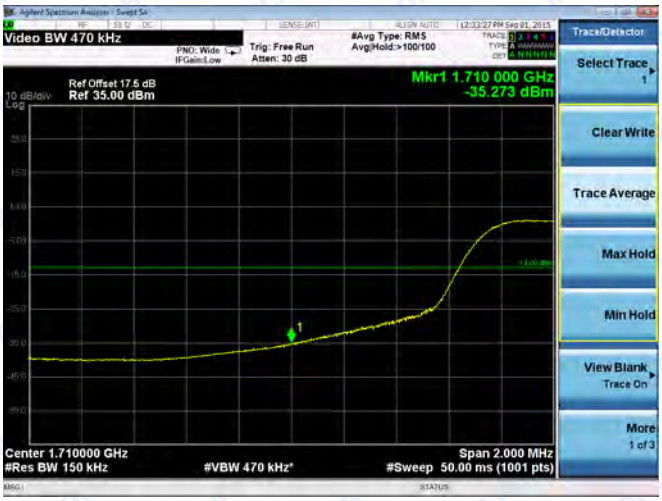


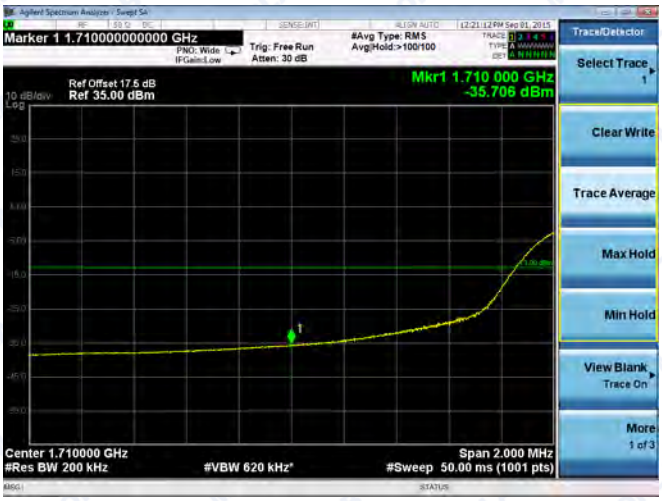
Channel Bandwidth: 1.4MHz							
Channel	19957	RB Size 1	RB Offset 5	Channel	20393	RB Size 6	RB Offset 0

LTE Band 4							
Channel Bandwidth: 3MHz							
Channel	19965	RB Size 1	RB Offset 0	Channel	20385	RB Size 15	RB Offset 0
							
Channel Bandwidth: 3MHz							
Channel	19965	RB Size 1	RB Offset 14	Channel	20385	RB Size 15	RB Offset 0
							

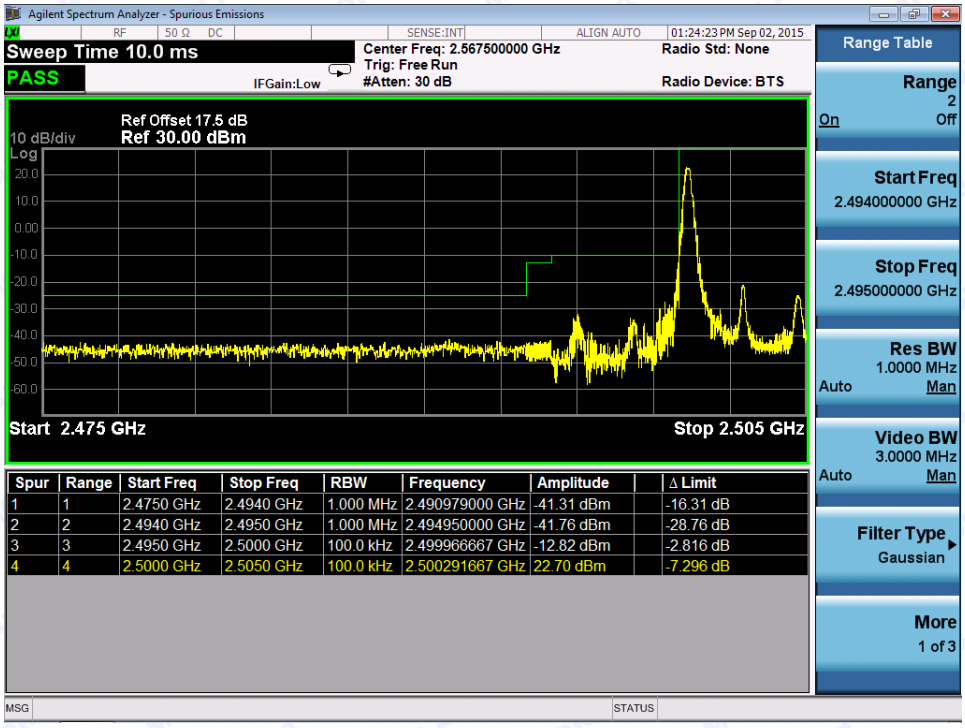
LTE Band 4							
Channel Bandwidth: 5MHz							
Channel	19975	RB Size 1	RB Offset 0	Channel	20375	RB Size 25	RB Offset 0
							
Channel Bandwidth: 5MHz							
Channel	19975	RB Size 1	RB Offset 24	Channel	20375	RB Size 25	RB Offset 0
							

LTE Band 4							
Channel Bandwidth: 10MHz							
Channel	20000	RB Size 1	RB Offset 0	Channel	20350	RB Size 50	RB Offset 0
							
Channel Bandwidth: 10MHz							
Channel	20000	RB Size 1	RB Offset 49	Channel	20350	RB Size 50	RB Offset 0
							

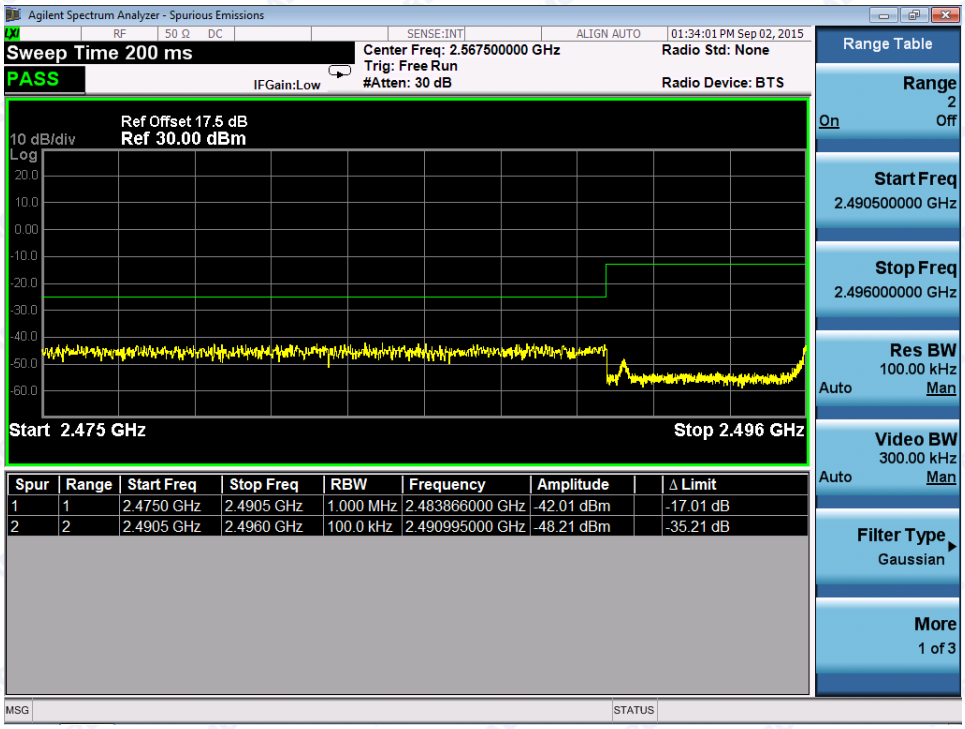
LTE Band 4							
Channel Bandwidth: 15MHz							
Channel	20025	RB Size 1	RB Offset 0	Channel	20325	RB Size 75	RB Offset 0
							
Channel Bandwidth: 15MHz							
Channel	20025	RB Size 1	RB Offset 74	Channel	20325	RB Size 75	RB Offset 0
							

LTE Band 4							
Channel Bandwidth: 20MHz							
Channel	20050	RB Size 1	RB Offset 0	Channel	20300	RB Size 100	RB Offset 0
							
Channel Bandwidth: 20MHz							
Channel	20050	RB Size 1	RB Offset 99	Channel	20300	RB Size 100	RB Offset 0
							

LTE Band 7			
Channel Bandwidth: 5MHz X=5.043MHz			
Channel	20775	RB Size 1	RB Offset 0

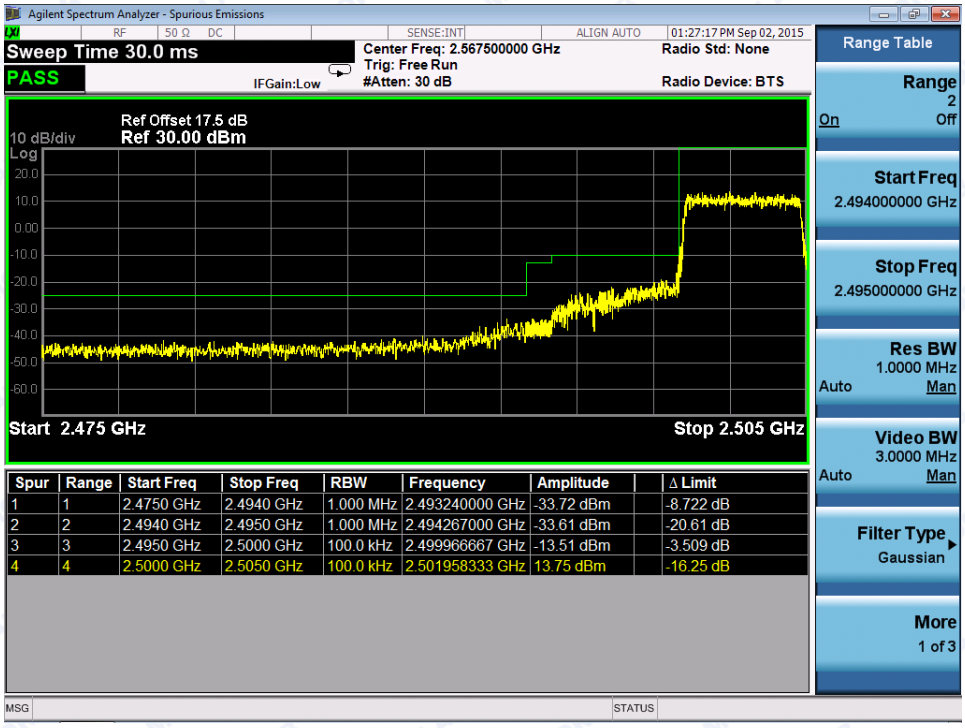


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4940 GHz	1.000 MHz	2.490979000 GHz	-41.31 dBm	-16.31 dB
2	2	2.4940 GHz	2.4950 GHz	1.000 MHz	2.494950000 GHz	-41.76 dBm	-28.76 dB
3	3	2.4950 GHz	2.5000 GHz	100.0 kHz	2.499966667 GHz	-12.82 dBm	-2.816 dB
4	4	2.5000 GHz	2.5050 GHz	100.0 kHz	2.500291667 GHz	22.70 dBm	-7.296 dB

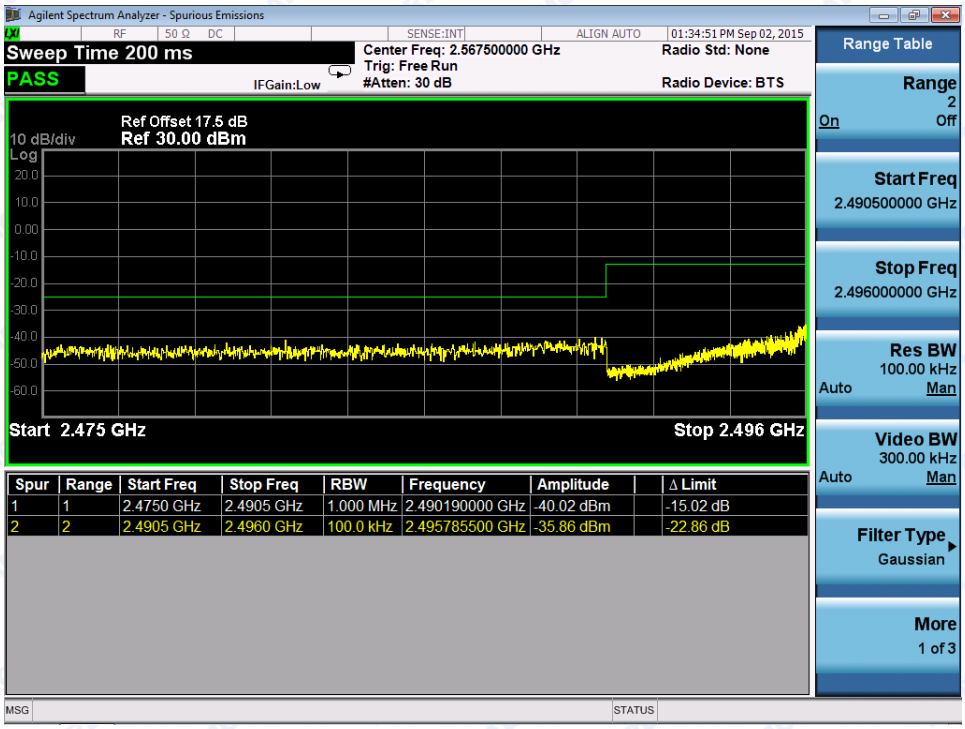


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.483866000 GHz	-42.01 dBm	-17.01 dB
2	2	2.4905 GHz	2.4960 GHz	100.0 kHz	2.490995000 GHz	-48.21 dBm	-35.21 dB

LTE Band 7			
Channel Bandwidth: 5MHz X=5.043MHz			
Channel	20775	RB Size 25	RB Offset 0

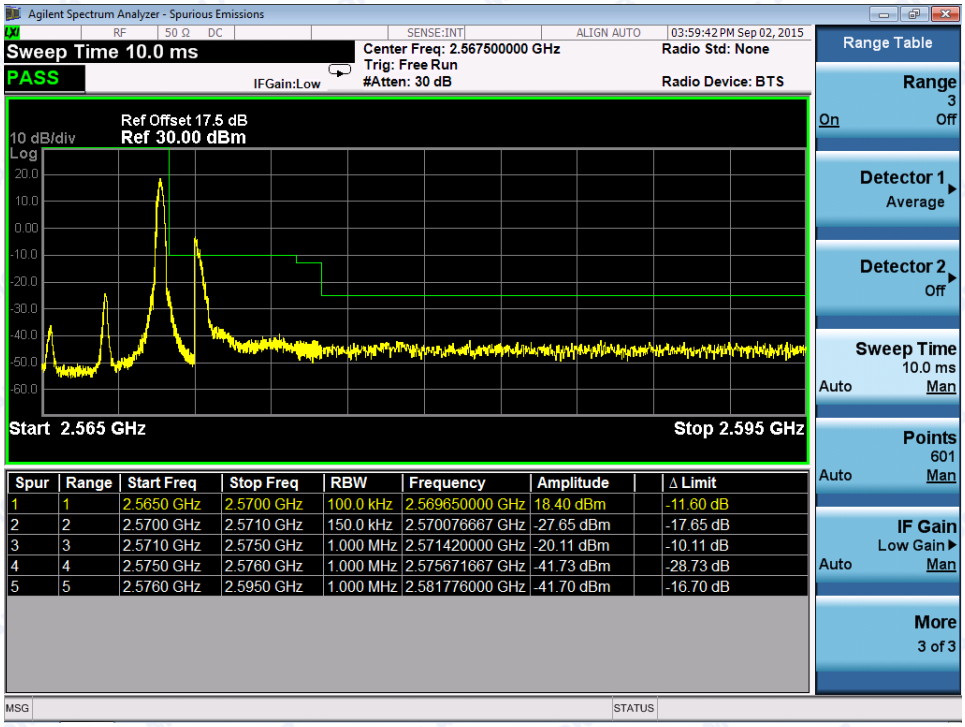


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4940 GHz	1.000 MHz	2.493240000 GHz	-33.72 dBm	-8.722 dB
2	2	2.4940 GHz	2.4950 GHz	1.000 MHz	2.494267000 GHz	-33.61 dBm	-20.61 dB
3	3	2.4950 GHz	2.5000 GHz	100.0 kHz	2.499966667 GHz	-13.51 dBm	-3.509 dB
4	4	2.5000 GHz	2.5050 GHz	100.0 kHz	2.501958333 GHz	13.75 dBm	-16.25 dB



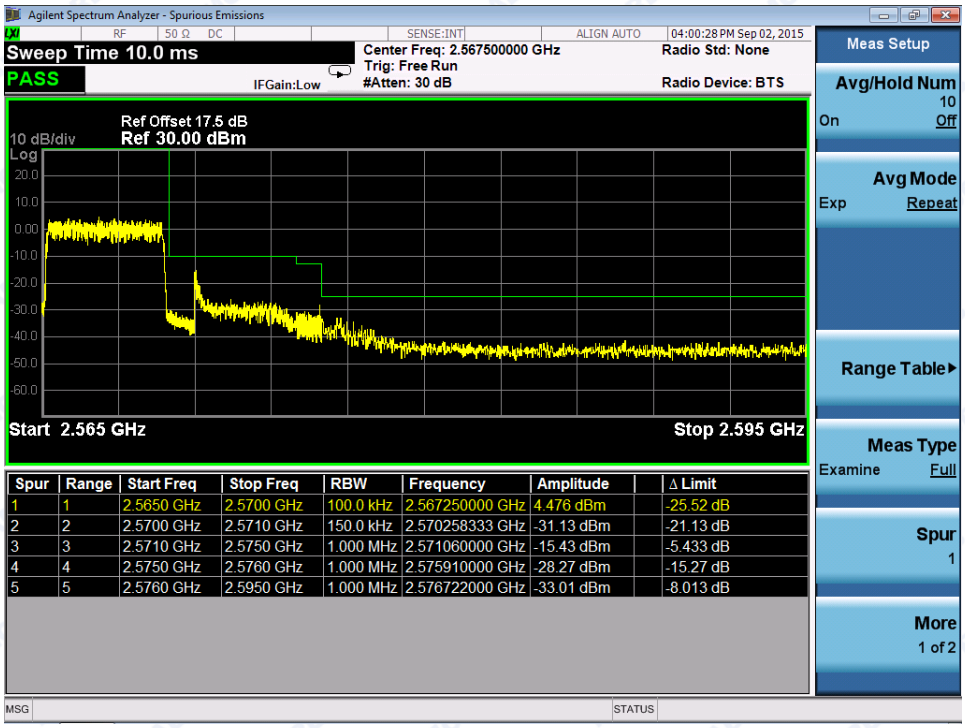
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490190000 GHz	-40.02 dBm	-15.02 dB
2	2	2.4905 GHz	2.4960 GHz	100.0 kHz	2.495785500 GHz	-35.86 dBm	-22.86 dB

LTE Band 7			
Channel Bandwidth: 5MHz X=5.019MHz			
Channel	21425	RB Size 1	RB Offset 24



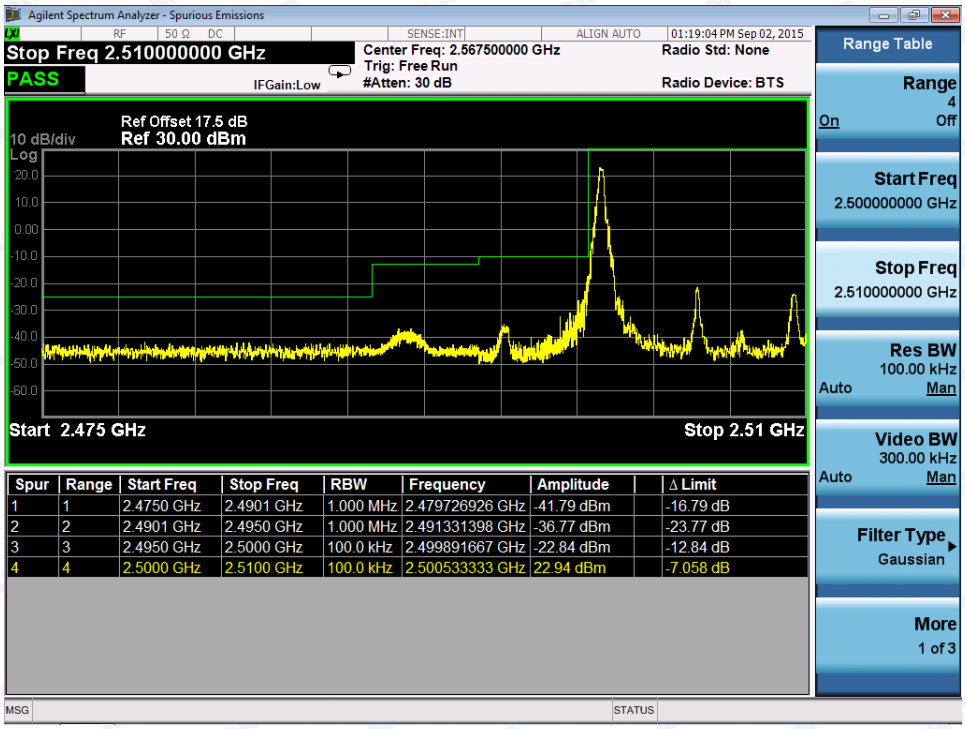
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5650 GHz	2.5700 GHz	100.0 kHz	2.569650000 GHz	18.40 dBm	-11.60 dB
2	2	2.5700 GHz	2.5710 GHz	150.0 kHz	2.570076667 GHz	-27.65 dBm	-17.65 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.571420000 GHz	-20.11 dBm	-10.11 dB
4	4	2.5750 GHz	2.5760 GHz	1.000 MHz	2.575671667 GHz	-41.73 dBm	-28.73 dB
5	5	2.5760 GHz	2.5950 GHz	1.000 MHz	2.581776000 GHz	-41.70 dBm	-16.70 dB

Channel	21425	RB Size 25	RB Offset 0

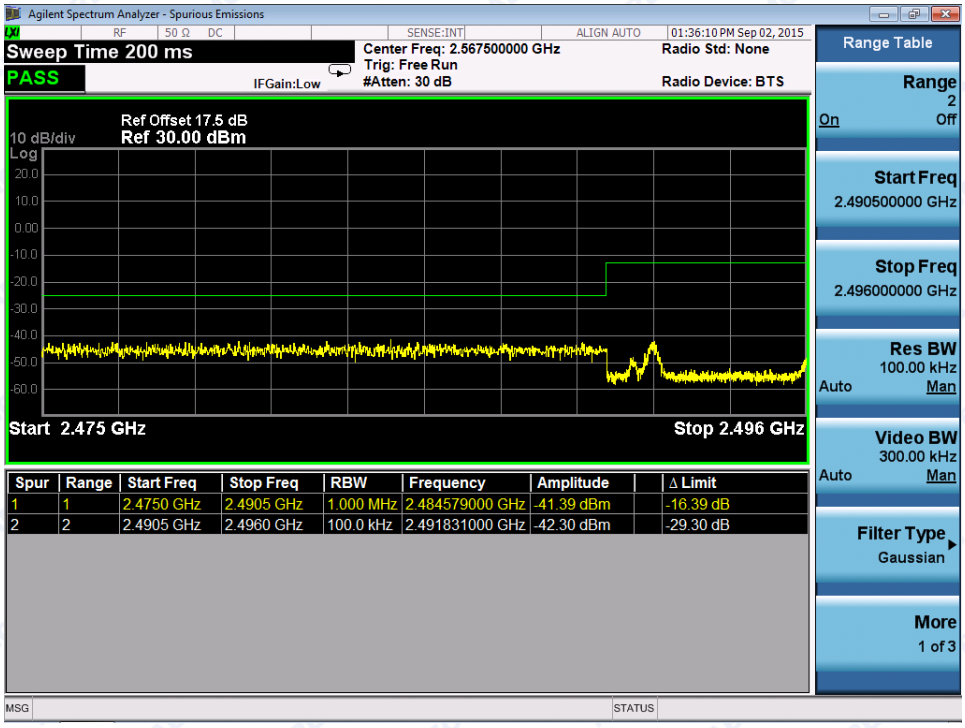


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5650 GHz	2.5700 GHz	100.0 kHz	2.567250000 GHz	4.476 dBm	-25.52 dB
2	2	2.5700 GHz	2.5710 GHz	150.0 kHz	2.570258333 GHz	-31.13 dBm	-21.13 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.571060000 GHz	-15.43 dBm	-5.433 dB
4	4	2.5750 GHz	2.5760 GHz	1.000 MHz	2.575910000 GHz	-28.27 dBm	-15.27 dB
5	5	2.5760 GHz	2.5950 GHz	1.000 MHz	2.576722000 GHz	-33.01 dBm	-8.013 dB

LTE Band 7			
Channel Bandwidth: 10MHz X=9.898MHz			
Channel	20800	RB Size 1	RB Offset 0

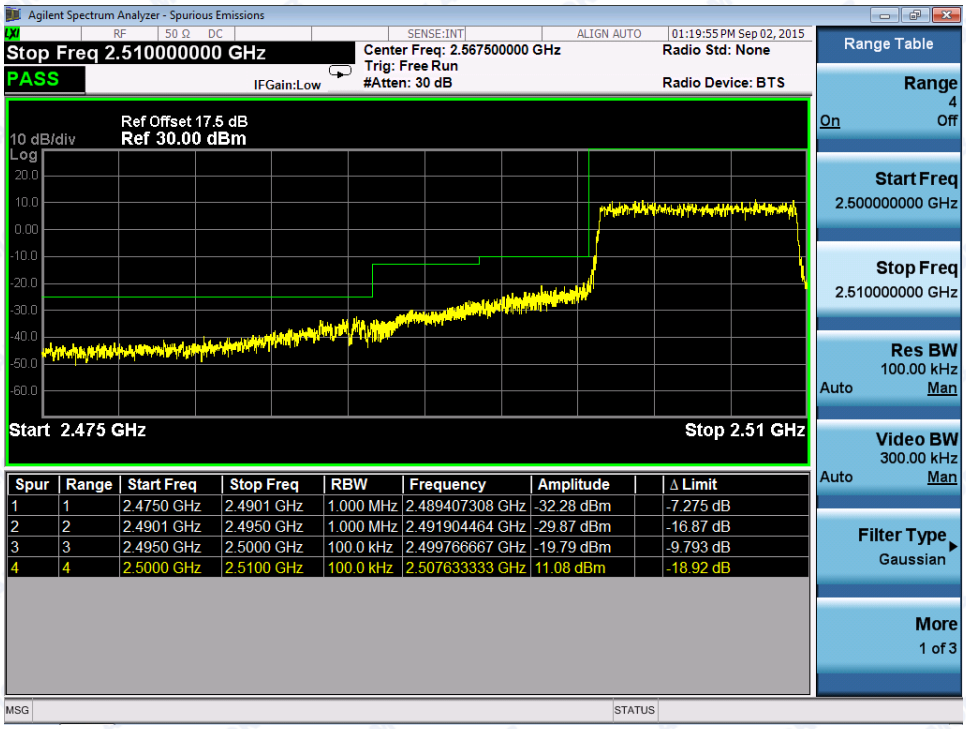


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4901 GHz	1.000 MHz	2.479726926 GHz	-41.79 dBm	-16.79 dB
2	2	2.4901 GHz	2.4950 GHz	1.000 MHz	2.491331398 GHz	-36.77 dBm	-23.77 dB
3	3	2.4950 GHz	2.5000 GHz	100.0 kHz	2.499891667 GHz	-22.84 dBm	-12.84 dB
4	4	2.5000 GHz	2.5100 GHz	100.0 kHz	2.500533333 GHz	22.94 dBm	-7.058 dB

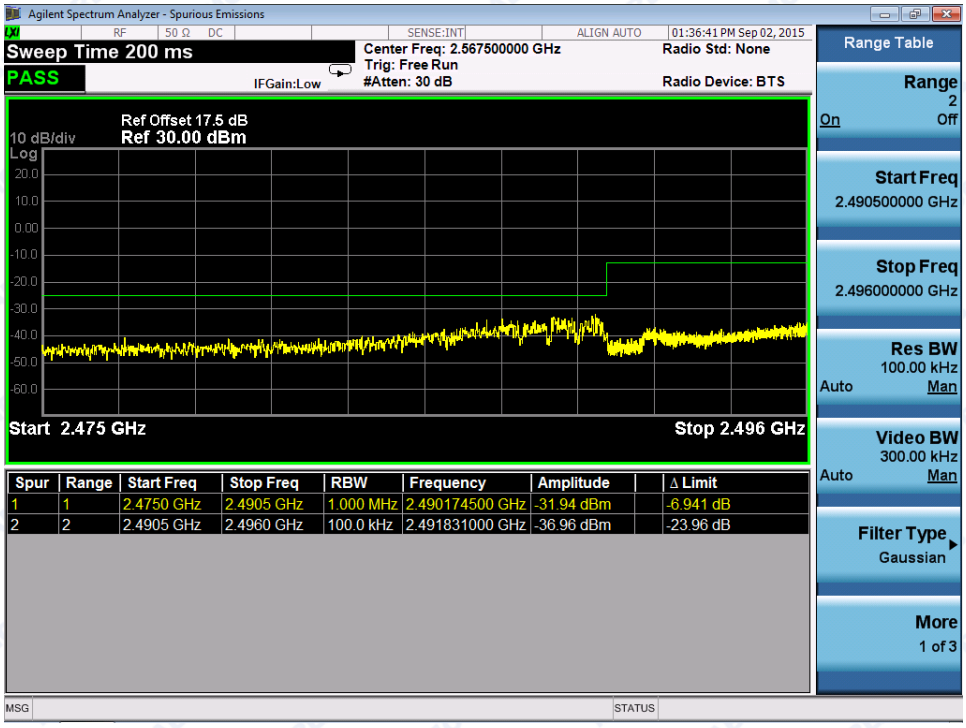


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.484579000 GHz	-41.39 dBm	-16.39 dB
2	2	2.4905 GHz	2.4960 GHz	100.0 kHz	2.491831000 GHz	-42.30 dBm	-29.30 dB

LTE Band 7			
Channel Bandwidth: 10MHz X=9.898MHz			
Channel	20800	RB Size 50	RB Offset 0

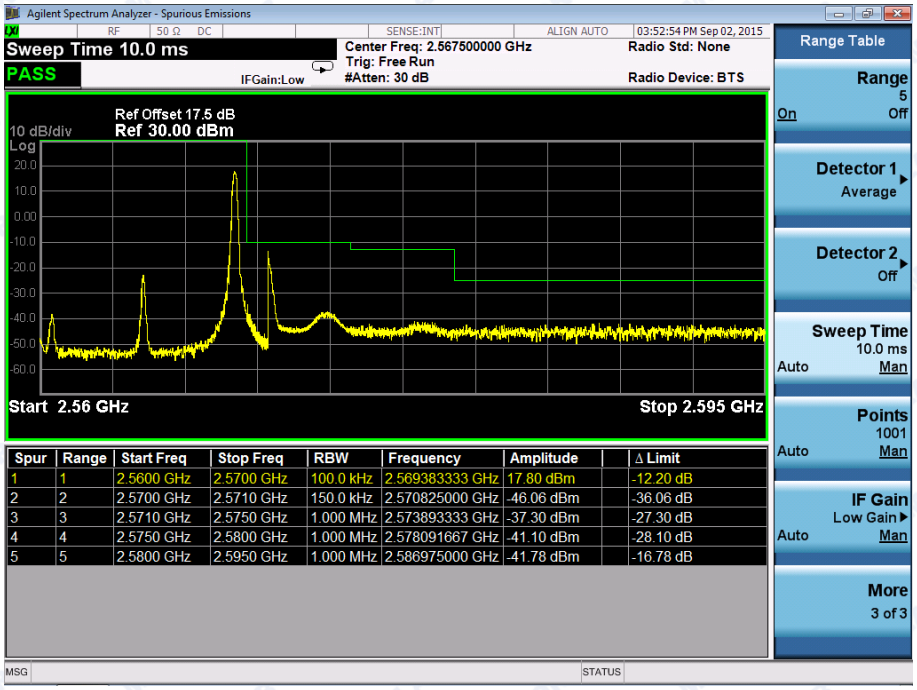


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4901 GHz	1.000 MHz	2.489407308 GHz	-32.28 dBm	-7.275 dB
2	2	2.4901 GHz	2.4950 GHz	1.000 MHz	2.491904464 GHz	-29.87 dBm	-16.87 dB
3	3	2.4950 GHz	2.5000 GHz	100.0 kHz	2.499766667 GHz	-19.79 dBm	-9.793 dB
4	4	2.5000 GHz	2.5100 GHz	100.0 kHz	2.507633333 GHz	11.08 dBm	-18.92 dB



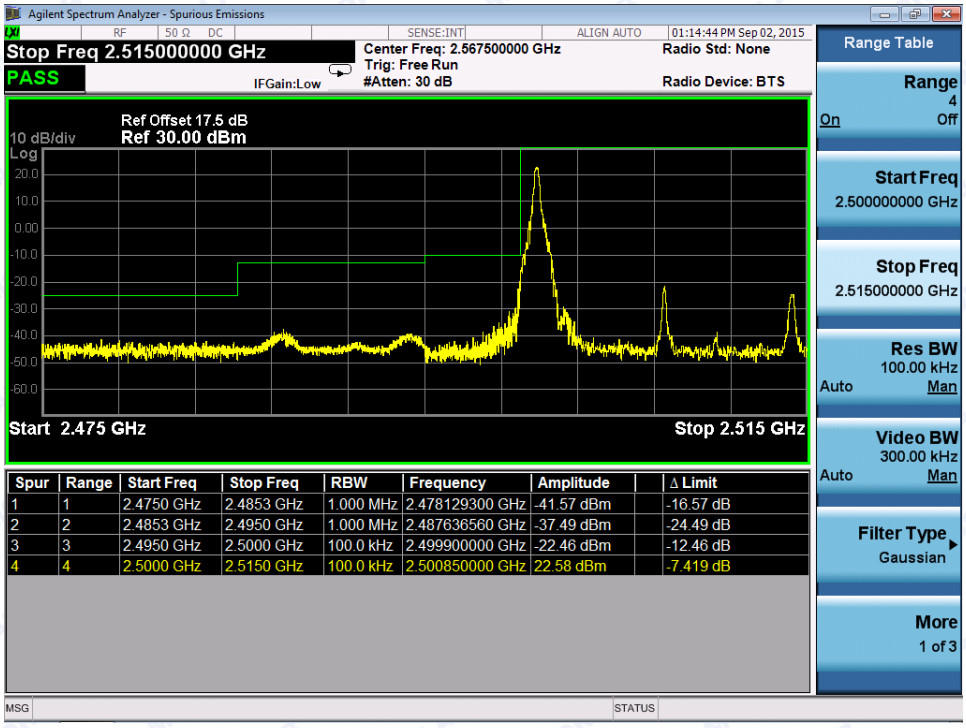
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490174500 GHz	-31.94 dBm	-6.941 dB
2	2	2.4905 GHz	2.4960 GHz	100.0 kHz	2.491831000 GHz	-36.96 dBm	-23.96 dB

LTE Band 7			
Channel Bandwidth: 10MHz X=10.01MHz			
Channel	21400	RB Size 1	RB Offset 49

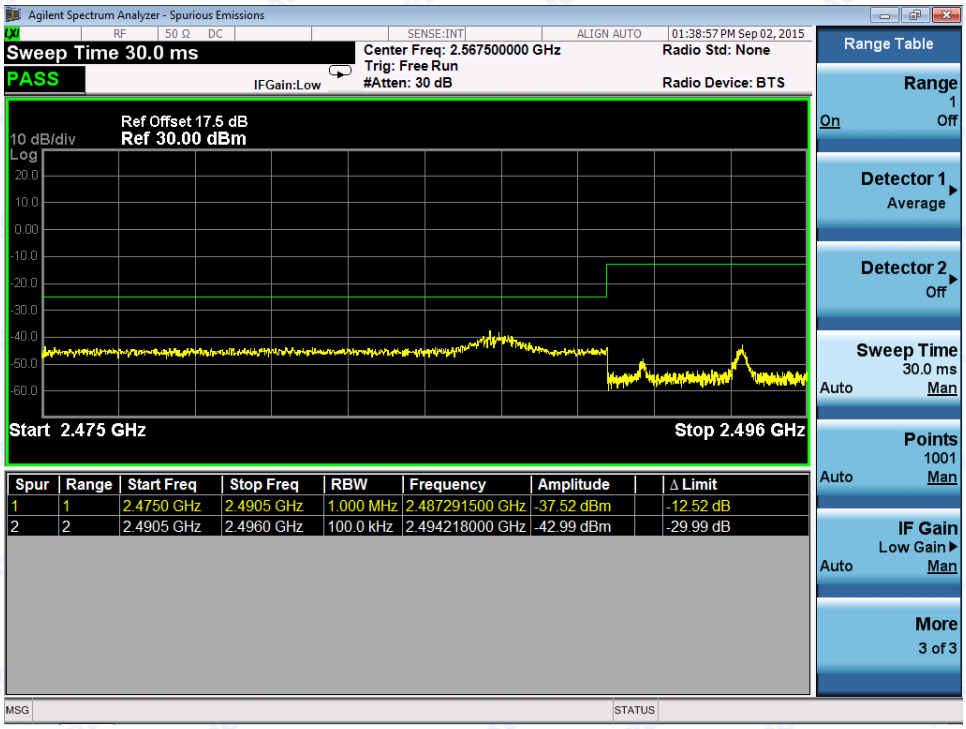


Channel	21400	RB Size 50	RB Offset 0

LTE Band 7			
Channel Bandwidth: 15MHz X=14.74MHz			
Channel	20825	RB Size 1	RB Offset 0

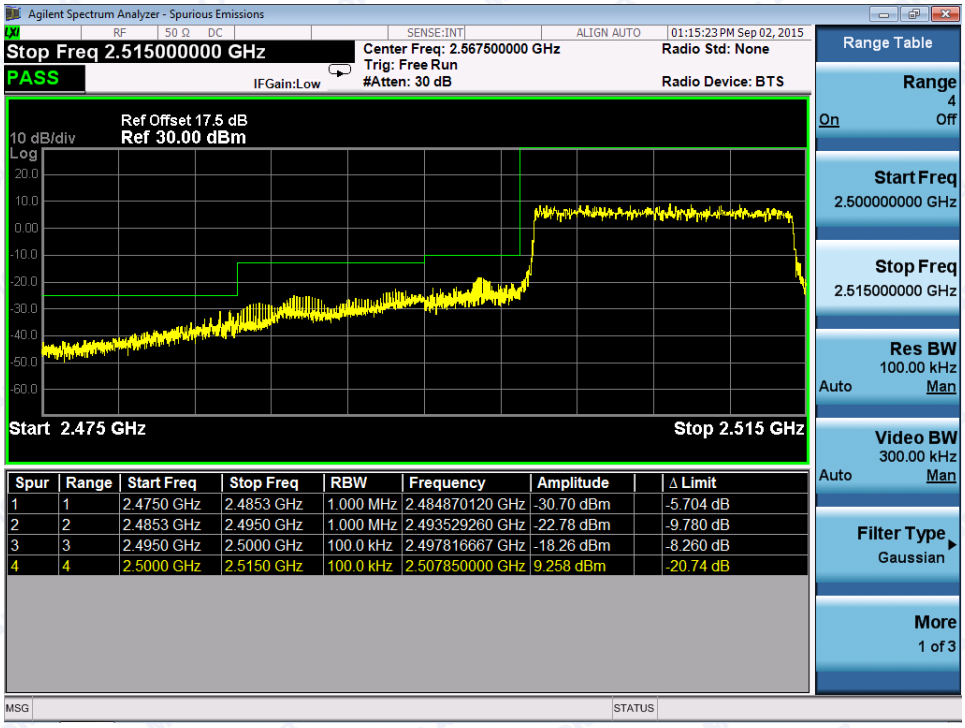


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4853 GHz	1.000 MHz	2.478129300 GHz	-41.57 dBm	-16.57 dB
2	2	2.4853 GHz	2.4950 GHz	1.000 MHz	2.487636560 GHz	-37.49 dBm	-24.49 dB
3	3	2.4950 GHz	2.5000 GHz	100.0 kHz	2.499900000 GHz	-22.46 dBm	-12.46 dB
4	4	2.5000 GHz	2.5150 GHz	100.0 kHz	2.500850000 GHz	22.58 dBm	-7.419 dB

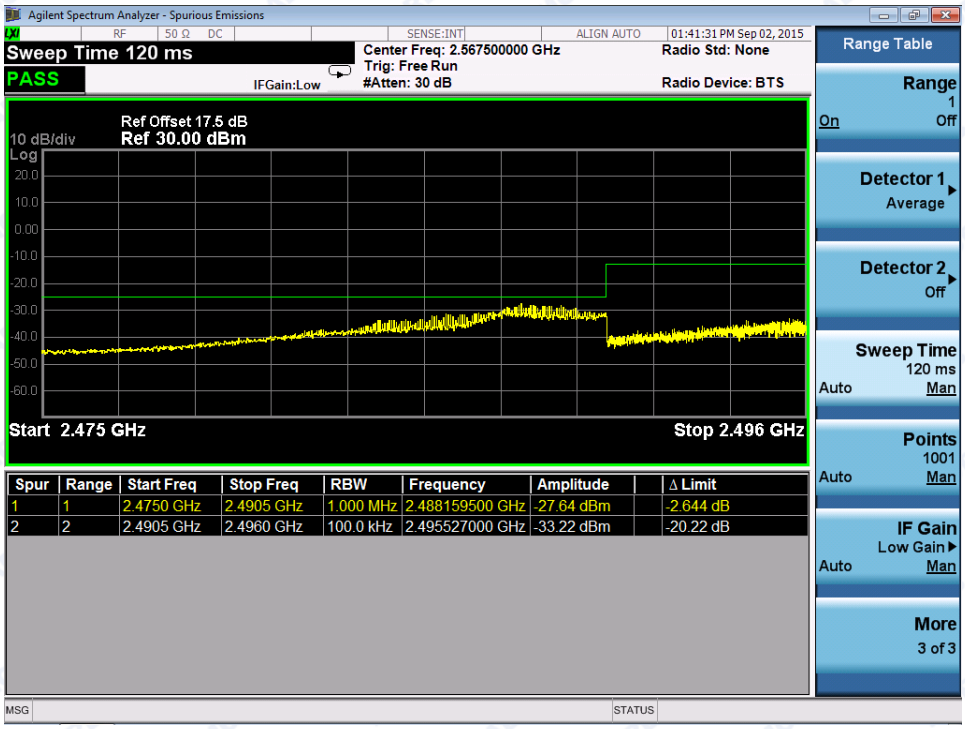


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.487291500 GHz	-37.52 dBm	-12.52 dB
2	2	2.4905 GHz	2.4960 GHz	100.0 kHz	2.494218000 GHz	-42.99 dBm	-29.99 dB

LTE Band 7			
Channel Bandwidth: 15MHz X=14.74MHz			
Channel	20825	RB Size 75	RB Offset 0

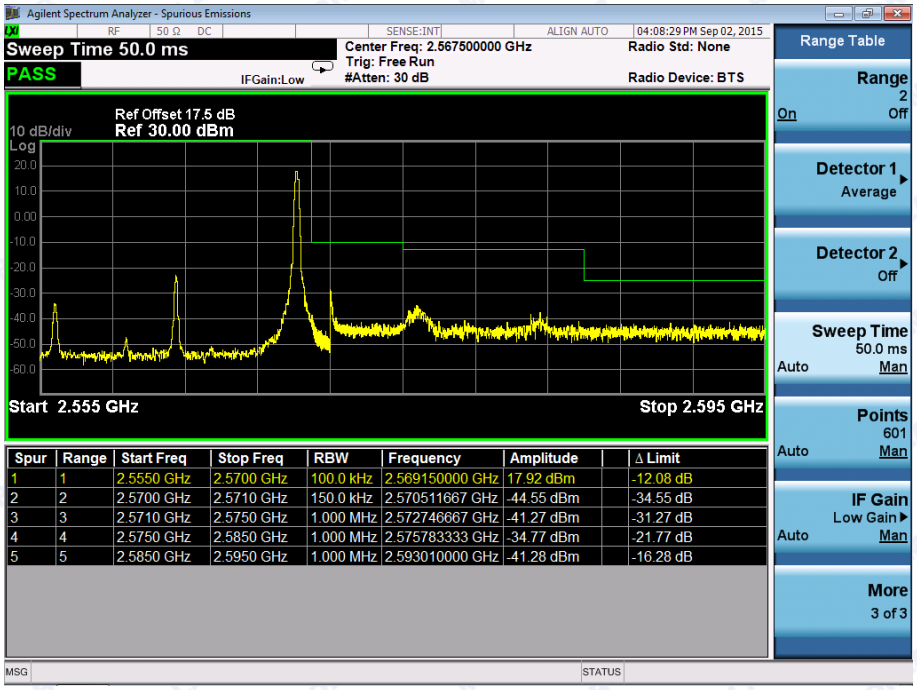


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4853 GHz	1.000 MHz	2.484870120 GHz	-30.70 dBm	-5.704 dB
2	2	2.4853 GHz	2.4950 GHz	1.000 MHz	2.493529260 GHz	-22.78 dBm	-9.780 dB
3	3	2.4950 GHz	2.5000 GHz	100.0 kHz	2.497816667 GHz	-18.26 dBm	-8.260 dB
4	4	2.5000 GHz	2.5150 GHz	100.0 kHz	2.507850000 GHz	9.258 dBm	-20.74 dB



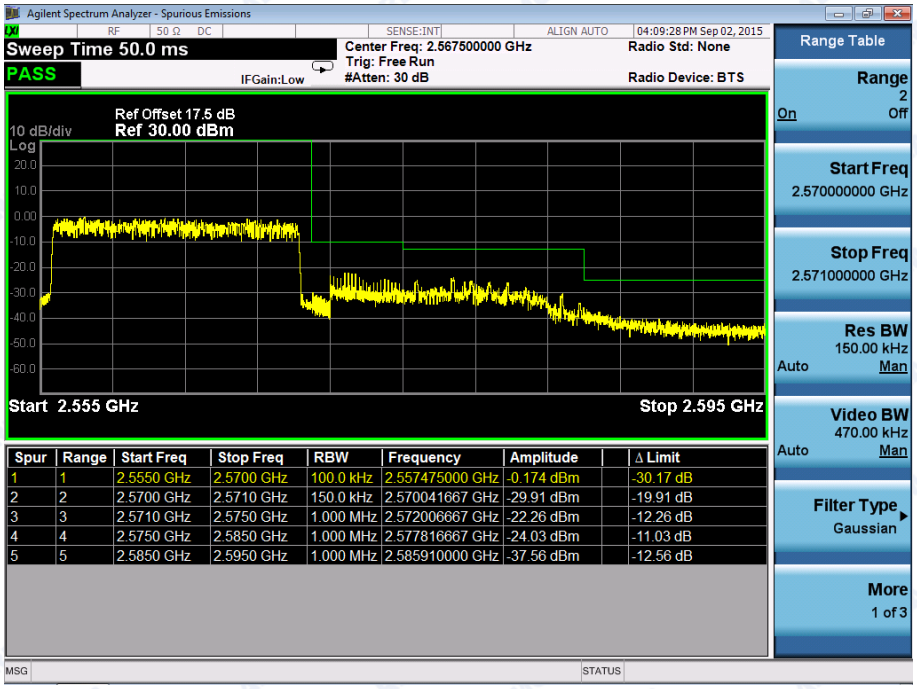
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.488159500 GHz	-27.64 dBm	-2.644 dB
2	2	2.4905 GHz	2.4960 GHz	100.0 kHz	2.495527000 GHz	-33.22 dBm	-20.22 dB

LTE Band 7			
Channel Bandwidth: 15MHz X=14.84MHz			
Channel	21375	RB Size 1	RB Offset 74



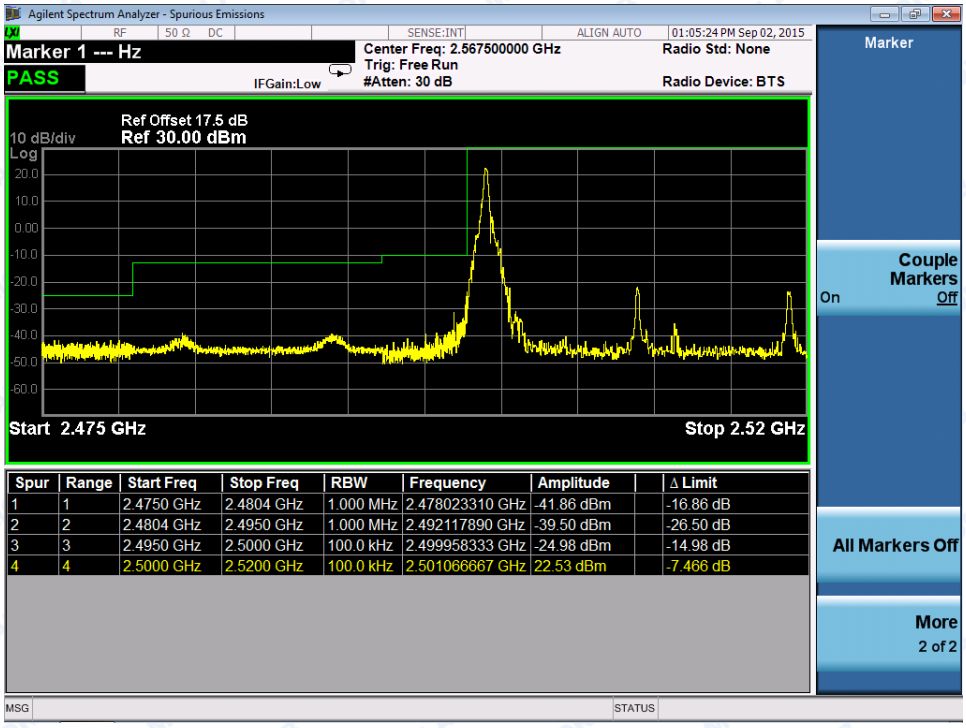
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5550 GHz	2.5700 GHz	100.0 kHz	2.569150000 GHz	17.92 dBm	-12.08 dB
2	2	2.5700 GHz	2.5710 GHz	150.0 kHz	2.570511667 GHz	-44.55 dBm	-34.55 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.572746667 GHz	-41.27 dBm	-31.27 dB
4	4	2.5750 GHz	2.5850 GHz	1.000 MHz	2.575783333 GHz	-34.77 dBm	-21.77 dB
5	5	2.5850 GHz	2.5950 GHz	1.000 MHz	2.593010000 GHz	-41.28 dBm	-16.28 dB

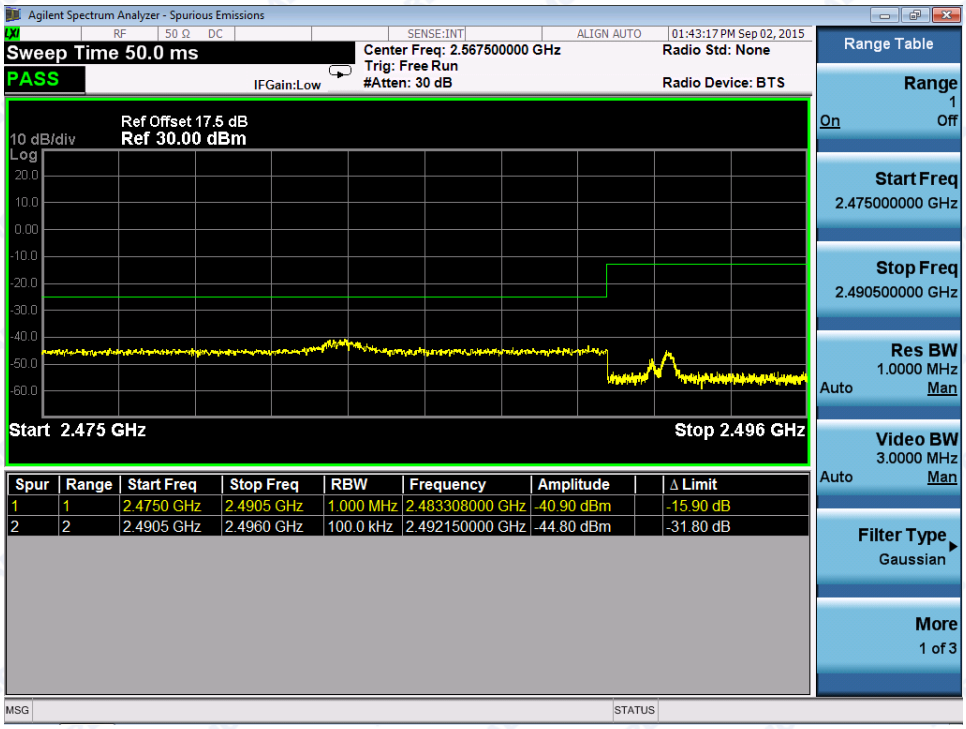
Channel	21375	RB Size 75	RB Offset 0



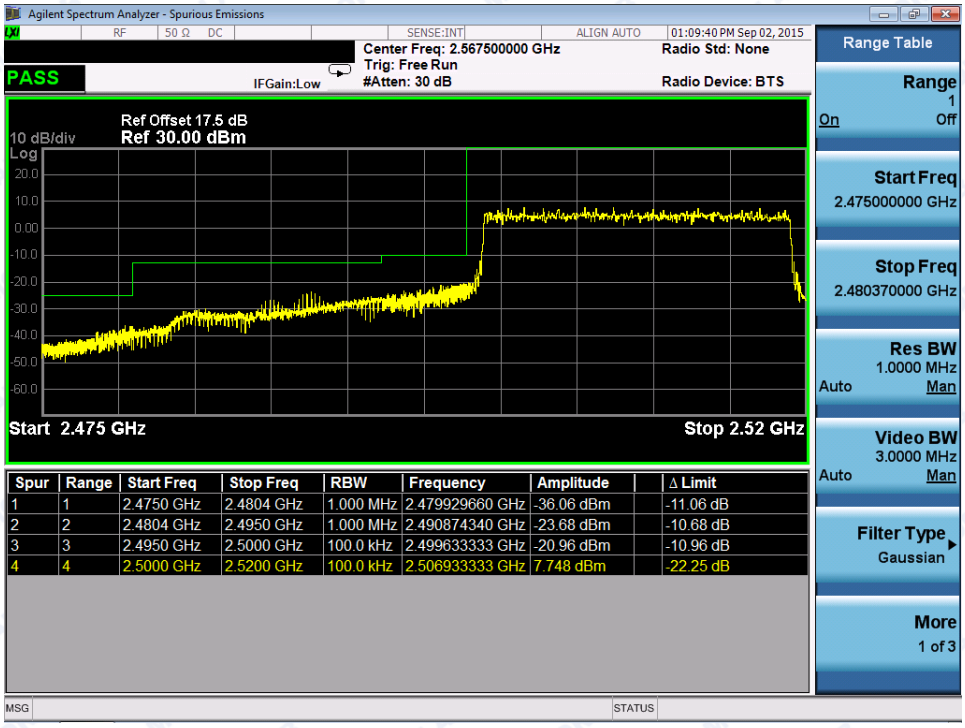
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5550 GHz	2.5700 GHz	100.0 kHz	2.557475000 GHz	-0.174 dBm	-30.17 dB
2	2	2.5700 GHz	2.5710 GHz	150.0 kHz	2.570041667 GHz	-29.91 dBm	-19.91 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.572006667 GHz	-22.26 dBm	-12.26 dB
4	4	2.5750 GHz	2.5850 GHz	1.000 MHz	2.577816667 GHz	-24.03 dBm	-11.03 dB
5	5	2.5850 GHz	2.5950 GHz	1.000 MHz	2.585910000 GHz	-37.56 dBm	-12.56 dB

LTE Band 7			
Channel Bandwidth: 20MHz X=19.63MHz			
Channel	20850	RB Size 1	RB Offset 0

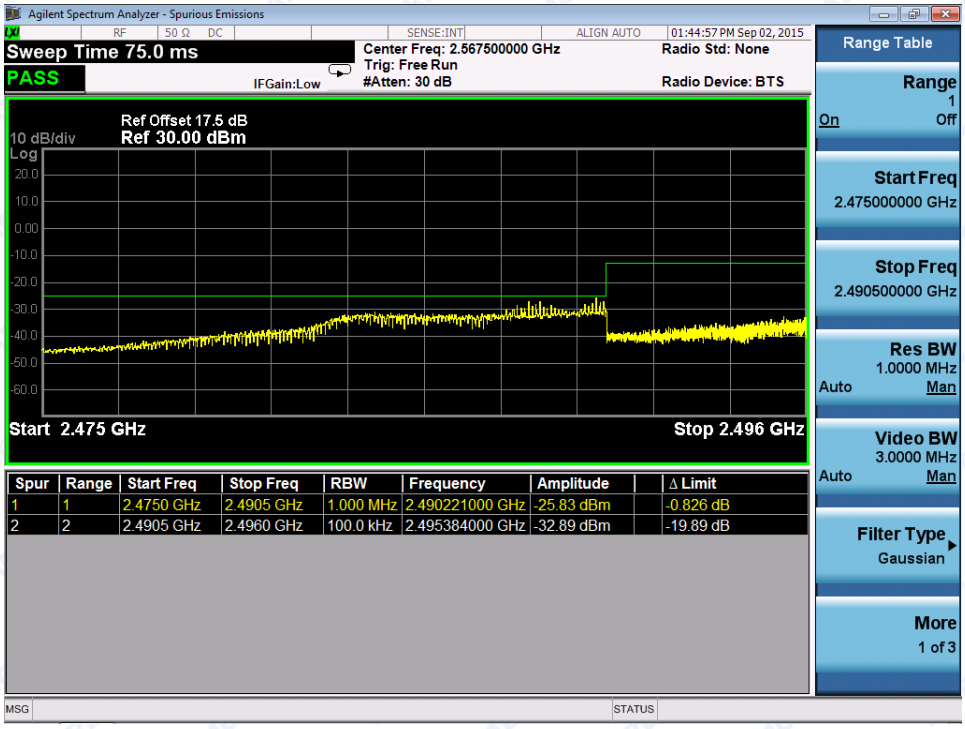




LTE Band 7			
Channel Bandwidth: 20MHz X=19.63MHz			
Channel	20850	RB Size 100	RB Offset 0

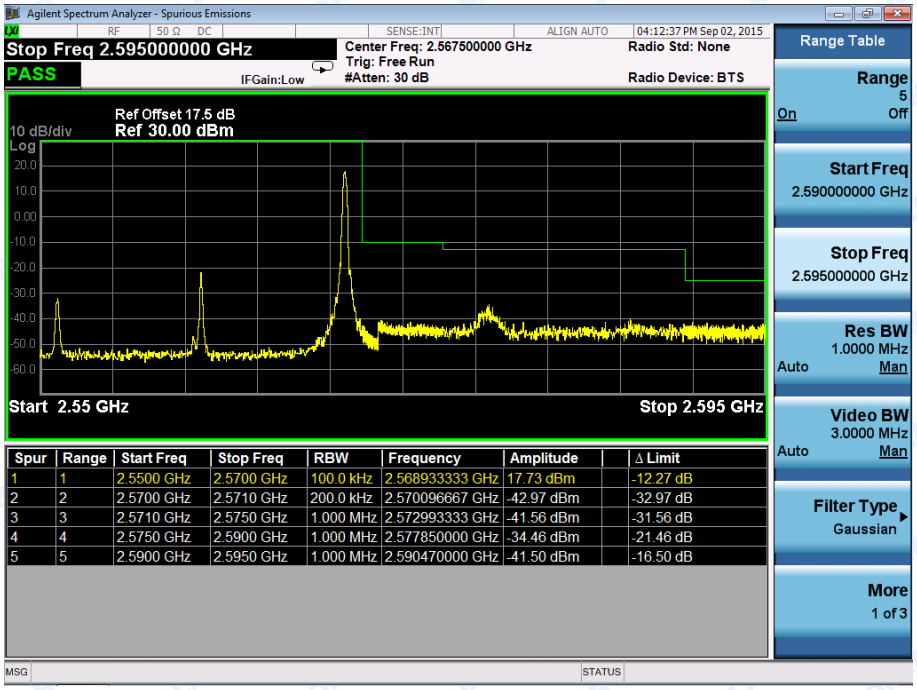


Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4804 GHz	1.000 MHz	2.479929660 GHz	-36.06 dBm	-11.06 dB
2	2	2.4804 GHz	2.4950 GHz	1.000 MHz	2.490874340 GHz	-23.68 dBm	-10.68 dB
3	3	2.4950 GHz	2.5000 GHz	100.0 kHz	2.499633333 GHz	-20.96 dBm	-10.96 dB
4	4	2.5000 GHz	2.5200 GHz	100.0 kHz	2.506933333 GHz	7.748 dBm	-22.25 dB



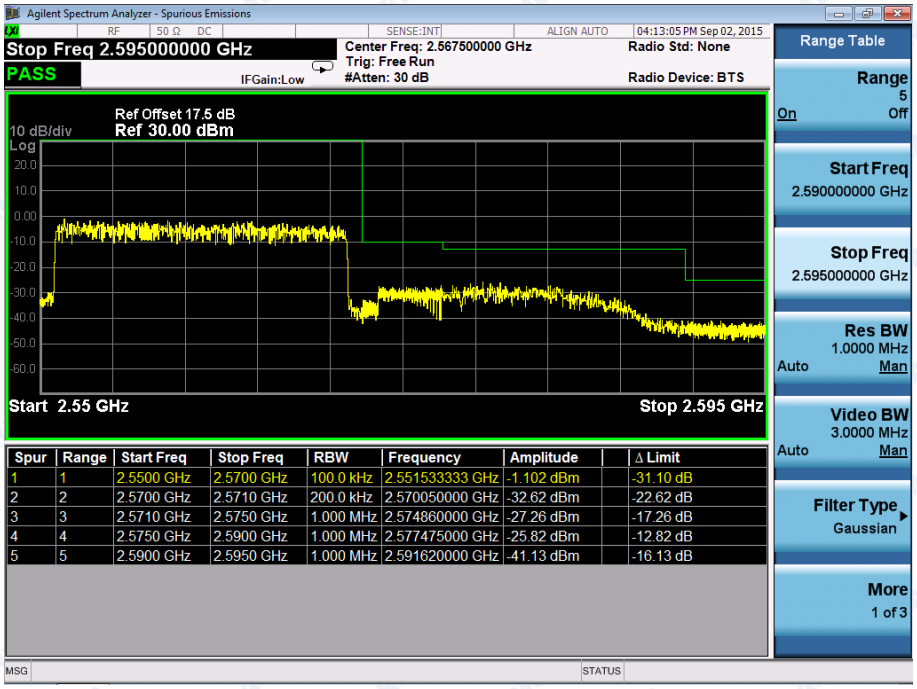
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.4750 GHz	2.4905 GHz	1.000 MHz	2.490221000 GHz	-25.83 dBm	-0.826 dB
2	2	2.4905 GHz	2.4960 GHz	100.0 kHz	2.495384000 GHz	-32.89 dBm	-19.89 dB

LTE Band 7			
Channel Bandwidth: 20MHz X=19.71MHz			
Channel	21350	RB Size 1	RB Offset 99

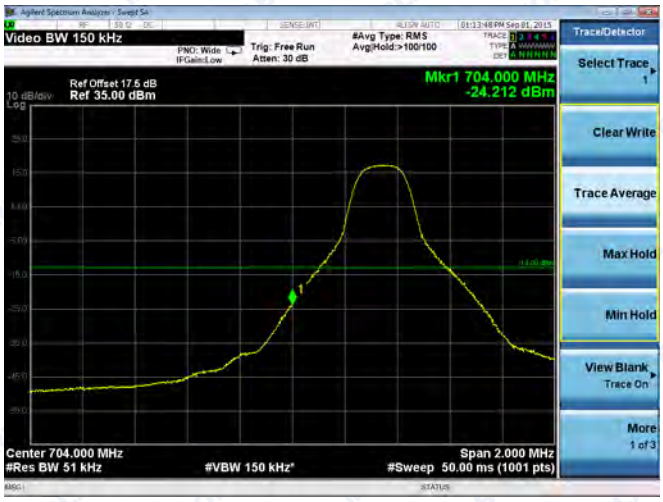
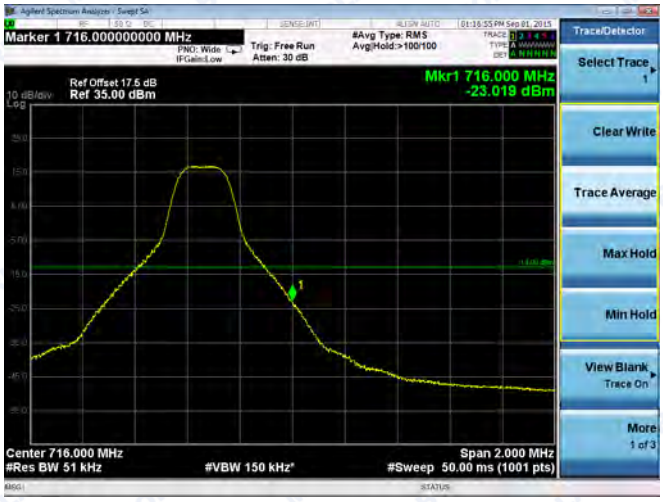


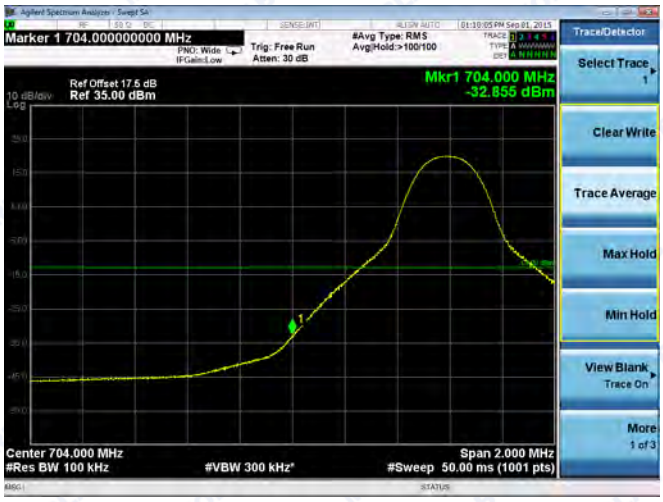
Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5500 GHz	2.5700 GHz	100.0 kHz	2.568933333 GHz	17.73 dBm	-12.27 dB
2	2	2.5700 GHz	2.5710 GHz	200.0 kHz	2.570096667 GHz	-42.97 dBm	-32.97 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.572993333 GHz	-41.56 dBm	-31.56 dB
4	4	2.5750 GHz	2.5900 GHz	1.000 MHz	2.577850000 GHz	-34.46 dBm	-21.46 dB
5	5	2.5900 GHz	2.5950 GHz	1.000 MHz	2.590470000 GHz	-41.50 dBm	-16.50 dB

Channel	21350	RB Size 100	RB Offset 0



Spur	Range	Start Freq	Stop Freq	RBW	Frequency	Amplitude	Δ Limit
1	1	2.5500 GHz	2.5700 GHz	100.0 kHz	2.551533333 GHz	-1.102 dBm	-31.10 dB
2	2	2.5700 GHz	2.5710 GHz	200.0 kHz	2.570050000 GHz	-32.62 dBm	-22.62 dB
3	3	2.5710 GHz	2.5750 GHz	1.000 MHz	2.574860000 GHz	-27.26 dBm	-17.26 dB
4	4	2.5750 GHz	2.5900 GHz	1.000 MHz	2.577475000 GHz	-25.82 dBm	-12.82 dB
5	5	2.5900 GHz	2.5950 GHz	1.000 MHz	2.591620000 GHz	-41.13 dBm	-16.13 dB

LTE Band 17							
Channel Bandwidth: 5MHz							
Channel	23755	RB Size 1	RB Offset 0	Channel	23755	RB Size 25	RB Offset 0
							
Channel Bandwidth: 5MHz							
Channel	23825	RB Size 1	RB Offset 24	Channel	23825	RB Size 25	RB Offset 0
							

LTE Band 17							
Channel Bandwidth: 10MHz							
Channel	23780	RB Size 1	RB Offset 0	Channel	23780	RB Size 50	RB Offset 0
							
Channel Bandwidth: 10MHz							
Channel	23800	RB Size 1	RB Offset 49	Channel	23800	RB Size 50	RB Offset 0
							

2.7 Transmitter Radiated Power (EIRP/ERP)

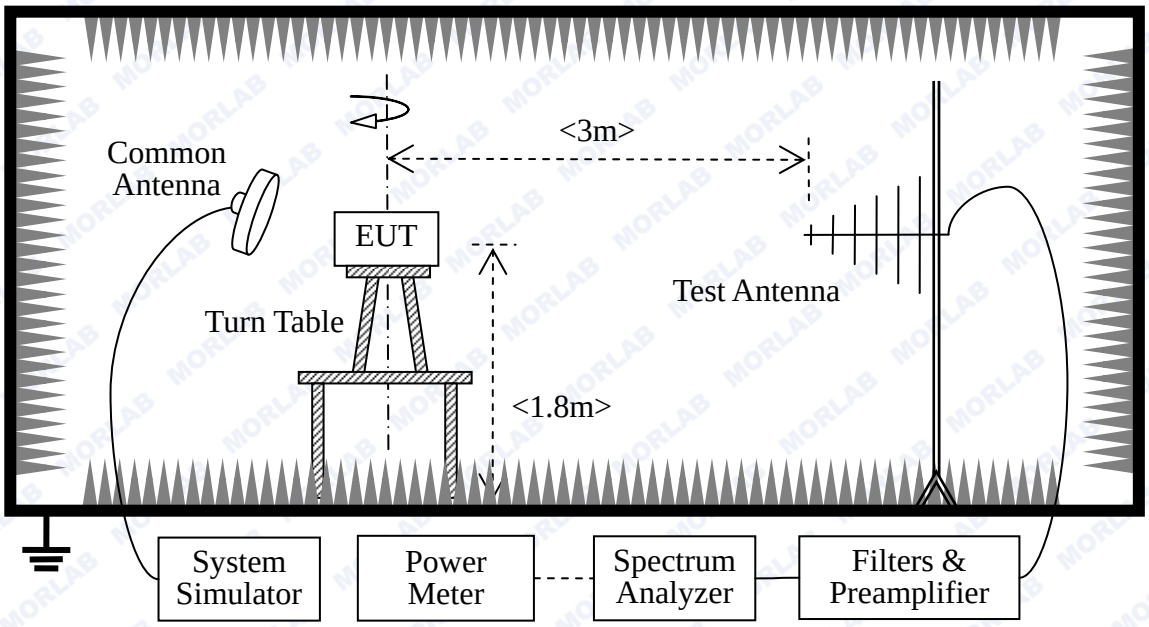
2.7.1 Requirement

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

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.

Equipments List:

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
System Simulator	Rohde& Schwarz	CMW500	1201.0002k50/ 124534/wk	2015.02.26	2016.02.25
Spectrum Analyzer	Rohde& Schwarz	FSL	10246	2015.02.26	2016.02.25
Spectrum Analyzer	Agilent	E4445A	MY44200685	2015.02.26	2016.02.25
Full-Anechoic Chamber	Albatross	9m*6m*6m	(n.a.)	2015.02.26	2016.02.25
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2015.02.26	2016.02.25
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2015.02.26	2016.02.25

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:

$A_{SUBST} = P_{SUBST\_TX} - P_{SUBST\_RX} - L_{SUBST\_CABLES} + G_{SUBST\_TX\_ANT}$

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

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

P_{SUBST_TX} is signal generator level,

P_{SUBST_RX} is receiver level,

L_{SUBST_CABLES} is cable losses including TX cable,

$G_{SUBST\_TX\_ANT}$ 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	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 4	20MHz	L 20050	1720.0	QPSK	1	0	23.44
					100	0	22.15
				16-QAM	1	0	22.18
					100	0	21.34
		M 20175	1732.5	QPSK	1	0	23.31
					100	0	22.54
				16-QAM	1	0	22.45
					100	0	21.19
		H 20300	1745.0	QPSK	1	0	23.21
					100	0	22.47
				16-QAM	1	0	22.52
					100	0	21.41
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 4	15MHz	L 20025	1717.5	QPSK	1	0	23.45
					75	0	22.39
				16-QAM	1	0	22.80
					75	0	21.47
		M 20175	1732.5	QPSK	1	0	23.33
					75	0	22.52
				16-QAM	1	0	22.98
					75	0	21.44
		H 20325	1747.5	QPSK	1	0	23.32
					75	0	22.37
				16-QAM	1	0	22.54
					75	0	21.11
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 4	10MHz	L 20000	1715.0	QPSK	1	0	23.25
					50	0	22.21
				16-QAM	1	0	22.54
					50	0	21.16
		M 20175	1732.5	QPSK	1	0	23.24
					50	0	22.47
				16-QAM	1	0	22.89
					50	0	21.45
		H 20350	1750.0	QPSK	1	0	23.31
					50	0	22.42
				16-QAM	1	0	22..89
					50	0	21.61

Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 4	5MHz	L 19975	1712.5	QPSK	1	0	22.86
					25	0	21.33
				16-QAM	1	0	22.57
					25	0	21.36
		M 20175	1732.5	QPSK	1	0	23.29
					25	0	22.27
				16-QAM	1	0	23.18
					25	0	22.31
		H 20375	1752.5	QPSK	1	0	22.98
					25	0	21.49
				16-QAM	1	0	22.66
					25	0	21.31
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 4	3MHz	L 19965	1711.5	QPSK	1	0	23.10
					15	0	22.11
				16-QAM	1	0	22.87
					15	0	21.41
		M 20175	1732.5	QPSK	1	0	22.99
					15	0	21.87
				16-QAM	1	0	22.57
					15	0	21.31
		H 20385	1753.5	QPSK	1	0	23.14
					15	0	22.57
				16-QAM	1	0	22.86
					15	0	21.37
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 4	1.4MHz	L 19957	1710.7	QPSK	1	0	23.15
					6	0	22.50
				16-QAM	1	0	22.97
					6	0	21.38
		M 20175	1732.5	QPSK	1	0	23.17
					6	0	22.54
				16-QAM	1	0	22.89
					6	0	21.14
		H 20393	1754.3	QPSK	1	0	23.11
					6	0	21.86
				16-QAM	1	0	22.93
					6	0	21.41

Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 7	20MHz	L 20850	2510	QPSK	1	0	23.29
					100	0	22.14
				16-QAM	1	0	22.87
					100	0	21.33
		M 21100	2535	QPSK	1	0	23.46
					100	0	22.17
				16-QAM	1	0	22.86
					100	0	21.44
		H 21350	2560	QPSK	1	0	23.23
					100	0	21.77
				16-QAM	1	0	22.75
					100	0	21.11
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 7	15MHz	L 20825	2507.5	QPSK	1	0	23.51
					75	0	22.47
				16-QAM	1	0	22.86
					75	0	21.25
		M 21100	2535	QPSK	1	0	23.44
					75	0	22.31
				16-QAM	1	0	22.69
					75	0	21.15
		H 21375	2562.5	QPSK	1	0	23.32
					75	0	22.11
				16-QAM	1	0	22.68
					75	0	21.27
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP
					RB Size	RB Offset	(dBm)
LTE Band 7	10MHz	L 20800	2505	QPSK	1	0	23.43
					50	0	22.15
				16-QAM	1	0	22.49
					50	0	21.12
		M 21100	2535	QPSK	1	0	23.16
					50	0	20.97
				16-QAM	1	0	22.89
					50	0	21.47
		H 21400	2565	QPSK	1	0	23.33
					50	0	22.18
				16-QAM	1	0	22.69
					50	0	20.27

Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		EIRP (dBm)
					RB Size	RB Offset	
LTE Band 7	5MHz	L 20775	2502.5	QPSK	1	0	23.16
					25	0	22.44
				16-QAM	1	0	22.85
					25	0	21.22
		M 21100	2535	QPSK	1	0	23.25
					25	0	22.39
				16-QAM	1	0	22.78
					25	0	21.33
		H 21425	2567.5	QPSK	1	0	23.12
					25	0	21.87
				16-QAM	1	0	22.64
					25	0	21.11

Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
LTE Band 17	10MHz	L 23780	709	QPSK	1	0	23.12
					50	0	21.49
				16-QAM	1	0	22.88
					50	0	21.55
		M 23790	710	QPSK	1	0	23.39
					50	0	22.17
				16-QAM	1	0	22.69
					50	0	20.57
		H 23800	711	QPSK	1	0	23.26
					50	0	21.88
				16-QAM	1	0	22.64
					50	0	20.37
Band	Band Width	Channel	Freq.(MHz)	Modulation	RB Configuration		ERP (dBm)
					RB Size	RB Offset	
LTE Band 17	5MHz	L 23755	706.5	QPSK	1	0	23.16
					25	0	22.01
				16-QAM	1	0	22.67
					25	0	20.56
		M 23790	710	QPSK	1	0	23.16
					25	0	21.94
				16-QAM	1	0	22.46
					25	0	21.11
		H 23825	713.5	QPSK	1	0	23.24
					25	0	22.02
				16-QAM	1	0	22.73
					25	0	21.27

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

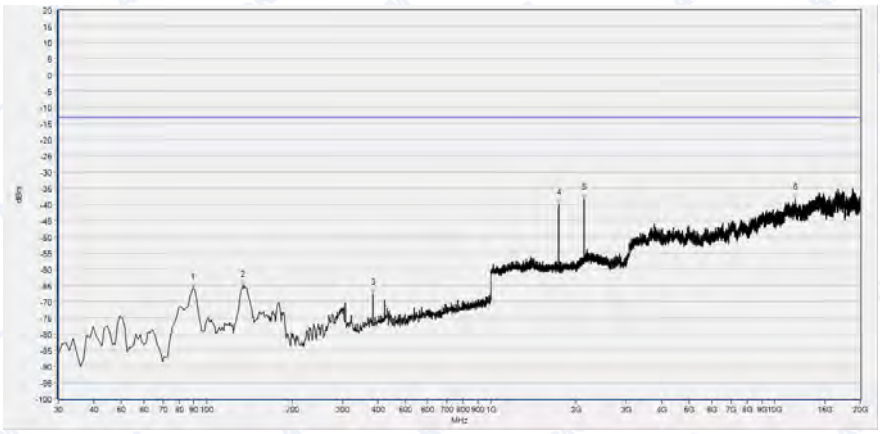
The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The Turn Table is actuated to turn from 0° to 360°, and both horizontal and vertical polarizations of the Test Antenna are used to find the maximum radiated power. Mid channels on all channel bandwidth verified.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

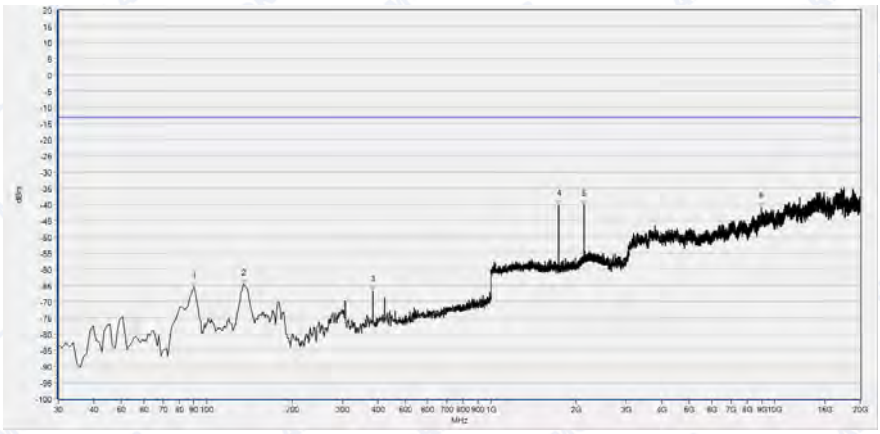
LTE Band 4 1.4MHz BW, Mid Channel, QPSK



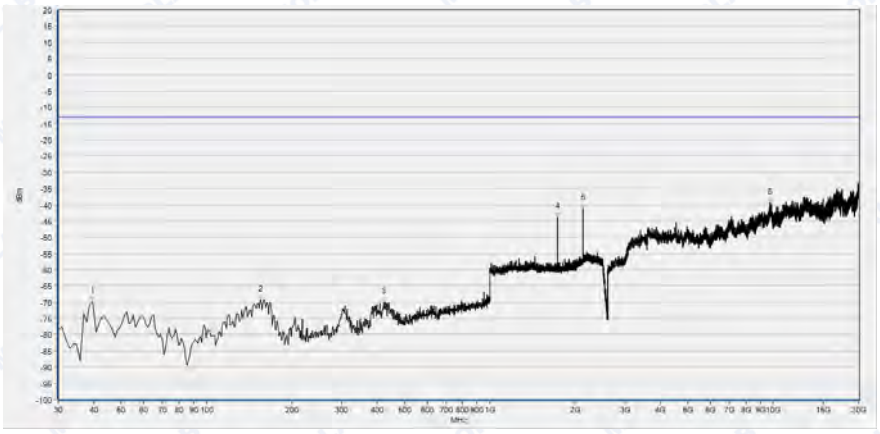
Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	89.229	-66.01	-13.00	Horizontal	PASS
2	133.894	-65.16	-13.00	Horizontal	PASS
3	384.404	-67.57	-13.00	Horizontal	PASS
4	1733.167	-40.03	-13.00	Horizontal	PASS
5	2132.566	-38.36	-13.00	Horizontal	PASS
6	11838.040	-38.37	-13.00	Horizontal	PASS

Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	31.942	-66.42	-13.00	Vertical	PASS
2	90.200	-62.89	-13.00	Vertical	PASS
3	1733.167	-49.46	-13.00	Vertical	PASS
4	2133.367	-45.89	-13.00	Vertical	PASS
5	3713.786	-45.66	-13.00	Vertical	PASS
6	10294.982	-40.27	-13.00	Vertical	PASS

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

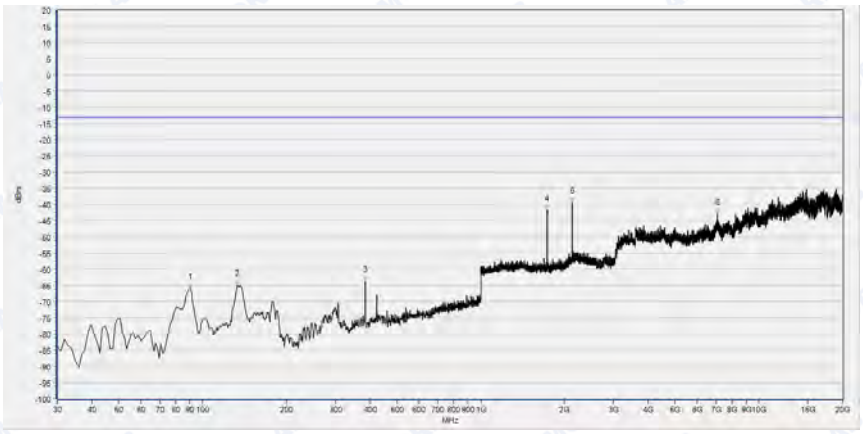


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-65.83	-13.00	Horizontal	PASS
2	134.865	-64.86	-13.00	Horizontal	PASS
3	384.404	-66.71	-13.00	Horizontal	PASS
4	1733.167	-40.25	-13.00	Horizontal	PASS
5	2132.566	-40.30	-13.00	Horizontal	PASS
6	8978.163	-40.93	-13.00	Horizontal	PASS

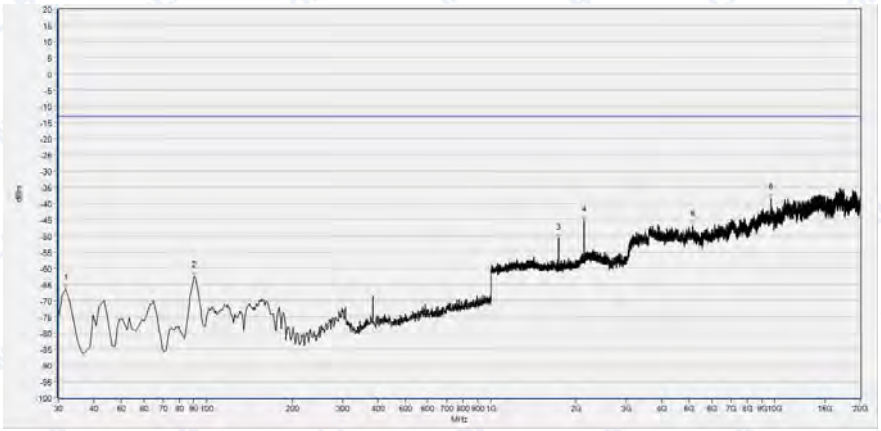


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	39.710	-69.73	-13.00	Vertical	PASS
2	155.255	-69.44	-13.00	Vertical	PASS
3	422.272	-70.02	-13.00	Vertical	PASS
4	1733.167	-44.01	-13.00	Vertical	PASS
5	2132.566	-41.17	-13.00	Vertical	PASS
6	9740.990	-39.34	-13.00	Vertical	PASS

LTE Band 4 3MHz BW, Mid Channel, QPSK

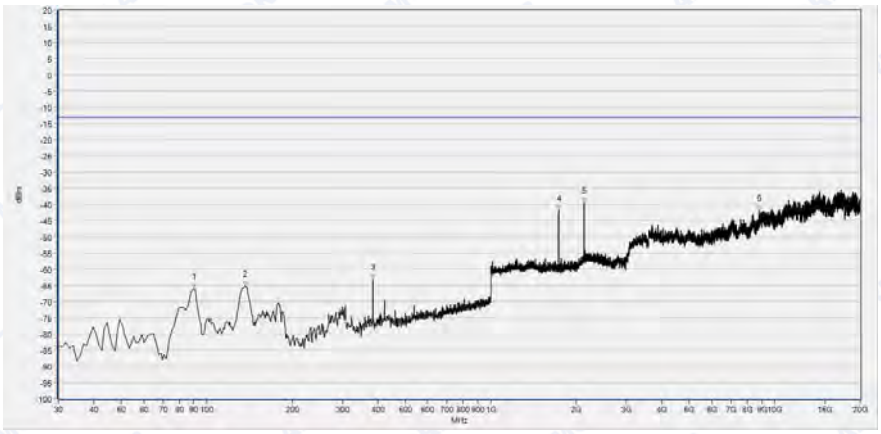


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-65.89	-13.00	Horizontal	PASS
2	132.923	-65.11	-13.00	Horizontal	PASS
3	384.404	-63.92	-13.00	Horizontal	PASS
4	1732.366	-41.83	-13.00	Horizontal	PASS
5	2133.367	-39.48	-13.00	Horizontal	PASS
6	7107.351	-43.16	-13.00	Horizontal	PASS



Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	31.942	-66.48	-13.00	Vertical	PASS
2	90.200	-62.69	-13.00	Vertical	PASS
3	1732.366	-50.99	-13.00	Vertical	PASS
4	2132.566	-45.56	-13.00	Vertical	PASS
5	5129.222	-46.96	-13.00	Vertical	PASS
6	9717.786	-38.68	-13.00	Vertical	PASS

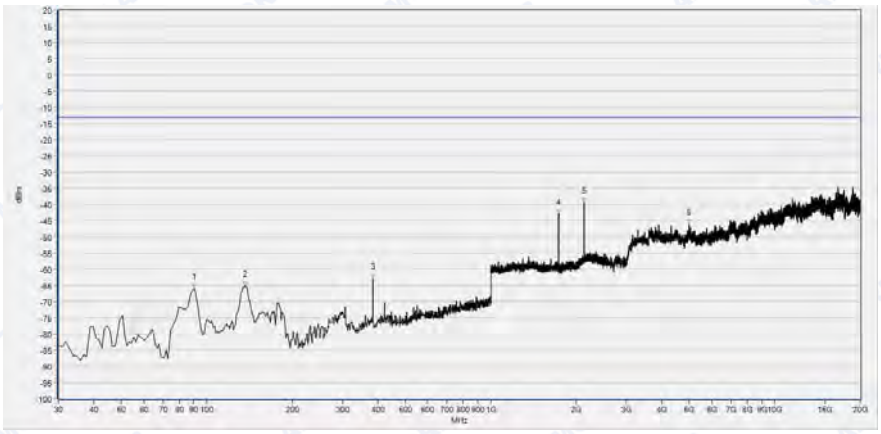
LTE Band 4 3MHz BW, Mid Channel, 16QAM



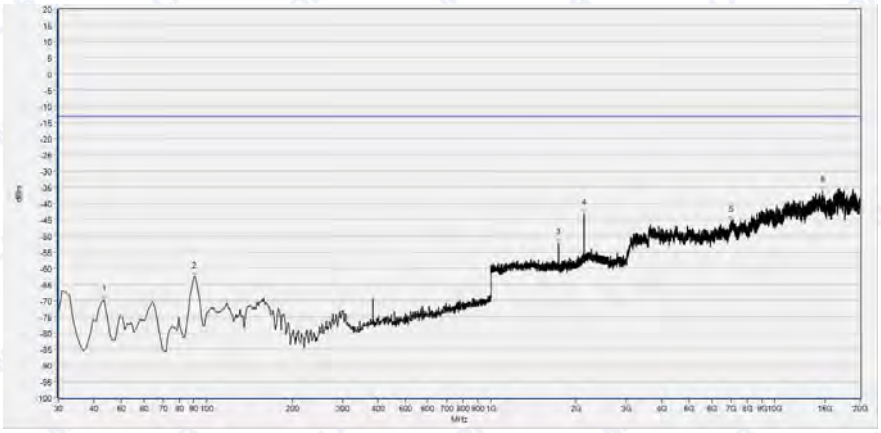
Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-66.00	-13.00	Horizontal	PASS
2	136.807	-65.24	-13.00	Horizontal	PASS
3	384.404	-62.99	-13.00	Horizontal	PASS
4	1733.967	-41.88	-13.00	Horizontal	PASS
5	2133.367	-39.60	-13.00	Horizontal	PASS
6	8786.731	-41.96	-13.00	Horizontal	PASS

Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-62.97	-13.00	Vertical	PASS
2	153.313	-69.88	-13.00	Vertical	PASS
3	1733.167	-50.64	-13.00	Vertical	PASS
4	2132.566	-45.25	-13.00	Vertical	PASS
5	4447.608	-46.55	-13.00	Vertical	PASS
6	10819.970	-39.46	-13.00	Vertical	PASS

LTE Band 4 5MHz BW, Mid Channel, QPSK

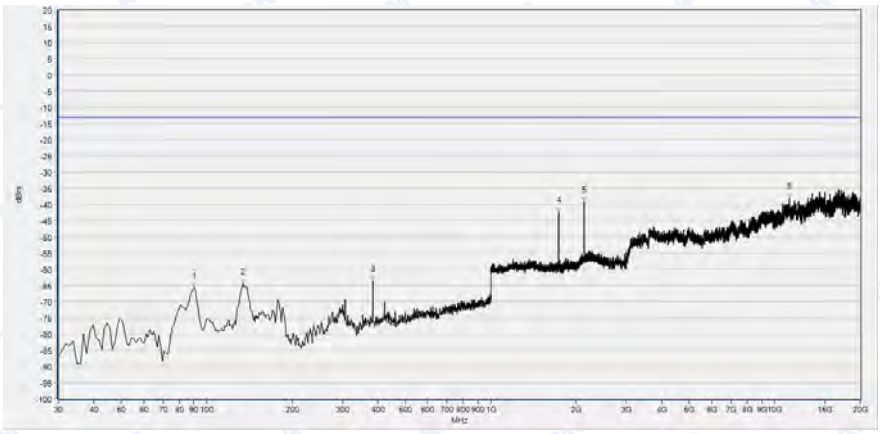


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-65.86	-13.00	Horizontal	PASS
2	136.807	-65.34	-13.00	Horizontal	PASS
3	384.404	-62.84	-13.00	Horizontal	PASS
4	1732.366	-43.05	-13.00	Horizontal	PASS
5	2130.965	-39.47	-13.00	Horizontal	PASS
6	4984.197	-46.18	-13.00	Horizontal	PASS

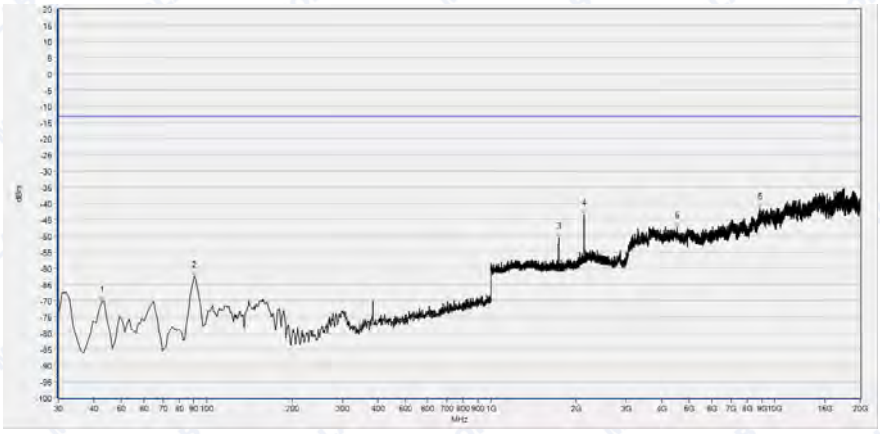


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	43.594	-69.91	-13.00	Vertical	PASS
2	90.200	-62.83	-13.00	Vertical	PASS
3	1731.566	-52.39	-13.00	Vertical	PASS
4	2131.766	-43.29	-13.00	Vertical	PASS
5	7008.735	-45.55	-13.00	Vertical	PASS
6	14753.026	-36.13	-13.00	Vertical	PASS

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

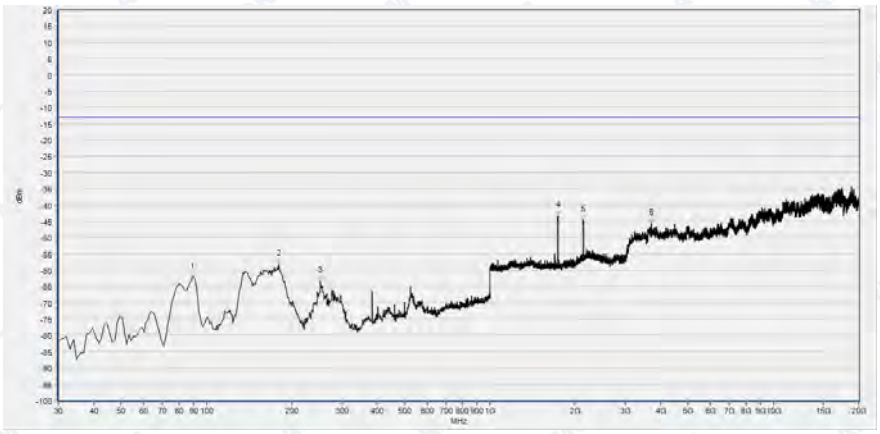


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-65.62	-13.00	Horizontal	PASS
2	133.894	-64.56	-13.00	Horizontal	PASS
3	384.404	-63.67	-13.00	Horizontal	PASS
4	1734.767	-42.47	-13.00	Horizontal	PASS
5	2132.566	-39.24	-13.00	Horizontal	PASS
6	11243.441	-38.18	-13.00	Horizontal	PASS

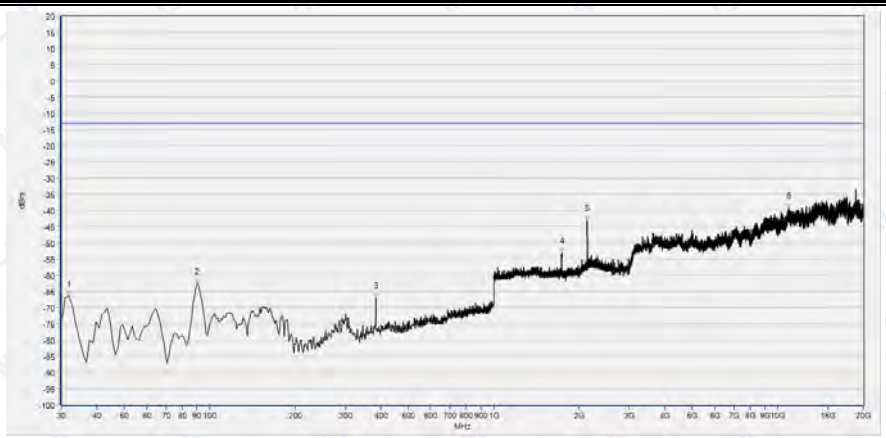


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	42.623	-70.17	-13.00	Vertical	PASS
2	90.200	-62.65	-13.00	Vertical	PASS
3	1733.967	-50.83	-13.00	Vertical	PASS
4	2132.566	-43.47	-13.00	Vertical	PASS
5	4540.423	-47.38	-13.00	Vertical	PASS
6	8876.646	-41.58	-13.00	Vertical	PASS

LTE Band 4 10MHz BW, Mid Channel, QPSK

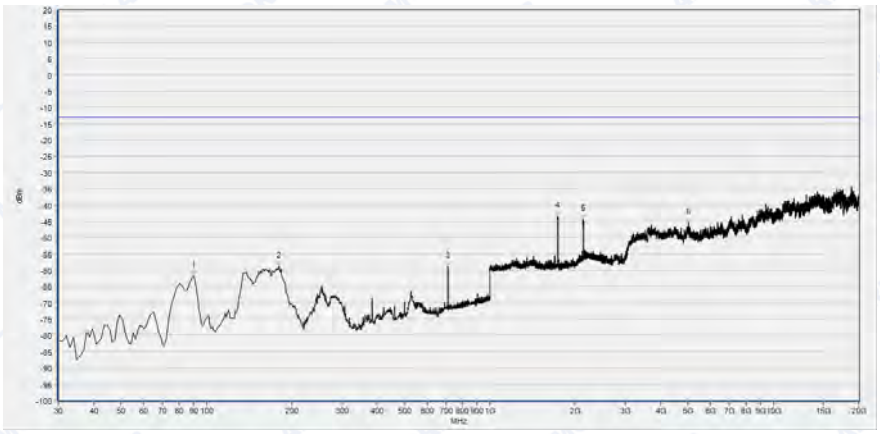


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	89.229	-61.95	-13.00	Horizontal	PASS
2	179.530	-58.18	-13.00	Horizontal	PASS
3	252.352	-63.39	-13.00	Horizontal	PASS
4	1737.169	-43.25	-13.00	Horizontal	PASS
5	2130.165	-44.60	-13.00	Horizontal	PASS
6	3710.885	-45.65	-13.00	Horizontal	PASS

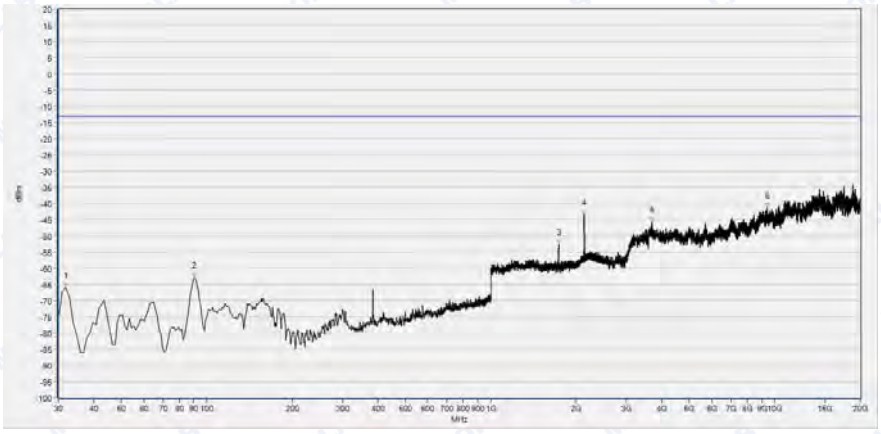


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	31.942	-66.42	-13.00	Vertical	PASS
2	90.200	-62.68	-13.00	Vertical	PASS
3	384.404	-66.82	-13.00	Vertical	PASS
4	1734.767	-53.13	-13.00	Vertical	PASS
5	2129.365	-43.21	-13.00	Vertical	PASS
6	10892.482	-39.21	-13.00	Vertical	PASS

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

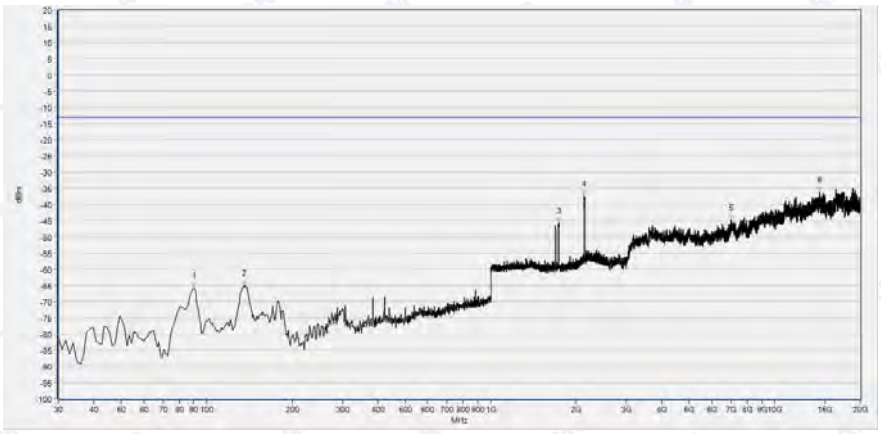


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-61.73	-13.00	Horizontal	PASS
2	179.530	-58.92	-13.00	Horizontal	PASS
3	710.651	-58.79	-13.00	Horizontal	PASS
4	1735.568	-43.57	-13.00	Horizontal	PASS
5	2133.367	-44.28	-13.00	Horizontal	PASS
6	5004.501	-45.57	-13.00	Horizontal	PASS

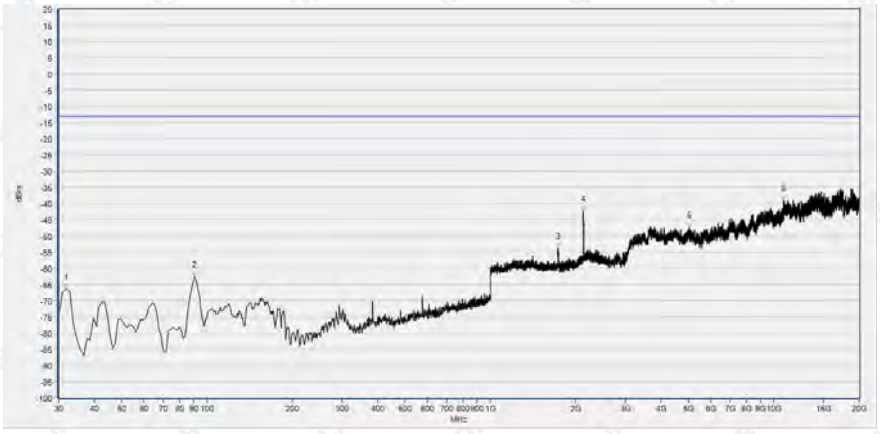


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	31.942	-65.96	-13.00	Vertical	PASS
2	90.200	-62.83	-13.00	Vertical	PASS
3	1736.368	-52.73	-13.00	Vertical	PASS
4	2129.365	-43.63	-13.00	Vertical	PASS
5	3702.184	-45.61	-13.00	Vertical	PASS
6	9419.037	-41.41	-13.00	Vertical	PASS

LTE Band 4 15MHz BW, Mid Channel, QPSK

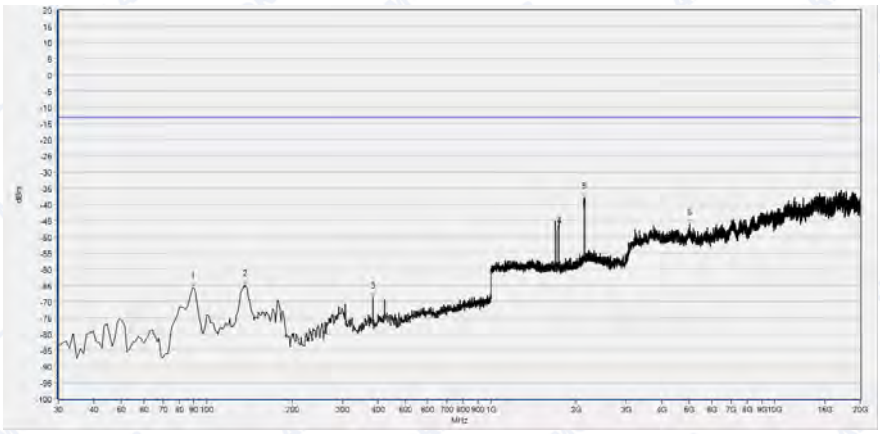


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-65.61	-13.00	Horizontal	PASS
2	135.836	-65.11	-13.00	Horizontal	PASS
3	1734.767	-45.79	-13.00	Horizontal	PASS
4	2135.768	-37.45	-13.00	Horizontal	PASS
5	7014.536	-44.86	-13.00	Horizontal	PASS
6	14375.963	-36.19	-13.00	Horizontal	PASS

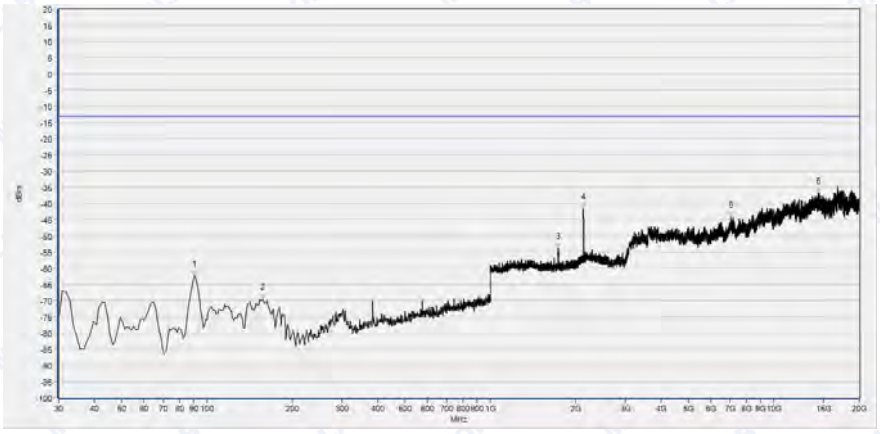


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	31.942	-66.34	-13.00	Vertical	PASS
2	90.200	-62.55	-13.00	Vertical	PASS
3	1732.366	-53.92	-13.00	Vertical	PASS
4	2127.764	-42.41	-13.00	Vertical	PASS
5	5036.406	-47.43	-13.00	Vertical	PASS
6	10825.771	-39.02	-13.00	Vertical	PASS

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

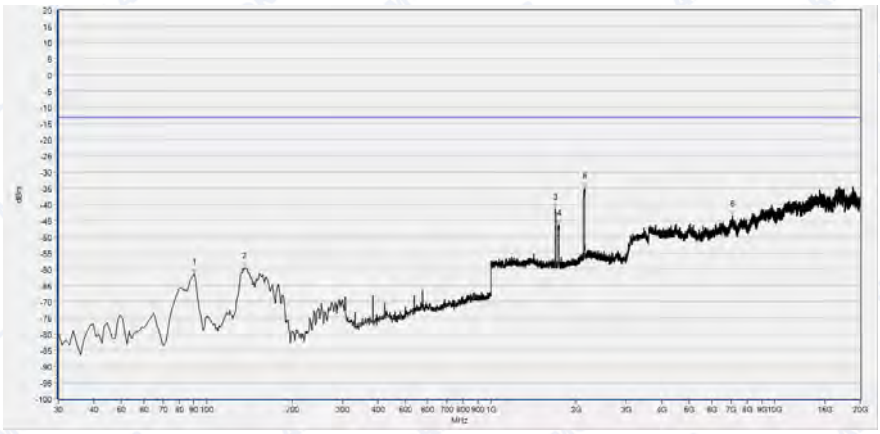


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	89.229	-65.78	-13.00	Horizontal	PASS
2	136.807	-65.05	-13.00	Horizontal	PASS
3	384.404	-68.88	-13.00	Horizontal	PASS
4	1735.568	-45.21	-13.00	Horizontal	PASS
5	2134.167	-38.04	-13.00	Horizontal	PASS
6	5004.501	-46.23	-13.00	Horizontal	PASS

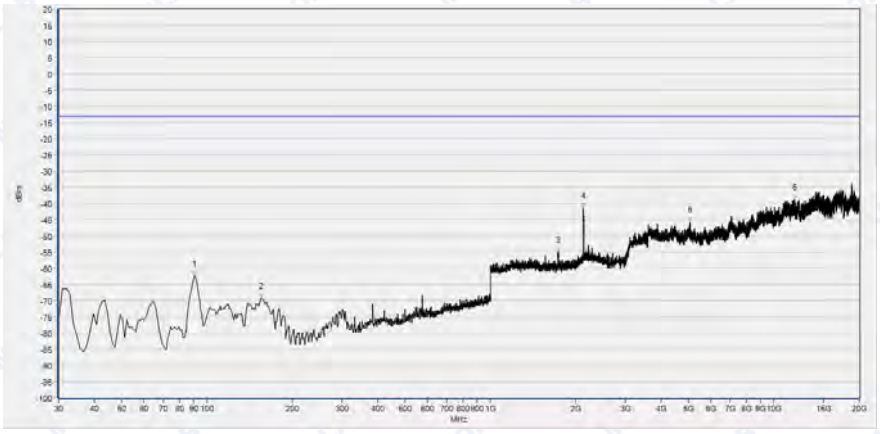


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-62.34	-13.00	Vertical	PASS
2	157.197	-69.56	-13.00	Vertical	PASS
3	1736.368	-53.86	-13.00	Vertical	PASS
4	2127.764	-41.78	-13.00	Vertical	PASS
5	7034.839	-44.31	-13.00	Vertical	PASS
6	14338.256	-36.99	-13.00	Vertical	PASS

LTE Band 4 20MHz BW, Mid Channel, QPSK

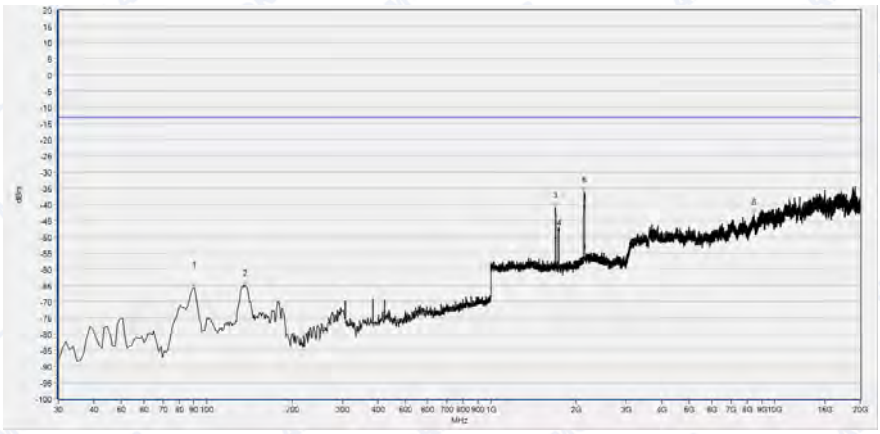


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-61.51	-13.00	Horizontal	PASS
2	135.836	-59.60	-13.00	Horizontal	PASS
3	1689.945	-41.31	-13.00	Horizontal	PASS
4	1736.368	-46.42	-13.00	Horizontal	PASS
5	2141.371	-34.89	-13.00	Horizontal	PASS
6	7116.053	-43.60	-13.00	Horizontal	PASS

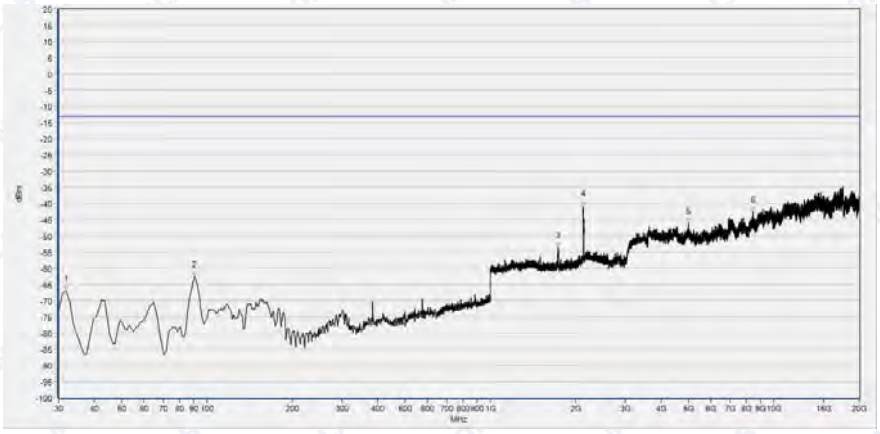


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-62.28	-13.00	Vertical	PASS
2	155.255	-69.32	-13.00	Vertical	PASS
3	1733.167	-55.06	-13.00	Vertical	PASS
4	2126.963	-41.42	-13.00	Vertical	PASS
5	5059.610	-45.65	-13.00	Vertical	PASS
6	11846.741	-38.87	-13.00	Vertical	PASS

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

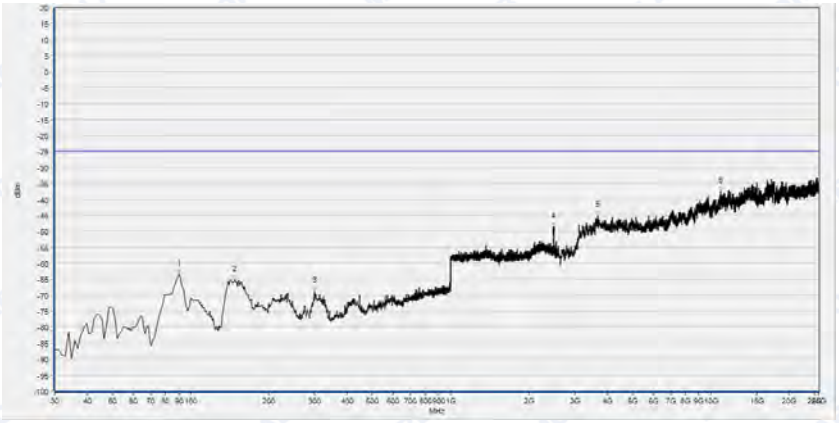


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-65.83	-13.00	Horizontal	PASS
2	136.807	-65.03	-13.00	Horizontal	PASS
3	1690.745	-40.97	-13.00	Horizontal	PASS
4	1737.169	-46.91	-13.00	Horizontal	PASS
5	2136.568	-36.21	-13.00	Horizontal	PASS
6	8427.071	-43.20	-13.00	Horizontal	PASS

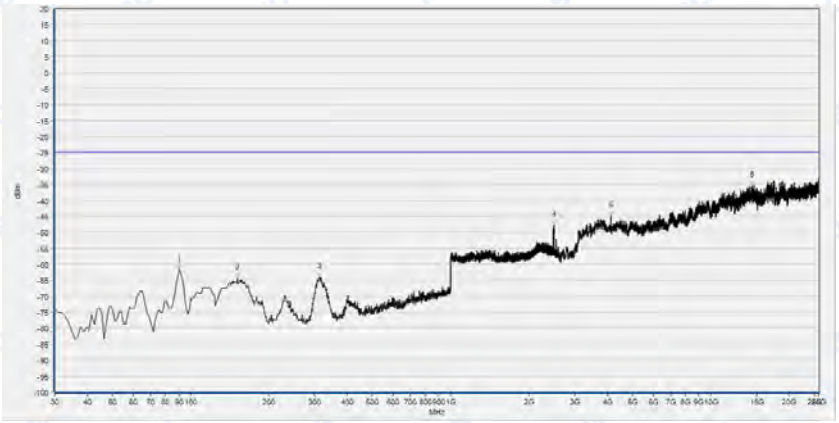


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	31.942	-66.95	-13.00	Vertical	PASS
2	90.200	-62.66	-13.00	Vertical	PASS
3	1736.368	-53.62	-13.00	Vertical	PASS
4	2126.963	-41.08	-13.00	Vertical	PASS
5	5013.202	-46.26	-13.00	Vertical	PASS
6	8464.777	-42.66	-13.00	Vertical	PASS

LTE Band 7 5MHz BW, Mid Channel, QPSK



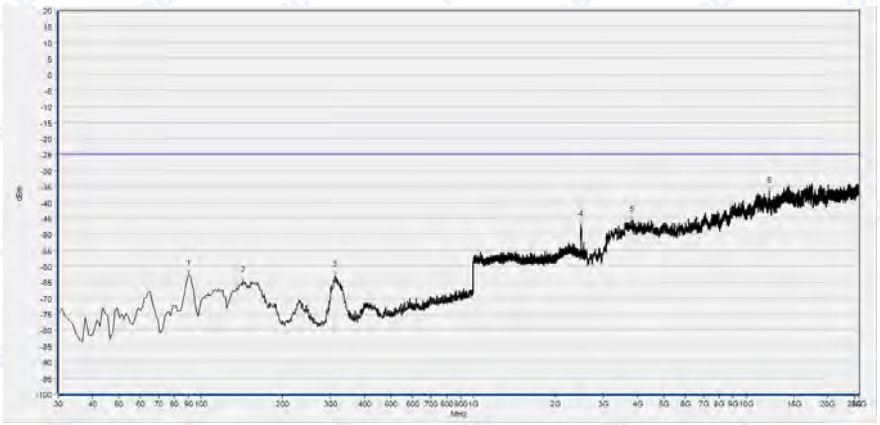
Num	Freq(MHz)	PK	limit PK	Antenna	Verdict
1	90.140	-63.27	-25.00	Horizontal	PASS
2	147.370	-65.14	-25.00	Horizontal	PASS
3	299.660	-68.68	-25.00	Horizontal	PASS
4	2535.156	-48.70	-25.00	Horizontal	PASS
5	3672.340	-45.07	-25.00	Horizontal	PASS
6	10948.936	-37.35	-25.00	Horizontal	PASS



Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-61.81	-25.00	Vertical	PASS
2	151.250	-64.42	-25.00	Vertical	PASS
3	312.270	-64.03	-25.00	Vertical	PASS
4	2535.156	-47.65	-25.00	Vertical	PASS
5	4123.404	-44.87	-25.00	Vertical	PASS
6	14446.809	-35.45	-25.00	Vertical	PASS

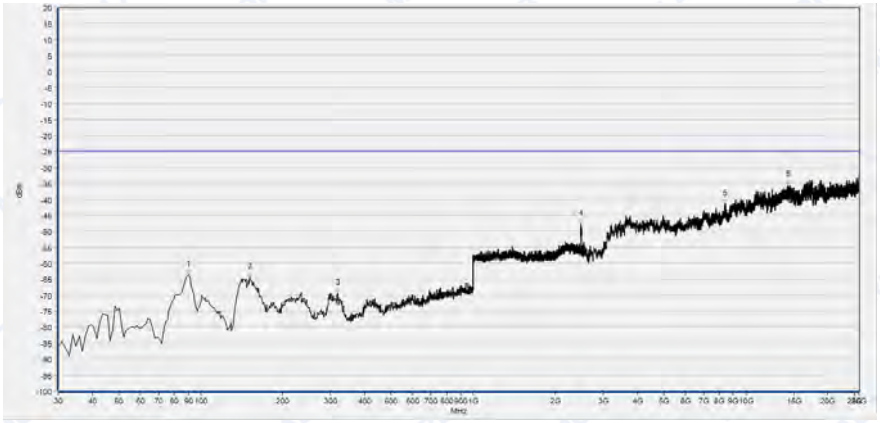
LTE Band 7 5MHz BW, Mid Channel, 16QAM

Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	89.170	-63.81	-25.00	Horizontal	PASS
2	150.280	-63.12	-25.00	Horizontal	PASS
3	699.300	-67.35	-25.00	Horizontal	PASS
4	2535.156	-46.83	-25.00	Horizontal	PASS
5	4489.362	-44.99	-25.00	Horizontal	PASS
6	8906.383	-39.80	-25.00	Horizontal	PASS

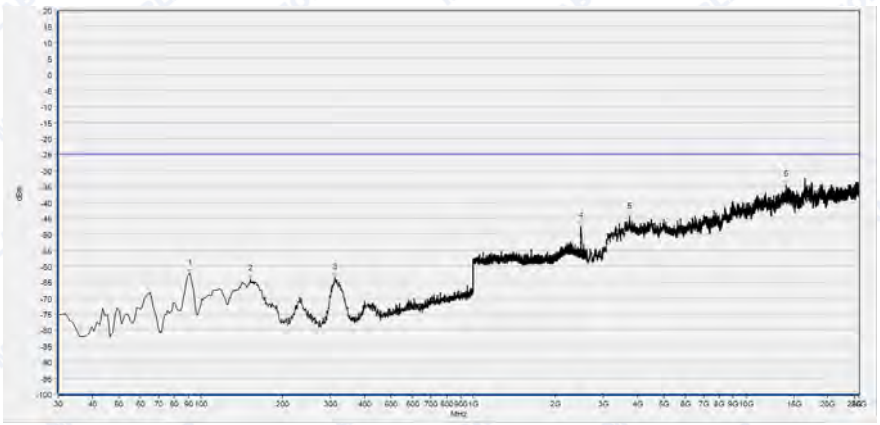


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-62.46	-25.00	Vertical	PASS
2	143.490	-64.53	-25.00	Vertical	PASS
3	310.330	-62.89	-25.00	Vertical	PASS
4	2535.156	-47.14	-25.00	Vertical	PASS
5	3825.532	-45.50	-25.00	Vertical	PASS
6	12195.745	-36.46	-25.00	Vertical	PASS

LTE Band 7 10MHz BW, Mid Channel, QPSK

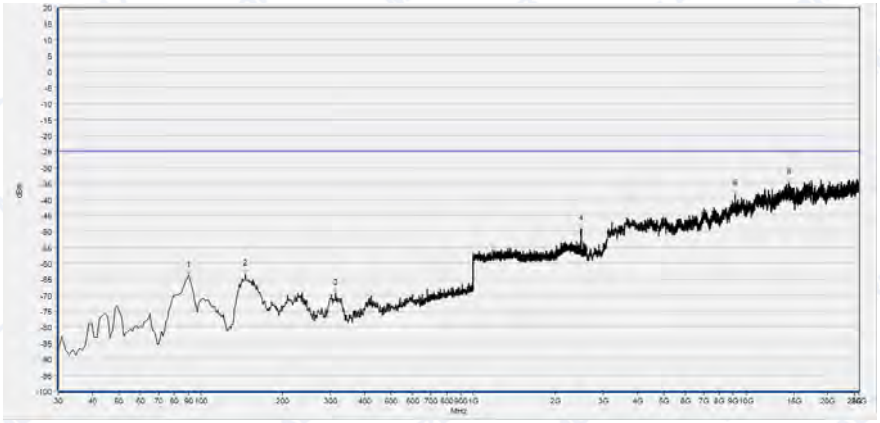


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-63.53	-25.00	Horizontal	PASS
2	151.250	-64.50	-25.00	Horizontal	PASS
3	319.060	-69.45	-25.00	Horizontal	PASS
4	2535.156	-47.60	-25.00	Horizontal	PASS
5	8365.957	-41.54	-25.00	Horizontal	PASS
6	14280.851	-35.49	-25.00	Horizontal	PASS



Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	91.110	-62.18	-25.00	Vertical	PASS
2	152.220	-64.12	-25.00	Vertical	PASS
3	310.330	-63.65	-25.00	Vertical	PASS
4	2535.156	-47.57	-25.00	Vertical	PASS
5	3757.447	-44.53	-25.00	Vertical	PASS
6	14021.277	-34.57	-25.00	Vertical	PASS

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



Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-63.91	-25.00	Horizontal	PASS
2	145.430	-63.46	-25.00	Horizontal	PASS
3	312.270	-69.32	-25.00	Horizontal	PASS
4	2535.156	-49.24	-25.00	Horizontal	PASS
5	9161.702	-38.36	-25.00	Horizontal	PASS
6	14434.043	-34.78	-25.00	Horizontal	PASS

Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-62.34	-25.00	Vertical	PASS
2	157.070	-64.36	-25.00	Vertical	PASS
3	313.240	-62.96	-25.00	Vertical	PASS
4	2535.156	-48.57	-25.00	Vertical	PASS
5	7046.809	-41.41	-25.00	Vertical	PASS
6	11136.170	-35.28	-25.00	Vertical	PASS

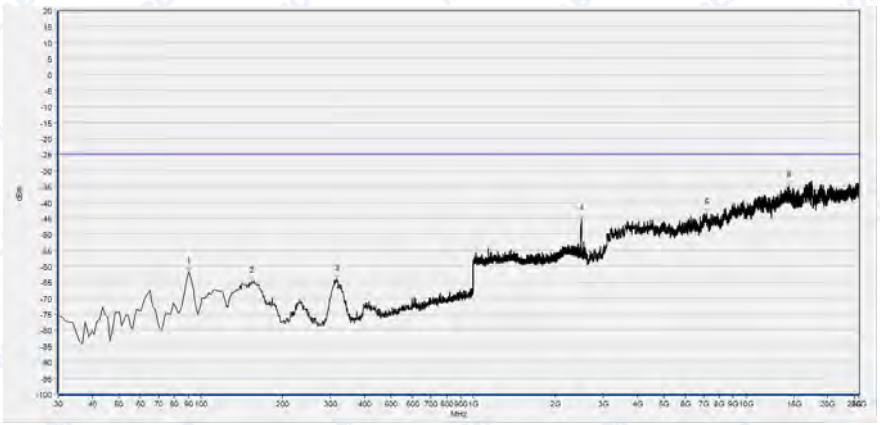
LTE Band 7 15MHz BW, Mid Channel, QPSK

Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-64.10	-25.00	Horizontal	PASS
2	134.760	-60.93	-25.00	Horizontal	PASS
3	576.110	-66.18	-25.00	Horizontal	PASS
4	2535.156	-46.95	-25.00	Horizontal	PASS
5	4970.213	-46.14	-25.00	Horizontal	PASS
6	11736.170	-38.45	-25.00	Horizontal	PASS

Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-61.98	-25.00	Vertical	PASS
2	153.190	-64.11	-25.00	Vertical	PASS
3	311.300	-63.41	-25.00	Vertical	PASS
4	2535.156	-47.60	-25.00	Vertical	PASS
5	6365.957	-44.41	-25.00	Vertical	PASS
6	9770.213	-38.73	-25.00	Vertical	PASS

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

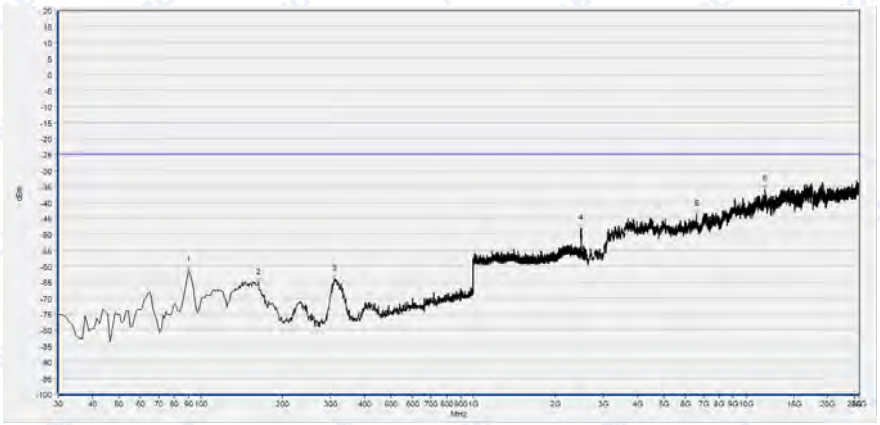
Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	89.170	-64.10	-25.00	Horizontal	PASS
2	134.760	-60.55	-25.00	Horizontal	PASS
3	576.110	-65.36	-25.00	Horizontal	PASS
4	2535.156	-44.25	-25.00	Horizontal	PASS
5	7642.553	-43.58	-25.00	Horizontal	PASS
6	17463.830	-33.64	-25.00	Horizontal	PASS



Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-61.90	-25.00	Vertical	PASS
2	154.160	-64.72	-25.00	Vertical	PASS
3	317.120	-64.00	-25.00	Vertical	PASS
4	2535.156	-45.32	-25.00	Vertical	PASS
5	7174.468	-43.28	-25.00	Vertical	PASS
6	14378.723	-34.86	-25.00	Vertical	PASS

LTE Band 7 20MHz BW, Mid Channel, QPSK

Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	89.170	-64.40	-25.00	Horizontal	PASS
2	134.760	-60.71	-25.00	Horizontal	PASS
3	576.110	-66.74	-25.00	Horizontal	PASS
4	2535.156	-41.00	-25.00	Horizontal	PASS
5	4476.596	-46.39	-25.00	Horizontal	PASS
6	11723.404	-38.29	-25.00	Horizontal	PASS



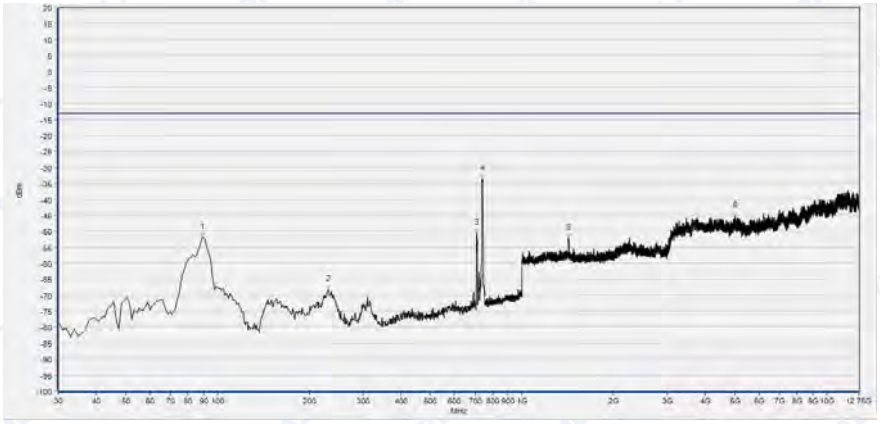
Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-61.41	-25.00	Vertical	PASS
2	162.890	-65.08	-25.00	Vertical	PASS
3	309.360	-63.95	-25.00	Vertical	PASS
4	2535.156	-48.06	-25.00	Vertical	PASS
5	6612.766	-43.67	-25.00	Vertical	PASS
6	11795.745	-35.86	-25.00	Vertical	PASS

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

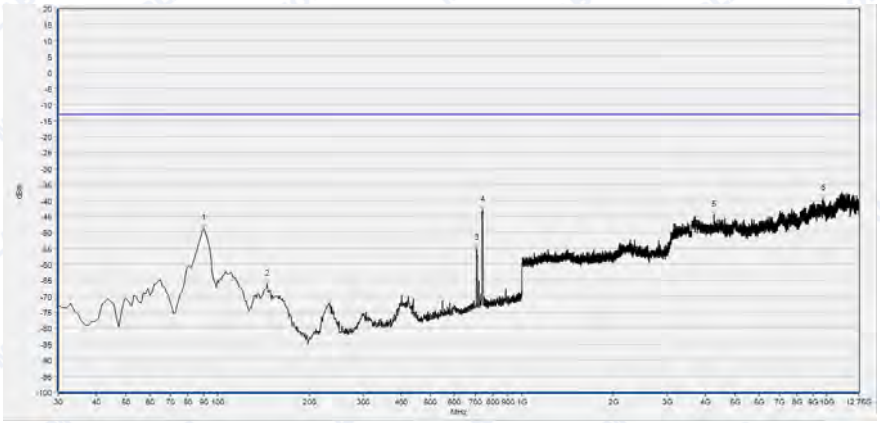
Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-63.98	-25.00	Horizontal	PASS
2	133.790	-60.64	-25.00	Horizontal	PASS
3	576.110	-66.59	-25.00	Horizontal	PASS
4	2535.156	-41.22	-25.00	Horizontal	PASS
5	7042.553	-44.08	-25.00	Horizontal	PASS
6	14434.043	-36.11	-25.00	Horizontal	PASS

Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.140	-62.38	-25.00	Vertical	PASS
2	156.100	-64.78	-25.00	Vertical	PASS
3	311.300	-63.33	-25.00	Vertical	PASS
4	2535.156	-48.31	-25.00	Vertical	PASS
5	5063.830	-44.60	-25.00	Vertical	PASS
6	14089.362	-34.75	-25.00	Vertical	PASS

LTE Band 17 5MHz BW, Mid Channel, QPSK

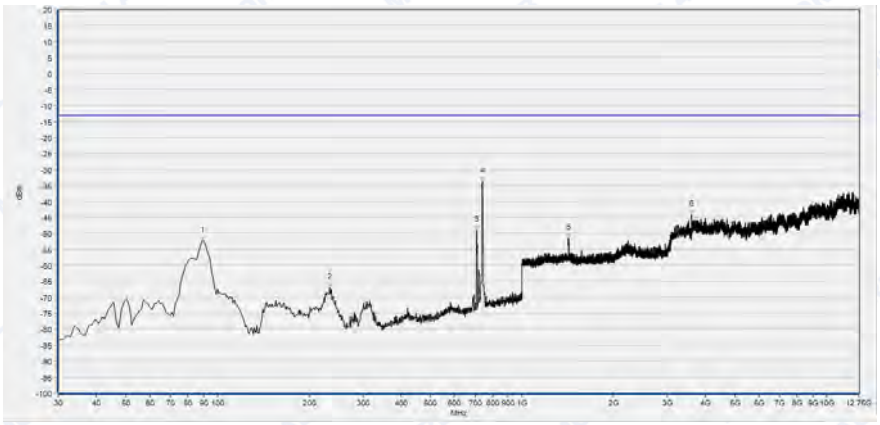


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	89.229	-52.01	-13.00	Horizontal	PASS
2	230.991	-68.29	-13.00	Horizontal	PASS
3	708.709	-50.70	-13.00	Horizontal	PASS
4	739.780	-33.71	-13.00	Horizontal	PASS
5	1418.273	-52.18	-13.00	Horizontal	PASS
6	5012.122	-45.35	-13.00	Horizontal	PASS

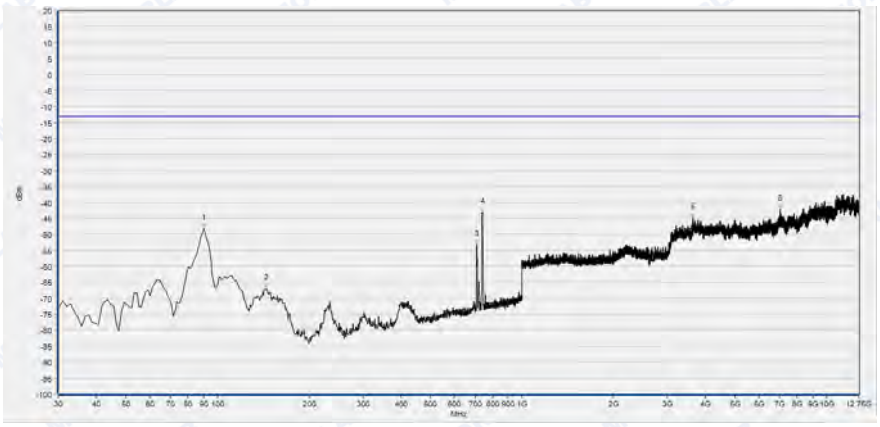


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-48.80	-13.00	Vertical	PASS
2	145.546	-66.32	-13.00	Vertical	PASS
3	708.709	-55.16	-13.00	Vertical	PASS
4	741.722	-43.10	-13.00	Vertical	PASS
5	4256.811	-44.55	-13.00	Vertical	PASS
6	9730.786	-39.38	-13.00	Vertical	PASS

LTE Band 17 5MHz BW, Mid Channel, 16QAM

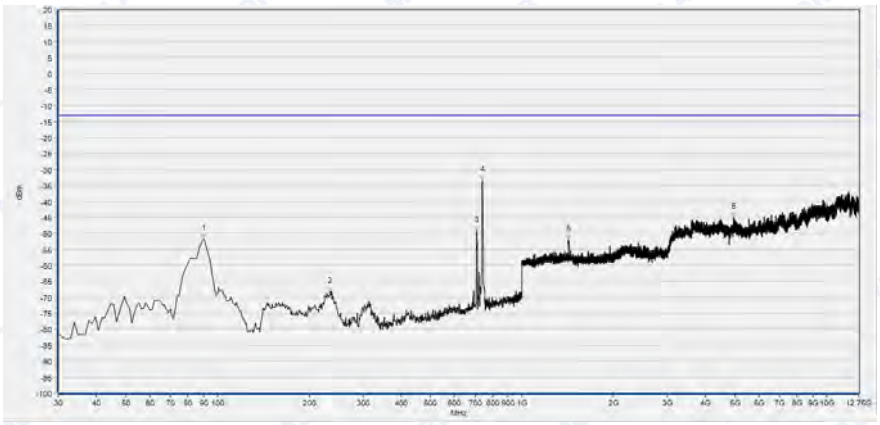


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	89.229	-52.49	-13.00	Horizontal	PASS
2	232.933	-66.90	-13.00	Horizontal	PASS
3	708.709	-48.95	-13.00	Horizontal	PASS
4	741.722	-33.87	-13.00	Horizontal	PASS
5	1418.273	-51.58	-13.00	Horizontal	PASS
6	3605.051	-44.04	-13.00	Horizontal	PASS

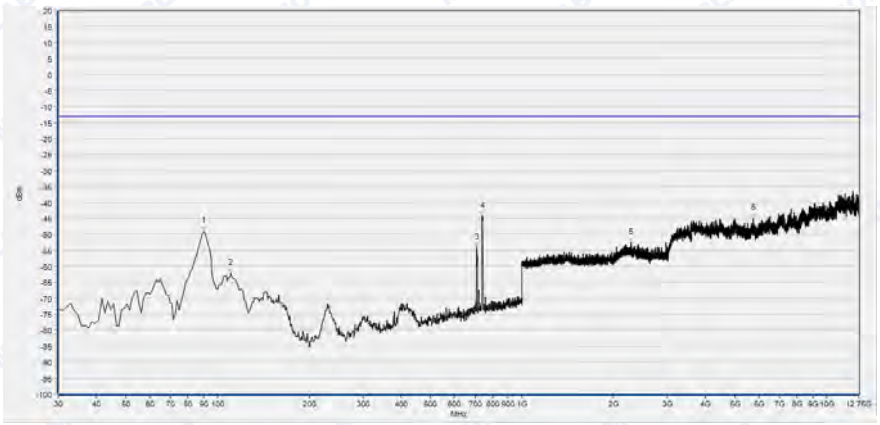


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-48.19	-13.00	Vertical	PASS
2	144.575	-67.00	-13.00	Vertical	PASS
3	708.709	-53.24	-13.00	Vertical	PASS
4	740.751	-43.00	-13.00	Vertical	PASS
5	3635.507	-44.77	-13.00	Vertical	PASS
6	7024.255	-42.03	-13.00	Vertical	PASS

LTE Band 17 10MHz BW, Mid Channel, QPSK

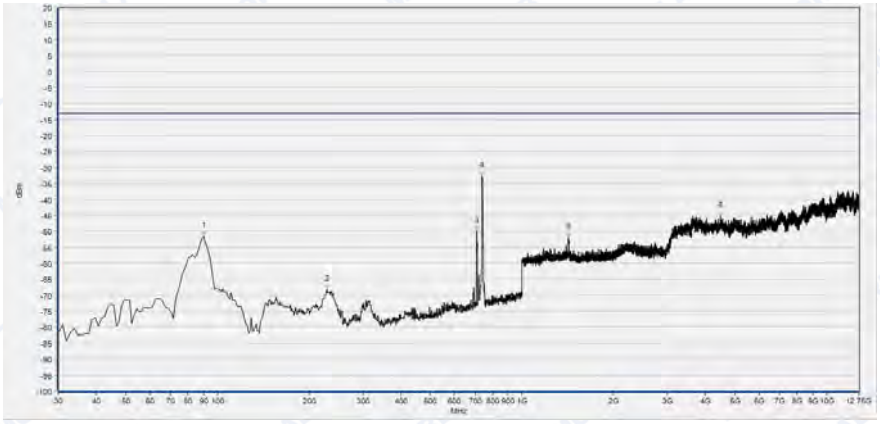


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-51.77	-13.00	Horizontal	PASS
2	233.904	-68.38	-13.00	Horizontal	PASS
3	708.709	-49.19	-13.00	Horizontal	PASS
4	739.780	-33.45	-13.00	Horizontal	PASS
5	1420.407	-51.88	-13.00	Horizontal	PASS
6	4943.089	-45.09	-13.00	Horizontal	PASS

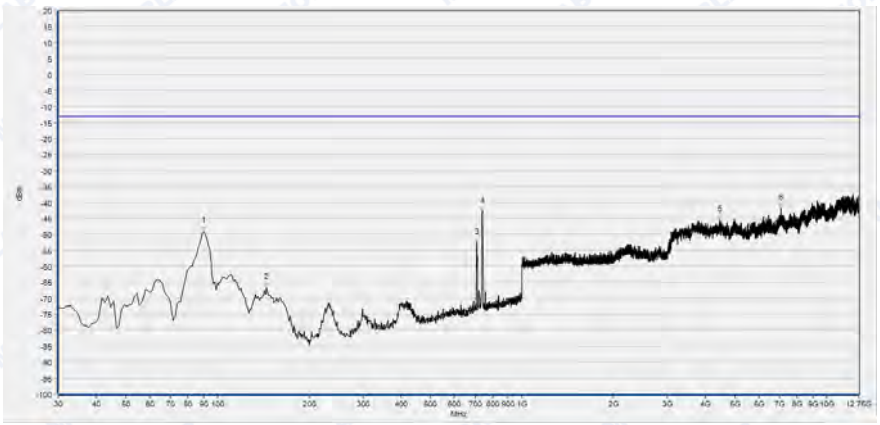


Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-49.05	-13.00	Vertical	PASS
2	110.591	-62.18	-13.00	Vertical	PASS
3	708.709	-54.23	-13.00	Vertical	PASS
4	740.751	-44.42	-13.00	Vertical	PASS
5	2284.161	-52.62	-13.00	Vertical	PASS
6	5755.251	-45.02	-13.00	Vertical	PASS

LTE Band 17 10MHz BW, Mid Channel, 16QAM



Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-51.47	-13.00	Horizontal	PASS
2	228.078	-68.17	-13.00	Horizontal	PASS
3	708.709	-49.93	-13.00	Horizontal	PASS
4	738.809	-32.79	-13.00	Horizontal	PASS
5	1421.474	-51.87	-13.00	Horizontal	PASS
6	4474.065	-45.15	-13.00	Horizontal	PASS



Num.	Fre. (MHz)	Peak	Limit(PK)	Antenna	Verdict
1	90.200	-49.12	-13.00	Vertical	PASS
2	144.575	-66.67	-13.00	Vertical	PASS
3	708.709	-52.52	-13.00	Vertical	PASS
4	739.780	-42.75	-13.00	Vertical	PASS
5	4465.943	-45.52	-13.00	Vertical	PASS
6	7091.258	-41.85	-13.00	Vertical	PASS

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