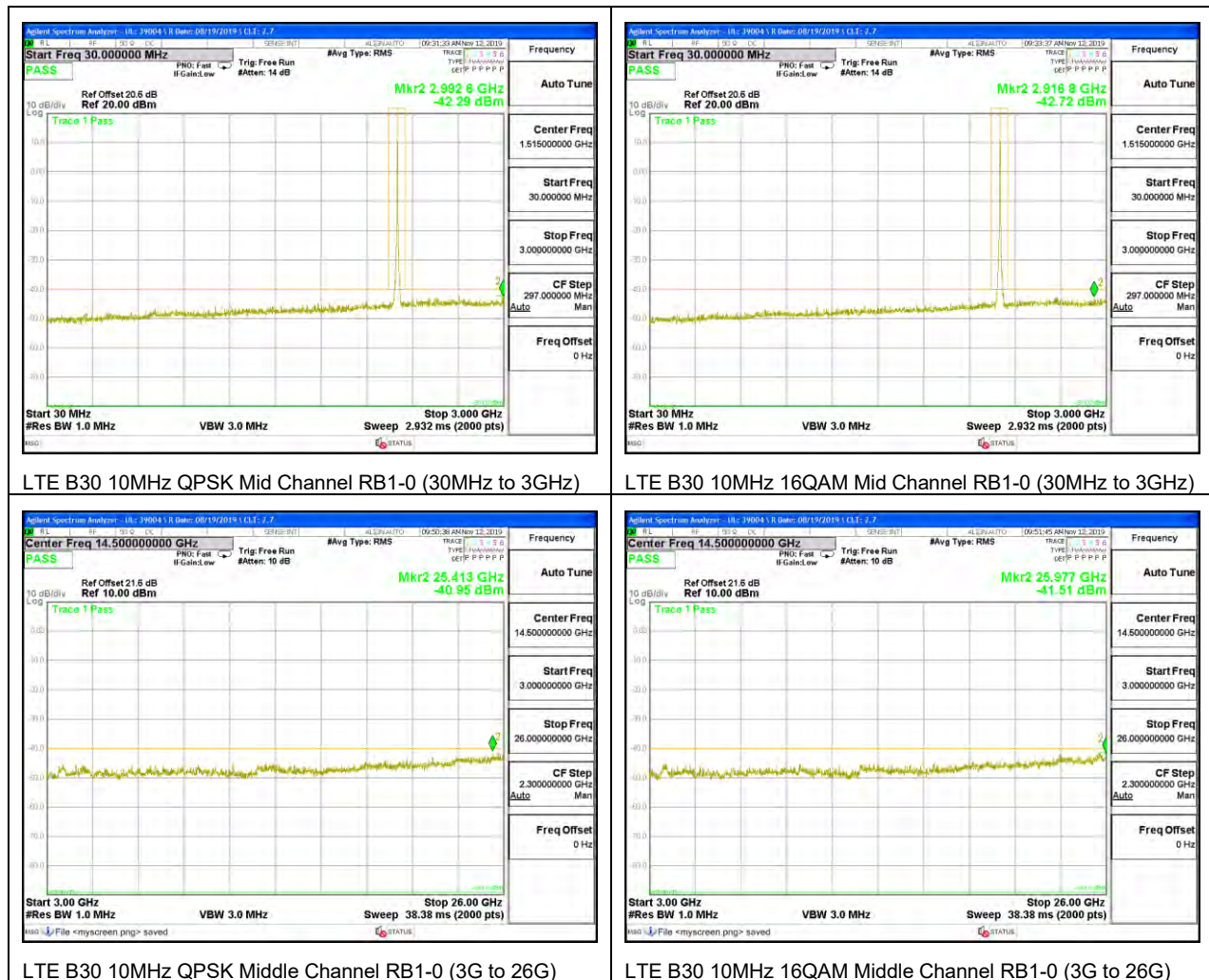
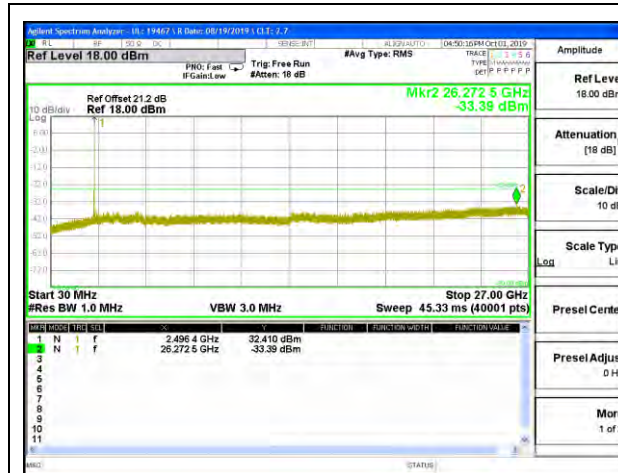
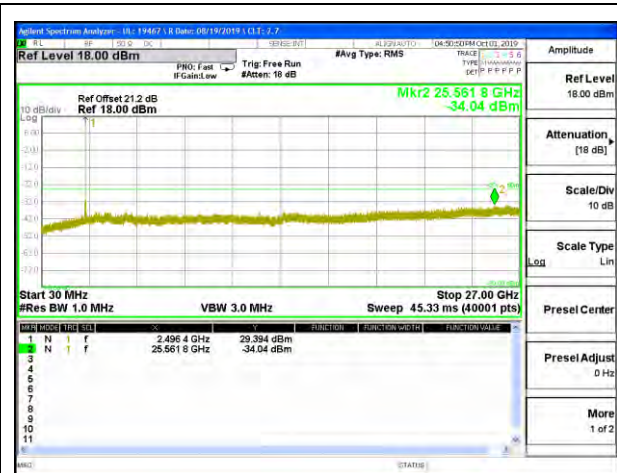




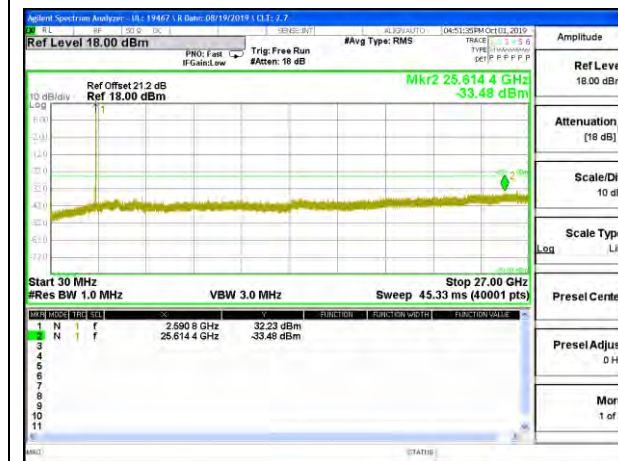
8.3.10. LTE BAND 41



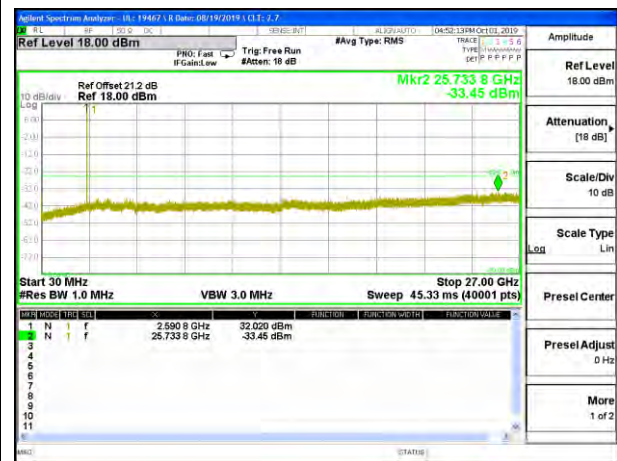
LTE B41 5MHz QPSK Low Channel RB1-0



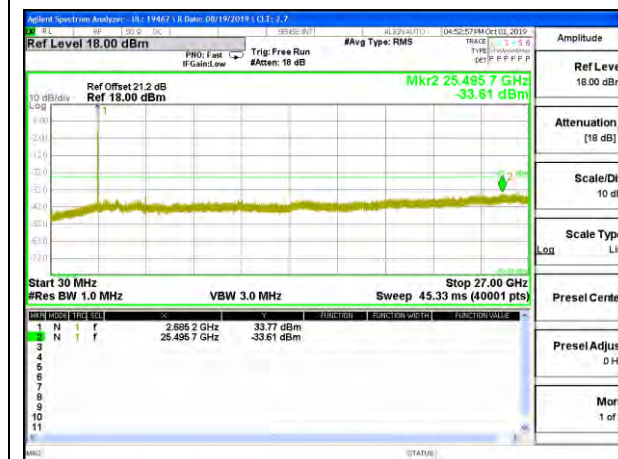
LTE B41 5MHz 16QAM Low Channel RB1-0



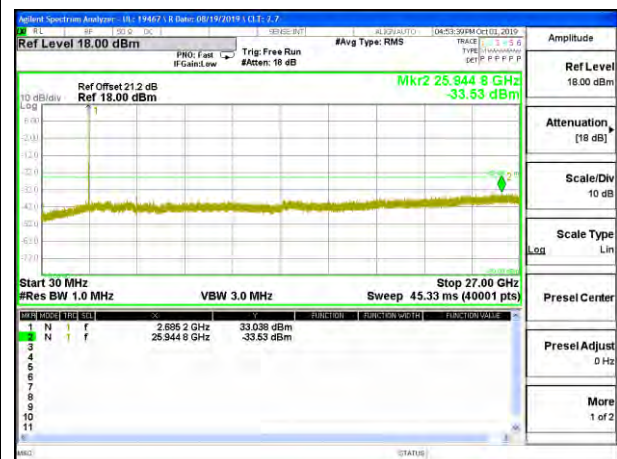
LTE B41 5MHz QPSK Middle Channel RB1-0



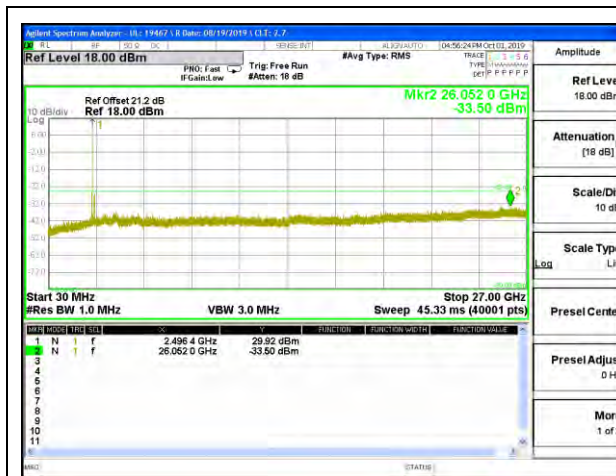
LTE B41 5MHz 16QAM Middle Channel RB1-0



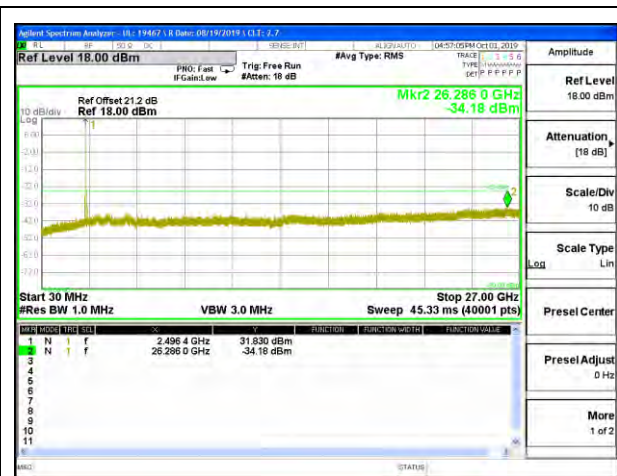
LTE B41 5MHz QPSK High Channel RB1-0



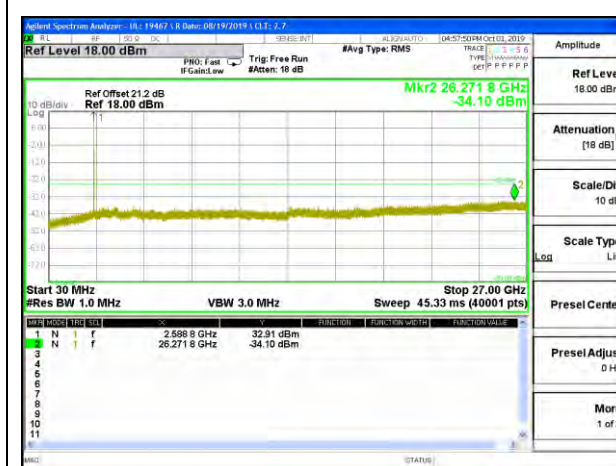
LTE B41 5MHz 16QAM High Channel RB1-0



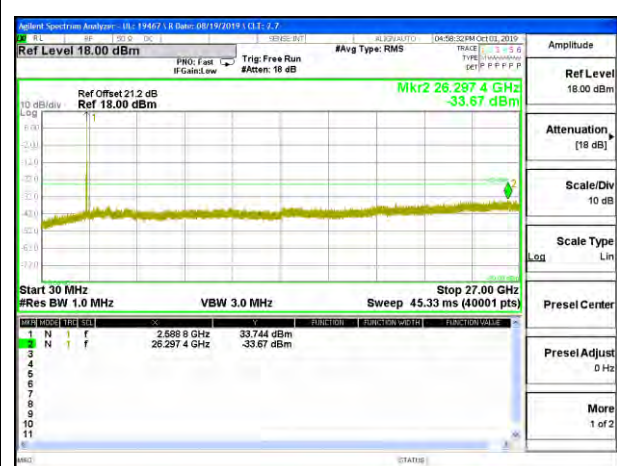
LTE B41 10MHz QPSK Low Channel RB1-0



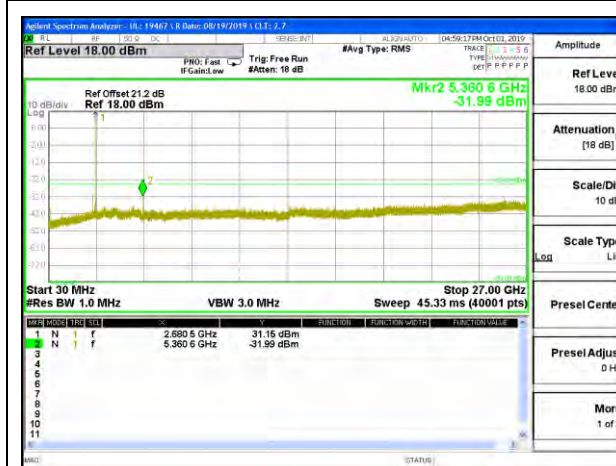
LTE B41 10MHz 16QAM Low Channel RB1-0



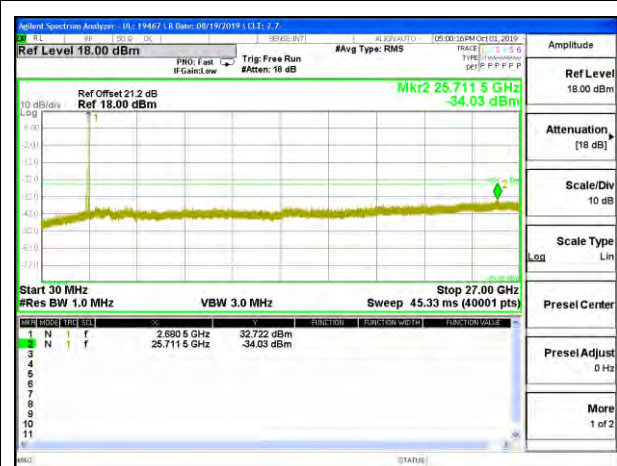
LTE B41 10MHz QPSK Middle Channel RB1-0



LTE B41 10MHz 16QAM Middle Channel RB1-0

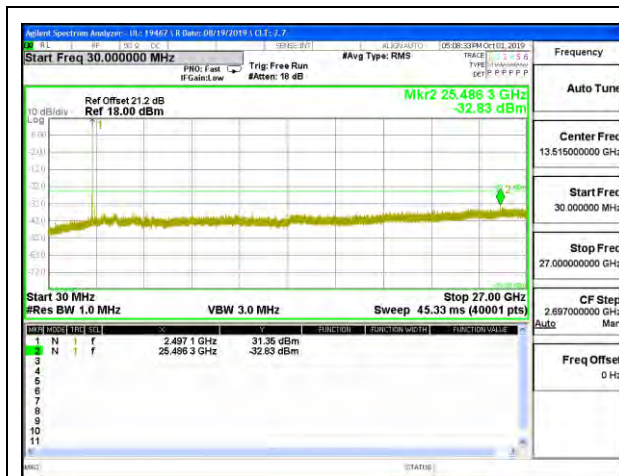


LTE B41 10MHz QPSK High Channel RB1-0

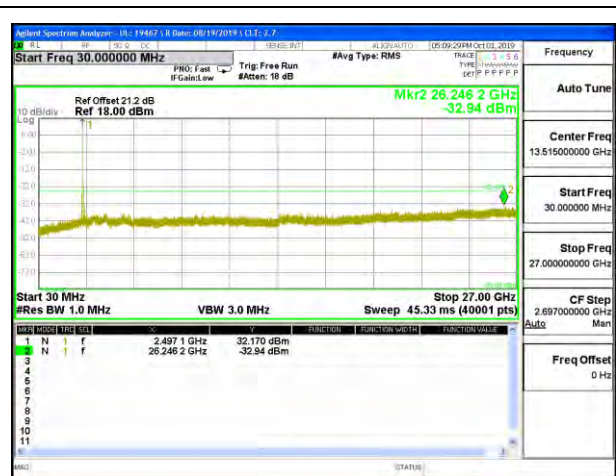


LTE B41 10MHz 16QAM High Channel RB1-0

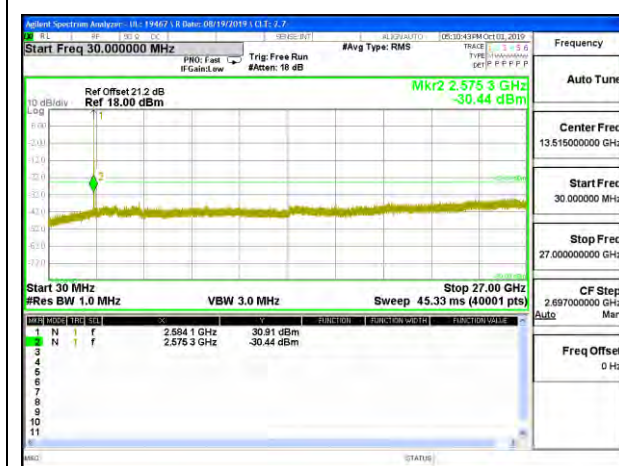




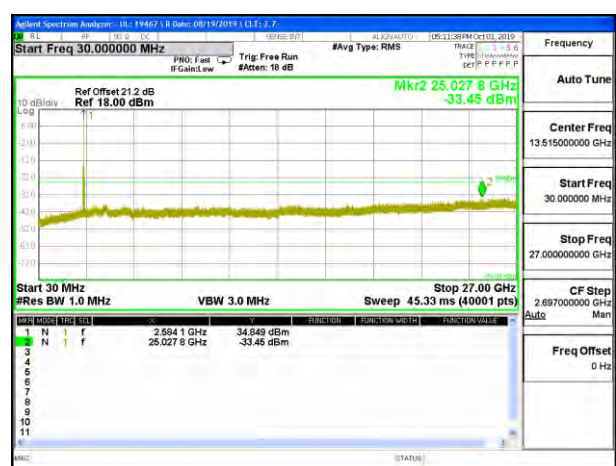
LTE B41 20MHz QPSK Low Channel RB1-0



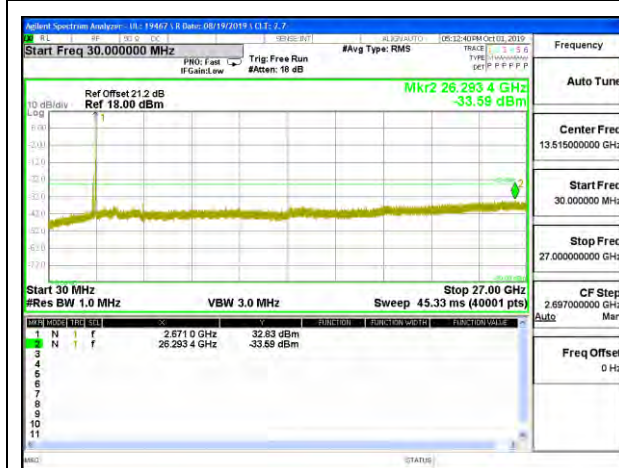
LTE B41 20MHz 16QAM Low Channel RB1-0



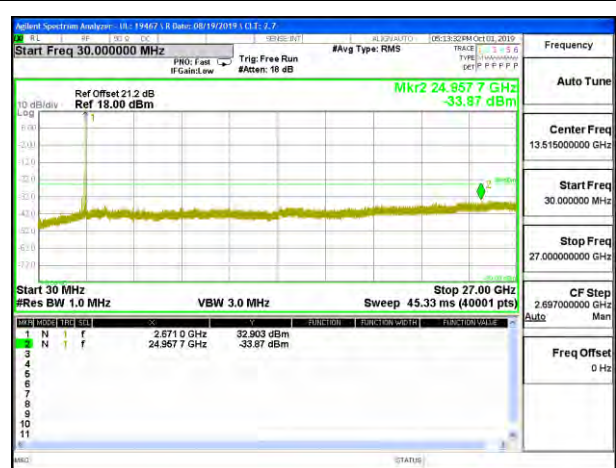
LTE B41 20MHz QPSK Middle Channel RB1-0



LTE B41 20MHz 16QAM Middle Channel RB1-0



LTE B41 20MHz QPSK High Channel RB1-0



LTE B41 20MHz 16QAM High Channel RB1-0

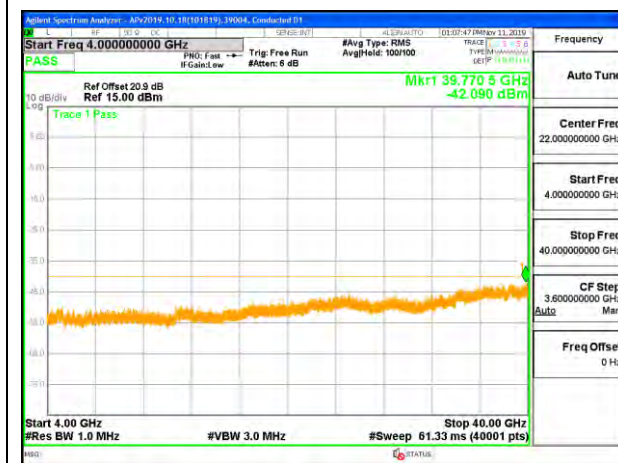
8.3.11. LTE BAND 48



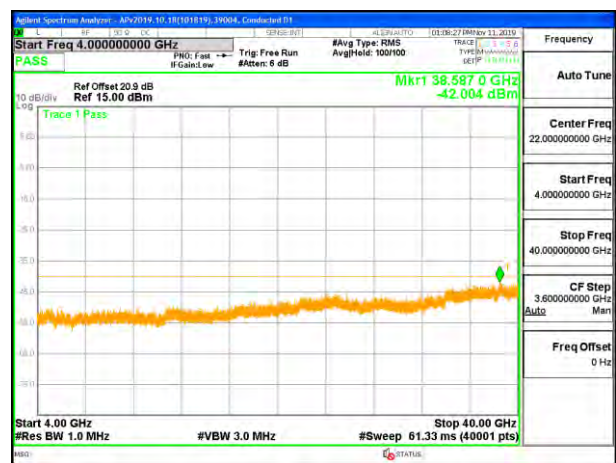
LTE B48 5MHz QPSK Low Channel RB1-0 (30MHz to 4GHz)



LTE B48 5MHz 16QAM Low Channel RB1-0 (30MHz to 4GHz)



LTE B48 5MHz QPSK Low Channel RB1-0 (4G to 40G)



LTE B48 5MHz 16QAM Low Channel RB1-0 (4G to 40G)



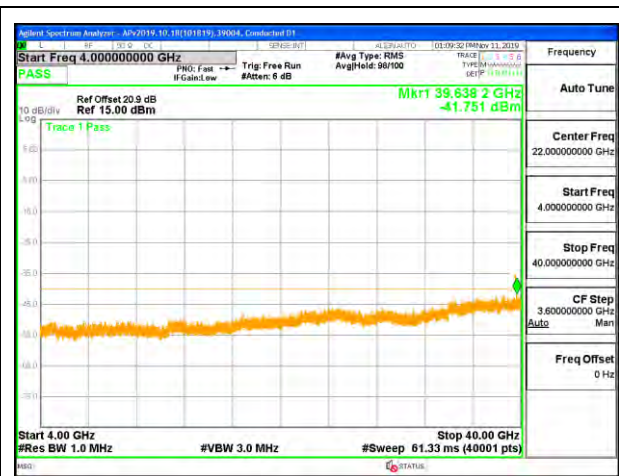
LTE B48 5MHz QPSK Mid Channel RB1-0 (30MHz to 4GHz)



LTE B48 5MHz 16QAM Mid Channel RB1-0 (30MHz to 4GHz)



LTE B48 5MHz QPSK Middle Channel RB1-0 (4G to 40G)



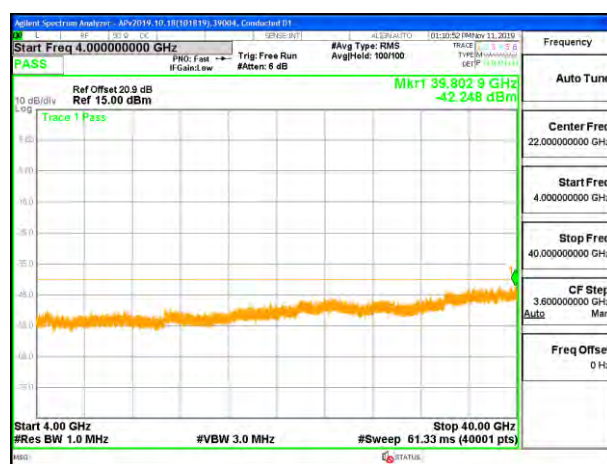
LTE B48 5MHz 16QAM Middle Channel RB1-0 (4G to 40G)



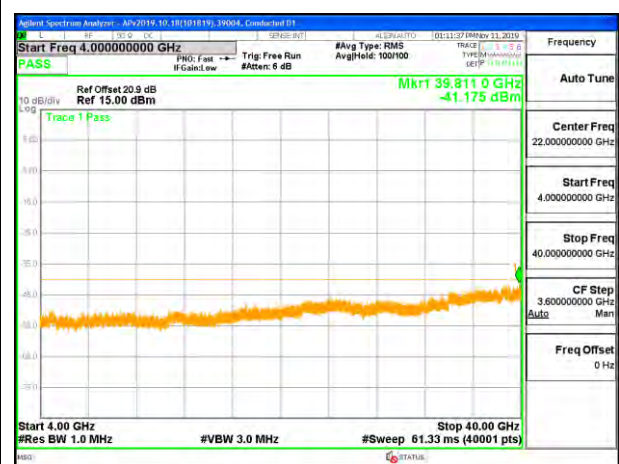
LTE B48 5MHz QPSK High Channel RB1-0 (30MHz to 4GHz)



LTE B48 5MHz 16QAM High Channel RB1-0 (30MHz to 4GHz)



LTE B48 5MHz QPSK High Channel RB1-0 (4G to 40G)



LTE B48 5MHz 16QAM High Channel RB1-0 (4G to 40G)



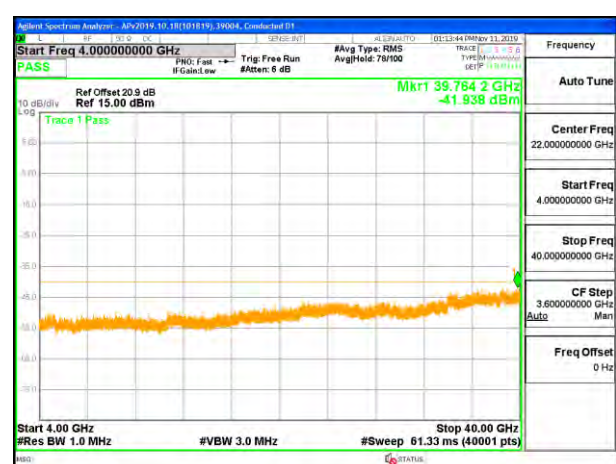
LTE B48 10MHz QPSK Low Channel RB1-0 (30MHz to 4GHz)



LTE B48 10MHz 16QAM Low Channel RB1-0 (30MHz to 4GHz)



LTE B48 10MHz QPSK Low Channel RB1-0 (4G to 40G)



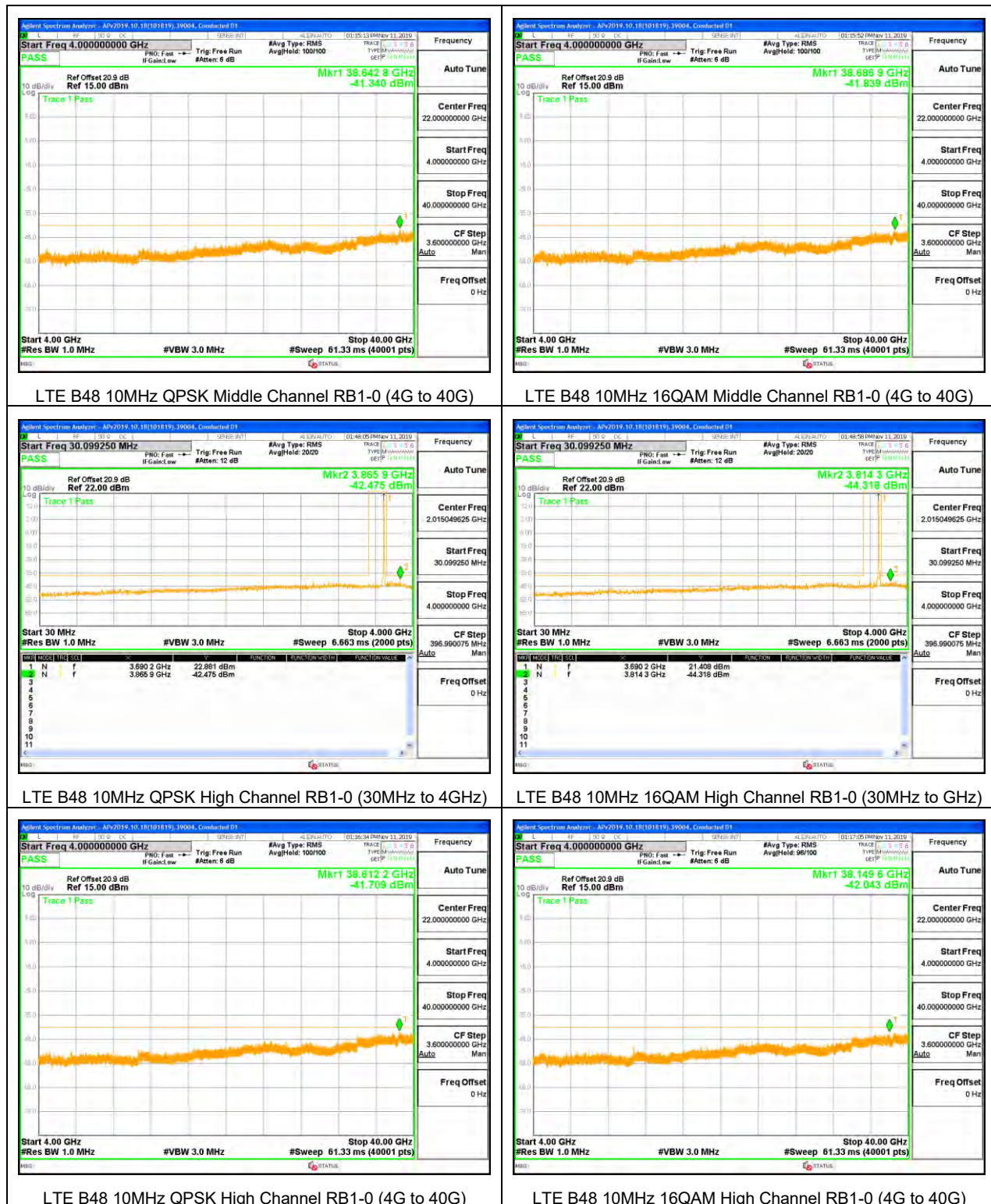
LTE B48 10MHz 16QAM Low Channel RB1-0 (4G to 40G)

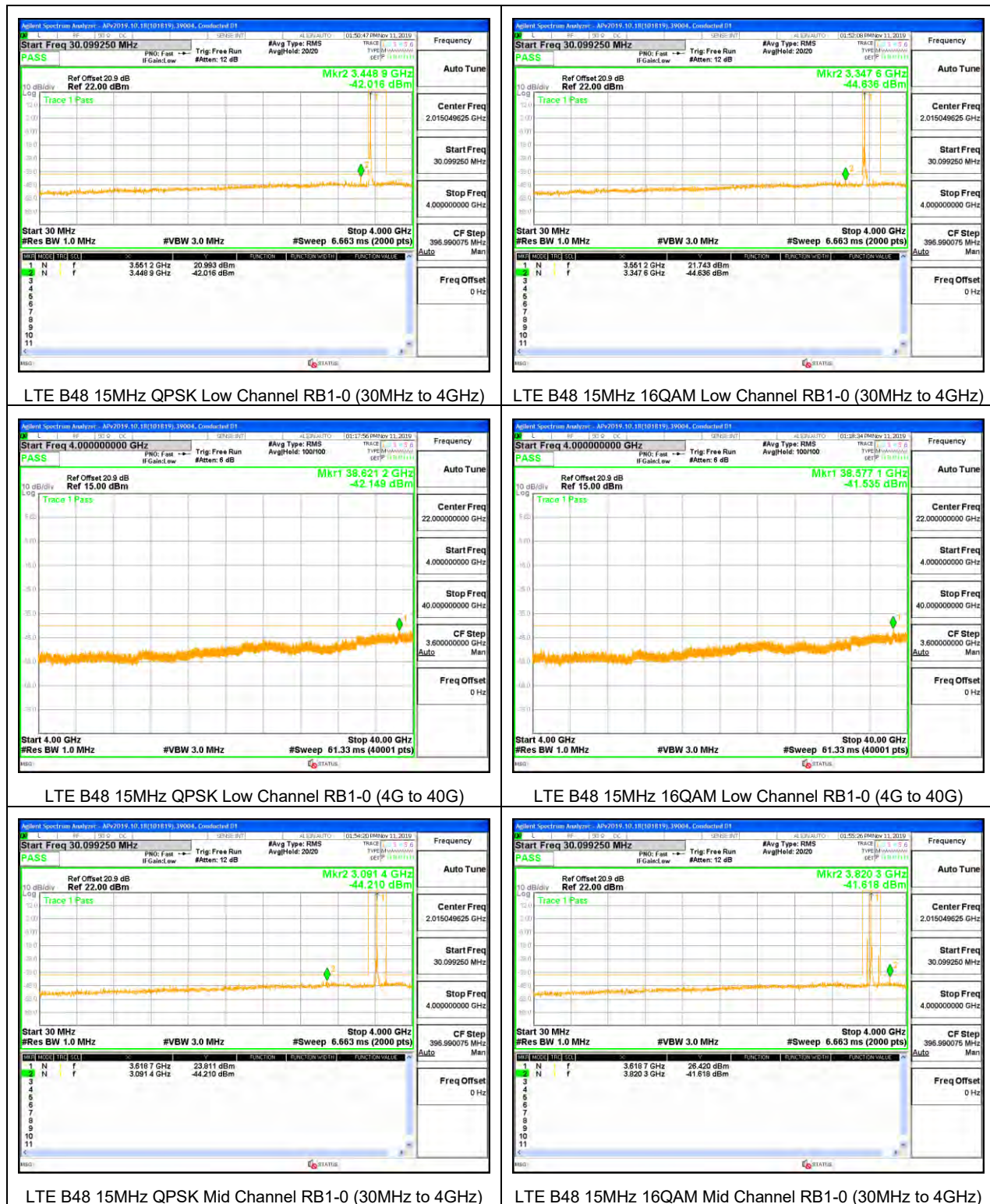


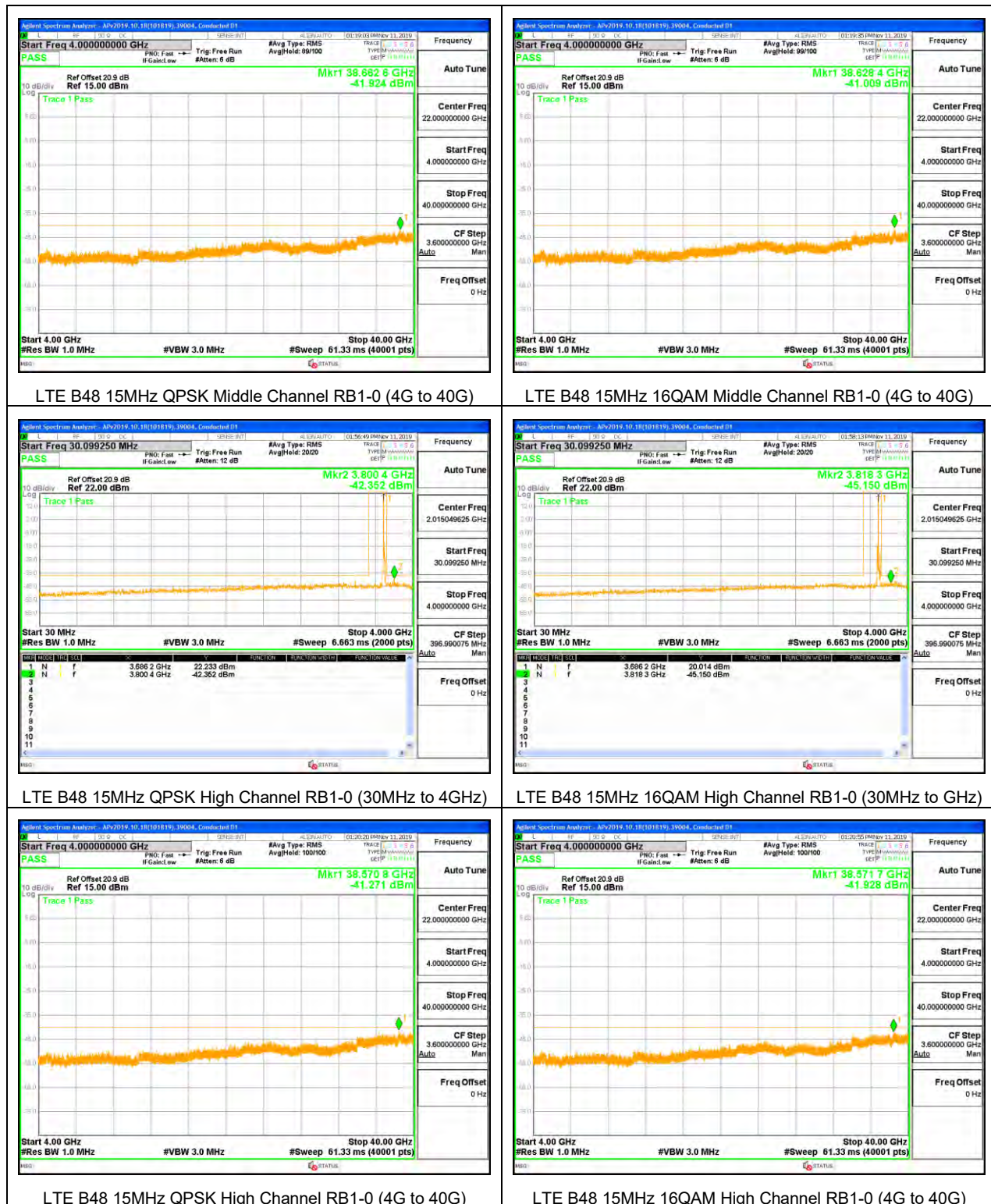
LTE B48 10MHz QPSK Mid Channel RB1-0 (30MHz to 4GHz)

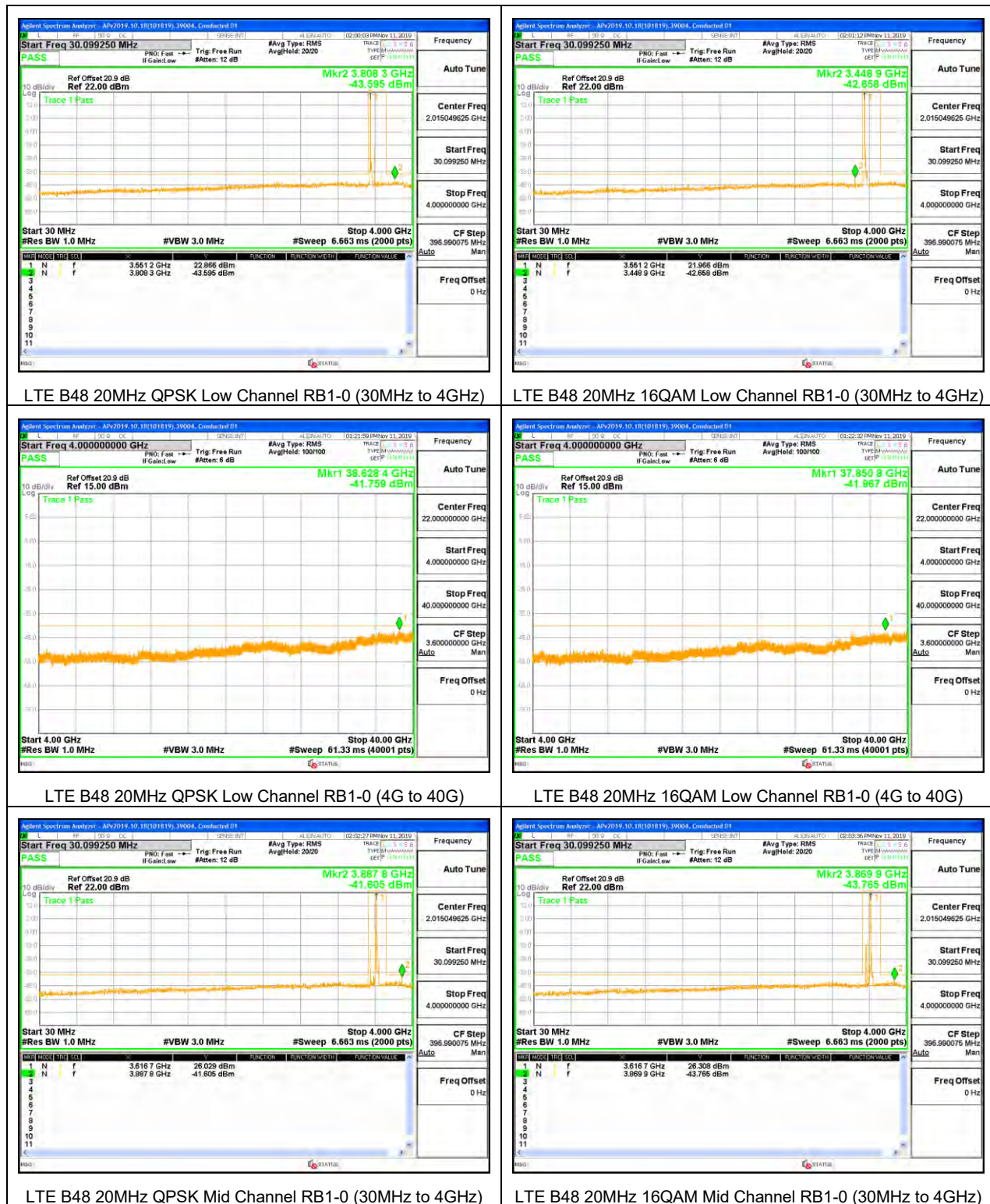


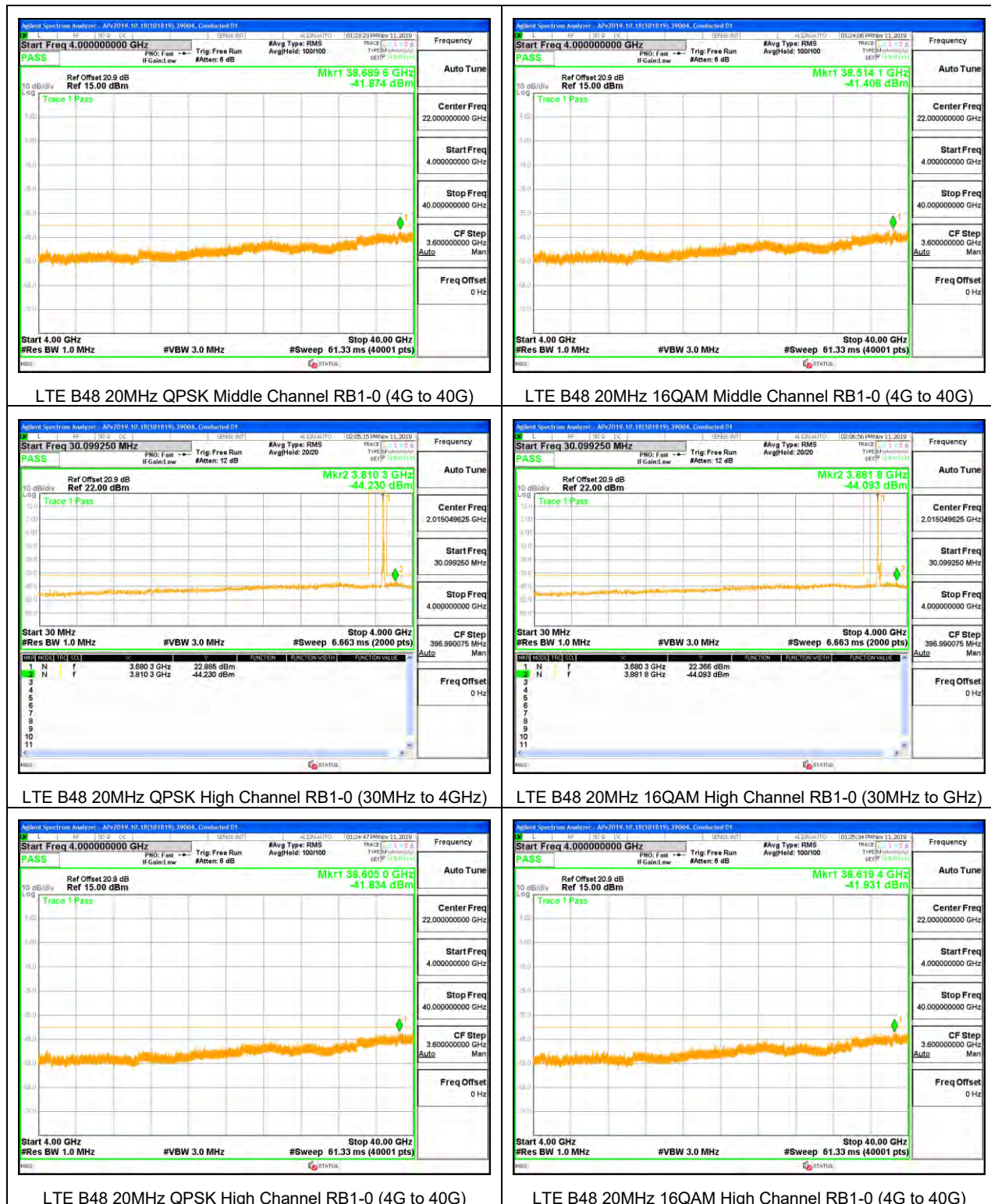
LTE B48 10MHz 16QAM Mid Channel RB1-0 (30MHz to 4GHz)



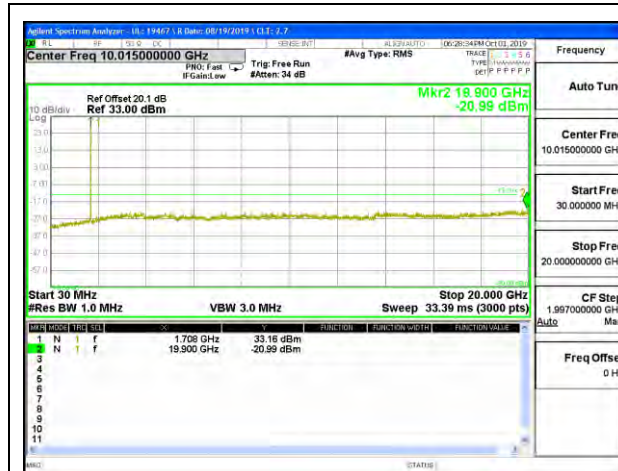




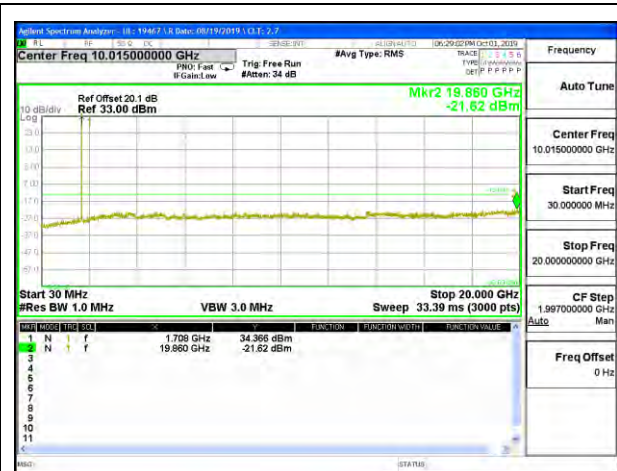




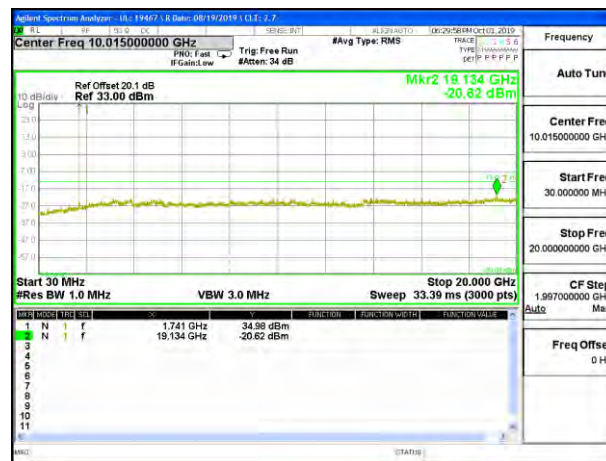
8.3.12. LTE BAND 66



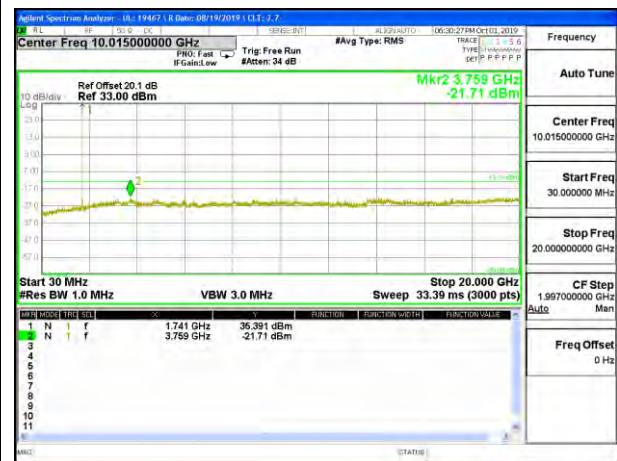
LTE B66 1.4MHz QPSK Low Channel RB1-0



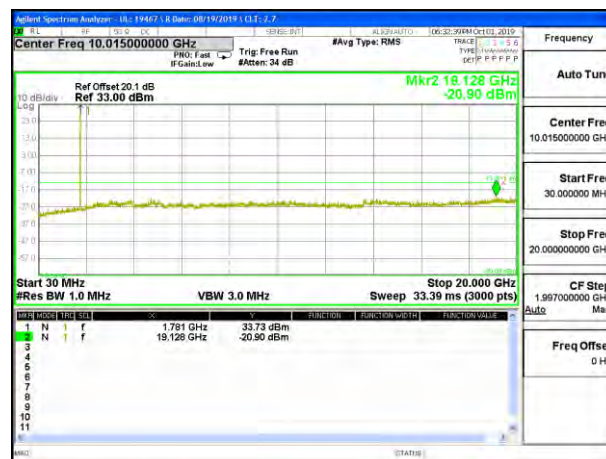
LTE B66 1.4MHz 16QAM Low Channel RB1-0



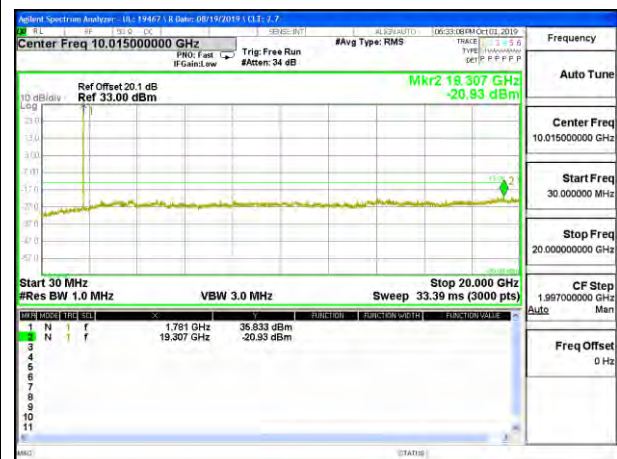
LTE B66 1.4MHz QPSK Middle Channel RB1-0



LTE B66 1.4MHz 16QAM Middle Channel RB1-0



LTE B66 1.4MHz QPSK High Channel RB1-0

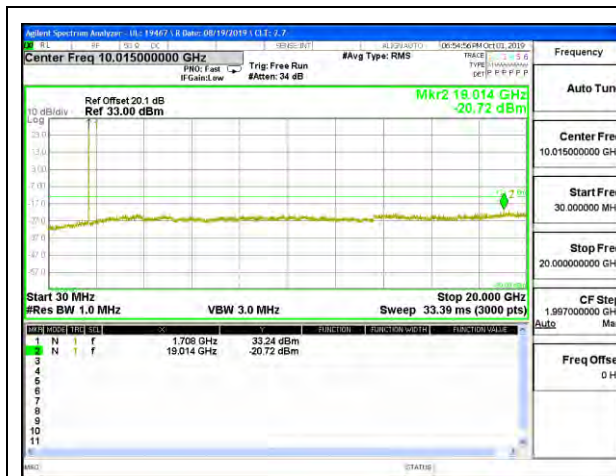


LTE B66 1.4MHz 16QAM High Channel RB1-0

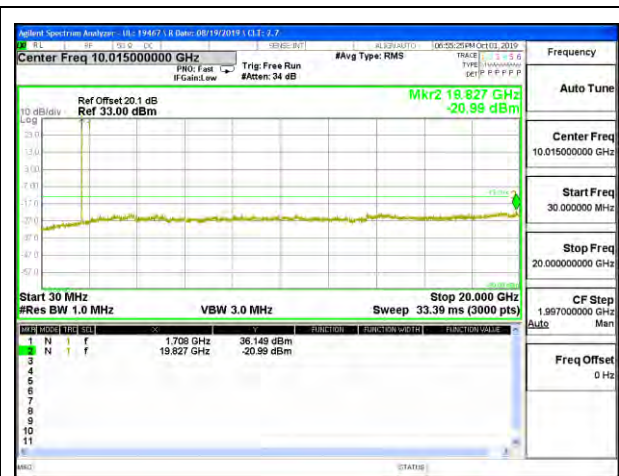




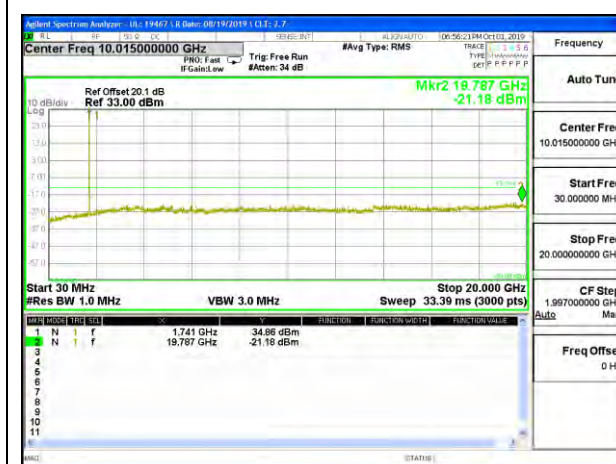




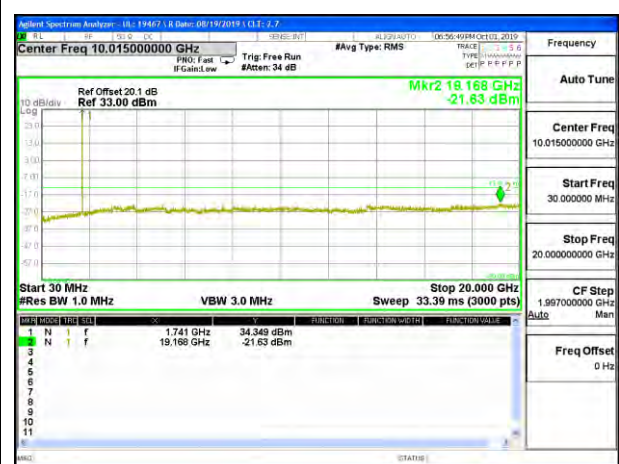
LTE B66 15MHz QPSK Low Channel RB1-0



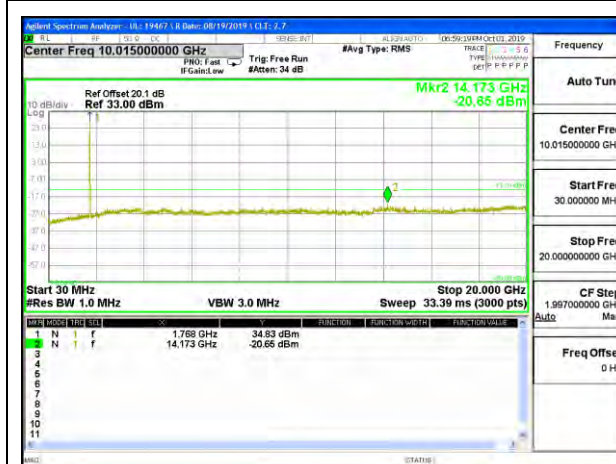
LTE B66 15MHz 16QAM Low Channel RB1-0



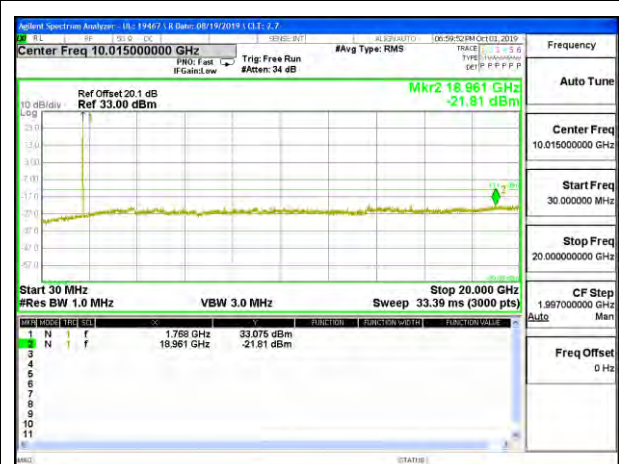
LTE B66 15MHz QPSK Middle Channel RB1-0



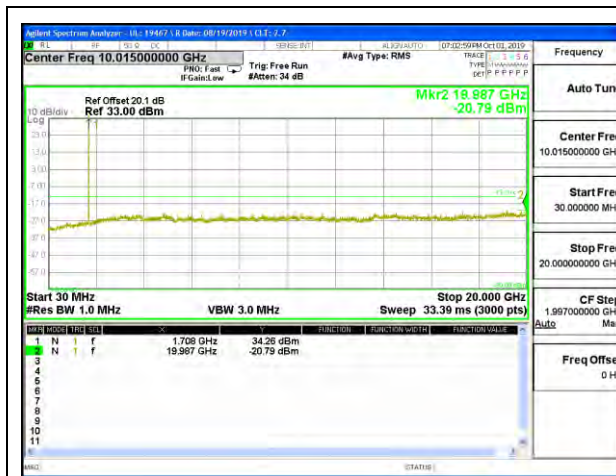
LTE B66 15MHz 16QAM Middle Channel RB1-0



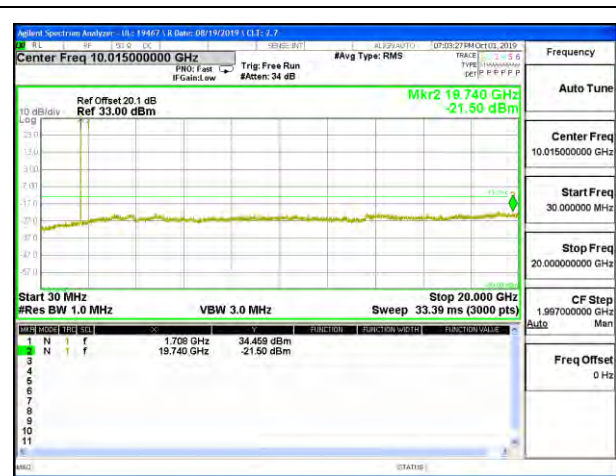
LTE B66 15MHz QPSK High Channel RB1-0



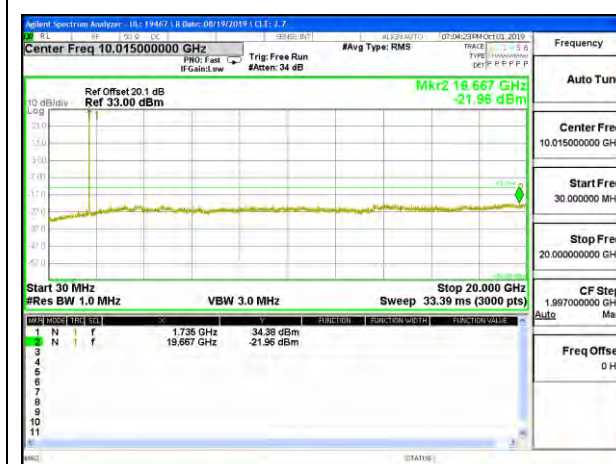
LTE B66 15MHz 16QAM High Channel RB1-0



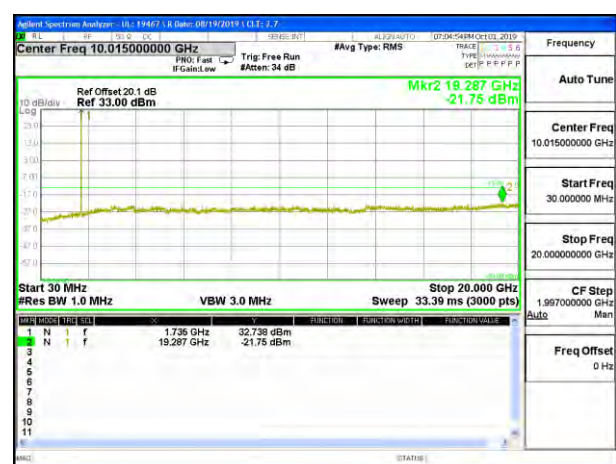
LTE B66 20MHz QPSK Low Channel RB1-0



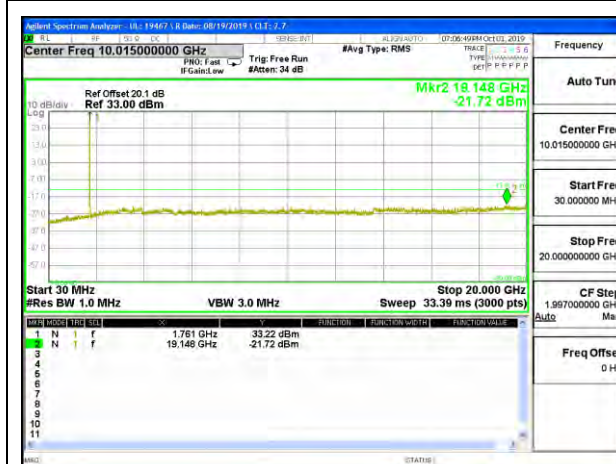
LTE B66 20MHz 16QAM Low Channel RB1-0



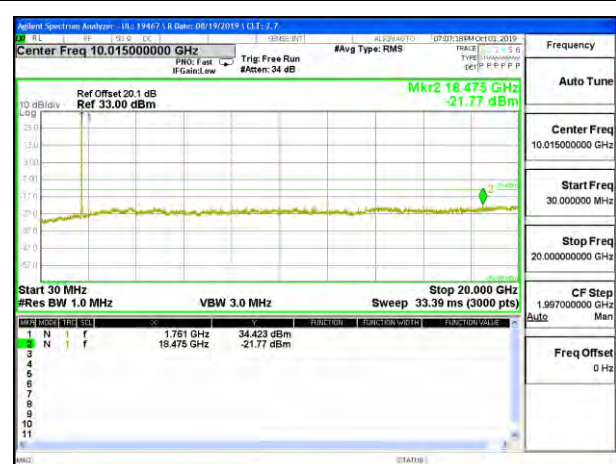
LTE B66 20MHz QPSK Middle Channel RB1-0



LTE B66 20MHz 16QAM Middle Channel RB1-0



LTE B66 20MHz QPSK High Channel RB1-0



LTE B66 20MHz 16QAM High Channel RB1-0

8.4. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235, §27.54, §90.213 and §90.539

LIMITS

FCC: §22.355, §90.213

The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

FCC: §90.539

(e) The frequency stability of mobile, portable and control transmitters operating in the wideband segment must be 1.25 ppm or better when AFC is locked to a base station, and 5 ppm or better when AFC is not locked.

FCC: §24.235 & §27.54

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

TEST PROCEDURE

Use CMW 500 with Frequency Error measurement capability.

- Temp. = -30°C to $+50^{\circ}\text{C}$
- Voltage = (85% - 115%)
Low voltage, 3.23VDC, Normal, 3.8VDC and High voltage, 4.37VDC.
End Voltage, 3.2VDC.

Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until $+50^{\circ}\text{C}$ is reached.

Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

MODES TESTED

- LTE Band 2
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 48
- LTE Band 66

RESULTS

See the following pages.

8.4.1. LTE BAND 2

Test Engineer ID:	38602	Test Date:	10/21/2019
-------------------	-------	------------	------------

QPSK, (20MHz BANDWIDTH)

Limit		1850	1910	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	1851.0540	1908.9416		
Extreme (50C)		1851.0540	1908.9416	-2.2	-0.001
Extreme (40C)		1851.0540	1908.9416	3.0	0.002
Extreme (30C)		1851.0540	1908.9416	2.4	0.001
Extreme (10C)		1851.0540	1908.9416	2.1	0.001
Extreme (0C)		1851.0540	1908.9416	1.2	0.001
Extreme (-10C)		1851.0540	1908.9416	1.6	0.001
Extreme (-20C)		1851.0540	1908.9416	2.2	0.001
Extreme (-30C)		1851.0540	1908.9416	2.8	0.001
20C	15%	1851.0540	1908.9416	1.4	0.001
	-15%	1851.0540	1908.9416	1.2	0.001
	End Point	1851.0540	1908.9416	2.5	0.001

8.4.2. LTE BAND 5

Test Engineer ID:	38602	Test Date:	10/21/2019
-------------------	-------	------------	------------

QPSK, (10MHz BANDWIDTH)

Limit		824	849	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	824.5098	848.4724		
Extreme (50C)		824.5098	848.4724	8.9	0.011
Extreme (40C)		824.5098	848.4724	8.1	0.010
Extreme (30C)		824.5098	848.4724	7.3	0.009
Extreme (10C)		824.5098	848.4724	6.6	0.008
Extreme (0C)		824.5098	848.4724	6.0	0.007
Extreme (-10C)		824.5098	848.4724	5.4	0.006
Extreme (-20C)		824.5098	848.4724	7.1	0.008
Extreme (-30C)		824.5098	848.4724	5.9	0.007
20C	15%	824.5098	848.4724	7.7	0.009
	-15%	824.5098	848.4724	6.9	0.008
	End Point	824.5098	848.4724	6.4	0.008

8.4.3. LTE BAND 7

Test Engineer ID:	38602	Test Date:	10/21/2019
-------------------	-------	------------	------------

QPSK, (20MHz BANDWIDTH)

Limit		2500	2570	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	2501.0557	2568.9427		
Extreme (50C)		2501.0557	2568.9427	10.2	0.004
Extreme (40C)		2501.0557	2568.9427	12.1	0.005
Extreme (30C)		2501.0557	2568.9427	9.3	0.004
Extreme (10C)		2501.0557	2568.9427	10.4	0.004
Extreme (0C)		2501.0557	2568.9427	9.7	0.004
Extreme (-10C)		2501.0557	2568.9427	10.9	0.004
Extreme (-20C)		2501.0557	2568.9427	12.0	0.005
Extreme (-30C)		2501.0557	2568.9427	14.5	0.006
20C	15%	2501.0557	2568.9427	10.5	0.004
	-15%	2501.0557	2568.9427	9.7	0.004
	End Point	2501.0557	2568.9427	12.6	0.005

8.4.4. LTE BAND 12

Test Engineer ID:	38602	Test Date:	10/21/2019
-------------------	-------	------------	------------

QPSK, (10MHz BANDWIDTH)

Limit		699	716	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	699.5183	715.5158		
Extreme (50C)		699.5183	715.5158	3.7	0.005
Extreme (40C)		699.5183	715.5158	4.5	0.006
Extreme (30C)		699.5183	715.5158	2.3	0.003
Extreme (10C)		699.5183	715.5158	2.6	0.004
Extreme (0C)		699.5183	715.5158	3.0	0.004
Extreme (-10C)		699.5183	715.5158	3.9	0.006
Extreme (-20C)		699.5183	715.5158	2.6	0.004
Extreme (-30C)		699.5183	715.5158	4.4	0.006
20C	15%	699.5183	715.5158	3.3	0.005
	-15%	699.5183	715.5158	2.4	0.003
	End Point	699.5183	715.5158	4.7	0.007

8.4.5. LTE BAND 13

Test Engineer ID:	38602	Test Date:	10/22/2019
-------------------	-------	------------	------------

QPSK, (10MHz BANDWIDTH)

Limit		777	787	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	777.5304	786.4691		
Extreme (50C)		777.5304	786.4691	2.2	0.003
Extreme (40C)		777.5304	786.4691	3.1	0.004
Extreme (30C)		777.5304	786.4691	2.9	0.004
Extreme (10C)		777.5304	786.4691	2.5	0.003
Extreme (0C)		777.5304	786.4691	3.8	0.005
Extreme (-10C)		777.5304	786.4691	4.2	0.005
Extreme (-20C)		777.5304	786.4691	5.3	0.007
Extreme (-30C)		777.5304	786.4691	3.4	0.004
20C	15%	777.5304	786.4691	2.5	0.003
	-15%	777.5304	786.4691	3.1	0.004
	End Point	777.5304	786.4691	3.8	0.005

8.4.6. LTE BAND 17

Test Engineer ID:	38602	Test Date:	10/22/2019
-------------------	-------	------------	------------

QPSK, (10MHz BANDWIDTH)

Limit		704	716	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	704.5306	715.4791		
Extreme (50C)		704.5306	715.4791	5.5	0.008
Extreme (40C)		704.5306	715.4791	-3.8	-0.005
Extreme (30C)		704.5306	715.4791	-5.1	-0.007
Extreme (10C)		704.5306	715.4791	-3.9	-0.005
Extreme (0C)		704.5306	715.4791	-5.5	-0.008
Extreme (-10C)		704.5306	715.4791	-4.3	-0.006
Extreme (-20C)		704.5306	715.4791	-5.6	-0.008
Extreme (-30C)		704.5306	715.4791	-4.5	-0.006
20C	15%	704.5306	715.4791	-4.1	-0.006
	-15%	704.5306	715.4791	-5.0	-0.007
	End Point	704.5306	715.4791	-5.6	-0.008

8.4.7. LTE BAND 25

Test Engineer ID:	38602	Test Date:	10/22/2019
-------------------	-------	------------	------------

QPSK, (20MHz BANDWIDTH)

Limit		1850	1915	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm	F high @ -13dBm		
Temperature	Voltage	(MHz)	(MHz)		
Normal (20C)	Normal	1851.0665	1913.9313		
Extreme (50C)		1851.0665	1913.9313	-2.5	-0.001
Extreme (40C)		1851.0665	1913.9313	-1.7	-0.001
Extreme (30C)		1851.0665	1913.9313	-1.3	-0.001
Extreme (10C)		1851.0665	1913.9313	-2.2	-0.001
Extreme (0C)		1851.0665	1913.9313	1.4	0.001
Extreme (-10C)		1851.0665	1913.9313	-2.8	-0.001
Extreme (-20C)		1851.0665	1913.9313	-3.6	-0.002
Extreme (-30C)		1851.0665	1913.9313	3.2	0.002
20C	15%	1851.0665	1913.9313	1.9	0.001
	-15%	1851.0665	1913.9313	-1.8	-0.001
	End Point	1851.0665	1913.9313	3.6	0.002

8.4.8. LTE BAND 26 (PART 90S)

Test Engineer ID:	38602	Test Date:	10/22/2019
-------------------	-------	------------	------------

QPSK, (10MHz BANDWIDTH)

Limit		814	824	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	814.5199	823.4701		
Extreme (50C)		814.5199	823.4701	9.7	0.012
Extreme (40C)		814.5199	823.4701	3.6	0.004
Extreme (30C)		814.5199	823.4701	2.8	0.003
Extreme (10C)		814.5199	823.4700	-3.1	-0.004
Extreme (0C)		814.5199	823.4700	-2.6	-0.003
Extreme (-10C)		814.5199	823.4701	2.3	0.003
Extreme (-20C)		814.5199	823.4701	3.1	0.004
Extreme (-30C)		814.5199	823.4701	4.2	0.005
20C	15%	814.5199	823.4700	-4.2	-0.005
	-15%	814.5199	823.4701	2.3	0.003
	End Point	814.5199	823.4701	4.4	0.005

8.4.9. LTE BAND 30

Test Engineer ID:	38602	Test Date:	10/28/2019
-------------------	-------	------------	------------

QPSK, (10MHz BANDWIDTH)

Limit		2305	2315	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	2305.5223	2314.4724		
Extreme (50C)		2305.5223	2314.4724	2.5	0.001
Extreme (40C)		2305.5223	2314.4724	2.2	0.001
Extreme (30C)		2305.5223	2314.4724	2.4	0.001
Extreme (10C)		2305.5223	2314.4724	2.1	0.001
Extreme (0C)		2305.5223	2314.4724	2.4	0.001
Extreme (-10C)		2305.5223	2314.4724	2.7	0.001
Extreme (-20C)		2305.5223	2314.4724	2.3	0.001
Extreme (-30C)		2305.5223	2314.4724	1.9	0.001
20C	15%	2305.5223	2314.4724	1.9	0.001
	-15%	2305.5223	2314.4724	2.3	0.001
	End Point	2305.5223	2314.4724	2.1	0.001

8.4.10. LTE BAND 41

Test Engineer ID:	38602	Test Date:	10/28/2019
-------------------	-------	------------	------------

QPSK, (20MHz BANDWIDTH)

Limit		2496	2690	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	2496.9392	2689.0481		
Extreme (50C)		2496.9392	2689.0481	3.9	0.002
Extreme (40C)		2496.9392	2689.0481	4.0	0.002
Extreme (30C)		2496.9392	2689.0481	2.5	0.001
Extreme (10C)		2496.9392	2689.0481	4.4	0.002
Extreme (0C)		2496.9392	2689.0481	3.5	0.001
Extreme (-10C)		2496.9392	2689.0481	4.1	0.002
Extreme (-20C)		2496.9392	2689.0481	4.3	0.002
Extreme (-30C)		2496.9392	2689.0481	4.1	0.002
20C	15%	2496.9392	2689.0481	2.2	0.001
	-15%	2496.9392	2689.0481	3.3	0.001
	End Point	2496.9392	2689.0481	3.9	0.002

8.4.11. LTE BAND 48

Test Engineer ID:	38602	Test Date:	10/30/2019
-------------------	-------	------------	------------

QPSK, (20MHz BANDWIDTH)

Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)	Delta (Hz)	Frequency Stability (ppm)
Temperature	Voltage				
Normal (20C)	Normal	3550.8371	3699.1832		
Extreme (50C)		3550.8371	3699.1832	-3.8	-0.001
Extreme (40C)		3550.8371	3699.1832	-3.4	-0.001
Extreme (30C)		3550.8371	3699.1832	-2.9	-0.001
Extreme (10C)		3550.8371	3699.1832	-3.2	-0.001
Extreme (0C)		3550.8371	3699.1832	-4.1	-0.001
Extreme (-10C)		3550.8371	3699.1832	-3.5	-0.001
Extreme (-20C)		3550.8371	3699.1832	-2.7	-0.001
Extreme (-30C)		3550.8371	3699.1832	4.4	0.001
20C	15%	3550.8371	3699.1832	-2.4	-0.001
	-15%	3550.8371	3699.1832	-3.1	-0.001
	End Point	3550.8371	3699.1832	-5.7	-0.002

8.4.12. LTE BAND 66

Test Engineer ID:	38602	Test Date:	10/28/2019
-------------------	-------	------------	------------

QPSK, (20MHz BANDWIDTH)

Limit		1710	1780	Delta (Hz)	Frequency Stability (ppm)
Condition		F low @ -13dBm (MHz)	F high @ -13dBm (MHz)		
Temperature	Voltage				
Normal (20C)	Normal	1711.0680	1778.9416		
Extreme (50C)		1711.0680	1778.9416	1.9	0.001
Extreme (40C)		1711.0680	1778.9416	1.4	0.001
Extreme (30C)		1711.0680	1778.9416	1.8	0.001
Extreme (10C)		1711.0680	1778.9416	2.1	0.001
Extreme (0C)		1711.0680	1778.9416	2.4	0.001
Extreme (-10C)		1711.0680	1778.9416	2.5	0.001
Extreme (-20C)		1711.0680	1778.9416	2.2	0.001
Extreme (-30C)		1711.0680	1778.9416	2.7	0.002
20C	15%	1711.0680	1778.9416	1.5	0.001
	-15%	1711.0680	1778.9416	1.9	0.001
	End Point	1711.0680	1778.9416	2.3	0.001

8.5. PEAK-TO-AVERAGE POWER RATIO

LIMIT

In addition, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

MODES TESTED

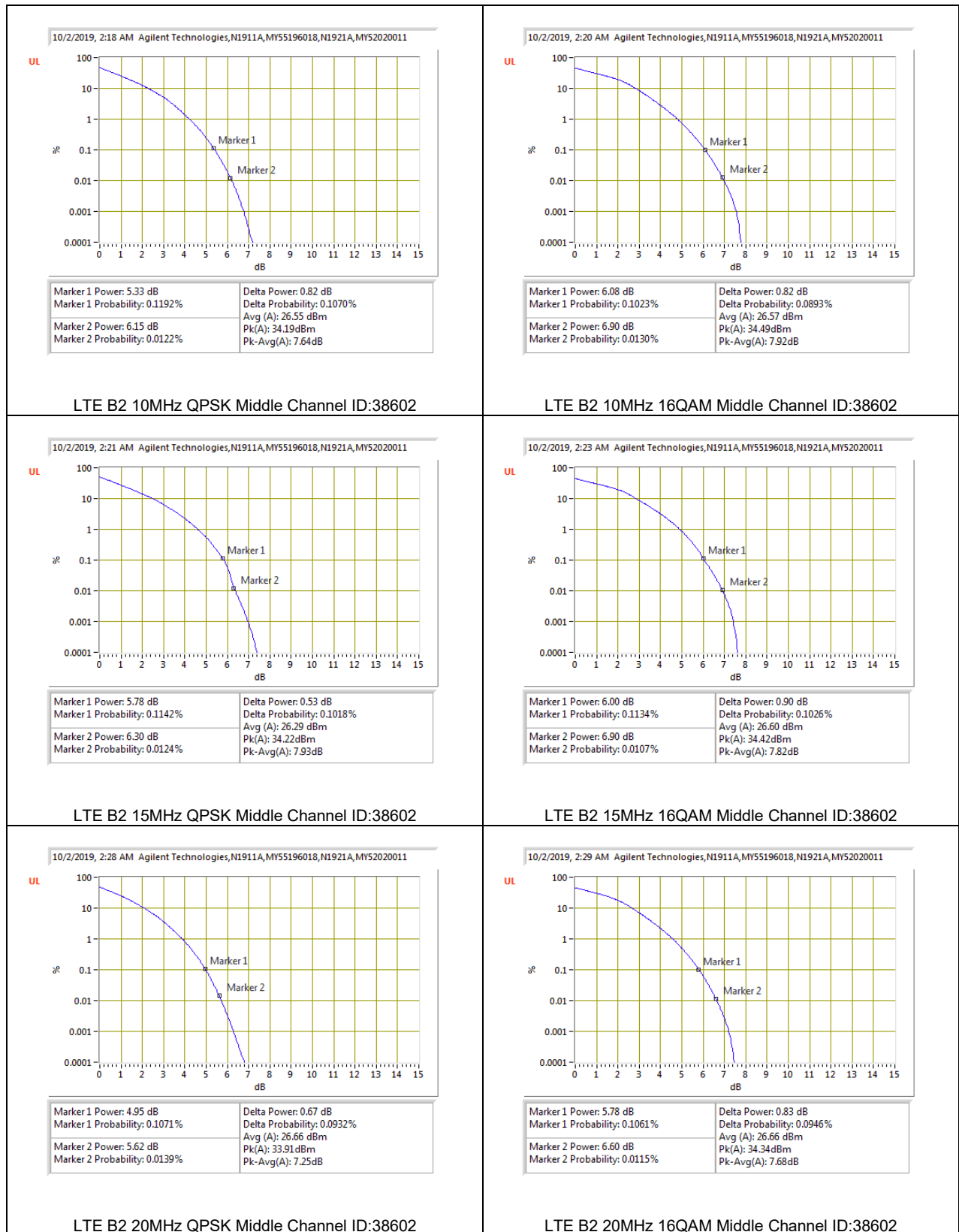
- LTE Band 2
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 48
- LTE Band 66

RESULT

Antenna 1 was used to measure as the worst case; full resource block (FRB) for each bandwidth was used to measure as the worst case. The results from all CCDF measurements are passed with 13dB peak-to-average power ratio criteria.

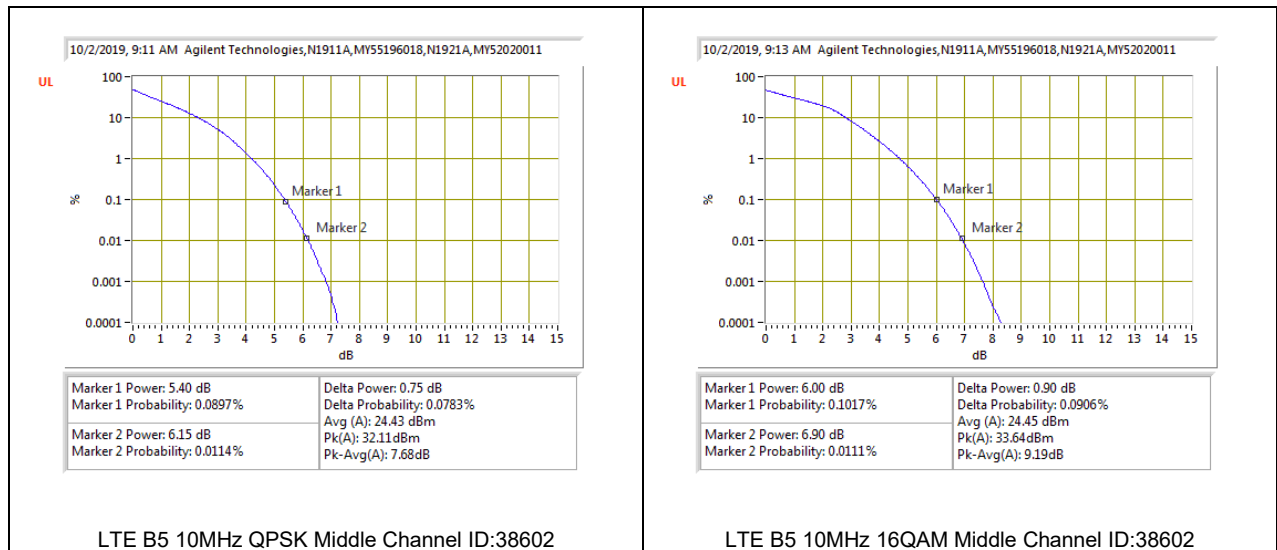
8.5.1. LTE BAND 2





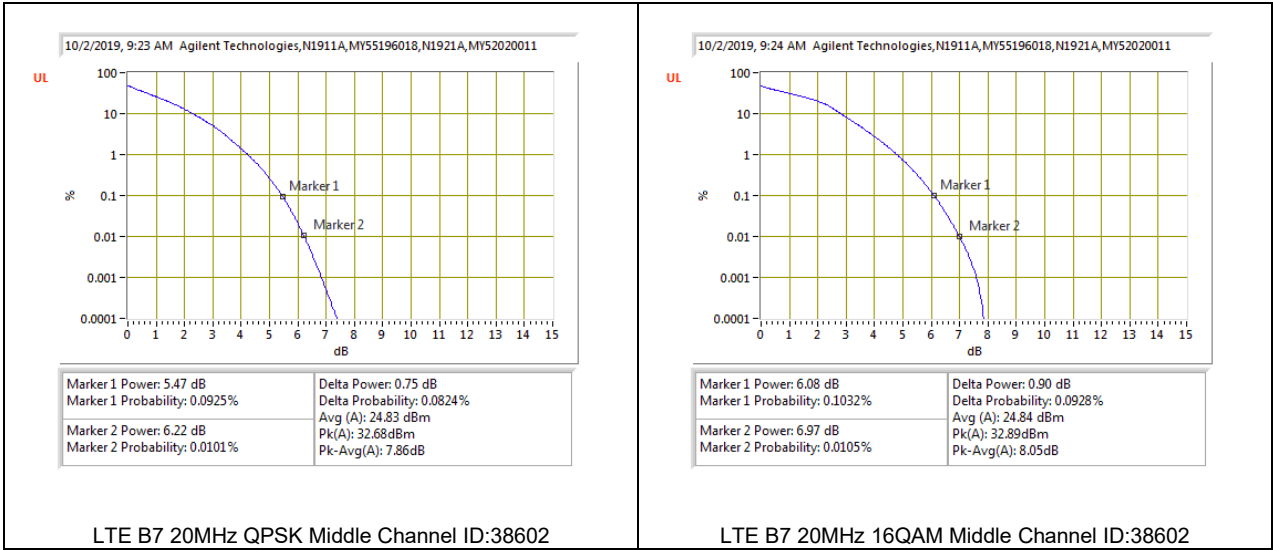
8.5.2. LTE BAND 5





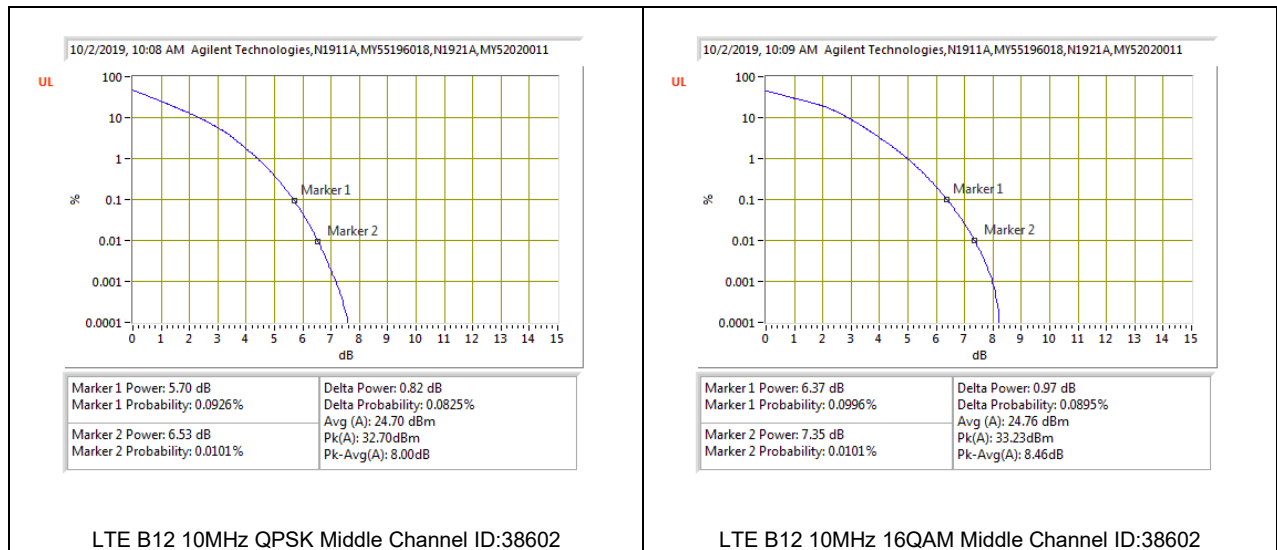
8.5.3. LTE BAND 7



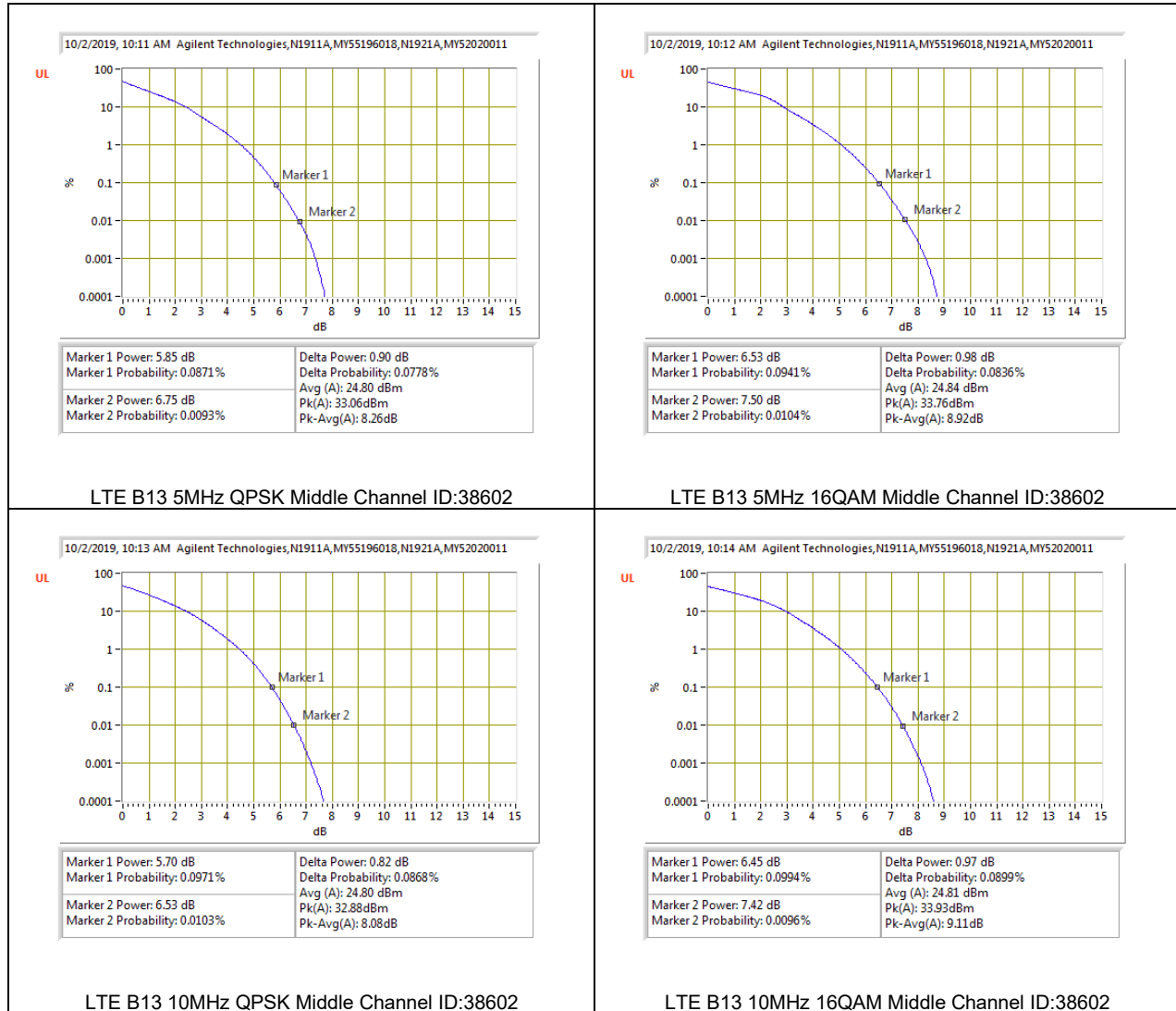


8.5.4. LTE BAND 12

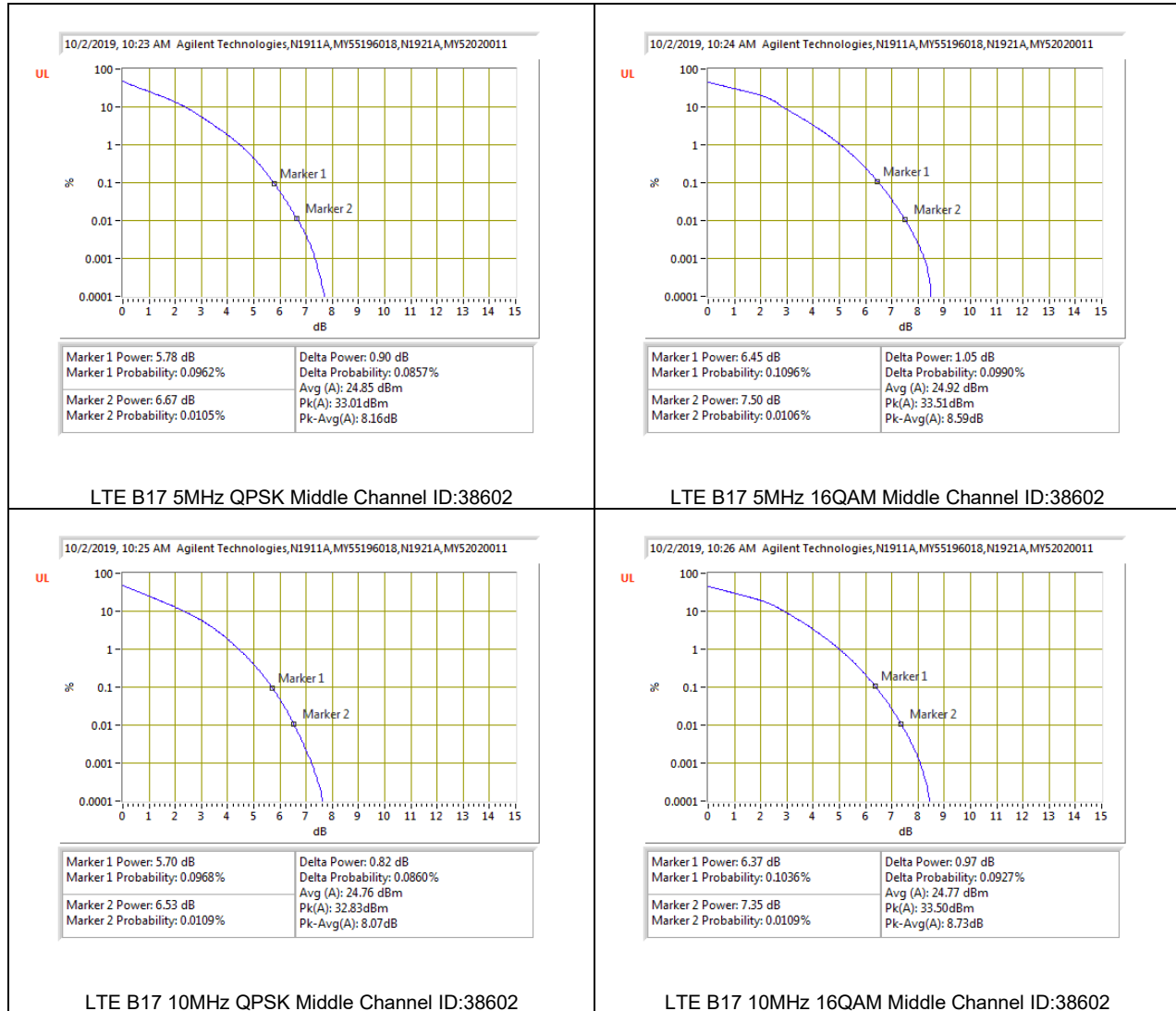




8.5.5. LTE BAND 13

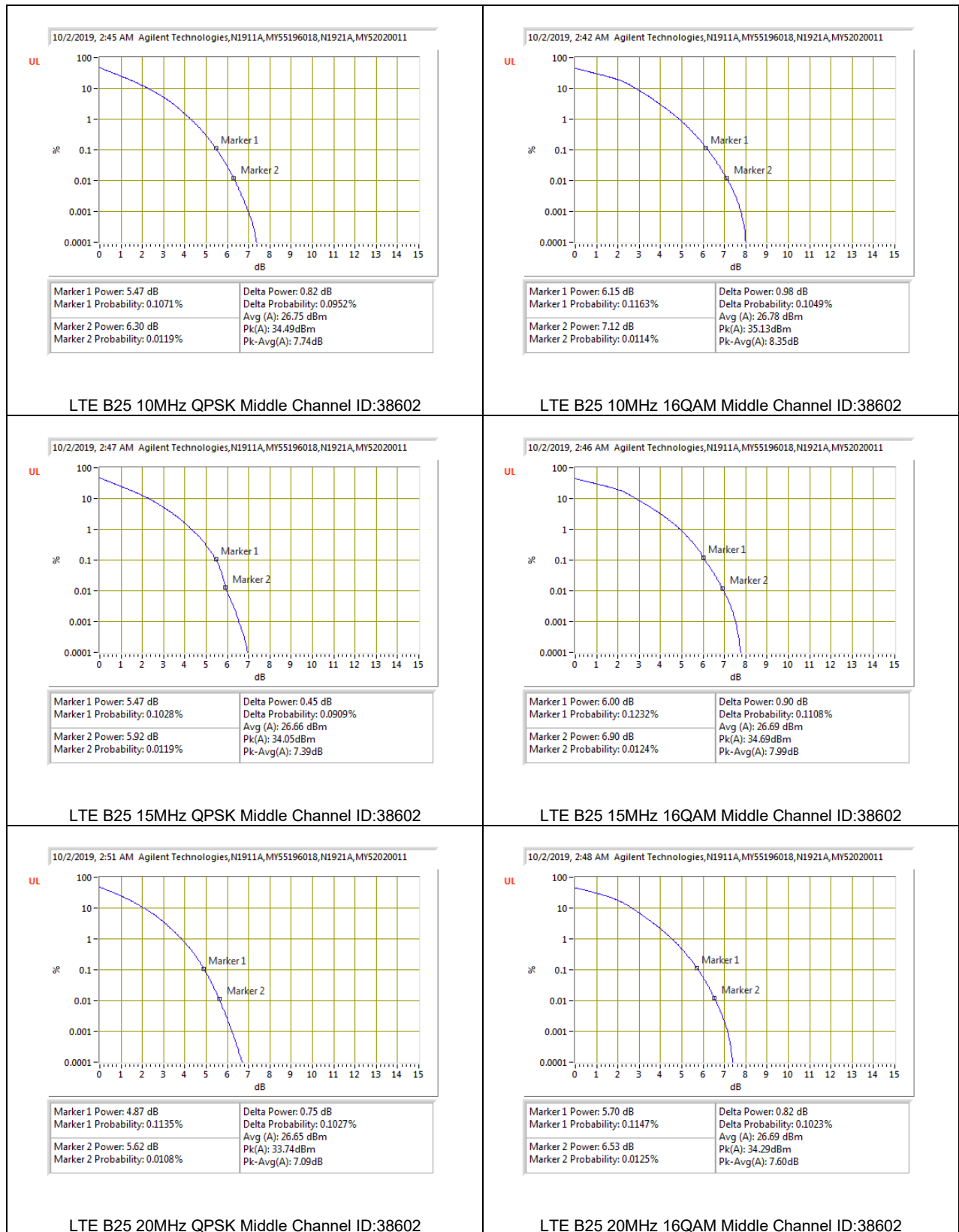


8.5.6. LTE BAND 17



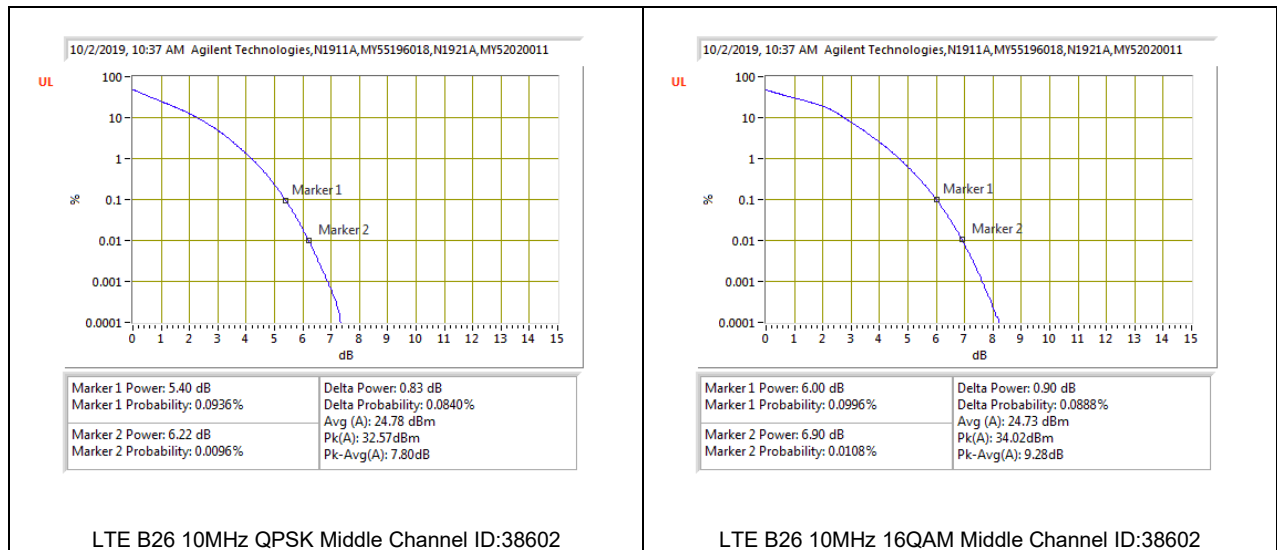
8.5.7. LTE BAND 25



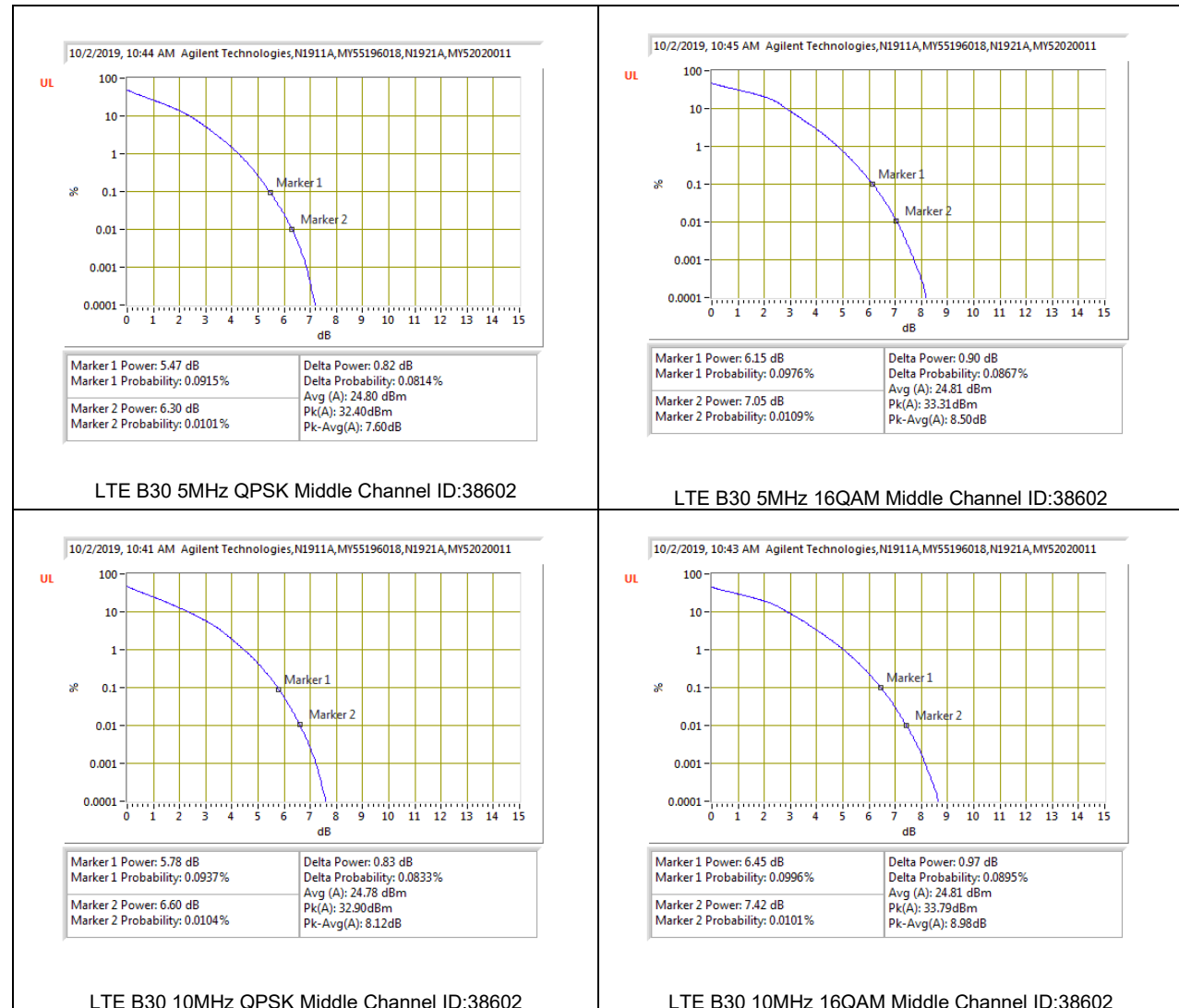


8.5.8. LTE BAND 26 (PART 90S)





8.5.9. LTE BAND 30



8.5.10. LTE BAND 41

Test Engineer ID:	39004	Test Date:	10/2/2019
-------------------	-------	------------	-----------

Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
Band 41	5MHz	2593.0	25	0	QPSK	38.05	26.64	4.42
					16QAM	37.84	25.7	5.15
	10MHz		50	0	QPSK	37.73	26.63	4.11
					16QAM	37.73	25.71	5.03
	15MHz		75	0	QPSK	37.79	26.63	4.17
					16QAM	37.89	25.65	5.25
	20MHz		100	0	QPSK	37.62	26.65	3.98
					16QAM	37.88	25.67	5.22
Duty Cycle Correction Factor (dB) =			6.99					
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

8.5.11. LTE BAND 48

Test Engineer ID:	10646	Test Date:	11/12/2019
-------------------	-------	------------	------------

Band	Bandwidth (MHz)	Frequency (MHz)	RB Allocation	RB OffSet	Modulation	Conducted Power (dBm)		Peak-to-Average Power Ratio (dB)
						Peak	Average	
Band 48	5MHz	3625.0	25	0	QPSK	31.87	17.24	7.64
					16QAM	31.38	16.15	8.24
	10MHz		50	0	QPSK	31.53	17.32	7.22
					16QAM	31.30	16.24	8.07
	15MHz		75	0	QPSK	30.98	17.19	6.80
					16QAM	30.94	16.17	7.78
	20MHz		100	0	QPSK	30.74	17.22	6.53
					16QAM	30.89	16.23	7.67
Duty Cycle Correction Factor (dB) =			6.99					
Peak-to-Average Power Ratio= Peak Reading - Average Reading - Duty Cycle Correction Factor								

8.5.12. LTE BAND 66





9. RADIATED TEST RESULTS

RULE PART(S)

FCC: §2.1053, §22.917, §24.238, §27.53, §90.669, §90.691, and §96.41

LIMIT

FCC: §22.917(a), §24.238(a), §27.53 (g), (h), §90.691

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.

FCC: §27.53 (Band 13)

(c) 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.

(f) Emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

FCC: § 90.669 Emission limits. (Band 26)

(a) On any frequency in an MTA licensee's spectrum block that is adjacent to a non-MTA frequency, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 plus $10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation.

FCC: §27.53 (a) (Band 30, Band 40)

For mobile and portable stations operating in the 2305-2315 MHz: by a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz.

FCC: §27.53 (m) (Band 7, 41)

At least $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the Channel ID:38602 edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section.

FCC: §96.41 (Band 48)

(e) 3.5 GHz Emissions and Interference Limits—

(2) Additional protection levels. Notwithstanding paragraph (d)(1) of this section, the conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40 dBm/MHz.

TEST PROCEDURE

KDB 971168 D01 v03r01/D02 v02/r01

All tests above 1GHz were done with a Resolution Bandwidth of 1MHz, and a Video Bandwidth of 3MHz.

All tests below 1GHz were done with a Resolution Bandwidth of 100kHz, and a Video Bandwidth of 300kHz.

MODES TESTED

- LTE Band 2
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 48
- LTE Band 66

RESULTS

9.1. FIELD STRENGTH OF SPURIOUS RADIATION, LAT 1

9.1.1. LTE BAND 2

QPSK LTE BAND 2 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/12/2019
Test Engineer:	12491
Configuration:	EUT + Charger
Mode	LTE 2 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
2.372	-67.92	Pk	31.8	-28.7	9.8	-55.02	-13	-42.02	V
3.321	-69.14	Pk	32.8	-27.2	9.2	-54.34	-13	-41.34	H
4.281	-68.79	Pk	33.7	-26	8.7	-52.39	-13	-39.39	V
4.466	-69.24	Pk	33.7	-25.8	10	-51.34	-13	-38.34	H
5.04	-69.64	Pk	34.1	-25	9	-51.54	-13	-38.54	V
5.553	-69.68	Pk	34.7	-25	8.9	-51.08	-13	-38.08	H
Mid Channel, 1880MHz									
3.668	-69.41	Pk	33	-26.7	10	-53.11	-13	-40.11	H
7.519	-71.69	Pk	35.6	-22.8	7.5	-51.39	-13	-38.39	H
3.671	-69.44	Pk	33.1	-26.7	10.6	-52.44	-13	-39.44	V
7.523	-71.28	Pk	35.6	-22.8	7.4	-51.08	-13	-38.08	V
5.637	-70.14	Pk	34.6	-24.9	8.5	-51.94	-13	-38.94	V
5.639	-70.33	Pk	34.7	-24.9	8.3	-52.23	-13	-39.23	H
High Channel, 1900MHz									
2.673	-68.6	Pk	32.3	-28	10.2	-54.1	-13	-41.1	V
2.721	-67.49	Pk	32.2	-28	9.9	-53.39	-13	-40.39	H
3.782	-57.59	Pk	33.5	-26.8	10	-40.89	-13	-27.89	H
3.782	-55.84	Pk	33.5	-26.8	9.7	-39.44	-13	-26.44	V
4.788	-69.47	Pk	34.2	-26.1	9.5	-51.87	-13	-38.87	V
7.158	-71.58	Pk	35.7	-22.9	7.7	-51.08	-13	-38.08	H

Pk - Peak detector

16QAM LTE BAND 2 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 2 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
2.402	-67.7	Pk	31.9	-28.7	9.3	-55.2	-13	-42.2	V
2.785	-68.45	Pk	32.3	-27.9	9.8	-54.25	-13	-41.25	H
3.224	-68.92	Pk	32.8	-27.4	9.1	-54.42	-13	-41.42	V
3.735	-67.75	Pk	33.2	-26.8	9.9	-51.45	-13	-38.45	H
4.523	-69.66	Pk	34.1	-25.9	10.4	-51.06	-13	-38.06	V
6.033	-70.16	Pk	35.4	-24.7	7.8	-51.66	-13	-38.66	H
Mid Channel, 1880MHz									
2.331	-68.34	Pk	31.6	-28.8	10.1	-55.44	-13	-42.44	H
2.481	-68.53	Pk	32.4	-28.5	8.7	-55.93	-13	-42.93	V
3.742	-59.93	Pk	33.3	-26.8	9.9	-43.53	-13	-30.53	H
3.742	-62	Pk	33.3	-26.8	9.7	-45.8	-13	-32.8	V
5.254	-70.74	Pk	34.3	-25.3	8.8	-52.94	-13	-39.94	H
5.613	-70.16	Pk	34.7	-24.9	8.6	-51.76	-13	-38.76	V
High Channel, 1900MHz									
2.673	-68.6	Pk	32.3	-28	10.2	-54.1	-13	-41.1	V
2.721	-67.49	Pk	32.2	-28	9.9	-53.39	-13	-40.39	H
3.782	-57.59	Pk	33.5	-26.8	10	-40.89	-13	-27.89	H
3.782	-55.84	Pk	33.5	-26.8	9.7	-39.44	-13	-26.44	V
4.788	-69.47	Pk	34.2	-26.1	9.5	-51.87	-13	-38.87	V
7.158	-71.58	Pk	35.7	-22.9	7.7	-51.08	-13	-38.08	H

Pk - Peak detector

9.1.2. LTE BAND 5

QPSK LTE BAND 5 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 5 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 829MHz									
2.492	-68.1	Pk	32.3	-28.5	8.4	-55.9	-13	-42.9	H
2.485	-68.39	Pk	32.3	-28.4	8.7	-55.79	-13	-42.79	V
1.649	-56.05	Pk	28.5	-29.8	10.9	-46.45	-13	-33.45	H
1.649	-60.16	Pk	28.5	-29.8	10.2	-51.26	-13	-38.26	V
3.316	-68.53	Pk	32.8	-27.2	9.7	-53.23	-13	-40.23	V
3.319	-68.74	Pk	32.8	-27.2	9.3	-53.84	-13	-40.84	H
Mid Channel, 836.5MHz									
1.673	-67.58	Pk	28.7	-29.9	10.6	-58.18	-13	-45.18	H
1.674	-67.72	Pk	28.7	-29.9	9	-59.92	-13	-46.92	V
2.51	-67.79	Pk	32.4	-28.6	9.3	-54.69	-13	-41.69	V
2.511	-68.15	Pk	32.4	-28.6	9.1	-55.25	-13	-42.25	H
3.344	-69.02	Pk	32.8	-27.2	9.3	-54.12	-13	-41.12	V
3.346	-68.82	Pk	32.8	-27.2	9.1	-54.12	-13	-41.12	H
High Channel, 844MHz									
1.679	-55.73	Pk	28.7	-29.7	10.8	-45.93	-13	-32.93	H
2.487	-68.22	Pk	32.3	-28.4	8.7	-55.62	-13	-42.62	H
1.679	-54.6	Pk	28.7	-29.7	9.2	-46.4	-13	-33.4	V
2.484	-68.26	Pk	32.3	-28.5	8.7	-55.76	-13	-42.76	V
3.314	-68.5	Pk	32.8	-27.1	9.6	-53.2	-13	-40.2	H
3.317	-68.2	Pk	32.8	-27.2	9.6	-53	-13	-40	V

Pk - Peak detector

16QAM LTE BAND 5 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 5 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 829MHz									
2.485	-68.43	Pk	32.3	-28.4	8.7	-55.83	-13	-42.83	H
2.49	-68.71	Pk	32.3	-28.5	8.7	-56.21	-13	-43.21	V
1.649	-53.02	Pk	28.5	-29.8	10.9	-43.42	-13	-30.42	H
1.649	-55.4	Pk	28.5	-29.8	10.2	-46.5	-13	-33.5	V
3.318	-68.71	Pk	32.8	-27.2	9.4	-53.71	-13	-40.71	H
3.323	-68.88	Pk	32.8	-27.2	9.1	-54.18	-13	-41.18	V
Mid Channel, 836.5MHz									
2.104	-68.28	Pk	31.2	-28.8	10.3	-55.58	-13	-42.58	H
2.41	-67.98	Pk	32	-28.6	9.6	-54.98	-13	-41.98	V
3.034	-68.84	Pk	32.8	-27.7	10.9	-52.84	-13	-39.84	H
3.575	-68.95	Pk	32.9	-27	9.9	-53.15	-13	-40.15	V
4.674	-69.14	Pk	34.2	-26.1	9.7	-51.34	-13	-38.34	H
5.941	-69.72	Pk	35.2	-24.6	8.6	-50.52	-13	-37.52	V
High Channel, 844MHz									
1.679	-53.3	Pk	28.7	-29.7	10.7	-43.6	-13	-30.6	H
2.489	-68.38	Pk	32.3	-28.4	8.7	-55.78	-13	-42.78	H
1.679	-56.31	Pk	28.7	-29.7	9.3	-48.01	-13	-35.01	V
2.488	-68.13	Pk	32.3	-28.4	8.7	-55.53	-13	-42.53	V
3.311	-68.99	Pk	32.8	-27.1	9.6	-53.69	-13	-40.69	H
3.316	-67.58	Pk	32.8	-27.2	9.7	-52.28	-13	-39.28	V

Pk - Peak detector

9.1.3. LTE BAND 7

QPSK LTE BAND 7 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 7 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2510MHz									
5.007	-71.61	Pk	34.1	-25.1	9.4	-53.21	-25	-28.21	H
7.534	-72.12	Pk	35.7	-22.8	7.4	-51.82	-25	-26.82	H
5.013	-70.53	Pk	34.2	-25.2	8.9	-52.63	-25	-27.63	V
7.531	-71.79	Pk	35.7	-22.8	7.3	-51.59	-25	-26.59	V
10.04	-73.08	Pk	37.1	-18.8	7.9	-46.88	-25	-21.88	V
10.041	-73.72	Pk	37.1	-18.9	8	-47.52	-25	-22.52	H
Mid Channel, 2535MHz									
5.069	-70.97	Pk	34.2	-25.1	8.6	-53.27	-25	-28.27	H
7.609	-71.71	Pk	35.6	-22.7	7.5	-51.31	-25	-26.31	H
5.075	-70.85	Pk	34.2	-25.1	8.4	-53.35	-25	-28.35	V
7.606	-71.81	Pk	35.7	-22.7	7.6	-51.21	-25	-26.21	V
10.139	-73.84	Pk	37.2	-18.9	6.4	-49.14	-25	-24.14	H
10.139	-73.55	Pk	37.2	-18.9	6.4	-48.85	-25	-23.85	V
High Channel, 2560MHz									
5.123	-69.83	Pk	34.3	-25.4	8.7	-52.23	-25	-27.23	H
7.674	-71.7	Pk	35.7	-22.1	7.8	-50.3	-25	-25.3	H
5.123	-71.46	Pk	34.3	-25.4	8.5	-54.06	-25	-29.06	V
7.679	-71.75	Pk	35.7	-22.1	7.6	-50.55	-25	-25.55	V
10.233	-73.79	Pk	37.4	-18.7	7.7	-47.39	-25	-22.39	H
10.236	-73.48	Pk	37.4	-18.7	7.5	-47.28	-25	-22.28	V

Pk - Peak detector

16QAM LTE BAND 7 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 7 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2510MHz									
5.015	-71.37	Pk	34.2	-25.2	8.6	-53.77	-25	-28.77	H
7.528	-71.49	Pk	35.7	-22.8	7.5	-51.09	-25	-26.09	H
5.018	-70.79	Pk	34.2	-25.1	8.7	-52.99	-25	-27.99	V
7.529	-71.41	Pk	35.7	-22.8	7.3	-51.21	-25	-26.21	V
10.038	-73.36	Pk	37.1	-18.8	8	-47.06	-25	-22.06	H
10.041	-73.95	Pk	37.1	-18.9	7.9	-47.85	-25	-22.85	V
Mid Channel, 2535MHz									
5.077	-70.27	Pk	34.2	-25.1	8.5	-52.67	-25	-27.67	H
7.606	-70.91	Pk	35.7	-22.7	7.6	-50.31	-25	-25.31	H
5.069	-70.71	Pk	34.2	-25.1	8.6	-53.01	-25	-28.01	V
7.611	-71.53	Pk	35.6	-22.7	7.4	-51.23	-25	-26.23	V
10.143	-73.78	Pk	37.2	-18.8	6.5	-48.88	-25	-23.88	H
10.144	-73.13	Pk	37.2	-18.8	6.4	-48.33	-25	-23.33	V
High Channel, 2560MHz									
3.314	-69.37	Pk	32.8	-27.1	9.6	-54.07	-25	-29.07	H
3.623	-68.7	Pk	32.9	-27	9.9	-52.9	-25	-27.9	V
4.538	-69.4	Pk	34.1	-25.8	9.6	-51.5	-25	-26.5	V
5.105	-69.73	Pk	34.2	-25.2	9.5	-51.23	-25	-26.23	H
5.87	-69.94	Pk	35	-24.6	7.8	-51.74	-25	-26.74	H
6.383	-70.17	Pk	35.5	-23.7	7.3	-51.07	-25	-26.07	V

Pk - Peak detector

9.1.4. LTE BAND 12

QPSK LTE BAND 12 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 12 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 704MHz									
1.779	-67.15	Pk	29.9	-29.6	10	-56.85	-13	-43.85	V
1.884	-67.52	Pk	30.6	-29.3	10.8	-55.42	-13	-42.42	H
2.15	-68.21	Pk	31.3	-28.9	10.5	-55.31	-13	-42.31	V
2.35	-68.31	Pk	31.6	-28.7	10.3	-55.11	-13	-42.11	H
2.987	-68.44	Pk	32.7	-27.8	10.2	-53.34	-13	-40.34	H
3.672	-68.31	Pk	33.1	-26.7	10.6	-51.31	-13	-38.31	V
Mid Channel, 707.5MHz									
1.888	-67.63	Pk	30.7	-29.4	10.8	-55.53	-13	-42.53	H
1.989	-68.14	Pk	31	-29	11	-55.14	-13	-42.14	V
2.519	-68.61	Pk	32.3	-28.5	9.1	-55.71	-13	-42.71	H
2.581	-68.84	Pk	32.3	-28.4	9.7	-55.24	-13	-42.24	V
3.944	-69.57	Pk	33.5	-26.8	10	-52.87	-13	-39.87	H
4.992	-70.98	Pk	34.1	-25	9.7	-52.18	-13	-39.18	V
High Channel, 711MHz									
1.842	-66.3	Pk	30.5	-29.5	10.3	-55	-13	-42	V
2.118	-67.9	Pk	31.3	-28.8	10.4	-55	-13	-42	H
3.262	-69.23	Pk	32.9	-27.3	10.4	-53.23	-13	-40.23	H
3.3	-68.89	Pk	32.9	-27.1	10	-53.09	-13	-40.09	V
3.698	-68.76	Pk	33.1	-26.9	10.4	-52.16	-13	-39.16	H
4.666	-69.47	Pk	34.2	-26	9.6	-51.67	-13	-38.67	V

Pk - Peak detector

16QAM LTE BAND 12 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 12 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 704MHz									
1.304	-67.04	Pk	28.7	-30.4	10.8	-57.94	-13	-44.94	V
1.885	-67.71	Pk	30.6	-29.3	10.8	-55.61	-13	-42.61	H
2.049	-67.4	Pk	30.9	-28.9	10.7	-54.7	-13	-41.7	V
2.096	-68.51	Pk	31.2	-28.9	10.8	-55.41	-13	-42.41	H
2.64	-67.86	Pk	32.4	-28.1	9.4	-54.16	-13	-41.16	V
3.147	-69.09	Pk	32.9	-27.6	9.8	-53.99	-13	-40.99	H
Mid Channel, 707.5MHz									
2.316	-68.13	Pk	31.7	-28.7	11.1	-54.03	-13	-41.03	H
2.663	-68.9	Pk	32.4	-28.1	9.9	-54.7	-13	-41.7	V
3.233	-68.75	Pk	32.8	-27.4	9.2	-54.15	-13	-41.15	V
3.892	-69.4	Pk	33.5	-26.7	9.3	-53.3	-13	-40.3	H
4.85	-69.81	Pk	34.2	-25.9	8.9	-52.61	-13	-39.61	H
5.115	-70.37	Pk	34.2	-25.2	9.2	-52.17	-13	-39.17	V
High Channel, 711MHz									
1.683	-67.19	Pk	28.7	-29.8	11	-57.29	-13	-44.29	H
1.795	-67.11	Pk	29.9	-29.4	9.8	-56.81	-13	-43.81	V
2.57	-68.17	Pk	32.3	-28.3	10.4	-53.77	-13	-40.77	H
2.876	-68.47	Pk	32.4	-27.7	9.1	-54.67	-13	-41.67	V
3.358	-67.62	Pk	32.8	-27.2	9.5	-52.52	-13	-39.52	H
3.812	-68.77	Pk	33.5	-27	9.5	-52.77	-13	-39.77	V

Pk - Peak detector

9.1.5. LTE BAND 13

QPSK LTE BAND 13 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/20/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 13 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 782MHz									
1.595	-59.03	Pk	28.1	-29.8	8.7	-52.03	-40	-12.03	H
1.596	-63.46	Pk	28.1	-29.8	10	-55.16	-40	-15.16	V
1.836	-67.99	Pk	30.5	-29.5	10.6	-56.39	-13	-43.39	H
1.992	-67.84	Pk	31	-29	10.7	-55.14	-13	-42.14	V
2.333	-63.63	Pk	31.6	-28.7	10	-50.73	-13	-37.73	H
3.133	-69.36	Pk	33	-27.6	10.2	-53.76	-13	-40.76	V

Pk - Peak detector

Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

FCC: §27.53 (Band 13)

(c) 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.

(f) Emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

16QAM LTE BAND 13 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/27/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 13 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 782MHz									
1.563	-67.74	Pk	30.9	-29.1	9.6	-56.34	-40	-16.34	V
1.569	-67.7	Pk	31.4	-28.8	11.1	-54	-40	-14.00	H
3.503	-69.24	Pk	32.7	-26.8	9.7	-53.64	-13	-40.64	H
3.566	-68.95	Pk	32.9	-27	9.3	-53.75	-13	-40.75	V
4.848	-69.96	Pk	34.2	-25.9	9	-52.66	-13	-39.66	H
5.413	-71.08	Pk	34.6	-25.7	8.8	-53.38	-13	-40.38	V

Pk - Peak detector

Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

FCC: §27.53 (Band 13)

(c) 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.

(f) Emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

9.1.6. LTE BAND 17

QPSK LTE BAND 17 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 17 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 710MHz									
1.411	-55.11	Pk	28.5	-30.2	10.3	-46.51	-13	-33.51	H
1.411	-58.36	Pk	28.5	-30.2	9.5	-50.56	-13	-37.56	V
1.987	-67.8	Pk	31	-29.1	11.2	-54.7	-13	-41.7	V
2.142	-69.06	Pk	31.4	-28.8	11.1	-55.36	-13	-42.36	H
2.552	-68.97	Pk	32.3	-28.4	9.2	-55.87	-13	-42.87	V
3.037	-69.26	Pk	32.9	-27.8	10.7	-53.46	-13	-40.46	H

Pk - Peak detector

16QAM LTE BAND 17 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/27/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 17 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 710MHz									
1.897	-67.47	Pk	30.5	-29.3	10.2	-56.07	-13	-43.07	H
1.981	-49.61	Pk	31	-29.2	11.4	-36.41	-13	-23.41	V
3.045	-68.99	Pk	32.9	-27.7	10.1	-53.69	-13	-40.69	H
3.142	-69	Pk	32.9	-27.6	10.3	-53.4	-13	-40.4	V
4.631	-69.67	Pk	34.1	-26.1	9.9	-51.77	-13	-38.77	V
4.833	-70.55	Pk	34.3	-26	9.3	-52.95	-13	-39.95	H

Pk - Peak detector

9.1.7. LTE BAND 25

QPSK LTE BAND 25 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 25 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
2.307	-68.46	Pk	31.7	-28.7	10.4	-55.06	-13	-42.06	H
3.112	-68.57	Pk	33	-27.7	10.1	-53.17	-13	-40.17	V
3.549	-68.59	Pk	32.9	-26.9	8.8	-53.79	-13	-40.79	V
3.926	-68.07	Pk	33.4	-26.5	9.8	-51.37	-13	-38.37	H
5.109	-69.65	Pk	34.2	-25.2	9.3	-51.35	-13	-38.35	H
5.169	-70.34	Pk	34.3	-25.4	9.4	-52.04	-13	-39.04	V
Mid Channel, 1882.5MHz									
2.669	-68.84	Pk	32.3	-28	9.9	-54.64	-13	-41.64	H
3.747	-66.2	Pk	33.3	-26.8	9.9	-49.8	-13	-36.8	H
3.852	-69.04	Pk	33.5	-26.7	9.6	-52.64	-13	-39.64	V
4.407	-69.07	Pk	33.6	-25.9	10.1	-51.27	-13	-38.27	V
5.853	-70.73	Pk	35	-24.7	7.1	-53.33	-13	-40.33	H
6.576	-72.4	Pk	35.6	-23.5	7.5	-52.8	-13	-39.8	V
High Channel, 1905MHz									
2.653	-67.97	Pk	32.4	-28.2	9.3	-54.47	-13	-41.47	V
3.092	-68.19	Pk	33	-27.6	9.8	-52.99	-13	-39.99	H
3.683	-68.43	Pk	33.1	-26.7	10.1	-51.93	-13	-38.93	V
4.581	-70.36	Pk	34.1	-26.1	10	-52.36	-13	-39.36	H
5.553	-70.37	Pk	34.7	-25	8.9	-51.77	-13	-38.77	H
6.09	-70.29	Pk	35.6	-24.9	8.3	-51.29	-13	-38.29	V

Pk - Peak detector

16QAM LTE BAND 25 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 25 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
2.387	-68.05	Pk	31.8	-28.8	10	-55.05	-13	-42.05	H
3.683	-68.51	Pk	33.1	-26.7	10.2	-51.91	-13	-38.91	H
4.099	-69.46	Pk	33.6	-26.4	9.7	-52.56	-13	-39.56	V
5.002	-70.79	Pk	34.1	-25	9.3	-52.39	-13	-39.39	V
5.672	-69.63	Pk	34.7	-24.6	8.4	-51.13	-13	-38.13	H
5.673	-70.14	Pk	34.7	-24.6	8.4	-51.64	-13	-38.64	H
Mid Channel, 1882.5MHz									
2.57	-68.71	Pk	32.3	-28.3	10.4	-54.31	-13	-41.31	H
2.657	-67.95	Pk	32.3	-28.1	9.6	-54.15	-13	-41.15	V
3.683	-68.36	Pk	33.1	-26.7	10.1	-51.86	-13	-38.86	V
3.796	-68.21	Pk	33.5	-26.9	10	-51.61	-13	-38.61	H
5.153	-70.02	Pk	34.3	-25.5	9.2	-52.02	-13	-39.02	H
5.611	-69.9	Pk	34.7	-24.8	8.5	-51.5	-13	-38.5	V
High Channel, 1905MHz									
2.653	-67.97	Pk	32.4	-28.2	9.3	-54.47	-13	-41.47	V
3.092	-68.19	Pk	33	-27.6	9.8	-52.99	-13	-39.99	H
3.683	-68.43	Pk	33.1	-26.7	10.1	-51.93	-13	-38.93	V
4.581	-70.36	Pk	34.1	-26.1	10	-52.36	-13	-39.36	H
5.553	-70.37	Pk	34.7	-25	8.9	-51.77	-13	-38.77	H
6.09	-70.29	Pk	35.6	-24.9	8.3	-51.29	-13	-38.29	V

Pk - Peak detector

9.1.8. LTE BAND 26 (PART 90S)

QPSK LTE BAND 26 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/20/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 26(90s) QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 819MHz									
1.664	-55.05	Pk	28.6	-29.8	10.2	-46.05	-13	-33.05	H
1.985	-66.82	Pk	31	-29.1	11.4	-53.52	-13	-40.52	V
2.094	-67.81	Pk	31.2	-28.9	11.2	-54.31	-13	-41.31	H
2.778	-67.74	Pk	32.2	-28	10	-53.54	-13	-40.54	H
3.567	-69.35	Pk	32.9	-27	9.6	-53.85	-13	-40.85	V
4.511	-69.38	Pk	34	-25.8	10.2	-50.98	-13	-37.98	V

Pk - Peak detector

16QAM LTE BAND 26 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/27/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 26(90s) 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 819MHz									
1.701	-67.56	Pk	28.8	-29.7	9.4	-59.06	-13	-46.06	H
2.232	-68.25	Pk	31.6	-28.8	9.9	-55.55	-13	-42.55	V
2.963	-68.37	Pk	32.5	-27.8	9.6	-54.07	-13	-41.07	V
3.904	-69.31	Pk	33.4	-26.8	9.3	-53.41	-13	-40.41	H
4.785	-69.74	Pk	34.2	-26.1	9.5	-52.14	-13	-39.14	H
5.009	-70.84	Pk	34.1	-25.1	9.2	-52.64	-13	-39.64	V

Pk - Peak detector

9.1.9. LTE BAND 30

QPSK LTE BAND 30 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/21/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 30 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.612	-67.57	Pk	34.1	-26.2	9.4	-50.27	-40	-10.27	H
4.612	-63.35	Pk	34.1	-26.2	9.4	-46.05	-40	-6.05	V
6.931	-70.93	Pk	35.8	-23.6	6.7	-52.03	-40	-12.03	H
6.931	-71.8	Pk	35.8	-23.6	6.8	-52.8	-40	-12.8	V
9.235	-73.31	Pk	36.3	-20	8	-49.01	-40	-9.01	V
9.242	-73.69	Pk	36.3	-19.9	7.7	-49.59	-40	-9.59	H

Pk - Peak detector

16QAM LTE BAND 30 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 30 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.615	-71.29	Pk	34.1	-26.2	9.6	-53.79	-40	-13.79	H
4.611	-68.01	Pk	34.1	-26.2	9.3	-50.81	-40	-10.81	V
6.926	-71.26	Pk	35.7	-23.5	6.9	-52.16	-40	-12.16	V
6.928	-71.77	Pk	35.7	-23.5	6.8	-52.77	-40	-12.77	H
9.235	-73.53	Pk	36.3	-20	8	-49.23	-40	-9.23	H
9.236	-73.17	Pk	36.3	-19.9	8	-48.77	-40	-8.77	V

Pk - Peak detector

9.1.10. LTE BAND 41

QPSK LTE BAND 41 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 41 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2506MHz									
4.994	-68.89	Pk	34.1	-24.9	9.8	-49.89	-25	-24.89	H
7.501	-72.09	Pk	35.6	-22.7	7.8	-51.39	-25	-26.39	H
4.994	-66.48	Pk	34.1	-24.9	9.9	-47.38	-25	-22.38	V
7.488	-71.57	Pk	35.6	-22.8	7.4	-51.37	-25	-26.37	V
9.984	-73	Pk	37	-18.8	8.1	-46.7	-25	-21.7	V
9.99	-73.16	Pk	37	-18.8	8.1	-46.86	-25	-21.86	H
Mid Channel, 2593MHz									
5.187	-69.88	Pk	34.2	-25.4	8.9	-52.18	-25	-27.18	H
5.191	-70.03	Pk	34.2	-25.3	8.7	-52.43	-25	-27.43	V
7.778	-71.36	Pk	35.7	-22.6	7.8	-50.46	-25	-25.46	H
7.778	-71.71	Pk	35.7	-22.6	7.9	-50.71	-25	-25.71	V
10.372	-72.9	Pk	37.5	-18.5	7.8	-46.1	-25	-21.1	H
10.381	-73.12	Pk	37.6	-18.4	7.9	-46.02	-25	-21.02	V
High Channel, 2680MHz									
5.362	-72.33	Pk	34.5	-25.6	8.7	-54.73	-25	-29.73	H
8.04	-72.41	Pk	35.7	-21.8	8.2	-50.31	-25	-25.31	H
10.723	-72.78	Pk	37.9	-18.5	7.8	-45.58	-25	-20.58	H
5.361	-72.23	Pk	34.5	-25.6	8.8	-54.53	-25	-29.53	V
8.035	-71.12	Pk	35.8	-21.8	8	-49.12	-25	-24.12	V
10.717	-73.04	Pk	38	-18.6	7.8	-45.84	-25	-20.84	V

Pk - Peak detector

16QAM LTE BAND 41 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 41 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2506MHz									
5.001	-72.38	Pk	34.1	-25	9.5	-53.78	-25	-28.78	H
7.49	-72.11	Pk	35.7	-22.8	7.6	-51.61	-25	-26.61	H
5	-71.67	Pk	34.1	-25	9.5	-53.07	-25	-28.07	V
7.491	-71.98	Pk	35.7	-22.8	7.6	-51.48	-25	-26.48	V
9.983	-73.34	Pk	37	-18.8	8.3	-46.84	-25	-21.84	H
9.983	-73.84	Pk	37	-18.8	8.1	-47.54	-25	-22.54	V
Mid Channel, 2593MHz									
5.168	-66.96	Pk	34.3	-25.4	9.5	-48.56	-25	-23.56	H
5.168	-64.64	Pk	34.3	-25.4	9.4	-46.34	-25	-21.34	V
7.753	-71.86	Pk	35.8	-22.3	7.4	-50.96	-25	-25.96	H
7.756	-70.76	Pk	35.7	-22.3	7.7	-49.66	-25	-24.66	V
10.338	-73.89	Pk	37.5	-18.6	6.9	-48.09	-25	-23.09	H
10.338	-73.52	Pk	37.5	-18.6	6.8	-47.82	-25	-22.82	V
High Channel, 2680MHz									
5.364	-71.51	Pk	34.5	-25.6	8.6	-54.01	-25	-29.01	H
8.046	-71.32	Pk	35.7	-21.8	8.1	-49.32	-25	-24.32	H
10.722	-72.86	Pk	37.9	-18.5	7.8	-45.66	-25	-20.66	H
5.366	-71.96	Pk	34.5	-25.6	8.7	-54.36	-25	-29.36	V
8.042	-72.11	Pk	35.7	-21.8	8	-50.21	-25	-25.21	V
10.722	-73.72	Pk	37.9	-18.5	7.8	-46.52	-25	-21.52	V

Pk - Peak detector

9.1.11. LTE BAND 48

QPSK LTE BAND 48 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 48 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3560MHz									
4.423	-69.87	Pk	33.6	-25.9	10	-52.17	-40	-12.17	V
4.528	-69.12	Pk	34.1	-25.9	10.2	-50.72	-40	-10.72	H
5.806	-70.66	Pk	35	-24.1	7.4	-52.36	-40	-12.36	H
5.861	-70.64	Pk	35	-24.5	7.6	-52.54	-40	-12.54	V
6.462	-71.34	Pk	35.5	-23.7	7.4	-52.14	-40	-12.14	H
7.668	-71.59	Pk	35.7	-22.3	7.9	-50.29	-40	-10.29	V
Mid Channel, 3625MHz									
4.525	-69.79	Pk	34.1	-26	10.2	-51.49	-40	-11.49	V
5.167	-69.86	Pk	34.3	-25.4	9.5	-51.46	-40	-11.46	H
5.982	-70.33	Pk	35.2	-24.5	8	-51.63	-40	-11.63	H
7.232	-72.19	Pk	35.6	-22.7	7.5	-51.79	-40	-11.79	V
7.927	-72.27	Pk	35.7	-21.4	8.5	-49.47	-40	-9.47	H
8.459	-72	Pk	35.9	-21.2	8.4	-48.9	-40	-8.9	V
High Channel, 3690MHz									
4.356	-69.46	Pk	33.7	-26.1	9.2	-52.66	-40	-12.66	V
4.992	-70.57	Pk	34.1	-25	9.6	-51.87	-40	-11.87	H
6.041	-70.03	Pk	35.4	-24.5	8	-51.13	-40	-11.13	H
6.347	-70.44	Pk	35.5	-23.5	7.4	-51.04	-40	-11.04	V
7.39	-70.81	Pk	35.5	-22.9	7.3	-50.91	-40	-10.91	V
7.507	-71.8	Pk	35.6	-22.7	7.8	-51.1	-40	-11.1	H

Pk - Peak detector

16QAM LTE BAND 48 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/28/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 48 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3560MHz									
4.115	-69.24	Pk	33.7	-26.3	9.2	-52.64	-40	-12.64	V
5.097	-69.63	Pk	34.2	-25.2	9.3	-51.33	-40	-11.33	H
5.99	-70.35	Pk	35.3	-24.6	8	-51.65	-40	-11.65	H
6.389	-71.32	Pk	35.5	-23.7	7.3	-52.22	-40	-12.22	V
7.325	-72.06	Pk	35.6	-22.5	7.3	-51.66	-40	-11.66	H
8.375	-71.7	Pk	35.7	-21.7	8.6	-49.1	-40	-9.10	V
Mid Channel, 3625MHz									
4.522	-69.84	Pk	34	-25.9	10.2	-51.54	-40	-11.54	H
4.679	-70.41	Pk	34.1	-26.2	9.7	-52.81	-40	-12.81	V
5.182	-69.76	Pk	34.2	-25.5	8.9	-52.16	-40	-12.16	H
5.523	-69.55	Pk	34.7	-25.2	8.6	-51.45	-40	-11.45	V
6.091	-70.39	Pk	35.6	-24.9	8.4	-51.29	-40	-11.29	H
6.38	-70.88	Pk	35.5	-23.7	7.5	-51.58	-40	-11.58	V
High Channel, 3690MHz									
4.404	-69.54	Pk	33.6	-25.9	10.1	-51.74	-40	-11.74	V
4.75	-69.28	Pk	34.1	-26	9	-52.18	-40	-12.18	H
5.939	-69.84	Pk	35.2	-24.6	8.5	-50.74	-40	-10.74	H
6.255	-70.48	Pk	35.6	-24.3	7.6	-51.58	-40	-11.58	V
7.305	-71.91	Pk	35.6	-22.2	7.3	-51.21	-40	-11.21	H
7.791	-71.32	Pk	35.8	-22.4	7.8	-50.12	-40	-10.12	V

Pk - Peak detector

9.1.12. LTE BAND 66

QPSK LTE BAND 66 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 66 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
5.133	-62.95	Pk	34.3	-25.2	8.3	-45.55	-13	-32.55	H
5.133	-60.87	Pk	34.3	-25.3	8.1	-43.77	-13	-30.77	V
3.422	-59.19	Pk	32.6	-27.1	8.9	-44.79	-13	-31.79	H
3.422	-55.66	Pk	32.6	-27.1	9.3	-40.86	-13	-27.86	V
6.831	-71.04	Pk	35.6	-23.7	7.3	-51.84	-13	-38.84	H
6.838	-71.15	Pk	35.6	-23.7	7	-52.25	-13	-39.25	V
Mid Channel, 1745MHz									
2.137	-52.02	Pk	31.4	-28.9	11.7	-37.82	-13	-24.82	H
2.147	-54.03	Pk	31.4	-28.9	10.3	-41.23	-13	-28.23	V
3.086	-68.46	Pk	33	-27.6	9.6	-53.46	-13	-40.46	V
3.647	-68.77	Pk	33	-27	9.7	-53.07	-13	-40.07	H
4.248	-70.2	Pk	33.6	-26.1	9.5	-53.2	-13	-40.2	H
4.739	-69.56	Pk	34.1	-26	9.2	-52.26	-13	-39.26	V
High Channel, 1770MHz									
3.522	-60.24	Pk	32.8	-26.9	10	-44.34	-13	-31.34	H
3.522	-59.8	Pk	32.8	-26.9	9.9	-44.00	-13	-31.00	V
5.283	-69.82	Pk	34.4	-25.3	8.2	-52.52	-13	-39.52	H
5.284	-69.53	Pk	34.4	-25.3	7.7	-52.73	-13	-39.73	V
7.04	-71.6	Pk	35.7	-22.9	7.2	-51.6	-13	-38.60	H
7.041	-71.35	Pk	35.7	-22.9	7.2	-51.35	-13	-38.35	V

Pk - Peak detector

16QAM LTE BAND 66 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 66 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
5.133	-62.37	Pk	34.3	-25.2	8.3	-44.97	-13	-31.97	H
5.133	-66.86	Pk	34.3	-25.2	8.1	-49.66	-13	-36.66	V
3.422	-57.16	Pk	32.6	-27.1	8.9	-42.76	-13	-29.76	H
3.422	-55.19	Pk	32.6	-27.1	9.3	-40.39	-13	-27.39	V
6.831	-70.5	Pk	35.6	-23.7	7.3	-51.3	-13	-38.3	H
6.833	-70.22	Pk	35.6	-23.7	7.3	-51.02	-13	-38.02	V
Mid Channel, 1745MHz									
2.141	-50.9	Pk	31.4	-28.8	9.7	-38.6	-13	-25.6	V
2.153	-49.85	Pk	31.3	-28.9	10.1	-37.35	-13	-24.35	H
3.472	-48.84	Pk	32.6	-26.9	9.5	-33.64	-13	-20.64	H
3.472	-51.37	Pk	32.6	-26.9	9.2	-36.47	-13	-23.47	V
3.605	-69.48	Pk	32.9	-26.8	8.8	-54.58	-13	-41.58	H
5.208	-65.53	Pk	34.2	-25.4	9.3	-47.43	-13	-34.43	V
High Channel, 1770MHz									
3.522	-59.16	Pk	32.8	-26.9	10	-43.26	-13	-30.26	H
3.522	-59.64	Pk	32.8	-26.9	9.9	-43.84	-13	-30.84	V
5.283	-64.78	Pk	34.4	-25.3	7.8	-47.88	-13	-34.88	V
5.287	-70.18	Pk	34.4	-25.3	7.9	-53.18	-13	-40.18	H
7.038	-71.05	Pk	35.6	-22.9	7.1	-51.25	-13	-38.25	V
7.04	-71.19	Pk	35.7	-22.9	7.1	-51.29	-13	-38.29	H

Pk - Peak detector

9.2. FIELD STRENGTH OF SPURIOUS RADIATION, UAT 1

9.2.1. LTE BAND 2

QPSK LTE BAND 2 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 2 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.715	-69.83	Pk	33.2	-26.8	9.8	-53.63	-13	-40.63	H
7.439	-72.1	Pk	35.6	-22.8	6.9	-52.4	-13	-39.4	H
3.725	-69.52	Pk	33.2	-26.7	10	-53.02	-13	-40.02	V
7.443	-71.06	Pk	35.6	-22.9	6.9	-51.46	-13	-38.46	V
5.583	-70.34	Pk	34.7	-25.1	8.1	-52.64	-13	-39.64	V
5.587	-70.17	Pk	34.7	-25.1	8.3	-52.27	-13	-39.27	H
Mid Channel, 1880MHz									
3.759	-68.72	Pk	33.4	-26.9	9.3	-52.92	-13	-39.92	H
7.52	-71.38	Pk	35.6	-22.8	7.5	-51.08	-13	-38.08	H
3.758	-68.56	Pk	33.3	-26.9	9.6	-52.56	-13	-39.56	V
7.527	-72.14	Pk	35.7	-22.8	7.3	-51.94	-13	-38.94	V
5.641	-70	Pk	34.7	-25	8.1	-52.2	-13	-39.2	V
5.646	-70.07	Pk	34.8	-25	8	-52.27	-13	-39.27	H
High Channel, 1900MHz									
3.803	-69.03	Pk	33.5	-26.8	9.8	-52.53	-13	-39.53	H
7.599	-71.48	Pk	35.7	-22.8	7.5	-51.08	-13	-38.08	H
3.803	-69.1	Pk	33.5	-26.8	9.4	-53	-13	-40	V
7.606	-71.37	Pk	35.7	-22.7	7.6	-50.77	-13	-37.77	V
5.698	-70.43	Pk	34.7	-24.7	7.7	-52.73	-13	-39.73	H
5.702	-70.2	Pk	34.8	-24.7	7.5	-52.6	-13	-39.6	V

Pk - Peak detector

16QAM LTE BAND 2 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 2 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.715	-69.91	Pk	33.2	-26.8	9.8	-53.71	-13	-40.71	H
7.44	-71.66	Pk	35.6	-22.8	7	-51.86	-13	-38.86	H
3.718	-69.42	Pk	33.2	-26.8	9.7	-53.32	-13	-40.32	V
7.438	-71.56	Pk	35.6	-22.8	7	-51.76	-13	-38.76	V
5.569	-70.16	Pk	34.7	-25	8.5	-51.96	-13	-38.96	H
5.572	-70.06	Pk	34.6	-25.1	8.4	-52.16	-13	-39.16	V
Mid Channel, 1880MHz									
3.756	-68.86	Pk	33.3	-26.9	9.3	-53.16	-13	-40.16	H
7.521	-72.01	Pk	35.6	-22.8	7.5	-51.71	-13	-38.71	H
3.756	-69.74	Pk	33.3	-26.8	9.6	-53.64	-13	-40.64	V
7.527	-70.51	Pk	35.7	-22.8	7.3	-50.31	-13	-37.31	V
5.638	-69.73	Pk	34.7	-24.9	8.4	-51.53	-13	-38.53	H
5.639	-70.6	Pk	34.7	-24.9	8.2	-52.6	-13	-39.6	V
High Channel, 1900MHz									
3.801	-69.68	Pk	33.4	-26.8	9.3	-53.78	-13	-40.78	H
7.617	-71.94	Pk	35.6	-22.8	7.6	-51.54	-13	-38.54	H
3.805	-69.72	Pk	33.3	-26.8	9.6	-53.62	-13	-40.62	V
7.616	-71.28	Pk	35.6	-22.8	7.5	-50.98	-13	-37.98	V
5.736	-68.75	Pk	34.6	-24.8	8.5	-50.45	-13	-37.45	V
5.737	-70.73	Pk	34.6	-24.9	8.5	-52.53	-13	-39.53	H

Pk - Peak detector

9.2.2. LTE BAND 5

QPSK LTE BAND 5 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 5 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 829MHz									
1.832	-67.23	Pk	30.4	-29.5	11.1	-55.23	-13	-42.23	H
2.026	-67.81	Pk	30.9	-29.1	9.7	-56.31	-13	-43.31	V
2.216	-66.92	Pk	31.7	-29	10.2	-54.02	-13	-41.02	V
2.318	-67.31	Pk	31.7	-28.8	11	-53.41	-13	-40.41	H
2.997	-67.85	Pk	32.8	-27.8	10	-52.85	-13	-39.85	H
3.816	-68.89	Pk	33.5	-26.9	9.8	-52.49	-13	-39.49	V
Mid Channel, 836.5MHz									
2.349	-68.27	Pk	31.6	-28.7	10.2	-55.17	-13	-42.17	H
2.484	-68.57	Pk	32.3	-28.4	8.7	-55.97	-13	-42.97	V
3.772	-69.57	Pk	33.4	-26.9	9.5	-53.57	-13	-40.57	H
3.928	-69.62	Pk	33.5	-26.5	9.6	-53.02	-13	-40.02	V
4.675	-70.22	Pk	34.2	-26.1	9.6	-52.52	-13	-39.52	H
5.942	-70.18	Pk	35.2	-24.6	8.6	-50.98	-13	-37.98	V
High Channel, 844MHz									
1.304	-66.6	Pk	28.7	-30.4	11.8	-56.5	-13	-43.5	H
2.131	-66.57	Pk	31.4	-28.8	10.3	-53.67	-13	-40.67	V
2.149	-67.99	Pk	31.4	-28.9	10.7	-54.79	-13	-41.79	H
3.109	-68.75	Pk	33	-27.6	10.5	-52.85	-13	-39.85	V
3.762	-68.56	Pk	33.4	-26.8	9.7	-52.26	-13	-39.26	V
3.789	-68.94	Pk	33.5	-26.8	10.2	-52.04	-13	-39.04	H

Pk - Peak detector

16QAM LTE BAND 5 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 5 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 829MHz									
1.827	-66.61	Pk	30.3	-29.5	11.5	-54.31	-13	-41.31	H
2.045	-68.09	Pk	30.9	-28.9	11	-55.09	-13	-42.09	V
2.831	-68.47	Pk	32.3	-27.9	9.6	-54.47	-13	-41.47	H
3.675	-68.02	Pk	33.1	-26.8	10.4	-51.32	-13	-38.32	V
3.915	-68.65	Pk	33.5	-26.6	9.3	-52.45	-13	-39.45	H
4.543	-69.42	Pk	34.2	-25.9	9.2	-51.92	-13	-38.92	V
Mid Channel, 836.5MHz									
1.303	-66.27	Pk	28.7	-30.4	11.7	-56.27	-13	-43.27	H
1.496	-66.45	Pk	28.1	-30	10.1	-58.25	-13	-45.25	V
1.842	-67.74	Pk	30.5	-29.5	10.4	-56.34	-13	-43.34	V
2.325	-67.95	Pk	31.7	-28.8	10.7	-54.35	-13	-41.35	H
2.635	-68.13	Pk	32.4	-28.2	9.7	-54.23	-13	-41.23	V
2.988	-68.21	Pk	32.7	-27.8	10.2	-53.11	-13	-40.11	H
High Channel, 844MHz									
1.566	-67.12	Pk	28	-29.9	10.2	-58.82	-13	-45.82	V
1.679	-66.41	Pk	28.7	-29.7	10.7	-56.71	-13	-43.71	H
2.122	-67.91	Pk	31.3	-28.6	10.1	-55.11	-13	-42.11	V
2.573	-67.46	Pk	32.3	-28.4	10.6	-52.96	-13	-39.96	H
3.679	-68.07	Pk	33.1	-26.8	10.3	-51.47	-13	-38.47	V
3.773	-68.8	Pk	33.4	-26.9	9.7	-52.6	-13	-39.6	H

Pk - Peak detector

9.2.3. LTE BAND 7

QPSK LTE BAND 7 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 7 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2510MHz									
3.368	-70.53	Pk	32.7	-27.1	9.9	-55.03	-25	-30.03	V
3.45	-69.19	Pk	32.6	-27.1	9.5	-54.19	-25	-29.19	H
5.044	-70.54	Pk	34.2	-25.1	9.1	-52.34	-25	-27.34	V
5.109	-69.38	Pk	34.2	-25.2	9.3	-51.08	-25	-26.08	H
6.818	-71.49	Pk	35.5	-23.7	7	-52.69	-25	-27.69	H
7.313	-72.02	Pk	35.6	-22.2	7.5	-51.12	-25	-26.12	V
Mid Channel, 2535MHz									
5.07	-69.42	Pk	34.2	-25.1	8.6	-51.72	-25	-26.72	H
7.611	-71.65	Pk	35.6	-22.7	7.5	-51.25	-25	-26.25	H
5.069	-69.69	Pk	34.2	-25.1	8.6	-51.99	-25	-26.99	V
7.604	-71.12	Pk	35.7	-22.8	7.6	-50.62	-25	-25.62	V
10.142	-73.5	Pk	37.2	-18.8	6.5	-48.6	-25	-23.6	H
10.143	-73.11	Pk	37.2	-18.8	6.4	-48.31	-25	-23.31	V
High Channel, 2560MHz									
3.674	-68.86	Pk	33.1	-26.8	10.4	-52.16	-25	-27.16	V
3.732	-69.13	Pk	33.2	-26.8	9.9	-52.83	-25	-27.83	H
5.125	-70.08	Pk	34.3	-25.4	8.3	-52.88	-25	-27.88	V
6.092	-70.75	Pk	35.6	-24.9	8.6	-51.45	-25	-26.45	H
7.188	-71.52	Pk	35.5	-22.8	7.7	-51.12	-25	-26.12	V
7.931	-72.44	Pk	35.7	-21.3	8.3	-49.74	-25	-24.74	H

Pk - Peak detector

16QAM LTE BAND 7 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 7 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2510MHz									
3.268	-68.69	Pk	32.9	-27.2	9.9	-53.09	-25	-28.09	H
3.681	-68.94	Pk	33.1	-26.7	10.2	-52.34	-25	-27.34	V
4.509	-69.8	Pk	34	-25.7	10.1	-51.4	-25	-26.4	H
5.106	-70.23	Pk	34.2	-25.2	9.4	-51.83	-25	-26.83	V
6.088	-71.24	Pk	35.6	-24.9	8.2	-52.34	-25	-27.34	H
6.508	-71.55	Pk	35.5	-23.7	8.2	-51.55	-25	-26.55	V
Mid Channel, 2535MHz									
5.113	-71.25	Pk	34.2	-25.2	9.3	-52.95	-25	-27.95	H
7.678	-71.51	Pk	35.7	-22	7.8	-50.01	-25	-25.01	H
5.116	-70.41	Pk	34.2	-25.2	9.2	-52.21	-25	-27.21	V
7.68	-72.17	Pk	35.7	-22.1	7.6	-50.97	-25	-25.97	V
10.234	-73.34	Pk	37.4	-18.7	7.7	-46.94	-25	-21.94	H
10.235	-72.69	Pk	37.4	-18.7	7.5	-46.49	-25	-21.49	V
High Channel, 2560MHz									
3.038	-69.81	Pk	32.9	-27.8	10.6	-54.11	-25	-29.11	H
3.092	-68.78	Pk	33	-27.6	10.3	-53.08	-25	-28.08	V
5.052	-70.35	Pk	34.2	-25	9.6	-51.55	-25	-26.55	V
5.539	-69.92	Pk	34.7	-25.1	8.9	-51.42	-25	-26.42	H
7.147	-71.37	Pk	35.6	-23	7.6	-51.17	-25	-26.17	H
7.695	-71.54	Pk	35.8	-22.2	7.3	-50.64	-25	-25.64	V

Pk - Peak detector

9.2.4. LTE BAND 12

QPSK LTE BAND 12 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 12 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 704MHz									
2.121	-67.44	Pk	31.3	-28.7	10	-54.84	-13	-41.84	V
2.13	-67.61	Pk	31.4	-28.8	10.6	-54.41	-13	-41.41	H
2.691	-67.6	Pk	32.3	-28.2	9.7	-53.8	-13	-40.8	V
3.143	-68.94	Pk	32.9	-27.7	10.4	-53.34	-13	-40.34	V
3.783	-68.82	Pk	33.5	-26.8	10	-52.12	-13	-39.12	H
4.412	-69.82	Pk	33.6	-26	10.3	-51.92	-13	-38.92	H
Mid Channel, 707.5MHz									
2.109	-61.9	Pk	31.3	-28.7	10.3	-49	-13	-36	H
2.109	-65.39	Pk	31.3	-28.7	9.5	-53.29	-13	-40.29	V
2.419	-68.29	Pk	32.1	-28.6	9.6	-55.19	-13	-42.19	H
2.7	-68.97	Pk	32.2	-28.1	9.5	-55.37	-13	-42.37	V
3.173	-69.18	Pk	32.8	-27.6	9.7	-54.28	-13	-41.28	H
3.935	-68.98	Pk	33.5	-26.6	9.8	-52.28	-13	-39.28	V
High Channel, 711MHz									
1.894	-67.21	Pk	30.5	-29.3	10.2	-55.81	-13	-42.81	H
1.98	-68.06	Pk	31	-29.2	11.3	-54.96	-13	-41.96	V
2.82	-68.02	Pk	32.3	-27.9	9.3	-54.32	-13	-41.32	V
3.106	-68.46	Pk	33	-27.5	10.8	-52.16	-13	-39.16	V
3.471	-61.78	Pk	32.6	-27	9.6	-46.58	-13	-33.58	H
4.668	-68.79	Pk	34.2	-26	9.8	-50.79	-13	-37.79	H

Pk - Peak detector

16QAM LTE BAND 12 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 12 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 704MHz									
2.092	-67.86	Pk	31.2	-28.9	11.3	-54.26	-13	-41.26	H
2.245	-68.5	Pk	31.7	-28.8	9.2	-56.4	-13	-43.4	V
3.105	-68.91	Pk	33	-27.5	10.8	-52.61	-13	-39.61	V
3.266	-68.65	Pk	32.9	-27.2	10.2	-52.75	-13	-39.75	H
3.83	-67.88	Pk	33.5	-26.9	9.3	-51.98	-13	-38.98	H
3.954	-68.23	Pk	33.4	-26.7	9.8	-51.73	-13	-38.73	V
Mid Channel, 707.5MHz									
1.828	-66.89	Pk	30.3	-29.5	11.5	-54.59	-13	-41.59	H
2.682	-68.45	Pk	32.3	-28.1	10.1	-54.15	-13	-41.15	V
3.236	-68.5	Pk	32.8	-27.4	9.7	-53.4	-13	-40.4	H
3.686	-68.77	Pk	33.1	-26.7	10	-52.37	-13	-39.37	V
5.051	-69.93	Pk	34.2	-25	9.4	-51.33	-13	-38.33	H
5.113	-69.12	Pk	34.2	-25.2	9.3	-50.82	-13	-37.82	V
High Channel, 711MHz									
1.517	-67.4	Pk	28.1	-29.9	9	-60.2	-13	-47.2	H
1.986	-67.74	Pk	31	-29.1	11.3	-54.54	-13	-41.54	V
2.526	-68.38	Pk	32.4	-28.5	9.5	-54.98	-13	-41.98	V
2.531	-67.62	Pk	32.4	-28.5	9.5	-54.22	-13	-41.22	V
2.676	-68.88	Pk	32.3	-28	9.7	-54.88	-13	-41.88	H
3.095	-67.92	Pk	33	-27.6	10.6	-51.92	-13	-38.92	V

Pk - Peak detector

9.2.5. LTE BAND 13

QPSK LTE BAND 13 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/21/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 13 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 782MHz									
1.987	-68.19	Pk	31	-29.1	11.2	-55.09	-13	-42.09	V
2.145	-67.7	Pk	31.4	-28.9	10.9	-54.3	-13	-41.30	H
3.045	-69.39	Pk	32.9	-27.7	10.2	-53.99	-13	-40.99	H
3.253	-69.6	Pk	32.8	-27.4	9.8	-54.4	-13	-41.40	V
4.564	-70.35	Pk	34.2	-26	9.7	-52.45	-13	-39.45	H
5.091	-69.59	Pk	34.2	-25.2	8.9	-51.69	-13	-38.69	V

Pk - Peak detector

Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

FCC: §27.53 (Band 13)

(c) 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.

(f) Emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

16QAM LTE BAND 13 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 13 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 782MHz									
1.827	-67.84	Pk	30.3	-29.5	11.5	-55.54	-13	-42.54	H
2.137	-68.15	Pk	31.4	-28.9	11.6	-54.05	-13	-41.05	H
2.201	-67.9	Pk	31.5	-28.9	9.9	-55.4	-13	-42.40	V
3.03	-68.73	Pk	32.8	-27.6	10.5	-53.03	-13	-40.03	H
3.107	-68.63	Pk	33	-27.5	10.7	-52.43	-13	-39.43	V
3.259	-68.54	Pk	32.8	-27.3	9.8	-53.24	-13	-40.24	V

Pk - Peak detector

Emissions in the GPS band were wideband emissions therefore the -40dBm/MHz limit was used.

FCC: §27.53 (Band 13)

(c) 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.

(f) Emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

9.2.6. LTE BAND 17

QPSK LTE BAND 17 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/21/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 17 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 710MHz									
2.117	-68.16	Pk	31.3	-28.8	10.3	-55.36	-13	-42.36	H
2.117	-63.35	Pk	31.3	-28.8	9.4	-51.45	-13	-38.45	V
2.563	-68.88	Pk	32.3	-28.5	9.9	-55.18	-13	-42.18	H
2.992	-68.84	Pk	32.8	-27.8	9.7	-54.14	-13	-41.14	V
4.847	-69.54	Pk	34.2	-26	9.4	-51.94	-13	-38.94	V
5.095	-69.17	Pk	34.2	-25.2	9.2	-50.97	-13	-37.97	H

Pk - Peak detector

16QAM LTE BAND 17 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 17 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 710MHz									
1.844	-67.39	Pk	30.5	-29.4	10.2	-56.09	-13	-43.09	V
2.563	-67.91	Pk	32.3	-28.5	9.9	-54.21	-13	-41.21	H
3.061	-68.82	Pk	33	-27.6	9.7	-53.72	-13	-40.72	V
3.1	-68.67	Pk	33	-27.7	9.8	-53.57	-13	-40.57	H
4.1	-69.29	Pk	33.7	-26.4	9.8	-52.19	-13	-39.19	V
4.408	-69.1	Pk	33.6	-26	10.3	-51.2	-13	-38.20	H

Pk - Peak detector

9.2.7. LTE BAND 25

QPSK LTE BAND 25 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	9/3/2019
Test Engineer:	12500
Configuration:	EUT + Charger
Mode	LTE 25 QPSK 20MHz
Chamber #:	Chamber K

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.716	-69.01	Pk	33.1	-32.6	10.5	-58.01	-13	-45.01	H
5.549	-72.05	Pk	34.6	-29.9	10.7	-56.65	-13	-43.65	H
7.447	-74.68	Pk	35.6	-26.8	10.5	-55.38	-13	-42.38	H
3.702	-69.44	Pk	33	-32.5	11	-57.94	-13	-44.94	V
5.530	-71.07	Pk	34.5	-29.9	10.8	-55.67	-13	-42.67	V
7.418	-74.74	Pk	35.7	-26.9	10.6	-55.34	-13	-42.34	V
Mid Channel, 1882.5MHz									
3.223	-69.42	Pk	32.8	-27.4	9.7	-54.32	-13	-41.32	H
4.455	-69.67	Pk	33.7	-25.9	10.1	-51.77	-13	-38.77	V
4.537	-69.52	Pk	34.1	-25.8	9.7	-51.52	-13	-38.52	H
5.153	-69.95	Pk	34.3	-25.5	9.1	-52.05	-13	-39.05	V
5.637	-70.99	Pk	34.7	-24.9	8.4	-52.79	-13	-39.79	H
6.375	-71.62	Pk	35.6	-23.7	7.4	-52.32	-13	-39.32	V
High Channel, 1905MHz									
3.818	-70.1	Pk	33.4	-32.2	10	-58.9	-13	-45.9	H
5.717	-72.86	Pk	34.9	-29.4	10	-57.36	-13	-44.36	H
7.609	-75.07	Pk	35.8	-26.6	10.4	-55.47	-13	-42.47	H
3.790	-68.97	Pk	33.3	-32.3	10.6	-57.37	-13	-44.37	V
5.697	-72.41	Pk	34.8	-29.3	10.4	-56.51	-13	-43.51	V
7.595	-74.51	Pk	35.6	-26.7	10.6	-55.01	-13	-42.01	V

Pk - Peak detector

16QAM LTE BAND 25 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	9/3/2019
Test Engineer:	12500
Configuration:	EUT + Charger
Mode	LTE 25 16QAM 20MHz
Chamber #:	Chamber K

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1860MHz									
3.721	-69.14	Pk	33	-32.6	10.5	-58.24	-13	-45.24	H
5.560	-73.1	Pk	34.6	-29.9	10.9	-57.5	-13	-44.5	H
7.425	-74.87	Pk	35.6	-26.8	10.4	-55.67	-13	-42.67	H
3.705	-70.49	Pk	33.1	-32.6	11	-58.99	-13	-45.99	V
5.552	-71.54	Pk	34.6	-29.9	10.9	-55.94	-13	-42.94	V
7.387	-74.7	Pk	35.6	-26.9	10.8	-55.2	-13	-42.2	V
Mid Channel, 1882.5MHz									
3.712	-69.71	Pk	33.1	-32.6	10.5	-58.71	-13	-45.71	H
5.610	-72.28	Pk	34.8	-29.6	10.5	-56.58	-13	-43.58	H
7.481	-74	Pk	35.6	-26.8	10.5	-54.7	-13	-41.70	H
3.688	-67.37	Pk	32.9	-32.5	11.2	-55.77	-13	-42.77	V
5.583	-72.72	Pk	34.7	-29.6	10.4	-57.22	-13	-44.22	V
7.478	-74.49	Pk	35.6	-26.8	10.5	-55.19	-13	-42.19	V
High Channel, 1905MHz									
3.786	-70.47	Pk	33.3	-32.4	10.8	-58.77	-13	-45.77	H
5.729	-72.58	Pk	34.9	-29.4	10.5	-56.58	-13	-43.58	H
7.597	-73.85	Pk	35.6	-26.7	10.4	-54.55	-13	-41.55	H
3.781	-70.18	Pk	33.4	-32.5	10.5	-58.78	-13	-45.78	V
5.699	-72.98	Pk	34.9	-29.3	10.4	-56.98	-13	-43.98	V
7.555	-74.13	Pk	35.7	-26.7	10.5	-54.63	-13	-41.63	V

Pk - Peak detector

9.2.8. LTE BAND 26 (PART 90S)

QPSK LTE BAND 26 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/22/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 26(90s) QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 819MHz									
2.328	-68.27	Pk	31.6	-28.8	10.5	-54.97	-13	-41.97	H
2.726	-67.5	Pk	32.2	-28	9.6	-53.70	-13	-40.70	V
3.629	-69.18	Pk	32.9	-26.9	9.6	-53.58	-13	-40.58	V
3.748	-69.3	Pk	33.3	-26.8	9.8	-53.00	-13	-40.00	H
4.48	-69.6	Pk	33.8	-25.8	9.8	-51.80	-13	-38.80	H
5.039	-70.47	Pk	34.1	-25	8.8	-52.57	-13	-39.57	V

Pk - Peak detector

16QAM LTE BAND 26 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 26(90s) 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 819MHz									
1.687	-67.04	Pk	28.7	-29.8	10.6	-57.54	-13	-44.54	H
2.135	-67.63	Pk	31.4	-28.9	10.4	-54.73	-13	-41.73	V
2.298	-68.36	Pk	31.8	-28.5	9.5	-55.56	-13	-42.56	H
3.302	-68.49	Pk	32.9	-27.1	10	-52.69	-13	-39.69	V
3.625	-69.24	Pk	32.9	-26.9	9.8	-53.44	-13	-40.44	H
5.99	-70.58	Pk	35.3	-24.6	8	-51.88	-13	-38.88	V

Pk - Peak detector

9.2.9. LTE BAND 30

QPSK LTE BAND 30 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/22/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 30 QPSK 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
4.619	-70.56	Pk	34.2	-26.2	9.5	-53.06	-40	-13.06	H
4.623	-79.18	Pk	34.2	-26.2	9.5	-61.68	-40	-21.68	V
6.927	-71.23	Pk	35.7	-23.5	6.8	-52.23	-40	-12.23	H
6.929	-81.66	Pk	35.7	-23.5	6.8	-62.66	-40	-22.66	V
9.238	-73.42	Pk	36.3	-19.9	8	-49.02	-40	-9.02	H
9.238	-83.38	Pk	36.3	-19.9	8	-58.98	-40	-18.98	V

Pk - Peak detector

16QAM LTE BAND 30 (10.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/29/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 30 16QAM 10MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Mid Channel, 2310MHz									
2.879	-69.23	Pk	32.4	-27.6	9.1	-55.33	-40	-15.33	H
3.101	-68.88	Pk	33	-27.7	10.6	-52.98	-40	-12.98	V
3.678	-68.63	Pk	33.1	-26.8	10.3	-52.03	-40	-12.03	V
3.707	-69.07	Pk	33.1	-26.8	10.2	-52.57	-40	-12.57	H
4.428	-69.88	Pk	33.6	-26	9.8	-52.48	-40	-12.48	V
4.995	-71.04	Pk	34.1	-24.9	9.9	-51.94	-40	-11.94	H

Pk - Peak detector

9.2.10. LTE BAND 41

QPSK LTE BAND 41 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 41 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2506MHz									
2.994	-68.08	Pk	32.8	-27.8	10.1	-52.98	-25	-27.98	H
3.942	-68.33	Pk	33.5	-26.8	10	-51.63	-25	-26.63	V
4.415	-69.81	Pk	33.6	-26	10.3	-51.91	-25	-26.91	H
5.865	-70.99	Pk	35	-24.5	8.3	-52.19	-25	-27.19	V
7.667	-71.46	Pk	35.7	-22.3	7.9	-50.16	-25	-25.16	H
8.243	-71.9	Pk	35.7	-21.8	8.1	-49.9	-25	-24.9	V
Mid Channel, 2593MHz									
5.169	-70.74	Pk	34.3	-25.4	9.4	-52.44	-25	-27.44	V
5.172	-72.05	Pk	34.2	-25.3	9.3	-53.85	-25	-28.85	H
7.753	-71.41	Pk	35.8	-22.3	7.5	-50.41	-25	-25.41	V
7.755	-72.26	Pk	35.7	-22.3	7.5	-51.36	-25	-26.36	H
10.34	-73.37	Pk	37.5	-18.6	6.9	-47.57	-25	-22.57	H
10.346	-73.03	Pk	37.5	-18.6	6.7	-47.43	-25	-22.43	V
High Channel, 2680MHz									
3.574	-68.89	Pk	32.9	-27	10.1	-52.89	-25	-27.89	V
3.781	-68.75	Pk	33.5	-26.8	9.9	-52.15	-25	-27.15	H
5	-70.5	Pk	34.1	-25	9.6	-51.8	-25	-26.8	H
5.565	-70.22	Pk	34.7	-24.9	8.9	-51.52	-25	-26.52	V
6.505	-70.3	Pk	35.5	-23.8	8.1	-50.5	-25	-25.5	H
8.239	-72.09	Pk	35.7	-21.7	8.1	-49.99	-25	-24.99	V

Pk - Peak detector

16QAM LTE BAND 41 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 41 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 2506MHz									
3.142	-68.89	Pk	32.9	-27.7	10.3	-53.39	-25	-28.39	V
3.522	-68.87	Pk	32.8	-26.9	10.1	-52.87	-25	-27.87	H
4.574	-69.95	Pk	34.2	-26	10.1	-51.65	-25	-26.65	V
4.578	-70.16	Pk	34.2	-26.1	10.1	-51.96	-25	-26.96	H
5.936	-70.02	Pk	35.2	-24.7	8.5	-51.02	-25	-26.02	H
7.327	-71.8	Pk	35.6	-22.5	7.6	-51.1	-25	-26.1	V
Mid Channel, 2593MHz									
3.155	-68.39	Pk	32.8	-27.7	10.2	-53.09	-25	-28.09	V
3.916	-68.74	Pk	33.5	-26.5	9.3	-52.44	-25	-27.44	H
4.479	-69.35	Pk	33.8	-25.8	9.8	-51.55	-25	-26.55	V
5.134	-69.4	Pk	34.3	-25.3	8.3	-52.1	-25	-27.1	H
5.69	-70.09	Pk	34.7	-24.6	7.9	-52.09	-25	-27.09	V
6.453	-71.22	Pk	35.5	-23.9	7.6	-52.02	-25	-27.02	H
High Channel, 2680MHz									
3.221	-68.34	Pk	32.8	-27.4	9.7	-53.24	-25	-28.24	H
3.948	-68.82	Pk	33.5	-26.7	9.8	-52.22	-25	-27.22	V
4.671	-70.01	Pk	34.2	-26.1	9.8	-52.11	-25	-27.11	H
4.951	-69.8	Pk	34.1	-25.3	9.3	-51.7	-25	-26.7	V
5.683	-70.17	Pk	34.7	-24.7	8	-52.17	-25	-27.17	V
5.943	-69.82	Pk	35.3	-24.6	8.4	-50.72	-25	-25.72	H

Pk - Peak detector

9.2.11. LTE BAND 48

QPSK LTE BAND 48 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	9/3/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 48 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3560MHz									
7.117	-73.72	Pk	35.6	-22.7	6.8	-54.02	-40	-14.02	H
7.121	-72.91	Pk	35.7	-22.6	6.7	-53.11	-40	-13.11	V
10.678	-73.87	Pk	37.9	-18.6	8.1	-46.47	-40	-6.47	H
10.678	-74.01	Pk	38	-18.6	8	-46.61	-40	-6.61	V
14.24	-76.32	Pk	39.1	-20.4	9.1	-48.52	-40	-8.52	H
14.242	-76.15	Pk	39.1	-20.4	9.1	-48.35	-40	-8.35	V
Mid Channel, 3625MHz									
4.532	-69.4	Pk	34.1	-25.8	10	-51.1	-40	-11.1	V
4.605	-69.77	Pk	34.1	-26.2	9.2	-52.67	-40	-12.67	H
5.376	-69.35	Pk	34.4	-25.7	9.1	-51.55	-40	-11.55	H
5.377	-69.71	Pk	34.4	-25.7	9	-52.01	-40	-12.01	H
7.67	-71.55	Pk	35.7	-22.2	7.9	-50.15	-40	-10.15	V
8.467	-71.84	Pk	35.9	-21.1	8.3	-48.74	-40	-8.74	V
High Channel, 3690MHz									
7.383	-74.11	Pk	35.6	-22.8	7.2	-54.11	-40	-14.11	H
7.381	-73.16	Pk	35.5	-22.8	7.6	-52.86	-40	-12.86	V
11.077	-77.97	Pk	38	-18.5	8.5	-49.97	-40	-9.97	H
11.073	-77.46	Pk	38	-18.5	8.5	-49.46	-40	-9.46	V
14.762	-77.22	Pk	39.8	-20.1	8.7	-48.82	-40	-8.82	H
14.764	-77.09	Pk	39.9	-20.1	8.8	-48.49	-40	-8.49	V

Pk - Peak detector

16QAM LTE BAND 48 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	9/3/2019
Test Engineer:	12492
Configuration:	EUT + Charger
Mode	LTE 48 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T346 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 3560MHz									
7.118	-73.69	Pk	35.7	-22.6	6.7	-53.89	-40	-13.89	H
7.125	-74.2	Pk	35.7	-22.7	6.8	-54.4	-40	-14.4	V
10.683	-78.17	Pk	38	-18.5	8.2	-50.47	-40	-10.47	H
10.679	-74.13	Pk	38	-18.6	8	-46.73	-40	-6.73	V
14.242	-76.8	Pk	39.1	-20.4	9.1	-49	-40	-9.00	H
14.245	-76.57	Pk	39.1	-20.4	9.2	-48.67	-40	-8.67	V
Mid Channel, 3625MHz									
7.252	-72.63	Pk	35.5	-22.5	7.6	-52.03	-40	-12.03	V
7.249	-72.17	Pk	35.5	-22.5	7.5	-51.67	-40	-11.67	H
10.877	-75.22	Pk	38	-18.4	7.5	-48.12	-40	-8.12	V
10.881	-74.21	Pk	38	-18.3	7.3	-47.21	-40	-7.21	H
14.501	-77.37	Pk	39.6	-20.2	11	-46.97	-40	-6.97	H
14.501	-76.77	Pk	39.6	-20.2	11.1	-46.27	-40	-6.27	V
High Channel, 3690MHz									
7.379	-74.49	Pk	35.5	-22.7	7.5	-54.19	-40	-14.19	H
7.384	-72.89	Pk	35.6	-22.8	7.5	-52.59	-40	-12.59	V
11.073	-79.41	Pk	38	-18.5	8.5	-51.41	-40	-11.41	H
11.072	-78.59	Pk	38	-18.5	8.5	-50.59	-40	-10.59	V
14.762	-77.66	Pk	39.9	-20.1	8.7	-49.16	-40	-9.16	H
14.765	-76.71	Pk	39.8	-20.1	8.8	-48.21	-40	-8.21	V

Pk - Peak detector

9.2.12. LTE BAND 66

QPSK LTE BAND 66 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 66 QPSK 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
2.118	-48.41	Pk	31.3	-28.8	10.3	-35.61	-13	-22.61	H
2.128	-49.63	Pk	31.4	-28.7	10.2	-36.73	-13	-23.73	V
2.769	-68.29	Pk	32.2	-28.1	9	-55.19	-13	-42.19	V
3.27	-68	Pk	32.9	-27.3	10	-52.4	-13	-39.4	H
3.831	-69	Pk	33.5	-26.9	9.3	-53.1	-13	-40.1	H
4.192	-69.27	Pk	33.5	-26.2	9.4	-52.57	-13	-39.57	V
Mid Channel, 1745MHz									
2.141	-50.4	Pk	31.4	-28.8	11.2	-36.6	-13	-23.6	H
2.145	-53.37	Pk	31.4	-28.9	10	-40.87	-13	-27.87	V
3.276	-68.85	Pk	32.9	-27.2	9.8	-53.35	-13	-40.35	H
3.317	-69.3	Pk	32.8	-27.2	9.6	-54.1	-13	-41.1	V
4.435	-68.5	Pk	33.7	-25.8	9	-51.6	-13	-38.6	H
4.924	-70.16	Pk	34.1	-25.3	9.1	-52.26	-13	-39.26	V
High Channel, 1770MHz									
2.168	-49.86	Pk	31.2	-28.8	9.5	-37.96	-13	-24.96	H
2.178	-52.3	Pk	31.3	-28.8	10	-39.8	-13	-26.8	V
2.767	-68.64	Pk	32.2	-28.1	9.8	-54.74	-13	-41.74	H
3.651	-68.71	Pk	33	-26.9	9.9	-52.71	-13	-39.71	V
4.262	-69.46	Pk	33.6	-25.9	9.6	-52.16	-13	-39.16	H
5.169	-69.62	Pk	34.3	-25.4	9.4	-51.32	-13	-38.32	V

Pk - Peak detector

16QAM LTE BAND 66 (20.0MHZ BANDWIDTH)

Company:	
Project #:	13018918
Date:	8/30/2019
Test Engineer:	50822
Configuration:	EUT + Charger
Mode	LTE 66 16QAM 20MHz
Chamber #:	Chamber B

Frequency (GHz)	Meter Reading (dBm)	Det	AF T344 (dB/m)	Amp/Cbl (dB)	Amp/Cbl (dB)	Corrected Reading (dBm)	Harmonics limit	Margin (dB)	Polarity
Low Channel, 1720MHz									
2.112	-48.93	Pk	31.3	-28.6	10.2	-36.03	-13	-23.03	H
2.121	-49.68	Pk	31.3	-28.7	9.9	-37.18	-13	-24.18	V
3.824	-68.65	Pk	33.6	-26.8	9.7	-52.15	-13	-39.15	V
3.992	-69.65	Pk	33.5	-26.7	9.8	-53.05	-13	-40.05	H
5.046	-69.3	Pk	34.2	-25.1	9.1	-51.1	-13	-38.1	H
5.376	-70.74	Pk	34.4	-25.7	8.9	-53.14	-13	-40.14	V
Mid Channel, 1745MHz									
2.147	-49.95	Pk	31.4	-28.9	10.8	-36.65	-13	-23.65	H
2.153	-52.23	Pk	31.3	-28.9	10.2	-39.63	-13	-26.63	V
3.452	-68.68	Pk	32.6	-27.1	9.1	-54.08	-13	-41.08	V
3.876	-68.68	Pk	33.6	-26.7	9.1	-52.68	-13	-39.68	H
4.568	-69.05	Pk	34.2	-26	9.7	-51.15	-13	-38.15	V
4.688	-69.62	Pk	34.1	-26	9.4	-52.12	-13	-39.12	H
High Channel, 1770MHz									
1.994	-67.33	Pk	31	-29	10.4	-54.93	-13	-41.93	V
2.162	-48.75	Pk	31.2	-28.8	9.7	-36.65	-13	-23.65	H
2.162	-51.26	Pk	31.2	-28.8	9.7	-39.16	-13	-26.16	V
3.15	-68.76	Pk	32.8	-27.6	9.8	-53.76	-13	-40.76	H
3.886	-68.77	Pk	33.4	-26.7	9.6	-52.47	-13	-39.47	V
5.913	-70.12	Pk	35.2	-24.6	7.6	-51.92	-13	-38.92	H

Pk - Peak detector

10. SETUP PHOTOS

Please see setup photo report 13018918-EP1V1

END OF REPORT