

UAT QPSK EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
Project #:		14U17676								
Date:		07/02/14								
Test Engineer:		M. Hua								
Configuration:		EUT Only								
Mode:		LTE Band 26 QPSK 5MHz BW								
<u>Test Equipment:</u>										
Receiving: Sunoi T407, and Chamber D Cable										
Substitution: Dipole S/N: 00022117, and 8ft SMA Cable										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Mid Ch										
821.30	13.43	V	0.62	0.0	12.81	14.96	38.45	40.60	-25.6	
821.30	17.18	H	0.62	0.0	16.56	18.71	38.45	40.60	-21.9	
Rev. 06.18.14										

UAT 16QAM EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber D										
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Configuration:		EUT Only								
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f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Mid Ch										
821.30	13.00	V	0.62	0.0	12.38	14.53	38.45	40.60	-26.1	
821.30	16.39	H	0.62	0.0	15.77	17.92	38.45	40.60	-22.7	
Rev. 06.18.14										

UAT QPSK EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber E										
Project #:		14U17676								
Date:		7/18/2014								
Test Engineer:		Macie								
Configuration:		EUT Only								
Mode:		LTE Band 26 QPSK 10MHz BW								
Test Equipment:										
Receiving: Sunol T408, and Chamber E Cable										
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin EIRP (dB)	Notes
Mid Ch										
819.00	16.46	V	0.62	0.0	15.84	17.99	38.45	40.60	-22.6	
819.00	17.55	H	0.62	0.0	16.93	19.08	38.45	40.60	-21.5	
Rev. 10.24.13										

UAT 16QAM EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

High Frequency Substitution Measurement UL Fremont Radiated Chamber E										
Project #:		14U17676								
Date:		7/18/2014								
Test Engineer:		Macie								
Configuration:		EUT Only								
Mode:		LTE Band 26 16QAM 10MHz BW								
Test Equipment:										
Receiving: Sunol T408, and Chamber E Cable										
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (s/n 245182-003; SUCOFLEX 104PEA)										
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	ERP (dBm)	EIRP (dBm)	ERP Limit (dBm)	EIRP Limit (dBm)	Margin (dB)	Notes
Low Ch										
819.00	14.15	V	0.62	0.0	13.53	15.68	38.45	40.60	-24.9	
819.00	16.34	H	0.62	0.0	15.72	17.87	38.45	40.60	-22.7	
Rev. 10.24.13										

9.2. PEAK-TO-AVERAGE RATIO

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB

Note: 0.0001% data on all mode were used for PAR as the worst case condition

9.2.1. LTE BAND 2

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	1.4	1880	28.495	23.856	4.639
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	1.4	1880	28.525	22.921	5.604
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	3.0	1880	28.465	23.936	4.529
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	3.0	1880	28.5	22.931	5.569
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	5.0	1880	28.465	23.936	4.529
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	5.0	1880	28.5	22.931	5.569
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	10	1880	28.369	23.968	4.401
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	10	1880	28.334	23.01	5.324
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	15	1880	28.245	23.969	4.276
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	15	1880	28.322	23.03	5.292
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	20	1880	28.191	23.725	4.466
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	20	1880	28.226	22.722	5.504
*Peak Reading = Average Reading + Peak-to-Average Ratio					

9.2.2. LTE BAND 4

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	1.4	1733	28.769	23.95	4.819
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	1.4	1733	28.786	23.047	5.739
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	3.0	1733	28.775	24.018	4.757
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	3.0	1733	28.751	23.062	5.689
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	5.0	1733	28.691	23.973	4.718
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	5.0	1733	28.679	22.996	5.683
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	10	1733	28.65	23.959	4.691
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	10	1733	28.56	23.034	5.526
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	15	1733	28.543	23.997	4.546
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	15	1733	28.471	23.068	5.403
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	20	1733	28.262	23.881	4.381
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	20	1733	28.25	22.9	5.35
*Peak Reading = Average Reading + Peak-to-Average Ratio					

9.2.3. LTE BAND 5

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	1.4	836.5	29.524	23.972	5.552
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	1.4	836.5	29.48	23.321	6.159
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	3.0	836.5	29.454	23.918	5.536
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	3.0	836.5	29.199	23.317	5.882
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	5.0	836.5	29.339	24.014	5.325
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	5.0	836.5	29.06	23.128	5.932
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	10.0	836.5	29.416	23.999	5.417
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	10.0	836.5	28.877	23.322	5.555
*Peak Reading = Average Reading + Peak-to-Average Ratio					

9.2.4. LTE BAND 13

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	5.0	782	29.34	24.038	5.302
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	5.0	782	28.543	23.059	5.484
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	10.0	782	28.31	23.963	4.347
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	10.0	782	27.697	23.198	4.499
*Peak Reading = Average Reading + Peak-to-Average Ratio					

9.2.5. LTE BAND 17

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	5.0	710.0	28.119	23.984	4.135
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	5.0	710.0	28.066	22.989	5.077
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	10.0	710.0	28.221	23.993	4.228
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	10.0	710.0	28.257	23.166	5.091
*Peak Reading = Average Reading + Peak-to-Average Ratio					

9.2.6. LTE BAND 25

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	1.4	1882.5	29.073	23.877	5.196
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	1.4	1882.5	29.187	22.995	6.192
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	3.0	1882.5	29.213	23.961	5.252
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	3.0	1882.5	29.161	23.018	6.143
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	5.0	1882.5	28.941	23.816	5.125
Mode	Channel Band-width	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	5.0	1882.5	28.897	22.97	5.927
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	10	1882.5	29.01	23.99	5.02
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	10	1882.5	28.922	23.025	5.897
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	15	1882.5	28.953	23.968	4.985
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	15	1882.5	28.823	22.994	5.829
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	20	1882.5	28.884	23.802	5.082
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	20	1882.5	28.846	22.969	5.877
*Peak Reading = Average Reading + Peak-to-Average Ratio					

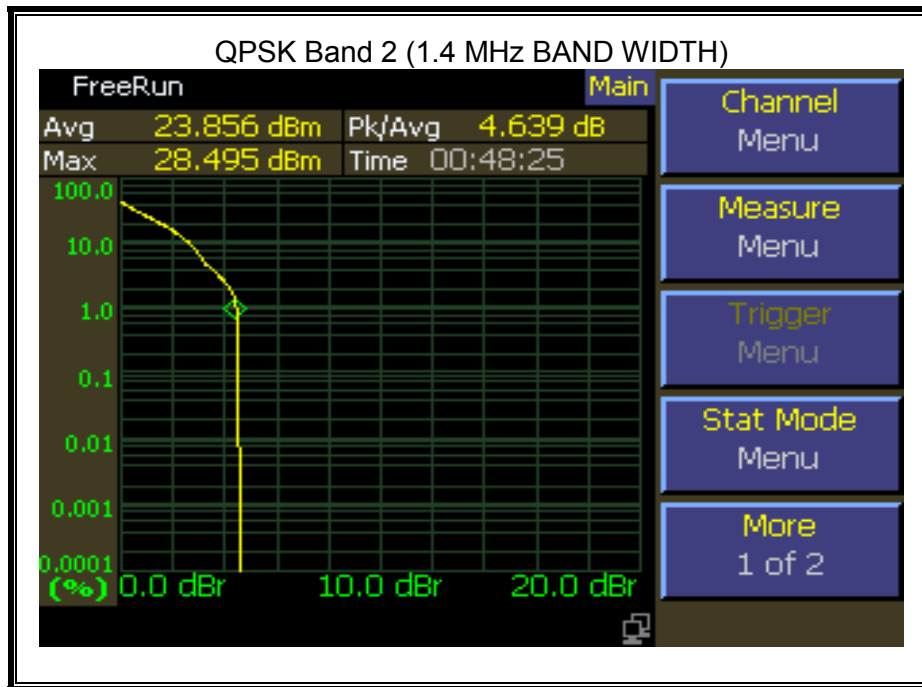
9.2.7. LTE BAND 26

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	3.0	821.3	28.822	23.524	5.298
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	3.0	821.3	28.667	22.745	5.922
*Peak Reading = Average Reading + Peak-to-Average Ratio					

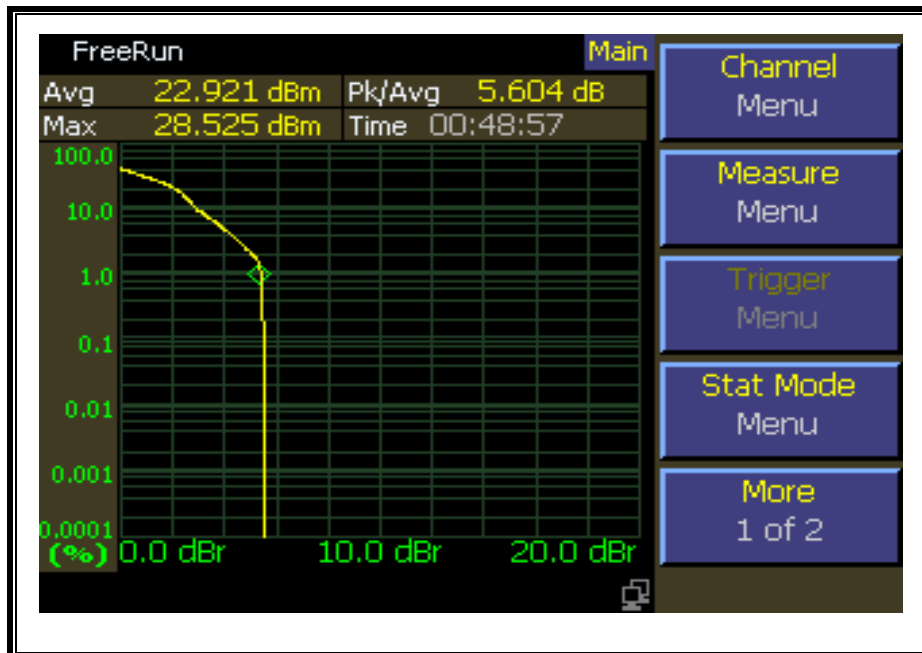
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	5.0	821.3	28.739	23.511	5.228
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	5.0	821.3	28.501	22.542	5.959
*Peak Reading = Average Reading + Peak-to-Average Ratio					

Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio (PAR)
			*Peak	Average	
QPSK	10.0	819.0	27.93	23.31	4.62
Mode	Channel Band-width (MHZ)	f (MHz)	Couducted Power (dBm)		Peak-to-Average Ratio
			*Peak	Average	
16QAM	10.0	819.0	27.74	22.38	5.36
*Peak Reading = Average Reading + Peak-to-Average Ratio					

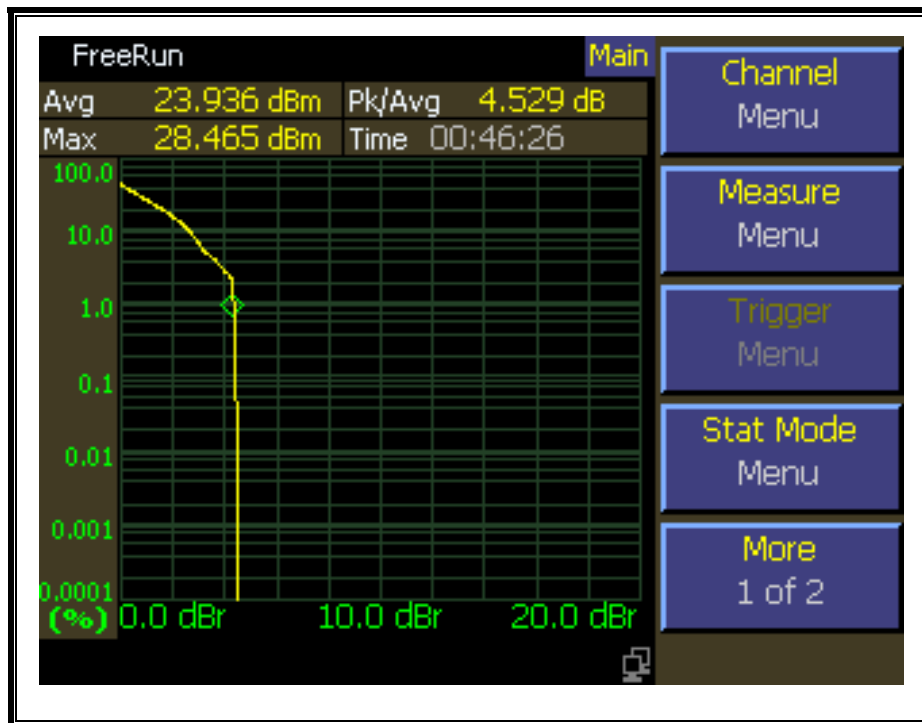
QPSK Band 2(1.4 MHz BAND WIDTH)



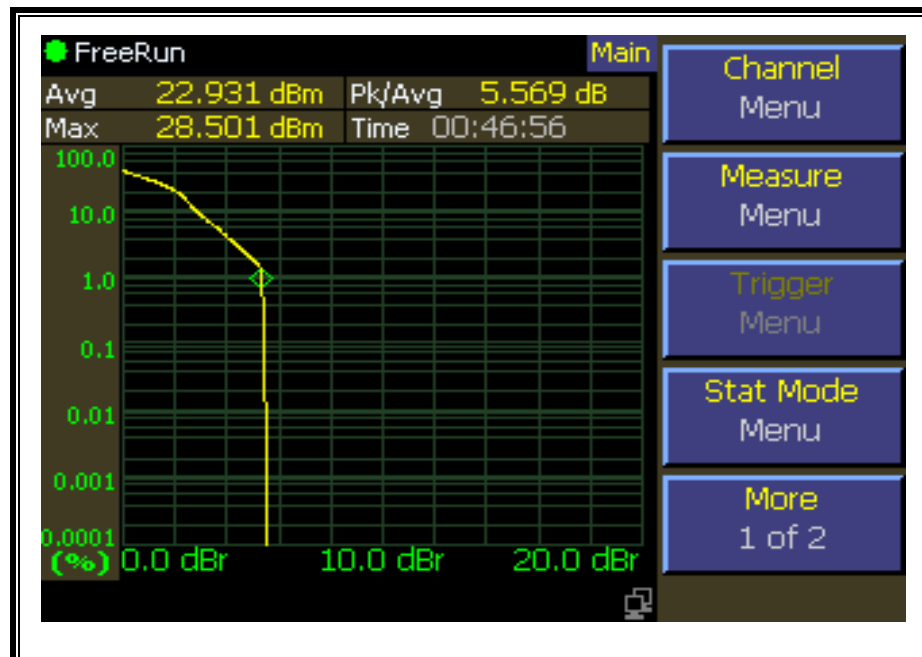
16 QUAM Band 2(1.4 MHz BAND WIDTH)



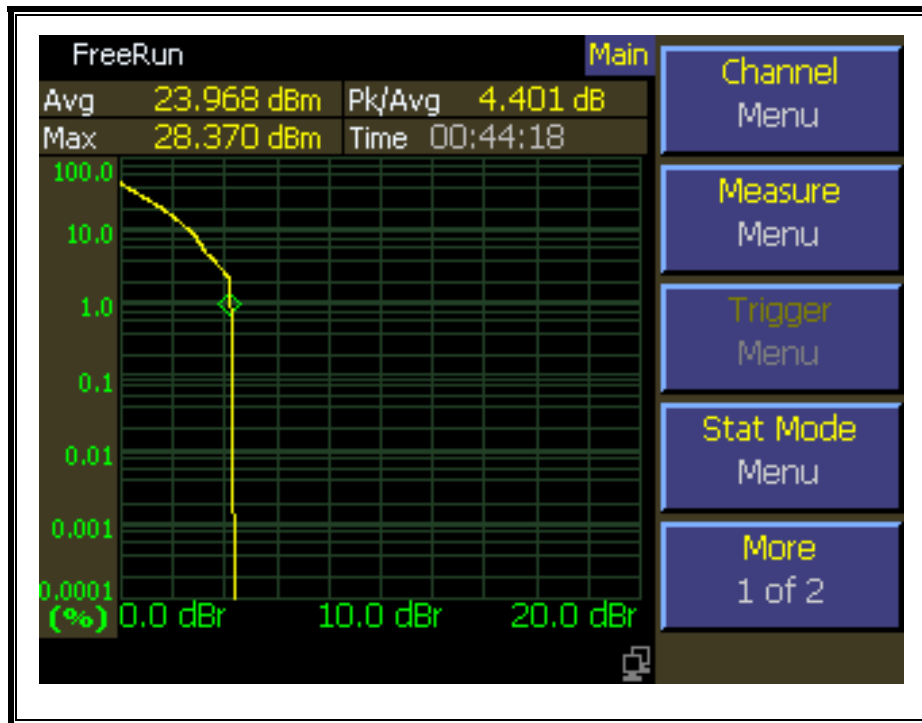
LTE QPSK Band 2 (3.0 MHz BAND WIDTH)



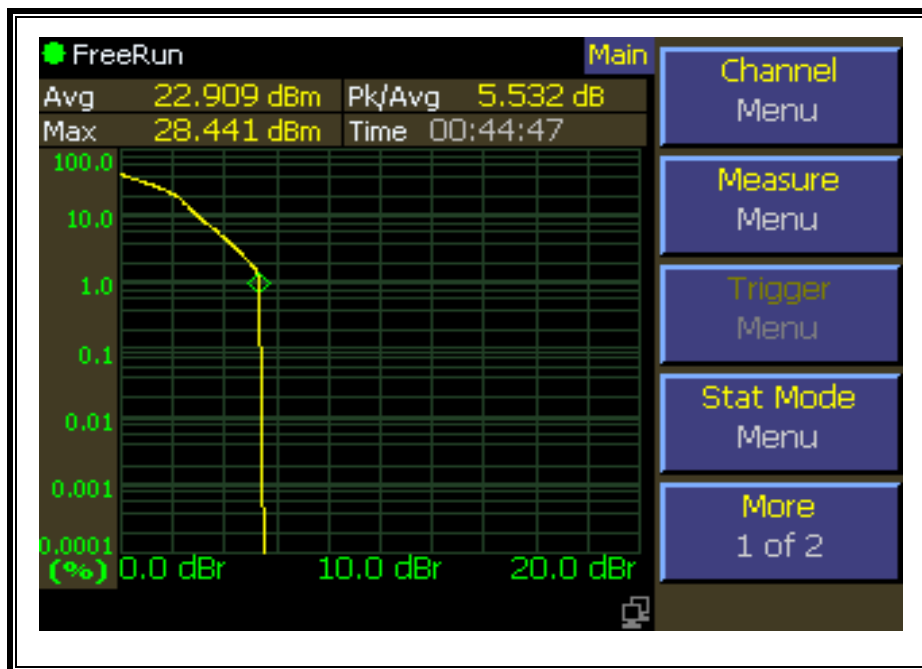
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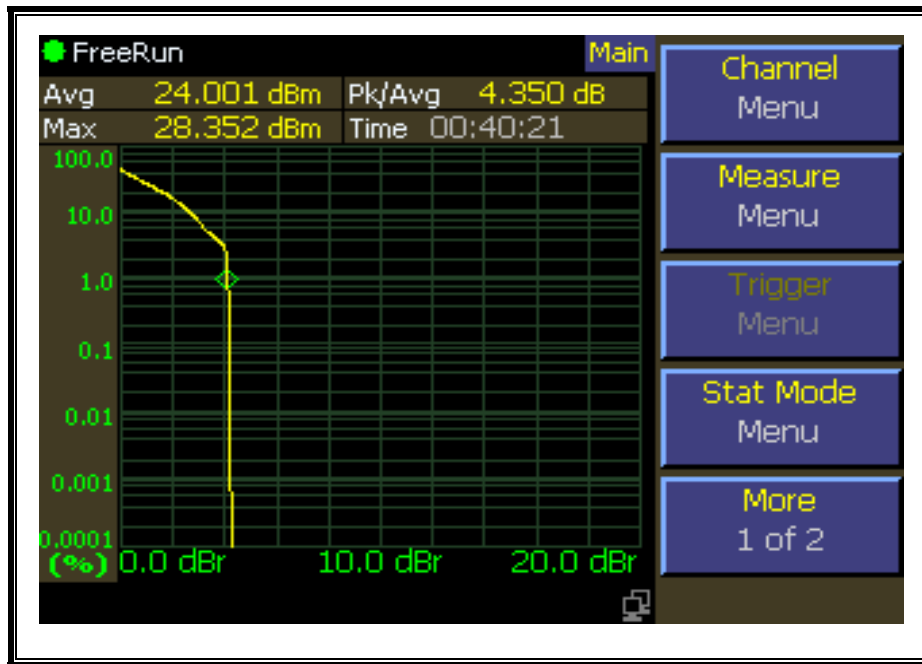
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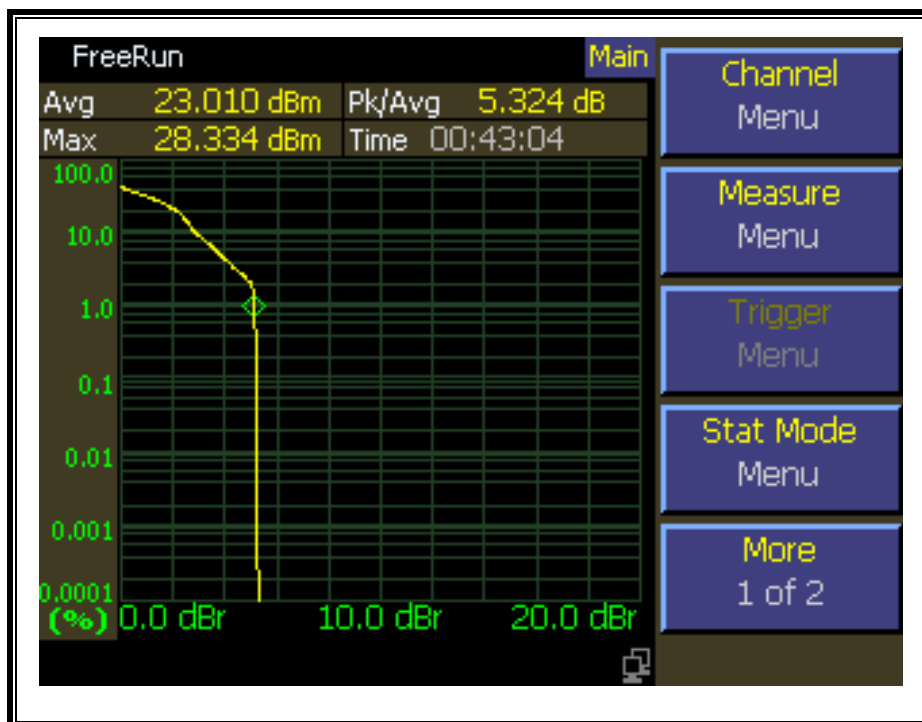
LTE 16QAM Band 2 (5.0 MHz BAND WIDTH)



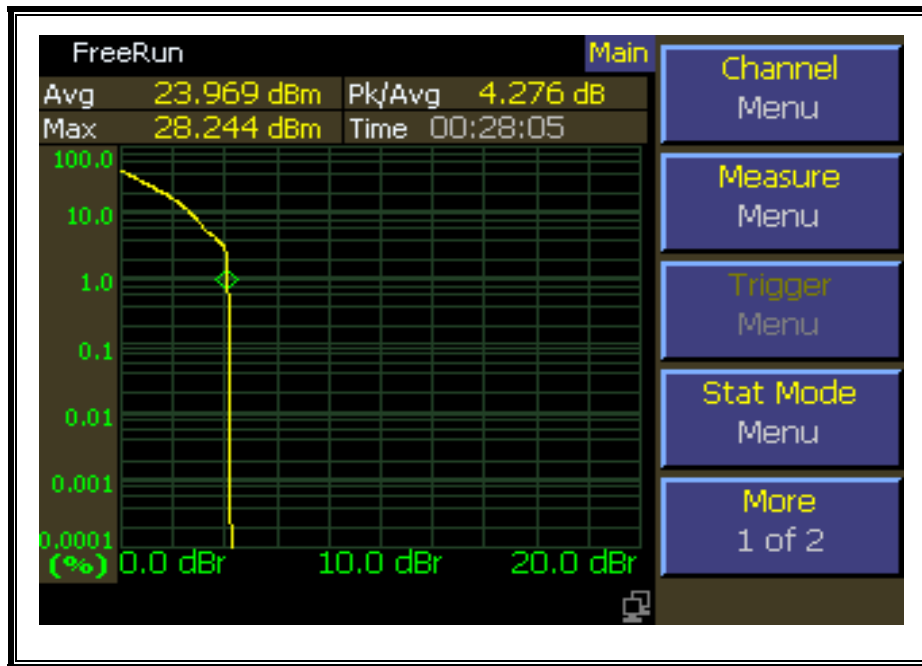
LTE QPSK Band 2 (10.0 MHz BAND WIDTH)



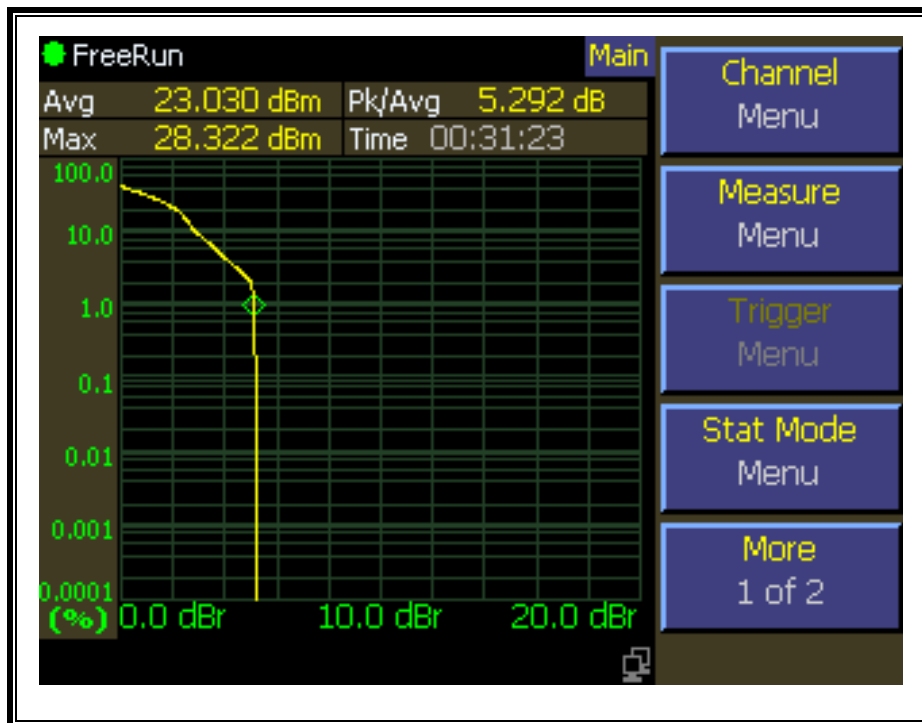
LTE 16QAM Band 2 (10.0 MHz BAND WIDTH)



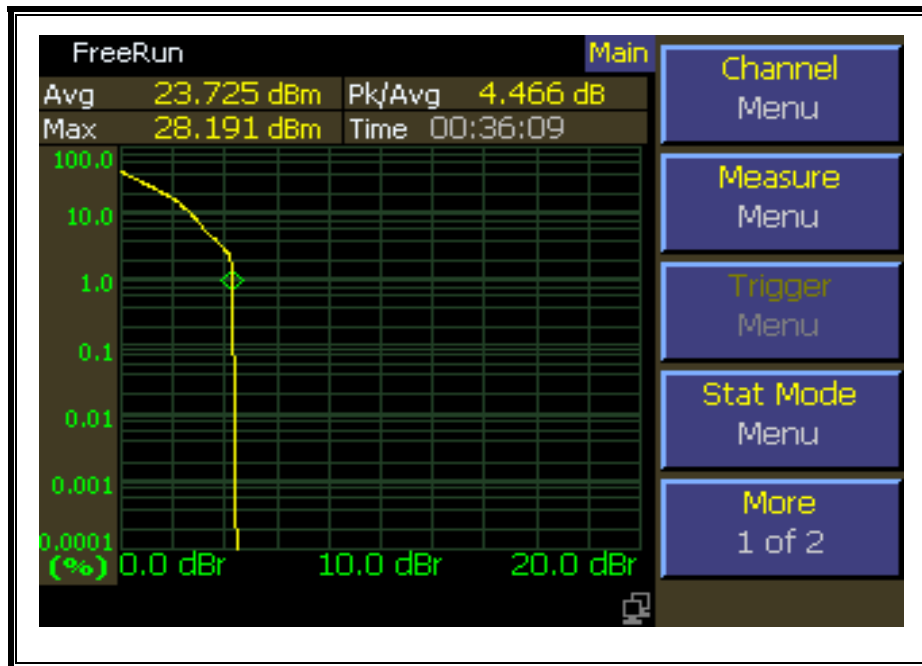
LTE QPSK Band 2 (15.0 MHz BAND WIDTH)



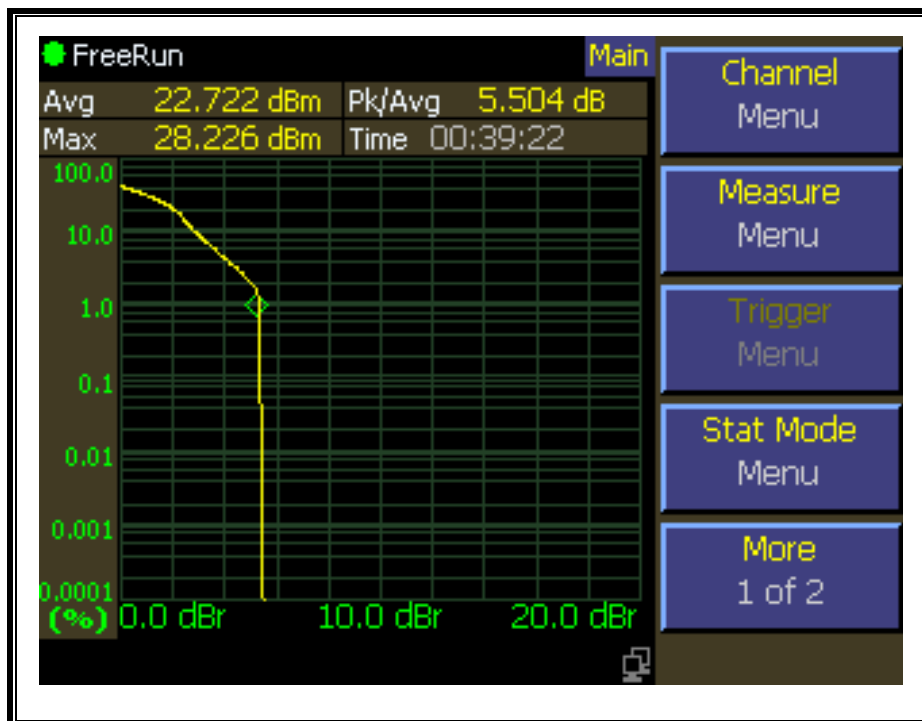
LTE 16QAM Band 2 (15.0 MHz BAND WIDTH)



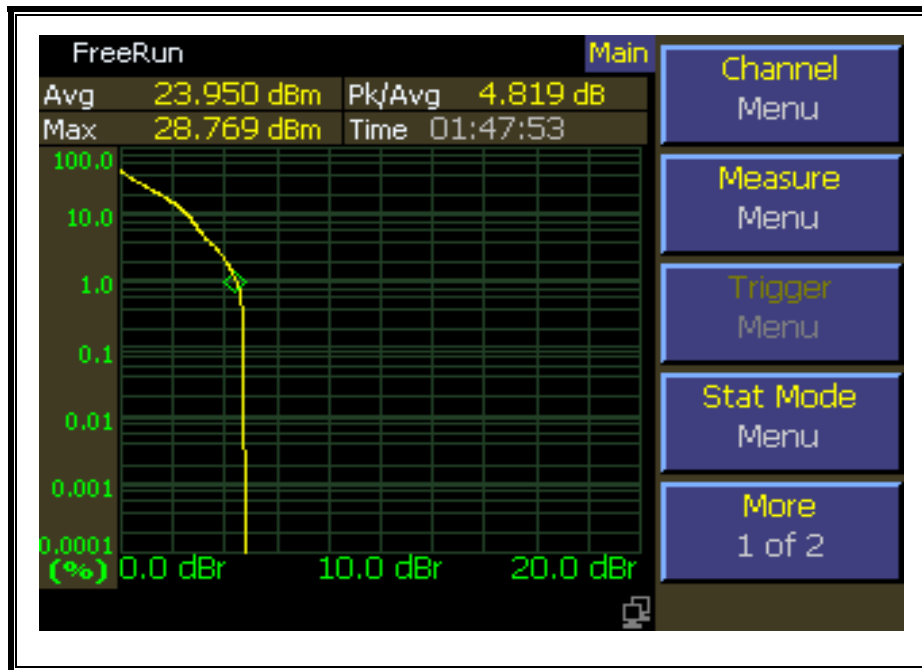
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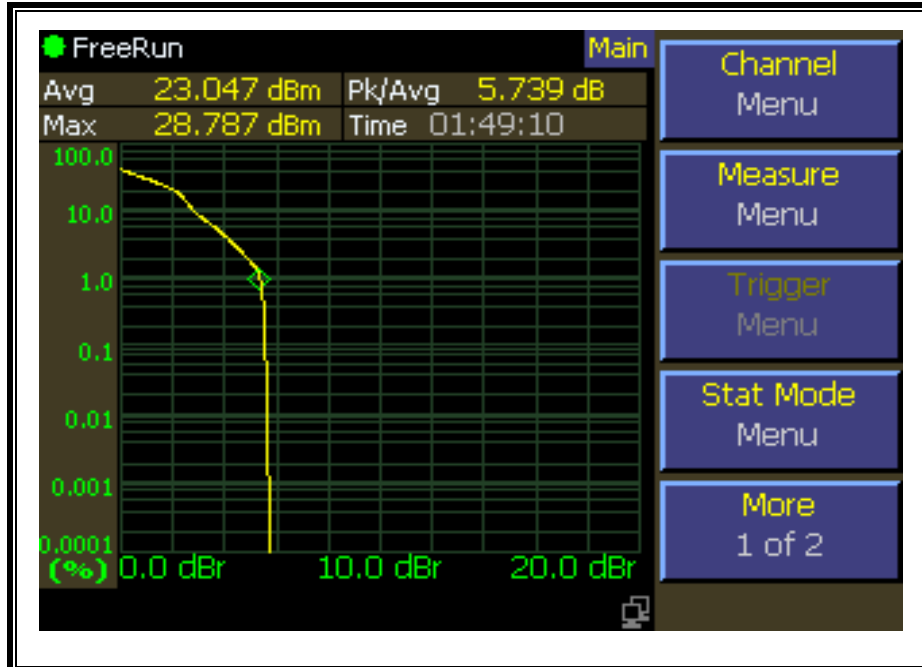
LTE 16QAM Band 2 (20.0 MHz BAND WIDTH)



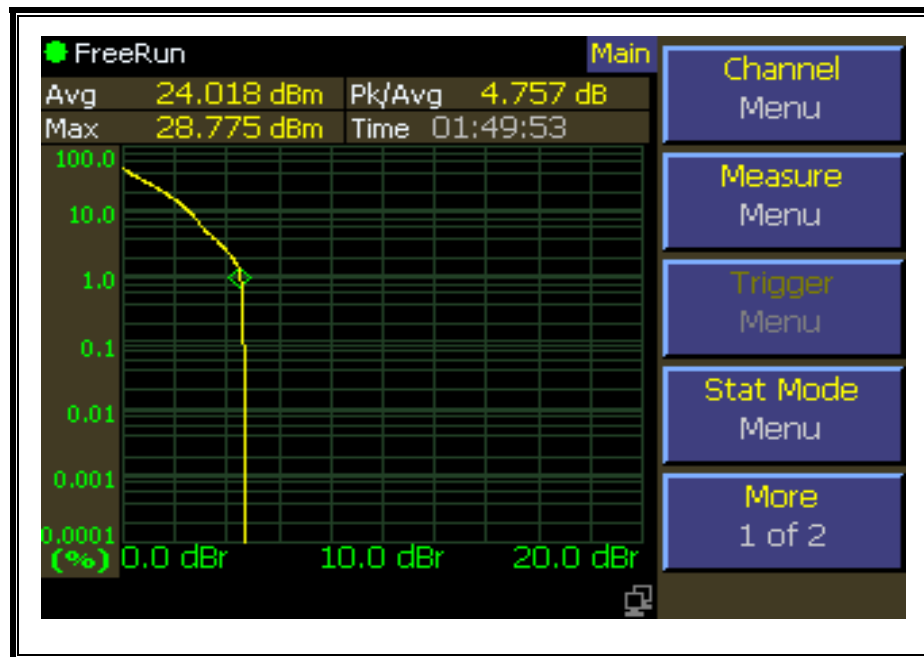
QPSK Band 4 (1.4 MHz BAND WIDTH)



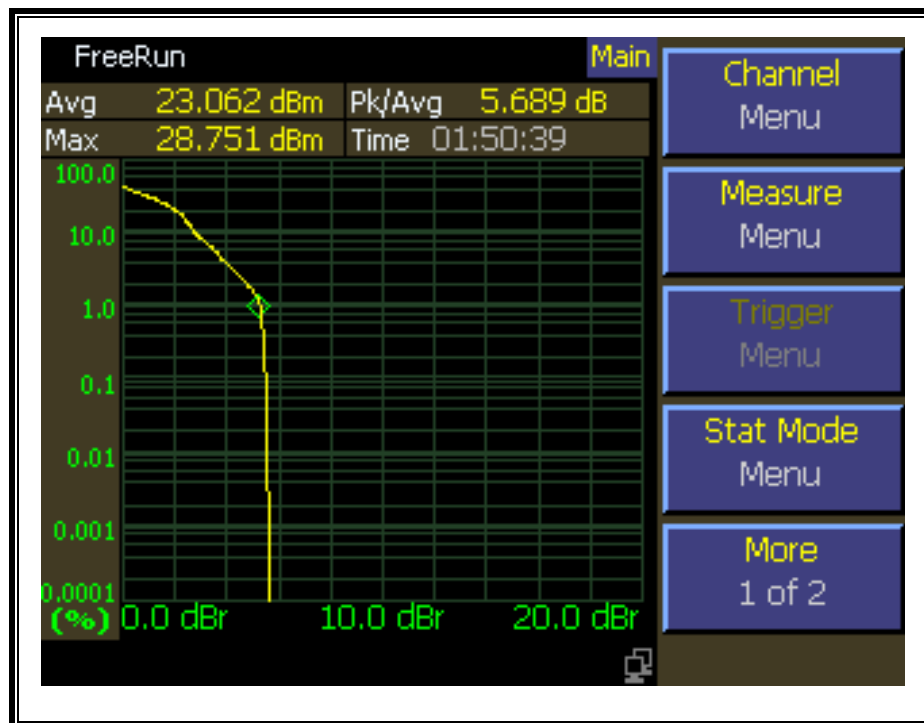
16QAM Band 4 (1.4 MHz BAND WIDTH)



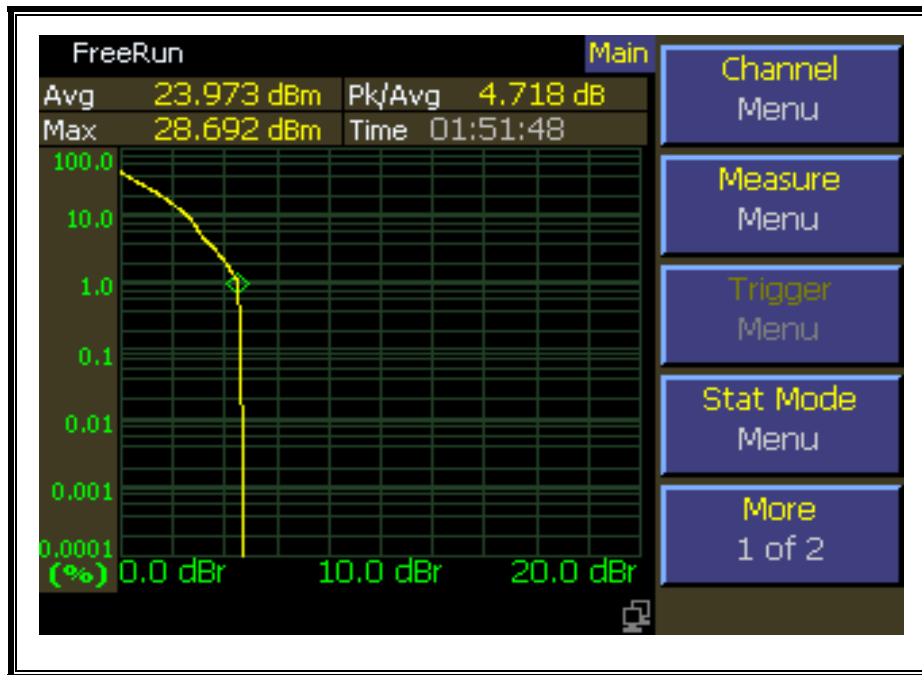
LTE QPSK Band 4 (3.0 MHz BAND WIDTH)



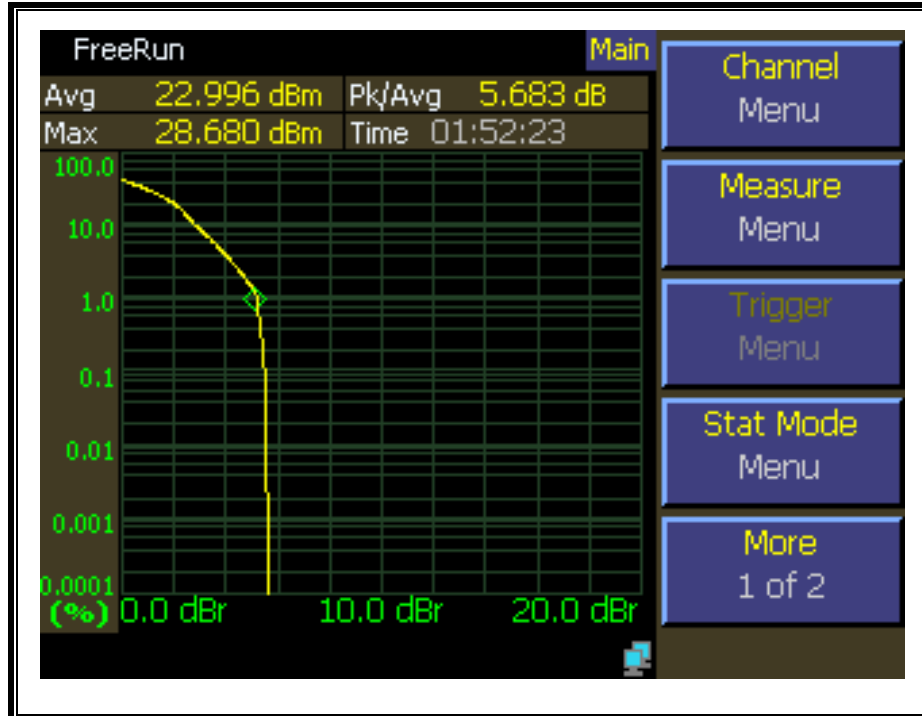
LTE 16QAM Band 4 (3.0 MHz BAND WIDTH)



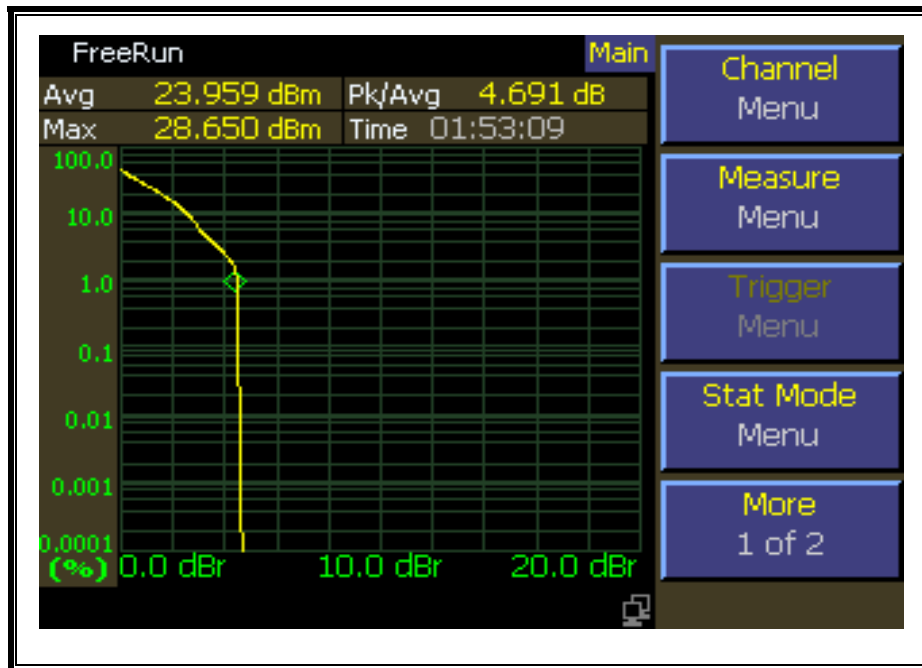
LTE QPSK Band 4 (5.0 MHz BAND WIDTH)



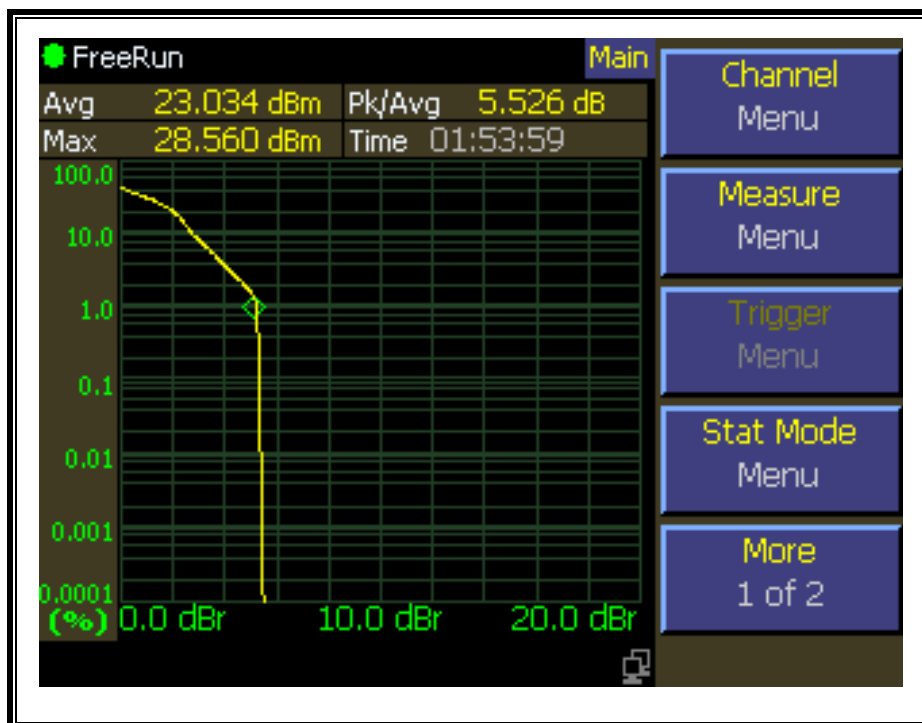
LTE 16QAM Band 4 (5.0 MHz BAND WIDTH)



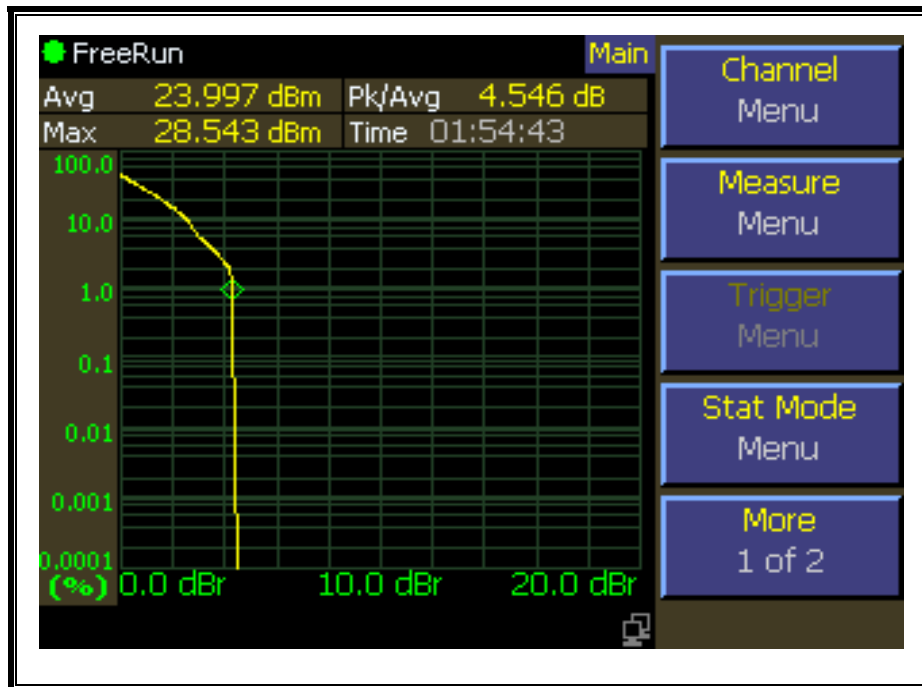
LTE QPSK Band 4 (10.0 MHz BAND WIDTH)



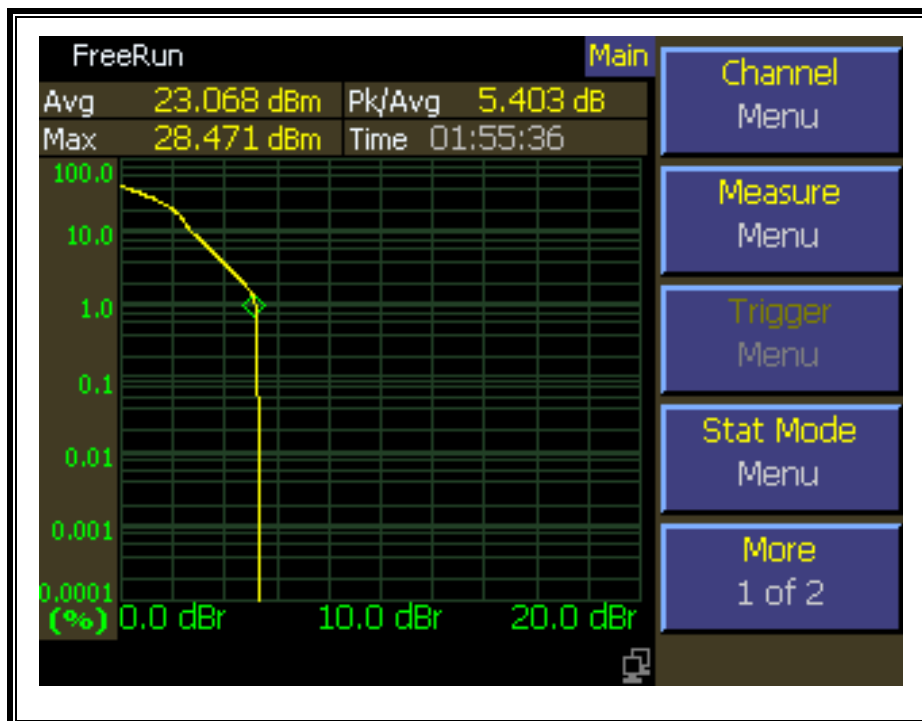
LTE 16QAM Band 4 (10.0 MHz BAND WIDTH)



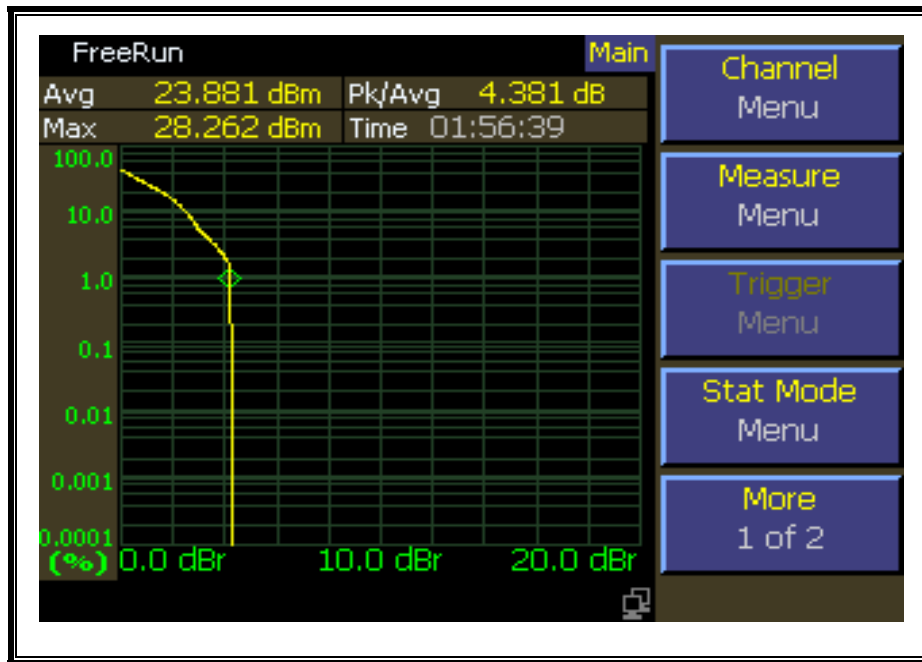
LTE QPSK Band 4 (15.0 MHz BAND WIDTH)



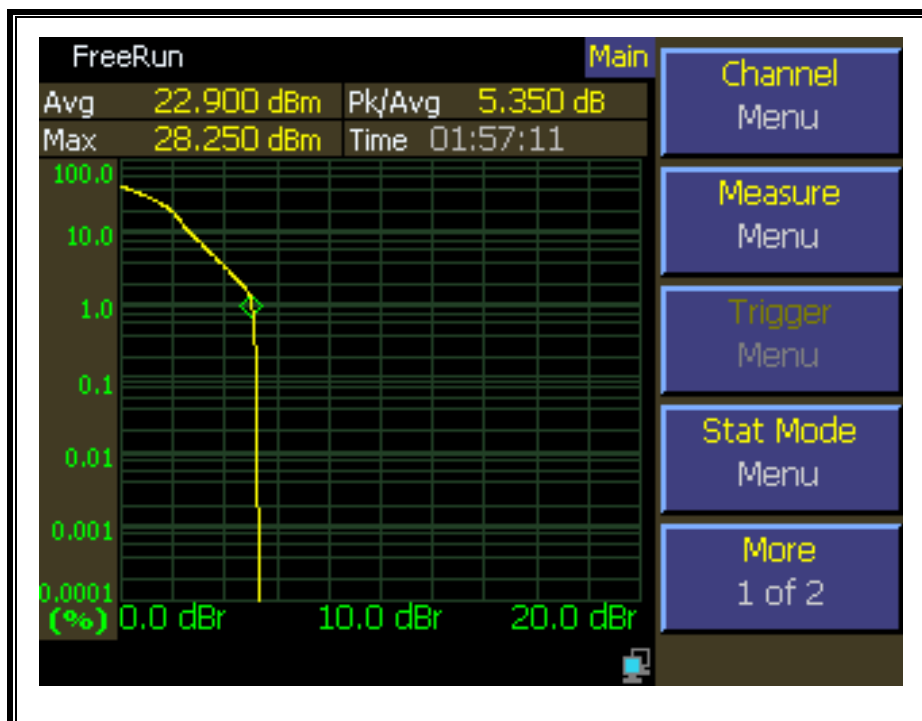
LTE 16QAM Band 4 (15.0 MHz BAND WIDTH)



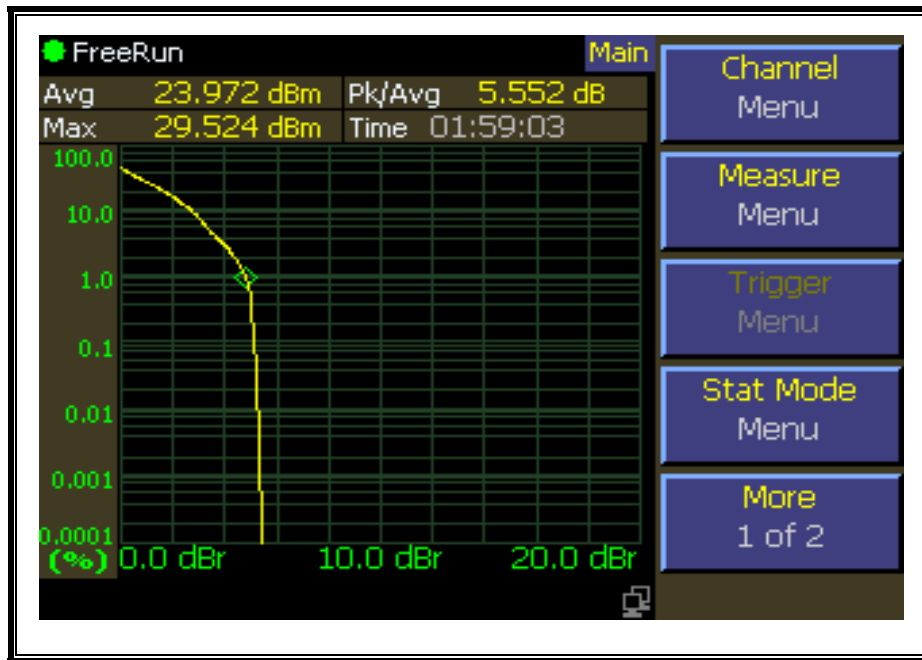
LTE QPSK Band 4 (20.0 MHz BAND WIDTH)



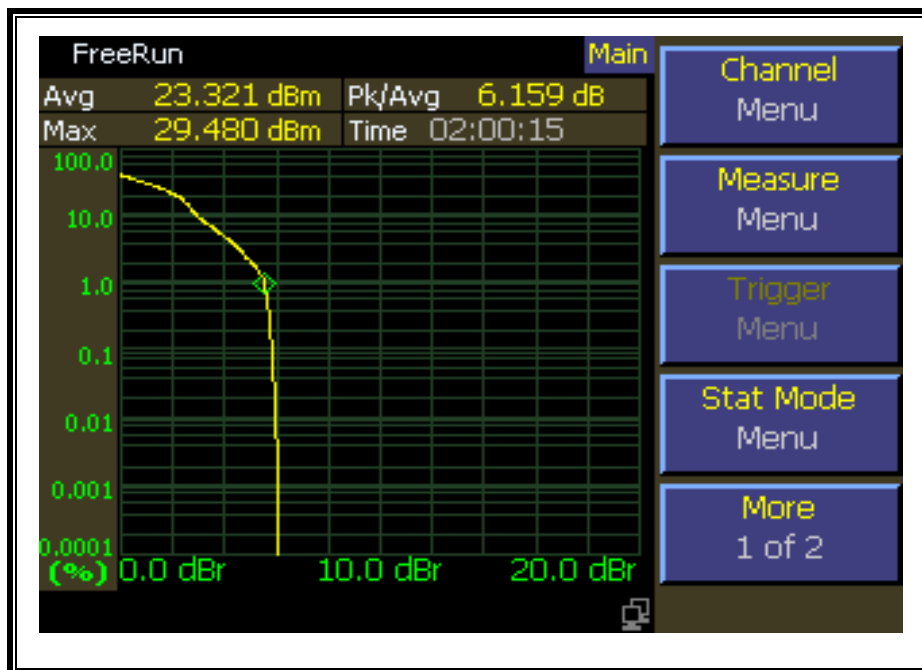
LTE 16QAM Band 4 (20.0 MHz BAND WIDTH)



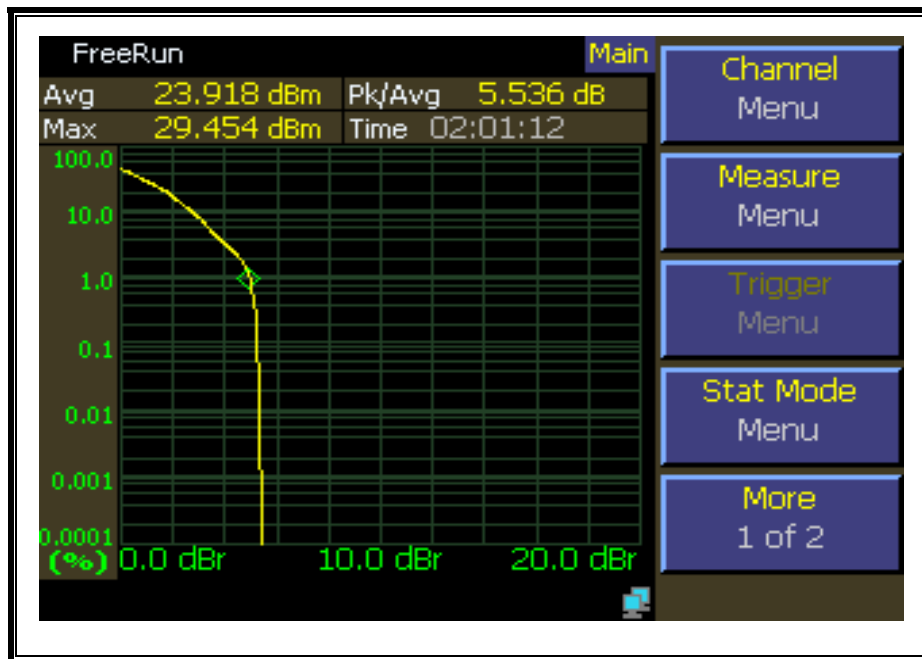
QPSK Band 5 (1.4 MHz BAND WIDTH)



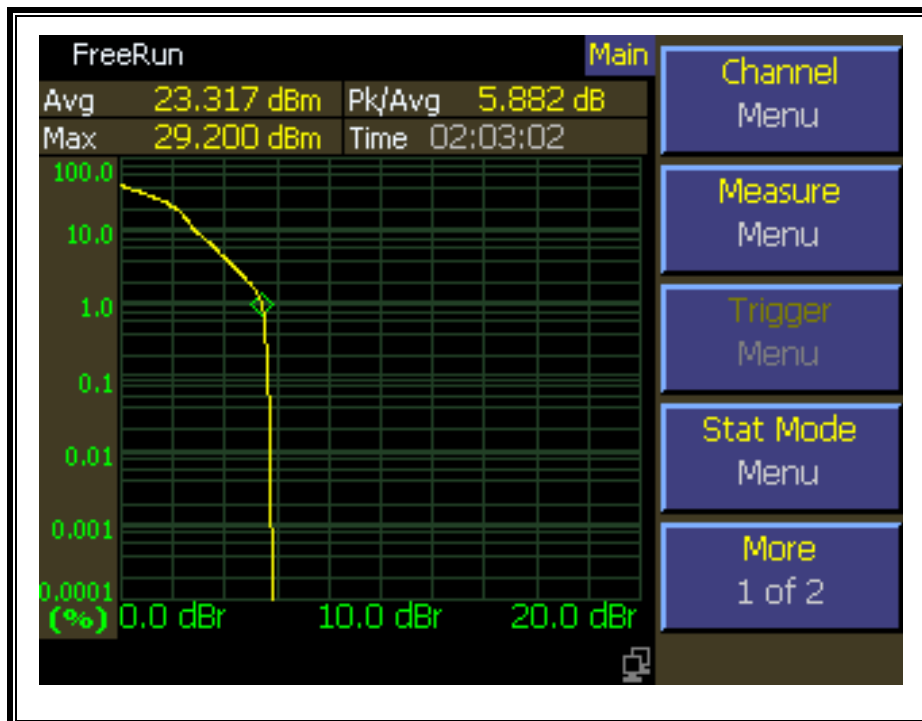
16QAM Band 5 (1.4 MHz BAND WIDTH)



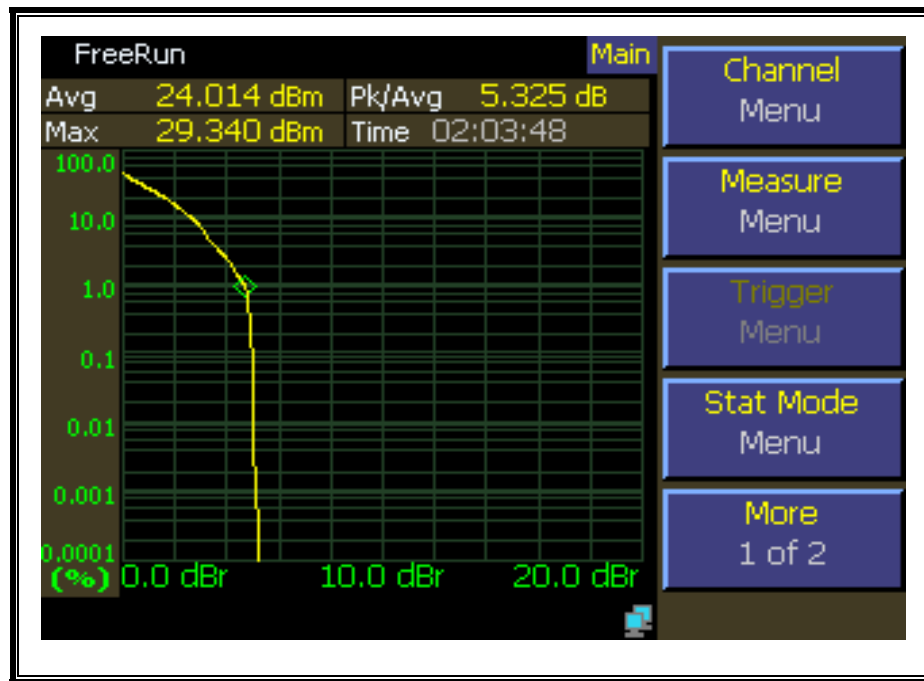
LTE QPSK Band 5 (3.0 MHz BAND WIDTH)



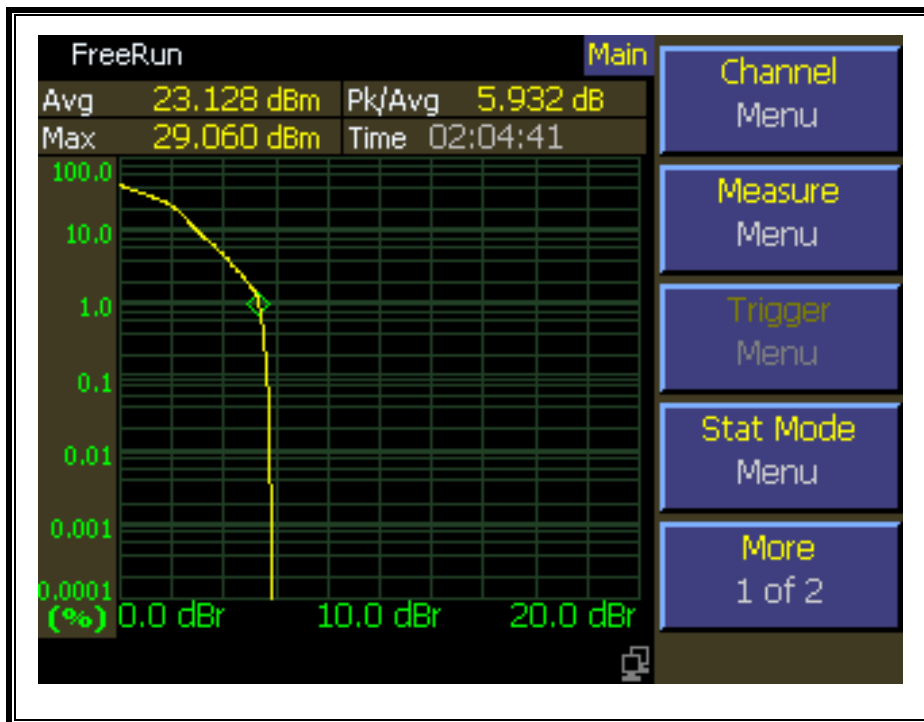
LTE 16QAM Band 5 (3.0 MHz BAND WIDTH)



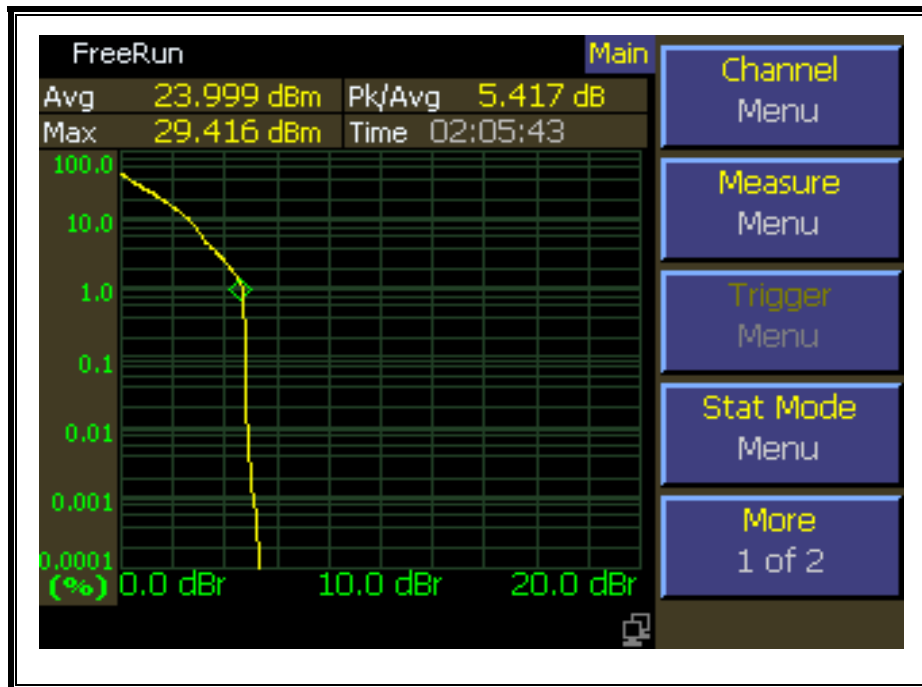
LTE QPSK Band 5 (5.0 MHz BAND WIDTH)



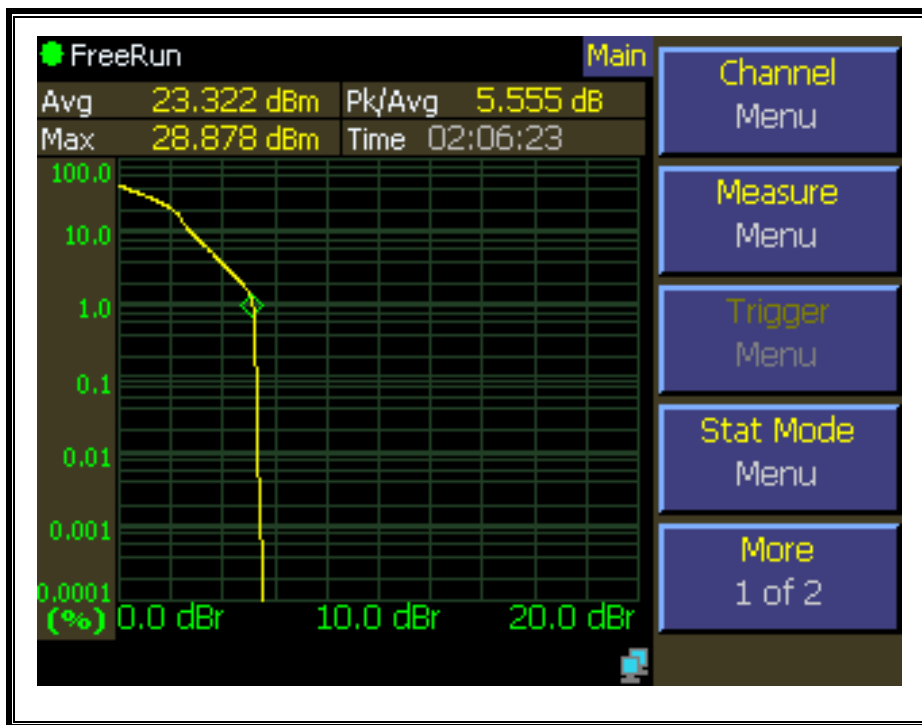
LTE 16QAM Band 5 (5.0 MHz BAND WIDTH)



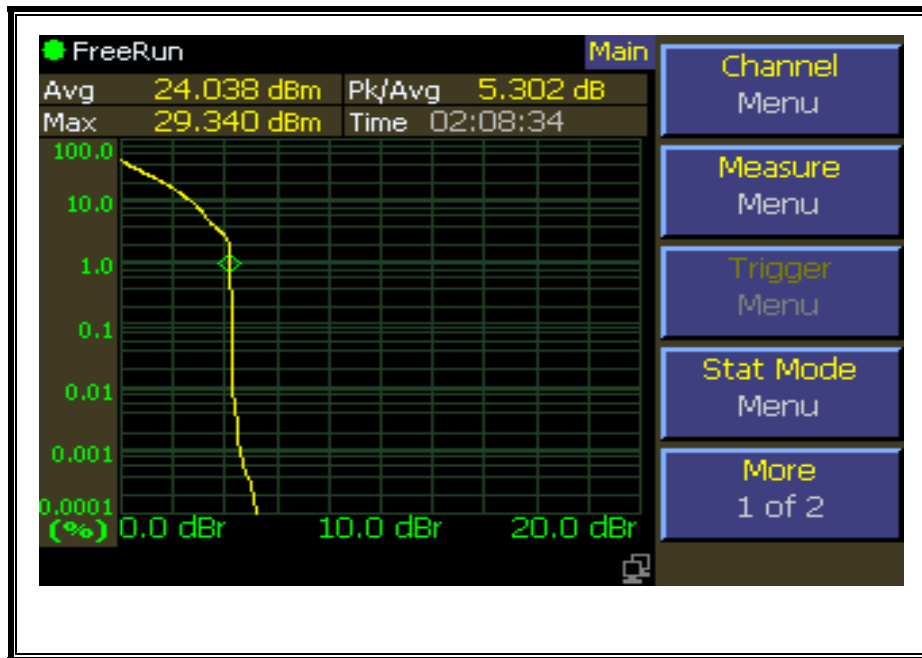
LTE QPSK Band 5 (10.0 MHz BAND WIDTH)



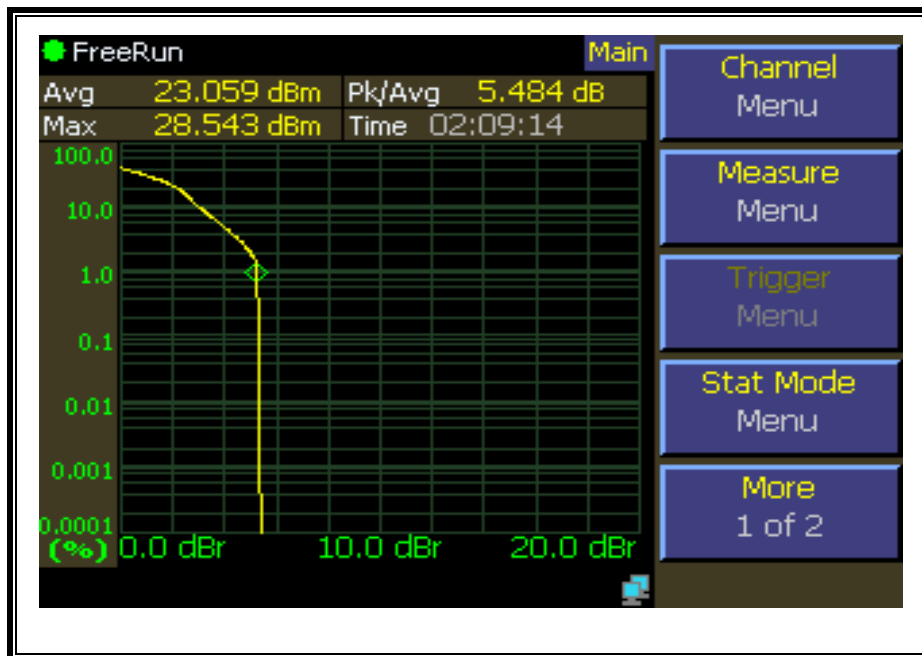
LTE 16QAM Band 5 (10.0 MHz BAND WIDTH)



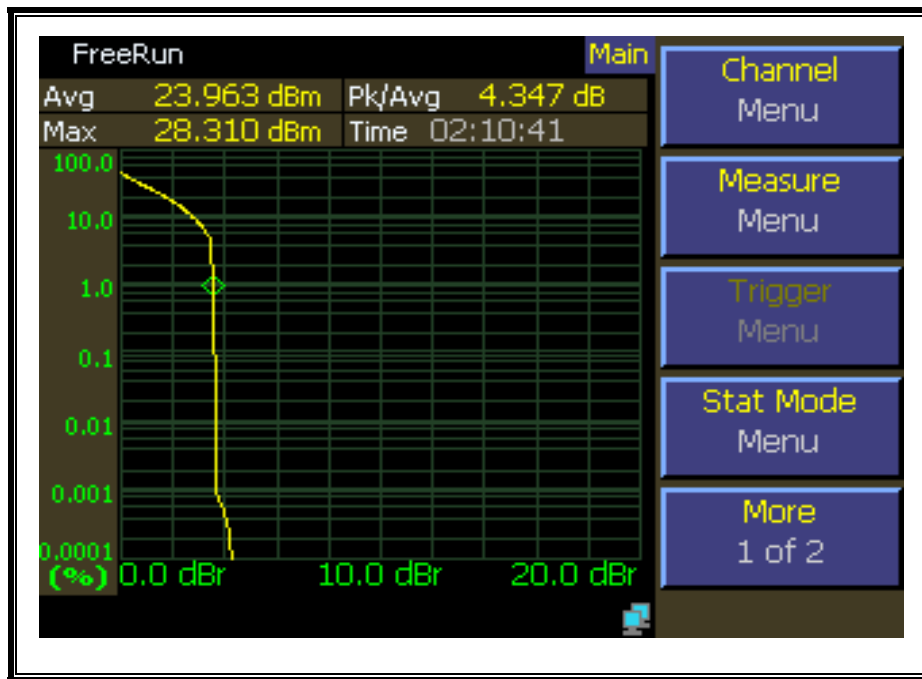
LTE QPSK Band 13 (5.0 MHz BAND WIDTH)



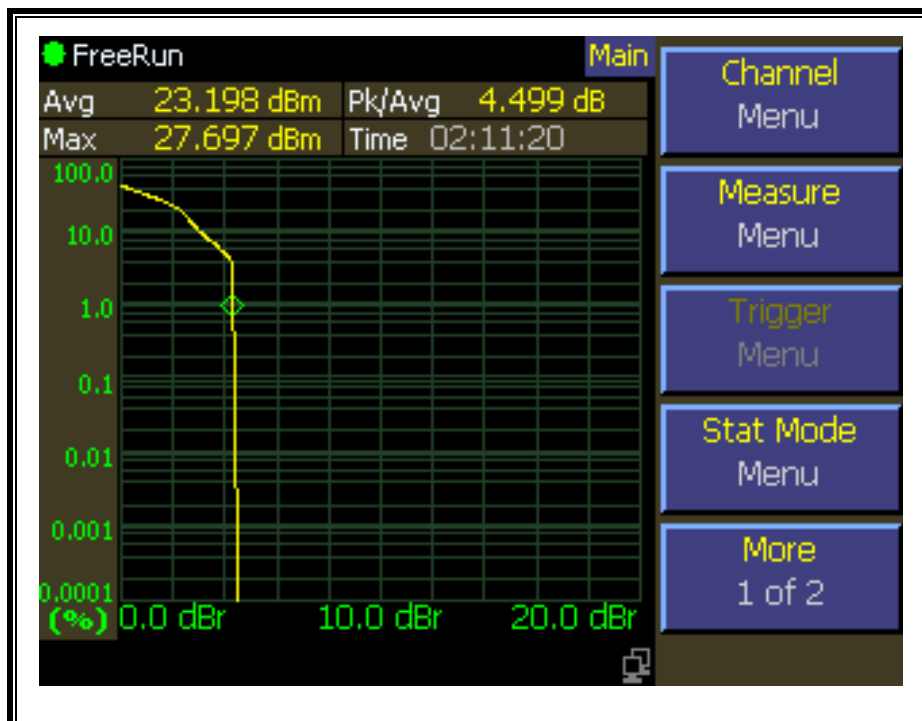
LTE 16QAM Band 13 (5.0 MHz BAND WIDTH)



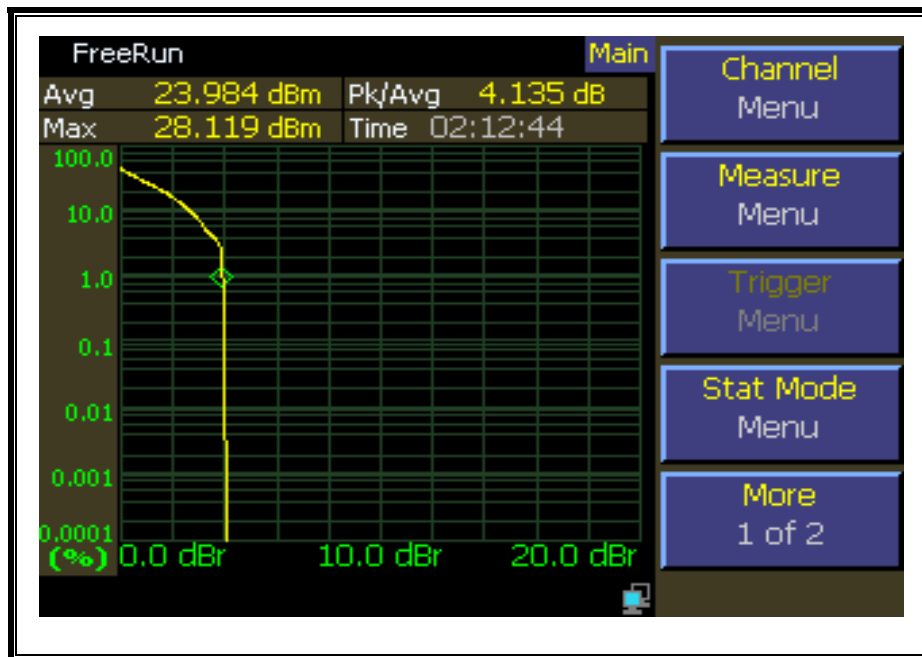
LTE QPSK Band 13 (10.0 MHz BAND WIDTH)



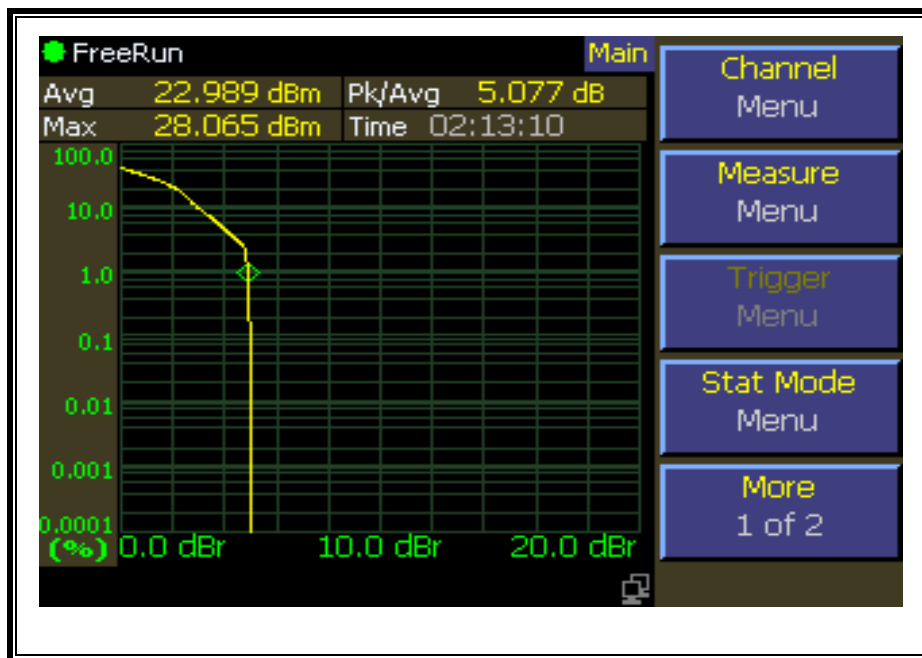
LTE 16QAM Band 13 (10.0 MHz BAND WIDTH)



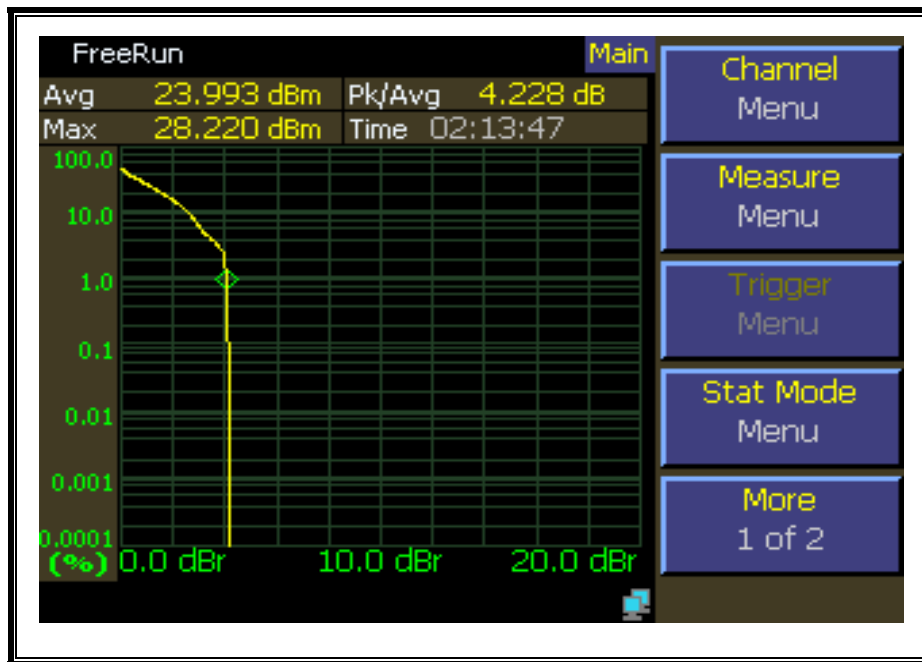
LTE QPSK Band 17 (5.0 MHz BAND WIDTH)



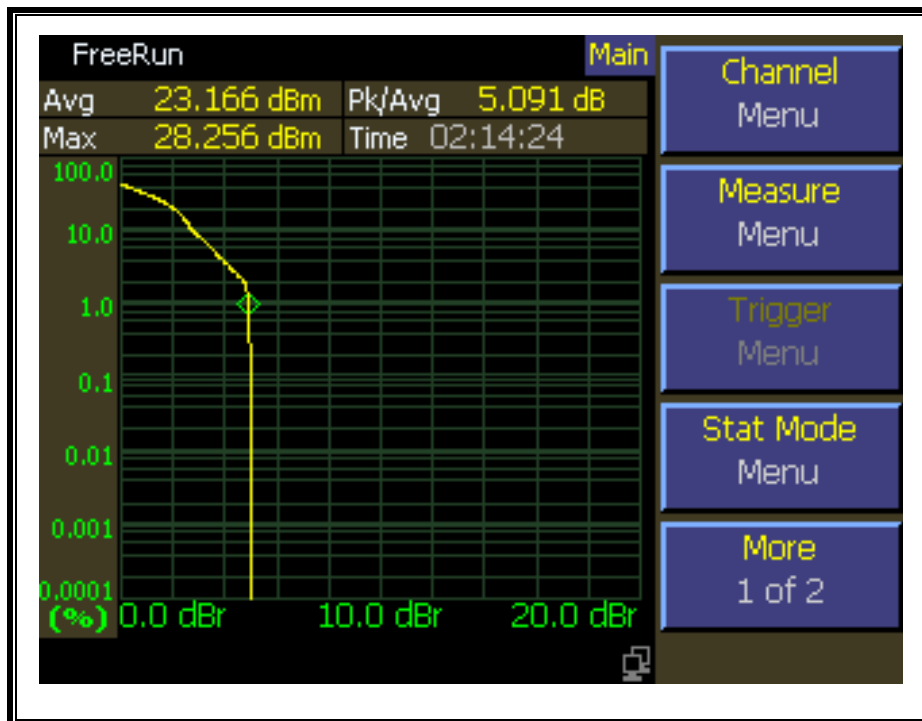
LTE 16QAM Band 17 (5.0 MHz BAND WIDTH)



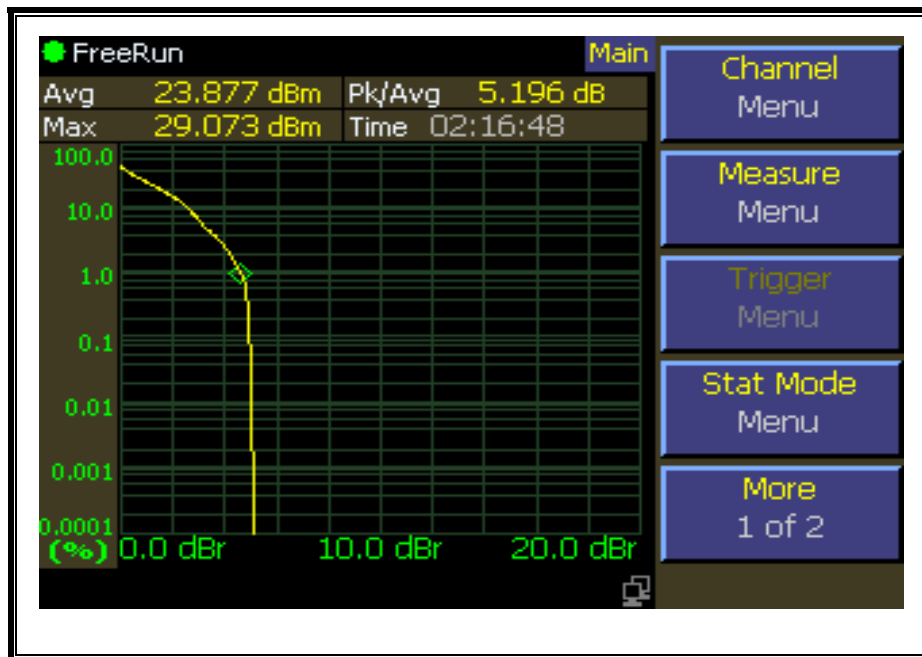
LTE QPSK Band 17 (10.0 MHz BAND WIDTH)



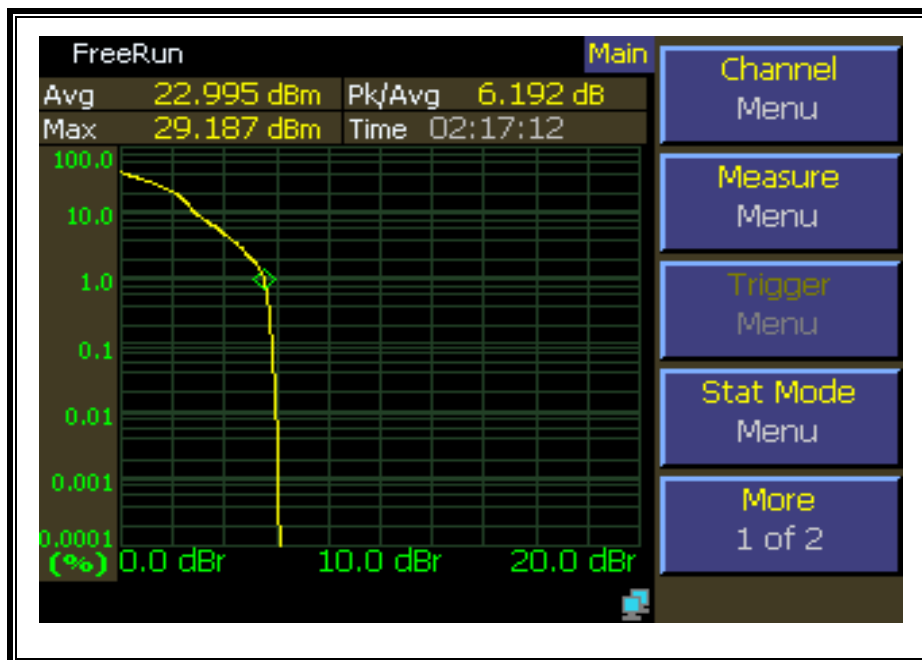
LTE 16 QAM Band 17 (10.0 MHz BAND WIDTH)



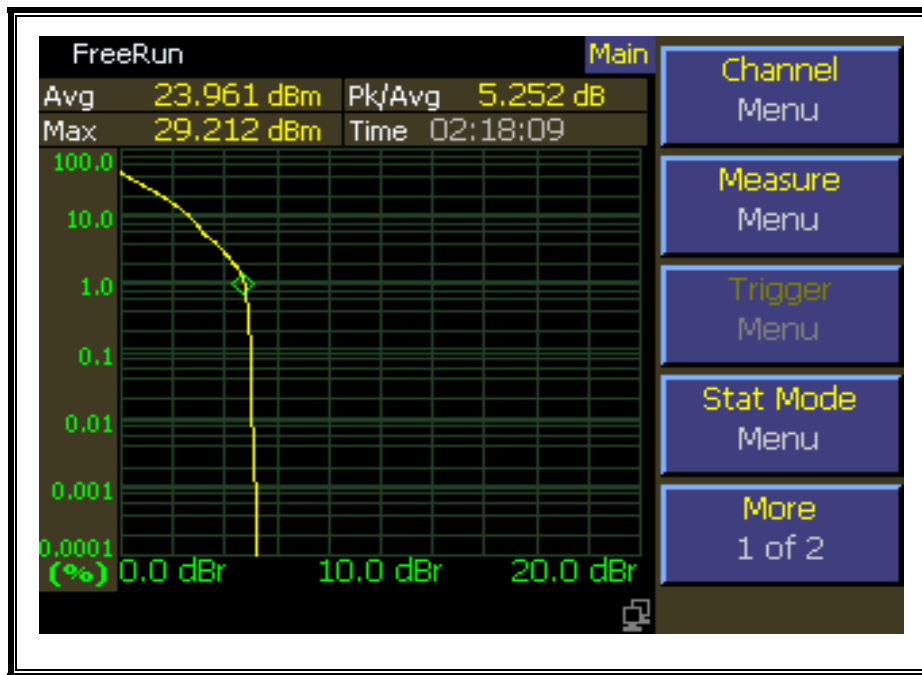
QPSK Band 25 (1.4 MHz BAND WIDTH)



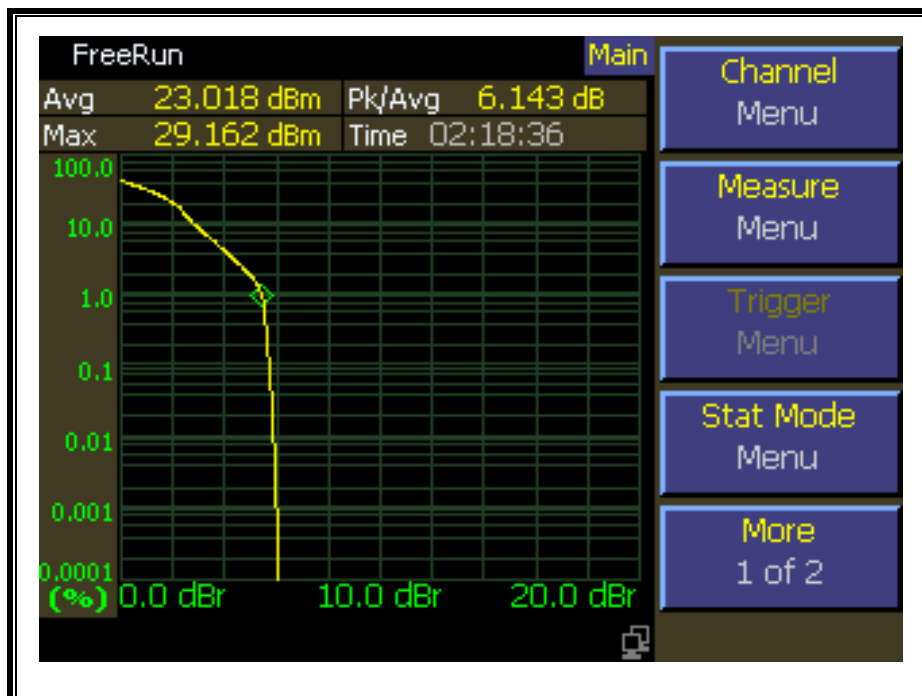
16QAM Band 25 (1.4 MHz BAND WIDTH)



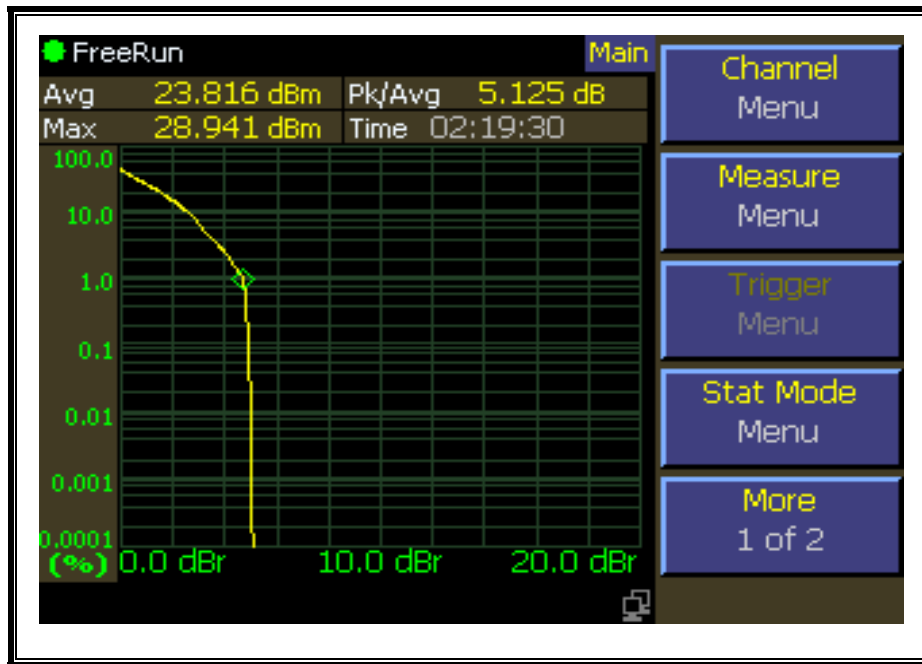
LTE QPSK Band 25 (3.0 MHz BAND WIDTH)



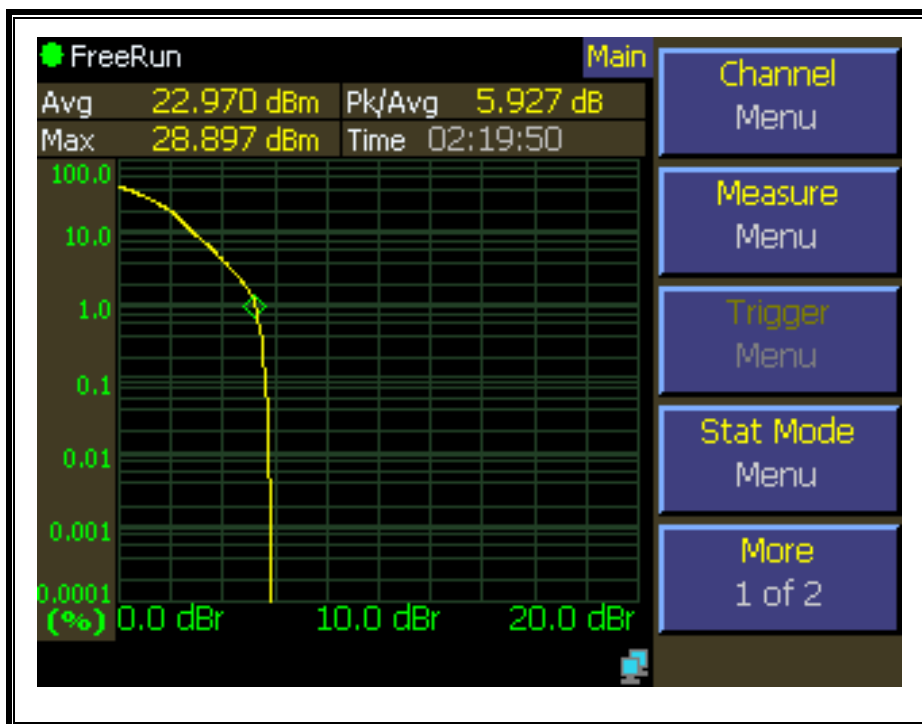
LTE 16QUAM Band 25 (3.0 MHz BAND WIDTH)



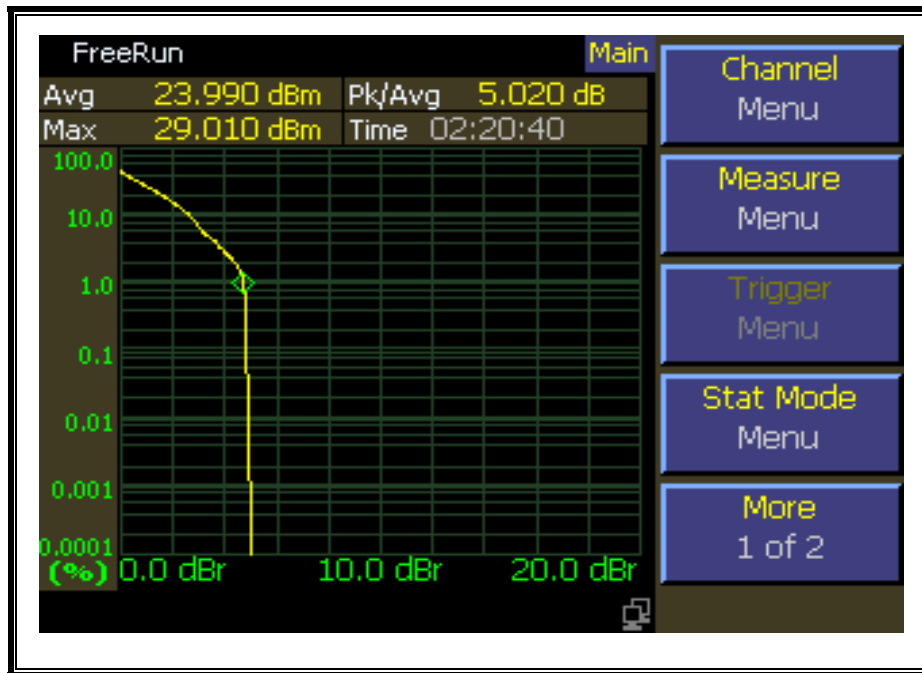
LTE QPSK Band 25 (5.0 MHz BAND WIDTH)



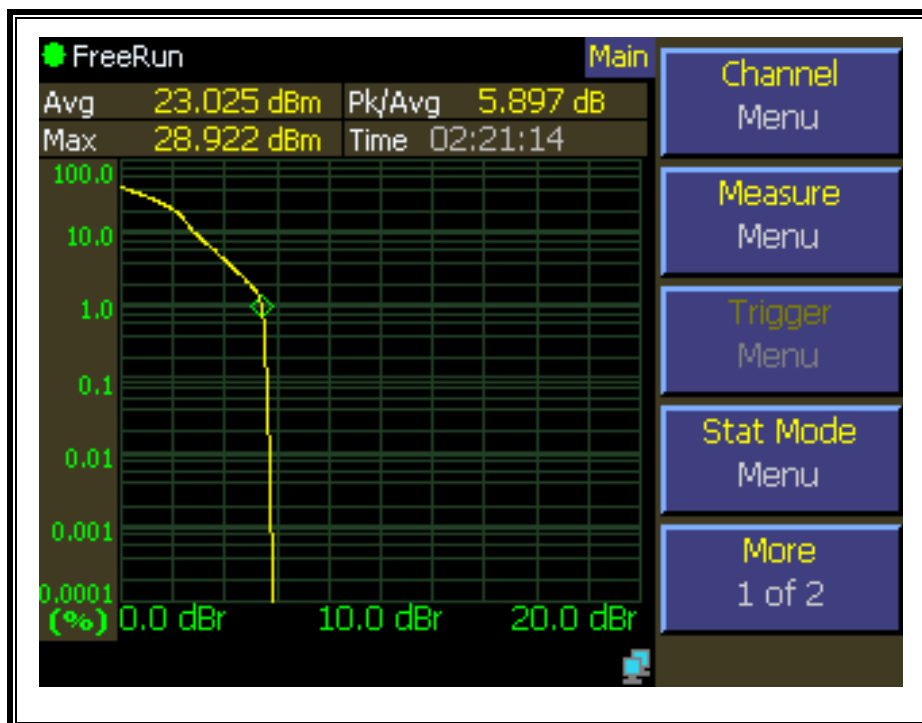
LTE 16QAM Band 25 (5.0 MHz BAND WIDTH)



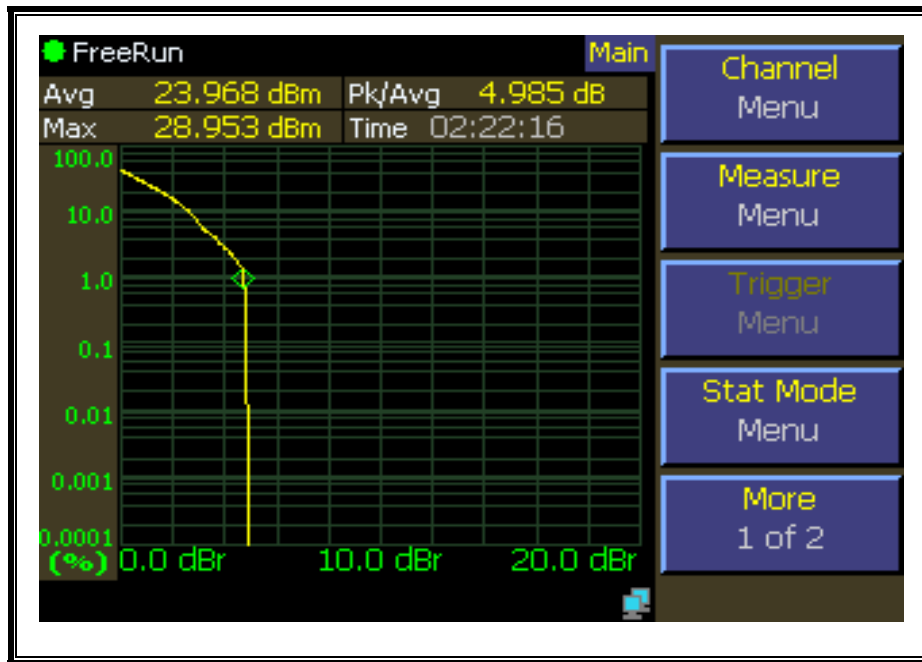
LTE QPSK Band 25 (10.0 MHz BAND WIDTH)



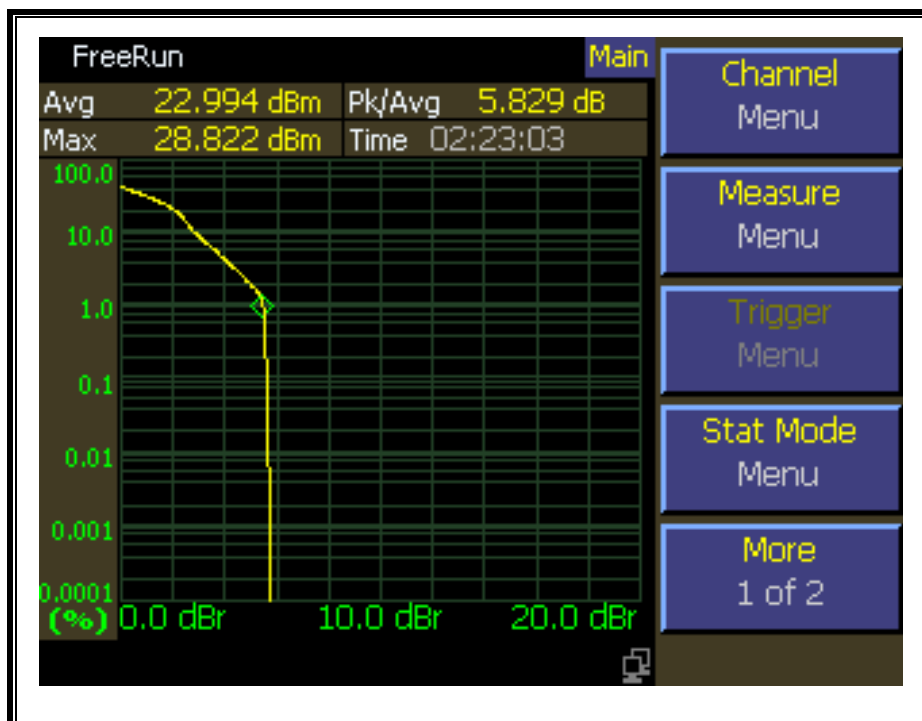
LTE 16QAM Band 25 (10.0 MHz BAND WIDTH)



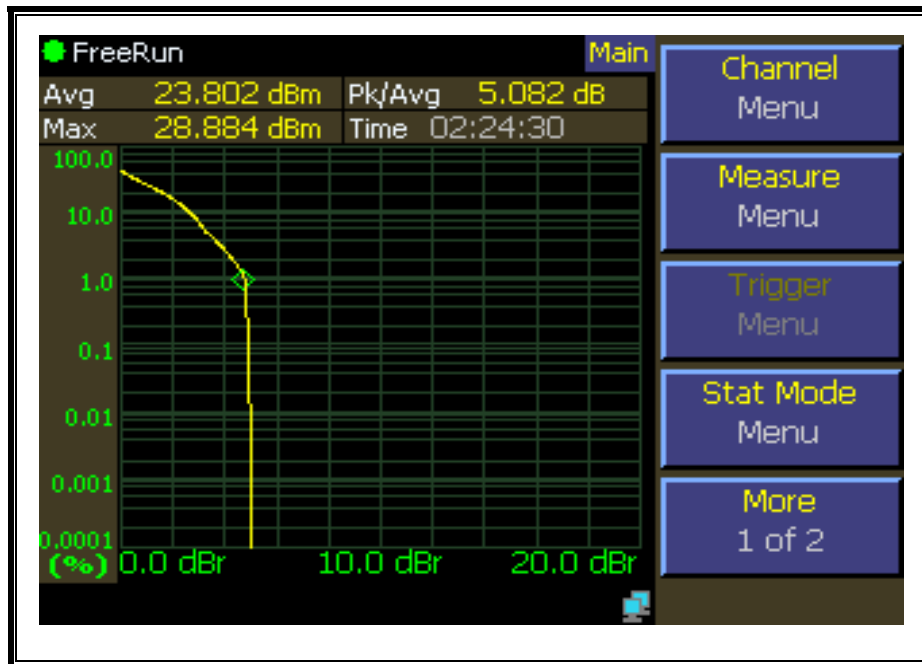
LTE QPSK Band 25 (15.0 MHz BAND WIDTH)



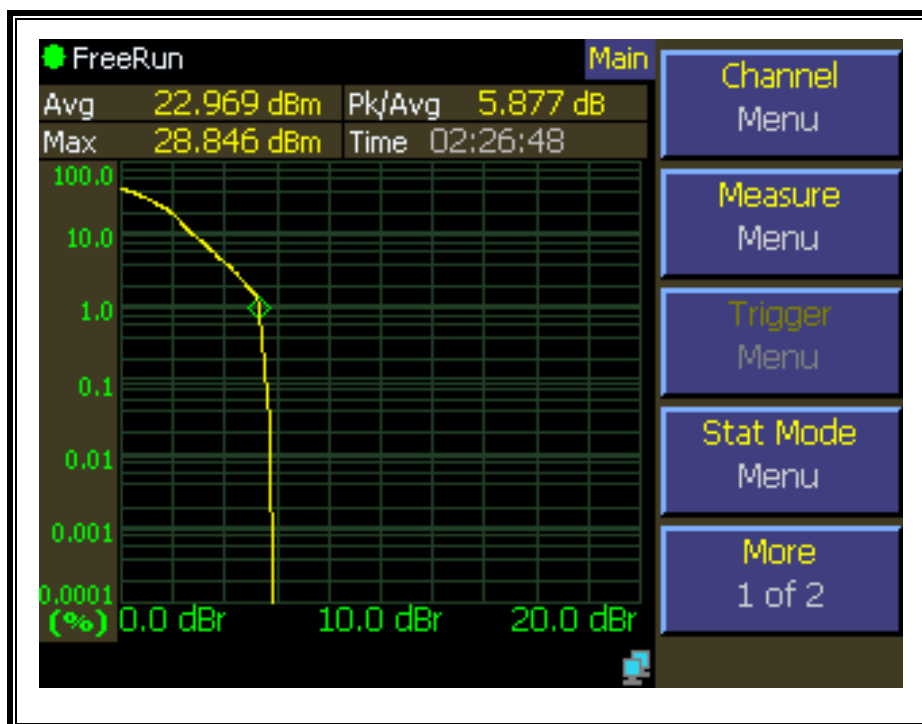
LTE 16QAM Band 25 (15.0 MHz BAND WIDTH)



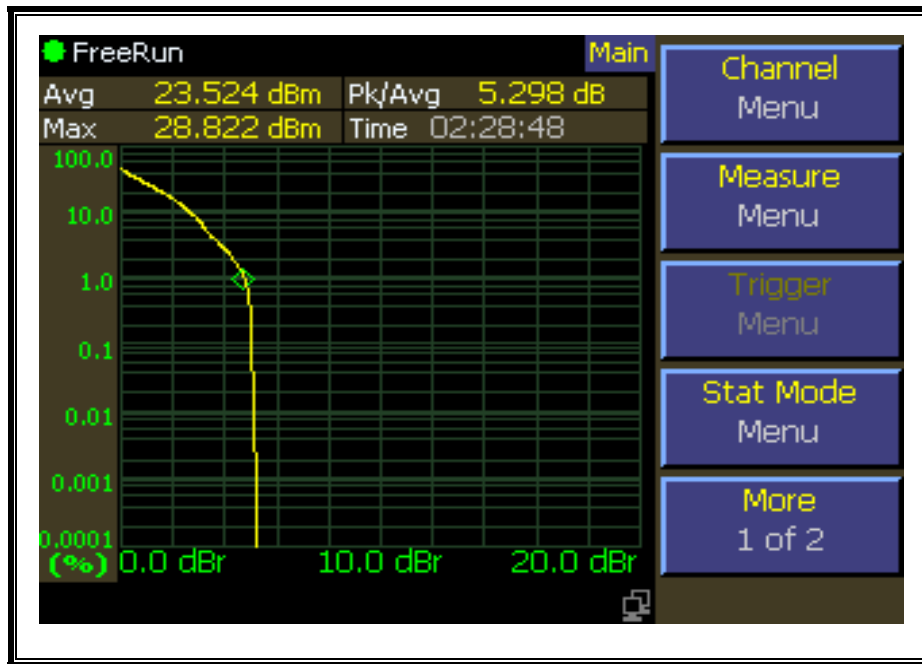
LTE QPSK Band 25 (20.0 MHz BAND WIDTH)



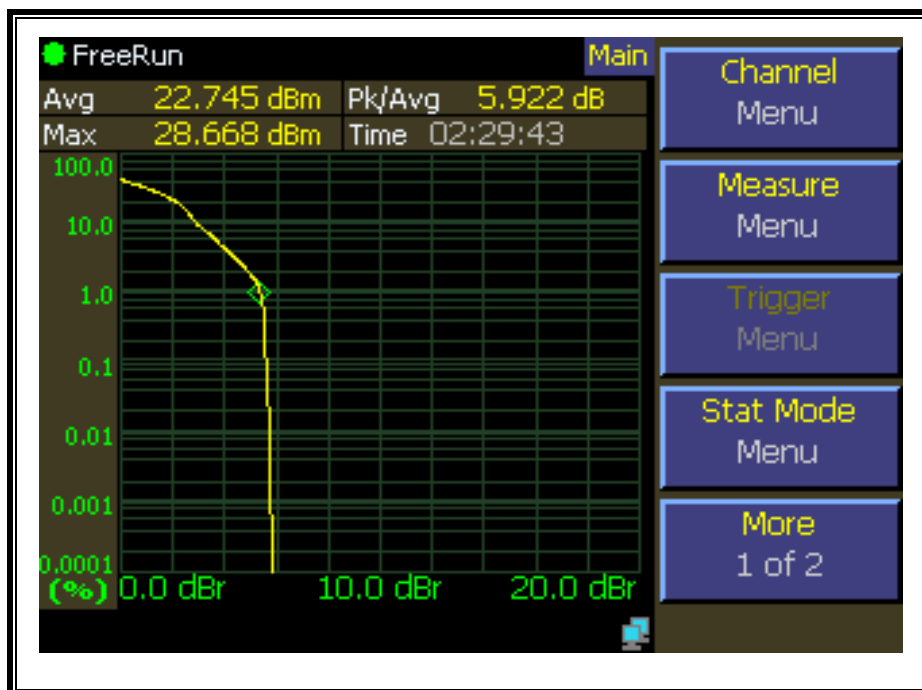
LTE 16QAM Band 25 (20.0 MHz BAND WIDTH)



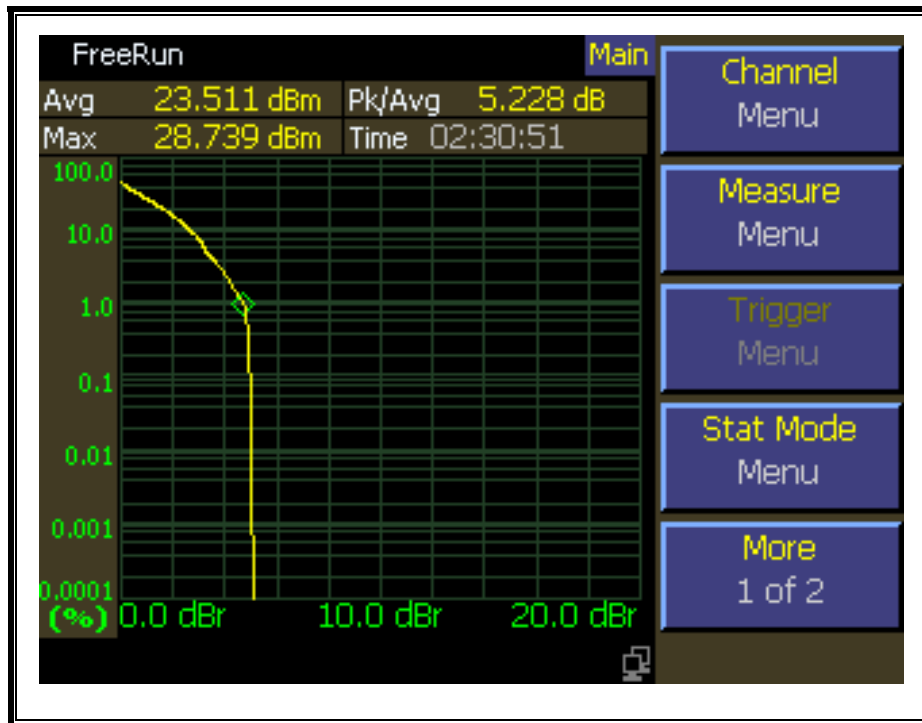
LTE QPSK Band 26 (3.0 MHz BAND WIDTH)



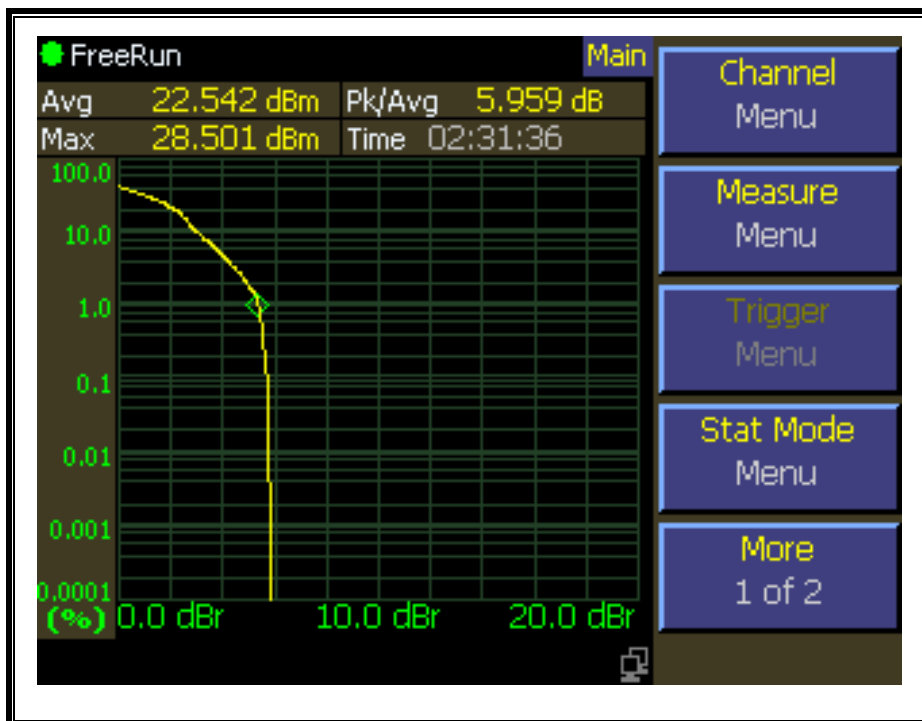
LTE 16QAM Band 26 (3.0 MHz BAND WIDTH)



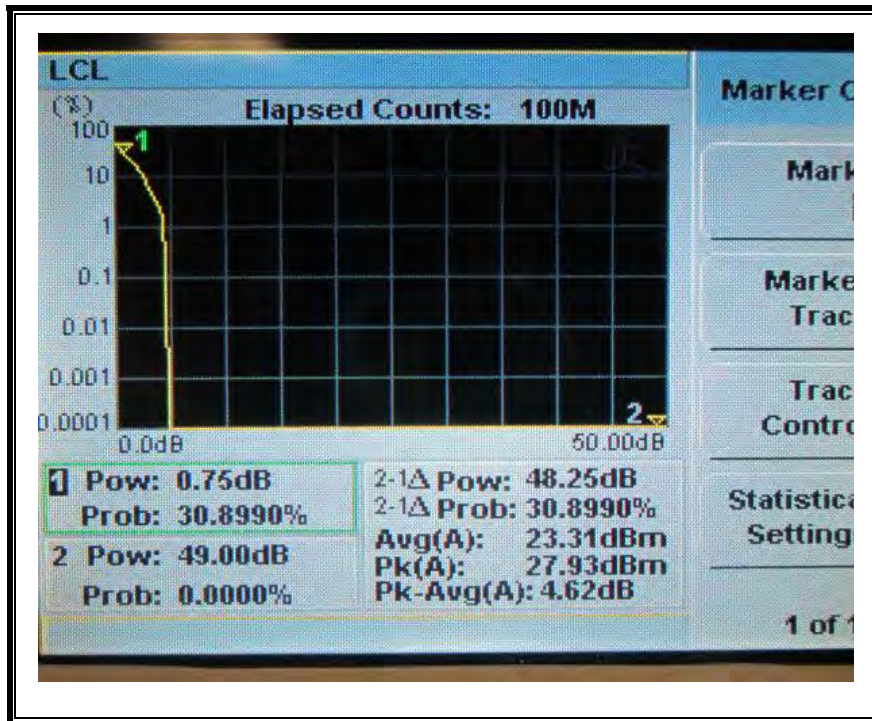
LTE QPSK Band 26 (5.0 MHz BAND WIDTH)



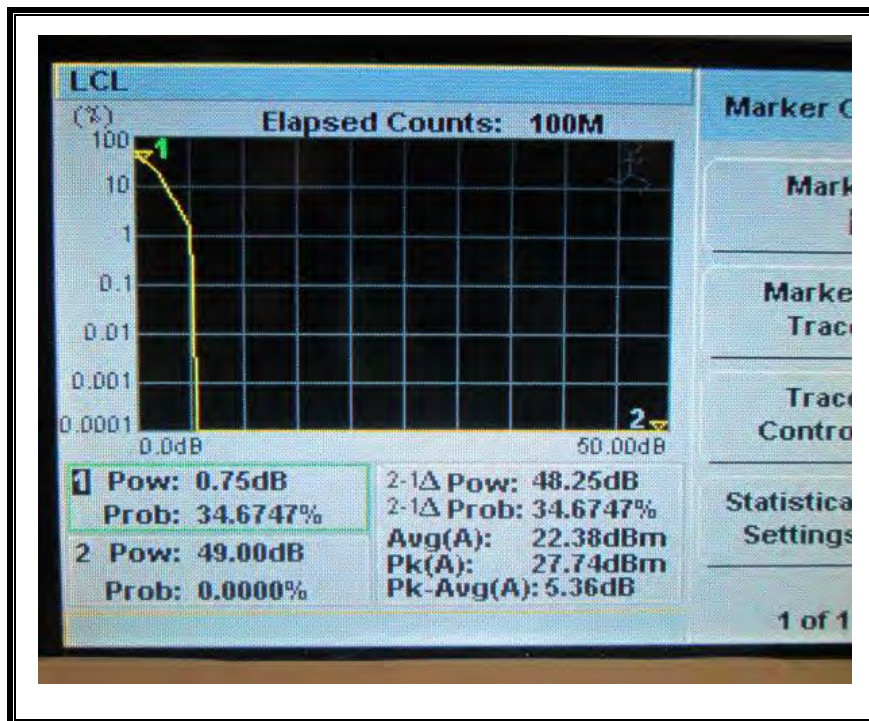
LTE 16QAM Band 26 (5.0 MHz BAND WIDTH)



LTE QPSK Band 26 (10.0 MHz BAND WIDTH)



LTE 16QAM Band 26 (10.0 MHz BAND WIDTH)



9.3. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238 and §27.53

LIMIT

§22.917 (e) and §24.238 (a): Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

§27.53 (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.

§27.53 (h) For operations in the 1710–1755 MHz and 2110–2155 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log(10P)$ dB.

TEST PROCEDURE

For Cellular equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

For PCS equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

The unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth in the 1 MHz band immediately outside and adjacent to the channel edge of the equipment. Beyond the 1 MHz band immediately outside the channel edge of the equipment, a resolution bandwidth of 1 MHz shall be employed. A narrower resolution bandwidth is allowed to be used provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz or 1% of the occupied bandwidth as applicable.

The power of any unwanted emissions measured from the channel edge of the equipment shall be attenuated below the transmitter power, P (dBW), as follows:

- a. for base station and subscriber equipment, other than mobile subscriber equipment, the attenuation shall not be less than $43 + 10 \log_{10}(p)$, dB; and
- b. for mobile subscriber equipment, the attenuation shall not be less than $43 + 10 \log_{10}(p)$, dB at the channel edges and $55 + 10 \log_{10}(p)$ at 5.5 MHz away and beyond the channel edges where p in (a) and (b) is the transmitter power measured in watts.

MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26

RESULTS

9.3.1. LTE BAND 2

LAT QPSK EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali. Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 2, 1.4MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber E		3m Chamber E				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1850.7MHz)									
3.70	-7.8	H	3.0	38.6	1.0	-45.4	-13.0	-32.4	
5.55	-11.7	H	3.0	38.0	1.0	-48.7	-13.0	-35.7	
3.70	-9.4	V	3.0	38.6	1.0	-46.9	-13.0	-33.9	
5.55	-14.1	V	3.0	38.0	1.0	-51.0	-13.0	-38.0	
Mid Channel (1880MHz)									
3.76	-8.7	H	3.0	38.6	1.0	-46.3	-13.0	-33.3	
5.64	-13.8	H	3.0	38.0	1.0	-50.8	-13.0	-37.8	
3.76	-11.0	V	3.0	38.6	1.0	-48.6	-13.0	-35.6	
5.64	-13.2	V	3.0	38.0	1.0	-50.2	-13.0	-37.2	
High Channel (1909.3MHz)									
3.8	-3.5	H	3.0	38.6	1.0	-41.1	-13.0	-28.1	
5.7	-9.5	H	3.0	37.9	1.0	-46.5	-13.0	-33.5	
3.8	-7.8	V	3.0	38.6	1.0	-45.4	-13.0	-32.4	
5.7	-13.8	V	3.0	37.9	1.0	-50.8	-13.0	-37.8	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/28/14
Test Engineer: Ali. Poushnejad
Configuration: EUT Only
Mode: LTE Band 2, 1.4MHz 16QAM

Test Equipment:
 Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber D

Pre-amplifier
 3m Chamber D

Filter

Limit
 Part 24

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamplifier	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1850.7MHz)									
3.70	-8.1	H	3.0	38.0	1.0	-45.1	-13.0	-32.1	
5.55	-12.4	H	3.0	37.4	1.0	-48.7	-13.0	-35.7	
3.70	-14.1	V	3.0	38.0	1.0	-51.2	-13.0	-38.2	
5.55	-13.8	V	3.0	37.4	1.0	-50.1	-13.0	-37.1	
Mid Channel (1880MHz)									
3.76	-9.3	H	3.0	38.0	1.0	-46.3	-13.0	-33.3	
5.64	-14.8	H	3.0	37.3	1.0	-51.2	-13.0	-38.2	
3.76	-5.3	V	3.0	38.0	1.0	-42.3	-13.0	-29.3	
5.64	-15.9	V	3.0	37.3	1.0	-52.2	-13.0	-39.2	
High Channel (1909.3MHz)									
3.8	-3.9	H	3.0	37.9	1.0	-40.9	-13.0	-27.9	
5.7	-11.3	H	3.0	37.3	1.0	-47.6	-13.0	-34.6	
3.8	-8.1	V	3.0	37.9	1.0	-45.0	-13.0	-32.0	
5.7	-13.6	V	3.0	37.3	1.0	-49.9	-13.0	-36.9	

Rev. 03.03.14

LAT QPSK EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali. Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 2, 3MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber E		3m Chamber E				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1851.5MHz)									
3.70	-7.7	H	3.0	38.6	1.0	-45.3	-13.0	-32.3	
5.55	-13.1	H	3.0	38.0	1.0	-50.1	-13.0	-37.1	
3.70	-13.2	V	3.0	38.6	1.0	-50.8	-13.0	-37.8	
5.55	-10.8	V	3.0	38.0	1.0	-47.8	-13.0	-34.8	
Mid Channel (1880MHz)									
3.76	-9.4	H	3.0	38.6	1.0	-47.0	-13.0	-34.0	
5.64	-13.9	H	3.0	38.0	1.0	-50.8	-13.0	-37.8	
3.76	-12.3	V	3.0	38.6	1.0	-49.9	-13.0	-36.9	
5.64	-12.9	V	3.0	38.0	1.0	-49.8	-13.0	-36.8	
High Channel (1908.5MHz)									
3.82	-3.2	H	3.0	38.6	1.0	-40.8	-13.0	-27.8	
5.73	-9.6	H	3.0	37.9	1.0	-46.5	-13.0	-33.5	
3.82	-7.4	V	3.0	38.6	1.0	-45.0	-13.0	-32.0	
5.73	-12.2	V	3.0	37.9	1.0	-49.2	-13.0	-36.2	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali. Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 2, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber E		3m Chamber E				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1851.5MHz)									
3.70	-6.6	H	3.0	38.6	1.0	-44.1	-13.0	-31.1	
5.55	-14.2	H	3.0	38.0	1.0	-51.1	-13.0	-38.1	
3.70	-8.9	V	3.0	38.6	1.0	-46.4	-13.0	-33.4	
5.55	-12.0	V	3.0	38.0	1.0	-49.0	-13.0	-36.0	
Mid Channel (1880MHz)									
3.76	-10.7	H	3.0	38.6	1.0	-48.2	-13.0	-35.2	
5.64	-13.7	H	3.0	38.0	1.0	-50.7	-13.0	-37.7	
3.76	-12.6	V	3.0	38.6	1.0	-50.2	-13.0	-37.2	
5.64	-12.9	V	3.0	38.0	1.0	-49.9	-13.0	-36.9	
High Channel (1908.5MHz)									
3.82	-4.1	H	3.0	38.6	1.0	-41.7	-13.0	-28.7	
5.73	-10.2	H	3.0	37.9	1.0	-47.1	-13.0	-34.1	
3.82	-8.0	V	3.0	38.6	1.0	-45.6	-13.0	-32.6	
5.73	-12.5	V	3.0	37.9	1.0	-49.5	-13.0	-36.5	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/19/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 2, 5MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1852.5MHz)									
3.71	-10.5	H	3.0	36.3	1.0	-45.8	-13.0	-32.8	
5.56	-13.4	H	3.0	35.6	1.0	-47.9	-13.0	-34.9	
3.71	-9.8	V	3.0	36.3	1.0	-45.1	-13.0	-32.1	
5.56	-12.4	V	3.0	35.6	1.0	-47.0	-13.0	-34.0	
Mid Channel (1880MHz)									
3.76	-8.3	H	3.0	36.3	1.0	-43.6	-13.0	-30.6	
5.64	-8.6	H	3.0	35.6	1.0	-43.2	-13.0	-30.2	
3.76	-8.6	V	3.0	36.3	1.0	-43.9	-13.0	-30.9	
5.64	-8.6	V	3.0	35.6	1.0	-43.2	-13.0	-30.2	
High Channel (1907.5MHz)									
3.82	-11.6	H	3.0	36.3	1.0	-46.8	-13.0	-33.8	
5.72	-11.7	H	3.0	35.6	1.0	-46.3	-13.0	-33.3	
3.82	-10.8	V	3.0	36.3	1.0	-46.0	-13.0	-33.0	
5.72	-11.0	V	3.0	35.6	1.0	-45.6	-13.0	-32.6	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/19/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 2, 5MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1852.5MHz)									
3.71	-11.0	H	3.0	36.3	1.0	-46.3	-13.0	-33.3	
5.56	-12.9	H	3.0	35.6	1.0	-47.4	-13.0	-34.4	
3.71	-9.4	V	3.0	36.3	1.0	-44.7	-13.0	-31.7	
5.56	-11.8	V	3.0	35.6	1.0	-46.4	-13.0	-33.4	
Mid Channel (1880MHz)									
3.76	-8.4	H	3.0	36.3	1.0	-43.7	-13.0	-30.7	
5.64	-8.8	H	3.0	35.6	1.0	-43.4	-13.0	-30.4	
3.76	-8.1	V	3.0	36.3	1.0	-43.3	-13.0	-30.3	
5.64	-9.4	V	3.0	35.6	1.0	-44.0	-13.0	-31.0	
High Channel (1907.5MHz)									
3.82	-10.0	H	3.0	36.3	1.0	-45.3	-13.0	-32.3	
5.72	-11.9	H	3.0	35.6	1.0	-46.5	-13.0	-33.5	
3.82	-10.4	V	3.0	36.3	1.0	-45.6	-13.0	-32.6	
5.72	-10.9	V	3.0	35.6	1.0	-45.5	-13.0	-32.5	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali. Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 2, 10MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber E		3m Chamber E				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1855MHz)									
3.71	-7.4	H	3.0	38.6	1.0	-45.0	-13.0	-32.0	
5.57	-10.3	H	3.0	38.0	1.0	-47.2	-13.0	-34.2	
3.71	-7.9	V	3.0	38.6	1.0	-45.4	-13.0	-32.4	
5.57	-12.0	V	3.0	38.0	1.0	-48.9	-13.0	-35.9	
Mid Channel (1880MHz)									
3.76	-8.7	H	3.0	38.6	1.0	-46.3	-13.0	-33.3	
5.64	-11.8	H	3.0	38.0	1.0	-48.7	-13.0	-35.7	
3.76	-12.2	V	3.0	38.6	1.0	-49.8	-13.0	-36.8	
5.64	-11.7	V	3.0	38.0	1.0	-48.6	-13.0	-35.6	
High Channel (1905MHz)									
3.81	-11.3	H	3.0	38.6	1.0	-48.9	-13.0	-35.9	
5.72	-11.1	H	3.0	37.9	1.0	-48.0	-13.0	-35.0	
3.81	-13.3	V	3.0	38.6	1.0	-50.9	-13.0	-37.9	
5.72	-10.3	V	3.0	37.9	1.0	-47.2	-13.0	-34.2	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:	14U17676								
Date:	06/20/14								
Test Engineer:	Ali. Poushnejad								
Configuration:	EUT Only								
Mode:	LTE Band 2, 10MHz 16QAM								
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber	Pre-amplifier	Filter	Limit						
3m Chamber E	3m Chamber E		Part 24						
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1855MHz)									
3.71	-7.5	H	3.0	38.6	1.0	-45.1	-13.0	-32.1	
5.57	-10.0	H	3.0	38.0	1.0	-47.0	-13.0	-34.0	
3.71	-8.5	V	3.0	38.6	1.0	-46.1	-13.0	-33.1	
5.57	-12.0	V	3.0	38.0	1.0	-49.0	-13.0	-36.0	
Mid Channel (1880MHz)									
3.76	-8.4	H	3.0	38.6	1.0	-45.9	-13.0	-32.9	
5.64	-11.6	H	3.0	38.0	1.0	-48.5	-13.0	-35.5	
3.76	-13.5	V	3.0	38.6	1.0	-51.1	-13.0	-38.1	
5.64	-11.6	V	3.0	38.0	1.0	-48.6	-13.0	-35.6	
High Channel (1905MHz)									
3.81	-10.5	H	3.0	38.6	1.0	-48.1	-13.0	-35.1	
5.72	-11.2	H	3.0	37.9	1.0	-48.1	-13.0	-35.1	
3.81	-13.3	V	3.0	38.6	1.0	-50.9	-13.0	-37.9	
5.72	-11.1	V	3.0	37.9	1.0	-48.0	-13.0	-35.0	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali. Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 2, 15MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D ▼		3m Chamber D ▼				Part 24 ▼			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1857.5MHz)									
3.72	-10.6	H	3.0	38.0	1.0	-47.6	-13.0	-34.6	
5.57	-13.8	H	3.0	37.4	1.0	-50.2	-13.0	-37.2	
3.72	-13.7	V	3.0	38.0	1.0	-50.7	-13.0	-37.7	
5.57	-14.4	V	3.0	37.4	1.0	-50.8	-13.0	-37.8	
Mid Channel (1880MHz)									
3.76	-11.5	H	3.0	38.0	1.0	-48.5	-13.0	-35.5	
5.64	-13.6	H	3.0	37.3	1.0	-50.0	-13.0	-37.0	
3.76	-12.9	V	3.0	38.0	1.0	-49.9	-13.0	-36.9	
5.64	-14.9	V	3.0	37.3	1.0	-51.3	-13.0	-38.3	
High Channel (1902.5MHz)									
3.81	-13.5	H	3.0	38.0	1.0	-50.5	-13.0	-37.5	
5.71	-14.7	H	3.0	37.3	1.0	-51.0	-13.0	-38.0	
3.81	-14.9	V	3.0	38.0	1.0	-51.9	-13.0	-38.9	
5.71	-15.0	V	3.0	37.3	1.0	-51.3	-13.0	-38.3	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali. Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 2, 15MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1857.5MHz)									
3.72	-11.2	H	3.0	38.0	1.0	-48.2	-13.0	-35.2	
5.57	-14.9	H	3.0	37.4	1.0	-51.3	-13.0	-38.3	
3.72	-14.2	V	3.0	38.0	1.0	-51.2	-13.0	-38.2	
5.57	-14.7	V	3.0	37.4	1.0	-51.0	-13.0	-38.0	
Mid Channel (1880MHz)									
3.76	-12.0	H	3.0	38.0	1.0	-49.0	-13.0	-36.0	
5.64	-13.3	H	3.0	37.3	1.0	-49.6	-13.0	-36.6	
3.76	-12.9	V	3.0	38.0	1.0	-49.8	-13.0	-36.8	
5.64	-14.6	V	3.0	37.3	1.0	-50.9	-13.0	-37.9	
High Channel (1902.5MHz)									
3.81	-13.5	H	3.0	38.0	1.0	-50.5	-13.0	-37.5	
5.71	-16.4	H	3.0	37.3	1.0	-52.7	-13.0	-39.7	
3.81	-14.9	V	3.0	38.0	1.0	-51.8	-13.0	-38.8	
5.71	-15.6	V	3.0	37.3	1.0	-51.9	-13.0	-38.9	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali. Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 2, 20MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber E		3m Chamber E				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1860MHz)									
3.72	-9.3	H	3.0	38.6	1.0	-46.9	-13.0	-33.9	
5.58	-14.1	H	3.0	38.0	1.0	-51.1	-13.0	-38.1	
3.72	-14.0	V	3.0	38.6	1.0	-51.5	-13.0	-38.5	
5.58	-14.0	V	3.0	38.0	1.0	-51.0	-13.0	-38.0	
Mid Channel (1880MHz)									
3.76	-13.7	H	3.0	38.6	1.0	-51.3	-13.0	-38.3	
5.64	-14.0	H	3.0	38.0	1.0	-51.0	-13.0	-38.0	
3.76	-13.1	V	3.0	38.6	1.0	-50.7	-13.0	-37.7	
5.64	-13.6	V	3.0	38.0	1.0	-50.6	-13.0	-37.6	
High Channel (1900MHz)									
3.8	-13.6	H	3.0	38.6	1.0	-51.2	-13.0	-38.2	
5.7	-14.1	H	3.0	37.9	1.0	-51.0	-13.0	-38.0	
3.8	-15.8	V	3.0	38.6	1.0	-53.4	-13.0	-40.4	
5.7	-13.9	V	3.0	37.9	1.0	-50.8	-13.0	-37.8	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali. Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 2, 20MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber E		3m Chamber E				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1860MHz)									
3.72	-10.3	H	3.0	38.6	1.0	-47.9	-13.0	-34.9	
5.58	-14.4	H	3.0	38.0	1.0	-51.3	-13.0	-38.3	
3.72	-13.9	V	3.0	38.6	1.0	-51.4	-13.0	-38.4	
5.58	-13.6	V	3.0	38.0	1.0	-50.6	-13.0	-37.6	
Mid Channel (1880MHz)									
3.76	-13.0	H	3.0	38.6	1.0	-50.6	-13.0	-37.6	
5.64	-14.1	H	3.0	38.0	1.0	-51.1	-13.0	-38.1	
3.76	-13.4	V	3.0	38.6	1.0	-51.0	-13.0	-38.0	
5.64	-14.4	V	3.0	38.0	1.0	-51.4	-13.0	-38.4	
High Channel (1900MHz)									
3.8	-12.9	H	3.0	38.6	1.0	-50.5	-13.0	-37.5	
5.7	-13.8	H	3.0	37.9	1.0	-50.7	-13.0	-37.7	
3.8	-16.5	V	3.0	38.6	1.0	-54.1	-13.0	-41.1	
5.7	-14.4	V	3.0	37.9	1.0	-51.4	-13.0	-38.4	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 1.4MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1850.7MHz)									
3.701	-10.1	H	3.0	38.0	1.0	-47.1	-13.0	-34.1	
5.552	-12.5	H	3.0	37.4	1.0	-48.9	-13.0	-35.9	
3.701	-10.0	V	3.0	38.0	1.0	-47.0	-13.0	-34.0	
5.552	-13.9	V	3.0	37.4	1.0	-50.3	-13.0	-37.3	
Mid Channel (1880MHz)									
3.760	-10.2	H	3.0	38.0	1.0	-47.1	-13.0	-34.1	
5.640	-15.5	H	3.0	37.3	1.0	-51.8	-13.0	-38.8	
3.760	-12.7	V	3.0	38.0	1.0	-49.7	-13.0	-36.7	
5.640	-14.4	V	3.0	37.3	1.0	-50.8	-13.0	-37.8	
High Channel (1909.3MHz)									
3.819	-4.6	H	3.0	37.9	1.0	-41.5	-13.0	-28.5	
5.728	-10.9	H	3.0	37.3	1.0	-47.2	-13.0	-34.2	
3.819	-9.6	V	3.0	37.9	1.0	-46.5	-13.0	-33.5	
5.728	-14.8	V	3.0	37.3	1.0	-51.1	-13.0	-38.1	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/21/14
Test Engineer: Macie
Configuration: EUT Only
Mode: LTE Band 2, 1.4MHz 16QAM

Test Equipment:
 Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber D

Pre-amplifier
 3m Chamber D

Filter

Limit
 Part 24

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1850.7MHz)									
3.701	-10.8	H	3.0	38.0	1.0	-47.8	-13.0	-34.8	
5.552	-13.4	H	3.0	37.4	1.0	-49.7	-13.0	-36.7	
3.701	-10.7	V	3.0	38.0	1.0	-47.7	-13.0	-34.7	
5.552	-14.7	V	3.0	37.4	1.0	-51.1	-13.0	-38.1	
Mid Channel (1880MHz)									
3.760	-11.0	H	3.0	38.0	1.0	-48.0	-13.0	-35.0	
5.640	-15.8	H	3.0	37.3	1.0	-52.1	-13.0	-39.1	
3.760	-13.4	V	3.0	38.0	1.0	-50.4	-13.0	-37.4	
5.640	-15.1	V	3.0	37.3	1.0	-51.4	-13.0	-38.4	
High Channel (1909.3MHz)									
3.819	-6.9	H	3.0	37.9	1.0	-43.8	-13.0	-30.8	
5.728	-12.1	H	3.0	37.3	1.0	-48.4	-13.0	-35.4	
3.819	-11.1	V	3.0	37.9	1.0	-48.0	-13.0	-35.0	
5.728	-15.2	V	3.0	37.3	1.0	-51.5	-13.0	-38.5	

Rev. 03.03.14

UAT QPSK EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 3MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1851.5MHz)									
3.703	-8.9	H	3.0	38.0	1.0	-45.9	-13.0	-32.9	
5.555	-14.1	H	3.0	37.4	1.0	-50.5	-13.0	-37.5	
3.703	-14.5	V	3.0	38.0	1.0	-51.6	-13.0	-38.6	
5.555	-13.2	V	3.0	37.4	1.0	-49.5	-13.0	-36.5	
Mid Channel (1880MHz)									
3.760	-10.8	H	3.0	38.0	1.0	-47.8	-13.0	-34.8	
5.640	-15.6	H	3.0	37.3	1.0	-52.0	-13.0	-39.0	
3.760	-14.5	V	3.0	38.0	1.0	-51.5	-13.0	-38.5	
5.640	-14.6	V	3.0	37.3	1.0	-51.0	-13.0	-38.0	
High Channel (1908.5MHz)									
3.817	-5.2	H	3.0	37.9	1.0	-42.1	-13.0	-29.1	
5.726	-11.2	H	3.0	37.3	1.0	-47.5	-13.0	-34.5	
3.817	-8.8	V	3.0	37.9	1.0	-45.7	-13.0	-32.7	
5.726	-14.6	V	3.0	37.3	1.0	-50.9	-13.0	-37.9	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 2 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1851.5MHz)									
3.703	-9.6	H	3.0	38.0	1.0	-46.7	-13.0	-33.7	
5.555	-14.5	H	3.0	37.4	1.0	-50.9	-13.0	-37.9	
3.703	-14.5	V	3.0	38.0	1.0	-51.6	-13.0	-38.6	
5.555	-13.7	V	3.0	37.4	1.0	-50.0	-13.0	-37.0	
Mid Channel (1880MHz)									
3.760	-12.1	H	3.0	38.0	1.0	-49.1	-13.0	-36.1	
5.640	-15.6	H	3.0	37.3	1.0	-52.0	-13.0	-39.0	
3.760	-14.9	V	3.0	38.0	1.0	-51.9	-13.0	-38.9	
5.640	-15.5	V	3.0	37.3	1.0	-51.8	-13.0	-38.8	
High Channel (1908.5MHz)									
3.817	-5.7	H	3.0	37.9	1.0	-42.6	-13.0	-29.6	
5.726	-12.3	H	3.0	37.3	1.0	-48.7	-13.0	-35.7	
3.817	-10.5	V	3.0	37.9	1.0	-47.4	-13.0	-34.4	
5.726	-15.7	V	3.0	37.3	1.0	-52.0	-13.0	-39.0	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/21/14
Test Engineer: Macie
Configuration: EUT Only
Mode: LTE Band 2, 5MHz QPSK

Test Equipment:
 Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber D

Pre-amplifier
 3m Chamber D

Filter
 2.5 HP Filter

Limit
 Part 24

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1852.5MHz)									
3.705	-12.1	H	3.0	38.0	1.0	-49.2	-13.0	-36.2	
5.558	-13.1	H	3.0	37.4	1.0	-49.5	-13.0	-36.5	
3.705	-10.1	V	3.0	38.0	1.0	-47.1	-13.0	-34.1	
5.558	-12.7	V	3.0	37.4	1.0	-49.1	-13.0	-36.1	
Mid Channel (1880MHz)									
3.760	-8.9	H	3.0	38.0	1.0	-45.9	-13.0	-32.9	
5.640	-9.9	H	3.0	37.3	1.0	-46.3	-13.0	-33.3	
3.760	-9.6	V	3.0	38.0	1.0	-46.6	-13.0	-33.6	
5.640	-9.6	V	3.0	37.3	1.0	-46.0	-13.0	-33.0	
High Channel (1907.5MHz)									
3.815	-12.0	H	3.0	37.9	1.0	-48.9	-13.0	-35.9	
5.723	-11.2	H	3.0	37.3	1.0	-47.5	-13.0	-34.5	
3.815	-11.6	V	3.0	37.9	1.0	-48.6	-13.0	-35.6	
5.723	-11.3	V	3.0	37.3	1.0	-47.6	-13.0	-34.6	

Rev. 03.03.14

UAT 16QAM EIRP POWER FOR LTE BAND 2 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 5MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5 HP Filter		Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1852.5MHz)									
3.705	-13.0	H	3.0	38.0	1.0	-50.0	-13.0	-37.0	
5.558	-14.1	H	3.0	37.4	1.0	-50.5	-13.0	-37.5	
3.705	-11.1	V	3.0	38.0	1.0	-48.1	-13.0	-35.1	
5.558	-13.6	V	3.0	37.4	1.0	-49.9	-13.0	-36.9	
Mid Channel (1880MHz)									
3.760	-9.8	H	3.0	38.0	1.0	-46.8	-13.0	-33.8	
5.640	-11.6	H	3.0	37.3	1.0	-47.9	-13.0	-34.9	
3.760	-11.2	V	3.0	38.0	1.0	-48.2	-13.0	-35.2	
5.640	-12.8	V	3.0	37.3	1.0	-49.1	-13.0	-36.1	
High Channel (1907.5MHz)									
3.815	-12.9	H	3.0	37.9	1.0	-49.9	-13.0	-36.9	
5.723	-12.6	H	3.0	37.3	1.0	-48.9	-13.0	-35.9	
3.815	-12.8	V	3.0	37.9	1.0	-49.8	-13.0	-36.8	
5.723	-13.3	V	3.0	37.3	1.0	-49.7	-13.0	-36.7	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 10MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5 HP Filter		Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1855MHz)									
3.710	-8.2	H	3.0	38.0	1.0	-45.2	-13.0	-32.2	
5.565	-11.6	H	3.0	37.4	1.0	-47.9	-13.0	-34.9	
3.710	-9.1	V	3.0	38.0	1.0	-46.2	-13.0	-33.2	
5.565	-12.9	V	3.0	37.4	1.0	-49.2	-13.0	-36.2	
Mid Channel (1880MHz)									
3.760	-10.0	H	3.0	38.0	1.0	-47.0	-13.0	-34.0	
5.640	-12.3	H	3.0	37.3	1.0	-48.7	-13.0	-35.7	
3.760	-13.0	V	3.0	38.0	1.0	-50.0	-13.0	-37.0	
5.640	-12.6	V	3.0	37.3	1.0	-49.0	-13.0	-36.0	
High Channel (1905MHz)									
3.810	-13.1	H	3.0	37.9	1.0	-50.1	-13.0	-37.1	
5.715	-11.6	H	3.0	37.3	1.0	-47.9	-13.0	-34.9	
3.810	-14.0	V	3.0	37.9	1.0	-50.9	-13.0	-37.9	
5.715	-12.2	V	3.0	37.3	1.0	-48.6	-13.0	-35.6	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 2 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 10MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5 HP Filter		Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1855MHz)									
3.710	-8.8	H	3.0	38.0	1.0	-45.8	-13.0	-32.8	
5.565	-12.8	H	3.0	37.4	1.0	-49.1	-13.0	-36.1	
3.710	-9.9	V	3.0	38.0	1.0	-46.9	-13.0	-33.9	
5.565	-14.1	V	3.0	37.4	1.0	-50.5	-13.0	-37.5	
Mid Channel (1880MHz)									
3.760	-11.0	H	3.0	38.0	1.0	-48.0	-13.0	-35.0	
5.640	-13.6	H	3.0	37.3	1.0	-50.0	-13.0	-37.0	
3.760	-14.5	V	3.0	38.0	1.0	-51.5	-13.0	-38.5	
5.640	-14.1	V	3.0	37.3	1.0	-50.5	-13.0	-37.5	
High Channel (1905MHz)									
3.810	-14.1	H	3.0	37.9	1.0	-51.1	-13.0	-38.1	
5.715	-12.1	H	3.0	37.3	1.0	-48.4	-13.0	-35.4	
3.810	-14.6	V	3.0	37.9	1.0	-51.5	-13.0	-38.5	
5.715	-12.9	V	3.0	37.3	1.0	-49.2	-13.0	-36.2	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 15MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1857.5MHz)									
3.715	-12.1	H	3.0	38.0	1.0	-49.1	-13.0	-36.1	
5.573	-13.8	H	3.0	37.4	1.0	-50.2	-13.0	-37.2	
3.715	-14.7	V	3.0	38.0	1.0	-51.7	-13.0	-38.7	
5.573	-14.3	V	3.0	37.4	1.0	-50.7	-13.0	-37.7	
Mid Channel (1880MHz)									
3.760	-13.0	H	3.0	38.0	1.0	-50.0	-13.0	-37.0	
5.640	-14.3	H	3.0	37.3	1.0	-50.7	-13.0	-37.7	
3.760	-12.7	V	3.0	38.0	1.0	-49.7	-13.0	-36.7	
5.640	-14.1	V	3.0	37.3	1.0	-50.5	-13.0	-37.5	
High Channel (1902.5MHz)									
3.805	-14.0	H	3.0	38.0	1.0	-50.9	-13.0	-37.9	
5.708	-15.1	H	3.0	37.3	1.0	-51.5	-13.0	-38.5	
3.805	-15.6	V	3.0	38.0	1.0	-52.5	-13.0	-39.5	
5.708	-14.5	V	3.0	37.3	1.0	-50.8	-13.0	-37.8	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 2 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 15MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1857.5MHz)									
3.715	-13.5	H	3.0	38.0	1.0	-50.6	-13.0	-37.6	
5.573	-14.2	H	3.0	37.4	1.0	-50.6	-13.0	-37.6	
3.715	-16.7	V	3.0	38.0	1.0	-53.7	-13.0	-40.7	
5.573	-15.2	V	3.0	37.4	1.0	-51.6	-13.0	-38.6	
Mid Channel (1880MHz)									
3.760	-15.0	H	3.0	38.0	1.0	-52.0	-13.0	-39.0	
5.640	-15.5	H	3.0	37.3	1.0	-51.9	-13.0	-38.9	
3.760	-14.1	V	3.0	38.0	1.0	-51.1	-13.0	-38.1	
5.640	-15.2	V	3.0	37.3	1.0	-51.5	-13.0	-38.5	
High Channel (1902.5MHz)									
3.805	-14.9	H	3.0	38.0	1.0	-51.8	-13.0	-38.8	
5.708	-15.7	H	3.0	37.3	1.0	-52.0	-13.0	-39.0	
3.805	-16.3	V	3.0	38.0	1.0	-53.3	-13.0	-40.3	
5.708	-15.4	V	3.0	37.3	1.0	-51.7	-13.0	-38.7	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 20MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1860MHz)									
3.720	-10.6	H	3.0	38.0	1.0	-47.6	-13.0	-34.6	
5.580	-10.4	H	3.0	37.4	1.0	-46.8	-13.0	-33.8	
3.720	-11.6	V	3.0	38.0	1.0	-48.7	-13.0	-35.7	
5.580	-14.3	V	3.0	37.4	1.0	-50.6	-13.0	-37.6	
Mid Channel (1880MHz)									
3.760	-11.5	H	3.0	38.0	1.0	-48.5	-13.0	-35.5	
5.640	-11.5	H	3.0	37.3	1.0	-47.8	-13.0	-34.8	
3.760	-12.0	V	3.0	38.0	1.0	-49.0	-13.0	-36.0	
5.640	-11.6	V	3.0	37.3	1.0	-48.0	-13.0	-35.0	
High Channel (1900MHz)									
3.800	-10.9	H	3.0	38.0	1.0	-47.9	-13.0	-34.9	
5.700	-12.0	H	3.0	37.3	1.0	-48.4	-13.0	-35.4	
3.800	-11.4	V	3.0	38.0	1.0	-48.3	-13.0	-35.3	
5.700	-11.5	V	3.0	37.3	1.0	-47.9	-13.0	-34.9	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 2, 20MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1860MHz)									
3.720	-11.7	H	3.0	38.0	1.0	-48.8	-13.0	-35.8	
5.580	-11.3	H	3.0	37.4	1.0	-47.7	-13.0	-34.7	
3.720	-12.8	V	3.0	38.0	1.0	-49.9	-13.0	-36.9	
5.580	-15.1	V	3.0	37.4	1.0	-51.5	-13.0	-38.5	
Mid Channel (1880MHz)									
3.760	-12.9	H	3.0	38.0	1.0	-49.8	-13.0	-36.8	
5.640	-12.1	H	3.0	37.3	1.0	-48.5	-13.0	-35.5	
3.760	-12.5	V	3.0	38.0	1.0	-49.5	-13.0	-36.5	
5.640	-12.4	V	3.0	37.3	1.0	-48.8	-13.0	-35.8	
High Channel (1900MHz)									
3.800	-12.0	H	3.0	38.0	1.0	-49.0	-13.0	-36.0	
5.700	-12.6	H	3.0	37.3	1.0	-48.9	-13.0	-35.9	
3.800	-13.1	V	3.0	38.0	1.0	-50.0	-13.0	-37.0	
5.700	-12.7	V	3.0	37.3	1.0	-49.0	-13.0	-36.0	
Rev. 03.03.14									

9.3.2. LTE BAND 4

LAT QPSK EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 1.4MHz QPSK							
<u>Test Equipment:</u>									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1710.7MHz)									
3.421	-14.2	H	3.0	38.3	1.0	-51.5	-13.0	-38.5	
5.132	-6.1	H	3.0	37.5	1.0	-42.5	-13.0	-29.5	
3.421	-14.0	V	3.0	38.3	1.0	-51.3	-13.0	-38.3	
5.132	-10.2	V	3.0	37.5	1.0	-46.7	-13.0	-33.7	
Mid Channel (1732.5MHz)									
3.465	-14.3	H	3.0	38.3	1.0	-51.6	-13.0	-38.6	
5.198	-6.0	H	3.0	37.5	1.0	-42.4	-13.0	-29.4	
3.465	-14.2	V	3.0	38.3	1.0	-51.5	-13.0	-38.5	
5.198	-11.1	V	3.0	37.5	1.0	-47.6	-13.0	-34.6	
High Channel (1754.3MHz)									
3.509	-13.5	H	3.0	38.2	1.0	-50.8	-13.0	-37.8	
5.263	-5.9	H	3.0	37.4	1.0	-42.3	-13.0	-29.3	
3.509	-13.7	V	3.0	38.2	1.0	-51.0	-13.0	-38.0	
5.263	-10.4	V	3.0	37.4	1.0	-46.9	-13.0	-33.9	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 1.4MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1710.7MHz)									
3.421	-16.8	H	3.0	38.3	1.0	-54.1	-13.0	-41.1	
5.132	-8.0	H	3.0	37.5	1.0	-44.4	-13.0	-31.4	
3.421	-16.3	V	3.0	38.3	1.0	-53.6	-13.0	-40.6	
5.132	-12.4	V	3.0	37.5	1.0	-48.9	-13.0	-35.9	
Mid Channel (1732.5MHz)									
3.465	-16.4	H	3.0	38.3	1.0	-53.7	-13.0	-40.7	
5.198	-7.9	H	3.0	37.5	1.0	-44.3	-13.0	-31.3	
3.465	-16.7	V	3.0	38.3	1.0	-54.0	-13.0	-41.0	
5.198	-13.4	V	3.0	37.5	1.0	-49.9	-13.0	-36.9	
High Channel (1754.3MHz)									
3.509	-15.1	H	3.0	38.2	1.0	-52.4	-13.0	-39.4	
5.263	-7.8	H	3.0	37.4	1.0	-44.2	-13.0	-31.2	
3.509	-16.3	V	3.0	38.2	1.0	-53.5	-13.0	-40.5	
5.263	-12.7	V	3.0	37.4	1.0	-49.1	-13.0	-36.1	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 3MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1711.5MHz)									
3.423	-14.4	H	3.0	38.3	1.0	-51.7	-13.0	-38.7	
5.135	-4.0	H	3.0	37.5	1.0	-40.5	-13.0	-27.5	
3.423	-15.1	V	3.0	38.3	1.0	-52.4	-13.0	-39.4	
5.135	-7.6	V	3.0	37.5	1.0	-44.1	-13.0	-31.1	
Mid Channel (1732.5MHz)									
3.465	-13.4	H	3.0	38.3	1.0	-50.7	-13.0	-37.7	
5.198	-4.4	H	3.0	37.5	1.0	-40.8	-13.0	-27.8	
3.465	-13.4	V	3.0	38.3	1.0	-50.7	-13.0	-37.7	
5.198	-11.8	V	3.0	37.5	1.0	-48.2	-13.0	-35.2	
High Channel (1753.5MHz)									
3.507	-13.6	H	3.0	38.2	1.0	-50.8	-13.0	-37.8	
5.261	-5.5	H	3.0	37.4	1.0	-42.0	-13.0	-29.0	
3.507	-14.3	V	3.0	38.2	1.0	-51.5	-13.0	-38.5	
5.261	-12.5	V	3.0	37.4	1.0	-48.9	-13.0	-35.9	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1711.5MHz)									
3.423	-15.8	H	3.0	38.3	1.0	-53.1	-13.0	-40.1	
5.135	-6.3	H	3.0	37.5	1.0	-42.7	-13.0	-29.7	
3.423	-17.3	V	3.0	38.3	1.0	-54.6	-13.0	-41.6	
5.135	-8.4	V	3.0	37.5	1.0	-44.9	-13.0	-31.9	
Mid Channel (1732.5MHz)									
3.465	-15.1	H	3.0	38.3	1.0	-52.4	-13.0	-39.4	
5.198	-6.1	H	3.0	37.5	1.0	-42.6	-13.0	-29.6	
3.465	-15.4	V	3.0	38.3	1.0	-52.6	-13.0	-39.6	
5.198	-13.7	V	3.0	37.5	1.0	-50.1	-13.0	-37.1	
High Channel (1753.5MHz)									
3.507	-14.7	H	3.0	38.2	1.0	-51.9	-13.0	-38.9	
5.261	-7.1	H	3.0	37.4	1.0	-43.6	-13.0	-30.6	
3.507	-16.1	V	3.0	38.2	1.0	-53.3	-13.0	-40.3	
5.261	-14.5	V	3.0	37.4	1.0	-51.0	-13.0	-38.0	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 5MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1712.5MHz)									
3.425	-4.6	H	3.0	38.3	1.0	-41.9	-13.0	-28.9	
5.138	-4.0	H	3.0	37.5	1.0	-40.5	-13.0	-27.5	
3.425	-4.5	V	3.0	38.3	1.0	-41.8	-13.0	-28.8	
5.138	-6.5	V	3.0	37.5	1.0	-43.0	-13.0	-30.0	
Mid Channel (1732.5MHz)									
3.465	-4.7	H	3.0	38.3	1.0	-42.0	-13.0	-29.0	
5.198	-3.1	H	3.0	37.5	1.0	-39.5	-13.0	-26.5	
3.465	-4.1	V	3.0	38.3	1.0	-41.3	-13.0	-28.3	
5.198	-3.9	V	3.0	37.5	1.0	-40.3	-13.0	-27.3	
High Channel (1752.5MHz)									
3.505	-5.1	H	3.0	38.2	1.0	-42.3	-13.0	-29.3	
5.258	-3.1	H	3.0	37.4	1.0	-39.5	-13.0	-26.5	
3.505	-6.5	V	3.0	38.2	1.0	-43.7	-13.0	-30.7	
5.258	-6.1	V	3.0	37.4	1.0	-42.6	-13.0	-29.6	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 5MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1712.5MHz)									
3.425	-4.8	H	3.0	38.3	1.0	-42.1	-13.0	-29.1	
5.138	-4.4	H	3.0	37.5	1.0	-40.9	-13.0	-27.9	
3.425	-4.9	V	3.0	38.3	1.0	-42.2	-13.0	-29.2	
5.138	-6.6	V	3.0	37.5	1.0	-43.1	-13.0	-30.1	
Mid Channel (1732.5MHz)									
3.465	-5.0	H	3.0	38.3	1.0	-42.3	-13.0	-29.3	
5.198	-3.3	H	3.0	37.5	1.0	-39.8	-13.0	-26.8	
3.465	-4.4	V	3.0	38.3	1.0	-41.6	-13.0	-28.6	
5.198	-4.2	V	3.0	37.5	1.0	-40.7	-13.0	-27.7	
High Channel (1752.5MHz)									
3.505	-5.4	H	3.0	38.2	1.0	-42.7	-13.0	-29.7	
5.258	-3.3	H	3.0	37.4	1.0	-39.7	-13.0	-26.7	
3.505	-6.6	V	3.0	38.2	1.0	-43.9	-13.0	-30.9	
5.258	-6.3	V	3.0	37.4	1.0	-42.8	-13.0	-29.8	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 10MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F ▾		3m Chamber F ▾		2.5G HP Filter ▾		Part 27 ▾			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1715MHz)									
3.430	-7.9	H	3.0	36.4	1.0	-43.2	-13.0	-30.2	
5.145	-5.1	H	3.0	35.5	1.0	-39.6	-13.0	-26.6	
3.430	-8.4	V	3.0	36.4	1.0	-43.8	-13.0	-30.8	
5.145	-5.7	V	3.0	35.5	1.0	-40.2	-13.0	-27.2	
Mid Channel (1732.5MHz)									
3.465	-6.7	H	3.0	36.4	1.0	-42.0	-13.0	-29.0	
5.198	-4.8	H	3.0	35.5	1.0	-39.3	-13.0	-26.3	
3.465	-7.4	V	3.0	36.4	1.0	-42.8	-13.0	-29.8	
5.198	-5.0	V	3.0	35.5	1.0	-39.5	-13.0	-26.5	
High Channel (1750MHz)									
3.500	-6.6	H	3.0	36.4	1.0	-42.0	-13.0	-29.0	
5.250	-5.1	H	3.0	35.5	1.0	-39.6	-13.0	-26.6	
3.500	-6.9	V	3.0	36.4	1.0	-42.2	-13.0	-29.2	
5.250	-4.7	V	3.0	35.5	1.0	-39.2	-13.0	-26.2	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 10MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1715MHz)									
3.430	-8.0	H	3.0	36.4	1.0	-43.4	-13.0	-30.4	
5.145	-5.3	H	3.0	35.5	1.0	-39.8	-13.0	-26.8	
3.430	-8.6	V	3.0	36.4	1.0	-44.0	-13.0	-31.0	
5.145	-6.1	V	3.0	35.5	1.0	-40.6	-13.0	-27.6	
Mid Channel (1732.5MHz)									
3.465	-6.9	H	3.0	36.4	1.0	-42.3	-13.0	-29.3	
5.198	-5.0	H	3.0	35.5	1.0	-39.5	-13.0	-26.5	
3.465	-7.4	V	3.0	36.4	1.0	-42.8	-13.0	-29.8	
5.198	-5.1	V	3.0	35.5	1.0	-39.6	-13.0	-26.6	
High Channel (1750MHz)									
3.500	-6.9	H	3.0	36.4	1.0	-42.3	-13.0	-29.3	
5.250	-6.3	H	3.0	35.5	1.0	-40.8	-13.0	-27.8	
3.500	-7.4	V	3.0	36.4	1.0	-42.7	-13.0	-29.7	
5.250	-4.8	V	3.0	35.5	1.0	-39.3	-13.0	-26.3	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 15MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1717.5MHz)									
3.435	-9.3	H	3.0	38.3	1.0	-46.6	-13.0	-33.6	
5.153	-6.5	H	3.0	37.5	1.0	-42.9	-13.0	-29.9	
3.435	-8.9	V	3.0	38.3	1.0	-46.2	-13.0	-33.2	
5.153	-5.0	V	3.0	37.5	1.0	-41.5	-13.0	-28.5	
Mid Channel (1732.5MHz)									
3.465	-8.6	H	3.0	38.3	1.0	-45.9	-13.0	-32.9	
5.198	-5.3	H	3.0	37.5	1.0	-41.8	-13.0	-28.8	
3.470	-8.3	V	3.0	38.3	1.0	-45.5	-13.0	-32.5	
5.198	-5.7	V	3.0	37.5	1.0	-42.1	-13.0	-29.1	
High Channel (1747.5MHz)									
3.495	-7.6	H	3.0	38.2	1.0	-44.9	-13.0	-31.9	
5.243	-5.3	H	3.0	37.4	1.0	-41.8	-13.0	-28.8	
3.495	-8.5	V	3.0	38.2	1.0	-45.7	-13.0	-32.7	
5.243	-5.1	V	3.0	37.4	1.0	-41.5	-13.0	-28.5	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 15MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1717.5MHz)									
3.435	-9.4	H	3.0	38.3	1.0	-46.7	-13.0	-33.7	
5.153	-6.7	H	3.0	37.5	1.0	-43.2	-13.0	-30.2	
3.435	-9.1	V	3.0	38.3	1.0	-46.4	-13.0	-33.4	
5.153	-5.3	V	3.0	37.5	1.0	-41.7	-13.0	-28.7	
Mid Channel (1732.5MHz)									
3.465	-8.7	H	3.0	38.3	1.0	-46.0	-13.0	-33.0	
5.198	-5.5	H	3.0	37.5	1.0	-41.9	-13.0	-28.9	
3.470	-8.3	V	3.0	38.3	1.0	-45.5	-13.0	-32.5	
5.198	-5.9	V	3.0	37.5	1.0	-42.4	-13.0	-29.4	
High Channel (1747.5MHz)									
3.495	-7.8	H	3.0	38.2	1.0	-45.0	-13.0	-32.0	
5.243	-5.7	H	3.0	37.4	1.0	-42.1	-13.0	-29.1	
3.495	-8.9	V	3.0	38.2	1.0	-46.1	-13.0	-33.1	
5.243	-7.0	V	3.0	37.4	1.0	-43.5	-13.0	-30.5	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 20MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1720MHz)									
3.44	-5.2	H	3.0	38.3	1.0	-42.4	-13.0	-29.4	
5.16	-5.9	H	3.0	37.5	1.0	-42.4	-13.0	-29.4	
3.44	-7.1	V	3.0	38.3	1.0	-44.4	-13.0	-31.4	
5.16	-6.9	V	3.0	37.5	1.0	-43.4	-13.0	-30.4	
Mid Channel (1732.5MHz)									
3.47	-6.2	H	3.0	38.3	1.0	-43.5	-13.0	-30.5	
5.20	-5.4	H	3.0	37.5	1.0	-41.8	-13.0	-28.8	
3.47	-7.5	V	3.0	38.3	1.0	-44.8	-13.0	-31.8	
5.20	-6.6	V	3.0	37.5	1.0	-43.0	-13.0	-30.0	
High Channel (1745MHz)									
3.49	-5.3	H	3.0	38.2	1.0	-42.5	-13.0	-29.5	
5.24	-5.4	H	3.0	37.4	1.0	-41.8	-13.0	-28.8	
3.49	-7.5	V	3.0	38.2	1.0	-44.8	-13.0	-31.8	
5.24	-5.8	V	3.0	37.4	1.0	-42.2	-13.0	-29.2	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 20MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1720MHz)									
3.44	-7.7	H	3.0	38.3	1.0	-45.0	-13.0	-32.0	
5.16	-6.2	H	3.0	37.5	1.0	-42.7	-13.0	-29.7	
3.44	-7.4	V	3.0	38.3	1.0	-44.7	-13.0	-31.7	
5.16	-6.8	V	3.0	37.5	1.0	-43.2	-13.0	-30.2	
Mid Channel (1732.5MHz)									
3.47	-7.9	H	3.0	38.3	1.0	-45.2	-13.0	-32.2	
5.20	-5.8	H	3.0	37.5	1.0	-42.2	-13.0	-29.2	
3.47	-8.4	V	3.0	38.3	1.0	-45.6	-13.0	-32.6	
5.20	-6.6	V	3.0	37.5	1.0	-43.0	-13.0	-30.0	
High Channel (1745MHz)									
3.49	-7.7	H	3.0	38.2	1.0	-45.0	-13.0	-32.0	
5.24	-5.7	H	3.0	37.4	1.0	-42.2	-13.0	-29.2	
3.49	-8.0	V	3.0	38.2	1.0	-45.2	-13.0	-32.2	
5.24	-6.4	V	3.0	37.4	1.0	-42.8	-13.0	-29.8	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

Above 1GHz Substitution Measurement

Project #: 14U17676
Date: 06/21/14
Test Engineer: Macie
Configuration: EUT only
Mode: LTE Band 4, 1.4MHz QPSK

Test Equipment:
Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
3m Chamber D

Pre-amplifier
3m Chamber D

Filter
2.5G HP Filter

Limit
Part 27

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1710.7MHz)									
3.421	-15.4	H	3.0	38.3	1.0	-52.7	-13.0	-39.7	
5.132	-6.9	H	3.0	37.5	1.0	-43.4	-13.0	-30.4	
3.421	-15.1	V	3.0	38.3	1.0	-52.4	-13.0	-39.4	
5.132	-11.5	V	3.0	37.5	1.0	-48.0	-13.0	-35.0	
Mid Channel (1732.5MHz)									
3.465	-15.6	H	3.0	38.3	1.0	-52.8	-13.0	-39.8	
5.198	-7.2	H	3.0	37.5	1.0	-43.6	-13.0	-30.6	
3.465	-15.8	V	3.0	38.3	1.0	-53.1	-13.0	-40.1	
5.198	-12.6	V	3.0	37.5	1.0	-49.0	-13.0	-36.0	
High Channel (1754.3MHz)									
3.509	-14.4	H	3.0	38.2	1.0	-51.6	-13.0	-38.6	
5.263	-7.2	H	3.0	37.4	1.0	-43.6	-13.0	-30.6	
3.509	-15.2	V	3.0	38.2	1.0	-52.5	-13.0	-39.5	
5.263	-12.1	V	3.0	37.4	1.0	-48.6	-13.0	-35.6	

Rev. 03.03.14

UAT 16QAM EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/21/14
Test Engineer: Macie
Configuration: EUT only
Mode: LTE Band 4, 1.4MHz 16QAM

Test Equipment:
 Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber D

Pre-amplifier
 3m Chamber D

Filter
 2.5G HP Filter

Limit
 Part 27

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1710.7MHz)									
3.421	-16.3	H	3.0	38.3	1.0	-53.6	-13.0	-40.6	
5.132	-7.8	H	3.0	37.5	1.0	-44.3	-13.0	-31.3	
3.421	-16.4	V	3.0	38.3	1.0	-53.7	-13.0	-40.7	
5.132	-12.1	V	3.0	37.5	1.0	-48.6	-13.0	-35.6	
Mid Channel (1732.5MHz)									
3.465	-16.5	H	3.0	38.3	1.0	-53.7	-13.0	-40.7	
5.198	-7.9	H	3.0	37.5	1.0	-44.3	-13.0	-31.3	
3.465	-16.7	V	3.0	38.3	1.0	-54.0	-13.0	-41.0	
5.198	-13.3	V	3.0	37.5	1.0	-49.7	-13.0	-36.7	
High Channel (1754.3MHz)									
3.509	-15.2	H	3.0	38.2	1.0	-52.4	-13.0	-39.4	
5.263	-8.1	H	3.0	37.4	1.0	-44.5	-13.0	-31.5	
3.509	-15.9	V	3.0	38.2	1.0	-53.1	-13.0	-40.1	
5.263	-13.2	V	3.0	37.4	1.0	-49.6	-13.0	-36.6	

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UAT QPSK EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 3MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1711.5MHz)									
3.42	-13.2	H	3.0	38.3	1.0	-50.5	-13.0	-37.5	
5.13	-5.0	H	3.0	37.5	1.0	-41.5	-13.0	-28.5	
3.42	-14.6	V	3.0	38.3	1.0	-51.9	-13.0	-38.9	
5.13	-8.5	V	3.0	37.5	1.0	-45.0	-13.0	-32.0	
Mid Channel (1732.5MHz)									
3.47	-13.3	H	3.0	38.3	1.0	-50.6	-13.0	-37.6	
5.20	-6.0	H	3.0	37.5	1.0	-42.4	-13.0	-29.4	
3.47	-13.0	V	3.0	38.3	1.0	-50.2	-13.0	-37.2	
5.20	-10.5	V	3.0	37.5	1.0	-47.0	-13.0	-34.0	
High Channel (1753.5MHz)									
3.51	-14.0	H	3.0	38.2	1.0	-51.2	-13.0	-38.2	
5.26	-6.6	H	3.0	37.4	1.0	-43.0	-13.0	-30.0	
3.51	-13.0	V	3.0	38.2	1.0	-50.2	-13.0	-37.2	
5.26	-11.4	V	3.0	37.4	1.0	-47.9	-13.0	-34.9	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 4 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1711.5MHz)									
3.42	-14.3	H	3.0	38.3	1.0	-51.6	-13.0	-38.6	
5.13	-6.2	H	3.0	37.5	1.0	-42.6	-13.0	-29.6	
3.42	-15.0	V	3.0	38.3	1.0	-52.3	-13.0	-39.3	
5.13	-9.2	V	3.0	37.5	1.0	-45.7	-13.0	-32.7	
Mid Channel (1732.5MHz)									
3.47	-14.5	H	3.0	38.3	1.0	-51.7	-13.0	-38.7	
5.20	-7.3	H	3.0	37.5	1.0	-43.7	-13.0	-30.7	
3.47	-13.9	V	3.0	38.3	1.0	-51.1	-13.0	-38.1	
5.20	-11.3	V	3.0	37.5	1.0	-47.8	-13.0	-34.8	
High Channel (1753.5MHz)									
3.51	-15.0	H	3.0	38.2	1.0	-52.3	-13.0	-39.3	
5.26	-7.8	H	3.0	37.4	1.0	-44.3	-13.0	-31.3	
3.51	-14.0	V	3.0	38.2	1.0	-51.2	-13.0	-38.2	
5.26	-12.4	V	3.0	37.4	1.0	-48.9	-13.0	-35.9	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/20/14
Test Engineer: Macie
Configuration: EUT only
Mode: LTE Band 4, 5MHz QPSK

Test Equipment:
Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
3m Chamber D

Pre-amplifier
3m Chamber D

Filter
2.5G HP Filter

Limit
Part 27

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamplifier	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1712.5MHz)									
3.425	-5.4	H	3.0	38.3	1.0	-42.7	-13.0	-29.7	
5.138	-4.8	H	3.0	37.5	1.0	-41.3	-13.0	-28.3	
3.425	-5.2	V	3.0	38.3	1.0	-42.5	-13.0	-29.5	
5.138	-7.4	V	3.0	37.5	1.0	-43.9	-13.0	-30.9	
Mid Channel (1732.5MHz)									
3.465	-5.3	H	3.0	38.3	1.0	-42.6	-13.0	-29.6	
5.198	-4.3	H	3.0	37.5	1.0	-40.7	-13.0	-27.7	
3.465	-5.5	V	3.0	38.3	1.0	-42.7	-13.0	-29.7	
5.198	-5.0	V	3.0	37.5	1.0	-41.5	-13.0	-28.5	
High Channel (1752.5MHz)									
3.505	-6.1	H	3.0	38.2	1.0	-43.4	-13.0	-30.4	
5.258	-4.3	H	3.0	37.4	1.0	-40.8	-13.0	-27.8	
3.505	-7.3	V	3.0	38.2	1.0	-44.5	-13.0	-31.5	
5.258	-7.3	V	3.0	37.4	1.0	-43.8	-13.0	-30.8	

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UAT 16QAM EIRP POWER FOR LTE BAND 4 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 5MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1712.5MHz)									
3.425	-7.1	H	3.0	38.3	1.0	-44.4	-13.0	-31.4	
5.138	-6.3	H	3.0	37.5	1.0	-42.8	-13.0	-29.8	
3.425	-7.7	V	3.0	38.3	1.0	-45.0	-13.0	-32.0	
5.138	-8.6	V	3.0	37.5	1.0	-45.1	-13.0	-32.1	
Mid Channel (1732.5MHz)									
3.465	-7.2	H	3.0	38.3	1.0	-44.5	-13.0	-31.5	
5.198	-5.1	H	3.0	37.5	1.0	-41.6	-13.0	-28.6	
3.465	-6.3	V	3.0	38.3	1.0	-43.5	-13.0	-30.5	
5.198	-5.8	V	3.0	37.5	1.0	-42.2	-13.0	-29.2	
High Channel (1752.5MHz)									
3.505	-7.6	H	3.0	38.2	1.0	-44.8	-13.0	-31.8	
5.258	-6.1	H	3.0	37.4	1.0	-42.5	-13.0	-29.5	
3.505	-8.9	V	3.0	38.2	1.0	-46.1	-13.0	-33.1	
5.258	-7.5	V	3.0	37.4	1.0	-44.0	-13.0	-31.0	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 10MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1715MHz)									
3.430	-7.8	H	3.0	36.4	1.0	-43.2	-13.0	-30.2	
5.145	-4.9	H	3.0	35.5	1.0	-39.4	-13.0	-26.4	
3.430	-8.2	V	3.0	36.4	1.0	-43.6	-13.0	-30.6	
5.145	-6.8	V	3.0	35.5	1.0	-41.3	-13.0	-28.3	
Mid Channel (1732.5MHz)									
3.465	-8.0	H	3.0	36.4	1.0	-43.4	-13.0	-30.4	
5.198	-5.2	H	3.0	35.5	1.0	-39.7	-13.0	-26.7	
3.465	-7.7	V	3.0	36.4	1.0	-43.0	-13.0	-30.0	
5.198	-5.5	V	3.0	35.5	1.0	-40.0	-13.0	-27.0	
High Channel (1750MHz)									
3.500	-7.6	H	3.0	36.4	1.0	-43.0	-13.0	-30.0	
5.250	-6.2	H	3.0	35.5	1.0	-40.7	-13.0	-27.7	
3.500	-8.1	V	3.0	36.4	1.0	-43.4	-13.0	-30.4	
5.250	-5.7	V	3.0	35.5	1.0	-40.2	-13.0	-27.2	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 4 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 10MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1715MHz)									
3.430	-8.7	H	3.0	36.4	1.0	-44.1	-13.0	-31.1	
5.145	-6.3	H	3.0	35.5	1.0	-40.8	-13.0	-27.8	
3.430	-9.7	V	3.0	36.4	1.0	-45.0	-13.0	-32.0	
5.145	-8.3	V	3.0	35.5	1.0	-42.8	-13.0	-29.8	
Mid Channel (1732.5MHz)									
3.465	-9.5	H	3.0	36.4	1.0	-44.9	-13.0	-31.9	
5.198	-6.6	H	3.0	35.5	1.0	-41.1	-13.0	-28.1	
3.465	-8.6	V	3.0	36.4	1.0	-44.0	-13.0	-31.0	
5.198	-7.2	V	3.0	35.5	1.0	-41.6	-13.0	-28.6	
High Channel (1750MHz)									
3.500	-8.8	H	3.0	36.4	1.0	-44.2	-13.0	-31.2	
5.250	-7.8	H	3.0	35.5	1.0	-42.3	-13.0	-29.3	
3.500	-9.7	V	3.0	36.4	1.0	-45.0	-13.0	-32.0	
5.250	-6.8	V	3.0	35.5	1.0	-41.3	-13.0	-28.3	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement

Project #: 14U17676

Date: 06/21/14

Test Engineer: Macie

Configuration: EUT only

Mode: LTE Band 4, 15MHz QPSK

Test Equipment:

Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
3m Chamber D

Pre-amplifier
3m Chamber D

Filter
2.5G HP Filter

Limit
Part 27

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1717.5MHz)									
3.435	-10.6	H	3.0	38.3	1.0	-47.9	-13.0	-34.9	
5.153	-5.7	H	3.0	37.5	1.0	-42.2	-13.0	-29.2	
3.435	-10.3	V	3.0	38.3	1.0	-47.6	-13.0	-34.6	
5.153	-5.2	V	3.0	37.5	1.0	-41.6	-13.0	-28.6	
Mid Channel (1732.5MHz)									
3.465	-9.1	H	3.0	38.3	1.0	-46.4	-13.0	-33.4	
5.198	-5.4	H	3.0	37.5	1.0	-41.9	-13.0	-28.9	
3.470	-8.3	V	3.0	38.3	1.0	-45.5	-13.0	-32.5	
5.198	-6.6	V	3.0	37.5	1.0	-43.0	-13.0	-30.0	
High Channel (1747.5MHz)									
3.495	-8.5	H	3.0	38.2	1.0	-45.8	-13.0	-32.8	
5.243	-6.2	H	3.0	37.4	1.0	-42.7	-13.0	-29.7	
3.495	-9.2	V	3.0	38.2	1.0	-46.5	-13.0	-33.5	
5.243	-6.3	V	3.0	37.4	1.0	-42.7	-13.0	-29.7	

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UAT 16QAM EIRP POWER FOR LTE BAND 4 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 15MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1717.5MHz)									
3.435	-11.8	H	3.0	38.3	1.0	-49.0	-13.0	-36.0	
5.153	-7.1	H	3.0	37.5	1.0	-43.6	-13.0	-30.6	
3.435	-11.6	V	3.0	38.3	1.0	-48.9	-13.0	-35.9	
5.153	-6.0	V	3.0	37.5	1.0	-42.5	-13.0	-29.5	
Mid Channel (1732.5MHz)									
3.465	-11.1	H	3.0	38.3	1.0	-48.4	-13.0	-35.4	
5.198	-5.9	H	3.0	37.5	1.0	-42.3	-13.0	-29.3	
3.470	-9.3	V	3.0	38.3	1.0	-46.5	-13.0	-33.5	
5.198	-7.5	V	3.0	37.5	1.0	-43.9	-13.0	-30.9	
High Channel (1747.5MHz)									
3.495	-9.5	H	3.0	38.2	1.0	-46.8	-13.0	-33.8	
5.243	-6.9	H	3.0	37.4	1.0	-43.4	-13.0	-30.4	
3.495	-10.4	V	3.0	38.2	1.0	-47.6	-13.0	-34.6	
5.243	-7.6	V	3.0	37.4	1.0	-44.0	-13.0	-31.0	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 20MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1720MHz)									
3.440	-9.5	H	3.0	38.3	1.0	-46.8	-13.0	-33.8	
5.160	-6.0	H	3.0	37.5	1.0	-42.5	-13.0	-29.5	
3.440	-9.5	V	3.0	38.3	1.0	-46.8	-13.0	-33.8	
5.160	-6.4	V	3.0	37.5	1.0	-42.9	-13.0	-29.9	
Mid Channel (1732.5MHz)									
3.465	-9.6	H	3.0	38.3	1.0	-46.9	-13.0	-33.9	
5.198	-5.4	H	3.0	37.5	1.0	-41.8	-13.0	-28.8	
3.465	-9.2	V	3.0	38.3	1.0	-46.5	-13.0	-33.5	
5.198	-6.4	V	3.0	37.5	1.0	-42.9	-13.0	-29.9	
High Channel (1745MHz)									
3.490	-9.5	H	3.0	38.2	1.0	-46.7	-13.0	-33.7	
5.235	-6.5	H	3.0	37.4	1.0	-42.9	-13.0	-29.9	
3.490	-9.4	V	3.0	38.2	1.0	-46.7	-13.0	-33.7	
5.235	-6.4	V	3.0	37.4	1.0	-42.8	-13.0	-29.8	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 4, 20MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1720MHz)									
3.440	-11.2	H	3.0	38.3	1.0	-48.5	-13.0	-35.5	
5.160	-8.2	H	3.0	37.5	1.0	-44.7	-13.0	-31.7	
3.440	-12.2	V	3.0	38.3	1.0	-49.5	-13.0	-36.5	
5.160	-8.7	V	3.0	37.5	1.0	-45.1	-13.0	-32.1	
Mid Channel (1732.5MHz)									
3.465	-11.3	H	3.0	38.3	1.0	-48.6	-13.0	-35.6	
5.198	-7.0	H	3.0	37.5	1.0	-43.4	-13.0	-30.4	
3.465	-11.0	V	3.0	38.3	1.0	-48.2	-13.0	-35.2	
5.198	-8.6	V	3.0	37.5	1.0	-45.0	-13.0	-32.0	
High Channel (1745MHz)									
3.490	-11.2	H	3.0	38.2	1.0	-48.4	-13.0	-35.4	
5.235	-9.3	H	3.0	37.4	1.0	-45.7	-13.0	-32.7	
3.490	-12.4	V	3.0	38.2	1.0	-49.7	-13.0	-36.7	
5.235	-10.1	V	3.0	37.4	1.0	-46.5	-13.0	-33.5	
Rev. 03.03.14									

9.3.3. LTE BAND 5

LAT QPSK EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 1.4MHz QPSK							
<u>Test Equipment:</u>									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (824.7MHz)									
1.65	-12.3	H	3.0	37.5	1.0	-48.8	-13.0	-35.8	
2.47	-21.0	H	3.0	37.8	1.0	-57.8	-13.0	-44.8	
1.65	-12.1	V	3.0	37.5	1.0	-48.6	-13.0	-35.6	
2.47	-20.0	V	3.0	37.8	1.0	-56.8	-13.0	-43.8	
Mid Channel (836.5MHz)									
1.67	-12.5	H	3.0	37.5	1.0	-49.0	-13.0	-36.0	
2.51	-20.3	H	3.0	37.7	1.0	-57.0	-13.0	-44.0	
1.67	-14.4	V	3.0	37.5	1.0	-50.9	-13.0	-37.9	
2.51	-19.0	V	3.0	37.7	1.0	-55.7	-13.0	-42.7	
High Channel (848.3MHz)									
1.70	-8.8	H	3.0	37.4	1.0	-45.3	-13.0	-32.3	
2.54	-19.8	H	3.0	37.8	1.0	-56.6	-13.0	-43.6	
1.70	-12.2	V	3.0	37.4	1.0	-48.7	-13.0	-35.7	
2.54	-17.6	V	3.0	37.8	1.0	-54.4	-13.0	-41.4	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 1.4MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (824.7MHz)									
1.65	-11.6	H	3.0	37.5	1.0	-48.2	-13.0	-35.2	
2.47	-21.5	H	3.0	37.8	1.0	-58.3	-13.0	-45.3	
1.65	-12.1	V	3.0	37.5	1.0	-48.7	-13.0	-35.7	
2.47	-20.2	V	3.0	37.8	1.0	-57.0	-13.0	-44.0	
Mid Channel (836.5MHz)									
1.67	-12.0	H	3.0	37.5	1.0	-48.5	-13.0	-35.5	
2.51	-21.4	H	3.0	37.7	1.0	-58.1	-13.0	-45.1	
1.67	-14.9	V	3.0	37.5	1.0	-51.4	-13.0	-38.4	
2.51	-19.0	V	3.0	37.7	1.0	-55.7	-13.0	-42.7	
High Channel (848.3MHz)									
1.70	-8.6	H	3.0	37.4	1.0	-45.0	-13.0	-32.0	
2.54	-19.3	H	3.0	37.8	1.0	-56.1	-13.0	-43.1	
1.70	-13.7	V	3.0	37.4	1.0	-50.2	-13.0	-37.2	
2.54	-17.6	V	3.0	37.8	1.0	-54.4	-13.0	-41.4	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 3MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (825.5MHz)									
1.65	-12.2	H	3.0	37.5	1.0	-48.8	-13.0	-35.8	
2.48	-20.8	H	3.0	37.8	1.0	-57.6	-13.0	-44.6	
1.65	-12.8	V	3.0	37.5	1.0	-49.3	-13.0	-36.3	
2.48	-20.5	V	3.0	37.8	1.0	-57.3	-13.0	-44.3	
Mid Channel (836.5MHz)									
1.67	-11.9	H	3.0	37.5	1.0	-48.4	-13.0	-35.4	
2.51	-21.2	H	3.0	37.7	1.0	-57.9	-13.0	-44.9	
1.67	-15.0	V	3.0	37.5	1.0	-51.5	-13.0	-38.5	
2.51	-21.3	V	3.0	37.7	1.0	-58.0	-13.0	-45.0	
High Channel (847.5MHz)									
1.7	-6.5	H	3.0	37.4	1.0	-42.9	-13.0	-29.9	
2.5	-21.1	H	3.0	37.8	1.0	-57.9	-13.0	-44.9	
1.7	-9.1	V	3.0	37.4	1.0	-45.6	-13.0	-32.6	
2.5	-21.4	V	3.0	37.8	1.0	-58.1	-13.0	-45.1	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (825.5MHz)									
1.65	-12.1	H	3.0	37.5	1.0	-48.6	-13.0	-35.6	
2.48	-20.7	H	3.0	37.8	1.0	-57.5	-13.0	-44.5	
1.65	-14.5	V	3.0	37.5	1.0	-51.0	-13.0	-38.0	
2.48	-19.9	V	3.0	37.8	1.0	-56.7	-13.0	-43.7	
Mid Channel (836.5MHz)									
1.67	-12.1	H	3.0	37.5	1.0	-48.5	-13.0	-35.5	
2.51	-20.9	H	3.0	37.7	1.0	-57.6	-13.0	-44.6	
1.67	-14.7	V	3.0	37.5	1.0	-51.2	-13.0	-38.2	
2.51	-20.5	V	3.0	37.7	1.0	-57.2	-13.0	-44.2	
High Channel (847.5MHz)									
1.7	-6.2	H	3.0	37.4	1.0	-42.6	-13.0	-29.6	
2.5	-20.6	H	3.0	37.8	1.0	-57.4	-13.0	-44.4	
1.7	-10.2	V	3.0	37.4	1.0	-46.7	-13.0	-33.7	
2.5	-20.2	V	3.0	37.8	1.0	-56.9	-13.0	-43.9	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 5MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (826.5MHz)									
1.65	-12.1	H	3.0	37.5	1.0	-48.6	-13.0	-35.6	
2.48	-21.3	H	3.0	37.8	1.0	-58.1	-13.0	-45.1	
1.65	-13.6	V	3.0	37.5	1.0	-50.1	-13.0	-37.1	
2.48	-20.3	V	3.0	37.8	1.0	-57.1	-13.0	-44.1	
Mid Channel (836.5MHz)									
1.67	-12.6	H	3.0	37.5	1.0	-49.1	-13.0	-36.1	
2.51	-21.3	H	3.0	37.7	1.0	-58.0	-13.0	-45.0	
1.67	-11.8	V	3.0	37.5	1.0	-48.2	-13.0	-35.2	
2.51	-21.0	V	3.0	37.7	1.0	-57.6	-13.0	-44.6	
High Channel (846.5MHz)									
1.69	-7.9	H	3.0	37.4	1.0	-44.3	-13.0	-31.3	
2.54	-20.8	H	3.0	37.8	1.0	-57.6	-13.0	-44.6	
1.69	-13.7	V	3.0	37.4	1.0	-50.1	-13.0	-37.1	
2.54	-19.8	V	3.0	37.8	1.0	-56.6	-13.0	-43.6	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 5MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (826.5MHz)									
1.65	-12.7	H	3.0	37.5	1.0	-49.3	-13.0	-36.3	
2.48	-21.1	H	3.0	37.8	1.0	-57.9	-13.0	-44.9	
1.65	-16.2	V	3.0	37.5	1.0	-52.7	-13.0	-39.7	
2.48	-21.0	V	3.0	37.8	1.0	-57.8	-13.0	-44.8	
Mid Channel (836.5MHz)									
1.67	-12.1	H	3.0	37.5	1.0	-48.6	-13.0	-35.6	
2.51	-21.7	H	3.0	37.7	1.0	-58.4	-13.0	-45.4	
1.67	-11.3	V	3.0	37.5	1.0	-47.7	-13.0	-34.7	
2.51	-21.3	V	3.0	37.7	1.0	-58.0	-13.0	-45.0	
High Channel (846.5MHz)									
1.69	-8.8	H	3.0	37.4	1.0	-45.3	-13.0	-32.3	
2.54	-21.2	H	3.0	37.8	1.0	-58.0	-13.0	-45.0	
1.69	-13.7	V	3.0	37.4	1.0	-50.2	-13.0	-37.2	
2.54	-21.1	V	3.0	37.8	1.0	-57.9	-13.0	-44.9	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 10MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (829MHz)									
1.66	-23.2	H	3.0	37.5	1.0	-59.7	-13.0	-46.7	
2.49	-21.1	H	3.0	37.7	1.0	-57.8	-13.0	-44.8	
1.66	-22.2	V	3.0	37.5	1.0	-58.7	-13.0	-45.7	
2.49	-20.9	V	3.0	37.7	1.0	-57.6	-13.0	-44.6	
Mid Channel (836.5MHz)									
1.67	-12.0	H	3.0	37.5	1.0	-48.5	-13.0	-35.5	
2.51	-20.0	H	3.0	37.7	1.0	-56.7	-13.0	-43.7	
1.67	-15.0	V	3.0	37.5	1.0	-51.5	-13.0	-38.5	
2.51	-20.5	V	3.0	37.7	1.0	-57.2	-13.0	-44.2	
High Channel (844MHz)									
1.69	-20.0	H	3.0	37.5	1.0	-56.4	-13.0	-43.4	
2.53	-20.4	H	3.0	37.7	1.0	-57.2	-13.0	-44.2	
1.69	-13.6	V	3.0	37.5	1.0	-50.0	-13.0	-37.0	
2.53	-20.8	V	3.0	37.7	1.0	-57.6	-13.0	-44.6	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/19/14							
Test Engineer:		O. Su							
Configuration:		EUT Only							
Mode:		LTE Band 5, 10MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		1G HP Filter		Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (829MHz)									
1.66	-16.2	H	3.0	34.9	1.0	-50.1	-13.0	-37.1	
2.49	-20.9	H	3.0	35.3	1.0	-55.2	-13.0	-42.2	
1.66	-6.8	V	3.0	34.9	1.0	-40.7	-13.0	-27.7	
2.49	-18.7	V	3.0	35.3	1.0	-53.0	-13.0	-40.0	
Mid Channel (836.5MHz)									
1.67	-14.3	H	3.0	34.9	1.0	-48.2	-13.0	-35.2	
2.51	-13.2	H	3.0	35.3	1.0	-47.5	-13.0	-34.5	
1.67	-10.5	V	3.0	34.9	1.0	-44.4	-13.0	-31.4	
2.51	-10.5	V	3.0	35.3	1.0	-44.8	-13.0	-31.8	
High Channel (844MHz)									
1.69	-10.9	H	3.0	34.9	1.0	-44.7	-13.0	-31.7	
2.53	-20.4	H	3.0	35.4	1.0	-54.8	-13.0	-41.8	
1.69	-13.2	V	3.0	34.9	1.0	-47.0	-13.0	-34.0	
2.53	-3.8	V	3.0	35.4	1.0	-38.2	-13.0	-25.2	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE band 5, 1.4MHz, QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		Filter 01		Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamplifier	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (824.7MHz)									
1.65	-21.6	H	3.0	34.9	1.0	-55.5	-13.0	-42.5	
2.47	-18.0	H	3.0	35.4	1.0	-52.4	-13.0	-39.4	
1.65	-20.2	V	3.0	34.9	1.0	-54.1	-13.0	-41.1	
2.47	-17.2	V	3.0	35.4	1.0	-51.5	-13.0	-38.5	
Mid Channel (836.5MHz)									
1.67	-21.9	H	3.0	34.9	1.0	-55.8	-13.0	-42.8	
2.51	-18.6	H	3.0	35.3	1.0	-52.9	-13.0	-39.9	
1.67	-18.6	V	3.0	34.9	1.0	-52.5	-13.0	-39.5	
2.51	-16.0	V	3.0	35.3	1.0	-50.3	-13.0	-37.3	
High Channel (848.3MHz)									
1.70	-21.1	H	3.0	34.9	1.0	-54.9	-13.0	-41.9	
2.54	-17.7	H	3.0	35.4	1.0	-52.1	-13.0	-39.1	
1.70	-19.3	V	3.0	34.9	1.0	-53.2	-13.0	-40.2	
2.54	-16.5	V	3.0	35.4	1.0	-50.9	-13.0	-37.9	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE band 5, 1.4MHz, 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		Filter 01		Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (824.7MHz)									
1.65	-22.8	H	3.0	34.9	1.0	-56.7	-13.0	-43.7	
2.47	-19.1	H	3.0	35.4	1.0	-53.5	-13.0	-40.5	
1.65	-20.8	V	3.0	34.9	1.0	-54.7	-13.0	-41.7	
2.47	-17.7	V	3.0	35.4	1.0	-52.1	-13.0	-39.1	
Mid Channel (836.5MHz)									
1.67	-22.9	H	3.0	34.9	1.0	-56.8	-13.0	-43.8	
2.51	-20.1	H	3.0	35.3	1.0	-54.4	-13.0	-41.4	
1.67	-20.0	V	3.0	34.9	1.0	-53.9	-13.0	-40.9	
2.51	-16.3	V	3.0	35.3	1.0	-50.6	-13.0	-37.6	
High Channel (848.3MHz)									
1.70	-22.5	H	3.0	34.9	1.0	-56.4	-13.0	-43.4	
2.54	-18.8	H	3.0	35.4	1.0	-53.1	-13.0	-40.1	
1.70	-19.4	V	3.0	34.9	1.0	-53.2	-13.0	-40.2	
2.54	-17.7	V	3.0	35.4	1.0	-52.1	-13.0	-39.1	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
 Date: 06/20/14
 Test Engineer: Macie
 Configuration: EUT Only
 Mode: LTE Band 5, 3MHz QPSK

Test Equipment:
 Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber D

Pre-amplifier
 3m Chamber D

Filter

Limit
 Part 22

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (825.5MHz)									
1.651	-22.9	H	3.0	37.5	1.0	-59.4	-13.0	-46.4	
2.477	-18.1	H	3.0	37.8	1.0	-54.9	-13.0	-41.9	
1.651	-18.8	V	3.0	37.5	1.0	-55.3	-13.0	-42.3	
2.477	-17.8	V	3.0	37.8	1.0	-54.6	-13.0	-41.6	
Mid Channel (836.5MHz)									
1.673	-21.2	H	3.0	37.5	1.0	-57.7	-13.0	-44.7	
2.510	-17.6	H	3.0	37.7	1.0	-54.3	-13.0	-41.3	
1.673	-18.7	V	3.0	37.5	1.0	-55.2	-13.0	-42.2	
2.510	-17.5	V	3.0	37.7	1.0	-54.2	-13.0	-41.2	
High Channel (847.5MHz)									
1.695	-21.7	H	3.0	37.4	1.0	-58.2	-13.0	-45.2	
2.543	-18.0	H	3.0	37.8	1.0	-54.8	-13.0	-41.8	
1.695	-19.4	V	3.0	37.4	1.0	-55.9	-13.0	-42.9	
2.543	-17.6	V	3.0	37.8	1.0	-54.3	-13.0	-41.3	

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UAT 16QAM EIRP POWER FOR LTE BAND 5 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT Only							
Mode:		LTE Band 5, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (825.5MHz)									
1.651	-24.0	H	3.0	37.5	1.0	-60.5	-13.0	-47.5	
2.477	-19.5	H	3.0	37.8	1.0	-56.3	-13.0	-43.3	
1.651	-21.1	V	3.0	37.5	1.0	-57.7	-13.0	-44.7	
2.477	-19.1	V	3.0	37.8	1.0	-55.9	-13.0	-42.9	
Mid Channel (836.5MHz)									
1.673	-23.5	H	3.0	37.5	1.0	-60.0	-13.0	-47.0	
2.510	-18.2	H	3.0	37.7	1.0	-54.9	-13.0	-41.9	
1.673	-20.4	V	3.0	37.5	1.0	-56.8	-13.0	-43.8	
2.510	-18.6	V	3.0	37.7	1.0	-55.3	-13.0	-42.3	
High Channel (847.5MHz)									
1.695	-22.7	H	3.0	37.4	1.0	-59.2	-13.0	-46.2	
2.543	-19.3	H	3.0	37.8	1.0	-56.1	-13.0	-43.1	
1.695	-20.7	V	3.0	37.4	1.0	-57.1	-13.0	-44.1	
2.543	-18.8	V	3.0	37.8	1.0	-55.5	-13.0	-42.5	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement

Project #: 14U17676
Date: 06/20/14
Test Engineer: Ali Poushnejad
Configuration: EUT Only
Mode: LTE Band 5, 5MHz QPSK

Test Equipment:
 Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber D

Pre-amplifier
 3m Chamber D

Filter

Limit
 Part 22

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamplifier	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (826.5MHz)									
1.65	-23.0	H	3.0	37.5	1.0	-59.6	-13.0	-46.6	
2.48	-19.8	H	3.0	37.8	1.0	-56.6	-13.0	-43.6	
1.65	-24.3	V	3.0	37.5	1.0	-60.8	-13.0	-47.8	
2.48	-21.3	V	3.0	37.8	1.0	-58.1	-13.0	-45.1	
Mid Channel (836.5MHz)									
1.67	-25.1	H	3.0	37.5	1.0	-61.5	-13.0	-48.5	
2.51	-20.2	H	3.0	37.7	1.0	-56.9	-13.0	-43.9	
1.67	-24.2	V	3.0	37.5	1.0	-60.7	-13.0	-47.7	
2.51	-19.9	V	3.0	37.7	1.0	-56.6	-13.0	-43.6	
High Channel (846.5MHz)									
1.69	-24.6	H	3.0	37.4	1.0	-61.1	-13.0	-48.1	
2.54	-21.5	H	3.0	37.8	1.0	-58.3	-13.0	-45.3	
1.69	-23.9	V	3.0	37.4	1.0	-60.4	-13.0	-47.4	
2.54	-20.4	V	3.0	37.8	1.0	-57.2	-13.0	-44.2	

Rev. 03.03.14

UAT 16QAM EIRP POWER FOR LTE BAND 5 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 5MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (826.5MHz)									
1.65	-25.3	H	3.0	37.5	1.0	-61.9	-13.0	-48.9	
2.48	-21.3	H	3.0	37.8	1.0	-58.1	-13.0	-45.1	
1.65	-23.9	V	3.0	37.5	1.0	-60.4	-13.0	-47.4	
2.48	-20.9	V	3.0	37.8	1.0	-57.7	-13.0	-44.7	
Mid Channel (836.5MHz)									
1.67	-25.3	H	3.0	37.5	1.0	-61.8	-13.0	-48.8	
2.51	-21.6	H	3.0	37.7	1.0	-58.3	-13.0	-45.3	
1.67	-24.4	V	3.0	37.5	1.0	-60.9	-13.0	-47.9	
2.51	-21.2	V	3.0	37.7	1.0	-57.9	-13.0	-44.9	
High Channel (846.5MHz)									
1.69	-22.6	H	3.0	37.4	1.0	-59.0	-13.0	-46.0	
2.54	-19.5	H	3.0	37.8	1.0	-56.3	-13.0	-43.3	
1.69	-24.4	V	3.0	37.4	1.0	-60.8	-13.0	-47.8	
2.54	-20.1	V	3.0	37.8	1.0	-56.9	-13.0	-43.9	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT Only							
Mode:		LTE Band 5, 10MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		1G HP Filter		Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamplifier	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (829MHz)									
1.66	-25.9	H	3.0	37.5	1.0	-62.4	-13.0	-49.4	
2.49	-21.8	H	3.0	37.7	1.0	-58.5	-13.0	-45.5	
1.66	-23.7	V	3.0	37.5	1.0	-60.2	-13.0	-47.2	
2.49	-20.1	V	3.0	37.7	1.0	-56.9	-13.0	-43.9	
Mid Channel (836.5MHz)									
1.67	-24.2	H	3.0	37.5	1.0	-60.7	-13.0	-47.7	
2.51	-20.6	H	3.0	37.7	1.0	-57.3	-13.0	-44.3	
1.67	-23.3	V	3.0	37.5	1.0	-59.8	-13.0	-46.8	
2.51	-20.3	V	3.0	37.7	1.0	-57.0	-13.0	-44.0	
High Channel (844MHz)									
1.69	-25.0	H	3.0	37.5	1.0	-61.5	-13.0	-48.5	
2.53	-20.3	H	3.0	37.7	1.0	-57.0	-13.0	-44.0	
1.69	-24.5	V	3.0	37.5	1.0	-60.9	-13.0	-47.9	
2.53	-20.8	V	3.0	37.7	1.0	-57.6	-13.0	-44.6	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 5 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 5, 10MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		1G HP Filter		Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (829MHz)									
1.66	-24.7	H	3.0	34.9	1.0	-58.6	-13.0	-45.6	
2.49	-21.6	H	3.0	35.3	1.0	-55.9	-13.0	-42.9	
1.66	-23.9	V	3.0	34.9	1.0	-57.8	-13.0	-44.8	
2.49	-20.6	V	3.0	35.3	1.0	-54.9	-13.0	-41.9	
Mid Channel (836.5MHz)									
1.67	-24.0	H	3.0	34.9	1.0	-57.8	-13.0	-44.8	
2.51	-20.5	H	3.0	35.3	1.0	-54.8	-13.0	-41.8	
1.67	-23.6	V	3.0	34.9	1.0	-57.5	-13.0	-44.5	
2.51	-20.1	V	3.0	35.3	1.0	-54.4	-13.0	-41.4	
High Channel (844MHz)									
1.69	-23.4	H	3.0	34.9	1.0	-57.3	-13.0	-44.3	
2.53	-19.4	H	3.0	35.4	1.0	-53.8	-13.0	-40.8	
1.69	-24.4	V	3.0	34.9	1.0	-58.2	-13.0	-45.2	
2.53	-19.8	V	3.0	35.4	1.0	-54.2	-13.0	-41.2	
Rev. 03.03.14									

9.3.4. LTE BAND 13

LAT QPSK EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement										
Project #:		14U17676								
Date:		06/23/14								
Test Engineer:		Macie								
Configuration:		EUT only								
Mode:		LTE Band 13, 5MHz QPSK								
Test Equipment:										
Substitution: Horn T59 Substitution, and 8ft SMA Cable										
Chamber		Pre-amplifier		Filter		Limit				
3m Chamber F ▾		3m Chamber F ▾		1.0GHz HP Filter ▾		Part 27 ▾				
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes	
Low Channel (779.5MHz)										
1.559	-10.7	V	3.0	35.0	1.0	-44.7	-40.0	-4.7	1559-1610 MHz	
2.389	4.6	V	3.0	35.6	1.0	-30.0	-13.0	-17.0		
3.118	-6.6	V	3.0	36.5	1.0	-42.1	-13.0	-29.1		
1.559	-12.4	H	3.0	35.0	1.0	-46.3	-40.0	-6.3	1559-1610 MHz	
2.389	-10.6	H	3.0	35.6	1.0	-45.3	-13.0	-32.3		
3.118	-8.4	H	3.0	36.5	1.0	-43.9	-13.0	-30.9		
Mid Channel (782MHz)										
1.564	-10.8	V	3.0	35.0	1.0	-44.8	-40.0	-4.8	1559-1610 MHz	
2.346	1.5	V	3.0	35.5	1.0	-33.1	-13.0	-20.1		
3.128	-8.5	V	3.0	36.5	1.0	-43.9	-13.0	-30.9		
1.564	-12.9	H	3.0	35.0	1.0	-46.9	-40.0	-6.9	1559-1610 MHz	
2.346	-4.9	H	3.0	35.5	1.0	-39.4	-13.0	-26.4		
3.128	-9.4	H	3.0	36.5	1.0	-44.8	-13.0	-31.8		
High Channel (784.5MHz)										
1.569	-10.9	V	3.0	35.0	1.0	-44.9	-40.0	-4.9	1559-1610 MHz	
2.354	1.6	V	3.0	35.6	1.0	-32.9	-13.0	-19.9		
3.138	-7.7	V	3.0	36.5	1.0	-43.2	-13.0	-30.2		
1.569	-12.5	H	3.0	35.0	1.0	-46.4	-40.0	-6.4	1559-1610 MHz	
2.354	-0.7	H	3.0	35.6	1.0	-35.2	-13.0	-22.2		
3.138	-9.0	H	3.0	36.5	1.0	-44.5	-13.0	-31.5		
Rev. 03.03.14										

LAT 16QAM EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/23/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 13, 5MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		1.0GHz HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (779.5MHz)									
1.559	-12.0	V	3.0	35.0	1.0	-46.0	-40.0	-6.0	1559-1610 MHz
2.389	3.8	V	3.0	35.6	1.0	-30.8	-13.0	-17.8	
3.118	-8.1	V	3.0	36.5	1.0	-43.6	-13.0	-30.6	
1.559	-13.7	H	3.0	35.0	1.0	-47.7	-40.0	-7.7	1559-1610 MHz
2.389	-11.9	H	3.0	35.6	1.0	-46.6	-13.0	-33.6	
3.118	-9.1	H	3.0	36.5	1.0	-44.6	-13.0	-31.6	
Mid Channel (782MHz)									
1.564	-12.1	V	3.0	35.0	1.0	-46.1	-40.0	-6.1	1559-1610 MHz
2.346	0.4	V	3.0	35.5	1.0	-34.1	-13.0	-21.1	
3.128	-9.5	V	3.0	36.5	1.0	-45.0	-13.0	-32.0	
1.564	-13.9	H	3.0	35.0	1.0	-47.9	-40.0	-7.9	1559-1610 MHz
2.346	-6.2	H	3.0	35.5	1.0	-40.7	-13.0	-27.7	
3.128	-10.3	H	3.0	36.5	1.0	-45.8	-13.0	-32.8	
High Channel (784.5MHz)									
1.569	-11.6	V	3.0	35.0	1.0	-45.5	-40.0	-5.5	1559-1610 MHz
2.354	0.5	V	3.0	35.6	1.0	-34.0	-13.0	-21.0	
3.138	-8.7	V	3.0	36.5	1.0	-44.2	-13.0	-31.2	
1.569	-13.9	H	3.0	35.0	1.0	-47.9	-40.0	-7.9	1559-1610 MHz
2.354	-0.9	H	3.0	35.6	1.0	-35.4	-13.0	-22.4	
3.138	-10.1	H	3.0	36.5	1.0	-45.5	-13.0	-32.5	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/23/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 13, 10MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		1.0GHz HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (782MHz)									
1.564	-12.6	H	3.0	35.0	1.0	-46.5	-40.0	-6.5	
2.346	-10.8	H	3.0	35.5	1.0	-45.3	-13.0	-32.3	
1.564	-8.6	V	3.0	35.0	1.0	-42.6	-40.0	-2.6	
2.346	-5.5	V	3.0	35.5	1.0	-40.0	-13.0	-27.0	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/23/14
Test Engineer: Macie
Configuration: EUT only
Mode: LTE Band 13, 10MHz 16QAM

Test Equipment:
Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
3m Chamber F

Pre-amplifier
3m Chamber F

Filter
1.0GHz HP Filter

Limit
Part 27

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (782MHz)									
1.564	-13.5	H	3.0	35.0	1.0	-47.5	-40.0	-7.5	
2.346	-11.3	H	3.0	35.5	1.0	-45.9	-13.0	-32.9	
1.564	-9.8	V	3.0	35.0	1.0	-43.8	-40.0	-3.8	
2.346	-6.0	V	3.0	35.5	1.0	-40.6	-13.0	-27.6	

Rev. 03.03.14

UAT QPSK EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/23/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 13, 5MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		1.0GHz HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (779.5MHz)									
1.559	-11.6	V	3.0	35.0	1.0	-45.6	-40.0	-5.6	1559-1610 MHz
2.389	2.9	V	3.0	35.6	1.0	-31.7	-13.0	-18.7	
3.118	-7.9	V	3.0	36.5	1.0	-43.4	-13.0	-30.4	
1.559	-13.5	H	3.0	35.0	1.0	-47.5	-40.0	-7.5	1559-1610 MHz
2.389	-1.7	H	3.0	35.6	1.0	-36.4	-13.0	-23.4	
3.118	-10.3	H	3.0	36.5	1.0	-45.8	-13.0	-32.8	
Mid Channel (782MHz)									
1.564	-11.9	V	3.0	35.0	1.0	-45.9	-40.0	-5.9	1559-1610 MHz
2.346	0.8	V	3.0	35.5	1.0	-33.8	-13.0	-20.8	
3.128	-9.7	V	3.0	36.5	1.0	-45.1	-13.0	-32.1	
1.564	-13.5	H	3.0	35.0	1.0	-47.5	-40.0	-7.5	1559-1610 MHz
2.346	-5.7	H	3.0	35.5	1.0	-40.3	-13.0	-27.3	
3.128	-11.0	H	3.0	36.5	1.0	-46.5	-13.0	-33.5	
High Channel (784.5MHz)									
1.569	-11.5	V	3.0	35.0	1.0	-45.5	-40.0	-5.5	1559-1610 MHz
2.354	3.8	V	3.0	35.6	1.0	-30.7	-13.0	-17.7	
3.138	-8.6	V	3.0	36.5	1.0	-44.1	-13.0	-31.1	
1.569	-13.8	H	3.0	35.0	1.0	-47.8	-40.0	-7.8	1559-1610 MHz
2.354	-1.6	H	3.0	35.6	1.0	-36.2	-13.0	-23.2	
3.138	-10.8	H	3.0	36.5	1.0	-46.3	-13.0	-33.3	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 13 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/23/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 13, 5MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		1.0GHz HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (779.5MHz)									
1.559	-12.6	V	3.0	35.0	1.0	-46.6	-40.0	-6.6	1559-1610 MHz
2.389	2.7	V	3.0	35.6	1.0	-32.0	-13.0	-19.0	
3.118	-9.5	V	3.0	36.5	1.0	-45.0	-13.0	-32.0	
1.559	-14.7	H	3.0	35.0	1.0	-48.7	-40.0	-8.7	1559-1610 MHz
2.389	-12.3	H	3.0	35.6	1.0	-46.9	-13.0	-33.9	
3.118	-10.2	H	3.0	36.5	1.0	-45.6	-13.0	-32.6	
Mid Channel (782MHz)									
1.564	-12.7	V	3.0	35.0	1.0	-46.6	-40.0	-6.6	1559-1610 MHz
2.346	-0.3	V	3.0	35.5	1.0	-34.8	-13.0	-21.8	
3.128	-10.7	V	3.0	36.5	1.0	-46.2	-13.0	-33.2	
1.564	-17.1	H	3.0	35.0	1.0	-51.0	-40.0	-11.0	1559-1610 MHz
2.346	-6.0	H	3.0	35.5	1.0	-40.6	-13.0	-27.6	
3.128	-11.3	H	3.0	36.5	1.0	-46.7	-13.0	-33.7	
High Channel (784.5MHz)									
1.569	-13.1	V	3.0	35.0	1.0	-47.0	-40.0	-7.0	1559-1610 MHz
2.354	-0.3	V	3.0	35.6	1.0	-34.9	-13.0	-21.9	
3.138	-9.6	V	3.0	36.5	1.0	-45.1	-13.0	-32.1	
1.569	-14.8	H	3.0	35.0	1.0	-48.8	-40.0	-8.8	1559-1610 MHz
2.354	-2.0	H	3.0	35.6	1.0	-36.6	-13.0	-23.6	
3.138	-11.0	H	3.0	36.5	1.0	-46.4	-13.0	-33.4	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/23/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 13, 10MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		1.0GHz HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (782MHz)									
1.564	-13.4	H	3.0	35.0	1.0	-47.4	-40.0	-7.4	
2.346	-9.0	H	3.0	35.5	1.0	-43.6	-13.0	-30.6	
1.564	-9.8	V	3.0	35.0	1.0	-43.7	-40.0	-3.7	
2.346	-6.5	V	3.0	35.5	1.0	-41.0	-13.0	-28.0	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 13 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/23/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 13, 10MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		1.0GHz HP Filter		Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (782MHz)									
1.564	-14.5	H	3.0	35.0	1.0	-48.5	-40.0	-8.5	
2.346	-9.8	H	3.0	35.5	1.0	-44.3	-13.0	-31.3	
1.564	-10.5	V	3.0	35.0	1.0	-44.5	-40.0	-4.5	
2.346	-7.4	V	3.0	35.5	1.0	-41.9	-13.0	-28.9	
Rev. 03.03.14									

9.3.5. LTE BAND 17

LAT QPSK EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 17, 5MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (706.5MHz)									
1.413	-17.1	H	3.0	35.3	1.0	-51.4	-13.0	-38.4	
2.120	-15.6	H	3.0	34.9	1.0	-49.5	-13.0	-36.5	
1.413	-21.1	V	3.0	35.3	1.0	-55.5	-13.0	-42.5	
2.120	-18.0	V	3.0	34.9	1.0	-51.9	-13.0	-38.9	
Mid Channel (710MHz)									
1.420	-15.2	H	3.0	35.3	1.0	-49.5	-13.0	-36.5	
2.130	-16.5	H	3.0	35.0	1.0	-50.5	-13.0	-37.5	
1.420	-18.1	V	3.0	35.3	1.0	-52.4	-13.0	-39.4	
2.130	-16.3	V	3.0	35.0	1.0	-50.2	-13.0	-37.2	
High Channel (713.5MHz)									
1.427	-14.2	H	3.0	35.3	1.0	-48.4	-13.0	-35.4	
2.141	-15.6	H	3.0	35.0	1.0	-49.6	-13.0	-36.6	
1.427	-17.4	V	3.0	35.3	1.0	-51.7	-13.0	-38.7	
2.141	-15.4	V	3.0	35.0	1.0	-49.4	-13.0	-36.4	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 17, 5MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (706.5MHz)									
1.413	-16.9	H	3.0	35.3	1.0	-51.3	-13.0	-38.3	
2.120	-15.9	H	3.0	34.9	1.0	-49.8	-13.0	-36.8	
1.413	-20.5	V	3.0	35.3	1.0	-54.8	-13.0	-41.8	
2.120	-18.0	V	3.0	34.9	1.0	-51.9	-13.0	-38.9	
Mid Channel (710MHz)									
1.420	-15.4	H	3.0	35.3	1.0	-49.7	-13.0	-36.7	
2.130	-18.0	H	3.0	35.0	1.0	-52.0	-13.0	-39.0	
1.420	-18.7	V	3.0	35.3	1.0	-53.0	-13.0	-40.0	
2.130	-14.7	V	3.0	35.0	1.0	-48.7	-13.0	-35.7	
High Channel (713.5MHz)									
1.427	-14.6	H	3.0	35.3	1.0	-48.8	-13.0	-35.8	
2.141	-15.5	H	3.0	35.0	1.0	-49.5	-13.0	-36.5	
1.427	-16.3	V	3.0	35.3	1.0	-50.6	-13.0	-37.6	
2.141	-14.7	V	3.0	35.0	1.0	-48.7	-13.0	-35.7	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:	14U17676								
Date:	06/20/14								
Test Engineer:	E.Yu								
Configuration:	EUT Only								
Mode:	LTE Band 17, 10MHz QPSK								
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (709MHz)									
1.418	-16.8	H	3.0	35.3	1.0	-51.1	-13.0	-38.1	
2.127	-16.5	H	3.0	34.9	1.0	-50.4	-13.0	-37.4	
1.418	-19.5	V	3.0	35.3	1.0	-53.8	-13.0	-40.8	
2.127	-15.1	V	3.0	34.9	1.0	-49.1	-13.0	-36.1	
Mid Channel (710MHz)									
1.420	-16.4	H	3.0	35.3	1.0	-50.8	-13.0	-37.8	
2.130	-16.8	H	3.0	35.0	1.0	-50.7	-13.0	-37.7	
1.420	-20.0	V	3.0	35.3	1.0	-54.3	-13.0	-41.3	
2.130	-15.2	V	3.0	35.0	1.0	-49.1	-13.0	-36.1	
High Channel (711MHz)									
1.422	-14.3	H	3.0	35.3	1.0	-48.6	-13.0	-35.6	
2.133	-16.7	H	3.0	35.0	1.0	-50.7	-13.0	-37.7	
1.422	-16.9	V	3.0	35.3	1.0	-51.2	-13.0	-38.2	
2.133	-15.9	V	3.0	35.0	1.0	-49.8	-13.0	-36.8	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 17, 10MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (709MHz)									
1.418	-17.3	H	3.0	35.3	1.0	-51.6	-13.0	-38.6	
2.127	-16.8	H	3.0	34.9	1.0	-50.7	-13.0	-37.7	
1.418	-20.1	V	3.0	35.3	1.0	-54.4	-13.0	-41.4	
2.127	-15.3	V	3.0	34.9	1.0	-49.2	-13.0	-36.2	
Mid Channel (710MHz)									
1.420	-16.2	H	3.0	35.3	1.0	-50.5	-13.0	-37.5	
2.130	-16.9	H	3.0	35.0	1.0	-50.9	-13.0	-37.9	
1.420	-19.5	V	3.0	35.3	1.0	-53.8	-13.0	-40.8	
2.130	-15.4	V	3.0	35.0	1.0	-49.4	-13.0	-36.4	
High Channel (711MHz)									
1.422	-15.3	H	3.0	35.3	1.0	-49.6	-13.0	-36.6	
2.133	-16.8	H	3.0	35.0	1.0	-50.8	-13.0	-37.8	
1.422	-17.5	V	3.0	35.3	1.0	-51.8	-13.0	-38.8	
2.133	-16.1	V	3.0	35.0	1.0	-50.0	-13.0	-37.0	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/23/14
Test Engineer: E.Yu
Configuration: EUT Only
Mode: LTE Band 17, 5MHz QPSK

Test Equipment:
Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
3m Chamber F

Pre-amplifier
3m Chamber F

Filter

Limit
Part 27

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (706.5MHz)									
1.413	-14.4	H	3.0	35.3	1.0	-48.7	-13.0	-35.7	
2.120	-10.0	H	3.0	34.9	1.0	-44.0	-13.0	-31.0	
1.413	-15.9	V	3.0	35.3	1.0	-50.2	-13.0	-37.2	
2.120	-12.7	V	3.0	34.9	1.0	-46.7	-13.0	-33.7	
Mid Channel (710MHz)									
1.420	-16.0	H	3.0	35.3	1.0	-50.3	-13.0	-37.3	
2.130	-13.8	H	3.0	35.0	1.0	-47.8	-13.0	-34.8	
1.420	-18.3	V	3.0	35.3	1.0	-52.6	-13.0	-39.6	
2.130	-15.3	V	3.0	35.0	1.0	-49.3	-13.0	-36.3	
High Channel (713.5MHz)									
1.427	-14.7	H	3.0	35.3	1.0	-48.9	-13.0	-35.9	
2.141	-11.2	H	3.0	35.0	1.0	-45.2	-13.0	-32.2	
1.427	-15.7	V	3.0	35.3	1.0	-49.9	-13.0	-36.9	
2.141	-13.2	V	3.0	35.0	1.0	-47.2	-13.0	-34.2	

Rev. 03.03.14

UAT 16QAM EIRP POWER FOR LTE BAND 17 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/23/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 17, 5MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (706.5MHz)									
1.413	-15.3	H	3.0	35.3	1.0	-49.6	-13.0	-36.6	
2.120	-10.8	H	3.0	34.9	1.0	-44.7	-13.0	-31.7	
1.413	-16.2	V	3.0	35.3	1.0	-50.5	-13.0	-37.5	
2.120	-13.4	V	3.0	34.9	1.0	-47.3	-13.0	-34.3	
Mid Channel (710MHz)									
1.420	-14.8	H	3.0	35.3	1.0	-49.1	-13.0	-36.1	
2.130	-11.6	H	3.0	35.0	1.0	-45.6	-13.0	-32.6	
1.420	-18.7	V	3.0	35.3	1.0	-53.0	-13.0	-40.0	
2.130	-14.9	V	3.0	35.0	1.0	-48.8	-13.0	-35.8	
High Channel (713.5MHz)									
1.427	-15.7	H	3.0	35.3	1.0	-49.9	-13.0	-36.9	
2.141	-14.5	H	3.0	35.0	1.0	-48.5	-13.0	-35.5	
1.427	-15.8	V	3.0	35.3	1.0	-50.1	-13.0	-37.1	
2.141	-13.3	V	3.0	35.0	1.0	-47.3	-13.0	-34.3	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:	14U17676								
Date:	06/23/14								
Test Engineer:	E.Yu								
Configuration:	EUT Only								
Mode:	LTE Band 17, 10MHz QPSK								
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber	Pre-amplifier	Filter	Limit						
3m Chamber F	3m Chamber F		Part 27						
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (709MHz)									
1.418	-16.8	H	3.0	35.3	1.0	-51.1	-13.0	-38.1	
2.127	-16.8	H	3.0	34.9	1.0	-50.7	-13.0	-37.7	
1.418	-19.1	V	3.0	35.3	1.0	-53.4	-13.0	-40.4	
2.127	-14.9	V	3.0	34.9	1.0	-48.9	-13.0	-35.9	
Mid Channel (710MHz)									
1.420	-15.8	H	3.0	35.3	1.0	-50.2	-13.0	-37.2	
2.130	-17.2	H	3.0	35.0	1.0	-51.1	-13.0	-38.1	
1.420	-19.1	V	3.0	35.3	1.0	-53.4	-13.0	-40.4	
2.130	-15.5	V	3.0	35.0	1.0	-49.4	-13.0	-36.4	
High Channel (711MHz)									
1.422	-14.8	H	3.0	35.3	1.0	-49.1	-13.0	-36.1	
2.133	-16.5	H	3.0	35.0	1.0	-50.5	-13.0	-37.5	
1.422	-16.7	V	3.0	35.3	1.0	-51.0	-13.0	-38.0	
2.133	-15.9	V	3.0	35.0	1.0	-49.8	-13.0	-36.8	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 17 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/23/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 17, 10MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 27			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (709MHz)									
1.418	-16.3	H	3.0	35.3	1.0	-50.6	-13.0	-37.6	
2.127	-16.5	H	3.0	34.9	1.0	-50.4	-13.0	-37.4	
1.418	-17.1	V	3.0	35.3	1.0	-51.4	-13.0	-38.4	
2.127	-15.3	V	3.0	34.9	1.0	-49.2	-13.0	-36.2	
Mid Channel (710MHz)									
1.420	-15.8	H	3.0	35.3	1.0	-50.1	-13.0	-37.1	
2.130	-17.1	H	3.0	35.0	1.0	-51.1	-13.0	-38.1	
1.420	-19.4	V	3.0	35.3	1.0	-53.7	-13.0	-40.7	
2.130	-15.7	V	3.0	35.0	1.0	-49.6	-13.0	-36.6	
High Channel (711MHz)									
1.422	-15.3	H	3.0	35.3	1.0	-49.6	-13.0	-36.6	
2.133	-17.2	H	3.0	35.0	1.0	-51.1	-13.0	-38.1	
1.422	-17.9	V	3.0	35.3	1.0	-52.2	-13.0	-39.2	
2.133	-16.0	V	3.0	35.0	1.0	-49.9	-13.0	-36.9	
Rev. 03.03.14									

9.3.6. LTE BAND 25

LAT QPSK EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/25/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 25, 1.4MHz QPSK							
<u>Test Equipment:</u>									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1850.7MHz)									
3.701	-12.8	H	3.0	38.0	1.0	-49.9	-13.0	-36.9	
5.552	-11.6	H	3.0	37.4	1.0	-48.0	-13.0	-35.0	
3.701	-13.8	V	3.0	38.0	1.0	-50.8	-13.0	-37.8	
5.552	-13.0	V	3.0	37.4	1.0	-49.3	-13.0	-36.3	
Mid Channel (1882.5MHz)									
3.765	-13.2	H	3.0	38.0	1.0	-50.2	-13.0	-37.2	
5.648	-12.2	H	3.0	37.3	1.0	-48.5	-13.0	-35.5	
3.765	-13.6	V	3.0	38.0	1.0	-50.6	-13.0	-37.6	
5.648	-7.6	V	3.0	37.3	1.0	-44.0	-13.0	-31.0	
High Channel (1914.3MHz)									
3.829	-14.1	H	3.0	37.9	1.0	-51.0	-13.0	-38.0	
5.743	-11.3	H	3.0	37.3	1.0	-47.6	-13.0	-34.6	
3.829	-11.5	V	3.0	37.9	1.0	-48.5	-13.0	-35.5	
5.743	-12.8	V	3.0	37.3	1.0	-49.1	-13.0	-36.1	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Company: Project #: 14U17676 Date: 06/25/14 Test Engineer: Macie Configuration: EUT only Mode: LTE Band 25, 1.4MHz 16QAM									
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
<div style="background-color: #e0f7fa; padding: 2px; margin-bottom: 2px;">Chamber</div> <div style="border: 1px solid black; padding: 2px;">3m Chamber D</div>	<div style="background-color: #e0f7fa; padding: 2px; margin-bottom: 2px;">Pre-amplifier</div> <div style="border: 1px solid black; padding: 2px;">3m Chamber D</div>	<div style="background-color: #e0f7fa; padding: 2px; margin-bottom: 2px;">Filter</div> <div style="border: 1px solid black; padding: 2px;"></div>	<div style="background-color: #e0f7fa; padding: 2px; margin-bottom: 2px;">Limit</div> <div style="border: 1px solid black; padding: 2px;">Part 24</div>						
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1850.7MHz)									
3.701	-11.9	H	3.0	38.0	1.0	-48.9	-13.0	-35.9	
5.552	-12.6	H	3.0	37.4	1.0	-48.9	-13.0	-35.9	
3.701	-14.6	V	3.0	38.0	1.0	-51.7	-13.0	-38.7	
5.552	-13.9	V	3.0	37.4	1.0	-50.2	-13.0	-37.2	
Mid Channel (1882.5MHz)									
3.765	-14.0	H	3.0	38.0	1.0	-50.9	-13.0	-37.9	
5.648	-13.3	H	3.0	37.3	1.0	-49.7	-13.0	-36.7	
3.765	-14.3	V	3.0	38.0	1.0	-51.3	-13.0	-38.3	
5.648	-8.0	V	3.0	37.3	1.0	-44.3	-13.0	-31.3	
High Channel (1914.3MHz)									
3.829	-14.5	H	3.0	37.9	1.0	-51.4	-13.0	-38.4	
5.743	-12.2	H	3.0	37.3	1.0	-48.5	-13.0	-35.5	
3.829	-12.7	V	3.0	37.9	1.0	-49.6	-13.0	-36.6	
5.743	-13.7	V	3.0	37.3	1.0	-50.0	-13.0	-37.0	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Company: Project #: 14U17676 Date: 06/25/14 Test Engineer: Macie Configuration: EUT only Mode: LTE Band 25, 3MHz QPSK									
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
<div style="background-color: #e0f7fa; padding: 2px; border: 1px solid black; margin-bottom: 2px;">Chamber</div> <div style="border: 1px solid black; padding: 2px;">3m Chamber D</div>	<div style="background-color: #e0f7fa; padding: 2px; border: 1px solid black; margin-bottom: 2px;">Pre-amplifier</div> <div style="border: 1px solid black; padding: 2px;">3m Chamber D</div>	<div style="background-color: #e0f7fa; padding: 2px; border: 1px solid black; margin-bottom: 2px;">Filter</div> <div style="border: 1px solid black; padding: 2px;"></div>	<div style="background-color: #e0f7fa; padding: 2px; border: 1px solid black; margin-bottom: 2px;">Limit</div> <div style="border: 1px solid black; padding: 2px;">Part 24</div>						
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1851.5MHz)									
3.703	-15.1	H	3.0	38.0	1.0	-52.2	-13.0	-39.2	
5.555	-12.7	H	3.0	37.4	1.0	-49.1	-13.0	-36.1	
3.703	-14.9	V	3.0	38.0	1.0	-51.9	-13.0	-38.9	
5.555	-13.6	V	3.0	37.4	1.0	-49.9	-13.0	-36.9	
Mid Channel (1882.5MHz)									
3.765	-14.9	H	3.0	38.0	1.0	-51.9	-13.0	-38.9	
5.648	-11.0	H	3.0	37.3	1.0	-47.4	-13.0	-34.4	
3.765	-13.7	V	3.0	38.0	1.0	-50.7	-13.0	-37.7	
5.648	-13.6	V	3.0	37.3	1.0	-49.9	-13.0	-36.9	
High Channel (1913.5MHz)									
3.827	-13.8	H	3.0	37.9	1.0	-50.7	-13.0	-37.7	
5.741	-14.5	H	3.0	37.3	1.0	-50.8	-13.0	-37.8	
3.827	-13.4	V	3.0	37.9	1.0	-50.4	-13.0	-37.4	
5.741	-12.8	V	3.0	37.3	1.0	-49.1	-13.0	-36.1	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Company: Project #: 14U17676 Date: 06/25/14 Test Engineer: Macie Configuration: EUT only Mode: LTE Band 25, 3MHz 16QAM									
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber	Pre-amplifier	Filter	Limit						
3m Chamber D	3m Chamber D		Part 24						
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1851.5MHz)									
3.703	-14.6	H	3.0	38.0	1.0	-51.6	-13.0	-38.6	
5.555	-13.6	H	3.0	37.4	1.0	-49.9	-13.0	-36.9	
3.703	-16.0	V	3.0	38.0	1.0	-53.0	-13.0	-40.0	
5.555	-13.8	V	3.0	37.4	1.0	-50.1	-13.0	-37.1	
Mid Channel (1882.5MHz)									
3.765	-15.1	H	3.0	38.0	1.0	-52.1	-13.0	-39.1	
5.648	-12.2	H	3.0	37.3	1.0	-48.5	-13.0	-35.5	
3.765	-14.4	V	3.0	38.0	1.0	-51.4	-13.0	-38.4	
5.648	-13.8	V	3.0	37.3	1.0	-50.2	-13.0	-37.2	
High Channel (1913.5MHz)									
3.827	-15.1	H	3.0	37.9	1.0	-52.0	-13.0	-39.0	
5.741	-14.6	H	3.0	37.3	1.0	-51.0	-13.0	-38.0	
3.827	-13.4	V	3.0	37.9	1.0	-50.3	-13.0	-37.3	
5.741	-13.1	V	3.0	37.3	1.0	-49.4	-13.0	-36.4	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Company: Project #: 14U17676 Date: 06/25/14 Test Engineer: Macie Configuration: EUT only Mode: LTE Band 25, 5MHz QPSK									
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
<div style="background-color: #e0f7fa; padding: 2px; border: 1px solid black; margin-bottom: 2px;">Chamber</div> <div style="border: 1px solid black; padding: 2px;">3m Chamber D</div>	<div style="background-color: #e0f7fa; padding: 2px; border: 1px solid black; margin-bottom: 2px;">Pre-amplifier</div> <div style="border: 1px solid black; padding: 2px;">3m Chamber D</div>	<div style="background-color: #e0f7fa; padding: 2px; border: 1px solid black; margin-bottom: 2px;">Filter</div> <div style="border: 1px solid black; padding: 2px;"></div>	<div style="background-color: #e0f7fa; padding: 2px; border: 1px solid black; margin-bottom: 2px;">Limit</div> <div style="border: 1px solid black; padding: 2px;">Part 24</div>						
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1852.5MHz)									
3.705	-14.0	H	3.0	38.0	1.0	-51.1	-13.0	-38.1	
5.065	-13.4	H	3.0	37.5	1.0	-49.9	-13.0	-36.9	
3.705	-15.1	V	3.0	38.0	1.0	-52.2	-13.0	-39.2	
5.065	-13.4	V	3.0	37.5	1.0	-49.9	-13.0	-36.9	
Mid Channel (1882.5MHz)									
3.765	-15.1	H	3.0	38.0	1.0	-52.1	-13.0	-39.1	
5.648	-12.6	H	3.0	37.3	1.0	-48.9	-13.0	-35.9	
3.765	-14.1	V	3.0	38.0	1.0	-51.1	-13.0	-38.1	
5.648	-11.6	V	3.0	37.3	1.0	-48.0	-13.0	-35.0	
High Channel (1912.5MHz)									
3.825	-14.1	H	3.0	37.9	1.0	-51.0	-13.0	-38.0	
5.738	-12.6	H	3.0	37.3	1.0	-48.9	-13.0	-35.9	
3.825	-13.2	V	3.0	37.9	1.0	-50.1	-13.0	-37.1	
5.738	-11.3	V	3.0	37.3	1.0	-47.7	-13.0	-34.7	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Company: Project #: 14U17676 Date: 06/25/14 Test Engineer: Macie Configuration: EUT only Mode: LTE Band 25, 5MHz 16QAM									
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1852.5MHz)									
3.705	-14.2	H	3.0	38.0	1.0	-51.3	-13.0	-38.3	
5.065	-14.2	H	3.0	37.5	1.0	-50.7	-13.0	-37.7	
3.705	-15.6	V	3.0	38.0	1.0	-52.7	-13.0	-39.7	
5.065	-14.3	V	3.0	37.5	1.0	-50.8	-13.0	-37.8	
Mid Channel (1882.5MHz)									
3.765	-15.8	H	3.0	38.0	1.0	-52.8	-13.0	-39.8	
5.648	-13.4	H	3.0	37.3	1.0	-49.8	-13.0	-36.8	
3.765	-15.5	V	3.0	38.0	1.0	-52.5	-13.0	-39.5	
5.648	-12.7	V	3.0	37.3	1.0	-49.0	-13.0	-36.0	
High Channel (1912.5MHz)									
3.825	-14.9	H	3.0	37.9	1.0	-51.8	-13.0	-38.8	
5.738	-13.6	H	3.0	37.3	1.0	-49.9	-13.0	-36.9	
3.825	-13.7	V	3.0	37.9	1.0	-50.7	-13.0	-37.7	
5.738	-12.3	V	3.0	37.3	1.0	-48.7	-13.0	-35.7	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Company: Project #: 14U17676 Date: 6/25/2014 Test Engineer: Macie Configuration: EUT only Mode: LTE Band 25, 10MHz QPSK									
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1855MHz)									
3.710	-13.7	H	3.0	38.0	1.0	-50.8	-13.0	-37.8	
5.565	-13.8	H	3.0	37.4	1.0	-50.1	-13.0	-37.1	
3.710	-14.7	V	3.0	38.0	1.0	-51.8	-13.0	-38.8	
5.565	-13.7	V	3.0	37.4	1.0	-50.1	-13.0	-37.1	
Mid Channel (1882.5MHz)									
3.765	-13.5	H	3.0	38.0	1.0	-50.5	-13.0	-37.5	
5.648	-13.8	H	3.0	37.3	1.0	-50.1	-13.0	-37.1	
3.765	-13.9	V	3.0	38.0	1.0	-50.9	-13.0	-37.9	
5.648	-13.7	V	3.0	37.3	1.0	-50.0	-13.0	-37.0	
High Channel (1910MHz)									
3.820	-13.9	H	3.0	37.9	1.0	-50.8	-13.0	-37.8	
5.730	-13.1	H	3.0	37.3	1.0	-49.4	-13.0	-36.4	
3.820	-13.9	V	3.0	37.9	1.0	-50.8	-13.0	-37.8	
5.730	-13.7	V	3.0	37.3	1.0	-50.0	-13.0	-37.0	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Company: Project #: 14U17676 Date: 6/25/2014 Test Engineer: Macie Configuration: EUT only Mode: LTE Band 25, 10MHz 16QAM									
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1855MHz)									
3.710	-14.2	H	3.0	38.0	1.0	-51.2	-13.0	-38.2	
5.565	-13.3	H	3.0	37.4	1.0	-49.7	-13.0	-36.7	
3.710	-14.7	V	3.0	38.0	1.0	-51.8	-13.0	-38.8	
5.565	-14.8	V	3.0	37.4	1.0	-51.2	-13.0	-38.2	
Mid Channel (1882.5MHz)									
3.765	-14.0	H	3.0	38.0	1.0	-51.0	-13.0	-38.0	
5.648	-14.3	H	3.0	37.3	1.0	-50.6	-13.0	-37.6	
3.765	-14.9	V	3.0	38.0	1.0	-51.9	-13.0	-38.9	
5.648	-14.7	V	3.0	37.3	1.0	-51.0	-13.0	-38.0	
High Channel (1910MHz)									
3.820	-14.7	H	3.0	37.9	1.0	-51.6	-13.0	-38.6	
5.730	-14.1	H	3.0	37.3	1.0	-50.4	-13.0	-37.4	
3.820	-15.3	V	3.0	37.9	1.0	-52.2	-13.0	-39.2	
5.730	-14.5	V	3.0	37.3	1.0	-50.8	-13.0	-37.8	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 25, 15MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1857.5MHz)									
3.72	-13.9	H	3.0	38.0	1.0	-50.9	-13.0	-37.9	
5.57	-12.6	H	3.0	37.4	1.0	-49.0	-13.0	-36.0	
3.72	-13.8	V	3.0	38.0	1.0	-50.8	-13.0	-37.8	
5.57	-13.0	V	3.0	37.4	1.0	-49.4	-13.0	-36.4	
Mid Channel (1882.5MHz)									
3.77	-12.5	H	3.0	38.0	1.0	-49.4	-13.0	-36.4	
5.65	-12.7	H	3.0	37.3	1.0	-49.1	-13.0	-36.1	
3.77	-14.6	V	3.0	38.0	1.0	-51.6	-13.0	-38.6	
5.65	-12.6	V	3.0	37.3	1.0	-48.9	-13.0	-35.9	
High Channel (1907.5MHz)									
3.82	-13.9	H	3.0	37.9	1.0	-50.8	-13.0	-37.8	
5.72	-11.6	H	3.0	37.3	1.0	-47.9	-13.0	-34.9	
3.82	-12.8	V	3.0	37.9	1.0	-49.8	-13.0	-36.8	
5.72	-12.9	V	3.0	37.3	1.0	-49.2	-13.0	-36.2	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 25, 15MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1857.5MHz)									
3.715	-13.8	H	3.0	38.0	1.0	-50.9	-13.0	-37.9	
5.573	-12.8	H	3.0	37.4	1.0	-49.2	-13.0	-36.2	
3.715	-14.3	V	3.0	38.0	1.0	-51.4	-13.0	-38.4	
5.573	-13.1	V	3.0	37.4	1.0	-49.4	-13.0	-36.4	
Mid Channel (1882.5MHz)									
3.765	-13.3	H	3.0	38.0	1.0	-50.3	-13.0	-37.3	
5.648	-12.7	H	3.0	37.3	1.0	-49.1	-13.0	-36.1	
3.765	-14.4	V	3.0	38.0	1.0	-51.4	-13.0	-38.4	
5.648	-13.1	V	3.0	37.3	1.0	-49.5	-13.0	-36.5	
High Channel (1907.5MHz)									
3.815	-14.0	H	3.0	37.9	1.0	-50.9	-13.0	-37.9	
5.723	-12.5	H	3.0	37.3	1.0	-48.9	-13.0	-35.9	
3.815	-14.0	V	3.0	37.9	1.0	-50.9	-13.0	-37.9	
5.723	-12.9	V	3.0	37.3	1.0	-49.3	-13.0	-36.3	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 25, 20MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1860MHz)									
3.720	-13.1	H	3.0	38.0	1.0	-50.1	-13.0	-37.1	
5.580	-12.4	H	3.0	37.4	1.0	-48.8	-13.0	-35.8	
3.720	-13.9	V	3.0	38.0	1.0	-50.9	-13.0	-37.9	
5.580	-12.4	V	3.0	37.4	1.0	-48.8	-13.0	-35.8	
Mid Channel (1882.5MHz)									
3.765	-13.4	H	3.0	38.0	1.0	-50.4	-13.0	-37.4	
5.648	-12.1	H	3.0	37.3	1.0	-48.4	-13.0	-35.4	
3.765	-13.2	V	3.0	38.0	1.0	-50.2	-13.0	-37.2	
5.648	-13.2	V	3.0	37.3	1.0	-49.6	-13.0	-36.6	
High Channel (1905MHz)									
3.810	-13.4	H	3.0	37.9	1.0	-50.3	-13.0	-37.3	
5.715	-12.8	H	3.0	37.3	1.0	-49.1	-13.0	-36.1	
3.810	-13.8	V	3.0	37.9	1.0	-50.8	-13.0	-37.8	
5.715	-12.0	V	3.0	37.3	1.0	-48.3	-13.0	-35.3	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/20/14							
Test Engineer:		Macie							
Configuration:		EUT only							
Mode:		LTE Band 25, 20MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1860MHz)									
3.720	-14.1	H	3.0	38.0	1.0	-51.1	-13.0	-38.1	
5.580	-12.3	H	3.0	37.4	1.0	-48.7	-13.0	-35.7	
3.720	-14.0	V	3.0	38.0	1.0	-51.1	-13.0	-38.1	
5.580	-13.0	V	3.0	37.4	1.0	-49.4	-13.0	-36.4	
Mid Channel (1882.5MHz)									
3.765	-13.9	H	3.0	38.0	1.0	-50.9	-13.0	-37.9	
5.648	-12.2	H	3.0	37.3	1.0	-48.5	-13.0	-35.5	
3.765	-13.7	V	3.0	38.0	1.0	-50.7	-13.0	-37.7	
5.648	-13.1	V	3.0	37.3	1.0	-49.4	-13.0	-36.4	
High Channel (1905MHz)									
3.810	-13.5	H	3.0	37.9	1.0	-50.4	-13.0	-37.4	
5.715	-12.4	H	3.0	37.3	1.0	-48.7	-13.0	-35.7	
3.810	-12.5	V	3.0	37.9	1.0	-49.4	-13.0	-36.4	
5.715	-13.2	V	3.0	37.3	1.0	-49.5	-13.0	-36.5	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 1.4MHz QPSK							
<u>Test Equipment:</u>									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1850.7MHz)									
3.701	-18.0	H	3.0	38.0	1.0	-55.1	-13.0	-42.1	
5.552	-16.6	H	3.0	37.4	1.0	-53.0	-13.0	-40.0	
3.701	-17.5	V	3.0	38.0	1.0	-54.5	-13.0	-41.5	
5.552	-17.7	V	3.0	37.4	1.0	-54.1	-13.0	-41.1	
Mid Channel (1882.5MHz)									
3.765	-18.8	H	3.0	38.0	1.0	-55.8	-13.0	-42.8	
5.648	-18.5	H	3.0	37.3	1.0	-54.9	-13.0	-41.9	
3.765	-19.1	V	3.0	38.0	1.0	-56.1	-13.0	-43.1	
5.648	-16.9	V	3.0	37.3	1.0	-53.2	-13.0	-40.2	
High Channel (1914.3MHz)									
3.829	-18.9	H	3.0	37.9	1.0	-55.8	-13.0	-42.8	
5.743	-18.5	H	3.0	37.3	1.0	-54.8	-13.0	-41.8	
3.829	-18.1	V	3.0	37.9	1.0	-55.0	-13.0	-42.0	
5.743	-17.3	V	3.0	37.3	1.0	-53.6	-13.0	-40.6	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 25 (1.4MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 1.4MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1850.7MHz)									
3.701	-19.4	H	3.0	38.0	1.0	-56.4	-13.0	-43.4	
5.552	-17.5	H	3.0	37.4	1.0	-53.9	-13.0	-40.9	
3.701	-16.5	V	3.0	38.0	1.0	-53.5	-13.0	-40.5	
5.552	-18.2	V	3.0	37.4	1.0	-54.6	-13.0	-41.6	
Mid Channel (1882.5MHz)									
3.765	-20.3	H	3.0	38.0	1.0	-57.3	-13.0	-44.3	
5.648	-18.1	H	3.0	37.3	1.0	-54.5	-13.0	-41.5	
3.765	-18.8	V	3.0	38.0	1.0	-55.8	-13.0	-42.8	
5.648	-17.1	V	3.0	37.3	1.0	-53.4	-13.0	-40.4	
High Channel (1914.3MHz)									
3.829	-19.8	H	3.0	37.9	1.0	-56.8	-13.0	-43.8	
5.743	-17.3	H	3.0	37.3	1.0	-53.6	-13.0	-40.6	
3.829	-17.4	V	3.0	37.9	1.0	-54.3	-13.0	-41.3	
5.743	-17.8	V	3.0	37.3	1.0	-54.1	-13.0	-41.1	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 3MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1851.5MHz)									
3.703	-19.0	H	3.0	38.0	1.0	-56.1	-13.0	-43.1	
5.555	-17.6	H	3.0	37.4	1.0	-53.9	-13.0	-40.9	
3.703	-18.7	V	3.0	38.0	1.0	-55.7	-13.0	-42.7	
5.555	-17.6	V	3.0	37.4	1.0	-53.9	-13.0	-40.9	
Mid Channel (1882.5MHz)									
3.765	-17.8	H	3.0	38.0	1.0	-54.8	-13.0	-41.8	
5.648	-17.6	H	3.0	37.3	1.0	-54.0	-13.0	-41.0	
3.765	-19.8	V	3.0	38.0	1.0	-56.8	-13.0	-43.8	
5.648	-18.6	V	3.0	37.3	1.0	-55.0	-13.0	-42.0	
High Channel (1913.5MHz)									
3.827	-17.2	H	3.0	37.9	1.0	-54.2	-13.0	-41.2	
5.741	-16.3	H	3.0	37.3	1.0	-52.6	-13.0	-39.6	
3.827	-18.8	V	3.0	37.9	1.0	-55.8	-13.0	-42.8	
5.741	-17.7	V	3.0	37.3	1.0	-54.0	-13.0	-41.0	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 25 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1851.5MHz)									
3.703	-19.2	H	3.0	38.0	1.0	-56.2	-13.0	-43.2	
5.555	-16.8	H	3.0	37.4	1.0	-53.2	-13.0	-40.2	
3.703	-17.3	V	3.0	38.0	1.0	-54.3	-13.0	-41.3	
5.555	-18.1	V	3.0	37.4	1.0	-54.5	-13.0	-41.5	
Mid Channel (1882.5MHz)									
3.765	-18.2	H	3.0	38.0	1.0	-55.2	-13.0	-42.2	
5.648	-17.8	H	3.0	37.3	1.0	-54.2	-13.0	-41.2	
3.765	-19.8	V	3.0	38.0	1.0	-56.8	-13.0	-43.8	
5.648	-19.0	V	3.0	37.3	1.0	-55.3	-13.0	-42.3	
High Channel (1913.5MHz)									
3.827	-17.8	H	3.0	37.9	1.0	-54.7	-13.0	-41.7	
5.741	-16.6	H	3.0	37.3	1.0	-52.9	-13.0	-39.9	
3.827	-19.0	V	3.0	37.9	1.0	-56.0	-13.0	-43.0	
5.741	-17.4	V	3.0	37.3	1.0	-53.7	-13.0	-40.7	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/21/14
Test Engineer: Ali Poushnejad
Configuration: EUT only
Mode: LTE Band 25, 5MHz QPSK

Test Equipment:
 Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber D

Pre-amplifier
 3m Chamber D

Filter

Limit
 Part 24

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamplifier	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1852.5MHz)									
3.705	-19.2	H	3.0	38.0	1.0	-56.2	-13.0	-43.2	
5.065	-18.8	H	3.0	37.5	1.0	-55.3	-13.0	-42.3	
3.705	-18.0	V	3.0	38.0	1.0	-55.1	-13.0	-42.1	
5.065	-18.6	V	3.0	37.5	1.0	-55.1	-13.0	-42.1	
Mid Channel (1882.5MHz)									
3.765	-18.7	H	3.0	38.0	1.0	-55.7	-13.0	-42.7	
5.648	-17.7	H	3.0	37.3	1.0	-54.0	-13.0	-41.0	
3.765	-18.4	V	3.0	38.0	1.0	-55.4	-13.0	-42.4	
5.648	-17.5	V	3.0	37.3	1.0	-53.8	-13.0	-40.8	
High Channel (1912.5MHz)									
3.825	-20.0	H	3.0	37.9	1.0	-56.9	-13.0	-43.9	
5.738	-16.9	H	3.0	37.3	1.0	-53.2	-13.0	-40.2	
3.825	-19.8	V	3.0	37.9	1.0	-56.7	-13.0	-43.7	
5.738	-17.3	V	3.0	37.3	1.0	-53.6	-13.0	-40.6	

Rev. 03.03.14

UAT 16QAM EIRP POWER FOR LTE BAND 25 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 5MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1852.5MHz)									
3.705	-19.4	H	3.0	38.0	1.0	-56.4	-13.0	-43.4	
5.065	-17.8	H	3.0	37.5	1.0	-54.3	-13.0	-41.3	
3.705	-19.4	V	3.0	38.0	1.0	-56.4	-13.0	-43.4	
5.065	-18.7	V	3.0	37.5	1.0	-55.2	-13.0	-42.2	
Mid Channel (1882.5MHz)									
3.765	-20.3	H	3.0	38.0	1.0	-57.2	-13.0	-44.2	
5.648	-18.7	H	3.0	37.3	1.0	-55.0	-13.0	-42.0	
3.765	-18.7	V	3.0	38.0	1.0	-55.7	-13.0	-42.7	
5.648	-18.0	V	3.0	37.3	1.0	-54.3	-13.0	-41.3	
High Channel (1912.5MHz)									
3.825	-19.5	H	3.0	37.9	1.0	-56.4	-13.0	-43.4	
5.738	-17.5	H	3.0	37.3	1.0	-53.8	-13.0	-40.8	
3.825	-19.4	V	3.0	37.9	1.0	-56.3	-13.0	-43.3	
5.738	-18.5	V	3.0	37.3	1.0	-54.9	-13.0	-41.9	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 10MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1855MHz)									
3.710	-18.3	H	3.0	38.0	1.0	-55.3	-13.0	-42.3	
5.565	-16.9	H	3.0	37.4	1.0	-53.3	-13.0	-40.3	
3.710	-19.0	V	3.0	38.0	1.0	-56.1	-13.0	-43.1	
5.565	-17.1	V	3.0	37.4	1.0	-53.5	-13.0	-40.5	
Mid Channel (1882.5MHz)									
3.765	-15.4	H	3.0	38.0	1.0	-52.4	-13.0	-39.4	
5.648	-18.4	H	3.0	37.3	1.0	-54.7	-13.0	-41.7	
3.765	-19.6	V	3.0	38.0	1.0	-56.6	-13.0	-43.6	
5.648	-18.6	V	3.0	37.3	1.0	-54.9	-13.0	-41.9	
High Channel (1910MHz)									
3.820	-20.1	H	3.0	37.9	1.0	-57.1	-13.0	-44.1	
5.730	-17.4	H	3.0	37.3	1.0	-53.7	-13.0	-40.7	
3.820	-19.1	V	3.0	37.9	1.0	-56.0	-13.0	-43.0	
5.730	-17.9	V	3.0	37.3	1.0	-54.2	-13.0	-41.2	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 25 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 10MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1855MHz)									
3.710	-20.0	H	3.0	38.0	1.0	-57.1	-13.0	-44.1	
5.565	-17.9	H	3.0	37.4	1.0	-54.3	-13.0	-41.3	
3.710	-19.1	V	3.0	38.0	1.0	-56.2	-13.0	-43.2	
5.565	-17.9	V	3.0	37.4	1.0	-54.3	-13.0	-41.3	
Mid Channel (1882.5MHz)									
3.765	-19.1	H	3.0	38.0	1.0	-56.1	-13.0	-43.1	
5.648	-18.5	H	3.0	37.3	1.0	-54.8	-13.0	-41.8	
3.765	-19.2	V	3.0	38.0	1.0	-56.2	-13.0	-43.2	
5.648	-17.7	V	3.0	37.3	1.0	-54.1	-13.0	-41.1	
High Channel (1910MHz)									
3.820	-19.9	H	3.0	37.9	1.0	-56.9	-13.0	-43.9	
5.730	-16.1	H	3.0	37.3	1.0	-52.5	-13.0	-39.5	
3.820	-19.6	V	3.0	37.9	1.0	-56.6	-13.0	-43.6	
5.730	-17.7	V	3.0	37.3	1.0	-54.0	-13.0	-41.0	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 15MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1857.5MHz)									
3.72	-18.9	H	3.0	38.0	1.0	-55.9	-13.0	-42.9	
5.57	-16.7	H	3.0	37.4	1.0	-53.1	-13.0	-40.1	
3.72	-18.9	V	3.0	38.0	1.0	-55.9	-13.0	-42.9	
5.57	-17.8	V	3.0	37.4	1.0	-54.1	-13.0	-41.1	
Mid Channel (1882.5MHz)									
3.77	-19.7	H	3.0	38.0	1.0	-56.7	-13.0	-43.7	
5.65	-18.5	H	3.0	37.3	1.0	-54.9	-13.0	-41.9	
3.77	-19.8	V	3.0	38.0	1.0	-56.7	-13.0	-43.7	
5.65	-19.0	V	3.0	37.3	1.0	-55.4	-13.0	-42.4	
High Channel (1907.5MHz)									
3.82	-19.2	H	3.0	37.9	1.0	-56.1	-13.0	-43.1	
5.72	-17.9	H	3.0	37.3	1.0	-54.2	-13.0	-41.2	
3.82	-19.0	V	3.0	37.9	1.0	-55.9	-13.0	-42.9	
5.72	-17.7	V	3.0	37.3	1.0	-54.0	-13.0	-41.0	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 25 (15.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 15MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D				Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1857.5MHz)									
3.715	-18.8	H	3.0	38.0	1.0	-55.8	-13.0	-42.8	
5.573	-16.7	H	3.0	37.4	1.0	-53.1	-13.0	-40.1	
3.715	-18.9	V	3.0	38.0	1.0	-55.9	-13.0	-42.9	
5.573	-17.8	V	3.0	37.4	1.0	-54.1	-13.0	-41.1	
Mid Channel (1882.5MHz)									
3.765	50.6	H	3.0	38.0	1.0	13.6	-13.0	26.6	
5.648	-17.3	H	3.0	37.3	1.0	-53.6	-13.0	-40.6	
3.765	-20.8	V	3.0	38.0	1.0	-57.8	-13.0	-44.8	
5.648	-17.5	V	3.0	37.3	1.0	-53.8	-13.0	-40.8	
High Channel (1907.5MHz)									
3.815	-19.2	H	3.0	37.9	1.0	-56.1	-13.0	-43.1	
5.723	-17.9	H	3.0	37.3	1.0	-54.2	-13.0	-41.2	
3.815	-18.9	V	3.0	37.9	1.0	-55.8	-13.0	-42.8	
5.723	-17.8	V	3.0	37.3	1.0	-54.1	-13.0	-41.1	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/21/14
Test Engineer: Ali Poushnejad
Configuration: EUT only
Mode: LTE Band 25, 20MHz QPSK

Test Equipment:
Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber

Pre-amplifier

Filter

Limit

3m Chamber D

3m Chamber D

2.5G HP Filter

Part 24

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1860MHz)									
3.720	-18.0	H	3.0	38.0	1.0	-55.0	-13.0	-42.0	
5.580	-17.8	H	3.0	37.4	1.0	-54.2	-13.0	-41.2	
3.720	-20.8	V	3.0	38.0	1.0	-57.8	-13.0	-44.8	
5.580	-17.5	V	3.0	37.4	1.0	-53.9	-13.0	-40.9	
Mid Channel (1882.5MHz)									
3.765	-18.0	H	3.0	38.0	1.0	-55.0	-13.0	-42.0	
5.648	-17.5	H	3.0	37.3	1.0	-53.8	-13.0	-40.8	
3.765	-19.2	V	3.0	38.0	1.0	-56.2	-13.0	-43.2	
5.648	-18.7	V	3.0	37.3	1.0	-55.1	-13.0	-42.1	
High Channel (1905MHz)									
3.810	-16.5	H	3.0	37.9	1.0	-53.5	-13.0	-40.5	
5.715	-17.9	H	3.0	37.3	1.0	-54.3	-13.0	-41.3	
3.810	-15.2	V	3.0	37.9	1.0	-52.2	-13.0	-39.2	
5.715	-18.4	V	3.0	37.3	1.0	-54.7	-13.0	-41.7	

Rev. 03.03.14

UAT 16QAM EIRP POWER FOR LTE BAND 25 (20.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		Ali Poushnejad							
Configuration:		EUT only							
Mode:		LTE Band 25, 20MHz 16QAM							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber D		3m Chamber D		2.5G HP Filter		Part 24			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (1860MHz)									
3.720	-20.4	H	3.0	38.0	1.0	-57.4	-13.0	-44.4	
5.580	-18.1	H	3.0	37.4	1.0	-54.5	-13.0	-41.5	
3.720	-21.2	V	3.0	38.0	1.0	-58.2	-13.0	-45.2	
5.580	-18.3	V	3.0	37.4	1.0	-54.6	-13.0	-41.6	
Mid Channel (1882.5MHz)									
3.765	-19.8	H	3.0	38.0	1.0	-56.8	-13.0	-43.8	
5.648	-18.0	H	3.0	37.3	1.0	-54.4	-13.0	-41.4	
3.765	-19.6	V	3.0	38.0	1.0	-56.6	-13.0	-43.6	
5.648	-18.6	V	3.0	37.3	1.0	-54.9	-13.0	-41.9	
High Channel (1905MHz)									
3.810	-17.1	H	3.0	37.9	1.0	-54.0	-13.0	-41.0	
5.715	-17.1	H	3.0	37.3	1.0	-53.5	-13.0	-40.5	
3.810	-14.2	V	3.0	37.9	1.0	-51.1	-13.0	-38.1	
5.715	-17.9	V	3.0	37.3	1.0	-54.2	-13.0	-41.2	
Rev. 03.03.14									

9.3.7. LTE BAND 26

LAT QPSK EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 26, 3MHz QPSK							
Test Equipment: Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (820.3MHz)									
1.631	-11.7	H	3.0	34.9	1.0	-45.6	-13.0	-32.6	
2.447	-10.5	H	3.0	35.5	1.0	-45.0	-13.0	-32.0	
1.631	-15.2	V	3.0	34.9	1.0	-49.1	-13.0	-36.1	
2.447	-14.8	V	3.0	35.5	1.0	-49.3	-13.0	-36.3	
Mid Channel (821.3MHz)									
1.663	-10.6	H	3.0	34.9	1.0	-44.5	-13.0	-31.5	
2.495	-9.9	H	3.0	35.3	1.0	-44.2	-13.0	-31.2	
1.663	-12.7	V	3.0	34.9	1.0	-46.6	-13.0	-33.6	
2.495	-13.7	V	3.0	35.3	1.0	-48.0	-13.0	-35.0	
High Channel (822.3MHz)									
1.695	-10.8	H	3.0	34.9	1.0	-44.7	-13.0	-31.7	
2.543	-12.2	H	3.0	35.4	1.0	-46.6	-13.0	-33.6	
1.695	-11.0	V	3.0	34.9	1.0	-44.9	-13.0	-31.9	
2.543	-13.0	V	3.0	35.4	1.0	-47.4	-13.0	-34.4	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 26, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (820.3MHz)									
1.631	-11.7	H	3.0	34.9	1.0	-45.6	-13.0	-32.6	
2.447	-10.3	H	3.0	35.5	1.0	-44.7	-13.0	-31.7	
1.631	-13.9	V	3.0	34.9	1.0	-47.8	-13.0	-34.8	
2.447	-14.7	V	3.0	35.5	1.0	-49.2	-13.0	-36.2	
Mid Channel (821.3MHz)									
1.663	-10.3	H	3.0	34.9	1.0	-44.2	-13.0	-31.2	
2.495	-10.1	H	3.0	35.3	1.0	-44.4	-13.0	-31.4	
1.663	-13.9	V	3.0	34.9	1.0	-47.8	-13.0	-34.8	
2.495	-13.8	V	3.0	35.3	1.0	-48.1	-13.0	-35.1	
High Channel (822.3MHz)									
1.695	-11.7	H	3.0	34.9	1.0	-45.6	-13.0	-32.6	
2.543	-13.7	H	3.0	35.4	1.0	-48.1	-13.0	-35.1	
1.695	-11.6	V	3.0	34.9	1.0	-45.5	-13.0	-32.5	
2.543	-14.0	V	3.0	35.4	1.0	-48.4	-13.0	-35.4	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 26, 5MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (821.3MHz)									
1.663	-10.3	H	3.0	34.9	1.0	-44.2	-13.0	-31.2	
2.495	-8.8	H	3.0	35.3	1.0	-43.1	-13.0	-30.1	
1.663	-13.2	V	3.0	34.9	1.0	-47.1	-13.0	-34.1	
2.495	-11.4	V	3.0	35.3	1.0	-45.7	-13.0	-32.7	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:	14U17676								
Date:	06/21/14								
Test Engineer:	E.Yu								
Configuration:	EUT Only								
Mode:	LTE Band 26, 5MHz 16QAM								
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (821.3MHz)									
1.663	-10.9	H	3.0	34.9	1.0	-44.8	-13.0	-31.8	
2.495	-8.9	H	3.0	35.3	1.0	-43.2	-13.0	-30.2	
1.663	-12.7	V	3.0	34.9	1.0	-46.6	-13.0	-33.6	
2.495	-12.0	V	3.0	35.3	1.0	-46.3	-13.0	-33.3	
Rev. 03.03.14									

LAT QPSK EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:	14U17676								
Date:	07/18/14								
Test Engineer:	E.Yu								
Configuration:	EUT Only								
Mode:	LTE Band 26, 10MHz QPSK								
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		Filter 01		Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (819MHz)									
1.638	-16.3	H	3.0	34.9	1.0	-50.2	-13.0	-37.2	
2.442	-14.6	H	3.0	35.5	1.0	-49.1	-13.0	-36.1	
1.638	-15.7	V	3.0	34.9	1.0	-49.7	-13.0	-36.7	
2.442	-12.3	V	3.0	35.5	1.0	-46.8	-13.0	-33.8	
Rev. 03.03.14									

LAT 16QAM EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		07/18/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 26, 10MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F		Filter 01		Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (819MHz)									
1.638	-14.8	H	3.0	34.9	1.0	-48.7	-13.0	-35.7	
2.442	-14.4	H	3.0	35.5	1.0	-48.9	-13.0	-35.9	
1.638	-15.2	V	3.0	34.9	1.0	-49.1	-13.0	-36.1	
2.442	-12.5	V	3.0	35.5	1.0	-47.0	-13.0	-34.0	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 06/21/14
Test Engineer: E.Yu
Configuration: EUT Only
Mode: LTE Band 26, 3MHz QPSK

Test Equipment:
Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber

Pre-amplifier

Filter

Limit

3m Chamber F

3m Chamber F

Part 22

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (820.3MHz)									
1.631	-14.3	H	3.0	34.9	1.0	-48.3	-13.0	-35.3	
2.447	-14.6	H	3.0	35.5	1.0	-49.1	-13.0	-36.1	
1.631	-15.7	V	3.0	34.9	1.0	-49.6	-13.0	-36.6	
2.447	-13.6	V	3.0	35.5	1.0	-48.1	-13.0	-35.1	
Mid Channel (821.3MHz)									
1.663	-12.0	H	3.0	34.9	1.0	-45.9	-13.0	-32.9	
2.495	-14.5	H	3.0	35.3	1.0	-48.8	-13.0	-35.8	
1.663	-12.7	V	3.0	34.9	1.0	-46.6	-13.0	-33.6	
2.495	-13.7	V	3.0	35.3	1.0	-48.0	-13.0	-35.0	
High Channel (822.3MHz)									
1.695	-11.7	H	3.0	34.9	1.0	-45.6	-13.0	-32.6	
2.543	-15.1	H	3.0	35.4	1.0	-49.5	-13.0	-36.5	
1.695	-13.2	V	3.0	34.9	1.0	-47.1	-13.0	-34.1	
2.543	-13.1	V	3.0	35.4	1.0	-47.5	-13.0	-34.5	

Rev. 03.03.14

UAT 16QAM EIRP POWER FOR LTE BAND 26 (3.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 26, 3MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Low Channel (820.3MHz)									
1.631	-13.0	H	3.0	34.9	1.0	-46.9	-13.0	-33.9	
2.447	-15.8	H	3.0	35.5	1.0	-50.3	-13.0	-37.3	
1.631	-16.7	V	3.0	34.9	1.0	-50.6	-13.0	-37.6	
2.447	-14.5	V	3.0	35.5	1.0	-49.0	-13.0	-36.0	
Mid Channel (821.3MHz)									
1.663	-12.5	H	3.0	34.9	1.0	-46.4	-13.0	-33.4	
2.495	-15.2	H	3.0	35.3	1.0	-49.5	-13.0	-36.5	
1.663	-13.9	V	3.0	34.9	1.0	-47.8	-13.0	-34.8	
2.495	-14.8	V	3.0	35.3	1.0	-49.1	-13.0	-36.1	
High Channel (822.3MHz)									
1.695	-14.4	H	3.0	34.9	1.0	-48.3	-13.0	-35.3	
2.543	-13.7	H	3.0	35.4	1.0	-48.1	-13.0	-35.1	
1.695	-14.1	V	3.0	34.9	1.0	-48.0	-13.0	-35.0	
2.543	-14.5	V	3.0	35.4	1.0	-48.9	-13.0	-35.9	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 26, 5MHz QPSK							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F ▼		3m Chamber F ▼		▼		Part 22 ▼			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (821.3MHz)									
1.663	-13.9	H	3.0	34.9	1.0	-47.8	-13.0	-34.8	
2.495	-13.7	H	3.0	35.3	1.0	-48.0	-13.0	-35.0	
1.663	-16.0	V	3.0	34.9	1.0	-49.9	-13.0	-36.9	
2.495	-14.9	V	3.0	35.3	1.0	-49.2	-13.0	-36.2	
Rev. 03.03.14									

UAT 16QAM EIRP POWER FOR LTE BAND 26 (5.0MHZ BANDWIDTH)

3m Radiated Emissions Chamber Above 1GHz Substitution Measurement									
Project #:		14U17676							
Date:		06/21/14							
Test Engineer:		E.Yu							
Configuration:		EUT Only							
Mode:		LTE Band 26, 5MHz 16QAM							
Test Equipment:									
Substitution: Horn T59 Substitution, and 8ft SMA Cable									
Chamber		Pre-amplifier		Filter		Limit			
3m Chamber F		3m Chamber F				Part 22			
Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (821.3MHz)									
1.663	-13.5	H	3.0	34.9	1.0	-47.4	-13.0	-34.4	
2.495	-13.1	H	3.0	35.3	1.0	-47.4	-13.0	-34.4	
1.663	-15.5	V	3.0	34.9	1.0	-49.4	-13.0	-36.4	
2.495	-14.0	V	3.0	35.3	1.0	-48.3	-13.0	-35.3	
Rev. 03.03.14									

UAT QPSK EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 07/18/14
Test Engineer: E.Yu
Configuration: EUT Only
Mode: LTE Band 26, 10MHz QPSK

Test Equipment:
 Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber F

Pre-amplifier
 3m Chamber F

Filter
 Filter 01

Limit
 Part 22

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (819MHz)									
1.638	-18.2	H	3.0	34.9	1.0	-52.1	-13.0	-39.1	
2.442	-15.9	H	3.0	35.5	1.0	-50.4	-13.0	-37.4	
1.638	-17.4	V	3.0	34.9	1.0	-51.4	-13.0	-38.4	
2.442	-15.3	V	3.0	35.5	1.0	-49.8	-13.0	-36.8	

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UAT 16QAM EIRP POWER FOR LTE BAND 26 (10.0MHZ BANDWIDTH)

**3m Radiated Emissions Chamber
Above 1GHz Substitution Measurement**

Project #: 14U17676
Date: 07/18/14
Test Engineer: E.Yu
Configuration: EUT Only
Mode: LTE Band 26, 10MHz 16QAM

Test Equipment:
Substitution: Horn T59 Substitution, and 8ft SMA Cable

Chamber
 3m Chamber F

Pre-amplifier
 3m Chamber F

Filter
 Filter 01

Limit
 Part 22

Frequency (GHz)	SG reading (dBm)	Ant. Pol. (H/V)	Distance	Preamp	Attenuator	EIRP	Limit	Delta	Notes
Mid Channel (819MHz)									
1.638	-17.6	H	3.0	34.9	1.0	-51.5	-13.0	-38.5	
2.442	-16.8	H	3.0	35.5	1.0	-51.3	-13.0	-38.3	
1.638	-16.9	V	3.0	34.9	1.0	-50.8	-13.0	-37.8	
2.442	-13.6	V	3.0	35.5	1.0	-48.1	-13.0	-35.1	

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