8 Conducted Spurious Emission Test

8.1. Limit

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 $\log_{10}$(P) dB. The limit of emission equal to -13dBm

§27.53(a)(4)

70 + 10 log (P) dB above 2365 MHz. The limit of emission equal to -40dBm

70 + 10 log (P) dB below 2288 MHz. The limit of emission equal to -40dBm

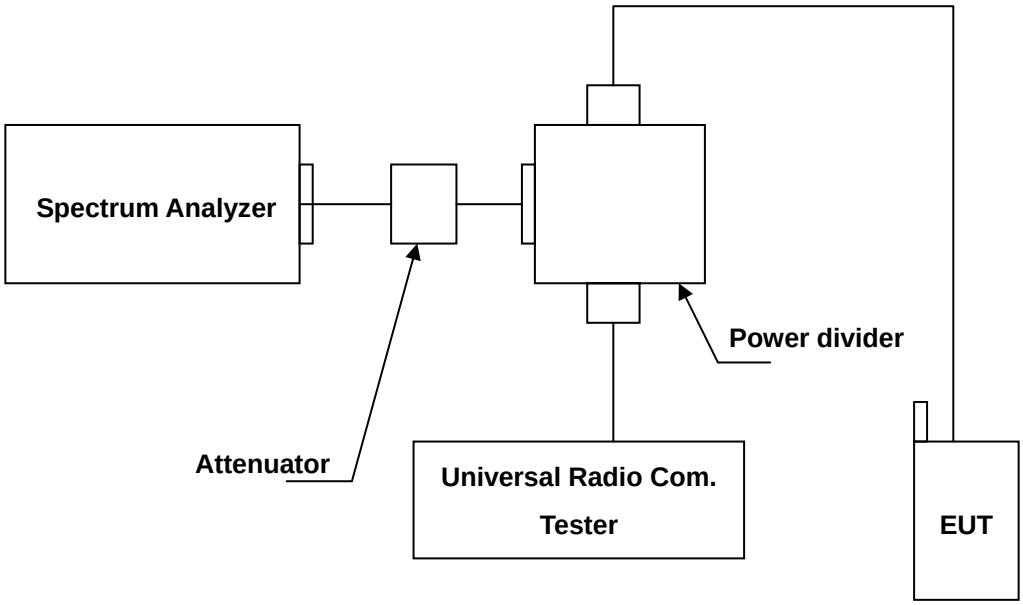
8.2. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Period
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/14/2015	1 year
Wideband Radio Communication Test	R & S	CMW500	103168	10/30/2015	1 year
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE02	TE02	N.C.R.	-----

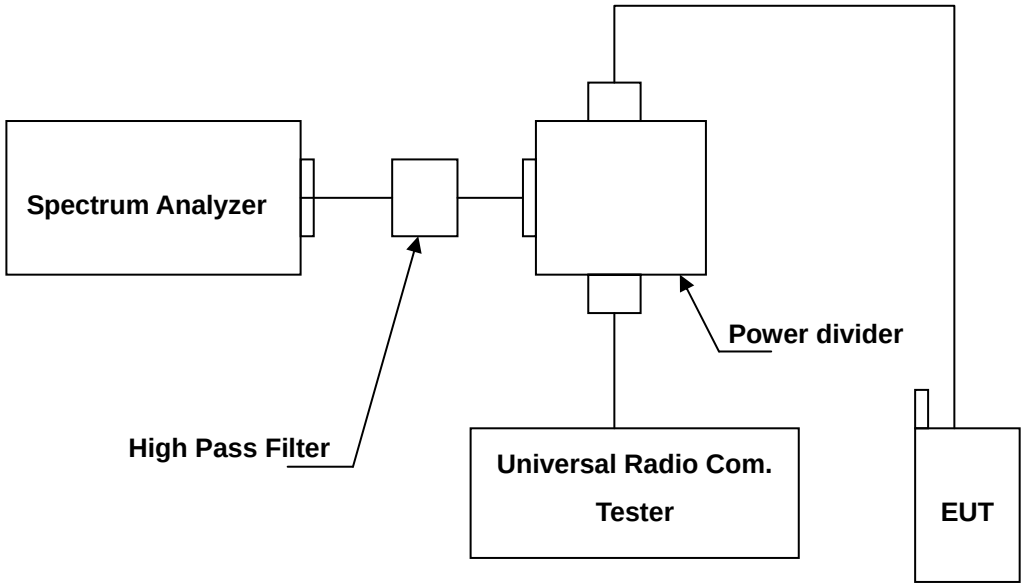
Note: N.C.R. = No Calibration Request.

8.3. Setup

Below 2.8GHz



Above 2.8GHz



8.4. Test Procedure

a. The EUT was set up for the maximum peak power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range.).

b. The conducted spurious emission used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.

c. When the spectrum scanned from 10MHz to 2.5GHz (Band 7, Band 30 and Band 41: scanned from 10MHz to 4GHz) , it shall be connected to the band reject filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.

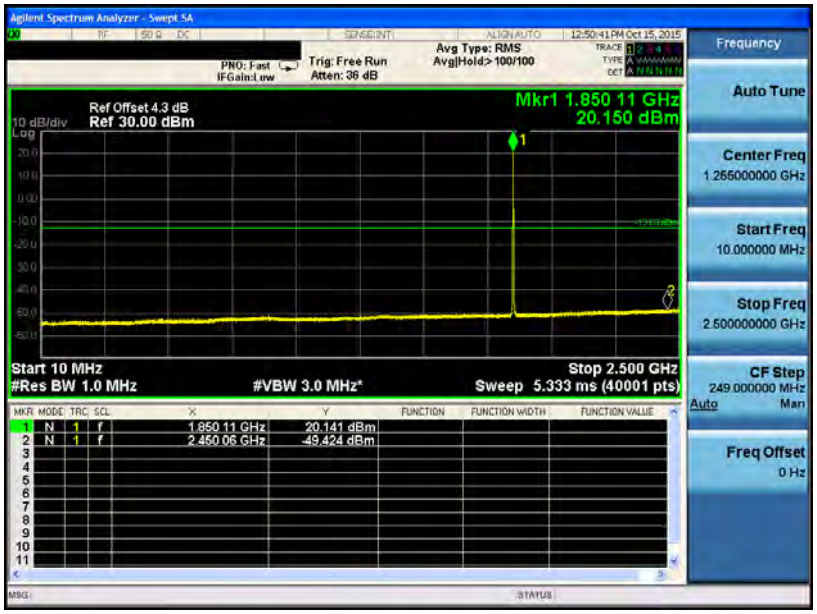
d. When the spectrum scanned from 2.5GHz to 10th harmonic (Band 7, Band 30 and Band 41: scanned from 4GHz to 10th harmonic), it shall be connected to the high pass filter attenuated the carried frequency. The spectrum set RB=1MHz, VB=3MHz.

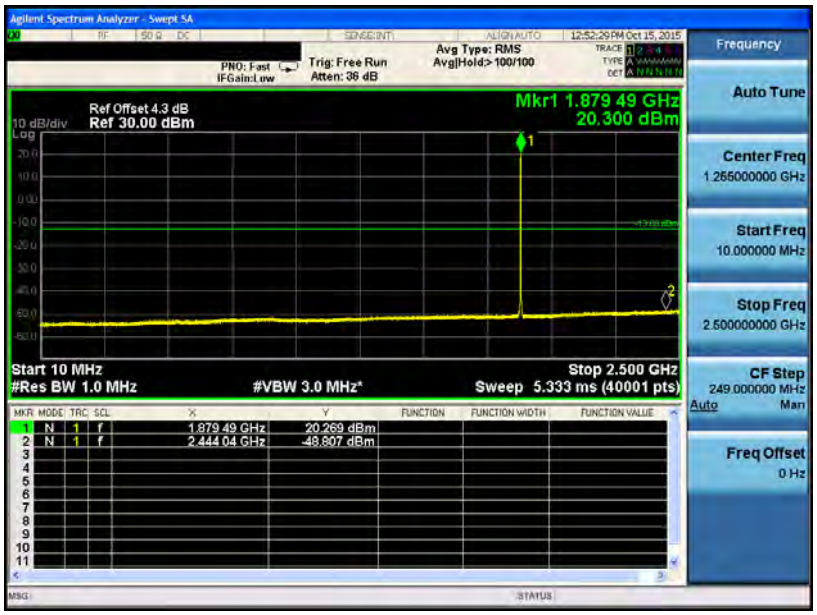
8.5. Uncertainty

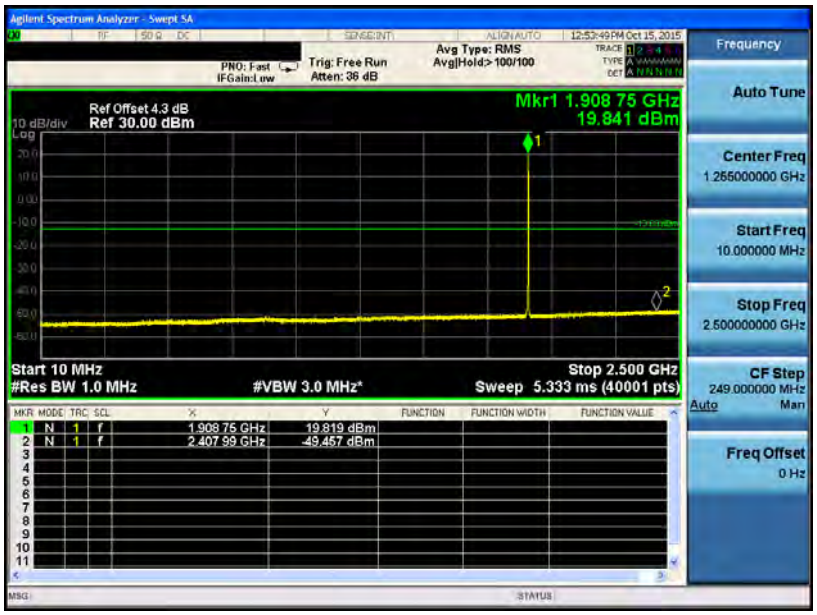
The measurement uncertainty is evaluated as ± 2.24 dB.

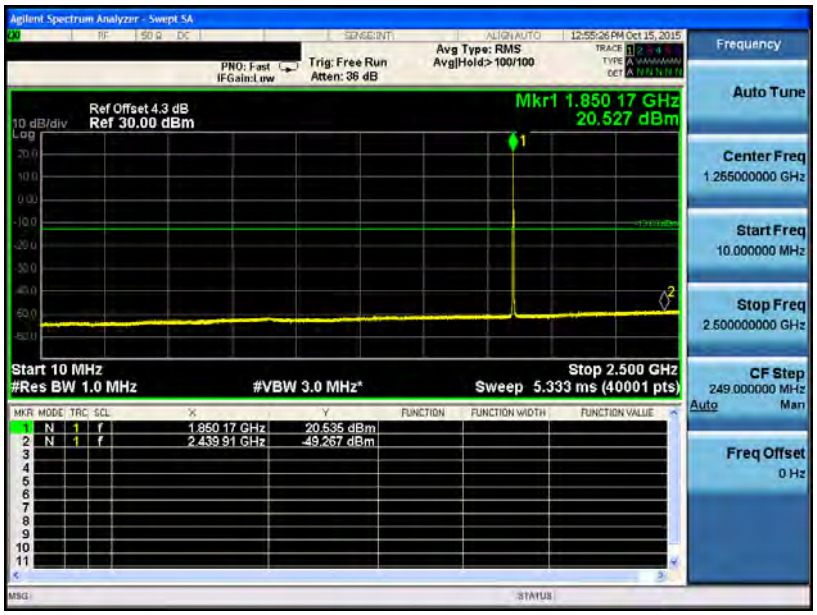
8.6. Test Results

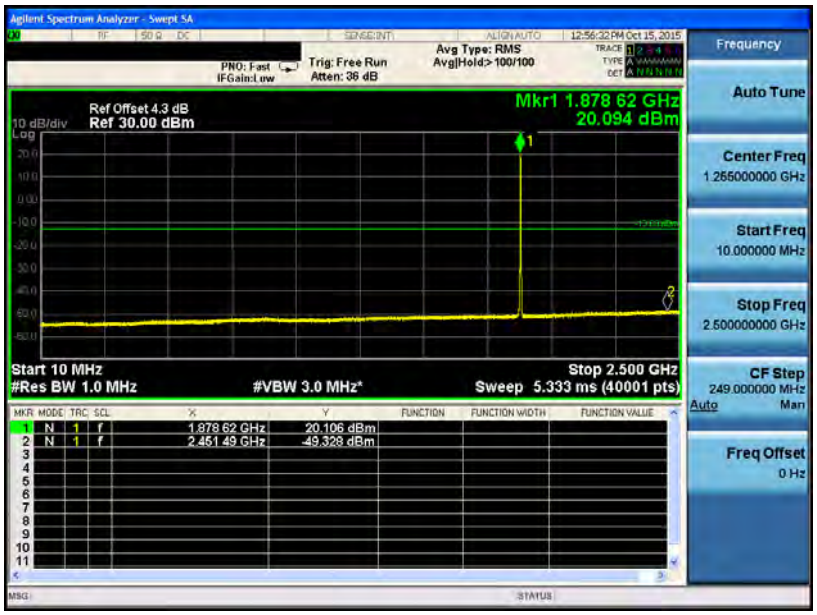
Model Number	AC815S
Test Item	Conducted Spurious Emission
Date of Test	10/15/2015, 12/03/2015

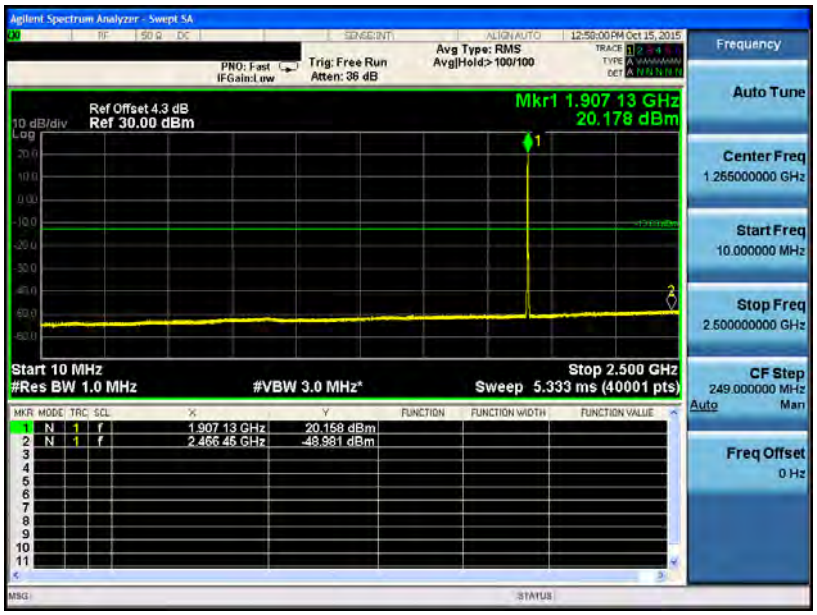
LTE Band 2 (Channel Bandwidth: 1.4 MHz) _ QPSK	
1850.7 MHz	

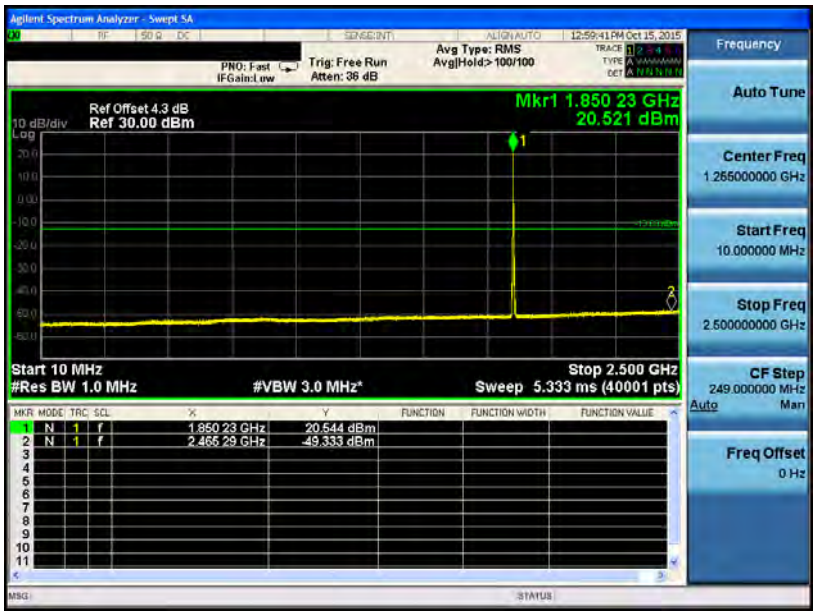
LTE Band 2 (Channel Bandwidth: 1.4 MHz) _ QPSK	
1880.0 MHz	

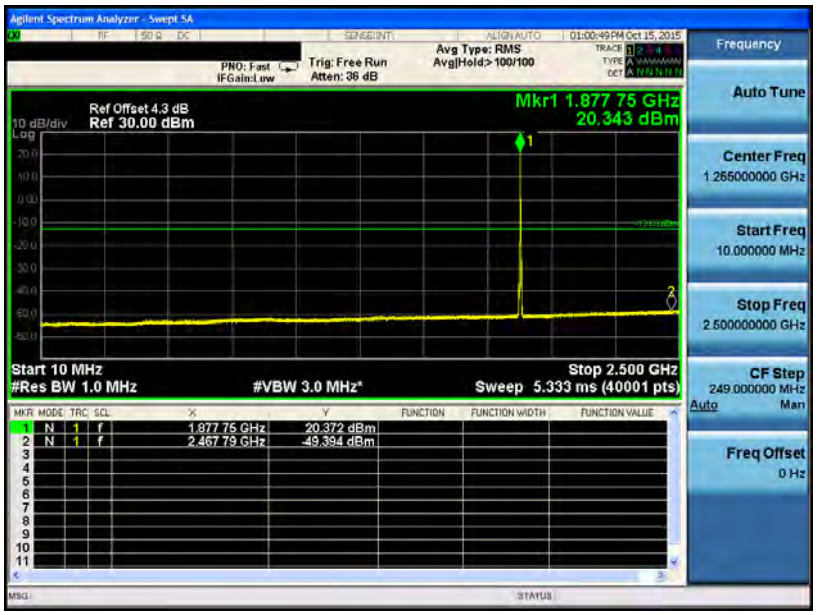
LTE Band 2 (Channel Bandwidth: 1.4 MHz) _ QPSK	
1909.3 MHz	

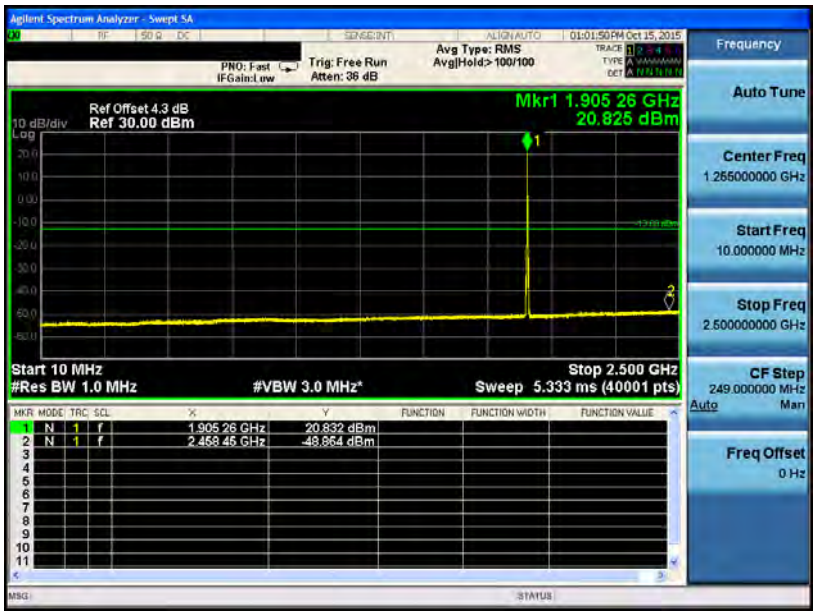
LTE Band 2 (Channel Bandwidth: 3 MHz) _ QPSK	
1851.5 MHz	

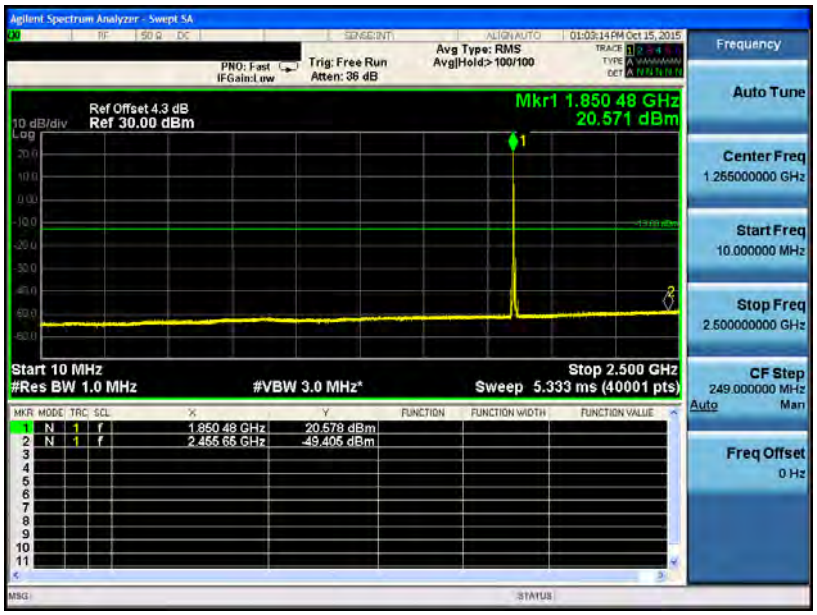
LTE Band 2 (Channel Bandwidth: 3 MHz) _ QPSK	
1880.0 MHz	

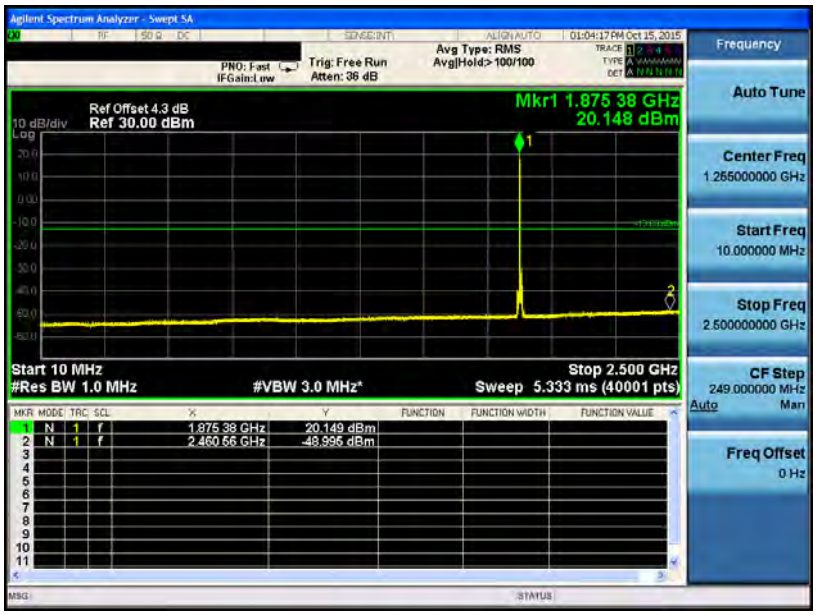
LTE Band 2 (Channel Bandwidth: 3 MHz) _ QPSK	
1908.5 MHz	

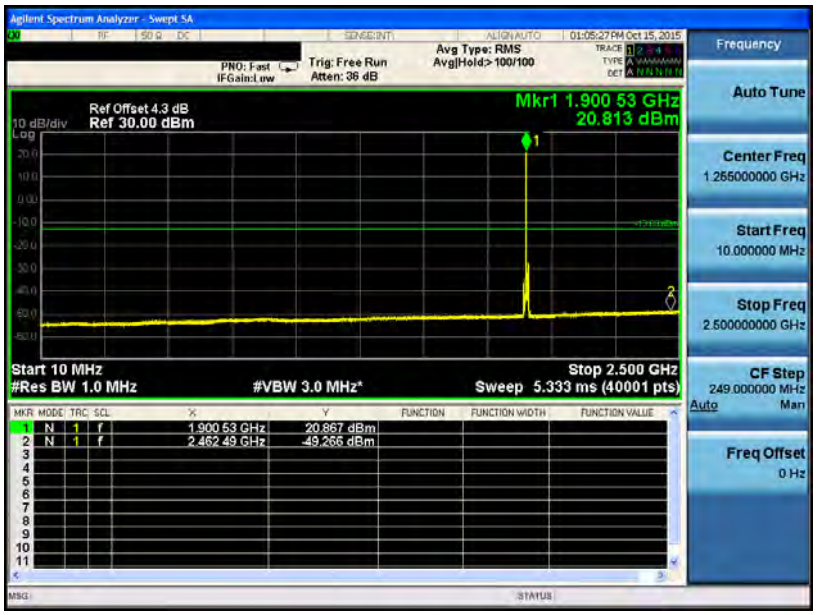
LTE Band 2 (Channel Bandwidth: 5 MHz) _ QPSK	
1852.5 MHz	

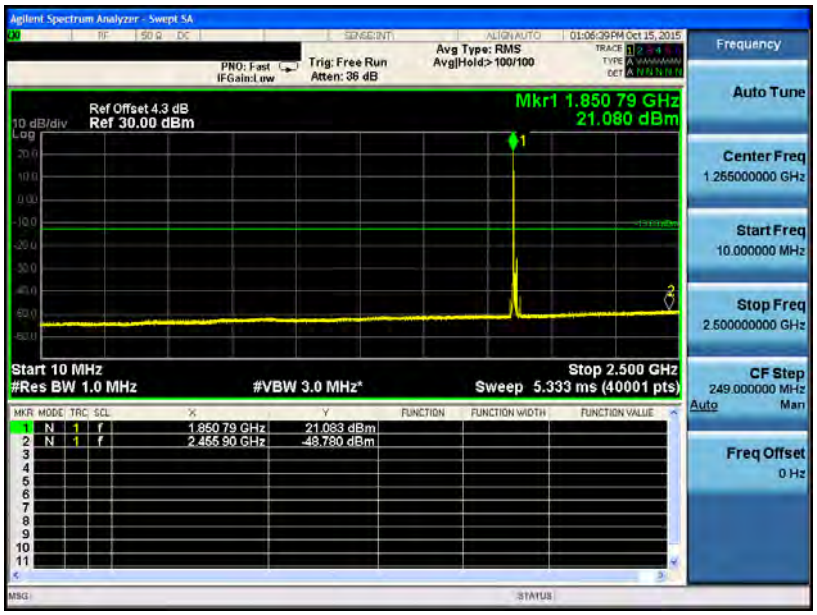
LTE Band 2 (Channel Bandwidth: 5 MHz) _ QPSK	
1880.0 MHz	

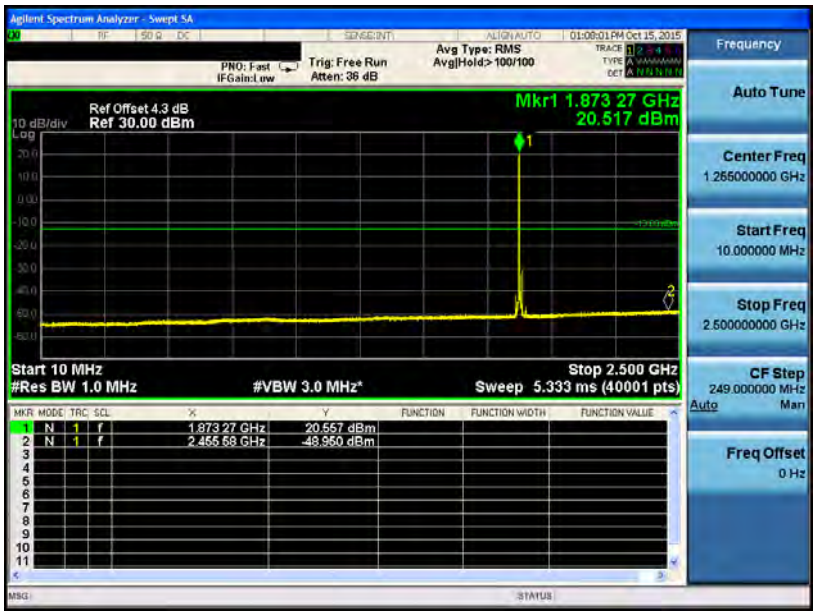
LTE Band 2 (Channel Bandwidth: 5 MHz) _ QPSK	
1907.5 MHz	

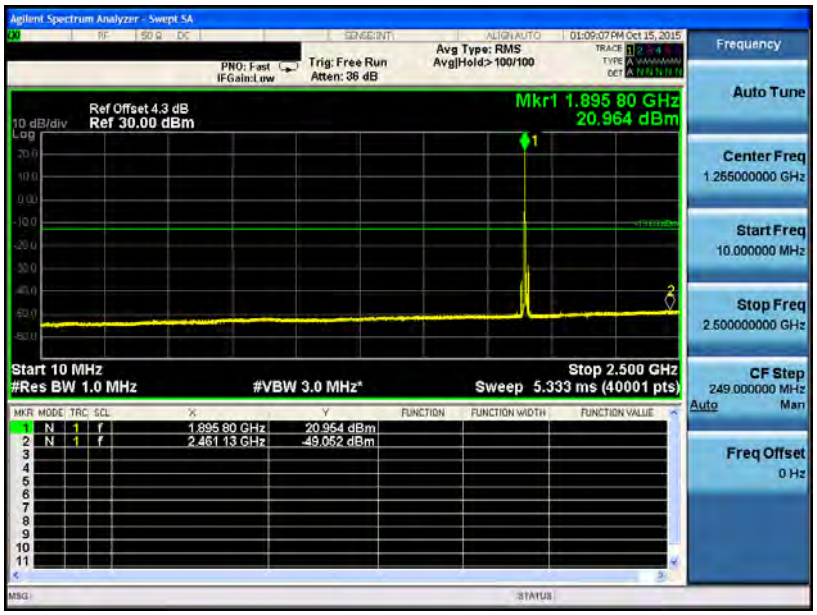
LTE Band 2 (Channel Bandwidth: 10 MHz) _ QPSK	
1855.0 MHz	

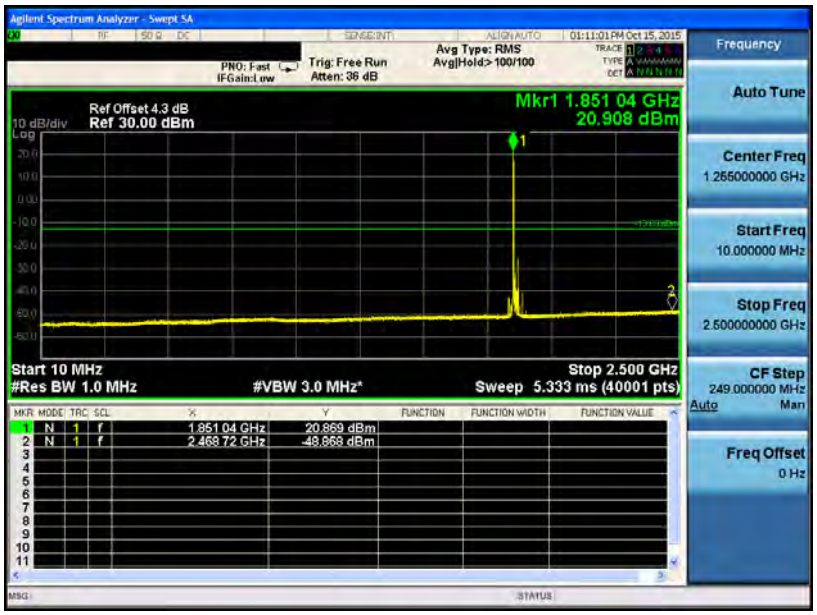
LTE Band 2 (Channel Bandwidth: 10 MHz) _ QPSK	
1880.0 MHz	

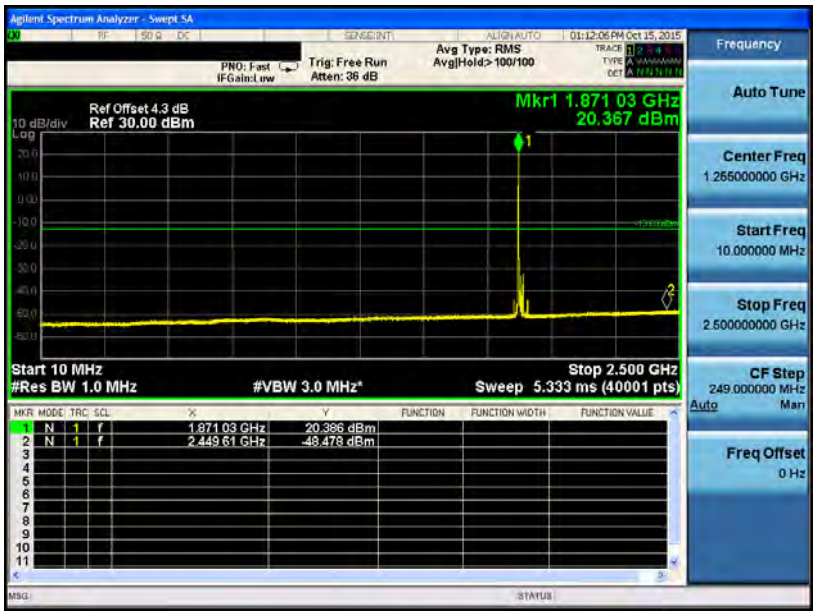
LTE Band 2 (Channel Bandwidth: 10 MHz) _ QPSK	
1905.0 MHz	

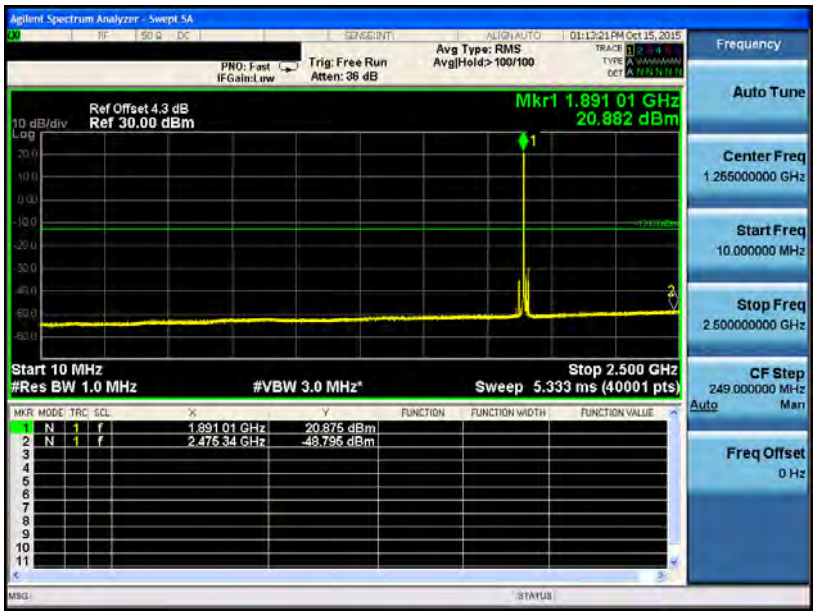
LTE Band 2 (Channel Bandwidth: 15 MHz) _ QPSK	
1857.5 MHz	

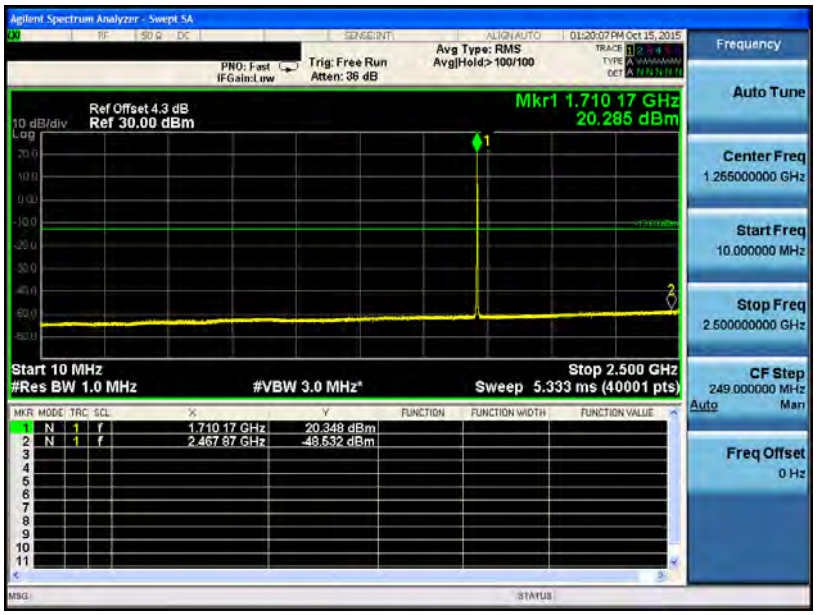
LTE Band 2 (Channel Bandwidth: 15 MHz) _ QPSK	
1880.0 MHz	

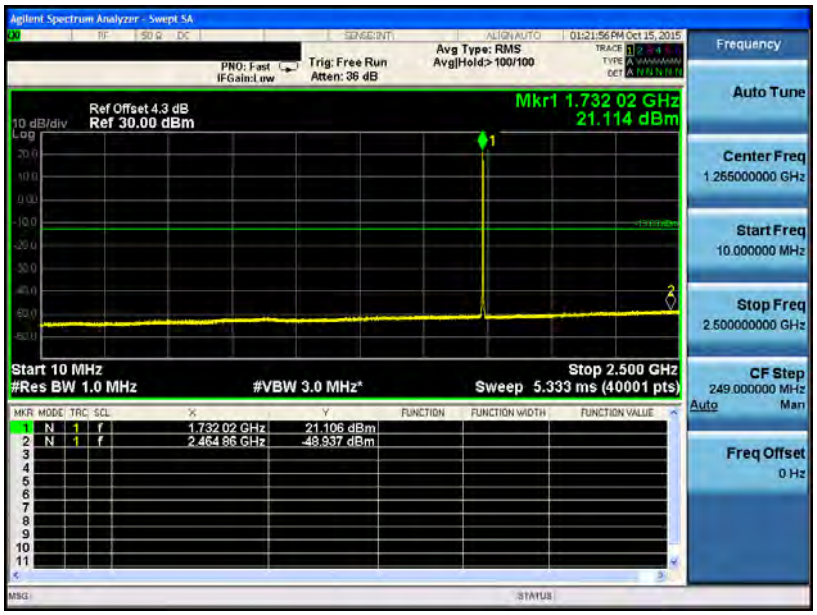
LTE Band 2 (Channel Bandwidth: 15 MHz) _ QPSK	
1902.5 MHz	

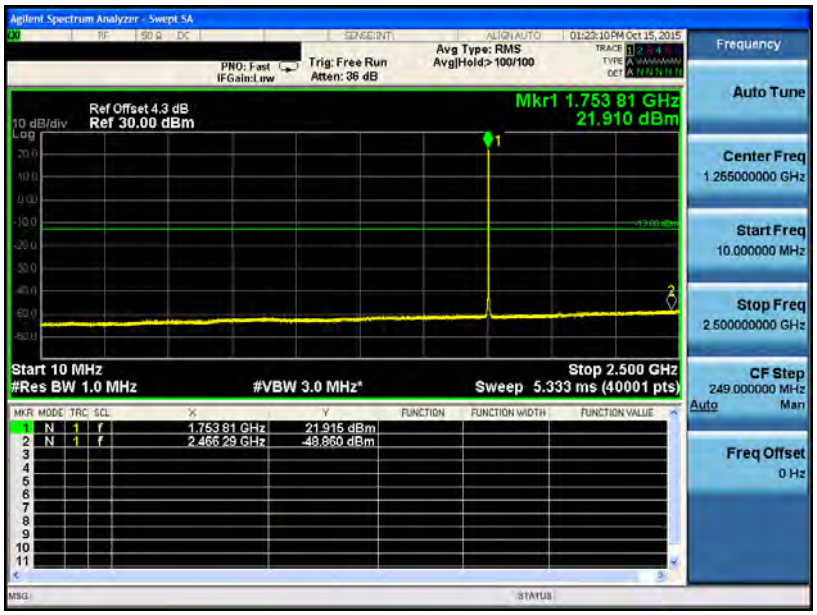
LTE Band 2 (Channel Bandwidth: 20 MHz) _ QPSK	
1860.0 MHz	

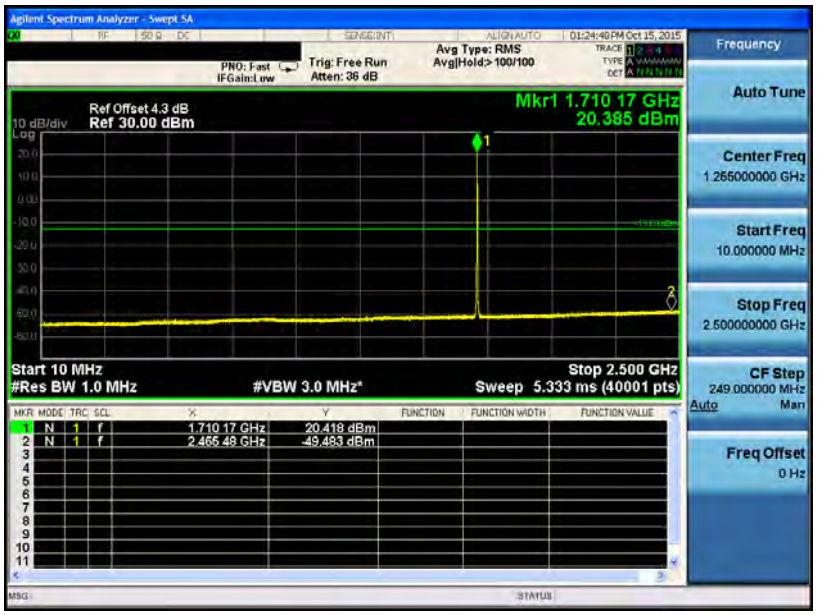
LTE Band 2 (Channel Bandwidth: 20 MHz) _ QPSK	
1880.0 MHz	

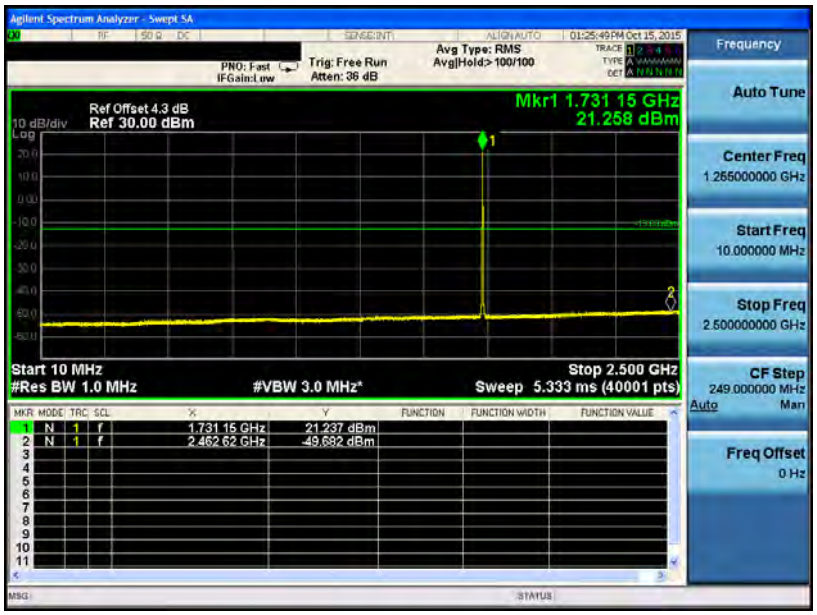
LTE Band 2 (Channel Bandwidth: 20 MHz) _ QPSK	
1900.0 MHz	

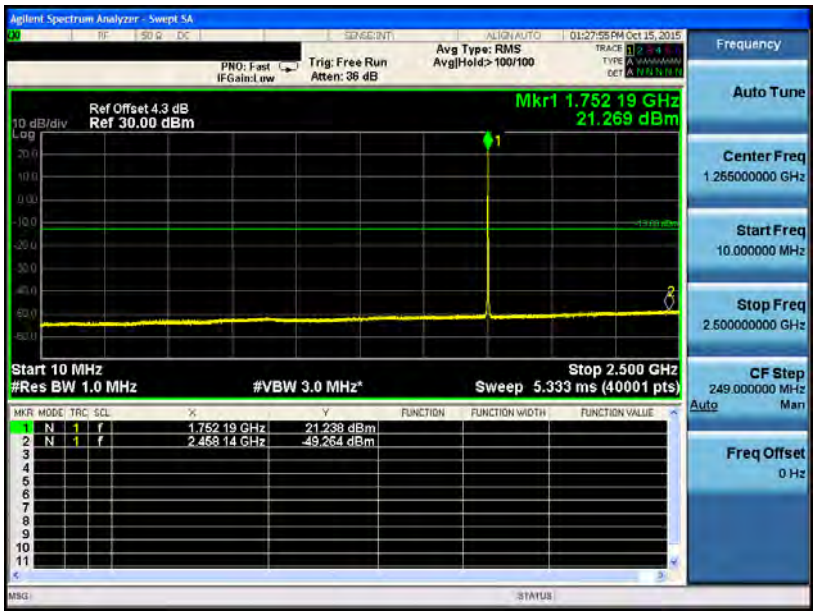
LTE Band 4 (Channel Bandwidth: 1.4 MHz) _ QPSK	
1710.7 MHz	

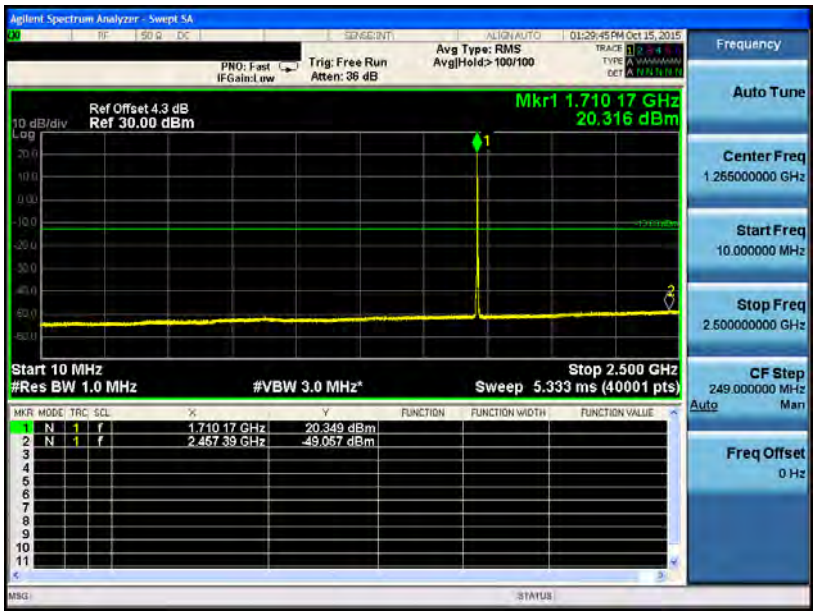
LTE Band 4 (Channel Bandwidth: 1.4 MHz) _ QPSK	
1732.5 MHz	

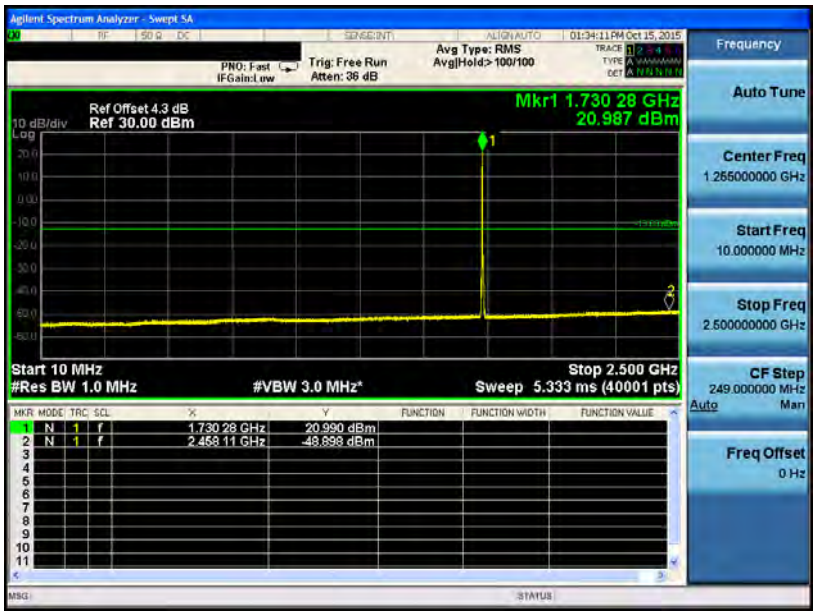
LTE Band 4 (Channel Bandwidth: 1.4 MHz) _ QPSK	
1754.3 MHz	

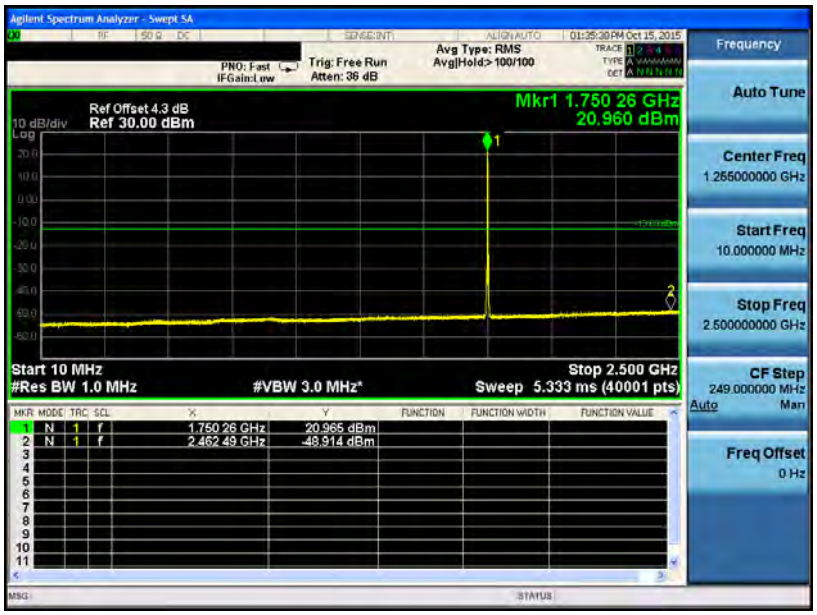
LTE Band 4 (Channel Bandwidth: 3 MHz) _ QPSK	
1711.5 MHz	

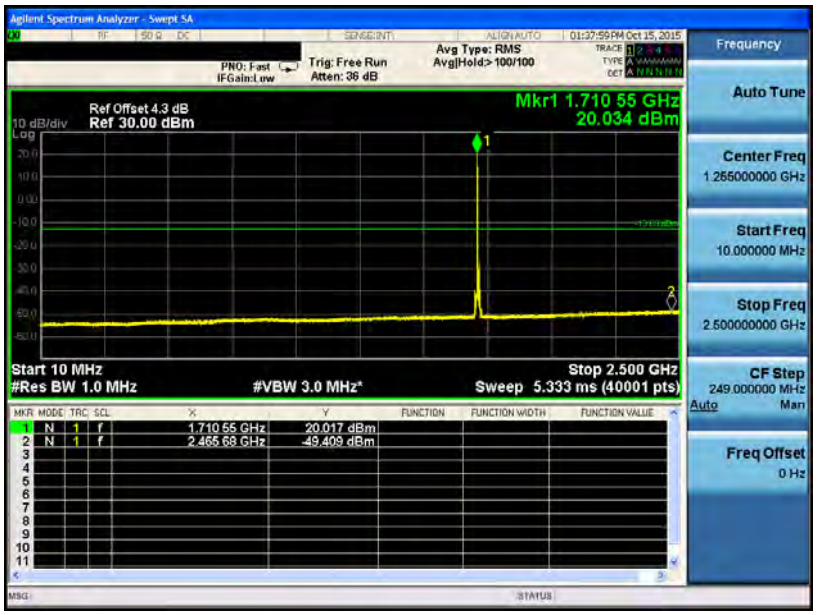
LTE Band 4 (Channel Bandwidth: 3 MHz) _ QPSK	
1732.5 MHz	

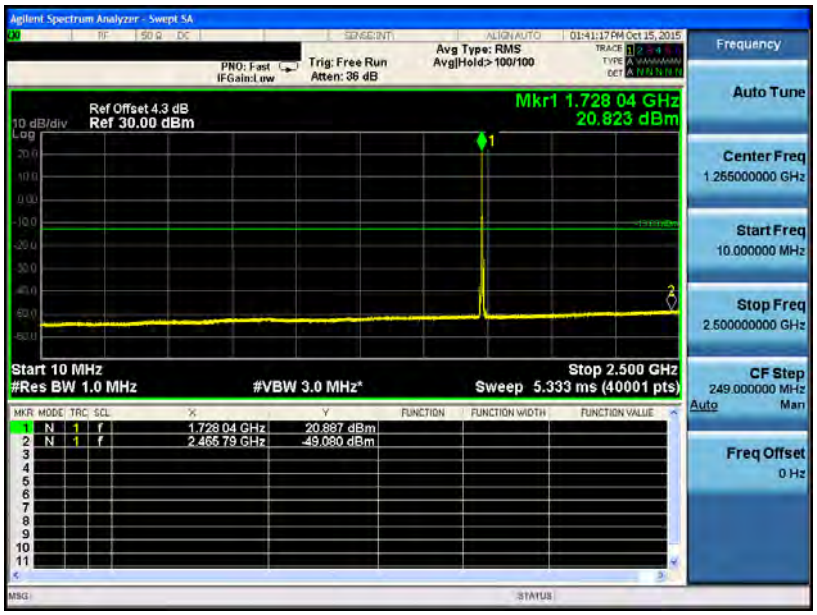
LTE Band 4 (Channel Bandwidth: 3 MHz) _ QPSK	
1753.5 MHz	

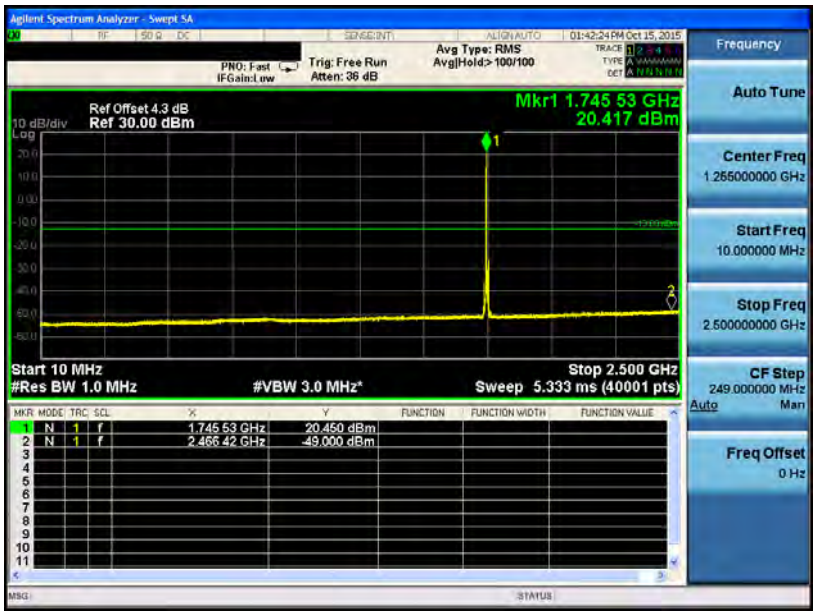
LTE Band 4 (Channel Bandwidth: 5 MHz) _ QPSK	
1712.5 MHz	

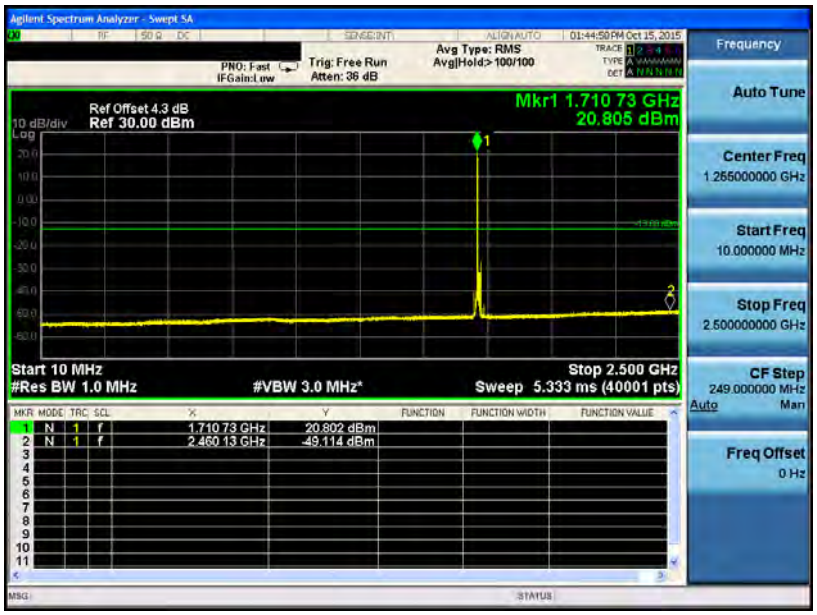
LTE Band 4 (Channel Bandwidth: 5 MHz) _ QPSK	
1732.5 MHz	

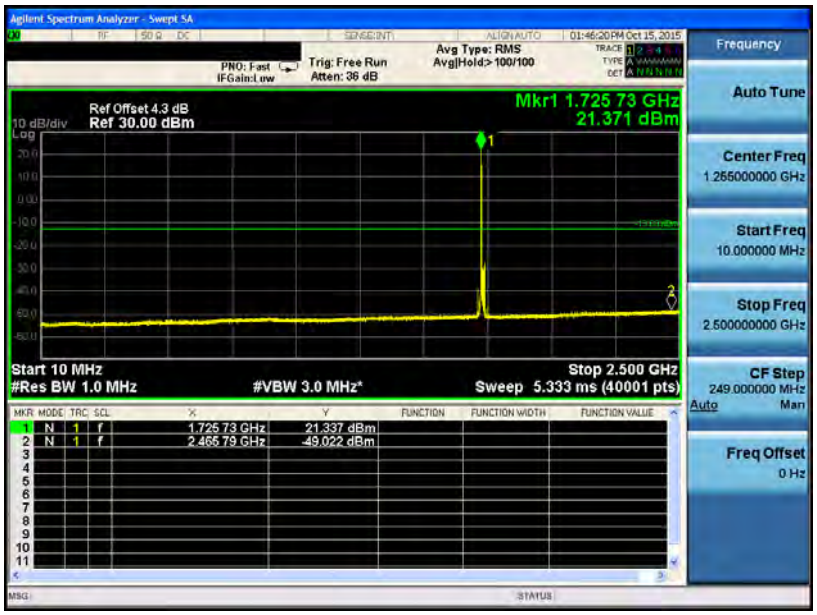
LTE Band 4 (Channel Bandwidth: 5 MHz) _ QPSK	
1752.5 MHz	

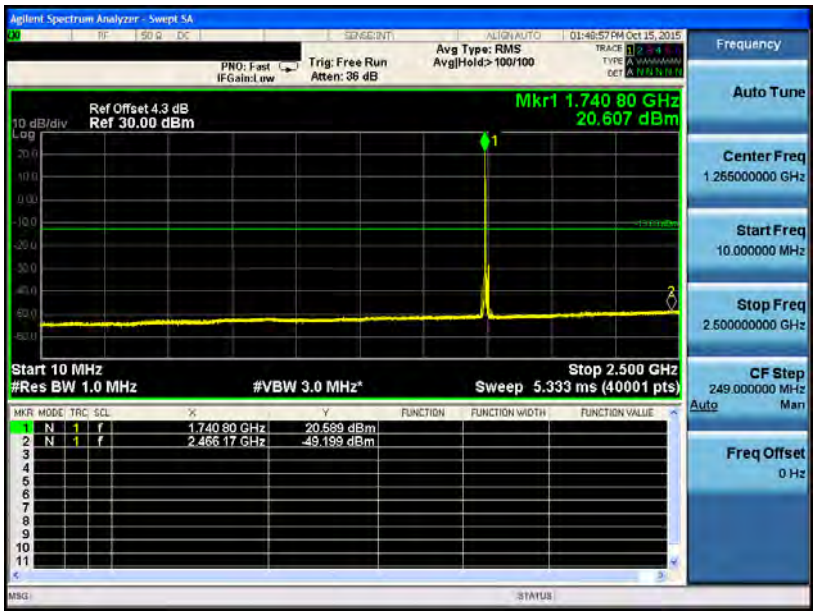
LTE Band 4 (Channel Bandwidth: 10 MHz) _ QPSK	
1715.0 MHz	

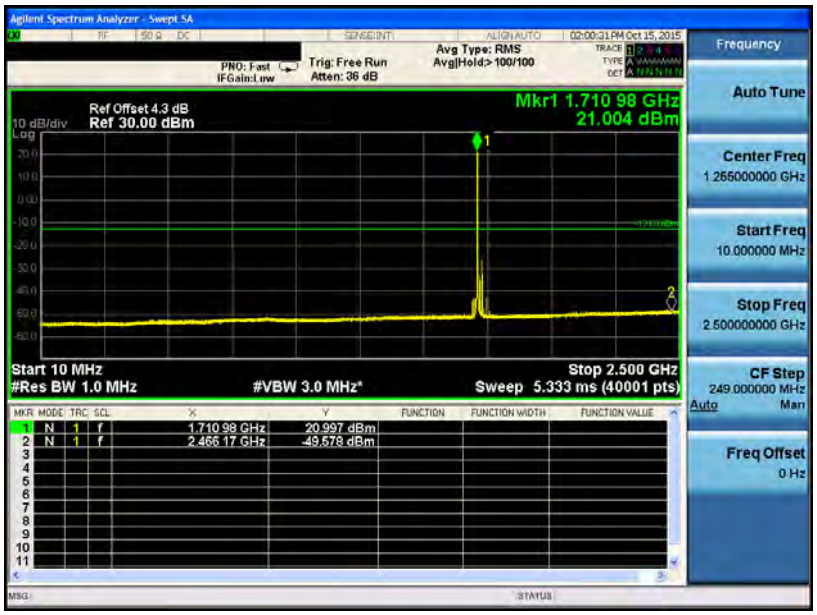
LTE Band 4 (Channel Bandwidth: 10 MHz) _ QPSK	
11732.5 MHz	

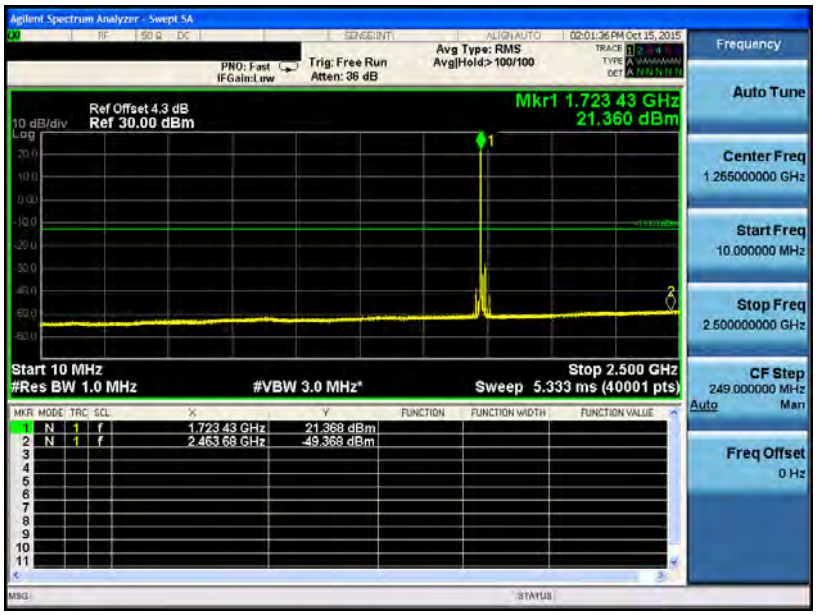
LTE Band 4 (Channel Bandwidth: 10 MHz) _ QPSK	
1750.0 MHz	

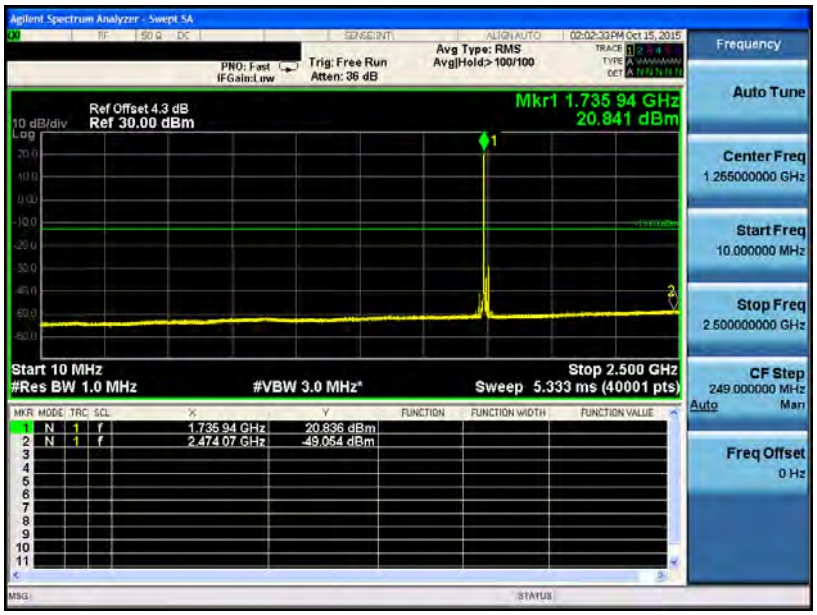
LTE Band 4 (Channel Bandwidth: 15 MHz) _ QPSK	
1717.5 MHz	

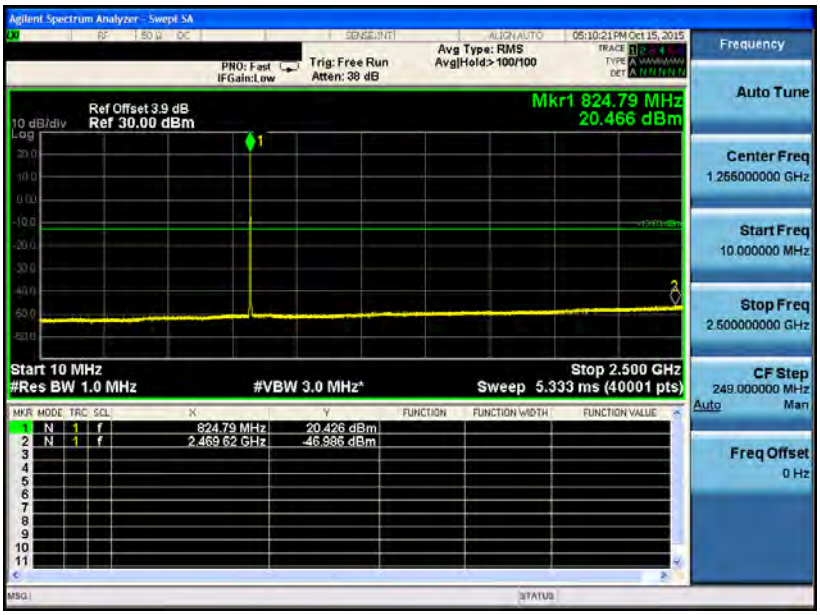
LTE Band 4 (Channel Bandwidth: 15 MHz) _ QPSK	
1732.5 MHz	

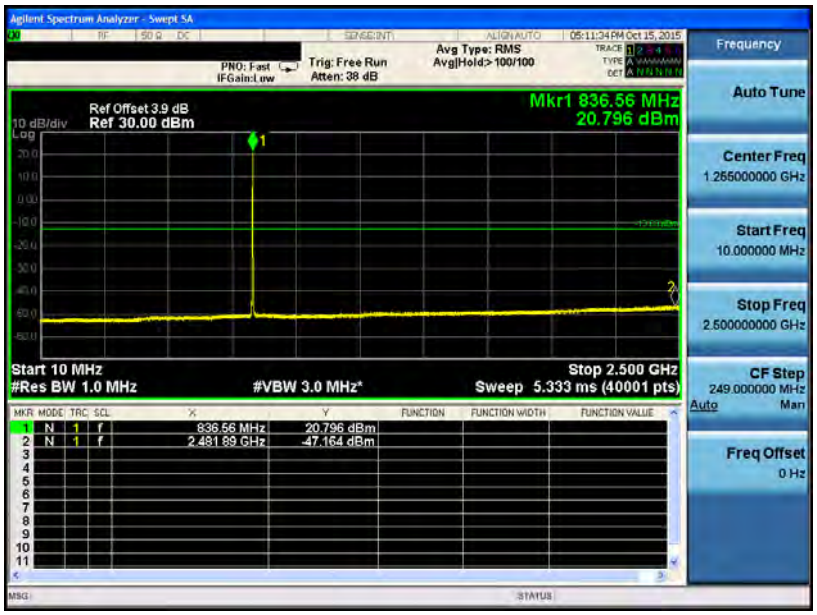
LTE Band 4 (Channel Bandwidth: 15 MHz) _ QPSK	
1747.5 MHz	

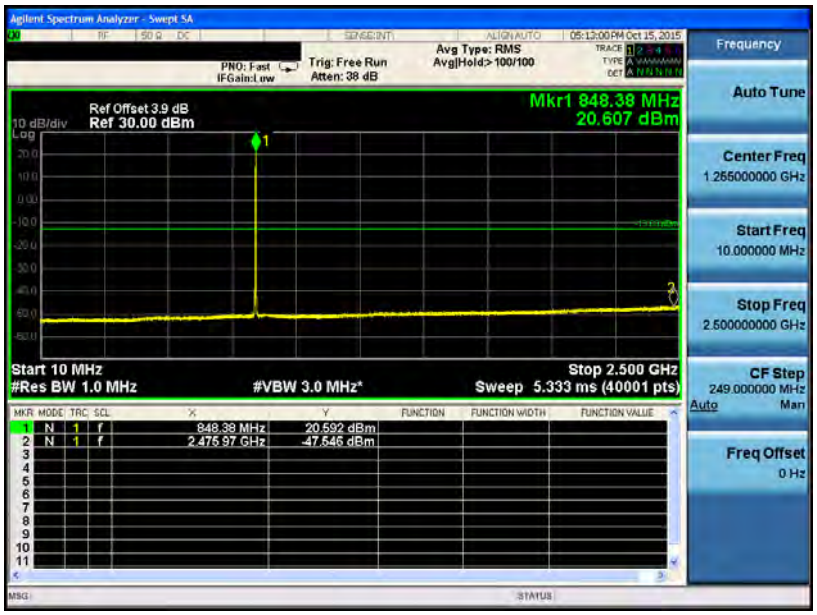
LTE Band 4 (Channel Bandwidth: 20 MHz) _ QPSK	
1720.0 MHz	

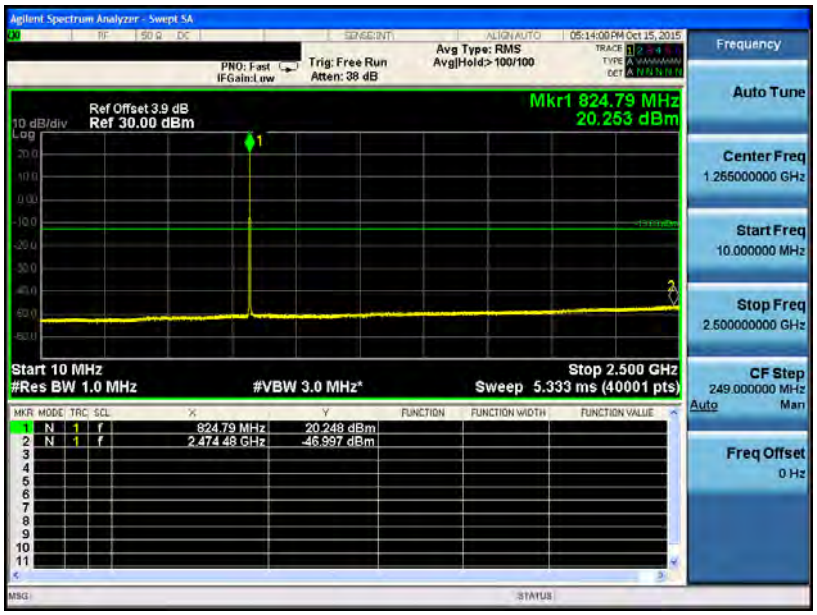
LTE Band 4 (Channel Bandwidth: 20 MHz) _ QPSK	
1732.5 MHz	

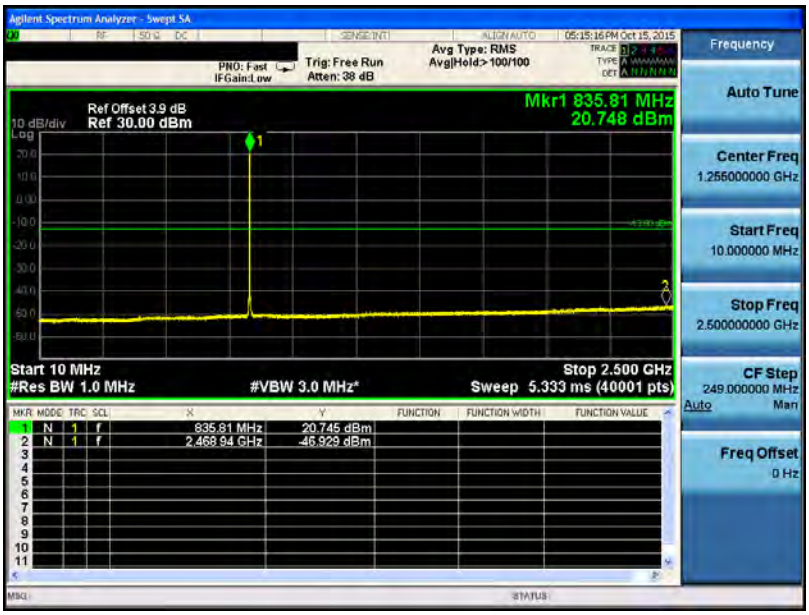
LTE Band 4 (Channel Bandwidth: 20 MHz) _ QPSK	
1745.0 MHz	

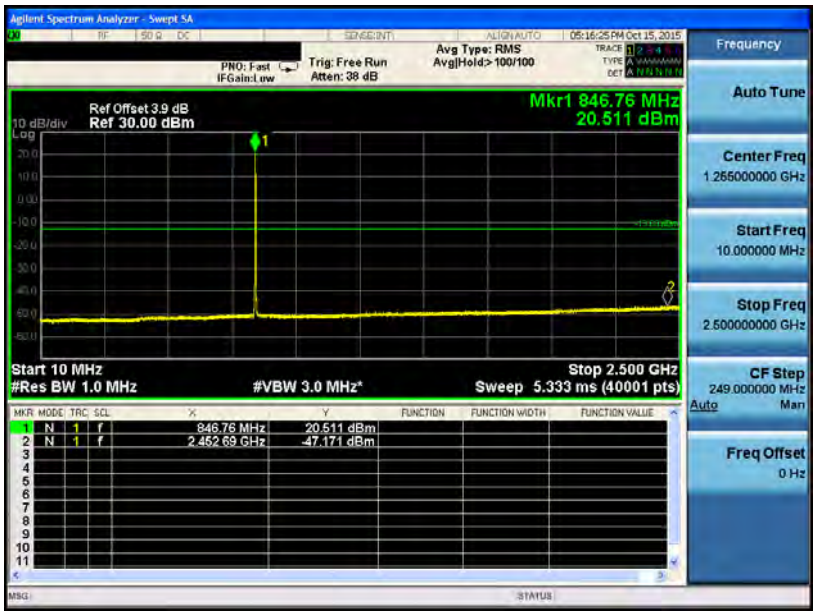
LTE Band 5 (Channel Bandwidth: 1.4 MHz) _ QPSK	
824.7 MHz	

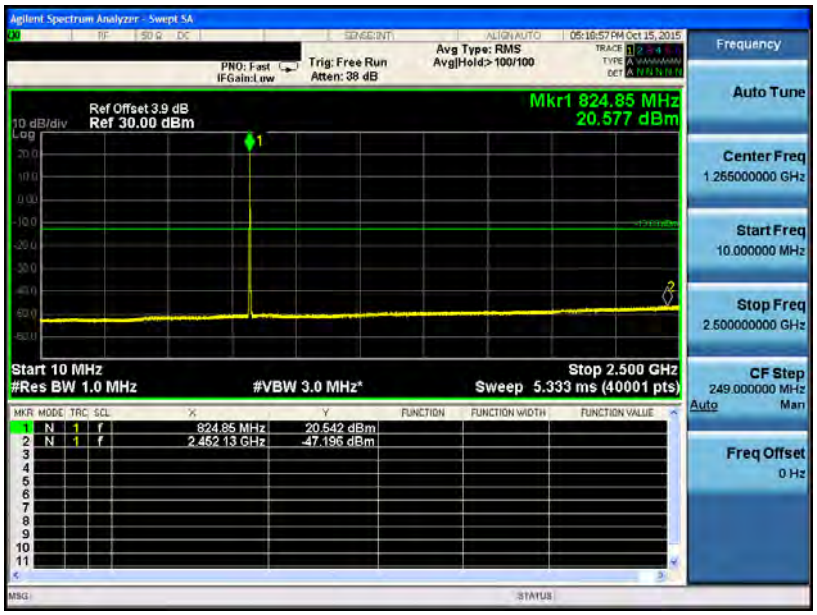
LTE Band 5 (Channel Bandwidth: 1.4 MHz) _ QPSK	
836.5 MHz	

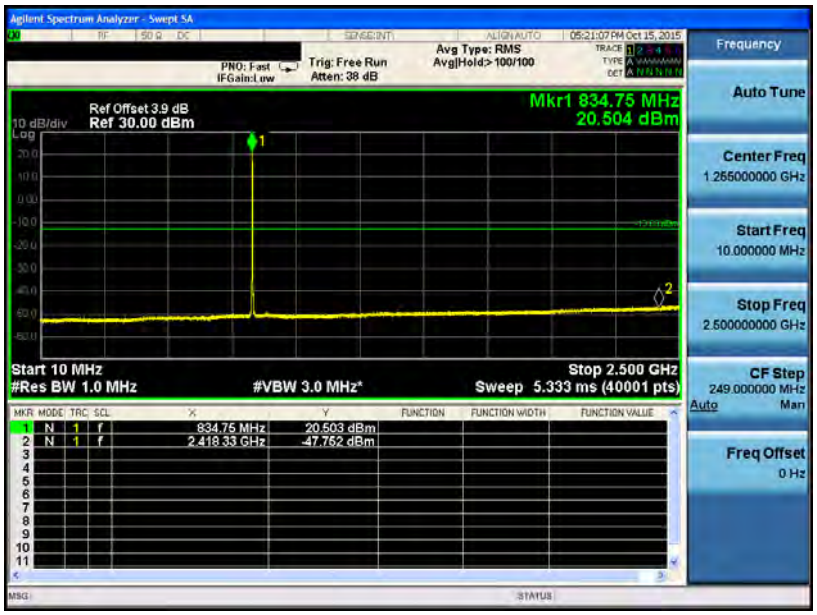
LTE Band 5 (Channel Bandwidth: 1.4 MHz) _ QPSK	
848.3 MHz	

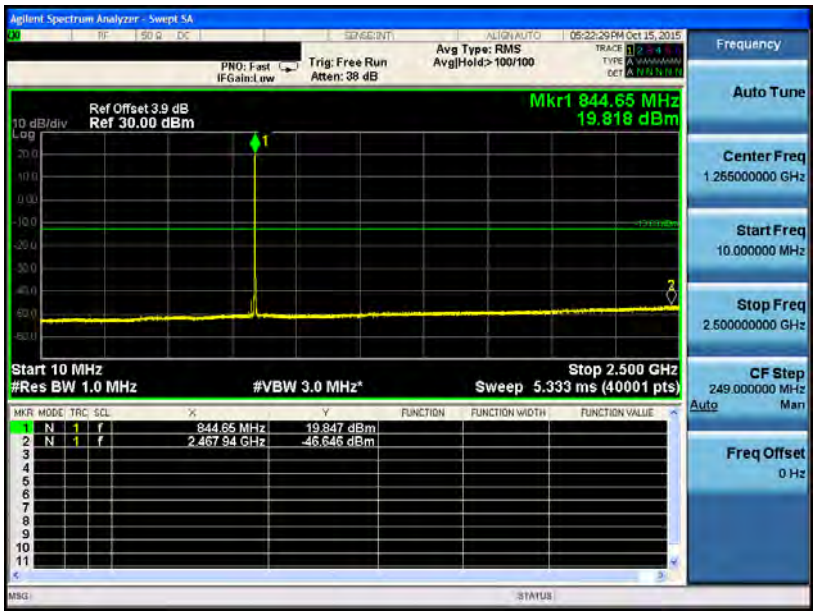
LTE Band 5 (Channel Bandwidth: 3 MHz) _ QPSK	
825.5 MHz	

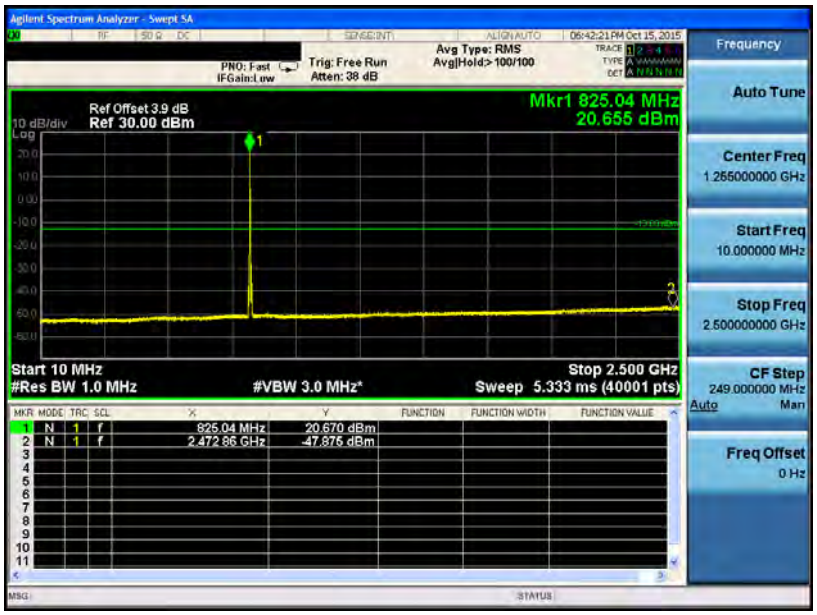
LTE Band 5 (Channel Bandwidth: 3 MHz) _ QPSK	
836.5 MHz	

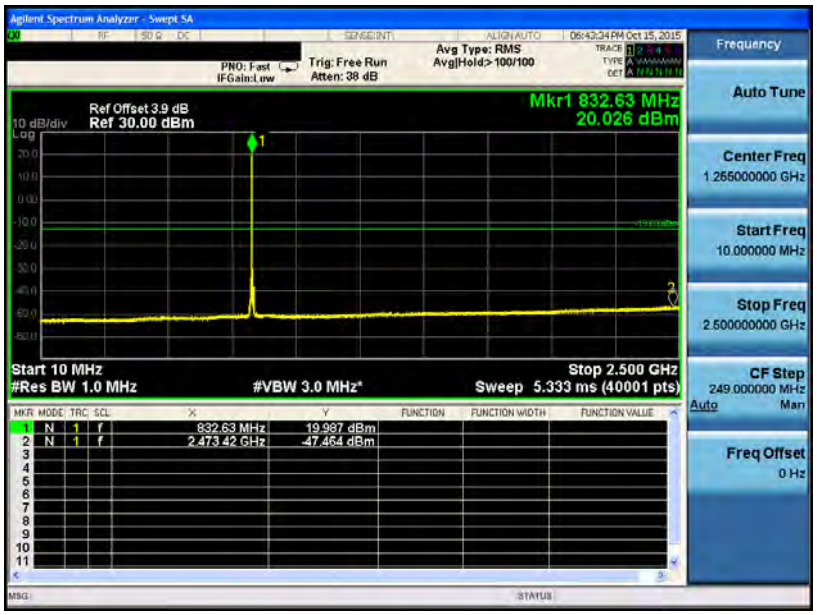
LTE Band 5 (Channel Bandwidth: 3 MHz) _ QPSK	
847.5 MHz	

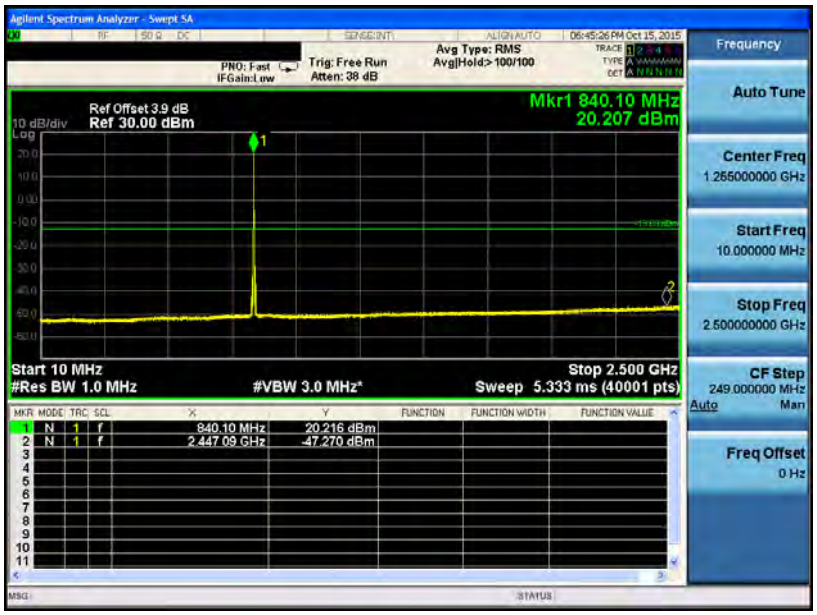
LTE Band 5 (Channel Bandwidth: 5 MHz) _ QPSK	
826.5 MHz	

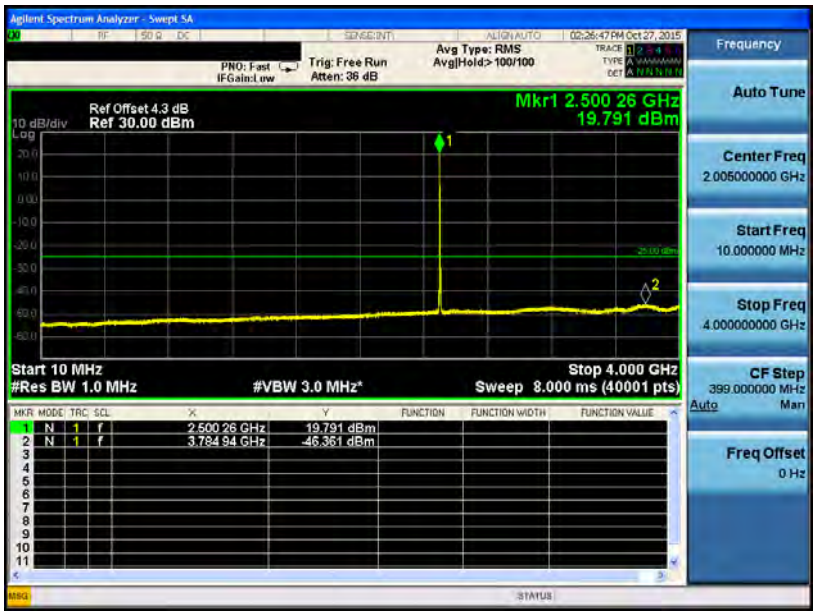
LTE Band 5 (Channel Bandwidth: 5 MHz) _ QPSK	
836.5 MHz	

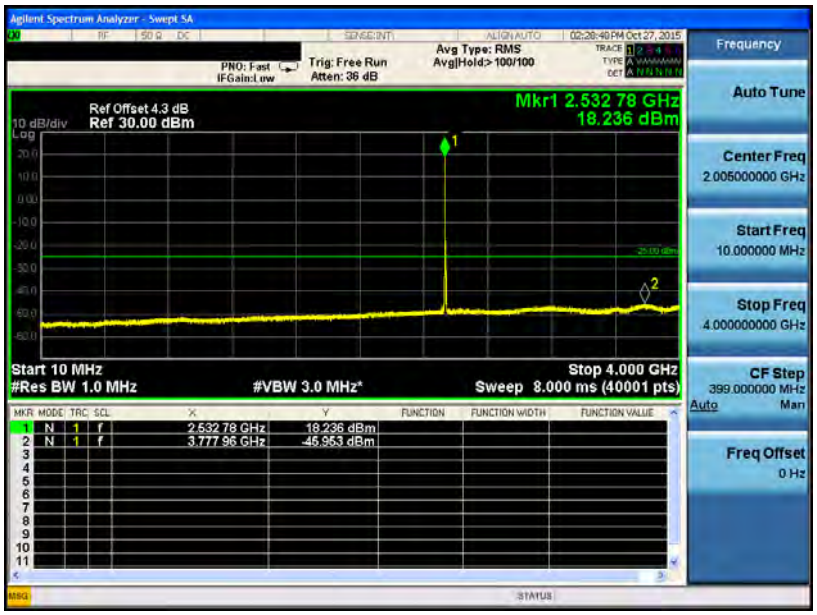
LTE Band 5 (Channel Bandwidth: 5 MHz) _ QPSK	
846.5 MHz	

LTE Band 5 (Channel Bandwidth: 10 MHz) _ QPSK	
829.0 MHz	

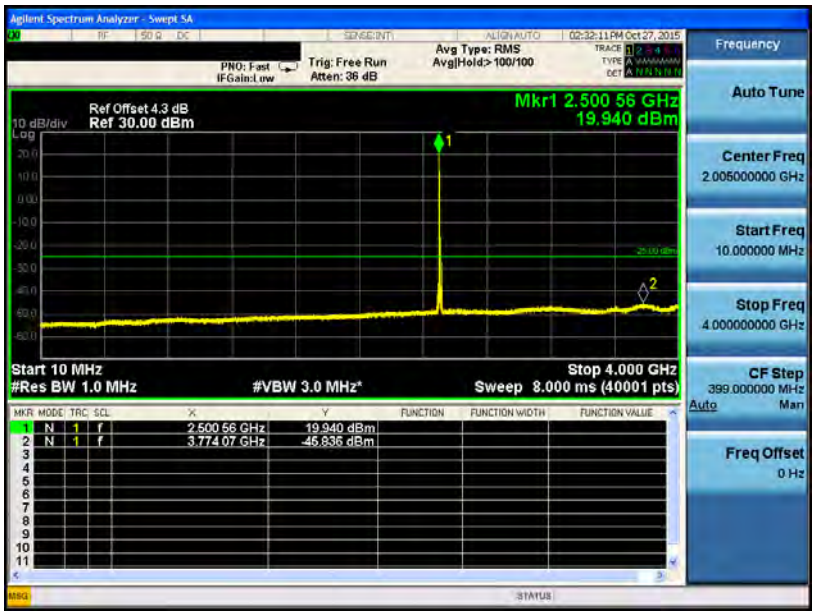
LTE Band 5 (Channel Bandwidth: 10 MHz) _ QPSK	
836.5 MHz	

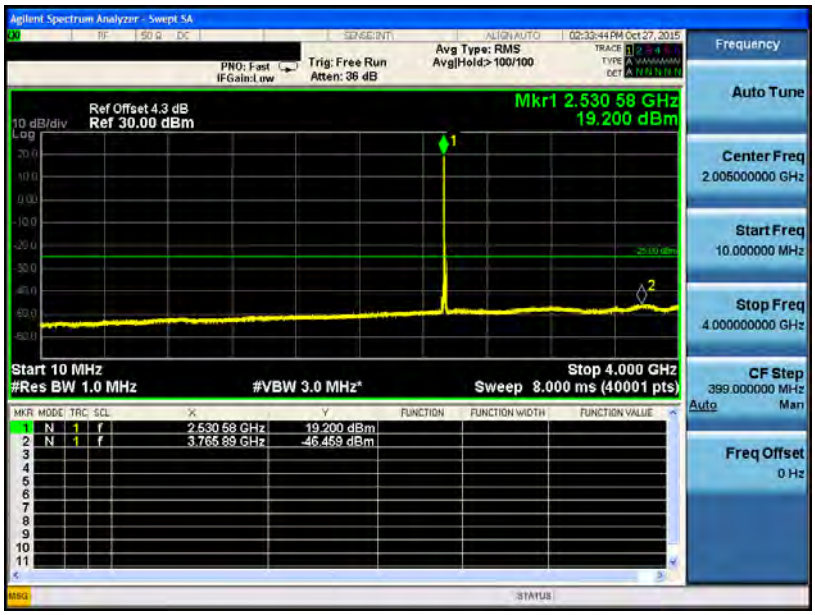
LTE Band 5 (Channel Bandwidth: 10 MHz) _ QPSK	
844.0 MHz	

LTE Band 7 (Channel Bandwidth: 5 MHz) _ QPSK	
2502.5 MHz	

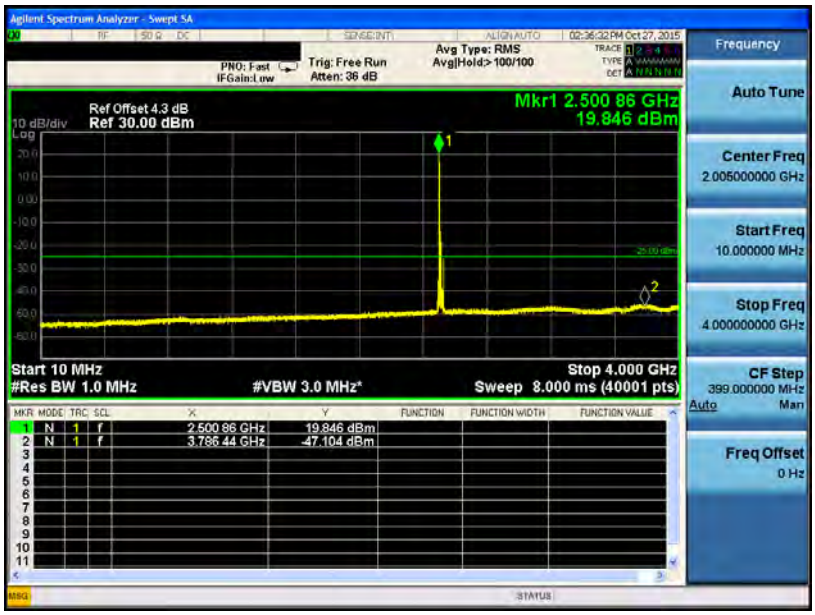
LTE Band 7 (Channel Bandwidth: 5 MHz) _ QPSK	
2535.0 MHz	

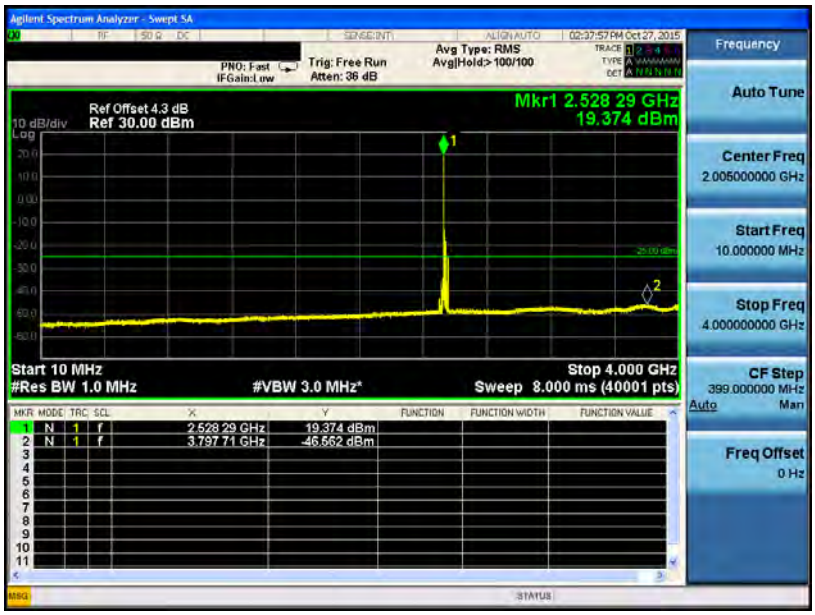
LTE Band 7 (Channel Bandwidth: 5 MHz) _ QPSK	
2567.5 MHz	

LTE Band 7 (Channel Bandwidth: 10 MHz) _ QPSK	
2505.0 MHz	

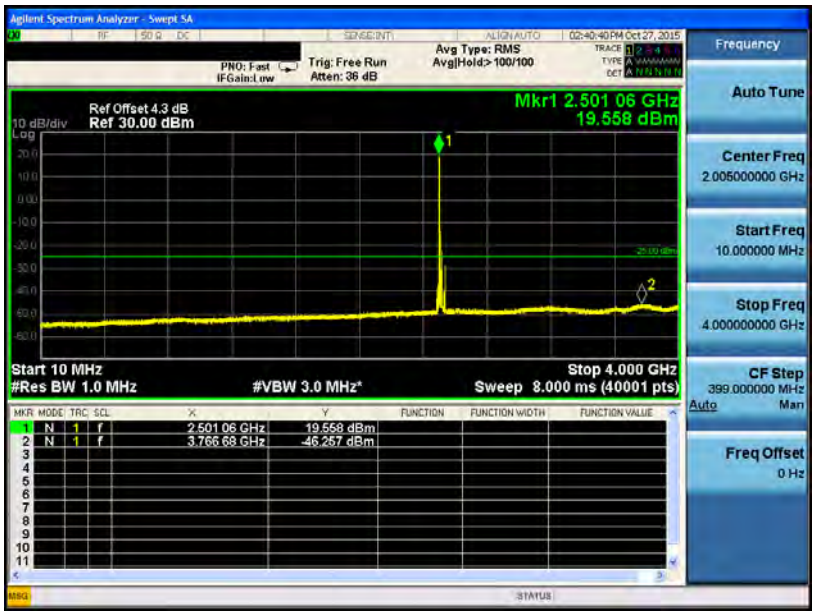
LTE Band 7 (Channel Bandwidth: 10 MHz) _ QPSK	
2535.0 MHz	

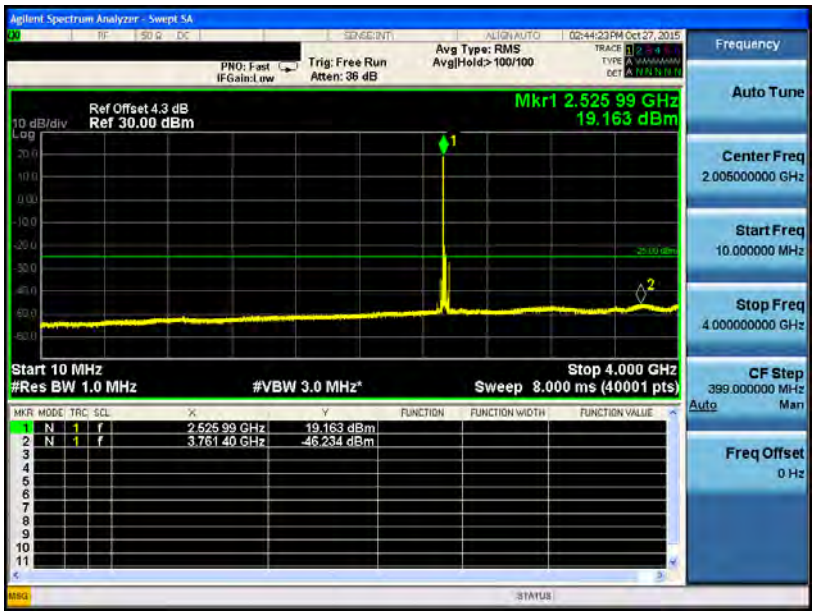
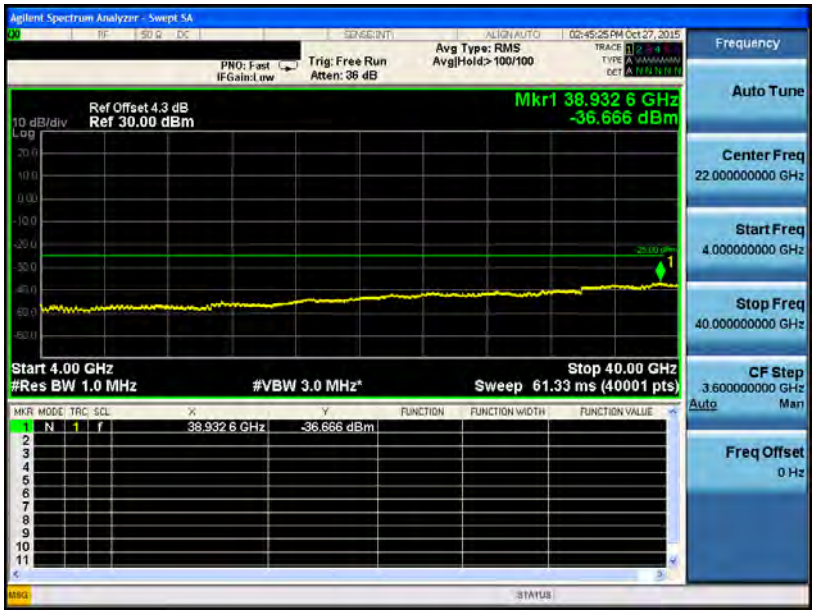
LTE Band 7 (Channel Bandwidth: 10 MHz) _ QPSK	
2565.0 MHz	

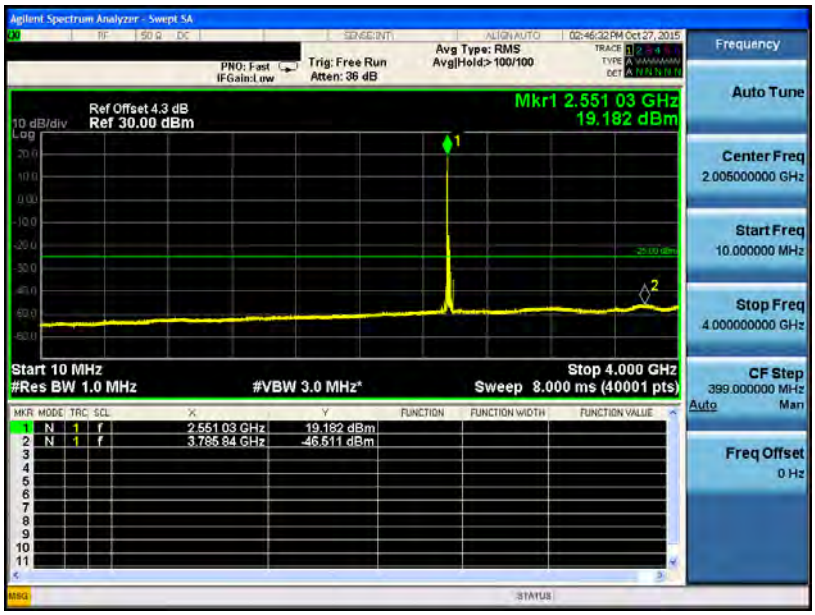
LTE Band 7 (Channel Bandwidth: 15 MHz) _ QPSK	
2507.5 MHz	

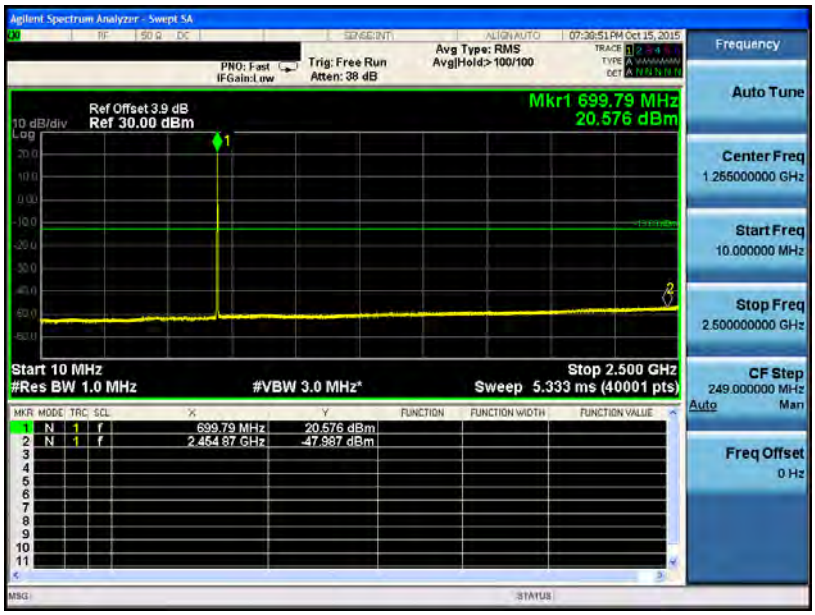
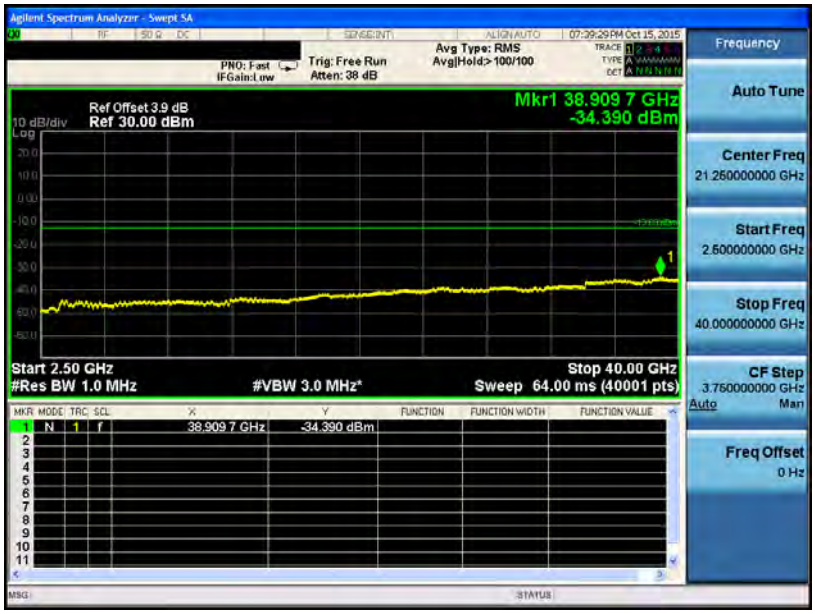
LTE Band 7 (Channel Bandwidth: 10 MHz) _ QPSK	
2535.0 MHz	

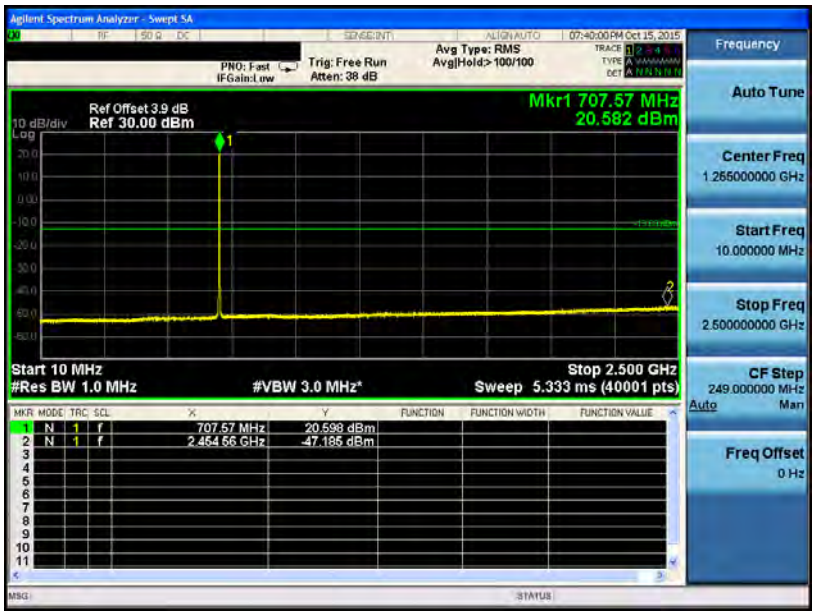
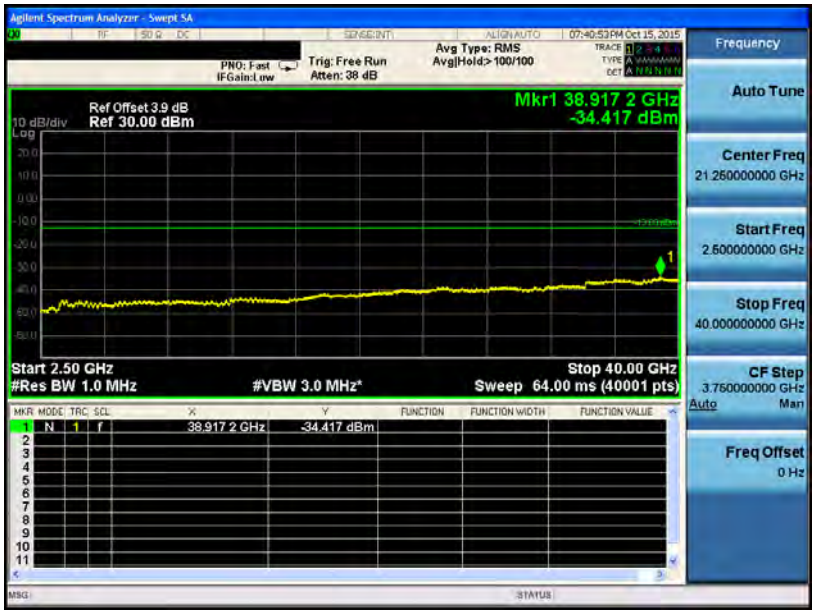
LTE Band 7 (Channel Bandwidth: 15 MHz) _ QPSK	
2562.5 MHz	

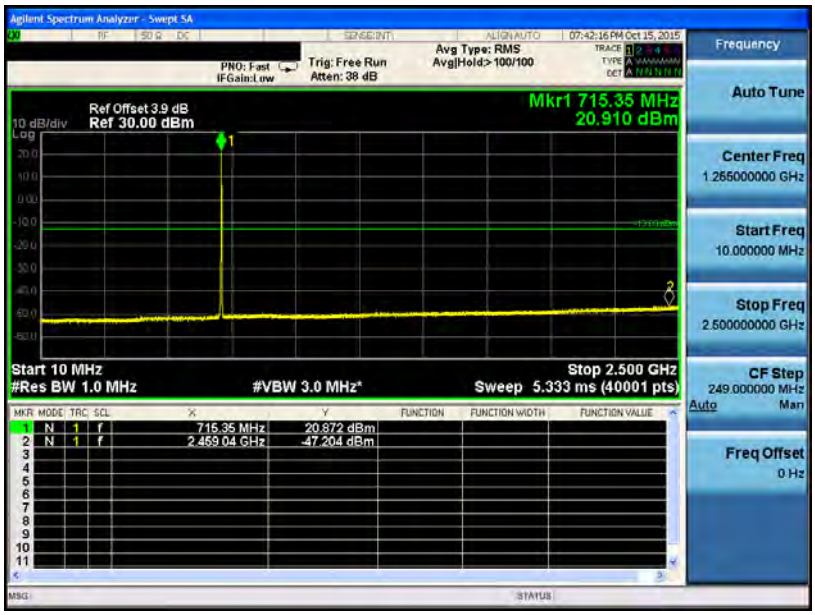
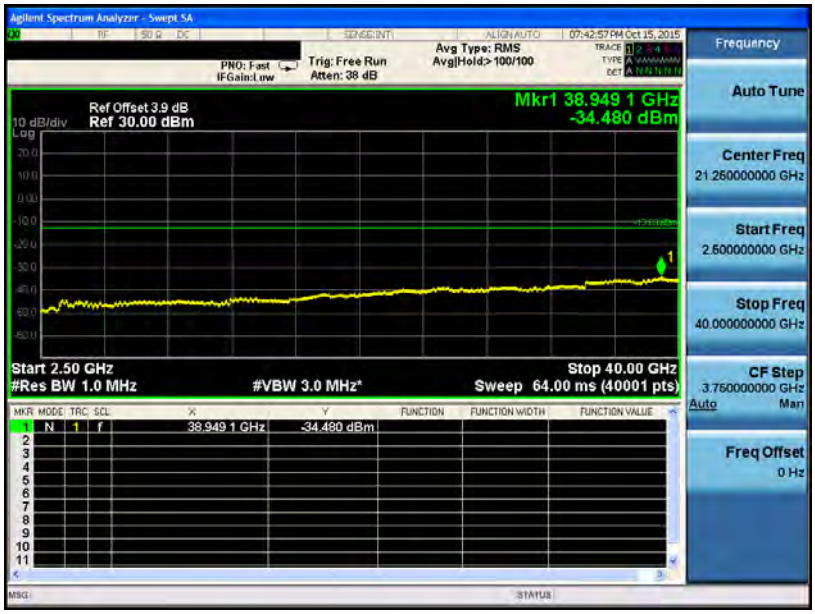
LTE Band 7 (Channel Bandwidth: 20 MHz) _ QPSK	
2510.0 MHz	

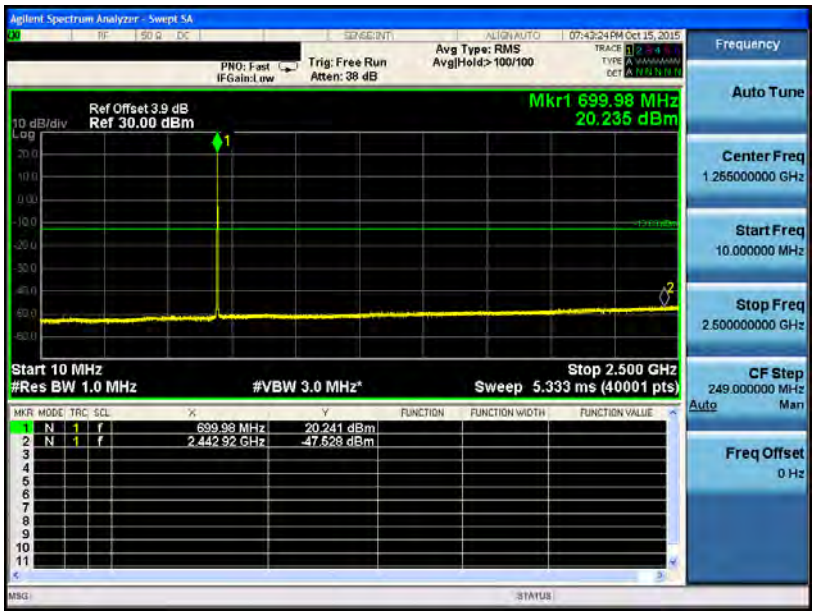
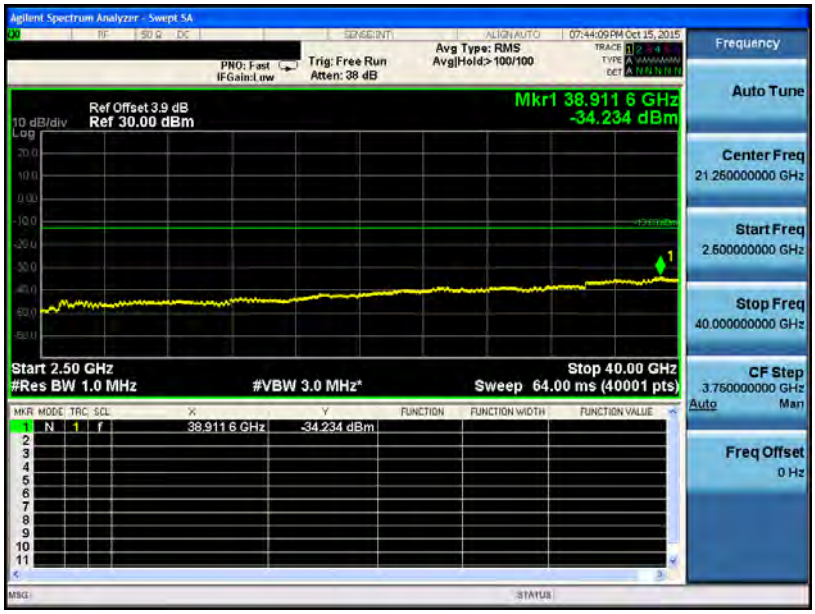
LTE Band 7 (Channel Bandwidth: 20 MHz) _ QPSK	
2535.0 MHz	
	

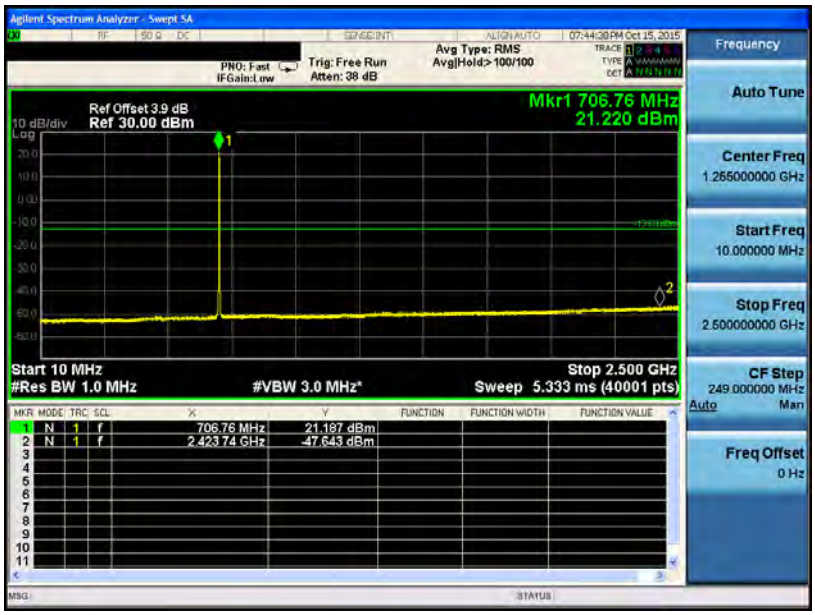
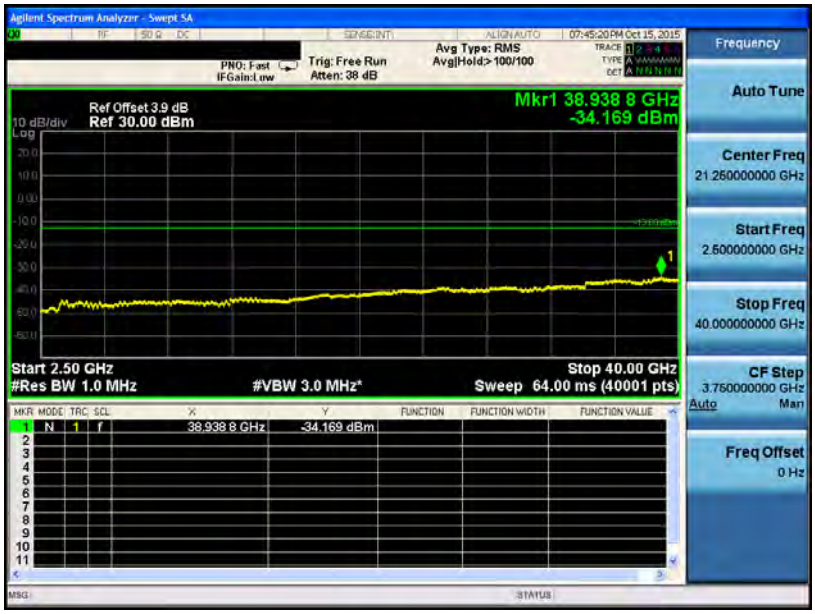
LTE Band 7 (Channel Bandwidth: 20 MHz) _ QPSK	
2560.0 MHz	

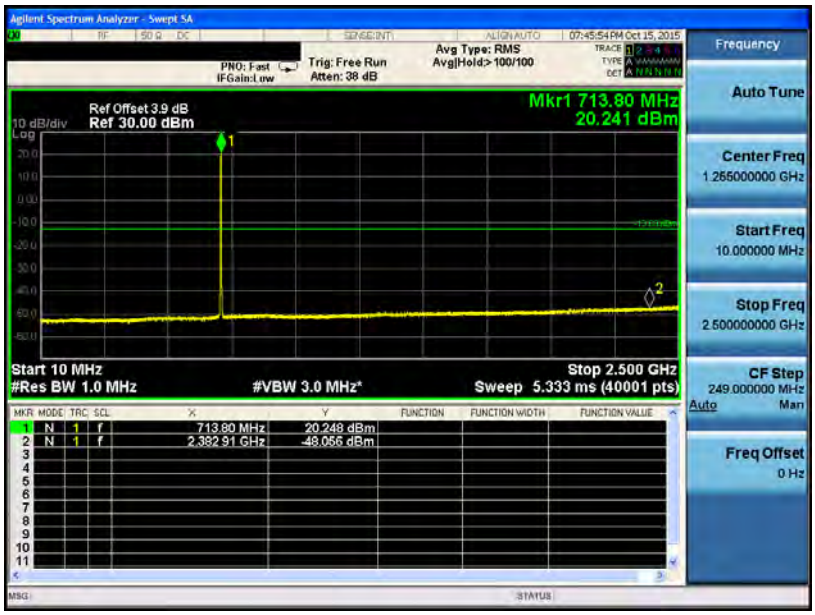
LTE Band 12 (Channel Bandwidth: 1.4 MHz) _ QPSK	
699.7 MHz	
	

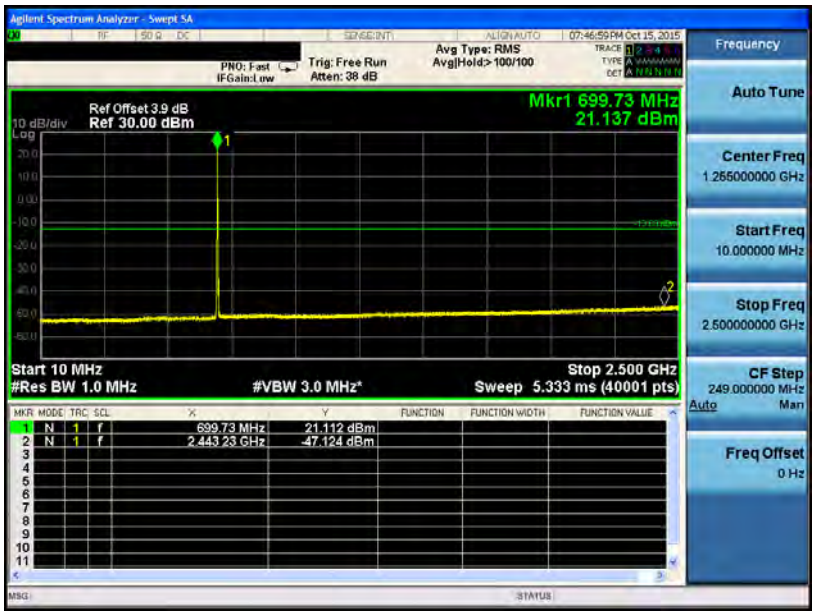
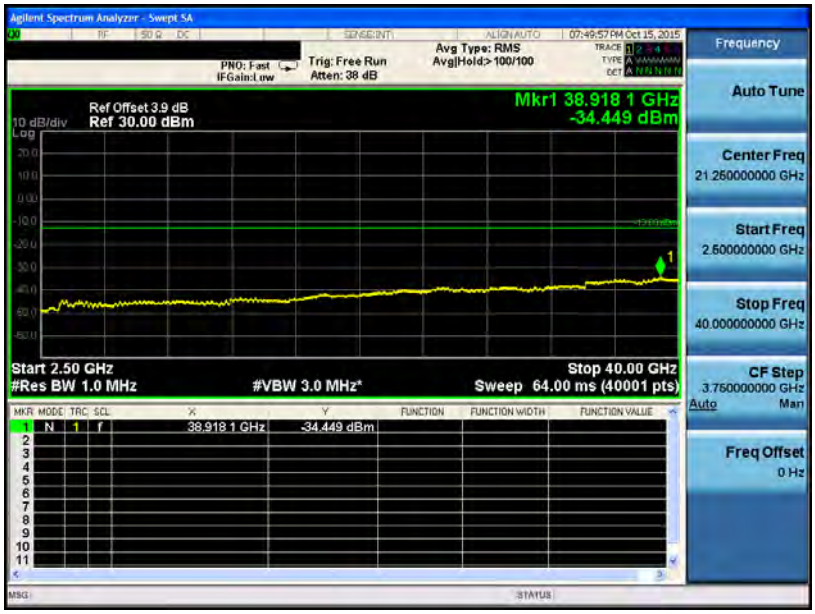
LTE Band 12 (Channel Bandwidth: 1.4 MHz) _ QPSK	
707.5 MHz	
	

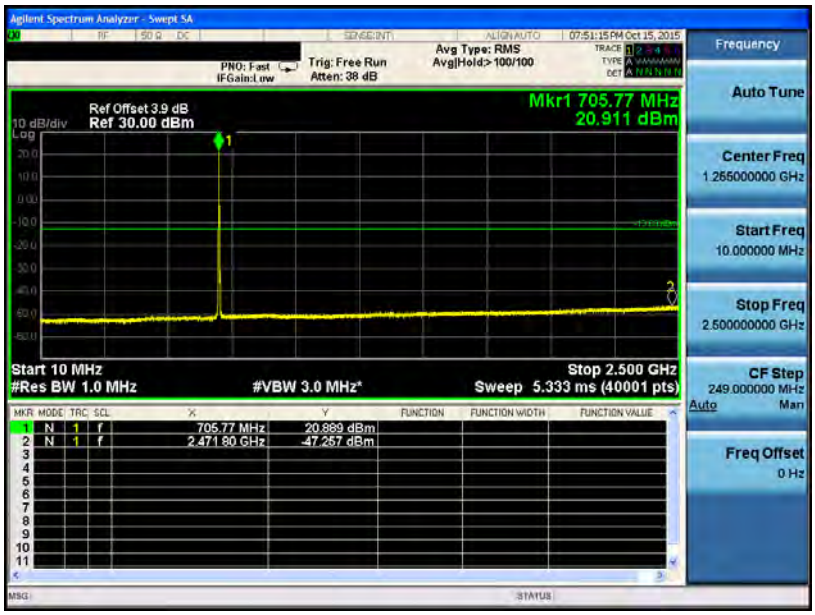
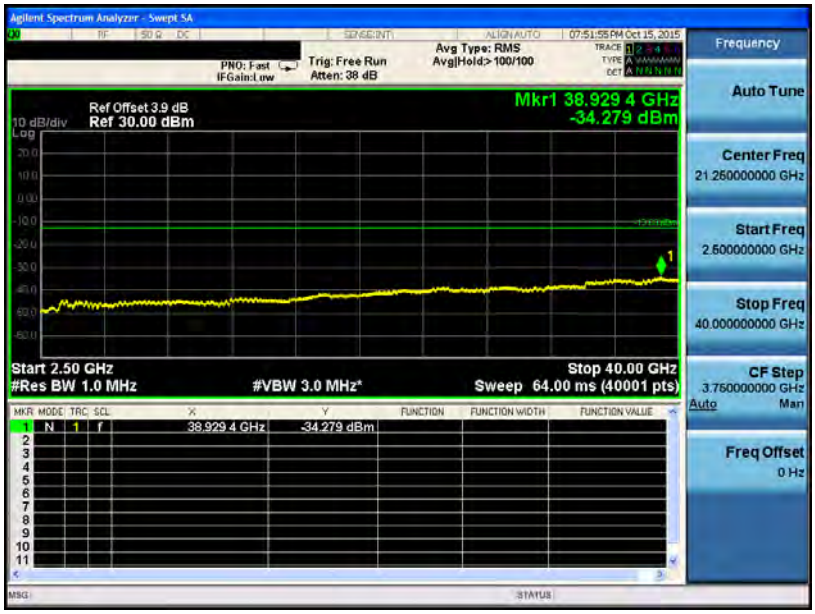
LTE Band 12 (Channel Bandwidth: 1.4 MHz) _ QPSK	
715.3 MHz	
	

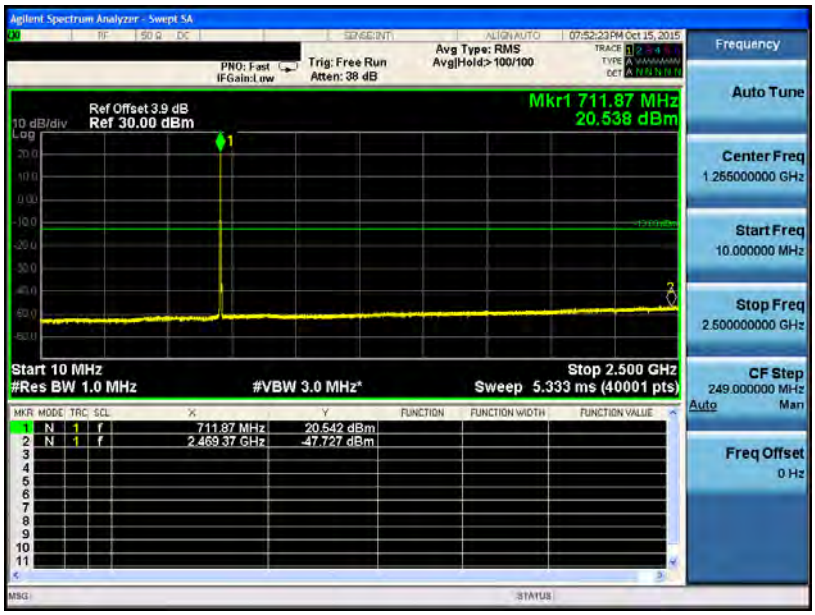
LTE Band 12 (Channel Bandwidth: 3 MHz) _ QPSK	
700.5 MHz	
	

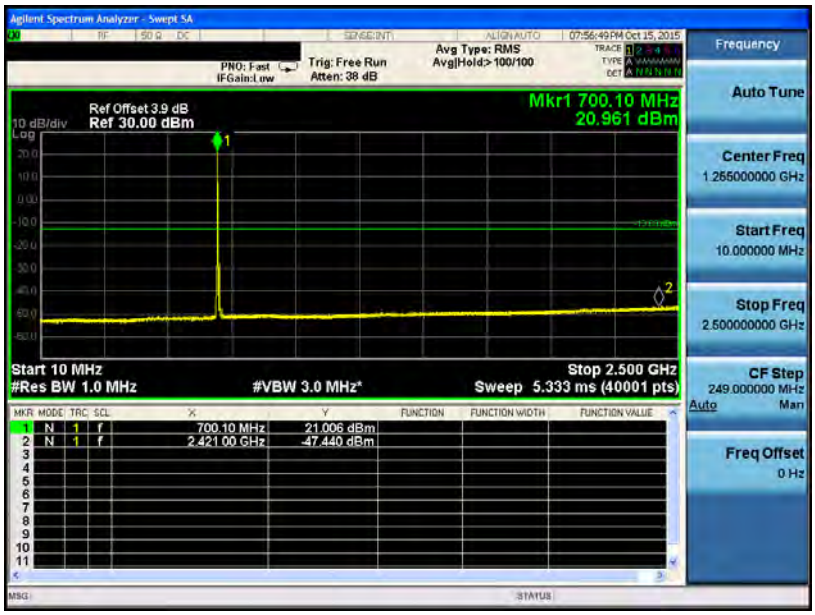
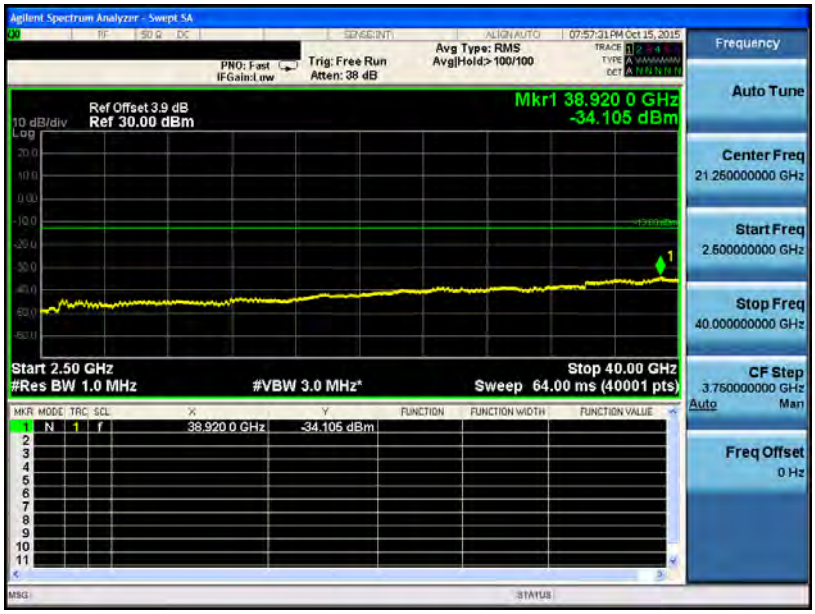
LTE Band 12 (Channel Bandwidth: 3 MHz) _ QPSK	
707.5 MHz	
	

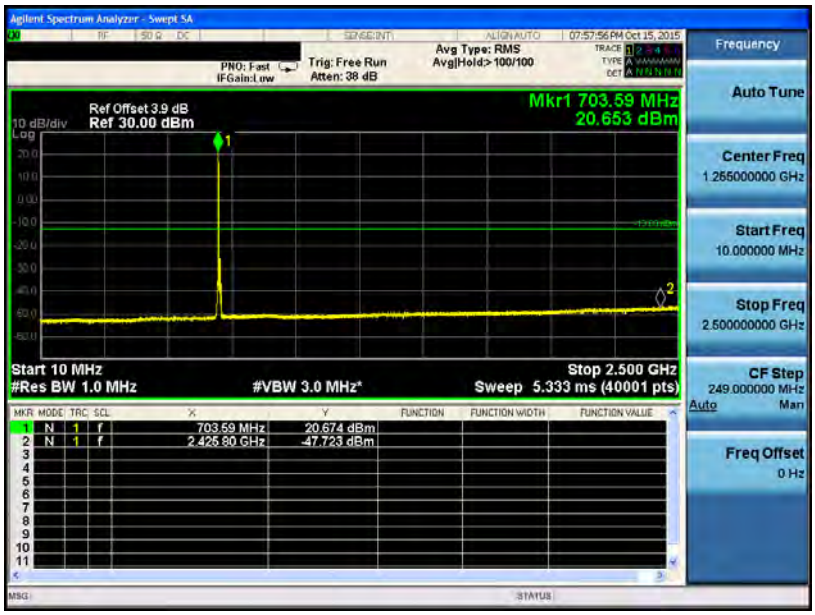
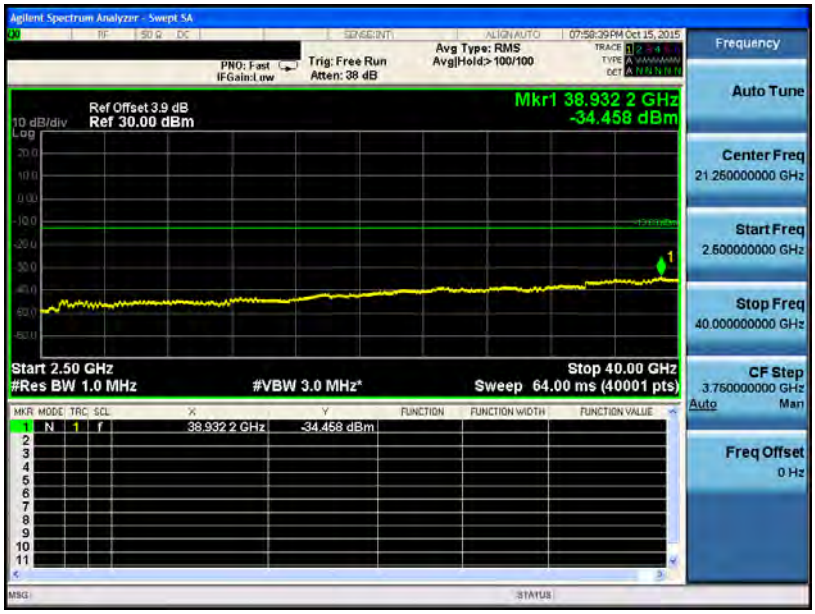
LTE Band 12 (Channel Bandwidth: 3 MHz) _ QPSK	
714.5 MHz	

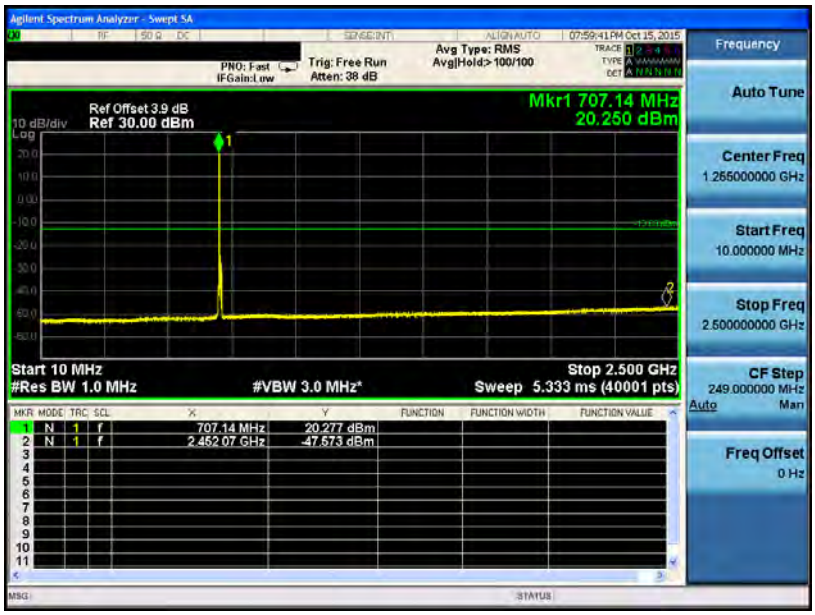
LTE Band 12 (Channel Bandwidth: 5 MHz) _ QPSK	
701.5 MHz	
	

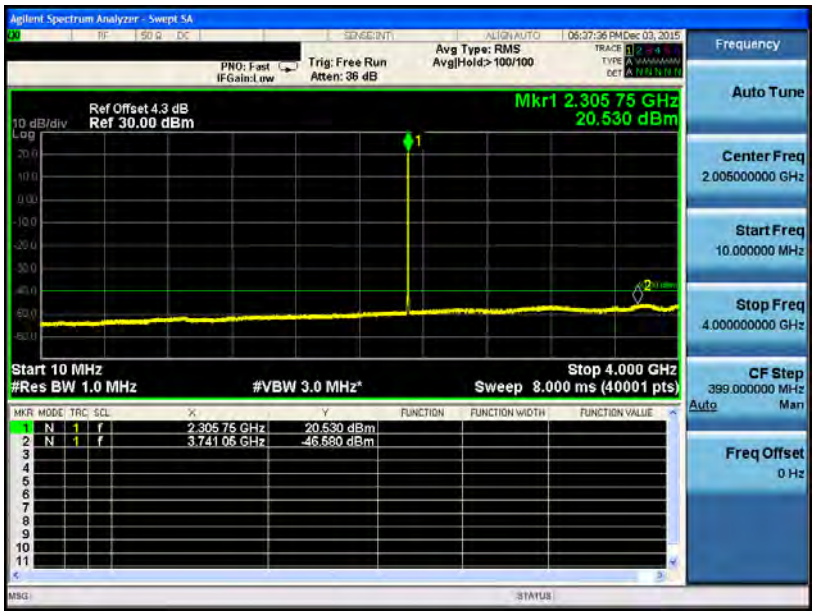
LTE Band 12 (Channel Bandwidth: 5 MHz) _ QPSK	
707.5 MHz	
	

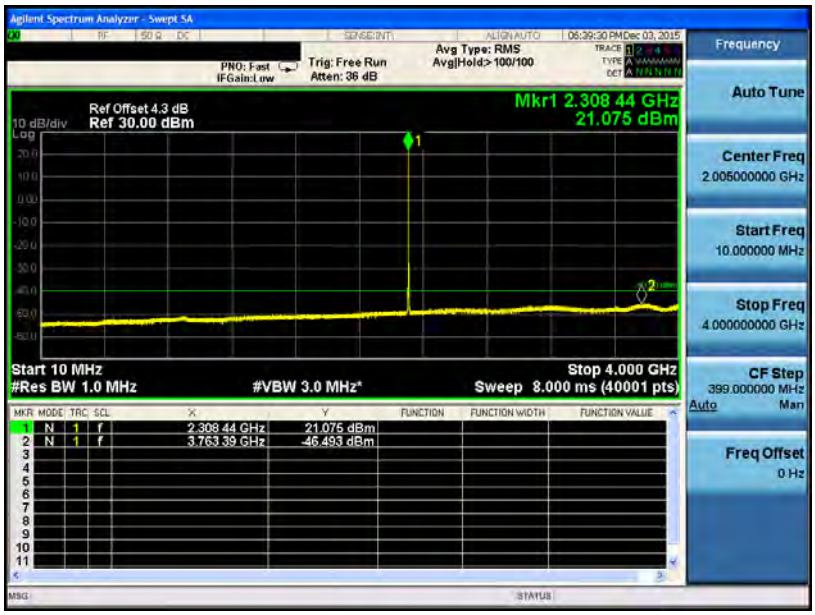
LTE Band 12 (Channel Bandwidth: 5 MHz) _ QPSK	
713.5 MHz	

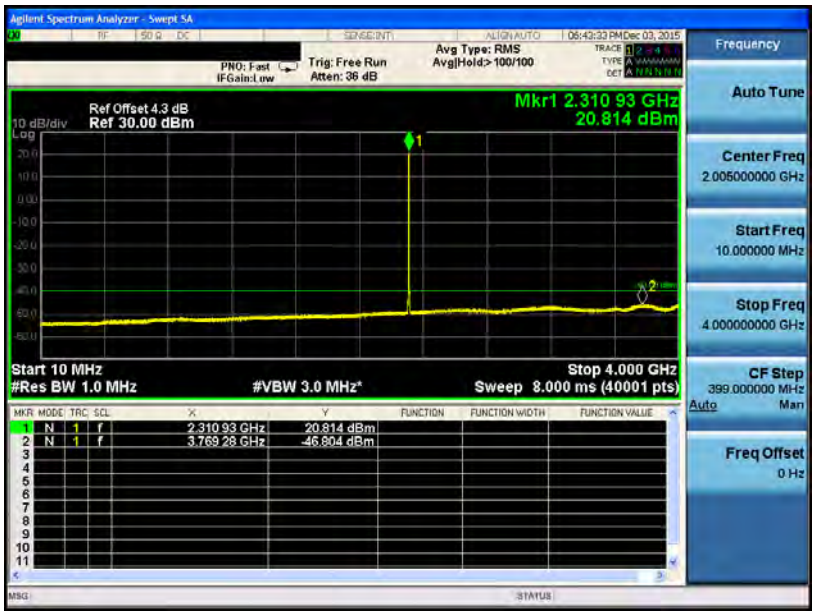
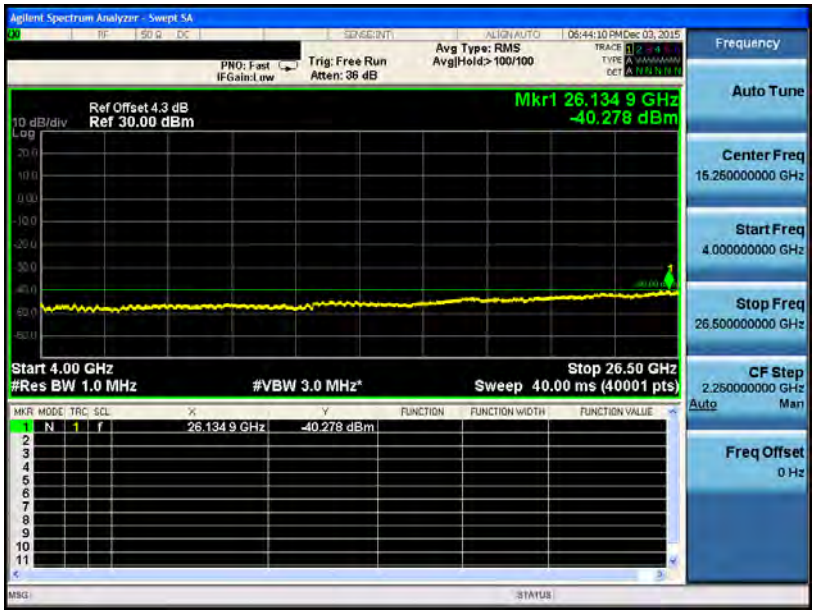
LTE Band 12 (Channel Bandwidth: 10 MHz) _ QPSK	
704.0 MHz	
	

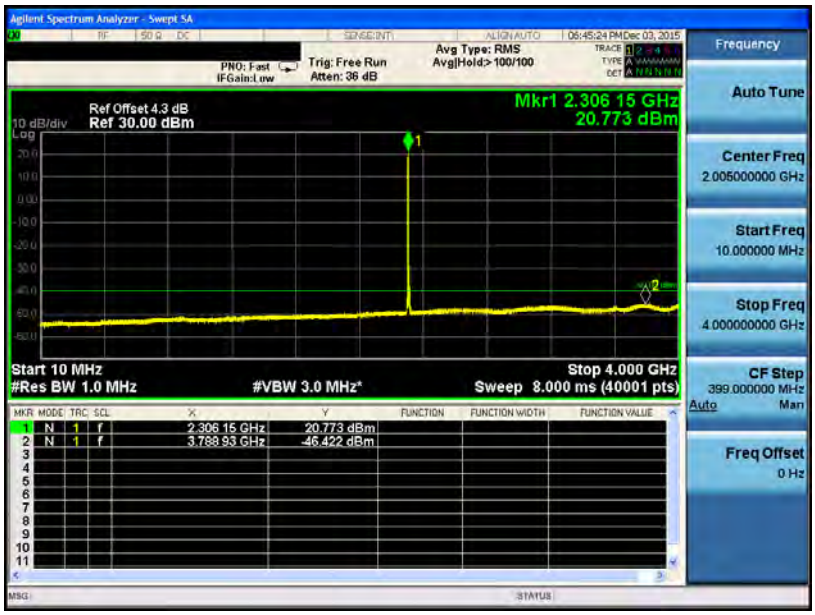
LTE Band 12 (Channel Bandwidth: 10 MHz) _ QPSK	
707.5 MHz	
	

LTE Band 12 (Channel Bandwidth: 10 MHz) _ QPSK	
711.0 MHz	

LTE Band 30 (Channel Bandwidth: 5 MHz) _ QPSK	
2307.5 MHz	

LTE Band 30 (Channel Bandwidth: 5 MHz) _ QPSK	
2310.0 MHz	

LTE Band 30 (Channel Bandwidth: 5 MHz) _ QPSK	
2312.5 MHz	
	

LTE Band 30 (Channel Bandwidth: 10 MHz) _ QPSK	
2310.0 MHz	

9 Radiated Emission Test

9.1. Limit

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least 43 +10 $\log_{10}$(P) dB. The limit of emission equal to -13dBm

§27.53(a)(4)

70 + 10 log (P) dB above 2365 MHz. The limit of emission equal to -40dBm

70 + 10 log (P) dB below 2288 MHz. The limit of emission equal to -40dBm

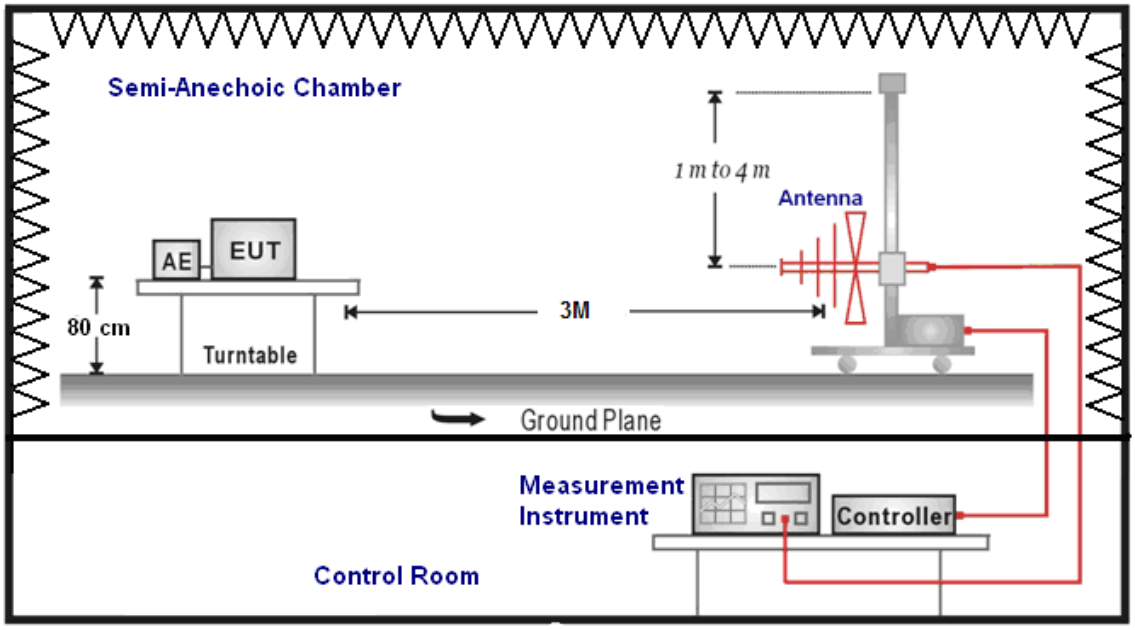
9.2. Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Cal. Period
RF Pre-selector	Agilent	N9039A	MY46520256	01/06/2015	1 year
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/06/2015	1 year
Pre Amplifier	Agilent	8449B	3008A02237	02/24/2015	1 year
Pre Amplifier	Agilent	8447D	2944A10961	02/24/2015	1 year
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	08/11/2015	1 year
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/12/2015	1 year
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	07/06/2015	1 year
Test Site	ATL	TE01	888001	08/27/2015	1 year

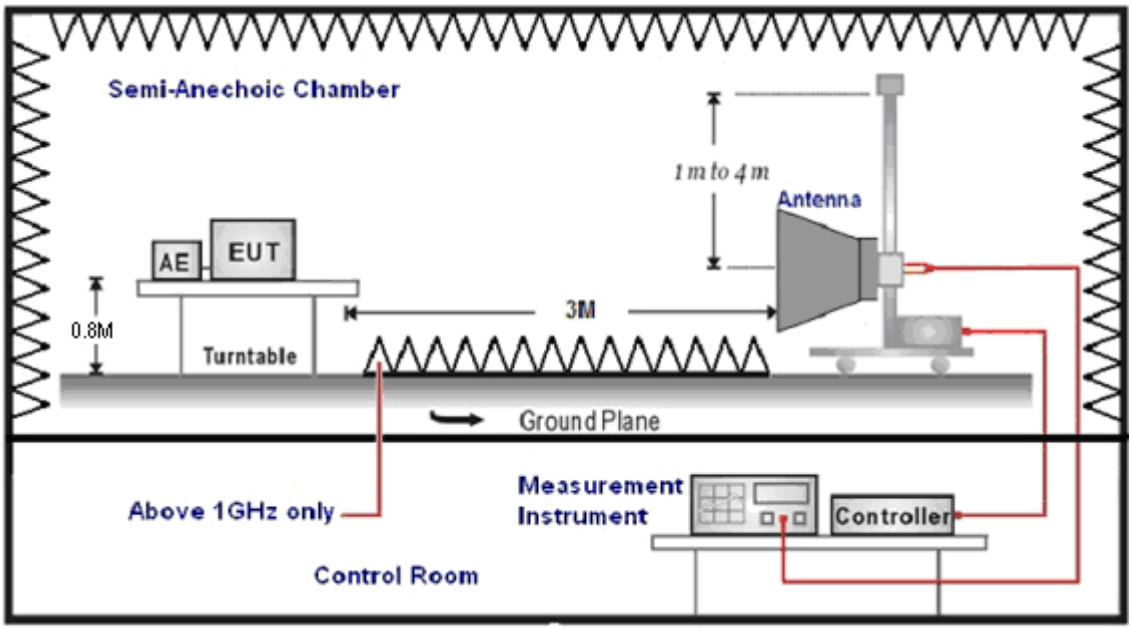
Note: N.C.R. = No Calibration Request.

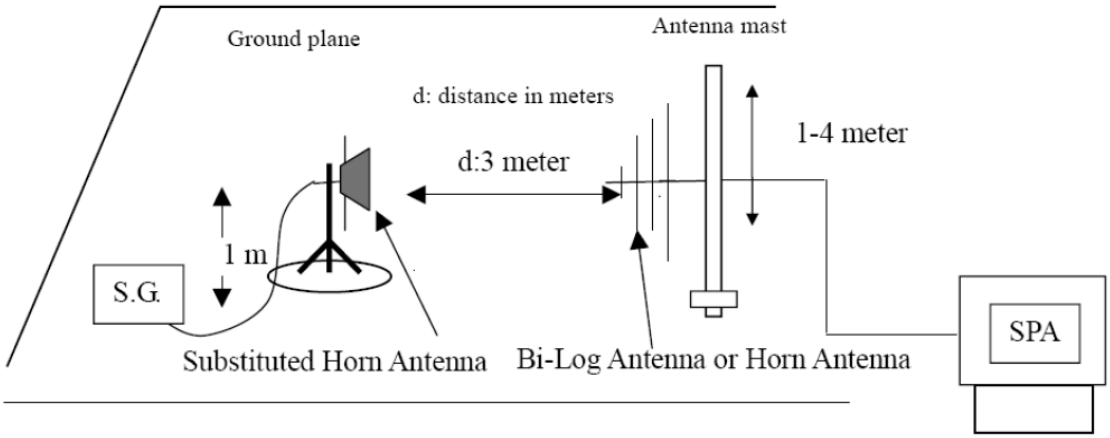
9.3. Setup

Below 1GHz



Above 1GHz


Semi-Anechoic Chamber
1 m to 4 m
Antenna
AE
EUT
0.8M
3M
Turntable
Ground Plane
Above 1GHz only
Measurement
Instrument
Controller
Control Room


Ground plane
Antenna mast
d: distance in meters
1-4 meter
d:3 meter
1 m
S.G.
SPA
Substituted Horn Antenna
Bi-Log Antenna or Horn Antenna

9.4. Test Procedure

a. The EUT was set up for the maximum power with LTE link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range). RWB and VBW is 1MHz.

b. Radiation Emission measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The “Read Value” is the spectrum reading the maximum power value.

c. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to “Read Value” of step a. Record the power level of S.G.

d. E.I.R.P. = Output power level of S.G - TX cable loss + Antenna gain of substitution horn

e. E.R.P. = E.I.R.P- 2.15 dB

9.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is ± 3.072 dB.

9.6. Test Result

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	1.4 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1850.7 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7240.000	-77.64	30.90	-46.74	-13.00	-33.74	peak	H
1	6508.000	-79.65	28.69	-50.96	-13.00	-37.96	peak	V

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6208.000	-78.63	26.92	-51.71	-13.00	-38.71	peak	H
1	6328.000	-79.41	27.64	-51.77	-13.00	-38.77	peak	V

Frequency:	1909.3 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6328.000	-78.56	27.64	-50.92	-13.00	-37.92	peak	H
1	6628.000	-77.09	29.02	-48.07	-13.00	-35.07	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	3 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1851.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5524.000	-78.81	23.81	-55.00	-13.00	-42.00	peak	H
1	5020.000	-79.27	22.56	-56.71	-13.00	-43.71	peak	V

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	4780.000	-78.53	21.10	-57.43	-13.00	-44.43	peak	H
1	6292.000	-77.85	27.43	-50.42	-13.00	-37.42	peak	V

Frequency:	1908.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6664.000	-78.19	29.13	-49.06	-13.00	-36.06	peak	H
1	6796.000	-77.54	29.50	-48.04	-13.00	-35.04	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1852.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6040.000	-79.86	25.92	-53.94	-13.00	-40.94	peak	H
1	6784.000	-77.38	29.47	-47.91	-13.00	-34.91	peak	V

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6940.000	-76.41	29.90	-46.51	-13.00	-33.51	peak	H
1	7240.000	-77.84	30.90	-46.94	-13.00	-33.94	peak	V

Frequency:	1907.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5536.000	-79.37	23.87	-55.50	-13.00	-42.50	peak	H
1	6340.000	-79.51	27.71	-51.80	-13.00	-38.80	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1855.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7168.000	-76.19	30.65	-45.54	-13.00	-32.54	peak	H
1	5428.000	-78.35	23.54	-54.81	-13.00	-41.81	peak	V

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6484.000	-77.58	28.57	-49.01	-13.00	-36.01	peak	H
1	7732.000	-77.25	32.09	-45.16	-13.00	-32.16	peak	V

Frequency:	1905.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	8500.000	-78.44	31.09	-47.35	-13.00	-34.35	peak	H
1	7144.000	-76.66	30.56	-46.10	-13.00	-33.10	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	15 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1857.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	4780.000	-78.47	21.10	-57.37	-13.00	-44.37	peak	H
1	6304.000	-78.50	27.50	-51.00	-13.00	-38.00	peak	V

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6532.000	-79.58	28.76	-50.82	-13.00	-37.82	peak	H
1	6364.000	-78.19	27.85	-50.34	-13.00	-37.34	peak	V

Frequency:	1902.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5428.000	-78.33	23.54	-54.79	-13.00	-41.79	peak	H
1	6556.000	-79.46	28.82	-50.64	-13.00	-37.64	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	20 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1860.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7360.000	-77.20	31.31	-45.89	-13.00	-32.89	peak	H
1	6472.000	-78.42	28.50	-49.92	-13.00	-36.92	peak	V

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5200.000	-78.98	22.99	-55.99	-13.00	-42.99	peak	H
1	5452.000	-80.08	23.59	-56.49	-13.00	-43.49	peak	V

Frequency:	1900.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	4936.000	-79.29	22.10	-57.19	-13.00	-44.19	peak	H
1	6940.000	-76.32	29.90	-46.42	-13.00	-33.42	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	1.4 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5200.000	-80.35	22.99	-57.36	-13.00	-44.36	peak	H
1	6760.000	-78.49	29.40	-49.09	-13.00	-36.09	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	3 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5356.000	-79.32	23.36	-55.96	-13.00	-42.96	peak	H
1	6772.000	-78.67	29.44	-49.23	-13.00	-36.23	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:								
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6424.000	-79.14	28.21	-50.93	-13.00	-37.93	peak	H
1	6160.000	-77.75	26.64	-51.11	-13.00	-38.11	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5368.000	-78.97	23.40	-55.57	-13.00	-42.57	peak	H
1	6172.000	-78.93	26.70	-52.23	-13.00	-39.23	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	15 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5812.000	-78.82	24.94	-53.88	-13.00	-40.88	peak	H
1	7084.000	-76.43	30.36	-46.07	-13.00	-33.07	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 2	Date:	11/08/2015
Channel Bandwidth:	20 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1880.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6172.000	-78.88	26.70	-52.18	-13.00	-39.18	peak	H
1	5308.000	-77.78	23.26	-54.52	-13.00	-41.52	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	1.4 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1710.7 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6748.000	-77.00	29.36	-47.64	-13.00	-34.64	peak	H
1	6316.000	-78.89	27.56	-51.33	-13.00	-38.33	peak	V

Frequency:	1732.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5128.000	-78.53	22.82	-55.71	-13.00	-42.71	peak	H
1	6364.000	-80.15	27.85	-52.30	-13.00	-39.30	peak	V

Frequency:	1754.3 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5968.000	-80.67	25.55	-55.12	-13.00	-42.12	peak	H
1	7312.000	-76.15	31.14	-45.01	-13.00	-32.01	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	3 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1711.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7204.000	-77.88	30.78	-47.10	-13.00	-34.10	peak	H
1	5596.000	-79.00	24.09	-54.91	-13.00	-41.91	peak	V

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7060.000	-76.71	30.27	-46.44	-13.00	-33.44	peak	H
1	5716.000	-78.35	24.56	-53.79	-13.00	-40.79	peak	V

Frequency:	1753.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6844.000	-75.54	29.63	-45.91	-13.00	-32.91	peak	H
1	7144.000	-76.79	30.56	-46.23	-13.00	-33.23	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1712.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7600.000	-77.70	31.92	-45.78	-13.00	-32.78	peak	H
1	4996.000	-77.62	22.48	-55.14	-13.00	-42.14	peak	V

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6256.000	-80.64	27.21	-53.43	-13.00	-40.43	peak	H
1	6604.000	-76.36	28.95	-47.41	-13.00	-34.41	peak	V

Frequency:	1752.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6460.000	-78.79	28.42	-50.37	-13.00	-37.37	peak	H
1	5968.000	-80.18	25.55	-54.63	-13.00	-41.63	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1715.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5416.000	-78.99	23.51	-55.48	-13.00	-42.48	peak	H
1	6172.000	-79.69	26.70	-52.99	-13.00	-39.99	peak	V

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5476.000	-79.40	23.65	-55.75	-13.00	-42.75	peak	H
1	7384.000	-77.92	31.39	-46.53	-13.00	-33.53	peak	V

Frequency:	1750.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6280.000	-79.13	27.35	-51.78	-13.00	-38.78	peak	H
1	6112.000	-79.84	26.35	-53.49	-13.00	-40.49	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	15 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1717.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7228.000	-76.82	30.85	-45.97	-13.00	-32.97	peak	H
1	5800.000	-79.94	24.89	-55.05	-13.00	-42.05	peak	V

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6160.000	-79.12	26.64	-52.48	-13.00	-39.48	peak	H
1	5716.000	-78.88	24.56	-54.32	-13.00	-41.32	peak	V

Frequency:	1747.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5344.000	-78.65	23.35	-55.30	-13.00	-42.30	peak	H
1	6484.000	-78.86	28.57	-50.29	-13.00	-37.29	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	20 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	1720.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7504.000	-77.39	31.79	-45.60	-13.00	-32.60	peak	H
1	6004.000	-79.40	25.70	-53.70	-13.00	-40.70	peak	V

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7348.000	-78.06	31.27	-46.79	-13.00	-33.79	peak	H
1	7228.000	-77.06	30.85	-46.21	-13.00	-33.21	peak	V

Frequency:	1745.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7180.000	-77.51	30.69	-46.82	-13.00	-33.82	peak	H
1	6400.000	-80.07	28.08	-51.99	-13.00	-38.99	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	1.4 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6664.000	-77.83	29.13	-48.70	-13.00	-35.70	peak	H
1	6388.000	-79.33	28.00	-51.33	-13.00	-38.33	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	3 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6292.000	-80.85	27.43	-53.42	-13.00	-40.42	peak	H
1	5884.000	-78.74	25.22	-53.52	-13.00	-40.52	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6448.000	-80.02	28.37	-51.65	-13.00	-38.65	peak	H
1	6640.000	-78.86	29.06	-49.80	-13.00	-36.80	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6040.000	-78.64	25.92	-52.72	-13.00	-39.72	peak	H
1	6340.000	-79.74	27.71	-52.03	-13.00	-39.03	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	15 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6772.000	-77.94	29.44	-48.50	-13.00	-35.50	peak	H
1	6160.000	-77.93	26.64	-51.29	-13.00	-38.29	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 4	Date:	11/08/2015
Channel Bandwidth:	20 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	1732.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6316.000	-78.89	27.56	-51.33	-13.00	-38.33	peak	H
1	5512.000	-79.03	23.77	-55.26	-13.00	-42.26	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 5	Date:	11/08/2015
Channel Bandwidth:	1.4 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	824.7 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6640.000	-77.33	29.06	-48.27	-13.00	-35.27	peak	H
1	5884.000	-77.97	25.22	-52.75	-13.00	-39.75	peak	V

Frequency:	836.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6016.000	-79.42	25.78	-53.64	-13.00	-40.64	peak	H
1	6136.000	-79.33	26.49	-52.84	-13.00	-39.84	peak	V

Frequency:	848.3 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6136.000	-78.87	26.49	-52.38	-13.00	-39.38	peak	H
1	6652.000	-77.46	29.09	-48.37	-13.00	-35.37	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 5	Date:	11/08/2015
Channel Bandwidth:	3 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	825.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	4720.000	-79.19	20.72	-58.47	-13.00	-45.47	peak	H
1	6712.000	-78.16	29.26	-48.90	-13.00	-35.90	peak	V

Frequency:	836.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6076.000	-80.16	26.13	-54.03	-13.00	-41.03	peak	H
1	5440.000	-79.61	23.57	-56.04	-13.00	-43.04	peak	V

Frequency:	847.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5884.000	-79.56	25.22	-54.34	-13.00	-41.34	peak	H
1	6868.000	-77.55	29.70	-47.85	-13.00	-34.85	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 5	Date:	11/08/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	826.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6160.000	-79.07	26.64	-52.43	-13.00	-39.43	peak	H
1	6832.000	-77.69	29.61	-48.08	-13.00	-35.08	peak	V

Frequency:	836.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5056.000	-78.61	22.64	-55.97	-13.00	-42.97	peak	H
1	6412.000	-80.04	28.13	-51.91	-13.00	-38.91	peak	V

Frequency:	846.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6088.000	-79.23	26.21	-53.02	-13.00	-40.02	peak	H
1	6544.000	-79.09	28.79	-50.30	-13.00	-37.30	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 5	Date:	11/08/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	829.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6388.000	-80.37	28.00	-52.37	-13.00	-39.37	peak	H
1	7324.000	-76.66	31.18	-45.48	-13.00	-32.48	peak	V

Frequency:	836.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7408.000	-76.09	31.47	-44.62	-13.00	-31.62	peak	H
1	6208.000	-79.26	26.92	-52.34	-13.00	-39.34	peak	V

Frequency:	844.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6748.000	-77.75	29.36	-48.39	-13.00	-35.39	peak	H
1	6676.000	-77.88	29.16	-48.72	-13.00	-35.72	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 5	Date:	11/08/2015
Channel Bandwidth:	1.4 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	836.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7072.000	-75.76	30.31	-45.45	-13.00	-32.45	peak	H
1	6244.000	-79.36	27.14	-52.22	-13.00	-39.22	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 5	Date:	11/08/2015
Channel Bandwidth:	3 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	836.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6532.000	-78.17	28.76	-49.41	-13.00	-36.41	peak	H
1	4852.000	-78.76	21.56	-57.20	-13.00	-44.20	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 5	Date:	11/08/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	836.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5956.000	-79.42	25.51	-53.91	-13.00	-40.91	peak	H
1	6616.000	-78.61	28.99	-49.62	-13.00	-36.62	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 5	Date:	11/08/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	836.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6472.000	-80.08	28.50	-51.58	-13.00	-38.58	peak	H
1	4864.000	-78.20	21.64	-56.56	-13.00	-43.56	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 7	Date:	11/08/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	2502.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6388.000	-79.22	28.00	-51.22	-25.00	-26.22	peak	H
1	4396.000	-78.87	19.15	-59.72	-25.00	-34.72	peak	V

Frequency:	2535.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7732.000	-77.37	32.09	-45.28	-25.00	-20.28	peak	H
1	6772.000	-77.81	29.44	-48.37	-25.00	-23.37	peak	V

Frequency:	2567.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6412.000	-79.62	28.13	-51.49	-25.00	-26.49	peak	H
1	6796.000	-77.45	29.50	-47.95	-25.00	-22.95	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 7	Date:	11/08/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	2505.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7660.000	-77.00	32.00	-45.00	-25.00	-20.00	peak	H
1	7816.000	-77.08	32.21	-44.87	-25.00	-19.87	peak	V

Frequency:	2535.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7444.000	-77.98	31.60	-46.38	-25.00	-21.38	peak	H
1	6328.000	-79.58	27.64	-51.94	-25.00	-26.94	peak	V

Frequency:	2565.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6196.000	-79.14	26.85	-52.29	-25.00	-27.29	peak	H
1	5584.000	-78.76	24.05	-54.71	-25.00	-29.71	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 7	Date:	11/09/2015
Channel Bandwidth:	15 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	2507.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6604.000	-78.45	28.95	-49.50	-25.00	-24.50	peak	H
1	7252.000	-77.85	30.93	-46.92	-25.00	-21.92	peak	V

Frequency:	2535.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6736.000	-77.52	29.33	-48.19	-25.00	-23.19	peak	H
1	5368.000	-79.79	23.40	-56.39	-25.00	-31.39	peak	V

Frequency:	2562.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6568.000	-77.60	28.85	-48.75	-25.00	-23.75	peak	H
1	7636.000	-76.87	31.97	-44.90	-25.00	-19.90	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 7	Date:	11/09/2015
Channel Bandwidth:	20 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	2510.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7576.000	-77.03	31.89	-45.14	-25.00	-20.14	peak	H
1	6328.000	-79.79	27.64	-52.15	-25.00	-27.15	peak	V

Frequency:	2535.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6700.000	-77.84	29.22	-48.62	-25.00	-23.62	peak	H
1	6508.000	-78.81	28.69	-50.12	-25.00	-25.12	peak	V

Frequency:	2560.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7828.000	-77.71	32.21	-45.50	-25.00	-20.50	peak	H
1	6472.000	-79.28	28.50	-50.78	-25.00	-25.78	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 7	Date:	11/09/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	2535.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6640.000	-77.34	29.06	-48.28	-25.00	-23.28	peak	H
1	7552.000	-77.85	31.86	-45.99	-25.00	-20.99	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 7	Date:	11/09/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	2535.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6184.000	-78.72	26.78	-51.94	-25.00	-26.94	peak	H
1	6424.000	-79.21	28.21	-51.00	-25.00	-26.00	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 7	Date:	11/09/2015
Channel Bandwidth:	15 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	2535.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7816.000	-78.24	32.21	-46.03	-25.00	-21.03	peak	H
1	6820.000	-77.60	29.57	-48.03	-25.00	-23.03	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 7	Date:	11/09/2015
Channel Bandwidth:	20 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	2535.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6388.000	-79.56	28.00	-51.56	-25.00	-26.56	peak	H
1	6496.000	-79.86	28.65	-51.21	-25.00	-26.21	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 12	Date:	10/04/2015
Channel Bandwidth:	1.4 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	699.7 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6124.000	-80.61	26.41	-54.20	-13.00	-41.20	peak	H
1	6340.000	-79.38	27.71	-51.67	-13.00	-38.67	peak	V

Frequency:	707.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6052.000	-78.98	25.98	-53.00	-13.00	-40.00	peak	H
1	6244.000	-78.35	27.14	-51.21	-13.00	-38.21	peak	V

Frequency:	715.3 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6400.000	-79.48	28.08	-51.40	-13.00	-38.40	peak	H
1	7372.000	-77.65	31.35	-46.30	-13.00	-33.30	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 12	Date:	10/06/2015
Channel Bandwidth:	3 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	700.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7324.000	-77.18	31.18	-46.00	-13.00	-33.00	peak	H
1	6352.000	-77.12	27.79	-49.33	-13.00	-36.33	peak	V

Frequency:	707.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6472.000	-79.23	28.50	-50.73	-13.00	-37.73	peak	H
1	7720.000	-77.20	32.08	-45.12	-13.00	-32.12	peak	V

Frequency:	714.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6736.000	-78.36	29.33	-49.03	-13.00	-36.03	peak	H
1	6760.000	-75.62	29.40	-46.22	-13.00	-33.22	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 12	Date:	10/06/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	701.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	5932.000	-78.95	25.42	-53.53	-13.00	-40.53	peak	H
1	6244.000	-79.17	27.14	-52.03	-13.00	-39.03	peak	V

Frequency:	707.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6148.000	-79.36	26.56	-52.80	-13.00	-39.80	peak	H
1	6808.000	-77.12	29.53	-47.59	-13.00	-34.59	peak	V

Frequency:	713.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7468.000	-77.91	31.68	-46.23	-13.00	-33.23	peak	H
1	7624.000	-77.55	31.96	-45.59	-13.00	-32.59	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 12	Date:	10/06/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	704.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7912.000	-77.83	32.34	-45.49	-13.00	-32.49	peak	H
1	6580.000	-78.71	28.89	-49.82	-13.00	-36.82	peak	V

Frequency:	707.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6580.000	-78.98	28.89	-50.09	-13.00	-37.09	peak	H
1	6256.000	-80.03	27.21	-52.82	-13.00	-39.82	peak	V

Frequency:	711.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6748.000	-78.62	29.36	-49.26	-13.00	-36.26	peak	H
1	5932.000	-78.46	25.42	-53.04	-13.00	-40.04	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 12	Date:	10/04/2015
Channel Bandwidth:	1.4 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	707.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	4804.000	-78.59	21.25	-57.34	-13.00	-44.34	peak	H
1	7276.000	-76.61	31.03	-45.58	-13.00	-32.58	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 12	Date:	10/06/2015
Channel Bandwidth:	3 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	707.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6148.000	-78.83	26.56	-52.27	-13.00	-39.27	peak	H
1	7852.000	-77.55	32.26	-45.29	-13.00	-32.29	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 12	Date:	10/04/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	707.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6556.000	-78.61	28.82	-49.79	-13.00	-36.79	peak	H
1	7228.000	-75.90	30.85	-45.05	-13.00	-32.05	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 12	Date:	10/06/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	707.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7300.000	-77.55	31.10	-46.45	-13.00	-33.45	peak	H
1	6988.000	-75.96	30.04	-45.92	-13.00	-32.92	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 30	Date:	12/04/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	2307.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7024.000	-75.18	25.66	-49.52	-40	-9.52	peak	H
1	7084.000	-75.85	25.83	-50.02	-40	-10.02	peak	V

Frequency:	2310.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7732.000	-76.04	27.13	-48.91	-40	-8.91	peak	H
1	6928.000	-76.83	25.44	-51.39	-40	-11.39	peak	V

Frequency:	2312.5 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7900.000	-77.61	27.27	-50.34	-40	-10.34	peak	H
1	7408.000	-77.32	26.70	-50.62	-40	-10.62	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 30	Date:	12/04/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	QPSK		

Frequency:	2310.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	6388.000	-80.51	23.86	-56.65	-40	-16.65	peak	H
1	7912.000	-77.57	27.29	-50.28	-40	-10.28	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 30	Date:	12/04/2015
Channel Bandwidth:	5 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	2310.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7540.000	-78.45	26.98	-51.47	-40	-11.47	peak	H
1	6712.000	-77.40	24.92	-52.48	-40	-12.48	peak	V

Standard:	FCC Part 27	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC815S	Temp.(℃)/Hum.(%RH):	26(℃)/60%RH
Operate Band:	LTE Band 30	Date:	12/04/2015
Channel Bandwidth:	10 MHz	Test By:	Eric Ou Yang
Modulation Technology:	16QAM		

Frequency:	2310.0 MHz							
No.	Frequency (MHz)	Reading (dBm)	Correct Factor(dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
1	7348.000	-77.32	26.55	-50.77	-13.00	-37.77	peak	H
1	6892.000	-78.22	25.34	-52.88	-13.00	-39.88	peak	V