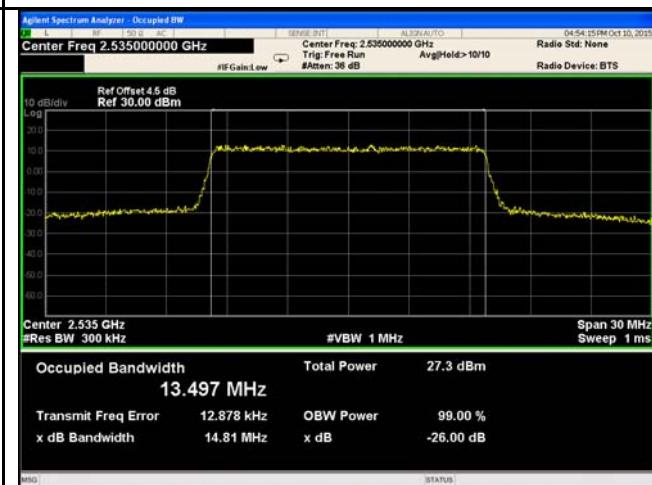
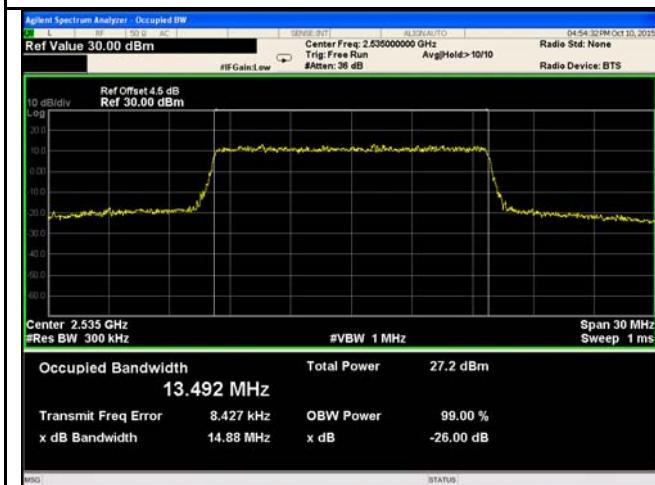


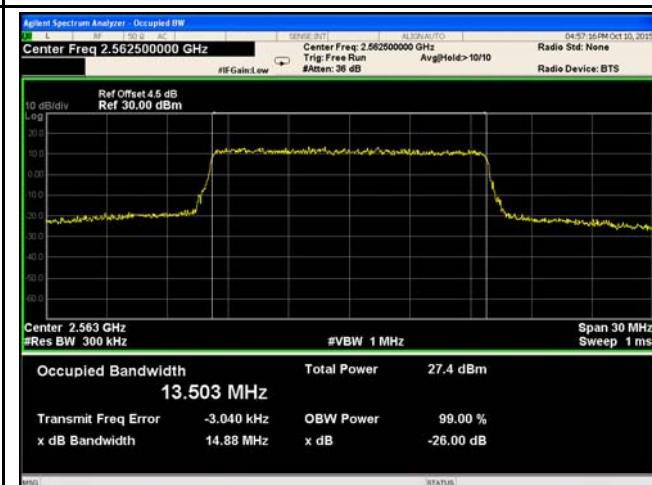
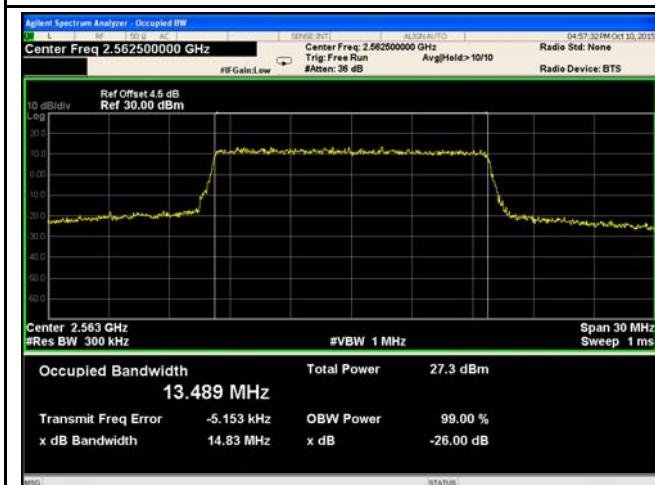
LTE band 7 - Low CH QPSK-15

LTE band 7 - Low CH 16QAM-15



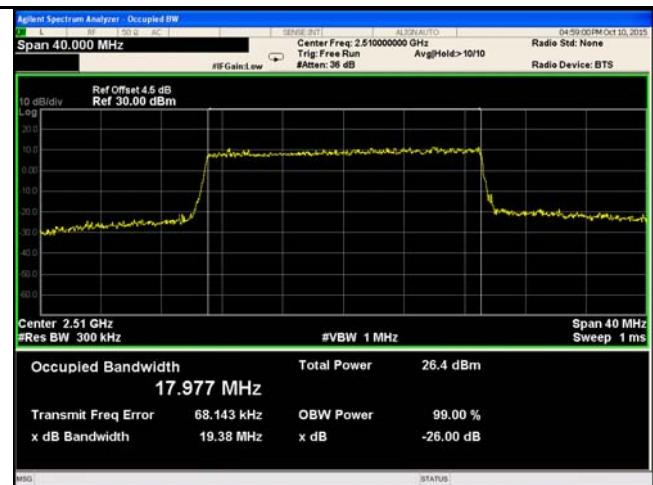
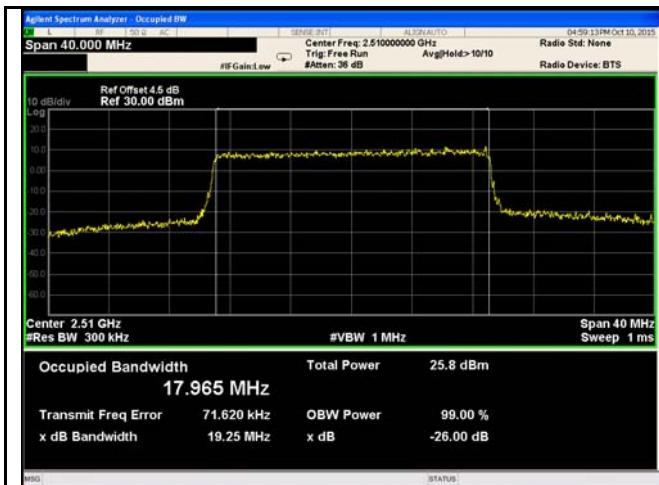
LTE band 7 - Middle CH QPSK-15

LTE band 7 - Middle CH 16QAM-15



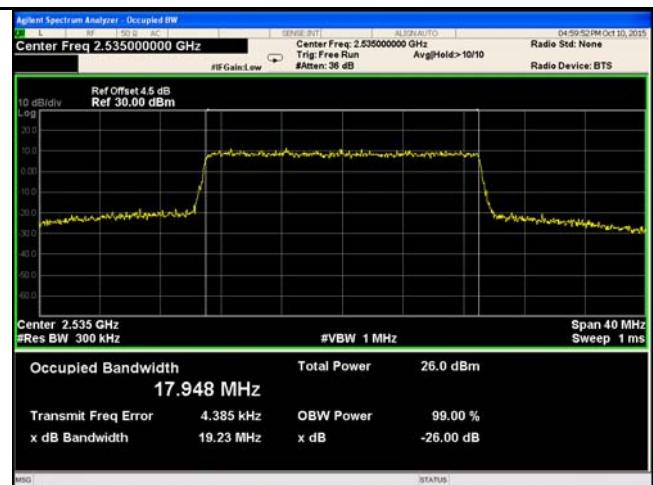
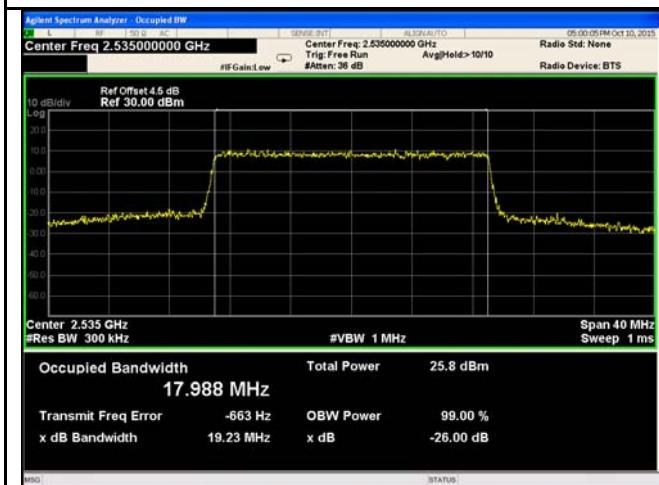
LTE band 7 - High CH QPSK-15

LTE band 7 - High CH 16QAM-15



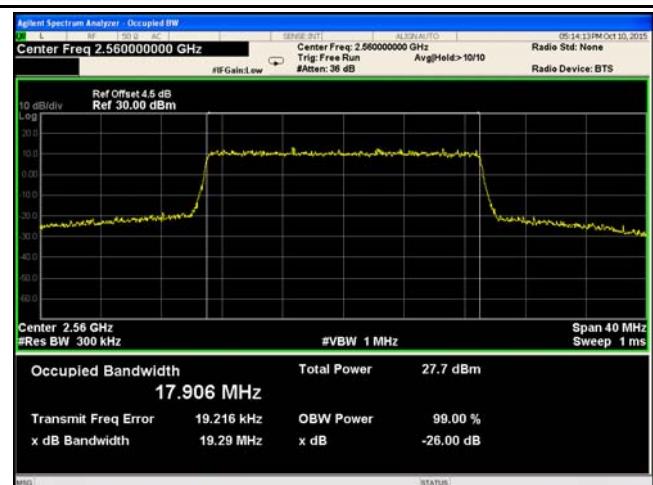
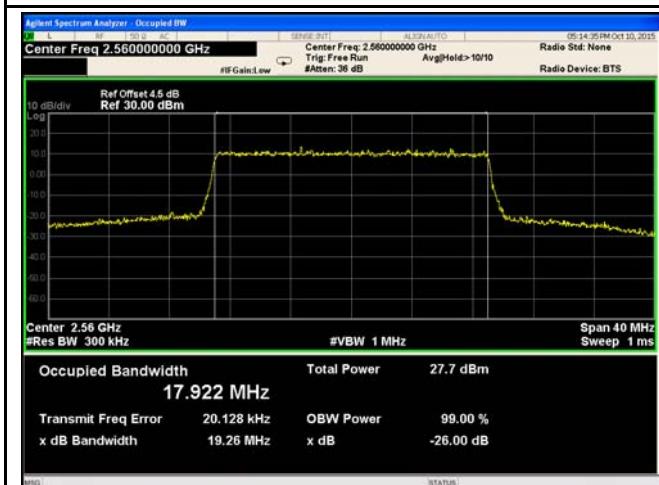
LTE band 7 - Low CH QPSK-20

LTE band 7 - Low CH 16QAM-20



LTE band 7 - Middle CH QPSK-20

LTE band 7 - Middle CH 16QAM-20



LTE band 7 - High CH QPSK-20

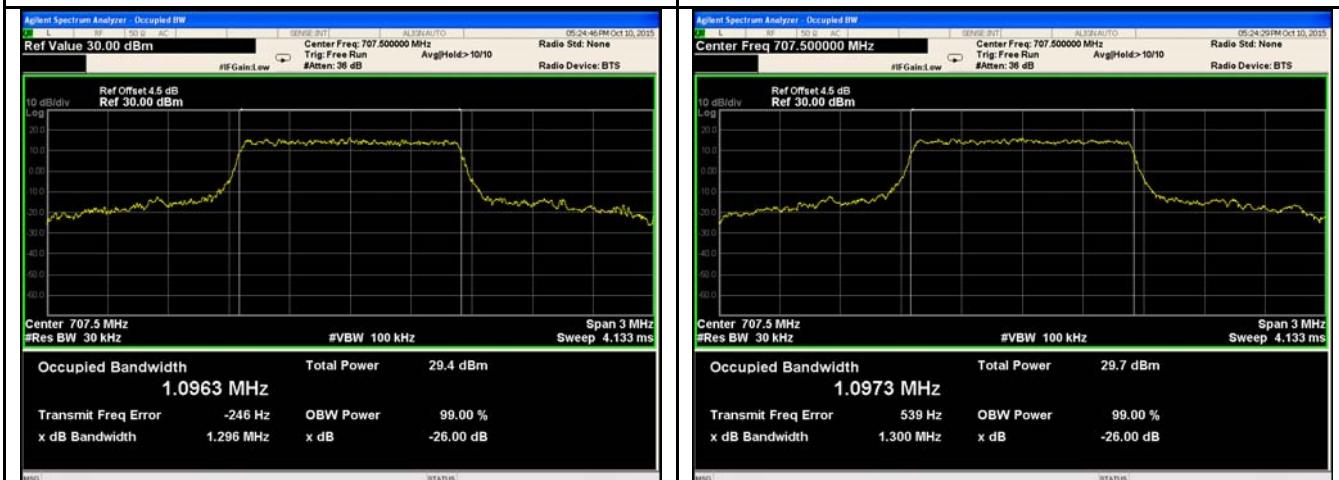
LTE band 7 - High CH 16QAM-20

LTE Band 12 (Part 27)



LTE band 12 - Low CH QPSK-1.4

LTE band 12 - Low CH 16QAM-1.4



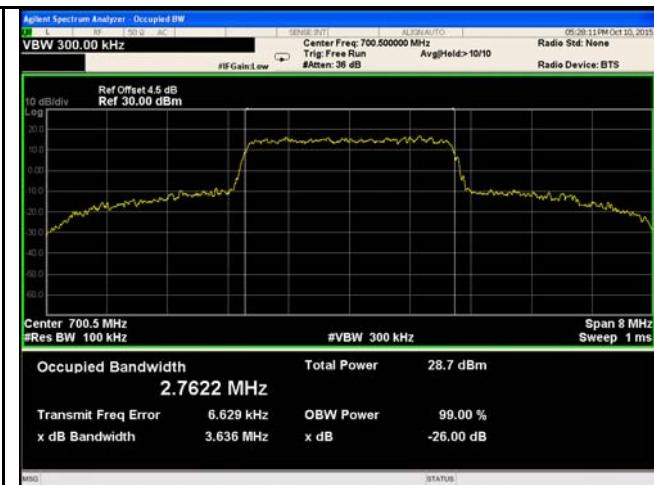
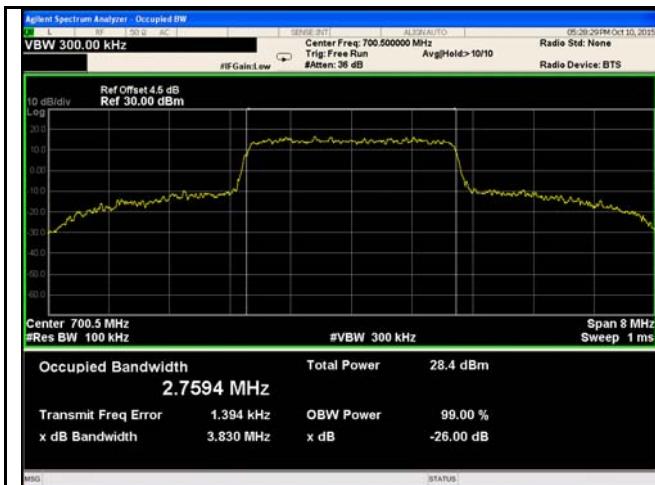
LTE band 12 - Middle CH QPSK-1.4

LTE band 12 - Middle CH 16QAM-1.4



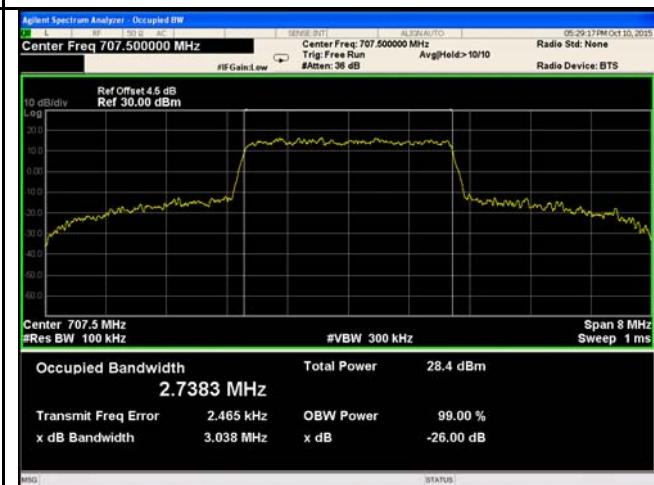
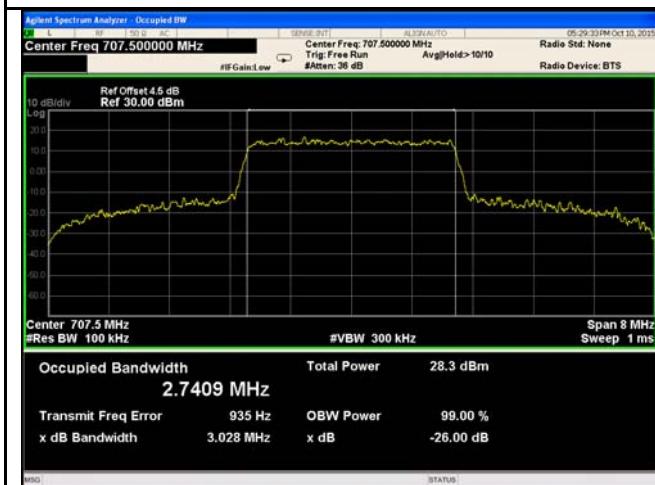
LTE band 12 - High CH QPSK-1.4

LTE band 12 - High CH 16QAM-1.4



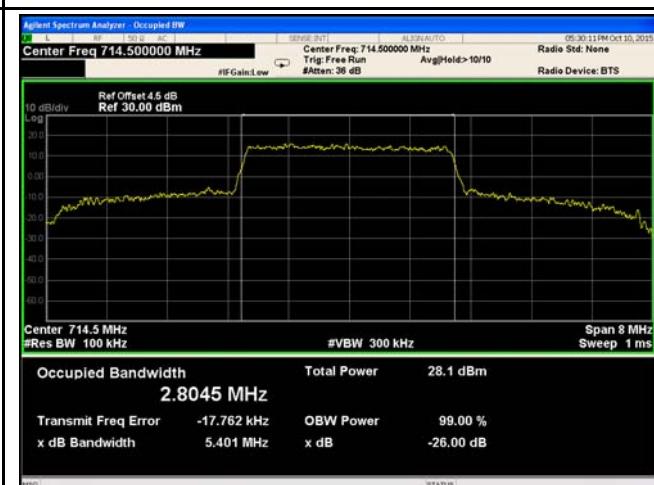
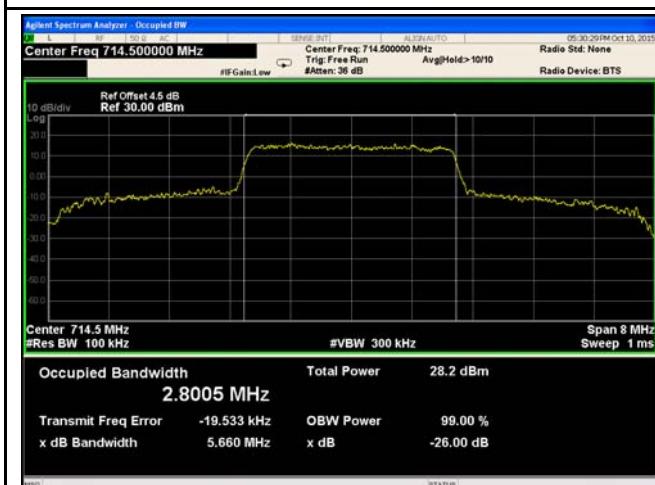
LTE band 12 - Low CH QPSK-3

LTE band 12 - Low CH 16QAM-3



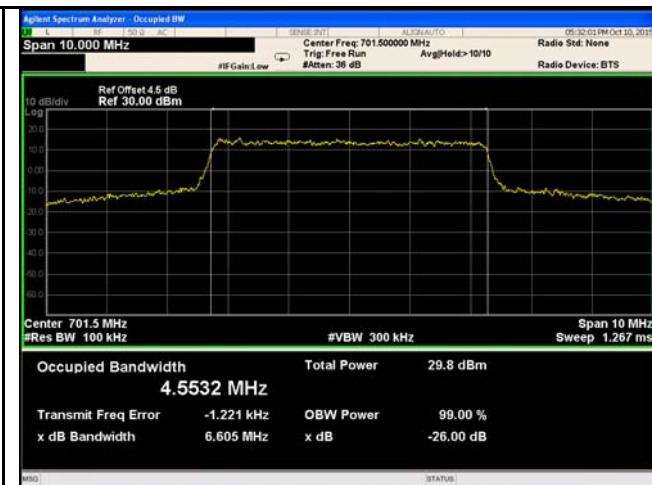
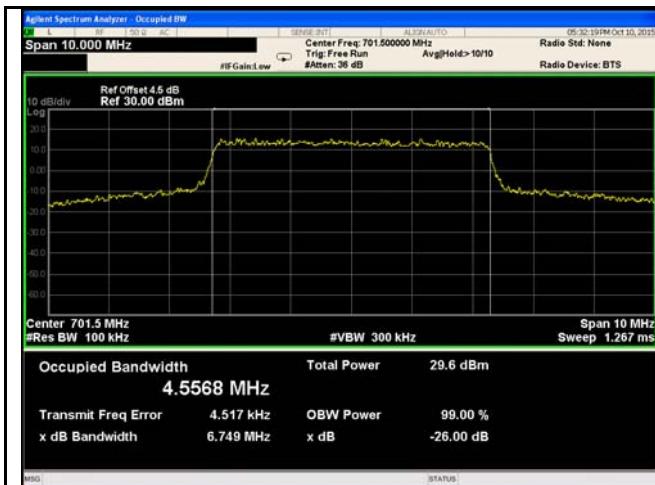
LTE band 12 - Middle CH QPSK-3

LTE band 12 - Middle CH 16QAM-3



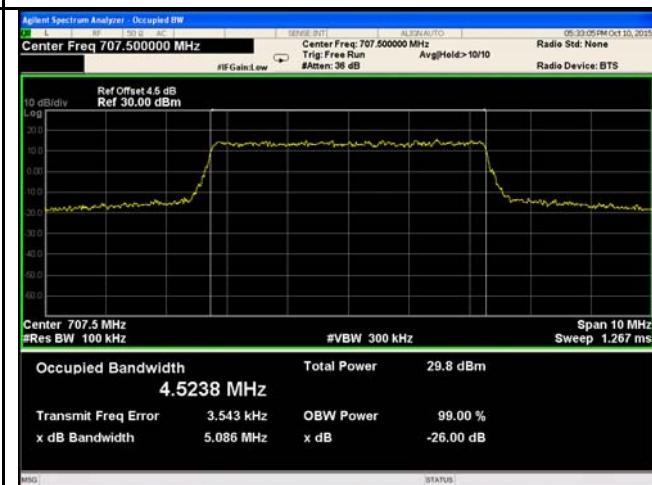
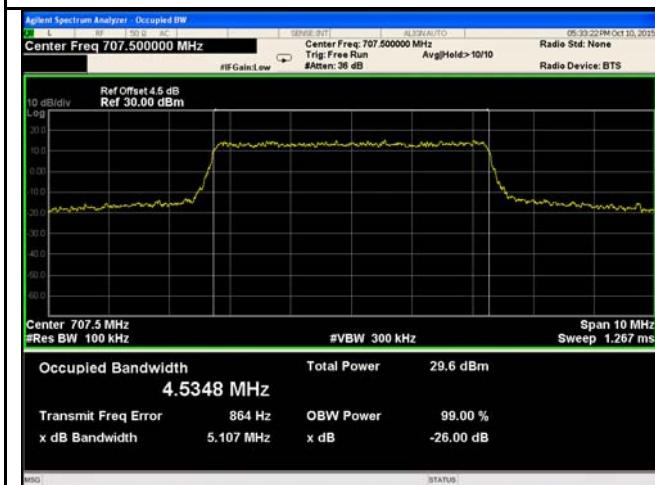
LTE band 12 - High CH QPSK-3

LTE band 12 - High CH 16QAM-3



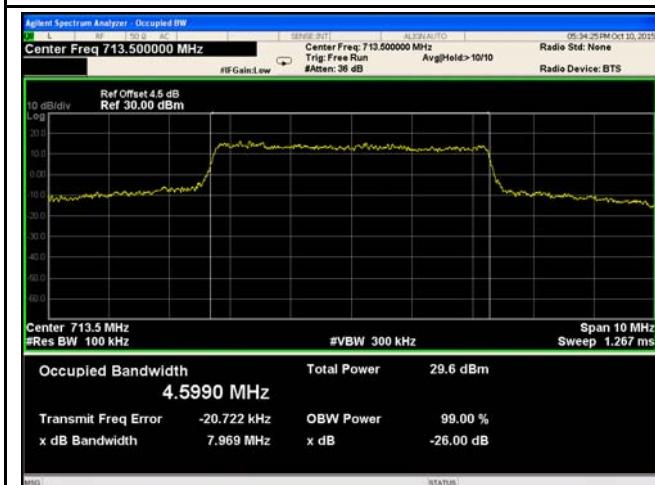
LTE band 12 - Low CH QPSK-5

LTE band 12 - Low CH 16QAM-5



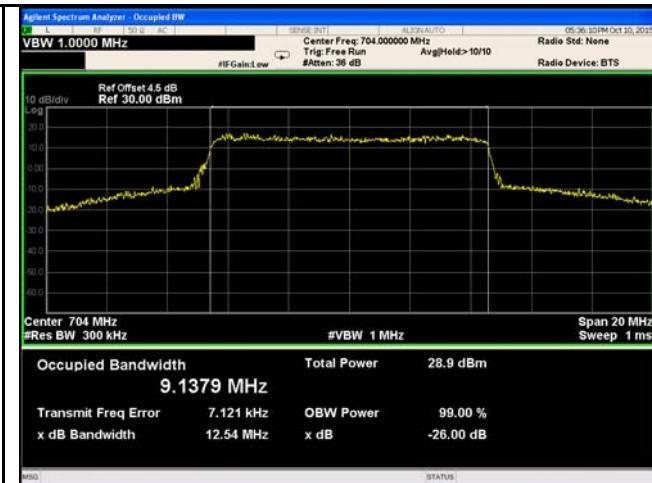
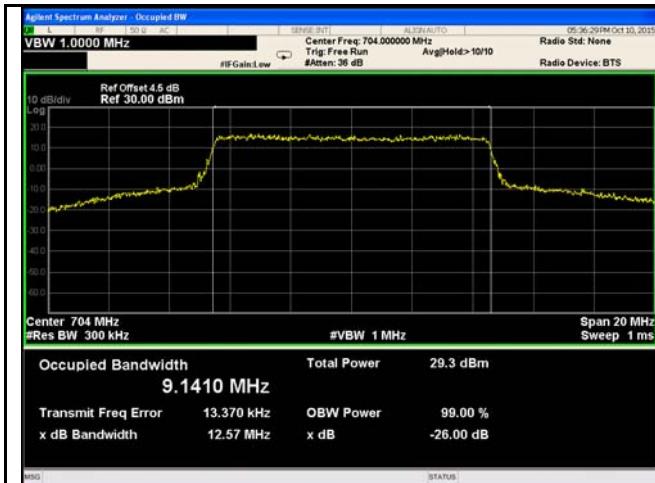
LTE band 12 - Middle CH QPSK-5

LTE band 12 - Middle CH 16QAM-5

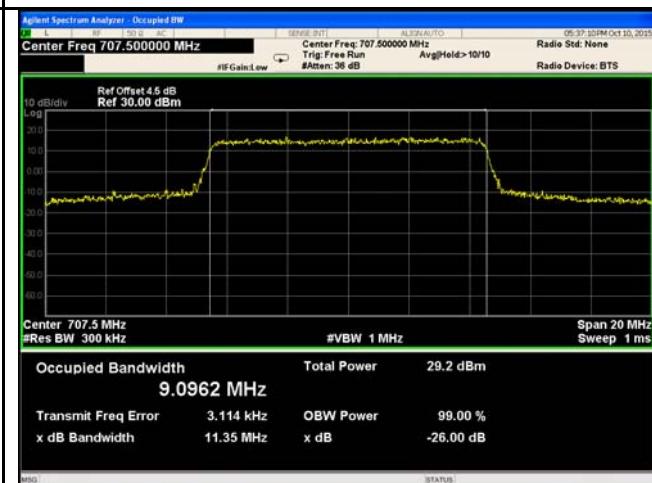
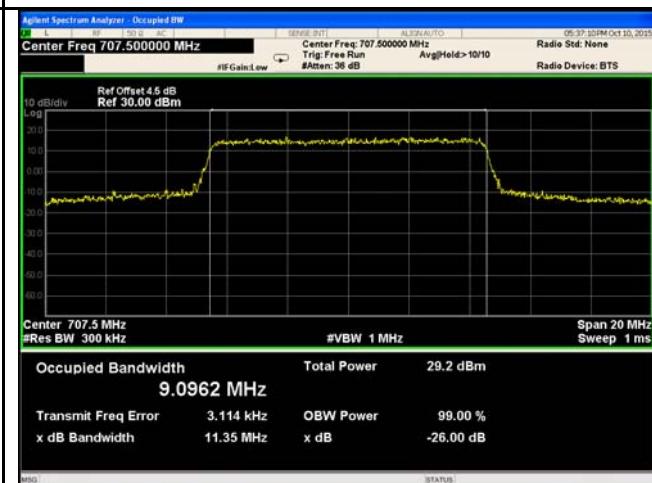


LTE band 12 - High CH QPSK-5

LTE band 12 - High CH 16QAM-5

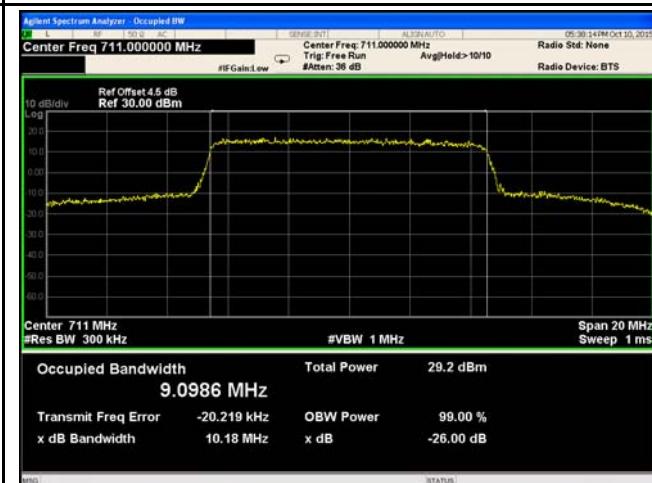
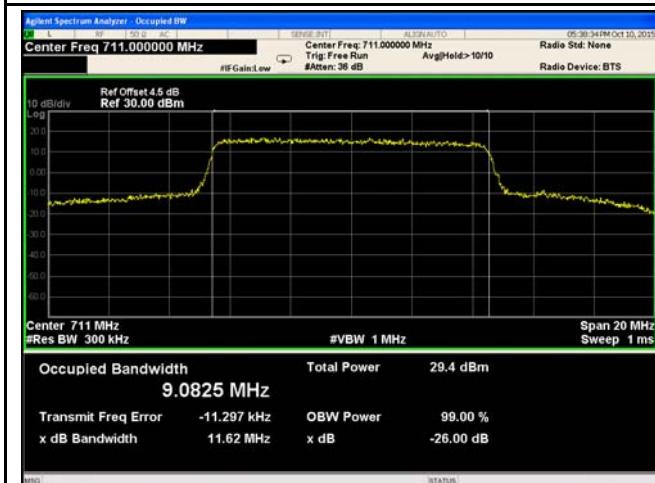


LTE band 12 - Low CH QPSK-10



LTE band 12 - Middle CH QPSK-10

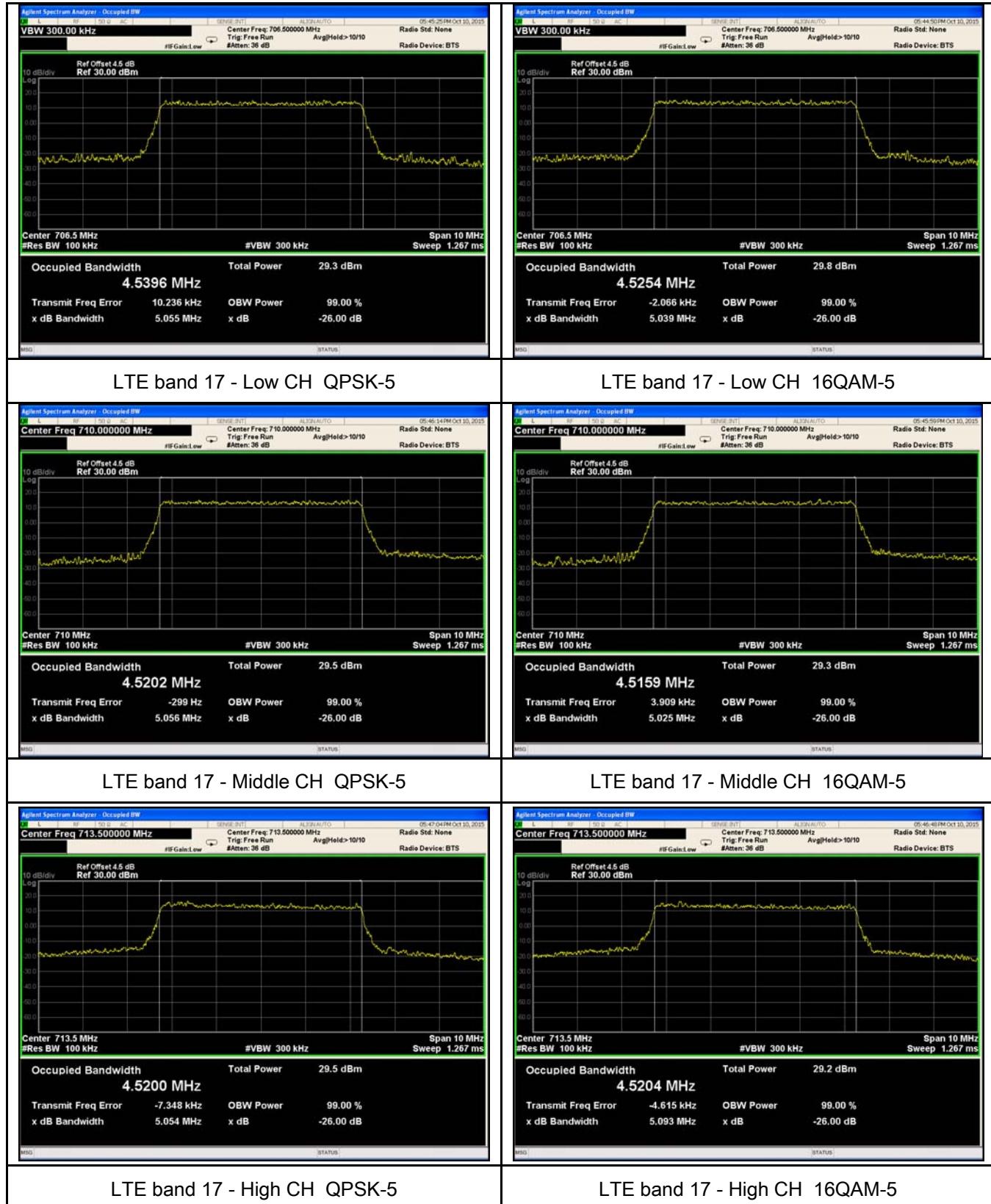
LTE band 12 - Low CH 16QAM-10

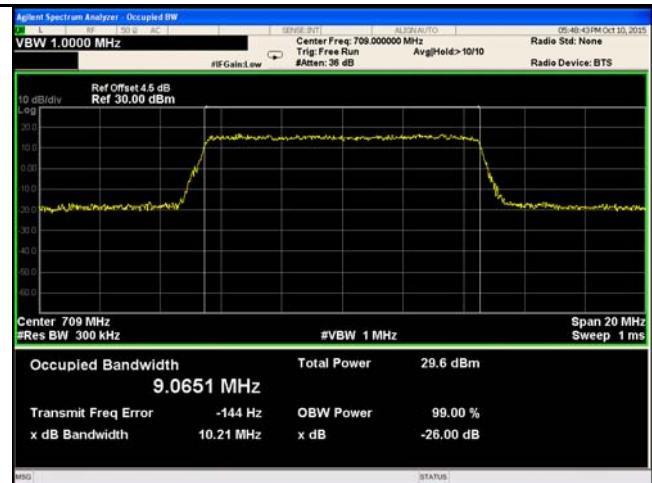
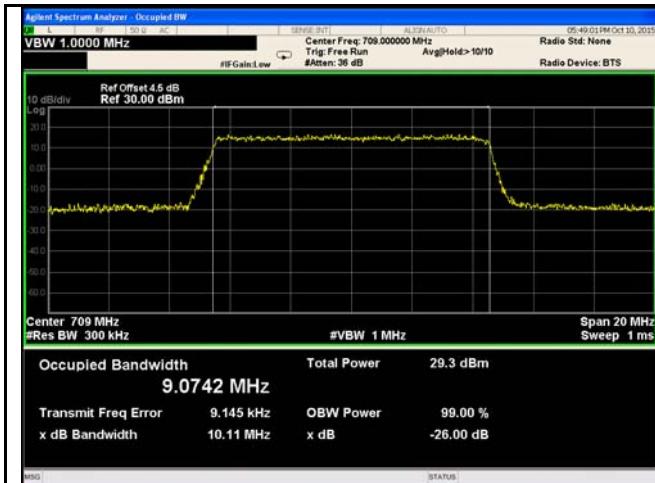


LTE band 12 - High CH QPSK-10

LTE band 12 - High CH 16QAM-10

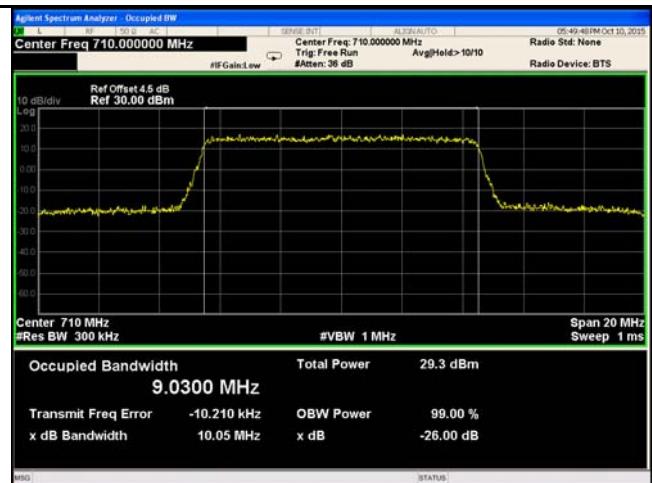
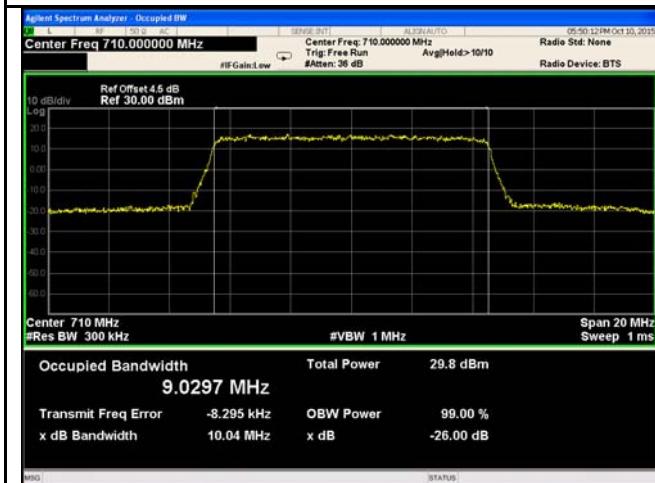
LTE Band 17 (Part 27)





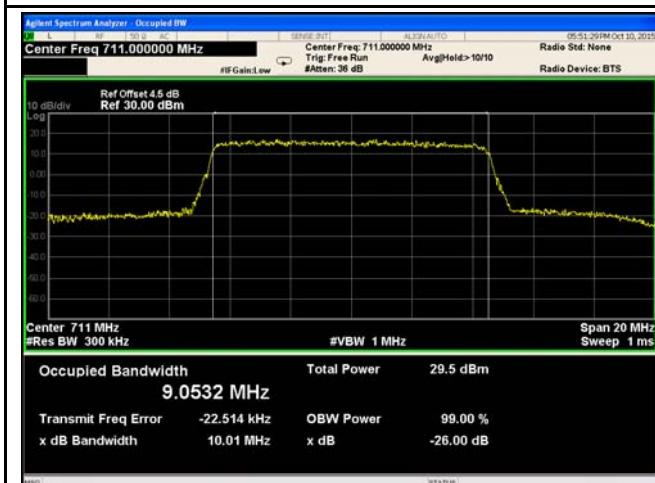
LTE band 17 - Low CH QPSK-10

LTE band 17 - Low CH 16QAM-10



LTE band 17 - Middle CH QPSK-10

LTE band 17 - Middle CH 16QAM-10



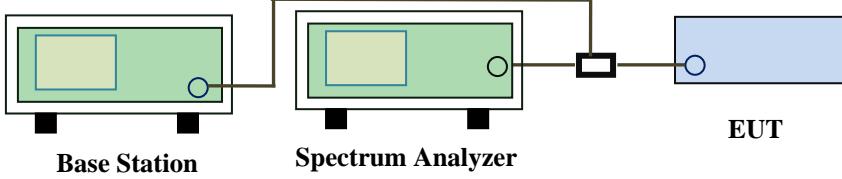
LTE band 17 - High CH QPSK-10

LTE band 17 - High CH 16QAM-10

6.6 Spurious Emissions at Antenna Terminals

Temperature	23°C
Relative Humidity	52%
Atmospheric Pressure	1010mbar
Test date :	October 10, 2015
Tested By :	Winnie Zhang

Requirement(s):

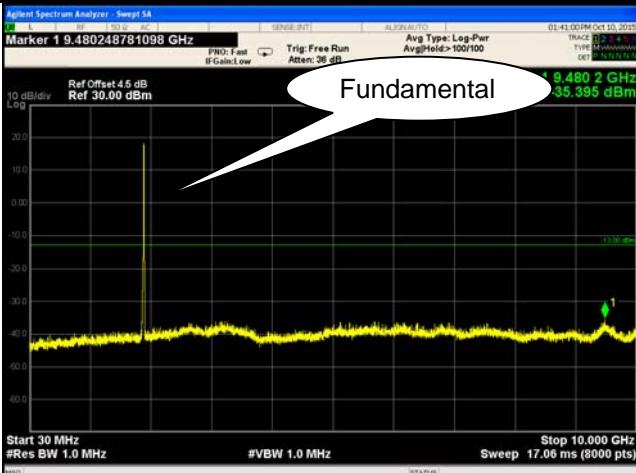
Spec	Item	Requirement	Applicable
§2.1051, §22.917(a)& §24.238(a) § 27.53(h)	a)	The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB	<input checked="" type="checkbox"/>
Test Setup		 <p style="text-align: center;">Base Station Spectrum Analyzer EUT</p>	
Test Procedure		<ul style="list-style-type: none"> - The EUT was connected to Spectrum Analyzer and Base Station via power divider. - The Band Edges of low and high channels for the highest RF powers were measured. - Setting RBW as roughly BW/100. 	
Remark			
Result		<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	

Test Data Yes N/A

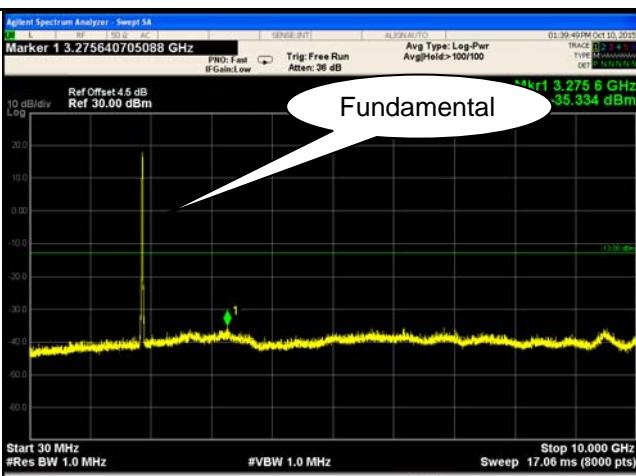
Test Plot Yes (See below) N/A

Test Plots 30MHz-5GHz

LTE Band 2 (Part 24E)



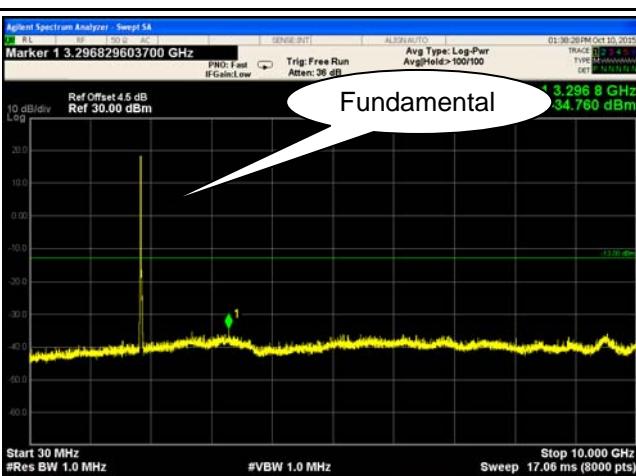
LTE Band 2 - Low Channel-1



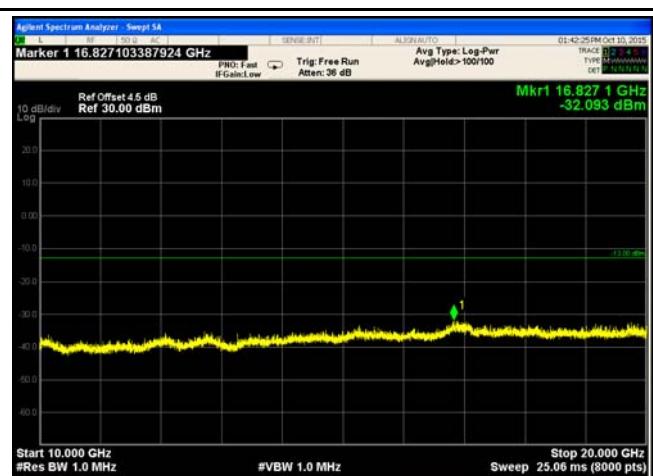
LTE Band 2 - Low Channel-2



LTE Band 2 Middle Channel-1



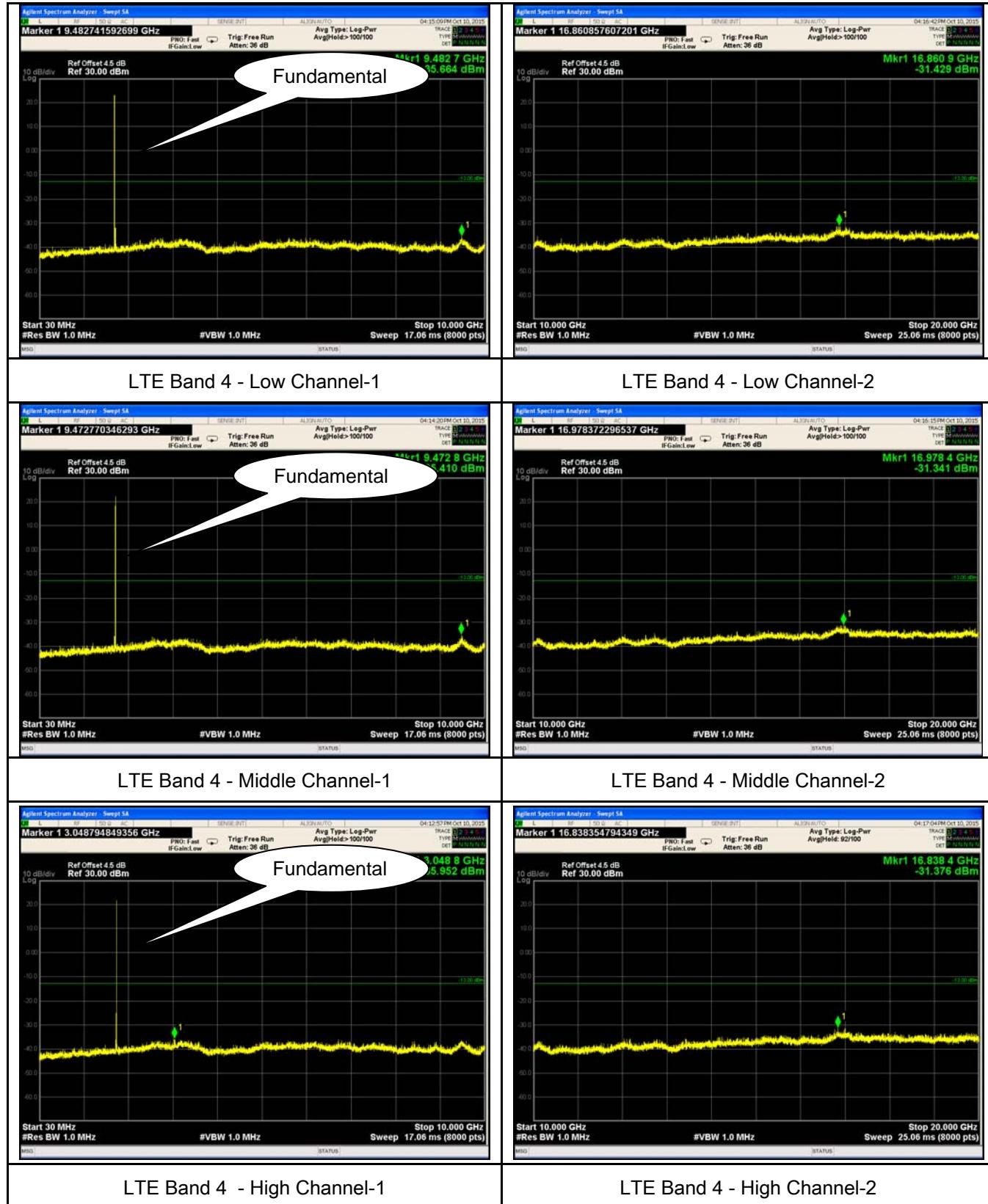
LTE Band 2 Middle Channel-2



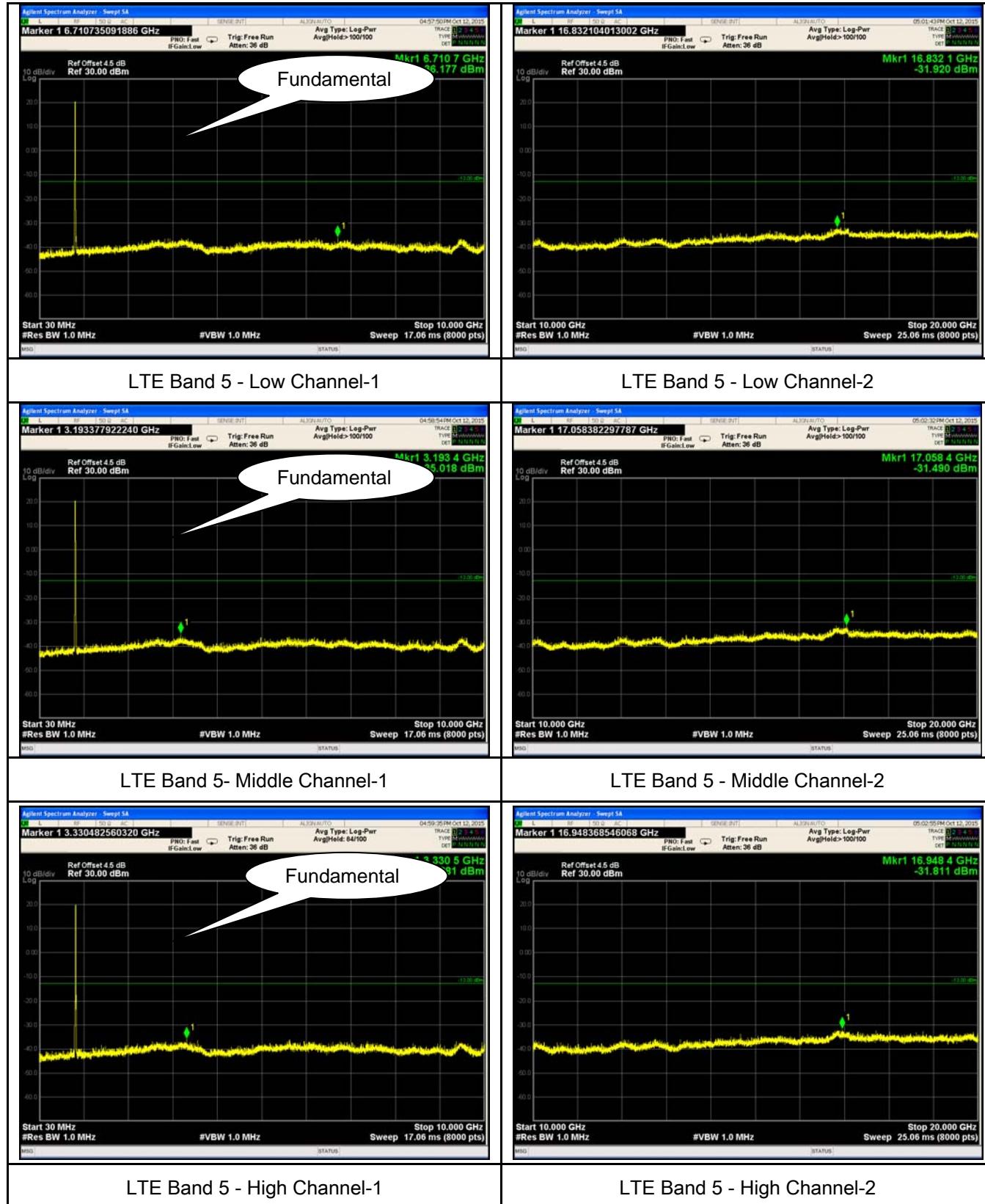
LTE Band 2 - High Channel-1

LTE Band 2 - High Channel-2

LTE Band 4 (Part27) result

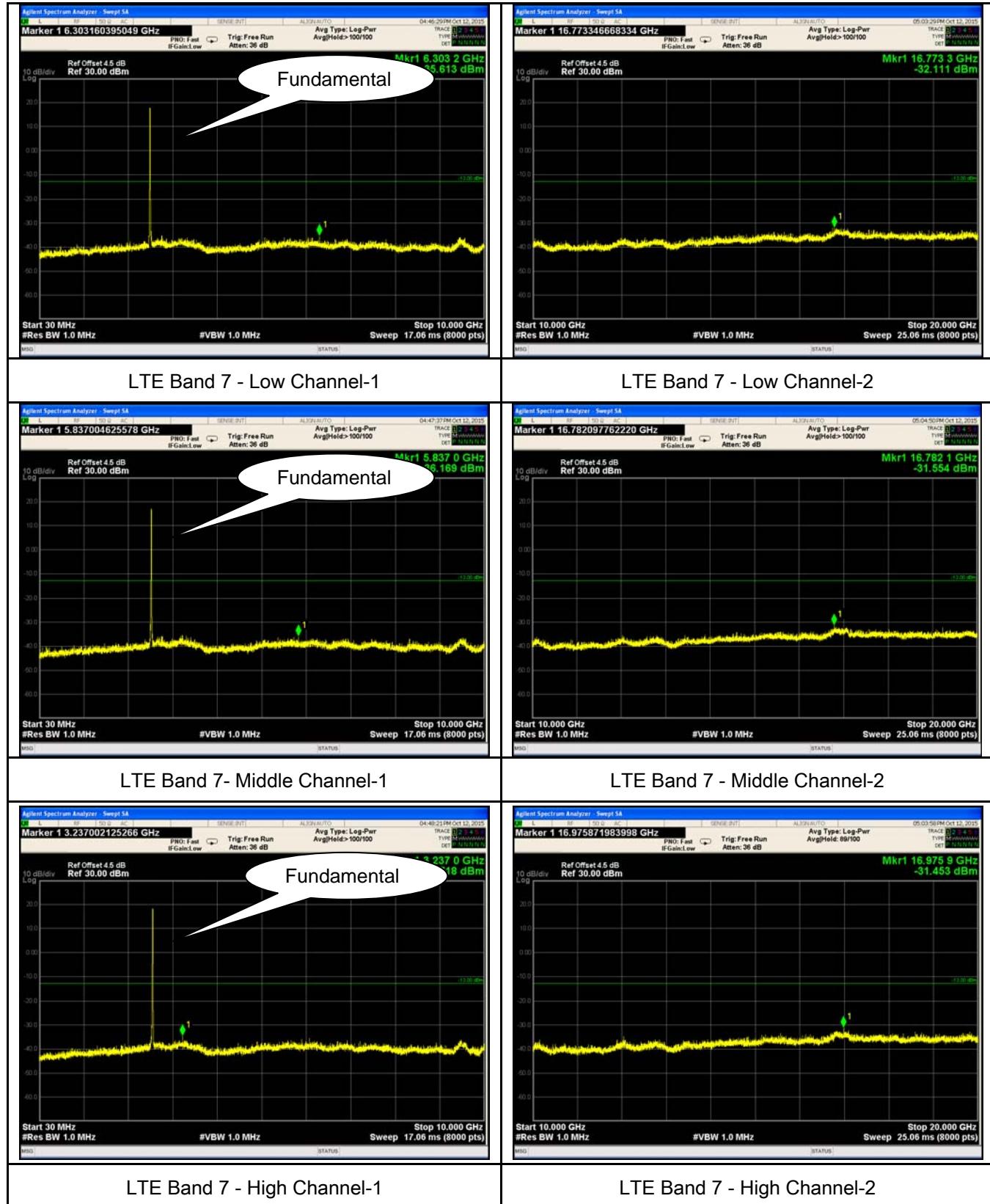


LTE Band 5 (Part 22H)

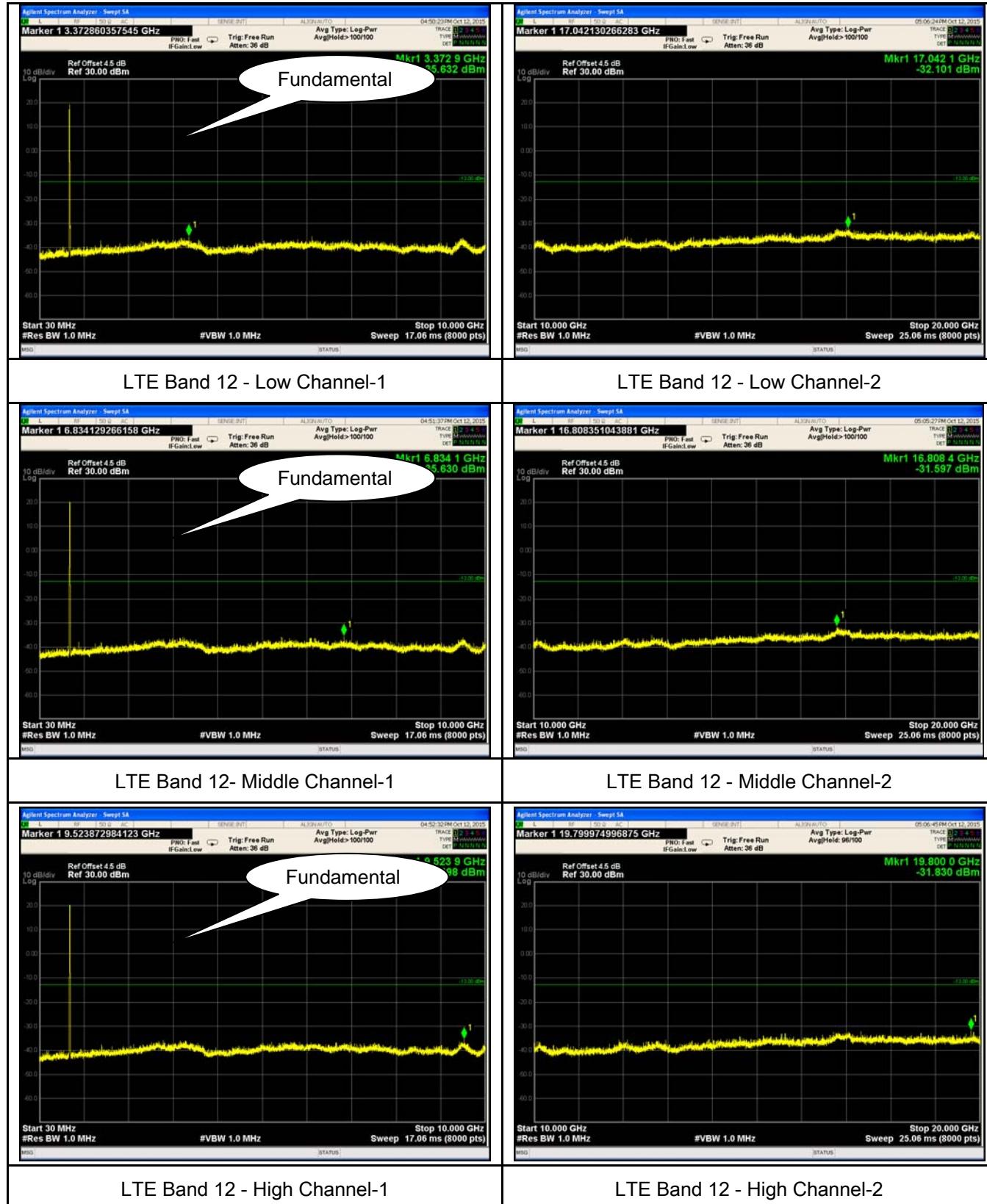


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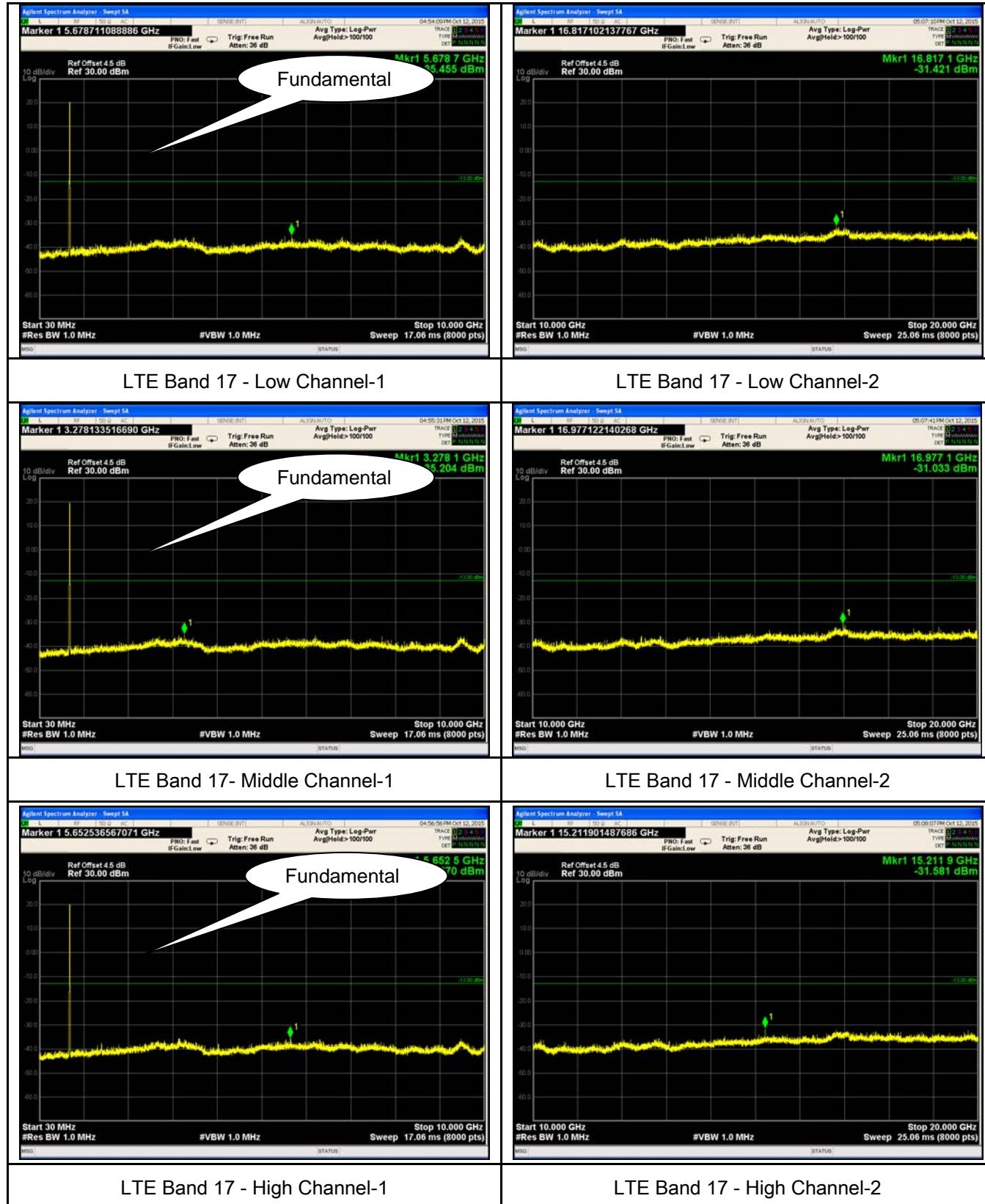
LTE Band 7 (Part 27)



LTE Band 12 (Part 27)



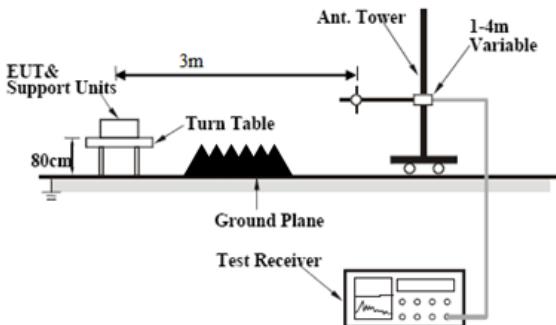
LTE Band 17 (Part 27)



6.7 Spurious Radiated Emissions

Temperature	25°C
Relative Humidity	50%
Atmospheric Pressure	1008mbar
Test date :	October 08, 2015
Tested By :	Winnie Zhang

Requirement(s):

Spec	Item	Requirement	Applicable
§2.1053, §22.917 & §24.238 § 27.53(h)	a)	The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.	<input checked="" type="checkbox"/>
Test setup			
Test Procedure	<ol style="list-style-type: none"> 1. The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable. 2. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis. 3. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution. <p>Sample Calculation:</p> <p>EUT Field Strength = Raw Amplitude (dBμV/m) – Amplifier Gain (dB) + Antenna Factor (dB) + Cable Loss (dB) + Filter Attenuation (dB, if used)</p>		
Remark			
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		

Test Data Yes N/A

Test Plot Yes (See below) N/A

LTE Band 2 (Part 24E) result

Low channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3720	-49.83	V	10.25	2.73	-42.31	-13	-29.31
3720	-50.18	H	10.25	2.73	-42.66	-13	-29.66
50.2	-43.71	V	-4.2	0.11	-48.02	-13	-35.02
187.1	-52.66	H	4.6	0.18	-48.24	-13	-35.24

Middle channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3760	-49.87	V	10.25	2.73	-42.35	-13	-29.35
3760	-50.22	H	10.25	2.73	-42.70	-13	-29.70
50.5	-43.56	V	-4.2	0.11	-47.87	-13	-34.87
187.9	-52.43	H	4.6	0.18	-48.01	-13	-35.01

High channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3800	-49.91	V	10.36	2.73	-42.28	-13	-29.28
3800	-50.34	H	10.36	2.73	-42.71	-13	-29.71
50.6	-43.62	V	-4.2	0.11	-47.93	-13	-34.93
187.4	-52.59	H	4.6	0.18	-48.17	-13	-35.17

LTE Band 4(Part27) result

Low channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3440	-50.35	V	10.06	2.52	-42.81	-13	-29.81
3440	-50.96	H	10.06	2.52	-43.42	-13	-30.42
51.3	-43.51	V	-4.2	0.11	-47.82	-13	-34.82
186.8	-52.49	H	4.6	0.18	-48.07	-13	-35.07

Middle channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3465	-50.29	V	10.09	2.52	-42.72	-13	-29.72
3465	-50.83	H	10.09	2.52	-43.26	-13	-30.26
51.5	-43.65	V	-4.2	0.11	-47.96	-13	-34.96
186.2	-52.56	H	4.6	0.18	-48.14	-13	-35.14

High channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
3490	-50.13	V	10.09	2.52	-42.56	-13	-29.56
3490	-50.77	H	10.09	2.52	-43.20	-13	-30.20
51.7	-43.51	V	-4.2	0.11	-47.82	-13	-34.82
186.6	-52.49	H	4.6	0.18	-48.07	-13	-35.07

LTE Band 5(Part22H) result

Low channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1658	-48.52	V	7.95	0.78	-41.35	-13	-28.35
1658	-49.19	H	7.95	0.78	-42.02	-13	-29.02
49.9	-42.48	V	-4.2	0.11	-46.79	-13	-33.79
188.2	-51.33	H	4.6	0.18	-46.91	-13	-33.91

Middle channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1673	-48.67	V	7.95	0.78	-41.50	-13	-28.50
1673	-49.05	H	7.95	0.78	-41.88	-13	-28.88
49.6	-42.31	V	-4.2	0.11	-46.62	-13	-33.62
188.5	-51.48	H	4.6	0.18	-47.06	-13	-34.06

High channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1688	-48.51	V	7.95	0.78	-41.34	-13	-28.34
1688	-49.28	H	7.95	0.78	-42.11	-13	-29.11
49.8	-42.15	V	-4.2	0.11	-46.46	-13	-33.46
188.3	-51.33	H	4.6	0.18	-46.91	-13	-33.91

LTE Band 7(Part27) result

Low channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
5020	-51.43	V	10.29	0.98	-42.12	-13	-29.12
5020	-52.37	H	10.29	0.98	-43.06	-13	-30.06
49.3	-43.51	V	-4.2	0.11	-47.82	-13	-34.82
188.1	-53.25	H	4.6	0.18	-48.83	-13	-35.83

Middle channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
5070	-51.37	V	10.3	0.99	-42.06	-13	-29.06
5070	-52.42	H	10.3	0.99	-43.11	-13	-30.11
49.5	-43.46	V	-4.2	0.11	-47.77	-13	-34.77
188.9	-53.11	H	4.6	0.18	-48.69	-13	-35.69

High channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
5120	-51.26	V	10.32	1	-41.94	-13	-28.94
5120	-52.39	H	10.32	1	-43.07	-13	-30.07
49.8	-43.51	V	-4.2	0.11	-47.82	-13	-34.82
188.2	-53.08	H	4.6	0.18	-48.66	-13	-35.66

LTE Band 12(Part27) result

Low channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1408	-49.26	V	7.65	0.75	-42.36	-13	-29.36
1408	-50.41	H	7.65	0.75	-43.51	-13	-30.51
50.5	-41.75	V	-4.2	0.11	-46.06	-13	-33.06
187.1	-51.19	H	4.6	0.18	-46.77	-13	-33.77

Middle channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1415	-49.31	V	7.65	0.75	-42.41	-13	-29.41
1415	-50.35	H	7.65	0.75	-43.45	-13	-30.45
50.8	-41.59	V	-4.2	0.11	-45.9	-13	-32.90
187.3	-51.03	H	4.6	0.18	-46.61	-13	-33.61

High channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1422	-49.25	V	7.65	0.75	-42.35	-13	-29.35
1422	-50.33	H	7.65	0.75	-43.43	-13	-30.43
50.4	-41.39	V	-4.2	0.11	-45.7	-13	-32.7
187.6	-50.85	H	4.6	0.18	-46.43	-13	-33.43

LTE Band 17(Part27) result

Low channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1418	-50.19	V	7.65	0.75	-43.29	-13	-30.29
1418	-50.73	H	7.65	0.75	-43.83	-13	-30.83
51.1	-42.51	V	-4.2	0.11	-46.82	-13	-33.82
186.9	-51.17	H	4.6	0.18	-46.75	-13	-33.75

Middle channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1420	-50.06	V	7.65	0.75	-43.16	-13	-30.16
1420	-50.68	H	7.65	0.75	-43.78	-13	-30.78
51.5	-42.43	V	-4.2	0.11	-46.74	-13	-33.74
186.5	-51.21	H	4.6	0.18	-46.79	-13	-33.79

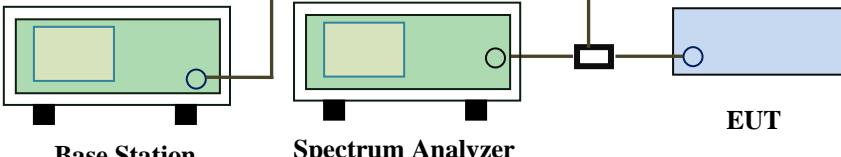
High channel

Frequency (MHz)	Substituted level (dBm)	Polarity (H/V)	Antenna Gain Correction (dB)	Cable Loss (dB)	Corrected Reading (dBm)	Limit (dBm)	Margin (dB)
1422	-50.14	V	7.65	0.75	-43.24	-13	-30.24
1422	-50.89	H	7.65	0.75	-43.99	-13	-30.99
51.8	-42.51	V	-4.2	0.11	-46.82	-13	-33.82
186.3	-51.38	H	4.6	0.18	-46.96	-13	-33.96

6.8 Band Edge

Temperature	23°C
Relative Humidity	52%
Atmospheric Pressure	1010mbar
Test date :	October 10, 2015
Tested By :	Winnie Zhang

Requirement(s):

Spec	Item	Requirement	Applicable
§22.917(a) §24.238(a) § 27.53(h)	a)	The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.	<input checked="" type="checkbox"/>
Test setup		 <p style="text-align: center;"> Base Station Spectrum Analyzer EUT </p>	
Procedure		<ul style="list-style-type: none"> - The EUT was connected to Spectrum Analyzer and Base Station via power divider. - The Band Edges of low and high channels for the highest RF powers were measured. Setting RBW as roughly BW/100. 	
Remark			
Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail		

Test Data Yes N/A

Test Plot Yes (See below) N/A

LTE Band 2 (Part 24E) result

BW(MHz)	Channel	Frequency (MHz)	Mode	Emission (dBm)	Limit (dBm)
1.4	18607	1850.7	QPSK	-25.460	-13
			16QAM	-25.993	-13
1.4	18900	1909.3	QPSK	-25.682	-13
			16QAM	-23.820	-13
3	18615	1851.5	QPSK	-19.117	-13
			16QAM	-18.927	-13
3	19185	1908.5	QPSK	-20.866	-13
			16QAM	-20.494	-13
5	18625	1852.5	QPSK	-16.479	-13
			16QAM	-16.812	-13
5	19175	1907.5	QPSK	-19.201	-13
			16QAM	-19.572	-13
10	18650	1855	QPSK	-22.935	-13
			16QAM	-20.741	-13
10	19150	1905	QPSK	-19.419	-13
			16QAM	-19.000	-13
15	18675	1857.5	QPSK	-21.916	-13
			16QAM	-21.354	-13
15	19125	1902.5	QPSK	-19.051	-13
			16QAM	-18.336	-13
20	18700	1860	QPSK	-21.719	-13
			16QAM	-21.332	-13
20	19100	1900	QPSK	-17.588	-13
			16QAM	-17.826	-13

LTE Band 4 (Part 27) result

BW(MHz)	Channel	Frequency (MHz)	Mode	Emission (dBm)	Limit (dBm)
1.4	19957	1710.7	QPSK	-27.348	-13
			16QAM	-28.160	-13
1.4	20393	1754.3	QPSK	-25.412	-13
			16QAM	-26.704	-13
3	19965	1711.5	QPSK	-19.272	-13
			16QAM	-22.147	-13
3	20385	1753.5	QPSK	-23.294	-13
			16QAM	-22.828	-13
5	19975	1712.5	QPSK	-18.811	-13
			16QAM	-17.887	-13
5	20375	1752.5	QPSK	-20.107	-13
			16QAM	-20.978	-13
10	20000	1715	QPSK	-18.894	-13
			16QAM	-18.855	-13
10	20350	1750	QPSK	-19.651	-13
			16QAM	-20.368	-13
15	20025	1717.5	QPSK	-21.447	-13
			16QAM	-23.703	-13
15	20325	1747.5	QPSK	-24.561	-13
			16QAM	-24.875	-13
20	20050	1720	QPSK	-24.335	-13
			16QAM	-23.512	-13
20	20300	1745	QPSK	-27.748	-13
			16QAM	-27.512	-13

LTE Band 5 (Part 22H) result

BW(MHz)	Channel	Frequency (MHz)	Mode	Emission (dBm)	Limit (dBm)
1.4	20407	824.7	QPSK	-25.927	-13
			16QAM	-26.619	-13
1.4	20643	848.3	QPSK	-27.620	-13
			16QAM	-27.639	-13
3	20415	825.5	QPSK	-18.780	-13
			16QAM	-17.175	-13
3	20635	847.5	QPSK	-21.179	-13
			16QAM	-20.960	-13
5	20425	826.5	QPSK	-18.403	-13
			16QAM	-18.586	-13
5	20625	846.5	QPSK	-19.004	-13
			16QAM	-18.522	-13
10	20450	829	QPSK	-18.393	-13
			16QAM	-20.156	-13
10	20800	844	QPSK	-17.958	-13
			16QAM	-19.110	-13

LTE Band 12 (Part 27) result

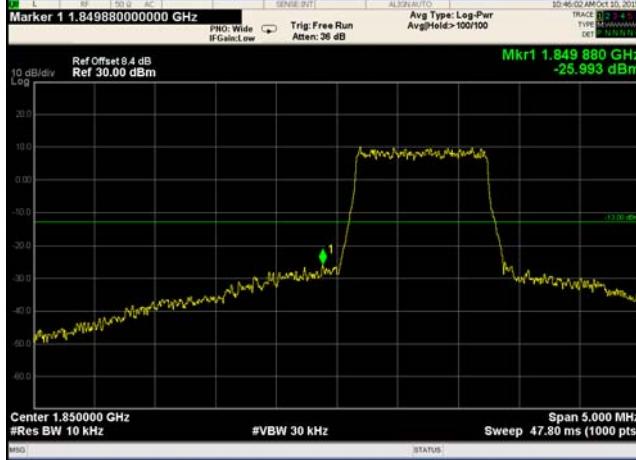
BW(MHz)	Channel	Frequency (MHz)	Mode	Emission (dBm)	Limit (dBm)
1.4	23017	699.7	QPSK	-16.958	-13
			16QAM	-13.894	-13
1.4	23173	715.3	QPSK	-13.660	-13
			16QAM	-14.353	-13
3	23025	700.5	QPSK	-17.224	-13
			16QAM	-17.615	-13
3	23165	714.5	QPSK	-14.784	-13
			16QAM	-15.035	-13
5	23035	701.5	QPSK	-15.395	-13
			16QAM	-14.564	-13
5	23155	713.5	QPSK	-14.953	-13
			16QAM	-14.582	-13
10	23060	704	QPSK	-20.101	-13
			16QAM	-20.081	-13
10	23130	711	QPSK	-19.106	-13
			16QAM	-19.618	-13

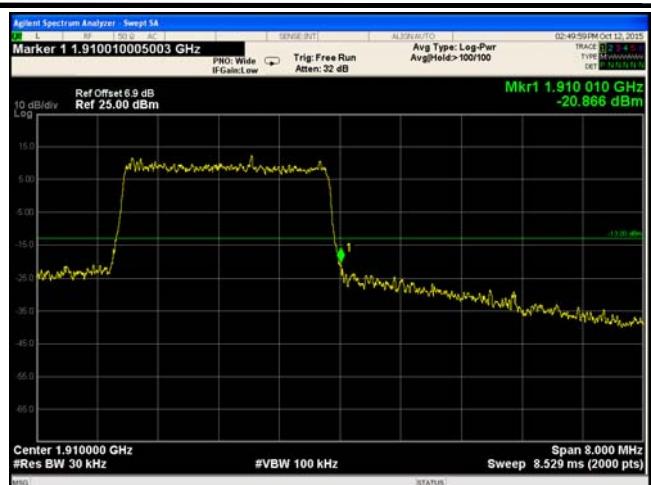
LTE Band 17 (Part 27) result

BW(MHz)	Channel	Frequency (MHz)	Mode	Emission (dBm)	Limit (dBm)
5	23755	706.5	QPSK	-16.986	-13
			16QAM	-16.607	-13
5	23825	713.5	QPSK	-16.507	-13
			16QAM	-16.432	-13
10	23780	709	QPSK	-18.872	-13
			16QAM	-19.203	-13
10	23800	711	QPSK	-18.542	-13
			16QAM	-19.329	-13

Test Plots

LTE Band 2 (Part 24E)

 <p>Marker 1 1.849835 GHz -25.460 dBm</p> <p>Center 1.850000 GHz #Res BW 10 kHz #VBW 30 kHz Span 5.000 MHz Sweep 47.80 ms (1000 pts)</p>	 <p>Marker 1 1.910100000000 GHz -25.682 dBm</p> <p>Center 1.910000 GHz #Res BW 10 kHz #VBW 30 kHz Span 5.000 MHz Sweep 47.80 ms (1000 pts)</p>
LTE Band 2 - Low Channel QPSK-1.4	LTE Band 2 - High Channel QPSK-1.4
Note: Offset=Cable loss (4.5) + 10log $(21.84/10)=4.5+3.4=7.9 \text{ dB}$	Note: Offset=Cable loss (4.5) + 10log $(21.97/10)=4.5+3.4=7.9 \text{ dB}$
 <p>Marker 1 1.849880 GHz -25.993 dBm</p> <p>Center 1.850000 GHz #Res BW 10 kHz #VBW 30 kHz Span 5.000 MHz Sweep 47.80 ms (1000 pts)</p>	 <p>Marker 1 1.910100000000 GHz -23.820 dBm</p> <p>Center 1.910000 GHz #Res BW 10 kHz #VBW 30 kHz Span 5.000 MHz Sweep 47.80 ms (1000 pts)</p>
LTE Band 2 - Low Channel 16QAM-1.4	LTE Band 2 - High Channel 16QAM-1.4
Note: Offset=Cable loss (4.5) + 10log $(24.72/10)=4.5+3.9=8.4 \text{ dB}$	Note: Offset=Cable loss (4.5) + 10log $(22.67/10)=4.5+3.6=8.1 \text{ dB}$



LTE Band 2 - Low Channel QPSK-3

Note: Offset=Cable loss (4.5) + 10log

$$56.78/30)=4.5+2.8=7.3 \text{ dB}$$

LTE Band 2 - High Channel QPSK-3

Note: Offset=Cable loss (4.5) + 10log

$$(51.60/30)=4.5+2.4=6.9 \text{ dB}$$



LTE Band 2 - Low Channel 16QAM-3

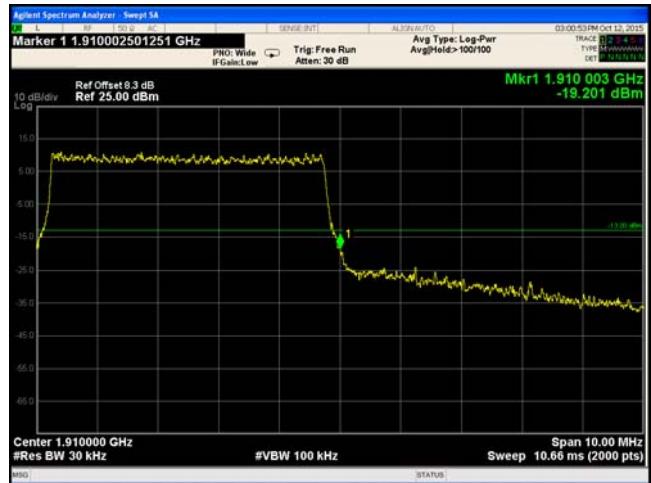
Note: Offset=Cable loss (4.5) + 10log

$$(57.38/30)=4.5+2.8=7.3 \text{ dB}$$

LTE Band 2 - High Channel 16QAM-3

Note: Offset=Cable loss (4.5) + 10log

$$(51.83/30)=4.5+2.4=6.9 \text{ dB}$$



LTE Band 2 - Low Channel QPSK-5

LTE Band 2 - High Channel QPSK-5

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Note: Offset=Cable loss (4.5) + 10log
 $(74.35/30)=4.5+3.9=8.4$ dB



Note: Offset=Cable loss (4.5) + 10log
 $(72.56/30)=4.5+3.8=8.3$ dB



LTE Band 2 - Low Channel 16QAM-5

Note: Offset=Cable loss (4.5) + 10log
 $(74.35/30)=4.5+3.9=8.4$ dB

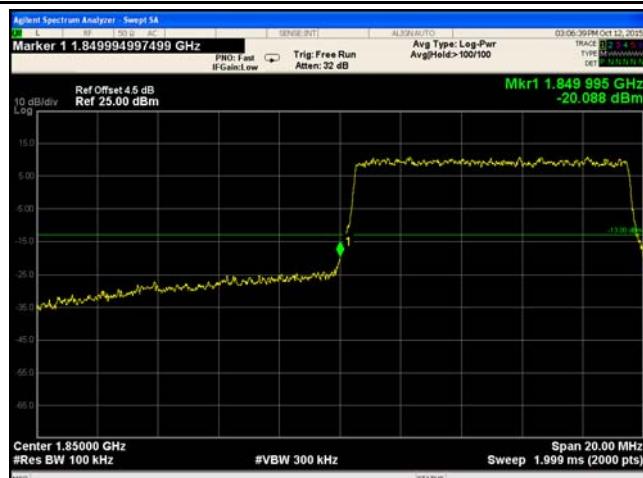


LTE Band 2 - High Channel 16QAM-5

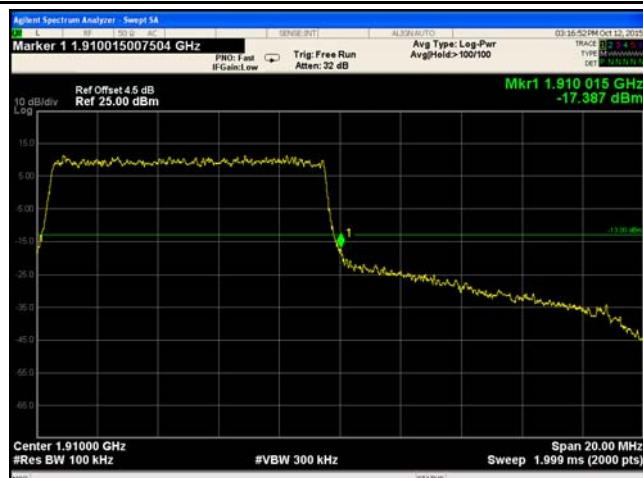
Note: Offset=Cable loss (4.5) + 10log
 $(74.07/30)=4.5+3.9=8.4$ dB



LTE Band 2 - Low Channel QPSK-10



LTE Band 2 - High Channel QPSK-10



LTE Band 2 - Low Channel 16QAM-10

LTE Band 2 - High Channel 16QAM-10

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Note: Offset=Cable loss (4.5) + 10log
 $(124.8/100)=4.5+0.0=4.5$ dB



Note: Offset=Cable loss (4.5) + 10log
 $(129/100)=4.5+0.0=4.5$ dB



LTE Band 2 - Low Channel QPSK-15

Note: Offset=Cable loss (4.5) + 10log
 $(153.1/100)=4.5+1.8=6.3$ dB



LTE Band 2 - High Channel QPSK-15

Note: Offset=Cable loss (4.5) + 10log
 $(152/100)=4.5+1.8=6.3$ dB

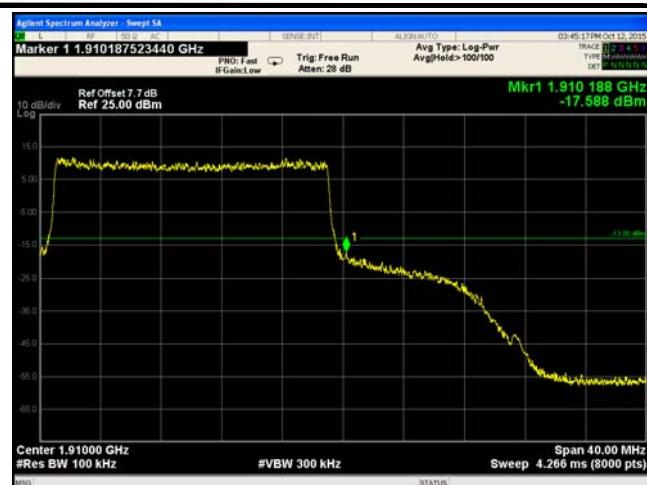
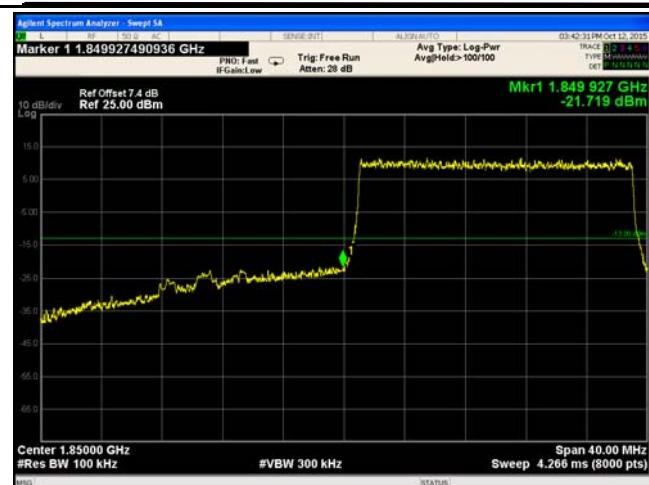


LTE Band 2 - Low Channel 16QAM-15

Note: Offset=Cable loss (4.5) + 10log
 $(151.9/100)=4.5+1.8=6 .3$ dB

LTE Band 2 - High Channel 16QAM-15

Note: Offset=Cable loss (4.5) + 10log
 $(152.1/100)=4.5+1.8=6.3$ dB

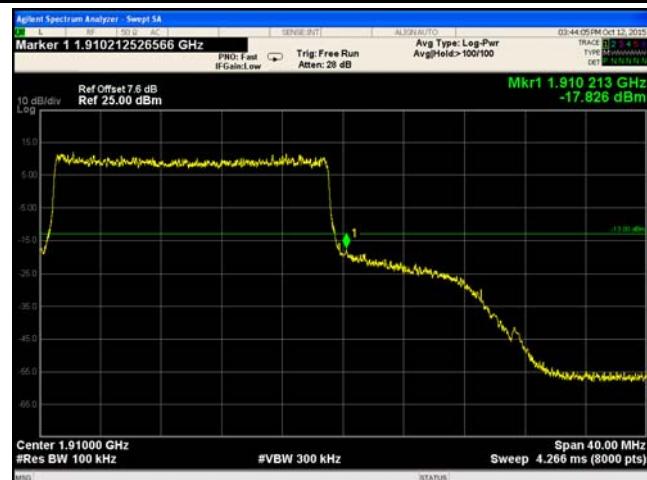


LTE Band 2 - Low Channel QPSK-20

Note: Offset=Cable loss (4.5) + 10log
 $(196.8/100)=4.5+2.9=7.4\text{dB}$

LTE Band 2 - High Channel QPSK-20

Note: Offset=Cable loss (4.5) + 10log
 $(211.3/100)=4.5+3.2=7.7\text{ dB}$



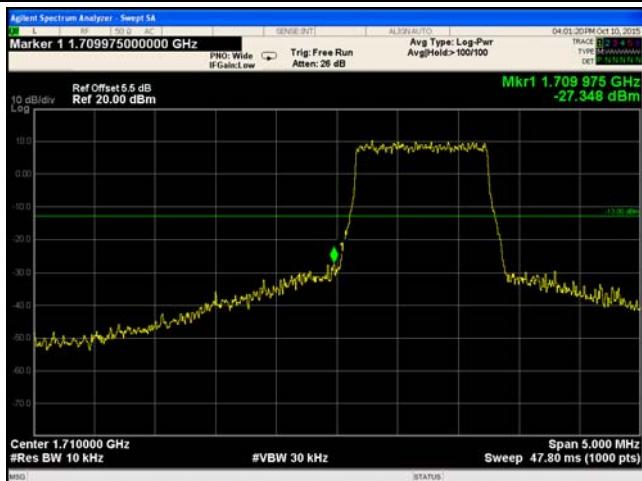
LTE Band 2 - Low Channel 16QAM-20

Note: Offset=Cable loss (4.5) + 10log
 $(197/100)=4.5+2.9=7.4\text{ dB}$

LTE Band 2 - High Channel 16QAM-20

Note: Offset=Cable loss (4.5) + 10log
 $(204.5/100)=4.5+3.1=7.6\text{ dB}$

LTE Band 4 (Part 27)

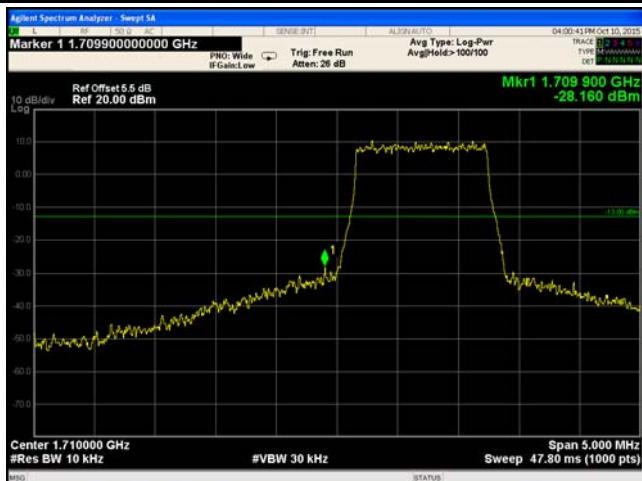


LTE Band 4 - Low Channel QPSK-1.4

Note: Offset=Cable loss (4.5) + 10log
(12.66/10)=4.5+1.0=5.5 dB

LTE Band 4 - High Channel QPSK-1.4

Note: Offset=Cable loss (4.5) + 10log
(12.58/10)=4.5+1.0=5.5 dB

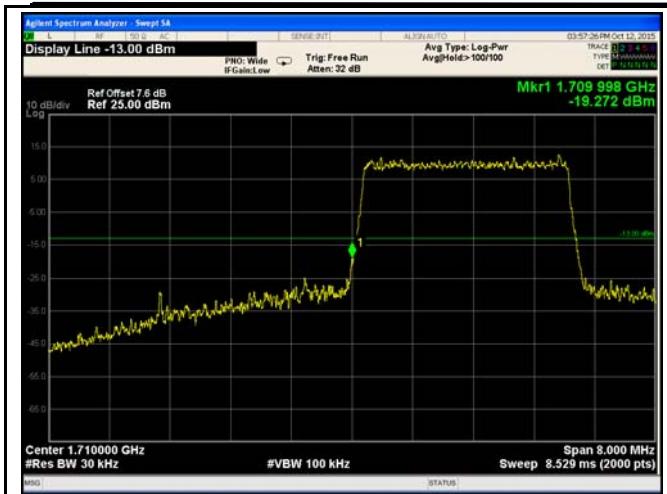
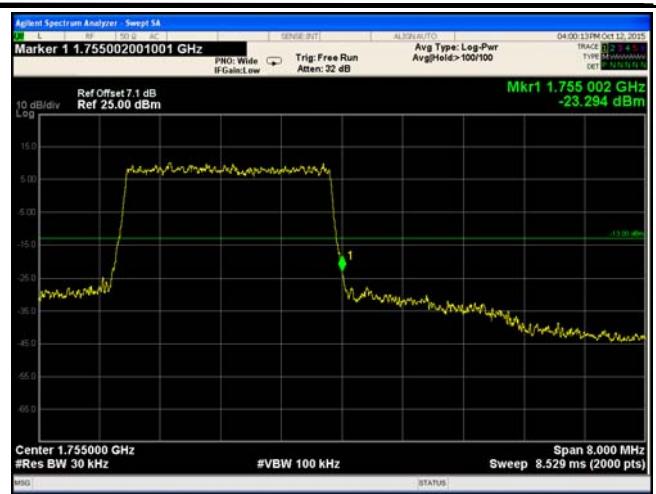
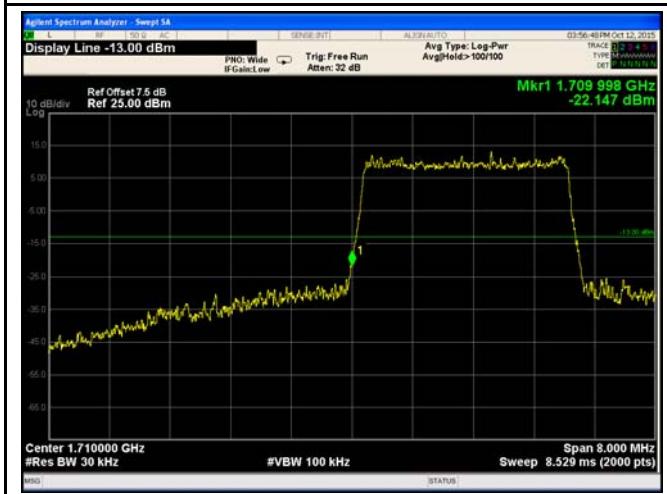
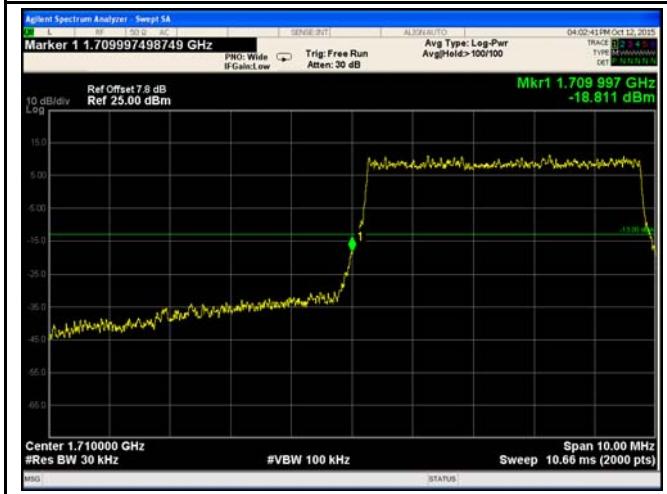


LTE Band 4 - Low Channel 16QAM-1.4

Note: Offset=Cable loss (4.5) + 10log
(12.61/10)=4.5+1.0=5.5 dB

LTE Band 4 - High Channel 16QAM-1.4

Note: Offset=Cable loss (4.5) + 10log
(12.60/10)=4.5+1.0=5.5 dB

 <p>Marker 1 1.709 998 GHz -19.272 dBm</p> <p>Center 1.710000 GHz #Res BW 30 kHz #VBW 100 kHz Sweep 8.000 MHz Span 8.000 MHz 8.529 ms (2000 pts)</p>	 <p>Marker 1 1.755 002 GHz -23.294 dBm</p> <p>Center 1.755000 GHz #Res BW 30 kHz #VBW 100 kHz Sweep 8.000 MHz Span 8.000 MHz 8.529 ms (2000 pts)</p>
<p>LTE Band 4 - Low Channel QPSK-3</p> <p>Note: Offset=Cable loss (4.5) + 10log $(61.72/30)=4.5+3.1=7.6$ dB</p>	<p>LTE Band 4 - High Channel QPSK-3</p> <p>Note: Offset=Cable loss (4.5) + 10log $(54.90/30)=4.5+2.6=7.1$ dB</p>
 <p>Marker 1 1.709 998 GHz -22.147 dBm</p> <p>Center 1.710000 GHz #Res BW 30 kHz #VBW 100 kHz Sweep 8.000 MHz Span 8.000 MHz 8.529 ms (2000 pts)</p>	 <p>Marker 1 1.755 002 GHz -22.828 dBm</p> <p>Center 1.755000 GHz #Res BW 30 kHz #VBW 100 kHz Sweep 8.000 MHz Span 8.000 MHz 8.529 ms (2000 pts)</p>
<p>LTE Band 4 - Low Channel 16QAM-3</p> <p>Note: Offset=Cable loss (4.5) + 10log $(59.76/30)=4.5+3.0=4.6$ dB</p>	<p>LTE Band 4 - High Channel 16QAM-3</p> <p>Note: Offset=Cable loss (4.5) + 10log $(57.58/30)=4.5+2.8=7.3$ dB</p>
 <p>Marker 1 1.709 997 GHz -18.811 dBm</p> <p>Center 1.710000 GHz #Res BW 30 kHz #VBW 100 kHz Sweep 10.000 ms (2000 pts)</p>	 <p>Marker 1 1.755 018 GHz -20.107 dBm</p> <p>Center 1.755000 GHz #Res BW 30 kHz #VBW 100 kHz Sweep 10.000 ms (2000 pts)</p>
<p>LTE Band 4 - Low Channel QPSK-5</p>	<p>LTE Band 4 - High Channel QPSK-5</p>

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Note: Offset=Cable loss (4.5) + 10log
 $(63.99/30)=4.5+3.3=7.8 \text{ dB}$



Note: Offset=Cable loss (4.5) + 10log
 $(76.68/30)=4.5+4.1=8.6 \text{ dB}$



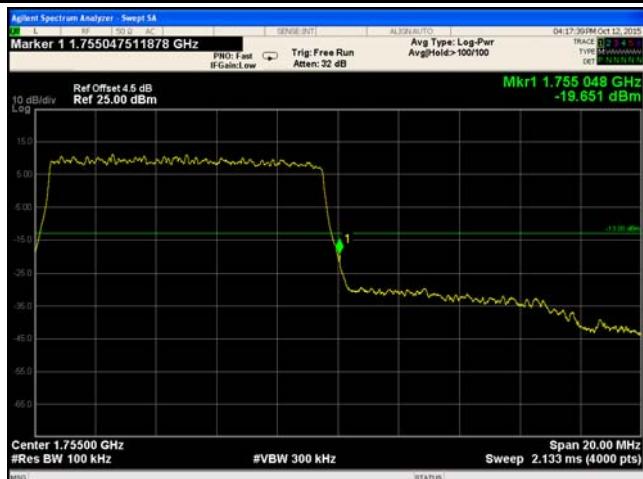
LTE Band 4 - Low Channel 16QAM-5

Note: Offset=Cable loss (4.5) + 10log
 $(69.69/30)=4.5+3.7=8.2 \text{ dB}$

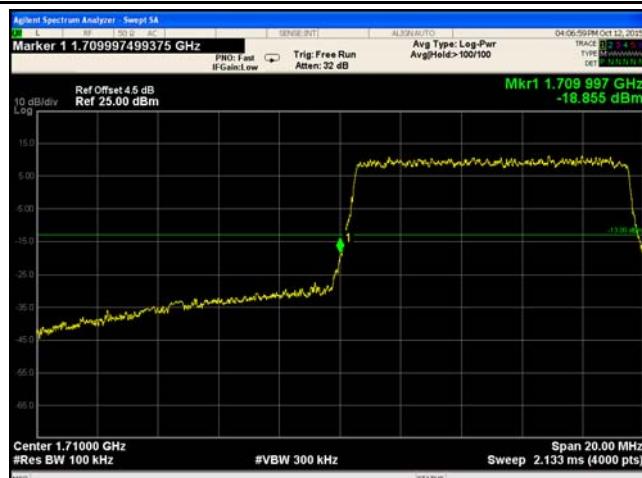


LTE Band 4 - High Channel 16QAM-5

Note: Offset=Cable loss (4.5) + 10log
 $(75.86/30)=4.5+4.0=8.5 \text{ dB}$



LTE Band 4 - Low Channel QPSK-10

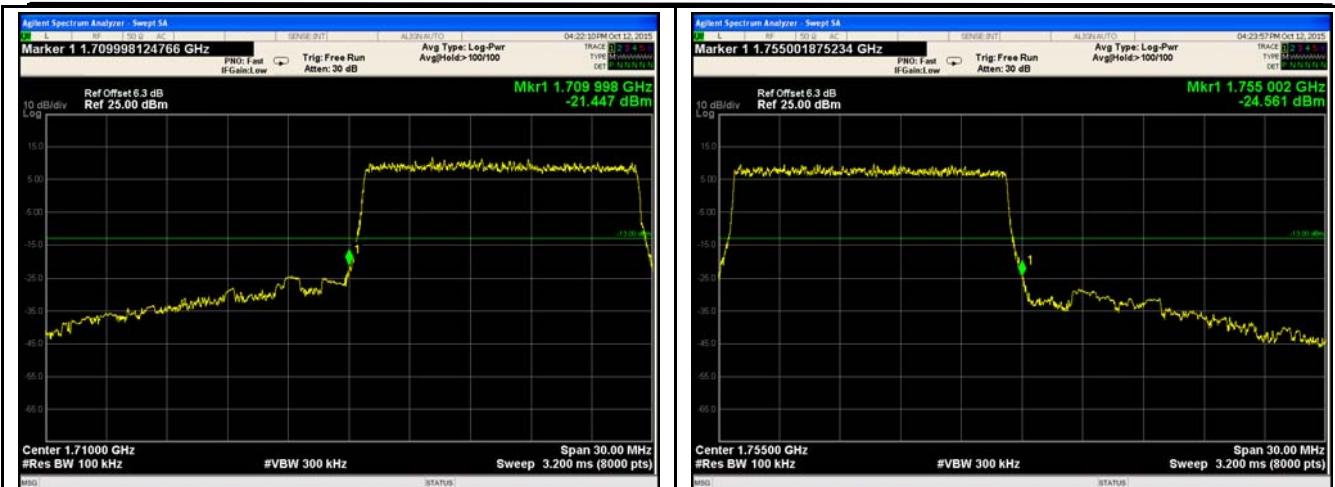


LTE Band 4 - High Channel QPSK-10



LTE Band 4 - Low Channel 16QAM-10

LTE Band 4 - High Channel 16QAM-10

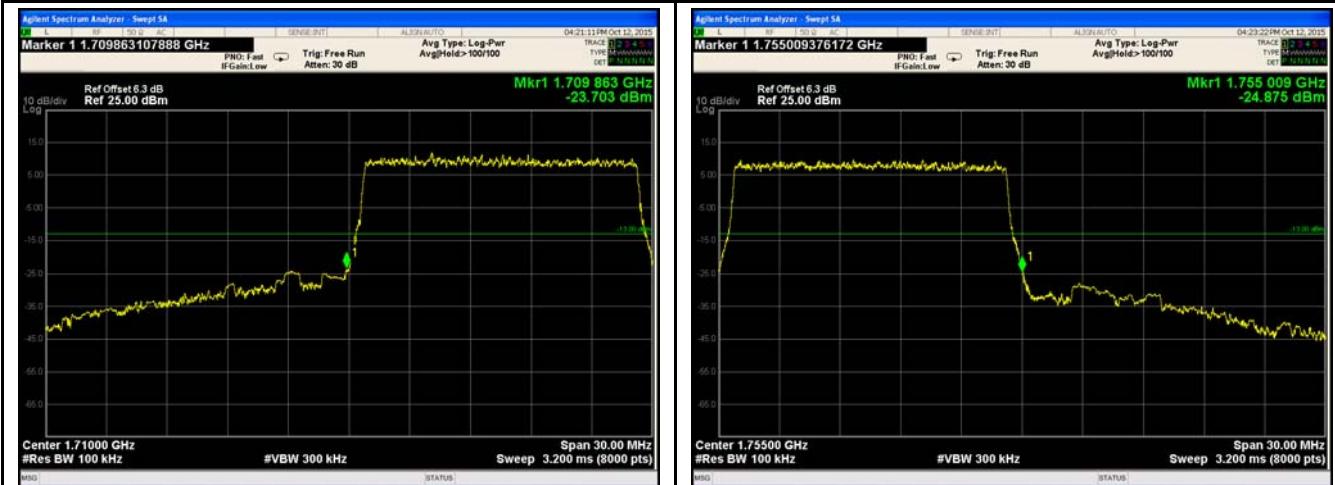


LTE Band 4 - Low Channel QPSK-15

Note: Offset=Cable loss (4.5) + 10log
 $(151.4/100)=4.5+1.8=6.3$ dB

LTE Band 4 - High Channel QPSK-15

Note: Offset=Cable loss (4.5) + 10log
 $(150.5/100)=4.5+1.8=6.3$ dB

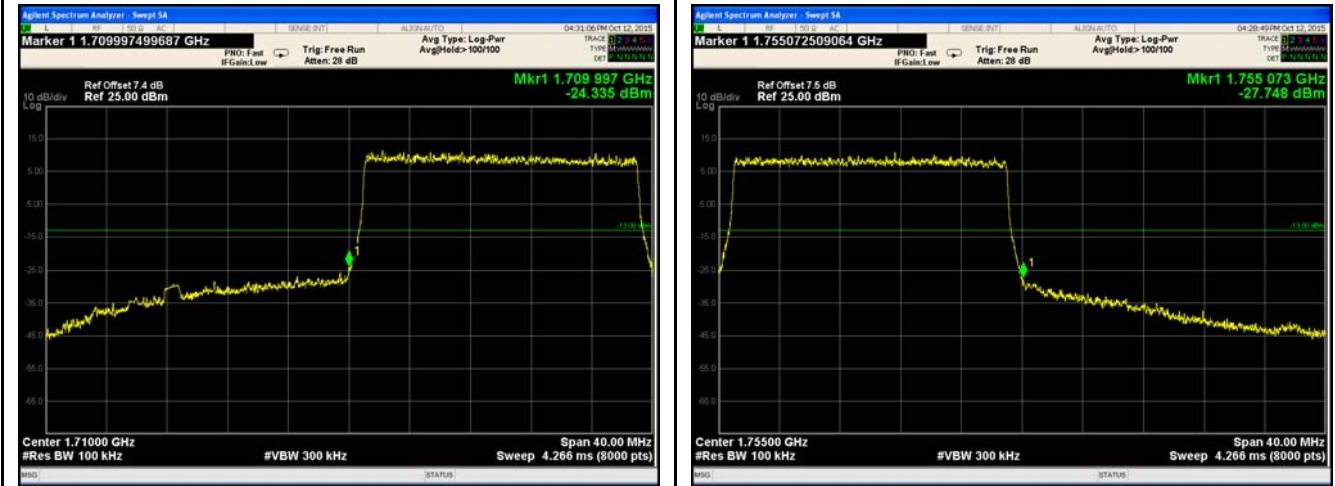


LTE Band 4 - Low Channel 16QAM-15

Note: Offset=Cable loss (4.5) + 10log
 $(152.1/100)=4.5+1.8=6.3$ dB

LTE Band 4 - High Channel 16QAM-15

Note: Offset=Cable loss (4.5) + 10log
 $(151.1/100)=4.5+1.8=6.3$ dB



LTE Band 4 - Low Channel QPSK-20

LTE Band 4 - High Channel QPSK-20

Note: Offset=Cable loss (4.5) + 10log
 $(196.9/100)=4.5+2.9=7.4 \text{ dB}$



Note: Offset=Cable loss (4.5) + 10log
 $(198.2/100)=4.5+3.0=7.5 \text{ dB}$



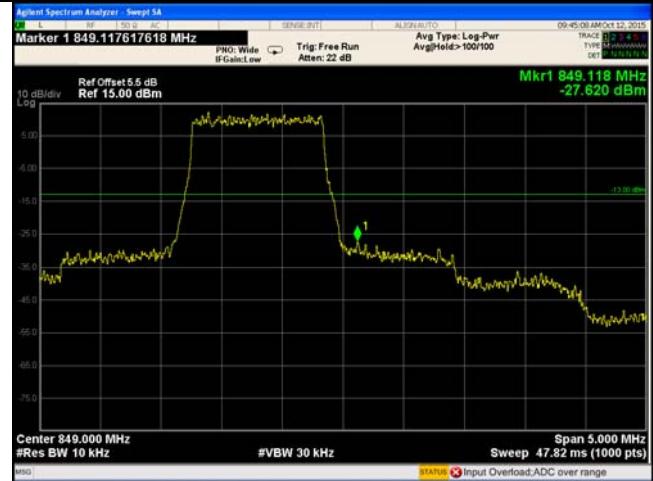
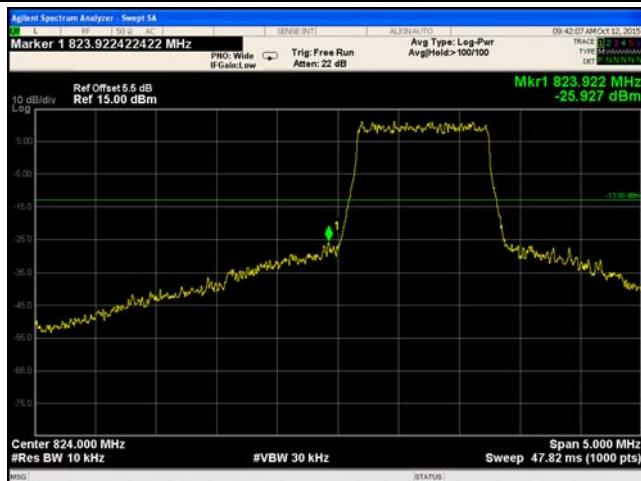
LTE Band 4 - Low Channel 16QAM-20

Note: Offset=Cable loss (4.5) + 10log
 $(198.1/100)=4.5+3.0=7.5 \text{ dB}$

LTE Band 4 - High Channel 16QAM-20

Note: Offset=Cable loss (4.5) + 10log
 $(194.7/100)=4.5+2.9=7.4 \text{ dB}$

LTE Band 5 (Part 22H)

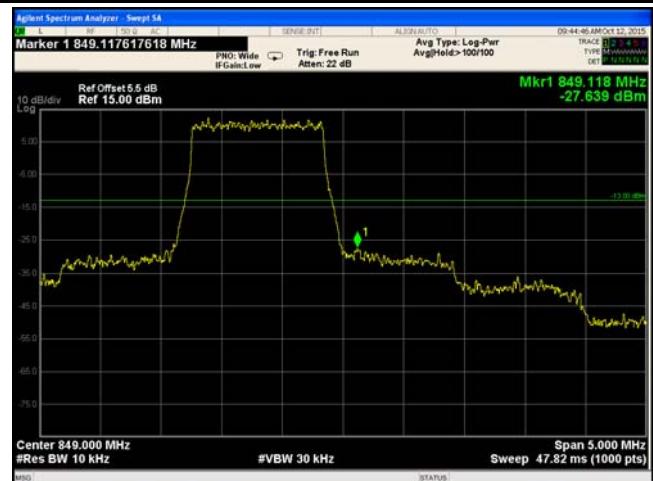


LTE Band 5 - Low Channel QPSK-1.4

Note: Offset=Cable loss (4.5) + 10log
(12.71/10)=4.5+1.0=5.5 dB

LTE Band 5 - High Channel QPSK-1.4

Note: Offset=Cable loss (4.5) + 10log
(12.61/10)=4.5+1.0=5.5 dB

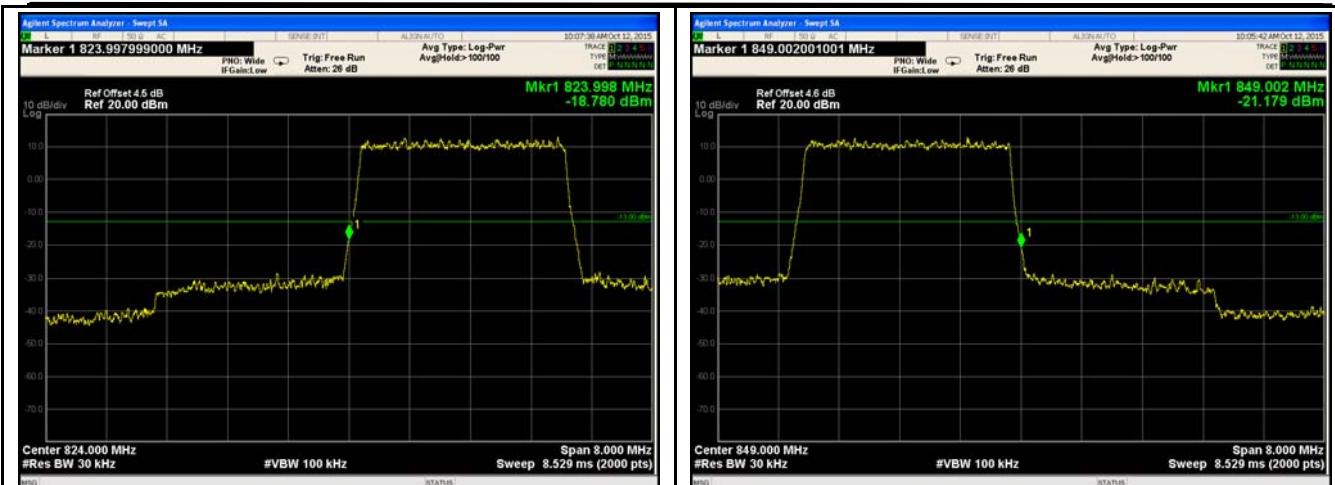


LTE Band 5 - Low Channel 16QAM-1.4

Note: Offset=Cable loss (4.5) + 10log
(12.74/10)=4.5+1.1=5.6 dB

LTE Band 5 - High Channel 16QAM-1.4

Note: Offset=Cable loss (4.5) + 10log
(12.73/10)=4.5+1.0=5.5 dB

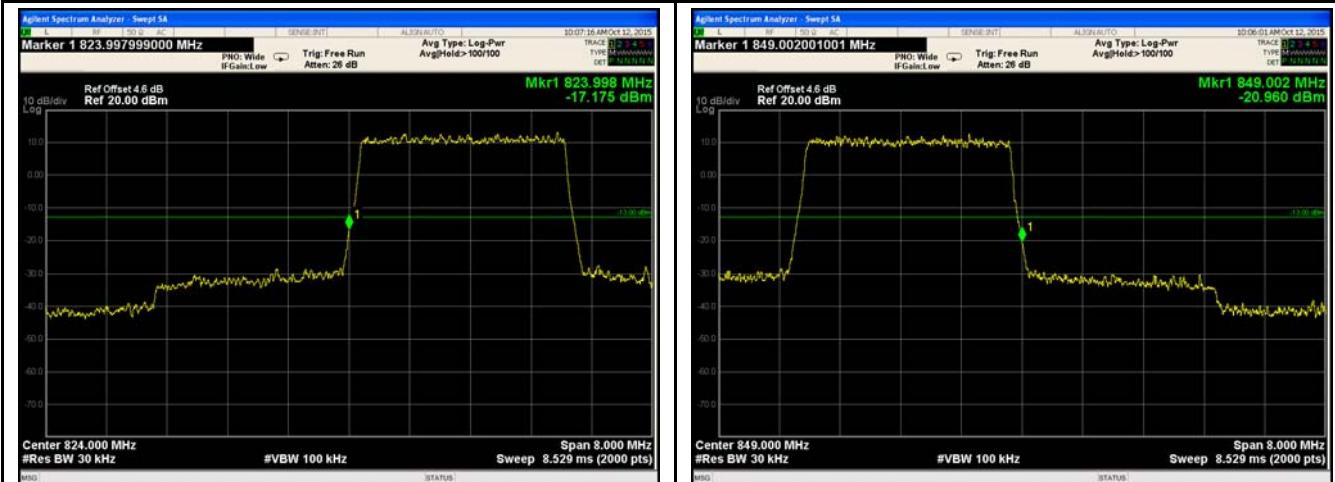


LTE Band 5 - Low Channel QPSK-3

Note: Offset=Cable loss (4.5) + 10log
 $(30.23/30)=4.5+0.0=4.5$ dB

LTE Band 5 - High Channel QPSK-3

Note: Offset=Cable loss (4.5) + 10log
 $(30.44/30)=4.5+0.1=4.6$ dB

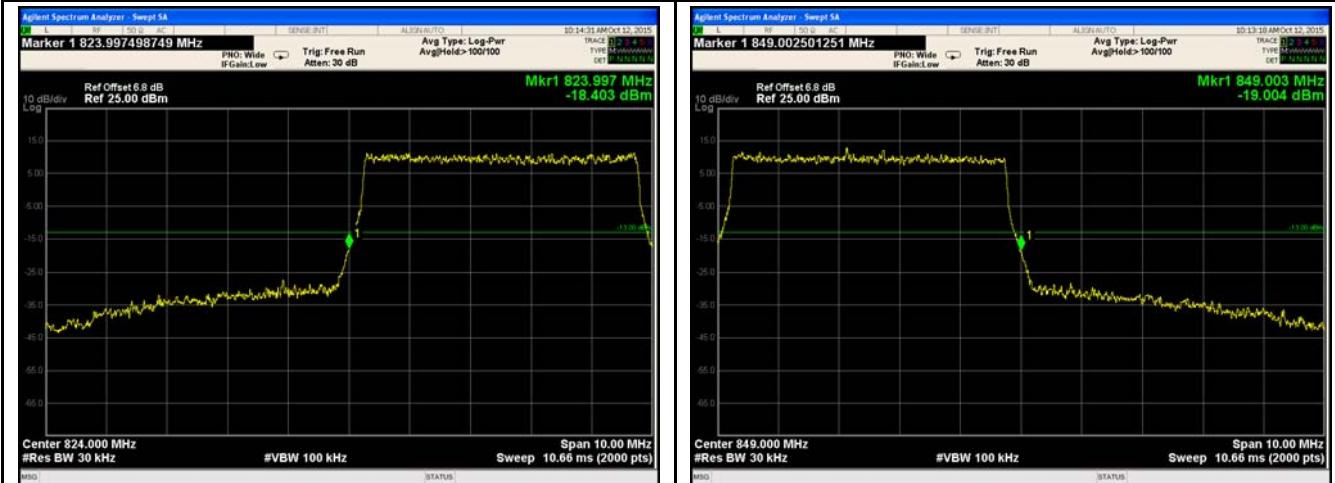


LTE Band 5 - Low Channel 16QAM-3

Note: Offset=Cable loss (4.5) + 10log
 $(30.49/30)=4.5+0.1=4.6$ dB

LTE Band 5 - High Channel 16QAM-3

Note: Offset=Cable loss (4.5) + 10log
 $(30.35/30)=4.5+0.1=4.6$ dB



LTE Band 5 - Low Channel QPSK-5

LTE Band 5 - High Channel QPSK-5