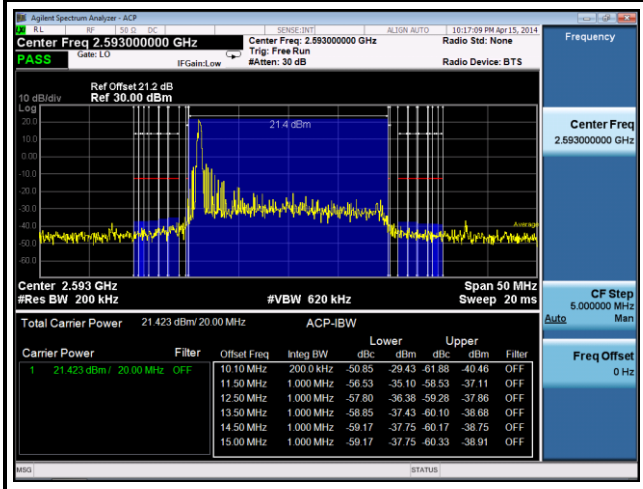
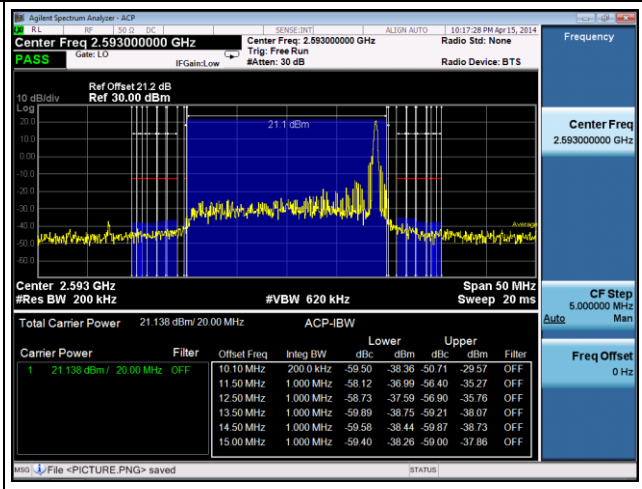
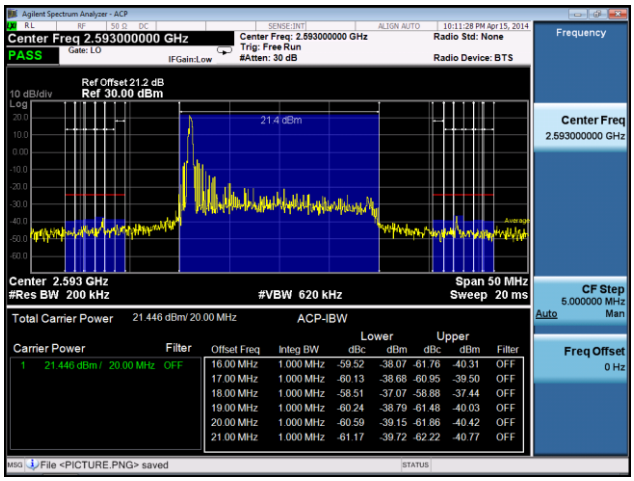
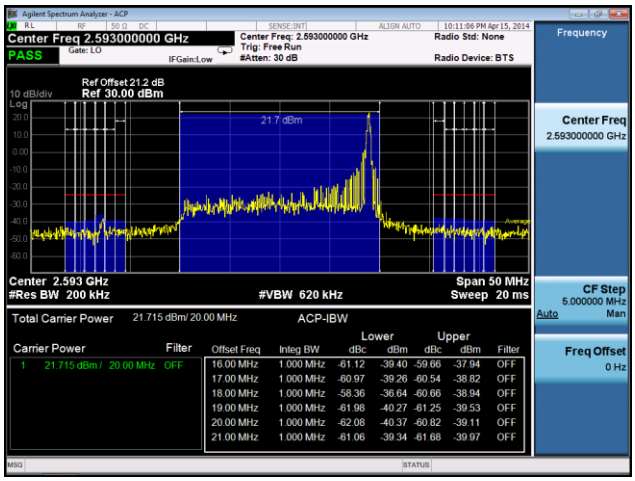
Mode	LTE Band 41, CB: 20MHz, 16QAM		
Channel	40620, 1RB at the lower edge	Channel	40620, 1RB at the upper edge



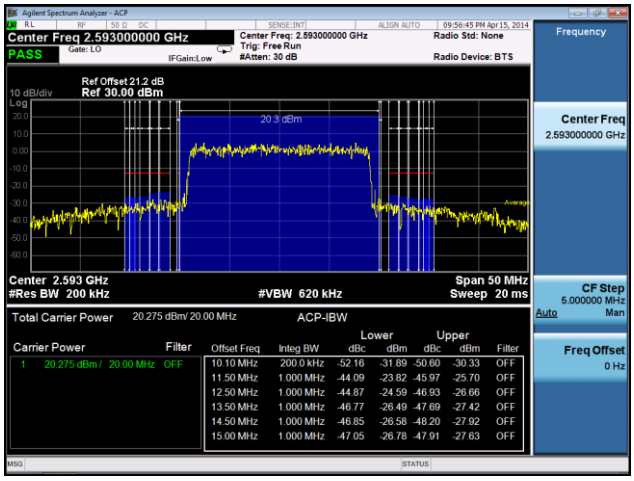


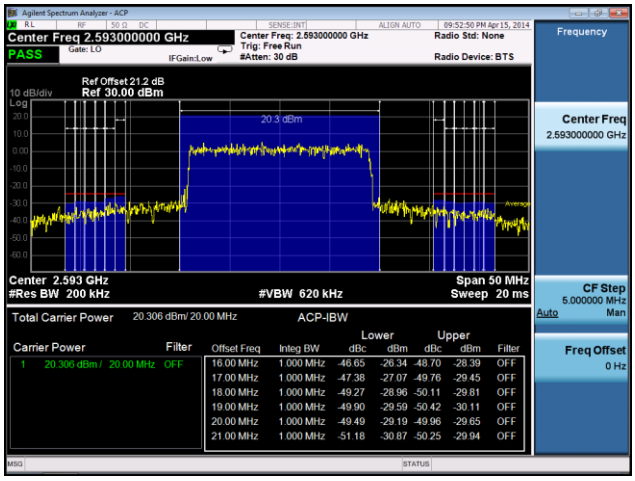
Channel	40620, 1RB at the lower edge	Channel	40620, 1RB at the upper edge



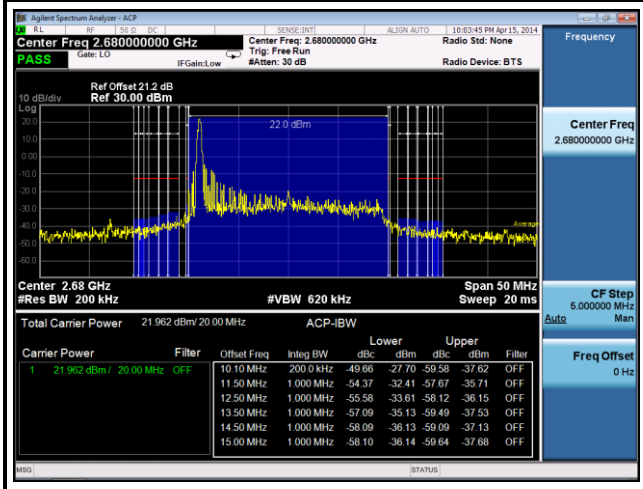


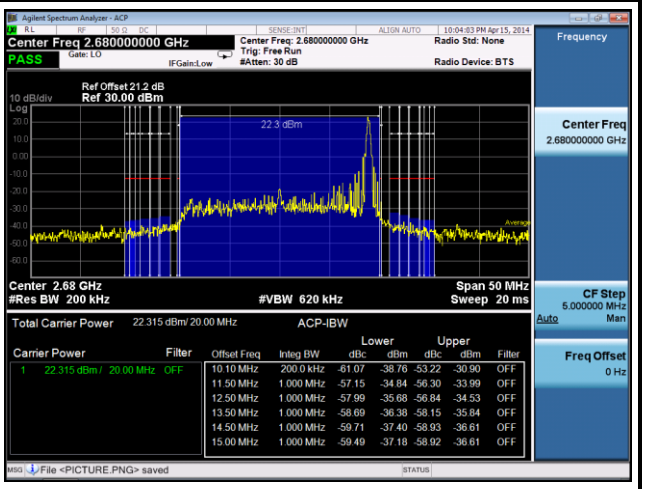
Channel	40620, 100%RB	Channel	40620, 100%RB



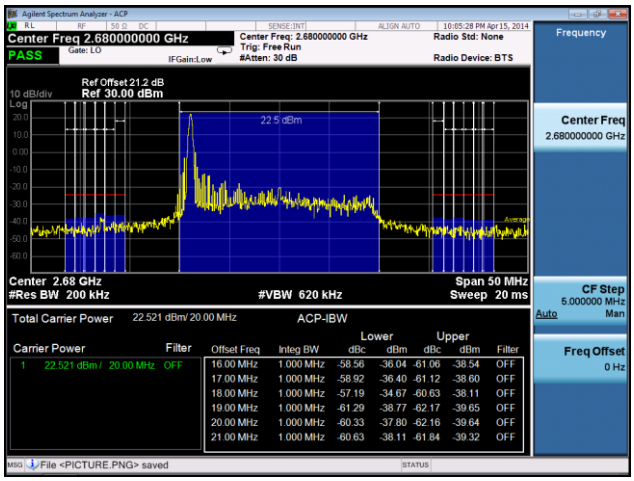


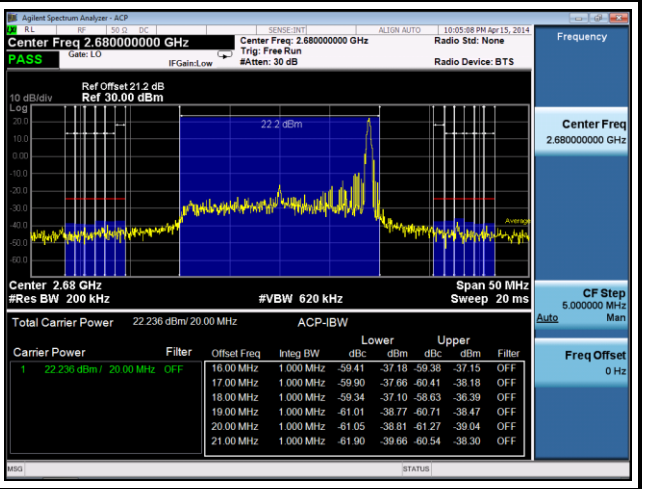
Mode	LTE Band 41, CB: 20MHz, QPSK		
Channel	41490, 1RB at the lower edge	Channel	41490, 1RB at the upper edge



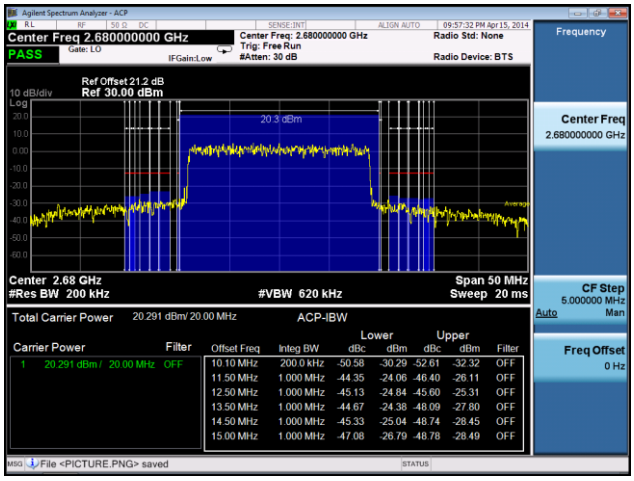


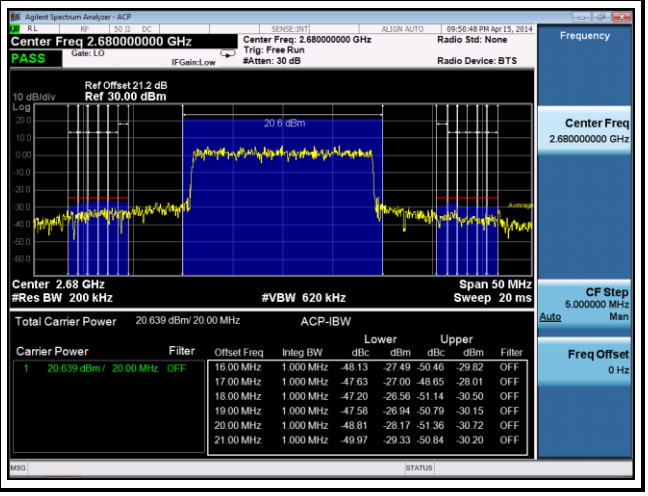
Channel	41490, 1RB at the lower edge	Channel	41490, 1RB at the upper edge



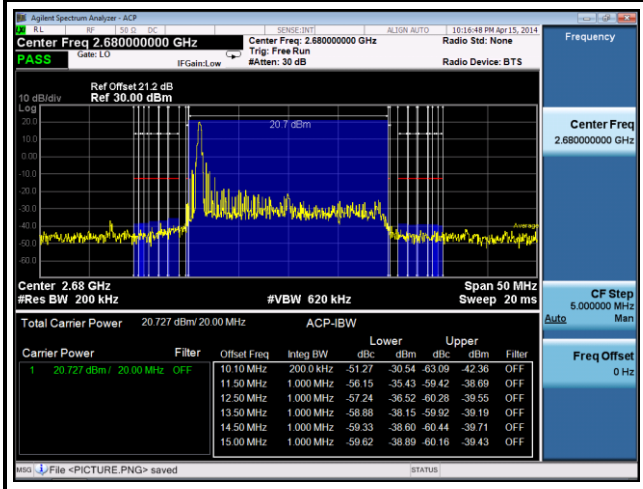


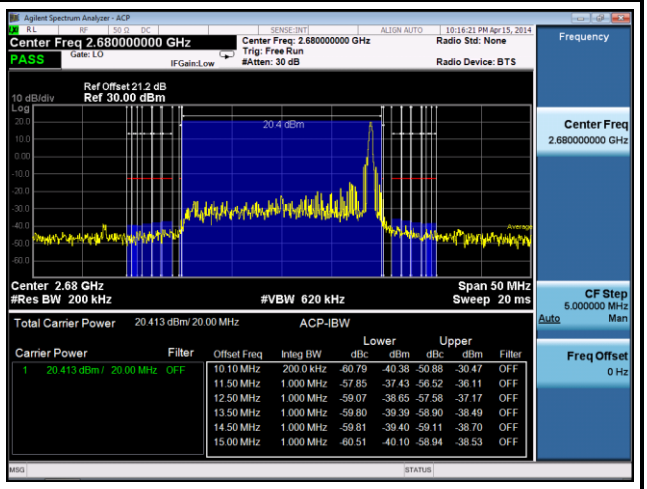
Channel	41490, 100%RB	Channel	41490, 100%RB



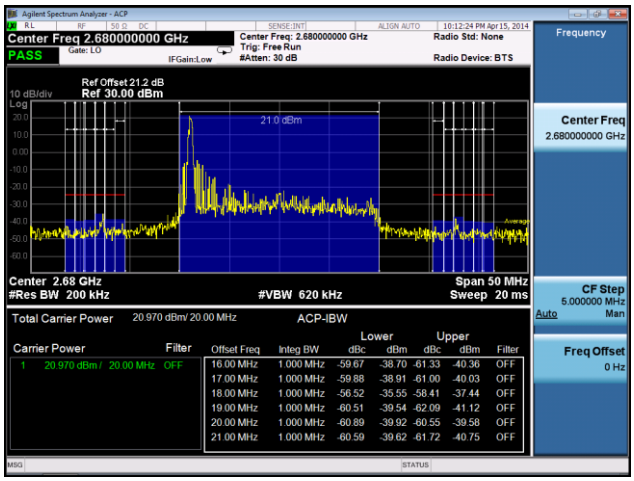


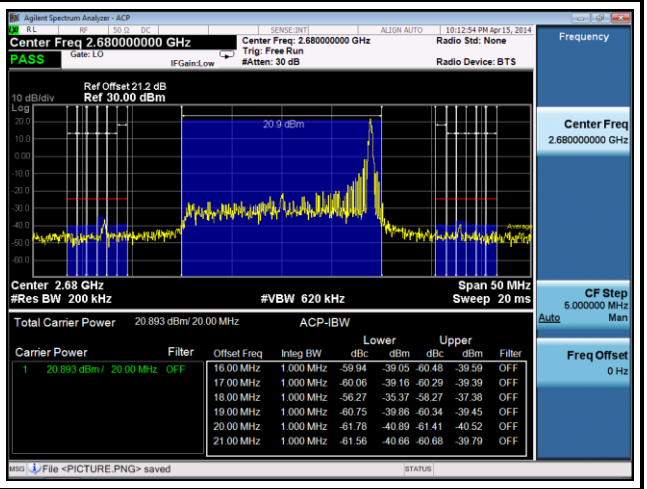
Mode	LTE Band 41, CB: 20MHz, 16QAM		
Channel	41490, 1RB at the lower edge	Channel	41490, 1RB at the upper edge



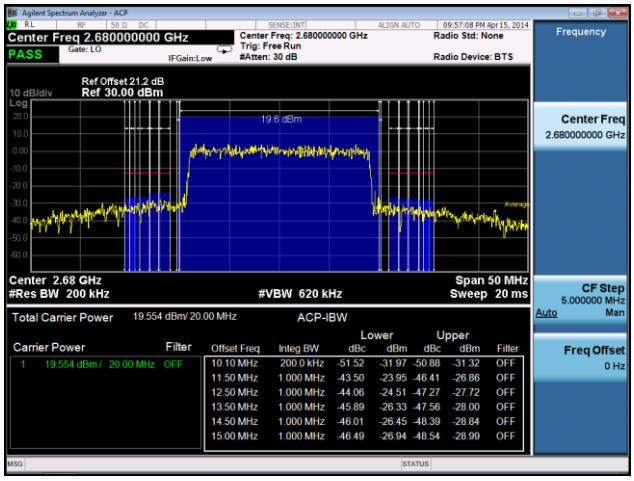


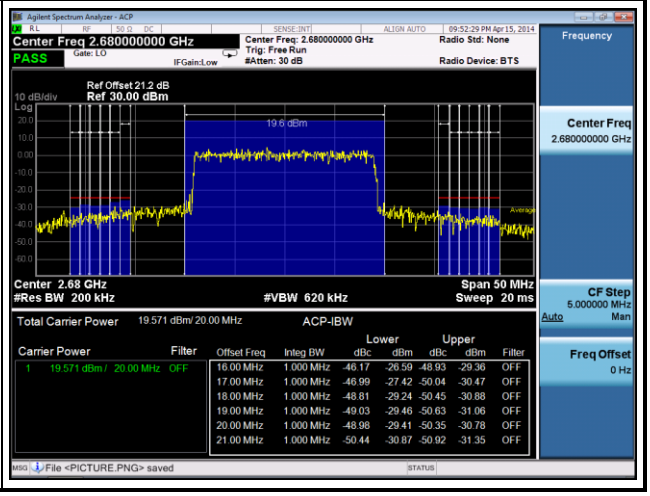
Channel	41490, 1RB at the lower edge	Channel	41490, 1RB at the upper edge





Channel	41490, 100%RB	Channel	41490, 100%RB



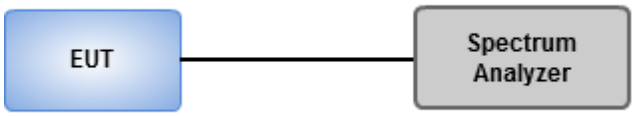


3.5 Emission and Occupied Bandwidth

3.5.1 Test Procedures

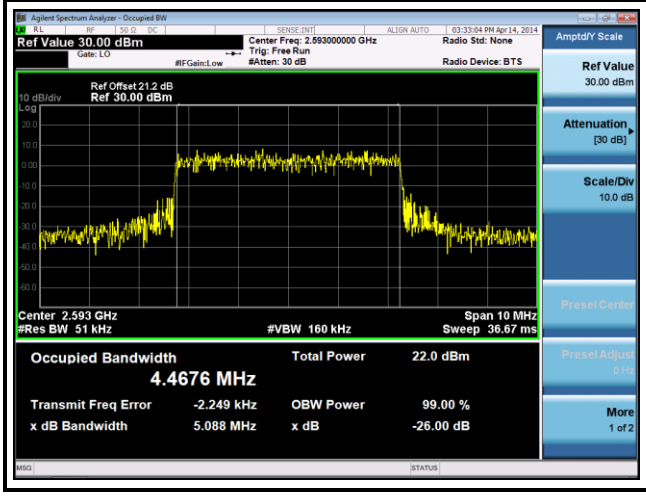
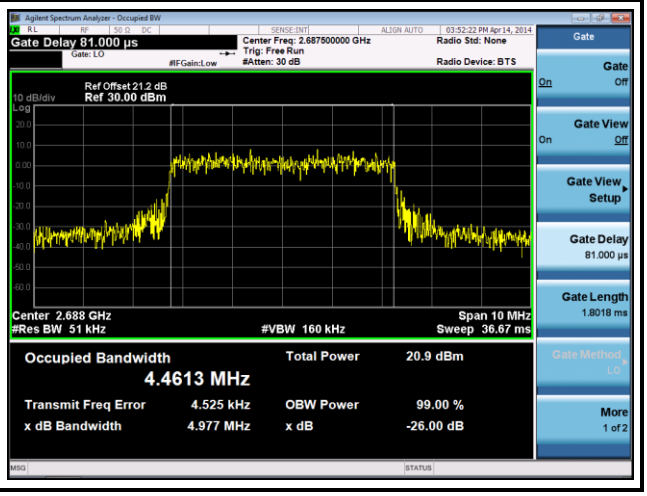
1. Set resolution bandwidth (RBW) = 51~200 kHz, Video bandwidth=160 ~ 620kHz for 5 ~ 20 MHz channel bandwidth
2. Set Detector = Peak, Trace mode = max hold, Sweep = auto couple, Allow the trace to stabilize.
3. Using 26dB and occupied bandwidth measurement function of spectrum analyzer to measure bandwidth

3.5.2 Test Setup

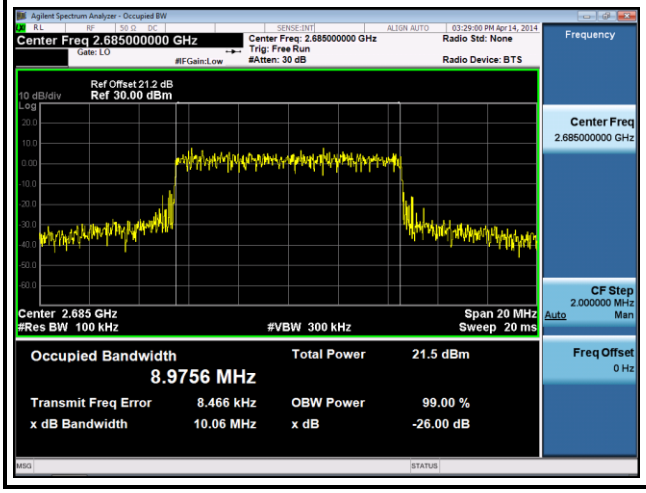
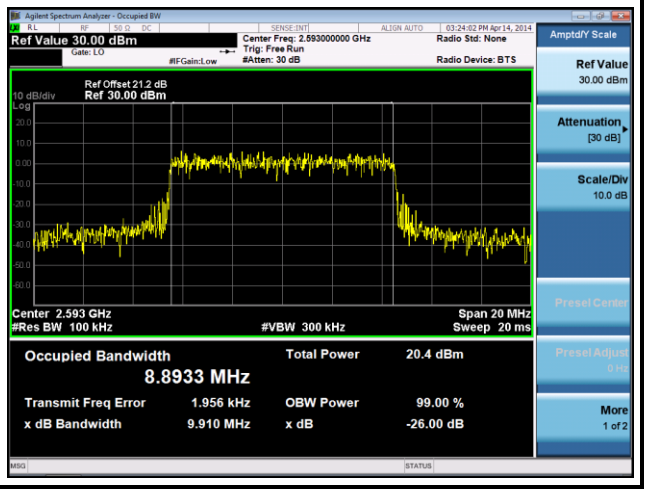


3.5.3 Test Result of Occupied Bandwidth

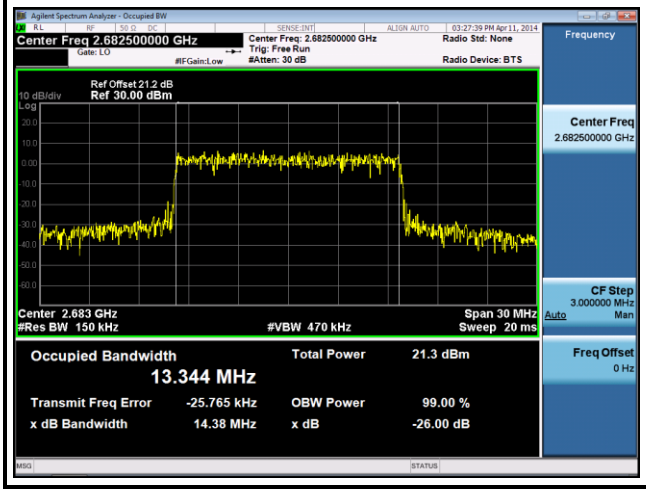
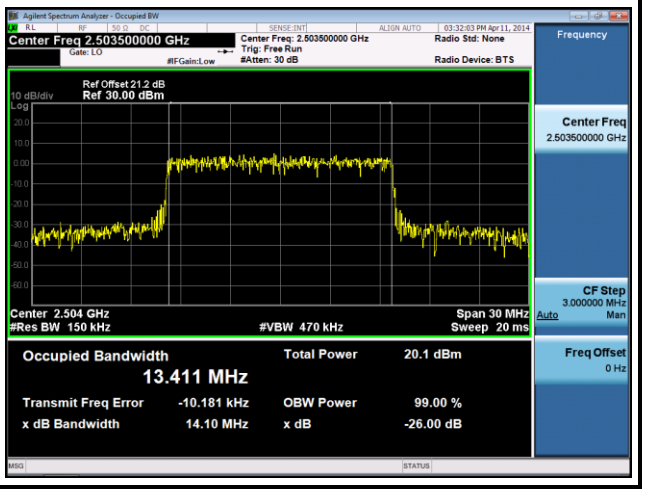
BW (MHz)	Modulation	Channel	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
5	QPSK	39675	2498.5	5.045	4.45
5	QPSK	40620	2593	5.088	4.47
5	QPSK	41565	2687.5	5.006	4.44
5	16QAM	39675	2498.5	4.968	4.44
5	16QAM	40620	2593	4.835	4.46
5	16QAM	41565	2687.5	4.977	4.46

Worst plots	
QPSK	16QAM
	

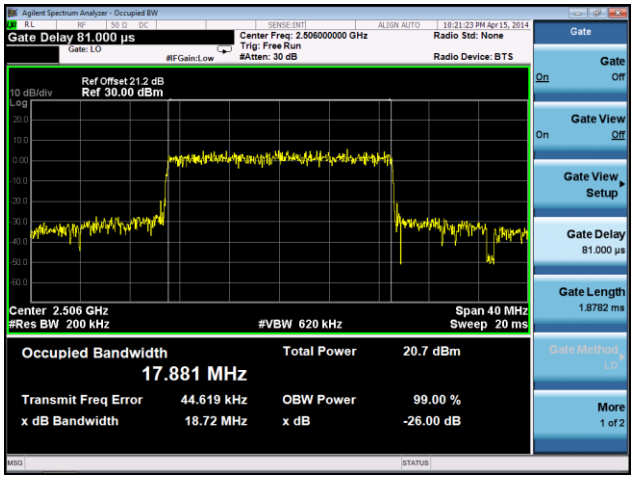
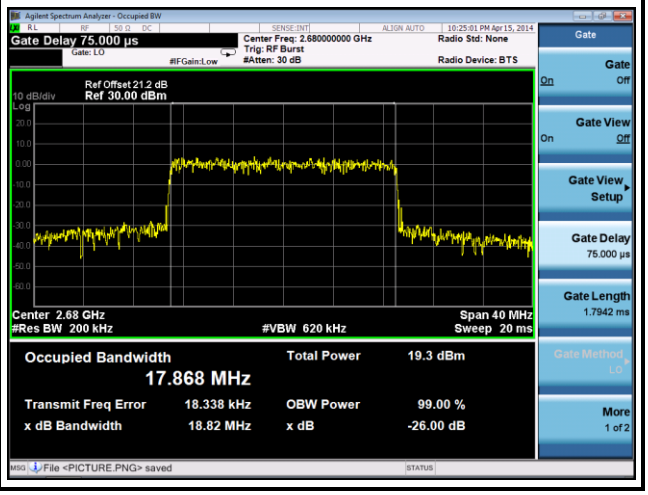
BW (MHz)	Modulation	Channel	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
10	QPSK	39700	2501	9.228	8.89
10	QPSK	40620	2593	9.500	8.88
10	QPSK	41540	2685	10.060	8.98
10	16QAM	39700	2501	9.771	8.96
10	16QAM	40620	2593	9.910	8.89
10	16QAM	41540	2685	9.640	8.96

Worst plots	
QPSK	16QAM
	

BW (MHz)	Modulation	Channel	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
15	QPSK	39725	2503.5	14.090	13.34
15	QPSK	40620	2593	14.370	13.34
15	QPSK	41515	2682.5	14.380	13.34
15	16QAM	39725	2503.5	14.100	13.41
15	16QAM	40620	2593	13.890	13.40
15	16QAM	41515	2682.5	13.890	13.36

Worst plots	
QPSK	16QAM
	

BW (MHz)	Modulation	Channel	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
20	QPSK	39750	2506	18.720	17.88
20	QPSK	40620	2593	18.430	17.90
20	QPSK	41490	2680	18.560	17.85
20	16QAM	39750	2506	18.660	17.84
20	16QAM	40620	2593	18.580	17.84
20	16QAM	41490	2680	18.820	17.87

Worst plots	
QPSK	16QAM
	

3.6 Frequency Stability

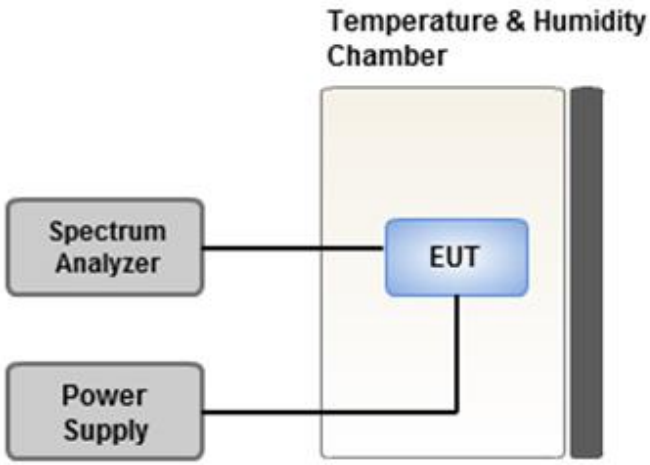
3.6.1 Limit of Frequency Stability

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation

3.6.2 Test Procedures

1. EUT was placed at temperature chamber and connected to an external power supply.
2. Temperature and voltage condition shall be tested to confirm frequency stability.
3. Temperature range is from -40~55°C and voltage range is from lowest to highest working voltage.
4. Tem Link up EUT and simulator. Confirm frequency drift value of simulator and record it.

3.6.3 Test Setup



3.6.4 Test Result of Frequency Stability

LTE Band 41, CB: 5MHz			
Temperature (°C)	**Voltage (Vac)**	**Frequency Drift (ppm)**	**Limit (ppm)**
55	110	0.030	2.5
50	110	0.030	2.5
40	110	0.028	2.5
30	110	0.024	2.5
20	110	0.027	2.5
10	110	0.028	2.5
0	110	0.027	2.5
-10	110	0.030	2.5
-20	110	0.029	2.5
-30	110	0.032	2.5
-40	110	0.035	2.5
20	126.5	0.028	2.5
20	93.5	0.022	2.5

LTE Band 41, CB: 10MHz			
Temperature (°C)	**Voltage (Vac)**	**Frequency Drift (ppm)**	**Limit (ppm)**
55	110	0.035	2.5
50	110	0.034	2.5
40	110	0.030	2.5
30	110	0.032	2.5
20	110	0.029	2.5
10	110	0.030	2.5
0	110	0.027	2.5
-10	110	0.030	2.5
-20	110	0.032	2.5
-30	110	0.036	2.5
-40	110	0.036	2.5
20	126.5	0.032	2.5
20	93.5	0.030	2.5

LTE Band 41, CB: 15MHz			
Temperature (°C)	**Voltage (Vac)**	**Frequency Drift (ppm)**	**Limit (ppm)**
55	110	0.038	2.5
50	110	0.031	2.5
40	110	0.033	2.5
30	110	0.032	2.5
20	110	0.033	2.5
10	110	0.034	2.5
0	110	0.038	2.5
-10	110	0.039	2.5
-20	110	0.036	2.5
-30	110	0.039	2.5
-40	110	0.036	2.5
20	126.5	0.038	2.5
20	93.5	0.031	2.5

LTE Band 41, CB: 20MHz			
Temperature (°C)	**Voltage (Vac)**	**Frequency Drift (ppm)**	**Limit (ppm)**
55	110	0.042	2.5
50	110	0.039	2.5
40	110	0.038	2.5
30	110	0.041	2.5
20	110	0.039	2.5
10	110	0.036	2.5
0	110	0.042	2.5
-10	110	0.042	2.5
-20	110	0.039	2.5
-30	110	0.036	2.5
-40	110	0.044	2.5
20	126.5	0.042	2.5
20	93.5	0.039	2.5

4 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website http://www.icertifi.com.tw.

Linkou

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Kwei Shan

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If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666
Fax: 886-3-318-0155
Email: ICC_Service@icertifi.com.tw

==END==