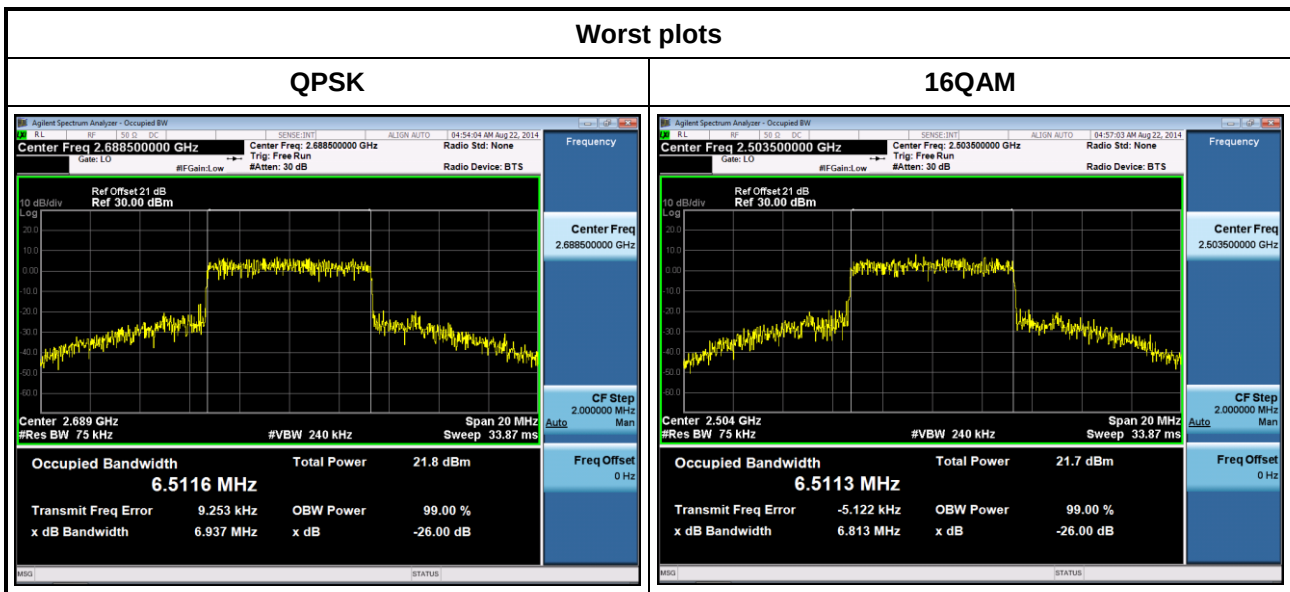
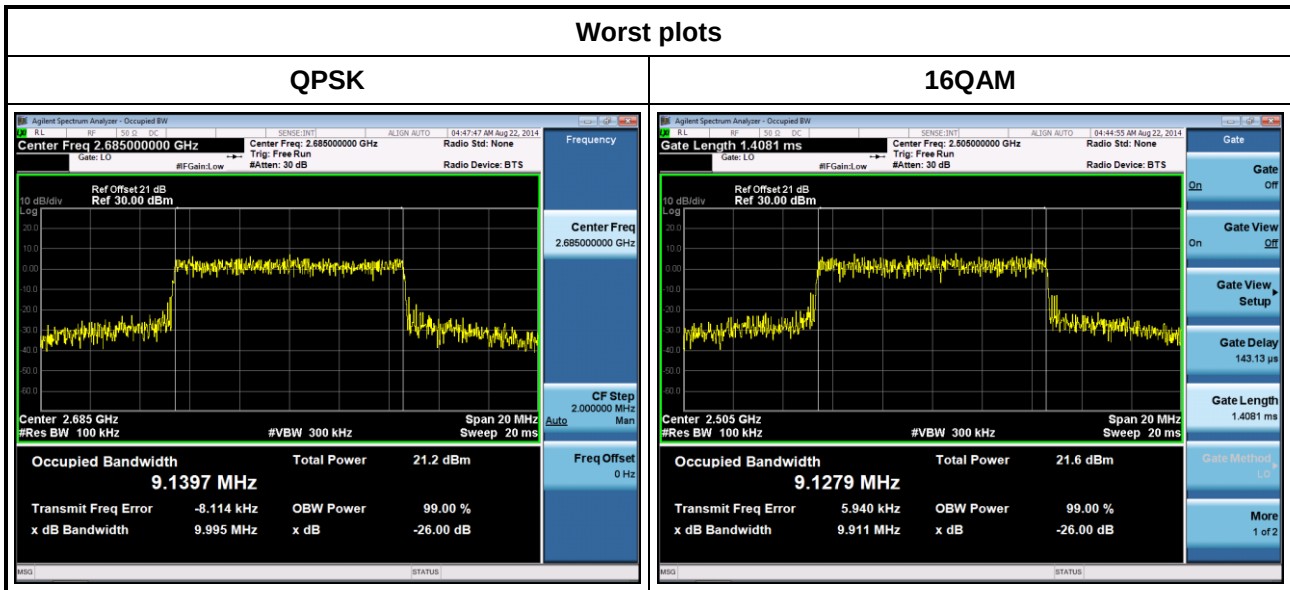


Channel Bandwidth (MHz)	Modulation	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
7	QPSK	2503.5	6.918	6.52
7	QPSK	2593.0	6.925	6.51
7	QPSK	2688.5	6.937	6.51
7	16QAM	2503.5	6.813	6.51
7	16QAM	2593.0	6.731	6.50
7	16QAM	2688.5	6.797	6.50



Channel Bandwidth (MHz)	Modulation	Frequency (MHz)	26dB BW (MHz)	99% OBW (MHz)
10	QPSK	2505.0	9.922	9.14
10	QPSK	2593.0	9.801	9.17
10	QPSK	2685.0	9.995	9.14
10	16QAM	2505.0	9.911	9.13
10	16QAM	2593.0	9.797	9.14
10	16QAM	2685.0	9.625	9.14



3.6 Frequency Stability

3.6.1 Limit of Frequency Stability

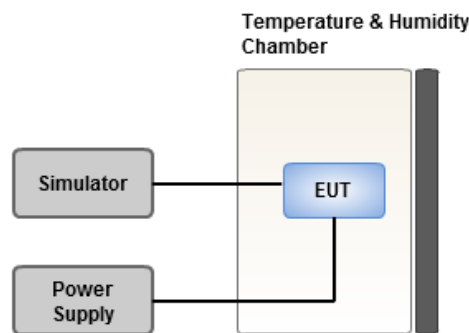
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation

3.6.2 Test Procedures

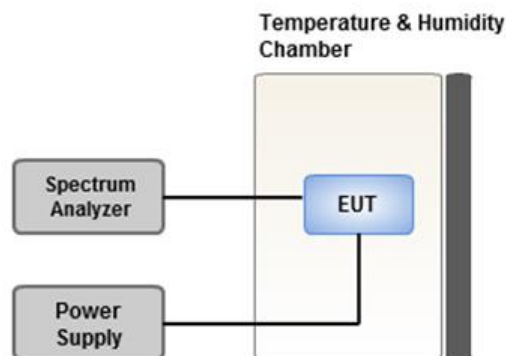
1. EUT was placed at temperature chamber and connected to an external power supply.
2. Temperature and voltage condition shall be tested to confirm frequency stability.
3. Temperature range is from -30~55°C and voltage range is from lowest to highest working voltage.
4. Tem Link up EUT and simulator. Confirm frequency drift value of simulator and record it.

3.6.3 Test Setup

For LTE mode



For Wimax mode



3.6.4 Test Result of Frequency Stability_LTE

LTE Band 41, CB: 5MHz			
Temperature (°C)	Voltage (Vac)	Frequency Drift (ppm)	Limit (ppm)
55	120	0.034	2.5
50	120	0.029	2.5
40	120	0.030	2.5
30	120	0.028	2.5
20	120	0.027	2.5
10	120	0.029	2.5
0	120	0.030	2.5
-10	120	0.029	2.5
-20	120	0.029	2.5
-30	120	0.027	2.5
20	138	0.034	2.5
20	102	0.034	2.5

LTE Band 41, CB: 10MHz			
Temperature (°C)	Voltage (Vac)	Frequency Drift (ppm)	Limit (ppm)
55	120	0.032	2.5
50	120	0.031	2.5
40	120	0.030	2.5
30	120	0.029	2.5
20	120	0.029	2.5
10	120	0.029	2.5
0	120	0.027	2.5
-10	120	0.030	2.5
-20	120	0.029	2.5
-30	120	0.028	2.5
20	138	0.031	2.5
20	102	0.032	2.5

LTE Band 41, CB: 15MHz

Temperature (°C)	Voltage (Vac)	Frequency Drift (ppm)	Limit (ppm)
55	120	0.032	2.5
50	120	0.032	2.5
40	120	0.031	2.5
30	120	0.031	2.5
20	120	0.030	2.5
10	120	0.030	2.5
0	120	0.032	2.5
-10	120	0.029	2.5
-20	120	0.030	2.5
-30	120	0.030	2.5
20	138	0.032	2.5
20	102	0.032	2.5

LTE Band 41, CB: 20MHz

Temperature (°C)	Voltage (Vac)	Frequency Drift (ppm)	Limit (ppm)
55	120	0.032	2.5
50	120	0.033	2.5
40	120	0.032	2.5
30	120	0.029	2.5
20	120	0.030	2.5
10	120	0.030	2.5
0	120	0.029	2.5
-10	120	0.028	2.5
-20	120	0.030	2.5
-30	120	0.029	2.5
20	138	0.032	2.5
20	102	0.031	2.5

3.6.5 Test Result of Frequency Stability_WiMAX

WiMAX, CB: 5MHz			
Temperature (°C)	Voltage (Vac)	Frequency Drift (ppm)	Limit (ppm)
55	120	-0.791	2.5
50	120	-0.833	2.5
40	120	-0.864	2.5
30	120	-0.671	2.5
20	120	-0.717	2.5
10	120	-0.818	2.5
0	120	-0.845	2.5
-10	120	-0.860	2.5
-20	120	-0.910	2.5
-30	120	-0.953	2.5
20	138	-1.037	2.5
20	102	-0.872	2.5

WiMAX, CB: 7MHz			
Temperature (°C)	Voltage (Vac)	Frequency Drift (ppm)	Limit (ppm)
55	120	-0.713	2.5
50	120	-0.640	2.5
40	120	-0.713	2.5
30	120	-0.818	2.5
20	120	-0.787	2.5
10	120	-0.860	2.5
0	120	-0.872	2.5
-10	120	-0.929	2.5
-20	120	-0.899	2.5
-30	120	-0.995	2.5
20	138	-0.605	2.5
20	102	-0.852	2.5

WiMAX, CB: 10MHz			
Temperature (°C)	Voltage (Vac)	Frequency Drift (ppm)	Limit (ppm)
55	120	-0.648	2.5
50	120	-0.729	2.5
40	120	-0.548	2.5
30	120	-0.991	2.5
20	120	-0.918	2.5
10	120	-0.945	2.5
0	120	-1.010	2.5
-10	120	-0.980	2.5
-20	120	-0.987	2.5
-30	120	-0.968	2.5
20	138	-0.717	2.5
20	102	-0.787	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>.

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St., Kwei Shan Hsiang, Tao
Yuan Hsien 333, Taiwan, R.O.C.

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

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Email: ICC_Service@icertifi.com.tw

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