Measurement Data:

QPSK Mode:

Test mode:	LTE Band 2(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.40	Vertical	-36.16	-13.00	Pass
5552.10	V	-39.87		
7402.80	V	-38.34		
9253.50	V	-43.71		
11104.20	V	-41.40		
3701.40	Horizontal	-38.93	-13.00	Pass
5552.10	H	-42.52		
7402.80	H	-44.62		
9253.50	H	-46.35		
11104.20	H	-46.88		
Test mode:	**LTE Band 2(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-37.80	-13.00	Pass
5640.00	V	-40.81		
7520.00	V	-38.61		
9400.00	V	-41.80		
11280.00	V	-41.83		
3760.00	Horizontal	-40.43	-13.00	Pass
5640.00	H	-41.11		
7520.00	H	-43.26		
9400.00	H	-45.67		
11280.00	H	-47.33		
Test mode:	**LTE Band 2(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3818.60	Vertical	-35.93	-13.00	Pass
5727.90	V	-37.66		
7637.20	V	-39.43		
9546.50	V	-43.97		
11455.80	V	-44.26		
3818.60	Horizontal	-38.76	-13.00	Pass
5727.90	H	-42.47		
7637.20	H	-44.82		
9546.50	H	-47.72		
11455.80	H	-45.19		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 4(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.40	Vertical	-37.20	-13.00	Pass
5132.10	V	-40.95		
6842.80	V	-37.38		
8553.50	V	-42.17		
10264.20	V	-44.45		
3421.40	Horizontal	-37.28	-13.00	Pass
5132.10	H	-41.27		
6842.80	H	-46.46		
8553.50	H	-44.70		
10264.20	H	-46.32		
Test mode:	**LTE Band 4(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.00	Vertical	-35.67	-13.00	Pass
5197.50	V	-41.11		
6930.00	V	-39.20		
8662.50	V	-43.26		
10395.00	V	-44.19		
3465.00	Horizontal	-38.52	-13.00	Pass
5197.50	H	-40.36		
6930.00	H	-44.98		
8662.50	H	-46.31		
10395.00	H	-47.08		
Test mode:	**LTE Band 4(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.60	Vertical	-35.98	-13.00	Pass
5262.90	V	-38.74		
7017.20	V	-37.00		
8771.50	V	-43.63		
10525.80	V	-42.80		
3508.60	Horizontal	-39.44	-13.00	Pass
5262.90	H	-40.98		
7017.20	H	-46.64		
8771.50	H	-45.49		
10525.80	H	-46.98		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 5(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1649.40	Vertical	-38.60	-13.00	Pass
2474.10	V	-37.65		
3298.80	V	-37.61		
4123.50	V	-45.03		
4948.20	V	-44.07		
1649.40	Horizontal	-38.11	-13.00	Pass
2474.10	H	-41.49		
3298.80	H	-44.94		
4123.50	H	-44.09		
4948.20	H	-46.22		
Test mode:	**LTE Band 5(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1673.00	Vertical	-37.25	-13.00	Pass
2509.50	V	-40.96		
3346.00	V	-38.50		
4182.50	V	-42.43		
5019.00	V	-41.43		
1673.00	Horizontal	-40.91	-13.00	Pass
2509.50	H	-43.82		
3346.00	H	-43.89		
4182.50	H	-45.45		
5019.00	H	-45.38		
Test mode:	**LTE Band 5(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.60	Vertical	-38.90	-13.00	Pass
2544.90	V	-39.68		
3393.20	V	-39.69		
4241.50	V	-42.12		
5089.80	V	-41.20		
1696.60	Horizontal	-38.62	-13.00	Pass
2544.90	H	-42.90		
3393.20	H	-44.67		
4241.50	H	-45.56		
5089.80	H	-45.68		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 7(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.00	Vertical	-36.47	-25.00	Pass
7507.50	V	-38.42		
10010.00	V	-40.06		
12512.50	V	-44.81		
15015.00	V	-44.62		
5005.00	Horizontal	-40.73	-25.00	Pass
7507.50	H	-42.85		
10010.00	H	-44.52		
12512.50	H	-43.73		
15015.00	H	-46.13		
Test mode:	**LTE Band 7(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-38.01	-25.00	Pass
7605.00	V	-40.01		
10140.00	V	-39.67		
12675.00	V	-41.90		
15210.00	V	-44.11		
5070.00	Horizontal	-37.66	-25.00	Pass
7605.00	H	-41.62		
10140.00	H	-43.84		
12675.00	H	-47.39		
15210.00	H	-44.04		
Test mode:	**LTE Band 7(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-36.54	-25.00	Pass
7702.50	V	-40.11		
10270.00	V	-38.09		
12837.50	V	-42.68		
15405.00	V	-41.99		
5135.00	Horizontal	-37.93	-25.00	Pass
7702.50	H	-44.20		
10270.00	H	-44.94		
12837.50	H	-44.20		
15405.00	H	-45.92		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 12(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1399.4	Vertical	-37.31	-13.00	Pass
2099.1	V	-40.84		
2798.8	V	-39.56		
3498.5	V	-43.86		
4198.2	V	-43.35		
1399.4	Horizontal	-38.67	-13.00	Pass
2099.1	H	-43.42		
2798.8	H	-43.05		
3498.5	H	-46.42		
4198.2	H	-44.89		
Test mode:	**LTE Band 12(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1415	Vertical	-35.36	-13.00	Pass
2122.5	V	-41.46		
2830	V	-39.62		
3537.5	V	-42.99		
4245	V	-44.28		
1415	Horizontal	-40.57	-13.00	Pass
2122.5	H	-43.76		
2830	H	-43.43		
3537.5	H	-44.92		
4245	H	-45.30		
Test mode:	**LTE Band 12(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1430.6	Vertical	-38.58	-13.00	Pass
2145.9	V	-38.22		
2861.2	V	-37.30		
3576.5	V	-43.84		
4291.8	V	-44.56		
1430.6	Horizontal	-39.27	-13.00	Pass
2145.9	H	-41.59		
2861.2	H	-45.54		
3576.5	H	-47.72		
4291.8	H	-46.29		

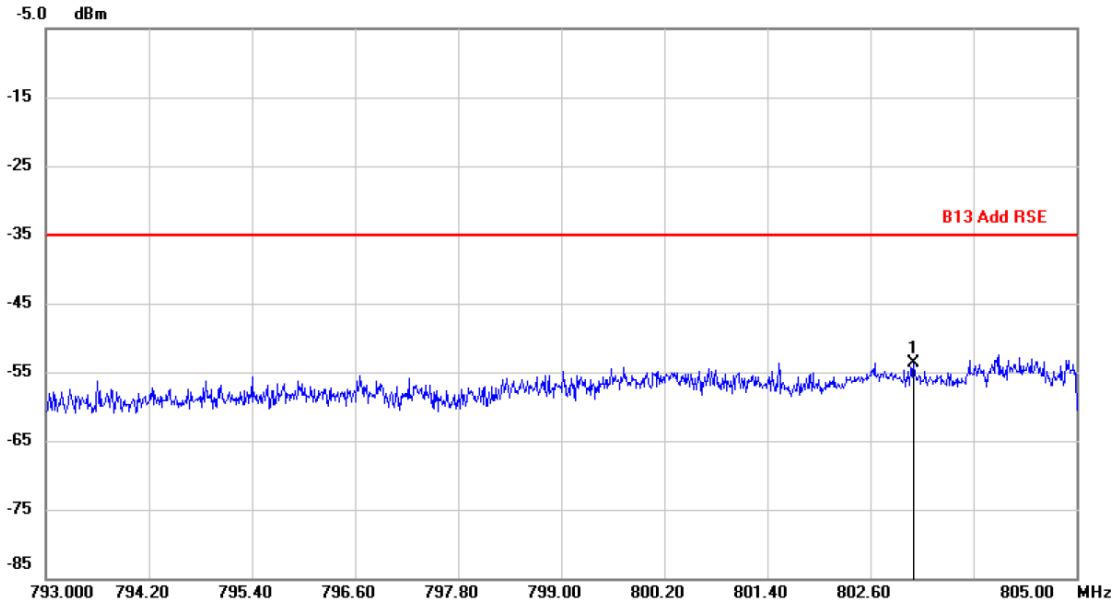
Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 13(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1559	Vertical	-37.87	-13.00	Pass
2338.5	V	-39.14		
3118	V	-37.33		
3897.5	V	-43.79		
4677	V	-44.58		
1559	Horizontal	-38.25	-13.00	Pass
2338.5	H	-42.13		
3118	H	-44.37		
3897.5	H	-46.15		
4677	H	-45.52		
Test mode:	**LTE Band 13(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1564	Vertical	-36.20	-13.00	Pass
2346	V	-40.40		
3128	V	-39.80		
3910	V	-43.78		
4692	V	-42.16		
1564	Horizontal	-39.31	-13.00	Pass
2346	H	-43.83		
3128	H	-46.54		
3910	H	-44.83		
4692	H	-43.76		
Test mode:	**LTE Band 13(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1569	Vertical	-35.20	-13.00	Pass
2353.5	V	-37.61		
3138	V	-38.29		
3922.5	V	-41.46		
4707	V	-42.35		
1569	Horizontal	-40.01	-13.00	Pass
2353.5	H	-40.39		
3138	H	-45.78		
3922.5	H	-44.52		
4707	H	-47.54		

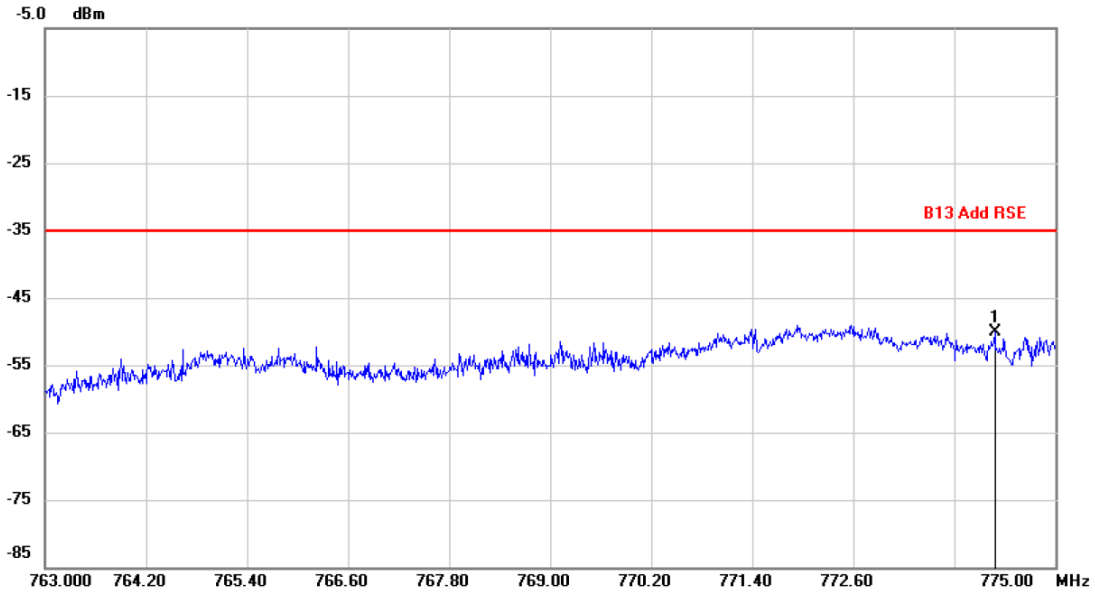
Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	803.1072	-88.04	34.41	-53.63	-35.00	-18.63	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	774.2892	-84.27	34.18	-50.09	-35.00	-15.09	peak			

Note:1. *:Maximum data; x:Over limit; !:over margin.
2.Measurement=Reading Level+Correct Factor; Correct Factor=Antenna Factor+Cable Loss.

QPSK Mode:

Test mode:	LTE Band 25(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.40	Vertical	-37.39	-13.00	Pass
5552.10	V	-40.71		
7402.80	V	-39.69		
9253.50	V	-43.65		
11104.20	V	-43.26		
3701.40	Horizontal	-38.14	-13.00	Pass
5552.10	H	-43.48		
7402.80	H	-44.63		
9253.50	H	-44.87		
11104.20	H	-46.46		
Test mode:	**LTE Band 25(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3765	Vertical	-37.37	-13.00	Pass
5647.5	V	-40.72		
7530	V	-39.58		
9412.5	V	-41.14		
11295	V	-42.96		
3765	Horizontal	-37.99	-13.00	Pass
5647.5	H	-41.28		
7530	H	-46.32		
9412.5	H	-45.82		
11295	H	-44.77		
Test mode:	**LTE Band 25(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3828.6	Vertical	-38.07	-13.00	Pass
5742.9	V	-39.19		
7657.2	V	-39.11		
9571.5	V	-42.59		
11485.8	V	-44.02		
3828.6	Horizontal	-38.97	-13.00	Pass
5742.9	H	-42.11		
7657.2	H	-44.86		
9571.5	H	-44.99		
11485.8	H	-44.50		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 26(at lower)(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.40	Vertical	-36.72	-13.00	Pass
5132.10	V	-39.14		
6842.80	V	-37.64		
8553.50	V	-43.49		
10264.20	V	---		
3421.40	Horizontal	-38.93	-13.00	Pass
5132.10	H	-42.10		
6842.80	H	-44.99		
8553.50	H	-45.79		
10264.20	H	---		
Test mode:	**LTE Band 26(at lower)(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.00	Vertical	-36.59	-13.00	Pass
5197.50	V	-39.87		
6930.00	V	-38.22		
8662.50	V	-43.29		
10395.00	V	---		
3465.00	Horizontal	-38.78	-13.00	Pass
5197.50	H	-42.32		
6930.00	H	-44.66		
8662.50	H	-46.23		
10395.00	H	---		
Test mode:	**LTE Band 26(at lower)(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.60	Vertical	-36.75	-13.00	Pass
5262.90	V	-39.79		
7017.20	V	-38.14		
8771.50	V	-43.51		
10525.80	V	---		
3508.60	Horizontal	-39.21	-13.00	Pass
5262.90	H	-42.79		
7017.20	H	-44.80		
8771.50	H	-46.41		
10525.80	H	---		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 26(at upper)(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1649.88	Vertical	-38.80	-13.00	Pass
2474.24	V	-37.59		
3298.41	V	-37.36		
4123.75	V	-45.23		
4948.00	V	-44.11		
1649.17	Horizontal	-37.81	-13.00	Pass
2474.41	H	-41.25		
3298.85	H	-45.32		
4123.47	H	-43.61		
4948.50	H	-45.98		
Test mode:	**LTE Band 26(at upper)(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1672.81	Vertical	-37.03	-13.00	Pass
2509.71	V	-40.50		
3345.97	V	-38.24		
4182.22	V	-42.84		
5019.47	V	-41.84		
1672.68	Horizontal	-41.04	-13.00	Pass
2509.93	H	-43.97		
3346.14	H	-43.91		
4182.63	H	-45.63		
5019.13	H	-45.40		
Test mode:	**LTE Band 26(at upper)(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.74	Vertical	-38.55	-13.00	Pass
2545.02	V	-39.77		
3392.99	V	-39.97		
4241.30	V	-42.20		
5089.86	V	-41.10		
1696.16	Horizontal	-38.73	-13.00	Pass
2544.60	H	-42.96		
3392.88	H	-44.71		
4241.54	H	-45.23		
5090.25	H	-46.09		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 38(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5145	Vertical	-37.31	-25.00	Pass
7717.5	V	-39.58		
10290	V	-38.39		
12862.5	V	-42.66		
15435	V	-41.62		
5145	Horizontal	-39.63	-25.00	Pass
7717.5	H	-42.34		
10290	H	-45.82		
12862.5	H	-44.74		
15435	H	-44.00		
Test mode:	**LTE Band 38(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5190	Vertical	-38.05	-25.00	Pass
7785	V	-41.46		
10380	V	-36.69		
12975	V	-44.71		
15570	V	-41.45		
5190	Horizontal	-37.79	-25.00	Pass
7785	H	-40.93		
10380	H	-44.13		
12975	H	-44.70		
15570	H	-44.16		
Test mode:	**LTE Band 38(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5235	Vertical	-38.68	-25.00	Pass
7852.5	V	-38.89		
10470	V	-39.01		
13087.5	V	-44.78		
15705	V	-41.67		
5235	Horizontal	-38.17	-25.00	Pass
7852.5	H	-42.22		
10470	H	-44.55		
13087.5	H	-44.32		
15705	H	-46.09		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 41(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
4997	Vertical	-36.45	-25.00	Pass
7495.5	V	-40.45		
9994	V	-38.24		
12492.5	V	-44.63		
14991	V	-41.32		
4997	Horizontal	-38.68	-25.00	Pass
7495.5	H	-41.71		
9994	H	-45.94		
12492.5	H	-43.77		
14991	H	-43.90		
Test mode:	**LTE Band 41(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5186	Vertical	-39.07	-25.00	Pass
7779	V	-41.10		
10372	V	-39.24		
12965	V	-42.00		
15558	V	-43.34		
5186	Horizontal	-39.09	-25.00	Pass
7779	H	-43.47		
10372	H	-44.45		
12965	H	-45.94		
15558	H	-44.94		
Test mode:	**LTE Band 41(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5375	Vertical	-38.55	-25.00	Pass
8062.5	V	-39.05		
10750	V	-37.42		
13437.5	V	-43.18		
16125	V	-42.61		
5375	Horizontal	-38.03	-25.00	Pass
8062.5	H	-40.89		
10750	H	-42.83		
13437.5	H	-44.63		
16125	H	-44.83		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

16 QAM Mode:

Test mode:	**LTE Band 2 (1.4MHz)**		**Test channel:**	**Lowest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.40	Vertical	-35.40	-13.00	Pass
5552.10	V	-41.07		
7402.80	V	-37.54		
9253.50	V	-44.20		
11104.20	V	-43.70		
3701.40	Horizontal	-39.07	-13.00	Pass
5552.10	H	-41.40		
7402.80	H	-46.33		
9253.50	H	-46.38		
11104.20	H	-47.61		
Test mode:	**LTE Band 2 (1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-36.01	-13.00	Pass
5640.00	V	-39.60		
7520.00	V	-38.59		
9400.00	V	-42.28		
11280.00	V	-41.84		
3760.00	Horizontal	-40.37	-13.00	Pass
5640.00	H	-43.55		
7520.00	H	-43.93		
9400.00	H	-44.14		
11280.00	H	-45.20		
Test mode:	**LTE Band 2 (1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3818.60	Vertical	-35.97	-13.00	Pass
5727.90	V	-40.50		
7637.20	V	-37.66		
9546.50	V	-44.80		
11455.80	V	-43.57		
3818.60	Horizontal	-39.63	-13.00	Pass
5727.90	H	-42.69		
7637.20	H	-44.35		
9546.50	H	-45.39		
11455.80	H	-46.69		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 4(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.40	Vertical	-35.82	-13.00	Pass
5132.10	V	-38.36		
6842.80	V	-38.13		
8553.50	V	-44.39		
10264.20	V	-43.13		
3421.40	Horizontal	-38.57	-13.00	Pass
5132.10	H	-44.05		
6842.80	H	-46.43		
8553.50	H	-44.90		
10264.20	H	-44.19		
Test mode:	**LTE Band 4(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465	Vertical	-35.33	-13.00	Pass
5197.5	V	-40.02		
6930	V	-36.67		
8662.5	V	-44.65		
10395	V	-44.58		
3465	Horizontal	-39.38	-13.00	Pass
5197.5	H	-41.69		
6930	H	-46.65		
8662.5	H	-45.14		
10395	H	-44.48		
Test mode:	**LTE Band 4(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.60	Vertical	-37.56	-13.00	Pass
5262.90	V	-41.37		
7017.20	V	-39.01		
8771.50	V	-41.22		
10525.80	V	-41.90		
3508.60	Horizontal	-37.42	-13.00	Pass
5262.90	H	-41.16		
7017.20	H	-43.25		
8771.50	H	-44.80		
10525.80	H	-44.57		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.

2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured

3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 5(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1649.40	Vertical	-36.58	-13.00	Pass
2474.10	V	-37.72		
3298.80	V	-39.74		
4123.50	V	-43.88		
4948.20	V	-42.75		
1649.40	Horizontal	-39.76	-13.00	Pass
2474.10	H	-43.33		
3298.80	H	-43.04		
4123.50	H	-46.80		
4948.20	H	-46.08		
Test mode:	**LTE Band 5(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1673.00	Vertical	-36.49	-13.00	Pass
2509.50	V	-38.65		
3346.00	V	-37.45		
4182.50	V	-44.59		
5019.00	V	-44.01		
1673.00	Horizontal	-38.18	-13.00	Pass
2509.50	H	-40.48		
3346.00	H	-43.00		
4182.50	H	-44.84		
5019.00	H	-44.62		
Test mode:	**LTE Band 5(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.60	Vertical	-37.03	-13.00	Pass
2544.90	V	-38.79		
3393.20	V	-39.08		
4241.50	V	-44.21		
5089.80	V	-42.39		
1696.60	Horizontal	-40.01	-13.00	Pass
2544.90	H	-40.81		
3393.20	H	-43.88		
4241.50	H	-44.99		
5089.80	H	-47.04		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 7(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.00	Vertical	-36.98	-25.00	Pass
7507.50	V	-38.49		
10010.00	V	-37.48		
12512.50	V	-43.25		
15015.00	V	-43.39		
5005.00	Horizontal	-37.92	-25.00	Pass
7507.50	H	-40.38		
10010.00	H	-44.60		
12512.50	H	-47.31		
15015.00	H	-46.59		
Test mode:	**LTE Band 7(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-38.33	-25.00	Pass
7605.00	V	-37.57		
10140.00	V	-38.09		
12675.00	V	-42.19		
15210.00	V	-42.91		
5070.00	Horizontal	-40.18	-25.00	Pass
7605.00	H	-43.65		
10140.00	H	-46.51		
12675.00	H	-44.90		
15210.00	H	-47.25		
Test mode:	**LTE Band 7(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-35.91	-25.00	Pass
7702.50	V	-37.94		
10270.00	V	-37.33		
12837.50	V	-42.01		
15405.00	V	-43.99		
5135.00	Horizontal	-40.50	-25.00	Pass
7702.50	H	-41.49		
10270.00	H	-44.11		
12837.50	H	-46.59		
15405.00	H	-46.21		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 12 (1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1399.4	Vertical	-36.60	-13.00	Pass
2099.1	V	-41.44		
2798.8	V	-39.36		
3498.5	V	-43.92		
4198.2	V	-42.90		
1399.4	Horizontal	-40.75	-13.00	Pass
2099.1	H	-42.05		
2798.8	H	-43.91		
3498.5	H	-44.06		
4198.2	H	-47.23		
Test mode:	**LTE Band 12 (1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1415	Vertical	-36.45	-13.00	Pass
2122.5	V	-40.53		
2830	V	-36.33		
3537.5	V	-42.92		
4245	V	-43.18		
1415	Horizontal	-38.70	-13.00	Pass
2122.5	H	-40.85		
2830	H	-44.51		
3537.5	H	-45.81		
4245	H	-46.87		
Test mode:	**LTE Band 12 (1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1430.6	Vertical	-36.98	-13.00	Pass
2145.9	V	-39.79		
2861.2	V	-38.48		
3576.5	V	-44.87		
4291.8	V	-41.79		
1430.6	Horizontal	-38.33	-13.00	Pass
2145.9	H	-41.99		
2861.2	H	-46.60		
3576.5	H	-47.46		
4291.8	H	-45.22		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 13(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1559	Vertical	-35.61	-13.00	Pass
2338.5	V	-40.63		
3118	V	-36.58		
3897.5	V	-41.32		
4677	V	-42.34		
1559	Horizontal	-37.30	-13.00	Pass
2338.5	H	-42.81		
3118	H	-44.24		
3897.5	H	-46.92		
4677	H	-47.52		
Test mode:	**LTE Band 13(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1564	Vertical	-37.97	-13.00	Pass
2346	V	-39.70		
3128	V	-39.43		
3910	V	-44.86		
4692	V	-42.20		
1564	Horizontal	-39.51	-13.00	Pass
2346	H	-43.30		
3128	H	-43.87		
3910	H	-44.44		
4692	H	-43.77		
Test mode:	**LTE Band 13(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1569	Vertical	-35.27	-13.00	Pass
2353.5	V	-40.54		
3138	V	-39.18		
3922.5	V	-41.59		
4707	V	-44.31		
1569	Horizontal	-39.66	-13.00	Pass
2353.5	H	-43.66		
3138	H	-44.90		
3922.5	H	-46.04		
4707	H	-45.71		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 25(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.4	Vertical	-35.49	-13.00	Pass
5552.1	V	-38.38		
7402.8	V	-36.62		
9253.5	V	-43.74		
11104.2	V	-44.21		
3701.4	Horizontal	-40.05	-13.00	Pass
5552.1	H	-43.73		
7402.8	H	-44.88		
9253.5	H	-46.32		
11104.2	H	-46.16		
Test mode:	**LTE Band 25(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3765	Vertical	-37.25	-13.00	Pass
5647.5	V	-39.23		
7530	V	-40.12		
9412.5	V	-44.82		
11295	V	-43.33		
3765	Horizontal	-39.39	-13.00	Pass
5647.5	H	-40.99		
7530	H	-45.95		
9412.5	H	-46.38		
11295	H	-45.14		
Test mode:	**LTE Band 25(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3828.6	Vertical	-35.37	-13.00	Pass
5742.9	V	-40.44		
7657.2	V	-38.64		
9571.5	V	-42.08		
11485.8	V	-42.18		
3828.6	Horizontal	-38.25	-13.00	Pass
5742.9	H	-42.67		
7657.2	H	-43.24		
9571.5	H	-46.55		
11485.8	H	-44.27		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.

2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured

3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 26(at lower)(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1629.4	Vertical	-36.27	-13.00	Pass
2444.1	V	-39.57		
3258.8	V	-39.06		
4073.5	V	-41.16		
4888.2	V	-42.75		
1629.4	Horizontal	-38.92	-13.00	Pass
2444.1	H	-40.68		
3258.8	H	-45.39		
4073.5	H	-45.05		
4888.2	H	-45.90		
Test mode:	**LTE Band 26(at lower)(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1638	Vertical	-36.10	-13.00	Pass
2457	V	-38.56		
3276	V	-36.85		
4095	V	-44.98		
4914	V	-43.33		
1638	Horizontal	-40.57	-13.00	Pass
2457	H	-42.97		
3276	H	-45.19		
4095	H	-44.64		
4914	H	-44.90		
Test mode:	**LTE Band 26(at lower)(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1646.6	Vertical	-39.04	-13.00	Pass
2469.9	V	-39.62		
3293.2	V	-36.62		
4116.5	V	-42.17		
4939.8	V	-42.02		
1646.6	Horizontal	-40.76	-13.00	Pass
2469.9	H	-43.71		
3293.2	H	-45.74		
4116.5	H	-46.07		
4939.8	H	-47.49		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 26(at upper)(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1649.70	Vertical	-38.90	-13.00	Pass
2474.52	V	-37.72		
3298.78	V	-37.65		
4123.59	V	-45.38		
4948.27	V	-44.58		
1649.15	Horizontal	-37.73	-13.00	Pass
2474.16	H	-41.22		
3298.57	H	-44.98		
4123.45	H	-43.32		
4948.88	H	-45.61		
Test mode:	**LTE Band 26(at upper)(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1672.42	Vertical	-37.11	-13.00	Pass
2509.84	V	-40.91		
3346.01	V	-38.62		
4182.20	V	-42.90		
5019.44	V	-41.58		
1673.11	Horizontal	-41.47	-13.00	Pass
2510.14	H	-43.54		
3346.29	H	-43.82		
4182.83	H	-46.11		
5018.99	H	-45.60		
Test mode:	**LTE Band 26(at upper)(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.89	Vertical	-38.07	-13.00	Pass
2545.06	V	-40.00		
3393.21	V	-39.79		
4241.42	V	-41.94		
5089.91	V	-40.98		
1696.52	Horizontal	-38.51	-13.00	Pass
2544.54	H	-43.33		
3392.56	H	-44.87		
4242.02	H	-45.35		
5090.53	H	-46.28		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 38 (5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5145	Vertical	-35.94	-25.00	Pass
7717.5	V	-38.21		
10290	V	-38.92		
12862.5	V	-42.23		
15435	V	-42.70		
5145	Horizontal	-39.06	-25.00	Pass
7717.5	H	-41.11		
10290	H	-43.30		
12862.5	H	-45.01		
15435	H	-44.30		
Test mode:	**LTE Band 38 (5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5190	Vertical	-35.97	-25.00	Pass
7785	V	-38.42		
10380	V	-38.13		
12975	V	-41.42		
15570	V	-42.12		
5190	Horizontal	-39.39	-25.00	Pass
7785	H	-43.08		
10380	H	-46.23		
12975	H	-46.14		
15570	H	-47.13		
Test mode:	**LTE Band 38 (5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5235	Vertical	-38.92	-25.00	Pass
7852.5	V	-38.55		
10470	V	-38.05		
13087.5	V	-41.31		
15705	V	-41.66		
5235	Horizontal	-39.31	-25.00	Pass
7852.5	H	-42.07		
10470	H	-46.06		
13087.5	H	-43.86		
15705	H	-44.45		

Remark：

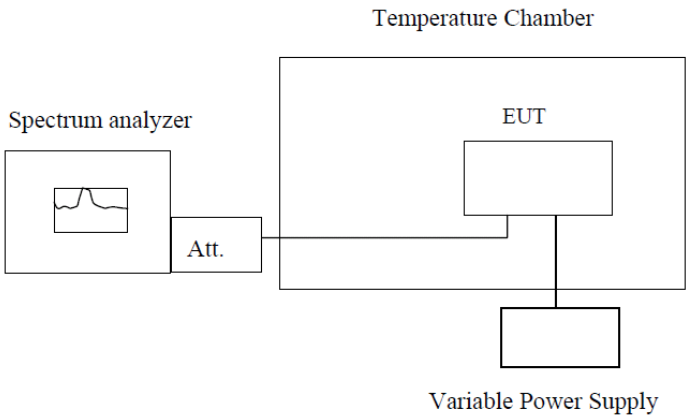
1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 41 (5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
4997	Vertical	-36.56	-25.00	Pass
7495.5	V	-37.70		
9994	V	-36.59		
12492.5	V	-41.61		
14991	V	-44.91		
4997	Horizontal	-39.78	-25.00	Pass
7495.5	H	-42.95		
9994	H	-45.82		
12492.5	H	-45.73		
14991	H	-47.55		
Test mode:	**LTE Band 41 (5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5186	Vertical	-36.08	-25.00	Pass
7779	V	-38.06		
10372	V	-39.02		
12965	V	-43.26		
15558	V	-42.21		
5186	Horizontal	-38.78	-25.00	Pass
7779	H	-41.71		
10372	H	-44.93		
12965	H	-44.94		
15558	H	-45.31		
Test mode:	**LTE Band 41 (5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5375	Vertical	-37.22	-25.00	Pass
8062.5	V	-41.09		
10750	V	-38.72		
13437.5	V	-44.46		
16125	V	-43.95		
5375	Horizontal	-39.49	-25.00	Pass
8062.5	H	-43.18		
10750	H	-43.30		
13437.5	H	-47.25		
16125	H	-44.26		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

4.10 Frequency stability V.S. Temperature measurement

Test Requirement:	FCC Part2.1055(a)(1)(b), FCC part90.213.(a)
Test Method:	ANSI C63.26:2015
Limit:	2.5ppm(Part 22) Within the authorized bands of operation(Part 24, Part 27)
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test procedure:	1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to –20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass
Remark:	If all frequencies stability are comply with the lower limit, then all results can be considered qualified

Measurement Data

Reference Frequency: LTE Band 2 Middle channel=18900 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	18	0.0070	Within the authorized bands	Pass
	-10	25	0.0101		
	0	23	0.0089		
	10	-28	-0.0109		
	20	17	0.0066		
	30	18	0.0070		
	40	-9	-0.0034		
	50	15	0.0058		
Reference Frequency: LTE Band 4 Middle channel=20175 channel=1732.5MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	20	0.0078	2.5	Pass
	-10	21	0.0083		
	0	25	0.0101		
	10	-22	-0.0088		
	20	23	0.0091		
	30	12	0.0048		
	40	-6	-0.0026		
	50	12	0.0048		
Reference Frequency: LTE Band 5 Middle channel=20175 channel=836.5MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	17	0.0208	2.5	Pass
	-10	24	0.0292		
	0	21	0.0252		
	10	-27	-0.0327		
	20	21	0.0250		
	30	15	0.0185		
	40	-5	-0.0062		
	50	11	0.0136		

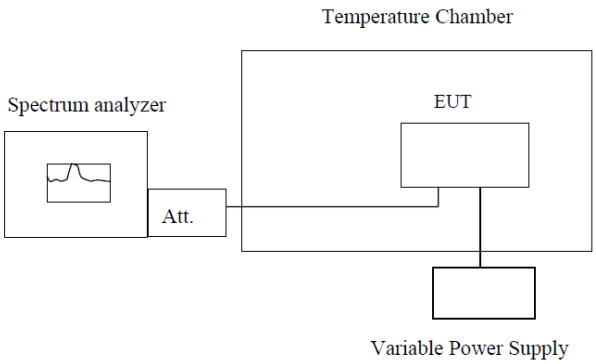
Reference Frequency: LTE Band 7 Middle channel=21100 channel=2535MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	21	0.0079	Within the authorized bands	Pass
	-10	23	0.0085		
	0	20	0.0074		
	10	-28	-0.0108		
	20	16	0.0059		
	30	19	0.0073		
	40	-9	-0.0032		
	50	14	0.0051		
Reference Frequency: LTE Band 12 Middle channel=23095 channel=707.5MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	21	0.0252	Within the authorized bands	Pass
	-10	23	0.0272		
	0	24	0.0287		
	10	-21	-0.0260		
	20	18	0.0224		
	30	12	0.0150		
	40	-7	-0.0084		
	50	13	0.0161		
Reference Frequency: LTE Band 13 Middle channel=23230 channel=782MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	21	0.0251	Within the authorized bands	Pass
	-10	20	0.0237		
	0	22	0.0258		
	10	-28	-0.0336		
	20	17	0.0203		
	30	14	0.0161		
	40	-8	-0.0096		
	50	14	0.0159		

Reference Frequency: LTE Band 25 Middle channel=26365 channel=1882.5MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	15	0.0059	Within the authorized bands	Pass
	-10	19	0.0076		
	0	26	0.0104		
	10	-24	-0.0095		
	20	18	0.0071		
	30	16	0.0064		
	40	-7	-0.0028		
	50	14	0.0054		
Reference Frequency: LTE Band 26(at lower) Middle channel=26740 channel=819MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	19	0.0230	2.5	Pass
	-10	21	0.0255		
	0	22	0.0261		
	10	-25	-0.0296		
	20	21	0.0248		
	30	16	0.0196		
	40	-1	-0.0015		
	50	9	0.0112		

Reference Frequency: LTE Band 26(at upper) Middle channel=26915 channel=836.5MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	16	0.0195	2.5	Pass
	-10	20	0.0235		
	0	20	0.0233		
	10	-27	-0.0325		
	20	21	0.0249		
	30	17	0.0206		
	40	-7	-0.0080		
	50	10	0.0123		

Reference Frequency: LTE Band 38 Middle channel=38000 channel=2595MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	17	0.0087	Within the authorized bands	Pass
	-10	20	0.0101		
	0	19	0.0097		
	10	-25	-0.0129		
	20	19	0.0099		
	30	16	0.0081		
	40	-6	-0.0031		
	50	11	0.0053		
Reference Frequency: LTE Band 41 Middle channel=21100 channel=2535MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
32.4	-20	22	0.0112	Within the authorized bands	Pass
	-10	27	0.0139		
	0	24	0.0123		
	10	-24	-0.0125		
	20	20	0.0103		
	30	15	0.0079		
	40	-8	-0.0037		
	50	11	0.0055		

4.11 Frequency stability V.S. Voltage measurement

Test Requirement:	FCC Part2.1055(d)(1)(2), FCC part90.213.(a)
Test Method:	ANSI C63.26:2015
Limit:	2.5ppm Band II & Band VII should be within authorized band.
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test procedure:	1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass
Remark:	1. If all frequencies stability are comply with the lower limit, then all results can be considered qualified

Measurement Data

Reference Frequency: LTE Band 2 Middle channel=18900 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	16	0.0062	within authorized band	Pass
	32.4	25	0.0099		
	27.54	24	0.0095		
Reference Frequency: LTE Band 4 Middle channel=20175 channel=1732.5MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	18	0.0073	2.5	Pass
	32.4	19	0.0077		
	27.54	23	0.0095		
Reference Frequency: LTE Band 5 Middle channel=20175 channel=836.5MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	15	0.0174	2.5	Pass
	32.4	22	0.0264		
	27.54	23	0.0277		
Reference Frequency: LTE Band 7 Middle channel=21100 channel=2535MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	27	0.0101	within authorized band	Pass
	32.4	-28	-0.0097		
	27.54	21	0.0076		

Reference Frequency: LTE Band 12 Middle channel=23095 channel=707.5MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	21	0.0258	within authorized band	Pass
	32.4	20	0.0238		
	27.54	22	0.0264		
Reference Frequency: LTE Band 13 Middle channel=23230 channel=782MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	21	0.0250	within authorized band	Pass
	32.4	21	0.0251		
	27.54	26	0.0309		
Reference Frequency: LTE Band 25 Middle channel=26365 channel=1882.5MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	17	0.0207	within authorized band	Pass
	32.4	-19	-0.0229		
	27.54	23	0.0286		
Reference Frequency: LTE Band 26(at lower) Middle channel=26740 channel=819MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	26	0.0312	2.5	Pass
	32.4	23	0.0278		
	27.54	-27	-0.0324		
Reference Frequency: LTE Band 26(at upper) Middle channel=26915 channel=836.5MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	21	0.0248	2.5	Pass
	32.4	26	0.0306		
	27.54	21	0.0251		

Reference Frequency: LTE Band 38 Middle channel=38000 channel=2595MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	19	0.0071	within authorized band	Pass
	32.4	24	0.0093		
	27.54	24	0.0090		

Reference Frequency: LTE Band 41 Middle channel=21100 channel=2535MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	37.26	20	0.0076	within authorized band	Pass
	32.4	21	0.0081		
	27.54	23	0.0086		

4.12 Test Setup Photo

Model: Apache 3

Radiated Emission

Model: Apache 3 Pro

Radiated Emission

Model: Apache 4

Radiated Emission

-------END OF REPORT-------