

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 7 (10MHz) 16 QAM	Lowest	50	0	H	V	22.22	33.00	Pass
					H	22.19		
				E1	V	23.28		
					H	22.03		
				E2	V	21.85		
					H	21.76		
	Middle	50	0	H	V	23.31	33.00	Pass
					H	22.18		
				E1	V	22.78		
					H	23.53		
				E2	V	21.20		
					H	23.47		
	Highest	50	0	H	V	22.31	33.00	Pass
					H	23.21		
				E1	V	22.41		
					H	21.97		
				E2	V	23.51		
					H	22.55		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 7 (15MHz) 16 QAM	Lowest	75	0	H	V	21.61	33.00	Pass
					H	21.43		
				E1	V	23.64		
					H	22.85		
				E2	V	21.82		
					H	21.75		
	Middle	75	0	H	V	22.18	33.00	Pass
					H	23.42		
				E1	V	23.52		
					H	21.78		
				E2	V	22.09		
					H	22.28		
	Highest	75	0	H	V	21.29	33.00	Pass
					H	22.30		
				E1	V	21.91		
					H	22.26		
				E2	V	22.82		
					H	21.30		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 7 (20MHz) 16 QAM	Lowest	100	0	H	V	22.26	33.00	Pass
					H	22.35		
				E1	V	22.30		
					H	23.07		
				E2	V	23.47		
					H	23.22		
	Middle	100	0	H	V	22.36	33.00	Pass
					H	23.23		
				E1	V	23.07		
					H	22.40		
				E2	V	23.59		
					H	21.36		
	Highest	100	0	H	V	22.21	33.00	Pass
					H	21.14		
				E1	V	23.14		
					H	21.95		
				E2	V	22.93		
					H	21.52		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 12 (1.4MHz) QPSK	Lowest	6	0	H	V	21.71	33.00	Pass
					H	21.99		
				E1	V	23.48		
					H	22.19		
				E2	V	22.42		
					H	22.41		
	Middle	6	0	H	V	23.37	33.00	Pass
					H	21.67		
				E1	V	22.86		
					H	22.01		
				E2	V	22.90		
					H	23.55		
	Highest	6	0	H	V	23.61	33.00	Pass
					H	22.38		
				E1	V	22.59		
					H	21.60		
				E2	V	23.35		
					H	22.36		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 12 (3MHz) QPSK	Lowest	15	0	H	V	22.30	33.00	Pass
					H	23.28		
				E1	V	23.06		
					H	21.17		
				E2	V	23.58		
					H	22.13		
	Middle	15	0	H	V	23.37	33.00	Pass
					H	21.48		
				E1	V	22.53		
					H	22.42		
				E2	V	23.19		
					H	22.74		
	Highest	15	0	H	V	21.78	33.00	Pass
					H	22.87		
				E1	V	21.47		
					H	22.77		
				E2	V	22.68		
					H	23.26		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 12 (5MHz) QPSK	Lowest	25	0	H	V	21.65	33.00	Pass
					H	21.47		
				E1	V	23.18		
					H	23.04		
				E2	V	22.67		
					H	22.17		
	Middle	25	0	H	V	22.54	33.00	Pass
					H	22.26		
				E1	V	23.42		
					H	21.83		
				E2	V	22.47		
					H	22.66		
	Highest	25	0	H	V	22.56	33.00	Pass
					H	22.13		
				E1	V	21.56		
					H	21.99		
				E2	V	22.76		
					H	21.69		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 12 (10MHz) QPSK	Lowest	50	0	H	V	22.16	33.00	Pass
					H	21.60		
				E1	V	22.19		
					H	23.08		
				E2	V	22.12		
					H	21.74		
	Middle	50	0	H	V	21.22	33.00	Pass
					H	23.33		
				E1	V	23.00		
					H	21.38		
				E2	V	22.20		
					H	22.91		
	Highest	50	0	H	V	23.51	33.00	Pass
					H	22.13		
				E1	V	22.14		
					H	22.83		
				E2	V	23.15		
					H	21.29		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 12 (1.4MHz) 16QAM	Lowest	6	0	H	V	21.57	33.00	Pass
					H	22.51		
				E1	V	23.17		
					H	23.57		
				E2	V	23.17		
					H	22.84		
	Middle	6	0	H	V	23.49	33.00	Pass
					H	23.30		
				E1	V	21.82		
					H	23.45		
				E2	V	21.33		
					H	22.76		
	Highest	6	0	H	V	21.54	33.00	Pass
					H	22.20		
				E1	V	21.41		
					H	22.23		
				E2	V	21.82		
					H	23.14		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 12 (3MHz) 16QAM	Lowest	15	0	H	V	22.31	33.00	Pass
					H	23.48		
				E1	V	23.23		
					H	23.04		
				E2	V	22.20		
					H	21.78		
	Middle	15	0	H	V	23.04	33.00	Pass
					H	22.11		
				E1	V	22.88		
					H	23.32		
				E2	V	22.38		
					H	22.78		
	Highest	15	0	H	V	22.03	33.00	Pass
					H	22.22		
				E1	V	22.77		
					H	22.25		
				E2	V	22.39		
					H	23.71		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 12 (5MHz) 16QAM	Lowest	25	0	H	V	22.42	33.00	Pass
					H	23.42		
				E1	V	23.11		
					H	21.65		
				E2	V	22.15		
					H	22.27		
	Middle	25	0	H	V	21.44	33.00	Pass
					H	21.46		
				E1	V	22.32		
					H	22.50		
				E2	V	22.79		
					H	21.85		
	Highest	25	0	H	V	23.54	33.00	Pass
					H	21.46		
				E1	V	21.94		
					H	21.57		
				E2	V	21.55		
					H	22.35		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 12 (10MHz) 16QAM	Lowest	50	0	H	V	22.62	33.00	Pass
					H	21.41		
				E1	V	21.47		
					H	23.38		
				E2	V	23.01		
					H	23.30		
	Middle	50	0	H	V	23.38	33.00	Pass
					H	22.46		
				E1	V	22.06		
					H	22.68		
				E2	V	21.54		
					H	23.16		
	Highest	50	0	H	V	23.39	33.00	Pass
					H	21.79		
				E1	V	21.68		
					H	21.42		
				E2	V	21.61		
					H	22.32		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 13 (5MHz) QPSK	Lowest	25	0	H	V	23.00	34.77	Pass
					H	21.81		
				E1	V	22.31		
					H	23.31		
				E2	V	22.61		
					H	22.36		
	Middle	25	0	H	V	23.23	34.77	Pass
					H	21.66		
				E1	V	22.60		
					H	22.07		
				E2	V	22.16		
					H	21.54		
	Highest	25	0	H	V	22.57	34.77	Pass
					H	23.03		
				E1	V	21.90		
					H	23.18		
				E2	V	21.71		
					H	23.48		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 13 (10MHz) QPSK	Middle	50	0	H	V	22.12	34.77	Pass
					H	23.61		
				E1	V	22.71		
					H	21.73		
				E2	V	23.10		
					H	22.94		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 13 (5MHz) 16QAM	Lowest	25	0	H	V	22.34	34.77	Pass
					H	21.76		
				E1	V	21.75		
					H	23.59		
				E2	V	23.27		
					H	21.34		
	Middle	25	0	H	V	23.72	34.77	Pass
					H	23.32		
				E1	V	21.17		
					H	22.05		
				E2	V	23.18		
					H	22.33		
	Highest	25	0	H	V	21.44	34.77	Pass
					H	21.40		
				E1	V	22.18		
					H	23.03		
				E2	V	23.15		
					H	21.98		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
LTE Band 13 (10MHz) 16QAM	Middle	50	0	H	V	21.91	34.77	Pass
					H	22.29		
				E1	V	22.97		
					H	22.36		
				E2	V	22.01		
					H	22.07		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 41 (5MHz) QPSK	Lowest	25	0	H	V	22.29	33.00	Pass
					H	22.71		
				E1	V	23.47		
					H	22.65		
				E2	V	23.50		
					H	22.40		
	Middle	25	0	H	V	22.02	33.00	Pass
					H	22.71		
				E1	V	22.37		
					H	22.67		
				E2	V	22.20		
					H	21.90		
	Highest	25	0	H	V	21.40	33.00	Pass
					H	21.89		
				E1	V	23.31		
					H	23.42		
				E2	V	22.01		
					H	23.14		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 41 (10MHz) QPSK	Lowest	50	0	H	V	23.67	33.00	Pass
					H	21.92		
				E1	V	21.44		
					H	23.24		
				E2	V	23.29		
					H	23.05		
	Middle	50	0	H	V	21.50	33.00	Pass
					H	22.64		
				E1	V	21.31		
					H	23.08		
				E2	V	22.48		
					H	23.54		
	Highest	50	0	H	V	23.26	33.00	Pass
					H	22.59		
				E1	V	22.90		
					H	23.47		
				E2	V	21.75		
					H	22.20		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 41 (15MHz) QPSK	Lowest	75	0	H	V	21.93	33.00	Pass
					H	22.13		
				E1	V	22.11		
					H	21.84		
				E2	V	22.68		
					H	21.52		
	Middle	75	0	H	V	22.09	33.00	Pass
					H	23.29		
				E1	V	21.89		
					H	23.43		
				E2	V	21.47		
					H	22.65		
	Highest	75	0	H	V	21.57	33.00	Pass
					H	23.48		
				E1	V	21.90		
					H	21.92		
				E2	V	23.16		
					H	22.43		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 41 (20MHz) QPSK	Lowest	100	0	H	V	23.24	33.00	Pass
					H	22.45		
				E1	V	23.40		
					H	23.14		
				E2	V	22.08		
					H	22.93		
	Middle	100	0	H	V	22.01	33.00	Pass
					H	23.60		
				E1	V	21.43		
					H	21.67		
				E2	V	23.30		
					H	23.42		
	Highest	100	0	H	V	22.39	33.00	Pass
					H	23.23		
				E1	V	22.52		
					H	22.65		
				E2	V	21.56		
					H	22.42		

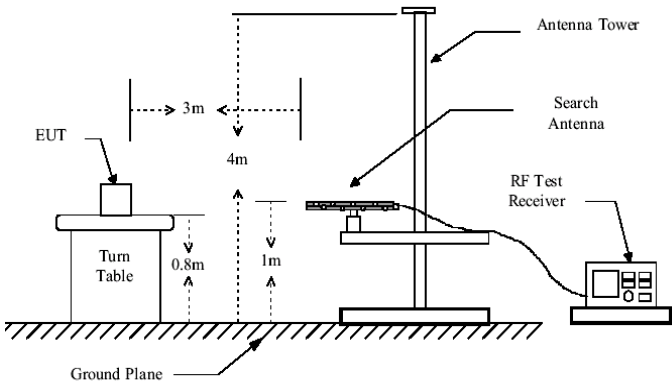
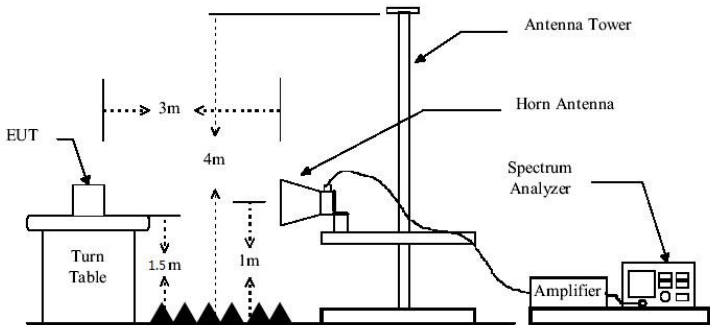
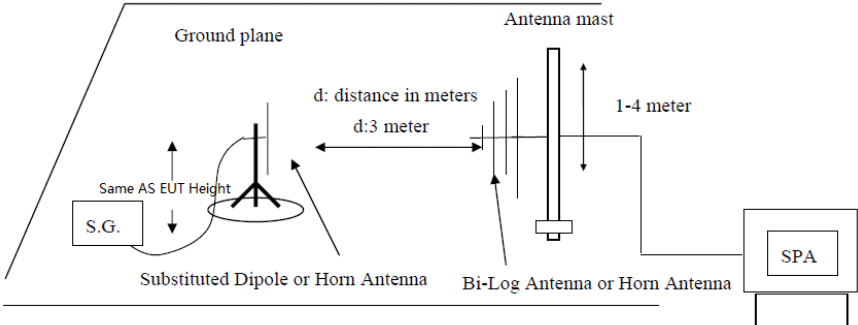
EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 41 (5MHz) 16 QAM	Lowest	25	0	H	V	21.58	33.00	Pass
					H	21.41		
				E1	V	21.96		
					H	22.89		
				E2	V	22.19		
					H	23.66		
	Middle	25	0	H	V	23.11	33.00	Pass
					H	23.67		
				E1	V	21.28		
					H	21.19		
				E2	V	23.57		
					H	23.07		
	Highest	25	0	H	V	23.40	33.00	Pass
					H	23.40		
				E1	V	23.69		
					H	23.35		
				E2	V	22.60		
					H	22.38		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 41 (10MHz) 16 QAM	Lowest	50	0	H	V	22.25	33.00	Pass
					H	22.41		
				E1	V	22.13		
					H	22.86		
				E2	V	22.71		
					H	23.00		
	Middle	50	0	H	V	23.16	33.00	Pass
					H	22.76		
				E1	V	23.07		
					H	22.09		
				E2	V	22.71		
					H	21.85		
	Highest	50	0	H	V	21.56	33.00	Pass
					H	22.59		
				E1	V	22.55		
					H	22.05		
				E2	V	21.53		
					H	22.33		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 41 (15MHz) 16 QAM	Lowest	75	0	H	V	22.00	33.00	Pass
					H	21.76		
				E1	V	22.05		
					H	22.72		
				E2	V	21.54		
					H	22.54		
	Middle	75	0	H	V	21.54	33.00	Pass
					H	23.31		
				E1	V	21.54		
					H	23.51		
				E2	V	22.19		
					H	21.44		
	Highest	75	0	H	V	23.23	33.00	Pass
					H	21.76		
				E1	V	22.34		
					H	21.40		
				E2	V	22.37		
					H	21.79		

EUT mode	Channel	RB Size	RB Offset	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
LTE Band 41 (20MHz) 16 QAM	Lowest	100	0	H	V	23.29	33.00	Pass
					H	21.83		
				E1	V	22.71		
					H	21.50		
				E2	V	22.24		
					H	23.46		
	Middle	100	0	H	V	21.54	33.00	Pass
					H	22.72		
				E1	V	23.38		
					H	22.88		
				E2	V	21.71		
					H	22.44		
	Highest	100	0	H	V	21.30	33.00	Pass
					H	22.01		
				E1	V	22.78		
					H	23.31		
				E2	V	23.24		
					H	23.23		

4.9 Field strength of spurious radiation measurement

Test Requirement:	FCC part22.913(a), FCC part24.238(a) and FCC part27.53
Test Method:	ANSI C63.26:2015
Limit:	Band 2/4/5/12/17/26:-13dBm Band 7/41:-25dBm
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. $\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$ 5. Compliance with the provisions of part 27 paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Measurement Data:

QPSK Mode:

Test mode:	LTE Band 2(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.53	V	-38.51	-13.00	Pass
5552.22	V	-34.97		
7402.51	V	-32.33		
9253.47	V	-32.12		
11104.39	V	-30.64		
3701.32	H	-38.07	-13.00	Pass
5551.98	H	-33.89		
7402.51	H	-32.30		
9253.11	H	-32.06		
11104.09	H	-29.33		
Test mode:	LTE Band 2(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3759.81	V	-38.11	-13.00	Pass
5639.83	V	-34.71		
7519.60	V	-32.39		
9400.08	V	-32.32		
11279.94	V	-30.16		
3759.75	H	-38.14	-13.00	Pass
5639.66	H	-33.89		
7520.15	H	-32.32		
9399.64	H	-32.19		
11279.69	H	-30.01		
Test mode:	LTE Band 2(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3504.94	V	-38.11	-13.00	Pass
5257.76	V	-35.64		
7010.18	V	-35.66		
8763.02	V	-32.26		
10515.77	V	-29.82		
3505.18	H	-38.76	-13.00	Pass
5257.78	H	-37.19		
7010.01	H	-34.65		
8762.68	H	-33.13		
10515.33	H	-29.55		

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)		
3421.41	V	-38.40	-13.00	Pass
5131.89	V	-34.72		
6842.63	V	-32.37		
8553.62	V	-32.15		
10264.00	V	-30.34		
3421.46	H	-38.14	-13.00	Pass
5132.07	H	-33.72		
6842.52	H	-32.57		
8553.17	H	-32.17		
10263.98	H	-29.50		
Test mode:	LTE Band 4(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3464.64	V	-38.13	-13.00	Pass
5197.46	V	-34.76		
6930.11	V	-32.55		
8662.31	V	-32.01		
10394.93	V	-29.92		
3464.71	H	-38.23	-13.00	Pass
5197.41	H	-34.09		
6929.99	H	-32.50		
8662.10	H	-32.36		
10394.82	H	-29.82		
Test mode:	LTE Band 4(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.52	V	-38.23	-13.00	Pass
5263.03	V	-35.66		
7017.12	V	-35.31		
8771.10	V	-32.58		
10525.63	V	-29.64		
3508.33	H	-38.95	-13.00	Pass
5262.56	H	-37.36		
7017.09	H	-34.98		
8771.45	H	-33.14		
10525.49	H	-29.79		

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)		
1649.08	V	-38.53	-13.00	Pass
2473.86	V	-35.11		
3298.77	V	-32.62		
4123.67	V	-32.40		
4947.82	V	-30.36		
1649.08	H	-38.23	-13.00	Pass
2473.73	H	-33.66		
3298.46	H	-32.50		
4123.46	H	-32.15		
4947.81	H	-29.57		
Test mode:	LTE Band 5(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1672.83	V	-37.88	-13.00	Pass
2509.64	V	-34.92		
3345.63	V	-32.79		
4182.70	V	-32.13		
5018.84	V	-30.11		
1672.92	H	-37.82	-13.00	Pass
2509.65	H	-34.16		
3345.79	H	-32.25		
4182.64	H	-32.36		
5019.02	H	-30.11		
Test mode:	LTE Band 5(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.23	V	-38.15	-13.00	Pass
2544.89	V	-35.74		
3392.96	V	-35.65		
4241.47	V	-32.10		
5089.53	V	-29.89		
1696.31	H	-39.09	-13.00	Pass
2545.09	H	-36.97		
3393.27	H	-34.74		
4241.25	H	-32.84		
5089.63	H	-29.53		

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)		
5004.97	V	-38.31	-25.00	Pass
7507.42	V	-34.92		
10009.77	V	-32.35		
12512.60	V	-32.05		
15014.73	V	-30.35		
5004.97	H	-38.27	-25.00	Pass
7507.47	H	-33.98		
10010.08	H	-32.31		
12512.24	H	-31.88		
15015.14	H	-29.47		
Test mode:	LTE Band 7(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5069.85	V	-37.85	-25.00	Pass
7605.01	V	-34.95		
10139.71	V	-32.66		
12674.72	V	-31.87		
15210.09	V	-29.91		
5069.85	H	-37.83	-25.00	Pass
7604.78	H	-34.02		
10139.73	H	-32.44		
12674.76	H	-32.06		
15209.83	H	-30.19		
Test mode:	LTE Band 7(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5134.84	V	-38.13	-25.00	Pass
7702.14	V	-35.95		
10269.81	V	-35.28		
12837.11	V	-32.50		
15404.84	V	-29.75		
5134.67	H	-39.02	-25.00	Pass
7702.32	H	-37.37		
10269.65	H	-34.56		
12837.13	H	-33.11		
15404.69	H	-29.54		

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.

Test mode:	LTE Band 12(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1399.60	V	-38.35	-13.00	Pass
2098.81	V	-34.80		
2798.56	V	-32.62		
3498.15	V	-32.26		
4198.09	V	-30.48		
1399.39	H	-38.24	-13.00	Pass
2098.87	H	-33.68		
2798.41	H	-32.29		
3498.58	H	-31.81		
4198.02	H	-29.37		
Test mode:	LTE Band 12(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1414.61	V	-38.10	-13.00	Pass
2122.52	V	-34.72		
2830.02	V	-32.65		
3537.51	V	-32.00		
4244.75	V	-30.32		
1414.95	H	-37.88	-13.00	Pass
2122.23	H	-34.32		
2829.68	H	-32.46		
3537.68	H	-31.87		
4245.04	H	-29.99		
Test mode:	LTE Band 12(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1430.68	V	-38.32	-13.00	Pass
2145.90	V	-36.05		
2861.18	V	-35.62		
3576.54	V	-32.15		
4291.73	V	-29.90		
1430.43	H	-38.78	-13.00	Pass
2145.53	H	-37.31		
2861.16	H	-34.57		
3576.30	H	-33.03		
4291.81	H	-29.67		

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)		
1586.55	V	-43.92	-40.00	Pass
770.47	V	-39.34	-35.00	Pass
801.20	V	-38.40	-35.00	Pass
5003.37	V	-34.44	-13.00	Pass
7507.57	V	-31.07		
10009.68	H	-26.79		
12510.76	H	-30.30		
15014.31	H	-28.14		
1585.97	V	-43.94	-40.00	Pass
769.54	V	-39.39	-35.00	Pass
800.60	V	-39.53	-35.00	Pass
5004.92	V	-29.02	-13.00	Pass
7506.96	V	-29.34		
10010.38	H	-31.72		
12510.94	H	-29.64		
15013.71	H	-27.77		
Test mode:	LTE Band 13(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1592.67	V	-42.33	-40.00	Pass
769.82	V	-40.01	-35.00	Pass
801.06	V	-40.06	-35.00	Pass
5070.36	V	-27.87	-13.00	Pass
7604.36	V	-30.67		
10140.35	H	-27.17		
12673.86	H	-27.74		
15208.64	H	-30.40		
1593.15	V	-43.51	-40.00	Pass
769.76	V	-39.02	-35.00	Pass
799.77	V	-39.63	-35.00	Pass
5067.93	V	-29.79	-13.00	Pass
7603.14	V	-28.12		
10139.18	H	-29.61		
12675.51	H	-26.45		
15209.06	H	-28.80		

Test mode:	LTE Band 13(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1578.92	V	-43.16	-40.00	Pass
769.58	V	-37.87	-35.00	Pass
798.76	V	-38.62	-35.00	Pass
5134.73	V	-33.66	-13.00	Pass
7703.07	V	-30.83		
10268.50	H	-29.10		
12837.66	H	-30.95		
15403.87	H	-29.73		
1579.62	V	-45.88	-40.00	Pass
770.24	V	-40.19	-35.00	Pass
800.03	V	-38.27	-35.00	Pass
5135.51	V	-33.22	-13.00	Pass
7702.02	V	-30.57		
10268.16	H	-31.66		
12836.65	H	-27.71		
15404.14	H	-29.88		

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)		
4997.18	V	-38.39	-25.00	Pass
7495.57	V	-35.07		
9993.85	V	-32.44		
12492.25	V	-32.54		
14991.15	V	-30.38		
4996.85	H	-38.07	-25.00	Pass
7495.23	H	-33.53		
9993.87	H	-32.50		
12492.64	H	-31.82		
14990.64	H	-29.30		
Test mode:	LTE Band 41(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5186.16	V	-38.26	-25.00	Pass
7778.99	V	-34.73		
10371.67	V	-32.68		
12964.87	V	-32.06		
15557.66	V	-30.36		
5185.67	H	-38.15	-25.00	Pass
7778.99	H	-34.23		
10372.18	H	-32.09		
12965.14	H	-32.11		
15558.02	H	-29.89		
Test mode:	LTE Band 41(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5374.76	V	-38.55	-25.00	Pass
8062.35	V	-35.89		
10749.76	V	-35.52		
13437.30	V	-32.30		
16125.00	V	-29.55		
5375.02	H	-38.66	-25.00	Pass
8062.60	H	-36.91		
10749.80	H	-34.94		
13437.31	H	-33.10		
16124.90	H	-29.65		

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)		
3701.29	V	-38.14	-13.00	Pass
5552.16	V	-34.76		
7402.97	V	-32.76		
9253.13	V	-32.15		
11103.93	V	-30.25		
3701.13	H	-38.16	-13.00	Pass
5551.84	H	-33.73		
7403.00	H	-32.58		
9253.18	H	-32.03		
11103.89	H	-29.66		
Test mode:	LTE Band 2 (1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.14	V	-37.87	-13.00	Pass
5639.87	V	-34.96		
7519.86	V	-32.82		
9400.19	V	-32.18		
11280.02	V	-30.26		
3759.86	H	-37.97	-13.00	Pass
5639.65	H	-34.21		
7519.67	H	-32.28		
9399.84	H	-32.36		
11279.88	H	-29.97		
Test mode:	LTE Band 2 (1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3818.58	V	-38.12	-13.00	Pass
5727.96	V	-35.97		
7637.19	V	-35.41		
9546.41	V	-32.42		
11455.98	V	-29.91		
3818.46	H	-38.93	-13.00	Pass
5727.57	H	-37.29		
7637.04	H	-34.56		
9546.21	H	-32.75		
11455.81	H	-29.84		

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)		
3421.17	V	-38.46	-13.00	Pass
5132.26	V	-34.79		
6842.76	V	-32.35		
8553.67	V	-32.55		
10264.35	V	-30.46		
3421.13	H	-38.05	-13.00	Pass
5132.07	H	-33.77		
6842.64	H	-32.30		
8553.32	H	-32.08		
10264.31	H	-29.47		
Test mode:	LTE Band 4(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.05	V	-38.00	-13.00	Pass
5197.68	V	-34.80		
6930.13	V	-32.40		
8662.62	V	-32.06		
10394.87	V	-30.28		
3465.08	H	-37.81	-13.00	Pass
5197.58	H	-33.96		
6930.14	H	-32.39		
8662.49	H	-31.90		
10394.95	H	-30.25		
Test mode:	LTE Band 4(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.50	V	-38.49	-13.00	Pass
5262.56	V	-36.02		
7017.31	V	-35.17		
8771.36	V	-32.54		
10525.62	V	-29.67		
3508.71	H	-38.84	-13.00	Pass
5262.58	H	-37.35		
7016.91	H	-34.98		
8771.69	H	-32.98		
10525.60	H	-29.54		

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.

Test mode:	LTE Band 5(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1649.43	V	-38.41	-13.00	Pass
2474.01	V	-34.97		
3298.51	V	-32.32		
4123.12	V	-32.06		
4948.34	V	-30.41		
1649.59	H	-38.22	-13.00	Pass
2474.14	H	-33.88		
3298.81	H	-32.37		
4123.60	H	-32.00		
4948.33	H	-29.45		
Test mode:	LTE Band 5(1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1672.82	V	-38.25	-13.00	Pass
2509.14	V	-35.07		
3346.19	V	-32.50		
4182.19	V	-31.84		
5019.03	V	-30.25		
1672.88	H	-38.20	-13.00	Pass
2509.50	H	-34.17		
3345.95	H	-32.47		
4182.52	H	-32.03		
5018.86	H	-29.78		
Test mode:	LTE Band 5(1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.49	V	-38.54	-13.00	Pass
2544.77	V	-35.91		
3393.26	V	-35.37		
4241.64	V	-32.31		
5089.61	V	-29.70		
1696.32	H	-38.80	-13.00	Pass
2544.80	H	-37.19		
3393.08	H	-34.84		
4241.38	H	-33.05		
5089.59	H	-29.79		

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)		
5004.90	V	-38.52	-25.00	Pass
7507.51	V	-35.05		
10009.84	V	-32.69		
12512.58	V	-32.43		
15014.81	V	-30.27		
5004.62	H	-38.00	-25.00	Pass
7507.37	H	-33.75		
10009.84	H	-32.36		
12512.38	H	-31.86		
15014.75	H	-29.52		
Test mode:	LTE Band 7(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5069.61	V	-37.98	-25.00	Pass
7604.70	V	-34.93		
10139.87	V	-32.67		
12674.73	V	-32.12		
15209.92	V	-29.92		
5069.85	H	-38.25	-25.00	Pass
7604.74	H	-33.95		
10139.77	H	-32.18		
12674.61	H	-32.25		
15210.14	H	-29.87		
Test mode:	LTE Band 7(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.04	V	-38.19	-25.00	Pass
7702.18	V	-35.85		
10270.01	V	-35.35		
12837.41	V	-32.11		
15404.83	V	-29.98		
5134.76	H	-38.75	-25.00	Pass
7702.28	H	-37.31		
10270.08	H	-34.87		
12837.65	H	-33.03		
15405.04	H	-29.58		

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)		
1399.35	V	-38.52	-13.00	Pass
2099.27	V	-34.92		
2798.50	V	-32.57		
3498.27	V	-32.33		
4198.22	V	-30.47		
1399.06	H	-38.21	-13.00	Pass
2099.09	H	-33.66		
2798.88	H	-32.55		
3498.64	H	-32.09		
4197.94	H	-29.31		
Test mode:	LTE Band 12 (1.4MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1414.66	V	-38.18	-13.00	Pass
2122.38	V	-34.67		
2829.66	V	-32.84		
3537.61	V	-32.00		
4244.81	V	-29.92		
1414.90	H	-37.91	-13.00	Pass
2122.55	H	-34.34		
2830.19	H	-32.41		
3537.52	H	-32.35		
4245.05	H	-29.85		
Test mode:	LTE Band 12 (1.4MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1430.32	V	-38.22	-13.00	Pass
2146.08	V	-35.81		
2861.01	V	-35.62		
3576.24	V	-32.47		
4291.62	V	-29.73		
1430.31	H	-38.79	-13.00	Pass
2145.70	H	-37.03		
2861.28	H	-34.86		
3576.52	H	-33.17		
4291.88	H	-29.53		

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)		
1587.34	V	-44.24	-40.00	Pass
771.21	V	-38.43	-35.00	Pass
801.40	V	-39.25	-35.00	Pass
5004.02	V	-33.67	-13.00	Pass
7507.82	V	-31.79		
10008.72	H	-26.37		
12510.33	H	-30.22		
15013.14	H	-29.20		
1585.52	V	-45.00	-40.00	Pass
768.93	V	-39.56	-35.00	Pass
801.11	V	-39.45	-35.00	Pass
5004.25	V	-28.92	-13.00	Pass
7507.31	V	-28.12		
10010.41	H	-31.21		
12510.65	H	-29.32		
15013.16	H	-27.21		
Test mode:	LTE Band 13(5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1591.58	V	-48.55	-40.00	Pass
769.78	V	-38.92	-35.00	Pass
800.82	V	-39.35	-35.00	Pass
5070.06	V	-27.29	-13.00	Pass
7604.55	V	-30.28		
10140.48	H	-26.60		
12675.01	H	-28.04		
15208.07	H	-30.34		
1592.45	V	-44.33	-40.00	Pass
770.27	V	-38.81	-35.00	Pass
800.49	V	-38.78	-35.00	Pass
5069.09	V	-28.88	-13.00	Pass
7604.18	V	-27.74		
10138.91	H	-29.62		
12676.48	H	-27.23		
15209.66	H	-28.24		

Test mode:	LTE Band 13(5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1577.97	V	-44.08	-40.00	Pass
770.50	V	-36.98	-35.00	Pass
797.94	V	-37.56	-35.00	Pass
5134.08	V	-34.73	-13.00	Pass
7702.15	V	-31.16		
10269.22	H	-29.58		
12837.87	H	-31.72		
15403.01	H	-30.97		
1580.33	V	-45.65	-40.00	Pass
769.03	V	-41.07	-35.00	Pass
799.72	V	-38.61	-35.00	Pass
5136.65	V	-32.68	-13.00	Pass
7703.23	V	-31.52		
10268.58	H	-31.96		
12837.02	H	-28.65		
15405.05	H	-30.13		

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)		
4997.11	V	-38.42	-25.00	Pass
7495.17	V	-34.99		
9993.65	V	-32.32		
12492.56	V	-32.07		
14990.78	V	-30.56		
4996.79	H	-37.83	-25.00	Pass
7495.16	H	-33.51		
9993.76	H	-32.28		
12492.60	H	-32.14		
14991.17	H	-29.59		
Test mode:	LTE Band 41 (5MHz)		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5185.94	V	-38.07	-25.00	Pass
7778.89	V	-34.86		
10371.78	V	-32.62		
12964.61	V	-31.92		
15557.80	V	-30.30		
5186.07	H	-38.25	-25.00	Pass
7778.90	H	-34.11		
10371.95	H	-32.08		
12965.03	H	-32.33		
15558.05	H	-30.15		
Test mode:	LTE Band 41 (5MHz)		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5374.97	V	-38.16	-25.00	Pass
8062.31	V	-35.58		
10750.14	V	-35.34		
13437.68	V	-32.16		
16125.11	V	-29.71		
5375.17	H	-38.93	-25.00	Pass
8062.15	H	-37.14		
10749.68	H	-34.67		
13437.67	H	-33.09		
16125.10	H	-29.56		

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)
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

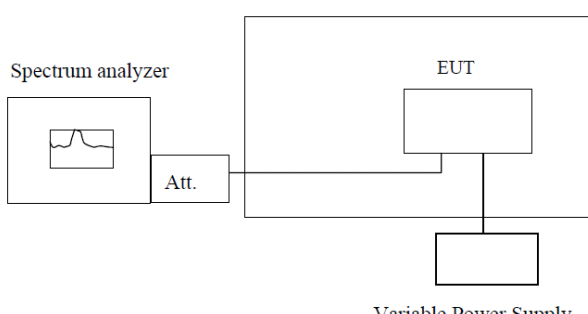
Measurement Data

Reference Frequency: LTE Band 2 Middle channel=18900 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
24	-20	5	0.0027	Within the authorized bands	Pass
	-10	8	0.0043		
	0	6	0.0032		
	10	3	0.0016		
	20	21	0.0112		
	30	13	0.0069		
	40	-3	-0.0016		
	50	-1	-0.0005		
	60	16	0.0085		
Reference Frequency: LTE Band 4 Middle channel=20175 channel=1732.5MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
24	-20	5	0.0029	2.5	Pass
	-10	14	0.0081		
	0	8	0.0046		
	10	-33	-0.0190		
	20	19	0.0110		
	30	8	0.0046		
	40	-7	-0.0040		
	50	4	0.0023		
	60	12	0.0069		
Reference Frequency: LTE Band 5 Middle channel=20175 channel=836.5MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
24	-20	-11	-0.0132	2.5	Pass
	-10	-1	-0.0012		
	0	9	0.0108		
	10	-17	-0.0203		
	20	-7	-0.0084		
	30	-15	-0.0179		
	40	5	0.0060		
	50	-1	-0.0012		
	60	5	0.0060		

Reference Frequency: LTE Band 7 Middle channel=21100 channel=2535MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
24	-20	3	0.0012	Within the authorized bands	Pass
	-10	6	0.0024		
	0	6	0.0024		
	10	9	0.0036		
	20	17	0.0067		
	30	9	0.0036		
	40	3	0.0012		
	50	-3	-0.0012		
	60	12	0.0047		
Reference Frequency: LTE Band 12 Middle channel=23095 channel=707.5MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
24	-20	6	0.0085	2.5	Pass
	-10	13	0.0184		
	0	1	0.0014		
	10	-36	-0.0509		
	20	13	0.0184		
	30	14	0.0198		
	40	-8	-0.0113		
	50	-1	-0.0014		
	60	16	0.0226		
Reference Frequency: LTE Band 13 Middle channel=23230 channel=782MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
24	-20	-10	-0.0128	Within the authorized bands	Pass
	-10	3	0.0038		
	0	7	0.0090		
	10	-14	-0.0179		
	20	-9	-0.0115		
	30	-13	-0.0166		
	40	5	0.0064		
	50	-1	-0.0013		
	60	4	0.0051		

Reference Frequency: LTE Band 41 Middle channel=40620 channel=2593MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
24	-20	6	0.0023	Within the authorized bands	Pass
	-10	7	0.0027		
	0	6	0.0023		
	10	7	0.0027		
	20	15	0.0058		
	30	12	0.0046		
	40	-1	-0.0004		
	50	4	0.0015		
	60	11	0.0042		

4.11 Frequency stability V.S. Voltage measurement

Test Requirement:	FCC Part2.1055(d)(1)(2)
Test Method:	ANSI C63.26:2015
Limit:	2.5ppm Band II & Band VII should be within authorized band.
Test setup:	Temperature Chamber  Variable Power Supply Note : Measurement setup for testing on Antenna connector
Test procedure:	1. Set chamber temperature to 20°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. Manufacturer specified the battery operating end point voltage is 3.6VDC, max voltage is 4.2VDC. 2. If all frequencies stability are comply with the lower limit, then all results can be considered qualified

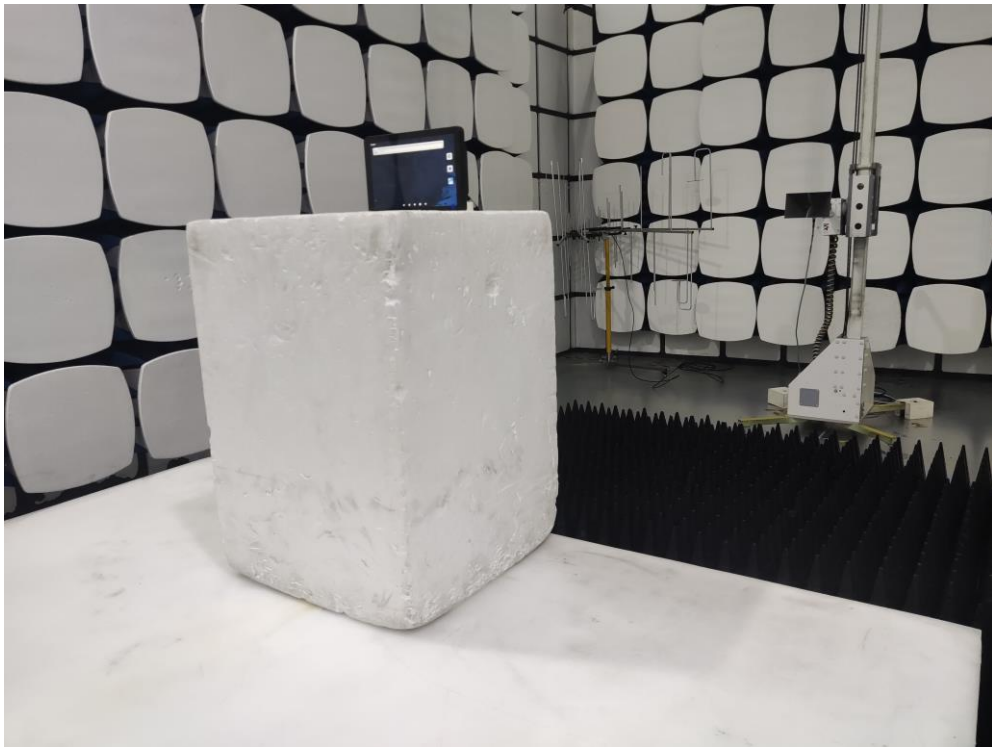
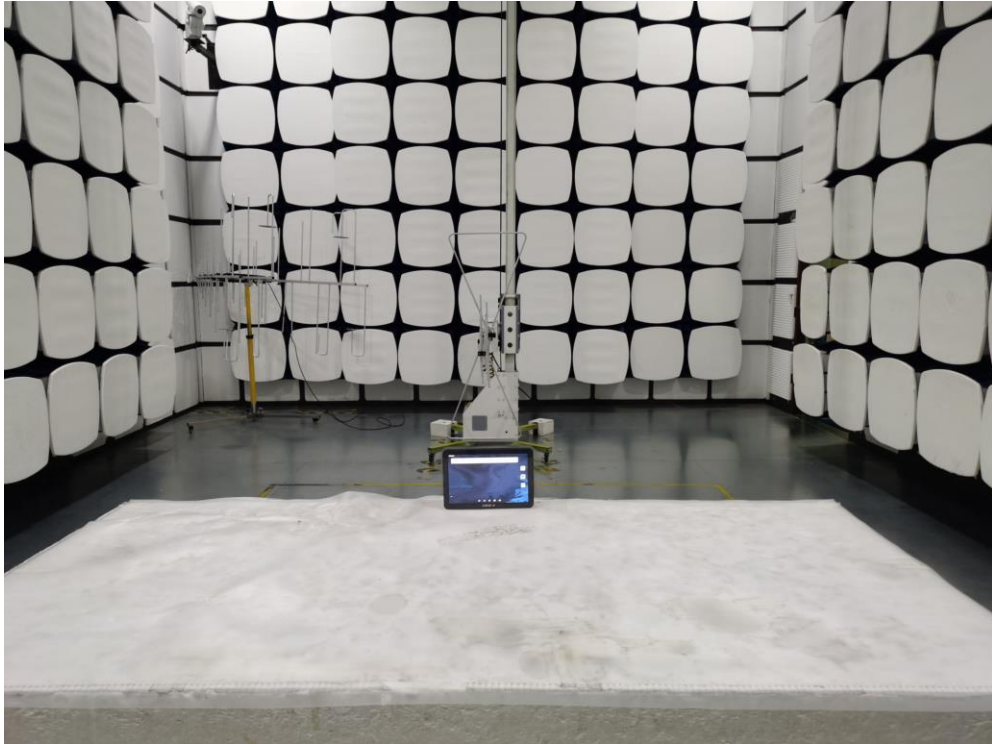
Measurement Data

Reference Frequency: LTE Band 2 Middle channel=18900 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	9	25	0.0133	within authorized band	Pass
	24	-15	-0.0080		
	36	22	0.0117		
Reference Frequency: LTE Band 4 Middle channel=20175 channel=1732.5MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	9	26	0.0150	2.5	Pass
	24	-11	-0.0063		
	36	20	0.0115		
Reference Frequency: LTE Band 5 Middle channel=20175 channel=836.5MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	9	23	0.0266	2.5	Pass
	24	-12	-0.0139		
	36	20	0.0232		
Reference Frequency: LTE Band 7 Middle channel=21100 channel=2535MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	9	16	0.0063	within authorized band	Pass
	24	-6	-0.0024		
	36	21	0.0083		

Reference Frequency: LTE Band 12 Middle channel=23095 channel=707.5MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	9	6	0.0085	2.5	Pass
	24	19	0.0269		
	36	7	0.0099		
Reference Frequency: LTE Band 13 Middle channel=23230 channel=782MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	9	10	0.0128	within authorized band	Pass
	24	7	0.0090		
	36	7	0.0090		
Reference Frequency: LTE Band 41 Middle channel=40620 channel=2593MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	9	-14	-0.0054	within authorized band	Pass
	24	-9	-0.0035		
	36	-14	-0.0054		

4.12 Test Setup Photo

Radiated Emission



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