

FCC CFR47 PART 22H, 24E, 27, 90S CERTIFICATION TEST REPORT

FCC ID: ZSW-30-126

Product: Mobile phone

Trade Mark: Bmobile

Model Number: BL63 PRO

Family Model: N/A

Report No.: S23030902101005

Prepared for

b mobile HK Limited

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Prepared by

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TEST RESULT CERTIFICATION

Applicant's name..... : b mobile HK Limited
Address : Flat 18; 14/F Block 1; Golden Industrial Building;16-26 Kwai Tak Street; Kwai Chung; New Territories; Hong Kong, China
Manufacturer's Name..... : b mobile HK Limited
Address : Flat 18; 14/F Block 1; Golden Industrial Building;16-26 Kwai Tak Street; Kwai Chung; New Territories; Hong Kong, China
Product name : Mobile phone
Model and/or type reference : BL63 PRO
Family Model: N/A
Test sample number S230309021001
Standards..... : FCC CFR 47 Part 22H, Part 24E, Part 27, Part 90S
Test procedure : ANSI C63.46:2015
ANSI/TIA-603-E-2016

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test
Date (s) of performance of tests 10 Mar. 2023 ~ 31 Mar. 2023
Date of Issue 03 Apr. 2023
Test Result..... Pass

Testing Engineer : [Signature]
(Allen Liu)

Authorized Signatory : [Signature]
(Alex Li)

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1. GENERAL INFORMATION

1.1 PRODUCT DESCRIPTION

A major technical description of EUT is described as following:

Product Designation:	Mobile phone
Trade Mark	Bmobile
Model Name	BL63 PRO
Family Model	N/A
Model Difference	N/A
FCC ID:	ZSW-30-126
Frequency Bands:	U.S. Bands: <input checked="" type="checkbox"/> LTE FDD Band 2, 4, 5, 7, 12, 26, 38, 66
Frequency Range:	LTE FDD Band 2 Uplink: 1850MHz-1910MHz, Downlink: 1930MHz-1990MHz; LTE FDD Band 4 Uplink: 1710MHz-1755MHz, Downlink: 2110MHz-2155MHz; LTE FDD Band 5 Uplink: 824MHz-849MHz, Downlink: 869MHz-894MHz; LTE-FDD Band 7 Uplink: 2500MHz-2570MHz, Downlink: 2620MHz-2690MHz; LTE FDD Band 12 Uplink: 699MHz-716MHz, Downlink: 729MHz-746MHz; LTE FDD Band 26 Uplink: 814MHz-849MHz, Downlink: 859MHz-894MHz; TDD Band 38: Uplink & Downlink: 2570 MHz to 2620 MHz LTE FDD Band 66 Uplink: 1710MHz-1780MHz, Downlink: 2110MHz-2200MHz;
Type of Modulation:	QPSK/16QAM
Antenna:	PIFA Antenna
Antenna gain:	B2:-0.8 dBi,B4:-0.8 dBi,B5:-2.3 dBi,B7:0.9 dBi, B12:-2.3 dBi,B26:0.9 dBi, B38:0.86 dBi,B66:-0.8 dBi,
Power Supply:	DC 3.8V/3000mAh from battery or DC 5V from Adapter.
Adapter:	INPUT: AC 100-240V~50-60Hz 0.2A OUTPUT: DC 5.0V---1A
Extreme Vol. Limits:	DC 3.4V to DC 4.2V (Nominal DC 3.8V) (Note 1)
HW Version	Bmobile_BL63Pro_HW_V001
SW Version	Bmobile_BL63Pro_TEM_MX_V001
** Note1: The High Voltage 4.2V and Low Voltage 3.4V was declared by manufacturer, The EUT	

couldn't be operate normally with higher or lower voltage.

1.2 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: ZSW-30-126** filing to comply with the FCC Part 22H&24E &27.

1.3 TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI/TIA-603-E-2016, FCC CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90S ,ANSI C63.46:2015.

1.4 TEST FACILITY

The test site used to collect the radiated data is located at:

ShenZhen NTEK Testing Technology Co., Ltd.

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R.China.

The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.46:2015& ANSI C63.4: 2014.

FCC Registration No.:463705

IC Registration No.:9270A-1,

CNAS Registration No.:L5516

MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.5dB

1.5 SPECIAL ACCESSORIES

The battery and the charger, earphone supplied by the applicant were used as accessories and being tested with EUT intended for FCC grant together.

1.6 WORST-CASE CONFIGURATION AND MODE

The worst-case scenario for all measurements is based on the investigation results.

The device has LTE Bands of: Band 2, Band 4, Band 5, Band 7, Band 26,Band 38, Band 66.

The RB Size was selected to measure for peak or average ERP and EIRP, which was based on the conducted power verification baseline data.

For the fundamental investigation of radiated emissions, the EUT is investigated for vertical and horizontal antenna orientations and X Y and Z orientations of the EUT alone. After the investigations the worst case was determined to be at X orientation for all LTE bands.

1.6 SUMMARY OF TEST RESULTS

FCC Part22, Subpart H/ FCC Part24, Subpart E, FCC Part27, Subpart L, KDB 971168 D01 Power Meas License Digital Systems v03			
FCC Rule	Test Item	Verdict	Remark
2.1046	Conducted Output Power	PASS	
22.913(d) 24.232(d) 27.50(d)(5) KDB 971168 D01 Clause 5.7	Peak-to-Average Ratio	PASS	
2.1049 22.917(b) 24.238(b) KDB 971168 D01 Clause 4.2	Occupied Bandwidth	PASS	
2.1051 22.917(a) 24.238(a) 27.53(c), (g), (h) KDB 971168 D01 Clause 6	Band Edge	PASS	
22.913(a)(2) 27.50(b)(10), (c)(10) KDB 971168 D01 Clause 5.6	Effective Radiated Power	PASS	
24.232(c) 27.50(h)(2), (d)(4) KDB 971168 D01 Clause 5.6	Equivalent Isotropic Radiated Power	PASS	
2.1053 22.917(a) 24.238(a) 27.53(c)(g)(h)(m) KDB 971168 D01 Clause 7	Field Strength of Spurious Radiation	PASS	
2.1055 22.355 24.235 27.54 KDB 971168 D01 Clause 9	Frequency Stability for Temperature & Voltage	PASS	

2.1051 22.917(a) 24.238(a) 27.53(c)(g)(h)(m) KDB 971168 D01 Clause 6	Conducted Emission	PASS	
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Remark:

1. "N/A" denotes test is not applicable in this Test Report.
2. All test items were verified and recorded according to the standards and without any deviation during the test.
3. No modifications are made to the EUT during all test items.

2. SYSTEM TEST CONFIGURATION

2.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

2.2 EUT EXERCISE

The Transmitter was operated in the maximum output power mode through Communication Tester. The TX frequency was fixed which was for the purpose of the measurements.

2.3 CONFIGURATION OF EUT SYSTEM

Table 2-1 Equipment Used in EUT System

Item	Equipment	Model No.	ID or Specification	Note
1	Mobile phone	BL63 PRO	FCC ID: ZSW-30-126	EUT

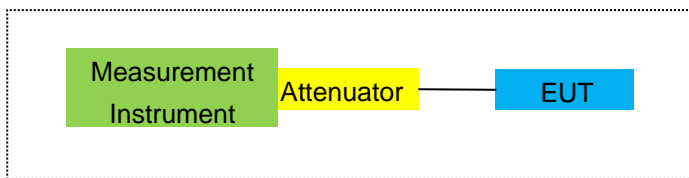
*Note: All the accessories have been used during the test.
the following "EUT" in setup diagram means EUT system.*

2.4 TEST SETUP

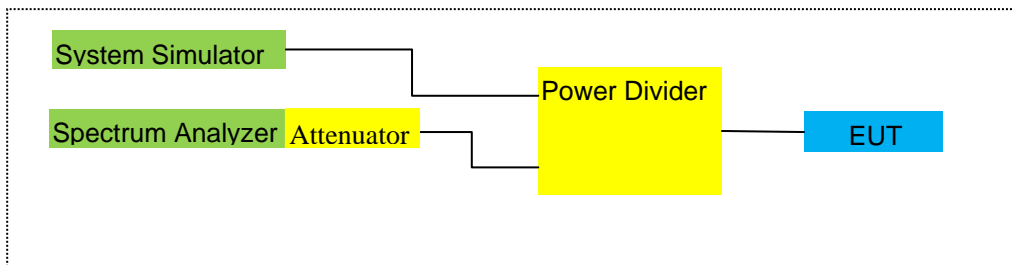
For Radiated Test Cases



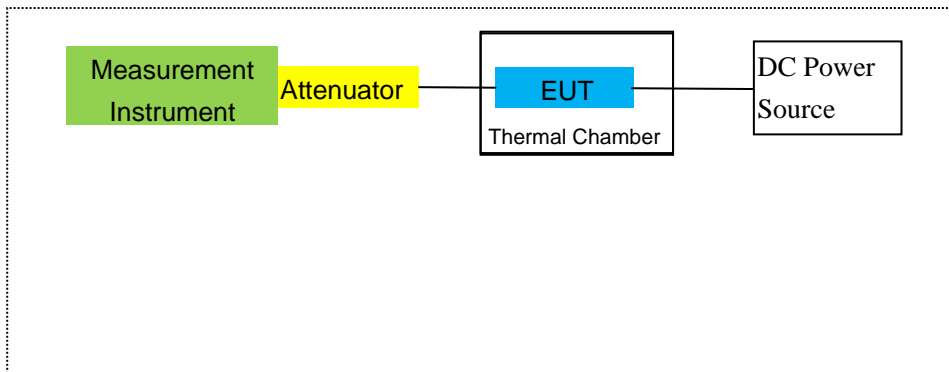
For Conducted Output Power



For Peak-to Average Ratio, Occupied Bandwidth, Conducted Band edge and Conducted Spurious Emission



For Frequency Stability



Note: EUT built-in battery-powered, the battery is fully-charged.

3. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	MXA Signal Analyzer	Agilent	N9020A	MY49100060	2022.04.06	2023.04.05	1 year
2	Test Receiver	R&S	ESPI	101318	2022.04.06	2023.04.05	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2023.02.19	2024.02.18	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2020.05.11	2023.05.10	3 year
5	Horn Antenna	EM	EM-AH-10180	2011071402	2023.02.19	2024.02.18	1 year
6	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2022.06.16	2023.06.15	1 year
7	Amplifier	EM	EM-30180	060538	2022.06.17	2023.06.16	1 year
8	Loop Antenna	ARA	PLA-1030/B	1029	2022.04.06	2023.04.05	1 year
9	Power Meter	R&S	NRVS	100696	2022.06.17	2023.06.16	1 year
10	Power Sensor	R&S	URV5-Z4	0395.1619.05	2022.04.06	2023.04.05	1 year
11	Test Cable	N/A	R-01	N/A	2020.05.11	2023.05.10	3 year
12	Test Cable	N/A	R-02	N/A	2020.05.11	2023.05.10	3 year
13	Test Cable	N/A	R-03	N/A	2022.06.17	2025.06.16	3 year
14	Test Receiver	R&S	ESCI	101160	2022.04.06	2023.04.05	1 year
15	LISN	R&S	ENV216	101313	2022.04.06	2023.04.05	1 year
16	LISN	EMCO	3816/2	00042990	2022.04.06	2023.04.05	1 year
17	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2022.04.06	2023.04.05	1 year
18	Passive Voltage Probe	R&S	ESH2-Z3	100196	2022.04.06	2023.04.05	1 year
19	Test Cable	N/A	C01	N/A	2020.05.11	2023.05.10	3 year
20	Test Cable	N/A	C02	N/A	2020.05.11	2023.05.10	3 year
21	Test Cable	N/A	C03	N/A	2020.05.11	2023.05.10	3 year
22	Attenuator	MCE	24-10-34	BN9258	2022.06.17	2023.06.16	1 year
23	Spectrum Analyzer	agilent	e4440a	us44300399	2022.04.06	2023.04.05	1 year
24	test receiver	R&S	ESCI	a0304218	2022.04.06	2023.04.05	1 year
25	Communication Tester	R&S	CMU200	A0304247	2022.06.17	2023.06.16	1 year

26	Thermal Chamber	Ten Billion	TTC-B3C	TBN-960502	2022.04.06	2023.04.05	1 year
27	DC Power Source	N/A	PS-6005D	2017040292 3	2020.05.11	2023.05.10	3 year
28	PSG Analog Signal Generator	Agilent	E8257D	MY51110112	2022.06.16	2023.06.15	1 year
29	Communication Tester	R&S	CMW500	148500	2022.06.16	2023.06.15	1 year

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable& DC Power Source which is scheduled for calibration every 3 years.

4. OUTPUT POWER

4.1 OUTPUT POWER MEASUREMENT

LTE Measurement Procedure:

All LTE bands conducted power peak and average are obtained from the CMW500 telecommunication test set. The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".3

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4, 10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10, 15, 20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3	13	10	Table 6.2.4-2	Table 6.2.4-2
	6.6.3.3.2				
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23 ¹	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
..					
NS_32	-	-	-	-	-

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

Test data reference attachment.

5. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only

TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The -26dB bandwidth was also measured and recorded.

MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 26
- LTE Band 38
- LTE Band 66

RESULTS

PASS

Test data reference attachment.

6. BANDEDGE AND EMISSION MASK

RULE PART(S)

FCC: §2.1051, §22.917(a), §24.238(a), §27.53(c)(g)(h)(m) and §90.691

FCC: §2.1046, §22.913, §24.232

LIMITS

The minimum permissible attenuation level of any spurious emission is $43 + \log_{10}(P[\text{Watts}])$, where P is the transmitter power in Watts.

The minimum permissible attenuation level for Band 7 is as following.

Per 27.53(g) for operations in the 698-746 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

Per 27.53(c.5) for operations in the 776-788 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

For all plots showing emissions in the 763 – 775MHz and 793 – 805MHz band, the FCC limit per 27.53(c.4) is $65 + 10\log_{10}(P) = -35\text{dBm}$ in a 6.25kHz bandwidth.

Per 27.53(m) for operations in the BRS/EBS bands, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth.

TEST PROCEDURE

The transmitter output was connected to a CMW500 Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

For each band edge measurement:

Set the spectrum analyzer span to include the block edge frequency

Set a marker to point the corresponding band edge frequency in each test case.

Set display line

Set resolution bandwidth to at least 1% of emission bandwidth.

MODES TESTED

- LTE Band 2/4/5/7/12/26/38/66

RESULTS

Test data reference attachment.

Note: Both QPSK and 16QAM has been tested, the worst case is QPSK mode, the report just reported the worst case.

7. OUT OF BAND EMISSIONS

RULE PART(S)

FCC: §2.1051, §22.917(a), §24.238(a), §27.53(c)(g)(h)(m) and §90.691

LIMITS

The minimum permissible attenuation level of any spurious emission is $43 + \log_{10}(P[\text{Watts}])$, where P is the transmitter power in Watts.

The minimum permissible attenuation level for Band 7 is as following.

Per 27.53(g) for operations in the 698-746 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

Per 27.53(c.5) for operations in the 776-788 MHz band, in the 100 kHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit.

For all plots showing emissions in the 763 – 775MHz and 793 – 805MHz band, the FCC limit per 27.53(c.4) is $65 + 10\log_{10}(P) = -35\text{dBm}$ in a 6.25kHz bandwidth.

Per 27.53(m) for operations in the BRS/EBS bands, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth.

TEST PROCEDURE

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

- Set display line
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 26
- LTE Band 38

LTE Band 66

7.1 MEASUREMENT METHOD

The test set up and general procedure is similar to conducted peak output power test. Only different for setting the measurement configuration of the measuring instrument of Spectrum Analyzer.

Test data reference attachment.

Note: Both QPSK and 16QAM has been tested, the worst case is QPSK mode, the report just reported the worst case.

8. RADIATED MEASUREMENT

8.1. RADIATED POWER (ERP & EIRP)

RULE PART(S)

FCC: §2.1046, §22.913(a)(2), §24.232(c) and §27.50 (h)(2), (b)(10), (c)(10), (d)(4) and §90.635

LIMITS:

22.913(a) (2)- The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.
24.232 (c) Mobile and portable stations are limited to 2 watts EIRP.
27.50 (c) (10) the following power and antenna height requirements apply to stations transmitting in the 698–746 MHz band, the portable stations (hand-held devices) are limited to 3 watts ERP.
27.50 (b)(10) Portable stations (hand-held devices) transmitting in the 746–757 MHz, 758–763 MHz, 776–793 MHz, and 805–806 MHz bands are limited to 3 watts ERP.
27.50 (d)(4) The following power and antenna height requirements apply to stations transmitting in the 1710–1755 MHz and 2110–2155 MHz bands: Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP.
27.50 (h)(2) Mobile and other user stations in the 2500–2570 MHz and 2620–2690 MHz bands. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

TEST PROCEDURE

ANSI/TIA-603-E Clause 2.2.17

KDB 971168 v02r01 RF power output using broadband peak and average power meter method.

KDB 971168 D01 Power Meas License Digital Systems v02r01, “Measurement Guidance for Certification of Licensed Digital Transmitters”

MODES TESTED

- ☐ LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 26
- LTE Band 38
- LTE Band 66

RESULTS

Pass

8.2 LTE BAND 2

Radiated Power (EIRP) for Band 2									
Mode	RB/RB SIZE	Frequency	Result						Conclusion
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP	
1.4MHz Band QPSK	1/#Mid	1850.7	-2.56	3.76	28.24	21.92	155.597	Horizontal	Pass
		1880	-2.37	3.91	28.22	21.94	156.315	Horizontal	Pass
		1909.3	-2.28	3.93	28.20	21.99	158.125	Horizontal	Pass
3.0MHz Band QPSK	1/#Mid	1851.5	-2.62	3.77	28.23	21.84	152.757	Horizontal	Pass
		1880	-2.47	3.91	28.24	21.86	153.462	Horizontal	Pass
		1908.5	-2.34	3.94	28.25	21.97	157.398	Horizontal	Pass
5.0MHz Band QPSK	1/#Mid	1852.5	-2.51	3.77	28.31	22.03	159.588	Horizontal	Pass
		1880	-2.13	3.91	28.22	22.18	165.196	Horizontal	Pass
		1907.5	-2.06	3.94	28.20	22.20	165.959	Horizontal	Pass
10.0MHz Band QPSK	1/#Mid	1855	-2.37	3.79	28.33	22.17	164.816	Horizontal	Pass
		1880	-2.07	3.95	28.22	22.20	165.959	Horizontal	Pass
		1905	-1.96	3.97	28.19	22.26	168.267	Horizontal	Pass
15.0MHz Band QPSK	1/#Mid	1857.5	-2.33	3.79	28.34	22.22	166.725	Horizontal	Pass
		1880	-2.12	3.95	28.22	22.15	164.059	Horizontal	Pass
		1902.5	-1.98	3.97	28.18	22.23	167.109	Horizontal	Pass
20.0MHz Band QPSK	1/#Mid	1860	-2.32	3.81	28.35	22.22	166.725	Horizontal	Pass
		1880	-1.99	3.96	28.22	22.27	168.655	Horizontal	Pass
		1900	-1.93	4.00	28.16	22.23	167.109	Horizontal	Pass
1.4MHz Band QPSK	1/#Mid	1850.7	-3.35	3.76	28.24	21.13	129.718	Vertical	Pass
		1880	-3.23	3.91	28.22	21.08	128.233	Vertical	Pass
		1909.3	-2.69	3.93	28.20	21.58	143.880	Vertical	Pass
3.0MHz Band QPSK	1/#Mid	1851.5	-3.74	3.77	28.23	20.72	118.032	Vertical	Pass
		1880	-3.64	3.91	28.24	20.69	117.220	Vertical	Pass
		1908.5	-2.70	3.94	28.25	21.61	144.877	Vertical	Pass
5.0MHz Band QPSK	1/#Mid	1852.5	-2.93	3.77	28.31	21.61	144.877	Vertical	Pass
		1880	-2.83	3.91	28.22	21.48	140.605	Vertical	Pass
		1907.5	-3.32	3.94	28.20	20.94	124.165	Vertical	Pass
10.0MHz Band	1/#Mid	1855	-3.44	3.79	28.33	21.10	128.825	Vertical	Pass
		1880	-2.72	3.95	28.22	21.55	142.889	Vertical	Pass

QPSK		1905	-3.41	3.97	28.19	20.81	120.504	Vertical	Pass
15.0MHz	1/#Mid	1857.5	-3.11	3.79	28.34	21.44	139.316	Vertical	Pass
Band		1880	-3.36	3.95	28.22	20.91	123.310	Vertical	Pass
QPSK		1902.5	-3.10	3.97	28.18	21.11	129.122	Vertical	Pass
20.0MHz	1/#Mid	1860	-3.39	3.81	28.35	21.15	130.317	Vertical	Pass
Band		1880	-3.15	3.96	28.22	21.11	129.122	Vertical	Pass
QPSK		1900	-3.33	4.00	28.16	20.83	121.060	Vertical	Pass

Note:

SG Level= Signal generator output

Max. EIRP Average (dBm)= Factor Gain(dB) + SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

Radiated Power (EIRP) for Band 2										
Mode	RB/RB SIZE	Frequency	Result						Conclusion	
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP	Max. EIRP	Polarization Of Max. ERP		
						Average (dBm)	Average			Average
							(mW)			
1.4MHz Band 16 QAM	1/#Mid	1850.7	-3.68	3.76	28.24	20.80	120.226	Horizontal	Pass	
		1880	-3.15	3.91	28.22	21.16	130.617	Horizontal	Pass	
		1909.3	-3.08	3.93	28.20	21.19	131.522	Horizontal	Pass	
3.0MHz Band 16 QAM	1/#Mid	1851.5	-3.18	3.77	28.23	21.28	134.276	Horizontal	Pass	
		1880	-3.26	3.91	28.24	21.07	127.938	Horizontal	Pass	
		1908.5	-3.47	3.94	28.25	20.84	121.339	Horizontal	Pass	
5.0MHz Band 16 QAM	1/#Mid	1852.5	-3.12	3.77	28.31	21.42	138.676	Horizontal	Pass	
		1880	-3.03	3.91	28.22	21.28	134.276	Horizontal	Pass	
		1907.5	-2.71	3.94	28.20	21.55	142.889	Horizontal	Pass	
10.0MHz Band 16 QAM	1/#Mid	1855	-3.17	3.79	28.33	21.37	137.088	Horizontal	Pass	
		1880	-3.16	3.95	28.22	21.11	129.122	Horizontal	Pass	
		1905	-2.63	3.97	28.19	21.59	144.212	Horizontal	Pass	
15.0MHz Band 16 QAM	1/#Mid	1857.5	-3.15	3.79	28.34	21.40	138.038	Horizontal	Pass	
		1880	-2.94	3.95	28.22	21.33	135.831	Horizontal	Pass	
		1902.5	-2.90	3.97	28.18	21.31	135.207	Horizontal	Pass	
20.0MHz Band 16 QAM	1/#Mid	1860	-3.04	3.81	28.35	21.50	141.254	Horizontal	Pass	
		1880	-2.74	3.96	28.22	21.52	141.906	Horizontal	Pass	
		1900	-2.56	4.00	28.16	21.60	144.544	Horizontal	Pass	
1.4MHz Band 16 QAM	1/#Mid	1850.7	-4.15	3.76	28.24	20.33	107.895	Vertical	Pass	
		1880	-3.77	3.91	28.22	20.54	113.240	Vertical	Pass	
		1909.3	-3.63	3.93	28.20	20.64	115.878	Vertical	Pass	
3.0MHz Band 16 QAM	1/#Mid	1851.5	-3.85	3.77	28.23	20.61	115.080	Vertical	Pass	
		1880	-3.97	3.91	28.24	20.36	108.643	Vertical	Pass	
		1908.5	-3.93	3.94	28.25	20.38	109.144	Vertical	Pass	
5.0MHz Band 16 QAM	1/#Mid	1852.5	-4.78	3.77	28.31	19.76	94.624	Vertical	Pass	
		1880	-4.03	3.91	28.22	20.28	106.660	Vertical	Pass	
		1907.5	-3.90	3.94	28.20	20.36	108.643	Vertical	Pass	
10.0MHz Band 16 QAM	1/#Mid	1855	-4.54	3.79	28.33	20.00	100.000	Vertical	Pass	
		1880	-4.62	3.95	28.22	19.65	92.257	Vertical	Pass	
		1905	-3.74	3.97	28.19	20.48	111.686	Vertical	Pass	
15.0MHz Band 16 QAM	1/#Mid	1857.5	-4.73	3.79	28.34	19.82	95.940	Vertical	Pass	
		1880	-4.28	3.95	28.22	19.99	99.770	Vertical	Pass	
		1902.5	-4.16	3.97	28.18	20.05	101.158	Vertical	Pass	

20.0MHz		1860	-4.35	3.81	28.35	20.19	104.472	Vertical	Pass
Band 16	1/#Mid	1880	-4.10	3.96	28.22	20.16	103.753	Vertical	Pass
QAM		1900	-4.51	4.00	28.16	19.65	92.257	Vertical	Pass

Note:

SG Level= Signal generator output

Max. EIRP Average (dBm)= Factor Gain (dB) + SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

8.3 LTE BAND 4

Radiated Power (EIRP) for Band 4									
Mode	RB/RB SIZE	Frequency	Result						Conclusion
			SG Level	Cable Loss	Antenna Factor	Max. EIRP	Max. EIRP	Polarization	
			(dBm)	(dBm)	(dB)	Average	Average	Of Max. ERP	
						(dBm)	(mW)		
1.4MHz Band QPSK	1/#Mid	1710.7	-2.47	3.12	27.58	21.99	158.125	Horizontal	Pass
		1732.5	-2.46	3.27	27.61	21.88	154.170	Horizontal	Pass
		1754.3	-2.44	3.29	27.63	21.90	154.882	Horizontal	Pass
3.0MHz Band QPSK	1/#Mid	1711.5	-2.64	3.13	27.61	21.84	152.757	Horizontal	Pass
		1732.5	-2.56	3.27	27.61	21.78	150.661	Horizontal	Pass
		1753.5	-2.48	3.30	27.62	21.84	152.757	Horizontal	Pass
5.0MHz Band QPSK	1/#Mid	1712.5	-2.41	3.13	27.63	22.09	161.808	Horizontal	Pass
		1732.5	-2.31	3.27	27.61	22.03	159.588	Horizontal	Pass
		1752.5	-2.19	3.30	27.60	22.11	162.555	Horizontal	Pass
10.0MHz Band QPSK	1/#Mid	1715	-2.35	3.15	27.64	22.14	163.682	Horizontal	Pass
		1732.5	-2.12	3.31	27.61	22.18	165.196	Horizontal	Pass
		1750	-2.14	3.33	27.59	22.12	162.930	Horizontal	Pass
15.0MHz Band QPSK	1/#Mid	1717.5	-2.36	3.15	27.65	22.14	163.682	Horizontal	Pass
		1732.5	-2.20	3.31	27.61	22.10	162.181	Horizontal	Pass
		1747.5	-2.14	3.33	27.57	22.10	162.181	Horizontal	Pass
20.0MHz Band QPSK	1/#Mid	1720	-2.30	3.17	27.66	22.19	165.577	Horizontal	Pass
		1732.5	-2.13	3.32	27.61	22.16	164.437	Horizontal	Pass
		1745	-2.07	3.36	27.56	22.13	163.305	Horizontal	Pass
1.4MHz Band QPSK	1/#Mid	1710.7	-3.29	3.12	27.58	21.17	130.918	Vertical	Pass
		1732.5	-3.29	3.27	27.61	21.05	127.350	Vertical	Pass
		1754.3	-3.43	3.29	27.63	20.91	123.310	Vertical	Pass
3.0MHz Band QPSK	1/#Mid	1711.5	-3.57	3.13	27.61	20.91	123.310	Vertical	Pass
		1732.5	-3.08	3.27	27.61	21.26	133.660	Vertical	Pass
		1753.5	-3.39	3.30	27.62	20.93	123.880	Vertical	Pass
5.0MHz Band QPSK	1/#Mid	1712.5	-3.70	3.13	27.63	20.80	120.226	Vertical	Pass
		1732.5	-3.67	3.27	27.61	20.67	116.681	Vertical	Pass
		1752.5	-3.60	3.30	27.60	20.70	117.490	Vertical	Pass
10.0MHz Band QPSK	1/#Mid	1715	-3.85	3.15	27.64	20.64	115.878	Vertical	Pass
		1732.5	-3.11	3.31	27.61	21.19	131.522	Vertical	Pass
		1750	-3.20	3.33	27.59	21.06	127.644	Vertical	Pass

15.0MHz		1717.5	-3.40	3.15	27.65	21.10	128.825	Vertical	Pass
Band	1/#Mid	1732.5	-3.49	3.31	27.61	20.81	120.504	Vertical	Pass
QPSK		1747.5	-3.37	3.33	27.57	20.87	122.180	Vertical	Pass
20.0MHz		1720	-3.65	3.17	27.66	20.84	121.339	Vertical	Pass
Band	1/#Mid	1732.5	-3.26	3.32	27.61	21.03	126.765	Vertical	Pass
QPSK		1745	-3.21	3.36	27.56	20.99	125.603	Vertical	Pass

Note:

SG Level= Signal generator output

Max. EIRP Average (dBm)= Factor Gain (dB)+ SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

Radiated Power (EIRP) for Band 4									
Mode	RB/RB SIZE	Frequency	Result						Conclusion
			SG Level	Cable Loss	Antenna Factor	Max. EIRP	Max. EIRP	Polarization	
			(dBm)	(dBm)	(dB)	Average	Average	Of Max. ERP	
						(dBm)	(mW)		
1.4MHz Band 16 QAM	1/#Mid	1710.7	-3.28	3.12	27.58	21.18	131.220	Horizontal	Pass
		1732.5	-3.13	3.27	27.61	21.21	132.130	Horizontal	Pass
		1754.3	-3.13	3.29	27.63	21.21	132.130	Horizontal	Pass
3.0MHz Band 16 QAM	1/#Mid	1711.5	-3.22	3.13	27.61	21.26	133.660	Horizontal	Pass
		1732.5	-3.35	3.27	27.61	20.99	125.603	Horizontal	Pass
		1753.5	-3.57	3.30	27.62	20.75	118.850	Horizontal	Pass
5.0MHz Band 16 QAM	1/#Mid	1712.5	-3.05	3.13	27.63	21.45	139.637	Horizontal	Pass
		1732.5	-3.01	3.27	27.61	21.33	135.831	Horizontal	Pass
		1752.5	-2.70	3.30	27.60	21.60	144.544	Horizontal	Pass
10.0MHz Band 16 QAM	1/#Mid	1715	-3.12	3.15	27.64	21.37	137.088	Horizontal	Pass
		1732.5	-3.31	3.31	27.61	20.99	125.603	Horizontal	Pass
		1750	-2.69	3.33	27.59	21.57	143.549	Horizontal	Pass
15.0MHz Band 16 QAM	1/#Mid	1717.5	-2.92	3.15	27.65	21.58	143.880	Horizontal	Pass
		1732.5	-2.98	3.31	27.61	21.32	135.519	Horizontal	Pass
		1747.5	-3.00	3.33	27.57	21.24	133.045	Horizontal	Pass
20.0MHz Band 16 QAM	1/#Mid	1720	-2.87	3.17	27.66	21.62	145.211	Horizontal	Pass
		1732.5	-2.88	3.32	27.61	21.41	138.357	Horizontal	Pass
		1745	-2.69	3.36	27.56	21.51	141.579	Horizontal	Pass
1.4MHz Band 16 QAM	1/#Mid	1710.7	-3.83	3.12	27.58	20.63	115.611	Vertical	Pass
		1732.5	-3.90	3.27	27.61	20.44	110.662	Vertical	Pass
		1754.3	-3.79	3.29	27.63	20.55	113.501	Vertical	Pass
3.0MHz Band 16 QAM	1/#Mid	1711.5	-4.28	3.13	27.61	20.20	104.713	Vertical	Pass
		1732.5	-4.51	3.27	27.61	19.83	96.161	Vertical	Pass
		1753.5	-4.52	3.30	27.62	19.80	95.499	Vertical	Pass
5.0MHz Band 16 QAM	1/#Mid	1712.5	-4.71	3.13	27.63	19.79	95.280	Vertical	Pass
		1732.5	-4.37	3.27	27.61	19.97	99.312	Vertical	Pass
		1752.5	-3.73	3.30	27.60	20.57	114.025	Vertical	Pass
10.0MHz Band 16 QAM	1/#Mid	1715	-4.21	3.15	27.64	20.28	106.660	Vertical	Pass
		1732.5	-4.51	3.31	27.61	19.79	95.280	Vertical	Pass
		1750	-3.92	3.33	27.59	20.34	108.143	Vertical	Pass
15.0MHz Band 16 QAM	1/#Mid	1717.5	-4.65	3.15	27.65	19.85	96.605	Vertical	Pass
		1732.5	-4.59	3.31	27.61	19.71	93.541	Vertical	Pass
		1747.5	-4.33	3.33	27.57	19.91	97.949	Vertical	Pass

20.0MHz		1720	-4.83	3.17	27.66	19.66	92.470	Vertical	Pass
Band 16	1/#Mid	1732.5	-3.91	3.32	27.61	20.38	109.144	Vertical	Pass
QAM		1745	-3.72	3.36	27.56	20.48	111.686	Vertical	Pass

Note:

SG Level= Signal generator output

Max. EIRP Average (dBm)= Factor Gain (dB)+ SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

8.4 LTE BAND 5

Radiated Power (ERP) for Band 5											
Mode	RB/RB SIZE	Frequency	Result							Polarization	Conclusion
			SG Level	Cable Loss	Antenna Factor	Correction	Max. EIRP	Max. EIRP	Of Max. ERP		
			(dBm)	(dBm)	(dB)	(dB)	Average	Average	ERP		
							(dBm)	(mW)			
1.4MHz Band QPSK	3/#Mid	824.7	6.83	2.01	19.68	2.15	22.35	171.791	Horizontal	Pass	
		836.5	6.71	2.01	19.77	2.15	22.32	170.608	Horizontal	Pass	
		848.3	6.51	2.02	19.82	2.15	22.16	164.437	Horizontal	Pass	
3.0MHz Band QPSK	1/#Mid	825.5	6.60	2.01	19.70	2.15	22.14	163.682	Horizontal	Pass	
		836.5	6.50	2.01	19.77	2.15	22.11	162.555	Horizontal	Pass	
		847.5	6.37	2.02	19.81	2.15	22.01	158.855	Horizontal	Pass	
5.0MHz Band QPSK	1/#Mid	826.5	6.88	2.01	19.71	2.15	22.43	174.985	Horizontal	Pass	
		836.5	6.76	2.01	19.77	2.15	22.37	172.584	Horizontal	Pass	
		846.5	6.60	2.02	19.79	2.15	22.22	166.725	Horizontal	Pass	
10.0MHz Band QPSK	1/#Mid	829	6.90	2.01	19.73	2.15	22.47	176.604	Horizontal	Pass	
		836.5	6.85	2.01	19.77	2.15	22.46	176.198	Horizontal	Pass	
		844	6.75	2.02	19.78	2.15	22.36	172.187	Horizontal	Pass	
1.4MHz Band QPSK	1/#Mid	824.7	5.27	2.01	19.68	2.15	20.79	119.950	Vertical	Pass	
		836.5	5.97	2.01	19.77	2.15	21.58	143.880	Vertical	Pass	
		848.3	5.49	2.02	19.82	2.15	21.14	130.017	Vertical	Pass	
3.0MHz Band QPSK	1/#Mid	825.5	5.54	2.01	19.70	2.15	21.08	128.233	Vertical	Pass	
		836.5	5.80	2.01	19.77	2.15	21.41	138.357	Vertical	Pass	
		847.5	5.80	2.02	19.81	2.15	21.44	139.316	Vertical	Pass	
5.0MHz Band QPSK	1/#Mid	826.5	5.62	2.01	19.71	2.15	21.17	130.918	Vertical	Pass	
		836.5	5.06	2.01	19.77	2.15	20.67	116.681	Vertical	Pass	
		846.5	5.99	2.02	19.79	2.15	21.61	144.877	Vertical	Pass	
10.0MHz Band QPSK	1/#Mid	829	5.83	2.01	19.73	2.15	21.40	138.038	Vertical	Pass	
		836.5	5.97	2.01	19.77	2.15	21.58	143.880	Vertical	Pass	
		844	5.65	2.02	19.78	2.15	21.26	133.660	Vertical	Pass	

Radiated Power (ERP) for Band 5

Radiated Power (ERP) for Band 5											
Mode	RB/RB SIZE	Frequency	Result							Polarization Of Max. ERP	Conclusion
			SG Level	Cable Loss	Antenna Factor	Correction	Max. EIRP	Max. EIRP			
			(dBm)	(dBm)	(dB)	(dB)	Average	Average			
							(dBm)	(mW)			
1.4MHz Band 16 QAM	3/#Mid	824.7	5.98	2.01	19.68	2.15	21.50	141.254	Horizontal	Pass	
		836.5	5.91	2.01	19.77	2.15	21.52	141.906	Horizontal	Pass	
		848.3	5.75	2.02	19.82	2.15	21.40	138.038	Horizontal	Pass	
3.0MHz Band 16 QAM	1/#Mid	825.5	6.06	2.01	19.70	2.15	21.60	144.544	Horizontal	Pass	
		836.5	5.77	2.01	19.77	2.15	21.38	137.404	Horizontal	Pass	
		847.5	5.25	2.02	19.81	2.15	20.89	122.744	Horizontal	Pass	
5.0MHz Band 16 QAM	1/#Mid	826.5	6.38	2.01	19.71	2.15	21.93	155.955	Horizontal	Pass	
		836.5	6.15	2.01	19.77	2.15	21.76	149.968	Horizontal	Pass	
		846.5	5.90	2.02	19.79	2.15	21.52	141.906	Horizontal	Pass	
10.0MHz Band 16 QAM	1/#Mid	829	6.38	2.01	19.73	2.15	21.95	156.675	Horizontal	Pass	
		836.5	6.10	2.01	19.77	2.15	21.71	148.252	Horizontal	Pass	
		844	5.64	2.02	19.78	2.15	21.25	133.352	Horizontal	Pass	
1.4MHz Band 16 QAM	1/#Mid	824.7	4.94	2.01	19.68	2.15	20.46	111.173	Vertical	Pass	
		836.5	4.59	2.01	19.77	2.15	20.20	104.713	Vertical	Pass	
		848.3	5.77	2.02	19.82	2.15	21.42	138.676	Vertical	Pass	
3.0MHz Band 16 QAM	1/#Mid	825.5	5.19	2.01	19.70	2.15	20.73	118.304	Vertical	Pass	
		836.5	4.80	2.01	19.77	2.15	20.41	109.901	Vertical	Pass	
		847.5	4.73	2.02	19.81	2.15	20.37	108.893	Vertical	Pass	
5.0MHz Band 16 QAM	1/#Mid	826.5	4.99	2.01	19.71	2.15	20.54	113.240	Vertical	Pass	
		836.5	5.09	2.01	19.77	2.15	20.70	117.490	Vertical	Pass	
		846.5	4.25	2.02	19.79	2.15	19.87	97.051	Vertical	Pass	
10.0MHz Band 16 QAM	1/#Mid	829	5.72	2.01	19.73	2.15	21.29	134.586	Vertical	Pass	
		836.5	5.77	2.01	19.77	2.15	21.38	137.404	Vertical	Pass	
		844	4.77	2.02	19.78	2.15	20.38	109.144	Vertical	Pass	

Note:

ERP=EIRP-2.15

SG Level= Signal generator output

Max. EIRP Average (dBm)= Factor Gain (dB)+ SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

8.5 LTE BAND 7

Radiated Power (EIRP) for Band 7									
Mode	RB/RB SIZE	Frequency	Result						Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP	Max. EIRP	Polarization Of Max. ERP	
			(dBm)			Average	Average		
						(dBm)	(mW)		
5.0MHz Band QPSK	1/#Mid	2502.5	-0.75	4.54	27.75	22.46	176.198	Horizontal	Pass
		2535	-0.58	4.69	27.72	22.45	175.792	Horizontal	Pass
		2567.5	-0.51	4.71	27.71	22.49	177.419	Horizontal	Pass
10.0MHz Band QPSK	1/#Mid	2505	-0.68	4.55	27.76	22.53	179.061	Horizontal	Pass
		2535	-0.49	4.69	27.72	22.54	179.473	Horizontal	Pass
		2565	-0.41	4.72	27.70	22.57	180.717	Horizontal	Pass
15.0MHz Band QPSK	1/#Mid	2507.5	-0.69	4.55	27.77	22.53	179.061	Horizontal	Pass
		2535	-0.55	4.69	27.72	22.48	177.011	Horizontal	Pass
		2562.5	-0.45	4.72	27.69	22.52	178.649	Horizontal	Pass
20.0MHz Band QPSK	1/#Mid	2510	-0.63	4.57	27.78	22.58	181.134	Horizontal	Pass
		2535	-0.45	4.73	27.72	22.54	179.473	Horizontal	Pass
		2560	-0.41	4.75	27.68	22.52	178.649	Horizontal	Pass
5.0MHz Band QPSK	1/#Mid	2502.5	-2.13	4.54	27.75	21.08	128.233	Vertical	Pass
		2535	-1.91	4.69	27.72	21.12	129.420	Vertical	Pass
		2567.5	-1.92	4.71	27.71	21.08	128.233	Vertical	Pass
10.0MHz Band QPSK	1/#Mid	2505	-2.19	4.55	27.76	21.02	126.474	Vertical	Pass
		2535	-1.87	4.69	27.72	21.16	130.617	Vertical	Pass
		2565	-1.60	4.72	27.70	21.38	137.404	Vertical	Pass
15.0MHz Band QPSK	1/#Mid	2507.5	-2.32	4.55	27.77	20.90	123.027	Vertical	Pass
		2535	-1.91	4.69	27.72	21.12	129.420	Vertical	Pass
		2562.5	-1.35	4.72	27.69	21.62	145.211	Vertical	Pass
20.0MHz Band QPSK	1/#Mid	2510	-1.70	4.57	27.78	21.51	141.579	Vertical	Pass
		2535	-1.90	4.73	27.72	21.09	128.529	Vertical	Pass
		2560	-1.93	4.75	27.68	21.00	125.893	Vertical	Pass

Radiated Power (EIRP) for Band 7									
Mode	RB/RB SIZE	Frequency	Result						Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP	Max. EIRP	Polarization Of Max. ERP	
			(dBm)			Average	Average		
						(dBm)	(mW)		
5.0MHz Band 16 QAM	1#Mid	2502.5	-1.44	4.54	27.75	21.77	150.314	Horizontal	Pass
		2535	-1.13	4.69	27.72	21.90	154.882	Horizontal	Pass
		2567.5	-1.21	4.71	27.71	21.79	151.008	Horizontal	Pass
10.0MHz Band 16 QAM	1#Mid	2505	-1.33	4.55	27.76	21.88	154.170	Horizontal	Pass
		2535	-1.34	4.69	27.72	21.69	147.571	Horizontal	Pass
		2565	-1.61	4.72	27.70	21.37	137.088	Horizontal	Pass
15.0MHz Band 16 QAM	1#Mid	2507.5	-1.51	4.55	27.77	21.71	148.252	Horizontal	Pass
		2535	-1.48	4.69	27.72	21.55	142.889	Horizontal	Pass
		2562.5	-1.09	4.72	27.69	21.88	154.170	Horizontal	Pass
20.0MHz Band 16 QAM	1#Mid	2510	-1.39	4.57	27.78	21.82	152.055	Horizontal	Pass
		2535	-1.06	4.73	27.72	21.93	155.955	Horizontal	Pass
		2560	-1.16	4.75	27.68	21.77	150.314	Horizontal	Pass
5.0MHz Band 16 QAM	1#Mid	2502.5	-3.49	4.54	27.75	19.72	93.756	Vertical	Pass
		2535	-2.69	4.69	27.72	20.34	108.143	Vertical	Pass
		2567.5	-1.53	4.71	27.71	21.47	140.281	Vertical	Pass
10.0MHz Band 16 QAM	1#Mid	2505	-2.17	4.55	27.76	21.04	127.057	Vertical	Pass
		2535	-2.55	4.69	27.72	20.48	111.686	Vertical	Pass
		2565	-2.23	4.72	27.70	20.75	118.850	Vertical	Pass
15.0MHz Band 16 QAM	1#Mid	2507.5	-2.98	4.55	27.77	20.24	105.682	Vertical	Pass
		2535	-2.53	4.69	27.72	20.50	112.202	Vertical	Pass
		2562.5	-1.94	4.72	27.69	21.03	126.765	Vertical	Pass
20.0MHz Band 16 QAM	1#Mid	2510	-1.64	4.57	27.78	21.57	143.549	Vertical	Pass
		2535	-3.14	4.73	27.72	19.85	96.605	Vertical	Pass
		2560	-1.50	4.75	27.68	21.43	138.995	Vertical	Pass

Note:

SG Level= Signal generator output

Max. EIRP Average (dBm)= Factor Gain (dB)+ SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

8.6LTE BAND 12

Radiated Power (ERP) for Band 12											
Mode	RB/RB SIZE	Frequency	Result							Polarization Of Max. ERP	Conclusion
			SG Level	Cable Loss	Antenna Factor	Correction	Max. EIRP	Max. EIRP			
			(dBm)	(dBm)	(dB)		Average	Average			
						(dB)	(dBm)	(mW)			
1.4MHz Band QPSK	1#Mid	699.7	6.97	1.91	19.21	2.15	22.12	162.930	Vertical	Pass	
		707.5	6.89	1.91	19.26	2.15	22.09	161.808	Vertical	Pass	
		715.3	6.67	1.93	19.34	2.15	21.93	155.955	Vertical	Pass	
3.0MHz Band QPSK	1#Mid	700.5	6.76	1.91	19.21	2.15	21.91	155.239	Vertical	Pass	
		707.5	6.68	1.91	19.26	2.15	21.88	154.170	Vertical	Pass	
		714.5	6.52	1.93	19.34	2.15	21.78	150.661	Vertical	Pass	
5.0MHz Band QPSK	1#Mid	701.5	7.03	1.91	19.23	2.15	22.20	165.959	Vertical	Pass	
		707.5	6.94	1.91	19.26	2.15	22.14	163.682	Vertical	Pass	
		713.5	6.73	1.92	19.33	2.15	21.99	158.125	Vertical	Pass	
10.0MHz Band QPSK	1#Mid	704	7.05	1.91	19.25	2.15	22.24	167.494	Vertical	Pass	
		707.5	7.03	1.91	19.26	2.15	22.23	167.109	Vertical	Pass	
		711	6.88	1.92	19.32	2.15	22.13	163.305	Vertical	Pass	
1.4MHz Band QPSK	1#Mid	699.7	6.05	1.91	19.21	2.15	21.20	131.826	Horizontal	Pass	
		707.5	6.19	1.91	19.26	2.15	21.39	137.721	Horizontal	Pass	
		715.3	5.49	1.93	19.34	2.15	20.75	118.850	Horizontal	Pass	
3.0MHz Band QPSK	1#Mid	700.5	5.62	1.91	19.21	2.15	20.77	119.399	Horizontal	Pass	
		707.5	5.81	1.91	19.26	2.15	21.01	126.183	Horizontal	Pass	
		714.5	5.28	1.93	19.34	2.15	20.54	113.240	Horizontal	Pass	
5.0MHz Band QPSK	1#Mid	701.5	6.05	1.91	19.23	2.15	21.22	132.434	Horizontal	Pass	
		707.5	6.03	1.91	19.26	2.15	21.23	132.739	Horizontal	Pass	
		713.5	5.55	1.92	19.33	2.15	20.81	120.504	Horizontal	Pass	
10.0MHz Band QPSK	1#Mid	704	5.49	1.91	19.25	2.15	20.68	116.950	Horizontal	Pass	
		707.5	5.65	1.91	19.26	2.15	20.85	121.619	Horizontal	Pass	
		711	6.09	1.92	19.32	2.15	21.34	136.144	Horizontal	Pass	

Radiated Power (ERP) for Band 12										
Mode	RB/RB SIZE	Frequency	Result							Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Correction (dB)	Max. EIRP	Max. EIRP	Polarization Of Max. ERP	
			(dBm)				Average	Average		
							(dBm)	(mW)		
1.4MHz Band 16 QAM	1/#Mid	699.7	6.93	1.91	19.21	2.15	22.08	161.436	Vertical	Pass
		707.5	6.85	1.91	19.26	2.15	22.05	160.325	Vertical	Pass
		715.3	6.63	1.93	19.34	2.15	21.89	154.525	Vertical	Pass
3.0MHz Band 16 QAM	1/#Mid	700.5	6.72	1.91	19.21	2.15	21.87	153.815	Vertical	Pass
		707.5	6.64	1.91	19.26	2.15	21.84	152.757	Vertical	Pass
		714.5	6.48	1.93	19.34	2.15	21.74	149.279	Vertical	Pass
5.0MHz Band 16 QAM	1/#Mid	701.5	6.99	1.91	19.23	2.15	22.16	164.437	Vertical	Pass
		707.5	6.90	1.91	19.26	2.15	22.10	162.181	Vertical	Pass
		713.5	6.69	1.92	19.33	2.15	21.95	156.675	Vertical	Pass
10.0MHz Band 16 QAM	1/#Mid	704	7.01	1.91	19.25	2.15	22.20	165.959	Vertical	Pass
		707.5	6.99	1.91	19.26	2.15	22.19	165.577	Vertical	Pass
		711	6.84	1.92	19.32	2.15	22.09	161.808	Vertical	Pass
1.4MHz Band 16 QAM	1/#Mid	699.7	6.16	1.91	19.21	2.15	21.31	135.207	Horizontal	Pass
		707.5	5.79	1.91	19.26	2.15	20.99	125.603	Horizontal	Pass
		715.3	5.60	1.93	19.34	2.15	20.86	121.899	Horizontal	Pass
3.0MHz Band 16 QAM	1/#Mid	700.5	6.18	1.91	19.21	2.15	21.33	135.831	Horizontal	Pass
		707.5	5.40	1.91	19.26	2.15	20.60	114.815	Horizontal	Pass
		714.5	5.82	1.93	19.34	2.15	21.08	128.233	Horizontal	Pass
5.0MHz Band 16 QAM	1/#Mid	701.5	6.06	1.91	19.23	2.15	21.23	132.739	Horizontal	Pass
		707.5	5.40	1.91	19.26	2.15	20.60	114.815	Horizontal	Pass
		713.5	5.89	1.92	19.33	2.15	21.15	130.317	Horizontal	Pass
10.0MHz Band 16 QAM	1/#Mid	704	5.72	1.91	19.25	2.15	20.91	123.310	Horizontal	Pass
		707.5	5.95	1.91	19.26	2.15	21.15	130.317	Horizontal	Pass
		711	5.74	1.92	19.32	2.15	20.99	125.603	Horizontal	Pass

Note:

ERP=EIRP-2.15

SG Level= Signal generator output

Max. EIRP Average (dBm)= Antenna Factor (dB)+ SG Level (dBm)- Cable Loss(dBm)

8.7 LTE BAND 26 A

Radiated Power (ERP) for Band 26(814-824)										
Mode	RB/RB SIZE	Frequency	Result							Conclusion
			SG Level	Cable Loss	Antenna Factor	Correction	Max. EIRP	Max. EIRP	Polarization	
			(dBm)	(dBm)	(dB)	(dB)	Average	Average	Of Max. ERP	
							(dBm)	(mW)		
1.4MHz BW QPSK	6/0	814.7	-0.56	3.76	28.24	2.15	21.77	150.31	Horizontal	Pass
		819	-0.40	3.91	28.22	2.15	21.76	149.97	Horizontal	Pass
		823.3	-0.32	3.93	28.20	2.15	21.80	151.36	Horizontal	Pass
3.0MHz BW QPSK	15/0	815.5	-0.47	3.77	28.23	2.15	21.84	152.76	Horizontal	Pass
		819	-0.33	3.91	28.24	2.15	21.85	153.11	Horizontal	Pass
		822.5	-0.28	3.94	28.25	2.15	21.88	154.17	Horizontal	Pass
5.0MHz BW QPSK	25/0	816.5	-0.55	3.77	28.31	2.15	21.84	152.76	Horizontal	Pass
		819	-0.37	3.91	28.22	2.15	21.79	151.01	Horizontal	Pass
		821.5	-0.28	3.94	28.20	2.15	21.83	152.41	Horizontal	Pass
10.0MHz BW QPSK	50/0	819	-0.27	3.91	28.22	2.15	21.89	154.53	Horizontal	Pass
1.4MHz BW QPSK	6/0	814.7	-0.55	3.79	28.34	2.15	21.85	153.11	Vertical	Pass
		819	-0.29	3.95	28.22	2.15	21.83	152.41	Vertical	Pass
		823.3	-2.10	3.97	28.18	2.15	19.96	99.08	Vertical	Pass
3.0MHz BW QPSK	15/0	815.5	-1.98	3.77	28.23	2.15	20.33	107.89	Vertical	Pass
		819	-1.29	3.91	28.24	2.15	20.89	122.74	Vertical	Pass
		822.5	-1.65	3.94	28.25	2.15	20.51	112.46	Vertical	Pass
5.0MHz BW QPSK	25/0	816.5	-1.49	3.77	28.31	2.15	20.90	123.03	Vertical	Pass
		819	-1.43	3.91	28.22	2.15	20.73	118.30	Vertical	Pass
		821.5	-1.50	3.94	28.20	2.15	20.61	115.08	Vertical	Pass
10.0MHz BW QPSK	50/0	819	-1.27	3.91	28.22	2.15	20.89	122.74	Vertical	Pass

Radiated Power (ERP) for Band 26(814-824)										
Mode	RB/RB SIZE	Frequency	Result						Polarization Of Max. ERP	Conclusion
			SG Level	Cable Loss	Antenna Factor	Correction	Max. EIRP	Max. EIRP		
			(dBm)	(dBm)	(dB)	(dB)	Average	Average		
							(dBm)	(mW)		
1.4MHz	6/0	814.7	-0.44	3.76	28.24	2.15	21.89	154.53	Horizontal	Pass
BW 16		819	-0.28	3.91	28.22	2.15	21.88	154.17	Horizontal	Pass
QAM		823.3	-0.20	3.93	28.20	2.15	21.92	155.60	Horizontal	Pass
3.0MHz	15/0	815.5	-0.35	3.77	28.23	2.15	21.96	157.04	Horizontal	Pass
BW 16		819	-0.21	3.91	28.24	2.15	21.97	157.40	Horizontal	Pass
QAM		822.5	-0.16	3.94	28.25	2.15	22.00	158.49	Horizontal	Pass
5.0MHz	25/0	816.5	-0.43	3.77	28.31	2.15	21.96	157.04	Horizontal	Pass
BW 16		819	-0.25	3.91	28.22	2.15	21.91	155.24	Horizontal	Pass
QAM		821.5	-0.16	3.94	28.20	2.15	21.95	156.68	Horizontal	Pass
10.0MHz	50/0	819	-0.17	3.91	28.24	2.15	22.01	158.85	Horizontal	Pass
1.4MHz	6/0	814.7	-0.43	3.79	28.34	2.15	21.97	157.40	Vertical	Pass
BW 16		819	-0.17	3.95	28.22	2.15	21.95	156.68	Vertical	Pass
QAM		823.3	-1.42	3.97	28.18	2.15	20.64	115.88	Vertical	Pass
3.0MHz	15/0	815.5	-1.61	3.77	28.23	2.15	20.70	117.49	Vertical	Pass
BW 16		819	-1.58	3.91	28.24	2.15	20.60	114.82	Vertical	Pass
QAM		822.5	-1.90	3.94	28.25	2.15	20.26	106.17	Vertical	Pass
5.0MHz	25/0	816.5	-1.65	3.77	28.31	2.15	20.74	118.58	Vertical	Pass
BW 16		819	-1.89	3.91	28.22	2.15	20.27	106.41	Vertical	Pass
QAM		821.5	-1.54	3.94	28.20	2.15	20.57	114.02	Vertical	Pass
10.0MHz	50/0	819	-1.81	3.91	28.24	2.15	20.37	108.89	Vertical	Pass

8.8 LTE BAND 26B

Radiated Power (ERP) for Band 26(824-849)											
Mode	RB/RB SIZE	Frequency	Result							Polarization Of Max. ERP	Conclusion
			SG Level	Cable Loss	Antenna Factor	Correction	Max. EIRP	Max. EIRP			
			(dBm)	(dBm)	(dB)	(dB)	Average	Average			
							(dBm)	(mW)			
1.4MHz	6/0	824.7	6.15	2.01	19.68	2.15	21.67	146.89	Horizontal	Pass	
Band		836.5	6.05	2.01	19.77	2.15	21.66	146.55	Horizontal	Pass	
QPSK		848.3	6.05	2.02	19.82	2.15	21.70	147.91	Horizontal	Pass	
3.0MHz	15/0	825.5	6.20	2.01	19.70	2.15	21.74	149.28	Horizontal	Pass	
Band		836.5	6.14	2.01	19.77	2.15	21.75	149.62	Horizontal	Pass	
QPSK		847.5	6.14	2.02	19.81	2.15	21.78	150.66	Horizontal	Pass	
5.0MHz	25/0	826.5	6.19	2.01	19.71	2.15	21.74	149.28	Horizontal	Pass	
Band		836.5	6.08	2.01	19.77	2.15	21.69	147.57	Horizontal	Pass	
QPSK		846.5	6.11	2.02	19.79	2.15	21.73	148.94	Horizontal	Pass	
10.0MHz	50/0	829	6.22	2.01	19.73	2.15	21.79	151.01	Horizontal	Pass	
Band		836.5	6.14	2.01	19.77	2.15	21.75	149.62	Horizontal	Pass	
QPSK		844	6.24	2.02	19.78	2.15	21.85	153.11	Horizontal	Pass	
15.0MHz	75/0	831.5	4.73	2.01	19.73	2.15	20.30	107.15	Horizontal	Pass	
Band		836.5	6.26	2.01	19.77	2.15	21.87	153.82	Horizontal	Pass	
QPSK		841.5	4.80	2.02	19.78	2.15	20.41	109.90	Horizontal	Pass	
1.4MHz	6/0	824.7	4.59	2.01	19.68	2.15	20.11	102.57	Vertical	Pass	
Band		836.5	5.02	2.01	19.77	2.15	20.63	115.61	Vertical	Pass	
QPSK		848.3	4.46	2.02	19.82	2.15	20.11	102.57	Vertical	Pass	
3.0MHz	15/0	825.5	4.97	2.01	19.70	2.15	20.51	112.46	Vertical	Pass	
Band		836.5	5.17	2.01	19.77	2.15	20.78	119.67	Vertical	Pass	
QPSK		847.5	6.03	2.02	19.81	2.15	21.67	146.89	Vertical	Pass	
5.0MHz	25/0	826.5	6.11	2.01	19.71	2.15	21.66	146.55	Vertical	Pass	
Band		836.5	6.09	2.01	19.77	2.15	21.70	147.91	Vertical	Pass	
QPSK		846.5	6.12	2.02	19.79	2.15	21.74	149.28	Vertical	Pass	
10.0MHz	50/0	829	6.18	2.01	19.73	2.15	21.75	149.62	Vertical	Pass	
Band		836.5	6.17	2.01	19.77	2.15	21.78	150.66	Vertical	Pass	
QPSK		844	6.13	2.02	19.78	2.15	21.74	149.28	Vertical	Pass	
15.0MHz	75/0	831.5	6.12	2.01	19.73	2.15	21.69	147.57	Vertical	Pass	
Band		836.5	6.12	2.01	19.77	2.15	21.73	148.94	Vertical	Pass	
QPSK		841.5	5.13	2.02	19.78	2.15	20.74	118.58	Vertical	Pass	

Radiated Power (ERP) for Band 26(824-849)											
Mode	RB/RB SIZE	Frequency	Result							Polarization Of Max. ERP	Conclusion
			SG Level	Cable Loss	Antenna Factor	Correction	Max. EIRP	Max. EIRP			
			(dBm)	(dBm)	(dB)	(dB)	Average	Average			
							(dBm)	(mW)			
1.4MHz Band 16 QAM	6/0	824.7	6.23	2.01	19.68	2.15	21.75	149.62	Horizontal	Pass	
		836.5	6.13	2.01	19.77	2.15	21.74	149.28	Horizontal	Pass	
		848.3	6.13	2.02	19.82	2.15	21.78	150.66	Horizontal	Pass	
3.0MHz Band 16 QAM	15/0	825.5	6.28	2.01	19.70	2.15	21.82	152.05	Horizontal	Pass	
		836.5	6.22	2.01	19.77	2.15	21.83	152.41	Horizontal	Pass	
		847.5	6.22	2.02	19.81	2.15	21.86	153.46	Horizontal	Pass	
5.0MHz Band 16 QAM	25/0	826.5	6.27	2.01	19.71	2.15	21.82	152.05	Horizontal	Pass	
		836.5	6.16	2.01	19.77	2.15	21.77	150.31	Horizontal	Pass	
		846.5	6.19	2.02	19.79	2.15	21.81	151.71	Horizontal	Pass	
10.0MHz Band 16 QAM	50/0	829	6.30	2.01	19.73	2.15	21.87	153.82	Horizontal	Pass	
		836.5	6.22	2.01	19.77	2.15	21.83	152.41	Horizontal	Pass	
		844	6.20	2.02	19.78	2.15	21.81	151.71	Horizontal	Pass	
15.0MHz Band QPSK	75/0	831.5	6.36	2.01	19.73	2.15	21.93	155.96	Horizontal	Pass	
		836.5	4.70	2.01	19.77	2.15	20.31	107.40	Horizontal	Pass	
		841.5	5.01	2.02	19.78	2.15	20.62	115.35	Horizontal	Pass	
1.4MHz Band 16 QAM	6/0	824.7	5.32	2.01	19.68	2.15	20.84	121.34	Vertical	Pass	
		836.5	5.06	2.01	19.77	2.15	20.67	116.68	Vertical	Pass	
		848.3	4.49	2.02	19.82	2.15	20.14	103.28	Vertical	Pass	
3.0MHz Band 16 QAM	15/0	825.5	4.70	2.01	19.70	2.15	20.24	105.68	Vertical	Pass	
		836.5	5.25	2.01	19.77	2.15	20.86	121.90	Vertical	Pass	
		847.5	6.11	2.02	19.81	2.15	21.75	149.62	Vertical	Pass	
5.0MHz Band 16 QAM	25/0	826.5	6.19	2.01	19.71	2.15	21.74	149.28	Vertical	Pass	
		836.5	6.17	2.01	19.77	2.15	21.78	150.66	Vertical	Pass	
		846.5	6.20	2.02	19.79	2.15	21.82	152.05	Vertical	Pass	
10.0MHz Band 16 QAM	50/0	829	6.26	2.01	19.73	2.15	21.83	152.41	Vertical	Pass	
		836.5	6.25	2.01	19.77	2.15	21.86	153.46	Vertical	Pass	
		844	6.21	2.02	19.78	2.15	21.82	152.05	Vertical	Pass	

15.0MHz	75/0	831.5	6.20	2.01	19.73	2.15	21.77	150.31	Vertical	Pass
Band		836.5	6.20	2.01	19.77	2.15	21.81	151.71	Vertical	Pass
QPSK		841.5	6.26	2.02	19.78	2.15	21.87	153.82	Vertical	Pass

Note:

SG Level= Signal generator output

Max. EIRP Average (dBm)= Antenna Gain(dB)+ SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

8.9 LTE BAND 38

Radiated Power (EIRP) for Band 38										
Mode	RB/RB SIZE	Frequency	Result						Polarization	Conclusion
			SG Level	Cable Loss	Antenna Gain	Max. EIRP	Max. EIRP	Of Max. ERP		
			(dBm)	(dBm)	(dB)	Average	Average	ERP		
						(dBm)	(mW)			
5.0MHz Band QPSK	25/0	2572.5	-2.12	4.95	27.79	21.00	125.893	Vertical	Pass	
		2595	-2.64	4.88	27.71	21.28	134.276	Vertical	Pass	
		2617.5	-2.58	4.93	27.95	21.27	133.968	Vertical	Pass	
5.0MHz Band 16 QAM	25/0	2572.5	-2.37	4.81	27.73	21.90	154.882	Vertical	Pass	
		2595	-2.47	4.95	27.81	21.07	127.938	Vertical	Pass	
		2617.5	-2.59	5.03	27.69	21.72	148.594	Vertical	Pass	
10.0MHz Band QPSK	50/0	2575	-2.98	5.01	27.86	21.47	140.281	Vertical	Pass	
		2595	-2.6	5	27.65	21.41	138.357	Vertical	Pass	
		2615	-2.67	4.87	27.89	21.06	127.644	Vertical	Pass	
10.0MHz Band 16 QAM	50/0	2575	-2.71	4.77	27.78	21.01	126.183	Vertical	Pass	
		2595	-2.38	4.87	27.87	21.59	144.212	Vertical	Pass	
		2615	-2.56	4.94	27.77	21.44	139.316	Vertical	Pass	
15.0MHz Band QPSK	75/0	2577.5	-2.9	4.89	27.88	21.64	145.881	Vertical	Pass	
		2595	-2.32	4.87	27.84	21.09	128.529	Vertical	Pass	
		2612.5	-2.52	4.92	27.93	21.72	148.594	Vertical	Pass	
15.0MHz Band 16 QAM	75/0	2577.5	-2.53	4.75	27.78	21.78	150.661	Vertical	Pass	
		2595	-2.53	4.98	27.82	21.66	146.555	Vertical	Pass	
		2612.5	-2.6	4.95	27.83	21.39	137.721	Vertical	Pass	
20.0MHz Band QPSK	100/0	2580	-2.53	4.86	27.8	21.60	144.544	Vertical	Pass	
		2595	-2.37	4.79	27.83	22.58	181.134	Vertical	Pass	
		2610	-2.68	4.89	27.87	21.60	144.544	Vertical	Pass	
20.0MHz Band 16 QAM	100/0	2580	-2.87	4.95	27.73	21.31	135.207	Vertical	Pass	
		2595	-2.88	4.91	27.71	21.06	127.644	Vertical	Pass	
		2610	-2.81	4.96	27.92	21.64	145.881	Vertical	Pass	

Radiated Power (EIRP) for Band 38										
Mode	RB/RB SIZE	Frequency	Result					Polarization	Of Max. ERP	Conclusion
			SG Level	Cable Loss	Antenna Gain	Max. EIRP	Max. EIRP			
			(dBm)	(dBm)	(dB)	Average	Average			
						(dBm)	(mW)			
5.0MHz Band QPSK	25/0	2572.5	-2.12	4.95	27.79	21.10	128.825	Horizontal	Pass	
		2595	-2.64	4.88	27.71	21.08	128.233	Horizontal	Pass	
		2617.5	-2.58	4.93	27.95	21.35	136.458	Horizontal	Pass	
5.0MHz Band 16 QAM	25/0	2572.5	-2.37	4.81	27.73	21.47	140.281	Horizontal	Pass	
		2595	-2.47	4.95	27.81	20.83	121.060	Horizontal	Pass	
		2617.5	-2.59	5.03	27.69	21.27	133.968	Horizontal	Pass	
10.0MHz Band QPSK	50/0	2575	-2.98	5.01	27.86	21.43	138.995	Horizontal	Pass	
		2595	-2.6	5	27.65	20.67	116.681	Horizontal	Pass	
		2615	-2.67	4.87	27.89	20.85	121.619	Horizontal	Pass	
10.0MHz Band 16 QAM	50/0	2575	-2.71	4.77	27.78	21.15	130.317	Horizontal	Pass	
		2595	-2.38	4.87	27.87	20.90	123.027	Horizontal	Pass	
		2615	-2.56	4.94	27.77	21.49	140.929	Horizontal	Pass	
15.0MHz Band QPSK	75/0	2577.5	-2.9	4.89	27.88	21.47	140.281	Horizontal	Pass	
		2595	-2.32	4.87	27.84	21.58	143.880	Horizontal	Pass	
		2612.5	-2.52	4.92	27.93	20.95	124.451	Horizontal	Pass	
15.0MHz Band 16 QAM	75/0	2577.5	-2.53	4.75	27.78	21.53	142.233	Horizontal	Pass	
		2595	-2.53	4.98	27.82	21.03	126.765	Horizontal	Pass	
		2612.5	-2.6	4.95	27.83	21.36	136.773	Horizontal	Pass	
20.0MHz Band QPSK	100/0	2580	-2.53	4.86	27.8	20.88	122.462	Horizontal	Pass	
		2595	-2.37	4.79	27.83	22.25	167.880	Horizontal	Pass	
		2610	-2.68	4.89	27.87	21.33	135.831	Horizontal	Pass	
20.0MHz Band 16 QAM	100/0	2580	-2.87	4.95	27.73	20.80	120.226	Horizontal	Pass	
		2595	-2.88	4.91	27.71	22.45	175.792	Horizontal	Pass	
		2610	-2.81	4.96	27.92	21.12	129.420	Horizontal	Pass	

Note:

SG Level= Signal generator output

Max. EIRP Average (dBm)= Factor Gain (dB)+ SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

8.10 LTE BAND 66

Radiated Power (EIRP) for Band 66										
Mode	RB/RB SIZE	Frequency	Result						Polarization Of Max. ERP	Conclusion
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP Average (dBm)	Max. EIRP Average (mW)			
1.4MHz Band QPSK	1/#Mid	1710.7	-3.07	3.76	28.24	21.41	138.357	Horizontal	Pass	
		1745	-2.93	3.91	28.22	21.38	137.404	Horizontal	Pass	
		1779.3	-2.80	3.93	28.2	21.47	140.281	Horizontal	Pass	
3.0MHz Band QPSK	1/#Mid	1711.5	-3.13	3.77	28.23	21.33	135.831	Horizontal	Pass	
		1745	-3.04	3.91	28.24	21.29	134.586	Horizontal	Pass	
		1778.5	-3.06	3.94	28.25	21.25	133.352	Horizontal	Pass	
5.0MHz Band QPSK	1/#Mid	1712.5	-3.03	3.77	28.31	21.51	141.579	Horizontal	Pass	
		1745	-2.71	3.91	28.22	21.60	144.544	Horizontal	Pass	
		1777.5	-2.77	3.94	28.2	21.49	140.929	Horizontal	Pass	
10.0MHz Band QPSK	1/#Mid	1715	-2.92	3.79	28.33	21.62	145.211	Horizontal	Pass	
		1745	-2.65	3.95	28.22	21.62	145.211	Horizontal	Pass	
		1775	-2.66	3.97	28.19	21.56	143.219	Horizontal	Pass	
15.0MHz Band QPSK	1/#Mid	1717.5	-2.94	3.79	28.34	21.61	144.877	Horizontal	Pass	
		1745	-2.75	3.95	28.22	21.52	141.906	Horizontal	Pass	
		1772.5	-2.70	3.97	28.18	21.51	141.579	Horizontal	Pass	
20.0MHz Band QPSK	1/#Mid	1720	-2.91	3.81	28.35	21.63	145.546	Horizontal	Pass	
		1745	-2.65	3.96	28.22	21.61	144.877	Horizontal	Pass	
		1770	-2.67	4	28.16	21.49	140.929	Horizontal	Pass	
1.4MHz Band QPSK	1/#Mid	1710.7	-4.57	3.76	28.24	19.91	97.949	Vertical	Pass	
		1745	-3.67	3.91	28.22	20.64	115.878	Vertical	Pass	
		1779.3	-4.26	3.93	28.2	20.01	100.231	Vertical	Pass	
3.0MHz Band QPSK	1/#Mid	1711.5	-3.86	3.77	28.23	20.60	114.815	Vertical	Pass	
		1745	-3.95	3.91	28.24	20.38	109.144	Vertical	Pass	
		1778.5	-3.47	3.94	28.25	20.84	121.339	Vertical	Pass	
5.0MHz Band QPSK	1/#Mid	1712.5	-3.87	3.77	28.31	20.67	116.681	Vertical	Pass	
		1745	-4.20	3.91	28.22	20.11	102.565	Vertical	Pass	
		1777.5	-3.64	3.94	28.2	20.62	115.345	Vertical	Pass	
10.0MHz Band QPSK	1/#Mid	1715	-4.05	3.79	28.34	20.50	112.202	Vertical	Pass	
		1745	-4.33	3.95	28.22	19.94	98.628	Vertical	Pass	
		1775	-3.72	3.97	28.18	20.49	111.944	Vertical	Pass	

15.0MHz		1717.5	-4.31	3.81	28.35	20.23	105.439	Vertical	Pass
Band	1/#Mid	1745	-4.28	3.96	28.22	19.98	99.541	Vertical	Pass
QPSK		1772.5	-4.21	4	28.16	19.95	98.855	Vertical	Pass
20.0MHz		1720	-3.99	3.79	28.34	20.56	113.763	Vertical	Pass
Band	1/#Mid	1745	-4.05	3.95	28.22	20.22	105.196	Vertical	Pass
QPSK		1770	-3.48	3.97	28.18	20.73	118.304	Vertical	Pass

Radiated Power (EIRP) for Band 66										
Mode	RB/RB SIZE	Frequency	Result						Conclusion	
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP	Max. EIRP	Polarization Of Max. ERP		
						Average (dBm)	Average			Average
							(mW)			
1.4MHz Band 16 QAM	1/#Mid	1710.7	-3.90	3.76	28.24	20.58	114.288	Horizontal	Pass	
		1745	-3.51	3.91	28.22	20.80	120.226	Horizontal	Pass	
		1779.3	-3.69	3.93	28.2	20.58	114.288	Horizontal	Pass	
3.0MHz Band 16 QAM	1/#Mid	1711.5	-4.29	3.77	28.23	20.17	103.992	Horizontal	Pass	
		1745	-3.54	3.91	28.24	20.79	119.950	Horizontal	Pass	
		1778.5	-3.83	3.94	28.25	20.48	111.686	Horizontal	Pass	
5.0MHz Band 16 QAM	1/#Mid	1712.5	-3.71	3.77	28.31	20.83	121.060	Horizontal	Pass	
		1745	-3.77	3.91	28.22	20.54	113.240	Horizontal	Pass	
		1777.5	-3.44	3.94	28.2	20.82	120.781	Horizontal	Pass	
10.0MHz Band 16 QAM	1/#Mid	1715	-3.76	3.79	28.33	20.78	119.674	Horizontal	Pass	
		1745	-3.42	3.95	28.22	20.85	121.619	Horizontal	Pass	
		1775	-3.74	3.97	28.19	20.48	111.686	Horizontal	Pass	
15.0MHz Band 16 QAM	1/#Mid	1717.5	-3.75	3.79	28.34	20.80	120.226	Horizontal	Pass	
		1745	-3.57	3.95	28.22	20.70	117.490	Horizontal	Pass	
		1772.5	-3.36	3.97	28.18	20.85	121.619	Horizontal	Pass	
20.0MHz Band 16 QAM	1/#Mid	1720	-3.58	3.81	28.35	20.96	124.738	Horizontal	Pass	
		1745	-3.36	3.96	28.22	20.90	123.027	Horizontal	Pass	
		1770	-3.30	4	28.16	20.86	121.899	Horizontal	Pass	
1.4MHz Band 16 QAM	1/#Mid	1710.7	-5.44	3.76	28.24	19.04	80.168	Vertical	Pass	
		1745	-4.42	3.91	28.22	19.89	97.499	Vertical	Pass	
		1779.3	-5.33	3.93	28.2	18.94	78.343	Vertical	Pass	
3.0MHz Band 16 QAM	1/#Mid	1711.5	-5.37	3.77	28.23	19.09	81.096	Vertical	Pass	
		1745	-5.27	3.91	28.24	19.06	80.538	Vertical	Pass	
		1778.5	-4.44	3.94	28.25	19.87	97.051	Vertical	Pass	
5.0MHz Band 16 QAM	1/#Mid	1712.5	-5.22	3.77	28.31	19.32	85.507	Vertical	Pass	
		1745	-4.00	3.91	28.22	20.31	107.399	Vertical	Pass	
		1777.5	-4.85	3.94	28.2	19.41	87.297	Vertical	Pass	
10.0MHz Band 16 QAM	1/#Mid	1715	-5.57	3.79	28.34	18.98	79.068	Vertical	Pass	
		1745	-4.53	3.95	28.22	19.74	94.189	Vertical	Pass	
		1775	-3.65	3.97	28.18	20.56	113.763	Vertical	Pass	
15.0MHz Band 16	1/#Mid	1717.5	-3.68	3.81	28.35	20.86	121.899	Vertical	Pass	
		1745	-3.60	3.96	28.22	20.66	116.413	Vertical	Pass	

QAM		1772.5	-5.13	4	28.16	19.03	79.983	Vertical	Pass
20.0MHz		1720	-3.69	3.79	28.34	20.86	121.899	Vertical	Pass
Band 16	1#Mid	1745	-4.96	3.95	28.22	19.31	85.310	Vertical	Pass
QAM		1770	-4.89	3.97	28.18	19.32	85.507	Vertical	Pass

Note:

SG Level= Signal generator output

Max. EIRP Average (dBm)= Antenna Gain(dB)+ SG Level (dBm)- Cable Loss(dBm)

Factor Gain(dB)=Antenna Gain(dB) + Amplifier Factor (dB)

9. SPURIOUS RADIATION EMISSION

RULE PART(S)

FCC: §2.1051, §22.917(a), §24.238(a), §27.53(c)(g)(h)(m) and §90.691

LIMIT

For Band 7, the minimum permissible attenuation level of any spurious emission is $55 + \log_{10}(P)$ [Watts].

The minimum permissible attenuation level of any spurious emission is $43 + \log_{10}(P)$ [Watts], where P is the transmitter power in Watts.

TEST PROCEDURE

For Cellular equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

For PCS equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

The unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth in the 1 MHz band immediately outside and adjacent to the channel edge of the equipment. Beyond the 1 MHz band immediately outside the channel edge of the equipment, a resolution bandwidth of 1 MHz shall be employed. A narrower resolution bandwidth is allowed to be used provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz or 1% of the occupied bandwidth as applicable.

The power of any unwanted emissions measured from the channel edge of the equipment shall be attenuated below the transmitter power, P (dBW), as follows:

- a. for base station and subscriber equipment, other than mobile subscriber equipment, the attenuation shall not be less than $43 + 10 \text{ Log}_{10}(p)$, dB; and
- b. for mobile subscriber equipment, the attenuation shall not be less than $43 + 10 \text{ Log}_{10}(p)$, dB at the channel edges and $55 + 10 \text{ Log}_{10}(p)$ at 5.5 MHz away and beyond the channel edges where p in (a) and (b) is the transmitter power measured in watts.

MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 26
- LTE Band 38
- LTE Band 66

RESULTS

PASS

9.1 LTE BAND 2

QPSK EIRP POWER FOR LTE BAND 2 (1.4MHZ BANDWIDTH)

Test Results for Low Channel 1850.7MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3701.4	-52.86	4.04	33.51	-23.39	-13	-10.39	Horizontal
3701.4	-52.07	4.04	33.51	-22.60	-13	-9.60	Vertical
5552.1	-50.08	5.24	35.84	-19.48	-13	-6.48	Vertical
5552.1	-52.45	5.24	35.84	-21.85	-13	-8.85	Horizontal
189.0	-38.48	1.43	16.02	-23.89	-13	-10.89	Vertical
263.4	-38.34	1.30	17.99	-21.65	-13	-8.65	Horizontal
Test Results for Mid Channel 1880MHz							
3760.0	-53.98	4.04	33.56	-24.46	-13	-11.46	Horizontal
3760.0	-51.99	4.04	33.56	-22.47	-13	-9.47	Vertical
5640.0	-47.57	5.24	35.91	-16.90	-13	-3.90	Vertical
5640.0	-53.46	5.24	35.91	-22.79	-13	-9.79	Horizontal
210.5	-38.13	1.62	16.97	-22.78	-13	-9.78	Vertical
233.1	-35.46	1.74	15.98	-21.23	-13	-8.23	Horizontal
Test Results for High Channel 1909.3MHz							
3818.6	-53.48	4.04	34.00	-23.52	-13	-10.52	Horizontal
3818.6	-53.76	4.04	34.00	-23.80	-13	-10.80	Vertical
5727.9	-52.98	5.24	36.04	-22.18	-13	-9.18	Vertical
5727.9	-50.14	5.24	36.04	-19.34	-13	-6.34	Horizontal
177.6	-43.63	1.42	17.29	-27.76	-13	-14.76	Vertical
354.9	-37.00	1.50	17.90	-20.59	-13	-7.59	Horizontal

QPSK EIRP POWER FOR LTE BAND 2 (20.0MHZ BANDWIDTH)

Test Results for Low Channel 1860MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3720.0	-53.21	4.07	33.54	-23.74	-13	-10.74	Horizontal
3720.0	-53.30	4.07	33.54	-23.83	-13	-10.83	Vertical
5580.0	-47.20	5.28	35.86	-16.62	-13	-3.62	Vertical
5580.0	-49.20	5.28	35.86	-18.62	-13	-5.62	Horizontal
190.3	-38.70	1.58	16.89	-23.38	-13	-10.38	Vertical
356.1	-38.47	1.76	17.26	-22.97	-13	-9.97	Horizontal
Test Results for Mid Channel 1880MHz							
3760.0	-52.61	4.04	33.56	-23.09	-13	-10.09	Horizontal
3760.0	-53.36	4.04	33.56	-23.84	-13	-10.84	Vertical
5640.0	-51.36	5.24	35.91	-20.69	-13	-7.69	Vertical
5640.0	-53.23	5.24	35.91	-22.56	-13	-9.56	Horizontal
199.7	-43.20	1.46	16.27	-28.39	-13	-15.39	Vertical
438.1	-43.58	1.59	15.15	-30.02	-13	-17.02	Horizontal
Test Results for High Channel 1900MHz							
3800.0	-49.59	4.04	34.00	-19.63	-13	-6.63	Horizontal
3800.0	-49.31	4.04	34.00	-19.35	-13	-6.35	Vertical
5700.0	-53.30	5.24	36.04	-22.50	-13	-9.50	Vertical
5700.0	-53.43	5.24	36.04	-22.63	-13	-9.63	Horizontal
205.4	-39.27	1.36	17.39	-23.23	-13	-10.23	Vertical
251.8	-43.43	1.66	15.39	-29.70	-13	-16.70	Horizontal

9.2 LTE BAND 4

QPSK EIRP POWER FOR LTE BAND 4 (1.4MHZ BANDWIDTH)

Test Results for Low Channel 1710.7MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3421.4	-51.64	4.02	29.80	-25.86	-13	-12.86	Horizontal
3421.4	-49.51	4.02	29.80	-23.73	-13	-10.73	Vertical
5132.1	-51.19	5.24	35.84	-20.59	-13	-7.59	Vertical
5132.1	-50.78	5.24	35.84	-20.18	-13	-7.18	Horizontal
188.9	-40.91	1.68	16.04	-26.55	-13	-13.55	Vertical
304.2	-44.11	1.78	17.74	-28.15	-13	-15.15	Horizontal
Test Results for Mid Channel 1732.5MHz							
3465.0	-46.95	4.03	30.00	-20.98	-13	-7.98	Horizontal
3465.0	-48.22	4.03	30.00	-22.25	-13	-9.25	Vertical
5197.5	-49.40	5.25	35.86	-18.79	-13	-5.79	Vertical
5197.5	-51.68	5.25	35.86	-21.07	-13	-8.07	Horizontal
177.5	-44.76	1.72	17.69	-28.79	-13	-15.79	Vertical
422.8	-35.78	1.62	16.02	-21.37	-13	-8.37	Horizontal
Test Results for High Channel 1754.3MHz							
3508.6	-50.64	4.05	30.01	-24.68	-13	-11.68	Horizontal
3508.6	-48.77	4.05	30.01	-22.81	-13	-9.81	Vertical
5262.9	-49.57	5.26	35.86	-18.97	-13	-5.97	Vertical
5262.9	-52.93	5.26	35.86	-22.33	-13	-9.33	Horizontal
195.4	-41.22	1.80	16.69	-26.33	-13	-13.33	Vertical
423.0	-41.44	1.75	16.66	-26.54	-13	-13.54	Horizontal

QPSK EIRP POWER FOR LTE BAND 4 (20.0MHZ BANDWIDTH)

Test Results for Low Channel 1720MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3440.0	-48.47	4.02	29.80	-22.69	-13	-9.69	Horizontal
3440.0	-47.90	4.02	29.80	-22.12	-13	-9.12	Vertical
5160.0	-49.85	5.24	35.84	-19.25	-13	-6.25	Vertical
5160.0	-51.34	5.24	35.84	-20.74	-13	-7.74	Horizontal
186.1	-36.41	1.57	17.26	-20.72	-13	-7.72	Vertical
236.7	-39.48	1.78	16.35	-24.91	-13	-11.91	Horizontal
Test Results for Mid Channel 1732.5MHz							
3465.0	-52.08	4.03	30.00	-26.11	-13	-13.11	Horizontal
3465.0	-45.84	4.03	30.00	-19.87	-13	-6.87	Vertical
5197.5	-46.97	5.25	35.86	-16.36	-13	-3.36	Vertical
5197.5	-51.10	5.25	35.86	-20.49	-13	-7.49	Horizontal
199.7	-34.32	1.44	17.95	-17.81	-13	-4.81	Vertical
390.1	-34.67	1.65	16.09	-20.23	-13	-7.23	Horizontal
Test Results for High Channel 1745MHz							
3490.0	-51.49	2.91	27.68	-26.72	-13	-13.72	Horizontal
3490.0	-52.67	2.91	27.68	-27.90	-13	-14.90	Vertical
5235.0	-51.02	5.26	35.86	-20.42	-13	-7.42	Vertical
5235.0	-49.29	5.26	35.86	-18.69	-13	-5.69	Horizontal
195.8	-39.06	1.61	16.85	-23.82	-13	-10.82	Vertical
433.6	-42.73	1.61	15.19	-29.15	-13	-16.15	Horizontal

9.3 LTE BAND 5

QPSK EIRP POWER FOR LTE BAND 5 (1.4MHZ BANDWIDTH)

Test Results for Low Channel 824.7MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1649.4	-46.57	2.78	27.50	-21.85	-13	-8.85	Horizontal
1649.4	-53.08	2.78	27.50	-28.36	-13	-15.36	Vertical
2474.1	-47.56	2.90	27.80	-22.66	-13	-9.66	Vertical
2474.1	-51.00	2.90	27.80	-26.10	-13	-13.10	Horizontal
184.2	-43.74	1.76	17.59	-27.91	-13	-14.91	Vertical
336.4	-43.74	1.63	15.87	-29.50	-13	-16.50	Horizontal
Test Results For Mid Channel 836.5MHz							
1673.0	-44.86	2.80	27.48	-20.18	-13	-7.18	Horizontal
1673.0	-52.21	2.80	27.48	-27.53	-13	-14.53	Vertical
2509.5	-51.26	2.91	27.70	-26.47	-13	-13.47	Vertical
2509.5	-53.01	2.91	27.70	-28.22	-13	-15.22	Horizontal
200.6	-37.18	1.61	15.68	-23.11	-13	-10.11	Vertical
259.1	-44.60	1.59	17.52	-28.68	-13	-15.68	Horizontal
Test Results for High Channel 848.3MHz							
1696.6	-45.13	2.82	27.43	-20.52	-13	-7.52	Horizontal
1696.6	-47.76	2.82	27.43	-23.15	-13	-10.15	Vertical
2544.9	-49.60	2.92	27.74	-24.78	-13	-11.78	Vertical
2544.9	-51.78	2.92	27.74	-26.96	-13	-13.96	Horizontal
203.1	-39.38	1.69	16.67	-24.39	-13	-11.39	Vertical
354.1	-42.96	1.70	17.18	-27.48	-13	-14.48	Horizontal

QPSK EIRP POWER FOR LTE BAND 5 (10MHZ BANDWIDTH)

Test Results for Low Channel 829MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1658.0	-50.11	2.78	27.50	-25.39	-13	-12.39	Horizontal
1658.0	-52.56	2.78	27.50	-27.84	-13	-14.84	Vertical
2487.0	-50.32	2.90	27.80	-25.42	-13	-12.42	Vertical
2487.0	-50.39	2.90	27.80	-25.49	-13	-12.49	Horizontal
202.4	-35.84	1.71	15.57	-21.98	-13	-8.98	Vertical
357.1	-36.18	1.34	16.40	-21.12	-13	-8.12	Horizontal
Test Results for Mid Channel 836.5MHz							
1673.0	-53.24	2.80	27.48	-28.56	-13	-15.56	Horizontal
1673.0	-53.12	2.80	27.48	-28.44	-13	-15.44	Vertical
2509.5	-45.56	2.91	27.70	-20.77	-13	-7.77	Vertical
2509.5	-53.50	2.91	27.70	-28.71	-13	-15.71	Horizontal
198.0	-41.50	1.44	17.04	-25.90	-13	-12.90	Vertical
430.7	-43.79	1.76	17.62	-27.93	-13	-14.93	Horizontal
Test Results for High Channel 844MHz							
1688.0	-52.51	2.82	27.43	-27.90	-13	-14.90	Horizontal
1688.0	-48.32	2.82	27.43	-23.71	-13	-10.71	Vertical
2532.0	-51.72	2.92	27.74	-26.90	-13	-13.90	Vertical
2532.0	-51.94	2.92	27.74	-27.12	-13	-14.12	Horizontal
191.9	-43.91	1.74	17.70	-27.95	-13	-14.95	Vertical
304.1	-41.76	1.41	17.46	-25.70	-13	-12.70	Horizontal

9.4 LTE BAND 7

QPSK EIRP POWER FOR LTE BAND 7 (5.0MHZ BANDWIDTH)

Test Results for Low Channel 2502.5MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
5005.0	-63.73	5.23	35.81	-33.15	-25	-8.15	Horizontal
5005.0	-59.59	5.23	35.81	-29.01	-25	-4.01	Vertical
7507.5	-63.36	5.67	36.85	-32.18	-25	-7.18	Vertical
7507.5	-61.66	5.67	36.85	-30.48	-25	-5.48	Horizontal
206.9	-48.40	1.73	17.97	-32.16	-25	-7.16	Vertical
352.1	-48.84	1.38	15.11	-35.11	-25	-10.11	Horizontal
Test Results for Mid Channel 2535MHz							
5070.0	-59.47	5.23	35.82	-28.88	-25	-3.88	Horizontal
5070.0	-62.07	5.23	35.82	-31.48	-25	-6.48	Vertical
7605.0	-64.32	5.67	36.85	-33.14	-25	-8.14	Vertical
7605.0	-60.88	5.67	36.85	-29.70	-25	-4.70	Horizontal
181.1	-54.52	1.77	16.17	-40.11	-25	-15.11	Vertical
290.3	-53.69	1.63	15.21	-40.11	-25	-15.11	Horizontal
Test Results for High Channel 2567.5MHz							
5135.0	-64.32	5.24	35.83	-33.73	-25	-8.73	Horizontal
5135.0	-63.71	5.24	35.83	-33.12	-25	-8.12	Vertical
7702.5	-61.05	5.68	36.87	-29.86	-25	-4.86	Vertical
7702.5	-60.38	5.68	36.87	-29.19	-25	-4.19	Horizontal
206.4	-54.19	1.58	17.56	-38.21	-25	-13.21	Vertical
274.1	-44.35	1.45	16.58	-29.22	-25	-4.22	Horizontal

QPSK EIRP POWER FOR LTE BAND 7 (20.0MHZ BANDWIDTH)

Test Results for Low Channel 2510MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
5020.0	-61.62	5.23	35.82	-31.03	-25	-6.03	Horizontal
5020.0	-60.79	5.23	35.82	-30.20	-25	-5.20	Vertical
7530.0	-63.72	5.67	36.86	-32.53	-25	-7.53	Vertical
7530.0	-61.79	5.67	36.86	-30.60	-25	-5.60	Horizontal
211.8	-45.73	1.63	15.76	-31.60	-25	-6.60	Vertical
281.0	-47.39	1.71	15.44	-33.66	-25	-8.66	Horizontal
Test Results for Mid Channel 2535MHz							
5070.0	-63.13	5.23	35.82	-32.54	-25	-7.54	Horizontal
5070.0	-61.18	5.23	35.82	-30.59	-25	-5.59	Vertical
7605.0	-62.25	5.67	36.85	-31.07	-25	-6.07	Vertical
7605.0	-62.47	5.67	36.85	-31.29	-25	-6.29	Horizontal
206.5	-53.39	1.79	16.84	-38.33	-25	-13.33	Vertical
295.6	-52.68	1.71	17.64	-36.75	-25	-11.75	Horizontal
Test Results for High Channel 2560MHz							
5120.0	-60.12	5.24	35.83	-29.53	-25	-4.53	Horizontal
5120.0	-63.91	5.24	35.83	-33.32	-25	-8.32	Vertical
7680.0	-62.09	5.70	36.88	-30.91	-25	-5.91	Vertical
7680.0	-63.39	5.70	36.88	-32.21	-25	-7.21	Horizontal
182.1	-49.62	1.79	16.84	-34.56	-25	-9.56	Vertical
318.1	-49.65	1.71	17.64	-33.72	-25	-8.72	Horizontal

9.5 LTE BAND 12

QPSK EIRP POWER FOR LTE BAND 12 (1.4MHZ BANDWIDTH)

Test Results for Low Channel 699.7MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1399.4	-47.60	2.60	27.20	-23.00	-13	-10.00	Horizontal
1399.4	-50.59	2.60	27.20	-25.99	-13	-12.99	Vertical
2099.1	-44.20	2.85	27.54	-19.51	-13	-6.51	Vertical
2099.1	-53.16	2.85	27.54	-28.47	-13	-15.47	Horizontal
200.1	-39.58	1.49	17.78	-23.29	-13	-10.29	Vertical
393.8	-41.00	1.36	17.33	-25.03	-13	-12.03	Horizontal
Test Results For Mid Channel 707.5MHz							
1415.0	-45.36	2.61	27.28	-20.69	-13	-7.69	Horizontal
1415.0	-46.15	2.61	27.28	-21.48	-13	-8.48	Vertical
2122.5	-47.16	2.87	27.59	-22.44	-13	-9.44	Vertical
2122.5	-49.55	2.87	27.59	-24.83	-13	-11.83	Horizontal
181.8	-43.76	1.73	15.74	-29.75	-13	-16.75	Vertical
278.4	-43.29	1.62	15.79	-29.12	-13	-16.12	Horizontal
Test Results for High Channel 715.3MHz							
1430.6	-52.06	2.63	27.28	-27.41	-13	-14.41	Horizontal
1430.6	-51.50	2.63	27.28	-26.85	-13	-13.85	Vertical
2145.9	-49.12	2.88	27.60	-24.40	-13	-11.40	Vertical
2145.9	-51.77	2.88	27.60	-27.05	-13	-14.05	Horizontal
177.9	-43.76	1.61	18.00	-27.37	-13	-14.37	Vertical
263.9	-38.80	1.45	15.49	-24.77	-13	-11.77	Horizontal

QPSK EIRP POWER FOR LTE BAND 12 (10MHZ BANDWIDTH)

Test Results for Low Channel 704MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1408.0	-44.56	2.61	27.26	-19.91	-13	-6.91	Horizontal
1408.0	-53.22	2.61	27.26	-28.57	-13	-15.57	Vertical
2112.0	-44.06	2.87	27.58	-19.35	-13	-6.35	Vertical
2112.0	-52.83	2.87	27.58	-28.12	-13	-15.12	Horizontal
184.7	-44.30	1.31	16.97	-28.64	-13	-15.64	Vertical
262.5	-39.19	1.65	16.70	-24.14	-13	-11.14	Horizontal
Test Results for Mid Channel 707.5MHz							
1415.0	-52.91	2.61	27.28	-28.24	-13	-15.24	Horizontal
1415.0	-49.06	2.61	27.28	-24.39	-13	-11.39	Vertical
2122.5	-52.93	2.87	27.59	-28.21	-13	-15.21	Vertical
2122.5	-51.62	2.87	27.59	-26.90	-13	-13.90	Horizontal
187.6	-37.52	1.72	17.99	-21.25	-13	-8.25	Vertical
331.8	-41.16	1.73	17.94	-24.95	-13	-11.95	Horizontal
Test Results for High Channel 711MHz							
1422.0	-46.92	2.62	27.28	-22.26	-13	-9.26	Horizontal
1422.0	-53.67	2.62	27.28	-29.01	-13	-16.01	Vertical
2133.0	-45.44	2.87	27.60	-20.71	-13	-7.71	Vertical
2133.0	-52.84	2.87	27.60	-28.11	-13	-15.11	Horizontal
204.0	-37.16	1.58	15.93	-22.81	-13	-9.81	Vertical
421.3	-41.96	1.36	15.59	-27.73	-13	-14.73	Horizontal

Note: Spurious Emission Level = Spectrum Analyzer Read Value + Cable Loss+ Antenna Factor + 11.74
 . Margin = Spurious Emission Level - Limit
 . Both QPSK and 16QAM has been tested, the worst case is QPSK mode, the report just reported the worst case

9.6 LTE BAND 26

QPSK EIRP POWER FOR LTE BAND 26(814MHz~824MHz) (1.4MHZ BANDWIDTH)

Test Results for Low Channel 814.7MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1629.4	-49.25	2.78	27.50	-24.53	-13	-11.53	Horizontal
1629.4	-46.20	2.78	27.50	-21.48	-13	-8.48	Vertical
2444.1	-46.34	2.90	27.80	-21.44	-13	-8.44	Vertical
2444.1	-48.54	2.90	27.80	-23.64	-13	-10.64	Horizontal
229.6	-32.97	1.54	16.98	-17.53	-13	-4.53	Vertical
83.3	-34.18	1.47	15.82	-19.83	-13	-6.83	Horizontal
Test Results For Mid Channel 819MHz							
1638.0	-49.94	2.80	27.48	-25.26	-13	-12.26	Horizontal
1638.0	-41.90	2.80	27.48	-17.22	-13	-4.22	Vertical
2457.0	-47.57	2.91	27.70	-22.78	-13	-9.78	Vertical
2457.0	-49.87	2.91	27.70	-25.08	-13	-12.08	Horizontal
168.2	-34.62	1.74	16.19	-20.17	-13	-7.17	Vertical
92.9	-34.31	1.46	15.43	-20.34	-13	-7.34	Horizontal
Test Results for High Channel 823.3MHz							
1646.6	-49.47	2.82	27.43	-24.86	-13	-11.86	Horizontal
1646.6	-44.27	2.82	27.43	-19.66	-13	-6.66	Vertical
2469.9	-49.51	2.92	27.74	-24.69	-13	-11.69	Vertical
2469.9	-46.06	2.92	27.74	-21.24	-13	-8.24	Horizontal
213.1	-32.53	1.67	17.05	-17.15	-13	-4.15	Vertical
121.7	-34.66	1.42	16.12	-19.96	-13	-6.96	Horizontal

QPSK EIRP POWER FOR LTE BAND 26(814MHz~824MHz) (1.4MHZ BANDWIDTH)

Test Results for Channel 819MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1638.0	-47.98	2.78	27.50	-23.26	-13	-10.26	Horizontal
1638.0	-45.14	2.78	27.50	-20.42	-13	-7.42	Vertical
2457.0	-49.14	2.90	27.80	-24.24	-13	-11.24	Vertical
2457.0	-48.67	2.90	27.80	-23.77	-13	-10.77	Horizontal
253.7	-33.79	1.43	17.34	-17.88	-13	-4.88	Vertical
256.8	-33.41	1.56	15.71	-19.26	-13	-6.26	Horizontal

QPSK EIRP POWER FOR LTE BAND 26(824MHz~849MHz) (1.4MHZ BANDWIDTH)

Test Results for Low Channel 824.7MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1649.4	-47.23	2.78	27.50	-22.51	-13	-9.51	Horizontal
1649.4	-47.79	2.78	27.50	-23.07	-13	-10.07	Vertical
2474.1	-46.54	2.90	27.80	-21.64	-13	-8.64	Vertical
2474.1	-46.08	2.90	27.80	-21.18	-13	-8.18	Horizontal
237.0	-34.21	1.33	17.34	-18.20	-13	-5.20	Vertical
180.5	-32.01	1.47	16.80	-16.68	-13	-3.68	Horizontal
Test Results For Mid Channel 836.5MHz							
1673.0	-47.80	2.80	27.48	-23.12	-13	-10.12	Horizontal
1673.0	-44.17	2.80	27.48	-19.49	-13	-6.49	Vertical
2509.5	-46.96	2.91	27.70	-22.17	-13	-9.17	Vertical
2509.5	-46.45	2.91	27.70	-21.66	-13	-8.66	Horizontal
140.8	-32.35	1.75	15.46	-18.64	-13	-5.64	Vertical
90.6	-34.41	1.52	16.14	-19.79	-13	-6.79	Horizontal
Test Results for High Channel 848.3MHz							
1696.6	-49.81	2.82	27.43	-25.20	-13	-12.20	Horizontal
1696.6	-43.72	2.82	27.43	-19.11	-13	-6.11	Vertical
2544.9	-49.67	2.92	27.74	-24.85	-13	-11.85	Vertical
2544.9	-49.73	2.92	27.74	-24.91	-13	-11.91	Horizontal
171.4	-34.12	1.67	16.09	-19.70	-13	-6.70	Vertical
247.2	-34.75	1.80	17.55	-19.00	-13	-6.00	Horizontal

QPSK EIRP POWER FOR LTE BAND 26(824MHz~849MHz) (15MHZ BANDWIDTH)

Test Results for Low Channel 831.5MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1663.0	-49.86	2.78	27.50	-25.14	-13	-12.14	Horizontal
1663.0	-46.60	2.78	27.50	-21.88	-13	-8.88	Vertical
2494.5	-46.75	2.90	27.80	-21.85	-13	-8.85	Vertical
2494.5	-49.37	2.90	27.80	-24.47	-13	-11.47	Horizontal
255.4	-34.71	1.52	15.72	-20.51	-13	-7.51	Vertical
163.1	-34.35	1.40	17.03	-18.72	-13	-5.72	Horizontal
Test Results for Mid Channel 836.5MHz							
1673.0	-46.79	2.80	27.48	-22.11	-13	-9.11	Horizontal
1673.0	-41.66	2.80	27.48	-16.98	-13	-3.98	Vertical
2509.5	-46.95	2.91	27.70	-22.16	-13	-9.16	Vertical
2509.5	-49.88	2.91	27.70	-25.09	-13	-12.09	Horizontal
227.1	-33.10	1.74	16.38	-18.46	-13	-5.46	Vertical
101.3	-32.15	1.79	15.20	-18.74	-13	-5.74	Horizontal
Test Results for High Channel 841.5MHz							
1683.0	-47.05	2.82	27.43	-22.44	-13	-9.44	Horizontal
1683.0	-44.76	2.82	27.43	-20.15	-13	-7.15	Vertical
2524.5	-49.45	2.92	27.74	-24.63	-13	-11.63	Vertical
2524.5	-48.10	2.92	27.74	-23.28	-13	-10.28	Horizontal
261.1	-33.08	1.78	17.44	-17.42	-13	-4.42	Vertical
120.1	-34.96	1.70	15.93	-20.73	-13	-7.73	Horizontal

9.7 LTE BAND 38

QPSK EIRP POWER FOR LTE BAND 38 (5MHZ BANDWIDTH)

Test Results for Low Channel 2572.5MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Gain(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
5145	-54.34	4.01	27.5	-30.85	-13	-17.85	Horizontal
5145	-49.77	4.01	27.5	-26.28	-13	-13.28	Vertical
7717.5	-49.04	5.09	27.8	-26.33	-13	-13.33	Vertical
7717.5	-49.61	5.09	27.8	-26.90	-13	-13.90	Horizontal
Test Results For Mid Channel 2595MHz							
5190	-49.83	4.1	27.48	-26.45	-13	-13.45	Horizontal
5190	-54.46	4.1	27.48	-31.08	-13	-18.08	Vertical
7785	-50.81	5.42	27.7	-28.53	-13	-15.53	Vertical
7785	-49.75	5.42	27.7	-27.47	-13	-14.47	Horizontal
Test Results for High Channel 2617.5MHz							
5234	-50.93	4.11	27.43	-27.61	-13	-14.61	Horizontal
5234	-53.51	4.11	27.43	-30.19	-13	-17.19	Vertical
7851	-51.00	5.31	27.74	-28.57	-13	-15.57	Vertical
7851	-52.84	5.31	27.74	-30.41	-13	-17.41	Horizontal

QPSK EIRP POWER FOR LTE BAND 38 (20MHZ BANDWIDTH)

Test Results for Low Channel 2580MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Gain(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
5160	-54.17	3.89	27.5	-30.56	-13	-17.56	Horizontal
5160	-49.03	3.89	27.5	-25.42	-13	-12.42	Vertical
7740	-49.70	5.33	27.8	-27.23	-13	-14.23	Vertical
7740	-53.12	5.33	27.8	-30.65	-13	-17.65	Horizontal
Test Results for Mid Channel 2595MHz							
5190	-51.09	4.1	27.48	-27.71	-13	-14.71	Horizontal
5190	-49.66	4.1	27.48	-26.28	-13	-13.28	Vertical
7785	-50.28	5.42	27.7	-28.00	-13	-15.00	Vertical
7785	-49.32	5.42	27.7	-27.04	-13	-14.04	Horizontal
Test Results for High Channel 2610MHz							
5220	-51.99	4.01	27.43	-28.57	-13	-15.57	Horizontal
5220	-54.37	4.01	27.43	-30.95	-13	-17.95	Vertical
7830	-49.19	5.34	27.74	-26.79	-13	-13.79	Vertical
7830	-49.04	5.34	27.74	-26.64	-13	-13.64	Horizontal

Note: $P_{Mea}(dBm) = Power(dBm) + ARpl(dBm)$

Over Limit = $P_{Mea}(dBm) - Limit(dBm)$

We test both H direction and V direction, recorded worst case direction.

Both QPSK and 16QAM has been tested, the worst case is QPSK mode, the report just reported the worst case.

9.8 LTE BAND 66

QPSK EIRP POWER FOR LTE BAND 66 (1.4MHZ BANDWIDTH)

Test Results for Low Channel 1710.7MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Gain(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3421.4	-48.51	4.02	29.80	-22.73	-13	-9.73	Horizontal
3421.4	-53.80	4.02	29.80	-28.02	-13	-15.02	Vertical
5132.1	-53.68	5.24	35.84	-23.08	-13	-10.08	Vertical
5132.1	-48.12	5.24	35.84	-17.52	-13	-4.52	Horizontal
112.6	-44.84	1.52	15.57	-30.79	-13	-17.79	Vertical
220.5	-45.65	1.33	17.14	-29.84	-13	-16.84	Horizontal
Test Results for Mid Channel 1745MHz							
3490.0	-46.08	4.03	30.00	-20.11	-13	-7.11	Horizontal
3490.0	-47.99	4.03	30.00	-22.02	-13	-9.02	Vertical
5235.0	-51.84	5.25	35.86	-21.23	-13	-8.23	Vertical
5235.0	-51.20	5.25	35.86	-20.59	-13	-7.59	Horizontal
157.3	-46.31	1.53	17.13	-30.71	-13	-17.71	Vertical
213.1	-54.87	1.41	15.95	-40.33	-13	-27.33	Horizontal
Test Results for High Channel 1779.3MHz							
3558.6	-49.24	4.05	30.01	-23.28	-13	-10.28	Horizontal
3558.6	-47.04	4.05	30.01	-21.08	-13	-8.08	Vertical
5337.9	-49.02	5.26	35.86	-18.42	-13	-5.42	Vertical
5337.9	-51.30	5.26	35.86	-20.70	-13	-7.70	Horizontal
170.6	-47.06	1.44	15.51	-32.99	-13	-19.99	Vertical
169.0	-51.01	1.78	15.76	-37.03	-13	-24.03	Horizontal

QPSK EIRP POWER FOR LTE BAND 66 (20MHZ BANDWIDTH)

Test Results for Low Channel 1720MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3440.0	-51.34	4.02	29.80	-25.56	-13	-12.56	Horizontal
3440.0	-54.98	4.02	29.80	-29.20	-13	-16.20	Vertical
5160.0	-51.82	5.24	35.84	-21.22	-13	-8.22	Vertical
5160.0	-53.05	5.24	35.84	-22.45	-13	-9.45	Horizontal
268.8	-50.70	1.62	17.02	-35.30	-13	-22.30	Vertical
161.4	-46.16	1.32	17.31	-30.17	-13	-17.17	Horizontal
Test Results for Mid Channel 1745MHz							
3490.0	-52.95	4.03	30.00	-26.98	-13	-13.98	Horizontal
3490.0	-53.17	4.03	30.00	-27.20	-13	-14.20	Vertical
5235.0	-52.94	5.25	35.86	-22.33	-13	-9.33	Vertical
5235.0	-54.03	5.25	35.86	-23.42	-13	-10.42	Horizontal
159.9	-54.38	1.45	15.17	-40.66	-13	-27.66	Vertical
172.1	-47.91	1.48	17.82	-31.57	-13	-18.57	Horizontal
Test Results for High Channel 1770MHz							
3540.0	-44.14	2.91	27.68	-19.37	-13	-6.37	Horizontal
3540.0	-54.76	2.91	27.68	-29.99	-13	-16.99	Vertical
5310.0	-51.92	5.26	35.86	-21.32	-13	-8.32	Vertical
5310.0	-50.00	5.26	35.86	-19.40	-13	-6.40	Horizontal
197.3	-53.53	1.76	16.38	-38.91	-13	-25.91	Vertical
158.5	-46.95	1.43	17.13	-31.25	-13	-18.25	Horizontal

Note: $P_{Mea}(dBm) = Power(dBm) + ARpl(dBm)$

Over Limit = $P_{Mea}(dBm) - Limit(dBm)$

We test both H direction and V direction, recorded worst case direction.

Both QPSK and 16QAM has been tested, the worst case is QPSK mode, the report just reported the worst case.

10. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235, §27.54, §90.213

LIMITS

§22.355 - The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.

§24.235 - The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

TEST PROCEDURE

Use CMW 500 with Frequency Error measurement capability.

- Temp. = -30° to $+50^{\circ}\text{C}$
- Voltage = low voltage, DC 3.4V, Normal, DC 3.8V and High voltage, DC 4.2V.

Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to -30°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until $+50^{\circ}\text{C}$ is reached.

Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 26
- LTE Band 38
- LTE Band 66

RESULTS

See the following pages.

10.1 LTE BAND 2

QPSK, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 2 QPSK, (CH 18900 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	1880	8.6	0.00458	2.5
3.8	1880	6.2	0.00332	2.5
4.2	1880	5.3	0.00280	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 2 QPSK, (CH 18900 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	1880	6.0	0.00319	2.5
Extreme (50C)	1880	6.9	0.00365	2.5
Extreme (40C)	1880	8.0	0.00424	2.5
Extreme (30C)	1880	9.1	0.00485	2.5
Extreme (10C)	1880	8.4	0.00445	2.5
Extreme (0C)	1880	5.9	0.00315	2.5
Extreme (-10C)	1880	7.7	0.00409	2.5
Extreme (-20C)	1880	7.8	0.00416	2.5
Extreme (-30C)	1880	6.0	0.00317	2.5

16QAM, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 2 16QAM, (CH 18900 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	1880	8.2	0.00436	2.5
3.8	1880	5.8	0.00311	2.5
4.2	1880	6.8	0.00361	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 2 16QAM, (CH 18900 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	1880	7.6	0.00406	2.5
Extreme (50C)	1880	6.5	0.00346	2.5
Extreme (40C)	1880	5.6	0.00297	2.5
Extreme (30C)	1880	6.9	0.00365	2.5
Extreme (10C)	1880	6.7	0.00358	2.5
Extreme (0C)	1880	4.8	0.00253	2.5
Extreme (-10C)	1880	9.2	0.00492	2.5
Extreme (-20C)	1880	6.1	0.00324	2.5
Extreme (-30C)	1880	5.9	0.00316	2.5

*Note: Frequency error measurements were made by using the build-in capability of the Wireless Communication Test Set.

10.2 LTE BAND 4

QPSK, (10MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 4 QPSK, (CH 20175 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	1732.5	6.3	0.00361	2.5
3.8	1732.5	5.6	0.00321	2.5
4.2	1732.5	6.8	0.00394	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 4 QPSK, (CH 20175 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	1732.5	4.7	0.00269	2.5
Extreme (50C)	1732.5	9.7	0.00561	2.5
Extreme (40C)	1732.5	6.1	0.00354	2.5
Extreme (30C)	1732.5	6.2	0.00356	2.5
Extreme (10C)	1732.5	6.7	0.00384	2.5
Extreme (0C)	1732.5	9.7	0.00557	2.5
Extreme (-10C)	1732.5	5.8	0.00336	2.5
Extreme (-20C)	1732.5	6.6	0.00380	2.5
Extreme (-30C)	1732.5	6.0	0.00349	2.5

16QAM, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 4 16QAM, (CH 20175 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	1732.5	6.2	0.00355	2.5
3.8	1732.5	6.0	0.00349	2.5
4.2	1732.5	5.7	0.00328	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 4 16QAM, (CH 20175 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	1732.5	-7.0	-0.00402	2.5
Extreme (50C)	1732.5	-4.2	-0.00243	2.5
Extreme (40C)	1732.5	5.0	0.00288	2.5
Extreme (30C)	1732.5	-4.2	-0.00240	2.5
Extreme (10C)	1732.5	6.8	0.00391	2.5
Extreme (0C)	1732.5	4.8	0.00277	2.5
Extreme (-10C)	1732.5	9.4	0.00543	2.5
Extreme (-20C)	1732.5	11.1	0.00643	2.5
Extreme (-30C)	1732.5	6.0	0.00348	2.5

***Note:** Frequency error measurements were made by using the build-in capability of the Wireless Communication Test Set.

10.3 LTE BAND 5

QPSK, (10MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 5 QPSK, (CH 20525 RB size 50 RB Offset 0 10MHz BANDWIDTH)				
3.4	836.5	6.9	0.00827	2.5
3.8	836.5	8.4	0.01002	2.5
4.2	836.5	4.0	0.00484	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 5 QPSK, (CH 20525 RB size 50 RB Offset 0 10MHz BANDWIDTH)				
Normal (25C)	836.5	6.7	0.00797	2.5
Extreme (50C)	836.5	8.2	0.00975	2.5
Extreme (40C)	836.5	9.2	0.01097	2.5
Extreme (30C)	836.5	5.7	0.00681	2.5
Extreme (10C)	836.5	6.0	0.00718	2.5
Extreme (0C)	836.5	4.6	0.00550	2.5
Extreme (-10C)	836.5	3.1	0.00374	2.5
Extreme (-20C)	836.5	5.8	0.00694	2.5
Extreme (-30C)	836.5	6.8	0.00815	2.5

16QAM, (10MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 5 16QAM, (CH 20525 RB size 50 RB Offset 0 10MHz BANDWIDTH)				
3.4	836.5	8.1	0.00971	2.5
3.8	836.5	9.8	0.01166	2.5
4.2	836.5	7.4	0.00888	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 5 16QAM, (CH 20525 RB size 50 RB Offset 0 10MHz BANDWIDTH)				
Normal (25C)	836.5	6.9	0.00820	2.5
Extreme (50C)	836.5	5.2	0.00625	2.5
Extreme (40C)	836.5	3.2	0.00381	2.5
Extreme (30C)	836.5	2.5	0.00298	2.5
Extreme (10C)	836.5	6.2	0.00745	2.5
Extreme (0C)	836.5	2.4	0.00287	2.5
Extreme (-10C)	836.5	9.9	0.01182	2.5
Extreme (-20C)	836.5	6.5	0.00779	2.5
Extreme (-30C)	836.5	6.3	0.00751	2.5

***Note:** Frequency error measurements were made by using the build-in capability of the Wireless Communication Test Set.

10.4 LTE BAND 7

QPSK, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 7 QPSK, (CH 21100 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	2535	6.0	0.00237	2.5
3.8	2535	5.9	0.00234	2.5
4.2	2535	7.7	0.00302	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 7 QPSK, (CH 21100 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	2535	7.2	0.00283	2.5
Extreme (50C)	2535	6.5	0.00258	2.5
Extreme (40C)	2535	5.2	0.00204	2.5
Extreme (30C)	2535	6.7	0.00262	2.5
Extreme (10C)	2535	6.7	0.00263	2.5
Extreme (0C)	2535	4.9	0.00193	2.5
Extreme (-10C)	2535	9.3	0.00366	2.5
Extreme (-20C)	2535	6.0	0.00236	2.5
Extreme (-30C)	2535	6.5	0.00255	2.5

16QAM, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 7 16QAM, (CH 21100 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	2535	6.0	0.00235	2.5
3.8	2535	6.2	0.00245	2.5
4.2	2535	9.0	0.00357	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 7 16QAM, (CH 21100 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	2535	7.0	0.00276	2.5
Extreme (50C)	2535	6.4	0.00253	2.5
Extreme (40C)	2535	5.6	0.00221	2.5
Extreme (30C)	2535	3.8	0.00149	2.5
Extreme (10C)	2535	6.2	0.00244	2.5
Extreme (0C)	2535	4.6	0.00181	2.5
Extreme (-10C)	2535	9.4	0.00372	2.5
Extreme (-20C)	2535	10.4	0.00409	2.5
Extreme (-30C)	2535	6.4	0.00251	2.5

***Note:** Frequency error measurements were made by using the build-in capability of the Wireless Communication Test Set.

10.5 LTE BAND 12

Band 12 QPSK, (10MHz BANDWIDTH RB size 50 RB Offset 0)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.4	707.5	8.7	0.01235	2.5
3.85	707.5	10.4	0.01465	2.5
4.2	707.5	8.7	0.01230	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	707.5	9.1	0.01281	2.5
Extreme (50C)	707.5	7.8	0.01105	2.5
Extreme (40C)	707.5	7.7	0.01092	2.5
Extreme (30C)	707.5	8.3	0.01170	2.5
Extreme (10C)	707.5	7.7	0.01093	2.5
Extreme (0C)	707.5	8.6	0.01212	2.5
Extreme (-10C)	707.5	8.1	0.01145	2.5
Extreme (-20C)	707.5	8.7	0.01235	2.5
Extreme (-30C)	707.5	8.2	0.01159	2.5

Band 12 16QAM, (10MHz BANDWIDTH RB size 50 RB Offset 0)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.4	707.5	7.0	0.00986	2.5
3.85	707.5	8.7	0.01233	2.5
4.2	707.5	7.6	0.01080	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	707.5	6.5	0.00918	2.5
Extreme (50C)	707.5	5.5	0.00777	2.5
Extreme (40C)	707.5	6.4	0.00911	2.5
Extreme (30C)	707.5	-7.7	-0.01091	2.5
Extreme (10C)	707.5	-8.2	-0.01159	2.5
Extreme (0C)	707.5	2.9	0.00410	2.5
Extreme (-10C)	707.5	-5.2	-0.00729	2.5
Extreme (-20C)	707.5	-8.7	-0.01230	2.5
Extreme (-30C)	707.5	-10.2	-0.01435	2.5

***Note:** Frequency error measurements were made by using the build-in capability of the Wireless Communication Test Set.

10.6 LTE BAND 26

Band 26 A (814MHz~824MHz) QPSK,10MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26A QPSK, (CH 26740 RB size 50 RB Offset 0 10MHz BANDWIDTH)				
3.4	819	12.7	0.01546	2.5
3.8	819	14.0	0.01706	2.5
4.2	819	13.1	0.01605	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26A QPSK, (CH 26740RB size 50 RB Offset 0 10MHz BANDWIDTH)				
Normal (25C)	819	8.0	0.00971	2.5
Extreme (50C)	819	-3.8	-0.00469	2.5
Extreme (40C)	819	5.4	0.00656	2.5
Extreme (30C)	819	-3.4	-0.00416	2.5
Extreme (10C)	819	6.0	0.00731	2.5
Extreme (0C)	819	4.5	0.00555	2.5
Extreme (-10C)	819	9.7	0.01184	2.5
Extreme (-20C)	819	11.1	0.01354	2.5
Extreme (-30C)	819	6.0	0.00738	2.5

Band 26A (814MHz~824MHz) 16QAM, (10MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26A 16QAM, (CH 26740 RB size 50 RB Offset 0 10MHz BANDWIDTH)				
3.4	819	8.0	0.00977	2.5
3.8	819	6.1	0.00746	2.5
4.2	819	5.6	0.00685	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26A 16QAM, (CH 26740 RB size 50 RB Offset 0 10MHz BANDWIDTH)				
Normal (25C)	819	7.6	0.00932	2.5
Extreme (50C)	819	4.3	0.00531	2.5
Extreme (40C)	819	5.8	0.00711	2.5
Extreme (30C)	819	4.4	0.00536	2.5
Extreme (10C)	819	6.5	0.00789	2.5
Extreme (0C)	819	5.0	0.00612	2.5
Extreme (-10C)	819	9.7	0.01182	2.5
Extreme (-20C)	819	11.2	0.01368	2.5
Extreme (-30C)	819	5.8	0.00714	2.5

***Note:** Frequency error measurements were made by using the build-in capability of the Wireless Communication Test Set.

Band 26B ((824MHz~849MHz) QPSK,15MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26B QPSK, (CH 26915 RB size 75 RB Offset 0 15MHz BANDWIDTH)				
3.4	836.5	12.9	0.01543	2.5
3.8	836.5	13.4	0.01607	2.5
4.2	836.5	13.5	0.01609	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26B QPSK, (CH 26915 RB size 75 RB Offset 0 15MHz BANDWIDTH)				
Normal (25C)	836.5	7.8	0.00936	2.5
Extreme (50C)	836.5	4.4	0.00526	2.5
Extreme (40C)	836.5	5.0	0.00592	2.5
Extreme (30C)	836.5	4.9	0.00592	2.5
Extreme (10C)	836.5	6.6	0.00784	2.5
Extreme (0C)	836.5	5.2	0.00622	2.5
Extreme (-10C)	836.5	9.3	0.01117	2.5
Extreme (-20C)	836.5	10.3	0.01236	2.5
Extreme (-30C)	836.5	6.6	0.00787	2.5

Band 26B (824MHz~849MHz) 16QAM, (15MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26B 16QAM, (CH 26915 RB size 75 RB Offset 0 15MHz BANDWIDTH)				
3.4	836.5	13.0	0.01553	2.5
3.8	836.5	14.0	0.01673	2.5
4.2	836.5	13.0	0.01553	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26B 16QAM, (CH 26915 RB size 75 RB Offset 0 15MHz BANDWIDTH)				
Normal (25C)	836.5	8.0	0.00951	2.5
Extreme (50C)	836.5	4.8	0.00568	2.5
Extreme (40C)	836.5	5.8	0.00695	2.5
Extreme (30C)	836.5	5.2	0.00623	2.5
Extreme (10C)	836.5	6.4	0.00767	2.5
Extreme (0C)	836.5	5.3	0.00631	2.5
Extreme (-10C)	836.5	9.7	0.01164	2.5
Extreme (-20C)	836.5	11.0	0.01318	2.5
Extreme (-30C)	836.5	5.9	0.00706	2.5

***Note:** Frequency error measurements were made by using the build-in capability of the Wireless Communication

10.7 LTE BAND 38

QPSK, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 38 QPSK, (CH 37850 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	2595	8.6	0.00333	2.5
3.8	2595	6.7	0.00258	2.5
4.2	2595	7.9	0.00303	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 38 QPSK, (CH 37850 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	2595	7.4	0.00286	2.5
Extreme (50C)	2595	4.7	0.00183	2.5
Extreme (40C)	2595	5.8	0.00224	2.5
Extreme (30C)	2595	5.1	0.00197	2.5
Extreme (10C)	2595	6.6	0.00254	2.5
Extreme (0C)	2595	4.6	0.00177	2.5
Extreme (-10C)	2595	9.3	0.00359	2.5
Extreme (-20C)	2595	10.5	0.00403	2.5
Extreme (-30C)	2595	6.6	0.00254	2.5

16QAM, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 38 16QAM, (CH 37850 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	2595	8.1	0.00310	2.5
3.8	2595	6.3	0.00242	2.5
4.2	2595	6.0	0.00232	2.5

Frequency error vs. Temperature

Temperature [° C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 38 16QAM, (CH 37850 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	2595	7.9	0.00306	2.5
Extreme (50C)	2595	4.4	0.00170	2.5
Extreme (40C)	2595	5.1	0.00197	2.5
Extreme (30C)	2595	4.9	0.00188	2.5
Extreme (10C)	2595	6.2	0.00240	2.5
Extreme (0C)	2595	4.9	0.00189	2.5
Extreme (-10C)	2595	9.7	0.00375	2.5
Extreme (-20C)	2595	11.2	0.00433	2.5
Extreme (-30C)	2595	6.5	0.00249	2.5

***Note:** Frequency error measurements were made by using the build-in capability of the Wireless Communication Test Set.

10.8 LTE BAND 66

QPSK, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 66 QPSK, (CH 132322 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	1745	12.9	0.00740	2.5
3.8	1745	13.4	0.00767	2.5
4.2	1745	13.3	0.00762	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 66 QPSK, (CH 132322 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	1745	7.5	0.00427	2.5
Extreme (50C)	1745	4.5	0.00260	2.5
Extreme (40C)	1745	5.6	0.00321	2.5
Extreme (30C)	1745	5.1	0.00292	2.5
Extreme (10C)	1745	6.6	0.00376	2.5
Extreme (0C)	1745	4.7	0.00272	2.5
Extreme (-10C)	1745	9.8	0.00561	2.5
Extreme (-20C)	1745	11.1	0.00638	2.5
Extreme (-30C)	1745	6.5	0.00372	2.5

16QAM, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 66 16QAM, (CH 132322 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
3.4	1745	12.3	0.00707	2.5
3.8	1745	14.2	0.00814	2.5
4.2	1745	13.3	0.00765	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 66 16QAM, (CH 132322 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	1745	7.9	0.00450	2.5
Extreme (50C)	1745	4.9	0.00282	2.5
Extreme (40C)	1745	5.8	0.00333	2.5
Extreme (30C)	1745	4.9	0.00281	2.5
Extreme (10C)	1745	6.2	0.00356	2.5
Extreme (0C)	1745	4.8	0.00278	2.5
Extreme (-10C)	1745	9.2	0.00530	2.5
Extreme (-20C)	1745	11.1	0.00637	2.5
Extreme (-30C)	1745	6.6	0.00378	2.5

***Note:** Frequency error measurements were made by using the build-in capability of the Wireless Communication Test Set.

11. Peak-to-Average Ratio

11.1 Description of the PAR Measurement

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

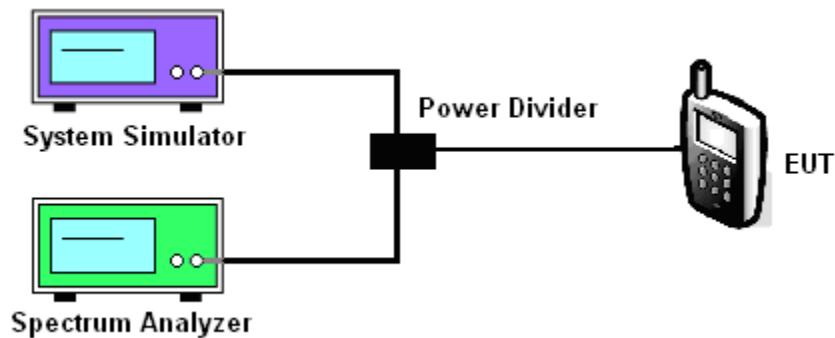
11.2 Measuring Instruments

See list of measuring instruments of this test report.

11.3 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. For GSM/EGPRS operating modes:
 - a. Set the RBW = 1MHz, VBW = 1MHz, Peak detector in spectrum analyzer.
 - b. Set EUT in maximum power output, and triggered the burst signal.
 - c. Measured respectively the Peak level and Mean level, and the deviation was recorded as Peak to Average Ratio.
4. For UMTS operating modes:
 - a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
 - b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.

11.4 Test Setup



MODES TESTED

- LTE Band 2/4/5/7/12/26/38/66
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Test data reference attachment.

----END OF REPORT----