

FCC CFR47 PART 22H, 24E, 27,90S CERTIFICATION TEST REPORT FCC ID:2ANMU-WP63

Product: Smart phone

Trade Mark: OUKITEL

Model No.: WP63

WP63 S, WP63 GT, WP63 Pro, WP63 Plus, WP63

Family Model: Ultra, WP63 MAX, WP63 4G, WP63 5G, WP63 TITAN,
WP63 Lite, WP63 Go, WP63 Pure

Report No.: N26052704326E

Issue Date: Sept. 10, 2026

Prepared for

SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE,
GUANLAN, LONGHUA SHENZHEN, 518XXX China

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name : SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD

Address..... : A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU
INDUSTRIAL ZONE, GUANLAN,LONGHUA SHENZHEN, 518XXX
China

Manufacturer's Name..... : SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD

Address..... : A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU
INDUSTRIAL ZONE, GUANLAN,LONGHUA SHENZHEN, 518XXX
China

Product name..... : Smart phone

Model and/or type reference .. : WP63

Trade Mark..... : OUKITEL

Family Model..... : WP63 S, WP63 GT, WP63 Pro, WP63 Plus, WP63 Ultra, WP63 MAX,
WP63 4G, WP63 5G, WP63 TITAN, WP63 Lite, WP63 Go, WP63 Pure

Test Sample Number..... S2605280137-1#

Standards..... : FCC CFR 47 Part 22H, Part 24E, Part 27, Part 90S

Test procedure : ANSI C63.26:2015
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.

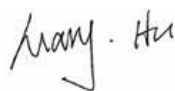
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Date of Test

Date (s) of performance of tests..... Jun. 02, 2026 ~ Sept. 10, 2026

Date of Issue Sept. 10, 2026

Test Result..... **Pass**

Prepared : 
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(Project Engineer)

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1. GENERAL INFORMATION

1.1 PRODUCT DESCRIPTION

A major technical description of EUT is described as following:

Product Designation:	Smart phone
Trade Mark	OUKITEL
Model Name	WP63
Family Model	WP63 S, WP63 GT, WP63 Pro, WP63 Plus, WP63 Ultra, WP63 MAX, WP63 4G, WP63 5G, WP63 TITAN, WP63 Lite, WP63 Go, WP63 Pure
Model Difference	All models have the same circuit and RF module, except for model names.
FCC ID:	2ANMU-WP63
Frequency Bands:	U.S. Bands: ☒ LTE FDD Band 2, 4, 5, 7, 12, 17, 25, 26, 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 17 Uplink: 704MHz-716MHz, Downlink: 734MHz-746MHz; LTE FDD Band 25 Uplink: 1850MHz-1915MHz, Downlink: 1930MHz-1995MHz; LTE FDD Band 26A Uplink: 814MHz-824MHz, Downlink: 859MHz-869MHz; LTE FDD Band 26B Uplink: 824MHz-849MHz, Downlink: 869MHz-894MHz; LTE FDD Band 66 Uplink: 1710MHz-1780MHz, Downlink: 2110MHz-2200MHz;
Type of Modulation:	QPSK/16QAM/64QAM(Only Downlink)
Power Class	Class 3
SIM Card:	SIM 1 and SIM 2 is a chipset unit and tested as a single chipset. The SIM 1 is chosen for test.
Antenna:	FPC Antenna
Antenna gain:	Band 2: 1.15 dBi, Band 4: 0.28 dBi, Band 5: -4.79 dBi, Band 7: 2.34 dBi, Band 12: -4.01dBi, Band 17: -4.01dBi, Band25: 1.15dBi, Band 26: -4.79 dBi, Band66: 0.28dBi;

Adapter	Model: HJ-PD33W-US Input: 100-240V~50/60Hz 0.6A Output: 5.0V---3.0A 15.0W OR 9.0V---3.0A 27.0W OR 12.0V---2.75A 33.0W MAX
Battery	DC 3.87V, 20000mAh, 77.4Wh
Power supply	DC 3.87V from battery or DC 5V/9V/12V from adapter
Extreme Vol. Limits:	DC 3.29V to DC 4.45V (Nominal DC 3.87V) (Note 1)
HW Version	N/A
SW Version	V04
** Note1: The High Voltage DC 4.45V and Low Voltage 3.29V 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:2ANMU-WP63** filing to comply with the FCC Part 22H&24E&27&90S

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 C63.26:2015.

1.4 TEST FACILITY

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

ShenZhen NTEK Testing Technology Co., Ltd.

No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street, Baoan District, Shenzhen, Guangdong, People's Republic of China.

The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.26:2015& ANSI C63.4: 2014.

FCC Registration No.:463705

IC Registration No.:9270A,

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	Conducted output power	0.5dB
2	Occupied bandwidth	0.01
3	Spurious emissions at antenna terminals	2.71dB
4	Emission mask	2.71dB
5	Frequency stability	0.21ppm
8	Field strength of spurious radiation(30MHz ~ 1GHz)	5.1dB
9	Field strength of spurious radiation(1GHz ~ 18GHz)	4.9dB
10	Field strength of spurious radiation(18GHz ~ 40GHz)	5.76dB
11	Temperature	1°C
12	Humidity	5%

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 2/4/5/7/12/17/25/26/66

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.

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

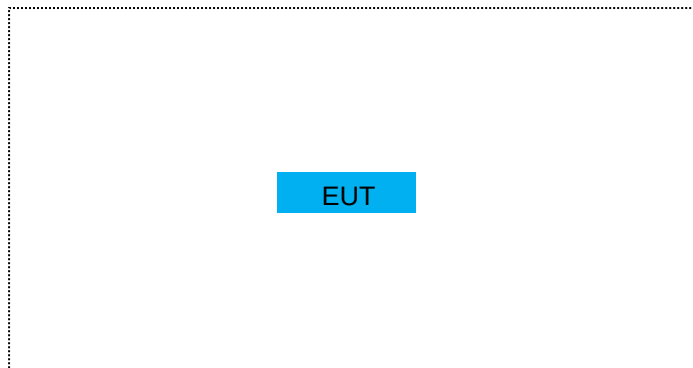
Table 2-1 Equipment Used in EUT System

Item	Equipment	Model No.	ID or Specification	Note
1	Smart phone	WP63	FCC ID: 2ANMU-WP63	EUT

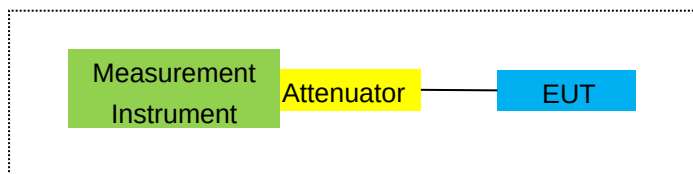
*Note: All the accessories have been used during the test.
the following "EUT" in setup diagram means EUT system.*

2.4 TEST SETUP

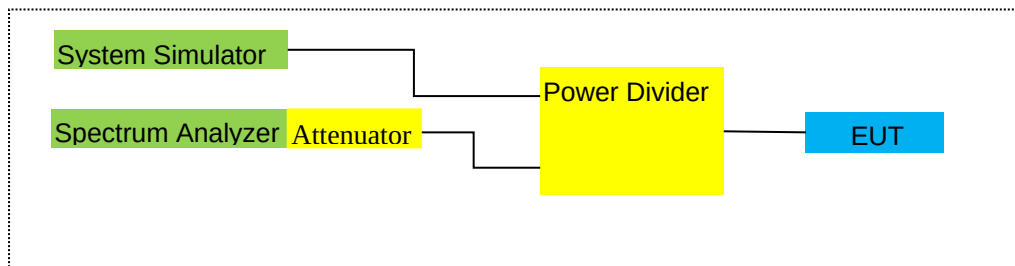
For Radiated Test Cases



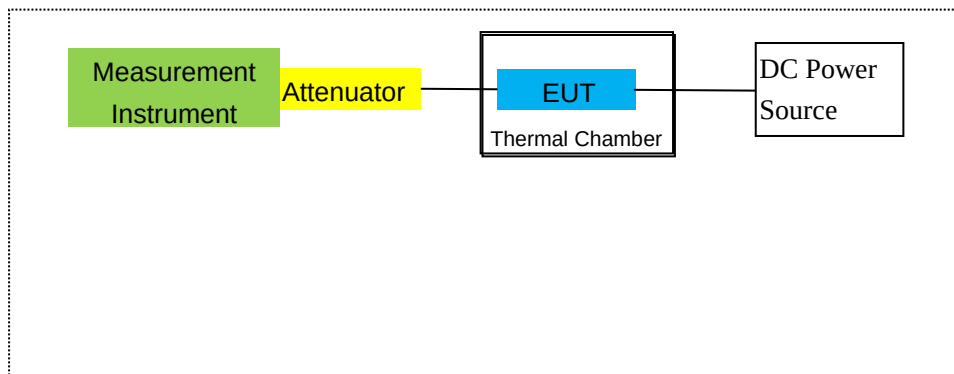
For Conducted Output Power



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	2026.04.08	2027.04.07	1 year
2	Test Receiver	R&S	ESPI3	101417	2026.06.29	2027.06.28	1 year
3	Log-Periodic Antenna	SCHWARZBECK	VULB 9162	584	2026.04.11	2027.04.10	3 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2024.04.26	2027.04.25	3 year
5	Horn Antenna	EM	EM-AH-10180	2011071402	2024.05.12	2027.05.11	3 year
6	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2024.05.12	2027.05.11	3 year
7	Amplifier	EM	EM-30180	060538	2026.04.08	2027.04.07	1 year
8	Loop Antenna	ARA	PLA-1030/B	1029	2026.04.08	2027.04.07	1 year
9	Power Meter	R&S	NRVS	100696	2026.04.08	2027.04.07	1 year
10	Power Sensor	R&S	URV5-Z4	0395.1619.05	2026.04.08	2027.04.07	1 year
11	Test Cable	N/A	R-01	N/A	2024.06.16	2027.06.15	3 year
12	Test Cable	N/A	R-02	N/A	2024.06.16	2027.06.15	3 year
13	Test Cable	N/A	R-03	N/A	2024.06.16	2027.06.15	3 year
14	Test Receiver	R&S	ESCI	101160	2026.04.08	2027.04.07	1 year
15	LISN	R&S	ENV216	101313	2026.04.08	2027.04.07	1 year
16	LISN	EMCO	3816/2	00042990	2026.04.08	2027.04.07	1 year
17	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2026.04.08	2027.04.07	1 year
18	Passive Voltage Probe	R&S	ESH2-Z3	100196	2026.04.08	2027.04.07	1 year
19	Test Cable	N/A	C01	N/A	2024.05.06	2027.05.05	3 year
20	Test Cable	N/A	C02	N/A	2024.05.06	2027.05.05	3 year
21	Test Cable	N/A	C03	N/A	2024.05.06	2027.05.05	3 year
22	Attenuator	MCE	24-10-34	BN9258	2026.04.08	2027.04.07	1 year
23	Spectrum Analyzer	agilent	e4440a	us44300399	2026.04.08	2027.04.07	1 year
24	test receiver	R&S	ESCI	a0304218	2026.04.08	2027.04.07	1 year
25	Communication Tester	R&S	CMU200	A0304247	2026.04.08	2027.04.07	1 year

26	Thermal Chamber	Ten Billion	TTC-B3C	TBN-960502	2026.04.08	2027.04.07	1 year
27	DC Power Source	N/A	PS-6005D	20170402923	2024.05.06	2027.05.05	3 year
28	MXG Vector Signal Generator	Agilent	N5182A	MY47070317	2026.04.08	2027.04.07	1 year
29	Communication Tester	R&S	CMW500	148500	2026.04.27	2027.04.26	1 year
30	Log-Periodic Antenna	SCHWARZBECK	VULB 9168	1742	2025.11.01	2026.10.31	1 year
31	Horn Antenna	SCHWARZBECK	BBHA 9120D	2816	2024.05.18	2027.05.17	3 year
32	PSG Analog Signal Generator	Agilent	E8257D	MY51110112	2026.04.27	2027.04.26	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

Measurement Software

Item	Manufacturer	Software Name	Software Version	Description
1	MWRTest	MTS 8200	2.0	RF Conducted Test
2	Farad	EZ-EMC_RE	AIT-03A	RadiatedTest
3	raditeq	RadiMation	2023.1.3	RadiatedTest

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 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
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

Band 2/4/5/7/12/17/25/26/66

RESULTS

PASS

Test data reference attachment.

6. BANDEDGE AND EMISSION MASK

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53, and §90.691

FCC: §22.359

LIMITS

FCC: §22.917, §24.238, §27.53

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

(m)(4) For mobile digital stations, 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 as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. Show citation box.

(c)(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;

FCC: §90.691 Emission mask requirements for EA-based systems.

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

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 resolution bandwidth to at least 1% of emission bandwidth.

MODES TESTED

Band 2/4/5/7/12/17/25/26/66

RESULTS

Test data reference attachment.

7. OUT OF BAND EMISSIONS

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53 and §90.691

LIMITS

1. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.
2. The Band 7/41 emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $55 + 10 \log (P)$ dB.

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

MODES TESTED

Band 2/4/5/7/12/17/25/26/66

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.

8. RADIATED MEASUREMENT

8.1. RADIATED POWER (ERP & EIRP)

RULE PART(S)

FCC: §2.1046, §22.913, §24.232, §27.50 and §90.635

LIMITS:

22.913(a) - 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. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

90.635(b) The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

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

Band 2/4/5/7/12/17/25/26/66

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	Polarization Of Max. ERP		
							Average		Limit	
							(mW)		(W)	
1.4MHz Band QPSK	6/0	1850.7	15.16	3.76	8.90	20.3	107.15	Horizontal	2	Pass
		1880	12.92	3.91	8.90	17.91	61.80	Horizontal	2	Pass
		1909.3	13.13	3.93	8.90	18.1	64.57	Horizontal	2	Pass
3.0MHz Band QPSK	15/0	1851.5	11.77	3.77	8.90	16.9	48.98	Horizontal	2	Pass
		1880	12.82	3.91	8.90	17.81	60.39	Horizontal	2	Pass
		1908.5	14.22	3.94	8.90	19.18	82.79	Horizontal	2	Pass
5.0MHz Band QPSK	25/0	1852.5	13.65	3.77	8.90	18.78	75.51	Horizontal	2	Pass
		1880	14.87	3.91	8.90	19.86	96.83	Horizontal	2	Pass
		1907.5	13.98	3.94	8.90	18.94	78.34	Horizontal	2	Pass
10.0MHz Band QPSK	50/0	1855	14.49	3.79	8.90	19.6	91.20	Horizontal	2	Pass
		1880	15.42	3.95	8.90	20.37	108.89	Horizontal	2	Pass
		1905	14.26	3.97	8.90	19.19	82.99	Horizontal	2	Pass
15.0MHz Band QPSK	75/0	1857.5	13.20	3.79	8.90	18.31	67.76	Horizontal	2	Pass
		1880	14.55	3.95	8.90	19.5	89.13	Horizontal	2	Pass
		1902.5	13.89	3.97	8.90	18.82	76.21	Horizontal	2	Pass
20.0MHz Band QPSK	100/0	1860	13.88	3.81	8.90	18.97	78.89	Horizontal	2	Pass
		1880	12.15	3.96	8.90	17.09	51.17	Horizontal	2	Pass
		1900	14.90	4.00	8.90	19.8	95.50	Horizontal	2	Pass
1.4MHz Band QPSK	6/0	1850.7	12.88	3.76	8.90	18.02	63.39	Vertical	2	Pass
		1880	12.71	3.91	8.90	17.7	58.88	Vertical	2	Pass
		1909.3	13.60	3.93	8.90	18.57	71.94	Vertical	2	Pass
3.0MHz Band QPSK	15/0	1851.5	13.61	3.77	8.90	18.74	74.82	Vertical	2	Pass
		1880	14.35	3.91	8.90	19.34	85.90	Vertical	2	Pass
		1908.5	12.55	3.94	8.90	17.51	56.36	Vertical	2	Pass
5.0MHz Band QPSK	25/0	1852.5	13.13	3.77	8.90	18.26	66.99	Vertical	2	Pass
		1880	13.17	3.91	8.90	18.16	65.46	Vertical	2	Pass
		1907.5	14.80	3.94	8.90	19.76	94.62	Vertical	2	Pass
10.0MHz Band QPSK	50/0	1855	12.56	3.79	8.90	17.67	58.48	Vertical	2	Pass
		1880	10.44	3.95	8.90	15.39	34.59	Vertical	2	Pass
		1905	11.51	3.97	8.90	16.44	44.06	Vertical	2	Pass
15.0MHz	75/0	1857.5	12.24	3.79	8.90	17.35	54.33	Vertical	2	Pass

Band QPSK		1880	13.30	3.95	8.90	18.25	66.83	Vertical	2	Pass
		1902.5	14.58	3.97	8.90	19.51	89.33	Vertical	2	Pass
20.0MHz	100/0	1860	15.60	3.81	8.90	20.69	117.22	Vertical	2	Pass
Band		1880	13.16	3.96	8.90	18.1	64.57	Vertical	2	Pass
QPSK		1900	14.27	4.00	8.90	19.17	82.60	Vertical	2	Pass

		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	Polarization Of Max. ERP		
							Average		Limit	
							(mW)		(W)	
1.4MHz Band 16 QAM	6/0	1850.7	14.60	3.76	8.90	19.06	80.54	Horizontal	2	Pass
		1880	15.75	3.91	8.90	17.84	60.81	Horizontal	2	Pass
		1909.3	15.45	3.93	8.90	19.31	85.31	Horizontal	2	Pass
3.0MHz Band 16 QAM	15/0	1851.5	15.29	3.77	8.90	17.48	55.98	Horizontal	2	Pass
		1880	14.95	3.91	8.90	18.25	66.83	Horizontal	2	Pass
		1908.5	14.55	3.94	8.90	17.97	62.66	Horizontal	2	Pass
5.0MHz Band 16 QAM	25/0	1852.5	15.14	3.77	8.90	19.18	82.79	Horizontal	2	Pass
		1880	15.50	3.91	8.90	17.55	56.89	Horizontal	2	Pass
		1907.5	14.00	3.94	8.90	16.84	48.31	Horizontal	2	Pass
10.0MHz Band 16 QAM	50/0	1855	15.35	3.79	8.90	19.82	95.94	Horizontal	2	Pass
		1880	14.05	3.95	8.90	17.92	61.94	Horizontal	2	Pass
		1905	15.36	3.97	8.90	19.17	82.60	Horizontal	2	Pass
15.0MHz Band 16 QAM	75/0	1857.5	13.68	3.79	8.90	18.29	67.45	Horizontal	2	Pass
		1880	15.77	3.95	8.90	17.42	55.21	Horizontal	2	Pass
		1902.5	15.65	3.97	8.90	19.57	90.57	Horizontal	2	Pass
20.0MHz Band 16 QAM	100/0	1860	13.84	3.81	8.90	18.02	63.39	Horizontal	2	Pass
		1880	16.17	3.96	8.90	18.41	69.34	Horizontal	2	Pass
		1900	14.55	4.00	8.90	16.95	49.55	Horizontal	2	Pass
1.4MHz Band 16 QAM	6/0	1850.7	14.61	3.76	8.90	18.8	75.86	Vertical	2	Pass
		1880	15.84	3.91	8.90	17.85	60.95	Vertical	2	Pass
		1909.3	15.13	3.93	8.90	18.57	71.94	Vertical	2	Pass
3.0MHz Band 16 QAM	15/0	1851.5	13.77	3.77	8.90	17.11	51.40	Vertical	2	Pass
		1880	14.83	3.91	8.90	19.15	82.22	Vertical	2	Pass
		1908.5	14.56	3.94	8.90	17.77	59.84	Vertical	2	Pass
5.0MHz Band 16 QAM	25/0	1852.5	13.76	3.77	8.90	20.02	100.46	Vertical	2	Pass
		1880	15.05	3.91	8.90	19.58	90.78	Vertical	2	Pass
		1907.5	15.69	3.94	8.90	18.37	68.71	Vertical	2	Pass
10.0MHz Band 16 QAM	50/0	1855	13.98	3.79	8.90	19.38	86.70	Vertical	2	Pass
		1880	15.57	3.95	8.90	18.32	67.92	Vertical	2	Pass
		1905	15.12	3.97	8.90	18.92	77.98	Vertical	2	Pass
15.0MHz Band 16 QAM	75/0	1857.5	13.85	3.79	8.90	17.28	53.46	Vertical	2	Pass
		1880	14.87	3.95	8.90	19.45	88.10	Vertical	2	Pass
		1902.5	13.66	3.97	8.90	18.3	67.61	Vertical	2	Pass

20.0MHz Band 16 QAM	100/0	1860	14.29	3.81	8.90	18.69	73.96	Vertical	2	Pass
		1880	14.90	3.96	8.90	20.59	114.55	Vertical	2	Pass
		1900	13.78	4.00	8.90	18.3	67.61	Vertical	2	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)

8.3 LTE BAND 4

		Radiated Power (EIRP) for Band 4								
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		
									Limit	
1.4MHz Band QPSK	6/0	1710.7	14.34	3.12	8.90	20.12	102.80	Horizontal	1	Pass
		1732.5	13.64	3.27	8.90	19.27	84.53	Horizontal	1	Pass
		1754.3	14.69	3.29	8.90	20.3	107.15	Horizontal	1	Pass
3.0MHz Band QPSK	15/0	1711.5	13.82	3.13	8.90	19.59	90.99	Horizontal	1	Pass
		1732.5	12.59	3.27	8.90	18.22	66.37	Horizontal	1	Pass
		1753.5	14.32	3.30	8.90	19.92	98.17	Horizontal	1	Pass
5.0MHz Band QPSK	25/0	1712.5	14.15	3.13	8.90	19.92	98.17	Horizontal	1	Pass
		1732.5	14.66	3.27	8.90	20.29	106.91	Horizontal	1	Pass
		1752.5	13.72	3.30	8.90	19.32	85.51	Horizontal	1	Pass
10.0MHz Band QPSK	50/0	1715	14.17	3.15	8.90	19.92	98.17	Horizontal	1	Pass
		1732.5	14.18	3.31	8.90	19.77	94.84	Horizontal	1	Pass
		1750	16.20	3.33	8.90	21.77	150.31	Horizontal	1	Pass
15.0MHz Band QPSK	75/0	1717.5	13.93	3.15	8.90	19.68	92.90	Horizontal	1	Pass
		1732.5	14.28	3.31	8.90	19.87	97.05	Horizontal	1	Pass
		1747.5	14.46	3.33	8.90	20.03	100.69	Horizontal	1	Pass
20.0MHz Band QPSK	100/0	1720	13.28	3.17	8.90	19.01	79.62	Horizontal	1	Pass
		1732.5	14.34	3.32	8.90	19.92	98.17	Horizontal	1	Pass
		1745	13.62	3.36	8.90	19.16	82.41	Horizontal	1	Pass
1.4MHz Band QPSK	6/0	1710.7	13.76	3.12	8.90	19.54	89.95	Vertical	1	Pass
		1732.5	14.38	3.27	8.90	20.01	100.23	Vertical	1	Pass
		1754.3	13.52	3.29	8.90	19.13	81.85	Vertical	1	Pass
3.0MHz Band QPSK	15/0	1711.5	13.42	3.13	8.90	19.19	82.99	Vertical	1	Pass
		1732.5	14.45	3.27	8.90	20.08	101.86	Vertical	1	Pass
		1753.5	15.30	3.30	8.90	20.9	123.03	Vertical	1	Pass
5.0MHz Band QPSK	25/0	1712.5	13.03	3.13	8.90	18.8	75.86	Vertical	1	Pass
		1732.5	15.23	3.27	8.90	20.86	121.90	Vertical	1	Pass
		1752.5	13.73	3.30	8.90	19.33	85.70	Vertical	1	Pass
10.0MHz Band QPSK	50/0	1715	11.96	3.15	8.90	17.71	59.02	Vertical	1	Pass
		1732.5	13.85	3.31	8.90	19.44	87.90	Vertical	1	Pass
		1750	14.08	3.33	8.90	19.65	92.26	Vertical	1	Pass

15.0MHz	75/0	1717.5	16.07	3.15	8.90	21.82	152.05	Vertical	1	Pass
Band		1732.5	14.40	3.31	8.90	19.99	99.77	Vertical	1	Pass
QPSK		1747.5	13.90	3.33	8.90	19.47	88.51	Vertical	1	Pass
20.0MHz	100/0	1720	15.56	3.17	8.90	21.29	134.59	Vertical	1	Pass
Band		1732.5	16.94	3.32	8.90	22.52	178.65	Vertical	1	Pass
QPSK		1745	13.78	3.36	8.90	19.32	85.51	Vertical	1	Pass

		Radiated Power (EIRP) for Band 4								
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	Average		Limit	
						(dBm)	(mW)			
1.4MHz Band 16 QAM	6/0	1710.7	14.12	3.12	8.90	19.90	97.72	Horizontal	1	Pass
		1732.5	15.83	3.27	8.90	21.46	139.96	Horizontal	1	Pass
		1754.3	14.27	3.29	8.90	19.88	97.27	Horizontal	1	Pass
3.0MHz Band 16 QAM	15/0	1711.5	13.45	3.13	8.90	19.22	83.56	Horizontal	1	Pass
		1732.5	14.66	3.27	8.90	20.29	106.91	Horizontal	1	Pass
		1753.5	14.56	3.30	8.90	20.16	103.75	Horizontal	1	Pass
5.0MHz Band 16 QAM	25/0	1712.5	13.74	3.13	8.90	19.51	89.33	Horizontal	1	Pass
		1732.5	13.25	3.27	8.90	18.88	77.27	Horizontal	1	Pass
		1752.5	14.49	3.30	8.90	20.09	102.09	Horizontal	1	Pass
10.0MHz Band 16 QAM	50/0	1715	15.33	3.15	8.90	21.08	128.23	Horizontal	1	Pass
		1732.5	12.75	3.31	8.90	18.34	68.23	Horizontal	1	Pass
		1750	13.01	3.33	8.90	18.58	72.11	Horizontal	1	Pass
15.0MHz Band 16 QAM	75/0	1717.5	14.31	3.15	8.90	20.06	101.39	Horizontal	1	Pass
		1732.5	14.41	3.31	8.90	20.00	100.00	Horizontal	1	Pass
		1747.5	15.65	3.33	8.90	21.22	132.43	Horizontal	1	Pass
20.0MHz Band 16 QAM	100/0	1720	14.51	3.17	8.90	20.24	105.68	Horizontal	1	Pass
		1732.5	15.46	3.32	8.90	21.04	127.06	Horizontal	1	Pass
		1745	16.16	3.36	8.90	21.70	147.91	Horizontal	1	Pass
1.4MHz Band 16 QAM	6/0	1710.7	15.33	3.12	8.90	21.11	129.12	Vertical	1	Pass
		1732.5	14.87	3.27	8.90	20.50	112.20	Vertical	1	Pass
		1754.3	13.88	3.29	8.90	19.49	88.92	Vertical	1	Pass
3.0MHz Band 16 QAM	15/0	1711.5	12.74	3.13	8.90	18.51	70.96	Vertical	1	Pass
		1732.5	14.81	3.27	8.90	20.44	110.66	Vertical	1	Pass
		1753.5	15.14	3.30	8.90	20.74	118.58	Vertical	1	Pass
5.0MHz Band 16 QAM	25/0	1712.5	17.64	3.13	8.90	23.41	219.28	Vertical	1	Pass
		1732.5	14.78	3.27	8.90	20.41	109.90	Vertical	1	Pass
		1752.5	13.96	3.30	8.90	19.56	90.36	Vertical	1	Pass
10.0MHz Band 16 QAM	50/0	1715	15.00	3.15	8.90	20.75	118.85	Vertical	1	Pass
		1732.5	15.88	3.31	8.90	21.47	140.28	Vertical	1	Pass
		1750	15.41	3.33	8.90	20.98	125.31	Vertical	1	Pass
15.0MHz Band 16 QAM	75/0	1717.5	13.75	3.15	8.90	19.50	89.13	Vertical	1	Pass
		1732.5	13.18	3.31	8.90	18.77	75.34	Vertical	1	Pass
		1747.5	15.28	3.33	8.90	20.85	121.62	Vertical	1	Pass

20.0MHz	100/0	1720	14.02	3.17	8.90	19.75	94.41	Vertical	1	Pass
Band 16		1732.5	15.14	3.32	8.90	20.72	118.03	Vertical	1	Pass
QAM		1745	14.32	3.36	8.90	19.86	96.83	Vertical	1	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)

8.4 LTE BAND 5

Radiated Power (ERP) for Band 5											
Mode	RB/R B SIZE	Frequenc y	Result								Conclusio n
			SG Level	Cable Loss (dBm)	Antenn a Factor (dB)	Correctio n	Max. EIRP	Max. ERP	Polarizatio n Of Max. ERP		
			(dBm)			(dB)	Average	Averag e		Limi t	
							(dBm)	(mW)		(W)	
1.4MHz Band QPSK	6/0	824.7	16.83	2.01	5.30	2.15	17.97	62.661	Horizontal	7	Pass
		836.5	18.02	2.01	5.30	2.15	19.16	82.414	Horizontal	7	Pass
		848.3	16.12	2.02	5.70	2.15	17.65	58.210	Horizontal	7	Pass
3.0MHz Band QPSK	15/0	825.5	18.33	2.01	5.30	2.15	19.47	88.512	Horizontal	7	Pass
		836.5	18.25	2.01	5.30	2.15	19.39	86.896	Horizontal	7	Pass
		847.5	17.20	2.02	5.70	2.15	18.73	74.645	Horizontal	7	Pass
5.0MHz Band QPSK	25/0	826.5	16.96	2.01	5.30	2.15	18.1	64.565	Horizontal	7	Pass
		836.5	17.69	2.01	5.30	2.15	18.83	76.384	Horizontal	7	Pass
		846.5	18.09	2.02	5.70	2.15	19.62	91.622	Horizontal	7	Pass
10.0MH z Band QPSK	50/0	829	16.69	2.01	5.30	2.15	17.83	60.674	Horizontal	7	Pass
		836.5	18.28	2.01	5.30	2.15	19.42	87.498	Horizontal	7	Pass
		844	16.55	2.02	5.70	2.15	18.08	64.269	Horizontal	7	Pass
1.4MHz Band QPSK	6/0	824.7	18.63	2.01	5.30	2.15	19.77	94.842	Vertical	7	Pass
		836.5	18.50	2.01	5.30	2.15	19.64	92.045	Vertical	7	Pass
		848.3	16.42	2.02	5.70	2.15	17.95	62.373	Vertical	7	Pass
3.0MHz Band QPSK	15/0	825.5	18.40	2.01	5.30	2.15	19.54	89.950	Vertical	7	Pass
		836.5	17.85	2.01	5.30	2.15	18.99	79.250	Vertical	7	Pass
		847.5	15.33	2.02	5.70	2.15	16.86	48.529	Vertical	7	Pass
5.0MHz Band QPSK	25/0	826.5	15.67	2.01	5.30	2.15	16.81	47.973	Vertical	7	Pass
		836.5	18.17	2.01	5.30	2.15	19.31	85.310	Vertical	7	Pass
		846.5	16.50	2.02	5.70	2.15	18.03	63.533	Vertical	7	Pass
10.0MH z Band QPSK	50/0	829	15.40	2.01	5.30	2.15	16.54	45.082	Vertical	7	Pass
		836.5	19.24	2.01	5.30	2.15	20.38	109.144	Vertical	7	Pass
		844	16.72	2.02	5.70	2.15	18.25	66.834	Vertical	7	Pass

		Radiated Power (ERP) for Band 5									
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Correction	Max. EIRP	Max. ERP	Polarization Of Max. ERP		
						(dB)	Average	Average		Limit	
							(dBm)	(mW)		(W)	
1.4MHz Band 16 QAM	6/0	824.7	16.86	2.01	5.30	2.15	18	63.096	Horizontal	7	Pass
		836.5	17.23	2.01	5.30	2.15	18.37	68.707	Horizontal	7	Pass
		848.3	15.97	2.02	5.70	2.15	17.5	56.234	Horizontal	7	Pass
3.0MHz Band 16 QAM	15/0	825.5	16.43	2.01	5.30	2.15	17.57	57.148	Horizontal	7	Pass
		836.5	15.57	2.01	5.30	2.15	16.71	46.881	Horizontal	7	Pass
		847.5	16.19	2.02	5.70	2.15	17.72	59.156	Horizontal	7	Pass
5.0MHz Band 16 QAM	25/0	826.5	16.99	2.01	5.30	2.15	18.13	65.013	Horizontal	7	Pass
		836.5	16.00	2.01	5.30	2.15	17.14	51.761	Horizontal	7	Pass
		846.5	16.63	2.02	5.70	2.15	18.16	65.464	Horizontal	7	Pass
10.0MHz Band 16 QAM	50/0	829	15.63	2.01	5.30	2.15	16.77	47.534	Horizontal	7	Pass
		836.5	15.73	2.01	5.30	2.15	16.87	48.641	Horizontal	7	Pass
		844	15.76	2.02	5.70	2.15	17.29	53.580	Horizontal	7	Pass
1.4MHz Band 16 QAM	6/0	824.7	17.00	2.01	5.30	2.15	18.14	65.163	Vertical	7	Pass
		836.5	16.78	2.01	5.30	2.15	17.92	61.944	Vertical	7	Pass
		848.3	16.53	2.02	5.70	2.15	18.06	63.973	Vertical	7	Pass
3.0MHz Band 16 QAM	15/0	825.5	15.32	2.01	5.30	2.15	16.46	44.259	Vertical	7	Pass
		836.5	17.03	2.01	5.30	2.15	18.17	65.615	Vertical	7	Pass
		847.5	15.16	2.02	5.70	2.15	16.69	46.666	Vertical	7	Pass
5.0MHz Band 16 QAM	25/0	826.5	16.55	2.01	5.30	2.15	17.69	58.749	Vertical	7	Pass
		836.5	14.06	2.01	5.30	2.15	15.2	33.113	Vertical	7	Pass
		846.5	16.51	2.02	5.70	2.15	18.04	63.680	Vertical	7	Pass
10.0MHz Band 16 QAM	50/0	829	15.59	2.01	5.30	2.15	16.73	47.098	Vertical	7	Pass
		836.5	17.85	2.01	5.30	2.15	18.99	79.250	Vertical	7	Pass
		844	17.89	2.02	5.70	2.15	19.42	87.498	Vertical	7	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)

ERP(dBm)=EIRP-2.15

8.5 LTE BAND 7

		Radiated Power (EIRP) for Band 7								
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	Average		Limit	
						(dBm)	(mW)		(W)	
5.0MHz Band QPSK	25/0	2502.5	17.65	4.54	9.00	22.11	162.55	Horizontal	2	Pass
		2535	19.65	4.69	9.00	23.96	248.89	Horizontal	2	Pass
		2567.5	14.54	4.71	9.00	18.83	76.38	Horizontal	2	Pass
10.0MHz Band QPSK	50/0	2505	15.65	4.55	9.00	20.1	102.33	Horizontal	2	Pass
		2535	18.18	4.69	9.00	22.49	177.42	Horizontal	2	Pass
		2565	16.44	4.72	9.00	20.72	118.03	Horizontal	2	Pass
15.0MHz Band QPSK	75/0	2507.5	18.31	4.55	9.00	22.76	188.80	Horizontal	2	Pass
		2535	16.81	4.69	9.00	21.12	129.42	Horizontal	2	Pass
		2562.5	18.32	4.72	9.00	22.6	181.97	Horizontal	2	Pass
20.0MHz Band QPSK	100/0	2510	15.81	4.57	9.00	20.24	105.68	Horizontal	2	Pass
		2535	17.23	4.73	9.00	21.5	141.25	Horizontal	2	Pass
		2560	17.89	4.75	9.00	22.14	163.68	Horizontal	2	Pass
5.0MHz Band QPSK	25/0	2502.5	17.50	4.54	9.00	21.96	157.04	Vertical	2	Pass
		2535	18.79	4.69	9.00	23.1	204.17	Vertical	2	Pass
		2567.5	18.04	4.71	9.00	22.33	171.00	Vertical	2	Pass
10.0MHz Band QPSK	50/0	2505	16.64	4.55	9.00	21.09	128.53	Vertical	2	Pass
		2535	18.70	4.69	9.00	23.01	199.99	Vertical	2	Pass
		2565	17.60	4.72	9.00	21.88	154.17	Vertical	2	Pass
15.0MHz Band QPSK	75/0	2507.5	18.32	4.55	9.00	22.77	189.23	Vertical	2	Pass
		2535	18.20	4.69	9.00	22.51	178.24	Vertical	2	Pass
		2562.5	16.47	4.72	9.00	20.75	118.85	Vertical	2	Pass
20.0MHz Band QPSK	100/0	2510	19.85	4.57	9.00	24.28	267.92	Vertical	2	Pass
		2535	17.38	4.73	9.00	21.65	146.22	Vertical	2	Pass
		2560	19.95	4.75	9.00	24.2	263.03	Vertical	2	Pass

		Radiated Power (EIRP) for Band 7								
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	Average		Limit	
						(dBm)	(mW)		(W)	
5.0MHz Band 16 QAM	25/0	2502.5	16.86	4.54	9.00	21.32	135.52	Horizontal	2	Pass
		2535	18.35	4.69	9.00	22.66	184.50	Horizontal	2	Pass
		2567.5	17.69	4.71	9.00	21.98	157.76	Horizontal	2	Pass
10.0MHz Band 16 QAM	50/0	2505	17.09	4.55	9.00	21.54	142.56	Horizontal	2	Pass
		2535	18.38	4.69	9.00	22.69	185.78	Horizontal	2	Pass
		2565	17.76	4.72	9.00	22.04	159.96	Horizontal	2	Pass
15.0MHz Band 16 QAM	75/0	2507.5	18.85	4.55	9.00	23.3	213.80	Horizontal	2	Pass
		2535	18.29	4.69	9.00	22.6	181.97	Horizontal	2	Pass
		2562.5	16.60	4.72	9.00	20.88	122.46	Horizontal	2	Pass
20.0MHz Band 16 QAM	100/0	2510	17.04	4.57	9.00	21.47	140.28	Horizontal	2	Pass
		2535	16.65	4.73	9.00	20.92	123.59	Horizontal	2	Pass
		2560	18.74	4.75	9.00	22.99	199.07	Horizontal	2	Pass
5.0MHz Band 16 QAM	25/0	2502.5	18.23	4.54	9.00	22.69	185.78	Vertical	2	Pass
		2535	19.04	4.69	9.00	23.35	216.27	Vertical	2	Pass
		2567.5	18.19	4.71	9.00	22.48	177.01	Vertical	2	Pass
10.0MHz Band 16 QAM	50/0	2505	17.86	4.55	9.00	22.31	170.22	Vertical	2	Pass
		2535	19.85	4.69	9.00	24.16	260.62	Vertical	2	Pass
		2565	16.95	4.72	9.00	21.23	132.74	Vertical	2	Pass
15.0MHz Band 16 QAM	75/0	2507.5	18.33	4.55	9.00	22.78	189.67	Vertical	2	Pass
		2535	17.59	4.69	9.00	21.9	154.88	Vertical	2	Pass
		2562.5	16.22	4.72	9.00	20.5	112.20	Vertical	2	Pass
20.0MHz Band 16 QAM	100/0	2510	18.55	4.57	9.00	22.98	198.61	Vertical	2	Pass
		2535	18.97	4.73	9.00	23.24	210.86	Vertical	2	Pass
		2560	18.26	4.75	9.00	22.51	178.24	Vertical	2	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)

8.6 LTE BAND 12

		Radiated Power (ERP) for Band 12									
Mode	RB/RB SIZE	Frequency	Result								Conclusio n
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Correction (dB)	Max. EIRP Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP		
										Limit	
1.4MHz Band QPSK	6/0	699.7	16.42	1.91	5.60	2.15	17.96	62.517	Horizontal	3	Pass
		707.5	17.15	1.91	5.70	2.15	18.79	75.683	Horizontal	3	Pass
		715.3	15.01	1.93	5.80	2.15	16.73	47.098	Horizontal	3	Pass
3.0MHz Band QPSK	15/0	700.5	15.15	1.91	5.60	2.15	16.69	46.666	Horizontal	3	Pass
		707.5	15.80	1.91	5.70	2.15	17.44	55.463	Horizontal	3	Pass
		714.5	16.47	1.93	5.80	2.15	18.19	65.917	Horizontal	3	Pass
5.0MHz Band QPSK	25/0	701.5	16.00	1.91	5.60	2.15	17.54	56.754	Horizontal	3	Pass
		707.5	16.44	1.91	5.70	2.15	18.08	64.269	Horizontal	3	Pass
		713.5	16.43	1.92	5.80	2.15	18.16	65.464	Horizontal	3	Pass
10.0MHz Band QPSK	50/0	704	16.00	1.91	5.60	2.15	17.54	56.754	Horizontal	3	Pass
		707.5	15.52	1.91	5.70	2.15	17.16	52.000	Horizontal	3	Pass
		711	14.78	1.92	5.80	2.15	16.51	44.771	Horizontal	3	Pass
1.4MHz Band QPSK	6/0	699.7	15.46	1.91	5.60	2.15	17	50.119	Vertical	3	Pass
		707.5	15.84	1.91	5.70	2.15	17.48	55.976	Vertical	3	Pass
		715.3	15.00	1.93	5.80	2.15	16.72	46.989	Vertical	3	Pass
3.0MHz Band QPSK	15/0	700.5	15.79	1.91	5.60	2.15	17.33	54.075	Vertical	3	Pass
		707.5	14.93	1.91	5.70	2.15	16.57	45.394	Vertical	3	Pass
		714.5	17.58	1.93	5.80	2.15	19.3	85.114	Vertical	3	Pass
5.0MHz Band QPSK	25/0	701.5	14.91	1.91	5.60	2.15	16.45	44.157	Vertical	3	Pass
		707.5	16.41	1.91	5.70	2.15	18.05	63.826	Vertical	3	Pass
		713.5	16.11	1.92	5.80	2.15	17.84	60.814	Vertical	3	Pass
10.0MHz Band QPSK	50/0	704	15.19	1.91	5.60	2.15	16.73	47.098	Vertical	3	Pass
		707.5	15.49	1.91	5.70	2.15	17.13	51.642	Vertical	3	Pass
		711	16.74	1.92	5.80	2.15	18.47	70.307	Vertical	3	Pass

		Radiated Power (ERP) for Band 12									
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Correction	Max. EIRP	Max. EIRP	Polarization Of Max. ERP		
						(dB)	Average	Average		Limit	
							(dBm)	(mW)		(W)	
1.4MHz Band 16 QAM	6/0	699.7	16.01	1.91	5.60	2.15	17.55	56.885	Horizontal	3	Pass
		707.5	16.38	1.91	5.70	2.15	18.02	63.387	Horizontal	3	Pass
		715.3	15.95	1.93	5.80	2.15	17.67	58.479	Horizontal	3	Pass
3.0MHz Band 16 QAM	15/0	700.5	16.65	1.91	5.60	2.15	18.19	65.917	Horizontal	3	Pass
		707.5	14.32	1.91	5.70	2.15	15.96	39.446	Horizontal	3	Pass
		714.5	14.91	1.93	5.80	2.15	16.63	46.026	Horizontal	3	Pass
5.0MHz Band 16 QAM	25/0	701.5	14.89	1.91	5.60	2.15	16.43	43.954	Horizontal	3	Pass
		707.5	16.82	1.91	5.70	2.15	18.46	70.146	Horizontal	3	Pass
		713.5	17.44	1.92	5.80	2.15	19.17	82.604	Horizontal	3	Pass
10.0MHz Band 16 QAM	50/0	704	16.45	1.91	5.60	2.15	17.99	62.951	Horizontal	3	Pass
		707.5	15.53	1.91	5.70	2.15	17.17	52.119	Horizontal	3	Pass
		711	16.62	1.92	5.80	2.15	18.35	68.391	Horizontal	3	Pass
1.4MHz Band 16 QAM	6/0	699.7	14.84	1.91	5.60	2.15	16.38	43.451	Vertical	3	Pass
		707.5	16.92	1.91	5.70	2.15	18.56	71.779	Vertical	3	Pass
		715.3	16.48	1.93	5.80	2.15	18.2	66.069	Vertical	3	Pass
3.0MHz Band 16 QAM	15/0	700.5	17.55	1.91	5.60	2.15	19.09	81.096	Vertical	3	Pass
		707.5	16.12	1.91	5.70	2.15	17.76	59.704	Vertical	3	Pass
		714.5	16.93	1.93	5.80	2.15	18.65	73.282	Vertical	3	Pass
5.0MHz Band 16 QAM	25/0	701.5	16.49	1.91	5.60	2.15	18.03	63.533	Vertical	3	Pass
		707.5	17.02	1.91	5.70	2.15	18.66	73.451	Vertical	3	Pass
		713.5	15.58	1.92	5.80	2.15	17.31	53.827	Vertical	3	Pass
10.0MHz Band 16 QAM	50/0	704	17.14	1.91	5.60	2.15	18.68	73.790	Vertical	3	Pass
		707.5	17.19	1.91	5.70	2.15	18.83	76.384	Vertical	3	Pass
		711	16.55	1.92	5.80	2.15	18.28	67.298	Vertical	3	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)

ERP(dBm)=EIRP-2.15

8.7 LTE BAND 17

Radiated Power (ERP) for Band 17											
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Correction	Max. EIRP	Max. EIRP	Polarization Of Max. ERP	Limit	
			(dBm)				Average	Average		(W)	
5.0MHz Band QPSK	25/0	706.5	14.76	1.91	5.60	2.15	16.3	42.658	Vertical	3	Pass
		710	16.78	1.91	5.70	2.15	18.42	69.502	Vertical	3	Pass
		713.5	17.28	1.92	5.80	2.15	19.01	79.616	Vertical	3	Pass
10.0MHz Band QPSK	50/0	709	14.98	1.91	5.60	2.15	16.52	44.875	Vertical	3	Pass
		710	16.35	1.91	5.70	2.15	17.99	62.951	Vertical	3	Pass
		711	13.05	1.92	5.80	2.15	14.78	30.061	Vertical	3	Pass
5.0MHz Band QPSK	25/0	706.5	14.41	1.91	5.60	2.15	15.95	39.355	Horizontal	3	Pass
		710	15.15	1.91	5.70	2.15	16.79	47.753	Horizontal	3	Pass
		713.5	15.34	1.92	5.80	2.15	17.07	50.933	Horizontal	3	Pass
10.0MHz Band QPSK	50/0	709	16.90	1.91	5.60	2.15	18.44	69.823	Horizontal	3	Pass
		710	16.43	1.91	5.70	2.15	18.07	64.121	Horizontal	3	Pass
		711	16.11	1.92	5.80	2.15	17.84	60.814	Horizontal	3	Pass

		Radiated Power (ERP) for Band 17									
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Correction	Max. EIRP	Max. EIRP	Polarization Of Max. ERP		
			(dBm)				Average	Average		Limit	
							(dB)	(dBm)		(mW)	
5.0MHz Band 16 QAM	25/0	706.5	16.81	1.91	5.6	2.15	17.71	59.020	Vertical	3	Pass
		710	16.39	1.91	5.7	2.15	16.67	46.452	Vertical	3	Pass
		713.5	17.43	1.92	5.8	2.15	18.71	74.302	Vertical	3	Pass
10.0MHz Band 16 QAM	50/0	709	15.91	1.91	5.6	2.15	17.03	50.466	Vertical	3	Pass
		710	15.84	1.91	5.7	2.15	18.57	71.945	Vertical	3	Pass
		711	15.59	1.92	5.8	2.15	17.82	60.534	Vertical	3	Pass
5.0MHz Band 16 QAM	25/0	706.5	17.52	1.91	5.6	2.15	17.92	61.944	Horizontal	3	Pass
		710	17.46	1.91	5.7	2.15	18.44	69.823	Horizontal	3	Pass
		713.5	16.25	1.92	5.8	2.15	17.69	58.749	Horizontal	3	Pass
10.0MHz Band 16 QAM	50/0	709	17.30	1.91	5.6	2.15	18.19	65.917	Horizontal	3	Pass
		710	17.57	1.91	5.7	2.15	19.31	85.310	Horizontal	3	Pass
		711	16.65	1.92	5.8	2.15	18.47	70.307	Horizontal	3	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)

ERP(dBm)=EIRP-2.15

8.8 LTE BAND 25

		Radiated Power (EIRP) for Band 25								
Mode	RB/RB SIZE	Frequency	Result							Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP	Max. EIRP	Polarization Of Max. ERP		
						Average	Average		Limit	
						(dBm)	(mW)		(W)	
1.4MHz Band QPSK	6/0	1850.7	16.98	3.12	8.90	22.76	188.80	Horizontal	2	Pass
		1882.5	15.69	3.27	8.90	21.32	135.52	Horizontal	2	Pass
		1914.3	17.17	3.29	8.90	22.78	189.67	Horizontal	2	Pass
3.0MHz Band QPSK	15/0	1851.5	15.92	3.13	8.90	21.69	147.57	Horizontal	2	Pass
		1882.5	17.15	3.27	8.90	22.78	189.67	Horizontal	2	Pass
		1913.5	16.02	3.30	8.90	21.62	145.21	Horizontal	2	Pass
5.0MHz Band QPSK	25/0	1852.5	15.88	3.13	8.90	21.65	146.22	Horizontal	2	Pass
		1882.5	16.33	3.27	8.90	21.96	157.04	Horizontal	2	Pass
		1912.5	16.14	3.30	8.90	21.74	149.28	Horizontal	2	Pass
10.0MHz Band QPSK	50/0	1855	15.91	3.15	8.90	21.66	146.55	Horizontal	2	Pass
		1882.5	16.47	3.31	8.90	22.06	160.69	Horizontal	2	Pass
		1910	16.01	3.33	8.90	21.58	143.88	Horizontal	2	Pass
15.0MHz Band QPSK	75/0	1857.5	16.87	3.15	8.90	22.62	182.81	Horizontal	2	Pass
		1882.5	16.60	3.31	8.90	22.19	165.58	Horizontal	2	Pass
		1907.5	16.78	3.33	8.90	22.35	171.79	Horizontal	2	Pass
20.0MHz Band QPSK	100/0	1860	14.33	3.17	8.90	20.06	101.39	Horizontal	2	Pass
		1882.5	16.47	3.32	8.90	22.05	160.32	Horizontal	2	Pass
		1905	16.68	3.36	8.90	22.22	166.72	Horizontal	2	Pass
1.4MHz Band QPSK	6/0	1850.7	16.69	3.12	8.90	22.47	176.60	Vertical	2	Pass
		1882.5	15.84	3.27	8.90	21.47	140.28	Vertical	2	Pass
		1914.3	15.41	3.29	8.90	21.02	126.47	Vertical	2	Pass
3.0MHz Band QPSK	15/0	1851.5	16.96	3.13	8.90	22.73	187.50	Vertical	2	Pass
		1882.5	17.10	3.27	8.90	22.73	187.50	Vertical	2	Pass
		1913.5	16.25	3.30	8.90	21.85	153.11	Vertical	2	Pass
5.0MHz Band QPSK	25/0	1852.5	16.90	3.13	8.90	22.67	184.93	Vertical	2	Pass
		1882.5	15.70	3.27	8.90	21.33	135.83	Vertical	2	Pass
		1912.5	16.02	3.30	8.90	21.62	145.21	Vertical	2	Pass
10.0MHz Band	50/0	1855	15.15	3.15	8.90	20.9	123.03	Vertical	2	Pass
		1882.5	17.45	3.31	8.90	23.04	201.37	Vertical	2	Pass

QPSK		1910	15.50	3.33	8.90	21.07	127.94	Vertical	2	Pass
15.0MHz	75/0	1857.5	15.36	3.15	8.90	21.11	129.12	Vertical	2	Pass
Band		1882.5	17.16	3.31	8.90	22.75	188.36	Vertical	2	Pass
QPSK		1907.5	15.31	3.33	8.90	20.88	122.46	Vertical	2	Pass
20.0MHz	100/0	1860	14.25	3.17	8.90	19.98	99.54	Vertical	2	Pass
Band		1882.5	17.49	3.32	8.90	23.07	202.77	Vertical	2	Pass
QPSK		1905	17.14	3.36	8.90	22.68	185.35	Vertical	2	Pass

		Radiated Power (EIRP) for Band 25								
Mode	RB/RB SIZE	Frequency	Result							Conclusion
			SG Level	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP	Max. EIRP	Polarization Of Max. ERP		
						Average	Average		Limit	
						(dBm)	(mW)		(W)	
1.4MHz Band 16 QAM	6/0	1850.7	15.99	3.12	8.90	21.77	150.31	Horizontal	2	Pass
		1882.5	14.66	3.27	8.90	20.29	106.91	Horizontal	2	Pass
		1914.3	15.84	3.29	8.90	21.45	139.64	Horizontal	2	Pass
3.0MHz Band 16 QAM	15/0	1851.5	14.97	3.13	8.90	20.74	118.58	Horizontal	2	Pass
		1882.5	15.31	3.27	8.90	20.94	124.17	Horizontal	2	Pass
		1913.5	16.27	3.30	8.90	21.87	153.82	Horizontal	2	Pass
5.0MHz Band 16 QAM	25/0	1852.5	16.66	3.13	8.90	22.43	174.98	Horizontal	2	Pass
		1882.5	15.30	3.27	8.90	20.93	123.88	Horizontal	2	Pass
		1912.5	16.17	3.30	8.90	21.77	150.31	Horizontal	2	Pass
10.0MHz Band 16 QAM	50/0	1855	15.29	3.15	8.90	21.04	127.06	Horizontal	2	Pass
		1882.5	15.06	3.31	8.90	20.65	116.14	Horizontal	2	Pass
		1910	15.36	3.33	8.90	20.93	123.88	Horizontal	2	Pass
15.0MHz Band 16 QAM	75/0	1857.5	16.81	3.15	8.90	22.56	180.30	Horizontal	2	Pass
		1882.5	15.43	3.31	8.90	21.02	126.47	Horizontal	2	Pass
		1907.5	14.40	3.33	8.90	19.97	99.31	Horizontal	2	Pass
20.0MHz Band 16 QAM	100/0	1860	14.63	3.17	8.90	20.36	108.64	Horizontal	2	Pass
		1882.5	15.83	3.32	8.90	21.41	138.36	Horizontal	2	Pass
		1905	14.98	3.36	8.90	20.52	112.72	Horizontal	2	Pass
1.4MHz Band 16 QAM	6/0	1850.7	16.19	3.12	8.90	21.97	157.40	Vertical	2	Pass
		1882.5	15.63	3.27	8.90	21.26	133.66	Vertical	2	Pass
		1914.3	15.82	3.29	8.90	21.43	139.00	Vertical	2	Pass
3.0MHz Band 16 QAM	15/0	1851.5	15.44	3.13	8.90	21.21	132.13	Vertical	2	Pass
		1882.5	16.03	3.27	8.90	21.66	146.55	Vertical	2	Pass
		1913.5	15.89	3.30	8.90	21.49	140.93	Vertical	2	Pass
5.0MHz Band 16 QAM	25/0	1852.5	16.21	3.13	8.90	21.98	157.76	Vertical	2	Pass
		1882.5	15.44	3.27	8.90	21.07	127.94	Vertical	2	Pass
		1912.5	16.38	3.30	8.90	21.98	157.76	Vertical	2	Pass
10.0MHz Band 16 QAM	50/0	1855	14.66	3.15	8.90	20.41	109.90	Vertical	2	Pass
		1882.5	17.02	3.31	8.90	22.61	182.39	Vertical	2	Pass
		1910	16.02	3.33	8.90	21.59	144.21	Vertical	2	Pass
15.0MHz Band 16 QAM	75/0	1857.5	15.21	3.15	8.90	20.96	124.74	Vertical	2	Pass
		1882.5	15.67	3.31	8.90	21.26	133.66	Vertical	2	Pass
		1907.5	15.47	3.33	8.90	21.04	127.06	Vertical	2	Pass

20.0MHz Band 16 QAM	100/0	1860	15.77	3.17	8.90	21.5	141.25	Vertical	2	Pass
		1882.5	17.18	3.32	8.90	22.76	188.80	Vertical	2	Pass
		1905	14.97	3.36	8.90	20.51	112.46	Vertical	2	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 26 A

		Radiated Power (ERP) for Band 26(814-824)									
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Correction	Max. EIRP	Max. EIRP	Polarization Of Max. ERP		
						(dB)	Average	Average		Limit	
							(dBm)	(mW)		(W)	
1.4MHz BW QPSK	6/0	814.7	16.87	3.76	5.30	2.15	16.26	42.267	Horizontal	100	Pass
		819	17.55	3.91	5.30	2.15	16.79	47.753	Horizontal	100	Pass
		823.3	16.72	3.93	5.70	2.15	16.34	43.053	Horizontal	100	Pass
3.0MHz BW QPSK	15/0	815.5	17.14	3.77	5.30	2.15	16.52	44.875	Horizontal	100	Pass
		819	17.76	3.91	5.30	2.15	17	50.119	Horizontal	100	Pass
		822.5	17.05	3.94	5.70	2.15	16.66	46.345	Horizontal	100	Pass
5.0MHz BW QPSK	25/0	816.5	16.41	3.77	5.30	2.15	15.79	37.931	Horizontal	100	Pass
		819	17.45	3.91	5.30	2.15	16.69	46.666	Horizontal	100	Pass
		821.5	17.35	3.94	5.70	2.15	16.96	49.659	Horizontal	100	Pass
10.0MHz BW QPSK	50/0	819	17.20	3.91	5.30	2.15	16.44	44.055	Horizontal	100	Pass
1.4MHz BW QPSK	6/0	814.7	17.11	3.79	5.30	2.15	16.47	44.361	Vertical	100	Pass
		819	16.96	3.95	5.70	2.15	16.56	45.290	Vertical	100	Pass
		823.3	17.24	3.97	5.30	2.15	16.42	43.853	Vertical	100	Pass
3.0MHz BW QPSK	15/0	815.5	16.43	3.77	5.30	2.15	15.81	38.107	Vertical	100	Pass
		819	17.00	3.91	5.70	2.15	16.64	46.132	Vertical	100	Pass
		822.5	17.34	3.94	5.30	2.15	16.55	45.186	Vertical	100	Pass
5.0MHz BW QPSK	25/0	816.5	17.67	3.77	5.30	2.15	17.05	50.699	Vertical	100	Pass
		819	17.60	3.91	5.70	2.15	17.24	52.966	Vertical	100	Pass
		821.5	17.38	3.94	5.30	2.15	16.59	45.604	Vertical	100	Pass
10.0MHz BW QPSK	50/0	819	17.96	3.91	5.30	2.15	17.2	52.481	Vertical	100	Pass

		Radiated Power (ERP) for Band 26(814-824)									
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Correction	Max. EIRP	Max. EIRP	Polarization Of Max. ERP		
						(dB)	Average	Average		Limit	
							(dBm)	(mW)		(W)	
1.4MHz BW 16 QAM	6/0	814.7	16.84	3.76	5.30	2.15	16.23	41.976	Horizontal	100	Pass
		819	17.20	3.91	5.30	2.15	16.44	44.055	Horizontal	100	Pass
		823.3	17.71	3.93	5.70	2.15	17.33	54.075	Horizontal	100	Pass
3.0MHz BW 16 QAM	15/0	815.5	17.44	3.77	5.30	2.15	16.82	48.084	Horizontal	100	Pass
		819	17.62	3.91	5.30	2.15	16.86	48.529	Horizontal	100	Pass
		822.5	16.87	3.94	5.70	2.15	16.48	44.463	Horizontal	100	Pass
5.0MHz BW 16 QAM	25/0	816.5	17.59	3.77	5.30	2.15	16.97	49.774	Horizontal	100	Pass
		819	16.56	3.91	5.30	2.15	15.8	38.019	Horizontal	100	Pass
		821.5	17.30	3.94	5.70	2.15	16.91	49.091	Horizontal	100	Pass
10.0MHz BW 16 QAM	50/0	819	17.66	3.91	5.30	2.15	16.9	48.978	Horizontal	100	Pass
1.4MHz BW 16 QAM	6/0	814.7	17.22	3.79	5.30	2.15	16.58	45.499	Vertical	100	Pass
		819	17.25	3.95	5.70	2.15	16.85	48.417	Vertical	100	Pass
		823.3	17.24	3.97	5.30	2.15	16.42	43.853	Vertical	100	Pass
3.0MHz BW 16 QAM	15/0	815.5	17.60	3.77	5.30	2.15	16.98	49.888	Vertical	100	Pass
		819	17.57	3.91	5.70	2.15	17.21	52.602	Vertical	100	Pass
		822.5	17.18	3.94	5.30	2.15	16.39	43.551	Vertical	100	Pass
5.0MHz BW 16 QAM	25/0	816.5	16.65	3.77	5.30	2.15	16.03	40.087	Vertical	100	Pass
		819	16.73	3.91	5.70	2.15	16.37	43.351	Vertical	100	Pass
		821.5	17.39	3.94	5.30	2.15	16.6	45.709	Vertical	100	Pass
10.0MHz BW 16 QAM	50/0	819	17.26	3.91	5.30	2.15	16.5	44.668	Vertical	100	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)

ERP(dBm)=EIRP-2.15

8.10 LTE BAND 26 B

		Radiated Power (ERP) for Band 26(824-849)									
Mode	RB/R B SIZE	Frequency	Result								Conclusion
			SG Level	Cable Loss (dBm)	Antenn a Factor (dB)	Correction	Max. ERP	Max. ERP	Polarizati on Of Max. ERP		
						(dB)	Average	Average		Limit	
							(dBm)	(mW)			
1.4MHz Band QPSK	6/0	824.7	17.55	2.01	5.30	2.15	18.69	73.96	Horizontal	7	Pass
		836.5	16.17	2.01	5.30	2.15	17.31	53.83	Horizontal	7	Pass
		848.3	17.14	2.02	5.70	2.15	18.67	73.62	Horizontal	7	Pass
3.0MHz Band QPSK	15/0	825.5	16.46	2.01	5.30	2.15	17.6	57.54	Horizontal	7	Pass
		836.5	17.58	2.01	5.30	2.15	18.72	74.47	Horizontal	7	Pass
		847.5	16.17	2.02	5.70	2.15	17.7	58.88	Horizontal	7	Pass
5.0MHz Band QPSK	25/0	826.5	15.99	2.01	5.30	2.15	17.13	51.64	Horizontal	7	Pass
		836.5	15.72	2.01	5.30	2.15	16.86	48.53	Horizontal	7	Pass
		846.5	16.45	2.02	5.70	2.15	17.98	62.81	Horizontal	7	Pass
10.0MHz Band QPSK	50/0	829	15.13	2.01	5.30	2.15	16.27	42.36	Horizontal	7	Pass
		836.5	16.09	2.01	5.30	2.15	17.23	52.84	Horizontal	7	Pass
		844	15.50	2.02	5.70	2.15	17.03	50.47	Horizontal	7	Pass
15.0MHz Band QPSK	75/0	831.5	16.97	2.01	5.30	2.15	18.11	64.71	Vertical	7	Pass
		836.5	16.89	2.01	5.30	2.15	18.03	63.53	Vertical	7	Pass
		841.5	16.58	2.02	5.70	2.15	18.11	64.71	Vertical	7	Pass
1.4MHz Band QPSK	6/0	824.7	17.47	2.01	5.30	2.15	18.61	72.61	Vertical	7	Pass
		836.5	17.16	2.01	5.30	2.15	18.3	67.61	Vertical	7	Pass
		848.3	17.57	2.02	5.70	2.15	19.1	81.28	Vertical	7	Pass
3.0MHz Band QPSK	15/0	825.5	15.60	2.01	5.30	2.15	16.74	47.21	Vertical	7	Pass
		836.5	17.34	2.01	5.30	2.15	18.48	70.47	Vertical	7	Pass
		847.5	16.43	2.02	5.70	2.15	17.96	62.52	Vertical	7	Pass
5.0MHz Band QPSK	25/0	826.5	16.12	2.01	5.30	2.15	17.26	53.21	Vertical	7	Pass
		836.5	17.88	2.01	5.30	2.15	19.02	79.80	Vertical	7	Pass
		846.5	16.69	2.02	5.70	2.15	18.22	66.37	Vertical	7	Pass
10.0MHz Band QPSK	50/0	829	17.06	2.01	5.30	2.15	18.2	66.07	Vertical	7	Pass
		836.5	18.89	2.01	5.30	2.15	20.03	100.69	Vertical	7	Pass
		844	17.94	2.02	5.70	2.15	19.47	88.51	Vertical	7	Pass
15.0MHz Band QPSK	75/0	831.5	17.09	2.01	5.30	2.15	18.23	66.53	Vertical	7	Pass
		836.5	18.96	2.01	5.30	2.15	20.1	102.33	Vertical	7	Pass
		841.5	16.11	2.02	5.70	2.15	17.64	58.08	Vertical	7	Pass

		Radiated Power (ERP) for Band 26(824-849)									
Mode	RB/R B SIZE	Freque nc y	Result								Conclusion
			SG Level	Cable Loss (dBm)	Anten na Factor (dB)	Correctio n	Max. EIRP	Max. EIRP	Polarizatio n Of Max. ERP		
			(dBm)			(dB)	Average	Average		Limit	
							(dBm)	(mW)		(W)	
1.4MHz Band 16 QAM	6/0	824.7	17.83	2.01	5.30	2.15	18.97	78.89	Horizontal	7	Pass
		836.5	16.60	2.01	5.30	2.15	17.74	59.43	Horizontal	7	Pass
		848.3	15.01	2.02	5.70	2.15	16.54	45.08	Horizontal	7	Pass
3.0MHz Band 16 QAM	15/0	825.5	15.47	2.01	5.30	2.15	16.61	45.81	Horizontal	7	Pass
		836.5	16.70	2.01	5.30	2.15	17.84	60.81	Horizontal	7	Pass
		847.5	16.42	2.02	5.70	2.15	17.95	62.37	Horizontal	7	Pass
5.0MHz Band 16 QAM	25/0	826.5	15.86	2.01	5.30	2.15	17	50.12	Horizontal	7	Pass
		836.5	15.73	2.01	5.30	2.15	16.87	48.64	Horizontal	7	Pass
		846.5	14.52	2.02	5.70	2.15	16.05	40.27	Horizontal	7	Pass
10.0MHz Band 16 QAM	50/0	829	15.36	2.01	5.30	2.15	16.5	44.67	Horizontal	7	Pass
		836.5	17.00	2.01	5.30	2.15	18.14	65.16	Horizontal	7	Pass
		844	16.33	2.02	5.70	2.15	17.86	61.09	Horizontal	7	Pass
15.0MHz Band QPSK	75/0	831.5	15.84	2.01	5.30	2.15	16.98	49.89	Horizontal	7	Pass
		836.5	15.65	2.01	5.30	2.15	16.79	47.75	Horizontal	7	Pass
		841.5	16.34	2.02	5.70	2.15	17.87	61.24	Horizontal	7	Pass
1.4MHz Band 16 QAM	6/0	824.7	16.54	2.01	5.30	2.15	17.68	58.61	Vertical	7	Pass
		836.5	16.72	2.01	5.30	2.15	17.86	61.09	Vertical	7	Pass
		848.3	16.86	2.02	5.70	2.15	18.39	69.02	Vertical	7	Pass
3.0MHz Band 16 QAM	15/0	825.5	14.75	2.01	5.30	2.15	15.89	38.82	Vertical	7	Pass
		836.5	15.27	2.01	5.30	2.15	16.41	43.75	Vertical	7	Pass
		847.5	15.44	2.02	5.70	2.15	16.97	49.77	Vertical	7	Pass
5.0MHz Band 16 QAM	25/0	826.5	16.85	2.01	5.30	2.15	17.99	62.95	Vertical	7	Pass
		836.5	15.96	2.01	5.30	2.15	17.1	51.29	Vertical	7	Pass
		846.5	17.81	2.02	5.70	2.15	19.34	85.90	Vertical	7	Pass
10.0MHz Band 16 QAM	50/0	829	17.71	2.01	5.30	2.15	18.85	76.74	Vertical	7	Pass
		836.5	17.49	2.01	5.30	2.15	18.63	72.95	Vertical	7	Pass
		844	15.66	2.02	5.70	2.15	17.19	52.36	Vertical	7	Pass
15.0MHz Band QPSK	75/0	831.5	16.11	2.01	5.30	2.15	17.25	53.09	Vertical	7	Pass
		836.5	16.45	2.01	5.30	2.15	17.59	57.41	Vertical	7	Pass
		841.5	18.52	2.02	5.70	2.15	20.05	101.16	Vertical	7	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)

ERP(dBm)=EIRP-2.15

8.11 LTE BAND 66

		Radiated Power (EIRP) for Band 66									
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			Limit (W)
1.4MHz Band QPSK	6/0	1710.7	15.09	3.12	8.90	21.49	140.93	Horizontal	1	Pass	
		1745	13.86	3.27	8.90	19.37	86.50	Horizontal	1	Pass	
		1779.3	16.28	3.29	8.90	22.52	178.65	Horizontal	1	Pass	
3.0MHz Band QPSK	15/0	1711.5	14.20	3.13	8.90	20.08	101.86	Horizontal	1	Pass	
		1745	14.87	3.27	8.90	21.48	140.60	Horizontal	1	Pass	
		1778.5	15.56	3.30	8.90	19.9	97.72	Horizontal	1	Pass	
5.0MHz Band QPSK	25/0	1712.5	16.05	3.13	8.90	21.64	145.88	Horizontal	1	Pass	
		1745	16.21	3.27	8.90	21.82	152.05	Horizontal	1	Pass	
		1777.5	14.87	3.30	8.90	19.75	94.41	Horizontal	1	Pass	
10.0MHz Band QPSK	50/0	1715	15.19	3.15	8.90	21.27	133.97	Horizontal	1	Pass	
		1745	15.29	3.31	8.90	21.57	143.55	Horizontal	1	Pass	
		1775	16.10	3.33	8.90	21.17	130.92	Horizontal	1	Pass	
15.0MHz Band QPSK	75/0	1717.5	15.36	3.15	8.90	21.94	156.31	Horizontal	1	Pass	
		1745	15.89	3.31	8.90	21.86	153.46	Horizontal	1	Pass	
		1772.5	16.64	3.33	8.90	21.73	148.94	Horizontal	1	Pass	
20.0MHz Band QPSK	100/0	1720	13.97	3.17	8.90	20.45	110.92	Horizontal	1	Pass	
		1745	15.42	3.32	8.90	22.23	167.11	Horizontal	1	Pass	
		1770	15.22	3.36	8.90	21.24	133.05	Horizontal	1	Pass	
1.4MHz Band QPSK	6/0	1710.7	15.71	3.12	8.90	20.26	106.17	Vertical	1	Pass	
		1745	16.21	3.27	8.90	22.64	183.65	Vertical	1	Pass	
		1779.3	15.56	3.29	8.90	21.33	135.83	Vertical	1	Pass	
3.0MHz Band QPSK	15/0	1711.5	16.08	3.13	8.90	21.76	149.97	Vertical	1	Pass	
		1745	16.14	3.27	8.90	22.66	184.50	Vertical	1	Pass	
		1778.5	16.41	3.30	8.90	21.59	144.21	Vertical	1	Pass	
5.0MHz Band QPSK	25/0	1712.5	15.17	3.13	8.90	21.49	140.93	Vertical	1	Pass	
		1745	15.65	3.27	8.90	20.62	115.35	Vertical	1	Pass	
		1777.5	14.24	3.30	8.90	20.99	125.60	Vertical	1	Pass	
10.0MHz Band QPSK	50/0	1715	12.72	3.15	8.90	18.6	72.44	Vertical	1	Pass	
		1745	16.63	3.31	8.90	22.34	171.40	Vertical	1	Pass	
		1775	15.66	3.33	8.90	20.57	114.02	Vertical	1	Pass	

15.0MHz Band QPSK	75/0	1717.5	16.69	3.15	8.90	22.2	165.96	Vertical	1	Pass
		1745	16.08	3.31	8.90	21.45	139.64	Vertical	1	Pass
		1772.5	15.30	3.33	8.90	21.5	141.25	Vertical	1	Pass
20.0MHz Band QPSK	100/0	1720	17.39	3.17	8.90	23.11	204.64	Vertical	1	Pass
		1745	17.54	3.32	8.90	22.34	171.40	Vertical	1	Pass
		1770	14.41	3.36	8.90	19.17	82.60	Vertical	1	Pass

		Radiated Power (EIRP) for Band 66								
Mode	RB/RB SIZE	Frequency	Result							Conclusion
			SG Level (dBm)	Cable Loss	Antenna Factor (dB)	Max. EIRP Average (dBm)	Max. EIRP	Polarization Of Max. ERP		
									(dBm)	
1.4MHz Band 16 QAM	6/0	1710.7	17.03	3.12	8.9	22.81	190.99	Horizontal	1	Pass
		1745	15.78	3.27	8.9	21.41	138.36	Horizontal	1	Pass
		1779.3	16.42	3.29	8.9	22.03	159.59	Horizontal	1	Pass
3.0MHz Band 16 QAM	15/0	1711.5	16.50	3.13	8.9	22.27	168.66	Horizontal	1	Pass
		1745	16.08	3.27	8.9	21.71	148.25	Horizontal	1	Pass
		1778.5	16.30	3.3	8.9	21.9	154.88	Horizontal	1	Pass
5.0MHz Band 16 QAM	25/0	1712.5	15.51	3.13	8.9	21.28	134.28	Horizontal	1	Pass
		1745	14.55	3.27	8.9	20.18	104.23	Horizontal	1	Pass
		1777.5	14.99	3.3	8.9	20.59	114.55	Horizontal	1	Pass
10.0MHz Band 16 QAM	50/0	1715	17.35	3.15	8.9	23.1	204.17	Horizontal	1	Pass
		1745	14.78	3.31	8.9	20.37	108.89	Horizontal	1	Pass
		1775	14.92	3.33	8.9	20.49	111.94	Horizontal	1	Pass
15.0MHz Band 16 QAM	75/0	1717.5	15.01	3.15	8.9	20.76	119.12	Horizontal	1	Pass
		1745	16.58	3.31	8.9	22.17	164.82	Horizontal	1	Pass
		1772.5	16.25	3.33	8.9	21.82	152.05	Horizontal	1	Pass
20.0MHz Band 16 QAM	100/0	1720	15.88	3.17	8.9	21.61	144.88	Horizontal	1	Pass
		1745	16.83	3.32	8.9	22.41	174.18	Horizontal	1	Pass
		1770	16.44	3.36	8.9	21.98	157.76	Horizontal	1	Pass
1.4MHz Band 16 QAM	6/0	1710.7	16.40	3.12	8.9	22.18	165.20	Vertical	1	Pass
		1745	16.06	3.27	8.9	21.69	147.57	Vertical	1	Pass
		1779.3	15.44	3.29	8.9	21.05	127.35	Vertical	1	Pass
3.0MHz Band 16 QAM	15/0	1711.5	14.81	3.13	8.9	20.58	114.29	Vertical	1	Pass
		1745	14.85	3.27	8.9	20.48	111.69	Vertical	1	Pass
		1778.5	15.55	3.3	8.9	21.15	130.32	Vertical	1	Pass
5.0MHz Band 16 QAM	25/0	1712.5	17.00	3.13	8.9	22.77	189.23	Vertical	1	Pass
		1745	16.80	3.27	8.9	22.43	174.98	Vertical	1	Pass
		1777.5	15.50	3.3	8.9	21.1	128.82	Vertical	1	Pass
10.0MHz Band 16 QAM	50/0	1715	14.37	3.15	8.9	20.12	102.80	Vertical	1	Pass
		1745	16.45	3.31	8.9	22.04	159.96	Vertical	1	Pass
		1775	17.02	3.33	8.9	22.59	181.55	Vertical	1	Pass
15.0MHz Band 16 QAM	75/0	1717.5	15.96	3.15	8.9	21.71	148.25	Vertical	1	Pass
		1745	16.21	3.31	8.9	21.8	151.36	Vertical	1	Pass
		1772.5	15.73	3.33	8.9	21.3	134.90	Vertical	1	Pass

20.0MHz	100/0	1720	17.05	3.17	8.9	22.78	189.67	Vertical	1	Pass
Band 16		1745	16.49	3.32	8.9	22.07	161.06	Vertical	1	Pass
QAM		1770	16.48	3.36	8.9	22.02	159.22	Vertical	1	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: §2.1053, §22.917, §24.238, §27.53 and §90.691

LIMIT

§22.917 (e) and §24.238 and §90.691 (a): Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

§27.53 (g) For operations in the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB.

§27.53 (h) For operations in the 1710–1755 MHz and 2110–2155 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB.

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 $43 + 10 \log_{10}(p)$, dB; and
- b. for mobile subscriber equipment, the attenuation shall not be less than $43 + 10 \log_{10}(p)$, dB at the channel edges and $55 + 10 \log_{10}(p)$ 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 2/4/5/7/12/17/25/26/66

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	-54.52	4.04	33.51	-25.05	-13	-12.05	Horizontal
3701.4	-51.70	4.04	33.51	-22.23	-13	-9.23	Vertical
5552.1	-56.24	5.24	35.84	-25.64	-13	-12.64	Vertical
5552.1	-57.51	5.24	35.84	-26.91	-13	-13.91	Horizontal
Test Results for Mid Channel 1880MHz							
3760	-47.13	4.04	33.56	-17.61	-13	-4.61	Horizontal
3760	-54.20	4.04	33.56	-24.68	-13	-11.68	Vertical
5640	-49.81	5.24	35.91	-19.14	-13	-6.14	Vertical
5640	-57.48	5.24	35.91	-26.81	-13	-13.81	Horizontal
Test Results for High Channel 1909.3MHz							
3818.6	-47.41	4.04	34.00	-17.45	-13	-4.45	Horizontal
3818.6	-49.41	4.04	34.00	-19.45	-13	-6.45	Vertical
5727.9	-51.37	5.24	36.04	-20.57	-13	-7.57	Vertical
5727.9	-58.00	5.24	36.04	-27.20	-13	-14.20	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	-51.41	4.07	33.54	-21.94	-13	-8.94	Horizontal
3720	-52.12	4.07	33.54	-22.65	-13	-9.65	Vertical
5580	-51.06	5.28	35.86	-20.48	-13	-7.48	Vertical
5580	-54.04	5.28	35.86	-23.46	-13	-10.46	Horizontal
Test Results for Mid Channel 1880MHz							
3760	-51.98	4.04	33.56	-22.46	-13	-9.46	Horizontal
3760	-54.12	4.04	33.56	-24.60	-13	-11.60	Vertical
5640	-53.42	5.24	35.91	-22.75	-13	-9.75	Vertical
5640	-57.07	5.24	35.91	-26.40	-13	-13.40	Horizontal
Test Results for High Channel 1900MHz							
3800	-54.70	4.04	34.00	-24.74	-13	-11.74	Horizontal
3800	-51.03	4.04	34.00	-21.07	-13	-8.07	Vertical
5700	-51.33	5.24	36.04	-20.53	-13	-7.53	Vertical
5700	-56.97	5.24	36.04	-26.17	-13	-13.17	Horizontal

Note: P_{Mea}(dBm)= Power(dBm)+ AR_{pl} (dBm)

. Over Limit= : P_{Mea}(dBm)-Limit(dBm)

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

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	-52.12	4.02	29.80	-26.34	-13	-13.34	Horizontal
3421.4	-47.80	4.02	29.80	-22.02	-13	-9.02	Vertical
5132.1	-53.36	5.24	35.84	-22.76	-13	-9.76	Vertical
5132.1	-57.50	5.24	35.84	-26.90	-13	-13.90	Horizontal
Test Results for Mid Channel 1732.5MHz							
3465	-52.85	4.03	30.00	-26.88	-13	-13.88	Horizontal
3465	-53.33	4.03	30.00	-27.36	-13	-14.36	Vertical
5197.5	-49.33	5.25	35.86	-18.72	-13	-5.72	Vertical
5197.5	-54.85	5.25	35.86	-24.24	-13	-11.24	Horizontal
Test Results for High Channel 1754.3MHz							
3508.6	-49.50	4.05	30.01	-23.54	-13	-10.54	Horizontal
3508.6	-54.69	4.05	30.01	-28.73	-13	-15.73	Vertical
5262.9	-57.05	5.26	35.86	-26.45	-13	-13.45	Vertical
5262.9	-53.54	5.26	35.86	-22.94	-13	-9.94	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	-52.03	4.02	29.80	-26.25	-13	-13.25	Horizontal
3440	-52.36	4.02	29.80	-26.58	-13	-13.58	Vertical
5160	-56.10	5.24	35.84	-25.50	-13	-12.50	Vertical
5160	-57.41	5.24	35.84	-26.81	-13	-13.81	Horizontal
Test Results for Mid Channel 1732.5MHz							
3465	-49.89	4.03	30.00	-23.92	-13	-10.92	Horizontal
3465	-53.70	4.03	30.00	-27.73	-13	-14.73	Vertical
5197.5	-53.73	5.25	35.86	-23.12	-13	-10.12	Vertical
5197.5	-54.68	5.25	35.86	-24.07	-13	-11.07	Horizontal
Test Results for High Channel 1745MHz							
2490	-54.58	2.91	27.68	-29.81	-13	-16.81	Horizontal
3490	-53.49	2.91	27.68	-28.72	-13	-15.72	Vertical
5235	-54.33	5.26	35.86	-23.73	-13	-10.73	Vertical
5235	-54.43	5.26	35.86	-23.83	-13	-10.83	Horizontal

Note: P_{Mea}(dBm)= Power(dBm)+ AR_{pl} (dBm)

. Over Limit= : P_{Mea}(dBm)-Limit(dBm)

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

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	-53.58	2.78	27.50	-28.86	-13	-15.86	Horizontal
1649.4	-52.24	2.78	27.50	-27.52	-13	-14.52	Vertical
2474.1	-56.80	2.90	27.80	-31.90	-13	-18.90	Vertical
2474.1	-56.77	2.90	27.80	-31.87	-13	-18.87	Horizontal
Test Results For Mid Channel 836.5MHz							
1673	-49.04	2.78	27.48	-24.34	-13	-11.34	Horizontal
1673	-51.36	2.78	27.48	-26.66	-13	-13.66	Vertical
2509.5	-54.67	2.91	27.70	-29.88	-13	-16.88	Vertical
2509.5	-54.34	2.91	27.70	-29.55	-13	-16.55	Horizontal
Test Results for High Channel 848.3MHz							
1696.6	-47.80	2.78	27.43	-23.15	-13	-10.15	Horizontal
1696.6	-47.82	2.78	27.43	-23.17	-13	-10.17	Vertical
2544.9	-56.82	2.92	27.74	-32.00	-13	-19.00	Vertical
2544.9	-55.33	2.92	27.74	-30.51	-13	-17.51	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	-49.46	2.78	27.50	-24.74	-13	-11.74	Horizontal
1658	-50.94	2.78	27.50	-26.22	-13	-13.22	Vertical
2487	-52.60	2.90	27.80	-27.70	-13	-14.70	Vertical
2487	-52.21	2.90	27.80	-27.31	-13	-14.31	Horizontal
Test Results for Mid Channel 836.5MHz							
1673	-54.24	2.78	27.48	-29.54	-13	-16.54	Horizontal
1673	-51.95	2.78	27.48	-27.25	-13	-14.25	Vertical
2509.5	-49.25	2.91	27.70	-24.46	-13	-11.46	Vertical
2509.5	-56.32	2.91	27.70	-31.53	-13	-18.53	Horizontal
Test Results for High Channel 844MHz							
1688	-50.80	2.78	27.43	-26.15	-13	-13.15	Horizontal
1688	-53.99	2.78	27.43	-29.34	-13	-16.34	Vertical
2532	-52.45	2.92	27.74	-27.63	-13	-14.63	Vertical
2532	-52.49	2.92	27.74	-27.67	-13	-14.67	Horizontal

Note: P_{Mea}(dBm)= Power(dBm)+ AR_{pl} (dBm)

. Over Limit= : P_{Mea}(dBm)-Limit(dBm)

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

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	-58.24	5.23	35.81	-27.66	-25	-2.66	Horizontal
5005	-58.54	5.23	35.81	-27.96	-25	-2.96	Vertical
7507.5	-61.22	5.67	36.85	-30.04	-25	-5.04	Vertical
7507.5	-59.39	5.67	36.85	-28.21	-25	-3.21	Horizontal
Test Results for Mid Channel 2535MHz							
5070	-57.29	5.23	35.82	-26.70	-25	-1.70	Horizontal
5070	-60.14	5.23	35.82	-29.55	-25	-4.55	Vertical
7605	-59.57	5.67	36.85	-28.39	-25	-3.39	Vertical
7605	-60.01	5.67	36.85	-28.83	-25	-3.83	Horizontal
Test Results for High Channel 2567.5MHz							
5135	-58.45	5.24	35.83	-27.86	-25	-2.86	Horizontal
5135	-61.42	5.24	35.83	-30.83	-25	-5.83	Vertical
7702.5	-59.46	5.68	36.87	-28.27	-25	-3.27	Vertical
7702.5	-59.89	5.68	36.87	-28.70	-25	-3.70	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	-60.27	5.23	35.82	-29.68	-25	-4.68	Horizontal
5020	-59.39	5.23	35.82	-28.80	-25	-3.80	Vertical
7530	-62.28	5.67	36.86	-31.09	-25	-6.09	Vertical
7530	-61.58	5.67	36.86	-30.39	-25	-5.39	Horizontal
Test Results for Mid Channel 2535MHz							
5070	-57.59	5.23	35.82	-27.00	-25	-2.00	Horizontal
5070	-60.59	5.23	35.82	-30.00	-25	-5.00	Vertical
7605	-60.21	5.67	36.85	-29.03	-25	-4.03	Vertical
7605	-60.80	5.67	36.85	-29.62	-25	-4.62	Horizontal
Test Results for High Channel 2560MHz							
5120	-58.20	5.24	35.83	-27.61	-25	-2.61	Horizontal
5120	-59.54	5.24	35.83	-28.95	-25	-3.95	Vertical
7680	-64.20	5.70	36.88	-33.02	-25	-8.02	Vertical
7680	-63.49	5.70	36.88	-32.31	-25	-7.31	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.

9.5 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	-48.18	2.60	27.2	-23.58	-13	-10.58	Horizontal
1399.4	-47.59	2.60	27.2	-22.99	-13	-9.99	Vertical
2099.1	-56.22	2.85	27.54	-31.53	-13	-18.53	Vertical
2099.1	-57.20	2.85	27.54	-32.51	-13	-19.51	Horizontal
Test Results For Mid Channel 707.5MHz							
1415	-54.65	2.61	27.28	-29.98	-13	-16.98	Horizontal
1415	-52.71	2.61	27.28	-28.04	-13	-15.04	Vertical
2122.5	-55.69	2.87	27.59	-30.97	-13	-17.97	Vertical
2122.5	-49.02	2.87	27.59	-24.30	-13	-11.30	Horizontal
Test Results for High Channel 715.3MHz							
1430.6	-54.27	2.63	27.28	-29.62	-13	-16.62	Horizontal
1430.6	-50.71	2.63	27.28	-26.06	-13	-13.06	Vertical
2145.9	-53.21	2.88	27.60	-28.49	-13	-15.49	Vertical
2145.9	-56.38	2.88	27.60	-31.66	-13	-18.66	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	-49.80	2.61	27.26	-25.15	-13	-12.15	Horizontal
1408	-47.50	2.61	27.26	-22.85	-13	-9.85	Vertical
2112	-56.17	2.87	27.58	-31.46	-13	-18.46	Vertical
2112	-55.73	2.87	27.58	-31.02	-13	-18.02	Horizontal
Test Results for Mid Channel 707.5MHz							
1415	-48.55	2.61	27.28	-23.88	-13	-10.88	Horizontal
1415	-49.93	2.61	27.28	-25.26	-13	-12.26	Vertical
2122.5	-54.58	2.87	27.59	-29.86	-13	-16.86	Vertical
2122.5	-53.92	2.87	27.59	-29.20	-13	-16.20	Horizontal
Test Results for High Channel 711MHz							
1422	-54.88	2.62	27.28	-30.22	-13	-17.22	Horizontal
1422	-49.02	2.62	27.28	-24.36	-13	-11.36	Vertical
2133	-57.36	2.87	27.60	-32.63	-13	-19.63	Vertical
2133	-57.07	2.87	27.60	-32.34	-13	-19.34	Horizontal

Note: P_{Mea}(dBm)= Power(dBm)+ AR_{pl} (dBm)

. Over Limit= : P_{Mea}(dBm)-Limit(dBm)

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

9.6 LTE BAND 17

QPSK EIRP POWER FOR LTE BAND 17 (5MHZ BANDWIDTH)

Test Results for Low Channel 706.5MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1413	-50.61	2.61	27.28	-25.94	-13	-12.94	Horizontal
1413	-48.39	2.61	27.28	-23.72	-13	-10.72	Vertical
2119.5	-54.71	2.87	27.59	-29.99	-13	-16.99	Vertical
2119.5	-55.58	2.87	27.59	-30.86	-13	-17.86	Horizontal
Test Results For Mid Channel 710MHz							
1420	-54.71	2.62	27.30	-30.03	-13	-17.03	Horizontal
1420	-54.15	2.62	27.30	-29.47	-13	-16.47	Vertical
2130	-49.24	2.87	27.62	-24.49	-13	-11.49	Vertical
2130	-56.48	2.87	27.62	-31.73	-13	-18.73	Horizontal
Test Results for High Channel 713.5MHz							
1427	-50.97	2.66	27.28	-26.35	-13	-13.35	Horizontal
1427	-50.52	2.66	27.28	-25.90	-13	-12.90	Vertical
2140.5	-50.84	2.88	27.60	-26.12	-13	-13.12	Vertical
2140.5	-57.98	2.88	27.60	-33.26	-13	-20.26	Horizontal

QPSK EIRP POWER FOR LTE BAND 17 (10MHZ BANDWIDTH)

Test Results for Low Channel 709MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1418	-54.20	2.62	27.30	-29.52	-13	-16.52	Horizontal
1418	-49.17	2.62	27.30	-24.49	-13	-11.49	Vertical
2127	-55.77	2.87	27.62	-31.02	-13	-18.02	Vertical
2127	-50.78	2.87	27.62	-26.03	-13	-13.03	Horizontal
Test Results for Mid Channel 710MHz							
1420	-54.83	2.62	27.30	-30.15	-13	-17.15	Horizontal
1420	-48.60	2.62	27.30	-23.92	-13	-10.92	Vertical
2130	-56.72	2.87	27.62	-31.97	-13	-18.97	Vertical
2130	-52.33	2.87	27.62	-27.58	-13	-14.58	Horizontal
Test Results for High Channel 711MHz							
1422	-49.61	2.62	27.30	-24.93	-13	-11.93	Horizontal
1422	-49.37	2.62	27.30	-24.69	-13	-11.69	Vertical
2133	-52.87	2.87	27.62	-28.12	-13	-15.12	Vertical
2133	-56.52	2.87	27.62	-31.77	-13	-18.77	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.

9.7 LTE BAND 25

QPSK EIRP POWER FOR LTE BAND 25 (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
3701.4	-50.15	2.61	27.26	-25.50	-13	-12.50	Horizontal
3701.4	-51.16	2.61	27.26	-26.51	-13	-13.51	Vertical
5552.1	-56.87	2.87	27.58	-32.16	-13	-19.16	Vertical
5552.1	-53.22	2.87	27.58	-28.51	-13	-15.51	Horizontal
Test Results for Mid Channel 1732.5MHz							
3765	-54.41	2.63	27.28	-29.76	-13	-16.76	Horizontal
3765	-50.94	2.63	27.28	-26.29	-13	-13.29	Vertical
5647.5	-49.16	2.88	27.62	-24.42	-13	-11.42	Vertical
5647.5	-56.58	2.88	27.62	-31.84	-13	-18.84	Horizontal
Test Results for High Channel 1754.3MHz							
3828.6	-48.66	2.65	27.28	-24.03	-13	-11.03	Horizontal
3828.6	-51.40	2.65	27.28	-26.77	-13	-13.77	Vertical
5742.9	-53.59	2.88	27.70	-28.77	-13	-15.77	Vertical
5742.9	-56.27	2.88	27.70	-31.45	-13	-18.45	Horizontal

QPSK EIRP POWER FOR LTE BAND 25 (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
3720	-52.63	2.62	27.30	-27.95	-13	-14.95	Horizontal
3720	-48.00	2.62	27.30	-23.32	-13	-10.32	Vertical
5580	-55.84	2.87	27.62	-31.09	-13	-18.09	Vertical
5580	-49.02	2.87	27.62	-24.27	-13	-11.27	Horizontal
Test Results for Mid Channel 1732.5MHz							
3765	-47.50	2.64	27.33	-22.81	-13	-9.81	Horizontal
3765	-48.09	2.64	27.33	-23.40	-13	-10.40	Vertical
5647.5	-55.37	2.88	27.67	-30.58	-13	-17.58	Vertical
5647.5	-55.20	2.88	27.67	-30.41	-13	-17.41	Horizontal
Test Results for High Channel 1745MHz							
3810	-49.01	2.64	27.33	-24.32	-13	-11.32	Horizontal
3810	-54.52	2.64	27.33	-29.83	-13	-16.83	Vertical
5715	-49.91	2.88	27.67	-25.12	-13	-12.12	Vertical
5715	-51.53	2.88	27.67	-26.74	-13	-13.74	Horizontal

9.8 LTE BAND 26 A

QPSK EIRP POWER FOR LTE BAND 26A(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	-51.39	2.78	27.5	-26.67	-13	-13.67	Horizontal
1629.4	-52.86	2.78	27.5	-28.14	-13	-15.14	Vertical
2444.1	-52.93	2.9	27.8	-28.03	-13	-15.03	Vertical
2444.1	-55.57	2.9	27.8	-30.67	-13	-17.67	Horizontal
Test Results For Mid Channel 819MHz							
1638	-48.88	2.8	27.48	-24.20	-13	-11.20	Horizontal
1638	-53.32	2.8	27.48	-28.64	-13	-15.64	Vertical
2457.5	-50.57	2.91	27.7	-25.78	-13	-12.78	Vertical
2457.5	-52.20	2.91	27.7	-27.41	-13	-14.41	Horizontal
Test Results for High Channel 823.3MHz							
1646.6	-51.87	2.82	27.43	-27.26	-13	-14.26	Horizontal
1646.6	-52.34	2.82	27.43	-27.73	-13	-14.73	Vertical
2469.9	-50.17	2.92	27.74	-25.35	-13	-12.35	Vertical
2469.9	-57.20	2.92	27.74	-32.38	-13	-19.38	Horizontal

QPSK EIRP POWER FOR LTE BAND 26A(814MHz~824MHz) (10MHZ 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	-47.04	2.82	27.43	-22.43	-13	-9.43	Horizontal
1638	-47.12	2.82	27.43	-22.51	-13	-9.51	Vertical
2457.5	-52.20	2.91	27.74	-27.37	-13	-14.37	Vertical
2457.5	-57.96	2.91	27.74	-33.13	-13	-20.13	Horizontal

9.9 LTE BAND 26 B

QPSK EIRP POWER FOR LTE BAND 26B(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	-49.48	2.78	27.28	-24.98	-13	-11.98	Horizontal
1649.4	-49.25	2.78	27.28	-24.75	-13	-11.75	Vertical
2474.1	-50.42	2.9	27.59	-25.73	-13	-12.73	Vertical
2474.1	-53.61	2.9	27.59	-28.92	-13	-15.92	Horizontal
Test Results For Mid Channel 836.5MHz							
1673	-53.09	2.78	27.3	-28.57	-13	-15.57	Horizontal
1673	-49.84	2.78	27.3	-25.32	-13	-12.32	Vertical
2509.4	-50.83	2.91	27.62	-26.12	-13	-13.12	Vertical
2509.4	-53.43	2.91	27.62	-28.72	-13	-15.72	Horizontal
Test Results for High Channel 848.3MHz							
1696.6	-54.74	2.78	27.28	-30.24	-13	-17.24	Horizontal
1696.6	-49.15	2.78	27.28	-24.65	-13	-11.65	Vertical
2544.9	-55.20	2.92	27.6	-30.52	-13	-17.52	Vertical
2544.9	-54.76	2.92	27.6	-30.08	-13	-17.08	Horizontal

QPSK EIRP POWER FOR LTE BAND 26B(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	-50.49	2.78	27.3	-25.97	-13	-12.97	Horizontal
1663	-48.06	2.78	27.3	-23.54	-13	-10.54	Vertical
2494.5	-54.59	2.9	27.62	-29.87	-13	-16.87	Vertical
2494.5	-55.22	2.9	27.62	-30.50	-13	-17.50	Horizontal
Test Results for Mid Channel 836.5MHz							
1673	-50.40	2.78	27.3	-25.88	-13	-12.88	Horizontal
1673	-47.91	2.78	27.3	-23.39	-13	-10.39	Vertical
2509.5	-55.69	2.91	27.62	-30.98	-13	-17.98	Vertical
2509.5	-52.77	2.91	27.62	-28.06	-13	-15.06	Horizontal
Test Results for High Channel 841.5MHz							
1683	-53.27	2.78	27.3	-28.75	-13	-15.75	Horizontal
1683	-50.90	2.78	27.3	-26.38	-13	-13.38	Vertical
2524.5	-54.61	2.92	27.62	-29.91	-13	-16.91	Vertical
2524.5	-50.26	2.92	27.62	-25.56	-13	-12.56	Horizontal

9.10 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 Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3421.4	-52.67	2.61	27.28	-28.00	-13	-15.00	Horizontal
3421.4	-49.95	2.61	27.28	-25.28	-13	-12.28	Vertical
5132.1	-53.25	2.87	27.59	-28.53	-13	-15.53	Vertical
5132.1	-52.26	2.87	27.59	-27.54	-13	-14.54	Horizontal
Test Results for Mid Channel 1745MHz							
3490	-50.38	2.62	27.3	-25.70	-13	-12.70	Horizontal
3490	-50.90	2.62	27.3	-26.22	-13	-13.22	Vertical
5337.9	-55.42	2.87	27.62	-30.67	-13	-17.67	Vertical
5337.9	-55.08	2.87	27.62	-30.33	-13	-17.33	Horizontal
Test Results for High Channel 1779.3MHz							
3558.6	-52.48	2.66	27.28	-27.86	-13	-14.86	Horizontal
3558.6	-51.45	2.66	27.28	-26.83	-13	-13.83	Vertical
5337.9	-55.11	2.88	27.6	-30.39	-13	-17.39	Vertical
5337.9	-50.03	2.88	27.6	-25.31	-13	-12.31	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	-52.23	2.62	27.3	-27.55	-13	-14.55	Horizontal
3440	-48.78	2.62	27.3	-24.10	-13	-11.10	Vertical
5160	-56.77	2.87	27.62	-32.02	-13	-19.02	Vertical
5160	-53.63	2.87	27.62	-28.88	-13	-15.88	Horizontal
Test Results for Mid Channel 1745MHz							
3490	-50.59	2.62	27.3	-25.91	-13	-12.91	Horizontal
3490	-49.14	2.62	27.3	-24.46	-13	-11.46	Vertical
5337.9	-51.55	2.87	27.62	-26.80	-13	-13.80	Vertical
5337.9	-55.83	2.87	27.62	-31.08	-13	-18.08	Horizontal
Test Results for High Channel 1770MHz							
3540	-48.78	2.62	27.3	-24.10	-13	-11.10	Horizontal
3540	-49.38	2.62	27.3	-24.70	-13	-11.70	Vertical
5310	-53.26	2.87	27.62	-28.51	-13	-15.51	Vertical
5310	-56.99	2.87	27.62	-32.24	-13	-19.24	Horizontal

Note: P_{Mea}(dBm)= Power(dBm)+ AR_{pl} (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 3.29V, Normal, DC 3.87V and High voltage, DC 4.45V.

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 2/4/5/7/12/17/25/26/66

RESULTS

See the following pages.

10.1 LTE BAND 2

Band 2 QPSK, (20MHz BANDWIDTH RB size 100 RB Offset 0)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.29	1880	13	0.00691	2.5
3.87	1880	5	0.00266	2.5
4.45	1880	13	0.00691	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1880	14	0.00745	2.5
Extreme (50C)	1880	15	0.00798	2.5
Extreme (40C)	1880	19	0.01011	2.5
Extreme (30C)	1880	10	0.00532	2.5
Extreme (10C)	1880	16	0.00851	2.5
Extreme (0C)	1880	20	0.01064	2.5
Extreme (-10C)	1880	8	0.00426	2.5
Extreme (-20C)	1880	19	0.01011	2.5
Extreme (-30C)	1880	13	0.00691	2.5

Band 2 16QAM, (20MHz BANDWIDTH RB size 100 RB Offset 0)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.29	1880	3	0.00160	2.5
3.87	1880	9	0.00479	2.5
4.45	1880	14	0.00745	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1880	13	0.00691	2.5
Extreme (50C)	1880	12	0.00638	2.5
Extreme (40C)	1880	12	0.00638	2.5
Extreme (30C)	1880	8	0.00426	2.5
Extreme (10C)	1880	16	0.00851	2.5
Extreme (0C)	1880	2	0.00106	2.5
Extreme (-10C)	1880	3	0.00160	2.5
Extreme (-20C)	1880	16	0.00851	2.5
Extreme (-30C)	1880	17	0.00904	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

Band 4 QPSK, (20MHz BANDWIDTH RB size 100 RB Offset 0)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.29	1732.5	3	0.00173	2.5
3.87	1732.5	3	0.00173	2.5
4.45	1732.5	2	0.00115	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1732.5	14	0.00808	2.5
Extreme (50C)	1732.5	14	0.00808	2.5
Extreme (40C)	1732.5	20	0.01154	2.5
Extreme (30C)	1732.5	0	0.00000	2.5
Extreme (10C)	1732.5	27	0.01558	2.5
Extreme (0C)	1732.5	1	0.00058	2.5
Extreme (-10C)	1732.5	16	0.00924	2.5
Extreme (-20C)	1732.5	5	0.00289	2.5
Extreme (-30C)	1732.5	7	0.00404	2.5

Band 4 16QAM, (20MHz BANDWIDTH RB size 100 RB Offset 0)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.29	1732.5	24	0.01385	2.5
3.87	1732.5	9	0.00519	2.5
4.45	1732.5	17	0.00981	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1732.5	5	0.00289	2.5
Extreme (50C)	1732.5	2	0.00115	2.5
Extreme (40C)	1732.5	4	0.00231	2.5
Extreme (30C)	1732.5	5	0.00289	2.5
Extreme (10C)	1732.5	7	0.00404	2.5
Extreme (0C)	1732.5	10	0.00577	2.5
Extreme (-10C)	1732.5	12	0.00693	2.5
Extreme (-20C)	1732.5	7	0.00404	2.5
Extreme (-30C)	1732.5	16	0.00924	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

Band 5 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]
3.29	836.5	8	0.00956	2.5
3.87	836.5	20	0.02391	2.5
4.45	836.5	2	0.00239	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	836.5	27	0.03228	2.5
Extreme (50C)	836.5	5	0.00598	2.5
Extreme (40C)	836.5	6	0.00717	2.5
Extreme (30C)	836.5	10	0.01195	2.5
Extreme (10C)	836.5	14	0.01674	2.5
Extreme (0C)	836.5	25	0.02989	2.5
Extreme (-10C)	836.5	3	0.00359	2.5
Extreme (-20C)	836.5	13	0.01554	2.5
Extreme (-30C)	836.5	2	0.00239	2.5

Band 5 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]
3.29	836.5	13	0.01554	2.5
3.87	836.5	25	0.02989	2.5
4.45	836.5	25	0.02989	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	836.5	15	0.01793	2.5
Extreme (50C)	836.5	26	0.03108	2.5
Extreme (40C)	836.5	1	0.00120	2.5
Extreme (30C)	836.5	27	0.03228	2.5
Extreme (10C)	836.5	12	0.01435	2.5
Extreme (0C)	836.5	22	0.02630	2.5
Extreme (-10C)	836.5	3	0.00359	2.5
Extreme (-20C)	836.5	21	0.02510	2.5
Extreme (-30C)	836.5	26	0.03108	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

Band 7 QPSK, (20MHz BANDWIDTH RB size 100 RB Offset 0)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.29	2535	22	0.00868	2.5
3.87	2535	15	0.00592	2.5
4.45	2535	13	0.00513	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	2535	18	0.00710	2.5
Extreme (50C)	2535	15	0.00592	2.5
Extreme (40C)	2535	18	0.00710	2.5
Extreme (30C)	2535	26	0.01026	2.5
Extreme (10C)	2535	19	0.00750	2.5
Extreme (0C)	2535	12	0.00473	2.5
Extreme (-10C)	2535	25	0.00986	2.5
Extreme (-20C)	2535	11	0.00434	2.5
Extreme (-30C)	2535	19	0.00750	2.5

Band 7 16QAM, (20MHz BANDWIDTH RB size 100 RB Offset 0)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.29	2535	27	0.01065	2.5
3.87	2535	4	0.00158	2.5
4.45	2535	26	0.01026	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	2535	9	0.00355	2.5
Extreme (50C)	2535	15	0.00592	2.5
Extreme (40C)	2535	22	0.00868	2.5
Extreme (30C)	2535	2	0.00079	2.5
Extreme (10C)	2535	16	0.00631	2.5
Extreme (0C)	2535	2	0.00079	2.5
Extreme (-10C)	2535	16	0.00631	2.5
Extreme (-20C)	2535	5	0.00197	2.5
Extreme (-30C)	2535	9	0.00355	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]
3.29	707.5	10	0.01413	2.5
3.87	707.5	15	0.02120	2.5
4.45	707.5	18	0.02544	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	707.5	8	0.01131	2.5
Extreme (50C)	707.5	15	0.02120	2.5
Extreme (40C)	707.5	26	0.03675	2.5
Extreme (30C)	707.5	4	0.00565	2.5
Extreme (10C)	707.5	15	0.02120	2.5
Extreme (0C)	707.5	25	0.03534	2.5
Extreme (-10C)	707.5	16	0.02261	2.5
Extreme (-20C)	707.5	4	0.00565	2.5
Extreme (-30C)	707.5	10	0.01413	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]
3.29	707.5	1	0.00141	2.5
3.87	707.5	5	0.00707	2.5
4.45	707.5	6	0.00848	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	707.5	10	0.01413	2.5
Extreme (50C)	707.5	17	0.02403	2.5
Extreme (40C)	707.5	19	0.02686	2.5
Extreme (30C)	707.5	8	0.01131	2.5
Extreme (10C)	707.5	10	0.01413	2.5
Extreme (0C)	707.5	7	0.00989	2.5
Extreme (-10C)	707.5	17	0.02403	2.5
Extreme (-20C)	707.5	23	0.03251	2.5
Extreme (-30C)	707.5	9	0.01272	2.5

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

10.6 LTE BAND 17

Band 17 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]
3.29	710.0	4	0.00563	2.5
3.87	710.0	8	0.01127	2.5
4.45	710.0	17	0.02394	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	710.0	2	0.00282	2.5
Extreme (50C)	710.0	7	0.00986	2.5
Extreme (40C)	710.0	8	0.01127	2.5
Extreme (30C)	710.0	8	0.01127	2.5
Extreme (10C)	710.0	5	0.00704	2.5
Extreme (0C)	710.0	9	0.01268	2.5
Extreme (-10C)	710.0	19	0.02676	2.5
Extreme (-20C)	710.0	13	0.01831	2.5
Extreme (-30C)	710.0	20	0.02817	2.5

Band 17 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]
3.29	710.0	24	0.03380	2.5
3.87	710.0	25	0.03521	2.5
4.45	710.0	16	0.02254	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	710.0	7	0.00986	2.5
Extreme (50C)	710.0	1	0.00141	2.5
Extreme (40C)	710.0	8	0.01127	2.5
Extreme (30C)	710.0	22	0.03099	2.5
Extreme (10C)	710.0	18	0.02535	2.5
Extreme (0C)	710.0	25	0.03521	2.5
Extreme (-10C)	710.0	8	0.01127	2.5
Extreme (-20C)	710.0	7	0.00986	2.5
Extreme (-30C)	710.0	7	0.00986	2.5

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

10.7 LTE BAND 25

QPSK, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.29	1882.5	11	0.00584	2.5
3.87	1882.5	27	0.01434	2.5
4.45	1882.5	9	0.00478	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1882.5	20	0.01062	2.5
Extreme (50C)	1882.5	11	0.00584	2.5
Extreme (40C)	1882.5	19	0.01009	2.5
Extreme (30C)	1882.5	1	0.00053	2.5
Extreme (10C)	1882.5	9	0.00478	2.5
Extreme (0C)	1882.5	13	0.00691	2.5
Extreme (-10C)	1882.5	22	0.01169	2.5
Extreme (-20C)	1882.5	5	0.00266	2.5
Extreme (-30C)	1882.5	12	0.00637	2.5

16QAM, (20MHz BANDWIDTH)

Frequency error vs. Voltage

Voltage [Vdc]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
3.29	1882.5	7	0.00372	2.5
3.87	1882.5	8	0.00425	2.5
4.45	1882.5	26	0.01381	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1882.5	16	0.00850	2.5
Extreme (50C)	1882.5	19	0.01009	2.5
Extreme (40C)	1882.5	27	0.01434	2.5
Extreme (30C)	1882.5	0	0.00000	2.5
Extreme (10C)	1882.5	3	0.00159	2.5
Extreme (0C)	1882.5	0	0.00000	2.5
Extreme (-10C)	1882.5	7	0.00372	2.5
Extreme (-20C)	1882.5	25	0.01328	2.5
Extreme (-30C)	1882.5	16	0.00850	2.5

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

10.8 LTE BAND 26 A

Band 26A 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]
BAND 26 QPSK, (CH 26915 RB size 75 RB Offset 0 10MHz BANDWIDTH)				
3.29	819	21	0.02564	2.5
3.87	819	7	0.00855	2.5
4.45	819	7	0.00855	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26 QPSK, (CH 26915 RB size 75 RB Offset 0 10MHz BANDWIDTH)				
Normal (25C)	819	22	0.02686	2.5
Extreme (50C)	819	23	0.02808	2.5
Extreme (40C)	819	9	0.01099	2.5
Extreme (30C)	819	10	0.01221	2.5
Extreme (10C)	819	18	0.02198	2.5
Extreme (0C)	819	26	0.03175	2.5
Extreme (-10C)	819	24	0.02930	2.5
Extreme (-20C)	819	15	0.01832	2.5
Extreme (-30C)	819	9	0.01099	2.5

Band 26A 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]
BAND 26 16QAM, (CH 26915 RB size 75 RB Offset 0 10MHz BANDWIDTH)				
3.29	819	15	0.01832	2.5
3.87	819	4	0.00488	2.5
4.45	819	19	0.02320	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26 16QAM, (CH 26915 RB size 75 RB Offset 0 10MHz BANDWIDTH)				
Normal (25C)	819	21	0.02564	2.5
Extreme (50C)	819	8	0.00977	2.5
Extreme (40C)	819	13	0.01587	2.5
Extreme (30C)	819	20	0.02442	2.5
Extreme (10C)	819	3	0.00366	2.5
Extreme (0C)	819	10	0.01221	2.5
Extreme (-10C)	819	12	0.01465	2.5
Extreme (-20C)	819	19	0.02320	2.5
Extreme (-30C)	819	23	0.02808	2.5

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

10.9 LTE BAND 26 B

Band 26A 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]
BAND 26 QPSK, (CH 26740 RB size 75 RB Offset 0 10MHz)				
3.29	836.5	15	0.01793	2.5
3.87	836.5	6	0.00717	2.5
4.45	836.5	2	0.00239	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26 QPSK, (CH 26740 RB size 75 RB Offset 0 10MHz)				
Normal (25C)	836.5	22	0.02630	2.5
Extreme (50C)	836.5	20	0.02391	2.5
Extreme (40C)	836.5	8	0.00956	2.5
Extreme (30C)	836.5	2	0.00239	2.5
Extreme (10C)	836.5	19	0.02271	2.5
Extreme (0C)	836.5	16	0.01913	2.5
Extreme (-10C)	836.5	0	0.00000	2.5
Extreme (-20C)	836.5	9	0.01076	2.5
Extreme (-30C)	836.5	18	0.02152	2.5

Band 26A 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]
BAND 26 16QAM, (CH 26740 RB size 75 RB Offset 0 10MHz)				
3.29	836.5	20	0.02391	2.5
3.87	836.5	5	0.00598	2.5
4.45	836.5	12	0.01435	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 26 16QAM, (CH 26740 RB size 75 RB Offset 0 10MHz)				
Normal (25C)	836.5	26	0.03108	2.5
Extreme (50C)	836.5	4	0.00478	2.5
Extreme (40C)	836.5	7	0.00837	2.5
Extreme (30C)	836.5	25	0.02989	2.5
Extreme (10C)	836.5	20	0.02391	2.5
Extreme (0C)	836.5	13	0.01554	2.5
Extreme (-10C)	836.5	14	0.01674	2.5
Extreme (-20C)	836.5	26	0.01124	2.5
Extreme (-30C)	836.5	24	0.00729	2.5

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

10.10 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)				
3.29	1745	23	0.01318	2.5
3.87	1745	14	0.00802	2.5
4.45	1745	7	0.00401	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	13	0.00745	2.5
Extreme (50C)	1745	1	0.00057	2.5
Extreme (40C)	1745	10	0.00573	2.5
Extreme (30C)	1745	14	0.00802	2.5
Extreme (10C)	1745	15	0.00860	2.5
Extreme (0C)	1745	25	0.01433	2.5
Extreme (-10C)	1745	17	0.00974	2.5
Extreme (-20C)	1745	17	0.00974	2.5
Extreme (-30C)	1745	18	0.01032	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)				
3.29	1745	20	0.01146	2.5
3.87	1745	11	0.00630	2.5
4.45	1745	19	0.01089	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	17	0.00974	2.5
Extreme (50C)	1745	21	0.01203	2.5
Extreme (40C)	1745	6	0.00344	2.5
Extreme (30C)	1745	12	0.00688	2.5
Extreme (10C)	1745	13	0.00745	2.5
Extreme (0C)	1745	9	0.00516	2.5
Extreme (-10C)	1745	25	0.01433	2.5
Extreme (-20C)	1745	22	0.01261	2.5
Extreme (-30C)	1745	1	0.00057	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.

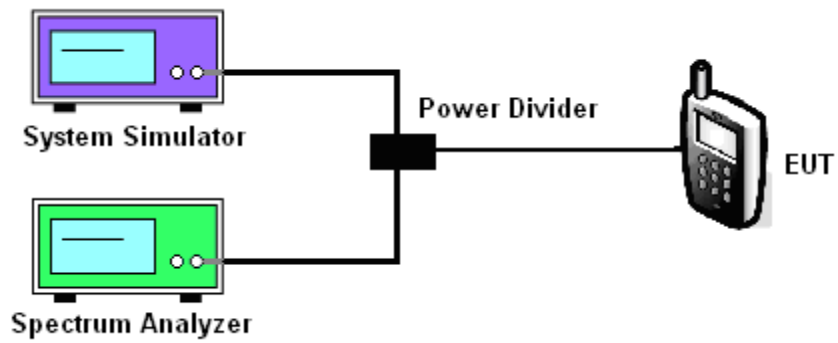
11.2 Measuring Instruments

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 LTE 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 2/4/5/7/12/17/25/26/66

Test data reference attachment.

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