

FCC CFR47 PART 22H, 24E, 27,90S CERTIFICATION TEST REPORT FCC ID:2ANMU-C71

Product: Smart phone

Trade Mark: OUKITEL

Model No.: C71

Family Model: C71 GT, C71 S, C71 Pro, C71 Plus, C71 Ultra, C71 MAX,
C71 Lite, C71 Go, C71 Pure

Report No.: N26020406718E

Issue Date: May. 25, 2026

Prepared for

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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
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Product name: Smart phone

Model and/or type reference: C71

Trade Mark: OUKITEL

Family Model: C71 GT, C71 S, C71 Pro, C71 Plus, C71 Ultra, C71 MAX, C71 Lite,
C71 Go, C71 Pure

Test Sample Number: S2603260317-1#

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 Feb. 04, 2026 ~ May. 25, 2026

Date of Issue May. 25, 2026

Test Result **Pass**

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TABLE OF CONTENTS

1. GENERAL INFORMATION	6
1.1 PRODUCT DESCRIPTION	6
1.2 RELATED SUBMITTAL(S) / GRANT (S).....	8
1.3 TEST METHODOLOGY.....	8
1.4 TEST FACILITY.....	8
MEASUREMENT UNCERTAINTY	8
1.5 SPECIAL ACCESSORIES.....	8
1.6 WORST-CASE CONFIGURATION AND MODE.....	8
2. SYSTEM TEST CONFIGURATION	9
2.1 EUT CONFIGURATION.....	9
2.2 EUT EXERCISE	9
2.3 CONFIGURATION OF EUT SYSTEM.....	9
2.4 TEST SETUP	10
3.TEST AND MEASUREMENT EQUIPMENT	11
4. OUTPUT POWER.....	13
4.1 OUTPUT POWER MEASUREMENT	13
5. OCCUPIED BANDWIDTH.....	15
6. BANDEDGE AND EMISSION MASK	16
7. OUT OF BAND EMISSIONS.....	18
7.1 MEASUREMENT METHOD	18
8. RADIATED MEASUREMENT	19
8.1. RADIATED POWER (ERP & EIRP)	19
8.2 LTE BAND 2	20
8.3 LTE BAND 4	24

8.4 LTE BAND 5	28
8.5 LTE BAND 7	30
8.6 LTE BAND 12	32
8.7 LTE BAND 17	34
8.8 LTE BAND 25	36
8.9 LTE BAND 26 A	40
8.10 LTE BAND 26 B	42
8.11 LTE BAND 66	45
9. SPURIOUS RADIATION EMISSION	49
9.1 LTE BAND 2	51
9.2 LTE BAND 4	53
9.3 LTE BAND 5	55
9.4 LTE BAND 7	57
9.5 LTE BAND 12	59
9.6 LTE BAND 17	61
9.7 LTE BAND 25	63
9.8 LTE BAND 26 A	65
9.9 LTE BAND 26 B	67
9.10 LTE BAND 66	69
10. FREQUENCY STABILITY	71
10.1 LTE BAND 2	72
10.2 LTE BAND 4	74
10.3 LTE BAND 5	76
10.4 LTE BAND 7	78
10.5 LTE BAND 12	80
10.6 LTE BAND 17	82
10.7 LTE BAND 25	84
10.8 LTE BAND 26 A	86
10.9 LTE BAND 26 B	88

10.10 LTE BAND 66	90
11. PEAK-TO-AVERAGE RATIO	92
11.1 Description of the PAR Measurement	92
11.2 Measuring Instruments	92
11.3 Test Procedures	92
11.4 Test Setup	93

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	C71
Family Model	C71 GT, C71 S, C71 Pro, C71 Plus, C71 Ultra, C71 MAX, C71 Lite, C71 Go, C71 Pure
Model Difference	All models have the same circuit and RF module, except for model names.
FCC ID:	2ANMU-C71
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:	PIFA Antenna
Antenna gain:	Band 2:1.14 dBi, Band 4: 0.44 dBi, Band 5: -2.42 dBi, Band 7: 1.28 dBi, Band 12: -3.83 dBi, Band 17: -3.83 dBi, Band25:2.74 dBi, Band 26: -2.42 dBi, Band66: 0.44dBi;
Adapter	Model: HJ-PD18W-US Input: 100-240V~50/60Hz 0.6A Output: 5.0V---3.0A 15.0W OR 9.0V---2.0A 18.0W OR 12.0V---1.5A 18.0W MAX
Battery	DC 3.87V, 5150mAh, 19.93Wh
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-C71** 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 expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

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

1.5 SPECIAL ACCESSORIES

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

1.6 WORST-CASE CONFIGURATION AND MODE

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

The device has LTE Bands of: Band 2/4/5/7/12/17/25/26/66

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

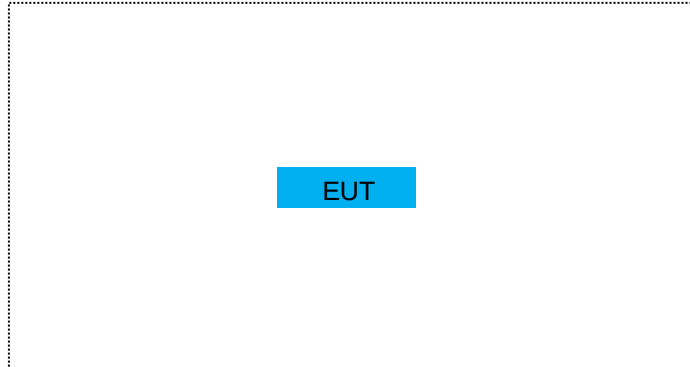
Table 2-1 Equipment Used in EUT System

Item	Equipment	Model No.	ID or Specification	Note
1	Smart phone	C71	FCC ID: 2ANMU-C71	EUT

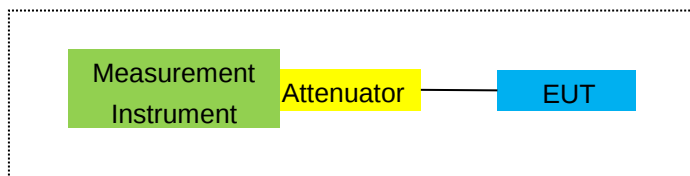
*Note: All the accessories have been used during the test.
the following "EUT" in setup diagram means EUT system.*

2.4 TEST SETUP

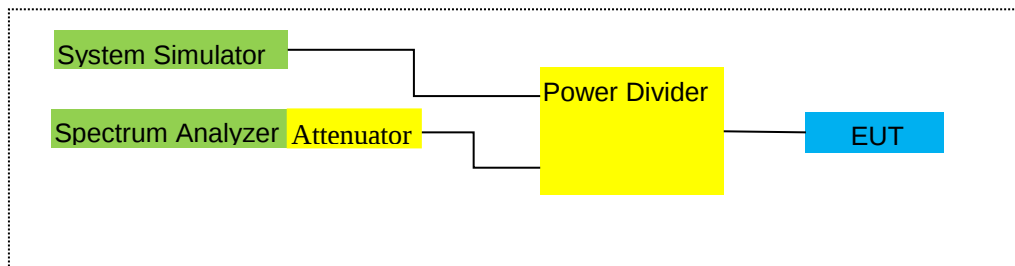
For Radiated Test Cases



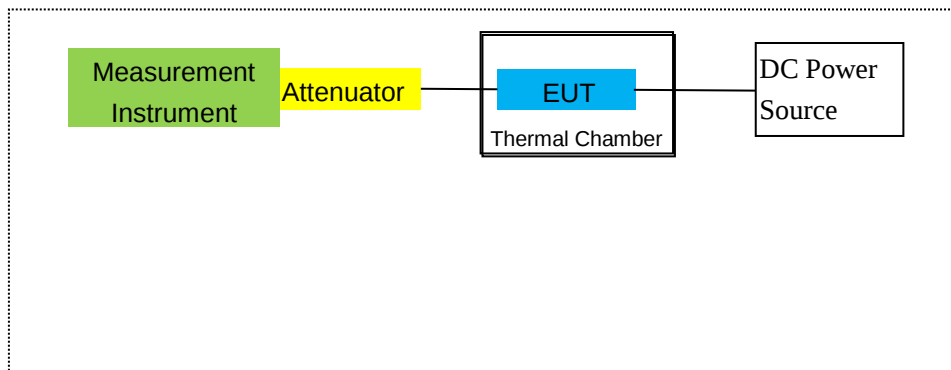
For Conducted Output Power



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	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
2	Test Receiver	R&S	ESPI3	101417	2025/7/23	2026/7/22	1 year
3	Bilog Antenna	ETS	3142E	00214344	2024/6/1	2027/5/30	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	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
8	Loop Antenna	ARA	PLA-1030/B	1029	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
9	Power Meter	R&S	NRVS	100696	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
10	Power Sensor	R&S	URV5-Z4	0395.1619.05	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
11	Test Cable	N/A	R-01	N/A	2023.06.16	2026.06.15	3 year
12	Test Cable	N/A	R-02	N/A	2023.06.16	2026.06.15	3 year
13	Test Cable	N/A	R-03	N/A	2023.06.16	2026.06.15	3 year
14	Test Receiver	R&S	ESCI	101160	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
15	LISN	R&S	ENV216	101313	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
16	LISN	EMCO	3816/2	00042990	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
17	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
18	Passive Voltage Probe	R&S	ESH2-Z3	100196	2025.04.17 2026.04.08	2026.04.16 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	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
23	Spectrum Analyzer	agilent	e4440a	us44300399	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
24	test receiver	R&S	ESCI	a0304218	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year

25	Communication Tester	R&S	CMU200	A0304247	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
26	Thermal Chamber	Ten Billion	TTC-B3C	TBN-960502	2025.04.17 2026.04.08	2026.04.16 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	2025.04.17 2026.04.08	2026.04.16 2027.04.07	1 year
29	Communication Tester	R&S	CMW500	148500	2025.05.06 2026.04.27	2026.05.05 2027.04.26	1 year
30	Log-Periodic Antenna	SCHWARZBECK	VULB 9168	1742	2025/11/1	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	2025/5/23 2026/4/27	2026/5/22 2027/4/26	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	MWRFTtest	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
64 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".

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		
									Limit	
							(W)			
1.4MHz Band QPSK	1/#Mid	1850.7	-7.43	3.76	28.24	17.05	50.699	Horizontal	2	Pass
		1880	-7.24	3.91	28.22	17.07	50.933	Horizontal	2	Pass
		1909.3	-7.15	3.93	28.20	17.12	51.523	Horizontal	2	Pass
3.0MHz Band QPSK	1/#Mid	1851.5	-7.49	3.77	28.23	16.97	49.774	Horizontal	2	Pass
		1880	-7.34	3.91	28.24	16.99	50.003	Horizontal	2	Pass
		1908.5	-7.21	3.94	28.25	17.10	51.286	Horizontal	2	Pass
5.0MHz Band QPSK	1/#Mid	1852.5	-7.38	3.77	28.31	17.16	52.000	Horizontal	2	Pass
		1880	-7.00	3.91	28.22	17.31	53.827	Horizontal	2	Pass
		1907.5	-6.93	3.94	28.20	17.33	54.075	Horizontal	2	Pass
10.0MHz Band QPSK	1/#Mid	1855	-7.24	3.79	28.33	17.30	53.703	Horizontal	2	Pass
		1880	-6.94	3.95	28.22	17.33	54.075	Horizontal	2	Pass
		1905	-6.83	3.97	28.19	17.39	54.828	Horizontal	2	Pass
15.0MHz Band QPSK	1/#Mid	1857.5	-7.20	3.79	28.34	17.35	54.325	Horizontal	2	Pass
		1880	-6.99	3.95	28.22	17.28	53.456	Horizontal	2	Pass
		1902.5	-6.85	3.97	28.18	17.36	54.450	Horizontal	2	Pass
20.0MHz Band QPSK	1/#Mid	1860	-7.19	3.81	28.35	17.35	54.325	Horizontal	2	Pass
		1880	-6.86	3.96	28.22	17.40	54.954	Horizontal	2	Pass
		1900	-6.80	4.00	28.16	17.36	54.450	Horizontal	2	Pass
1.4MHz Band QPSK	1/#Mid	1850.7	-8.60	3.76	28.24	15.88	38.726	Vertical	2	Pass
		1880	-8.06	3.91	28.22	16.25	42.170	Vertical	2	Pass
		1909.3	-8.26	3.93	28.20	16.01	39.902	Vertical	2	Pass
3.0MHz Band QPSK	1/#Mid	1851.5	-7.78	3.77	28.23	16.68	46.559	Vertical	2	Pass
		1880	-7.84	3.91	28.24	16.49	44.566	Vertical	2	Pass
		1908.5	-8.32	3.94	28.25	15.99	39.719	Vertical	2	Pass
5.0MHz Band QPSK	1/#Mid	1852.5	-8.56	3.77	28.31	15.98	39.628	Vertical	2	Pass
		1880	-8.02	3.91	28.22	16.29	42.560	Vertical	2	Pass
		1907.5	-7.97	3.94	28.20	16.29	42.560	Vertical	2	Pass
10.0MHz Band QPSK	1/#Mid	1855	-8.72	3.79	28.33	15.82	38.194	Vertical	2	Pass
		1880	-7.76	3.95	28.22	16.51	44.771	Vertical	2	Pass
		1905	-7.60	3.97	28.19	16.62	45.920	Vertical	2	Pass
15.0MHz	1/#Mid	1857.5	-8.46	3.79	28.34	16.09	40.644	Vertical	2	Pass

Band QPSK		1880	-8.40	3.95	28.22	15.87	38.637	Vertical	2	Pass
		1902.5	-8.36	3.97	28.18	15.85	38.459	Vertical	2	Pass
20.0MHz	1/#Mid	1860	-7.80	3.81	28.35	16.74	47.206	Vertical	2	Pass
Band		1880	-8.32	3.96	28.22	15.94	39.264	Vertical	2	Pass
QPSK		1900	-8.21	4.00	28.16	15.95	39.355	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	1/##Mid	1850.7	-8.55	3.76	28.24	15.93	39.174	Horizontal	2	Pass
		1880	-8.02	3.91	28.22	16.29	42.560	Horizontal	2	Pass
		1909.3	-7.95	3.93	28.20	16.32	42.855	Horizontal	2	Pass
3.0MHz Band 16 QAM	1/##Mid	1851.5	-8.05	3.77	28.23	16.41	43.752	Horizontal	2	Pass
		1880	-8.13	3.91	28.24	16.20	41.687	Horizontal	2	Pass
		1908.5	-8.34	3.94	28.25	15.97	39.537	Horizontal	2	Pass
5.0MHz Band 16 QAM	1/##Mid	1852.5	-7.99	3.77	28.31	16.55	45.186	Horizontal	2	Pass
		1880	-7.90	3.91	28.22	16.41	43.752	Horizontal	2	Pass
		1907.5	-7.58	3.94	28.20	16.68	46.559	Horizontal	2	Pass
10.0MHz Band 16 QAM	1/##Mid	1855	-8.04	3.79	28.33	16.50	44.668	Horizontal	2	Pass
		1880	-8.03	3.95	28.22	16.24	42.073	Horizontal	2	Pass
		1905	-7.50	3.97	28.19	16.72	46.989	Horizontal	2	Pass
15.0MHz Band 16 QAM	1/##Mid	1857.5	-8.02	3.79	28.34	16.53	44.978	Horizontal	2	Pass
		1880	-7.81	3.95	28.22	16.46	44.259	Horizontal	2	Pass
		1902.5	-7.77	3.97	28.18	16.44	44.055	Horizontal	2	Pass
20.0MHz Band 16 QAM	1/##Mid	1860	-7.91	3.81	28.35	16.63	46.026	Horizontal	2	Pass
		1880	-7.61	3.96	28.22	16.65	46.238	Horizontal	2	Pass
		1900	-7.43	4.00	28.16	16.73	47.098	Horizontal	2	Pass
1.4MHz Band 16 QAM	1/##Mid	1850.7	-9.12	3.76	28.24	15.36	34.356	Vertical	2	Pass
		1880	-9.04	3.91	28.22	15.27	33.651	Vertical	2	Pass
		1909.3	-8.83	3.93	28.20	15.44	34.995	Vertical	2	Pass
3.0MHz Band 16 QAM	1/##Mid	1851.5	-8.96	3.77	28.23	15.50	35.481	Vertical	2	Pass
		1880	-8.67	3.91	28.24	15.66	36.813	Vertical	2	Pass
		1908.5	-9.29	3.94	28.25	15.02	31.769	Vertical	2	Pass
5.0MHz Band 16 QAM	1/##Mid	1852.5	-8.90	3.77	28.31	15.64	36.644	Vertical	2	Pass
		1880	-8.72	3.91	28.22	15.59	36.224	Vertical	2	Pass
		1907.5	-9.27	3.94	28.20	14.99	31.550	Vertical	2	Pass
10.0MHz Band 16 QAM	1/##Mid	1855	-9.30	3.79	28.33	15.24	33.420	Vertical	2	Pass
		1880	-9.17	3.95	28.22	15.10	32.359	Vertical	2	Pass
		1905	-9.17	3.97	28.19	15.05	31.989	Vertical	2	Pass
15.0MHz Band 16 QAM	1/##Mid	1857.5	-9.66	3.79	28.34	14.89	30.832	Vertical	2	Pass
		1880	-9.29	3.95	28.22	14.98	31.477	Vertical	2	Pass
		1902.5	-9.24	3.97	28.18	14.97	31.405	Vertical	2	Pass

20.0MHz		1860	-9.21	3.81	28.35	15.33	34.119	Vertical	2	Pass
Band 16	1/#Mid	1880	-9.16	3.96	28.22	15.10	32.359	Vertical	2	Pass
QAM		1900	-8.84	4.00	28.16	15.32	34.041	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	1/#Mid	1710.7	-7.34	3.12	27.58	17.12	51.523	Horizontal	1	Pass
		1732.5	-7.33	3.27	27.61	17.01	50.234	Horizontal	1	Pass
		1754.3	-7.31	3.29	27.63	17.03	50.466	Horizontal	1	Pass
3.0MHz Band QPSK	1/#Mid	1711.5	-7.51	3.13	27.61	16.97	49.774	Horizontal	1	Pass
		1732.5	-7.43	3.27	27.61	16.91	49.091	Horizontal	1	Pass
		1753.5	-7.35	3.30	27.62	16.97	49.774	Horizontal	1	Pass
5.0MHz Band QPSK	1/#Mid	1712.5	-7.28	3.13	27.63	17.22	52.723	Horizontal	1	Pass
		1732.5	-7.18	3.27	27.61	17.16	52.000	Horizontal	1	Pass
		1752.5	-7.06	3.30	27.60	17.24	52.966	Horizontal	1	Pass
10.0MHz Band QPSK	1/#Mid	1715	-7.22	3.15	27.64	17.27	53.333	Horizontal	1	Pass
		1732.5	-6.99	3.31	27.61	17.31	53.827	Horizontal	1	Pass
		1750	-7.01	3.33	27.59	17.25	53.088	Horizontal	1	Pass
15.0MHz Band QPSK	1/#Mid	1717.5	-7.23	3.15	27.65	17.27	53.333	Horizontal	1	Pass
		1732.5	-7.07	3.31	27.61	17.23	52.845	Horizontal	1	Pass
		1747.5	-7.01	3.33	27.57	17.23	52.845	Horizontal	1	Pass
20.0MHz Band QPSK	1/#Mid	1720	-7.17	3.17	27.66	17.32	53.951	Horizontal	1	Pass
		1732.5	-7.00	3.32	27.61	17.29	53.580	Horizontal	1	Pass
		1745	-6.94	3.36	27.56	17.26	53.211	Horizontal	1	Pass
1.4MHz Band QPSK	1/#Mid	1710.7	-8.14	3.12	27.58	16.32	42.855	Vertical	1	Pass
		1732.5	-8.52	3.27	27.61	15.82	38.194	Vertical	1	Pass
		1754.3	-8.12	3.29	27.63	16.22	41.879	Vertical	1	Pass
3.0MHz Band QPSK	1/#Mid	1711.5	-8.04	3.13	27.61	16.44	44.055	Vertical	1	Pass
		1732.5	-7.57	3.27	27.61	16.77	47.534	Vertical	1	Pass
		1753.5	-8.41	3.30	27.62	15.91	38.994	Vertical	1	Pass
5.0MHz Band QPSK	1/#Mid	1712.5	-7.90	3.13	27.63	16.60	45.709	Vertical	1	Pass
		1732.5	-7.74	3.27	27.61	16.60	45.709	Vertical	1	Pass
		1752.5	-7.97	3.30	27.60	16.33	42.954	Vertical	1	Pass
10.0MHz Band QPSK	1/#Mid	1715	-8.47	3.15	27.64	16.02	39.994	Vertical	1	Pass
		1732.5	-7.96	3.31	27.61	16.34	43.053	Vertical	1	Pass
		1750	-8.14	3.33	27.59	16.12	40.926	Vertical	1	Pass

15.0MHz	1/#Mid	1717.5	-8.67	3.15	27.65	15.83	38.282	Vertical	1	Pass
Band		1732.5	-8.24	3.31	27.61	16.06	40.365	Vertical	1	Pass
QPSK		1747.5	-8.40	3.33	27.57	15.84	38.371	Vertical	1	Pass
20.0MHz	1/#Mid	1720	-8.63	3.17	27.66	15.86	38.548	Vertical	1	Pass
Band		1732.5	-7.58	3.32	27.61	16.71	46.881	Vertical	1	Pass
QPSK		1745	-8.19	3.36	27.56	16.01	39.902	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 Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP		
									Limit	
1.4MHz Band 16 QAM	1/#Mid	1710.7	-8.15	3.12	27.58	16.31	42.756	Horizontal	1	Pass
		1732.5	-8.00	3.27	27.61	16.34	43.053	Horizontal	1	Pass
		1754.3	-8.00	3.29	27.63	16.34	43.053	Horizontal	1	Pass
3.0MHz Band 16 QAM	1/#Mid	1711.5	-8.09	3.13	27.61	16.39	43.551	Horizontal	1	Pass
		1732.5	-8.22	3.27	27.61	16.12	40.926	Horizontal	1	Pass
		1753.5	-8.44	3.30	27.62	15.88	38.726	Horizontal	1	Pass
5.0MHz Band 16 QAM	1/#Mid	1712.5	-7.92	3.13	27.63	16.58	45.499	Horizontal	1	Pass
		1732.5	-7.88	3.27	27.61	16.46	44.259	Horizontal	1	Pass
		1752.5	-7.57	3.30	27.60	16.73	47.098	Horizontal	1	Pass
10.0MHz Band 16 QAM	1/#Mid	1715	-7.99	3.15	27.64	16.50	44.668	Horizontal	1	Pass
		1732.5	-8.18	3.31	27.61	16.12	40.926	Horizontal	1	Pass
		1750	-7.56	3.33	27.59	16.70	46.774	Horizontal	1	Pass
15.0MHz Band 16 QAM	1/#Mid	1717.5	-7.79	3.15	27.65	16.71	46.881	Horizontal	1	Pass
		1732.5	-7.85	3.31	27.61	16.45	44.157	Horizontal	1	Pass
		1747.5	-7.87	3.33	27.57	16.37	43.351	Horizontal	1	Pass
20.0MHz Band 16 QAM	1/#Mid	1720	-7.74	3.17	27.66	16.75	47.315	Horizontal	1	Pass
		1732.5	-7.75	3.32	27.61	16.54	45.082	Horizontal	1	Pass
		1745	-7.56	3.36	27.56	16.64	46.132	Horizontal	1	Pass
1.4MHz Band 16 QAM	1/#Mid	1710.7	-8.79	3.12	27.58	15.67	36.898	Vertical	1	Pass
		1732.5	-9.05	3.27	27.61	15.29	33.806	Vertical	1	Pass
		1754.3	-9.29	3.29	27.63	15.05	31.989	Vertical	1	Pass
3.0MHz Band 16 QAM	1/#Mid	1711.5	-8.98	3.13	27.61	15.50	35.481	Vertical	1	Pass
		1732.5	-8.88	3.27	27.61	15.46	35.156	Vertical	1	Pass
		1753.5	-8.92	3.30	27.62	15.40	34.674	Vertical	1	Pass
5.0MHz Band 16 QAM	1/#Mid	1712.5	-9.54	3.13	27.63	14.96	31.333	Vertical	1	Pass
		1732.5	-9.25	3.27	27.61	15.09	32.285	Vertical	1	Pass
		1752.5	-8.86	3.30	27.60	15.44	34.995	Vertical	1	Pass
10.0MHz Band 16 QAM	1/#Mid	1715	-9.67	3.15	27.64	14.82	30.339	Vertical	1	Pass
		1732.5	-9.01	3.31	27.61	15.29	33.806	Vertical	1	Pass
		1750	-9.14	3.33	27.59	15.12	32.509	Vertical	1	Pass
15.0MHz Band 16 QAM	1/#Mid	1717.5	-9.57	3.15	27.65	14.93	31.117	Vertical	1	Pass
		1732.5	-9.49	3.31	27.61	14.81	30.269	Vertical	1	Pass
		1747.5	-9.46	3.33	27.57	14.78	30.061	Vertical	1	Pass

20.0MHz		1720	-9.03	3.17	27.66	15.46	35.156	Vertical	1	Pass
Band 16	1/#Mid	1732.5	-9.21	3.32	27.61	15.08	32.211	Vertical	1	Pass
QAM		1745	-8.87	3.36	27.56	15.33	34.119	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/RB SIZE	Frequency	Result								Conclusion
			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	3/#Mid	824.7	1.96	2.01	19.68	2.15	17.48	55.976	Horizontal	7	Pass
Band		836.5	1.84	2.01	19.77	2.15	17.45	55.590	Horizontal	7	Pass
QPSK		848.3	1.64	2.02	19.82	2.15	17.29	53.580	Horizontal	7	Pass
3.0MHz	1/#Mid	825.5	1.73	2.01	19.70	2.15	17.27	53.333	Horizontal	7	Pass
Band		836.5	1.63	2.01	19.77	2.15	17.24	52.966	Horizontal	7	Pass
QPSK		847.5	1.50	2.02	19.81	2.15	17.14	51.761	Horizontal	7	Pass
5.0MHz	1/#Mid	826.5	2.01	2.01	19.71	2.15	17.56	57.016	Horizontal	7	Pass
Band		836.5	1.89	2.01	19.77	2.15	17.50	56.234	Horizontal	7	Pass
QPSK		846.5	1.73	2.02	19.79	2.15	17.35	54.325	Horizontal	7	Pass
10.0MHz	1/#Mid	829	2.03	2.01	19.73	2.15	17.60	57.544	Horizontal	7	Pass
Band		836.5	1.98	2.01	19.77	2.15	17.59	57.412	Horizontal	7	Pass
QPSK		844	1.88	2.02	19.78	2.15	17.49	56.105	Horizontal	7	Pass
1.4MHz	1/#Mid	824.7	0.55	2.01	19.68	2.15	16.07	40.458	Vertical	7	Pass
Band		836.5	0.59	2.01	19.77	2.15	16.20	41.687	Vertical	7	Pass
QPSK		848.3	0.92	2.02	19.82	2.15	16.57	45.394	Vertical	7	Pass
3.0MHz	1/#Mid	825.5	1.23	2.01	19.70	2.15	16.77	47.534	Vertical	7	Pass
Band		836.5	0.72	2.01	19.77	2.15	16.33	42.954	Vertical	7	Pass
QPSK		847.5	0.74	2.02	19.81	2.15	16.38	43.451	Vertical	7	Pass
5.0MHz	1/#Mid	826.5	0.47	2.01	19.71	2.15	16.02	39.994	Vertical	7	Pass
Band		836.5	0.67	2.01	19.77	2.15	16.28	42.462	Vertical	7	Pass
QPSK		846.5	0.74	2.02	19.79	2.15	16.36	43.251	Vertical	7	Pass
10.0MHz	1/#Mid	829	0.33	2.01	19.73	2.15	15.90	38.905	Vertical	7	Pass
Band		836.5	0.91	2.01	19.77	2.15	16.52	44.875	Vertical	7	Pass
QPSK		844	1.14	2.02	19.78	2.15	16.75	47.315	Vertical	7	Pass

		Radiated Power (ERP) for Band 5									
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			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 16 QAM	3/#Mid	824.7	1.11	2.01	19.68	2.15	16.63	46.026	Horizontal	7	Pass
		836.5	1.04	2.01	19.77	2.15	16.65	46.238	Horizontal	7	Pass
		848.3	0.88	2.02	19.82	2.15	16.53	44.978	Horizontal	7	Pass
3.0MHz Band 16 QAM	1/#Mid	825.5	1.19	2.01	19.70	2.15	16.73	47.098	Horizontal	7	Pass
		836.5	0.90	2.01	19.77	2.15	16.51	44.771	Horizontal	7	Pass
		847.5	0.38	2.02	19.81	2.15	16.02	39.994	Horizontal	7	Pass
5.0MHz Band 16 QAM	1/#Mid	826.5	1.51	2.01	19.71	2.15	17.06	50.816	Horizontal	7	Pass
		836.5	1.28	2.01	19.77	2.15	16.89	48.865	Horizontal	7	Pass
		846.5	1.03	2.02	19.79	2.15	16.65	46.238	Horizontal	7	Pass
10.0MHz Band 16 QAM	1/#Mid	829	1.51	2.01	19.73	2.15	17.08	51.050	Horizontal	7	Pass
		836.5	1.23	2.01	19.77	2.15	16.84	48.306	Horizontal	7	Pass
		844	0.77	2.02	19.78	2.15	16.38	43.451	Horizontal	7	Pass
1.4MHz Band 16 QAM	1/#Mid	824.7	0.25	2.01	19.68	2.15	15.77	37.757	Vertical	7	Pass
		836.5	1.16	2.01	19.77	2.15	16.77	47.534	Vertical	7	Pass
		848.3	0.68	2.02	19.82	2.15	16.33	42.954	Vertical	7	Pass
3.0MHz Band 16 QAM	1/#Mid	825.5	0.56	2.01	19.70	2.15	16.10	40.738	Vertical	7	Pass
		836.5	-0.50	2.01	19.77	2.15	15.11	32.434	Vertical	7	Pass
		847.5	0.17	2.02	19.81	2.15	15.81	38.107	Vertical	7	Pass
5.0MHz Band 16 QAM	1/#Mid	826.5	0.21	2.01	19.71	2.15	15.76	37.670	Vertical	7	Pass
		836.5	-0.25	2.01	19.77	2.15	15.36	34.356	Vertical	7	Pass
		846.5	-0.83	2.02	19.79	2.15	14.79	30.130	Vertical	7	Pass
10.0MHz Band 16 QAM	1/#Mid	829	-0.28	2.01	19.73	2.15	15.29	33.806	Vertical	7	Pass
		836.5	-0.41	2.01	19.77	2.15	15.20	33.113	Vertical	7	Pass
		844	-0.01	2.02	19.78	2.15	15.60	36.308	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 Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP		
									Limit	
5.0MHz Band QPSK	1/#Mid	2502.5	-5.62	4.54	27.75	17.59	57.412	Horizontal	2	Pass
		2535	-5.45	4.69	27.72	17.58	57.280	Horizontal	2	Pass
		2567.5	-5.38	4.71	27.71	17.62	57.810	Horizontal	2	Pass
10.0MHz Band QPSK	1/#Mid	2505	-5.55	4.55	27.76	17.66	58.345	Horizontal	2	Pass
		2535	-5.36	4.69	27.72	17.67	58.479	Horizontal	2	Pass
		2565	-5.28	4.72	27.70	17.70	58.884	Horizontal	2	Pass
15.0MHz Band QPSK	1/#Mid	2507.5	-5.56	4.55	27.77	17.66	58.345	Horizontal	2	Pass
		2535	-5.42	4.69	27.72	17.61	57.677	Horizontal	2	Pass
		2562.5	-5.32	4.72	27.69	17.65	58.210	Horizontal	2	Pass
20.0MHz Band QPSK	1/#Mid	2510	-5.50	4.57	27.78	17.71	59.020	Horizontal	2	Pass
		2535	-5.32	4.73	27.72	17.67	58.479	Horizontal	2	Pass
		2560	-5.28	4.75	27.68	17.65	58.210	Horizontal	2	Pass
5.0MHz Band QPSK	1/#Mid	2502.5	-7.42	4.54	27.75	15.79	37.931	Vertical	2	Pass
		2535	-7.19	4.69	27.72	15.84	38.371	Vertical	2	Pass
		2567.5	-6.54	4.71	27.71	16.46	44.259	Vertical	2	Pass
10.0MHz Band QPSK	1/#Mid	2505	-6.82	4.55	27.76	16.39	43.551	Vertical	2	Pass
		2535	-6.48	4.69	27.72	16.55	45.186	Vertical	2	Pass
		2565	-7.09	4.72	27.70	15.89	38.815	Vertical	2	Pass
15.0MHz Band QPSK	1/#Mid	2507.5	-6.72	4.55	27.77	16.50	44.668	Vertical	2	Pass
		2535	-6.42	4.69	27.72	16.61	45.814	Vertical	2	Pass
		2562.5	-7.20	4.72	27.69	15.77	37.757	Vertical	2	Pass
20.0MHz Band QPSK	1/#Mid	2510	-6.51	4.57	27.78	16.70	46.774	Vertical	2	Pass
		2535	-6.97	4.73	27.72	16.02	39.994	Vertical	2	Pass
		2560	-7.15	4.75	27.68	15.78	37.844	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 Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP		
									Limit	
									(W)	
5.0MHz Band 16 QAM	1/#Mid	2502.5	-6.31	4.54	27.75	16.90	48.978	Horizontal	2	Pass
		2535	-6.00	4.69	27.72	17.03	50.466	Horizontal	2	Pass
		2567.5	-6.08	4.71	27.71	16.92	49.204	Horizontal	2	Pass
10.0MHz Band 16 QAM	1/#Mid	2505	-6.20	4.55	27.76	17.01	50.234	Horizontal	2	Pass
		2535	-6.21	4.69	27.72	16.82	48.084	Horizontal	2	Pass
		2565	-6.48	4.72	27.70	16.50	44.668	Horizontal	2	Pass
15.0MHz Band 16 QAM	1/#Mid	2507.5	-6.38	4.55	27.77	16.84	48.306	Horizontal	2	Pass
		2535	-6.35	4.69	27.72	16.68	46.559	Horizontal	2	Pass
		2562.5	-5.96	4.72	27.69	17.01	50.234	Horizontal	2	Pass
20.0MHz Band 16 QAM	1/#Mid	2510	-6.26	4.57	27.78	16.95	49.545	Horizontal	2	Pass
		2535	-5.93	4.73	27.72	17.06	50.816	Horizontal	2	Pass
		2560	-6.03	4.75	27.68	16.90	48.978	Horizontal	2	Pass
5.0MHz Band 16 QAM	1/#Mid	2502.5	-7.68	4.54	27.75	15.53	35.727	Vertical	2	Pass
		2535	-7.76	4.69	27.72	15.27	33.651	Vertical	2	Pass
		2567.5	-6.46	4.71	27.71	16.54	45.082	Vertical	2	Pass
10.0MHz Band 16 QAM	1/#Mid	2505	-6.57	4.55	27.76	16.64	46.132	Vertical	2	Pass
		2535	-7.01	4.69	27.72	16.02	39.994	Vertical	2	Pass
		2565	-7.05	4.72	27.70	15.93	39.174	Vertical	2	Pass
15.0MHz Band 16 QAM	1/#Mid	2507.5	-6.95	4.55	27.77	16.27	42.364	Vertical	2	Pass
		2535	-7.21	4.69	27.72	15.82	38.194	Vertical	2	Pass
		2562.5	-7.39	4.72	27.69	15.58	36.141	Vertical	2	Pass
20.0MHz Band 16 QAM	1/#Mid	2510	-7.94	4.57	27.78	15.27	33.651	Vertical	2	Pass
		2535	-7.69	4.73	27.72	15.30	33.884	Vertical	2	Pass
		2560	-6.80	4.75	27.68	16.13	41.020	Vertical	2	Pass

Note:

SG Level= Signal generator output

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

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	1/#Mid	699.7	2.64	1.91	19.21	2.15	17.79	60.117	Vertical	3	Pass
		707.5	2.56	1.91	19.26	2.15	17.76	59.704	Vertical	3	Pass
		715.3	2.34	1.93	19.34	2.15	17.60	57.544	Vertical	3	Pass
3.0MHz Band QPSK	1/#Mid	700.5	2.43	1.91	19.21	2.15	17.58	57.280	Vertical	3	Pass
		707.5	2.35	1.91	19.26	2.15	17.55	56.885	Vertical	3	Pass
		714.5	2.19	1.93	19.34	2.15	17.45	55.590	Vertical	3	Pass
5.0MHz Band QPSK	1/#Mid	701.5	2.70	1.91	19.23	2.15	17.87	61.235	Vertical	3	Pass
		707.5	2.61	1.91	19.26	2.15	17.81	60.395	Vertical	3	Pass
		713.5	2.40	1.92	19.33	2.15	17.66	58.345	Vertical	3	Pass
10.0MHz Band QPSK	1/#Mid	704	2.72	1.91	19.25	2.15	17.91	61.802	Vertical	3	Pass
		707.5	2.70	1.91	19.26	2.15	17.90	61.660	Vertical	3	Pass
		711	2.55	1.92	19.32	2.15	17.80	60.256	Vertical	3	Pass
1.4MHz Band QPSK	1/#Mid	699.7	1.56	1.91	19.21	2.15	16.71	46.881	Horizontal	3	Pass
		707.5	1.87	1.91	19.26	2.15	17.07	50.933	Horizontal	3	Pass
		715.3	1.71	1.93	19.34	2.15	16.97	49.774	Horizontal	3	Pass
3.0MHz Band QPSK	1/#Mid	700.5	0.94	1.91	19.21	2.15	16.09	40.644	Horizontal	3	Pass
		707.5	0.98	1.91	19.26	2.15	16.18	41.495	Horizontal	3	Pass
		714.5	1.12	1.93	19.34	2.15	16.38	43.451	Horizontal	3	Pass
5.0MHz Band QPSK	1/#Mid	701.5	1.49	1.91	19.23	2.15	16.66	46.345	Horizontal	3	Pass
		707.5	1.17	1.91	19.26	2.15	16.37	43.351	Horizontal	3	Pass
		713.5	1.50	1.92	19.33	2.15	16.76	47.424	Horizontal	3	Pass
10.0MHz Band QPSK	1/#Mid	704	1.72	1.91	19.25	2.15	16.91	49.091	Horizontal	3	Pass
		707.5	1.39	1.91	19.26	2.15	16.59	45.604	Horizontal	3	Pass
		711	1.58	1.92	19.32	2.15	16.83	48.195	Horizontal	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	1/#Mid	699.7	2.51	1.91	19.21	2.15	17.66	58.345	Vertical	3	Pass
		707.5	2.43	1.91	19.26	2.15	17.63	57.943	Vertical	3	Pass
		715.3	2.21	1.93	19.34	2.15	17.47	55.847	Vertical	3	Pass
3.0MHz Band 16 QAM	1/#Mid	700.5	2.30	1.91	19.21	2.15	17.45	55.590	Vertical	3	Pass
		707.5	2.22	1.91	19.26	2.15	17.42	55.208	Vertical	3	Pass
		714.5	2.06	1.93	19.34	2.15	17.32	53.951	Vertical	3	Pass
5.0MHz Band 16 QAM	1/#Mid	701.5	2.57	1.91	19.23	2.15	17.74	59.429	Vertical	3	Pass
		707.5	2.48	1.91	19.26	2.15	17.68	58.614	Vertical	3	Pass
		713.5	2.27	1.92	19.33	2.15	17.53	56.624	Vertical	3	Pass
10.0MHz Band 16 QAM	1/#Mid	704	2.59	1.91	19.25	2.15	17.78	59.979	Vertical	3	Pass
		707.5	2.57	1.91	19.26	2.15	17.77	59.841	Vertical	3	Pass
		711	2.42	1.92	19.32	2.15	17.67	58.479	Vertical	3	Pass
1.4MHz Band 16 QAM	1/#Mid	699.7	1.15	1.91	19.21	2.15	16.30	42.658	Horizontal	3	Pass
		707.5	1.17	1.91	19.26	2.15	16.37	43.351	Horizontal	3	Pass
		715.3	1.22	1.93	19.34	2.15	16.48	44.463	Horizontal	3	Pass
3.0MHz Band 16 QAM	1/#Mid	700.5	1.21	1.91	19.21	2.15	16.36	43.251	Horizontal	3	Pass
		707.5	1.32	1.91	19.26	2.15	16.52	44.875	Horizontal	3	Pass
		714.5	1.05	1.93	19.34	2.15	16.31	42.756	Horizontal	3	Pass
5.0MHz Band 16 QAM	1/#Mid	701.5	1.55	1.91	19.23	2.15	16.72	46.989	Horizontal	3	Pass
		707.5	1.39	1.91	19.26	2.15	16.59	45.604	Horizontal	3	Pass
		713.5	1.55	1.92	19.33	2.15	16.81	47.973	Horizontal	3	Pass
10.0MHz Band 16 QAM	1/#Mid	704	1.03	1.91	19.25	2.15	16.22	41.879	Horizontal	3	Pass
		707.5	0.80	1.91	19.26	2.15	16.00	39.811	Horizontal	3	Pass
		711	0.96	1.92	19.32	2.15	16.21	41.783	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

8.7 LTE BAND 17

		Radiated Power (ERP) for Band 17									
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	
										(W)	
5.0MHz Band QPSK	1/#Mid	706.5	3.13	1.91	19.23	2.15	18.30	67.608	Vertical	3	Pass
		710	2.99	1.91	19.26	2.15	18.19	65.917	Vertical	3	Pass
		713.5	2.89	1.92	19.33	2.15	18.15	65.313	Vertical	3	Pass
10.0MHz Band QPSK	1/#Mid	709	3.14	1.91	19.25	2.15	18.33	68.077	Vertical	3	Pass
		710	3.09	1.91	19.26	2.15	18.29	67.453	Vertical	3	Pass
		711	3.05	1.92	19.32	2.15	18.30	67.608	Vertical	3	Pass
5.0MHz Band QPSK	1/#Mid	706.5	1.70	1.91	19.23	2.15	16.87	48.641	Horizontal	3	Pass
		710	1.52	1.91	19.26	2.15	16.72	46.989	Horizontal	3	Pass
		713.5	1.93	1.92	19.33	2.15	17.19	52.360	Horizontal	3	Pass
10.0MHz Band QPSK	1/#Mid	709	2.74	1.91	19.25	2.15	17.93	62.087	Horizontal	3	Pass
		710	2.40	1.91	19.26	2.15	17.60	57.544	Horizontal	3	Pass
		711	1.49	1.92	19.32	2.15	16.74	47.206	Horizontal	3	Pass

		Radiated Power (ERP) for Band 17									
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Correction (dB)	Max. EIRP Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP		
										Limit	
										(W)	
5.0MHz Band 16 QAM	1/#Mid	706.5	2.60	1.91	19.23	2.15	17.77	59.841	Vertical	3	Pass
		710	2.51	1.91	19.26	2.15	17.71	59.020	Vertical	3	Pass
		713.5	2.31	1.92	19.33	2.15	17.57	57.148	Vertical	3	Pass
10.0MHz Band 16 QAM	1/#Mid	709	2.14	1.91	19.25	2.15	17.33	54.075	Vertical	3	Pass
		710	2.67	1.91	19.26	2.15	17.87	61.235	Vertical	3	Pass
		711	2.40	1.92	19.32	2.15	17.65	58.210	Vertical	3	Pass
5.0MHz Band 16 QAM	1/#Mid	706.5	1.69	1.91	19.23	2.15	16.86	48.529	Horizontal	3	Pass
		710	1.55	1.91	19.26	2.15	16.75	47.315	Horizontal	3	Pass
		713.5	1.14	1.92	19.33	2.15	16.40	43.652	Horizontal	3	Pass
10.0MHz Band 16 QAM	1/#Mid	709	1.24	1.91	19.25	2.15	16.43	43.954	Horizontal	3	Pass
		710	1.04	1.91	19.26	2.15	16.24	42.073	Horizontal	3	Pass
		711	1.28	1.92	19.32	2.15	16.53	44.978	Horizontal	3	Pass

Note:

ERP=EIRP-2.15

SG Level= Signal generator output

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

8.8 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	1/#Mid	1850.7	-6.86	3.12	27.58	17.60	57.544	Horizontal	2	Pass
		1882,5	-6.77	3.27	27.61	17.57	57.148	Horizontal	2	Pass
		1914.3	-6.93	3.29	27.63	17.41	55.081	Horizontal	2	Pass
3.0MHz Band QPSK	1/#Mid	1851.5	-7.09	3.13	27.61	17.39	54.828	Horizontal	2	Pass
		1882,5	-6.98	3.27	27.61	17.36	54.450	Horizontal	2	Pass
		1913.5	-7.06	3.30	27.62	17.26	53.211	Horizontal	2	Pass
5.0MHz Band QPSK	1/#Mid	1852.5	-6.82	3.13	27.63	17.68	58.614	Horizontal	2	Pass
		1882,5	-6.72	3.27	27.61	17.62	57.810	Horizontal	2	Pass
		1912.5	-6.83	3.30	27.60	17.47	55.847	Horizontal	2	Pass
10.0MHz Band QPSK	1/#Mid	1855	-6.77	3.15	27.64	17.72	59.156	Horizontal	2	Pass
		1882,5	-6.59	3.31	27.61	17.71	59.020	Horizontal	2	Pass
		1910	-6.65	3.33	27.59	17.61	57.677	Horizontal	2	Pass
15.0MHz Band QPSK	1/#Mid	1857.5	-8.14	3.15	27.65	16.36	43.251	Horizontal	2	Pass
		1882,5	-7.97	3.31	27.61	16.33	42.954	Horizontal	2	Pass
		1907.5	-8.11	3.33	27.57	16.13	41.020	Horizontal	2	Pass
20.0MHz Band QPSK	1/#Mid	1860	-8.32	3.17	27.66	16.17	41.400	Horizontal	2	Pass
		1882,5	-6.56	3.32	27.61	17.73	59.293	Horizontal	2	Pass
		1905	-6.37	3.36	27.56	17.83	60.674	Horizontal	2	Pass
1.4MHz Band QPSK	1/#Mid	1850.7	-7.89	3.12	27.58	16.57	45.394	Vertical	2	Pass
		1882,5	-7.63	3.27	27.61	16.71	46.881	Vertical	2	Pass
		1914.3	-7.77	3.29	27.63	16.57	45.394	Vertical	2	Pass
3.0MHz Band QPSK	1/#Mid	1851.5	-7.67	3.13	27.61	16.81	47.973	Vertical	2	Pass
		1882,5	-7.91	3.27	27.61	16.43	43.954	Vertical	2	Pass
		1913.5	-7.90	3.30	27.62	16.42	43.853	Vertical	2	Pass
5.0MHz Band QPSK	1/#Mid	1852.5	-7.68	3.13	27.63	16.82	48.084	Vertical	2	Pass
		1882,5	-8.23	3.27	27.61	16.11	40.832	Vertical	2	Pass
		1912.5	-7.54	3.30	27.60	16.76	47.424	Vertical	2	Pass
10.0MHz Band	1/#Mid	1855	-8.23	3.15	27.64	16.26	42.267	Vertical	2	Pass
		1882,5	-7.69	3.31	27.61	16.61	45.814	Vertical	2	Pass

QPSK		1910	-7.95	3.33	27.59	16.31	42.756	Vertical	2	Pass
15.0MHz	1/#Mid	1857.5	-8.46	3.15	27.65	16.04	40.179	Vertical	2	Pass
Band		1882,5	-7.77	3.31	27.61	16.53	44.978	Vertical	2	Pass
QPSK		1907.5	-7.51	3.33	27.57	16.73	47.098	Vertical	2	Pass
20.0MHz	1/#Mid	1860	-8.25	3.17	27.66	16.24	42.073	Vertical	2	Pass
Band		1882,5	-7.59	3.32	27.61	16.70	46.774	Vertical	2	Pass
QPSK		1905	-8.17	3.36	27.56	16.03	40.087	Vertical	2	Pass

		Radiated Power (EIRP) for Band 25								
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)	
1.4MHz Band 16 QAM	1/#Mid	1850.7	-7.06	3.12	27.58	17.40	54.954	Horizontal	2	Pass
		1882,5	-6.97	3.27	27.61	17.37	54.576	Horizontal	2	Pass
		1914.3	-7.13	3.29	27.63	17.21	52.602	Horizontal	2	Pass
3.0MHz Band 16 QAM	1/#Mid	1851.5	-7.29	3.13	27.61	17.19	52.360	Horizontal	2	Pass
		1882,5	-7.18	3.27	27.61	17.16	52.000	Horizontal	2	Pass
		1913.5	-7.26	3.30	27.62	17.06	50.816	Horizontal	2	Pass
5.0MHz Band 16 QAM	1/#Mid	1852.5	-7.02	3.13	27.63	17.48	55.976	Horizontal	2	Pass
		1882,5	-6.92	3.27	27.61	17.42	55.208	Horizontal	2	Pass
		1912.5	-7.03	3.30	27.60	17.27	53.333	Horizontal	2	Pass
10.0MHz Band 16 QAM	1/#Mid	1855	-6.97	3.15	27.64	17.52	56.494	Horizontal	2	Pass
		1882,5	-6.79	3.31	27.61	17.51	56.364	Horizontal	2	Pass
		1910	-6.66	3.33	27.59	17.60	57.544	Horizontal	2	Pass
15.0MHz Band 16 QAM	1/#Mid	1857.5	-8.02	3.15	27.65	16.48	44.463	Horizontal	2	Pass
		1882,5	-8.26	3.31	27.61	16.04	40.179	Horizontal	2	Pass
		1907.5	-8.22	3.33	27.57	16.02	39.994	Horizontal	2	Pass
20.0MHz Band 16 QAM	1/#Mid	1860	-8.68	3.17	27.66	15.81	38.107	Horizontal	2	Pass
		1882,5	-7.73	3.32	27.61	16.56	45.290	Horizontal	2	Pass
		1905	-8.40	3.36	27.56	15.80	38.019	Horizontal	2	Pass
1.4MHz Band 16 QAM	1/#Mid	1850.7	-8.39	3.12	27.58	16.07	40.458	Vertical	2	Pass
		1882,5	-7.94	3.27	27.61	16.40	43.652	Vertical	2	Pass
		1914.3	-8.60	3.29	27.63	15.74	37.497	Vertical	2	Pass
3.0MHz Band 16 QAM	1/#Mid	1851.5	-8.41	3.13	27.61	16.07	40.458	Vertical	2	Pass
		1882,5	-8.29	3.27	27.61	16.05	40.272	Vertical	2	Pass
		1913.5	-8.25	3.30	27.62	16.07	40.458	Vertical	2	Pass
5.0MHz Band 16 QAM	1/#Mid	1852.5	-8.23	3.13	27.63	16.27	42.364	Vertical	2	Pass
		1882,5	-8.54	3.27	27.61	15.80	38.019	Vertical	2	Pass
		1912.5	-7.78	3.30	27.60	16.52	44.875	Vertical	2	Pass
10.0MHz Band 16 QAM	1/#Mid	1855	-8.53	3.15	27.64	15.96	39.446	Vertical	2	Pass
		1882,5	-7.85	3.31	27.61	16.45	44.157	Vertical	2	Pass
		1910	-7.66	3.33	27.59	16.60	45.709	Vertical	2	Pass
15.0MHz Band 16 QAM	1/#Mid	1857.5	-8.01	3.15	27.65	16.49	44.566	Vertical	2	Pass
		1882,5	-7.80	3.31	27.61	16.50	44.668	Vertical	2	Pass
		1907.5	-8.30	3.33	27.57	15.94	39.264	Vertical	2	Pass

20.0MHz		1860	-8.34	3.17	27.66	16.15	41.210	Vertical	2	Pass
Band 16	1/#Mid	1882,5	-7.92	3.32	27.61	16.37	43.351	Vertical	2	Pass
QAM		1905	-7.91	3.36	27.56	16.29	42.560	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 (dB)	Max. EIRP Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP		
										Limit	
1.4MHz BW QPSK	6/0	814.7	-4.47	3.76	28.24	2.15	17.86	61.09	Horizontal	100	Pass
		819	-4.33	3.91	28.22	2.15	17.83	60.67	Horizontal	100	Pass
		823.3	-4.45	3.93	28.20	2.15	17.67	58.48	Horizontal	100	Pass
3.0MHz BW QPSK	15/0	815.5	-4.66	3.77	28.23	2.15	17.65	58.21	Horizontal	100	Pass
		819	-4.56	3.91	28.24	2.15	17.62	57.81	Horizontal	100	Pass
		822.5	-4.64	3.94	28.25	2.15	17.52	56.49	Horizontal	100	Pass
5.0MHz BW QPSK	25/0	816.5	-4.45	3.77	28.31	2.15	17.94	62.23	Horizontal	100	Pass
		819	-4.28	3.91	28.22	2.15	17.88	61.38	Horizontal	100	Pass
		821.5	-4.38	3.94	28.20	2.15	17.73	59.29	Horizontal	100	Pass
10.0MHz BW QPSK	50/0	819	-4.18	3.91	28.22	2.15	17.98	62.81	Horizontal	100	Pass
1.4MHz BW QPSK	6/0	814.7	-4.43	3.79	28.34	2.15	17.97	62.66	Vertical	100	Pass
		819	-4.25	3.95	28.22	2.15	17.87	61.24	Vertical	100	Pass
		823.3	-5.00	3.97	28.18	2.15	17.06	50.82	Vertical	100	Pass
3.0MHz BW QPSK	15/0	815.5	-6.00	3.77	28.23	2.15	16.31	42.76	Vertical	100	Pass
		819	-5.64	3.91	28.24	2.15	16.54	45.08	Vertical	100	Pass
		822.5	-5.64	3.94	28.25	2.15	16.52	44.87	Vertical	100	Pass
5.0MHz BW QPSK	25/0	816.5	-5.26	3.77	28.31	2.15	17.13	51.64	Vertical	100	Pass
		819	-5.42	3.91	28.22	2.15	16.74	47.21	Vertical	100	Pass
		821.5	-5.27	3.94	28.20	2.15	16.84	48.31	Vertical	100	Pass
10.0MHz BW QPSK	50/0	819	-5.63	3.91	28.22	2.15	16.53	44.98	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 (dB)	Max. EIRP Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP		
										Limit	
1.4MHz BW 16 QAM	6/0	814.7	-4.33	3.76	28.24	2.15	18.00	63.10	Horizontal	100	Pass
		819	-4.19	3.91	28.22	2.15	17.97	62.66	Horizontal	100	Pass
		823.3	-4.31	3.93	28.20	2.15	17.81	60.39	Horizontal	100	Pass
3.0MHz BW 16 QAM	15/0	815.5	-4.52	3.77	28.23	2.15	17.79	60.12	Horizontal	100	Pass
		819	-4.42	3.91	28.24	2.15	17.76	59.70	Horizontal	100	Pass
		822.5	-4.50	3.94	28.25	2.15	17.66	58.34	Horizontal	100	Pass
5.0MHz BW 16 QAM	25/0	816.5	-4.31	3.77	28.31	2.15	18.08	64.27	Horizontal	100	Pass
		819	-4.14	3.91	28.22	2.15	18.02	63.39	Horizontal	100	Pass
		821.5	-4.24	3.94	28.20	2.15	17.87	61.24	Horizontal	100	Pass
10.0MHz BW 16 QAM	50/0	819	-4.06	3.91	28.24	2.15	18.12	64.86	Horizontal	100	Pass
1.4MHz BW 16 QAM	6/0	814.7	-4.29	3.79	28.34	2.15	18.11	64.71	Vertical	100	Pass
		819	-4.11	3.95	28.22	2.15	18.01	63.24	Vertical	100	Pass
		823.3	-5.69	3.97	28.18	2.15	16.37	43.35	Vertical	100	Pass
3.0MHz BW 16 QAM	15/0	815.5	-5.80	3.77	28.23	2.15	16.51	44.77	Vertical	100	Pass
		819	-5.05	3.91	28.24	2.15	17.13	51.64	Vertical	100	Pass
		822.5	-5.07	3.94	28.25	2.15	17.09	51.17	Vertical	100	Pass
5.0MHz BW 16 QAM	25/0	816.5	-5.28	3.77	28.31	2.15	17.11	51.40	Vertical	100	Pass
		819	-5.16	3.91	28.22	2.15	17.00	50.12	Vertical	100	Pass
		821.5	-5.67	3.94	28.20	2.15	16.44	44.06	Vertical	100	Pass
10.0MHz BW 16 QAM	50/0	819	-5.08	3.91	28.24	2.15	17.10	51.29	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/RB SIZE	Frequency	Result								Conclusion
			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	824.7	1.55	2.01	19.68	2.15	17.07	50.93	Horizontal	7	Pass
		836.5	1.49	2.01	19.77	2.15	17.10	51.29	Horizontal	7	Pass
		848.3	1.43	2.02	19.82	2.15	17.08	51.05	Horizontal	7	Pass
3.0MHz Band QPSK	15/0	825.5	1.59	2.01	19.70	2.15	17.13	51.64	Horizontal	7	Pass
		836.5	1.22	2.01	19.77	2.15	16.83	48.19	Horizontal	7	Pass
		847.5	1.67	2.02	19.81	2.15	17.31	53.83	Horizontal	7	Pass
5.0MHz Band QPSK	25/0	826.5	1.85	2.01	19.71	2.15	17.40	54.95	Horizontal	7	Pass
		836.5	1.67	2.01	19.77	2.15	17.28	53.46	Horizontal	7	Pass
		846.5	1.04	2.02	19.79	2.15	16.66	46.34	Horizontal	7	Pass
10.0MHz Band QPSK	50/0	829	1.06	2.01	19.73	2.15	16.63	46.03	Horizontal	7	Pass
		836.5	1.18	2.01	19.77	2.15	16.79	47.75	Horizontal	7	Pass
		844	1.78	2.02	19.78	2.15	17.39	54.83	Horizontal	7	Pass
15.0MHz Band QPSK	75/0	831.5	0.87	2.01	19.73	2.15	16.44	44.06	Horizontal	7	Pass
		836.5	1.80	2.01	19.77	2.15	17.41	55.08	Horizontal	7	Pass
		841.5	1.53	2.02	19.78	2.15	17.14	51.76	Horizontal	7	Pass
1.4MHz Band QPSK	6/0	824.7	1.13	2.01	19.68	2.15	16.65	46.24	Vertical	7	Pass
		836.5	1.07	2.01	19.77	2.15	16.68	46.56	Vertical	7	Pass
		848.3	1.33	2.02	19.82	2.15	16.98	49.89	Vertical	7	Pass
3.0MHz Band QPSK	15/0	825.5	1.27	2.01	19.70	2.15	16.81	47.97	Vertical	7	Pass
		836.5	0.89	2.01	19.77	2.15	16.50	44.67	Vertical	7	Pass
		847.5	1.14	2.02	19.81	2.15	16.78	47.64	Vertical	7	Pass
5.0MHz Band QPSK	25/0	826.5	1.29	2.01	19.71	2.15	16.84	48.31	Vertical	7	Pass
		836.5	1.04	2.01	19.77	2.15	16.65	46.24	Vertical	7	Pass
		846.5	1.16	2.02	19.79	2.15	16.78	47.64	Vertical	7	Pass
10.0MHz Band QPSK	50/0	829	0.93	2.01	19.73	2.15	16.50	44.67	Vertical	7	Pass
		836.5	1.27	2.01	19.77	2.15	16.88	48.75	Vertical	7	Pass
		844	1.11	2.02	19.78	2.15	16.72	46.99	Vertical	7	Pass
15.0MHz Band QPSK	75/0	831.5	0.94	2.01	19.73	2.15	16.51	44.77	Vertical	7	Pass
		836.5	1.69	2.01	19.77	2.15	17.30	53.70	Vertical	7	Pass
		841.5	1.29	2.02	19.78	2.15	16.90	48.98	Vertical	7	Pass

		Radiated Power (ERP) for Band 26(824-849)									
Mode	RB/RB SIZE	Frequency	Result								Conclusion
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Correction (dB)	Max. EIRP Average (dBm)	Max. EIRP Average (mW)	Polarization Of Max. ERP		
										Limit	
										(W)	
1.4MHz Band 16 QAM	6/0	824.7	1.86	2.01	19.68	2.15	17.38	54.70	Horizontal	7	Pass
		836.5	1.09	2.01	19.77	2.15	16.70	46.77	Horizontal	7	Pass
		848.3	1.03	2.02	19.82	2.15	16.68	46.56	Horizontal	7	Pass
3.0MHz Band 16 QAM	15/0	825.5	1.12	2.01	19.70	2.15	16.66	46.34	Horizontal	7	Pass
		836.5	1.42	2.01	19.77	2.15	17.03	50.47	Horizontal	7	Pass
		847.5	1.12	2.02	19.81	2.15	16.76	47.42	Horizontal	7	Pass
5.0MHz Band 16 QAM	25/0	826.5	1.28	2.01	19.71	2.15	16.83	48.19	Horizontal	7	Pass
		836.5	1.25	2.01	19.77	2.15	16.86	48.53	Horizontal	7	Pass
		846.5	1.09	2.02	19.79	2.15	16.71	46.88	Horizontal	7	Pass
10.0MHz Band 16 QAM	50/0	829	1.49	2.01	19.73	2.15	17.06	50.82	Horizontal	7	Pass
		836.5	1.81	2.01	19.77	2.15	17.42	55.21	Horizontal	7	Pass
		844	1.05	2.02	19.78	2.15	16.66	46.34	Horizontal	7	Pass
15.0MHz Band QPSK	75/0	831.5	1.87	2.01	19.73	2.15	17.44	55.46	Horizontal	7	Pass
		836.5	1.05	2.01	19.77	2.15	16.66	46.34	Horizontal	7	Pass
		841.5	0.85	2.02	19.78	2.15	16.46	44.26	Horizontal	7	Pass
1.4MHz Band 16 QAM	6/0	824.7	1.37	2.01	19.68	2.15	16.89	48.87	Vertical	7	Pass
		836.5	1.76	2.01	19.77	2.15	17.37	54.58	Vertical	7	Pass
		848.3	1.51	2.02	19.82	2.15	17.16	52.00	Vertical	7	Pass
3.0MHz Band 16 QAM	15/0	825.5	1.31	2.01	19.70	2.15	16.85	48.42	Vertical	7	Pass
		836.5	1.13	2.01	19.77	2.15	16.74	47.21	Vertical	7	Pass
		847.5	1.73	2.02	19.81	2.15	17.37	54.58	Vertical	7	Pass
5.0MHz Band 16 QAM	25/0	826.5	1.00	2.01	19.71	2.15	16.55	45.19	Vertical	7	Pass
		836.5	1.44	2.01	19.77	2.15	17.05	50.70	Vertical	7	Pass
		846.5	1.06	2.02	19.79	2.15	16.68	46.56	Vertical	7	Pass
10.0MHz Band 16 QAM	50/0	829	1.47	2.01	19.73	2.15	17.04	50.58	Vertical	7	Pass
		836.5	1.69	2.01	19.77	2.15	17.30	53.70	Vertical	7	Pass
		844	1.07	2.02	19.78	2.15	16.68	46.56	Vertical	7	Pass

15.0MHz	75/0	831.5	1.01	2.01	19.73	2.15	16.58	45.50	Vertical	7	Pass
Band		836.5	0.94	2.01	19.77	2.15	16.55	45.19	Vertical	7	Pass
QPSK		841.5	1.20	2.02	19.78	2.15	16.81	47.97	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	Polarization Of Max. ERP		
							Average		Limit	
							(mW)		(W)	
1.4MHz Band QPSK	1/#Mid	1710.7	-6.65	3.76	28.24	17.83	60.674	Horizontal	1	Pass
		1745	-6.51	3.91	28.22	17.80	60.256	Horizontal	1	Pass
		1779.3	-6.38	3.93	28.2	17.89	61.518	Horizontal	1	Pass
3.0MHz Band QPSK	1/#Mid	1711.5	-6.71	3.77	28.23	17.75	59.566	Horizontal	1	Pass
		1745	-6.62	3.91	28.24	17.71	59.020	Horizontal	1	Pass
		1778.5	-6.64	3.94	28.25	17.67	58.479	Horizontal	1	Pass
5.0MHz Band QPSK	1/#Mid	1712.5	-6.61	3.77	28.31	17.93	62.087	Horizontal	1	Pass
		1745	-6.29	3.91	28.22	18.02	63.387	Horizontal	1	Pass
		1777.5	-6.35	3.94	28.2	17.91	61.802	Horizontal	1	Pass
10.0MHz Band QPSK	1/#Mid	1715	-6.50	3.79	28.33	18.04	63.680	Horizontal	1	Pass
		1745	-6.23	3.95	28.22	18.04	63.680	Horizontal	1	Pass
		1775	-6.24	3.97	28.19	17.98	62.806	Horizontal	1	Pass
15.0MHz Band QPSK	1/#Mid	1717.5	-6.52	3.79	28.34	18.03	63.533	Horizontal	1	Pass
		1745	-6.33	3.95	28.22	17.94	62.230	Horizontal	1	Pass
		1772.5	-6.28	3.97	28.18	17.93	62.087	Horizontal	1	Pass
20.0MHz Band QPSK	1/#Mid	1720	-6.49	3.81	28.35	18.05	63.826	Horizontal	1	Pass
		1745	-6.23	3.96	28.22	18.03	63.533	Horizontal	1	Pass
		1770	-6.25	4	28.16	17.91	61.802	Horizontal	1	Pass
1.4MHz Band QPSK	1/#Mid	1710.7	-7.91	3.76	28.24	16.57	45.394	Vertical	1	Pass
		1745	-7.66	3.91	28.22	16.65	46.238	Vertical	1	Pass
		1779.3	-7.62	3.93	28.2	16.65	46.238	Vertical	1	Pass
3.0MHz Band QPSK	1/#Mid	1711.5	-7.72	3.77	28.23	16.74	47.206	Vertical	1	Pass
		1745	-7.02	3.91	28.24	17.31	53.827	Vertical	1	Pass
		1778.5	-7.39	3.94	28.25	16.92	49.204	Vertical	1	Pass
5.0MHz Band QPSK	1/#Mid	1712.5	-7.83	3.77	28.31	16.71	46.881	Vertical	1	Pass
		1745	-7.24	3.91	28.22	17.07	50.933	Vertical	1	Pass
		1777.5	-7.30	3.94	28.2	16.96	49.659	Vertical	1	Pass
10.0MHz Band	1/#Mid	1715	-7.65	3.79	28.34	16.90	48.978	Vertical	1	Pass
		1745	-7.25	3.95	28.22	17.02	50.350	Vertical	1	Pass

QPSK		1775	-6.94	3.97	28.18	17.27	53.333	Vertical	1	Pass
15.0MHz	1/#Mid	1717.5	-7.41	3.81	28.35	17.13	51.642	Vertical	1	Pass
Band		1745	-7.88	3.96	28.22	16.38	43.451	Vertical	1	Pass
QPSK		1772.5	-7.61	4	28.16	16.55	45.186	Vertical	1	Pass
20.0MHz	1/#Mid	1720	-7.90	3.79	28.34	16.65	46.238	Vertical	1	Pass
Band		1745	-7.11	3.95	28.22	17.16	52.000	Vertical	1	Pass
QPSK		1770	-7.85	3.97	28.18	16.36	43.251	Vertical	1	Pass

		Radiated Power (EIRP) for Band 66								
Mode	RB/RB SIZE	Frequency	Result							Conclusion
			SG Level (dBm)	Cable Loss (dBm)	Antenna Factor (dB)	Max. EIRP Average (dBm)	Max. EIRP	Polarization Of Max. ERP		
							Average		Limit	
							(mW)		(W)	
1.4MHz Band 16 QAM	1/#Mid	1710.7	-7.52	3.76	28.24	16.96	49.659	Horizontal	1	Pass
		1745	-7.13	3.91	28.22	17.18	52.240	Horizontal	1	Pass
		1779.3	-7.31	3.93	28.2	16.96	49.659	Horizontal	1	Pass
3.0MHz Band 16 QAM	1/#Mid	1711.5	-7.91	3.77	28.23	16.55	45.186	Horizontal	1	Pass
		1745	-7.16	3.91	28.24	17.17	52.119	Horizontal	1	Pass
		1778.5	-7.45	3.94	28.25	16.86	48.529	Horizontal	1	Pass
5.0MHz Band 16 QAM	1/#Mid	1712.5	-7.33	3.77	28.31	17.21	52.602	Horizontal	1	Pass
		1745	-7.39	3.91	28.22	16.92	49.204	Horizontal	1	Pass
		1777.5	-7.06	3.94	28.2	17.20	52.481	Horizontal	1	Pass
10.0MHz Band 16 QAM	1/#Mid	1715	-7.38	3.79	28.33	17.16	52.000	Horizontal	1	Pass
		1745	-7.04	3.95	28.22	17.23	52.845	Horizontal	1	Pass
		1775	-7.36	3.97	28.19	16.86	48.529	Horizontal	1	Pass
15.0MHz Band 16 QAM	1/#Mid	1717.5	-7.37	3.79	28.34	17.18	52.240	Horizontal	1	Pass
		1745	-7.19	3.95	28.22	17.08	51.050	Horizontal	1	Pass
		1772.5	-6.98	3.97	28.18	17.23	52.845	Horizontal	1	Pass
20.0MHz Band 16 QAM	1/#Mid	1720	-7.20	3.81	28.35	17.34	54.200	Horizontal	1	Pass
		1745	-6.98	3.96	28.22	17.28	53.456	Horizontal	1	Pass
		1770	-6.92	4	28.16	17.24	52.966	Horizontal	1	Pass
1.4MHz Band 16 QAM	1/#Mid	1710.7	-7.60	3.76	28.24	16.88	48.753	Vertical	1	Pass
		1745	-8.95	3.91	28.22	15.36	34.356	Vertical	1	Pass
		1779.3	-7.35	3.93	28.2	16.92	49.204	Vertical	1	Pass
3.0MHz Band 16 QAM	1/#Mid	1711.5	-8.99	3.77	28.23	15.47	35.237	Vertical	1	Pass
		1745	-7.44	3.91	28.24	16.89	48.865	Vertical	1	Pass
		1778.5	-9.04	3.94	28.25	15.27	33.651	Vertical	1	Pass
5.0MHz Band 16 QAM	1/#Mid	1712.5	-8.73	3.77	28.31	15.81	38.107	Vertical	1	Pass
		1745	-8.91	3.91	28.22	15.40	34.674	Vertical	1	Pass
		1777.5	-8.60	3.94	28.2	15.66	36.813	Vertical	1	Pass
10.0MHz Band 16 QAM	1/#Mid	1715	-7.39	3.79	28.34	17.16	52.000	Vertical	1	Pass
		1745	-7.85	3.95	28.22	16.42	43.853	Vertical	1	Pass
		1775	-8.90	3.97	28.18	15.31	33.963	Vertical	1	Pass
15.0MHz	1/#Mid	1717.5	-9.24	3.81	28.35	15.30	33.884	Vertical	1	Pass

Band 16		1745	-7.23	3.96	28.22	17.03	50.466	Vertical	1	Pass
QAM		1772.5	-7.52	4	28.16	16.64	46.132	Vertical	1	Pass
20.0MHz	1/#Mid	1720	-8.93	3.79	28.34	15.62	36.475	Vertical	1	Pass
Band 16		1745	-8.30	3.95	28.22	15.97	39.537	Vertical	1	Pass
QAM		1770	-7.21	3.97	28.18	17.00	50.119	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	-47.70	4.04	33.51	-18.23	-13	-5.23	Horizontal
3701.4	-46.03	4.04	33.51	-16.56	-13	-3.56	Vertical
5552.1	-51.58	5.24	35.84	-20.98	-13	-7.98	Vertical
5552.1	-51.79	5.24	35.84	-21.19	-13	-8.19	Horizontal
188.3	-42.70	1.43	16.02	-28.11	-13	-15.11	Vertical
283.2	-39.57	1.30	17.99	-22.88	-13	-9.88	Horizontal
Test Results for Mid Channel 1880MHz							
3760.0	-50.42	4.04	33.56	-20.90	-13	-7.90	Horizontal
3760.0	-44.43	4.04	33.56	-14.91	-13	-1.91	Vertical
5640.0	-49.29	5.24	35.91	-18.62	-13	-5.62	Vertical
5640.0	-51.64	5.24	35.91	-20.97	-13	-7.97	Horizontal
199.2	-40.33	1.62	16.97	-24.98	-13	-11.98	Vertical
275.9	-39.19	1.74	15.98	-24.96	-13	-11.96	Horizontal
Test Results for High Channel 1909.3MHz							
3818.6	-47.53	4.04	34.00	-17.57	-13	-4.57	Horizontal
3818.6	-49.90	4.04	34.00	-19.94	-13	-6.94	Vertical
5727.9	-50.54	5.24	36.04	-19.74	-13	-6.74	Vertical
5727.9	-51.02	5.24	36.04	-20.22	-13	-7.22	Horizontal
194.4	-44.04	1.42	17.29	-28.17	-13	-15.17	Vertical
268.4	-34.33	1.50	17.90	-17.92	-13	-4.92	Horizontal

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

Test Results for Low Channel 1860MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3720.0	-46.28	4.07	33.54	-16.81	-13	-3.81	Horizontal
3720.0	-47.69	4.07	33.54	-18.22	-13	-5.22	Vertical
5580.0	-47.89	5.28	35.86	-17.31	-13	-4.31	Vertical
5580.0	-53.74	5.28	35.86	-23.16	-13	-10.16	Horizontal
211.7	-34.51	1.58	16.89	-19.19	-13	-6.19	Vertical
372.3	-38.54	1.76	17.26	-23.04	-13	-10.04	Horizontal
Test Results for Mid Channel 1880MHz							
3760.0	-45.63	4.04	33.56	-16.11	-13	-3.11	Horizontal
3760.0	-53.23	4.04	33.56	-23.71	-13	-10.71	Vertical
5640.0	-52.55	5.24	35.91	-21.88	-13	-8.88	Vertical
5640.0	-50.90	5.24	35.91	-20.23	-13	-7.23	Horizontal
192.1	-36.65	1.46	16.27	-21.84	-13	-8.84	Vertical
254.6	-44.81	1.59	15.15	-31.25	-13	-18.25	Horizontal
Test Results for High Channel 1900MHz							
3800.0	-46.30	4.04	34.00	-16.34	-13	-3.34	Horizontal
3800.0	-45.39	4.04	34.00	-15.43	-13	-2.43	Vertical
5700.0	-46.04	5.24	36.04	-15.24	-13	-2.24	Vertical
5700.0	-51.27	5.24	36.04	-20.47	-13	-7.47	Horizontal
182.3	-34.57	1.36	17.39	-18.53	-13	-5.53	Vertical
458.1	-44.44	1.66	15.39	-30.71	-13	-17.71	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	-44.24	4.02	29.80	-18.46	-13	-5.46	Horizontal
3421.4	-50.60	4.02	29.80	-24.82	-13	-11.82	Vertical
5132.1	-52.21	5.24	35.84	-21.61	-13	-8.61	Vertical
5132.1	-49.00	5.24	35.84	-18.40	-13	-5.40	Horizontal
187.6	-37.46	1.68	16.04	-23.10	-13	-10.10	Vertical
302.9	-41.64	1.78	17.74	-25.68	-13	-12.68	Horizontal
Test Results for Mid Channel 1732.5MHz							
3465.0	-51.18	4.03	30.00	-25.21	-13	-12.21	Horizontal
3465.0	-53.31	4.03	30.00	-27.34	-13	-14.34	Vertical
5197.5	-50.23	5.25	35.86	-19.62	-13	-6.62	Vertical
5197.5	-50.88	5.25	35.86	-20.27	-13	-7.27	Horizontal
182.3	-36.86	1.72	17.69	-20.89	-13	-7.89	Vertical
237.8	-35.28	1.62	16.02	-20.87	-13	-7.87	Horizontal
Test Results for High Channel 1754.3MHz							
3508.6	-49.77	4.05	30.01	-23.81	-13	-10.81	Horizontal
3508.6	-52.14	4.05	30.01	-26.18	-13	-13.18	Vertical
5262.9	-48.74	5.26	35.86	-18.14	-13	-5.14	Vertical
5262.9	-52.55	5.26	35.86	-21.95	-13	-8.95	Horizontal
208.7	-40.19	1.80	16.69	-25.30	-13	-12.30	Vertical
361.1	-36.60	1.75	16.66	-21.70	-13	-8.70	Horizontal

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

Test Results for Low Channel 1720MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3440.0	-44.14	4.02	29.80	-18.36	-13	-5.36	Horizontal
3440.0	-50.83	4.02	29.80	-25.05	-13	-12.05	Vertical
5160.0	-48.62	5.24	35.84	-18.02	-13	-5.02	Vertical
5160.0	-50.59	5.24	35.84	-19.99	-13	-6.99	Horizontal
190.1	-39.20	1.57	17.26	-23.51	-13	-10.51	Vertical
277.1	-41.10	1.78	16.35	-26.53	-13	-13.53	Horizontal
Test Results for Mid Channel 1732.5MHz							
3465.0	-52.76	4.03	30.00	-26.79	-13	-13.79	Horizontal
3465.0	-44.63	4.03	30.00	-18.66	-13	-5.66	Vertical
5197.5	-50.59	5.25	35.86	-19.98	-13	-6.98	Vertical
5197.5	-52.00	5.25	35.86	-21.39	-13	-8.39	Horizontal
185.6	-37.21	1.44	17.95	-20.70	-13	-7.70	Vertical
420.1	-42.61	1.65	16.09	-28.17	-13	-15.17	Horizontal
Test Results for High Channel 1745MHz							
3490.0	-50.72	2.91	27.68	-25.95	-13	-12.95	Horizontal
3490.0	-45.38	2.91	27.68	-20.61	-13	-7.61	Vertical
5235.0	-52.72	5.26	35.86	-22.12	-13	-9.12	Vertical
5235.0	-52.65	5.26	35.86	-22.05	-13	-9.05	Horizontal
199.6	-37.39	1.61	16.85	-22.15	-13	-9.15	Vertical
450.3	-42.95	1.61	15.19	-29.37	-13	-16.37	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	-51.11	2.78	27.50	-26.39	-13	-13.39	Horizontal
1649.4	-47.59	2.78	27.50	-22.87	-13	-9.87	Vertical
2474.1	-49.66	2.90	27.80	-24.76	-13	-11.76	Vertical
2474.1	-50.56	2.90	27.80	-25.66	-13	-12.66	Horizontal
190.7	-39.58	1.76	17.59	-23.75	-13	-10.75	Vertical
276.0	-42.37	1.63	15.87	-28.13	-13	-15.13	Horizontal
Test Results For Mid Channel 836.5MHz							
1673.0	-51.25	2.80	27.48	-26.57	-13	-13.57	Horizontal
1673.0	-47.20	2.80	27.48	-22.52	-13	-9.52	Vertical
2509.5	-46.39	2.91	27.70	-21.60	-13	-8.60	Vertical
2509.5	-49.78	2.91	27.70	-24.99	-13	-11.99	Horizontal
207.5	-42.64	1.61	15.68	-28.57	-13	-15.57	Vertical
351.4	-41.97	1.59	17.52	-26.05	-13	-13.05	Horizontal
Test Results for High Channel 848.3MHz							
1696.6	-52.55	2.82	27.43	-27.94	-13	-14.94	Horizontal
1696.6	-48.78	2.82	27.43	-24.17	-13	-11.17	Vertical
2544.9	-49.49	2.92	27.74	-24.67	-13	-11.67	Vertical
2544.9	-52.28	2.92	27.74	-27.46	-13	-14.46	Horizontal
177.6	-41.48	1.69	16.67	-26.49	-13	-13.49	Vertical
359.6	-38.94	1.70	17.18	-23.46	-13	-10.46	Horizontal

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

Test Results for Low Channel 829MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1658.0	-49.18	2.78	27.50	-24.46	-13	-11.46	Horizontal
1658.0	-50.03	2.78	27.50	-25.31	-13	-12.31	Vertical
2487.0	-44.75	2.90	27.80	-19.85	-13	-6.85	Vertical
2487.0	-51.82	2.90	27.80	-26.92	-13	-13.92	Horizontal
194.8	-42.50	1.71	15.57	-28.64	-13	-15.64	Vertical
308.9	-40.57	1.34	16.40	-25.51	-13	-12.51	Horizontal
Test Results for Mid Channel 836.5MHz							
1673.0	-53.33	2.80	27.48	-28.65	-13	-15.65	Horizontal
1673.0	-50.33	2.80	27.48	-25.65	-13	-12.65	Vertical
2509.5	-44.12	2.91	27.70	-19.33	-13	-6.33	Vertical
2509.5	-53.86	2.91	27.70	-29.07	-13	-16.07	Horizontal
184.6	-39.98	1.44	17.04	-24.38	-13	-11.38	Vertical
313.4	-43.38	1.76	17.62	-27.52	-13	-14.52	Horizontal
Test Results for High Channel 844MHz							
1688.0	-44.68	2.82	27.43	-20.07	-13	-7.07	Horizontal
1688.0	-45.13	2.82	27.43	-20.52	-13	-7.52	Vertical
2532.0	-49.74	2.92	27.74	-24.92	-13	-11.92	Vertical
2532.0	-52.43	2.92	27.74	-27.61	-13	-14.61	Horizontal
198.4	-44.71	1.74	17.70	-28.75	-13	-15.75	Vertical
374.1	-42.05	1.41	17.46	-25.99	-13	-12.99	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
5005.0	-60.07	5.23	35.81	-29.49	-25	-4.49	Horizontal
5005.0	-64.75	5.23	35.81	-34.17	-25	-9.17	Vertical
7507.5	-64.81	5.67	36.85	-33.63	-25	-8.63	Vertical
7507.5	-64.75	5.67	36.85	-33.57	-25	-8.57	Horizontal
203.4	-44.38	1.73	17.97	-28.14	-25	-3.14	Vertical
343.0	-51.66	1.38	15.11	-37.93	-25	-12.93	Horizontal
Test Results for Mid Channel 2535MHz							
5070.0	-61.63	5.23	35.82	-31.04	-25	-6.04	Horizontal
5070.0	-64.11	5.23	35.82	-33.52	-25	-8.52	Vertical
7605.0	-59.11	5.67	36.85	-27.93	-25	-2.93	Vertical
7605.0	-63.57	5.67	36.85	-32.39	-25	-7.39	Horizontal
201.1	-46.23	1.77	16.17	-31.82	-25	-6.82	Vertical
291.8	-49.17	1.63	15.21	-35.59	-25	-10.59	Horizontal
Test Results for High Channel 2567.5MHz							
5135.0	-64.13	5.24	35.83	-33.54	-25	-8.54	Horizontal
5135.0	-59.05	5.24	35.83	-28.46	-25	-3.46	Vertical
7702.5	-61.25	5.68	36.87	-30.06	-25	-5.06	Vertical
7702.5	-64.02	5.68	36.87	-32.83	-25	-7.83	Horizontal
212.0	-44.07	1.58	17.56	-28.09	-25	-3.09	Vertical
321.4	-49.43	1.45	16.58	-34.30	-25	-9.30	Horizontal

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

Test Results for Low Channel 2510MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
5020.0	-64.60	5.23	35.82	-34.01	-25	-9.01	Horizontal
5020.0	-63.01	5.23	35.82	-32.42	-25	-7.42	Vertical
7530.0	-63.45	5.67	36.86	-32.26	-25	-7.26	Vertical
7530.0	-59.47	5.67	36.86	-28.28	-25	-3.28	Horizontal
204.8	-44.75	1.63	15.76	-30.62	-25	-5.62	Vertical
282.6	-50.09	1.71	15.44	-36.36	-25	-11.36	Horizontal
Test Results for Mid Channel 2535MHz							
5070.0	-64.70	5.23	35.82	-34.11	-25	-9.11	Horizontal
5070.0	-59.38	5.23	35.82	-28.79	-25	-3.79	Vertical
7605.0	-61.30	5.67	36.85	-30.12	-25	-5.12	Vertical
7605.0	-60.38	5.67	36.85	-29.20	-25	-4.20	Horizontal
202.5	-52.81	1.79	16.84	-37.75	-25	-12.75	Vertical
374.2	-47.02	1.71	17.64	-31.09	-25	-6.09	Horizontal
Test Results for High Channel 2560MHz							
5120.0	-63.77	5.24	35.83	-33.18	-25	-8.18	Horizontal
5120.0	-62.63	5.24	35.83	-32.04	-25	-7.04	Vertical
7680.0	-62.69	5.70	36.88	-31.51	-25	-6.51	Vertical
7680.0	-64.73	5.70	36.88	-33.55	-25	-8.55	Horizontal
202.4	-46.57	1.79	16.84	-31.51	-25	-6.51	Vertical
421.6	-45.50	1.71	17.64	-29.57	-25	-4.57	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	-51.24	2.60	27.20	-26.64	-13	-13.64	Horizontal
1399.4	-46.77	2.60	27.20	-22.17	-13	-9.17	Vertical
2099.1	-49.73	2.85	27.54	-25.04	-13	-12.04	Vertical
2099.1	-50.48	2.85	27.54	-25.79	-13	-12.79	Horizontal
208.6	-36.34	1.49	17.78	-20.05	-13	-7.05	Vertical
329.4	-40.33	1.36	17.33	-24.36	-13	-11.36	Horizontal
Test Results For Mid Channel 707.5MHz							
1415.0	-52.53	2.61	27.28	-27.86	-13	-14.86	Horizontal
1415.0	-48.68	2.61	27.28	-24.01	-13	-11.01	Vertical
2122.5	-52.97	2.87	27.59	-28.25	-13	-15.25	Vertical
2122.5	-53.72	2.87	27.59	-29.00	-13	-16.00	Horizontal
204.3	-43.86	1.73	15.74	-29.85	-13	-16.85	Vertical
284.9	-42.23	1.62	15.79	-28.06	-13	-15.06	Horizontal
Test Results for High Channel 715.3MHz							
1430.6	-50.10	2.63	27.28	-25.45	-13	-12.45	Horizontal
1430.6	-49.78	2.63	27.28	-25.13	-13	-12.13	Vertical
2145.9	-52.85	2.88	27.60	-28.13	-13	-15.13	Vertical
2145.9	-50.47	2.88	27.60	-25.75	-13	-12.75	Horizontal
180.8	-36.12	1.61	18.00	-19.73	-13	-6.73	Vertical
281.6	-40.26	1.45	15.49	-26.23	-13	-13.23	Horizontal

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

Test Results for Low Channel 704MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
1408.0	-46.05	2.61	27.26	-21.40	-13	-8.40	Horizontal
1408.0	-53.24	2.61	27.26	-28.59	-13	-15.59	Vertical
2112.0	-48.86	2.87	27.58	-24.15	-13	-11.15	Vertical
2112.0	-52.58	2.87	27.58	-27.87	-13	-14.87	Horizontal
184.1	-44.36	1.31	16.97	-28.70	-13	-15.70	Vertical
353.7	-37.06	1.65	16.70	-22.01	-13	-9.01	Horizontal
Test Results for Mid Channel 707.5MHz							
1415.0	-44.61	2.61	27.28	-19.94	-13	-6.94	Horizontal
1415.0	-48.96	2.61	27.28	-24.29	-13	-11.29	Vertical
2122.5	-52.08	2.87	27.59	-27.36	-13	-14.36	Vertical
2122.5	-53.83	2.87	27.59	-29.11	-13	-16.11	Horizontal
177.5	-43.57	1.72	17.99	-27.30	-13	-14.30	Vertical
240.9	-42.56	1.73	17.94	-26.35	-13	-13.35	Horizontal
Test Results for High Channel 711MHz							
1422.0	-52.69	2.62	27.28	-28.03	-13	-15.03	Horizontal
1422.0	-46.30	2.62	27.28	-21.64	-13	-8.64	Vertical
2133.0	-51.04	2.87	27.60	-26.31	-13	-13.31	Vertical
2133.0	-52.91	2.87	27.60	-28.18	-13	-15.18	Horizontal
201.1	-40.04	1.58	15.93	-25.69	-13	-12.69	Vertical
420.8	-38.26	1.36	15.59	-24.03	-13	-11.03	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
1413.0	-45.63	2.61	27.28	-20.96	-13	-7.96	Horizontal
1413.0	-47.06	2.61	27.28	-22.39	-13	-9.39	Vertical
2119.5	-49.85	2.87	27.59	-25.13	-13	-12.13	Vertical
2119.5	-49.50	2.87	27.59	-24.78	-13	-11.78	Horizontal
204.1	-39.59	1.71	16.15	-25.15	-13	-12.15	Vertical
247.1	-37.48	1.41	17.32	-21.57	-13	-8.57	Horizontal
Test Results For Mid Channel 710MHz							
1420.0	-52.28	2.62	27.30	-27.60	-13	-14.60	Horizontal
1420.0	-45.58	2.62	27.30	-20.90	-13	-7.90	Vertical
2130.0	-47.31	2.87	27.62	-22.56	-13	-9.56	Vertical
2130.0	-50.89	2.87	27.62	-26.14	-13	-13.14	Horizontal
210.8	-34.02	1.42	15.25	-20.20	-13	-7.20	Vertical
375.2	-44.99	1.36	17.19	-29.16	-13	-16.16	Horizontal
Test Results for High Channel 713.5MHz							
1427.0	-51.80	2.66	27.28	-27.18	-13	-14.18	Horizontal
1427.0	-47.25	2.66	27.28	-22.63	-13	-9.63	Vertical
2140.5	-46.16	2.88	27.60	-21.44	-13	-8.44	Vertical
2140.5	-49.26	2.88	27.60	-24.54	-13	-11.54	Horizontal
194.1	-39.09	1.32	17.29	-23.12	-13	-10.12	Vertical
284.2	-44.11	1.72	16.89	-28.94	-13	-15.94	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
1418.0	-48.62	2.62	27.30	-23.94	-13	-10.94	Horizontal
1418.0	-47.61	2.62	27.30	-22.93	-13	-9.93	Vertical
2127.0	-50.25	2.87	27.62	-25.50	-13	-12.50	Vertical
2127.0	-52.14	2.87	27.62	-27.39	-13	-14.39	Horizontal
199.9	-39.90	1.35	16.91	-24.34	-13	-11.34	Vertical
304.9	-37.50	1.62	16.31	-22.81	-13	-9.81	Horizontal
Test Results for Mid Channel 710MHz							
1420.0	-46.03	2.62	27.30	-21.35	-13	-8.35	Horizontal
1420.0	-53.29	2.62	27.30	-28.61	-13	-15.61	Vertical
2130.0	-53.35	2.87	27.62	-28.60	-13	-15.60	Vertical
2130.0	-52.90	2.87	27.62	-28.15	-13	-15.15	Horizontal
204.8	-43.41	1.51	17.14	-27.78	-13	-14.78	Vertical
351.9	-39.47	1.77	16.88	-24.36	-13	-11.36	Horizontal
Test Results for High Channel 711MHz							
1422.0	-46.52	2.62	27.30	-21.84	-13	-8.84	Horizontal
1422.0	-44.51	2.62	27.30	-19.83	-13	-6.83	Vertical
2133.0	-44.34	2.87	27.62	-19.59	-13	-6.59	Vertical
2133.0	-53.54	2.87	27.62	-28.79	-13	-15.79	Horizontal
177.3	-34.67	1.78	15.95	-20.50	-13	-7.50	Vertical
445.5	-36.45	1.34	17.95	-19.85	-13	-6.85	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	-47.94	4.02	29.80	-22.16	-13	-9.16	Horizontal
3701.4	-47.20	4.02	29.80	-21.42	-13	-8.42	Vertical
5552.1	-46.50	5.24	35.84	-15.90	-13	-2.90	Vertical
5552.1	-48.39	5.24	35.84	-17.79	-13	-4.79	Horizontal
93.9	-34.59	1.59	15.11	-21.07	-13	-8.07	Vertical
119.7	-33.75	1.80	15.61	-19.94	-13	-6.94	Horizontal
Test Results for Mid Channel 1732.5MHz							
3765.0	-49.33	4.03	30.00	-23.36	-13	-10.36	Horizontal
3765.0	-42.59	4.03	30.00	-16.62	-13	-3.62	Vertical
5647.5	-46.27	5.25	35.86	-15.66	-13	-2.66	Vertical
5647.5	-47.99	5.25	35.86	-17.38	-13	-4.38	Horizontal
166.1	-34.77	1.37	15.62	-20.52	-13	-7.52	Vertical
274.4	-32.77	1.55	17.51	-16.81	-13	-3.81	Horizontal
Test Results for High Channel 1754.3MHz							
3828.6	-48.45	4.05	30.01	-22.49	-13	-9.49	Horizontal
3828.6	-49.59	4.05	30.01	-23.63	-13	-10.63	Vertical
5742.9	-48.80	5.26	35.86	-18.20	-13	-5.20	Vertical
5742.9	-48.72	5.26	35.86	-18.12	-13	-5.12	Horizontal
108.6	-34.96	1.66	17.19	-19.43	-13	-6.43	Vertical
138.7	-34.59	1.35	17.94	-18.00	-13	-5.00	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
3720.0	-48.66	4.02	29.80	-22.88	-13	-9.88	Horizontal
3720.0	-47.53	4.02	29.80	-21.75	-13	-8.75	Vertical
5580.0	-46.45	5.24	35.84	-15.85	-13	-2.85	Vertical
5580.0	-49.31	5.24	35.84	-18.71	-13	-5.71	Horizontal
146.2	-32.82	1.70	15.24	-19.28	-13	-6.28	Vertical
215.4	-32.62	1.42	16.58	-17.46	-13	-4.46	Horizontal
Test Results for Mid Channel 1732.5MHz							
3765.0	-47.37	4.03	30.00	-21.40	-13	-8.40	Horizontal
3765.0	-49.34	4.03	30.00	-23.37	-13	-10.37	Vertical
5647.5	-49.80	5.25	35.86	-19.19	-13	-6.19	Vertical
5647.5	-47.57	5.25	35.86	-16.96	-13	-3.96	Horizontal
132.2	-33.81	1.64	16.16	-19.29	-13	-6.29	Vertical
133.3	-34.07	1.62	17.37	-18.32	-13	-5.32	Horizontal
Test Results for High Channel 1745MHz							
3810.0	-49.30	2.91	27.68	-24.53	-13	-11.53	Horizontal
3810.0	-43.54	2.91	27.68	-18.77	-13	-5.77	Vertical
5715.0	-49.89	5.26	35.86	-19.29	-13	-6.29	Vertical
5715.0	-47.77	5.26	35.86	-17.17	-13	-4.17	Horizontal
212.6	-34.04	1.49	15.29	-20.24	-13	-7.24	Vertical
275.8	-33.67	1.79	16.42	-19.04	-13	-6.04	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	-46.29	2.78	27.50	-21.57	-13	-8.57	Horizontal
1629.4	-45.69	2.78	27.50	-20.97	-13	-7.97	Vertical
2444.1	-46.01	2.90	27.80	-21.11	-13	-8.11	Vertical
2444.1	-48.72	2.90	27.80	-23.82	-13	-10.82	Horizontal
229.6	-34.98	1.54	16.98	-19.54	-13	-6.54	Vertical
83.3	-33.39	1.47	15.82	-19.04	-13	-6.04	Horizontal
Test Results For Mid Channel 819MHz							
1638.0	-47.87	2.80	27.48	-23.19	-13	-10.19	Horizontal
1638.0	-44.79	2.80	27.48	-20.11	-13	-7.11	Vertical
2457.0	-49.81	2.91	27.70	-25.02	-13	-12.02	Vertical
2457.0	-48.58	2.91	27.70	-23.79	-13	-10.79	Horizontal
168.2	-33.68	1.74	16.19	-19.23	-13	-6.23	Vertical
92.9	-33.08	1.46	15.43	-19.11	-13	-6.11	Horizontal
Test Results for High Channel 823.3MHz							
1646.6	-47.40	2.82	27.43	-22.79	-13	-9.79	Horizontal
1646.6	-44.05	2.82	27.43	-19.44	-13	-6.44	Vertical
2469.9	-49.18	2.92	27.74	-24.36	-13	-11.36	Vertical
2469.9	-47.92	2.92	27.74	-23.10	-13	-10.10	Horizontal
213.1	-33.56	1.67	17.05	-18.18	-13	-5.18	Vertical
121.7	-33.08	1.42	16.12	-18.38	-13	-5.38	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
1638.0	-46.79	2.78	27.50	-22.07	-13	-9.07	Horizontal
1638.0	-42.98	2.78	27.50	-18.26	-13	-5.26	Vertical
2457.0	-46.83	2.90	27.80	-21.93	-13	-8.93	Vertical
2457.0	-46.50	2.90	27.80	-21.60	-13	-8.60	Horizontal
253.7	-33.61	1.43	17.34	-17.70	-13	-4.70	Vertical
256.8	-34.83	1.56	15.71	-20.68	-13	-7.68	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	-48.16	2.78	27.50	-23.44	-13	-10.44	Horizontal
1649.4	-41.59	2.78	27.50	-16.87	-13	-3.87	Vertical
2474.1	-47.18	2.90	27.80	-22.28	-13	-9.28	Vertical
2474.1	-46.05	2.90	27.80	-21.15	-13	-8.15	Horizontal
237.0	-34.99	1.33	17.34	-18.98	-13	-5.98	Vertical
180.5	-34.17	1.47	16.80	-18.84	-13	-5.84	Horizontal
Test Results For Mid Channel 836.5MHz							
1673.0	-49.48	2.80	27.48	-24.80	-13	-11.80	Horizontal
1673.0	-47.48	2.80	27.48	-22.80	-13	-9.80	Vertical
2509.5	-48.76	2.91	27.70	-23.97	-13	-10.97	Vertical
2509.5	-46.46	2.91	27.70	-21.67	-13	-8.67	Horizontal
140.8	-34.17	1.75	15.46	-20.46	-13	-7.46	Vertical
90.6	-33.59	1.52	16.14	-18.97	-13	-5.97	Horizontal
Test Results for High Channel 848.3MHz							
1696.6	-49.08	2.82	27.43	-24.47	-13	-11.47	Horizontal
1696.6	-46.65	2.82	27.43	-22.04	-13	-9.04	Vertical
2544.9	-49.86	2.92	27.74	-25.04	-13	-12.04	Vertical
2544.9	-47.36	2.92	27.74	-22.54	-13	-9.54	Horizontal
171.4	-32.62	1.67	16.09	-18.20	-13	-5.20	Vertical
247.2	-34.92	1.80	17.55	-19.17	-13	-6.17	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
1663.0	-49.19	2.78	27.50	-24.47	-13	-11.47	Horizontal
1663.0	-43.73	2.78	27.50	-19.01	-13	-6.01	Vertical
2494.5	-47.64	2.90	27.80	-22.74	-13	-9.74	Vertical
2494.5	-46.12	2.90	27.80	-21.22	-13	-8.22	Horizontal
255.4	-33.29	1.52	15.72	-19.09	-13	-6.09	Vertical
163.1	-34.52	1.40	17.03	-18.89	-13	-5.89	Horizontal
Test Results for Mid Channel 836.5MHz							
1673.0	-48.56	2.80	27.48	-23.88	-13	-10.88	Horizontal
1673.0	-41.57	2.80	27.48	-16.89	-13	-3.89	Vertical
2509.5	-49.47	2.91	27.70	-24.68	-13	-11.68	Vertical
2509.5	-46.38	2.91	27.70	-21.59	-13	-8.59	Horizontal
227.1	-32.36	1.74	16.38	-17.72	-13	-4.72	Vertical
101.3	-33.14	1.79	15.20	-19.73	-13	-6.73	Horizontal
Test Results for High Channel 841.5MHz							
1683.0	-46.52	2.82	27.43	-21.91	-13	-8.91	Horizontal
1683.0	-44.11	2.82	27.43	-19.50	-13	-6.50	Vertical
2524.5	-48.70	2.92	27.74	-23.88	-13	-10.88	Vertical
2524.5	-47.82	2.92	27.74	-23.00	-13	-10.00	Horizontal
261.1	-32.55	1.78	17.44	-16.89	-13	-3.89	Vertical
120.1	-32.85	1.70	15.93	-18.62	-13	-5.62	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	-54.28	4.02	29.80	-28.50	-13	-15.50	Horizontal
3421.4	-49.91	4.02	29.80	-24.13	-13	-11.13	Vertical
5132.1	-51.46	5.24	35.84	-20.86	-13	-7.86	Vertical
5132.1	-47.37	5.24	35.84	-16.77	-13	-3.77	Horizontal
112.6	-48.16	1.52	15.57	-34.11	-13	-21.11	Vertical
220.5	-51.96	1.33	17.14	-36.15	-13	-23.15	Horizontal
Test Results for Mid Channel 1745MHz							
3490.0	-54.21	4.03	30.00	-28.24	-13	-15.24	Horizontal
3490.0	-47.57	4.03	30.00	-21.60	-13	-8.60	Vertical
5235.0	-53.72	5.25	35.86	-23.11	-13	-10.11	Vertical
5235.0	-48.00	5.25	35.86	-17.39	-13	-4.39	Horizontal
157.3	-49.91	1.53	17.13	-34.31	-13	-21.31	Vertical
213.1	-48.35	1.41	15.95	-33.81	-13	-20.81	Horizontal
Test Results for High Channel 1779.3MHz							
3558.6	-45.78	4.05	30.01	-19.82	-13	-6.82	Horizontal
3558.6	-45.28	4.05	30.01	-19.32	-13	-6.32	Vertical
5337.9	-49.41	5.26	35.86	-18.81	-13	-5.81	Vertical
5337.9	-49.75	5.26	35.86	-19.15	-13	-6.15	Horizontal
170.6	-54.14	1.44	15.51	-40.07	-13	-27.07	Vertical
169.0	-54.95	1.78	15.76	-40.97	-13	-27.97	Horizontal

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

Test Results for Low Channel 1720MHz							
Frequency(MHz)	SG Level(dBm)	Cable Loss(dB)	Antenna Factor(dB)	Absolute Level(dBm)	Limit (dBm)	Margin(dBm)	Polarity
3440.0	-48.89	4.02	29.80	-23.11	-13	-10.11	Horizontal
3440.0	-45.82	4.02	29.80	-20.04	-13	-7.04	Vertical
5160.0	-49.50	5.24	35.84	-18.90	-13	-5.90	Vertical
5160.0	-52.06	5.24	35.84	-21.46	-13	-8.46	Horizontal
268.8	-53.55	1.62	17.02	-38.15	-13	-25.15	Vertical
161.4	-48.45	1.32	17.31	-32.46	-13	-19.46	Horizontal
Test Results for Mid Channel 1745MHz							
3490.0	-54.69	4.03	30.00	-28.72	-13	-15.72	Horizontal
3490.0	-45.01	4.03	30.00	-19.04	-13	-6.04	Vertical
5235.0	-50.71	5.25	35.86	-20.10	-13	-7.10	Vertical
5235.0	-53.63	5.25	35.86	-23.02	-13	-10.02	Horizontal
159.9	-45.60	1.45	15.17	-31.88	-13	-18.88	Vertical
172.1	-47.72	1.48	17.82	-31.38	-13	-18.38	Horizontal
Test Results for High Channel 1770MHz							
3540.0	-50.18	2.91	27.68	-25.41	-13	-12.41	Horizontal
3540.0	-49.99	2.91	27.68	-25.22	-13	-12.22	Vertical
5310.0	-50.63	5.26	35.86	-20.03	-13	-7.03	Vertical
5310.0	-53.99	5.26	35.86	-23.39	-13	-10.39	Horizontal
197.3	-53.59	1.76	16.38	-38.97	-13	-25.97	Vertical
158.5	-50.21	1.43	17.13	-34.51	-13	-21.51	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	12.8	0.006786	2.5
3.87	1880	13.3	0.007092	2.5
4.45	1880	13.5	0.007166	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1880	12.4	0.006581	2.5
Extreme (50C)	1880	11.3	0.006016	2.5
Extreme (40C)	1880	13.5	0.007157	2.5
Extreme (30C)	1880	13.5	0.007200	2.5
Extreme (10C)	1880	13.7	0.007301	2.5
Extreme (0C)	1880	11.8	0.006274	2.5
Extreme (-10C)	1880	13.1	0.006948	2.5
Extreme (-20C)	1880	14.1	0.007509	2.5
Extreme (-30C)	1880	15.0	0.007990	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	9.9	0.005253	2.5
3.87	1880	9.2	0.004885	2.5
4.45	1880	8.4	0.004453	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1880	9.5	0.005078	2.5
Extreme (50C)	1880	9.2	0.004886	2.5
Extreme (40C)	1880	8.4	0.004451	2.5
Extreme (30C)	1880	8.7	0.004643	2.5
Extreme (10C)	1880	9.3	0.004945	2.5
Extreme (0C)	1880	8.5	0.004515	2.5
Extreme (-10C)	1880	8.6	0.004578	2.5
Extreme (-20C)	1880	8.6	0.004552	2.5
Extreme (-30C)	1880	8.4	0.004450	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	8.6	0.004976	2.5
3.87	1732.5	9.0	0.005215	2.5
4.45	1732.5	8.9	0.005115	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1732.5	8.2	0.004737	2.5
Extreme (50C)	1732.5	9.3	0.005349	2.5
Extreme (40C)	1732.5	7.3	0.004220	2.5
Extreme (30C)	1732.5	5.4	0.003128	2.5
Extreme (10C)	1732.5	6.9	0.003962	2.5
Extreme (0C)	1732.5	9.6	0.005570	2.5
Extreme (-10C)	1732.5	8.1	0.004670	2.5
Extreme (-20C)	1732.5	6.6	0.003803	2.5
Extreme (-30C)	1732.5	8.8	0.005104	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	9.9	0.005723	2.5
3.87	1732.5	9.0	0.005192	2.5
4.45	1732.5	8.1	0.004660	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1732.5	9.6	0.005526	2.5
Extreme (50C)	1732.5	8.8	0.005086	2.5
Extreme (40C)	1732.5	7.9	0.004571	2.5
Extreme (30C)	1732.5	9.2	0.005311	2.5
Extreme (10C)	1732.5	9.3	0.005363	2.5
Extreme (0C)	1732.5	8.4	0.004827	2.5
Extreme (-10C)	1732.5	9.1	0.005275	2.5
Extreme (-20C)	1732.5	8.6	0.004963	2.5
Extreme (-30C)	1732.5	7.6	0.004407	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	5.7	0.006792	2.5
3.87	836.5	6.8	0.008077	2.5
4.45	836.5	4.3	0.005169	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	836.5	6.3	0.007535	2.5
Extreme (50C)	836.5	6.0	0.007222	2.5
Extreme (40C)	836.5	5.7	0.006871	2.5
Extreme (30C)	836.5	6.6	0.007910	2.5
Extreme (10C)	836.5	5.8	0.006944	2.5
Extreme (0C)	836.5	5.5	0.006624	2.5
Extreme (-10C)	836.5	5.9	0.007047	2.5
Extreme (-20C)	836.5	6.5	0.007768	2.5
Extreme (-30C)	836.5	6.7	0.008035	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	6.2	0.007433	2.5
3.87	836.5	6.4	0.007687	2.5
4.45	836.5	5.1	0.006051	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	836.5	6.1	0.007241	2.5
Extreme (50C)	836.5	6.4	0.007592	2.5
Extreme (40C)	836.5	5.9	0.007006	2.5
Extreme (30C)	836.5	6.2	0.007425	2.5
Extreme (10C)	836.5	5.8	0.006882	2.5
Extreme (0C)	836.5	4.8	0.005768	2.5
Extreme (-10C)	836.5	5.3	0.006291	2.5
Extreme (-20C)	836.5	5.7	0.006807	2.5
Extreme (-30C)	836.5	6.0	0.007118	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	10.5	0.004124	2.5
3.87	2535	9.2	0.003627	2.5
4.45	2535	8.5	0.003360	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	2535	9.0	0.003552	2.5
Extreme (50C)	2535	8.8	0.003454	2.5
Extreme (40C)	2535	8.8	0.003489	2.5
Extreme (30C)	2535	8.5	0.003361	2.5
Extreme (10C)	2535	7.9	0.003127	2.5
Extreme (0C)	2535	8.3	0.003288	2.5
Extreme (-10C)	2535	9.3	0.003650	2.5
Extreme (-20C)	2535	8.5	0.003347	2.5
Extreme (-30C)	2535	7.9	0.003128	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	6.7	0.002638	2.5
3.87	2535	6.5	0.002552	2.5
4.45	2535	6.2	0.002427	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	2535	6.7	0.002643	2.5
Extreme (50C)	2535	6.0	0.002382	2.5
Extreme (40C)	2535	5.6	0.002196	2.5
Extreme (30C)	2535	6.7	0.002629	2.5
Extreme (10C)	2535	5.5	0.002177	2.5
Extreme (0C)	2535	5.4	0.002133	2.5
Extreme (-10C)	2535	4.9	0.001933	2.5
Extreme (-20C)	2535	6.2	0.002435	2.5
Extreme (-30C)	2535	5.5	0.002177	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	8.9	0.012611	2.5
3.87	707.5	10.1	0.014234	2.5
4.45	707.5	8.3	0.011675	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	707.5	9.0	0.012656	2.5
Extreme (50C)	707.5	7.1	0.009967	2.5
Extreme (40C)	707.5	7.2	0.010229	2.5
Extreme (30C)	707.5	8.7	0.012247	2.5
Extreme (10C)	707.5	7.7	0.010831	2.5
Extreme (0C)	707.5	8.8	0.012462	2.5
Extreme (-10C)	707.5	8.3	0.011762	2.5
Extreme (-20C)	707.5	8.4	0.011927	2.5
Extreme (-30C)	707.5	8.0	0.011371	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	7.4	0.010530	2.5
3.87	707.5	8.0	0.011258	2.5
4.45	707.5	7.8	0.011016	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	707.5	9.3	0.013172	2.5
Extreme (50C)	707.5	8.6	0.012149	2.5
Extreme (40C)	707.5	9.0	0.012686	2.5
Extreme (30C)	707.5	7.5	0.010596	2.5
Extreme (10C)	707.5	8.5	0.011947	2.5
Extreme (0C)	707.5	7.0	0.009951	2.5
Extreme (-10C)	707.5	7.0	0.009915	2.5
Extreme (-20C)	707.5	9.2	0.012938	2.5
Extreme (-30C)	707.5	8.2	0.011562	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	9.9	0.013913	2.5
3.87	710.0	9.1	0.012833	2.5
4.45	710.0	8.4	0.011890	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	710.0	9.7	0.013625	2.5
Extreme (50C)	710.0	9.3	0.013107	2.5
Extreme (40C)	710.0	7.7	0.010891	2.5
Extreme (30C)	710.0	8.8	0.012379	2.5
Extreme (10C)	710.0	9.3	0.013060	2.5
Extreme (0C)	710.0	8.2	0.011595	2.5
Extreme (-10C)	710.0	9.4	0.013187	2.5
Extreme (-20C)	710.0	8.6	0.012169	2.5
Extreme (-30C)	710.0	8.3	0.011635	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	10.4	0.014680	2.5
3.87	710.0	9.2	0.012931	2.5
4.45	710.0	8.1	0.011412	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	710.0	9.1	0.012882	2.5
Extreme (50C)	710.0	8.7	0.012211	2.5
Extreme (40C)	710.0	8.2	0.011548	2.5
Extreme (30C)	710.0	8.8	0.012370	2.5
Extreme (10C)	710.0	7.9	0.011137	2.5
Extreme (0C)	710.0	8.1	0.011452	2.5
Extreme (-10C)	710.0	9.7	0.013671	2.5
Extreme (-20C)	710.0	8.8	0.012328	2.5
Extreme (-30C)	710.0	8.6	0.012138	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	6	0.003187	2.5
3.87	1882.5	8	0.004250	2.5
4.45	1882.5	14	0.007437	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1882.5	4.3	0.002280	2.5
Extreme (50C)	1882.5	9.1	0.004827	2.5
Extreme (40C)	1882.5	6.2	0.003269	2.5
Extreme (30C)	1882.5	6.0	0.003193	2.5
Extreme (10C)	1882.5	5.1	0.002684	2.5
Extreme (0C)	1882.5	8.5	0.004493	2.5
Extreme (-10C)	1882.5	1.7	0.000906	2.5
Extreme (-20C)	1882.5	2.0	0.001064	2.5
Extreme (-30C)	1882.5	6.5	0.003475	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	9.2	0.004861	2.5
3.87	1882.5	8.0	0.004233	2.5
4.45	1882.5	5.5	0.002918	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
Normal (25C)	1882.5	7.7	0.004094	2.5
Extreme (50C)	1882.5	5.8	0.003094	2.5
Extreme (40C)	1882.5	8.0	0.004255	2.5
Extreme (30C)	1882.5	1.4	0.000723	2.5
Extreme (10C)	1882.5	2.6	0.001400	2.5
Extreme (0C)	1882.5	6.6	0.003504	2.5
Extreme (-10C)	1882.5	5.6	0.002972	2.5
Extreme (-20C)	1882.5	7.2	0.003812	2.5
Extreme (-30C)	1882.5	6.5	0.003478	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	8.8	0.010726	2.5
3.87	819	5.4	0.006601	2.5
4.45	819	6.4	0.007780	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	8.1	0.009925	2.5
Extreme (50C)	819	1.5	0.001832	2.5
Extreme (40C)	819	2.5	0.003075	2.5
Extreme (30C)	819	6.9	0.008424	2.5
Extreme (10C)	819	5.6	0.006848	2.5
Extreme (0C)	819	7.0	0.008543	2.5
Extreme (-10C)	819	8.7	0.010631	2.5
Extreme (-20C)	819	6.5	0.007909	2.5
Extreme (-30C)	819	4.8	0.005806	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	2.2	0.002638	2.5
3.87	819	6.1	0.007503	2.5
4.45	819	5.7	0.006909	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	6.9	0.008375	2.5
Extreme (50C)	819	8.1	0.009929	2.5
Extreme (40C)	819	6.1	0.007462	2.5
Extreme (30C)	819	4.3	0.005298	2.5
Extreme (10C)	819	6.8	0.008313	2.5
Extreme (0C)	819	5.4	0.006601	2.5
Extreme (-10C)	819	8.9	0.010858	2.5
Extreme (-20C)	819	6.5	0.007920	2.5
Extreme (-30C)	819	7.2	0.008840	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 26B 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	8.3	0.009926	2.5
3.87	836.5	6.9	0.008233	2.5
4.45	836.5	8.7	0.010453	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	10.6	0.012685	2.5
Extreme (50C)	836.5	9.2	0.010940	2.5
Extreme (40C)	836.5	6.2	0.007376	2.5
Extreme (30C)	836.5	8.5	0.010156	2.5
Extreme (10C)	836.5	7.7	0.009256	2.5
Extreme (0C)	836.5	9.2	0.011018	2.5
Extreme (-10C)	836.5	1.4	0.001627	2.5
Extreme (-20C)	836.5	8.0	0.009582	2.5
Extreme (-30C)	836.5	7.1	0.008488	2.5

Band 26B 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	9.2	0.011042	2.5
3.87	836.5	11.6	0.013813	2.5
4.45	836.5	10.3	0.012344	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	6.6	0.007881	2.5
Extreme (50C)	836.5	8.9	0.010582	2.5
Extreme (40C)	836.5	7.9	0.009456	2.5
Extreme (30C)	836.5	7.8	0.009333	2.5
Extreme (10C)	836.5	6.4	0.007679	2.5
Extreme (0C)	836.5	5.5	0.006599	2.5
Extreme (-10C)	836.5	5.2	0.006267	2.5
Extreme (-20C)	836.5	3.9	0.011237	2.5
Extreme (-30C)	836.5	8.1	0.007292	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	13.0	0.00747	2.5
3.87	1745	14.2	0.00813	2.5
4.45	1745	13.4	0.00769	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 66 QPSK, (CH 132322 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	1745	7.8	0.004462	2.5
Extreme (50C)	1745	5.1	0.002932	2.5
Extreme (40C)	1745	5.7	0.003265	2.5
Extreme (30C)	1745	4.3	0.002486	2.5
Extreme (10C)	1745	6.8	0.003911	2.5
Extreme (0C)	1745	4.9	0.002797	2.5
Extreme (-10C)	1745	9.5	0.005451	2.5
Extreme (-20C)	1745	10.8	0.006170	2.5
Extreme (-30C)	1745	5.7	0.003281	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	12.5	0.007184	2.5
3.87	1745	13.5	0.007712	2.5
4.45	1745	13.6	0.007800	2.5

Frequency error vs. Temperature

Temperature [°C]	Frequency [MHz]	Frequency* Error[Hz]	Frequency Error[ppm]	Limit [ppm]
BAND 66 16QAM, (CH 132322 RB size 100 RB Offset 0 20MHz BANDWIDTH)				
Normal (25C)	1745	7.8	0.004482	2.5
Extreme (50C)	1745	4.5	0.002606	2.5
Extreme (40C)	1745	5.9	0.003379	2.5
Extreme (30C)	1745	4.7	0.002676	2.5
Extreme (10C)	1745	6.6	0.003769	2.5
Extreme (0C)	1745	4.9	0.002789	2.5
Extreme (-10C)	1745	9.3	0.005319	2.5
Extreme (-20C)	1745	10.8	0.006175	2.5
Extreme (-30C)	1745	6.0	0.003436	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.

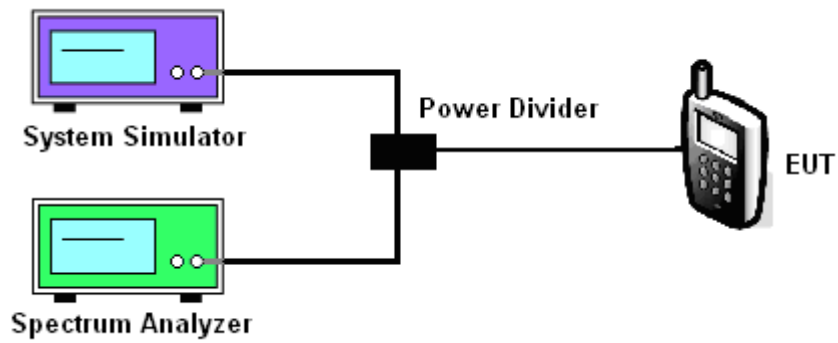
11.2 Measuring Instruments

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-----