

TEST REPORT

Report No.: SHE20090007-02AE

Date: 2021-04-07

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Applicant : Sonim Technologies, Inc.
Address of Applicant : 6836 Bee Cave Road, Building 1, Suite 279, Austin, Texas 78746, USA

Product Name : Rugged Smart Phone
Model No. : RS60

Sample No. : E20090007-01#01
E20090007-01#10
E20090007-01#13

FCC ID : WYPRS60
ISED Number : 8090A-RS60

Standards : FCC CFR47 Part 2
RSS-Gen
(Others refer to chapter 1.4)

Date of Receipt : 2020-09-29
Date of Test : 2020-10-09 ~ 2021-04-07
Date of Issue : 2021-04-07

Remark:

This report details the results of the testing carried out on one sample, the results contained in this report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report

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(Jennifer Zhou)

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(Authorized signatory: Guoyou Chi)

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1 General Information

1.1 Testing Laboratory

Company Name	ICAS Testing Technology Service (Shanghai) Co., Ltd.
Address	No.1298 Pingan Rd, Minhang District, Shanghai, China
Telephone	0086 21-51682999
Fax	0086 21-54711112
Homepage	www.icasiso.com

1.2 Details of Application

Company Name	Sonim Technologies, Inc.
Address	6836 Bee Cave Road, Building 1, Suite 279, Austin, Texas 78746, USA
Contact Person	Avena.Xu
Telephone	1-650-378-8100
Email	avena.xu@sonimtech.com

1.3 Details of EUT

Product Name	Rugged Smart Phone
Brand Name	Sonim
Model No.	RS60
FCC ID	WYPRS60
Mode of Operation	GSM/GPRS/EDGE 850/1900; WCDMA/HSDPA/HSUPA Band II/IV/V; LTE FDD Band 2/4/5/7/12/13/25/66; LTE TDD Band 38/41;
Modulation Type	GMSK for GSM/GPRS and 8PSK for EGPRS;QPSK for WCDMA; QPSK/16QAM for HSDPA/HSUPA/LTE;
Power Class	GSM/GPRS 850: 4 GSM/GPRS 1900: 1 EDGE 850/1900: E2 WCDMA/HSDPA/HSUPA Band II: 3 WCDMA/HSDPA/HSUPA Band IV: 3 WCDMA/HSDPA/HSUPA Band V: 3 LTE FDD Band 2: 3 LTE FDD Band 4: 3 LTE FDD Band 5: 3 LTE FDD Band 7: 3 LTE TDD Band 38: 3 LTE TDD Band 41: 3 LTE FDD Band 66: 3

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	LTE band 12/13/25: 1
Multislot Class	GPRS/EDGE: 12
Antenna Type	Internal Antenna
Antenna Gain	GSM/GPRS/EDGE 850: 1.45 dBi GSM/GPRS/EDGE 1900: 2.76 dBi WCDMA/HSDPA/HSUPA Band II: 2.76 dBi WCDMA/HSDPA/HSUPA Band IV: 2.51 dBi WCDMA/HSDPA/HSUPA Band V: 1.45 dBi LTE FDD Band 2: 2.76 dBi LTE FDD Band 4: 2.51 dBi LTE FDD Band 5: 1.45 dBi LTE FDD Band 7: 3.87 dBi LTE FDD Band 12: -0.02 dBi LTE FDD Band 13: 1.05 dBi LTE FDD Band 25: 2.76 dBi LTE FDD Band 66: 2.51 dBi LTE FDD Band 38: 3.87 dBi LTE FDD Band 41: 3.87 dBi
Extreme Temperature Range	-20°C ~ +55°C
Hardware version	V1.0
Software version	60.0.0-01-10.0.0-00.01.01
Test SW Version	BL410_R;BL410_E

1.4 Test Methodology

47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
47 CFR Part 22 Subpart H	Public Mobile Services
47 CFR Part 24 Subpart E	Personal Communications Services
47 CFR Part 27	Miscellaneous Wireless Communications Services
RSS-Gen	General Requirements and Information for the Certification of Radio Apparatus
RSS-130	Equipment Operating in the Frequency Bands 617-652 MHz, 663-698 MHz, 698-756 MHz and 777-787 MHz
RSS-132	Cellular Telephone Systems Operating in the Bands 824-849 MHz and 869-894 MHz
RSS-133	2 GHz Personal Communications Services
RSS-139	Advanced Wireless Services (AWS) Equipment Operating in the Bands

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		1710-1780 MHz and 2110-2180 MHz
RSS-199		Broadband Radio Service (BRS) Equipment Operating in the Band 2500–2690 MHz
ANSI/TIA-603-E 2016	March	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
ANSI C63.26:2015		American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
KDB 971168 D01 v03r01		Measurement Guidance for Certification of Licensed Digital Transmitters

Note(s):

All test items were verified and recorded according to the standards and without any addition/deviation/exclusion during the test.

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1.5 Test Verdict

No.	FCC Part No.	ISED Part No.	Description	Test Result	Verdict
1	2.1046	RSS-Gen 6.12 RSS-130 4.4 RSS-132 5.4 RSS-133 6.4 RSS-139 6.5 RSS-199 4.4	Conducted RF Output Power	Reporting Only Clause 5.1.1	PASS
2	2.1046 22.913 24.232 27.50	RSS-Gen 6.12 RSS-130 4.4 RSS-132 5.4 RSS-133 6.4 RSS-139 6.5 RSS-199 4.4	Effective (Isotropic) Radiated Power	Clause 5.1.1	PASS
3	2.1046 24.232(d) 27.50(d)	RSS-130 4.4 RSS-132 5.4 RSS-133 6.4 RSS-139 6.5 RSS-199 4.4	Peak to Average Ratio	Clause 5.1.2	PASS
4	2.1049 22.917 24.238 27.53	RSS-Gen 6.6	Occupied Bandwidth	Clause 5.1.3	PASS
5	2.1055 22.355 24.235 27.54	RSS-Gen 6.11 RSS-130 4.3 RSS-132 5.3 RSS-133 6.3 RSS-139 6.4 RSS-199 4.3	Frequency Stability	Clause 5.1.4	PASS
6	2.1051 22.917 24.238 27.53	RSS-Gen 6.13 RSS-130 4.6 RSS-132 5.5 RSS-133 6.5 RSS-139 6.6 RSS-199 4.5	Spurious Emission at Antenna Terminals	Clause 5.1.5	PASS
7	2.1051 22.917 24.238 27.53	RSS-130 4.6 RSS-132 5.5 RSS-133 6.5 RSS-139 6.6 RSS-199 4.5	Band Edge	Clause 5.1.6	PASS

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8	2.1051 22.917 24.238 27.53	RSS-Gen 6.13 RSS-130 4.6 RSS-132 5.5 RSS-133 6.5 RSS-139 6.6 RSS-199 4.5	Field Strength of Spurious Radiation	Clause 5.1.7	PASS
9	N/A	RSS-Gen 8.8	AC Power-Line Conducted Emissions	Clause 5.1.8	PASS
10	N/A	RSS-Gen 7 RSS-132 5.6 RSS-133 6.6	Receiver Spurious Emissions	Clause 5.1.9	PASS

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2 Test Condition

2.1 Environmental conditions

Temperature (°C)	18-25
Humidity (%RH)	40-65
Barometric Pressure (mbar)	960-1060

2.2 Test Environments

During the measurement, the environmental conditions were within the listed ranges:

Test Voltage	NV (Normal Voltage)	3.80 V
	LV (Low Voltage)	3.70 V
	HV (High Voltage)	4.35 V
Test Temperature	NT (Normal Temperature)	+25 °C
	LT (Low Temperature)	-20 °C
	HT (High Temperature)	+55 °C

2.3 Equipment List

Name of Equipment	Manufacturer	Model	Serial No.	Cal. Due Date
Spectrum Analyzer	Keysight	N9020A	MY59260184	2021-08-23
Spectrum Analyzer	Keysight	N9020B	MY59260184	2021-08-18
Spectrum Analyzer	Rohde & Schwarz	FSV40N	101450	2021-06-08
EMI Test Receiver	Rohde & Schwarz	ESPI3	100173	2021-06-08
EMI Test Receiver	Rohde & Schwarz	ESR 7	101911	2021-06-08
V-network	SCHWARZBECK	NSLK 8127	8127-902	2021-07-28
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	100687	2021-08-18
Wideband Radio Communication Tester	Rohde & Schwarz	CMW 500	150835	2021-08-18
DC Power Supply	ACPOWER	ADC-0800025-15	D215010003	2022-03-19
Temperature Chamber	SHKTEST	SHK-B101	20190819001	2021-12-22
Broadband Antenna	SCHWARZBECK	VULB9163	9163-1037	2021-06-08
Horn Antenna-18G	SCHWARZBECK	BBHA9120D	9120D-1775	2021-07-28
Loop Antenna	SCHWARZBECK	FMZB 1513	N/A	2021-11-22
Horn Antenna-40G	YINGLIAN	LB-180400-KF	N/A	2021-07-26
EMC chamber 9*6*6 (L*W*H)	CHANGNING	966	N/A	2023-06-08
Shielded Enclosure 8*5*4 (L*W*H)	CHANGNING	854	N/A	2021-06-08
Test Software	BL	BL410_E	N/A	N/A
Test Software	BL	BL410_R	N/A	N/A

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2.4 Measurement Uncertainty

FCC Part Section	Test Description	Uncertainty
2.1046	Conducted RF Output Power	$\pm 0.68\text{dB}$
2.1046 24.232(d) 27.50(d)	Peak to Average Ratio	$\pm 0.015\%$
2.1049 22.917 24.238 27.53	Occupied Bandwidth	$\pm 30\text{kHz}$
2.1055 22.355 24.235 27.54 90.213	Frequency Stability	$\pm 12\text{Hz}$
2.1051 22.917 24.238 27.53 90.691	Spurious Emission at Antenna Terminals	$\pm 2.56\text{dB}$
2.1051 22.917 24.238 27.53 90.691	Band Edge	$\pm 2.56\text{dB}$

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3 Test Set-up and Operation Modes

3.1 Details of Test Mode

Test Item	Test Mode	Test Channel		
		LCH	MCH	HCH
Effective (Isotropic) Radiated Power	GSM 850	v	v	v
	GSM 1900	v	v	v
	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EDGE 850	v	v	v
	EDGE 1900	v	v	v
	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v
	WCDMA Band V	v	v	v
	HSDPA Band II	v	v	v
	HSDPA Band IV	v	v	v
	HSDPA Band V	v	v	v
	HSUPA Band II	v	v	v
	HSUPA Band IV	v	v	v
	HSUPA Band V	v	v	v
Peak to Average Ratio	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v
	WCDMA Band V	v	v	v
Occupied Occupied	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EDGE 850	v	v	v
	EDGE 1900	v	v	v
	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v
	WCDMA Band V	v	v	v
Frequency Stability	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EDGE 850	v	v	v
	EDGE 1900	v	v	v
	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v

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	WCDMA Band V	v	v	v
Spurious Emission at Antenna Terminals	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EDGE 850	v	v	v
	EDGE 1900	v	v	v
	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v
	WCDMA Band V	v	v	v
Band Edge	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EDGE 850	v	v	v
	EDGE 1900	v	v	v
	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v
	WCDMA Band V	v	v	v
Field Strength of Spurious Radiation	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EDGE 850	v	v	v
	EDGE 1900	v	v	v
	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v
	WCDMA Band V	v	v	v
AC Power-Line Conducted Emissions	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EDGE 850	v	v	v
	EDGE 1900	v	v	v
	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v
	WCDMA Band V	v	v	v
Receiver Spurious Emissions	GPRS 850	v	v	v
	GPRS 1900	v	v	v
	EDGE 850	v	v	v
	EDGE 1900	v	v	v
	WCDMA Band II	v	v	v
	WCDMA Band IV	v	v	v
	WCDMA Band V	v	v	v

Note(s): The mark 'v' means that this configuration is chosen for testing.

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Test Item	LTE Band	Bandwidth (MHz)						Modulation Type		RB#			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	LCH	MCH	HCH
Effective (Isotropic) Radiated Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v	n	n	v	v	v	v	v	v	v	v
	7	n	n	v	v	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v	n	n	v	v	v	v	v	v	v	v
	13	n	n	v	v	n	n	v	v	v	v	v	v	v	v
	25	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	38	n	n	v	v	v	v	v	v	v	v	v	v	v	v
	41	n	n	v	v	v	v	v	v	v	v	v	v	v	v
	66	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak to Average Radio	2	--	--	--	--	--	v	v	v	v	--	v	v	v	v
	4	--	--	--	--	--	v	v	v	v	--	v	v	v	v
	5	--	--	--	v	n	n	v	v	v	--	v	v	v	v
	7	n	n	--	--	--	v	v	v	v	--	v	v	v	v
	12	n	n	--	v	n	n	v	v	v	--	v	v	v	v
	13	--	--	--	v	n	n	v	v	v	--	v	v	v	v
	25	--	--	--	--	--	v	v	v	v	--	v	v	v	v
	38	n	n	--	--	--	v	v	v	v	--	v	v	v	v
	41	n	n	--	--	--	v	v	v	v	--	v	v	v	v
	66	--	--	--	--	--	v	v	v	v	--	v	v	v	v
Occupied Bandwidth	2	v	v	v	v	v	v	v	v	--	--	v	v	v	v
	4	v	v	v	v	v	v	v	v	--	--	v	v	v	v
	5	v	v	v	v	n	n	v	v	--	--	v	v	v	v
	7	n	n	v	v	v	v	v	v	--	--	v	v	v	v
	12	v	v	v	v	n	n	v	v	--	--	v	v	v	v
	13	n	n	v	v	n	n	v	v	--	--	v	v	v	v
	25	v	v	v	v	v	v	v	v	--	--	v	v	v	v
	38	n	n	v	v	v	v	v	v	--	--	v	v	v	v
	41	n	n	v	v	v	v	v	v	--	--	v	v	v	v
	66	v	v	v	v	v	v	v	v	--	--	v	v	v	v
Frequency Stability	2	--	--	--	v	--	--	v	v	--	--	v	--	v	--
	4	--	--	--	v	--	--	v	v	--	--	v	--	v	--
	5	--	--	--	v	n	n	v	v	--	--	v	--	v	--
	7	n	n	--	v	--	--	v	v	--	--	v	--	v	--
	12	n	n	--	v	n	n	v	v	--	--	v	--	v	--
	13	--	--	--	v	n	n	v	v	--	--	v	--	v	--
	25	--	--	--	v	--	--	v	v	--	--	v	--	v	--

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	38	n	n	--	v	--	--	v	v	--	--	v	--	v	--
	41	n	n	--	v	--	--	v	v	--	--	v	--	v	--
	66	--	--	--	v	--	--	v	v	--	--	v	--	v	--
Spurious Emission at Antenna Terminals	2	v	v	v	v	v	v	v	v	v	--	--	v	v	v
	4	v	v	v	v	v	v	v	v	v	--	--	v	v	v
	5	v	v	v	v	n	n	v	v	v	--	--	v	v	v
	7	n	n	v	v	v	v	v	v	v	--	--	v	v	v
	12	v	v	v	v	n	n	v	v	v	--	--	v	v	v
	13	n	n	v	v	n	n	v	v	v	--	--	v	v	v
	25	v	v	v	v	v	v	v	v	v	--	--	v	v	v
	38	n	n	v	v	v	v	v	v	v	--	--	v	v	v
	41	n	n	v	v	v	v	v	v	v	--	--	v	v	v
66	v	v	v	v	v	v	v	v	v	--	--	v	v	v	
Band Edge	2	v	v	v	v	v	v	v	v	v	--	v	v	--	v
	4	v	v	v	v	v	v	v	v	v	--	v	v	--	v
	5	v	v	v	v	n	n	v	v	v	--	v	v	--	v
	7	n	n	v	v	v	v	v	v	v	--	v	v	--	v
	12	v	v	v	v	n	n	v	v	v	--	v	v	--	v
	13	n	n	v	v	n	n	v	v	v	--	v	v	--	v
	25	v	v	v	v	v	v	v	v	v	--	v	v	--	v
	38	n	n	v	v	v	v	v	v	v	--	v	v	--	v
	41	n	n	v	v	v	v	v	v	v	--	v	v	--	v
66	v	v	v	v	v	v	v	v	v	--	v	v	--	v	
Field Strength of Spurious Radiation	2	v	v	v	v	v	v	v	--	v	--	--	--	v	--
	4	v	v	v	v	v	v	v	--	v	--	--	--	v	--
	5	v	v	v	v	n	n	v	--	v	--	--	--	v	--
	7	n	n	v	v	v	v	v	--	v	--	--	--	v	--
	12	v	v	v	v	n	n	v	--	v	--	--	--	v	--
	13	n	n	v	v	n	n	v	--	v	--	--	--	v	--
	14	n	n	v	v	n	n	v	--	v	--	--	--	v	--
	25	v	v	v	v	v	v	v	--	v	--	--	--	v	--
	38	n	n	v	v	v	v	v	--	v	--	--	--	v	--
	41	n	n	v	v	v	v	v	--	v	--	--	--	v	--
66	v	v	v	v	v	v	v	--	v	--	--	--	v	--	

Note(s):

1. The mark 'v' means that this configuration is chosen for testing.
2. The mark 'n' means that this bandwidth is not supported.

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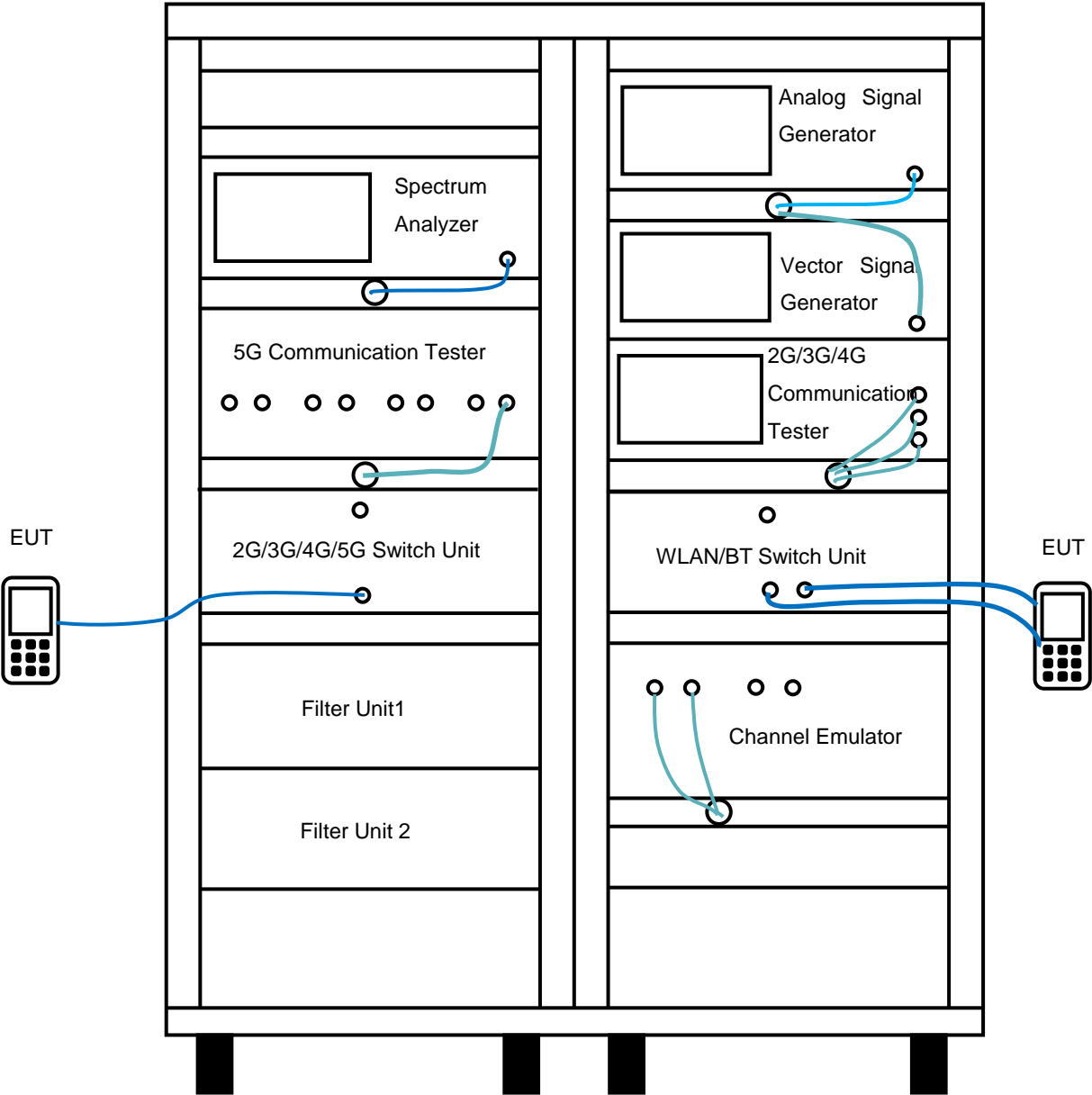
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3.2 Test Setup Diagram

Diagram of Measurement Equipment Configuration for Antenna Port Test



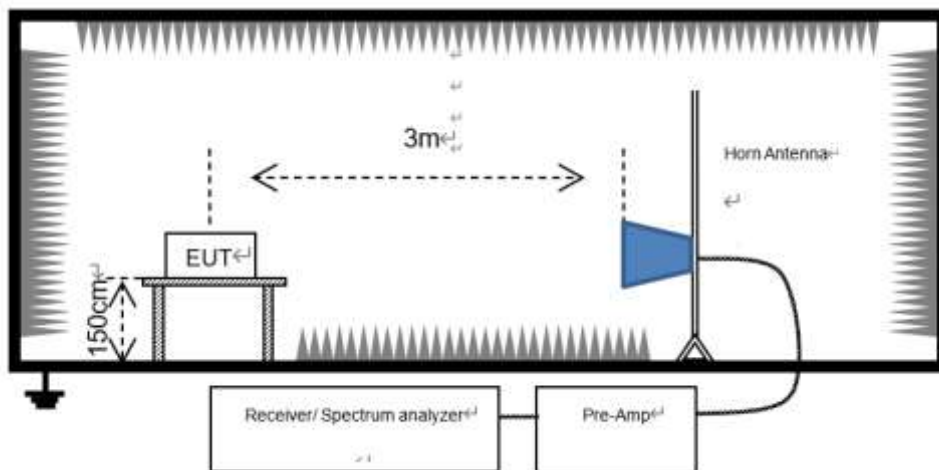
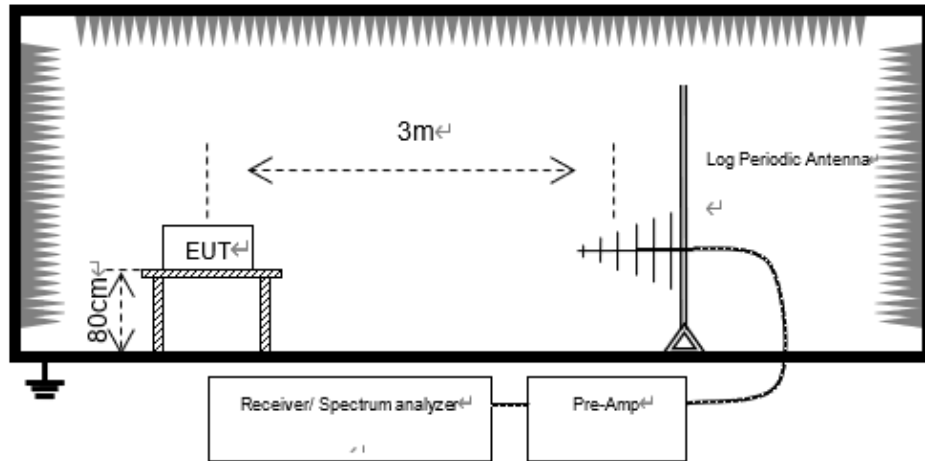
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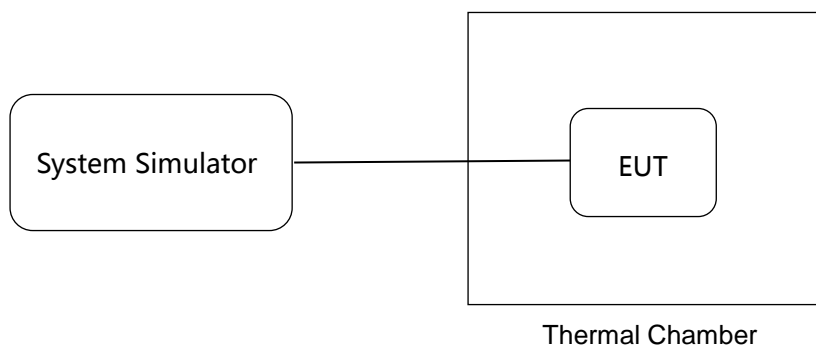
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Diagram of Measurement Configuration for Radiation Test



Note: Measurements below 1GHz are done with a table height of 0.8m and above 1GHz are done with a table height of 1.5m. In addition, there is RF absorbing material on the floor of the test site for above 1GHz measurement.

Diagram of Measurement Configuration for Frequency Stability



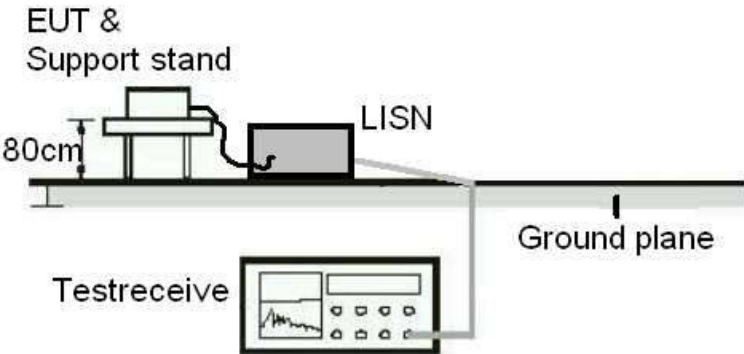
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Diagram of Measurement Equipment Configuration for Conduction Measurement



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4 Test Items

4.1 Transmitter Radiated Power (EIRP/ERP)

4.1.1 Limit

FCC § 2.1046(a) & 22.913(a) & 24.232(c) & 27.50(b) & 27.50(c) & 27.50(d) & 27.50(h)

According to FCC section 22.913(a) (2), the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 24.232(c), Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to FCC section 27.50(b) (10), portable stations (hand-held devices) transmitting in the 746-757MHz, 776-788MHz, and 805-806MHz bands are limited to 3 watts ERP.

FCC section 27.50(c) (10), portable stations (hand-held devices) in the 698-746MHz band are limited to 3 watts ERP.

FCC section 27.50(d) (4), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

Fixed, mobile, and portable (hand-held) stations operating in the 2000-2020 MHz band are limited to 2 watts EIRP.

And FCC section 27.50(h) (2), for mobile and other user stations, mobile stations are limited to 2 watts EIRP. All user stations are limited to 2 watts transmitter output power.

RSS-132 § 5.4 & RSS-133 § 6.4 & RSS-139 § 6.5 & RSS-199 § 4.4

According to RSS-132 § 5.4, the Effective Radiated Power (ERP) for mobile equipment shall not exceed 11.5 watts.

According to RSS-133 § 6.4 (SRSP 510), mobile stations and hand-held portables are limited to 2 watts maximum EIRP.

According to RSS-139 § 6.5, the EIRP for mobile and portable transmitters shall not exceed 1 watt.

According to RSS-199 § 4.4, for mobile subscriber equipment, the EIRP shall not exceed 2 watts.

4.1.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

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The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{EIRP} = P_T + G_T - L_C$$

$$\text{ERP} = \text{EIRP} - 2.15$$

Where:

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

The relevant equation for determining the ERP/EIRP from the radiated RF output power is:

$$\text{ERP/EIRP} = \text{SA Read Value} + \text{Correction Factor}$$

where:

ERP/EIRP = effective or equivalent radiated power in dBm

SA Read Value = measured transmitter power received by EMI receiver or spectrum analyzer in dBm

Correction Factor = total correction factor including cable loss in dB

During the test, the data of Correction Factor (dB) is added in the EMI receiver or spectrum analyzer, so SA Read Value (dBm) is the final values which contains the data of Correction Factor (dB).

4.1.3 Test Result

Please refer to 5.1.1.

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4.2 Peak-to-Average Ratio

4.2.1 Limit

FCC § 2.1046 & 24.232(d) & 27.50(d)

RSS-132 § 5.4 & RSS-133 § 6.4 & RSS-139 § 6.5 & RSS-199 § 4.4

In addition, when the transmitter power is measured in terms of average value, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

According to FCC section 24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with 24.232 (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of § 24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

For FCC section 24.232(e), peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an RMS equivalent voltage. The measurement results shall be properly adjusted for any instrument limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement for the emission in question over the full bandwidth of the channel.

According to FCC section 27.50(d), in measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

4.2.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

4.2.3 Test Result

Please refer to 5.1.2.

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4.3 Occupied Bandwidth

4.3.1 Limit

FCC § 2.1049

RSS-Gen § 6.6

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Many of the individual rule parts specify a relative OBW in lieu of the 99% OBW. In such cases, the OBW 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 by at least X dB below the transmitter power, where the value of X is typically specified as 26.

4.3.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

4.3.3 Test Result

Please refer to 5.1.3.

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4.4 Frequency Stability

4.4.1 Limit

FCC § 2.1055 & 22.355 & 24.235 & 27.54

RSS-Gen § 6.11 & RSS-132 § 5.3 & RSS-133 § 6.3 & RSS-139 § 6.4 & RSS-199 § 4.3

FCC § 2.1055

The frequency stability shall be measured with variation of ambient temperature as follows:

(1) The temperature is varied from -30°C to +50°C.

(2) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10°C through the range. The frequency stability shall be measured with variation of primary supply voltage as follows:

(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than carried battery equipment.

(2) For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating and point which shall be specified by the manufacture.

(3) The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

FCC § 22.355

Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in table as below.

Frequency range (MHz)	Base, fixed (ppm)	Mobile >3 watts (ppm)	Mobile ≤3 watts (ppm)
25 to 50	20.0	20.0	50.0
50 to 450	5.0	5.0	50.0
450 to 512	2.5	5.0	5.0
821 to 896	1.5	2.5	2.5
928 to 929	5.0	n/a	n/a
929 to 960	1.5	n/a	n/a
2110 to 2220	10.0	n/a	n/a

FCC § 24.235

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

FCC § 27.54

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

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4.4.2 Test Procedures

For Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

For Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

4.4.3 Test Result

Please refer to 5.1.4.

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4.5 Spurious Emission at Antenna Terminals

4.5.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(c) & 27.53(g) & 27.53(h) & 27.53(m)

RSS-Gen § 6.13 & RSS-132 § 5.5 & RSS-133 § 6.5 & RSS-139 § 6.6

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.

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.

FCC § 22.917(a) & 24.238(a)

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. This is calculated to be -13 dBm.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the 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, in accordance with the following:

- (1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;
- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;
- (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;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

- (6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz 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.

FCC § 27.53(h) (1)

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the

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power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

FCC § 27.53(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.

RSS-199 § 4.5

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

$40 + 10 \log P$ dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge.

$43 + 10 \log P$ dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,

$55 + 10 \log P$ dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).

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.

4.5.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. 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.
4. CMW500 is used to establish communication with the EUT, and its parameters are set to force the EUT transmitting at maximum output power.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from $43 + 10 \log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10 \log(P)] \text{ (dB)}$$

$$= [30 + 10 \log(P)] \text{ (dBm)} - [43 + 10 \log(P)] \text{ (dB)}$$

$$= -13 \text{ dBm.}$$

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11. For Band 7/41

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)

$= P(W) - [55 + 10\log(P)]$ (dB)

$= [30 + 10\log(P)]$ (dBm) - $[55 + 10\log(P)]$ (dB)

$= -25$ dBm.

4.5.3 Test Result

Please refer to 5.1.5.

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4.6 Band Edge

4.6.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(c) & 27.53(g) & 27.53(h) & 27.53(m)

RSS-132 § 5.5 & RSS-133 § 6.5 & RSS-139 § 6.6

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.

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.

FCC § 22.917(a) & 24.238(a)

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. This is calculated to be -13 dBm.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the 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, in accordance with the following:

- (1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;
- (2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;
- (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;
- (5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

- (6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz 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.

FCC § 27.53(h) (1)

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the

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power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

FCC § 27.53(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.

RSS-199 § 4.5

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

$40 + 10 \log P$ dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge.

$43 + 10 \log P$ dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,

$55 + 10 \log P$ dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).

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.

4.6.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW \geq 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

Example:

The limit line is derived from $43 + 10 \log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10 \log(P)] \text{ (dB)}$$

$$= [30 + 10 \log(P)] \text{ (dBm)} - [43 + 10 \log(P)] \text{ (dB)} = -13 \text{ dBm.}$$

9. For LTE Band 7/41, the other 40 dB, and 55 dB have additionally applied same calculation above.

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4.6.3 Test Result

Please refer to 5.1.6.

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4.7 Field Strength of Spurious Radiation

4.7.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(c) & 27.53(g) & 27.53(h) & 27.53(m)

RSS-Gen § 6.13 & RSS-132 § 5.5 & RSS-133 § 6.5 & RSS-139 § 6.6

FCC § 22.917(a) & 24.238(a)

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. This is calculated to be -13 dBm.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the 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, in accordance with the following:

(1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log(P)$ dB;

(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;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater.

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz 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.

FCC § 27.53(h) (1)

Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

FCC § 27.53(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

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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.

RSS-199 § 4.5

For mobile digital stations (BRS and EBS stations), the attenuation factor shall be not less than:

40+10logP dB (-10 dBm, 100 nW) on all frequencies between the channel edge and 5 MHz from the channel edge.

43+10logP dB (-13 dBm, 50 nW) on all frequencies between 5 MHz and X MHz from the channel edge,

55+10logP dB (-25 dBm, 3 nW) on all frequencies more than X MHz from the channel edge, where X is the greater of 6 MHz or the actual emission bandwidth (26 dB).

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.

4.7.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$
13. For Band 7/41: The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [55 + 10\log(P)] \text{ (dB)}$

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$$\begin{aligned} &= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)} \\ &= -25\text{dBm}. \end{aligned}$$

4.7.3 Test Result

Please refer to 5.1.7.

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4.8 AC Power-line Conducted Emissions

4.8.1 Limit

Limit

RSS-Gen § 8.8

For AC power-line conducted emissions, both quasi-peak and average detectors having the characteristics specified in CAN/CSA-CISPR 16-1-1:15 for the 150 kHz to 30 MHz frequency range shall be employed. Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 3, as measured using a $50 \mu\text{H} / 50 \Omega$ line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 3 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

4.8.2 Test Procedures

1. The test employing the methods of measurement described in the publication referenced in Section 3(b) (ANSI C63.4).
2. The EUT is connected to the power mains through a LISN which provides $50 \Omega / 50 \mu\text{H}$ of coupling impedance for the measuring instrument.
3. The test frequency range is from 150 kHz to 30 MHz.
4. The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels that are more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors.
5. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed.
6. Devices subject to Part 15 must be tested for all available U.S. voltages and frequencies (such as a nominal 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz) for which the device is capable of operation.
7. A device rated for 50/60 Hz operation need not be tested at both frequencies provided the radiated and line conducted emissions are the same at both frequencies.

4.8.3 Test Result

Please refer to 5.1.8

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4.9 Receiver Spurious Emissions

4.9.1 Limit

Limit

RSS-Gen § 7.3/4 & RSS-132 § 5.6 & RSS-133 § 6.6

For emissions at frequencies below 1 GHz, measurements shall be performed using a CISPR quasi-peak detector and the related measurement bandwidth. At frequencies above 1 GHz, measurements shall be performed using a linear average detector with a minimum resolution bandwidth of 1 MHz.

As an alternative to CISPR quasi-peak or average measurements, compliance with the emission limit can be demonstrated using measuring equipment employing a peak detector function properly adjusted for factors such as pulse desensitization, as required, with a measurement bandwidth equal to, or greater than, the applicable CISPR quasi-peak bandwidth or 1 MHz bandwidth, respectively.

Receiver Radiated Limits

Radiated emission measurements shall be performed with the receiver antenna connected to the receiver antenna ports. The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (e.g. local oscillator, intermediate or carrier frequency), or 30 MHz, whichever is higher, to at least five times the highest tunable or local oscillator frequency, whichever is higher, without exceeding 40 GHz.

Spurious emissions from receivers shall not exceed the radiated emissions limits shown in Table 2 below.

Table 2 –Receiver radiated emissions limits

Frequency (MHz)	Field Strength ($\mu\text{V/m}$ at 3 metres)
30 - 88	100
88 - 216	150
216 - 960	200
Above 960	500

Receiver Conducted Limits

If the receiver has a detachable antenna of known impedance, an antenna-conducted spurious emissions measurement is permitted as an alternative to radiated measurement. However, the radiated method is preferred.

The antenna-conducted test shall be performed with the antenna disconnected and with the receiver antenna port connected to a measuring instrument having equal input impedance to that specified for the antenna. The RF cable connecting the receiver under test to the measuring instrument shall also have the same impedance to that specified for the receiver's antenna.

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The spurious emissions from the receiver at any discrete frequency, measured at the antenna port by the antenna-conducted method, shall not exceed 2 nW in the frequency range 30-1000 MHz and 5 nW above 1 GHz.

4.9.2 Test Procedures

1. The test employing the methods of measurement described in the publication referenced in Section 3(b) (ANSI C63.4).
2. All Spurious Emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.
3. An initial pre-scan was performed in the chamber using the EMI Receiver in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph.
4. The EUT was measured by Bi-Log antenna with 2 orthogonal polarities.

4.9.3 Test Result

Please refer to 5.1.9

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5 Test Results

5.1.1 Transmitter Radiated Power (EIRP/ERP)

Conducted Power Measurement Results for GPRS/EDGE

Conducted Power (dBm)							
Band		GSM 850			GSM 1900		
Channel		128	190	251	512	661	810
GSM		33.72	33.80	33.71	30.16	29.93	29.97
GPRS	1 TX slot	30.31	30.34	30.23	26.74	26.25	26.37
	2 TX slot	30.26	30.29	30.18	26.68	26.18	26.31
	3 TX slot	30.21	30.25	30.14	26.63	26.13	26.26
	4 TX slot	30.17	30.21	30.10	26.59	26.09	26.22
EDGE	1 TX slot	23.49	23.76	23.46	21.61	21.03	20.92
	2 TX slot	23.44	23.62	23.36	21.69	20.96	21.02
	3 TX slot	23.55	23.56	23.38	21.43	20.85	20.80
	4 TX slot	23.46	23.51	23.54	21.50	20.90	20.91

Conducted Power Measurement Results for WCDMA/HSDPA/HSPUA

WCDMA Band II	Mode	Conducted Power (dBm)		
		Channel		
		Low	Mid	High
RMC	12.2 kbps	22.88	23.06	23.22
HSDPA	Sub - Test 1	21.95	22.09	22.31
	Sub - Test 2	21.96	22.12	22.33
	Sub - Test 3	21.47	21.61	21.84
	Sub - Test 4	21.47	21.62	21.83
HSUPA	Sub - Test 1	22.00	22.13	22.16
	Sub - Test 2	19.96	20.12	20.14
	Sub - Test 3	21.01	21.16	21.15
	Sub - Test 4	19.96	19.96	20.13
	Sub - Test 5	21.99	21.98	22.13

WCDMA Band IV	Mode	Conducted Power (dBm)		
		Channel		
		Low	Mid	High
RMC	12.2 kbps	22.90	22.86	22.79
HSDPA	Sub - Test 1	21.91	21.87	21.83

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	Sub - Test 2	21.93	21.87	21.82
	Sub - Test 3	21.43	21.37	21.33
	Sub - Test 4	21.40	21.35	21.32
HSUPA	Sub - Test 1	21.95	21.94	21.88
	Sub - Test 2	19.84	19.91	19.81
	Sub - Test 3	20.87	20.86	20.88
	Sub - Test 4	19.92	19.86	19.82
	Sub - Test 5	21.86	21.92	21.85

WCDMA Band V	Mode	Conducted Power (dBm)		
		Channel		
		Low	Mid	High
RMC	12.2 kbps	23.95	24.02	24.18
HSDPA	Sub - Test 1	22.95	23.03	23.16
	Sub - Test 2	23.04	23.02	23.17
	Sub - Test 3	22.55	22.53	22.66
	Sub - Test 4	22.54	22.54	22.65
HSUPA	Sub - Test 1	23.06	23.04	23.17
	Sub - Test 2	21.06	21.06	21.17
	Sub - Test 3	22.07	22.06	22.20
	Sub - Test 4	21.03	20.99	21.18
	Sub - Test 5	23.09	23.10	23.21

Conducted power measurement results for LTE

FDD LTE Band 2							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
		Channel	18700	18900	19100	18700	18900
20MHz	1 (RB_Pos:0)	23.27	23.46	23.37	22.77	22.83	22.84
	1 (RB_Pos:49)	23.16	23.29	23.25	22.63	22.22	22.78
	1 (RB_Pos:99)	23.53	23.39	23.29	22.92	22.74	22.72
	50 (RB_Pos:0)	22.01	22.25	22.47	21.05	21.20	21.43
	50 (RB_Pos:24)	22.15	22.22	22.41	21.12	21.19	21.36
	50 (RB_Pos:49)	22.21	22.21	22.34	21.19	21.23	21.32
	100 (RB_Pos:0)	22.07	22.20	22.40	21.13	21.37	21.41
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
		Channel	18675	18900	19125	18675	18900

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15MHz	1 (RB_Pos:0)	23.18	23.31	23.48	21.94	22.88	22.82
	1 (RB_Pos:37)	22.96	23.12	23.13	21.75	22.58	22.47
	1 (RB_Pos:74)	23.38	23.41	23.47	22.09	22.91	22.76
	36 (RB_Pos:0)	21.90	22.15	22.32	20.89	21.20	21.25
	36 (RB_Pos:18)	21.84	22.17	22.23	20.94	21.26	21.23
	36 (RB_Pos:37)	22.01	22.26	22.19	21.11	21.34	21.34
	75 (RB_Pos:0)	21.97	22.43	22.34	21.00	21.44	21.29
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18650	18900	19150	18650	18900	19150
10MHz	1 (RB_Pos:0)	23.14	23.63	23.47	22.06	23.15	22.61
	1 (RB_Pos:24)	22.93	23.33	23.29	21.87	22.90	22.23
	1 (RB_Pos:49)	23.25	23.60	23.50	22.16	23.08	22.58
	25 (RB_Pos:0)	22.06	22.51	22.40	21.06	21.57	21.52
	25 (RB_Pos:12)	22.03	22.46	22.48	21.06	21.55	21.60
	25 (RB_Pos:24)	22.06	22.50	22.46	21.15	21.59	21.59
	50 (RB_Pos:0)	22.01	22.52	22.43	20.99	21.51	21.45
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18625	18900	19175	18625	18900	19175
5MHz	1 (RB_Pos:0)	23.09	23.62	23.35	22.38	23.02	22.65
	1 (RB_Pos:12)	22.97	23.51	23.27	22.19	22.93	22.46
	1 (RB_Pos:24)	22.90	23.41	23.24	22.17	22.87	22.45
	12 (RB_Pos:0)	22.05	22.49	22.47	21.16	21.66	21.54
	12 (RB_Pos:6)	21.98	22.47	22.39	21.08	21.63	21.52
	12 (RB_Pos:11)	22.01	22.39	22.31	21.08	21.54	21.38
	25 (RB_Pos:0)	22.01	22.46	22.31	21.09	21.50	21.38
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18615	18900	19185	18615	18900	19185
3MHz	1 (RB_Pos:0)	22.96	23.45	23.35	21.90	23.03	22.43
	1 (RB_Pos:7)	22.93	23.48	23.30	21.91	23.00	22.40
	1 (RB_Pos:14)	22.91	23.34	23.21	21.79	22.92	22.29
	8 (RB_Pos:0)	22.01	22.41	22.31	21.17	21.62	21.45
	8 (RB_Pos:4)	22.00	22.46	22.29	21.13	21.70	21.41
	8 (RB_Pos:7)	22.00	22.40	22.29	21.11	21.59	21.36
	15 (RB_Pos:0)	22.00	22.40	22.32	21.02	21.54	21.30
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	18607	18900	19193	18607	18900	19193

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1.4MHz	1 (RB_Pos:0)	22.74	23.26	23.14	22.34	22.81	22.20
	1 (RB_Pos: 2)	22.76	23.32	23.20	22.39	22.86	22.19
	1 (RB_Pos:5)	22.87	23.22	23.07	22.31	22.79	22.33
	3 (RB_Pos:0)	22.82	23.22	23.18	22.14	22.51	22.45
	3 (RB_Pos:1)	22.84	23.24	23.23	22.03	22.50	22.49
	3 (RB_Pos:2)	22.83	23.14	23.18	22.03	22.37	22.42
	6 (RB_Pos:0)	21.96	22.30	22.17	21.15	21.32	21.50

FDD LTE Band 4							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20050	20175	20300	20050	20175	20300
20MHz	1 (RB_Pos:0)	22.82	22.80	22.73	22.24	22.20	22.16
	1 (RB_Pos:49)	22.73	22.69	22.45	22.06	22.15	21.92
	1 (RB_Pos:99)	22.81	22.69	22.79	22.23	22.06	22.11
	50 (RB_Pos:0)	21.72	21.61	21.61	20.76	20.65	20.64
	50 (RB_Pos:24)	21.67	21.69	21.60	20.70	20.74	20.57
	50 (RB_Pos:49)	21.73	21.66	21.73	20.78	20.64	20.72
	100 (RB_Pos:0)	21.75	21.65	21.62	20.74	20.69	20.64
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20025	20175	20325	20025	20175	20325
15MHz	1 (RB_Pos:0)	22.90	22.95	22.81	21.85	22.38	22.24
	1 (RB_Pos:37)	22.61	22.60	22.54	21.56	22.08	22.00
	1 (RB_Pos:74)	22.88	22.79	22.96	21.89	22.18	22.34
	36 (RB_Pos:0)	21.65	21.67	21.55	20.70	20.73	20.63
	36 (RB_Pos:18)	21.70	21.68	21.62	20.75	20.76	20.61
	36 (RB_Pos:37)	21.76	21.76	21.67	20.84	20.75	20.71
	75 (RB_Pos:0)	21.68	21.68	21.59	20.74	20.75	20.64
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20000	20175	20350	20000	20175	20350
10MHz	1 (RB_Pos:0)	23.06	23.05	22.84	21.97	22.43	21.90
	1 (RB_Pos:24)	22.75	22.79	22.64	21.68	22.19	21.64
	1 (RB_Pos:49)	22.98	22.91	22.91	21.96	22.33	21.91
	25 (RB_Pos:0)	21.91	21.88	21.64	20.93	20.93	20.69
	25 (RB_Pos:12)	21.89	21.84	21.65	20.89	20.89	20.79
	25 (RB_Pos:24)	21.87	21.80	21.64	20.90	20.82	20.74
	50 (RB_Pos:0)	21.86	21.90	21.73	20.88	20.92	20.71
Bandwidth	RB Set	Power (dBm)					

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(MHz)	Channel	QPSK			16QAM		
		19975	20175	20375	19975	20175	20375
5MHz	1 (RB_Pos:0)	22.86	22.93	22.8	22.38	22.06	21.89
	1 (RB_Pos:12)	22.77	22.82	22.66	22.32	21.86	21.75
	1 (RB_Pos:24)	22.78	22.70	22.62	22.31	21.85	21.8
	12 (RB_Pos:0)	21.82	21.85	21.61	21.04	20.92	20.73
	12 (RB_Pos:6)	21.83	21.83	21.62	21.02	20.88	20.67
	12 (RB_Pos:11)	21.85	21.79	21.71	21.08	20.87	20.76
	25 (RB_Pos:0)	21.82	21.75	21.61	20.93	20.8	20.63
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19965	20175	20385	19965	20175	20385
3MHz	1 (RB_Pos:0)	22.85	22.90	22.60	21.79	22.29	21.70
	1 (RB_Pos:7)	22.83	22.82	22.67	21.69	22.25	21.76
	1 (RB_Pos:14)	22.75	22.65	22.58	21.70	22.06	21.67
	8 (RB_Pos:0)	21.87	21.76	21.63	21.02	20.85	20.67
	8 (RB_Pos:4)	21.81	21.78	21.71	20.93	20.90	20.71
	8 (RB_Pos:7)	21.83	21.76	21.67	20.96	20.87	20.69
	15 (RB_Pos:0)	21.79	21.82	21.68	20.87	20.82	20.70
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	19957	20175	20393	19957	20175	20393
1.4MHz	1 (RB_Pos:0)	22.76	22.76	22.60	21.75	22.13	21.66
	1 (RB_Pos: 2)	22.72	22.80	22.66	21.91	22.20	21.77
	1 (RB_Pos:5)	22.71	22.76	22.61	21.81	22.15	21.66
	3 (RB_Pos:0)	22.72	22.80	22.72	21.76	21.95	21.79
	3 (RB_Pos:1)	22.78	22.80	22.75	21.90	21.98	21.77
	3 (RB_Pos:2)	22.75	22.81	22.68	21.89	21.92	21.72
	6 (RB_Pos:0)	21.74	21.80	21.71	20.98	20.72	20.84

FDD LTE Band 5							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20450	20525	20600	20450	20525	20600
10MHz	1 (RB_Pos:0)	24.02	23.94	24.11	23.31	23.41	23.10
	1 (RB_Pos:24)	23.76	23.71	23.82	23.04	23.20	22.89
	1 (RB_Pos:49)	24.14	24.05	24.11	23.23	23.50	23.07
	25 (RB_Pos:0)	22.92	22.91	22.95	21.95	21.95	22.09
	25 (RB_Pos:12)	23.00	22.91	22.97	22.00	21.94	22.10
	25 (RB_Pos:24)	22.99	22.89	22.92	21.94	21.97	22.07

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Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
		Channel	20425	20525	20625	20425	20525
	50 (RB_Pos:0)	23.02	22.93	22.99	21.93	21.94	22.07
5MHz	1 (RB_Pos:0)	23.96	23.78	23.99	23.10	23.02	23.41
	1 (RB_Pos:12)	23.85	23.75	24.00	23.00	22.99	23.42
	1 (RB_Pos:24)	23.79	23.74	23.81	23.03	22.99	23.31
	12 (RB_Pos:0)	22.94	22.90	22.90	21.97	21.97	22.09
	12 (RB_Pos:6)	22.85	22.86	22.88	21.91	21.93	21.98
	12 (RB_Pos:11)	22.90	22.86	22.80	21.90	21.92	21.92
	25 (RB_Pos:0)	22.83	22.81	22.90	21.83	21.91	21.97
3MHz	1 (RB_Pos:0)	23.94	23.78	23.90	22.80	23.30	22.90
	1 (RB_Pos:7)	23.98	23.75	23.84	22.83	23.23	22.88
	1 (RB_Pos:14)	23.80	23.74	23.81	22.64	23.24	22.80
	8 (RB_Pos:0)	22.95	22.90	22.88	22.05	21.99	22.01
	8 (RB_Pos:4)	23.01	22.85	22.82	22.13	21.98	21.94
	8 (RB_Pos:7)	22.95	22.88	22.89	22.07	22.01	21.94
	15 (RB_Pos:0)	22.97	22.84	22.81	21.96	21.91	21.85
1.4MHz	1 (RB_Pos:0)	23.76	23.76	23.82	22.98	23.20	22.83
	1 (RB_Pos: 2)	23.84	23.75	23.83	22.99	23.23	22.74
	1 (RB_Pos:5)	23.75	23.76	23.79	22.95	23.23	22.83
	3 (RB_Pos:0)	23.80	23.65	23.79	22.90	23.01	23.01
	3 (RB_Pos:1)	23.79	23.78	23.81	22.85	22.98	23.07
	3 (RB_Pos:2)	23.82	23.68	23.74	22.87	22.93	22.96
	6 (RB_Pos:0)	22.84	22.77	22.79	21.95	21.73	22.02

FDD LTE Band 7							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
		Channel	20850	21100	21350	20850	21100
20MHz	1 (RB_Pos:0)	21.58	22.70	22.54	21.15	22.02	21.91
	1 (RB_Pos:49)	22.69	22.75	22.60	22.31	22.08	22.07
	1 (RB_Pos:99)	22.59	22.64	22.60	22.15	22.01	22.08
	50 (RB_Pos:0)	21.81	21.67	21.73	20.82	20.78	20.70

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	50 (RB_Pos:24)	21.92	21.75	21.82	20.93	20.80	20.80
	50 (RB_Pos:49)	21.93	21.68	21.73	20.85	20.67	20.70
	100 (RB_Pos:0)	21.87	21.69	21.77	21.03	20.73	20.73
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20825	21100	21375	20825	21100	21375
15MHz	1 (RB_Pos:0)	21.67	22.57	22.60	20.57	21.97	21.98
	1 (RB_Pos:37)	22.26	22.61	22.71	21.21	22.10	22.06
	1 (RB_Pos:74)	22.57	22.62	22.63	21.78	22.11	22.03
	36 (RB_Pos:0)	21.81	21.68	21.72	20.87	20.80	20.69
	36 (RB_Pos:18)	21.83	21.70	21.89	20.95	20.86	20.82
	36 (RB_Pos:37)	21.79	21.66	21.76	20.93	20.75	20.74
	75 (RB_Pos:0)	21.91	21.67	21.73	20.87	20.75	20.76
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20800	21100	21400	20800	21100	21400
10MHz	1 (RB_Pos:0)	21.26	22.82	22.99	20.22	22.26	22.06
	1 (RB_Pos:24)	21.72	22.59	22.79	20.71	22.06	21.81
	1 (RB_Pos:49)	22.20	22.58	22.89	21.16	22.07	21.96
	25 (RB_Pos:0)	21.49	21.77	21.97	20.60	20.83	21.07
	25 (RB_Pos:12)	21.65	21.72	21.87	20.75	20.78	20.93
	25 (RB_Pos:24)	21.73	21.78	21.86	20.81	20.84	20.95
	50 (RB_Pos:0)	21.74	21.74	21.91	20.70	20.80	20.94
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	20775	21100	21425	20775	21100	21425
5MHz	1 (RB_Pos:0)	21.44	22.83	22.87	20.65	22.28	22.05
	1 (RB_Pos:12)	21.55	22.68	22.80	20.78	22.20	21.98
	1 (RB_Pos:24)	21.43	22.62	22.78	20.71	22.22	21.96
	12 (RB_Pos:0)	21.49	21.69	21.95	20.67	20.85	21.01
	12 (RB_Pos:6)	21.52	21.72	21.91	20.71	20.84	20.96
	12 (RB_Pos:11)	21.50	21.73	21.85	20.68	20.83	20.91
	25 (RB_Pos:0)	21.48	21.71	21.88	20.61	20.80	20.73

FDD LTE Band 12

Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23060	23095	23130	23060	23095	23130
10MHz	1 (RB_Pos:0)	24.29	24.27	24.15	23.25	23.21	23.52
	1 (RB_Pos:24)	23.91	23.84	23.92	22.83	22.90	23.31

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	1 (RB_Pos:49)	24.10	24.08	23.95	23.09	22.97	23.32
	25 (RB_Pos:0)	22.97	23.02	23.04	22.15	22.09	22.10
	25 (RB_Pos:12)	23.01	22.99	22.98	22.00	21.94	22.00
	25 (RB_Pos:24)	23.04	23.04	22.91	22.01	21.96	21.96
	50 (RB_Pos:0)	23.13	23.03	23.09	21.98	21.91	22.15
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23035	23095	23155	23035	23095	23155
5MHz	1 (RB_Pos:0)	23.95	24.01	23.75	23.14	23.51	22.97
	1 (RB_Pos:12)	23.89	23.93	23.78	23.09	23.42	22.94
	1 (RB_Pos:24)	23.84	23.95	23.64	23.10	23.43	22.84
	12 (RB_Pos:0)	23.01	23.00	22.80	22.19	22.09	21.87
	12 (RB_Pos:6)	22.92	22.92	22.75	21.99	22.01	21.71
	12 (RB_Pos:11)	22.87	22.85	22.67	21.90	22.04	21.69
	25 (RB_Pos:0)	22.85	22.90	22.78	21.87	21.94	21.78
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23025	23095	23165	23025	23095	23165
3MHz	1 (RB_Pos:0)	23.79	23.87	23.77	22.89	22.92	23.18
	1 (RB_Pos:7)	23.80	23.86	23.73	22.84	22.83	23.15
	1 (RB_Pos:14)	23.77	23.77	23.70	22.80	22.74	23.12
	8 (RB_Pos:0)	22.82	22.81	22.84	21.88	21.99	21.81
	8 (RB_Pos:4)	22.74	22.96	22.81	21.80	22.03	21.71
	8 (RB_Pos:7)	22.70	22.95	22.80	21.75	21.98	21.80
	15 (RB_Pos:0)	22.69	22.93	22.85	21.72	21.91	21.82
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23017	23095	23173	23017	23095	23173
1.4MHz	1 (RB_Pos:0)	23.75	23.73	23.71	22.84	23.22	22.78
	1 (RB_Pos: 2)	23.83	23.83	23.71	22.87	23.25	22.74
	1 (RB_Pos:5)	23.78	23.79	23.69	22.91	23.19	22.76
	3 (RB_Pos:0)	23.80	23.69	23.78	22.82	23.03	22.94
	3 (RB_Pos:1)	23.82	23.82	23.81	22.86	22.98	22.88
	3 (RB_Pos:2)	23.81	23.76	23.74	22.83	22.96	22.80
	6 (RB_Pos:0)	22.71	22.80	22.68	22.10	21.75	21.81

FDD LTE Band 13

Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	--	23230	--	--	23230	--

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10MHz	1 (RB_Pos:0)	--	24.02	--	--	23.84	--
	1 (RB_Pos:24)	--	23.77	--	--	23.20	--
	1 (RB_Pos:49)	--	23.93	--	--	23.55	--
	25 (RB_Pos:0)	--	22.89	--	--	21.93	--
	25 (RB_Pos:12)	--	22.89	--	--	21.94	--
	25 (RB_Pos:24)	--	22.84	--	--	21.89	--
	50 (RB_Pos:0)	--	22.88	--	--	21.83	--
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	23205	23230	23255	23205	23230	23255
5MHz	1 (RB_Pos:0)	23.82	23.80	23.88	22.89	22.92	23.41
	1 (RB_Pos:12)	23.80	23.83	23.83	22.87	22.99	23.29
	1 (RB_Pos:24)	23.80	23.75	23.77	22.89	22.94	23.24
	12 (RB_Pos:0)	22.79	22.79	22.78	21.86	21.94	21.95
	12 (RB_Pos:6)	22.76	22.80	22.74	21.81	21.95	21.96
	12 (RB_Pos:11)	22.82	22.77	22.75	21.88	21.86	21.91
	25 (RB_Pos:0)	22.82	22.85	22.83	21.80	21.90	21.90

FDD LTE Band 25							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26140	26365	26590	26140	26365	26590
20MHz	1 (RB_Pos:0)	22.83	23.11	23.04	22.37	22.51	22.47
	1 (RB_Pos:49)	22.79	23.04	23.15	22.42	22.41	22.51
	1 (RB_Pos:99)	22.77	22.75	22.83	22.27	22.13	22.22
	50 (RB_Pos:0)	21.85	21.96	22.13	20.88	20.94	21.09
	50 (RB_Pos:24)	21.87	21.99	22.19	20.94	20.96	21.24
	50 (RB_Pos:49)	21.77	21.90	22.04	20.86	20.90	21.03
	100 (RB_Pos:0)	21.75	21.83	21.64	20.84	21.01	20.71
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26115	26365	26615	26115	26365	26615
15MHz	1 (RB_Pos:0)	22.91	23.15	23.24	21.94	22.56	22.70
	1 (RB_Pos:37)	22.73	22.92	23.07	21.74	22.33	22.45
	1 (RB_Pos:74)	22.95	23.10	22.80	21.95	22.47	22.28
	36 (RB_Pos:0)	21.84	21.95	22.00	20.87	21.01	21.10
	36 (RB_Pos:18)	21.91	21.97	22.03	20.88	21.00	21.16
	36 (RB_Pos:37)	21.80	22.01	22.17	20.94	21.04	21.16
	75 (RB_Pos:0)	21.75	22.06	22.08	20.83	21.03	21.22

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Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26090	26365	26640	26090	26365	26640
10MHz	1 (RB_Pos:0)	23.16	23.28	23.41	22.14	22.73	22.48
	1 (RB_Pos:24)	23.06	23.12	23.29	22.04	22.55	22.30
	1 (RB_Pos:49)	23.04	23.32	22.48	22.05	22.67	21.59
	25 (RB_Pos:0)	22.04	22.18	22.35	21.13	21.21	21.36
	25 (RB_Pos:12)	22.06	22.16	22.21	21.06	21.24	21.32
	25 (RB_Pos:24)	22.07	22.10	22.23	21.07	21.20	21.43
	50 (RB_Pos:0)	22.13	22.22	22.32	21.10	21.23	21.35
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26065	26365	26665	26065	26365	26665
5MHz	1 (RB_Pos:0)	23.17	23.29	23.44	22.70	22.45	22.54
	1 (RB_Pos:12)	23.08	23.21	23.31	22.62	22.32	22.49
	1 (RB_Pos:24)	23.08	23.15	22.53	22.58	22.32	21.80
	12 (RB_Pos:0)	22.11	22.25	22.47	21.25	21.39	21.44
	12 (RB_Pos:6)	22.06	22.20	22.49	21.19	21.32	21.42
	12 (RB_Pos:11)	22.09	22.18	22.46	21.21	21.24	21.41
	25 (RB_Pos:0)	22.11	22.17	22.30	21.20	21.24	21.41
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26055	26365	26675	26055	26365	26675
3MHz	1 (RB_Pos:0)	23.10	23.22	23.27	22.54	22.25	22.20
	1 (RB_Pos:7)	23.01	23.16	23.21	22.45	22.16	22.21
	1 (RB_Pos:14)	23.07	23.12	22.63	22.40	22.12	21.65
	8 (RB_Pos:0)	22.08	22.13	22.27	21.17	21.21	21.45
	8 (RB_Pos:4)	22.13	22.19	22.32	21.18	21.21	21.50
	8 (RB_Pos:7)	22.08	22.12	22.29	21.12	21.12	21.45
	15 (RB_Pos:0)	22.07	22.20	22.29	21.13	21.09	21.33
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	26047	26365	26683	26047	26365	26683
1.4MHz	1 (RB_Pos:0)	23.00	23.10	23.10	22.03	22.19	22.51
	1 (RB_Pos: 2)	23.07	23.10	22.88	22.08	22.22	22.30
	1 (RB_Pos:5)	22.98	23.08	22.70	22.05	22.21	22.13
	3 (RB_Pos:0)	22.96	23.15	22.95	22.19	22.17	22.24
	3 (RB_Pos:1)	23.03	23.19	22.83	22.21	22.17	22.10
	3 (RB_Pos:2)	22.98	23.12	22.72	22.19	22.17	21.98
	6 (RB_Pos:0)	22.02	22.11	22.29	21.20	21.28	21.29

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FDD LTE Band 38							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	37850	38000	38150	37850	38000	38150
20MHz	1 (RB_Pos:0)	22.96	23.01	23.14	22.28	22.27	22.46
	1 (RB_Pos:49)	23.11	23.10	23.30	22.37	22.25	22.54
	1 (RB_Pos:99)	23.09	23.19	23.28	22.45	22.47	22.64
	50 (RB_Pos:0)	22.03	22.00	21.97	21.04	21.02	21.02
	50 (RB_Pos:24)	22.05	22.06	22.09	21.09	21.10	21.12
	50 (RB_Pos:49)	22.12	22.10	22.15	21.10	21.16	21.15
	100 (RB_Pos:0)	22.07	22.04	22.08	21.06	21.05	21.10
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	37825	38000	38175	37825	38000	38175
15MHz	1 (RB_Pos:0)	23.02	23.04	23.05	22.24	22.48	22.36
	1 (RB_Pos:37)	23.07	23.15	23.07	22.30	22.64	22.47
	1 (RB_Pos:74)	23.16	23.27	23.13	22.38	22.71	22.50
	36 (RB_Pos:0)	22.03	22.05	21.98	21.10	21.04	21.02
	36 (RB_Pos:18)	22.07	22.12	22.08	21.09	21.10	21.13
	36 (RB_Pos:37)	22.11	22.09	22.07	21.08	21.10	21.12
	75 (RB_Pos:0)	22.06	22.02	22.07	21.06	21.06	21.11
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	37800	38000	38200	37800	38000	38200
10MHz	1 (RB_Pos:0)	23.37	23.31	23.49	22.61	22.75	22.75
	1 (RB_Pos:24)	23.24	23.28	23.31	22.56	22.78	22.69
	1 (RB_Pos:49)	23.42	23.47	23.48	22.77	23.00	22.93
	25 (RB_Pos:0)	22.22	22.15	22.20	21.20	21.17	21.24
	25 (RB_Pos:12)	22.22	22.26	22.31	21.25	21.28	21.35
	25 (RB_Pos:24)	22.23	22.28	22.31	21.23	21.29	21.32
	50 (RB_Pos:0)	22.24	22.29	22.26	21.25	21.30	21.33
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	37775	38000	38225	37775	38000	38225
5MHz	1 (RB_Pos:0)	23.36	23.27	23.36	22.57	22.69	22.66
	1 (RB_Pos:12)	23.32	23.19	23.27	22.55	22.62	22.57
	1 (RB_Pos:24)	23.33	23.26	23.28	22.56	22.64	22.49
	12 (RB_Pos:0)	22.26	22.30	22.21	21.26	21.40	21.28

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	12 (RB_Pos:6)	22.20	22.26	22.29	21.23	21.37	21.35
	12 (RB_Pos:11)	22.22	22.12	22.30	21.21	21.28	21.30
	25 (RB_Pos:0)	22.24	22.22	22.31	21.26	21.32	21.29

FDD LTE Band 41							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	39750	40620	41490	39750	40620	41490
20MHz	1 (RB_Pos:0)	24.10	23.93	24.15	24.35	24.25	24.49
	1 (RB_Pos:49)	24.30	24.09	24.42	24.58	24.39	24.74
	1 (RB_Pos:99)	23.67	23.39	23.86	24.04	23.73	24.23
	50 (RB_Pos:0)	24.24	24.11	24.38	24.16	24.06	24.40
	50 (RB_Pos:24)	24.29	24.09	24.44	24.27	24.11	24.45
	50 (RB_Pos:49)	24.18	23.93	24.40	24.18	23.88	24.38
	100 (RB_Pos:0)	24.19	24.02	24.34	24.24	24.06	24.40
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	39725	40620	41515	39725	40620	41515
15MHz	1 (RB_Pos:0)	23.73	23.62	23.93	24.02	23.92	24.26
	1 (RB_Pos:37)	24.12	23.92	24.30	24.46	24.24	24.63
	1 (RB_Pos:74)	23.56	23.27	23.74	23.90	23.62	24.07
	36 (RB_Pos:0)	24.23	24.00	24.40	24.25	24.06	24.45
	36 (RB_Pos:18)	24.36	24.14	24.56	24.40	24.16	24.59
	36 (RB_Pos:37)	24.39	24.08	24.50	24.41	24.13	24.55
	75 (RB_Pos:0)	24.33	24.12	24.48	24.39	24.17	24.58
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	39700	40620	41540	39700	40620	41540
10MHz	1 (RB_Pos:0)	23.69	23.59	24.03	23.99	23.85	24.31
	1 (RB_Pos:24)	23.75	23.57	24.06	24.08	23.88	24.37
	1 (RB_Pos:49)	23.65	23.46	24.07	24.04	23.80	24.36
	25 (RB_Pos:0)	23.79	23.59	24.17	23.80	23.62	24.24
	25 (RB_Pos:12)	23.87	23.69	24.14	23.88	23.73	24.24
	25 (RB_Pos:24)	23.81	23.68	24.16	23.82	23.69	24.20
	50 (RB_Pos:0)	23.74	23.63	24.10	23.77	23.69	24.21
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	39675	40620	41565	39675	40620	41565
5MHz	1 (RB_Pos:0)	23.90	23.60	21.45	24.23	23.88	24.36

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	1 (RB_Pos:12)	23.80	23.60	21.36	24.15	23.83	24.41
	1 (RB_Pos:24)	23.76	23.57	21.37	24.12	23.80	24.33
	12 (RB_Pos:0)	23.96	23.65	23.63	24.00	23.74	24.19
	12 (RB_Pos:6)	23.90	23.63	23.54	24.03	23.70	24.23
	12 (RB_Pos:11)	23.90	23.63	24.18	23.96	23.65	24.18
	25 (RB_Pos:0)	23.90	23.60	24.11	23.98	23.68	24.22

FDD LTE Band 66							
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	132072	132322	132572	132072	132322	132572
20MHz	1 (RB_Pos:0)	23.23	23.09	22.91	22.67	22.49	22.25
	1 (RB_Pos:49)	21.45	21.14	21.13	20.78	20.57	20.52
	1 (RB_Pos:99)	22.93	22.67	22.65	22.34	22.04	22.09
	50 (RB_Pos:0)	20.97	20.75	20.77	19.84	19.72	19.74
	50 (RB_Pos:24)	20.54	20.29	20.36	19.53	19.29	19.37
	50 (RB_Pos:49)	20.92	20.63	20.66	19.98	19.71	19.66
	100 (RB_Pos:0)	20.99	20.69	20.85	19.91	19.69	19.74
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	132047	132322	132597	132047	132322	132597
15MHz	1 (RB_Pos:0)	22.44	22.26	22.19	21.41	21.63	21.56
	1 (RB_Pos:37)	21.35	21.07	21.11	20.33	20.45	20.50
	1 (RB_Pos:74)	22.25	21.97	21.96	21.20	21.37	21.44
	36 (RB_Pos:0)	20.85	20.55	20.44	19.84	19.56	19.53
	36 (RB_Pos:18)	20.52	20.23	20.20	19.55	19.26	19.20
	36 (RB_Pos:37)	20.67	20.48	20.44	19.78	19.45	19.38
	75 (RB_Pos:0)	20.72	20.42	20.42	19.71	19.51	19.48
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	132022	132322	132622	132022	132322	132622
10MHz	1 (RB_Pos:0)	23.08	23.11	22.99	22.03	22.45	22.04
	1 (RB_Pos:24)	22.67	22.70	22.57	21.64	22.04	21.63
	1 (RB_Pos:49)	22.88	23.00	22.95	21.75	22.31	21.95
	25 (RB_Pos:0)	21.76	21.84	21.74	20.82	20.86	20.72
	25 (RB_Pos:12)	21.73	21.68	21.57	20.79	20.76	20.70
	25 (RB_Pos:24)	21.76	21.82	21.72	20.79	20.84	20.80
	50 (RB_Pos:0)	21.86	21.77	21.70	20.85	20.83	20.70
Bandwidth	RB Set	Power (dBm)					

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(MHz)	Channel	QPSK			16QAM		
		131997	132322	132647	131997	132322	132647
5MHz	1 (RB_Pos:0)	22.85	22.85	22.65	21.98	22.37	21.86
	1 (RB_Pos:12)	22.70	22.67	22.63	21.80	22.20	21.75
	1 (RB_Pos:24)	22.64	22.76	22.62	21.81	22.20	21.78
	12 (RB_Pos:0)	21.79	21.68	21.76	20.90	20.87	20.80
	12 (RB_Pos:6)	21.70	21.69	21.61	20.81	20.84	20.72
	12 (RB_Pos:11)	21.65	21.62	21.61	20.75	20.80	20.64
	25 (RB_Pos:0)	21.67	21.70	21.63	20.70	20.75	20.66
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	131987	132322	132657	131987	132322	132657
3MHz	1 (RB_Pos:0)	22.64	22.70	22.61	21.64	22.01	21.70
	1 (RB_Pos:7)	22.70	22.67	22.64	21.67	22.04	21.63
	1 (RB_Pos:14)	22.59	22.59	22.53	21.56	21.97	21.59
	8 (RB_Pos:0)	21.77	21.65	21.56	20.85	20.76	20.68
	8 (RB_Pos:4)	21.80	21.71	21.63	20.85	20.74	20.64
	8 (RB_Pos:7)	21.76	21.63	21.59	20.81	20.66	20.63
	15 (RB_Pos:0)	21.77	21.67	21.60	20.78	20.68	20.56
Bandwidth (MHz)	RB Set	Power (dBm)					
		QPSK			16QAM		
	Channel	131979	132322	132665	131979	132322	132665
1.4MHz	1 (RB_Pos:0)	22.69	22.59	22.55	21.79	21.99	21.63
	1 (RB_Pos: 2)	22.69	22.66	22.61	21.80	22.01	21.68
	1 (RB_Pos:5)	22.67	22.64	22.57	21.79	21.97	21.67
	3 (RB_Pos:0)	22.63	22.65	22.63	21.76	21.82	21.74
	3 (RB_Pos:1)	22.70	22.65	22.60	21.71	21.86	21.81
	3 (RB_Pos:2)	22.63	22.60	22.57	21.69	21.81	21.71
	6 (RB_Pos:0)	21.66	21.64	21.52	20.81	20.55	20.78

Effective (Isotropic) Radiated Power Measurement Results for GSM/GPRS/EDGE

Test Band	Channel	Measured ERP				Limit (W)	Verdict
		SA Read Value (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)		
GSM 850	Low	18.73	9.83	28.56	0.72	7	PASS
	Middle	18.74	9.83	28.57	0.72		PASS
	High	18.52	9.83	28.35	0.68		PASS
GPRS	Low	15.29	9.83	25.12	0.33		PASS

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850	Middle	15.43	9.83	25.26	0.34		PASS
	High	14.97	9.83	24.80	0.30		PASS
EDGE 850	Low	8.53	9.83	18.36	0.07		PASS
	Middle	8.87	9.83	18.70	0.07		PASS
	High	8.32	9.83	18.15	0.07		PASS

Note(s): For GPRS and EGPRS mode, all the slots were tested and just the worst data were recorded in this table

Test Band	Channel	Measured EIRP				Limit (W)	Verdict
		SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
GSM 1900	Low	11.45	17.8	29.25	0.84	2	PASS
	Middle	11.35	17.8	29.15	0.82		PASS
	High	11.4	17.8	29.20	0.83		PASS
GPRS 1900	Low	7.92	17.8	25.72	0.37		PASS
	Middle	7.45	17.8	25.25	0.33		PASS
	High	7.78	17.8	25.58	0.36		PASS
EDGE 1900	Low	2.84	17.8	20.64	0.12		PASS
	Middle	2.43	17.8	20.23	0.11		PASS
	High	2.11	17.8	19.91	0.10		PASS

Effective (Isotropic) Radiated Power Measurement Results for WCDMA/HSDPA/HSUPA

Test Band	Channel	Measured EIRP				Limit (W)	Verdict
		SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
WCDMA Band II	Low	0.11	17.8	17.91	0.06	2	PASS
	Middle	0.53	17.8	18.33	0.07		PASS
	High	0.63	17.8	18.43	0.07		PASS
HSDPA Band II	Low	-0.59	17.8	17.21	0.05		PASS
	Middle	-0.34	17.8	17.46	0.06		PASS
	High	-0.22	17.8	17.58	0.06		PASS
HSUPA Band II	Low	-0.69	17.8	17.11	0.05		PASS
	Middle	-0.69	17.8	17.11	0.05		PASS
	High	-0.53	17.8	17.27	0.05		PASS

Test Band	Channel	Measured EIRP				Limit (W)	Verdict
		SA Read Value	Correction	EIRP	EIRP		

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		(dBm)	Factor (dB)	(dBm)	(W)		
WCDMA Band IV	Low	4.22	14.4	18.62	0.07	1	PASS
	Middle	4.14	14.4	18.54	0.07		PASS
	High	3.96	14.4	18.36	0.07		PASS
HSDPA Band IV	Low	3.22	14.4	17.62	0.06		PASS
	Middle	3.27	14.4	17.67	0.06		PASS
	High	2.99	14.4	17.39	0.05		PASS
HSUPA Band IV	Low	3.43	14.4	17.83	0.06		PASS
	Middle	3.40	14.4	17.80	0.06		PASS
	High	3.23	14.4	17.63	0.06		PASS

Test Band	Channel	Measured ERP				Limit (W)	Verdict
		SA Read Value (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)		
WCDMA Band V	Low	11.62	9.83	21.45	0.14	7	PASS
	Middle	12.14	9.83	21.97	0.16		PASS
	High	12.11	9.83	21.94	0.16		PASS
HSDPA Band V	Low	10.92	9.83	20.75	0.12		PASS
	Middle	10.84	9.83	20.67	0.12		PASS
	High	10.93	9.83	20.76	0.12		PASS
HSUPA Band V	Low	11.08	9.83	20.91	0.12		PASS
	Middle	10.82	9.83	20.65	0.12		PASS
	High	11.33	9.83	21.16	0.13		PASS

Note(s):

For the HSDPA and HSUPA mode, all the subtests were tested and just the worst data were recorded in this table.

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Effective (Isotropic) Radiated Power Measurement Results for LTE

FDD LTE Band 2									
Test BW	CH	Modul.	RB Set (Size#Offset)	Measured EIRP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
1.4 MHz	Low	QPSK	RB1#0	0.15	17.8	17.95	0.06	2	PASS
			RB6#0	-0.94	17.8	16.86	0.05	2	PASS
		16QAM	RB1#0	-0.61	17.8	17.19	0.05	2	PASS
			RB6#0	-1.60	17.8	16.20	0.04	2	PASS
	Middle	QPSK	RB1#0	0.50	17.8	18.30	0.07	2	PASS
			RB6#0	-0.34	17.8	17.46	0.06	2	PASS
		16QAM	RB1#0	0.22	17.8	18.02	0.06	2	PASS
			RB6#0	-1.49	17.8	16.31	0.04	2	PASS
	High	QPSK	RB1#0	0.34	17.8	18.14	0.07	2	PASS
			RB6#0	-0.65	17.8	17.15	0.05	2	PASS
		16QAM	RB1#0	-0.61	17.8	17.19	0.05	2	PASS
			RB6#0	-1.28	17.8	16.52	0.04	2	PASS
3 MHz	Low	QPSK	RB1#0	0.49	17.8	18.29	0.07	2	PASS
			RB15#0	-0.92	17.8	16.88	0.05	2	PASS
		16QAM	RB1#0	-0.75	17.8	17.05	0.05	2	PASS
			RB15#0	-1.91	17.8	15.89	0.04	2	PASS
	Middle	QPSK	RB1#0	0.85	17.8	18.65	0.07	2	PASS
			RB15#0	-0.16	17.8	17.64	0.06	2	PASS
		16QAM	RB1#0	0.42	17.8	18.22	0.07	2	PASS
			RB15#0	-1.09	17.8	16.71	0.05	2	PASS
	High	QPSK	RB1#0	0.68	17.8	18.48	0.07	2	PASS
			RB15#0	-0.22	17.8	17.58	0.06	2	PASS
		16QAM	RB1#0	-0.12	17.8	17.68	0.06	2	PASS
			RB15#0	-1.55	17.8	16.25	0.04	2	PASS
5 MHz	Low	QPSK	RB1#0	0.43	17.8	18.23	0.07	2	PASS
			RB25#0	-0.90	17.8	16.90	0.05	2	PASS
		16QAM	RB1#0	-0.38	17.8	17.42	0.06	2	PASS
			RB25#0	-1.72	17.8	16.08	0.04	2	PASS
	Middle	QPSK	RB1#0	0.73	17.8	18.53	0.07	2	PASS
			RB25#0	-0.44	17.8	17.36	0.05	2	PASS
		16QAM	RB1#0	0.39	17.8	18.19	0.07	2	PASS
			RB25#0	-1.42	17.8	16.38	0.04	2	PASS
	High	QPSK	RB1#0	0.80	17.8	18.60	0.07	2	PASS
			RB25#0	-0.27	17.8	17.53	0.06	2	PASS

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		16QAM	RB1#0	0.14	17.8	17.94	0.06	2	PASS
			RB25#0	-1.56	17.8	16.24	0.04	2	PASS
10 MHz	Low	QPSK	RB1#0	0.43	17.8	18.23	0.07	2	PASS
			RB50#0	-0.62	17.8	17.18	0.05	2	PASS
		16QAM	RB1#0	-0.75	17.8	17.05	0.05	2	PASS
			RB50#0	-1.92	17.8	15.88	0.04	2	PASS
	Middle	QPSK	RB1#0	0.75	17.8	18.55	0.07	2	PASS
			RB50#0	-0.29	17.8	17.51	0.06	2	PASS
		16QAM	RB1#0	0.56	17.8	18.36	0.07	2	PASS
			RB50#0	-0.97	17.8	16.83	0.05	2	PASS
	High	QPSK	RB1#0	0.57	17.8	18.37	0.07	2	PASS
			RB50#0	-0.06	17.8	17.74	0.06	2	PASS
		16QAM	RB1#0	-0.33	17.8	17.47	0.06	2	PASS
			RB50#0	-1.29	17.8	16.51	0.04	2	PASS
15 MHz	Low	QPSK	RB1#0	0.63	17.8	18.43	0.07	2	PASS
			RB75#0	-0.48	17.8	17.32	0.05	2	PASS
		16QAM	RB1#0	-0.58	17.8	17.22	0.05	2	PASS
			RB75#0	-1.64	17.8	16.16	0.04	2	PASS
	Middle	QPSK	RB1#0	0.51	17.8	18.31	0.07	2	PASS
			RB75#0	-0.11	17.8	17.69	0.06	2	PASS
		16QAM	RB1#0	-0.06	17.8	17.74	0.06	2	PASS
			RB75#0	-1.28	17.8	16.52	0.04	2	PASS
	High	QPSK	RB1#0	0.84	17.8	18.64	0.07	2	PASS
			RB75#0	-0.47	17.8	17.33	0.05	2	PASS
		16QAM	RB1#0	-0.04	17.8	17.76	0.06	2	PASS
			RB75#0	-1.58	17.8	16.22	0.04	2	PASS
20MHz	Low	QPSK	RB1#0	0.76	17.8	18.56	0.07	2	PASS
			RB100#0	-0.76	17.8	17.04	0.05	2	PASS
		16QAM	RB1#0	0.05	17.8	17.85	0.06	2	PASS
			RB100#0	-1.40	17.8	16.40	0.04	2	PASS
	Middle	QPSK	RB1#0	0.64	17.8	18.44	0.07	2	PASS
			RB100#0	-0.35	17.8	17.45	0.06	2	PASS
		16QAM	RB1#0	0.11	17.8	17.91	0.06	2	PASS
			RB100#0	-1.28	17.8	16.52	0.04	2	PASS
	High	QPSK	RB1#0	0.65	17.8	18.45	0.07	2	PASS
			RB100#0	-0.19	17.8	17.61	0.06	2	PASS
		16QAM	RB1#0	0.27	17.8	18.07	0.06	2	PASS
			RB100#0	-1.36	17.8	16.44	0.04	2	PASS

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FDD LTE Band 4									
Test BW	CH	Modul.	RB Set (Size#Offset)	Measured EIRP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
1.4 MHz	Low	QPSK	RB1#0	6.54	14.4	20.94	0.12	1	PASS
			RB6#0	5.55	14.4	19.95	0.10	1	PASS
		16QAM	RB1#0	5.87	14.4	20.27	0.11	1	PASS
			RB6#0	4.93	14.4	19.33	0.09	1	PASS
	Middle	QPSK	RB1#0	6.44	14.4	20.84	0.12	1	PASS
			RB6#0	5.66	14.4	20.06	0.10	1	PASS
		16QAM	RB1#0	6.16	14.4	20.56	0.11	1	PASS
			RB6#0	4.52	14.4	18.92	0.08	1	PASS
	High	QPSK	RB1#0	6.64	14.4	21.04	0.13	1	PASS
			RB6#0	5.70	14.4	20.10	0.10	1	PASS
		16QAM	RB1#0	5.52	14.4	19.92	0.10	1	PASS
			RB6#0	4.66	14.4	19.06	0.08	1	PASS
3 MHz	Low	QPSK	RB1#0	6.54	14.4	20.94	0.12	1	PASS
			RB15#0	5.74	14.4	20.14	0.10	1	PASS
		16QAM	RB1#0	5.92	14.4	20.32	0.11	1	PASS
			RB15#0	4.79	14.4	19.19	0.08	1	PASS
	Middle	QPSK	RB1#0	6.81	14.4	21.21	0.13	1	PASS
			RB15#0	5.55	14.4	19.95	0.10	1	PASS
		16QAM	RB1#0	6.15	14.4	20.55	0.11	1	PASS
			RB15#0	4.90	14.4	19.30	0.09	1	PASS
	High	QPSK	RB1#0	6.61	14.4	21.01	0.13	1	PASS
			RB15#0	5.49	14.4	19.89	0.10	1	PASS
		16QAM	RB1#0	5.48	14.4	19.88	0.10	1	PASS
			RB15#0	4.61	14.4	19.01	0.08	1	PASS
5 MHz	Low	QPSK	RB1#0	6.58	14.4	20.98	0.13	1	PASS
			RB25#0	5.96	14.4	20.36	0.11	1	PASS
		16QAM	RB1#0	6.27	14.4	20.67	0.12	1	PASS
			RB25#0	4.77	14.4	19.17	0.08	1	PASS
	Middle	QPSK	RB1#0	6.82	14.4	21.22	0.13	1	PASS
			RB25#0	5.84	14.4	20.24	0.11	1	PASS
		16QAM	RB1#0	5.88	14.4	20.28	0.11	1	PASS
			RB25#0	4.96	14.4	19.36	0.09	1	PASS
	High	QPSK	RB1#0	6.60	14.4	21.00	0.13	1	PASS
			RB25#0	5.28	14.4	19.68	0.09	1	PASS

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		16QAM	RB1#0	5.79	14.4	20.19	0.10	1	PASS
			RB25#0	4.72	14.4	19.12	0.08	1	PASS
10 MHz	Low	QPSK	RB1#0	6.86	14.4	21.26	0.13	1	PASS
			RB50#0	5.58	14.4	19.98	0.10	1	PASS
		16QAM	RB1#0	5.66	14.4	20.06	0.10	1	PASS
			RB50#0	4.61	14.4	19.01	0.08	1	PASS
	Middle	QPSK	RB1#0	6.95	14.4	21.35	0.14	1	PASS
			RB50#0	5.72	14.4	20.12	0.10	1	PASS
		16QAM	RB1#0	6.5	14.4	20.90	0.12	1	PASS
			RB50#0	5.02	14.4	19.42	0.09	1	PASS
	High	QPSK	RB1#0	6.93	14.4	21.33	0.14	1	PASS
			RB50#0	5.5	14.4	19.90	0.10	1	PASS
		16QAM	RB1#0	5.83	14.4	20.23	0.11	1	PASS
			RB50#0	4.62	14.4	19.02	0.08	1	PASS
15 MHz	Low	QPSK	RB1#0	6.65	14.4	21.05	0.13	1	PASS
			RB75#0	5.7	14.4	20.10	0.10	1	PASS
		16QAM	RB1#0	5.73	14.4	20.13	0.10	1	PASS
			RB75#0	4.74	14.4	19.14	0.08	1	PASS
	Middle	QPSK	RB1#0	6.93	14.4	21.33	0.14	1	PASS
			RB75#0	5.6	14.4	20.00	0.10	1	PASS
		16QAM	RB1#0	6.19	14.4	20.59	0.11	1	PASS
			RB75#0	4.42	14.4	18.82	0.08	1	PASS
	High	QPSK	RB1#0	6.94	14.4	21.34	0.14	1	PASS
			RB75#0	5.68	14.4	20.08	0.10	1	PASS
		16QAM	RB1#0	6.12	14.4	20.52	0.11	1	PASS
			RB75#0	4.44	14.4	18.84	0.08	1	PASS
20MHz	Low	QPSK	RB1#0	6.74	14.4	21.14	0.13	1	PASS
			RB100#0	5.55	14.4	19.95	0.10	1	PASS
		16QAM	RB1#0	6.23	14.4	20.63	0.12	1	PASS
			RB100#0	4.48	14.4	18.88	0.08	1	PASS
	Middle	QPSK	RB1#0	6.54	14.4	20.94	0.12	1	PASS
			RB100#0	5.68	14.4	20.08	0.10	1	PASS
		16QAM	RB1#0	6.12	14.4	20.52	0.11	1	PASS
			RB100#0	4.56	14.4	18.96	0.08	1	PASS
	High	QPSK	RB1#0	6.89	14.4	21.29	0.13	1	PASS
			RB100#0	5.53	14.4	19.93	0.10	1	PASS
		16QAM	RB1#0	5.9	14.4	20.30	0.11	1	PASS
			RB100#0	4.35	14.4	18.75	0.07	1	PASS

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FDD LTE Band 5									
Test BW	CH	Modul.	RB Set (Size#Offset)	Measured ERP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)		
1.4 MHz	Low	QPSK	RB1#0	10.63	9.83	20.46	0.11	7	PASS
			RB6#0	9.47	9.83	19.30	0.09	7	PASS
		16QAM	RB1#0	10.04	9.83	19.87	0.10	7	PASS
			RB6#0	8.62	9.83	18.45	0.07	7	PASS
	Middle	QPSK	RB1#0	10.41	9.83	20.24	0.11	7	PASS
			RB6#0	9.51	9.83	19.34	0.09	7	PASS
		16QAM	RB1#0	10.13	9.83	19.96	0.10	7	PASS
			RB6#0	8.58	9.83	18.41	0.07	7	PASS
	High	QPSK	RB1#0	10.88	9.83	20.71	0.12	7	PASS
			RB6#0	9.75	9.83	19.58	0.09	7	PASS
		16QAM	RB1#0	9.76	9.83	19.59	0.09	7	PASS
			RB6#0	8.88	9.83	18.71	0.07	7	PASS
3 MHz	Low	QPSK	RB1#0	10.95	9.83	20.78	0.12	7	PASS
			RB15#0	9.68	9.83	19.51	0.09	7	PASS
		16QAM	RB1#0	9.57	9.83	19.40	0.09	7	PASS
			RB15#0	9.06	9.83	18.89	0.08	7	PASS
	Middle	QPSK	RB1#0	10.73	9.83	20.56	0.11	7	PASS
			RB15#0	9.5	9.83	19.33	0.09	7	PASS
		16QAM	RB1#0	10.33	9.83	20.16	0.10	7	PASS
			RB15#0	8.97	9.83	18.80	0.08	7	PASS
	High	QPSK	RB1#0	10.62	9.83	20.45	0.11	7	PASS
			RB15#0	9.83	9.83	19.66	0.09	7	PASS
		16QAM	RB1#0	9.79	9.83	19.62	0.09	7	PASS
			RB15#0	8.88	9.83	18.71	0.07	7	PASS
5 MHz	Low	QPSK	RB1#0	10.82	9.83	20.65	0.12	7	PASS
			RB25#0	9.47	9.83	19.30	0.09	7	PASS
		16QAM	RB1#0	10.04	9.83	19.87	0.10	7	PASS
			RB25#0	8.51	9.83	18.34	0.07	7	PASS
	Middle	QPSK	RB1#0	10.53	9.83	20.36	0.11	7	PASS
			RB25#0	9.74	9.83	19.57	0.09	7	PASS
		16QAM	RB1#0	9.71	9.83	19.54	0.09	7	PASS
			RB25#0	8.98	9.83	18.81	0.08	7	PASS
	High	QPSK	RB1#0	11.09	9.83	20.92	0.12	7	PASS
			RB25#0	9.91	9.83	19.74	0.09	7	PASS
16QAM	RB1#0	10.48	9.83	20.31	0.11	7	PASS		

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Test BW	CH	Modul.	RB Set (Size#Offset)	SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
10 MHz	Low	QPSK	RB25#0	8.62	9.83	18.45	0.07	7	PASS
			RB1#0	10.75	9.83	20.58	0.11	7	PASS
		16QAM	RB50#0	10.08	9.83	19.91	0.10	7	PASS
			RB1#0	10.30	9.83	20.13	0.10	7	PASS
	Middle	QPSK	RB50#0	8.96	9.83	18.79	0.08	7	PASS
			RB1#0	10.95	9.83	20.78	0.12	7	PASS
		16QAM	RB50#0	9.87	9.83	19.70	0.09	7	PASS
			RB1#0	10.51	9.83	20.34	0.11	7	PASS
	High	QPSK	RB50#0	8.58	9.83	18.41	0.07	7	PASS
			RB1#0	11.23	9.83	21.06	0.13	7	PASS
		16QAM	RB50#0	10.01	9.83	19.84	0.10	7	PASS
			RB1#0	10.13	9.83	19.96	0.10	7	PASS
			RB50#0	9.18	9.83	19.01	0.08	7	PASS

FDD LTE Band 7

Test BW	CH	Modul.	RB Set (Size#Offset)	Measured EIRP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
5 MHz	Low	QPSK	RB1#0	0.68	19.5	20.18	0.10	2	PASS
			RB25#0	0.84	19.5	20.34	0.11	2	PASS
		16QAM	RB1#0	-0.26	19.5	19.24	0.08	2	PASS
			RB25#0	-0.04	19.5	19.46	0.09	2	PASS
	Middle	QPSK	RB1#0	1.96	19.5	21.46	0.14	2	PASS
			RB25#0	0.59	19.5	20.09	0.10	2	PASS
		16QAM	RB1#0	1.27	19.5	20.77	0.12	2	PASS
			RB25#0	-0.32	19.5	19.18	0.08	2	PASS
	High	QPSK	RB1#0	1.79	19.5	21.29	0.13	2	PASS
			RB25#0	1.06	19.5	20.56	0.11	2	PASS
		16QAM	RB1#0	1.34	19.5	20.84	0.12	2	PASS
			RB25#0	-0.4	19.5	19.10	0.08	2	PASS
10 MHz	Low	QPSK	RB1#0	0.44	19.5	19.94	0.10	2	PASS
			RB50#0	0.95	19.5	20.45	0.11	2	PASS
		16QAM	RB1#0	-0.9	19.5	18.60	0.07	2	PASS
			RB50#0	-0.36	19.5	19.14	0.08	2	PASS
	Middle	QPSK	RB1#0	2.15	19.5	21.65	0.15	2	PASS
			RB50#0	1.09	19.5	20.59	0.11	2	PASS
		16QAM	RB1#0	1.59	19.5	21.09	0.13	2	PASS
			RB50#0	0.07	19.5	19.57	0.09	2	PASS
	High	QPSK	RB1#0	2.08	19.5	21.58	0.14	2	PASS

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			RB50#0	0.95	19.5	20.45	0.11	2	PASS
		16QAM	RB1#0	1.13	19.5	20.63	0.12	2	PASS
			RB50#0	0.02	19.5	19.52	0.09	2	PASS
15 MHz	Low	QPSK	RB1#0	0.94	19.5	20.44	0.11	2	PASS
			RB75#0	0.86	19.5	20.36	0.11	2	PASS
		16QAM	RB1#0	-0.20	19.5	19.30	0.09	2	PASS
			RB75#0	-0.12	19.5	19.38	0.09	2	PASS
	Middle	QPSK	RB1#0	1.82	19.5	21.32	0.14	2	PASS
			RB75#0	0.89	19.5	20.39	0.11	2	PASS
		16QAM	RB1#0	1.01	19.5	20.51	0.11	2	PASS
			RB75#0	-0.15	19.5	19.35	0.09	2	PASS
	High	QPSK	RB1#0	1.61	19.5	21.11	0.13	2	PASS
			RB75#0	1.08	19.5	20.58	0.11	2	PASS
		16QAM	RB1#0	0.86	19.5	20.36	0.11	2	PASS
			RB75#0	0.00	19.5	19.50	0.09	2	PASS
20MHz	Low	QPSK	RB1#0	0.63	19.5	20.13	0.10	2	PASS
			RB100#0	1.18	19.5	20.68	0.12	2	PASS
		16QAM	RB1#0	0.06	19.5	19.56	0.09	2	PASS
			RB100#0	0.17	19.5	19.67	0.09	2	PASS
	Middle	QPSK	RB1#0	2.06	19.5	21.56	0.14	2	PASS
			RB100#0	0.85	19.5	20.35	0.11	2	PASS
		16QAM	RB1#0	1.12	19.5	20.62	0.12	2	PASS
			RB100#0	-0.35	19.5	19.15	0.08	2	PASS
	High	QPSK	RB1#0	1.45	19.5	20.95	0.12	2	PASS
			RB100#0	0.64	19.5	20.14	0.10	2	PASS
		16QAM	RB1#0	1.24	19.5	20.74	0.12	2	PASS
			RB100#0	0.09	19.5	19.59	0.09	2	PASS

FDD LTE Band 12

Test BW	CH	Modul.	RB Set (Size#Offset)	Measured ERP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)		
1.4 MHz	Low	QPSK	RB1#0	11.00	8.1	19.10	0.08	3	PASS
			RB6#0	9.52	8.1	17.62	0.06	3	PASS
		16QAM	RB1#0	9.84	8.1	17.94	0.06	3	PASS
			RB6#0	8.93	8.1	17.03	0.05	3	PASS
	Middle	QPSK	RB1#0	10.83	8.1	18.93	0.08	3	PASS
			RB6#0	10.06	8.1	18.16	0.07	3	PASS
		16QAM	RB1#0	10.43	8.1	18.53	0.07	3	PASS

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	High	QPSK	RB6#0	8.66	8.1	16.76	0.05	3	PASS
			RB1#0	10.64	8.1	18.74	0.07	3	PASS
		16QAM	RB6#0	9.93	8.1	18.03	0.06	3	PASS
			RB1#0	9.65	8.1	17.75	0.06	3	PASS
3 MHz	Low	QPSK	RB6#0	8.96	8.1	17.06	0.05	3	PASS
			RB1#0	10.77	8.1	18.87	0.08	3	PASS
		16QAM	RB1#0	10.15	8.1	18.25	0.07	3	PASS
			RB15#0	8.77	8.1	16.87	0.05	3	PASS
	Middle	QPSK	RB1#0	10.79	8.1	18.89	0.08	3	PASS
			RB15#0	10.04	8.1	18.14	0.07	3	PASS
		16QAM	RB1#0	9.78	8.1	17.88	0.06	3	PASS
			RB15#0	9.02	8.1	17.12	0.05	3	PASS
	High	QPSK	RB1#0	10.94	8.1	19.04	0.08	3	PASS
			RB15#0	9.68	8.1	17.78	0.06	3	PASS
		16QAM	RB1#0	10.30	8.1	18.40	0.07	3	PASS
			RB15#0	8.77	8.1	16.87	0.05	3	PASS
5 MHz	Low	QPSK	RB1#0	11.15	8.1	19.25	0.08	3	PASS
			RB25#0	10.10	8.1	18.20	0.07	3	PASS
		16QAM	RB1#0	10.13	8.1	18.23	0.07	3	PASS
			RB25#0	9.07	8.1	17.17	0.05	3	PASS
	Middle	QPSK	RB1#0	11.09	8.1	19.19	0.08	3	PASS
			RB25#0	10.09	8.1	18.19	0.07	3	PASS
		16QAM	RB1#0	10.76	8.1	18.86	0.08	3	PASS
			RB25#0	9.11	8.1	17.21	0.05	3	PASS
	High	QPSK	RB1#0	10.60	8.1	18.70	0.07	3	PASS
			RB25#0	9.75	8.1	17.85	0.06	3	PASS
		16QAM	RB1#0	9.99	8.1	18.09	0.06	3	PASS
			RB25#0	8.91	8.1	17.01	0.05	3	PASS
10 MHz	Low	QPSK	RB1#0	11.52	8.1	19.62	0.09	3	PASS
			RB50#0	10.20	8.1	18.30	0.07	3	PASS
		16QAM	RB1#0	10.15	8.1	18.25	0.07	3	PASS
			RB50#0	8.86	8.1	16.96	0.05	3	PASS
	Middle	QPSK	RB1#0	11.47	8.1	19.57	0.09	3	PASS
			RB50#0	9.96	8.1	18.06	0.06	3	PASS
		16QAM	RB1#0	10.06	8.1	18.16	0.07	3	PASS
			RB50#0	8.82	8.1	16.92	0.05	3	PASS
	High	QPSK	RB1#0	10.96	8.1	19.06	0.08	3	PASS
			RB50#0	10.08	8.1	18.18	0.07	3	PASS
16QAM	RB1#0	10.30	8.1	18.40	0.07	3	PASS		

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			RB50#0	9.33	8.1	17.43	0.06	3	PASS
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Test BW	CH	Modul.	RB Set (Size#Offset)	Measured ERP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	ERP (dBm)	ERP (W)		
5 MHz	Low	QPSK	RB1#0	10.25	9.83	20.08	0.10	3	PASS
			RB25#0	9.03	9.83	18.86	0.08	3	PASS
		16QAM	RB1#0	9.29	9.83	19.12	0.08	3	PASS
			RB25#0	8.21	9.83	18.04	0.06	3	PASS
	Middle	QPSK	RB1#0	9.98	9.83	19.81	0.10	3	PASS
			RB25#0	9.39	9.83	19.22	0.08	3	PASS
		16QAM	RB1#0	9.54	9.83	19.37	0.09	3	PASS
			RB25#0	8.45	9.83	18.28	0.07	3	PASS
	High	QPSK	RB1#0	10.16	9.83	19.99	0.10	3	PASS
			RB25#0	9.01	9.83	18.84	0.08	3	PASS
		16QAM	RB1#0	9.61	9.83	19.44	0.09	3	PASS
			RB25#0	8.55	9.83	18.38	0.07	3	PASS
10 MHz	Low	QPSK	RB1#0	-	-	-	-	3	PASS
			RB50#0	-	-	-	-	3	PASS
		16QAM	RB1#0	-	-	-	-	3	PASS
			RB50#0	-	-	-	-	3	PASS
	Middle	QPSK	RB1#0	10.57	9.83	20.40	0.11	3	PASS
			RB50#0	9.35	9.83	19.18	0.08	3	PASS
		16QAM	RB1#0	10.14	9.83	19.97	0.10	3	PASS
			RB50#0	8.17	9.83	18.00	0.06	3	PASS
	High	QPSK	RB1#0	-	-	-	-	3	PASS
			RB50#0	-	-	-	-	3	PASS
		16QAM	RB1#0	-	-	-	-	3	PASS
			RB50#0	-	-	-	-	3	PASS

FDD LTE Band 25									
Test BW	CH	Modul.	RB Set (Size#Offset)	Measured EIRP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
1.4 MHz	Low	QPSK	RB1#0	0.15	17.8	17.95	0.06	2	PASS
			RB6#0	-0.72	17.8	17.08	0.05	2	PASS
		16QAM	RB1#0	-0.80	17.8	17.00	0.05	2	PASS

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	Middle	QPSK	RB6#0	-1.54	17.8	16.26	0.04	2	PASS	
			RB1#0	0.59	17.8	18.39	0.07	2	PASS	
		16QAM	RB6#0	-0.71	17.8	17.09	0.05	2	PASS	
			RB1#0	-0.31	17.8	17.49	0.06	2	PASS	
		High	QPSK	RB6#0	-1.18	17.8	16.62	0.05	2	PASS
				RB1#0	0.42	17.8	18.22	0.07	2	PASS
	16QAM		RB6#0	-0.43	17.8	17.37	0.05	2	PASS	
			RB1#0	-0.18	17.8	17.62	0.06	2	PASS	
	3 MHz	Low	QPSK	RB6#0	-1.26	17.8	16.54	0.05	2	PASS
				RB1#0	0.60	17.8	18.40	0.07	2	PASS
			16QAM	RB15#0	-0.76	17.8	17.04	0.05	2	PASS
				RB1#0	-0.27	17.8	17.53	0.06	2	PASS
Middle		QPSK	RB15#0	-1.72	17.8	16.08	0.04	2	PASS	
			RB1#0	0.84	17.8	18.64	0.07	2	PASS	
		16QAM	RB15#0	-0.59	17.8	17.21	0.05	2	PASS	
			RB1#0	-0.49	17.8	17.31	0.05	2	PASS	
High		QPSK	RB15#0	-1.62	17.8	16.18	0.04	2	PASS	
			RB1#0	0.82	17.8	18.62	0.07	2	PASS	
		16QAM	RB15#0	-0.45	17.8	17.35	0.05	2	PASS	
			RB1#0	-0.22	17.8	17.58	0.06	2	PASS	
5 MHz	Low	QPSK	RB15#0	-1.21	17.8	16.59	0.05	2	PASS	
			RB1#0	0.49	17.8	18.29	0.07	2	PASS	
		16QAM	RB25#0	-0.32	17.8	17.48	0.06	2	PASS	
			RB1#0	0.23	17.8	18.03	0.06	2	PASS	
	Middle	QPSK	RB25#0	-1.49	17.8	16.31	0.04	2	PASS	
			RB1#0	0.46	17.8	18.26	0.07	2	PASS	
		16QAM	RB25#0	-0.34	17.8	17.46	0.06	2	PASS	
			RB1#0	-0.10	17.8	17.70	0.06	2	PASS	
	High	QPSK	RB25#0	-1.20	17.8	16.60	0.05	2	PASS	
			RB1#0	0.86	17.8	18.66	0.07	2	PASS	
		16QAM	RB25#0	-0.12	17.8	17.68	0.06	2	PASS	
			RB1#0	0.12	17.8	17.92	0.06	2	PASS	
10 MHz	Low	QPSK	RB25#0	-1.05	17.8	16.75	0.05	2	PASS	
			RB1#0	0.51	17.8	18.31	0.07	2	PASS	
		16QAM	RB50#0	-0.62	17.8	17.18	0.05	2	PASS	
			RB1#0	-0.56	17.8	17.24	0.05	2	PASS	
	Middle	QPSK	RB50#0	-1.38	17.8	16.42	0.04	2	PASS	
			RB1#0	0.73	17.8	18.53	0.07	2	PASS	
		16QAM	RB50#0	-0.44	17.8	17.36	0.05	2	PASS	
			RB1#0	0.14	17.8	17.94	0.06	2	PASS	

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	High	QPSK	RB50#0	-1.15	17.8	16.65	0.05	2	PASS
			RB1#0	0.88	17.8	18.68	0.07	2	PASS
		16QAM	RB50#0	-0.51	17.8	17.29	0.05	2	PASS
			RB1#0	-0.12	17.8	17.68	0.06	2	PASS
15 MHz	Low	QPSK	RB50#0	-1.32	17.8	16.48	0.04	2	PASS
			RB1#0	0.26	17.8	18.06	0.06	2	PASS
		16QAM	RB1#0	-0.86	17.8	16.94	0.05	2	PASS
			RB75#0	-1.90	17.8	15.90	0.04	2	PASS
	Middle	QPSK	RB1#0	0.42	17.8	18.22	0.07	2	PASS
			RB75#0	-0.48	17.8	17.32	0.05	2	PASS
		16QAM	RB1#0	0.15	17.8	17.95	0.06	2	PASS
			RB75#0	-1.83	17.8	15.97	0.04	2	PASS
	High	QPSK	RB1#0	0.54	17.8	18.34	0.07	2	PASS
			RB75#0	-0.51	17.8	17.29	0.05	2	PASS
		16QAM	RB1#0	-0.16	17.8	17.64	0.06	2	PASS
			RB75#0	-1.55	17.8	16.25	0.04	2	PASS
20MHz	Low	QPSK	RB1#0	0.38	17.8	18.18	0.07	2	PASS
			RB100#0	-0.68	17.8	17.12	0.05	2	PASS
		16QAM	RB1#0	-0.20	17.8	17.60	0.06	2	PASS
			RB100#0	-1.62	17.8	16.18	0.04	2	PASS
	Middle	QPSK	RB1#0	0.66	17.8	18.46	0.07	2	PASS
			RB100#0	-0.68	17.8	17.12	0.05	2	PASS
		16QAM	RB1#0	-0.27	17.8	17.53	0.06	2	PASS
			RB100#0	-1.43	17.8	16.37	0.04	2	PASS
	High	QPSK	RB1#0	0.48	17.8	18.28	0.07	2	PASS
			RB100#0	-0.75	17.8	17.05	0.05	2	PASS
		16QAM	RB1#0	-0.18	17.8	17.62	0.06	2	PASS
			RB100#0	-1.95	17.8	15.85	0.04	2	PASS

FDD LTE Band 38

Test BW	CH	Modul.	RB Set (Size#Offset)	Measured EIRP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
5 MHz	Low	QPSK	RB1#0	2.44	19.5	21.94	0.16	2	PASS
			RB25#0	1.39	19.5	20.89	0.12	2	PASS
		16QAM	RB1#0	1.59	19.5	21.09	0.13	2	PASS
			RB25#0	0.40	19.5	19.90	0.10	2	PASS
	Middle	QPSK	RB1#0	2.34	19.5	21.84	0.15	2	PASS

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		16QAM	RB25#0	1.19	19.5	20.69	0.12	2	PASS	
			RB1#0	1.96	19.5	21.46	0.14	2	PASS	
		High	QPSK	RB25#0	0.62	19.5	20.12	0.10	2	PASS
				RB1#0	2.62	19.5	22.12	0.16	2	PASS
			16QAM	RB25#0	1.27	19.5	20.77	0.12	2	PASS
				RB1#0	1.97	19.5	21.47	0.14	2	PASS
10 MHz	Low	QPSK	RB1#0	2.38	19.5	21.88	0.15	2	PASS	
			RB50#0	1.49	19.5	20.99	0.13	2	PASS	
		16QAM	RB1#0	1.93	19.5	21.43	0.14	2	PASS	
			RB50#0	0.59	19.5	20.09	0.10	2	PASS	
	Middle	QPSK	RB1#0	2.22	19.5	21.72	0.15	2	PASS	
			RB50#0	1.58	19.5	21.08	0.13	2	PASS	
		16QAM	RB1#0	1.79	19.5	21.29	0.13	2	PASS	
			RB50#0	0.42	19.5	19.92	0.10	2	PASS	
	High	QPSK	RB1#0	2.78	19.5	22.28	0.17	2	PASS	
			RB50#0	1.51	19.5	21.01	0.13	2	PASS	
		16QAM	RB1#0	2.07	19.5	21.57	0.14	2	PASS	
			RB50#0	0.55	19.5	20.05	0.10	2	PASS	
	15 MHz	Low	QPSK	RB1#0	2.00	19.5	21.50	0.14	2	PASS
				RB75#0	1.10	19.5	20.60	0.11	2	PASS
			16QAM	RB1#0	1.42	19.5	20.92	0.12	2	PASS
				RB75#0	0.27	19.5	19.77	0.09	2	PASS
		Middle	QPSK	RB1#0	2.29	19.5	21.79	0.15	2	PASS
				RB75#0	1.13	19.5	20.63	0.12	2	PASS
16QAM			RB1#0	1.58	19.5	21.08	0.13	2	PASS	
			RB75#0	0.04	19.5	19.54	0.09	2	PASS	
High		QPSK	RB1#0	2.26	19.5	21.76	0.15	2	PASS	
			RB75#0	1.11	19.5	20.61	0.12	2	PASS	
		16QAM	RB1#0	1.39	19.5	20.89	0.12	2	PASS	
			RB75#0	0.25	19.5	19.75	0.09	2	PASS	
20MHz	Low	QPSK	RB1#0	1.90	19.5	21.40	0.14	2	PASS	
			RB100#0	1.30	19.5	20.80	0.12	2	PASS	
		16QAM	RB1#0	1.38	19.5	20.88	0.12	2	PASS	
			RB100#0	0.14	19.5	19.64	0.09	2	PASS	
	Middle	QPSK	RB1#0	2.23	19.5	21.73	0.15	2	PASS	
			RB100#0	1.19	19.5	20.69	0.12	2	PASS	
		16QAM	RB1#0	1.28	19.5	20.78	0.12	2	PASS	
			RB100#0	0.36	19.5	19.86	0.10	2	PASS	
	High	QPSK	RB1#0	2.08	19.5	21.58	0.14	2	PASS	

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		RB100#0	1.12	19.5	20.62	0.12	2	PASS
	16QAM	RB1#0	1.37	19.5	20.87	0.12	2	PASS
		RB100#0	0.02	19.5	19.52	0.09	2	PASS

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Test BW	CH	Modul.	RB Set (Size#Offset)	Measured EIRP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
5 MHz	Low	QPSK	RB1#0	4.20	19.5	23.70	0.23	2	PASS
			RB25#0	4.19	19.5	23.69	0.23	2	PASS
		16QAM	RB1#0	4.33	19.5	23.83	0.24	2	PASS
			RB25#0	3.96	19.5	23.46	0.22	2	PASS
	Middle	QPSK	RB1#0	3.94	19.5	23.44	0.22	2	PASS
			RB25#0	3.86	19.5	23.36	0.22	2	PASS
		16QAM	RB1#0	4.18	19.5	23.68	0.23	2	PASS
			RB25#0	3.77	19.5	23.27	0.21	2	PASS
	High	QPSK	RB1#0	1.80	19.5	21.30	0.13	2	PASS
			RB25#0	4.09	19.5	23.59	0.23	2	PASS
		16QAM	RB1#0	4.62	19.5	24.12	0.26	2	PASS
			RB25#0	4.41	19.5	23.91	0.25	2	PASS
10 MHz	Low	QPSK	RB1#0	3.60	19.5	23.10	0.20	2	PASS
			RB50#0	3.94	19.5	23.44	0.22	2	PASS
		16QAM	RB1#0	4.20	19.5	23.70	0.23	2	PASS
			RB50#0	4.06	19.5	23.56	0.23	2	PASS
	Middle	QPSK	RB1#0	3.70	19.5	23.20	0.21	2	PASS
			RB50#0	3.69	19.5	23.19	0.21	2	PASS
		16QAM	RB1#0	3.90	19.5	23.40	0.22	2	PASS
			RB50#0	3.89	19.5	23.39	0.22	2	PASS
	High	QPSK	RB1#0	4.37	19.5	23.87	0.24	2	PASS
			RB50#0	4.25	19.5	23.75	0.24	2	PASS
		16QAM	RB1#0	4.41	19.5	23.91	0.25	2	PASS
			RB50#0	4.10	19.5	23.60	0.23	2	PASS
15 MHz	Low	QPSK	RB1#0	3.70	19.5	23.20	0.21	2	PASS
			RB75#0	4.48	19.5	23.98	0.25	2	PASS
		16QAM	RB1#0	4.05	19.5	23.55	0.23	2	PASS
			RB75#0	4.58	19.5	24.08	0.26	2	PASS
	Middle	QPSK	RB1#0	3.78	19.5	23.28	0.21	2	PASS
			RB75#0	4.11	19.5	23.61	0.23	2	PASS
		16QAM	RB1#0	3.83	19.5	23.33	0.22	2	PASS

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	High	QPSK	RB75#0	4.38	19.5	23.88	0.24	2	PASS	
			RB1#0	4.10	19.5	23.60	0.23	2	PASS	
		16QAM	RB75#0	4.75	19.5	24.25	0.27	2	PASS	
			RB1#0	4.46	19.5	23.96	0.25	2	PASS	
	20MHz	Low	QPSK	RB75#0	4.86	19.5	24.36	0.27	2	PASS
				RB1#0	4.11	19.5	23.61	0.23	2	PASS
			16QAM	RB100#0	4.06	19.5	23.56	0.23	2	PASS
				RB1#0	4.62	19.5	24.12	0.26	2	PASS
Middle		QPSK	RB100#0	4.17	19.5	23.67	0.23	2	PASS	
			RB1#0	4.24	19.5	23.74	0.24	2	PASS	
		16QAM	RB100#0	4.07	19.5	23.57	0.23	2	PASS	
			RB1#0	4.22	19.5	23.72	0.24	2	PASS	
High	QPSK	RB100#0	4.34	19.5	23.84	0.24	2	PASS		
		RB1#0	4.50	19.5	24.00	0.25	2	PASS		
	16QAM	RB100#0	4.66	19.5	24.16	0.26	2	PASS		
		RB1#0	4.82	19.5	24.32	0.27	2	PASS		
			RB100#0	4.64	19.5	24.14	0.26	2	PASS	

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Test BW	CH	Modul.	RB Set (Size#Offset)	Measured EIRP				Limit (W)	Verdict
				SA Read Value (dBm)	Correction Factor (dB)	EIRP (dBm)	EIRP (W)		
1.4 MHz	Low	QPSK	RB1#0	3.36	14.4	17.76	0.06	1	PASS
			RB6#0	2.14	14.4	16.54	0.05	1	PASS
		16QAM	RB1#0	2.38	14.4	16.78	0.05	1	PASS
			RB6#0	1.54	14.4	15.94	0.04	1	PASS
	Middle	QPSK	RB1#0	3.17	14.4	17.57	0.06	1	PASS
			RB6#0	2.50	14.4	16.90	0.05	1	PASS
		16QAM	RB1#0	2.69	14.4	17.09	0.05	1	PASS
			RB6#0	1.22	14.4	15.62	0.04	1	PASS
	High	QPSK	RB1#0	3.11	14.4	17.51	0.06	1	PASS
			RB6#0	2.36	14.4	16.76	0.05	1	PASS
		16QAM	RB1#0	2.58	14.4	16.98	0.05	1	PASS
			RB6#0	1.34	14.4	15.74	0.04	1	PASS
3 MHz	Low	QPSK	RB1#0	3.22	14.4	17.62	0.06	1	PASS
			RB15#0	2.66	14.4	17.06	0.05	1	PASS
		16QAM	RB1#0	2.54	14.4	16.94	0.05	1	PASS
			RB15#0	1.61	14.4	16.01	0.04	1	PASS
	Middle	QPSK	RB1#0	3.20	14.4	17.60	0.06	1	PASS

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		16QAM	RB15#0	2.54	14.4	16.94	0.05	1	PASS	
			RB1#0	2.76	14.4	17.16	0.05	1	PASS	
		High	QPSK	RB15#0	1.32	14.4	15.72	0.04	1	PASS
				RB1#0	3.57	14.4	17.97	0.06	1	PASS
			16QAM	RB15#0	2.45	14.4	16.85	0.05	1	PASS
				RB1#0	2.36	14.4	16.76	0.05	1	PASS
5 MHz	Low	QPSK	RB1#0	3.67	14.4	18.07	0.06	1	PASS	
			RB25#0	2.39	14.4	16.79	0.05	1	PASS	
		16QAM	RB1#0	2.83	14.4	17.23	0.05	1	PASS	
			RB25#0	1.67	14.4	16.07	0.04	1	PASS	
	Middle	QPSK	RB1#0	3.42	14.4	17.82	0.06	1	PASS	
			RB25#0	2.50	14.4	16.90	0.05	1	PASS	
		16QAM	RB1#0	3.15	14.4	17.55	0.06	1	PASS	
			RB25#0	1.69	14.4	16.09	0.04	1	PASS	
	High	QPSK	RB1#0	3.33	14.4	17.73	0.06	1	PASS	
			RB25#0	2.30	14.4	16.70	0.05	1	PASS	
		16QAM	RB1#0	2.60	14.4	17.00	0.05	1	PASS	
			RB25#0	1.29	14.4	15.69	0.04	1	PASS	
10 MHz	Low	QPSK	RB1#0	3.79	14.4	18.19	0.07	1	PASS	
			RB50#0	2.56	14.4	16.96	0.05	1	PASS	
		16QAM	RB1#0	2.78	14.4	17.18	0.05	1	PASS	
			RB50#0	1.64	14.4	16.04	0.04	1	PASS	
	Middle	QPSK	RB1#0	3.62	14.4	18.02	0.06	1	PASS	
			RB50#0	2.72	14.4	17.12	0.05	1	PASS	
		16QAM	RB1#0	3.28	14.4	17.68	0.06	1	PASS	
			RB50#0	1.50	14.4	15.90	0.04	1	PASS	
	High	QPSK	RB1#0	3.57	14.4	17.97	0.06	1	PASS	
			RB50#0	2.30	14.4	16.70	0.05	1	PASS	
16QAM		RB1#0	2.77	14.4	17.17	0.05	1	PASS		
		RB50#0	1.56	14.4	15.96	0.04	1	PASS		
15 MHz	Low	QPSK	RB1#0	2.97	14.4	17.37	0.05	1	PASS	
			RB75#0	1.36	14.4	15.76	0.04	1	PASS	
		16QAM	RB1#0	2.23	14.4	16.63	0.05	1	PASS	
			RB75#0	0.29	14.4	14.69	0.03	1	PASS	
	Middle	QPSK	RB1#0	2.84	14.4	17.24	0.05	1	PASS	
			RB75#0	1.20	14.4	15.60	0.04	1	PASS	
		16QAM	RB1#0	2.44	14.4	16.84	0.05	1	PASS	
			RB75#0	0.33	14.4	14.73	0.03	1	PASS	
High	QPSK	RB1#0	2.75	14.4	17.15	0.05	1	PASS		

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			RB75#0	1.10	14.4	15.50	0.04	1	PASS
		16QAM	RB1#0	2.26	14.4	16.66	0.05	1	PASS
			RB75#0	0.33	14.4	14.73	0.03	1	PASS
20MHz	Low	QPSK	RB1#0	4.08	14.4	18.48	0.07	1	PASS
			RB100#0	1.84	14.4	16.24	0.04	1	PASS
		16QAM	RB1#0	3.23	14.4	17.63	0.06	1	PASS
			RB100#0	0.52	14.4	14.92	0.03	1	PASS
	Middle	QPSK	RB1#0	3.81	14.4	18.21	0.07	1	PASS
			RB100#0	1.22	14.4	15.62	0.04	1	PASS
		16QAM	RB1#0	3.42	14.4	17.82	0.06	1	PASS
			RB100#0	0.40	14.4	14.80	0.03	1	PASS
	High	QPSK	RB1#0	3.49	14.4	17.89	0.06	1	PASS
			RB100#0	1.63	14.4	16.03	0.04	1	PASS
		16QAM	RB1#0	2.76	14.4	17.16	0.05	1	PASS
			RB100#0	0.65	14.4	15.05	0.03	1	PASS

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5.1.2 Peak to Average Ratio

Note(s):

1. For GSM, GPRS and EGPRS, there are peak power to demonstrate compliance, PAR measurements are not required.
2. Test plots please refer to the document "Annex No: SHE20090007-02AE Data EXHIBIT A".

Peak to Average Ratio Measurement Results for WCDMA

Test Band	Channel	Peak to Average Ratio (dB)	Limit (W)	Refer to Plot ^{Note 2}	Verdict
WCDMA Band II	Low	2.89	13	1.1	PASS
	Middle	3.12	13	1.2	PASS
	High	2.86	13	1.3	PASS
WCDMA Band IV	Low	2.61	13	2.1	PASS
	Middle	3.09	13	2.2	PASS
	High	2.12	13	2.3	PASS
WCDMA Band V	Low	3.16	13	3.1	PASS
	Middle	3.12	13	3.2	PASS
	High	3.15	13	3.3	PASS

Peak to Average Ratio Measurement Results for LTE

FDD LTE Band 2							
Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
20 MHz	Low	QPSK	RB1#0	3.31	13	4.1	PASS
			RB100#0	5.26	13	4.2	PASS
		16QAM	RB1#0	4.11	13	4.3	PASS
			RB100#0	6.14	13	4.4	PASS
	Middle	QPSK	RB1#0	3.76	13	4.5	PASS
			RB100#0	4.34	13	4.6	PASS
		16QAM	RB1#0	4.79	13	4.7	PASS
			RB100#0	5.28	13	4.8	PASS
	High	QPSK	RB1#0	3.29	13	4.9	PASS
			RB100#0	5.53	13	4.10	PASS
		16QAM	RB1#0	4.20	13	4.11	PASS
			RB100#0	6.24	13	4.12	PASS

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FDD LTE Band 4							
Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
20 MHz	Low	QPSK	RB1#0	3.43	13	5.1	PASS
			RB100#0	5.26	13	5.2	PASS
		16QAM	RB1#0	4.39	13	5.3	PASS
			RB100#0	6.01	13	5.4	PASS
	Middle	QPSK	RB1#0	4.90	13	5.5	PASS
			RB100#0	5.20	13	5.6	PASS
		16QAM	RB1#0	5.72	13	5.7	PASS
			RB100#0	5.91	13	5.8	PASS
	High	QPSK	RB1#0	4.40	13	5.9	PASS
			RB100#0	4.63	13	5.10	PASS
		16QAM	RB1#0	5.35	13	5.11	PASS
			RB100#0	5.40	13	5.12	PASS

FDD LTE Band 5							
Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
10 MHz	Low	QPSK	RB1#0	3.80	13	6.1	PASS
			RB50#0	5.51	13	6.2	PASS
		16QAM	RB1#0	4.53	13	6.3	PASS
			RB50#0	6.21	13	6.4	PASS
	Middle	QPSK	RB1#0	3.81	13	6.5	PASS
			RB50#0	5.40	13	6.6	PASS
		16QAM	RB1#0	4.72	13	6.7	PASS
			RB50#0	6.21	13	6.8	PASS
	High	QPSK	RB1#0	3.74	13	6.9	PASS
			RB50#0	5.43	13	6.10	PASS
		16QAM	RB1#0	4.58	13	6.11	PASS
			RB50#0	6.20	13	6.12	PASS

FDD LTE Band 7							
Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
20 MHz	Low	QPSK	RB1#0	3.50	13	7.1	PASS
			RB100#0	4.93	13	7.2	PASS

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		16QAM	RB1#0	4.20	13	7.3	PASS
			RB100#0	5.81	13	7.4	PASS
	Middle	QPSK	RB1#0	3.75	13	7.5	PASS
			RB100#0	5.29	13	7.6	PASS
		16QAM	RB1#0	4.62	13	7.7	PASS
			RB100#0	6.03	13	7.8	PASS
	High	QPSK	RB1#0	3.60	13	7.9	PASS
			RB100#0	5.41	13	7.10	PASS
		16QAM	RB1#0	4.55	13	7.11	PASS
			RB100#0	6.09	13	7.12	PASS

FDD LTE Band 12

Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
10 MHz	Low	QPSK	RB1#0	3.99	13	8.1	PASS
			RB50#0	5.18	13	8.2	PASS
		16QAM	RB1#0	4.78	13	8.3	PASS
			RB50#0	5.99	13	8.4	PASS
	Middle	QPSK	RB1#0	4.26	13	8.5	PASS
			RB50#0	5.34	13	8.6	PASS
		16QAM	RB1#0	5.20	13	8.7	PASS
			RB50#0	6.14	13	8.8	PASS
	High	QPSK	RB1#0	4.37	13	8.9	PASS
			RB50#0	5.01	13	8.10	PASS
		16QAM	RB1#0	5.24	13	8.11	PASS
			RB50#0	5.91	13	8.12	PASS

FDD LTE Band 13

Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
10 MHz	Low	QPSK	RB1#0	--	--	--	--
			RB50#0	--	--	--	--
		16QAM	RB1#0	--	--	--	--
			RB50#0	--	--	--	--
	Middle	QPSK	RB1#0	3.91	13	9.1	PASS
			RB50#0	5.10	13	9.2	PASS
		16QAM	RB1#0	4.69	13	9.3	PASS
			RB50#0	5.87	13	9.4	PASS

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	High	QPSK	RB1#0	--	--	--	--
			RB50#0	--	--	--	--
		16QAM	RB1#0	--	--	--	--
			RB50#0	--	--	--	--

FDD LTE Band 25

Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
20 MHz	Low	QPSK	RB1#0	3.89	13	10.1	PASS
			RB100#0	5.20	13	10.2	PASS
		16QAM	RB1#0	4.53	13	10.3	PASS
			RB100#0	6.00	13	10.4	PASS
	Middle	QPSK	RB1#0	4.68	13	10.5	PASS
			RB100#0	4.71	13	10.6	PASS
		16QAM	RB1#0	5.54	13	10.7	PASS
			RB100#0	5.64	13	10.8	PASS
	High	QPSK	RB1#0	4.51	13	10.9	PASS
			RB100#0	4.68	13	10.10	PASS
		16QAM	RB1#0	5.42	13	10.11	PASS
			RB100#0	5.45	13	10.12	PASS

TDD LTE Band 38

Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
20 MHz	Low	QPSK	RB1#0	8.65	13	11.1	PASS
			RB100#0	9.18	13	11.2	PASS
		16QAM	RB1#0	9.43	13	11.3	PASS
			RB100#0	9.08	13	11.4	PASS
	Middle	QPSK	RB1#0	8.80	13	11.5	PASS
			RB100#0	8.84	13	11.6	PASS
		16QAM	RB1#0	10.35	13	11.7	PASS
			RB100#0	9.27	13	11.8	PASS
	High	QPSK	RB1#0	9.68	13	11.9	PASS
			RB100#0	8.71	13	11.10	PASS
		16QAM	RB1#0	9.19	13	11.11	PASS
			RB100#0	10.62	13	11.12	PASS

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TDD LTE Band 41

Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
20 MHz	Low	QPSK	RB1#0	8.03	13	12.1	PASS
			RB100#0	7.95	13	12.2	PASS
		16QAM	RB1#0	6.46	13	12.3	PASS
			RB100#0	9.49	13	12.4	PASS
	Middle	QPSK	RB1#0	7.87	13	12.5	PASS
			RB100#0	8.23	13	12.6	PASS
		16QAM	RB1#0	7.17	13	12.7	PASS
			RB100#0	9.52	13	12.8	PASS
	High	QPSK	RB1#0	7.76	13	12.9	PASS
			RB100#0	7.87	13	12.10	PASS
		16QAM	RB1#0	8.06	13	12.11	PASS
			RB100#0	8.24	13	12.12	PASS

FDD LTE Band 66

Test BW	Channel	Modul.	RB Set (Size#Offset)	Peak to Average Ratio (dB)	Limit (dB)	Refer to Plot ^{Note 2}	Verdict
20 MHz	Low	QPSK	RB1#0	3.54	13	13.1	PASS
			RB100#0	5.08	13	13.2	PASS
		16QAM	RB1#0	4.63	13	13.3	PASS
			RB100#0	5.82	13	13.4	PASS
	Middle	QPSK	RB1#0	4.05	13	13.5	PASS
			RB100#0	5.11	13	13.6	PASS
		16QAM	RB1#0	5.35	13	13.7	PASS
			RB100#0	5.79	13	13.8	PASS
	High	QPSK	RB1#0	2.80	13	13.9	PASS
			RB100#0	5.15	13	13.10	PASS
		16QAM	RB1#0	4.61	13	13.11	PASS
			RB100#0	5.85	13	13.12	PASS

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5.1.3 Occupied Bandwidth

Note(s):

1. All modes were tested, but only the typical data were reported in this report.
2. Test plots please refer to the document "Annex No: SHE20090007-02AE Data EXHIBIT B".

Occupied Bandwidth Measurement Results for GSM/WCDMA

Test Band	Channel	Measured 99% Occupied Bandwidth (MHz)	Measured -26 dB Occupied Bandwidth (MHz)	Refer to Plot ^{Note 2}
GSM 850	Low	0.244	0.312	1.1
	Middle	0.245	0.309	1.2
	High	0.246	0.316	1.3
GSM 1900	Low	0.245	0.308	2.1
	Middle	0.243	0.309	2.2
	High	0.245	0.316	2.3
GRPS 850	Low	0.245	0.313	3.1
	Middle	0.246	0.318	3.2
	High	0.245	0.312	3.3
GRPS 1900	Low	0.246	0.322	4.1
	Middle	0.241	0.310	4.2
	High	0.243	0.312	4.3
EDGE 850	Low	0.247	0.314	5.1
	Middle	0.248	0.313	5.2
	High	0.244	0.301	5.3
EDGE 1900	Low	0.244	0.311	6.1
	Middle	0.246	0.309	6.2
	High	0.246	0.306	6.3
WCDMA Band II	Low	4.137	4.714	7.1
	Middle	4.134	4.709	7.2
	High	4.113	4.711	7.3
WCDMA Band IV	Low	4.134	4.738	8.1
	Middle	4.124	4.709	8.2
	High	4.187	4.847	8.3
WCDMA Band V	Low	4.127	4.692	9.1
	Middle	4.124	4.709	9.2
	High	4.123	4.704	9.3

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Occupied Bandwidth Measurement Results for LTE

FDD LTE Band 2						
Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
1.4 MHz	Low	QPSK	RB6#0	1.089	1.271	10.1
		16QAM	RB6#0	1.092	1.289	10.2
	Middle	QPSK	RB6#0	1.090	1.311	10.3
		16QAM	RB6#0	1.088	1.281	10.4
	High	QPSK	RB6#0	1.092	1.276	10.5
		16QAM	RB6#0	1.091	1.283	10.6
3 MHz	Low	QPSK	RB15#0	2.700	2.981	10.7
		16QAM	RB15#0	2.703	2.983	10.8
	Middle	QPSK	RB15#0	2.700	2.961	10.9
		16QAM	RB15#0	2.701	2.985	10.10
	High	QPSK	RB15#0	2.703	2.979	10.11
		16QAM	RB15#0	2.695	2.963	10.12
5 MHz	Low	QPSK	RB25#0	4.508	4.997	10.13
		16QAM	RB25#0	4.498	4.954	10.14
	Middle	QPSK	RB25#0	4.500	4.956	10.15
		16QAM	RB25#0	4.510	4.999	10.16
	High	QPSK	RB25#0	4.484	4.980	10.17
		16QAM	RB25#0	4.488	5.000	10.18
10 MHz	Low	QPSK	RB50#0	8.977	9.876	10.19
		16QAM	RB50#0	8.979	9.817	10.20
	Middle	QPSK	RB50#0	8.934	9.928	10.21
		16QAM	RB50#0	8.946	9.815	10.22
	High	QPSK	RB50#0	8.941	9.775	10.23
		16QAM	RB50#0	8.932	9.828	10.24
15 MHz	Low	QPSK	RB75#0	13.464	14.740	10.25
		16QAM	RB75#0	13.460	14.636	10.26
	Middle	QPSK	RB75#0	13.380	14.531	10.27
		16QAM	RB75#0	13.413	14.590	10.28
	High	QPSK	RB75#0	13.448	14.745	10.29
		16QAM	RB75#0	13.469	14.570	10.30
20 MHz	Low	QPSK	RB100#0	17.968	19.427	10.31
		16QAM	RB100#0	18.016	19.472	10.32
	Middle	QPSK	RB100#0	17.856	19.261	10.33
		16QAM	RB100#0	17.811	19.303	10.34
	High	QPSK	RB100#0	18.050	19.710	10.35

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		16QAM	RB100#0	18.042	19.541	10.36
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FDD LTE Band 4						
Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
1.4 MHz	Low	QPSK	RB6#0	1.093	1.285	11.1
		16QAM	RB6#0	1.092	1.303	11.2
	Middle	QPSK	RB6#0	1.088	1.275	11.3
		16QAM	RB6#0	1.093	1.290	11.4
	High	QPSK	RB6#0	1.095	1.375	11.5
		16QAM	RB6#0	1.091	1.313	11.6
3 MHz	Low	QPSK	RB15#0	2.705	2.988	11.7
		16QAM	RB15#0	2.702	2.997	11.8
	Middle	QPSK	RB15#0	2.700	2.968	11.9
		16QAM	RB15#0	2.702	2.992	11.10
	High	QPSK	RB15#0	2.708	3.035	11.11
		16QAM	RB15#0	2.705	2.991	11.12
5 MHz	Low	QPSK	RB25#0	4.494	4.964	11.13
		16QAM	RB25#0	4.515	5.005	11.14
	Middle	QPSK	RB25#0	4.508	5.019	11.15
		16QAM	RB25#0	4.500	4.976	11.16
	High	QPSK	RB25#0	4.513	5.062	11.17
		16QAM	RB25#0	4.525	5.004	11.18
10 MHz	Low	QPSK	RB50#0	8.962	9.869	11.19
		16QAM	RB50#0	8.975	9.885	11.20
	Middle	QPSK	RB50#0	8.980	9.952	11.21
		16QAM	RB50#0	8.964	9.856	11.22
	High	QPSK	RB50#0	8.982	10.185	11.23
		16QAM	RB50#0	8.983	9.832	11.24
15 MHz	Low	QPSK	RB75#0	13.449	14.839	11.25
		16QAM	RB75#0	13.481	14.802	11.26
	Middle	QPSK	RB75#0	13.473	14.834	11.27
		16QAM	RB75#0	13.467	14.751	11.28
	High	QPSK	RB75#0	13.452	14.754	11.29
		16QAM	RB75#0	13.477	14.712	11.30
20 MHz	Low	QPSK	RB100#0	17.968	19.592	11.31
		16QAM	RB100#0	17.965	19.526	11.32
	Middle	QPSK	RB100#0	17.926	19.497	11.33
		16QAM	RB100#0	17.916	19.541	11.34
	High	QPSK	RB100#0	17.932	19.498	11.35

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		16QAM	RB100#0	17.923	19.432	11.36
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FDD LTE Band 5						
Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
1.4 MHz	Low	QPSK	RB6#0	1.089	1.282	12.1
		16QAM	RB6#0	1.093	1.294	12.2
	Middle	QPSK	RB6#0	1.091	1.290	12.3
		16QAM	RB6#0	1.086	1.274	12.4
	High	QPSK	RB6#0	1.092	1.274	12.5
		16QAM	RB6#0	1.092	1.279	12.6
3 MHz	Low	QPSK	RB15#0	2.704	2.983	12.7
		16QAM	RB15#0	2.703	2.971	12.8
	Middle	QPSK	RB15#0	2.705	2.977	12.9
		16QAM	RB15#0	2.702	2.986	12.10
	High	QPSK	RB15#0	2.707	2.981	12.11
		16QAM	RB15#0	2.699	2.989	12.12
5 MHz	Low	QPSK	RB25#0	4.517	4.991	12.13
		16QAM	RB25#0	4.500	4.981	12.14
	Middle	QPSK	RB25#0	4.502	4.980	12.15
		16QAM	RB25#0	4.510	5.013	12.16
	High	QPSK	RB25#0	4.500	4.972	12.17
		16QAM	RB25#0	4.514	5.002	12.18
10 MHz	Low	QPSK	RB50#0	8.995	9.935	12.19
		16QAM	RB50#0	8.992	9.820	12.20
	Middle	QPSK	RB50#0	8.949	9.876	12.21
		16QAM	RB50#0	8.965	9.884	12.22
	High	QPSK	RB50#0	8.981	9.926	12.23
		16QAM	RB50#0	8.972	9.938	12.24

FDD LTE Band 7						
Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
5 MHz	Low	QPSK	RB25#0	4.520	5.019	13.1
		16QAM	RB25#0	4.503	5.002	13.2
	Middle	QPSK	RB25#0	4.499	4.837	13.3
		16QAM	RB25#0	4.521	5.030	13.4
	High	QPSK	RB25#0	4.494	5.014	13.5
		16QAM	RB25#0	4.519	5.033	13.6
10	Low	QPSK	RB50#0	8.976	10.048	13.7

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MHz	Middle	16QAM	RB50#0	8.973	9.843	13.8
		QPSK	RB50#0	8.965	9.974	13.9
	High	16QAM	RB50#0	8.974	9.929	13.10
		QPSK	RB50#0	8.991	9.926	13.11
15 MHz	Low	16QAM	RB50#0	8.982	9.938	13.12
		QPSK	RB75#0	13.441	14.824	13.13
	Middle	16QAM	RB75#0	13.444	14.732	13.14
		QPSK	RB75#0	13.440	14.798	13.15
	High	16QAM	RB75#0	13.485	14.732	13.16
		QPSK	RB75#0	13.486	14.869	13.17
20 MHz	Low	16QAM	RB75#0	13.515	14.841	13.18
		QPSK	RB100#0	17.869	19.349	13.19
	Middle	16QAM	RB100#0	17.930	19.497	13.20
		QPSK	RB100#0	17.943	19.496	13.21
	High	16QAM	RB100#0	17.956	19.671	13.22
		QPSK	RB100#0	18.079	19.870	13.23
		16QAM	RB100#0	18.029	19.675	13.24

FDD LTE Band 12

Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
1.4 MHz	Low	QPSK	RB6#0	1.087	1.283	14.1
		16QAM	RB6#0	1.094	1.280	14.2
	Middle	QPSK	RB6#0	1.091	1.297	14.3
		16QAM	RB6#0	1.086	1.284	14.4
	High	QPSK	RB6#0	1.095	1.277	14.5
		16QAM	RB6#0	1.092	1.278	14.6
3 MHz	Low	QPSK	RB15#0	2.699	2.971	14.7
		16QAM	RB15#0	2.698	2.994	14.8
	Middle	QPSK	RB15#0	2.702	2.966	14.9
		16QAM	RB15#0	2.701	2.993	14.10
	High	QPSK	RB15#0	2.709	2.988	14.11
		16QAM	RB15#0	2.703	2.998	14.12
5 MHz	Low	QPSK	RB25#0	4.498	4.982	14.13
		16QAM	RB25#0	4.488	4.951	14.14
	Middle	QPSK	RB25#0	4.510	4.996	14.15
		16QAM	RB25#0	4.517	5.016	14.16
	High	QPSK	RB25#0	4.499	4.958	14.17
		16QAM	RB25#0	4.501	5.010	14.18
10	Low	QPSK	RB50#0	8.973	9.926	14.19

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MHz	Middle	16QAM	RB50#0	8.962	9.839	14.20
		QPSK	RB50#0	9.012	9.926	14.21
		16QAM	RB50#0	9.002	9.906	14.22
	High	QPSK	RB50#0	8.952	9.832	14.23
		16QAM	RB50#0	8.943	9.834	14.24

FDD LTE Band 13

Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
5 MHz	Low	QPSK	RB25#0	4.510	5.006	15.1
		16QAM	RB25#0	4.501	4.996	15.2
	Middle	QPSK	RB25#0	4.504	4.995	15.3
		16QAM	RB25#0	4.513	4.976	15.4
	High	QPSK	RB25#0	4.501	4.964	15.5
		16QAM	RB25#0	4.512	5.011	15.6
10 MHz	Low	QPSK	RB50#0	--	--	--
		16QAM	RB50#0	--	--	--
	Middle	QPSK	RB50#0	8.985	9.993	15.7
		16QAM	RB50#0	8.974	9.863	15.8
	High	QPSK	RB50#0	--	--	--
		16QAM	RB50#0	--	--	--

FDD LTE Band 25

Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
1.4 MHz	Low	QPSK	RB6#0	1.090	1.301	16.1
		16QAM	RB6#0	1.094	1.298	16.2
	Middle	QPSK	RB6#0	1.090	1.307	16.3
		16QAM	RB6#0	1.088	1.286	16.4
	High	QPSK	RB6#0	1.093	1.274	16.5
		16QAM	RB6#0	1.093	1.286	16.6
3 MHz	Low	QPSK	RB15#0	2.702	2.982	16.7
		16QAM	RB15#0	2.703	2.997	16.8
	Middle	QPSK	RB15#0	2.702	2.990	16.9
		16QAM	RB15#0	2.701	2.990	16.10
	High	QPSK	RB15#0	2.706	2.977	16.11
		16QAM	RB15#0	2.703	2.994	16.12
5 MHz	Low	QPSK	RB25#0	4.512	4.991	16.13
		16QAM	RB25#0	4.500	4.973	16.14
	Middle	QPSK	RB25#0	4.493	5.001	16.15

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	High	16QAM	RB25#0	4.510	5.019	16.16
		QPSK	RB25#0	4.511	4.965	16.17
		16QAM	RB25#0	4.519	5.030	16.18
10 MHz	Low	QPSK	RB50#0	8.983	9.942	16.19
		16QAM	RB50#0	8.956	9.773	16.20
	Middle	QPSK	RB50#0	8.930	9.824	16.21
		16QAM	RB50#0	8.933	9.826	16.22
	High	QPSK	RB50#0	8.913	9.757	16.23
		16QAM	RB50#0	8.919	9.809	16.24
15 MHz	Low	QPSK	RB75#0	13.478	14.679	16.25
		16QAM	RB75#0	13.467	14.638	16.26
	Middle	QPSK	RB75#0	13.337	14.570	16.27
		16QAM	RB75#0	13.360	14.606	16.28
	High	QPSK	RB75#0	13.291	14.550	16.29
		16QAM	RB75#0	13.313	14.460	16.30
20 MHz	Low	QPSK	RB100#0	17.969	19.380	16.31
		16QAM	RB100#0	17.979	19.364	16.32
	Middle	QPSK	RB100#0	17.801	19.249	16.33
		16QAM	RB100#0	17.784	19.353	16.34
	High	QPSK	RB100#0	17.788	19.385	16.35
		16QAM	RB100#0	17.761	19.152	16.36

TDD LTE Band 38

Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
5 MHz	Low	QPSK	RB25#0	4.503	5.024	17.1
		16QAM	RB25#0	4.508	5.021	17.2
	Middle	QPSK	RB25#0	4.511	5.230	17.3
		16QAM	RB25#0	4.498	5.000	17.4
	High	QPSK	RB25#0	4.495	5.178	17.5
		16QAM	RB25#0	4.509	5.004	17.6
10 MHz	Low	QPSK	RB50#0	8.986	9.947	17.7
		16QAM	RB50#0	8.979	9.932	17.8
	Middle	QPSK	RB50#0	8.990	9.949	17.9
		16QAM	RB50#0	8.939	9.843	17.10
	High	QPSK	RB50#0	8.999	10.130	17.11
		16QAM	RB50#0	8.977	9.810	17.12
15 MHz	Low	QPSK	RB75#0	13.536	16.264	17.13
		16QAM	RB75#0	13.497	15.138	17.14
	Middle	QPSK	RB75#0	13.437	15.891	17.15

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	High	16QAM	RB75#0	13.522	15.581	17.16
		QPSK	RB75#0	13.478	14.969	17.17
20 MHz	Low	16QAM	RB75#0	13.521	15.593	17.18
		QPSK	RB100#0	17.985	20.213	17.19
	16QAM	RB100#0	17.946	20.257	17.20	
	Middle	QPSK	RB100#0	17.965	19.675	17.21
		16QAM	RB100#0	17.975	21.155	17.22
	High	QPSK	RB100#0	17.969	20.711	17.23
16QAM		RB100#0	17.940	21.953	17.24	

TDD LTE Band 41						
Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
5 MHz	Low	QPSK	RB25#0	4.503	5.018	18.1
		16QAM	RB25#0	4.508	5.010	18.2
	Middle	QPSK	RB25#0	4.511	5.286	18.3
		16QAM	RB25#0	4.498	4.998	18.4
	High	QPSK	RB25#0	4.495	5.055	18.5
		16QAM	RB25#0	4.509	5.019	18.6
10 MHz	Low	QPSK	RB50#0	8.986	9.989	18.7
		16QAM	RB50#0	8.979	9.843	18.8
	Middle	QPSK	RB50#0	8.990	10.282	18.9
		16QAM	RB50#0	8.939	9.823	18.10
	High	QPSK	RB50#0	8.999	9.984	18.11
		16QAM	RB50#0	8.977	9.919	18.12
15 MHz	Low	QPSK	RB75#0	13.536	16.064	18.13
		16QAM	RB75#0	13.497	15.936	18.14
	Middle	QPSK	RB75#0	13.437	14.963	18.15
		16QAM	RB75#0	13.522	15.881	18.16
	High	QPSK	RB75#0	13.478	16.282	18.17
		16QAM	RB75#0	13.521	15.214	18.18
20 MHz	Low	QPSK	RB100#0	17.985	19.622	18.19
		16QAM	RB100#0	17.946	20.071	18.20
	Middle	QPSK	RB100#0	17.965	20.733	18.21
		16QAM	RB100#0	17.975	21.531	18.22
	High	QPSK	RB100#0	17.969	20.345	18.23
		16QAM	RB100#0	17.940	20.179	18.24

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Test BW	CH	Modul.	RB Set (Size#Offset)	99% Occupied Bandwidth (MHz)	-26 dB Bandwidth (MHz)	Refer to Plot ^{Note 2}
1.4 MHz	Low	QPSK	RB6#0	1.088	1.283	19.1
		16QAM	RB6#0	1.096	1.296	19.2
	Middle	QPSK	RB6#0	1.090	1.287	19.3
		16QAM	RB6#0	1.088	1.271	19.4
	High	QPSK	RB6#0	1.091	1.274	19.5
		16QAM	RB6#0	1.091	1.278	19.6
3 MHz	Low	QPSK	RB15#0	2.700	2.980	19.7
		16QAM	RB15#0	2.701	3.007	19.8
	Middle	QPSK	RB15#0	2.699	2.980	19.9
		16QAM	RB15#0	2.701	3.003	19.10
	High	QPSK	RB15#0	2.704	2.997	19.11
		16QAM	RB15#0	2.700	2.982	19.12
5 MHz	Low	QPSK	RB25#0	4.511	4.963	19.13
		16QAM	RB25#0	4.502	4.964	19.14
	Middle	QPSK	RB25#0	4.496	5.010	19.15
		16QAM	RB25#0	4.510	5.023	19.16
	High	QPSK	RB25#0	4.499	5.014	19.17
		16QAM	RB25#0	4.509	4.994	19.18
10 MHz	Low	QPSK	RB50#0	8.983	10.014	19.19
		16QAM	RB50#0	8.976	9.821	19.20
	Middle	QPSK	RB50#0	8.951	9.866	19.21
		16QAM	RB50#0	8.974	9.861	19.22
	High	QPSK	RB50#0	8.967	9.871	19.23
		16QAM	RB50#0	8.965	9.899	19.24
15 MHz	Low	QPSK	RB75#0	13.464	14.766	19.25
		16QAM	RB75#0	13.471	14.735	19.26
	Middle	QPSK	RB75#0	13.432	14.705	19.27
		16QAM	RB75#0	13.448	14.741	19.28
	High	QPSK	RB75#0	13.458	14.846	19.29
		16QAM	RB75#0	13.489	14.808	19.30
20 MHz	Low	QPSK	RB100#0	17.926	19.434	19.31
		16QAM	RB100#0	17.922	19.521	19.32
	Middle	QPSK	RB100#0	17.920	19.414	19.33
		16QAM	RB100#0	17.942	19.681	19.34
	High	QPSK	RB100#0	17.963	19.583	19.35
		16QAM	RB100#0	17.965	19.513	19.36

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5.1.4 Frequency Stability

Frequency Stability Measurement Results for GSM/GPRS/EDGE

GSM 850								
Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 824.2 MHz		Middle channel 836.6 MHz		High channel 848.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±2060.5	--	±2091.5	--	±2122	PASS
	-20	21.34		17.05		15.46		
	-10	14.92		15.63		15.59		
	0	14.19		17.09		16.24		
	10	16.75		15.87		15.67		
	20	18.25		17.16		13.26		
	25	17.31		18.40		12.75		
	30	18.26		18.14		13.68		
	40	18.82		17.60		13.11		
	50	17.05		16.89		14.46		
3.7 V	25	13.72		15.88		14.95		
4.35V	25	18.60		15.92		11.62		

GSM 1900								
Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 1850.2 MHz		Middle channel 1880 MHz		High channel 1909.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±4625.5	--	±4700.0	--	±4774.5	PASS
	-20	19.37		27.51		24.02		
	-10	20.86		25.05		29.35		
	0	20.27				28.24		
	10	19.35				18.92		
	20	18.26				17.35		
	25	19.03				18.57		
	30	19.34				22.65		
	40	19.37		24.67		25.99		
	50	20.76		25.63		24.15		
3.7 V	25	17.27		22.15		31.58		
4.35V	25	18.44		26.70		25.34		

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GPRS 850

Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 824.2 MHz		Middle channel 836.6 MHz		High channel 848.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±2060.5	--	±2091.5	--	±2122	PASS
	-20	29.86		29.90		24.60		
	-10	28.23		29.34		23.85		
	0	27.26		28.31		23.76		
	10	26.34		27.54		26.38		
	20	29.36		28.39		28.31		
	25	28.28		26.18		22.37		
	30	27.31		25.54		19.76		
	40	24.92		28.93		26.28		
	50	31.87		28.41		25.09		
3.7 V	25	26.56		28.63		22.37		
4.35V	25	27.34		26.54		26.38		

GPRS 1900

Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 1850.2 MHz		Middle channel 1880 MHz		High channel 1909.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±4625.5	--	±4700.0	--	±4774.5	PASS
	-20	34.74		30.38		36.00		
	-10	32.56		31.59		33.54		
	0	29.58		28.64		29.35		
	10	34.02		33.14		35.61		
	20	52.34		48.56		47.62		
	25	58.89		46.75		31.77		
	30	51.37		50.26		46.25		
	40	28.56		29.35		32.89		
	50	29.12		27.18		34.61		
3.7 V	25	34.74		30.38		36.00		
4.35V	25	35.00		32.09		34.19		

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EDGE 850

Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 824.2 MHz		Middle channel 836.6 MHz		High channel 848.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±2060.5	--	±2091.5	--	±2122	PASS
	-20	33.93		34.71		33.13		
	-10	34.34		35.68		35.02		
	0	38.65		36.92		34.68		
	10	35.97		37.56		38.25		
	20	29.78		38.21		36.91		
	25	29.32		33.16		27.28		
	30	28.65		29.35		29.07		
	40	28.07		35.19		34.67		
	50	26.38		32.06		27.31		
3.7 V	25	35.26		31.54		24.63		
4.35V	25	29.15		30.28		29.35		

EDGE 1900

Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 1850.2 MHz		Middle channel 1880 MHz		High channel 1909.8 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±4625.5	--	±4700.0	--	±4774.5	PASS
	-20	34.29		27.35		26.28		
	-10	33.57		33.26		28.64		
	0	31.62		30.89		29.35		
	10	30.94		29.68		30.37		
	20	31.68		33.97		34.25		
	25	33.16		34.22		35.26		
	30	30.64		33.54		33.64		
	40	31.68		30.67		28.58		
	50	32.83		27.12		27.99		
3.7 V	25	31.67		28.41		31.03		
4.35V	25	29.85		28.65		29.67		

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Frequency Stability Measurement Results for WCDMA

WCDMA Band II								
Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 1852.4 MHz		Middle channel 1880 MHz		High channel 1907.6 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±4631	--	±4700	--	±4769	PASS
	-20	-3.47		-3.28		-3.57		
	-10	-3.78		-3.55		-3.91		
	0	-3.64		-3.28		-4.82		
	10	-3.46		-3.27		-5.06		
	20	-3.15		-3.58		-3.47		
	25	-2.52		-4.53		-3.43		
	30	-3.65		-4.05		-4.35		
	40	-3.18		-5.64		-4.84		
50	-3.43	-3.53	-4.68					
3.7 V	25	-3.54		-3.49		-3.82		
4.35V	25	-3.87		-4.97		-3.35		

WCDMA Band IV								
Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 1712.4 MHz		Middle channel 1732.4 MHz		High channel 1752.6 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±4281	--	±4331	--	±4381..5	PASS
	-20	-2.38		-1.79		-0.86		
	-10	-5.36		-1.67		-0.63		
	0	-2.32		-1.95		-2.02		
	10	-3.60		-1.58		-1.81		
	20	-4.24		-3.68		-1.97		
	25	-0.82		-1.36		-0.89		
	30	-0.66		-0.68		-0.85		
	40	-1.68		-2.35		-2.68		
50	-1.57	-0.68	-3.04					
3.7 V	25	-2.09		-1.42		-3.19		
4.35V	25	-3.23		-1.48		-3.06		

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WCDMA Band V								
Test Conditions		Frequency Deviation						Verdict
Power (V)	Temperature (°C)	Low channel 826.4 MHz		Middle channel 836.4 MHz		High channel 846.6 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±2066	--	±2091	--	±2116.5	PASS
	-20	-0.97		-0.98		0.95		
	-10	-3.04		-0.36		0.87		
	0	-3.21		-0.95		0.81		
	10	-2.98		1.19		-0.93		
	20	-2.65		1.68		-0.86		
	25	-1.69		-0.85		-0.76		
	30	-2.31		-1.21		-0.97		
	40	-3.18		-1.37		0.88		
	50	-3.62		0.55		1.04		
3.7 V	25	-1.88		-0.86		0.59		
4.35V	25	-2.05		-0.89		-0.86		

Frequency Stability Measurement Results for LTE

FDD LTE Band 2						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 1880 MHz		Middle channel 1880 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±4700	--	±4700	PASS
	-20	0.54		0.27		
	-10	2.26		0.99		
	0	1.58		1.05		
	10	1.37		1.38		
	20	1.47		1.52		
	25	1.56		1.46		
	30	1.09		1.14		
	40	0.34		0.33		
	50	0.36		-0.77		
3.7 V	25	-1.65		1.20		
4.35V	25	1.60		-0.07		

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FDD LTE Band 4						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 1732.5 MHz		Middle channel 1732.5 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±4331.25	--	±4331.25	PASS
	-20	-0.06		0.73		
	-10	0.03		0.67		
	0	0.08		0.54		
	10	1.35		1.19		
	20	1.64		1.38		
	25	1.79		1.77		
	30	1.35		1.64		
	40	0.60		-0.11		
	50	-0.60		0.39		
3.7 V	25	0.14		-1.72		
4.35V	25	-0.13		-0.44		

FDD LTE Band 5						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 836.5 MHz		Middle channel 836.5 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±2091.25	--	±2091.25	PASS
	-20	-0.54		-0.99		
	-10	-0.01		-0.80		
	0	0.16		-0.65		
	10	0.28		0.37		
	20	0.32		0.51		
	25	0.14		-0.10		
	30	-0.79		-0.95		
	40	-0.66		-1.17		
	50	-1.39		-0.47		
3.7 V	25	-0.64		-1.22		
4.35V	25	-2.00		-1.50		

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FDD LTE Band 7						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 2535 MHz		Middle channel 2535 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±6337.5	--	±6337.5	PASS
	-20	-2.63		-4.55		
	-10	-4.31		-4.01		
	0	-1.57		-3.58		
	10	-1.98		-2.85		
	20	-1.56		-3.54		
	25	-2.02		-2.42		
	30	-3.54		-3.29		
	40	-4.18		-4.13		
	50	-2.66		-4.53		
3.7 V	25	-2.29		-5.02		
4.35V	25	-3.23		-3.93		

FDD LTE Band 12						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 707.5 MHz		Middle channel 707.5 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±1768.75	--	±1768.75	PASS
	-20	-2.15		-0.57		
	-10	-1.44		-1.53		
	0	-1.93		-1.75		
	10	-2.67		-2.19		
	20	-3.08		-2.58		
	25	-2.75		-2.10		
	30	-2.17		-1.86		
	40	0.41		-2.25		
	50	-1.77		-1.92		
3.7 V	25	-0.09		-0.94		
4.35V	25	0.10		-1.77		

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FDD LTE Band 13						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 782 MHz		Middle channel 782 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±1955	--	±1955	PASS
	-20	-0.13		-1.85		
	-10	0.09		-0.21		
	0	0.26		0.18		
	10	0.34		0.35		
	20	0.16		0.28		
	25	0.08		0.16		
	30	-0.82		2.14		
	40	-0.66		3.43		
	50	0.67		-2.50		
3.7 V	25	0.33		-2.57		
4.35V	25	-0.96		-3.05		

FDD LTE Band 25						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 1882.5 MHz		Middle channel 1882.5 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±4706.25	--	±4706.25	PASS
	-20	1.75		-0.31		
	-10	0.53		-0.26		
	0	0.28		-0.52		
	10	0.34		0.64		
	20	1.57		1.75		
	25	1.70		1.69		
	30	2.25		1.92		
	40	2.59		-0.03		
	50	1.23		0.47		
3.7 V	25	0.19		-0.62		
4.35V	25	1.24		0.43		

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TDD LTE Band 38						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 2605 MHz		Middle channel 2605 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±6512.5	--	±6512.5	PASS
	-20	7.06		6.72		
	-10	6.14		6.59		
	0	6.22		8.62		
	10	6.16		8.98		
	20	6.24		8.11		
	25	6.15		8.73		
	30	6.37		8.35		
	40	5.73		7.66		
	50	6.08		7.24		
3.7 V	25	6.19		4.86		
4.35V	25	6.16		7.57		

TDD LTE Band 41						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 2605 MHz		Middle channel 2605 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±6512.5	--	±6512.5	PASS
	-20	8.26		7.62		
	-10	8.34		7.35		
	0	8.52		9.07		
	10	8.26		8.59		
	20	8.34		7.81		
	25	8.45		9.28		
	30	8.47		8.42		
	40	6.59		8.26		
	50	5.78		7.62		
3.7 V	25	6.59		5.98		

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4.35V	25	7.26		3.57		
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FDD LTE Band 66						
Test Conditions		Frequency Deviation				Verdict
Power (V)	Temperature (°C)	QPSK 10MHz		16QAM 10MHz		
		Middle channel 2605 MHz		Middle channel 2605 MHz		
		Value (Hz)	Limits (Hz)	Value (Hz)	Limits (Hz)	
3.8 V	-30	--	±6512.5	--	±6512.5	PASS
	-20	-3.86		-2.88		
	-10	-2.80		-3.12		
	0	-3.86		-4.06		
	10	-4.65		-3.15		
	20	-3.21		-2.16		
	25	-1.96		-2.78		
	30	-3.06		-3.14		
	40	-3.82		-3.38		
	50	-4.65		-3.15		
3.7 V	25	-4.59		-2.93		
4.35V	25	-0.46		-3.78		

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5.1.5 Spurious Emission at Antenna Terminals

Note(s):

1. GSM and EGPRS modes have been verified, and only the worst data with different bandwidth for LTE are shown here.
2. The frequencies of verdict which are marked by "N/A" should be ignored because they are MS carrier frequency.
3. Test plots please refer to the document "Annex No: SHE20090007-02AE Data EXHIBIT C".

Spurious Emission Measurement Results for GSM/WCDMA/CDMA

Test Band	Channel	Refer to Plot ^{Note 3}	Verdict
GSM 850	Low	1.1	PASS
	Middle	1.2	PASS
	High	1.3	PASS
GSM 1900	Low	2.1	PASS
	Middle	2.2	PASS
	High	2.3	PASS
GRPS 850	Low	3.1	PASS
	Middle	3.2	PASS
	High	3.3	PASS
GRPS 1900	Low	4.1	PASS
	Middle	4.2	PASS
	High	4.3	PASS
EDGE 850	Low	5.1	PASS
	Middle	5.2	PASS
	High	5.3	PASS
EDGE 1900	Low	6.1	PASS
	Middle	6.2	PASS
	High	6.3	PASS
WCDMA Band II	Low	7.1	PASS
	Middle	7.2	PASS
	High	7.3	PASS
WCDMA Band IV	Low	8.1	PASS
	Middle	8.2	PASS
	High	8.3	PASS
WCDMA Band V	Low	9.1	PASS
	Middle	9.2	PASS
	High	9.3	PASS

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Spurious Emission Measurement Results for LTE

FDD LTE Band 2					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
1.4 MHz	Low	QPSK	RB1#0	10.1	PASS
		16QAM	RB1#0	10.2	PASS
	Middle	QPSK	RB1#0	10.3	PASS
		16QAM	RB1#0	10.4	PASS
	High	QPSK	RB1#0	10.5	PASS
		16QAM	RB1#0	10.6	PASS
3 MHz	Low	QPSK	RB1#0	10.7	PASS
		16QAM	RB1#0	10.8	PASS
	Middle	QPSK	RB1#0	10.9	PASS
		16QAM	RB1#0	10.10	PASS
	High	QPSK	RB1#0	10.11	PASS
		16QAM	RB1#0	10.12	PASS
5 MHz	Low	QPSK	RB1#0	10.13	PASS
		16QAM	RB1#0	10.14	PASS
	Middle	QPSK	RB1#0	10.15	PASS
		16QAM	RB1#0	10.16	PASS
	High	QPSK	RB1#0	10.17	PASS
		16QAM	RB1#0	10.18	PASS
10 MHz	Low	QPSK	RB1#0	10.19	PASS
		16QAM	RB1#0	10.20	PASS
	Middle	QPSK	RB1#0	10.21	PASS
		16QAM	RB1#0	10.22	PASS
	High	QPSK	RB1#0	10.23	PASS
		16QAM	RB1#0	10.24	PASS
15 MHz	Low	QPSK	RB1#0	10.25	PASS
		16QAM	RB1#0	10.26	PASS
	Middle	QPSK	RB1#0	10.27	PASS
		16QAM	RB1#0	10.28	PASS
	High	QPSK	RB1#0	10.29	PASS
		16QAM	RB1#0	10.30	PASS
20 MHz	Low	QPSK	RB1#0	10.31	PASS
		16QAM	RB1#0	10.32	PASS
	Middle	QPSK	RB1#0	10.33	PASS
		16QAM	RB1#0	10.34	PASS
	High	QPSK	RB1#0	10.35	PASS
		16QAM	RB1#0	10.36	PASS

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FDD LTE Band 4					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
1.4 MHz	Low	QPSK	RB1#0	11.1	PASS
		16QAM	RB1#0	11.2	PASS
	Middle	QPSK	RB1#0	11.3	PASS
		16QAM	RB1#0	11.4	PASS
	High	QPSK	RB1#0	11.5	PASS
		16QAM	RB1#0	11.6	PASS
3 MHz	Low	QPSK	RB1#0	11.7	PASS
		16QAM	RB1#0	11.8	PASS
	Middle	QPSK	RB1#0	11.9	PASS
		16QAM	RB1#0	11.10	PASS
	High	QPSK	RB1#0	11.11	PASS
		16QAM	RB1#0	11.12	PASS
5 MHz	Low	QPSK	RB1#0	11.13	PASS
		16QAM	RB1#0	11.14	PASS
	Middle	QPSK	RB1#0	11.15	PASS
		16QAM	RB1#0	11.16	PASS
	High	QPSK	RB1#0	11.17	PASS
		16QAM	RB1#0	11.18	PASS
10 MHz	Low	QPSK	RB1#0	11.19	PASS
		16QAM	RB1#0	11.20	PASS
	Middle	QPSK	RB1#0	11.21	PASS
		16QAM	RB1#0	11.22	PASS
	High	QPSK	RB1#0	11.23	PASS
		16QAM	RB1#0	11.24	PASS
15 MHz	Low	QPSK	RB1#0	11.25	PASS
		16QAM	RB1#0	11.26	PASS
	Middle	QPSK	RB1#0	11.27	PASS
		16QAM	RB1#0	11.28	PASS
	High	QPSK	RB1#0	11.29	PASS
		16QAM	RB1#0	11.30	PASS
20 MHz	Low	QPSK	RB1#0	11.31	PASS
		16QAM	RB1#0	11.32	PASS
	Middle	QPSK	RB1#0	11.33	PASS
		16QAM	RB1#0	11.34	PASS
	High	QPSK	RB1#0	11.35	PASS
		16QAM	RB1#0	11.36	PASS

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FDD LTE Band 5					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
1.4 MHz	Low	QPSK	RB1#0	12.1	PASS
		16QAM	RB1#0	12.2	PASS
	Middle	QPSK	RB1#0	12.3	PASS
		16QAM	RB1#0	12.4	PASS
	High	QPSK	RB1#0	12.5	PASS
		16QAM	RB1#0	12.6	PASS
3 MHz	Low	QPSK	RB1#0	12.7	PASS
		16QAM	RB1#0	12.8	PASS
	Middle	QPSK	RB1#0	12.9	PASS
		16QAM	RB1#0	12.10	PASS
	High	QPSK	RB1#0	12.11	PASS
		16QAM	RB1#0	12.12	PASS
5 MHz	Low	QPSK	RB1#0	12.13	PASS
		16QAM	RB1#0	12.14	PASS
	Middle	QPSK	RB1#0	12.15	PASS
		16QAM	RB1#0	12.16	PASS
	High	QPSK	RB1#0	12.17	PASS
		16QAM	RB1#0	12.18	PASS
10 MHz	Low	QPSK	RB1#0	12.19	PASS
		16QAM	RB1#0	12.20	PASS
	Middle	QPSK	RB1#0	12.21	PASS
		16QAM	RB1#0	12.22	PASS
	High	QPSK	RB1#0	12.23	PASS
		16QAM	RB1#0	12.24	PASS

FDD LTE Band 7					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
5 MHz	Low	QPSK	RB1#0	13.1	PASS
		16QAM	RB1#0	13.2	PASS
	Middle	QPSK	RB1#0	13.3	PASS
		16QAM	RB1#0	13.4	PASS
	High	QPSK	RB1#0	13.5	PASS
		16QAM	RB1#0	13.6	PASS
10 MHz	Low	QPSK	RB1#0	13.7	PASS
		16QAM	RB1#0	13.8	PASS

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	Middle	QPSK	RB1#0	13.9	PASS
		16QAM	RB1#0	13.10	PASS
	High	QPSK	RB1#0	13.11	PASS
		16QAM	RB1#0	13.12	PASS
15 MHz	Low	QPSK	RB1#0	13.13	PASS
		16QAM	RB1#0	13.14	PASS
	Middle	QPSK	RB1#0	13.15	PASS
		16QAM	RB1#0	13.16	PASS
	High	QPSK	RB1#0	13.17	PASS
		16QAM	RB1#0	13.18	PASS
20 MHz	Low	QPSK	RB1#0	13.19	PASS
		16QAM	RB1#0	13.20	PASS
	Middle	QPSK	RB1#0	13.21	PASS
		16QAM	RB1#0	13.22	PASS
	High	QPSK	RB1#0	13.23	PASS
		16QAM	RB1#0	13.24	PASS

FDD LTE Band 12

Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
1.4 MHz	Low	QPSK	RB1#0	14.1	PASS
		16QAM	RB1#0	14.2	PASS
	Middle	QPSK	RB1#0	14.3	PASS
		16QAM	RB1#0	14.4	PASS
	High	QPSK	RB1#0	14.5	PASS
		16QAM	RB1#0	14.6	PASS
3 MHz	Low	QPSK	RB1#0	14.7	PASS
		16QAM	RB1#0	14.8	PASS
	Middle	QPSK	RB1#0	14.9	PASS
		16QAM	RB1#0	14.10	PASS
	High	QPSK	RB1#0	14.11	PASS
		16QAM	RB1#0	14.12	PASS
5 MHz	Low	QPSK	RB1#0	14.13	PASS
		16QAM	RB1#0	14.14	PASS
	Middle	QPSK	RB1#0	14.15	PASS
		16QAM	RB1#0	14.16	PASS
	High	QPSK	RB1#0	14.17	PASS
		16QAM	RB1#0	14.18	PASS
10 MHz	Low	QPSK	RB1#0	14.19	PASS
		16QAM	RB1#0	14.20	PASS

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	Middle	QPSK	RB1#0	14.21	PASS
		16QAM	RB1#0	14.22	PASS
	High	QPSK	RB1#0	14.23	PASS
		16QAM	RB1#0	14.24	PASS

FDD LTE Band 13

Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
5 MHz	Low	QPSK	RB1#0	15.1	PASS
		16QAM	RB1#0	15.2	PASS
	Middle	QPSK	RB1#0	15.3	PASS
		16QAM	RB1#0	15.4	PASS
	High	QPSK	RB1#0	15.5	PASS
		16QAM	RB1#0	15.6	PASS
10 MHz	Low	QPSK	--	--	--
		16QAM	--	--	--
	Middle	QPSK	RB1#0	15.7	PASS
		16QAM	RB1#0	15.8	PASS
	High	QPSK	--	--	--
		16QAM	--	--	--

FDD LTE Band 25

Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
1.4 MHz	Low	QPSK	RB1#0	16.1	PASS
		16QAM	RB1#0	16.2	PASS
	Middle	QPSK	RB1#0	16.3	PASS
		16QAM	RB1#0	16.4	PASS
	High	QPSK	RB1#0	16.5	PASS
		16QAM	RB1#0	16.6	PASS
3 MHz	Low	QPSK	RB1#0	16.7	PASS
		16QAM	RB1#0	16.8	PASS
	Middle	QPSK	RB1#0	16.9	PASS
		16QAM	RB1#0	16.10	PASS
	High	QPSK	RB1#0	16.11	PASS
		16QAM	RB1#0	16.12	PASS
5 MHz	Low	QPSK	RB1#0	16.13	PASS
		16QAM	RB1#0	16.14	PASS
	Middle	QPSK	RB1#0	16.15	PASS
		16QAM	RB1#0	16.16	PASS

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	High	QPSK	RB1#0	16.17	PASS
		16QAM	RB1#0	16.18	PASS
10 MHz	Low	QPSK	RB1#0	16.19	PASS
		16QAM	RB1#0	16.20	PASS
	Middle	QPSK	RB1#0	16.21	PASS
		16QAM	RB1#0	16.22	PASS
	High	QPSK	RB1#0	16.23	PASS
		16QAM	RB1#0	16.24	PASS
15 MHz	Low	QPSK	RB1#0	16.25	PASS
		16QAM	RB1#0	16.26	PASS
	Middle	QPSK	RB1#0	16.27	PASS
		16QAM	RB1#0	16.28	PASS
	High	QPSK	RB1#0	16.29	PASS
		16QAM	RB1#0	16.30	PASS
20 MHz	Low	QPSK	RB1#0	16.31	PASS
		16QAM	RB1#0	16.32	PASS
	Middle	QPSK	RB1#0	16.33	PASS
		16QAM	RB1#0	16.34	PASS
	High	QPSK	RB1#0	16.35	PASS
		16QAM	RB1#0	16.36	PASS

TDD LTE Band 38					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
5 MHz	Low	QPSK	RB1#0	17.1	PASS
		16QAM	RB1#0	17.2	PASS
	Middle	QPSK	RB1#0	17.3	PASS
		16QAM	RB1#0	17.4	PASS
	High	QPSK	RB1#0	17.5	PASS
		16QAM	RB1#0	17.6	PASS
10 MHz	Low	QPSK	RB1#0	17.7	PASS
		16QAM	RB1#0	17.8	PASS
	Middle	QPSK	RB1#0	17.9	PASS
		16QAM	RB1#0	17.10	PASS
	High	QPSK	RB1#0	17.11	PASS
		16QAM	RB1#0	17.12	PASS
15 MHz	Low	QPSK	RB1#0	17.13	PASS
		16QAM	RB1#0	17.14	PASS
	Middle	QPSK	RB1#0	17.15	PASS
		16QAM	RB1#0	17.16	PASS

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20 MHz	High	QPSK	RB1#0	17.17	PASS
		16QAM	RB1#0	17.18	PASS
	Low	QPSK	RB1#0	17.19	PASS
		16QAM	RB1#0	17.20	PASS
	Middle	QPSK	RB1#0	17.21	PASS
		16QAM	RB1#0	17.22	PASS
High	QPSK	RB1#0	17.23	PASS	
	16QAM	RB1#0	17.24	PASS	

TDD LTE Band 41

Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
5 MHz	Low	QPSK	RB1#0	18.1	PASS
		16QAM	RB1#0	18.2	PASS
	Middle	QPSK	RB1#0	18.3	PASS
		16QAM	RB1#0	18.4	PASS
	High	QPSK	RB1#0	18.5	PASS
		16QAM	RB1#0	18.6	PASS
10 MHz	Low	QPSK	RB1#0	18.7	PASS
		16QAM	RB1#0	18.8	PASS
	Middle	QPSK	RB1#0	18.9	PASS
		16QAM	RB1#0	18.10	PASS
	High	QPSK	RB1#0	18.11	PASS
		16QAM	RB1#0	18.12	PASS
15 MHz	Low	QPSK	RB1#0	18.13	PASS
		16QAM	RB1#0	18.14	PASS
	Middle	QPSK	RB1#0	18.15	PASS
		16QAM	RB1#0	18.16	PASS
	High	QPSK	RB1#0	18.17	PASS
		16QAM	RB1#0	18.18	PASS
20 MHz	Low	QPSK	RB1#0	18.19	PASS
		16QAM	RB1#0	18.20	PASS
	Middle	QPSK	RB1#0	18.21	PASS
		16QAM	RB1#0	18.22	PASS
	High	QPSK	RB1#0	18.23	PASS
		16QAM	RB1#0	18.24	PASS

FDD LTE Band 66

Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 3}	Verdict
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1.4 MHz	Low	QPSK	RB1#0	19.1	PASS
		16QAM	RB1#0	19.2	PASS
	Middle	QPSK	RB1#0	19.3	PASS
		16QAM	RB1#0	19.4	PASS
	High	QPSK	RB1#0	19.5	PASS
		16QAM	RB1#0	19.6	PASS
3 MHz	Low	QPSK	RB1#0	19.7	PASS
		16QAM	RB1#0	19.8	PASS
	Middle	QPSK	RB1#0	19.9	PASS
		16QAM	RB1#0	19.10	PASS
	High	QPSK	RB1#0	19.11	PASS
		16QAM	RB1#0	19.12	PASS
5 MHz	Low	QPSK	RB1#0	19.13	PASS
		16QAM	RB1#0	19.14	PASS
	Middle	QPSK	RB1#0	19.15	PASS
		16QAM	RB1#0	19.16	PASS
	High	QPSK	RB1#0	19.17	PASS
		16QAM	RB1#0	19.18	PASS
10 MHz	Low	QPSK	RB1#0	19.19	PASS
		16QAM	RB1#0	19.20	PASS
	Middle	QPSK	RB1#0	19.21	PASS
		16QAM	RB1#0	19.22	PASS
	High	QPSK	RB1#0	19.23	PASS
		16QAM	RB1#0	19.24	PASS
15 MHz	Low	QPSK	RB1#0	19.25	PASS
		16QAM	RB1#0	19.26	PASS
	Middle	QPSK	RB1#0	19.27	PASS
		16QAM	RB1#0	19.28	PASS
	High	QPSK	RB1#0	19.29	PASS
		16QAM	RB1#0	19.30	PASS
20 MHz	Low	QPSK	RB1#0	19.31	PASS
		16QAM	RB1#0	19.32	PASS
	Middle	QPSK	RB1#0	19.33	PASS
		16QAM	RB1#0	19.34	PASS
	High	QPSK	RB1#0	19.35	PASS
		16QAM	RB1#0	19.36	PASS

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5.1.6 Band Edge

Note(s):

1. Test plots please refer to the document "Annex No: SHE20090007-02AE Data EXHIBIT D".

Band Edge Measurement Results for WCDMA

Test Band	Channel	Refer to Plot ^{Note 1}	Verdict
GSM 850	Low	1.1	PASS
	High	1.2	PASS
GSM 1900	Low	2.1	PASS
	High	2.2	PASS
GRPS 850	Low	3.1	PASS
	High	3.2	PASS
GRPS 1900	Low	4.1	PASS
	High	4.2	PASS
EDGE 850	Low	5.1	PASS
	High	5.2	PASS
EDGE 1900	Low	6.1	PASS
	High	6.2	PASS
WCDMA Band II	Low	7.1	PASS
	High	7.2	PASS
WCDMA Band IV	Low	8.1	PASS
	High	8.2	PASS
WCDMA Band V	Low	9.1	PASS
	High	9.2	PASS

Band Edge Measurement Results for LTE

FDD LTE Band 2					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
1.4 MHz	Low	QPSK	RB1#0	10.1	PASS
			RB6#0	10.2	PASS
		16QAM	RB1#0	10.3	PASS
			RB6#0	10.4	PASS
	High	QPSK	RB1#0	10.5	PASS
			RB6#0	10.6	PASS
		16QAM	RB1#0	10.7	PASS
			RB6#0	10.8	PASS
3 MHz	Low	QPSK	RB1#0	10.9	PASS
			RB15#0	10.10	PASS
		16QAM	RB1#0	10.11	PASS

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	High	QPSK	RB15#0	10.12	PASS
			RB1#0	10.13	PASS
		16QAM	RB15#0	10.14	PASS
			RB1#0	10.15	PASS
5 MHz	Low	QPSK	RB15#0	10.16	PASS
			RB1#0	10.17	PASS
		16QAM	RB25#0	10.18	PASS
			RB1#0	10.19	PASS
	High	QPSK	RB25#0	10.20	PASS
			RB1#0	10.21	PASS
		16QAM	RB25#0	10.22	PASS
			RB1#0	10.23	PASS
10 MHz	Low	QPSK	RB25#0	10.24	PASS
			RB1#0	10.25	PASS
		16QAM	RB50#0	10.26	PASS
			RB1#0	10.27	PASS
	High	QPSK	RB50#0	10.28	PASS
			RB1#0	10.29	PASS
		16QAM	RB50#0	10.30	PASS
			RB1#0	10.31	PASS
15 MHz	Low	QPSK	RB50#0	10.32	PASS
			RB1#0	10.33	PASS
		16QAM	RB75#0	10.34	PASS
			RB1#0	10.35	PASS
	High	QPSK	RB75#0	10.36	PASS
			RB1#0	10.37	PASS
		16QAM	RB75#0	10.38	PASS
			RB1#0	10.39	PASS
20 MHz	Low	QPSK	RB75#0	10.40	PASS
			RB1#0	10.41	PASS
		16QAM	RB100#0	10.42	PASS
			RB1#0	10.43	PASS
	High	QPSK	RB100#0	10.44	PASS
			RB1#0	10.45	PASS
		16QAM	RB100#0	10.45	PASS
			RB1#0	10.47	PASS
			RB100#0	10.48	PASS

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FDD LTE Band 4					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
1.4 MHz	Low	QPSK	RB1#0	11.1	PASS
			RB6#0	11.2	PASS
		16QAM	RB1#0	11.3	PASS
			RB6#0	11.4	PASS
	High	QPSK	RB1#0	11.5	PASS
			RB6#0	11.6	PASS
		16QAM	RB1#0	11.7	PASS
			RB6#0	11.8	PASS
3 MHz	Low	QPSK	RB1#0	11.9	PASS
			RB15#0	11.10	PASS
		16QAM	RB1#0	11.11	PASS
			RB15#0	11.12	PASS
	High	QPSK	RB1#0	11.13	PASS
			RB15#0	11.14	PASS
		16QAM	RB1#0	11.15	PASS
			RB15#0	11.16	PASS
5 MHz	Low	QPSK	RB1#0	11.17	PASS
			RB25#0	11.18	PASS
		16QAM	RB1#0	11.19	PASS
			RB25#0	11.20	PASS
	High	QPSK	RB1#0	11.21	PASS
			RB25#0	11.22	PASS
		16QAM	RB1#0	11.23	PASS
			RB25#0	11.24	PASS
10 MHz	Low	QPSK	RB1#0	11.25	PASS
			RB50#0	11.26	PASS
		16QAM	RB1#0	11.27	PASS
			RB50#0	11.28	PASS
	High	QPSK	RB1#0	11.29	PASS
			RB50#0	11.30	PASS
		16QAM	RB1#0	11.31	PASS
			RB50#0	11.32	PASS
15 MHz	Low	QPSK	RB1#0	11.33	PASS
			RB75#0	11.34	PASS
		16QAM	RB1#0	11.35	PASS
			RB75#0	11.36	PASS

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	High	QPSK	RB1#0	11.37	PASS
			RB75#0	11.38	PASS
		16QAM	RB1#0	11.39	PASS
			RB75#0	11.40	PASS
20 MHz	Low	QPSK	RB1#0	11.41	PASS
			RB100#0	11.42	PASS
		16QAM	RB1#0	11.43	PASS
			RB100#0	11.44	PASS
	High	QPSK	RB1#0	11.45	PASS
			RB100#0	11.46	PASS
		16QAM	RB1#0	11.47	PASS
			RB100#0	11.48	PASS

FDD LTE Band 5					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
1.4 MHz	Low	QPSK	RB1#0	12.1	PASS
			RB6#0	12.2	PASS
		16QAM	RB1#0	12.3	PASS
			RB6#0	12.4	PASS
	High	QPSK	RB1#0	12.5	PASS
			RB6#0	12.6	PASS
		16QAM	RB1#0	12.7	PASS
			RB6#0	12.8	PASS
3 MHz	Low	QPSK	RB1#0	12.9	PASS
			RB15#0	12.10	PASS
		16QAM	RB1#0	12.11	PASS
			RB15#0	12.12	PASS
	High	QPSK	RB1#0	12.13	PASS
			RB15#0	12.14	PASS
		16QAM	RB1#0	12.15	PASS
			RB15#0	12.16	PASS
5 MHz	Low	QPSK	RB1#0	12.17	PASS
			RB25#0	12.18	PASS
		16QAM	RB1#0	12.19	PASS
			RB25#0	12.20	PASS
	High	QPSK	RB1#0	12.21	PASS
			RB25#0	12.22	PASS
		16QAM	RB1#0	12.23	PASS
			RB25#0	12.24	PASS

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10 MHz	Low	QPSK	RB1#0	12.25	PASS
			RB50#0	12.26	PASS
		16QAM	RB1#0	12.27	PASS
			RB50#0	12.28	PASS
	High	QPSK	RB1#0	12.29	PASS
			RB50#0	12.30	PASS
		16QAM	RB1#0	12.31	PASS
			RB50#0	12.32	PASS

FDD LTE Band 7					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
5 MHz	Low	QPSK	RB1#0	13.1	PASS
			RB25#0	13.2	PASS
		16QAM	RB1#0	13.3	PASS
			RB25#0	13.4	PASS
	High	QPSK	RB1#0	13.5	PASS
			RB25#0	13.6	PASS
		16QAM	RB1#0	13.7	PASS
			RB25#0	13.8	PASS
10 MHz	Low	QPSK	RB1#0	13.9	PASS
			RB50#0	13.10	PASS
		16QAM	RB1#0	13.11	PASS
			RB50#0	13.12	PASS
	High	QPSK	RB1#0	13.13	PASS
			RB50#0	13.14	PASS
		16QAM	RB1#0	13.15	PASS
			RB50#0	13.16	PASS
15 MHz	Low	QPSK	RB1#0	13.17	PASS
			RB75#0	13.18	PASS
		16QAM	RB1#0	13.19	PASS
			RB75#0	13.20	PASS
	High	QPSK	RB1#0	13.21	PASS
			RB75#0	13.22	PASS
		16QAM	RB1#0	13.23	PASS
			RB75#0	13.24	PASS
20 MHz	Low	QPSK	RB1#0	13.25	PASS
			RB100#0	13.26	PASS
		16QAM	RB1#0	13.27	PASS
			RB100#0	13.28	PASS

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	High	QPSK	RB1#0	13.29	PASS
			RB100#0	13.30	PASS
		16QAM	RB1#0	13.31	PASS
			RB100#0	13.32	PASS

FDD LTE Band 12					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
1.4 MHz	Low	QPSK	RB1#0	14.1	PASS
			RB6#0	14.2	PASS
		16QAM	RB1#0	14.3	PASS
			RB6#0	14.4	PASS
	High	QPSK	RB1#0	14.5	PASS
			RB6#0	14.6	PASS
		16QAM	RB1#0	14.7	PASS
			RB6#0	1.8	PASS
3 MHz	Low	QPSK	RB1#0	14.9	PASS
			RB15#0	14.10	PASS
		16QAM	RB1#0	14.11	PASS
			RB15#0	14.12	PASS
	High	QPSK	RB1#0	14.13	PASS
			RB15#0	14.14	PASS
		16QAM	RB1#0	14.15	PASS
			RB15#0	14.16	PASS
5 MHz	Low	QPSK	RB1#0	14.17	PASS
			RB25#0	14.18	PASS
		16QAM	RB1#0	14.19	PASS
			RB25#0	14.20	PASS
	High	QPSK	RB1#0	14.21	PASS
			RB25#0	14.22	PASS
		16QAM	RB1#0	14.23	PASS
			RB25#0	14.24	PASS
10 MHz	Low	QPSK	RB1#0	14.25	PASS
			RB50#0	14.26	PASS
		16QAM	RB1#0	14.27	PASS
			RB50#0	14.28	PASS
	High	QPSK	RB1#0	14.29	PASS
			RB50#0	14.30	PASS
		16QAM	RB1#0	14.31	PASS
			RB50#0	14.32	PASS

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FDD LTE Band 13					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
5 MHz	Low	QPSK	RB1#0	15.1	PASS
			RB25#0	15.2	PASS
		16QAM	RB1#0	15.3	PASS
			RB25#0	15.4	PASS
	High	QPSK	RB1#0	15.5	PASS
			RB25#0	15.6	PASS
		16QAM	RB1#0	15.7	PASS
			RB25#0	15.8	PASS
10 MHz	Low	QPSK	RB1#0	15.9	PASS
			RB50#0	15.10	PASS
		16QAM	RB1#0	15.11	PASS
			RB50#0	15.12	PASS
	High	QPSK	RB1#0	15.13	PASS
			RB50#0	15.14	PASS
		16QAM	RB1#0	15.15	PASS
			RB50#0	15.16	PASS

FDD LTE Band 25					
Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
1.4 MHz	Low	QPSK	RB1#0	16.1	PASS
			RB6#0	16.2	PASS
		16QAM	RB1#0	16.3	PASS
			RB6#0	16.4	PASS
	High	QPSK	RB1#0	16.5	PASS
			RB6#0	16.6	PASS
		16QAM	RB1#0	16.7	PASS
			RB6#0	16.8	PASS
3 MHz	Low	QPSK	RB1#0	16.9	PASS
			RB15#0	16.10	PASS
		16QAM	RB1#0	16.11	PASS
			RB15#0	16.12	PASS
	High	QPSK	RB1#0	16.13	PASS
			RB15#0	16.14	PASS
		16QAM	RB1#0	16.15	PASS
			RB15#0	16.16	PASS

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5 MHz	Low	QPSK	RB1#0	16.17	PASS
			RB25#0	16.18	PASS
		16QAM	RB1#0	16.19	PASS
			RB25#0	16.20	PASS
	High	QPSK	RB1#0	16.21	PASS
			RB25#0	16.22	PASS
		16QAM	RB1#0	16.23	PASS
			RB25#0	16.24	PASS
10 MHz	Low	QPSK	RB1#0	16.25	PASS
			RB50#0	16.26	PASS
		16QAM	RB1#0	16.27	PASS
			RB50#0	16.28	PASS
	High	QPSK	RB1#0	16.29	PASS
			RB50#0	16.30	PASS
		16QAM	RB1#0	16.31	PASS
			RB50#0	16.32	PASS
15 MHz	Low	QPSK	RB1#0	16.33	PASS
			RB75#0	16.34	PASS
		16QAM	RB1#0	16.35	PASS
			RB75#0	16.36	PASS
	High	QPSK	RB1#0	16.37	PASS
			RB75#0	16.38	PASS
		16QAM	RB1#0	16.39	PASS
			RB75#0	16.40	PASS
20 MHz	Low	QPSK	RB1#0	16.41	PASS
			RB100#0	16.42	PASS
		16QAM	RB1#0	16.43	PASS
			RB100#0	16.44	PASS
	High	QPSK	RB1#0	16.45	PASS
			RB100#0	16.46	PASS
		16QAM	RB1#0	16.47	PASS
			RB100#0	16.48	PASS

TDD LTE Band 38

Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
5 MHz	Low	QPSK	RB1#0	17.1	PASS
			RB25#0	17.2	PASS
		16QAM	RB1#0	17.3	PASS
			RB25#0	17.4	PASS

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	High	QPSK	RB1#0	17.5	PASS
			RB25#0	17.6	PASS
		16QAM	RB1#0	17.7	PASS
			RB25#0	17.8	PASS
10 MHz	Low	QPSK	RB1#0	17.9	PASS
			RB50#0	17.10	PASS
		16QAM	RB1#0	17.11	PASS
			RB50#0	17.12	PASS
	High	QPSK	RB1#0	17.13	PASS
			RB50#0	17.14	PASS
		16QAM	RB1#0	17.15	PASS
			RB50#0	17.16	PASS
15 MHz	Low	QPSK	RB1#0	17.17	PASS
			RB75#0	17.18	PASS
		16QAM	RB1#0	17.19	PASS
			RB75#0	17.20	PASS
	High	QPSK	RB1#0	17.21	PASS
			RB75#0	17.22	PASS
		16QAM	RB1#0	17.23	PASS
			RB75#0	17.24	PASS
20 MHz	Low	QPSK	RB1#0	17.25	PASS
			RB100#0	17.26	PASS
		16QAM	RB1#0	17.27	PASS
			RB100#0	17.28	PASS
	High	QPSK	RB1#0	17.29	PASS
			RB100#0	17.30	PASS
		16QAM	RB1#0	17.31	PASS
			RB100#0	17.32	PASS

TDD LTE Band 41

Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
5 MHz	Low	QPSK	RB1#0	18.1	PASS
			RB25#0	18.2	PASS
		16QAM	RB1#0	18.3	PASS
			RB25#0	18.4	PASS
	High	QPSK	RB1#0	18.5	PASS
			RB25#0	18.6	PASS
		16QAM	RB1#0	18.7	PASS
			RB25#0	18.8	PASS

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10 MHz	Low	QPSK	RB1#0	18.9	PASS
			RB50#0	18.10	PASS
		16QAM	RB1#0	18.11	PASS
			RB50#0	18.12	PASS
	High	QPSK	RB1#0	18.13	PASS
			RB50#0	18.14	PASS
		16QAM	RB1#0	18.15	PASS
			RB50#0	18.16	PASS
15 MHz	Low	QPSK	RB1#0	18.17	PASS
			RB75#0	18.18	PASS
		16QAM	RB1#0	18.19	PASS
			RB75#0	18.20	PASS
	High	QPSK	RB1#0	18.21	PASS
			RB75#0	18.22	PASS
		16QAM	RB1#0	18.23	PASS
			RB75#0	18.24	PASS
20 MHz	Low	QPSK	RB1#0	18.25	PASS
			RB100#0	18.26	PASS
		16QAM	RB1#0	18.27	PASS
			RB100#0	18.28	PASS
	High	QPSK	RB1#0	18.29	PASS
			RB100#0	18.30	PASS
		16QAM	RB1#0	18.31	PASS
			RB100#0	18.32	PASS

FDD LTE Band 66

Test BW	CH	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 1}	Verdict
1.4 MHz	Low	QPSK	RB1#0	19.1	PASS
			RB6#0	19.2	PASS
		16QAM	RB1#0	19.3	PASS
			RB6#0	19.4	PASS
	High	QPSK	RB1#0	19.5	PASS
			RB6#0	19.6	PASS
		16QAM	RB1#0	19.7	PASS
			RB6#0	19.8	PASS
3 MHz	Low	QPSK	RB1#0	19.9	PASS
			RB15#0	19.10	PASS
		16QAM	RB1#0	19.11	PASS
			RB15#0	19.12	PASS

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	High	QPSK	RB1#0	19.13	PASS
			RB15#0	19.14	PASS
		16QAM	RB1#0	19.15	PASS
			RB15#0	19.16	PASS
5 MHz	Low	QPSK	RB1#0	19.17	PASS
			RB25#0	19.18	PASS
		16QAM	RB1#0	19.19	PASS
			RB25#0	19.20	PASS
	High	QPSK	RB1#0	19.21	PASS
			RB25#0	19.22	PASS
		16QAM	RB1#0	19.23	PASS
			RB25#0	19.24	PASS
10 MHz	Low	QPSK	RB1#0	19.25	PASS
			RB50#0	19.26	PASS
		16QAM	RB1#0	19.27	PASS
			RB50#0	19.28	PASS
	High	QPSK	RB1#0	19.29	PASS
			RB50#0	19.30	PASS
		16QAM	RB1#0	19.31	PASS
			RB50#0	19.32	PASS
15 MHz	Low	QPSK	RB1#0	19.33	PASS
			RB75#0	19.34	PASS
		16QAM	RB1#0	19.35	PASS
			RB75#0	19.36	PASS
	High	QPSK	RB1#0	19.37	PASS
			RB75#0	19.38	PASS
		16QAM	RB1#0	19.39	PASS
			RB75#0	19.40	PASS
20 MHz	Low	QPSK	RB1#0	19.41	PASS
			RB100#0	19.42	PASS
		16QAM	RB1#0	19.43	PASS
			RB100#0	19.44	PASS
	High	QPSK	RB1#0	19.45	PASS
			RB100#0	19.46	PASS
		16QAM	RB1#0	19.47	PASS
			RB100#0	19.48	PASS

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5.1.7 Field Strength of Spurious Radiation

Note(s):

1. GSM and EGPRS modes have been verified, only the worst data with different transmit bandwidth for LTE are shown here.
2. The frequencies of verdict which are marked by "N/A" should be ignored because they are MS carrier frequency.
3. When measurement frequency is above 18GHz, there is only noise floor of test system existing. So that there is no test data above 18GHz in the report.
4. Test plots please refer to the document "SHE20090007-02AE Data FCC PCE GSM-TX EXHIBIT E GSM850 GSM1900 " and SHE20090007-02AE Data FCC PCE WCDMA -TX EXHIBIT E W2 W4 W5" and "SHE20090007-02AE Data FCC PCE LTE-TX EXHIBIT E B2 B4 B5 B7 B12 B13" and "SHE20090007-02AE Data FCC PCE LTE-TX EXHIBIT E B25 B38 B41 B66"

Field Strength of Spurious Radiation Measurement Results for GSM/WCDMA

Test Band	Channel	Refer to Plot ^{Note 4}	Verdict
GSM 850	Middle	--	PASS
GSM 1900	Middle	--	PASS
GPRS 850	Middle	--	PASS
GPRS 1900	Middle	--	PASS
EDGE 850	Middle	--	PASS
EDGE 1900	Middle	--	PASS
WCDMA Band II	Middle	--	PASS
WCDMA Band IV	Middle	--	PASS
WCDMA Band V	Middle	--	PASS

Band Edge Measurement Results for LTE

FDD LTE Band 2					
Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
1.4 MHz	Middle	QPSK	RB1#0	--	Pass
3 MHz	Middle	QPSK	RB1#0	--	Pass
5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass
15 MHz	Middle	QPSK	RB1#0	--	Pass
20 MHz	Middle	QPSK	RB1#0	--	Pass

FDD LTE Band 4					
Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
1.4 MHz	Middle	QPSK	RB1#0	--	Pass
3 MHz	Middle	QPSK	RB1#0	--	Pass

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5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass
15 MHz	Middle	QPSK	RB1#0	--	Pass
20 MHz	Middle	QPSK	RB1#0	--	Pass

FDD LTE Band 5					
Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
1.4 MHz	Middle	QPSK	RB1#0	--	Pass
3 MHz	Middle	QPSK	RB1#0	--	Pass
5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass

FDD LTE Band 7					
Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass
15 MHz	Middle	QPSK	RB1#0	--	Pass
20 MHz	Middle	QPSK	RB1#0	--	Pass

FDD LTE Band 12					
Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
1.4 MHz	Middle	QPSK	RB1#0	--	Pass
3 MHz	Middle	QPSK	RB1#0	--	Pass
5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass

FDD LTE Band 13					
Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass

FDD LTE Band 25					
Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
1.4 MHz	Middle	QPSK	RB1#0	--	Pass
3 MHz	Middle	QPSK	RB1#0	--	Pass

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5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass
15 MHz	Middle	QPSK	RB1#0	--	Pass
20 MHz	Middle	QPSK	RB1#0	--	Pass

TDD LTE Band 38

Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass
15 MHz	Middle	QPSK	RB1#0	--	Pass
20 MHz	Middle	QPSK	RB1#0	--	Pass

TDD LTE Band 41

Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass
15 MHz	Middle	QPSK	RB1#0	--	Pass
20 MHz	Middle	QPSK	RB1#0	--	Pass

FDD LTE Band 66

Test BW	Channel	Modul.	RB Set (Size#Offset)	Refer to Plot ^{Note 4}	Verdict
1.4 MHz	Middle	QPSK	RB1#0	--	Pass
3 MHz	Middle	QPSK	RB1#0	--	Pass
5 MHz	Middle	QPSK	RB1#0	--	Pass
10 MHz	Middle	QPSK	RB1#0	--	Pass
15 MHz	Middle	QPSK	RB1#0	--	Pass
20 MHz	Middle	QPSK	RB1#0	--	Pass

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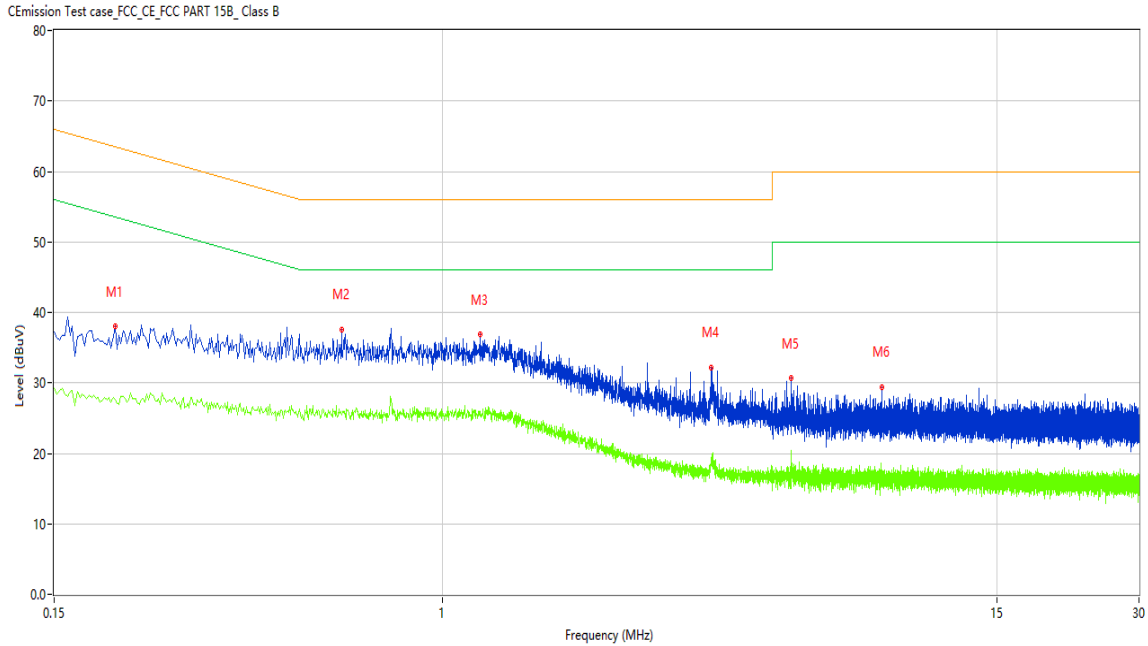
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5.1.8 AC Power-line Conducted Emissions

Note: Only the worst test results were recorded in this report.



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.202	52.88	9.65	63.53	-10.65	Peak	L	Pass
1*	0.202	33.28	9.65	63.53	-30.25	QP	L	Pass
1**	0.202	27.57	9.65	53.53	-25.96	AV	L	Pass
2	0.610	40.21	9.76	56.00	-15.79	Peak	L	Pass
2*	0.610	26.75	9.76	56.00	-29.25	QP	L	Pass
2**	0.610	25.70	9.76	46.00	-20.30	AV	L	Pass
3	1.204	30.85	9.66	56.00	-25.15	Peak	L	Pass
3*	1.204	21.56	9.66	56.00	-34.44	QP	L	Pass
3**	1.204	25.88	9.66	46.00	-20.12	AV	L	Pass
4	3.712	30.21	9.68	56.00	-25.79	Peak	L	Pass
4*	3.712	19.88	9.68	56.00	-36.12	QP	L	Pass
4**	3.712	19.24	9.68	46.00	-26.76	AV	L	Pass
5	5.494	26.67	9.70	60.00	-33.33	Peak	L	Pass
5*	5.494	15.58	9.70	60.00	-44.42	QP	L	Pass
5**	5.494	19.19	9.70	50.00	-30.81	AV	L	Pass
6	8.542	24.04	9.67	60.00	-35.96	Peak	L	Pass
6*	8.542	13.01	9.67	60.00	-46.99	QP	L	Pass
6**	8.542	17.05	9.67	50.00	-32.95	AV	L	Pass

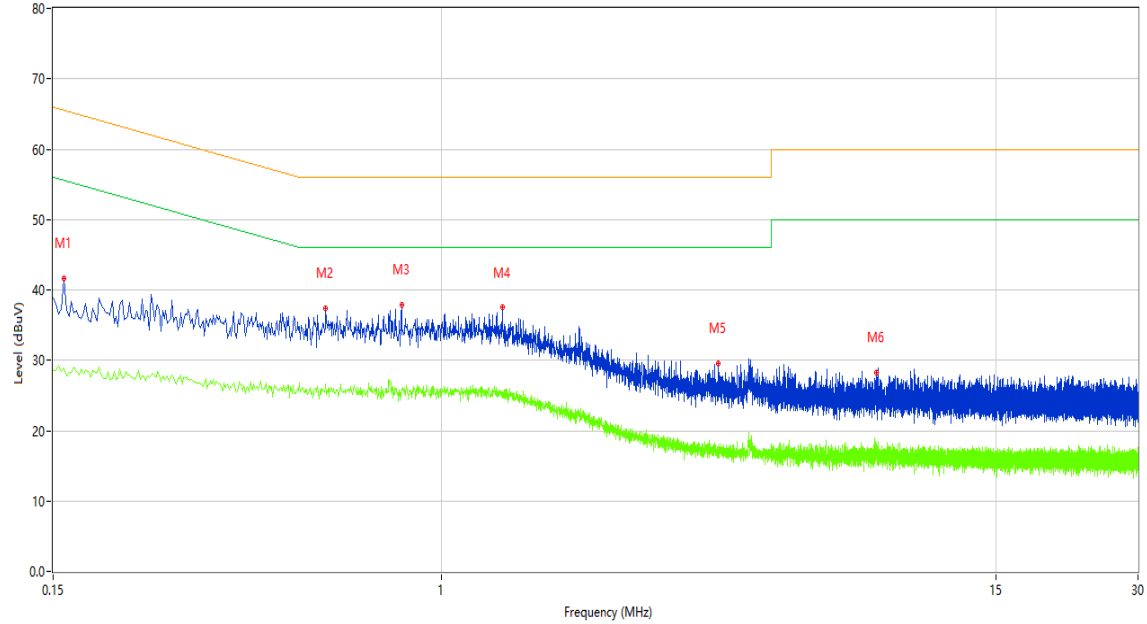
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Emission Test case_FCC_CE_FCC PART 15B_Class B



No.	Frequency (MHz)	Results (dBuV)	Factor (dB)	Limit (dBuV)	Over Limit (dB)	Detector	Line	Verdict
1	0.150	56.84	9.67	66.00	-9.16	Peak	N	Pass
1*	0.150	37.21	9.67	66.00	-28.79	QP	N	Pass
1**	0.150	28.61	9.67	56.00	-27.39	AV	N	Pass
2	0.568	34.63	9.76	56.00	-21.37	Peak	N	Pass
2*	0.568	24.32	9.76	56.00	-31.68	QP	N	Pass
2**	0.568	26.55	9.76	46.00	-19.45	AV	N	Pass
3	0.822	27.94	9.75	56.00	-28.06	Peak	N	Pass
3*	0.822	20.89	9.75	56.00	-35.11	QP	N	Pass
3**	0.822	26.02	9.75	46.00	-19.98	AV	N	Pass
4	1.344	32.85	9.67	56.00	-23.15	Peak	N	Pass
4*	1.344	23.40	9.67	56.00	-32.60	QP	N	Pass
4**	1.344	24.73	9.67	46.00	-21.27	AV	N	Pass
5	3.858	32.46	9.68	56.00	-23.54	Peak	N	Pass
5*	3.858	19.73	9.68	56.00	-36.27	QP	N	Pass
5**	3.858	16.83	9.68	46.00	-29.17	AV	N	Pass
6	8.380	28.13	9.67	60.00	-31.87	Peak	N	Pass
6*	8.380	16.29	9.67	60.00	-43.71	QP	N	Pass
6**	8.380	17.25	9.67	50.00	-32.75	AV	N	Pass

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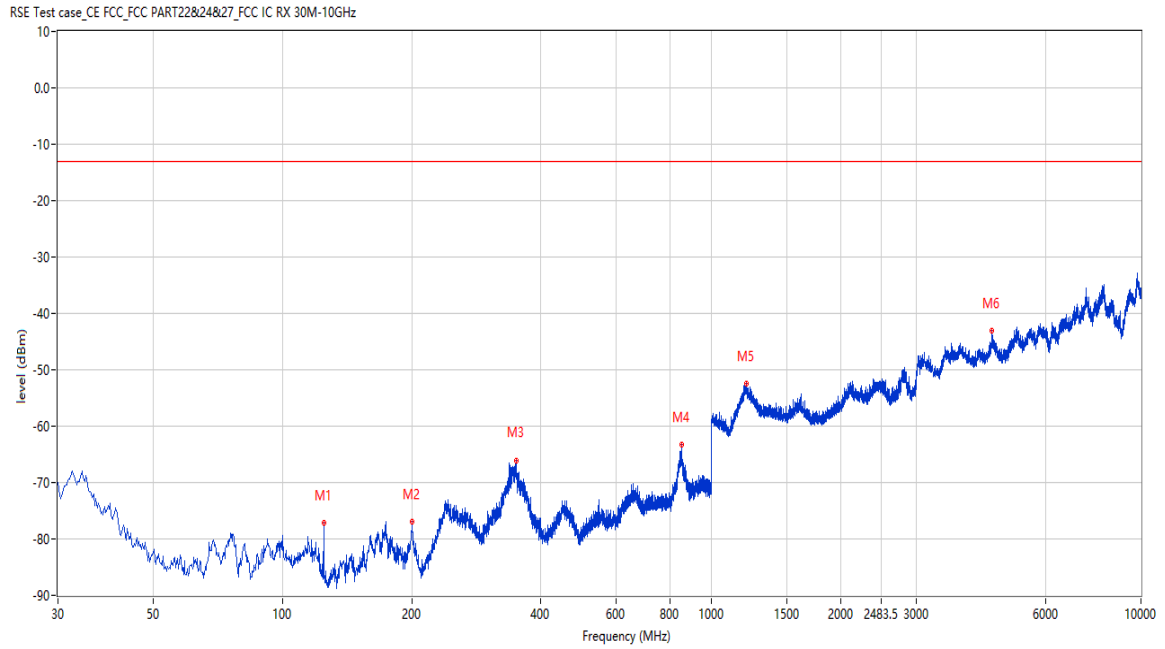
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5.1.9 Receiver Spurious Emissions

Note: Only the worst test results were recorded in this report.



Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
124.794	-77.17	-14.25	-13.0	-64.17	359.40	Horizontal	Vertical	Pass
200.920	-77.01	-8.36	-13.0	-64.01	153.50	Horizontal	Vertical	Pass
350.262	-66.13	-6.40	-13.0	-53.13	110.40	Horizontal	Vertical	Pass
852.354	-63.34	9.74	-13.0	-50.34	65.00	Horizontal	Vertical	Pass
1205.449	-52.49	2.08	-13.0	-39.49	158.50	Horizontal	Vertical	Pass
4485.379	-43.06	10.64	-13.0	-30.06	0.70	Horizontal	Vertical	Pass

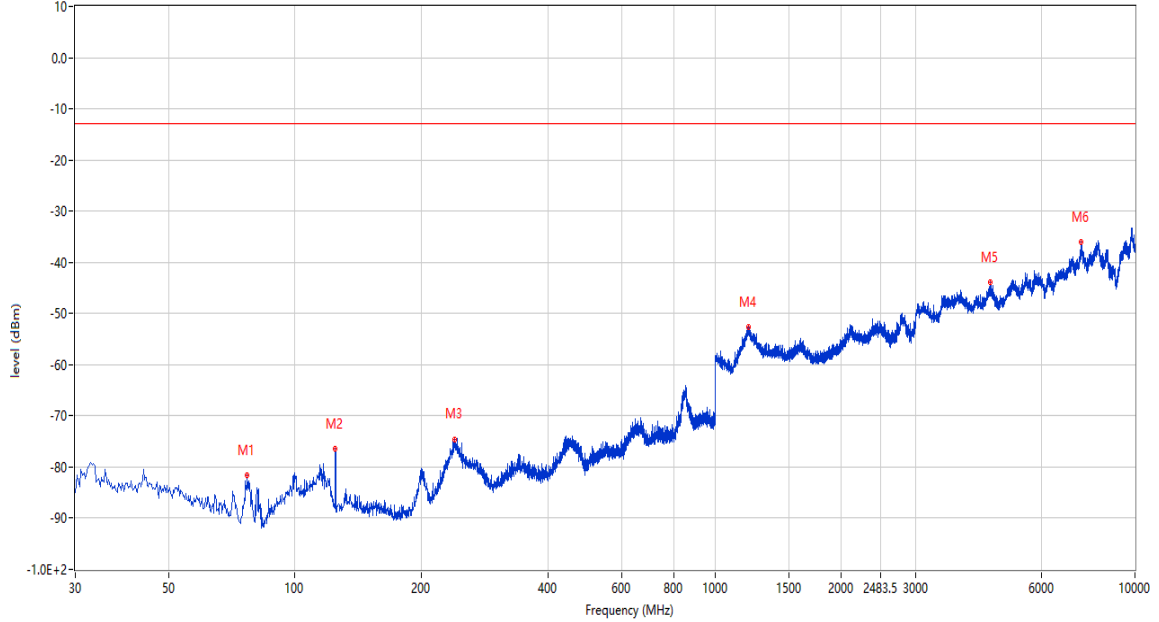
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RSE Test case_CE FCC_FCC PART2&24&27_FCC IC RX 30M-10GHz



Frequency (MHz)	Result (dBm)	Factor (dB)	PK Limit (dBm)	Over Limit (dB)	Table (o)	ANT	EUT	Verdict
77.033	-81.62	-18.90	-13.0	-68.62	92.30	Vertical	Vertical	Pass
124.794	-76.47	-14.25	-13.0	-63.47	342.40	Vertical	Vertical	Pass
239.953	-74.54	-2.23	-13.0	-61.54	150.40	Vertical	Vertical	Pass
1199.950	-52.66	2.33	-13.0	-39.66	74.00	Vertical	Vertical	Pass
4534.366	-43.91	10.68	-13.0	-30.91	330.30	Vertical	Vertical	Pass
7454.386	-36.08	17.88	-13.0	-23.08	143.10	Vertical	Vertical	Pass

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6 Photos

6.1 Photographs of the Sample



Front of the sample



Rear of the sampl

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6.2 Set-up for Conducted Emissions



6.3 Set-up for Conducted RF test at Antenna Port



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6.4 Set-up for Spurious Emissions below 1GHz



Below 1 GHz

6.5 Set-up for Spurious Emissions above 1GHz



Above 1GHz

End of the report