FCC Test Report

Report No.: AGC00408210801FE07A

FCC ID	:	2A35I-PX1
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	5G Smart phone
BRAND NAME	:	InfiRay
MODEL NAME	:	PX1
APPLICANT	:	Yantai Iray Technology Co., Ltd
DATE OF ISSUE	:	Jan. 18, 2022
STANDARD(S)	:	FCC Part 22 Rules FCC Part 24 Rules FCC Part 27 Rules
REPORT VERSION	:	V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd.

REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jan. 18, 2022	Valid	Class II Permissive Change

Note: The original test report Ref. No. (AGC00408210801FE07) (dated 2021-10-20), was modified on 2022-01-18 to include the following changes and additions for:

-Updated brand name, model name.

-Uddated applicant name and applicant address.

-Uddated manufacturer name and manufacturer address.

-Updated Battery

-Updated Adapter.

For the above described change(s),updated RADIATED OUTPUT POWER and RADIATED SPURIOUS EMISSION TEST.

TABLE OF CONTENTS

1. GENERAL INFORMATION

Applicant	Yantai Iray Technology Co., Ltd
Address	Guiyang Street NO.11, YEDA, Yantai, China
Manufacturer	Yantai Iray Technology Co., Ltd
Address	Guiyang Street NO.11, YEDA, Yantai, China
Factory	Shenzhen AIJIEMO Technology Company Limited
Address	1st Floor 101 and 2nd Floor 201, Building A2, Huafeng Century Technology Park, Nanchang Community, Xixiang, Baoan District, Shenzhen, China
Product Designation	5G Smart phone
Brand Name	InfiRay
Test Model	PX1
Date of test	Dec. 24, 2021~Jan. 18, 2022
Deviation	No any deviation from the test method.
Condition of Test Sample	Normal

WE HEREBY CERTIFY THAT:

The above equipment was tested by Attestation of Global Compliance(Shenzhen) Co., Ltd. The data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI/TIA-603-E-2016. The sample tested as described in this report is in compliance with the FCC Rules Part 22, 24, 27. The test results of this report relate only to the tested sample identified in this report.

Prepared By

Bibo Zhang
(Project Engineer) Jan. 18, 2022

Reviewed By

Calvin Liu
(Reviewer) Jan. 18, 2022

Approved By

Max Zhang
Authorized Officer Jan. 18, 2022

2. PRODUCT INFORMATION

2.1 PRODUCT TECHNICAL DESCRIPTION

A major technical description of EUT is described as following:

Product Designation:	5G Smart phone			
Hardware Version:	V1.00			
Software Version:	N18804.02.01.00US			
Radio System Type:	LTE FUNCTION			
Frequency Bands:	☒FDD Band 2 ☐FDD Band 12 ☐FDD Band 26 ☐FDD Band 66 ☒FDD Band 1 ☐FDD Band 28 (Non-U.S. Bands)	☒FDD Band 4 ☐FDD Band 13 ☒TDD Band 38 ☐TDD Band 71 ☒FDD Band 3 ☐FDD Band 38	☒FDD Band 5 ☐FDD Band 17 ☒TDD Band 40 (U.S. Bands) ☒FDD Band 8 ☐TDD Band 40	☒FDD Band 7 ☐FDD Band 25 ☒TDD Band 41 ☒FDD Band 20 ☐TDD Band 41
Transmission Frequency Range:	LTE-Band 2	1850.7 MHz – 1909.3 MHz---(1.4MHz)		
		1851.5 MHz – 1908.5 MHz---(3.0MHz)		
		1852.5 MHz – 1907.5 MHz---(5.0MHz)		
		1855.0 MHz – 1905.0 MHz---(10.0MHz)		
		1857.5 MHz – 1902.5 MHz---(15.0MHz)		
		1860.0 MHz – 1900.0 MHz---(20.0MHz)		
	LTE-Band 4	1710.7 MHz – 1754.3 MHz---(1.4MHz)		
		1711.5 MHz – 1753.5 MHz---(3.0MHz)		
		1712.5 MHz – 1752.5 MHz---(5.0MHz)		
		1715.0 MHz – 1750.0 MHz---(10.0MHz)		
		1717.5 MHz – 1747.5 MHz---(15.0MHz)		
		1720.0 MHz – 1745.0 MHz---(20.0MHz)		
	LTE-Band 5	824.7 MHz – 848.3 MHz---(1.4MHz)		
		825.5 MHz – 847.7 MHz---(3.0MHz)		
		826.5 MHz – 846.5 MHz---(5.0MHz)		
		829.0 MHz – 844.0 MHz---(10.0MHz)		
	LTE-Band 7	2502.5 MHz – 2567.5 MHz---(5.0MHz)		
		2505.0 MHz – 2565.0 MHz---(10.0MHz)		
		2507.5 MHz – 2562.5 MHz---(15.0MHz)		
		2510.0 MHz – 2560.0 MHz---(20.0MHz)		
	LTE-Band 38	2572.5 MHz-2617.5 MHz ---(5.0MHz)		

		2575 MHz-2615MHz---(10.0MHz)
		2577.5 MHz-2612.5 MHz ---(15.0MHz)
		2580 MHz-2610 MHz---(20.0MHz)
	LTE-Band 40 (Lower Side)	2307.5 MHz-2312.5 MHz---(5MHz)
		2310.0 MHz---(10.0MHz)
	LTE-Band 40 (Upper Side)	2352.5 MHz-2357.5 MHz---(5.0MHz)
		2355.0 MHz---(10.0MHz)
	LTE-Band 41	2498.5 MHz –2687.5 MHz---(5.0MHz)
		2501.0 MHz –2685.0 MHz---(10.0MHz)
		2503.5 MHz –2682.5 MHz---(15.0MHz)
		2506.0 MHz –2680.0 MHz---(20.0MHz)
Antenna Type:	PIFA Antenna	
Type of Modulation:	QPSK/16QAM	
Power Supply:	DC 3.85V by battery	
Category	NB1	
Deployment	Stand-alone	
Sub-carrier spacing	3.75KHz, 15KHz	
Ntones	Single, Multi-tone	
Dual Card:	WCDMA/LTE Card Slot	
Power Class:	3	
Extreme Vol. Limits:	DC3.27V to 4.40V (Normal: 3.85V)	
Extreme Temp. Tolerance	-30℃ to +50℃	
Operating Temp	5℃ to +40℃	
Note1: The High Voltage DC3.70V and Low Voltage DC3.15V were declared by manufacturer, The EUT couldn't be operating normally with higher or lower voltage.		

2.2 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: 2A35I-PX1** , filing to comply with the FCC Part 22, Part 24 and Pant 27 requirements.

2.3 TEST METHODOLOGY

The tests were performed according to following standards:

No.	Identity	Document Title
1	47 CFR FCC Part 2	Frequency allocations and radio treaty matters, general rules and regulations.
2	47 CFR FCC Part 22	Public Mobile Services.
3	47 CFR FCC Part 24	Personal Communications Services.
4	47 CFR FCC Part 27	Miscellaneous Wireless Communications Services.
5	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
6	ANSI/TIA-603-E-2016	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
7	KDB 971168	D01 v03r01 Measurement Guidance For Certification Of Licensed Digital Transmitters.

2.4 DEVICE CAPABILITIES

This device contains the following capabilities:
850/1900 GSM/GPRS/EGPRS,850/1700/1900 WCDMA/HSPA, Multi-Band LTE,5GNR, 802.11 b/g/n for WLAN,802.11 a/n/ac for UNII, Bluetooth (1X,EDR,LE),GPS,NFC.
This device uses a tuner circuit that dynamically updates the antenna impedance parameters to optimize antenna performance for certain bands and modes of operation. The tuner for this device was set to simulate a "free space"condition where the transmit antenna is matched to the medium into which it is transmitting and, thus, the power is at its maximum level.
LTE Band 26 (814.7-849 MHz) overlaps the entire frequency range of LTE Band 5 (824 – 849 MHz).
Therefore,test data provided in this report covers Band 5 and the portion of Band 26 subject to Part 22.
LTE Band 66 (1710-1780 MHz) overlaps the entire frequency range of LTE Band 4 (1710 - 1755 MHz).
Therefore,test data provided in this report covers Band 4 as well as Band 66.
LTE Band 25 (1850-1915 MHz) overlaps the entire frequency range of LTE Band 2 (1850 - 1910 MHz).
Therefore, test data provided in this report covers Band 2 as well as Band 25.
LTE Band 41 (2496-2690 MHz) overlaps the entire frequency range of LTE Band 38 (2560 - 2620 MHz).
Therefore, test data provided in this report covers Band 41 as well as Band 38.
For emissions from 1GHz – 18GHz, low, mid, and high channels were tested with highest power and worst case configuration.
The above inclusion relationship is only a statement of the frequency coverage between the LTE working bands, and the actual supported frequency bands are subject to the reported data.
The emissions below 1GHz and above 18GHz were tested with the highest transmitting power channel and the worst case configuration.

The EUT was manipulated through three orthogonal planes of X-orientation (flatbed), Y-orientation (landscape),and Z-orientation (portrait) during the testing. Only the worst case emissions were reported in this test report.

2.5 SPECIAL ACCESSORIES

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

2.6 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2.7 EMISSION DESIGNATOR

GSM Emission Designator

Emission Designator = 249KGXW
GSM BW = 249 kHz
G = Phase Modulation
X = Cases not otherwise covered
W = Combination (Audio/Data)

EDGE Emission Designator

Emission Designator = 249KG7W
GSM BW = 249 kHz
G = Phase Modulation
7 = Quantized/Digital Info
W = Combination (Audio/Data)

WCDMA Emission Designator

Emission Designator = 4M17F9W
WCDMA BW = 4.17 MHz
F = Frequency Modulation
9 = Composite Digital Info
W = Combination (Audio/Data)

QPSK Modulation

Emission Designator = 4M48G7D
LTE BW = 4.48 MHz
G = Phase Modulation
7 = Quantized/Digital Info
D = Data transmission; telemetry; telecommand

QAM Modulation

Emission Designator = 4M48W7D
LTE BW = 4.48 MHz
W = Amplitude/Angle Modulated
7 = Quantized/Digital Info
D = Data transmission; telemetry; telecommand

3. TEST ENVIRONMENT

3.1 ADDRESS OF THE TEST LABORATORY

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements) for the Competence of Testing and Calibration Laboratories

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842

3.3 ENVIRONMENTAL CONDITIONS

	NORMAL CONDITIONS	EXTREME CONDITIONS
Temperature range	15~35℃	-30℃~50℃
Humidty range	20 % to 75 %.	20 % to 75 %.
Pressure range	86-106kPa	86-106kPa
Power supply	DC 3.85V	DC3.27V or 4.40V
Note: The Extreme Temperature and Extreme Voltages declared by the manufacturer.		

3.4 MEASUREMENT UNCERTAINTY

Test	Measurement Uncertainty	Notes
Transmitter power conducted	±0.57 dB	(1)
Transmitter power Radiated	±2.20 dB	(1)
Conducted spurious emission 9KHz-40 GHz	±2.20 dB	(1)
Occupied Bandwidth	±0.01ppm	(1)
Radiated Emission 30~1000MHz	±4.10dB	(1)
Radiated Emission Above 1GHz	±4.32dB	(1)
Conducted Disturbance0.15~30MHz	±3.20dB	(1)
Radio Frequency	± 6.5 x 10-8	(1)
RF Power, Conducted	± 0.9 dB	(1)

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.5 LIST OF TEST EQUIPMENT

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESPI	101206	May 11, 2021	May 10, 2022
LISN	R&S	ESH2-Z5	100086	Jun. 09, 2021	Jun. 08, 2022
TEST RECEIVER	R&S	ESCI	10096	Apr. 14, 2021	Apr. 13, 2022
EXA Signal Analyzer	Aglient	N9010A	MY53470504	Dec. 07, 2020	Dec. 06, 2021
Horn antenna	SCHWARZBECK	BBHA 9170	#768	Oct. 20, 2019	Oct. 19, 2022
preamplifier	ChengYi	EMC184045SE	980508	Sep. 19, 2021	Sep. 18, 2022
Double-Ridged Waveguide Horn	ETS LINDGREN	3117	00034609	Apr. 23, 2021	Apr. 22, 2023
Broadband Preamplifier	SCHWARZBECK	00073	BBHA 9120 J	Sep. 27, 2019	Sep. 26, 2021
Broadband Preamplifier	SCHWARZBECK	00073	BBHA 9120 J	Sep. 25, 2021	Sep. 24, 2022
ANTENNA	SCHWARZBECK	VULB9168	D69250	Apr. 28, 2021	Apr. 27, 2023
Wireless communicationtest	R&S	CMW500	120909	Oct. 24, 2020	Oct. 23, 2021
Power Splitter	Agilent	11636A	34	Jun.08, 2021	Jun.07, 2022
Attenuator	JFW	50FHC-006-50	N/A	Jun.08, 2021	Jun.07, 2022

4. SYSTEM TEST CONFIGURATION

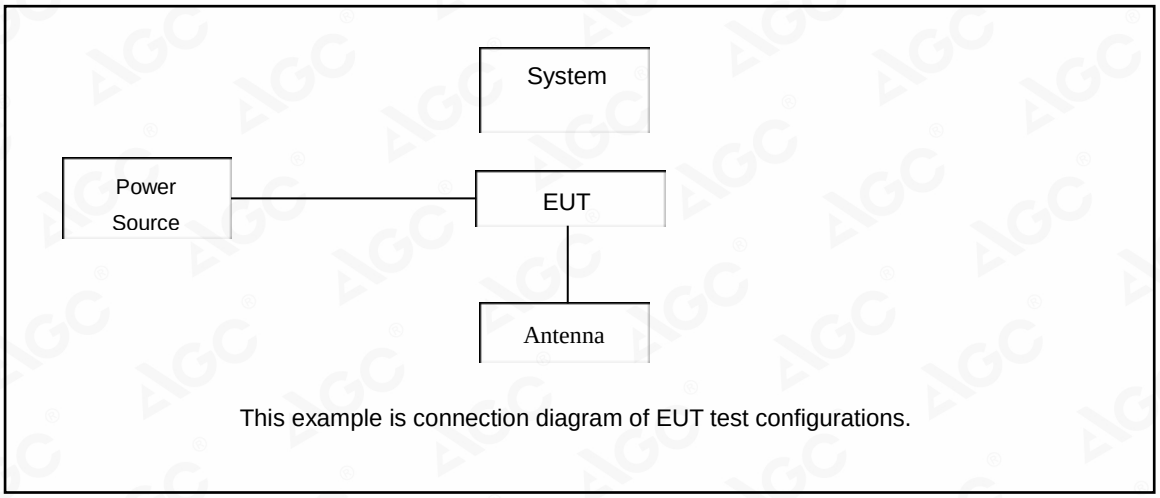
4.1 EUT CONFIGURATION

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

4.2 EUT EXERCISE

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

4.3 CONFIGURATION OF EUT SYSTEM



This example is connection diagram of EUT test configurations.

Table 2-1 Equipment Used in EUT System

4.4 EQUIPMENT USED IN TESTED SYSTEM

The Following Peripheral Devices And Interface Cables Were Connected During The Measurement:

☐ Test Accessories Come From The Laboratory

☒ Test Accessories Come From The Manufacturer

Item	Equipment	Model No.	Identifier	Note
1	5G Smart phone	PX1	FCC ID: 2A35I-PX1	EUT
2	Adapter	U312QC1801	Input:100-240V, 50/60Hz, 0.5A Output: 5V 0.3A/9V 2.0A/12V 1.5A	AE
3	Battery	Glory G1	DC 3.85V 5500mAh	AE
4	USB Cable	N/A	N/A	AE

5. SUMMARY OF TEST RESULTS

5.1TEST CONDITION : RADIATED TEST

Item	Test Description	FCC Rules	Result
1	Radiated Spurious and Harmonic Emissions	§2.1053, §22.917(a), §27.53(g), § 27.53(m) (4), §27.53(a) §27.53(h), §24.238(a)	Pass

6. DESCRIPTION OF TEST MODES

During the testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication Tester (CMW 500) to ensure max power transmission and proper modulation. Three channels (The top channel, the middle channel and the bottom channel) were chosen for testing on both LTE frequency band.

The worst condition was recorded in the test report if no other modes test data.

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3

LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 7 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

LTE Band 38 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	37850	38000	38150
	Frequency	2580	2595	2610
15	Channel	37825	38000	38175
	Frequency	2577.5	2595	2612.5
10	Channel	37800	38000	38200
	Frequency	2575	2595	2615
5	Channel	37775	38000	38225
	Frequency	2572.5	2595	2617.5

LTE Band 40 Channel and Frequency List-Lower Side				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
10	Channel	--	38750	--
	Frequency	--	2310	--
5	Channel	38725	38750	38775
	Frequency	2307.5	2310	2312.5
LTE Band 40 Channel and Frequency List-Upper Side				
10	Channel	--	39200	--
	Frequency	--	2355	--
5	Channel	39175	39200	39225
	Frequency	2352.5	2355	2357.5

LTE Band 41 Channel and Frequency List				
BW [MHz]	Channel/Frequency (MHz)	Lowest	Middle	Highest
20	Channel	39750	40620	41490
	Frequency	2506.0	2593.0	2680.0
15	Channel	39725	40620	41515
	Frequency	2503.5	2593.0	2682.5
10	Channel	39700	40620	41540
	Frequency	2501.0	2593.0	2685.0
5	Channel	39675	40620	41565
	Frequency	2498.5	2593.0	2687.5

Test Mode	Test Modes Description
LTE BAND 2	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 4	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 5	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 7	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 38	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 40	LTE system, QPSK modulation
	LTE system, 16QAM modulation
LTE BAND 41	LTE system, QPSK modulation
	LTE system, 16QAM modulation

ACCORDING TO 3GPP 36.521 SUB-CLAUSE 6.2.3.3, THE MAXIMUM OUTPUT POWER IS ALLOWED TO BE REDUCED BY FOLLOWING THE TABLE.

TABLE 6.2.3.3-1: MAXIMUM POWER REDUCTION (MPR) FOR POWER CLASS 3

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

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (For PRACH, PUCCH and SRS transmission, the allowed MPR is according to that specified for PUSCH QPSK modulation for the corresponding transmission bandwidth.).

When PRACH, PUCCH are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

For each subframe, the MPR is evaluated per slot and given by the maximum value taken over the transmission(s) within the slot, the maximum MPR over the two slots is then applied for the entire subframe.

For the UE maximum output power modified by MPR, the power limits specified in subclause 6.2.5.3 apply. The normative reference for this requirement is TS 36.101 clause 6.2.3.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.

7. RADIATED OUTPUT POWER

7.1 PROVISIONS APPLICABLE

The radiation test is carried out in a semi-anechoic chamber.

According to the test, put the device under test on a non-conductive platform 3 meters away from the receiving antenna (ANSI/TIA-603-E-2016 Article 2.2.17).

The following rules are for the maximum radiated power limit requirements of the product:

Mode	Nominal Peak Power
LTE Band 2	< 2 Watts max. EIRP (33dBm)
LTE Band 4	< 1 Watts max. EIRP (30dBm)
LTE Band 5	< 7 Watts max. ERP (38.45dBm)
LTE Band 7	< 2 Watts max. EIRP (33dBm)
LTE Band 38	< 2 Watts max. EIRP (33dBm)
LTE Band 40	< 0.25 Watts max. EIRP (23.98dBm)
LTE Band 41	< 2 Watts max. EIRP (33dBm)

7.2 MEASUREMENT METHOD

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation.
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW ≥ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points > 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto".
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize.

RADIATION CONSTRUCTION METHOD：

1. The turntable is rotated through 360 degrees, and the receiving antenna scans in order to determine the level of the maximized emission.
2. A half wave dipole is then substituted in place of the EUT. For emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.

   The power is calculated by the following formula：

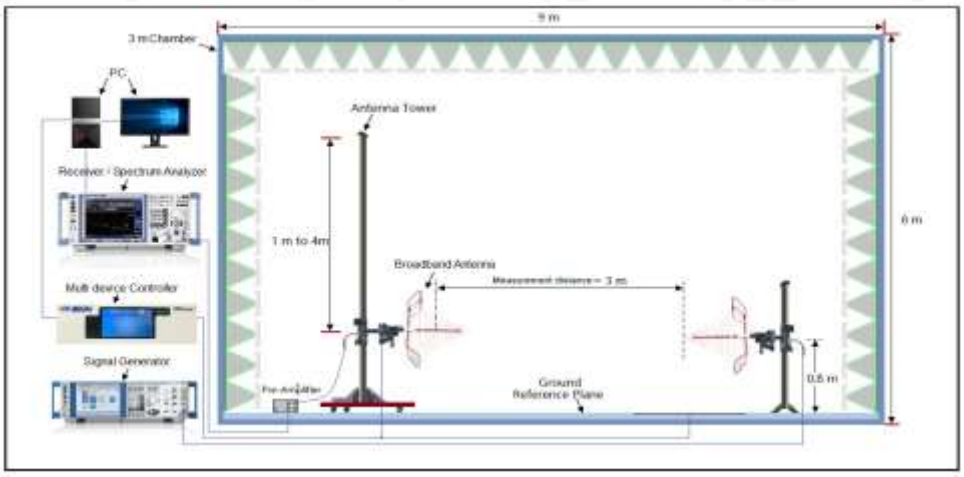
   Pd(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dB)

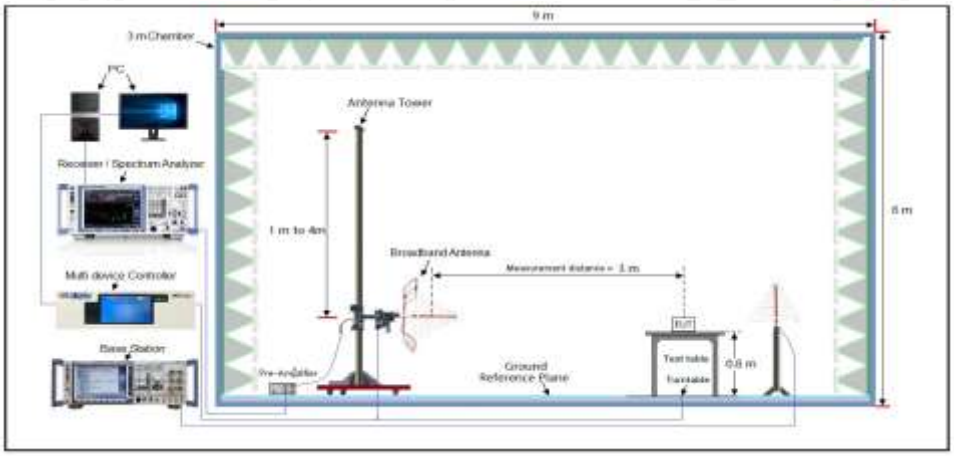
   Where: Pd is the dipole equivalent power and Pg is the generator output power into the substitution antenna.

3. The maximum value is calculated by adding the forward power to the calibrated source plus its appropriate gain value. These steps are repeated with the receiving antenna in both vertical and horizontal polarization. the difference between the gain of the horn and an isotropic antenna are taken into consideration
4. The EUT was tested in three orthogonal planes (X, Y, Z) and in all possible test configurations and positioning.
5. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

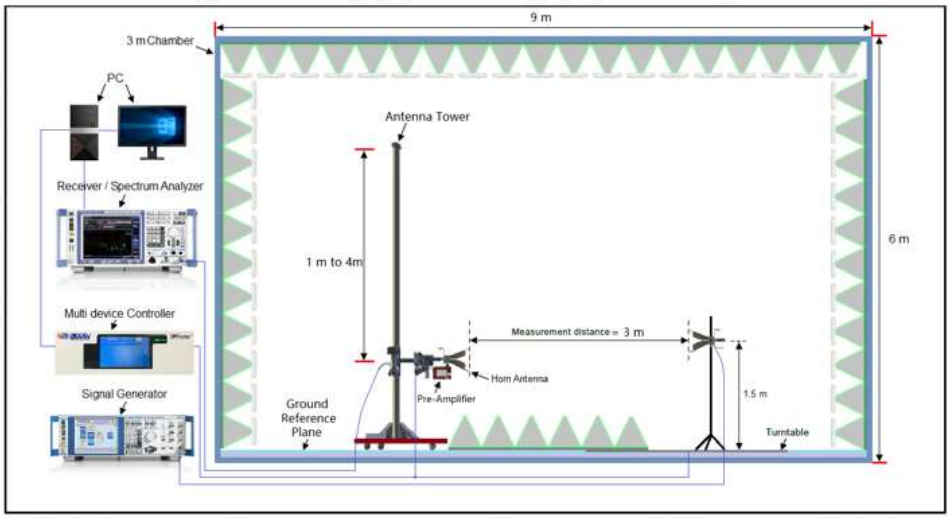
7.3 MEASUREMENT SETUP

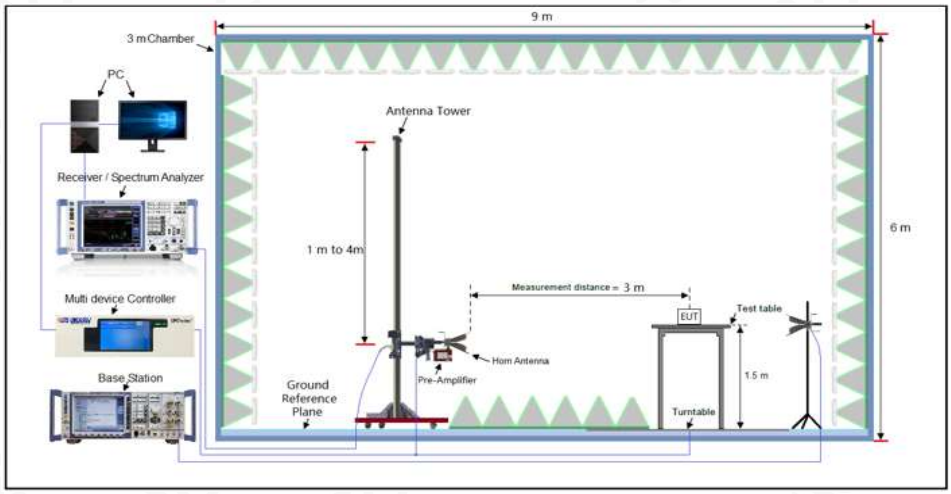
Radiated Power 30MHz to 1GHz Test setup





Radiated Power Above 1GHz Test setup





7.4 MEASUREMENT RESULT

EIRP for LTE Band 2

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
1850.7	1.4	QPSK	1/0	11.96	V	7.95	0.79	19.12	33
1880.0	1.4	QPSK	1/0	10.89	V	7.95	0.79	18.05	33
1909.3	1.4	QPSK	1/0	11.18	V	7.95	0.79	18.34	33
1850.7	1.4	QPSK	1/0	12.86	H	7.95	0.79	**20.02**	33
1880.0	1.4	QPSK	1/0	12.41	H	7.95	0.79	19.57	33
1909.3	1.4	QPSK	1/0	12.17	H	7.95	0.79	19.33	33
1850.7	1.4	16-QAM	1/5	10.13	V	7.95	0.79	17.29	33
1880.0	1.4	16-QAM	1/0	10.26	V	7.95	0.79	17.42	33
1909.3	1.4	16-QAM	1/0	9.97	V	7.95	0.79	17.13	33
1850.7	1.4	16-QAM	1/5	10.89	H	7.95	0.79	18.05	33
1880.0	1.4	16-QAM	1/0	10.96	H	7.95	0.79	18.12	33
1909.3	1.4	16-QAM	1/0	12.56	H	7.95	0.79	19.72	33
1851.5	3	QPSK	1/0	11.35	V	7.95	0.79	18.51	33
1880.0	3	QPSK	1/0	11.18	V	7.95	0.79	18.34	33
1908.5	3	QPSK	1/0	11.26	V	7.95	0.79	18.42	33
1851.5	3	QPSK	1/0	12.12	H	7.95	0.79	19.28	33
1880.0	3	QPSK	1/0	12.01	H	7.95	0.79	19.17	33
1908.5	3	QPSK	1/0	11.86	H	7.95	0.79	19.02	33
1851.5	3	16-QAM	1/0	11.20	V	7.95	0.79	18.36	33
1880.0	3	16-QAM	1/0	10.06	V	7.95	0.79	17.22	33
1908.5	3	16-QAM	1/0	10.05	V	7.95	0.79	17.21	33
1851.5	3	16-QAM	1/0	11.97	H	7.95	0.79	19.13	33
1880.0	3	16-QAM	1/0	10.98	H	7.95	0.79	18.14	33
1908.5	3	16-QAM	1/0	11.09	H	7.95	0.79	18.25	33
1852.5	5	QPSK	1/0	11.18	V	7.95	0.79	18.34	33
1880.0	5	QPSK	1/0	10.14	V	7.95	0.79	17.30	33
1907.5	5	QPSK	1/24	11.09	V	7.95	0.79	18.25	33
1852.5	5	QPSK	1/0	12.11	H	7.95	0.79	19.27	33
1880.0	5	QPSK	1/0	12.03	H	7.95	0.79	19.19	33
1907.5	5	QPSK	1/24	12.18	H	7.95	0.79	19.34	33
1852.5	5	16-QAM	1/0	11.12	V	7.95	0.79	18.28	33
1880.0	5	16-QAM	1/0	10.27	V	7.95	0.79	17.43	33

1907.5	5	16-QAM	1/24	10.05	V	7.95	0.79	17.21	33
1852.5	5	16-QAM	1/0	11.90	H	7.95	0.79	19.06	33
1880.0	5	16-QAM	1/0	11.58	H	7.95	0.79	18.74	33
1907.5	5	16-QAM	1/24	11.12	H	7.95	0.79	18.28	33
1855	10	QPSK	1/0	10.27	V	7.95	0.79	17.43	33
1880	10	QPSK	1/49	10.03	V	7.95	0.79	17.19	33
1905	10	QPSK	1/0	9.15	V	7.95	0.79	16.31	33
1855	10	QPSK	1/0	11.11	H	7.95	0.79	18.27	33
1880	10	QPSK	1/49	11.28	H	7.95	0.79	18.44	33
1905	10	QPSK	1/0	9.86	H	7.95	0.79	17.02	33
1855	10	16-QAM	1/0	10.95	V	7.95	0.79	18.11	33
1880	10	16-QAM	1/49	10.84	V	7.95	0.79	18.00	33
1905	10	16-QAM	1/0	10.85	V	7.95	0.79	18.01	33
1855	10	16-QAM	1/0	12.15	H	7.95	0.79	19.31	33
1880	10	16-QAM	1/49	12.09	H	7.95	0.79	19.25	33
1905	10	16-QAM	1/0	12.02	H	7.95	0.79	19.18	33
1857.5	15	QPSK	1/0	10.56	V	7.95	0.79	17.72	33
1880	15	QPSK	1/74	10.19	V	7.95	0.79	17.35	33
1902.5	15	QPSK	1/0	10.11	V	7.95	0.79	17.27	33
1857.5	15	QPSK	1/0	10.96	H	7.95	0.79	18.12	33
1880	15	QPSK	1/74	11.04	H	7.95	0.79	18.20	33
1902.5	15	QPSK	1/0	11.39	H	7.95	0.79	18.55	33
1857.5	15	16-QAM	1/0	11.37	V	7.95	0.79	18.53	33
1880	15	16-QAM	1/74	11.12	V	7.95	0.79	18.28	33
1902.5	15	16-QAM	1/0	10.99	V	7.95	0.79	18.15	33
1857.5	15	16-QAM	1/0	12.10	H	7.95	0.79	19.26	33
1880	15	16-QAM	1/74	12.21	H	7.95	0.79	19.37	33
1902.5	15	16-QAM	1/0	11.89	H	7.95	0.79	19.05	33
1860	20	QPSK	1/99	10.96	V	7.95	0.79	18.12	33
1880	20	QPSK	1/99	10.07	V	7.95	0.79	17.23	33
1900	20	QPSK	1/0	10.21	V	7.95	0.79	17.37	33
1860	20	QPSK	1/99	12.26	H	7.95	0.79	19.42	33
1880	20	QPSK	1/99	11.13	H	7.95	0.79	18.29	33
1900	20	QPSK	1/0	11.08	H	7.95	0.79	18.24	33
1860	20	16-QAM	1/99	10.20	V	7.95	0.79	17.36	33
1880	20	16-QAM	1/99	10.09	V	7.95	0.79	17.25	33

1900	20	16-QAM	1/0	10.18	V	7.95	0.79	17.34	33
1860	20	16-QAM	1/99	12.29	H	7.95	0.79	19.45	33
1880	20	16-QAM	1/99	11.12	H	7.95	0.79	18.28	33
1900	20	16-QAM	1/0	11.20	H	7.95	0.79	18.36	33

EIRP for LTE Band 4

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
1710.7	1.4	QPSK	1/0	12.89	V	7.95	0.79	20.05	30
1732.5	1.4	QPSK	1/0	12.98	V	7.95	0.79	20.14	30
1754.3	1.4	QPSK	1/0	13.16	V	7.95	0.79	20.32	30
1710.7	1.4	QPSK	1/0	14.09	H	7.95	0.79	21.25	30
1732.5	1.4	QPSK	1/0	14.27	H	7.95	0.79	21.43	30
1754.3	1.4	QPSK	1/0	14.21	H	7.95	0.79	21.37	30
1710.7	1.4	16-QAM	1/5	11.94	V	7.95	0.79	19.10	30
1732.5	1.4	16-QAM	1/0	12.05	V	7.95	0.79	19.21	30
1754.3	1.4	16-QAM	1/0	12.07	V	7.95	0.79	19.23	30
1710.7	1.4	16-QAM	1/5	13.09	H	7.95	0.79	20.25	30
1732.5	1.4	16-QAM	1/0	13.27	H	7.95	0.79	20.43	30
1754.3	1.4	16-QAM	1/0	13.12	H	7.95	0.79	20.28	30
1711.5	3	QPSK	1/0	12.26	V	7.95	0.79	19.42	30
1732.5	3	QPSK	1/0	12.03	V	7.95	0.79	19.19	30
1753.5	3	QPSK	1/0	12.07	V	7.95	0.79	19.23	30
1711.5	3	QPSK	1/0	13.09	H	7.95	0.79	20.25	30
1732.5	3	QPSK	1/0	13.27	H	7.95	0.79	**20.43**	30
1753.5	3	QPSK	1/0	13.11	H	7.95	0.79	20.27	30
1711.5	3	16-QAM	1/0	12.30	V	7.95	0.79	19.46	30
1732.5	3	16-QAM	1/0	12.13	V	7.95	0.79	19.29	30
1753.5	3	16-QAM	1/0	11.05	V	7.95	0.79	18.21	30
1711.5	3	16-QAM	1/0	12.84	H	7.95	0.79	20.00	30
1732.5	3	16-QAM	1/0	12.96	H	7.95	0.79	20.12	30
1753.5	3	16-QAM	1/0	11.91	H	7.95	0.79	19.07	30
1712.5	5	QPSK	1/0	11.00	V	7.95	0.79	18.16	30
1732.5	5	QPSK	1/0	11.37	V	7.95	0.79	18.53	30
1752.5	5	QPSK	1/24	11.09	V	7.95	0.79	18.25	30
1712.5	5	QPSK	1/0	12.21	H	7.95	0.79	19.37	30
1732.5	5	QPSK	1/0	12.26	H	7.95	0.79	19.42	30
1752.5	5	QPSK	1/24	12.13	H	7.95	0.79	19.29	30
1712.5	5	16-QAM	1/0	11.09	V	7.95	0.79	18.25	30
1732.5	5	16-QAM	1/0	11.21	V	7.95	0.79	18.37	30
1752.5	5	16-QAM	1/24	11.00	V	7.95	0.79	18.16	30
1712.5	5	16-QAM	1/0	12.11	H	7.95	0.79	19.27	30
1732.5	5	16-QAM	1/0	11.89	H	7.95	0.79	19.05	30
1752.5	5	16-QAM	1/24	12.00	H	7.95	0.79	19.16	30

1715	10	QPSK	1/0	11.08	V	7.95	0.79	18.24	30
1732.5	10	QPSK	1/49	10.99	V	7.95	0.79	18.15	30
1750	10	QPSK	1/0	11.03	V	7.95	0.79	18.19	30
1715	10	QPSK	1/0	12.11	H	7.95	0.79	19.27	30
1732.5	10	QPSK	1/49	12.26	H	7.95	0.79	19.42	30
1750	10	QPSK	1/0	12.17	H	7.95	0.79	19.33	30
1715	10	16-QAM	1/0	11.96	V	7.95	0.79	19.12	30
1732.5	10	16-QAM	1/49	12.08	V	7.95	0.79	19.24	30
1750	10	16-QAM	1/0	12.12	V	7.95	0.79	19.28	30
1715	10	16-QAM	1/0	13.18	H	7.95	0.79	20.34	30
1732.5	10	16-QAM	1/49	12.95	H	7.95	0.79	20.11	30
1750	10	16-QAM	1/0	12.89	H	7.95	0.79	20.05	30
1717.5	15	QPSK	1/0	12.03	V	7.95	0.79	19.19	30
1732.5	15	QPSK	1/74	11.11	V	7.95	0.79	18.27	30
1747.5	15	QPSK	1/0	11.09	V	7.95	0.79	18.25	30
1717.5	15	QPSK	1/0	13.27	H	7.95	0.79	20.43	30
1732.5	15	QPSK	1/74	12.12	H	7.95	0.79	19.28	30
1747.5	15	QPSK	1/0	11.88	H	7.95	0.79	19.04	30
1717.5	15	16-QAM	1/0	11.05	V	7.95	0.79	18.21	30
1732.5	15	16-QAM	1/74	11.12	V	7.95	0.79	18.28	30
1747.5	15	16-QAM	1/0	10.95	V	7.95	0.79	18.11	30
1717.5	15	16-QAM	1/0	11.91	H	7.95	0.79	19.07	30
1732.5	15	16-QAM	1/74	12.20	H	7.95	0.79	19.36	30
1747.5	15	16-QAM	1/0	13.53	H	7.95	0.79	20.69	30
1720	20	QPSK	1/99	11.58	V	7.95	0.79	18.74	30
1732.5	20	QPSK	1/99	10.96	V	7.95	0.79	18.12	30
1745	20	QPSK	1/0	12.34	V	7.95	0.79	19.50	30
1720	20	QPSK	1/99	12.45	H	7.95	0.79	19.61	30
1732.5	20	QPSK	1/99	11.85	H	7.95	0.79	19.01	30
1745	20	QPSK	1/0	12.94	H	7.95	0.79	20.10	30
1720	20	16-QAM	1/99	11.18	V	7.95	0.79	18.34	30
1732.5	20	16-QAM	1/99	10.91	V	7.95	0.79	18.07	30
1745	20	16-QAM	1/0	11.03	V	7.95	0.79	18.19	30
1720	20	16-QAM	1/99	12.11	H	7.95	0.79	19.27	30
1732.5	20	16-QAM	1/99	12.14	H	7.95	0.79	19.30	30
1745	20	16-QAM	1/0	11.95	H	7.95	0.79	19.11	30

ERP for LTE Band 5

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
824.7	1.4	QPSK	1/0	13.81	V	6.7	0.49	20.02	38.45
836.5	1.4	QPSK	1/0	13.89	V	6.7	0.49	20.10	38.45
848.3	1.4	QPSK	1/0	13.02	V	6.7	0.49	19.23	38.45
824.7	1.4	QPSK	1/0	15.11	H	6.7	0.49	21.32	38.45
836.5	1.4	QPSK	1/0	15.26	H	6.7	0.49	21.47	38.45
848.3	1.4	QPSK	1/0	15.02	H	6.7	0.49	21.23	38.45
824.7	1.4	16-QAM	1/0	12.92	V	6.7	0.49	19.13	38.45
836.5	1.4	16-QAM	1/0	13.04	V	6.7	0.49	19.25	38.45
848.3	1.4	16-QAM	1/0	13.50	V	6.7	0.49	19.71	38.45
824.7	1.4	16-QAM	1/0	13.87	H	6.7	0.49	20.08	38.45
836.5	1.4	16-QAM	1/0	14.04	H	6.7	0.49	20.25	38.45
848.3	1.4	16-QAM	1/0	13.90	H	6.7	0.49	20.11	38.45
825.5	3	QPSK	1/0	12.92	V	6.7	0.49	19.13	38.45
836.5	3	QPSK	1/0	14.06	V	6.7	0.49	20.27	38.45
847.5	3	QPSK	1/0	13.21	V	6.7	0.49	19.42	38.45
825.5	3	QPSK	1/0	15.32	H	6.7	0.49	21.53	38.45
836.5	3	QPSK	1/0	15.64	H	6.7	0.49	21.85	38.45
847.5	3	QPSK	1/0	15.45	H	6.7	0.49	21.66	38.45
825.5	3	16-QAM	1/0	13.50	V	6.7	0.49	19.71	38.45
836.5	3	16-QAM	1/0	13.05	V	6.7	0.49	19.26	38.45
847.5	3	16-QAM	1/0	12.68	V	6.7	0.49	18.89	38.45
825.5	3	16-QAM	1/0	14.16	H	6.7	0.49	20.37	38.45
836.5	3	16-QAM	1/0	14.20	H	6.7	0.49	20.41	38.45
847.5	3	16-QAM	1/0	14.04	H	6.7	0.49	20.25	38.45
826.5	5	QPSK	1/0	10.42	V	6.7	0.49	16.63	38.45
836.5	5	QPSK	1/0	12.64	V	6.7	0.49	18.85	38.45
846.5	5	QPSK	1/0	12.45	V	6.7	0.49	18.66	38.45
826.5	5	QPSK	1/0	12.53	H	6.7	0.49	18.74	38.45
836.5	5	QPSK	1/0	13.68	H	6.7	0.49	19.89	38.45
846.5	5	QPSK	1/0	13.31	H	6.7	0.49	19.52	38.45
826.5	5	16-QAM	1/0	11.91	V	6.7	0.49	18.12	38.45
836.5	5	16-QAM	1/0	10.81	V	6.7	0.49	17.02	38.45
846.5	5	16-QAM	1/0	12.32	V	6.7	0.49	18.53	38.45
826.5	5	16-QAM	1/0	12.80	H	6.7	0.49	19.01	38.45
836.5	5	16-QAM	1/0	11.83	H	6.7	0.49	18.04	38.45
846.5	5	16-QAM	1/0	14.15	H	6.7	0.49	20.36	38.45

829	10	QPSK	1/0	13.21	V	6.7	0.49	19.42	38.45
836.5	10	QPSK	1/0	12.15	V	6.7	0.49	18.36	38.45
844	10	QPSK	1/0	12.20	V	6.7	0.49	18.41	38.45
829	10	QPSK	1/0	14.05	H	6.7	0.49	20.26	38.45
836.5	10	QPSK	1/0	14.55	H	6.7	0.49	20.76	38.45
844	10	QPSK	1/0	14.03	H	6.7	0.49	20.24	38.45
829	10	16-QAM	1/0	14.15	V	6.7	0.49	20.36	38.45
836.5	10	16-QAM	1/0	13.83	V	6.7	0.49	20.04	38.45
844	10	16-QAM	1/0	12.94	V	6.7	0.49	19.15	38.45
829	10	16-QAM	1/0	15.00	H	6.7	0.49	**21.21**	38.45
836.5	10	16-QAM	1/0	15.15	H	6.7	0.49	21.36	38.45
844	10	16-QAM	1/0	14.14	H	6.7	0.49	20.35	38.45

EIRP for LTE Band 7

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2502.5	5	QPSK	1/0	12.27	V	8.23	1.12	19.38	33
2535	5	QPSK	1/0	13.01	V	8.23	1.12	20.12	33
2567.5	5	QPSK	1/24	12.89	V	8.23	1.12	20.00	33
2502.5	5	QPSK	1/0	13.58	H	8.23	1.12	20.69	33
2535	5	QPSK	1/0	14.20	H	8.23	1.12	21.31	33
2567.5	5	QPSK	1/24	14.01	H	8.23	1.12	21.12	33
2502.5	5	16-QAM	1/0	11.33	V	8.23	1.12	18.44	33
2535	5	16-QAM	1/0	11.92	V	8.23	1.12	19.03	33
2567.5	5	16-QAM	1/24	11.85	V	8.23	1.12	18.96	33
2502.5	5	16-QAM	1/0	12.66	H	8.23	1.12	19.77	33
2535	5	16-QAM	1/0	12.99	H	8.23	1.12	20.10	33
2567.5	5	16-QAM	1/24	13.14	H	8.23	1.12	20.25	33
2505	10	QPSK	1/0	12.68	V	8.23	1.12	19.79	33
2535	10	QPSK	1/49	12.23	V	8.23	1.12	19.34	33
2565	10	QPSK	1/0	12.11	V	8.23	1.12	19.22	33
2505	10	QPSK	1/0	13.08	H	8.23	1.12	20.19	33
2535	10	QPSK	1/49	13.89	H	8.23	1.12	21.00	33
2565	10	QPSK	1/0	13.85	H	8.23	1.12	20.96	33
2505	10	16-QAM	1/0	12.42	V	8.23	1.12	19.53	33
2535	10	16-QAM	1/49	12.01	V	8.23	1.12	19.12	33
2565	10	16-QAM	1/0	12.44	V	8.23	1.12	19.55	33
2505	10	16-QAM	1/0	13.39	H	8.23	1.12	20.50	33
2535	10	16-QAM	1/49	13.40	H	8.23	1.12	20.51	33
2565	10	16-QAM	1/0	13.12	H	8.23	1.12	20.23	33
2507.5	15	QPSK	1/0	11.31	V	8.23	1.12	18.42	33
2535	15	QPSK	1/74	12.17	V	8.23	1.12	19.28	33
2562.5	15	QPSK	1/0	12.36	V	8.23	1.12	19.47	33
2507.5	15	QPSK	1/0	13.01	H	8.23	1.12	20.12	33
2535	15	QPSK	1/74	13.12	H	8.23	1.12	20.23	33
2562.5	15	QPSK	1/0	13.27	H	8.23	1.12	20.38	33
2507.5	15	16-QAM	1/0	13.31	V	8.23	1.12	20.42	33
2535	15	16-QAM	1/74	11.09	V	8.23	1.12	18.20	33
2562.5	15	16-QAM	1/0	10.01	V	8.23	1.12	17.12	33
2507.5	15	16-QAM	1/0	13.28	H	8.23	1.12	20.39	33
2535	15	16-QAM	1/74	12.01	H	8.23	1.12	19.12	33
2562.5	15	16-QAM	1/0	12.20	H	8.23	1.12	19.31	33

2510	20	QPSK	1/99	11.78	V	8.23	1.12	18.89	33
2535	20	QPSK	1/99	11.47	V	8.23	1.12	18.58	33
2560	20	QPSK	1/0	10.12	V	8.23	1.12	17.23	33
2510	20	QPSK	1/99	12.31	H	8.23	1.12	19.42	33
2535	20	QPSK	1/99	12.20	H	8.23	1.12	19.31	33
2560	20	QPSK	1/0	11.17	H	8.23	1.12	18.28	33
2510	20	16-QAM	1/99	12.31	V	8.23	1.12	19.42	33
2535	20	16-QAM	1/99	12.28	V	8.23	1.12	19.39	33
2560	20	16-QAM	1/0	13.00	V	8.23	1.12	20.11	33
2510	20	16-QAM	1/99	13.71	H	8.23	1.12	20.82	33
2535	20	16-QAM	1/99	14.14	H	8.23	1.12	21.25	33
2560	20	16-QAM	1/0	14.18	H	8.23	1.12	**21.29**	33

EIRP for LTE Band 38

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2572.5	5	QPSK	1/0	13.23	V	8.22	1.10	20.35	33
2595	5	QPSK	1/0	13.12	V	8.22	1.10	20.24	33
2617.5	5	QPSK	1/24	12.98	V	8.22	1.10	20.10	33
2572.5	5	QPSK	1/0	14.51	H	8.22	1.10	**21.63**	33
2595	5	QPSK	1/0	13.92	H	8.22	1.10	21.04	33
2617.5	5	QPSK	1/24	14.16	H	8.22	1.10	21.28	33
2572.5	5	16-QAM	1/0	12.30	V	8.22	1.10	19.42	33
2595	5	16-QAM	1/0	11.98	V	8.22	1.10	19.10	33
2617.5	5	16-QAM	1/24	11.67	V	8.22	1.10	18.79	33
2572.5	5	16-QAM	1/0	13.22	H	8.22	1.10	20.34	33
2595	5	16-QAM	1/0	13.94	H	8.22	1.10	21.06	33
2617.5	5	16-QAM	1/24	12.89	H	8.22	1.10	20.01	33
2575	10	QPSK	1/0	13.01	V	8.22	1.10	20.13	33
2595	10	QPSK	1/49	12.98	V	8.22	1.10	20.10	33
2615	10	QPSK	1/0	12.26	V	8.22	1.10	19.38	33
2575	10	QPSK	1/0	14.10	H	8.22	1.10	21.22	33
2595	10	QPSK	1/49	14.12	H	8.22	1.10	21.24	33
2615	10	QPSK	1/0	13.31	H	8.22	1.10	20.43	33
2575	10	16-QAM	1/0	12.10	V	8.22	1.10	19.22	33
2595	10	16-QAM	1/49	12.26	V	8.22	1.10	19.38	33
2615	10	16-QAM	1/0	11.77	V	8.22	1.10	18.89	33
2575	10	16-QAM	1/0	13.51	H	8.22	1.10	20.63	33
2595	10	16-QAM	1/49	13.30	H	8.22	1.10	20.42	33
2615	10	16-QAM	1/0	13.21	H	8.22	1.10	20.33	33
2577.5	15	QPSK	1/0	11.02	V	8.22	1.10	18.14	33
2595	15	QPSK	1/74	12.41	V	8.22	1.10	19.53	33
2612.5	15	QPSK	1/0	11.46	V	8.22	1.10	18.58	33
2577.5	15	QPSK	1/0	12.35	H	8.22	1.10	19.47	33
2595	15	QPSK	1/74	13.00	H	8.22	1.10	20.12	33
2612.5	15	QPSK	1/0	12.97	H	8.22	1.10	20.09	33
2577.5	15	16-QAM	1/0	10.92	V	8.22	1.10	18.04	33
2595	15	16-QAM	1/74	10.22	V	8.22	1.10	17.34	33
2612.5	15	16-QAM	1/0	12.14	V	8.22	1.10	19.26	33
2577.5	15	16-QAM	1/0	12.25	H	8.22	1.10	19.37	33
2595	15	16-QAM	1/74	12.13	H	8.22	1.10	19.25	33
2612.5	15	16-QAM	1/0	13.29	H	8.22	1.10	20.41	33

2580	20	QPSK	1/99	12.44	V	8.22	1.10	19.56	33
2595	20	QPSK	1/99	11.73	V	8.22	1.10	18.85	33
2610	20	QPSK	1/0	10.66	V	8.22	1.10	17.78	33
2580	20	QPSK	1/99	13.13	H	8.22	1.10	20.25	33
2595	20	QPSK	1/99	13.07	H	8.22	1.10	20.19	33
2610	20	QPSK	1/0	12.25	H	8.22	1.10	19.37	33
2580	20	16-QAM	1/99	13.11	V	8.22	1.10	20.23	33
2595	20	16-QAM	1/99	12.93	V	8.22	1.10	20.05	33
2610	20	16-QAM	1/0	12.66	V	8.22	1.10	19.78	33
2580	20	16-QAM	1/99	14.31	H	8.22	1.10	21.43	33
2595	20	16-QAM	1/99	14.13	H	8.22	1.10	21.25	33
2610	20	16-QAM	1/0	14.07	H	8.22	1.10	21.19	33

EIRP for LTE Band 40-Lower Side

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2307.5	5	QPSK	1/0	13.10	V	8.10	0.98	20.22	23.98
2310.0	5	QPSK	1/0	13.07	V	8.10	0.98	20.19	23.98
2312.5	5	QPSK	1/24	12.46	V	8.10	0.98	19.58	23.98
2307.5	5	QPSK	1/0	14.90	H	8.10	0.98	**22.02**	23.98
2310.0	5	QPSK	1/0	14.31	H	8.10	0.98	21.43	23.98
2312.5	5	QPSK	1/24	14.10	H	8.10	0.98	21.22	23.98
2307.5	5	16-QAM	1/0	12.26	V	8.10	0.98	19.38	23.98
2310.0	5	16-QAM	1/0	13.07	V	8.10	0.98	20.19	23.98
2312.5	5	16-QAM	1/24	12.36	V	8.10	0.98	19.48	23.98
2307.5	5	16-QAM	1/0	13.62	H	8.10	0.98	20.74	23.98
2310.0	5	16-QAM	1/0	14.24	H	8.10	0.98	21.36	23.98
2312.5	5	16-QAM	1/24	14.40	H	8.10	0.98	21.52	23.98
2310	10	QPSK	1/0	12.31	V	8.10	0.98	19.43	23.98
2310	10	QPSK	1/49	11.29	V	8.10	0.98	18.41	23.98
2310	10	QPSK	1/0	14.16	H	8.10	0.98	21.28	23.98
2310	10	QPSK	1/49	14.11	H	8.10	0.98	21.23	23.98
2310	10	16-QAM	1/0	13.13	V	8.10	0.98	20.25	23.98
2310	10	16-QAM	1/49	12.24	V	8.10	0.98	19.36	23.98
2310	10	16-QAM	1/0	13.30	H	8.10	0.98	20.42	23.98
2310	10	16-QAM	1/49	13.46	H	8.10	0.98	20.58	23.98

EIRP for LTE Band 40-UpperSide

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2352.5	5	QPSK	1/0	13.13	V	8.10	0.98	20.25	23.98
2355.0	5	QPSK	1/0	13.07	V	8.10	0.98	20.19	23.98
2357.5	5	QPSK	1/24	12.99	V	8.10	0.98	20.11	23.98
2352.5	5	QPSK	1/0	14.40	H	8.10	0.98	**21.52**	23.98
2355.0	5	QPSK	1/0	14.62	H	8.10	0.98	21.74	23.98
2357.5	5	QPSK	1/24	14.51	H	8.10	0.98	21.63	23.98
2352.5	5	16-QAM	1/0	12.13	V	8.10	0.98	19.25	23.98
2355.0	5	16-QAM	1/0	12.07	V	8.10	0.98	19.19	23.98
2357.5	5	16-QAM	1/24	11.91	V	8.10	0.98	19.03	23.98
2352.5	5	16-QAM	1/0	13.45	H	8.10	0.98	20.57	23.98
2355.0	5	16-QAM	1/0	13.51	H	8.10	0.98	20.63	23.98
2357.5	5	16-QAM	1/24	14.29	H	8.10	0.98	21.41	23.98
2355	10	QPSK	1/0	12.00	V	8.10	0.98	19.12	23.98
2355	10	QPSK	1/49	10.96	V	8.10	0.98	18.08	23.98
2355	10	QPSK	1/0	13.22	H	8.10	0.98	20.34	23.98
2355	10	QPSK	1/49	13.16	H	8.10	0.98	20.28	23.98
2355	10	16-QAM	1/0	12.99	V	8.10	0.98	20.11	23.98
2355	10	16-QAM	1/49	11.93	V	8.10	0.98	19.05	23.98
2355	10	16-QAM	1/0	12.24	H	8.10	0.98	19.36	23.98
2355	10	16-QAM	1/49	12.35	H	8.10	0.98	19.47	23.98

EIRP for LTE Band 41

Frequency	Channel Bandwidth	Mode.	RB	Substituted level	Antenna Polarization	Antenna Gain correction	Cable Loss	Absolute Level	Limit (dBm)
2498.5	5	QPSK	1/0	13.12	V	8.23	1.12	20.23	33
2593.0	5	QPSK	1/0	13.01	V	8.23	1.12	20.12	33
2687.5	5	QPSK	1/24	13.41	V	8.23	1.12	20.52	33
2498.5	5	QPSK	1/0	15.00	H	8.23	1.12	22.11	33
2593.0	5	QPSK	1/0	14.89	H	8.23	1.12	22.00	33
2687.5	5	QPSK	1/24	14.89	H	8.23	1.12	22.00	33
2498.5	5	16-QAM	1/0	12.42	V	8.23	1.12	19.53	33
2593.0	5	16-QAM	1/0	12.36	V	8.23	1.12	19.47	33
2687.5	5	16-QAM	1/24	12.27	V	8.23	1.12	19.38	33
2498.5	5	16-QAM	1/0	13.35	H	8.23	1.12	20.46	33
2593.0	5	16-QAM	1/0	13.92	H	8.23	1.12	21.03	33
2687.5	5	16-QAM	1/24	13.90	H	8.23	1.12	21.01	33
2501.0	10	QPSK	1/0	11.36	V	8.23	1.12	18.47	33
2593.0	10	QPSK	1/49	12.11	V	8.23	1.12	19.22	33
2685.0	10	QPSK	1/0	12.27	V	8.23	1.12	19.38	33
2501.0	10	QPSK	1/0	12.89	H	8.23	1.12	20.00	33
2593.0	10	QPSK	1/49	13.03	H	8.23	1.12	20.14	33
2685.0	10	QPSK	1/0	13.78	H	8.23	1.12	20.89	33
2501.0	10	16-QAM	1/0	11.16	V	8.23	1.12	18.27	33
2593.0	10	16-QAM	1/49	11.14	V	8.23	1.12	18.25	33
2685.0	10	16-QAM	1/0	11.12	V	8.23	1.12	18.23	33
2501.0	10	16-QAM	1/0	12.37	H	8.23	1.12	19.48	33
2593.0	10	16-QAM	1/49	12.26	H	8.23	1.12	19.37	33
2685.0	10	16-QAM	1/0	12.38	H	8.23	1.12	19.49	33
2503.5	15	QPSK	1/0	11.31	V	8.23	1.12	18.42	33
2593.0	15	QPSK	1/74	11.02	V	8.23	1.12	18.13	33
2682.5	15	QPSK	1/0	11.16	V	8.23	1.12	18.27	33
2503.5	15	QPSK	1/0	12.44	H	8.23	1.12	19.55	33
2593.0	15	QPSK	1/74	12.89	H	8.23	1.12	20.00	33
2682.5	15	QPSK	1/0	12.38	H	8.23	1.12	19.49	33
2503.5	15	16-QAM	1/0	11.11	V	8.23	1.12	18.22	33
2593.0	15	16-QAM	1/74	10.35	V	8.23	1.12	17.46	33
2682.5	15	16-QAM	1/0	10.26	V	8.23	1.12	17.37	33
2503.5	15	16-QAM	1/0	12.32	H	8.23	1.12	19.43	33
2593.0	15	16-QAM	1/74	11.78	H	8.23	1.12	18.89	33
2682.5	15	16-QAM	1/0	11.63	H	8.23	1.12	18.74	33

2506.0	20	QPSK	1/99	11.21	V	8.23	1.12	18.32	33
2593.0	20	QPSK	1/99	11.48	V	8.23	1.12	18.59	33
2680.0	20	QPSK	1/0	10.31	V	8.23	1.12	17.42	33
2506.0	20	QPSK	1/99	13.00	H	8.23	1.12	20.11	33
2593.0	20	QPSK	1/99	12.42	H	8.23	1.12	19.53	33
2680.0	20	QPSK	1/0	11.78	H	8.23	1.12	18.89	33
2506.0	20	16-QAM	1/99	13.02	V	8.23	1.12	20.13	33
2593.0	20	16-QAM	1/99	13.14	V	8.23	1.12	20.25	33
2680.0	20	16-QAM	1/0	13.42	V	8.23	1.12	20.53	33
2506.0	20	16-QAM	1/99	14.74	H	8.23	1.12	**21.85**	33
2593.0	20	16-QAM	1/99	14.63	H	8.23	1.12	21.74	33
2680.0	20	16-QAM	1/0	14.89	H	8.23	1.12	22.00	33

Note: Above is the worst mode data.

8. RADIATED SPURIOUS EMISSION

7.1 PROVISIONS APPLICABLE

(A) On any frequency outside a licensee's frequency block (e.g. A, D, B, etc.) within the USPCS spectrum, the power of any emission shall be attenuated below the transmitter power (P, in Watts) by at least 43+10Log(P) dB. The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm.

At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

(B) For specific criteria, please refer to the description in section 9.2 of the report for corresponding evaluation.

8.2 MEASUREMENT PROCEDURE

1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and RBW for peak reading. Then 1MHz RBW and 10Hz VBW for average reading in spectrum analyzer. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
8. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.

9. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
10. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High - Low scan is not required in this case.
11. For spurious emissions above 1GHz, a horn antenna is substituted in place of the EUT.
The substitute antenna is driven by a signal generator and the previously recorded signal was duplicated.
The spurious emissions is calculated by the following formula;

Result(dBm) = Pg(dBm) +Factor(dB)

Factor(dB) = Ant Gain(dB)-Cable Loss(dB) + Power Splitter(dB) (Above 1GHz)

Factor(dB) = Ant Gain(dB)-Cable Loss(dB) (Below 1GHz)

Where: Pgis the generator output power into the substitution antenna.
If the fundalmatal frequency is below 1GHz, RF output power has been converted to EIRP.

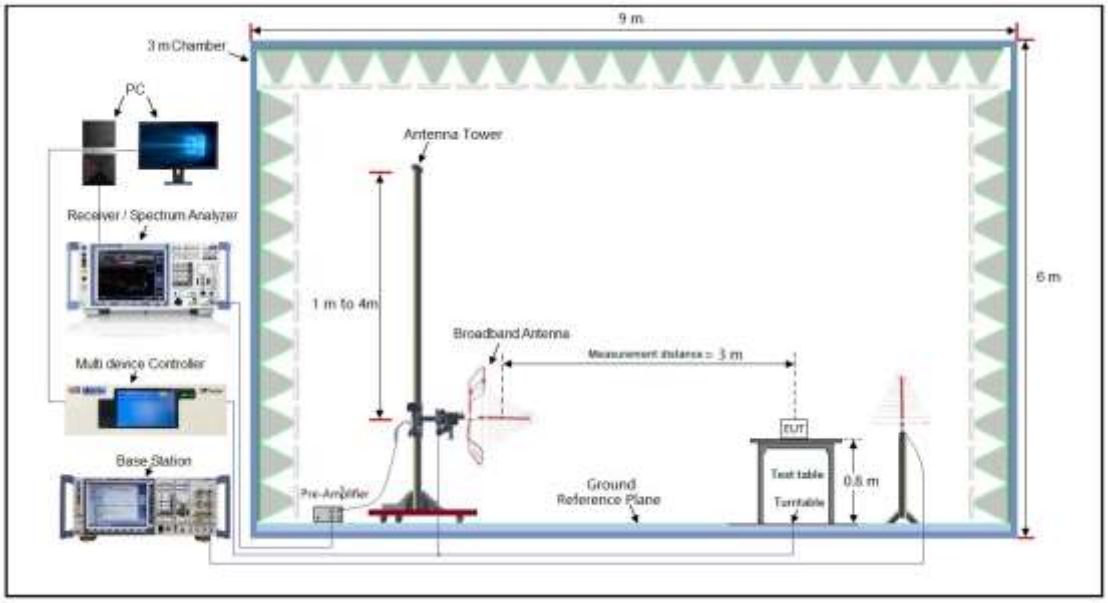
EIRP(dBm) = ERP(dBm) + 2.15

12. Examples of Factor parameters for testing radiation spurious:

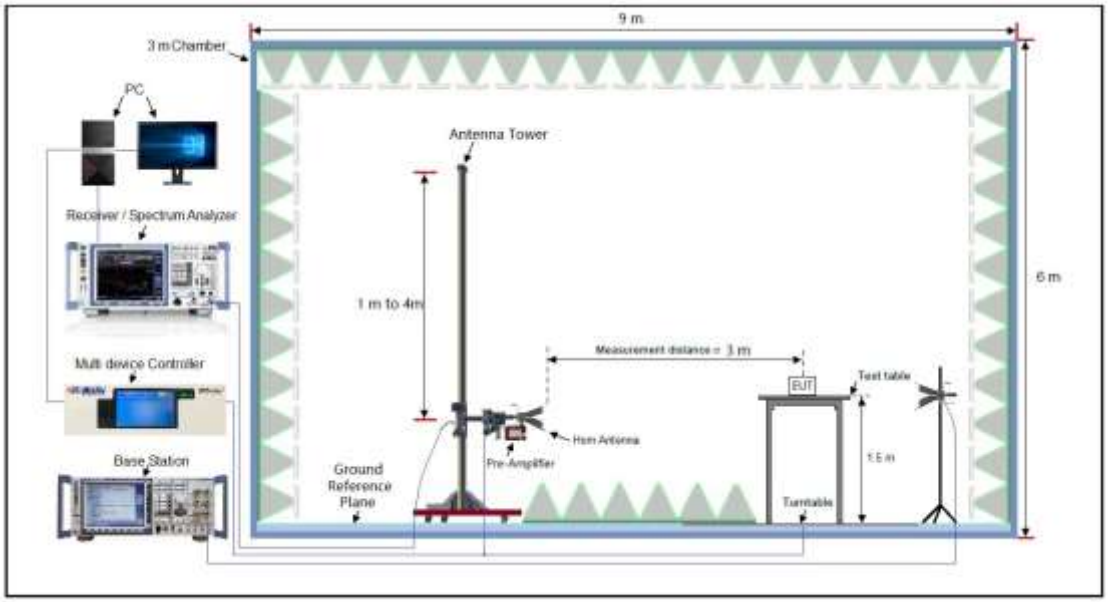
Frequency Range(MHz)	Factor(dB)
30-500	6.18
500-1000	9.37
1000-1500	27.56
1500-2000	28.27
2000-3000	29.45
3000-5000	30.15
5000-10000	31.26
10000-15000	32.78
15000-20000	33.99
Above 20GHz	35.04

8.3 MEASUREMENT SETUP

Radiated Emissions 30MHz to 1GHz Test setup



Radiated Emissions Above 1GHz Test setup



8.4 MEASUREMENT RESULT

LTE Band 2_TX Mode
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5552.1	V	-42.07	-13	-29.07
3701.4	V	-40.49	-13	-27.49
695.5	V	-47.67	-13	-34.67
412.1	V	-50.87	-13	-37.87
5552.1	H	-40.54	-13	-27.54
3701.4	H	-40.91	-13	-27.91
678.3	H	-49.42	-13	-36.42
452.1	H	-50.90	-13	-37.9

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5640	V	-42.51	-13	-29.51
3760	V	-40.62	-13	-27.62
885.1	V	-48.09	-13	-35.09
618.7	V	-49.68	-13	-36.68
5640	H	-49.51	-13	-36.51
3760	H	-41.43	-13	-28.43
851.3	H	-45.81	-13	-32.81
732.5	H	-49.06	-13	-36.06

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5727.9	V	-42.08	-13	-29.08
3818.6	V	-42.50	-13	-29.5
664.5	V	-47.66	-13	-34.66
525.8	V	-47.13	-13	-34.13
5727.9	H	-40.03	-13	-27.03
3818.6	H	-41.20	-13	-28.2
669.8	H	-49.45	-13	-36.45
574.4	H	-48.94	-13	-35.94

LTE Band 4_TX Mode
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5132.1	V	-41.25	-13	-28.25
3421.4	V	-40.95	-13	-27.95
745.5	V	-44.73	-13	-31.73
528.1	V	-49.15	-13	-36.15
5132.1	H	-40.33	-13	-27.33
3421.4	H	-41.27	-13	-28.27
520.5	H	-48.64	-13	-35.64
395.8	H	-43.51	-13	-30.51

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5197.5	V	-39.30	-13	-26.3
3465	V	-39.07	-13	-26.07
669.4	V	-47.69	-13	-34.69
512.5	V	-49.27	-13	-36.27
5197.5	H	-39.25	-13	-26.25
3465	H	-41.96	-13	-28.96
569.4	H	-47.72	-13	-34.72
469.3	H	-47.20	-13	-34.2

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
5262.9	V	-38.36	-13	-25.36
3508.6	V	-39.34	-13	-26.34
711.1	V	-47.76	-13	-34.76
528.7	V	-47.46	-13	-34.46
5262.9	H	-38.76	-13	-25.76
3508.6	H	-38.36	-13	-25.36
612.5	H	-46.03	-13	-33.03
553.9	H	-46.82	-13	-33.82

LTE Band 5_TX Mode

Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2474.1	V	-43.05	-13	-30.05
1649.4	V	-42.36	-13	-29.36
512.2	V	-48.16	-13	-35.16
365.5	V	-47.82	-13	-34.82
2474.1	H	-40.38	-13	-27.38
1649.4	H	-40.73	-13	-27.73
521.1	H	-45.44	-13	-32.44
336.5	H	-45.93	-13	-32.93

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2509.5	V	-44.58	-13	-31.58
1673	V	-43.66	-13	-30.66
725.8	V	-47.40	-13	-34.4
616.6	V	-47.24	-13	-34.24
2509.5	H	-40.77	-13	-27.77
1673	H	-43.09	-13	-30.09
705.5	H	-45.69	-13	-32.69
558.9	H	-46.79	-13	-33.79

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
2544.9	V	-41.32	-13	-28.32
1696.6	V	-40.25	-13	-27.25
648.3	V	-46.84	-13	-33.84
482.7	V	-47.82	-13	-34.82
2544.9	H	-41.01	-13	-28.01
1696.6	H	-41.97	-13	-28.97
785.6	H	-46.25	-13	-33.25
615.7	H	-47.50	-13	-34.5

LTE Band 7_TX Mode
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7507.5	V	-45.18	-25	-20.18
5005	V	-44.34	-25	-19.34
925.7	V	-50.26	-25	-25.26
678.9	V	-53.03	-25	-28.03
7507.5	H	-42.67	-25	-17.67
5005	H	-43.05	-25	-18.05
873.6	H	-49.64	-25	-24.64
662.7	H	-51.39	-25	-26.39

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBc)	Margin (dB)
7605	V	-43.90	-25	-18.90
5070	V	-41.40	-25	-16.40
833.7	V	-51.25	-25	-26.25
521.2	V	-52.42	-25	-27.42
7605	H	-42.16	-25	-17.16
5070	H	-42.91	-25	-17.91
819.6	H	-51.48	-25	-26.48
520.5	H	-49.54	-25	-24.54

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7702.5	V	-44.64	-25	-19.64
5135	V	-45.37	-25	-20.37
752.6	V	-52.87	-25	-27.87
511.4	V	-52.59	-25	-27.59
7702.5	H	-41.80	-25	-16.80
5135	H	-44.38	-25	-19.38
701.1	H	-49.53	-25	-24.53
507.1	H	-50.69	-25	-25.69

LTE Band 38_TX Mode
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7717.5	V	-51.30	-25	-26.30
5145	V	-46.45	-25	-21.45
881.2	V	-50.71	-25	-25.71
594.3	V	-53.72	-25	-28.72
7717.5	H	-48.90	-25	-23.90
5145	H	-45.56	-25	-20.56
463.8	H	-56.27	-25	-31.27
367.5	H	-50.49	-25	-25.49

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7785	V	-46.98	-25	-21.98
5190	V	-48.07	-25	-23.07
674.1	V	-55.31	-25	-30.31
493.2	V	-55.54	-25	-30.54
7785	H	-47.73	-25	-22.73
5190	H	-49.47	-25	-24.47
421.8	H	-49.97	-25	-24.97
203.1	H	-53.99	-25	-28.99

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7851	V	-47.70	-25	-22.70
5235	V	-47.94	-25	-22.94
745.3	V	-50.69	-25	-25.69
582.6	V	-53.67	-25	-28.67
7851	H	-46.28	-25	-21.28
5235	H	-46.80	-25	-21.80
742.1	H	-54.36	-25	-29.36
652.7	H	-53.00	-25	-28.00

LTE Band 40-Lower Side_TX Mode

Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
6922.5	V	-51.71	-40	-11.71
4615.0	V	-49.28	-40	-9.28
857.3	V	-53.08	-40	-13.08
921.6	V	-56.07	-40	-16.07
6922.5	H	-50.81	-40	-10.81
4615.0	H	-47.64	-40	-7.64
584.3	H	-57.36	-40	-17.36
462.8	H	-51.70	-40	-11.70

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
6930	V	-48.78	-40	-8.78
4620	V	-48.83	-40	-8.83
587.6	V	-55.55	-40	-15.55
415.9	V	-55.73	-40	-15.73
6930	H	-48.49	-40	-8.49
4620	H	-51.29	-40	-11.29
469.5	H	-52.13	-40	-12.13
351.2	H	-53.79	-40	-13.79

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
6937.5	V	-49.74	-40	-9.74
4625.0	V	-49.31	-40	-9.31
785.4	V	-54.44	-40	-14.44
569.3	V	-55.17	-40	-15.17
6937.5	H	-46.95	-40	-6.95
4625.0	H	-49.01	-40	-9.01
699.7	H	-55.74	-40	-15.74
512.0	H	-54.22	-40	-14.22

LTE Band 40-Upper Side_TX Mode
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7057.5	V	-50.85	-40	-10.85
4705.0	V	-48.20	-40	-8.20
763.5	V	-50.84	-40	-10.84
512.8	V	-56.19	-40	-16.19
7057.5	H	-48.85	-40	-8.85
4705.0	H	-46.16	-40	-6.16
496.8	H	-56.85	-40	-16.85
359.2	H	-52.01	-40	-12.01

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7065	V	-49.57	-40	-9.57
4710	V	-48.53	-40	-8.53
887.4	V	-55.78	-40	-15.78
746.3	V	-55.03	-40	-15.03
7065	H	-47.85	-40	-7.85
4710	H	-47.93	-40	-7.93
649.7	H	-51.09	-40	-11.09
523.1	H	-55.63	-40	-15.63

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7072.5	V	-48.41	-40	-8.41
4715.0	V	-49.17	-40	-9.17
469.8	V	-51.46	-40	-11.46
321.7	V	-55.78	-40	-15.78
7072.5	H	-45.91	-40	-5.91
4715.0	H	-46.07	-40	-6.07
447.5	H	-54.48	-40	-14.48
369.3	H	-53.81	-40	-13.81

LTE Band 41_TX Mode
Low channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7495.5	V	-48.97	-25	-23.97
4997	V	-45.76	-25	-20.76
612.1	V	-49.15	-25	-24.15
483.6	V	-55.29	-25	-30.29
7495.5	H	-46.85	-25	-21.85
4997	H	-46.77	-25	-21.77
742.8	H	-54.68	-25	-29.68
563.7	H	-51.44	-25	-26.44

Middle channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
7779	V	-45.89	-25	-20.89
5186	V	-47.50	-25	-22.50
568.2	V	-52.25	-25	-27.25
341.5	V	-55.93	-25	-30.93
7779	H	-45.67	-25	-20.67
5186	H	-46.63	-25	-21.63
552.7	H	-49.25	-25	-24.25
421.5	H	-54.25	-25	-29.25

High channel

Frequency (MHz)	Polarity (H/V)	Emission Level (dBm)	Limit (dBm)	Margin (dB)
8062.5	V	-47.54	-25	-22.54
5375	V	-47.11	-25	-22.11
642.9	V	-49.61	-25	-24.61
471.6	V	-53.01	-25	-28.01
8062.5	H	-44.37	-25	-19.37
5375	H	-46.29	-25	-21.29
363.2	H	-50.86	-25	-25.86
274.6	H	-51.28	-25	-26.28

Note: 1. Margin (dB) = Emission Level(dBm) -Limit(dBm)
Emission Level(dBm)= Measurement Reading(dBm)+Factor(dB)
Factor(dB) = ANT Gain -Cable Loss + Power Splitter

2. The test refers to the value of Factor, please refer to the results listed in the test method in this section of the report.
3. The radiated spurious emission has been tested with maximum bandwidth QPSK modulation, resource block size 1 and resource block offset 0.
4. Below 30MHz, no spurious emission was found, and only the worst mode data above 30MHz is recorded in the report.

APPENDIX I PHOTOGRAPHS OF TEST SETUP

Refer to the Report No.: AGC00408210801AP01A

APPENDIX II: PHOTOGRAPHS OF EUT

Refer to the Report No.: AGC00408210801AP03A

----END OF REPORT----

Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the "Clients").

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3.The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.

4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.

5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.

6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.

7.Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.

8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.

9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.