



FCC Test Report

FCC ID: 2BLBN-JH2001

Applicant: DONGGUAN JIEHONG INTELLIGEN TECHNOLOGY CO.,LTD.
Address: 3-4F, No.8, Jinsheng Road, Jinxia Village, Chang'an Town, Dongguan City, Guangdong Province, China
Manufacturer: DONGGUAN JIEHONG INTELLIGEN TECHNOLOGY CO.,LTD.
Address: 3-4F, No.8, Jinsheng Road, Jinxia Village, Chang'an Town, Dongguan City, Guangdong Province, China
EUT: Intelligent interactive integrated machine
Trade Mark: N/A
Model Number: JH2001, JH2002, JH2201, JH2202, JH2203, JH2308, JH2401, JH2701, JH2702, JH3201, JH3202
Date of Receipt: Aug. 22, 2024
Test Date: Aug. 22, 2024 - Sep. 10, 2024
Date of Report: Sep. 10, 2024
Prepared By: Shenzhen DL Testing Technology Co., Ltd.
Address: 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China
Applicable Standards: FCC CFR Title 47 Part22 Subpart H
FCC CFR Title 47 Part24 Subpart E
FCC CFR Title 47 Part27
ANSI/ TIA/ EIA-603-E-2016
FCC KDB 971168 D01 Power Meas. License Digital Systems v02v02
ANSI C63.26:2015
Test Result: Pass
Report Number: DL-240822033ER

Prepared (Test Engineer): Pxing Huang
Reviewer (Supervisor): Jack Bu
Approved (Manager): Jade Yang



This test report is based on a single evaluation of one sample of above mentioned products. It is not permitted to be duplicated in extracts without written approval of Shenzhen DL Testing Technology Co., Ltd.

**TABLE OF CONTENTS**

Test Report Declaration	Page
1. TEST SUMMARY	3
2. GENERAL PRODUCT INFORMATION	4
2.1. Description of Device (EUT)	4
2.2. Product Function.....	5
2.3. Independent Operation Modes.....	5
3. TEST SITES	6
3.1. Test Facilities	6
3.2. Measurement Uncertainty	6
3.3. List of Test and Measurement Instruments	7
4. TEST SET-UP	8
4.1. Principle of Configuration Selection.....	8
4.2. Block Diagram of Test Set-up.....	8
4.3. Test Environment:	8
5. EMISSION TEST RESULTS.....	9
5.1. Conducted RF Output Power.....	9
5.2. -26dB and 99% Occupied Bandwidth.....	18
5.3. Peak to Average Ratio.....	19
5.4. Frequency Stability	20
5.5. Conducted Spurious Emissions	27
5.6. Transmitter Radiated Power (EIRP/ERP)	28
5.7. Radiated Out of Band Emissions	38
6. PHOTOGRAPHS OF TEST SET-UP	51
7. PHOTOGRAPHS OF THE EUT	51

**1. TEST SUMMARY**

Test Items	Test Requirement& band	Result
Conducted RF Output Power	2.1046(band 2, band 4, band 5, band 12, band 66)	PASS*
Peak to Average Ratio	2.1055,22.355(band 5) 24.235(band 2, band 4, band 66),27.54(band 12)	PASS*
99% & -26 dB Occupied Bandwidth	2.1049, 22.917(band 5) 24.238, (band 2, band 4, band 66) 27.53(band 12)	PASS*
Frequency Stability	2.1055, 22.355(band 5) 24.235, (band 2, band 4, band 66) 27.54(band 12)	PASS*
Conducted Out of Band Emissions	2.1051,2.1057 22.917, (band 5) 24.238(band 2, band 4, band 66) 27.53(h) /27.53(m) (band 12)	PASS*
Band Edge	2.1051,2.1057 22.917, (band 5) 24.238(band 2, band 4, band 66) 27.53(h) /27.53(m) (band 12)	PASS*
Transmitter Radiated Power (EIPR/ERP)	22.913, (band 5) 24.232(band 2, band 4, band 66) 27.50(d)(4)/27.50(h)(2) (band 12)	PASS
Radiated Out of Band Emissions	2.1053,2.1057 22.917(band 5), 24.238(band 2, band 4, band 66) 27.53(g) (band 12)	PASS



2. GENERAL PRODUCT INFORMATION

2.1. Description of Device (EUT)

Product Name:	Intelligent interactive integrated machine
Trademark	N/A
Model No.:	JH2001, JH2002, JH2201, JH2202, JH2203, JH2308, JH2401, JH2701, JH2702, JH3201, JH3202
Model Difference	The product's different for model number and appearance color.
Operation Frequency:	WCDMA Band 2: Tx: 1850.00 - 1910.00MHz; Rx: 1930.00 - 1990.00MHz WCDMA Band 5: Tx: 824.00 - 849.00MHz; Rx: 869.00 - 894.00MHz LTE Band 2: Tx: 1850.00 - 1910.00MHz; Rx: 1930.00 - 1990.00MHz LTE Band 4: Tx: 1710.00 - 1755.00MHz; Rx: 2110.00 - 2155.00MHz LTE Band 5: Tx: 824.00 - 849.00MHz; Rx: 869.00 - 894.00MHz LTE Band 12: Tx: 699.00 - 716.00MHz; Rx: 729.00 - 746.00MHz LTE Band 66: Tx: 1710.00 - 1780.00MHz; Rx: 2110.00 - 2200.00MHz
Modulation technology:	WCDMA Mode with BPSK Modulation HSDPA Mode with QPSK, 16QAM Modulation HSUPA Mode with QPSK, 16QAM Modulation LTE Mode with QPSK, 16QAM
Antenna Type:	Internal Antenna
Antenna gain:	WCDMA BAND 2: 1.31dBi WCDMA BAND5: -2.89dBi LTE Band 2: 1.31dBi LTE Band 4: 1.31dBi LTE Band 5: -2.89dBi LTE Band 12: -1.38dBi LTE Band 66: 1.31dBi
Power supply:	DC 14.8V from battery DC 12-19V from charger
Adapter 1:	Manufacturer: Shenzhen Keweiye Electronics CO., LTD Model: KWY65A-1903420US Input: 100-240V~ 50-60Hz, 2.0A Output: 19.0V  3420mA
LTE Category	4
Hardware Version	V1.1
Software Version	V3.17

Note:

- 1.For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- 2.The EUT's all information provided by client.



2.2. Product Function

Refer to Technical Construction Form and User Manual.

2.3. Independent Operation Modes

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Test modes		
Band	Radiated	Conducted
WCDMA	RMC/ HSDPA/ HSUPA/ DC-HSDPA	RMC/ HSDPA/ HSUPA/ DC-HSDPA
LTE Band 2	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%
LTE Band 4	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%
LTE Band 5	Bandwidth:(MHz)1.4/3/5/10MHz Modulation: QPSK/16QAM RB:1//100%	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%
LTE Band12	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%
LTE Band66	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%	Bandwidth:(MHz)1.4/3/5/10/15/20MHz Modulation: QPSK/16QAM RB:1//100%



Test Channel(MHz)			
Band	Low	Middle	High
WCDMA Band 2	1852.4	1880	1907.6
WCDMA Band 5	826.4	836.4	846.6
LTE Band 2	1850.7	1880	1909.3
LTE Band 4	1710.7	1732.5	1754.3
LTE Band 5	824.7	836.5	848.3
LTE Band 12	699.7	708.6	715.3
LTE Band 66	1710.7	1745.0	1779.0

Note1: for LTE mode, if the bandwidth is different, the test frequency is changed.

3. TEST SITES

3.1. Test Facilities

Site Description

Name of Firm : Shenzhen DL Testing Technology Co., Ltd.

Site Location : 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China

3.2. Measurement Uncertainty

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

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 1.38\text{dB}$
2	RF power,conducted	$\pm 0.16\text{dB}$
3	Spurious emissions,conducted	$\pm 0.21\text{dB}$
4	All emissions,radiated(<1G)	$\pm 4.68\text{dB}$
5	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$
8	CCDF	$\pm 0.16\text{dB}$



3.3. List of Test and Measurement Instruments

3.3.1. For conducted emission at the mains terminals test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
843 Shielded Room	ChengYu	843 Room	843	Sep. 20, 2022	Sep. 19, 2025
EMI Receiver	R&S	ESR	101421	Nov. 05, 2023	Nov. 04, 2024
LISN	R&S	ENV216	102417	Nov. 05, 2023	Nov. 04, 2024
843 Cable 1#	ChengYu	CE Cable	001	Nov. 05, 2023	Nov. 04, 2024
843 Cable 1#	FUJIKURA	843C1#	001	Nov. 05, 2023	Nov. 04, 2024

3.3.2. For radiated test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Spectrum Analyzer (9kHz-26.5GHz)	Agilent	E4408B	MY50140780	Nov. 05, 2023	Nov. 04, 2024
Test Receiver (9kHz-7GHz)	R&S	ESRP7	101393	Nov. 05, 2023	Nov. 04, 2024
Bilog Antenna (30MHz-1GHz)	R&S	VULB9162	00306	Nov. 05, 2023	Nov. 04, 2024
Horn Antenna (1GHz-18GHz)	Schwarzbeck	BBHA9120D	02139	Nov. 05, 2023	Nov. 04, 2024
Horn Antenna (18GHz-40GHz)	A.H. Systems	SAS-574	588	Nov. 05, 2023	Nov. 04, 2024
Amplifier (9KHz-6GHz)	Schwarzbeck	BBV9743B	00153	Nov. 05, 2023	Nov. 04, 2024
Amplifier (1GHz-18GHz)	EMEC	EM01G8GA	00270	Nov. 05, 2023	Nov. 04, 2024
Amplifier(18GHz-40GHz)	Quanjuda	DLE-161	97	Nov. 05, 2023	Nov. 04, 2024
Loop Antenna(9KHz-30MHz)	Schwarzbeck	FMZB1519B	00014	Nov. 05, 2023	Nov. 04, 2024
RF cables1 (9kHz-1GHz)	ChengYu	966	004	Nov. 05, 2023	Nov. 04, 2024
RF cables2 (1GHz-40GHz)	ChengYu	966	003	Nov. 05, 2023	Nov. 04, 2024
Antenna connector	Florida RF Labs	N/A	RF 01#	Nov. 05, 2023	Nov. 04, 2024
Power probe	KEYSIGHT	U2021XA	MY55210018	Nov. 05, 2023	Nov. 04, 2024
Signal Analyzer	Agilent	N9020A	MY55370280	Nov. 05, 2023	Nov. 04, 2024
Test Receiver	R&S	ESU 40	100376	Nov. 05, 2023	Nov. 04, 2024
D.C. Power Supply	LongWei	PS-305D	010964729	Nov. 05, 2023	Nov. 04, 2024
Signal Amplifier	DAZE	ZN3380B	11235	Nov. 05, 2023	Nov. 04, 2024
High Pass filter	KANGMAI	WHKX1.0/1.5G-10SS	40	Nov. 05, 2023	Nov. 04, 2024
Filter	COM-MW	ZBSF-C836.5-25-X	BCTC042	Nov. 05, 2023	Nov. 04, 2024
Filter	COM-MW	ZBSF-C1747.5-75-X2	BCTC045	Nov. 05, 2023	Nov. 04, 2024
Filter	COM-MW	ZBSF-C1880-60-X2	BCTC047	Nov. 05, 2023	Nov. 04, 2024
Splitter	Agilent	11435B	1125162	Nov. 05, 2023	Nov. 04, 2024
RF CONDUCTED TEST					
System Simulator	Agilent	E5515C	GB43130252	Nov. 05, 2023	Nov. 04, 2024
Spectrum Analyzer	Agilent	N9020A	MY45108040	Nov. 05, 2023	Nov. 04, 2024
DC Power Supply	LongWei	PS-305D	010965682	Nov. 05, 2023	Nov. 04, 2024
Constant temperature and humidity box	GF	GTH-800-40-2P	MAA9906-012	Nov. 05, 2023	Nov. 04, 2024
Universal radio communication tester	R&S	CMW500	115295	Nov. 05, 2023	Nov. 04, 2024



4. TEST SET-UP

4.1. Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the Operating Instructions.

4.2. Block Diagram of Test Set-up

System Diagram of Connections between EUT and Simulators



4.3. Test Environment:

Ambient conditions in the test laboratory:

Items	Actual
Temperature (°C)	21~23
Humidity (%RH)	50~65



5. EMISSION TEST RESULTS

5.1. Conducted RF Output Power

5.1.1. Limit

According to FCC section 2.1046(a), FCC part22.913(a), FCC part22.50(a) and FCC part 24.232(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

5.1.2. Test Setup

The EUT, which is powered by the adapter, is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power.

5.1.3. Test Result

Here the lowest, middle and highest channels are selected to perform testing to verify the conducted RF output power of the EUT.

Pass, the table and plot please see annex.

The conducted power tables are as follows:

Average Conducted Power						
Band	WCDMA Band 2.			WCDMA Band 5.		
Frequency	1852.4	1880.0	1907.6	826.4	836.4	846.6
RMC 12.2Kbps	24.52	24.19	23.96	22.27	22.61	22.63
RMC 64kbps	23.94	23.99	24.62	22.35	22.25	22.27
RMC 144kbps	24.49	24.24	24.43	22.05	22.13	22.42
RMC 384kbps	23.93	24.19	24.14	22.18	22.15	22.36
HSDPA Subtest-1	24.15	24.33	24.54	22.70	22.72	22.72
HSDPA Subtest-2	24.33	24.50	24.41	22.69	22.34	22.51
HSDPA Subtest-3	24.52	24.58	23.85	22.27	22.38	22.83
HSDPA Subtest-4	23.99	24.06	24.55	22.36	22.78	22.62
HSUPA Subtest-1	24.25	24.25	24.23	22.35	22.76	22.29
HSUPA Subtest-2	24.48	23.94	24.59	22.38	22.16	22.28
HSUPA Subtest-3	24.63	23.88	23.87	22.50	22.71	22.12
HSUPA Subtest-4	23.94	24.54	24.06	22.53	22.32	22.81



Average Conducted Power						
Band	LTE Band 2			Channel/Frequency (MHz)		
Bandwidth	Modulation	RB size	RB offset	18607/1850.7	18900/1880	19193/1909.3
1.4MHz	QPSK	1	0	22.78	22.81	22.33
		1	2	22.68	22.69	22.46
		1	5	22.80	22.75	22.38
		6	0	22.17	22.22	22.51
	16QAM	1	0	22.41	22.27	22.55
		1	2	22.67	22.64	22.44
		1	5	22.43	22.74	22.42
		6	0	22.17	22.22	22.51
Bandwidth	Modulation	RB size	RB offset	18615/1851.5	18900/1880	19185/1908.5
3MHz	QPSK	1	0	22.12	22.16	22.50
		1	7	22.41	22.24	22.05
		1	14	22.29	22.28	22.68
		15	0	22.23	22.23	22.07
	16QAM	1	0	22.44	22.82	22.64
		1	7	22.80	22.72	22.74
		1	14	22.40	22.80	22.28
		15	0	22.23	22.23	22.07
Bandwidth	Modulation	RB size	RB offset	18625/1852.5	18900/1880	19175/1907.5
5MHz	QPSK	1	0	22.83	22.62	22.35
		1	13	22.28	22.74	22.21
		1	24	22.54	22.29	22.38
		25	0	22.49	22.77	22.18
	16QAM	1	0	22.21	22.66	22.82
		1	13	22.42	22.82	22.73
		1	24	22.74	22.71	22.59
		25	0	22.49	22.77	22.18



Average Conducted Power						
Band	LTE Band 2			Channel/Frequency (MHz)		
Bandwidth	Modulation	RB size	RB offset	18650/1855	18900/1880	19150/1905
10MHz	QPSK	1	0	22.65	22.60	22.49
		1	25	22.44	22.68	22.77
		1	49	22.42	22.59	22.45
		50	0	22.68	22.40	22.47
	16QAM	1	0	22.18	22.55	22.40
		1	25	22.60	22.15	22.72
		1	49	22.17	22.78	22.48
		50	0	22.68	22.40	22.47
Bandwidth	Modulation	RB size	RB offset	18675/1857.5	18900/1880	19125/1902.5
15MHz	QPSK	1	0	22.20	22.32	22.42
		1	38	22.63	22.32	22.26
		1	74	22.23	22.60	22.74
		75	0	22.13	22.72	22.22
	16QAM	1	0	22.22	22.80	22.55
		1	38	22.20	22.12	22.77
		1	74	22.35	22.11	22.56
		75	0	22.13	22.72	22.22
Bandwidth	Modulation	RB size	RB offset	18700/1860	18900/1880	19100/1900
20MHz	QPSK	1	0	22.60	22.57	22.64
		1	50	22.16	22.27	22.34
		1	99	22.65	22.07	22.47
		100	0	22.73	22.74	22.78
	16QAM	1	0	22.12	22.13	22.54
		1	50	22.21	22.33	22.07
		1	99	22.14	22.43	22.37
		100	0	22.50	22.08	22.65

Note: Measurement Uncertainty: ± 2.6 dB.



Average Conducted Power						
Band	LTE Band 4			Channel/Frequency (MHz)		
Bandwidth	Modulation	RB size	RB offset	19957/1710.7	20175/1732.5	20393/1754.3
1.4MHz	QPSK	1	0	22.07	22.05	22.28
		1	2	22.70	22.34	22.70
		1	5	22.51	22.85	22.66
		6	0	22.84	22.30	22.11
	16QAM	1	0	22.10	22.21	22.69
		1	2	22.41	22.30	22.64
		1	5	22.33	22.59	22.38
		6	0	22.07	22.05	22.28
Bandwidth	Modulation	RB size	RB offset	19965/1711.5	20175/1732.5	20385/1753.5
3MHz	QPSK	1	0	22.83	22.62	22.34
		1	7	22.31	22.63	22.49
		1	14	22.68	22.40	22.38
		15	0	22.31	22.23	22.20
	16QAM	1	0	22.17	22.53	22.33
		1	7	22.39	22.85	22.47
		1	14	22.09	22.64	22.18
		15	0	22.08	22.54	22.34
Bandwidth	Modulation	RB size	RB offset	19975/1712.5	20175/1732.5	20375/1752.5
5MHz	QPSK	1	0	22.70	22.20	22.77
		1	13	22.33	22.37	22.64
		1	24	22.08	22.49	22.27
		25	0	22.29	22.32	22.34
	16QAM	1	0	22.14	22.35	22.19
		1	13	22.31	22.65	22.47
		1	24	22.45	22.62	22.55
		25	0	22.70	22.20	22.77



Average Conducted Power						
Band	LTE Band 4			Channel/Frequency (MHz)		
Bandwidth	Modulation	RB size	RB offset	20000/1715	20175/1732.5	20350/1750
10MHz	QPSK	1	0	22.80	22.23	22.05
		1	25	22.85	22.71	22.09
		1	49	22.64	22.62	22.35
		50	0	22.63	22.74	22.39
	16QAM	1	0	22.60	22.48	22.39
		1	25	22.40	22.76	22.08
		1	49	22.17	22.85	22.80
		50	0	22.46	22.11	22.71
Bandwidth	Modulation	RB size	RB offset	20025/1717.5	20175/1732.5	20325/1747.5
15MHz	QPSK	1	0	22.79	22.12	22.06
		1	38	22.61	22.74	22.63
		1	74	22.75	22.28	22.36
		75	0	22.29	22.22	22.83
	16QAM	1	0	22.18	22.08	22.19
		1	38	22.27	22.37	22.63
		1	74	22.79	22.39	22.73
		75	0	22.33	22.33	22.19
Bandwidth	Modulation	RB size	RB offset	20050/1720	20175/1732.5	20300/1745
20MHz	QPSK	1	0	22.41	22.09	22.20
		1	50	22.25	22.21	22.19
		1	99	22.33	22.28	22.06
		100	0	22.56	22.77	22.29
	16QAM	1	0	22.16	22.36	22.67
		1	50	22.23	22.85	22.35
		1	99	22.82	22.68	22.17
		100	0	22.13	22.44	22.32

Note: Measurement Uncertainty: ± 2.6 dB.



Average Conducted Power						
Band	LTE Band 5			Channel/Frequency (MHz)		
Bandwidth	Modulation	RB size	RB offset	20407/824.7	20525/836.5	20643/848.3
1.4MHz	QPSK	1	0	22.60	22.64	22.69
		1	2	22.12	22.40	22.39
		1	5	22.56	22.18	22.46
		6	0	22.72	22.59	22.24
	16QAM	1	0	22.17	22.80	22.80
		1	2	22.84	22.79	22.56
		1	5	22.34	22.83	22.07
		6	0	22.52	22.12	22.33
Bandwidth	Modulation	RB size	RB offset	20415/825.5	20525/836.5	20635/847.5
3MHz	QPSK	1	0	22.59	22.56	22.21
		1	7	22.36	22.85	22.14
		1	14	22.06	22.81	22.15
		15	0	22.13	22.28	22.65
	16QAM	1	0	22.32	22.05	22.77
		1	7	22.06	22.11	22.31
		1	14	22.57	22.15	22.54
		15	0	22.45	22.35	22.76
Bandwidth	Modulation	RB size	RB offset	20425/826.5	20525/836.5	20625/846.5
5MHz	QPSK	1	0	22.06	22.43	22.67
		1	13	22.48	22.76	22.36
		1	24	22.11	22.26	22.07
		25	0	22.64	22.51	22.37
	16QAM	1	0	22.63	22.06	22.59
		1	13	22.82	22.15	22.08
		1	24	22.18	22.07	22.76
		25	0	22.30	22.83	22.29
Bandwidth	Modulation	RB size	RB offset	20450/829	20525/836.5	20600/844
10MHz	QPSK	1	0	22.54	22.11	22.24
		1	25	22.45	22.81	22.35
		1	49	22.31	22.44	22.36
		50	0	22.22	22.25	22.44
	16QAM	1	0	22.51	22.11	22.30
		1	25	22.45	22.83	22.34
		1	49	22.44	22.44	22.65
		50	0	22.27	22.39	22.13

Note: Measurement Uncertainty: ± 2.6 dB.



Average Conducted Power						
Band	LTE Band 12			Channel/Frequency (MHz)		
Bandwidth	Modulation	RB size	RB offset	23017/699.7	23095/707.5	23173/715.3
1.4MHz	QPSK	1	0	22.22	22.15	22.62
		1	2	22.56	22.43	22.39
		1	5	22.23	22.14	22.11
		6	0	22.84	22.71	22.49
	16QAM	1	0	22.12	22.07	22.63
		1	2	22.55	22.39	22.29
		1	5	22.11	22.39	22.27
		6	0	22.82	22.29	22.21
Bandwidth	Modulation	RB size	RB offset	23025/700.5	23095/707.5	23165/714.5
3MHz	QPSK	1	0	22.85	22.74	22.75
		1	7	22.35	22.82	22.81
		1	14	22.75	22.23	22.45
		15	0	22.18	22.70	22.27
	16QAM	1	0	22.81	22.39	22.41
		1	7	22.54	22.42	22.63
		1	14	22.67	22.14	22.55
		15	0	22.83	22.38	22.32
Bandwidth	Modulation	RB size	RB offset	23035/701.5	23095/707.5	23155/713.5
5MHz	QPSK	1	0	22.45	22.65	22.83
		1	12	22.63	22.78	22.76
		1	24	22.64	22.44	22.79
		25	0	22.07	22.10	22.35
	16QAM	1	0	22.13	22.77	22.50
		1	12	22.81	22.11	22.71
		1	24	22.78	22.83	22.61
		25	0	22.53	22.54	22.79
Bandwidth	Modulation	RB size	RB offset	23060/704	23095/707.5	23130/711
10MHz	QPSK	1	0	22.06	22.58	22.63
		1	24	22.35	22.48	22.67
		1	49	22.39	22.77	22.42
		50	0	22.44	22.62	22.52
	16QAM	1	0	22.79	22.40	22.65
		1	24	22.10	22.36	22.75
		1	49	22.16	22.33	22.60
		50	0	22.72	22.43	22.60

Note: Measurement Uncertainty: ± 2.6 dB.



Average Conducted Power						
Band	LTE Band 66			Channel/Frequency (MHz)		
Bandwidth	Modulation	RB size	RB offset	131979/1710.7	132322/1745	132665/1779.3
1.4MHz	QPSK	1	0	22.27	22.79	22.52
		1	2	22.09	22.35	22.82
		1	5	22.43	22.49	22.81
		6	0	22.55	22.76	22.65
	16QAM	1	0	22.76	22.74	22.41
		1	2	22.24	22.27	22.69
		1	5	22.81	22.16	22.51
		6	0	22.84	22.79	22.49
Bandwidth	Modulation	RB size	RB offset	131987/1711.5	132322/1745	132657/1778.5
3MHz	QPSK	1	0	22.23	22.49	22.71
		1	7	22.56	22.52	22.77
		1	14	22.71	22.09	22.47
		15	0	22.28	22.14	22.41
	16QAM	1	0	22.30	22.20	22.60
		1	7	22.57	22.63	22.77
		1	14	22.74	22.28	22.54
		15	0	22.30	22.64	22.54
Bandwidth	Modulation	RB size	RB offset	131997/1712.5	132322/1745	132647/1777.5
5MHz	QPSK	1	0	22.30	22.67	22.71
		1	12	22.34	22.44	22.52
		1	24	22.27	22.18	22.55
		25	0	22.85	22.18	22.21
	16QAM	1	0	22.15	22.18	22.36
		1	12	22.50	22.41	22.38
		1	24	22.37	22.70	22.38
		25	0	22.36	22.73	22.57



Average Conducted Power						
Band	LTE Band 66			Channel/Frequency (MHz)		
Bandwidth	Modulation	RB size	RB offset	132022/1715	132322/1745	132622/1775
10MHz	QPSK	1	0	22.44	22.45	22.11
		1	24	22.66	22.22	22.23
		1	49	22.21	22.42	22.16
		50	0	22.21	22.18	22.61
	16QAM	1	0	22.30	22.21	22.18
		1	24	22.55	22.45	22.28
		1	49	22.76	22.76	22.44
		50	0	22.27	22.46	22.20
Bandwidth	Modulation	RB size	RB offset	132047/1717.5	132322/1745	132597/1772.5
15MHz	QPSK	1	0	22.49	22.36	22.12
		1	38	22.42	22.26	22.21
		1	74	22.50	22.24	22.52
		75	0	22.38	22.60	22.80
	16QAM	1	0	22.32	22.84	22.78
		1	38	22.64	22.28	22.31
		1	74	22.12	22.15	22.53
		75	0	22.14	22.79	22.18
Bandwidth	Modulation	RB size	RB offset	132072/1720	132322/1745	132572/1770
20MHz	QPSK	1	0	22.66	22.59	22.82
		1	50	22.69	22.37	22.43
		1	99	22.83	22.59	22.26
		100	0	22.14	22.35	22.09
	16QAM	1	0	22.53	22.79	22.21
		1	50	22.32	22.12	22.73
		1	99	22.42	22.09	22.44
		100	0	22.09	22.07	22.22

Note: Measurement Uncertainty: $\pm 2.6\text{dB}$.



5.2. -26dB and 99% Occupied Bandwidth

5.2.1. Limit

According to FCC section 2.1049 and FCC part22.99 and FCC part24.131, 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.

Occupied bandwidth is also known as the 99% emission bandwidth,

5.2.2. Test Setup

The EUT, which is powered by the adapter, is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power.

5.2.3. Test Result

Pass, the table and plot please see annex.

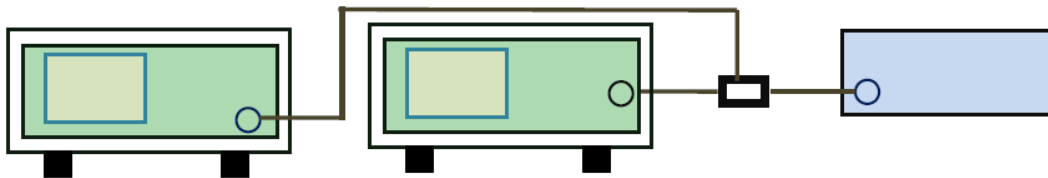


5.3. Peak to Average Ratio

5.3.1. Limit

According to FCC section 27.50(d)(5), 22.99, 24.131 the peak to average ratio(PAR) of the transmission may not exceed 13dB.

5.3.2. Test Setup



5.3.3. Test Procedure

According with KDB 971168 v02r02

1. The signal analyzer's CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW > Emission bandwidth of signal
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

5.3.4. Test Result

Pass, the table and plot please see annex.

Measurement data as follows:



5.4. Frequency Stability

5.4.1. Limit

FCC section 24.235: The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

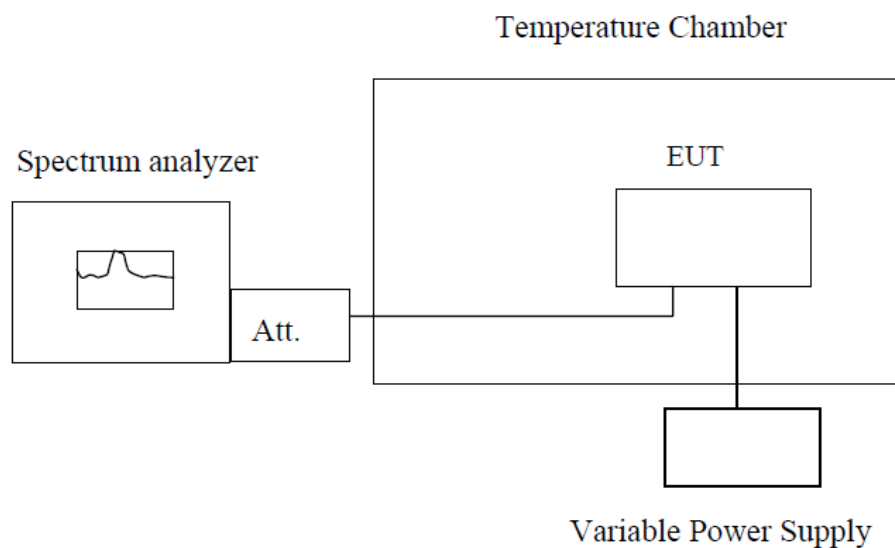
FCC section 22.355. Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C-1 of this section.

Table C-1—Frequency Tolerance for Transmitters in the Public Mobile Services

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 section 27.54: The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

5.4.2. Test Setup



Note : Measurement setup for testing on Antenna connector

The EUT, which is powered by the DC Power Supply directly, is located in the Temperature Chamber.

The EUT is commanded by the System Simulator (SS) to operate at the maximum output power

5.4.3. Test Result

The frequency deviation limit of 850MHz band is $\pm 2.5\text{ppm}$, and 1900MHz is $\pm 1\text{ppm}$.

For LTE mode, only test the max bandwidth.

The table and plot please see annex.



Test Conditions			Frequency Deviation			Result
Band	Power(Vdc)	Temperature(°C)	Frequency Error(Hz)	ppm	Limit	
WCDMA Band 2 Middle channel 1880MHz	14.8	-40	20	0.0106	±1	PASS
	14.8	-30	66	0.0351		
	14.8	-20	89	0.0473		
	14.8	-10	25	0.0133		
	14.8	0	97	0.0516		
	14.8	10	74	0.0394		
	14.8	20	69	0.0367		
	14.8	30	85	0.0452		
	14.8	40	14	0.0074		
	14.8	50	43	0.0229		
	14.8	60	89	0.0473		
	14.8	70	27	0.0144		
	14.8	80	78	0.0415		
	17.02	25	5	0.0027		
	14.8	25	2	0.0011		
	12.58	25	20	0.0106		
WCDMA Band 5 Middle channel 836.6MHz	14.8	-40	49	0.0586	±2.5	PASS
	14.8	-30	53	0.0634		
	14.8	-20	60	0.0717		
	14.8	-10	42	0.0502		
	14.8	0	24	0.0287		
	14.8	10	30	0.0359		
	14.8	20	74	0.0885		
	14.8	30	64	0.0765		
	14.8	40	97	0.1159		
	14.8	50	40	0.0478		
	14.8	60	57	0.0681		
	14.8	70	89	0.1064		
	14.8	80	96	0.1148		
	17.02	25	11	0.0131		
	14.8	25	19	0.0227		
	12.58	25	15	0.0179		



Test Conditions			Frequency Deviation			Result
Band	Power(Vdc)	Temperature(°C)	Frequency Error(Hz)	ppm	Limit	
LTE Band 2 Bandwidth 20MHz QPSK Middle channel 1880MHz	14.8	-40	43	0.0229	within the authorized frequency	PASS
	14.8	-30	28	0.0149		
	14.8	-20	68	0.0362		
	14.8	-10	87	0.0463		
	14.8	0	93	0.0495		
	14.8	10	75	0.0399		
	14.8	20	82	0.0436		
	14.8	30	74	0.0394		
	14.8	40	81	0.0431		
	14.8	50	71	0.0378		
	14.8	60	3	0.0016		
	14.8	70	91	0.0484		
	14.8	80	88	0.0468		
	17.02	25	30	0.0160		
	14.8	25	43	0.0229		
	12.58	25	85	0.0452		
LTE Band 2 Bandwidth 20MHz 16QAM Middle channel 1880MHz	14.8	-40	41	0.0218	within the authorized frequency	PASS
	14.8	-30	12	0.0064		
	14.8	-20	92	0.0489		
	14.8	-10	50	0.0266		
	14.8	0	90	0.0479		
	14.8	10	30	0.0160		
	14.8	20	78	0.0415		
	14.8	30	93	0.0495		
	14.8	40	64	0.0340		
	14.8	50	57	0.0303		
	14.8	60	85	0.0452		
	14.8	70	87	0.0463		
	14.8	80	9	0.0048		
	17.02	25	56	0.0298		
	14.8	25	15	0.0080		
	12.58	25	74	0.0394		



Test Conditions			Frequency Deviation			Result
Band	Power(Vdc)	Temperature(°C)	Frequency Error(Hz)	ppm	Limit	
LTE Band 4 Bandwidth 15MHz QPSK Middle channel 1732.5MHz	14.8	-40	48	0.0277	within the authorized frequency	PASS
	14.8	-30	32	0.0185		
	14.8	-20	82	0.0473		
	14.8	-10	17	0.0098		
	14.8	0	8	0.0046		
	14.8	10	47	0.0271		
	14.8	20	74	0.0427		
	14.8	30	21	0.0121		
	14.8	40	27	0.0156		
	14.8	50	74	0.0427		
	14.8	60	36	0.0208		
	14.8	70	69	0.0398		
	14.8	80	29	0.0167		
	17.02	25	93	0.0537		
	14.8	25	88	0.0508		
	12.58	25	16	0.0092		
LTE Band 4 Bandwidth 15MHz 16QAM Middle channel 1732.5MHz	14.8	-40	93	0.0538	within the authorized frequency	PASS
	14.8	-30	65	0.0373		
	14.8	-20	99	0.0574		
	14.8	-10	64	0.0369		
	14.8	0	85	0.0492		
	14.8	10	52	0.0303		
	14.8	20	43	0.0246		
	14.8	30	10	0.0058		
	14.8	40	76	0.0439		
	14.8	50	70	0.0402		
	14.8	60	54	0.0312		
	14.8	70	20	0.0113		
	14.8	80	66	0.0383		
	17.02	25	56	0.0324		
	14.8	25	87	0.0501		
	12.58	25	68	0.0395		

Note: Measurement Uncertainty: $\pm 20\text{Hz}$.



Test Conditions			Frequency Deviation			Result
Band	Power(Vdc)	Temperature(°C)	Frequency Error(Hz)	ppm	Limit	
LTE Band 5 Bandwidth 10MHz QPSK Middle channel 836.5MHz	14.8	-40	40	0.0477	±2.5	PASS
	14.8	-30	48	0.0576		
	14.8	-20	65	0.0775		
	14.8	-10	47	0.0557		
	14.8	0	39	0.0465		
	14.8	10	30	0.0356		
	14.8	20	30	0.0358		
	14.8	30	60	0.0718		
	14.8	40	67	0.0799		
	14.8	50	78	0.0927		
	14.8	60	51	0.0607		
	14.8	70	29	0.0349		
	14.8	80	51	0.0606		
	17.02	25	47	0.0565		
	14.8	25	41	0.0488		
	12.58	25	44	0.0525		
LTE Band 5 Bandwidth 10MHz 16QAM Middle channel 836.5MHz	14.8	-40	22	0.0264	±2.5	PASS
	14.8	-30	31	0.0372		
	14.8	-20	28	0.0338		
	14.8	-10	32	0.0378		
	14.8	0	54	0.0644		
	14.8	10	41	0.0488		
	14.8	20	66	0.0794		
	14.8	30	66	0.0787		
	14.8	40	32	0.0382		
	14.8	50	33	0.0400		
	14.8	60	32	0.0380		
	14.8	70	53	0.0637		
	14.8	80	67	0.0800		
	17.02	25	77	0.0917		
	14.8	25	68	0.0810		
	12.58	25	30	0.0356		

Note: Measurement Uncertainty: ±20Hz.



Test Conditions			Frequency Deviation			Result
Band	Power(Vdc)	Temperature(°C)	Frequency Error(Hz)	ppm	Limit	
LTE Band 12 Bandwidth 20MHz QPSK Middle channel 707.5MHz	14.8	-40	32	0.0445	within the authorized frequency	PASS
	14.8	-30	39	0.0553		
	14.8	-20	71	0.1005		
	14.8	-10	79	0.1115		
	14.8	0	51	0.0725		
	14.8	10	22	0.0310		
	14.8	20	41	0.0573		
	14.8	30	79	0.1126		
	14.8	40	71	0.1007		
	14.8	50	53	0.0755		
	14.8	60	50	0.0708		
	14.8	70	55	0.0773		
	14.8	80	50	0.0708		
	17.02	25	80	0.1128		
	14.8	25	35	0.0492		
	12.58	25	33	0.0467		
LTE Band 12 Bandwidth 20MHz 16QAM Middle channel 707.5MHz	14.8	-40	28	0.0392	within the authorized frequency	PASS
	14.8	-30	58	0.0815		
	14.8	-20	56	0.0786		
	14.8	-10	25	0.0348		
	14.8	0	44	0.0625		
	14.8	10	59	0.0830		
	14.8	20	68	0.0965		
	14.8	30	57	0.0808		
	14.8	40	76	0.1067		
	14.8	50	35	0.0490		
	14.8	60	22	0.0307		
	14.8	70	74	0.1042		
	14.8	80	24	0.0341		
	17.02	25	58	0.0813		
	14.8	25	57	0.0802		
	12.58	25	48	0.0674		

Note: Measurement Uncertainty: $\pm 20\text{Hz}$.



Test Conditions			Frequency Deviation			Result
Band	Power(Vdc)	Temperature(°C)	Frequency Error(Hz)	ppm	Limit	
LTE Band 66 Bandwidth 20MHz QPSK Middle channel 1745MHz	14.8	-40	33	0.0189	within the authorized frequency	PASS
	14.8	-30	48	0.0274		
	14.8	-20	68	0.0387		
	14.8	-10	53	0.0305		
	14.8	0	62	0.0354		
	14.8	10	69	0.0393		
	14.8	20	24	0.0136		
	14.8	30	76	0.0436		
	14.8	40	44	0.0251		
	14.8	50	28	0.0160		
	14.8	60	73	0.0416		
	14.8	70	64	0.0367		
	14.8	80	63	0.0360		
	17.02	25	31	0.0177		
	14.8	25	65	0.0372		
	12.58	25	27	0.0153		
LTE Band 66 Bandwidth 20MHz 16QAM Middle channel 1745MHz	14.8	-40	20	0.0115	within the authorized frequency	PASS
	14.8	-30	59	0.0339		
	14.8	-20	48	0.0273		
	14.8	-10	77	0.0440		
	14.8	0	75	0.0429		
	14.8	10	32	0.0182		
	14.8	20	46	0.0264		
	14.8	30	32	0.0182		
	14.8	40	33	0.0191		
	14.8	50	41	0.0236		
	14.8	60	46	0.0262		
	14.8	70	32	0.0186		
	14.8	80	66	0.0375		
	17.02	25	63	0.0363		
	14.8	25	21	0.0119		
	12.58	25	40	0.0229		

Note: Measurement Uncertainty: $\pm 20\text{Hz}$.

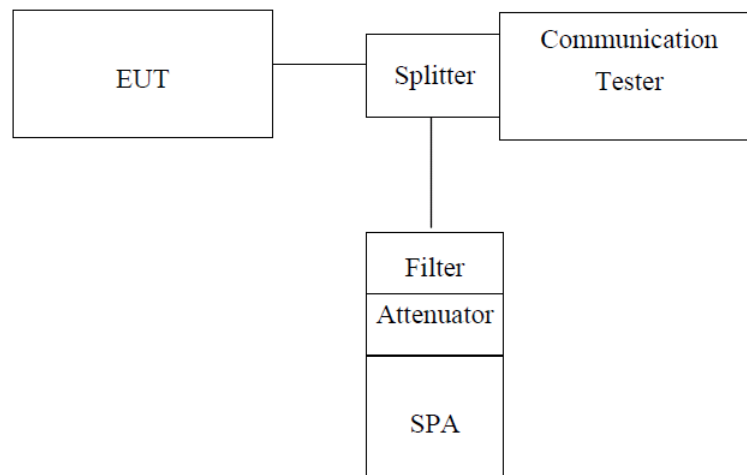


5.5. Conducted Spurious Emissions

5.5.1. Limit

According to FCC section 22.917(a) and FCC section 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 calculated to be -13dBm.

5.5.2. Test Setup



Note: Measurement setup for testing on Antenna connector

5.5.3. Measurement Procedure

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

For the out of band: Set the RBW, VBW = 100KHz, Start=30MHz, Stop= 10th harmonic.

Limit = -13dBm

5.5.4. Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the out of band emissions.

For LTE mode, the plot only show the min and max bandwidth's data.

Pass, the table and plot please see annex.



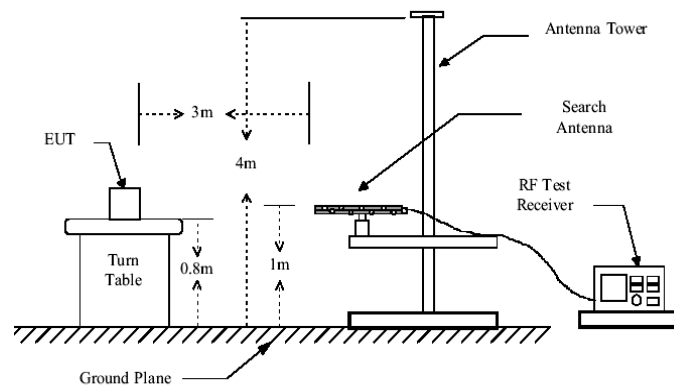
5.6. Transmitter Radiated Power (EIRP/ERP)

5.6.1. Limit

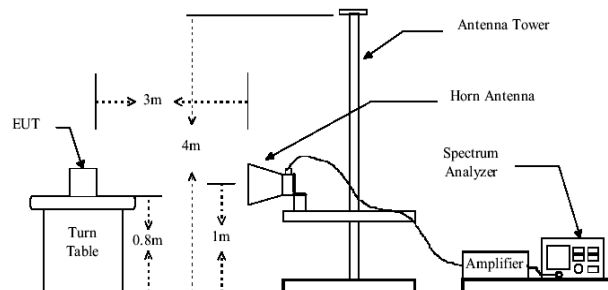
According to FCC section 22.913, the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7Watts, and FCC section 24.232, FCC section 27.50 the broadband PCS mobile station is limited to 2 Watts e.i.r.p. peak power.

5.6.2. Test Setup

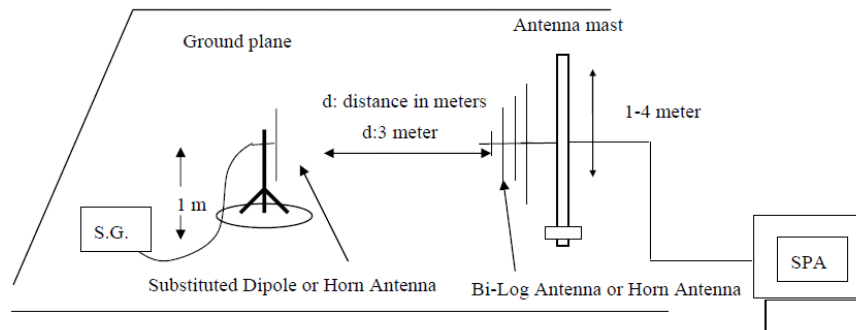
Below 1GHz



Above 1GHz



Substituted method:



5.6.3. Measurement Procedure

The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. all test in Full-Anechoic Chamber.



During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824.2 –848.80.8MHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows:

EIRP in frequency band 1850.2 –1909.8MHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows:

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)} - 2.15$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}$$

5.6.4. Test Result

Pass, the table and plot please see annex.

EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
WCDMA Band 2	Lowest	V	7.04	19.33	2.52	23.85	33.00	Pass
		H	7.20	19.33	2.52	24.01		
	Middle	V	7.46	19.50	2.60	24.36	33.00	Pass
		H	7.29	19.50	2.60	24.19		
	Highest	V	6.75	19.94	2.71	23.98	33.00	Pass
		H	6.68	19.94	2.71	23.91		

EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)	Result
WCDMA Band 5	Lowest	V	8.88	15.68	1.65	20.76	38.45	Pass
		H	8.92	15.68	1.65	20.80		
	Middle	V	8.43	15.70	1.67	20.31	38.45	Pass
		H	8.33	15.70	1.67	20.21		
	Highest	V	9.09	15.70	1.71	20.93	38.45	Pass
		H	10.35	15.70	1.71	22.19		



EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
LTE BAND 2 1.4MHz QPSK	Lowest	V	5.51	19.35	2.54	22.32	33.00	Pass
		H	5.59	19.35	2.54	22.40		
	Middle	V	5.84	19.51	2.62	22.73	33.00	Pass
		H	5.29	19.51	2.62	22.18		
	Highest	V	5.71	19.96	2.69	22.98	33.00	Pass
		H	5.67	19.96	2.69	22.94		
LTE BAND 2 3MHz QPSK	Lowest	V	5.40	19.35	2.54	22.21	33.00	Pass
		H	5.49	19.35	2.54	22.30		
	Middle	V	5.32	19.51	2.62	22.21	33.00	Pass
		H	5.18	19.51	2.62	22.07		
	Highest	V	5.59	19.96	2.69	22.86	33.00	Pass
		H	5.58	19.96	2.69	22.85		
LTE BAND 2 5MHz QPSK	Lowest	V	5.59	19.35	2.54	22.40	33.00	Pass
		H	5.68	19.35	2.54	22.49		
	Middle	V	5.52	19.51	2.62	22.41	33.00	Pass
		H	5.37	19.51	2.62	22.26		
	Highest	V	5.79	19.96	2.69	23.06	33.00	Pass
		H	5.76	19.96	2.69	23.03		
LTE BAND 2 10MHz QPSK	Lowest	V	5.52	19.35	2.54	22.33	33.00	Pass
		H	5.60	19.35	2.54	22.41		
	Middle	V	5.85	19.51	2.62	22.74	33.00	Pass
		H	5.30	19.51	2.62	22.19		
	Highest	V	5.72	19.96	2.69	22.99	33.00	Pass
		H	5.68	19.96	2.69	22.95		
LTE BAND 2 15MHz QPSK	Lowest	V	5.41	19.35	2.54	22.22	33.00	Pass
		H	5.50	19.35	2.54	22.31		
	Middle	V	5.33	19.51	2.62	22.22	33.00	Pass
		H	5.19	19.51	2.62	22.08		
	Highest	V	5.60	19.96	2.69	22.87	33.00	Pass
		H	5.59	19.96	2.69	22.86		
LTE BAND 2 20MHz QPSK	Lowest	V	5.60	19.35	2.54	22.41	33.00	Pass
		H	5.69	19.35	2.54	22.50		
	Middle	V	5.53	19.51	2.62	22.42	33.00	Pass
		H	5.38	19.51	2.62	22.27		
	Highest	V	5.80	19.96	2.69	23.07	33.00	Pass
		H	5.77	19.96	2.69	23.04		



EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
LTE BAND 2 1.4MHz 16QAM	Lowest	V	5.45	19.35	2.54	22.26	33.00	Pass
		H	5.53	19.35	2.54	22.34		
	Middle	V	6.37	19.51	2.62	23.26	33.00	Pass
		H	5.24	19.51	2.62	22.13		
	Highest	V	5.65	19.96	2.69	22.92	33.00	Pass
		H	5.61	19.96	2.69	22.88		
LTE BAND 2 3MHz 16QAM	Lowest	V	5.35	19.35	2.54	22.16	33.00	Pass
		H	5.44	19.35	2.54	22.25		
	Middle	V	6.24	19.51	2.62	23.13	33.00	Pass
		H	5.13	19.51	2.62	22.02		
	Highest	V	5.53	19.96	2.69	22.80	33.00	Pass
		H	5.52	19.96	2.69	22.79		
LTE BAND 2 5MHz 16QAM	Lowest	V	5.53	19.35	2.54	22.34	33.00	Pass
		H	5.62	19.35	2.54	22.43		
	Middle	V	6.46	19.51	2.62	23.35	33.00	Pass
		H	6.31	19.51	2.62	23.20		
	Highest	V	5.73	19.96	2.69	23.00	33.00	Pass
		H	5.70	19.96	2.69	22.97		
LTE BAND 2 10MHz 16QAM	Lowest	V	5.03	19.35	2.54	21.84	33.00	Pass
		H	5.19	19.35	2.54	22.00		
	Middle	V	5.45	19.51	2.62	22.34	33.00	Pass
		H	5.29	19.51	2.62	22.18		
	Highest	V	5.67	19.96	2.69	22.94	33.00	Pass
		H	5.60	19.96	2.69	22.87		
LTE BAND 2 15MHz 16QAM	Lowest	V	5.03	19.35	2.54	21.84	33.00	Pass
		H	5.19	19.35	2.54	22.00		
	Middle	V	5.45	19.51	2.62	22.34	33.00	Pass
		H	5.29	19.51	2.62	22.18		
	Highest	V	5.67	19.96	2.69	22.94	33.00	Pass
		H	5.60	19.96	2.69	22.87		
LTE BAND 2 20MHz 16QAM	Lowest	V	5.12	19.35	2.54	21.93	33.00	Pass
		H	5.28	19.35	2.54	22.09		
	Middle	V	5.54	19.51	2.62	22.43	33.00	Pass
		H	5.38	19.51	2.62	22.27		
	Highest	V	5.77	19.96	2.69	23.04	33.00	Pass
		H	5.70	19.96	2.69	22.97		



EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
LTE BAND 4 1.4MHz QPSK	Lowest	V	5.48	19.35	2.54	22.29	30.00	Pass
		H	5.54	19.35	2.54	22.35		
	Middle	V	6.38	19.51	2.62	23.27	30.00	Pass
		H	5.24	19.51	2.62	22.13		
	Highest	V	5.66	19.96	2.69	22.93	30.00	Pass
		H	5.62	19.96	2.69	22.89		
LTE BAND 4 3MHz QPSK	Lowest	V	5.35	19.35	2.54	22.16	30.00	Pass
		H	5.46	19.35	2.54	22.27		
	Middle	V	5.27	19.51	2.62	22.16	30.00	Pass
		H	5.13	19.51	2.62	22.02		
	Highest	V	5.54	19.96	2.69	22.81	30.00	Pass
		H	5.53	19.96	2.69	22.80		
LTE BAND 4 5MHz QPSK	Lowest	V	5.55	19.35	2.54	22.36	30.00	Pass
		H	5.63	19.35	2.54	22.44		
	Middle	V	5.48	19.51	2.62	22.37	30.00	Pass
		H	5.32	19.51	2.62	22.21		
	Highest	V	5.74	19.96	2.69	23.01	30.00	Pass
		H	5.71	19.96	2.69	22.98		
LTE BAND 4 10MHz QPSK	Lowest	V	5.04	19.33	2.52	21.85	30.00	Pass
		H	5.18	19.33	2.52	21.99		
	Middle	V	5.45	19.50	2.60	22.35	30.00	Pass
		H	5.27	19.50	2.60	22.17		
	Highest	V	5.72	19.94	2.71	22.95	30.00	Pass
		H	5.65	19.94	2.71	22.88		
LTE BAND 4 15MHz QPSK	Lowest	V	5.04	19.33	2.52	21.85	30.00	Pass
		H	5.18	19.33	2.52	21.99		
	Middle	V	5.45	19.50	2.60	22.35	30.00	Pass
		H	5.27	19.50	2.60	22.17		
	Highest	V	5.72	19.94	2.71	22.95	30.00	Pass
		H	5.65	19.94	2.71	22.88		
LTE BAND 4 20MHz QPSK	Lowest	V	5.04	19.33	2.52	21.85	30.00	Pass
		H	5.18	19.33	2.52	21.99		
	Middle	V	5.45	19.50	2.60	22.35	30.00	Pass
		H	5.27	19.50	2.60	22.17		
	Highest	V	5.72	19.94	2.71	22.95	30.00	Pass
		H	5.65	19.94	2.71	22.88		



EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
LTE BAND 4 1.4MHz 16QAM	Lowest	V	5.54	19.35	2.54	22.35	30.00	Pass
		H	5.62	19.35	2.54	22.43		
	Middle	V	6.46	19.51	2.62	23.35	30.00	Pass
		H	5.30	19.51	2.62	22.19		
	Highest	V	5.74	19.96	2.69	23.01	30.00	Pass
		H	5.70	19.96	2.69	22.97		
LTE BAND 4 3MHz 16QAM	Lowest	V	5.42	19.35	2.54	22.23	30.00	Pass
		H	5.52	19.35	2.54	22.33		
	Middle	V	5.33	19.51	2.62	22.22	30.00	Pass
		H	5.19	19.51	2.62	22.08		
	Highest	V	5.62	19.96	2.69	22.89	30.00	Pass
		H	5.61	19.96	2.69	22.88		
LTE BAND 4 5MHz 16QAM	Lowest	V	5.52	19.35	2.54	22.33	30.00	Pass
		H	5.61	19.35	2.54	22.42		
	Middle	V	5.45	19.51	2.62	22.34	30.00	Pass
		H	5.29	19.51	2.62	22.18		
	Highest	V	5.72	19.96	2.69	22.99	30.00	Pass
		H	5.69	19.96	2.69	22.96		
LTE BAND 4 10MHz 16QAM	Lowest	V	5.10	19.33	2.52	21.91	30.00	Pass
		H	5.25	19.33	2.52	22.06		
	Middle	V	5.52	19.50	2.60	22.42	30.00	Pass
		H	5.34	19.50	2.60	22.24		
	Highest	V	5.79	19.94	2.71	23.02	30.00	Pass
		H	5.73	19.94	2.71	22.96		
LTE BAND 4 15MHz 16QAM	Lowest	V	5.10	19.33	2.52	21.91	30.00	Pass
		H	5.25	19.33	2.52	22.06		
	Middle	V	5.52	19.50	2.60	22.42	30.00	Pass
		H	5.34	19.50	2.60	22.24		
	Highest	V	5.79	19.94	2.71	23.02	30.00	Pass
		H	5.73	19.94	2.71	22.96		
LTE BAND 4 20MHz 16QAM	Lowest	V	5.10	19.33	2.52	21.91	30.00	Pass
		H	5.25	19.33	2.52	22.06		
	Middle	V	5.52	19.50	2.60	22.42	30.00	Pass
		H	5.34	19.50	2.60	22.24		
	Highest	V	5.79	19.94	2.71	23.02	30.00	Pass
		H	5.73	19.94	2.71	22.96		



EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)	Result
LTE BAND 5 1.4MHz QPSK	Lowest	V	6.95	15.68	1.65	18.83	38.45	Pass
		H	7.98	15.68	1.65	19.86		
	Middle	V	7.50	15.70	1.67	19.38	38.45	Pass
		H	7.39	15.70	1.67	19.27		
	Highest	V	8.16	15.70	1.71	20.00	38.45	Pass
		H	6.95	15.70	1.71	18.79		
LTE BAND 5 3MHz QPSK	Lowest	V	7.78	15.68	1.65	19.66	38.45	Pass
		H	7.83	15.68	1.65	19.71		
	Middle	V	7.34	15.70	1.67	19.22	38.45	Pass
		H	7.24	15.70	1.67	19.12		
	Highest	V	6.99	15.70	1.71	18.83	38.45	Pass
		H	7.80	15.70	1.71	19.64		
LTE BAND 5 5MHz QPSK	Lowest	V	7.87	15.68	1.65	19.75	38.45	Pass
		H	7.91	15.68	1.65	19.79		
	Middle	V	7.43	15.70	1.67	19.31	38.45	Pass
		H	7.33	15.70	1.67	19.21		
	Highest	V	7.08	15.70	1.71	18.92	38.45	Pass
		H	7.88	15.70	1.71	19.72		
LTE BAND 5 10MHz QPSK	Lowest	V	7.79	15.68	1.65	19.67	38.45	Pass
		H	7.84	15.68	1.65	19.72		
	Middle	V	7.35	15.70	1.67	19.23	38.45	Pass
		H	6.26	15.70	1.67	18.14		
	Highest	V	8.01	15.70	1.71	19.85	38.45	Pass
		H	7.81	15.70	1.71	19.65		
LTE BAND 5 1.4MHz 16QAM	Lowest	V	6.97	15.68	1.65	18.85	38.45	Pass
		H	8.01	15.68	1.65	19.89		
	Middle	V	7.53	15.70	1.67	19.41	38.45	Pass
		H	7.42	15.70	1.67	19.30		
	Highest	V	7.19	15.70	1.71	19.03	38.45	Pass
		H	6.97	15.70	1.71	18.81		
LTE BAND 5 3MHz 16QAM	Lowest	V	7.81	15.68	1.65	19.69	38.45	Pass
		H	7.86	15.68	1.65	19.74		
	Middle	V	7.37	15.70	1.67	19.25	38.45	Pass
		H	7.26	15.70	1.67	19.14		
	Highest	V	7.02	15.70	1.71	18.86	38.45	Pass
		H	7.83	15.70	1.71	19.67		
LTE BAND 5 5MHz 16QAM	Lowest	V	7.90	15.68	1.65	19.78	38.45	Pass
		H	7.95	15.68	1.65	19.83		
	Middle	V	7.46	15.70	1.67	19.34	38.45	Pass
		H	7.36	15.70	1.67	19.24		
	Highest	V	7.10	15.70	1.71	18.94	38.45	Pass
		H	7.91	15.70	1.71	19.75		
LTE BAND 5 10MHz 16QAM	Lowest	V	7.82	15.68	1.65	19.70	38.45	Pass
		H	7.87	15.68	1.65	19.75		
	Middle	V	7.38	15.70	1.67	19.26	38.45	Pass
		H	7.27	15.70	1.67	19.15		
	Highest	V	8.04	15.70	1.71	19.88	38.45	Pass
		H	7.91	15.70	1.71	19.75		



EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	ERP (dBm)	Limit (dBm)	Result
LTE BAND 12 1.4MHz QPSK	Lowest	V	5.50	19.35	2.54	20.16	34.77	Pass
		H	5.58	19.35	2.54	20.24		
	Middle	V	6.44	19.51	2.62	21.18	34.77	Pass
		H	5.26	19.51	2.62	20.00		
	Highest	V	5.70	19.96	2.69	20.82	34.77	Pass
		H	5.66	19.96	2.69	20.78		
LTE BAND 12 3MHz QPSK	Lowest	V	5.37	19.35	2.54	20.03	34.77	Pass
		H	5.48	19.35	2.54	20.14		
	Middle	V	5.29	19.51	2.62	20.03	34.77	Pass
		H	5.15	19.51	2.62	19.89		
	Highest	V	5.58	19.96	2.69	20.70	34.77	Pass
		H	5.57	19.96	2.69	20.69		
LTE BAND 12 5MHz QPSK	Lowest	V	5.48	19.35	2.54	20.14	34.77	Pass
		H	5.57	19.35	2.54	20.23		
	Middle	V	5.41	19.51	2.62	20.15	34.77	Pass
		H	5.25	19.51	2.62	19.99		
	Highest	V	5.68	19.96	2.69	20.80	34.77	Pass
		H	5.65	19.96	2.69	20.77		
LTE BAND 12 10MHz QPSK	Lowest	V	5.50	19.35	2.54	20.16	34.77	Pass
		H	5.58	19.35	2.54	20.24		
	Middle	V	5.43	19.51	2.62	20.17	34.77	Pass
		H	5.32	19.51	2.62	20.06		
	Highest	V	5.71	19.96	2.69	20.83	34.77	Pass
		H	5.65	19.96	2.69	20.77		
LTE BAND 12 1.4MHz 16QAM	Lowest	V	5.32	19.35	2.54	19.98	34.77	Pass
		H	5.42	19.35	2.54	20.08		
	Middle	V	5.24	19.51	2.62	19.98	34.77	Pass
		H	5.10	19.51	2.62	19.84		
	Highest	V	5.52	19.96	2.69	20.64	34.77	Pass
		H	5.76	19.96	2.69	20.88		
LTE BAND 12 3MHz 16QAM	Lowest	V	5.43	19.35	2.54	20.09	34.77	Pass
		H	5.52	19.35	2.54	20.18		
	Middle	V	5.35	19.51	2.62	20.09	34.77	Pass
		H	5.21	19.51	2.62	19.95		
	Highest	V	5.63	19.96	2.69	20.75	34.77	Pass
		H	5.60	19.96	2.69	20.72		
LTE BAND 12 5MHz 16QAM	Lowest	V	5.33	19.35	2.54	19.99	34.77	Pass
		H	5.43	19.35	2.54	20.09		
	Middle	V	5.25	19.51	2.62	19.99	34.77	Pass
		H	5.11	19.51	2.62	19.85		
	Highest	V	5.53	19.96	2.69	20.65	34.77	Pass
		H	5.52	19.96	2.69	20.64		
LTE BAND 12 10MHz 16QAM	Lowest	V	5.43	19.35	2.54	20.09	34.77	Pass
		H	5.52	19.35	2.54	20.18		
	Middle	V	5.35	19.51	2.62	20.09	34.77	Pass
		H	5.21	19.51	2.62	19.95		
	Highest	V	5.65	19.96	2.69	20.77	34.77	Pass
		H	5.60	19.96	2.69	20.72		



EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
LTE BAND 66 1.4MHz QPSK	Lowest	V	5.49	19.35	2.54	22.30	33.00	Pass
		H	5.57	19.35	2.54	22.38		
	Middle	V	6.41	19.51	2.62	23.30	33.00	Pass
		H	5.26	19.51	2.62	22.15		
	Highest	V	5.69	19.96	2.69	22.96	33.00	Pass
		H	5.65	19.96	2.69	22.92		
LTE BAND 66 3MHz QPSK	Lowest	V	5.37	19.35	2.54	22.18	33.00	Pass
		H	5.47	19.35	2.54	22.28		
	Middle	V	5.29	19.51	2.62	22.18	33.00	Pass
		H	5.16	19.51	2.62	22.05		
	Highest	V	5.57	19.96	2.69	22.84	33.00	Pass
		H	5.56	19.96	2.69	22.83		
LTE BAND 66 5MHz QPSK	Lowest	V	5.56	19.35	2.54	22.37	33.00	Pass
		H	5.64	19.35	2.54	22.45		
	Middle	V	6.49	19.51	2.62	23.38	33.00	Pass
		H	5.32	19.51	2.62	22.21		
	Highest	V	5.76	19.96	2.69	23.03	33.00	Pass
		H	5.72	19.96	2.69	22.99		
LTE BAND 66 10MHz QPSK	Lowest	V	5.44	19.35	2.54	22.25	33.00	Pass
		H	5.54	19.35	2.54	22.35		
	Middle	V	5.35	19.51	2.62	22.24	33.00	Pass
		H	5.22	19.51	2.62	22.11		
	Highest	V	5.64	19.96	2.69	22.91	33.00	Pass
		H	5.63	19.96	2.69	22.90		
LTE BAND 66 15MHz QPSK	Lowest	V	5.54	19.35	2.54	22.35	33.00	Pass
		H	5.63	19.35	2.54	22.44		
	Middle	V	5.47	19.51	2.62	22.36	33.00	Pass
		H	5.31	19.51	2.62	22.20		
	Highest	V	5.74	19.96	2.69	23.01	33.00	Pass
		H	5.71	19.96	2.69	22.98		
LTE BAND 66 20MHz QPSK	Lowest	V	5.56	19.35	2.54	22.37	33.00	Pass
		H	5.64	19.35	2.54	22.45		
	Middle	V	5.49	19.51	2.62	22.38	33.00	Pass
		H	5.32	19.51	2.62	22.21		
	Highest	V	5.76	19.96	2.69	23.03	33.00	Pass
		H	5.72	19.96	2.69	22.99		



EUT mode	Channel	Antenna Pol.	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	EIRP (dBm)	Limit (dBm)	Result
LTE BAND 66 1.4MHz 16QAM	Lowest	V	5.51	19.35	2.54	22.32	33.00	Pass
		H	5.59	19.35	2.54	22.40		
	Middle	V	6.43	19.51	2.62	23.32	33.00	Pass
		H	5.27	19.51	2.62	22.16		
	Highest	V	5.71	19.96	2.69	22.98	33.00	Pass
		H	5.67	19.96	2.69	22.94		
LTE BAND 66 3MHz 16QAM	Lowest	V	5.39	19.35	2.54	22.20	33.00	Pass
		H	5.49	19.35	2.54	22.30		
	Middle	V	5.30	19.51	2.62	22.19	33.00	Pass
		H	5.17	19.51	2.62	22.06		
	Highest	V	5.59	19.96	2.69	22.86	33.00	Pass
		H	5.58	19.96	2.69	22.85		
LTE BAND 66 5MHz 16QAM	Lowest	V	5.39	19.35	2.54	22.20	33.00	Pass
		H	5.48	19.35	2.54	22.29		
	Middle	V	5.31	19.51	2.62	22.20	33.00	Pass
		H	5.17	19.51	2.62	22.06		
	Highest	V	5.58	19.96	2.69	22.85	33.00	Pass
		H	5.57	19.96	2.69	22.84		
LTE BAND 66 10MHz 16QAM	Lowest	V	5.48	19.35	2.54	22.29	33.00	Pass
		H	5.57	19.35	2.54	22.38		
	Middle	V	5.41	19.51	2.62	22.30	33.00	Pass
		H	5.27	19.51	2.62	22.16		
	Highest	V	5.68	19.96	2.69	22.95	33.00	Pass
		H	5.65	19.96	2.69	22.92		
LTE BAND 66 15MHz 16QAM	Lowest	V	5.39	19.35	2.54	22.20	33.00	Pass
		H	5.48	19.35	2.54	22.29		
	Middle	V	5.31	19.51	2.62	22.20	33.00	Pass
		H	5.17	19.51	2.62	22.06		
	Highest	V	5.58	19.96	2.69	22.85	33.00	Pass
		H	5.57	19.96	2.69	22.84		
LTE BAND 66 20MHz 16QAM	Lowest	V	5.48	19.35	2.54	22.29	33.00	Pass
		H	5.57	19.35	2.54	22.38		
	Middle	V	5.56	19.51	2.62	22.45	33.00	Pass
		H	5.64	19.51	2.62	22.53		
	Highest	V	6.49	19.96	2.69	23.76	33.00	Pass
		H	5.32	19.96	2.69	22.59		



5.7. Radiated Out of Band Emissions

5.7.1. Limit

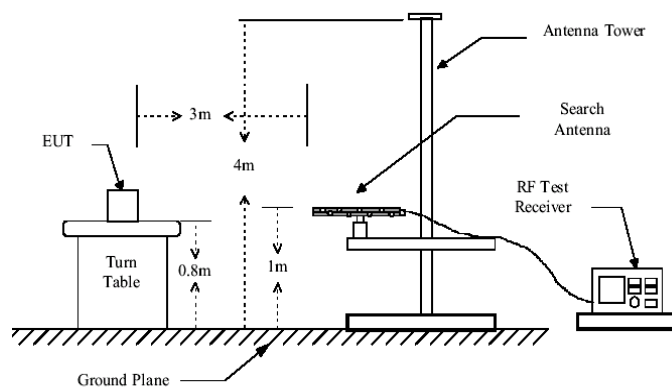
According to FCC section 22.917(a) and section 24.238(a), 27.53(g) 27.53(h), 27.53(c) the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power.

(P) by a factor of at least $43+10*\log(P)$ dB. This calculated to be -13dBm.

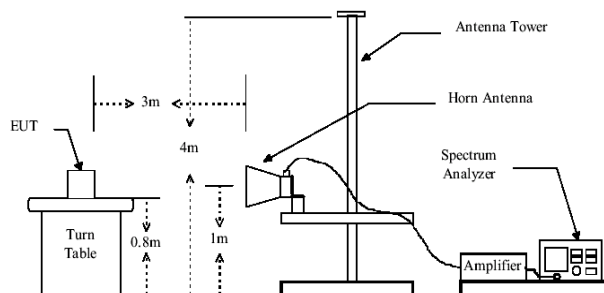
The spurious emission with frequency band 1900 according to FCC section 2.1057.

5.7.2. Test Setup

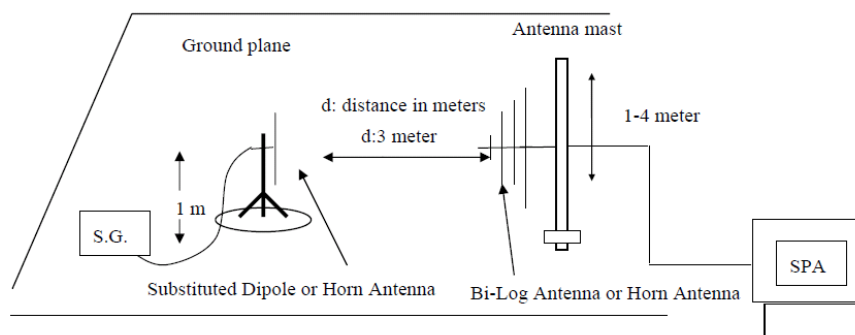
Below 1GHz



Above 1GHz



Substituted method:





5.7.3. Measurement Procedure

The EUT was placed on a non-conductive, The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. all test in Full-Anechoic Chamber.

The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.

The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.

$EIRP \text{ (Level)} = S.G. \text{ output (dBm)} + \text{Antenna Gain(dBi)} - \text{Cable Loss (dB)}$

Note: Measurement Uncertainty: $\pm 3.6 \text{ dB}$.

The data show only the worst results, and the other results are very low and not shown in the report.

5.7.4. Test Result

Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	EIRP (dBm)		
WCDMA Band 2 Lowest	87.21	Vertical	-74.25	3.35	0.38	-71.28	-13	PASS
	3704.80	Vertical	-45.44	7.76	3.75	-41.43		
	5557.20	Vertical	-46.54	9.84	4.94	-41.64		
	7409.60	Vertical	-39.09	10.21	5.32	-34.20		
	9262.00	Vertical	-42.42	11.36	6.02	-37.08		
	11114.40	Vertical	-43.93	14.52	6.68	-36.09		
WCDMA Band 2 Middle	88.39	Vertical	-74.25	3.35	0.38	-71.28	-13	PASS
	3760.00	Vertical	-46.75	7.76	3.75	-42.74		
	5640.00	Vertical	-46.35	9.84	4.94	-41.45		
	7520.00	Vertical	-42.04	10.21	5.32	-37.15		
	9400.00	Vertical	-41.45	11.36	6.02	-36.11		
	11280.00	Vertical	-45.34	14.52	6.68	-37.50		
WCDMA Band 2 Highest	88.24	Vertical	-74.21	3.35	0.38	-71.24	-13	PASS
	3819.60	Vertical	-46.35	7.79	3.53	-42.09		
	5729.40	Vertical	-40.89	9.88	5.02	-36.03		
	7639.20	Vertical	-37.15	10.25	5.54	-32.44		
	9549.00	Vertical	-43.90	11.38	6.16	-38.68		
	11458.80	Vertical	-46.30	14.56	6.72	-38.46		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBd)	Cable Loss (dB)	ERP (dBm)		
WCDMA Band 5 Lowest	87.48	Vertical	-74.94	3.35	0.38	-71.97	-13	PASS
	1652.80	Vertical	-29.00	6.51	1.35	-23.84		
	2479.20	Vertical	-35.14	6.88	2.53	-30.79		
	3305.60	Vertical	-36.98	7.61	3.67	-33.04		
	4132.00	Vertical	-45.02	8.67	4.06	-40.41		
	4958.40	Vertical	-39.62	9.35	4.38	-34.65		
WCDMA Band 5 Lowest	87.69	Vertical	-74.89	3.35	0.38	-71.92	-13	PASS
	1670.00	Vertical	-31.93	6.58	1.38	-26.73		
	2505.00	Vertical	-32.47	6.92	2.57	-28.12		
	3340.00	Vertical	-39.88	7.67	3.72	-35.93		
	4175.00	Vertical	-47.37	8.75	4.19	-42.81		
	5010.00	Vertical	-42.92	9.48	4.45	-37.89		
WCDMA Band 5 Lowest	88.26	Vertical	-74.58	3.35	0.38	-71.61	-13	PASS
	1693.20	Vertical	-30.83	6.57	1.48	-25.74		
	2539.80	Vertical	-32.73	6.96	2.67	-28.44		
	3386.40	Vertical	-35.85	7.68	3.78	-31.95		
	4233.00	Vertical	-41.12	8.76	4.24	-36.60		
	5079.60	Vertical	-46.50	9.47	4.63	-41.66		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 2 1.4MHz Lowest	87.15	Vertical	-75.02	3.35	0.38	-72.05	-13	PASS
	3701.40	Vertical	-45.91	7.76	3.75	-41.90		
	5552.10	Vertical	-47.02	9.84	4.94	-42.12		
	7402.80	Vertical	-39.49	10.21	5.32	-34.60		
	9253.50	Vertical	-42.86	11.36	6.02	-37.52		
	11104.20	Vertical	-44.39	14.52	6.68	-36.55		
LTE BAND 2 1.4MHz Middle	88.27	Vertical	-75.02	3.35	0.38	-72.05	-13	PASS
	3760.00	Vertical	-47.23	7.76	3.75	-43.22		
	5640.00	Vertical	-46.83	9.84	4.94	-41.93		
	7520.00	Vertical	-42.48	10.21	5.32	-37.59		
	9400.00	Vertical	-41.89	11.36	6.02	-36.55		
	11280.00	Vertical	-45.81	14.52	6.68	-37.97		
LTE BAND 2 1.4MHz Highest	88.21	Vertical	-74.98	3.35	0.38	-72.01	-13	PASS
	3819.60	Vertical	-46.83	7.79	3.53	-42.57		
	5729.40	Vertical	-41.32	9.88	5.02	-36.46		
	7639.20	Vertical	-37.54	10.25	5.54	-32.83		
	9549.00	Vertical	-44.36	11.38	6.16	-39.14		
	11458.80	Vertical	-46.77	14.56	6.72	-38.93		
LTE BAND 2 3MHz Lowest	87.33	Vertical	-75.02	3.35	0.38	-72.05	-13	PASS
	3700.40	Vertical	-45.91	7.76	3.75	-41.90		
	5550.60	Vertical	-46.71	9.84	4.94	-41.81		
	7400.80	Vertical	-39.23	10.21	5.32	-34.34		
	9251.00	Vertical	-42.58	11.36	6.02	-37.24		
	11101.20	Vertical	-44.09	14.52	6.68	-36.25		
LTE BAND 2 3MHz Middle	88.32	Vertical	-74.61	3.35	0.38	-71.64	-13	PASS
	3760.00	Vertical	-46.97	7.76	3.75	-42.96		
	5640.00	Vertical	-46.57	9.84	4.94	-41.67		
	7520.00	Vertical	-42.24	10.21	5.32	-37.35		
	9400.00	Vertical	-41.66	11.36	6.02	-36.32		
	11280.00	Vertical	-45.56	14.52	6.68	-37.72		
LTE BAND 2 3MHz Highest	88.45	Vertical	-74.57	3.35	0.38	-71.60	-13	PASS
	3819.60	Vertical	-46.57	7.79	3.53	-42.31		
	5729.40	Vertical	-41.09	9.88	5.02	-36.23		
	7639.20	Vertical	-37.33	10.25	5.54	-32.62		
	9549.00	Vertical	-44.11	11.38	6.16	-38.89		
	11458.80	Vertical	-46.52	14.56	6.72	-38.68		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 2 5MHz Lowest	87.54	Vertical	-74.64	3.35	0.38	-71.67	-13	PASS
	3700.40	Vertical	-45.69	7.76	3.75	-41.68		
	5550.60	Vertical	-46.78	9.84	4.94	-41.88		
	7400.80	Vertical	-39.30	10.21	5.32	-34.41		
	9251.00	Vertical	-42.65	11.36	6.02	-37.31		
	11101.20	Vertical	-44.16	14.52	6.68	-36.32		
LTE BAND 2 5MHz Middle	88.76	Vertical	-74.64	3.35	0.38	-71.67	-13	PASS
	3760.00	Vertical	-46.99	7.76	3.75	-42.98		
	5640.00	Vertical	-46.60	9.84	4.94	-41.70		
	7520.00	Vertical	-42.26	10.21	5.32	-37.37		
	9400.00	Vertical	-41.68	11.36	6.02	-36.34		
	11280.00	Vertical	-45.59	14.52	6.68	-37.75		
LTE BAND 2 5MHz Highest	88.56	Vertical	-74.61	3.35	0.38	-71.64	-13	PASS
	3819.60	Vertical	-46.60	7.79	3.53	-42.34		
	5729.40	Vertical	-41.11	9.88	5.02	-36.25		
	7639.20	Vertical	-37.35	10.25	5.54	-32.64		
	9549.00	Vertical	-44.13	11.38	6.16	-38.91		
	11458.80	Vertical	-46.55	14.56	6.72	-38.71		
LTE BAND 2 10MHz Lowest	87.23	Vertical	-74.64	3.35	0.38	-71.67	-13	PASS
	3700.40	Vertical	-45.94	7.76	3.75	-41.93		
	5550.60	Vertical	-46.74	9.84	4.94	-41.84		
	7400.80	Vertical	-39.25	10.21	5.32	-34.36		
	9251.00	Vertical	-42.60	11.36	6.02	-37.26		
	11101.20	Vertical	-44.11	14.52	6.68	-36.27		
LTE BAND 2 10MHz Middle	88.56	Vertical	-74.69	3.35	0.38	-71.72	-13	PASS
	3760.00	Vertical	-47.02	7.76	3.75	-43.01		
	5640.00	Vertical	-46.63	9.84	4.94	-41.73		
	7520.00	Vertical	-42.29	10.21	5.32	-37.40		
	9400.00	Vertical	-41.70	11.36	6.02	-36.36		
	11280.00	Vertical	-45.62	14.52	6.68	-37.78		
LTE BAND 2 10MHz Highest	88.54	Vertical	-74.65	3.35	0.38	-71.68	-13	PASS
	3819.60	Vertical	-46.63	7.79	3.53	-42.37		
	5729.40	Vertical	-41.14	9.88	5.02	-36.28		
	7639.20	Vertical	-37.37	10.25	5.54	-32.66		
	9549.00	Vertical	-44.16	11.38	6.16	-38.94		
	11458.80	Vertical	-46.58	14.56	6.72	-38.74		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 2 15MHz Lowest	87.41	Vertical	-74.47	3.35	0.38	-71.50	-13	PASS
	3700.40	Vertical	-45.62	7.76	3.75	-41.61		
	5550.60	Vertical	-46.72	9.84	4.94	-41.82		
	7400.80	Vertical	-39.24	10.21	5.32	-34.35		
	9251.00	Vertical	-42.59	11.36	6.02	-37.25		
	11101.20	Vertical	-44.09	14.52	6.68	-36.25		
LTE BAND 2 15MHz Middle	88.14	Vertical	-74.54	3.35	0.38	-71.57	-13	PASS
	3760.00	Vertical	-46.92	7.76	3.75	-42.91		
	5640.00	Vertical	-46.53	9.84	4.94	-41.63		
	7520.00	Vertical	-42.20	10.21	5.32	-37.31		
	9400.00	Vertical	-41.62	11.36	6.02	-36.28		
	11280.00	Vertical	-45.52	14.52	6.68	-37.68		
LTE BAND 2 15MHz Highest	88.62	Vertical	-74.50	3.35	0.38	-71.53	-13	PASS
	3819.60	Vertical	-46.53	7.79	3.53	-42.27		
	5729.40	Vertical	-41.05	9.88	5.02	-36.19		
	7639.20	Vertical	-37.29	10.25	5.54	-32.58		
	9549.00	Vertical	-44.06	11.38	6.16	-38.84		
	11458.80	Vertical	-46.48	14.56	6.72	-38.64		
LTE BAND 2 20MHz Lowest	87.53	Vertical	-74.51	3.35	0.38	-71.54	-13	PASS
	3700.40	Vertical	-45.60	7.76	3.75	-41.59		
	5550.60	Vertical	-46.70	9.84	4.94	-41.80		
	7400.80	Vertical	-39.23	10.21	5.32	-34.34		
	9251.00	Vertical	-42.57	11.36	6.02	-37.23		
	11101.20	Vertical	-44.08	14.52	6.68	-36.24		
LTE BAND 2 20MHz Middle	88.65	Vertical	-74.51	3.35	0.38	-71.54	-13	PASS
	3760.00	Vertical	-46.90	7.76	3.75	-42.89		
	5640.00	Vertical	-46.51	9.84	4.94	-41.61		
	7520.00	Vertical	-42.18	10.21	5.32	-37.29		
	9400.00	Vertical	-41.60	11.36	6.02	-36.26		
	11280.00	Vertical	-45.50	14.52	6.68	-37.66		
LTE BAND 2 20MHz Highest	88.34	Vertical	-74.47	3.35	0.38	-71.50	-13	PASS
	3819.60	Vertical	-46.51	7.79	3.53	-42.25		
	5729.40	Vertical	-41.03	9.88	5.02	-36.17		
	7639.20	Vertical	-37.27	10.25	5.54	-32.56		
	9549.00	Vertical	-44.04	11.38	6.16	-38.82		
	11458.80	Vertical	-46.46	14.56	6.72	-38.62		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 5 1.4MHz Lowest	87.45	Vertical	-74.55	3.35	0.38	-71.58	-13	PASS
	3700.40	Vertical	-45.63	7.76	3.75	-41.62		
	5550.60	Vertical	-46.73	9.84	4.94	-41.83		
	7400.80	Vertical	-39.25	10.21	5.32	-34.36		
	9251.00	Vertical	-42.60	11.36	6.02	-37.26		
	11101.20	Vertical	-44.11	14.52	6.68	-36.27		
LTE BAND 5 1.4MHz Middle	88.21	Vertical	-74.55	3.35	0.38	-71.58	-13	PASS
	3760.00	Vertical	-46.93	7.76	3.75	-42.92		
	5640.00	Vertical	-46.54	9.84	4.94	-41.64		
	7520.00	Vertical	-42.21	10.21	5.32	-37.32		
	9400.00	Vertical	-41.63	11.36	6.02	-36.29		
	11280.00	Vertical	-45.53	14.52	6.68	-37.69		
LTE BAND 5 1.4MHz Highest	88.77	Vertical	-74.51	3.35	0.38	-71.54	-13	PASS
	3819.60	Vertical	-46.54	7.79	3.53	-42.28		
	5729.40	Vertical	-41.05	9.88	5.02	-36.19		
	7639.20	Vertical	-37.30	10.25	5.54	-32.59		
	9549.00	Vertical	-44.08	11.38	6.16	-38.86		
	11458.80	Vertical	-46.49	14.56	6.72	-38.65		
LTE BAND 5 3MHz Lowest	87.98	Vertical	-74.50	3.35	0.38	-71.53	-13	PASS
	3700.40	Vertical	-45.59	7.76	3.75	-41.58		
	5550.60	Vertical	-46.70	9.84	4.94	-41.80		
	7400.80	Vertical	-39.23	10.21	5.32	-34.34		
	9251.00	Vertical	-42.57	11.36	6.02	-37.23		
	11101.20	Vertical	-44.08	14.52	6.68	-36.24		
LTE BAND 5 3MHz Middle	88.78	Vertical	-74.63	3.35	0.38	-71.66	-13	PASS
	3760.00	Vertical	-46.98	7.76	3.75	-42.97		
	5640.00	Vertical	-46.59	9.84	4.94	-41.69		
	7520.00	Vertical	-42.26	10.21	5.32	-37.37		
	9400.00	Vertical	-41.67	11.36	6.02	-36.33		
	11280.00	Vertical	-45.57	14.52	6.68	-37.73		
LTE BAND 5 3MHz Highest	88.67	Vertical	-74.59	3.35	0.38	-71.62	-13	PASS
	3819.60	Vertical	-46.59	7.79	3.53	-42.33		
	5729.40	Vertical	-41.09	9.88	5.02	-36.23		
	7639.20	Vertical	-37.34	10.25	5.54	-32.63		
	9549.00	Vertical	-44.13	11.38	6.16	-38.91		
	11458.80	Vertical	-46.54	14.56	6.72	-38.70		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 5 5MHz Lowest	87.66	Vertical	-74.11	3.35	0.38	-71.14	-13	PASS
	3700.40	Vertical	-45.35	7.76	3.75	-41.34		
	5550.60	Vertical	-46.45	9.84	4.94	-41.55		
	7400.80	Vertical	-39.02	10.21	5.32	-34.13		
	9251.00	Vertical	-42.35	11.36	6.02	-37.01		
	11101.20	Vertical	-43.85	14.52	6.68	-36.01		
LTE BAND 5 5MHz Middle	88.32	Vertical	-74.11	3.35	0.38	-71.14	-13	PASS
	3760.00	Vertical	-46.66	7.76	3.75	-42.65		
	5640.00	Vertical	-46.27	9.84	4.94	-41.37		
	7520.00	Vertical	-41.96	10.21	5.32	-37.07		
	9400.00	Vertical	-41.37	11.36	6.02	-36.03		
	11280.00	Vertical	-45.25	14.52	6.68	-37.41		
LTE BAND 5 5MHz Highest	88.32	Vertical	-74.07	3.35	0.38	-71.10	-13	PASS
	3819.60	Vertical	-46.27	7.79	3.53	-42.01		
	5729.40	Vertical	-40.81	9.88	5.02	-35.95		
	7639.20	Vertical	-37.08	10.25	5.54	-32.37		
	9549.00	Vertical	-43.82	11.38	6.16	-38.60		
	11458.80	Vertical	-46.22	14.56	6.72	-38.38		
LTE BAND 5 10MHz Lowest	87.23	Vertical	-74.14	3.35	0.38	-71.17	-13	PASS
	3700.40	Vertical	-45.37	7.76	3.75	-41.36		
	5550.60	Vertical	-46.46	9.84	4.94	-41.56		
	7400.80	Vertical	-39.03	10.21	5.32	-34.14		
	9251.00	Vertical	-42.37	11.36	6.02	-37.03		
	11101.20	Vertical	-43.87	14.52	6.68	-36.03		
LTE BAND 5 10MHz Middle	88.21	Vertical	-74.21	3.35	0.38	-71.24	-13	PASS
	3760.00	Vertical	-46.72	7.76	3.75	-42.71		
	5640.00	Vertical	-46.32	9.84	4.94	-41.42		
	7520.00	Vertical	-42.03	10.21	5.32	-37.14		
	9400.00	Vertical	-41.43	11.36	6.02	-36.09		
	11280.00	Vertical	-45.31	14.52	6.68	-37.47		
LTE BAND 5 10MHz Highest	88.15	Vertical	-74.17	3.35	0.38	-71.20	-13	PASS
	3819.60	Vertical	-46.32	7.79	3.53	-42.06		
	5729.40	Vertical	-40.87	9.88	5.02	-36.01		
	7639.20	Vertical	-37.14	10.25	5.54	-32.43		
	9549.00	Vertical	-43.88	11.38	6.16	-38.66		
	11458.80	Vertical	-46.27	14.56	6.72	-38.43		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 12 1.4MHz Lowest	87.89	Vertical	-74.38	3.35	0.38	-71.41	-13	PASS
	5005.00	Vertical	-45.49	7.76	3.75	-41.48		
	7507.50	Vertical	-46.59	9.84	4.94	-41.69		
	10010.00	Vertical	-39.14	10.21	5.32	-34.25		
	12512.50	Vertical	-42.48	11.36	6.02	-37.14		
	15015.00	Vertical	-43.99	14.52	6.68	-36.15		
LTE BAND 12 1.4MHz Middle	87.87	Vertical	-74.34	3.35	0.38	-71.37	-13	PASS
	5070.00	Vertical	-46.80	7.76	3.75	-42.79		
	7605.00	Vertical	-46.40	9.84	4.94	-41.50		
	10140.00	Vertical	-42.09	10.21	5.32	-37.20		
	12675.00	Vertical	-41.50	11.36	6.02	-36.16		
	15210.00	Vertical	-45.39	14.52	6.68	-37.55		
LTE BAND 12 1.4MHz Highest	88.87	Vertical	-74.30	3.35	0.38	-71.33	-13	PASS
	5135.00	Vertical	-46.40	7.79	3.53	-42.14		
	7702.50	Vertical	-40.94	9.88	5.02	-36.08		
	10270.00	Vertical	-37.20	10.25	5.54	-32.49		
	12837.50	Vertical	-43.96	11.38	6.16	-38.74		
	15405.00	Vertical	-46.35	14.56	6.72	-38.51		
LTE BAND 12 3MHz Lowest	87.53	Vertical	-73.50	3.35	0.38	-70.53	-13	PASS
	5010.00	Vertical	-44.98	7.76	3.75	-40.97		
	7515.00	Vertical	-46.06	9.84	4.94	-41.16		
	10020.00	Vertical	-38.71	10.21	5.32	-33.82		
	12525.00	Vertical	-42.00	11.36	6.02	-36.66		
	15030.00	Vertical	-43.49	14.52	6.68	-35.65		
LTE BAND 12 3MHz Middle	88.23	Vertical	-74.40	3.35	0.38	-71.43	-13	PASS
	5070.00	Vertical	-46.83	7.76	3.75	-42.82		
	7605.00	Vertical	-46.44	9.84	4.94	-41.54		
	10140.00	Vertical	-42.13	10.21	5.32	-37.24		
	12675.00	Vertical	-41.55	11.36	6.02	-36.21		
	15210.00	Vertical	-45.43	14.52	6.68	-37.59		
LTE BAND 12 3MHz Highest	88.23	Vertical	-74.36	3.35	0.38	-71.39	-13	PASS
	5130.00	Vertical	-46.44	7.79	3.53	-42.18		
	7695.00	Vertical	-40.97	9.88	5.02	-36.11		
	10260.00	Vertical	-37.23	10.25	5.54	-32.52		
	12825.00	Vertical	-44.00	11.38	6.16	-38.78		
	15390.00	Vertical	-46.39	14.56	6.72	-38.55		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 12 5MHz Lowest	87.12	Vertical	-74.08	3.35	0.38	-71.11	-13	PASS
	5015.00	Vertical	-45.34	7.76	3.75	-41.33		
	7522.50	Vertical	-46.43	9.84	4.94	-41.53		
	10030.00	Vertical	-39.01	10.21	5.32	-34.12		
	12537.50	Vertical	-42.33	11.36	6.02	-36.99		
	15045.00	Vertical	-43.84	14.52	6.68	-36.00		
LTE BAND 12 5MHz Middle	88.87	Vertical	-74.08	3.35	0.38	-71.11	-13	PASS
	5070.00	Vertical	-46.64	7.76	3.75	-42.63		
	7605.00	Vertical	-46.24	9.84	4.94	-41.34		
	10140.00	Vertical	-41.95	10.21	5.32	-37.06		
	12675.00	Vertical	-41.36	11.36	6.02	-36.02		
	15210.00	Vertical	-45.24	14.52	6.68	-37.40		
LTE BAND 12 5MHz Highest	88.29	Vertical	-74.04	3.35	0.38	-71.07	-13	PASS
	5125.00	Vertical	-46.24	7.79	3.53	-41.98		
	7687.50	Vertical	-40.80	9.88	5.02	-35.94		
	10250.00	Vertical	-37.08	10.25	5.54	-32.37		
	12812.50	Vertical	-43.81	11.38	6.16	-38.59		
	15375.00	Vertical	-46.19	14.56	6.72	-38.35		
LTE BAND 12 10MHz Lowest	87.81	Vertical	-74.05	3.35	0.38	-71.08	-13	PASS
	5020.00	Vertical	-45.32	7.76	3.75	-41.31		
	7530.00	Vertical	-46.41	9.84	4.94	-41.51		
	10040.00	Vertical	-38.99	10.21	5.32	-34.10		
	12550.00	Vertical	-42.32	11.36	6.02	-36.98		
	15060.00	Vertical	-43.82	14.52	6.68	-35.98		
LTE BAND 12 10MHz Middle	88.56	Vertical	-74.25	3.35	0.38	-71.28	-13	PASS
	5070.00	Vertical	-46.74	7.76	3.75	-42.73		
	7605.00	Vertical	-46.34	9.84	4.94	-41.44		
	10140.00	Vertical	-42.05	10.21	5.32	-37.16		
	12675.00	Vertical	-41.46	11.36	6.02	-36.12		
	15210.00	Vertical	-45.34	14.52	6.68	-37.50		
LTE BAND 12 10MHz Highest	88.22	Vertical	-74.21	3.35	0.38	-71.24	-13	PASS
	5120.00	Vertical	-46.34	7.79	3.53	-42.08		
	7680.00	Vertical	-40.90	9.88	5.02	-36.04		
	10240.00	Vertical	-37.15	10.25	5.54	-32.44		
	12800.00	Vertical	-43.91	11.38	6.16	-38.69		
	15360.00	Vertical	-46.29	14.56	6.72	-38.45		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 66 1.4MHz Lowest	87.18	Vertical	-74.40	3.35	0.38	-71.43	-13	PASS
	3421.40	Vertical	-45.53	7.76	3.75	-41.52		
	5132.10	Vertical	-46.63	9.84	4.94	-41.73		
	6842.80	Vertical	-39.17	10.21	5.32	-34.28		
	8553.50	Vertical	-42.51	11.36	6.02	-37.17		
	10264.20	Vertical	-44.02	14.52	6.68	-36.18		
LTE BAND 66 1.4MHz Middle	88.32	Vertical	-74.40	3.35	0.38	-71.43	-13	PASS
	3490.00	Vertical	-46.84	7.76	3.75	-42.83		
	5235.00	Vertical	-46.44	9.84	4.94	-41.54		
	6980.00	Vertical	-42.13	10.21	5.32	-37.24		
	8725.00	Vertical	-41.54	11.36	6.02	-36.20		
	10470.00	Vertical	-45.43	14.52	6.68	-37.59		
LTE BAND 66 1.4MHz Highest	88.11	Vertical	-74.36	3.35	0.38	-71.39	-13	PASS
	3558.60	Vertical	-46.44	7.79	3.53	-42.18		
	5337.90	Vertical	-40.98	9.88	5.02	-36.12		
	7117.20	Vertical	-37.23	10.25	5.54	-32.52		
	8896.50	Vertical	-43.99	11.38	6.16	-38.77		
	10675.80	Vertical	-46.39	14.56	6.72	-38.55		
LTE BAND 66 3MHz Lowest	87.32	Vertical	-74.42	3.35	0.38	-71.45	-13	PASS
	3423.00	Vertical	-45.55	7.76	3.75	-41.54		
	5134.50	Vertical	-46.65	9.84	4.94	-41.75		
	6846.00	Vertical	-39.18	10.21	5.32	-34.29		
	8557.50	Vertical	-42.52	11.36	6.02	-37.18		
	10269.00	Vertical	-44.03	14.52	6.68	-36.19		
LTE BAND 66 3MHz Middle	88.21	Vertical	-74.44	3.35	0.38	-71.47	-13	PASS
	3490.00	Vertical	-46.86	7.76	3.75	-42.85		
	5235.00	Vertical	-46.48	9.84	4.94	-41.58		
	6980.00	Vertical	-42.15	10.21	5.32	-37.26		
	8725.00	Vertical	-41.57	11.36	6.02	-36.23		
	10470.00	Vertical	-45.47	14.52	6.68	-37.63		
LTE BAND 66 3MHz Highest	88.76	Vertical	-74.41	3.35	0.38	-71.44	-13	PASS
	3557.00	Vertical	-46.48	7.79	3.53	-42.22		
	5335.50	Vertical	-41.00	9.88	5.02	-36.14		
	7114.00	Vertical	-37.25	10.25	5.54	-32.54		
	8892.50	Vertical	-44.01	11.38	6.16	-38.79		
	10671.00	Vertical	-46.43	14.56	6.72	-38.59		



Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 66 5MHz Lowest	87.45	Vertical	-74.29	3.35	0.38	-71.32	-13	PASS
	3425.00	Vertical	-45.47	7.76	3.75	-41.46		
	5137.50	Vertical	-46.57	9.84	4.94	-41.67		
	6850.00	Vertical	-39.11	10.21	5.32	-34.22		
	8562.50	Vertical	-42.45	11.36	6.02	-37.11		
	10275.00	Vertical	-43.95	14.52	6.68	-36.11		
LTE BAND 66 5MHz Middle	88.65	Vertical	-74.29	3.35	0.38	-71.32	-13	PASS
	3490.00	Vertical	-46.77	7.76	3.75	-42.76		
	5235.00	Vertical	-46.38	9.84	4.94	-41.48		
	6980.00	Vertical	-42.06	10.21	5.32	-37.17		
	8725.00	Vertical	-41.48	11.36	6.02	-36.14		
	10470.00	Vertical	-45.37	14.52	6.68	-37.53		
LTE BAND 66 5MHz Highest	88.36	Vertical	-74.25	3.35	0.38	-71.28	-13	PASS
	3555.00	Vertical	-46.38	7.79	3.53	-42.12		
	5332.50	Vertical	-40.92	9.88	5.02	-36.06		
	7110.00	Vertical	-37.17	10.25	5.54	-32.46		
	8887.50	Vertical	-43.92	11.38	6.16	-38.70		
	10665.00	Vertical	-46.33	14.56	6.72	-38.49		
LTE BAND 66 10MHz Lowest	87.11	Vertical	-74.31	3.35	0.38	-71.34	-13	PASS
	3430.00	Vertical	-45.48	7.76	3.75	-41.47		
	5145.00	Vertical	-46.58	9.84	4.94	-41.68		
	6860.00	Vertical	-39.12	10.21	5.32	-34.23		
	8575.00	Vertical	-42.53	11.36	6.02	-37.19		
	10290.00	Vertical	-44.04	14.52	6.68	-36.20		
LTE BAND 66 10MHz Middle	88.21	Vertical	-74.33	3.35	0.38	-71.36	-13	PASS
	3490.00	Vertical	-46.79	7.76	3.75	-42.78		
	5235.00	Vertical	-46.40	9.84	4.94	-41.50		
	6980.00	Vertical	-42.08	10.21	5.32	-37.19		
	8725.00	Vertical	-41.50	11.36	6.02	-36.16		
	10470.00	Vertical	-45.39	14.52	6.68	-37.55		
LTE BAND 66 10MHz Highest	88.54	Vertical	-74.29	3.35	0.38	-71.32	-13	PASS
	3550.00	Vertical	-46.40	7.79	3.53	-42.14		
	5325.00	Vertical	-40.94	9.88	5.02	-36.08		
	7100.00	Vertical	-37.19	10.25	5.54	-32.48		
	8875.00	Vertical	-43.94	11.38	6.16	-38.72		
	10650.00	Vertical	-46.35	14.56	6.72	-38.51		



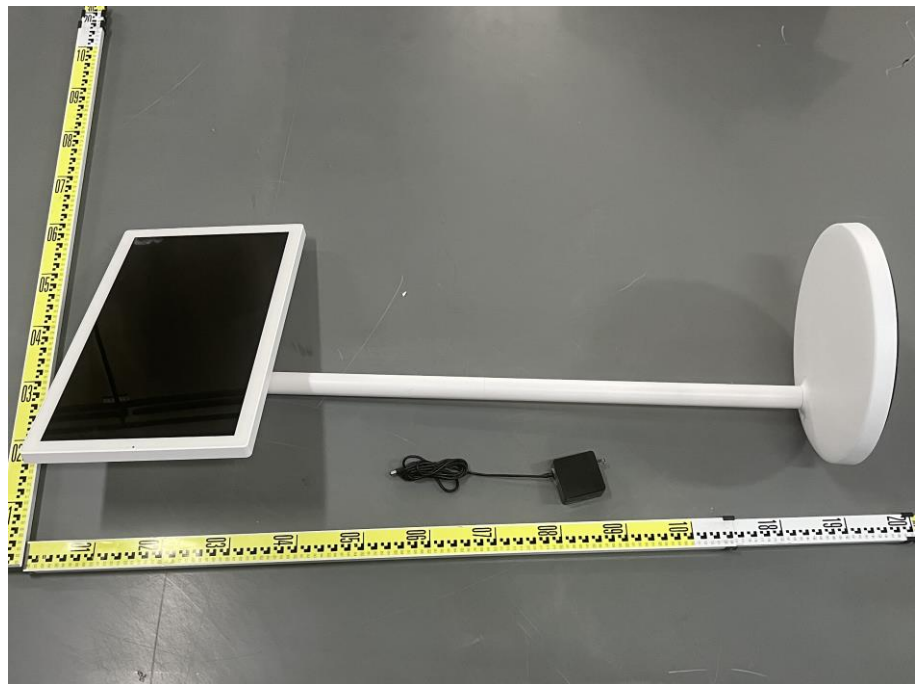
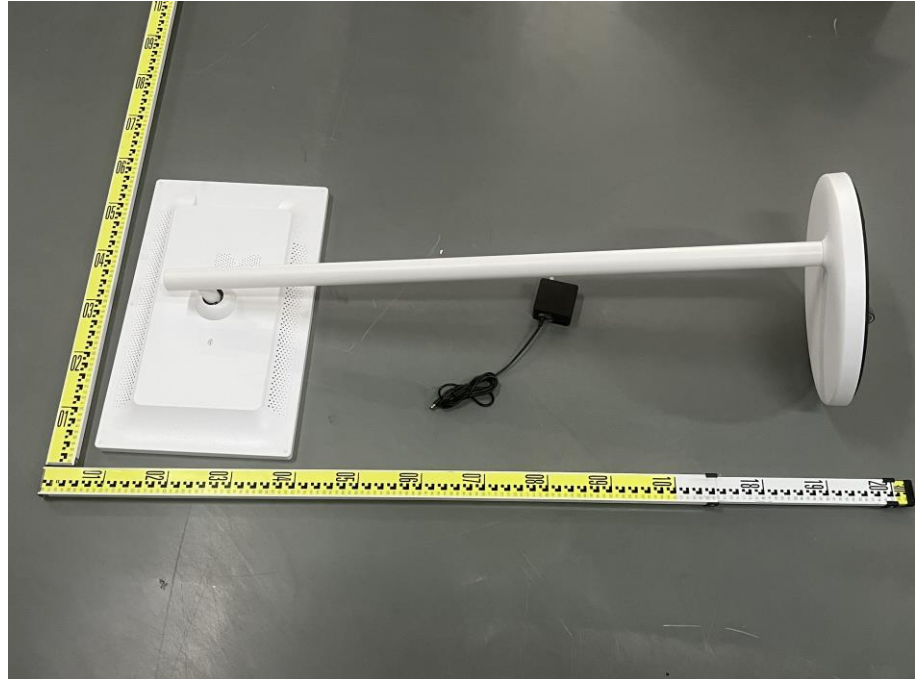
Band	Frequency (MHz)	Spurious Emission					Limit (dBm)	Result
		Polarization	S.G. output (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Level (dBm)		
LTE BAND 66 20MHz Lowest	87.18	Vertical	-73.37	3.35	0.38	-70.40	-13	PASS
	3440.00	Vertical	-44.90	7.76	3.75	-40.89		
	5160.00	Vertical	-46.00	9.84	4.94	-41.10		
	6880.00	Vertical	-38.64	10.21	5.32	-33.75		
	8600.00	Vertical	-41.93	11.36	6.02	-36.59		
	10320.00	Vertical	-43.41	14.52	6.68	-35.57		
LTE BAND 66 20MHz Middle	88.43	Vertical	-73.37	3.35	0.38	-70.40	-13	PASS
	3490.00	Vertical	-46.20	7.76	3.75	-42.19		
	5235.00	Vertical	-45.81	9.84	4.94	-40.91		
	6980.00	Vertical	-41.54	10.21	5.32	-36.65		
	8725.00	Vertical	-40.97	11.36	6.02	-35.63		
	10470.00	Vertical	-44.80	14.52	6.68	-36.96		
LTE BAND 66 20MHz Highest	88.12	Vertical	-73.33	3.35	0.38	-70.36	-13	PASS
	3540.00	Vertical	-45.81	7.79	3.53	-41.55		
	5310.00	Vertical	-40.42	9.88	5.02	-35.56		
	7080.00	Vertical	-36.73	10.25	5.54	-32.02		
	8850.00	Vertical	-43.38	11.38	6.16	-38.16		
	10620.00	Vertical	-45.76	14.56	6.72	-37.92		



6. PHOTOGRAPHS OF TEST SET-UP

Please see setup photo.

7. PHOTOGRAPHS OF THE EUT







***** END OF REPORT *****