TEST REPORT

Applicant:	TCL Communication Ltd.
Address:	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong SciencePark, Shatin, NT, Hong Kong
Equipment Type:	Mobile Hot Spot
Model Name:	MW513U
Brand Name:	TCL
FCC ID:	2ACCJB183
Test Standard:	47 CFR Part 2 (Others refer to chapter 3.1)
Sample Arrival Date:	Jan. 08, 2026
Test Date:	Jan. 12, 2026 - Jan. 28, 2026
Date of Issue:	Feb. 06, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.

Tested by: Liu Juren **Checked by:** Lu Jiamin **Approved by:** Tolan Tu

(Testing Director)

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Feb. 06, 2026	Initial Issue

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
	☑ 1/F, Building B, Ganghongji High-tech Intelligent Industrial Park, No. 1008, Songbai Road, Yangguang Community, Xili Sub-district, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	TCL Communication Ltd.
Address	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong SciencePark, Shatin, NT, Hong Kong

2.2 Manufacturer Information

Manufacturer	TCL Communication Ltd.
Address	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong SciencePark, Shatin, NT, Hong Kong

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile Hot Spot
Model Name Under Test	MW513U
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	V4.0
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

All Network and Wireless connectivity for EUT	4G Network LTE FDD Band 1/2/3/4/5/7/12/13/20/28/46/66 LTE TDD Band 48 LTE CA Frequency Band: CA_2A-2A, CA_2A-4A, CA_2A-5A, CA_2A-13A, CA_2A-46A, CA_2A-48A, CA_2A-66A, CA_4A-4A, CA_4A-5A, CA_4A-13A, CA_4A-46A, CA_4A-48A, CA_5A-5A, CA_5A-46A, CA_5A-48A, CA_5A-66A, CA_5B, CA_13A-46A, CA_13A-48A, CA_13A-66A, CA_46A-66A, CA_48A-66A, CA_48C, CA_66A-66A, CA_66B, CA_66C, CA_2A-2A-4A, CA_2A-2A-5A, CA_2A-2A-13A, CA_2A-2A-66A, CA_2A-4A-4A, CA_2A-4A-5A, CA_2A-4A-13A, CA_2A-5A-46A, CA_2A-5A-48A, CA_2A-5A-66A, CA_2A-5B, CA_2A-13A-46A, CA_2A-13A-48A, CA_2A-13A-66A, CA_2A-46A-46A, CA_2A-46A-66A, CA_2A-46C, CA_2A-48A-48A, CA_2A-48A-66A, CA_2A-48C, CA_2A-66A-66A, CA_2A-66B, CA_2A-66C, CA_4A-4A-5A, CA_4A-4A-13A, CA_4A-5B, CA_4A-46A-46A, CA_4A-46C, CA_4A-48C, CA_5A-5A-66A, CA_5A-46A-66A, CA_5A-46C, CA_5A-48A-66A, CA_5A-66A-66A, CA_5A-66B, CA_5A-66C, CA_5B-46A, CA_5B-66A, CA_13A-46A-66A, CA_13A-46C, CA_13A-48A-48A, CA_13A-48A-66A, CA_13A-48C, CA_13A-66A-66A, CA_13A-66B, CA_13A-66C, CA_46A-46A-66A, CA_46C-66A, CA_48A-48A-66A, CA_48A-66A-66A, CA_48A-66B, CA_48A-66C, CA_48C-66A, CA_48D, CA_66A-66A-66A, CA_66A-66C, CA_2A-2A-4A-4A, CA_2A-2A-4A-5A, CA_2A-2A-5A-66A, CA_2A-2A-13A-66A, CA_2A-2A-46C, CA_2A-2A-66A-66A, CA_2A-2A-66B, CA_2A-2A-66C,CA_2A-4A-4A-5A, CA_2A-4A-5B, CA_2A-5A-46C, CA_2A-5A-66A-66A, CA_2A-5A-66B, CA_2A-5A-66C, CA_2A-5B-66A, CA_2A-13A-46C, CA_2A-13A-48C, CA_2A-13A-66A-66A, CA_2A-13A-66B, CA_2A-13A-66C, CA_2A-46A-46C, CA_2A-46C-66A, CA_2A-46D, CA_2A-48A-48C, CA_2A-48C-66A, CA_2A-48D, CA_2A-48D-66A, CA_2A-66A-66A-66A, CA_4A-4A-5B, CA_4A-46A-46C, CA_4A-46D, CA_4A-48D, CA_5A-5A-66A-66A, CA_5A-5A-66B, CA_5A-5A-66C, CA_5A-46C-66A, CA_5A-46D, CA_5A-48D, CA_5B-46C, CA_5B-66A-66A, CA_5B-66B, CA_5B-66C, CA_13A-46C-66A, CA_13A-46D, CA_13A-48A-48C, CA_13A-48A-66B, CA_13A-48A-66C, CA_13A-48C-66A, CA_13A-48D, CA_46A-46C-66A, CA_46D-66A, CA_48A-48A-66A-66A, CA_48A-48A-66B, CA_48A-48A-66C, CA_48A-48C-66A, CA_48C-66A-66A, CA_48C-66B, CA_48C-66C, CA_48D-66A, CA_48E, CA_2A-2A-5A-66A-66A, CA_2A-2A-5A-66B, CA_2A-2A-5A-66C, CA_2A-2A-13A-66A-66A, CA_2A-2A-46D, CA_2A-5A-46D, CA_2A-5B-66A-66A, CA_2A-5B-66B, CA_2A-5B-66C, CA_2A-13A-46D, CA_2A-13A-48D, CA_2A-13A-66A-66B, CA_2A-46A-46d, CA_2A-46D-66A, CA_2A-46E, CA_2A-48A-48D, CA_2A-48C-48C, CA_2A-48D-66A, CA_2A-48E, CA_4A-46A-46D, CA_4A-48E, CA_5A-

	46D-66A, CA_5A-46E, CA_5B-46D, CA_13A-46D-66A, CA_13A-46E, CA_13A-48A-48D, CA_13A-48C-48C, CA_13A-48D-66A, CA_13A-48E, CA_46A-46D-66A, CA_46D-66A-66A, CA_46E-66A, CA_48A-48C-66B,CA_48A-48C-66C, CA_48A-48D-66A, CA_48A-48E, CA_48C-48C-66A, CA_48C-48D, CA_48E-66A 5G Network SA: NR n2/5/48/66/77/78/257/260/261 UL MIMO: n77 UL MIMO/78 UL MIMO NSA(EN-DC): DC_2A-5A_n2A, DC_2A-5B_n2A, DC_2A-13A_n2A, DC_2A-66A_n2A, DC_2A-66A-66A_n2A, DC_5A_n2A, DC_5A-5A_n2A, DC_5A-5A-66A_n2A, DC_5A-5A-66A-66A_n2A, DC_5A-66A_n2A, DC_5A-66A-66A_n2A, DC_5A-66B_n2A, DC_5B_n2A, DC_5B-66A_n2A, DC_5B-66A-66A_n2A, DC_13A_n2A, DC_13A-46A_n2A, DC_13A-48A_n2A, DC_13A-48D_n2A, DC_13A-48E_n2A, DC_13A-66A_n2A, DC_13A-66A-66A_n2A, DC_13A-66B_n2A, DC_13A-66C_n2A, DC_48A-66A_n2A, DC_48C-66A_n2A, DC_48D-66A_n2A, DC_48E-66A_n2A, DC_66A_n2A, DC_66A-66A_n2A, DC_66A-66A-66A_n2A, DC_66B_n2A, DC_66C_n2A, DC_5A_n2A-n77A, DC_13A_n2A-n77A, DC_66A_n2A-n77A, DC_66A-66A_n2A-n77A, DC_2A_n5A, DC_2A-2A_n5A, DC_2A-2A-66A_n5A, DC_2A-2A-66A-66A_N5A, DC_2A-5A_n5A, DC_2A-46D_n5A, DC_2A-46E_n5A, DC_2A-48A_n5A, DC_2A-48C_n5A, DC_2A-48D_n5A, DC_2A-48E_n5A, DC_2A-66A_n5A, DC_2A-66A-66A_n5A, DC_2A-66B_n5A, DC_5A-66A_n5A, DC_5A-66A-66A_n5A, DC_46A-66A_n5A, DC_48A_n5A, DC_48A-66A_n5A, DC_48C_n5A, DC_48C-66A_n5A, DC_48D_n5A, DC_48D-66A_n5A, DC_48E_n5A, DC_48E-66A_n5A, DC_66A_n5A, DC_66A-66A_n5A, DC_66B_n5A, DC_66C_n5A, DC_2A_n5A-n77A, DC_2A-2A_n5A-n77A, DC_66A_n5A-n77A, DC_66A-66A_n5A-n77A, DC_2A_n66A, DC_2A-2A_n66A, DC_2A-2A-5A_n66A, DC_2A-2A-13A_n66A, DC_2A-2A-66A_n66A, DC_2A-2A-66A-66A_n66A, DC_2A-5A_n66A, DC_2A-5B_n66A, DC_2A-13A_n66A, DC_2A-46A_n66A, DC_2A-48A_n66A, DC_2A-48C_n66A, DC_2A-48D_n66A, DC_2A-48E_n66A, DC_2A-66A_n66A, DC_2A-66A-66A_n66A, DC_5A_n66A, DC_5A-5A_n66A, DC_5A-5A-66A_n66A, DC_5A-46A_n66A, DC_5A-66A_n66A, DC_5B_n66A, DC_5B-66A_n66A, DC_13A_n66A, DC_13A-46A_n66A, DC_13A-48A_n66A, DC_13A-48D_n66A, DC_13A-48E_n66A, DC_13A-66A_n66A, DC_2A_n66A-n77A, DC_2A-2A_n66A-n77A, DC_5A_n66A-n77A, DC_13A_n66A-n77A, DC_2A_n77A, DC_2A-2A_n77A, DC_2A-2A-5A_n77A, DC_2A-2A-13A_n77A, DC_2A-2A-66A_n77A, DC_2A-2A-66A-66A_n77A, DC_2A-5A_n77A, DC_2A-13A_n77A, DC_2A-66A_n77A, DC_2A-66A-66A_n77A, DC_13A_n77A, DC_13A-66A_n77A, DC_13A-66A-66A_n77A, DC_5A_n77A, DC_5A-66A_n77A, DC_5A-66A-66A_n77A, DC_66A_n77A, DC_66A-66A_n77A, DC_66A-66A-

	66A_n77A, DC_2A_n5A-n77A, DC_2A_n66A-n77A, DC_2A-2A_n5A-n77A, DC_2A-2A_n66A-n77A, DC_5A_n2A-n77A, DC_5A_n66A-n77A, DC_13A_n2A-n77A, DC_13A_n66A-n77A, DC_66A_n2A-n77A, DC_66A_n5A-n77A, DC_66A-66A_n2A-n77A, DC_66A-66A_n5A-n77A, DC_1A_n257A , DC_3A_n257A , DC_5A_n257A , DC_7A_n257A, DC_2A_n260A, DC_2A_n260I, DC_2A-2A-66A_n260A, DC_2A-5A_n260A, DC_2A-5A_n260I, DC_2A-13A_n260A, DC_2A-13A_n260I, DC_2A-66A_n260A, DC_2A-66A_n260I, DC_2A-66A-66A_n260A, DC_2A-66A-66A_n260I, DC_5A_n260A, DC_5A_n260I, DC_5A-66A_n260A, DC_5A-66A_n260I, DC_5A-66A-66A_n260A, DC_5A-66A-66A_n260I, DC_13A_n260A,DC_13A_n260I, DC_13A-66A_n260A, DC_13A-66A_n260I, DC_13A-66A-66A_n260A, DC_13A-66A-66A_n260I, DC_48A_n260A, DC_48A_n260I, DC_66A_n260A, DC_66A_n260I, DC_66A-66A_n260A, DC_66A-66A_n260I, DC_2A_n261(2G), DC_2A_n261A, DC_2A_n261I, DC_2A-2A_n261A, DC_2A-2A_n261I, DC_2A-2A-13A_n261A, DC_2A-2A-13A_n261I, DC_2A-2A-66A_n261A, DC_2A-2A-66A_n261I, DC_2A-5A_n261(2G), DC_2A-5A_n261A, DC_2A-5A_n261I, DC_2A-13A_n261(2G), DC_2A-13A_n261A, DC_2A-13A_n261I, DC_2A-46A_n261A, DC_2A-46A_n261I, DC_2A-66A_n261(2G), DC_2A-66A_n261A, DC_2A-66A_n261I, DC_2A-66A-66A_n261(2G), DC_2A-66A-66A_n261A, DC_2A-66A-66A_n261I, DC_5A_n261(2G), DC_5A_n261A, DC_5A_n261I, DC_5A-66A_n261(2G), DC_5A-66A_n261A, DC_5A-66A_n261I, DC_5A-66A-66A_n261(2G), DC_5A-66A-66A_n261A, DC_5A-66A-66A_n261I, DC_13A_n261(2G), DC_13A_n261A, DC_13A_n261I, DC_13A-46A_n261A, DC_13A-46A_n261I, DC_13A-66A_n261(2G), DC_13A-66A_n261A, DC_13A-66A_n261I, DC_13A-66A-66A_n261(2G), DC_13A-66A-66A_n261A, DC_13A-66A-66A_n261I, DC_46A-66A_n261A, DC_46A-66A_n261I, DC_48A_n261(2G), DC_48A_n261A, DC_48A_n261I, DC_66A_n261(2G), DC_66A_n261A, DC_66A_n261I, DC_66A-66A_n261(2G), DC_66A-66A_n261A, DC_66A-66A_n261I, DC_2A_n260G, DC_5A_n260G, DC_13A_n260G, DC_48A_n260G, DC_66A_n260G, DC_2A_n261G, DC_5A_n261G, DC_13A_n261G, DC_48A_n261G, DC_66A_n261G NR-DC Frequency Band: DC_n2A_n260A, DC_n2A_n260G, DC_n2A-n261A, DC_n2A-n261G, DC_n5A-n260A, DC_n5A-n260G, DC_n5A_n261A, DC_n5A_n261G, DC_n66A-n260A, DC_n66A-n260G, DC_n66A_n261A, DC_n66A_n261G, DC_n48A-n260A, DC_n48A-n260G, DC_n48A_n261A, DC_n48A_n261G, DC_n77A-n260A, DC_n77A-n260G, DC_n77A_n261A, DC_n77A_n261G NR CA Frequency Band: CA_n2(2A), CA_n2A-n5A, CA_n2A-n66A, CA_n5(2A), CA_n5A-n66A, CA_n5B, CA_n66(2A), CA_n66B,

	CA_n48(2A), CA_n48B, CA_n48C, CA_n77C, CA_n2A-n48A, CA_n2A-n77A, CA_n5A-n48A, CA_n5A-n77A, CA_n48A-n66A, CA_n66A-n77A WIFI 802.11a, 802.11b, 802.11g, 802.11n(HT20/40), 802.11ac(VHT20/40/80/160), 802.11ax(HE20/40/80/160)
About the Product	The equipment is Mobile Hot Spot, intended for used with information technology equipment.

The following is the technical information of the EUT tested frequency bands in this report.

Operating Bands		TDD LTE Band 48 SA: n48	
Modulation Type		LTE	QPSK
			16QAM
			64QAM
			256QAM
		NR	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
			DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM
Antenna Type		Embedded Antenna	
Antenna Gain		LTE Band 48: -2.10 dBi (ANT5) NR Band n48: -2.10 dBi (ANT5)	
The Max RF Output Power (EIRP/ERP)		LTE Band 48: 19.71 dBm NR Band n48: 20.64 dBm CA_48C: 19.84 dBm	
SCS and Channel Bandwidths		n48_SCS 30kHz: 10 MHz, 20 MHz, 30 MHz, 40 MHz	
Band	Power Class	Tx Frequency Range	Rx Frequency Range
LTE B48	3	3550 MHz ~ 3700 MHz	3550 MHz ~ 3700 MHz
NR n48	3	3550 MHz ~ 3700 MHz	3550 MHz ~ 3700 MHz

Note1: The EUT information provided by the applicant, except for The Max RF Conducted Power. For more detailed band specifications and features description, please refer to the manufacturer's specifications or user's manual.

Note2: This report presents the worst configuration based on the original report.

3 SUMMARY OF TEST RESULTS

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 96	CITIZENS BROADBAND RADIO SERVICE
3	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
4	KDB 971168 D01 v03	Measurement Guidance for Certification of Licensed Digital Transmitters

3.2 Test Verdict

No.	Test Description	FCC Part No.	Test Result	Test Verdict
1	Conducted RF Output Power	2.1046	Reporting only (ANNEX A.1)	Pass
2	Effective (Isotropic) Radiated Power	2.1046 96.41(b)	ANNEX A.1	Pass
3	Peak to Average Radio	2.1046	ANNEX A.2	Pass
4	Occupied Bandwidth	2.1049	ANNEX A.3	Pass
5	Frequency Stability	2.1055	ANNEX A.4	Pass
6	Spurious Emission at Antenna Terminals	2.1051 96.41(e)	ANNEX A.5	Pass
7	Band Edge	2.1051 96.41(e)	ANNEX A.6	Pass
8	Field Strength of Spurious Radiation	2.1053 96.41(e)	ANNEX A.7	Pass

Note 1: Compared with the EUT of test report No. I22Z60940-WMD01&I22Z60940-WMD02, the changes of the EUT of this report as below:

1.Replace the following components

Reference locaiton	Quantity	Component Name	Difference
U2101	1	Memory	Different Brand Name Different model name
U7101	1	Proximity Sensor	Same brand Different model name
U4401	1	RF switch	Same brand, same series
U4402,U4601	2	RF switch	Same brand, same series
L3201,L3202,L3203,L3204,L3205,L3206,L3207	7	Power Inductor	Different Brand Name
FL4405,FL4604	2	SAW Filter	Same brand, same series
U1101	1	Proximity Sensor	Same brand Different model Name

2.The specifications of the replaced components remain unchanged and do not affect the RF performance.

3.No change of schematic and PCB Layout.

No.	Test Description	FCC Part No.	Test Result	Test Verdict
4.No change in radio parameters has occurred. Other hardware circuit and software are the same as EUT referred in test report No. I22Z60940-WMD01&I22Z60940-WMD02. Therefore, Only the Effective (Isotropic) Radiated Power was retested in this report, other test results refer to report No. I22Z60940-WMD01, which was issued by CTTL-Telecommunication Technology Labs, CAICT on Jul. 27, 2022 and I22Z60940-WMD02, which was issued by CTTL-Telecommunication Technology Labs, CAICT on Jul. 29, 2022.				

3.3 Measurement Uncertainty

Test Case	Uncertainty
Conducted RF Output Power	0.68dB
Effective (Isotropic) Radiated Power	2.50dB
Peak to Average Radio	0.015%
Occupied Bandwidth	1.4/3MHz: 30kHz 5/10MHz: 100kHz 15/20MHz: 300kHz
Frequency Stability	12Hz
Spurious Emission at Antenna Terminals	2.56dB
Band Edge	1.48dB
Field Strength of Spurious Radiation	4.55dB

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity		25% to 75%
Atmospheric Pressure		98 kPa to 102 kPa
Test Voltage of the EUT	NV (Normal Voltage)	3.8V
	LV (Low Voltage)	3.4V
	HV (High Voltage)	4.4V
Test Temperature of the EUT	NT (Normal Temperature)	15 °C to 35 °C
	LT (Low Temperature)	-30 °C
	HT (High Temperature)	50°C

4.2 Test Equipment List

Description	Manufacturer	Model	Serial No.	Version	Cal. Date	Cal. Due
2/3/4/5G RF Test System						
BL410 Test Software	BALUN	BL410R	N/A	3.0.1.536	N/A	N/A
CMUgo Test Software	R&S	CMUgo	N/A	V2.0.1	N/A	N/A
UCTS Test Software	Anritsu	UCTS	N/A	V 6.21.1105.0	N/A	N/A
Temperature Chamber	OK	OK-TH-100C	OK2022110401	N/A	2025-09-15	2026-09-14
Universal Radio Communication Tester	R&S	CMU 200	119280	V5.13	2025-10-20	2026-10-19
Wideband Radio Communication Tester	R&S	CMW 500	120598	V3.7.172	2025-08-13	2026-08-12
Radio Communication Test Station	Anritsu	MT8821C	6201588572	40.10S #017	2025-04-30	2026-04-29
Radio Communication Test Station	Anritsu	MT8000A	6261940329	Ver.8.60.4.0	2025-10-20	2026-10-19
5G Wireless Test Platform	Starpoint	SP9500-CTS	20395	C1.0.7.30+SP1	2025-12-25	2026-12-24
Spectrum Analyzer	R&S	FSV40	101544	2.30.SP4	2025-10-30	2026-10-29
DC Power Supply	ITECH	IT6863A	800014020757120008	N/A	2025-07-28	2026-07-27
Spectrum Analyzer	Agilent	E4440A	MY46181663	A.11.21	2025-07-15	2026-07-14
Radiated Test System						
Radiated Test System Test Software	BALUN	BL410-E	N/A	V22.4	N/A	N/A

Wideband Radio Communication Tester	R&S	CMW 500	120598	V3.7.172	2025-08-13	2026-08-12
5G Wireless Test Platform	Keysight	E7515B UXM	MY59321617	15.26.12.8161	2025-07-15	2026-07-14
Spectrum Analyzer	R&S	FSV40	101544	2.30.SP4	2025-10-30	2026-10-29
Test Antenna-Horn(18-40 GHz)	A-INFO	LB-180400KF	J211060273	N/A	2024-06-15	2027-06-14
Test Antenna-Bi-Log(30 MHz-3 GHz)	Schwarzbeck	VULB 9163	01414	N/A	2023-11-03	2026-11-02
Test Antenna-Horn(1-18 GHz)	Schwarzbeck	BBHA 9120D	02459	N/A	2023-10-26	2026-10-25
Anechoic Chamber	YIHENG	C8-966	N/A	N/A	2024-05-15	2027-05-11
EMI Receiver	Keysight	N9038A	MY55330121	A.20.03	2025-04-16	2026-04-15

4.3 Test Configurations

LTE Band	Bandwidth (MHz)						Modulation Type				RB#			Test Channel		
	1.4	3	5	10	15	20	QPSK	16-QAM	64-QAM	256-QAM	1	Half	Full	LCH	MCH	HCH
Effective (Isotropic) Radiated Power																
48	n	n	v	v	v	v	v	v	v	v	v	v	v	v	v	v

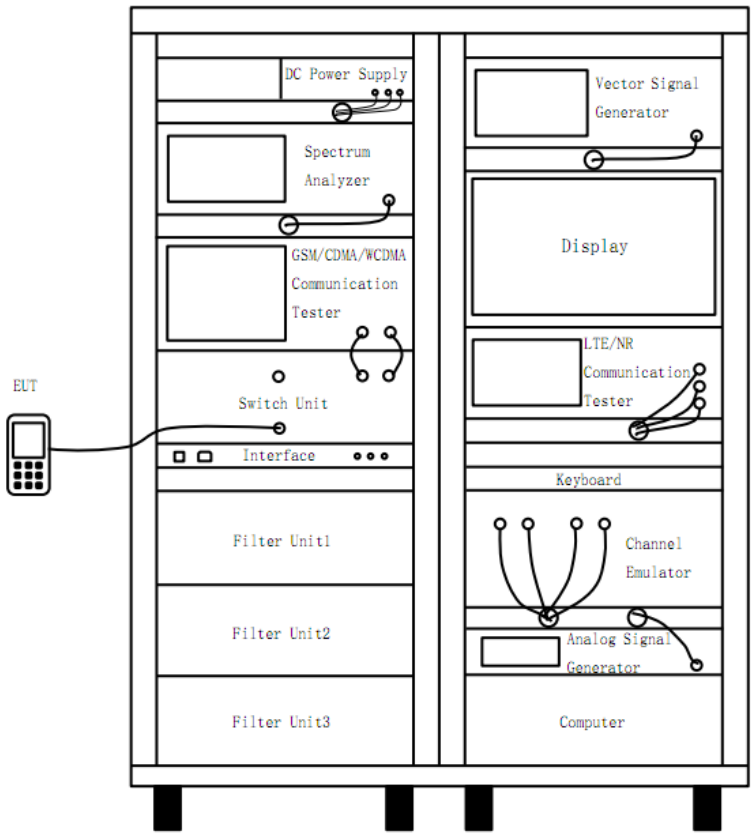
Note 1: The mark “v” means that this configuration is chosen for testing.
Note 2: The mark “n” means that this bandwidth is not supported.

Test Mode	UL Channel	Channel Bandwidth (MHz)	UL Channel No.	UL Frequency (MHz)
LTE Band 48	Low Range	5	55265	3552.5
		10	55290	3555
		15	55315	3557.5
		20	55340	3560
	Middle Range	5/10/15/20	55990	3625
	High Range	5	56715	3697.5
		10	56690	3695
		15	56665	3692.5
		20	56640	3690

Test Mode	Channel Bandwidth (MHz)	UL Channel	UL Channel No.	UL Frequency (MHz)
NR Band n48	10	Low Range	637000	3555
		Middle Range	641666	3624.99
		High Range	646332	3694.98
	20	Low Range	637334	3560.01
		Middle Range	641666	3624.99
		High Range	646000	3690
	30	Low Range	637668	3565.02
		Middle Range	641666	3624.99
		High Range	645666	3684.99
	40	Low Range	638000	3570
		Middle Range	641666	3624.99
		High Range	645332	3679.98

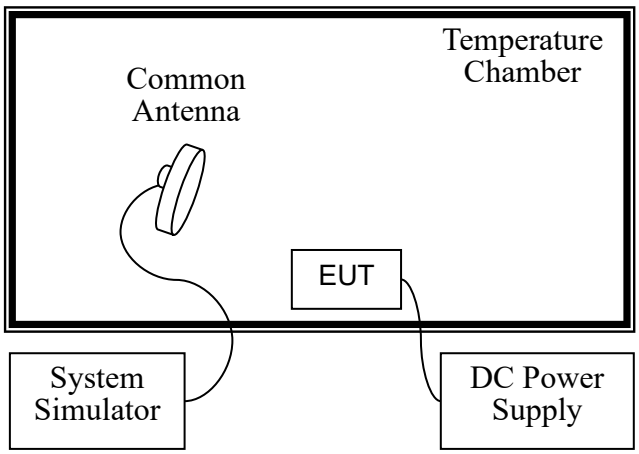
4.4 Test Setup

4.4.1 For Antenna Port Test



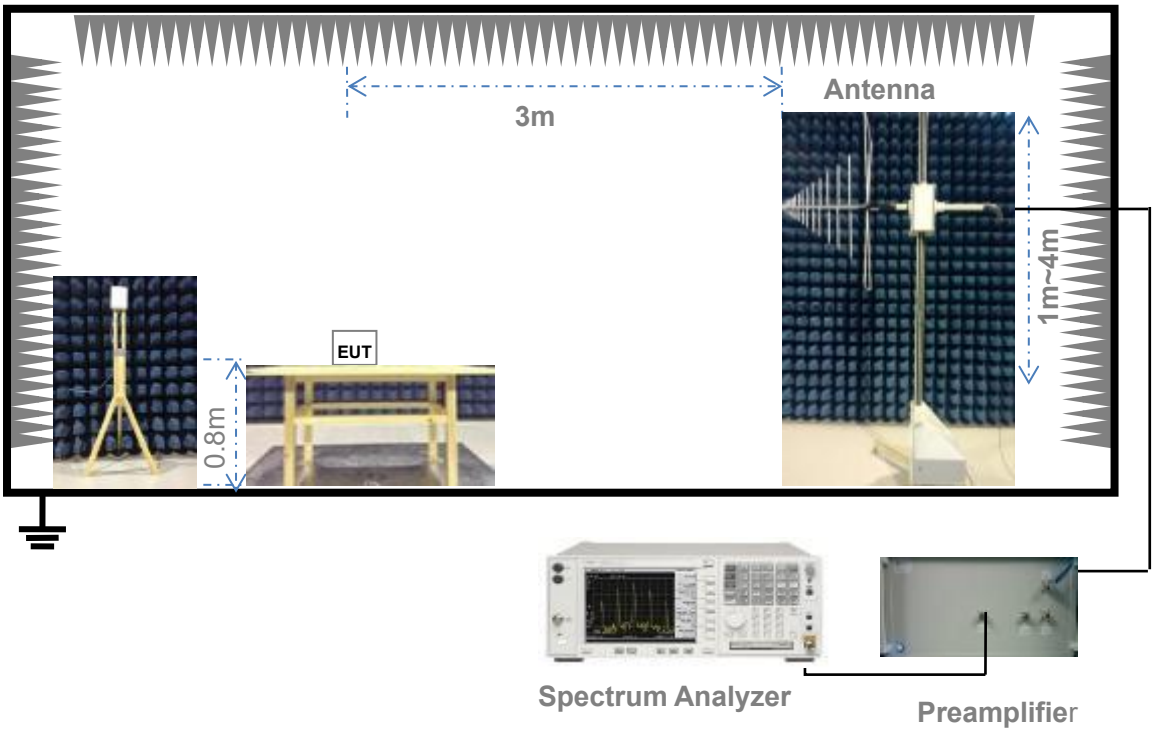
(Diagram 1)

4.4.2 For Frequency Stability Test



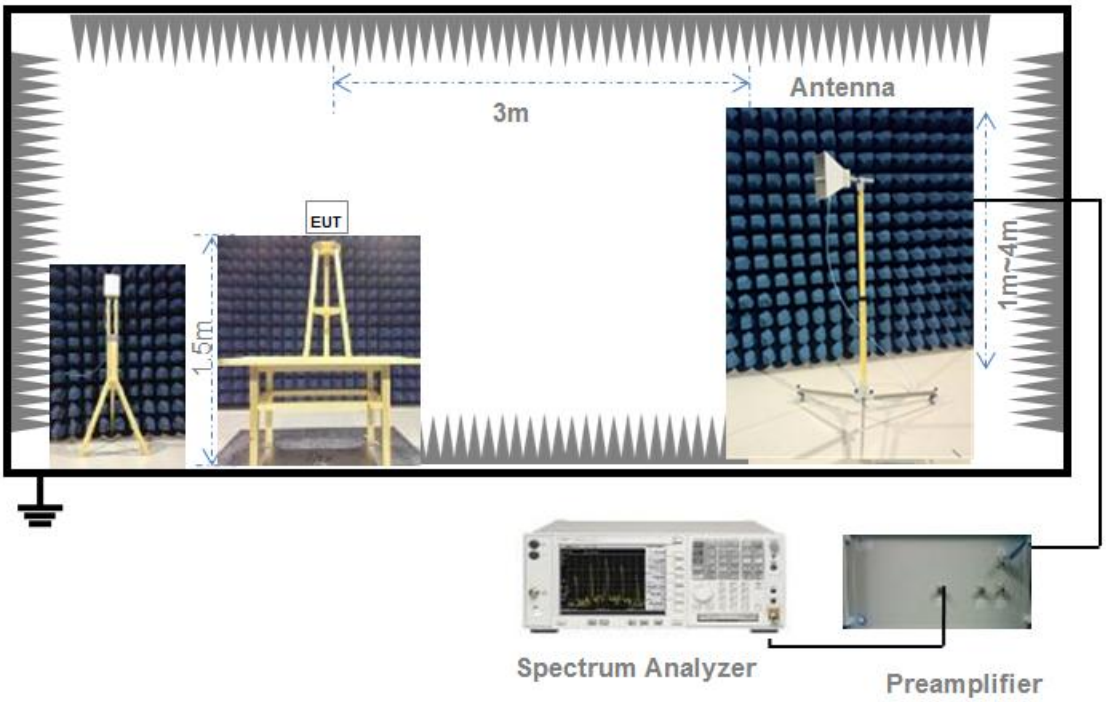
(Diagram 2)

4.4.3 For Radiated Test (30 MHz ~ 1 GHz)



(Diagram 3)

4.4.4 For Radiated Test (Above 1 GHz)



(Diagram 4)

5 TEST ITEMS

5.1 Transmitter Radiated Power (EIRP/ERP)

5.1.1 Limit

FCC § 2.1046 & 22.913(a) & 24.232(c) & 27.50(a) & 27.50(b) & 27.50(c) & 27.50(d) & 27.50(h) & 27.50(j) & 27.50(k) & 90.635(b) & 90.542(a) & 96.41(b)

According to FCC section 22.913(a) (5), the Effective Radiated Power (ERP) of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

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

According to FCC section 27.50(a) (3), for mobile and portable stations transmitting in the 2305-2315MHz band or the 2350-2360MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands.

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

FCC section 27.50(c) (10), portable stations (hand-held devices) in the 600MHz uplink band and the 698-746MHz band, and fixed and mobile stations in the 600MHz uplink band are limited to 3 watts ERP.

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

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

And FCC section 27.50(h) (2), for mobile and other user stations, mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

FCC section 27.50(j) (3), for mobile, and portable (hand-held) stations operating in the 3700-3980 MHz band are limited to 1 watt EIRP.

FCC section 27.50(k) (3), Mobile devices are limited to 1Watt (30 dBm) EIRP in the 3450-3550 MHz band.

According to FCC section 90.635(b), the maximum output power of the transmitter for mobile stations is 100 watts (20dBW).

According to FCC section 90.542(a) (7), portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP.

FCC section 96.41(b), the maximum effective isotropic radiated power (EIRP) and maximum Power Spectral Density (PSD) of any CBSD and End User Device must comply with the limits shown in the table in this paragraph below:

Device	Maximum EIRP (dBm/10 megahertz)	Maximum PSD (dBm/MHz)
End User Device	23	N/A
Category A CBSD	30	20
Category B CBSD[note1]	47	37
Note1: Category B CBSDs will only be authorized for use after an ESC is approved and commercially deployed consistent with §§ 96.15 and 96.67.		

RSS-Gen § 6.12 & RSS-130 § 4.6 & RSS-132 § 5.4 & RSS-133 § 6.4 & RSS-139 § 6.5 & RSS-195 § 5.5 & RSS-199 § 5.5 & RSS-140 § 4.3 & RSS-192 § 5.5 & RSS-197 § 5.6

According to RSS-130 § 4.6.3, The e.r.p. shall not exceed 30 watts for mobile equipment and outdoor fixed subscriber equipment. The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment.

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

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

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

According to RSS-195 § 5.5, the EIRP of mobile or portable equipment transmitting in the band 2305-2315MHz or the band 2350-2360MHz, employing 3GPP LTE standards, shall not exceed 250mW within 5MHz bandwidth. For other technologies, the EIRP shall not exceed 50mW within any 1MHz bandwidth.

According to RSS-199 § 5.5, Subscriber equipment other than fixed subscriber equipment shall not exceed an e.i.r.p of 2W per channel bandwidth.

According to RSS-140 § 4.3, the equivalent radiated power (e.r.p.) for control and mobile equipment shall not exceed 30 W. The e.r.p. for portable equipment including handheld devices shall not exceed 3 W.

According to RSS-192 § 5.5, for Subscriber equipment other than fixed subscriber equipment(Non-SAS), the EIRP shall not exceed 30dBm/channel bandwidth.

According to RSS-197 § 5.6, The maximum e.i.r.p. density of mobile equipment shall not exceed 40 mW in any 1 MHz bandwidth.

5.1.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description is used for conducted test, and the section 4.4.3 and

4.4.4 (Diagram 3, 4) test setup description is used for radiated test. The photo of test setup please refer to ANNEX B.

5.1.3 Test Procedure

Description of the Conducted Output Power Measurement

The EUT is coupled to the SS with attenuator through power splitter; the RF load attached to EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. A system simulator is used to establish communication with the EUT, and its parameters are set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The relevant equation for determining the conducted measured value is:

Conducted Output Power Value (dBm) = Measured Value (dBm) + Path Loss (dB)

where:
Conducted Output Power Value = final conducted measured value in the conducted power test, in dBm;
Measured Value = measured conducted power received by spectrum analyzer or power meter, in dBm;
Path Loss = signal attenuation in the connecting cable between the transmitter and spectrum analyzer or power meter, including external cable loss, in dB;

During the test, the data of Path Loss (dB) is added in the spectrum analyzer or power meter, so Measured Value (dBm) is the final values which contains the data of Path Loss (dB).

For example:

In the conducted output power test, when measured value for GSM850 is 24.7 dBm, and path loss is 8.5 dB, then final conducted output power value is:

Conducted Output Power Value (dBm) = 24.7 dBm + 8.5 dB = 33.2 dBm

Description of the Transmitter Radiated Power Measurement

In many cases, the RF output power limits for licensed digital transmission devices is specified in terms of effective radiated power (ERP) or equivalent isotropic radiated power (EIRP). Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1 GHz. Both are determined by adding the transmit antenna gain to the conducted RF output power with the primary difference between the two being that when determining the ERP, the transmit antenna gain is referenced to a dipole antenna (i.e., dBd) whereas when determining the EIRP, the transmit antenna gain is referenced to an isotropic antenna (dBi).

Final measurement calculation as below:

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

ERP/EIRP = P_{Meas} + GT − LC

where:
ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as P_{Meas}, typically dBW or dBm);
P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;
GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);
dBd (ERP)=dBi (EIRP) -2.15 dB
LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

For example:
In the EIRP test, when P_{Meas} value for GSM1900 is 30.2 dBm, LC is 0.6 dB, and GT is -3.4 dB, then final EIRP value is:
EIRP for GSM1900 = 30.2 dBm - 3.4 dBi - 0.6 dB = 26.2 dBm

The relevant equation for determining the ERP/EIRP from the radiated RF output power is:
ERP/EIRP (dBm) = SA Read Value (dBm) + Correction Factor (dB)

where:
ERP/EIRP = effective or equivalent radiated power, in dBm;
SA Read Value = measured transmitter power received by EMI receiver or spectrum analyzer, in dBm;
Correction Factor = total correction factor including cable loss, in dB;

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

For example:

In the ERP test, when SA read value for GSM850 is 21dBm, and correction factor is 8dB, then final ERP value for GSM850 is:

ERP (dBm) = 21dBm + 8dB = 29dBm

5.1.4 Test Result

Please refer to ANNEX A.1.

5.2 Peak to Average Ratio

5.2.1 Limit

FCC § 2.1046 & 24.232(d) & 27.50(d) & 27.50(j) & 27.50(k)

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

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

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

According to FCC section 27.50(d) (5) & 27.50(j) & 27.50(k), in measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

RSS-130 § 4.6 & RSS-132 § 5.4 & RSS-133 § 6.4 & RSS-139 § 6.5 & RSS-195 § 5.5

& RSS-199 § 5.5 & RSS-140 § 4.3 & RSS-192 §5.5 & RSS-197 § 5.6

According to RSS-130 § 4.6.1, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

According to RSS-132 § 5.4, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

According to RSS-133 § 6.4, the transmitter's peak-to-average power ratio (PAPR) shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

According to RSS-139 § 5.5, the peak to average power ratio (PAPR) of the equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

According to RSS-140 § 4.3, the peak to average power ratio (PAPR) of theequipment shall not exceed 13 dB for more than 0.1% of the time, using asignal that corresponds to the highest PAPR during periods of continuous transmission.

According to RSS-192 § 5.5, the peak to average power ratio (PAPR) of the equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

According to RSS-195 § 5.5.1, the PAPR of the transmitter output power of base and fixed station equipment shall not exceed 13 dB for more than 0.1% of the time, using a signal that corresponds to the highest PAPR during periods of continuous transmission.

According to RSS-199 § 5.5, the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13 dB for more than 0.1% of the time and shall use a signal corresponding to the highest PAPR during periods of continuous transmission.

5.2.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description is used for this test. The photo of test setup please refer to ANNEX B.

5.2.3 Test Procedure

Here the lowest, middle and highest channels are selected to perform testing to verify the peak-to-average ratio.

According to KDB 971168 D01, there is CCDF procedure for PAPR:

a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Set the measurement interval as follows:

1) for continuous transmissions, set to 1 ms,

2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.

e) Record the maximum PAPR level associated with a probability of 0.1%.

Alternate procedure for PAPR:

Use one of the procedures presented in 4.1 to measure the total peak power and record as P_{Pk}. Use one of the applicable procedures presented 4.2 to measure the total average power and record as P_{Avg}. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

PAPR (dB) = P_{Pk} (dBm) - P_{Avg} (dBm).

5.2.4 Test Result

Please refer to ANNEX A.2.

5.3 Occupied Bandwidth

5.3.1 Limit

FCC § 2.1049

RSS-Gen § 6.7

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission.

Many of the individual rule parts specify a relative OBW in lieu of the 99% OBW. In such cases, the OBW is defined as the width of the signal between two points, one below the carrier center frequency and on above the carrier center frequency, outside of which all emissions are attenuated by at least X dB below the transmitter power, where the value of X is typically specified as 26.

5.3.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description is used for this test. The photo of test setup please refer to ANNEX B.

5.3.3 Test Procedure

The following procedure shall be used for measuring power bandwidth.

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the anticipated OBW).

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.

c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.

d) NOTE—Steps a) through c) may require iteration to adjust within the specified tolerances.

e) For -26 dB OBW, the dynamic range of the spectrum analyzer at the selected RBW shall be at least 10dB below the target “-X dB down” requirement, e.g. -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be 36dB below the reference value.

f) Set the detection mode to peak, and the trace mode to max hold.

g) For 99% OBW, use the 99 % power bandwidth function of the spectrum analyzer (if available) and report the measured bandwidth.

If the instrument does not have a 99 % power bandwidth function, the trace data points are to be recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at

the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99 % power bandwidth is the difference between these two frequencies.

h) For -26 dB OBW, determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).

Determine the “-X dB down amplitude” as equal to (reference value -X). Alternatively, this calculation can be performed by the analyzer by using the marker-delta function.

Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below “-X dB down amplitude” determined in step g). If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.

i) The OBW shall be reported by providing plot(s) of the measuring instrument display. The frequency and amplitude axes and scale shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

j) Change variable modulations, coding, or channel bandwidth settings, then repeat above test procedures.

5.3.4 Test Result

Please refer to ANNEX A.3.

5.4 Frequency Stability

5.4.1 Limit

FCC § 2.1055 & 22.355 & 24.235 & 27.54 & 90.213

RSS-Gen § 6.11 & RSS-130 § 4.5 & RSS-132 § 5.3 & RSS-133 § 6.3 & RSS-139 § 6.4 & RSS-195 § 5.4 & RSS-199 § 5.4 & RSS-140 § 4.2 & RSS-192 § 5.4 & RSS-197 § 5.3

RSS-Gen § 6.11

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

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

(2) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10°C through the range.

The frequency stability shall be measured with variation of primary supply voltage as follows:

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

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

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

FCC § 22.355

Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table 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 § 24.235

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

FCC § 27.54

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

FCC § 90.213

The frequency stability shall not depart from the reference frequency in excess of ±2.5ppm for mobile stations.

RSS-130 § 4.5

The frequency stability shall be sufficient to ensure that the occupied bandwidth remains within each frequency block range when tested at the temperature and supply voltage variations specified in RSS-Gen.

RSS-132 § 5.3

The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations and ±1.5 ppm for base stations.

RSS-133 § 6.3

The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations and ±1.0 ppm for base stations.

RSS-139 § 6.4

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

RSS-195 § 5.4

The applicant shall ensure frequency stability by showing that the occupied bandwidth is maintained within the range of the operating frequency blocks when testing under the temperature and supply voltage variations specified for the frequency stability measurement in RSS-Gen.

RSS-199 § 5.4

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested to the temperature and supply voltage variations specified in RSS-Gen.

RSS-140 § 4.2

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested at the temperature and supply voltage variations specified in RSS-Gen.

RSS-192 § 5.4

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block when tested at the temperature and supply voltage variations specified in RSS-Gen.

RSS-197 § 5.3

The transmitter frequency stability limit shall be determined as follows:

a.The frequency offset shall be measured according to the procedure described in RSS-Gen and recorded;

b.Using a resolution bandwidth of 1% of the occupied bandwidth, a reference point at the unwanted emission level specified in Section 5.7 on the emission mask of the lowest and highest channel shall be selected, and the frequency at these points shall be recorded as fL and fH respectively.

The applicant shall ensure frequency stability by showing that fL minus the frequency offset and fH plus the frequency offset shall be within the 3650-3700 MHz band..

5.4.2 Test Setup

The section 4.4.2 (Diagram 2) test setup description is used for this test. The photo of test setup please refer to ANNEX B.

5.4.3 Test Procedure

1. The EUT is placed in a temperature chamber.

2. The temperature is set to 25°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured.

3. The temperature is increased by not more than 10 degrees, allowed to stabilize and soak, and then repeat the frequency error measurement.

4. Repeat procedure 3 until +50°C and -30°C is reached.

5. Change supply voltage, and repeat measurement until extreme voltage is reached.

5.4.4 Test Result

Please refer to ANNEX A.4.

5.5 Spurious Emission at Antenna Terminals

5.5.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(a) & 27.53(c) & 27.53(f) & 27.53(g) & 27.53(h) & 27.53(l) & 27.53(m) & 27.53(n) & 90.691 & 90.543 & 96.41(e)

RSS-Gen § 6.13 & RSS-130 § 4.7 & RSS-132 § 5.5 & RSS-133 § 6.5 & RSS-139 § 6.6 & RSS-195 § 5.6

& RSS-199 § 5.6 & RSS-140 § 4.4 & RSS-192 § 5.6 & RSS-197 § 5.7

In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC § 22.917(a) & 24.238(a) & RSS-132 § 5.5 & RSS-133 § 6.5

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P) dB. This is calculated to be -13 dBm.

FCC § 27.53(a) (4)

For mobile and portable stations operating in the 2305-2315MHz and 2350-2360MHz bands:

(1)By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320MHz and on all frequencies between 2345 and 2360MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324MHz and on all frequencies between 2341 and 2345MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328MHz and on all frequencies between 2337 and 2341MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337MHz.

(2)By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292MHz, and 70 + 10 log (P) dB below 2288MHz.

(3)By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365MHz, and not less than 70 + 10 log (P) dB above 2365MHz.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;

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

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

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth

of at least 30 kHz may be employed;

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

FCC § 27.53(f)

For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to - 70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43+10*log(P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC § 27.53(h) (1) & RSS-139 § 6.6

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

FCC § 27.53(l) (2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

FCC § 27.53(m) (4) & RSS-199 § 4.5

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

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

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

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

In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

FCC § 27.53(n) (2)

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

FCC § 90.691

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

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

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

(b) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

FCC § 90.543

(e) For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee’s frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(f) For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559– 1610 MHz shall be limited to -70 dBW/ MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC § 96.41(e)

The conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any emission shall not exceed-25 dBm/MHz.The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed-40 dBm/MHz.

Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than1GHz.However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolutionbandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least26 dB below the transmitter power.

RSS-132 § 5.5 & RSS-133 § 6.5

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P) dB. This is calculated to be -13 dBm.

RSS-139 § 6.6

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

RSS-199 § 5.6

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

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

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

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

In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

RSS-130 § 4.7

The unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10Log_{10}(P) (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

In addition to the limit outlined above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

(a) The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least:

(i) 76 + 10 log10 p (watts), dB, for base and fixed equipment and

(ii) 65 + 10 log10 p (watts), dB, for mobile and portable equipment

(b) The e.i.r.p. in the band 1559-1610 MHz shall not exceed −70 dBW/MHz for wideband signal and −80 dBW for discrete emission with bandwidth less than 700 Hz.

RSS-195 § 5.6

The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power, P (dBW), by the amount indicated in table below and graphically represented in figure below, where p is the transmitter output power measured in watts.

Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)
＜2200	43+10 log_{10} (p)	2324-2328	61+10 log_{10} (p)
2200-2288	70+10 log_{10} (p)	2328-2337	67+10 log_{10} (p)
2288-2292	67+10 log_{10} (p)	2337-2341	61+10 log_{10} (p)

2292-2296	61+10 $\log_{10}$ (p)	2341-2345	55+10 $\log_{10}$ (p)
2296-2300	55+10 $\log_{10}$ (p)	2345-2360	43+10 $\log_{10}$ (p) Note
2300-2305	43+10 $\log_{10}$ (p)	2360-2365	43+10 $\log_{10}$ (p)
2305-2320	43+10 $\log_{10}$ (p)Note	2365-2395	70+10 $\log_{10}$ (p)
2320-2324	55+10 $\log_{10}$ (p)	＞2395	43+10 $\log_{10}$ (p)
Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See section 5.2 for the permitted frequency ranges for various equipment types.			

RSS-140 § 4.4

The power of any unwanted emission outside the bands 758-768 MHz and 788-798 MHz shall be attenuated below the transmitter output power P in dBW as follows, where p is the transmitter output power in watts:

For any frequency between 769-775 MHz and 799-806 MHz:

76 + 10 log (p), dB in a 6.25 kHz band for fixed and base station equipment

65 + 10 log (p), dB in a 6.25 kHz band for mobile and portable/hand-held equipment

For any frequency between 775-788 MHz, above 806 MHz, and below 758 MHz: 43 + 10 log (p), dB in a bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency bands 758-768 MHz and 788-798 MHz, a resolution bandwidth of 30 kHz may be employed.

In addition, the equivalent isotropically radiated power (e.i.r.p.) of all emissions, including harmonics in the band 1559-1610 MHz, shall not exceed −70 dBW/MHz for wideband emissions, and −80 dBW/kHz for discrete emissions of less than 700 Hz bandwidth.

RSS-192 § 5.6.3

For the unwanted emissions shall not exceed:

wSubscriber equipment shall have the TRP or conducted power (per antenna), where applicable, of unwanted emission not exceeding the following:

a. the limits in table below

b. a limit of -30 dBm/MHz in the frequency range greater than (B+5) MHz from the edge of the frequency band

Frequency block group (B)	Offset frequency from the edge of the frequency block group (MHz)			
	0-1	1-5	5-B	>B
10 MHz, 20MHz, 30 MHz and 40 MHz	-13 dBm/1% of B	-10 dBm/MHz	-13 dBm/MHz	-25 dBm/MHz

> 40 MHz	-13 dBm/400 kHz	-10 dBm/MHz	-13 dBm/MHz	-25 dBm/MHz

RSS-197 § 5.7

The unwanted emissions shall be measured at the frequencies of the highest and lowest channel of all bandwidths and types of modulation that the equipment can operate with a resolution bandwidth of 1 MHz or less, but at least 1% of the occupied bandwidth of the transmitter, provided that the measured power is integrated over a 1 MHz bandwidth.

The power of any emissions outside the frequency band 3650-3700 MHz shall be attenuated below the channel transmitter power P (dBW) by 43 + 10 Log (p), where p is measured in watts.

5.5.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.5.3 Test Procedure

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to a frequency including its 10th harmonic. On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency blocks a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

1. The EUT is coupled to the system simulator and spectrum analyzer; the RF load attached to EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

2. CMW500 is used to establish communication with the EUT, and its parameters are set to force the EUT transmitting at maximum output power.

3. The RF output of the transmitter is connected to the input of the spectrum analyzer through sufficient attenuation.

4. Spurious emissions are tested with 0.001MHz RBW for frequency less than 150kHz, 0.01MHz RBW for frequency less than 30MHz, 0.1MHz RBW for frequency less than 1GHz, and 1MHz RBW for frequency above 1GHz. And sweep point number are at least 401, referring to following formula.

Sweep point number = Span/RBW

VBW=3*RBW

Detector Mode=mean or average power

5. Record the frequencies and levels of spurious emissions.

5.5.4 Test Result

Please refer to ANNEX A.5.

5.6 Band Edge

5.6.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(a) & 27.53(c) & 27.53(f) & 27.53(g) & 27.53(h) & 27.53(l) & 27.53(m) & 27.53(n) & 90.691 & 90.543 & 96.41(e)

RSS-Gen § 6.13 & RSS-130 § 4.7 & RSS-132 § 5.5 & RSS-133 § 6.5 & RSS-139 § 6.6 & RSS-195 § 5.6

& RSS-199 § 5.6 & RSS-140 § 4.4 & RSS-192 § 5.6 & RSS-197 § 5.7

In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC § 22.917(a) & 24.238(a) & RSS-132 § 5.5 & RSS-133 § 6.5

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P) dB. This is calculated to be -13 dBm.

FCC § 27.53(a) (4)

For mobile and portable stations operating in the 2305-2315MHz and 2350-2360MHz bands:

(1)By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320MHz and on all frequencies between 2345 and 2360MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324MHz and on all frequencies between 2341 and 2345MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328MHz and on all frequencies between 2337 and 2341MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337MHz.

(2)By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292MHz, and 70 + 10 log (P) dB below 2288MHz.

(3)By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365MHz, and not less than 70 + 10 log (P) dB above 2365MHz.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;

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

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

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth

of at least 30 kHz may be employed;

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

FCC § 27.53(f)

For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to - 70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee’s frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43+10*log(P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz bands immediately outside and adjacent to a licensee’s frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC § 27.53(h) (1) & RSS-139 § 6.6

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

FCC § 27.53(l) (2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

FCC § 27.53(m) (4) & RSS-199 § 4.5

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

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

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

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

In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

FCC § 27.53(n) (2)

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

FCC § 90.691

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

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

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

(b) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

FCC § 90.543

(e) For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee’s frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(f) For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559– 1610 MHz shall be limited to -70 dBW/ MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC § 96.41(e)

The conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any emission shall not exceed-25 dBm/MHz.The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed-40 dBm/MHz.

Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than1GHz.However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolutionbandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least26 dB below the transmitter power.

RSS-132 § 5.5 & RSS-133 § 6.5

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P) dB. This is calculated to be -13 dBm.

RSS-139 § 6.6

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

RSS-199 § 5.6

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

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

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

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

In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

RSS-130 § 4.7

The unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10Log_{10}(P) (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

In addition to the limit outlined above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

(a) The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least:

(i) 76 + 10 log10 p (watts), dB, for base and fixed equipment and

(ii) 65 + 10 log10 p (watts), dB, for mobile and portable equipment

(b) The e.i.r.p. in the band 1559-1610 MHz shall not exceed −70 dBW/MHz for wideband signal and −80 dBW for discrete emission with bandwidth less than 700 Hz.

RSS-195 § 5.6

The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power, P (dBW), by the amount indicated in table below and graphically represented in figure below, where p is the transmitter output power measured in watts.

Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)
＜2200	43+10 log_{10} (p)	2324-2328	61+10 log_{10} (p)
2200-2288	70+10 log_{10} (p)	2328-2337	67+10 log_{10} (p)
2288-2292	67+10 log_{10} (p)	2337-2341	61+10 log_{10} (p)

2292-2296	61+10 $\log_{10}$ (p)	2341-2345	55+10 $\log_{10}$ (p)
2296-2300	55+10 $\log_{10}$ (p)	2345-2360	43+10 $\log_{10}$ (p) Note
2300-2305	43+10 $\log_{10}$ (p)	2360-2365	43+10 $\log_{10}$ (p)
2305-2320	43+10 $\log_{10}$ (p)Note	2365-2395	70+10 $\log_{10}$ (p)
2320-2324	55+10 $\log_{10}$ (p)	＞2395	43+10 $\log_{10}$ (p)
Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See section 5.2 for the permitted frequency ranges for various equipment types.			

RSS-140 § 4.4

The power of any unwanted emission outside the bands 758-768 MHz and 788-798 MHz shall be attenuated below the transmitter output power P in dBW as follows, where p is the transmitter output power in watts:

For any frequency between 769-775 MHz and 799-806 MHz:

76 + 10 log (p), dB in a 6.25 kHz band for fixed and base station equipment

65 + 10 log (p), dB in a 6.25 kHz band for mobile and portable/hand-held equipment

For any frequency between 775-788 MHz, above 806 MHz, and below 758 MHz: 43 + 10 log (p), dB in a bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency bands 758-768 MHz and 788-798 MHz, a resolution bandwidth of 30 kHz may be employed.

In addition, the equivalent isotropically radiated power (e.i.r.p.) of all emissions, including harmonics in the band 1559-1610 MHz, shall not exceed −70 dBW/MHz for wideband emissions, and −80 dBW/kHz for discrete emissions of less than 700 Hz bandwidth.

RSS-192 § 5.6.3

For the unwanted emissions shall not exceed:

wSubscriber equipment shall have the TRP or conducted power (per antenna), where applicable, of unwanted emission not exceeding the following:

c. the limits in table below

d. a limit of -30 dBm/MHz in the frequency range greater than (B+5) MHz from the edge of the frequency band

Frequency block group (B)	Offset frequency from the edge of the frequency block group (MHz)			
	0-1	1-5	5-B	>B
10 MHz, 20MHz, 30 MHz and 40 MHz	-13 dBm/1% of B	-10 dBm/MHz	-13 dBm/MHz	-25 dBm/MHz

> 40 MHz	-13 dBm/400 kHz	-10 dBm/MHz	-13 dBm/MHz	-25 dBm/MHz

RSS-197 § 5.7

The unwanted emissions shall be measured at the frequencies of the highest and lowest channel of all bandwidths and types of modulation that the equipment can operate with a resolution bandwidth of 1 MHz or less, but at least 1% of the occupied bandwidth of the transmitter, provided that the measured power is integrated over a 1 MHz bandwidth.

The power of any emissions outside the frequency band 3650-3700 MHz shall be attenuated below the channel transmitter power P (dBW) by 43 + 10 Log (p), where p is measured in watts.

5.6.2 Test Setup

The section 4.4.1 (Diagram 1) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.6.3 Test Procedure

The EUT, which is powered by the Battery, 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 50 Ohm; the path loss as the factor is calibrated to correct the reading.

1.The EUT is coupled to the system simulator and spectrum analyzer; the RF load attached to EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

2. CMW500 is used to establish communication with the EUT, and its parameters are set to force the EUT transmitting at maximum output power.

3. The RF output of the transmitter is connected to the input of the spectrum analyzer through sufficient attenuation.

4. The center of the spectrum analyzer was set to block edge frequency.

5. Band edge are tested with 1%*cBW (RBW), and sweep point number referred to following formula.

Sweep point number = 2*Span/RBW

VBW=3RBW

6. Record the frequencies and levels of spurious emissions.

For mobile and portable stations, on all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment. Since it was not possible to set the resolution bandwidth to 6.25 kHz with the available equipment, a bandwidth of 10 kHz was used instead to show compliance. By using a 10 kHz bandwidth on the spectrum analyzer.

10*log(10 kHz / 6.25 kHz) = 2.04 dB
Limit Line = -35 dBm + 2.04 dB = -32.96dBm

5.6.4 Test Result

Please refer to ANNEX A.6.

5.7 Field Strength of Spurious Radiation

5.7.1 Limit

FCC § 2.1051 & 22.917(a) & 24.238(a) & 27.53(a) & 27.53(c) & 27.53(f) & 27.53(g) & 27.53(h) & 27.53(l) & 27.53(m) & 27.53(n) & 90.691 & 90.543 & 96.41(e)

RSS-Gen § 6.13 & RSS-130 § 4.7 & RSS-132 § 5.5 & RSS-133 § 6.5 & RSS-139 § 6.6 & RSS-195 § 5.6

& RSS-199 § 5.6 & RSS-140 § 4.4 & RSS-192 § 5.6 & RSS-197 § 5.7

In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC § 22.917(a) & 24.238(a) & RSS-132 § 5.5 & RSS-133 § 6.5

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P) dB. This is calculated to be -13 dBm.

FCC § 27.53(a) (4)

For mobile and portable stations operating in the 2305-2315MHz and 2350-2360MHz bands:

(1)By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320MHz and on all frequencies between 2345 and 2360MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324MHz and on all frequencies between 2341 and 2345MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328MHz and on all frequencies between 2337 and 2341MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337MHz.

(2)By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292MHz, and 70 + 10 log (P) dB below 2288MHz.

(3)By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365MHz, and not less than 70 + 10 log (P) dB above 2365MHz.

FCC § 27.53(c)

For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On any frequency outside the 746–758 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the

band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(3) On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations;

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

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

However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth

of at least 30 kHz may be employed;

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

FCC § 27.53(f)

For operations in the 746–758 MHz, 775–788 MHz, and 805–806 MHz bands, emissions in the band 1559–1610 MHz shall be limited to - 70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC § 27.53(g)

For operations in the 600MHz band and the 698-746MHz band, the power of any emission outside a licensee’s frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43+10*log(P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz bands immediately outside and adjacent to a licensee’s frequency block, a resolution bandwidth of at least 30 kHz may be employed.

FCC § 27.53(h) (1) & RSS-139 § 6.6

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

FCC § 27.53(l) (2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

FCC § 27.53(m) (4) & RSS-199 § 4.5

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

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

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

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

In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

FCC § 27.53(n) (2)

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz.

FCC § 90.691

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

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

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

(b) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

FCC § 90.543

(e) For operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee’s frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(f) For operations in the 758–775 MHz and 788–805 MHz bands, all emissions including harmonics in the band 1559– 1610 MHz shall be limited to -70 dBW/ MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

FCC § 96.41(e)

The conducted power of any emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed -13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any emission shall not exceed-25 dBm/MHz.The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed-40 dBm/MHz.

Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater for frequencies less than 1 GHz and 1 MHz or greater for frequencies greater than1GHz.However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolutionbandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least26 dB below the transmitter power.

RSS-132 § 5.5 & RSS-133 § 6.5

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P) dB. This is calculated to be -13 dBm.

RSS-139 § 6.6

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

RSS-199 § 5.6

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

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

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

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

In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

RSS-130 § 4.7

The unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dBW), by at least 43 + 10Log_{10}(P) (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

In addition to the limit outlined above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

(a) The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least:

(i) 76 + 10 log10 p (watts), dB, for base and fixed equipment and

(ii) 65 + 10 log10 p (watts), dB, for mobile and portable equipment

(b) The e.i.r.p. in the band 1559-1610 MHz shall not exceed −70 dBW/MHz for wideband signal and −80 dBW for discrete emission with bandwidth less than 700 Hz.

RSS-195 § 5.6

The power of any emission outside the frequency range(s) in which the equipment operates shall be attenuated below the transmitter power, P (dBW), by the amount indicated in table below and graphically represented in figure below, where p is the transmitter output power measured in watts.

Frequency (MHz)	Attenuation (dB)	Frequency (MHz)	Attenuation (dB)
＜2200	43+10 log_{10} (p)	2324-2328	61+10 log_{10} (p)
2200-2288	70+10 log_{10} (p)	2328-2337	67+10 log_{10} (p)
2288-2292	67+10 log_{10} (p)	2337-2341	61+10 log_{10} (p)

2292-2296	61+10 $\log_{10}$ (p)	2341-2345	55+10 $\log_{10}$ (p)
2296-2300	55+10 $\log_{10}$ (p)	2345-2360	43+10 $\log_{10}$ (p) Note
2300-2305	43+10 $\log_{10}$ (p)	2360-2365	43+10 $\log_{10}$ (p)
2305-2320	43+10 $\log_{10}$ (p)Note	2365-2395	70+10 $\log_{10}$ (p)
2320-2324	55+10 $\log_{10}$ (p)	＞2395	43+10 $\log_{10}$ (p)
Note: Measured at the edges of the highest and lowest frequency range(s) in which the equipment is designed to operate. See section 5.2 for the permitted frequency ranges for various equipment types.			

RSS-140 § 4.4

The power of any unwanted emission outside the bands 758-768 MHz and 788-798 MHz shall be attenuated below the transmitter output power P in dBW as follows, where p is the transmitter output power in watts:

For any frequency between 769-775 MHz and 799-806 MHz:

76 + 10 log (p), dB in a 6.25 kHz band for fixed and base station equipment

65 + 10 log (p), dB in a 6.25 kHz band for mobile and portable/hand-held equipment

For any frequency between 775-788 MHz, above 806 MHz, and below 758 MHz: 43 + 10 log (p), dB in a bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency bands 758-768 MHz and 788-798 MHz, a resolution bandwidth of 30 kHz may be employed.

In addition, the equivalent isotropically radiated power (e.i.r.p.) of all emissions, including harmonics in the band 1559-1610 MHz, shall not exceed −70 dBW/MHz for wideband emissions, and −80 dBW/kHz for discrete emissions of less than 700 Hz bandwidth.

RSS-192 § 5.6.3

For the unwanted emissions shall not exceed:

wSubscriber equipment shall have the TRP or conducted power (per antenna), where applicable, of unwanted emission not exceeding the following:

e. the limits in table below

f. a limit of -30 dBm/MHz in the frequency range greater than (B+5) MHz from the edge of the frequency band

Frequency block group (B)	Offset frequency from the edge of the frequency block group (MHz)			
	0-1	1-5	5-B	>B
10 MHz, 20MHz, 30 MHz and 40 MHz	-13 dBm/1% of B	-10 dBm/MHz	-13 dBm/MHz	-25 dBm/MHz

> 40 MHz	-13 dBm/400 kHz	-10 dBm/MHz	-13 dBm/MHz	-25 dBm/MHz

RSS-197 § 5.7

The unwanted emissions shall be measured at the frequencies of the highest and lowest channel of all bandwidths and types of modulation that the equipment can operate with a resolution bandwidth of 1 MHz or less, but at least 1% of the occupied bandwidth of the transmitter, provided that the measured power is integrated over a 1 MHz bandwidth.

The power of any emissions outside the frequency band 3650-3700 MHz shall be attenuated below the channel transmitter power P (dBW) by 43 + 10 Log (p), where p is measured in watts.

5.7.2 Test Setup

The section 4.4.3 and 4.4.4 (Diagram 3, 4) test setup description was used for this test. The photo of test setup please refer to ANNEX B.

5.7.3 Test Procedure

1. On a test site, the EUT shall be placed at 80cm height on a turn table, and in the position close to normal use as declared by the applicant.

2. The test antenna shall be oriented initially for vertical polarization located 3 m from EUT to correspond to the fundamental frequency of the transmitter.

3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.

4. During the measurement of the EUT, the resolution bandwidth was to 1 MHz and the average bandwidth

was set to 1 MHz.

5. The transmitter shall be switched on; the measuring receiver shall be tuned to the frequency of the transmitter under test.

6. The test antenna shall be raised and lowered through the specified range of height until the maximum signal level is detected by the measuring receiver.

7. The transmitter shall be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.

8. The test antenna shall be raised and lowered again through the specified range of height until the maximum signal level is detected by the measuring receiver.

9. The maximum signal level detected by the measuring receiver shall be noted.

10. The EUT was replaced by half-wave dipole (824 ~ 849 MHz) or horn antenna (1 850 ~ 1 910 MHz) connected to a signal generator.

11. In necessary, the input attenuator setting on the measuring receiver shall be adjusted in order to increase

the sensitivity of the measuring receiver.

12. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.

13. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring received, which is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.

14. The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.

15. The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.

Final measurement calculation as below:

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

ERP/EIRP (dBm) = SA Read Value (dBm) + Correction Factor (dB)

where:
ERP/EIRP = effective or equivalent radiated power, in dBm;
SA Read Value = measured transmitter power received by EMI receiver or spectrum analyzer, in dBm;
Correction Factor = total correction factor including cable loss, in dB;

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

For example:

In the ERP test, when SA read value for GSM850 is 21dBm, and correction factor is 8dB, then final ERP value for GSM850 is:

ERP (dBm) = 21dBm + 8dB = 29dBm

5.7.4 Test Result

Please refer to ANNEX A.7.

ANNEX A TEST RESULTS

A.1 Transmitter Radiated Power (EIRP/ERP)

LTE Mode Test Data

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
5 MHz	LCH	QPSK	RB1#0	21.66	-2.1	19.56	0.090	0.200	Pass
			RB1#13	21.8	-2.1	19.70	0.093	0.200	Pass
			RB1#24	21.76	-2.1	19.66	0.092	0.200	Pass
			RB12#0	20.65	-2.1	18.55	0.072	0.200	Pass
			RB12#6	20.71	-2.1	18.61	0.073	0.200	Pass
			RB12#13	20.61	-2.1	18.51	0.071	0.200	Pass
			RB25#0	20.56	-2.1	18.46	0.070	0.200	Pass
		16-QAM	RB1#0	20.96	-2.1	18.86	0.077	0.200	Pass
			RB1#13	20.95	-2.1	18.85	0.077	0.200	Pass
			RB1#24	20.86	-2.1	18.76	0.075	0.200	Pass
			RB12#0	19.73	-2.1	17.63	0.058	0.200	Pass
			RB12#6	19.76	-2.1	17.66	0.058	0.200	Pass
			RB12#13	19.68	-2.1	17.58	0.057	0.200	Pass
			RB25#0	19.62	-2.1	17.52	0.056	0.200	Pass
		64QAM	RB1#0	19.79	-2.1	17.69	0.059	0.200	Pass
			RB1#13	19.91	-2.1	17.81	0.060	0.200	Pass
			RB1#24	19.78	-2.1	17.68	0.059	0.200	Pass
			RB12#0	18.84	-2.1	16.74	0.047	0.200	Pass
			RB12#6	18.75	-2.1	16.65	0.046	0.200	Pass
			RB12#13	18.61	-2.1	16.51	0.045	0.200	Pass
			RB25#0	18.56	-2.1	16.46	0.044	0.200	Pass
		256QAM	RB1#0	16.73	-2.1	14.63	0.029	0.200	Pass
			RB1#13	16.79	-2.1	14.69	0.029	0.200	Pass
			RB1#24	16.7	-2.1	14.60	0.029	0.200	Pass
			RB12#0	16.64	-2.1	14.54	0.028	0.200	Pass
			RB12#6	16.74	-2.1	14.64	0.029	0.200	Pass
			RB12#13	16.58	-2.1	14.48	0.028	0.200	Pass
			RB25#0	16.56	-2.1	14.46	0.028	0.200	Pass
	MCH	QPSK	RB1#0	21.31	-2.1	19.21	0.083	0.200	Pass
			RB1#13	21.44	-2.1	19.34	0.086	0.200	Pass
			RB1#24	21.42	-2.1	19.32	0.086	0.200	Pass
			RB12#0	20.36	-2.1	18.26	0.067	0.200	Pass
			RB12#6	20.4	-2.1	18.30	0.068	0.200	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
			RB12#13	20.39	-2.1	18.29	0.067	0.200	Pass
			RB25#0	20.37	-2.1	18.27	0.067	0.200	Pass
		16-QAM	RB1#0	20.58	-2.1	18.48	0.070	0.200	Pass
			RB1#13	20.77	-2.1	18.67	0.074	0.200	Pass
			RB1#24	20.58	-2.1	18.48	0.070	0.200	Pass
			RB12#0	19.41	-2.1	17.31	0.054	0.200	Pass
			RB12#6	19.37	-2.1	17.27	0.053	0.200	Pass
			RB12#13	19.39	-2.1	17.29	0.054	0.200	Pass
			RB25#0	19.35	-2.1	17.25	0.053	0.200	Pass
		64QAM	RB1#0	19.47	-2.1	17.37	0.055	0.200	Pass
			RB1#13	19.54	-2.1	17.44	0.055	0.200	Pass
			RB1#24	19.49	-2.1	17.39	0.055	0.200	Pass
			RB12#0	18.37	-2.1	16.27	0.042	0.200	Pass
			RB12#6	18.47	-2.1	16.37	0.043	0.200	Pass
			RB12#13	18.4	-2.1	16.30	0.043	0.200	Pass
			RB25#0	18.37	-2.1	16.27	0.042	0.200	Pass
		256QAM	RB1#0	16.51	-2.1	14.41	0.028	0.200	Pass
			RB1#13	16.57	-2.1	14.47	0.028	0.200	Pass
			RB1#24	16.51	-2.1	14.41	0.028	0.200	Pass
			RB12#0	16.39	-2.1	14.29	0.027	0.200	Pass
			RB12#6	16.43	-2.1	14.33	0.027	0.200	Pass
			RB12#13	16.38	-2.1	14.28	0.027	0.200	Pass
			RB25#0	16.34	-2.1	14.24	0.027	0.200	Pass
	HCH	QPSK	RB1#0	21.52	-2.1	19.42	0.087	0.200	Pass
			RB1#13	21.68	-2.1	19.58	0.091	0.200	Pass
			RB1#24	21.51	-2.1	19.41	0.087	0.200	Pass
			RB12#0	20.55	-2.1	18.45	0.070	0.200	Pass
			RB12#6	20.53	-2.1	18.43	0.070	0.200	Pass
			RB12#13	20.57	-2.1	18.47	0.070	0.200	Pass
			RB25#0	20.52	-2.1	18.42	0.070	0.200	Pass
		16-QAM	RB1#0	20.78	-2.1	18.68	0.074	0.200	Pass
			RB1#13	20.76	-2.1	18.66	0.073	0.200	Pass
			RB1#24	20.79	-2.1	18.69	0.074	0.200	Pass
			RB12#0	19.59	-2.1	17.49	0.056	0.200	Pass
			RB12#6	19.64	-2.1	17.54	0.057	0.200	Pass
			RB12#13	19.67	-2.1	17.57	0.057	0.200	Pass
			RB25#0	19.52	-2.1	17.42	0.055	0.200	Pass
		64QAM	RB1#0	19.62	-2.1	17.52	0.056	0.200	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
			RB1#13	19.79	-2.1	17.69	0.059	0.200	Pass
			RB1#24	19.78	-2.1	17.68	0.059	0.200	Pass
			RB12#0	18.6	-2.1	16.50	0.045	0.200	Pass
			RB12#6	18.58	-2.1	16.48	0.044	0.200	Pass
			RB12#13	18.59	-2.1	16.49	0.045	0.200	Pass
			RB25#0	18.49	-2.1	16.39	0.044	0.200	Pass
		256QAM	RB1#0	16.48	-2.1	14.38	0.027	0.200	Pass
			RB1#13	16.72	-2.1	14.62	0.029	0.200	Pass
			RB1#24	16.57	-2.1	14.47	0.028	0.200	Pass
			RB12#0	16.5	-2.1	14.40	0.028	0.200	Pass
			RB12#6	16.59	-2.1	14.49	0.028	0.200	Pass
			RB12#13	16.56	-2.1	14.46	0.028	0.200	Pass
			RB25#0	16.51	-2.1	14.41	0.028	0.200	Pass
10 MHz	LCH	QPSK	RB1#0	21.78	-2.1	19.68	0.093	0.200	Pass
			RB1#25	21.81	-2.1	19.71	0.094	0.200	Pass
			RB1#49	21.71	-2.1	19.61	0.091	0.200	Pass
			RB25#0	20.69	-2.1	18.59	0.072	0.200	Pass
			RB25#13	20.66	-2.1	18.56	0.072	0.200	Pass
			RB25#25	20.59	-2.1	18.49	0.071	0.200	Pass
			RB50#0	20.7	-2.1	18.60	0.072	0.200	Pass
		16-QAM	RB1#0	20.89	-2.1	18.79	0.076	0.200	Pass
			RB1#25	21.01	-2.1	18.91	0.078	0.200	Pass
			RB1#49	20.96	-2.1	18.86	0.077	0.200	Pass
			RB25#0	19.63	-2.1	17.53	0.057	0.200	Pass
			RB25#13	19.71	-2.1	17.61	0.058	0.200	Pass
			RB25#25	19.58	-2.1	17.48	0.056	0.200	Pass
			RB50#0	19.61	-2.1	17.51	0.056	0.200	Pass
		64QAM	RB1#0	19.77	-2.1	17.67	0.058	0.200	Pass
			RB1#25	19.79	-2.1	17.69	0.059	0.200	Pass
			RB1#49	19.77	-2.1	17.67	0.058	0.200	Pass
			RB25#0	18.68	-2.1	16.58	0.045	0.200	Pass
			RB25#13	18.68	-2.1	16.58	0.045	0.200	Pass
			RB25#25	18.61	-2.1	16.51	0.045	0.200	Pass
			RB50#0	18.71	-2.1	16.61	0.046	0.200	Pass
		256QAM	RB1#0	16.7	-2.1	14.60	0.029	0.200	Pass
			RB1#25	16.74	-2.1	14.64	0.029	0.200	Pass
			RB1#49	16.61	-2.1	14.51	0.028	0.200	Pass
			RB25#0	16.7	-2.1	14.60	0.029	0.200	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
			RB25#13	16.7	-2.1	14.60	0.029	0.200	Pass
			RB25#25	16.56	-2.1	14.46	0.028	0.200	Pass
			RB50#0	16.69	-2.1	14.59	0.029	0.200	Pass
	MCH	QPSK	RB1#0	21.43	-2.1	19.33	0.086	0.200	Pass
			RB1#25	21.5	-2.1	19.40	0.087	0.200	Pass
			RB1#49	21.52	-2.1	19.42	0.087	0.200	Pass
			RB25#0	20.39	-2.1	18.29	0.067	0.200	Pass
			RB25#13	20.4	-2.1	18.30	0.068	0.200	Pass
			RB25#25	20.4	-2.1	18.30	0.068	0.200	Pass
			RB50#0	20.36	-2.1	18.26	0.067	0.200	Pass
		16-QAM	RB1#0	20.56	-2.1	18.46	0.070	0.200	Pass
			RB1#25	20.7	-2.1	18.60	0.072	0.200	Pass
			RB1#49	20.62	-2.1	18.52	0.071	0.200	Pass
			RB25#0	19.41	-2.1	17.31	0.054	0.200	Pass
			RB25#13	19.45	-2.1	17.35	0.054	0.200	Pass
			RB25#25	19.41	-2.1	17.31	0.054	0.200	Pass
			RB50#0	19.42	-2.1	17.32	0.054	0.200	Pass
		64QAM	RB1#0	19.41	-2.1	17.31	0.054	0.200	Pass
			RB1#25	19.57	-2.1	17.47	0.056	0.200	Pass
			RB1#49	19.6	-2.1	17.50	0.056	0.200	Pass
			RB25#0	18.38	-2.1	16.28	0.042	0.200	Pass
			RB25#13	18.43	-2.1	16.33	0.043	0.200	Pass
			RB25#25	18.44	-2.1	16.34	0.043	0.200	Pass
			RB50#0	18.42	-2.1	16.32	0.043	0.200	Pass
		256QAM	RB1#0	16.53	-2.1	14.43	0.028	0.200	Pass
			RB1#25	16.53	-2.1	14.43	0.028	0.200	Pass
			RB1#49	16.59	-2.1	14.49	0.028	0.200	Pass
			RB25#0	16.33	-2.1	14.23	0.026	0.200	Pass
			RB25#13	16.4	-2.1	14.30	0.027	0.200	Pass
			RB25#25	16.46	-2.1	14.36	0.027	0.200	Pass
			RB50#0	16.43	-2.1	14.33	0.027	0.200	Pass
	HCH	QPSK	RB1#0	21.48	-2.1	19.38	0.087	0.200	Pass
			RB1#25	21.53	-2.1	19.43	0.088	0.200	Pass
			RB1#49	21.55	-2.1	19.45	0.088	0.200	Pass
			RB25#0	20.52	-2.1	18.42	0.070	0.200	Pass
			RB25#13	20.59	-2.1	18.49	0.071	0.200	Pass
			RB25#25	20.56	-2.1	18.46	0.070	0.200	Pass
			RB50#0	20.54	-2.1	18.44	0.070	0.200	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
		16-QAM	RB1#0	20.72	-2.1	18.62	0.073	0.200	Pass
			RB1#25	20.83	-2.1	18.73	0.075	0.200	Pass
			RB1#49	20.88	-2.1	18.78	0.076	0.200	Pass
			RB25#0	19.55	-2.1	17.45	0.056	0.200	Pass
			RB25#13	19.61	-2.1	17.51	0.056	0.200	Pass
			RB25#25	19.58	-2.1	17.48	0.056	0.200	Pass
			RB50#0	19.54	-2.1	17.44	0.055	0.200	Pass
		64QAM	RB1#0	19.7	-2.1	17.60	0.058	0.200	Pass
			RB1#25	19.76	-2.1	17.66	0.058	0.200	Pass
			RB1#49	19.62	-2.1	17.52	0.056	0.200	Pass
			RB25#0	18.5	-2.1	16.40	0.044	0.200	Pass
			RB25#13	18.56	-2.1	16.46	0.044	0.200	Pass
			RB25#25	18.56	-2.1	16.46	0.044	0.200	Pass
			RB50#0	18.58	-2.1	16.48	0.044	0.200	Pass
		256QAM	RB1#0	16.57	-2.1	14.47	0.028	0.200	Pass
			RB1#25	16.61	-2.1	14.51	0.028	0.200	Pass
			RB1#49	16.59	-2.1	14.49	0.028	0.200	Pass
			RB25#0	16.57	-2.1	14.47	0.028	0.200	Pass
			RB25#13	16.62	-2.1	14.52	0.028	0.200	Pass
			RB25#25	16.56	-2.1	14.46	0.028	0.200	Pass
			RB50#0	16.53	-2.1	14.43	0.028	0.200	Pass
15 MHz	LCH	QPSK	RB1#0	21.47	-2.1	19.37	0.086	0.200	Pass
			RB1#38	21.58	-2.1	19.48	0.089	0.200	Pass
			RB1#74	21.43	-2.1	19.33	0.086	0.200	Pass
			RB36#0	20.53	-2.1	18.43	0.070	0.200	Pass
			RB36#19	20.42	-2.1	18.32	0.068	0.200	Pass
			RB36#39	20.4	-2.1	18.30	0.068	0.200	Pass
			RB75#0	20.38	-2.1	18.28	0.067	0.200	Pass
		16-QAM	RB1#0	20.68	-2.1	18.58	0.072	0.200	Pass
			RB1#38	20.75	-2.1	18.65	0.073	0.200	Pass
			RB1#74	20.59	-2.1	18.49	0.071	0.200	Pass
			RB36#0	19.59	-2.1	17.49	0.056	0.200	Pass
			RB36#19	19.45	-2.1	17.35	0.054	0.200	Pass
			RB36#39	19.46	-2.1	17.36	0.054	0.200	Pass
			RB75#0	19.44	-2.1	17.34	0.054	0.200	Pass
		64QAM	RB1#0	19.71	-2.1	17.61	0.058	0.200	Pass
			RB1#38	19.68	-2.1	17.58	0.057	0.200	Pass
			RB1#74	19.76	-2.1	17.66	0.058	0.200	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
			RB36#0	18.56	-2.1	16.46	0.044	0.200	Pass
			RB36#19	18.51	-2.1	16.41	0.044	0.200	Pass
			RB36#39	18.38	-2.1	16.28	0.042	0.200	Pass
			RB75#0	18.43	-2.1	16.33	0.043	0.200	Pass
		256QAM	RB1#0	16.65	-2.1	14.55	0.029	0.200	Pass
			RB1#38	16.54	-2.1	14.44	0.028	0.200	Pass
			RB1#74	16.59	-2.1	14.49	0.028	0.200	Pass
			RB36#0	16.48	-2.1	14.38	0.027	0.200	Pass
			RB36#19	16.44	-2.1	14.34	0.027	0.200	Pass
			RB36#39	16.38	-2.1	14.28	0.027	0.200	Pass
			RB75#0	16.45	-2.1	14.35	0.027	0.200	Pass
	MCH	QPSK	RB1#0	21.17	-2.1	19.07	0.081	0.200	Pass
			RB1#38	21.31	-2.1	19.21	0.083	0.200	Pass
			RB1#74	21.23	-2.1	19.13	0.082	0.200	Pass
			RB36#0	20.23	-2.1	18.13	0.065	0.200	Pass
			RB36#19	20.28	-2.1	18.18	0.066	0.200	Pass
			RB36#39	20.31	-2.1	18.21	0.066	0.200	Pass
			RB75#0	20.28	-2.1	18.18	0.066	0.200	Pass
		16-QAM	RB1#0	20.43	-2.1	18.33	0.068	0.200	Pass
			RB1#38	20.52	-2.1	18.42	0.070	0.200	Pass
			RB1#74	20.46	-2.1	18.36	0.069	0.200	Pass
			RB36#0	19.25	-2.1	17.15	0.052	0.200	Pass
			RB36#19	19.33	-2.1	17.23	0.053	0.200	Pass
			RB36#39	19.3	-2.1	17.20	0.052	0.200	Pass
			RB75#0	19.28	-2.1	17.18	0.052	0.200	Pass
		64QAM	RB1#0	19.39	-2.1	17.29	0.054	0.200	Pass
			RB1#38	19.49	-2.1	17.39	0.055	0.200	Pass
			RB1#74	19.44	-2.1	17.34	0.054	0.200	Pass
			RB36#0	18.23	-2.1	16.13	0.041	0.200	Pass
			RB36#19	18.24	-2.1	16.14	0.041	0.200	Pass
			RB36#39	18.29	-2.1	16.19	0.042	0.200	Pass
			RB75#0	18.23	-2.1	16.13	0.041	0.200	Pass
		256QAM	RB1#0	16.32	-2.1	14.22	0.026	0.200	Pass
			RB1#38	16.23	-2.1	14.13	0.026	0.200	Pass
			RB1#74	16.32	-2.1	14.22	0.026	0.200	Pass
			RB36#0	16.23	-2.1	14.13	0.026	0.200	Pass
			RB36#19	16.27	-2.1	14.17	0.026	0.200	Pass
			RB36#39	16.26	-2.1	14.16	0.026	0.200	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
			RB75#0	16.24	-2.1	14.14	0.026	0.200	Pass
	HCH	QPSK	RB1#0	21.32	-2.1	19.22	0.084	0.200	Pass
			RB1#38	21.43	-2.1	19.33	0.086	0.200	Pass
			RB1#74	21.41	-2.1	19.31	0.085	0.200	Pass
			RB36#0	20.37	-2.1	18.27	0.067	0.200	Pass
			RB36#19	20.37	-2.1	18.27	0.067	0.200	Pass
			RB36#39	20.42	-2.1	18.32	0.068	0.200	Pass
			RB75#0	20.43	-2.1	18.33	0.068	0.200	Pass
		16-QAM	RB1#0	20.59	-2.1	18.49	0.071	0.200	Pass
			RB1#38	20.7	-2.1	18.60	0.072	0.200	Pass
			RB1#74	20.69	-2.1	18.59	0.072	0.200	Pass
			RB36#0	19.44	-2.1	17.34	0.054	0.200	Pass
			RB36#19	19.49	-2.1	17.39	0.055	0.200	Pass
			RB36#39	19.42	-2.1	17.32	0.054	0.200	Pass
			RB75#0	19.43	-2.1	17.33	0.054	0.200	Pass
		64QAM	RB1#0	19.45	-2.1	17.35	0.054	0.200	Pass
			RB1#38	19.71	-2.1	17.61	0.058	0.200	Pass
			RB1#74	19.55	-2.1	17.45	0.056	0.200	Pass
			RB36#0	18.43	-2.1	16.33	0.043	0.200	Pass
			RB36#19	18.42	-2.1	16.32	0.043	0.200	Pass
			RB36#39	18.49	-2.1	16.39	0.044	0.200	Pass
			RB75#0	18.46	-2.1	16.36	0.043	0.200	Pass
		256QAM	RB1#0	16.4	-2.1	14.30	0.027	0.200	Pass
			RB1#38	16.46	-2.1	14.36	0.027	0.200	Pass
			RB1#74	16.75	-2.1	14.65	0.029	0.200	Pass
			RB36#0	16.41	-2.1	14.31	0.027	0.200	Pass
			RB36#19	16.41	-2.1	14.31	0.027	0.200	Pass
			RB36#39	16.44	-2.1	14.34	0.027	0.200	Pass
			RB75#0	16.42	-2.1	14.32	0.027	0.200	Pass
20 MHz	LCH	QPSK	RB1#0	21.52	-2.1	19.42	0.087	0.200	Pass
			RB1#50	21.49	-2.1	19.39	0.087	0.200	Pass
			RB1#99	21.4	-2.1	19.30	0.085	0.200	Pass
			RB50#0	20.52	-2.1	18.42	0.070	0.200	Pass
			RB50#25	20.42	-2.1	18.32	0.068	0.200	Pass
			RB50#50	20.4	-2.1	18.30	0.068	0.200	Pass
			RB100#0	20.35	-2.1	18.25	0.067	0.200	Pass
		16-QAM	RB1#0	20.66	-2.1	18.56	0.072	0.200	Pass
			RB1#50	20.73	-2.1	18.63	0.073	0.200	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
			RB1#99	20.58	-2.1	18.48	0.070	0.200	Pass
			RB50#0	19.53	-2.1	17.43	0.055	0.200	Pass
			RB50#25	19.37	-2.1	17.27	0.053	0.200	Pass
			RB50#50	19.38	-2.1	17.28	0.053	0.200	Pass
			RB100#0	19.41	-2.1	17.31	0.054	0.200	Pass
		64QAM	RB1#0	19.63	-2.1	17.53	0.057	0.200	Pass
			RB1#50	19.73	-2.1	17.63	0.058	0.200	Pass
			RB1#99	19.51	-2.1	17.41	0.055	0.200	Pass
			RB50#0	18.5	-2.1	16.40	0.044	0.200	Pass
			RB50#25	18.43	-2.1	16.33	0.043	0.200	Pass
			RB50#50	18.37	-2.1	16.27	0.042	0.200	Pass
			RB100#0	18.38	-2.1	16.28	0.042	0.200	Pass
		256QAM	RB1#0	16.66	-2.1	14.56	0.029	0.200	Pass
			RB1#50	16.62	-2.1	14.52	0.028	0.200	Pass
			RB1#99	16.46	-2.1	14.36	0.027	0.200	Pass
			RB50#0	16.47	-2.1	14.37	0.027	0.200	Pass
			RB50#25	16.44	-2.1	14.34	0.027	0.200	Pass
			RB50#50	16.4	-2.1	14.30	0.027	0.200	Pass
			RB100#0	16.42	-2.1	14.32	0.027	0.200	Pass
	MCH	QPSK	RB1#0	21.22	-2.1	19.12	0.082	0.200	Pass
			RB1#50	21.32	-2.1	19.22	0.084	0.200	Pass
			RB1#99	21.28	-2.1	19.18	0.083	0.200	Pass
			RB50#0	20.24	-2.1	18.14	0.065	0.200	Pass
			RB50#25	20.3	-2.1	18.20	0.066	0.200	Pass
			RB50#50	20.34	-2.1	18.24	0.067	0.200	Pass
			RB100#0	20.27	-2.1	18.17	0.066	0.200	Pass
		16-QAM	RB1#0	20.53	-2.1	18.43	0.070	0.200	Pass
			RB1#50	20.65	-2.1	18.55	0.072	0.200	Pass
			RB1#99	20.37	-2.1	18.27	0.067	0.200	Pass
			RB50#0	19.27	-2.1	17.17	0.052	0.200	Pass
			RB50#25	19.32	-2.1	17.22	0.053	0.200	Pass
			RB50#50	19.32	-2.1	17.22	0.053	0.200	Pass
			RB100#0	19.26	-2.1	17.16	0.052	0.200	Pass
		64QAM	RB1#0	19.4	-2.1	17.30	0.054	0.200	Pass
			RB1#50	19.51	-2.1	17.41	0.055	0.200	Pass
			RB1#99	19.45	-2.1	17.35	0.054	0.200	Pass
			RB50#0	18.25	-2.1	16.15	0.041	0.200	Pass
			RB50#25	18.26	-2.1	16.16	0.041	0.200	Pass

Test BW	Test Channel	Test Mode	Test RB (Size#Offset)	Conducted Output AV Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP (W)	Limit (W)	Verdict
LTE BAND48									
			RB50#50	18.34	-2.1	16.24	0.042	0.200	Pass
			RB100#0	18.28	-2.1	16.18	0.041	0.200	Pass
		256QAM	RB1#0	16.56	-2.1	14.46	0.028	0.200	Pass
			RB1#50	16.46	-2.1	14.36	0.027	0.200	Pass
			RB1#99	16.51	-2.1	14.41	0.028	0.200	Pass
			RB50#0	16.23	-2.1	14.13	0.026	0.200	Pass
			RB50#25	16.3	-2.1	14.20	0.026	0.200	Pass
			RB50#50	16.3	-2.1	14.20	0.026	0.200	Pass
			RB100#0	16.23	-2.1	14.13	0.026	0.200	Pass
	HCH	QPSK	RB1#0	21.39	-2.1	19.29	0.085	0.200	Pass
			RB1#50	21.5	-2.1	19.40	0.087	0.200	Pass
			RB1#99	21.39	-2.1	19.29	0.085	0.200	Pass
			RB50#0	20.42	-2.1	18.32	0.068	0.200	Pass
			RB50#25	20.48	-2.1	18.38	0.069	0.200	Pass
			RB50#50	20.46	-2.1	18.36	0.069	0.200	Pass
			RB100#0	20.43	-2.1	18.33	0.068	0.200	Pass
		16-QAM	RB1#0	20.53	-2.1	18.43	0.070	0.200	Pass
			RB1#50	20.58	-2.1	18.48	0.070	0.200	Pass
			RB1#99	20.71	-2.1	18.61	0.073	0.200	Pass
			RB50#0	19.39	-2.1	17.29	0.054	0.200	Pass
			RB50#25	19.48	-2.1	17.38	0.055	0.200	Pass
			RB50#50	19.48	-2.1	17.38	0.055	0.200	Pass
			RB100#0	19.45	-2.1	17.35	0.054	0.200	Pass
		64QAM	RB1#0	19.6	-2.1	17.50	0.056	0.200	Pass
			RB1#50	19.67	-2.1	17.57	0.057	0.200	Pass
			RB1#99	19.61	-2.1	17.51	0.056	0.200	Pass
			RB50#0	18.4	-2.1	16.30	0.043	0.200	Pass
			RB50#25	18.42	-2.1	16.32	0.043	0.200	Pass
			RB50#50	18.43	-2.1	16.33	0.043	0.200	Pass
			RB100#0	18.46	-2.1	16.36	0.043	0.200	Pass
		256QAM	RB1#0	16.44	-2.1	14.34	0.027	0.200	Pass
			RB1#50	16.39	-2.1	14.29	0.027	0.200	Pass
			RB1#99	16.53	-2.1	14.43	0.028	0.200	Pass
			RB50#0	16.43	-2.1	14.33	0.027	0.200	Pass
			RB50#25	16.46	-2.1	14.36	0.027	0.200	Pass
			RB50#50	16.47	-2.1	14.37	0.027	0.200	Pass
			RB100#0	16.43	-2.1	14.33	0.027	0.200	Pass

Modulation	PCC RB		SCC RB		Conducted Output AV Power (dBm)			Antenna Gain (dBi)	EIRP (W)			Limit (W)
	Size	Offset	Size	Offset	LCH	MCH	HCH		LCH	MCH	HCH	
CA_48C												
5MHz+20MHz												
QPSK	1	24	1	0	21.01	21.05	21.06	-2.1	0.078	0.079	0.079	0.200
	25	0	100	0	19.85	19.94	20.17	-2.1	0.060	0.061	0.064	0.200
16-QAM	1	24	1	0	21.08	21.21	21.32	-2.1	0.079	0.081	0.084	0.200
	25	0	100	0	19.07	19.13	19.18	-2.1	0.050	0.050	0.051	0.200
20MHz+5MHz												
QPSK	1	0	0	0	21.43	21.46	21.4	-2.1	0.086	0.086	0.085	0.200
	50	0	0	0	19.42	19.37	19.32	-2.1	0.054	0.053	0.053	0.200
	100	0	0	0	19.44	19.4	19.31	-2.1	0.054	0.054	0.053	0.200
	1	99	1	0	21.17	21.11	21	-2.1	0.081	0.080	0.078	0.200
	100	0	25	0	20.2	20.08	19.98	-2.1	0.065	0.063	0.061	0.200
16-QAM	1	0	0	0	20.73	20.82	20.96	-2.1	0.073	0.074	0.077	0.200
	50	0	0	0	18.35	18.3	18.31	-2.1	0.042	0.042	0.042	0.200
	100	0	0	0	18.46	18.39	18.33	-2.1	0.043	0.043	0.042	0.200
	1	99	1	0	21.18	21.21	21.26	-2.1	0.081	0.081	0.082	0.200
	100	0	25	0	18.96	19.94	18.96	-2.1	0.049	0.061	0.049	0.200
10MHz+20MHz												
QPSK	1	49	1	0	21.09	21.14	21.18	-2.1	0.079	0.080	0.081	0.200
	50	0	100	0	19.85	19.97	20.03	-2.1	0.060	0.061	0.062	0.200
16-QAM	1	49	1	0	21.92	21.78	21.62	-2.1	0.096	0.093	0.090	0.200
	50	0	100	0	18.94	19.05	19.14	-2.1	0.048	0.050	0.051	0.200
20MHz+10MHz												
QPSK	1	99	1	0	21.33	21.37	21.4	-2.1	0.084	0.085	0.085	0.200
	100	0	50	0	20.28	20.31	20.26	-2.1	0.066	0.066	0.065	0.200
16-QAM	1	99	1	0	21.05	21.09	21.13	-2.1	0.079	0.079	0.080	0.200
	100	0	50	0	18.94	19.03	19.11	-2.1	0.048	0.049	0.050	0.200
15MHz+20MHz												
QPSK	1	74	1	0	20.92	21.03	21.11	-2.1	0.076	0.078	0.080	0.200
	75	0	100	0	20.18	20.11	20.03	-2.1	0.064	0.063	0.062	0.200
16-QAM	1	74	1	0	20.87	20.9	20.95	-2.1	0.075	0.076	0.077	0.200
	75	0	100	0	18.92	19.06	19.23	-2.1	0.048	0.050	0.052	0.200
20MHz+15MHz												
QPSK	1	99	1	0	21.17	21.21	21.29	-2.1	0.081	0.081	0.083	0.200
	100	0	75	0	20.24	20.21	20.18	-2.1	0.065	0.065	0.064	0.200
16-QAM	1	99	1	0	21.62	21.65	21.69	-2.1	0.090	0.090	0.091	0.200
	100	0	75	0	19.93	20.03	20.16	-2.1	0.061	0.062	0.064	0.200
20MHz+20MHz												
QPSK	1	0	0	0	21.29	21.31	21.34	-2.1	0.083	0.083	0.084	0.200

Modulation	PCC RB		SCC RB		Conducted Output AV Power (dBm)			Antenna Gain (dBi)	EIRP (W)			Limit (W)
	Size	Offset	Size	Offset	LCH	MCH	HCH		LCH	MCH	HCH	
CA_48C												
	50	0	0	0	20.36	20.38	20.41	-2.1	0.067	0.067	0.068	0.200
	100	0	0	0	20.35	20.33	20.31	-2.1	0.067	0.067	0.066	0.200
	1	99	1	0	20.95	21.1	21.27	-2.1	0.077	0.079	0.083	0.200
	100	0	100	0	19.93	20.09	20.21	-2.1	0.061	0.063	0.065	0.200
16-QAM	1	0	0	0	20.96	20.77	20.68	-2.1	0.077	0.074	0.072	0.200
	50	0	0	0	19.53	19.48	19.44	-2.1	0.055	0.055	0.054	0.200
	100	0	0	0	19.45	19.4	19.39	-2.1	0.054	0.054	0.054	0.200
	1	99	1	0	21.61	21.79	21.94	-2.1	0.089	0.093	0.096	0.200
	100	0	100	0	18.98	19.01	19.06	-2.1	0.049	0.049	0.050	0.200

NR Mode Test Data

Test BW	Test Channel	Test Mode	UL RB Number	UL RB Position	Conducted Output AV Power(dBm)	EIRP (W)	Limit (W)	Verdict
NR Band n48								
10	LCH	PI/2 BPSK	12	6	21.37	0.085	0.200	Pass
			1	1	21.34	0.084	0.200	Pass
			1	22	21.33	0.084	0.200	Pass
		QPSK	12	6	21.37	0.085	0.200	Pass
			1	1	21.35	0.084	0.200	Pass
			1	22	21.32	0.084	0.200	Pass
		16QAM	12	6	21.03	0.078	0.200	Pass
			1	1	21.05	0.079	0.200	Pass
			1	22	21.09	0.079	0.200	Pass
		64QAM	12	6	19.49	0.055	0.200	Pass
			1	1	19.44	0.054	0.200	Pass
			1	22	19.42	0.054	0.200	Pass
		256QAM	12	6	17.38	0.034	0.200	Pass
			1	1	17.23	0.033	0.200	Pass
			1	22	17.28	0.033	0.200	Pass
	MCH	PI/2 BPSK	12	6	22.17	0.102	0.200	Pass
			1	1	22.11	0.100	0.200	Pass
			1	22	22.21	0.103	0.200	Pass
		QPSK	12	6	22.15	0.101	0.200	Pass
			1	1	22.14	0.101	0.200	Pass
			1	22	22.22	0.103	0.200	Pass
		16QAM	12	6	21.84	0.094	0.200	Pass
			1	1	21.82	0.094	0.200	Pass
			1	22	21.94	0.096	0.200	Pass
		64QAM	12	6	20.27	0.066	0.200	Pass
			1	1	20.2	0.065	0.200	Pass
			1	22	20.32	0.066	0.200	Pass
		256QAM	12	6	18.16	0.040	0.200	Pass
			1	1	17.98	0.039	0.200	Pass
			1	22	18.14	0.040	0.200	Pass
	HCH	PI/2 BPSK	12	6	22.71	0.115	0.200	Pass
			1	1	22.66	0.114	0.200	Pass
			1	22	22.67	0.114	0.200	Pass
		QPSK	12	6	22.74	0.116	0.200	Pass
			1	1	22.73	0.116	0.200	Pass
			1	22	22.72	0.115	0.200	Pass
		16QAM	12	6	22.4	0.107	0.200	Pass
			1	1	22.34	0.106	0.200	Pass

			1	22	22.37	0.106	0.200	Pass
		64QAM	12	6	20.8	0.074	0.200	Pass
			1	1	20.84	0.075	0.200	Pass
			1	22	20.76	0.073	0.200	Pass
		256QAM	12	6	18.7	0.046	0.200	Pass
			1	1	18.62	0.045	0.200	Pass
			1	22	18.64	0.045	0.200	Pass
20	LCH	PI/2 BPSK	25	12	22.33	0.105	0.200	Pass
			1	1	18.85	0.047	0.200	Pass
			1	49	22.26	0.104	0.200	Pass
		QPSK	25	12	22.33	0.105	0.200	Pass
			1	1	18.82	0.047	0.200	Pass
			1	49	22.27	0.104	0.200	Pass
		16QAM	25	12	22.01	0.098	0.200	Pass
			1	1	17.79	0.037	0.200	Pass
			1	49	21.83	0.094	0.200	Pass
		64QAM	25	12	20.41	0.068	0.200	Pass
			1	1	17.85	0.038	0.200	Pass
			1	49	20.53	0.070	0.200	Pass
		256QAM	25	12	18.42	0.043	0.200	Pass
			1	1	18.35	0.042	0.200	Pass
			1	49	18.38	0.042	0.200	Pass
	MCH	PI/2 BPSK	25	12	22.41	0.107	0.200	Pass
			1	1	22.38	0.107	0.200	Pass
			1	49	22.35	0.106	0.200	Pass
		QPSK	25	12	22.44	0.108	0.200	Pass
			1	1	22.37	0.106	0.200	Pass
			1	49	22.33	0.105	0.200	Pass
		16QAM	25	12	22.07	0.099	0.200	Pass
			1	1	21.98	0.097	0.200	Pass
			1	49	21.94	0.096	0.200	Pass
		64QAM	25	12	20.52	0.070	0.200	Pass
			1	1	20.57	0.070	0.200	Pass
			1	49	20.51	0.069	0.200	Pass
		256QAM	25	12	18.51	0.044	0.200	Pass
			1	1	18.54	0.044	0.200	Pass
			1	49	18.45	0.043	0.200	Pass
	HCH	PI/2 BPSK	25	12	22.61	0.112	0.200	Pass
			1	1	22.63	0.113	0.200	Pass
			1	49	19.09	0.050	0.200	Pass
		QPSK	25	12	22.6	0.112	0.200	Pass
			1	1	22.61	0.112	0.200	Pass
			1	49	19.09	0.050	0.200	Pass

		16QAM	25	12	22.26	0.104	0.200	Pass
			1	1	22.16	0.101	0.200	Pass
			1	49	18.05	0.039	0.200	Pass
		64QAM	25	12	20.7	0.072	0.200	Pass
			1	1	20.8	0.074	0.200	Pass
			1	49	18.08	0.040	0.200	Pass
		256QAM	25	12	18.67	0.045	0.200	Pass
			1	1	18.72	0.046	0.200	Pass
			1	49	18.63	0.045	0.200	Pass
30	LCH	PI/2 BPSK	36	18	12.47	0.011	0.200	Pass
			1	1	12.61	0.011	0.200	Pass
			1	76	12.38	0.011	0.200	Pass
		QPSK	36	18	12.54	0.011	0.200	Pass
			1	1	12.51	0.011	0.200	Pass
			1	76	12.37	0.011	0.200	Pass
		16QAM	36	18	12.02	0.010	0.200	Pass
			1	1	12.02	0.010	0.200	Pass
			1	76	11.89	0.010	0.200	Pass
		64QAM	36	18	12.03	0.010	0.200	Pass
			1	1	12.05	0.010	0.200	Pass
			1	76	11.89	0.010	0.200	Pass
		256QAM	36	18	12.08	0.010	0.200	Pass
			1	1	12.08	0.010	0.200	Pass
			1	76	11.92	0.010	0.200	Pass
	MCH	PI/2 BPSK	36	18	22.48	0.109	0.200	Pass
			1	1	19.06	0.050	0.200	Pass
			1	76	22.41	0.107	0.200	Pass
		QPSK	36	18	22.5	0.110	0.200	Pass
			1	1	19.04	0.049	0.200	Pass
			1	76	22.34	0.106	0.200	Pass
		16QAM	36	18	22.1	0.100	0.200	Pass
			1	1	19.05	0.050	0.200	Pass
			1	76	21.9	0.095	0.200	Pass
		64QAM	36	18	20.58	0.070	0.200	Pass
			1	1	19.13	0.050	0.200	Pass
			1	76	20.54	0.070	0.200	Pass
		256QAM	36	18	18.61	0.045	0.200	Pass
			1	1	18.64	0.045	0.200	Pass
			1	76	18.51	0.044	0.200	Pass
	HCH	PI/2 BPSK	36	18	18.84	0.047	0.200	Pass
			1	1	12.69	0.011	0.200	Pass
			1	76	18.71	0.046	0.200	Pass
		QPSK	36	18	18.84	0.047	0.200	Pass

			1	1	12.72	0.012	0.200	Pass
			1	76	18.64	0.045	0.200	Pass
		16QAM	36	18	18.84	0.047	0.200	Pass
			1	1	12.16	0.010	0.200	Pass
			1	76	18.59	0.045	0.200	Pass
		64QAM	36	18	18.76	0.046	0.200	Pass
			1	1	12.31	0.010	0.200	Pass
			1	76	18.74	0.046	0.200	Pass
		256QAM	36	18	18.8	0.047	0.200	Pass
			1	1	12.24	0.010	0.200	Pass
			1	76	12.06	0.010	0.200	Pass
40	LCH	PI/2 BPSK	50	25	12.65	0.011	0.200	Pass
			1	1	12.57	0.011	0.200	Pass
			1	104	12.67	0.011	0.200	Pass
		QPSK	50	25	12.64	0.011	0.200	Pass
			1	1	12.58	0.011	0.200	Pass
			1	104	12.63	0.011	0.200	Pass
		16QAM	50	25	12.14	0.010	0.200	Pass
			1	1	12.11	0.010	0.200	Pass
			1	104	12.17	0.010	0.200	Pass
		64QAM	50	25	12.12	0.010	0.200	Pass
			1	1	12.1	0.010	0.200	Pass
			1	104	12.19	0.010	0.200	Pass
		256QAM	50	25	12.18	0.010	0.200	Pass
			1	1	12.17	0.010	0.200	Pass
			1	104	12.2	0.010	0.200	Pass
	MCH	PI/2 BPSK	50	25	22.51	0.110	0.200	Pass
			1	1	19.03	0.049	0.200	Pass
			1	104	19.08	0.050	0.200	Pass
		QPSK	50	25	22.49	0.109	0.200	Pass
			1	1	19.03	0.049	0.200	Pass
			1	104	19.05	0.050	0.200	Pass
		16QAM	50	25	22.12	0.100	0.200	Pass
			1	1	19.02	0.049	0.200	Pass
			1	104	19.01	0.049	0.200	Pass
		64QAM	50	25	20.62	0.071	0.200	Pass
			1	1	19.14	0.051	0.200	Pass
			1	104	19.13	0.050	0.200	Pass
		256QAM	50	25	18.65	0.045	0.200	Pass
			1	1	18.62	0.045	0.200	Pass
			1	104	18.63	0.045	0.200	Pass
	HCH	PI/2 BPSK	50	25	12.6	0.011	0.200	Pass
			1	1	12.63	0.011	0.200	Pass

			1	104	12.55	0.011	0.200	Pass
		QPSK	50	25	12.61	0.011	0.200	Pass
			1	1	12.53	0.011	0.200	Pass
			1	104	12.58	0.011	0.200	Pass
		16QAM	50	25	12.09	0.010	0.200	Pass
			1	1	12.04	0.010	0.200	Pass
			1	104	12.09	0.010	0.200	Pass
		64QAM	50	25	12.05	0.010	0.200	Pass
			1	1	12.04	0.010	0.200	Pass
			1	104	12.07	0.010	0.200	Pass
		256QAM	50	25	12.13	0.010	0.200	Pass
			1	1	12.05	0.010	0.200	Pass
			1	104	12.13	0.010	0.200	Pass

A.2 Peak to Average Ratio

Note: The Peak to Average Ratio please refer to the Report No. I22Z60940-WMD01, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 27, 2022, ANNEX A.8 PEAK-TO-AVERAGE POWER RATIO, Report No. I22Z60940-WMD02, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 29, 2022, ANNEX A.8 PEAK-TO-AVERAGE POWER RATIO.

A.3 Occupied Bandwidth

Note: The Occupied Bandwidth please refer to the Report No. I22Z60940-WMD01, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 27, 2022, ANNEX A.4 OCCUPIED BANDWIDTH, Report No. I22Z60940-WMD02, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 29, 2022, ANNEX A.4 OCCUPIED BANDWIDTH.

A.4 Frequency Stability

Note: The Frequency Stability please refer to the Report No. I22Z60940-WMD01, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 27, 2022, ANNEX A.3 FREQUENCY STABILITY, Report No. I22Z60940-WMD02, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 29, 2022, ANNEX A.3 FREQUENCY STABILITY.

A.5 Spurious Emission at Antenna Terminals

Note: The Spurious Emission at Antenna Terminals please refer to the Report No. I22Z60940-WMD01, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 27, 2022, ANNEX A.7 CONDUCTED SPURIOUS EMISSION, Report No. I22Z60940-WMD02, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 29, 2022, ANNEX A.7 CONDUCTED SPURIOUS EMISSION.

A.6 Band Edge

Note: The Band Edge please refer to the Report No. I22Z60940-WMD01, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 27, 2022, ANNEX A.6 BAND EDGE COMPLIANCE, Report No. I22Z60940-WMD02, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 29, 2022, ANNEX A.6 BAND EDGE COMPLIANCE.

A.7 Field Strength of Spurious Radiation

Note: The Field Strength of Spurious Radiation please refer to the Report No. I22Z60940-WMD01, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 27, 2022, ANNEX A.7 CONDUCTED SPURIOUS EMISSION, Report No. I22Z60940-WMD02, which issued by CTTL-Telecommunication Technology Labs, CAICT. On Jul. 29, 2022, ANNEX A.7 CONDUCTED SPURIOUS EMISSION.

ANNEX B TEST SETUP PHOTOS

Please refer to the document “BL-SZ25C1299-AR.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer to the document “BL-SZ25C1299-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer to the document “BL-SZ25C1299-AI.PDF”.

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