TEST REPORT

Applicant:	BLU Products,Inc.
Address:	8600 NW 36th Street, Suite #300 | Miami, FL 33166
Equipment Type:	Hotspot
Model Name:	M100
Brand Name:	BLU
FCC ID:	YHLBLUM100
Test Standard:	47 CFR Part 2 (Others refer to chapter 3.1)
Sample Arrival Date:	May 21,2025
Test Date:	May 23, 2025 - Jul. 17, 2025
Date of Issue:	Jul. 21, 2025

ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

Prepared by: Yan Jun	**Reviewed by:** Zhu Feng	**Approved by:** Chen Zidong (Technical Director)
Yan Jun	Zhu Feng	Chen Zidong

Revision History

Version	Issue Date	Revisions Content
Rev. 01	Jul.1, 2025	Initial Issue

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory.The designation number is CN1352

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	BLU Products,Inc.
Address	8600 NW 36th Street, Suite #300 | Miami, FL 33166

2.2 Manufacturer Information

Manufacturer	BLU Products,Inc.
Address	8600 NW 36th Street, Suite #300 | Miami, FL 33166

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	Hotspot
Model Name Under Test	M100
Series Model Name	N/A
Description of Model name differentiation	N/A
Sample No	SC-SH2550058-S27/SC-SH2550058-S31
Hardware Version	V1.0
Software Version	BLU_M100_V15.0.03.05.03.03_FSec
Dimensions (Approx.)	L:119mm*W:89mm*H:15mm*
Weight (Approx.)	N/A

2.5 Technical Information

All Network and Wireless connectivity for EUT	4G Network LTE FDD Band:B2/4/5/7/12/13/66 LTETDD Band:48 LTE CA Uplink(UL): CA_2A-4A,CA_2A-5A,CA_2A-13A,CA_2A-66A,CA_4A-5A,CA_4A-13A,CA_5A-66A ,CA_13A-66A 5G Network NSA(EN-DC): n2:DC_13A_n2A/DC_5A_n2A/DC_66A_n2A/DC_48A_n2A n5:DC_2A_n5A/DC_66A_5A/DC_48A_n5A n66:DC_13A_n66A/DC_2A_n66A/DC_5A_n66A/DC_48A_n66A n77:DC_13A_n77A/DC_2A_n77A/DC_5A_n77A/DC_66A_n77A 2.4G WIFI 802.11b, 802.11g, 802.11n HT20 5G WIFI 802.11a, 802.11n(HT20/40), 802.11ac(VHT20/40/80)
About the Product	The equipment is Hotspot, intended for used with information technology equipment.

The requirement for the following technical information of the EUT was tested in this report:

Operating Bands	4G Network TDD-LTE: B48 5G Network ENDC: DC_48A_n2A DC_48A_n5A DC_48A_n66A	
Modulation Type	LTE	UL: QPSK/16QAM/64QAM/256QAM DL: QPSK/16QAM/64QAM/256QAM
	NR	CP-OFDM: QPSK/16QAM/64QAM/256QAM
		DFT-s-OFDM:PI/2BPSK/QPSK/16QAM/64QAM/256QAM
Antenna Type	Monopole Antenna	
Antenna Gain	TDD LTE Band 48: 0.5 dBi(ANT4) FDD NR Band n2: 1.1 dBi(ANT 1) 0.9dBi(ANT 5) FDD NR Band n5: 1.3 dBi(ANT 1) FDD NR Band n66: 1.0 dBi(ANT 1) 0.8dBi(ANT 5)	
The Max RF Output Power (EIRP/ERP)	TDD Band 48: 23.30 dBm DC_48A_n2A: 24.16 dBm DC_48A_n5A: 24.58 dBm DC_48A_n66A: 24.17 dBm	
SCS and Channel	n2_SCS 15kHz: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz, 30 MHz, 40 MHz n5_SCS 15kHz: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 25 MHz	

Bandwidths		n66_SCS 15kHz: 5 MHz, 10 MHz, 15 MHz, 20 MHz, 30MHz, 40MHz	
Band	Power Class	Tx Frequency Range	Rx Frequency Range
LTE B48	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: All ENDC bands support Power Class 3 only.
Note3: These frequency ranges are only applicable in the United States.

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

3.3 Decision Rule

☐ No Need

☑ Use General conformity decision rule (Consider uncertainty or not ☑ No ☐ Yes)

☐ Use Special Conformity Decision Rule (Consider uncertainty or not ☐ No ☐ Yes)

4 GENERAL TEST CONFIGURATIONS

4.1 Test Environments

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

Relative Humidity		25% to 75%
Test Voltage of the EUT	NV (Normal Voltage)	3.87V
	LV (Low Voltage)	3.5V
	HV (High Voltage)	4.5V
Test Temperature of the EUT	NT (Normal Temperature)	15 °C to 35 °C
	LT (Low Temperature)	-10 °C
	HT (High Temperature)	+45 °C

4.2 Test Equipment List

Description	Manufacturer	Model	Equipment No.	Software /Firmware Version	Cal. Date	Cal. Due
BL410 2G/3G/4G/5G RF Test System						
Wideband Radio Communication Tester	R&S	CMW 500	BH-EMC-L064	V3.7.60	2025/2/12	2026/2/12
PSA Spectrum Analyzer	Agilent	E4440A	TJEMC013	A.11.07	2025/4/6	2026/4/6
Signal Generator	Keysight	N5173B	BH-EMC-L074	B.01.90	2025/2/12	2026/2/12
DC Power Supply	ITECH	IT6863A	BH-EMC-L113	N/A	2025/2/12	2026/2/12
Filter unit	BALUN	SU319F	BH-EMC-L077	N/A	N/A	N/A
Filter unit	BALUN	SU319F	BH-EMC-L078	N/A	N/A	N/A
Filter unit	BALUN	SU319F	BH-EMC-L122	N/A	N/A	N/A
Switch unit	BALUN	SU319	BH-EMC-L076	N/A	N/A	N/A
Wireless Communication Comprehensive Tester	Starpoint	SP9500-CTS	BH-EMC-L093	NA	2025/2/12	2026/2/12
Test Software	BALUN	BL410R	NA	V3.0.1.539	N/A	N/A
Radiated Test System						

Test Antenna-Bi-Log	SCHWARZBECK	VULB 9163	BH-EMC-L008	NA	2024/3/11	2027/3/10
Test Antenna-Horn	Schwarzbeck	BBHA 9120D	BH-EMC-L044	NA	2024/3/11	2027/3/10
Anechoic Chamber	YIHENG	9m*6m*6m	BH-EMC-L001	NA	2024/4/14	2027/4/13
EMI Receiver	KEYSIGHT	N9038A	BH-EMC-L127	NA	2025/2/12	2026/2/11
Wideband Radio Communication Tester	R&S	CMW 500	BH-EMC-L094	V3.7.172	2025/2/12	2026/2/11
Radio Communication Analyzer	Anritsu	MT8000A	TJOTA080	N/A	2025/4/23	2026/4/23
Test Software	BALUN	BL410-E	NA	V21.919	N/A	N/A

4.3 Test Configurations

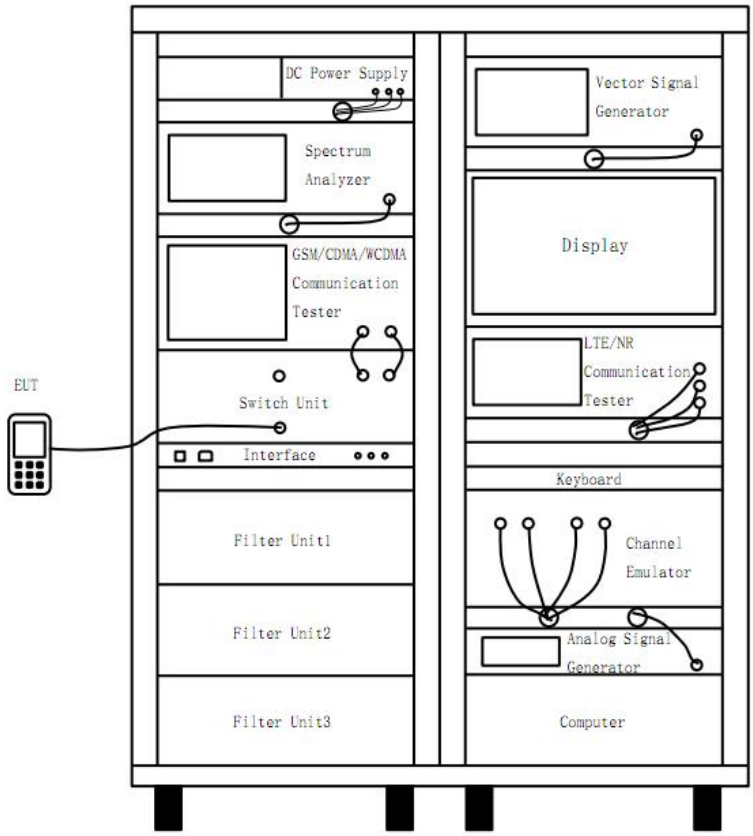
LTE Band	Bandwidth (MHz)						Modulation Type				RB #	Test Channel				
	1.4	3	5	10	15	20	QPSK	16-QAM	64-QAM	256-QAM	1	Half	Full	LCH	MCH	HCH
Effective (Isotropic) Radiated Power																
48	n	n	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak to Average Ratio																
48	n	n	--	v	--	--	v	v	--	--	v	--	v	v	v	v
Occupied Bandwidth																
48	n	n	v	v	v	v	v	v	v	v	--	--	v	v	v	v
Frequency Stability																
48	n	n	--	v	--	--	v	v	--	--	--	--	v	--	v	--
Spurious Emission at Antenna Terminals																
48	n	n	v	v	v	v	v	v	--	--	v	--	--	v	v	v
Band Edge																
48	n	n	v	v	v	v	v	v	--	--	v	--	v	v	--	v
Field Strength of Spurious Radiation																
48	Worst case															
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

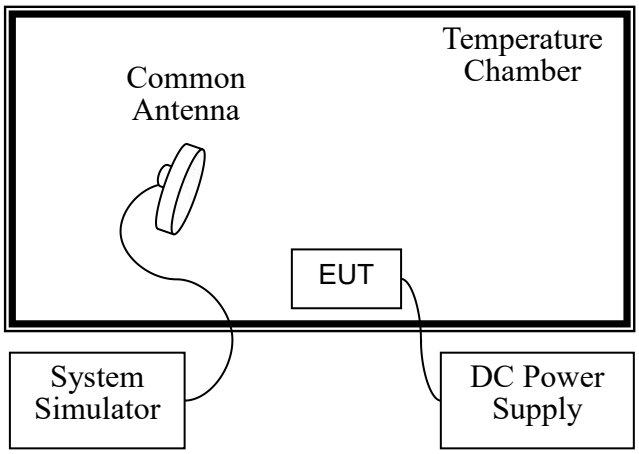
4.4 Test Setup

4.4.1 For Antenna Port Test



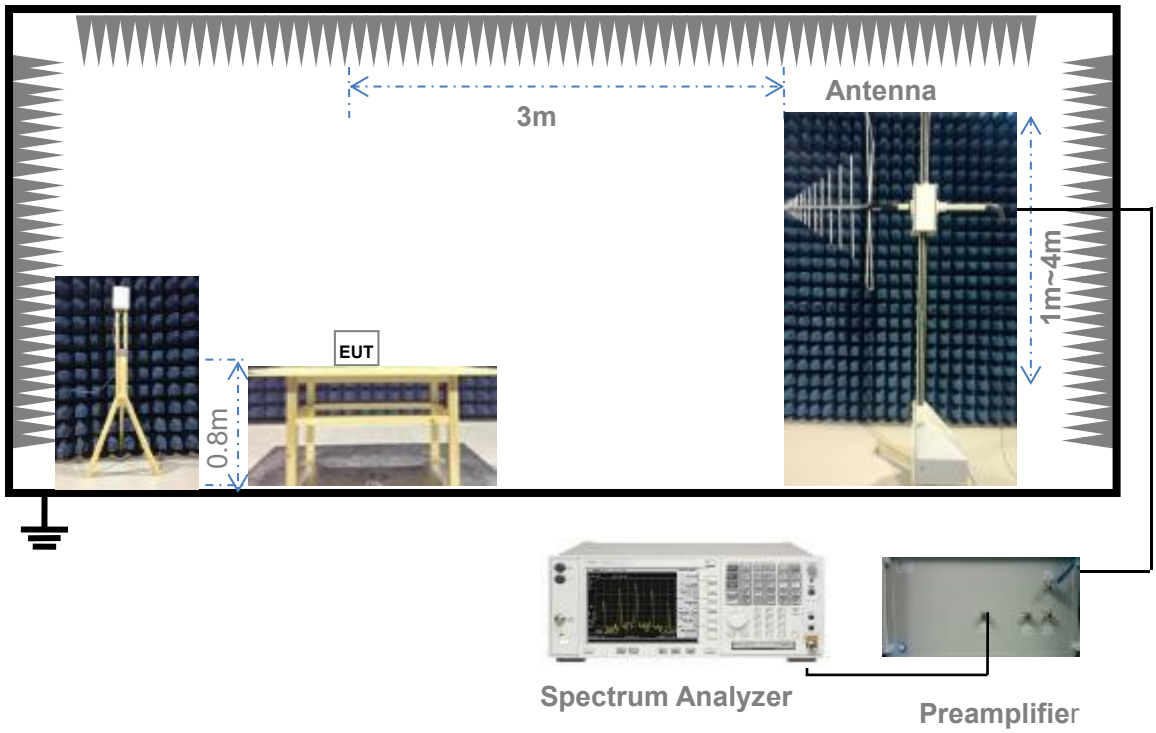
(Diagram 1)

4.4.2 For Frequency Stability Test



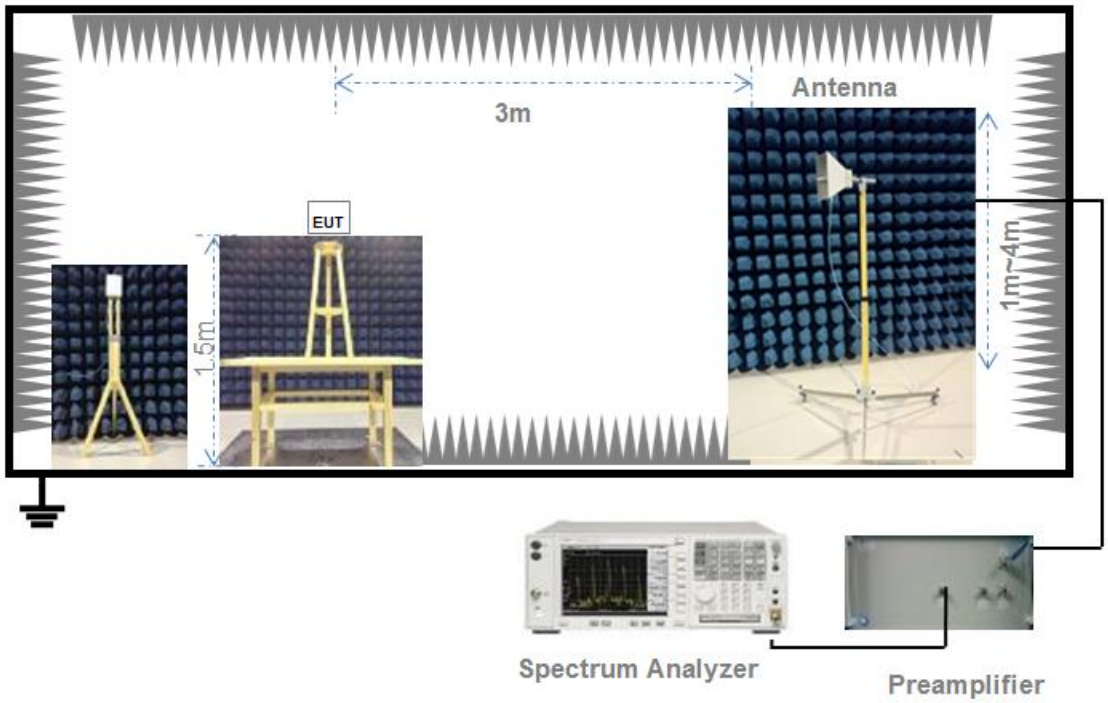
(Diagram 2)

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 & 96.41(b)

According to 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.		

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

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.

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

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

FCC § 2.1055

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

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

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

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

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

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

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

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 & 96.41(e)

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 § 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.

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 & 96.41(e)

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 § 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.

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 § 2.1053 & 96.41(e)

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.

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 BAND 48									
5 MHz	LCH	QPSK	RB1#0	22.16	0.5	22.66	0.185	0.200	Pass
			RB1#13	22.21	0.5	22.71	0.187	0.200	Pass
			RB1#24	22.29	0.5	22.79	0.190	0.200	Pass
			RB12#0	21.11	0.5	21.61	0.145	0.200	Pass
			RB12#6	21.15	0.5	21.65	0.146	0.200	Pass
			RB12#13	21.18	0.5	21.68	0.147	0.200	Pass
			RB25#0	21.17	0.5	21.67	0.147	0.200	Pass
		16-QAM	RB1#0	21.29	0.5	21.79	0.151	0.200	Pass
			RB1#13	21.41	0.5	21.91	0.155	0.200	Pass
			RB1#24	21.45	0.5	21.95	0.157	0.200	Pass
			RB12#0	20.14	0.5	20.64	0.116	0.200	Pass
			RB12#6	20.16	0.5	20.66	0.116	0.200	Pass
			RB12#13	20.2	0.5	20.70	0.117	0.200	Pass
			RB25#0	20.16	0.5	20.66	0.116	0.200	Pass
		64-QAM	RB1#0	20.1	0.5	20.60	0.115	0.200	Pass
			RB1#12	20.16	0.5	20.66	0.116	0.200	Pass
			RB1#24	20.26	0.5	20.76	0.119	0.200	Pass
			RB12#0	19.07	0.5	19.57	0.091	0.200	Pass
			RB12#6	19.11	0.5	19.61	0.091	0.200	Pass
			RB12#13	19.15	0.5	19.65	0.092	0.200	Pass
			RB25#0	19.18	0.5	19.68	0.093	0.200	Pass
		256-QAM	RB1#0	17.39	0.5	17.89	0.062	0.200	Pass
			RB1#12	17.51	0.5	18.01	0.063	0.200	Pass
			RB1#24	17.56	0.5	18.06	0.064	0.200	Pass
			RB12#0	17.08	0.5	17.58	0.057	0.200	Pass
			RB12#6	17.09	0.5	17.59	0.057	0.200	Pass
			RB12#13	17.13	0.5	17.63	0.058	0.200	Pass
			RB25#0	17.11	0.5	17.61	0.058	0.200	Pass
	MCH	QPSK	RB1#0	21.7	0.5	22.20	0.166	0.200	Pass
			RB1#12	21.69	0.5	22.19	0.166	0.200	Pass
			RB1#24	21.7	0.5	22.20	0.166	0.200	Pass
			RB12#0	21.7	0.5	22.20	0.166	0.200	Pass
			RB12#6	21.7	0.5	22.20	0.166	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 BAND 48									
			RB12#13	21.7	0.5	22.20	0.166	0.200	Pass
			RB25#0	21.71	0.5	22.21	0.166	0.200	Pass
		16-QAM	RB1#0	21.7	0.5	22.20	0.166	0.200	Pass
			RB1#12	21.69	0.5	22.19	0.166	0.200	Pass
			RB1#24	21.68	0.5	22.18	0.165	0.200	Pass
			RB12#0	21.68	0.5	22.18	0.165	0.200	Pass
			RB12#6	21.69	0.5	22.19	0.166	0.200	Pass
			RB12#13	21.7	0.5	22.20	0.166	0.200	Pass
			RB25#0	21.72	0.5	22.22	0.167	0.200	Pass
		64-QAM	RB1#0	21.7	0.5	22.20	0.166	0.200	Pass
			RB1#12	21.7	0.5	22.20	0.166	0.200	Pass
			RB1#24	21.71	0.5	22.21	0.166	0.200	Pass
			RB12#0	21.71	0.5	22.21	0.166	0.200	Pass
			RB12#6	21.71	0.5	22.21	0.166	0.200	Pass
			RB12#13	21.67	0.5	22.17	0.165	0.200	Pass
			RB25#0	21.7	0.5	22.20	0.166	0.200	Pass
		256-QAM	RB1#0	18.56	0.5	19.06	0.081	0.200	Pass
			RB1#12	18.61	0.5	19.11	0.081	0.200	Pass
			RB1#24	18.66	0.5	19.16	0.082	0.200	Pass
			RB12#0	18.2	0.5	18.70	0.074	0.200	Pass
			RB12#6	18.24	0.5	18.74	0.075	0.200	Pass
			RB12#13	18.26	0.5	18.76	0.075	0.200	Pass
			RB25#0	18.26	0.5	18.76	0.075	0.200	Pass
	HCH	QPSK	RB1#0	22.06	0.5	22.56	0.180	0.200	Pass
			RB1#12	22.07	0.5	22.57	0.181	0.200	Pass
			RB1#24	22.06	0.5	22.56	0.180	0.200	Pass
			RB12#0	22.06	0.5	22.56	0.180	0.200	Pass
			RB12#6	22.08	0.5	22.58	0.181	0.200	Pass
			RB12#13	22.05	0.5	22.55	0.180	0.200	Pass
			RB25#0	22.08	0.5	22.58	0.181	0.200	Pass
		16-QAM	RB1#0	22.08	0.5	22.58	0.181	0.200	Pass
			RB1#12	22.07	0.5	22.57	0.181	0.200	Pass
			RB1#24	22.07	0.5	22.57	0.181	0.200	Pass
			RB12#0	22.06	0.5	22.56	0.180	0.200	Pass
			RB12#6	22.07	0.5	22.57	0.181	0.200	Pass
			RB12#13	22.06	0.5	22.56	0.180	0.200	Pass
			RB25#0	22.07	0.5	22.57	0.181	0.200	Pass
		64-QAM	RB1#0	22.07	0.5	22.57	0.181	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 BAND 48									
			RB1#12	22.06	0.5	22.56	0.180	0.200	Pass
			RB1#24	22.07	0.5	22.57	0.181	0.200	Pass
			RB12#0	22.05	0.5	22.55	0.180	0.200	Pass
			RB12#6	22.06	0.5	22.56	0.180	0.200	Pass
			RB12#13	22.06	0.5	22.56	0.180	0.200	Pass
			RB25#0	22.06	0.5	22.56	0.180	0.200	Pass
		256-QAM	RB1#0	19.06	0.5	19.56	0.090	0.200	Pass
			RB1#12	19.17	0.5	19.67	0.093	0.200	Pass
			RB1#24	19.05	0.5	19.55	0.090	0.200	Pass
			RB12#0	18.72	0.5	19.22	0.084	0.200	Pass
			RB12#6	18.75	0.5	19.25	0.084	0.200	Pass
			RB12#13	18.73	0.5	19.23	0.084	0.200	Pass
			RB25#0	18.74	0.5	19.24	0.084	0.200	Pass
10 MHz	LCH	QPSK	RB1#0	21.63	0.5	22.13	0.163	0.200	Pass
			RB1#24	22.16	0.5	22.66	0.185	0.200	Pass
			RB1#49	22.35	0.5	22.85	0.193	0.200	Pass
			RB25#0	21.15	0.5	21.65	0.146	0.200	Pass
			RB25#12	21.22	0.5	21.72	0.149	0.200	Pass
			RB25#25	21.32	0.5	21.82	0.152	0.200	Pass
			RB50#0	21.22	0.5	21.72	0.149	0.200	Pass
		16-QAM	RB1#0	21.31	0.5	21.81	0.152	0.200	Pass
			RB1#24	21.41	0.5	21.91	0.155	0.200	Pass
			RB1#49	21.66	0.5	22.16	0.164	0.200	Pass
			RB25#0	20.12	0.5	20.62	0.115	0.200	Pass
			RB25#12	20.21	0.5	20.71	0.118	0.200	Pass
			RB25#25	20.29	0.5	20.79	0.120	0.200	Pass
			RB50#0	20.22	0.5	20.72	0.118	0.200	Pass
		64-QAM	RB1#0	19.91	0.5	20.41	0.110	0.200	Pass
			RB1#24	20.08	0.5	20.58	0.114	0.200	Pass
			RB1#49	20.24	0.5	20.74	0.119	0.200	Pass
			RB25#0	19.15	0.5	19.65	0.092	0.200	Pass
			RB25#12	19.23	0.5	19.73	0.094	0.200	Pass
			RB25#25	19.34	0.5	19.84	0.096	0.200	Pass
			RB50#0	19.2	0.5	19.70	0.093	0.200	Pass
		256-QAM	RB1#0	17.21	0.5	17.71	0.059	0.200	Pass
			RB1#24	17.32	0.5	17.82	0.061	0.200	Pass
			RB1#49	17.53	0.5	18.03	0.064	0.200	Pass
			RB25#0	17.13	0.5	17.63	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 BAND 48									
			RB25#12	17.18	0.5	17.68	0.059	0.200	Pass
			RB25#25	17.28	0.5	17.78	0.060	0.200	Pass
			RB50#0	17.22	0.5	17.72	0.059	0.200	Pass
		QPSK	RB1#0	21.59	0.5	22.09	0.162	0.200	Pass
			RB1#24	21.59	0.5	22.09	0.162	0.200	Pass
			RB1#49	21.59	0.5	22.09	0.162	0.200	Pass
			RB25#0	21.6	0.5	22.10	0.162	0.200	Pass
			RB25#12	21.59	0.5	22.09	0.162	0.200	Pass
			RB25#25	21.59	0.5	22.09	0.162	0.200	Pass
			RB50#0	21.6	0.5	22.10	0.162	0.200	Pass
		16-QAM	RB1#0	21.6	0.5	22.10	0.162	0.200	Pass
			RB1#24	21.6	0.5	22.10	0.162	0.200	Pass
			RB1#49	21.6	0.5	22.10	0.162	0.200	Pass
			RB25#0	21.6	0.5	22.10	0.162	0.200	Pass
			RB25#12	21.61	0.5	22.11	0.163	0.200	Pass
			RB25#25	21.6	0.5	22.10	0.162	0.200	Pass
			RB50#0	21.61	0.5	22.11	0.163	0.200	Pass
	MCH	64-QAM	RB1#0	21.6	0.5	22.10	0.162	0.200	Pass
			RB1#24	21.61	0.5	22.11	0.163	0.200	Pass
			RB1#49	21.6	0.5	22.10	0.162	0.200	Pass
			RB25#0	21.6	0.5	22.10	0.162	0.200	Pass
			RB25#12	21.61	0.5	22.11	0.163	0.200	Pass
			RB25#25	21.61	0.5	22.11	0.163	0.200	Pass
			RB50#0	21.6	0.5	22.10	0.162	0.200	Pass
		256-QAM	RB1#0	17.93	0.5	18.43	0.070	0.200	Pass
			RB1#24	18.09	0.5	18.59	0.072	0.200	Pass
			RB1#49	18.24	0.5	18.74	0.075	0.200	Pass
			RB25#0	18.24	0.5	18.74	0.075	0.200	Pass
			RB25#12	18.28	0.5	18.78	0.076	0.200	Pass
			RB25#25	18.38	0.5	18.88	0.077	0.200	Pass
			RB50#0	18.24	0.5	18.74	0.075	0.200	Pass
		QPSK	RB1#0	21.94	0.5	22.44	0.175	0.200	Pass
			RB1#24	21.94	0.5	22.44	0.175	0.200	Pass
			RB1#49	21.92	0.5	22.42	0.175	0.200	Pass
	HCH		RB25#0	21.94	0.5	22.44	0.175	0.200	Pass
			RB25#12	21.93	0.5	22.43	0.175	0.200	Pass
			RB25#25	21.92	0.5	22.42	0.175	0.200	Pass
			RB50#0	21.94	0.5	22.44	0.175	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 BAND 48									
		16-QAM	RB1#0	21.93	0.5	22.43	0.175	0.200	Pass
			RB1#24	21.92	0.5	22.42	0.175	0.200	Pass
			RB1#49	21.94	0.5	22.44	0.175	0.200	Pass
			RB25#0	21.92	0.5	22.42	0.175	0.200	Pass
			RB25#12	21.92	0.5	22.42	0.175	0.200	Pass
			RB25#25	21.93	0.5	22.43	0.175	0.200	Pass
			RB50#0	21.94	0.5	22.44	0.175	0.200	Pass
		64-QAM	RB1#0	21.92	0.5	22.42	0.175	0.200	Pass
			RB1#24	21.93	0.5	22.43	0.175	0.200	Pass
			RB1#49	21.93	0.5	22.43	0.175	0.200	Pass
			RB25#0	21.93	0.5	22.43	0.175	0.200	Pass
			RB25#12	21.94	0.5	22.44	0.175	0.200	Pass
			RB25#25	21.93	0.5	22.43	0.175	0.200	Pass
			RB50#0	21.92	0.5	22.42	0.175	0.200	Pass
		256-QAM	RB1#0	19.13	0.5	19.63	0.092	0.200	Pass
			RB1#24	19.08	0.5	19.58	0.091	0.200	Pass
			RB1#49	19.09	0.5	19.59	0.091	0.200	Pass
			RB25#0	18.78	0.5	19.28	0.085	0.200	Pass
			RB25#12	18.72	0.5	19.22	0.084	0.200	Pass
			RB25#25	18.75	0.5	19.25	0.084	0.200	Pass
			RB50#0	18.72	0.5	19.22	0.084	0.200	Pass
15 MHz	LCH	QPSK	RB1#0	21.64	0.5	22.14	0.164	0.200	Pass
			RB1#37	22.29	0.5	22.79	0.190	0.200	Pass
			RB1#74	22.53	0.5	23.03	0.201	0.200	Pass
			RB36#0	21.13	0.5	21.63	0.146	0.200	Pass
			RB36#19	21.27	0.5	21.77	0.150	0.200	Pass
			RB36#39	21.43	0.5	21.93	0.156	0.200	Pass
			RB75#0	21.32	0.5	21.82	0.152	0.200	Pass
		16-QAM	RB1#0	21.31	0.5	21.81	0.152	0.200	Pass
			RB1#37	21.53	0.5	22.03	0.160	0.200	Pass
			RB1#74	21.81	0.5	22.31	0.170	0.200	Pass
			RB36#0	20.15	0.5	20.65	0.116	0.200	Pass
			RB36#19	20.27	0.5	20.77	0.119	0.200	Pass
			RB36#39	20.44	0.5	20.94	0.124	0.200	Pass
			RB75#0	20.35	0.5	20.85	0.122	0.200	Pass
		64-QAM	RB1#0	19.89	0.5	20.39	0.109	0.200	Pass
			RB1#37	20.2	0.5	20.70	0.117	0.200	Pass
			RB1#74	20.43	0.5	20.93	0.124	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 BAND 48									
			RB36#0	19.2	0.5	19.70	0.093	0.200	Pass
			RB36#19	19.33	0.5	19.83	0.096	0.200	Pass
			RB36#39	19.49	0.5	19.99	0.100	0.200	Pass
			RB75#0	19.33	0.5	19.83	0.096	0.200	Pass
		256-QAM	RB1#0	17.22	0.5	17.72	0.059	0.200	Pass
			RB1#37	17.49	0.5	17.99	0.063	0.200	Pass
			RB1#74	17.74	0.5	18.24	0.067	0.200	Pass
			RB36#0	17.16	0.5	17.66	0.058	0.200	Pass
			RB36#19	17.3	0.5	17.80	0.060	0.200	Pass
			RB36#39	17.47	0.5	17.97	0.063	0.200	Pass
			RB75#0	17.34	0.5	17.84	0.061	0.200	Pass
	MCH	QPSK	RB1#0	21.56	0.5	22.06	0.161	0.200	Pass
			RB1#37	21.57	0.5	22.07	0.161	0.200	Pass
			RB1#74	21.57	0.5	22.07	0.161	0.200	Pass
			RB36#0	21.56	0.5	22.06	0.161	0.200	Pass
			RB36#19	21.56	0.5	22.06	0.161	0.200	Pass
			RB36#39	21.57	0.5	22.07	0.161	0.200	Pass
			RB75#0	21.56	0.5	22.06	0.161	0.200	Pass
		16-QAM	RB1#0	21.56	0.5	22.06	0.161	0.200	Pass
			RB1#37	21.56	0.5	22.06	0.161	0.200	Pass
			RB1#74	21.57	0.5	22.07	0.161	0.200	Pass
			RB36#0	21.58	0.5	22.08	0.161	0.200	Pass
			RB36#19	21.58	0.5	22.08	0.161	0.200	Pass
			RB36#39	21.57	0.5	22.07	0.161	0.200	Pass
			RB75#0	21.58	0.5	22.08	0.161	0.200	Pass
		64-QAM	RB1#0	21.55	0.5	22.05	0.160	0.200	Pass
			RB1#37	21.56	0.5	22.06	0.161	0.200	Pass
			RB1#74	21.57	0.5	22.07	0.161	0.200	Pass
			RB36#0	21.58	0.5	22.08	0.161	0.200	Pass
			RB36#19	21.58	0.5	22.08	0.161	0.200	Pass
			RB36#39	21.57	0.5	22.07	0.161	0.200	Pass
			RB75#0	21.57	0.5	22.07	0.161	0.200	Pass
		256-QAM	RB1#0	17.93	0.5	18.43	0.070	0.200	Pass
			RB1#37	18.18	0.5	18.68	0.074	0.200	Pass
			RB1#74	18.35	0.5	18.85	0.077	0.200	Pass
			RB36#0	18.18	0.5	18.68	0.074	0.200	Pass
			RB36#19	18.29	0.5	18.79	0.076	0.200	Pass
			RB36#39	18.4	0.5	18.90	0.078	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 BAND 48									
			RB75#0	18.33	0.5	18.83	0.076	0.200	Pass
	HCH	QPSK	RB1#0	22.21	0.5	22.71	0.187	2.000	Pass
			RB1#37	22.19	0.5	22.69	0.186	2.000	Pass
			RB1#74	22.2	0.5	22.70	0.186	2.000	Pass
			RB36#0	22.2	0.5	22.70	0.186	2.000	Pass
			RB36#19	22.2	0.5	22.70	0.186	2.000	Pass
			RB36#39	22.17	0.5	22.67	0.185	2.000	Pass
			RB75#0	22.2	0.5	22.70	0.186	2.000	Pass
		16-QAM	RB1#0	22.19	0.5	22.69	0.186	2.000	Pass
			RB1#37	22.18	0.5	22.68	0.185	2.000	Pass
			RB1#74	22.19	0.5	22.69	0.186	2.000	Pass
			RB36#0	22.2	0.5	22.70	0.186	2.000	Pass
			RB36#19	22.18	0.5	22.68	0.185	2.000	Pass
			RB36#39	22.2	0.5	22.70	0.186	2.000	Pass
			RB75#0	22.19	0.5	22.69	0.186	2.000	Pass
		64-QAM	RB1#0	22.18	0.5	22.68	0.185	2.000	Pass
			RB1#37	22.2	0.5	22.70	0.186	2.000	Pass
			RB1#74	22.19	0.5	22.69	0.186	2.000	Pass
			RB36#0	22.2	0.5	22.70	0.186	2.000	Pass
			RB36#19	22.2	0.5	22.70	0.186	2.000	Pass
			RB36#39	22.2	0.5	22.70	0.186	2.000	Pass
			RB75#0	22.18	0.5	22.68	0.185	2.000	Pass
		256-QAM	RB1#0	19.22	0.5	19.72	0.094	2.000	Pass
			RB1#37	19.26	0.5	19.76	0.095	2.000	Pass
			RB1#74	19.19	0.5	19.69	0.093	2.000	Pass
			RB36#0	18.78	0.5	19.28	0.085	2.000	Pass
			RB36#19	18.76	0.5	19.26	0.084	2.000	Pass
			RB36#39	18.78	0.5	19.28	0.085	2.000	Pass
			RB75#0	18.85	0.5	19.35	0.086	2.000	Pass
20 MHz	LCH	QPSK	RB1#0	21.58	0.5	22.08	0.161	2.000	Pass
			RB1#49	22.45	0.5	22.95	0.197	2.000	Pass
			RB1#99	**22.8**	0.5	23.30	0.214	2.000	Pass
			RB50#0	21.25	0.5	21.75	0.150	2.000	Pass
			RB50#25	21.43	0.5	21.93	0.156	2.000	Pass
			RB50#50	21.6	0.5	22.10	0.162	2.000	Pass
			RB100#0	21.45	0.5	21.95	0.157	2.000	Pass
		16-QAM	RB1#0	21.34	0.5	21.84	0.153	2.000	Pass
			RB1#49	21.71	0.5	22.21	0.166	2.000	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 BAND 48									
			RB1#99	22.02	0.5	22.52	0.179	2.000	Pass
			RB50#0	20.21	0.5	20.71	0.118	2.000	Pass
			RB50#25	20.42	0.5	20.92	0.124	2.000	Pass
			RB50#50	20.58	0.5	21.08	0.128	2.000	Pass
			RB100#0	20.42	0.5	20.92	0.124	2.000	Pass
		64-QAM	RB1#0	20.61	0.5	21.11	0.129	2.000	Pass
			RB1#49	20.91	0.5	21.41	0.138	2.000	Pass
			RB1#99	21.28	0.5	21.78	0.151	2.000	Pass
			RB50#0	19.26	0.5	19.76	0.095	2.000	Pass
			RB50#25	19.46	0.5	19.96	0.099	2.000	Pass
			RB50#50	19.62	0.5	20.12	0.103	2.000	Pass
			RB100#0	19.44	0.5	19.94	0.099	2.000	Pass
		256-QAM	RB1#0	17.41	0.5	17.91	0.062	2.000	Pass
			RB1#49	17.77	0.5	18.27	0.067	2.000	Pass
			RB1#99	18.11	0.5	18.61	0.073	2.000	Pass
			RB50#0	17.24	0.5	17.74	0.059	2.000	Pass
			RB50#25	17.38	0.5	17.88	0.061	2.000	Pass
			RB50#50	17.58	0.5	18.08	0.064	2.000	Pass
			RB100#0	17.43	0.5	17.93	0.062	2.000	Pass
	MCH	QPSK	RB1#0	21.12	0.5	21.62	0.145	2.000	Pass
			RB1#49	21.13	0.5	21.63	0.146	2.000	Pass
			RB1#99	21.14	0.5	21.64	0.146	2.000	Pass
			RB50#0	21.12	0.5	21.62	0.145	2.000	Pass
			RB50#25	21.12	0.5	21.62	0.145	2.000	Pass
			RB50#50	21.15	0.5	21.65	0.146	2.000	Pass
			RB100#0	21.14	0.5	21.64	0.146	2.000	Pass
		16-QAM	RB1#0	21.13	0.5	21.63	0.146	2.000	Pass
			RB1#49	21.15	0.5	21.65	0.146	2.000	Pass
			RB1#99	21.15	0.5	21.65	0.146	2.000	Pass
			RB50#0	21.13	0.5	21.63	0.146	2.000	Pass
			RB50#25	21.13	0.5	21.63	0.146	2.000	Pass
			RB50#50	21.14	0.5	21.64	0.146	2.000	Pass
			RB100#0	21.14	0.5	21.64	0.146	2.000	Pass
		64-QAM	RB1#0	21.14	0.5	21.64	0.146	2.000	Pass
			RB1#49	21.13	0.5	21.63	0.146	2.000	Pass
			RB1#99	21.14	0.5	21.64	0.146	2.000	Pass
			RB50#0	21.15	0.5	21.65	0.146	2.000	Pass
			RB50#25	21.14	0.5	21.64	0.146	2.000	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 BAND 48									
			RB50#50	21.13	0.5	21.63	0.146	2.000	Pass
			RB100#0	21.14	0.5	21.64	0.146	2.000	Pass
			RB1#0	18.24	0.5	18.74	0.075	2.000	Pass
			RB1#49	18.52	0.5	19.02	0.080	2.000	Pass
			RB1#99	18.72	0.5	19.22	0.084	2.000	Pass
			RB50#0	18.23	0.5	18.73	0.075	2.000	Pass
			RB50#25	18.34	0.5	18.84	0.077	2.000	Pass
			RB50#50	18.49	0.5	18.99	0.079	2.000	Pass
			RB100#0	18.33	0.5	18.83	0.076	2.000	Pass
	HCH	QPSK	RB1#0	22.33	0.5	22.83	0.192	2.000	Pass
			RB1#49	22.32	0.5	22.82	0.191	2.000	Pass
			RB1#99	22.3	0.5	22.80	0.191	2.000	Pass
			RB50#0	22.32	0.5	22.82	0.191	2.000	Pass
			RB50#25	22.31	0.5	22.81	0.191	2.000	Pass
			RB50#50	22.32	0.5	22.82	0.191	2.000	Pass
			RB100#0	22.31	0.5	22.81	0.191	2.000	Pass
		16-QAM	RB1#0	22.31	0.5	22.81	0.191	2.000	Pass
			RB1#49	22.32	0.5	22.82	0.191	2.000	Pass
			RB1#99	22.31	0.5	22.81	0.191	2.000	Pass
			RB50#0	22.31	0.5	22.81	0.191	2.000	Pass
			RB50#25	22.31	0.5	22.81	0.191	2.000	Pass
			RB50#50	22.31	0.5	22.81	0.191	2.000	Pass
			RB100#0	22.3	0.5	22.80	0.191	2.000	Pass
		64-QAM	RB1#0	22.31	0.5	22.81	0.191	2.000	Pass
			RB1#49	22.32	0.5	22.82	0.191	2.000	Pass
			RB1#99	22.3	0.5	22.80	0.191	2.000	Pass
			RB50#0	22.32	0.5	22.82	0.191	2.000	Pass
			RB50#25	22.3	0.5	22.80	0.191	2.000	Pass
			RB50#50	22.32	0.5	22.82	0.191	2.000	Pass
			RB100#0	22.31	0.5	22.81	0.191	2.000	Pass
		256-QAM	RB1#0	19.12	0.5	19.62	0.092	2.000	Pass
			RB1#49	19.15	0.5	19.65	0.092	2.000	Pass
			RB1#99	19.11	0.5	19.61	0.091	2.000	Pass
			RB50#0	18.81	0.5	19.31	0.085	2.000	Pass
			RB50#25	18.8	0.5	19.30	0.085	2.000	Pass
			RB50#50	18.82	0.5	19.32	0.086	2.000	Pass
			RB100#0	18.82	0.5	19.32	0.086	2.000	Pass

ENDC Mode Test Data

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	Total EIRP (dBm)	Total EIRP (W)	Limit (W)	Verdict
DC_48A_n2A													
5MHz(LTE)+5MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	20.623	19.591	23.1479	23.99	0.251	2.00	Pass
			12	6	8	0	20.619	19.609	23.1536	24.00	0.251	2.00	Pass
	MCH		12	6	8	0	20.591	19.601	23.1344	23.98	0.250	2.00	Pass
	HCH		1	23	1	24	20.624	19.603	23.1537	24.00	0.251	2.00	Pass
			12	6	8	0	20.643	19.631	23.1767	24.02	0.252	2.00	Pass
	LCH	QPSK	1	1	1	0	20.603	19.503	23.098	23.95	0.248	2.00	Pass
			12	6	8	0	20.665	19.575	23.1644	24.01	0.252	2.00	Pass
	MCH		12	6	8	0	20.654	19.607	23.1723	24.02	0.252	2.00	Pass
	HCH		1	23	1	24	20.636	19.608	23.1626	24.01	0.252	2.00	Pass
			12	6	8	0	20.640	19.592	23.1578	24.00	0.251	2.00	Pass
	LCH	16QAM	1	1	1	0	20.414	19.547	23.0124	23.85	0.243	2.00	Pass
			12	6	8	0	20.571	19.602	23.1238	23.97	0.249	2.00	Pass
	MCH		12	6	8	0	20.603	19.582	23.1327	23.98	0.250	2.00	Pass
	HCH		1	23	1	24	20.380	19.573	23.0055	23.84	0.242	2.00	Pass
			12	6	8	0	20.586	19.550	23.1091	23.95	0.249	2.00	Pass
	LCH	64QAM	1	1	1	0	20.621	19.537	23.123	23.97	0.249	2.00	Pass
			12	6	8	0	20.615	19.601	23.1478	23.99	0.251	2.00	Pass
	MCH		12	6	8	0	20.618	19.594	23.1464	23.99	0.251	2.00	Pass
	HCH		1	23	1	24	20.657	19.624	23.1814	24.03	0.253	2.00	Pass
			12	6	8	0	20.598	19.574	23.1264	23.97	0.250	2.00	Pass
	LCH	256QAM	1	1	1	0	19.106	19.529	22.3329	23.13	0.206	2.00	Pass
			12	6	8	0	18.990	19.625	22.3294	23.12	0.205	2.00	Pass
	MCH		12	6	8	0	19.019	19.563	22.3098	23.10	0.204	2.00	Pass
	HCH		1	23	1	24	19.083	19.628	22.3743	23.17	0.207	2.00	Pass
			12	6	8	0	19.007	19.617	22.333	23.12	0.205	2.00	Pass
20MHz(LTE)+40MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	20.471	19.462	23.006	23.85	0.243	2.00	Pass
			108	54	18	0	20.868	19.569	23.2772	24.13	0.259	2.00	Pass
	MCH		108	54	18	0	20.846	19.570	23.265	24.12	0.258	2.00	Pass
	HCH		1	214	1	99	20.640	19.565	23.146	23.99	0.251	2.00	Pass
			108	54	18	0	20.902	19.588	**23.3048**	24.16	0.261	2.00	Pass
	LCH	QPSK	1	1	1	0	20.477	19.461	23.0089	23.85	0.243	2.00	Pass
			108	54	18	0	20.872	19.580	23.2842	24.14	0.259	2.00	Pass
	MCH		108	54	18	0	20.855	19.568	23.2693	24.12	0.258	2.00	Pass
	HCH		1	214	1	99	20.652	19.576	23.1575	24.00	0.251	2.00	Pass
			108	54	18	0	20.824	19.581	23.2571	24.11	0.258	2.00	Pass

	LCH	16QAM	1	1	1	0	20.165	19.454	22.8343	23.67	0.233	2.00	Pass
			108	54	18	0	20.868	19.565	23.2755	24.13	0.259	2.00	Pass
	MCH		108	54	18	0	20.851	19.612	23.2858	24.14	0.259	2.00	Pass
	HCH		1	214	1	99	20.395	19.556	23.006	23.85	0.242	2.00	Pass
			108	54	18	0	20.874	19.617	23.3011	24.15	0.260	2.00	Pass
	LCH	64QAM	1	1	1	0	20.494	19.432	23.0057	23.85	0.243	2.00	Pass
			108	54	18	0	20.859	19.623	23.2951	24.15	0.260	2.00	Pass
	MCH		108	54	18	0	20.856	19.573	23.272	24.13	0.259	2.00	Pass
	HCH		1	214	1	99	20.640	19.586	23.1552	24.00	0.251	2.00	Pass
			108	54	18	0	20.830	19.609	23.2726	24.12	0.258	2.00	Pass
	LCH	256QAM	1	1	1	0	18.859	19.436	22.1674	22.96	0.198	2.00	Pass
			108	54	18	0	19.385	19.581	22.4944	23.30	0.214	2.00	Pass
	MCH		108	54	18	0	19.343	19.586	22.4765	23.28	0.213	2.00	Pass
	HCH		1	214	1	99	19.042	19.582	22.3307	23.12	0.205	2.00	Pass
			108	54	18	0	19.343	19.598	22.4827	23.28	0.213	2.00	Pass

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	Total EIRP (dBm)	Total EIRP (W)	Limit (W)	Verdict
DC_48A_n5A													
5MHz(LTE) + 5MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	20.713	19.561	23.1854	24.05	0.254	2.00	Pass
			12	6	8	0	20.791	19.614	23.2526	24.12	0.258	2.00	Pass
	MCH		12	6	8	0	20.774	19.588	23.2317	24.10	0.257	2.00	Pass
	HCH		1	23	1	24	20.858	19.624	23.295	24.16	0.260	2.00	Pass
			12	6	8	0	20.802	19.592	23.2493	24.11	0.258	2.00	Pass
	LCH	QPSK	1	1	1	0	20.791	19.595	23.2443	24.11	0.258	2.00	Pass
			12	6	8	0	20.815	19.586	23.2541	24.12	0.258	2.00	Pass
	MCH		12	6	8	0	20.824	19.599	23.2648	24.13	0.259	2.00	Pass
	HCH		1	23	1	24	20.836	19.582	23.2644	24.13	0.259	2.00	Pass
			12	6	8	0	20.842	19.589	23.2708	24.13	0.259	2.00	Pass
	LCH	16QA	1	1	1	0	20.497	19.548	23.0587	23.93	0.247	2.00	Pass

		M	12	6	8	0	20.792	19.598	23.2462	24.11	0.258	2.00	Pass
	MCH		12	6	8	0	20.784	19.605	23.2447	24.11	0.258	2.00	Pass
	HCH		1	23	1	24	20.791	19.586	23.2405	24.10	0.257	2.00	Pass
			12	6	8	0	20.843	19.576	23.2658	24.13	0.259	2.00	Pass
	LCH	64QAM	1	1	1	0	20.854	19.553	23.2623	24.12	0.258	2.00	Pass
			12	6	8	0	20.784	19.554	23.2227	24.08	0.256	2.00	Pass
	MCH		12	6	8	0	20.797	19.558	23.2318	24.09	0.257	2.00	Pass
	HCH		1	23	1	24	20.866	19.615	23.2957	24.16	0.260	2.00	Pass
			12	6	8	0	20.783	19.587	23.2363	24.10	0.257	2.00	Pass
	LCH	256QAM	1	1	1	0	19.167	19.555	22.3756	23.31	0.214	2.00	Pass
			12	6	8	0	19.172	19.559	22.3801	23.32	0.215	2.00	Pass
	MCH		12	6	8	0	19.186	19.619	22.4182	23.36	0.217	2.00	Pass
	HCH		1	23	1	24	19.268	19.584	22.4392	23.37	0.217	2.00	Pass
			12	6	8	0	19.185	19.573	22.3936	23.33	0.215	2.00	Pass
20MHz(LTE) + 20MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	20.758	19.500	23.1847	24.16	0.261	2.00	Pass
			50	25	18	0	21.170	19.573	23.4548	24.45	0.278	2.00	Pass
	MCH		50	25	18	0	21.131	19.541	23.4187	24.41	0.276	2.00	Pass
	HCH		1	104	1	99	21.333	19.501	23.5232	24.52	0.283	2.00	Pass
			50	25	18	0	21.143	19.571	23.438	24.43	0.277	2.00	Pass
	LCH	QPSK	1	1	1	0	20.865	19.539	23.2627	24.24	0.266	2.00	Pass
			50	25	18	0	21.179	19.602	23.472	24.46	0.279	2.00	Pass
	MCH		50	25	18	0	21.157	19.559	23.4414	24.43	0.277	2.00	Pass
	HCH		1	104	1	99	21.379	19.566	**23.5767**	24.58	0.287	2.00	Pass
			50	25	18	0	21.131	19.600	23.4429	24.43	0.277	2.00	Pass
	LCH	16QAM	1	1	1	0	20.576	19.448	23.0588	24.03	0.253	2.00	Pass
			50	25	18	0	21.115	19.571	23.4216	24.41	0.276	2.00	Pass
	MCH		50	25	18	0	21.148	19.553	23.4336	24.42	0.277	2.00	Pass
	HCH		1	104	1	99	21.120	19.556	23.4183	24.41	0.276	2.00	Pass
			50	25	18	0	21.171	19.606	23.4689	24.46	0.279	2.00	Pass
	LCH	64QAM	1	1	1	0	20.748	19.390	23.1322	24.11	0.258	2.00	Pass
			50	25	18	0	21.124	19.587	23.4334	24.42	0.277	2.00	Pass
	MCH		50	25	18	0	21.172	19.585	23.4609	24.45	0.279	2.00	Pass
	HCH		1	104	1	99	21.239	19.582	23.4994	24.49	0.281	2.00	Pass
			50	25	18	0	21.122	19.617	23.4447	24.43	0.277	2.00	Pass
	LCH	256QAM	1	1	1	0	19.204	19.376	22.3012	23.21	0.209	2.00	Pass
			50	25	18	0	19.641	19.562	22.612	23.53	0.226	2.00	Pass
	MCH		50	25	18	0	19.635	19.572	22.6139	23.54	0.226	2.00	Pass
	HCH		1	104	1	99	19.703	19.552	22.6385	23.56	0.227	2.00	Pass
			50	25	18	0	19.644	19.599	22.6319	23.55	0.227	2.00	Pass

Test BW	Test Channel	Test Mode	NR UL RB No.	NR UL RB Pos.	LTE UL RB No.	LTE UL RB Pos.	NR Conducted Output Power (dBm)	LTE Conducted Output Power (dBm)	Total Conducted Output Power (dBm)	Total EIRP (dBm)	Total EIRP (W)	Limit (W)	Verdict
DC_48A_n66A													
5MHz(LTE) + 5MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	20.682	19.503	23.1427	23.93	0.247	2.00	Pass
			12	6	8	0	20.658	19.606	23.1741	23.96	0.249	2.00	Pass
	MCH		12	6	8	0	20.638	19.576	23.1497	23.94	0.248	2.00	Pass
	HCH		1	23	1	24	20.677	19.593	23.179	23.97	0.249	2.00	Pass
			12	6	8	0	20.645	19.569	23.1505	23.94	0.248	2.00	Pass
	LCH	QPSK	1	1	1	0	20.728	19.560	23.1934	23.98	0.250	2.00	Pass
			12	6	8	0	20.665	19.590	23.171	23.96	0.249	2.00	Pass
	MCH		12	6	8	0	20.727	19.599	23.2098	24.00	0.251	2.00	Pass
	HCH		1	23	1	24	20.684	19.601	23.1865	23.97	0.250	2.00	Pass
			12	6	8	0	20.745	19.570	23.2074	24.00	0.251	2.00	Pass
	LCH	16QAM	1	1	1	0	20.487	19.551	23.0545	23.84	0.242	2.00	Pass
			12	6	8	0	20.673	19.606	23.1825	23.97	0.249	2.00	Pass
	MCH		12	6	8	0	20.615	19.561	23.1302	23.92	0.246	2.00	Pass
	HCH		1	23	1	24	20.384	19.648	23.0419	23.82	0.241	2.00	Pass
			12	6	8	0	20.650	19.560	23.1494	23.94	0.248	2.00	Pass
	LCH	64QAM	1	1	1	0	20.741	19.532	23.1887	23.98	0.250	2.00	Pass
			12	6	8	0	20.671	19.612	23.184	23.97	0.250	2.00	Pass
	MCH		12	6	8	0	20.665	19.544	23.1509	23.94	0.248	2.00	Pass
	HCH		1	23	1	24	20.606	19.616	23.1494	23.93	0.247	2.00	Pass
			12	6	8	0	20.669	19.500	23.134	23.92	0.247	2.00	Pass
	LCH	256QAM	1	1	1	0	19.129	19.511	22.3345	23.08	0.203	2.00	Pass
			12	6	8	0	19.050	19.571	22.3286	23.07	0.203	2.00	Pass
	MCH		12	6	8	0	19.095	19.616	22.3736	23.12	0.205	2.00	Pass
	HCH		1	23	1	24	18.986	19.637	22.334	23.07	0.203	2.00	Pass
			12	6	8	0	19.079	19.606	22.3608	23.10	0.204	2.00	Pass
20MHz(LTE) + 40MHz(NR)	LCH	PI/2 BPSK	1	1	1	0	20.735	19.441	23.1463	23.94	0.248	2.00	Pass
			108	54	18	0	20.869	19.618	23.2987	24.09	0.257	2.00	Pass
	MCH		108	54	18	0	20.861	19.589	23.2817	24.08	0.256	2.00	Pass
	HCH		1	214	1	99	21.050	19.543	**23.3718**	24.17	0.261	2.00	Pass
			108	54	18	0	20.862	19.550	23.2657	24.06	0.255	2.00	Pass
	LCH	QPSK	1	1	1	0	20.719	19.460	23.1453	23.94	0.248	2.00	Pass
			108	54	18	0	20.860	19.602	23.2867	24.08	0.256	2.00	Pass
	MCH		108	54	18	0	20.868	19.544	23.2666	24.06	0.255	2.00	Pass
	HCH		1	214	1	99	21.062	19.531	23.3739	24.17	0.261	2.00	Pass
			108	54	18	0	20.873	19.580	23.2847	24.08	0.256	2.00	Pass
	LCH	16QA	1	1	1	0	20.405	19.486	22.9801	23.76	0.238	2.00	Pass

		M	108	54	18	0	20.843	19.581	23.268	24.06	0.255	2.00	Pass
	MCH		108	54	18	0	20.868	19.572	23.2785	24.07	0.255	2.00	Pass
	HCH		1	214	1	99	20.761	19.538	23.2027	23.99	0.251	2.00	Pass
			108	54	18	0	20.855	19.579	23.274	24.07	0.255	2.00	Pass
	LCH	64QAM	1	1	1	0	20.735	19.430	23.1416	23.94	0.248	2.00	Pass
			108	54	18	0	20.821	19.598	23.2627	24.05	0.254	2.00	Pass
	MCH		108	54	18	0	20.824	19.613	23.2709	24.06	0.255	2.00	Pass
	HCH		1	214	1	99	21.028	19.580	23.3744	24.17	0.261	2.00	Pass
			108	54	18	0	20.871	19.576	23.2819	24.08	0.256	2.00	Pass
	LCH	256QAM	1	1	1	0	19.131	19.421	22.2887	23.04	0.201	2.00	Pass
			108	54	18	0	19.456	19.568	22.5227	23.28	0.213	2.00	Pass
	MCH		108	54	18	0	19.385	19.568	22.4878	23.24	0.211	2.00	Pass
	HCH		1	214	1	99	19.516	19.572	22.5544	23.31	0.214	2.00	Pass
			108	54	18	0	19.478	19.487	22.4928	23.25	0.211	2.00	Pass

A.2 Peak to Average Ratio

Note 1: Test plots please refer to the document “Annex No.:BL-SH2550525-503 Data Part 1.pdf”.

LTE Mode Test Data

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot[Note1]	Verdict
LTE Band 48	10 MHz	LCH	QPSK	RB1#Low	1.1	Pass
				RB50#Low	1.2	Pass
			16-QAM	RB1#Low	1.3	Pass
				RB50#Low	1.4	Pass
		MCH	QPSK	RB1#Low	1.5	Pass
				RB50#Low	1.6	Pass
			16-QAM	RB1#Low	1.7	Pass
				RB50#Low	1.8	Pass
		HCH	QPSK	RB1#Low	1.9	Pass
				RB50#Low	1.10	Pass
			16-QAM	RB1#Low	1.11	Pass
				RB50#Low	1.12	Pass

A.3 Occupied Bandwidth

Note 1: All modes were tested, but only the typical data were reported in this report.

Note 2: Test plots please refer to the document “Annex No.:BL-SH250525-503 Data Part 2.pdf”.

LTE Mode Test Data

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot[Note2]
Band 48(Part 96)	5 MHz	LCH	QPSK	RB25#Low	1.1
			16-QAM	RB25#Low	1.2
			256-QAM	RB25#Low	1.3
		MCH	QPSK	RB25#Low	1.4
			16-QAM	RB25#Low	1.5
			256-QAM	RB25#Low	1.6
		HCH	QPSK	RB25#Low	1.7
			16-QAM	RB25#Low	1.8
			256-QAM	RB25#Low	1.9
	10 MHz	LCH	QPSK	RB50#Low	1.10
			16-QAM	RB50#Low	1.11
			256-QAM	RB50#Low	1.12
		MCH	QPSK	RB50#Low	1.13
			16-QAM	RB50#Low	1.14
			256-QAM	RB50#Low	1.15
		HCH	QPSK	RB50#Low	1.16
			16-QAM	RB50#Low	1.17
			256-QAM	RB50#Low	1.18
	15 MHz	LCH	QPSK	RB75#Low	1.19
			16-QAM	RB75#Low	1.20
			256-QAM	RB75#Low	1.21
		MCH	QPSK	RB75#Low	1.22
			16-QAM	RB75#Low	1.23
			256-QAM	RB75#Low	1.24
		HCH	QPSK	RB75#Low	1.25
			16-QAM	RB75#Low	1.26
			256-QAM	RB75#Low	1.27
	20 MHz	LCH	QPSK	RB100#Low	1.28
			16-QAM	RB100#Low	1.29
			256-QAM	RB100#Low	1.30
		MCH	QPSK	RB100#Low	1.31
			16-QAM	RB100#Low	1.32
			256-QAM	RB100#Low	1.33
		HCH	QPSK	RB100#Low	1.34

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot[Note2]
			16-QAM	RB100#Low	1.35
			256-QAM	RB100#Low	1.36

A.4 Frequency Stability

LTE Band 48(Part 96) QPSK 10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3625 MHz		
		Value (Hz)	Limits (Hz)	
3.87	-10	-8.41	±8162.5	Pass
	0	-3.75		
	+10	-6.64		
	+20	-7.56		
	+25	-7.29		
	+30	-7.15		
	+40	-8.6		
	+45	-5.94		
4.2	+25	-5.09		
3.6	+25	-6.09		

LTE Band 48(Part 96) 16QAM10 MHz

Test Conditions		Frequency Deviation		Verdict
Power (VDC)	Temperature (°C)	MCH 3625 MHz		
		Value (Hz)	Limits (Hz)	
3.87	-10	-11.46	±8162.5	Pass
	0	-5.21		
	+10	-0.46		
	+20	-0.01		
	+25	-7.12		
	+30	-4.69		
	+40	-2.63		
	+45	-6.02		
4.2	+25	-4.47		
3.6	+25	-6.85		

A.5 Spurious Emission at Antenna Terminals

Note 1: The frequencies of verdict which are marked by "N/A" should be ignored because they are UE carrier frequency.

Note 2: Test plots please refer to the document “Annex No.:BL-SH250525-503 Data Part 3.pdf”.

LTE Mode Test Verdict

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot[Note2]	Verdict
Band 48(Part 96)	5 MHz	LCH	QPSK	RB1#Low	1.1	Pass
			16-QAM	RB1#Low	1.2	Pass
		MCH	QPSK	RB1#Low	1.3	Pass
			16-QAM	RB1#Low	1.4	Pass
		HCH	QPSK	RB1#Low	1.5	Pass
			16-QAM	RB1#Low	1.6	Pass
	10 MHz	LCH	QPSK	RB1#Low	1.7	Pass
			16-QAM	RB1#Low	1.8	Pass
		MCH	QPSK	RB1#Low	1.9	Pass
			16-QAM	RB1#Low	1.10	Pass
		HCH	QPSK	RB1#Low	1.11	Pass
			16-QAM	RB1#Low	1.12	Pass
	15 MHz	LCH	QPSK	RB1#Low	1.13	Pass
			16-QAM	RB1#Low	1.14	Pass
		MCH	QPSK	RB1#Low	1.15	Pass
			16-QAM	RB1#Low	1.16	Pass
		HCH	QPSK	RB1#Low	1.17	Pass
			16-QAM	RB1#Low	1.18	Pass
	20 MHz	LCH	QPSK	RB1#Low	1.19	Pass
			16-QAM	RB1#Low	1.20	Pass
		MCH	QPSK	RB1#Low	1.21	Pass
			16-QAM	RB1#Low	1.22	Pass
		HCH	QPSK	RB1#Low	1.23	Pass
			16-QAM	RB1#Low	1.24	Pass

A.6 Band Edge

Note 1: Test plots please refer to the document “Annex No.:BL-SH2550525-503 Data Part 4.pdf”.

LTE Mode Test Verdict

Test Band	Test Bandwidth	Test Channel	Test Mode	Test RB (Size#Offset)	Refer to Plot[Note1]	Verdict
Band 48(Part 96)	5 MHz	LCH	QPSK	RB1#Low	1.1	Pass
				RB25#Low	1.2	Pass
			16-QAM	RB1#Low	1.3	Pass
				RB25#Low	1.4	Pass
		HCH	QPSK	RB1#High	1.5	Pass
				RB25#High	1.6	Pass
			16-QAM	RB1#High	1.7	Pass
				RB25#High	1.8	Pass
	10 MHz	LCH	QPSK	RB1#Low	1.9	Pass
				RB50#Low	1.10	Pass
			16-QAM	RB1#Low	1.11	Pass
				RB50#Low	1.12	Pass
		HCH	QPSK	RB1#High	1.13	Pass
				RB50#High	1.14	Pass
			16-QAM	RB1#High	1.15	Pass
				RB50#High	1.16	Pass
	15 MHz	LCH	QPSK	RB1#Low	1.17	Pass
				RB75#Low	1.18	Pass
			16-QAM	RB1#Low	1.19	Pass
				RB75#Low	1.20	Pass
		HCH	QPSK	RB1#High	1.21	Pass
				RB75#High	1.22	Pass
			16-QAM	RB1#High	1.23	Pass
				RB75#High	1.24	Pass
	20 MHz	LCH	QPSK	RB1#Low	1.25	Pass
				RB100#Low	1.26	Pass
			16-QAM	RB1#Low	1.27	Pass
				RB100#Low	1.28	Pass
		HCH	QPSK	RB1#High	1.29	Pass
				RB100#High	1.30	Pass
			16-QAM	RB1#High	1.31	Pass
				RB100#High	1.32	Pass

A.7 Field Strength of Spurious Radiation

Note 1: All modes have been tested, and only the worst case data are shown here.

Note 2: The frequencies of verdict which are marked by "N/A" should be ignored because they are UE carrier frequency.

Note 3: Test plots please refer to the document “Annex No.:BL-SH2550525-503 Data Part 5.pdf”.

LTE Mode Test Verdict

Test Band	Test Bandwidth	Test Channel	Refer to PlotNote3	Verdict
Band 48	15 MHz	LCH	1.1	Pass

EN-DC Configuration		DC_48A_n2A	DC_48A_n5A	DC_48A_n66A
		Mid Channel	High Channel	High Channel
NR Cell	Band	N2	N5	N66
	SCS (kHz)	15	15	15
	Bandwidth (MHz)	5	5	40
	DL Channel	392000	178300	432000
	Modulation	DFT_QPSK	DFT_QPSK	DFT_BPSK
E-UTRA Cell	Band	Band48	Band48	Band48
	Bandwidth (MHz)	5	5	20
	DL Channel	55990	55990	55990
	Modulation	QPSK	QPSK	QPSK
Refer to Plot[Note3]		2.1	2.2	2.3
Verdict		Pass	Pass	Pass

ANNEX B TEST SETUP PHOTOS

Please refer to the document “BL-SH2550525-AR RF.PDF”.

ANNEX C EUT EXTERNAL PHOTOS

Please refer to the document “BL-SH2550525-AW.PDF”.

ANNEX D EUT INTERNAL PHOTOS

Please refer to the document “BL-SH2550525-AI.PDF”.

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--END OF REPORT--