

TESTREPORT

Applicant Name : Franklin Technology Inc.
 Address : 906 JEI Platz, 186, Gasan digital 1-ro, Gumcheon-Gu Seoul,
 South Korea 08502
 Report Number : RA230104-00558E-RF-00C
 FCC ID: XHG-CG890

Test Standard (s)

FCC PART 27; FCC PART 22H; FCC PART 24E

Sample Description

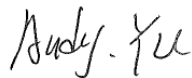
Product Type: Home Router CG890
 Model No.: CG890
 Multiple Model(s) No.: N/A
 Trade Mark: N/A
 Date Received: 2023/01/04
 Report Date: 2023/03/22

Test Result:	Pass*
--------------	-------

* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:

Approved By:




Andy Yu
EMC Engineer

Candy Li
EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

Shenzhen Accurate Technology Co., Ltd. is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk "★". Customer model name, addresses, names, trademarks etc. are not considered data.

This report cannot be reproduced except in full, without prior written approval of the Company. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.

Shenzhen Accurate Technology Co., Ltd.

1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

Tel: +86 755-26503290

Fax: +86 755-26503396

Web: www.atc-lab.com

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY	3
GENERAL INFORMATION.....	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....	4
OBJECTIVE	4
TEST METHODOLOGY	5
MEASUREMENT UNCERTAINTY	5
TEST FACILITY	5
SYSTEM TEST CONFIGURATION.....	6
DESCRIPTION OF TEST CONFIGURATION	6
EQUIPMENT MODIFICATIONS	7
SUPPORT EQUIPMENT LIST AND DETAILS	7
SUPPORT CABLE DESCRIPTION	7
BLOCK DIAGRAM OF TEST SETUP	8
SUMMARY OF TEST RESULTS	9
TEST EQUIPMENT LIST	10
FCC §1.1307 (B) (3) & §2.1091- MPE-BASED EXEMPTION.....	12
FCC §2.1047 - MODULATION CHARACTERISTIC	14
FCC § 2.1046, § 22.913 (A) (D)& § 24.232(C) (D); §27.50(C)(D)(H) - RF OUTPUT POWER.....	15
APPLICABLE STANDARD	15
TEST PROCEDURE	15
TEST DATA	15
FCC §2.1049, §22.917, §22.905 & §24.238& §27.53 - OCCUPIED BANDWIDTH.....	38
APPLICABLE STANDARD	38
TEST PROCEDURE	38
TEST DATA	38
FCC §2.1051, §22.917(A) & §24.238(A)& §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS...40	40
APPLICABLE STANDARD	40
TEST PROCEDURE	40
TEST DATA	40
FCC § 2.1053; § 22.917 (A); §24.238 (A); §27.53 - SPURIOUS RADIATED EMISSIONS.....	41
APPLICABLE STANDARD	41
TEST PROCEDURE	41
TEST DATA	41
FCC § 22.917 (A); § 24.238 (A); §27.53 (G) (H)(M) - BAND EDGES.....	53
APPLICABLE STANDARD	53
TEST PROCEDURE	53
TEST DATA	54
FCC § 2.1055; § 22.355; § 24.235; §27.54 - FREQUENCY STABILITY	55
APPLICABLE STANDARD	55
TEST PROCEDURE	55
TEST DATA	56

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	RA230104-00558E-RF-00C	Original Report	2023-03-22

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	WCDMA Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) WCDMA Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) WCDMA Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 2: 1850-1910MHz(TX); 1930-1990MHz(RX) LTE Band 4: 1710-1755MHz(TX); 2110-2155MHz(RX) LTE Band 5: 1710-1755MHz(TX); 2110-2155MHz(RX) LTE Band 7: 2500-2570MHz(TX); 2620-2690MHz(RX) LTE Band 12: 699-716MHz(TX); 729-746MHz(RX) LTE Band 41: 2496-2690MHz(TX/RX) LTE Band 66: 1710-1780MHz(TX); 2110-2180MHz(RX) LTE Band 71: 663-698MHz(TX); 617-652MHz(RX)
Modulation Technique	3G: BPSK, QPSK, 16QAM 4G: QPSK, 16QAM
Antenna Specification*	ANT 0: WCDMA Band2/4/LTE Band2/4/66: 3.5dBi; LTE Band5/ WCDMA Band5: 2.0dBi; LTE Band12: 2.1dBi; LTE Band7 /41 :0.3dBi; LTE Band71: 1.8dBi (provided by the applicant)
Voltage Range	DC 12V from adapter or DC 3.8V from battery
Sample serial number	1XJ7-2 for Radiated Emissions Test 1XJH-12 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition
Adapter information	Model: APS-M024120200W-G Input: AC 100-240V, 50/60Hz, 0.6A Max Output: DC 12V, 2.0A
Extreme condition*	VL: Low Voltage 3.6V VN: Normal Voltage 3.8V VH: High Voltage 4.2V (provided by the applicant)

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H, Part24-Subpart E and Part 27 of the Federal Communication Commission's rules.

The objective is to determine the compliance of the EUT with FCC rules for output power, modulation characteristic, occupied bandwidth, and spurious emission at antenna terminal, spurious radiated emission, frequency stability and band edge.

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2-Subpart J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
 Part 24 Subpart E - Personal Communication Services
 Part 27 - Miscellaneous Wireless Communications Services

ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF output power, conducted		±0.73dB
Unwanted Emission, conducted		±1.6dB
RF Frequency		±0.082*10 ⁻⁷
Emissions, Radiated	30MHz - 1GHz	±4.28dB
	1GHz - 18GHz	±4.98dB
	18GHz - 26.5GHz	±5.06dB
Temperature		±1 °C
Humidity		±6%
Supply voltages		±0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The Test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 429 7.01.

Listed by Innovation, Science and Economic Development Canada (ISED), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The final qualification test was performed with the EUT operating at normal mode.

Test was performed as below table:

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
WCDMA B2	4.2	1852.4	1880	1907.6
WCDMA B4	4.2	1712.4	1732.6	1752.6
WCDMA B5	4.2	826.4	836.4	846.6
LTE B2	1.4	1850.7	1880	1909.3
	3	1851.5	1880	1908.5
	5	1852.5	1880	1907.5
	10	1855	1880	1905
	15	1857.5	1880	1902.5
	20	1860	1880	1900
LTE B4	1.4	1710.7	1732.5	1754.3
	3	1711.5	1732.5	1753.5
	5	1712.5	1732.5	1752.5
	10	1715	1732.5	1750
	15	1717.5	1732.5	1747.5
LTE B5	1.4	824.7	836.5	848.3
	3	825.5	836.5	847.5
	5	826.5	836.5	846.5
	10	829	836.5	844
LTE B7	5	2502.5	2535	2567.5
	10	2505	2535	2565
	15	2507.5	2535	2562.5
	20	2510	2535	2560
LTE B12	1.4	699.7	707.5	715.3
	3	700.5	707.5	714.5
	5	701.5	707.5	713.5
	10	704	707.5	711
LTE B41	5	2498.5	2593	2687.5
	10	2501	2593	2685
	15	2503.5	2593	2682.5
	20	2506	2593	2680

Frequency band	Bandwidth (MHz)	Test Frequency(MHz)		
		Low	Middle	High
LTE B66	1.4	1710.7	1745	1779.3
	3	1711.5	1745	1778.5
	5	1712.5	1745	1777.5
	10	1715	1745	1775
	15	1717.5	1745	1772.5
	20	1720	1745	1770
LTE B71	5	665.5	680.5	695.5
	10	668	680.5	693
	15	670.5	680.5	690.5
	20	673	680.5	688

Equipment Modifications

No modification was made to the EUT.

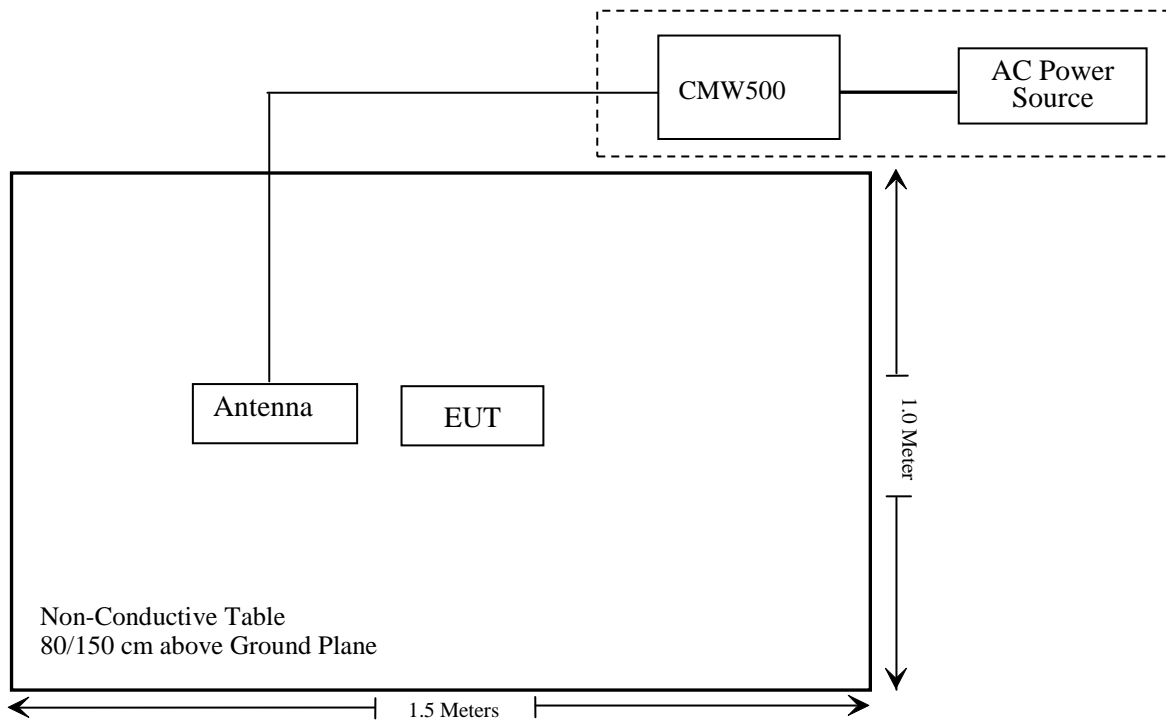
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606

Support Cable Description

Cable Description	Length (m)	From / Port	To
Un-shielded Un-detachable AC cable	1.2	AC Power	CMW500

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result	Remark
FCC §1.1307 (b) (3) & §2.1091	MPE-Based Exemption	Compliant	-
§2.1046; §22.913 (a) (d); §24.232 (c)(d); §27.50 (c) (d)(h)	RF Output Power	Compliant (LTE Band 7)	See Note
§2.1047	Modulation Characteristics	Not Applicable	-
§2.1049; §22.905; §22.917; §24.238; §27.53	Occupied Bandwidth	Compliant (LTE Band 7)	See Note
§2.1051; §22.917 (a); §24.238 (a); §27.53	Spurious Emissions at Antenna Terminal	Compliant (LTE Band 7)	See Note
§2.1053; §22.917 (a); §24.238 (a); §27.53	Field Strength of Spurious Radiation	Compliant	-
§22.917 (a); §24.238 (a); §27.53 (g) (h) (m)	Band Edge	Compliant (LTE Band 7)	See Note
§2.1055; §22.355; §24.235; §27.54	Frequency stability	Compliant (LTE Band 7)	See Note

Note:

1. According to manufacturer declared, the WWAN module installed in EUT has the following changes based on the certified module (FCC ID: XHG-M2500), which granted on 08/30/2022:

- (1) Adding the Frequency band of LTE Band 7 by software upgrade
- (2) Adding EN-DC mode: DC_12A_n66A/ DC_5A_n48A / DC_5A_n66A by software upgrade

Based on the above differences, it will affect all test data for the new adding frequency bands; all the test items for those bands were performed.

2. The RF output power was spot checked and it's consistently with the module report.
3. The test data for other bands refer to the module report.
4. The ATC is responsible for all the information provided in this report, except when information is provided by the customer as identified in this report.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2022/11/25	2023/11/24
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2022/11/25	2023/11/24
SONOMA INSTRUMENT	Amplifier	310 N	186131	2022/11/08	2023/11/07
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2022/11/08	2023/11/07
Quinstar	Amplifier	QLW-184055 36-J0	15964001002	2022/11/08	2023/11/07
Unknown	RF Coaxial Cable	No.10	N050	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.11	N1000	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.12	N040	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.13	N300	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.14	N800	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.15	N600	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.16	N650	2022/11/25	2023/11/24
Schwarzbeck	Bilog Antenna	VULB9163	9163-194	2021/07/06	2024/07/05
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-655	2022/12/26	2025/12/25
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2022/11/30	2025/11/29
PASTERNAK	Horn Antenn	PE9852/2F-20	1120 (ATC-BA-024-1)	2023/01/04	2026/01/03
PASTERNAK	Horn Antenn	PE9852/2F-20	1120 (ATC-BA-025-1)	2023/01/04	2026/01/03
PASTERNAK	Horn Antenn	PE9850/2F-20	720 (ATC-BA-024)	2023/01/04	2026/01/03
PASTERNAK	Horn Antenn	PE9850/2F-20	720 (ATC-BA-025)	2023/01/04	2026/01/03
Unknown	RFCoaxialCable	No.16	N200	2022/11/25	2023/11/24
Agilent	Signal Generator	N5183A	MY51040755	2022/11/25	2023/11/24
Wainwright	High Pass Filter	WHKX3.6/18 G-10SS	5	2022/11/25	2023/11/24
CD	High Pass Filter	HPM-1.2/18G -60	110	2022/11/25	2023/11/24

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101948	2022/11/25	2023/11/24
WEINSCHHEL	10dB Attenuator	5324	AU 3842	2022/11/25	2023/11/24
REALE	Temp. & Humid. Chamber	RHP-800BT	R20170318310	2022/11/23	2023/11/22
Rohde & Schwarz	Wideband Radio Communication Tester	CMW500	154606	2022/11/25	2023/11/24
Mini-Circuits	Power Splitter	DC-18000MHz	SF10944151S	2022/11/25	2023/11/24
Fluke	Multi Meter	45	7664009	2022/11/23	2023/11/22
Manson	DC Power Source	KPS-6604	ATCS-205	NCR	NCR
Unknown	RF Coaxial Cable	No.31	RF-01	Each time	

* Statement of Traceability: Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §1.1307 (b) (3) & §2.1091- MPE-Based Exemption

Applicable Standard

According to subpart 2.1091 systems operating under the provisions of this section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

According to KDB 447498 D04 Interim General RF Exposure Guidance

MPE-Based Exemption:

General frequency and separation-distance dependent MPE-based effective radiated power(ERP) thresholds are in Table B.1 [Table 1 of § 1.1307(b)(1)(i)(C)] to support an exemption from further evaluation from 300 kHz through 100 GHz.

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$.
1.34-30	$3,450 R^2/f^2$.
30-300	$3.83 R^2$.
300-1,500	$0.0128 R^2f$.
1,500-100,000	$19.2R^2$.

R is the minimum separation distance in meters

f = frequency in MHz

For multiple RF sources: Multiple RF sources are exempt if:

in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation:

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Result

For worst case:

Mode	Frequency (MHz)	Tune up conducted power	Antenna Gain		ERP		Evaluation Distance (m)	ERP Limit (W)
		(dBm)	(dBi)	(dBd)	(dBm)	(W)		
2.4G Wi-Fi	2412-2462	21.5	3.1	0.95	22.45	0.176	0.3	1.728
5G Wi-Fi	5150-5250	20.5	2.2	0.05	20.55	0.114	0.3	1.728
	5725-5850	20.5	2.2	0.05	20.55	0.114	0.3	1.728
WCDMA B2	1850-1910	24.0	3.5	1.35	25.35	0.343	0.3	1.728
WCDMA B4	1710-1755	24.0	3.5	1.35	25.35	0.343	0.3	1.728
WCDMA B5	824-849	25.0	2.0	-0.15	24.85	0.305	0.3	0.949
LTE B2	1850-1910	23.0	3.5	1.35	24.35	0.272	0.3	1.728
LTE B4	1710-1755	23.5	3.5	1.35	24.85	0.305	0.3	1.728
LTE B5	824-849	23.5	2.0	-0.15	23.35	0.216	0.3	0.949
LTE B7	2500-2570	24.0	0.3	-1.85	22.15	0.164	0.3	1.728
LTE B12	699-716	24.0	2.1	-0.05	23.95	0.248	0.3	0.805
LTE B41	2496-2690	27.0	0.3	-1.85	25.15	0.327	0.3	1.728
LTE B48	3550-3700	23.0	-0.6	-2.75	20.25	0.106	0.3	1.728
LTE B66	1710-1780	23.5	3.5	1.35	24.85	0.305	0.3	1.728
LTE B71	663-698	24.0	1.8	-0.35	23.65	0.232	0.3	0.764
5G n48	3550-3700	23.5	-0.6	-2.75	20.75	0.119	0.3	1.728
5G n66	1710-1780	24.0	3.6	1.45	25.45	0.351	0.3	1.728
5G n71	663-698	24.5	1.8	-0.35	24.15	0.260	0.3	0.764

Note: 1. The tune up conducted power and antenna gain was declared by the applicant.
 2. The 2.4G Wi-Fi can transmit at the same time with the 5G Wi-Fi.
 3. 0dBd=2.15dBi

Simultaneous transmitting consideration (worst case):

$$\text{The ratio} = \frac{\text{ERP}_{2.4\text{G Wi-Fi}}}{\text{ERP}_{\text{Limit}}} + \frac{\text{ERP}_{5\text{G Wi-Fi}}}{\text{ERP}_{\text{Limit}}} + \frac{\text{ERP}_{\text{WCDMA}}}{\text{ERP}_{\text{Limit}}} + \frac{\text{ERP}_{5\text{G NR}}}{\text{ERP}_{\text{Limit}}} \\ = 0.176/1.728 + 0.114/1.728 + 0.305/0.949 + 0.260/0.764 = 0.830 < 1.0$$

So simultaneous exposure is compliant.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 30cm from nearby persons.

Result: Compliant.

FCC §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H,24E&27 there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046, § 22.913 (a) (d) & § 24.232(c) (d); § 27.50(c)(d)(h) - RF OUTPUT POWER

Applicable Standard

According to FCC § 2.1046 and § 22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC § 2.1046 and § 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.

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB.

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

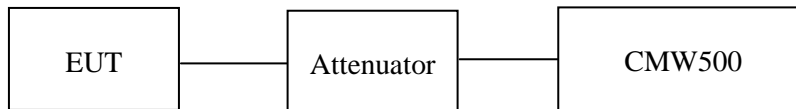
According to § 27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

According to § 27.50(h), the maximum EIRP must not exceed 2 Watts (33dBm) for 2496-2690MHz.

Test Procedure

Conducted method:

The RF output of the transmitter was connected to the CMW500 through sufficient attenuation.



ANSI C63.26-2015 Section 5.5.

Test Data

Environmental Conditions

Temperature:	25~27°C
Relative Humidity:	48~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang from 2023-02-05 to 2023-03-15.

Cellular Band (Part 22H)

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 5)	RMC12.2k		23.57	23.88	23.81	22.92	23.23	23.16
	HSDPA	1	21.08	20.83	21.33	20.43	20.18	20.68
		2	21.28	21.09	21.13	20.63	20.44	20.48
		3	20.79	20.88	21.02	20.14	20.23	20.37
		4	20.85	21.20	20.62	20.20	20.55	19.97
	HSUPA	1	22.73	22.07	22.46	22.08	21.42	21.81
		2	22.91	21.96	22.32	22.26	21.31	21.67
		3	22.33	21.97	21.92	21.68	21.32	21.27
		4	22.65	22.30	22.17	22.00	21.65	21.52
		5	22.51	22.33	22.01	21.86	21.68	21.36
	HSPA+	1	22.66	22.21	21.97	22.01	21.56	21.32

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable loss(dB)
 For WCDMA Band5: Antenna Gain = 2.0dBi = -0.15dBd (0dBd=2.15dBi)
 Cable loss = 0.5dB
 Limit: ERP ≤ 38.45dBm

PCS Band (Part 24E)

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 2)	RMC12.2k		22.25	22.56	22.21	24.85	25.16	24.81
	HSDPA	1	20.34	20.47	20.29	22.94	23.07	22.89
		2	19.98	20.02	19.92	22.58	22.62	22.52
		3	20.01	20.01	20.28	22.61	22.61	22.88
		4	19.85	19.85	20.22	22.45	22.45	22.82
	HSUPA	1	21.83	21.52	21.19	24.43	24.12	23.79
		2	21.22	21.19	21.46	23.82	23.79	24.06
		3	21.20	21.20	21.32	23.80	23.80	23.92
		4	22.08	21.04	20.72	24.68	23.64	23.32
		5	21.84	21.20	20.87	24.44	23.80	23.47
	HSPA+	1	21.65	20.78	21.03	24.25	23.38	23.63

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - Cable loss(dB)
 For PCS1900 / WCDMA Band2: Antenna Gain = 3.5dBi
 Cable loss = 0.9dB
 Limit: EIRP ≤ 33dBm

AWS Band

Mode	Test Mode	3GPP Sub Test	Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
WCDMA (Band 4)	RMC12.2k		23.28	23.36	23.22	26.08	26.16	26.02
	HSDPA	1	20.26	20.15	19.72	23.06	22.95	22.52
		2	20.14	20.48	20.03	22.94	23.28	22.83
		3	20.19	20.31	20.27	22.99	23.11	23.07
		4	20.10	19.45	20.17	22.90	22.25	22.97
	HSUPA	1	21.33	21.69	20.83	24.13	24.49	23.63
		2	21.36	20.94	21.19	24.16	23.74	23.99
		3	22.10	20.67	20.91	24.90	23.47	23.71
		4	21.68	20.84	21.16	24.48	23.64	23.96
		5	22.13	21.14	21.20	24.93	23.94	24.00
	HSPA+	1	22.15	20.83	20.50	24.95	23.63	23.30

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - Cable loss(dB)
WCDMA Band4: Antenna Gain =3.5dBi
Cable loss = 0.7dB
Limit: EIRP ≤ 33dBm

LTE Band 2

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	22.48	22.33	22.13	25.08	24.93	24.73
		RB1#3	22.52	22.21	22.08	25.12	24.81	24.68
		RB1#5	22.38	22.27	21.96	24.98	24.87	24.56
		RB3#0	22.40	22.29	22.06	25.00	24.89	24.66
		RB3#3	22.38	22.17	21.98	24.98	24.77	24.58
		RB6#0	21.39	21.21	21.00	23.99	23.81	23.60
	16QAM	RB1#0	21.48	21.54	21.26	24.08	24.14	23.86
		RB1#3	21.56	21.54	21.28	24.16	24.14	23.88
		RB1#5	21.51	21.41	21.07	24.11	24.01	23.67
		RB3#0	21.48	21.36	21.18	24.08	23.96	23.78
		RB3#3	21.52	21.32	21.10	24.12	23.92	23.70
		RB6#0	20.55	20.15	19.94	23.15	22.75	22.54
3.0	QPSK	RB1#0	22.48	22.21	22.10	25.08	24.81	24.70
		RB1#8	22.47	22.29	22.12	25.07	24.89	24.72
		RB1#14	22.31	22.04	21.96	24.91	24.64	24.56
		RB6#0	21.43	21.22	21.17	24.03	23.82	23.77
		RB6#9	21.36	21.18	21.03	23.96	23.78	23.63
		RB15#0	21.44	21.15	21.09	24.04	23.75	23.69
	16QAM	RB1#0	21.65	21.51	21.42	24.25	24.11	24.02
		RB1#8	21.59	21.50	21.32	24.19	24.10	23.92
		RB1#14	21.47	21.32	21.12	24.07	23.92	23.72
		RB6#0	20.56	20.31	20.14	23.16	22.91	22.74
		RB6#9	20.42	20.17	20.04	23.02	22.77	22.64
		RB15#0	20.44	20.22	20.14	23.04	22.82	22.74

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	22.50	22.43	22.22	25.10	25.03	24.82
		RB1#13	22.59	22.46	22.17	25.19	25.06	24.77
		RB1#24	22.43	22.30	22.15	25.03	24.90	24.75
		RB15#0	21.53	21.22	21.15	24.13	23.82	23.75
		RB15#10	21.47	21.18	21.15	24.07	23.78	23.75
		RB25#0	21.51	21.26	21.14	24.11	23.86	23.74
	16QAM	RB1#0	21.61	21.58	21.26	24.21	24.18	23.86
		RB1#13	21.66	21.50	21.36	24.26	24.10	23.96
		RB1#24	21.59	21.36	21.22	24.19	23.96	23.82
		RB15#0	20.63	20.27	20.22	23.23	22.87	22.82
		RB15#10	20.51	20.21	20.15	23.11	22.81	22.75
		RB25#0	20.56	20.28	20.17	23.16	22.88	22.77
10.0	QPSK	RB1#0	22.47	22.25	22.20	25.07	24.85	24.80
		RB1#25	22.44	22.27	22.19	25.04	24.87	24.79
		RB1#49	22.37	22.11	22.10	24.97	24.71	24.70
		RB25#0	21.38	21.24	21.17	23.98	23.84	23.77
		RB25#25	21.39	21.15	21.10	23.99	23.75	23.70
		RB50#0	21.43	21.17	21.14	24.03	23.77	23.74
	16QAM	RB1#0	21.57	21.46	21.25	24.17	24.06	23.85
		RB1#25	21.69	21.48	21.19	24.29	24.08	23.79
		RB1#49	21.55	21.37	21.21	24.15	23.97	23.81
		RB25#0	20.40	20.29	20.17	23.00	22.89	22.77
		RB25#25	20.39	20.19	20.10	22.99	22.79	22.70
		RB50#0	20.47	20.18	20.10	23.07	22.78	22.70

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	22.28	22.10	21.92	24.88	24.70	24.52
		RB1#38	22.23	22.13	21.96	24.83	24.73	24.56
		RB1#74	22.16	21.87	21.79	24.76	24.47	24.39
		RB36#0	21.26	21.08	21.05	23.86	23.68	23.65
		RB36#39	21.27	21.03	20.93	23.87	23.63	23.53
		RB75#0	21.29	21.04	21.03	23.89	23.64	23.63
	16QAM	RB1#0	21.44	21.32	21.09	24.04	23.92	23.69
		RB1#38	21.43	21.23	21.14	24.03	23.83	23.74
		RB1#74	21.37	21.25	21.05	23.97	23.85	23.65
		RB36#0	20.28	20.13	20.09	22.88	22.73	22.69
		RB36#39	20.30	20.08	19.97	22.90	22.68	22.57
		RB75#0	20.31	20.08	20.07	22.91	22.68	22.67
20.0	QPSK	RB1#0	22.67	22.16	22.12	25.27	24.76	24.72
		RB1#50	22.25	22.10	22.05	24.85	24.70	24.65
		RB1#99	22.12	22.08	21.91	24.72	24.68	24.51
		RB50#0	21.36	21.20	21.08	23.96	23.80	23.68
		RB50#50	21.36	21.19	21.11	23.96	23.79	23.71
		RB100#0	21.33	21.18	21.10	23.93	23.78	23.70
	16QAM	RB1#0	21.39	21.40	21.03	23.99	24.00	23.63
		RB1#50	21.78	21.45	21.38	24.38	24.05	23.98
		RB1#99	21.23	21.37	21.06	23.83	23.97	23.66
		RB50#0	20.39	20.18	20.18	22.99	22.78	22.78
		RB50#50	20.32	20.12	20.07	22.92	22.72	22.67
		RB100#0	20.37	20.15	20.10	22.97	22.75	22.70

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - Cable loss(dB)

For Band2: Antenna Gain = 3.5dBi

Cable loss = 0.9dB

Limit: EIRP ≤ 33dBm

LTE Band 4

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	22.29	22.46	22.65	25.09	25.26	25.45
		RB1#3	22.39	22.55	22.68	25.19	25.35	25.48
		RB1#5	22.31	22.47	22.62	25.11	25.27	25.42
		RB3#0	22.35	22.45	22.61	25.15	25.25	25.41
		RB3#3	22.41	22.47	22.60	25.21	25.27	25.40
		RB6#0	21.40	21.49	21.60	24.20	24.29	24.40
	16QAM	RB1#0	21.51	21.65	21.80	24.31	24.45	24.60
		RB1#3	21.50	21.73	21.84	24.30	24.53	24.64
		RB1#5	21.57	21.68	21.75	24.37	24.48	24.55
		RB3#0	21.48	21.53	21.73	24.28	24.33	24.53
		RB3#3	21.41	21.56	21.72	24.21	24.36	24.52
		RB6#0	20.37	20.52	20.69	23.17	23.32	23.49
3.0	QPSK	RB1#0	22.28	22.53	22.56	25.08	25.33	25.36
		RB1#8	22.40	22.54	22.74	25.20	25.34	25.54
		RB1#14	22.36	22.46	22.60	25.16	25.26	25.40
		RB6#0	21.37	21.49	21.53	24.17	24.29	24.33
		RB6#9	21.45	21.54	21.63	24.25	24.34	24.43
		RB15#0	21.45	21.59	21.68	24.25	24.39	24.48
	16QAM	RB1#0	21.43	21.67	21.76	24.23	24.47	24.56
		RB1#8	21.56	21.77	21.82	24.36	24.57	24.62
		RB1#14	21.59	21.56	21.82	24.39	24.36	24.62
		RB6#0	20.48	20.63	20.68	23.28	23.43	23.48
		RB6#9	20.57	20.58	20.62	23.37	23.38	23.42
		RB15#0	20.48	20.57	20.65	23.28	23.37	23.45

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	22.44	22.59	22.60	25.24	25.39	25.40
		RB1#13	22.55	22.51	22.63	25.35	25.31	25.43
		RB1#24	22.50	22.58	22.64	25.30	25.38	25.44
		RB15#0	21.40	21.53	21.58	24.20	24.33	24.38
		RB15#10	21.47	21.58	21.67	24.27	24.38	24.47
		RB25#0	21.47	21.61	21.59	24.27	24.41	24.39
	16QAM	RB1#0	21.66	21.73	21.82	24.46	24.53	24.62
		RB1#13	21.72	21.71	21.81	24.52	24.51	24.61
		RB1#24	21.68	21.70	21.78	24.48	24.50	24.58
		RB15#0	20.36	20.53	20.60	23.16	23.33	23.40
		RB15#10	20.50	20.63	20.67	23.30	23.43	23.47
		RB25#0	20.51	20.60	20.60	23.31	23.40	23.40
10.0	QPSK	RB1#0	22.36	22.55	22.65	25.16	25.35	25.45
		RB1#25	22.50	22.54	22.69	25.30	25.34	25.49
		RB1#49	22.39	22.47	22.65	25.19	25.27	25.45
		RB25#0	21.37	21.59	21.54	24.17	24.39	24.34
		RB25#25	21.50	21.60	21.66	24.30	24.40	24.46
		RB50#0	21.49	21.62	21.58	24.29	24.42	24.38
	16QAM	RB1#0	21.52	21.61	21.82	24.32	24.41	24.62
		RB1#25	21.60	21.71	21.85	24.40	24.51	24.65
		RB1#49	21.58	21.77	21.83	24.38	24.57	24.63
		RB25#0	20.41	20.58	20.62	23.21	23.38	23.42
		RB25#25	20.54	20.63	20.69	23.34	23.43	23.49
		RB50#0	20.50	20.60	20.57	23.30	23.40	23.37

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	22.31	22.42	22.47	25.11	25.22	25.27
		RB1#38	22.35	22.33	22.45	25.15	25.13	25.25
		RB1#74	22.38	22.28	22.44	25.18	25.08	25.24
		RB36#0	21.32	21.43	21.45	24.12	24.23	24.25
		RB36#39	21.42	21.44	21.49	24.22	24.24	24.29
		RB75#0	21.40	21.47	21.50	24.20	24.27	24.30
	16QAM	RB1#0	21.45	21.59	21.65	24.25	24.39	24.45
		RB1#38	21.56	21.53	21.58	24.36	24.33	24.38
		RB1#74	21.47	21.67	21.62	24.27	24.47	24.42
		RB36#0	20.35	20.42	20.47	23.15	23.22	23.27
		RB36#39	20.43	20.47	20.50	23.23	23.27	23.30
		RB75#0	20.43	20.47	20.53	23.23	23.27	23.33
20.0	QPSK	RB1#0	22.30	22.46	22.79	25.10	25.26	25.59
		RB1#50	22.39	22.38	22.38	25.19	25.18	25.18
		RB1#99	22.40	22.45	22.42	25.20	25.25	25.22
		RB50#0	21.37	21.46	21.50	24.17	24.26	24.30
		RB50#50	21.45	21.46	21.51	24.25	24.26	24.31
		RB100#0	21.48	21.51	21.56	24.28	24.31	24.36
	16QAM	RB1#0	21.52	21.52	21.62	24.32	24.32	24.42
		RB1#50	21.58	21.44	21.57	24.38	24.24	24.37
		RB1#99	21.58	21.56	21.87	24.38	24.36	24.67
		RB50#0	20.38	20.49	20.50	23.18	23.29	23.30
		RB50#50	20.46	20.48	20.46	23.26	23.28	23.26
		RB100#0	20.44	20.53	20.53	23.24	23.33	23.33

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - Cable loss
For Band4: Antenna Gain = 3.5dBi
Cable loss = 0.7dB
Limit: EIRP ≤ 33dBm

LTE Band 5

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	23.35	23.21	23.14	22.70	22.56	22.49
		RB1#3	23.37	23.29	23.21	22.72	22.64	22.56
		RB1#5	23.28	23.24	23.11	22.63	22.59	22.46
		RB3#0	23.28	23.25	23.11	22.63	22.60	22.46
		RB3#3	23.32	23.29	23.15	22.67	22.64	22.50
		RB6#0	22.29	22.18	22.08	21.64	21.53	21.43
	16QAM	RB1#0	22.46	22.38	22.36	21.81	21.73	21.71
		RB1#3	22.47	22.37	22.29	21.82	21.72	21.64
		RB1#5	22.44	22.33	22.29	21.79	21.68	21.64
		RB3#0	22.40	22.35	22.20	21.75	21.70	21.55
		RB3#3	22.48	22.33	22.16	21.83	21.68	21.51
		RB6#0	21.29	21.26	21.07	20.64	20.61	20.42
3.0	QPSK	RB1#0	23.37	23.21	23.16	22.72	22.56	22.51
		RB1#8	23.41	23.34	23.23	22.76	22.69	22.58
		RB1#14	23.32	23.22	23.20	22.67	22.57	22.55
		RB6#0	22.31	22.24	22.12	21.66	21.59	21.47
		RB6#9	22.40	22.34	22.16	21.75	21.69	21.51
		RB15#0	22.37	22.24	22.15	21.72	21.59	21.50
	16QAM	RB1#0	22.53	22.42	22.46	21.88	21.77	21.81
		RB1#8	22.51	22.44	22.28	21.86	21.79	21.63
		RB1#14	22.50	22.41	22.36	21.85	21.76	21.71
		RB6#0	21.48	21.21	21.30	20.83	20.56	20.65
		RB6#9	21.27	21.33	21.22	20.62	20.68	20.57
		RB15#0	21.42	21.25	21.18	20.77	20.60	20.53

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.42	23.40	23.18	22.77	22.75	22.53
		RB1#13	23.28	23.43	23.24	22.63	22.78	22.59
		RB1#24	23.25	23.35	23.11	22.60	22.70	22.46
		RB15#0	22.35	22.28	22.18	21.70	21.63	21.53
		RB15#10	22.37	22.35	22.20	21.72	21.70	21.55
		RB25#0	22.39	22.30	22.26	21.74	21.65	21.61
	16QAM	RB1#0	22.33	22.32	22.33	21.68	21.67	21.68
		RB1#13	22.35	22.14	22.42	21.70	21.49	21.77
		RB1#24	22.15	22.26	22.34	21.50	21.61	21.69
		RB15#0	21.42	21.27	21.21	20.77	20.62	20.56
		RB15#10	21.42	21.32	21.25	20.77	20.67	20.60
		RB25#0	21.43	21.32	21.23	20.78	20.67	20.58
10.0	QPSK	RB1#0	23.44	23.31	23.38	22.79	22.66	22.73
		RB1#25	23.41	23.37	23.32	22.76	22.72	22.67
		RB1#49	23.34	23.24	23.23	22.69	22.59	22.58
		RB25#0	22.40	22.31	22.34	21.75	21.66	21.69
		RB25#25	22.32	22.37	22.26	21.67	21.72	21.61
		RB50#0	22.42	22.30	22.24	21.77	21.65	21.59
	16QAM	RB1#0	22.51	22.50	22.53	21.86	21.85	21.88
		RB1#25	22.56	22.57	22.46	21.91	21.92	21.81
		RB1#49	22.38	22.43	22.25	21.73	21.78	21.60
		RB25#0	21.43	21.28	21.37	20.78	20.63	20.72
		RB25#25	21.30	21.34	21.22	20.65	20.69	20.57
		RB50#0	21.42	21.29	21.26	20.77	20.64	20.61

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd) - Cable Loss(dB)

For Band5: Antenna Gain = 2.0dBi = -0.15dBd (0dBd = 2.15dBi)

Cable Loss = 0.5dB

Limit: ERP ≤ 38.45dBm

LTE Band 7

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	22.03	21.93	22.22	21.33	21.23	21.52
		RB1#13	22.10	22.09	22.34	21.40	21.39	21.64
		RB1#24	22.01	22.03	22.36	21.31	21.33	21.66
		RB15#0	21.00	20.88	21.20	20.30	20.18	20.50
		RB15#10	21.08	21.02	21.37	20.38	20.32	20.67
		RB25#0	21.02	20.96	21.32	20.32	20.26	20.62
	16QAM	RB1#0	21.17	21.02	21.39	20.47	20.32	20.69
		RB1#13	21.28	21.01	21.46	20.58	20.31	20.76
		RB1#24	21.12	21.21	21.50	20.42	20.51	20.80
		RB15#0	20.02	19.88	20.17	19.32	19.18	19.47
		RB15#10	20.06	19.99	20.29	19.36	19.29	19.59
		RB25#0	20.09	20.00	20.32	19.39	19.30	19.62
10.0	QPSK	RB1#0	21.94	22.01	22.28	21.24	21.31	21.58
		RB1#25	22.02	22.04	22.33	21.32	21.34	21.63
		RB1#49	21.93	22.03	22.32	21.23	21.33	21.62
		RB25#0	21.04	20.92	21.20	20.34	20.22	20.50
		RB25#25	21.04	21.01	21.30	20.34	20.31	20.60
		RB50#0	21.04	21.03	21.30	20.34	20.33	20.60
	16QAM	RB1#0	21.04	21.05	21.26	20.34	20.35	20.56
		RB1#25	21.15	21.24	21.49	20.45	20.54	20.79
		RB1#49	21.10	21.11	21.41	20.40	20.41	20.71
		RB25#0	20.07	19.95	20.20	19.37	19.25	19.50
		RB25#25	20.00	19.98	20.31	19.30	19.28	19.61
		RB50#0	20.05	20.01	20.29	19.35	19.31	19.59

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	22.74	22.59	22.90	22.04	21.89	22.20
		RB1#38	22.71	22.58	22.91	22.01	21.88	22.21
		RB1#74	22.74	22.63	23.00	22.04	21.93	22.30
		RB36#0	21.70	21.62	21.91	21.00	20.92	21.21
		RB36#39	21.77	21.67	21.94	21.07	20.97	21.24
		RB75#0	21.84	21.89	22.04	21.14	21.19	21.34
	16QAM	RB1#0	21.88	21.77	21.91	21.18	21.07	21.21
		RB1#38	21.95	21.85	21.98	21.25	21.15	21.28
		RB1#74	21.89	21.74	22.14	21.19	21.04	21.44
		RB36#0	20.70	20.67	21.04	20.00	19.97	20.34
		RB36#39	20.80	20.70	20.92	20.10	20.00	20.22
		RB75#0	20.89	20.73	21.16	20.19	20.03	20.46
20.0	QPSK	RB1#0	23.53	23.55	23.75	22.83	22.85	23.05
		RB1#50	23.49	23.57	23.77	22.79	22.87	23.07
		RB1#99	23.46	23.65	23.64	22.76	22.95	22.94
		RB50#0	22.50	22.62	22.84	21.80	21.92	22.14
		RB50#50	22.56	22.71	22.97	21.86	22.01	22.27
		RB100#0	22.65	22.63	22.81	21.95	21.93	22.11
	16QAM	RB1#0	22.59	22.61	22.77	21.89	21.91	22.07
		RB1#50	22.53	22.83	22.99	21.83	22.13	22.29
		RB1#99	22.61	22.87	23.18	21.91	22.17	22.48
		RB50#0	21.46	21.68	21.78	20.76	20.98	21.08
		RB50#50	21.66	21.71	21.98	20.96	21.01	21.28
		RB100#0	21.61	21.82	21.83	20.91	21.12	21.13

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - Cable loss

For Band7: Antenna Gain = 0.3dBi

Cable loss = 1dB

Limit: EIRP ≤ 33dBm

LTE Band 12

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QPSK	RB1#0	23.22	23.15	23.13	22.77	22.70	22.68
		RB1#3	23.29	23.17	23.12	22.84	22.72	22.67
		RB1#5	23.34	23.11	23.09	22.89	22.66	22.64
		RB3#0	23.30	23.10	23.16	22.85	22.65	22.71
		RB3#3	23.23	23.10	23.05	22.78	22.65	22.60
		RB6#0	22.24	22.00	22.10	21.79	21.55	21.65
	16QAM	RB1#0	22.49	22.17	22.26	22.04	21.72	21.81
		RB1#3	22.42	22.24	22.38	21.97	21.79	21.93
		RB1#5	22.29	22.25	22.29	21.84	21.80	21.84
		RB3#0	22.42	22.13	22.19	21.97	21.68	21.74
		RB3#3	22.31	22.14	22.19	21.86	21.69	21.74
		RB6#0	21.22	21.13	21.13	20.77	20.68	20.68
3.0	QPSK	RB1#0	23.22	23.05	23.12	22.77	22.60	22.67
		RB1#8	23.23	23.11	23.17	22.78	22.66	22.72
		RB1#14	23.13	23.02	23.02	22.68	22.57	22.57
		RB6#0	22.25	22.04	22.09	21.80	21.59	21.64
		RB6#9	22.23	22.10	22.11	21.78	21.65	21.66
		RB15#0	22.27	22.04	22.04	21.82	21.59	21.59
	16QAM	RB1#0	22.46	22.21	22.27	22.01	21.76	21.82
		RB1#8	22.42	22.29	22.39	21.97	21.84	21.94
		RB1#14	22.39	22.10	22.28	21.94	21.65	21.83
		RB6#0	21.39	21.06	21.15	20.94	20.61	20.70
		RB6#9	21.37	21.04	21.12	20.92	20.59	20.67
		RB15#0	21.30	21.03	21.06	20.85	20.58	20.61

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QPSK	RB1#0	23.15	23.16	23.08	22.70	22.71	22.63
		RB1#13	23.34	23.18	23.14	22.89	22.73	22.69
		RB1#24	23.21	23.06	23.06	22.76	22.61	22.61
		RB15#0	22.20	22.06	22.07	21.75	21.61	21.62
		RB15#10	22.21	22.12	22.11	21.76	21.67	21.66
		RB25#0	22.22	22.03	22.10	21.77	21.58	21.65
	16QAM	RB1#0	22.36	22.11	22.29	21.91	21.66	21.84
		RB1#13	22.43	22.15	22.23	21.98	21.70	21.78
		RB1#24	22.38	22.18	22.27	21.93	21.73	21.82
		RB15#0	21.19	21.07	21.07	20.74	20.62	20.62
		RB15#10	21.23	21.09	21.16	20.78	20.64	20.71
		RB25#0	21.26	21.04	21.13	20.81	20.59	20.68
10.0	QPSK	RB1#0	23.37	23.22	23.18	22.92	22.77	22.73
		RB1#25	23.21	23.07	23.11	22.76	22.62	22.66
		RB1#49	22.98	23.05	23.06	22.53	22.60	22.61
		RB25#0	22.21	22.15	22.05	21.76	21.70	21.60
		RB25#25	22.10	22.12	22.16	21.65	21.67	21.71
		RB50#0	22.18	22.09	22.07	21.73	21.64	21.62
	16QAM	RB1#0	22.61	22.24	22.33	22.16	21.79	21.88
		RB1#25	22.31	22.20	22.18	21.86	21.75	21.73
		RB1#49	22.15	22.29	22.18	21.70	21.84	21.73
		RB25#0	21.19	21.21	21.13	20.74	20.76	20.68
		RB25#25	21.09	21.13	21.19	20.64	20.68	20.74
		RB50#0	21.23	21.11	21.08	20.78	20.66	20.63

Note: ERP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)-Cable loss(dB)

For Band12: Antenna Gain =2.1dBi = -0.05dBd (0dBd=2.15dBi)

Cable loss=0.4dB

Limit: ERP≤34.77dBm

LTE Band 41:

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QP SK	RB1#0	25.30	25.03	25.46	24.60	24.33	24.76
		RB1#13	25.48	25.02	25.43	24.78	24.32	24.73
		RB1#24	25.33	25.01	25.44	24.63	24.31	24.74
		RB15#0	25.15	24.77	25.21	24.45	24.07	24.51
		RB15#10	25.21	24.86	25.16	24.51	24.16	24.46
		RB25#0	25.22	24.68	25.29	24.52	23.98	24.59
	16QAM	RB1#0	24.41	24.39	24.41	23.71	23.69	23.71
		RB1#13	24.49	24.35	24.39	23.79	23.65	23.69
		RB1#24	24.61	24.53	24.41	23.91	23.83	23.71
		RB15#0	24.77	24.78	25.00	24.07	24.08	24.30
		RB15#10	24.15	24.88	24.99	23.45	24.18	24.29
		RB25#0	24.08	24.70	25.01	23.38	24.00	24.31
10.0	QPSK	RB1#0	25.22	24.95	25.14	24.52	24.25	24.44
		RB1#25	25.22	25.06	25.29	24.52	24.36	24.59
		RB1#49	25.32	25.01	25.01	24.62	24.31	24.31
		RB25#0	25.02	24.70	25.09	24.32	24.00	24.39
		RB25#25	25.04	24.78	25.23	24.34	24.08	24.53
		RB50#0	24.29	24.79	25.00	23.59	24.09	24.30
	16QAM	RB1#0	24.03	24.64	24.98	23.33	23.94	24.28
		RB1#25	24.46	24.97	24.63	23.76	24.27	23.93
		RB1#49	24.93	24.87	24.97	24.23	24.17	24.27
		RB25#0	24.96	24.88	24.99	24.26	24.18	24.29
		RB25#25	24.88	24.93	24.92	24.18	24.23	24.22
		RB50#0	24.87	24.65	24.92	24.17	23.95	24.22

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	25.11	24.81	24.97	24.41	24.11	24.27
		RB1#38	25.02	24.87	25.15	24.32	24.17	24.45
		RB1#74	25.04	24.77	25.18	24.34	24.07	24.48
		RB36#0	24.87	24.64	24.79	24.17	23.94	24.09
		RB36#39	24.92	24.61	25.01	24.22	23.91	24.31
		RB75#0	24.94	24.74	25.04	24.24	24.04	24.34
	16QAM	RB1#0	24.21	24.87	24.07	23.51	24.17	23.37
		RB1#38	24.16	24.89	24.49	23.46	24.19	23.79
		RB1#74	24.17	24.93	24.44	23.47	24.23	23.74
		RB36#0	24.73	24.57	25.01	24.03	23.87	24.31
		RB36#39	24.04	24.75	24.97	23.34	24.05	24.27
		RB75#0	24.03	24.61	24.93	23.33	23.91	24.23
20.0	QPSK	RB1#0	25.07	25.68	25.21	24.37	24.98	24.51
		RB1#50	24.93	24.83	24.73	24.23	24.13	24.03
		RB1#99	24.55	24.44	24.67	23.85	23.74	23.97
		RB50#0	24.56	24.35	24.49	23.86	23.65	23.79
		RB50#50	24.59	24.45	24.79	23.89	23.75	24.09
		RB100#0	24.66	24.34	24.57	23.96	23.64	23.87
	16QAM	RB1#0	24.70	24.46	24.46	24.00	23.76	23.76
		RB1#50	24.68	24.52	25.02	23.98	23.82	24.32
		RB1#99	24.63	24.66	24.85	23.93	23.96	24.15
		RB50#0	24.06	23.87	24.00	23.36	23.17	23.30
		RB50#50	24.10	23.92	23.98	23.40	23.22	23.28
		RB100#0	24.14	23.86	24.08	23.44	23.16	23.38

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - Cable loss(dB)
For Band41: Antenna Gain =0.3dBi
Cable loss=1.0dB
Limit: EIRP ≤ 30dBm

LTE Band 66:

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
1.4	QP SK	RB1#0	22.48	22.62	22.31	25.28	25.42	25.11
		RB1#3	22.55	22.66	22.25	25.35	25.46	25.05
		RB1#5	22.53	22.63	22.25	25.33	25.43	25.05
		RB3#0	22.48	22.58	22.25	25.28	25.38	25.05
		RB3#3	22.54	22.64	22.21	25.34	25.44	25.01
		RB6#0	21.52	21.54	21.28	24.32	24.34	24.08
	16QAM	RB1#0	21.63	21.73	21.44	24.43	24.53	24.24
		RB1#3	21.71	21.83	21.44	24.51	24.63	24.24
		RB1#5	21.90	21.76	21.39	24.70	24.56	24.19
		RB3#0	21.64	21.66	21.37	24.44	24.46	24.17
		RB3#3	21.64	21.75	21.37	24.44	24.55	24.17
		RB6#0	20.30	20.55	20.31	23.10	23.35	23.11
3.0	QPSK	RB1#0	22.43	22.62	22.26	25.23	25.42	25.06
		RB1#8	22.55	22.64	22.30	25.35	25.44	25.10
		RB1#14	22.52	22.53	22.25	25.32	25.33	25.05
		RB6#0	21.48	21.58	21.36	24.28	24.38	24.16
		RB6#9	21.55	21.58	21.30	24.35	24.38	24.10
		RB15#0	21.53	21.60	21.34	24.33	24.40	24.14
	16QAM	RB1#0	21.61	21.82	21.41	24.41	24.62	24.21
		RB1#8	21.78	22.02	21.58	24.58	24.82	24.38
		RB1#14	21.66	21.73	21.58	24.46	24.53	24.38
		RB6#0	20.51	20.66	20.36	23.31	23.46	23.16
		RB6#9	20.62	20.69	20.37	23.42	23.49	23.17
		RB15#0	20.55	20.57	20.33	23.35	23.37	23.13

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QP SK	RB1#0	22.50	22.69	22.45	25.30	25.49	25.25
		RB1#13	22.63	22.72	22.43	25.43	25.52	25.23
		RB1#24	22.62	22.65	22.34	25.42	25.45	25.14
		RB15#0	21.50	21.63	21.40	24.30	24.43	24.20
		RB15#10	21.60	21.58	21.38	24.40	24.38	24.18
		RB25#0	21.59	21.61	21.36	24.39	24.41	24.16
	16QAM	RB1#0	21.80	21.89	21.47	24.60	24.69	24.27
		RB1#13	21.77	21.86	21.45	24.57	24.66	24.25
		RB1#24	21.78	21.88	21.39	24.58	24.68	24.19
		RB15#0	20.58	20.65	20.41	23.38	23.45	23.21
		RB15#10	20.66	20.65	20.39	23.46	23.45	23.19
		RB25#0	20.66	20.63	20.37	23.46	23.43	23.17
10.0	QPSK	RB1#0	22.56	22.71	22.37	25.36	25.51	25.17
		RB1#25	22.57	22.69	22.41	25.37	25.49	25.21
		RB1#49	22.58	22.53	22.27	25.38	25.33	25.07
		RB25#0	21.50	21.69	21.44	24.30	24.49	24.24
		RB25#25	21.60	21.61	21.38	24.40	24.41	24.18
		RB50#0	21.64	21.63	21.42	24.44	24.43	24.22
	16QAM	RB1#0	21.61	21.97	21.53	24.41	24.77	24.33
		RB1#25	21.79	21.94	21.49	24.59	24.74	24.29
		RB1#49	21.65	21.77	21.42	24.45	24.57	24.22
		RB25#0	20.63	20.69	20.47	23.43	23.49	23.27
		RB25#25	20.62	20.67	20.35	23.42	23.47	23.15
		RB50#0	20.61	20.60	20.43	23.41	23.40	23.23

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			EIRP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	22.40	22.58	22.21	25.20	25.38	25.01
		RB1#38	22.48	22.66	22.19	25.28	25.46	24.99
		RB1#74	22.38	22.35	22.12	25.18	25.15	24.92
		RB36#0	21.46	21.53	21.27	24.26	24.33	24.07
		RB36#39	21.55	21.47	21.22	24.35	24.27	24.02
		RB75#0	21.53	21.50	21.30	24.33	24.30	24.10
	16QAM	RB1#0	21.54	21.57	21.47	24.34	24.37	24.27
		RB1#38	21.77	21.69	21.49	24.57	24.49	24.29
		RB1#74	21.71	21.53	21.49	24.51	24.33	24.29
		RB36#0	20.46	20.56	20.33	23.26	23.36	23.13
		RB36#39	20.58	20.45	20.22	23.38	23.25	23.02
		RB75#0	20.55	20.51	20.31	23.35	23.31	23.11
20.0	QPSK	RB1#0	22.43	22.49	22.21	25.23	25.29	25.01
		RB1#50	22.53	22.78	22.27	25.33	25.58	25.07
		RB1#99	22.53	22.38	22.19	25.33	25.18	24.99
		RB50#0	21.47	21.58	21.32	24.27	24.38	24.12
		RB50#50	21.54	21.48	21.22	24.34	24.28	24.02
		RB100#0	21.57	21.53	21.32	24.37	24.33	24.12
	16QAM	RB1#0	21.77	21.77	21.38	24.57	24.57	24.18
		RB1#50	21.73	21.85	21.45	24.53	24.65	24.25
		RB1#99	22.07	21.57	21.28	24.87	24.37	24.08
		RB50#0	20.51	20.57	21.30	23.31	23.37	24.10
		RB50#50	20.57	20.48	20.26	23.37	23.28	23.06
		RB100#0	20.59	20.51	20.32	23.39	23.31	23.12

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBi) - Cable loss(dB)

For Band66: Antenna Gain =3.5dBi

Cable loss=0.7dB

Limit: EIRP ≤ 30dBm

LTE Band71:

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
5.0	QP SK	RB1#0	23.69	23.54	23.34	22.94	22.79	22.59
		RB1#13	23.69	23.63	23.35	22.94	22.88	22.60
		RB1#24	23.54	23.44	23.23	22.79	22.69	22.48
		RB15#0	22.51	22.47	22.21	21.76	21.72	21.46
		RB15#10	22.53	22.53	22.27	21.78	21.78	21.52
		RB25#0	22.56	22.43	22.19	21.81	21.68	21.44
	16QAM	RB1#0	22.75	22.75	22.43	22.00	22.00	21.68
		RB1#13	22.70	22.87	22.42	21.95	22.12	21.67
		RB1#24	22.63	22.65	22.33	21.88	21.90	21.58
		RB15#0	21.54	21.53	21.22	20.79	20.78	20.47
		RB15#10	21.54	21.55	21.29	20.79	20.80	20.54
		RB25#0	21.58	21.43	21.17	20.83	20.68	20.42
10.0	QPSK	RB1#0	23.63	23.48	23.33	22.88	22.73	22.58
		RB1#25	23.54	23.51	23.34	22.79	22.76	22.59
		RB1#49	23.40	23.39	23.28	22.65	22.64	22.53
		RB25#0	22.47	22.46	22.23	21.72	21.71	21.48
		RB25#25	22.38	22.44	22.27	21.63	21.69	21.52
		RB50#0	22.50	22.41	22.27	21.75	21.66	21.52
	16QAM	RB1#0	22.86	22.65	22.59	22.11	21.90	21.84
		RB1#25	22.68	22.66	22.51	21.93	21.91	21.76
		RB1#49	22.56	22.33	22.46	21.81	21.58	21.71
		RB25#0	21.51	21.47	21.18	20.76	20.72	20.43
		RB25#25	21.42	21.45	21.30	20.67	20.70	20.55
		RB50#0	21.52	21.40	21.29	20.77	20.65	20.54

Bandwidth (MHz)	Modulation	RB size/ RB Offset	Conducted Average Output Power (dBm)			ERP(dBm)		
			Low	Mid	High	Low	Mid	High
15.0	QPSK	RB1#0	23.35	23.11	23.18	22.60	22.36	22.43
		RB1#38	23.34	23.31	23.07	22.59	22.56	22.32
		RB1#74	23.30	23.09	23.03	22.55	22.34	22.28
		RB36#0	22.33	22.33	22.10	21.58	21.58	21.35
		RB36#39	22.26	22.25	22.08	21.51	21.50	21.33
		RB75#0	22.33	22.23	22.06	21.58	21.48	21.31
	16QAM	RB1#0	22.57	22.39	22.45	21.82	21.64	21.70
		RB1#38	22.34	22.48	22.35	21.59	21.73	21.60
		RB1#74	22.53	22.32	22.19	21.78	21.57	21.44
		RB36#0	21.33	21.30	21.08	20.58	20.55	20.33
		RB36#39	21.29	21.25	21.06	20.54	20.50	20.31
		RB75#0	21.41	21.25	21.05	20.66	20.50	20.30
20.0	QPSK	RB1#0	23.55	23.71	23.57	22.80	22.96	22.82
		RB1#50	23.23	23.29	23.16	22.48	22.54	22.41
		RB1#99	23.22	23.03	23.12	22.47	22.28	22.37
		RB50#0	22.36	22.30	22.21	21.61	21.55	21.46
		RB50#50	22.39	22.20	22.09	21.64	21.45	21.34
		RB100#0	22.40	22.26	22.21	21.65	21.51	21.46
	16QAM	RB1#0	22.58	22.22	22.37	21.83	21.47	21.62
		RB1#50	22.76	22.88	22.68	22.01	22.13	21.93
		RB1#99	22.49	22.13	22.15	21.74	21.38	21.40
		RB50#0	21.34	21.33	21.22	20.59	20.58	20.47
		RB50#50	21.37	21.20	21.10	20.62	20.45	20.35
		RB100#0	21.41	21.23	21.20	20.66	20.48	20.45

Note: EIRP(dBm) = Conducted Power(dBm) + Antenna Gain(dBd)-Cable loss(dB)

For Band71: Antenna Gain = 1.8dBi = -0.35dBd (0dBd=2.15dBi)

Cable loss=0.4dB

Limit: ERP ≤ 30dBm

Peak-to-average ratio (PAR)**LTE Band 7 20MHz Bandwidth**

Modulation	Low channel (dB)	Middle channel (dB)	High channel (dB)	PAR Limit (dB)	Result
QPSK (1RB Size)	9.01	9.04	9.74	13	Pass
QPSK (100RB Size)	8.83	9.76	9.96	13	Pass
16QAM (1RB Size)	6.15	5.88	9.23	13	Pass
16QAM (100RB Size)	7.13	8.16	6.51	13	Pass

FCC §2.1049, §22.917, §22.905 & §24.238 & §27.53 - OCCUPIED BANDWIDTH

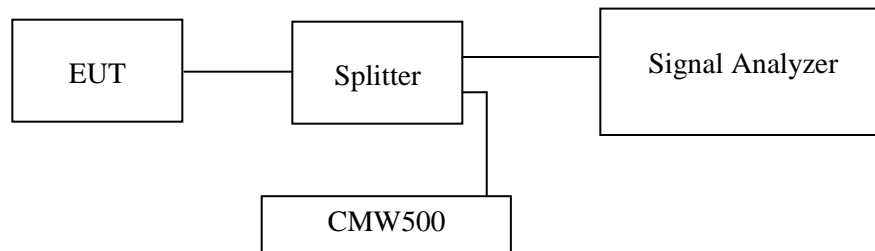
Applicable Standard

FCC 47 §2.1049, §22.917, §22.905, §24.238 and §27.53.

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 1% to 5% of the anticipated emission bandwidth and the 26 dB & 99% bandwidth was recorded.



Test Data

Environmental Conditions

Temperature:	25~27°C
Relative Humidity:	48~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2023-03-15.

EUT operation mode: Transmitting

Test Result: Pass

LTE Band 7

Bandwidth	Modulation	Low channel		Middle channel		High channel	
		OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)	OBW (MHz)	26dB EBW (MHz)
5 MHz	QPSK	4.551	5.240	4.531	5.260	4.531	5.260
	16QAM	4.551	5.240	4.531	5.200	4.571	5.320
10 MHz	QPSK	8.982	9.960	8.982	9.920	8.982	9.840
	16QAM	8.982	9.960	8.982	9.880	8.982	9.960
15 MHz	QPSK	13.473	15.120	13.533	15.060	13.533	14.940
	16QAM	13.473	14.940	13.533	15.120	13.533	15.000
20 MHz	QPSK	17.964	19.680	17.964	18.960	17.884	19.600
	16QAM	17.884	18.960	18.044	19.920	17.884	19.600

The test plots please refer to the Appendix A.

FCC §2.1051, §22.917(a) & §24.238(a)& §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

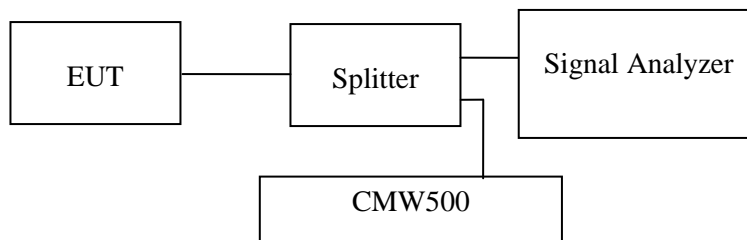
Applicable Standard

FCC §2.1051, §22.917(a) & §24.238(a)& §27.53.

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in §2.1051.

Test Procedure

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



Note: the worst path loss (cable loss and splitter inset loss) among the test frequency range was added into plots.

Test Data

Environmental Conditions

Temperature:	26°C
Relative Humidity:	48~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2023-03-15.

EUT operation mode: Transmitting

Test result: Pass

The test plots of please refer to the Appendix B.

FCC § 2.1053; § 22.917 (a); § 24.238 (a); § 27.53 - SPURIOUS RADIATED EMISSIONS

Applicable Standard

FCC § 2.1053, § 22.917(a) & § 24.238(a) & § 27.53.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the receiving antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Test Data

Environmental Conditions

Temperature:	24.5~25°C
Relative Humidity:	50~56%
ATM Pressure:	101.0kPa

The testing was performed by Jimi Zheng on 2023-02-03 for below 1GHz and from 2023-01-10 to 2023-01-11 for above 1GHz.

Test mode: Transmitting (Pre-scan in the X, Y and Z axes of orientation, the worst case Y-axis of orientation was recorded)

The worst case is as below:

30MHz-20GHz:**PCS Band (Part 24E)**

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 2, Low Channel								
960.23	-62.98	181	1.6	H	10	-52.98	-13	-39.98
960.23	-62	235	1.9	V	11.7	-50.3	-13	-37.3
3704.8	-50.20	286	1.0	H	8.1	-42.10	-13	-29.10
3704.8	-49.60	83	1.2	V	7.6	-42.00	-13	-29.00
5557.2	-50.80	337	1.5	H	9.6	-41.20	-13	-28.20
5557.2	-49.70	189	1.2	V	9.1	-40.60	-13	-27.60
WCDMA Band 2, Middle Channel								
960.8	-62.62	258	2	H	10	-52.62	-13	-39.62
960.8	-62.7	39	2.1	V	11.7	-51	-13	-38
3760	-51.90	301	1.4	H	8.8	-43.10	-13	-30.10
3760	-51.10	33	2.1	V	8	-43.10	-13	-30.10
5640	-51.40	220	2.3	H	10.2	-41.20	-13	-28.20
5640	-50.00	182	1.4	V	9.4	-40.60	-13	-27.60
WCDMA Band 2, High Channel								
959.56	-61.82	359	1	H	10	-51.82	-13	-38.82
959.56	-62.07	356	2.2	V	11.7	-50.37	-13	-37.37
3815.2	-51.00	145	2	H	8.7	-42.30	-13	-29.30
3815.2	-50.10	147	1.7	V	7.9	-42.20	-13	-29.20
5722.8	-51.90	325	2	H	10.6	-41.30	-13	-28.30
5722.8	-50.70	351	1.4	V	10.2	-40.50	-13	-27.50

AWS Band (Part 27)

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 4, Low Channel								
959.69	-62.95	299	1.8	H	10	-52.95	-13	-39.95
959.69	-62.24	18	1.4	V	11.7	-50.54	-13	-37.54
3424.8	-47.80	355	2.2	H	6.4	-41.40	-13	-28.40
3424.8	-46.70	11	2.3	V	5.8	-40.90	-13	-27.90
5137.2	-53.20	42	1.6	H	11.4	-41.80	-13	-28.80
5137.2	-52.40	114	2.4	V	10.8	-41.60	-13	-28.60
WCDMA Band 4, Middle Channel								
960.71	-62.55	359	2	H	10	-52.55	-13	-39.55
960.71	-62.63	193	2.5	V	11.7	-50.93	-13	-37.93
3465.2	-48.7	100	1.5	H	7	-41.70	-13	-28.70
3465.2	-49.3	86	2.4	V	6.2	-43.10	-13	-30.10
5197.8	-52.7	147	1.7	H	10.4	-42.30	-13	-29.30
5197.8	-51.5	243	1	V	9.8	-41.70	-13	-28.70
WCDMA Band 4, High Channel								
959.58	-62.06	71	1.7	H	10	-52.06	-13	-39.06
959.58	-61.77	259	1.8	V	11.7	-50.07	-13	-37.07
3505.2	-49.00	122	1.8	H	7.8	-41.20	-13	-28.20
3505.2	-48.60	82	1.1	V	6.5	-42.10	-13	-29.10
5257.8	-51.70	182	1.6	H	9.4	-42.30	-13	-29.30
5257.8	-50.50	199	2.3	V	9	-41.50	-13	-28.50

30MHz-10GHz:**Cellular Band (Part 22H)**

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
WCDMA Band 5, Low Channel								
960.13	-62.76	62	1	H	10	-52.76	-13	-39.76
960.13	-61.86	168	1.6	V	11.7	-50.16	-13	-37.16
1652.8	-52.10	163	1.7	H	3.5	-48.60	-13	-35.60
1652.8	-52.40	254	2	V	3.1	-49.30	-13	-36.30
2479.2	-48.70	120	1.5	H	6.6	-42.10	-13	-29.10
2479.2	-51.90	114	1.2	V	5.8	-46.10	-13	-33.10
3305.6	-38.00	198	1.1	H	6.4	-31.60	-13	-18.60
3305.6	-35.60	302	2.4	V	5.7	-29.90	-13	-16.90
WCDMA Band 5, Middle Channel								
960.47	-62.41	84	2	H	10	-52.41	-13	-39.41
960.47	-62.77	96	1.9	V	11.7	-51.07	-13	-38.07
1673.2	-49.40	245	2	H	3.8	-45.60	-13	-32.60
1673.2	-48.90	356	2.2	V	3.1	-45.80	-13	-32.80
2509.8	-47.50	224	2	H	6.2	-41.30	-13	-28.30
2509.8	-53.00	122	1.2	V	5.6	-47.40	-13	-34.40
3346.4	-37.70	178	1.2	H	6.6	-31.10	-13	-18.10
3346.4	-35.00	352	1.7	V	5.4	-29.60	-13	-16.60
WCDMA Band 5, High Channel								
960.03	-61.83	43	1.3	H	10	-51.83	-13	-38.83
960.03	-62.66	325	1.5	V	11.7	-50.96	-13	-37.96
1693.2	-52.00	40	2.4	H	4.1	-47.90	-13	-34.90
1693.2	-51.00	281	1.1	V	3.1	-47.90	-13	-34.90
2539.8	-48.00	323	1.3	H	6.1	-41.90	-13	-28.90
2539.8	-51.70	62	1.8	V	5.8	-45.90	-13	-32.90
3386.4	-37.10	113	2.0	H	6.2	-30.90	-13	-17.90
3386.4	-34.90	333	2.3	V	5.4	-29.50	-13	-16.50

LTE Band: (Pre-scan with all the bandwidth and modulation, and worst case as below)

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 2, Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz, 1850.7MHz								
960.3	-62.17	224	2.2	H	10	-52.17	-13	-39.17
960.3	-62.26	90	1.5	V	11.7	-50.56	-13	-37.56
3701.4	-50.70	25	2.2	H	8.1	-42.60	-13	-29.60
3701.4	-49.80	129	1.4	V	7.6	-42.20	-13	-29.20
5552.1	-50.30	154	2.5	H	9.6	-40.70	-13	-27.70
5552.1	-50.00	25	1.1	V	9.1	-40.90	-13	-27.90
QPSK, 1.4MHz, 1880MHz								
960.62	-61.42	32	1.1	H	10	-51.42	-13	-38.42
960.62	-62.05	17	1.2	V	11.7	-50.35	-13	-37.35
3760	-51.80	197	1.3	H	8.8	-43.00	-13	-30.00
3760	-50.40	229	1.4	V	8	-42.40	-13	-29.40
5640	-51.30	281	2.3	H	10.2	-41.10	-13	-28.10
5640	-49.90	347	2.4	V	9.4	-40.50	-13	-27.50
QPSK, 1.4MHz, 1909.3MHz								
959.82	-61.65	21	1.1	H	10	-51.65	-13	-38.65
959.82	-61.93	229	2	V	11.7	-50.23	-13	-37.23
3818.6	-50.10	316	2.1	H	8.7	-41.40	-13	-28.40
3818.6	-49.40	181	1.4	V	7.9	-41.50	-13	-28.50
5727.9	-51.30	145	1.9	H	10.6	-40.70	-13	-27.70
5727.9	-50.60	145	1.2	V	10.2	-40.40	-13	-27.40

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 4, Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz, 1710.7MHz								
960.19	-62.44	233	2.3	H	10	-52.44	-13	-39.44
960.19	-62.18	356	1.3	V	11.7	-50.48	-13	-37.48
3421.4	-47.90	227	1.2	H	6.4	-41.50	-13	-28.50
3421.4	-46.80	333	1.8	V	5.8	-41.00	-13	-28.00
5132.1	-51.50	194	1.9	H	11.4	-40.10	-13	-27.10
5132.1	-52.50	341	1.5	V	10.8	-41.70	-13	-28.70
QPSK, 1.4MHz, 1732.5MHz								
960.1	-61.9	19	2	H	10	-51.9	-13	-38.9
960.1	-61.98	275	2.1	V	11.7	-50.28	-13	-37.28
3465	-48.2	234	1.9	H	7	-41.20	-13	-28.20
3465	-48.5	224	1.3	V	6.2	-42.30	-13	-29.30
5197.5	-50.8	331	1.9	H	10.4	-40.40	-13	-27.40
5197.5	-51.4	57	2.2	V	9.8	-41.60	-13	-28.60
QPSK, 1.4MHz, 1754.3MHz								
959.27	-61.84	83	1.2	H	10	-51.84	-13	-38.84
959.27	-61.96	154	2.4	V	11.7	-50.26	-13	-37.26
3508.6	-48.00	324	2.3	H	7.8	-40.20	-13	-27.20
3508.6	-47.30	338	1.9	V	6.5	-40.80	-13	-27.80
5262.9	-49.60	317	1.2	H	9.4	-40.20	-13	-27.20
5262.9	-50.30	119	1	V	9	-41.30	-13	-28.30

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 5, Test frequency range: 30MHz-10GHz								
QPSK,1.4MHz, 824.7MHz								
959.89	-62.52	280	1.6	H	10	-52.52	-13	-39.52
959.89	-62.08	242	1.2	V	11.7	-50.38	-13	-37.38
1649.4	-57.50	272	2.1	H	3.5	-54.00	-13	-41.00
1649.4	-55.20	359	2	V	3.1	-52.10	-13	-39.10
2474.1	-45.60	136	2	H	6.6	-39.00	-13	-26.00
2474.1	-45.40	17	1.9	V	5.8	-39.60	-13	-26.60
3298.8	-48.50	153	1.1	H	6.4	-42.10	-13	-29.10
3298.8	-45.80	55	1.5	V	5.7	-40.10	-13	-27.10
QPSK,1.4MHz, 836.5Hz								
961.01	-61.99	72	1.3	H	10	-51.99	-13	-38.99
961.01	-62.71	262	1.5	V	11.7	-51.01	-13	-38.01
1673.0	-48.80	191	2.4	H	3.8	-45.00	-13	-32.00
1673.0	-49.30	342	2.5	V	3.1	-46.20	-13	-33.20
2509.5	-44.40	26	1	H	6.2	-38.20	-13	-25.20
2509.5	-50.80	65	1.9	V	5.6	-45.20	-13	-32.20
3346.0	-49.20	241	1.1	H	6.6	-42.60	-13	-29.60
3346.0	-48.30	92	2.4	V	5.4	-42.90	-13	-29.90
QPSK,1.4MHz, 848.3Hz								
959.69	-61.79	52	1.9	H	10	-51.79	-13	-38.79
959.69	-62.15	237	1.6	V	11.7	-50.45	-13	-37.45
1696.6	-54.40	42	1.4	H	4.1	-50.30	-13	-37.30
1696.6	-52.00	58	1.4	V	3.1	-48.90	-13	-35.90
2544.9	-42.80	287	1.8	H	6.1	-36.70	-13	-23.70
2544.9	-47.00	200	1.5	V	5.8	-41.20	-13	-28.20
3393.2	-48.90	120	1.6	H	6.2	-42.70	-13	-29.70
3393.2	-48.20	171	1.4	V	5.4	-42.80	-13	-29.80

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 7, Test frequency range: 30MHz-26GHz								
QPSK, 5MHz, 2502.5MHz								
959.95	-60.65	81	1.1	H	10	-50.65	-25	-25.65
959.95	-61.86	105	1.3	V	11.7	-50.16	-25	-25.16
5005	-46.50	82	1.9	H	10.8	-35.70	-25	-10.70
5005	-48.20	224	2	V	10.2	-38.00	-25	-13.00
7507.5	-62.70	325	2.4	H	20.4	-42.30	-25	-17.30
7507.5	-62.30	221	2.1	V	20.1	-42.20	-25	-17.20
QPSK, 5MHz, 2535MHz								
960.09	-60.6	90	1.3	H	10	-50.6	-25	-25.6
960.09	-61.25	177	2	V	11.7	-49.55	-25	-24.55
5070	-46.60	72	2	H	11.1	-35.50	-25	-10.50
5070	-49.50	257	2	V	10.8	-38.70	-25	-13.70
7605	-65.80	295	1.3	H	21.2	-44.60	-25	-19.60
7605	-64.20	247	2.3	V	20.1	-44.10	-25	-19.10
QPSK, 5MHz, 2567.5MHz								
959.48	-60.92	24	1.7	H	10	-50.92	-25	-25.92
959.48	-61.75	271	1.6	V	11.7	-50.05	-25	-25.05
5135	-49.30	6	1.6	H	11.3	-38.00	-25	-13.00
5135	-50.70	296	2.1	V	10.8	-39.90	-25	-14.90
7702.5	-66.10	63	1.7	H	21.2	-44.90	-25	-19.90
7702.5	-65.50	309	1.5	V	21	-44.50	-25	-19.50

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 12, Test frequency range: 30MHz-10GHz								
QPSK, 1.4MHz, 699.7MHz								
960.11	-61.73	126	1.8	H	10	-51.73	-13	-38.73
960.11	-62.03	277	1.1	V	11.7	-50.33	-13	-37.33
1399.4	-54.3	274	1.2	H	6.3	-48.00	-13	-35.00
1399.4	-55.6	204	1.1	V	5.7	-49.90	-13	-36.90
2099.1	-50.8	11	1.1	H	4.9	-45.90	-13	-32.90
2099.1	-50.2	109	2.3	V	3.9	-46.30	-13	-33.30
2798.8	-54.4	98	2.2	H	6.6	-47.80	-13	-34.80
2798.8	-51.8	224	1.5	V	6	-45.80	-13	-32.80
QPSK, 1.4MHz, 707.5MHz								
960.12	-61.49	12	1.7	H	10	-51.49	-13	-38.49
960.12	-62.53	178	1.9	V	11.7	-50.83	-13	-37.83
1415	-59.8	246	1	H	5.9	-53.90	-13	-40.90
1415	-59.9	143	1.3	V	5.9	-54.00	-13	-41.00
2122.5	-52.3	292	1.9	H	6.3	-46.00	-13	-33.00
2122.5	-51.8	35	2.4	V	5.1	-46.70	-13	-33.70
2830	-54.7	30	1.3	H	6.7	-48.00	-13	-35.00
2830	-53.6	43	1.5	V	6.7	-46.90	-13	-33.90
QPSK, 1.4MHz, 715.3MHz								
959.85	-61.41	44	1.1	H	10	-51.41	-13	-38.41
959.85	-62	337	1.3	V	11.7	-50.3	-13	-37.3
1430.6	-59.6	151	2.4	H	5.9	-53.70	-13	-40.70
1430.6	-60.1	188	2.4	V	5.9	-54.20	-13	-41.20
2145.9	-52.2	314	2	H	6.3	-45.90	-13	-32.90
2145.9	-51.7	47	2.1	V	5.1	-46.60	-13	-33.60
2861.2	-55.2	23	1.1	H	6.7	-48.50	-13	-35.50
2861.2	-54.9	248	1.2	V	6.7	-48.20	-13	-35.20

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 41, Test frequency range: 30MHz-27GHz								
QPSK,5MHz,2498.5MHz								
959.99	-60.83	334	1.3	H	10	-50.83	-25	-25.83
959.99	-60.95	253	2.4	V	11.7	-49.25	-25	-24.25
4997	-44.3	203	1.3	H	10.8	-33.50	-25	-8.50
4997	-46.8	15	2	V	10.1	-36.70	-25	-11.70
7495.5	-64	262	2.3	H	21.2	-42.80	-25	-17.80
7495.5	-61.9	99	1.9	V	20.2	-41.70	-25	-16.70
QPSK, 5MHz,2593MHz								
960.85	-61.16	153	2	H	10	-51.16	-25	-26.16
960.85	-61.13	121	1.9	V	11.7	-49.43	-25	-24.43
5186	-50.6	254	1.9	H	10.5	-40.10	-25	-15.10
5186	-51.2	334	1	V	10	-41.20	-25	-16.20
7779	-62.6	348	1.2	H	18.3	-44.30	-25	-19.30
7779	-62.6	190	2.2	V	18	-44.60	-25	-19.60
QPSK, 5MHz,2687.5MHz								
959.75	-61.25	301	1.8	H	10	-51.25	-25	-26.25
959.75	-61.41	301	2.1	V	11.7	-49.71	-25	-24.71
5375	-51.2	32	2.4	H	9.5	-41.70	-25	-16.70
5375	-50.2	276	1.4	V	8.9	-41.30	-25	-16.30
8062.5	-62.9	231	2.4	H	18.9	-44.00	-25	-19.00
8062.5	-62	318	1.9	V	18.5	-43.50	-25	-18.50

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 66, Test frequency range: 30MHz-20GHz								
QPSK, 1.4MHz,1710.7MHz								
960.13	-62.45	161	2.3	H	10	-52.45	-13	-39.45
960.13	-62.24	237	1	V	11.7	-50.54	-13	-37.54
3421.4	-47.6	22	1	H	6.4	-41.20	-13	-28.20
3421.4	-46.9	277	1.5	V	5.7	-41.20	-13	-28.20
5132.1	-51.2	272	2.3	H	11.3	-39.90	-13	-26.90
5132.1	-52.3	41	2	V	10.8	-41.50	-13	-28.50
QPSK, 1.4MHz,1745MHz								
960.77	-61.41	40	2.1	H	10	-51.41	-13	-38.41
960.77	-62.02	266	1.3	V	11.7	-50.32	-13	-37.32
3490	-47.7	292	2.3	H	7.6	-40.10	-13	-27.10
3490	-47.8	190	1.6	V	6.4	-41.40	-13	-28.40
5235	-50.1	93	1.8	H	9.7	-40.40	-13	-27.40
5235	-50.6	71	2	V	9.2	-41.40	-13	-28.40
QPSK, 1.4MHz,1779.3MHz								
959.35	-61.29	133	2.4	H	10	-51.29	-13	-38.29
959.35	-61.44	217	2.2	V	11.7	-49.74	-13	-36.74
3558.6	-48.3	46	2	H	7.8	-40.50	-13	-27.50
3558.6	-47.5	231	1.9	V	7.0	-40.50	-13	-27.50
5337.9	-50.1	52	2.1	H	9.4	-40.70	-13	-27.70
5337.9	-50	335	1.6	V	8.7	-41.30	-13	-28.30

Frequency (MHz)	Receiver Reading (dBm)	Turntable Degree	Rx Antenna		Substituted Factor (dB)	Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Height (m)	Polar (H/V)				
LTE Band 71, Test frequency range: 30MHz-10GHz								
QPSK,5MHz,665.5MHz								
960.23	-61.75	4	2.3	H	10	-51.75	-13	-38.75
960.23	-62.28	356	1.1	V	11.7	-50.58	-13	-37.58
1331.0	-54.90	274	1.4	H	6.4	-48.50	-13	-35.50
1331.0	-54.70	233	2.5	V	5.4	-49.30	-13	-36.30
1996.5	-46.60	29	1.1	H	4.3	-42.30	-13	-29.30
1996.5	-46.60	285	1.1	V	3.3	-43.30	-13	-30.30
2662.0	-54.40	332	1.8	H	6.4	-48.00	-13	-35.00
2662.0	-52.80	24	1.6	V	5.7	-47.10	-13	-34.10
QPSK, 5MHz,680.5MHz								
959.96	-61.74	196	1.3	H	10	-51.74	-13	-38.74
959.96	-62.46	72	1.2	V	11.7	-50.76	-13	-37.76
1361.0	-54.80	285	1.4	H	6.3	-48.50	-13	-35.50
1361.0	-55.50	129	1.7	V	5.7	-49.80	-13	-36.80
2041.5	-48.30	107	1.2	H	4.8	-43.50	-13	-30.50
2041.5	-47.30	232	1.8	V	3.8	-43.50	-13	-30.50
2722.0	-55.70	136	2.3	H	6.6	-49.10	-13	-36.10
2722.0	-54.10	105	1	V	6	-48.10	-13	-35.10
QPSK, 5MHz,695.5MHz								
959.27	-61.73	32	2.5	H	10	-51.73	-13	-38.73
959.27	-61.71	126	1.4	V	11.7	-50.01	-13	-37.01
1391	-53.70	236	2.0	H	6	-47.70	-13	-34.70
1391	-53.70	89	2.4	V	5.8	-47.90	-13	-34.90
2086.5	-48.40	220	1.5	H	5.9	-42.50	-13	-29.50
2086.5	-48.00	308	2.0	V	4.8	-43.20	-13	-30.20
2782	-54.20	283	1.1	H	6.7	-47.50	-13	-34.50
2782	-53.90	235	1.7	V	6.4	-47.50	-13	-34.50

Note:

Absolute Level = Reading Level + Substituted Factor

Substituted Factor contains: Substituted Level - Cable loss+ Antenna Gain

Margin = Absolute Level -Limit

FCC § 22.917 (a); § 24.238 (a); §27.53 (g) (h)(m) - BAND EDGES

Applicable Standard

According to §22.917(a), the power of any emissions 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.

According to §24.238(a), the power of any emissions 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.

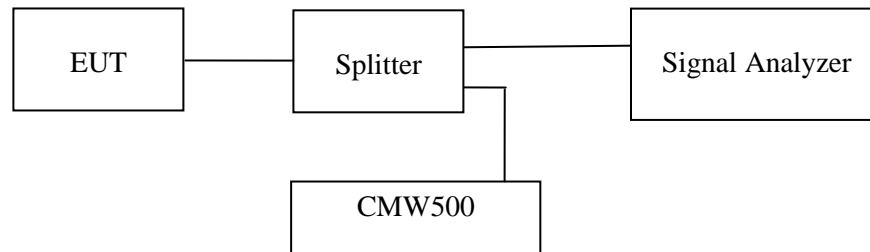
According to FCC §27.53 (g) (h), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to FCC §27.53 (m), For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less 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 2490.5MHz.

Test Procedure

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

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



Test Data**Environmental Conditions**

Temperature:	25~27°C
Relative Humidity:	48~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2023-03-21.

EUT operation mode: Transmitting (Worst case)

Test Result: Pass

The test plots of LTE bands please refer to the Appendix C.

FCC § 2.1055; § 22.355; § 24.235; §27.54 - FREQUENCY STABILITY

Applicable Standard

FCC § 2.1055, §22.355, §24.235& §27.54.

According to FCC §2.1055, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

According to §22.355, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table below:

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

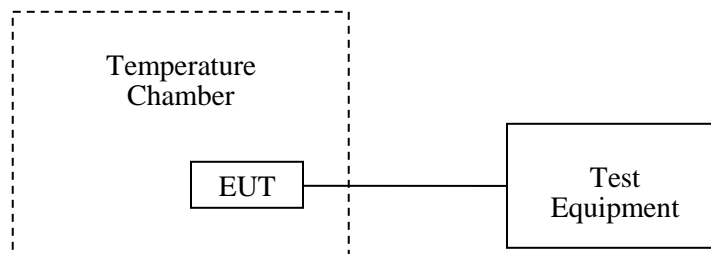
According to §24.235& §27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

Test Procedure

Frequency Stability vs. Temperature: The equipment under test was connected to an external AC power supply and the RF output was connected to communication test set via feed-through attenuators. The EUT was placed inside the temperature chamber. The AC leads and RF output cable exited the chamber through an opening made for the purpose.

After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from the communication test set.

Frequency Stability vs. Voltage: For hand carried, battery powered equipment; reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.



Test Data**Environmental Conditions**

Temperature:	25~27°C
Relative Humidity:	48~56 %
ATM Pressure:	101.0 kPa

The testing was performed by Glenn Jiang on 2023-03-15.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the following tables.

**LTE:
QPSK:
Band 7:**

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V_{DC})	F_L (MHz)	F_H (MHz)	F_L Limit (MHz)	F_H Limit (MHz)
-30	N.V.	2500.1824	2569.8859	2500	2570
-20		2500.1855	2569.9024	2500	2570
-10		2500.1806	2569.8881	2500	2570
0		2500.1870	2569.8845	2500	2570
10		2500.1996	2569.8865	2500	2570
20		2500.1917	2569.8440	2500	2570
30		2500.1843	2569.8435	2500	2570
40		2500.1690	2569.8935	2500	2570
50		2500.1648	2569.8975	2500	2570
20		L.V.	2500.1591	2569.8925	2500
	H.V.	2500.1451	2569.8762	2500	2570

16QAM:**Band 7:**

10 MHz Bandwidth					
Temperature (°C)	Power Supplied (V _{DC})	F _L (MHz)	F _H (MHz)	F _L Limit (MHz)	F _H Limit (MHz)
-30	N.V.	2500.1699	2569.8433	2500	2570
-20		2500.1502	2569.8553	2500	2570
-10		2500.1775	2569.8485	2500	2570
0		2500.1532	2569.8607	2500	2570
10		2500.1516	2569.8308	2500	2570
20		2500.1449	2569.8926	2500	2570
30		2500.1466	2569.8923	2500	2570
40		2500.1439	2569.8487	2500	2570
50		2500.1524	2569.8517	2500	2570
20		L.V.	2500.1530	2569.8391	2500
	H.V.	2500.1595	2569.8242	2500	2570

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