

TEST REPORT

Applicant Name: INFINIX MOBILITY LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT, Hong Kong
Report Number: 2401S73382E-RF-00D
FCC ID: 2AIZN-X6861

Test Standard (s)

FCC PART 27; FCC PART 22H

Sample Description

Product Type: Mobile Phone
Model No.: X6861
Multiple Model(s) No.: N/A
Trade Mark: Infinix
Date Received: 2024/04/30
Issue Date: 2024/07/08

Test Result:

Pass▲

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

Prepared and Checked By:

Andy Yu

Andy Yu
RF Engineer

Approved By:

Nancy Wang

Nancy Wang
RF Supervisor

Note: The information marked # is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

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.

This report must not be used by the customer to claim product certification, approval, or endorsement by NVLAP or any agency of the U.S. Government.

This report may contain data that are not covered by the NVLAP accreditation and are marked with an asterisk "▼".

Bay Area Compliance Laboratories Corp. (Shenzhen)

5F(B-West), 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China

Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

TABLE OF CONTENTS

DOCUMENT REVISION HISTORY	4
GENERAL INFORMATION.....	5
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	5
OBJECTIVE	6
TEST METHODOLOGY	6
MEASUREMENT UNCERTAINTY	6
TEST FACILITY	7
SYSTEM TEST CONFIGURATION	8
DESCRIPTION OF TEST CONFIGURATION	8
EQUIPMENT MODIFICATIONS	9
SUPPORT EQUIPMENT LIST AND DETAILS	10
SUPPORT CABLE DESCRIPTION	10
BLOCK DIAGRAM OF TEST SETUP	11
SUMMARY OF TEST RESULTS	12
TEST EQUIPMENT LIST	13
FCC §1.1307(B) & §2.1093 - RF EXPOSURE INFORMATION.....	15
APPLICABLE STANDARD	15
TEST RESULT	15
FCC§2.1047 - MODULATION CHARACTERISTIC	16
FCC § 2.1046, § 22.913 (A) & §27.50 (C) (H) - RF OUTPUT POWER.....	17
APPLICABLE STANDARD	17
TEST PROCEDURE	17
TEST DATA	17
FCC §2.1049, §22.917, §22.905§27.53 - OCCUPIED BANDWIDTH	18
APPLICABLE STANDARD	18
TEST PROCEDURE	18
TEST DATA	18
FCC §2.1051, §22.917(A) & §27.53 - SPURIOUS EMISSIONS AT ANTENNA TERMINALS.....	19
APPLICABLE STANDARD	19
TEST PROCEDURE	19
TEST DATA	19
FCC § 2.1053; § 22.917 (A); §27.53 - SPURIOUS RADIATED EMISSIONS	20
APPLICABLE STANDARD	20
TEST PROCEDURE	20
TEST DATA	20
FCC§ 22.917 (A);§27.53 (H)(M) - BAND EDGES	26
APPLICABLE STANDARD	26
TEST PROCEDURE	26
TEST DATA	27

Version 1.0 (2023/10/07)

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401S73382E-RF-00D	Original Report	2024/07/08

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Mobile Phone			
Tested Model	X6861			
Multiple Model(s)	N/A			
Frequency Range	LTE Band 5: 824-849MHz(TX); 869-894MHz(RX) LTE Band 7: 2500-2570MHz(TX); 2620-2690MHz(TX) LTE Band 38: 2570-2620MHz(TX/RX) LTE Band 41: 2496-2690MHz(TX/RX) LTE Band 66: 1710-1780MHz(TX); 2110-2200MHz(RX)			
Support Mode	CA_5B, CA_7C, CA_38C, CA_41C, CA_66C			
Modulation Technique	QPSK, 16QAM, 64QAM, 256QAM			
Antenna Specification [#]	Antenna	Operation Bands	Antenna Gain (G _T) (dBi)	L _C (dB)
	ANT1	LTE B5	-6.9	0.8
	ANT2	LTE B7/B38/B41	-0.8	0.9
		LTE B66	-2.3	0.8
	ANT3	LTE B5	-5.2	0
	ANT7	LTE B7/B38/B41	-1.3	0
		LTE B66	-4.0	0
Note: Lc= Signal Attenuation in the connecting cable between the transmitter and antenna, in dB.				
Voltage Range	DC 3.91V from battery or DC 5V /5-10/ 11V from adapter			
Sample serial number	2KRB-1 for Radiated Emissions Test 2KRB-2 for RF Conducted Test (Assigned by BACL, Shenzhen)			
Sample/EUT Status	Good condition			
Normal/Extreme Condition [#]	VL: Low Voltage 3.45V VN: Normal Voltage 3.91V VH: High Voltage 4.5V (provided by the applicant)			
Adapter Information	Model: U450XSB Input: 100-240V,50/60Hz,1.8A Output: 5.0V,3.0A,15.0W or 5.0~10.0V,4.5A or 11.0V,4.1A,45.0W Max			

Objective

This test report is in accordance with Part 2-Subpart J, Part 22-Subpart H 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 27 - Miscellaneous Wireless Communications Services

ANSI C63.26-2015: American National Standard for Compliance Testing of Transmitters Used in
Licensed Radio Services
KDB 971168 D01: Power Meas License Digital Systems v03r01

All emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Shenzhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		±5%
RF output power, conducted		0.72 dB(k=2, 95% level of confidence)
Unwanted Emission, conducted		1.75 dB(k=2, 95% level of confidence)
RF Frequency		213.55 Hz(k=2, 95% level of confidence)
Radiated Emissions	30MHz~200MHz (Horizontal)	4.48dB(k=2, 95% level of confidence)
	30MHz~200MHz (Vertical)	4.55dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Horizontal)	4.85dB(k=2, 95% level of confidence)
	200MHz~1000MHz (Vertical)	5.05dB(k=2, 95% level of confidence)
	1GHz - 6GHz	5.35dB(k=2, 95% level of confidence)
	6GHz - 18GHz	5.44dB(k=2, 95% level of confidence)
	18GHz - 40GHz	5.16dB(k=2, 95% level of confidence)
Temperature		±1°C
Humidity		±1%
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 Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located on the 5F(B-West) , 6F, 7F, the 3rd Phase of Wan Li Industrial Building D, Shihua Rd, FuTian Free Trade Zone, Shenzhen, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 715558, the FCC Designation No. : CN5045.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

LTE Band 5B CA Frequency List				
Bandwidth (MHz)	Mode	Lowest (MHz)	Middle (MHz)	Highest (MHz)
5+10	PCC	826.8	831.8	836.8
	SCC	834	839	844
10+5	PCC	829	834	839
	SCC	836.2	841.2	846.2
10+10	PCC	829	831.6	834.1
	SCC	838.9	841.5	844

LTE Band 7C CA Frequency List				
Bandwidth (MHz)	Mode	Lowest (MHz)	Middle (MHz)	Highest (MHz)
20+20	PCC	2510.0	2525.1	2540.2
	SCC	2529.8	2544.9	2560.0
20+15	PCC	2510.0	2527.6	2545.1
	SCC	2527.1	2544.7	2562.2
15+20	PCC	2507.8	2525.3	2542.9
	SCC	2524.9	2542.4	2560.0
20+10	PCC	2510.0	2530.1	2550.1
	SCC	2524.4	2544.5	2564.5
10+20	PCC	2505.5	2525.6	2545.6
	SCC	2519.9	2540.0	2560.0
15+15	PCC	2507.5	2527.5	2547.5
	SCC	2522.5	2542.5	2562.5
15+10	PCC	2507.5	2530.1	2552.7
	SCC	2519.5	2542.1	2564.7

LTE Band 38C CA Frequency List				
Bandwidth (MHz)	Mode	Lowest (MHz)	Middle (MHz)	Highest (MHz)
20+20	PCC	2580.0	2585.1	2590.2
	SCC	2599.8	2604.9	2610.0
15+15	PCC	2577.5	2587.5	2597.5
	SCC	2592.5	2602.5	2612.5

LTE Band 41C CA Frequency List				
Bandwidth (MHz)	Mode	Lowest (MHz)	Middle (MHz)	Highest (MHz)
20+20	PCC	2506.0	2583.1	2660.2
	SCC	2525.8	2602.9	2680.0
20+15	PCC	2506.0	2585.6	2665.1
	SCC	2523.1	2602.7	2682.2
15+20	PCC	2503.8	2593.3	2662.9
	SCC	2520.9	2600.4	2680.0
20+10	PCC	2506.0	2588.1	2670.1
	SCC	2520.4	2602.5	2684.5
10+20	PCC	2501.5	2583.6	2665.6
	SCC	2515.9	2598.0	2680.0
20+5	PCC	2506.0	2590.5	2675.0
	SCC	2517.7	2602.2	2686.7
5+20	PCC	2499.3	2583.8	2668.3
	SCC	2511.0	2595.5	2680.0
15+15	PCC	2503.5	2585.5	2667.5
	SCC	2518.5	2600.5	2682.5
10+15	PCC	2501.3	2585.9	2670.5
	SCC	2513.3	2597.9	2682.5
15+10	PCC	2503.5	2588.1	2672.7
	SCC	2515.5	2600.1	2684.7

LTE Band 66C CA Frequency List				
Bandwidth (MHz)	Mode	Lowest (MHz)	Middle (MHz)	Highest (MHz)
10+15	PCC	1715.3	1747.9	1760.5
	SCC	1727.3	1759.9	1772.5
15+10	PCC	1717.5	1750.1	1762.7
	SCC	1729.5	1762.1	1774.7
10+20	PCC	1715.5	1745.6	1755.6
	SCC	1729.9	1760.0	1770.0
20+10	PCC	1720.0	1750.1	1760.1
	SCC	1734.4	1764.5	1774.5
15+15	PCC	1717.5	1747.5	1757.5
	SCC	1732.5	1762.5	1772.5
15+20	PCC	1717.8	1745.3	1752.9
	SCC	1734.9	1762.4	1770.0
20+15	PCC	1720.0	1747.6	1755.1
	SCC	1737.1	1764.7	1772.2
20+5	PCC	1720.0	1752.5	1765.0
	SCC	1731.7	1764.2	1776.7
5+20	PCC	1713.3	1745.8	1758.3
	SCC	1725.0	1757.5	1770.0
20+20	PCC	1720.0	1745.1	1750.2
	SCC	1739.8	1764.9	1770.0

Equipment Modifications

No modification was made to the EUT.

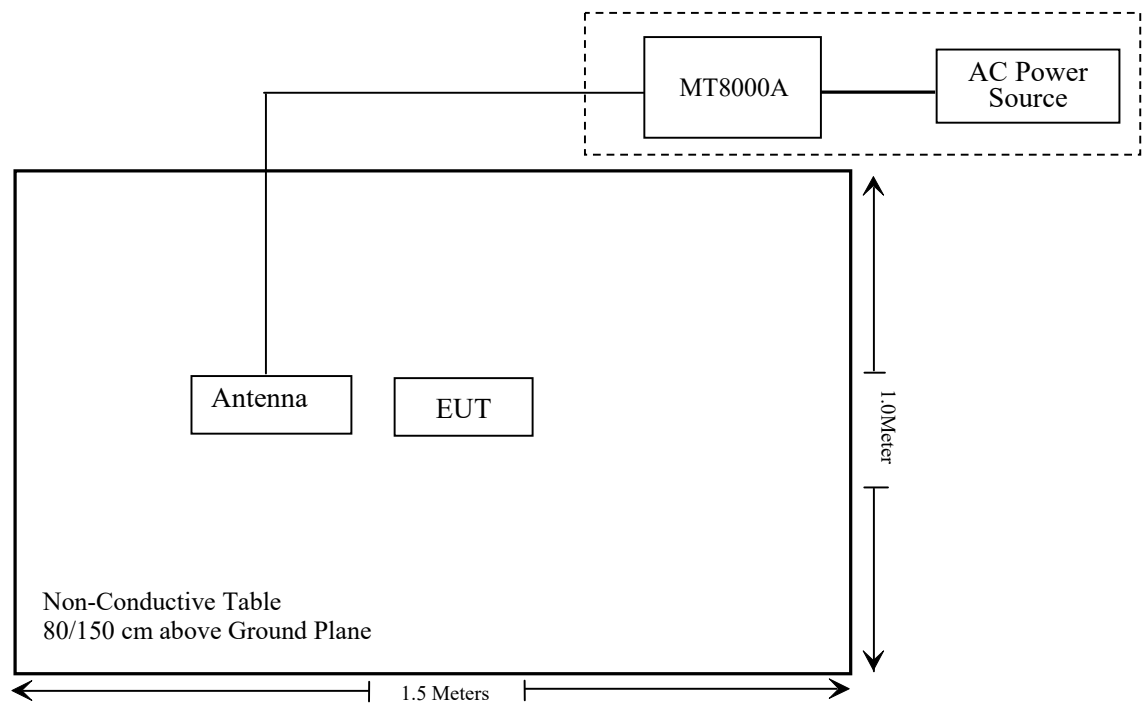
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Keysight	UXM 5G Wireless Test Platform	E7515B	MY58120284

Support Cable Description

Cable Description	Length (m)	From / Port	To
Un-shielded Detachable AC Cable	1.2	AC Mains	MT8000A

Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307,§2.1093	RF Exposure Information	Compliant
§2.1046; § 22.913 (a); §27.50 (b) (c) (h);	RF Output Power	Compliant
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905; § 22.917;§27.53	Occupied Bandwidth	Compliant
§ 2.1051; §22.917 (a); §27.53;	Spurious Emissions at Antenna Terminal	Compliant
§ 2.1053; § 22.917 (a); §27.53	Field Strength of Spurious Radiation	Compliant
§ 22.917 (a); §27.53 (c) (h) (m)	Band Edge	Compliant
§ 2.1055; § 22.355; §27.54;	Frequency stability	Compliant

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission Test					
R&S	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15
Sonoma instrument	Pre-amplifier	310 N	186238	2024/05/21	2025/05/20
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Unknown	Cable	Chamber Cable 1	F-03-EM236	2023/08/03	2024/08/02
Unknown	Cable	Chamber Cable 4	EC-007	2023/08/03	2024/08/02
COM-POWER	Dipole Antenna	AD-100	721027	NCR	NCR
Rohde & Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
COM-POWER	Pre-amplifier	PA-122	181919	2024/06/18	2025/06/17
Schwarzbeck	Horn Antenna	BBHA9120D (1201)	1143	2023/07/26	2026/07/25
A.H.System	Horn Antenna	SAS-200/571	135	2021/07/14	2024/07/13
Unknown	RF Cable	KMSE	0735	2023/10/08	2024/10/07
Unknown	RF Cable	UFA147	219661	2023/10/08	2024/10/07
Unknown	RF Cable	XH750A-N	J-10M	2023/10/08	2024/10/07
JD	Multiplex Switch Test Control Set	DT7220FSU	DQ77926	NCR	NCR
Keysight	UXM 5G Wireless Test Platform	E7515B	MY58120284	2024/05/17	2025/05/16
A.H.System	Pre-amplifier	PAM-1840VH	190	2023/08/02	2024/08/01
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
Electro-Mechanics Co	Horn Antenna	3116	2026	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2023/08/03	2024/08/02
Agilent	Signal Generator	N5183A	MY50140588	2023/12/18	2024/12/17

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
R&S	SPECTRUM ANALYZER	FSV40-N	102259	2024/01/16	2025/01/15
BACL	Temperature & Humidity Chamber	BTH-150-40	30145	2024/01/16	2025/01/15
Keysight	UXM 5G Wireless Test Platform	E7515B	MY58120284	2024/04/15	2025/04/14
instek	DC Power Supply	GPS-3030DD	EM832096	NCR	NCR
Fluke	Digital Multimeter	287	19000011	2024/05/21	2025/05/20
WEINSCHEL	3dB Attenuator	Unknown	F-03-EM220	2023/07/04	2024/07/03
narda	Power divider	SN5	100005	2023/12/07	2024/12/06
Unknown	RF Cable	65475	01670515	2023/07/04	2024/07/03

* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) 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) & §2.1093 - RF EXPOSURE INFORMATION

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: 2401S73382E-SA.

FCC§2.1047 - MODULATION CHARACTERISTIC

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

FCC § 2.1046, § 22.913 (a) & § 27.50 (c) (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.

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

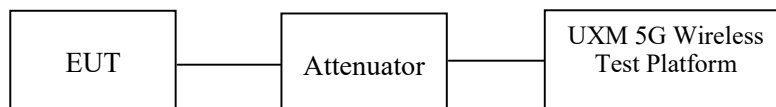
According to §27.50(d), Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

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

Test Procedure

Conducted method: ANSI C63.26-2015 Section 5.2

The RF output of the transmitter was connected to the UXM 5G Wireless Test Platform through sufficient attenuation.



Test Data

Environmental Conditions

Temperature:	24.5-26.5
Relative Humidity:	45-60 %
ATM Pressure:	101kPa

The testing was performed by Jim Cheng from 2024-06-24 to 2024-07-07.

EUT operation mode: Transmitting (Worst case record in the reports)

Please refer to the Appendix D4 for Transmitter Conducted Output Power

Please refer to the Appendix E3 for Peak-to-average ratio (PAR)

FCC §2.1049, §22.917, §22.905§27.53 - OCCUPIED BANDWIDTH**Applicable Standard**

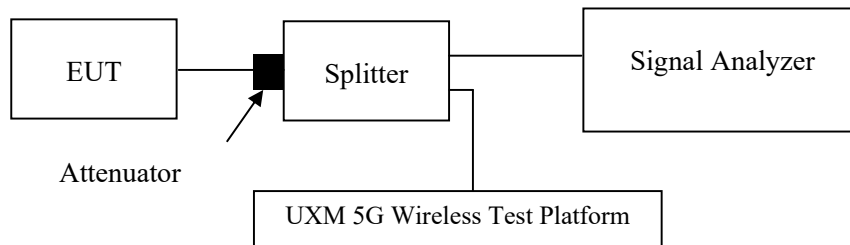
FCC 47 §2.1049, §22.917, §22.905 and §27.53.

Test Procedure

ANSI C63.26-2015 Section 5.4.4

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:	24.5~26.5°C
Relative Humidity:	45-60%
ATM Pressure:	101 kPa

The testing was performed by Jim Cheng from 2024-06-24 to 2024-07-07.

EUT operation mode: Transmitting

Test Result: Compliant

Please refer to the Appendix F3 for occupied bandwidth

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

Applicable Standard

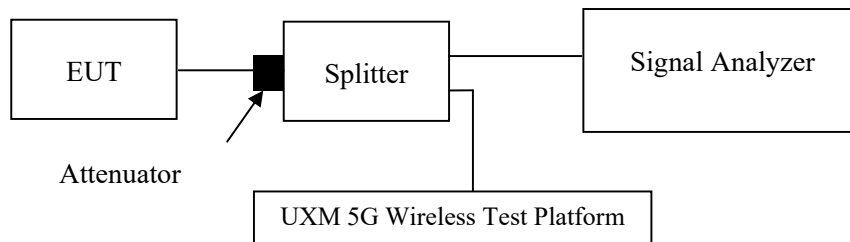
FCC §2.1051, §22.917(a)& §27.53.

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

Test Procedure

ANSI C63.26-2015 Section 5.7

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:	24.5~.5°C
Relative Humidity:	45~60%
ATM Pressure:	101.0 kPa

The testing was performed by Jim Cheng from 2024-06-24 to 2024-07-07.

EUT operation mode: Transmitting

Test result: Compliant

Please refer to the Appendix G3 for spurious emissions at antenna terminals.

FCC § 2.1053; § 22.917 (a); §27.53 - SPURIOUS RADIATED EMISSIONS**Applicable Standard**

FCC § 2.1053, §22.917(a)&§ 27.53.

Test Procedure

ANSI/TIA-603-E-2016 Section 2.2.12
KDB 671168 D01 v03r01 Section 6.2

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:	25~25.6 °C
Relative Humidity:	50 %
ATM Pressure:	101 kPa

The testing was performed by Anson Su on 2024-07-03 for below 1GHz and by Dylan Yang on 2024-07-03 .

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

LTE Bands: (pre-scan QPSK & 16QAM & 65QAM & 256QAM with all bandwidths, the worst case as below)

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
LTE CA_5B Low Channel								
956.2	33.84	H	-62.7	1.36	0.0	-64.06	-13	51.06
956.2	33.12	V	-60.7	1.36	0.0	-62.06	-13	49.06
1651.00	48.91	H	-58.6	0.90	8.60	-50.90	-13	37.90
1651.00	51.93	V	-56.2	0.90	8.60	-48.50	-13	35.50
2476.5	51.43	H	-56.1	1.10	8.80	-48.40	-13	35.40
2476.5	53.24	V	-53.9	1.10	8.80	-46.20	-13	33.20
LTE CA_5B Middle Channel								
956.8	34.01	H	-62.4	1.36	0.0	-63.76	-13	50.76
956.8	33.92	V	-60.1	1.36	0.0	-61.46	-13	48.46
1668.00	47.87	H	-59.8	0.90	8.60	-52.10	-13	39.10
1668.00	51.24	V	-56.9	0.90	8.60	-49.20	-13	36.20
2502.00	50.14	H	-57.2	1.10	8.80	-49.50	-13	36.50
2502.00	52.87	V	-54.2	1.10	8.80	-46.50	-13	33.50
LTE CA_5B High Channel								
957.6	34.25	H	-62.2	1.36	0.0	-63.56	-13	50.56
957.6	33.67	V	-60.4	1.36	0.0	-61.76	-13	48.76
1685.00	49.02	H	-57.5	0.90	8.60	-49.80	-13	36.80
1685.00	51.87	V	-56.3	0.90	8.60	-48.60	-13	35.60
2527.50	52.24	H	-55.4	1.10	8.80	-47.70	-13	34.70
2527.50	54.62	V	-52.5	1.10	8.80	-44.80	-13	31.80

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
CA_7C Low Channel								
959.1	33.54	H	-63.0	1.36	0.0	-64.36	-25	39.36
959.1	33.24	V	-60.8	1.36	0.0	-62.16	-25	37.16
5011.00	54.95	H	-48.3	1.50	9.60	-40.20	-25	15.20
5011.00	53.56	V	-49.0	1.50	9.60	-40.90	-25	15.90
7516.50	50.81	H	-45.2	1.90	10.80	-36.30	-25	11.30
7516.50	49.75	V	-46.8	1.90	10.80	-37.90	-25	12.90
CA_7C Middle Channel								
957.9	33.43	H	-63.0	1.36	0.0	-64.36	-25	39.36
957.9	33.75	V	-60.3	1.36	0.0	-61.66	-25	36.66
5051.20	53.72	H	-49.4	1.50	9.60	-41.30	-25	16.30
5051.20	52.91	V	-49.7	1.50	9.60	-41.60	-25	16.60
7576.80	50.64	H	-45.2	1.90	11.00	-36.10	-25	11.10
7576.80	49.74	V	-46.5	1.90	11.00	-37.40	-25	12.40
CA_7C High Channel								
951.2	33.98	H	-62.6	1.36	0.0	-63.96	-25	38.96
951.2	33.47	V	-60.8	1.36	0.0	-62.16	-25	37.16
5091.20	54.93	H	-48.2	1.50	9.60	-40.10	-25	15.10
5091.20	55.75	V	-47.1	1.50	9.60	-39.00	-25	14.00
7636.80	52.67	H	-43.6	1.90	10.90	-34.60	-25	9.60
7636.80	51.67	V	-44.6	1.90	10.90	-35.60	-25	10.60

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
CA_38C Low Channel								
958.2	33.02	H	-63.4	1.36	0.0	-64.76	-25	39.76
958.2	32.43	V	-61.0	1.36	0.0	-62.36	-25	37.36
5155.00	55.34	H	-47.6	1.60	9.70	-39.50	-25	14.50
5155.00	53.84	V	-48.5	1.60	9.70	-40.40	-25	15.40
CA_38C Middle Channel								
951.7	33.27	H	-63.3	1.36	0.0	-64.66	-25	39.66
951.7	32.92	V	-61.3	1.36	0.0	-62.66	-25	37.66
5160.00	54.75	H	-48.2	1.60	9.70	-40.10	-25	15.10
5160.00	52.75	V	-49.6	1.60	9.70	-41.50	-25	16.50
CA_38C High Channel								
952.1	33.45	H	-63.1	1.36	0.0	-64.46	-25	39.46
952.1	33.21	V	-60.8	1.36	0.0	-62.16	-25	37.16
5195.00	54.75	H	-48.2	1.60	9.70	-40.10	-25	15.10
5195.00	53.42	V	-49.2	1.60	9.70	-41.10	-25	16.10

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
CA_41C Low Channel								
957.4	34.02	H	-62.5	1.36	0.0	-63.86	-25	38.86
957.4	33.68	V	-60.4	1.36	0.0	-61.76	-25	36.76
4998.6	52.38	H	-51.4	1.50	9.80	-43.10	-25	18.10
4998.6	50.24	V	-52.3	1.50	9.80	-44.00	-25	19.00
CA_41C Middle Channel								
952.6	33.47	H	-62.9	1.36	0.0	-64.26	-25	39.26
952.6	33.27	V	-60.8	1.36	0.0	-62.16	-25	37.16
5167.60	53.42	H	-50.3	1.60	9.70	-42.20	-25	17.20
5167.60	52.43	V	-50.2	1.60	9.70	-42.10	-25	17.10
CA_41C High Channel								
956.7	34.24	H	-62.2	1.36	0.0	-63.56	-25	38.56
956.7	33.54	V	-60.5	1.36	0.0	-61.86	-25	36.86
5336.6	54.02	H	-46.9	1.60	10.00	-38.50	-25	13.50
5336.6	53.21	V	-49.5	1.60	10.00	-41.10	-25	16.10

Frequency (MHz)	Receiver Reading (dBμV)	Polar (H / V)	Substituted			Absolute Level (dBm)	Limit (dBm)	Margin (dB)
			Substituted Level (dBm)	Cable Loss (dB)	Antenna Gain (dBi/dBd)			
CA_66C Low Channel								
954.3	33.75	H	-62.8	1.36	0.0	-64.16	-13	51.16
954.3	33.27	V	-61.3	1.36	0.0	-62.66	-13	49.66
3426.6	50.21	H	-55.4	1.30	9.90	-46.80	-13	33.80
3426.6	49.78	V	-55.1	1.30	9.90	-46.50	-13	33.50
5139.90	48.74	H	-54.2	1.50	9.60	-46.10	-13	33.10
5139.90	47.65	V	-55.2	1.50	9.60	-47.10	-13	34.10
CA_66C Middle Channel								
951.7	33.74	H	-62.9	1.36	0.0	-64.26	-13	51.26
951.7	33.47	V	-60.6	1.36	0.0	-61.96	-13	48.96
3491.6	50.81	H	-55.2	1.30	10.50	-46.00	-13	33.00
3491.6	48.75	V	-56.3	1.30	10.50	-47.10	-13	34.10
5237.40	47.98	H	-55.1	1.60	9.70	-47.00	-13	34.00
5237.40	46.78	V	-55.8	1.60	9.70	-47.70	-13	34.70
CA_66C High Channel								
952.7	33.87	H	-62.4	1.36	0.0	-63.76	-13	50.76
952.7	33.51	V	-60.5	1.36	0.0	-61.86	-13	48.86
3516.6	49.72	H	-56.1	1.30	10.50	-46.90	-13	33.90
3516.6	48.65	V	-57.2	1.30	10.50	-48.00	-13	35.00
5274.90	47.32	H	-55.7	1.60	10.00	-47.30	-13	34.30
5274.90	46.74	V	-56.1	1.60	10.00	-47.70	-13	34.70

Note:

Absolute Level = Reading Level + Substituted Factor

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

Margin = Limit-Absolute Level

FCC§ 22.917 (a);§27.53 (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 FCC §27.53 (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.

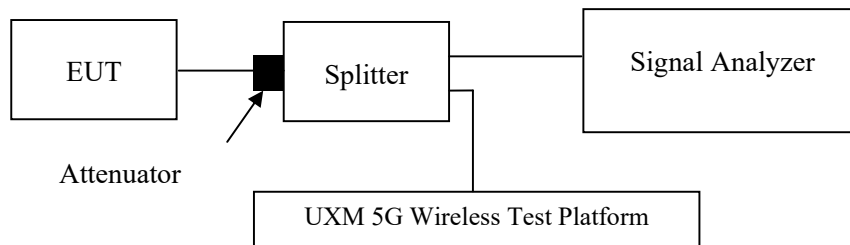
According to FCC §27.53 (m), For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel 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 than $43 + 10 \log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log(P)$ dB at or below 2490.5MHz.

Test Procedure

ANSI C63.26-2015 Section 5.7

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:	24.5~26.5 °C
Relative Humidity:	45~60 %
ATM Pressure:	101 kPa

The testing was performed by Jim Cheng from 2024-06-24 to 2024-07-07.

EUT operation mode: Transmitting (Worst case)

Test Result: Compliant

Please refer to the Appendix H3 for band edges.

FCC § 2.1055; § 22.355; §27.54 - FREQUENCY STABILITY**Applicable Standard**

FCC § 2.1055, §22.355&§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 §27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stays within the authorized frequency block.

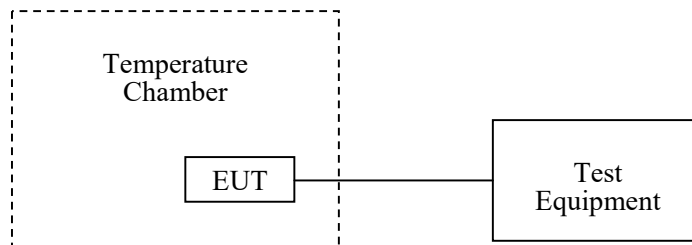
Test Procedure

ANSI C63.26-2015 Section 5.6

Frequency Stability vs. Temperature: The equipment under test was connected to an external DC 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 DC 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:	24.5~26.5 °C
Relative Humidity:	45~60 %
ATM Pressure:	101 kPa

The testing was performed by Jim Cheng from 2024-06-24 to 2024-07-07.

EUT operation mode: Transmitting

Test Result: Compliant

Please refer to the Appendix I25 for frequency stability.

EUT PHOTOGRAPHS

Please refer to the attachment 2403S73382E-RF-EXP External photo and 2403S73382E-RF-INP Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2401S73382E-RF Test Setup photo.

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