

TEST REPORT

Applicant Name: TECNO MOBILE LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Report Number: 2401W26164E-RF-00B
FCC ID: 2ADYY-KL8HS

Test Standard (s)

FCC PART 27; FCC PART 22H

Sample Description

Product Type: Mobile Phone
Model No.: KL8hs
Multiple Model(s) No.: N/A
Trade Mark: TECNO
Date Received: 2024-08-13
Issue Date: 2024-10-10

Test Result:	Pass▲
--------------	-------

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

Prepared and Checked By:

Jim Cheng

Jim Cheng
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	3
GENERAL INFORMATION.....	4
PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT).....	4
OBJECTIVE	5
TEST METHODOLOGY	5
MEASUREMENT UNCERTAINTY.....	5
TEST FACILITY	6
SYSTEM TEST CONFIGURATION.....	7
SUMMARY OF TEST RESULTS.....	11
TEST EQUIPMENT LIST	12
REQUIREMENTS AND TEST PROCEDURES	14
MODULATION CHARACTERISTIC.....	14
RF OUTPUT POWER.....	15
OCCUPIED BANDWIDTH	16
SPURIOUS EMISSIONS AT ANTENNA TERMINALS.....	17
SPURIOUS RADIATED EMISSIONS	18
BAND EDGES.....	19
FREQUENCY STABILITY	21
TEST DATA AND RESULTS.....	22
SPURIOUS RADIATED EMISSIONS	22
RF CONDUCTED DATA.....	33
RF EXPOSURE INFORMATION.....	34
EUT PHOTOGRAPHS.....	35
TEST SETUP PHOTOGRAPHS	36

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	2401W26164E-RF-00B	Original Report	2024-10-10

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Frequency Range	5G NR Band 5: 824-849 MHz(TX); 869-894MHz(RX) 5G NR Band 7: 2500-2570 MHz(TX); 2620-2690MHz(RX) 5G NR Band 12: 699-716MHz(TX); 729-746MHz(RX) 5G NR Band 38: 2570-2620MHz(TX/RX) 5G NR Band 41: 2496-2690MHz(TX/RX) 5G NR Band 66: 1710-1780MHz(TX); 2110-2180MHz(RX) 5G NR Band 77_1: 3450-3550MHz (TX/RX) 5G NR Band 77_3: 3700-3980MHz(TX/RX) 5G NR Band 78_1: 3450-3550MHz (TX/RX) 5G NR Band 78_3: 3700-3800MHz(TX/RX)
EN-DC possible combinations	DC_2A_n7A, DC_4A_n7A, DC_5A_n7A, DC_7A_n7A, DC_66A_n7A, DC_4A_n38A, DC_5A_n38A, DC_66A_n38A, DC_4A_n41A, DC_5A_n41A, DC_41A_n41A, DC_66A_n41A, DC_2A_n66A, DC_5A_n66A, DC_7A_n66A, DC_66A_n66A, DC_2A_n78A, DC_4A_n78A, DC_5A_n78A, DC_7A_n78A, DC_38A_n78A, DC_41A_n78A, DC_66A_n78A, DC_5A_n77A, DC_7A_n77A, DC_41A_n77A, DC_66A_n77A DC_2A_38A_n78, DC_2A_7A_n78, DC_2A_66A_n78, DC_5A_7A_n78A, DC_7A_7A_n78A, DC_7A_66A_n78A DC_7C_n78A, DC_7C_n77A, DC_41C_n41A, DC_41C_n77A, DC_41C_n78A
Carrier aggregation	None Carrier aggregation
Modulation Technique	DFT-s-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
Antenna Specification[#]	Please refer to the Antenna Specifications [#] , which was provided by manufacturer.
Voltage Range	DC 3.87V from battery or DC 5V from adapter
Sample serial number	2Q03-2 for Radiated Emissions Test 2Q03-1 for RF Conducted Test (Assigned by BAACL, Shenzhen)
Sample/EUT Status	Good condition
Normal/Extreme Condition[#]	VL: Low Voltage 3.45V _{DC} VN: Normal Voltage 3.87V _{DC} VH: High Voltage 4.45V _{DC} (provided by the applicant)
Adapter Information	Model: U100TSA Input: AC 100-240V, 50/60Hz, 0.3A Output: DC 5.0V, 2.0A 10.0W
<p>Remark:</p> <p>1. For NSA mode, we only show the combination of the maximum power among all NSA combinations in the report as below: DC_5A_n7A, DC_5A_n38A, DC_5A_n41A, DC_5A_n66A, DC_5A_n77A, DC_5A_n78A</p> <p>2. The device has multiple antennas in each frequency band, all of which share the same transmit signal paths, and the transmit antenna is selected by the antenna switch. Only the worst case is recorded in this report.</p>	

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

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 Frequency		213.55Hz(k=2, 95% level of confidence)
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)
Emissions, Radiated	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

Description of Test Configuration

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

The test items were performed with the EUT operating at testing mode. Test was performed with channels as below table:

Bands	Frequency Range (MHz)	Bandwidth (MHz)	Test Frequency (MHz)		
			Low	Middle	High
N5	824-849	5	826.5	836.5	846.5
		10	829	836.5	844
		15	831.5	836.5	841.5
		20	834	836.5	839
N7	2500-2570	5	2502.5	2535	2567.5
		10	2505	2535	2565
		15	2507.5	2535	2562.5
		20	2510	2535	2560
N12	699-716	5	701.5	707.5	713.5
		10	704	707.5	711
		15	706.5	707.5	708.5
N38	2570-2620	5	2572.5	2595	2617.5
		10	2575	2595	2615
		15	2577.5	2595	2612.5
		20	2580	2595	2610
		25	2582.5	2595	2607.5
		30	2585	2595	2605
		40	2590	2595	2600
N41	2496-2690	10	2501	2593	2685
		15	2503.5	2593	2682.5
		20	2506	2593	2680
		30	2511	2593	2675
		40	2516	2593	2670
		50	2521	2593	2665
		60	2526	2593	2660
		80	2536	2593	2650
		90	2541	2593	2645
100	2546	2593	2640		

Bands	Frequency Range (MHz)	Bandwidth (MHz)	Test Frequency (MHz)		
			Low	Middle	High
N66	1710-1780	5	1712.5	1745	1777.5
		10	1715	1745	1775
		15	1717.5	1745	1772.5
		20	1720	1745	1770
		25	1722.5	1745	1767.5
		30	1725	1745	1765
		40	1730	1745	1760
N77_1	3450-3550	10	3455	3500	3545
		15	3457.5	3500	3542.5
		20	3460	3500	3540
		30	3465	3500	3535
		40	3470	3500	3530
		50	3475	3500	3525
		60	3480	3500	3520
		70	3485	3500	3515
		80	3490	3500	3510
		90	3495	3500	3505
N77_3	3700-3980	10	3705	3840	3975
		15	3707.5	3840	3972.5
		20	3710	3840	3970
		30	3715	3840	3965
		40	3720	3840	3960
		50	3725	3840	3955
		60	3730	3840	3950
		70	3735	3840	3945
		80	3740	3840	3940
		90	3745	3840	3935
		100	3750	3840	3930

Bands	Frequency Range (MHz)	Bandwidth (MHz)	Test Frequency (MHz)		
			Low	Middle	High
N78_1	3450-3550	10	3455	3500	3545
		15	3457.5	3500	3542.5
		20	3460	3500	3540
		30	3465	3500	3535
		40	3470	3500	3530
		50	3475	3500	3525
		60	3480	3500	3520
		70	3485	3500	3515
		80	3490	3500	3510
		90	3495	3500	3505
		100	/	3500	/
N78_3	3700-3800	10	3705	3750	3795
		15	3707.5	3750	3792.5
		20	3710	3750	3790
		30	3715	3750	3785
		40	3720	3750	3780
		50	3725	3750	3775
		60	3730	3750	3770
		70	3735	3750	3765
		80	3740	3750	3760
		90	3745	3750	3755
		100	/	3750	/

Note:

- SCS 15kHz, 30kHz was supported by the device, they have same output power, so only SCS 15kHz was tested for FDD band, and SCS 30kHz tested for TDD band except that the n38 5MHz Bandwidth only supports SCS 15kHz, so only N38 5MHz Bandwidth tests the SCS 15kHz.
- For modulation of CP-OFDM and DFT-s-OFDM, the maximum power of CP-OFDM is lower than DFT-s-OFDM modulation, therefore, we chose higher power (DFT-s-OFDM modulation) to perform all tests and show in the report.

Equipment Modifications

No modification was made to the EUT tested.

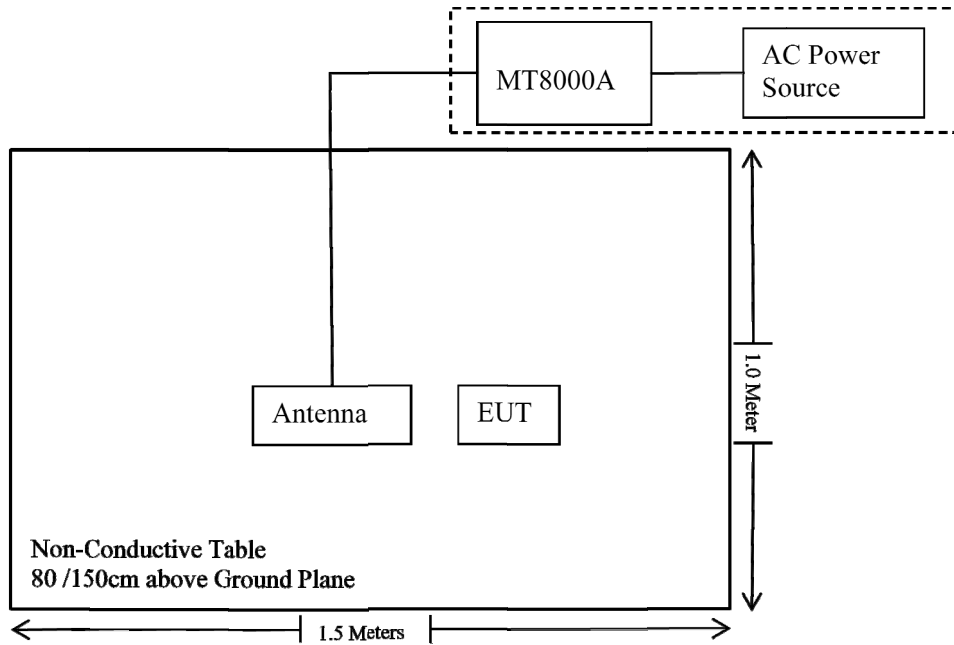
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Anritsu	Radio Communication Test Station	MT8000A	6262309799

External I/O Cable

Cable Description	Length (m)	From Port	To
Un-shielded Un-detachable AC cable	1.2	AC Power	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) (d); §27.50(c)(d)(h)(j)(k)	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(g)(h)(l)(m)(n)	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					
Rohde & Schwarz	EMI Test Receiver	ESR3	102455	2024/01/16	2025/01/15
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2023/07/20	2026/07/19
Sonoma instrument	Pre-amplifier	310N	186238	2024/05/21	2025/05/20
Unknown	Cable	XH500C	J-10M-A	2024/06/18	2025/06/17
Agilent	Signal Generator	N5183A	MY50140588	2023/12/18	2024/12/17
COM-POWER	Dipole Antenna	AD-100	721027	NCR	NCR
Rohde&Schwarz	Spectrum Analyzer	FSV40	101605	2024/03/27	2025/03/26
Schwarzbeck	Horn Antenna	BBHA9120D(1201)	1143	2023/07/26	2026/07/25
COM-POWER	Pre-amplifier	PA-122	181919	2024/06/18	2025/06/17
Unknown	RF Cable	KMSE	0735	2024/06/18	2025/06/17
Unknown	RF Cable	UFA147	219661	2024/06/18	2025/06/17
Unknown	RF Cable	XH750A-N	J-10M	2024/06/18	2025/06/17
A.H.System	Pre-amplifier	PAM-1840VH	190	2024/06/18	2025/06/17
Electro-Mechanics Co	Horn Antenna	3116	2026	2023/09/18	2026/09/17
UTIFLEX	RF Cable	NO. 13	232308-001	2024/06/18	2025/06/17
The Electro-Mechanics Co.	Horn Antenna	3115	9107-3694	2024/06/06	2027/06/05
Electro-Mechanics Co	Horn Antenna	3116	9510-2270	2023/09/18	2026/09/17
Anritsu	Radio Communication Analyzer	MT8821C	6262287697	2024/05/17	2025/05/16
JD	Multiplex Switch Test Control Set	DT7220FSU	DQ77926	2024/06/18	2025/06/17
Anritsu	Radio Communication Test Station	MT8000A	6262309799	2024/05/17	2025/05/16

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
BACL	Temperature & Humidity Chamber	BTH-150-40	30145	2024/01/16	2025/01/15
Anritsu	Radio Communication Analyzer	MT8821C	6262287697	2024/05/17	2025/05/16
Unknown	RF Cable	65475	01670515	2024/06/27	2025/06/26
R&S	spectrum analyzer	FSV40	101942	2023/12/18	2024/12/17
Fluke	Digital Multimeter	287	19000011	2024/05/21	2025/05/20
Agilent	Signal Generator	N5183A	MY50140588	2023/12/18	2024/12/17
WEINSCHHEL	Power Splitter	1515	RH476	2024/06/27	2025/06/26
instek	DC Power Supply	GPS-3030DD	EM832096	NCR	NCR
WEINSCHHEL	3dB Attenuator	Unknown	F-03-EM220	2024/06/27	2025/06/26
Anritsu	Radio Communication Test Station	MT8000A	6262309799	2024/05/17	2025/05/16
Keysight	UXM 5G Wireless Test Platform	E7515B	MY58120284	2024/05/17	2025/05/16

*** 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).

REQUIREMENTS AND TEST PROCEDURES

Modulation Characteristic

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

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 §27.50(c), Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP. And 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 following power limits shall apply in the BRS and EBS:

(2) Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

According to §27.50 (j) The following power requirements apply to stations transmitting in the 3700–3980 MHz band:

(3) Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

According to §27.50 (k) The following power requirements apply to stations transmitting in the 3450–3550 MHz band:

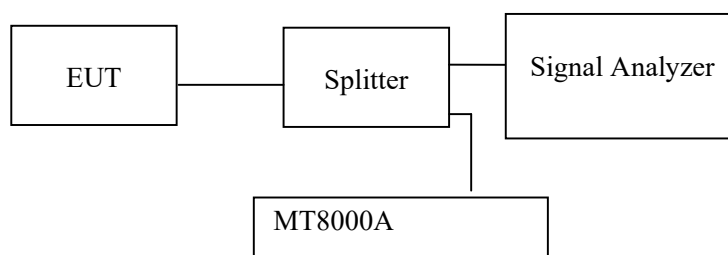
(3) Mobile devices are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

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

Test Procedure

Conducted method: ANSI C63.26-2015 Section 5.2

The RF output of the transmitter was connected to the E7515B through sufficient attenuation.



Note: the worst case path loss (cable loss and splitter inset loss) among the test frequency range has included in plots.

Occupied Bandwidth

Applicable Standard

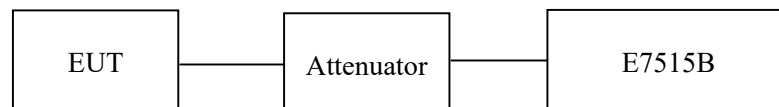
FCC 47 §2.1049, §27.53, §22.917, §22.905

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.



Spurious Emissions at Antenna Terminals

Applicable Standard

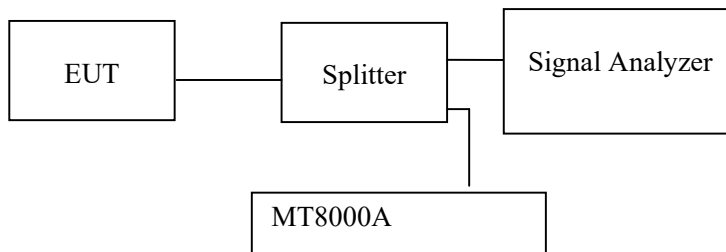
FCC §2.1051, §22.917(a) & §27.53

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 case path loss (cable loss and splitter inset loss) among the test frequency range has included in plots.

Spurious Radiated Emissions

Applicable Standard

FCC § 2.1053, §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 5.5

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.

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

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(l)(2), For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

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.

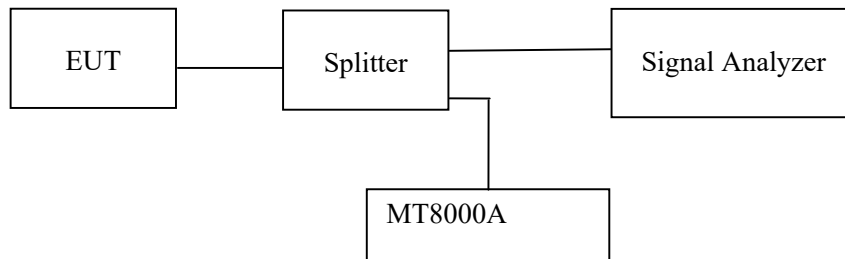
According to FCC §27.53(n)(2), For mobile operations in the 3450 – 3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

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



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.

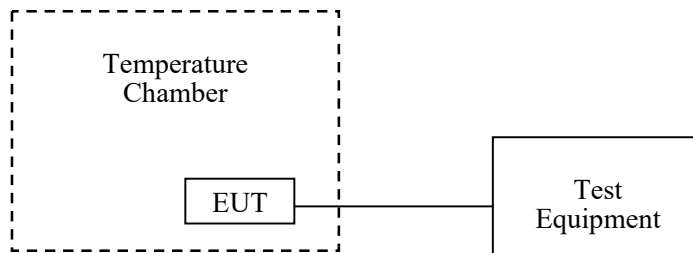
Test Procedure

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 AND RESULTS

Spurious Radiated Emissions

Environmental Conditions

Temperature (°C)	24.5-25.5	Relative Humidity (%)	50-55
ATM Pressure (kPa):	101	Test engineer:	Anson Su & Dylan Yang
Test date:	2024/09/22&2024/09/23		
EUT operation mode:	Transmitting		
Note:	After pre-scan in the X, Y and Z axes of orientation, the worst case z-axis of orientation were recorded.		

Test Mode Description: (worst case)

Mode	NR Band	Channel	SCS(kHz)	Condition
SA	n5	Low/Middle/High	15	5MHz DFT-s-OFDM (QPSK)
	n7	Low/Middle/High	15	5MHz DFT-s-OFDM (QPSK)
	n12	Low/Middle/High	15	5MHz DFT-s-OFDM (QPSK)
	n38	Low/Middle/High	15	5MHz DFT-s-OFDM (QPSK)
	n41	Low/Middle/High	30	10MHz DFT-s-OFDM (QPSK)
	n66	Low/Middle/High	15	5MHz DFT-s-OFDM (QPSK)
	n77	Low/Middle/High	30	10MHz DFT-s-OFDM (QPSK)
	n78	Low/Middle/High	30	10MHz DFT-s-OFDM (QPSK)
NSA	DC 5A n7A	Low/Middle/High	15	10MHz 5MHz QPSK DFT-s-OFDM (QPSK)
	DC 5A n38A	Low/Middle/High	15	10MHz 5MHz QPSK DFT-s-OFDM (QPSK)
	DC 5A n41A	Low/Middle/High	30	10MHz 10MHz QPSK DFT-s-OFDM (QPSK)
	DC 5A n66A	Low/Middle/High	15	10MHz 5MHz QPSK DFT-s-OFDM (QPSK)
	DC 5A n77A	Low/Middle/High	30	10MHz 10MHz QPSK DFT-s-OFDM (QPSK)
	DC 5A n78A	Low/Middle/High	30	10MHz 10MHz QPSK DFT-s-OFDM (QPSK)

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)			
N5_ ANT 7								
QPSK 5MHz Bandwidth, Low Channel								
956.2	33.51	H	-63.0	1.36	0.0	-64.36	-13	51.36
956.2	33.42	V	-60.6	1.36	0.0	-61.96	-13	48.96
1653	47.14	H	-60.4	0.90	8.6	-52.70	-13	39.70
1653	48.62	V	-59.5	0.90	8.6	-51.80	-13	38.80
2479.5	47.68	H	-59.7	1.10	8.8	-52.00	-13	39.00
2479.5	45.82	V	-61.3	1.10	8.8	-53.60	-13	40.60
QPSK 5MHz Bandwidth, Middle Channel								
952.8	33.63	H	-62.9	1.36	0.0	-64.26	-13	51.26
952.8	33.58	V	-60.5	1.36	0.0	-61.86	-13	48.86
1673	46.70	H	-60.9	0.90	8.6	-53.20	-13	40.20
1673	49.42	V	-58.7	0.90	8.6	-51.00	-13	38.00
2509.5	47.06	H	-60.3	1.10	8.8	-52.60	-13	39.60
2509.5	47.46	V	-59.6	1.10	8.8	-51.90	-13	38.90
QPSK 5MHz Bandwidth, High Channel								
950.7	33.89	H	-62.6	1.36	0.0	-63.96	-13	50.96
950.7	33.76	V	-60.3	1.36	0.0	-61.66	-13	48.66
1693	48.14	H	-59.4	0.90	8.6	-51.70	-13	38.70
1693	48.94	V	-59.2	0.90	8.6	-51.50	-13	38.50
2539.5	47.82	H	-59.5	1.10	8.8	-51.80	-13	38.80
2539.5	47.52	V	-59.6	1.10	8.8	-51.90	-13	38.90

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)			
N7_ ANT 7								
QPSK 5MHz Bandwidth, Low Channel								
951.9	32.27	H	-64.2	1.36	0.0	-65.56	-25	40.56
951.9	32.38	V	-61.7	1.36	0.0	-63.06	-25	38.06
5005	51.54	H	-51.8	1.50	9.8	-43.50	-25	18.50
5005	52.86	V	-49.7	1.50	9.8	-41.40	-25	16.40
QPSK 5MHz Bandwidth, Middle Channel								
955.7	32.48	H	-64.0	1.36	0.0	-65.36	-25	40.36
955.7	32.59	V	-61.5	1.36	0.0	-62.86	-25	37.86
5070	51.55	H	-51.6	1.50	9.6	-43.50	-25	18.50
5070	53.08	V	-49.5	1.50	9.6	-41.40	-25	16.40
QPSK 5MHz Bandwidth, High Channel								
953.3	32.65	H	-63.9	1.36	0.0	-65.26	-25	40.26
953.3	32.76	V	-61.3	1.36	0.0	-62.66	-25	37.66
5135	50.86	H	-52.3	1.50	9.6	-44.20	-25	19.20
5135	50.96	V	-51.7	1.50	9.6	-43.60	-25	18.60
N12_ ANT 7								
QPSK 5MHz Bandwidth, Low Channel								
957.6	33.15	H	-63.4	1.36	0.0	-64.76	-13	51.76
957.6	33.12	V	-60.9	1.36	0.0	-62.26	-13	49.26
1403	48.97	H	-58.7	0.80	7.9	-51.60	-13	38.60
1403	50.08	V	-58.3	0.80	7.9	-51.20	-13	38.20
2104.5	47.87	H	-59.4	1.00	8.3	-52.10	-13	39.10
2104.5	48.72	V	-59.1	1.00	8.3	-51.80	-13	38.80
QPSK 5MHz Bandwidth, Middle Channel								
952.7	33.28	H	-63.2	1.36	0.0	-64.56	-13	51.56
952.7	33.27	V	-60.8	1.36	0.0	-62.16	-13	49.16
1415	49.02	H	-58.7	0.80	7.9	-51.60	-13	38.60
1415	49.53	V	-58.9	0.80	7.9	-51.80	-13	38.80
2122.5	48.53	H	-58.8	1.00	8.3	-51.50	-13	38.50
2122.5	49.09	V	-58.7	1.00	8.3	-51.40	-13	38.40
QPSK 5MHz Bandwidth, High Channel								
953.4	33.43	H	-63.1	1.36	0.0	-64.46	-13	51.46
953.4	33.37	V	-60.7	1.36	0.0	-62.06	-13	49.06
1427	49.05	H	-58.7	0.80	7.9	-51.60	-13	38.60
1427	49.29	V	-59.1	0.80	7.9	-52.00	-13	39.00
2140.5	49.84	H	-57.5	1.00	8.3	-50.20	-13	37.20
2140.5	52.90	V	-54.9	1.00	8.3	-47.60	-13	34.60

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)			
N38_ ANT 7								
QPSK 5MHz Bandwidth, Low Channel								
959	32.86	H	-63.6	1.36	0.0	-64.96	-25	39.96
959	32.91	V	-61.1	1.36	0.0	-62.46	-25	37.46
5145	45.47	H	-57.7	1.50	9.6	-49.60	-25	24.60
5145	47.16	V	-55.5	1.50	9.6	-47.40	-25	22.40
7717.5	52.04	H	-43.8	1.90	10.9	-34.80	-25	9.80
7717.5	57.90	V	-38.3	1.90	10.9	-29.30	-25	4.30
QPSK 5MHz Bandwidth, Middle Channel								
958.8	33.04	H	-63.5	1.36	0.0	-64.86	-25	39.86
958.8	33.02	V	-61.0	1.36	0.0	-62.36	-25	37.36
5190	47.17	H	-55.9	1.60	9.7	-47.80	-25	22.80
5190	46.41	V	-56.2	1.60	9.7	-48.10	-25	23.10
7785	52.31	H	-43.4	1.90	11.1	-34.20	-25	9.20
7785	58.78	V	-37.3	1.90	11.1	-28.10	-25	3.10
QPSK 5MHz Bandwidth, High Channel								
954.7	33.27	H	-63.2	1.36	0.0	-64.56	-25	39.56
954.7	33.18	V	-60.9	1.36	0.0	-62.26	-25	37.26
5235	46.39	H	-56.7	1.60	9.7	-48.60	-25	23.60
5235	47.63	V	-55.0	1.60	9.7	-46.90	-25	21.90
7852.5	53.49	H	-42.2	1.90	11.1	-33.00	-25	8.00
7852.5	58.08	V	-37.9	1.90	11.1	-28.70	-25	3.70

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)			
N41_ ANT 7								
QPSK 10MHz Bandwidth, Low Channel								
959.2	33.45	H	-63.1	1.36	0.0	-64.46	-25	39.46
959.2	33.34	V	-60.7	1.36	0.0	-62.06	-25	37.06
5002	56.77	H	-46.5	1.50	9.8	-38.20	-25	13.20
5002	54.89	V	-47.7	1.50	9.8	-39.40	-25	14.40
7503	53.04	H	-42.9	1.90	10.8	-34.00	-25	9.00
7503	54.52	V	-41.8	1.90	10.8	-32.90	-25	7.90
QPSK 10MHz Bandwidth, Middle Channel								
954.9	33.63	H	-62.9	1.36	0.0	-64.26	-25	39.26
954.9	33.59	V	-60.5	1.36	0.0	-61.86	-25	36.86
5186	55.18	H	-47.9	1.60	9.7	-39.80	-25	14.80
5186	53.69	V	-49.0	1.60	9.7	-40.90	-25	15.90
7779	55.04	H	-40.7	1.90	11.1	-31.50	-25	6.50
7779	55.93	V	-40.2	1.90	11.1	-31.00	-25	6.00
QPSK 10MHz Bandwidth, High Channel								
951.5	33.84	H	-62.7	1.36	0.0	-64.06	-25	39.06
951.5	33.76	V	-60.3	1.36	0.0	-61.66	-25	36.66
5370	56.36	H	-46.4	1.70	10.5	-37.60	-25	12.60
5370	55.01	V	-47.7	1.70	10.5	-38.90	-25	13.90
8055	53.19	H	-42.5	2.00	11.4	-33.10	-25	8.10
8055	57.05	V	-38.9	2.00	11.4	-29.50	-25	4.50
N66_ ANT 7								
QPSK 5MHz Bandwidth, Low channel								
953.5	32.84	H	-63.7	1.36	0.0	-65.06	-13	52.06
953.5	32.83	V	-61.2	1.36	0.0	-62.56	-13	49.56
3425	44.88	H	-61.1	1.30	9.9	-52.50	-13	39.50
3425	45.69	V	-60.0	1.30	9.9	-51.40	-13	38.40
QPSK 5MHz Bandwidth, Middle channel								
954.8	32.93	H	-63.6	1.36	0.0	-64.96	-13	51.96
954.8	32.91	V	-61.1	1.36	0.0	-62.46	-13	49.46
3490	45.44	H	-60.5	1.30	10.5	-51.30	-13	38.30
3490	46.41	V	-59.2	1.30	10.5	-50.00	-13	37.00
QPSK 5MHz Bandwidth, High channel								
957.1	33.04	H	-63.5	1.36	0.0	-64.86	-13	51.86
957.1	33.03	V	-61.0	1.36	0.0	-62.36	-13	49.36
3555	47.23	H	-58.4	1.30	10.9	-48.80	-13	35.80
3555	46.35	V	-59.1	1.30	10.9	-49.50	-13	36.50

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)			
N77_1(3450MHz-3550MHz) _ ANT0								
QPSK 10MHz Bandwidth, Low channel								
953.2	32.54	H	-64.0	1.36	0.0	-65.36	-13	52.36
953.2	32.51	V	-61.5	1.36	0.0	-62.86	-13	49.86
6910	43.38	H	-54.9	1.90	10.3	-46.50	-13	33.50
6910	45.39	V	-52.9	1.90	10.3	-44.50	-13	31.50
QPSK 10MHz Bandwidth, Middle channel								
957.6	32.63	H	-63.9	1.36	0.0	-65.26	-13	52.26
957.6	32.62	V	-61.4	1.36	0.0	-62.76	-13	49.76
7000	45.94	H	-51.8	1.90	10.2	-43.50	-13	30.50
7000	46.82	V	-51.0	1.90	10.2	-42.70	-13	29.70
QPSK 10MHz Bandwidth, High channel								
955.5	32.75	H	-63.8	1.36	0.0	-65.16	-13	52.16
955.5	32.71	V	-61.3	1.36	0.0	-62.66	-13	49.66
7090	45.17	H	-52.2	1.90	10.2	-43.90	-13	30.90
7090	43.61	V	-53.9	1.90	10.2	-45.60	-13	32.60
N77_3(3700MHz-3980MHz) _ ANT0								
QPSK 10MHz Bandwidth, Low channel								
954	32.42	H	-64.1	1.36	0.0	-65.46	-13	52.46
954	32.26	V	-61.8	1.36	0.0	-63.16	-13	50.16
7410	47.21	H	-49.1	1.90	10.6	-40.40	-13	27.40
7410	47.90	V	-48.7	1.90	10.6	-40.00	-13	27.00
QPSK 10MHz Bandwidth, Middle channel								
952.7	32.35	H	-64.2	1.36	0.0	-65.56	-13	52.56
952.7	32.32	V	-61.7	1.36	0.0	-63.06	-13	50.06
7680	47.79	H	-48.0	1.90	10.9	-39.00	-13	26.00
7680	47.08	V	-49.1	1.90	10.9	-40.10	-13	27.10
QPSK 10MHz Bandwidth, High channel								
956.9	32.43	H	-64.1	1.36	0.0	-65.46	-13	52.46
956.9	32.47	V	-61.6	1.36	0.0	-62.96	-13	49.96
7950	48.37	H	-47.2	1.90	11.1	-38.00	-13	25.00
7950	47.88	V	-48.1	1.90	11.1	-38.90	-13	25.90

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)			
N78_1 (3450MHz-3550MHz) _ ANT0								
QPSK 10MHz Bandwidth, Low channel								
952.8	32.13	H	-64.4	1.36	0.0	-65.76	-13	52.76
952.8	31.91	V	-62.1	1.36	0.0	-63.46	-13	50.46
6910	46.00	H	-52.3	1.90	10.3	-43.90	-13	30.90
6910	44.86	V	-53.5	1.90	10.3	-45.10	-13	32.10
QPSK 10MHz Bandwidth, Middle channel								
955.1	32.24	H	-64.3	1.36	0.0	-65.66	-13	52.66
955.1	32.03	V	-62.0	1.36	0.0	-63.36	-13	50.36
7000	46.79	H	-50.9	1.90	10.2	-42.60	-13	29.60
7000	46.43	V	-51.4	1.90	10.2	-43.10	-13	30.10
QPSK 10MHz Bandwidth, High channel								
958.9	32.35	H	-64.2	1.36	0.0	-65.56	-13	52.56
958.9	32.14	V	-61.9	1.36	0.0	-63.26	-13	50.26
7090	46.51	H	-50.9	1.90	10.2	-42.60	-13	29.60
7090	44.89	V	-52.6	1.90	10.2	-44.30	-13	31.30
N78_3(3700MHz-3800MHz) _ ANT0								
QPSK 10MHz Bandwidth, Low channel								
953.2	31.81	H	-64.7	1.36	0.0	-66.06	-13	53.06
953.2	31.65	V	-62.4	1.36	0.0	-63.76	-13	50.76
7410	51.71	H	-44.6	1.90	10.6	-35.90	-13	22.90
7410	49.72	V	-46.9	1.90	10.6	-38.20	-13	25.20
QPSK 10MHz Bandwidth, Middle channel								
950.2	31.92	H	-64.6	1.36	0.0	-65.96	-13	52.96
950.2	31.74	V	-62.3	1.36	0.0	-63.66	-13	50.66
7500	53.00	H	-43.0	1.90	10.8	-34.10	-13	21.10
7500	50.85	V	-45.5	1.90	10.8	-36.60	-13	23.60
QPSK 10MHz Bandwidth, High channel								
957.8	32.05	H	-64.5	1.36	0.0	-65.86	-13	52.86
957.8	31.83	V	-62.2	1.36	0.0	-63.56	-13	50.56
7590	51.25	H	-44.6	1.90	11.0	-35.50	-13	22.50
7590	52.45	V	-43.8	1.90	11.0	-34.70	-13	21.70

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)			
DC_5A_n7A_ (LTE ANT7+NR ANT7)								
QPSK 5MHz Bandwidth, Low channel								
958	32.41	H	-64.1	1.36	0.0	-65.46	-25	40.46
958	32.55	V	-61.5	1.36	0.0	-62.86	-25	37.86
5005	50.64	H	-52.7	1.50	9.8	-44.40	-25	19.40
5005	51.50	V	-51.1	1.50	9.8	-42.80	-25	17.80
7507.5	51.36	H	-44.6	1.90	10.8	-35.70	-25	10.70
7507.5	51.56	V	-44.8	1.90	10.8	-35.90	-25	10.90
QPSK 5MHz Bandwidth, Middle channel								
952.4	32.52	H	-64.0	1.36	0.0	-65.36	-25	40.36
952.4	32.78	V	-61.3	1.36	0.0	-62.66	-25	37.66
5070	51.67	H	-51.5	1.50	9.6	-43.40	-25	18.40
5070	51.53	V	-51.1	1.50	9.6	-43.00	-25	18.00
7605	50.80	H	-45.1	1.90	11.0	-36.00	-25	11.00
7605	51.02	V	-45.2	1.90	11.0	-36.10	-25	11.10
QPSK 5MHz Bandwidth, High Channel								
956.9	32.78	H	-63.7	1.36	0.0	-65.06	-25	40.06
956.9	32.91	V	-61.1	1.36	0.0	-62.46	-25	37.46
5135	51.31	H	-51.9	1.50	9.6	-43.80	-25	18.80
5135	50.80	V	-51.8	1.50	9.6	-43.70	-25	18.70
7702.5	53.55	H	-42.3	1.90	10.9	-33.30	-25	8.30
7702.5	52.08	V	-44.1	1.90	10.9	-35.10	-25	10.10

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)			
DC_5A_n38A_(LTE ANT7+NR ANT7)								
QPSK 5MHz Bandwidth, Low channel								
958.4	32.93	H	-63.6	1.36	0.0	-64.96	-25	39.96
958.4	33.02	V	-61.0	1.36	0.0	-62.36	-25	37.36
5145	45.05	H	-58.1	1.50	9.6	-50.00	-25	25.00
5145	45.78	V	-56.8	1.50	9.6	-48.70	-25	23.70
7717.5	43.64	H	-52.2	1.90	10.9	-43.20	-25	18.20
7717.5	43.97	V	-52.2	1.90	10.9	-43.20	-25	18.20
QPSK 5MHz Bandwidth, Middle channel								
954.1	33.05	H	-63.5	1.36	0.0	-64.86	-25	39.86
954.1	33.18	V	-60.9	1.36	0.0	-62.26	-25	37.26
5190	44.98	H	-58.1	1.60	9.7	-50.00	-25	25.00
5190	47.20	V	-55.5	1.60	9.7	-47.40	-25	22.40
7785	43.93	H	-51.8	1.90	11.1	-42.60	-25	17.60
7785	43.99	V	-52.1	1.90	11.1	-42.90	-25	17.90
QPSK 5MHz Bandwidth, High Channel								
957.6	33.24	H	-63.3	1.36	0.0	-64.66	-25	39.66
957.6	33.39	V	-60.7	1.36	0.0	-62.06	-25	37.06
5235	46.33	H	-56.7	1.60	9.7	-48.60	-25	23.60
5235	45.47	V	-57.2	1.60	9.7	-49.10	-25	24.10
7852.5	44.67	H	-51.0	1.90	11.1	-41.80	-25	16.80
7852.5	42.97	V	-53.0	1.90	11.1	-43.80	-25	18.80

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)			
DC_5A_n41A_ (LTE ANT7+NR ANT7)								
QPSK10MHz Bandwidth, Low channel								
957	33.47	H	-63.0	1.36	0.0	-64.36	-25	39.36
957	33.55	V	-60.5	1.36	0.0	-61.86	-25	36.86
5002	51.76	H	-51.5	1.50	9.8	-43.20	-25	18.20
5002	53.24	V	-49.3	1.50	9.8	-41.00	-25	16.00
7503	47.13	H	-48.8	1.90	10.8	-39.90	-25	14.90
7503	45.55	V	-50.8	1.90	10.8	-41.90	-25	16.90
QPSK 10MHz Bandwidth, Middle channel								
952.8	33.62	H	-62.9	1.36	0.0	-64.26	-25	39.26
952.8	33.71	V	-60.3	1.36	0.0	-61.66	-25	36.66
5186	52.34	H	-50.7	1.60	9.7	-42.60	-25	17.60
5186	52.43	V	-50.2	1.60	9.7	-42.10	-25	17.10
7779	47.62	H	-48.1	1.90	11.1	-38.90	-25	13.90
7779	46.72	V	-49.4	1.90	11.1	-40.20	-25	15.20
QPSK 10MHz Bandwidth, High Channel								
953.1	33.79	H	-62.7	1.36	0.0	-64.06	-25	39.06
953.1	33.82	V	-60.2	1.36	0.0	-61.56	-25	36.56
5370	52.76	H	-50.0	1.70	10.5	-41.20	-25	16.20
5370	53.62	V	-49.1	1.70	10.5	-40.30	-25	15.30
8055	47.93	H	-47.7	2.00	11.4	-38.30	-25	13.30
8055	47.25	V	-48.7	2.00	11.4	-39.30	-25	14.30
DC_5A_n66A_ (LTE ANT7+NR ANT7)								
QPSK 5MHz Bandwidth, Low channel								
959.5	32.75	H	-63.8	1.36	0.0	-65.16	-13	52.16
959.5	32.73	V	-61.3	1.36	0.0	-62.66	-13	49.66
3425	43.37	H	-62.6	1.30	9.9	-54.00	-13	41.00
3425	47.41	V	-58.2	1.30	9.9	-49.60	-13	36.60
QPSK 5MHz Bandwidth, Middle channel								
952.1	32.94	H	-63.6	1.36	0.0	-64.96	-13	51.96
952.1	32.93	V	-61.1	1.36	0.0	-62.46	-13	49.46
3490	44.63	H	-61.3	1.30	10.5	-52.10	-13	39.10
3490	47.35	V	-58.3	1.30	10.5	-49.10	-13	36.10
QPSK 5MHz Bandwidth, High Channel								
955.1	33.05	H	-63.5	1.36	0.0	-64.86	-13	51.86
955.1	33.01	V	-61.0	1.36	0.0	-62.36	-13	49.36
3555	44.55	H	-61.1	1.30	10.9	-51.50	-13	38.50
3555	46.79	V	-58.6	1.30	10.9	-49.00	-13	36.00

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)			
DC_5A_n77A(3700MHz-3980MHz)_ (LTE ANT7+NR ANT0)								
QPSK 5MHz Bandwidth, Low channel								
954.6	33.27	H	-63.2	1.36	0.0	-64.56	-13	51.56
954.6	33.19	V	-60.9	1.36	0.0	-62.26	-13	49.26
7410	44.30	H	-52.0	1.90	10.6	-43.30	-13	30.30
7410	45.73	V	-50.9	1.90	10.6	-42.20	-13	29.20
QPSK 5MHz Bandwidth, Middle channel								
950.1	33.43	H	-63.1	1.36	0.0	-64.46	-13	51.46
950.1	33.38	V	-60.7	1.36	0.0	-62.06	-13	49.06
7680	44.32	H	-51.5	1.90	10.9	-42.50	-13	29.50
7680	44.83	V	-51.3	1.90	10.9	-42.30	-13	29.30
QPSK 5MHz Bandwidth, High Channel								
955.2	33.51	H	-63.0	1.36	0.0	-64.36	-13	51.36
955.2	33.59	V	-60.5	1.36	0.0	-61.86	-13	48.86
7950	44.62	H	-50.9	1.90	11.1	-41.70	-13	28.70
7950	46.23	V	-49.7	1.90	11.1	-40.50	-13	27.50
DC_5A_n78A(3700MHz-3800MHz)_ (LTE ANT7+NR ANT0)								
QPSK 5MHz Bandwidth, Low channel								
952.8	33.64	H	-62.9	1.36	0.0	-64.26	-13	51.26
952.8	33.72	V	-60.3	1.36	0.0	-61.66	-13	48.66
7410	44.46	H	-51.9	1.90	10.6	-43.20	-13	30.20
7410	43.58	V	-53.0	1.90	10.6	-44.30	-13	31.30
QPSK 5MHz Bandwidth, Middle channel								
953.5	33.72	H	-62.8	1.36	0.0	-64.16	-13	51.16
953.5	33.81	V	-60.2	1.36	0.0	-61.56	-13	48.56
7500	44.52	H	-51.4	1.90	10.8	-42.50	-13	29.50
7500	45.12	V	-51.2	1.90	10.8	-42.30	-13	29.30
QPSK 5MHz Bandwidth, High Channel								
954.2	33.81	H	-62.7	1.36	0.0	-64.06	-13	51.06
954.2	33.93	V	-60.1	1.36	0.0	-61.46	-13	48.46
7590	46.00	H	-49.9	1.90	11.0	-40.80	-13	27.80
7590	46.22	V	-50.0	1.90	11.0	-40.90	-13	27.90

Note:

Absolute Level = Reading Level + Substituted Factor

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

Margin = Limit-Absolute Level

RF Conducted Data

The test data please refer to the Appendix.

Test Items	Test Data
RF Output Power	Appendix L1-L5
Peak-to-average Ratio(PAR)	Appendix K1-K2
Occupied Bandwidth	Appendix I1-I2
Spurious Emissions at Antenna Terminal	Appendix M1-M2
Band Edge	Appendix J1-J2
Frequency Stability_ Error	Appendix H
Frequency Stability_ Range	Appendix N1-N11

RF EXPOSURE INFORMATION

Applicable Standard

FCC§1.1310 and §2.1093.

Test Result

Compliant, please refer to the SAR report: 2401W26164E-SA.

EUT PHOTOGRAPHS

Please refer to the attachment 2403W26164E-RF-EXP External photo and 2403W26164E-RF-INP Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2401W26164E-RF-00A Test Setup photo.

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