FCC RF Test Report

(5G NR)

Report No.:	JYTSZ-R12-2400055
Applicant:	INFINIX MOBILITY LIMITED
Address of Applicant:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Equipment Under Test (EUT)	
Product Name:	Mobile Phone
Model No.:	X6851B
Trade Mark:	Infinix
FCC ID:	2AIZN-X6851B
Applicable Standards:	FCC CFR Title 47 Part 2, 22H, 27L & M & H & O & Q, 96A
Date of Sample Receipt:	11 Jan., 2024
Date of Test:	12 Jan., to 12 Mar., 2024
Date of Report Issued:	17 Mar., 2024
Test Result:	PASS

Project by:	Neal Wu	***Date:***	*17 Mar., 2024*
	Project Engineer		
Reviewed by:	Beta Hao	***Date:***	*17 Mar., 2024*
	Senior Engineer		
Approved by:	Janet Wei	***Date:***	*17 Mar., 2024*
	Manager		

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in above the application standard version. Test results reported herein relate only to the item(s) tested.

1 Version

Version No.	Date	Description
00	*17 Mar., 2024*	*Original*

2 Contents

3 General Information

3.1 Client Information

Applicant:	INFINIX MOBILITY LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Manufacturer:	INFINIX MOBILITY LIMITED
Address:	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG
Factory:	SHENZHEN TECNO TECHNOLOGY CO., LTD.
Address:	101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R.China

3.2 General Description of E.U.T.

Product Name:	Mobile Phone		
Model No.:	X6851B		
Operation Frequency Range:	Band n5:	Tx: 824 MHz - 849 MHz	Rx: 869 MHz - 894 MHz
	Band n7:	Tx: 2500 MHz - 2570 MHz	Rx: 2620 MHz - 2690 MHz
	Band n12:	Tx: 699 MHz - 716 MHz	Rx: 729 MHz - 746 MHz
	Band n38:	Tx: 2570 MHz - 2620 MHz	Rx: 2570 MHz - 2620 MHz
	Band n41:	Tx: 2496 MHz - 2690 MHz	Rx: 2496 MHz - 2690 MHz
	Band n66:	Tx: 1710 MHz - 1780 MHz	Rx: 2110 MHz - 2200 MHz
	Band n77:	Tx: 3450 MHz - 3550 MHz	Rx: 3450 MHz - 3550 MHz
	Band n77:	Tx: 3550 MHz - 3700 MHz	Rx: 3550 MHz - 3700 MHz
	Band n77:	Tx: 3700 MHz - 3980 MHz	Rx: 3700 MHz - 3980 MHz
	Band n78:	Tx: 3450 MHz - 3550 MHz	Rx: 3450 MHz - 3550 MHz
	Band n78:	Tx: 3550 MHz - 3700 MHz	Rx: 3550 MHz - 3700 MHz
	Band n78:	Tx: 3700 MHz - 3800 MHz	Rx: 3700 MHz - 3800 MHz
Modulation Type:	☒ DFT-s-OFDM:	Pi/2-BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM	
	☒ CP-OFDM:	QPSK, 16-QAM, 64-QAM, 256-QAM	
Network Mode:	☒ SA:	N5, n7, n12, n38, n41, n66, n77, n78	
	☒ CA:	CA_N41A_N78A(Only supports downlink CA)	
	☒ NSA(EN-DC):	DC_2A_n7A, DC_5A_n7A, DC_7A_n7A, DC_66A_n7A, 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	
		EN-DC with LTE 2CA: DC_7C_n78A, DC_41C_n78A, DC_7C_n77A, DC_41C_n77A, DC_41C_n41A, DC_7A_7A_n78A, DC_2A_7A_n78, DC_2A_66A_n78, DC_5A-7A_n78A, DC_2A_7C_N78 (LTE Band 7C and 41C only supports downlink)	
SCS Support:	☒ 15 kHz	☒ 30 kHz	☐ 60 kHz ☐ 120 kHz
Antenna Type:	Internal Antenna		
Antenna Gain:	Band n5:	ANT1: -6.80dBi (declare by Applicant)	

	Band n7:	ANT2: -3.76 dBi (declare by Applicant) ANT6: -1.84(declare by Applicant)
	Band n12:	ANT1: -8.16 dBi (declare by Applicant)
	Band n38:	ANT2: -3.76dBi (declare by Applicant)
	Band n41:	ANT2: -3.76dBi (declare by Applicant)
	Band n66:	ANT2: -4.38dBi (declare by Applicant) ANT6: -1.74(declare by Applicant)
	Band n77:	ANT7: -1.85dBi (declare by Applicant)
	Band n78:	ANT7: -1.85dBi (declare by Applicant)
Power Supply:	Rechargeable Li-ion Polymer Battery DC3.91V, 4500mAh	
AC Adapter:	Model: U1000XSA Input: AC100-240V, 50/60Hz, 2.3A Output: DC 5.0V, 3.0A 15.0W or DC 5.0V-11.0V, 9.1A or DC 4.0V-20.0V, 5.0A 100.0W MAX	
Test Sample Condition:	The test samples were provided in good working order with no visible defects.	

3.3 Test Mode and Environment

Test Mode:	
DFT-s-OFDM access mode:	Keep the EUT communication with simulated station in Pi/2-BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM modulation of DFT-s-OFDM access mode.
CP-OFDM access mode:	Keep the EUT communication with simulated station in Pi/2-BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM modulation of CP-OFDM access mode.
Remark: *The EUT has been tested under continuous transmitting mode. Channel Low, Mid and High for each type band with rated data rate were chosen for full testing. The field strength of spurious radiation emission was measured as EUT stand-up position (H mode) and lie down position (E1, E2 mode) for these modes. Just the worst case position (H mode) shown in report.*	
Operating Environment:	
Temperature:	15℃ ~ 35℃
Humidity:	20 % ~ 75 % RH
Atmospheric Pressure:	1008 mbar
Voltage:	Nominal: 3.91 Vdc, Extreme: Low 3.45 Vdc, High 4.50 Vdc
Test Engineer:	Lucas Ding (Conducted measurement)

3.4 Description of Test Auxiliary Equipment

Test Equipment	Manufacturer	Model No.	Serial No.
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY60192444

3.5 Measurement Uncertainty

Please refer to FCC ID: 2AIZN-X6851, report No.: JYTSZ-R12-2301780.

3.6 Additions to, Deviations, or Exclusions from the Method

No

3.7 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

- **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

3.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.
Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info-JYTee@lets.com, Website: http://jyt.lets.com

3.9 Test Instruments List

Conducted Method:					
Test Equipment	**Manufacturer**	**Model No.**	**Manage No.**	**Cal. Date (mm-dd-yy)**	**Cal. Due date (mm-dd-yy)**
Spectrum Analyzer	Keysight	N9010B	WXJ004-2	09-25-2023	09-24-2024
UXM 5G Wireless Test Platform	Keysight	E7515B	WXJ008-6	09-25-2023	09-24-2024
Temperature Humidity Chamber	HONG ZHI	CZ-A-80D	WXJ032-2	01-09-2023	01-08-2025
RF Control Box	MWRF-test	MW400-RFCB	WXG005	N/A	
Automatic Filter Box	MWRF-test	MW400-SFCB1	WXG005-1	N/A	
Automatic Filter Box	MWRF-test	MW400-SFCB2	WXG005-2	N/A	
DC Power Supply	Keysight	E3642A	WXJ025-3	N/A	
Test Software	MWRF-test	MTS 8200 NR	Version: 2.0.0.0		

4 Measurement Setup and Procedure

4.1 Test Channel

According to ANSI C63.26-2015 chapter 5.1.2.1 Table 2 requirement, select lowest channel, middle channel, and highest channel in the frequency range in which device operates for testing. The detailed frequency points are as follows:

Band n5, SCS: 15 kHz

Channels	ARFCN	Frequency (MHz)	Channels	ARFCN	Frequency (MHz)
5 MHz			**10 MHz**		
Lowest	165300	826.5	Lowest	165800	829.0
Middle	167300	836.5	Middle	167300	836.5
Highest	169300	846.5	Highest	168800	844.0
15 MHz			**20 MHz**		
Lowest	166300	831.5	Lowest	166800	834.0
Middle	167300	836.5	Middle	167300	836.5
Highest	168300	841.5	Highest	167800	839.0

Band n5, SCS: 30 kHz

Channels	ARFCN	Frequency (MHz)	Channels	ARFCN	Frequency (MHz)
10 MHz			**15 MHz**		
Lowest	165800	829.0	Lowest	166300	831.5
Middle	167300	836.5	Middle	167300	836.5
Highest	168800	844.0	Highest	168300	841.5
20 MHz					
Lowest	166800	834.0			
Middle	167300	836.5			
Highest	167800	839.0			

Band n7, SCS: 15 kHz

Channels	ARFCN	Frequency (MHz)	Channels	ARFCN	Frequency (MHz)
5 MHz			**10 MHz**		
Lowest	500500	2502.5	Lowest	501000	2505.0
Middle	507000	2535.0	Middle	507000	2535.0
Highest	513500	2567.5	Highest	513000	2565.0
15 MHz			**20 MHz**		
Lowest	501500	2507.5	Lowest	502000	2510.0
Middle	507000	2535.0	Middle	507000	2535.0
Highest	512500	2562.5	Highest	512000	2560.0

Band n7, SCS: 30 kHz

Channels	ARFCN	Frequency (MHz)	Channels	ARFCN	Frequency (MHz)
10 MHz			**15 MHz**		
Lowest	501000	2505.0	Lowest	501500	2507.5
Middle	507000	2535.0	Middle	507000	2535.0
Highest	513000	2565.0	Highest	512500	2562.5
20 MHz					
Lowest	502000	2510.0			
Middle	507000	2535.0			
Highest	512000	2560.0			

Band n12, SCS: 15 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
5 MHz			**10 MHz**		
Lowest	140300	701.5	Lowest	140800	704.0
Middle	141500	707.5	Middle	141500	707.5
Highest	142700	713.5	Highest	142200	711.0
15 MHz					
Lowest	141300	706.5			
Middle	141500	707.5			
Highest	141700	708.5			

Band n12, SCS: 30 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	140800	704.0	Lowest	141300	706.5
Middle	141500	707.5	Middle	141500	707.5
Highest	142200	711.0	Highest	141700	708.5

Band n38, SCS: 15 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
5 MHz			**10 MHz**		
Lowest	514500	2572.5	Lowest	515000	2575.0
Middle	518500	2592.5	Middle	519000	2595.0
Highest	523500	2617.5	Highest	523000	2615.0
15 MHz			**20 MHz**		
Lowest	515500	2577.5	Lowest	516000	2580.0
Middle	519000	2595.0	Middle	519000	2595.0
Highest	522500	2612.5	Highest	522000	2610.0
40 MHz					
Lowest	518000	2590.0			
Middle	519000	2595.0			
Highest	520000	2600.0			

Band n38, SCS: 30 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	515000	2575.0	Lowest	515500	2577.5
Middle	519000	2595.0	Middle	519000	2595.0
Highest	523000	2615.0	Highest	522500	2612.5
20 MHz			**40 MHz**		
Lowest	516000	2580.0	Lowest	518000	2590.0
Middle	519000	2595.0	Middle	519000	2595.0
Highest	522000	2610.0	Highest	520000	2600.0

Band n41, SCS: 15 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	500202	2501.010	Lowest	500700	2503.500
Middle	518601	2593.005	Middle	518601	2593.005
Highest	537000	2685.000	Highest	536499	2682.495
20 MHz			**30 MHz**		
Lowest	501201	2506.005	Lowest	502200	2511.000
Middle	518601	2593.005	Middle	518601	2593.005
Highest	535998	2679.990	Highest	534999	2674.995
40 MHz			**50 MHz**		
Lowest	503202	2516.010	Lowest	504201	2521.005
Middle	518601	2593.005	Middle	518601	2593.005
Highest	534000	2670.000	Highest	532998	2664.990

Band n41, SCS: 30 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	500202	2501.010	Lowest	500700	2503.500
Middle	518598	2592.990	Middle	518598	2592.990
Highest	537000	2685.000	Highest	536496	2682.480
20 MHz			**30 MHz**		
Lowest	501204	2506.020	Lowest	502200	2511.000
Middle	518598	2592.990	Middle	518598	2592.990
Highest	535998	2679.990	Highest	534996	2674.980
40 MHz			**50 MHz**		
Lowest	503202	2516.010	Lowest	504204	2521.020
Middle	518598	2592.990	Middle	518598	2592.990
Highest	534000	2670.000	Highest	532998	2664.990
60 MHz			**80 MHz**		
Lowest	505200	2526.000	Lowest	507204	2536.020
Middle	518598	2592.990	Middle	518598	2592.990
Highest	531996	2659.980	Highest	52998	2649.990
90 MHz			**100 MHz**		
Lowest	508200	2541.000	Lowest	509202	2546.010
Middle	518598	2592.990	Middle	518598	2592.990
Highest	528996	2644.980	Highest	528000	2640.000

Band n66, SCS: 15 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
5 MHz			**10 MHz**		
Lowest	342500	1712.5	Lowest	343000	1715.0
Middle	349000	1745.0	Middle	349000	1745.0
Highest	355500	1777.5	Highest	355000	1775.0
15 MHz			**20 MHz**		
Lowest	343500	1717.5	Lowest	344000	1720.0
Middle	349000	1745.0	Middle	349000	1745.0
Highest	354500	1772.5	Highest	354000	1770.0
40 MHz					
Lowest	346000	1730.0			
Middle	349000	1745.0			
Highest	352000	1760.0			

Band n66, SCS: 30 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	343000	1715.0	Lowest	343500	1717.5
Middle	349000	1745.0	Middle	349000	1745.0
Highest	355000	1775.0	Highest	354500	1772.5
20 MHz			**40 MHz**		
Lowest	344000	1720.0	Lowest	346000	1730.0
Middle	349000	1745.0	Middle	349000	1745.0
Highest	354000	1770.0	Highest	352000	1760.0

Band n77/ (3450-3550), SCS: 15 kHz --Include n78(3450-3550) , SCS: 15 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	630334	3455.010	Lowest	630500	3457.500
Middle	633333	3499.995	Middle	633333	3499.995
Highest	636333	3544.995	Highest	636166	3542.490
20 MHz			**30 MHz**		
Lowest	630667	3460.005	Lowest	631000	3465.000
Middle	633333	3499.995	Middle	633333	3499.995
Highest	636000	3540.000	Highest	635666	3534.990
40 MHz			**50 MHz**		
Lowest	631334	3470.010	Lowest	631667	3475.005
Middle	633333	3499.995	Middle	633333	3499.995
Highest	635333	3529.995	Highest	635000	3525.000

Band n77(3450-3550), SCS: 30 kHz-- Include n78(3450-3550) , SCS: 30kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	630334	3455.010	Lowest	630500	3457.500
Middle	633334	3500.010	Middle	633334	3500.010
Highest	636332	3544.980	Highest	636166	3542.490
20 MHz			**30 MHz**		
Lowest	630668	3460.020	Lowest	631000	3465.000
Middle	633334	3500.010	Middle	633334	3500.010
Highest	636000	3540.000	Highest	635666	3534.990
40 MHz			**50 MHz**		
Lowest	631334	3470.010	Lowest	631668	3475.020
Middle	633334	3500.010	Middle	633334	3500.010
Highest	635332	3529.980	Highest	635000	3525.000
60 MHz			**80 MHz**		
Lowest	632000	3480.000	Lowest	632668	3490.020
Middle	633334	3500.010	Middle	633334	3500.010
Highest	634666	3519.990	Highest	634000	3510.000
90 MHz			**100 MHz**		
Lowest	633000	3495.000	Lowest	/	/
Middle	633334	3500.010	Middle	633334	3500.010
Highest	633666	3504.990	Highest	/	/

Band n77(3550-3700), SCS: 15 kHz--Include n78(3550-3700) , SCS: 15 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	637000	3555.000	Lowest	637168	3557.520
Middle	641666	3624.990	Middle	641666	3624.990
Highest	646332	3649.980	Highest	646166	3692.490
20 MHz			**30 MHz**		
Lowest	637334	3560.010	Lowest	637668	3565.020
Middle	641666	3624.990	Middle	641666	3624.990
Highest	646000	3690.000	Highest	645666	3684.990
40 MHz			**50 MHz**		
Lowest	638000	3570.000	Lowest	638334	3575.010
Middle	641666	3624.990	Middle	641666	3624.990
Highest	645332	3679.980	Highest	645000	3675.000

Band n77(3550-3700), SCS: 30 kHz--Include n78(3550-3700) , SCS: 30 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	637000	3555.000	Lowest	637168	3557.520
Middle	641666	3624.990	Middle	641666	3624.990
Highest	646332	3649.980	Highest	646166	3692.490
20 MHz			**30 MHz**		
Lowest	637334	3560.010	Lowest	637668	3565.020
Middle	641666	3624.990	Middle	641666	3624.990
Highest	646000	3690.000	Highest	645666	3684.990
40 MHz			**50 MHz**		
Lowest	638000	3570.000	Lowest	638334	3575.010
Middle	641666	3624.990	Middle	641666	3624.990
Highest	645332	3679.980	Highest	645000	3675.000
60 MHz			**80 MHz**		
Lowest	638668	3580.020	Lowest	639334	3590.010
Middle	641666	3624.990	Middle	641666	3624.990
Highest	644666	3669.990	Highest	644000	3660.000
90 MHz			**100 MHz**		
Lowest	639668	3595.020	Lowest	640000	3600.000
Middle	641666	3624.990	Middle	641666	3624.990
Highest	643666	643666	Highest	643332	3649.980

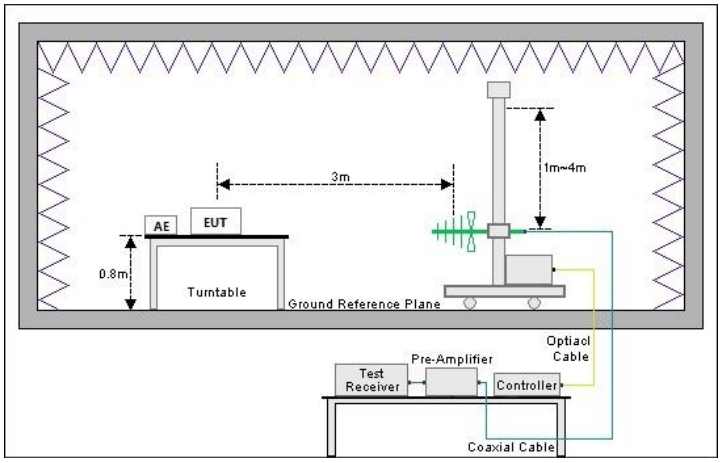
Band n77(3700-3980), SCS: 15 kHz--Include n78(3700-3980) , SCS: 15 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	647000	3705.000	Lowest	647167	3707.505
Middle	656000	3840.000	Middle	656000	3840.000
Highest	665000	3975.000	Highest	664833	3972.495
20 MHz			**30 MHz**		
Lowest	647334	3710.010	Lowest	647667	3715.005
Middle	656000	3840.000	Middle	656000	3840.000
Highest	664666	3969.990	Highest	664333	3964.995
40 MHz			**50 MHz**		

Lowest	648000	3720.000	Lowest	648334	3725.010
Middle	656000	3840.000	Middle	656000	3840.000
Highest	664000	3960.000	Highest	663666	3954.990
Band n77(3700-3980), SCS: 30 kHz--Include n78(3700-3980) , SCS: 30 kHz					
Channels	**ARFCN**	**Frequency (MHz)**	**Channels**	**ARFCN**	**Frequency (MHz)**
10 MHz			**15 MHz**		
Lowest	647000	3705.000	Lowest	647168	3707.520
Middle	656000	3840.000	Middle	656000	3840.000
Highest	665000	3975.000	Highest	664832	3972.480
20 MHz			**30 MHz**		
Lowest	647334	3710.010	Lowest	647668	3715.020
Middle	656000	3840.000	Middle	656000	3840.000
Highest	664666	3969.990	Highest	664332	3964.980
40 MHz			**50 MHz**		
Lowest	648000	3720.000	Lowest	648334	3725.010
Middle	656000	3840.000	Middle	656000	3840.000
Highest	664000	3960.000	Highest	663666	3954.990
60 MHz			**80 MHz**		
Lowest	648668	3730.020	Lowest	649334	3740.010
Middle	656000	3840.000	Middle	656000	3840.000
Highest	663332	3949.980	Highest	662666	3939.990
90 MHz			**100 MHz**		
Lowest	649668	3745.020	Lowest	650000	3750.000
Middle	656000	3840.000	Middle	656000	3840.000
Highest	662332	3934.980	Highest	662000	3930.000

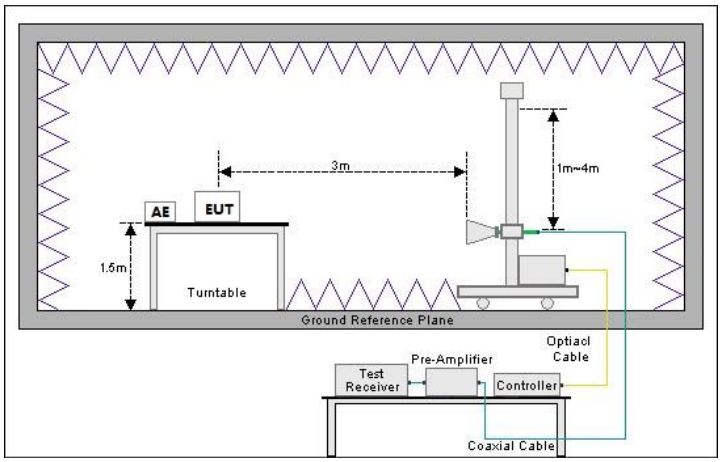
4.2 Test Setup

1) Radiated emission measurement:

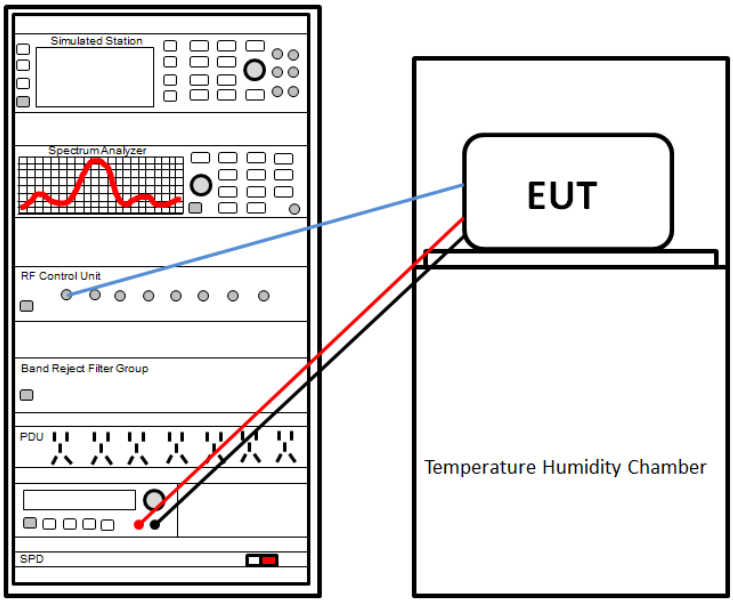
Below 1GHz (3m SAC)



Above 1GHz (3m FAR)



2) Conducted test method



4.3 Test Procedure

Test method	Test step
Radiated emission	**For below 1GHz:** 1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m. 2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data. **For above 1GHz:** 1. The EUT was placed on the tabletop of a rotating table 1.5 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m. 2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working, respectively on 3 axis (X, Y & Z) and considered typical configuration to obtain worst position. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations. 3. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
Conducted test method	1. The NR antenna port of EUT was connected to the test port of the test system through an RF cable. 2. The EUT is keeping in continuous transmission mode and tested in all modulation modes. 3. Open the test software, prepare a test plan, and control the system through the software. After the test is completed, the test report is exported through the test software.

5 Test Results

5.1 Summary

5.1.1 Clause and Data Summary

This report is revised according to the JYTSZ-R12-2301780 report, FCC ID: 2AIZN-X6851 issued by JianYan Testing Group Shenzhen Co., Ltd. Differences: The X6851B has one more HL3179 fast charge chip and peripheral devices than the X6851. The X6851B and X6851 battery connectors are different. The X6851 charges 45W and the X6851B charges 100W. The appearance of the prototype is different in color. And model update, so need to spot-check Conducted Output Power.

Test items	Standard clause	Test data	Result
RF Exposure (SAR)	Part 1.1307 Part 2.1093	Please refer to report No.: JYTSZ-R12-2301780.	Please refer to report No.: JYTSZ-R12-2301780.
RF Output Power	Part 2.1046 Part 22.913 (a)(5) Part 27.50 (h)(2) Part 27.50 (c)(10) Part 27.50 (d)(4) Part 27.50 (j)(3) Part 27.50 (k)(3) Part 96.41(b)	Please refer to report No.: JYTSZ-R12-2301780.	Please refer to report No.: JYTSZ-R12-2301780.
Peak-to-Average Power Ratio	Part 27.50 (d)(5) Part 27.50 (j)(4) Part 27.50 (k)(4) Part 96.41(g)	Please refer to report No.: JYTSZ-R12-2301780.	Please refer to report No.: JYTSZ-R12-2301780.
26dB Emission Bandwidth 99% Occupied Bandwidth	Part 2.1049 Part 22.917 (b) Part 27.53 (g) Part 27.53 (h)(3) Part 27.53 (l)(2) Part 27.53 (m)(6) Part 27.53 (n)(2) Part 96.41(e)(3)(i)	Please refer to report No.: JYTSZ-R12-2301780.	Please refer to report No.: JYTSZ-R12-2301780.
Out of Band Emission at Antenna Terminals	Part 2.1051 Part 22.917 (a) Part 27.53 (g) Part 27.53 (h)(1) Part 27.53 (l)(2) Part 27.53 (m)(4) Part 27.53 (n)(2) Part 96.41(e)(2)	Please refer to report No.: JYTSZ-R12-2301780.	Please refer to report No.: JYTSZ-R12-2301780.
Field Strength of Spurious Radiation	Part 2.1053 Part 22.917 (a) Part 27.53 (g) Part 27.53 (h)(1) Part 27.53 (l)(2) Part 27.53 (m)(4) Part 27.53 (n)(2) Part 96.41(e)(2)	Please refer to report No.: JYTSZ-R12-2301780.	Please refer to report No.: JYTSZ-R12-2301780.

Frequency Stability vs. Temperature	Part 2.1055 (a)(1)(b) Part 22.355 Part 24.235 Part 27.54	Please refer to report No.: JYTSZ-R12-2301780.	Please refer to report No.: JYTSZ-R12-2301780.
Frequency Stability vs. Voltage	Part 2.1055 (d)(2) Part 22.355 Part 24.235 Part 27.54	Please refer to report No.: JYTSZ-R12-2301780.	Please refer to report No.: JYTSZ-R12-2301780.
Remark: *1. Please refer to FCC ID: 2AIZN-X6851, report No.: JYTSZ-R12-2301780 issue by JianYan Testing Group Shenzhen Co., Ltd.* *2. The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (Fundamental Frequency below 1GHz)/1.0dB (Fundamental Frequency above 1GHz) (provided by the customer).*			
Test Method:	*ANSI/TIA-603-E-2016* *ANSI C63.26-2015*		

5.1.2 Test Limit

Test items	Limit
RF output power	**Band n7/38/41:** 2W EIRP, **Band n5:** 7W EIRP, **Band n12:** 3W EIRP **Band n66, n77, n78:** 1W EIRP
Peak-to-Average Power Ratio	The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB
Modulation Characteristics	N/A
26dB Emission Bandwidth 99% Occupied Bandwidth	N/A
Out of Band Emission at Antenna Terminals Field Strength of Spurious Radiation	**Band n5, n12, n66:** 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. **Band n7, n38, n41:** 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 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. **Band n77, n78:** 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.

Out of Band Emission at Antenna Terminals Field Strength of Spurious Radiation	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. **Band n77(3550-3700):** Notwithstanding paragraph (e)(1) of this section, for CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed ?25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed ?40dBm/MHz.
Frequency Stability vs. Temperature Frequency Stability vs. Voltage	The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.