

FCC Test Report

Report No.: RWAY2023000450

Applicant: Shenzhen Youmi Intelligent Technology Co., Ltd.

Address: 406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China

Product Name: Smart phone

Product Model: PG2309GBA

Multiple Models: N/A

Trade Mark: UMIDIGI

FCC ID: 2ATZ4-G65GA

Standards: FCC CFR Title 47 Part 2, 27

Test Date: 2024-01-22~2024-03-05

Test Result: Complied

Issue Date: 2024-03-11

Reviewed by:

Frank Yin

Approved by

Jacob Kong

Frank Yin
Project Engineer

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Prepared by:

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Revision History

Version No.	Issued Date	Description
00	2024-03-11	Original

Contents

1	General Information	4
1.1	Client Information	4
1.2	Product Description of EUT	4
1.3	Measurement Uncertainty	5
1.4	Laboratory Location	5
1.5	Test Methodology	5
2	Description of Measurement.....	6
2.1	Test Frequency of Low/Middle/High Channels	6
2.2	Test Configuration.....	6
2.3	Test Auxiliary Equipment	7
2.4	Test Setup.....	8
2.5	Test Procedure.....	10
2.6	Measurement Method.....	11
2.7	Measurement Equipment	12
3	Test Results	13
3.1	Test Summary.....	13
3.2	Limit	14
3.3	RF Conducted Test Data	17
3.3.1	RF Output Power&ERP/EIRP.....	17
3.3.2	Peak-to-average ratio (PAR)	17
3.3.3	26dB and 99% Bandwidth	17
3.3.4	Conducted Spurious Emissions.....	17
3.3.5	Out of band emission, Band Edge.....	17
3.3.6	Frequency Stability	17
3.4	Radiated Spurious emission Test Data.....	18
4	Test Setup Photo	20
5	E.U.T Photo	21

1 General Information

1.1 Client Information

Applicant:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China
Manufacturer:	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address:	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China

1.2 Product Description of EUT

The EUT is Smart phone that contains Classic Bluetooth(BDR/EDR), BLE, 2.4G/5G WLAN, NFC, GSM/GPRS/EGPRS/WCDMA/LTE and 5G NR radios, this report covers the full testing of the 5G NR radio.

Sample Serial number	2W-1 for CE&RE test, 2W-2 for RF test conducted test (assigned by WATC)		
Sample Received Date	2023-11-15		
Sample Status	Good Condition		
Radio System Type	SA, NSA		
Support Frequency Range	Band	TX Frequency (MHz)	RX Frequency (MHz)
	NR n41	2496-2690	2496-2690
	NR n66	1710-1780	2110-2180
	ENDC: DC 2A_n41A		
Modulation Technology	DFT-S-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM		
	NR n41	0.47dBi (ANT 5)	
	NR n66	1.2dBi (ANT 1)	
	DC_2A_n41A	LTE: 1.15dBi (ANT 1), NR: 0.47dBi (ANT 5)	
Power Supply	DC5V from adapter or DC3.87 V from battery		
Adapter 1 Information	Model: HJ-0502000W2-US Input: AC 100-240V~50/60Hz, 0.3A Output: DC 5V, 2A		
Adapter 2 Information	Model: HF-0502000U Input: AC 100-240V~50/60Hz, 0.3A Output: DC 5.0V, 2A		
Modification	Sample No Modification by the test lab		

1.3 Measurement Uncertainty

Parameter		Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
Emissions, Radiated	Below 30MHz	±2.78dB
	Below 1GHz	±4.84dB
	Above 1GHz	±5.44dB
Emissions, Conducted		1.75dB
Conducted Power		0.74dB
Frequency Error		150Hz
Bandwidth		0.34%
<p>Note 1: 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.</p> <p>Note 2: The Decision Rule is based on simple acceptance with ISO Guide 98-4:2012 Clause 8.2 (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)</p>		

1.4 Laboratory Location

World Alliance Testing and Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Tel: +86-755-29691511, Email: qa@watc.com.cn

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. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

1.5 Test Methodology

FCC CFR Title 47 Part 2, 22H, 24E, 27

ANSI C63.26-2015

FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

FCC KDB 412172 D01 Determining ERP and EIRP v01r01

2 Description of Measurement

2.1 Test Frequency of Low/Middle/High Channels

Band	Bandwidth (MHz)	Low Channel (MHz)	Middle Channel (MHz)	High Channel (MHz)
NR n41	10	2501.01	2592.99	2685
	15	2503.5	2592.99	2682.48
	20	2506.02	2592.99	2679.99
	30	2511	2592.99	2674.98
	40	2516.01	2592.99	2670
	50	2521.02	2592.99	2664.99
	60	2526	2592.99	2659.98
	80	2536.02	2592.99	2649.99
	90	2541	2592.99	2644.98
	100	2546.01	2592.99	2640
NR n66	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
DC_2A_n41A	10	2501.01	2593.005	2685
	15	2503.5	2593.005	2682.495
	20	2506.005	2593.005	2679.99
	30	2511	2593.005	2674.995
	40	2516.01	2593.005	2670
	50	2521.005	2593.005	2664.99

2.2 Test Configuration

Test Items	Band	Bandwidth	Modulation	RB#	Test Channel
RF Output Power ERP/EIRP	41	all Bandwidth supported	all modulation supported	1, half, full	L,M,H
	66	all Bandwidth supported	all modulation supported	1, half, full	L,M,H
	DC_2A_n41A	all Bandwidth supported	all modulation supported	1, half, full	L,M,H
Peak-to-Average Ratio	41	10MHz	all modulation supported	full	M
	66	10MHz	all modulation supported	full	M
	DC_2A_n41A	10MHz	all modulation supported	full	M
26dB and 99% Bandwidth	41	all Bandwidth supported	all modulation supported	full	M
	66	all Bandwidth supported	all modulation supported	full	M
	DC_2A_n41A	all Bandwidth supported	all modulation supported	full	M
Band Edge	41	all Bandwidth supported	DFT-s-OFDM QPSK	1, full	L,H
	66	all Bandwidth supported	DFT-s-OFDM QPSK	1, full	L,H
	DC_2A_n41A	all Bandwidth supported	DFT-s-OFDM QPSK	1, full	L,H
Conducted Spurious Emission	41	all Bandwidth supported	DFT-s-OFDM QPSK	1, full	L,M,H
	66	all Bandwidth supported	DFT-s-OFDM QPSK	1, full	L,M,H
	DC_2A_n41A	all Bandwidth supported	DFT-s-OFDM QPSK	1, full	L,M,H
Frequency Stability	41	all Bandwidth supported	DFT-s-OFDM QPSK	full	L,H
	66	all Bandwidth supported	DFT-s-OFDM QPSK	full	L,H
	DC_2A_n41A	all Bandwidth supported	DFT-s-OFDM QPSK	full	L,H
Radiated Spurious Emission	41	Minimum Bandwidth	DFT-s-OFDM QPSK	1	L,M,H
	66	Minimum Bandwidth	DFT-s-OFDM QPSK	1	L,M,H
	DC_2A_n41A	Minimum Bandwidth	DFT-s-OFDM QPSK	1	L,M,H

Worst-Case Configuration:

For radiated emissions, EUT was investigated in three orthogonal orientation, the worst-case orientation was recorded in report

For radiated emissions, measurement was investigated from 30MHz to 10 times of fundamental, the worst case bandwidth, RB size and modulation test data was recorded.

Voltage Condition	Voltage [#] (V _{DC})	Temperature Condition	Temperature [#] (°C)
Normal Voltage	3.87	Normal Temperature	20
VL(Low Voltage)	3.35	Lowest Temperature	-30
VH(High Voltage)	4.4	Highest Temperature	50

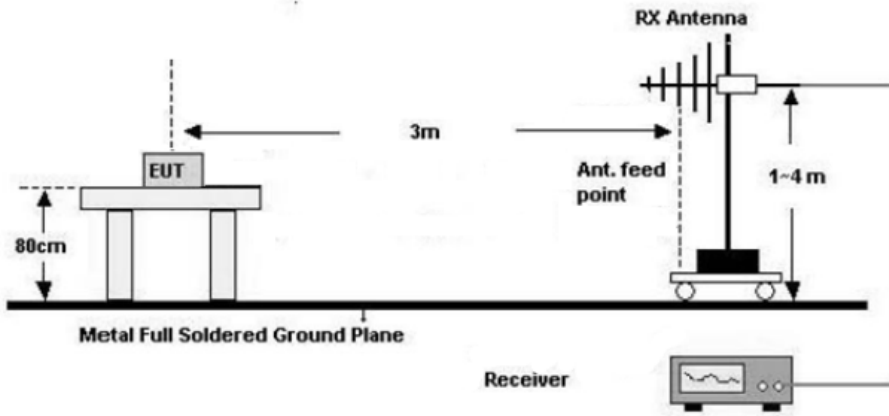
2.3 Test Auxiliary Equipment

Manufacturer	Description	Model	Serial Number
/	/	/	/

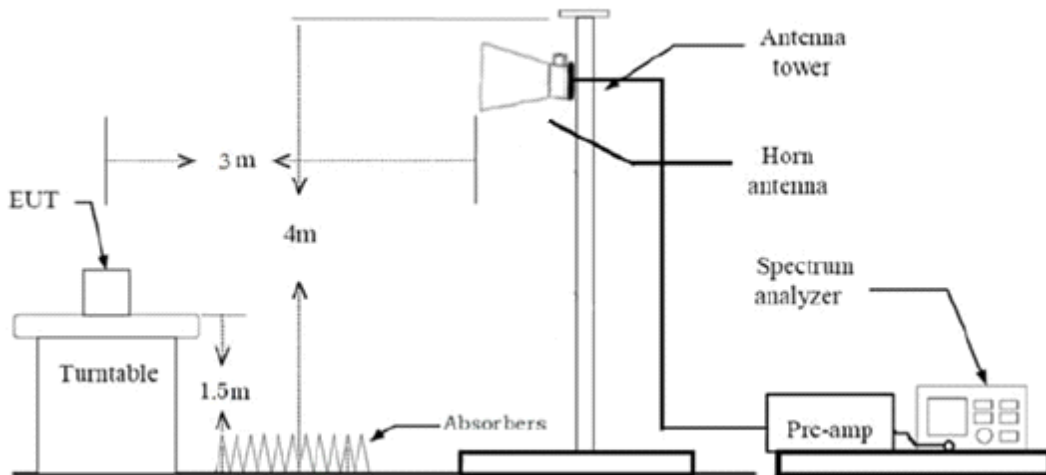
2.4 Test Setup

1) Radiated emission measurement:

30MHz-1GHz (3m SAC)

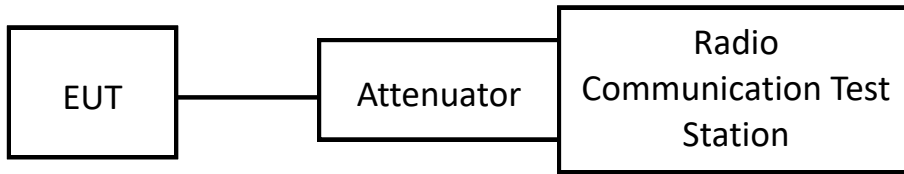


Above 1GHz (3m FAC)

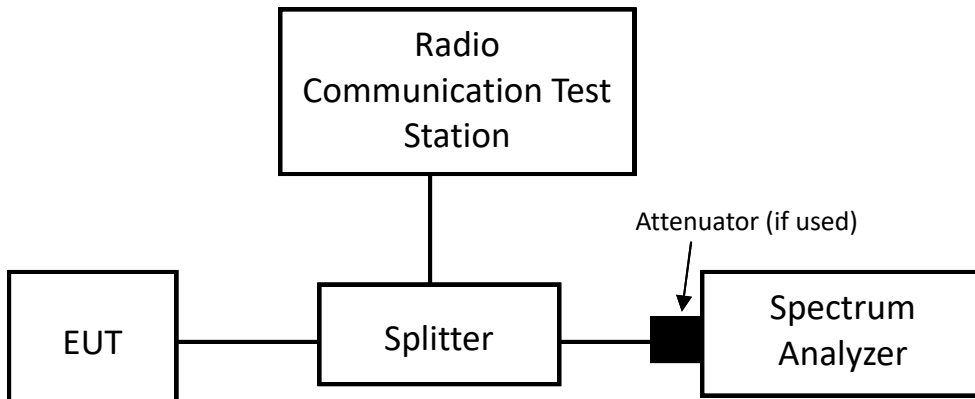


2) RF Conducted Test

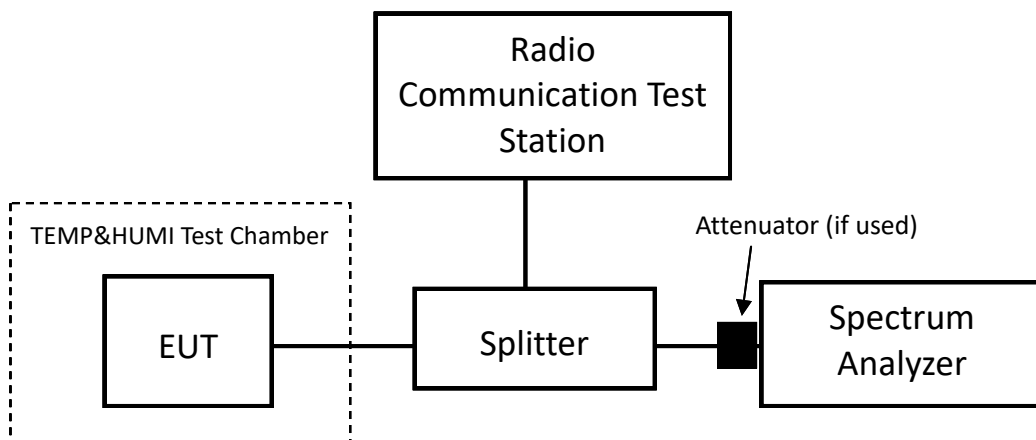
For RF Output Power test



For Bandwidth/Band edge/ PAR/Conducted spurious emissions Test



For Frequency Stability test



2.5 Test Procedure

Radiated Emission Procedure:

a) For 30MHz-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. 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.

b) 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. 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.

RF Conducted Test:

1. The antenna port of EUT was connected to the RF port of the test equipment (Radio Communication Test Station or Spectrum analyzer) through Attenuator and RF cable.
2. The cable assembly insertion loss of 10.5dB (including Splitter, attenuator and cable loss) was entered as an offset in the power meter. Note: Actual cable loss was unavailable at the time of testing, therefore a loss used was assumed as worst case. This was later verified to be true by laboratory. (if the RF cable provided by client, the cable loss declared by client)
3. The EUT is keeping in continuous transmission mode and tested in all modulation modes.

2.6 Measurement Method

Description of Test	Measurement Method
RF Output Power	ANSI C63.26-2015 section 5.2
ERP/EIRP	ANSI C63.26-2015 section 5.2.5.5
Peak-to-Average Ratio	ANSI C63.26-2015 section 5.2.3.4
26dB and 99% Bandwidth	ANSI C63.26-2015 section 5.4
Band Edge	ANSI C63.26-2015 section 5.7.3
Conducted Spurious Emissions	ANSI C63.26-2015 section 5.7.4
Frequency stability	ANSI C63.26-2015 section 5.6
Radiated Spurious Emissions	ANSI C63.26-2015 section 5.5.4

2.7 Measurement Equipment

Manufacturer	Description	Model	Management No.	Calibration Date	Calibration Due Date
Radiated Emission Test					
R&S	EMI test receiver	ESR3	102758	2023/7/3	2024/7/2
ROHDE& SCHWARZ	SPECTRUM ANALYZER	FSV40-N	101608	2023/7/3	2024/7/2
SONOMA INSTRUMENT	Low frequency amplifier	310	186014	2023/7/12	2024/7/11
COM-POWER	preamplifier	PAM-118A	18040152	2023/8/21	2024/8/20
COM-POWER	Amplifier	PAM-840A	461306	2023/8/8	2024/8/7
SCHWARZBECK	Log - periodic wideband antenna	VULB 9163	9163-872	2023/7/7	2024/7/6
Astro Antenna Ltd	Horn antenna	AHA-118S	3015	2023/7/6	2024/7/5
Ducommun technologies	Horn Antenna	ARH-4223-02	1007726-03	2023/7/10	2024/7/9
Ducommun technologies	Horn Antenna	ARH-2823-02	1007726-03	2023/7/10	2024/7/9
N/A	Coaxial Cable	N/A	NO.9	2023/8/8	2024/8/7
N/A	Coaxial Cable	N/A	NO.10	2023/8/8	2024/8/7
N/A	Coaxial Cable	N/A	NO.11	2023/8/8	2024/8/7
Audix	Test Software	E3	191218 V9	/	/
RF Conducted Test					
R&S	Spectrum Analyzer	FSV40-N	101608	2023/7/3	2024/7/2
zhuoxiang	Coaxial Cable	SMA-178	211002	Each time	N/A
Mini-Circuits	Power Splitter	ZFRSC-183-S+	S F448201619	Each time	N/A
Anritsu	Radio Communication Analyzer	MT8821C	6262150039	2024/1/19	2025/1/18
Anritsu	Radio Communication Test Station	MT8000A	6262166770	2024/1/19	2025/1/18
BACL	TEMP&HUMI Test Chamber	BTH-150-40	30174	2023/3/31	2024/3/30
UNI-T	Multimeter	UT39A+	C210582554	2023/9/28	2024/9/27
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D091 2386	N/A	N/A

Note: All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or International standards.

3 Test Results

3.1 Test Summary

FCC Rules	Description of Test	Result
FCC§2.1046; §27.50	RF Output Power	Compliance
FCC§ 2.1047	Modulation Characteristics	Compliance
FCC§ 2.1049; §27.53	26dB and 99% Bandwidth	Compliance
FCC§ 2.1051; §27.53	Conducted Spurious Emissions	Compliance
§27.53	Out of band emission, Band Edge	Compliance
FCC§ 2.1055; §27.54	Frequency stability	Compliance
FCC§ 2.1053; §27.53	Radiated Spurious Emissions	Compliance

3.2 Limit

Test items	Limit
RF Output Power	<p>FCC §27.50:</p> <p>(a)(3) Mobile and portable stations.</p> <p>(i) For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.</p> <p>(ii) Mobile and portable stations are not permitted to transmit in the 2315-2320 MHz and 2345-2350 MHz bands.</p> <p>(iii) Automatic transmit power control. Mobile and portable stations transmitting in the 2305-2315 MHz band or in the 2350-2360 MHz band must employ automatic transmit power control when operating so the stations operate with the minimum power necessary for successful communications.</p> <p>(iv) Prohibition on external vehicle-mounted antennas. The use of external vehicle-mounted antennas for mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band is prohibited.</p> <p>(b)(10) Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.</p> <p>(c)(10) 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.</p> <p>(d)(4) 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. Fixed stations operating in the 1710-1755 MHz band are limited to a maximum antenna height of 10 meters above ground. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.</p> <p>(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.</p>

<p>Unwanted Emissions (Out of band emission and spurious)</p>	<p>FCC §27.53:</p> <p>(a) For operations in the 2305-2320 MHz band and the 2345-2360 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power P (with averaging performed only during periods of transmission) within the licensed band(s) of operation, in watts, by the following amounts:</p> <p>(4) For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:</p> <p>(i) By a factor of not less than: $43 + 10 \log (P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log (P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log (P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log (P)$ dB on all frequencies between 2328 and 2337 MHz;</p> <p>(ii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log (P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log (P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log (P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log (P)$ dB below 2288 MHz;</p> <p>(iii) By a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz.</p> <p>(c) For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the 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, in accordance with the following:</p> <p>(1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;</p> <p>(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB;</p> <p>(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations;</p> <p>(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations;</p> <p>(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;</p> <p>(6) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.</p>
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	<p>(f) For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.</p> <p>(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.</p> <p>(h) AWS emission limits (1) <i>General protection levels.</i> Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.</p> <p>(m)(4) 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 2490.5 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.</p>
<p>Frequency stability</p>	<p>FCC §27.54:</p> <p>The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.</p>

3.3 RF Conducted Test Data

Test Date:	2024/1/30-2024/3/5	Test By:	Ryan Zhang
Environment condition:	Temperature: 25.3-26.7°C; Relative Humidity: 47-53%; ATM Pressure: 101kPa		

3.3.1 RF Output Power&ERP/EIRP

Result: Compliance, test data of RF Output Power&ERP/EIRP please refer to Appendix A1&A2.

3.3.2 Peak-to-average ratio (PAR)

Result: Compliance, test data of Peak-to-average ratio(PAR) please refer to Appendix B1&B2.

3.3.3 26dB and 99% Bandwidth

Result: Compliance, test data of 26dB and 99% Bandwidth please refer to Appendix C1&C2.

3.3.4 Conducted Spurious Emissions

Result: Compliance, test data of Conducted Spurious Emissions please refer to Appendix D1&D2.

3.3.5 Out of band emission, Band Edge

Result: Compliance, test data of Band Edge please refer to Appendix E1&E2.

3.3.6 Frequency Stability

Result: Compliance, test data of frequency stability/frequency error please refer to Appendix F1&F2.

3.4 Radiated Spurious emission Test Data

Test Date:	2024-1-22	Test By:	Bard Huang
Environment condition:	Temperature: 24.5°C; Relative Humidity:51.2%; ATM Pressure: 101.7kPa		

Frequency (MHz)	Reading level (dB μ V)	Polar (H/V)	Corrected Factor (dB/m)	Corrected Amplitude (dB μ V/m)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Remark
N66								
Low Channel								
3425	36.77	Horizontal	-1.67	35.10	-95.2	-13	-47.10	Peak
3425	37.67	Vertical	-1.67	36.00	-95.2	-13	-46.20	Peak
5137.5	36.65	Horizontal	1.53	38.18	-95.2	-13	-44.02	Peak
5137.5	37.95	Vertical	1.53	39.48	-95.2	-13	-42.72	Peak
Middle Channel								
3490	36.83	Horizontal	-1.56	35.27	-95.2	-13	-46.93	Peak
3490	37.73	Vertical	-1.56	36.17	-95.2	-13	-46.03	Peak
5235	37.14	Horizontal	1.58	38.72	-95.2	-13	-43.48	Peak
5235	36.74	Vertical	1.58	38.32	-95.2	-13	-43.88	Peak
High Channel								
3555	36.47	Horizontal	-1.51	34.96	-95.2	-13	-47.24	Peak
3555	36.97	Vertical	-1.51	35.46	-95.2	-13	-46.74	Peak
5332.5	36.83	Horizontal	1.44	38.27	-95.2	-13	-43.93	Peak
5332.5	38.53	Vertical	1.44	39.97	-95.2	-13	-42.23	Peak
N41								
Low Channel								
5002	50.08	Horizontal	1.21	51.29	-95.2	-25	-18.91	Peak
5002	51.44	Vertical	1.21	52.65	-95.2	-25	-17.55	Peak
7503	50.77	Horizontal	3.22	53.99	-95.2	-25	-16.21	Peak
7503	50.30	Vertical	3.22	53.52	-95.2	-25	-16.68	Peak
Middle Channel								
5186	52.60	Horizontal	1.65	54.25	-95.2	-25	-15.95	Peak
5186	53.32	Vertical	1.65	54.97	-95.2	-25	-15.23	Peak
7779	49.39	Horizontal	3.78	53.17	-95.2	-25	-17.03	Peak
7779	48.85	Vertical	3.78	52.63	-95.2	-25	-17.57	Peak
High Channel								
5370	53.31	Horizontal	1.42	54.73	-95.2	-25	-15.47	Peak
5370	53.94	Vertical	1.42	55.36	-95.2	-25	-14.84	Peak

8055	50.98	Horizontal	4.08	55.06	-95.2	-25	-15.14	Peak
8055	49.43	Vertical	4.08	53.51	-95.2	-25	-16.69	Peak
DC_2A_n41A								
Low Channel								
5002	50.98	Horizontal	1.21	52.19	-95.2	-25	-18.01	Peak
5002	51.68	Vertical	1.21	52.89	-95.2	-25	-17.31	Peak
7503	51.93	Horizontal	3.22	55.15	-95.2	-25	-15.05	Peak
7503	50.64	Vertical	3.22	53.86	-95.2	-25	-16.34	Peak
Middle Channel								
5186	52.98	Horizontal	1.65	54.63	-95.2	-25	-15.57	Peak
5186	53.05	Vertical	1.65	54.70	-95.2	-25	-15.50	Peak
7779	50.02	Horizontal	3.78	53.80	-95.2	-25	-16.40	Peak
7779	49.34	Vertical	3.78	53.12	-95.2	-25	-17.08	Peak
High Channel								
5370	52.32	Horizontal	1.42	53.74	-95.2	-25	-16.46	Peak
5370	53.55	Vertical	1.42	54.97	-95.2	-25	-15.23	Peak
8055	50.17	Horizontal	4.08	54.25	-95.2	-25	-15.95	Peak
8055	48.76	Vertical	4.08	52.84	-95.2	-25	-17.36	Peak

Remark:

Corrected Amplitude= Reading level + corrected Factor

Corrected Factor = Antenna factor + Cable loss – Amplifier gain

Margin = Result – Limit

According to ANSI C63.26-2.15 section 5.2.7:

$EIRP (dBm) = E (dB\mu V/m) + 20\log(D) - 104.8$; where D is the measurement distance (in the far field region) in m.

Test was performed on 3meters distance, so

Result = Corrected Amplitude + $20\log(3) - 104.8$

= Corrected Amplitude - 95.2

The emission levels of other frequencies that were lower than the limit 20dB, not show in test report.

4 Test Setup Photo

Please refer to the attachment RWAY202300045 Test Setup photo.

5 E.U.T Photo

Please refer to the attachment RWAY202300045 External photo and RWAY202300045 Internal photo.

---End of Report---