

TEST REPORT

Applicant: Anker Innovations Limited

Address: Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road,
Hong Kong

FCC ID: 2AOKB-T8709C

IC: 23451-T8709C

HVIN: T8709

Standard(s): 47 CFR Part 15, Subpart C(15.249)
RSS-210 Issue 11, June 25, 2024
RSS-Gen, Issue 5, February 2021 Amendment 2
ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 +
Errata to C63.10a-2024

The above device has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

Report Number: 2603S17096E-RF-00B

Date Of Issue: 2026/4/22

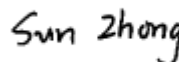
Reviewed By: Calvin Chen

Title: RF Test Supervisor



Approved By: Sun Zhong

Title: Manager



Test Laboratory: China Certification ICT Co., Ltd (Dongguan)

Room 101 & 201, Building 2, 256 Pingdong Road, Dalang Town,
Dongguan City, Guangdong, China.

Tel: +86-769-83085888

www.ccttt.com.cn

Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the Room 101 & 201, Building 2, 256 Pingdong Road, Dalang Town, Dongguan City, Guangdong, 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. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

This report cannot be reproduced except in full, without prior written approval of the Company.

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 may contain data that are not covered by the accreditation scope and shall be marked with an asterisk “★”.

Each test item follows the test standard(s) without deviation.

CONTENTS

DOCUMENT REVISION HISTORY	5
1. GENERAL INFORMATION	6
1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)	6
1.2 OPERATION FREQUENCY DETAIL:	6
1.3 ANTENNA INFORMATION DETAIL▲:	6
1.4 ACCESSORY INFORMATION:	6
1.5 DESCRIPTION OF TEST CONFIGURATION	7
1.5.1 EUT Operation Condition:	7
1.5.2 Support Equipment List and Details	7
1.5.3 Support Cable List and Details	7
1.5.4 Block Diagram of Test Setup	8
1.6 MEASUREMENT UNCERTAINTY	9
2. SUMMARY OF TEST RESULTS	10
3. REQUIREMENTS AND TEST PROCEDURES	11
3.1 AC LINE CONDUCTED EMISSIONS	11
3.1.1 Applicable Standard	11
3.1.2 EUT Setup.....	13
3.1.3 EMI Test Receiver Setup	13
3.1.4 Test Procedure	14
3.1.5 Corrected Amplitude & Margin Calculation.....	14
3.2 RADIATED EMISSIONS	15
3.2.1 Applicable Standard.....	15
3.2.2 EUT Setup.....	16
3.2.3 EMI Test Receiver & Spectrum Analyzer Setup	17
3.2.4 Test Procedure	18
3.2.5 Corrected Amplitude & Margin Calculation.....	18
3.3 20 dB EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH	19
3.3.1 Applicable Standard.....	19
3.3.2 EUT Setup.....	20
3.3.3 Test Procedure	20
3.4 ANTENNA REQUIREMENT	22
3.4.1 Applicable Standard.....	22
3.4.2 4 Judgment	22
4. Test DATA AND RESULTS	23
4.1 AC LINE CONDUCTED EMISSIONS	23
4.2 RADIATION SPURIOUS EMISSIONS	26
4.2.1 9 kHz – 1 GHz	26
4.2.2 1 GHz – 10 GHz	37
4.3 20 dB EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH:	42
5. RF EXPOSURE EVALUATION	43

5.1 MAXIMUM PERMISSIBLE EXPOSURE (MPE)	43
5.2 EXEMPTION LIMITS FOR ROUTINE EVALUATION –RF EXPOSURE EVALUATION	45
6. EUT PHOTOGRAPHS	46
7. TEST SETUP PHOTOGRAPHS	47

DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2603S17096E-RF-00B	Original Report	2026/4/22

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	Wi-Fi Module
Trade Name:	eufy
EUT Model:	T8709
Operation Frequency:	920-920.8 MHz
Modulation Type:	GFSK
Maximum E-field:	88.25 dBμV/m @3m
Rated Input Voltage:	5.0Vdc from USB
Sample Number:	For AC Line Conducted Emissions and Radiated Spurious Emissions Above 1G Tests:3JW6-1 For RF Conducted and Radiated Spurious Emissions Below 1G Tests: 3JW6-3
EUT Received Date:	2026/4/13
EUT Received Status:	Good

1.2 Operation Frequency Detail:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	920.0	4	920.6
2	920.2	5	920.8
3	920.4	/	/

Test Channel	Frequency (MHz)
Low	920.0
Middle	920.4
High	920.8

Note: According to the section 15.31(m) & RSS Gen section 6.9, the Middle channel was test for all items except Low, Middle, High channel was test for bandedge and fundamental.

1.3 Antenna Information Detail ▲:

Antenna Type	input impedance (Ohm)	Frequency Range (MHz)	Antenna Gain (dBi)
PCB	50	902-928	2.97

The Method of §15.203 Compliance:

- ☒ Antenna must be permanently attached to the unit.
☐ Antenna must use a unique type of connector to attach to the EUT.
☐ Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

1.4 Accessory Information:

Accessory Description	Manufacturer	Model	Serial Number
/	/	/	/

1.5 Description of Test Configuration

1.5.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Engineering Mode, which was provided by the manufacturer.		
Equipment Modifications:	No		
EUT Exercise Software:	Setup_SmartRF_Studio_7-2.31.0		
The software was provided by manufacturer. The maximum power was configured as below, that was provided by the manufacturer▲:			
Test Modes	Power Level Setting		
	Low Channel	Middle Channel	High Channel
SRD	-5	-5	-5

1.5.2 Support Equipment List and Details

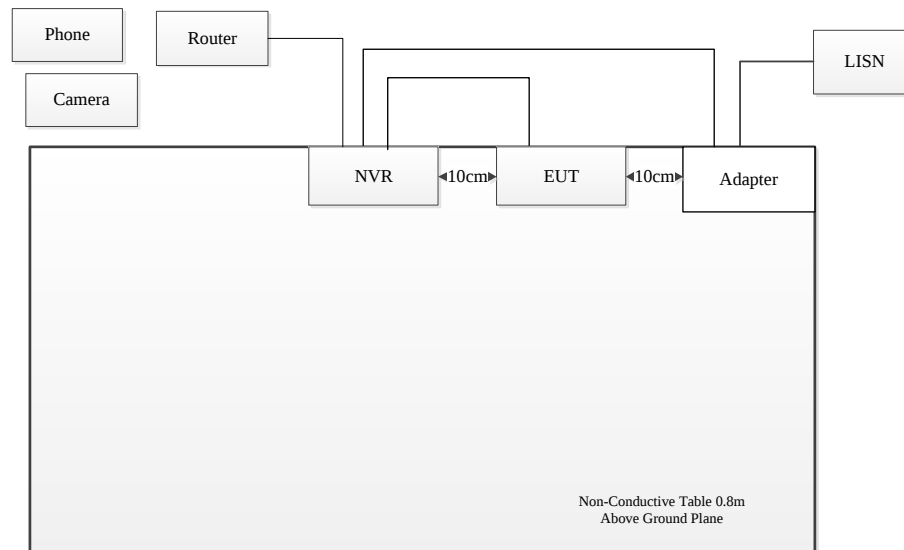
Manufacturer	Description	Model	Serial Number
DongFeng	Phone	P3	UP3_BSGF187E000165
Anker	NVR	T8N00	3JW6-5
Anker	camera	T8416	3JW6-6
Anker	Adapter(NVR)	HKA12048025-7E	3JW6-8
Tenda	Router	RX12 Pro	ED331010215000033

1.5.3 Support Cable List and Details

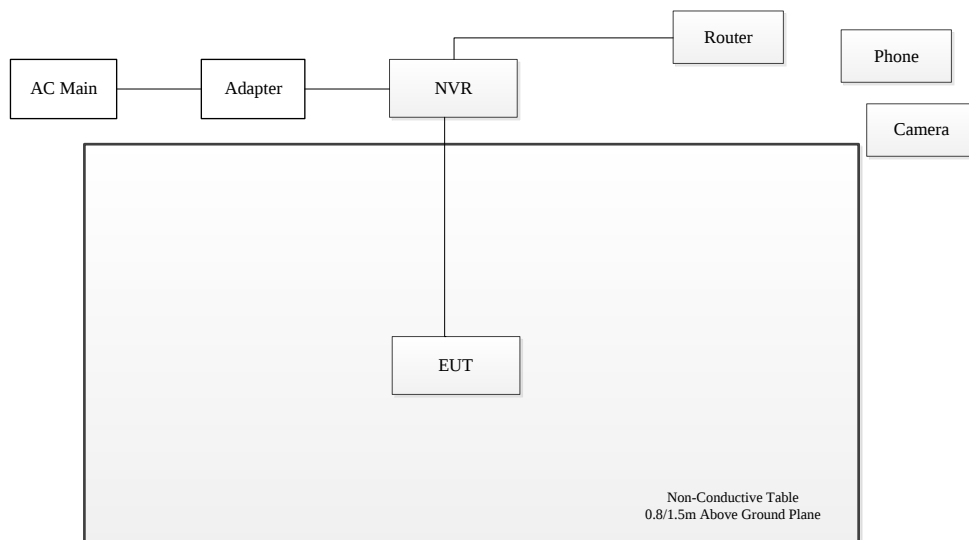
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
DC Cable	No	No	1.8	Adapter	NVR
USB Cable	No	No	2.2	NVR	EUT
RJ45 Cable	No	No	3.0	Router	NVR

1.5.4 Block Diagram of Test Setup

AC line conducted emissions:



Spurious Emissions:



1.6 Measurement Uncertainty

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

Parameter	Measurement Uncertainty
Occupied Channel Bandwidth	$\pm 5\%$
Unwanted Emissions, radiated	9kHz~30MHz: 4.12dB, 30M~200MHz: 4.15 dB, 200M~1GHz: 5.61 dB, 1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB, 18G~26.5G: 5.47 dB, 26.5G~40G: 5.63 dB
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 0.4\%$
Duty Cycle	1%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

2. SUMMARY OF TEST RESULTS

Standard(s)/Rule(s)	Description of Test	Result
§15.203 RSS-Gen Clause 6.8	Antenna Requirement	Compliant
§15.207(a) RSS-Gen Clause 8.8	Conduction Emissions	Compliant
15.205, §15.209, §15.249 RSS-Gen Clause 8.10 RSS-210 Annex B B.10	Radiated Emissions	Compliant
§15.215 (c)	20 dB Bandwidth	Compliant
RSS-Gen Clause 6.7	99% Occupied Bandwidth	Compliant
FCC §1.1310& §2.1091	Maximum Permissible Exposure (MPE)	Compliant
RSS-102 Clause 6.6	Exemption Limits For Routine Evaluation-RF Exposure Evaluation	Compliant
Note 1: For AC line conducted emissions, the maximum output power mode and channel was tested. Note 2: For Radiated Spurious Emissions 9kHz~1GHz and 18~25GHz, the maximum output power mode and channel was tested.		

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 Applicable Standard

FCC §15.207(a).

(a) Except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

(b) The limit shown in paragraph (a) of this section shall not apply to carrier current systems operating as intentional radiators on frequencies below 30 MHz. In lieu thereof, these carrier current systems shall be subject to the following standards:

(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(2) For all other carrier current systems: 1000 μ V within the frequency band 535-1705 kHz, as measured using a 50 μ H/50 ohms LISN.

(3) Carrier current systems operating below 30 MHz are also subject to the radiated emission limits in §15.205, §15.209, §15.221, §15.223, or §15.227, as appropriate.

(c) Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines. Devices that include, or make provisions for, the use of battery chargers which permit operating while charging, AC adapters or battery eliminators or that connect to the AC power lines indirectly, obtaining their power through another device which is connected to the AC power lines, shall be tested to demonstrate compliance with the conducted limits.

RSS-Gen Clause 8.8

Unless stated otherwise in the applicable RSS, for radio apparatus that are designed to be connected to the public utility AC power network, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the range 150 kHz to 30 MHz shall not exceed the limits in table 4, as measured using a 50 μ H / 50 Ω line impedance stabilization network. This requirement applies for the radio frequency voltage measured between each power line and the ground terminal of each AC power-line mains cable of the EUT.

For an EUT that connects to the AC power lines indirectly, through another device, the requirement for compliance with the limits in table 4 shall apply at the terminals of the AC power-line mains cable of a representative support device, while it provides power to the EUT. The lower limit applies at the boundary between the frequency ranges. The device used to power the EUT shall be representative of typical applications.

Table 4 – AC power-line conducted emissions limits

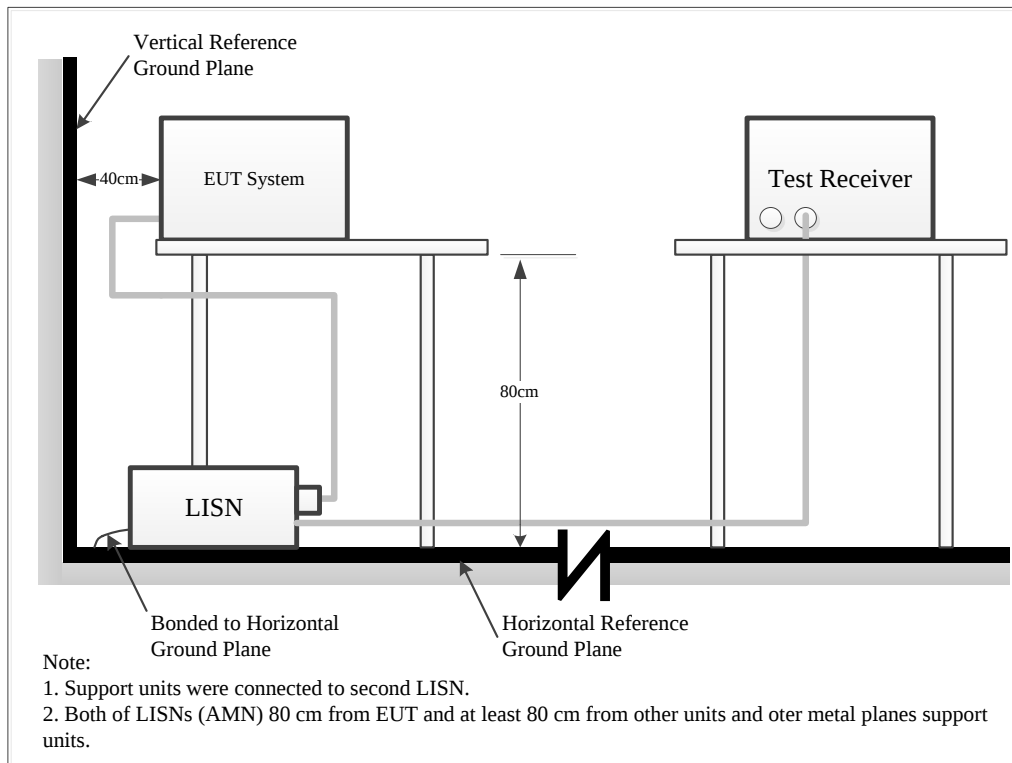
Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 ¹	56 to 46 ¹
0.5 – 5	56	46
5 – 30	60	50

Note 1: The level decreases linearly with the logarithm of the frequency.

For an EUT with a permanent or detachable antenna operating between 150 kHz and 30 MHz, the AC power-line conducted emissions must be measured using the following configurations:

- (a) Perform the AC power-line conducted emissions test with the antenna connected to determine compliance with the limits of table 4 outside the transmitter's fundamental emission band.
- (b) Retest with a dummy load instead of the antenna to determine compliance with the limits of table 4 within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network that simulates the antenna in the fundamental frequency band.

3.1.2 EUT Setup



The setup of EUT is according with per ANSI C63.10-2020 measurement procedure. The specification used was with the FCC Part 15.207, RSS-Gen limits.

The spacing between the peripherals was 10 cm.

The adapter or EUT was connected to the main LISN with a 120 V/60 Hz AC power source.

3.1.3 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.4 Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current-carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

3.1.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = attenuation caused by cable loss + voltage division factor of AMN

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

3.2 Radiated Emissions

3.2.1 Applicable Standard

As per FCC §15.249 (a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

As per FCC §15.249 (c), Field strength limits are specified at a distance of 3 meters.

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

RSS-210, Annex B, B.10

Devices operating in the frequency bands listed in table B2 may be used for any application and shall comply with the following requirements:

(a) The field strength of fundamental and harmonic emissions measured at 3 m shall not exceed the limits in table B2.

Table B2: Field strength limits for fundamental and harmonic emissions

Fundamental frequency (MHz)	Field strength (mV/m) of fundamental emissions	Field strength (mV/m) of harmonic emissions
902-928	50	0.5
2400-2483.5	50	0.5
5725-5875	50	0.5
24000-24250	250	2.5

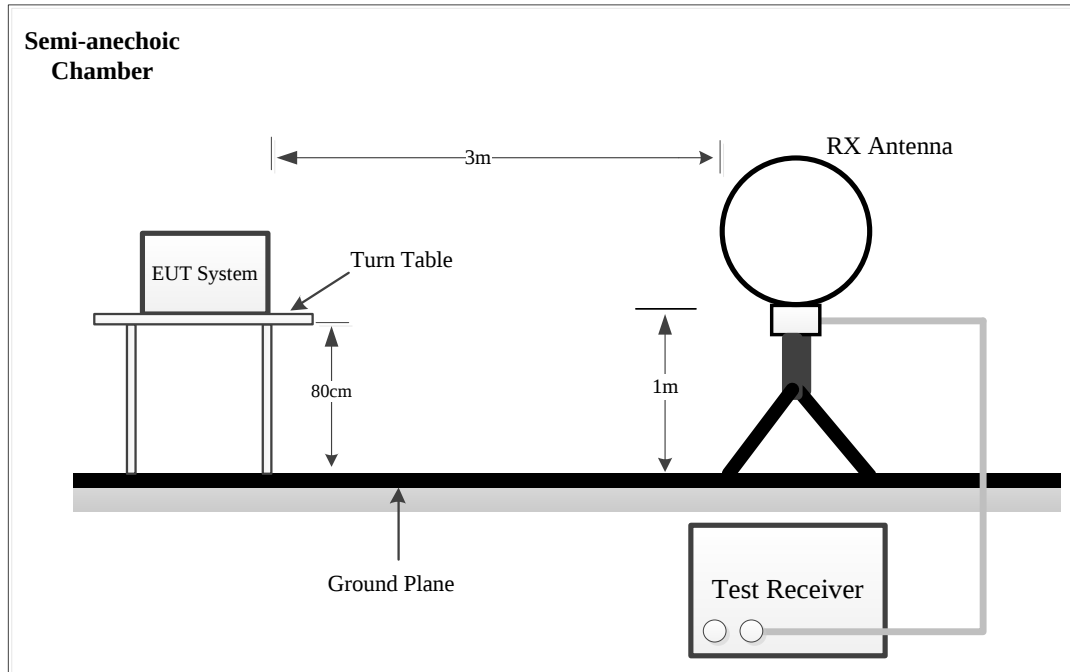
The field strength shall be measured using an average detector, except for the fundamental emission in the frequency band 902-928 MHz, which is based on measurements using a CISPR quasi-peak detector.

(b) Emissions radiated outside of the specified frequency bands, except for harmonic emissions, shall be attenuated by at least 50 dB below the level of the fundamental emission or to the general field strength limits listed in RSS-Gen, whichever is less stringent.

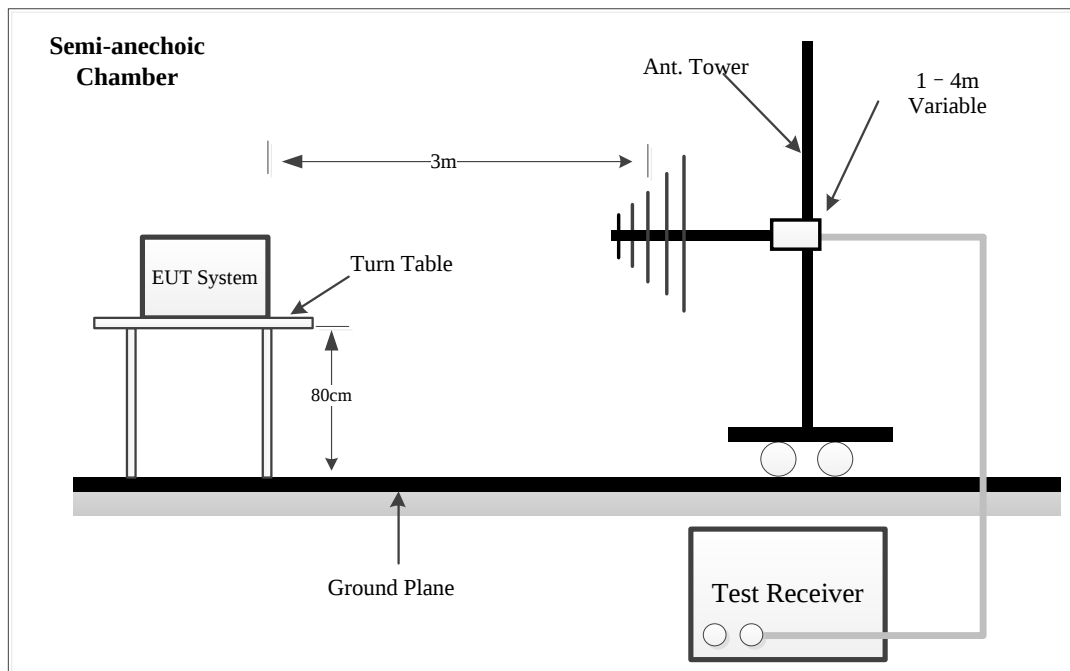
- (c) The provisions of RSS-Gen regarding pulsed operation do not apply to measurements performed in the 902-928 MHz frequency range.

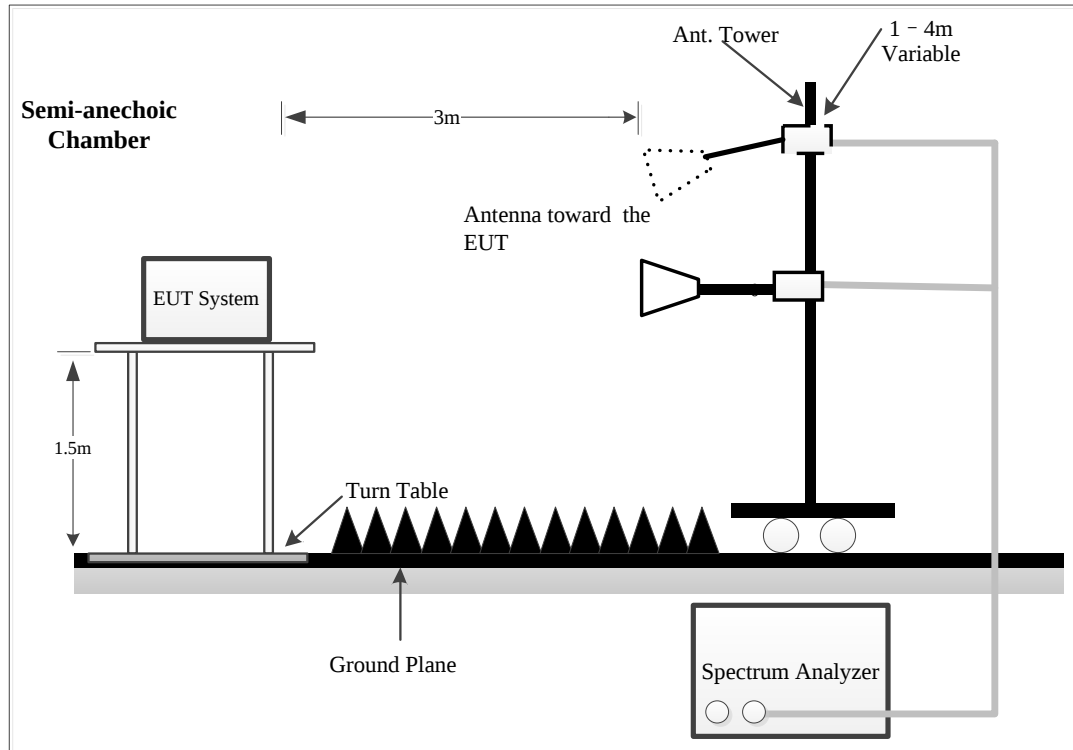
3.2.2 EUT Setup

9kHz~30MHz:



30MHz-1GHz:



1-10GHz:

For 9kHz-30MHz test, the lowest height of the magnetic antenna shall be 1 m above the ground and three antenna orientations (parallel, perpendicular, and ground-parallel) shall be measured.

The radiated emission test was performed in the 3 meters chamber, using the setup accordance with the ANSI C63.10-2020. The specification used was the FCC 15.209/15.205 and FCC 15.249 limits.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9 kHz to 10 GHz.

9kHz-1000MHz:

Frequency Range	Measurement	RBW	Video B/W	IF B/W	Detector
9 kHz-150 kHz	QP/AV	200 Hz	1 kHz	200 Hz	QP/AV
150 kHz-30 MHz	QP/AV	9 kHz	30 kHz	9 kHz	QP/AV
30 MHz-1000 MHz	Peak	120 kHz	500 kHz	/	PK
	QP	/	/	120 kHz	QP

Above 1GHz:

Pre-scan:

Frequency Range	Measurement	RBW	Video B/W	Detector
Above 1 GHz	Peak	1MHz	3 MHz	PK
	AV	1MHz	5kHz	PK

Final measurement for emission identified during the pre-scan:

Frequency Range	Measurement	RBW	Video B/W	Detector
Above 1 GHz	Peak	1MHz	3 MHz	PK
	AV	1MHz	10 Hz	PK

3.2.4 Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was required in Quasi-peak measurement for frequency range of 9 kHz-1 GHz except 9-90 kHz, 110-490 kHz, employing an average measurement, peak and Average measurement for frequencies above 1 GHz.

If the maximized peak measured value complies with under the QP/Average limit more than 6dB, then it is unnecessary to perform an QP/Average measurement.

All emissions under the average limit and under the noise floor have not recorded in the report.

3.2.5 Corrected Amplitude & Margin Calculation

$$E_{Log} = 20 \times \log_{10}(E_{Linear})$$

E_{Linear} is the field strength of the emission, in μ V/m

E_{Log} is the field strength of the emission, in dB μ V/m

For 9kHz-30MHz test, test distance is 3m, extrapolation limit shall be calculated using Equation:

$$E_{limit-measure} = E_{limit-Standard} + 40 \times \log_{10} (d_{standard}/d_{measure})$$

The basic equation is as follows:

$$\text{Result} = \text{Reading} + \text{Factor}$$

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Limit} - \text{Result}$$

For the spurious emission below 30MHz, the limit was convert from dB μ A/m to dB μ V/m by adding 51.5 dB.

3.3 20 dB Emission Bandwidth and 99% Occupied Bandwidth

3.3.1 Applicable Standard

FCC §15.215

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

RSS-Gen Clause 6.7

The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

In some cases, the “x dB bandwidth” is required, which is defined as the frequency range between two points, one at the lowest frequency below and one at the highest frequency above the carrier frequency, at which the maximum power level of the transmitted emission is attenuated x dB below the maximum in-band power level of the modulated signal, where the two points are on the outskirts of the in-band emission.

The following conditions shall be observed for measuring the occupied bandwidth and x dB bandwidth: The transmitter shall be operated at its maximum carrier power measured under normal test conditions.

The span of the spectrum analyzer shall be set large enough to capture all products of the modulation process, including the emission skirts, around the carrier frequency, but small enough to avoid having other emissions (e.g. on adjacent channels) within the span.

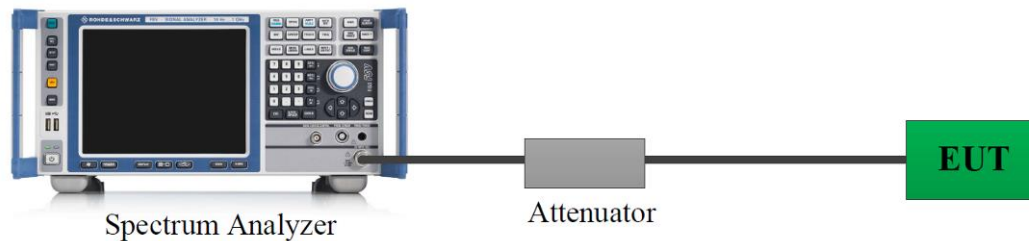
The detector of the spectrum analyzer shall be set to “Sample”. However, a peak, or peak hold, may be used in place of the sampling detector since this usually produces a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold (or “Max Hold”) may be necessary to determine the occupied / x dB bandwidth if the device is not transmitting continuously.

The resolution bandwidth (RBW) shall be in the range of 1% to 5% of the actual occupied / x dB bandwidth and the video bandwidth (VBW) shall not be smaller than three times the RBW value. Video averaging is not permitted.

Note: It may be necessary to repeat the measurement a few times until the RBW and VBW are in compliance with the above requirement.

For the 99% emission bandwidth, the trace data points are recovered and directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached, and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded. The difference between the two recorded frequencies is the occupied bandwidth (or the 99% emission bandwidth).

3.3.2 EUT Setup



A short RF cable with low cable loss connected to the EUT antenna port. The insert loss of this RF cable/attenuator was offset into the setting of test equipment:

Offset=Insert loss of RF cable+ Insert loss of attenuator

3.3.3 Test Procedure

According to ANSI C63.10-2020 Section 6.9.2

- The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, unless otherwise specified by the applicable requirement.
- Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

According to ANSI C63.10-2020 Section 6.9.3

The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

- The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.
- Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level. Specific guidance is given in 4.1.6.2.
- Step a) through step c) might require iteration to adjust within the specified range.
- Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.

h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

3.4 Antenna Requirement

3.4.1 Applicable Standard

FCC §15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §§15.211, 15.213, 15.217, 15.219, 15.221, or §15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

RSS-Gen Clause 6.8

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.

The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

For licence-exempt equipment with detachable antennas, the user manual shall also contain the following notice in a conspicuous location:

This radio transmitter [enter the device's ISED certification number] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Immediately following the above notice, the manufacturer shall provide a list of all antenna types which can be used with the transmitter, indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna type.

3.4.2 4 Judgment

Compliant. Please refer to the Antenna Information detail in Section 1.3.

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Sample Number	3JW6-1	Test Date:	2026/4/17
Test Site:	CE	Test Mode:	Transmitting
Tester:	Ella Huang	Test Result:	Pass

Environmental Conditions:

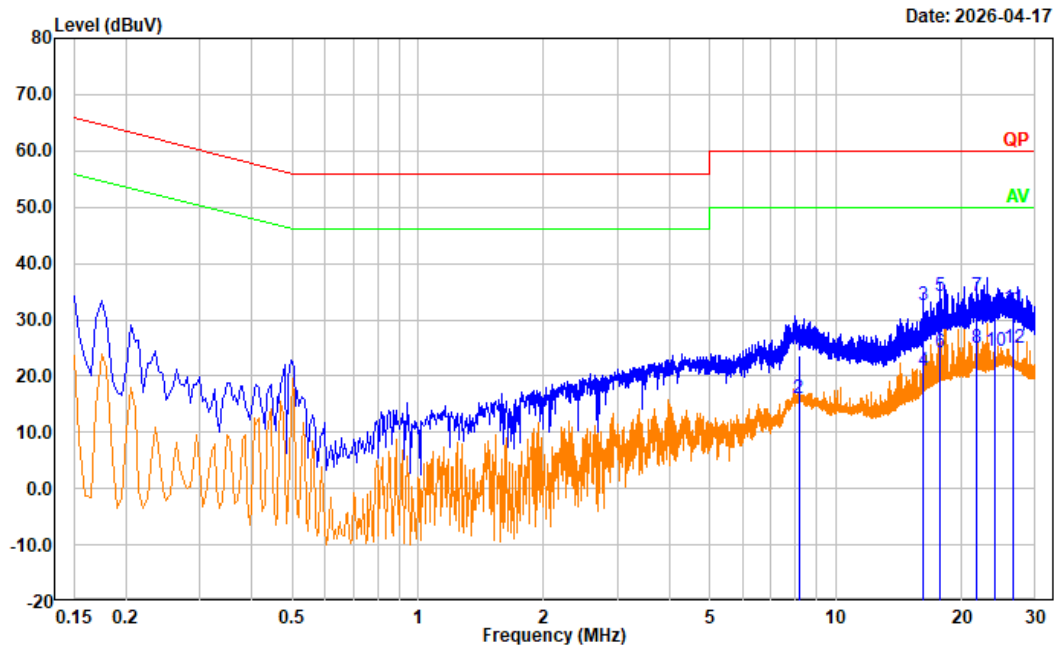
Temperature: (°C)	23.9	Relative Humidity: (%)	46	ATM Pressure: (kPa)	100.6
----------------------	------	---------------------------	----	---------------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101132	2025/09/26	2026/09/25
R&S	EMI Test Receiver	ESR3	103104	2025/5/9	2026/5/8
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2025/11/10	2026/11/9
Audix	Test Software	E3	191218 (V9)	N/A	N/A

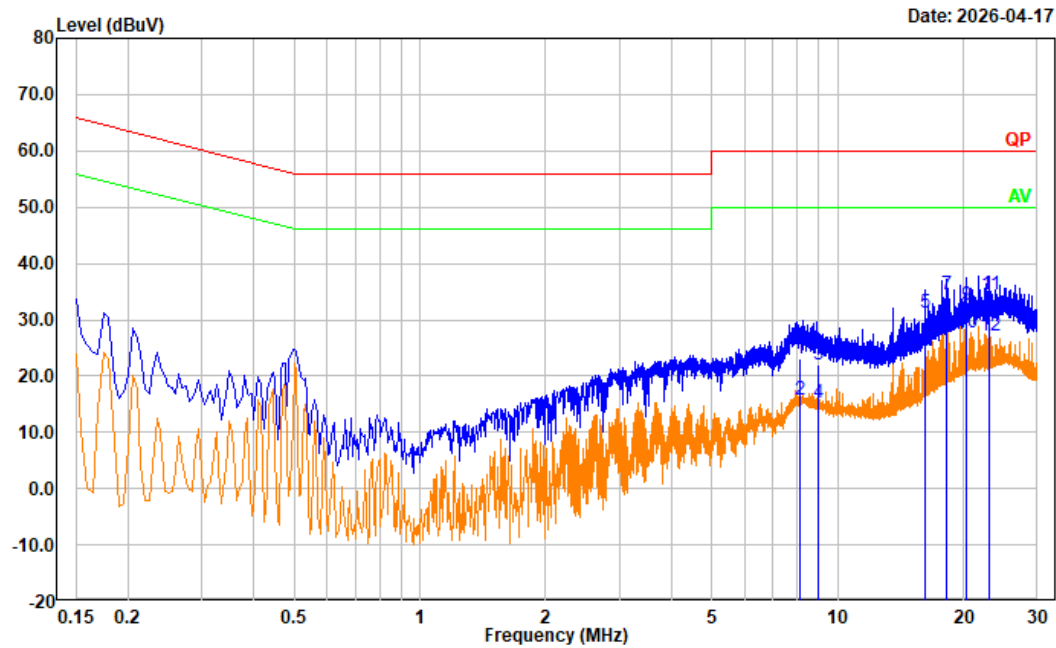
*** Statement of Traceability:** China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Project No.: 2603S17096E-RF
Tester: Ella Huang
Port: Line
Condition: RBW:9kHz
Test Mode: Transmitting
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	8.153	12.92	10.70	23.62	60.00	36.38	QP
2	8.153	5.22	10.70	15.92	50.00	34.08	Average
3	16.228	22.88	9.82	32.70	60.00	27.30	QP
4	16.228	11.11	9.82	20.93	50.00	29.07	Average
5	17.694	24.26	9.86	34.12	60.00	25.88	QP
6	17.694	14.44	9.86	24.30	50.00	25.70	Average
7	21.662	24.40	9.92	34.32	60.00	25.68	QP
8	21.662	15.04	9.92	24.96	50.00	25.04	Average
9	24.046	20.24	9.92	30.16	60.00	29.84	QP
10	24.046	14.58	9.92	24.50	50.00	25.50	Average
11	26.610	22.07	9.93	32.00	60.00	28.00	QP
12	26.610	15.07	9.93	25.00	50.00	25.00	Average

Project No.: 2603S17096E-RF
Tester: Ella Huang
Port: neutral
Condition: RBW:9kHz
Test Mode: Transmitting
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	8.141	12.38	10.58	22.96	60.00	37.04	QP
2	8.141	5.20	10.58	15.78	50.00	34.22	Average
3	8.951	11.51	10.57	22.08	60.00	37.92	QP
4	8.951	4.68	10.57	15.25	50.00	34.75	Average
5	16.226	21.49	9.77	31.26	60.00	28.74	QP
6	16.226	14.62	9.77	24.39	50.00	25.61	Average
7	18.243	24.48	9.90	34.38	60.00	25.62	QP
8	18.243	18.91	9.90	28.81	50.00	21.19	Average
9	20.380	22.50	10.01	32.51	60.00	27.49	QP
10	20.380	17.61	10.01	27.62	50.00	22.38	Average
11	23.130	24.37	9.99	34.36	60.00	25.64	QP
12	23.130	17.12	9.99	27.11	50.00	22.89	Average

4.2 Radiation Spurious Emissions

4.2.1 9 kHz – 1 GHz

Sample Number	3JW6-3	Test Date:	2026/4/17
Test Site:	966-1	Test Mode:	Transmitting
Tester:	Jin He	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.4	Relative Humidity: (%)	60	ATM Pressure: (kPa)	100.6
----------------------	------	---------------------------	----	---------------------------	-------

Test Equipment List and Details:

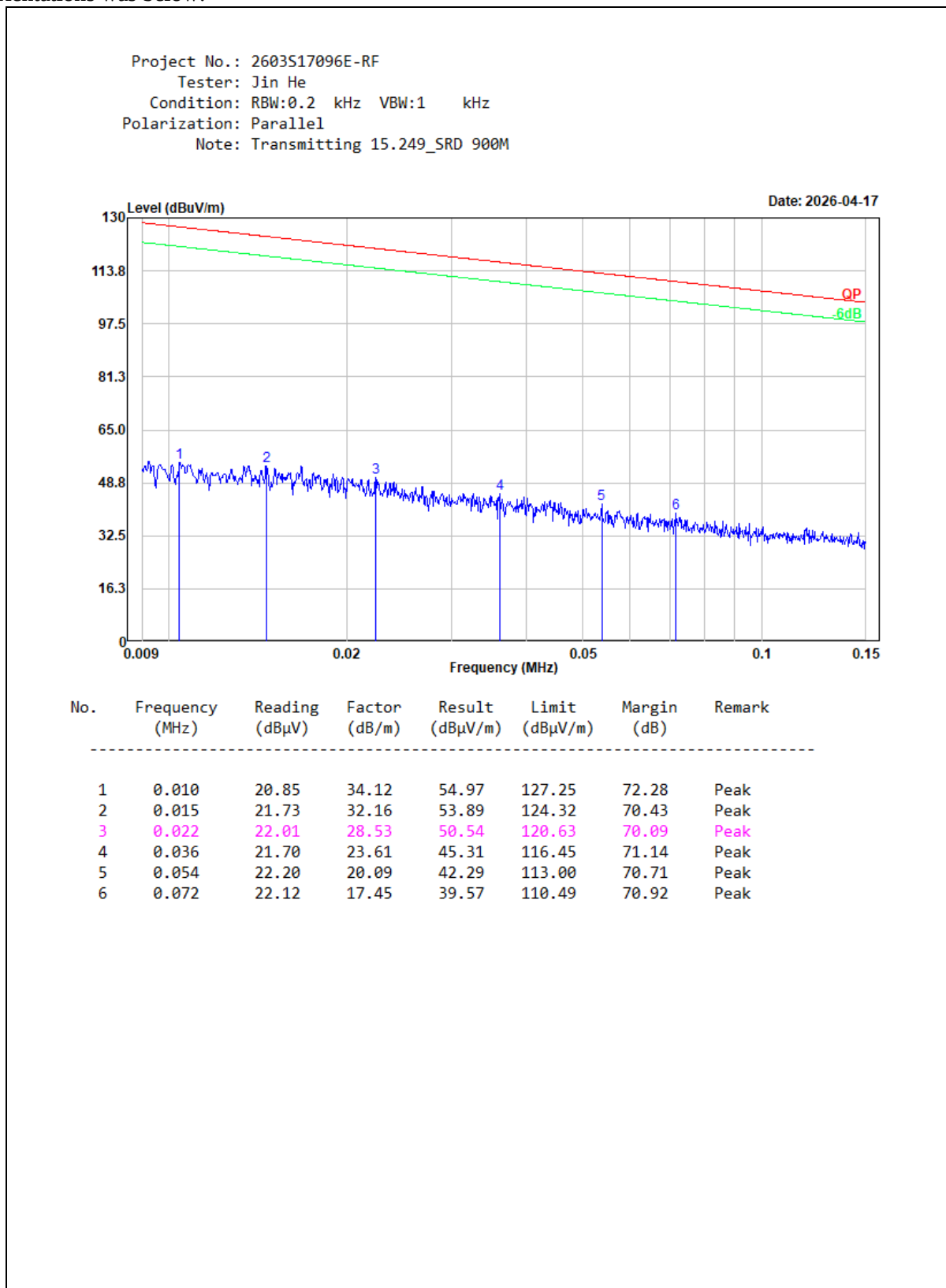
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2023/12/1	2026/11/30
GLOBAL	Loop Antenna	1313-1A	3110611	2023/12/4	2026/12/3
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0300-01	2025/11/10	2026/11/9
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0500-01	2025/11/10	2026/11/9
R&S	EMI Test Receiver	ESR3	102724	2026/2/27	2027/2/26
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0100-03	2025/11/10	2026/11/9
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0370-01	2025/11/10	2026/11/9
XQY	Coaxial Cable	XQY-CMR400UF-NJ- NJ-7M	24056379	2025/6/4	2026/6/3
Audix	Test Software	E3	191218 (V9)	N/A	N/A

** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

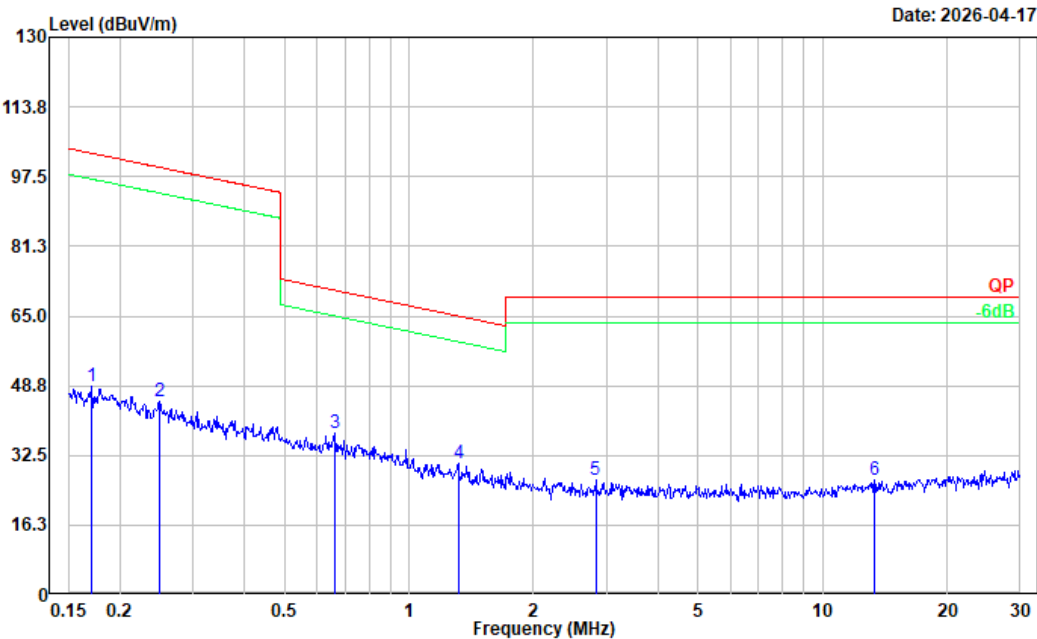
Test Data:

9kHz~30MHz

Three antenna orientations (parallel, perpendicular, and ground-parallel) was measured, the worst orientations was below:

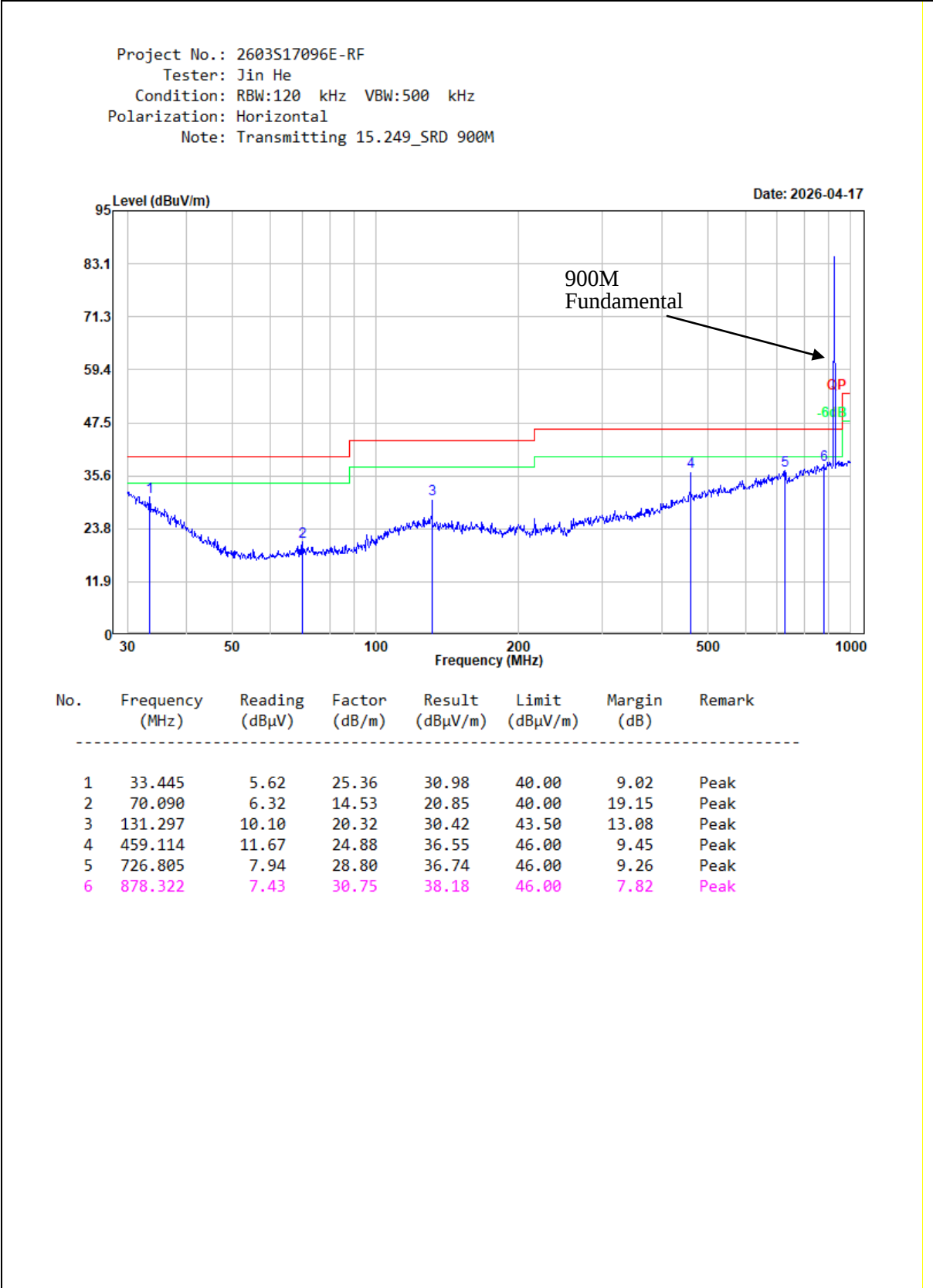


Project No.: 2603S17096E-RF
Tester: Jin He
Condition: RBW:9 kHz VBW:30 kHz
Polarization: Parallel
Note: Transmitting 15.249_SRD 900M

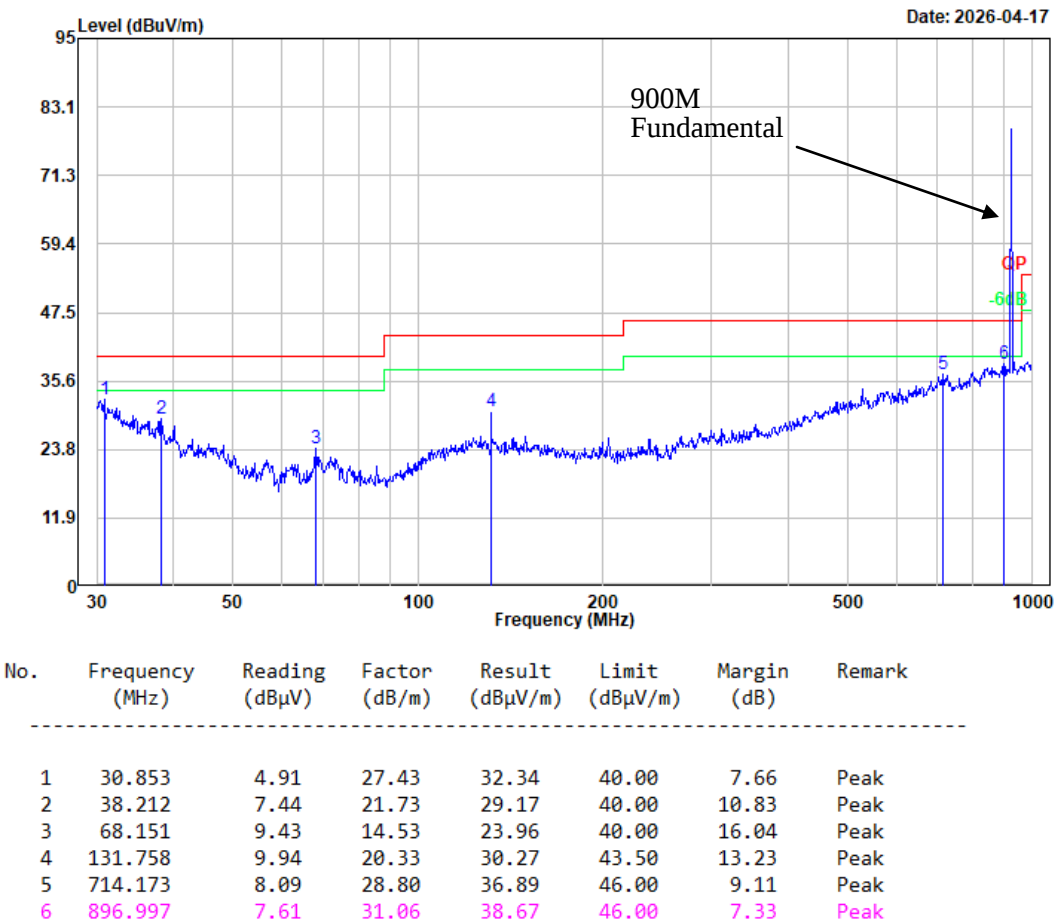


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	0.170	37.67	11.07	48.74	102.98	54.24	Peak
2	0.249	37.61	7.39	45.00	99.66	54.66	Peak
3	0.661	38.68	-0.90	37.78	71.14	33.36	Peak
4	1.317	35.93	-5.43	30.50	65.03	34.53	Peak
5	2.824	34.72	-8.10	26.62	69.54	42.92	Peak
6	13.337	34.78	-7.94	26.84	69.54	42.70	Peak

30MHz-1GHz

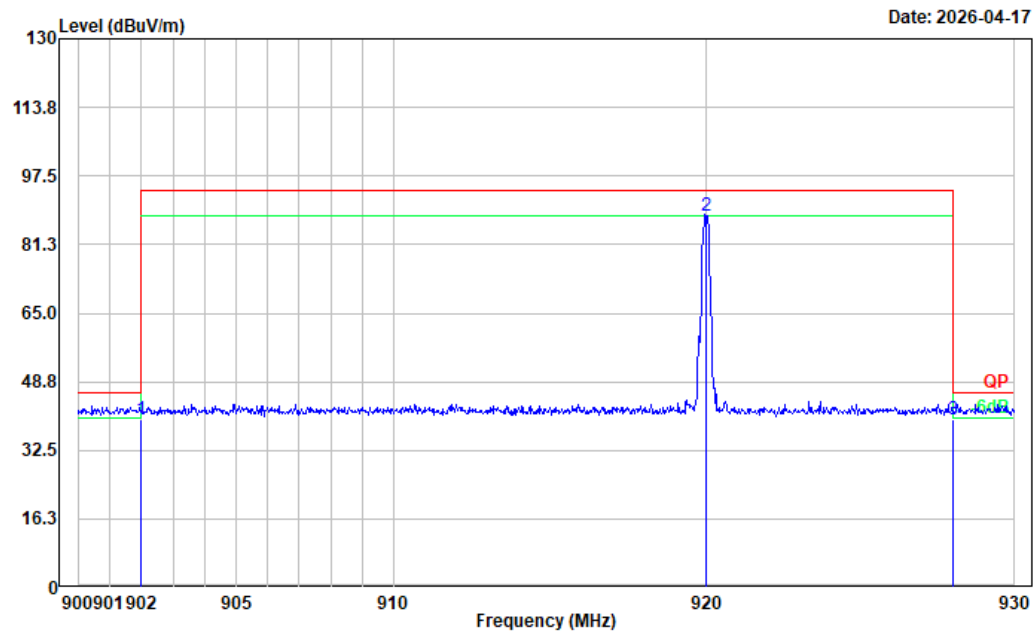


Project No.: 2603S17096E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: Vertical
Note: Transmitting 15.249_SRD 900M



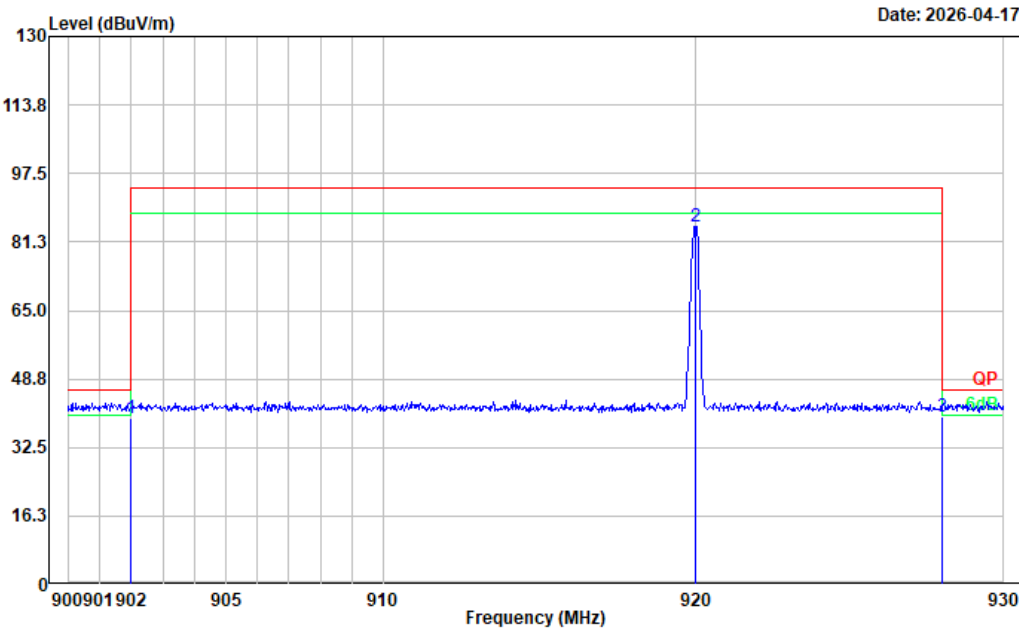
Bandedge and Fundamental:

Project No.: 2603S17096E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: Horizontal
Note: Transmitting 15.249_SRD low channel 920MHz



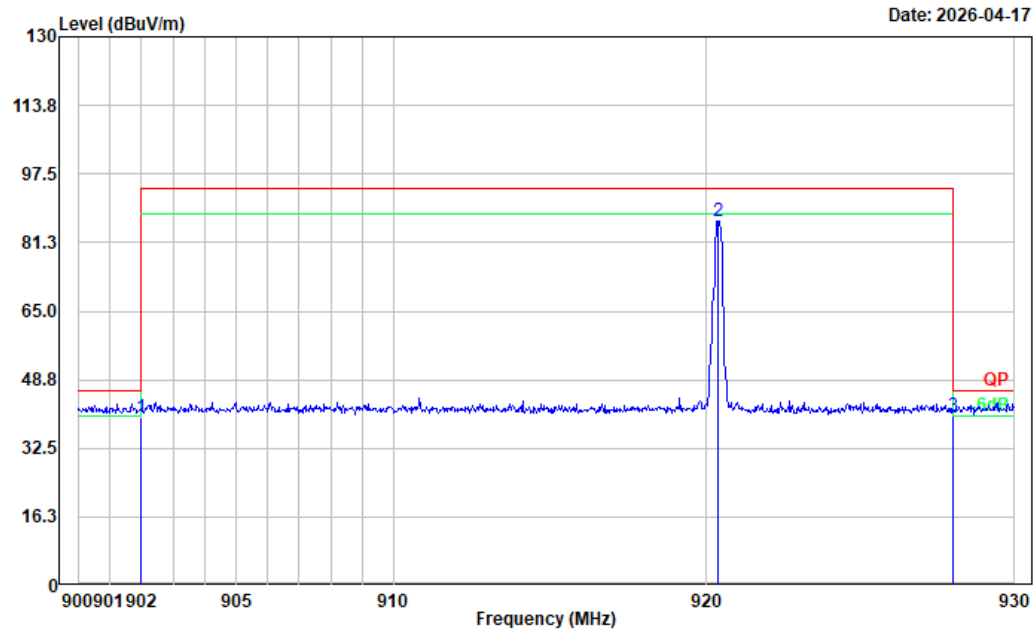
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	902.000	8.70	31.16	39.86	46.00	6.14	QP
2	920.000	56.80	31.45	88.25	93.98	5.73	QP
3	928.000	8.50	31.39	39.89	46.00	6.11	QP

Project No.: 2603S17096E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: Vertical
Note: Transmitting 15.249_SRD low channel 920MHz



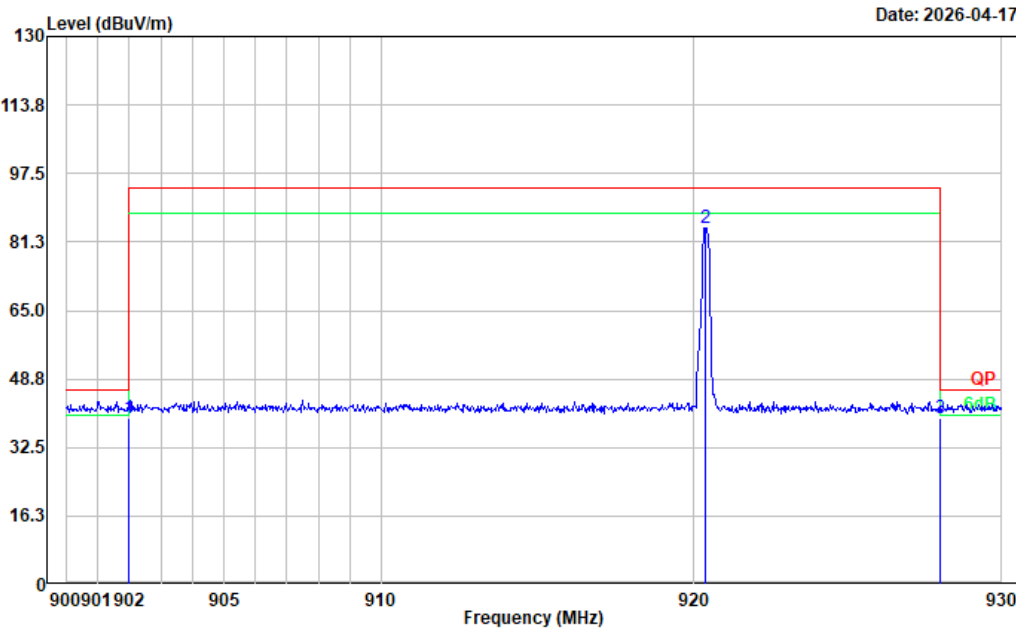
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	902.000	8.40	31.16	39.56	46.00	6.44	QP
2	920.000	53.41	31.45	84.86	93.98	9.12	Peak
3	928.000	8.40	31.39	39.79	46.00	6.21	QP

Project No.: 2603S17096E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: Horizontal
Note: Transmitting 15.249_SRD middle channel 920.4MHz



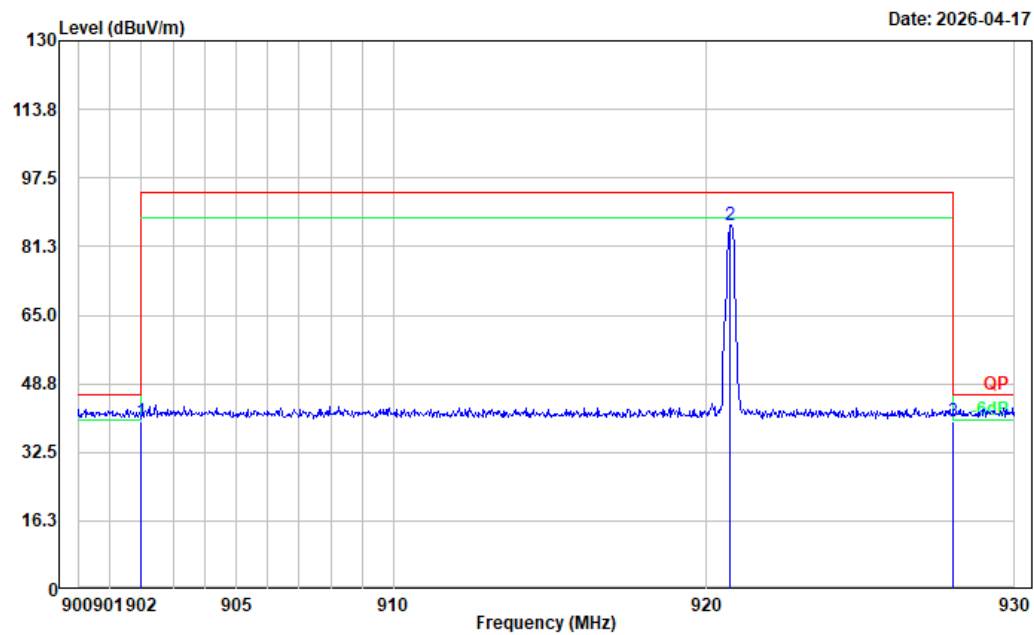
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	902.000	8.80	31.16	39.96	46.00	6.04	QP
2	920.400	55.03	31.44	86.47	93.98	7.51	Peak
3	928.000	8.60	31.39	39.99	46.00	6.01	QP

Project No.: 2603S17096E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: Vertical
Note: Transmitting 15.249_SRD middle channel 920.4MHz



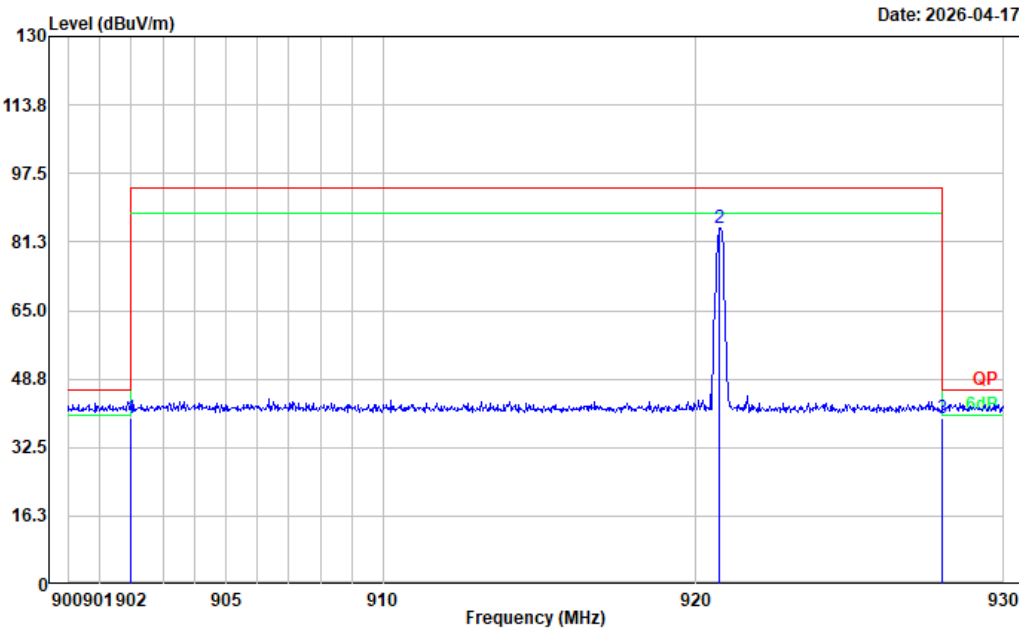
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	902.000	8.30	31.16	39.46	46.00	6.54	QP
2	920.400	53.26	31.44	84.70	93.98	9.28	Peak
3	928.000	7.90	31.39	39.29	46.00	6.71	QP

Project No.: 2603S17096E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: Horizontal
Note: Transmitting 15.249_SRD high channel 920.8MHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	902.000	8.50	31.16	39.66	46.00	6.34	QP
2	920.800	54.96	31.43	86.39	93.98	7.59	Peak
3	928.000	8.50	31.39	39.89	46.00	6.11	QP

Project No.: 2603S17096E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: Vertical
Note: Transmitting 15.249_SRD high channel 920.8MHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	902.000	8.20	31.16	39.36	46.00	6.64	QP
2	920.800	53.28	31.43	84.71	93.98	9.27	Peak
3	928.000	8.10	31.39	39.49	46.00	6.51	QP

4.2.2 1 GHz – 10 GHz

Sample Number	3JW6-1	Test Date:	2026/4/16
Test Site:	966-2	Test Mode:	Transmitting
Tester:	HuaYuan Miao	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	23.6	Relative Humidity: (%)	59	ATM Pressure: (kPa)	100.4
----------------------	------	---------------------------	----	---------------------------	-------

Test Equipment List and Details:

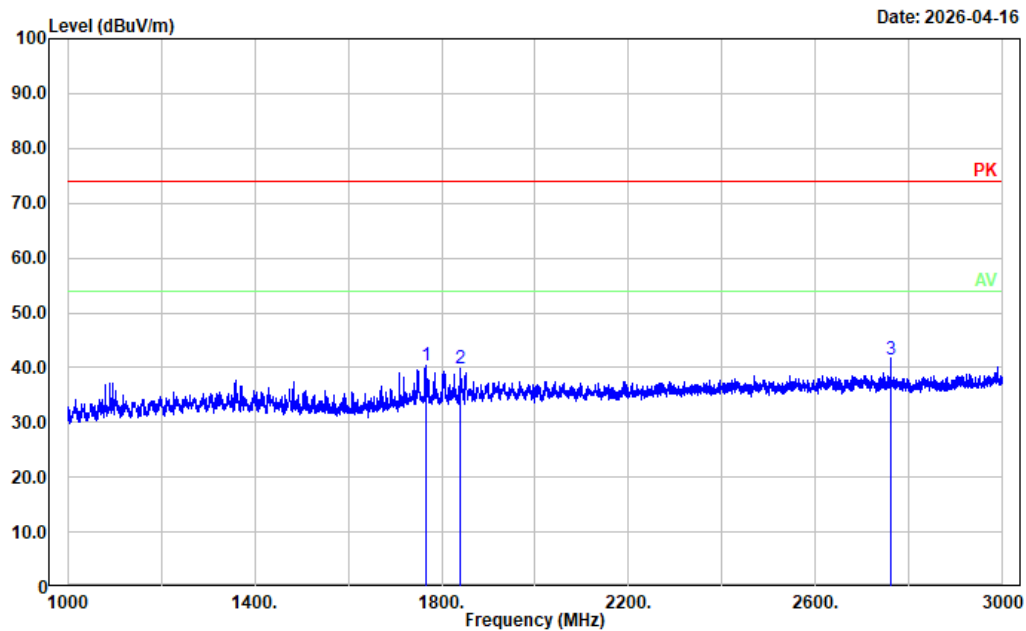
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS-Lindgren	Horn Antenna	3115	9912-5985	2023/12/6	2026/12/5
R&S	Spectrum Analyzer	FSV40	101591	2026/2/27	2027/2/26
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2025/11/10	2026/11/9
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2025/11/10	2026/11/9
A.H	Pre-amplifier	PAM-0118P	628	2025/11/10	2026/11/9
Audix	Test Software	E3	191218 (V9)	N/A	N/A

*** Statement of Traceability:** China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

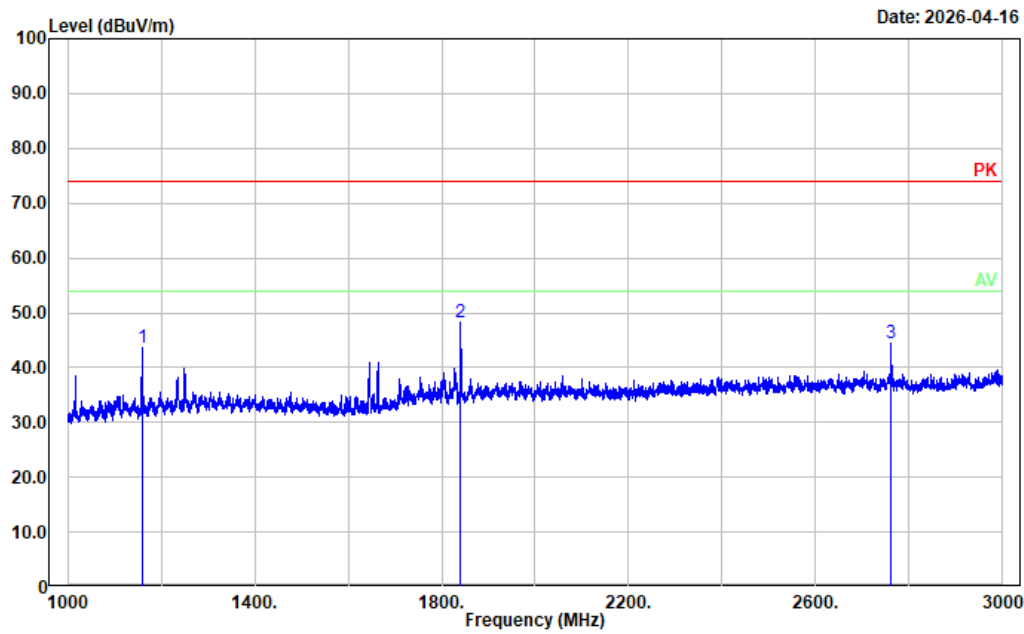
Worst radiation spurious emissions margin test plots

Project No: 2603S17096E-RF
Tester: HuaYuan Miao
Condition: PK trace RBW:1MHz; VBW:3MHz;
Polarization: horizontal
Note: SRD Middle Channel 920.4MHz



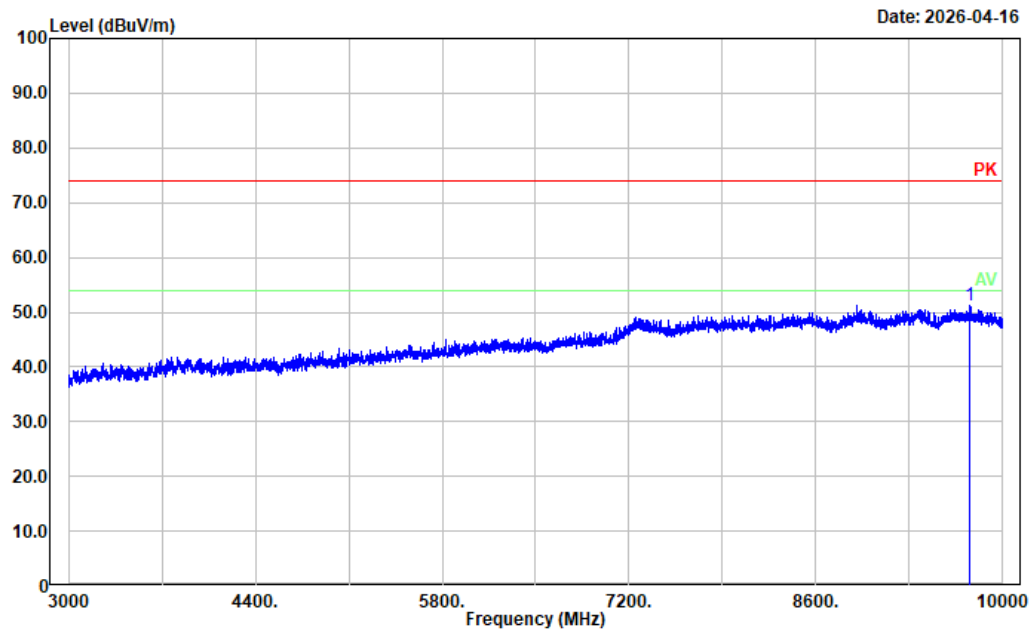
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1765.200	44.12	-3.81	40.31	74.00	33.69	Peak
2	1840.800	43.43	-3.66	39.77	74.00	34.23	Peak
3	2761.200	42.54	-1.12	41.42	74.00	32.58	Peak

Project No: 2603S17096E-RF
Tester: HuaYuan Miao
Condition: PK trace RBW:1MHz; VBW:3MHz;
Polarization: vertical
Note: SRD Middle Channel 920.4MHz



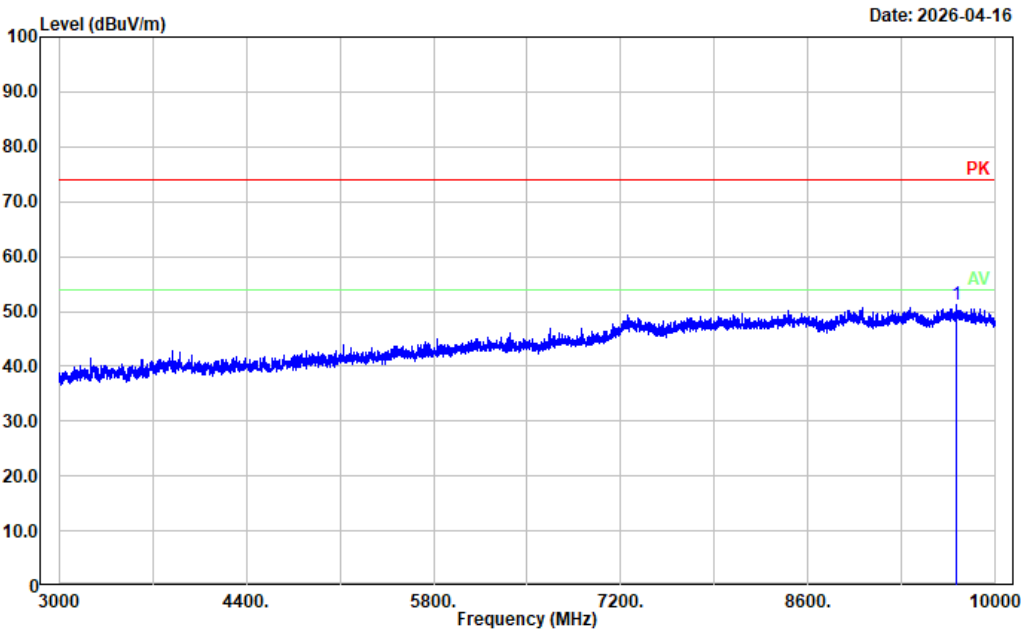
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	1158.800	48.75	-5.14	43.61	74.00	30.39	Peak
2	1840.800	51.77	-3.66	48.11	74.00	25.89	Peak
3	2761.200	45.61	-1.12	44.49	74.00	29.51	Peak

Project No: 2603S17096E-RF
Tester: HuaYuan Miao
Condition: PK trace RBW:1MHz; VBW:3MHz;
Polarization: horizontal
Note: SRD Middle Channel 920.4MHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	9756.400	38.30	12.95	51.25	74.00	22.75	Peak

Project No: 2603S17096E-RF
Tester: HuaYuan Miao
Condition: PK trace RBW:1MHz; VBW:3MHz;
Polarization: vertical
Note: SRD Middle Channel 920.4MHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	9708.800	38.26	12.92	51.18	74.00	22.82	Peak

4.3 20 dB Emission Bandwidth and 99% Occupied Bandwidth:

Sample Number	3JW6-3	Test Date:	2026/4/17
Test Site:	RF	Test Mode:	Transmitting
Tester:	Chin Qin	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.4	Relative Humidity: (%)	65	ATM Pressure: (kPa)	100.6
----------------------	------	---------------------------	----	---------------------------	-------

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101050	2026/2/27	2027/2/26
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060301	Each time	N/A

*** Statement of Traceability:** China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

Test Channel	Test Frequency (MHz)	20 dB Bandwidth (MHz)
Middle	920.4	0.104

Test Channel	Test Frequency (MHz)	99% Occupied Bandwidth (MHz)
Middle	920.4	0.0996

Note: the 20 dB bandwidth of the emission and 99% Occupied Bandwidth is contained within the operation frequency band. Please refer to the below plots.

20 dB Bandwidth _ Middle Channel



ProjectNo.:2603S17096E-RF Tester:Chin Qin
Date: 17.APR.2026 13:43:04

99% Occupied Bandwidth_ Middle Channel



ProjectNo.:2603S17096E-RF Tester:Chin Qin
Date: 17.APR.2026 13:42:21

5. RF EXPOSURE EVALUATION

5.1 Maximum Permissible Exposure (MPE)

Applicable Standard

According to subpart §1.1310,15.247(i) systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

Mode	Frequency (MHz)	Antenna Gain [▲]		Conducted output power including Tune-up Tolerance [▲]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
2.4G WiFi	2412-2462	6.26	4.23	27.5	562.34	20.00	0.4731	1.0
SRD	920-920.8	2.97	1.98	-9.92	0.10	20.00	0.00004	0.6

Note:

1. For SRD, field strength is 88.25dBμV/m @ 3m = -6.95 dBm EIRP. Conducted power is -9.92dBm.

2. The Antenna Gain and Conducted output power including Tune-up Tolerance provided by manufacturer

For Simultaneous transmission:

SRD and 2.4G Wifi can transmit simultaneously:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

$$= S_{2.4G\ Wifi} / S_{limit-2.4G\ Wifi} + S_{SRD} / S_{limit-SRD}$$

$$= 0.4731 / 1.0 + 0.00004 / 0.6$$

$$= 0.47317$$

$$< 1.0$$

Result: The device meet FCC MPE at 20 cm distance

5.2 Exemption Limits For Routine Evaluation –RF Exposure Evaluation

Applicable Standard

RSS-102, Issue 6, Clause 6.6:

Field reference level (FRL) exposure evaluation is required if the separation distance between the user and/or bystander and the device's radiating element is greater than 20cm (i.e. mobile devices), except when the device operates as follows:

- below 20 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $4.49/f^{0.5}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

In these cases, the information contained in the RF exposure technical brief may be limited to information that demonstrates how the e.i.r.p. was derived.

Calculated Data:

Mode	Frequency (MHz)	Antenna Gain [▲]	Conducted output power including Tune-up Tolerance [▲]	EIRP		Exemption limits (mW)
		(dBi)	(dBm)	(dBm)	(mW)	
2.4G WiFi	2412-2462	6.26	27.5	33.76	2376.84	2684
SRD	920-920.8	2.97	-9.92	-6.95	0.20	1389

Note:

1. For SRD, field strength is $88.25\text{dB}\mu\text{V/m}$ @ 3m = -6.95 dBm EIRP. Conducted power is -9.92dBm.
2. The Antenna Gain and Conducted output power including Tune-up Tolerance provided by manufacturer.

SRD and 2.4G Wifi can transmit simultaneously:

$$\text{EIRP}_{2.4\text{G Wifi}}/\text{Limit}_{2.4\text{G Wifi}} + \text{EIRP}_{\text{SRD}}/\text{Limit}_{\text{SRD}}$$

$$= 2376.84/2684 + 0.20/1389$$

$$= 0.886$$

$$< 1.0$$

Result: So the device is compliance with the exemption from Routine Evaluation Limits –RF exposure Evaluation.

6. EUT PHOTOGRAPHS

Please refer to the attachment 2603S17096E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2603S17096E-RF-INP EUT INTERNAL PHOTOGRAPHS

7. TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2603S17096E-RF-00B-TSP TEST SETUP PHOTOGRAPHS.

===== END OF REPORT =====