



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: Boost Lighting, Inc.

Address: 430 Satellite Boulevard NW, Suite 101, Suwanee, Georgia 30024
USA

FCC ID: 2AXLR-DA15WHRC1

Product Name: Remote control

Standard(s): 47 CFR Part 15, Subpart C(15.249)
ANSI C63.10-2013

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: 2403A110963E-00A

Date Of Issue: 2025/2/18

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, 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.

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.

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

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2403A110963E-00A	Original Report	2025/2/18

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	Remote control
EUT Model:	DA15WHRCDD1
Operation Frequency:	2426-2474 MHz
Modulation Type:	GFSK
Rated Input Voltage:	DC 3V from battery
Serial Number:	2W4P-1
EUT Received Date:	2024/12/17
EUT Received Status:	Good

Operation Frequency Detail:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2426	3	2474
2	2450	/	/
Per section 15.31(m), the below frequencies were performed the test as below:			
Test Channel		Frequency (MHz)	
Lowest		2426	
Middle		2450	
Highest		2474	

Antenna Information Detail ▲:

Antenna Type	input impedance (Ohm)	Frequency Range	Antenna Gain
PCB	50	2400-2500 MHz	1.31 dBi

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.

Accessory Information:

No Accessory.

1.2 Description of Test Configuration

1.2.1 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:	No
The engineering mode was provided by manufacturer▲. The maximum power was configured default setting.	

1.2.2 Support Equipment List and Details

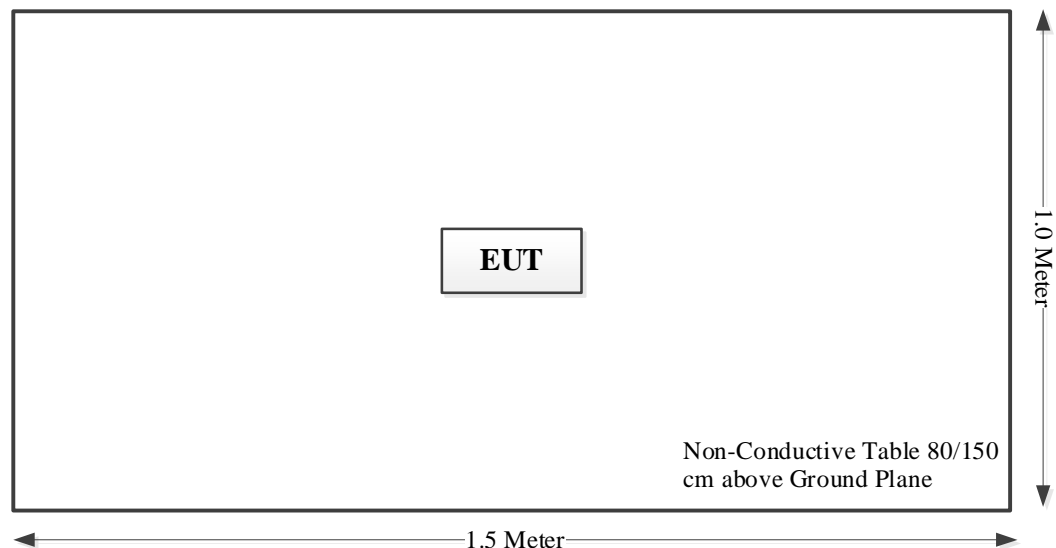
Manufacturer	Description	Model	Serial Number
/	/	/	/

1.2.3 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
/	/	/	/	/	/

1.2.4 Block Diagram of Test Setup

Spurious emissions:



1.3 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
§15.207(a)	Conduction Emissions	Not Applicable
15.205, §15.209, §15.249	Radiated Emissions	Compliant
§15.215 (c)	20 dB Bandwidth	Compliant
§15.203	Antenna Requirement	Compliant
§1.1307	RF Exposure Evaluation	Compliant

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:

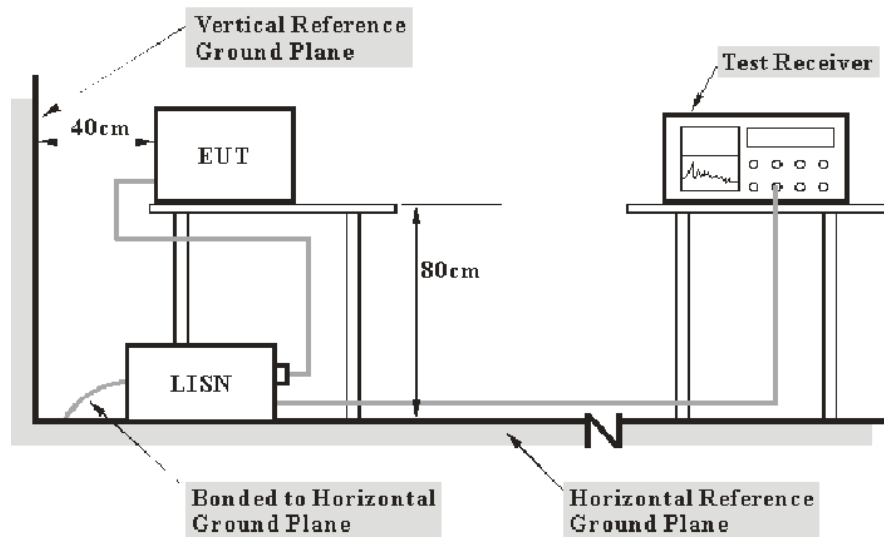
(1) For carrier current system containing their fundamental emission within the frequency band 535-1705 kHz and intended to be received using a standard AM broadcast receiver: no limit on conducted emissions.

(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.

3.1.2 EUT Setup



Note: 1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

The 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

During the conducted emission test, the EUT was connected to the outlet of the first LISN.

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:

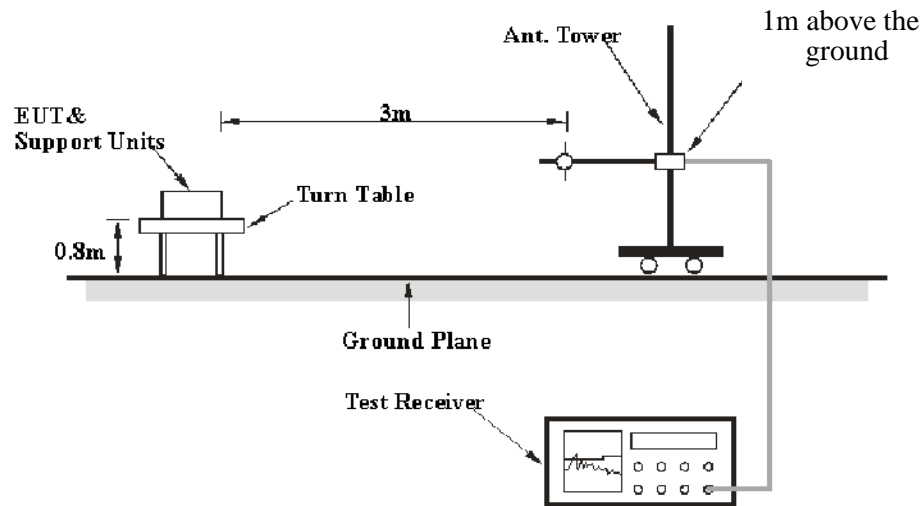
Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

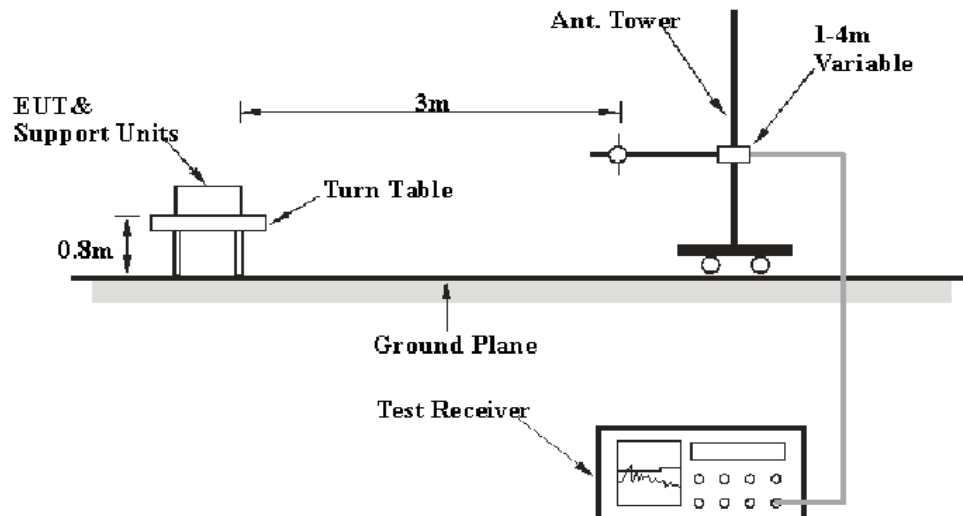
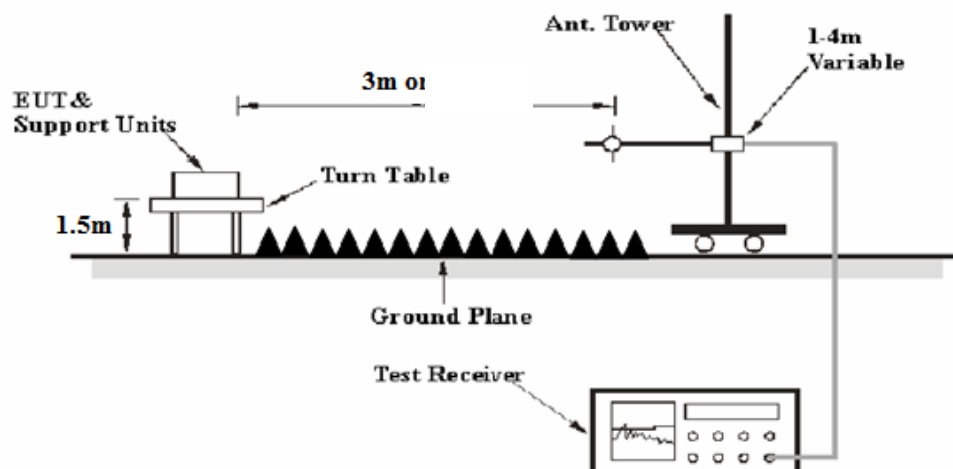
As per FCC§15.249 (c), Field strength limits are specified at a distance of 3 meters.

(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.

3.2.2 EUT Setup

9kHz~30MHz:



Below 1GHz:**Above 1GHz:**

The radiated emissions were performed in the 3 meters distance, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209, and FCC 15.249 limits.

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.

3.2.3 EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 9kHz to 25 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector	Measurement
9 kHz – 150 kHz	300 Hz	1 kHz	/	Peak	PK
	/	/	200 Hz	Quasi Peak/ Average	QP/AV
150 kHz – 30 MHz	10 kHz	30 kHz	/	Peak	PK
	/	/	9 kHz	Quasi Peak/ Average	QP/AV
30MHz – 1000 MHz	120 kHz	300 kHz	/	Peak	PK
	/	/	120kHz	Quasi Peak	QP

1GHz – 25GHz:

Pre-scan:

Measurement	RBW	Video B/W	Detector
PK	1MHz	3 MHz	Peak
AV	1MHz	5 kHz	Peak

Final measurement for emission identified during the pre-scan:

Measurement	RBW	Video B/W	Detector
PK	1MHz	3 MHz	Peak
AV	1MHz	10 Hz	Peak

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.

The spurious emissions which below the limit more than 20dB was not be recorded.

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 recorded in Quasi-peak detection mode for frequency range of 9 kHz-1 GHz except 9 – 90 kHz, 110 – 490 kHz, employing an average detector, peak and Average detection modes for frequencies above 1 GHz.

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

3.2.5 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

Factor = Antenna Factor + Cable Loss- 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:

Margin = Limit – Result

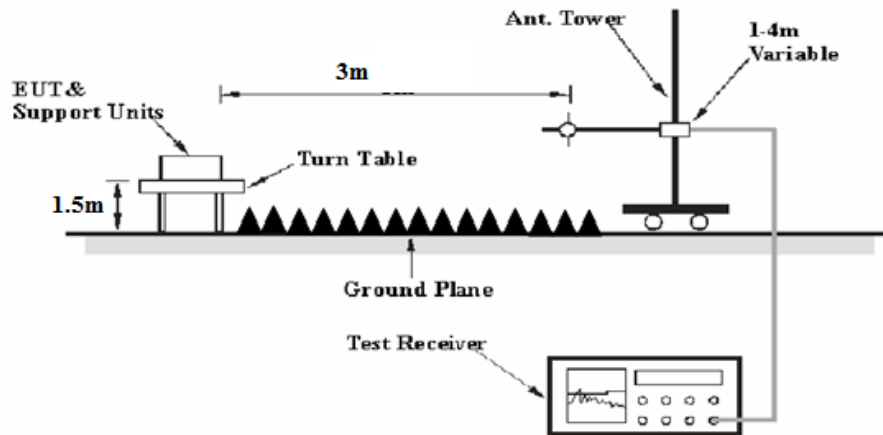
3.3 20 dB Emission Bandwidth

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.

3.3.2 EUT Setup



3.3.3 Test Procedure

According to ANSI C63.10-2013 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.

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 user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

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

3.4.2 Judgment

Please refer to the Antenna Information detail in Section 1.

4. Test DATA AND RESULTS

4.1 AC Line Conducted Emissions

Not Applicable, the device was powered by battery only.

4.2 Radiation Spurious Emissions

4.2.1 9 kHz – 1 GHz

Sample Number	2W4P-1	Test Date:	2024/12/24
Test Site:	966-2	Test Mode:	Transmitting (maximum output power mode, middle channel)
Tester:	Roinin Fu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.8	Relative Humidity: (%)	55	ATM Pressure: (kPa)	101.5
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Test Equipment List and Details:

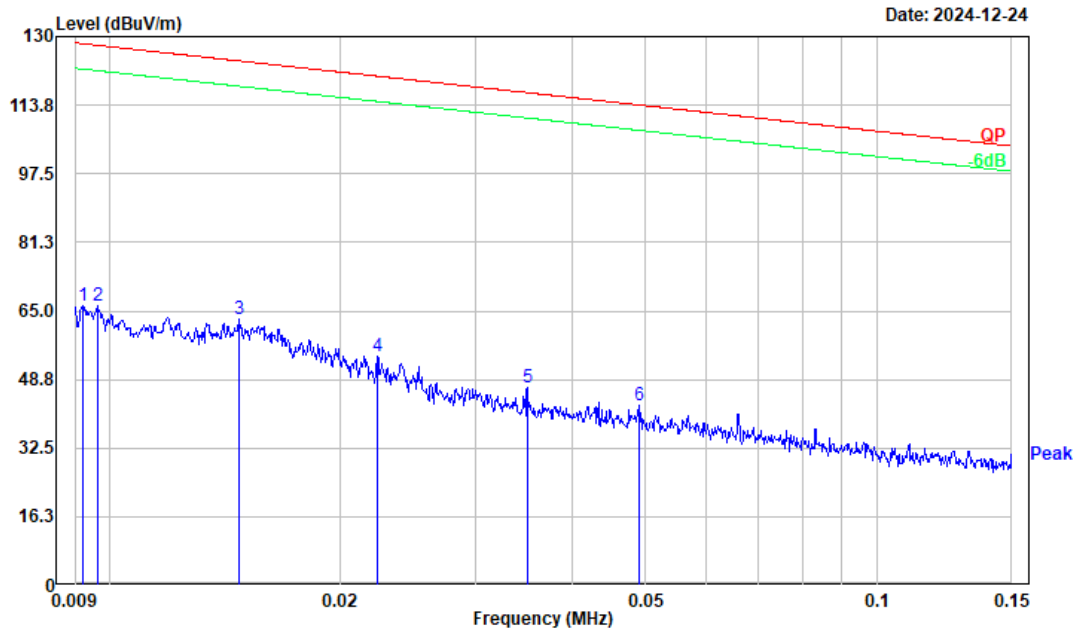
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2023/12/1	2026/11/30
BACL	Loop Antenna	1313-1A	3110611	2023/12/4	2026/12/3
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0300-01	2024/1/11	2025/1/10
Daruikang	Coaxial Cable	BNC-JJ-RG58	C-0500-01	2024/1/11	2025/1/10
R&S	EMI Test Receiver	ESR3	102724	2024/2/29	2025/2/28
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0100-03	2024/12/3	2025/12/2
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0370-01	2024/12/3	2025/12/2
XQY	Coaxial Cable	XQY-CMR400UF-NJ-NJ-7M	24056379	2024/6/11	2025/6/10
Sonoma	Amplifier	310N	186165	2024/12/3	2025/12/2
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:

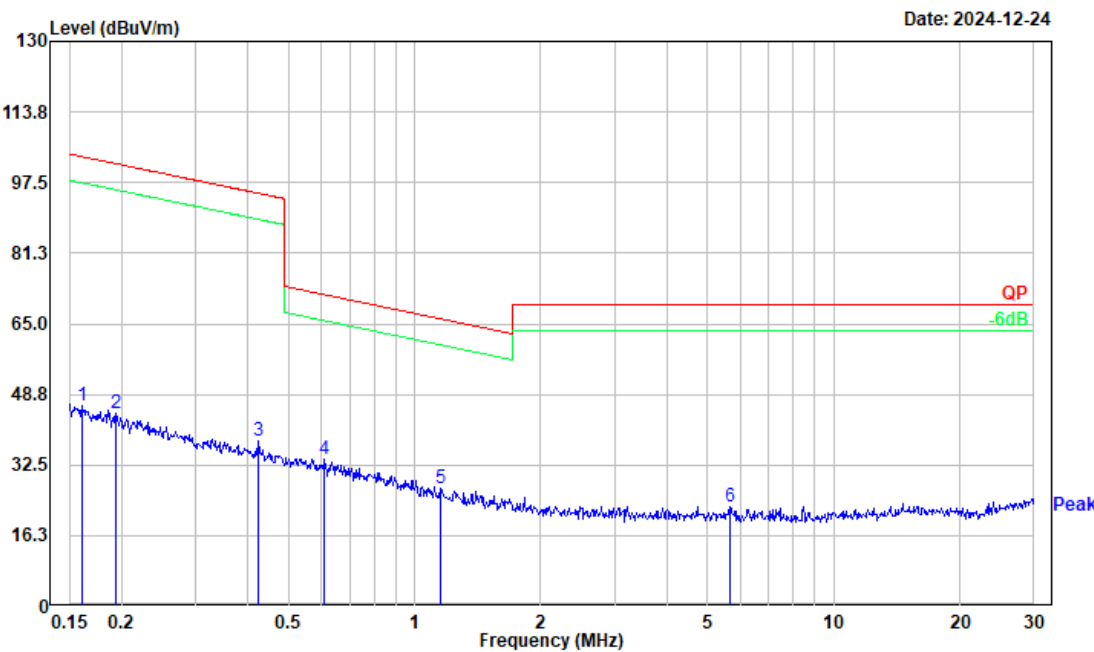
After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

Project No.: 2403A110963E-RF
Tester: Roinin Fu
Condition: RBW:0.3 kHz VBW:1 kHz SWT:0.1 sec
Polarization: Parallel
Note: Transmitting



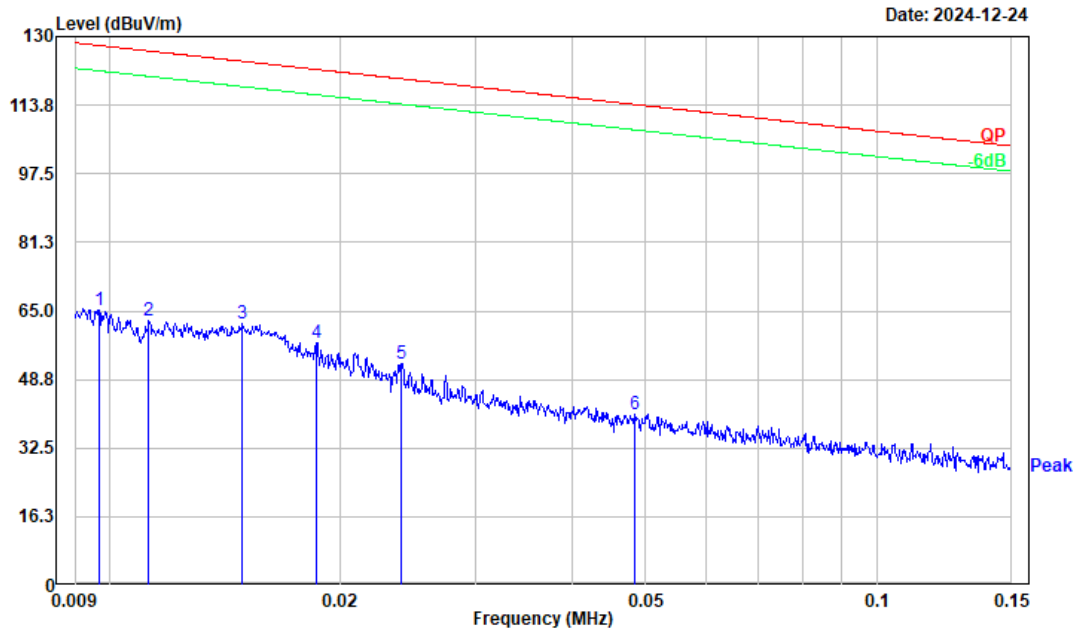
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.009	30.72	35.46	66.18	128.32	62.14	Peak
2	0.010	31.18	34.91	66.09	127.93	61.84	Peak
3	0.015	30.81	32.11	62.92	124.24	61.32	Peak
4	0.022	25.93	28.39	54.32	120.63	66.31	Peak
5	0.035	23.13	23.57	46.70	116.72	70.02	Peak
6	0.049	21.91	20.65	42.56	113.81	71.25	Peak

Project No.: 2403A110963E-RF
Tester: Roinin Fu
Condition: RBW:10 kHz VBW:30 kHz SWT:0.1 sec
Polarization: Parallel
Note: Transmitting



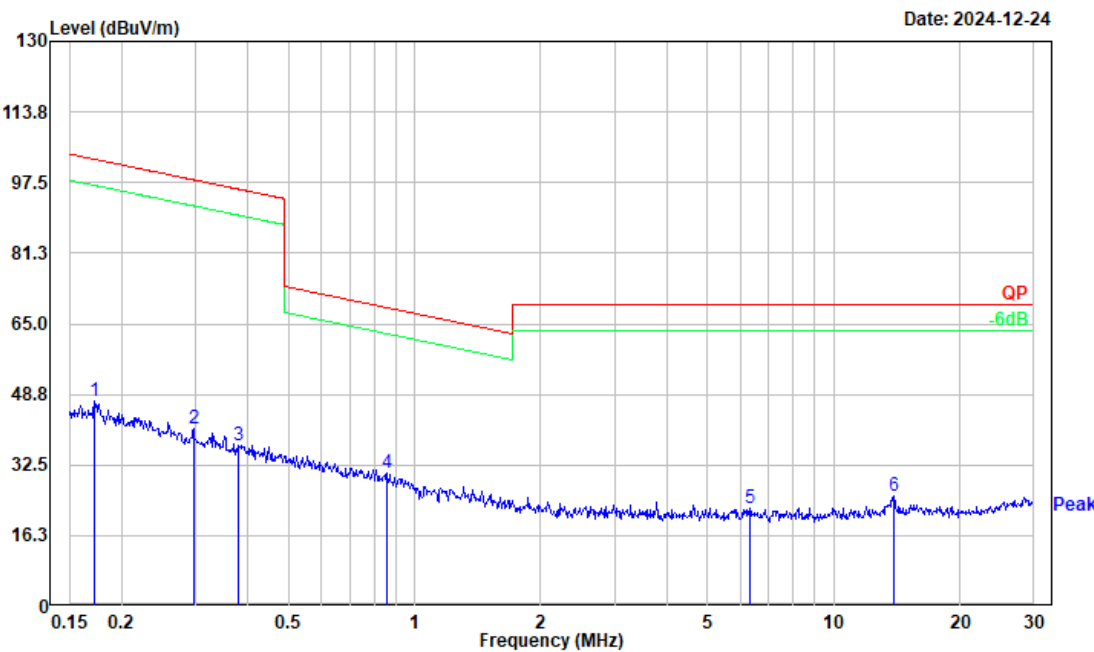
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.161	34.17	11.82	45.99	103.48	57.49	Peak
2	0.194	34.14	10.25	44.39	101.83	57.44	Peak
3	0.424	35.25	2.63	37.88	95.06	57.18	Peak
4	0.611	34.31	-0.32	33.99	71.85	37.86	Peak
5	1.153	31.71	-4.75	26.96	66.21	39.25	Peak
6	5.653	31.73	-8.91	22.82	69.54	46.72	Peak

Project No.: 2403A110963E-RF
Tester: Roinin Fu
Condition: RBW:0.3 kHz VBW:1 kHz SWT:0.1 sec
Polarization: Perpendicular
Note: Transmitting



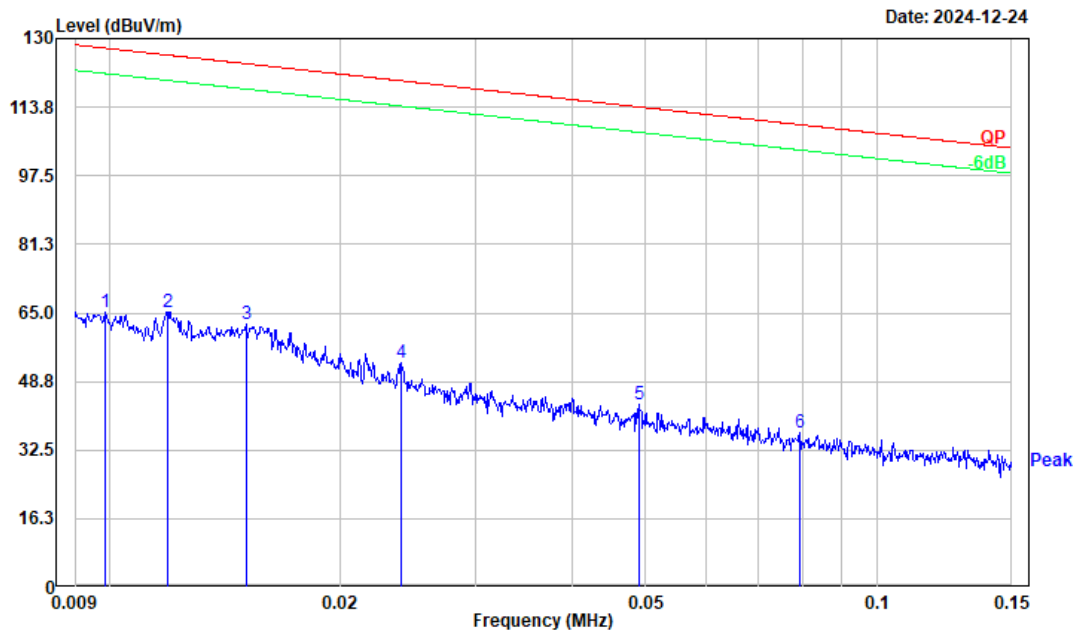
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.010	30.47	34.84	65.31	127.88	62.57	Peak
2	0.011	28.75	33.82	62.57	126.59	64.02	Peak
3	0.015	29.95	32.03	61.98	124.15	62.17	Peak
4	0.019	27.24	30.22	57.46	122.22	64.76	Peak
5	0.024	24.95	27.56	52.51	119.99	67.48	Peak
6	0.048	19.78	20.79	40.57	113.93	73.36	Peak

Project No.: 2403A110963E-RF
Tester: Roinin Fu
Condition: RBW:10 kHz VBW:30 kHz SWT:0.1 sec
Polarization: Perpendicular
Note: Transmitting



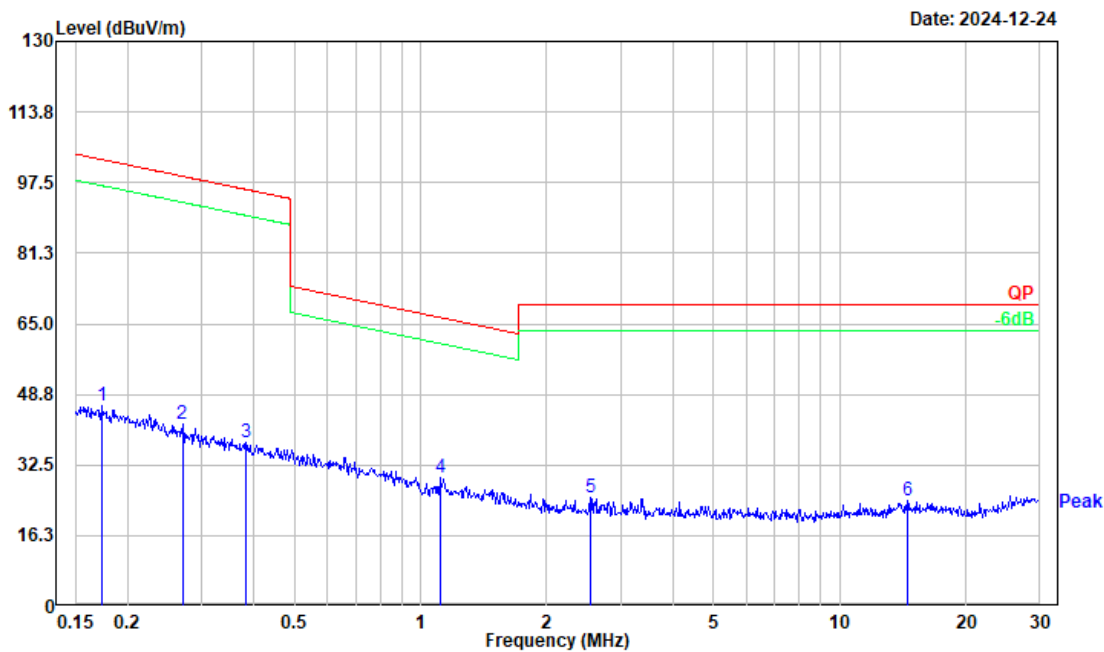
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.172	35.95	11.28	47.23	102.89	55.66	Peak
2	0.297	35.47	5.48	40.95	98.15	57.20	Peak
3	0.381	33.38	3.57	36.95	95.98	59.03	Peak
4	0.862	33.62	-3.04	30.58	68.79	38.21	Peak
5	6.319	31.48	-8.89	22.59	69.54	46.95	Peak
6	13.915	32.95	-7.72	25.23	69.54	44.31	Peak

Project No.: 2403A110963E-RF
Tester: Roinin Fu
Condition: RBW:0.3 kHz VBW:1 kHz SWT:0.1 sec
Polarization: Ground-parallel
Note: Transmitting



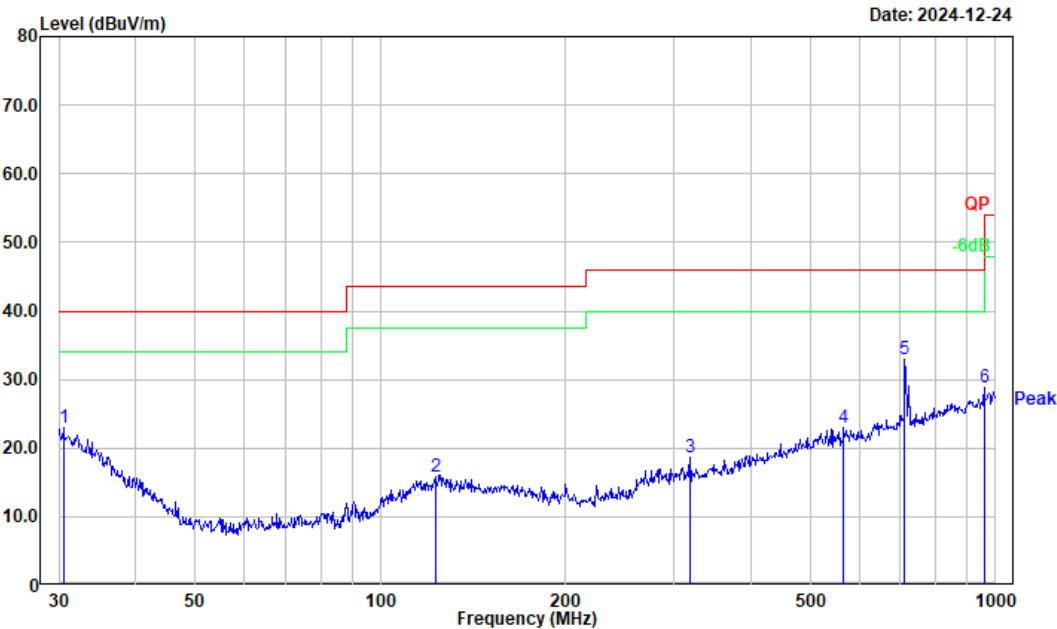
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.010	30.54	34.59	65.13	127.71	62.58	Peak
2	0.012	31.72	33.50	65.22	126.10	60.88	Peak
3	0.015	30.25	31.95	62.20	124.05	61.85	Peak
4	0.024	25.57	27.59	53.16	120.02	66.86	Peak
5	0.049	22.71	20.65	43.36	113.81	70.45	Peak
6	0.079	20.22	16.41	36.63	109.61	72.98	Peak

Project No.: 2403A110963E-RF
Tester: Roinin Fu
Condition: RBW:10 kHz VBW:30 kHz SWT:0.1 sec
Polarization: Ground-parallel
Note: Transmitting



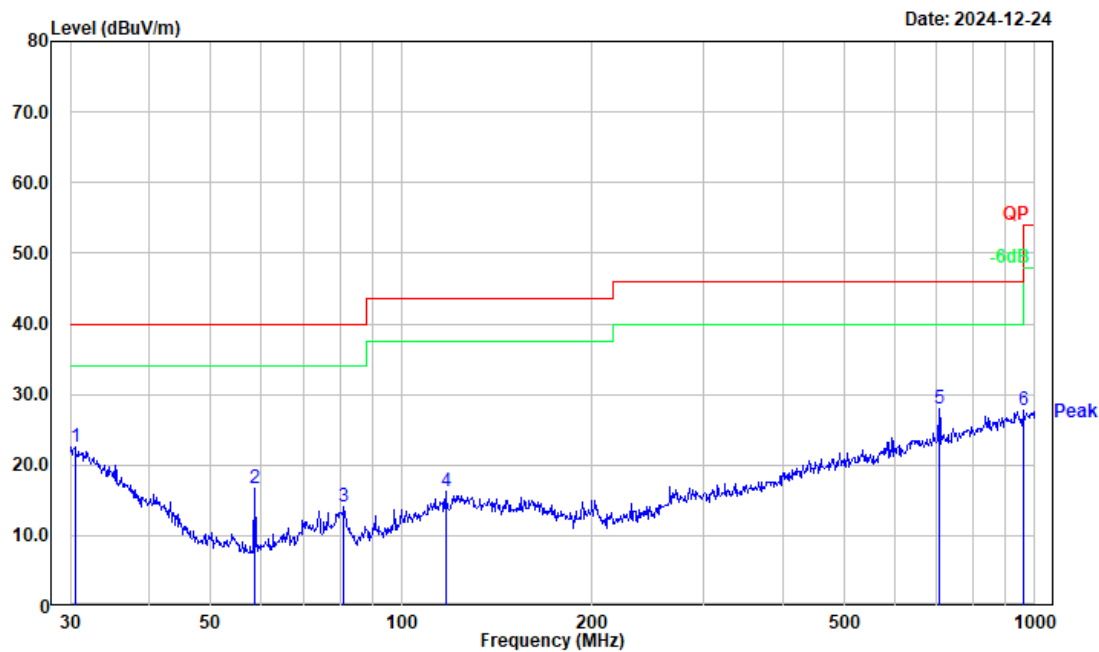
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	0.174	34.80	11.20	46.00	102.79	56.79	Peak
2	0.270	35.17	6.74	41.91	98.97	57.06	Peak
3	0.383	34.33	3.52	37.85	95.94	58.09	Peak
4	1.111	34.10	-4.60	29.50	66.54	37.04	Peak
5	2.540	33.04	-8.05	24.99	69.54	44.55	Peak
6	14.517	32.04	-7.67	24.37	69.54	45.17	Peak

Project No.: 2403A110963E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Transmitting



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.531	27.08	-4.14	22.94	40.00	17.06	Peak
2	122.834	26.69	-10.87	15.82	43.50	27.68	Peak
3	318.817	28.89	-10.15	18.74	46.00	27.26	Peak
4	566.622	28.06	-5.06	23.00	46.00	23.00	Peak
5	711.674	35.79	-2.83	32.96	46.00	13.04	Peak
6	958.794	28.21	0.70	28.91	46.00	17.09	Peak

Project No.: 2403A110963E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Transmitting



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.531	26.61	-4.14	22.47	40.00	17.53	Peak
2	58.613	34.36	-17.70	16.66	40.00	23.34	Peak
3	81.212	31.35	-17.29	14.06	40.00	25.94	Peak
4	117.360	27.66	-11.51	16.15	43.50	27.35	Peak
5	706.700	30.95	-2.87	28.08	46.00	17.92	Peak
6	962.162	26.99	0.78	27.77	54.00	26.23	Peak

4.2.2 1 GHz – 25 GHz

Sample Number	2W4P-1	Test Date:	2025/2/14
Test Site:	966-1	Test Mode:	Transmitting
Tester:	Mack Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	23.6	Relative Humidity: (%)	49	ATM Pressure: (kPa)	101.2
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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	2024/4/1	2025/3/31
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2025/1/10	2026/1/9
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2025/1/10	2026/1/9
BACL	Preamplifier	1313-A20M18G	4032311	2024/4/1	2025/3/31
Audix	Test Software	E3	191218 (V9)	N/A	N/A
PASTERNAK	Horn Antenna	PE9852/2F-20	112002	2024/2/4	2027/2/3
Quinstar	Preamplifier	QLW-18405536-JO	15964001005	2025/1/6	2026/1/5
MICRO-COAX	Coaxial Cable	UFB142A-1-2362-200200	235772-001	2025/1/6	2026/1/5
JD	Multiplex Switch Test Control Set	DT7220SCU	DQ77925	2024/8/5	2025/8/4
JD	Filter Switch Unit	DT7220FSU	DQ77928	2024/8/5	2025/8/4

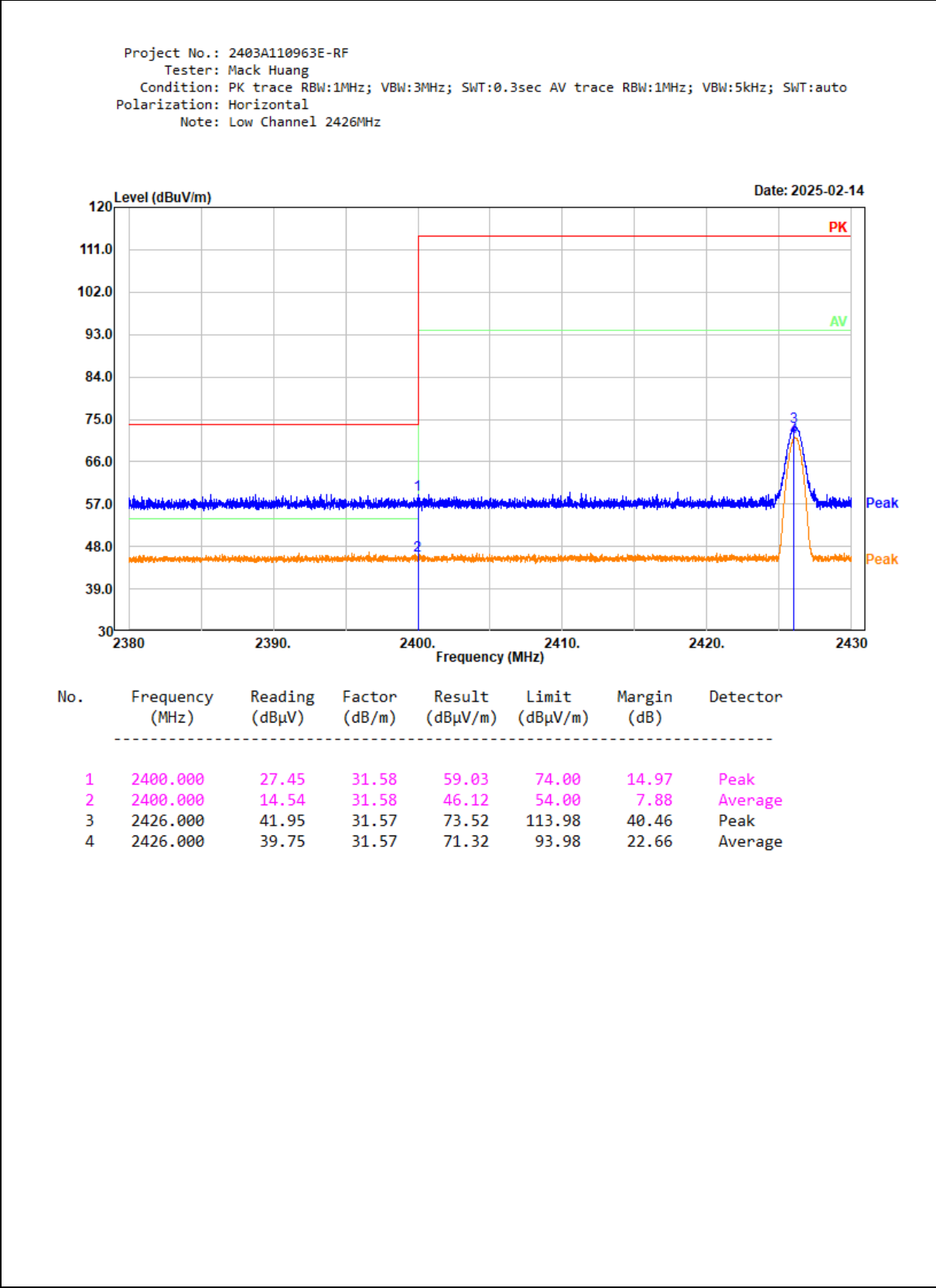
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

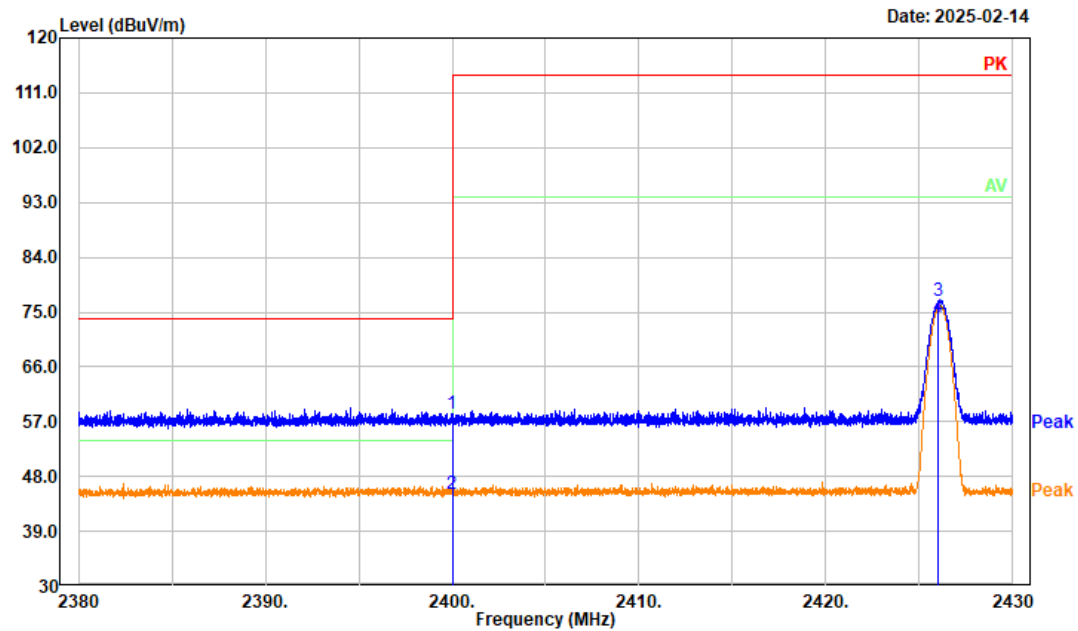
After pre-scan in the X, Y and Z axes of orientation, the worst case is below:

Frequency (MHz)	Receiver		Polar (H/V)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	Detector					
Low Channel:				2426	MHz		
2426.000	41.95	PK	H	31.57	73.52	113.98	40.46
2426.000	39.75	AV	H	31.57	71.32	93.98	22.66
2426.000	45.31	PK	V	31.57	76.88	113.98	37.10
2426.000	42.53	AV	V	31.57	74.10	93.98	19.88
4852.000	37.55	PK	H	9.22	46.77	74.00	27.23
4852.000	32.63	AV	H	9.22	41.85	54.00	12.15
4852.000	35.77	PK	V	9.22	44.99	74.00	29.01
4852.000	30.54	AV	V	9.22	39.76	54.00	14.24
7278.000	41.05	PK	H	11.44	52.49	74.00	21.51
7278.000	36.86	AV	H	11.44	48.30	54.00	5.70
7278.000	40.87	PK	V	11.44	52.31	74.00	21.69
7278.000	35.11	AV	V	11.44	46.55	54.00	7.45
Middle Channel:				2450	MHz		
2450.000	43.72	PK	H	31.56	75.28	113.98	38.70
2450.000	42.39	AV	H	31.56	73.95	93.98	20.03
2450.000	47.05	PK	V	31.56	78.61	113.98	35.37
2450.000	46.25	AV	V	31.56	77.81	93.98	16.17
4900.000	38.22	PK	H	9.07	47.29	74.00	26.71
4900.000	33.62	AV	H	9.07	42.69	54.00	11.31
4900.000	37.39	PK	V	9.07	46.46	74.00	27.54
4900.000	32.58	AV	V	9.07	41.65	54.00	12.35
7350.000	39.76	PK	H	11.68	51.44	74.00	22.56
7350.000	34.32	AV	H	11.68	46.00	54.00	8.00
7350.000	40.95	PK	V	11.68	52.63	74.00	21.37
7350.000	35.59	AV	V	11.68	47.27	54.00	6.73
High Channel:				2474	MHz		
2474.000	44.21	PK	H	31.60	75.81	113.98	38.17
2474.000	41.60	AV	H	31.60	73.20	93.98	20.78
2474.000	46.64	PK	V	31.60	78.24	113.98	35.74
2474.000	44.94	AV	V	31.60	76.54	93.98	17.44
4948.000	39.16	PK	H	8.89	48.05	74.00	25.95
4948.000	33.78	AV	H	8.89	42.67	54.00	11.33
4948.000	37.27	PK	V	8.89	46.16	74.00	27.84
4948.000	31.41	AV	V	8.89	40.30	54.00	13.70
7422.000	40.06	PK	H	11.48	51.54	74.00	22.46
7422.000	34.86	AV	H	11.48	46.34	54.00	7.66
7422.000	39.50	PK	V	11.48	50.98	74.00	23.02
7422.000	33.88	AV	V	11.48	45.36	54.00	8.64

Band edge and Fundamental test plots:

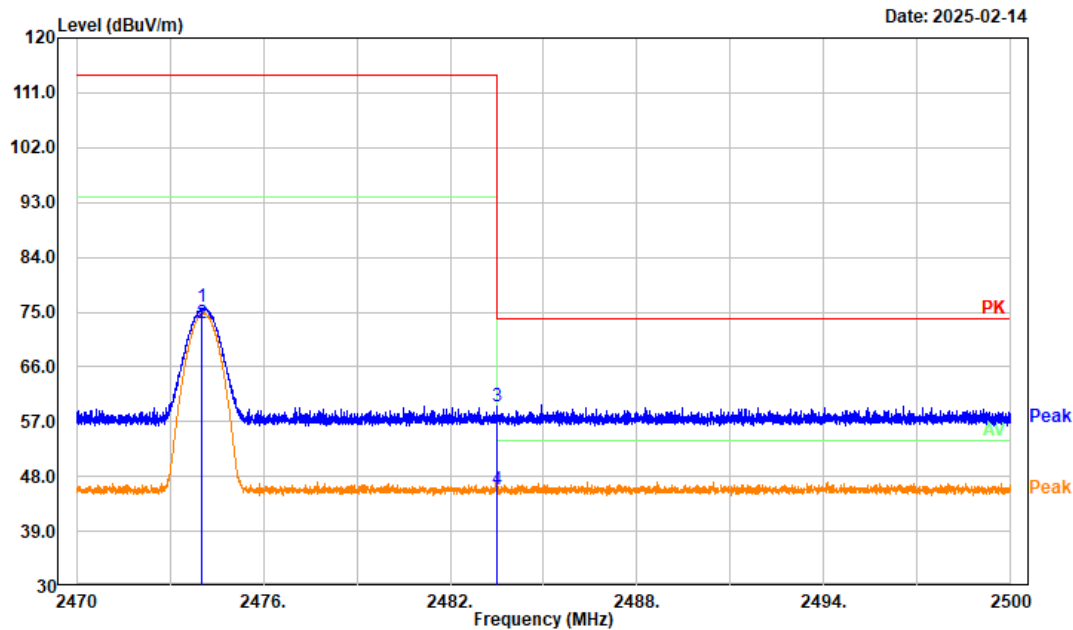


Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Vertical
Note: Low Channel 2426MHz



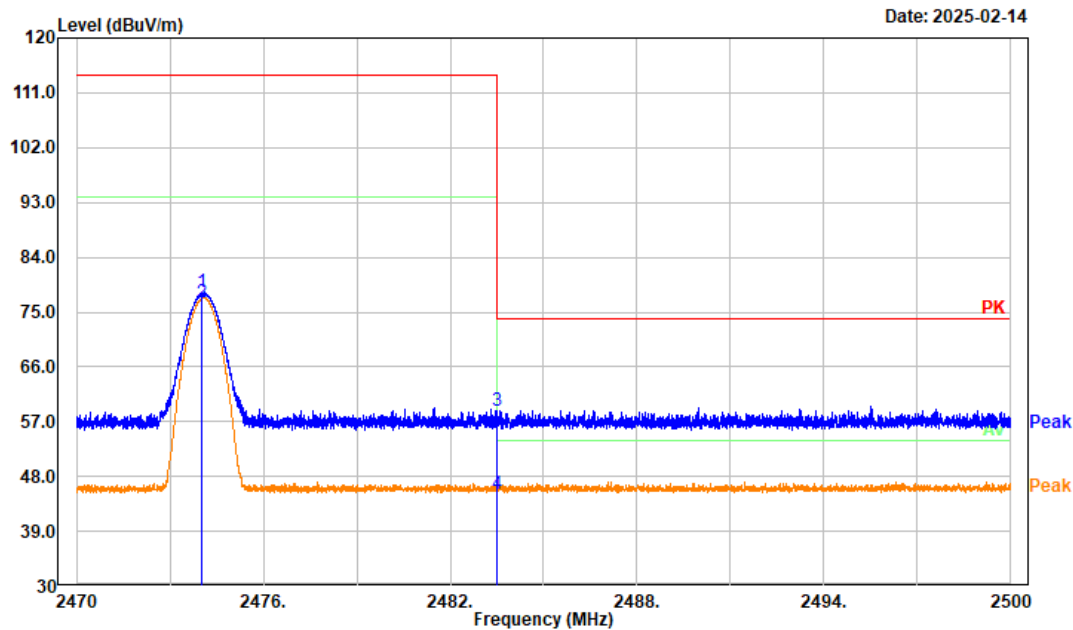
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2400.000	26.81	31.58	58.39	74.00	15.61	Peak
2	2400.000	13.43	31.58	45.01	54.00	8.99	Average
3	2426.000	45.31	31.57	76.88	113.98	37.10	Peak
4	2426.000	42.53	31.57	74.10	93.98	19.88	Average

Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Horizontal
Note: High Channel 2474MHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2474.000	44.21	31.60	75.81	113.98	38.17	Peak
2	2474.000	41.60	31.60	73.20	93.98	20.78	Average
3	2483.500	27.84	31.62	59.46	74.00	14.54	Peak
4	2483.500	14.27	31.62	45.89	54.00	8.11	Average

Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Vertical
Note: High Channel 2474MHz

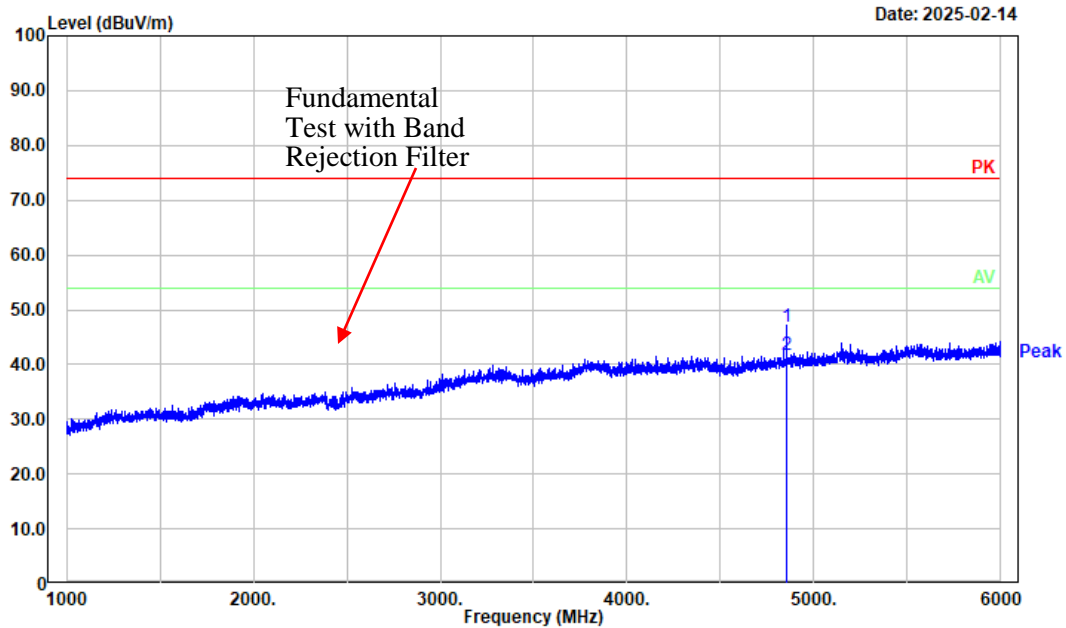


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	2474.000	46.64	31.60	78.24	113.98	35.74	Peak
2	2474.000	44.94	31.60	76.54	93.98	17.44	Average
3	2483.500	27.28	31.62	58.90	74.00	15.10	Peak
4	2483.500	13.48	31.62	45.10	54.00	8.90	Average

Worst radiation spurious emissions margin test plots

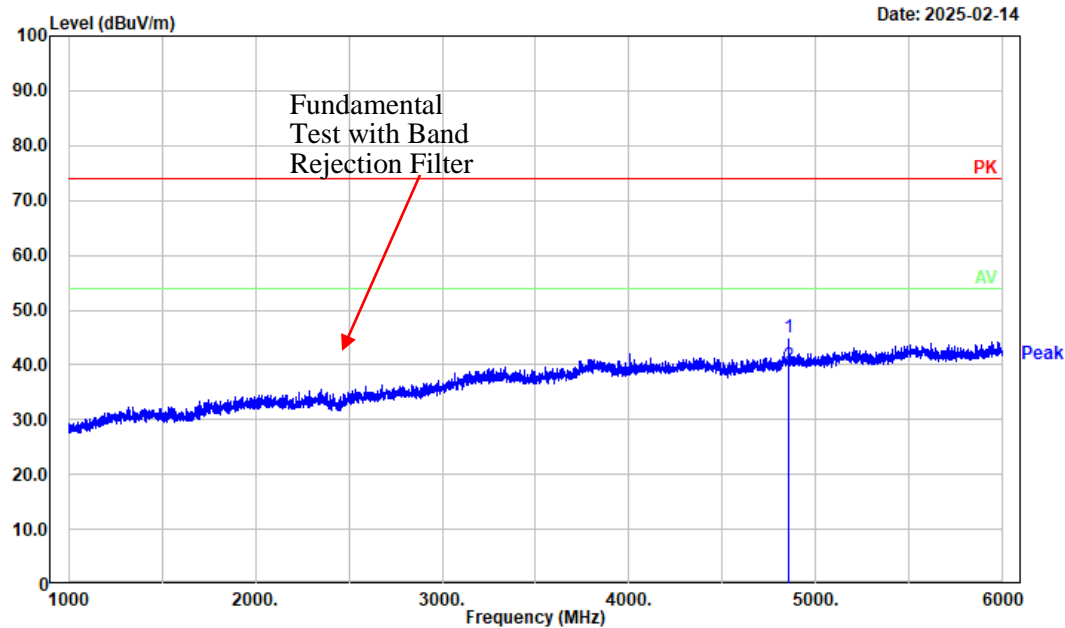
Note: for 18 – 25 GHz range, only report the worst case mode

Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: horizontal
Note: Low Channel 2426MHz



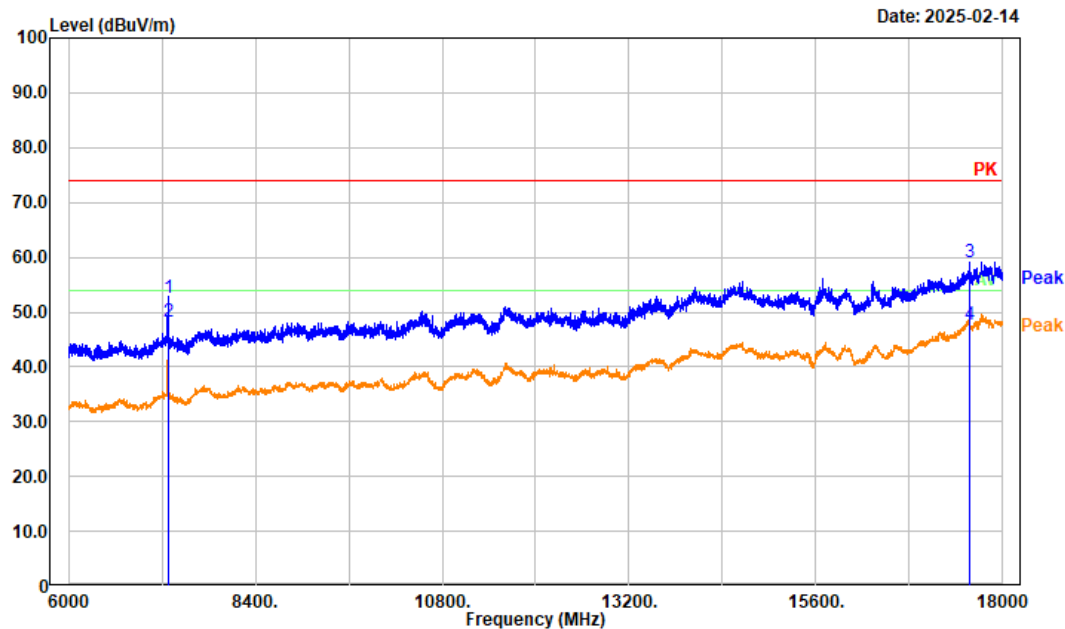
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	4852.000	37.55	9.22	46.77	74.00	27.23	Peak
2	4852.000	32.63	9.22	41.85	54.00	12.15	Average

Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: vertical
Note: Low Channel 2426MHz



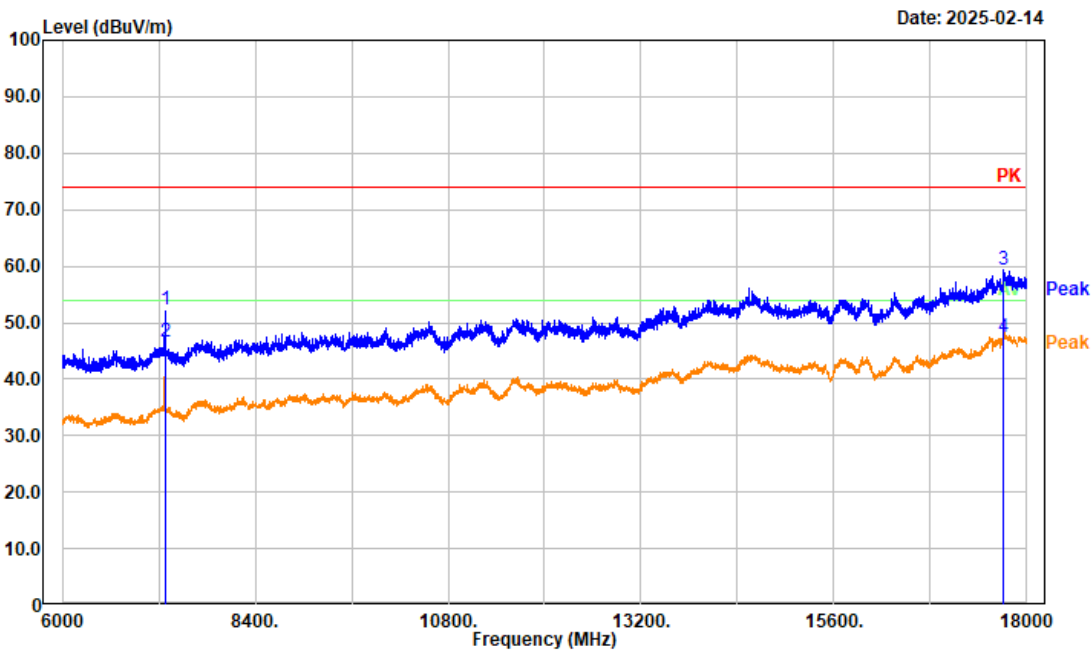
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	4852.000	35.77	9.22	44.99	74.00	29.01	Peak
2	4852.000	30.54	9.22	39.76	54.00	14.24	Average

Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: horizontal
Note: Low Channel 2426MHz



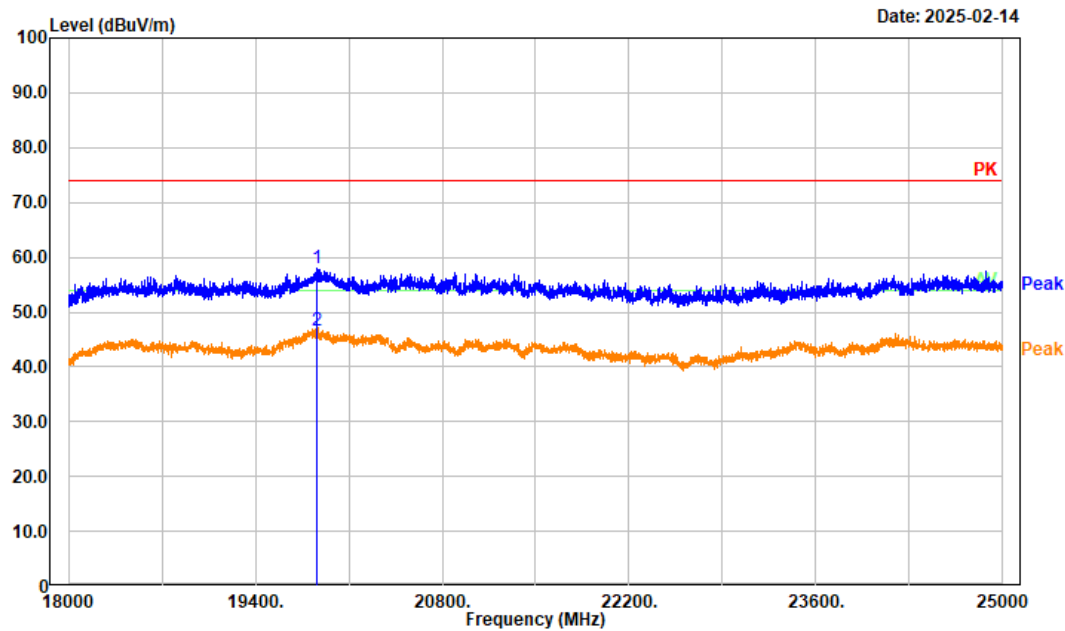
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	7278.000	41.05	11.44	52.49	74.00	21.51	Peak
2	7278.000	36.86	11.44	48.30	54.00	5.70	Average
3	17565.600	35.36	23.81	59.17	74.00	14.83	Peak
4	17565.600	23.84	23.81	47.65	54.00	6.35	Average

Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: vertical
Note: Low Channel 2426MHz



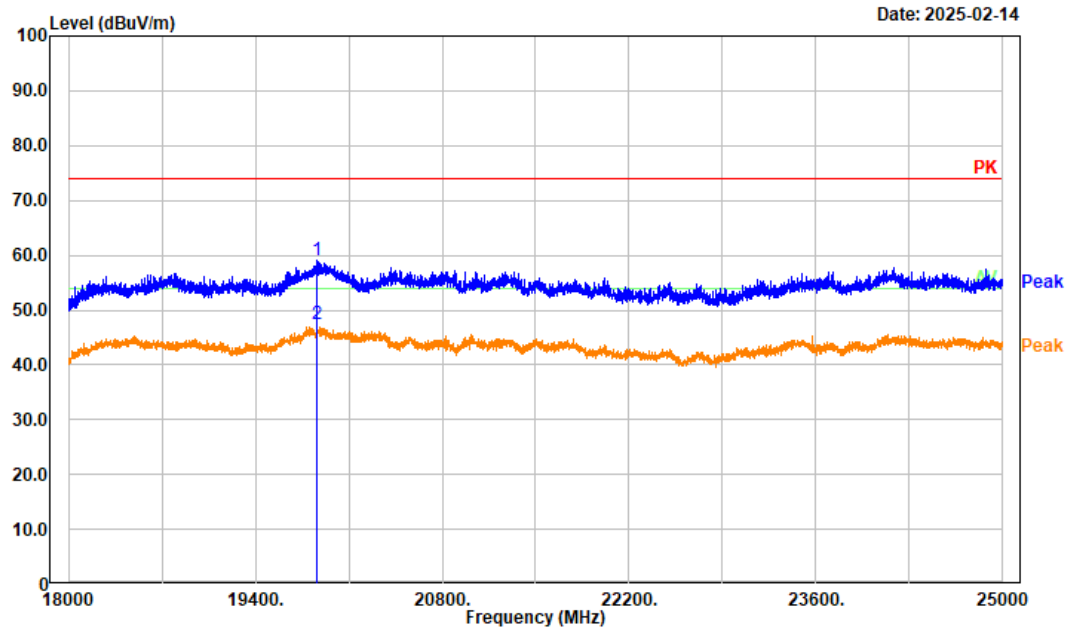
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	7278.000	40.87	11.44	52.31	74.00	21.69	Peak
2	7278.000	35.11	11.44	46.55	54.00	7.45	Average
3	17714.400	33.51	25.82	59.33	74.00	14.67	Peak
4	17714.400	21.69	25.82	47.51	54.00	6.49	Average

Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Horizontal
Note: Low Channel 2426MHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	19863.400	50.15	7.96	58.11	74.00	15.89	Peak
2	19863.400	38.73	7.96	46.69	54.00	7.31	Average

Project No.: 2403A110963E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec AV trace RBW:1MHz; VBW:5kHz; SWT:auto
Polarization: Vertical
Note: Low Channel 2426MHz



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	19863.400	51.15	7.96	59.11	74.00	14.89	Peak
2	19863.400	39.53	7.96	47.49	54.00	6.51	Average

4.3 20 dB Emission Bandwidth:

Sample Number	2W4P-1	Test Date:	2025/2/14
Test Site:	966-1	Test Mode:	Transmitting
Tester:	Mack Huang	Test Result:	N/A

Environmental Conditions:

Temperature: (°C)	23.6	Relative Humidity: (%)	49	ATM Pressure: (kPa)	101.2
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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	2024/4/1	2025/3/31
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2025/1/10	2026/1/9
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2025/1/10	2026/1/9

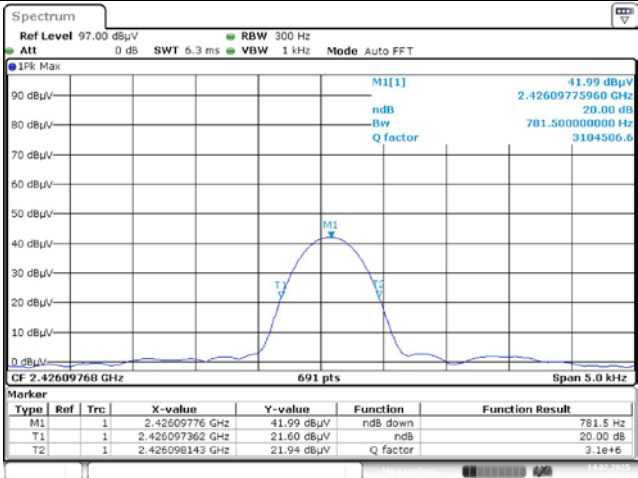
** **Statement of Traceability:** China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Test Data:

Test Frequency (MHz)	20 dB Bandwidth (Hz)
2426	782
2450	789
2474	782

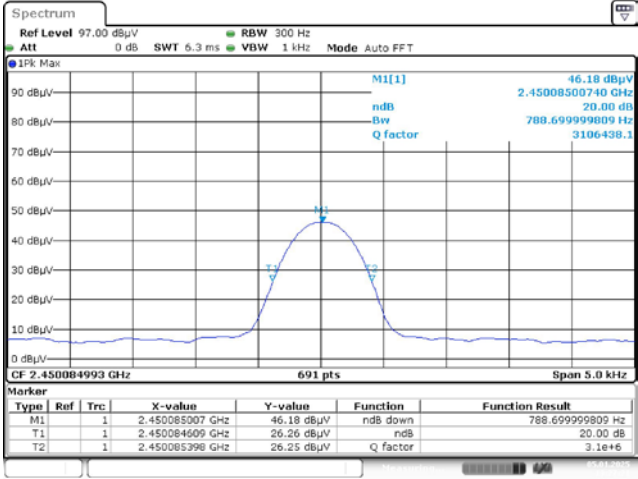
20dB Emission Bandwidth

2426MHz



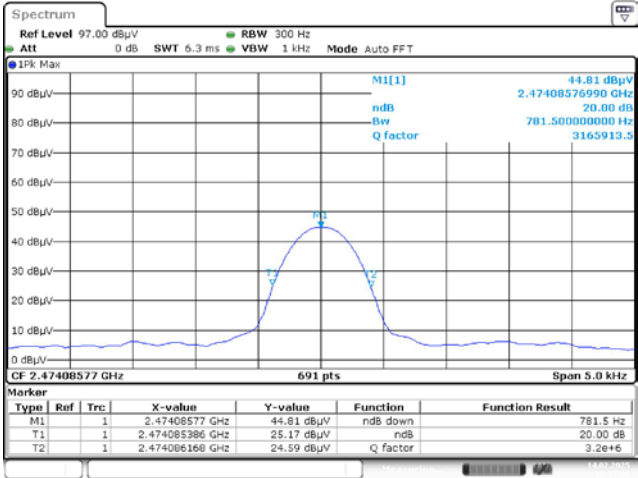
ProjectNo.:2403A110963E-RF Tester:Mark Huang
Date: 14.FEB.2025 15:06:33

2450MHz



ProjectNo.:2403A110963E-RF Tester:Mark Huang
Date: 14.FEB.2025 13:27:21

2474MHz



ProjectNo.:2403A110963E-RF Tester:Mark Huang
Date: 14.FEB.2025 15:15:59

5. RF EXPOSURE EVALUATION

5.1.1 Applicable Standard

FCC §1.1307(b)(3)(i)(A)

a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

5.1.2 Procedure

According to 447498 D04 Interim General RF Exposure Guidance v01, clause 2.1.2- 1-mW Test Exemption:

Per §1.1307(b)(3)(i)(A), a single RF source is *exempt RF device* (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

5.1.3 Measurement Result

Frequency (MHz)	Maximum Power		1-mW Test Exemption
	dBm	mW	
2405-2475	-17.9	0.016	Compliant

Note:

1. This device maximum E-Field level is 78.61 dBμV/m at 3m, so the EIRP power is -16.59 dBm, Antenna Gain is 1.31 dBi, so the Maximum Conduct Power is -17.9 dBm.
2. EIRP (dBm) = Field Strength of Fundamental(dBuV/m)-95.2 (dB),
Maximum Conduct Power (dBm)= EIRP (dBm)- Antenna Gain(dBi)

Result: Compliant. RF Exposure is exemption.

6. EUT PHOTOGRAPHS

Please refer to the attachment 2403A110963E-EXP EUT EXTERNAL PHOTOGRAPHS and 2403A110963E-INP EUT INTERNAL PHOTOGRAPHS

7. TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2403A110963E-00A-TSP TEST SETUP PHOTOGRAPHS.

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