



中认信通
CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: Shenzhen Muxin Intelligent Technology Co., Ltd.

Address: 2H, Building 1, Tingwei Industrial Park, No.6 Liufang Road, Block 67, Xingdong Community, Xin'an Subdistrict, Bao'an District, Shenzhen, China

FCC ID: 2BFNC-MM300

Product Name: AlwaysOn 4G Module

Standard(s): FCC Part 15B
ANSI C63.4-2014

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: 2603U29925E-RF-00B

Date Of Issue: 2026/7/9

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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 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.

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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.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2603U29925E-RF-00B	Original Report	2026/7/9

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	AlwaysOn 4G Module
Trade Name:	TERRAMOW
EUT Model:	MM300
Highest Operation Frequency[▲]:	2690MHz
Equipment Class:	Class B
Rated Input Voltage:	DC 5V
Sample Number:	3NW7-1
EUT Received Date:	2026/6/12
EUT Received Status:	Good

Accessory Information:

Accessory Description	Manufacturer	Model	Parameters
/	/	/	/

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Typical Use Mode, which was provided by the manufacturer. Test Mode: M1: Data transfer & WWAN Receiving
Equipment Modifications:	No
EUT Exercise Software:	No

1.2.2 Support Equipment List and Details

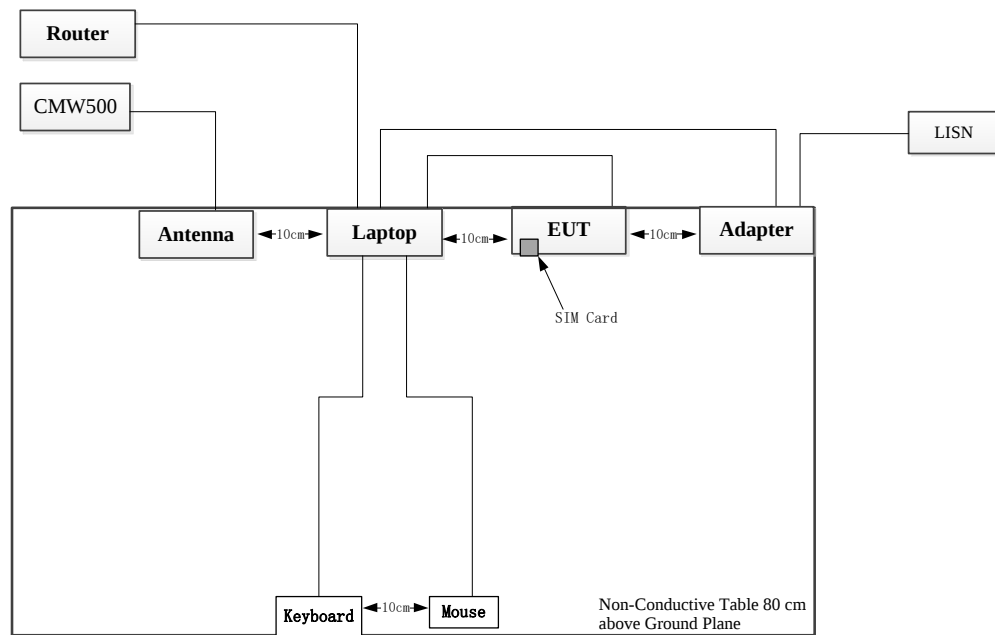
Manufacturer	Description	Model	Serial Number
Lenovo	Adapter	ADLX65NLC3A	SA10J20161
Lenovo	Laptop	T4610S	00331-10000-00001-AA729
iFoved	3D Opticla Mouse	SPT6393	SWD2414HR10K04
Unknow	Keyboard	SPT6334	SWB2310HD50K02
HuaWei	Router	DU8245W	21530355077SH3000183
R&S	Wideband Radio Communication Tester	CMW500	143458
InHand	Antenna	SMA	AANT090033

1.2.3 Support Cable List and Details

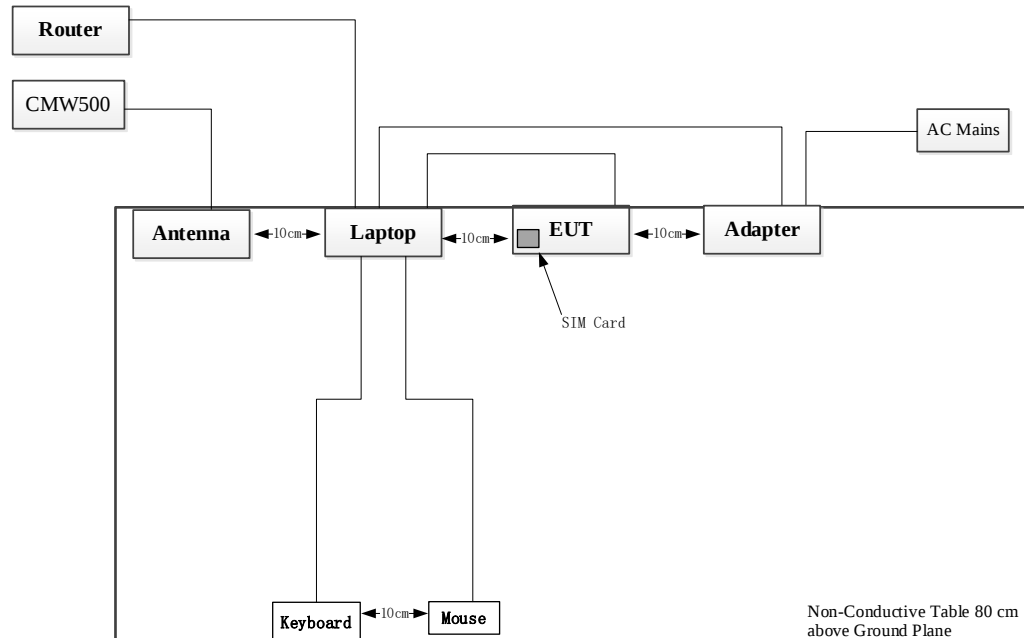
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Keyboard Cable	No	No	1.2	Keyboard	Laptop
Mouse Cable	No	No	1.2	Mouse	Laptop
Netword Cable	No	No	1.5	Router	Laptop
Coaxial cable	Yes	Yes	10	Antenna	CMW500

1.2.4 Block Diagram of Test Setup

Conducted Emissions:



Radiated 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
Unwanted Emissions, radiated	30M~200MHz: 3.89 dB, 200M~1GHz: 5.09 dB, 1G~6GHz: 5.12 dB, 6G~18GHz: 5.73 dB, 18G~26.5G: 5.47 dB, 26.5G~40G: 5.63 dB
Temperature	±1 °C
Humidity	±5%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

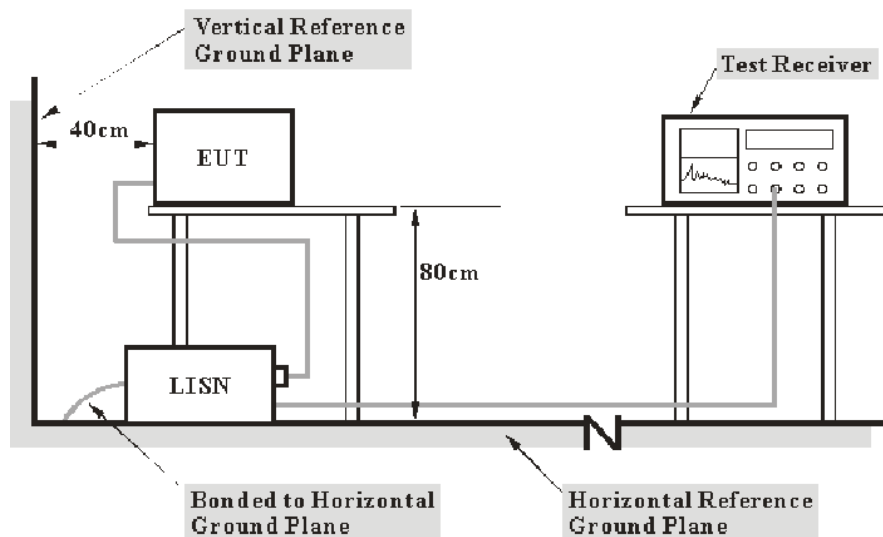
2. SUMMARY OF TEST RESULTS

Standard(s) Section	Description of Test	Result
§15.107	Conducted Emissions	Compliant
§15.109	Radiated Emissions	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 Conducted Emissions

3.1.1 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 C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

3.1.2 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

3.1.3 Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the first LISN and the other support equipments were connected to the outlet of the second LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT, the report shall list the six emissions with the smallest margin relative to the limit, unless the margin is greater than 20 dB.

All data was recorded in the Quasi-peak and average detection mode.

The report shall list the six emissions with the smallest margin relative to the limit, unless the margin is greater than 20 dB.

3.1.4 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

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

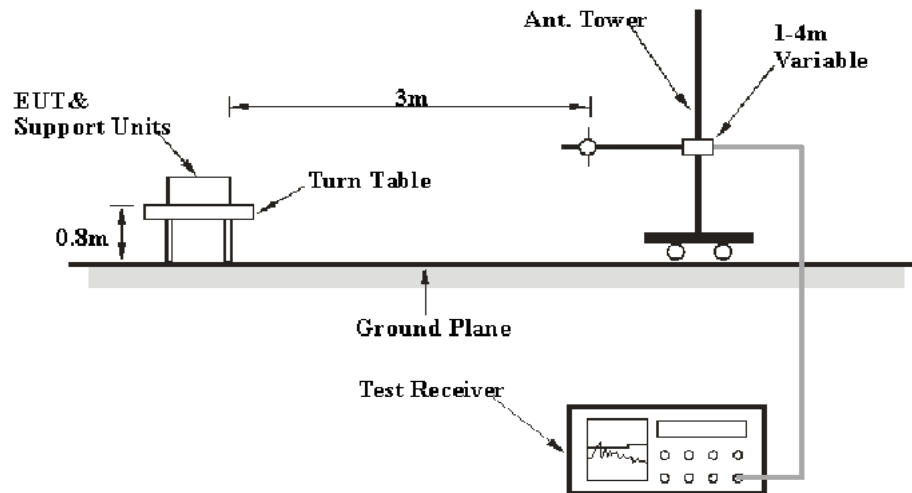
The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

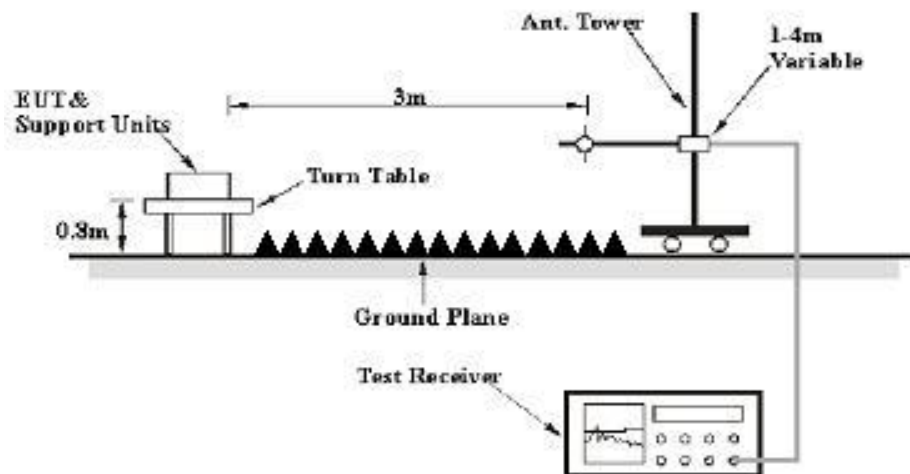
3.2 Radiation Emissions

3.2.1 EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission tests were performed in the 3 meters chamber, using the setup accordance with the ANSI C63.4-2014. The specification used was with the FCC Part 15 B Class B limits.

3.2.2 EMI Test Receiver Setup

The system was investigated from 30 MHz to 14 GHz.

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

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	120 kHz	500 kHz	/	PK
	/	/	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	Peak
	1 MHz	Reduced video bandwidth	/	AVG

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

3.2.3 Test Procedure

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

The data was recorded in the Quasi-peak detection mode for below 1 GHz, peak and average detection mode above 1 GHz.

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

3.2.4 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

4. TEST DATA AND RESULTS

4.1 Conducted Emissions

Sample Number:	3NW7-1	Test Date:	2026/6/17
Test Site:	CE	Test Mode:	M1
Tester:	Ella Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	22.9	Relative Humidity: (%)	60	ATM Pressure: (kPa)	100.2
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101132	2025/9/26	2026/9/25
R&S	EMI Test Receiver	ESR3	103104	2026/5/8	2027/5/7
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2025/11/10	2026/11/9
Audix	Test Software	E3	190306 (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.: 2603U29925E-RF

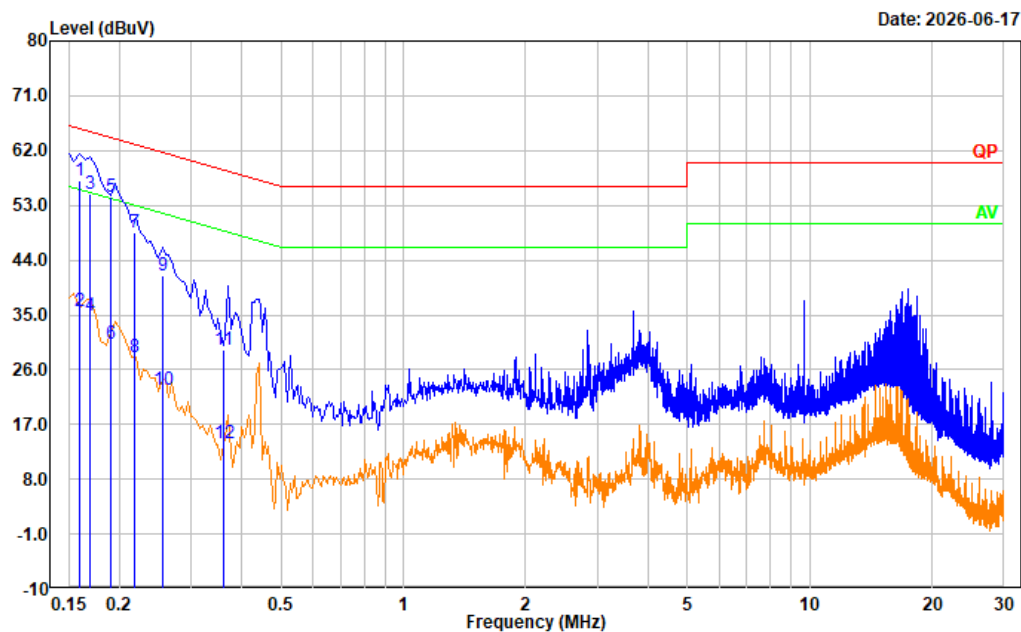
Tester: Ella Huang

Port: Line

Condition: RBW:9kHz

Test Mode: M1

Note:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.159	46.82	10.35	57.17	65.49	8.32	QP
2	0.159	25.19	10.35	35.54	55.49	19.95	Average
3	0.170	44.50	10.29	54.79	64.97	10.18	QP
4	0.170	24.61	10.29	34.90	54.97	20.07	Average
5	0.190	44.24	10.17	54.41	64.04	9.63	QP
6	0.190	20.01	10.17	30.18	54.04	23.86	Average
7	0.217	38.40	10.13	48.53	62.92	14.39	QP
8	0.217	17.89	10.13	28.02	52.92	24.90	Average
9	0.255	31.26	10.17	41.43	61.58	20.15	QP
10	0.255	12.61	10.17	22.78	51.58	28.80	Average
11	0.361	18.91	10.27	29.18	58.70	29.52	QP
12	0.361	3.60	10.27	13.87	48.70	34.83	Average

Project No.: 2603U29925E-RF

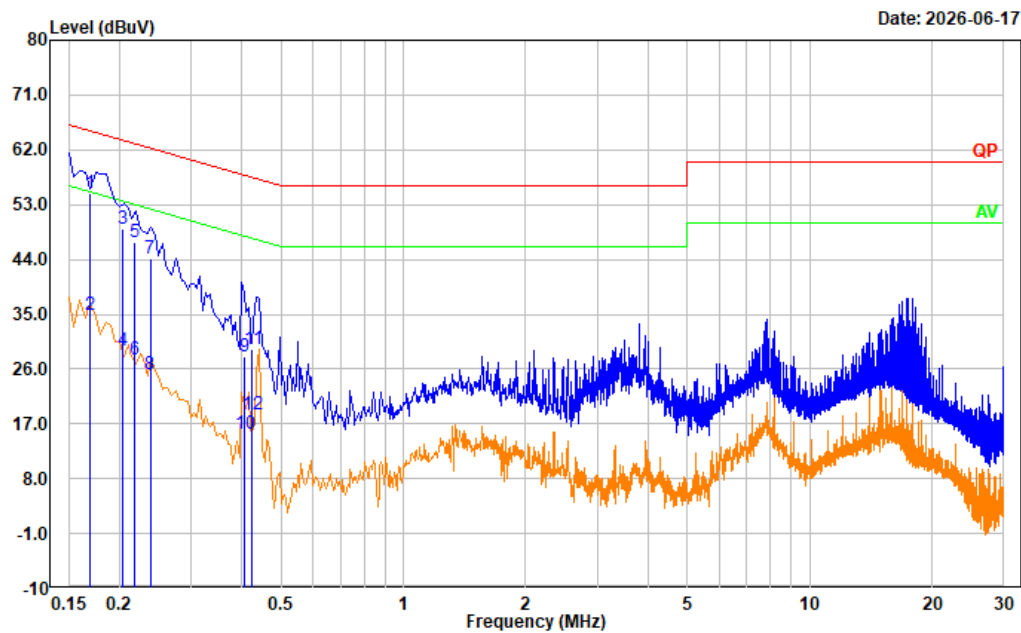
Tester: Ella Huang

Port: neutral

Condition: RBW:9kHz

Test Mode: M1

Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.170	44.58	10.37	54.95	64.96	10.01	QP
2	0.170	24.63	10.37	35.00	54.96	19.96	Average
3	0.204	38.82	10.31	49.13	63.46	14.33	QP
4	0.204	18.83	10.31	29.14	53.46	24.32	Average
5	0.217	36.64	10.31	46.95	62.92	15.97	QP
6	0.217	17.25	10.31	27.56	52.92	25.36	Average
7	0.238	33.77	10.31	44.08	62.16	18.08	QP
8	0.238	14.91	10.31	25.22	52.16	26.94	Average
9	0.406	17.71	10.31	28.02	57.73	29.71	QP
10	0.406	4.95	10.31	15.26	47.73	32.47	Average
11	0.425	19.05	10.31	29.36	57.35	27.99	QP
12	0.425	8.32	10.31	18.63	47.35	28.72	Average

4.2 Radiated Emissions

4.2.1 30 MHz – 1 GHz

Sample Number:	3NW7-1	Test Date:	2026/7/3
Test Site:	966-1	Test Mode:	M1
Tester:	Jin He	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.3	Relative Humidity: (%)	62	ATM Pressure: (kPa)	100.3
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Test Equipment List and Details:

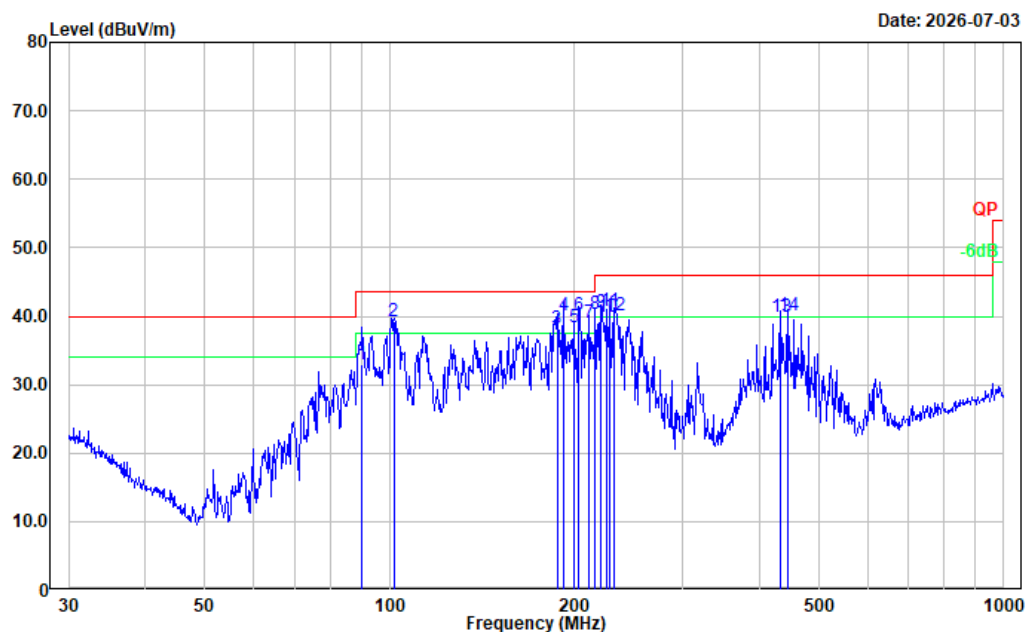
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2023/12/1	2026/11/30
R&S	EMI Test Receiver	ESR3	102724	2026/2/27	2027/2/26
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0100-03	2025/11/10	2026/11/9
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0370-01	2025/11/10	2026/11/9
XQY	Coaxial Cable	XQY-CMR400UF-NJ-NJ-7M	24056379	2026/5/21	2027/5/20
Sonoma	Amplifier	310N	186165	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:

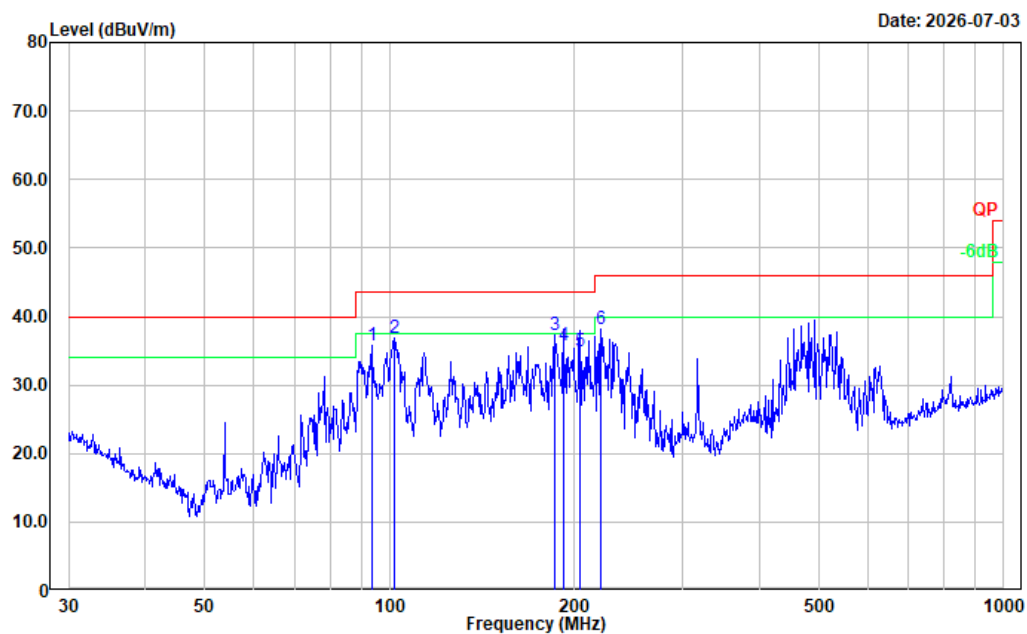
Please refer to the below table and plots.

Project No.: 2603U29925E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: horizontal
Note: M1



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	89.824	49.84	-16.96	32.88	43.50	10.62	QP
2	101.505	53.08	-13.91	39.17	43.50	4.33	QP
3	187.265	51.67	-13.60	38.07	43.50	5.43	QP
4	192.006	53.43	-13.38	40.05	43.50	3.45	QP
5	199.286	50.60	-12.32	38.28	43.50	5.22	QP
6	203.523	52.90	-12.86	40.04	43.50	3.46	QP
7	211.527	52.90	-13.81	39.09	43.50	4.41	QP
8	216.024	54.01	-13.69	40.32	46.00	5.68	QP
9	220.617	54.01	-13.49	40.52	46.00	5.48	QP
10	225.308	53.10	-13.26	39.84	46.00	6.16	QP
11	227.691	53.89	-13.14	40.75	46.00	5.25	QP
12	232.532	53.09	-12.92	40.17	46.00	5.83	QP
13	432.546	46.81	-6.89	39.92	46.00	6.08	QP
14	444.851	46.80	-6.64	40.16	46.00	5.84	QP

Project No.: 2603U29925E-RF
Tester: Jin He
Condition: RBW:120 kHz VBW:500 kHz
Polarization: vertical
Note: M1



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	93.440	52.10	-16.22	35.88	43.50	7.62	Peak
2	101.644	50.62	-13.87	36.75	43.50	6.75	Peak
3	185.788	50.84	-13.60	37.24	43.50	6.26	Peak
4	191.806	49.23	-13.38	35.85	43.50	7.65	QP
5	203.985	47.85	-12.96	34.89	43.50	8.61	QP
6	220.617	51.59	-13.49	38.10	46.00	7.90	Peak

4.2.2 Above 1 GHz:

Sample Number:	3NW7-1	Test Date:	2026/7/3
Test Site:	966-2	Test Mode:	M1
Tester:	Peter Rong	Test Result:	Pass

Environmental Conditions:

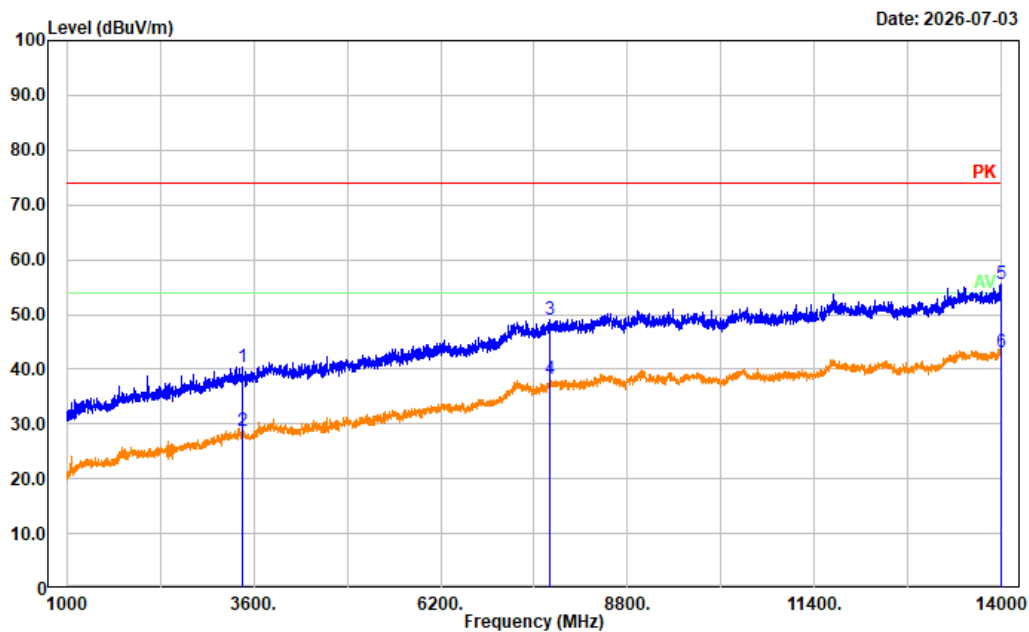
Temperature: (°C)	22.9	Relative Humidity: (%)	57	ATM Pressure: (kPa)	100.3
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Test Equipment List and Details:

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	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
Decentest	Multiplex Switch Test Control Set	DT7220SCU	DQ77925	2025/8/4	2026/8/3
Decentest	Filter Switch Unit	DT7220FSU	DQ77928	2025/8/4	2026/8/3

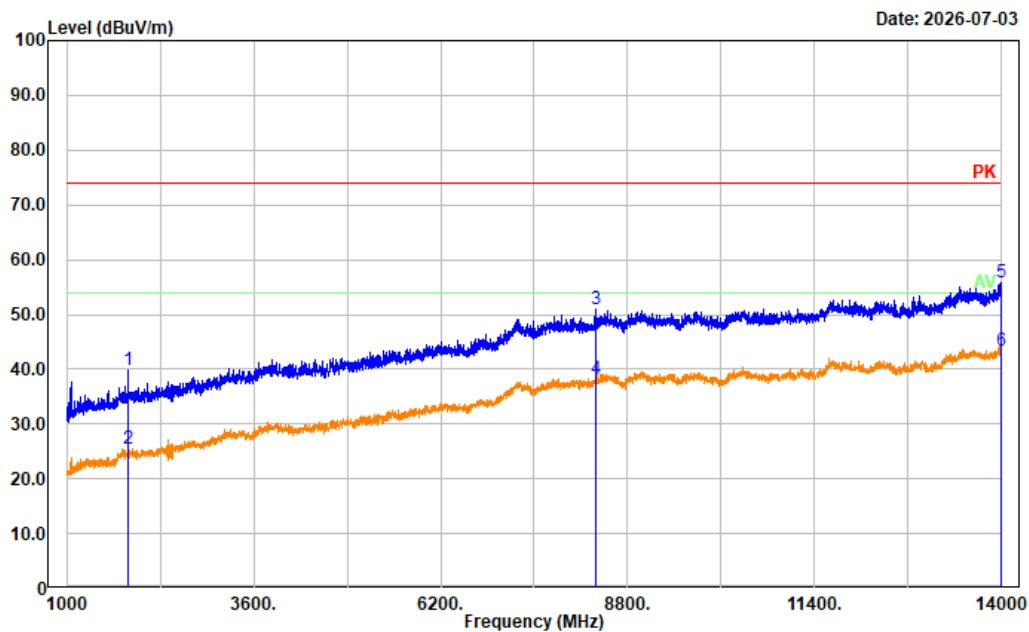
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

Project No: 2603U29925E-RF
Tester: Peter Rong
Condition: PK trace RBW:1MHz; VBW:3MHz; AV trace RBW:1MHz; VBW:5kHz
Polarization: horizontal
Note: M1



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	3444.000	38.89	1.59	40.48	74.00	33.52	Peak
2	3444.000	27.19	1.59	28.78	54.00	25.22	Average
3	7726.200	38.37	10.68	49.05	74.00	24.95	Peak
4	7726.200	27.44	10.68	38.12	54.00	15.88	Average
5	13994.800	37.94	17.57	55.51	74.00	18.49	Peak
6	13994.800	25.54	17.57	43.11	54.00	10.89	Average

Project No: 2603U29925E-RF
Tester: Peter Rong
Condition: PK trace RBW:1MHz; VBW:3MHz; AV trace RBW:1MHz; VBW:5kHz
Polarization: vertical
Note: M1



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	1860.600	43.23	-3.51	39.72	74.00	34.28	Peak
2	1860.600	28.87	-3.51	25.36	54.00	28.64	Average
3	8352.800	38.38	12.47	50.85	74.00	23.15	Peak
4	8352.800	25.64	12.47	38.11	54.00	15.89	Average
5	13997.400	38.18	17.59	55.77	74.00	18.23	Peak
6	13997.400	25.77	17.59	43.36	54.00	10.64	Average

5. EUT PHOTOGRAPHS

Please refer to the attachment 2603U29925E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2603U29925E-RF-INP EUT INTERNAL PHOTOGRAPHS.

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2603U29925E-RF-00B-TSP TEST SETUP PHOTOGRAPHS.

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