



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: Iradio Electronics Co., Ltd.

Address: No.16 Daxiamei Industrial Area, Nan'an, Quanzhou City, China

FCC ID: Y23UV-5118PLUS

Product Name: Two-way Radio

Standard(s): 47 CFR Part 15 Subpart B
ANSI C63.4-2014

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

Report Number: CR230849681-00A

Date Of Issue: 2023/9/18

Reviewed By: Calvin Chen

Title: RF Engineer

Approved By: Sun Zhong

Title: Manager

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

No. 113, Pingkang Road, Dalang Town, Dongguan,
Guangdong, China

Tel: +86-769-82016888

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.

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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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR230849681-00A	Original Report	2023/9/18

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Type:	Two-way Radio
Trade Name:	IRADIO
EUT Model:	UV-5118PLUS
Multiple Models:	RADTEL RT-890
Highest Operation Frequency:	480MHz
Rated Input Voltage:	DC 7.4V from battery or DC 5V from adapter for charging or AC 100-240V 50~60Hz from charger base charging
Serial Number:	2B6T-1
EUT Received Date:	2023/9/4
EUT Received Status:	Good
Note: The Multiple models are electrically identical with the test model. Please refer to the declaration letter for more detail, which was provided by manufacturer.	

Accessory Information:

Accessory Description	Manufacturer	Model
Charger Base	/	/

Operation Frequency and Test Channel:

Operation Modes	Operation Frequency Range (MHz)	Test Frequency (MHz)
Scanning	136-174/400-480	/
VHF Receiving	136-174	136.0125, 155, 173.9875
UHF Receiving	400-480	400.0125, 440, 479.9875

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: Scanning receiver(scanning mode) M2: Receiver at 136.0125 MHz M3: Receiver at 155 MHz M4: Receiver at 173.9875 MHz M5: Receiver at 400.0125 MHz M6: Receiver at 440 MHz M7: Receiver at 479.9875 MHz
Equipment Modifications:	No
EUT Exercise Software:	No

1.2.2 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Unknown	ANT	Unknown	Unknown
Agilent	Signal Generator	N5182B	MY51350144

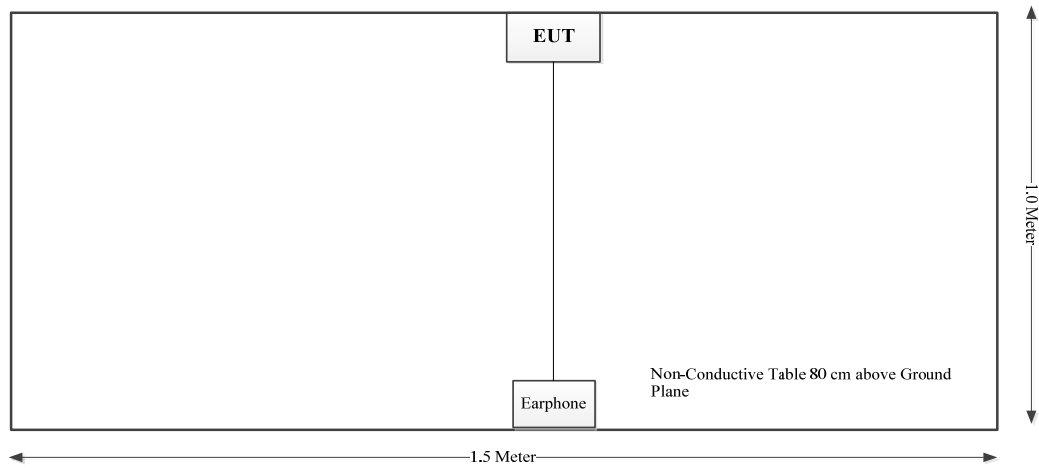
1.2.3 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Earphone Cable	No	No	0.8	EUT	Earphone
Coaxial Cable	No	No	10	Signal Generator	ANT

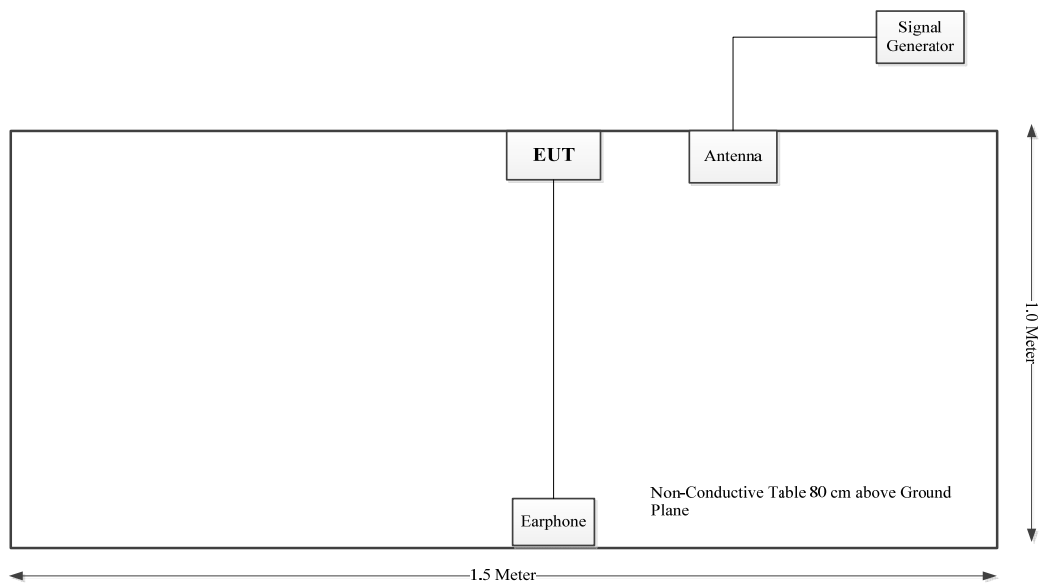
1.2.4 Block Diagram of Test Setup

Radiated emissions:

M1:



M2-M7:



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: 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	±1℃
Humidity	±5%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)
Unwanted Emissions, conducted	±1.26 dB

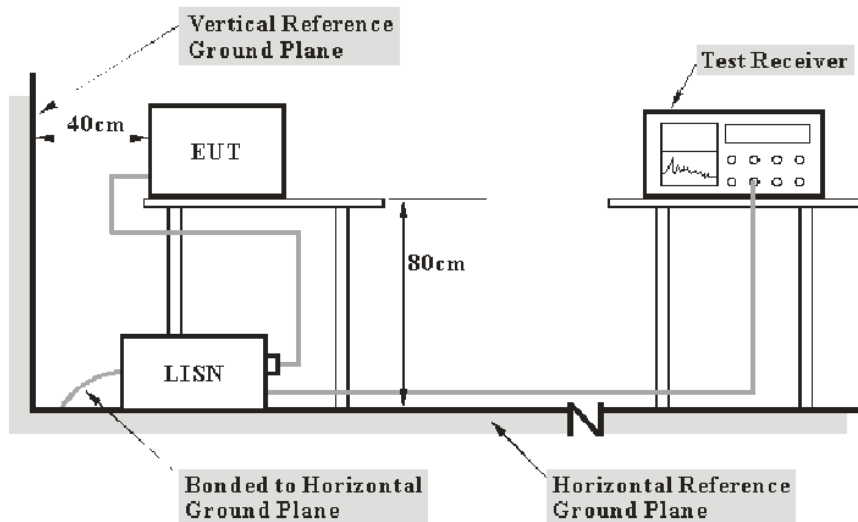
2. SUMMARY OF TEST RESULTS

Standard(s) Section	Description of Test	Result
§15.107	Conducted emissions	Not Applicable
§15.109	Radiated emissions	Compliant
§15.111	Antenna power conduction limits for receivers	Compliant
§15.121(b)	Scanning receivers and frequency converters used with scanning receivers	Compliant

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line 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.

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

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

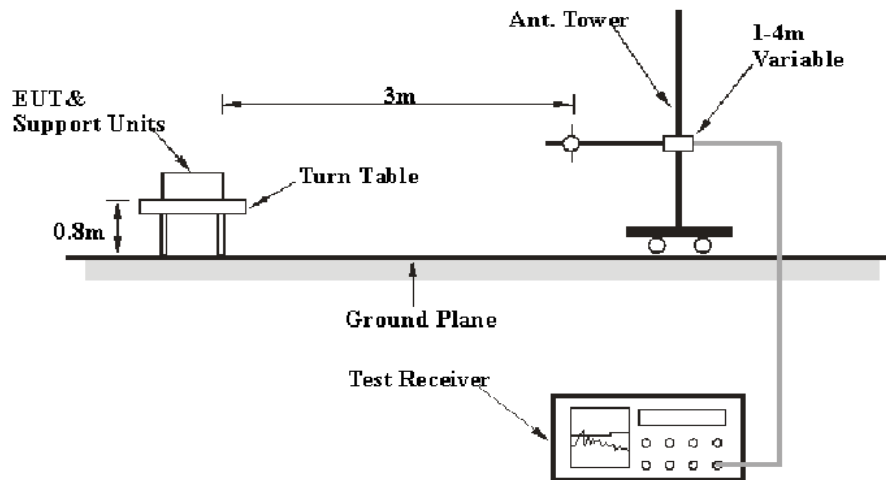
The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

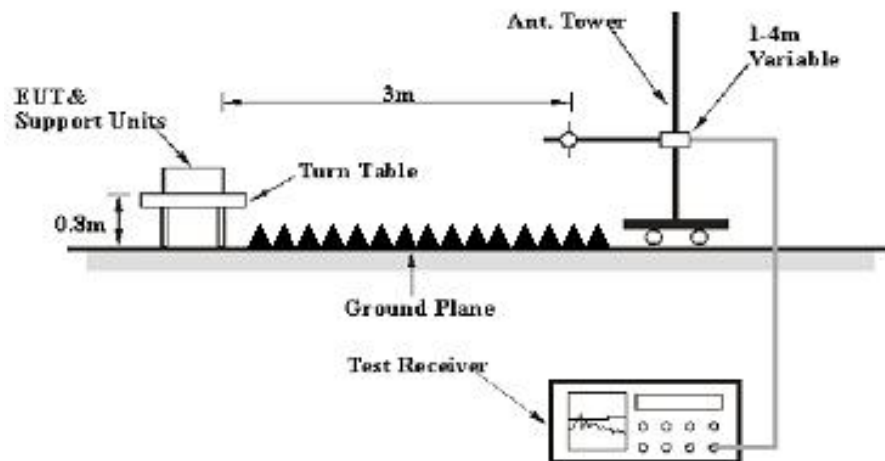
3.2 Radiation Spurious Emissions

3.2.1 EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emissions were performed in the 3 meters chamber test site, 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 5 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	300 kHz	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

During the radiated emissions, the adapter was connected to the first AC floor outlet and the other support equipments were connected to the second AC floor outlet.

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.

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

3.3 Antenna Power Conduction Limits for Receivers

3.3.1 Applicable Standard

FCC§15.111.

(a) In addition to the radiated emission limits, receivers that operate (tune) in the frequency range 30 to 960 MHz and CB receivers that provide terminals for the connection of an external receiving antenna may be tested to demonstrate compliance with the provisions of § 15.109 with the antenna terminals shielded and terminated with a resistive termination equal to the impedance specified for the antenna, provided these receivers also comply with the following: With the receiver antenna terminal connected to a resistive termination equal to the impedance specified or employed for the antenna, the power at the antenna terminal at any frequency within the range of measurements specified in § 15.33 shall not exceed 2.0 nanowatts.

3.3.2 EUT Setup



3.3.3 Test Procedure

EUT antenna port connected to a spectrum analyzer, the traces were recorded as shown on the data pages.

3.4 Scanning Receivers and Frequency Converters Used with Scanning Receivers

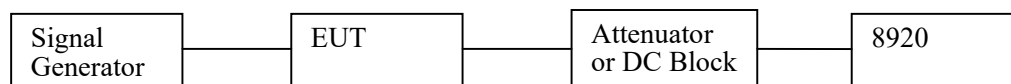
Applicable Standard

FCC §15.121(b).

(b) Except as provided in paragraph (c) of this section, scanning receivers shall reject any signals from the Cellular Radiotelephone Service frequency bands that are 38 dB or lower based upon a 12 dB SINAD measurement, which is considered the threshold where a signal can be clearly discerned from any interference that may be present.

Test Procedure

1. Connected the EUT as the below block diagram;



2. Apply a signal to the EUT antenna port at lowest, middle, highest channel frequencies of the operating band;
3. Adjust the audio output level of the EUT to its rated value with the distortion less than 10%;
4. Adjust the Signal Generator output power to produce 12 dB SINAD without the audio output power dropping by more than 3 dB; These output level of the Signal Generator at each channel frequency is the sensitivity of the EUT;
5. Select the lowest or worst case sensitivity level for all of the bands as the reference sensitivity;
6. Adjust the Signal Generator output to a level of +60 dB above the reference sensitivity obtained in step 5 and its frequency to the frequency point in the Cellular Band;
7. Set the EUT squelch to threshold, the signal required to open the squelch must be lower than the reference sensitivity level;
8. Set the EUT in a scanning mode and allow it to scan through its complete receiving range;
9. If the EUT un-squelched or stopped on any frequency, receiving at this frequency, then adjust the signal generator output level until 12 dB SINAD is produced, this level is the spurious value and the difference between the reference sensitivity and the spurious value is the rejection ratio and must be at least 38 dB;
10. Repeat above procedure at the frequencies 824, 836, 849 MHz for the mobile band, and 869, 881.5 and 894 MHz for the Cellular Base Band.

4. TEST DATA AND RESULTS

4.1 AC Line Conducted Emissions

Not Applicable, the device was powered by battery when operating.

4.2 Radiation Spurious Emissions

Serial Number:	2B6T-1	Test Date:	2023/9/8~2023/9/9
Test Site:	966-2,966-1	Test Mode:	M1-M7
Tester:	Carl Xue, Mack Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.1~25.4	Relative Humidity: (%)	58~68	ATM Pressure: (kPa)	100.1
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Below 1GHz					
Sunol Sciences	Antenna	JB6	A082520-5	2020/10/19	2023/10/18
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2023/7/16	2024/7/15
Sonoma	Amplifier	310N	186165	2023/7/16	2024/7/15
Audix	Test Software	E3	201021 (V9)	N/A	N/A
Above 1GHz					
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12
R&S	Spectrum Analyzer	FSV40	101591	2023/3/31	2024/3/30
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2023/8/6	2024/8/5
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2023/8/6	2024/8/5
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/9	2023/11/8
Audix	Test Software	E3	201021 (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).

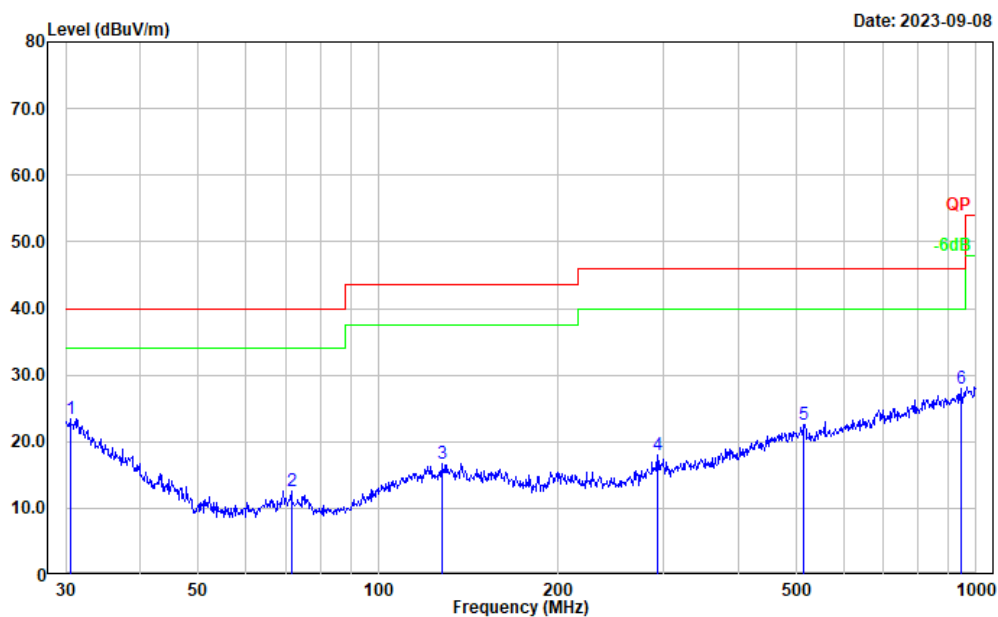
Test Data:

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

1) 30MHz-1GHz:

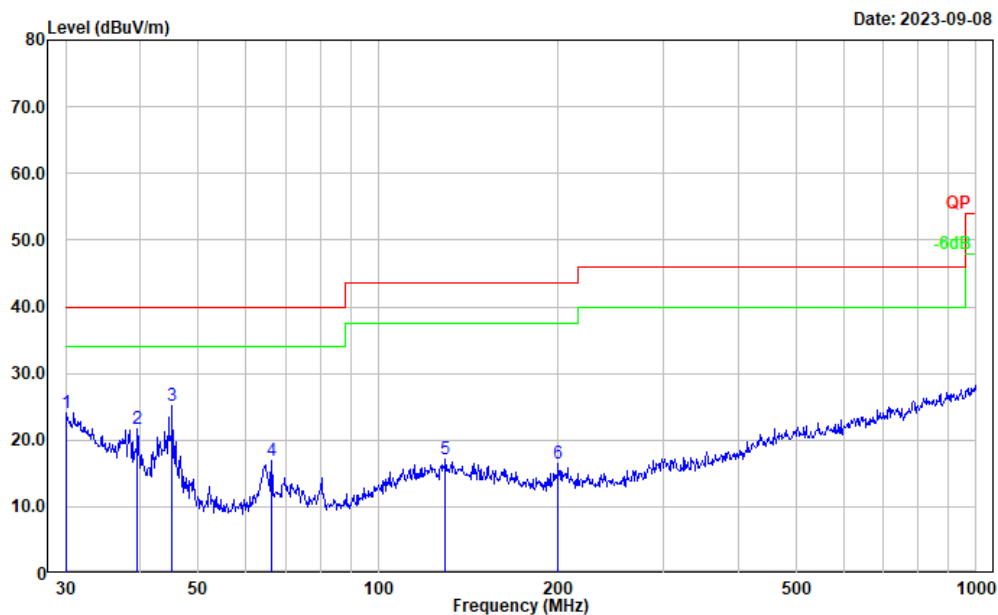
M1:

Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.531	27.44	-4.00	23.44	40.00	16.56	Peak
2	71.581	29.28	-16.64	12.64	40.00	27.36	Peak
3	127.665	27.99	-11.30	16.69	43.50	26.81	Peak
4	293.084	28.88	-10.87	18.01	46.00	27.99	Peak
5	513.633	28.29	-5.82	22.47	46.00	23.53	Peak
6	942.131	28.28	-0.34	27.94	46.00	18.06	Peak

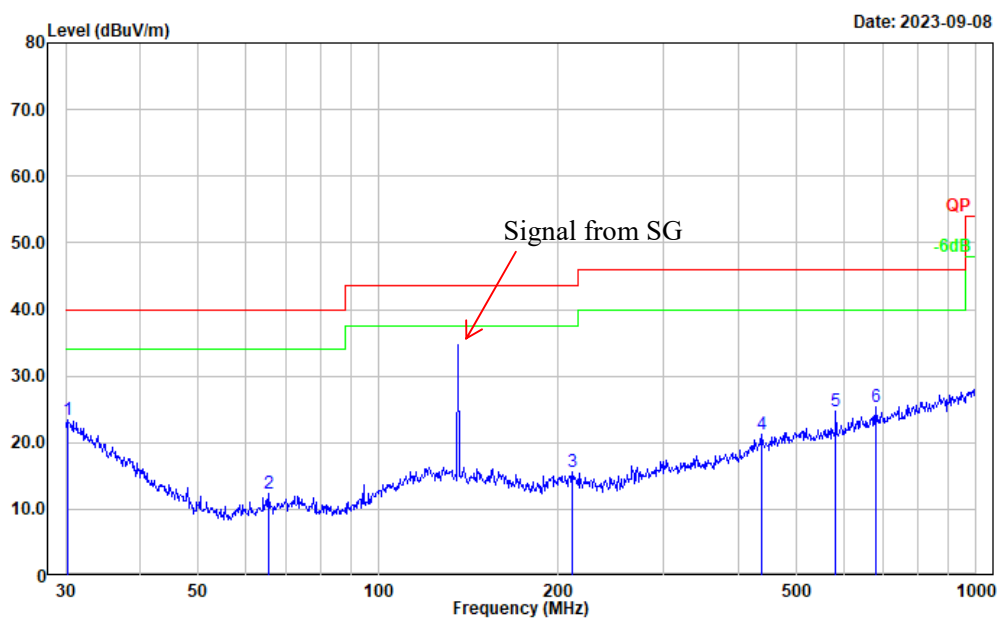
Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	27.77	-3.68	24.09	40.00	15.91	Peak
2	39.576	32.72	-10.98	21.74	40.00	18.26	Peak
3	45.217	39.48	-14.36	25.12	40.00	14.88	Peak
4	66.266	33.73	-16.84	16.89	40.00	23.11	Peak
5	129.468	28.34	-11.28	17.06	43.50	26.44	Peak
6	199.986	28.72	-12.21	16.51	43.50	26.99	Peak

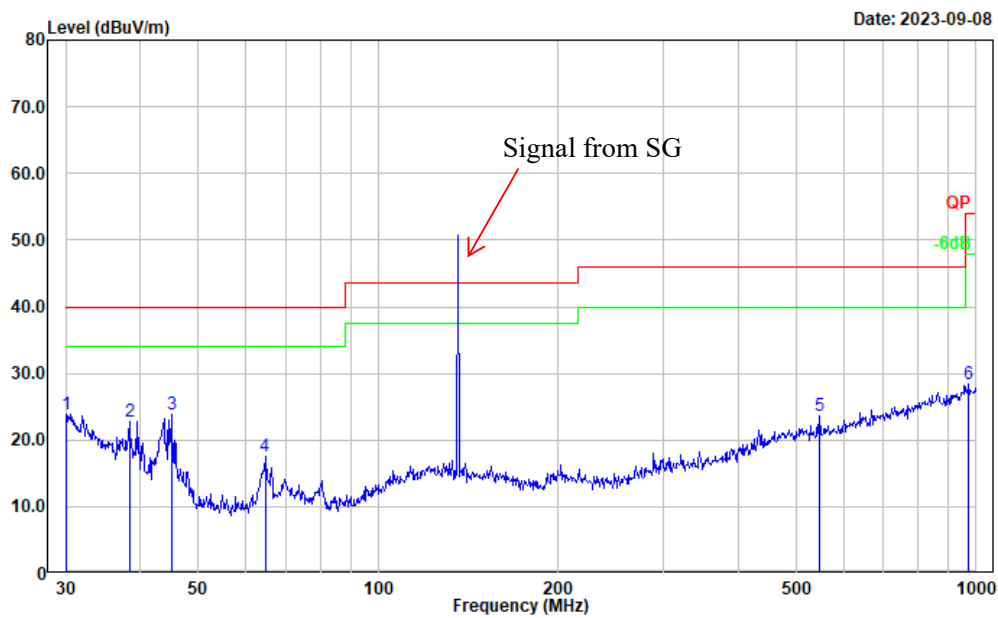
M2:

Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.317	27.22	-3.85	23.37	40.00	16.63	Peak
2	65.573	29.28	-16.90	12.38	40.00	27.62	Peak
3	211.527	28.19	-12.52	15.67	43.50	27.83	Peak
4	438.655	28.53	-7.31	21.22	46.00	24.78	Peak
5	582.743	30.17	-5.49	24.68	46.00	21.32	Peak
6	679.960	29.06	-3.76	25.30	46.00	20.70	Peak

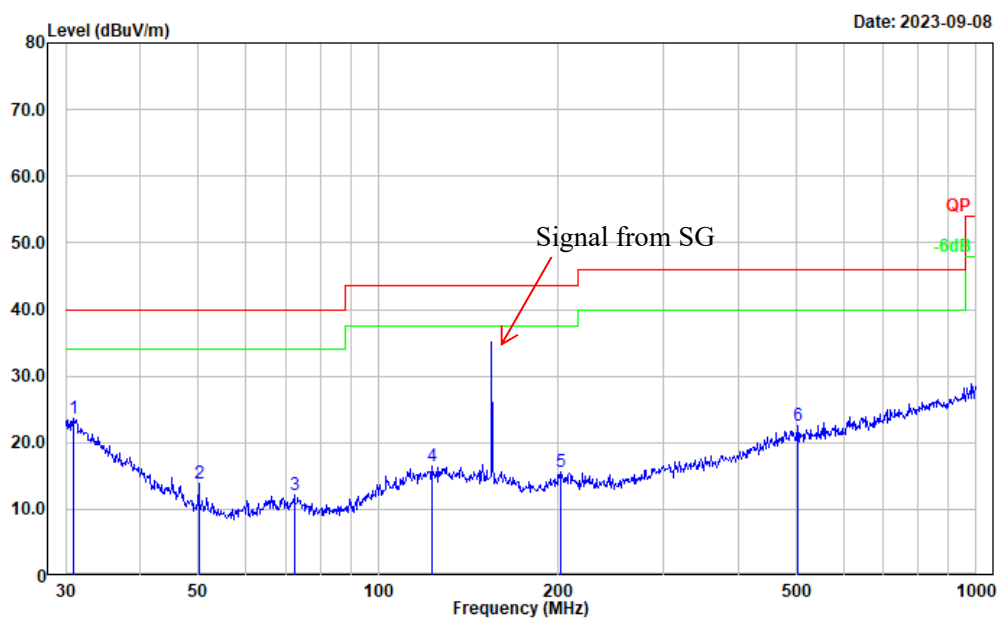
Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	27.45	-3.68	23.77	40.00	16.23	Peak
2	38.346	32.80	-10.00	22.80	40.00	17.20	Peak
3	45.058	38.02	-14.25	23.77	40.00	16.23	Peak
4	64.659	34.42	-16.96	17.46	40.00	22.54	Peak
5	547.098	29.40	-5.83	23.57	46.00	22.43	Peak
6	972.337	28.01	0.32	28.33	54.00	25.67	Peak

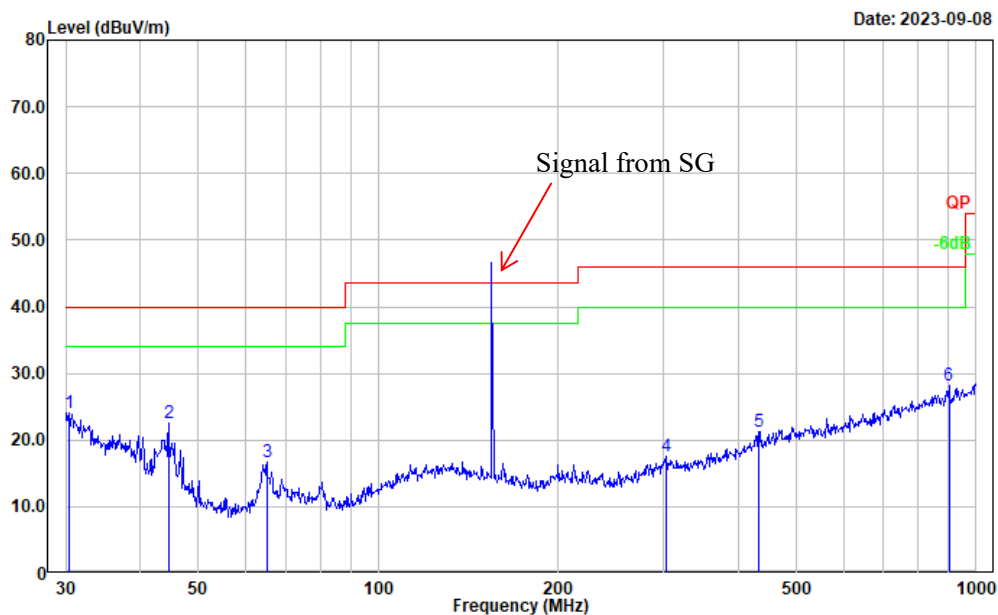
M3:

Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.853	27.97	-4.26	23.71	40.00	16.29	Peak
2	50.057	31.04	-17.16	13.88	40.00	26.12	Peak
3	72.338	28.83	-16.70	12.13	40.00	27.87	Peak
4	123.266	27.88	-11.38	16.50	43.50	27.00	Peak
5	201.393	27.91	-12.25	15.66	43.50	27.84	Peak
6	502.940	28.47	-5.95	22.52	46.00	23.48	Peak

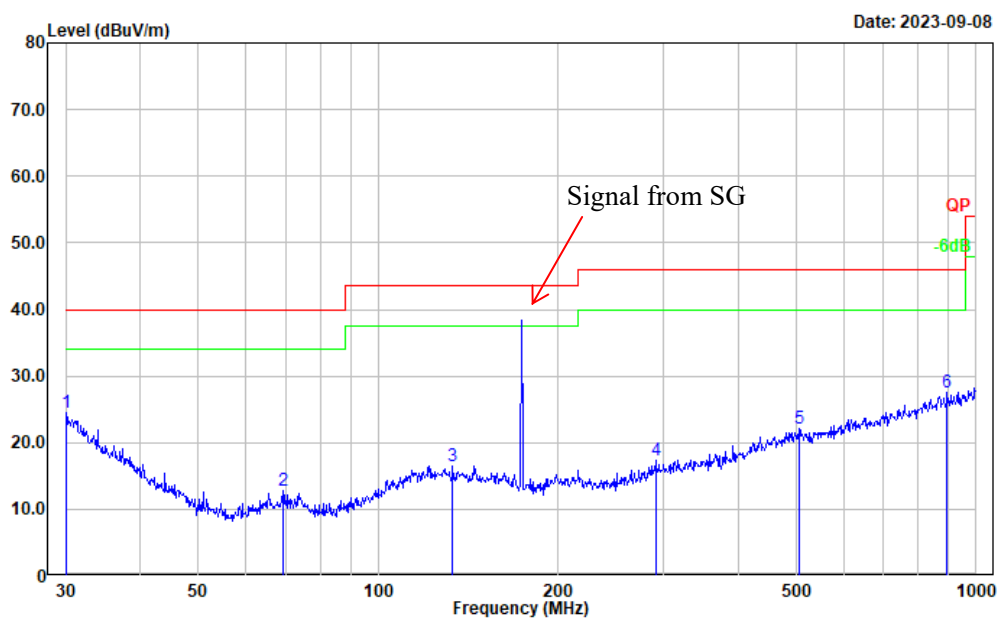
Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.424	28.07	-3.93	24.14	40.00	15.86	Peak
2	44.587	36.61	-14.00	22.61	40.00	17.39	Peak
3	65.114	33.64	-16.92	16.72	40.00	23.28	Peak
4	303.544	28.25	-10.59	17.66	46.00	28.34	Peak
5	432.546	28.76	-7.42	21.34	46.00	24.66	Peak
6	900.147	29.18	-0.96	28.22	46.00	17.78	Peak

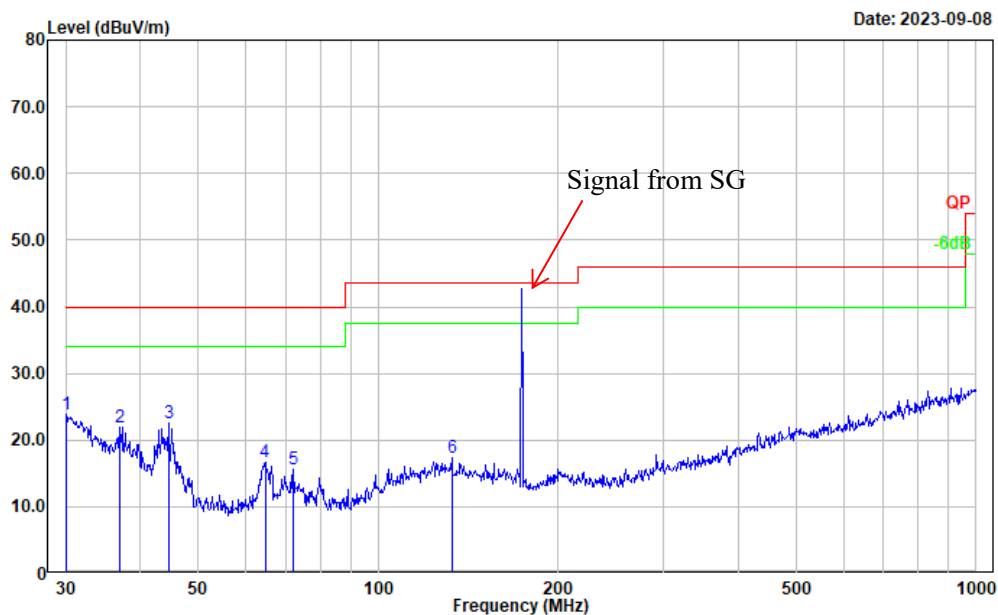
M4:

Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	28.27	-3.68	24.59	40.00	15.41	Peak
2	69.357	29.34	-16.56	12.78	40.00	27.22	Peak
3	133.151	27.97	-11.52	16.45	43.50	27.05	Peak
4	291.036	28.23	-10.99	17.24	46.00	28.76	Peak
5	504.706	28.00	-5.93	22.07	46.00	23.93	Peak
6	893.857	28.56	-1.09	27.47	46.00	18.53	Peak

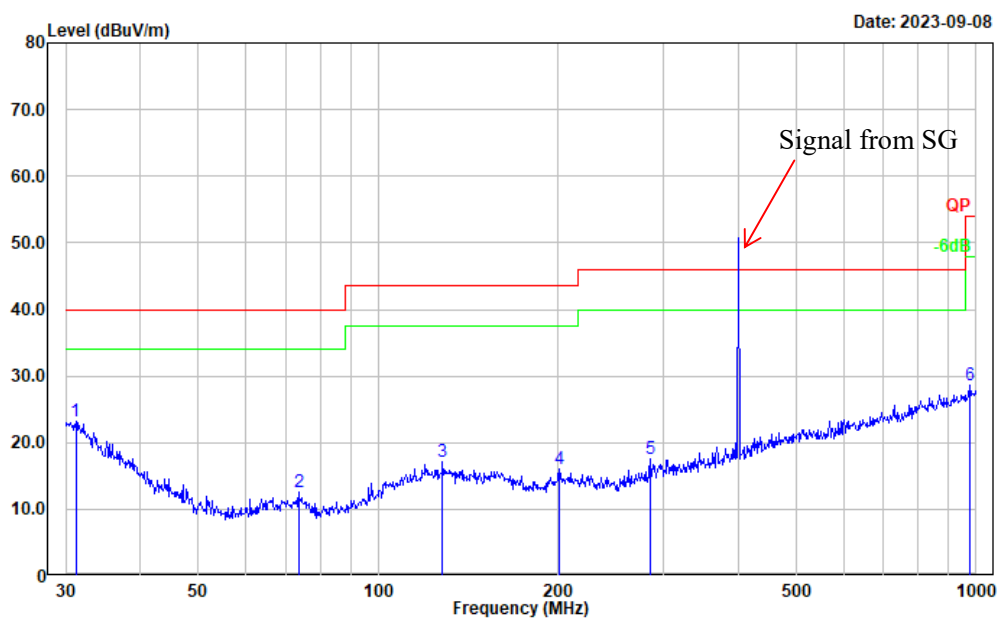
Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.105	27.63	-3.68	23.95	40.00	16.05	Peak
2	36.895	30.79	-8.93	21.86	40.00	18.14	Peak
3	44.587	36.57	-14.00	22.57	40.00	17.43	Peak
4	64.659	33.74	-16.96	16.78	40.00	23.22	Peak
5	72.084	32.22	-16.69	15.53	40.00	24.47	Peak
6	132.685	28.78	-11.48	17.30	43.50	26.20	Peak

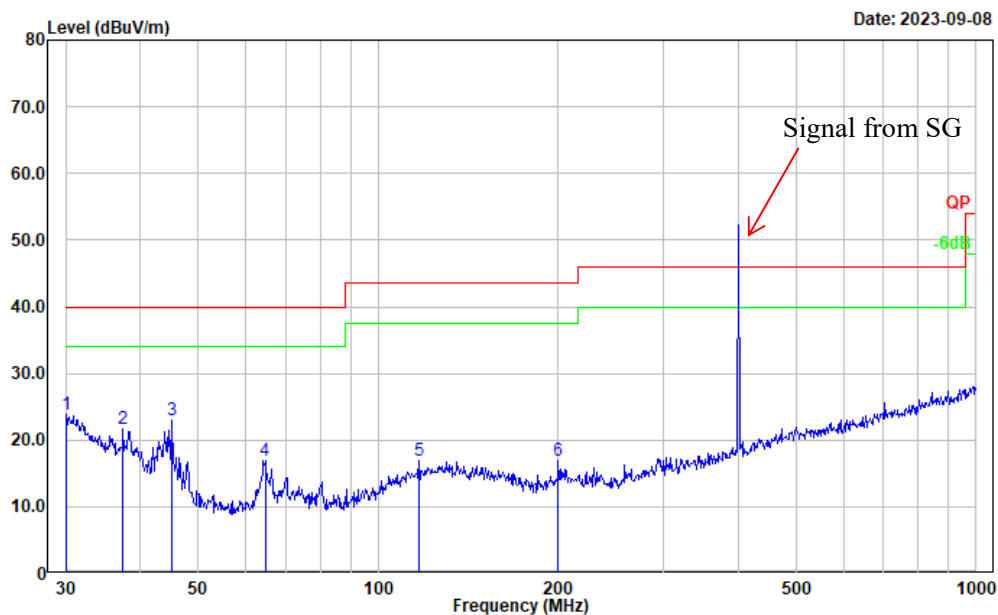
M5:

Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.180	27.62	-4.50	23.12	40.00	16.88	Peak
2	73.617	29.47	-16.83	12.64	40.00	27.36	Peak
3	128.113	28.32	-11.26	17.06	43.50	26.44	Peak
4	200.688	28.20	-12.23	15.97	43.50	27.53	Peak
5	284.977	28.86	-11.34	17.52	46.00	28.48	Peak
6	975.753	28.22	0.40	28.62	54.00	25.38	Peak

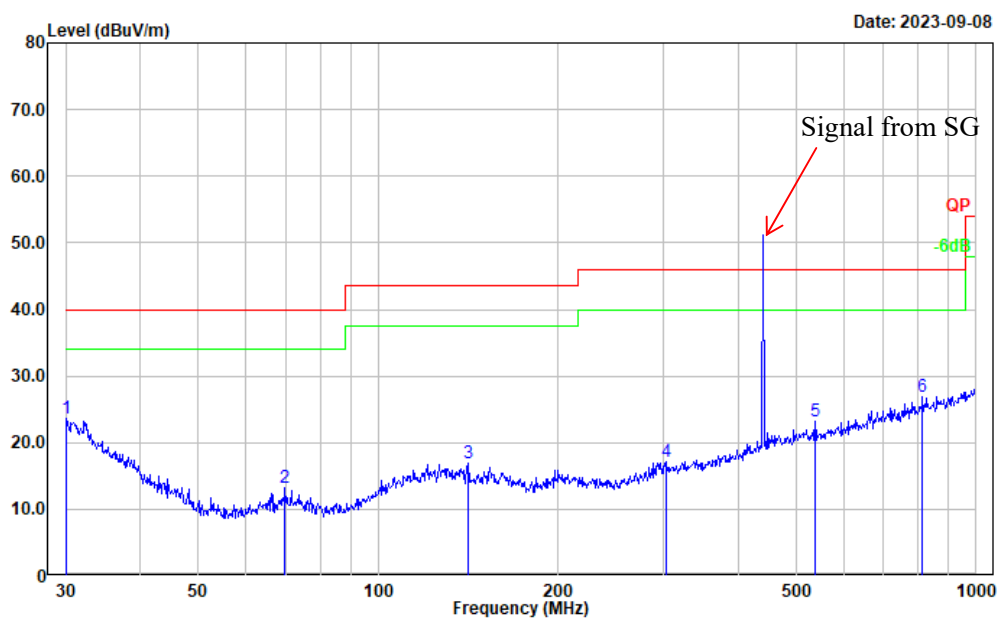
Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.000	27.35	-3.60	23.75	40.00	16.25	Peak
2	37.416	30.95	-9.31	21.64	40.00	18.36	Peak
3	45.058	37.13	-14.25	22.88	40.00	17.12	Peak
4	64.659	33.91	-16.96	16.95	40.00	23.05	Peak
5	116.950	28.58	-11.68	16.90	43.50	26.60	Peak
6	199.986	29.11	-12.21	16.90	43.50	26.60	Peak

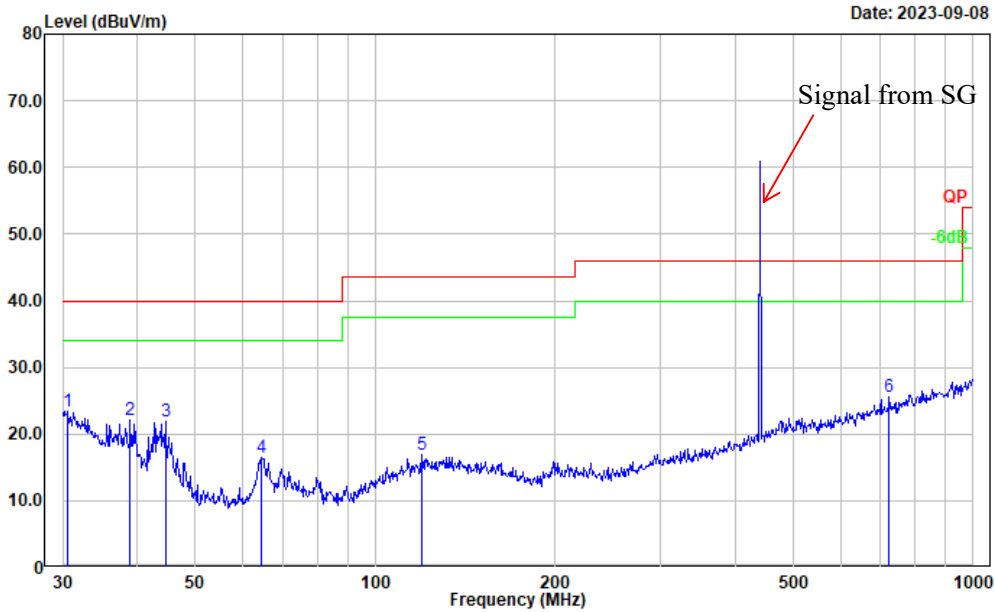
M6:

Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	27.26	-3.68	23.58	40.00	16.42	Peak
2	69.845	29.74	-16.48	13.26	40.00	26.74	Peak
3	141.330	28.75	-11.93	16.82	43.50	26.68	Peak
4	303.544	27.67	-10.59	17.08	46.00	28.92	Peak
5	537.589	29.09	-5.96	23.13	46.00	22.87	Peak
6	813.112	28.73	-1.85	26.88	46.00	19.12	Peak

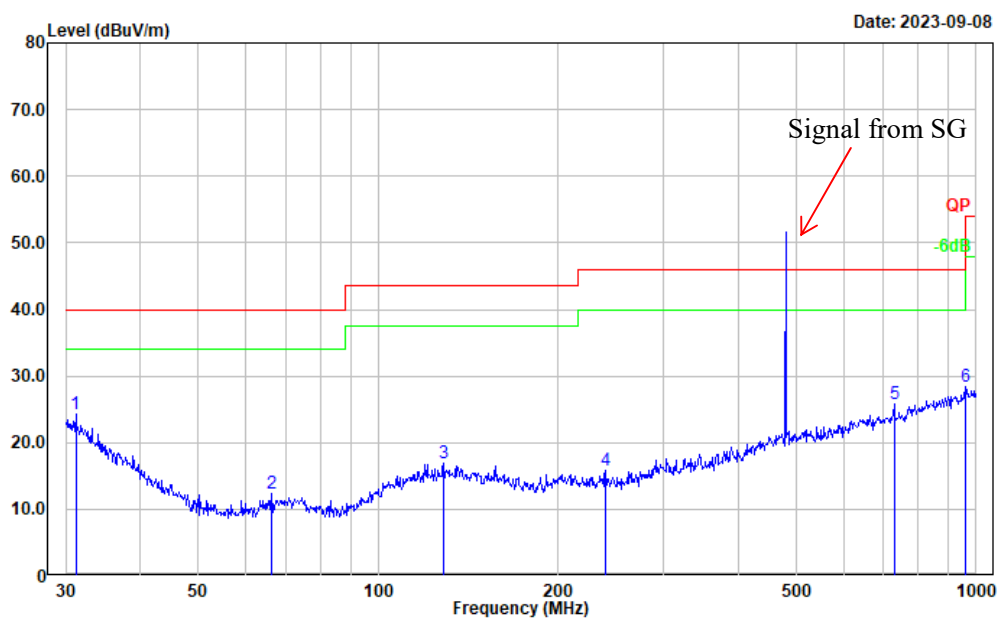
Project No.: CR230849681-RF
 Tester: Carl Xue
 Polarization: vertical
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.638	27.54	-4.09	23.45	40.00	16.55	Peak
2	38.888	32.57	-10.43	22.14	40.00	17.86	Peak
3	44.587	35.86	-14.00	21.86	40.00	18.14	Peak
4	64.433	33.46	-17.00	16.46	40.00	23.54	Peak
5	119.436	28.33	-11.49	16.84	43.50	26.66	Peak
6	724.261	28.79	-3.10	25.69	46.00	20.31	Peak

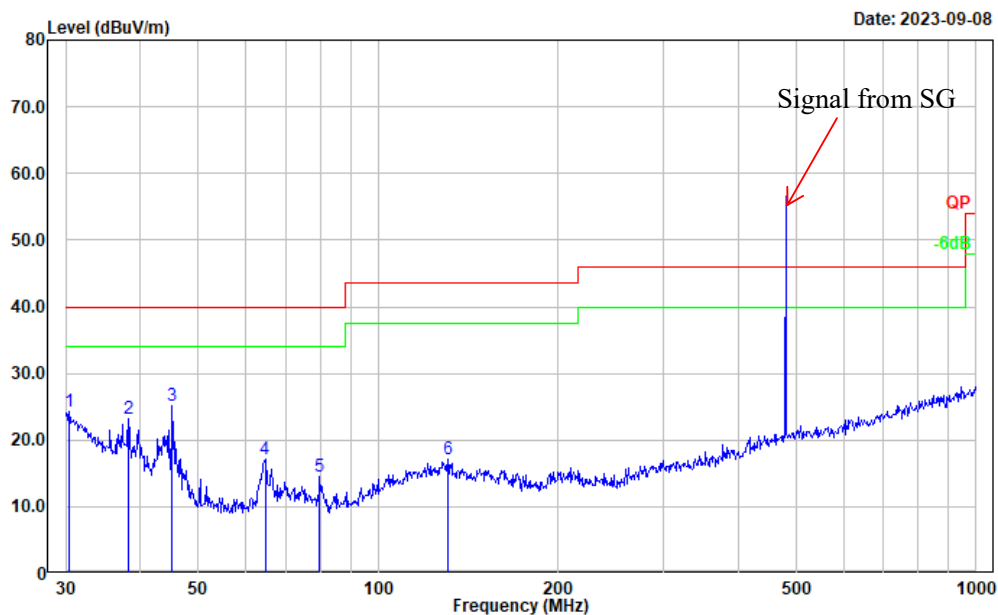
M7:

Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	31.180	28.73	-4.50	24.23	40.00	15.77	Peak
2	66.266	29.13	-16.84	12.29	40.00	27.71	Peak
3	128.563	28.20	-11.28	16.92	43.50	26.58	Peak
4	239.987	28.95	-13.02	15.93	46.00	30.07	Peak
5	729.358	28.72	-2.99	25.73	46.00	20.27	Peak
6	962.162	28.30	0.14	28.44	54.00	25.56	Peak

Project No.: CR230849681-RF
Tester: Carl Xue
Polarization: vertical
Note:



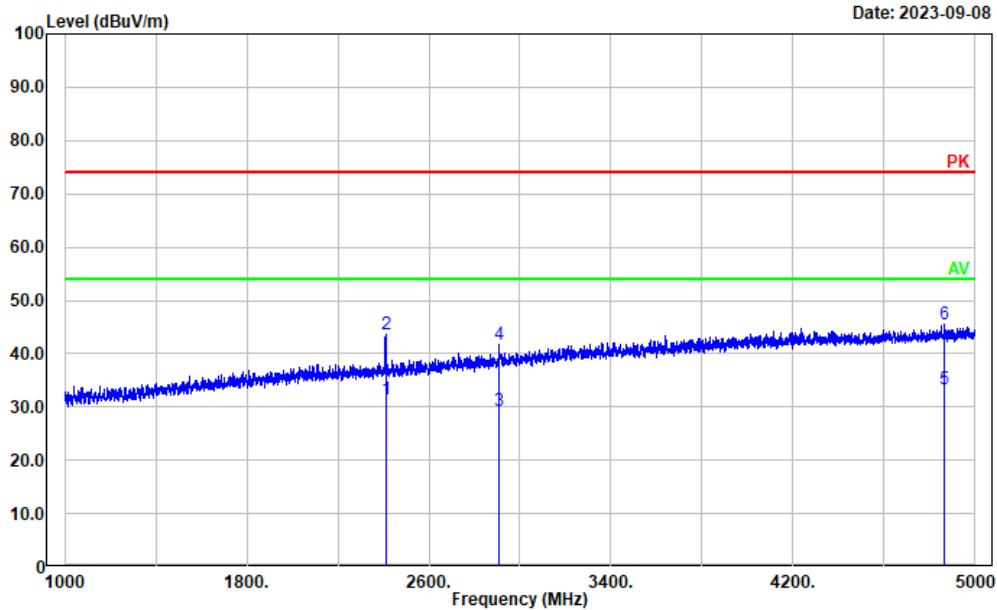
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	30.424	28.12	-3.93	24.19	40.00	15.81	Peak
2	38.212	33.19	-9.91	23.28	40.00	16.72	Peak
3	45.217	39.57	-14.36	25.21	40.00	14.79	Peak
4	64.659	34.13	-16.96	17.17	40.00	22.83	Peak
5	79.800	31.92	-17.44	14.48	40.00	25.52	Peak
6	130.837	28.43	-11.33	17.10	43.50	26.40	Peak

2) Above 1GHz

M1:

Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: horizontal
Note:

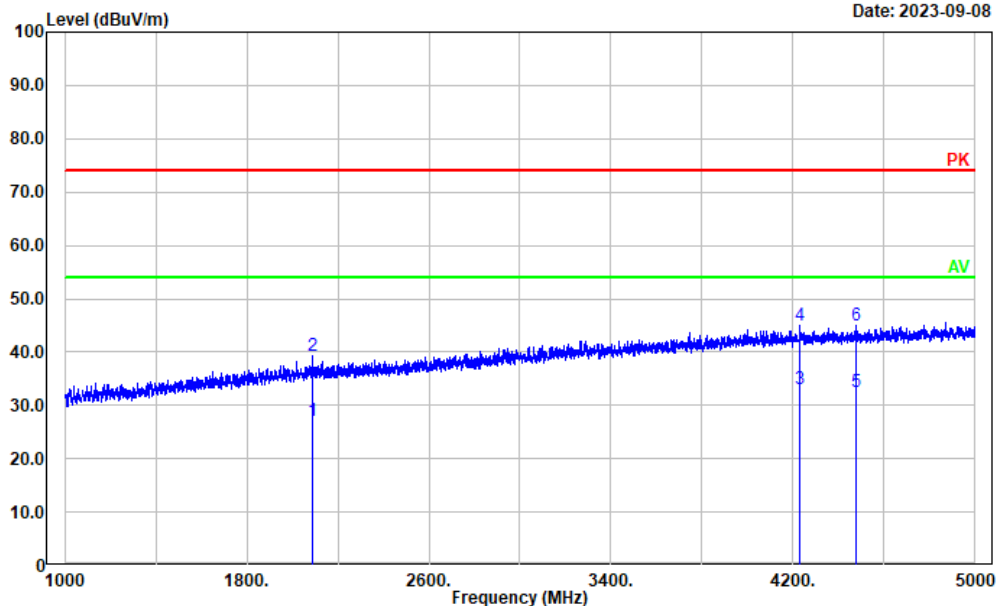
Date: 2023-09-08



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2410.682	27.82	3.55	31.37	54.00	22.63	Average
2	2410.682	40.18	3.55	43.73	74.00	30.27	Peak
3	2908.382	23.70	5.65	29.35	54.00	24.65	Average
4	2908.382	36.04	5.65	41.69	74.00	32.31	Peak
5	4863.973	22.21	11.02	33.23	54.00	20.77	Average
6	4863.973	34.44	11.02	45.46	74.00	28.54	Peak

Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: vertical
Note:

Date: 2023-09-08

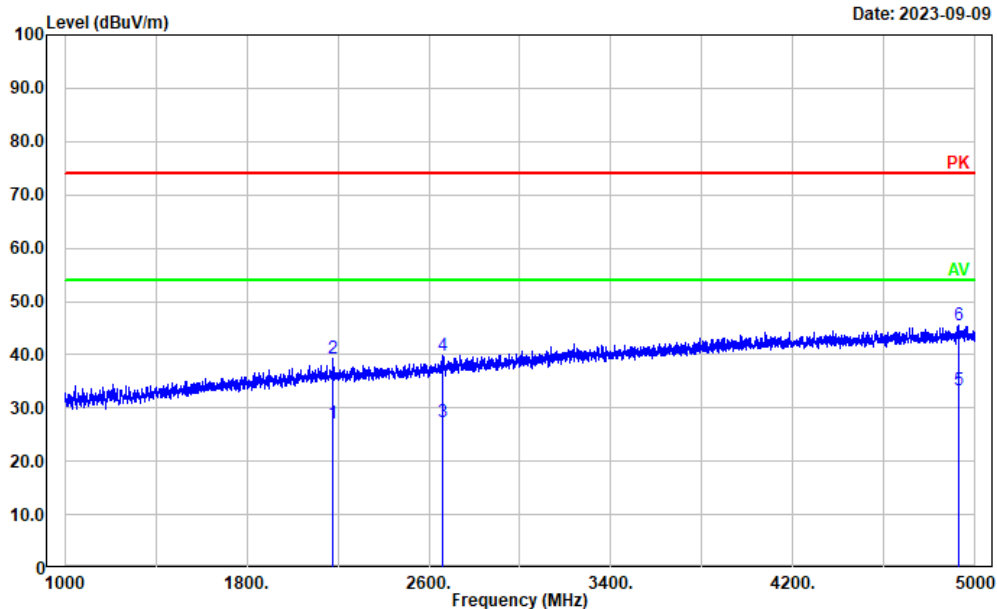


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2088.218	24.52	2.61	27.13	54.00	26.87	Average
2	2088.218	36.65	2.61	39.26	74.00	34.74	Peak
3	4231.846	23.36	9.70	33.06	54.00	20.94	Average
4	4231.846	35.41	9.70	45.11	74.00	28.89	Peak
5	4479.096	22.49	9.96	32.45	54.00	21.55	Average
6	4479.096	34.93	9.96	44.89	74.00	29.11	Peak

M2:

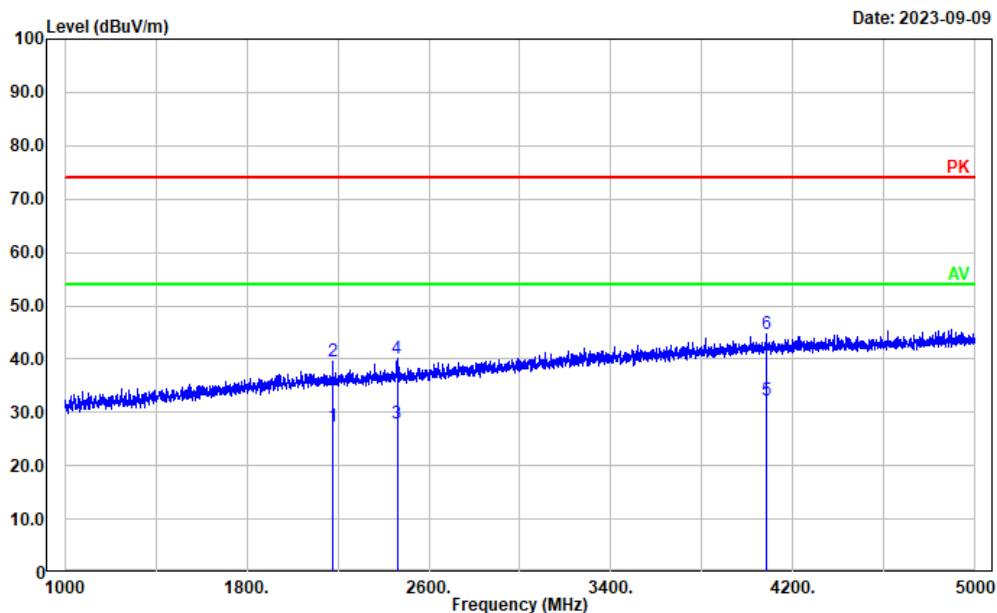
Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: horizontal
Note:

Date: 2023-09-09



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2175.435	24.33	2.87	27.20	54.00	26.80	Average
2	2175.435	36.52	2.87	39.39	74.00	34.61	Peak
3	2659.532	22.97	4.49	27.46	54.00	26.54	Average
4	2659.532	35.43	4.49	39.92	74.00	34.08	Peak
5	4924.785	22.04	11.19	33.23	54.00	20.77	Average
6	4924.785	34.26	11.19	45.45	74.00	28.55	Peak

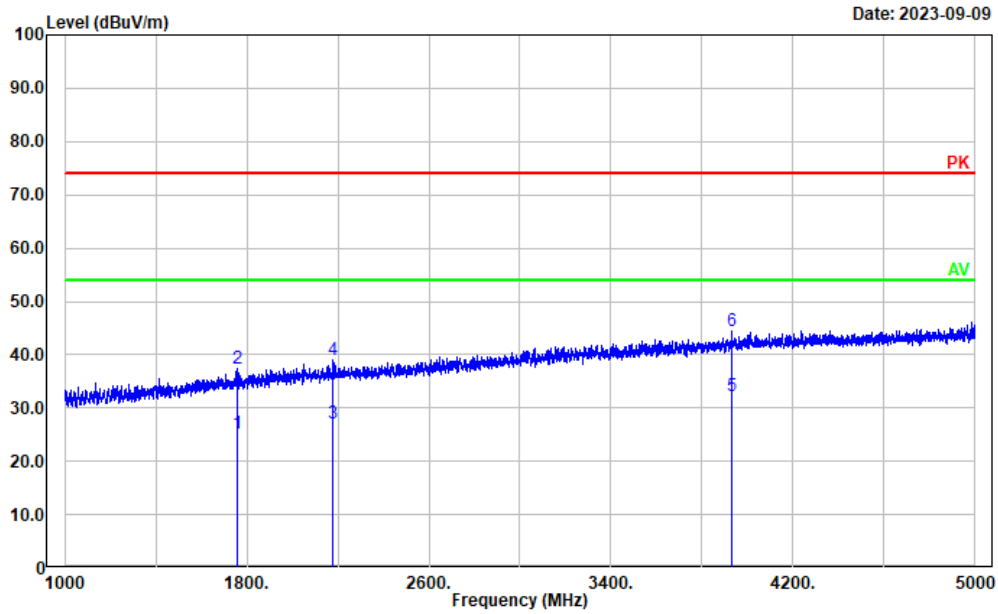
Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2175.435	24.42	2.87	27.29	54.00	26.71	Average
2	2175.435	36.71	2.87	39.58	74.00	34.42	Peak
3	2460.292	24.40	3.62	28.02	54.00	25.98	Average
4	2460.292	36.38	3.62	40.00	74.00	34.00	Peak
5	4083.017	22.80	9.51	32.31	54.00	21.69	Average
6	4083.017	35.10	9.51	44.61	74.00	29.39	Peak

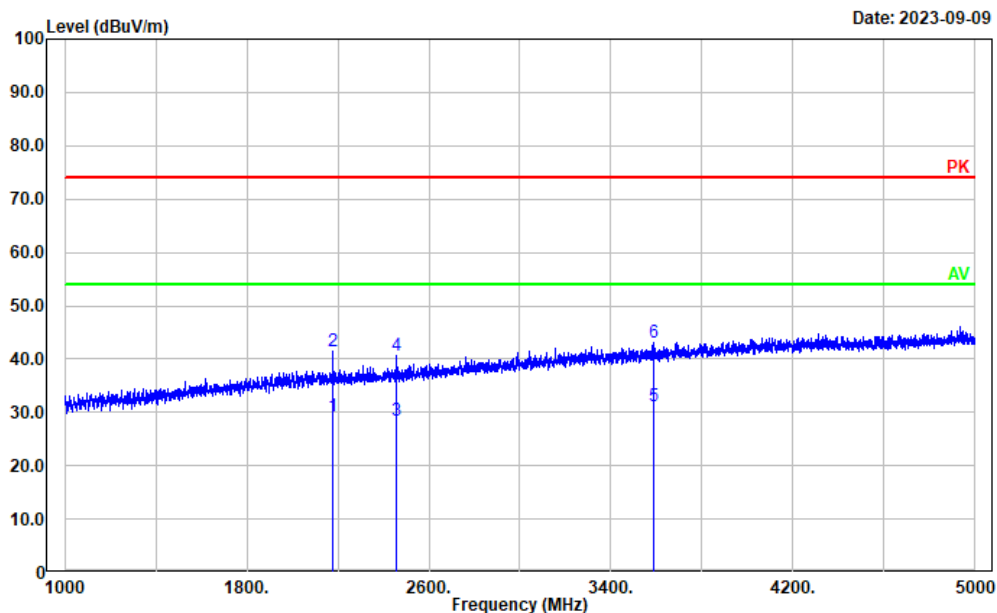
M3:

Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1760.152	24.14	1.04	25.18	54.00	28.82	Average
2	1760.152	36.32	1.04	37.36	74.00	36.64	Peak
3	2175.435	24.23	2.87	27.10	54.00	26.90	Average
4	2175.435	36.13	2.87	39.00	74.00	35.00	Peak
5	3930.186	23.08	9.15	32.23	54.00	21.77	Average
6	3930.186	35.30	9.15	44.45	74.00	29.55	Peak

Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: vertical
Note:

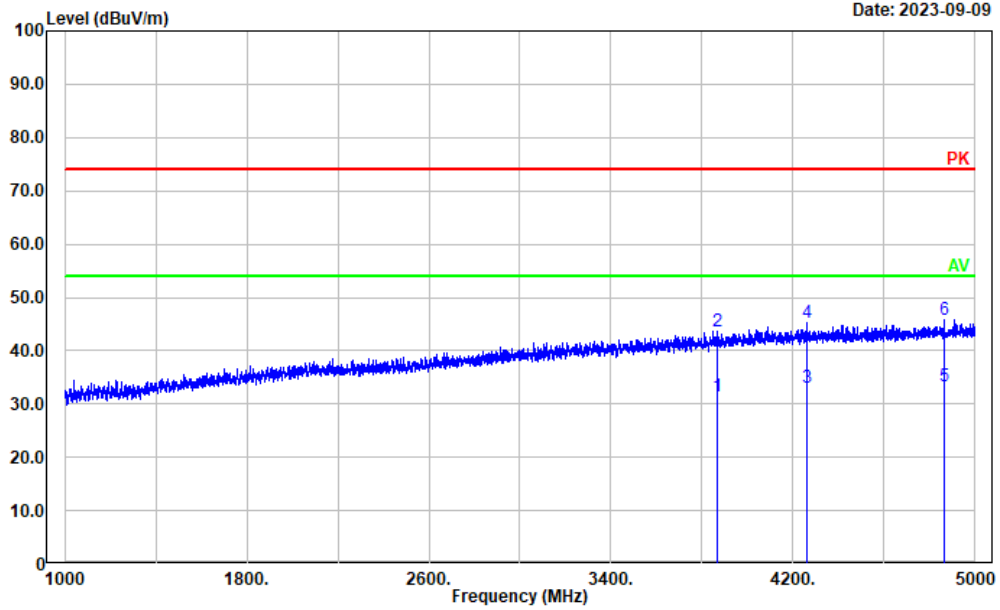


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2175.435	26.33	2.87	29.20	54.00	24.80	Average
2	2175.435	38.53	2.87	41.40	74.00	32.60	Peak
3	2458.692	24.69	3.63	28.32	54.00	25.68	Average
4	2458.692	37.01	3.63	40.64	74.00	33.36	Peak
5	3587.718	23.15	7.95	31.10	54.00	22.90	Average
6	3587.718	35.24	7.95	43.19	74.00	30.81	Peak

M4:

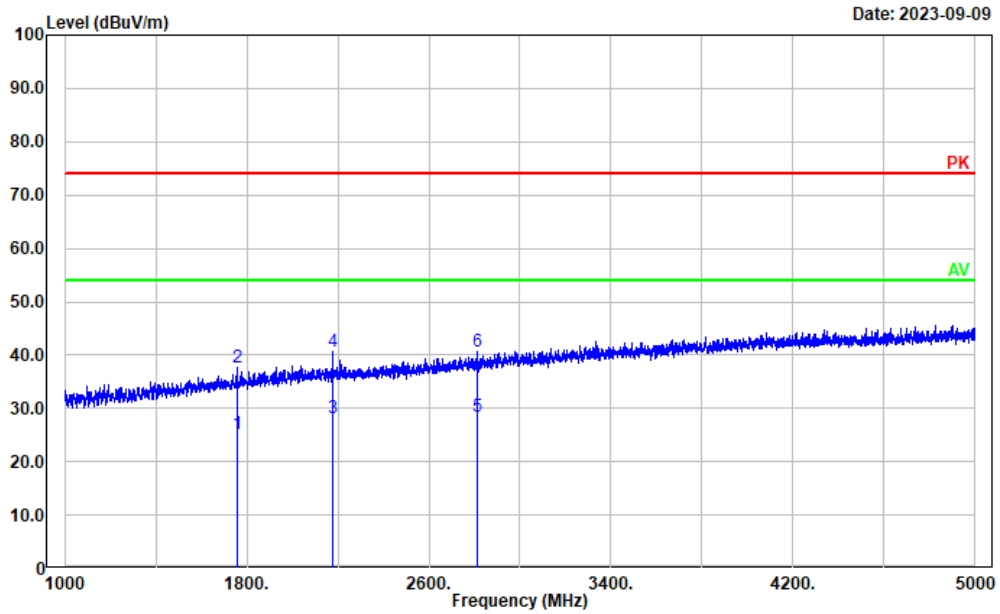
Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: horizontal
Note:

Date: 2023-09-09



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	3864.573	22.50	8.88	31.38	54.00	22.62	Average
2	3864.573	34.87	8.88	43.75	74.00	30.25	Peak
3	4261.452	23.38	9.71	33.09	54.00	20.91	Average
4	4261.452	35.46	9.71	45.17	74.00	28.83	Peak
5	4865.573	22.36	11.02	33.38	54.00	20.62	Average
6	4865.573	34.73	11.02	45.75	74.00	28.25	Peak

Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: vertical
Note:

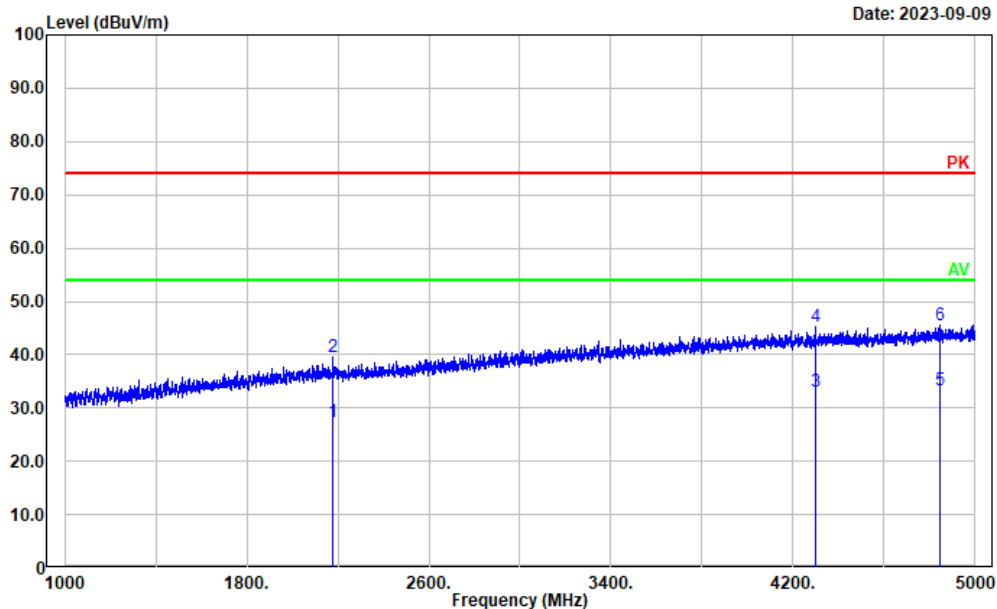


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1759.352	24.25	1.03	25.28	54.00	28.72	Average
2	1759.352	36.52	1.03	37.55	74.00	36.45	Peak
3	2175.435	25.39	2.87	28.26	54.00	25.74	Average
4	2175.435	37.65	2.87	40.52	74.00	33.48	Peak
5	2814.763	23.19	5.17	28.36	54.00	25.64	Average
6	2814.763	35.54	5.17	40.71	74.00	33.29	Peak

M5:

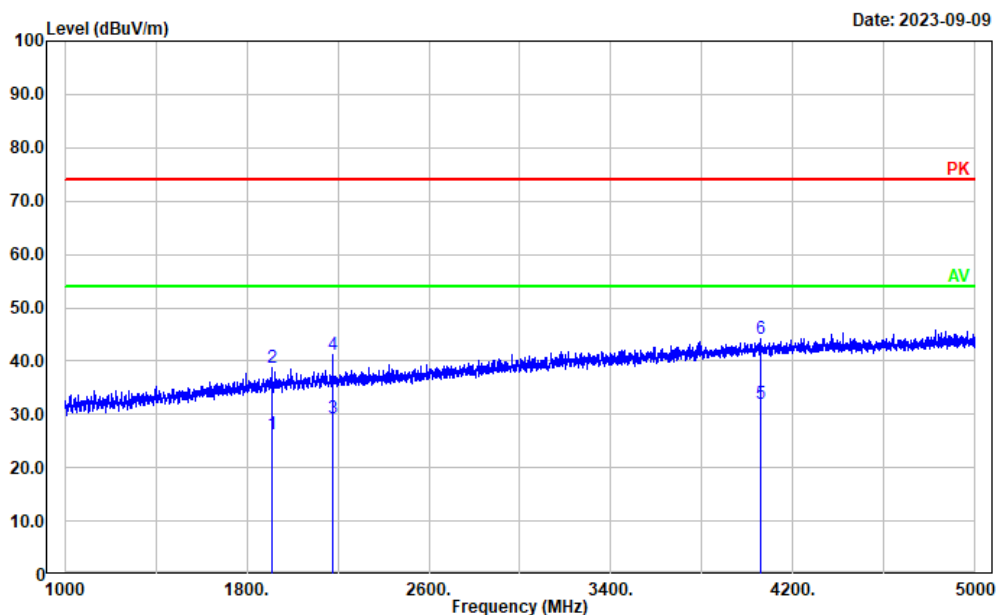
Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: horizontal
Note:

Date: 2023-09-09



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2175.435	24.42	2.87	27.29	54.00	26.71	Average
2	2175.435	36.71	2.87	39.58	74.00	34.42	Peak
3	4298.260	23.44	9.65	33.09	54.00	20.91	Average
4	4298.260	35.53	9.65	45.18	74.00	28.82	Peak
5	4847.970	22.24	10.97	33.21	54.00	20.79	Average
6	4847.970	34.45	10.97	45.42	74.00	28.58	Peak

Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: vertical
Note:

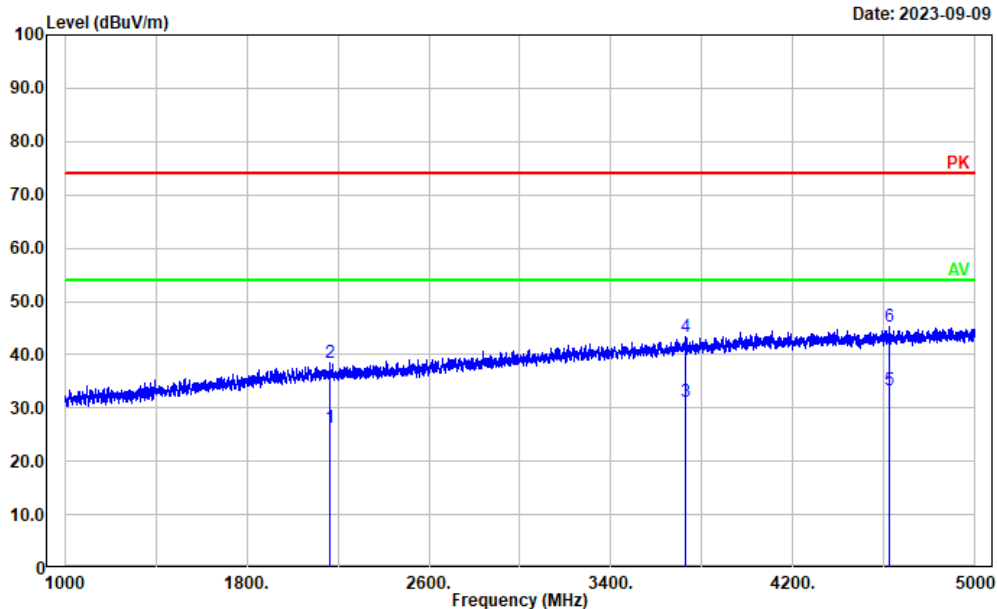


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1911.382	24.40	1.93	26.33	54.00	27.67	Average
2	1911.382	36.72	1.93	38.65	74.00	35.35	Peak
3	2175.435	26.29	2.87	29.16	54.00	24.84	Average
4	2175.435	38.45	2.87	41.32	74.00	32.68	Peak
5	4060.612	22.64	9.45	32.09	54.00	21.91	Average
6	4060.612	34.73	9.45	44.18	74.00	29.82	Peak

M6:

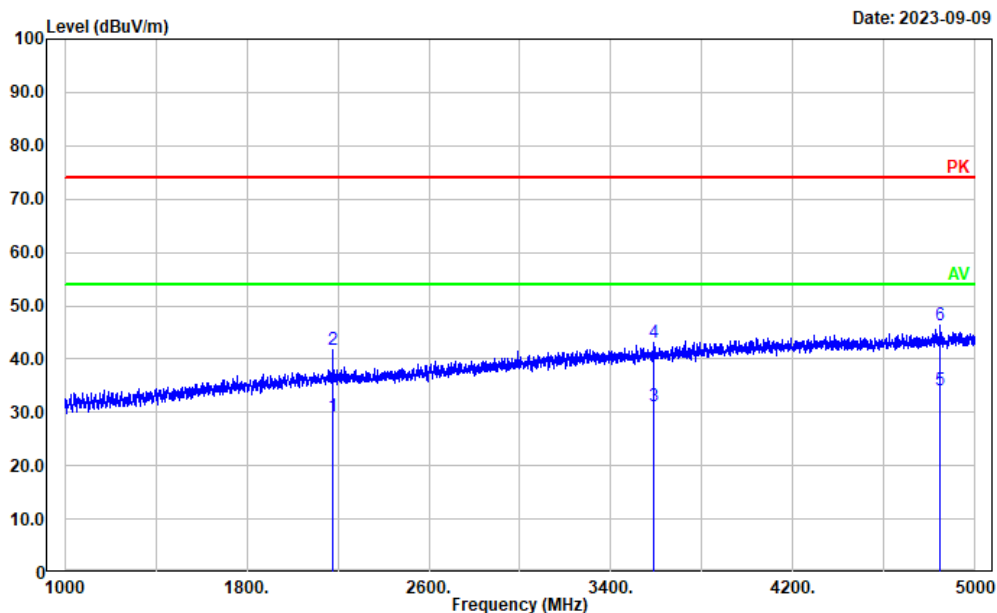
Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: horizontal
Note:

Date: 2023-09-09



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2162.633	23.39	2.85	26.24	54.00	27.76	Average
2	2162.633	35.62	2.85	38.47	74.00	35.53	Peak
3	3728.546	22.80	8.42	31.22	54.00	22.78	Average
4	3728.546	35.01	8.42	43.43	74.00	30.57	Peak
5	4619.924	22.79	10.41	33.20	54.00	20.80	Average
6	4619.924	34.98	10.41	45.39	74.00	28.61	Peak

Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: vertical
Note:

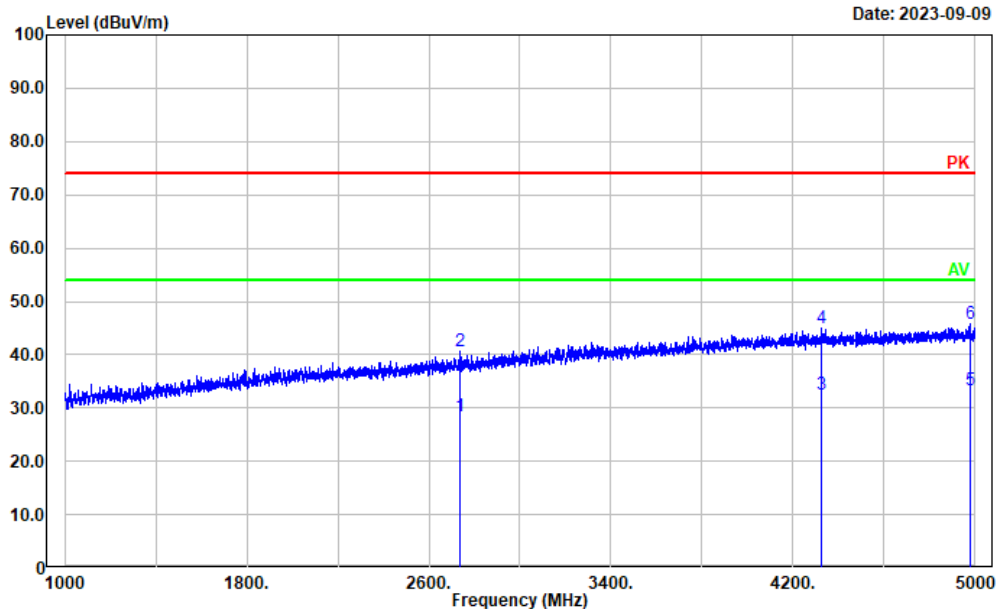


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2175.435	26.51	2.87	29.38	54.00	24.62	Average
2	2175.435	38.88	2.87	41.75	74.00	32.25	Peak
3	3590.118	23.15	7.95	31.10	54.00	22.90	Average
4	3590.118	35.25	7.95	43.20	74.00	30.80	Peak
5	4843.168	23.17	10.96	34.13	54.00	19.87	Average
6	4843.168	35.29	10.96	46.25	74.00	27.75	Peak

M7:

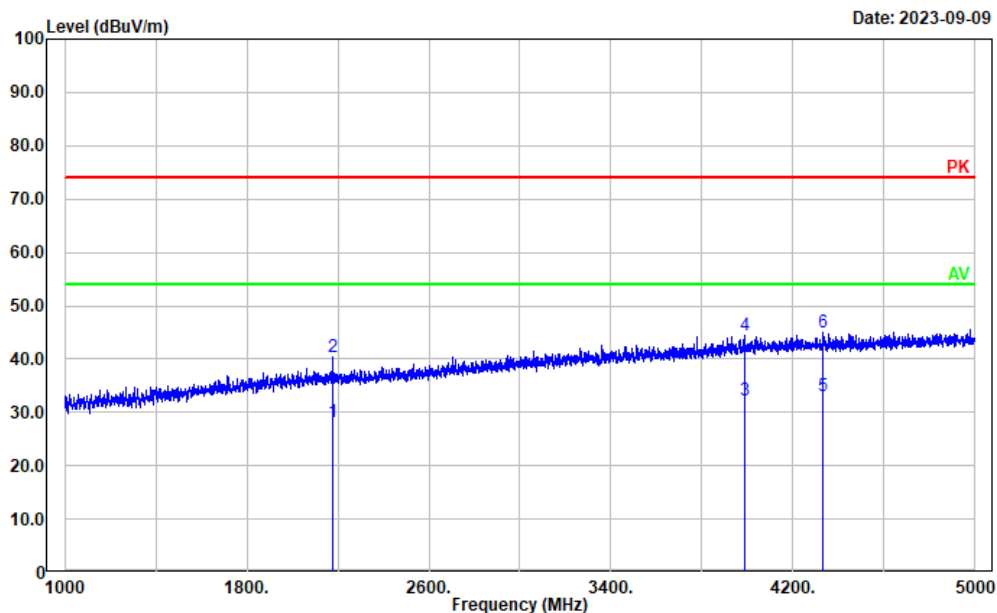
Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: horizontal
Note:

Date: 2023-09-09



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2739.548	23.43	4.89	28.32	54.00	25.68	Average
2	2739.548	35.76	4.89	40.65	74.00	33.35	Peak
3	4326.265	22.71	9.72	32.43	54.00	21.57	Average
4	4326.265	35.14	9.72	44.86	74.00	29.14	Peak
5	4978.396	22.21	11.22	33.43	54.00	20.57	Average
6	4978.396	34.65	11.22	45.87	74.00	28.13	Peak

Project No.: CR230849681-RF
Tester: Mack Huang
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2175.435	25.36	2.87	28.23	54.00	25.77	Average
2	2175.435	37.58	2.87	40.45	74.00	33.55	Peak
3	3987.798	22.90	9.31	32.21	54.00	21.79	Average
4	3987.798	35.10	9.31	44.41	74.00	29.59	Peak
5	4331.066	23.28	9.74	33.02	54.00	20.98	Average
6	4331.066	35.30	9.74	45.04	74.00	28.96	Peak

4.3 Antenna Power Conduction Limits for Receivers

Serial Number:	2B6T-1	Test Date:	2023/9/11
Test Site:	RF	Test Mode:	M1-M7
Tester:	Arthur Su	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.2	Relative Humidity: (%)	60	ATM Pressure: (kPa)	100.1
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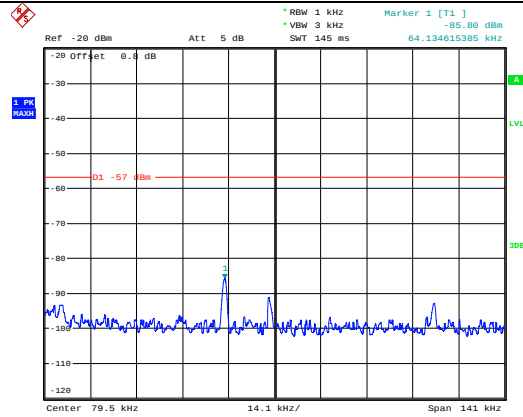
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	200256	2023/3/31	2024/3/30
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A

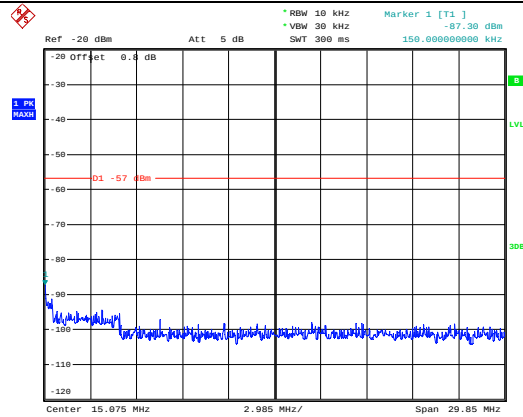
** Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

M1: Scanning receiver(scanning mode)

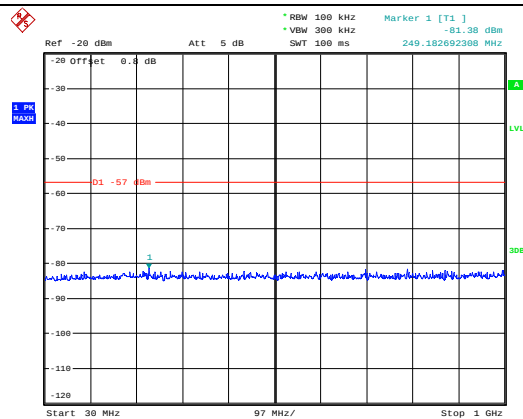
9KHz -150KHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:37:28

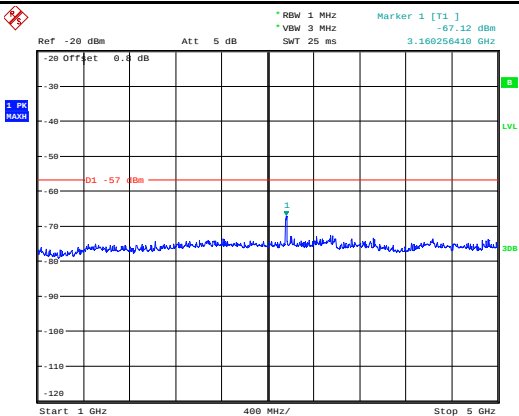
150KHz -30MHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:37:49

30MHz-1GHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:54:39

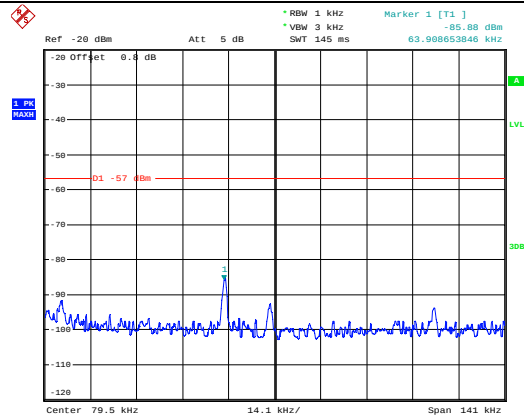
1GHz-5GHz



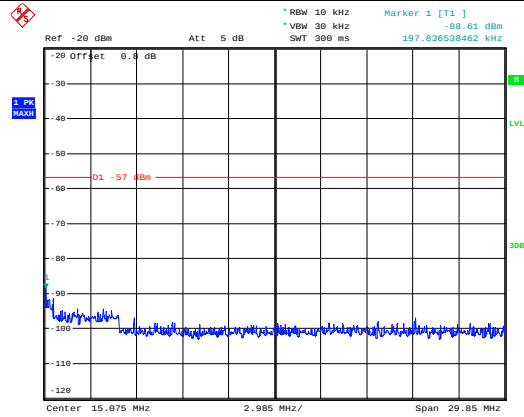
ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:54:58

M2: Receiving at 136.0125 MHz

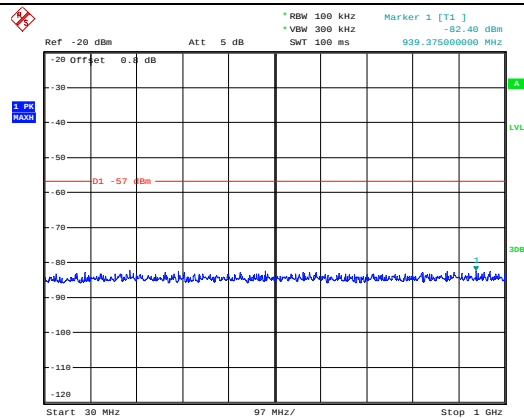
9KHz -150KHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:38:08

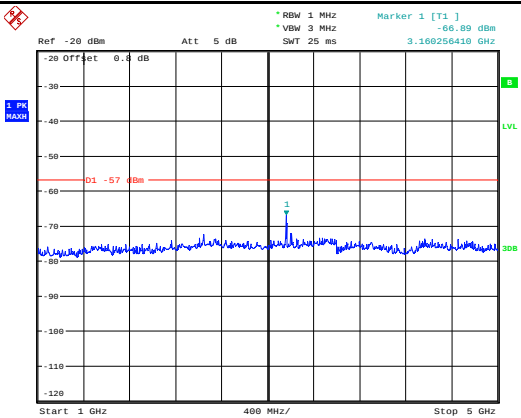
150KHz -30MHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:38:35

30MHz-1GHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:55:17

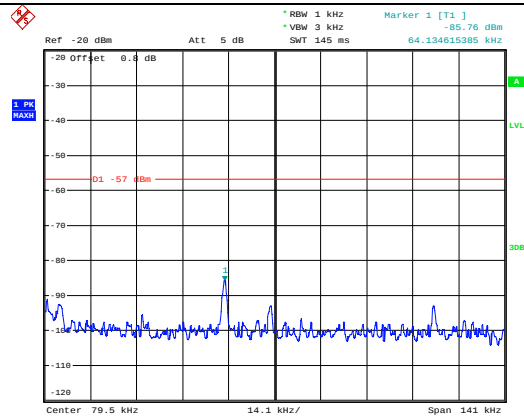
1GHz-5GHz



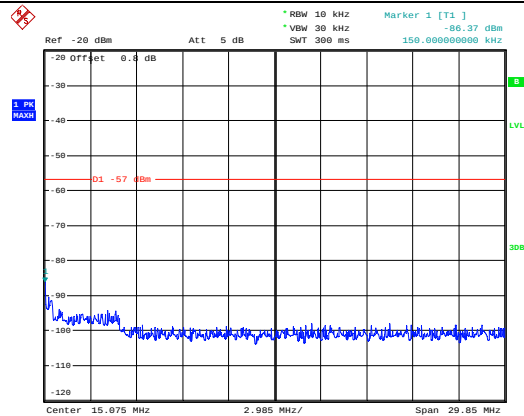
ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:55:32

M3: Receiver at 155MHz

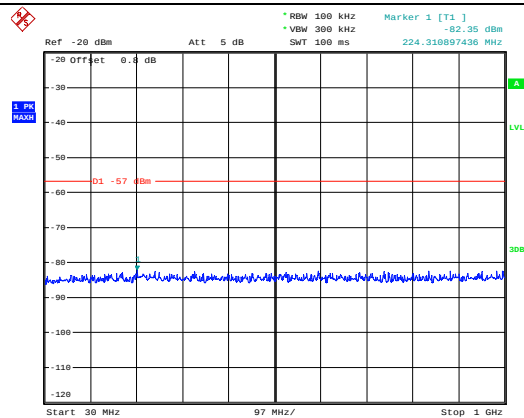
9KHz -150KHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:39:01

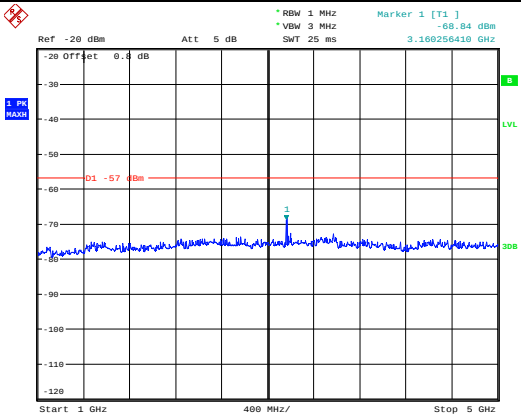
150KHz -30MHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:39:22

30MHz-1GHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:55:52

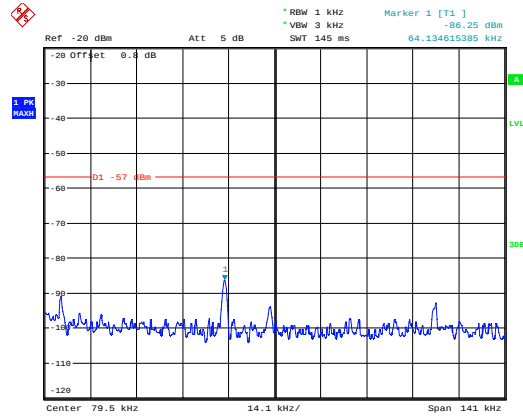
1GHz-5GHz



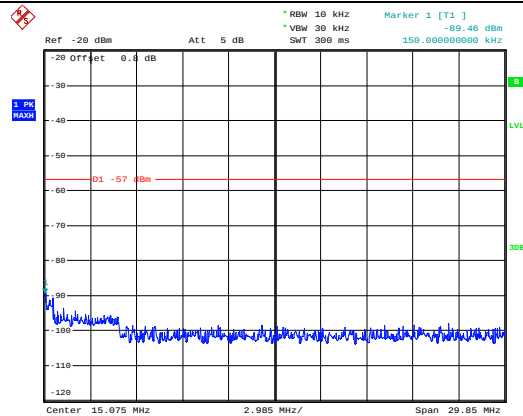
ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:56:05

M4: Receiver at 173.9875 MHz

9KHz -150KHz

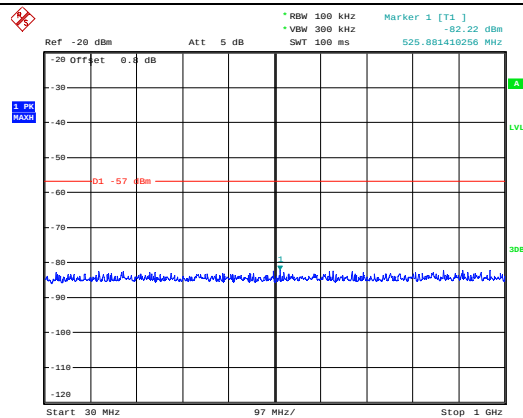


150KHz -30MHz



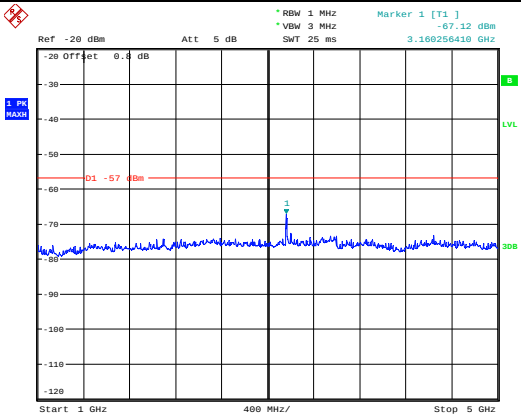
ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:40:41

30MHz-1GHz



ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:56:38

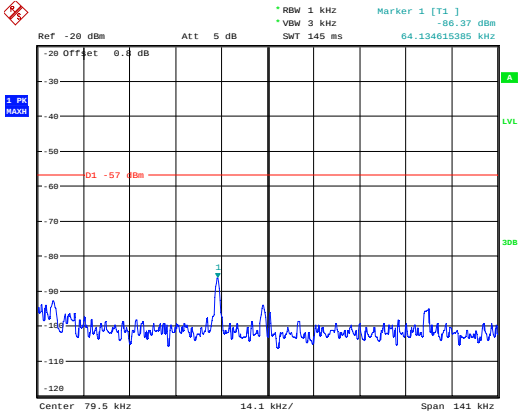
1GHz-5GHz



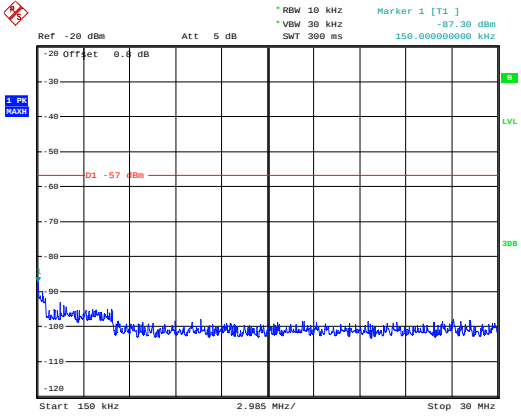
ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:56:54

M5: Receiver at 400.0125 MHz

9KHz -150KHz

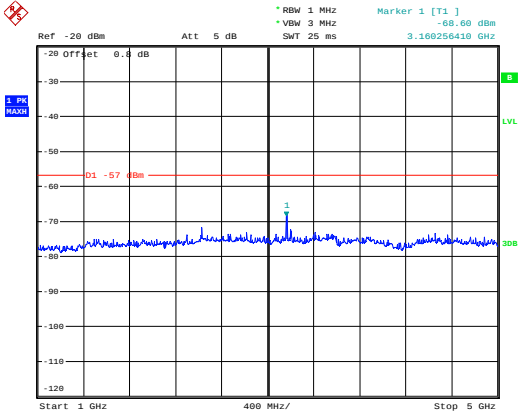


150KHz -30MHz



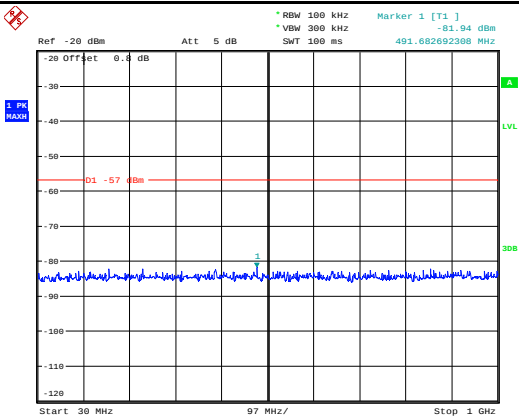
ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:41:16

30MHz-1GHz



ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:57:30

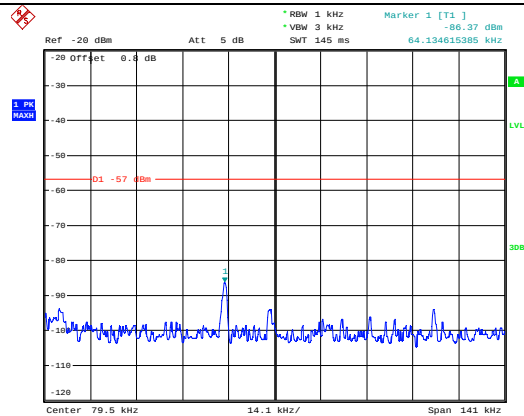
1GHz-5GHz



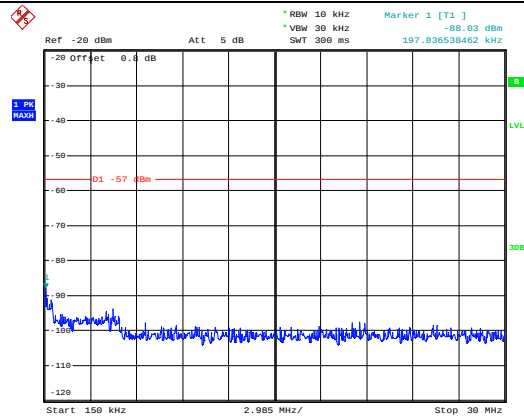
ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:57:14

M6: Receiver at 440MHz

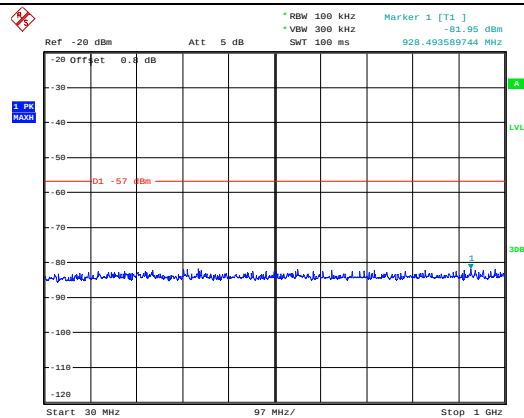
9KHz -150KHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:41:30

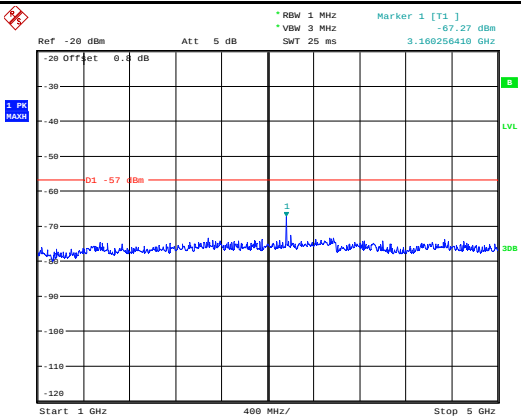
150KHz -30MHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:41:56

30MHz-1GHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:58:00

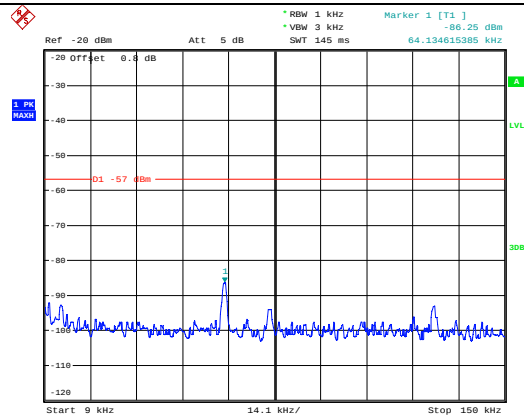
1GHz-5GHz



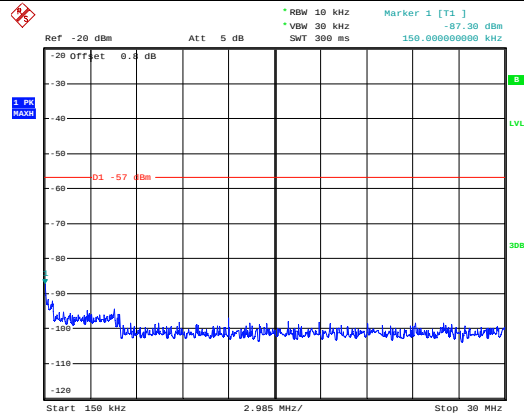
ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:58:13

M7: Receiver at 479.9875 MHz

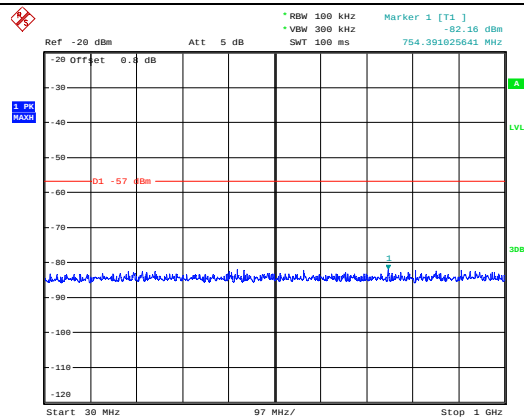
9KHz -150KHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:42:15

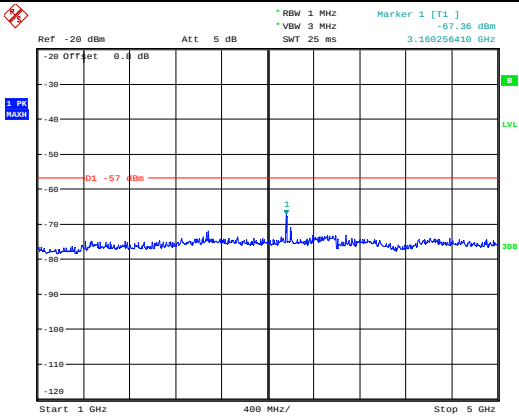
150KHz -30MHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:42:32

30MHz-1GHz

ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:58:37

1GHz-5GHz



ProjectNo.:CR230849681-RF Tester:Arthur Su
Date: 11.SEP.2023 22:59:01

4.4 Scanning Receivers and Frequency Converters Used with Scanning Receivers

Serial Number:	2B6T-1	Test Date:	2023/9/11
Test Site:	RF	Test Mode:	Scanning
Tester:	Arthur Su	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.2	Relative Humidity: (%)	60	ATM Pressure: (kPa)	100.1
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
HP	RF Communications Test Set	8920A	3438A05209	2023/3/31	2024/3/30
Agilent	MXG Vector Signal Generator	N5182B	MY51350144	2023/3/31	2024/3/30

** 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:

Scanning Frequency Range (MHz)	Test Frequency (MHz)	Measurement Result (Worst Case) (dB)	Limit (dB)
136-174 400-480	824, 836, 849, 869,881.5, 894	43	>38

5. EUT PHOTOGRAPHS

Please refer to the attachment CR230849681-EXP EUT EXTERNAL PHOTOGRAPHS and CR230849681-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR230849681-00A-TSP TEST SETUP PHOTOGRAPHS.

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