



**中认信通**

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



## TEST REPORT

**Applicant: PO FUNG ELECTRONIC (HK) INTERNATONAL GROUP COMPANY LIMITED**

Address: Room 1508, 15/F, Office Tower II, Grand Plaza, 625 Nathan Road, Kowloon, Hong Kong

**FCC ID: 2AJGM-AR1909U**

**Product Name: Amateur 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: CR230311938-00A**

**Date Of Issue: 2023/6/30**

**Reviewed By: Sun Zhong** *Sun Zhong*

Title: Manager

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

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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.

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**

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<b>Revision Number</b>	<b>Report Number</b>	<b>Description of Revision</b>	<b>Date of Revision</b>
1.0	CR230311938-00A	Original Report	2023/6/30

## 1. GENERAL INFORMATION

### 1.1 Product Description for Equipment under Test (EUT)

<b>Product Name:</b>	Amateur Radio
<b>Test Model:</b>	AR-1909U
<b>Multiple Models:</b>	AT-1909B
<b>Highest Operation Frequency:</b>	520MHz
<b>Rated Input Voltage:</b>	DC 7.4V from battery, DC 5V from USB
<b>Serial Number:</b>	234N_2
<b>EUT Received Date:</b>	2023/3/15
<b>EUT Received Status:</b>	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:

No

### Operation Frequency And Test Channel:

Operation Modes	Operation Frequency Range (MHz)	Test Frequency (MHz)
UHF Receiving	400-520	400.0125, 460, 519.9875
Scanning	400-520	/

## 1.2 Description of Test Configuration

### 1.2.1 EUT Operation Condition:

<b>EUT Operation Mode:</b>	<p>The system was configured for testing in Typical Use Mode, which was provided by the manufacturer.</p> <p>Test Mode: M1:Charging &amp; Scanning M2:Charging &amp; Receiving</p> <p>Note: EUT only support USB charging. It won't be used when charging with a charger.</p>
<b>Equipment Modifications:</b>	No
<b>EUT Exercise Software:</b>	No

### 1.2.2 Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
Jian Aohai	Adapter	A8-050200U-US3	AD220930002
Agilent	MXG Vector Signal Generator	8920A	3438A05209
/	Antenna	/	/

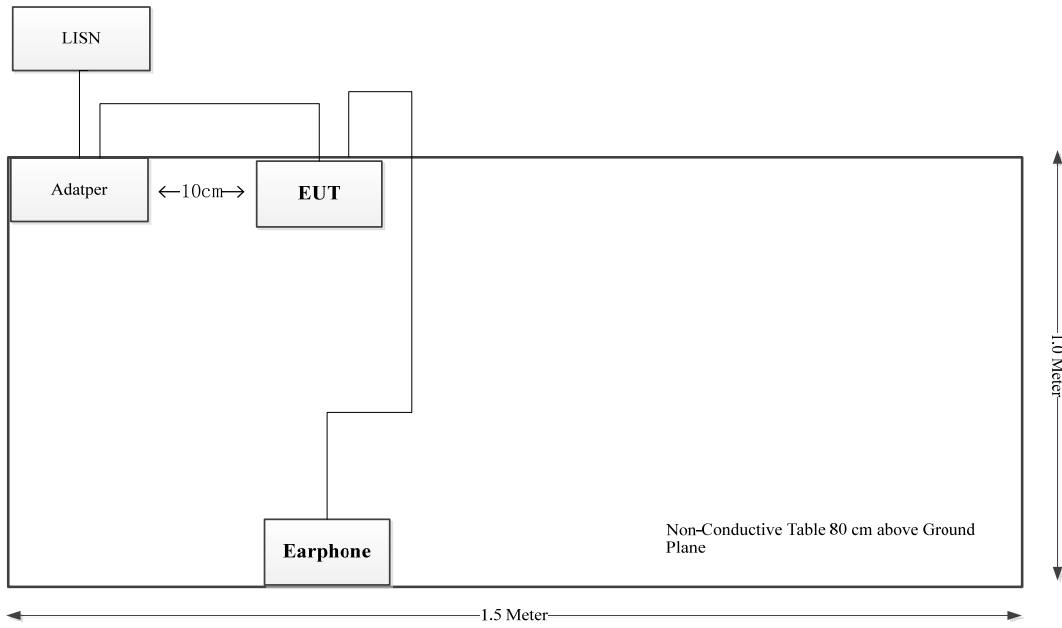
### 1.2.3 Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Type-C USB Cable	No	No	1	EUT	Adapter
Coaxial Cable	Yes	No	2	8920A	Antenna

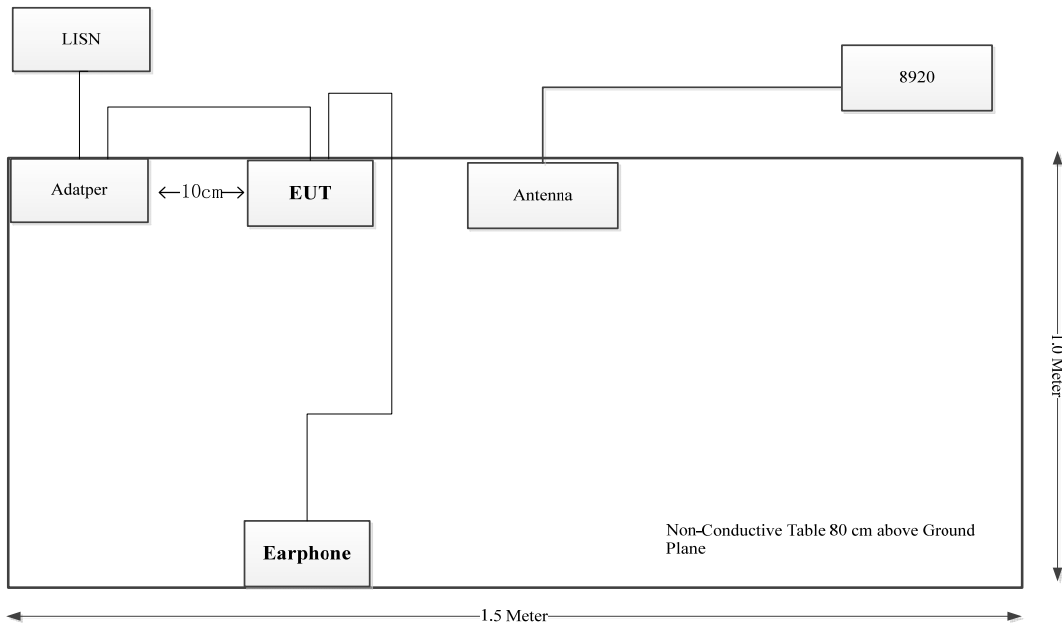
### 1.2.4 Block Diagram of Test Setup

For Conducted Emission Test:

M1:

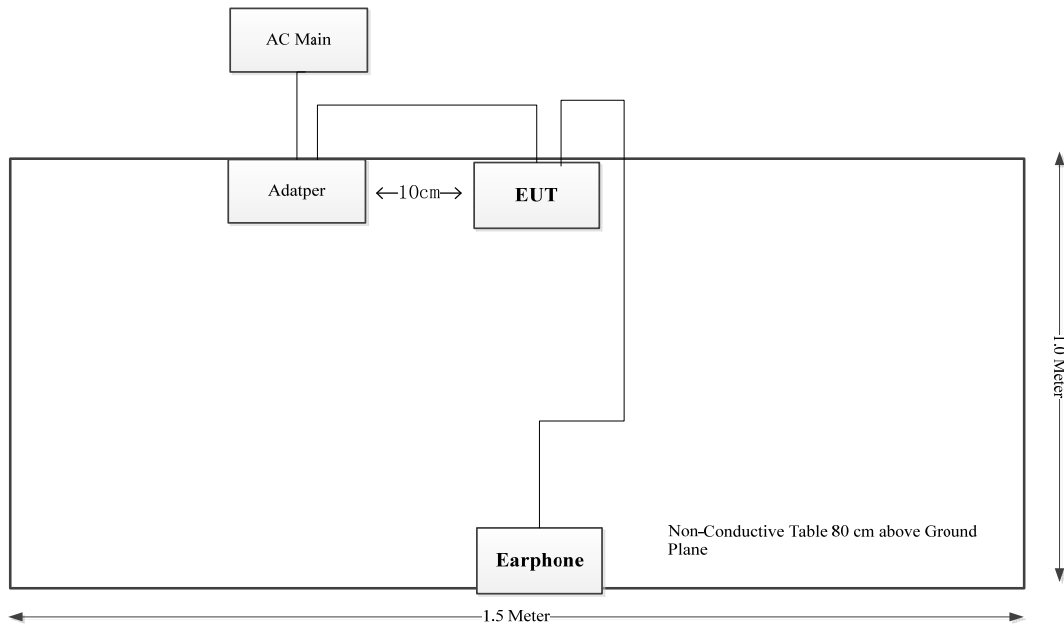


M2:

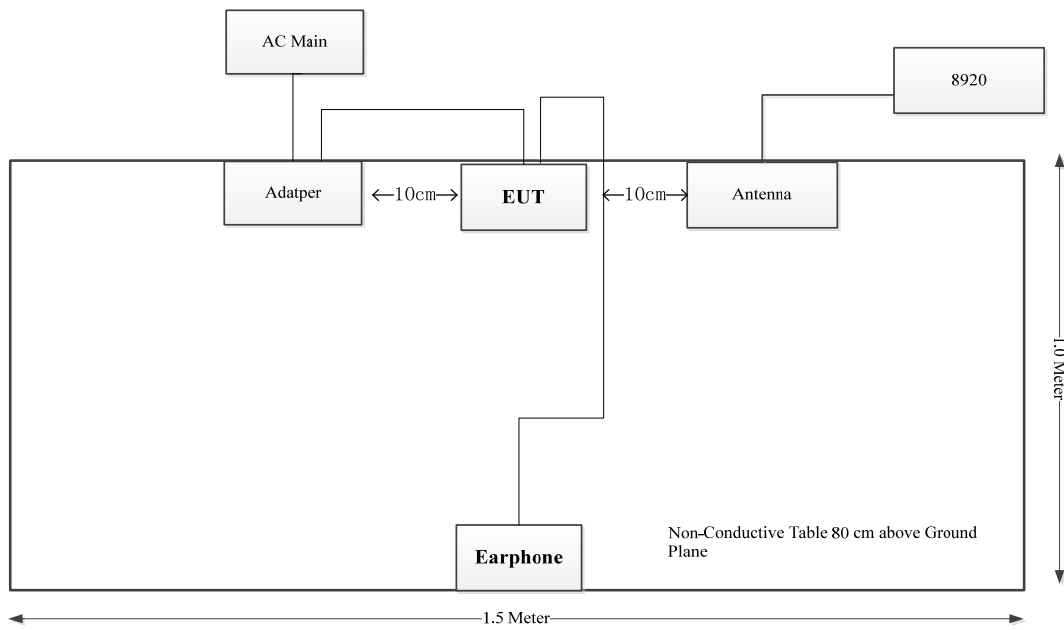


For Radiated Emission Test:

M1:



M2:





### 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 °C
Humidity	±5%
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

**2. SUMMARY OF TEST RESULTS**

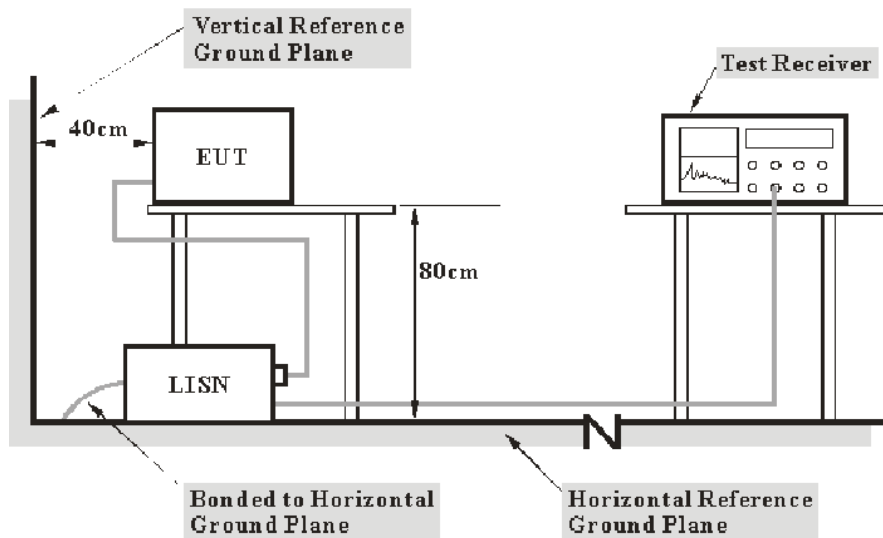
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<b>Standard(s) Section</b>	<b>Description of Test</b>	<b>Result</b>
§15.107	Conducted emissions	Compliant
§15.109	Radiated emissions	Compliant
§15.111	Antenna power conduction limits for receivers	Compliant
§15.121(b)	Scanning receivers and frequency 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

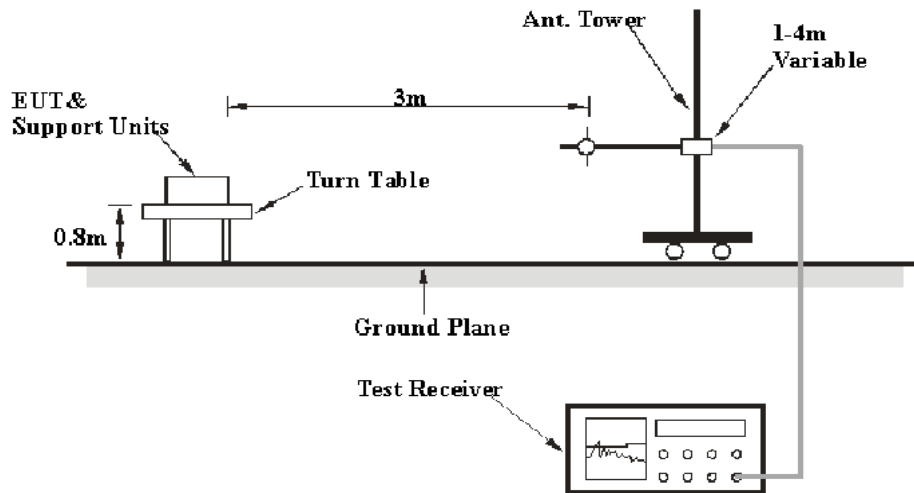
The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

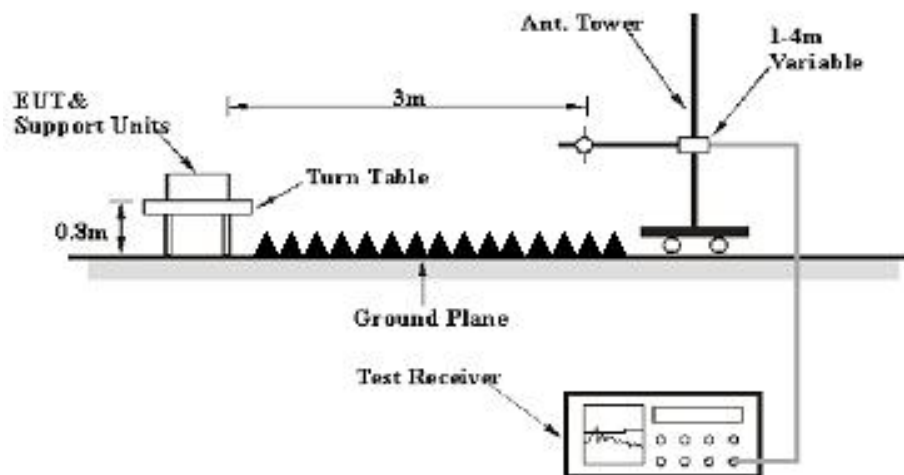
## 3.2 Radiation Spurious Emissions

### 3.2.1 EUT Setup

Below 1GHz:



Above 1GHz:



The radiated emission 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 Equipment Setup

The system was investigated from 30 MHz to 5 GHz.

During the radiated emission test, the test equipment 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	10Hz	/	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

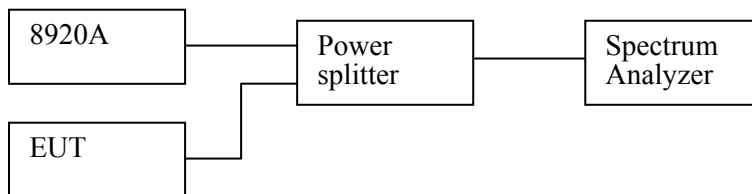
#### 3.3.1 Applicable Standard

FCC§15.111.

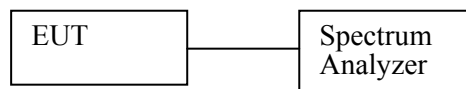
(a) In addition to the radiated emission limits, receivers that operate (tune) in the frequency range 30 to 960 MHz and CB receivers that provide terminals for the connection of an external receiving antenna may be tested to demonstrate compliance with the provisions of § 15.109 with the antenna terminals 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 Block Diagram of Test Setup

For receiving mode:



For scanning mode:



#### 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

#### 3.4.1 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.

#### 3.4.2 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

Serial Number:	234N_2	Test Date:	2023/04/03
Test Site:	CE	Test Mode:	M1, M2
Tester:	David Huang		Pass

#### Environmental Conditions:

Temperature: (°C)	24.3	Relative Humidity: (%)	65	ATM Pressure: (kPa)	100.3
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#### Test Equipment List and Details:

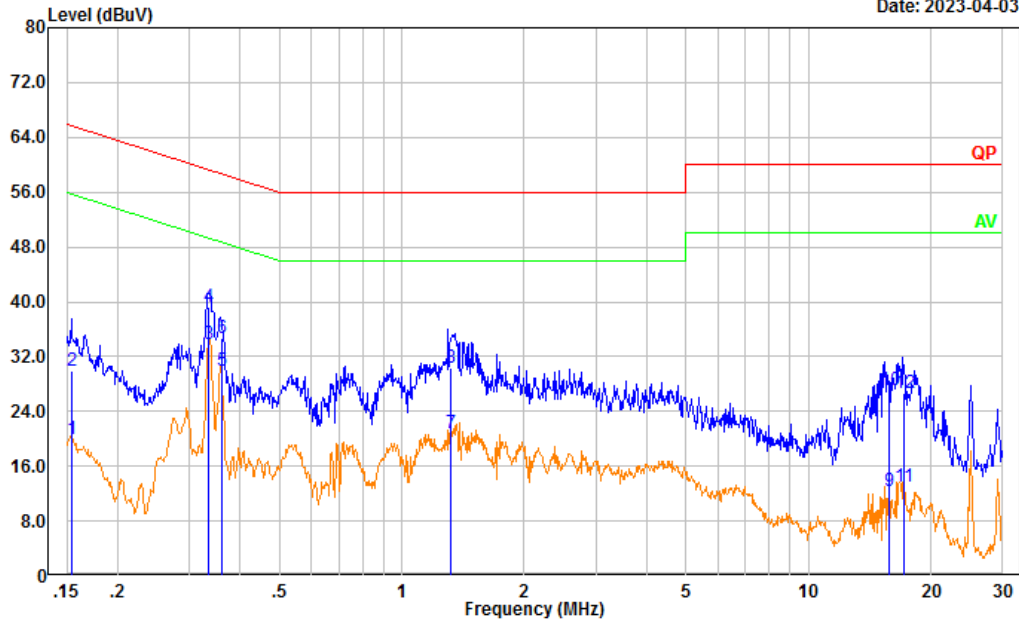
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2023/03/31	2024/03/30
R&S	EMI Test Receiver	ESR3	102726	2022/07/15	2023/07/14
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2022/08/07	2023/08/06
Audix	Test Software	E3	190306 (V9)	N/A	N/A

\* 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).

**Test Mode: M1**

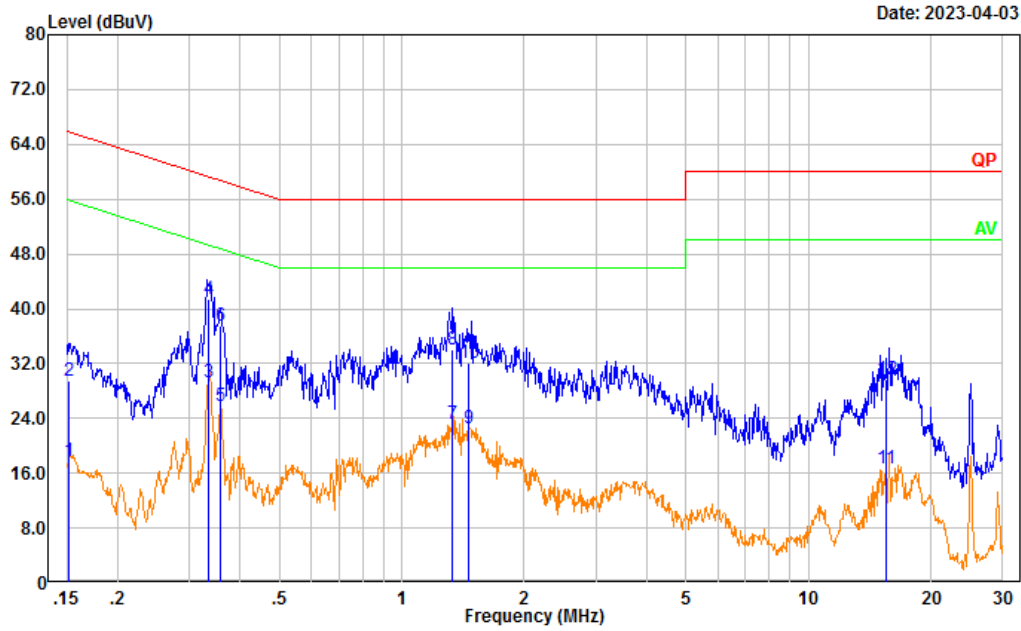
Test Mode: Charging& Scanning  
 Port: Line  
 Note:

Date: 2023-04-03



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.154	10.27	9.61	19.88	55.78	35.90	Average
2	0.154	20.34	9.61	29.95	65.78	35.83	QP
3	0.335	24.22	9.61	33.83	49.33	15.50	Average
4	0.335	29.55	9.61	39.16	59.33	20.17	QP
5	0.361	20.22	9.61	29.83	48.71	18.88	Average
6	0.361	25.00	9.61	34.61	58.71	24.10	QP
7	1.324	11.17	9.62	20.79	46.00	25.21	Average
8	1.324	20.71	9.62	30.33	56.00	25.67	QP
9	15.795	2.69	9.71	12.40	50.00	37.60	Average
10	15.795	17.44	9.71	27.15	60.00	32.85	QP
11	17.161	3.18	9.73	12.91	50.00	37.09	Average
12	17.161	17.00	9.73	26.73	60.00	33.27	QP

Test Mode: Charging& Scanning  
 Port: neutral  
 Note:

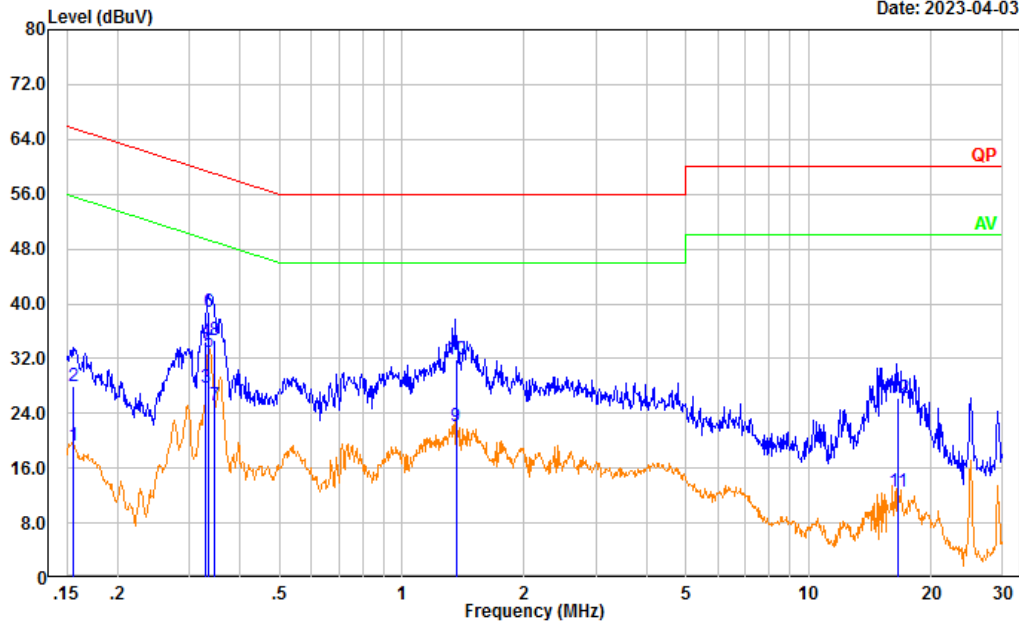


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.152	8.19	9.61	17.80	55.87	38.07	Average
2	0.152	19.84	9.61	29.45	65.87	36.42	QP
3	0.334	19.67	9.61	29.28	49.35	20.07	Average
4	0.334	31.84	9.61	41.45	59.35	17.90	QP
5	0.358	16.17	9.61	25.78	48.77	22.99	Average
6	0.358	27.83	9.61	37.44	58.77	21.33	QP
7	1.335	13.63	9.62	23.25	46.00	22.75	Average
8	1.335	24.35	9.62	33.97	56.00	22.03	QP
9	1.456	12.87	9.62	22.49	46.00	23.51	Average
10	1.456	22.40	9.62	32.02	56.00	23.98	QP
11	15.460	7.08	9.69	16.77	50.00	33.23	Average
12	15.460	19.98	9.69	29.67	60.00	30.33	QP

**Test Mode:** M2 (operating at 400.0125MHz)

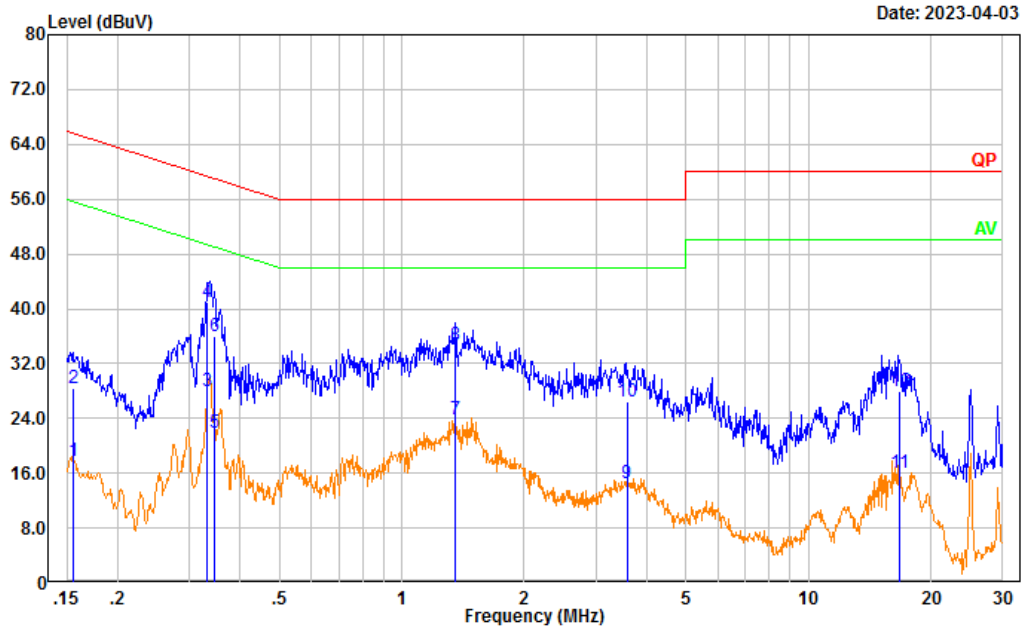
Test Mode: Charging& Receiving  
 Port: Line  
 Note:

Date: 2023-04-03



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.155	9.58	9.61	19.19	55.72	36.53	Average
2	0.155	18.33	9.61	27.94	65.72	37.78	QP
3	0.329	18.20	9.61	27.81	49.47	21.66	Average
4	0.329	24.89	9.61	34.50	59.47	24.97	QP
5	0.336	23.44	9.61	33.05	49.31	16.26	Average
6	0.336	29.25	9.61	38.86	59.31	20.45	QP
7	0.346	15.61	9.61	25.22	49.05	23.83	Average
8	0.346	25.07	9.61	34.68	59.05	24.37	QP
9	1.358	12.43	9.62	22.05	46.00	23.95	Average
10	1.358	22.27	9.62	31.89	56.00	24.11	QP
11	16.546	2.77	9.72	12.49	50.00	37.51	Average
12	16.546	16.57	9.72	26.29	60.00	33.71	QP

Test Mode: Charging& Receiving  
 Port: neutral  
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.155	8.16	9.61	17.77	55.70	37.93	Average
2	0.155	18.82	9.61	28.43	65.70	37.27	QP
3	0.333	18.42	9.61	28.03	49.37	21.34	Average
4	0.333	31.38	9.61	40.99	59.37	18.38	QP
5	0.347	12.21	9.61	21.82	49.04	27.22	Average
6	0.347	26.29	9.61	35.90	59.04	23.14	QP
7	1.358	14.18	9.62	23.80	46.00	22.20	Average
8	1.358	25.07	9.62	34.69	56.00	21.31	QP
9	3.574	4.88	9.65	14.53	46.00	31.47	Average
10	3.574	16.85	9.65	26.50	56.00	29.50	QP
11	16.680	6.43	9.69	16.12	50.00	33.88	Average
12	16.680	18.27	9.69	27.96	60.00	32.04	QP

## 4.2 Radiation Spurious Emissions

Serial Number:	234N_2	Test Date:	2023/04/15 ~2023/06/30
Test Site:	966-1/966-2	Test Mode:	M1, M2
Tester:	Carl Xue, Tao		Pass

### Environmental Conditions:

Temperature: (°C)	23.7~26.9	Relative Humidity: (%)	55~59	ATM Pressure: (kPa)	100.1~100.4
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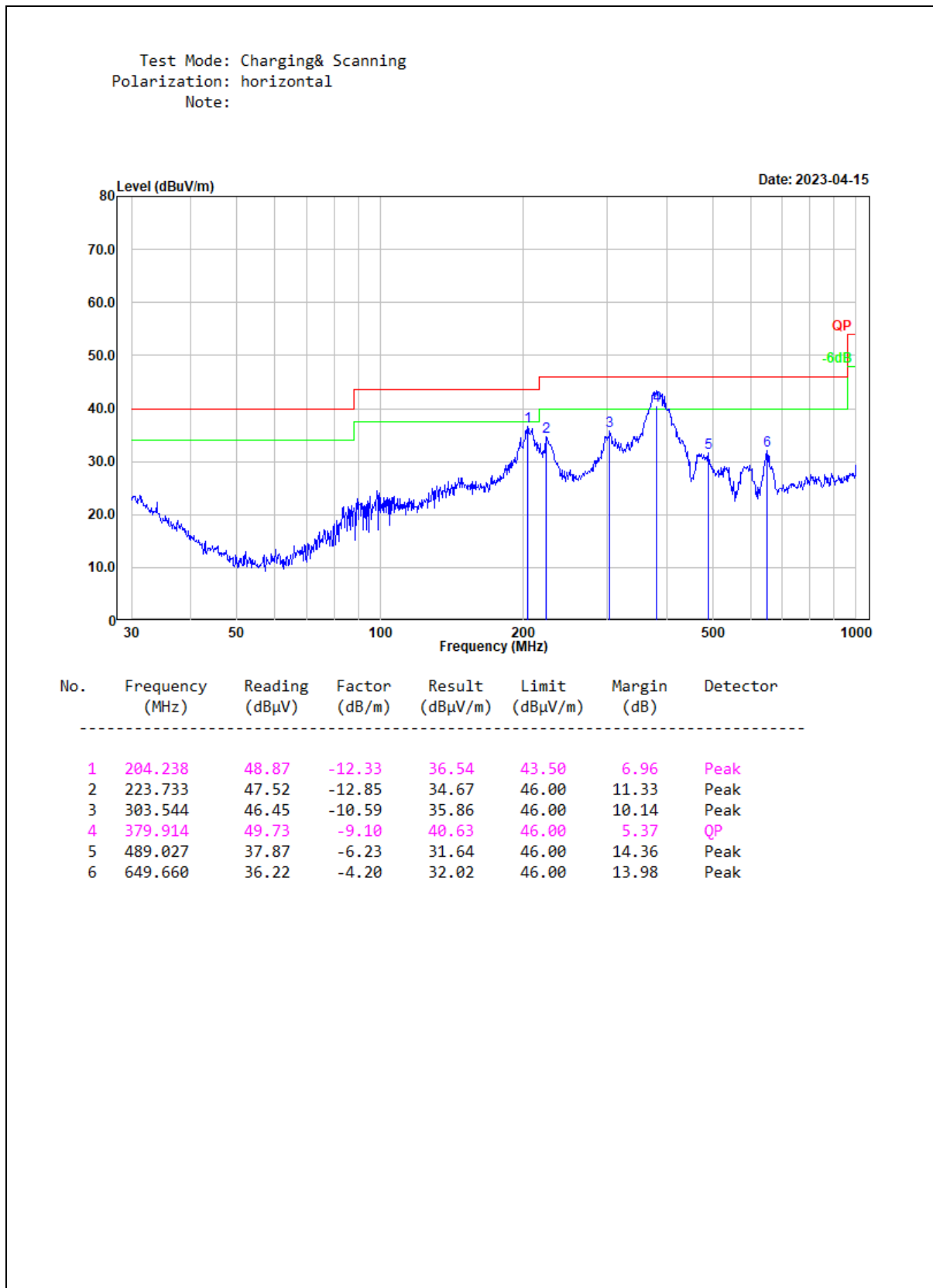
### Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020/10/19	2023/10/18
R&S	EMI Test Receiver	ESR3	102724	2022/07/15	2023/07/14
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2022/07/17	2023/07/16
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0780-01	2022/07/17	2023/07/16
Sonoma	Amplifier	310N	186165	2022/07/17	2023/07/16
Audix	Test Software	E3	201021 (V9)	N/A	N/A
ETS-Lindgren	Horn Antenna	3115	9912-5985	2020/10/13	2023/10/12
R&S	Spectrum Analyzer	FSV40	101591	2022/07/15	2023/07/14
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2022/08/07	2023/08/06
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2022/08/07	2023/08/06
Mini	Pre-amplifier	ZVA-183-S+	5969001149	2022/11/09	2023/11/08
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).

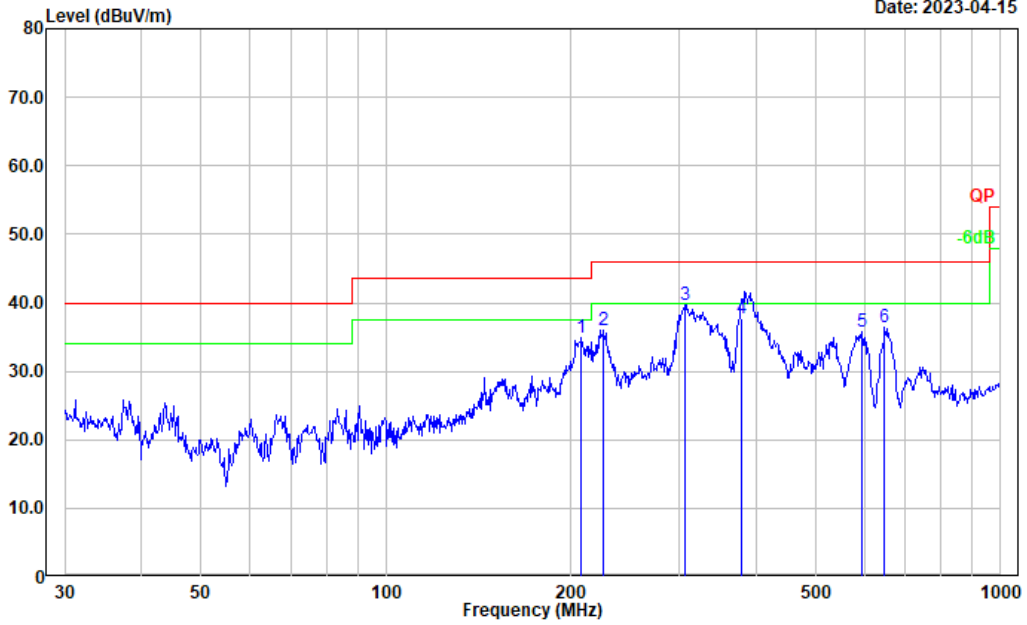
1) 30MHz-1GHz:

Test Mode: MI



Test Mode: Charging& Scanning  
 Polarization: vertical  
 Note:

Date: 2023-04-15



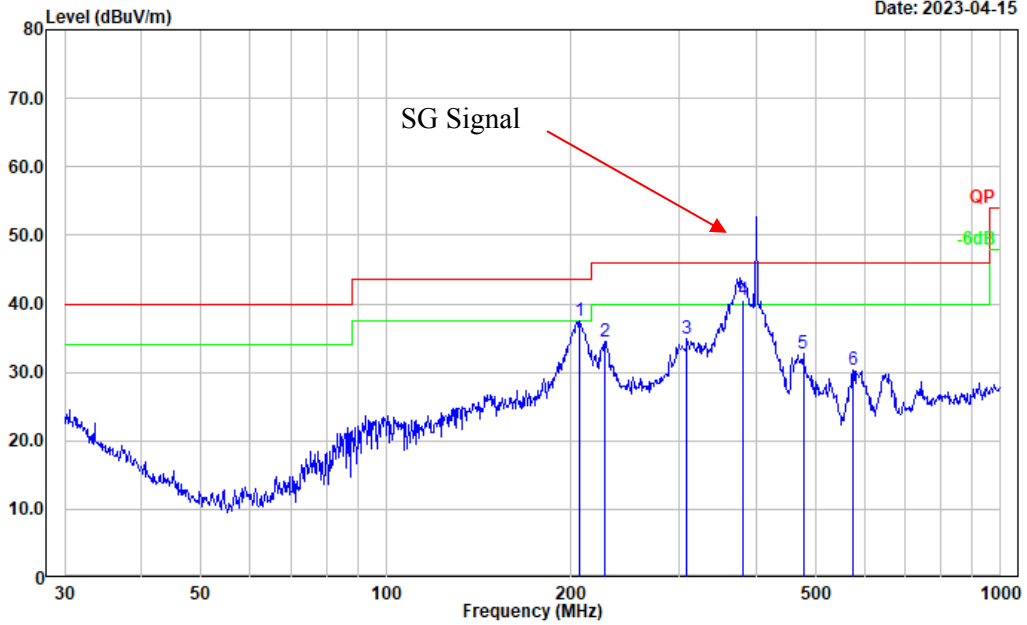
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	207.850	47.33	-12.43	34.90	43.50	8.60	Peak
2	226.099	48.86	-12.89	35.97	46.00	10.03	Peak
3	306.754	50.28	-10.58	39.70	46.00	6.30	Peak
4	378.930	46.88	-9.14	37.74	46.00	8.26	QP
5	593.050	41.03	-5.21	35.82	46.00	10.18	Peak
6	647.386	40.65	-4.19	36.46	46.00	9.54	Peak



**Test Mode:** M2 (operating at 400.0125MHz)

Test Mode: Charging& Receiving  
 Polarization: horizontal  
 Note:

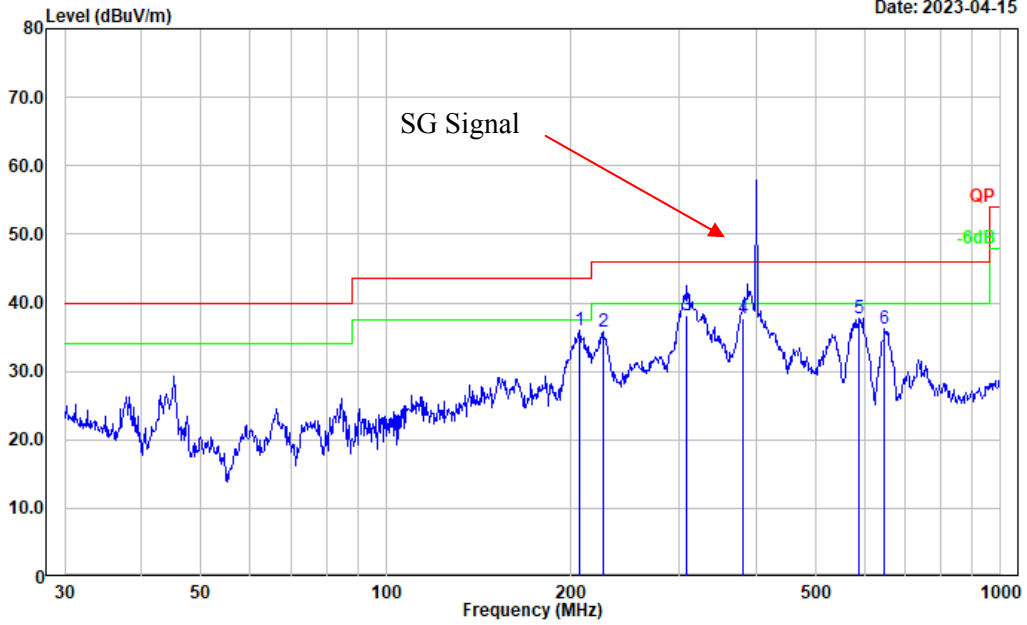
Date: 2023-04-15



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	206.398	49.85	-12.39	37.46	43.50	6.04	Peak
2	226.894	47.31	-12.91	34.40	46.00	11.60	Peak
3	308.913	45.40	-10.60	34.80	46.00	11.20	Peak
4	380.431	49.69	-9.09	40.60	46.00	5.40	QP
5	477.169	38.99	-6.27	32.72	46.00	13.28	Peak
6	574.626	35.94	-5.59	30.35	46.00	15.65	Peak

Test Mode: Charging& Receiving  
 Polarization: vertical  
 Note:

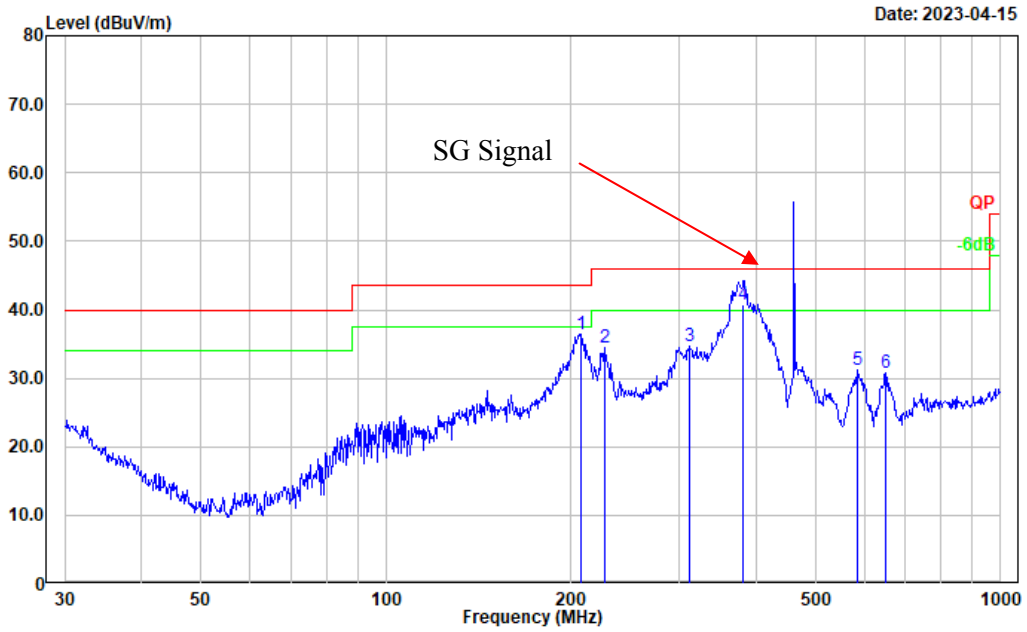
Date: 2023-04-15



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	206.398	48.41	-12.39	36.02	43.50	7.48	Peak
2	225.308	48.68	-12.87	35.81	46.00	10.19	Peak
3	308.505	48.69	-10.59	38.10	46.00	7.90	QP
4	380.519	46.90	-9.09	37.81	46.00	8.19	QP
5	588.905	43.05	-5.34	37.71	46.00	8.29	Peak
6	647.386	40.31	-4.19	36.12	46.00	9.88	Peak

**Test Mode: M2 (operating at 460MHz)**

Test Mode: Charging& Receiving  
 Polarization: horizontal  
 Note:

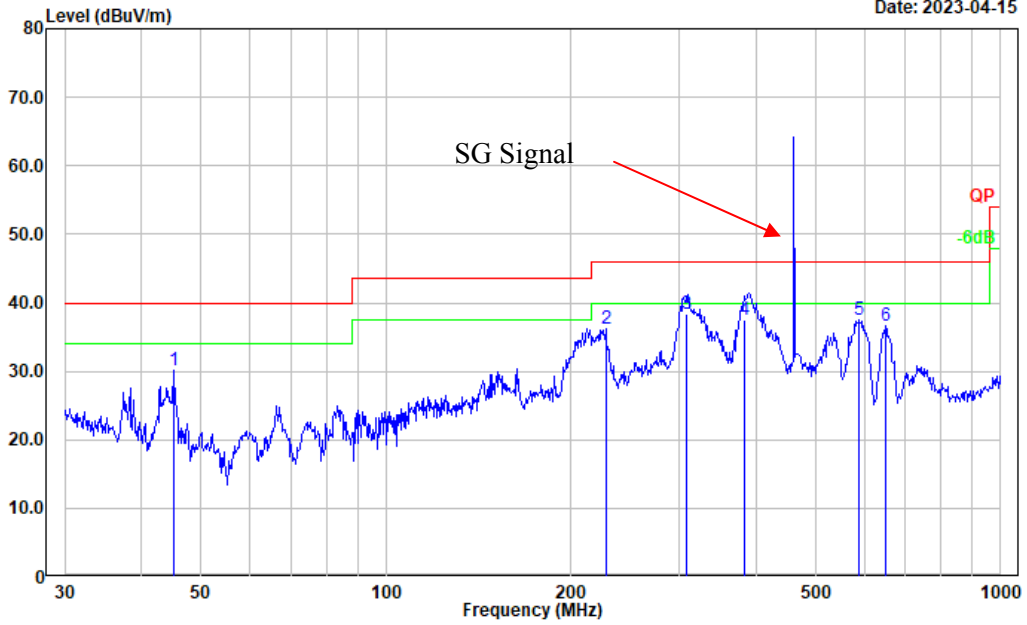


Date: 2023-04-15

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	207.850	48.94	-12.43	36.51	43.50	6.99	Peak
2	226.894	47.43	-12.91	34.52	46.00	11.48	Peak
3	311.087	45.20	-10.60	34.60	46.00	11.40	Peak
4	381.784	49.91	-9.07	40.84	46.00	5.16	QP
5	584.790	36.74	-5.44	31.30	46.00	14.70	Peak
6	649.660	35.04	-4.20	30.84	46.00	15.16	Peak

Test Mode: Charging& Receiving  
 Polarization: vertical  
 Note:

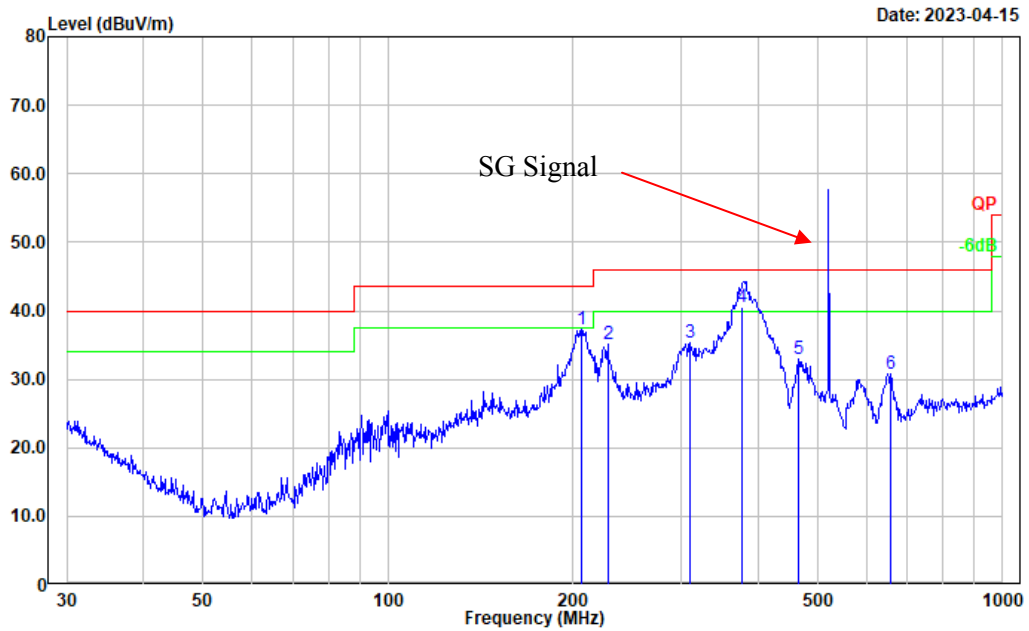
Date: 2023-04-15



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	45.058	44.29	-14.25	30.04	40.00	9.96	Peak
2	227.691	49.20	-12.93	36.27	46.00	9.73	Peak
3	307.892	49.02	-10.59	38.43	46.00	7.57	QP
4	382.074	46.53	-9.06	37.47	46.00	8.53	QP
5	588.905	42.91	-5.34	37.57	46.00	8.43	Peak
6	649.660	40.79	-4.20	36.59	46.00	9.41	Peak

**Test Mode: M2 (operating at 519.9875MHz)**

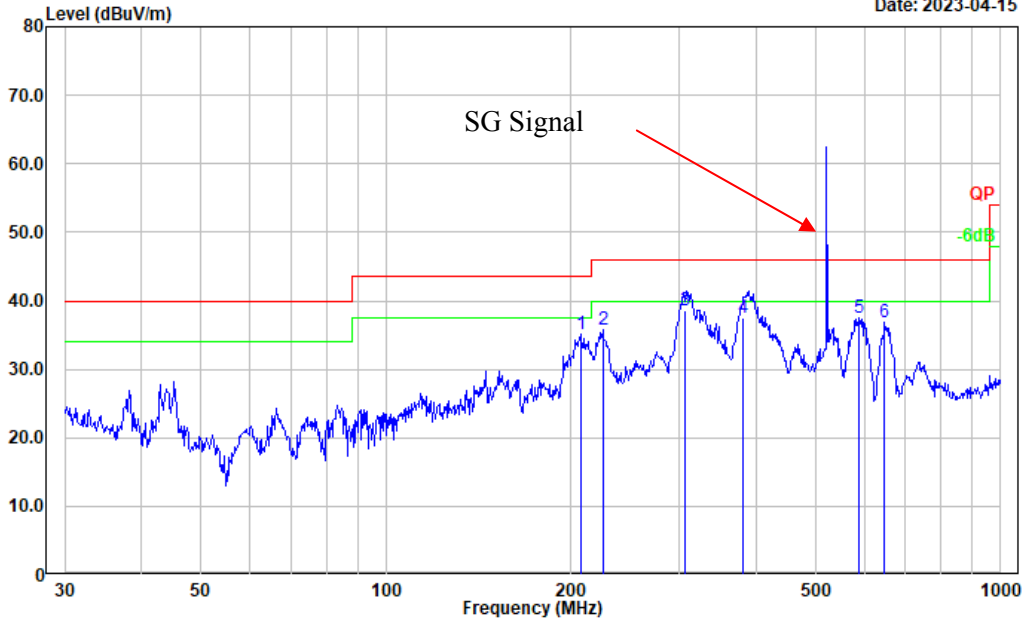
Test Mode: Charging& Receiving  
 Polarization: horizontal  
 Note:



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	206.398	49.59	-12.39	37.20	43.50	6.30	Peak
2	227.691	47.99	-12.93	35.06	46.00	10.94	Peak
3	309.998	45.86	-10.60	35.26	46.00	10.74	Peak
4	376.905	49.69	-9.24	40.45	46.00	5.55	QP
5	465.599	39.34	-6.46	32.88	46.00	13.12	Peak
6	658.836	35.02	-4.13	30.89	46.00	15.11	Peak

Test Mode: Charging& Receiving  
 Polarization: vertical  
 Note:

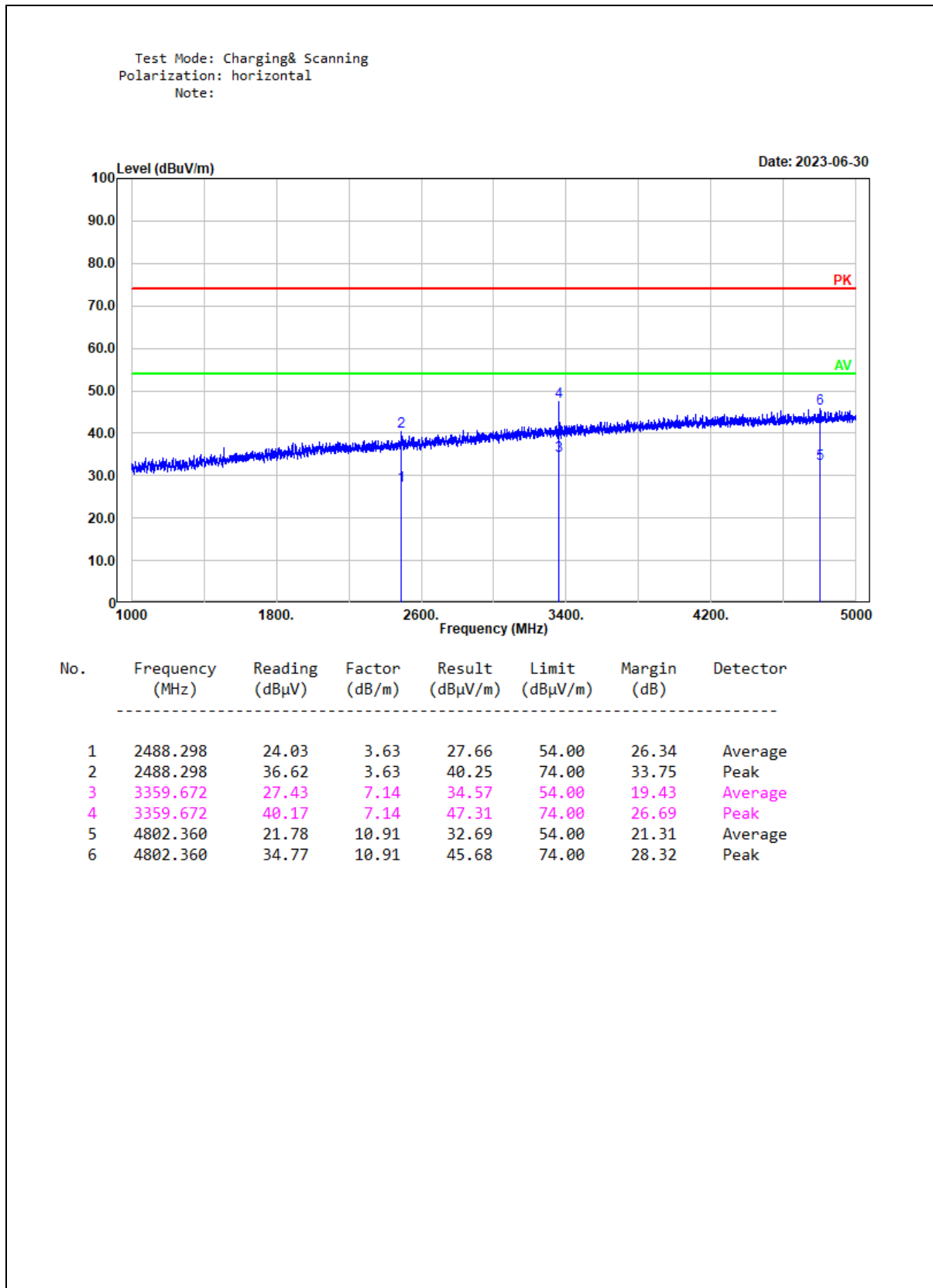
Date: 2023-04-15



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	207.123	47.58	-12.40	35.18	43.50	8.32	Peak
2	225.308	48.64	-12.87	35.77	46.00	10.23	Peak
3	307.221	49.16	-10.58	38.58	46.00	7.42	QP
4	381.716	46.55	-9.07	37.48	46.00	8.52	QP
5	586.844	42.83	-5.39	37.44	46.00	8.56	Peak
6	647.386	41.11	-4.19	36.92	46.00	9.08	Peak

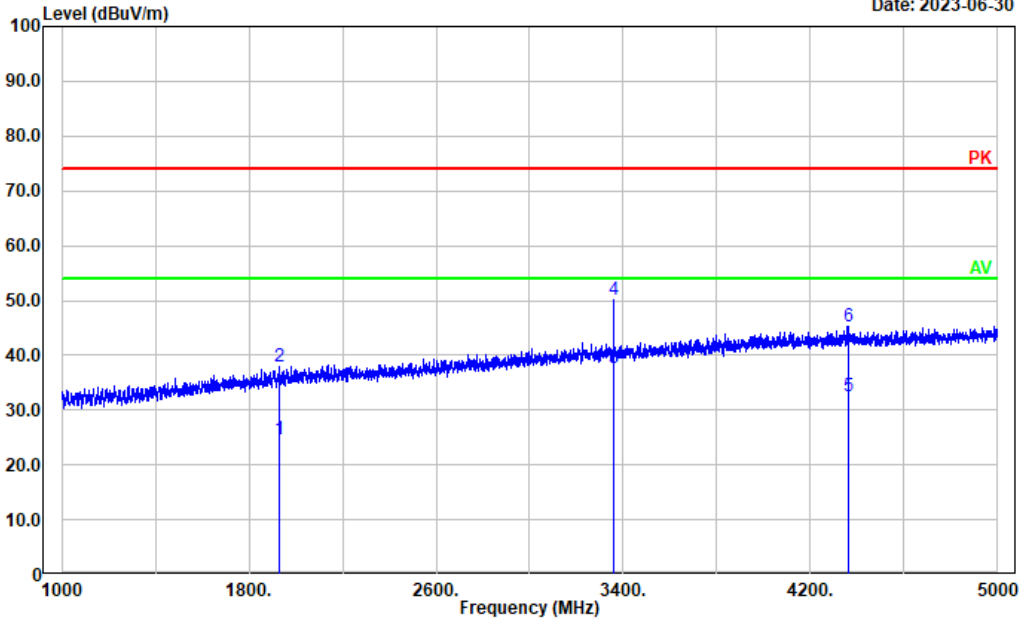
2) Above 1GHz (Worst mode is M3 (charging from base, operating at 222.0125MHz):

Test Mode: M1



Test Mode: Charging& Scanning  
 Polarization: vertical  
 Note:

Date: 2023-06-30



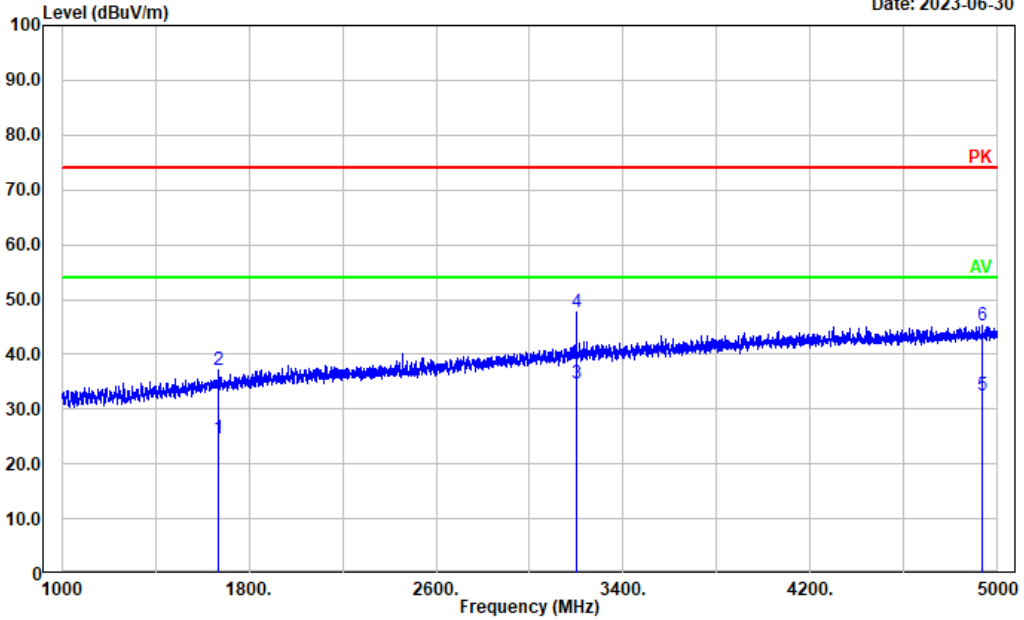
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1929.786	22.67	2.01	24.68	54.00	29.32	Average
2	1929.786	35.90	2.01	37.91	74.00	36.09	Peak
3	3360.472	30.52	7.14	37.66	54.00	16.34	Average
4	3360.472	43.00	7.14	50.14	74.00	23.86	Peak
5	4361.472	22.65	9.82	32.47	54.00	21.53	Average
6	4361.472	35.52	9.82	45.34	74.00	28.66	Peak



**Test Mode: M2 (operating at 400.0125MHz)**

Test Mode: Charging& Receiveing  
 Polarization: horizontal  
 Note:

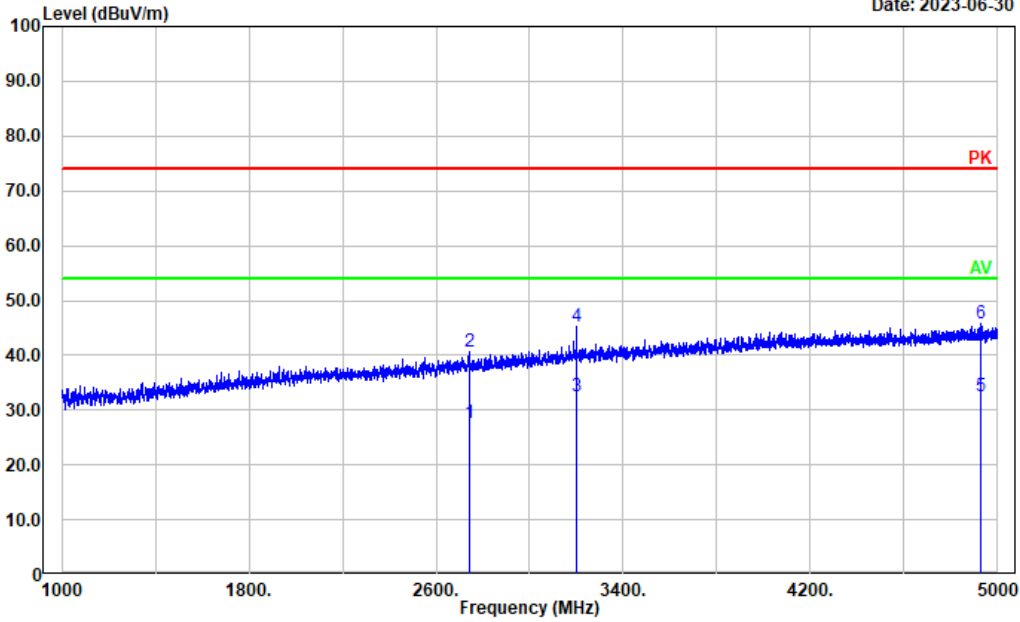
Date: 2023-06-30



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	1672.134	24.00	0.58	24.58	54.00	29.42	Average
2	1672.134	36.65	0.58	37.23	74.00	36.77	Peak
3	3200.440	27.91	6.76	34.67	54.00	19.33	Average
4	3200.440	40.85	6.76	47.61	74.00	26.39	Peak
5	4931.986	21.24	11.20	32.44	54.00	21.56	Average
6	4931.986	33.98	11.20	45.18	74.00	28.82	Peak

Test Mode: Charging& Receiveing  
 Polarization: vertical  
 Note:

Date: 2023-06-30

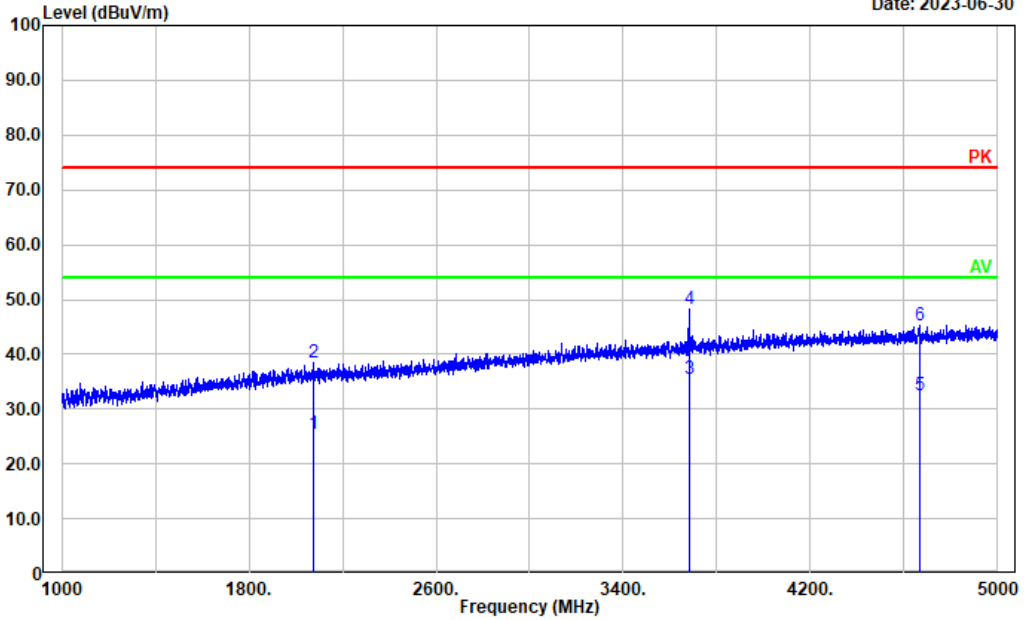


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2740.348	22.80	4.89	27.69	54.00	26.31	Average
2	2740.348	35.75	4.89	40.64	74.00	33.36	Peak
3	3200.440	25.82	6.76	32.58	54.00	21.42	Average
4	3200.440	38.59	6.76	45.35	74.00	28.65	Peak
5	4926.385	21.28	11.19	32.47	54.00	21.53	Average
6	4926.385	34.58	11.19	45.77	74.00	28.23	Peak

**Test Mode: M2 (operating at 460MHz)**

Test Mode: Charging& Receiveing  
 Polarization: horizontal  
 Note:

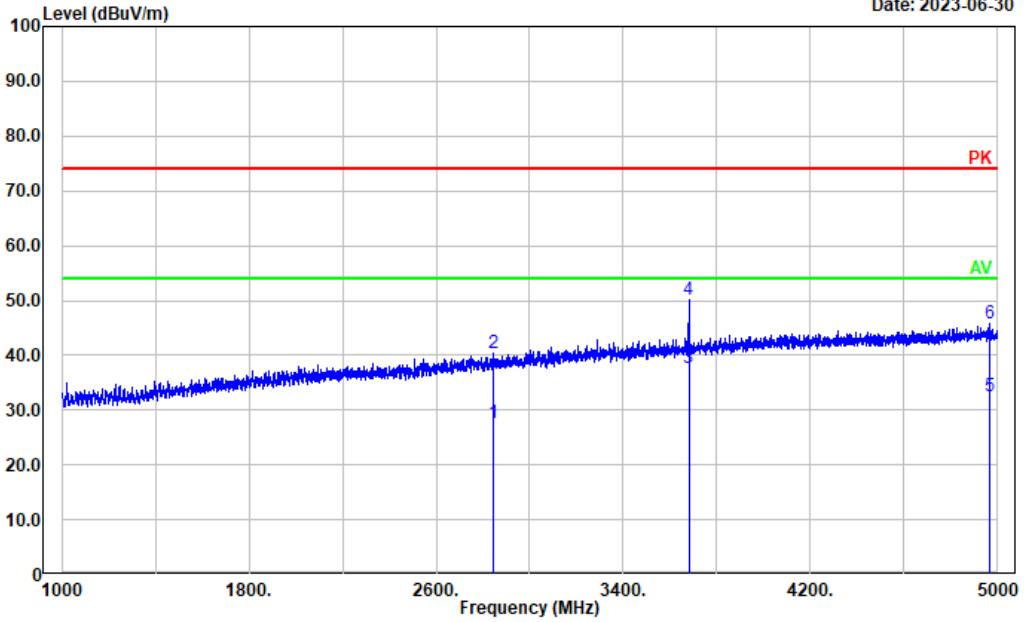
Date: 2023-06-30



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2077.015	22.79	2.57	25.36	54.00	28.64	Average
2	2077.015	35.81	2.57	38.38	74.00	35.62	Peak
3	3680.536	27.20	8.24	35.44	54.00	18.56	Average
4	3680.536	40.08	8.24	48.32	74.00	25.68	Peak
5	4669.534	21.98	10.49	32.47	54.00	21.53	Average
6	4669.534	34.77	10.49	45.26	74.00	28.74	Peak

Test Mode: Charging& Receiveing  
 Polarization: vertical  
 Note:

Date: 2023-06-30

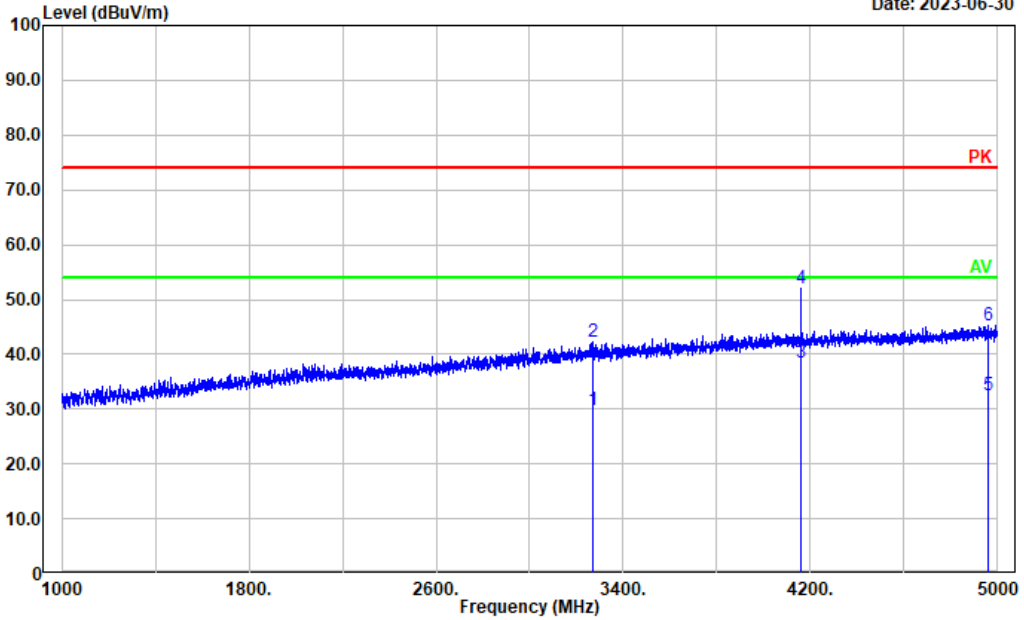


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2843.569	22.22	5.32	27.54	54.00	26.46	Average
2	2843.569	34.93	5.32	40.25	74.00	33.75	Peak
3	3679.736	29.35	8.24	37.59	54.00	16.41	Average
4	3679.736	41.78	8.24	50.02	74.00	23.98	Peak
5	4968.794	21.34	11.22	32.56	54.00	21.44	Average
6	4968.794	34.55	11.22	45.77	74.00	28.23	Peak

**Test Mode: M2 (operating at 519.9875MHz)**

Test Mode: Charging& Receiveing  
 Polarization: horizontal  
 Note:

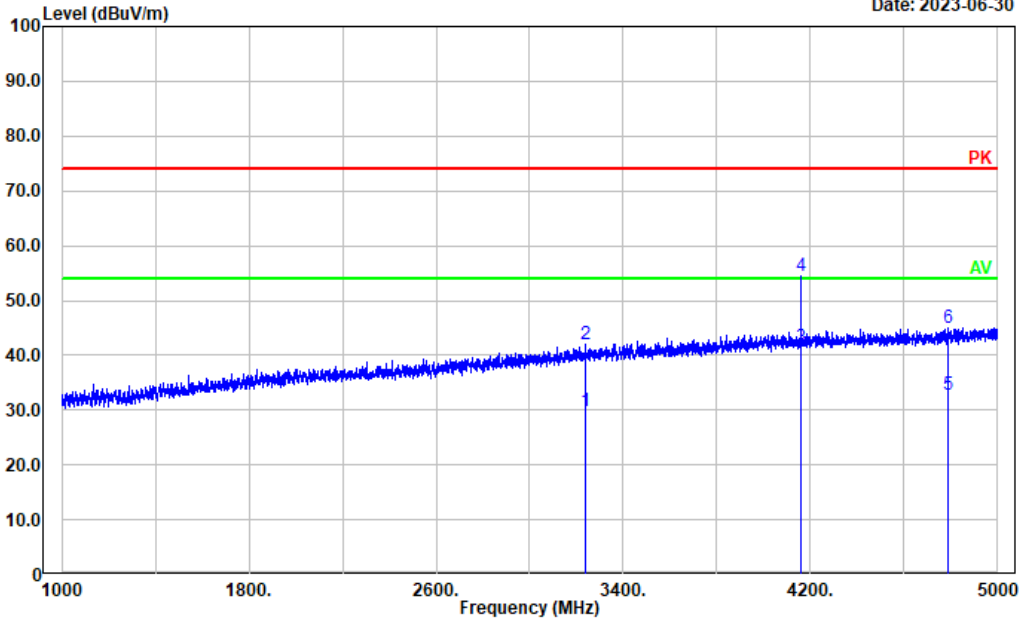
Date: 2023-06-30



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	3270.054	22.91	6.94	29.85	54.00	24.15	Average
2	3270.054	35.23	6.94	42.17	74.00	31.83	Peak
3	4159.832	28.94	9.51	38.45	54.00	15.55	Average
4	4159.832	42.40	9.51	51.91	74.00	22.09	Peak
5	4959.992	21.30	11.24	32.54	54.00	21.46	Average
6	4959.992	34.15	11.24	45.39	74.00	28.61	Peak

Test Mode: Charging& Receiveing  
 Polarization: vertical  
 Note:

Date: 2023-06-30



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	3240.448	23.00	6.87	29.87	54.00	24.13	Average
2	3240.448	35.23	6.87	42.10	74.00	31.90	Peak
3	4159.832	31.88	9.51	41.39	54.00	12.61	Average
4	4159.832	44.90	9.51	54.41	74.00	19.59	Peak
5	4788.758	21.80	10.86	32.66	54.00	21.34	Average
6	4788.758	34.23	10.86	45.09	74.00	28.91	Peak

**4.3 Antenna Power Conduction Limits for Receivers**

Serial Number:	234N_2	Test Date:	2023/04/24~2023/06/30
Test Site:	RF	Test Mode:	M1, M2
Tester:	Morpheus Shi	Test Result:	Pass

**Environmental Conditions:**

Temperature: (°C)	23.8	Relative Humidity: (%)	52	ATM Pressure: (kPa)	100.8
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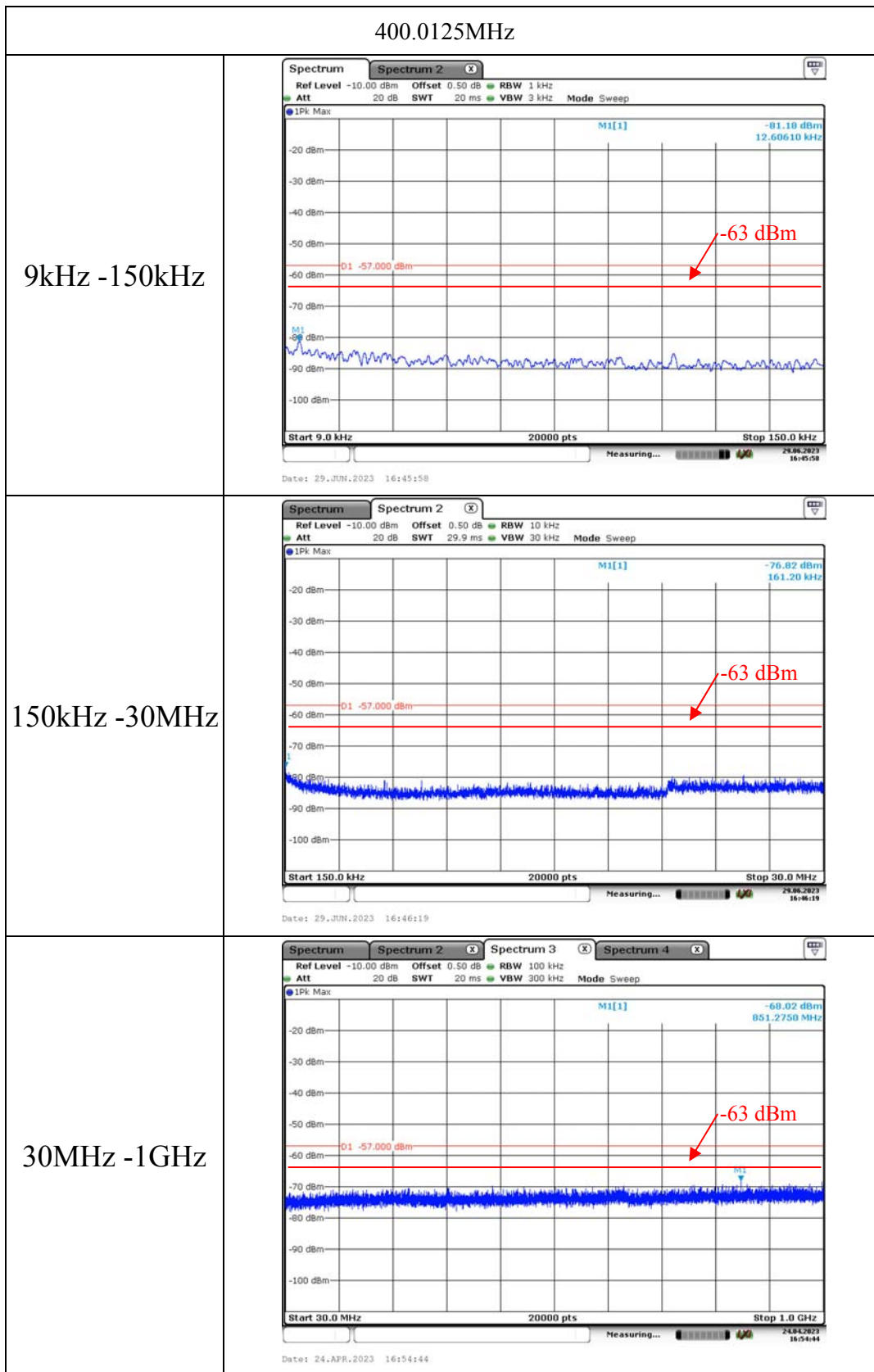
**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101474	2022/07/15	2023/07/14
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
HP	RF Communications Test Set	8920A	3438A05209	2022/7/15	2023/7/14
Weinschel	Power splitter	1515	RA915	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).*

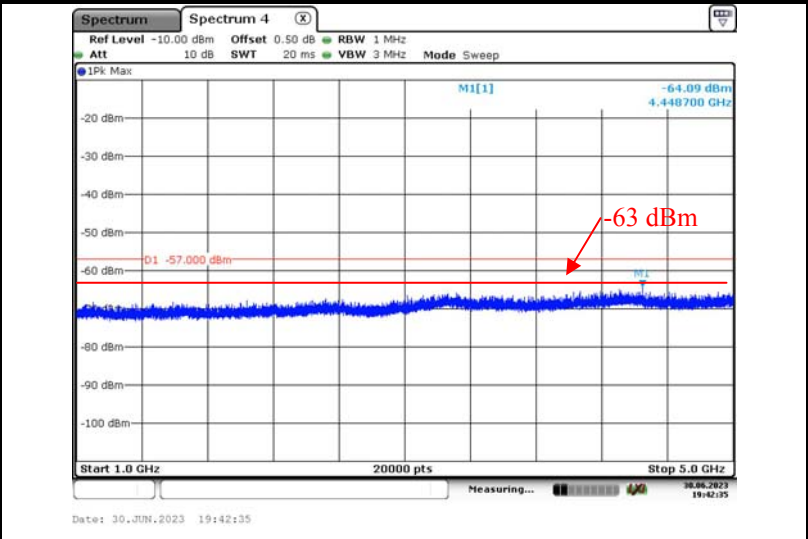
### Receiving Mode

Note: Because the insertion loss of power splitter (6dB) is no offset in the instrument, so the limit shall be under 6dB (-63dBm).

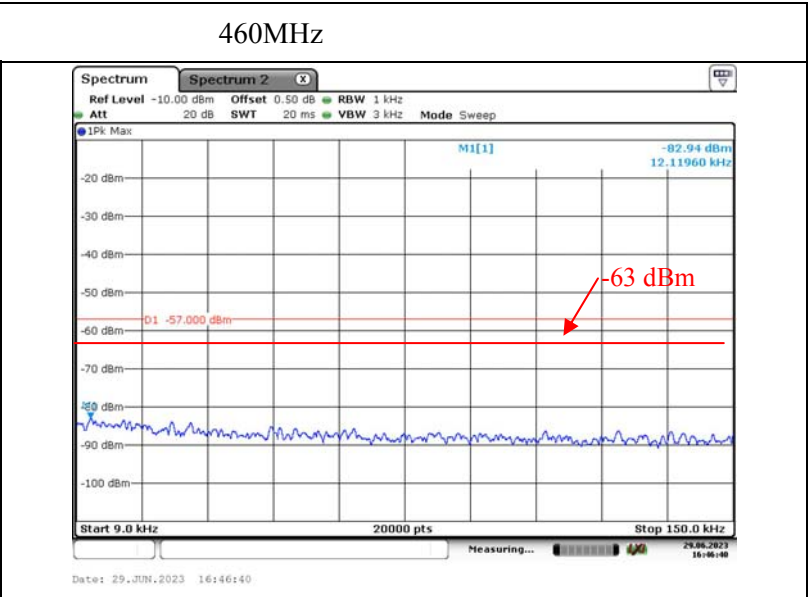




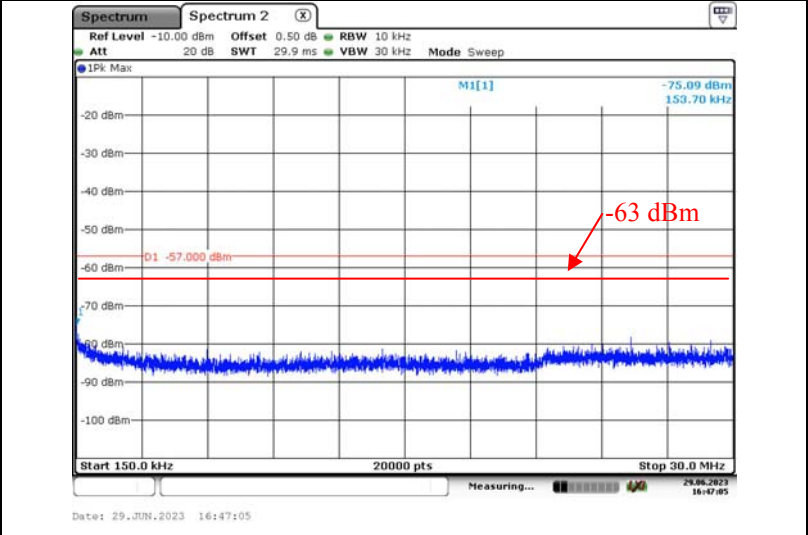
1GHz -5GHz



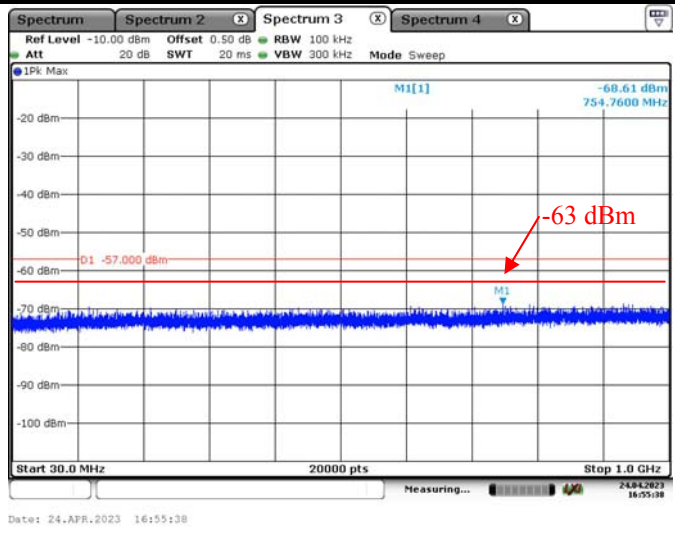
9kHz -150kHz



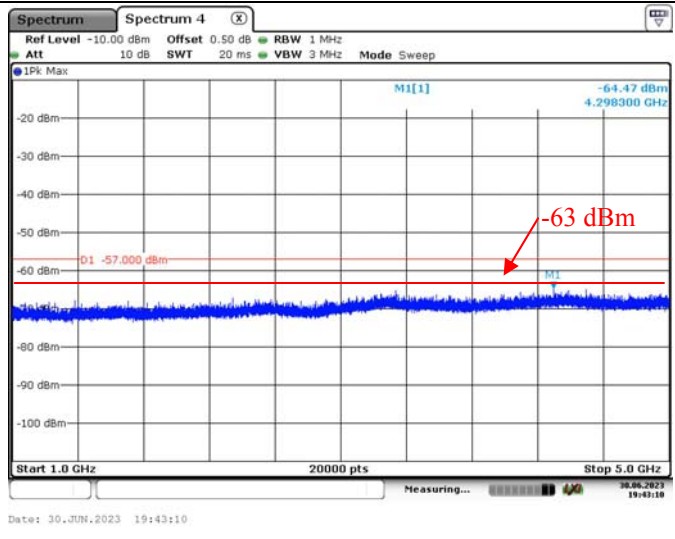
150kHz -30MHz



30MHz -1GHz

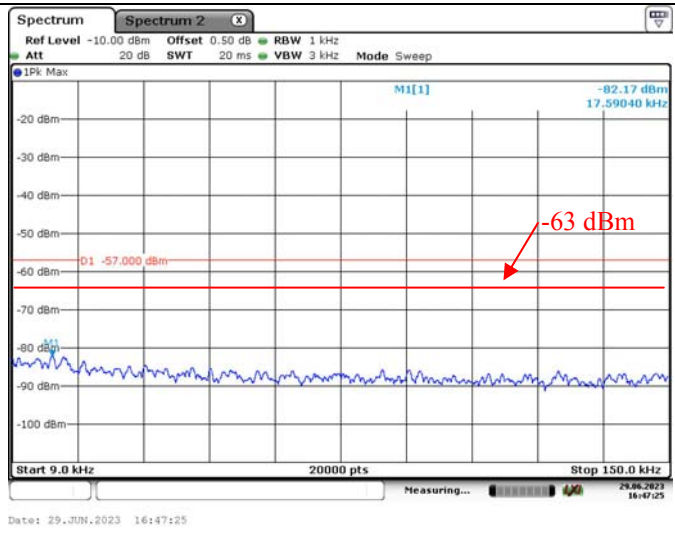


1GHz -5GHz

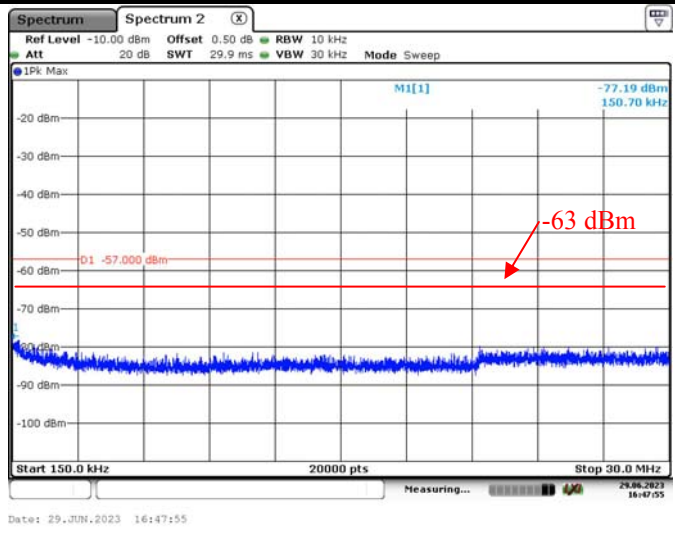


519.9875MHz

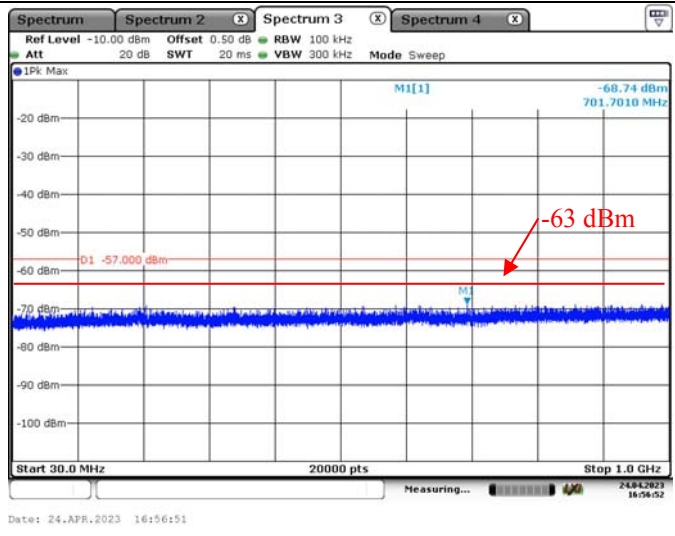
9kHz -150kHz



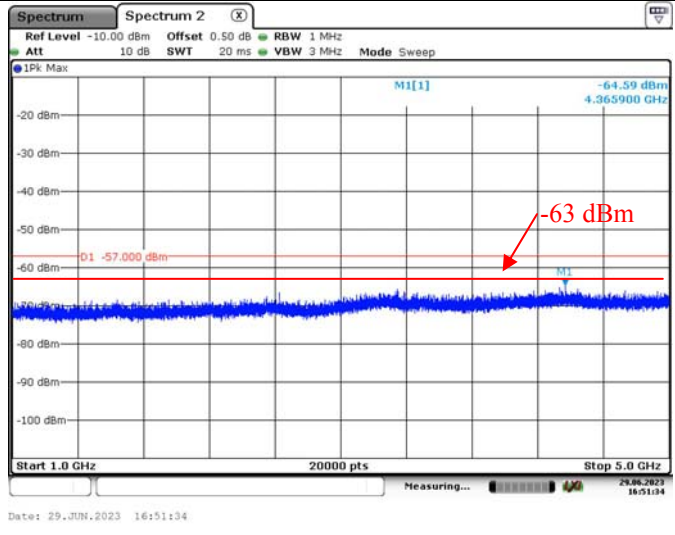
150kHz -30MHz



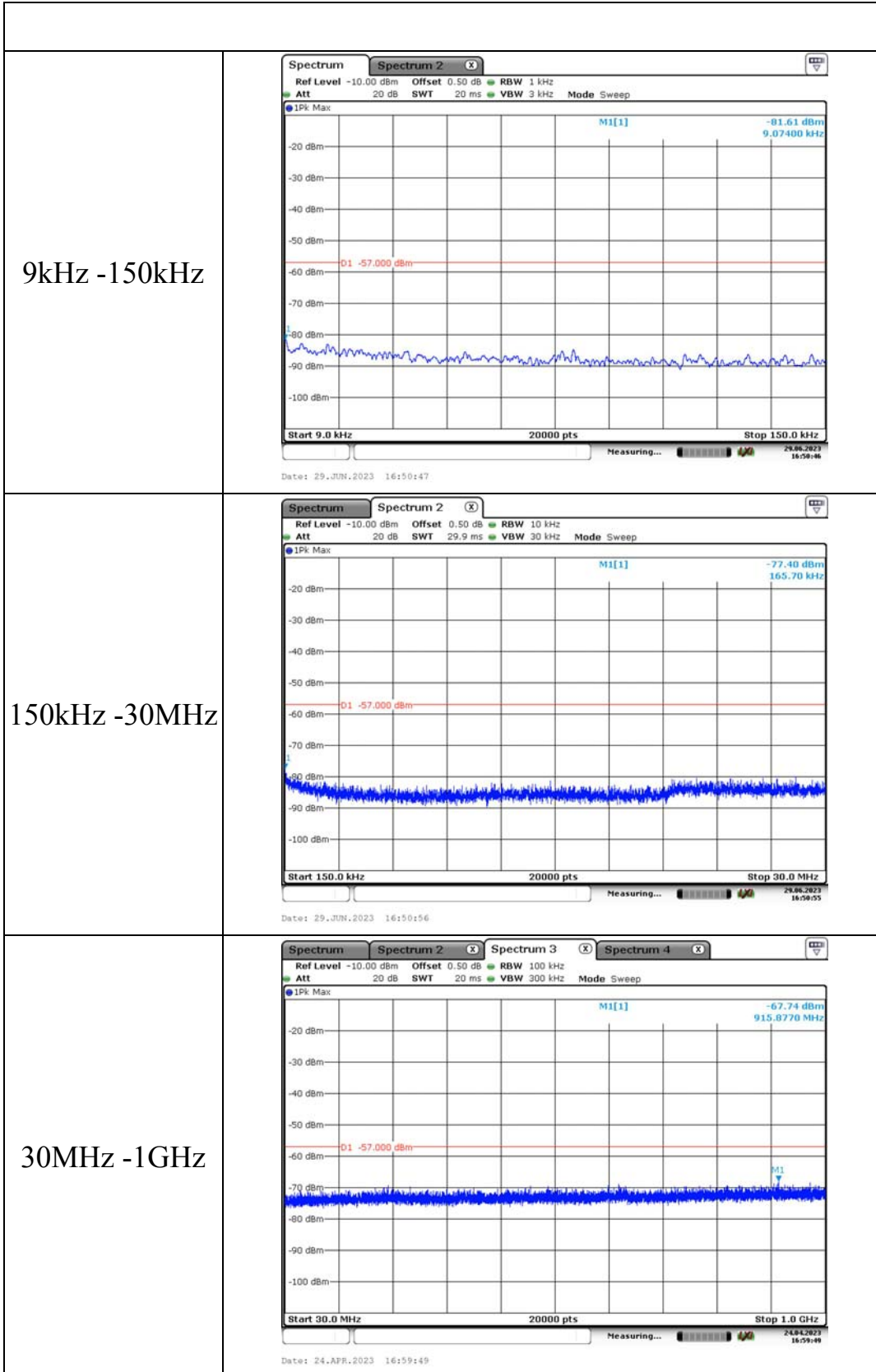
30MHz -1GHz



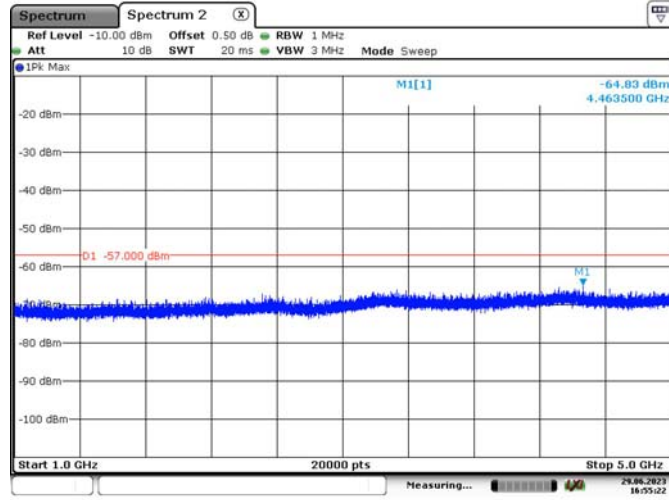
1GHz -5GHz



### Scanning Mode



1GHz -5GHz



**4.4 Scanning Receivers and Frequency Converters Used with Scanning Receivers**

Serial Number:	234N_2	Test Date:	2023/04/24
Test Site:	RF	Test Mode:	M1
Tester:	Morpheus Shi	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	23.8	Relative Humidity: (%)	52	ATM Pressure: (kPa)	100.8

**Test Equipment List and Details:**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
HP	RF Communications Test Set	8920A	3438A05209	2022/7/15	2023/7/14
Agilent	MXG Vector Signal Generator	N5182B	MY51350144	2023/4/22	2024/4/21
eastsheep	Coaxial Attenuator	2W-SMA-JK-18G	21060302	Each time	N/A

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

**Test Data:**

Scanning Frequency Range	Test Frequency	Measurement Result (Worst Case)	Limit
MHz	MHz	dB	dB
400-520	824, 836, 849, 869, 881.5, 894	45.1	>38

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