



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: EVOTE INTERNATIONAL LIMITED

Address: FLAT/RM A 12/F ZJ 300 300 LOCKHART ROAD WAN CHAI,
HONGKONG, China

FCC ID: 2A6DTET002

Product Name: TWO-WAY RADIOS

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: CR221152696-00A

Date Of Issue: 2023/2/14

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

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	CR221152696-00A	Original Report	2023/2/14

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

Product Name:	TWO-WAY RADIOS
Test Model:	KG-UV8D(Plus)
Multiple Models:	KG-UV8D Pro,KG-UV8D Mate, KG-UV8D,KG-UV8E,KG-UV8Q, KG-UV8G, KG-UV8P, KG-UV12W, KG-UV3Q
Highest Operation Frequency:	520MHz
Rated Input Voltage:	DC 7.4V from battery DC 8.4V charging from charger base
Serial Number:	IPI3-1
EUT Received Date:	2022/11/11
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	Parameters
Adapter	/	DSX-120050L-US	Input: AC 100-240V~50/60Hz 0.3A Output: DC 12V=0.5A

Operation Frequency And Test Channel:

Operation Modes	Operation Frequency Range (MHz)	Test Frequency (MHz)
VHF Receiving	136-174	136.0125, 155, 173.9875
UHF Receiving	400-520	400.0125, 460, 519.9875
Scanning	136-174 400-520	/
FM	76-108	76.1, 92, 107.9

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: Charging + Scanning M2: Charging + Receiving M3: Charging + FM Receiver
Equipment Modifications:	No
EUT Exercise Software:	No

1.2.2 Support Equipment List and Details

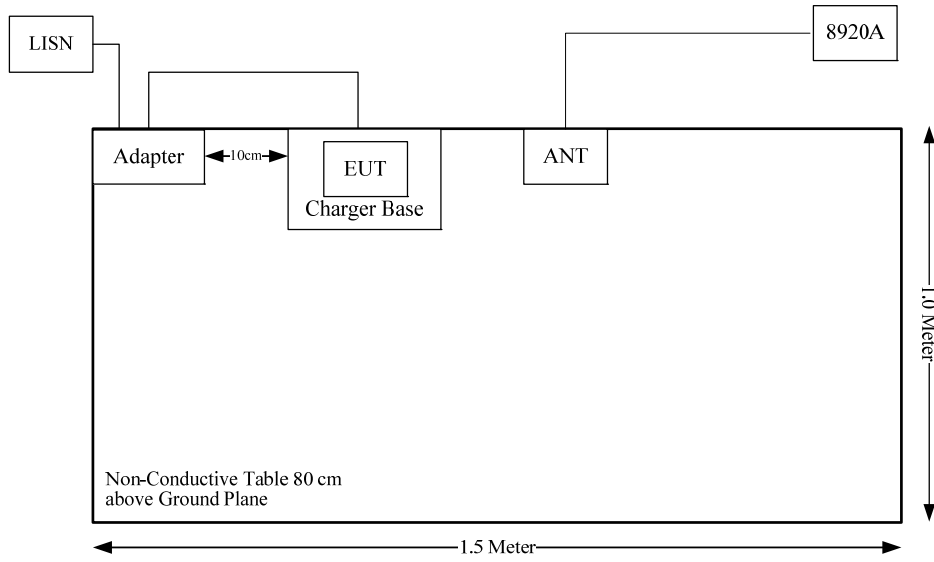
Manufacturer	Description	Model	Serial Number
HP	RF Communications Test Set	8920A	3438A05209

1.2.3 Support Cable List and Details

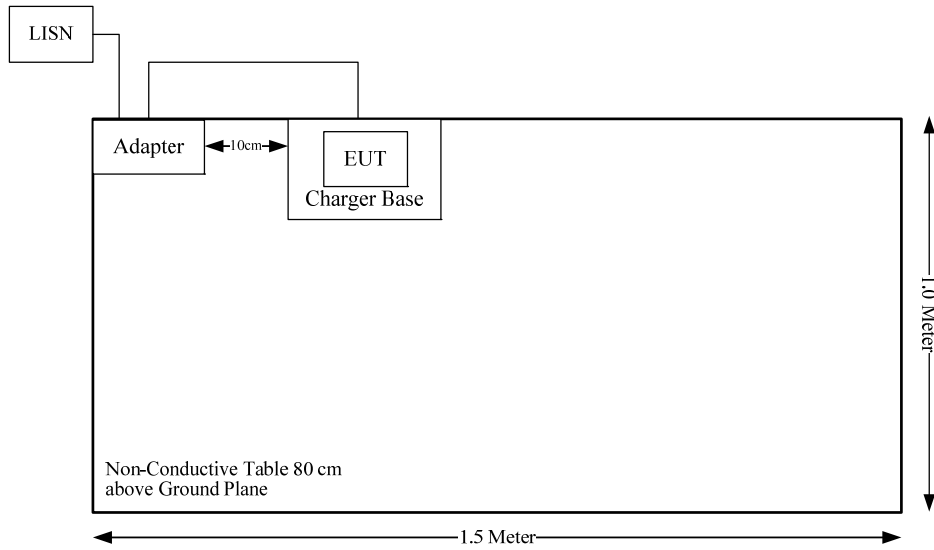
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
Adapter Cable	No	No	1.2	Adapter	Charger Base
Antenna Cable	No	No	1.5	8920A	Antenna

1.2.4 Block Diagram of Test Setup

M2/M3:



M1:



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)

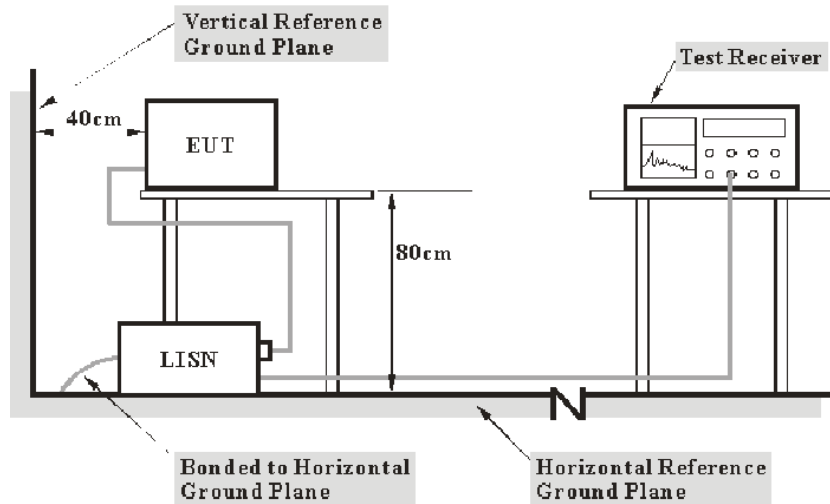
2. SUMMARY OF TEST RESULTS

Standard(s) Section	Description of Test	Result
§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

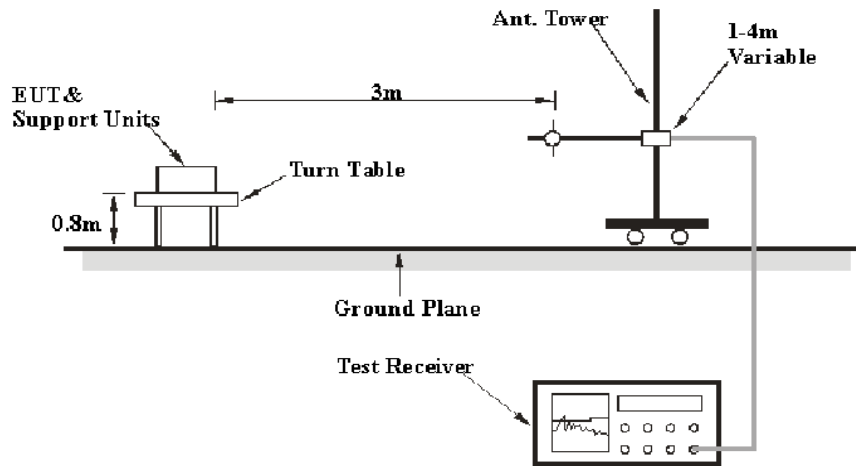
The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

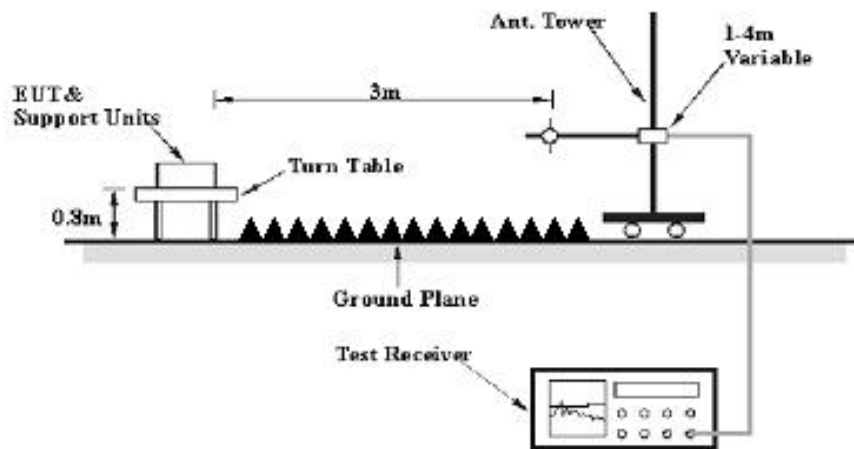
3.2 Radiation Spurious Emissions

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:

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

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

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

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

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.

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

Serial Number:	IPI3-1	Test Date:	2022/11/29
Test Site:	CE	Test Mode:	M1,M2,M3
Tester:	Vic Du	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	25.7	Relative Humidity: (%)	68	ATM Pressure: (kPa)	100.7

Test Equipment List and Details:

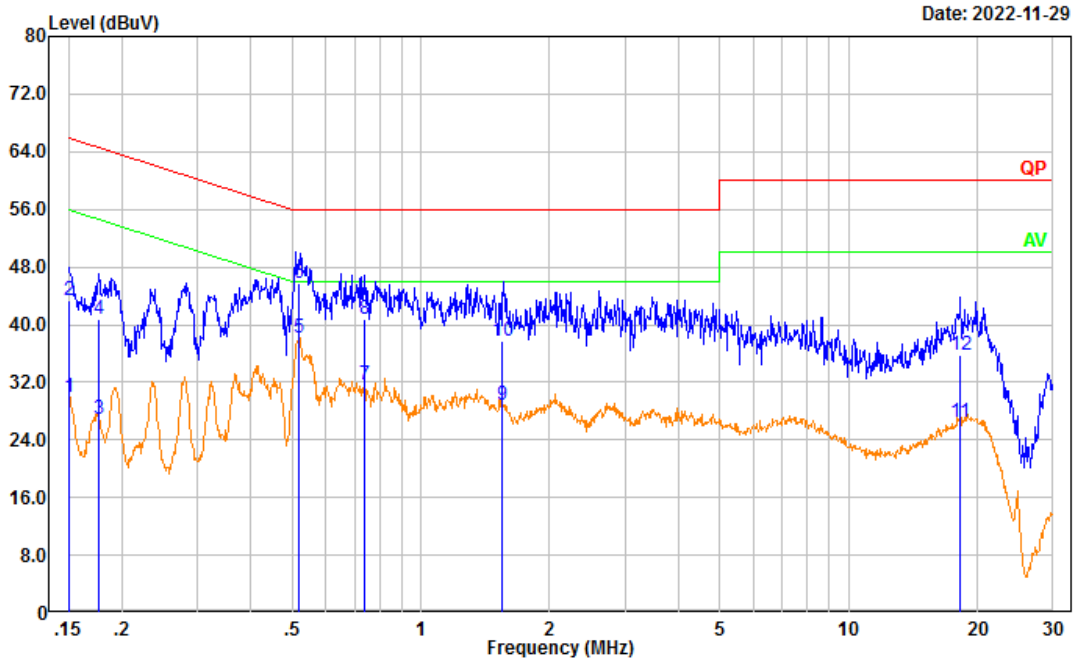
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	LISN	ENV216	101134	2022/04/01	2023/03/31
R&S	EMI Test Receiver	ESR3	102726	2022/07/15	2023/07/14
MICRO-COAX	Coaxial Cable	UTIFLEX	C-0200-01	2022/08/07	2023/08/06
Audix	Test Software	E3	190306 (V9)	N/A	N/A

* 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: MI

Line:

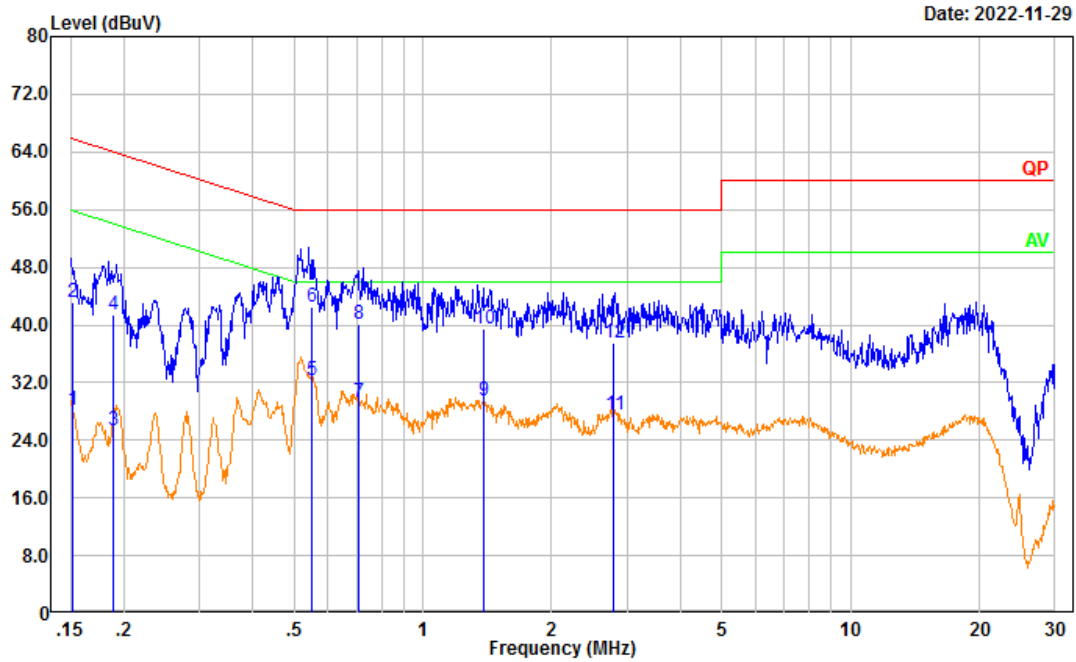
Test Mode: Charging + scanning
 Port: Line
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.150	20.23	9.61	29.84	55.99	26.15	Average
2	0.150	33.66	9.61	43.27	65.99	22.72	QP
3	0.177	17.22	9.61	26.83	54.65	27.82	Average
4	0.177	31.19	9.61	40.80	64.65	23.85	QP
5	0.518	28.59	9.61	38.20	46.00	7.80	Average
6	0.518	36.13	9.61	45.74	56.00	10.26	QP
7	0.736	22.04	9.62	31.66	46.00	14.34	Average
8	0.736	31.13	9.62	40.75	56.00	15.25	QP
9	1.552	19.23	9.63	28.86	46.00	17.14	Average
10	1.552	28.07	9.63	37.70	56.00	18.30	QP
11	18.222	16.71	9.75	26.46	50.00	23.54	Average
12	18.222	26.07	9.75	35.82	60.00	24.18	QP

Neutral:

Test Mode: Charging + scanning
 Port: neutral
 Note:



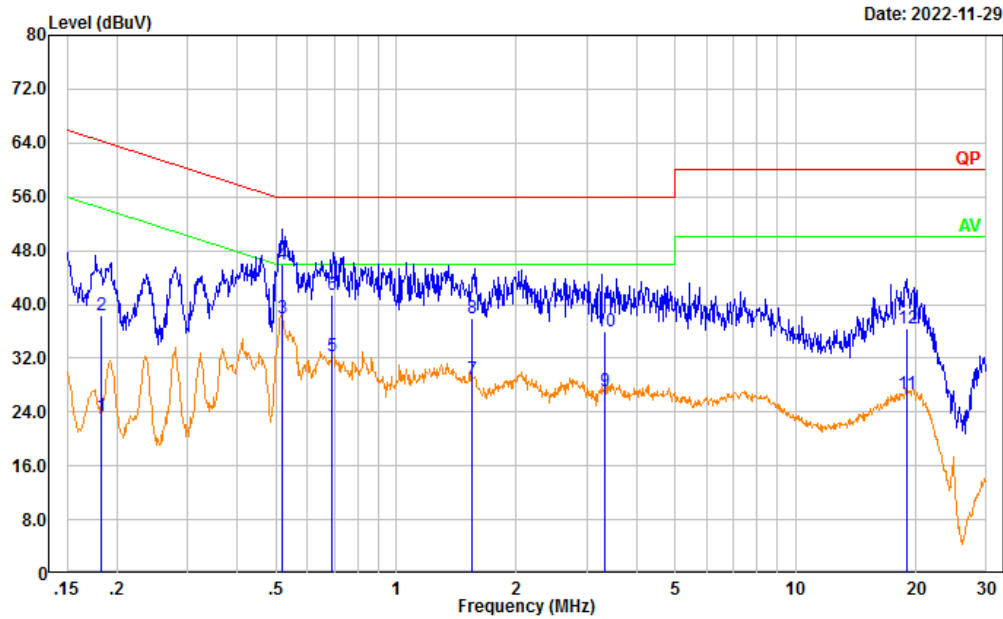
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.151	18.48	9.61	28.09	55.93	27.84	Average
2	0.151	33.58	9.61	43.19	65.93	22.74	QP
3	0.188	15.69	9.61	25.30	54.12	28.82	Average
4	0.188	31.79	9.61	41.40	64.12	22.72	QP
5	0.548	22.72	9.61	32.33	46.00	13.67	Average
6	0.548	32.88	9.61	42.49	56.00	13.51	QP
7	0.710	19.71	9.62	29.33	46.00	16.67	Average
8	0.710	30.47	9.62	40.09	56.00	15.91	QP
9	1.385	19.93	9.62	29.55	46.00	16.45	Average
10	1.385	29.75	9.62	39.37	56.00	16.63	QP
11	2.800	17.89	9.65	27.54	46.00	18.46	Average
12	2.800	27.96	9.65	37.61	56.00	18.39	QP

Test Mode: M2

Note: Pre-scan operating frequency at 136.0125/156/173.9875/400.0125/460/519.9875MHz, worst case is operating at 519.9875MHz.

Line:

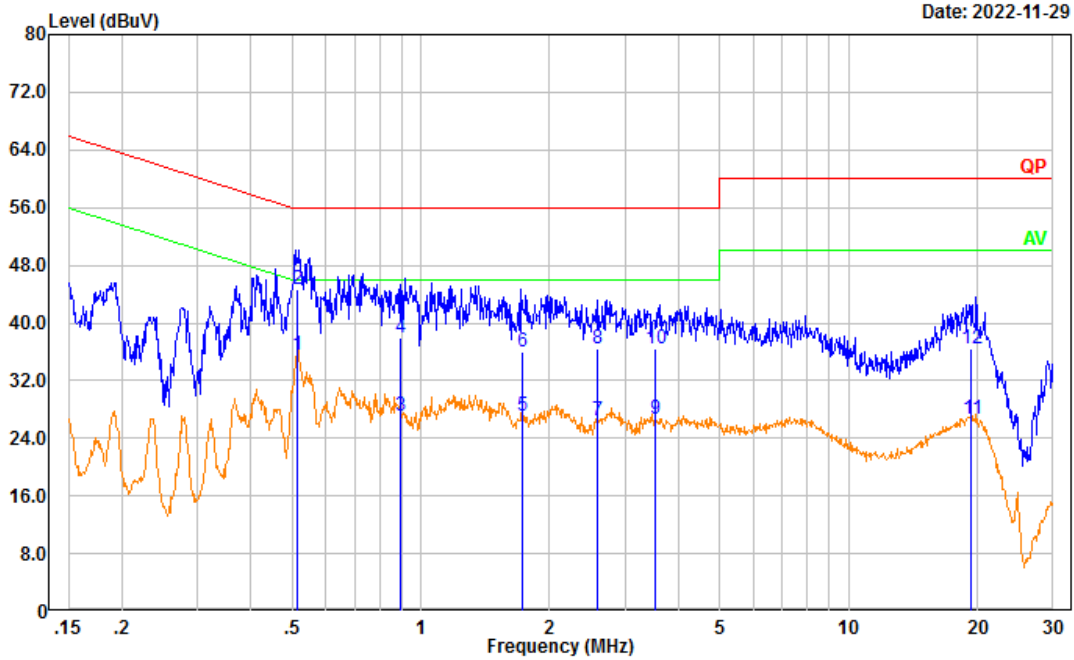
Test Mode: Charging + Receiving
 Port: Line
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.182	13.90	9.61	23.51	54.39	30.88	Average
2	0.182	28.85	9.61	38.46	64.39	25.93	QP
3	0.520	28.37	9.61	37.98	46.00	8.02	Average
4	0.520	36.25	9.61	45.86	56.00	10.14	QP
5	0.692	22.62	9.62	32.24	46.00	13.76	Average
6	0.692	31.72	9.62	41.34	56.00	14.66	QP
7	1.550	19.27	9.63	28.90	46.00	17.10	Average
8	1.550	28.36	9.63	37.99	56.00	18.01	QP
9	3.318	17.35	9.65	27.00	46.00	19.00	Average
10	3.318	26.41	9.65	36.06	56.00	19.94	QP
11	18.950	17.00	9.77	26.77	50.00	23.23	Average
12	18.950	26.60	9.77	36.37	60.00	23.63	QP

Neutral:

Test Mode: Charging + Receiving
 Port: neutral
 Note:



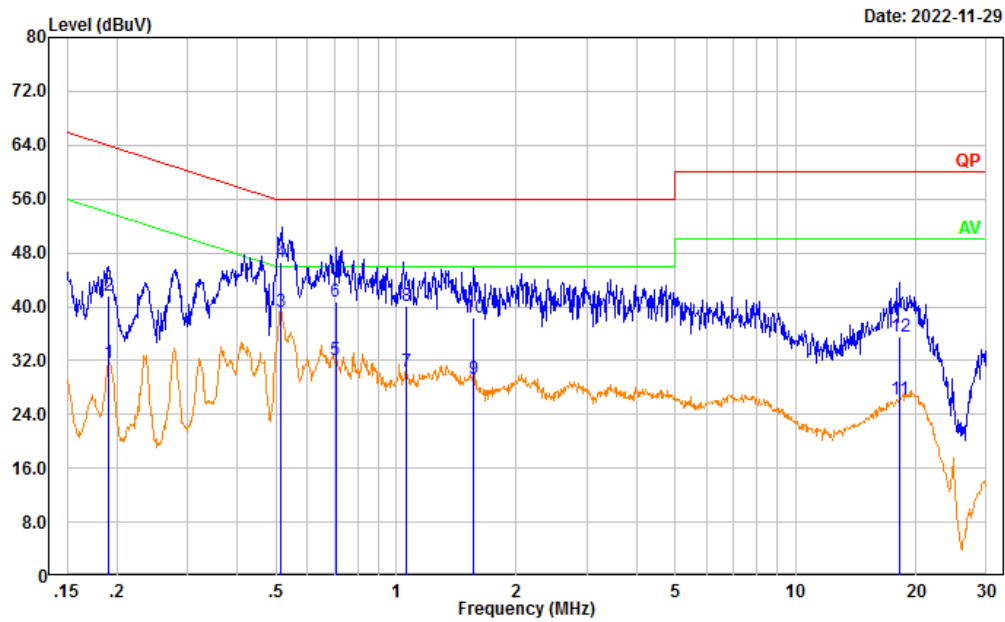
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.513	25.95	9.61	35.56	46.00	10.44	Average
2	0.513	34.97	9.61	44.58	56.00	11.42	QP
3	0.896	17.47	9.62	27.09	46.00	18.91	Average
4	0.896	28.31	9.62	37.93	56.00	18.07	QP
5	1.723	17.48	9.63	27.11	46.00	18.89	Average
6	1.723	26.31	9.63	35.94	56.00	20.06	QP
7	2.595	16.80	9.64	26.44	46.00	19.56	Average
8	2.595	26.74	9.64	36.38	56.00	19.62	QP
9	3.541	17.09	9.65	26.74	46.00	19.26	Average
10	3.541	26.80	9.65	36.45	56.00	19.55	QP
11	19.354	16.90	9.69	26.59	50.00	23.41	Average
12	19.354	26.73	9.69	36.42	60.00	23.58	QP

Test Mode: M3

Note: Pre-scan operating frequency at 76.1/92/107.9MHz, worst case is operating at 107.9MHz.

Line:

Test Mode: Charging + FM Receiver
 Port: Line
 Note:

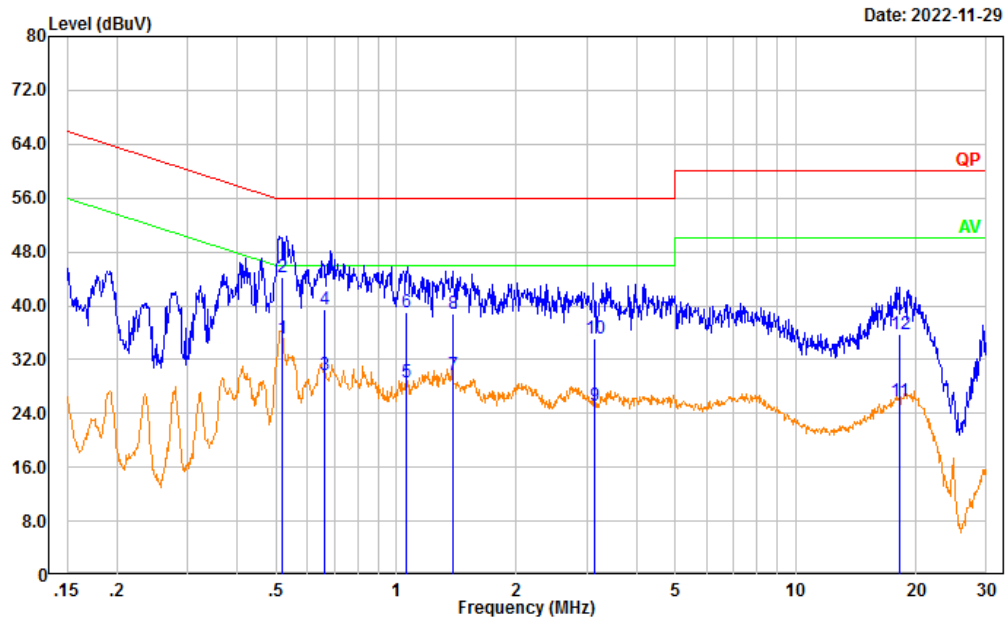


Date: 2022-11-29

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.191	22.05	9.61	31.66	53.98	22.32	Average
2	0.191	31.91	9.61	41.52	63.98	22.46	QP
3	0.513	29.57	9.61	39.18	46.00	6.82	Average
4	0.513	36.92	9.61	46.53	56.00	9.47	QP
5	0.705	22.44	9.62	32.06	46.00	13.94	Average
6	0.705	31.17	9.62	40.79	56.00	15.21	QP
7	1.057	20.76	9.62	30.38	46.00	15.62	Average
8	1.057	30.53	9.62	40.15	56.00	15.85	QP
9	1.555	19.55	9.63	29.18	46.00	16.82	Average
10	1.555	28.70	9.63	38.33	56.00	17.67	QP
11	18.184	16.38	9.75	26.13	50.00	23.87	Average
12	18.184	25.85	9.75	35.60	60.00	24.40	QP

Neutral:

Test Mode: Charging + FM Receiver
 Port: neutral
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.520	25.60	9.61	35.21	46.00	10.79	Average
2	0.520	34.64	9.61	44.25	56.00	11.75	QP
3	0.662	20.19	9.62	29.81	46.00	16.19	Average
4	0.662	29.94	9.62	39.56	56.00	16.44	QP
5	1.063	19.06	9.62	28.68	46.00	17.32	Average
6	1.063	29.30	9.62	38.92	56.00	17.08	QP
7	1.383	20.00	9.62	29.62	46.00	16.38	Average
8	1.383	29.19	9.62	38.81	56.00	17.19	QP
9	3.127	15.45	9.65	25.10	46.00	20.90	Average
10	3.127	25.55	9.65	35.20	56.00	20.80	QP
11	18.148	16.16	9.69	25.85	50.00	24.15	Average
12	18.148	26.05	9.69	35.74	60.00	24.26	QP

4.2 Radiation Spurious Emissions

Serial Number:	IPI3-1	Test Date:	2022/12/05~2022/12/06
Test Site:	966-1, 966-2	Test Mode:	M1, M2, M3
Tester:	Mack Huang, Carl Xue	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	23~23.4	Relative Humidity: (%)	45~55	ATM Pressure: (kPa)	101.4
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Test Equipment List and Details:

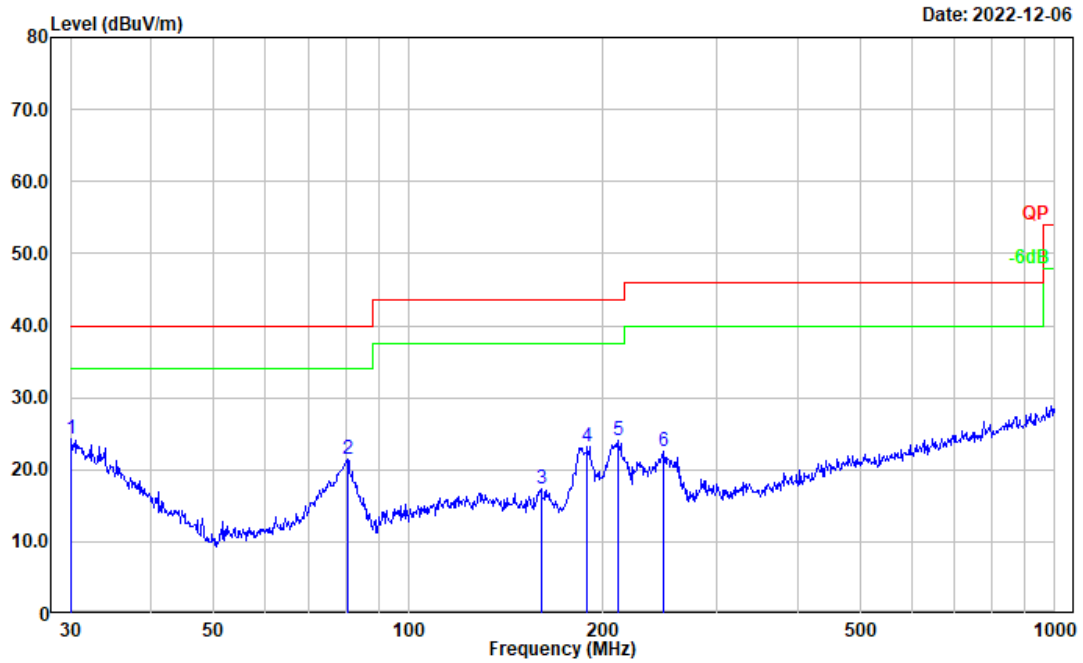
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2020/10/19	2023/10/18
R&S	EMI Test Receiver	ESR3	102724	2022/07/15	2023/07/14
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2022/07/17	2023/07/16
TIMES MICROWAVE	Coaxial 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
Agilent	MXG Vector Signal Generator	N5182B	MY51350144	2022/04/22	2023/04/21

* 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:

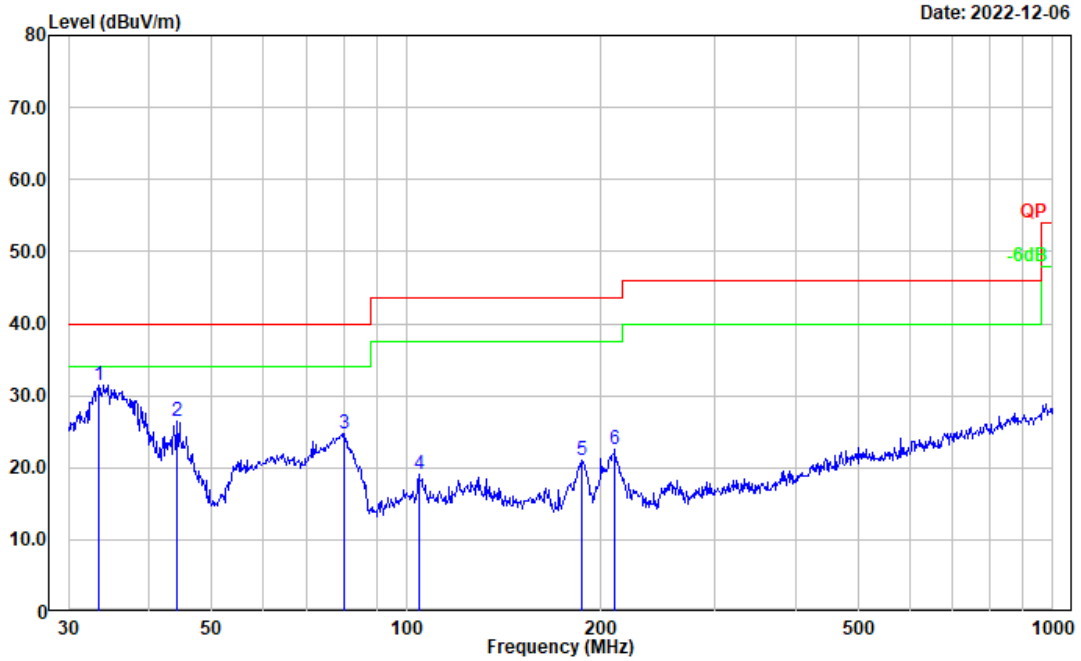
Test Mode: MI

Test Mode: Charging + Scanning
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	27.88	-3.68	24.20	40.00	15.80	Peak
2	80.644	38.87	-17.41	21.46	40.00	18.54	Peak
3	160.346	29.49	-12.09	17.40	43.50	26.10	Peak
4	189.074	36.65	-13.48	23.17	43.50	20.33	Peak
5	210.786	36.60	-12.49	24.11	43.50	19.39	Peak
6	247.682	35.61	-13.04	22.57	46.00	23.43	Peak

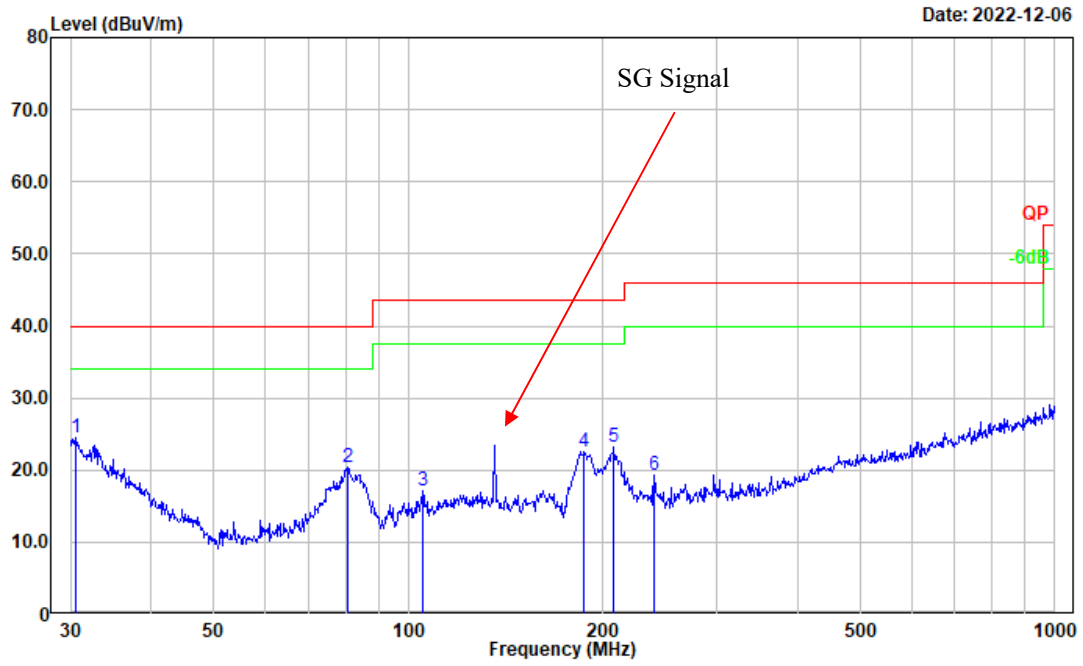
Test Mode: Charging + Scanning
 Polarization: vertical
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	33.445	37.73	-6.26	31.47	40.00	8.53	Peak
2	44.120	40.19	-13.73	26.46	40.00	13.54	Peak
3	80.081	42.13	-17.46	24.67	40.00	15.33	Peak
4	104.536	32.50	-13.44	19.06	43.50	24.44	Peak
5	186.441	34.68	-13.57	21.11	43.50	22.39	Peak
6	210.048	34.99	-12.47	22.52	43.50	20.98	Peak

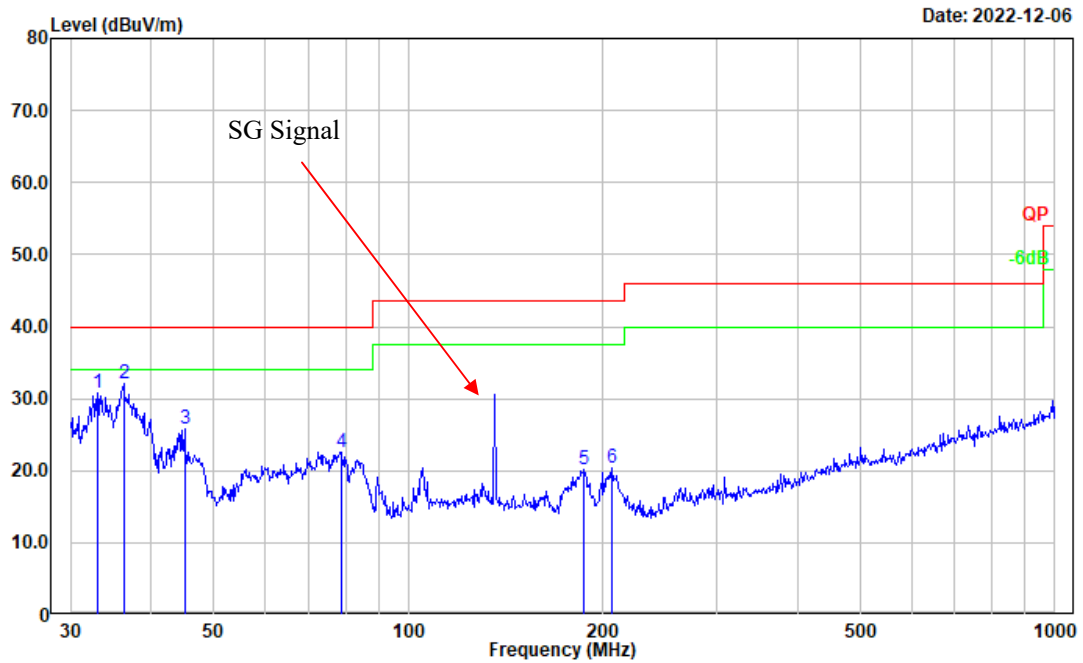
Test Mode: M2 (operating at 136.0125MHz)

Test Mode: Charging + Receiving
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.638	28.53	-4.09	24.44	40.00	15.56	Peak
2	80.362	37.84	-17.43	20.41	40.00	19.59	Peak
3	105.272	30.45	-13.31	17.14	43.50	26.36	Peak
4	187.096	36.12	-13.57	22.55	43.50	20.95	Peak
5	207.850	35.53	-12.43	23.10	43.50	20.40	Peak
6	239.987	32.35	-13.02	19.33	46.00	26.67	Peak

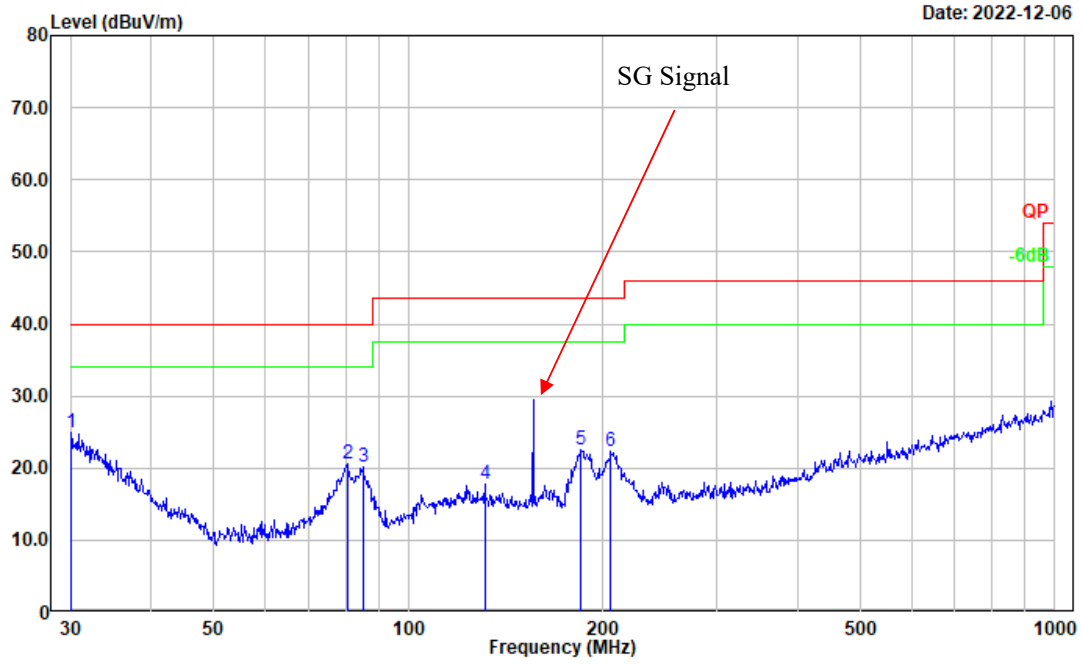
Test Mode: Charging + Receiving
 Polarization: vertical
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	33.095	36.87	-5.99	30.88	40.00	9.12	Peak
2	36.254	40.58	-8.44	32.14	40.00	7.86	Peak
3	45.058	39.95	-14.25	25.70	40.00	14.30	Peak
4	78.689	39.94	-17.32	22.62	40.00	17.38	Peak
5	187.096	33.77	-13.57	20.20	43.50	23.30	Peak
6	206.398	32.86	-12.39	20.47	43.50	23.03	Peak

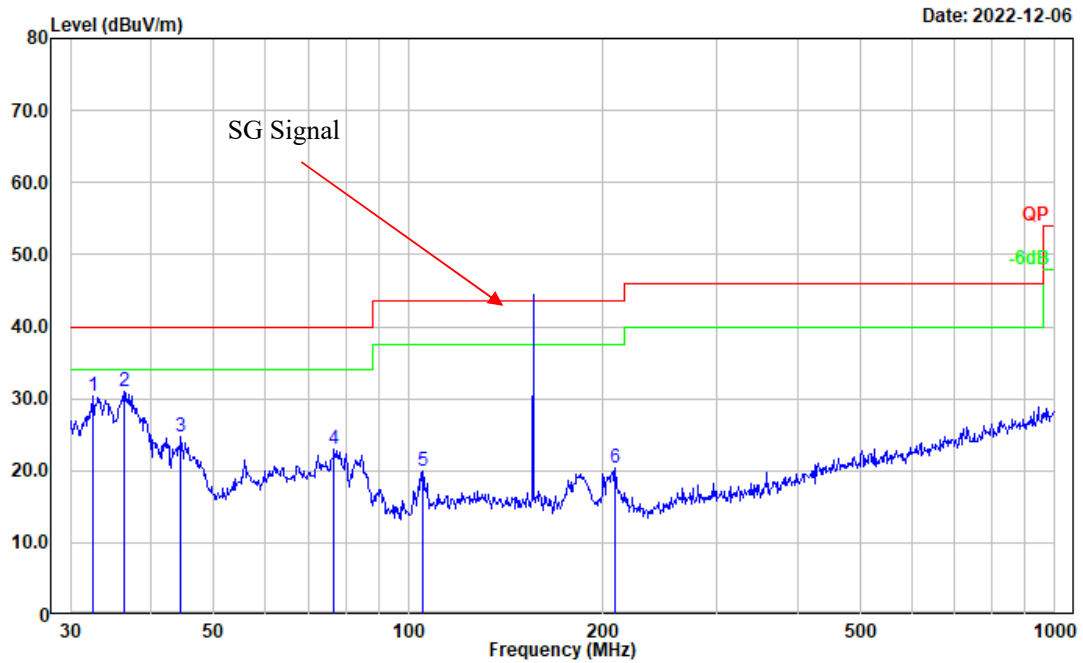
Test Mode: M2 (operating at 156MHz)

Test Mode: Charging + Receiving
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	28.55	-3.68	24.87	40.00	15.13	Peak
2	80.362	37.95	-17.43	20.52	40.00	19.48	Peak
3	84.999	37.35	-17.19	20.16	40.00	19.84	Peak
4	131.297	29.08	-11.36	17.72	43.50	25.78	Peak
5	185.138	36.16	-13.56	22.60	43.50	20.90	Peak
6	205.675	34.68	-12.37	22.31	43.50	21.19	Peak

Test Mode: Charging + Receiving
 Polarization: vertical
 Note:

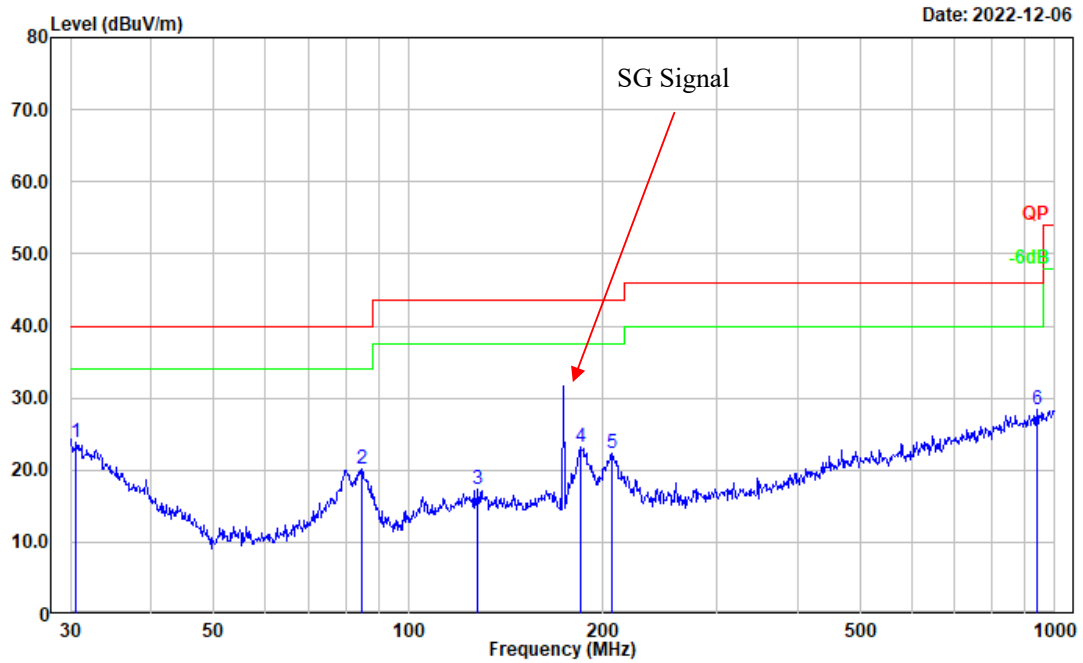


Date: 2022-12-06

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.520	35.92	-5.54	30.38	40.00	9.62	Peak
2	36.254	39.41	-8.44	30.97	40.00	9.03	Peak
3	44.431	38.57	-13.90	24.67	40.00	15.33	Peak
4	76.781	40.07	-17.12	22.95	40.00	17.05	Peak
5	105.272	33.21	-13.31	19.90	43.50	23.60	Peak
6	208.580	32.90	-12.44	20.46	43.50	23.04	Peak

Test Mode: M2 (operating at 173.9875MHz)

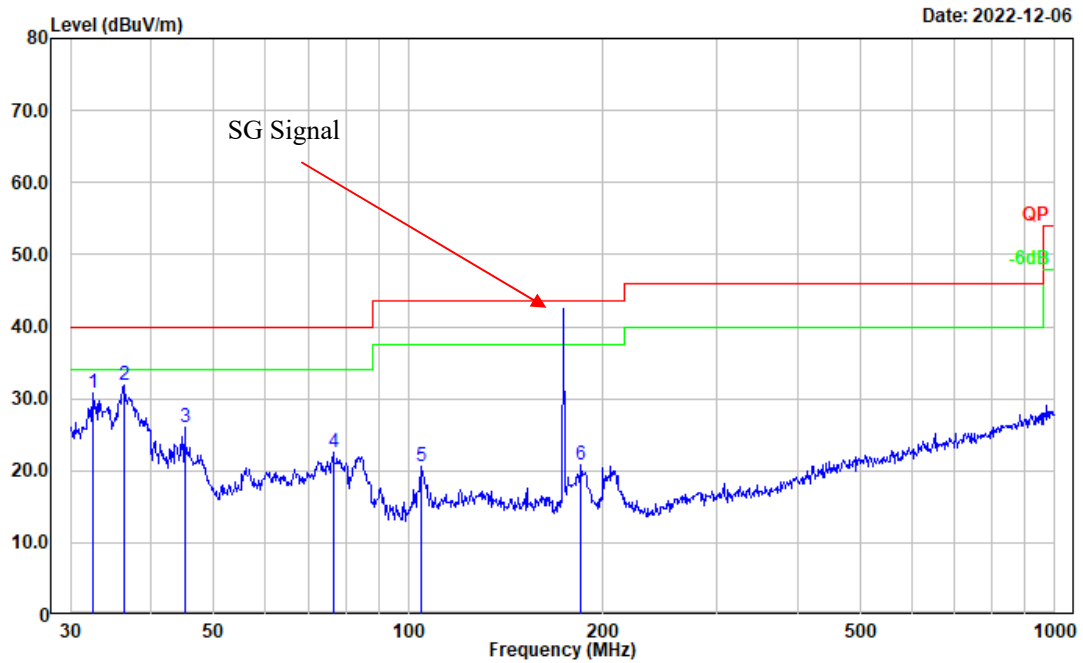
Test Mode: Charging + Receiving
 Polarization: horizontal
 Note:



Date: 2022-12-06

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.638	27.96	-4.09	23.87	40.00	16.13	Peak
2	84.702	37.25	-17.20	20.05	40.00	19.95	Peak
3	128.113	28.64	-11.26	17.38	43.50	26.12	Peak
4	184.490	36.87	-13.58	23.29	43.50	20.21	Peak
5	206.398	34.64	-12.39	22.25	43.50	21.25	Peak
6	938.833	28.72	-0.40	28.32	46.00	17.68	Peak

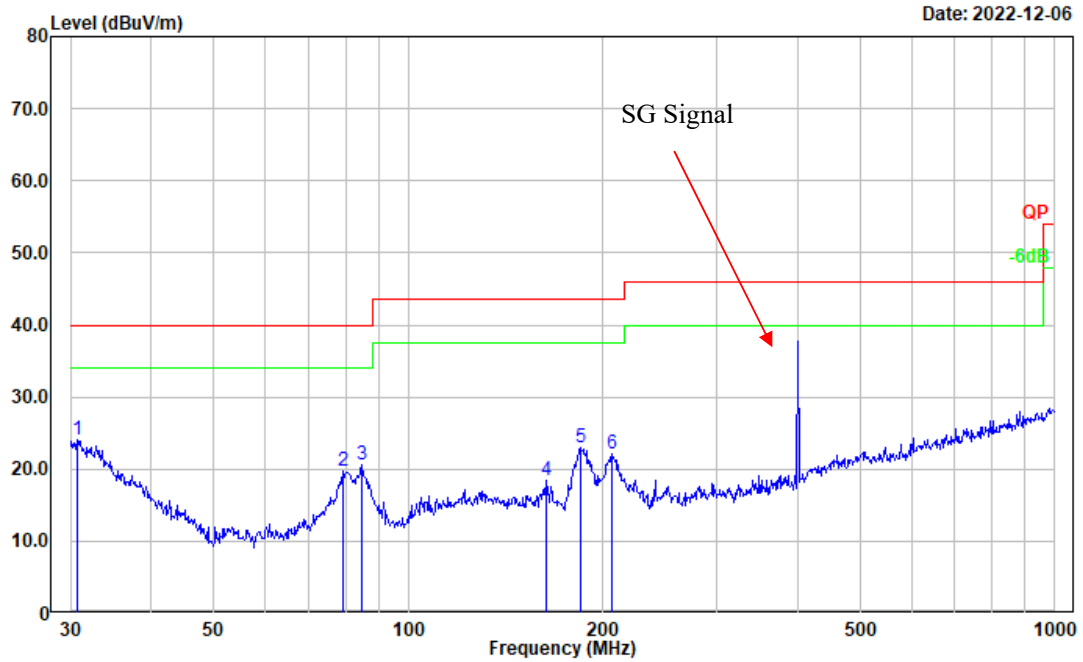
Test Mode: Charging + Receiving
 Polarization: vertical
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.520	36.33	-5.54	30.79	40.00	9.21	Peak
2	36.254	40.24	-8.44	31.80	40.00	8.20	Peak
3	45.058	40.24	-14.25	25.99	40.00	14.01	Peak
4	76.512	39.70	-17.09	22.61	40.00	17.39	Peak
5	104.536	33.95	-13.44	20.51	43.50	22.99	Peak
6	185.138	34.34	-13.56	20.78	43.50	22.72	Peak

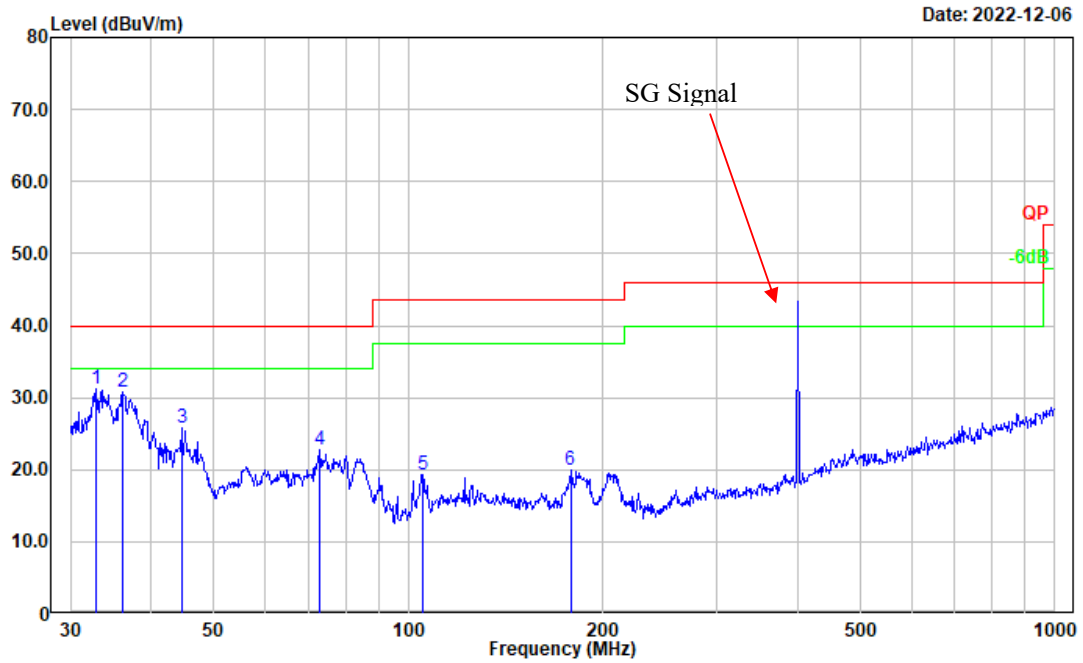
Test Mode: M2 (operating at 400.0125MHz)

Test Mode: Charging + Receiving
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.745	28.26	-4.17	24.09	40.00	15.91	Peak
2	79.243	37.09	-17.37	19.72	40.00	20.28	Peak
3	84.702	37.77	-17.20	20.57	40.00	19.43	Peak
4	163.755	30.75	-12.38	18.37	43.50	25.13	Peak
5	184.490	36.64	-13.58	23.06	43.50	20.44	Peak
6	206.398	34.49	-12.39	22.10	43.50	21.40	Peak

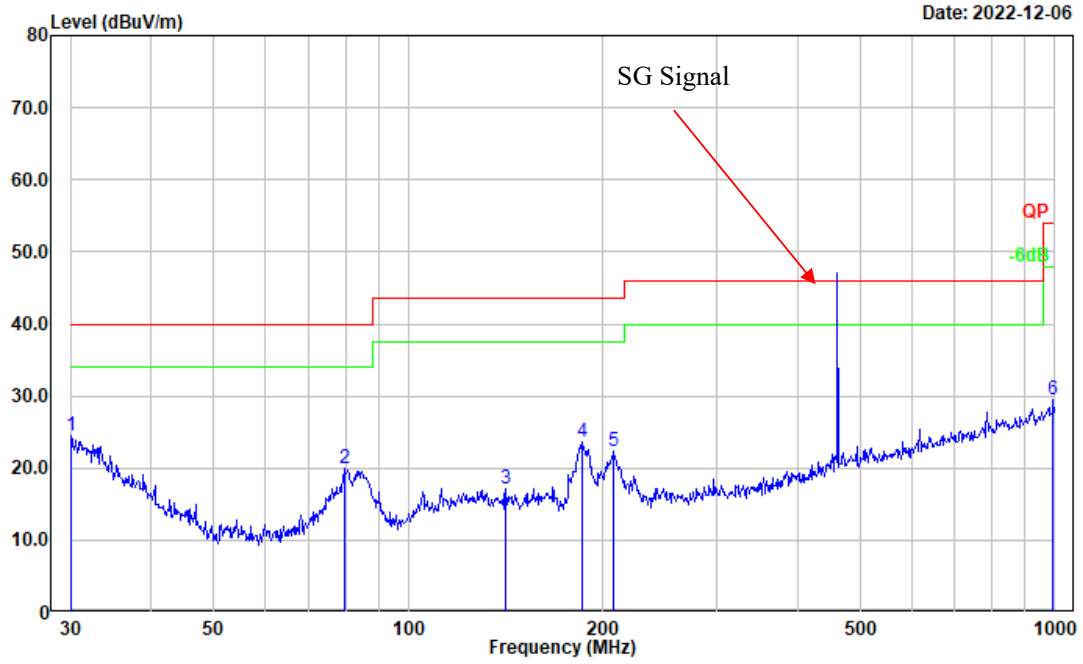
Test Mode: Charging + Receiving
 Polarization: vertical
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.864	36.99	-5.81	31.18	40.00	8.82	Peak
2	36.127	39.22	-8.34	30.88	40.00	9.12	Peak
3	44.587	39.78	-14.00	25.78	40.00	14.22	Peak
4	72.847	39.51	-16.72	22.79	40.00	17.21	Peak
5	105.272	32.63	-13.31	19.32	43.50	24.18	Peak
6	178.133	33.55	-13.50	20.05	43.50	23.45	Peak

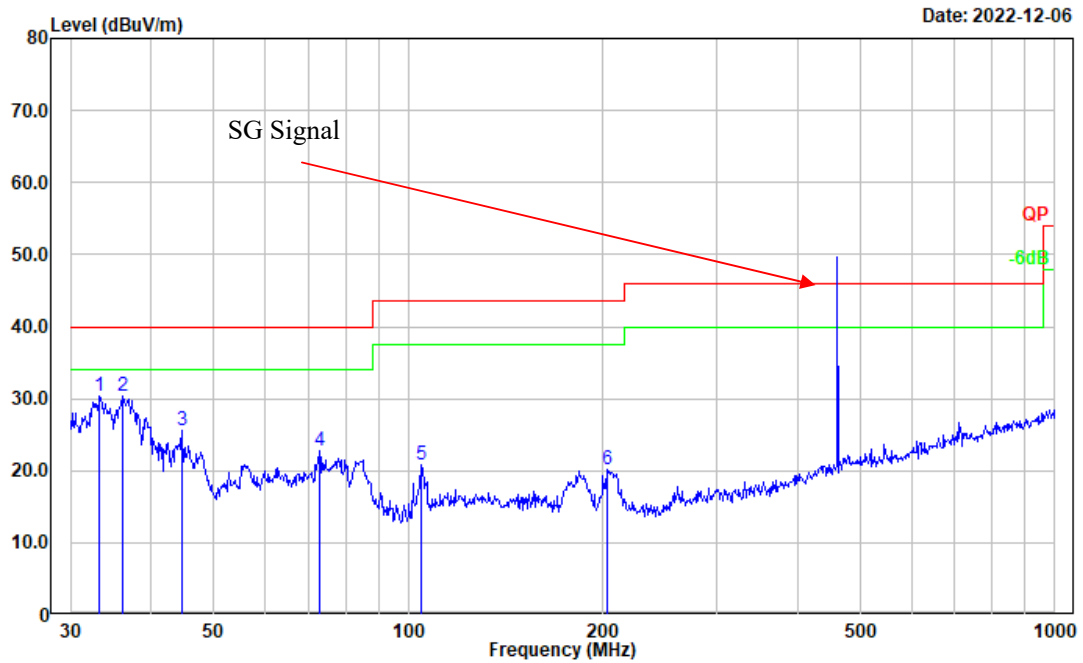
Test Mode: M2 (operating at 460MHz)

Test Mode: Charging + Receiving
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	28.22	-3.68	24.54	40.00	15.46	Peak
2	79.521	37.32	-17.41	19.91	40.00	20.09	Peak
3	141.330	29.14	-11.93	17.21	43.50	26.29	Peak
4	185.788	37.11	-13.56	23.55	43.50	19.95	Peak
5	207.850	34.72	-12.43	22.29	43.50	21.21	Peak
6	993.011	28.57	0.82	29.39	54.00	24.61	Peak

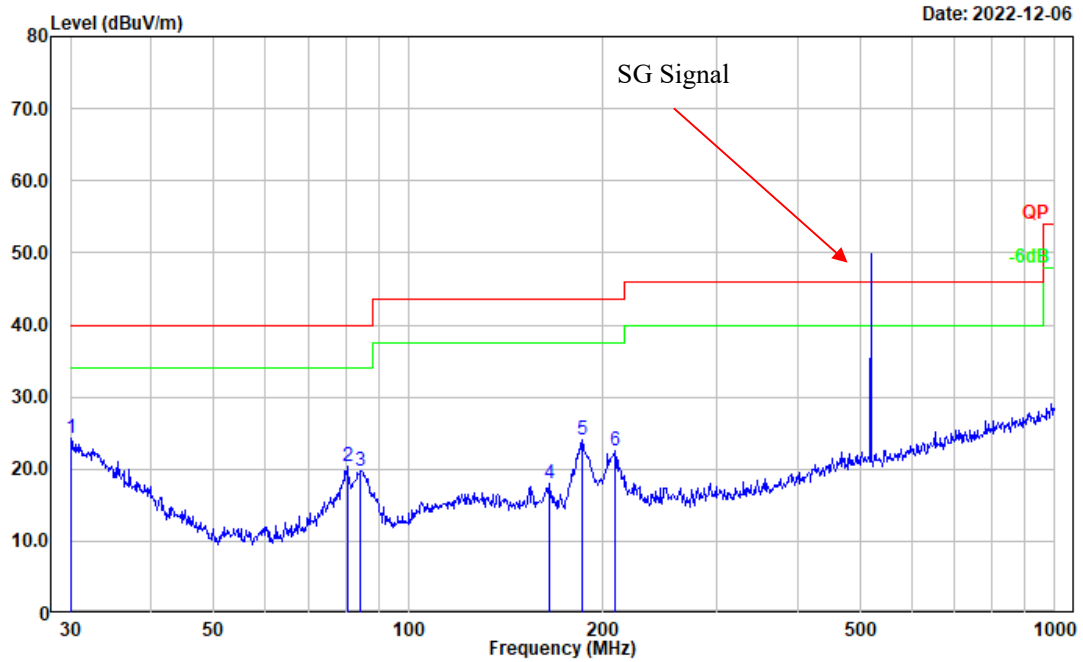
Test Mode: Charging + Receiving
 Polarization: vertical
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	33.328	36.60	-6.17	30.43	40.00	9.57	Peak
2	36.127	38.61	-8.34	30.27	40.00	9.73	Peak
3	44.587	39.55	-14.00	25.55	40.00	14.45	Peak
4	72.847	39.38	-16.72	22.66	40.00	17.34	Peak
5	104.903	34.23	-13.38	20.85	43.50	22.65	Peak
6	202.810	32.48	-12.29	20.19	43.50	23.31	Peak

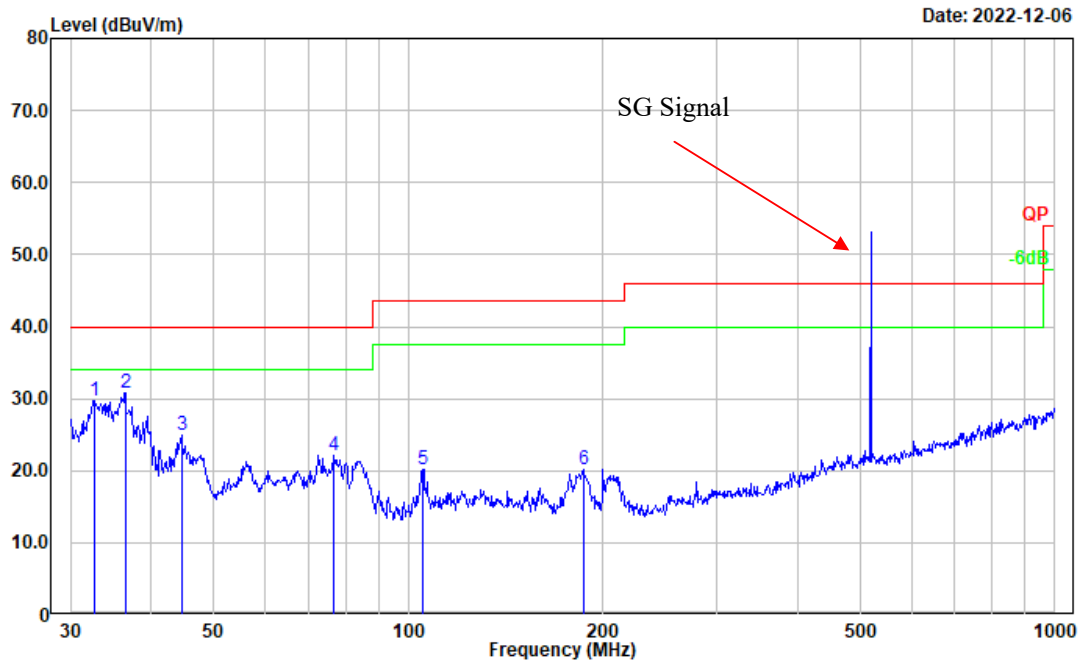
Test Mode: M2 (operating at 519.9875MHz)

Test Mode: Charging + Receiving
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.105	28.04	-3.68	24.36	40.00	15.64	Peak
2	80.362	37.80	-17.43	20.37	40.00	19.63	Peak
3	84.405	36.97	-17.22	19.75	40.00	20.25	Peak
4	164.908	30.41	-12.50	17.91	43.50	25.59	Peak
5	185.788	37.68	-13.56	24.12	43.50	19.38	Peak
6	208.580	34.89	-12.44	22.45	43.50	21.05	Peak

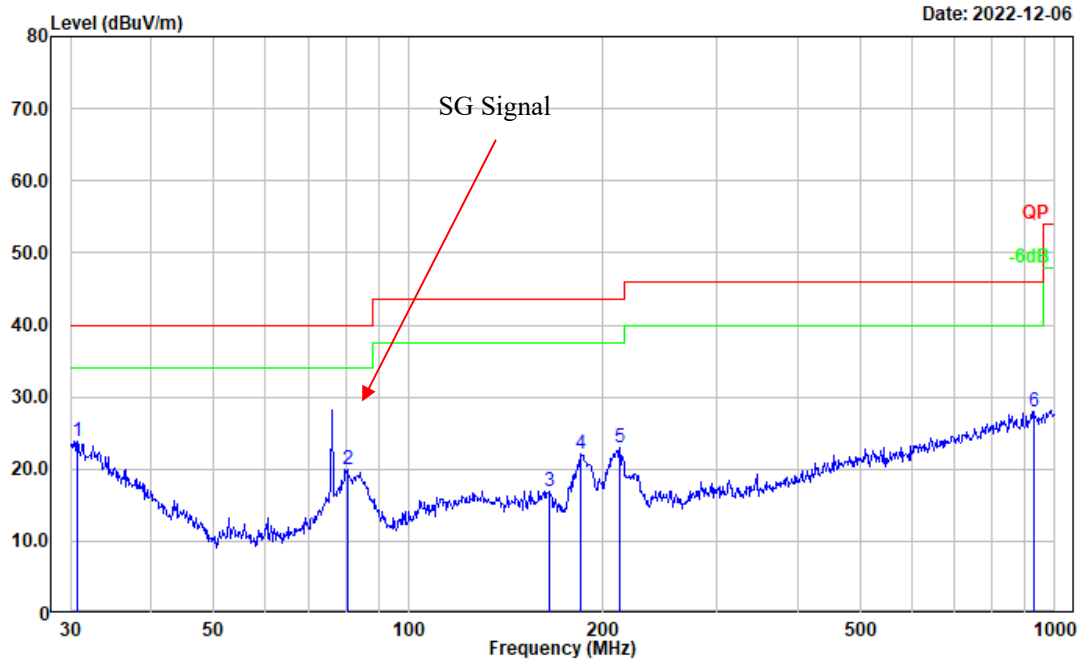
Test Mode: Charging + Receiving
 Polarization: vertical
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.634	35.37	-5.62	29.75	40.00	10.25	Peak
2	36.509	39.48	-8.63	30.85	40.00	9.15	Peak
3	44.587	38.88	-14.00	24.88	40.00	15.12	Peak
4	76.781	39.30	-17.12	22.18	40.00	17.82	Peak
5	105.272	33.49	-13.31	20.18	43.50	23.32	Peak
6	186.441	33.83	-13.57	20.26	43.50	23.24	Peak

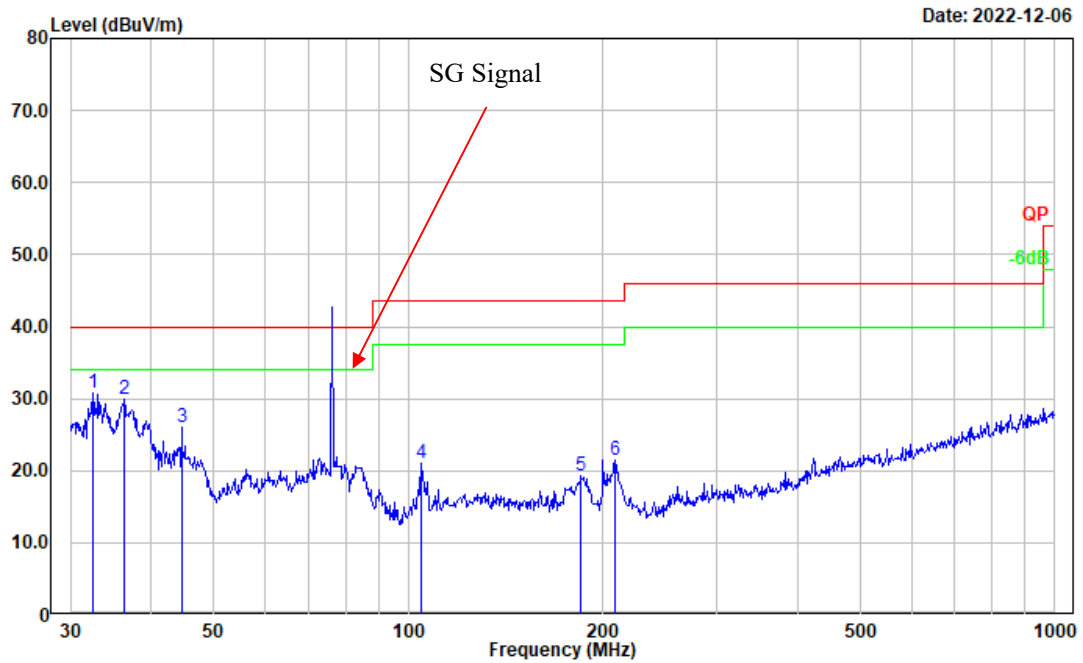
Test Mode: M3 (operating at 76.1MHz)

Test Mode: Charging + FM Receiver
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.745	28.08	-4.17	23.91	40.00	16.09	Peak
2	80.362	37.34	-17.43	19.91	40.00	20.09	Peak
3	164.908	29.50	-12.50	17.00	43.50	26.50	Peak
4	185.138	35.57	-13.56	22.01	43.50	21.49	Peak
5	212.270	35.48	-12.54	22.94	43.50	20.56	Peak
6	929.008	28.63	-0.58	28.05	46.00	17.95	Peak

Test Mode: Charging + FM Receiver
 Polarization: vertical
 Note:

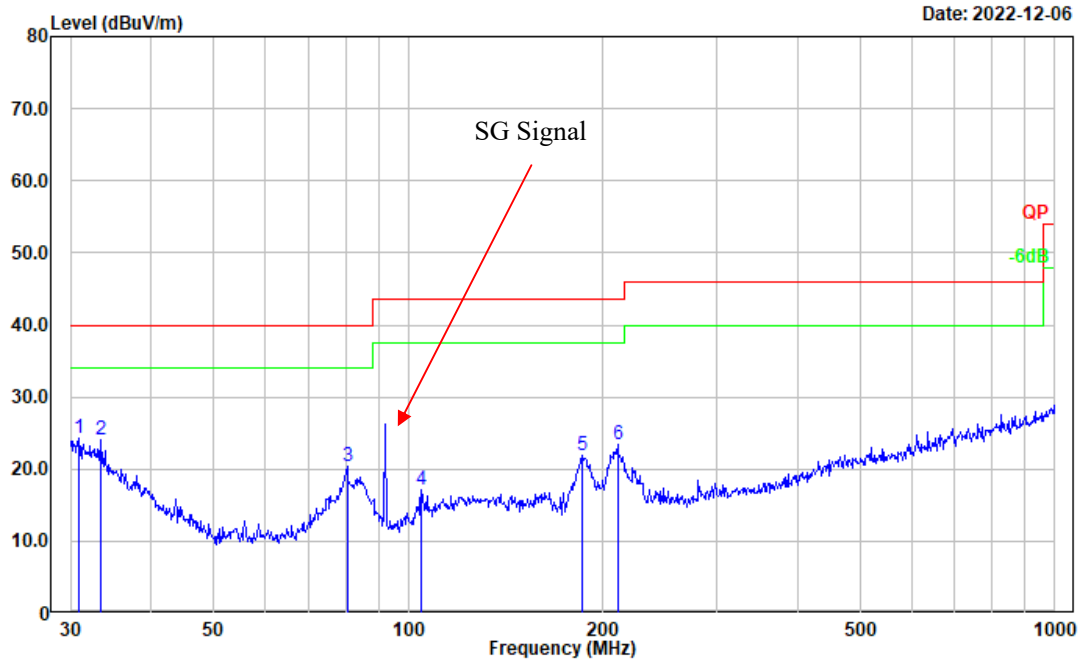


Date: 2022-12-06

No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.520	36.27	-5.54	30.73	40.00	9.27	Peak
2	36.381	38.52	-8.54	29.98	40.00	10.02	Peak
3	44.587	40.08	-14.00	26.08	40.00	13.92	Peak
4	104.536	34.43	-13.44	20.99	43.50	22.51	Peak
5	185.138	32.76	-13.56	19.20	43.50	24.30	Peak
6	208.580	33.97	-12.44	21.53	43.50	21.97	Peak

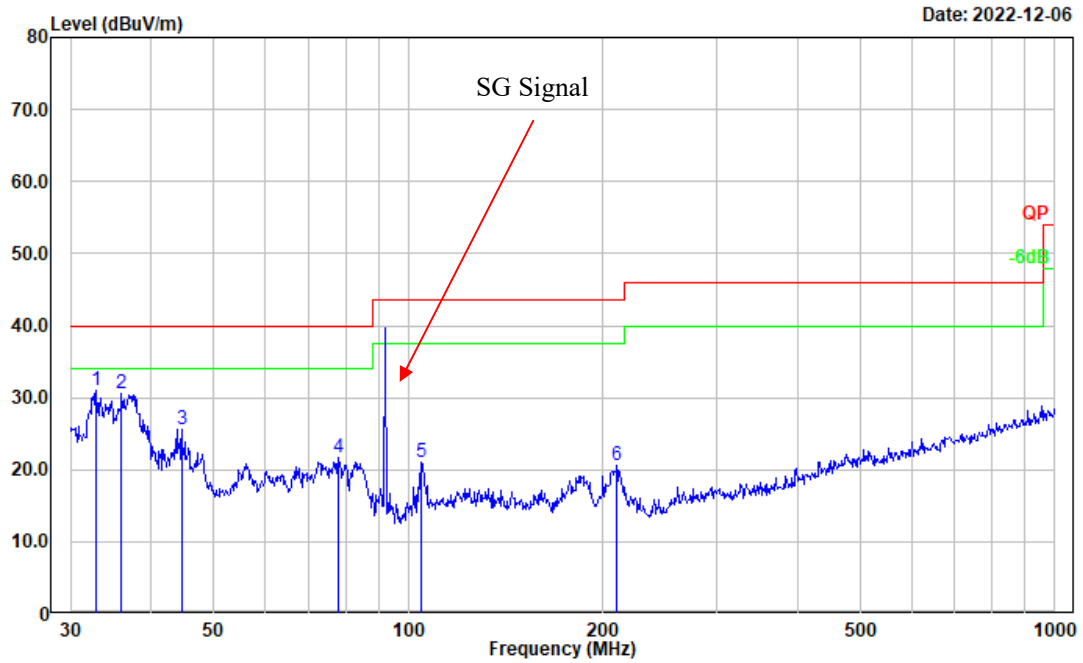
Test Mode: M3 (operating at 92MHz)

Test Mode: Charging + FM Receiver
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.962	28.70	-4.34	24.36	40.00	15.64	Peak
2	33.445	30.42	-6.26	24.16	40.00	15.84	Peak
3	80.362	37.73	-17.43	20.30	40.00	19.70	Peak
4	104.536	30.48	-13.44	17.04	43.50	26.46	Peak
5	185.788	35.54	-13.56	21.98	43.50	21.52	Peak
6	210.786	35.81	-12.49	23.32	43.50	20.18	Peak

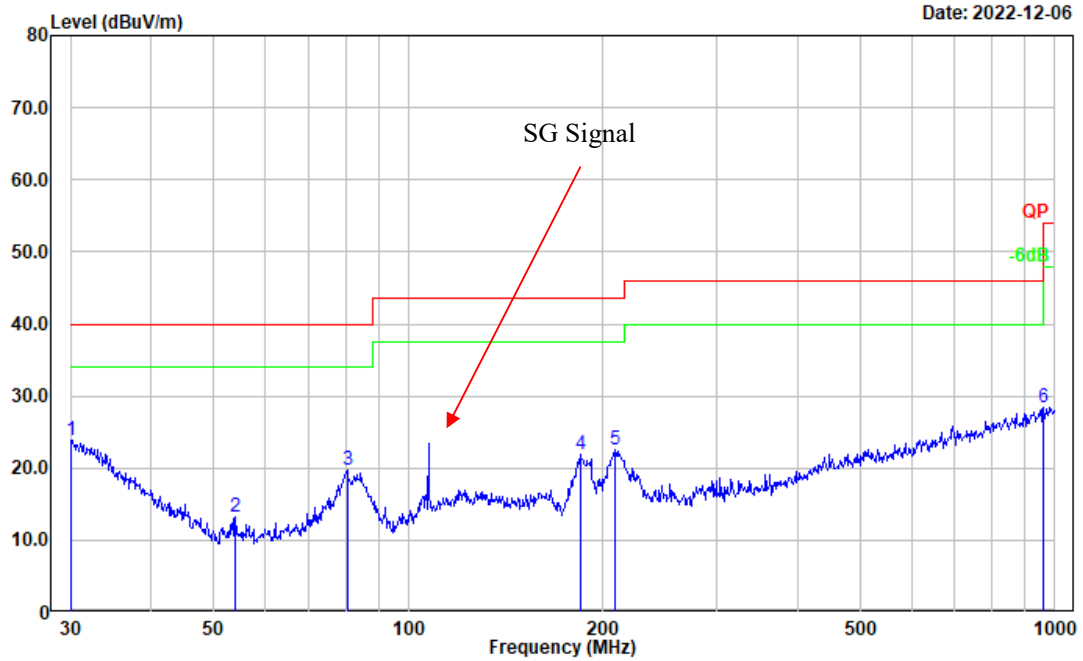
Test Mode: Charging + FM Receiver
 Polarization: vertical
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.864	36.86	-5.81	31.05	40.00	8.95	Peak
2	36.001	38.88	-8.24	30.64	40.00	9.36	Peak
3	44.587	39.62	-14.00	25.62	40.00	14.38	Peak
4	77.865	38.86	-17.25	21.61	40.00	18.39	Peak
5	104.536	34.55	-13.44	21.11	43.50	22.39	Peak
6	210.048	33.02	-12.47	20.55	43.50	22.95	Peak

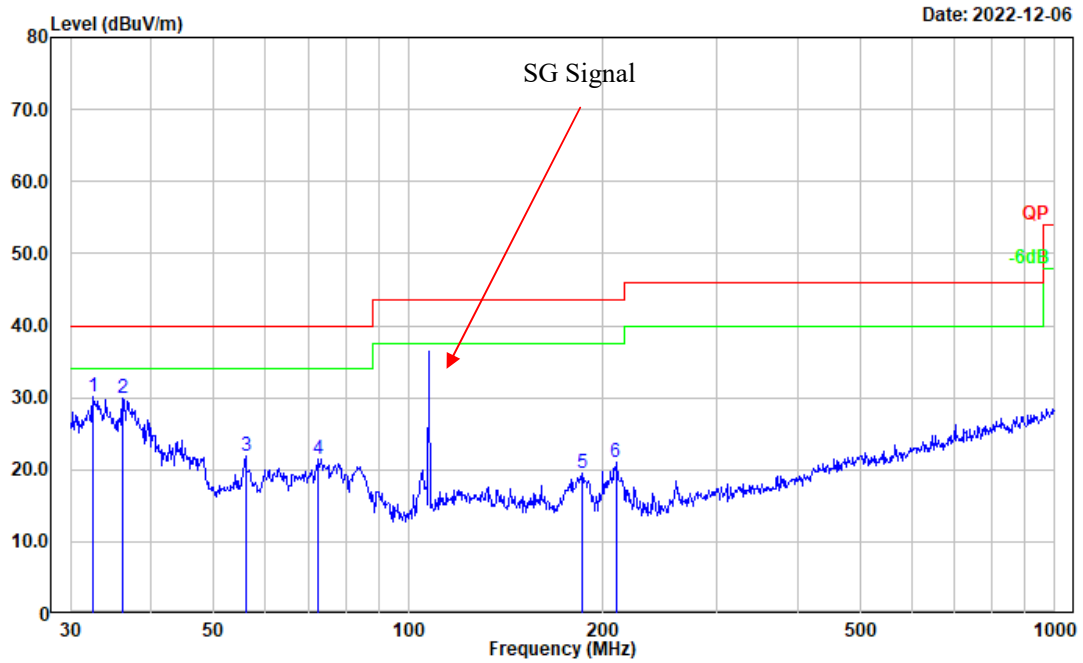
Test Mode: M3 (operating at 107.9MHz)

Test Mode: Charging + FM Receiver
 Polarization: horizontal
 Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	30.000	27.56	-3.60	23.96	40.00	16.04	Peak
2	54.071	30.48	-17.26	13.22	40.00	26.78	Peak
3	80.362	37.26	-17.43	19.83	40.00	20.17	Peak
4	184.490	35.41	-13.58	21.83	43.50	21.67	Peak
5	208.580	35.02	-12.44	22.58	43.50	20.92	Peak
6	962.162	28.35	0.14	28.49	54.00	25.51	Peak

Test Mode: Charging + FM Receiver
 Polarization: vertical
 Note:

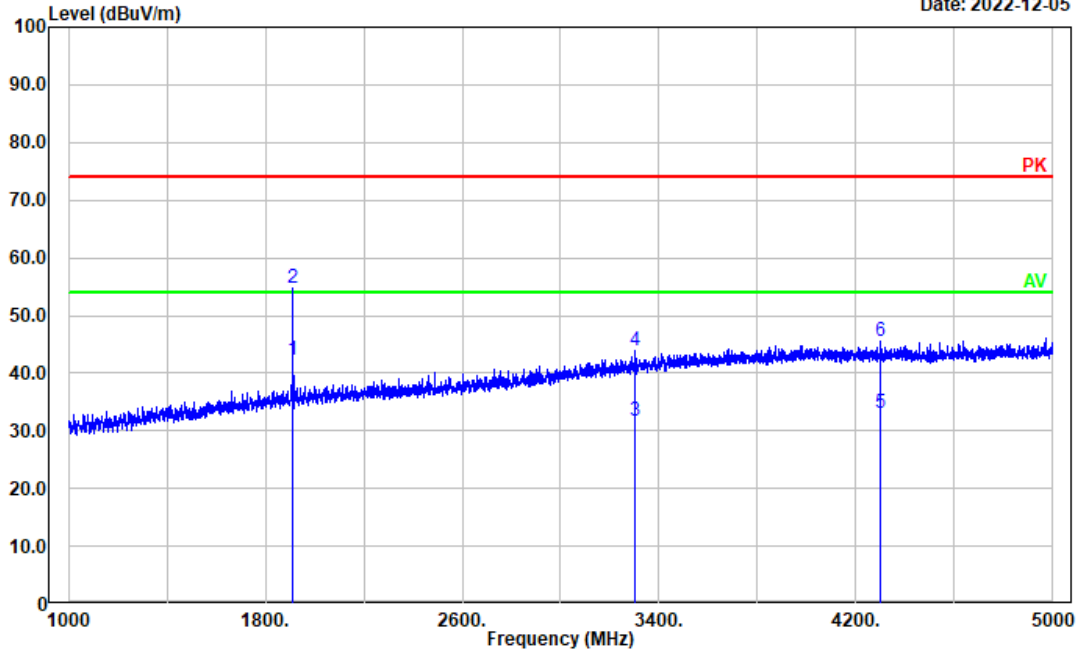


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	32.520	35.74	-5.54	30.20	40.00	9.80	Peak
2	36.127	38.33	-8.34	29.99	40.00	10.01	Peak
3	56.001	39.18	-17.32	21.86	40.00	18.14	Peak
4	72.338	38.27	-16.70	21.57	40.00	18.43	Peak
5	185.788	33.09	-13.56	19.53	43.50	23.97	Peak
6	209.313	33.42	-12.46	20.96	43.50	22.54	Peak

2) Above 1GHz (Worst mode is M2 (operating at 519.9875MHz)):

Test Mode: Charging + scanning stop
 Polarization: horizontal
 Note:

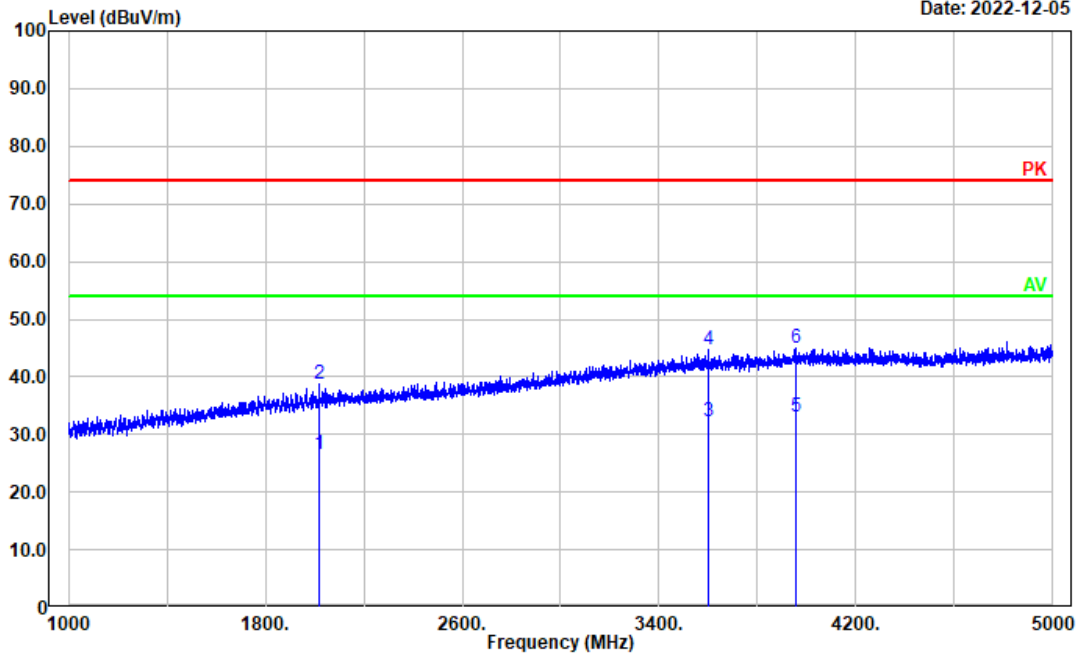
Date: 2022-12-05



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	1912.182	40.38	2.02	42.40	54.00	11.60	Average
2	1912.182	52.76	2.02	54.78	74.00	19.22	Peak
3	3303.661	24.10	7.63	31.73	54.00	22.27	Average
4	3303.661	36.19	7.63	43.82	74.00	30.18	Peak
5	4298.260	23.47	9.61	33.08	54.00	20.92	Average
6	4298.260	35.95	9.61	45.56	74.00	28.44	Peak

Test Mode: Charging + scanning stop
 Polarization: vertical
 Note:

Date: 2022-12-05



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	2017.003	24.13	2.43	26.56	54.00	27.44	Average
2	2017.003	36.27	2.43	38.70	74.00	35.30	Peak
3	3598.920	23.31	9.05	32.36	54.00	21.64	Average
4	3598.920	35.62	9.05	44.67	74.00	29.33	Peak
5	3958.192	23.10	9.88	32.98	54.00	21.02	Average
6	3958.192	35.18	9.88	45.06	74.00	28.94	Peak

4.3 Antenna Power Conduction Limits for Receivers

Serial Number:	1PI3-1	Test Date:	2023/1/6
Test Site:	RF	Test Mode:	Receiving
Tester:	Morpheus Shi	Test Result:	Pass

Environmental Conditions:

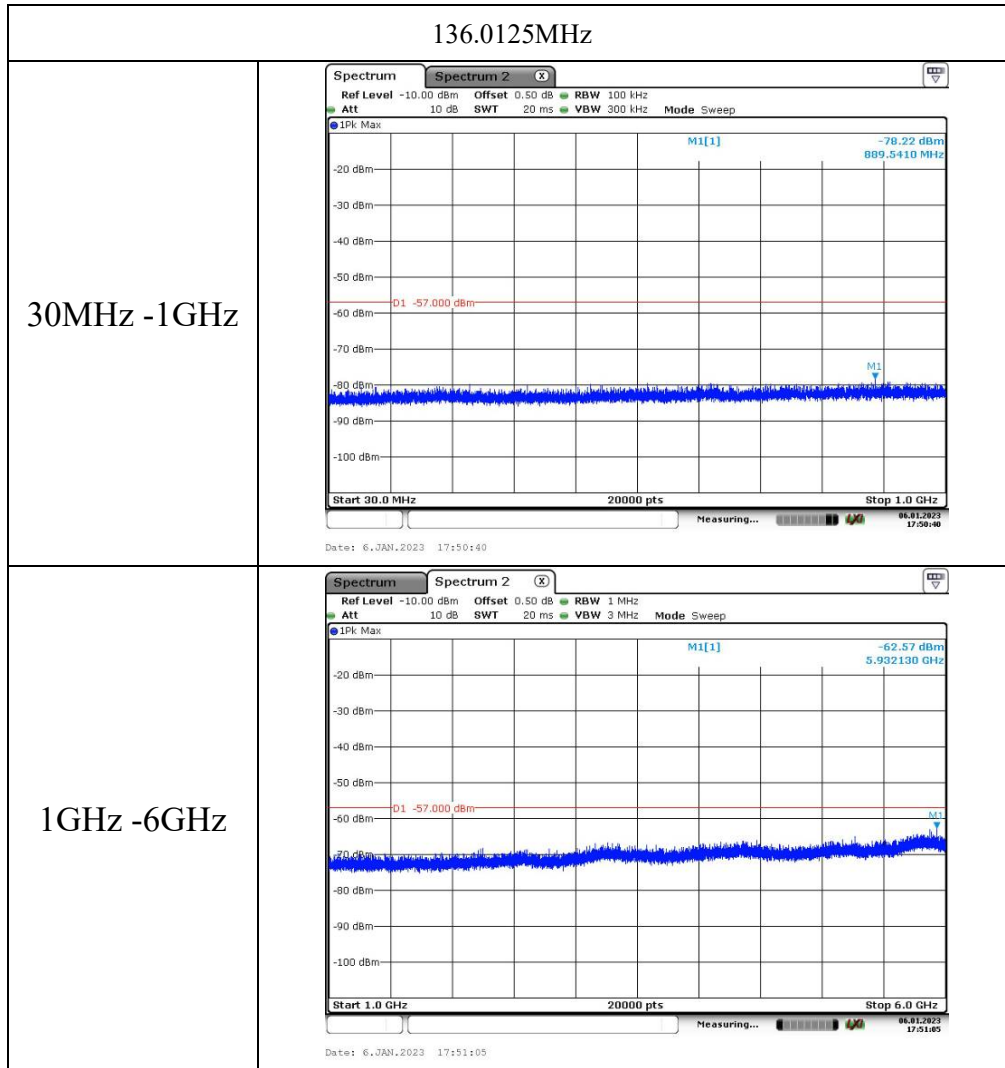
Temperature: (°C)	21.8	Relative Humidity: (%)	54	ATM Pressure: (kPa)	101.8
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2022/7/25	2023/7/24
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A

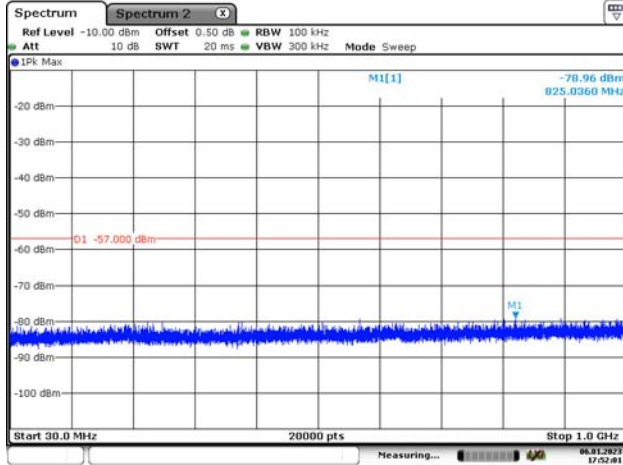
* *Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).*

M2



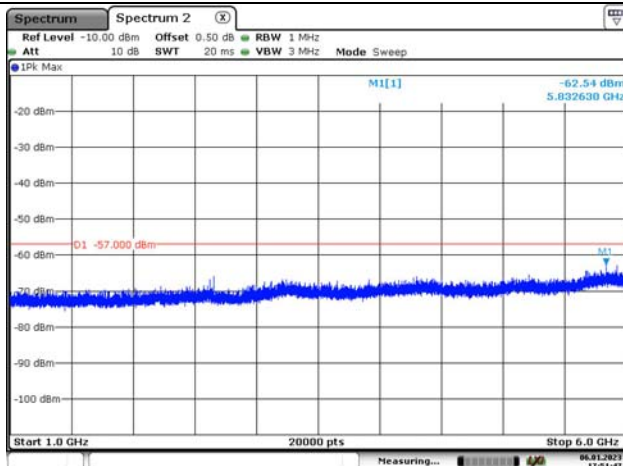
156MHz

30MHz -1GHz



Date: 6.JAN.2023 17:52:01

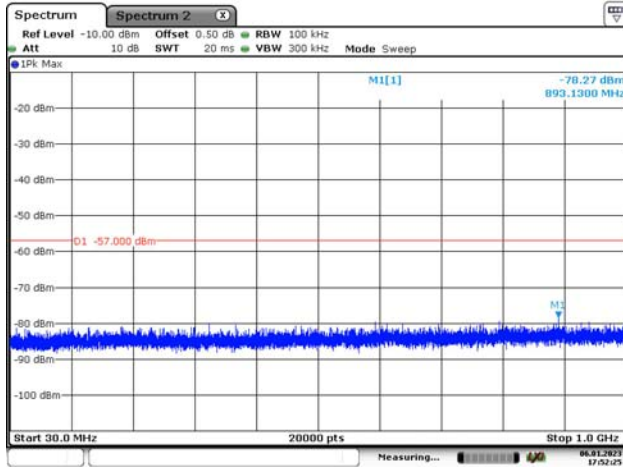
1GHz -6GHz



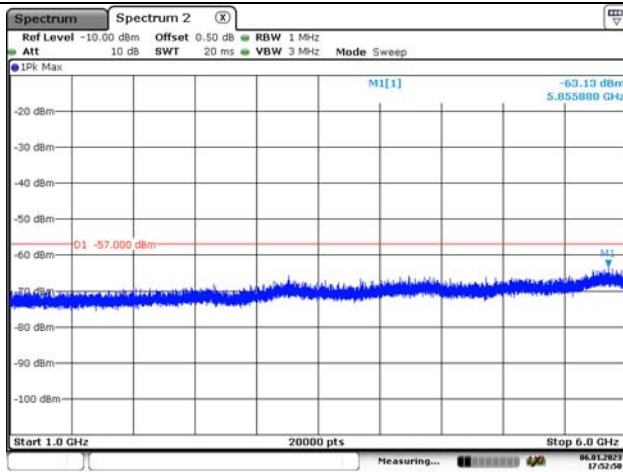
Date: 6.JAN.2023 17:51:47

173.9875MHz

30MHz -1GHz

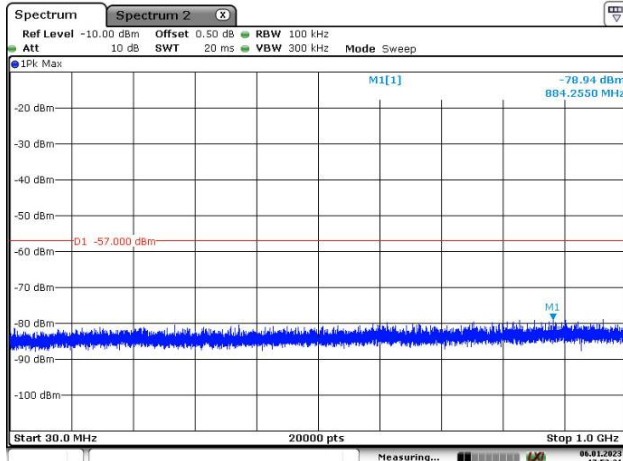


1GHz -6GHz



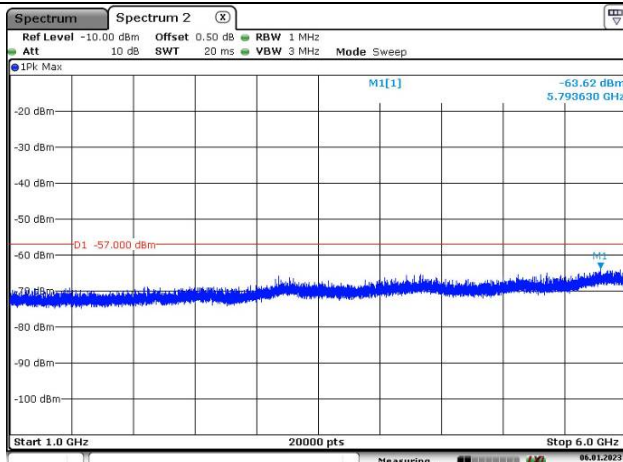
400.0125 MHz

30MHz -1GHz



Date: 6.JAN.2023 17:53:21

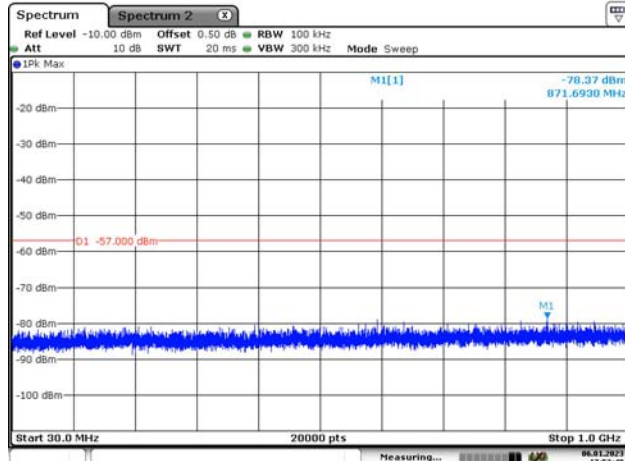
1GHz -6GHz



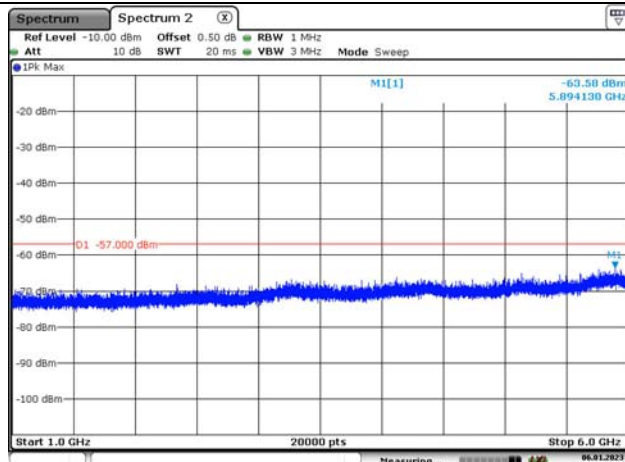
Date: 6.JAN.2023 17:53:10

460MHz

30MHz -1GHz

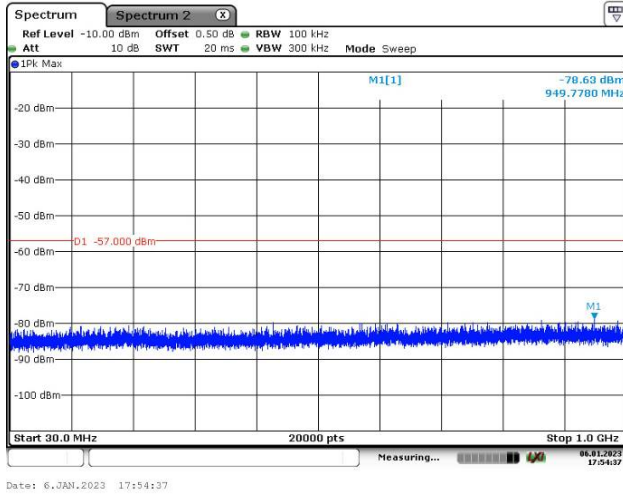


1GHz -6GHz

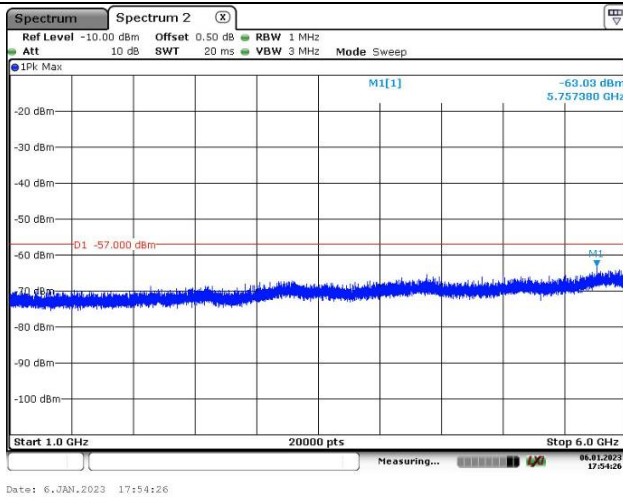


518.9875MHz

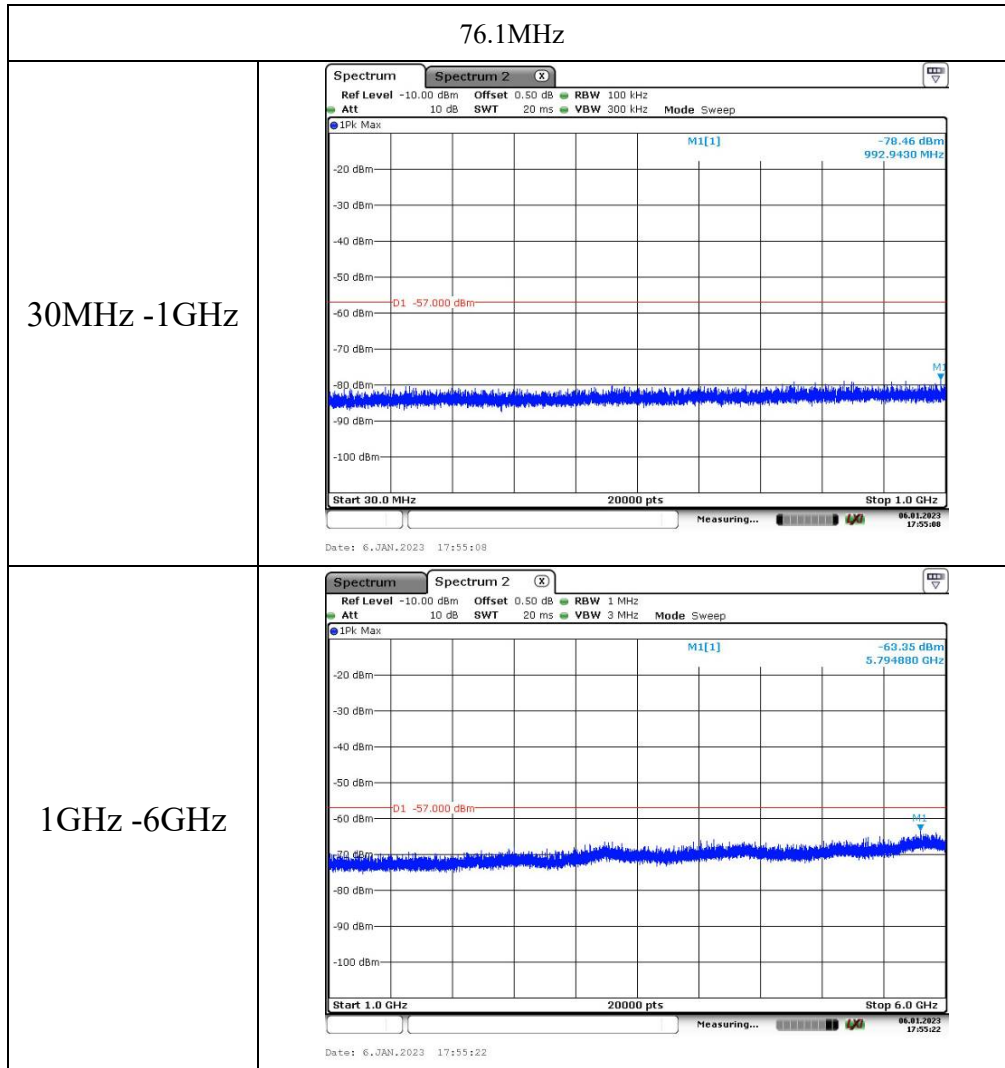
30MHz -1GHz



1GHz -6GHz

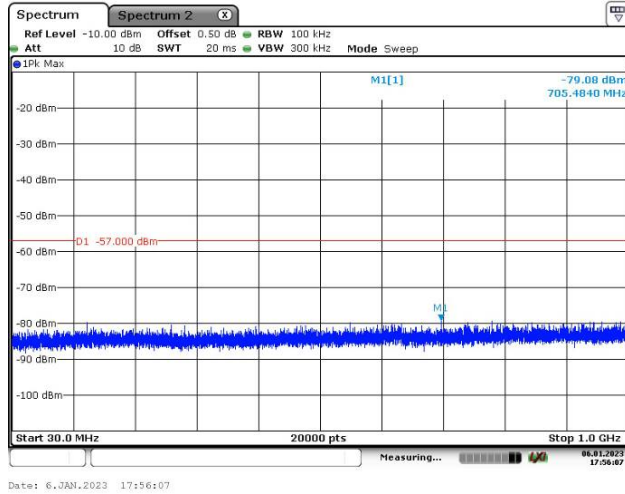


M3

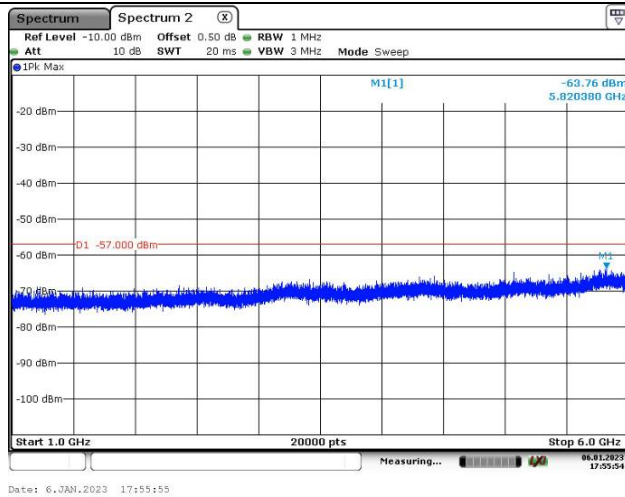


92MHz

30MHz -1GHz

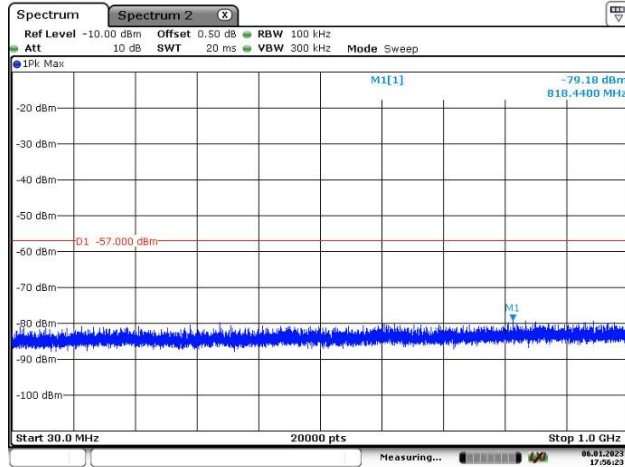


1GHz -6GHz



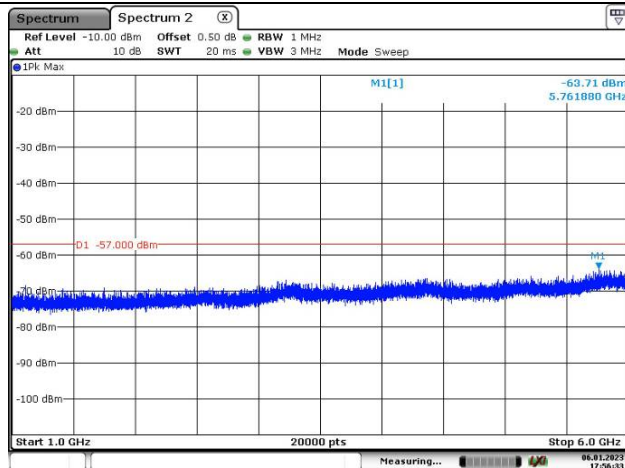
107.9MHz

30MHz -1GHz



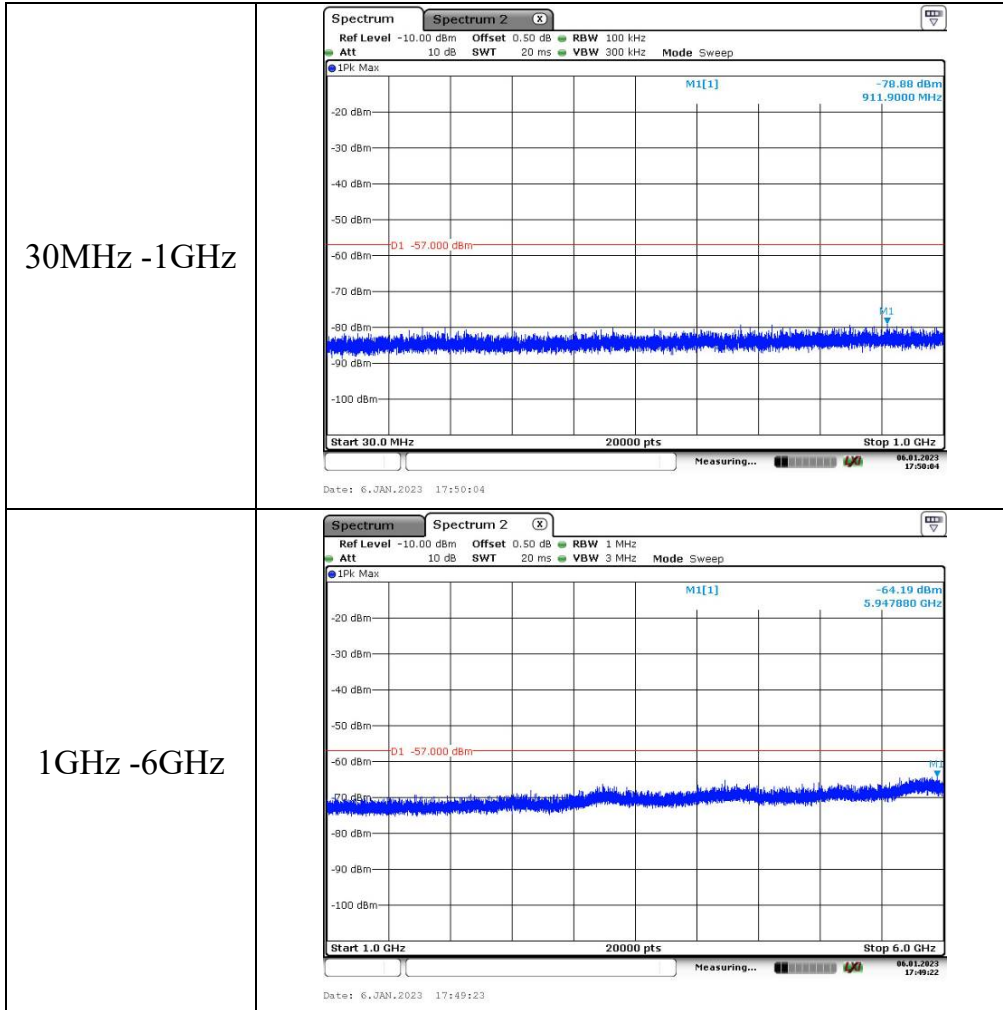
Date: 6, JAN, 2023 17:56:23

1GHz -6GHz



Date: 6, JAN, 2023 17:56:33

M1



4.4 Scanning Receivers and Frequency Converters Used with Scanning Receivers

Serial Number:	1PI3-1	Test Date:	2023/1/6
Test Site:	RF	Test Mode:	Receiving
Tester:	Morpheus Shi	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	21.8	Relative Humidity: (%)	54	ATM Pressure: (kPa)	101.8
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSV40	101943	2022/7/25	2023/7/24
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Agilent	MXG Vector Signal Generator	N5182B	MY51350144	2022/04/22	2023/04/21
HP	RF Communications Test Set	8920A	3438A05209	2022/7/15	2023/7/14

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Test Data:

Scanning Frequency Range	Test Frequency	Measurement Result (Worst Case)	Limit
MHz	MHz	dB	dB
136-174	824, 836, 849, 869, 881.5, 894	42	>38
400-520	824, 836, 849, 869, 881.5, 894	41	>38

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