



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: BTECH (BaoFeng Tech)

Address: 702 N Industrial Ave Arlington, South Dakota, United States 57212

FCC ID: 2AGND-GMRS-50PRO

Product Name: GMRS Mobile Radio

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

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

Report Number: CR231169585-00B

Date Of Issue: 2024/3/7

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Title: RF Engineer

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Title: Manager

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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.

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	CR231169585-00B	Original Report	2024/3/7

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	GMRS Mobile Radio
EUT Model:	GMRS-50PRO
Highest Operation Frequency:	2480 MHz
Rated Input Voltage:	DC13.8V
Serial Number:	2E6J-1
EUT Received Date:	2023/11/24
EUT Received Status:	Good

Accessory Information:

Accessory Description	Manufacturer	Model	Parameters
/	/	/	/

Receiving Frequency And Test Channel:

Operation Modes	Operation Frequency Range (MHz)	Test Frequency (MHz)
VHF Scanning	136-174MHz	136-174MHz
UHF Scanning	400-520MHz	400-520MHz
VHF Receiving	136-174MHz	136.0125MHz, 155MHz, 173.9875MHz
UHF Receiving	400-520MHz	400.0125MHz, 460MHz, 519.9875MHz

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 1: Scanning Test Mode 2: Receiving(Scanning Stop)
Equipment Modifications:	No
EUT Exercise Software:	No

1.2.2 Support Equipment List and Details

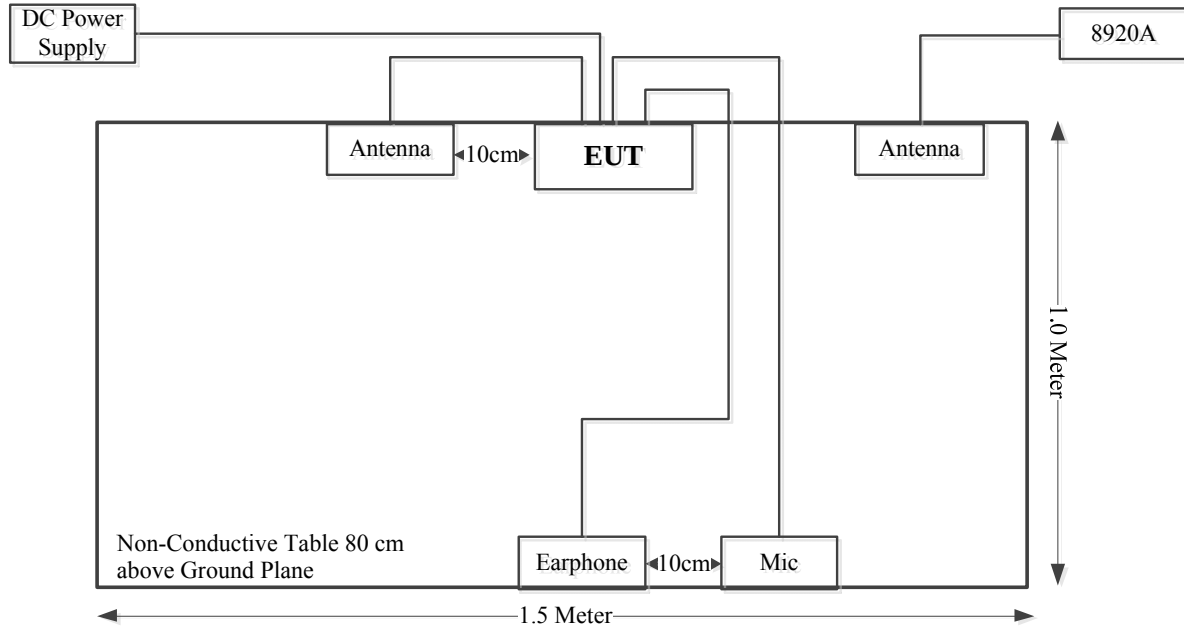
Manufacturer	Description	Model	Serial Number
BTECH	MIC	Unknown	2E6J-10
Unknown	Earphone	Unknown	Earphone 01
ZHAOXIN	DC Power Supply	RXN-6010D	21R6010D0912386
HP	RF Communications Test Set	8920A	3438A05201

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	earphone	EUT
MIC cable	No	No	1.5	MIC	EUT
Coaxial Cable	No	No	2	Antenna	8920A

1.2.4 Block Diagram of Test Setup

Radiated emissions:



1.3 Measurement Uncertainty

Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

Parameter	Measurement Uncertainty
Unwanted Emissions, radiated	30M~200MHz: 4.15 dB, 200M~1GHz: 5.61 dB, 1G~6GHz: 5.14 dB, 6G~18GHz: 5.93 dB, 18G~26.5G: 5.47 dB, 26.5G~40G: 5.63 dB
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)
Unwanted Emissions, conducted	± 1.26 dB

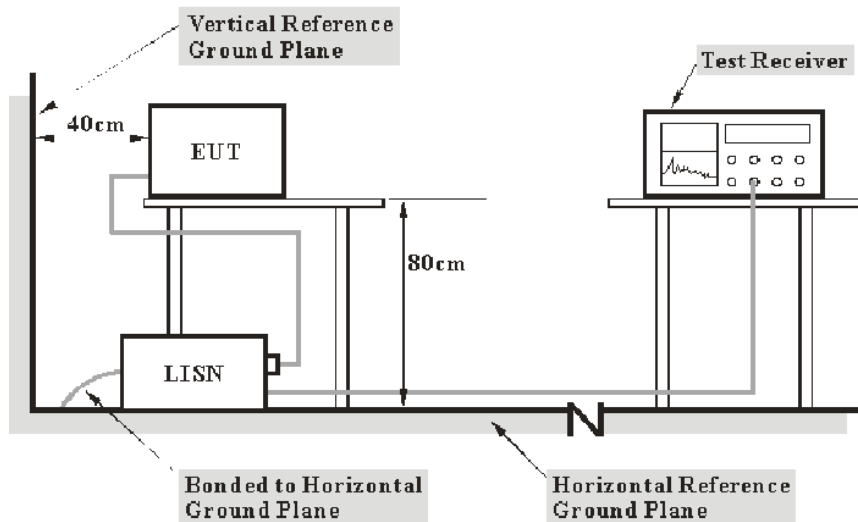
2. SUMMARY OF TEST RESULTS

Standard(s) Section	Description of Test	Result
§15.107	Conducted emissions	Not Applicable
§15.109	Radiated emissions	Compliant
§15.121(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

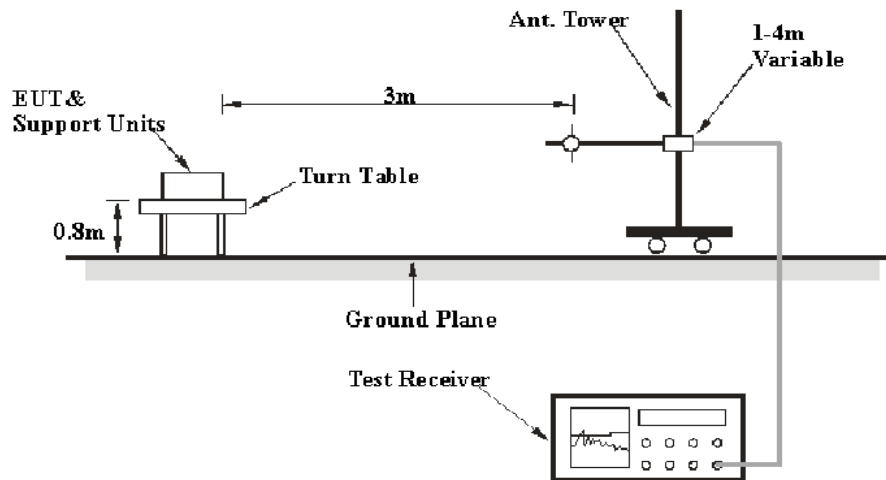
The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

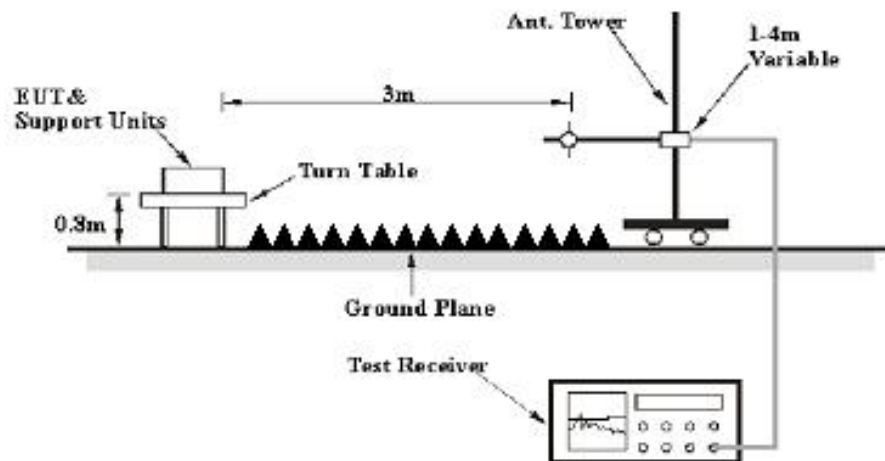
3.2 Radiation Spurious Emissions

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 2 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 Scanning Receivers and Frequency Converters Used with Scanning Receivers

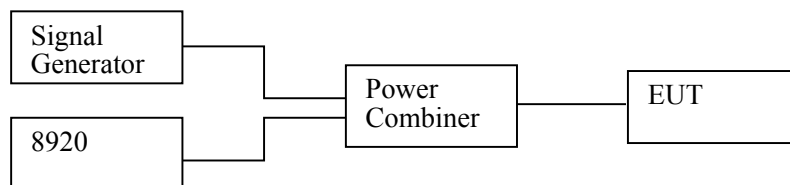
3.3.1 Applicable Standard

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.

3.3.2 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 8920 output power to produce 12 dB SINAD without the audio output power dropping by more than 3 dB; These output level of the 8920 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 vehicle system.

4.2 Radiation Spurious Emissions

Serial Number:	2E6J-1	Test Date:	2024/1/9~2024/3/6
Test Site:	966-1/966-2	Test Mode:	M1, M2
Tester:	Carl Xue, Jeff Luo, Mack Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	23.8~26.1	Relative Humidity: (%)	45~65	ATM Pressure: (kPa)	100.4~101.2
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Test Equipment List and Details:

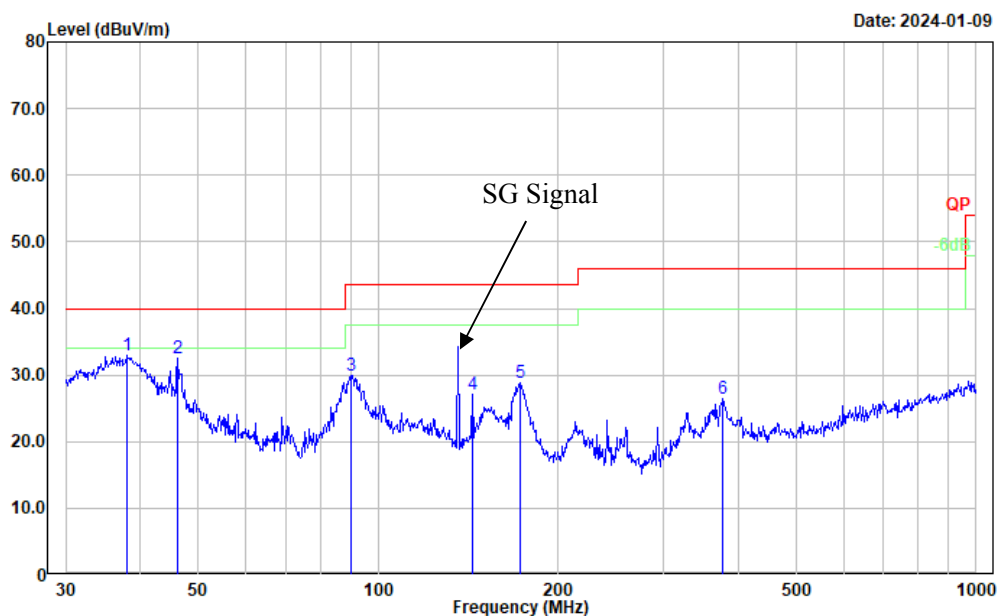
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Antenna	JB6	A082520-5	2023/12/1	2026/11/30
R&S	EMI Test Receiver	ESR3	102724	2023/3/31	2024/3/30
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0470-02	2023/7/16	2024/7/15
TIMES MICROWAVE	Coaxial Cable	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
AH	Double Ridge Guide Horn Antenna	SAS-571	1394	2023/2/22	2026/2/21
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	2023/11/8	2024/11/7

* 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:

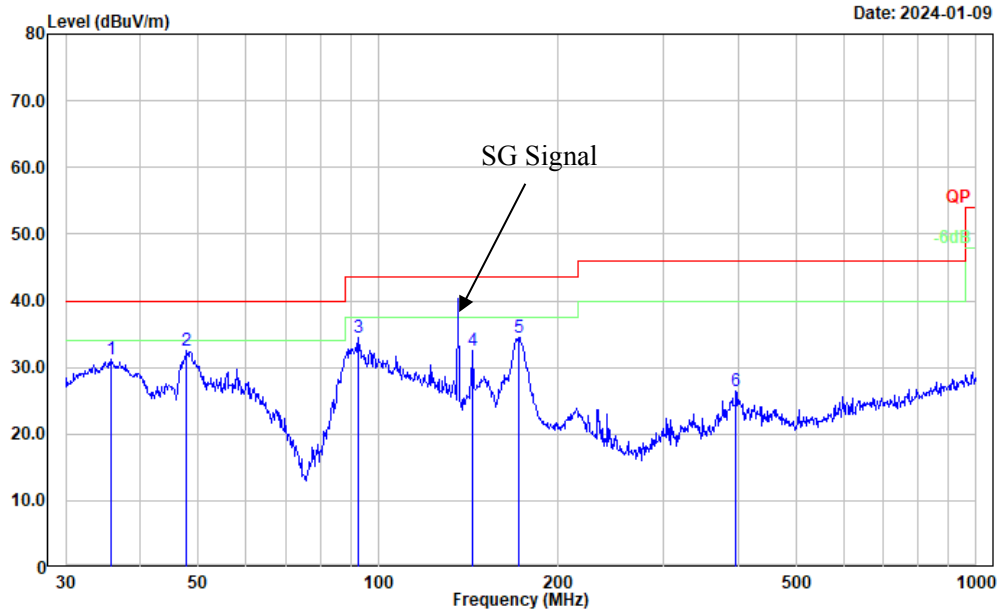
Receiving mode, 136.0125MHz

Project No.: CR231169585-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	38.078	42.91	-9.88	33.03	40.00	6.97	Peak
2	46.178	47.86	-15.42	32.44	40.00	7.56	Peak
3	89.905	46.95	-17.03	29.92	43.50	13.58	Peak
4	143.830	39.08	-12.07	27.01	43.50	16.49	Peak
5	173.205	41.60	-12.84	28.76	43.50	14.74	Peak
6	377.259	35.28	-8.88	26.40	46.00	19.60	Peak

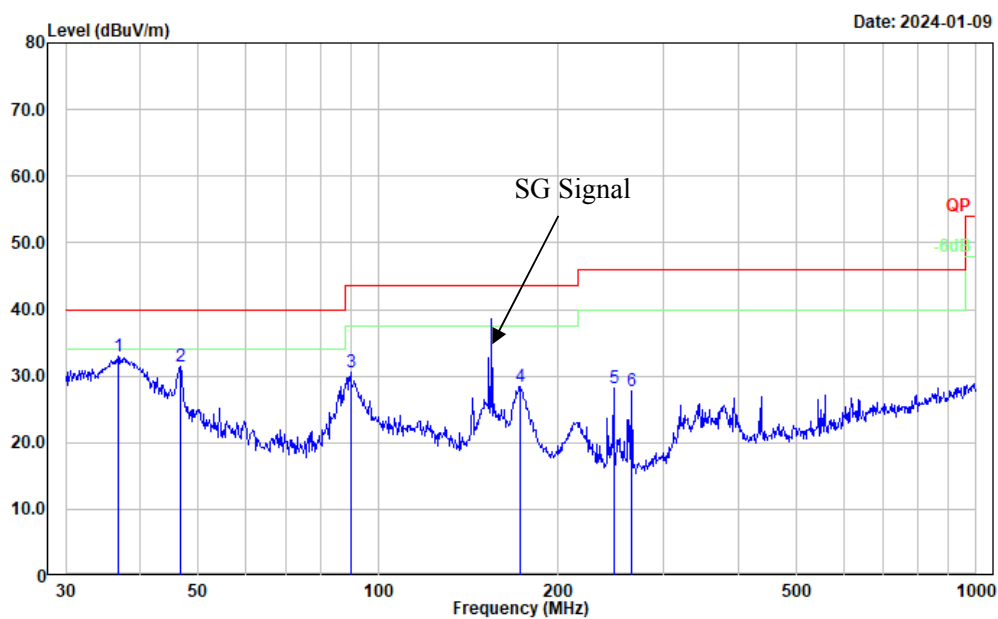
Project No.: CR231169585-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	35.749	39.26	-7.96	31.30	40.00	8.70	Peak
2	47.826	48.80	-16.32	32.48	40.00	7.52	Peak
3	92.787	50.96	-16.45	34.51	43.50	8.99	Peak
4	143.830	44.54	-12.07	32.47	43.50	11.03	Peak
5	171.393	47.27	-12.76	34.51	43.50	8.99	Peak
6	396.242	34.67	-8.21	26.46	46.00	19.54	Peak

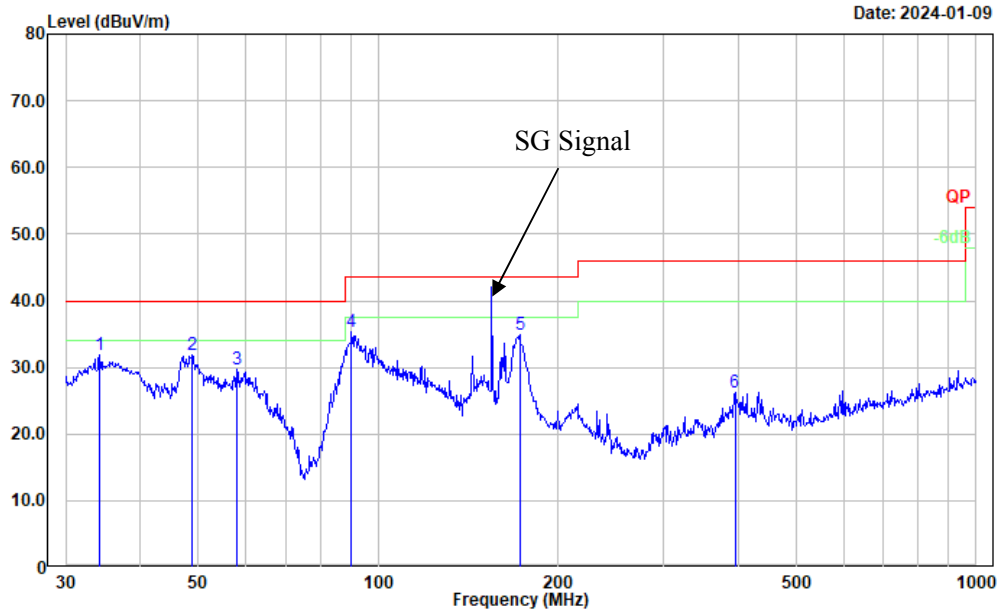
155MHz

Project No.: CR231169585-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	36.766	41.79	-8.83	32.96	40.00	7.04	Peak
2	46.666	47.22	-15.76	31.46	40.00	8.54	Peak
3	89.905	47.65	-17.03	30.62	43.50	12.88	Peak
4	172.599	41.27	-12.82	28.45	43.50	15.05	Peak
5	247.682	41.01	-12.91	28.10	46.00	17.90	Peak
6	265.676	38.91	-11.09	27.82	46.00	18.18	Peak

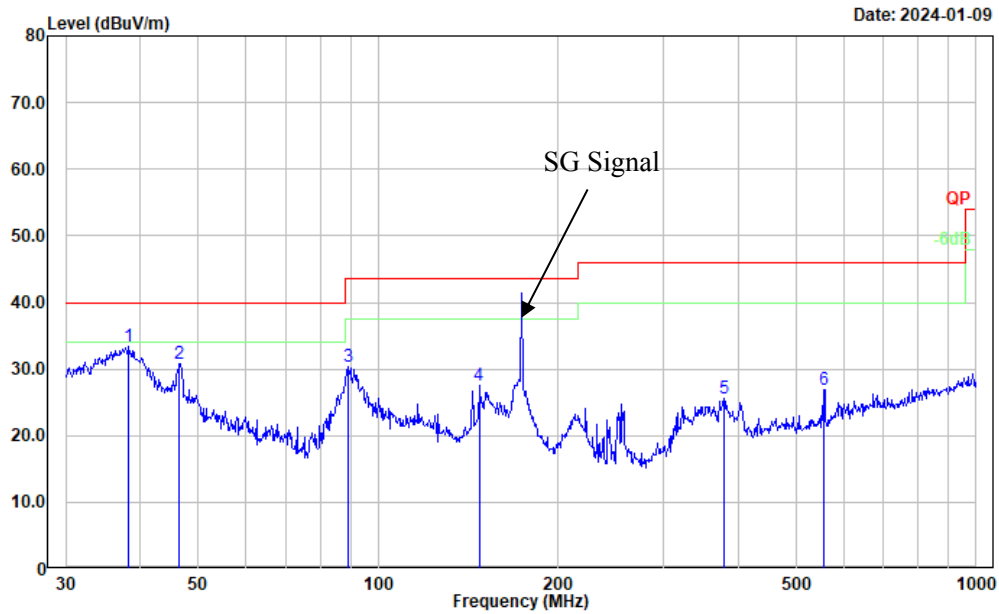
Project No.: CR231169585-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	34.156	38.73	-6.94	31.79	40.00	8.21	Peak
2	48.843	48.42	-16.63	31.79	40.00	8.21	Peak
3	57.999	47.36	-17.74	29.62	40.00	10.38	Peak
4	90.220	52.28	-17.00	35.28	43.50	8.22	Peak
5	172.599	47.72	-12.82	34.90	43.50	8.60	Peak
6	394.855	34.57	-8.27	26.30	46.00	19.70	Peak

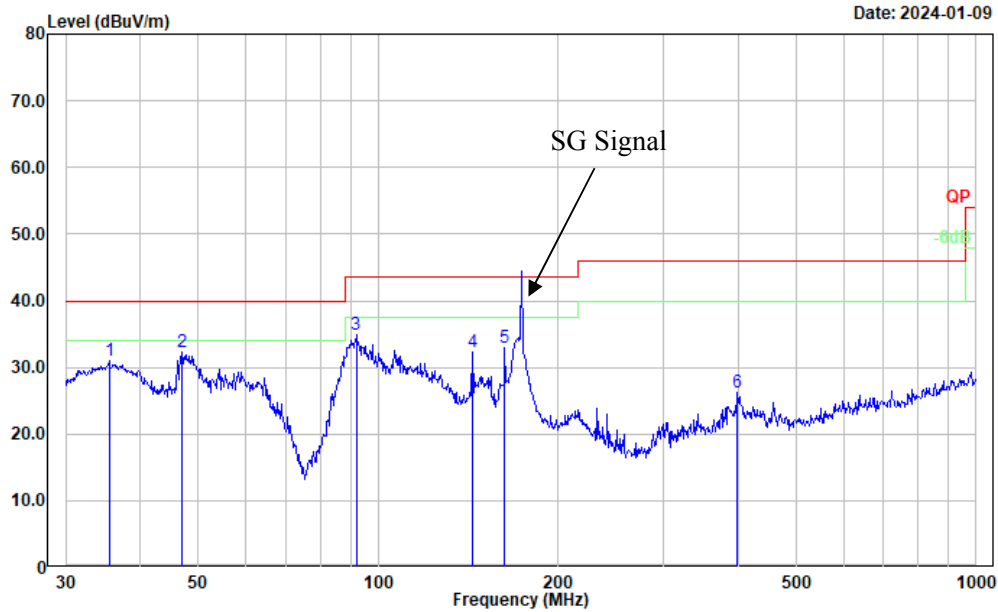
173.9875MHz

Project No.: CR231169585-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	38.212	43.28	-9.99	33.29	40.00	6.71	Peak
2	46.503	46.52	-15.64	30.88	40.00	9.12	Peak
3	89.276	47.51	-17.09	30.42	43.50	13.08	Peak
4	147.404	39.61	-12.13	27.48	43.50	16.02	Peak
5	378.584	34.42	-8.80	25.62	46.00	20.38	Peak
6	554.825	32.37	-5.43	26.94	46.00	19.06	Peak

Project No.: CR231169585-RF
Tester: Carl Xue
Polarization: vertical
Note:

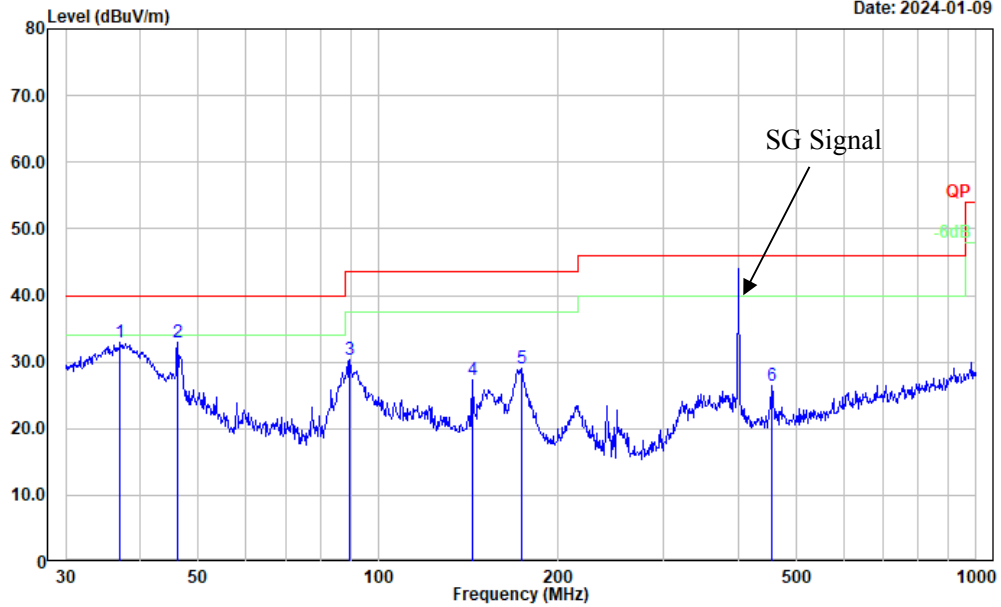


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	35.499	38.77	-7.80	30.97	40.00	9.03	Peak
2	46.830	48.19	-15.87	32.32	40.00	7.68	Peak
3	91.816	51.65	-16.67	34.98	43.50	8.52	Peak
4	143.830	44.33	-12.07	32.26	43.50	11.24	Peak
5	162.611	45.14	-12.10	33.04	43.50	10.46	Peak
6	399.030	34.30	-8.11	26.19	46.00	19.81	Peak

400.0125MHz

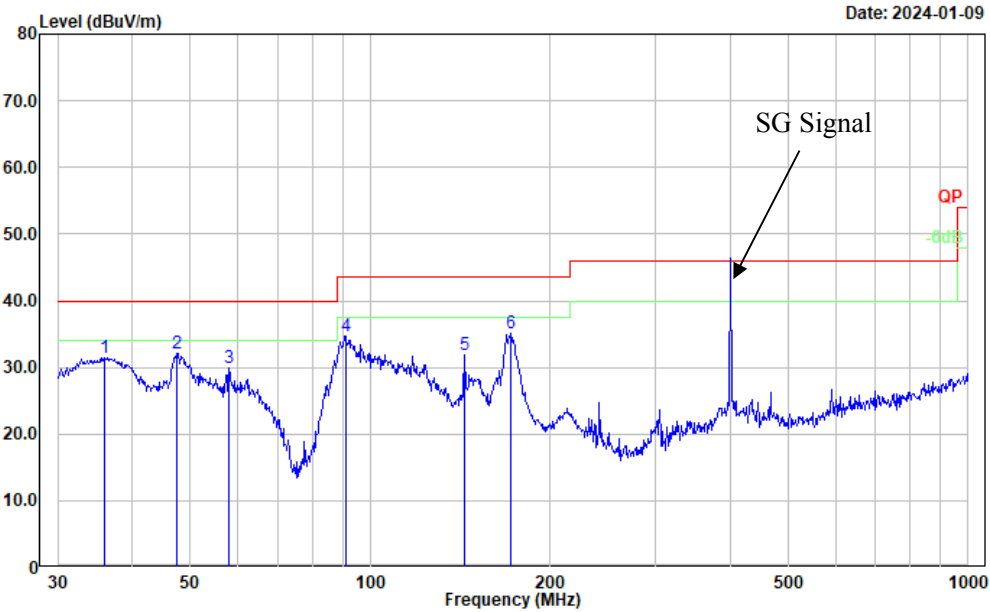
Project No.: CR231169585-RF
Tester: Carl Xue
Polarization: horizontal
Note:

Date: 2024-01-09



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	37.025	42.06	-9.06	33.00	40.00	7.00	Peak
2	46.178	48.43	-15.42	33.01	40.00	6.99	Peak
3	89.590	47.42	-17.06	30.36	43.50	13.14	Peak
4	143.830	39.46	-12.07	27.39	43.50	16.11	Peak
5	173.814	42.03	-12.89	29.14	43.50	14.36	Peak
6	455.906	33.20	-6.75	26.45	46.00	19.55	Peak

Project No.: CR231169585-RF
Tester: Carl Xue
Polarization: vertical
Note:

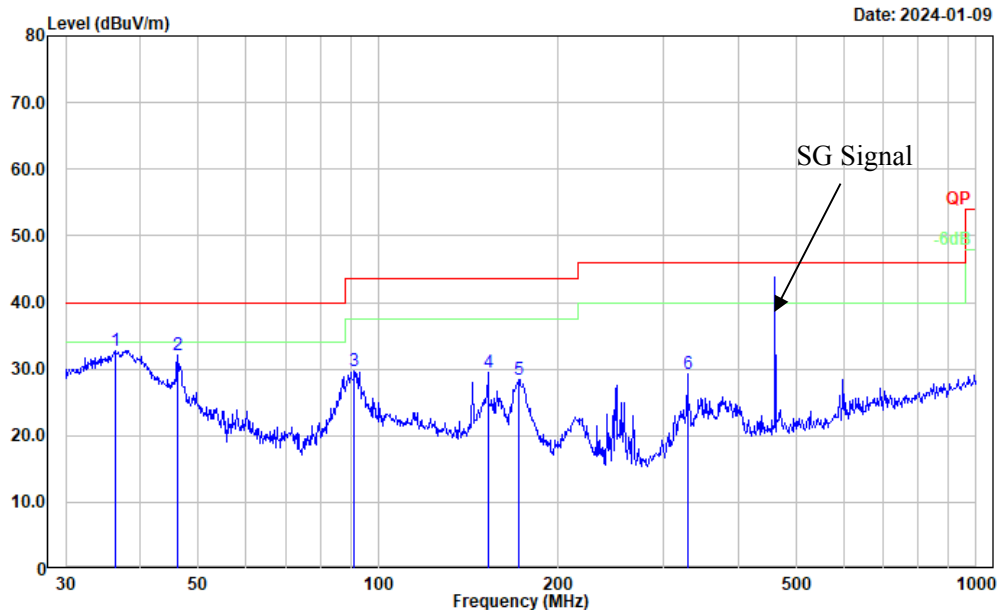


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	35.875	39.48	-8.05	31.43	40.00	8.57	Peak
2	47.492	48.36	-16.19	32.17	40.00	7.83	Peak
3	57.999	47.64	-17.74	29.90	40.00	10.10	Peak
4	90.855	51.67	-16.93	34.74	43.50	8.76	Peak
5	143.830	44.00	-12.07	31.93	43.50	11.57	Peak
6	171.393	47.80	-12.76	35.04	43.50	8.46	Peak

460MHz

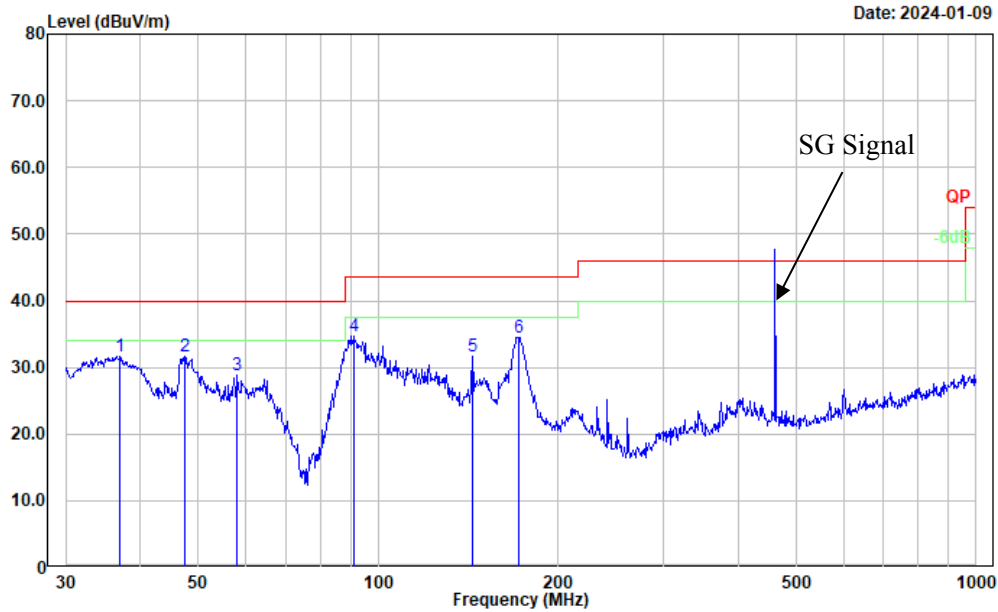
Project No.: CR231169585-RF
Tester: Carl Xue
Polarization: horizontal
Note:

Date: 2024-01-09



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	36.254	41.17	-8.37	32.80	40.00	7.20	Peak
2	46.178	47.42	-15.42	32.00	40.00	8.00	Peak
3	91.175	46.56	-16.87	29.69	43.50	13.81	Peak
4	152.664	41.71	-12.17	29.54	43.50	13.96	Peak
5	171.393	41.16	-12.76	28.40	43.50	15.10	Peak
6	329.039	39.17	-9.85	29.32	46.00	16.68	Peak

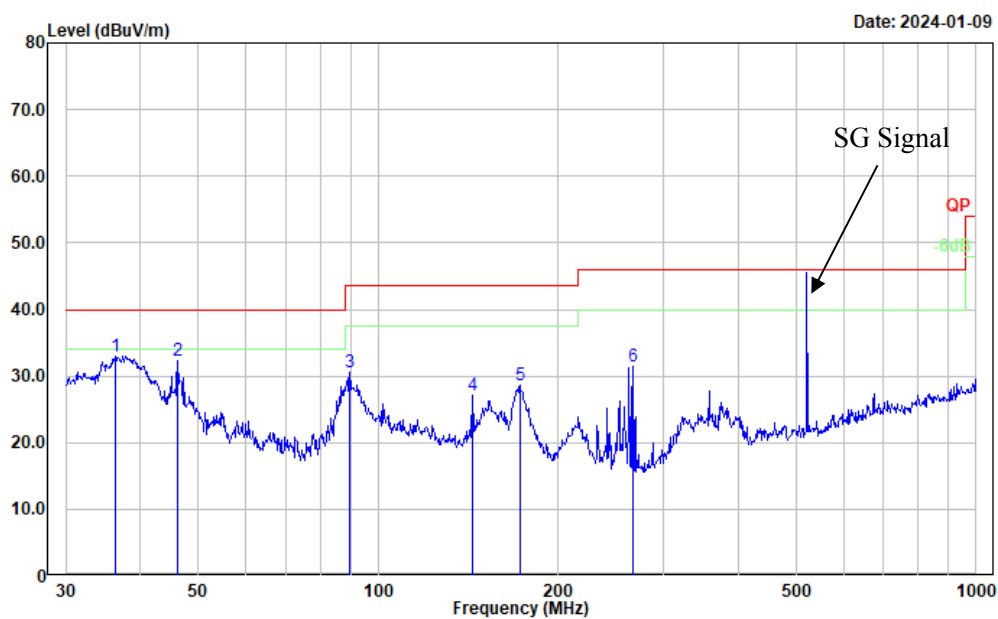
Project No.: CR231169585-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	37.025	40.63	-9.06	31.57	40.00	8.43	Peak
2	47.492	47.86	-16.19	31.67	40.00	8.33	Peak
3	57.999	46.67	-17.74	28.93	40.00	11.07	Peak
4	90.855	51.58	-16.93	34.65	43.50	8.85	Peak
5	143.830	43.81	-12.07	31.74	43.50	11.76	Peak
6	171.393	47.34	-12.76	34.58	43.50	8.92	Peak

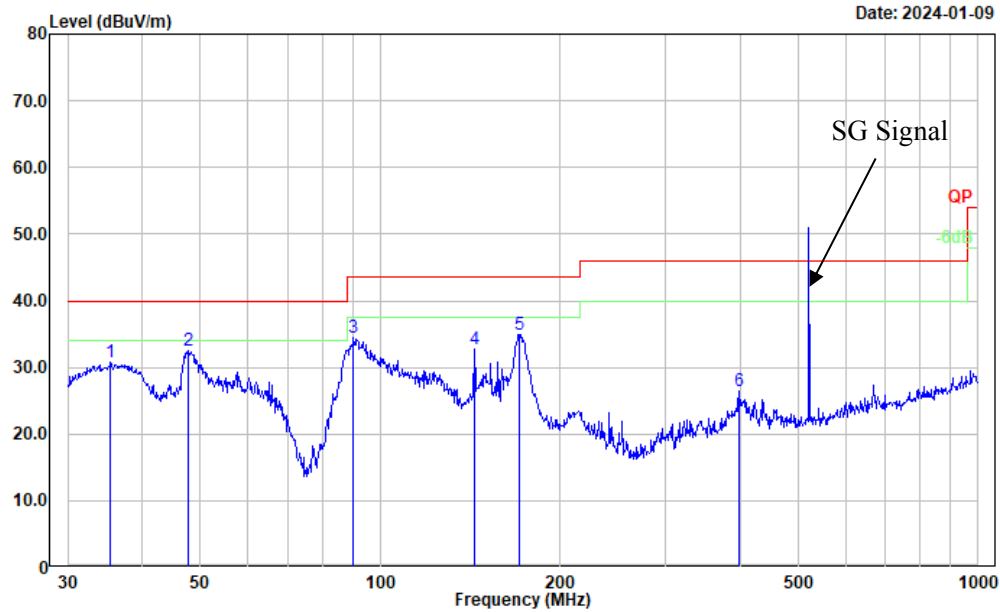
519.9875MHz

Project No.: CR231169585-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	36.381	41.54	-8.48	33.06	40.00	6.94	Peak
2	46.178	47.76	-15.42	32.34	40.00	7.66	Peak
3	89.590	47.69	-17.06	30.63	43.50	12.87	Peak
4	143.830	39.24	-12.07	27.17	43.50	16.33	Peak
5	172.599	41.54	-12.82	28.72	43.50	14.78	Peak
6	266.609	42.45	-11.05	31.40	46.00	14.60	Peak

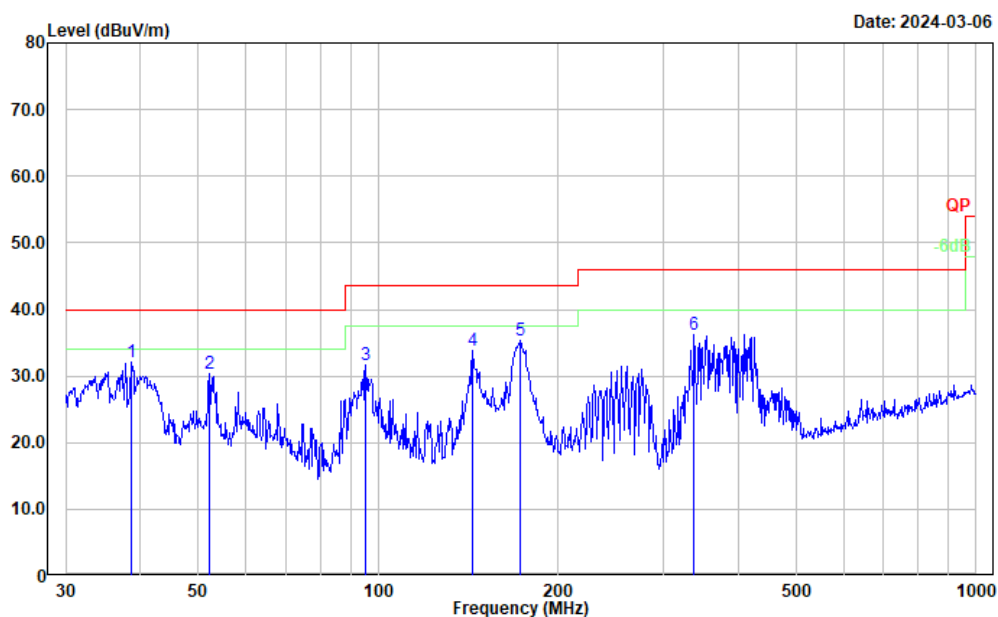
Project No.: CR231169585-RF
Tester: Carl Xue
Polarization: vertical
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	35.375	38.44	-7.71	30.73	40.00	9.27	Peak
2	47.826	48.91	-16.32	32.59	40.00	7.41	Peak
3	90.220	51.38	-17.00	34.38	43.50	9.12	Peak
4	143.830	44.84	-12.07	32.77	43.50	10.73	Peak
5	170.793	47.61	-12.70	34.91	43.50	8.59	Peak
6	399.030	34.54	-8.11	26.43	46.00	19.57	Peak

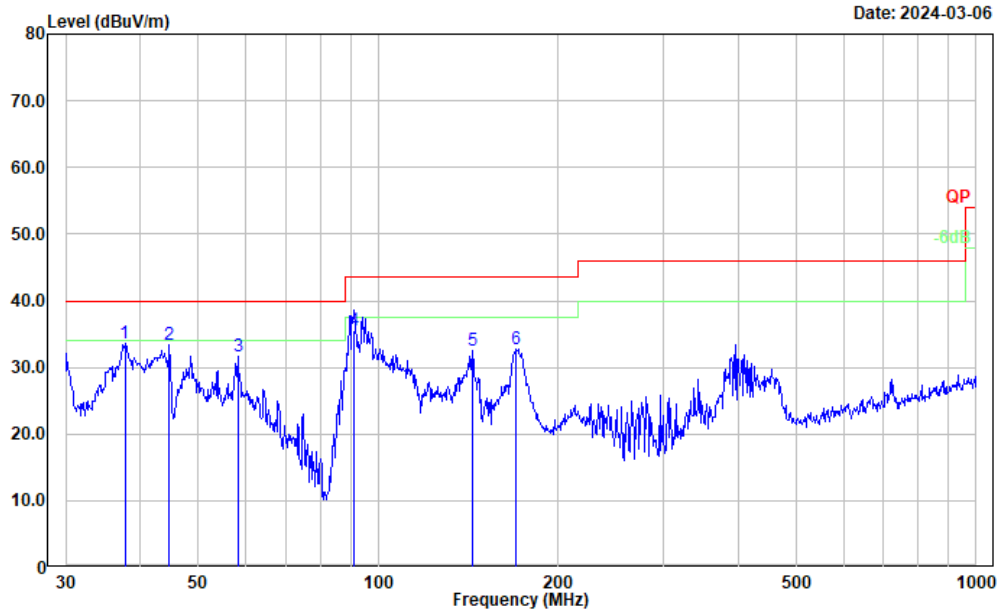
Scanning Mode:136-174MHz

Project No.: CR231169585-RF
Tester: Jeff Luo
Polarization: horizontal
Note:



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	38.616	42.33	-10.31	32.02	40.00	7.98	Peak
2	52.208	47.85	-17.56	30.29	40.00	9.71	Peak
3	95.427	47.58	-15.88	31.70	43.50	11.80	Peak
4	143.830	45.97	-12.07	33.90	43.50	9.60	Peak
5	172.599	48.15	-12.82	35.33	43.50	8.17	Peak
6	337.216	46.01	-9.72	36.29	46.00	9.71	Peak

Project No.: CR231169585-RF
Tester: Jeff Luo
Polarization: vertical
Note:

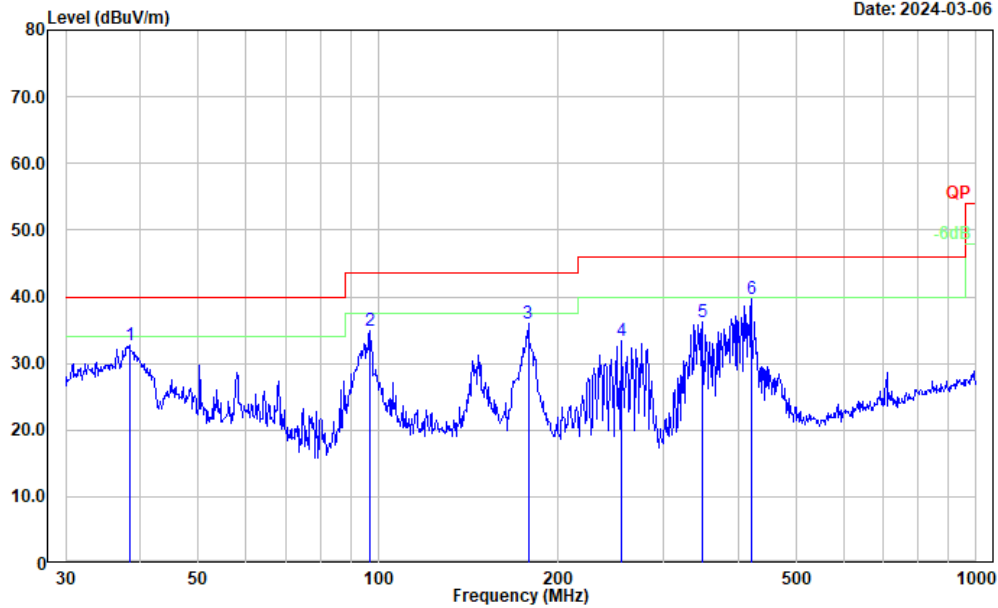


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	37.680	43.14	-9.56	33.58	40.00	6.42	Peak
2	44.743	47.90	-14.55	33.35	40.00	6.65	Peak
3	58.203	49.46	-17.72	31.74	40.00	8.26	Peak
4	90.855	52.47	-16.93	35.54	43.50	7.96	QP
5	143.830	44.61	-12.07	32.54	43.50	10.96	Peak
6	170.195	45.41	-12.64	32.77	43.50	10.73	Peak

400-520MHz

Project No.: CR231169585-RF
Tester: Jeff Luo
Polarization: horizontal
Note:

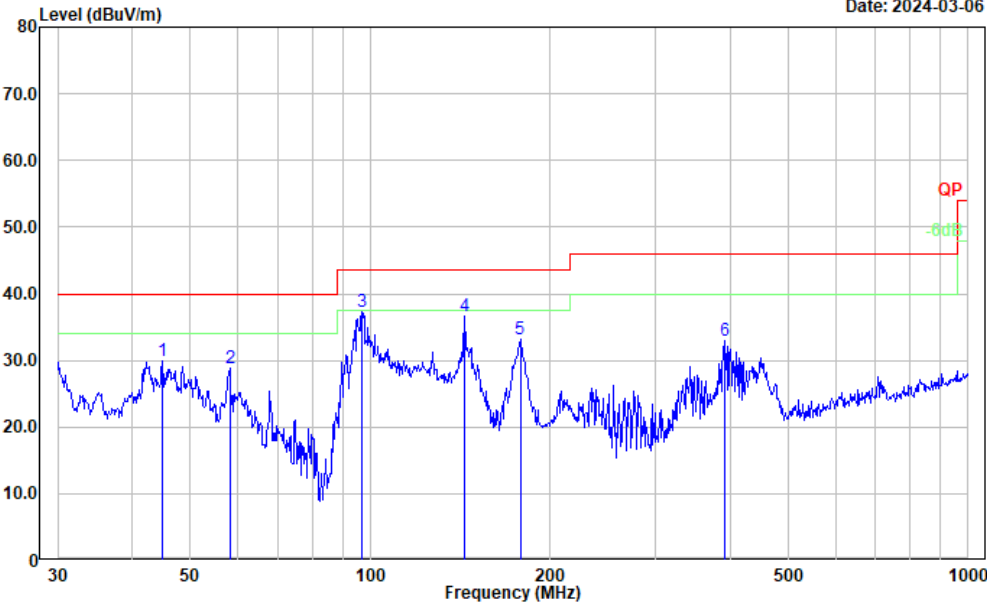
Date: 2024-03-06



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	38.346	42.73	-10.10	32.63	40.00	7.37	Peak
2	96.775	50.24	-15.38	34.86	43.50	8.64	Peak
3	178.133	49.30	-13.31	35.99	43.50	7.51	Peak
4	255.623	45.90	-12.54	33.36	46.00	12.64	Peak
5	348.027	45.89	-9.62	36.27	46.00	9.73	Peak
6	420.580	47.36	-7.69	39.67	46.00	6.33	Peak

Project No.: CR231169585-RF
Tester: Jeff Luo
Polarization: vertical
Note:

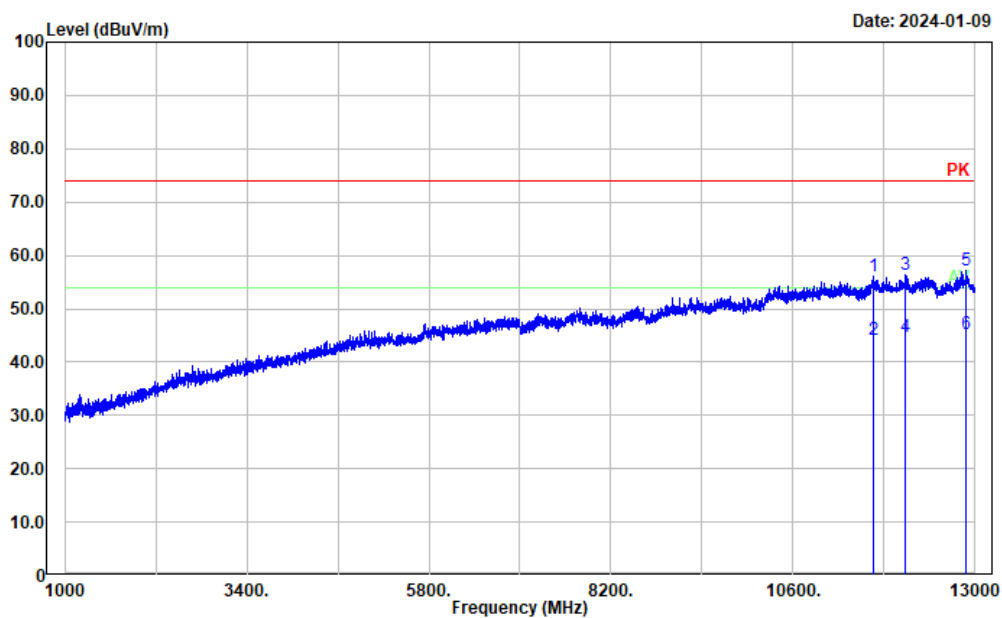
Date: 2024-03-06



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	44.901	44.58	-14.64	29.94	40.00	10.06	Peak
2	58.203	46.52	-17.72	28.80	40.00	11.20	Peak
3	96.775	52.68	-15.38	37.30	43.50	6.20	Peak
4	143.830	48.74	-12.07	36.67	43.50	6.83	Peak
5	178.133	46.49	-13.31	33.18	43.50	10.32	Peak
6	390.723	41.47	-8.43	33.04	46.00	12.96	Peak

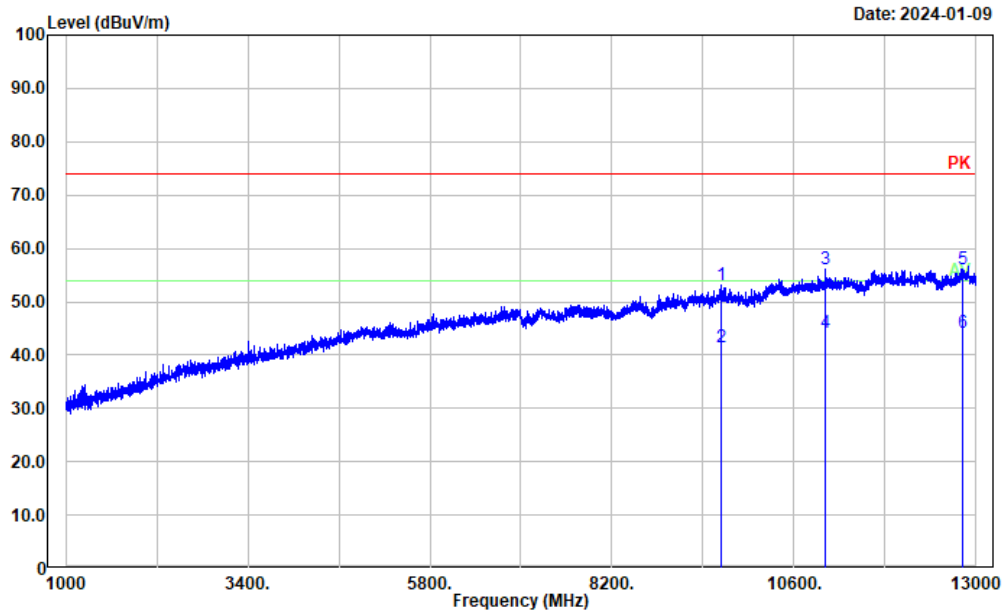
2) Above 1GHz: Receiving Mode, 136.0125MHz

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: horizontal
Note: Operating & Receiving (136.0125)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11668.000	33.96	22.12	56.08	74.00	17.92	Peak
2	11668.000	22.03	22.12	44.15	54.00	9.85	Average
3	12076.000	33.37	22.88	56.25	74.00	17.75	Peak
4	12076.000	21.81	22.88	44.69	54.00	9.31	Average
5	12875.200	34.06	23.20	57.26	74.00	16.74	Peak
6	12875.200	22.17	23.20	45.37	54.00	8.63	Average

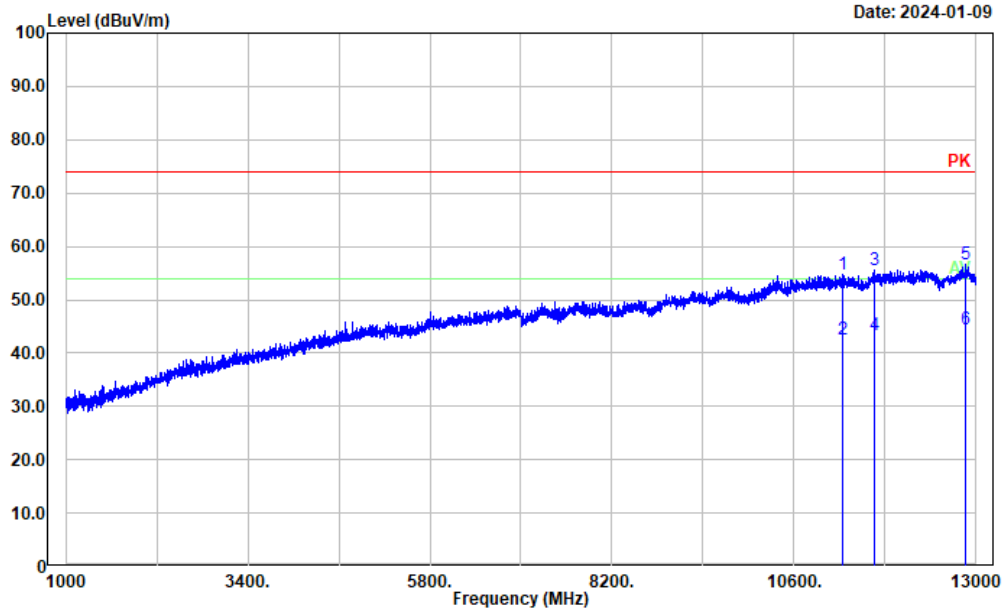
Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: vertical
Note: Operating & Receiving (136.0125)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	9635.200	33.97	19.28	53.25	74.00	20.75	Peak
2	9635.200	22.11	19.28	41.39	54.00	12.61	Average
3	11008.000	34.68	21.53	56.21	74.00	17.79	Peak
4	11008.000	22.75	21.53	44.28	54.00	9.72	Average
5	12812.800	33.23	22.95	56.18	74.00	17.82	Peak
6	12812.800	21.28	22.95	44.23	54.00	9.77	Average

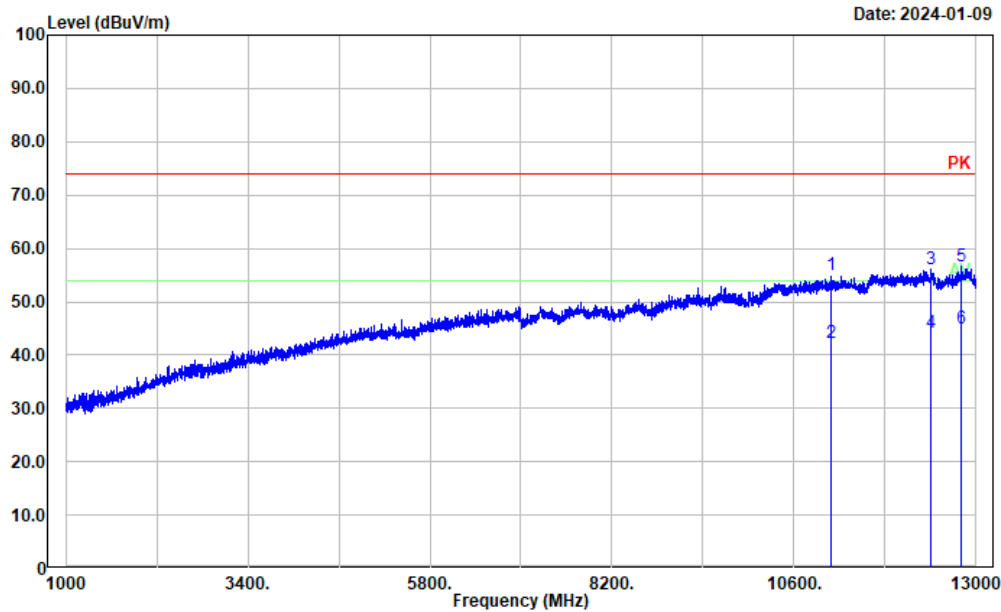
155MHz

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: horizontal
Note: Operating & Receiving (155)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11231.200	33.32	21.49	54.81	74.00	19.19	Peak
2	11231.200	21.08	21.49	42.57	54.00	11.43	Average
3	11663.200	33.59	22.10	55.69	74.00	18.31	Peak
4	11663.200	21.22	22.10	43.32	54.00	10.68	Average
5	12860.800	33.37	23.14	56.51	74.00	17.49	Peak
6	12860.800	21.37	23.14	44.51	54.00	9.49	Average

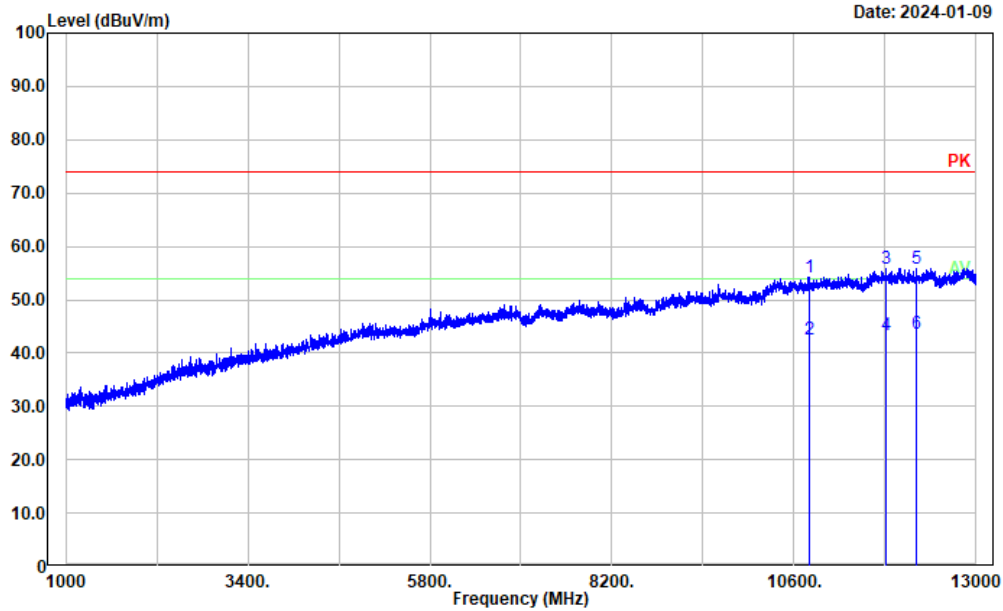
Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: vertical
Note: Operating & Receiving (155)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11087.200	33.40	21.48	54.88	74.00	19.12	Peak
2	11087.200	20.83	21.48	42.31	54.00	11.69	Average
3	12404.800	33.57	22.60	56.17	74.00	17.83	Peak
4	12404.800	21.67	22.60	44.27	54.00	9.73	Average
5	12805.600	33.77	22.91	56.68	74.00	17.32	Peak
6	12805.600	22.07	22.91	44.98	54.00	9.02	Average

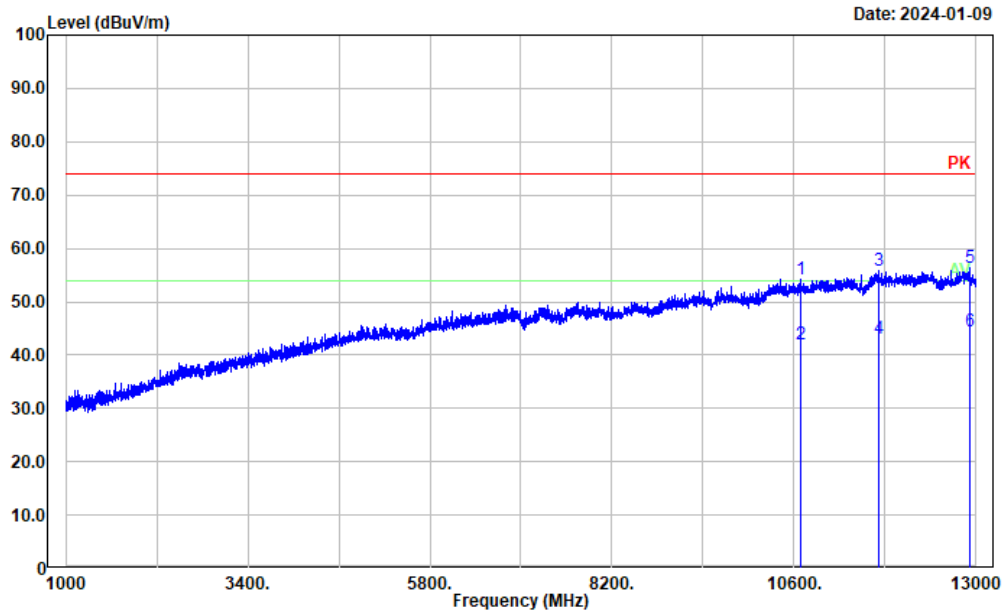
173.9875MHz

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: horizontal
Note: Operating & Receiving (173.9875)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10794.400	32.97	21.24	54.21	74.00	19.79	Peak
2	10794.400	21.37	21.24	42.61	54.00	11.39	Average
3	11804.800	33.65	22.23	55.88	74.00	18.12	Peak
4	11804.800	21.08	22.23	43.31	54.00	10.69	Average
5	12210.400	33.33	22.58	55.91	74.00	18.09	Peak
6	12210.400	20.94	22.58	43.52	54.00	10.48	Average

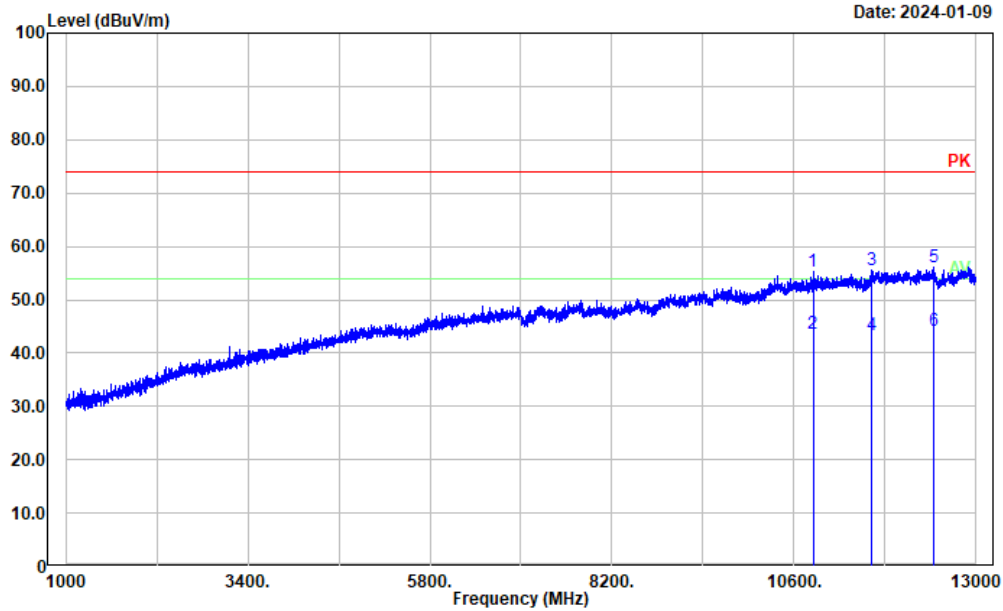
Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: vertical
Note: Operating & Receiving (173.9875)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10684.000	33.14	21.14	54.28	74.00	19.72	Peak
2	10684.000	20.92	21.14	42.06	54.00	11.94	Average
3	11713.600	33.66	22.24	55.90	74.00	18.10	Peak
4	11713.600	20.89	22.24	43.13	54.00	10.87	Average
5	12913.600	33.15	23.23	56.38	74.00	17.62	Peak
6	12913.600	21.29	23.23	44.52	54.00	9.48	Average

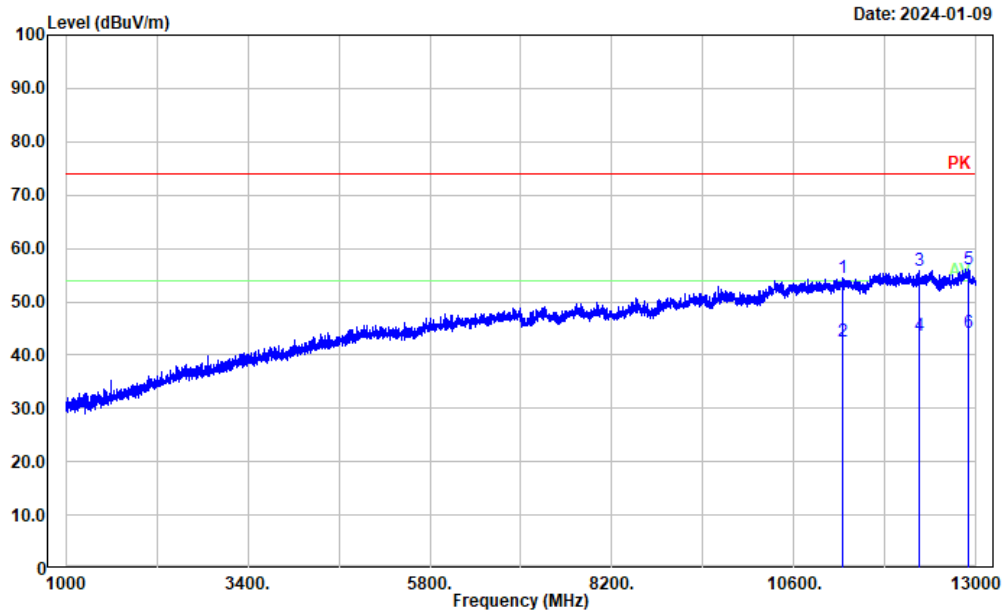
400.0125MHz

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: horizontal
Note: Operating & Receiving (400.0125)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10849.600	33.84	21.41	55.25	74.00	18.75	Peak
2	10849.600	22.11	21.41	43.52	54.00	10.48	Average
3	11620.000	33.65	21.92	55.57	74.00	18.43	Peak
4	11620.000	21.47	21.92	43.39	54.00	10.61	Average
5	12436.000	33.60	22.49	56.09	74.00	17.91	Peak
6	12436.000	21.75	22.49	44.24	54.00	9.76	Average

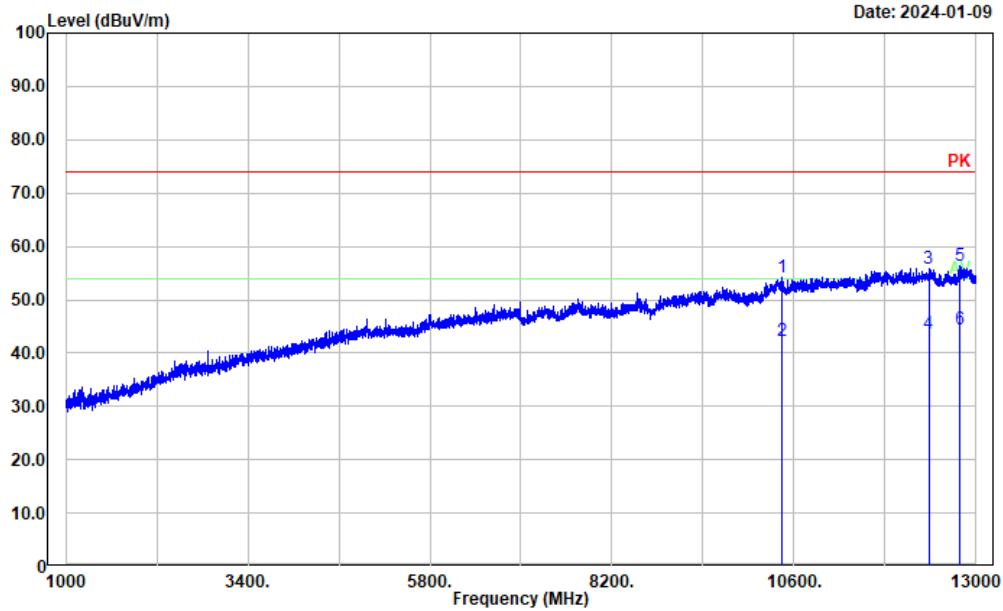
Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: vertical
Note: Operating & Receiving (400.0125)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11243.200	32.85	21.54	54.39	74.00	19.61	Peak
2	11243.200	21.03	21.54	42.57	54.00	11.43	Average
3	12241.600	33.30	22.61	55.91	74.00	18.09	Peak
4	12241.600	21.02	22.61	43.63	54.00	10.37	Average
5	12894.400	32.90	23.28	56.18	74.00	17.82	Peak
6	12894.400	20.84	23.28	44.12	54.00	9.88	Average

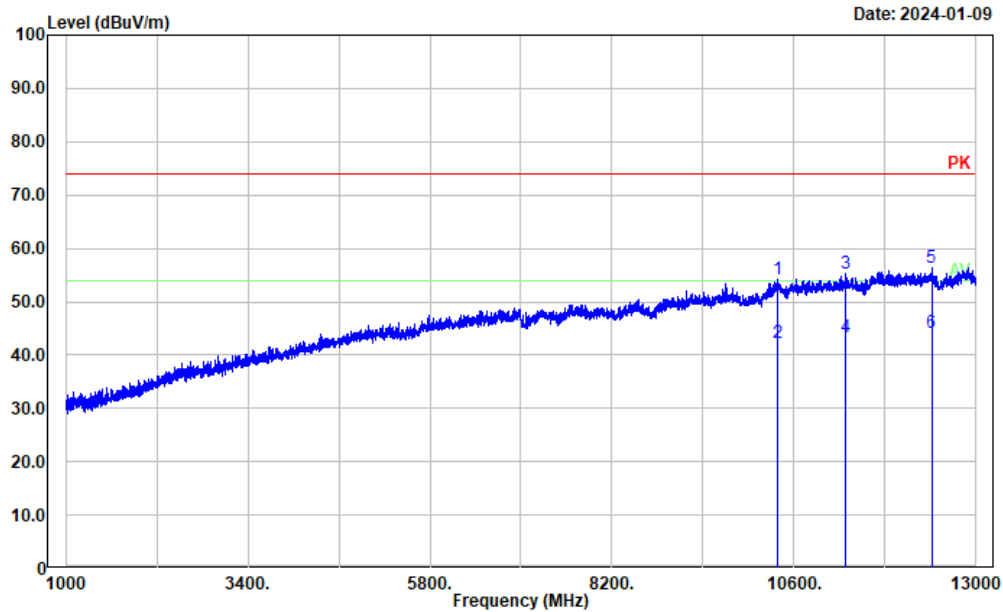
460MHz

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: horizontal
Note: Operating & Receiving (460)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10436.800	33.82	20.49	54.31	74.00	19.69	Peak
2	10436.800	21.81	20.49	42.30	54.00	11.70	Average
3	12373.600	33.28	22.63	55.91	74.00	18.09	Peak
4	12373.600	21.11	22.63	43.74	54.00	10.26	Average
5	12784.000	33.55	22.88	56.43	74.00	17.57	Peak
6	12784.000	21.45	22.88	44.33	54.00	9.67	Average

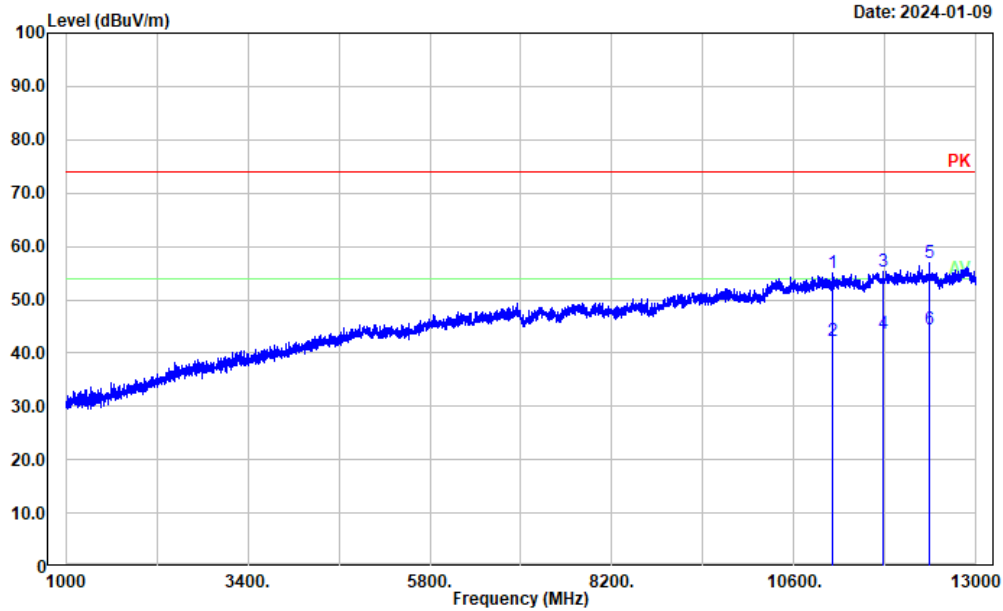
Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: vertical
Note: Operating & Receiving (460)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10381.600	33.64	20.51	54.15	74.00	19.85	Peak
2	10381.600	21.78	20.51	42.29	54.00	11.71	Average
3	11276.800	33.48	21.71	55.19	74.00	18.81	Peak
4	11276.800	21.66	21.71	43.37	54.00	10.63	Average
5	12412.000	33.87	22.58	56.45	74.00	17.55	Peak
6	12412.000	21.54	22.58	44.12	54.00	9.88	Average

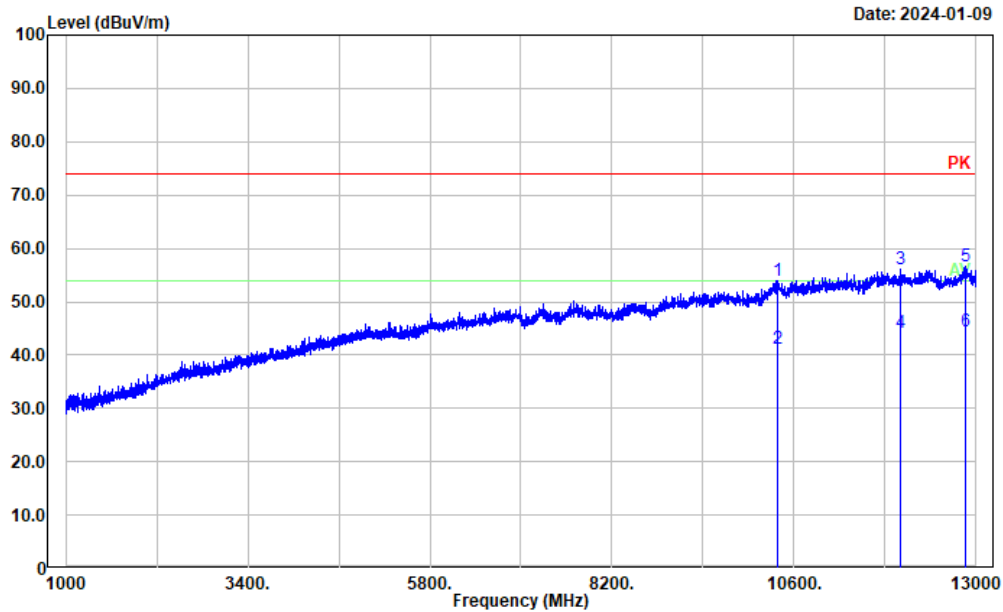
519.9875MHz

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: horizontal
Note: Operating & Receiving (519.9875)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	11101.600	33.50	21.47	54.97	74.00	19.03	Peak
2	11101.600	20.82	21.47	42.29	54.00	11.71	Average
3	11768.800	33.07	22.22	55.29	74.00	18.71	Peak
4	11768.800	21.29	22.22	43.51	54.00	10.49	Average
5	12380.800	34.24	22.63	56.87	74.00	17.13	Peak
6	12380.800	21.76	22.63	44.39	54.00	9.61	Average

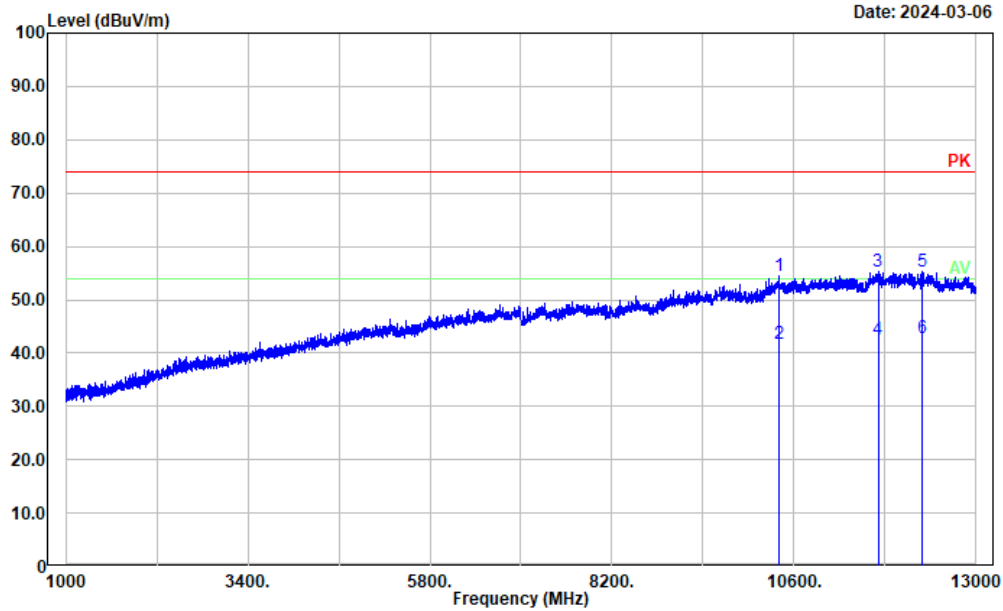
Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: vertical
Note: Operating & Receiving (519.9875)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10388.800	33.42	20.52	53.94	74.00	20.06	Peak
2	10388.800	20.57	20.52	41.09	54.00	12.91	Average
3	12008.800	33.54	22.59	56.13	74.00	17.87	Peak
4	12008.800	21.69	22.59	44.28	54.00	9.72	Average
5	12868.000	33.37	23.16	56.53	74.00	17.47	Peak
6	12868.000	21.15	23.16	44.31	54.00	9.69	Average

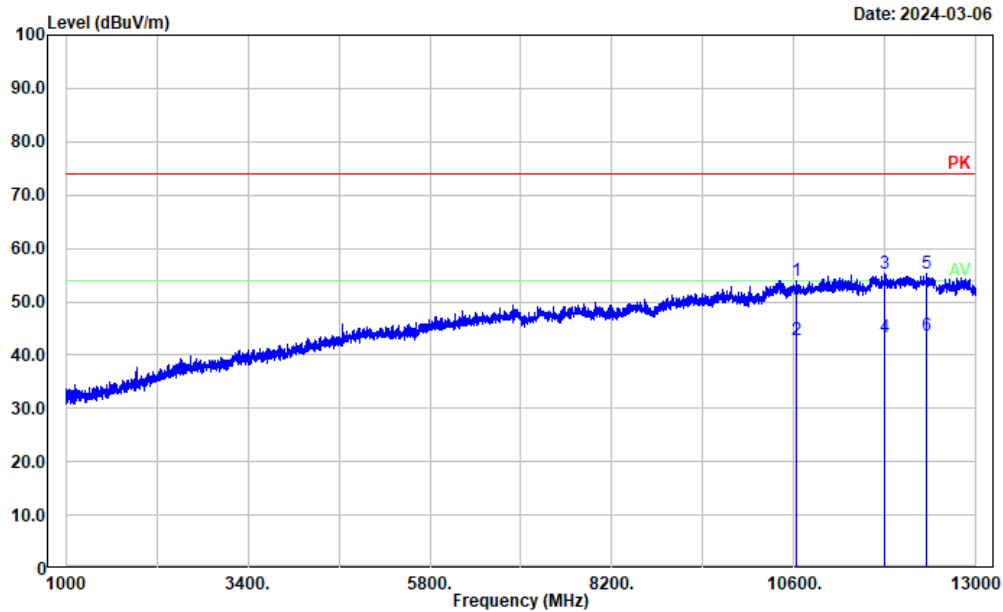
Scanning mode:136-174MHz

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: horizontal
Note: Operating &Scaning receiving(136-174)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10398.400	33.92	20.54	54.46	74.00	19.54	Peak
2	10398.400	21.11	20.54	41.65	54.00	12.35	Average
3	11706.400	33.03	22.25	55.28	74.00	18.72	Peak
4	11706.400	20.33	22.25	42.58	54.00	11.42	Average
5	12287.200	32.61	22.65	55.26	74.00	18.74	Peak
6	12287.200	20.04	22.65	42.69	54.00	11.31	Average

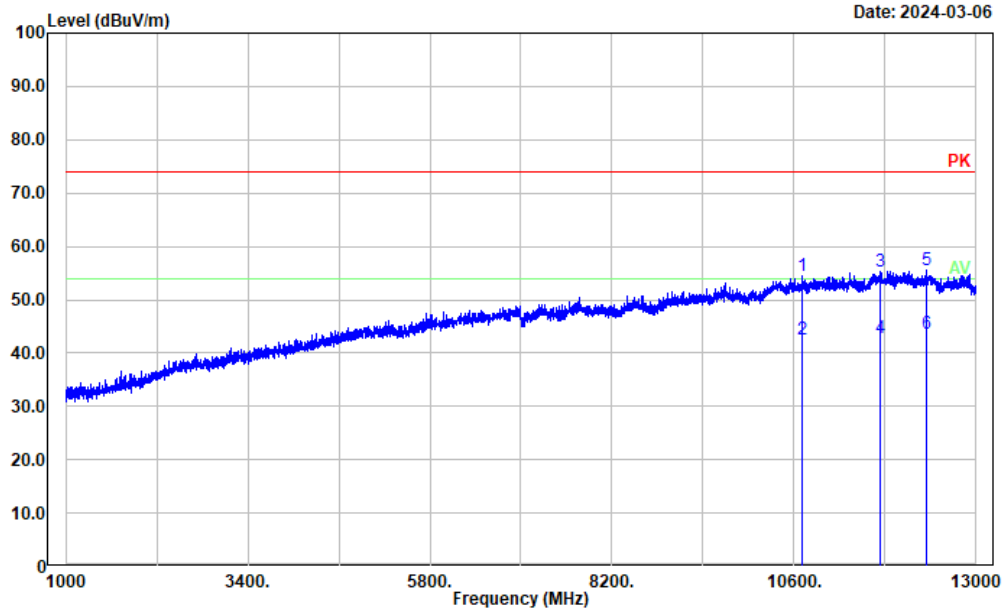
Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: vertical
Note: Operating & Scanning receiving(136-174)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10624.000	32.94	21.11	54.05	74.00	19.95	Peak
2	10624.000	21.58	21.11	42.69	54.00	11.31	Average
3	11792.800	32.94	22.22	55.16	74.00	18.84	Peak
4	11792.800	21.02	22.22	43.24	54.00	10.76	Average
5	12340.000	32.53	22.64	55.17	74.00	18.83	Peak
6	12340.000	21.02	22.64	43.66	54.00	10.34	Average

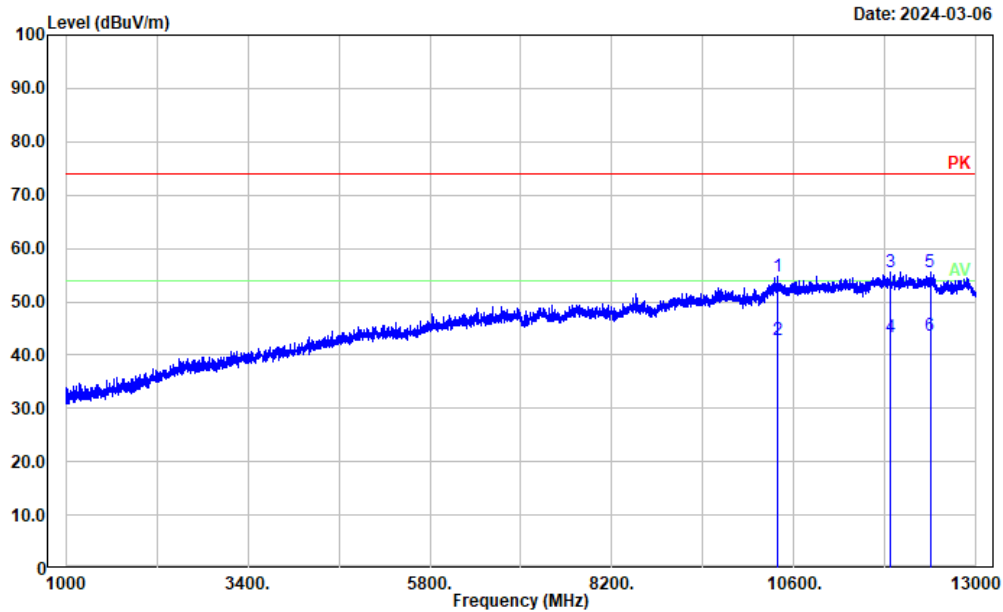
400-520MHz

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: horizontal
Note: Operating & Scanning receiving(400-520)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10715.200	33.17	21.17	54.34	74.00	19.66	Peak
2	10715.200	21.49	21.17	42.66	54.00	11.34	Average
3	11742.400	33.06	22.24	55.30	74.00	18.70	Peak
4	11742.400	20.50	22.24	42.74	54.00	11.26	Average
5	12344.800	32.86	22.64	55.50	74.00	18.50	Peak
6	12344.800	20.94	22.64	43.58	54.00	10.42	Average

Project No.: CR231169585-RF
Tester: Mack Huang
Polarization: vertical
Note: Operating &Scaning receiving(400-520)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	10381.600	34.22	20.51	54.73	74.00	19.27	Peak
2	10381.600	22.18	20.51	42.69	54.00	11.31	Average
3	11869.600	33.00	22.50	55.50	74.00	18.50	Peak
4	11869.600	20.80	22.50	43.30	54.00	10.70	Average
5	12392.800	32.97	22.62	55.59	74.00	18.41	Peak
6	12392.800	20.93	22.62	43.55	54.00	10.45	Average

4.3 Scanning Receivers and Frequency Converters Used with Scanning Receivers

Serial Number:	2E6J-1	Test Date:	2023/12/12
Test Site:	RF	Test Mode:	Scanning
Tester:	Morpheus Shi	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	25.4	Relative Humidity: (%)	53	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	FSU26	200445	2023/3/31	2024/3/30
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
Mini-Circuits	DC Block	BLK-18-S+	1554403	Each time	N/A
Agilent	MXG Vector Signal Generator	N5182B	MY51350144	2023/3/31	2024/3/30
HP	RF Communications Test Set	8920A	3438A05209	2023/3/31	2024/3/30
Mini-Circuits	Power Splitter	ZFRSC-183-S+	S F448201619	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	Limit
MHz	MHz	dB	dB
136-174	824, 836, 849, 869, 881.5, 894	44.5	>38
400-520	824, 836, 849, 869, 881.5, 894	45.1	>38

5. EUT PHOTOGRAPHS

Please refer to the attachment CR231169585-EXP EUT EXTERNAL PHOTOGRAPHS and
CR231169585-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment CR231169585-00B-TSP TEST SETUP PHOTOGRAPHS.

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