



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: Xiamen HONGKAIDE Information Technology Co., Ltd.

Address: NO. 681, Xiahe Road, Siming District, Xiamen, Fujian Province, China

FCC ID: 2BQH7-DM9100

Product Name: DMR Analog/Digital 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: 2503Q10191E-RF-00C

Date Of Issue: 2025/6/24

Reviewed By: Calvin Chen

Title: RF Engineer

Approved By: Sun Zhong

Title: Manager

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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.

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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Each test item follows the test standard(s) without deviation.

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
1.0	2503Q10191E-RF-00C	Original Report	2025/6/24

1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

EUT Name:	DMR Analog/Digital Mobile Radio
EUT Model:	DM9100
Highest Operation Frequency^:	2480MHz
Rated Input Voltage:	DC 12~13.8V Typical voltage: DC 13V
Sample Number:	RE: 2YVR-1 RF: 2YVR-2
EUT Received Date:	2025.3.4
EUT Received Status:	Good

Accessory Information:

Accessory Description	Manufacturer	Model
Microphone	HONGKAIDE	MD-66

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	400-470	400.0125, 435, 469.9875
Scanning	136-174 400-470	/

1.2 Description of Test Configuration

1.2.1 EUT Operation Condition:

EUT Operation Mode:	The system was configured for testing in Typical Use Mode, which was provided by the manufacturer. Test Mode: M1: Scanning (136-174 MHz, 400-470 MHz) M2: Receiving (136.0125 MHz; 155 MHz;173.9875 MHz; 400.0125 MHz; 435 MHz, 469.9875 MHz)
Equipment Modifications:	No
EUT Exercise Software:	No

1.2.2 Support Equipment List and Details

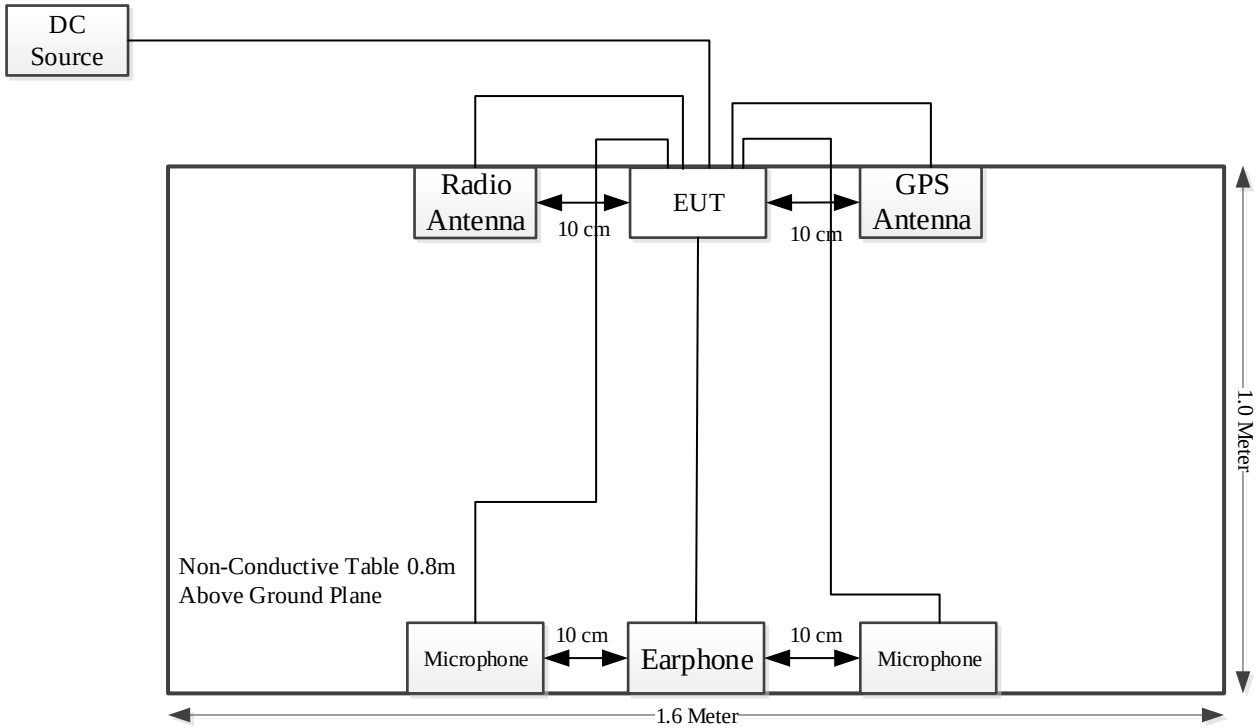
Manufacturer	Description	Model	Serial Number
ZHAOXIN	DC Source	RXN-6010D	21R6010D0912386
HONGKAIDE	Microphone	MD-66	Unknown
HONGKAIDE	GPS Antenna	Unknown	Unknown
HONGKAIDE	Mobile Antenna	NR-770R	Unknown
I PRO	Earphone	Phonenix 5.0s	EP221126001
HONGKAIDE	Microphone	MD-66	Unknown
Agilent	MXG Vector Signal Generator	N5182B	MY51350144
TEJIATE	Antenna	SMA	Unknown

1.2.3 Support Cable List and Details

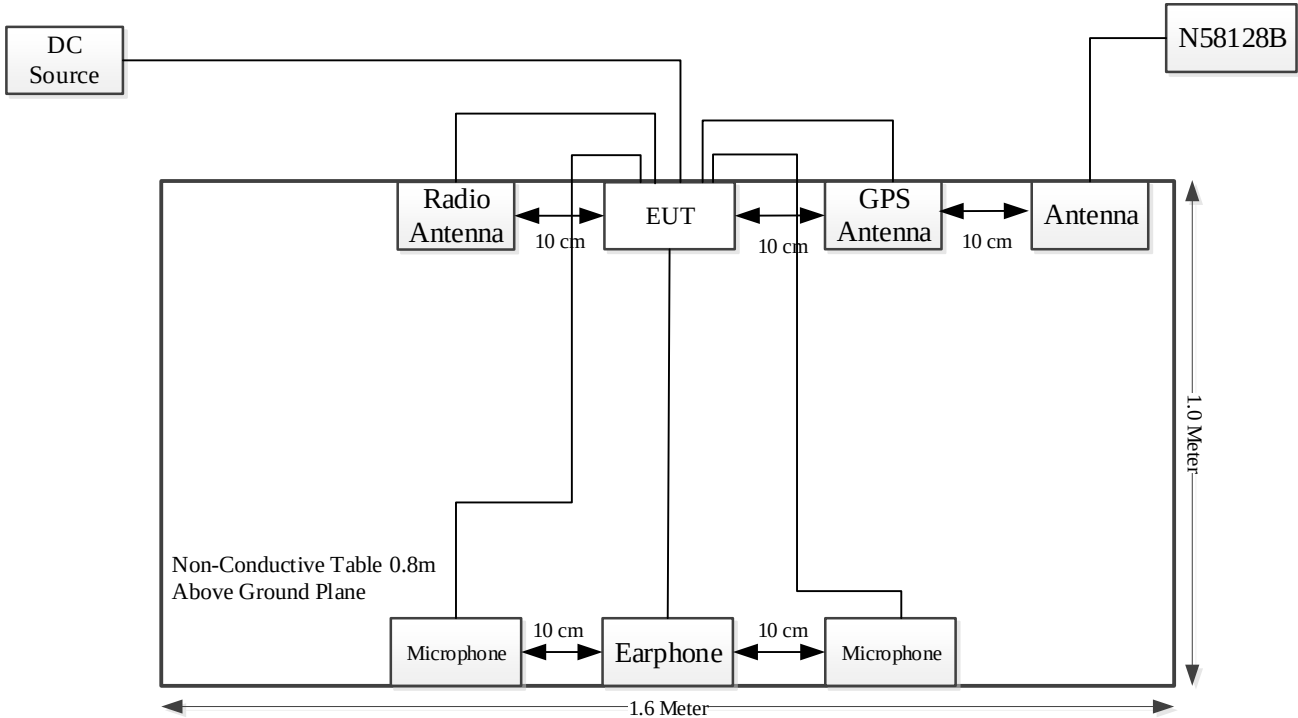
Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	To
DC Power Cable	No	No	3	DC Source	EUT
Mobile Antenna Cable	No	No	5	EUT	Rdaio Antenna
GPS Antenna Cable	No	No	5	EUT	GPS Antenna
Microphone Cable*2	No	No	5	EUT	Microphone
Earphone Cable	No	No	1.2	EUT	Earphone
Antenna Cable	No	No	10	N5182B	Antenna

1.2.4 Block Diagram of Test Setup

Spurious emissions: M1



Spurious emissions: 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	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
AC Power Lines Conducted Emission	2.8 dB (150 kHz to 30 MHz)

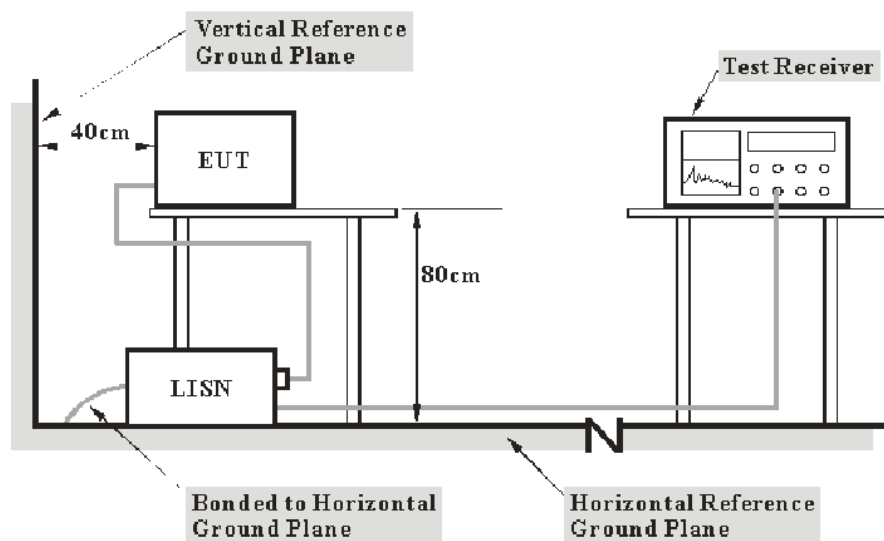
2. SUMMARY OF TEST RESULTS

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

3. REQUIREMENTS AND TEST PROCEDURES

3.1 AC Line Conducted Emissions

3.1.1 EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B Class B limits.

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

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

3.1.2 EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

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

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

3.1.3 Test Procedure

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

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

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

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

3.1.4 Corrected Amplitude & Margin Calculation

The basic equation is as follows:

Result = Reading + Factor

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

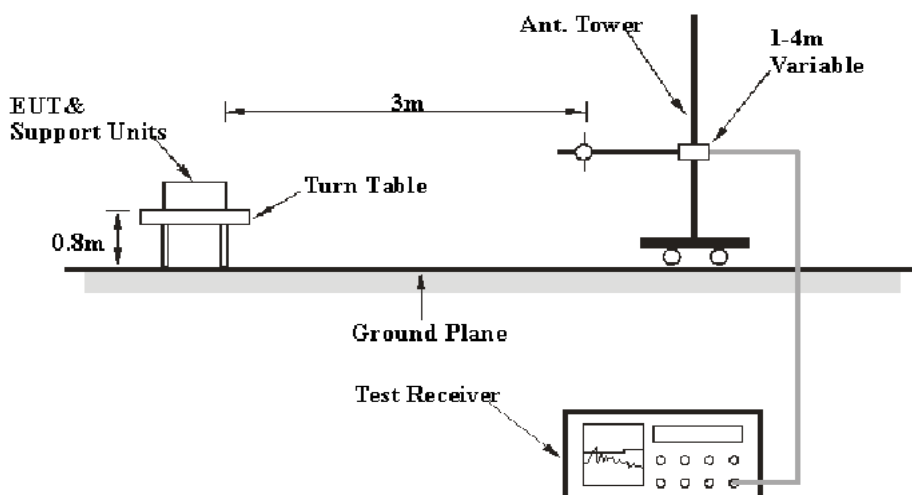
The “**Margin**” column of the following data tables indicates the degree of compliance within the applicable limit. The equation for margin calculation is as follows:

Margin = Limit – Result

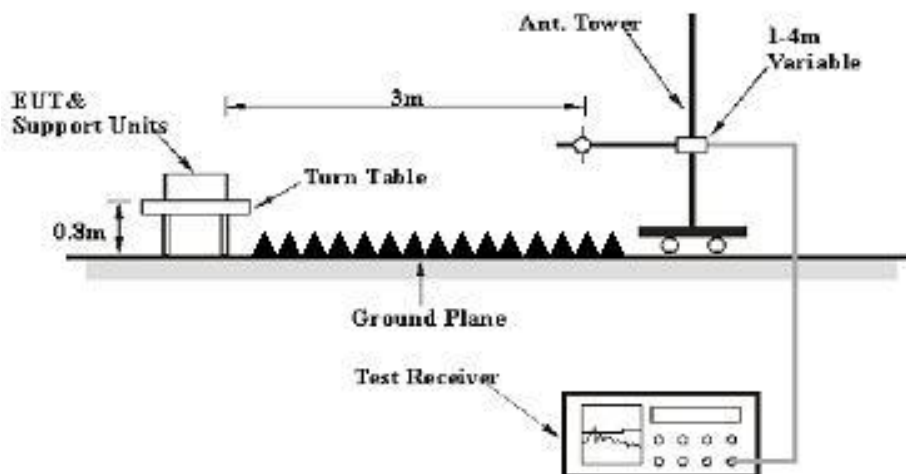
3.2 Radiation Spurious Emissions

3.2.1 EUT Setup

Below 1GHz:



Above 1GHz:



The radiated 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 13 GHz.

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

Frequency Range	RBW	Video B/W	IF B/W	Detector	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	/	Peak	PK
	/	/	120 kHz	Quasi Peak	QP
Above 1 GHz	1 MHz	3 MHz	/	Peak	Peak
	1 MHz	Reduced video bandwidth	/	Peak	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 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

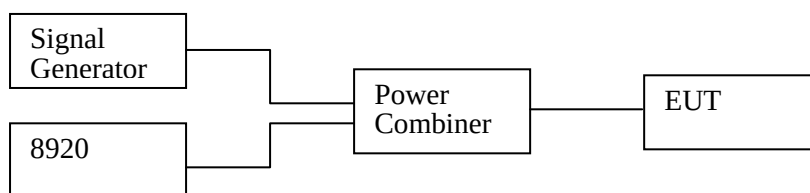
3.4.1 Applicable Standard

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 it's 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 it's 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 vehicle device.

4.2 Radiation Spurious Emissions

4.2.1 30 MHz – 1 GHz

Sample Number:	2YVR-1	Test Date:	2025/3/24
Test Site:	966-2	Test Mode:	M1, M2
Tester:	Roinin Fu	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	24.9	Relative Humidity: (%)	55	ATM Pressure: (kPa)	100.9
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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	2025/2/14	2026/2/13
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0100-03	2024/12/3	2025/12/2
TIMES MICROWAVE	Coaxial Cable	LMR-600-UltraFlex	C-0370-01	2024/12/3	2025/12/2
XQY	Coaxial Cable	XQY-CMR400UF-NJ-NJ-7M	24056379	2024/6/11	2025/6/10
Sonoma	Amplifier	310N	186165	2024/12/3	2025/12/2
Audix	Test Software	E3	191218 (V9)	N/A	N/A

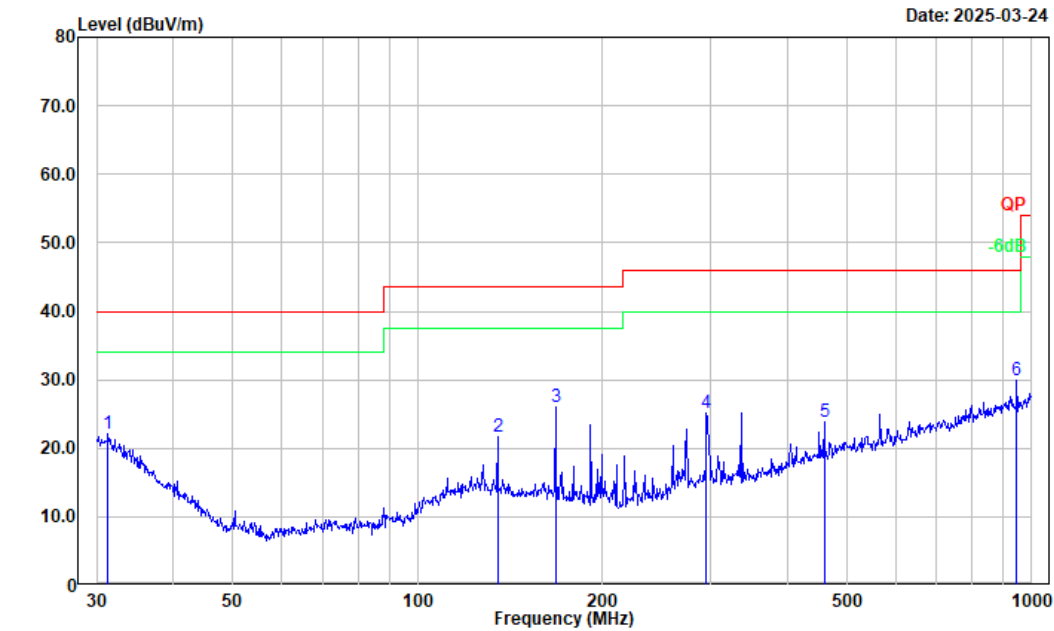
* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Data:

After pre-scan in the X, Y and Z axes of orientation, the worst case is refer to plots.

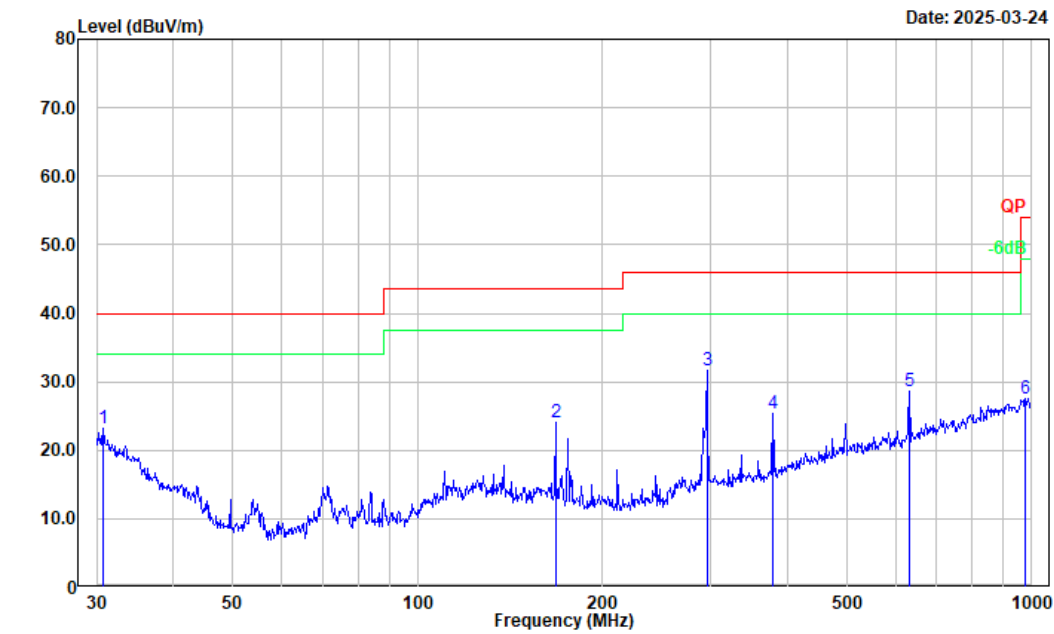
M1:

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Scanning (136-174)



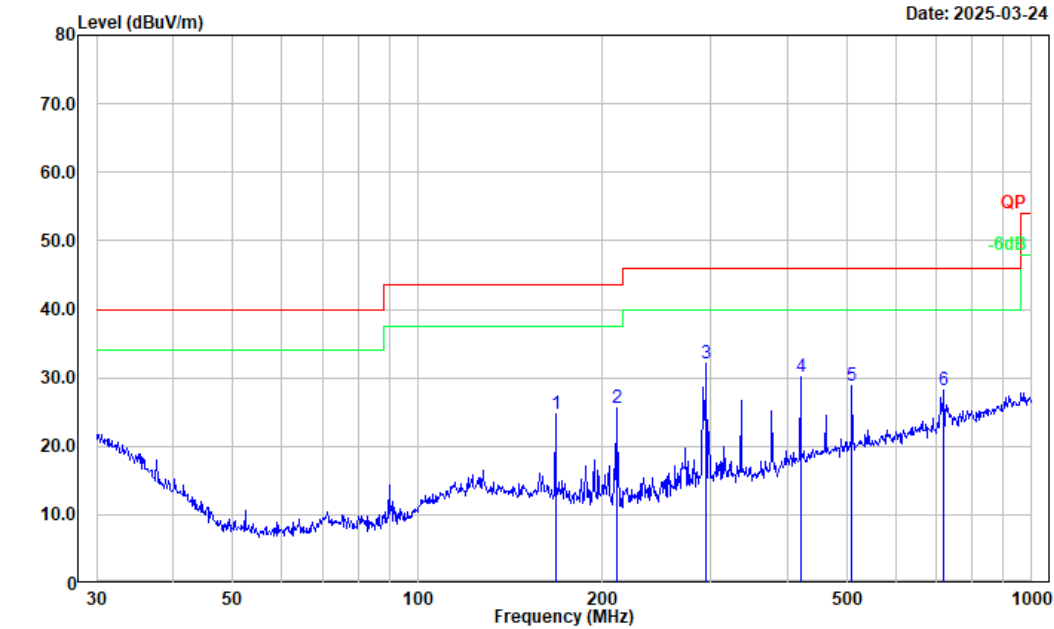
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	31.289	26.87	-4.68	22.19	40.00	17.81	Peak
2	135.032	33.25	-11.58	21.67	43.50	21.83	Peak
3	167.824	38.36	-12.41	25.95	43.50	17.55	Peak
4	295.147	35.75	-10.59	25.16	46.00	20.84	Peak
5	459.114	30.61	-6.82	23.79	46.00	22.21	Peak
6	945.440	29.48	0.36	29.84	46.00	16.16	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Scanning (136-174)



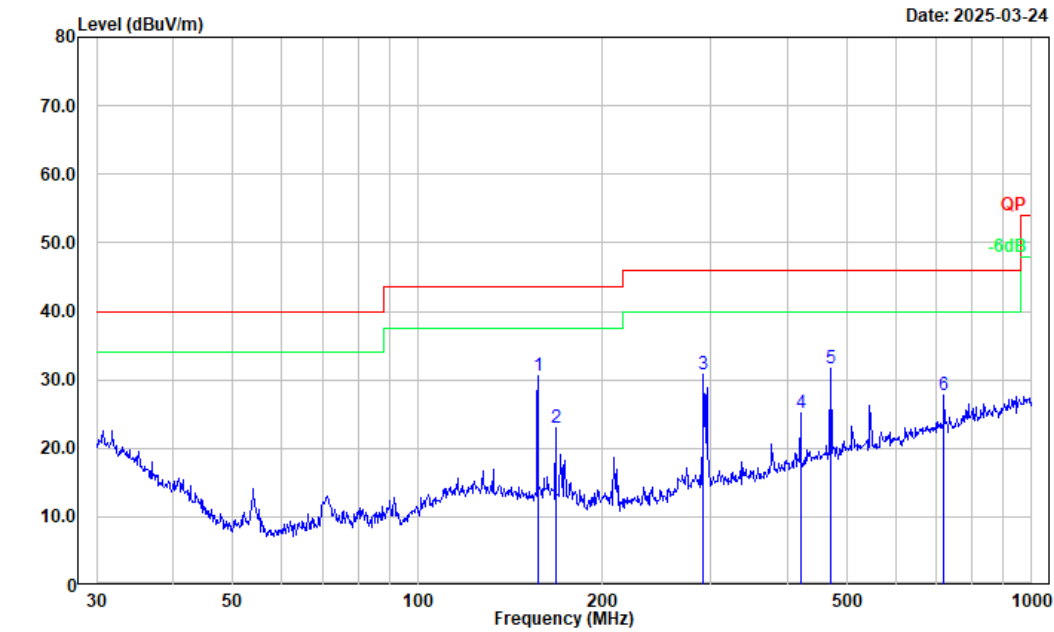
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.745	27.37	-4.27	23.10	40.00	16.90	Peak
2	167.824	36.57	-12.41	24.16	43.50	19.34	Peak
3	296.184	42.12	-10.56	31.56	46.00	14.44	Peak
4	378.584	34.28	-8.89	25.39	46.00	20.61	Peak
5	631.688	32.77	-4.12	28.65	46.00	17.35	Peak
6	975.753	26.39	1.10	27.49	54.00	26.51	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Scanning (400-470)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	167.824	37.14	-12.41	24.73	43.50	18.77	Peak
2	210.786	39.50	-14.00	25.50	43.50	18.00	Peak
3	295.147	42.71	-10.59	32.12	46.00	13.88	Peak
4	420.580	37.80	-7.74	30.06	46.00	15.94	Peak
5	510.044	34.64	-5.81	28.83	46.00	17.17	Peak
6	719.200	31.10	-2.87	28.23	46.00	17.77	Peak

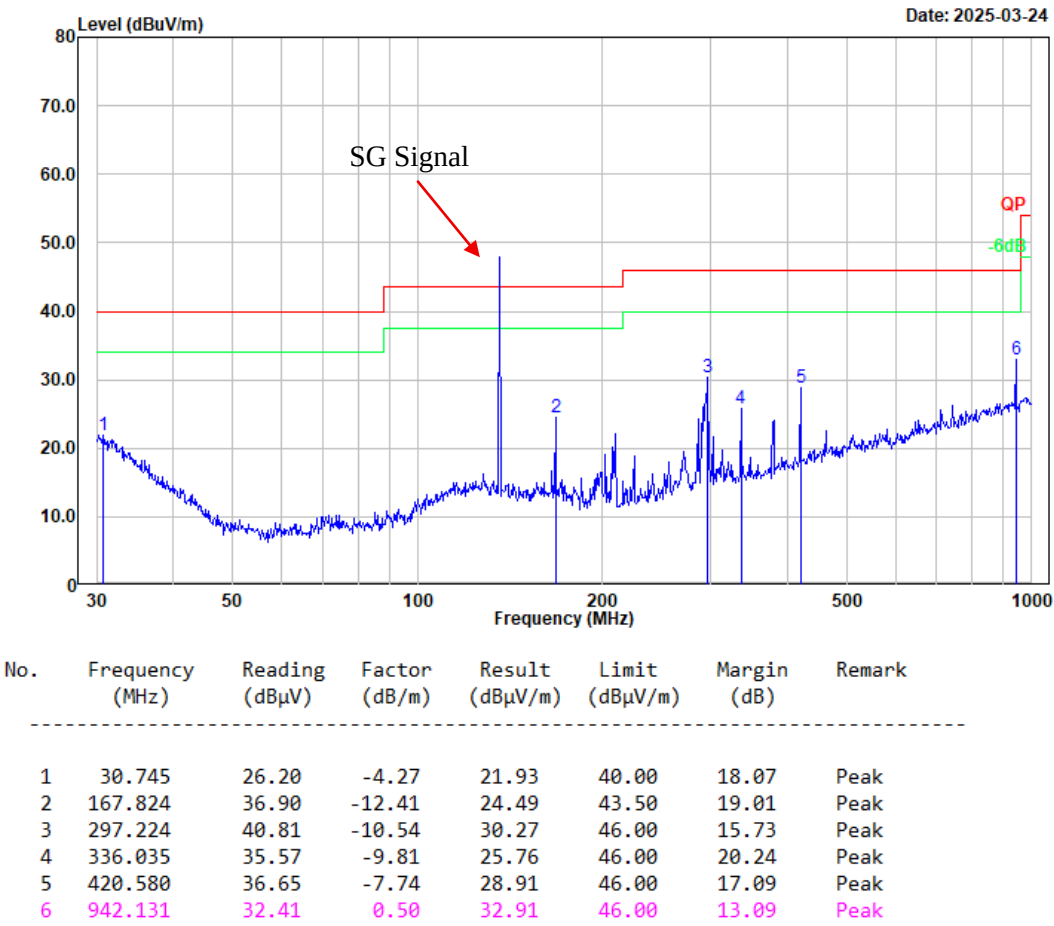
Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Scanning (400-470)



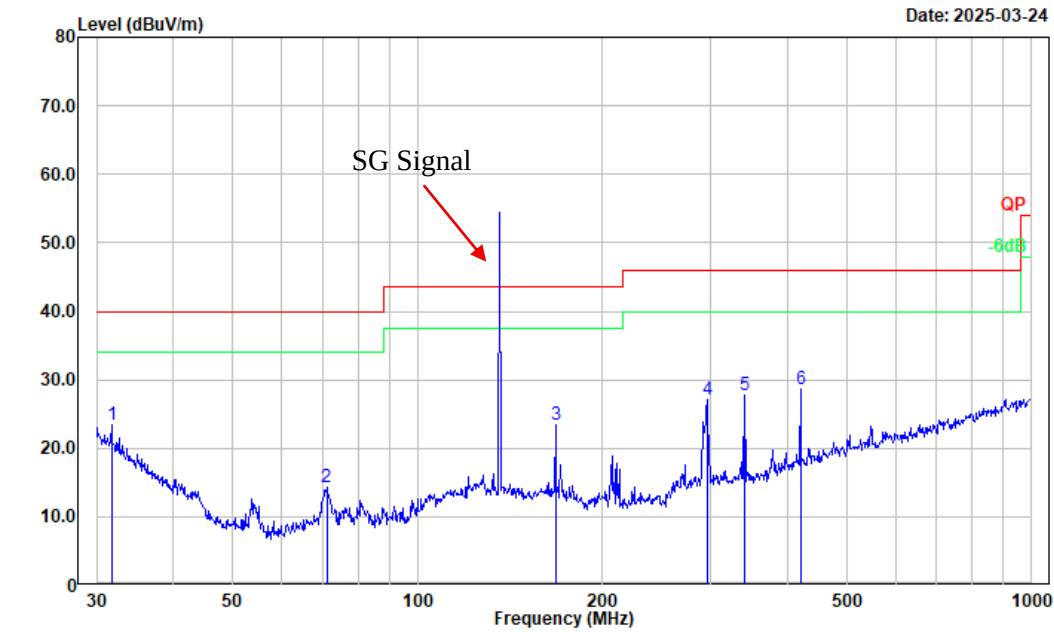
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	157.007	42.44	-11.89	30.55	43.50	12.95	Peak
2	167.824	35.45	-12.41	23.04	43.50	20.46	Peak
3	292.058	41.28	-10.42	30.86	46.00	15.14	Peak
4	420.580	32.98	-7.74	25.24	46.00	20.76	Peak
5	470.523	37.98	-6.36	31.62	46.00	14.38	Peak
6	719.200	30.63	-2.87	27.76	46.00	18.24	Peak

M2:

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Receiving (136.0125)

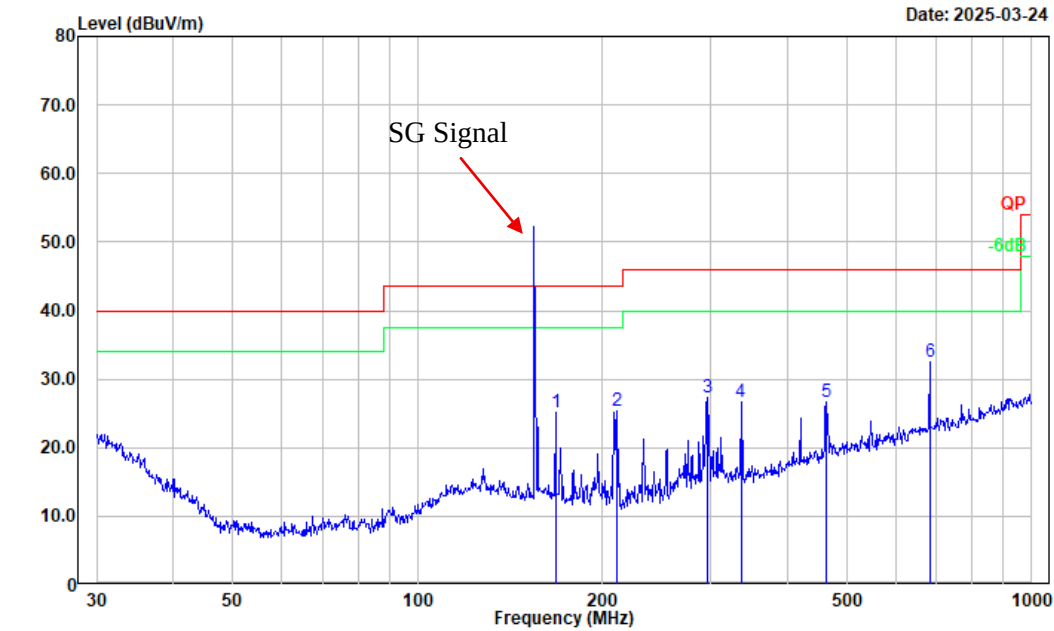


Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Receiving (136.0125)



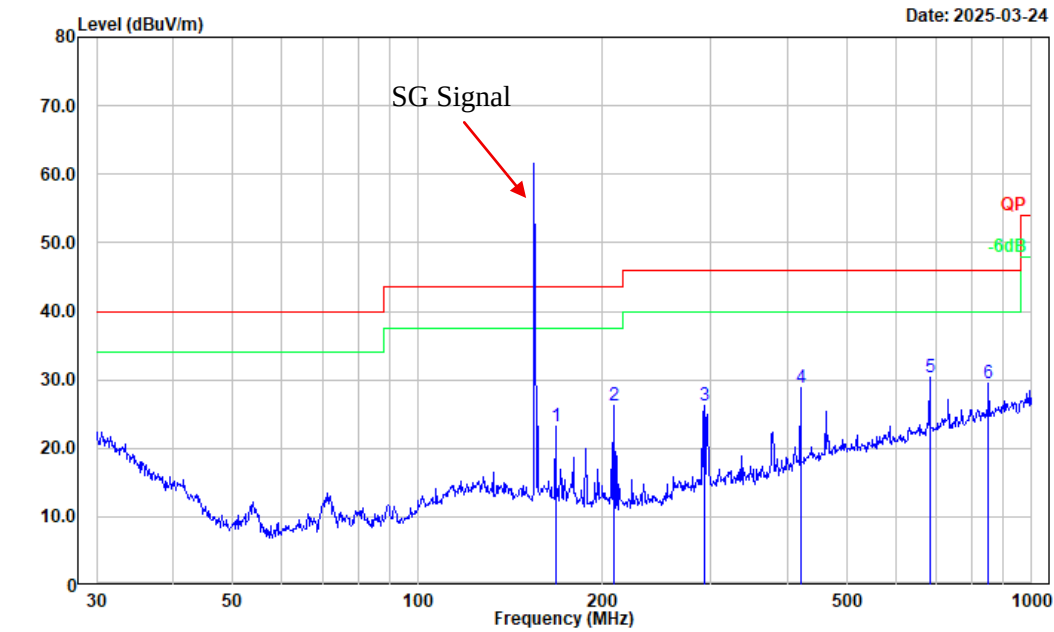
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	31.731	28.43	-5.04	23.39	40.00	16.61	Peak
2	71.080	31.57	-17.22	14.35	40.00	25.65	Peak
3	167.824	35.72	-12.41	23.31	43.50	20.19	Peak
4	296.184	37.66	-10.56	27.10	46.00	18.90	Peak
5	340.782	37.51	-9.79	27.72	46.00	18.28	Peak
6	420.580	36.41	-7.74	28.67	46.00	17.33	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Receiving (155)



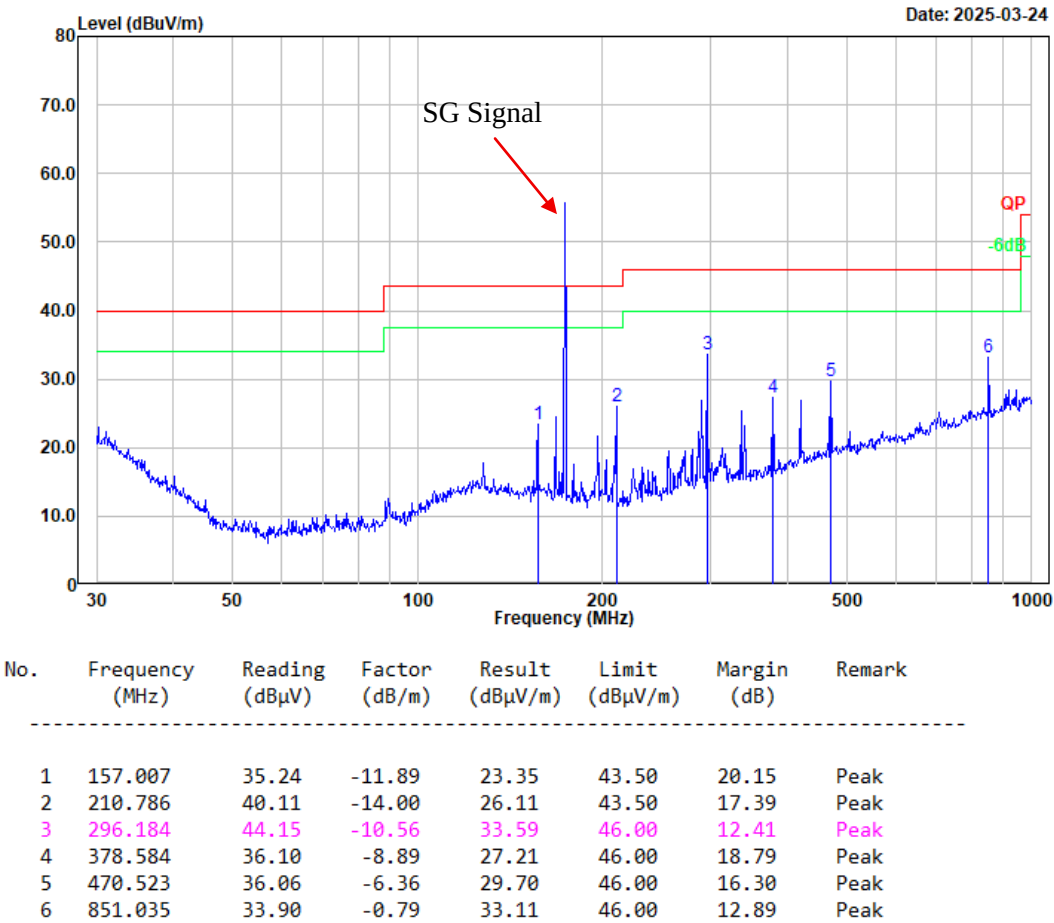
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	167.824	37.66	-12.41	25.25	43.50	18.25	Peak
2	211.527	39.27	-13.99	25.28	43.50	18.22	Peak
3	296.184	37.95	-10.56	27.39	46.00	18.61	Peak
4	336.035	36.40	-9.81	26.59	46.00	19.41	Peak
5	462.346	33.25	-6.65	26.60	46.00	19.40	Peak
6	682.348	35.90	-3.40	32.50	46.00	13.50	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Receiving (155)

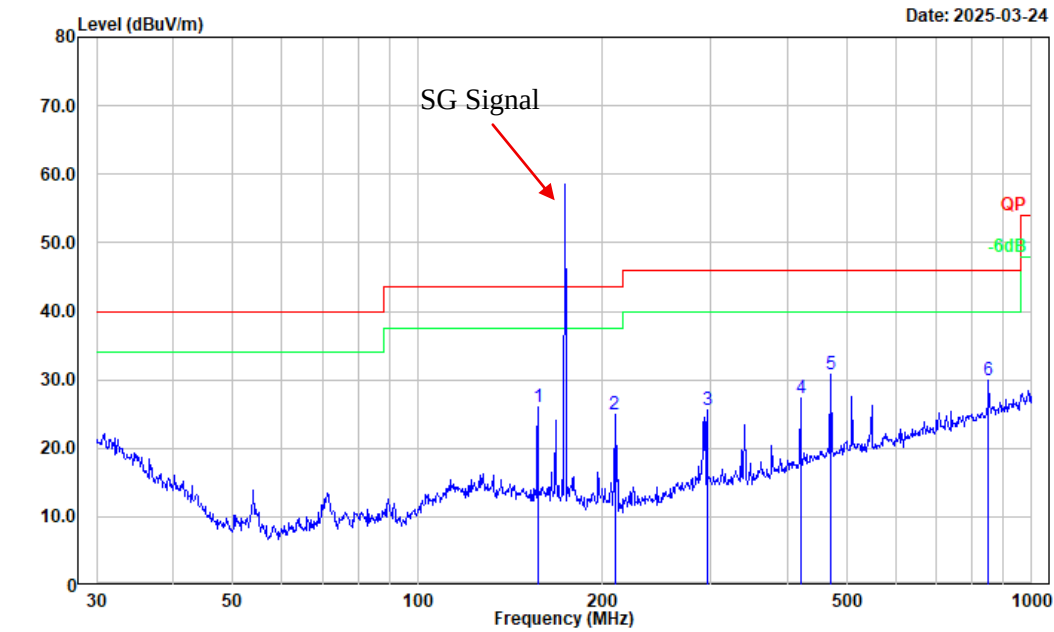


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	167.824	35.53	-12.41	23.12	43.50	20.38	Peak
2	208.580	40.07	-13.84	26.23	43.50	17.27	Peak
3	293.084	36.80	-10.48	26.32	46.00	19.68	Peak
4	420.580	36.47	-7.74	28.73	46.00	17.27	Peak
5	682.348	33.69	-3.40	30.29	46.00	15.71	Peak
6	851.035	30.23	-0.79	29.44	46.00	16.56	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Receiving (173.9875)

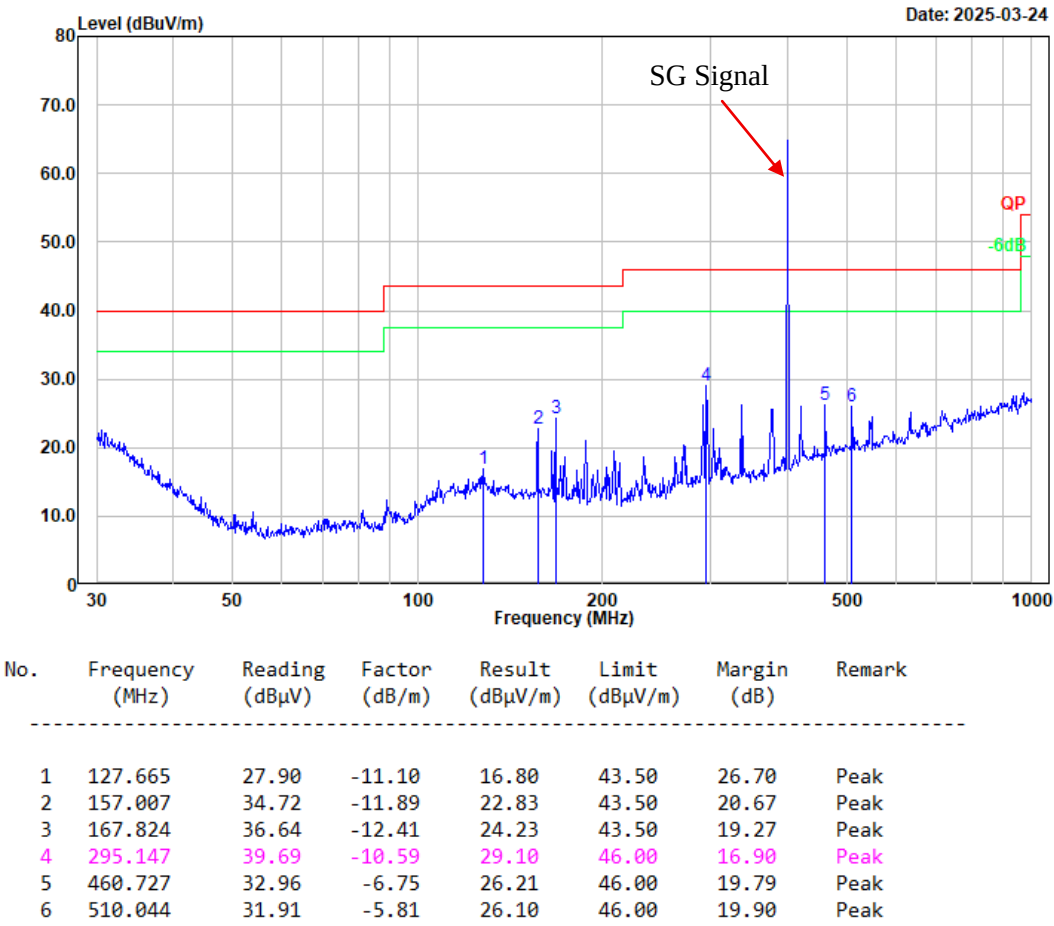


Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Receiving (173.9875)

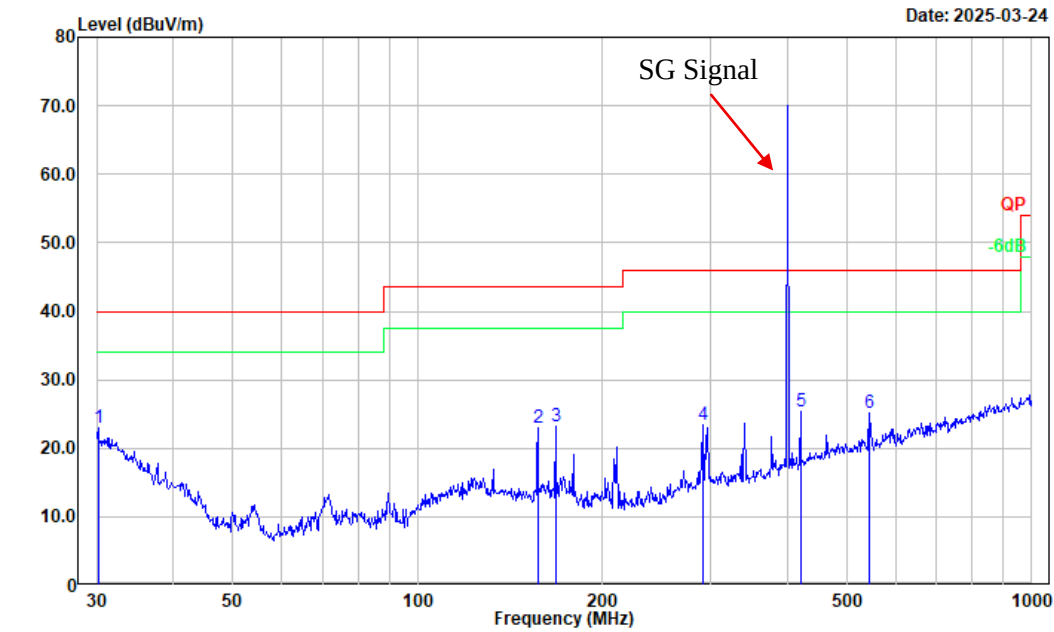


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	157.007	37.95	-11.89	26.06	43.50	17.44	Peak
2	209.313	38.91	-13.93	24.98	43.50	18.52	Peak
3	296.184	36.17	-10.56	25.61	46.00	20.39	Peak
4	420.580	34.99	-7.74	27.25	46.00	18.75	Peak
5	470.523	37.05	-6.36	30.69	46.00	15.31	Peak
6	851.035	30.63	-0.79	29.84	46.00	16.16	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Receiving (400.0125)

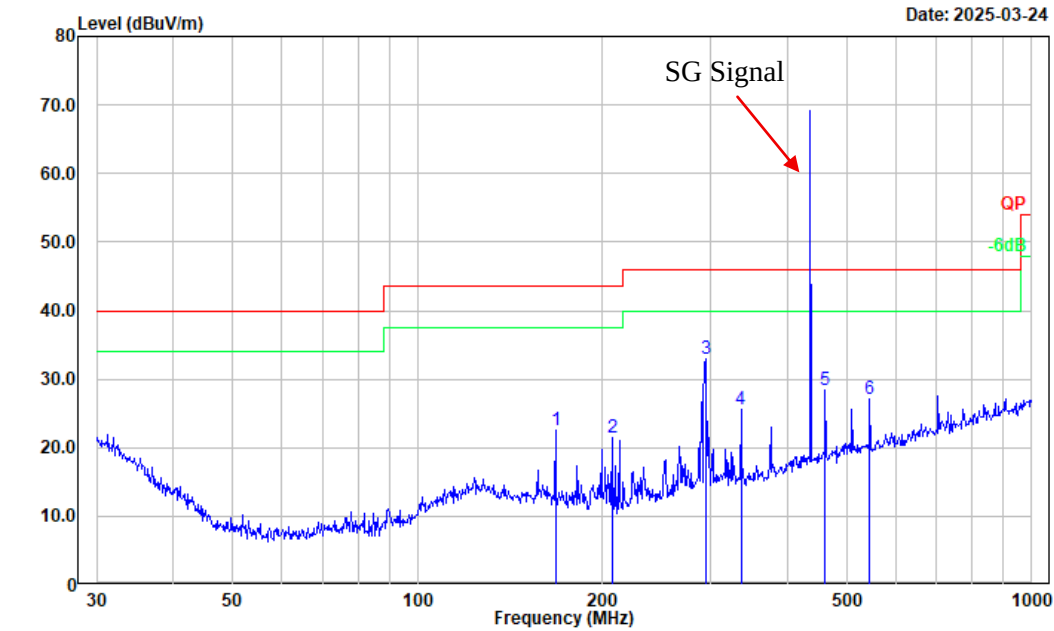


Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Receiving (400.0125)



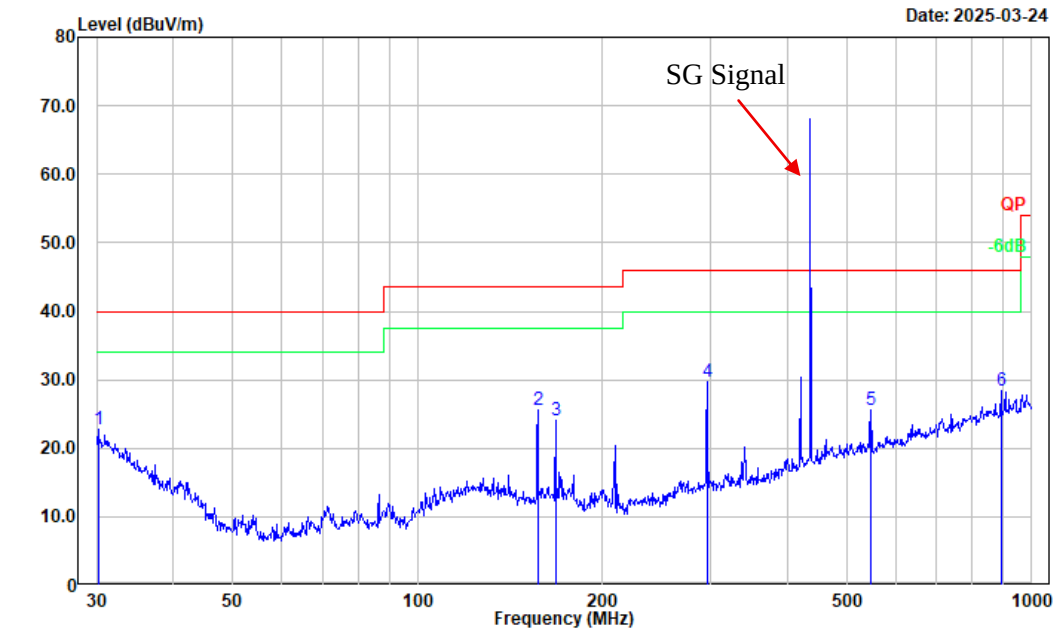
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	30.211	27.00	-3.93	23.07	40.00	16.93	Peak
2	157.007	34.86	-11.89	22.97	43.50	20.53	Peak
3	167.824	35.57	-12.41	23.16	43.50	20.34	Peak
4	291.036	33.78	-10.36	23.42	46.00	22.58	Peak
5	420.580	33.12	-7.74	25.38	46.00	20.62	Peak
6	545.183	30.68	-5.44	25.24	46.00	20.76	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Receiving (435)



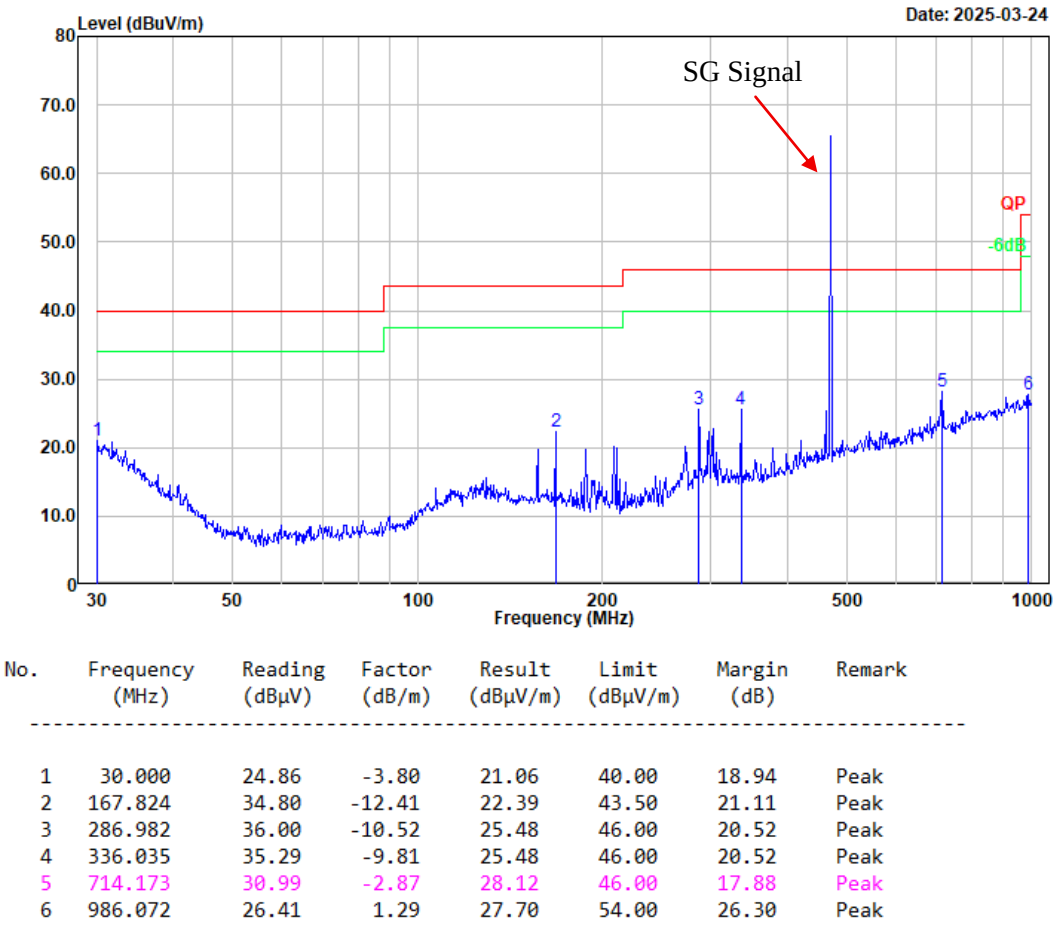
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	167.824	34.95	-12.41	22.54	43.50	20.96	Peak
2	207.123	35.12	-13.65	21.47	43.50	22.03	Peak
3	294.114	43.52	-10.54	32.98	46.00	13.02	Peak
4	336.035	35.32	-9.81	25.51	46.00	20.49	Peak
5	460.727	35.14	-6.75	28.39	46.00	17.61	Peak
6	545.183	32.53	-5.44	27.09	46.00	18.91	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: Vertical
Note: Receiving (435)

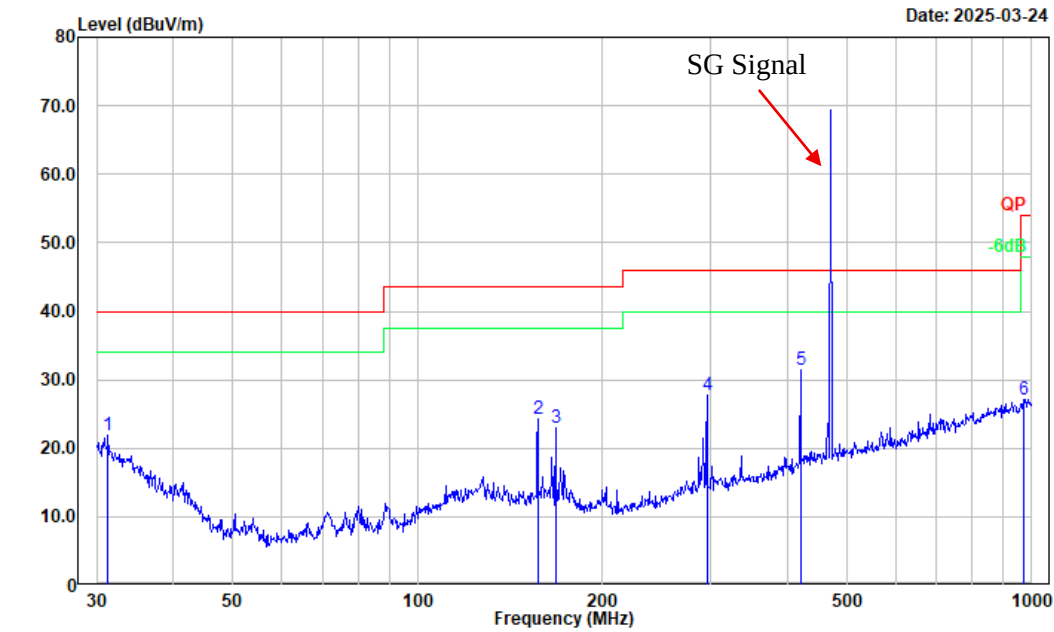


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	30.211	26.60	-3.93	22.67	40.00	17.33	Peak
2	157.007	37.54	-11.89	25.65	43.50	17.85	Peak
3	167.824	36.37	-12.41	23.96	43.50	19.54	Peak
4	296.184	40.31	-10.56	29.75	46.00	16.25	Peak
5	547.098	31.00	-5.48	25.52	46.00	20.48	Peak
6	890.728	28.71	-0.40	28.31	46.00	17.69	Peak

Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: horizontal
Note: Receiving (469.9875)



Project No.: 2503Q10191E-RF
Tester: Roinin Fu
Condition: RBW:100 kHz VBW:300 kHz SWT:0.1 sec
Polarization: vertical
Note: Receiving (469.9875)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	31.289	26.54	-4.68	21.86	40.00	18.14	Peak
2	157.007	36.12	-11.89	24.23	43.50	19.27	Peak
3	167.824	35.47	-12.41	23.06	43.50	20.44	Peak
4	296.184	38.41	-10.56	27.85	46.00	18.15	Peak
5	420.580	39.20	-7.74	31.46	46.00	14.54	Peak
6	968.934	26.07	1.06	27.13	54.00	26.87	Peak

4.2.2 Above 1 GHz:

Sample Number	2YVR-1	Test Date:	2025/3/25
Test Site:	966-1	Test Mode:	M1, M2
Tester:	Mack Huang	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	25.3	Relative Humidity: (%)	45	ATM Pressure: (kPa)	100.1

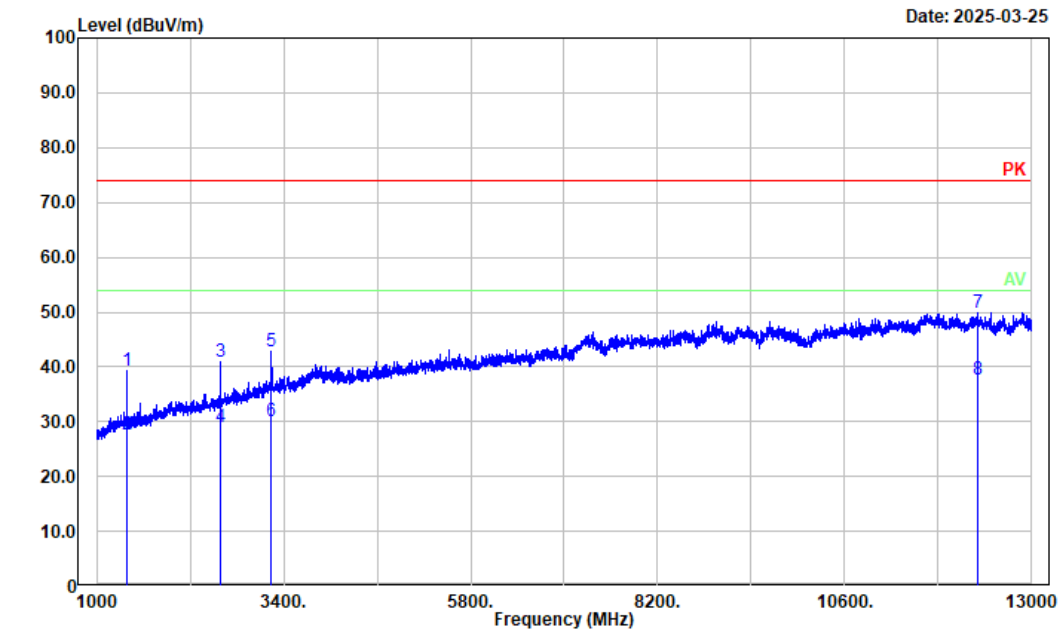
Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
ETS-Lindgren	Horn Antenna	3115	9912-5985	2023/12/6	2026/12/5
R&S	Spectrum Analyzer	FSV40	101591	2024/4/1	2025/3/31
MICRO-COAX	Coaxial Cable	UFA210A-1-1200-70U300	217423-008	2025/1/10	2026/1/9
MICRO-COAX	Coaxial Cable	UFA210A-1-2362-300300	235780-001	2025/1/10	2026/1/9
A.H	Preamplifier	PAM-0118P	628	2025/2/21	2026/2/20
Audix	Test Software	E3	191218 (V9)	N/A	N/A

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

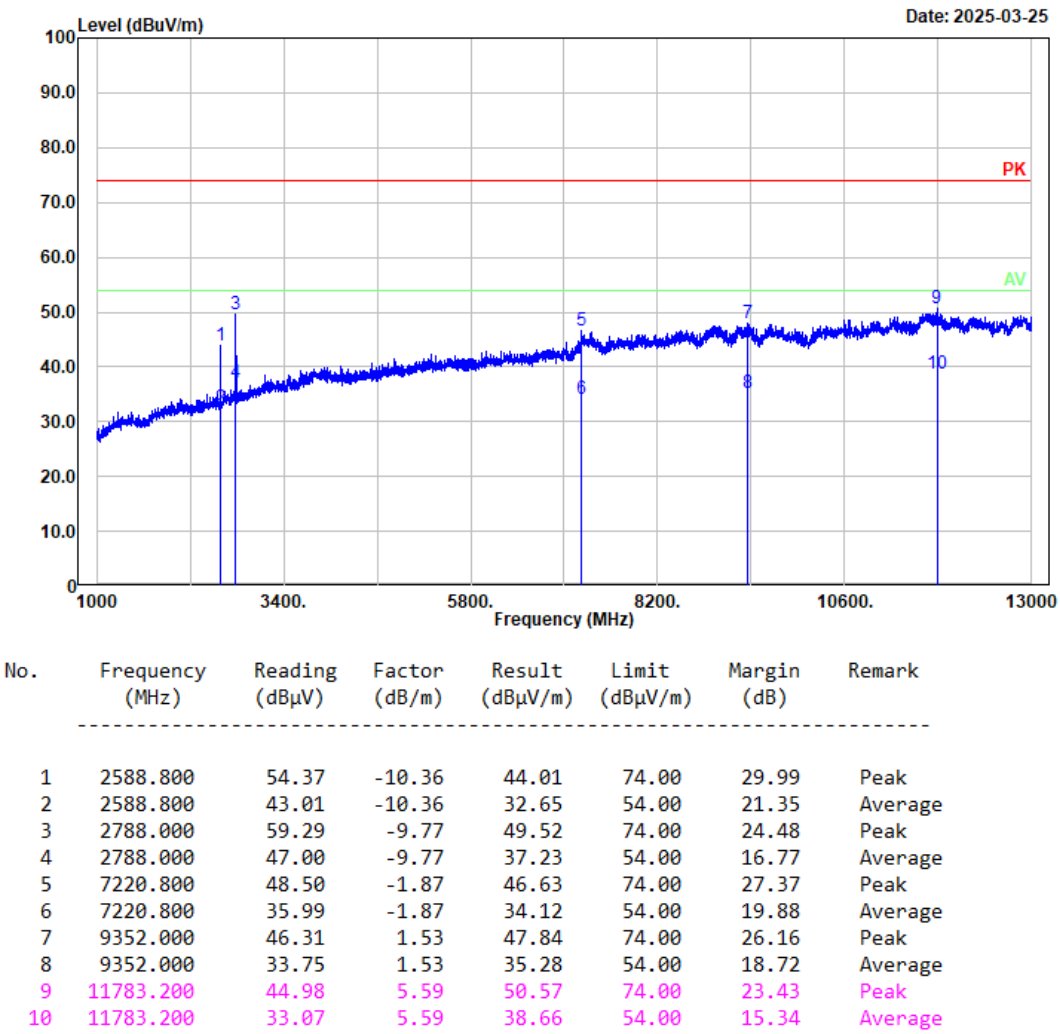
M1:

Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: Scanning (136-174)

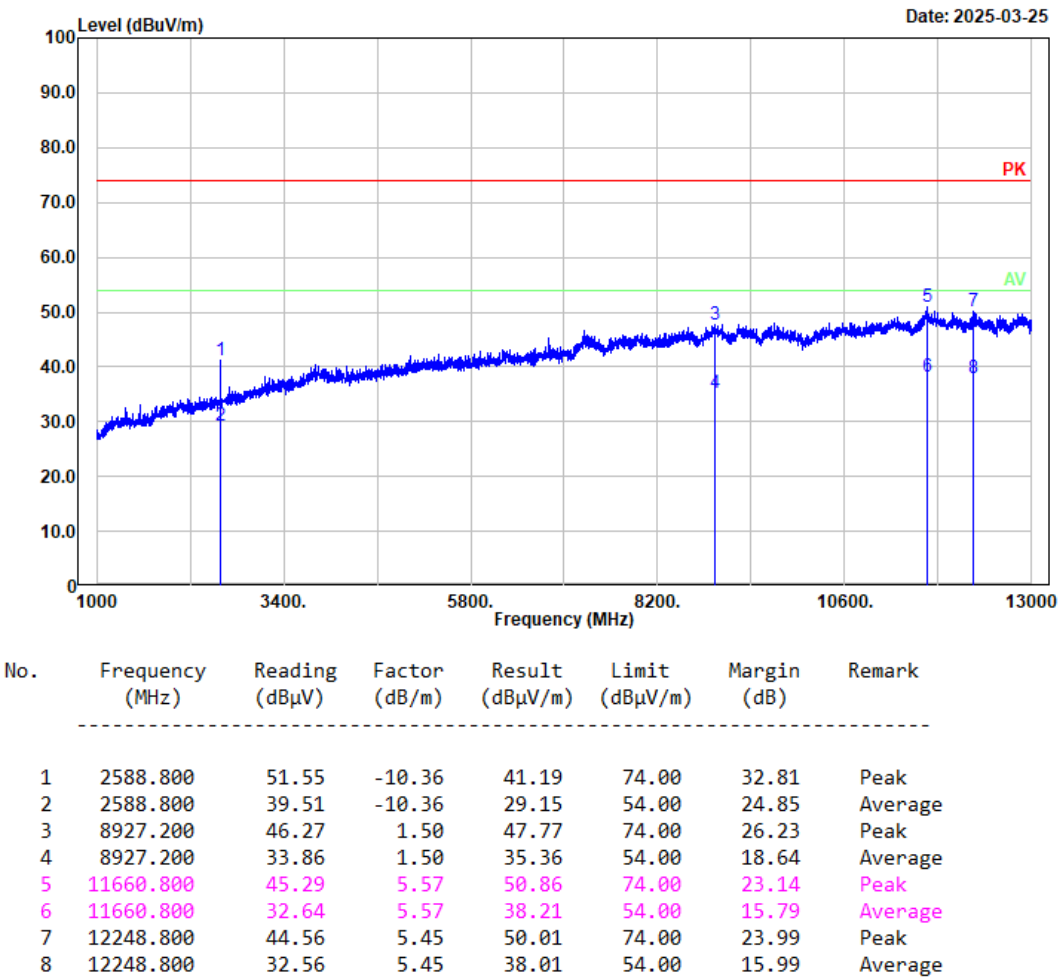


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	1388.800	52.81	-13.57	39.24	74.00	34.76	Peak
2	1388.800	41.11	-13.57	27.54	54.00	26.46	Average
3	2588.800	51.24	-10.36	40.88	74.00	33.12	Peak
4	2588.800	39.33	-10.36	28.97	54.00	25.03	Average
5	3246.400	49.88	-7.16	42.72	74.00	31.28	Peak
6	3246.400	37.30	-7.16	30.14	54.00	23.86	Average
7	12306.400	44.41	5.55	49.96	74.00	24.04	Peak
8	12306.400	32.14	5.55	37.69	54.00	16.31	Average

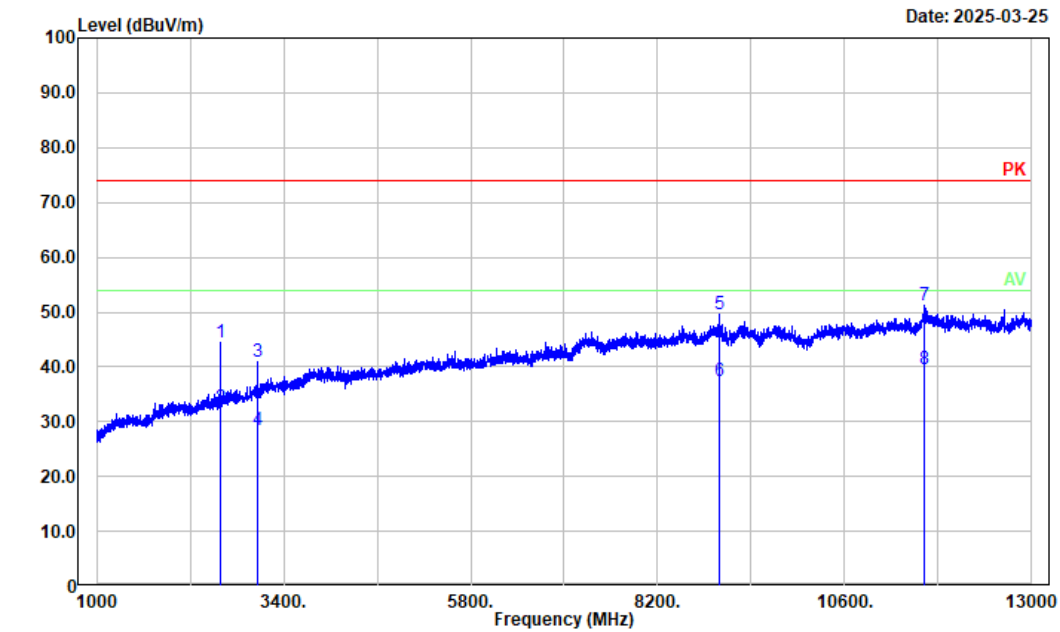
Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: Scanning (136-174)



Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: Scanning (400-470)



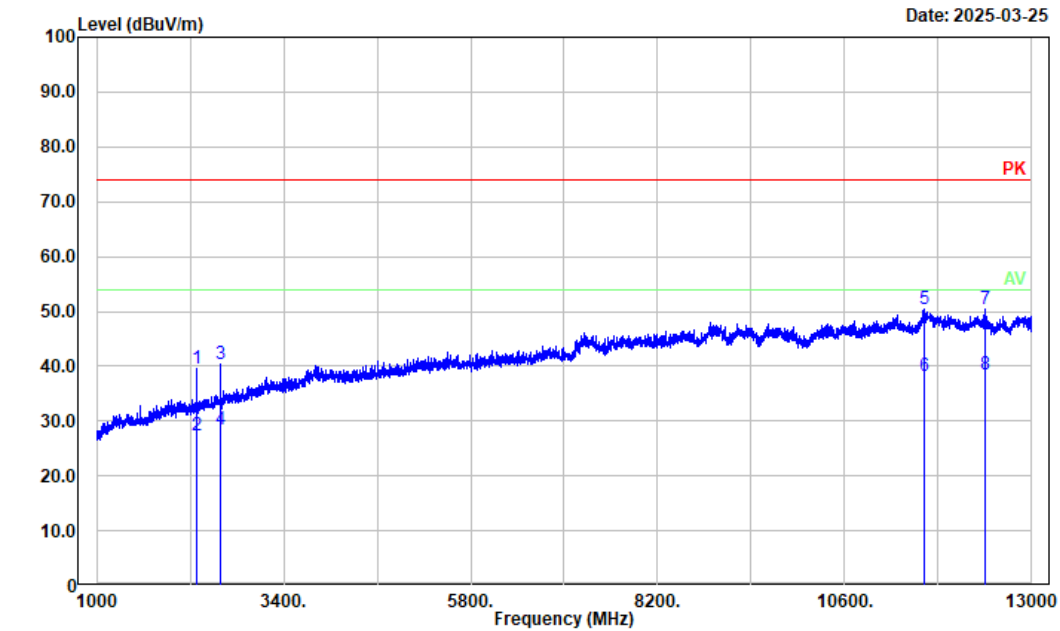
Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: Scanning (400-470)



No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	2588.800	54.85	-10.36	44.49	74.00	29.51	Peak
2	2588.800	42.81	-10.36	32.45	54.00	21.55	Average
3	3066.400	48.79	-7.99	40.80	74.00	33.20	Peak
4	3066.400	36.33	-7.99	28.34	54.00	25.66	Average
5	8992.000	47.91	1.70	49.61	74.00	24.39	Peak
6	8992.000	35.71	1.70	37.41	54.00	16.59	Average
7	11620.000	45.86	5.49	51.35	74.00	22.65	Peak
8	11620.000	34.18	5.49	39.67	54.00	14.33	Average

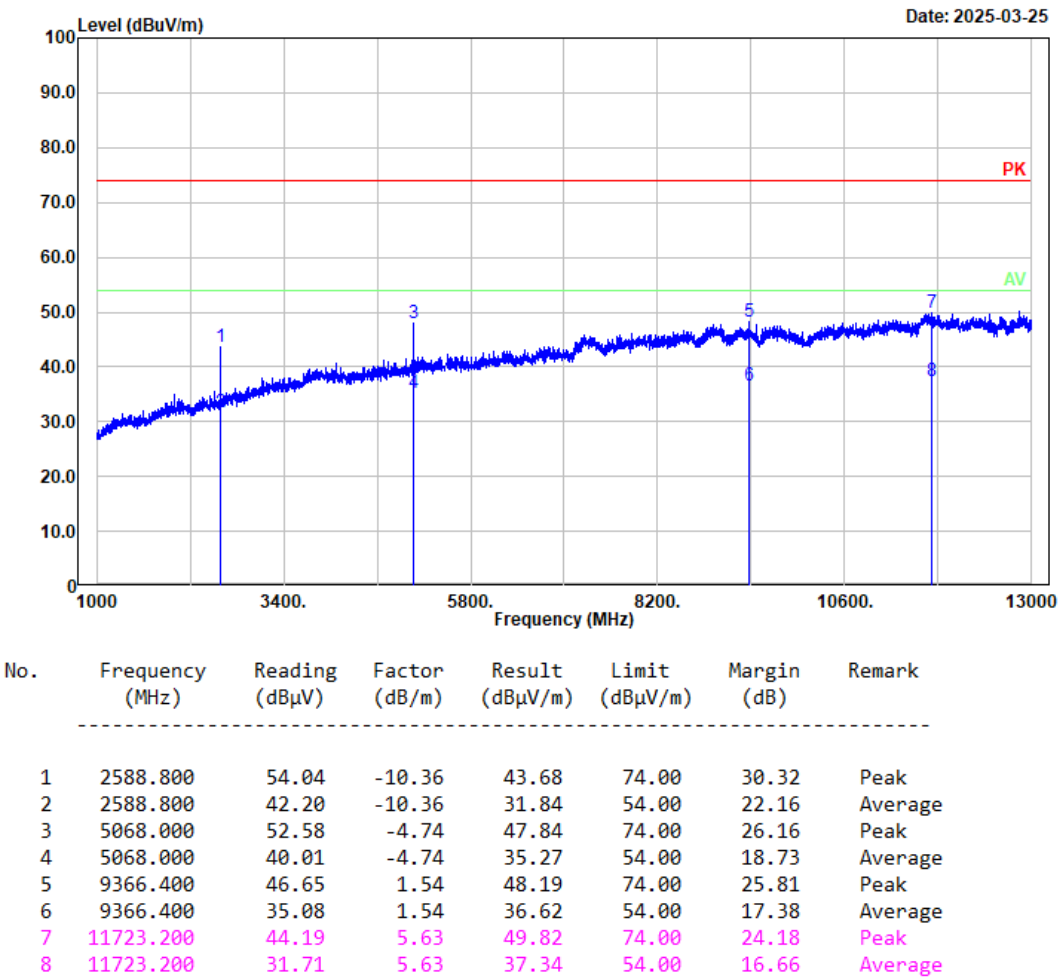
M2:

Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: Receiving (136.0125)

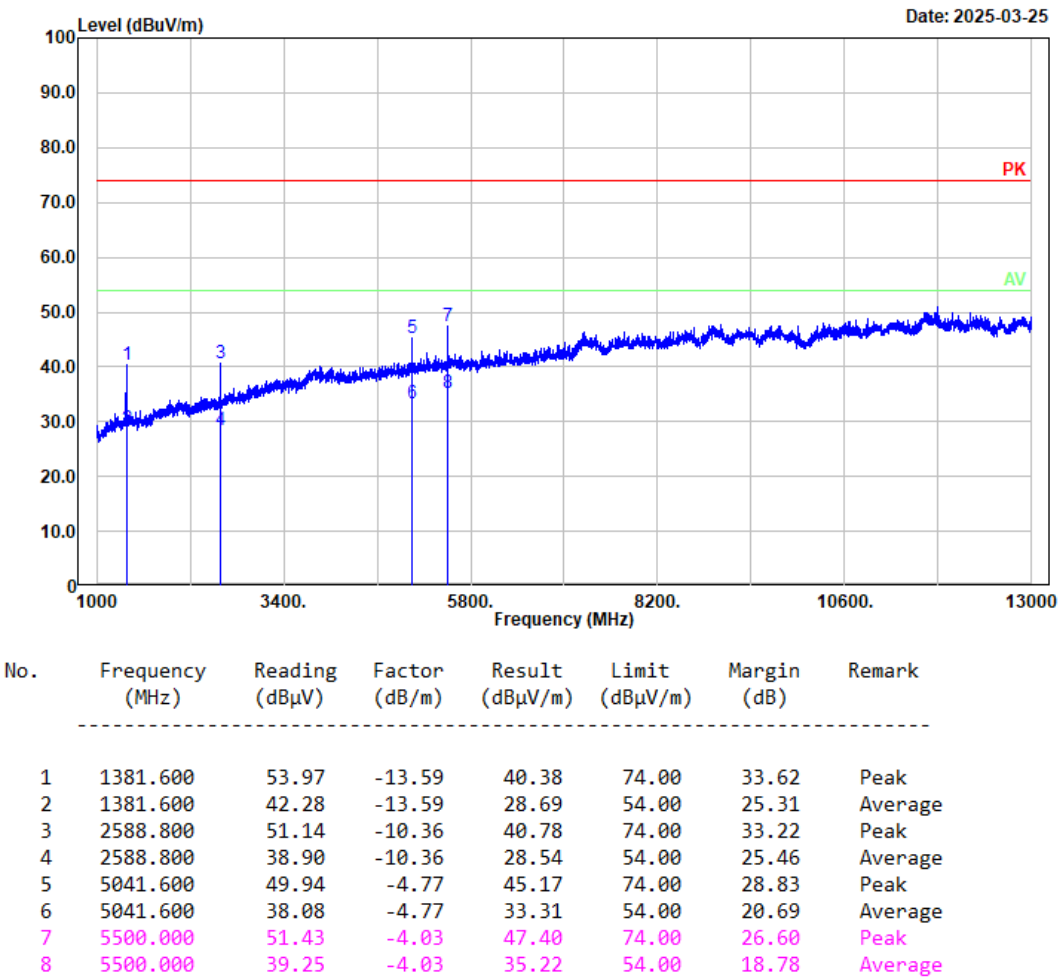


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	2291.200	50.45	-10.88	39.57	74.00	34.43	Peak
2	2291.200	38.33	-10.88	27.45	54.00	26.55	Average
3	2588.800	50.76	-10.36	40.40	74.00	33.60	Peak
4	2588.800	38.77	-10.36	28.41	54.00	25.59	Average
5	11629.600	44.77	5.51	50.28	74.00	23.72	Peak
6	11629.600	32.69	5.51	38.20	54.00	15.80	Average
7	12409.600	45.06	5.22	50.28	74.00	23.72	Peak
8	12409.600	33.17	5.22	38.39	54.00	15.61	Average

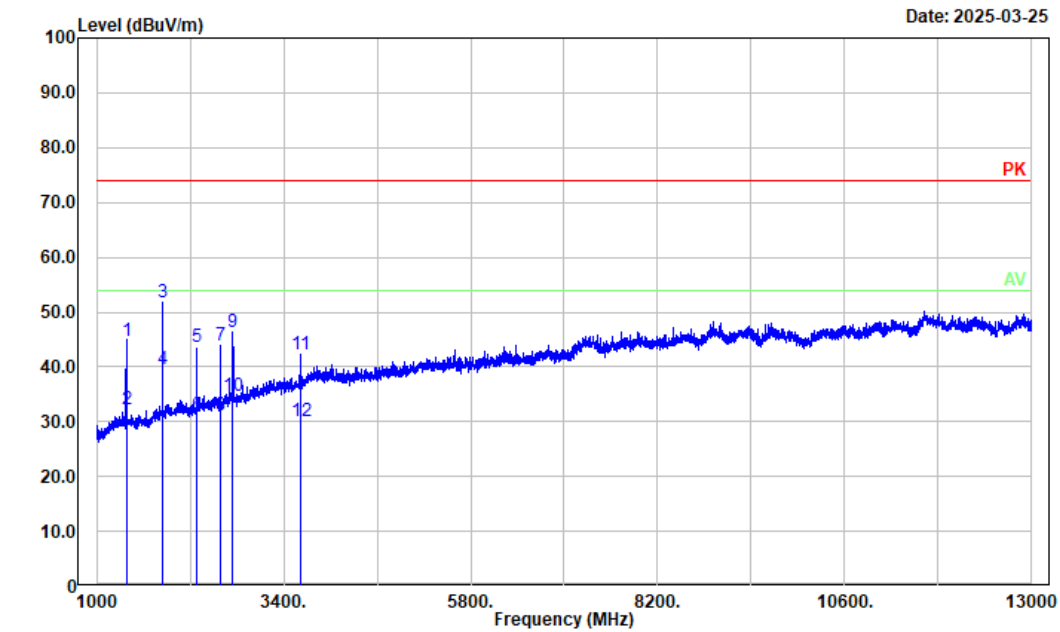
Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: Receiving (136.0125)



Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: Receiving (155)

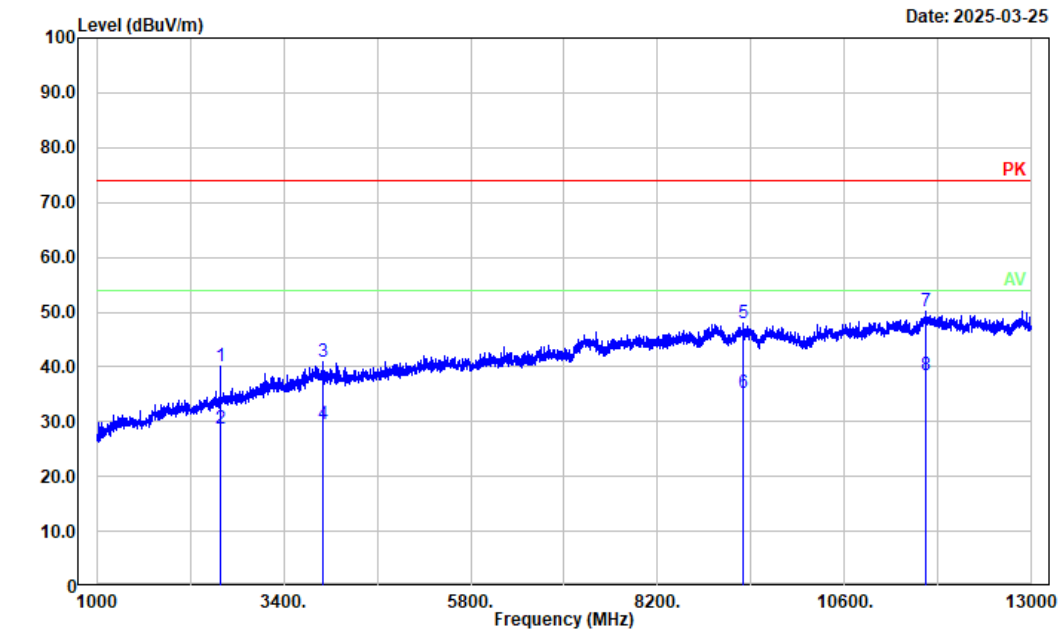


Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: Receiving (155)



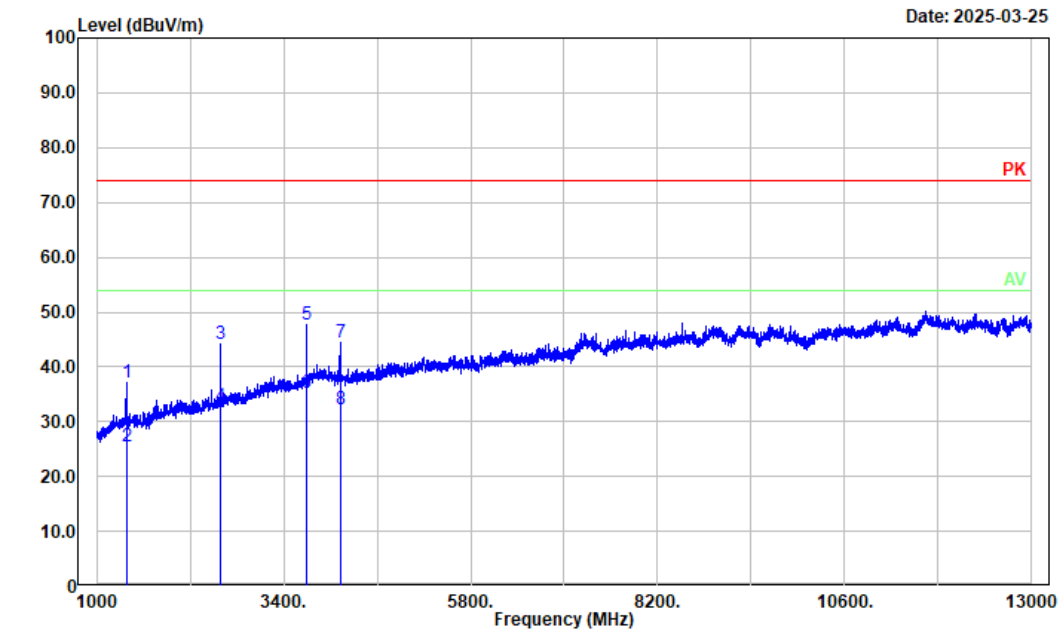
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	1381.600	58.44	-13.59	44.85	74.00	29.15	Peak
2	1381.600	45.71	-13.59	32.12	54.00	21.88	Average
3	1842.400	63.88	-12.04	51.84	74.00	22.16	Peak
4	1842.400	51.67	-12.04	39.63	54.00	14.37	Average
5	2291.200	54.38	-10.88	43.50	74.00	30.50	Peak
6	2291.200	42.05	-10.88	31.17	54.00	22.83	Average
7	2588.800	54.28	-10.36	43.92	74.00	30.08	Peak
8	2588.800	41.64	-10.36	31.28	54.00	22.72	Average
9	2749.600	56.17	-9.71	46.46	74.00	27.54	Peak
10	2749.600	44.36	-9.71	34.65	54.00	19.35	Average
11	3620.800	49.36	-7.14	42.22	74.00	31.78	Peak
12	3620.800	37.23	-7.14	30.09	54.00	23.91	Average

Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: Receiving (173.9875)



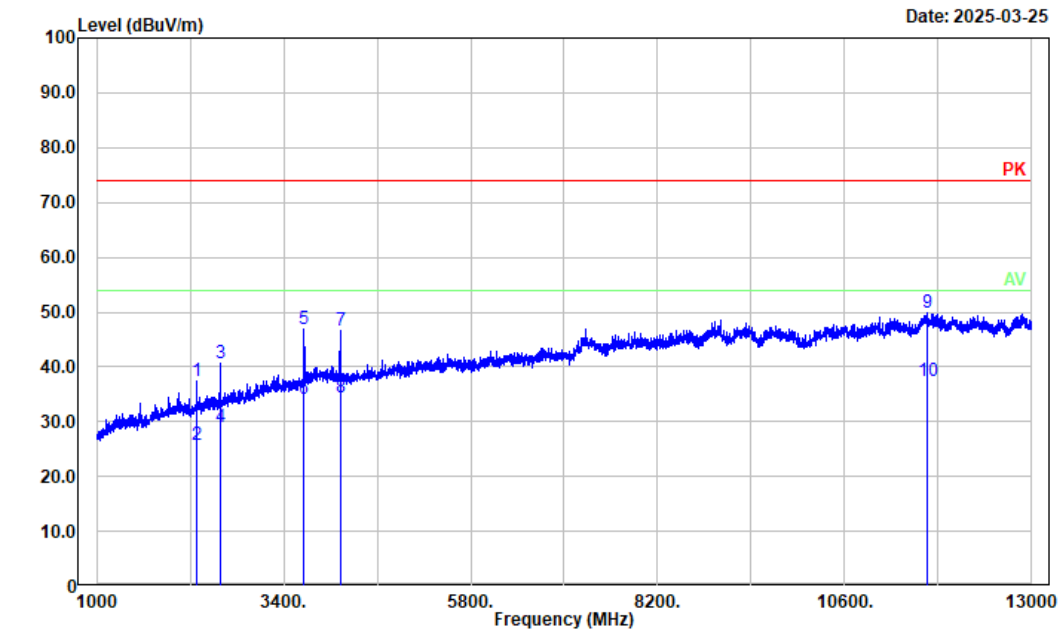
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	2588.800	50.48	-10.36	40.12	74.00	33.88	Peak
2	2588.800	38.98	-10.36	28.62	54.00	25.38	Average
3	3906.400	46.64	-5.61	41.03	74.00	32.97	Peak
4	3906.400	35.28	-5.61	29.67	54.00	24.33	Average
5	9289.600	46.40	1.56	47.96	74.00	26.04	Peak
6	9289.600	33.65	1.56	35.21	54.00	18.79	Average
7	11648.800	44.66	5.55	50.21	74.00	23.79	Peak
8	11648.800	33.01	5.55	38.56	54.00	15.44	Average

Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: Receiving (173.9875)



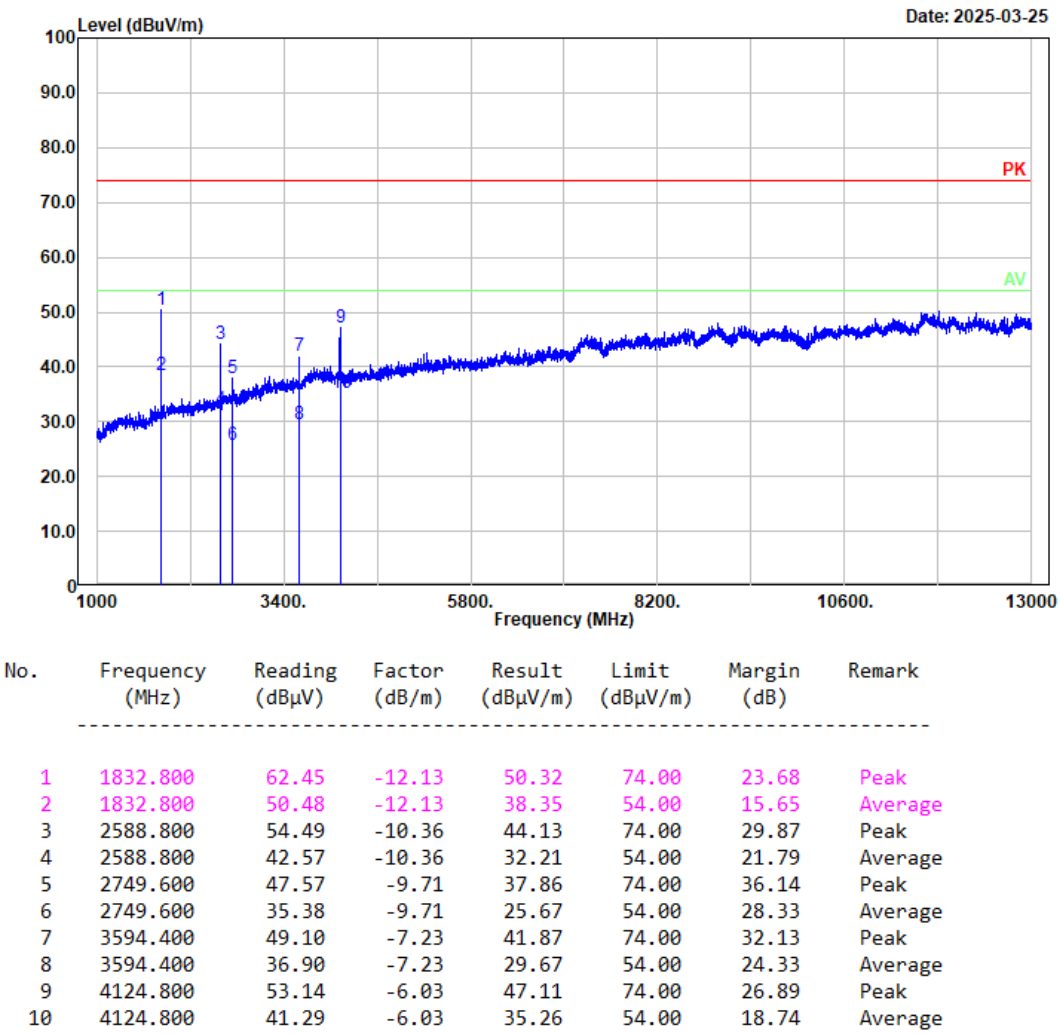
No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	1381.600	50.84	-13.59	37.25	74.00	36.75	Peak
2	1381.600	39.18	-13.59	25.59	54.00	28.41	Average
3	2588.800	54.57	-10.36	44.21	74.00	29.79	Peak
4	2588.800	43.05	-10.36	32.69	54.00	21.31	Average
5	3695.200	53.99	-6.41	47.58	74.00	26.42	Peak
6	3695.200	41.58	-6.41	35.17	54.00	18.83	Average
7	4124.800	50.60	-6.03	44.57	74.00	29.43	Peak
8	4124.800	38.39	-6.03	32.36	54.00	21.64	Average

Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: Receiving (400.0125)

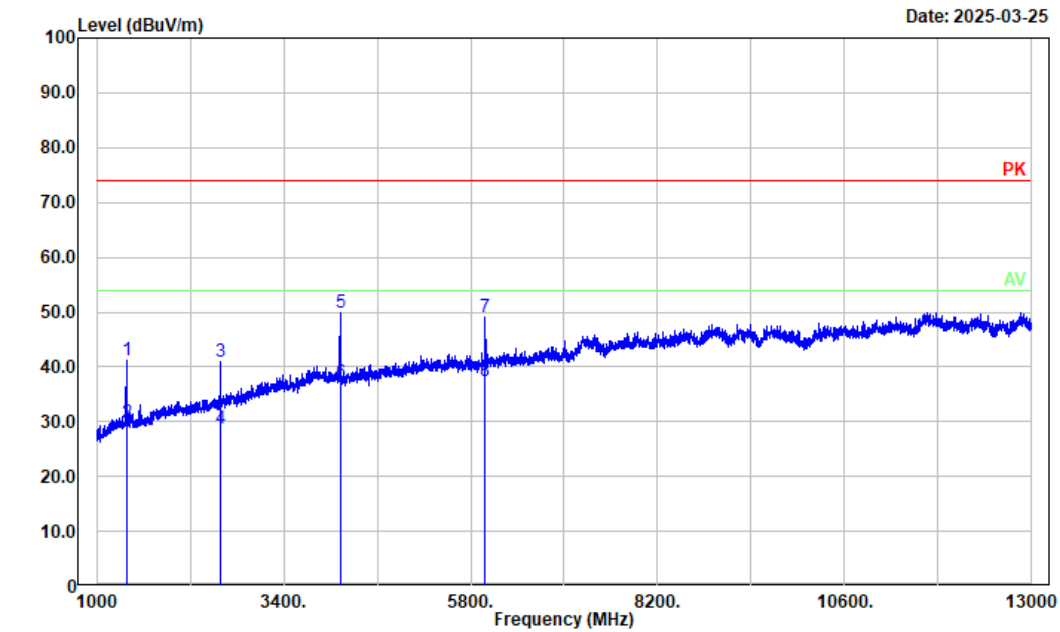


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	2291.200	48.32	-10.88	37.44	74.00	36.56	Peak
2	2291.200	36.51	-10.88	25.63	54.00	28.37	Average
3	2588.800	50.99	-10.36	40.63	74.00	33.37	Peak
4	2588.800	39.23	-10.36	28.87	54.00	25.13	Average
5	3656.800	53.69	-6.94	46.75	74.00	27.25	Peak
6	3656.800	41.05	-6.94	34.11	54.00	19.89	Average
7	4124.800	52.65	-6.03	46.62	74.00	27.38	Peak
8	4124.800	40.42	-6.03	34.39	54.00	19.61	Average
9	11656.000	44.31	5.57	49.88	74.00	24.12	Peak
10	11656.000	31.71	5.57	37.28	54.00	16.72	Average

Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: Receiving (400.0125)

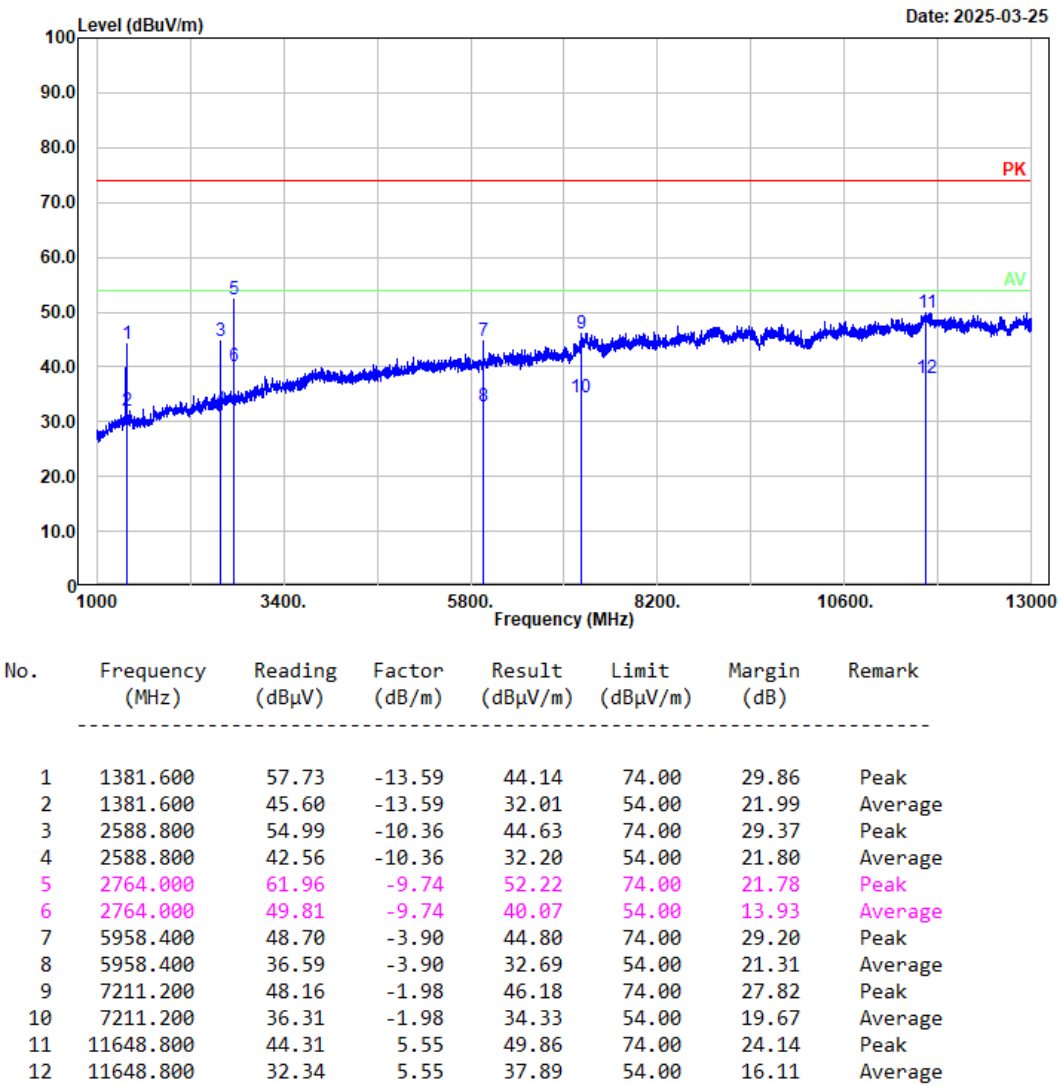


Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: Receiving (435)

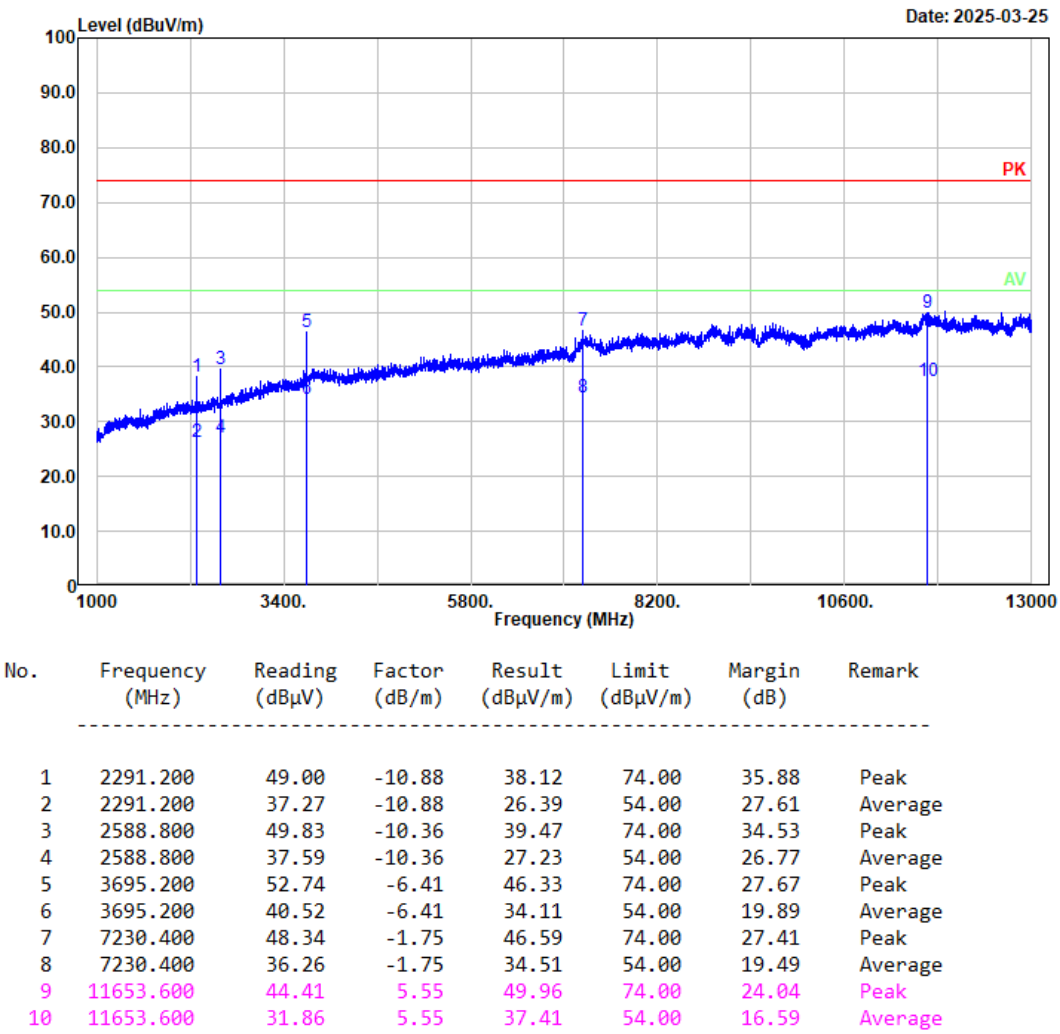


No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Remark
1	1381.600	54.72	-13.59	41.13	74.00	32.87	Peak
2	1381.600	43.27	-13.59	29.68	54.00	24.32	Average
3	2588.800	51.15	-10.36	40.79	74.00	33.21	Peak
4	2588.800	38.97	-10.36	28.61	54.00	25.39	Average
5	4124.800	55.84	-6.03	49.81	74.00	24.19	Peak
6	4124.800	43.17	-6.03	37.14	54.00	16.86	Average
7	5989.600	53.24	-4.10	49.14	74.00	24.86	Peak
8	5989.600	41.42	-4.10	37.32	54.00	16.68	Average

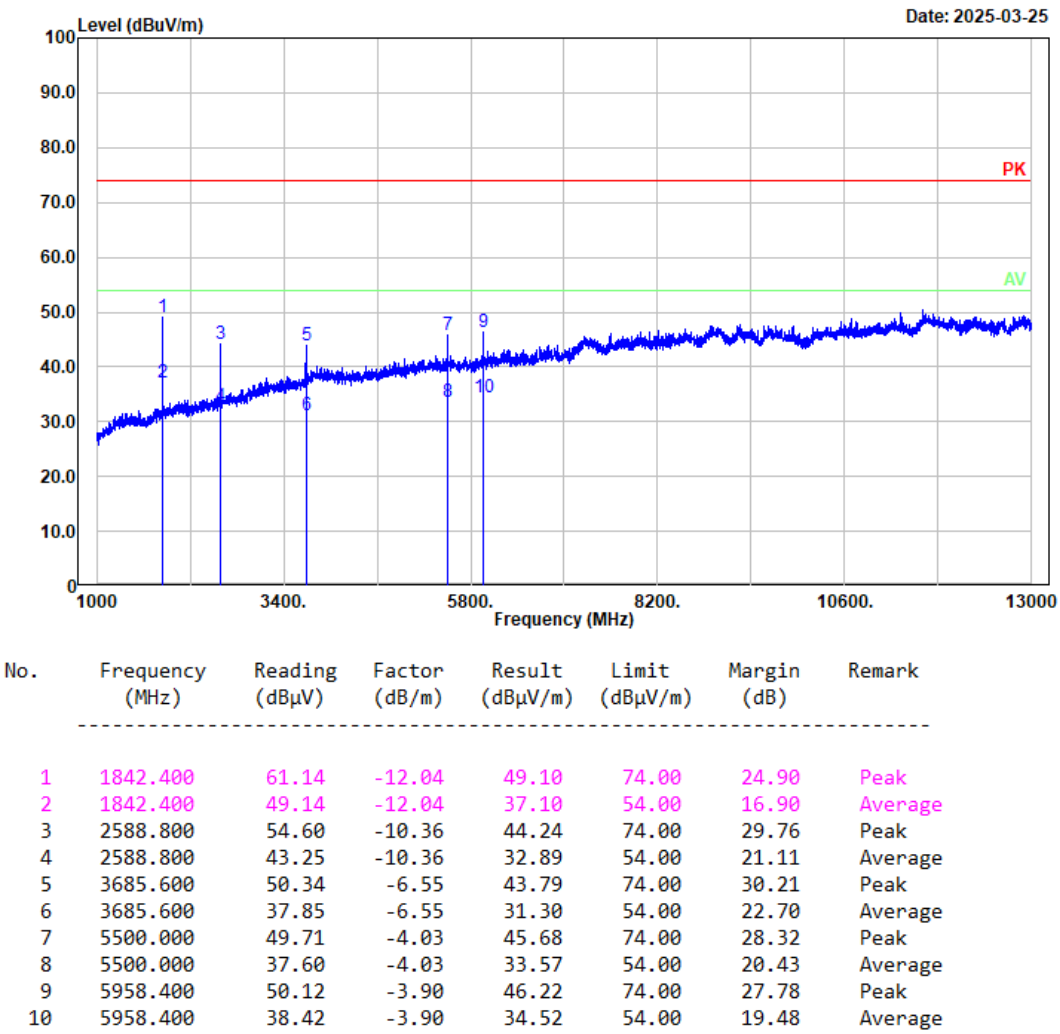
Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: Receiving (435)



Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: horizontal
Note: Receiving (469.9875)



Project No.: 2503Q10191E-RF
Tester: Mack Huang
Condition: PK trace RBW:1MHz; VBW:3MHz; SWT:0.3sec
Polarization: vertical
Note: Receiving (469.9875)



4.3 Antenna Power Conduction Limits for Receivers

Sample Number:	2YVR-2	Test Date:	2025/6/13
Test Site:	RF	Test Mode:	Scanning, Receiving
Tester:	Carl Xue	Test Result:	Pass

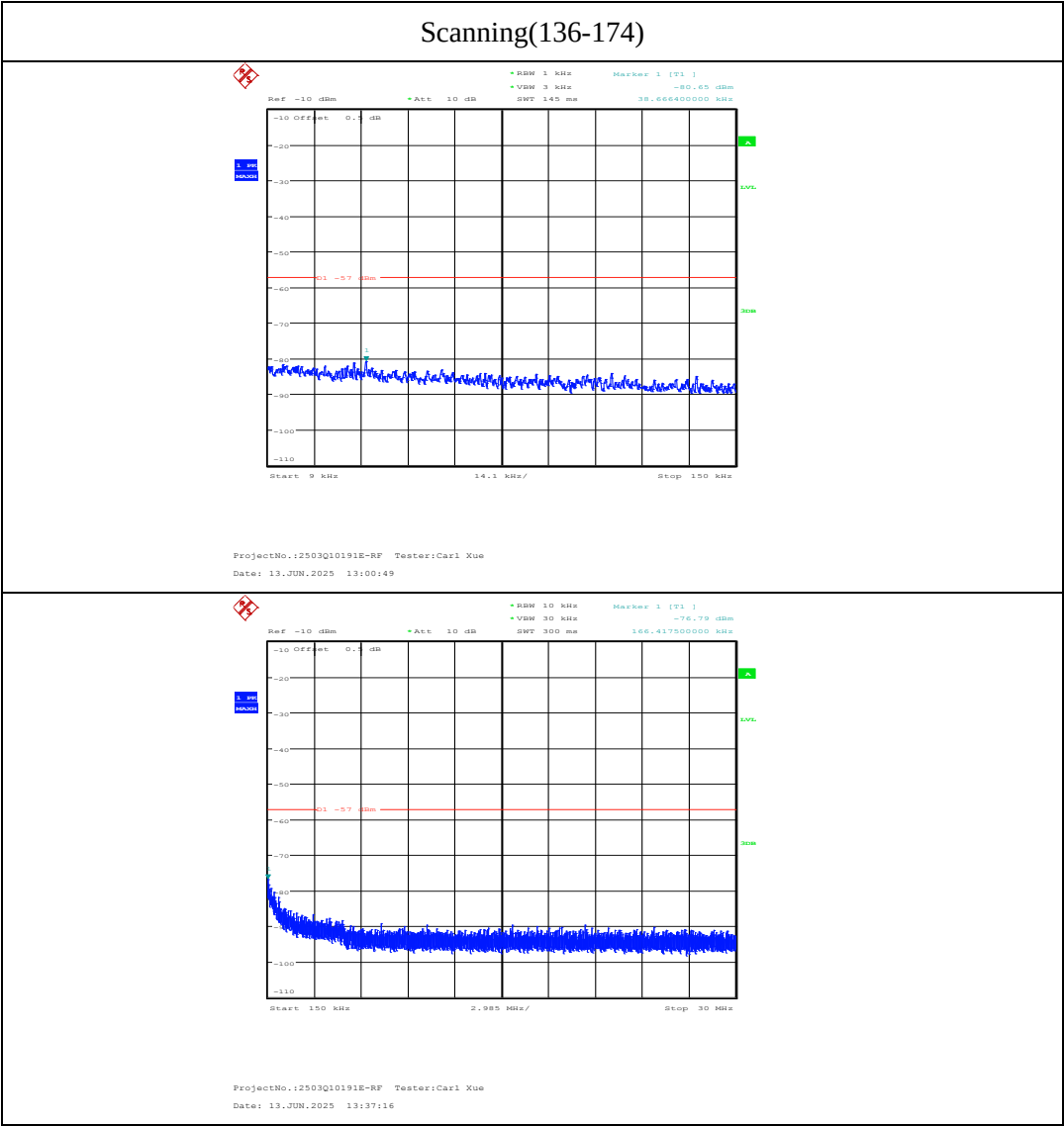
Environmental Conditions:					
Temperature: (°C)	25.5	Relative Humidity: (%)	60	ATM Pressure: (kPa)	101.1

Test Equipment List and Details:

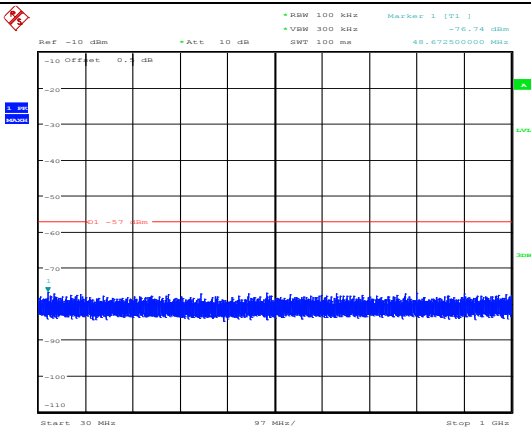
Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	100147	2025/3/31	2026/3/30
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A

** 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).*

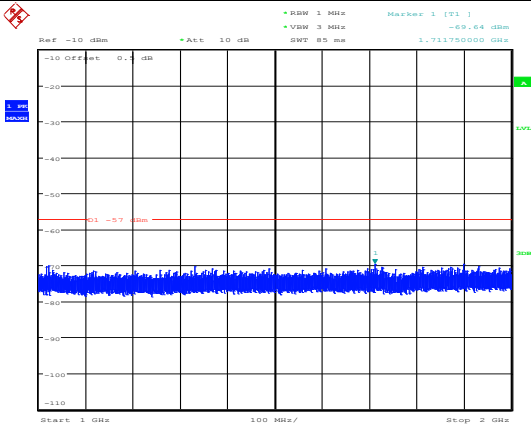
Test Mode: M1



Scanning(136-174)

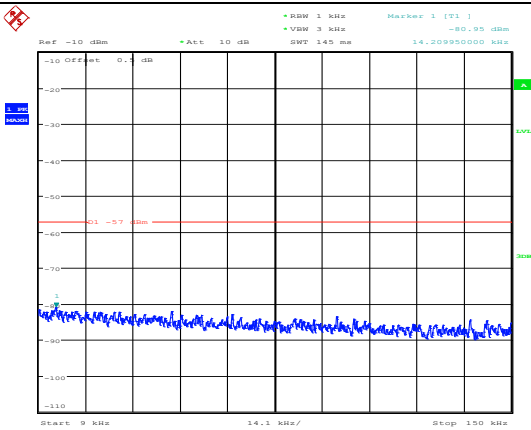


ProjectNo.:2503Q10191E-RF Tester:Carl Xue
Date: 13.JUN.2025 13:39:26

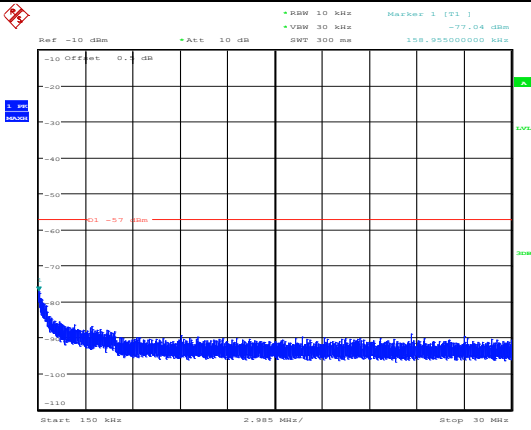


ProjectNo.:2503Q10191E-RF Tester:Carl Xue
Date: 13.JUN.2025 14:12:20

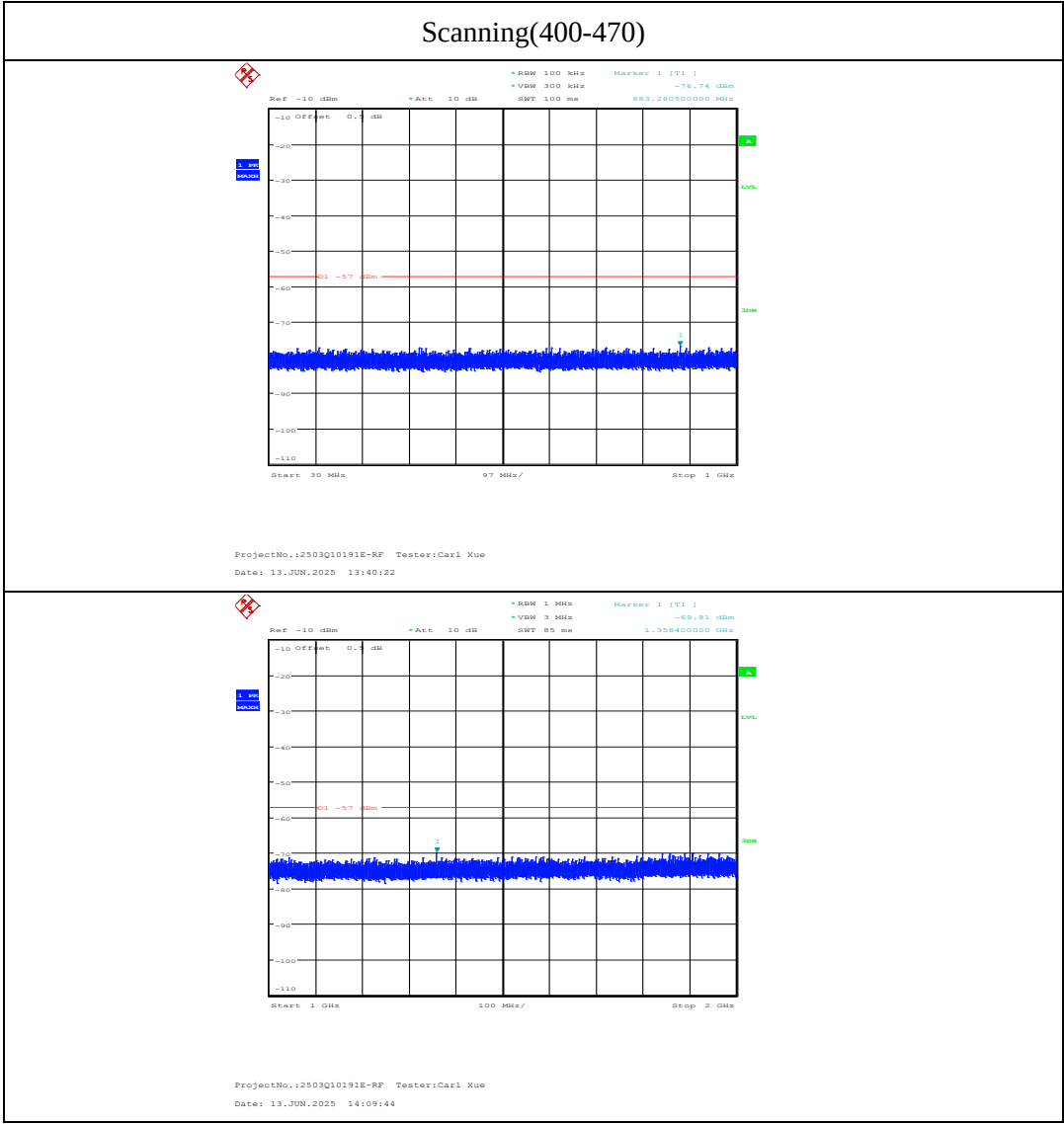
Scanning(400-470)



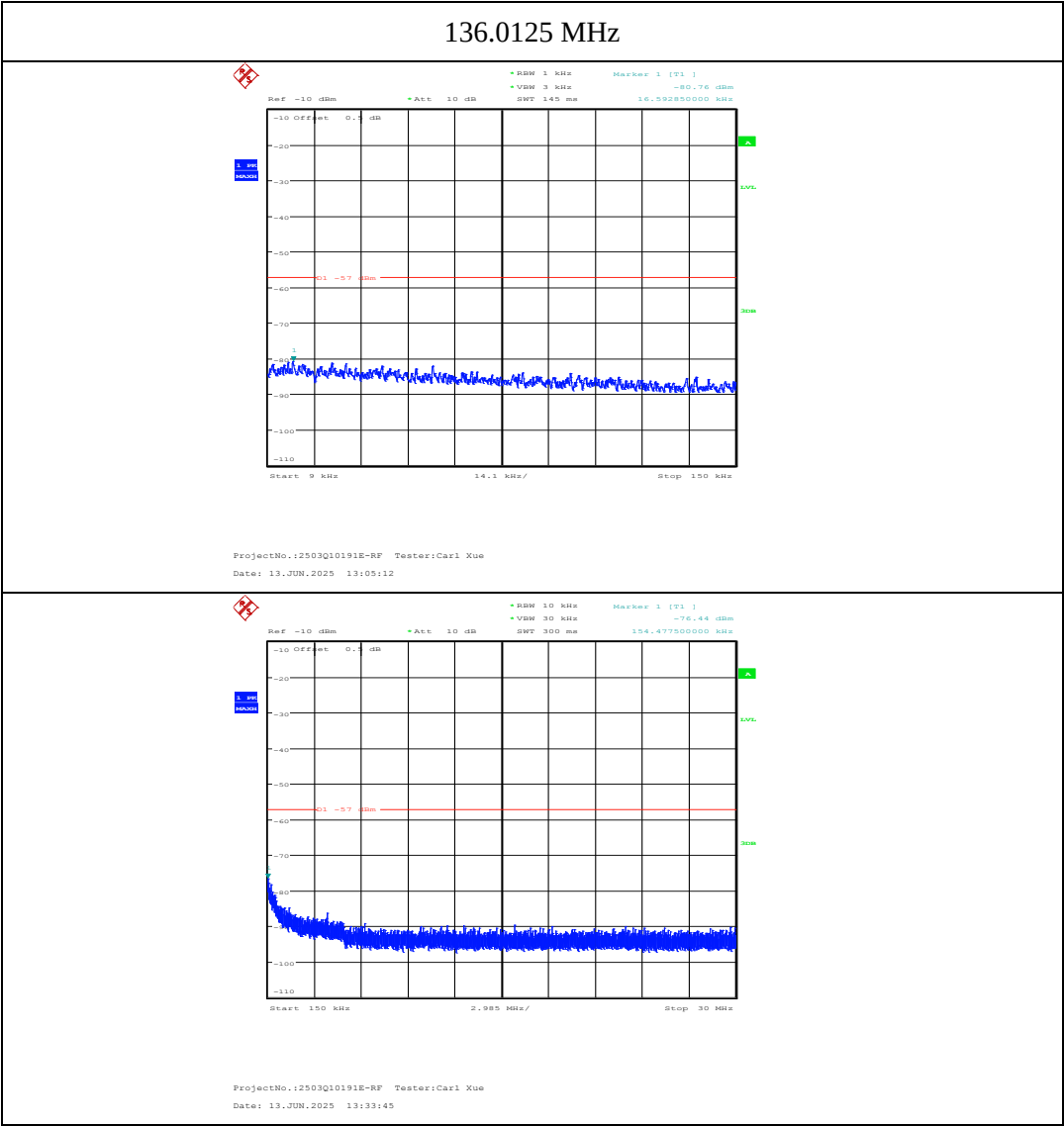
ProjectNo.:2503Q10191E-RF Tester:Carl Xue
Date: 13.JUN.2025 13:02:12

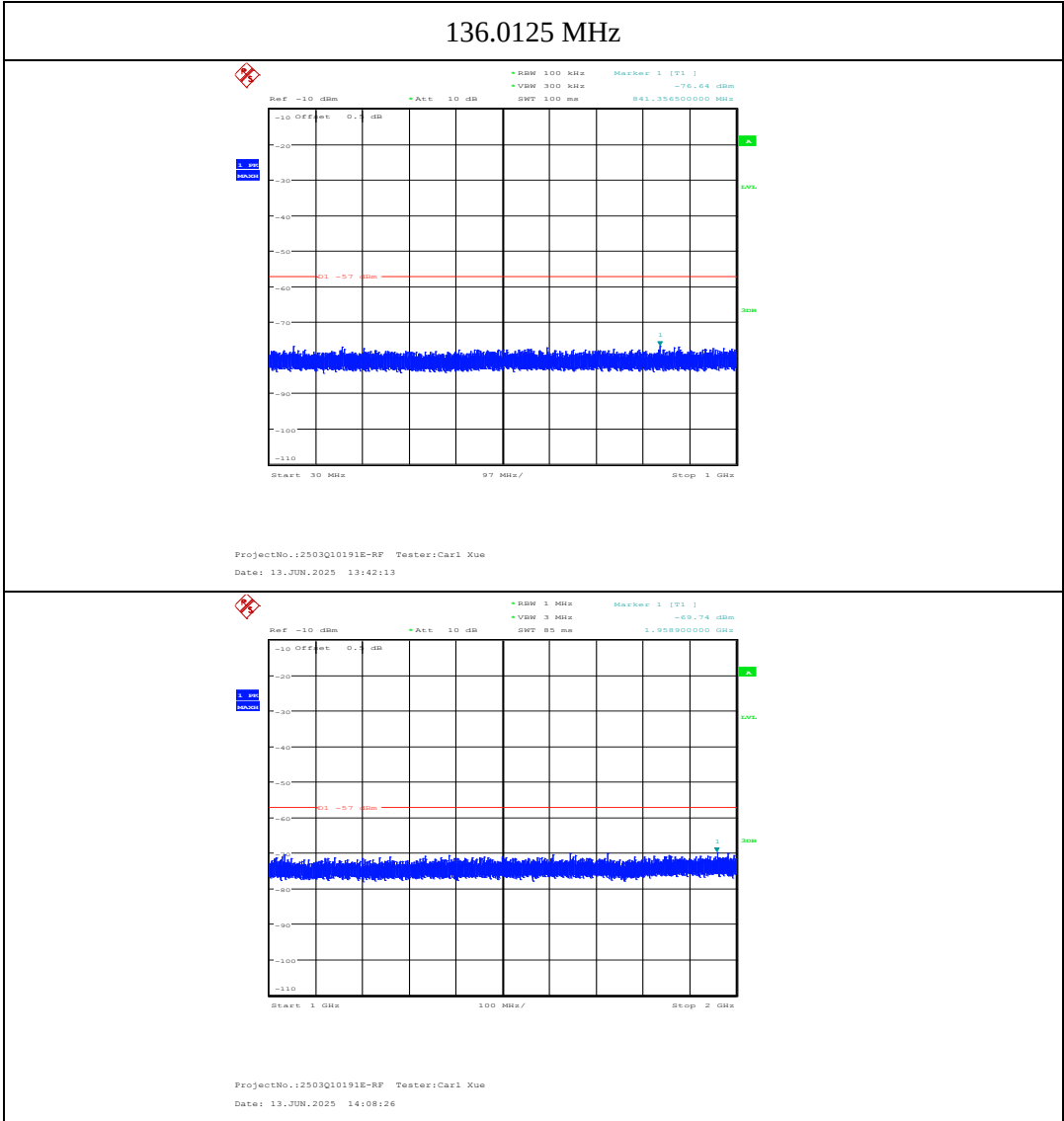


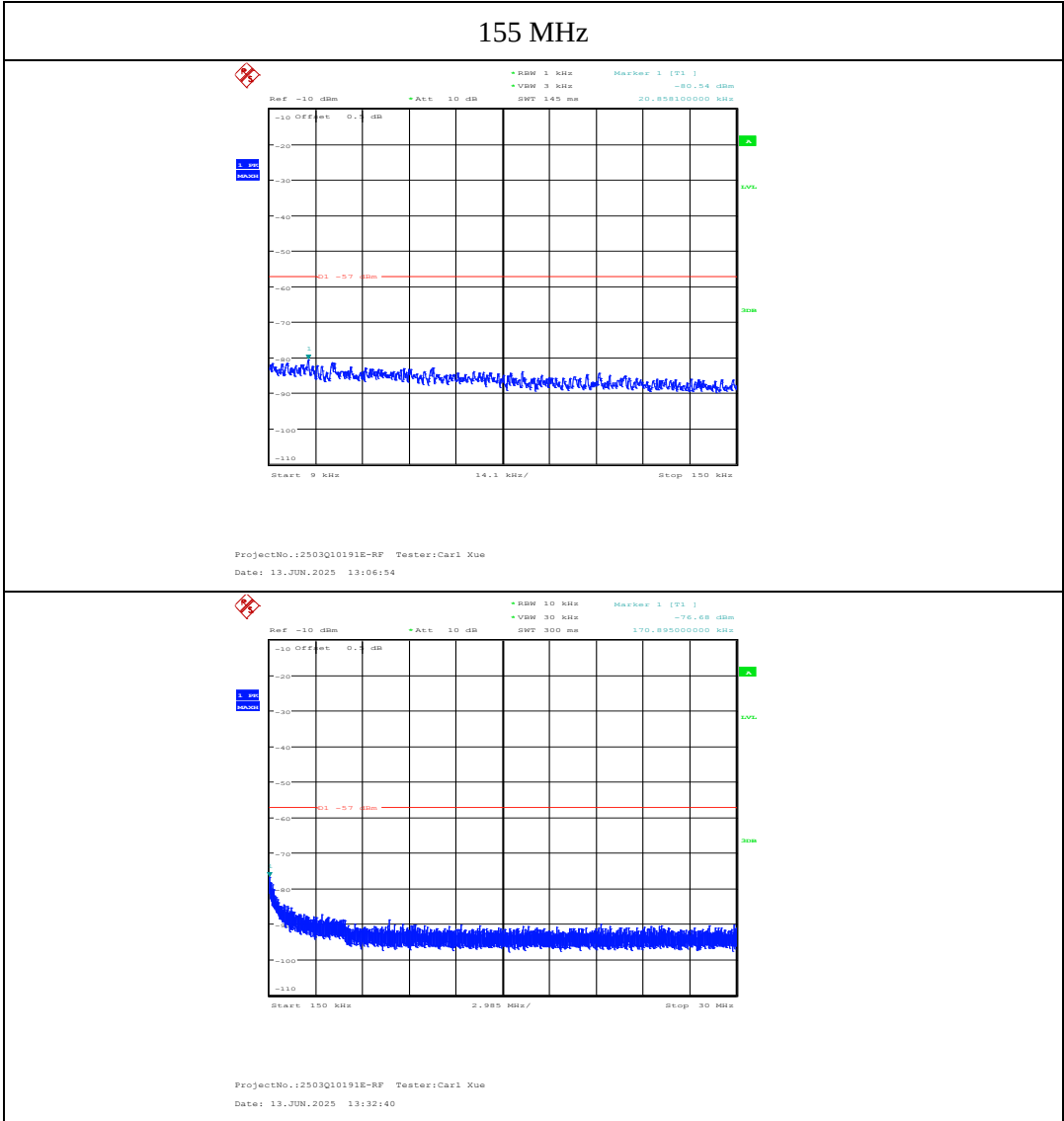
ProjectNo.:2503Q10191E-RF Tester:Carl Xue
Date: 13.JUN.2025 13:36:19

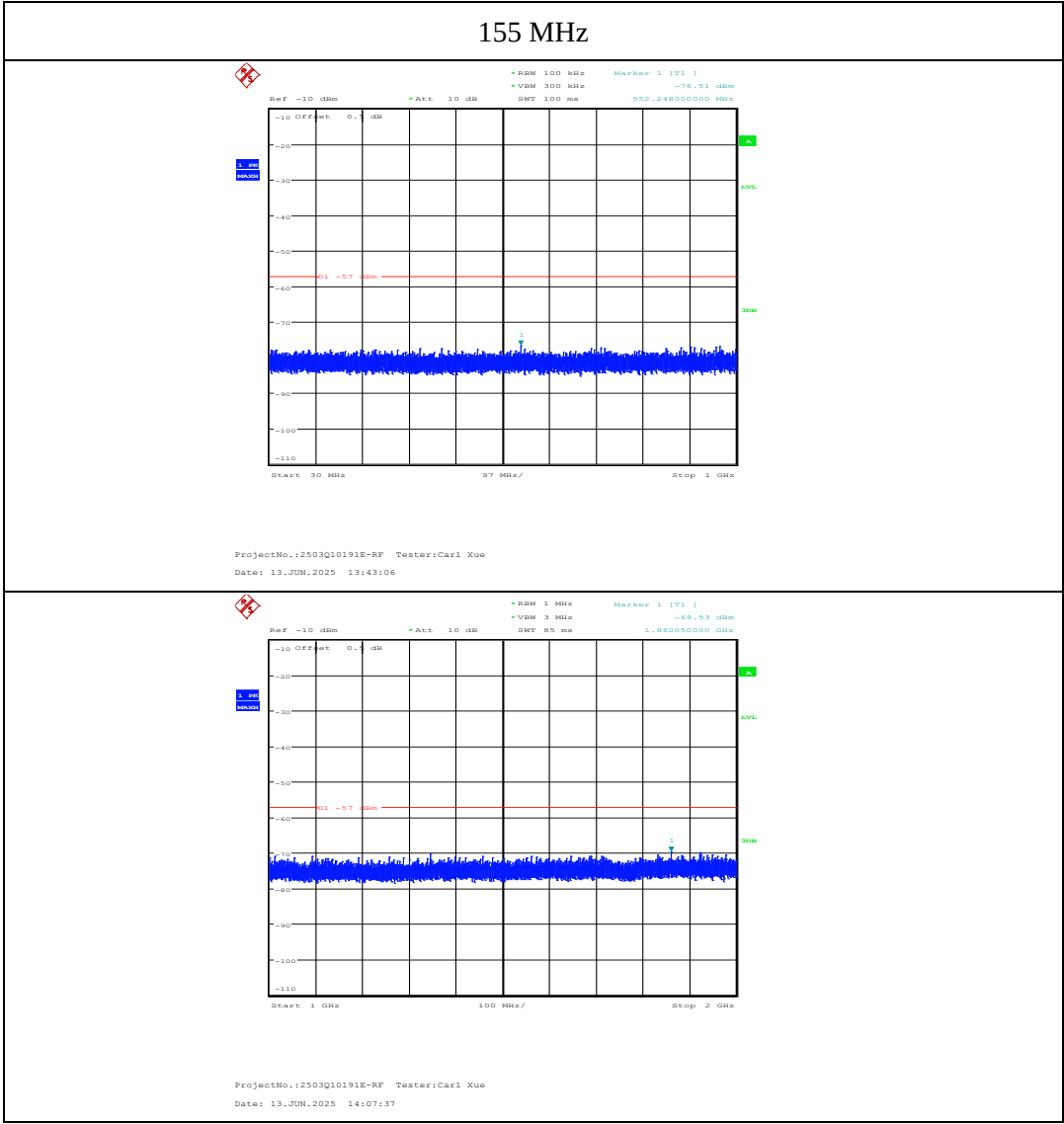


Test Mode: M2

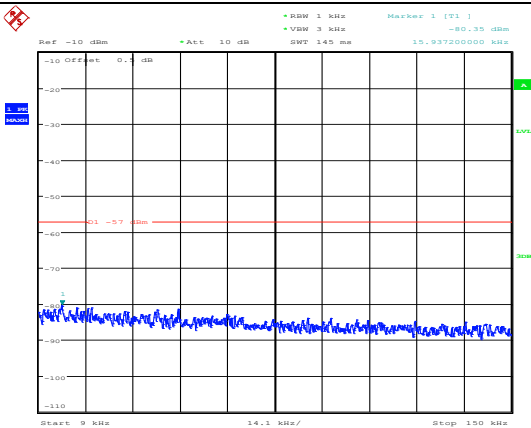




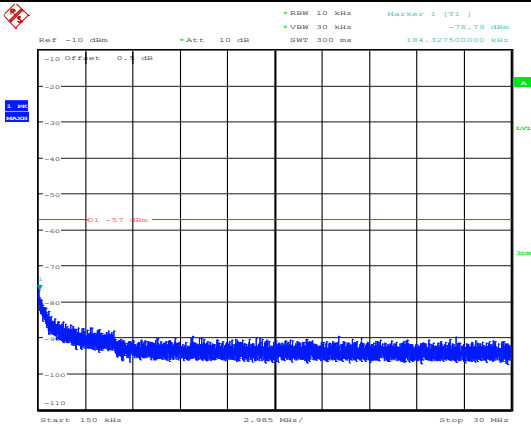




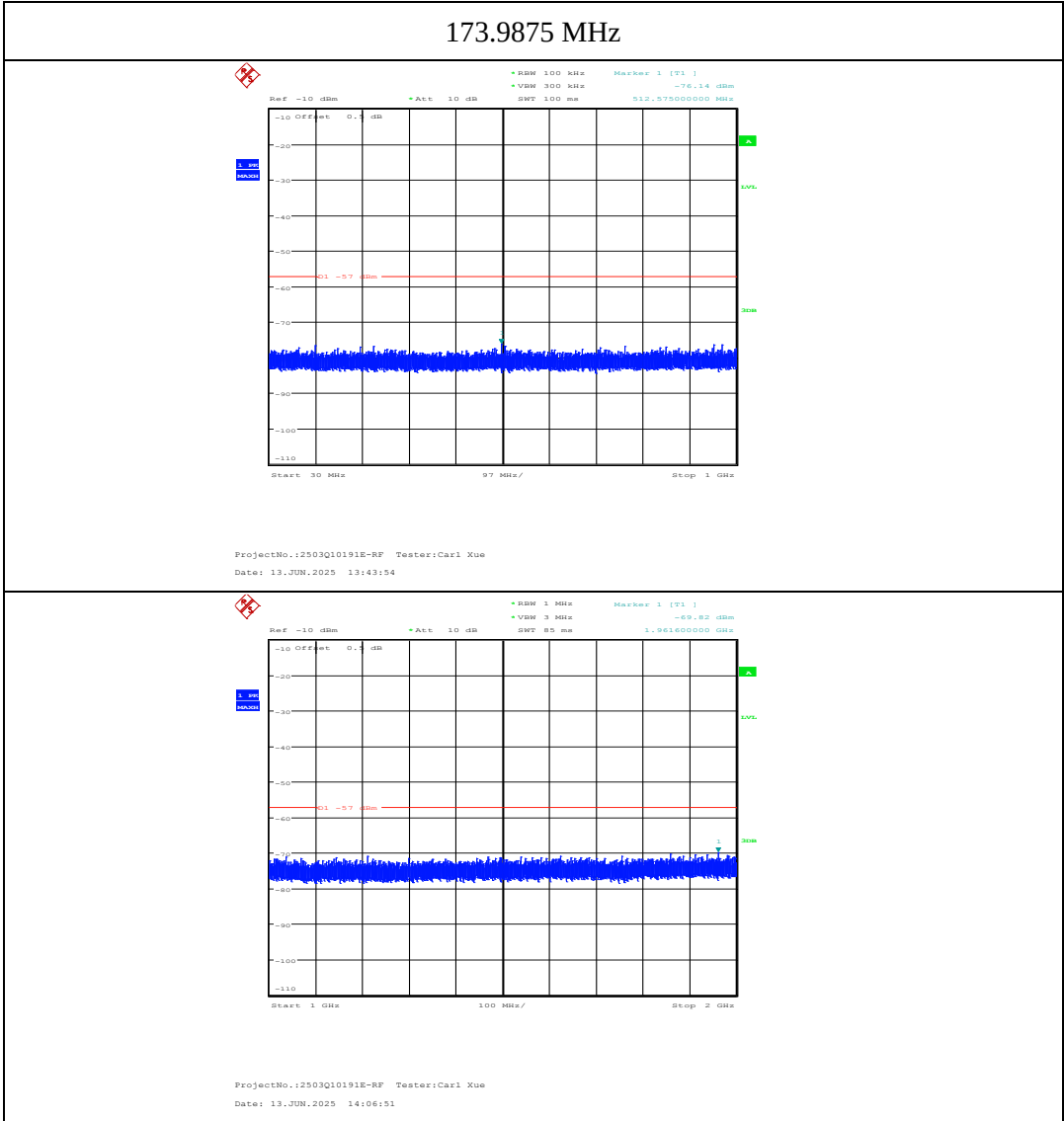
173.9875 MHz

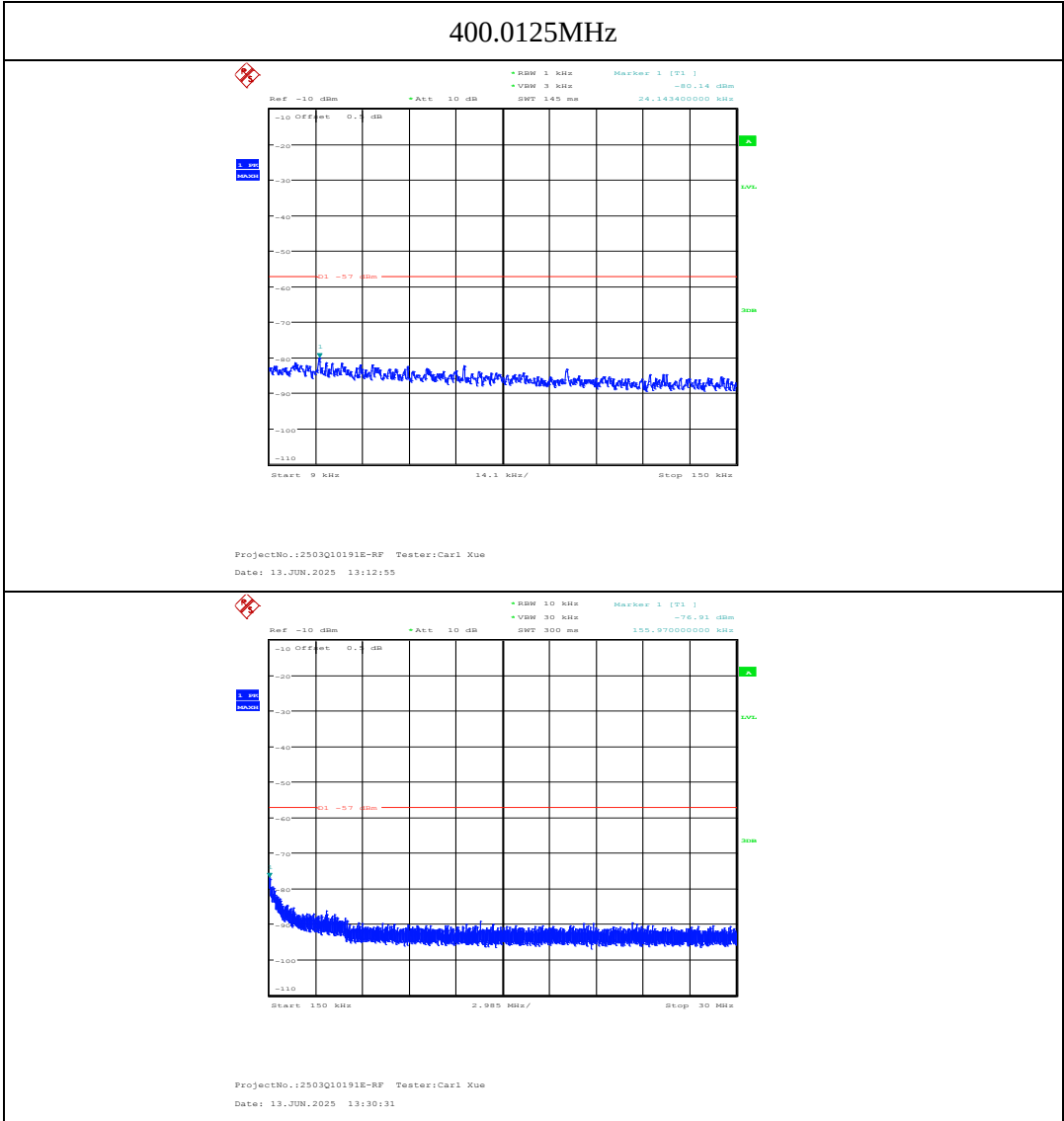


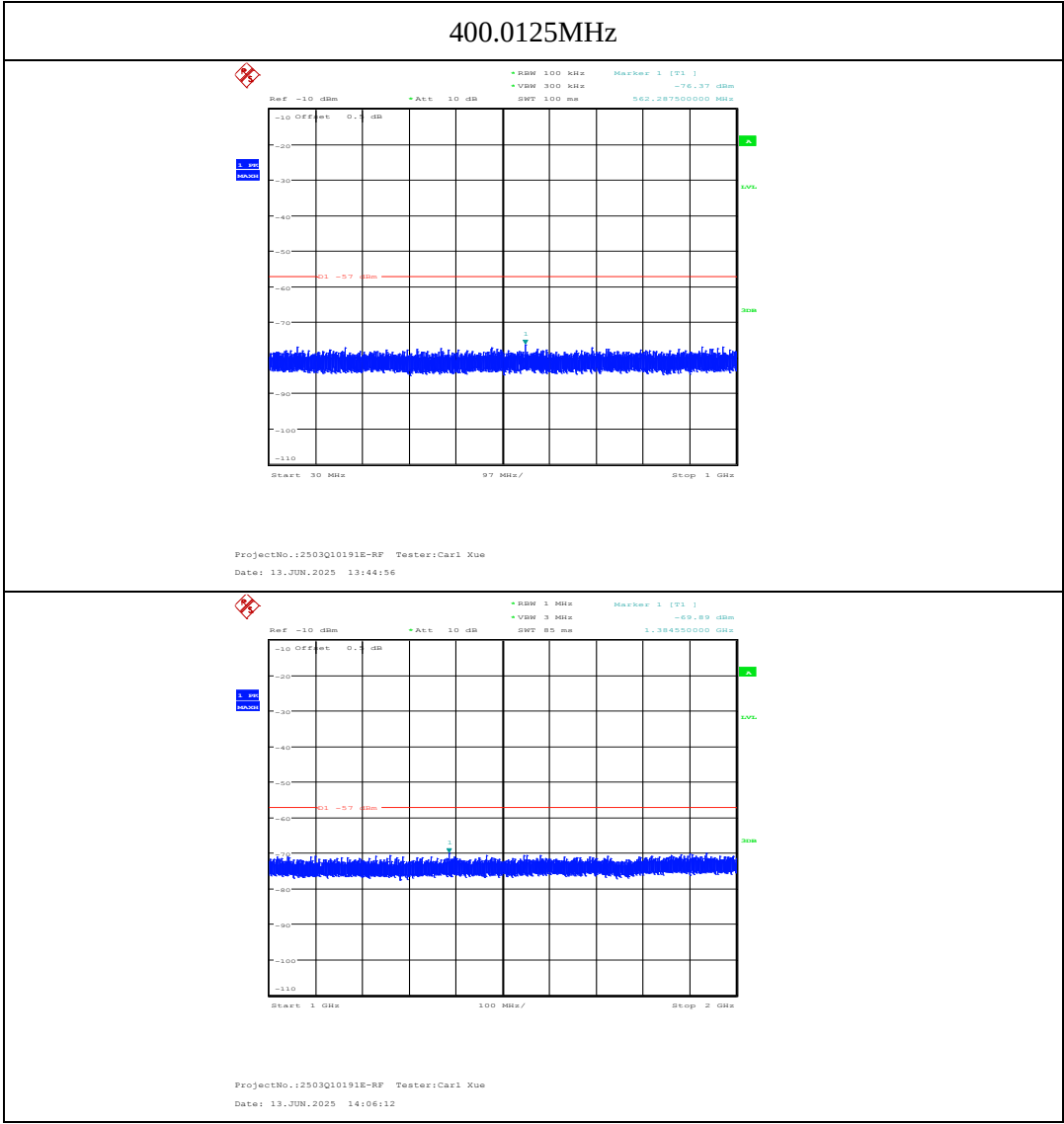
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Date: 13.JUN.2025 13:08:16

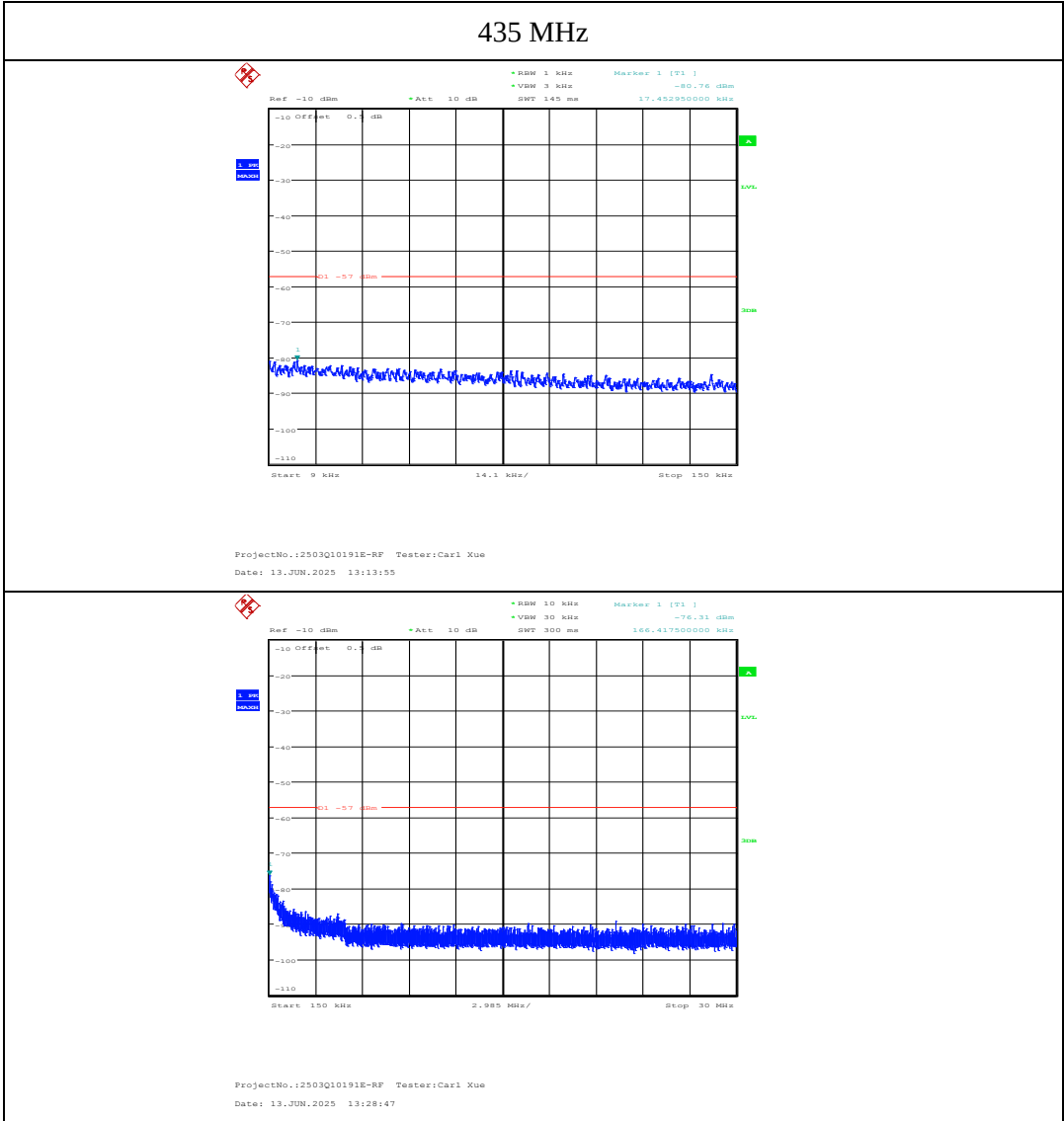


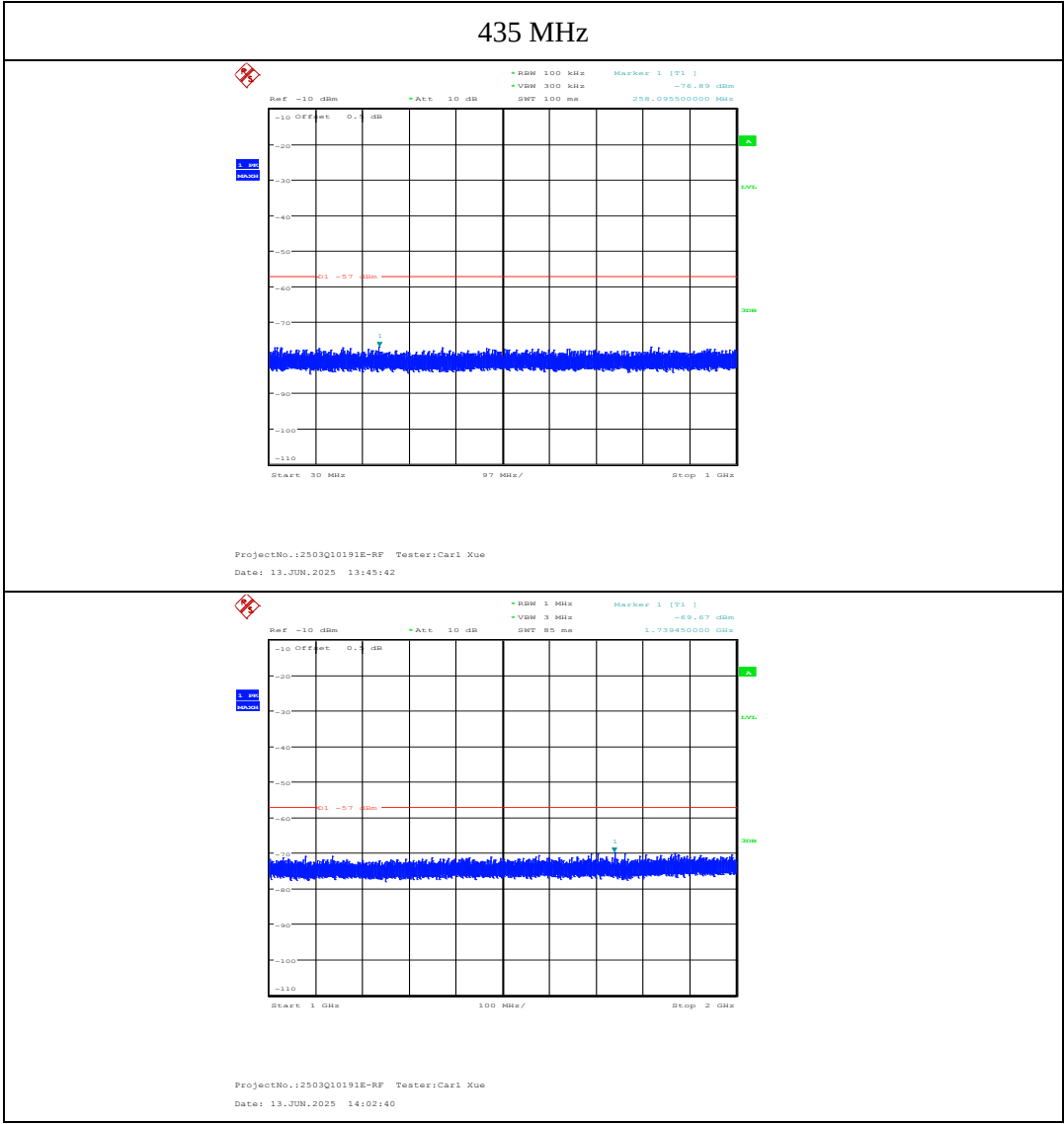
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Date: 13.JUN.2025 13:31:42

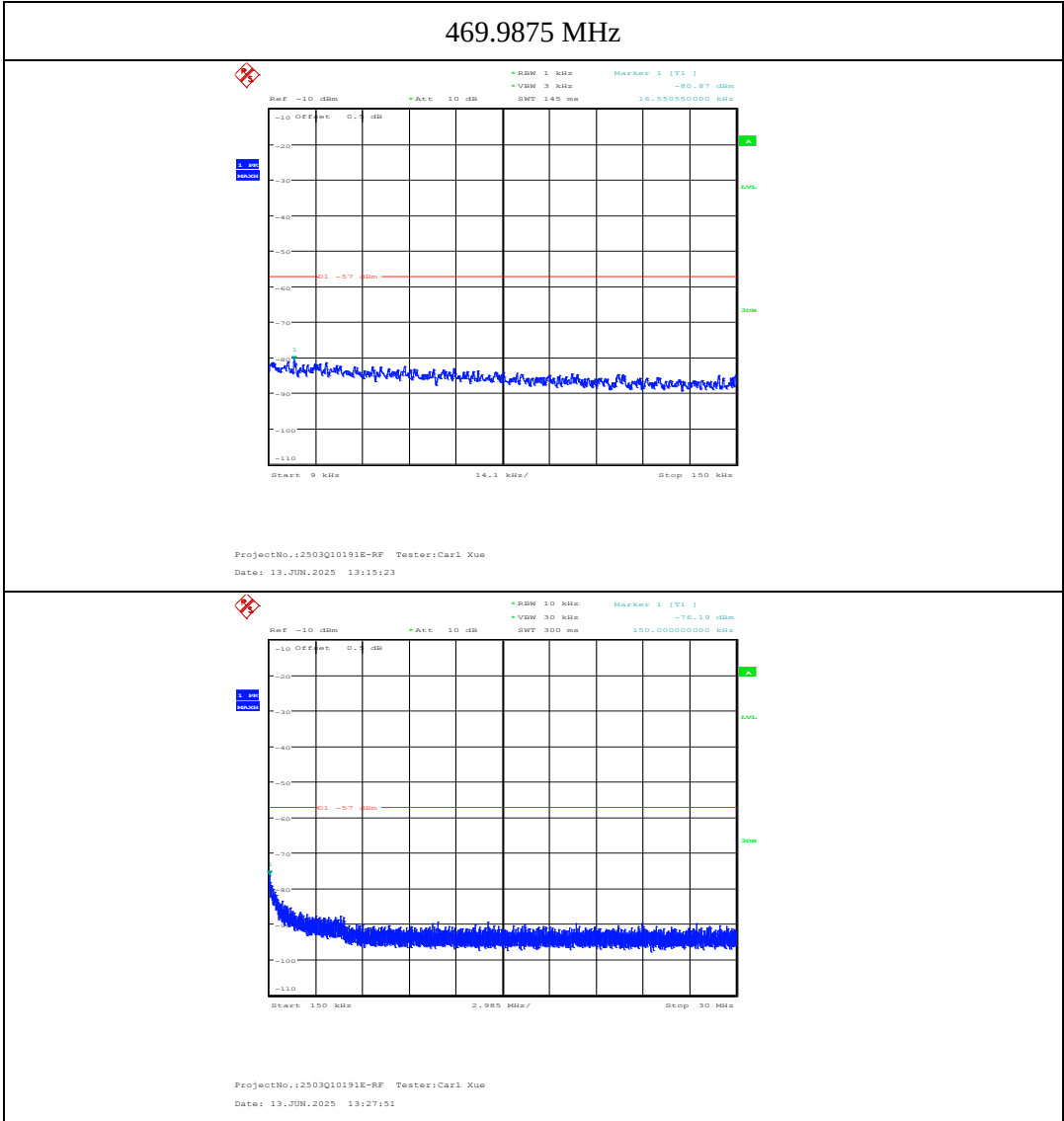


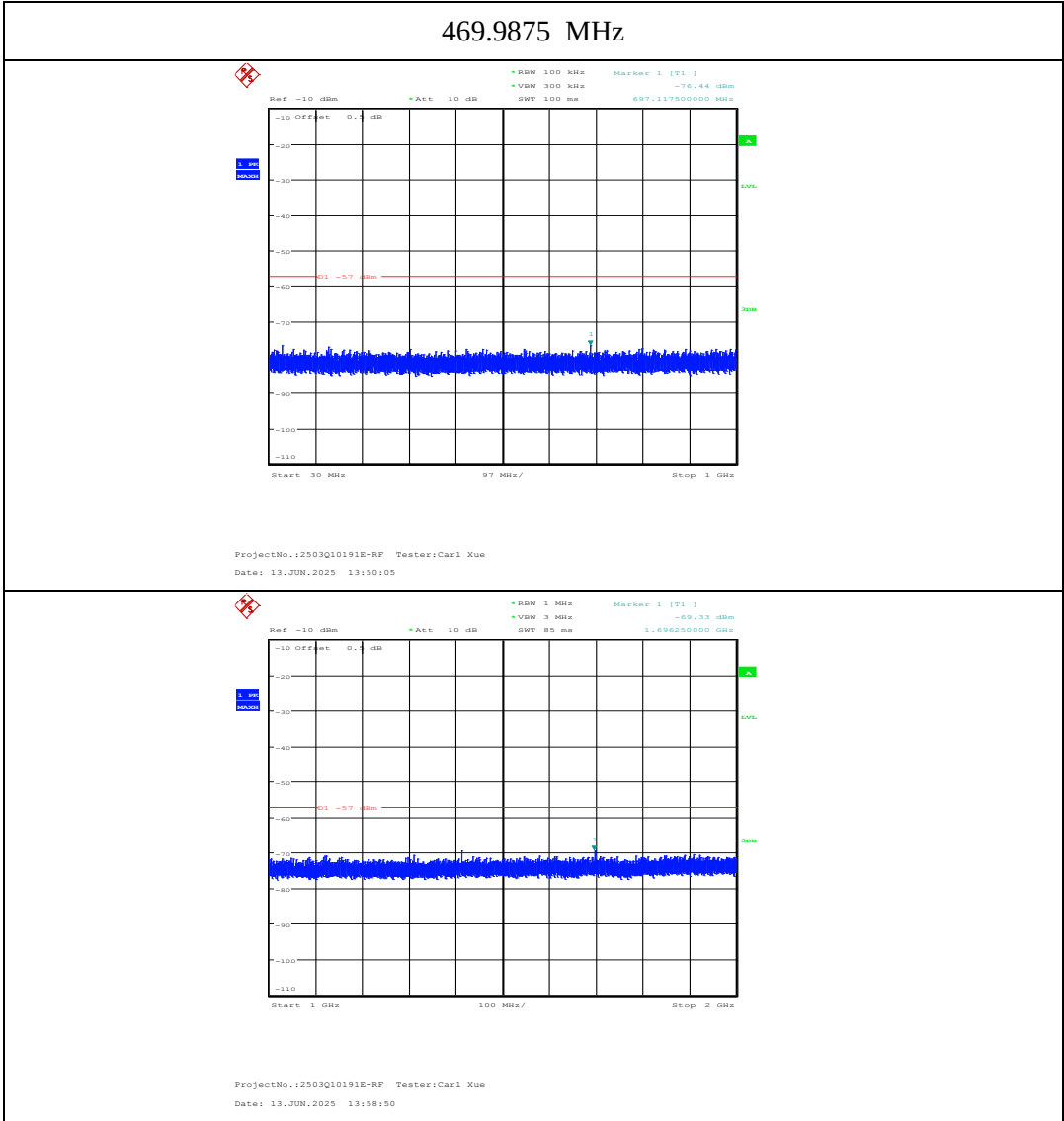












4.4 Scanning Receivers and Frequency Converters Used with Scanning Receivers

Sample Number:	2YVR-2	Test Date:	2025/6/13
Test Site:	RF	Test Mode:	Scanning
Tester:	Carl Xue	Test Result:	Pass

Environmental Conditions:					
Temperature: (°C)	25.5	Relative Humidity: (%)	60	ATM Pressure: (kPa)	101.1

Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
YINSAIGE	Coaxial Cable	SS402	SJ0100001	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100002	Each time	N/A
YINSAIGE	Coaxial Cable	SS402	SJ0100003	Each time	N/A
HP	RF Communications Test Set	8920A	3438A05209	2024/10/10	2025/10/9
Agilent	MXG Vector Signal Generator	N5182B	MY51350144	2025/1/9	2026/1/8
Minl-Clrcuts	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).

Scanning Frequency Range (MHz)	Test Frequency (MHz)	Measurement Result (Worst Case) (dB)	Limit (dB)
136-174	824, 836, 849, 869, 881.5, 894	43	>38
400-470	824, 836, 849, 869, 881.5, 894	46	>38

5. EUT PHOTOGRAPHS

Please refer to the attachment 2503Q10191E-RF-EXP EUT EXTERNAL PHOTOGRAPHS and 2503Q10191E-RF-INP EUT INTERNAL PHOTOGRAPHS

6. TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2503Q10191E-RF-00C-TSP TEST SETUP PHOTOGRAPHS.

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