



FCC PART 15B

TEST REPORT

For

Quanzhou Chierda Electronic Telecom Co., Ltd.

No.8,Zi'an Road,Jiangnan High-tech Industrial Zone Licheng District, Quanzhou Fujian, China

FCC ID: OA8-M520D

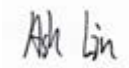
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Original Report	AMATEUR RADIO
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Report Date:	2026-02-06
Reviewed By:	Ash Lin 
Approved By:	Miles Chen
Prepared By:	Bay Area Compliance Laboratories Corp. (Xiamen) Unit 102, No. 902 Meifeng South Road, Binhai West Avenue Science and Technology Innovation Park, Torch High Tech Zone Xiamen, People's Republic of China Tel: +86-592-3200111 www.baclcorp.com.cn

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REPORT REVISION HISTORY

Number of Revisions	Report No.	Version	Issue Date	Description
0	2507Z03677E-EM-01	R1V1	2026-02-06	Initial Release

GENERAL INFORMATION**Product Description for Equipment under Test (EUT)**

Applicant:	Quanzhou Chierda Electronic Telecom Co., Ltd.
Product Name:	AMATEUR RADIO
Tested Model:	M520D
Series Model(s):	AR-7800
Trade Mark:	Chierda, ABBREE
Power Supply:	DC 13.8V from DC source
★Highest Operating Frequency:	2480 MHz
EUT Receive Status:	Good
<i>Note:</i> 1. The highest operating frequency is provided by the applicant. 2. The difference between tested model and series model are model name and color; please refer to declaration letter for more detail. 3. All measurement and test data in this report was gathered from production sample serial number: 3CEA-2 (Assigned by the BACL (Xiamen). The EUT was received on 2025-11-04).	

Objective

This report is prepared for *Quanzhou Chierda Electronic Telecom Co., Ltd.* in accordance with Part 2-Subpart J, and Part 15-Subparts A and B of the Federal Communication Commission's rules.

Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Xiamen) to collect test data is located on Unit 102, No. 902 Meifeng South Road, Binhai West Avenue Science and Technology Innovation Park, Torch High Tech Zone Xiamen, People's Republic of China.

Bay Area Compliance Laboratories Corp. (Xiamen) Lab is accredited to ISO/IEC 17025 by A2LA (Certificate Number: 7134.01) and the lab has been recognized as the FCC accredited lab under the KDB 974614 D01, the FCC Designation No. : CN1384.

Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the product as specified in CISPR 16-4-2. This uncertainty represents expanded uncertainty expressed at 95% confidence level using a coverage factor of k=2.

$$u_c(y) = \sqrt{\sum_i c_i^2 u^2(x_i)}$$

Item	Frequency Range	$U_{lab} = 2 u_c(y)$ (Confidence of 95%)
Radiated Emission	30MHz~200MHz(Horizontal)	3.33 dB
	30MHz~200MHz(Vertical)	3.51 dB
	200MHz~1GHz(Horizontal)	4.87 dB
	200MHz~1GHz(Vertical)	4.99 dB
	1GHz~6GHz	4.88dB
Unwanted Emissions, conducted		±2.92dB
Humidity		±5%
Temperature		±1°C

SYSTEM TEST CONFIGURATION

Test Mode and Voltage

The system was configured for testing in a typical mode (as normally used by a typical user).	
Test mode:	Test Mode 1: Scanning & GPS Operating & BT Linking Test Mode 2: Receiving & GPS Operating & BT Linking
Test voltage:	DC 13.8V from DC source

Description of Test Configuration

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

EUT Exercise Software

No exercise software was used to test.

Special Accessories

No special accessory was used.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
HP	RF Communications test set	8920A	3524A07202
Unknown	GPS Antenna	Unknown	Unknown
Unknown	Earphone	Unknown	Unknown
MAISHENG	DC Source	MS-606DS	1027453694
MIUI	BT Earphone	Redmi Buds 5 Pro	Unknown

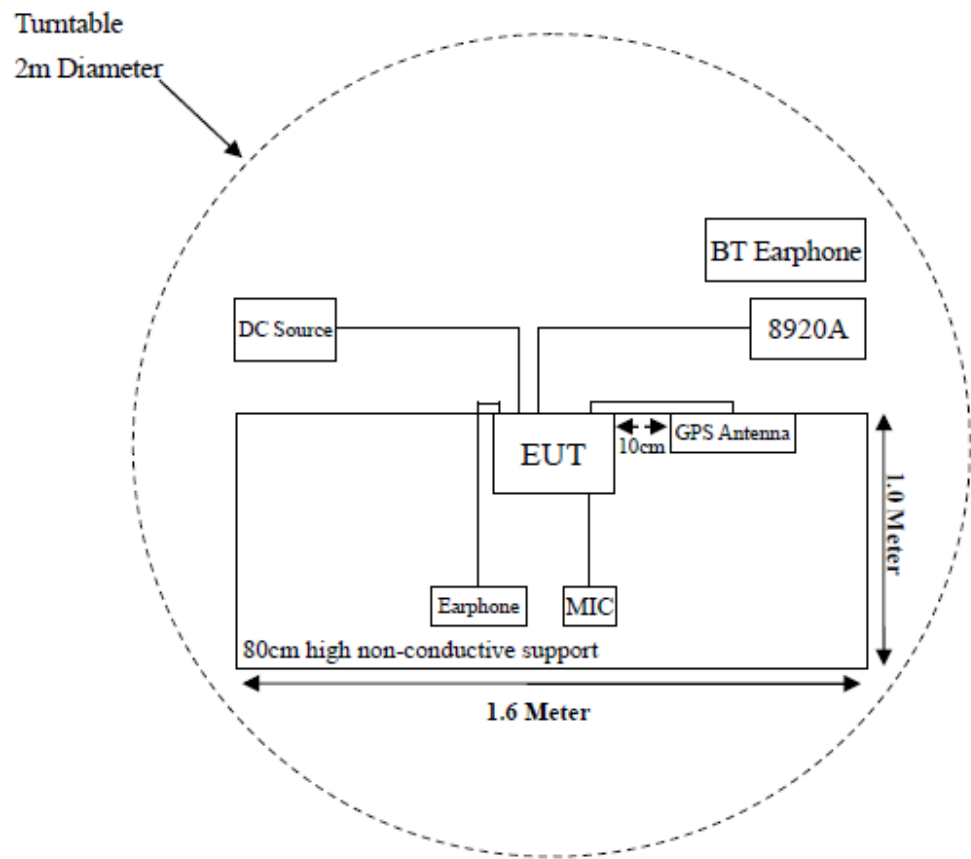
External I/O Cable

Cable Description	Length (m)	From Port	To Port
Coaxial Cable	3.0	8920A	EUT
Earphone Cable	1.0	Earphone	EUT
DC Power Cable	3.0	DC Source	EUT
GPS Antenna Cable	2.0	GPS Antenna	EUT

Block Diagram of Test Setup

Radiated Emission:

Test Mode 1 & Test Mode 2:



SUMMARY OF TEST RESULTS

Rule Part	Description of Test	Results
FCC§15.107	Conducted Emission	Not applicable (See Note 1)
FCC§15.109	Radiated Emission	Compliant
FCC §15.121(b)	Scanning receivers and frequency converters used with scanning receivers	Compliant
FCC §15.111	Antenna power conduction limits for receivers	Compliant

Note:

1. The EUT is powered by DC source.

TEST EQUIPMENT LIST

Test Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emission 30 MHz to 1 GHz					
EMI Test Receiver	Rohde & Schwarz	ESR	103103	2025/02/20	2026/02/19
Antenna	Sunol Sciences	JB6	A122022-5	2023/07/27	2026/07/26
Amplifier	Sonoma	310B	120903	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH400T-N-4M	CC002	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-2M	CC006	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH460B-N-12M	CC007	2025/02/20	2026/02/19
Test Software	Audix	E3	18621a	N/A	N/A
Radiated Emission Above 1 GHz					
Spectrum Analyzer	Rohde & Schwarz	FSU	100405	2025/02/20	2026/02/19
Horn Antenna	EMCO	3115	9002-3355	2024/11/19	2027/11/18
Preamplifier	GLOBAL	1313-A100M18G	4121301	2025/01/16	2026/01/15
Coaxial Cable	XINHANGWEIBO	XH800A-N-6M	CC003	2025/02/20	2026/02/19
Coaxial Cable	XINHANGWEIBO	XH800A-N-1M	CC005	2025/02/20	2026/02/19
Test Software	Audix	E3	18621a	N/A	N/A
Scanning Receiver					
Coaxial Cable	WEIHE	WH316	RFCC002	Each time	Each time
RF Communications test set	HP	8920A	3524A07202	2025/04/13	2026/04/12
Power Splitter	narda	4426LB-2	1661	Each time	Each time
Microwave Analog Signal Generator	Agilent	N5183A	MY47420335	2025/02/20	2026/02/19
Attenuator	Electronic Corporation	30-WA-FFN-30	1172435	2025/02/20	2026/02/19
RF Conducted Test					
Spectrum Analyzer	Rohde & Schwarz	FSU 26	200199	2026/01/21	2027/01/20
Coaxial Cable	WEIHE	WH316	RFCC002	Each time	Each time

Statement of Traceability: Bay Area Compliance Laboratories Corp. (Xiamen) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC §15.107 - CONDUCTED EMISSION

Applicable Standard

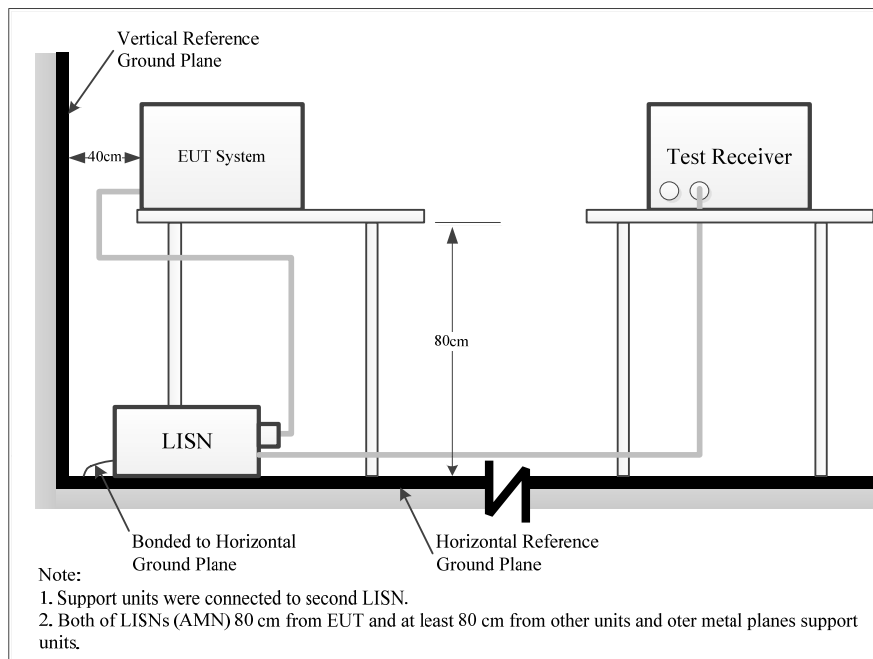
FCC §15.107

(a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

*Decreases with the logarithm of the frequency.

Test System Setup



The measurement procedure of test setup is according with ANSI C63.4-2014. The related limit was specified in FCC Part 15.107 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 spacing between the peripherals was 10 cm.

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

Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

Result & Margin Calculation

The Result is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation from the Meter Reading. The basic equation is as follows:

$$\text{Factor (dB)} = \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)}$$

$$\text{Result (dB}\mu\text{V)} = \text{Reading (dB}\mu\text{V)} + \text{Factor (dB)}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

$$\text{Margin (dB)} = \text{Limit (dB}\mu\text{V)} - \text{Result (dB}\mu\text{V)}$$

Test Data

Test Result: N/A.

Note: The EUT is powered by DC Source.

FCC §15.109 - RADIATED EMISSION IN FREQUENCY**Applicable Standard**

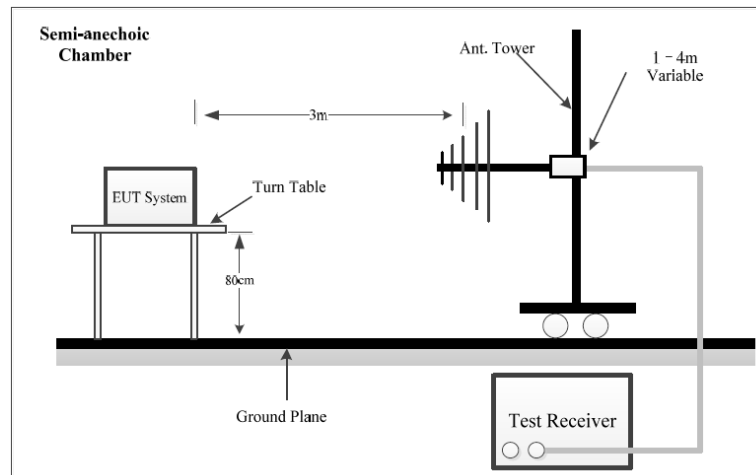
FCC§15.109

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

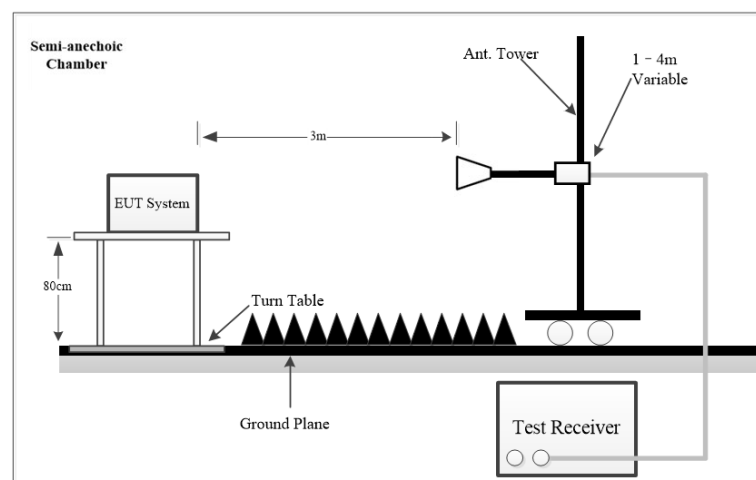
Frequency of emission (MHz)	Field strength (microvolts/meter)
30–88	100
88–216	150
216–960	200
Above 960	500

Test System Setup

Below 1 GHz:



Above 1 GHz:



The radiated emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 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 spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The system was investigated from 30 MHz to 13 GHz.

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

Frequency Range	RBW	VBW	Measurement	Detector
30 MHz – 1000 MHz	100 kHz	300 kHz	PK	PK
	120 kHz	/	QP	QP
Above 1 GHz	1 MHz	3 MHz	PK	PK
	1 MHz	10 Hz	AV	PK

Test Procedure

The frequency and amplitude of the six highest ac power-line conducted emissions relative to the limit, measured over all the current-carrying conductors of the EUT power cords, and the operating frequency or frequency to which the EUT is tuned (if appropriate), should be reported, unless such emissions are more than 20 dB below the limit. AC power-line conducted emissions measurements are to be separately carried out only on each of the phase (“hot”) line(s) and (if used) on the neutral line(s), but not on the ground [protective earth] line(s). If less than six emission frequencies are within 20 dB of the limit, then the noise level of the measuring instrument at representative frequencies should be reported. The specific conductor of the power-line cord for each of the reported emissions should be identified. Measure the six highest emissions with respect to the limit on each current-carrying conductor of each power cord associated with the EUT (but not the power cords of associated or peripheral equipment that are part of the test configuration). Then, report the six highest emissions with respect to the limit from among all the measurements identifying the frequency and specific current carrying conductor identified with the emission. The six highest emissions should be reported for each of the current-carrying conductors, or the six highest emissions may be reported over all the current-carrying conductors.

Result & Margin Calculation

The Result is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

Result (dBμV/m) = Reading (dBμV) + Factor (dB/m)

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dBμV/m) – Result (dBμV/m)

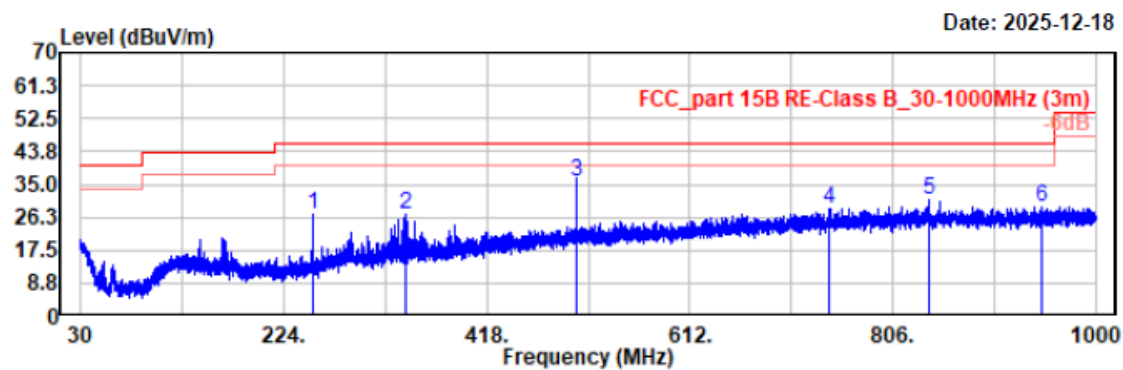
Test Data

Please refer to below plots:

1) 30MHz-1GHz:

Project No.: 2507Z03677E-EM
Test Mode: Mode 1(136-174MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

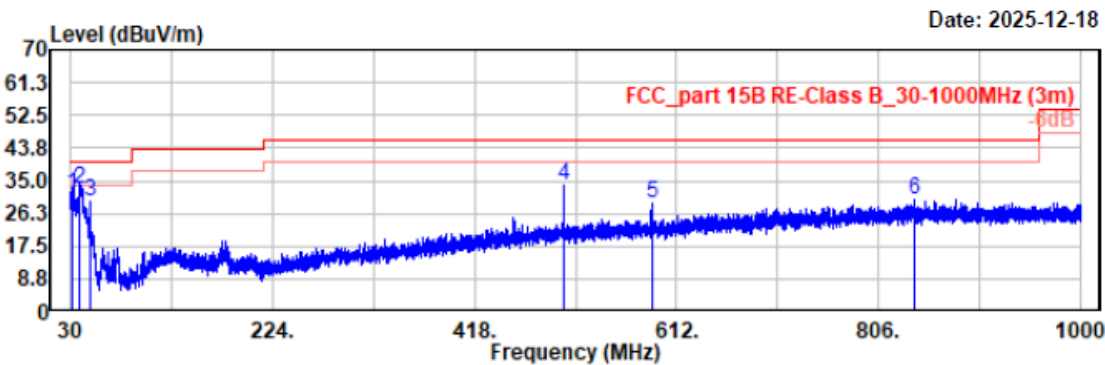


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
252.13	38.38	-11.40	26.98	46.00	19.02	Horizontal	Peak
341.08	35.49	-8.34	27.15	46.00	18.85	Horizontal	Peak
504.04	38.88	-3.38	35.50	46.00	10.50	Horizontal	QP
745.76	28.14	0.46	28.60	46.00	17.40	Horizontal	Peak
840.05	29.15	1.80	30.95	46.00	15.05	Horizontal	Peak
948.98	25.77	3.14	28.91	46.00	17.09	Horizontal	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 1(136-174MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

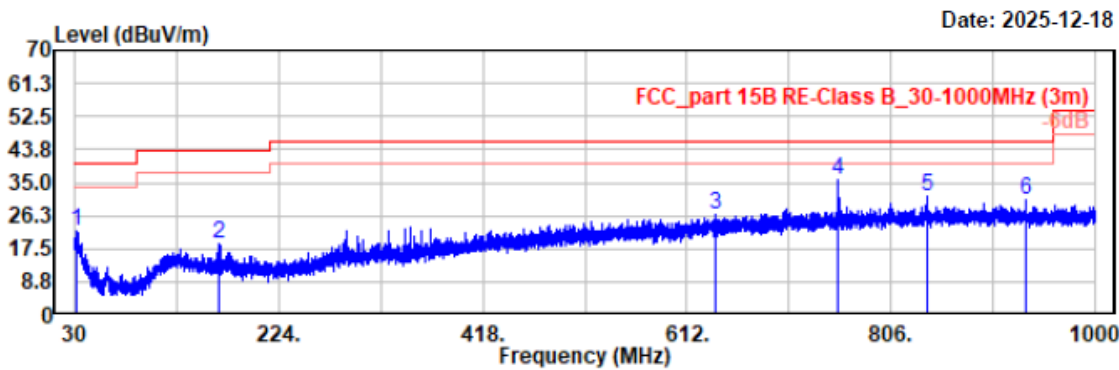


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
31.16	37.46	-5.94	31.52	40.00	8.48	Vertical	QP
39.12	43.91	-10.96	32.95	40.00	7.05	Vertical	QP
49.30	46.73	-17.27	29.46	40.00	10.54	Vertical	Peak
504.04	37.23	-3.38	33.85	46.00	12.15	Vertical	Peak
588.33	31.62	-2.52	29.10	46.00	16.90	Vertical	Peak
840.05	28.19	1.80	29.99	46.00	16.01	Vertical	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 1(400-520MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

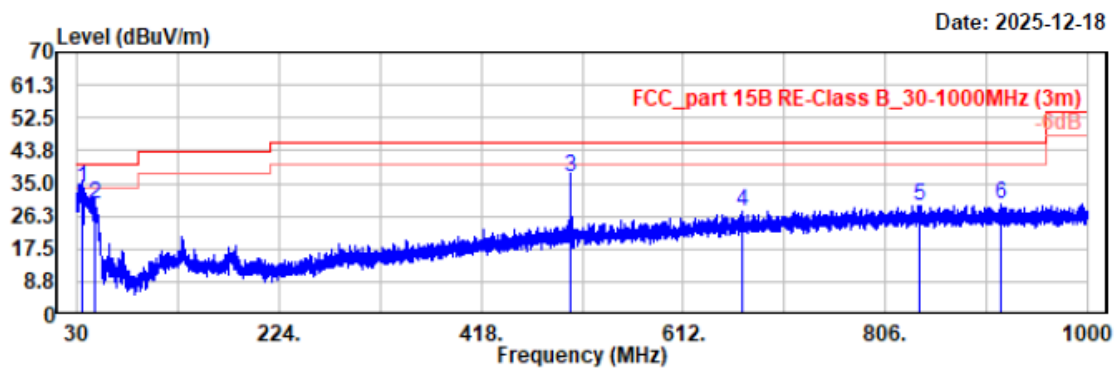


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
31.65	28.19	-6.21	21.98	40.00	18.02	Horizontal	Peak
167.06	30.36	-11.77	18.59	43.50	24.91	Horizontal	Peak
639.84	27.85	-1.14	26.71	46.00	19.29	Horizontal	Peak
755.85	35.16	0.49	35.65	46.00	10.35	Horizontal	Peak
840.05	29.58	1.80	31.38	46.00	14.62	Horizontal	Peak
934.14	27.32	3.04	30.36	46.00	15.64	Horizontal	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 1(400-520MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

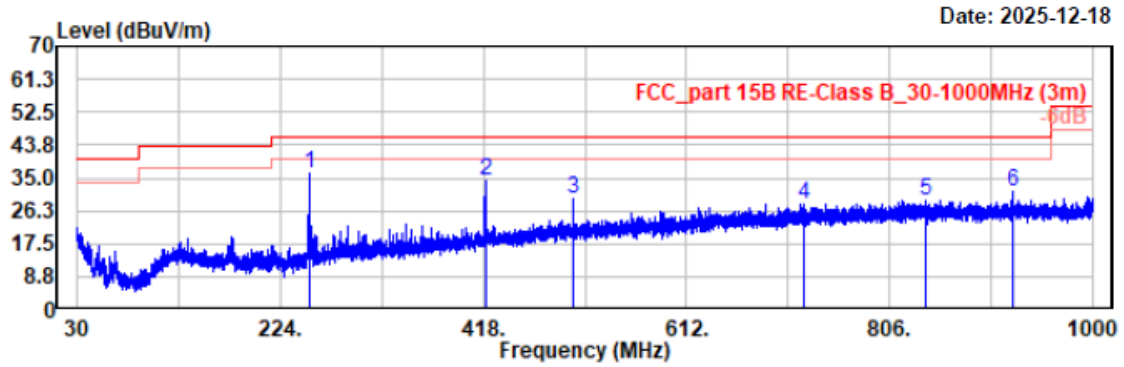


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
35.43	41.98	-8.34	33.64	40.00	6.36	Vertical	QP
46.68	45.50	-16.17	29.33	40.00	10.67	Vertical	QP
504.04	40.13	-3.38	36.75	46.00	9.25	Vertical	QP
668.55	28.16	-0.66	27.50	46.00	18.50	Vertical	Peak
839.37	27.31	1.80	29.11	46.00	16.89	Vertical	Peak
917.55	26.51	2.71	29.22	46.00	16.78	Vertical	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(136.0125MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

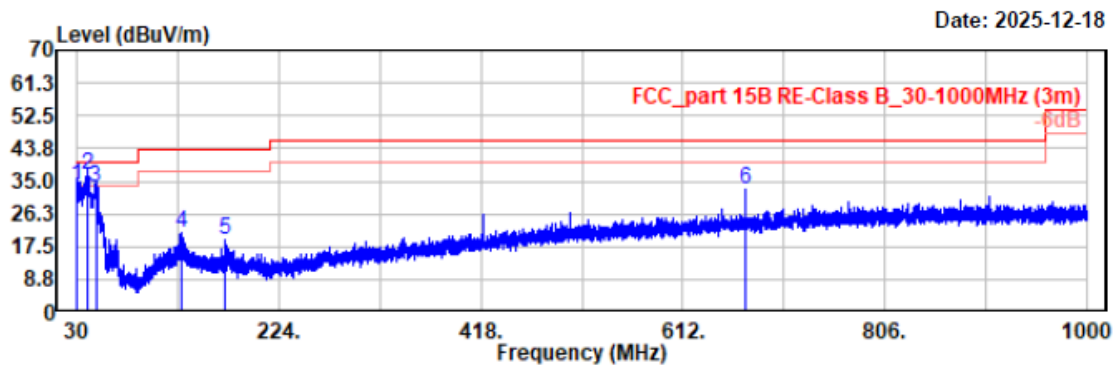


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
252.13	47.37	-11.40	35.97	46.00	10.03	Horizontal	Peak
419.65	39.73	-5.64	34.09	46.00	11.91	Horizontal	Peak
504.04	32.62	-3.38	29.24	46.00	16.76	Horizontal	Peak
724.23	28.17	0.06	28.23	46.00	17.77	Horizontal	Peak
839.85	27.22	1.80	29.02	46.00	16.98	Horizontal	Peak
924.44	28.39	2.83	31.22	46.00	14.78	Horizontal	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(136.0125MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

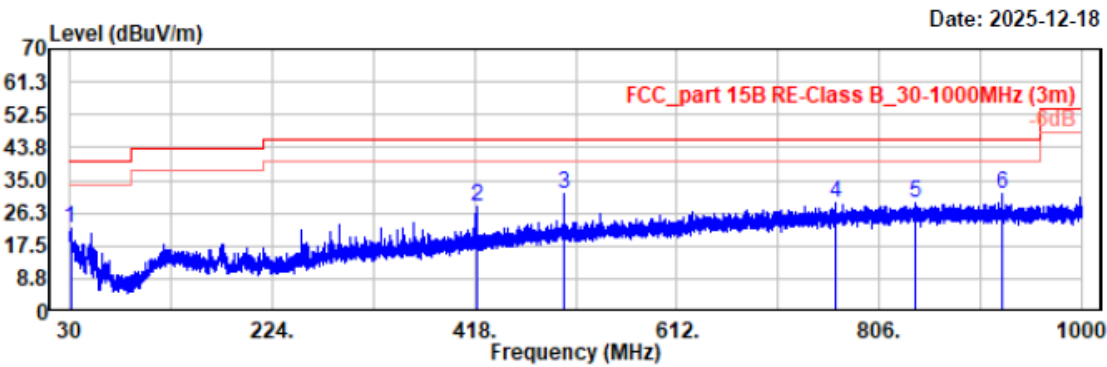


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.49	39.51	-5.73	33.78	40.00	6.22	Vertical	QP
40.19	48.39	-11.84	36.55	40.00	3.45	Vertical	QP
47.95	50.01	-16.82	33.19	40.00	6.81	Vertical	QP
129.72	31.48	-10.08	21.40	43.50	22.10	Vertical	Peak
172.30	31.18	-11.94	19.24	43.50	24.26	Vertical	Peak
672.04	33.65	-0.62	33.03	46.00	12.97	Vertical	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(155MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

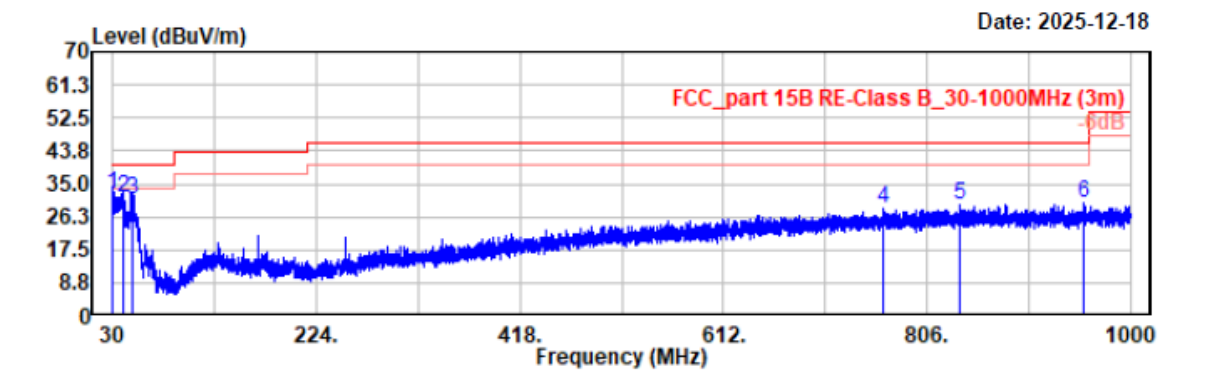


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.58	27.85	-5.74	22.11	40.00	17.89	Horizontal	Peak
420.33	33.79	-5.62	28.17	46.00	17.83	Horizontal	Peak
504.04	34.79	-3.38	31.41	46.00	14.59	Horizontal	Peak
763.71	28.22	0.68	28.90	46.00	17.10	Horizontal	Peak
841.41	27.38	1.81	29.19	46.00	16.81	Horizontal	Peak
924.44	28.34	2.83	31.17	46.00	14.83	Horizontal	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(155MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

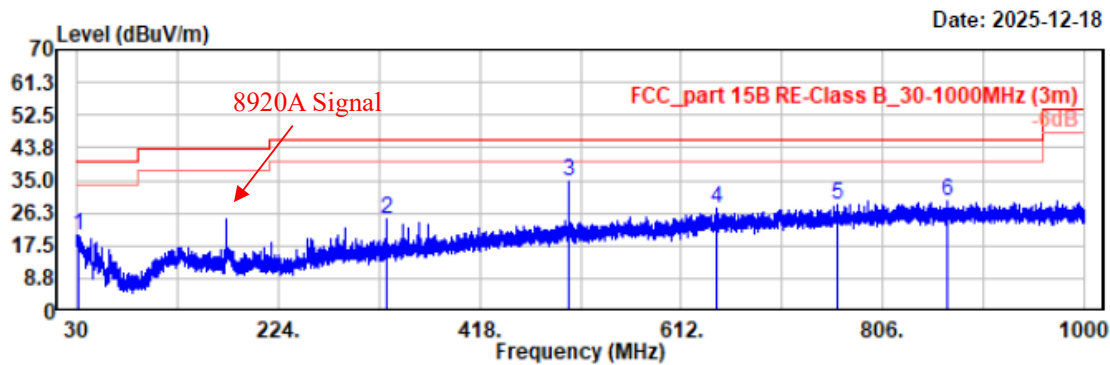


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.19	37.79	-5.65	32.14	40.00	7.86	Vertical	QP
40.57	43.39	-12.06	31.33	40.00	8.67	Vertical	QP
49.50	48.26	-17.29	30.97	40.00	9.03	Vertical	QP
764.29	27.68	0.70	28.38	46.00	17.62	Vertical	Peak
836.94	27.59	1.79	29.38	46.00	16.62	Vertical	Peak
954.51	26.66	3.25	29.91	46.00	16.09	Vertical	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(173.9875MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

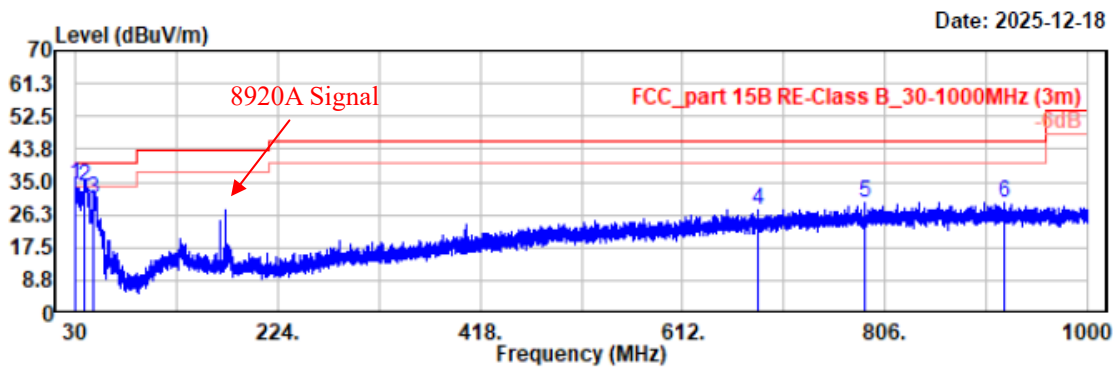


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.97	26.30	-5.84	20.46	40.00	19.54	Horizontal	Peak
327.98	33.13	-8.62	24.51	46.00	21.49	Horizontal	Peak
504.04	38.16	-3.38	34.78	46.00	11.22	Horizontal	Peak
646.53	28.35	-0.98	27.37	46.00	18.63	Horizontal	Peak
761.67	28.09	0.63	28.72	46.00	17.28	Horizontal	Peak
868.76	27.09	2.14	29.23	46.00	16.77	Horizontal	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(173.9875MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3℃/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

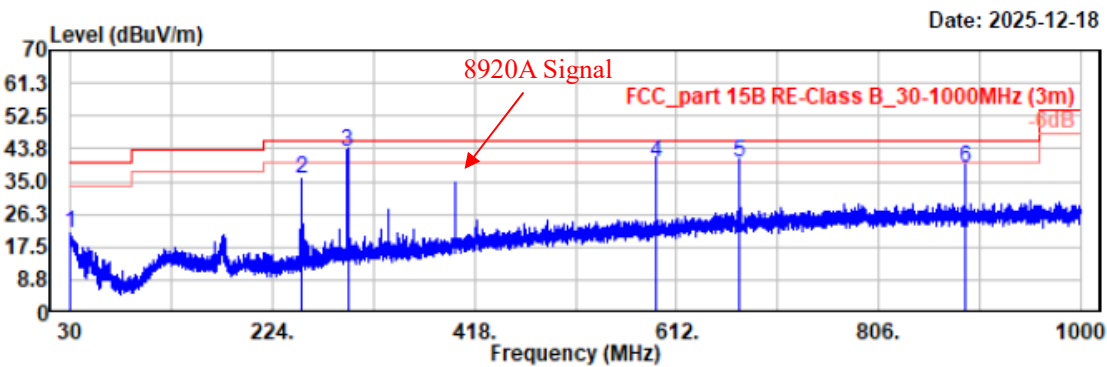


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.29	39.97	-5.68	34.29	40.00	5.71	Vertical	QP
39.02	44.46	-10.87	33.59	40.00	6.41	Vertical	QP
47.85	47.36	-16.77	30.59	40.00	9.41	Vertical	QP
683.59	28.13	-0.54	27.59	46.00	18.41	Vertical	Peak
786.31	28.54	1.09	29.63	46.00	16.37	Vertical	Peak
919.88	26.84	2.72	29.56	46.00	16.44	Vertical	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(400.0125MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3℃/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

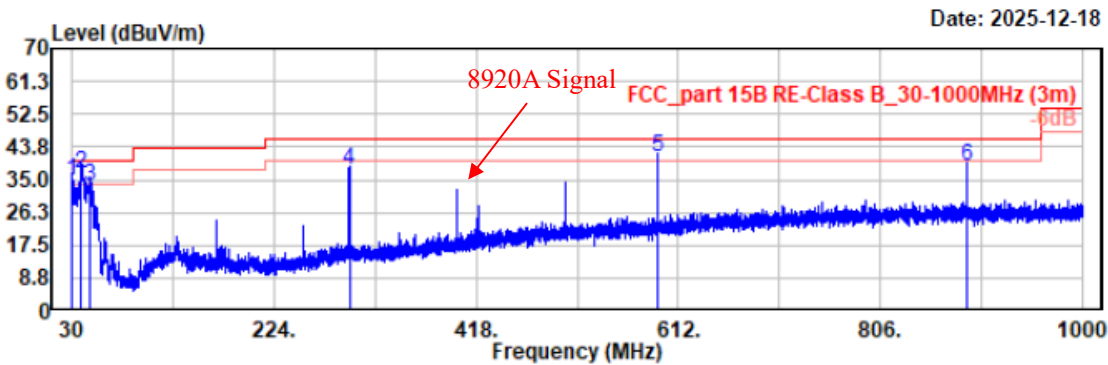


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.10	27.05	-5.63	21.42	40.00	18.58	Horizontal	Peak
252.23	47.07	-11.40	35.67	46.00	10.33	Horizontal	Peak
296.24	52.07	-9.27	42.80	46.00	3.20	Horizontal	QP
592.50	42.77	-2.48	40.29	46.00	5.71	Horizontal	QP
672.04	40.72	-0.62	40.10	46.00	5.90	Horizontal	QP
888.84	36.16	2.48	38.64	46.00	7.36	Horizontal	QP

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(400.0125MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3℃/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

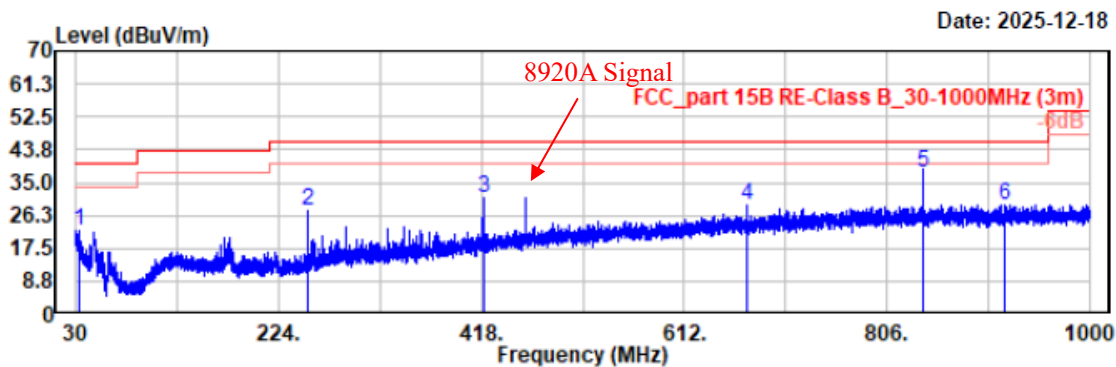


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.10	40.53	-5.63	34.90	40.00	5.10	Vertical	QP
39.02	47.42	-10.87	36.55	40.00	3.45	Vertical	QP
46.98	49.83	-16.34	33.49	40.00	6.51	Vertical	QP
296.27	46.68	-9.26	37.42	46.00	8.58	Vertical	QP
592.50	43.39	-2.48	40.91	46.00	5.09	Vertical	QP
888.84	36.09	2.48	38.57	46.00	7.43	Vertical	QP

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(460MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

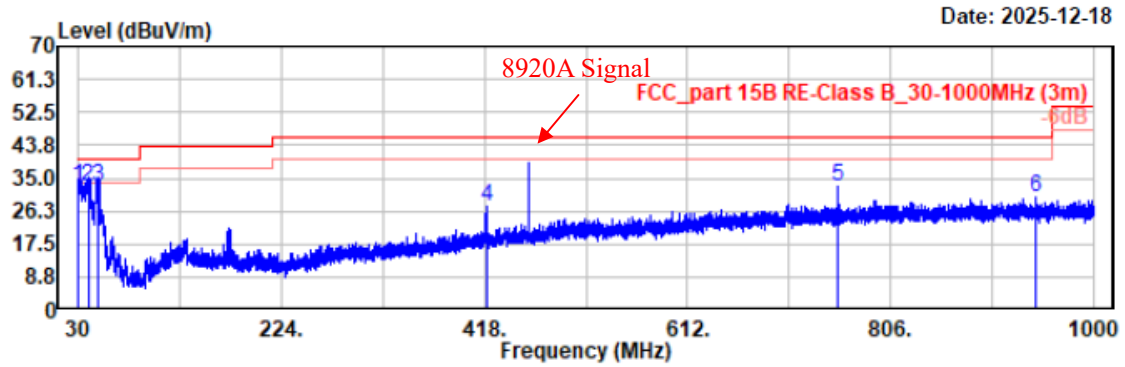


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
32.72	28.90	-6.79	22.11	40.00	17.89	Horizontal	Peak
252.32	39.07	-11.40	27.67	46.00	18.33	Horizontal	Peak
420.13	36.49	-5.63	30.86	46.00	15.14	Horizontal	Peak
672.04	29.47	-0.62	28.85	46.00	17.15	Horizontal	Peak
840.05	35.97	1.80	37.77	46.00	8.23	Horizontal	QP
919.30	26.48	2.72	29.20	46.00	16.80	Horizontal	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(460MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

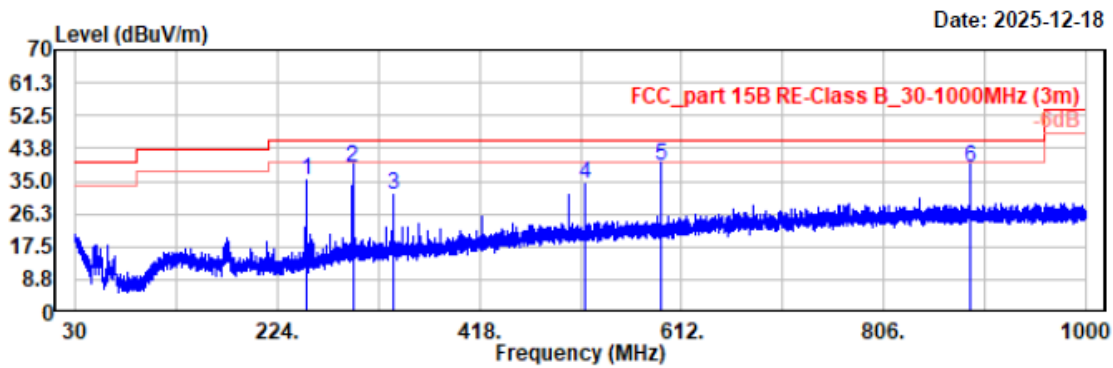


Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.00	38.26	-5.60	32.66	40.00	7.34	Vertical	QP
39.31	44.19	-11.13	33.06	40.00	6.94	Vertical	QP
49.40	50.30	-17.28	33.02	40.00	6.98	Vertical	QP
420.43	33.29	-5.62	27.67	46.00	18.33	Vertical	Peak
756.24	32.20	0.50	32.70	46.00	13.30	Vertical	Peak
945.49	26.65	3.12	29.77	46.00	16.23	Vertical	Peak

Project No.: 2507Z03677E-EM
 Test Mode: Mode 2(519.9875MHz)
 EUT Model: M520D
 Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
 Tested by: Zane Zhang
 Power Source: DC 13.8V from DC source



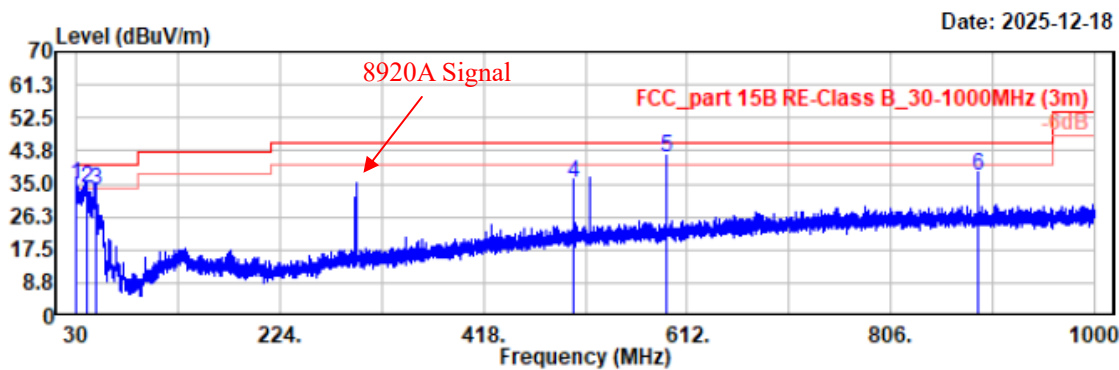
Date: 2025-12-18

Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
251.94	46.88	-11.40	35.48	46.00	10.52	Horizontal	Peak
296.27	47.98	-9.26	38.72	46.00	7.28	Horizontal	QP
335.94	39.89	-8.38	31.51	46.00	14.49	Horizontal	Peak
519.95	37.59	-3.40	34.19	46.00	11.81	Horizontal	Peak
592.70	41.57	-2.48	39.09	46.00	6.91	Horizontal	QP
889.03	36.00	2.48	38.48	46.00	7.52	Horizontal	QP

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(519.9875MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.3°C/48%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source



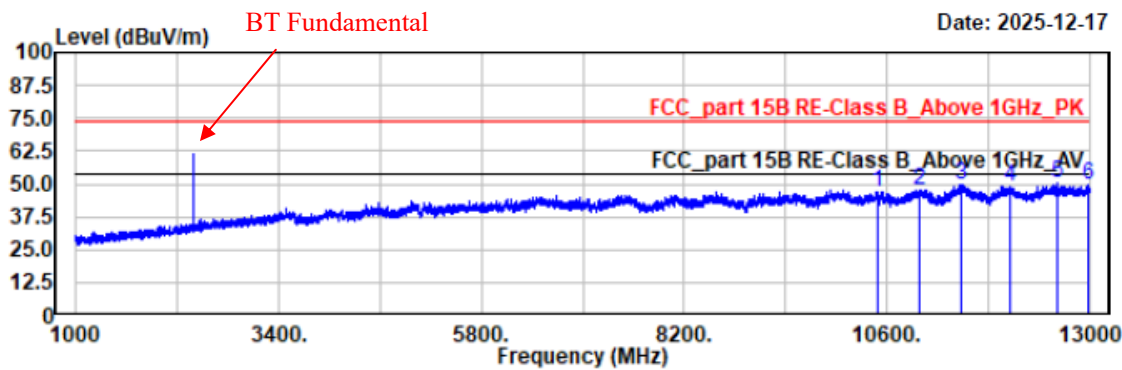
Condition: PK RBW:100kHz VBW:300kHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
30.00	40.47	-5.60	34.87	40.00	5.13	Vertical	QP
39.80	45.32	-11.55	33.77	40.00	6.23	Vertical	QP
48.14	50.20	-16.91	33.29	40.00	6.71	Vertical	QP
504.04	38.54	-3.38	35.16	46.00	10.84	Vertical	QP
592.63	44.48	-2.48	42.00	46.00	4.00	Vertical	QP
889.03	34.86	2.48	37.34	46.00	8.66	Vertical	QP

2) Above 1GHz

Project No.: 2507Z03677E-EM
Test Mode: Mode 1(400-520MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.1°C/55%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

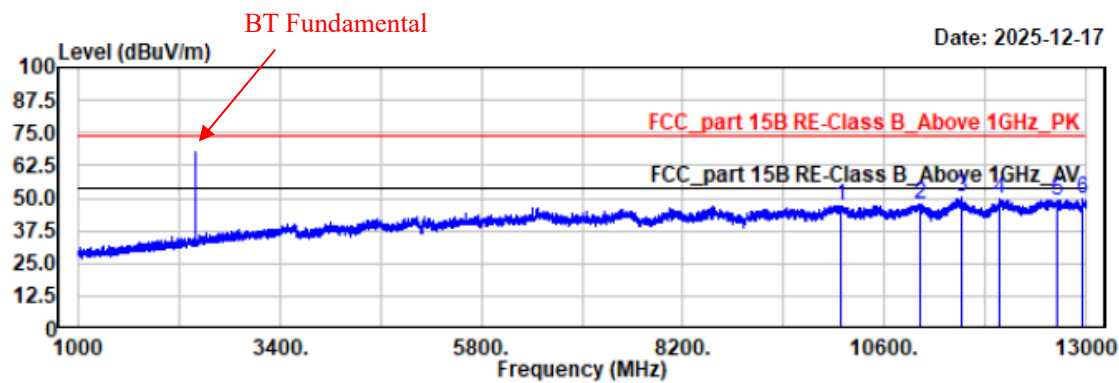


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
10481.20	45.43	1.67	47.10	74.00	26.90	horizontal	Peak
10982.80	45.59	2.12	47.71	74.00	26.29	horizontal	Peak
11470.00	46.65	3.08	49.73	74.00	24.27	horizontal	Peak
12054.40	46.00	3.20	49.20	74.00	24.80	horizontal	Peak
12608.80	46.72	3.63	50.35	74.00	23.65	horizontal	Peak
12973.60	45.35	4.39	49.74	74.00	24.26	horizontal	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 1(400-520MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.1°C/55%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

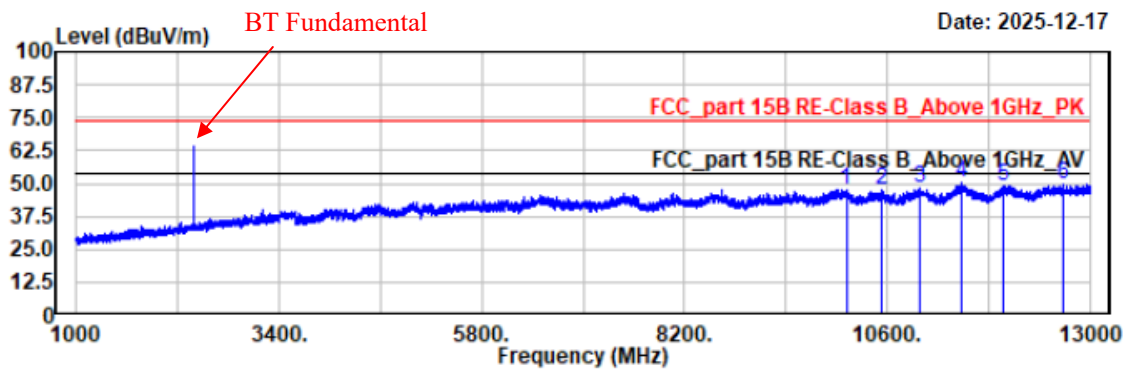


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
10074.40	45.62	1.55	47.17	74.00	26.83	vertical	Peak
11023.60	45.63	2.21	47.84	74.00	26.16	vertical	Peak
11514.40	46.91	3.15	50.06	74.00	23.94	vertical	Peak
11964.40	46.20	3.21	49.41	74.00	24.59	vertical	Peak
12655.60	45.44	3.71	49.15	74.00	24.85	vertical	Peak
12967.60	45.43	4.39	49.82	74.00	24.18	vertical	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(400.0125MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.1°C/55%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source

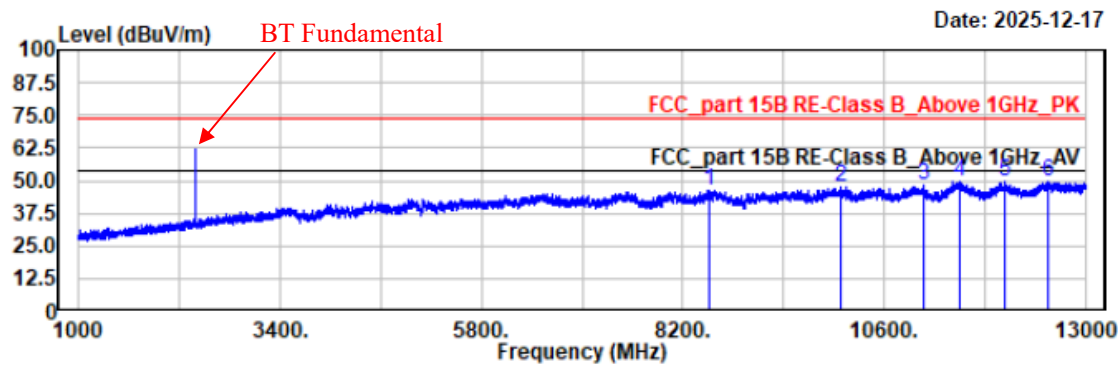


Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
10115.20	45.83	1.55	47.38	74.00	26.62	horizontal	Peak
10532.80	45.86	1.70	47.56	74.00	26.44	horizontal	Peak
10985.20	45.79	2.14	47.93	74.00	26.07	horizontal	Peak
11480.80	47.01	3.11	50.12	74.00	23.88	horizontal	Peak
11978.80	45.77	3.21	48.98	74.00	25.02	horizontal	Peak
12689.20	45.73	3.77	49.50	74.00	24.50	horizontal	Peak

Project No.: 2507Z03677E-EM
Test Mode: Mode 2(400.0125MHz)
EUT Model: M520D
Test distance: 3m

Temp/Humi/ATM: 22.1°C/55%/100.1kPa
Tested by: Zane Zhang
Power Source: DC 13.8V from DC source



Condition: PK RBW:1MHz VBW:3MHz SWT:auto

Freq MHz	Reading dBuV	Factor dB/m	Result dBuV/m	Limit dBuV/m	Margin dB	Polarity	Remark
8518.00	46.29	-0.05	46.24	74.00	27.76	vertical	Peak
10078.00	45.75	1.55	47.30	74.00	26.70	vertical	Peak
11065.60	46.30	2.28	48.58	74.00	25.42	vertical	Peak
11500.00	46.40	3.14	49.54	74.00	24.46	vertical	Peak
12040.00	46.51	3.20	49.71	74.00	24.29	vertical	Peak
12553.60	46.02	3.48	49.50	74.00	24.50	vertical	Peak

FCC §15.121(b) – SCANNING RECEIVERS AND FREQUENCY CONVERTERS USED WITH SCANNING RECEIVERS

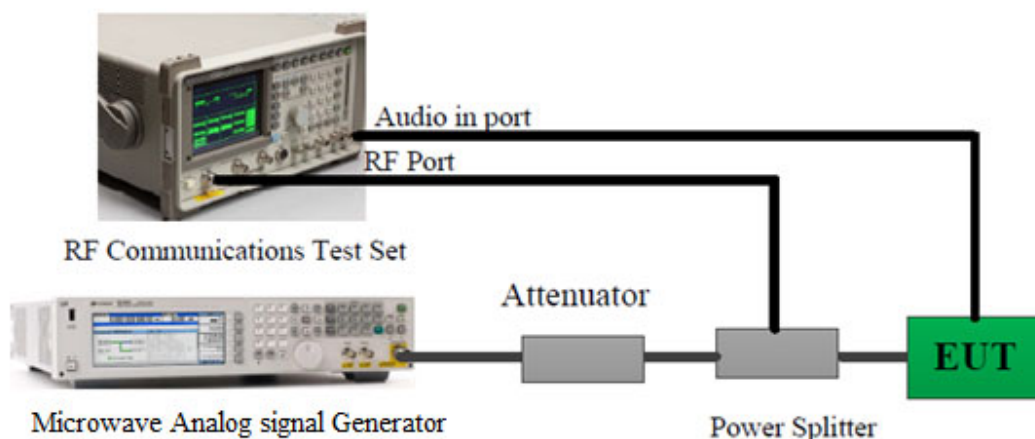
Applicable Standard

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 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.

Test Data

Test Mode:	Scanning	Test Engineer:	Lucas Lin
Test Date:	2026-01-26	Test Result:	Pass

Environment Conditions:

Temperature: (°C)	22.5	Relative Humidity: (%)	49	ATM Pressure: (kPa)	100.1
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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
400-520	824, 836, 849, 869, 881.5, 894	46	>38

FCC §15.111 – ANTENNA POWER CONDUCTION LIMITS FOR RECEIVERS

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.

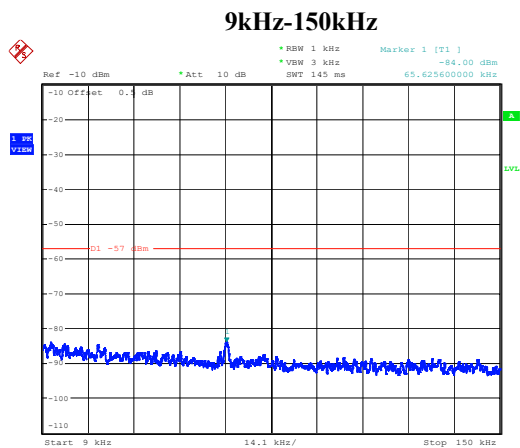
Test Data

Test Mode:	Scanning, Receiving	Test Engineer:	Lucas Lin
Test Date:	2026-01-26	Test Result:	Pass

Environment Conditions:					
Temperature: (°C)	22.5	Relative Humidity: (%)	49	ATM Pressure: (kPa)	100.1

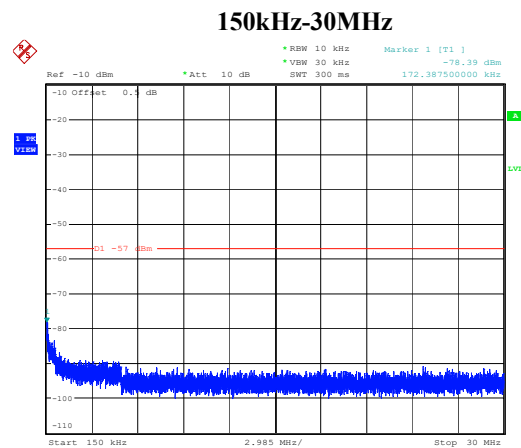
Test Mode: Scanning

Scanning(136-174MHz)



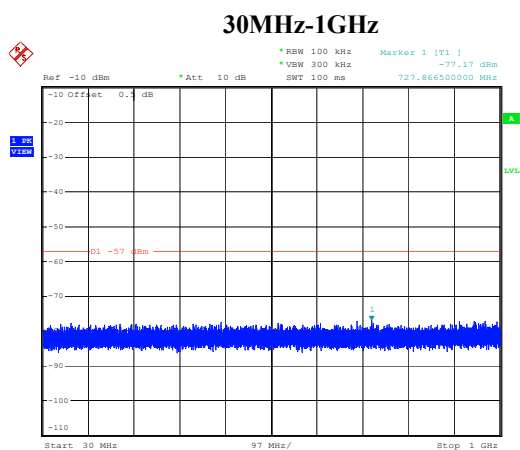
Project No.:2507Z03677E-RF
Date: 26.JAN.2026 15:42:36

Tester:Lucas Lin



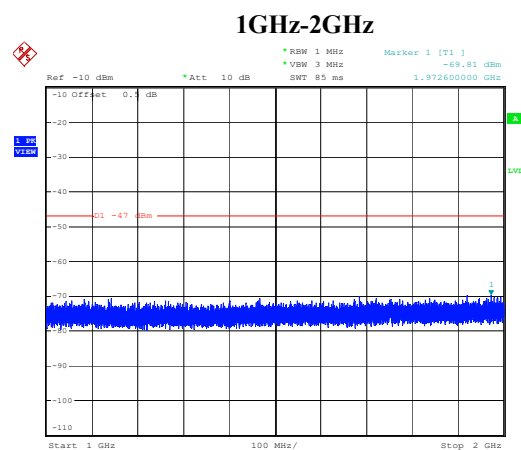
Project No.:2507Z03677E-RF
Date: 26.JAN.2026 15:44:32

Tester:Lucas Lin



Project No.:2507Z03677E-RF
Date: 26.JAN.2026 15:51:04

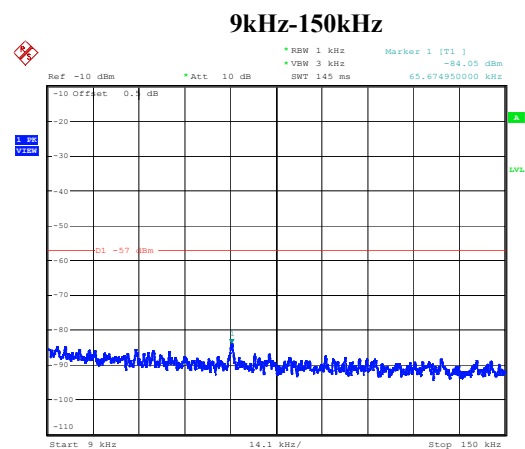
Tester:Lucas Lin



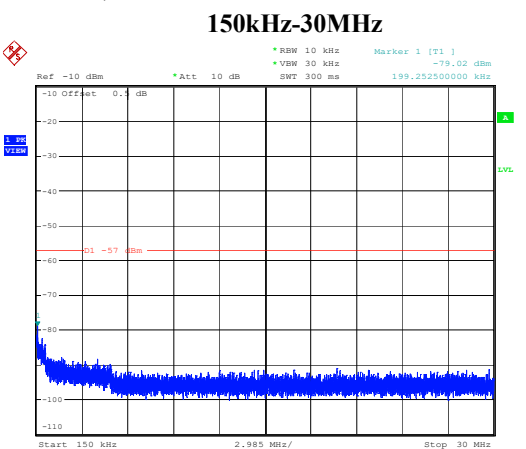
Project No.:2507Z03677E-RF
Date: 26.JAN.2026 15:56:55

Tester:Lucas Lin

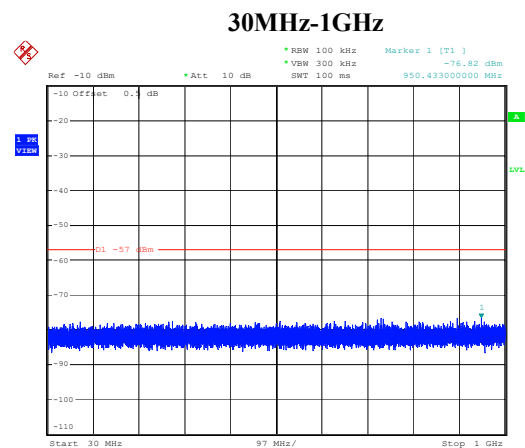
Scanning(400-520MHz)



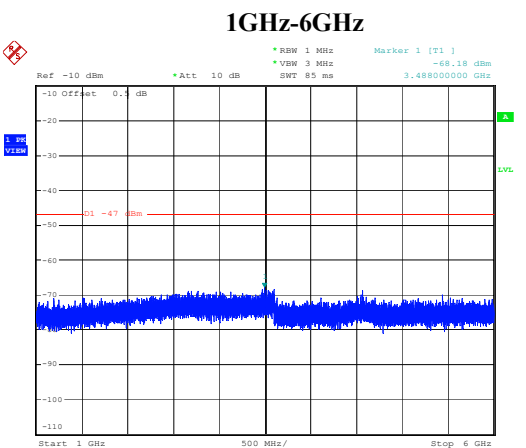
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:43:03



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:43:43



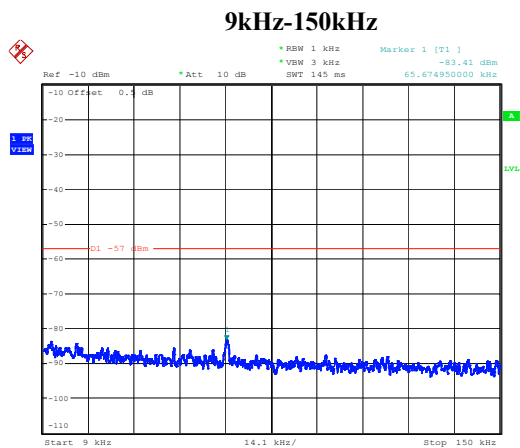
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:51:28



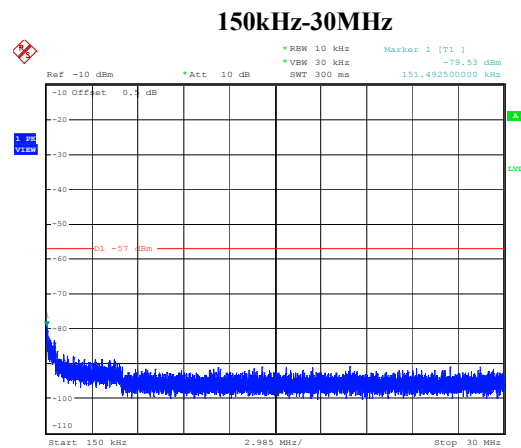
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:53:17

Test Mode: Receiving

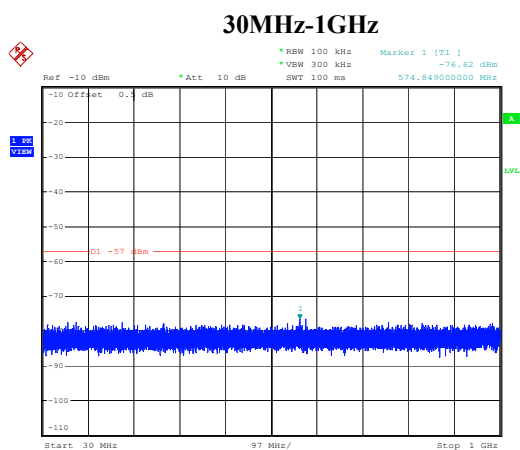
Receiving(136.0125MHz)



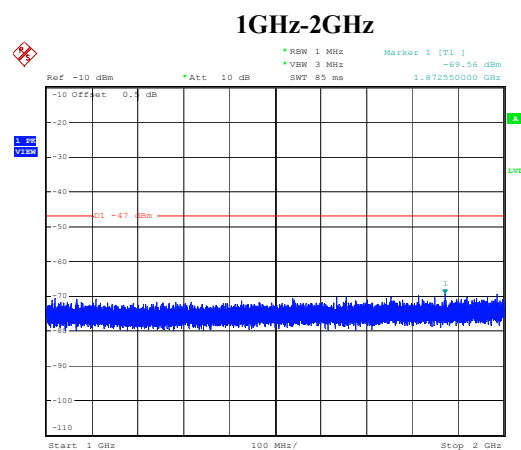
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:39:07



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:47:56

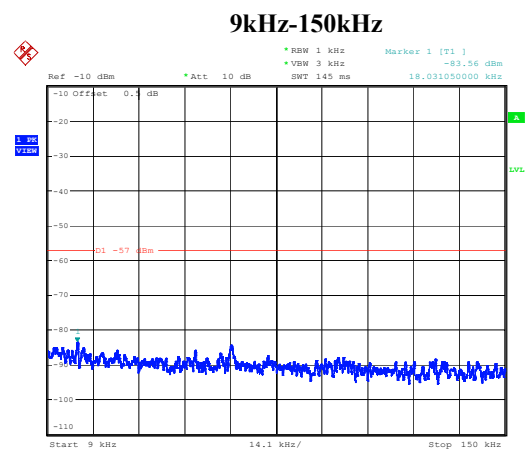


Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:48:24

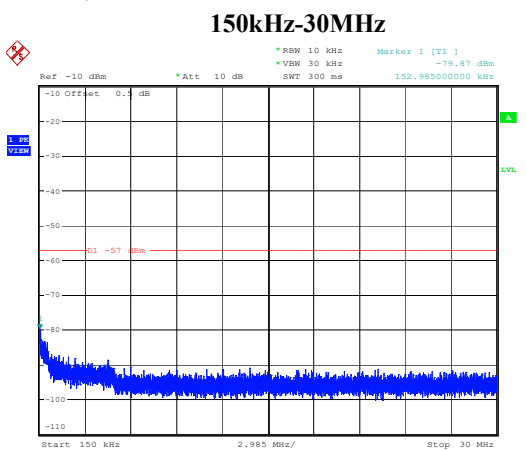


Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:55:41

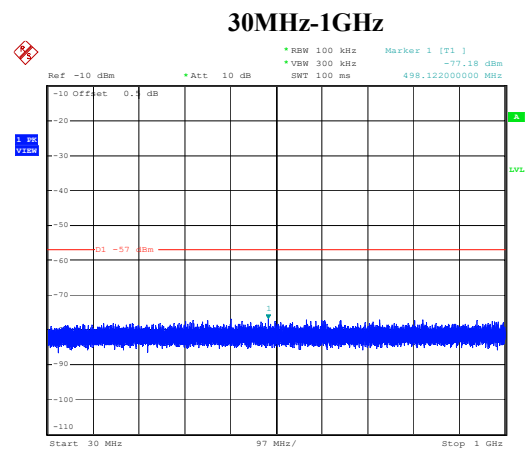
Receiving(155MHz)



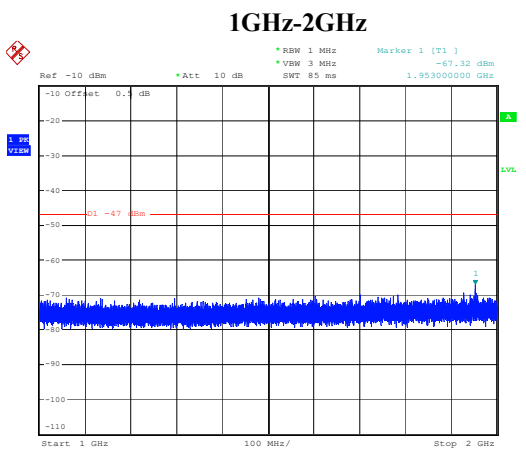
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:40:10



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:47:24

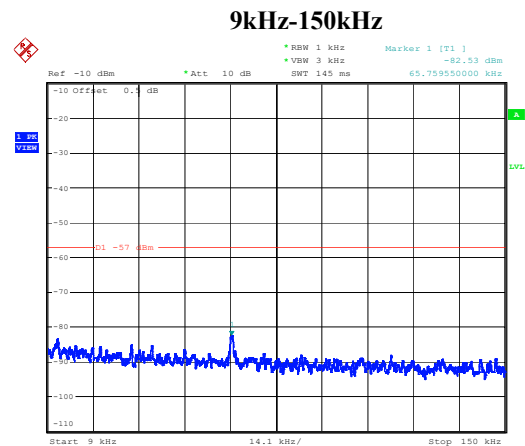


Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:48:50

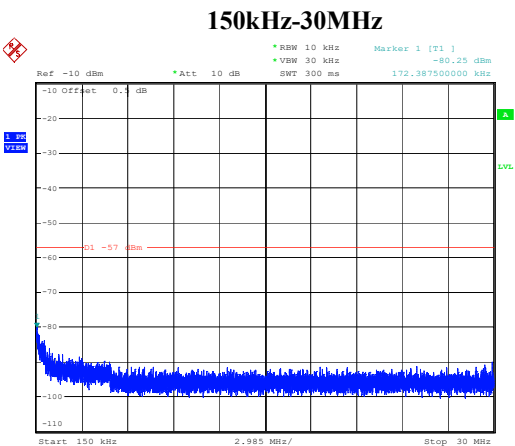


Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:56:08

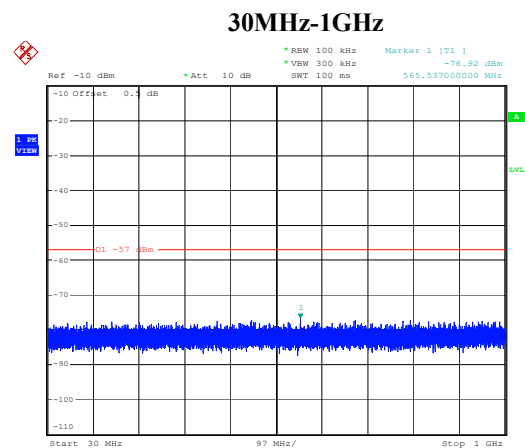
Receiving(173.9875MHz)



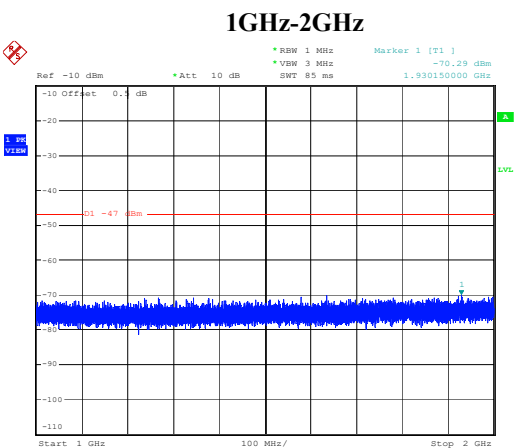
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:40:35



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:46:47

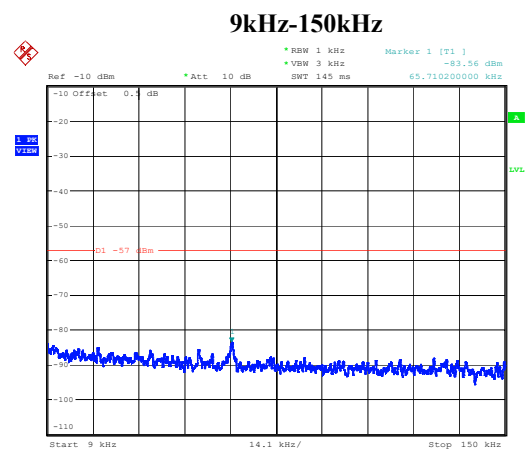


Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:49:12

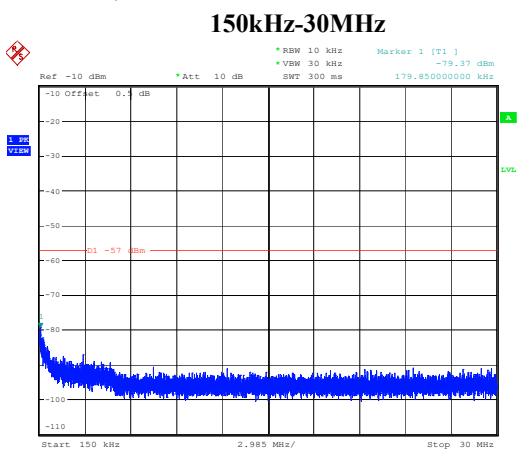


Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:56:31

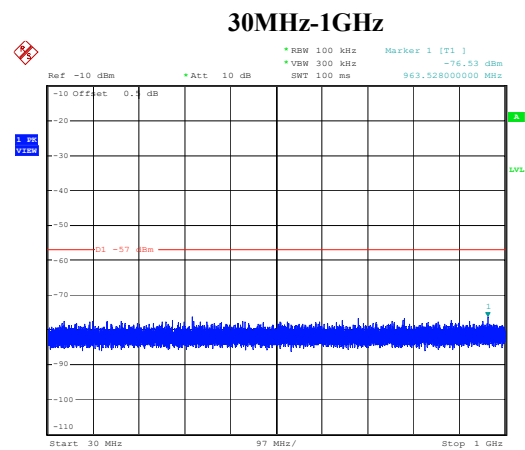
Receiving(400.0125MHz)



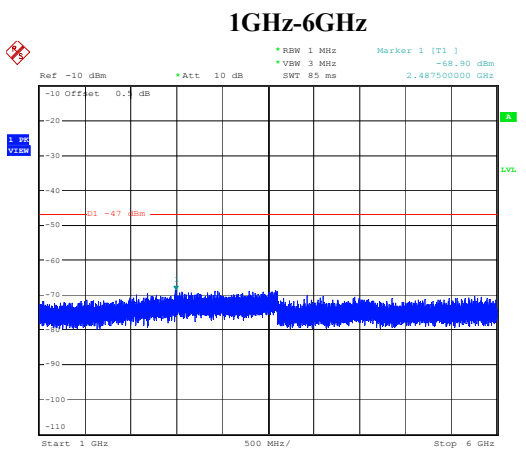
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:41:05



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:46:14



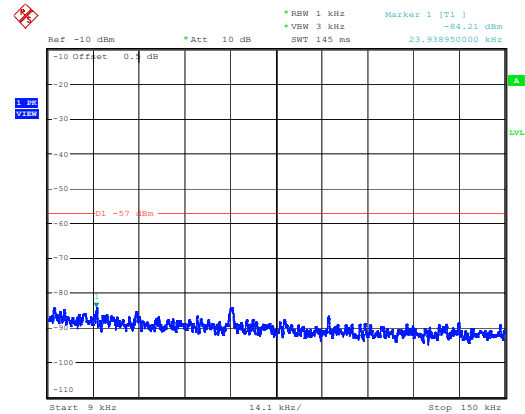
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:49:36



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:55:05

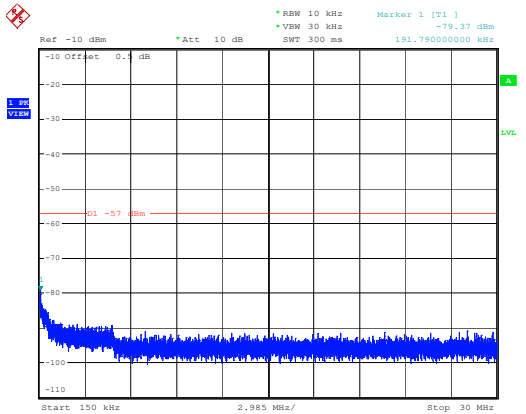
Receiving(460MHz)

9kHz-150kHz



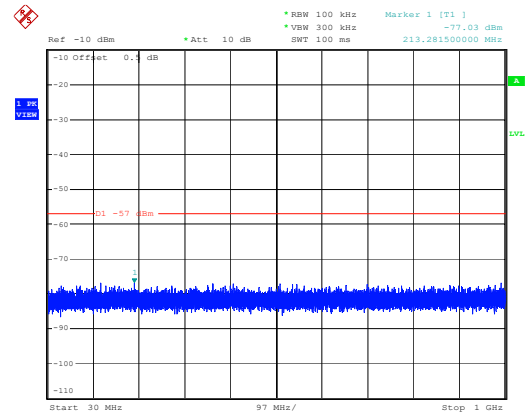
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:41:32

150kHz-30MHz



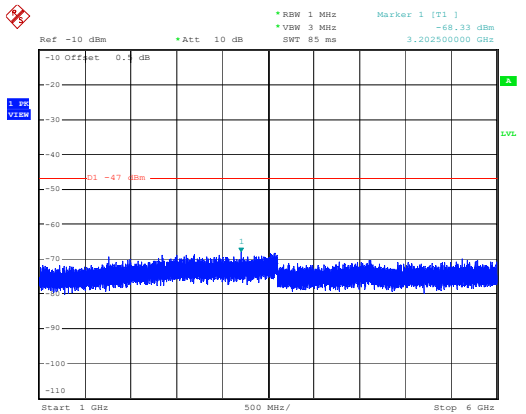
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:45:38

30MHz-1GHz



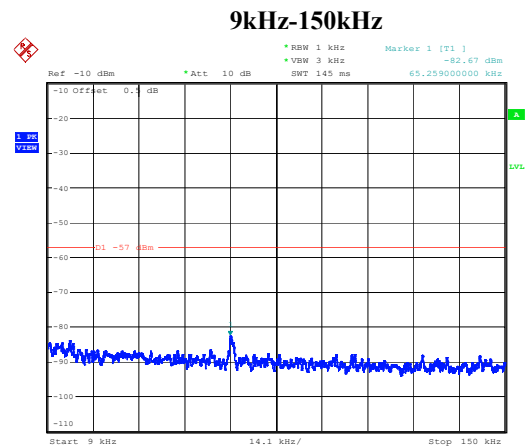
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:50:15

1GHz-6GHz

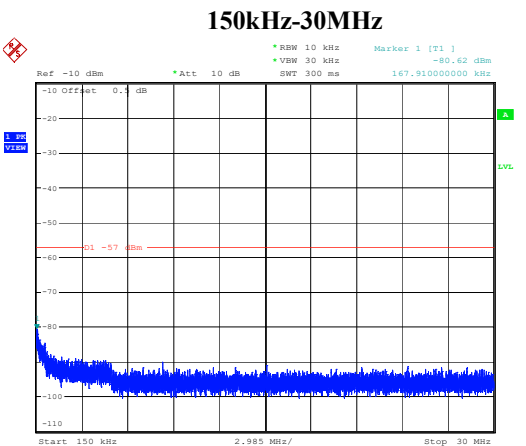


Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:54:41

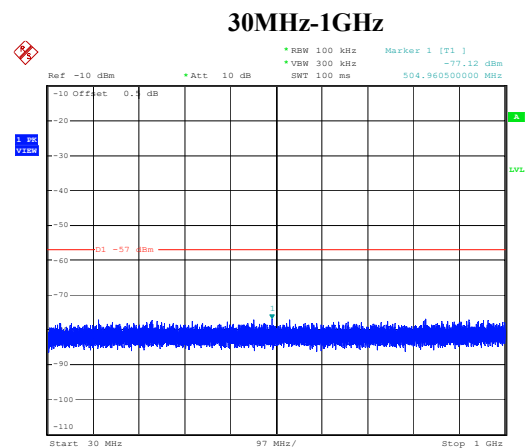
Receiving(519.9875MHz)



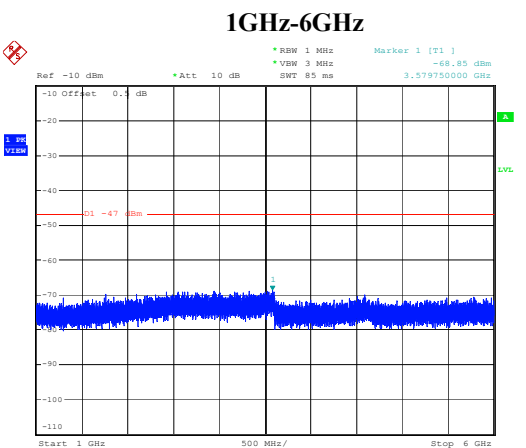
Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:42:01



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:45:05



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:50:40



Project No.:2507Z03677E-RF Tester:Lucas Lin
Date: 26.JAN.2026 15:54:15

EXHIBIT A - EUT PHOTOGRAPHS

Please refer to the attachment 2507Z03677E-EM-EXP EUT EXTERNAL PHOTOGRAPHS and 2507Z03677E-EM-INP EUT INTERNAL PHOTOGRAPHS.

EXHIBIT B – TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2507Z03677E-EM-TSP TEST SETUP PHOTOGRAPHS.

Declarations

1. Bay Area Compliance Laboratories Corp. (Xiamen) is not responsible for authenticity of any information provided by the applicant. Information from the applicant that may affect test results are marked with an asterisk “★”.
2. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.
3. Unless required by the rule provided by the applicant or product regulations, then decision rule in this report did not consider the uncertainty.
4. The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor $k=2$ with the 95% confidence interval.
5. This report cannot be reproduced except in full, without prior written approval of Bay Area Compliance Laboratories Corp. (Xiamen).
6. This report is valid only with a valid digital signature. The digital signature may be available only under the adobe software above version 7.0.

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