

# TEST REPORT

Applicant Name : Qixiang Electron Science& Technology Co., Ltd  
 Address : Qixiang Building, Tangxi Industrial Zone, Luojiang,  
 Quanzhou, Fujian, 362011 China  
 Report Number : XMTN1220117-02447E-EM  
 FCC ID: T4K-AT5555NII

**Test Standard (s)**  
 FCC PART 15B

## Sample Description

Product Type: 10 METER AMATEUR RADIO  
 Model No.: AT-5555N II  
 Multiple Model: AT-5555N, AT-5555N PLUS, CRT SS7900V, DYNASCAN 10M  
 Trade Mark: N/A  
 Date Received: 2022-01-18  
 Date of Test: 2022-03-08 to 2022-04-25  
 Report Date: 2022-05-10

Test Result:	Pass*
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\* In the configuration tested, the EUT complied with the standards above.

**Prepared and Checked By:**



Amy Cao  
 EMC Engineer

**Approved By:**



Candy Li  
 EMC Engineer

**Note:** This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

Shenzhen Accurate Technology Co., Ltd. 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 an asterisk '\*'. Customer model name, addresses, names, trademarks etc. are not considered data.

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## GENERAL INFORMATION

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

Product	10 METER AMATEUR RADIO
Tested Model	AT-5555N II
Multiple Model	AT-5555N , AT-5555N PLUS, CRT SS7900V, DYNASCAN 10M
Model Difference	Please refer to the DoS letter
Frequency Range	RX: 28-29.7MHz (Receiver and Scan) NOAA: 162.400-162.550MHz(Receiver)
Modulation	FM/AM/USB/LSB
Highest Operation Frequency	162.55 MHz (provided by the applicant.)
Voltage Range	DC 13.8V from Car battery
Sample number	XMTN1220117-02447E-EM-S1 (Assigned by ATC)
Sample/EUT Status	Good condition

### Objective

This report is in accordance with Part 2-Subpart J, and Part 15-Subparts A and B of the Federal Communication Commission's rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 15, Class B device.

### Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

## Measurement Uncertainty

Parameter		Uncertainty
RF Frequency		$0.082 \times 10^{-7}$
RF output power, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
Emissions, Radiated	9kHz - 30MHz	2.66dB
	30MHz - 1GHz	4.28dB
	1GHz - 18GHz	4.98dB
Temperature		1°C
Humidity		6%
Supply voltages		0.4%

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

## Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189.

Accredited by American Association for Laboratory Accreditation (A2LA). The Certificate Number is 4297.01

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0016. The Registration Number is 5077A.

## SYSTEM TEST CONFIGURATION

### Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

Test mode 1: Receiver at FM 28MHz  
 Test mode 2: Receiver at FM 29.7MHz  
 Test mode 3: Receiver at AM 28MHz  
 Test mode 4: Receiver at AM 29.7MHz  
 Test mode 5: Receiver at USB 28MHz  
 Test mode 6: Receiver at USB 29.7MHz  
 Test mode 7: Receiver at LSB 28MHz  
 Test mode 8: Receiver at LSB 29.7MHz  
 Test mode 9: Scan (Receiver)  
 Test mode 10: Receiver at NOAA 162.475MHz

28-29.7MHz Receiver and Scan Channel list:

Band A	Band B	Band C	Band D	Band E	Band F	Band G	Band H	Band I
Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (MHz)
<b>28.000</b>	28.200	28.400	28.600	28.800	29.000	29.200	29.400	29.600
28.005	28.205	28.405	28.605	28.805	29.005	29.205	29.405	29.605
28.010	28.210	28.410	28.610	28.810	29.010	29.210	29.410	29.610
...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...
28.080	28.280	28.480	28.680	28.880	29.080	29.280	29.480	29.680
28.085	28.285	28.485	28.685	28.885	29.085	29.285	29.485	29.685
28.090	28.290	28.490	28.690	28.890	29.090	29.290	29.490	29.690
28.095	28.295	28.495	28.695	28.895	29.095	29.295	29.495	29.695
28.100	28.300	28.500	28.700	28.900	29.100	29.300	29.500	<b>29.700</b>
28.105	28.305	28.505	28.705	28.905	29.105	29.305	29.505	/
...	...	...	...	...	...	...	...	/
...	...	...	...	...	...	...	...	/
28.190	28.390	28.590	28.790	28.990	29.190	29.390	29.590	/
28.195	28.395	28.595	28.795	28.995	29.195	29.395	29.595	/

NOAA Channel list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	162.550	5	162.450
2	162.400	6	162.500
3	<b>162.475</b>	7	162.525
4	162.425	/	/

### EUT Exercise Software

No exercise software.

### Special Accessories

No special accessory was used.

### Equipment Modifications

No modification was made to the EUT tested.

### Support Equipment List and Details

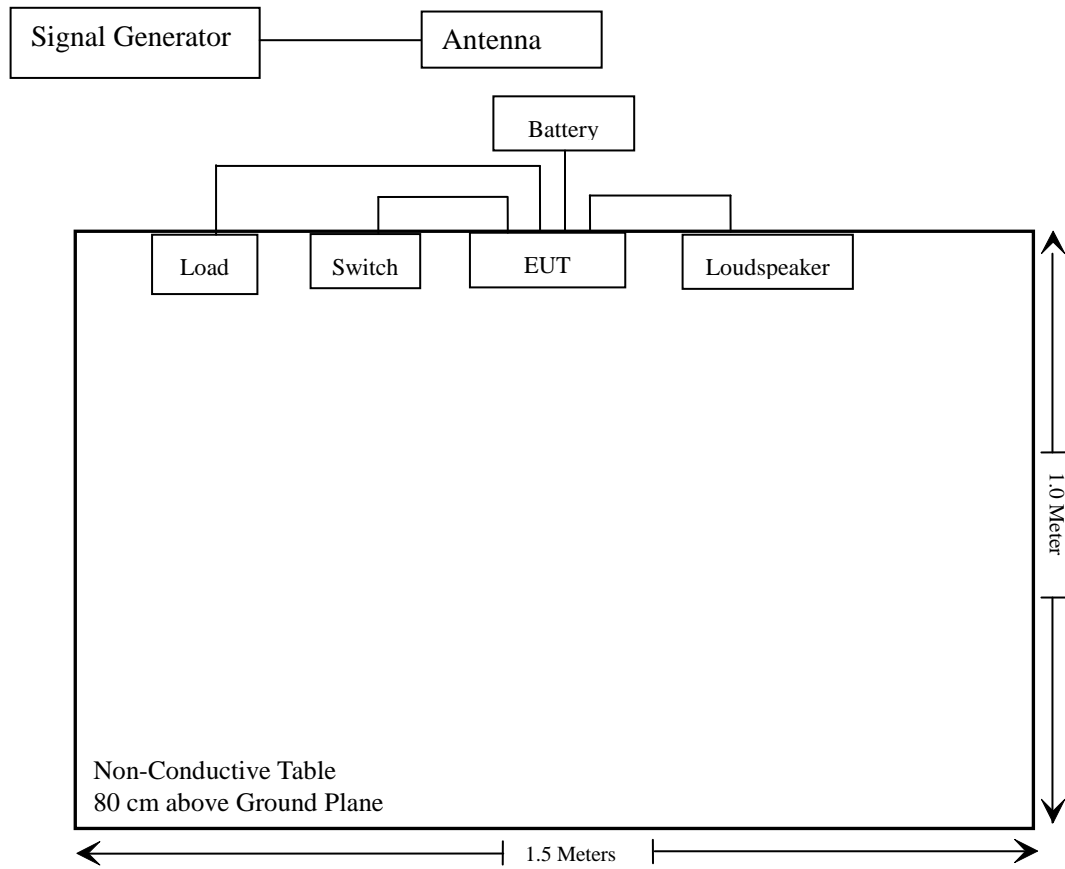
Manufacturer	Description	Model	Serial Number
AGILENT	Vector Signal Generator	N5182A	MY50143401
Unknown	Switch	Unknown	Unknown
Unknown	Speaker	Unknown	Unknown
CHUANXI	Battery	6-QW-60	Unknown
Unknown	Load(250W)	Unknown	Unknown

### External I/O Cable

Cable Description	Length (m)	From Port	To Port
Unshielded Detachable DC Power Cable	0.8	Battery	EUT
Unshielded Detachable Speaker Audio Cable	1.1	Speaker	EUT
Unshielded Detachable Switch Cable	0.3	Switch	EUT
Unshielded Detachable Load RF Cable	0.5	Load	EUT

### Block Diagram of Radiated Test Setup

For Radiated emission:



**SUMMARY OF TEST RESULTS**

<b>FCC Rules</b>	<b>Description of Test</b>	<b>Results</b>
§15.107	Conducted Emissions	Not Applicable
§15.109	Radiated Emissions	Compliant
§15.111	Antenna Conducted Power for receivers	Compliant

Not Applicable: The product is powered by Car battery only.



**TEST EQUIPMENT LIST**

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Radiated Emissions Test					
Rohde & Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
Rohde & Schwarz	Spectrum Analyzer	FSV40	101949	2021/12/13	2022/12/12
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2021/11/09	2022/11/08
SONOMA INSTRUMENT	Amplifier	310 N	186131	2021/11/11	2022/11/10
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
AGILENT	Vector Signal Generator	N5182A	MY50143401	2021/12/13	2022/12/12
Unknown	RF Coaxial Cable	No.10	N050	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.11	N1000	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.14	N800	2021/12/14	2022/12/13
Aeroflex/Weinschel	30dB Attenuator (Input 250W/Output 50W)	58-30-33	PS467	2021/12/14	2022/12/13
Radiated Emission Test Software: e3 19821b(V9)					
RF Conducted Test					
Rohde & Schwarz	Spectrum Analyzer	FSV-40	101495	2021/12/13	2022/12/12
AGILENT	Vector Signal Generator	N5182A	MY50143401	2021/12/13	2022/12/12

\* **Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

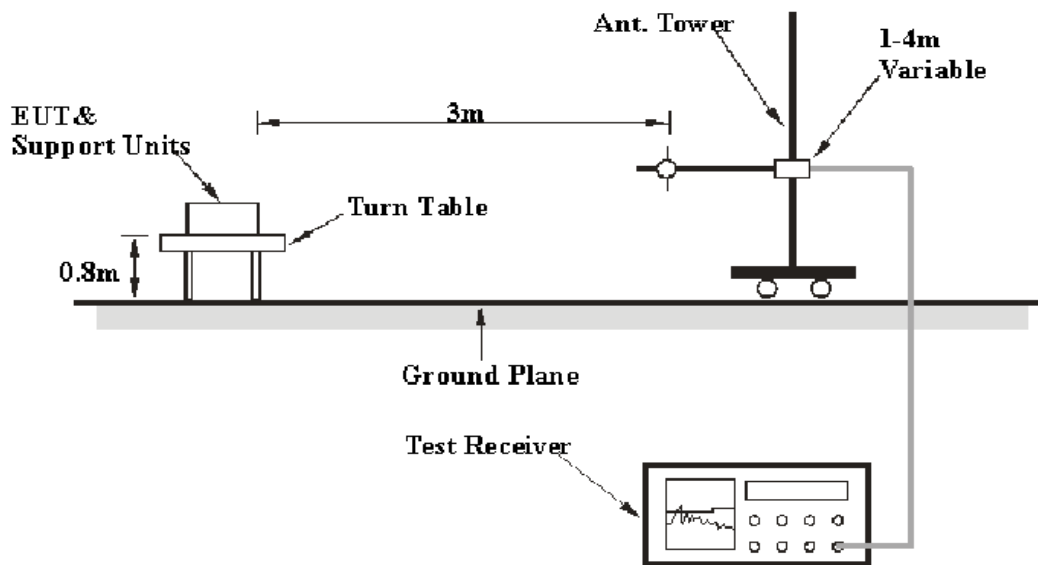
## FCC §15.109 - RADIATED EMISSIONS

### Applicable Standard

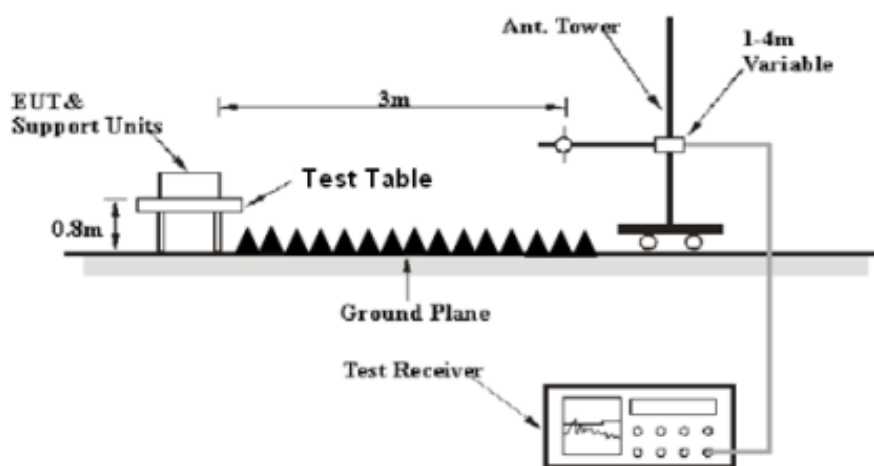
FCC §15.109

### EUT Setup

Below 1GHz:



Above 1GHz:



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 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	Detector
30MHz – 1000 MHz	120 kHz	300 kHz	120kHz	QP
Above 1 GHz	1MHz	3 MHz	/	Peak
	1MHz	3 MHz	1MHz	AV

### Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

All data was recorded in the Quasi-peak detector mode from 30 MHz to 1 GHz, Peak and average detection mode above 1 GHz.

If the maximized peak measured value complies with the limit, then it is unnecessary to perform QP/Average measurement.

### Factor & Over Limit Calculation – For Below 1GHz

The Factor 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:

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

The “**Over Limit**” 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:

$$\begin{aligned} \text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Reading} + \text{Factor} \end{aligned}$$

**Test Data****Environmental Conditions**

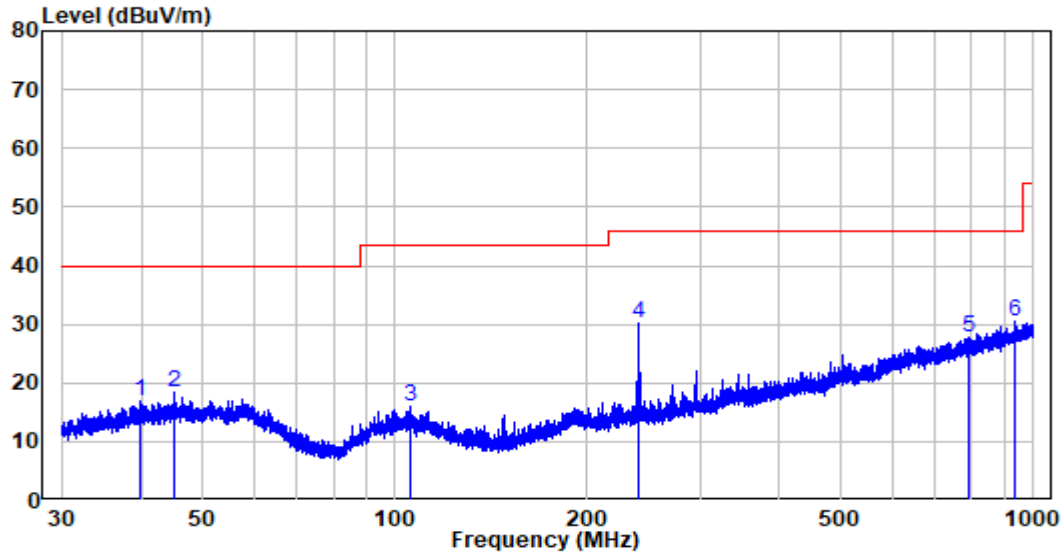
<b>Temperature:</b>	28°C
<b>Relative Humidity:</b>	55 %
<b>ATM Pressure:</b>	101.0 kPa

*The testing was performed by Nick fang on 2022-04-25 and Level on 2022-04-07.*

**30MHz-1GHz:**

**Test mode 1:**

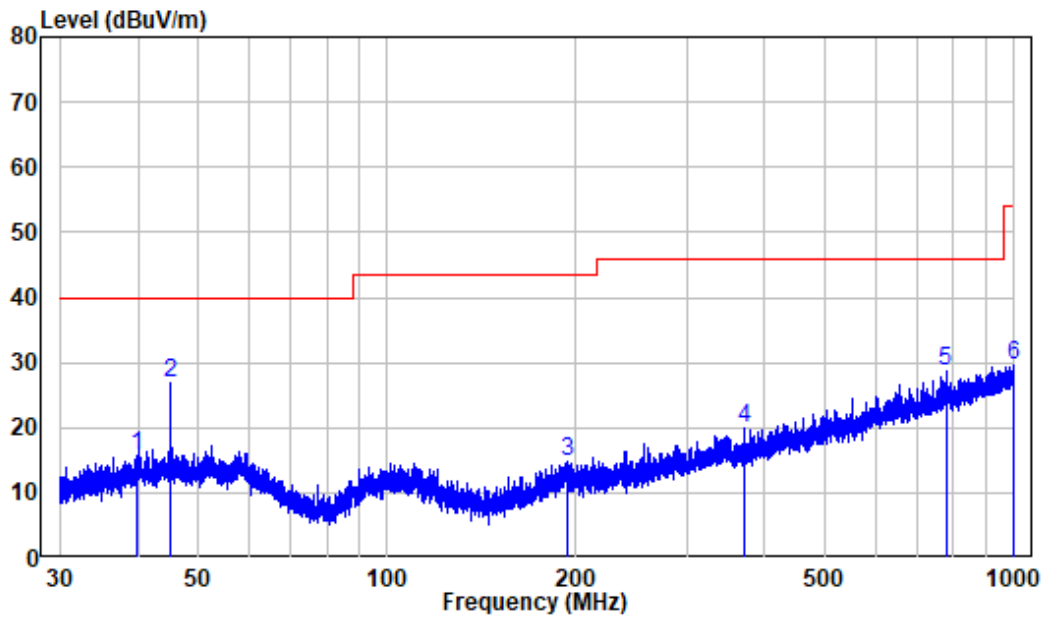
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at FM 28MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.977	-10.34	27.23	16.89	40.00	-23.11	Peak
2	45.078	-9.94	28.35	18.41	40.00	-21.59	Peak
3	105.595	-11.89	27.74	15.85	43.50	-27.65	Peak
4	239.987	-10.91	41.12	30.21	46.00	-15.79	Peak
5	793.744	-0.21	28.00	27.79	46.00	-18.21	Peak
6	938.421	1.75	28.67	30.42	46.00	-15.58	Peak

**Vertical**

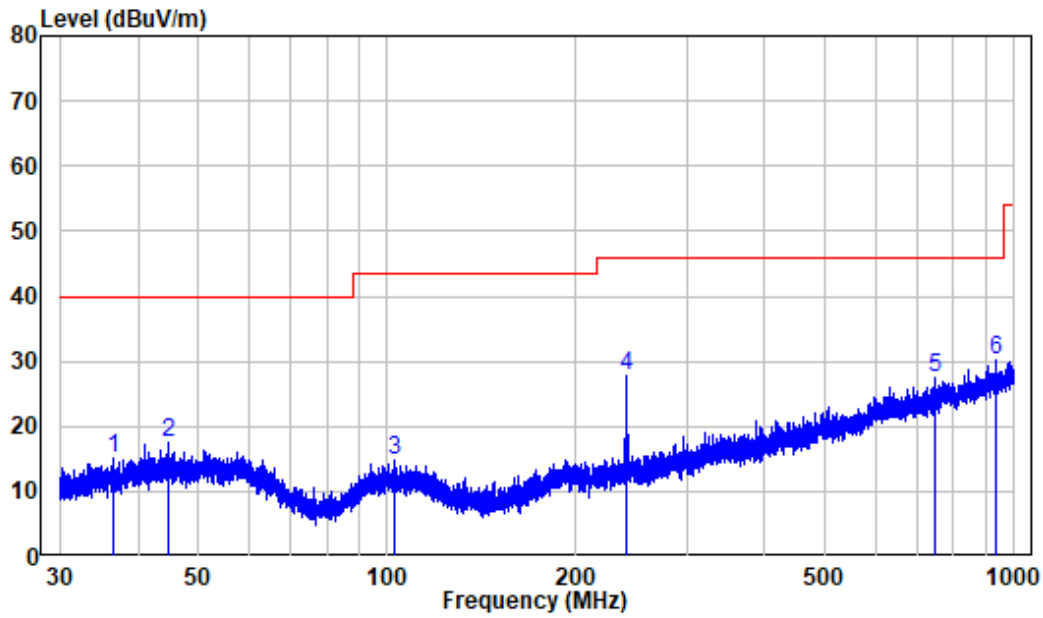


Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at FM 28MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.907	-10.36	26.08	15.72	40.00	-24.28	Peak
2	45.058	-9.94	36.74	26.80	40.00	-13.20	Peak
3	193.688	-11.30	26.00	14.70	43.50	-28.80	Peak
4	370.215	-7.31	27.09	19.78	46.00	-26.22	Peak
5	777.900	0.07	28.61	28.68	46.00	-17.32	Peak
6	998.248	2.98	26.66	29.64	54.00	-24.36	Peak

**Test mode 2:**

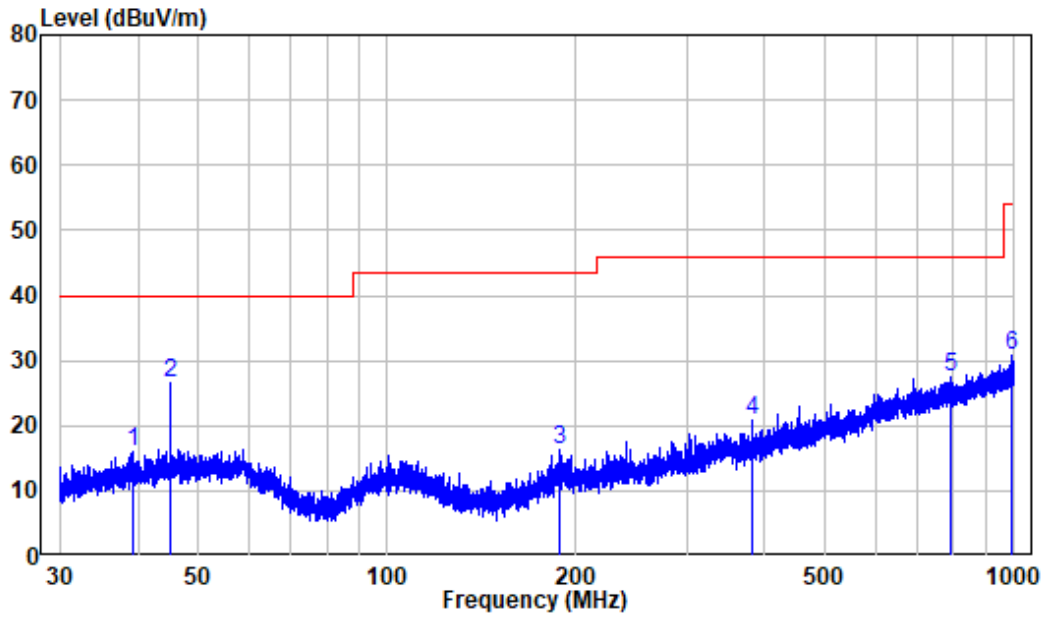
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at FM 29.7MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	36.637	-11.07	26.22	15.15	40.00	-24.85	Peak
2	44.861	-9.93	27.36	17.43	40.00	-22.57	Peak
3	102.854	-11.65	26.55	14.90	43.50	-28.60	Peak
4	239.987	-10.91	38.67	27.76	46.00	-18.24	Peak
5	747.483	-0.87	28.21	27.34	46.00	-18.66	Peak
6	932.680	1.77	28.35	30.12	46.00	-15.88	Peak

**Vertical**



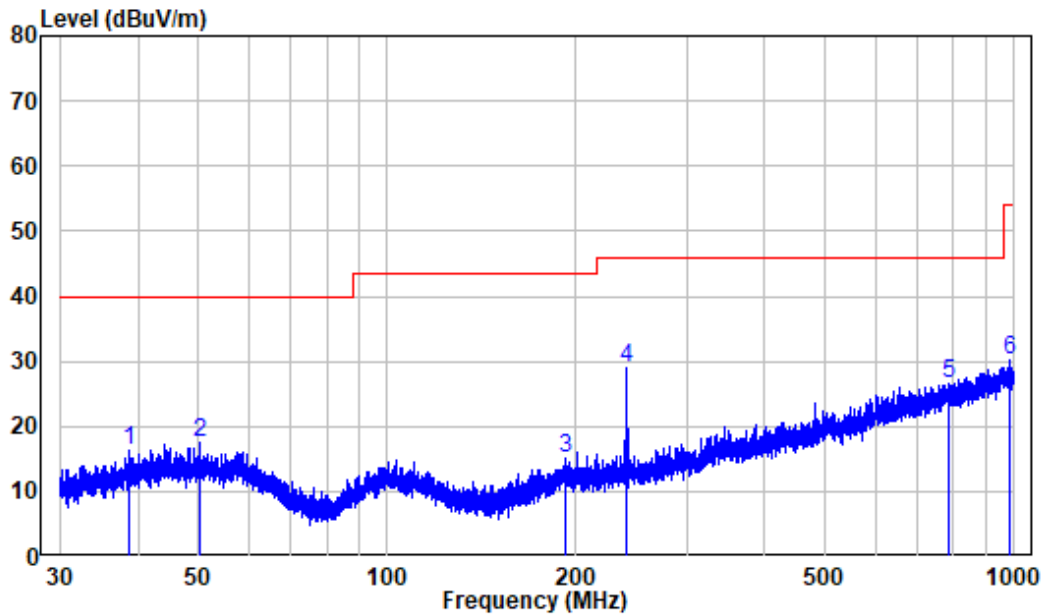
Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at FM 29.7MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.299	-10.50	26.65	16.15	40.00	-23.85	Peak
2	45.039	-9.94	36.52	26.58	40.00	-13.42	Peak
3	188.660	-11.74	28.02	16.28	43.50	-27.22	Peak
4	382.756	-7.09	27.90	20.81	46.00	-25.19	Peak
5	791.659	-0.16	27.54	27.38	46.00	-18.62	Peak
6	989.102	2.80	28.03	30.83	54.00	-23.17	Peak



**Test mode 3:**

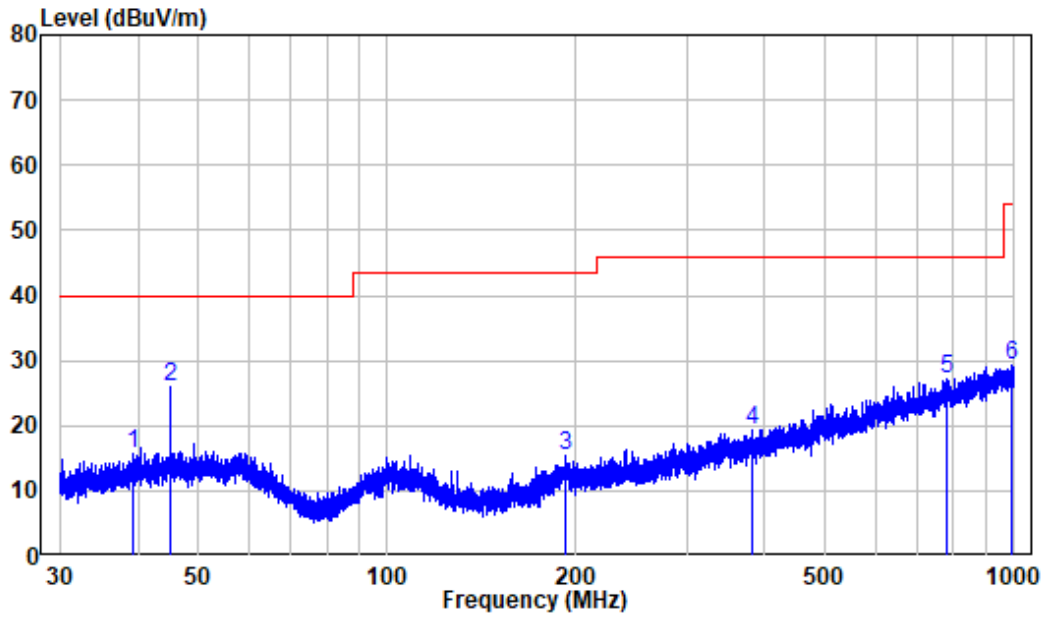
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at AM 28MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	38.616	-10.68	26.89	16.21	40.00	-23.79	Peak
2	50.321	-9.92	27.35	17.43	40.00	-22.57	Peak
3	191.997	-11.25	26.24	14.99	43.50	-28.51	Peak
4	240.093	-10.90	40.02	29.12	46.00	-16.88	Peak
5	786.816	-0.07	26.58	26.51	46.00	-19.49	Peak
6	981.329	2.49	27.65	30.14	54.00	-23.86	Peak

**Vertical**

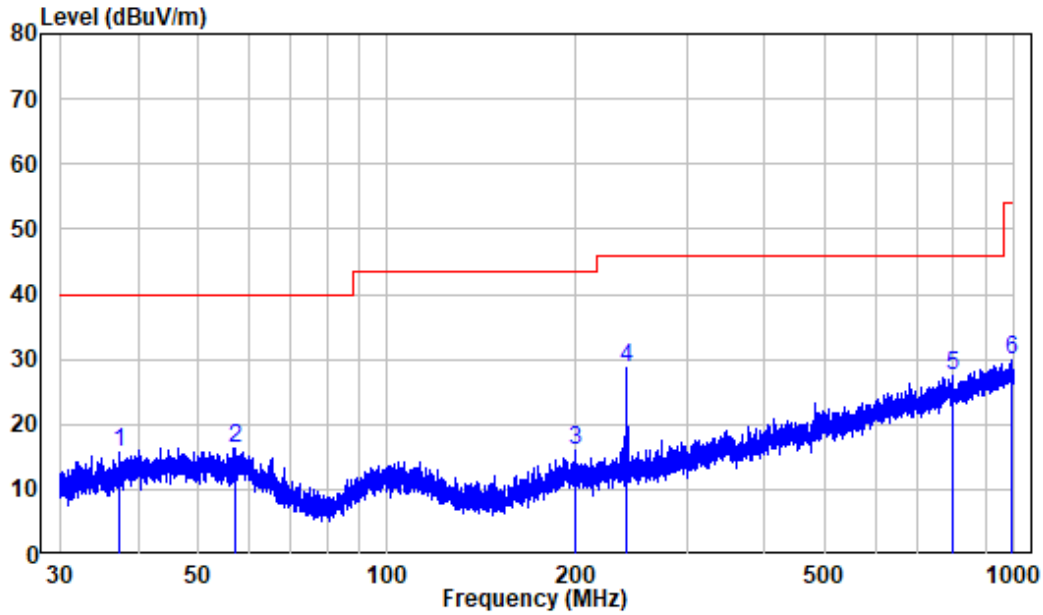


Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at AM 28MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.282	-10.50	26.09	15.59	40.00	-24.41	Peak
2	45.058	-9.94	36.03	26.09	40.00	-13.91	Peak
3	192.672	-11.27	26.81	15.54	43.50	-27.96	Peak
4	383.259	-7.08	26.40	19.32	46.00	-26.68	Peak
5	782.345	0.02	27.25	27.27	46.00	-18.73	Peak
6	991.272	2.84	26.34	29.18	54.00	-24.82	Peak

**Test mode 4:**

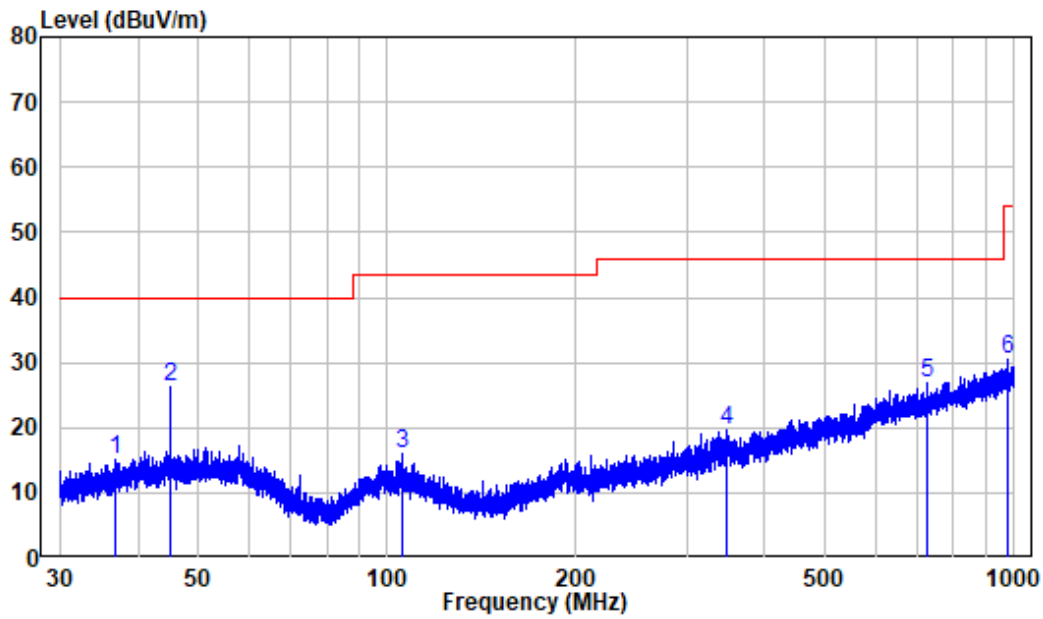
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at AM 29.7MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	37.236	-10.96	26.71	15.75	40.00	-24.25	Peak
2	57.267	-10.01	26.44	16.43	40.00	-23.57	Peak
3	199.548	-11.43	27.39	15.96	43.50	-27.54	Peak
4	239.987	-10.91	39.72	28.81	46.00	-17.19	Peak
5	798.630	-0.32	27.69	27.37	46.00	-18.63	Peak
6	992.576	2.86	26.95	29.81	54.00	-24.19	Peak

**Vertical**

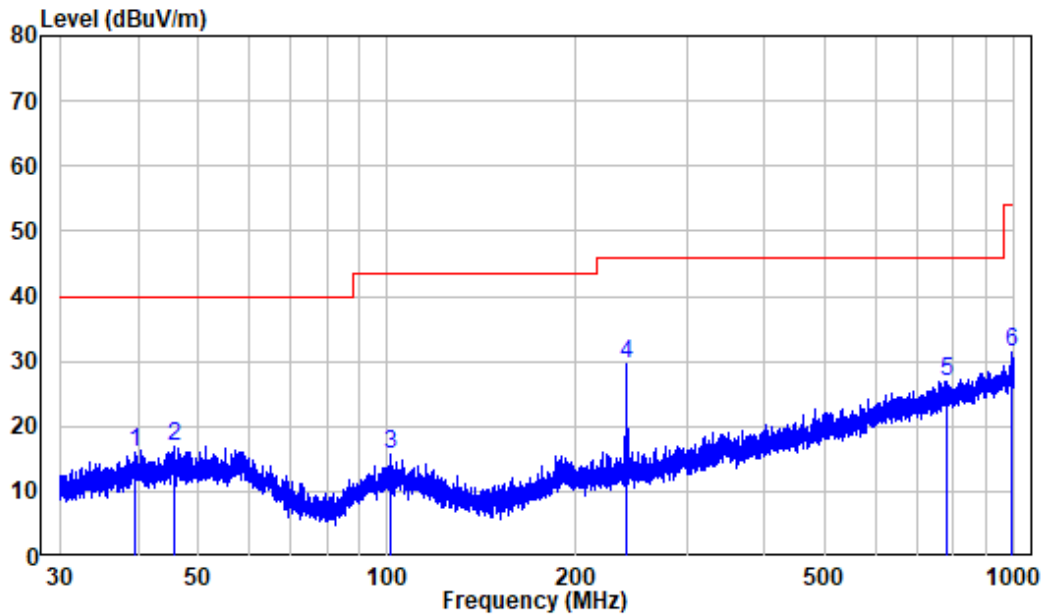


Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at AM 29.7MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	36.847	-11.04	26.01	14.97	40.00	-25.03	Peak
2	45.058	-9.94	36.27	26.33	40.00	-13.67	Peak
3	105.595	-11.89	27.85	15.96	43.50	-27.54	Peak
4	346.809	-7.25	26.84	19.59	46.00	-26.41	Peak
5	728.400	-1.03	28.03	27.00	46.00	-19.00	Peak
6	977.465	2.38	28.10	30.48	54.00	-23.52	Peak

**Test mode 5:**

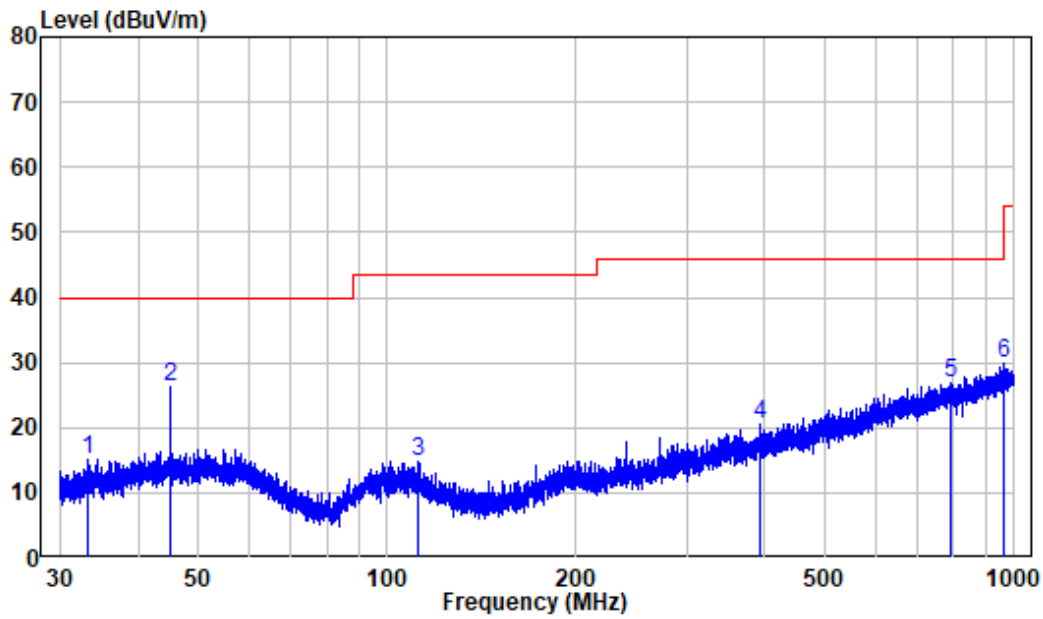
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at USB 28MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.593	-10.43	26.33	15.90	40.00	-24.10	Peak
2	45.675	-9.97	26.95	16.98	40.00	-23.02	Peak
3	101.067	-11.67	27.46	15.79	43.50	-27.71	Peak
4	240.093	-10.90	40.48	29.58	46.00	-16.42	Peak
5	780.291	0.07	26.89	26.96	46.00	-19.04	Peak
6	989.536	2.80	28.57	31.37	54.00	-22.63	Peak

**Vertical**

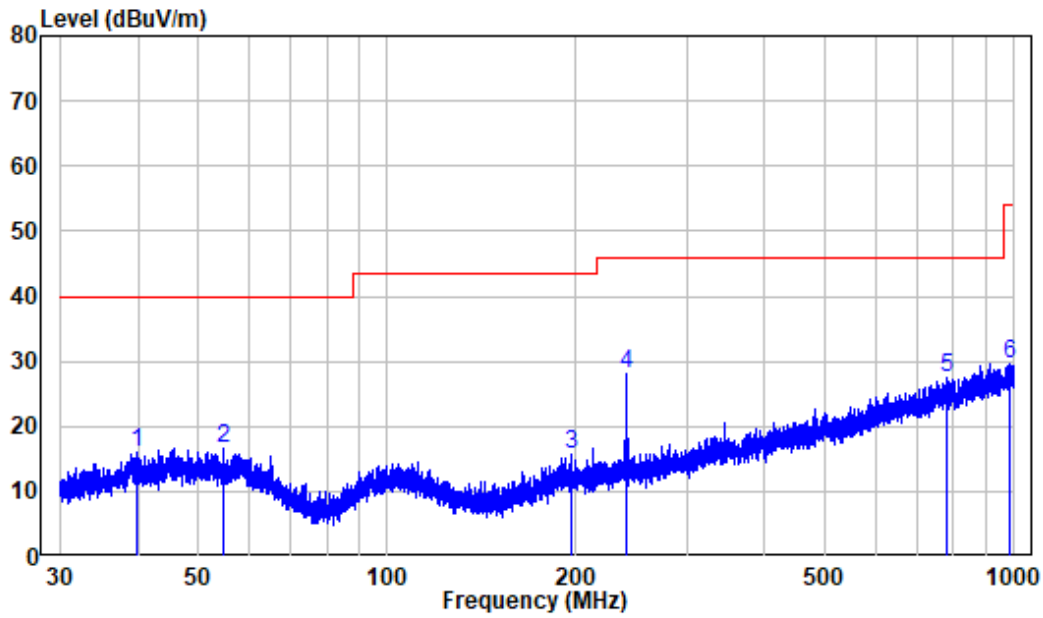


Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at USB 28MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	33.240	-11.97	27.09	15.12	40.00	-24.88	Peak
2	45.039	-9.94	36.31	26.37	40.00	-13.63	Peak
3	112.032	-12.25	27.09	14.84	43.50	-28.66	Peak
4	393.472	-6.83	27.29	20.46	46.00	-25.54	Peak
5	790.965	-0.15	27.12	26.97	46.00	-19.03	Peak
6	964.696	2.42	27.61	30.03	54.00	-23.97	Peak

**Test mode 6:**

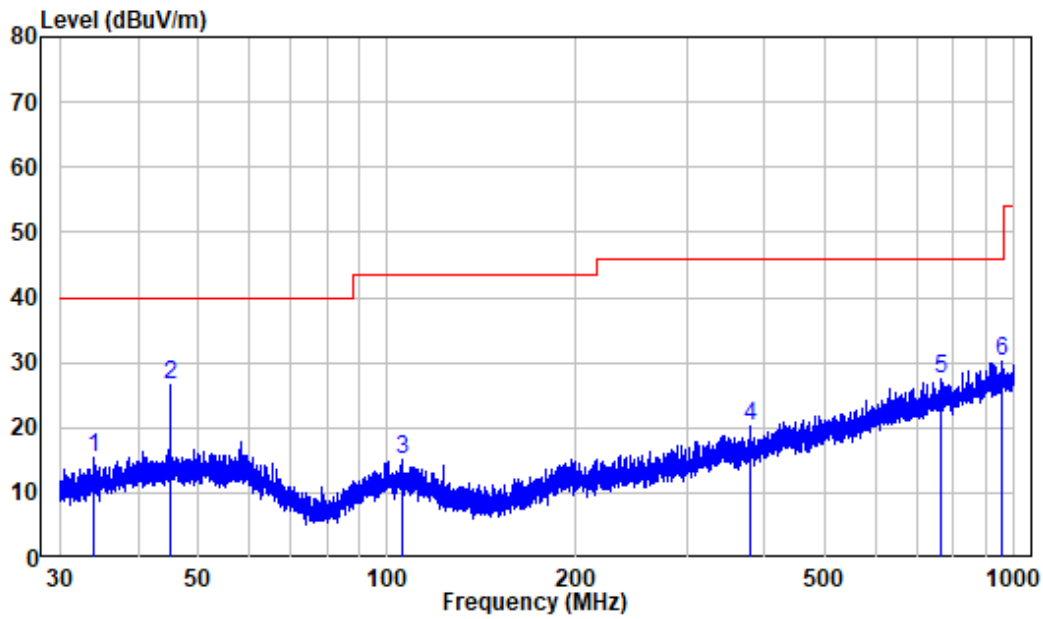
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at USB 29.7MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.977	-10.34	26.24	15.90	40.00	-24.10	Peak
2	54.883	-10.29	26.83	16.54	40.00	-23.46	Peak
3	196.855	-11.56	27.25	15.69	43.50	-27.81	Peak
4	239.987	-10.91	39.07	28.16	46.00	-17.84	Peak
5	781.660	0.05	27.43	27.48	46.00	-18.52	Peak
6	983.051	2.59	27.01	29.60	54.00	-24.40	Peak

**Vertical**



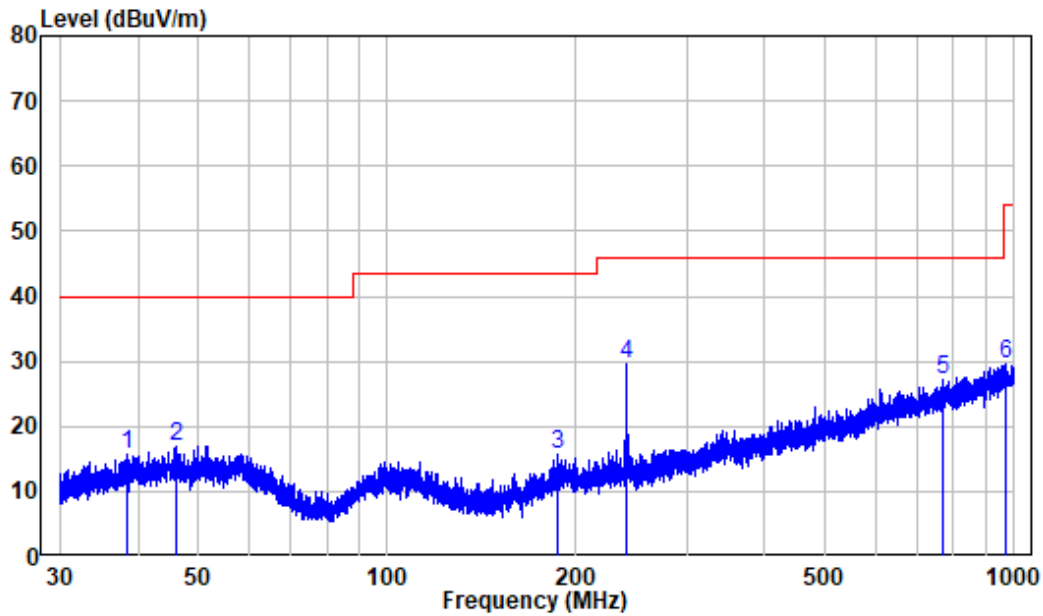
Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at USB 29.7MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	33.932	-11.86	27.25	15.39	40.00	-24.61	Peak
2	45.058	-9.94	36.42	26.48	40.00	-13.52	Peak
3	105.410	-11.87	26.97	15.10	43.50	-28.40	Peak
4	379.748	-7.15	27.35	20.20	46.00	-25.80	Peak
5	766.393	-0.35	27.76	27.41	46.00	-18.59	Peak
6	958.794	2.29	27.81	30.10	46.00	-15.90	Peak



**Test mode 7:**

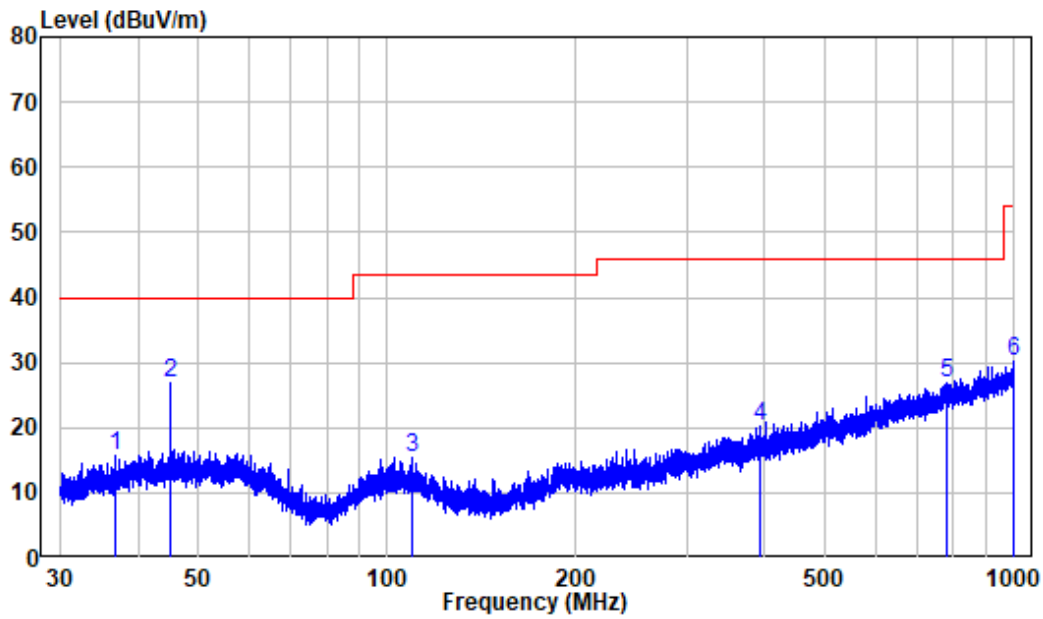
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at LSB 28MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	38.464	-10.71	26.31	15.60	40.00	-24.40	Peak
2	45.956	-9.99	26.93	16.94	40.00	-23.06	Peak
3	186.359	-12.01	27.61	15.60	43.50	-27.90	Peak
4	239.987	-10.91	40.44	29.53	46.00	-16.47	Peak
5	771.787	-0.10	27.34	27.24	46.00	-18.76	Peak
6	971.911	2.43	27.30	29.73	54.00	-24.27	Peak

**Vertical**

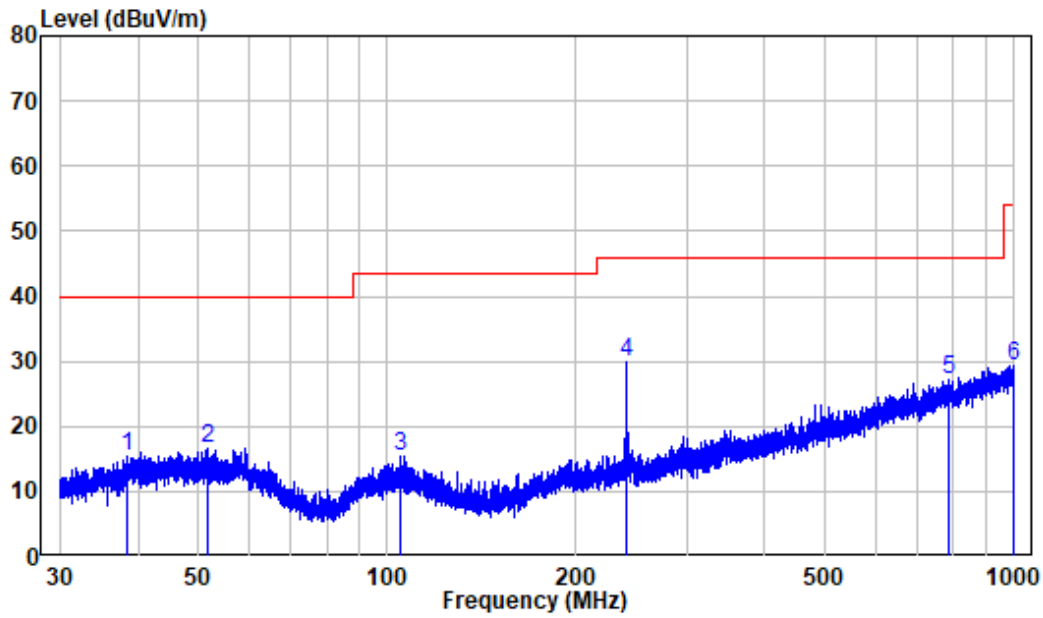


Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at LSB 28MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	36.911	-11.03	26.61	15.58	40.00	-24.42	Peak
2	45.058	-9.94	36.71	26.77	40.00	-13.23	Peak
3	109.172	-11.98	27.30	15.32	43.50	-28.18	Peak
4	393.128	-6.84	27.05	20.21	46.00	-25.79	Peak
5	779.265	0.08	26.77	26.85	46.00	-19.15	Peak
6	998.248	2.98	27.08	30.06	54.00	-23.94	Peak

**Test mode 8:**

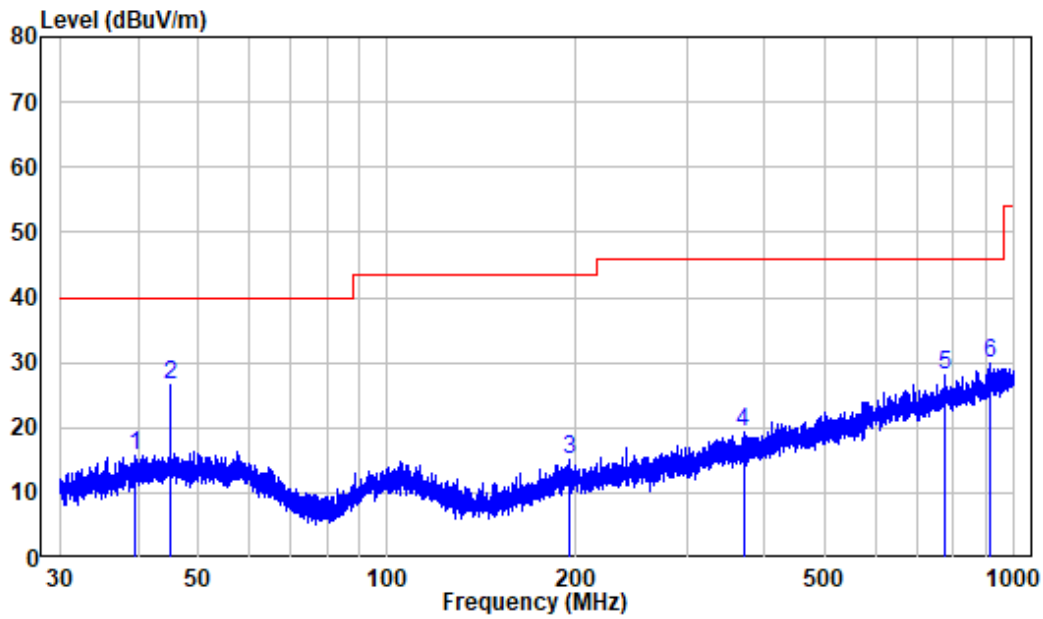
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at LSB 29.7MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	38.548	-10.69	26.10	15.41	40.00	-24.59	Peak
2	51.820	-9.97	26.58	16.61	40.00	-23.39	Peak
3	105.226	-11.85	27.15	15.30	43.50	-28.20	Peak
4	239.987	-10.91	40.67	29.76	46.00	-16.24	Peak
5	788.888	-0.12	27.43	27.31	46.00	-18.69	Peak
6	994.754	2.92	26.35	29.27	54.00	-24.73	Peak

Vertical

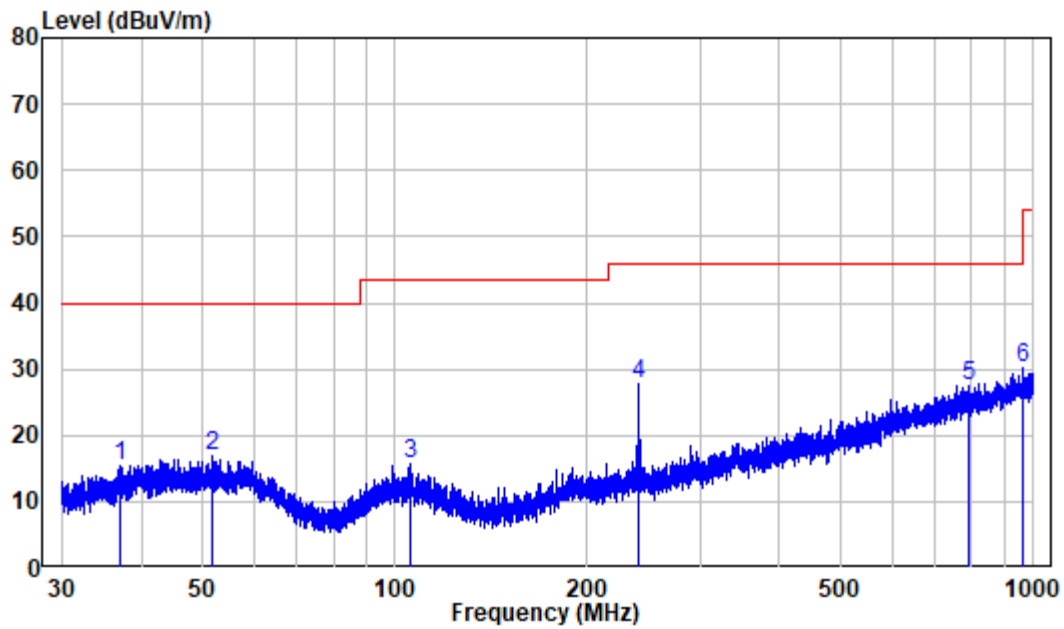


Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at LSB 29.7MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.437	-10.47	26.27	15.80	40.00	-24.20	Peak
2	45.039	-9.94	36.48	26.54	40.00	-13.46	Peak
3	195.137	-11.46	26.45	14.99	43.50	-28.51	Peak
4	369.729	-7.32	26.62	19.30	46.00	-26.70	Peak
5	773.480	-0.02	28.12	28.10	46.00	-17.90	Peak
6	912.862	1.57	28.25	29.82	46.00	-16.18	Peak

**Test mode 9:**

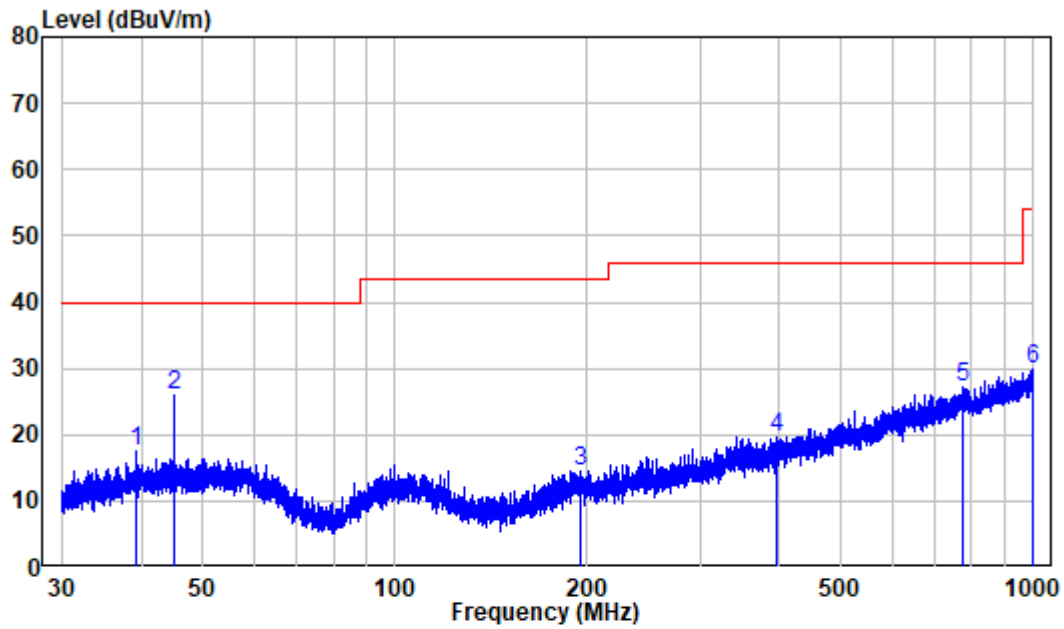
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: scan(receiver)

	Freq	factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	37.009	-11.01	26.42	15.41	40.00	-24.59	Peak
2	51.639	-9.96	26.73	16.77	40.00	-23.23	Peak
3	105.642	-11.89	27.67	15.78	43.50	-27.72	Peak
4	240.093	-10.90	38.68	27.78	46.00	-18.22	Peak
5	791.659	-0.16	27.59	27.43	46.00	-18.57	Peak
6	963.428	2.40	27.88	30.28	54.00	-23.72	Peak

Vertical

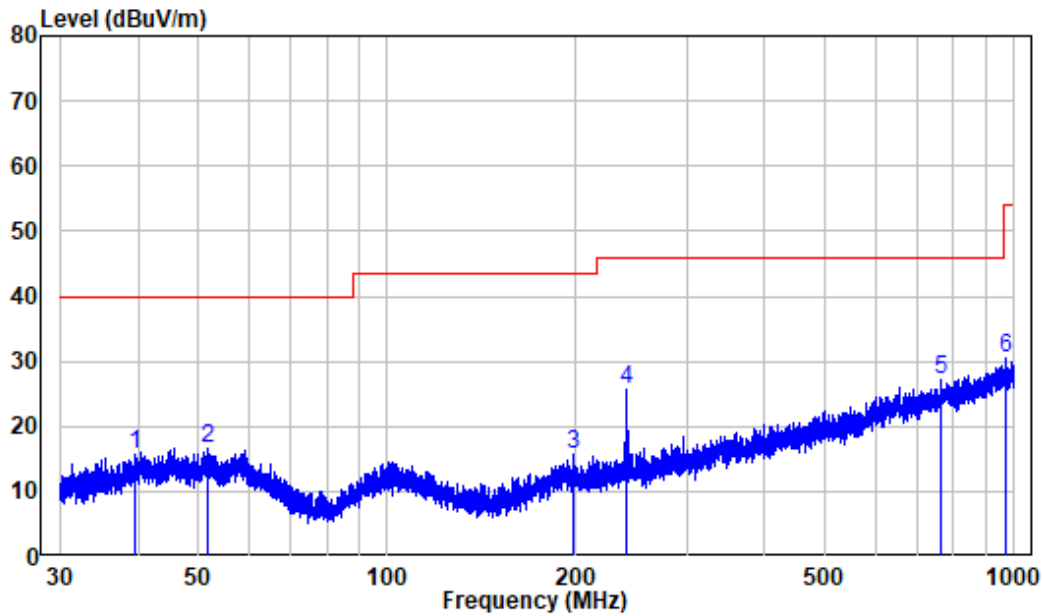


Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: scan(receiver)

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.385	-10.48	28.07	17.59	40.00	-22.41	Peak
2	45.058	-9.94	36.04	26.10	40.00	-13.90	Peak
3	194.880	-11.42	26.02	14.60	43.50	-28.90	Peak
4	394.682	-6.81	26.37	19.56	46.00	-26.44	Peak
5	775.177	0.05	26.98	27.03	46.00	-18.97	Peak
6	996.063	2.93	26.90	29.83	54.00	-24.17	Peak

**Test mode 10:**

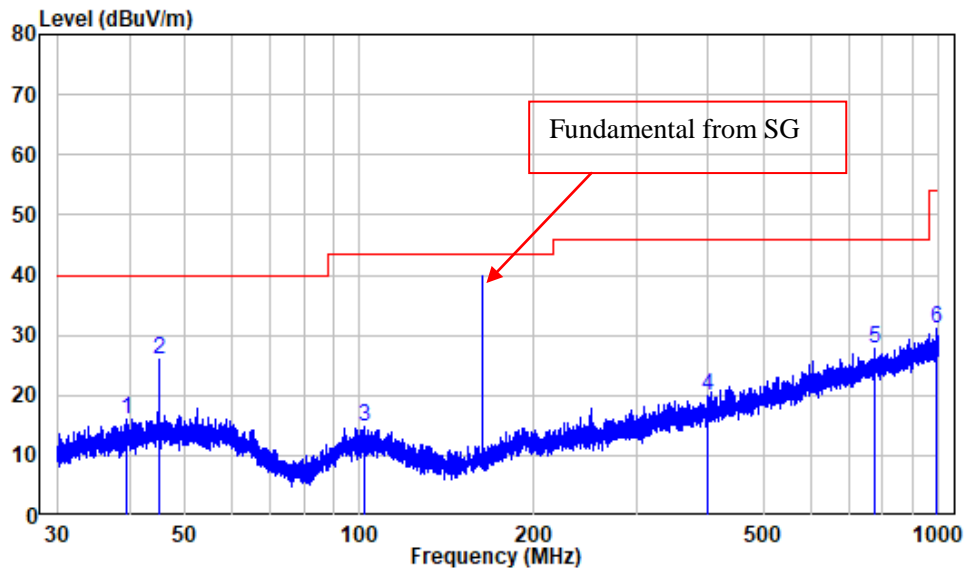
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at NOAA 162.475MHz

	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.576	-10.43	26.19	15.76	40.00	-24.24	Peak
2	51.684	-9.96	26.50	16.54	40.00	-23.46	Peak
3	198.588	-11.49	27.18	15.69	43.50	-27.81	Peak
4	239.987	-10.91	36.65	25.74	46.00	-20.26	Peak
5	762.039	-0.50	27.77	27.27	46.00	-18.73	Peak
6	970.634	2.46	28.06	30.52	54.00	-23.48	Peak

**Vertical**



Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at NOAA 162.475MHz

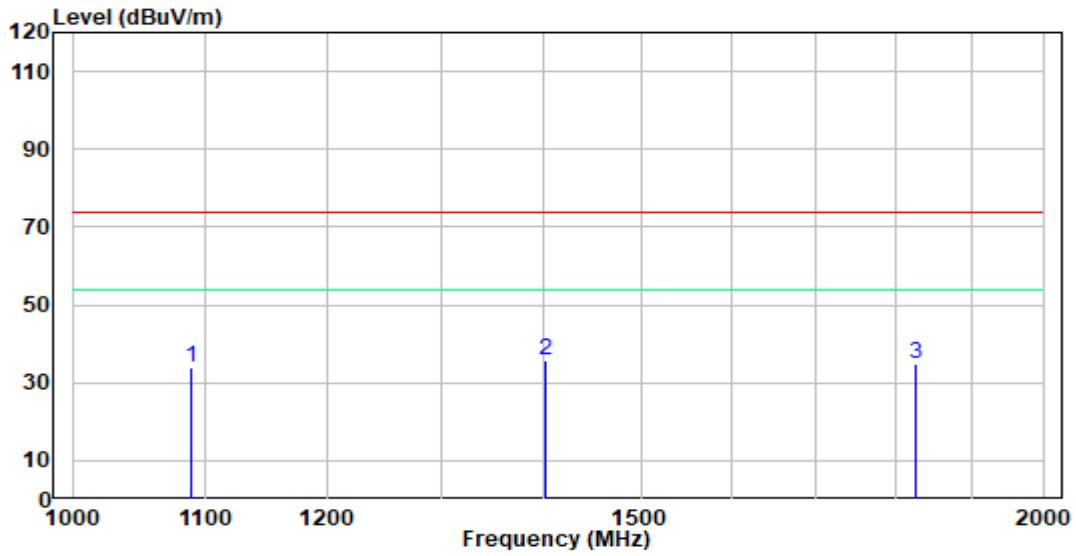
	Freq	Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	39.454	-10.47	26.45	15.98	40.00	-24.02	Peak
2	45.058	-9.94	36.01	26.07	40.00	-13.93	Peak
3	102.136	-11.58	26.50	14.92	43.50	-28.58	Peak
4	398.157	-6.76	26.61	19.85	46.00	-26.15	Peak
5	775.857	0.05	27.82	27.87	46.00	-18.13	Peak
6	990.838	2.83	28.34	31.17	54.00	-22.83	Peak



**Above 1 GHz:**

**Test mode 10:**

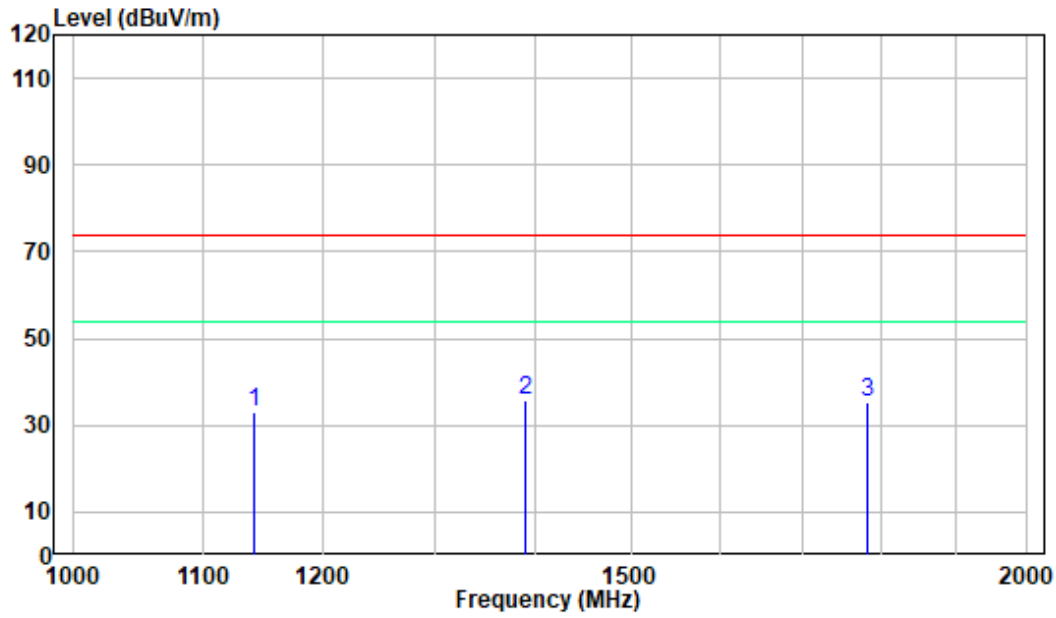
**Horizontal**



Site : chamber  
 Condition: 3m HORIZONTAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at NOAA 162.475MHz

	Freq	Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB
1	1087.875	-10.39	44.25	33.86	74.00	-40.14 Peak
2	1401.500	-9.96	45.83	35.87	74.00	-38.13 Peak
3	1825.625	-8.56	43.36	34.80	74.00	-39.20 Peak

**Vertical**



Site : chamber  
 Condition: 3m VERTICAL  
 Job No. : XMTN1220117-02447E-EM  
 Test Mode: receiver at NOAA 162.475MHz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	1141.375	-10.32	43.24	32.92	74.00	-41.08	Peak
2	1389.375	-9.99	45.76	35.77	74.00	-38.23	Peak
3	1781.750	-8.79	43.92	35.13	74.00	-38.87	Peak

## FCC §15.111 - ANTENNA CONDUCTED POWER FOR RECEIVERS

### Applicable Standard

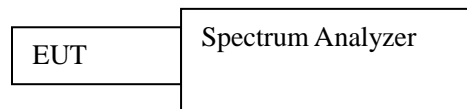
FCC §15.111

### Limit

The antenna conducted power of the receiver as defined in §15.111 shall not exceed the values given in the following tables

Frequency Range	Limit
9 kHz to 2 GHz	2.0 nW (-57 dBm)

### EUT Setup



### Test Procedure

1. The receiver antenna terminal connected to a spectrum analyzer.
2. The test data of the worst case condition was reported on the following Data page.

### Test Data

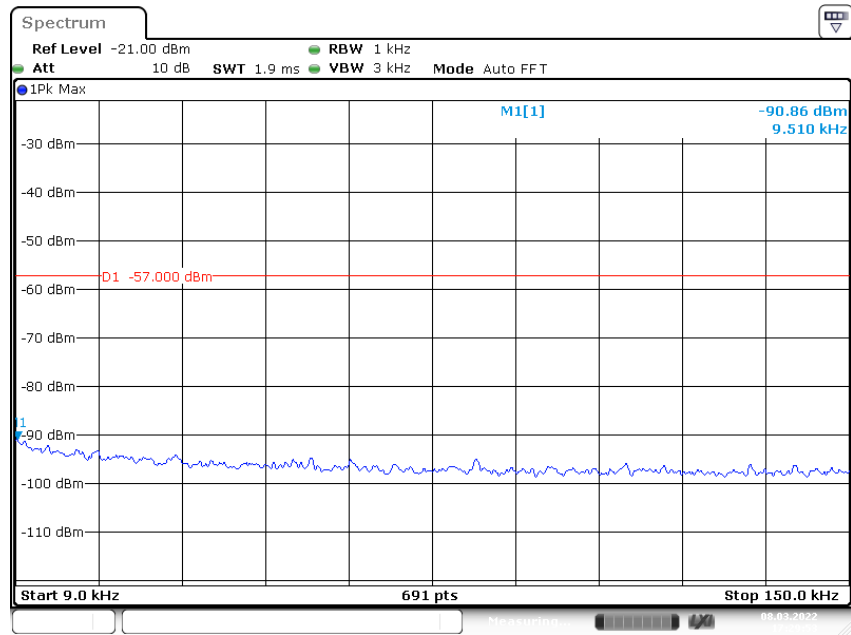
#### Environmental Conditions

Temperature:	25 °C
Relative Humidity:	64 %
ATM Pressure:	101.0 kPa

*The testing was performed by Nick Fang on 2022-03-08*

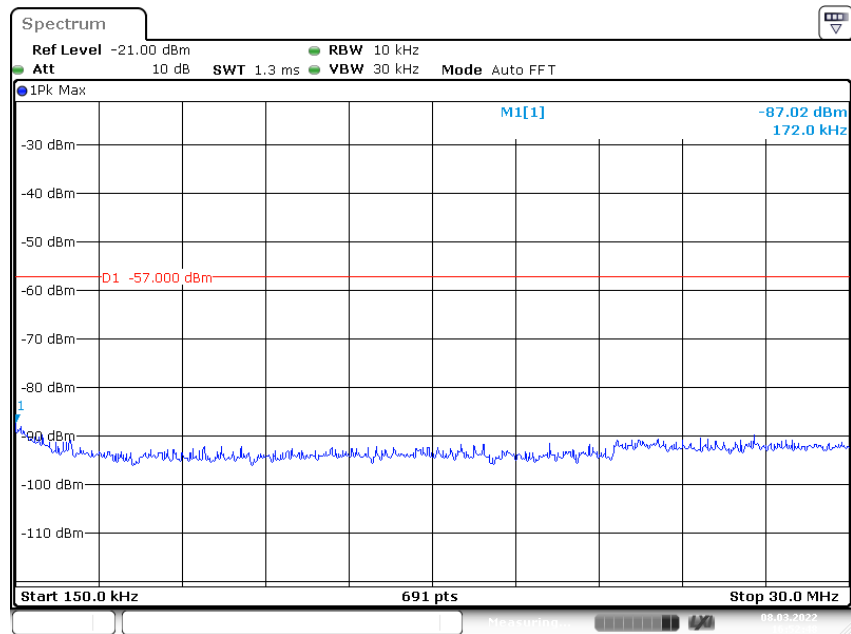
Test mode 1:

### Conducted Measurement (9 kHz to 150 kHz)



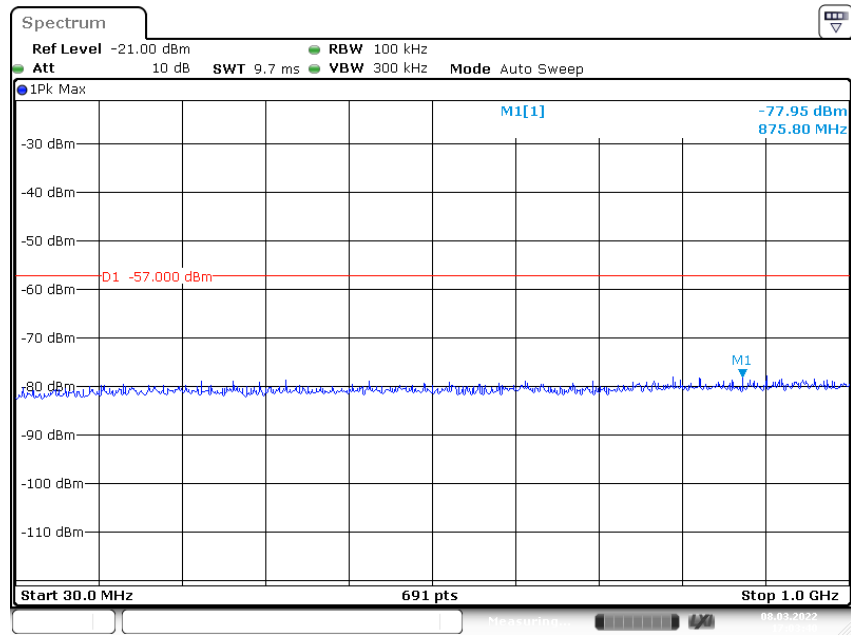
Date: 8.MAR.2022 17:29:53

### Conducted Measurement (150 kHz to 30MHz)



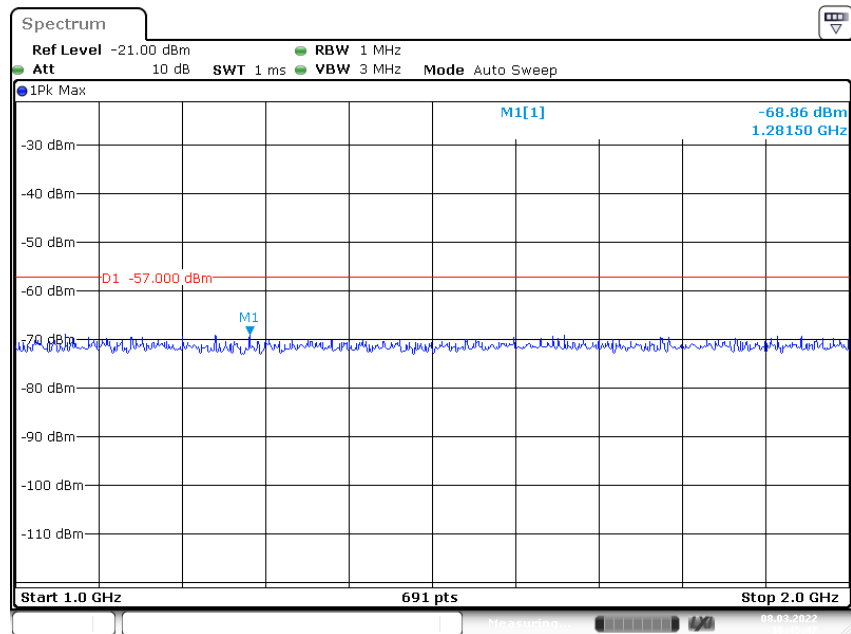
Date: 8.MAR.2022 16:52:48

### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 17:03:40

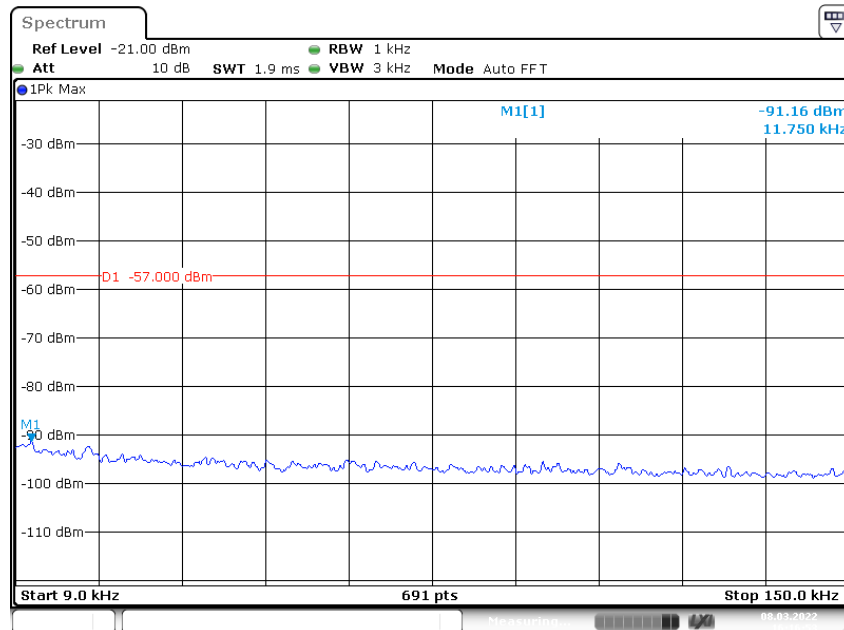
### Conducted Measurement (1GHz to 2GHz)



Date: 8.MAR.2022 16:45:48

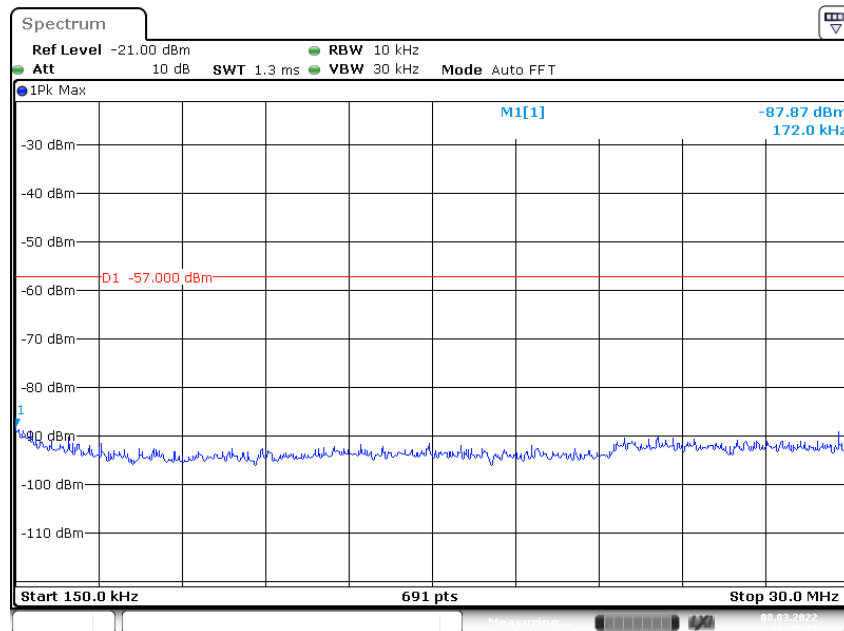
Test mode 2:

### Conducted Measurement (9 kHz to 150 kHz)



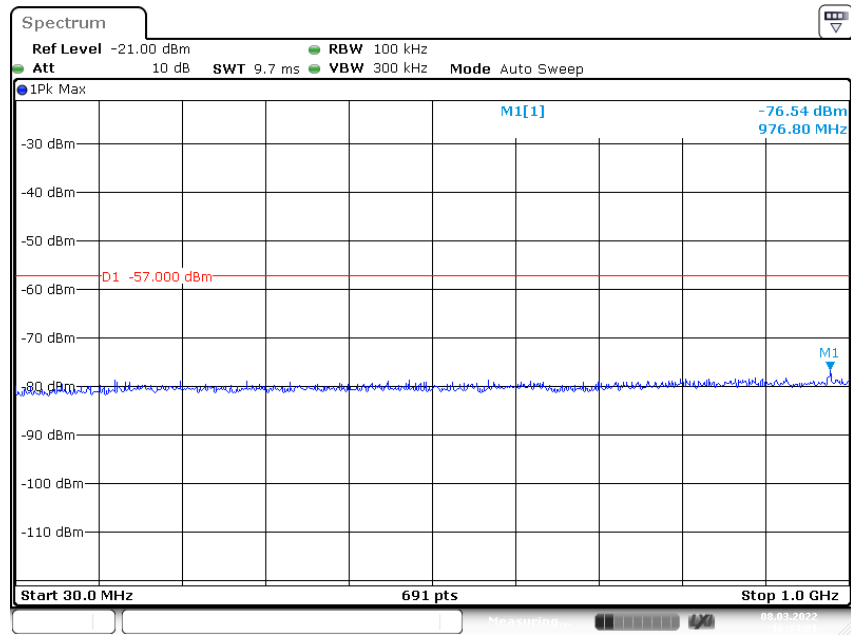
Date: 8.MAR.2022 16:16:53

### Conducted Measurement (150 kHz to 30MHz)



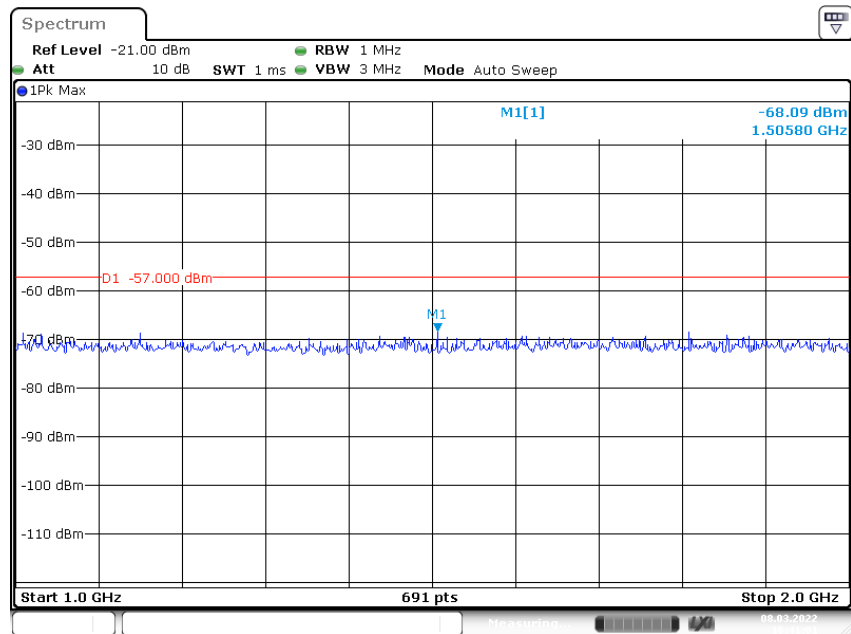
Date: 8.MAR.2022 16:25:18

### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 16:34:02

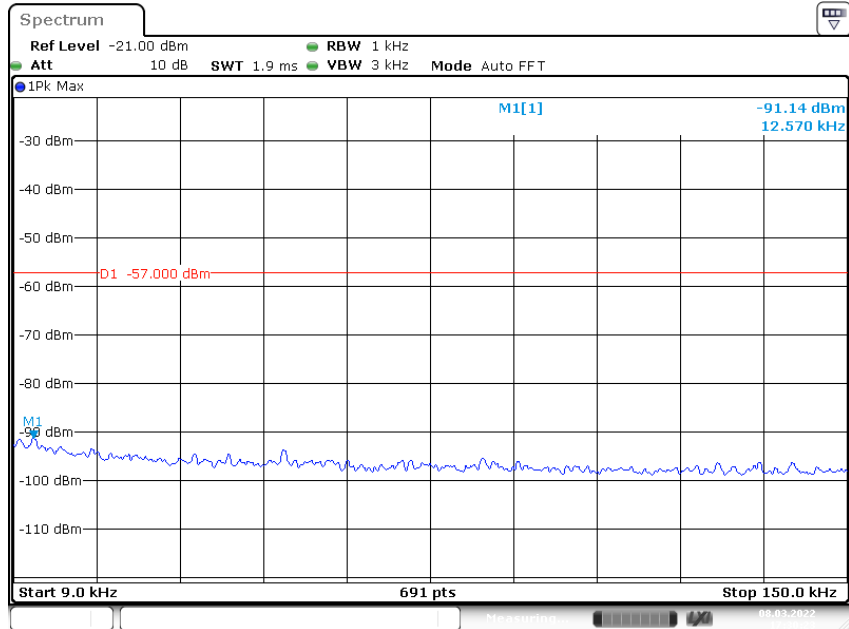
### Conducted Measurement (1GHz to 2GHz)



Date: 8.MAR.2022 16:41:02

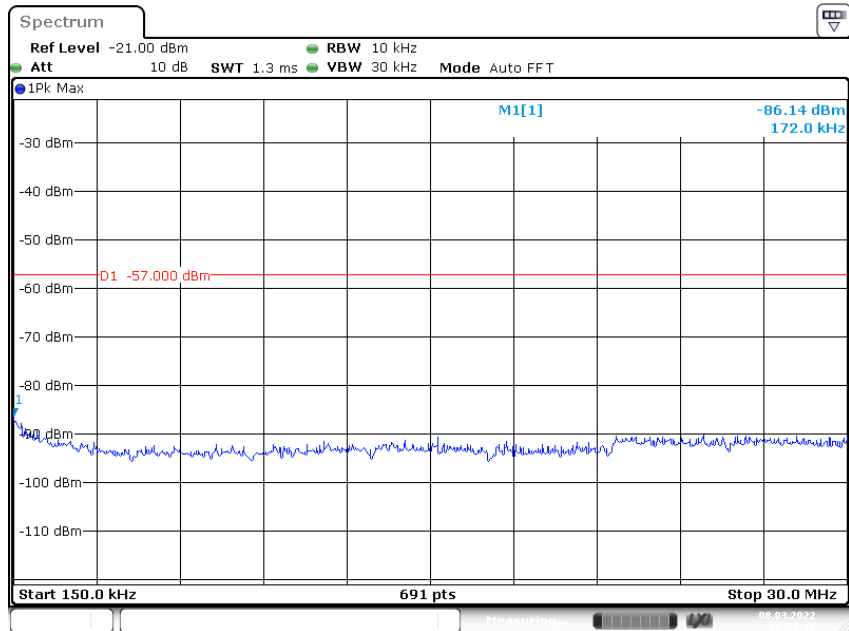
Test mode 3:

### Conducted Measurement (9 kHz to 150 kHz)



Date: 8.MAR.2022 17:30:24

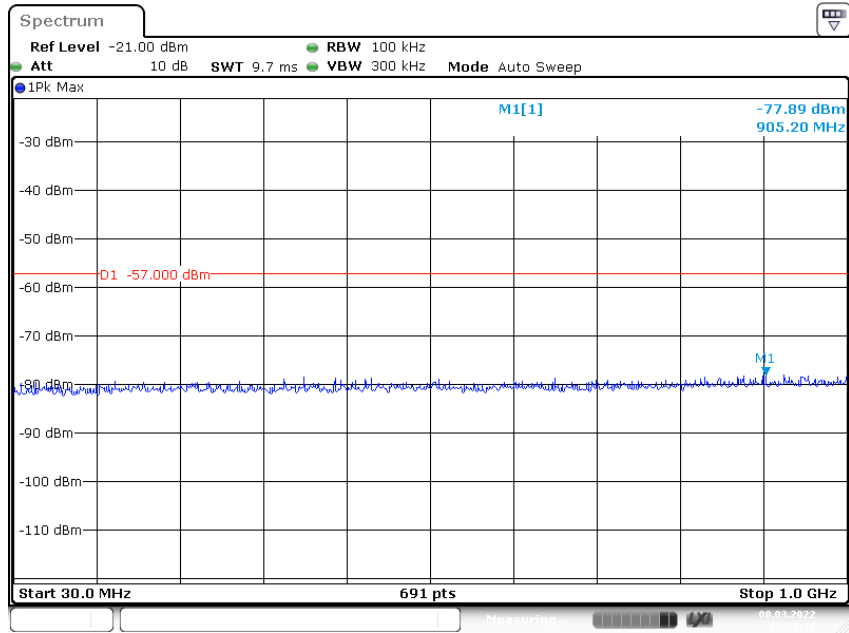
### Conducted Measurement (150 kHz to 30MHz)



Date: 8.MAR.2022 16:55:10

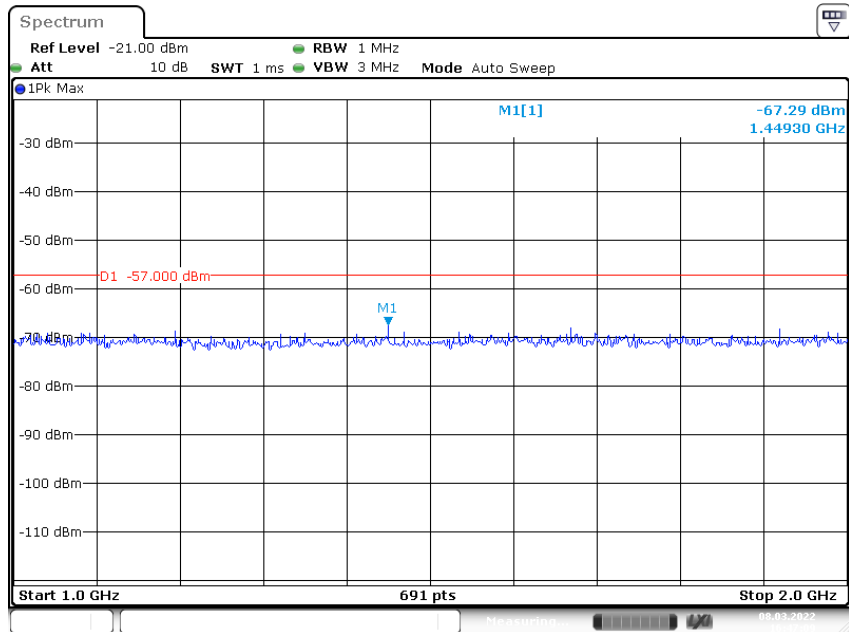


### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 17:05:12

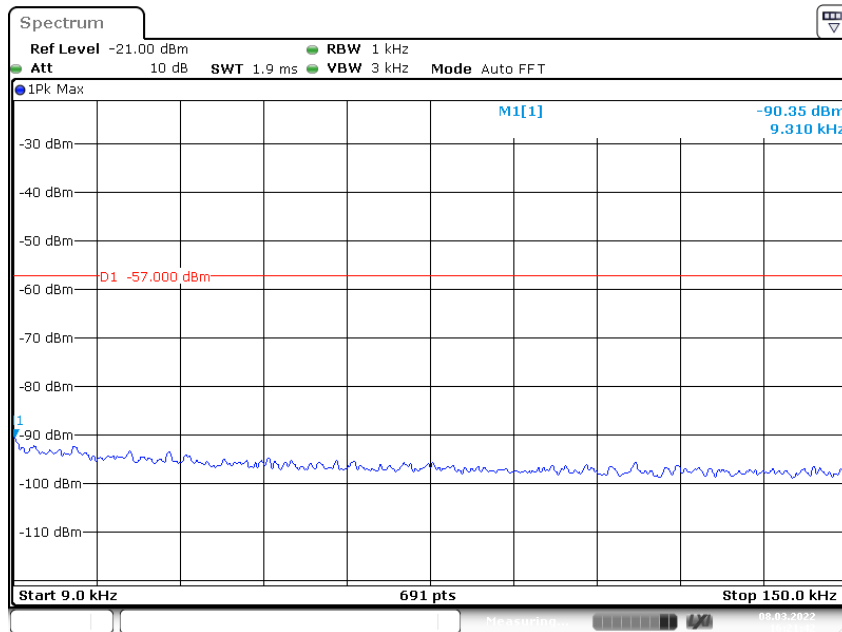
### Conducted Measurement (1GHz to 2GHz)



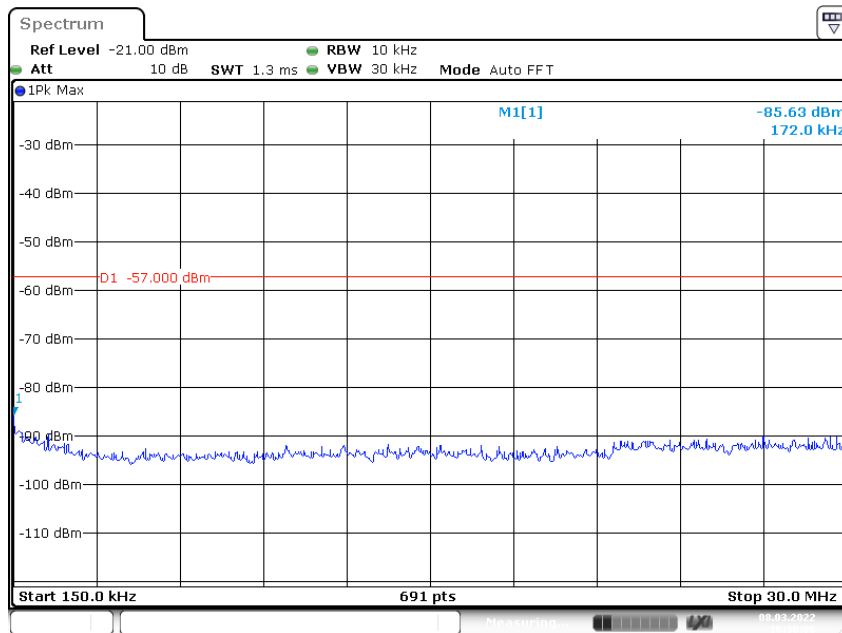
Date: 8.MAR.2022 16:47:09

Test mode 4:

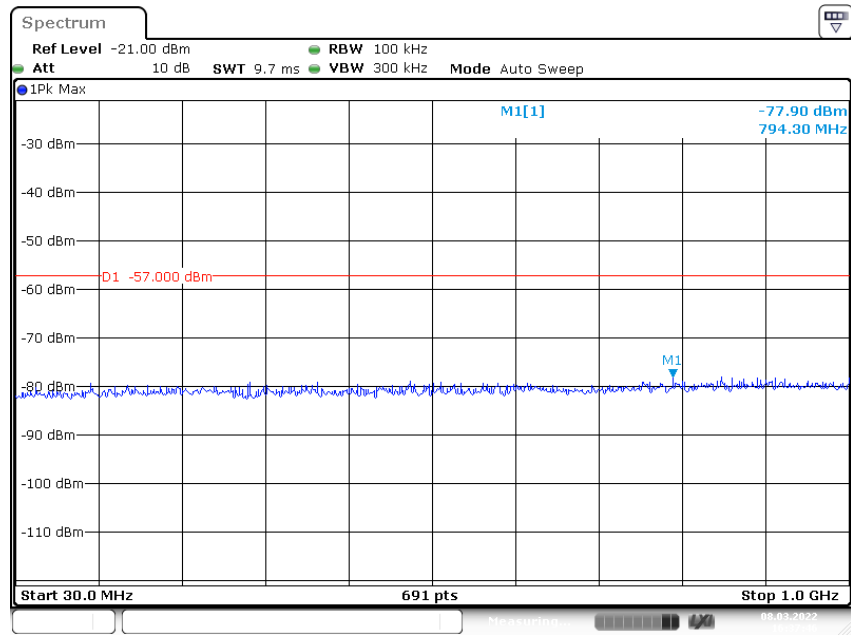
### Conducted Measurement (9 kHz to 150 kHz)



### Conducted Measurement (150 kHz to 30MHz)

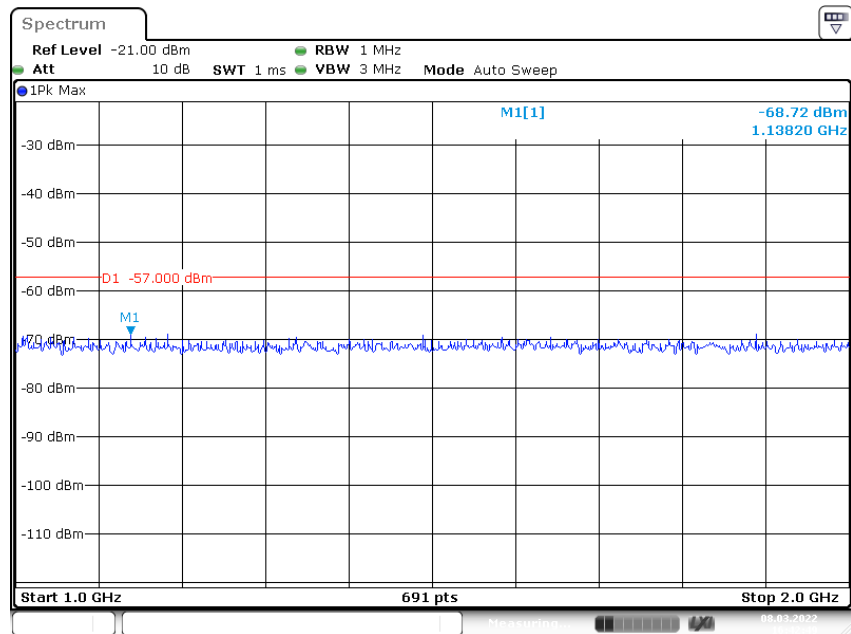


### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 16:37:46

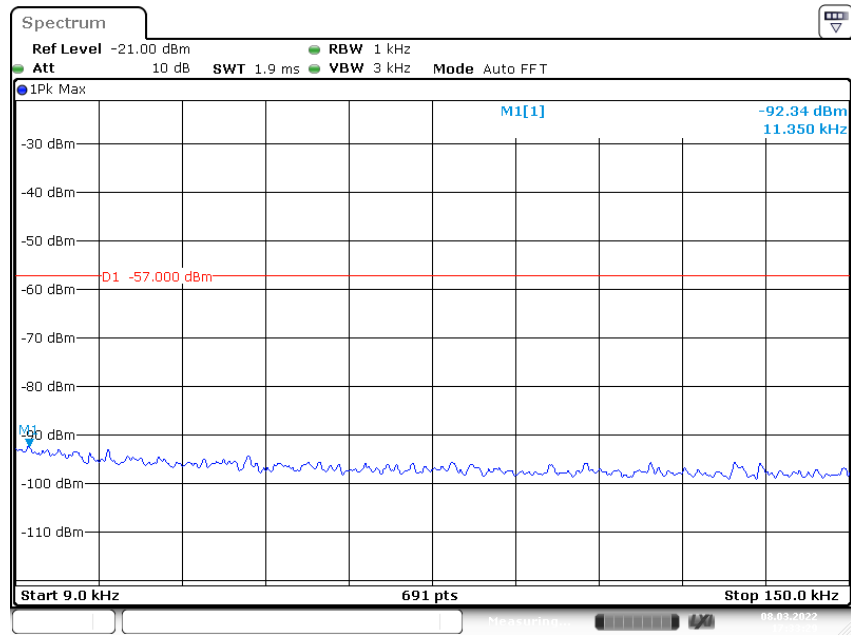
### Conducted Measurement (1GHz to 2GHz)



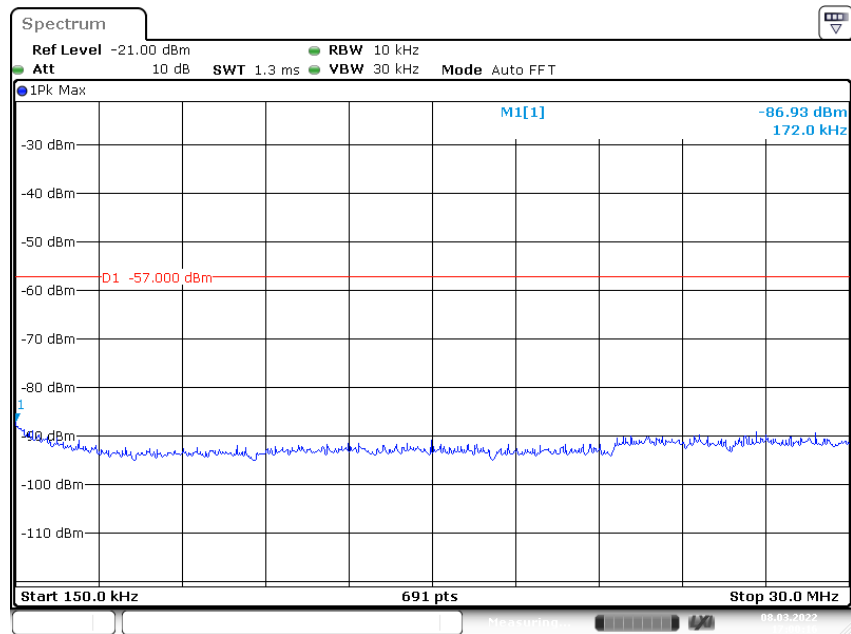
Date: 8.MAR.2022 16:42:49

Test mode 5:

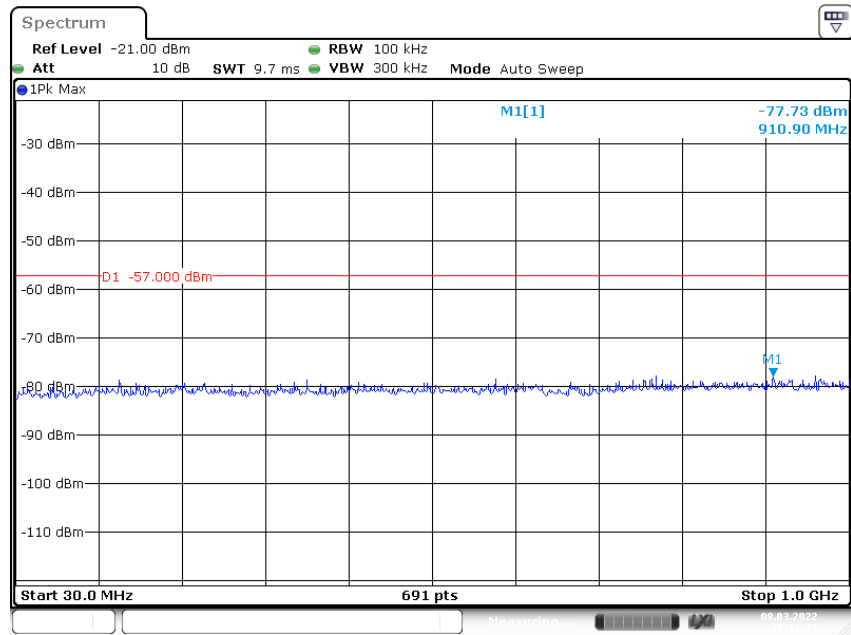
### Conducted Measurement (9 kHz to 150 kHz)



### Conducted Measurement (150 kHz to 30MHz)

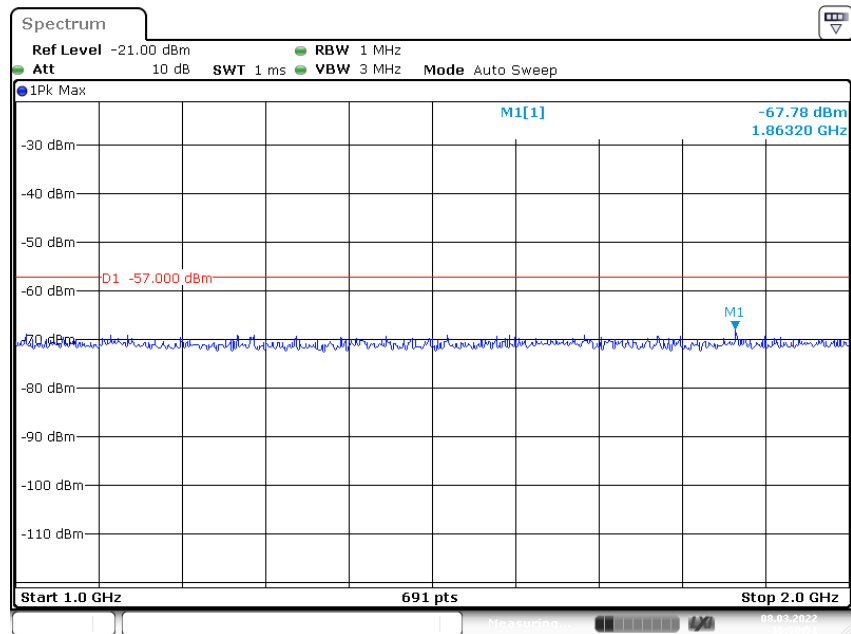


### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 17:11:19

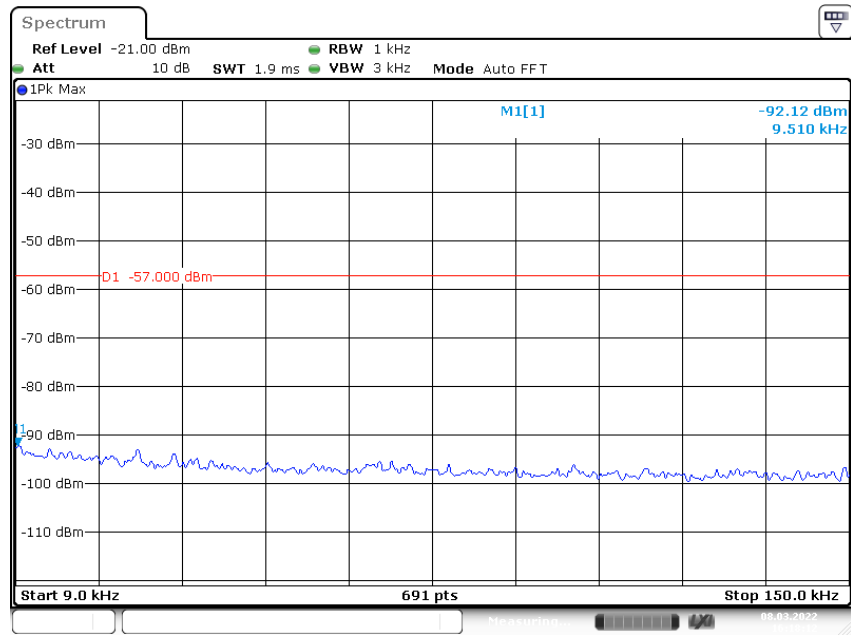
### Conducted Measurement (1GHz to 2GHz)



Date: 8.MAR.2022 16:50:51

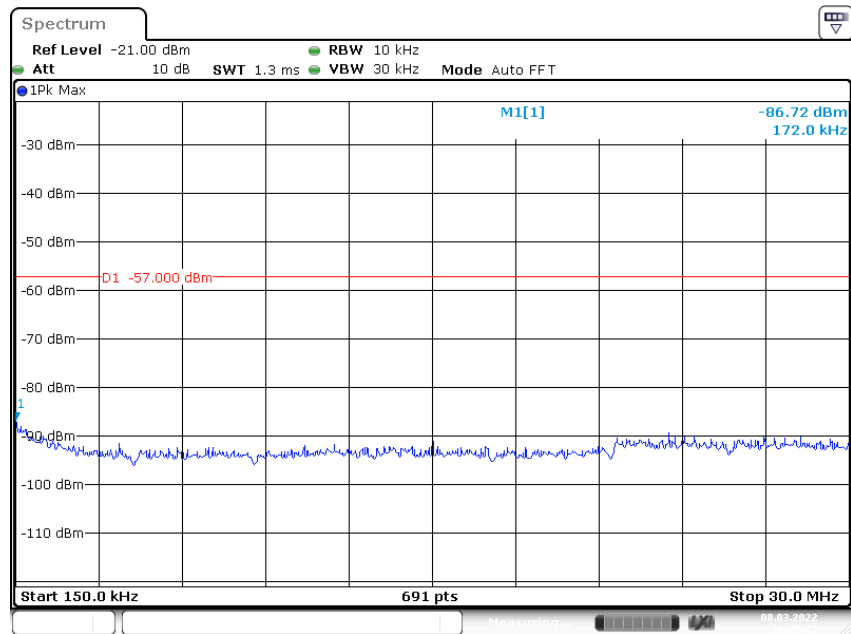
Test mode 6:

### Conducted Measurement (9 kHz to 150 kHz)



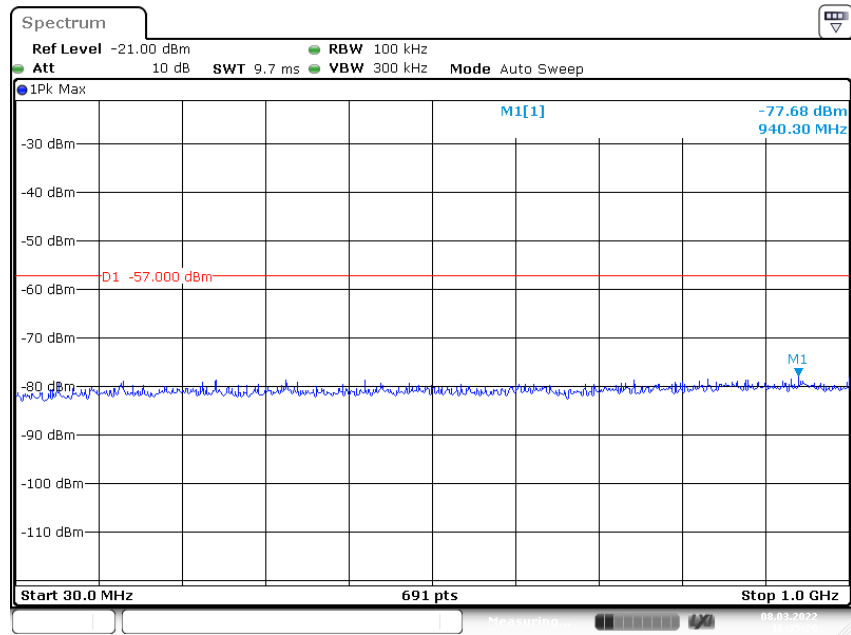
Date: 8.MAR.2022 16:18:12

### Conducted Measurement (150 kHz to 30MHz)



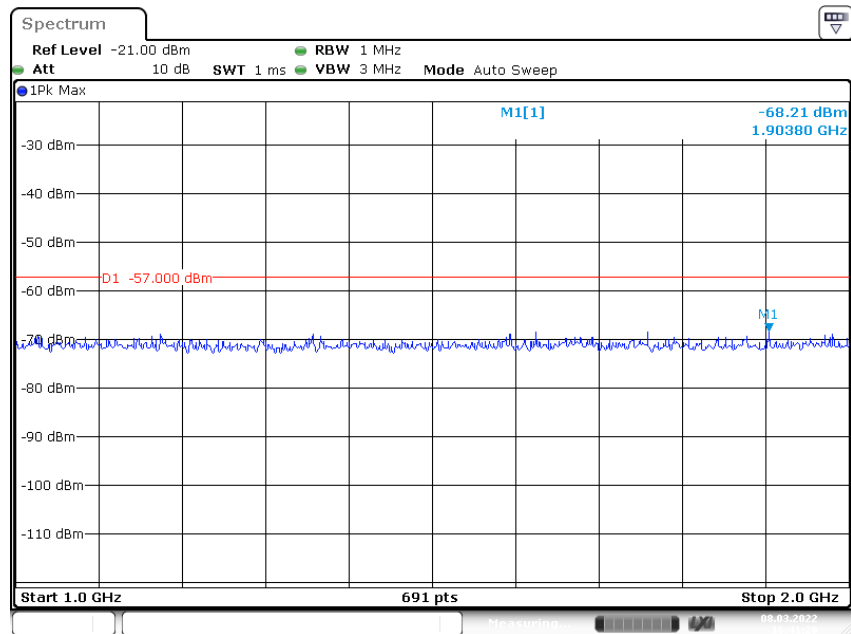
Date: 8.MAR.2022 16:27:46

### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 16:35:21

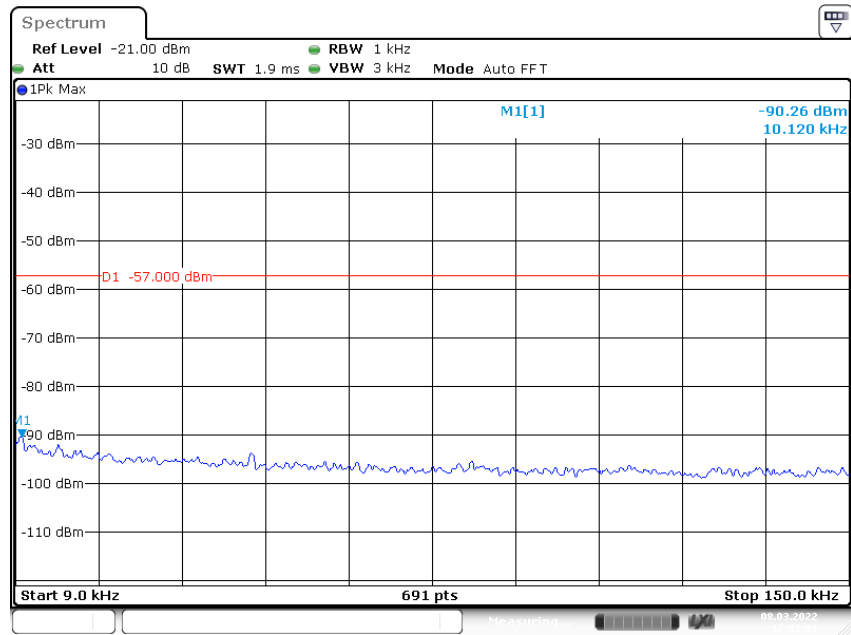
### Conducted Measurement (1GHz to 2GHz)



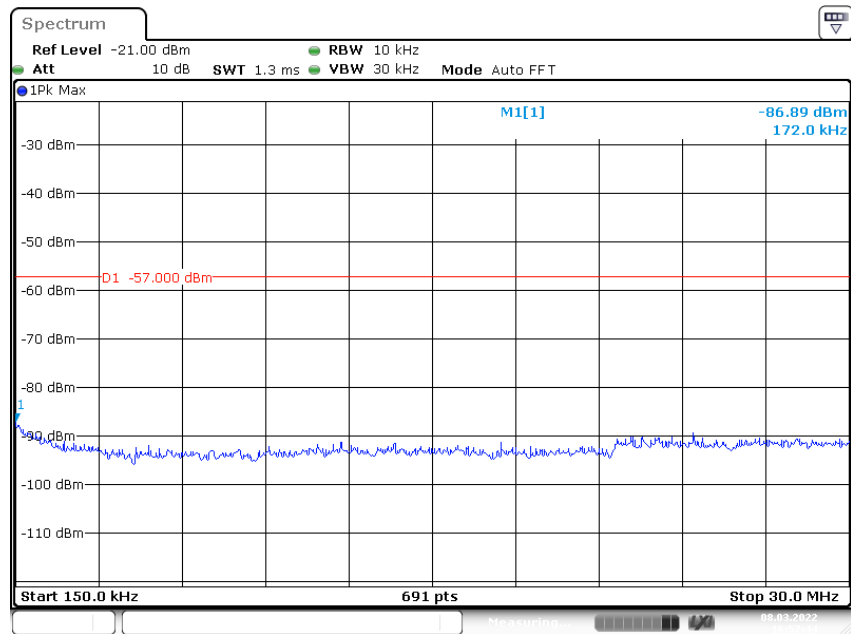
Date: 8.MAR.2022 16:41:21

Test mode 7:

### Conducted Measurement (9 kHz to 150 kHz)

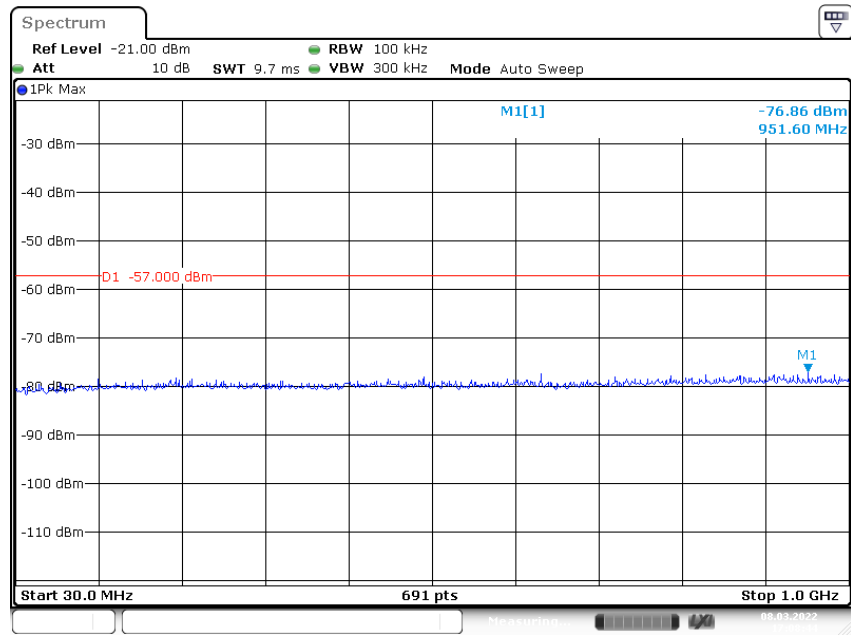


### Conducted Measurement (150 kHz to 30MHz)



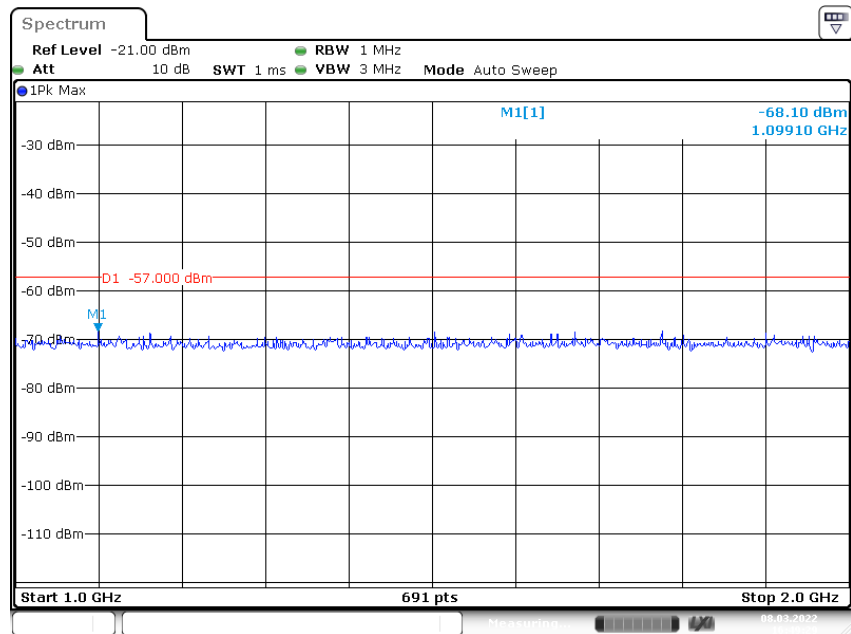


### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 17:08:44

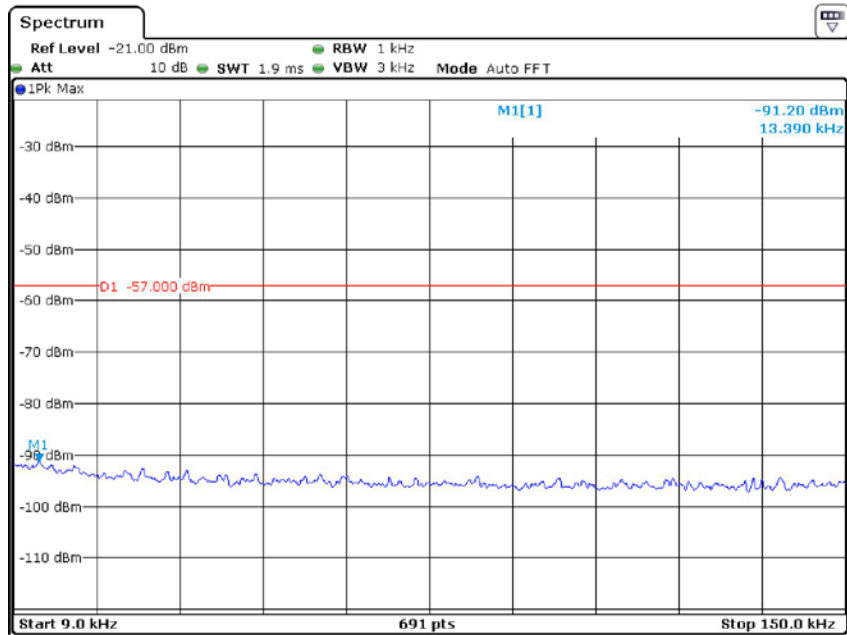
### Conducted Measurement (1GHz to 2GHz)



Date: 8.MAR.2022 16:49:30

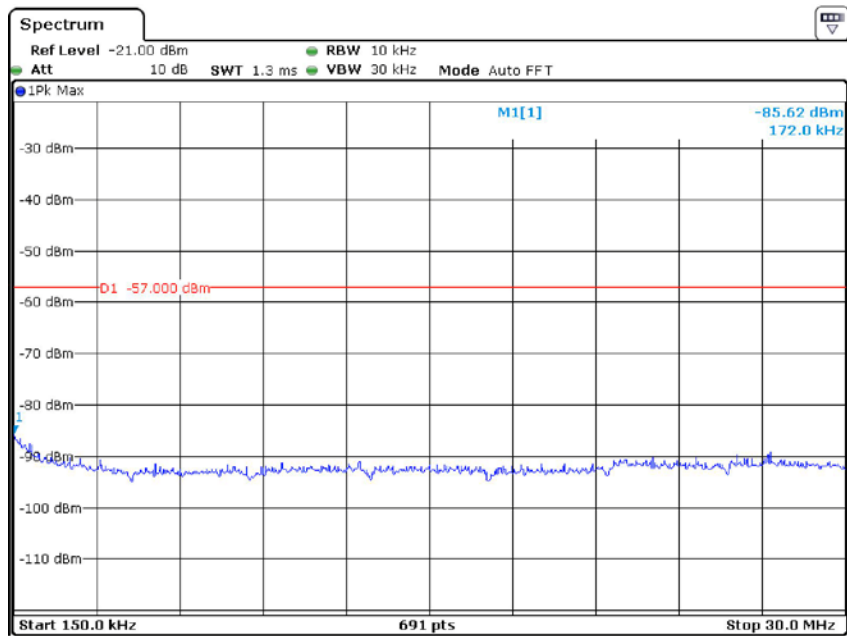
Test mode 8:

### Conducted Measurement (9 kHz to 150 kHz)



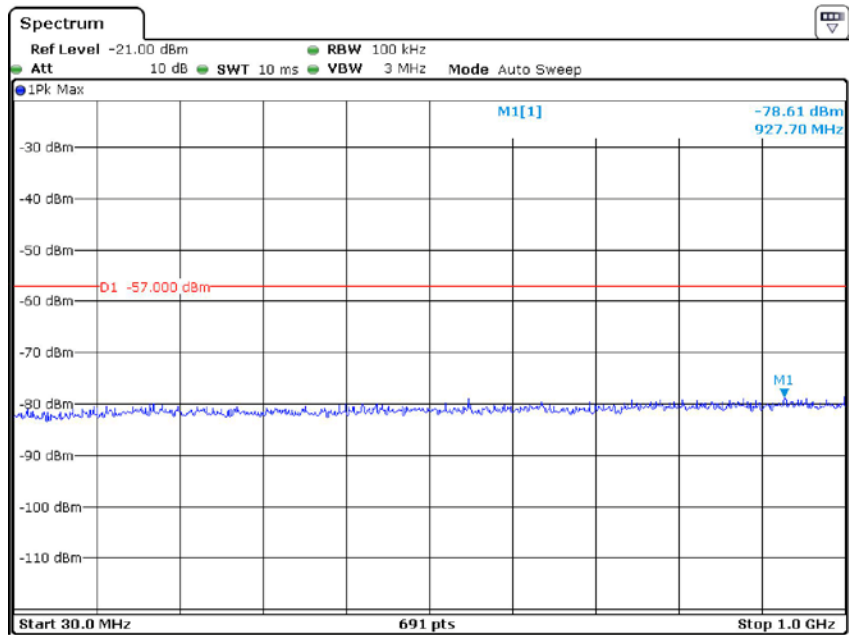
Date: 8.MAY.2022 18:37:07

### Conducted Measurement (150 kHz to 30MHz)



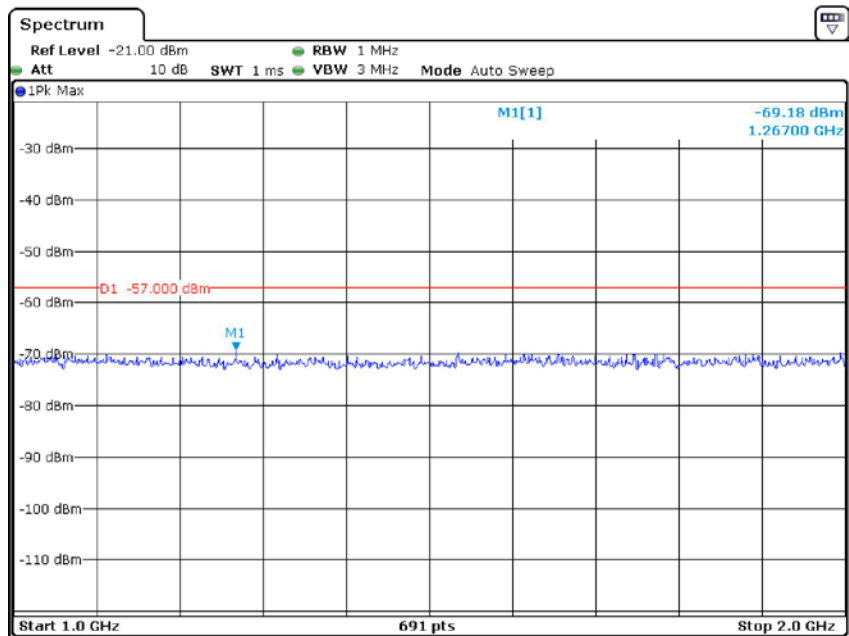
Date: 8.MAY.2022 18:42:00

### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAY.2022 18:38:40

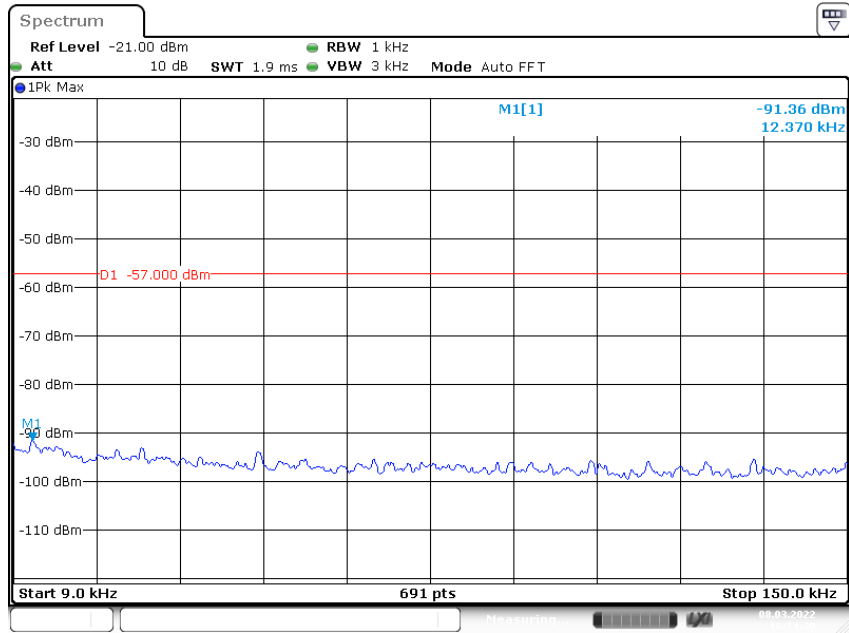
### Conducted Measurement (1GHz to 2GHz)



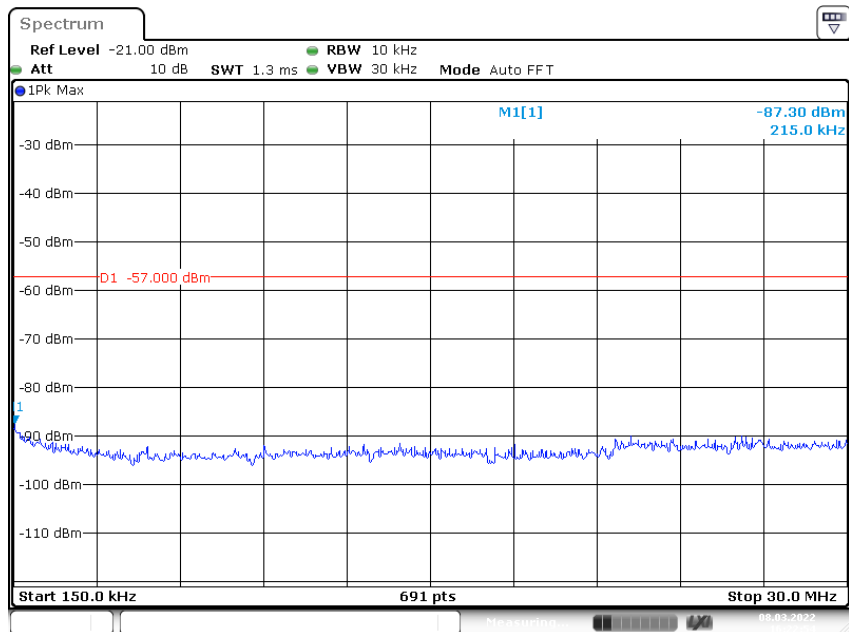
Date: 8.MAY.2022 18:34:50

Test mode 9:

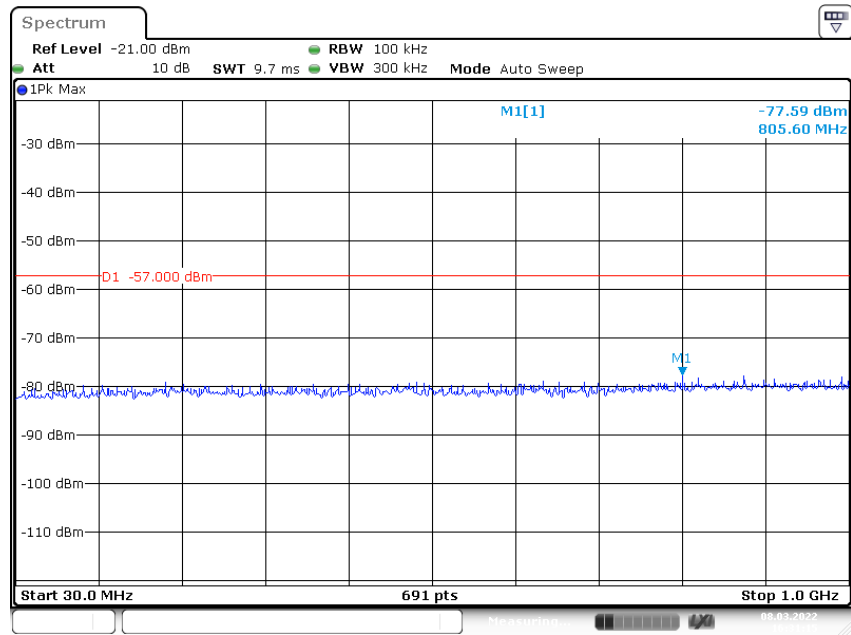
### Conducted Measurement (9 kHz to 150 kHz)



### Conducted Measurement (150 kHz to 30MHz)

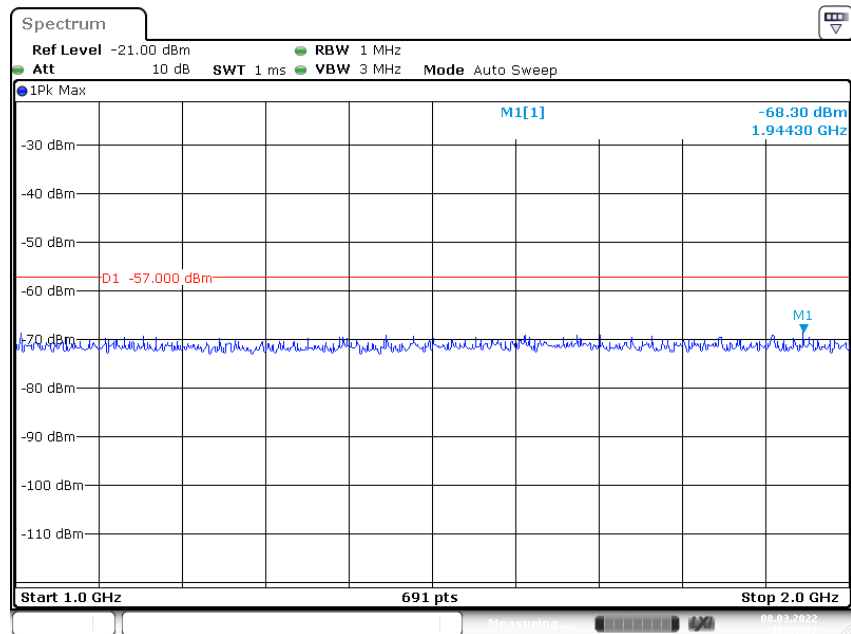


### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 16:31:16

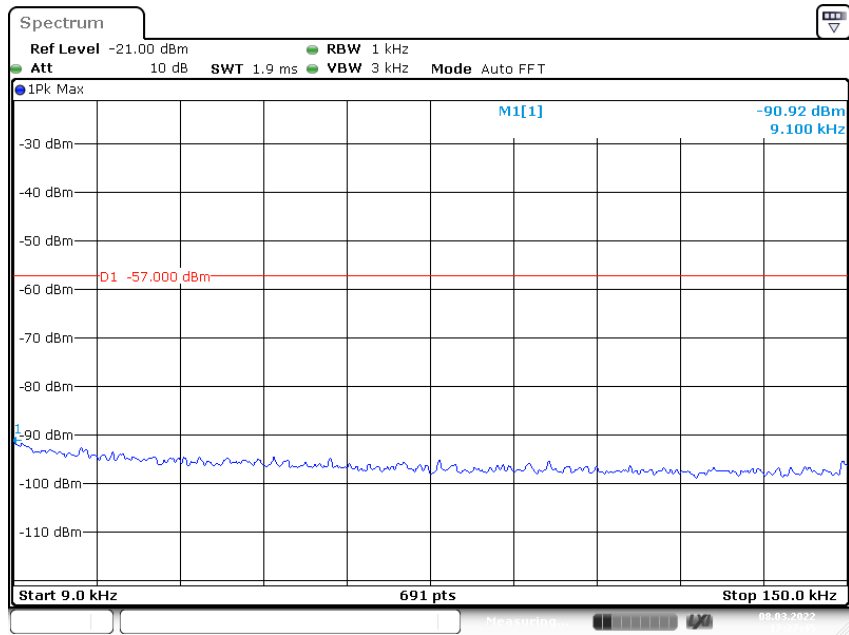
### Conducted Measurement (1GHz to 2GHz)



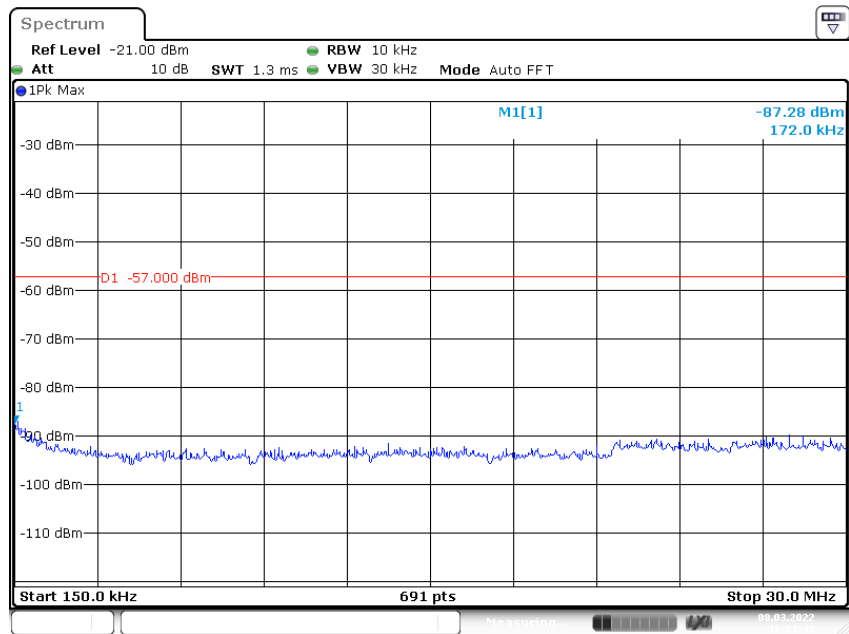
Date: 8.MAR.2022 16:38:37

Test mode10:

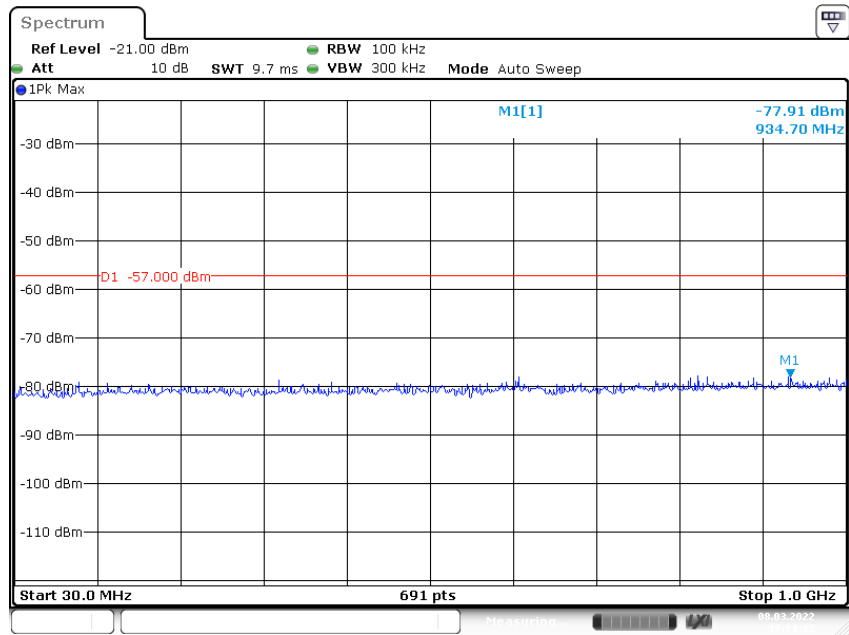
### Conducted Measurement (9 kHz to 150 kHz)



### Conducted Measurement (150 kHz to 30MHz)

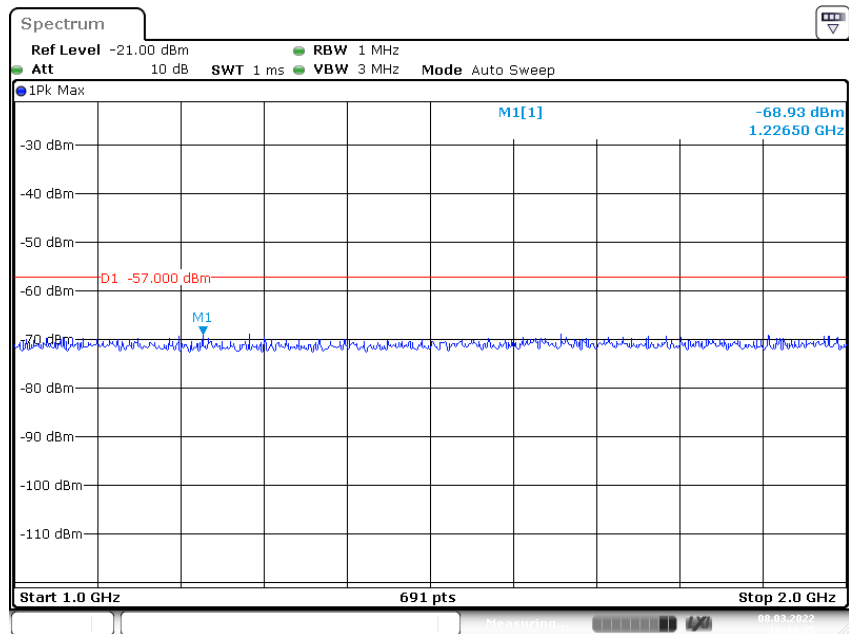


### Conducted Measurement (30MHz to 1GHz)



Date: 8.MAR.2022 17:01:13

### Conducted Measurement (1GHz to 2GHz)



Date: 8.MAR.2022 16:44:26

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