F2 Labs
16740 Peters Road
Middlefield, Ohio 44062
United States of America
www.f2labs.com

CERTIFICATION TEST REPORT

Manufacturer:	**Global Link Distribution Corp.** **700 Patricia Court** **Elkhart, Indiana 46516 USA**
Applicant:	**Same as Above**
Product Name:	**LatchXtend Keyless RV Door Lock with Bluetooth**
Product Description:	Bluetooth Aluminum Travel Trailer Latch, With 15 Inch Extended Handle
Operating Voltage/Freq. of EUT During Testing:	Battery-Operated (3VDC)
Model(s):	**TTLBT**
FCC ID:	**2BN28-TTLBT**
Testing Commenced:	2025-02-26
Testing Ended:	2025-04-02
Summary of Test Results:	**In Compliance** The EUT complies with the EMC requirements when manufactured identically as the unit tested in this report, including any required modifications and/or manufacturer's statement. Any changes to the design or build of this unit subsequent to this testing may deem it non-compliant.

Rules:

- **FCC Part 15 Subpart C, Section 15.247**
- **FCC Part 15.31(e)**
- **ANSI C63.10-2020/Cor 1-2023**

Evaluation Conducted by:

Erik Tobin, EMC Engineer

Report Reviewed by:

Ken Littell, Vice President of Operations

F2 Labs
26501 Ridge Road
Damascus, MD 20872
Ph 301.253.4500

F2 Labs
16740 Peters Road
Middlefield, OH 44062
Ph 440.632.5541

F2 Labs
8583 Zionsville Road
Indianapolis, IN 46268
Ph 317.610.0611

TABLE OF CONTENTS

1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Measurement Procedure:

All measurements were performed according to ANSI C63.10 and recommended FCC procedure of measurement under Section 15.247 and in KDB558074. A list of the measurement equipment can be found in Section 6.

1.3 Uncertainty Budget:

The uncertainty in EMC measurements arises from several factors which affect the results, some associated with environmental conditions in the measurement room, the test equipment being used and the measurement techniques adopted.

The measurement uncertainty budgets detailed below are calculated from the test and calibration data and are expressed with a 95% confidence factor. Note: Only measurements listed below which relate to tests included in this Test Report are applicable to it.

Measurement Range	Expanded Uncertainty	Combined Uncertainty
Radiated Emissions <1 GHz @ 3m	±5.07dB	±2.54dB
Radiated Emissions <1 GHz @10m	±5.09dB	±2.55dB
Radiated Emissions 1 GHz to 2.7 GHz	±3.62dB	±1.81dB
Radiated Emissions 2.7 GHz to 18 GHz	±3.10dB	±1.55dB
AC Power Line Conducted Emissions, 150kHz to 30 MHz	±2.76dB	±1.38dB

This Uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

1.4 Document History

Document Number	Description	Issue Date	Approved By
F2P34408-01E	First Issue	2025-05-03	K. Littell

2 SUMMARY OF TEST RESULTS

Test Name	Standard(s)	Results
Occupied Bandwidth	CFR 47 Part 15.247(a)(2) / KDB558074	Complies
Conducted Output Power	CFR 47 Part 15.247(b)(2) / KDB558074	Complies
Voltage Variations	CFR 47 Part 15.31(e)	Complies*
Conducted Spurious Emissions	CFR 47 Part 15.247(d) / Part 15.207 / KDB558074	Complies
Radiated Spurious Emission with 2.0dBi Gain Integral Antenna	CFR 47 Part 15.247(d) / Part 15.209 / KDB558074	Complies
Peak Power Spectral Density	CFR 47 Part 15.247(e) / KDB558074	Complies
Frequency Separation	ANSI 63.10 2013 (7.8.2)	N/A
Number of Hopping Frequencies	ANSI 63.10 2013 (7.8.3)	N/A
Dwell Time	ANSI 63.10 2013 (7.8.4)	N/A
Conducted Emissions	CFR 47 Part 15.207(a)	N/A

Note: Product is battery-operated. Requirements of 15.31 were met by using new batteries.

Modifications Made to the Equipment
None

3 TABLE OF MEASURED RESULTS

Test	Low Channel 2402 MHz	Mid Channel 2440 MHz	High Channel 2480 MHz
1Mb			
Conducted Output Power	2.089mW / 3.2dBm	2.056mW / 3.13dBm	2.0706mW / 3.16dBm
Conducted Output Power Limit	1 Watt / 30dBm	1 Watt / 30dBm	1 Watt / 30dBm
E.I.R.P. with 2.0dBi Integral Antenna	3.311mW / 5.2dBm	3.258mW / 5.13dBm	3.281mW 5.16dBm
E.I.R.P. Limit	4 Watts / 36.02dBm	4 Watts / 36.02dBm	4 Watts / 36.02dBm
-6dB Occupied Bandwidth	0.7162 MHz	0.7128 MHz	0.7128 MHz
-20dB Occupied Bandwidth	1.2318 MHz	1.233 MHz	1.2318 MHz
99% Occupied Bandwidth	1.037 MHz	1.033 MHz	1.033 MHz
Occupied Bandwidth Limit	>500kHz	>500kHz	>500kHz
Peak Power Spectral Density	-13.81dBm	-13.86dBm	-13.80dBm
Peak Power Spectral Density Limit	8dBm	8dBm	8dBm

Note: Product is battery-operated. Requirements of 15.31 were met by using new batteries.

Test	Low Channel 2402 MHz	Mid Channel 2440 MHz	High Channel 2480 MHz
2Mb			
Conducted Output Power	2.065mW / 3.15dBm	2.056mW / 3.13dBm	2.084mW / 3.19dBm
Conducted Output Power Limit	1 Watt / 30dBm	1 Watt / 30dBm	1 Watt / 30dBm
E.I.R.P. with 2.0dBi Integral Antenna	3.273mW / 5.15dBm	3.258mW / 5.13dBm	3.304mW 5.19dBm
E.I.R.P. Limit	4 Watts / 36.02dBm	4 Watts / 36.02dBm	4 Watts / 36.02dBm
-6dB Occupied Bandwidth	1.3514 MHz	1.3534 MHz	1.3514 MHz
-20dB Occupied Bandwidth	2.4683 MHz	2.4779 MHz	2.4779 MHz
99% Occupied Bandwidth	2.120 MHz	2.120 MHz	2.127 MHz
Occupied Bandwidth Limit	>500kHz	>500kHz	>500kHz
Peak Power Spectral Density	-14.19dBm	-14.92dBm	-14.89dBm
Peak Power Spectral Density Limit	8dBm	8dBm	8dBm

Note: Product is battery-operated. Requirements of 15.31 were met by using new batteries.

4 ENGINEERING STATEMENT

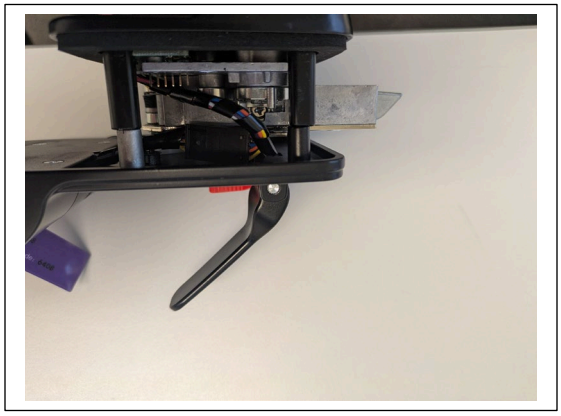
This report has been prepared on behalf of Global Link Distribution Corp., to provide documentation for the testing described herein. This equipment has been tested and found to comply with Part 15.247 of the FCC Rules using ANSI C63.10 and KDB558074 standards. The test results found in this test report relate only to the items tested.

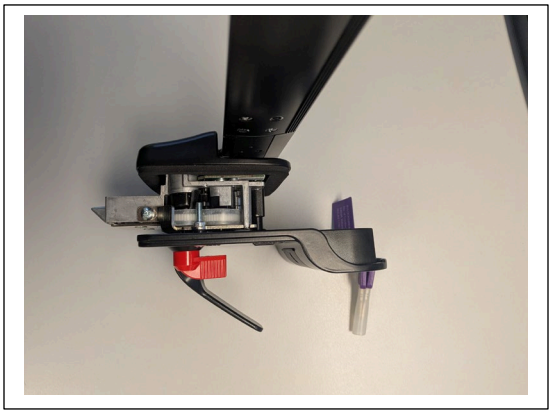
5 EUT INFORMATION AND DATA

5.1 Equipment Under Test:

Product: LatchXtend Keyless RV Door Lock with Bluetooth
Model(s): TTLBT*
Serial No(s).: 2842-LATCHXTEND004; 2842-LATCHXTEND003
FCC ID: 2BN28-TTLBT

**TTLBT-X product family, where X represents cosmetic differences and includes TTLBT-47660EHLF-2006 (tested), TTLBT-47660EHLF-2006-1PK and TTLBT-47660EHPLF-2006.*





5.2 Trade Name:

Global Link Distribution Corp.

5.3 Power Supply:

Battery-Operated (6VDC)

5.4 Applicable Rules:

CFR 47, Part 15.247, subpart C

5.5 Antenna:

Integral, 2dBi Gain

5.6 Accessories:

Device	Manufacturer	Model Number	Serial Number
Laptop	Dell	P104F	None Specified
Power Supply	Dell	DA65NM190	None Specified
Accessory Software Version:		TeraTerm 5	

5.7 Test Item Condition:

The equipment to be tested was received in good condition.

5.8 Testing Algorithm:

EUT was set to transmit (4dBm) continuous modulated signal at low, mid and high channels at 1Mb and 2Mb

6 LIST OF MEASUREMENT INSTRUMENTATION

Equipment Type	Asset Number	Manufacturer	Model	Serial Number	Calibration Due Date
Shielded Chamber	CL166	Albatross Projects	B83117-DF435-T261	US140023	2025-03-31
Receiver	CL151	Rohde & Schwarz	ESU40	100319	2025-04-09
Receiver	CL204	Rohbde & Schwarz	ESR7	101714	2025-04-10
Horn Antenna	CL333	The EMC Shop	DRHA18G	J203061349	2025-04-30
Low Loss Cable Set	CL315 / CL318	Fairview Microwave	FMC0202914-72 / FMC0202914-240	None Spec.	2025-04-09
Horn Antenna 18-26.5 GHz	CL114	A.H. Systems, Inc.	SAS-572	237	2026-01-09
Pre-Amplifier	CL250	Com-Power	PAM-118A	18040011	2025-04-11
Pre-Amplifier	CL189	Com-Power	PAM-840A	461303	2026-04-10
Active 18” Loop Antenna	CL163-Loop	A.H. Systems, Inc.	EHA-52B	100	2025-04-30
Antenna, JB3 Combination	CL175	Sunol Sciences	JB3	A030315	2025-09-18
Software:	Tile Version 3.4.B.3		Software Verified: 2025-02-26 to 2025-02-27		
Software:	EMC 32, Version 8.53.0		Software Verified: 2025-02-26 to 2025-02-27		
Temp/Hum Rec	CL232	Extech	445814	01	2025-05-19
Temp/Hum Rec	CL261	Extech	445814	04	2025-05-19

7 OCCUPIED BANDWIDTH

7.1 Requirements:

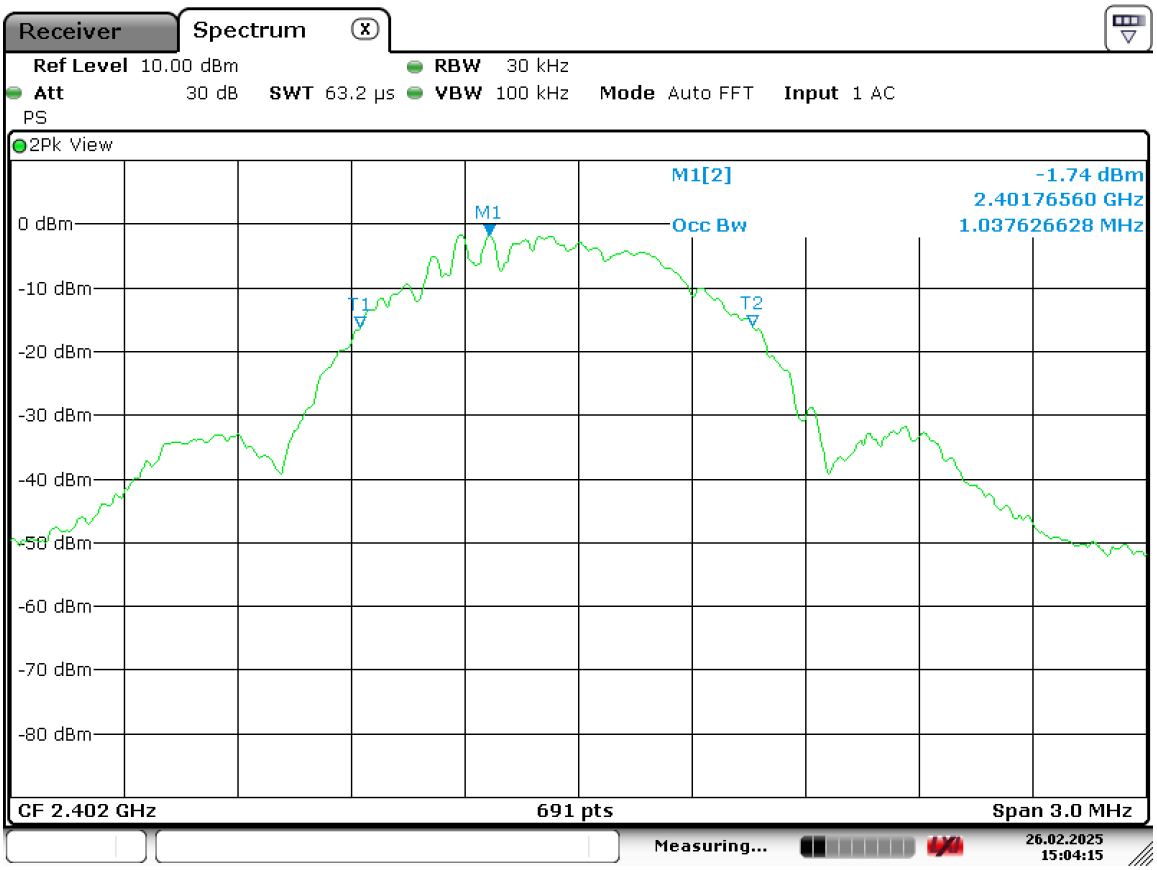
The 6dB bandwidth shall be greater than 500 kHz.

Bandwidth measurements were made at the low, mid and high frequencies with the Resolution Bandwidth set at 30 kHz (video bandwidth set at 100 kHz) for the 99% OBW, and 100kHz Resolution Bandwidth and 300kHz Video Bandwidth for the 6dB OBW. The span was set at 5 MHz. The bandwidth was measured using the analyzer's marker function.

7.2 Occupied Bandwidth Test Data

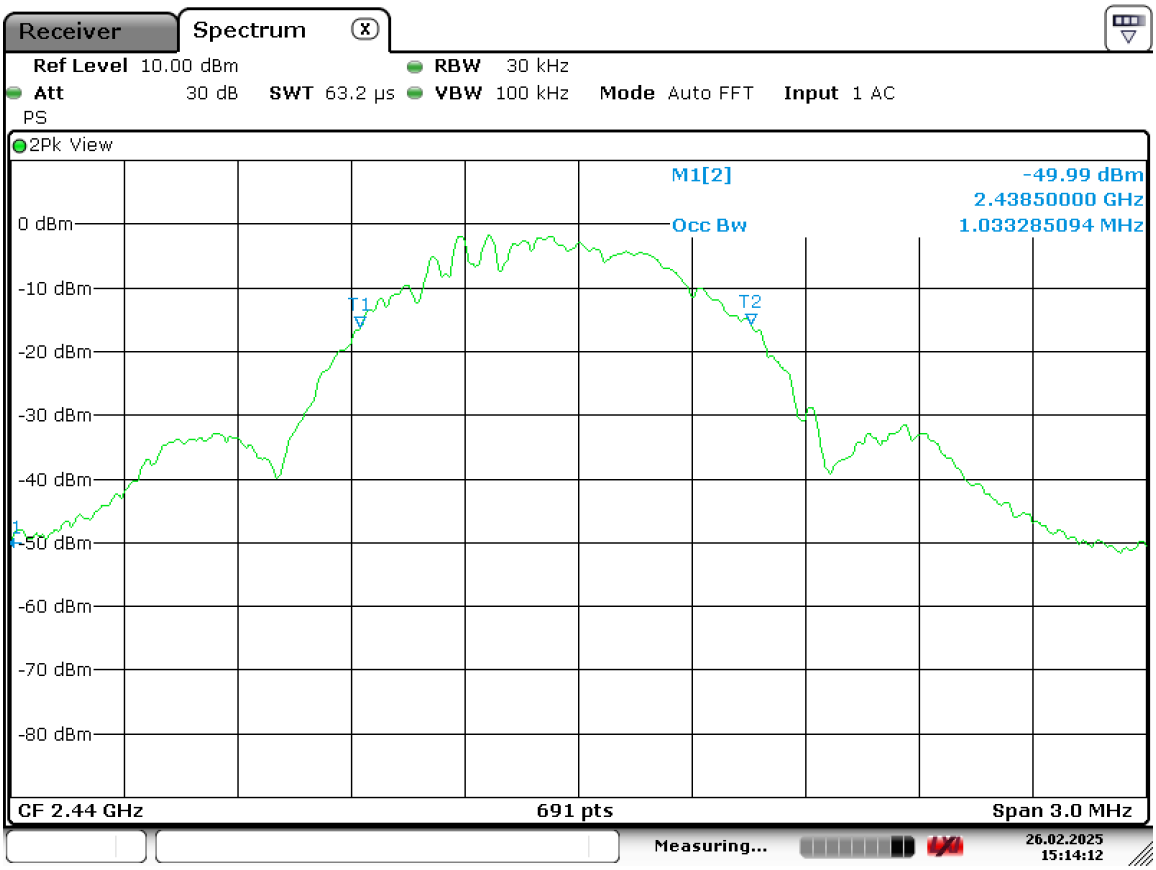
Test Date:	2025-02-26	Test Engineer:	E. Tobin
Standard(s):	CFR 47 Part 15.247(a)(2); KDB558074	Air Temperature:	20.3ºC
		Relative Humidity:	31%

1Mb, 99%: Low Channel



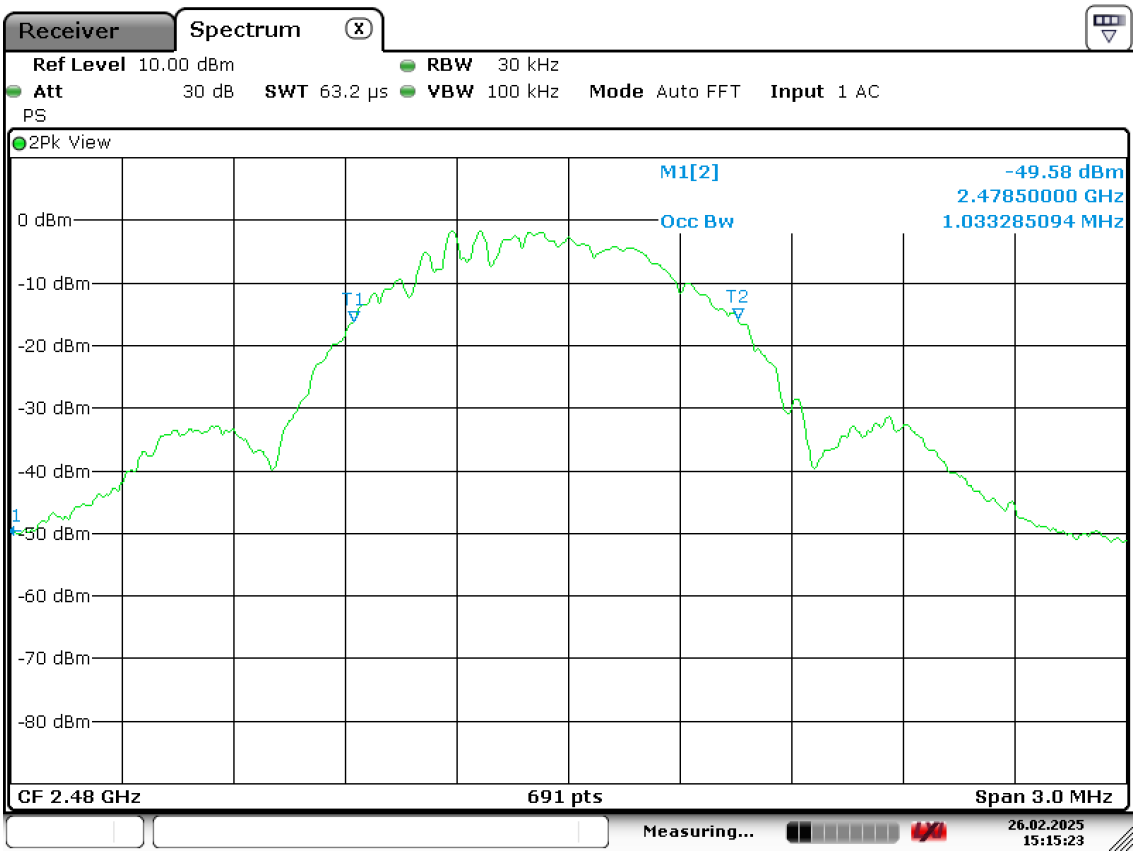
Date: 26.FEB.2025 15:04:15

1Mb, 99%: Mid Channel



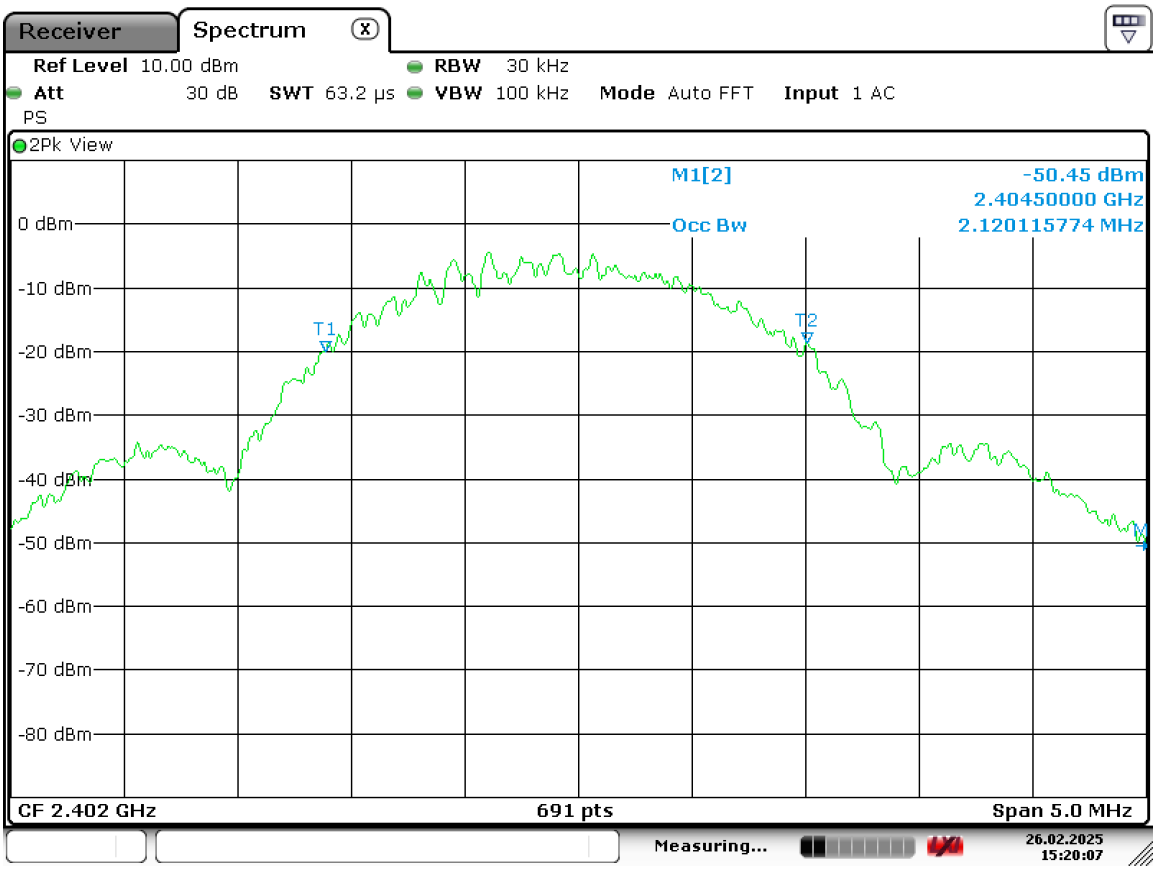
Date: 26.FEB.2025 15:14:12

1Mb, 99%: High Channel



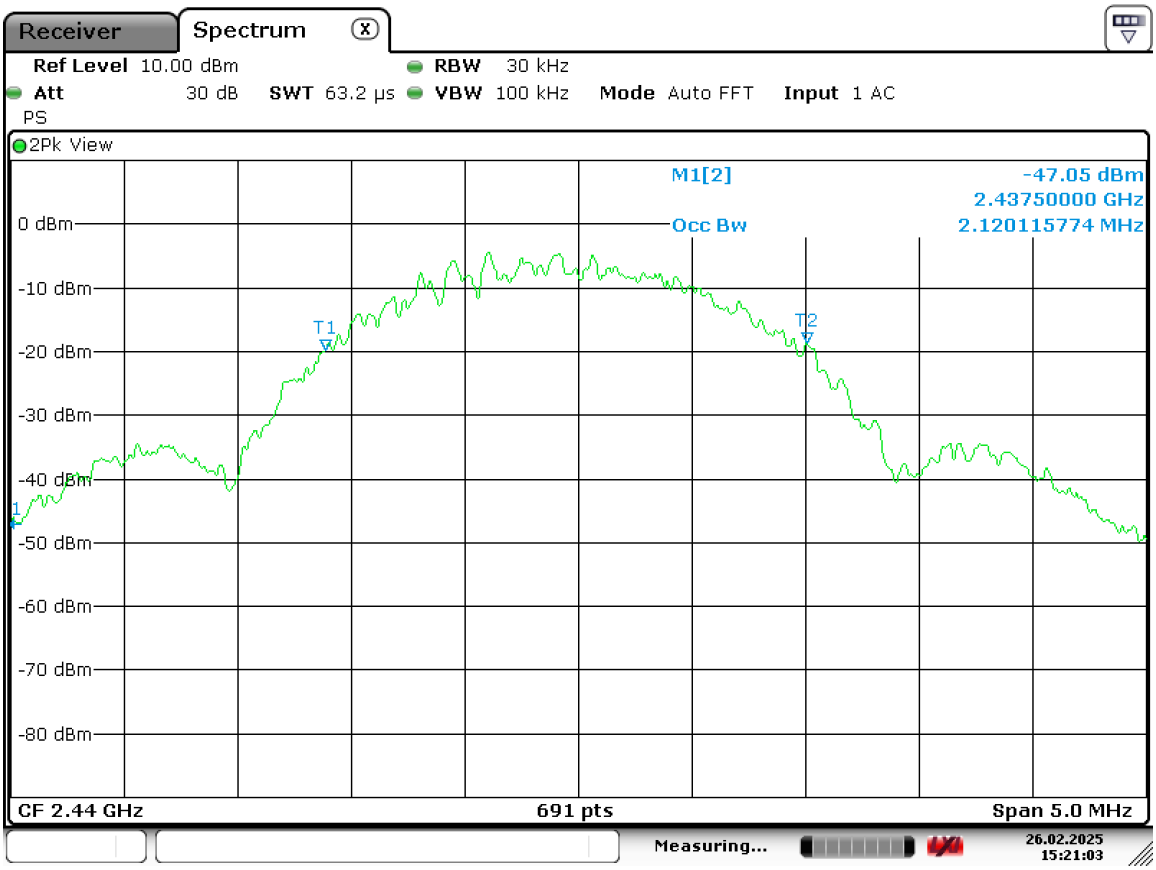
Date: 26.FEB.2025 15:15:22

2Mb, 99%: Low Channel



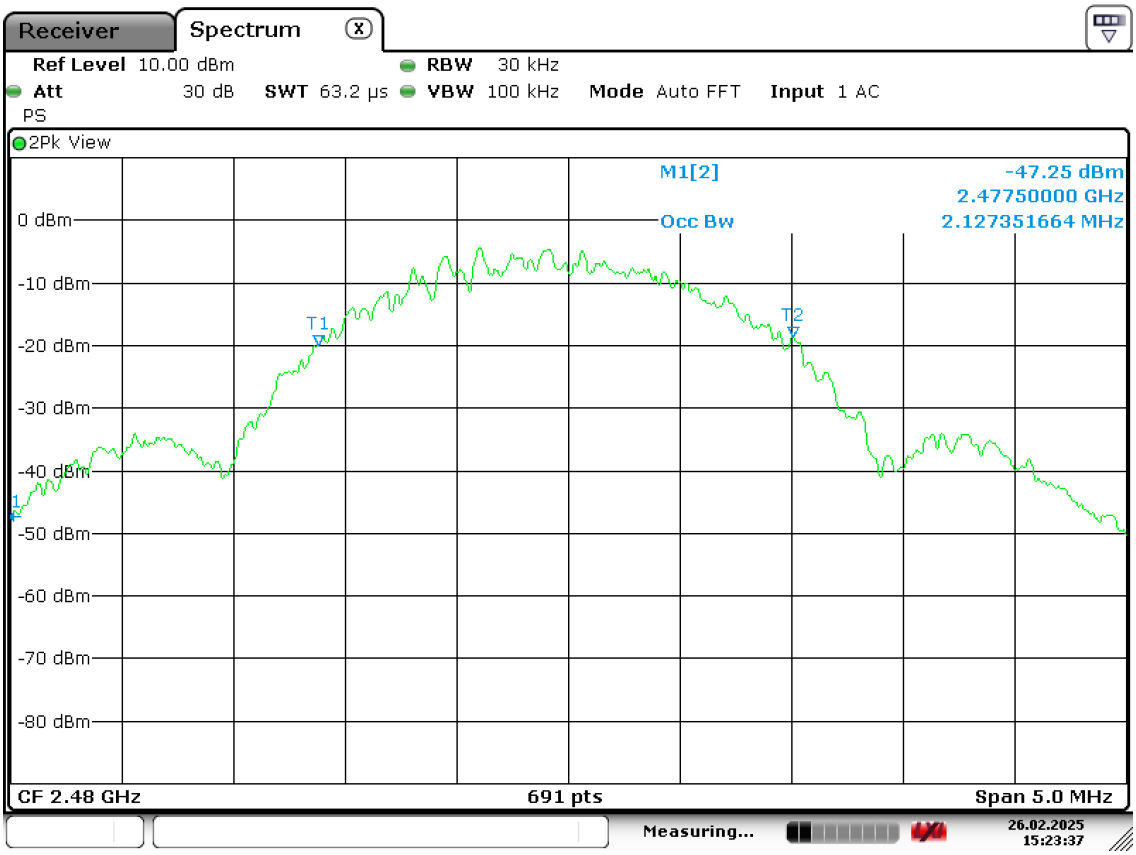
Date: 26.FEB.2025 15:20:08

2Mb, 99%: Mid Channel



Date: 26.FEB.2025 15:21:03

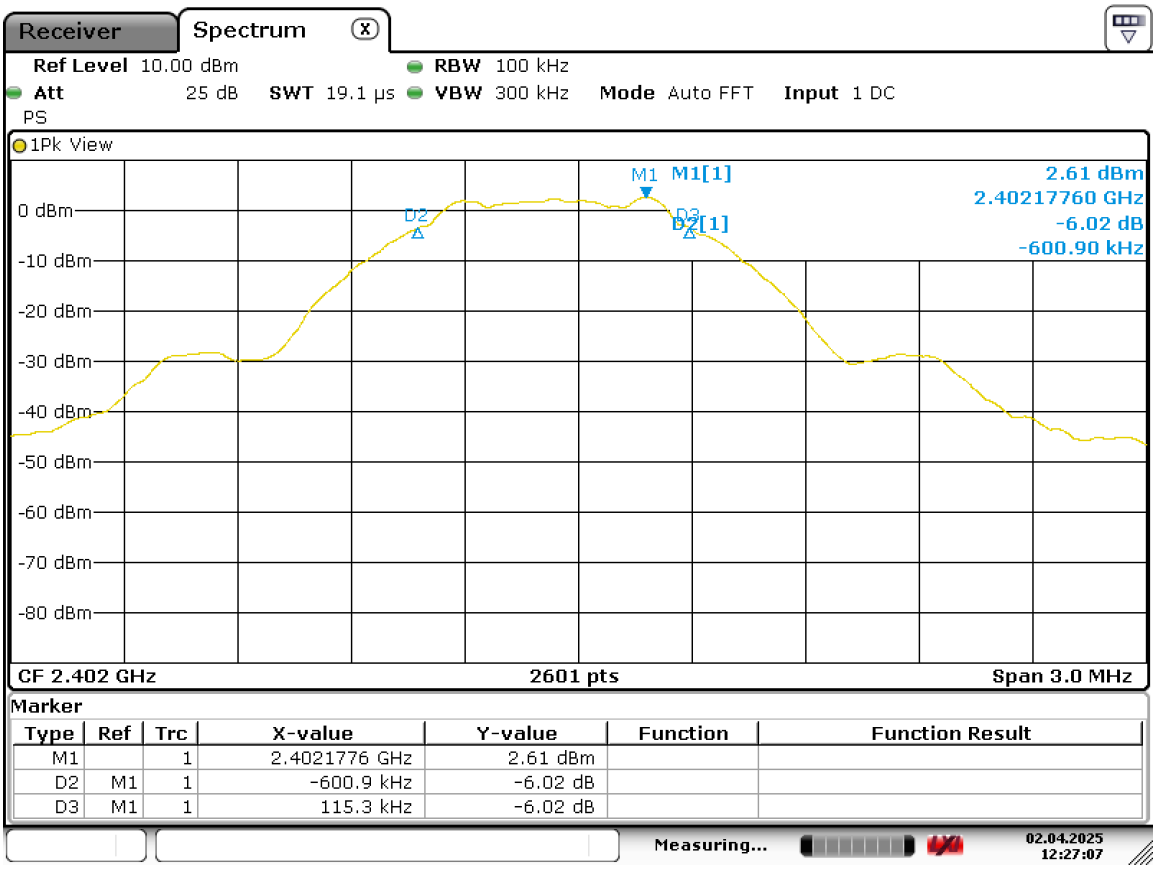
2Mb, 99%: High Channel



Date: 26.FEB.2025 15:23:37

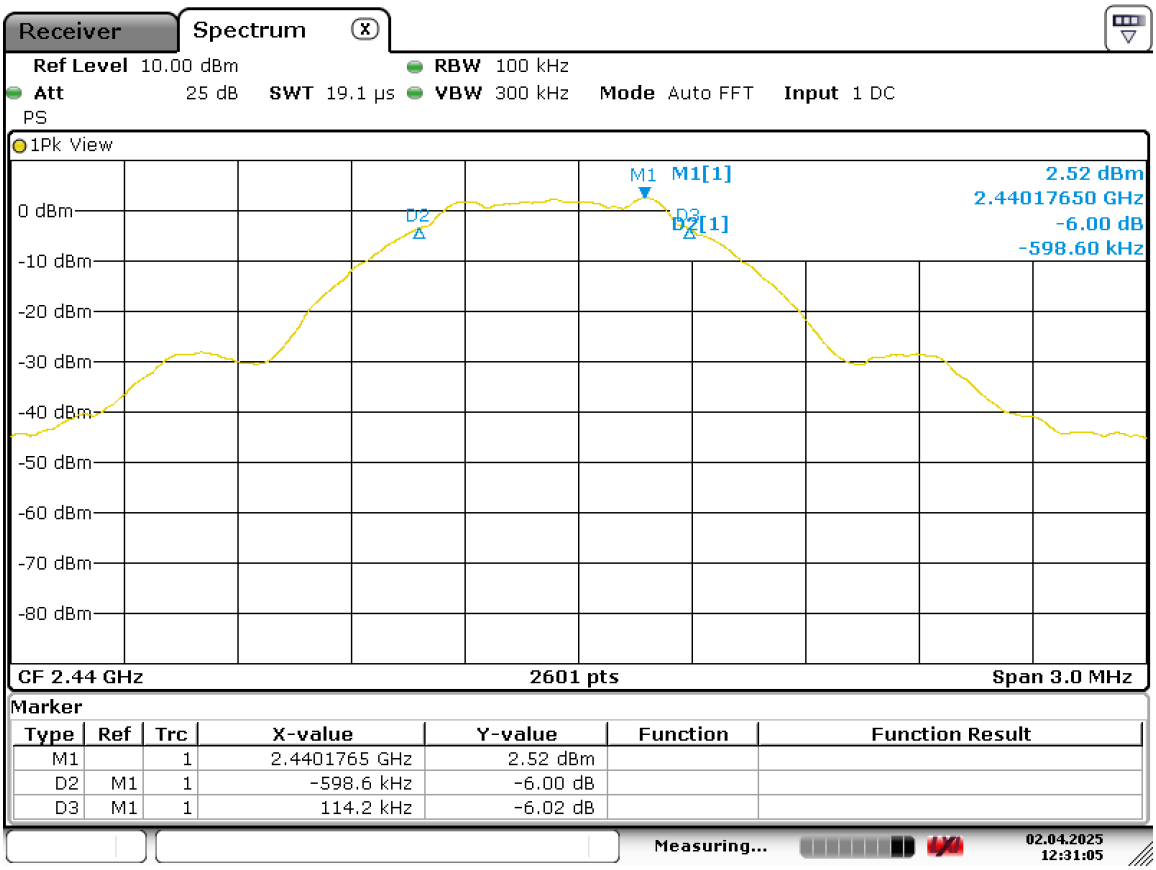
Test Date:	2025-04-02	Test Engineer:	E. Tobin
Standard(s):	CFR 47 Part 15.247(a)(2); KDB558074	Air Temperature:	21.0ºC
		Relative Humidity:	39%

1Mb, -6dB: Low Channel



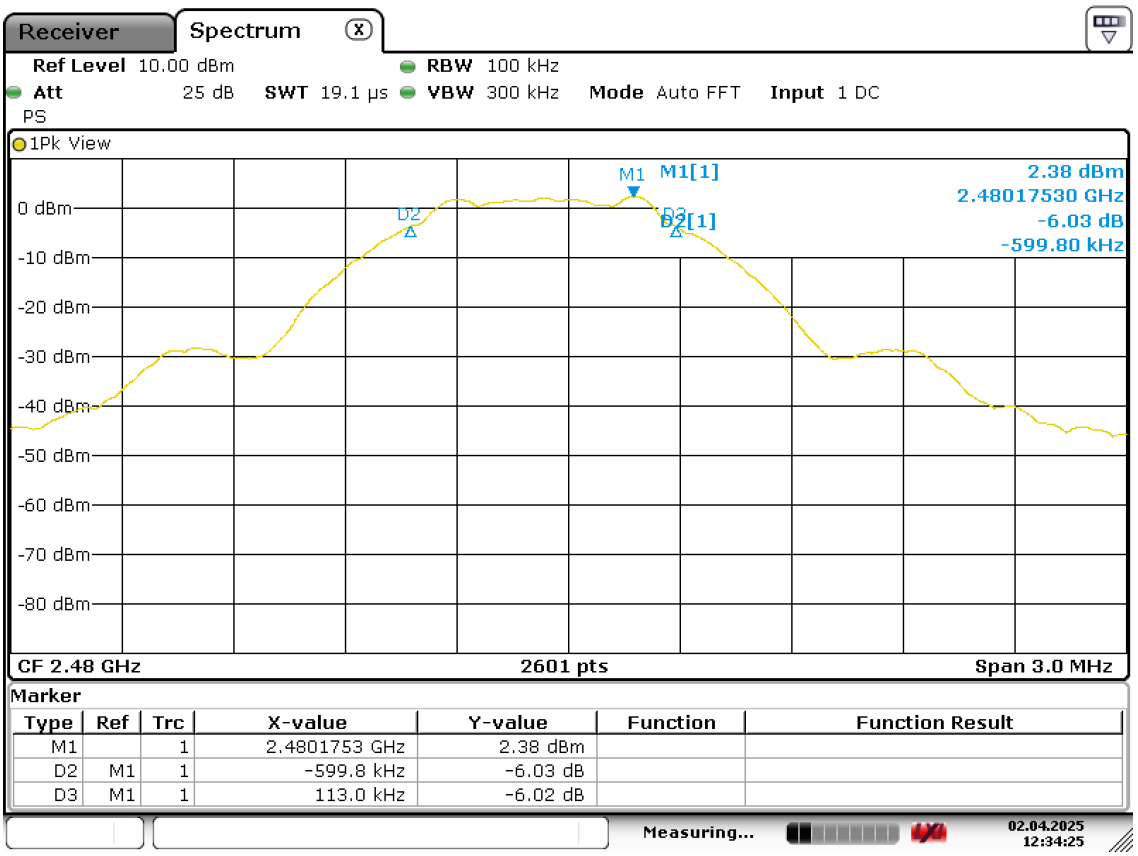
Date: 2.APR.2025 12:27:08

1Mb, -6dB: Mid Channel



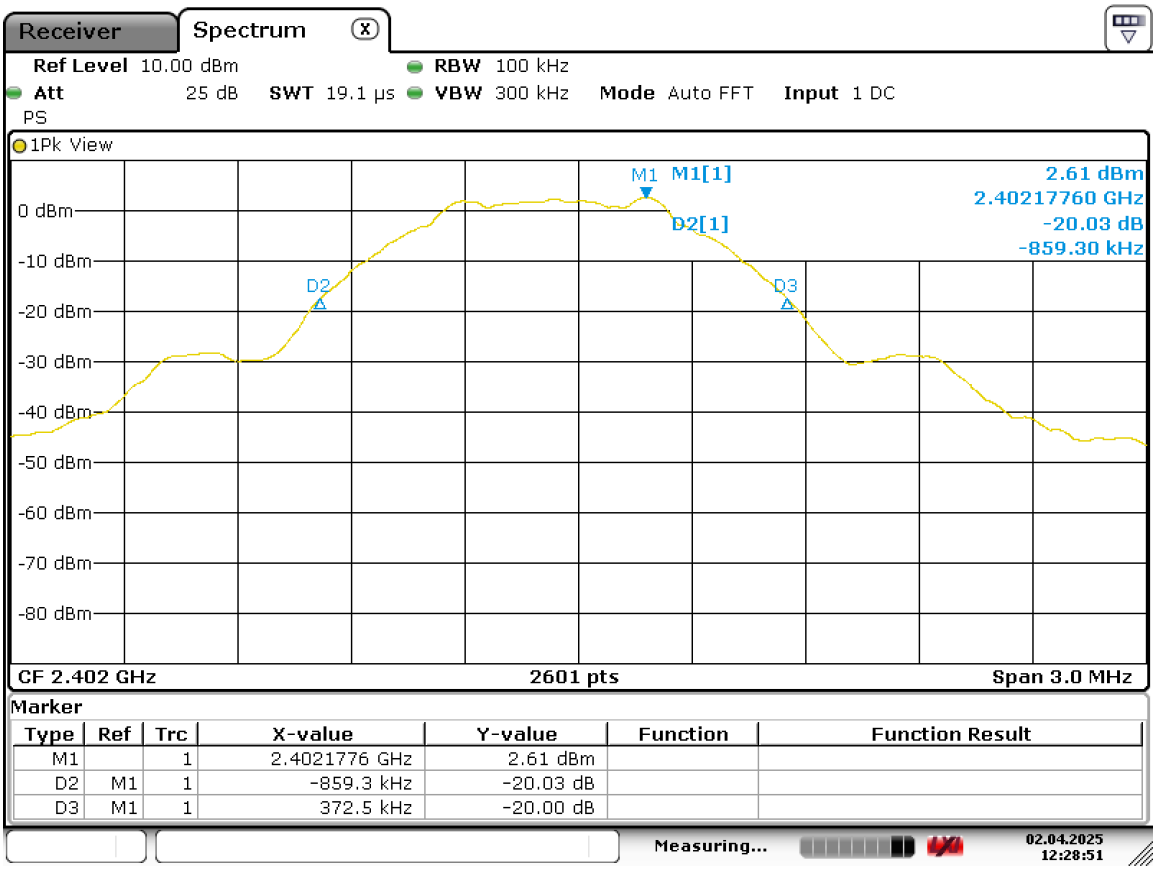
Date: 2.APR.2025 12:31:06

1Mb, -6dB: High Channel



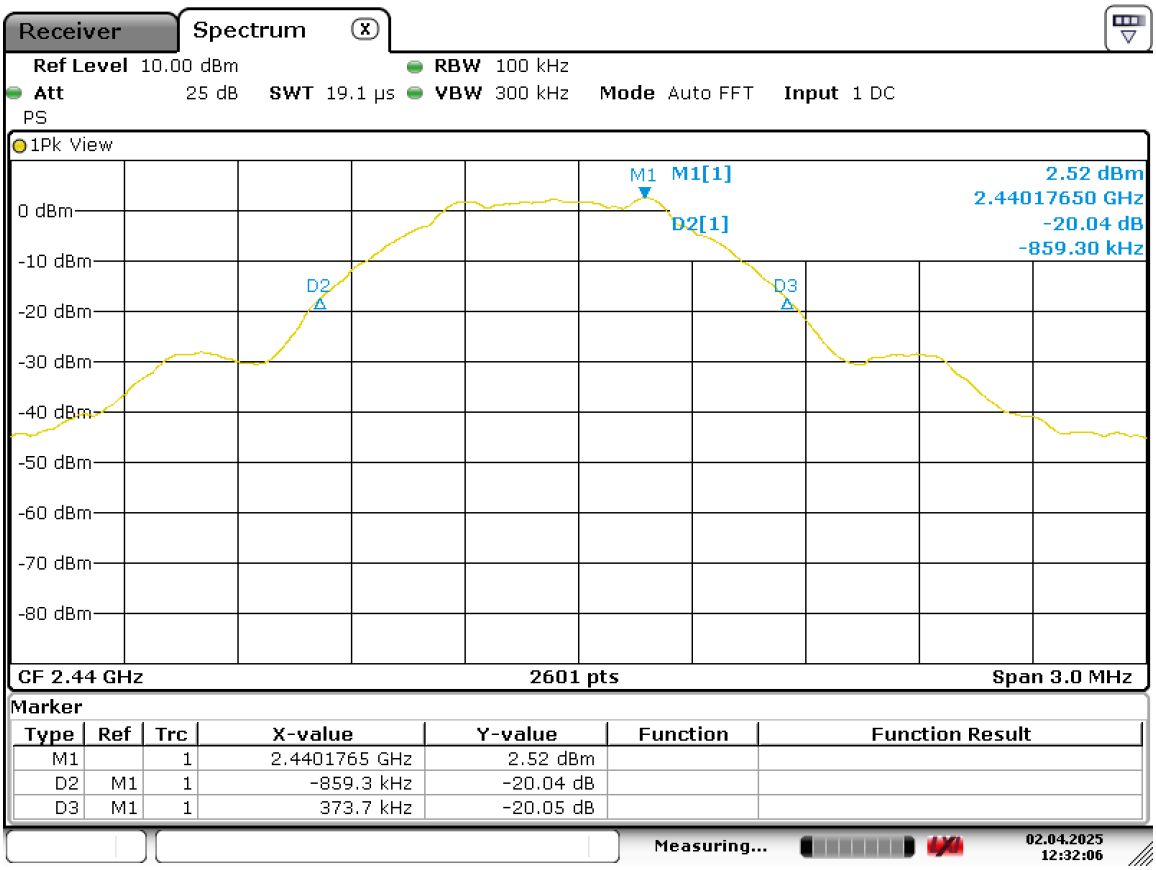
Date: 2.APR.2025 12:34:26

1Mb, -20dB: Low Channel



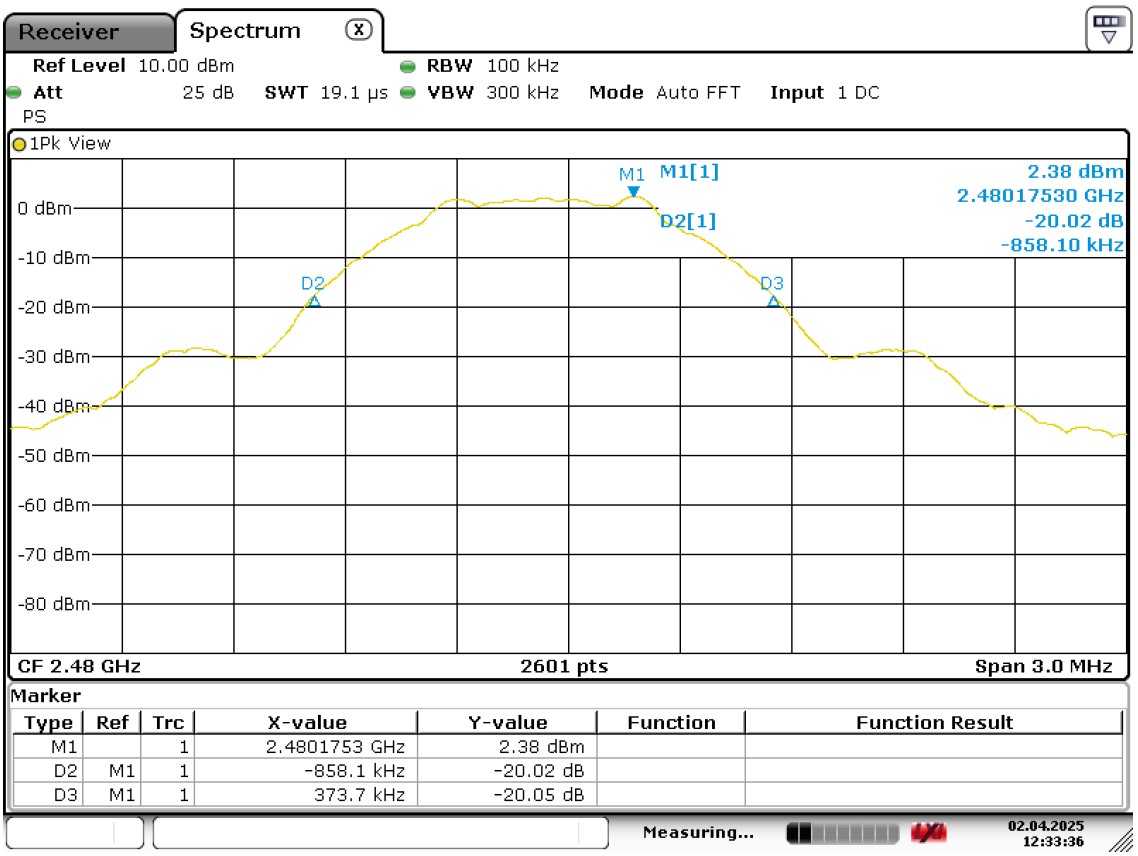
Date: 2.APR.2025 12:28:51

1Mb, -6dB: Mid Channel



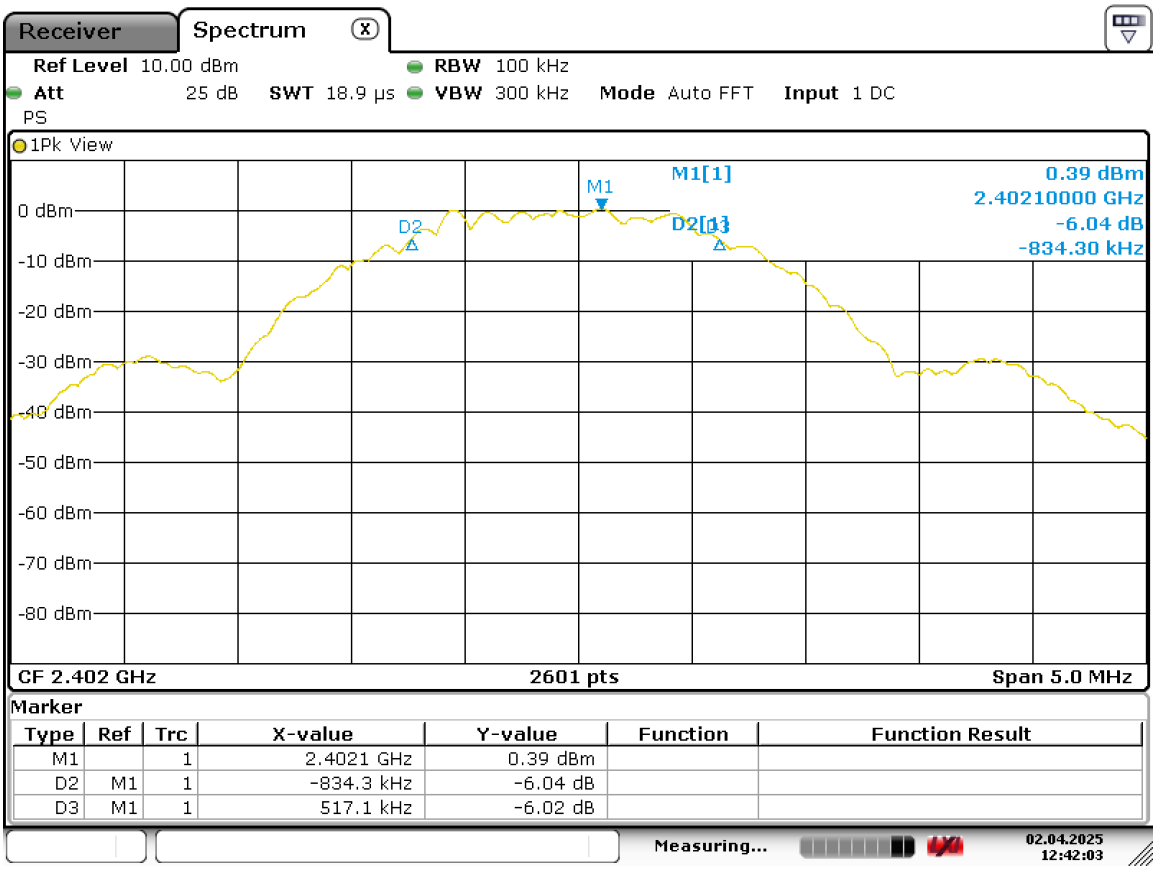
Date: 2.APR.2025 12:32:06

1Mb, -6dB: High Channel



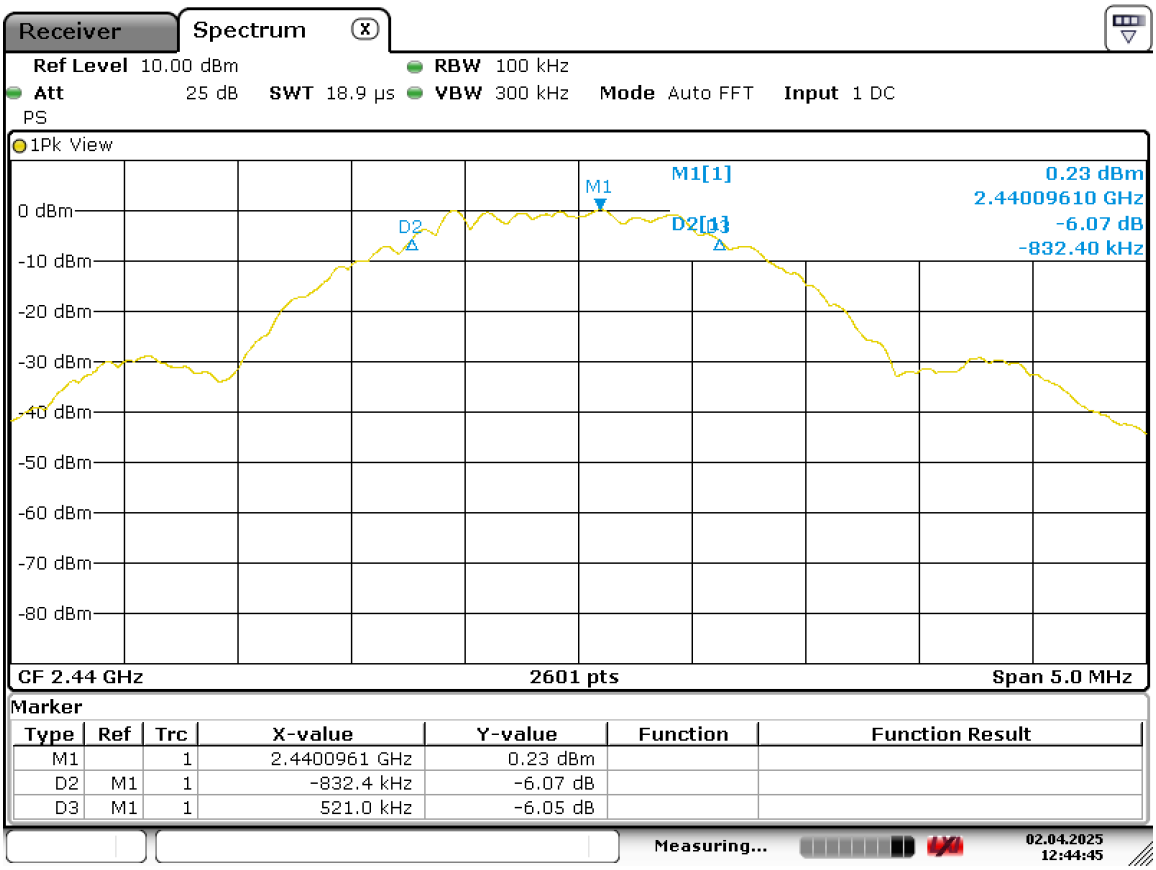
Date: 2.APR.2025 12:33:36

2Mb, -6dB: Low Channel



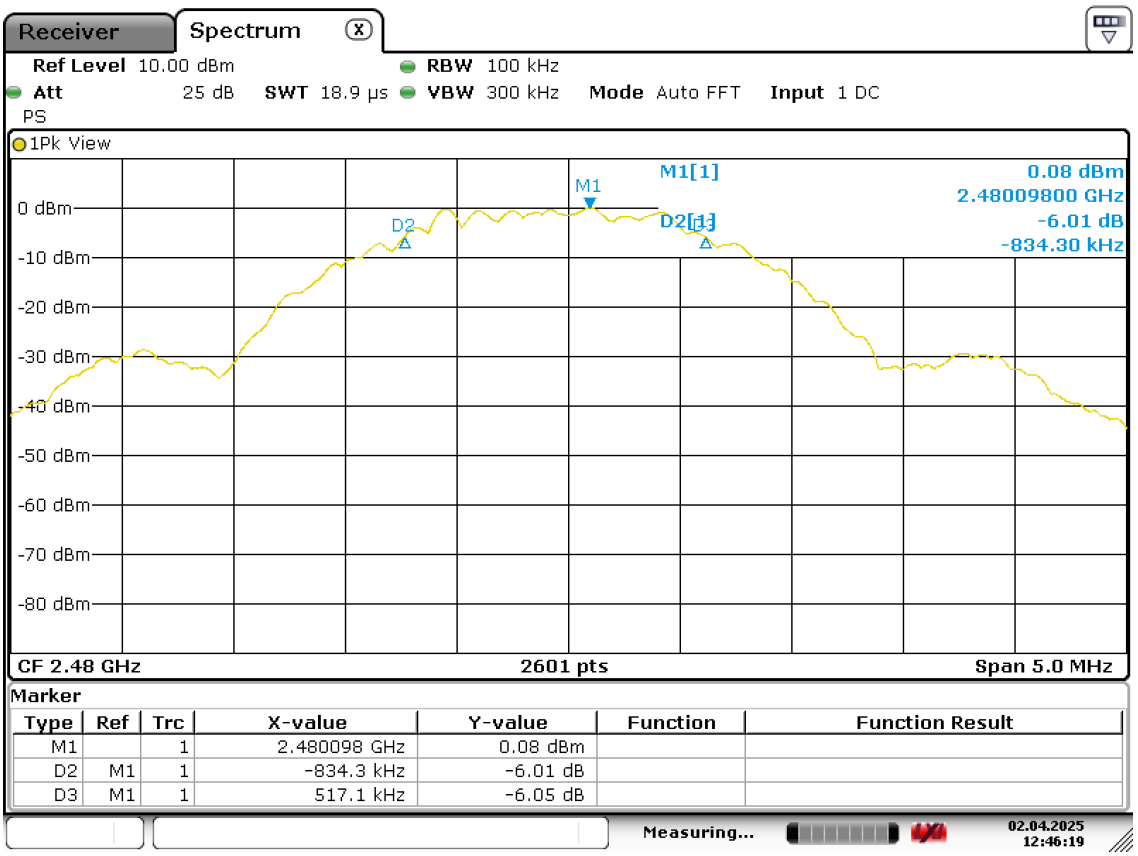
Date: 2.APR.2025 12:42:03

2Mb, -6dB: Mid Channel



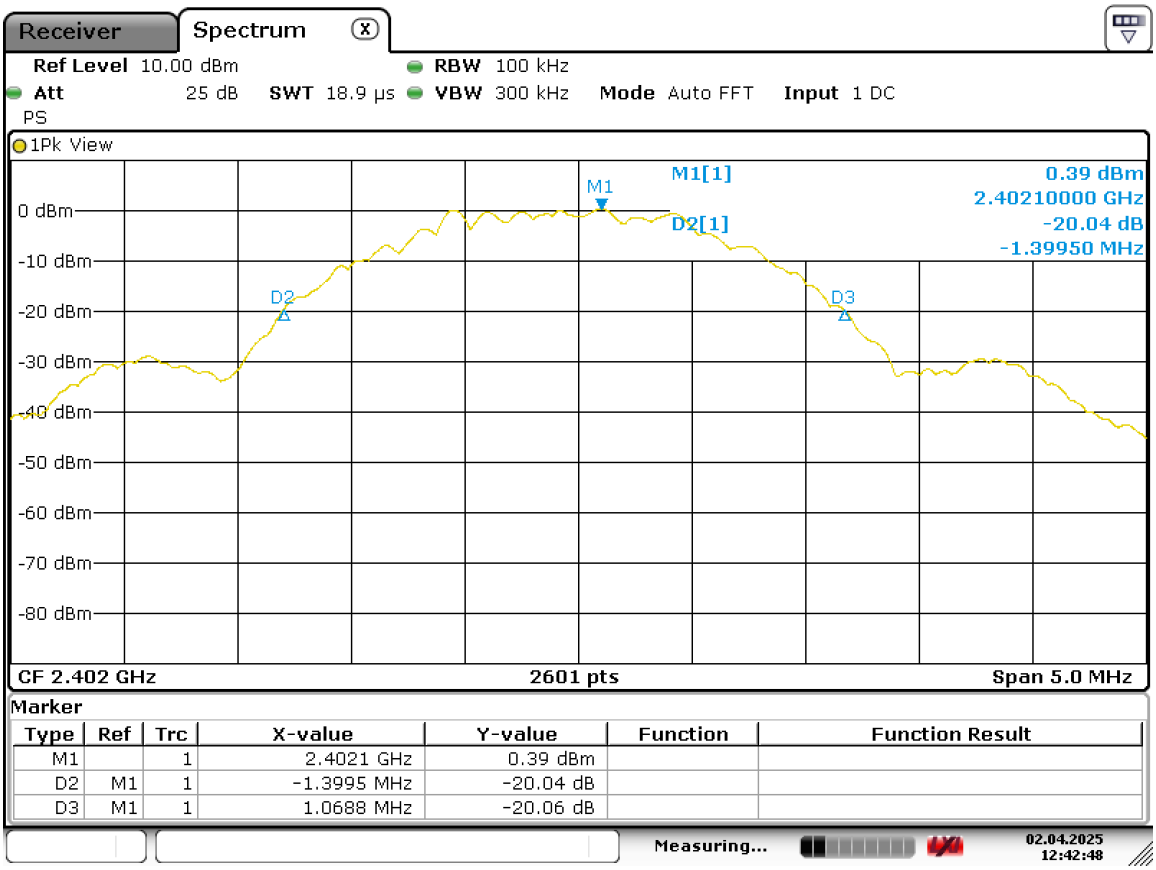
Date: 2.APR.2025 12:44:45

2Mb, -6dB: High Channel



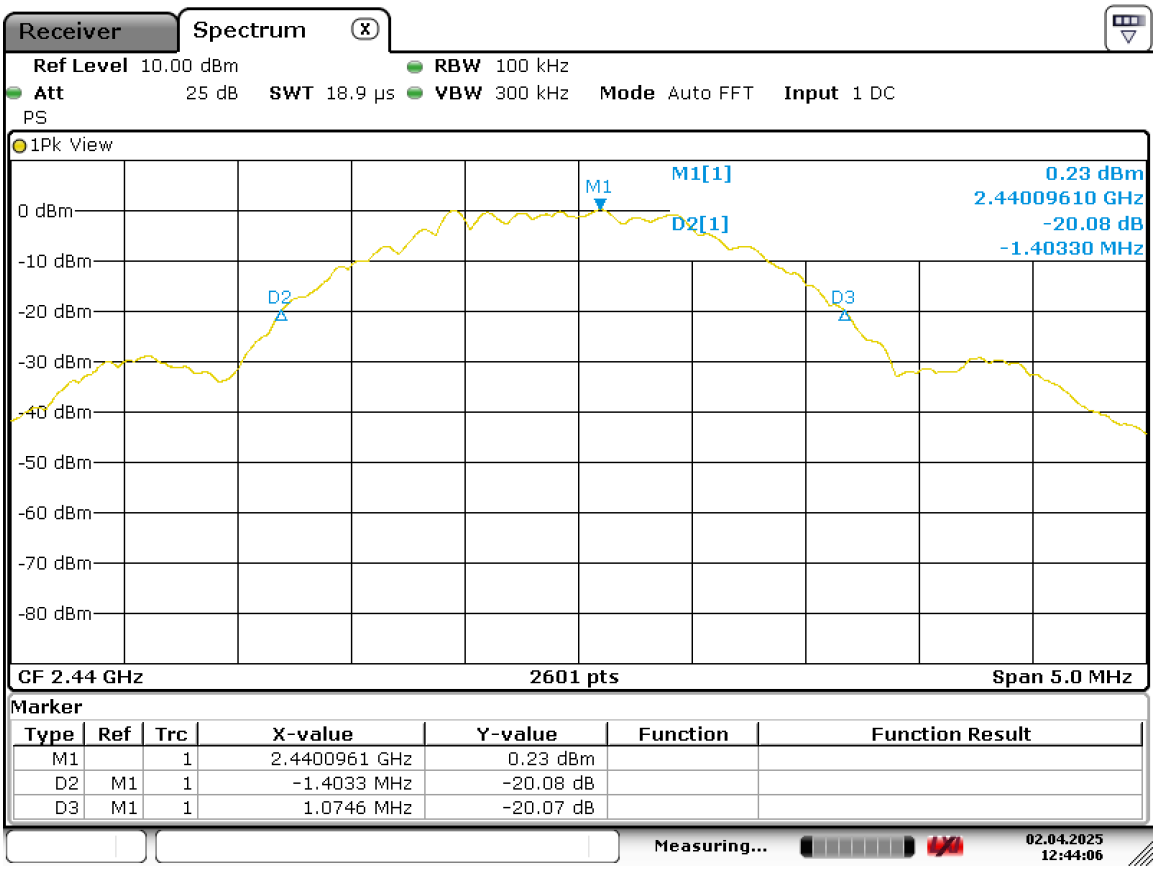
Date: 2.APR.2025 12:46:20

2Mb, -20dB: Low Channel



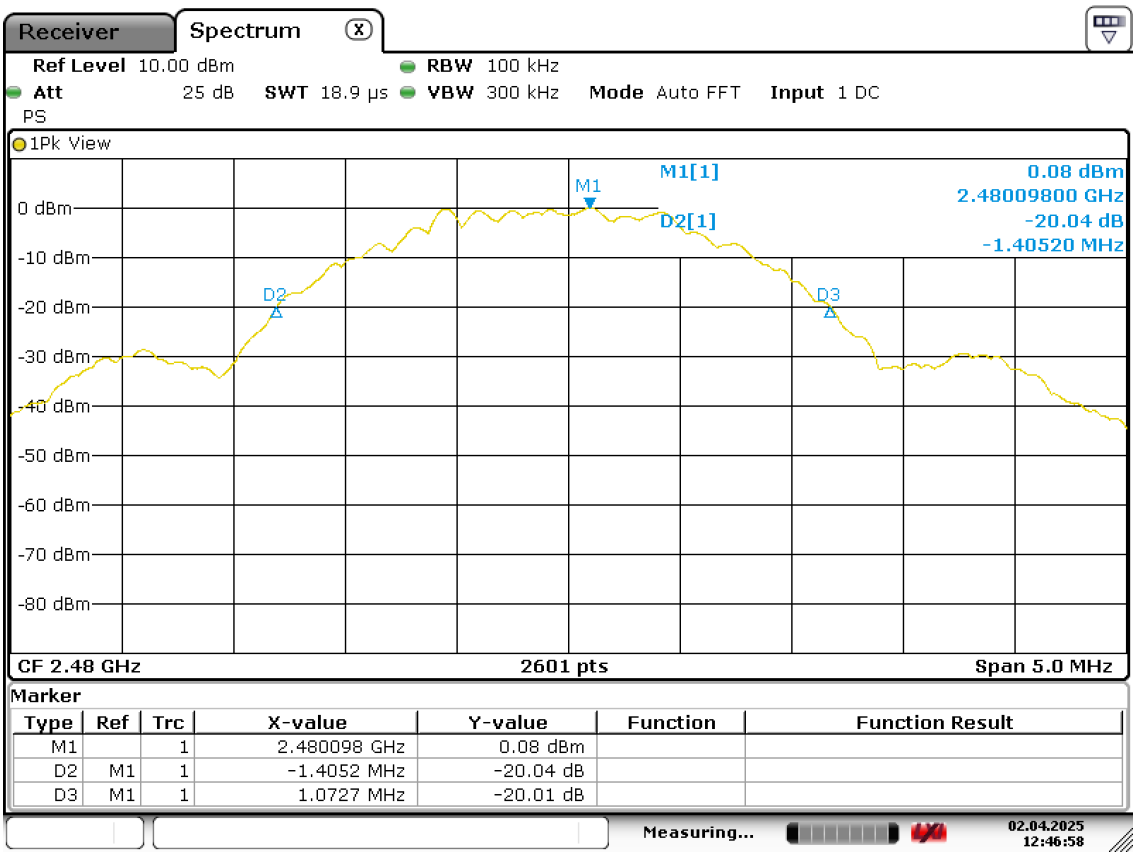
Date: 2.APR.2025 12:42:48

2Mb, -20dB: Mid Channel



Date: 2.APR.2025 12:44:06

2Mb, -20dB: High Channel



Date: 2.APR.2025 12:46:58

8 CONDUCTED OUTPUT POWER

The EUT antenna port was fitted with an SMA connector and directly connected to the input of the receiver. The peak power output was measured.

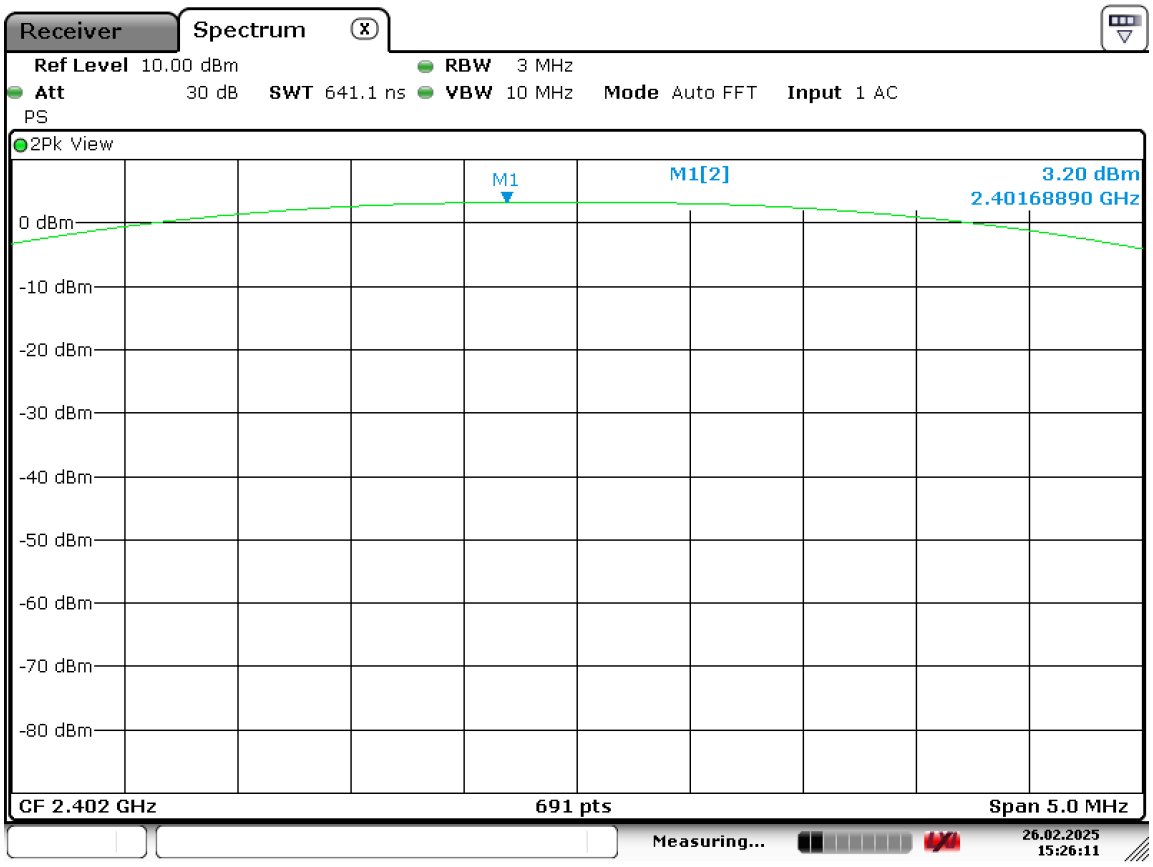
8.1 Requirements:

The peak power output shall be 1 watt (30 dBm) or less when using an antenna with a gain of less than 6dBi. For antennas having a gain of more than 6dBi, the limit is reduced by 1dB for every dB the antenna gain is over 6dBi.

8.2 Conducted Output Power Test Data

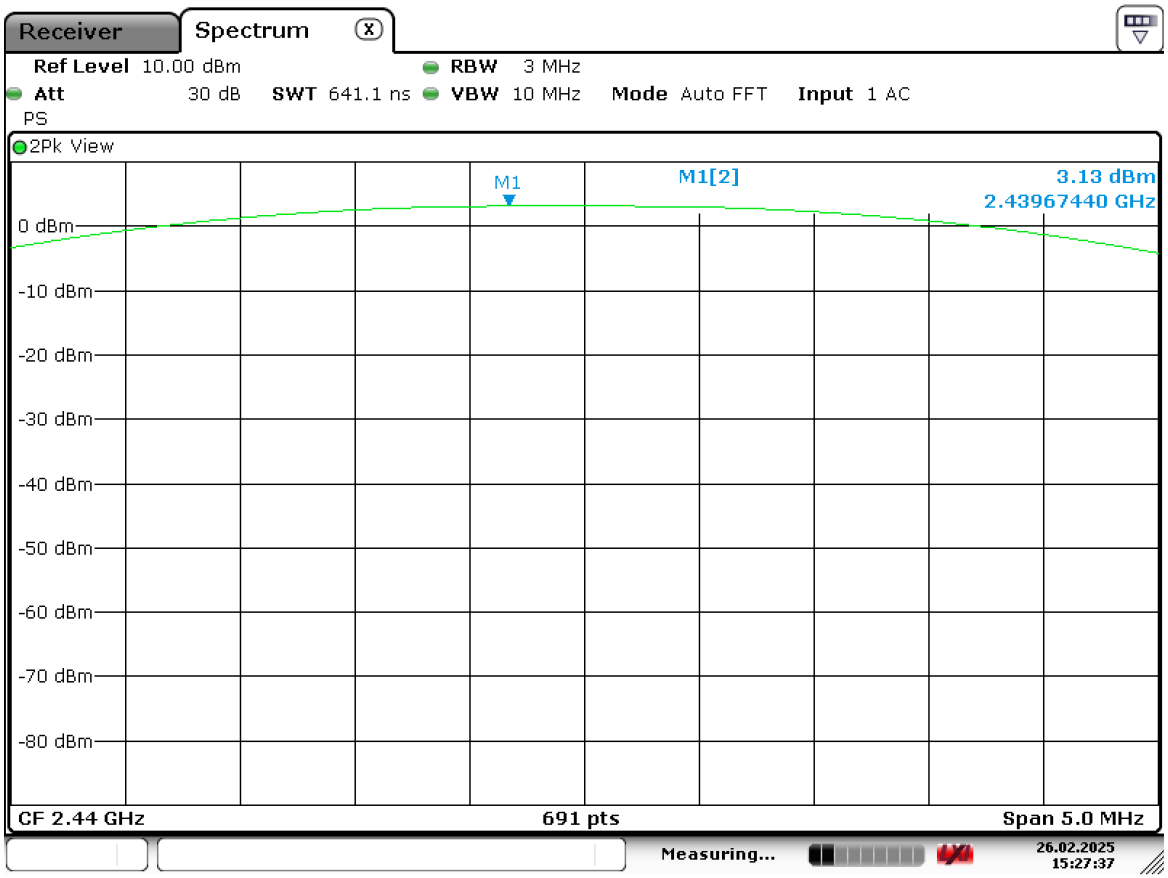
Test Date:	2025-02-26	Test Engineer:	E. Tobin
Standards:	CFR 47 Part 15.247(b)(3); KDB558074	Air Temperature:	20.3ºC
		Relative Humidity:	31%

1Mb: Low Channel



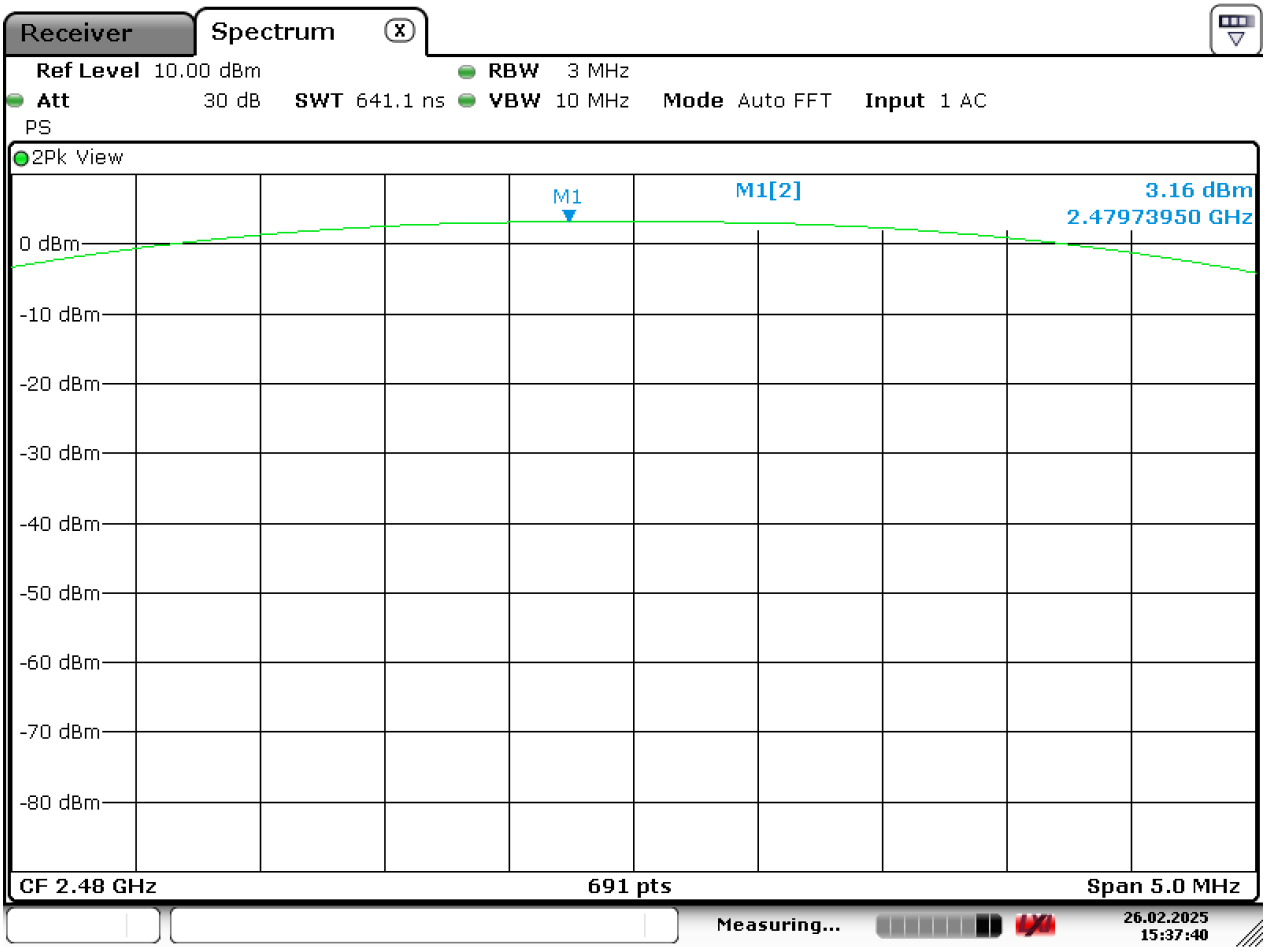
Date: 26.FEB.2025 15:26:11

1Mb: Mid Channel



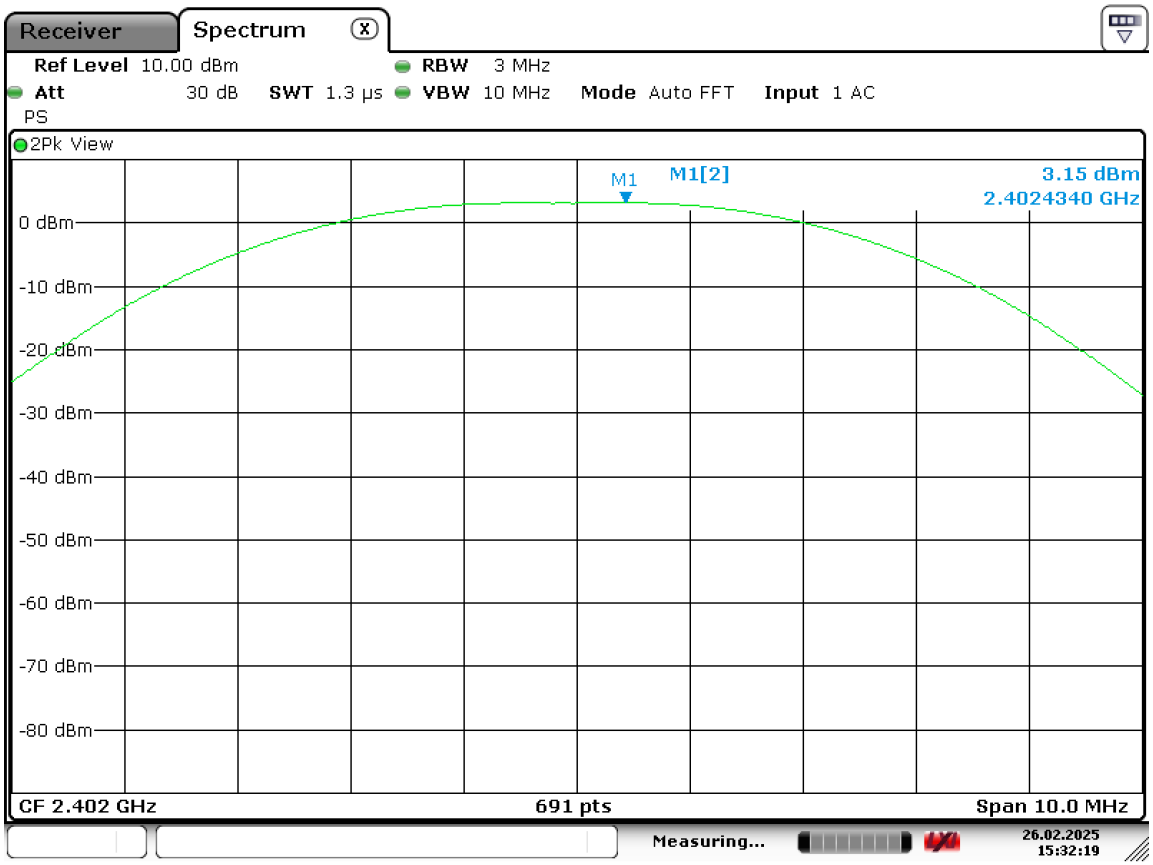
Date: 26.FEB.2025 15:27:37

1Mb: High Channel



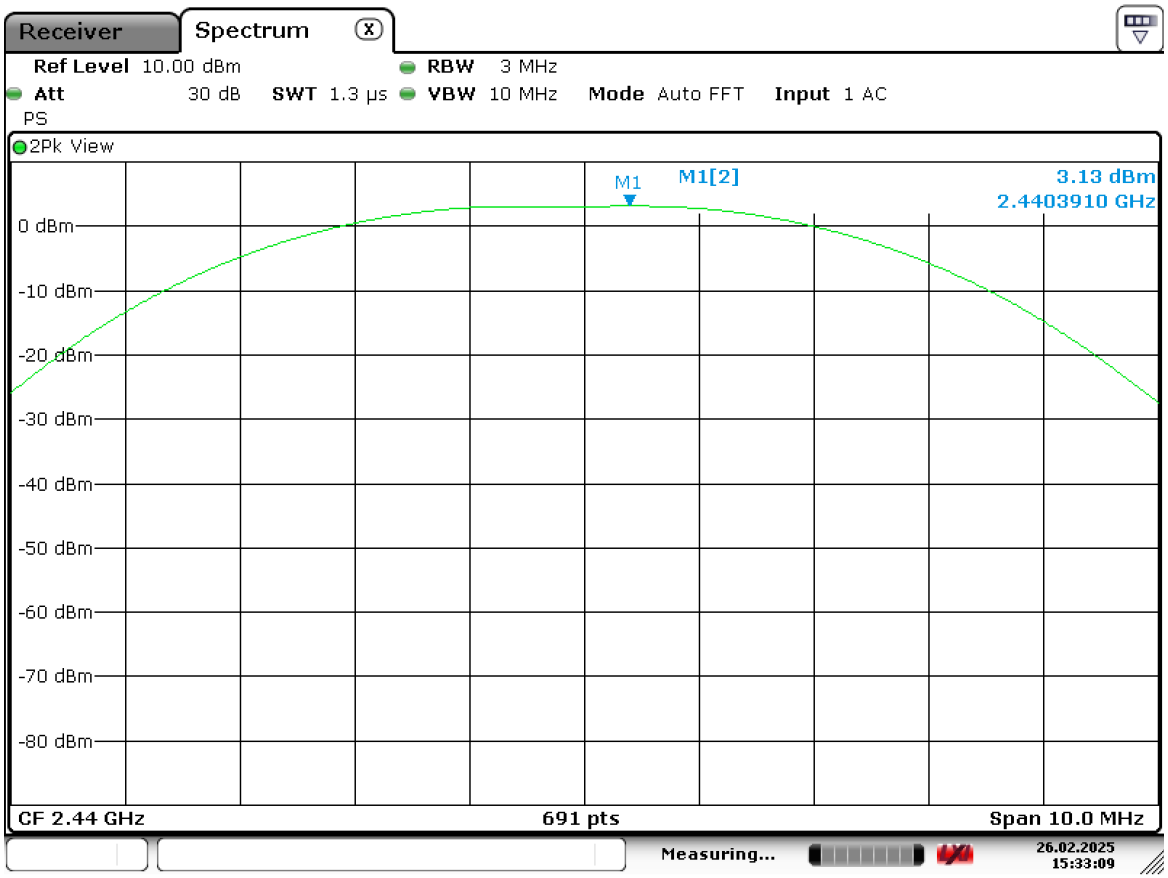
Date: 26.FEB.2025 15:37:40

2Mb: Low Channel



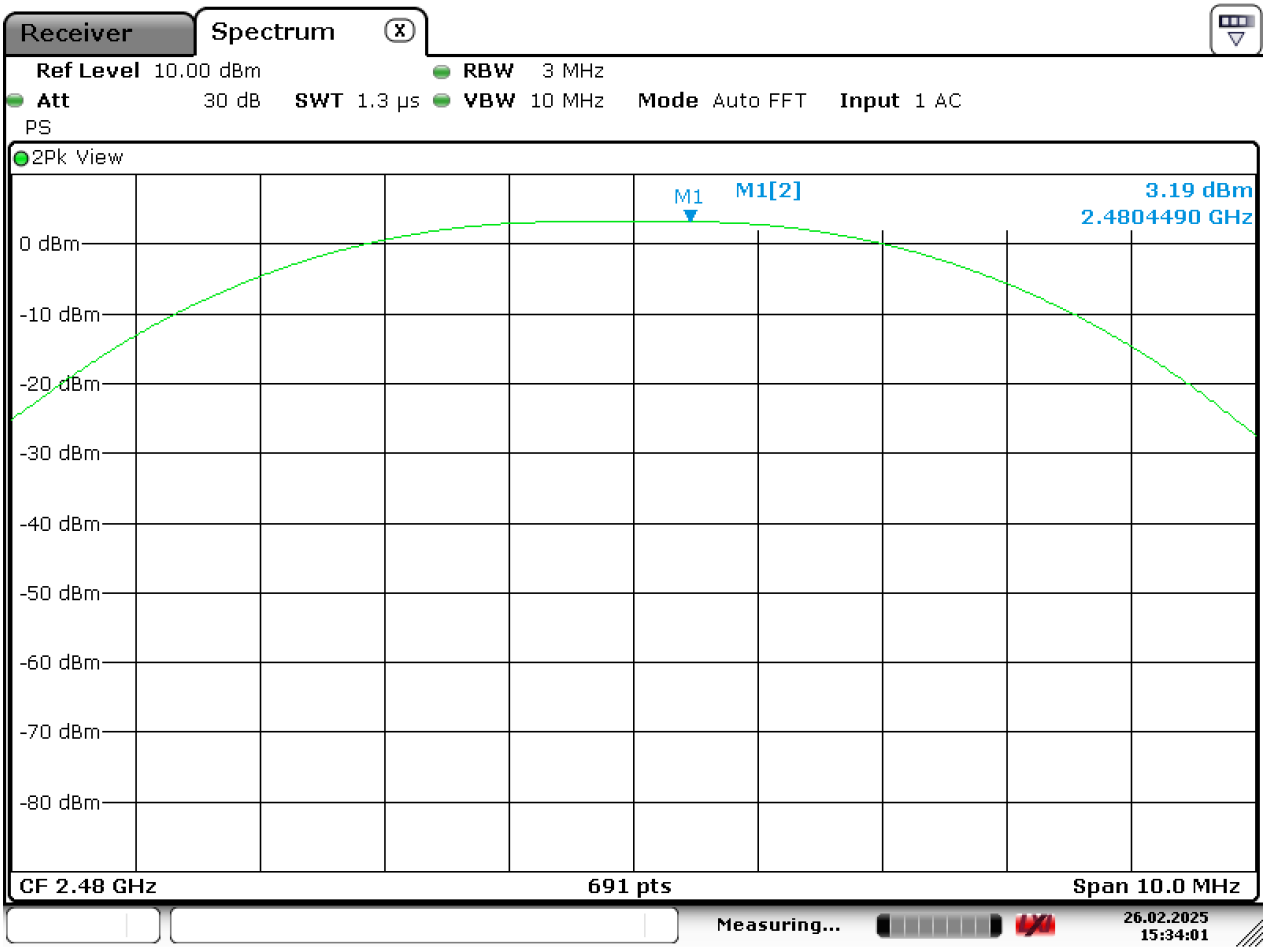
Date: 26.FEB.2025 15:32:18

2Mb: Mid Channel



Date: 26.FEB.2025 15:33:10

2Mb: High Channel



Date: 26.FEB.2025 15:34:01

9 CONDUCTED SPURIOUS EMISSIONS

The following tests were performed to demonstrate compliance.

RF Antenna Conducted Test

The EUT antenna port was fitted with an SMA connector and directly connected to the input of the spectrum analyzer.

9.1 Requirements:

All Spurious Emissions must be at least 20dB down from the highest emission level measured within the authorized band up through the tenth harmonic.

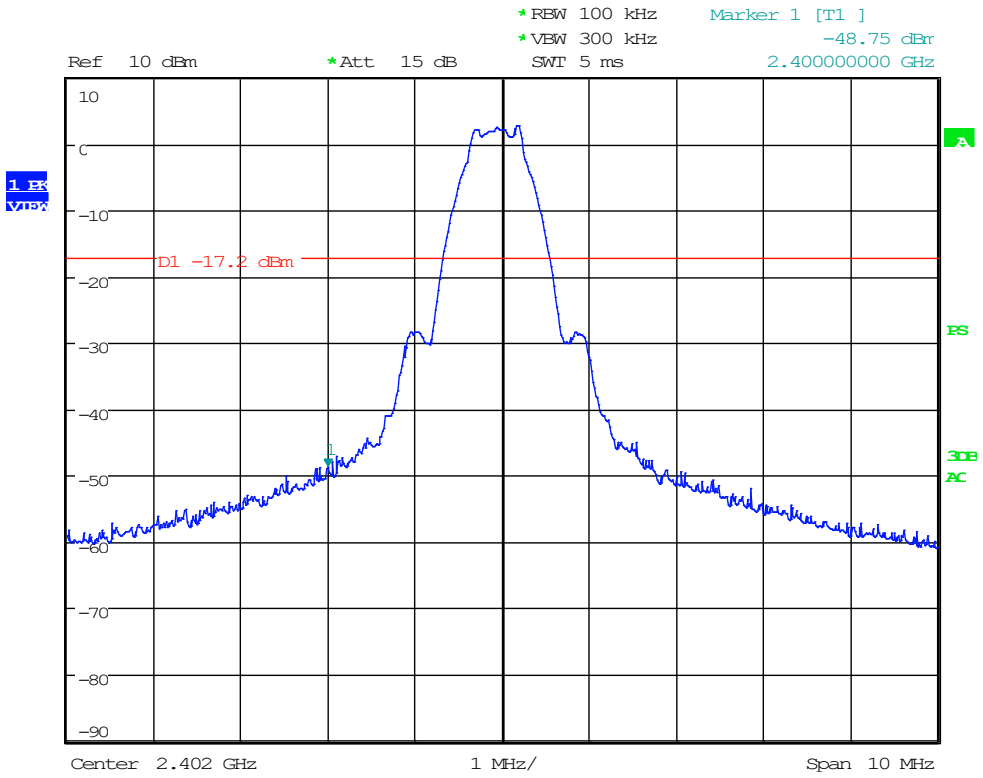
Spurious emissions measurements were made at the low, mid, and upper channels with the appropriate spectrum analyzer impulse bandwidth. Additionally, 20dB down points were measured for the low and high channels to verify band edge compliance.

9.2 Conducted Spurious Emissions Test Data

Test Date:	2025-02-26	**Test Engineer:**	E. Tobin
Standards:	CFR 47 Part 15.247(d) / Part 15.207 KDB558074	**Air Temperature:**	21.0ºC
		Relative Humidity:	32%
Results:	Complies		

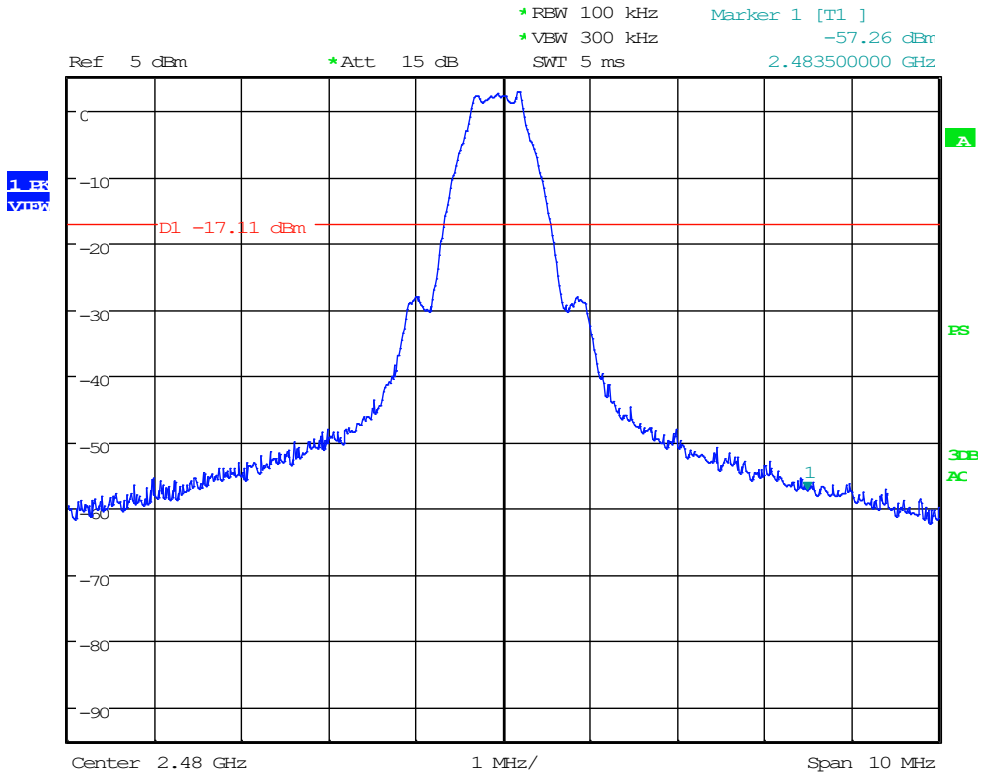
1 Mb: Low Band Edge

.



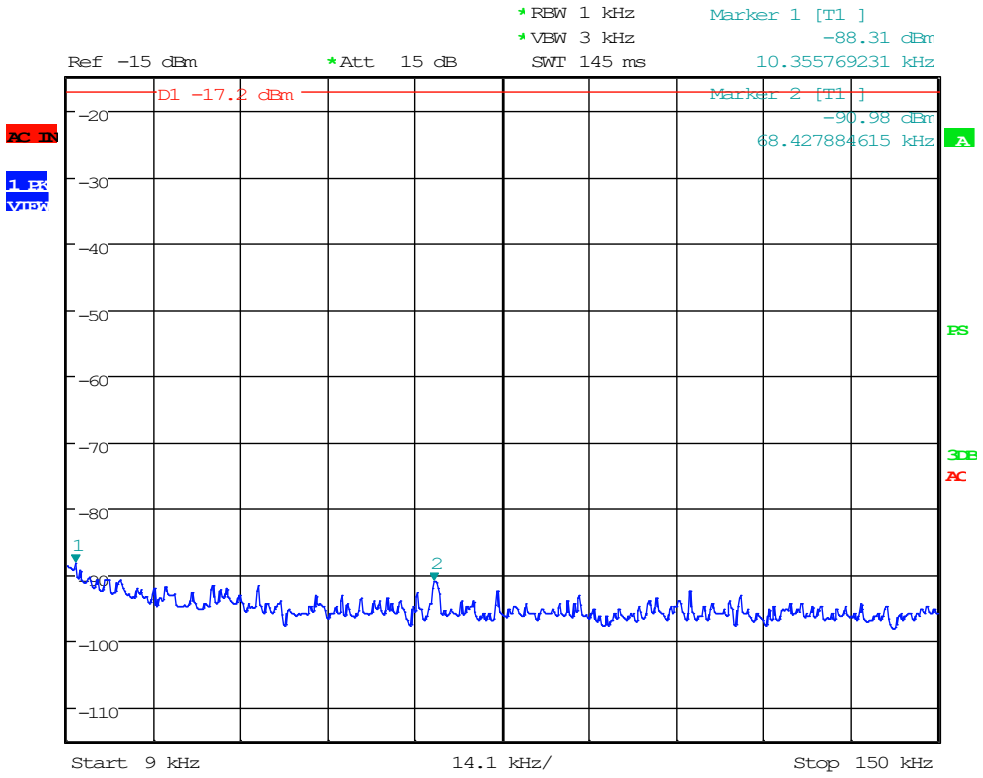
1Mb: High Band Edge

.



1Mb, Low Channel: 0.009 MHz to 0.15 MHz

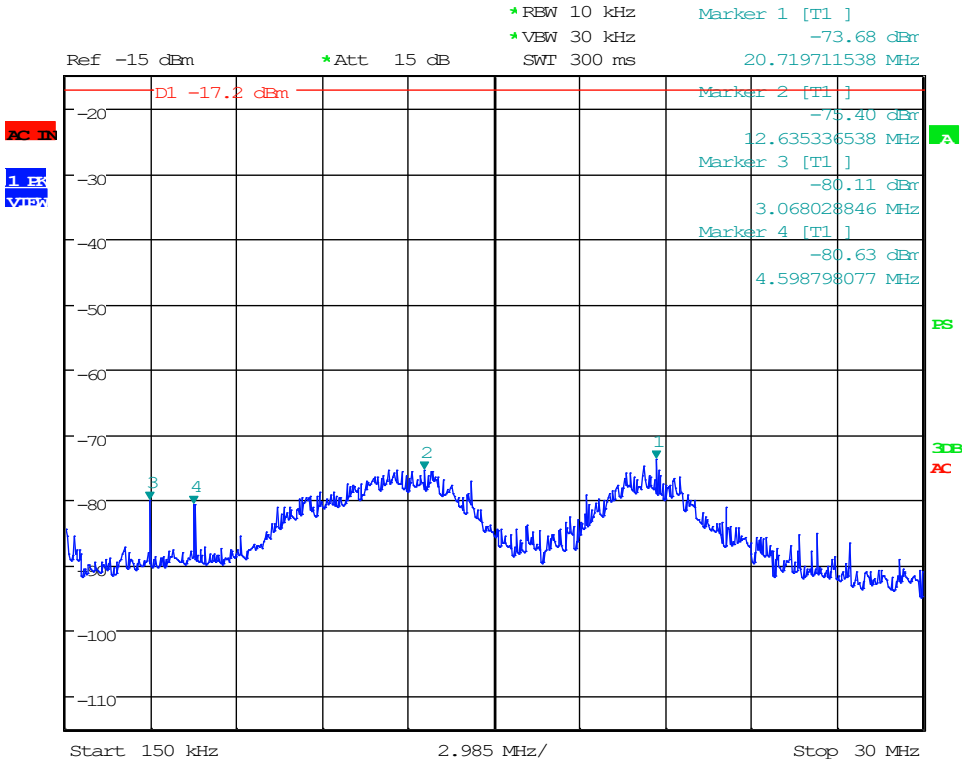
.



Date: 26.FEB.2025 15:10:32

1Mb, Low Channel: 0.15 MHz to 30 MHz

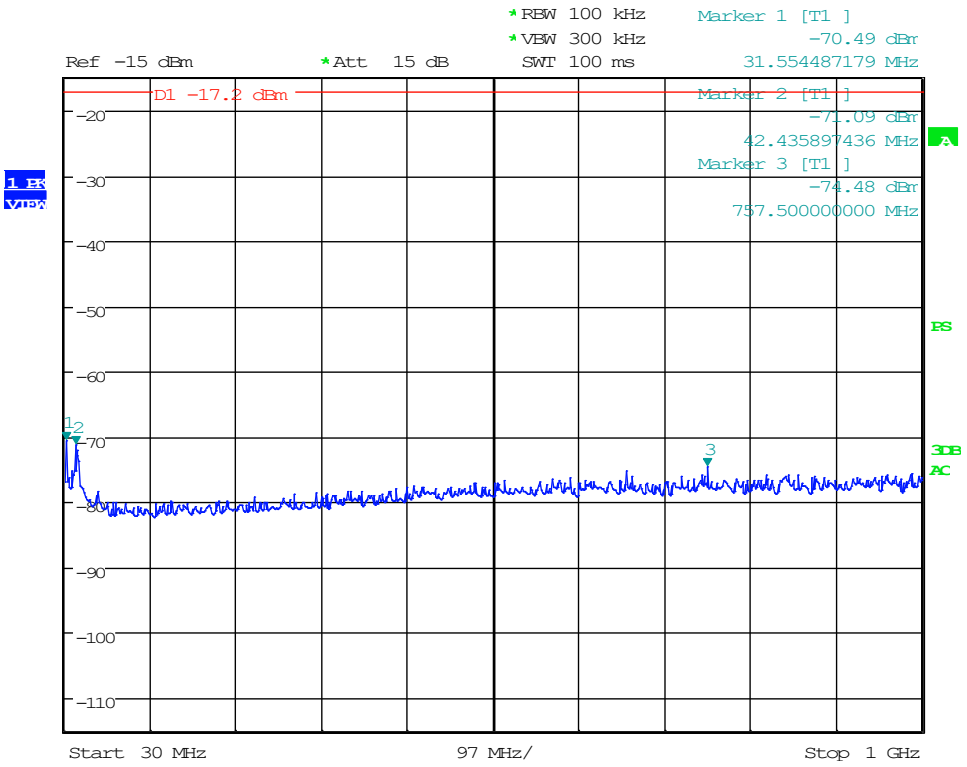
.



Date: 26.FEB.2025 15:11:29

1Mb, Low Channel: 30 MHz to 1000 MHz

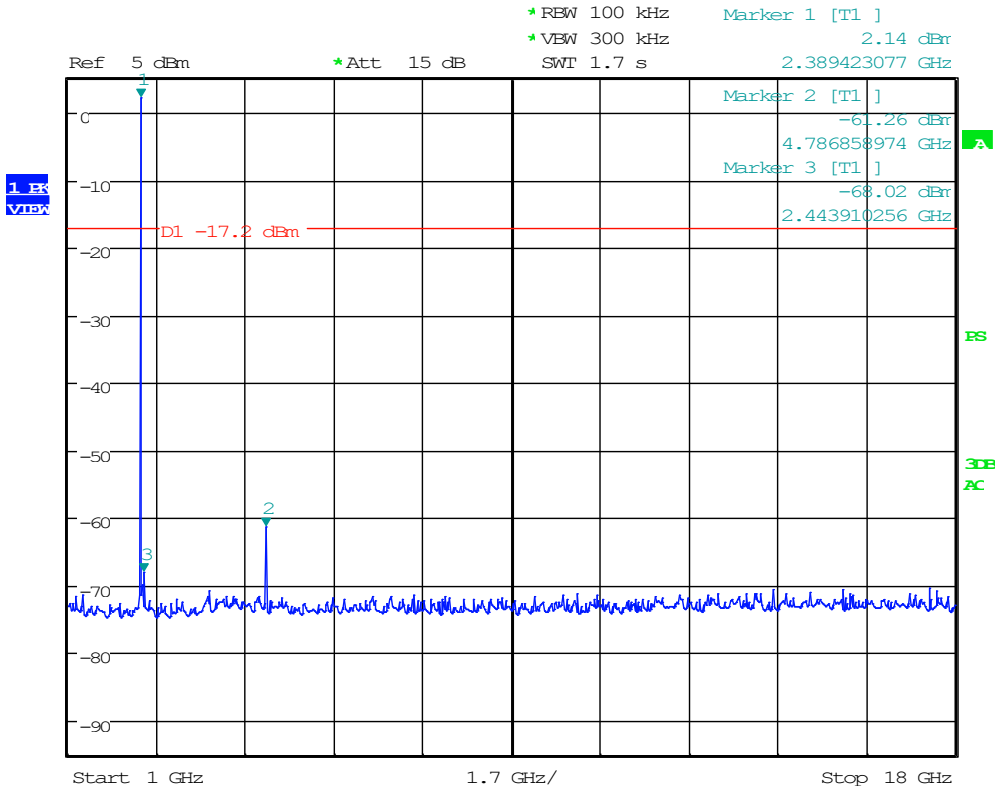
.



Date: 26.FEB.2025 15:12:04

1Mb, Low Channel: 1 GHz to 18 GHz

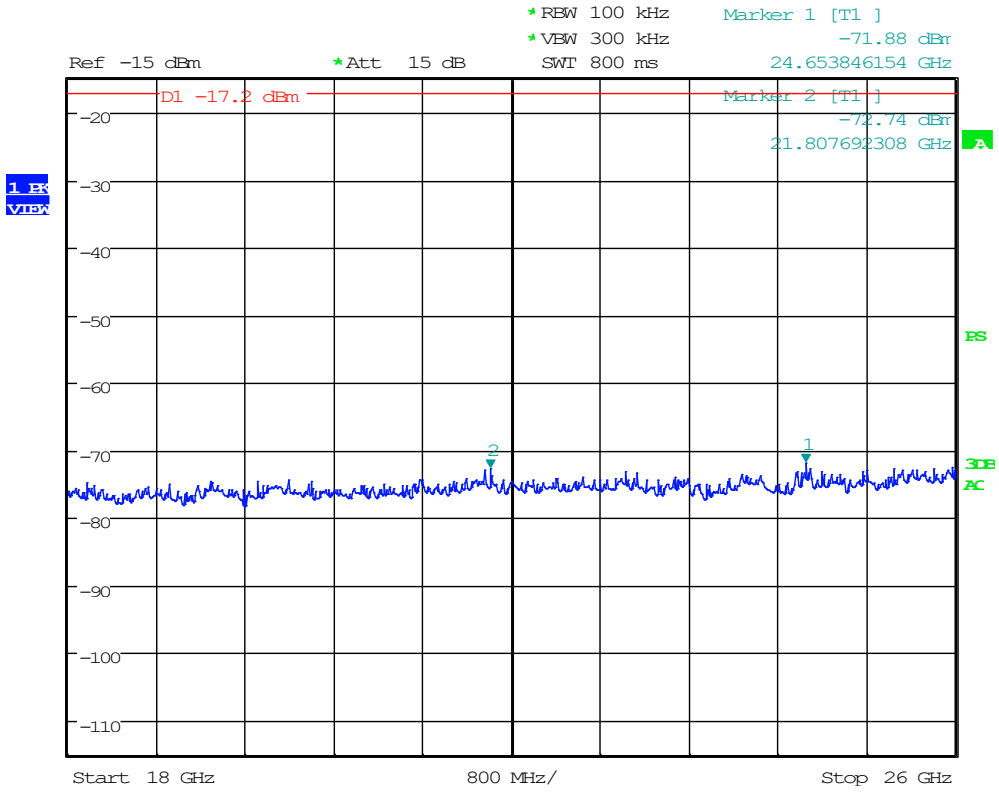
.



Date: 26.FEB.2025 15:12:54

1Mb, Low Channel: 18 GHz to 26 GHz

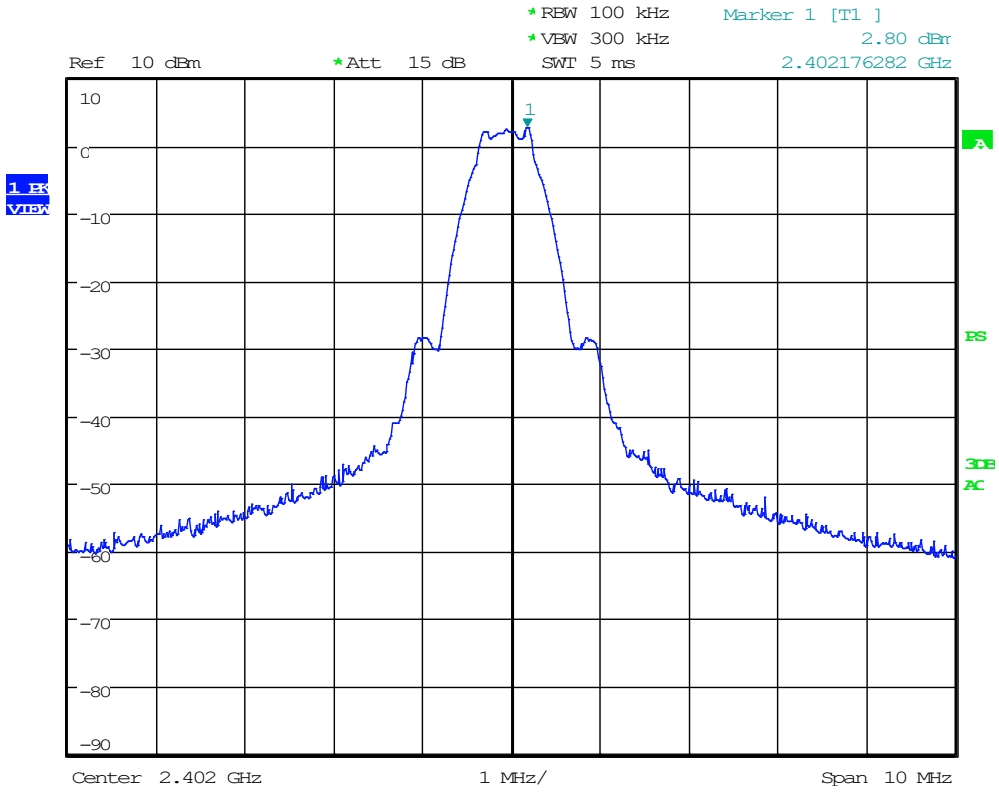
.



Date: 26.FEB.2025 15:13:38

1Mb, Low Channel: Spur Reference

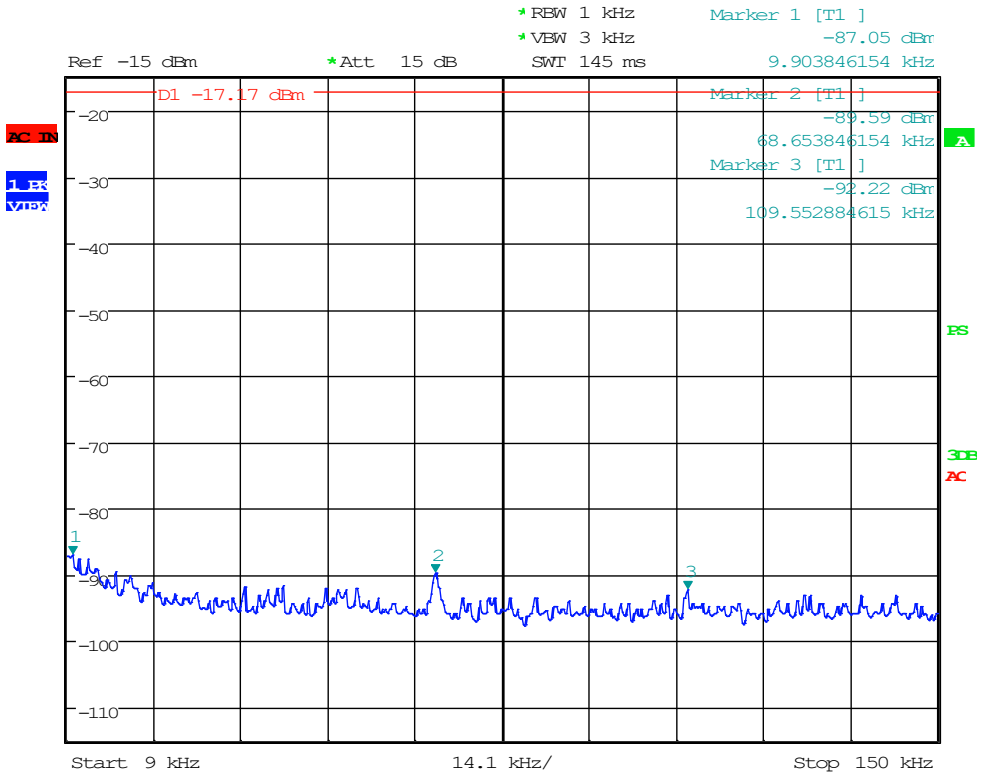
.



Date: 26.FEB.2025 15:08:48

1Mb, Mid Channel: 0.009 MHz to 0.15 MHz

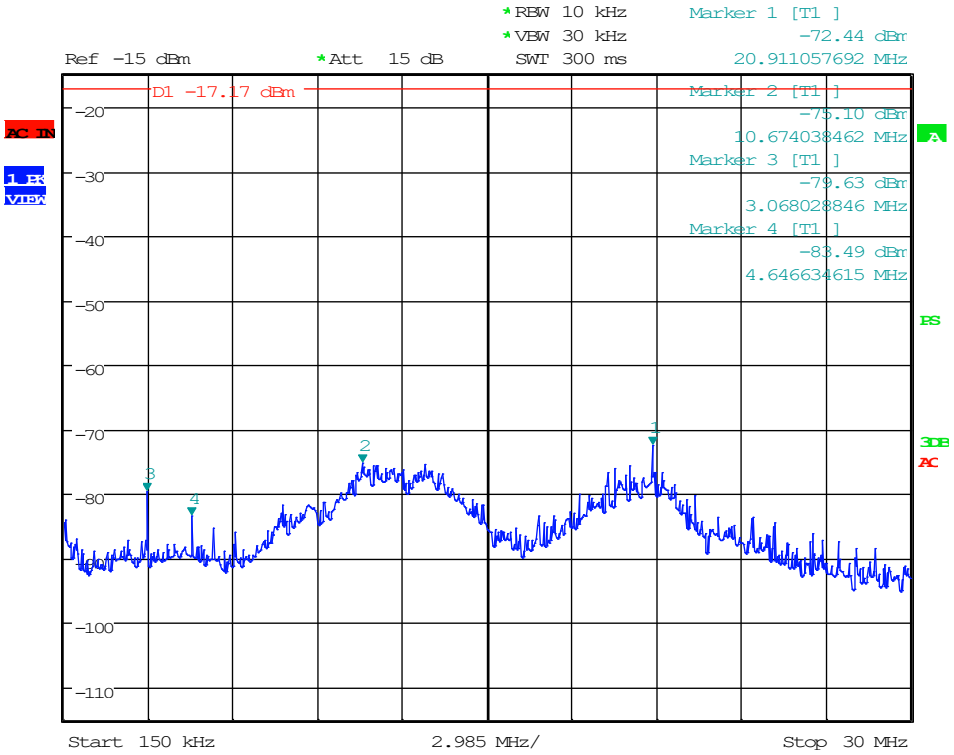
.



Date: 26.FEB.2025 15:17:43

1Mb, Mid Channel: 0.15 MHz to 30 MHz

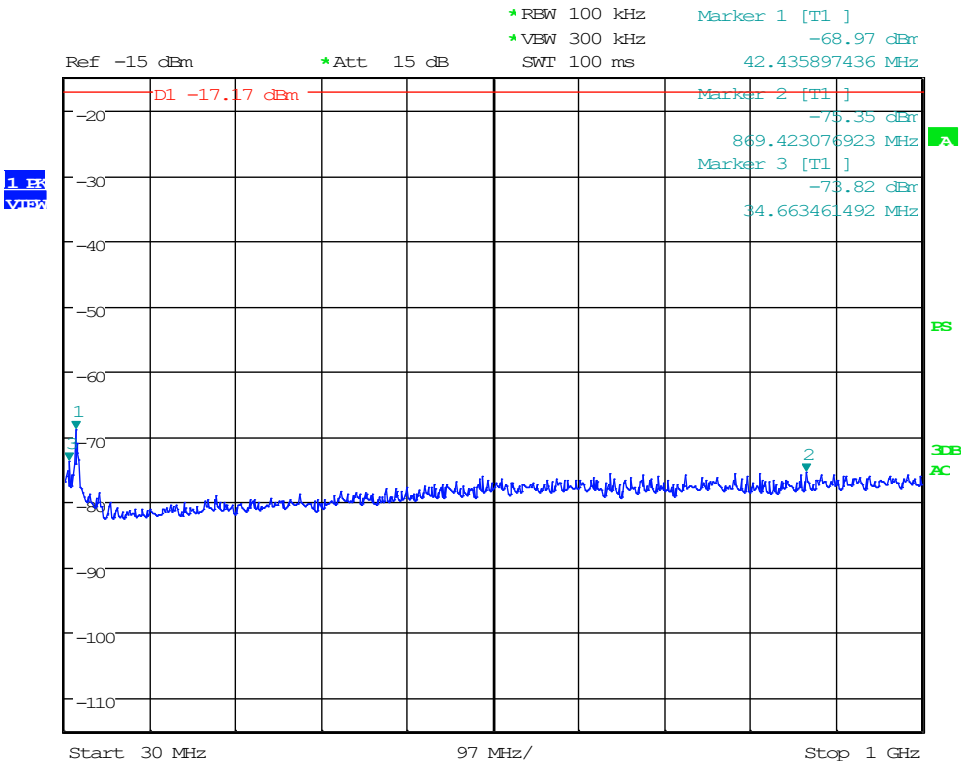
.



Date: 26.FEB.2025 15:18:21

1Mb, Mid Channel: 30 MHz to 1000 MHz

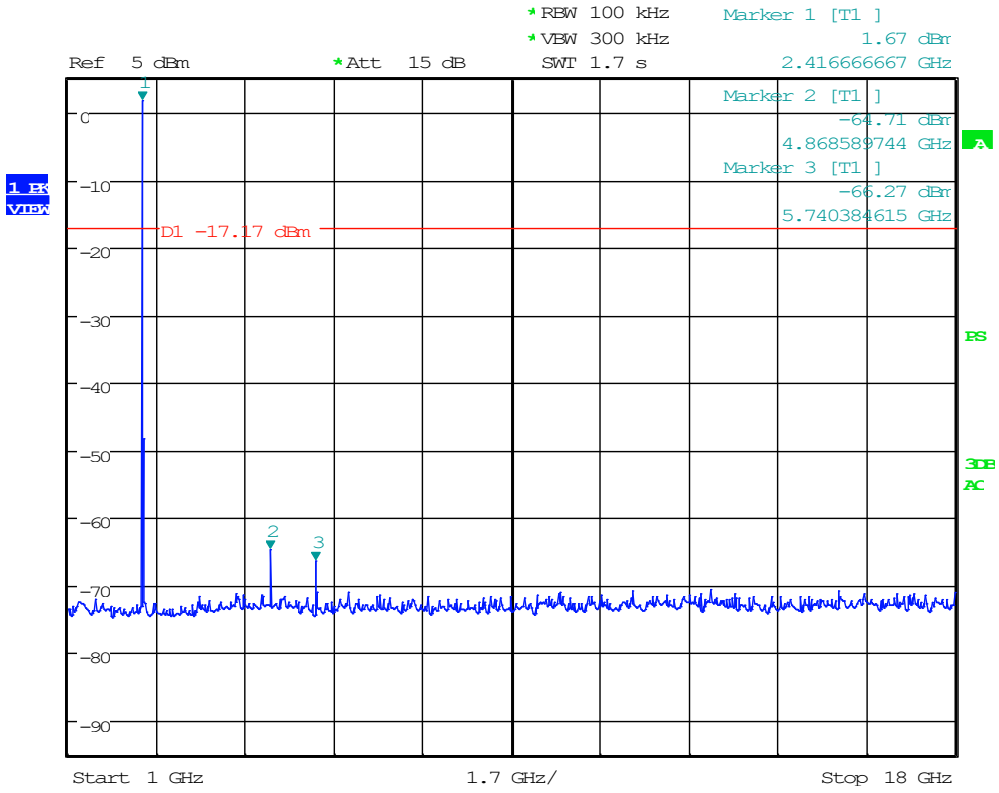
.



Date: 26.FEB.2025 15:19:01

1Mb, Mid Channel: 1 GHz to 18 GHz

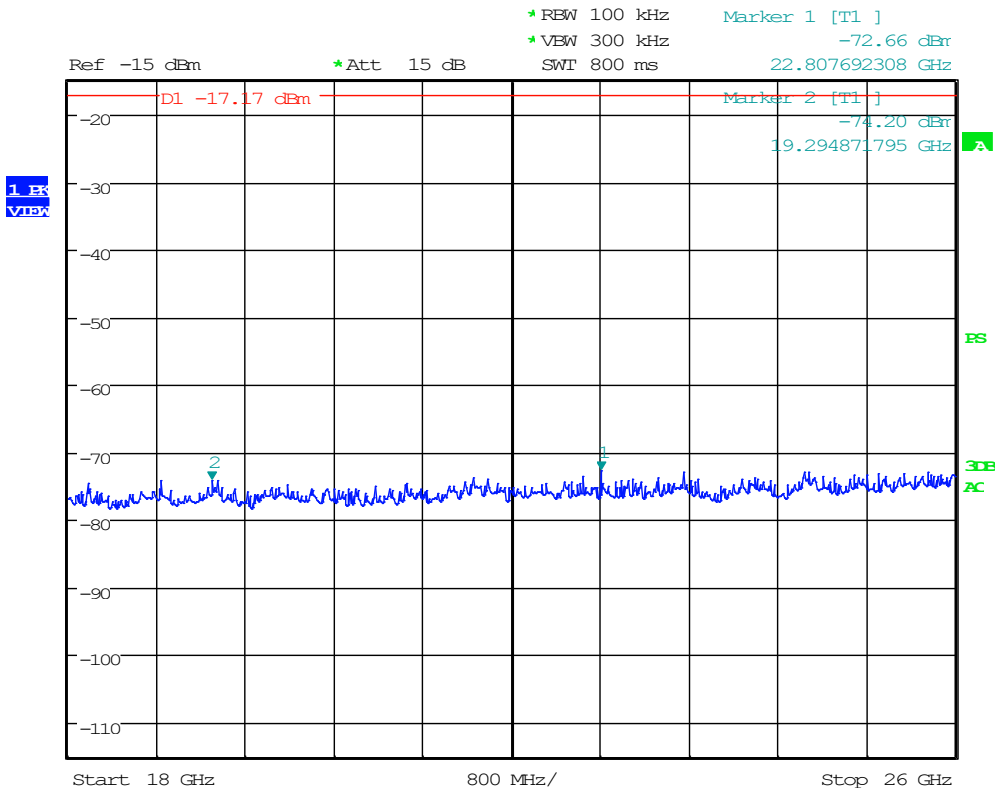
.



Date: 26.FEB.2025 15:19:41

1Mb, Mid Channel: 18 GHz to 26 GHz

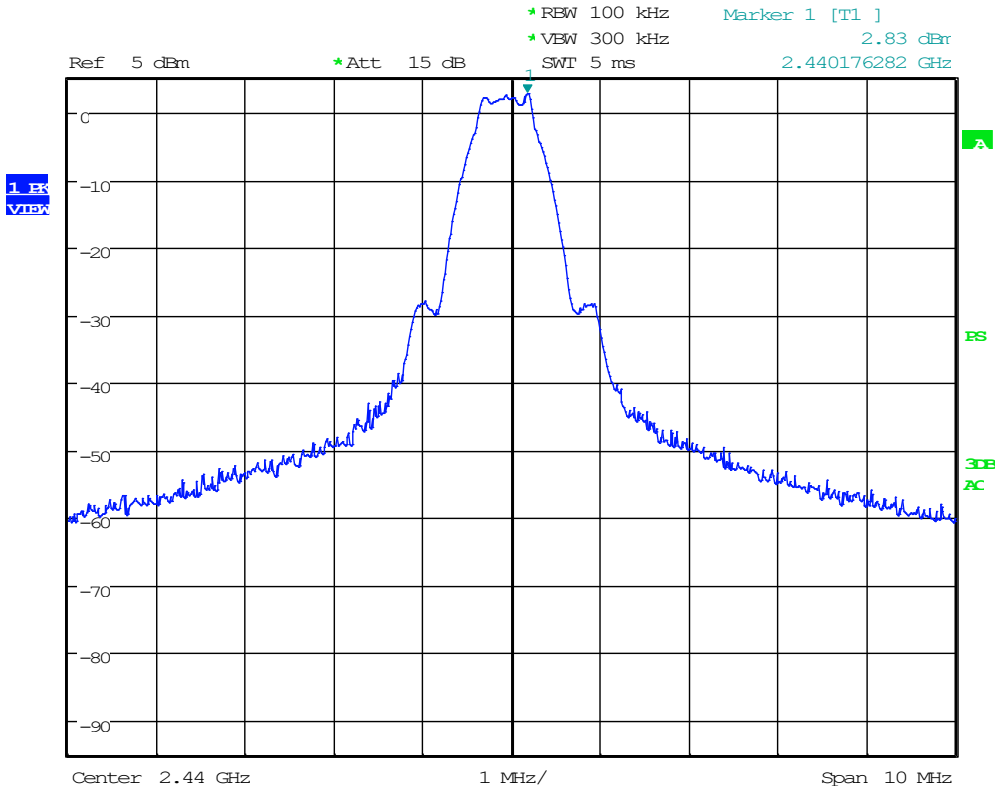
.



Date: 26.FEB.2025 15:20:15

1Mb, Mid Channel: Spur Reference

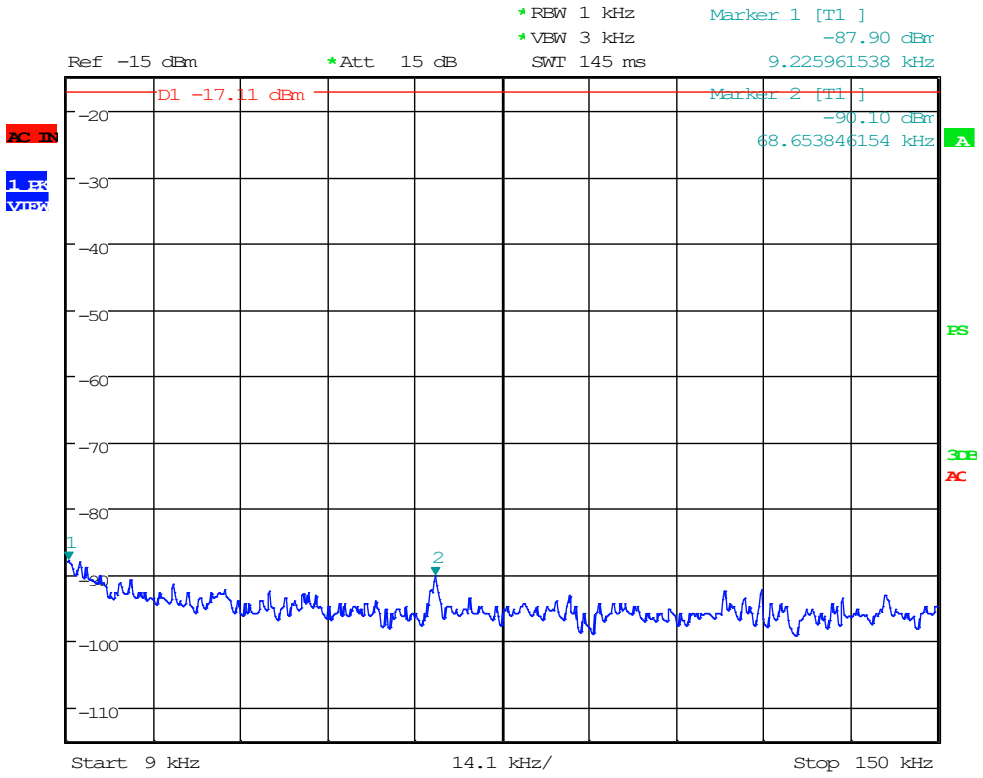
.



Date: 26.FEB.2025 15:16:34

1Mb, High Channel: 0.009 MHz to 0.15 MHz

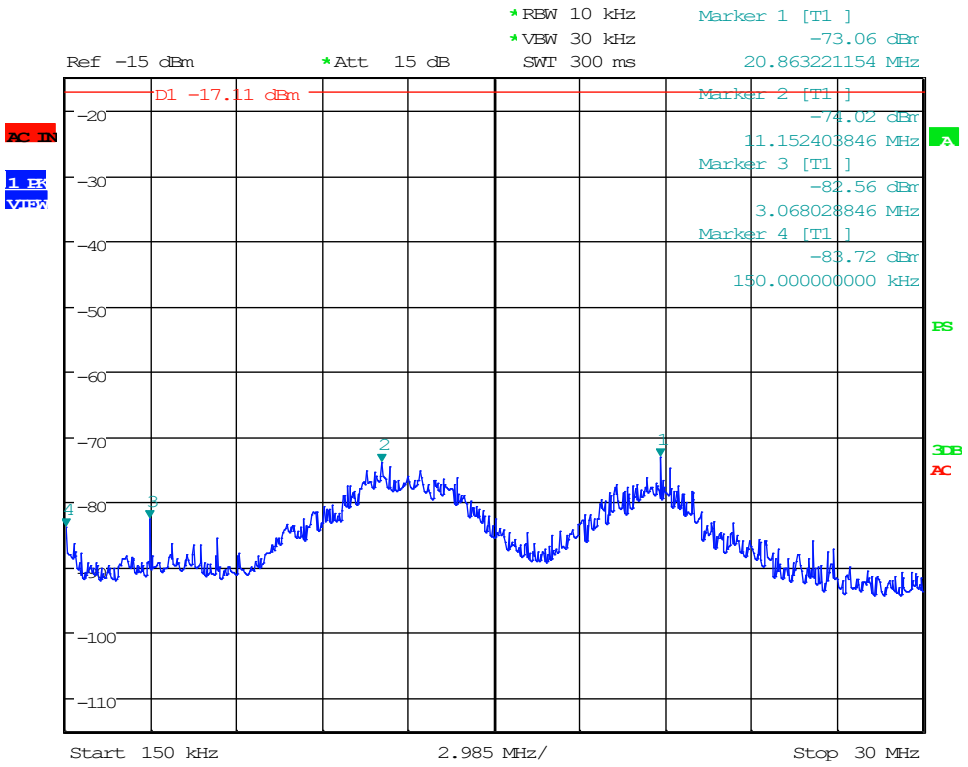
.



Date: 26.FEB.2025 15:22:44

1Mb, High Channel: 0.15 MHz to 30 MHz

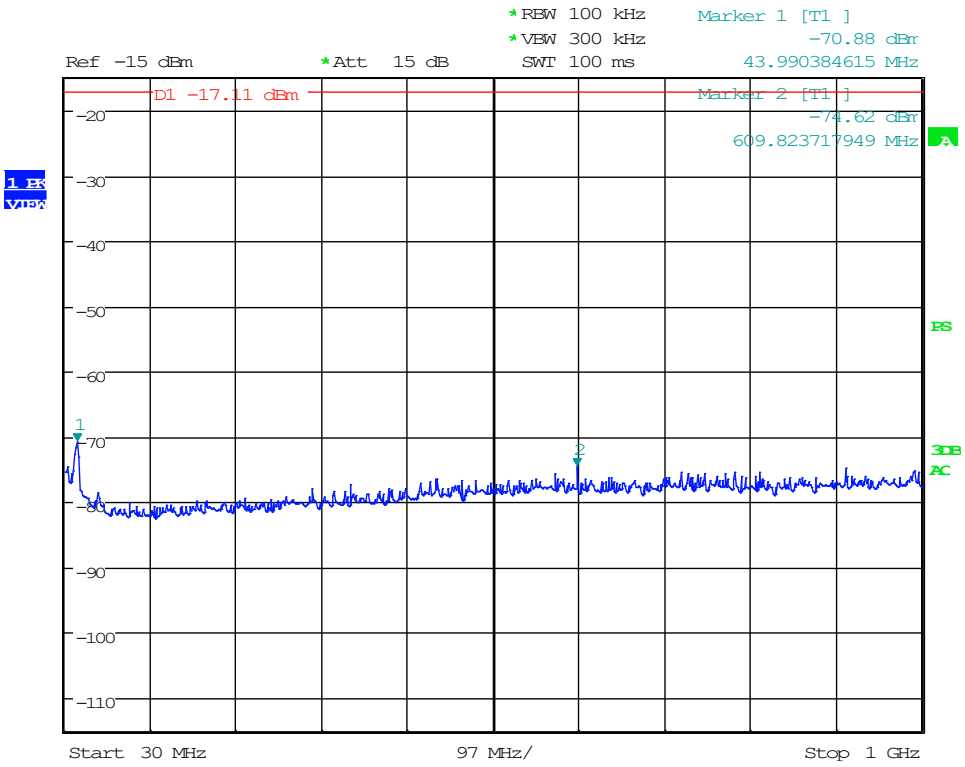
.



Date: 26.FEB.2025 15:23:30

1Mb, High Channel: 30 MHz to 1000 MHz

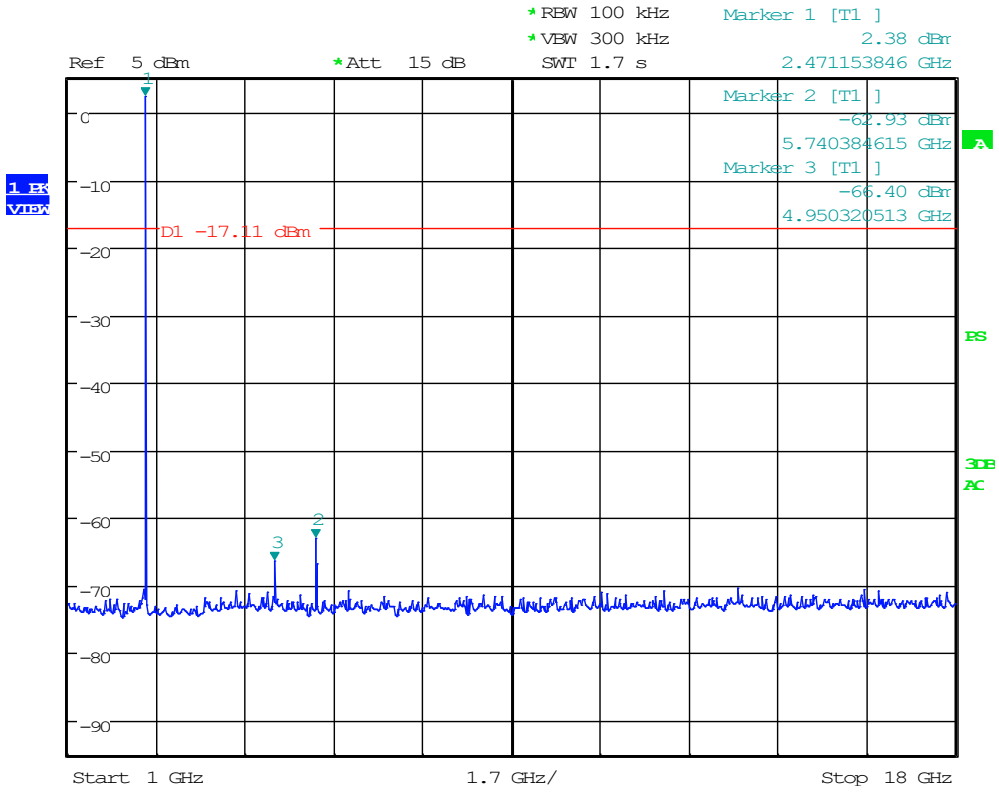
.



Date: 26.FEB.2025 15:24:14

1Mb, High Channel: 1 GHz to 18 GHz

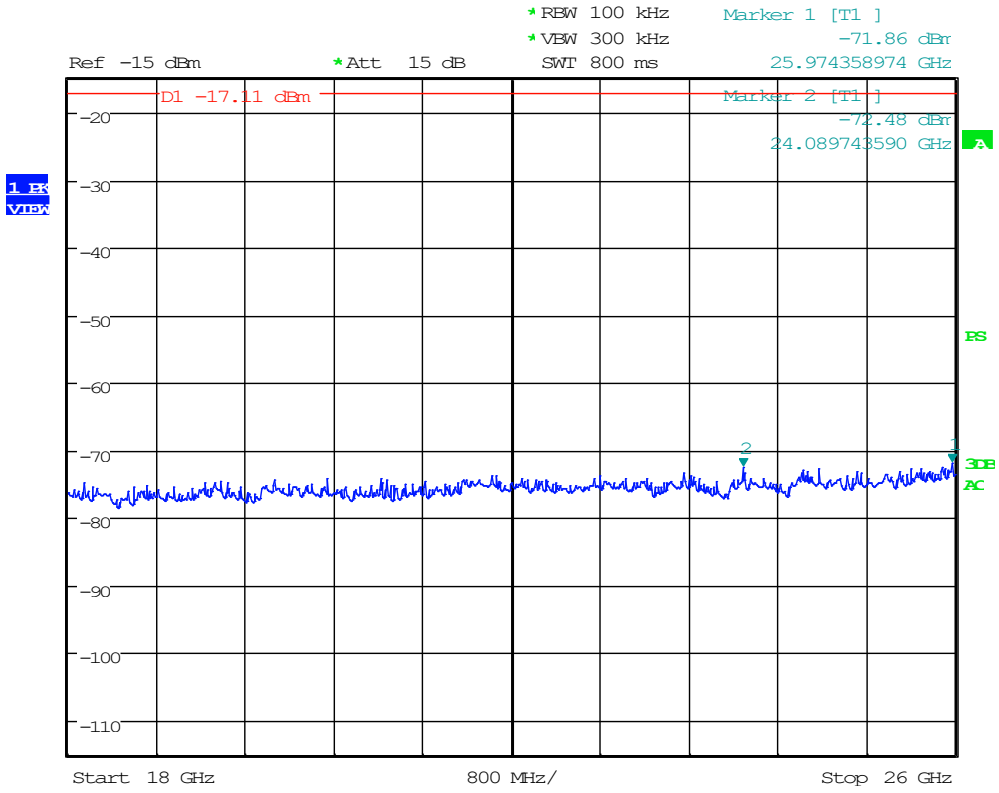
.



Date: 26.FEB.2025 15:25:02

1Mb, High Channel: 18 GHz to 26 GHz

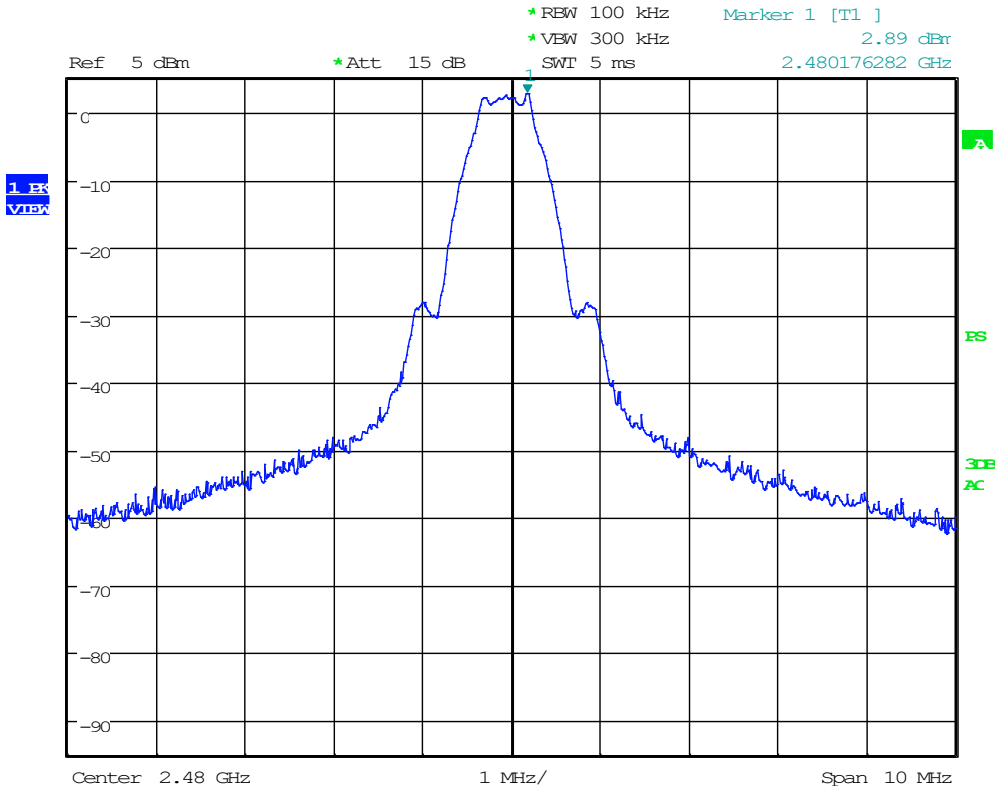
.



Date: 26.FEB.2025 15:25:47

1Mb, High Channel: Spur Reference

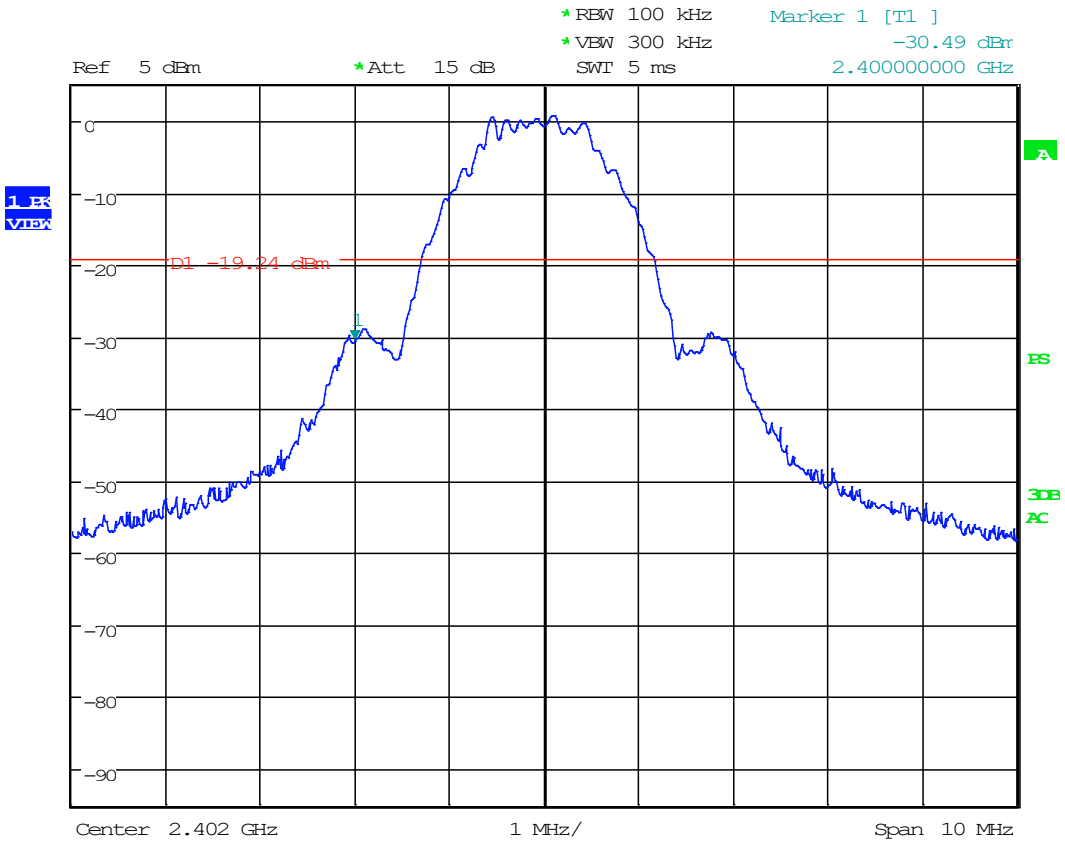
.



Date: 26.FEB.2025 15:21:21

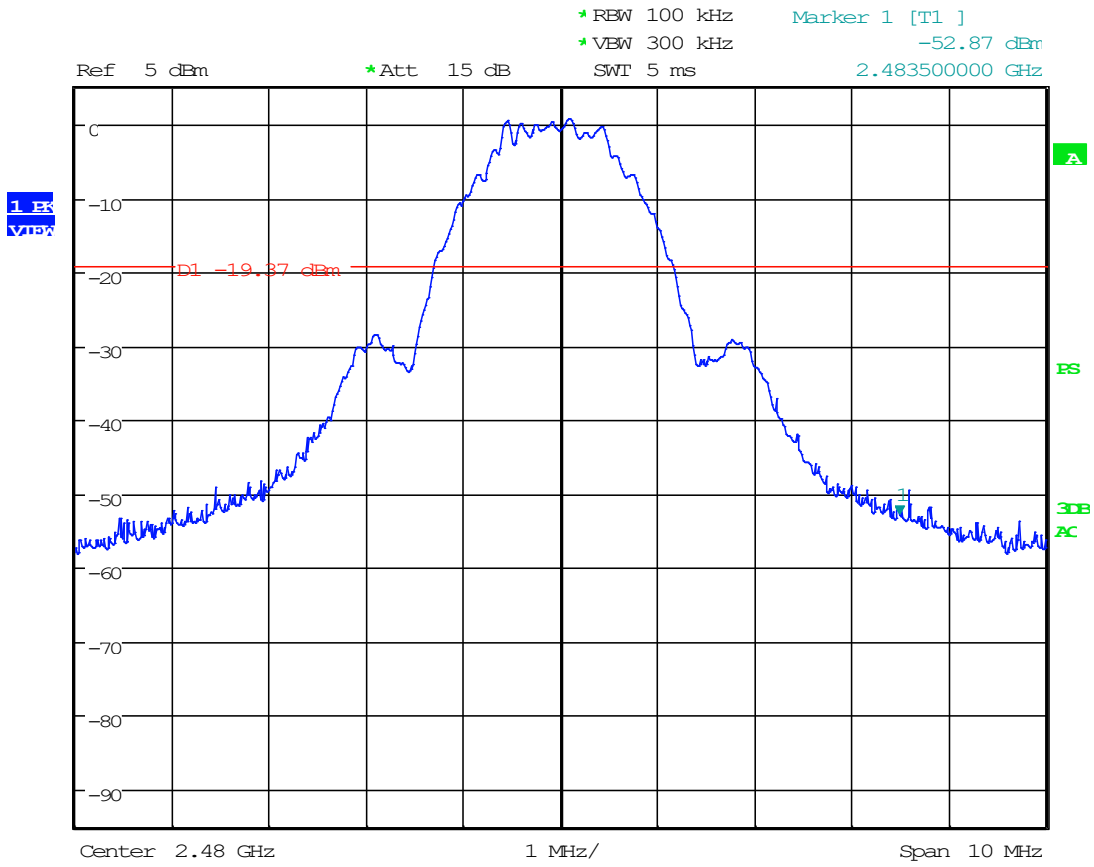
2Mb: Low Band Edge

.



2Mb: High Band Edge

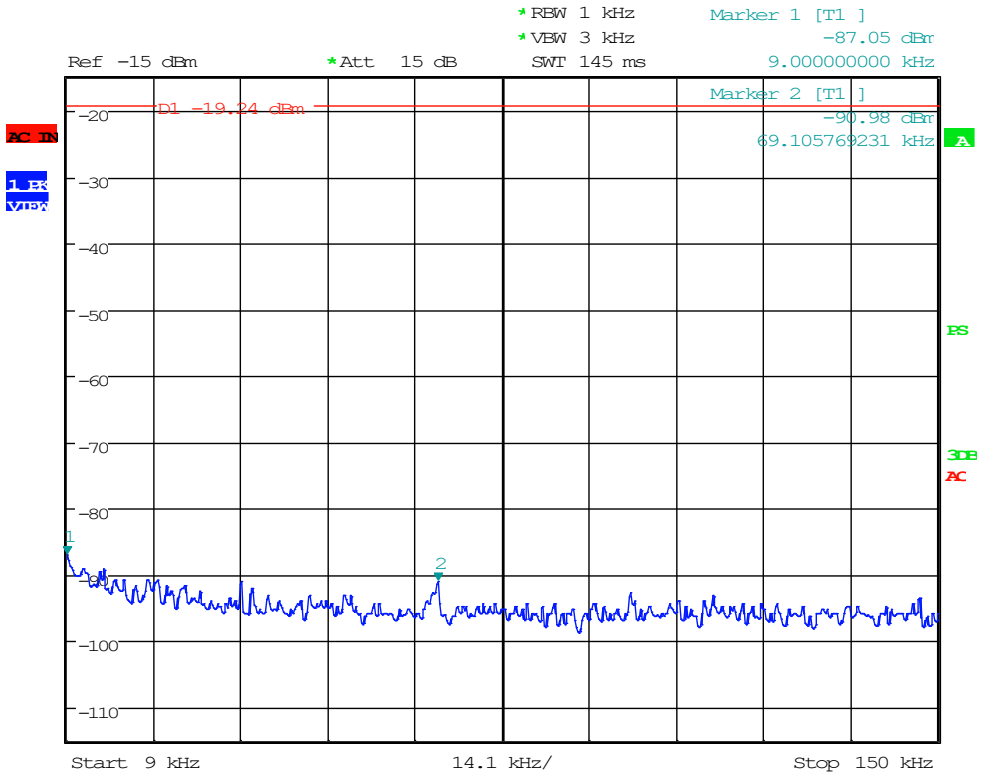
.



Date: 26.FEB.2025 15:53:53

2Mb, Low Channel: 0.009 MHz to 0.15 MHz

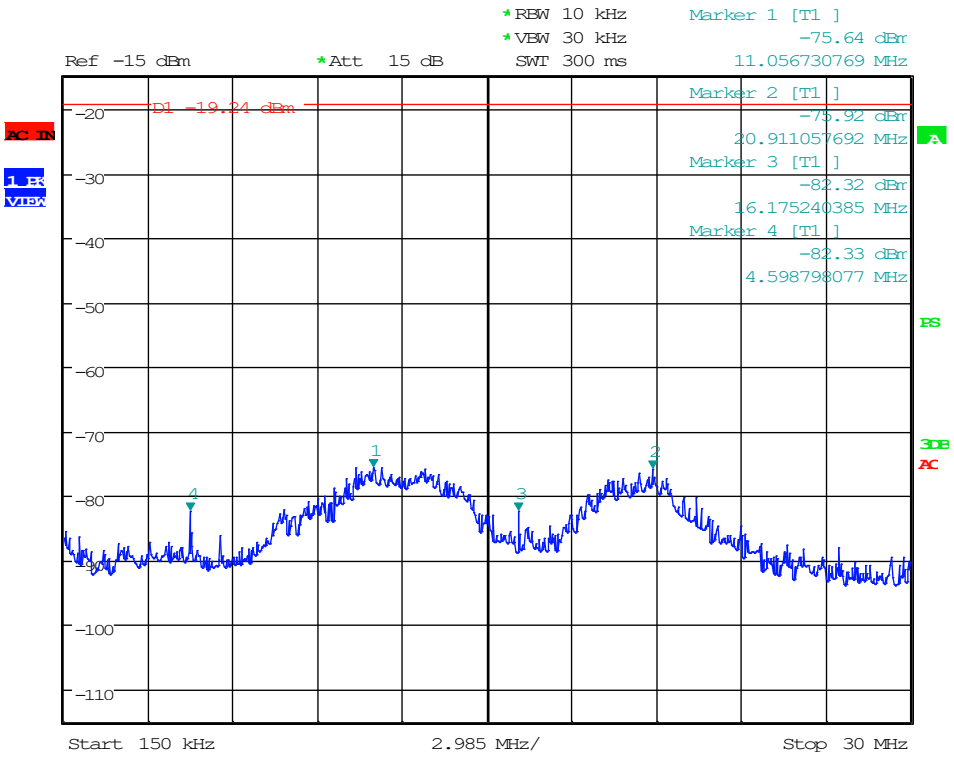
.



Date: 26.FEB.2025 15:40:37

2Mb, Low Channel: 0.15 MHz to 30 MHz

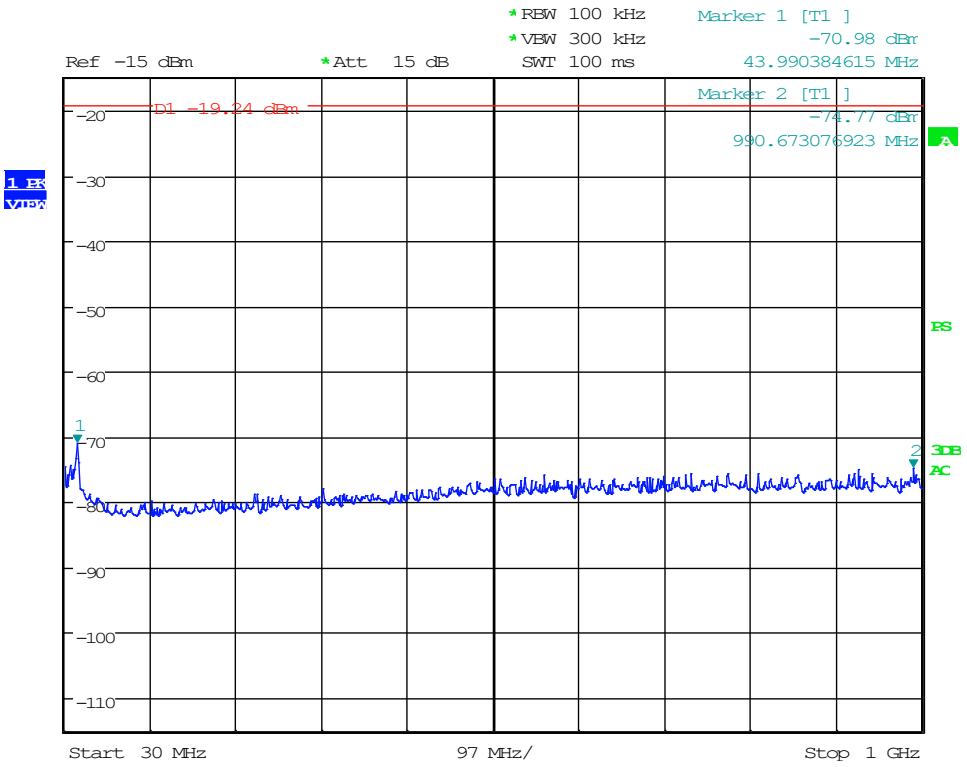
.



Date: 26.FEB.2025 15:41:20

2Mb, Low Channel: 30 MHz to 1000 MHz

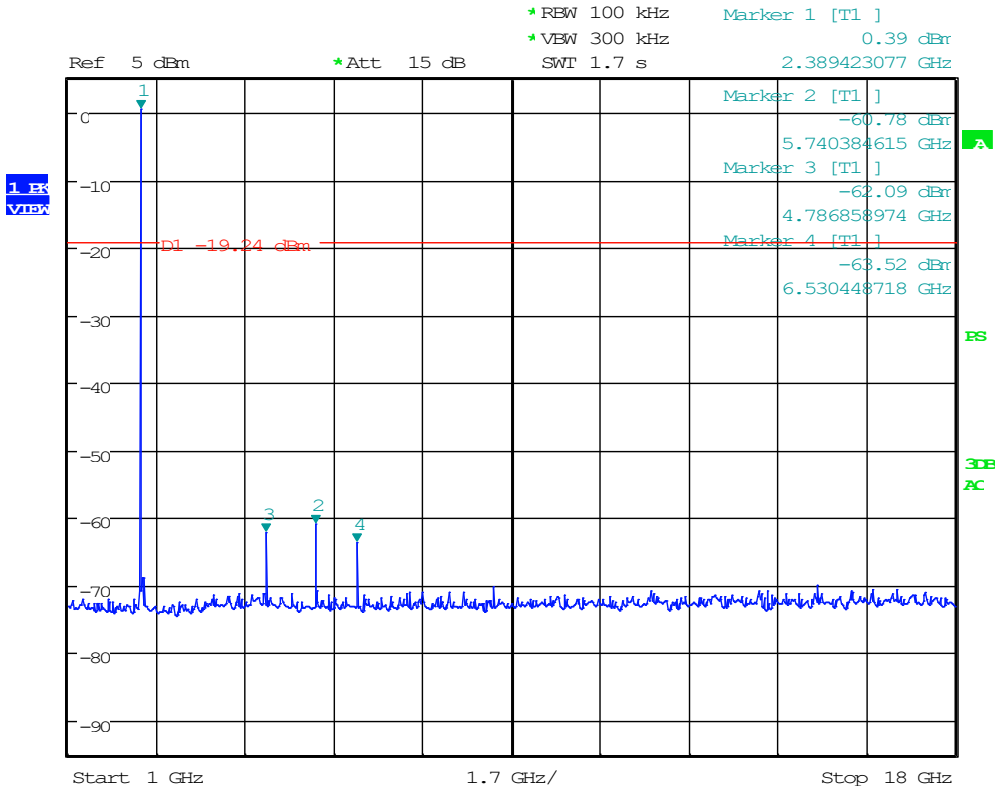
.



Date: 26.FEB.2025 15:41:56

2Mb, Low Channel: 1 GHz to 18 GHz

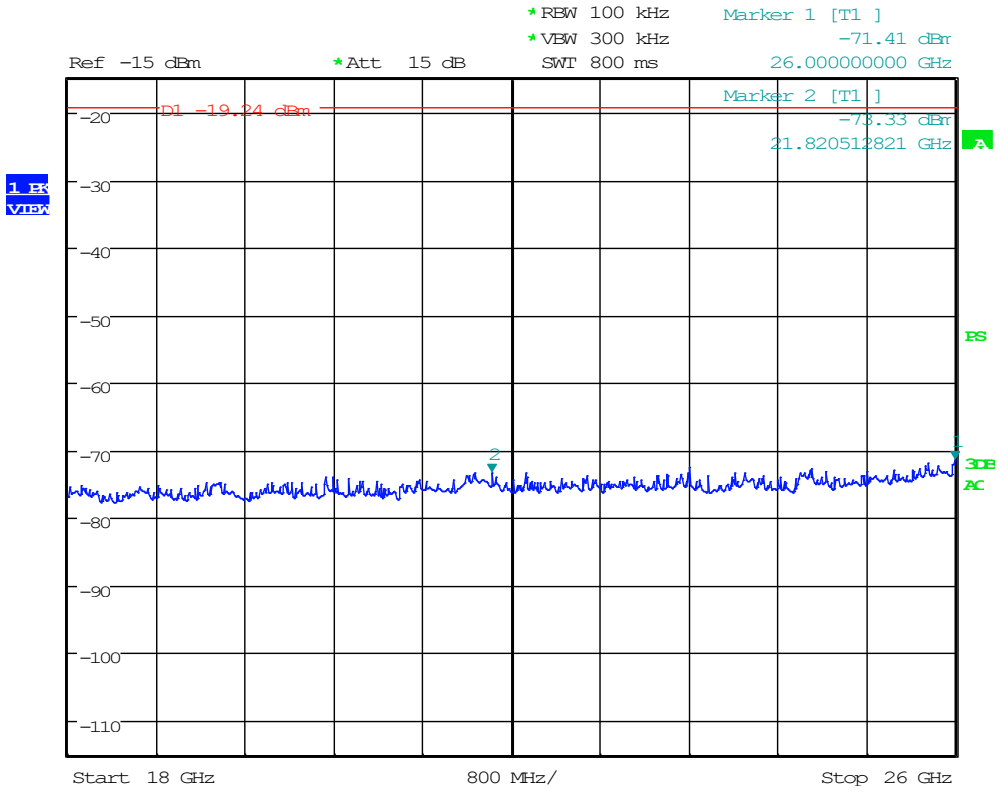
.



Date: 26.FEB.2025 15:42:49

2Mb, Low Channel: 18 GHz to 26 GHz

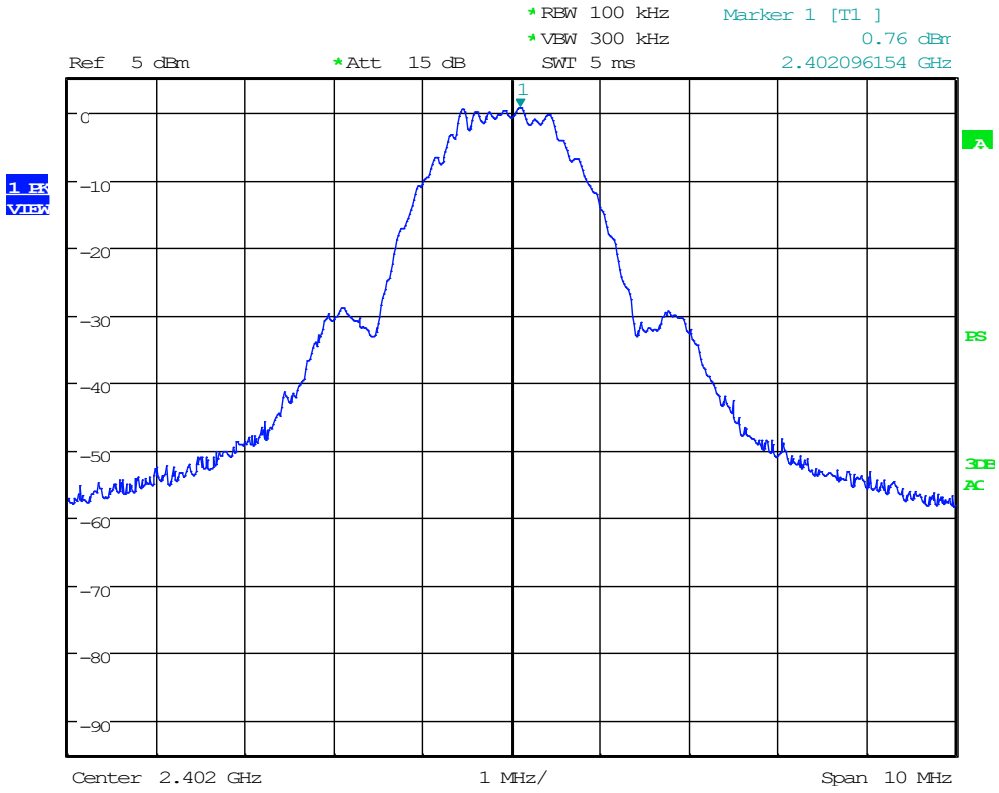
.



Date: 26.FEB.2025 15:43:46

2Mb, Low Channel: Spur Reference

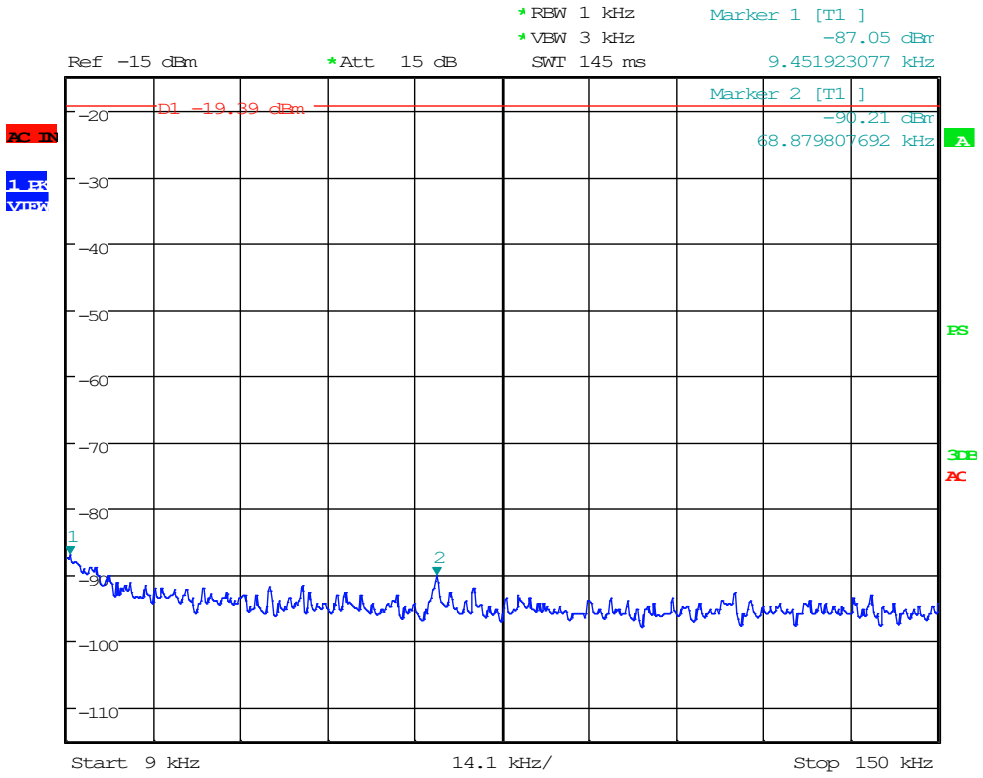
.



Date: 26.FEB.2025 15:39:27

2Mb, Mid Channel: 0.009 MHz to 0.15 MHz

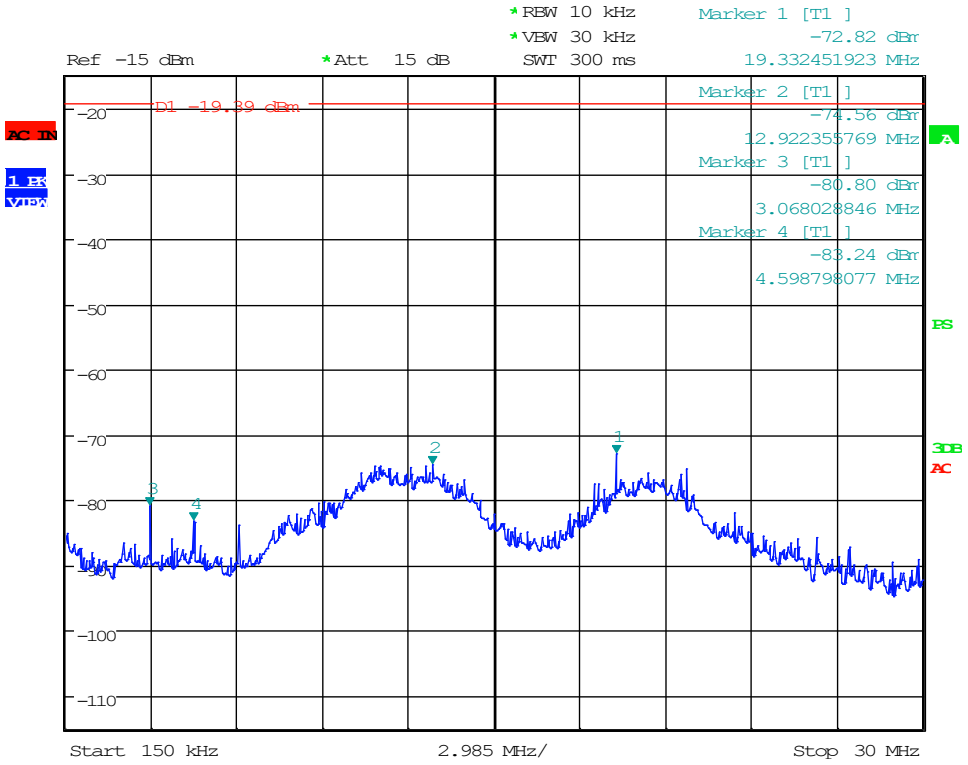
.



Date: 26.FEB.2025 15:47:48

2Mb, Mid Channel: 0.15 MHz to 30 MHz

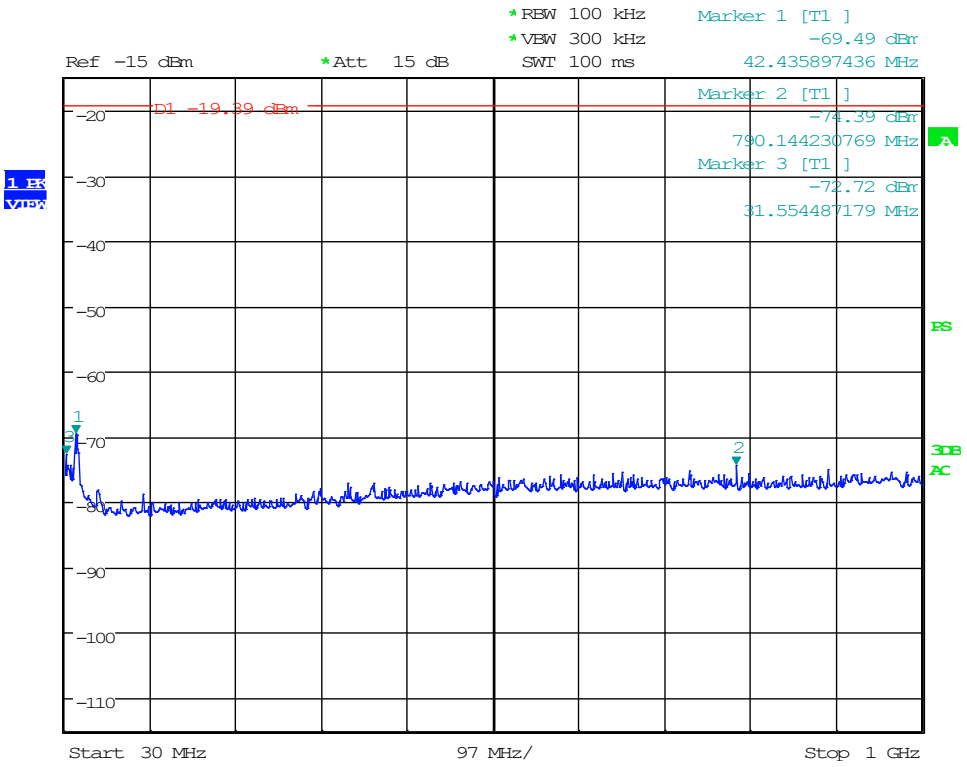
.



Date: 26.FEB.2025 15:48:55

2Mb, Mid Channel: 30 MHz to 1000 MHz

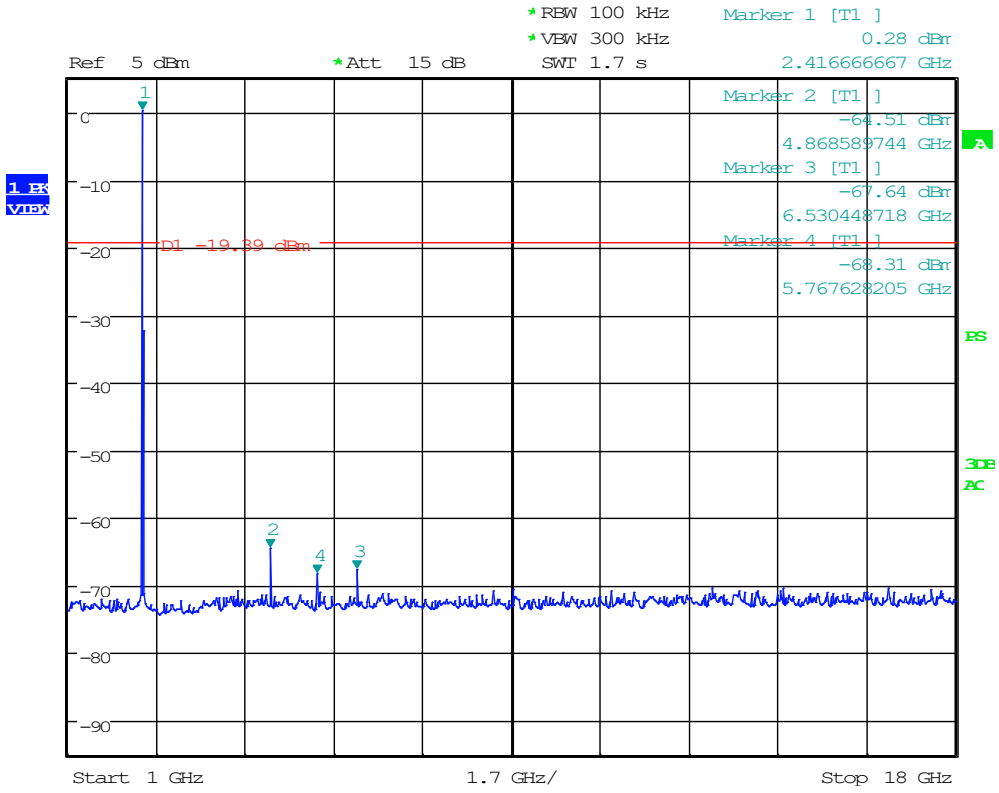
.



Date: 26.FEB.2025 15:49:50

2Mb, Mid Channel: 1 GHz to 18 GHz

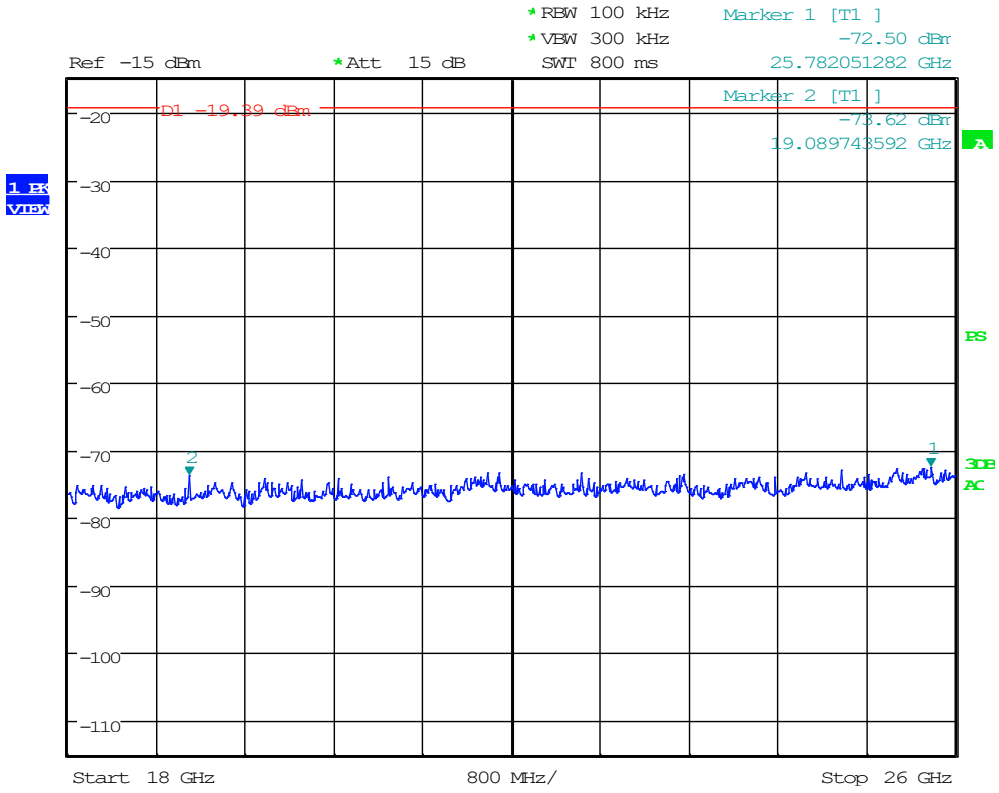
.



Date: 26.FEB.2025 15:50:54

2Mb, Mid Channel: 18 GHz to 26 GHz

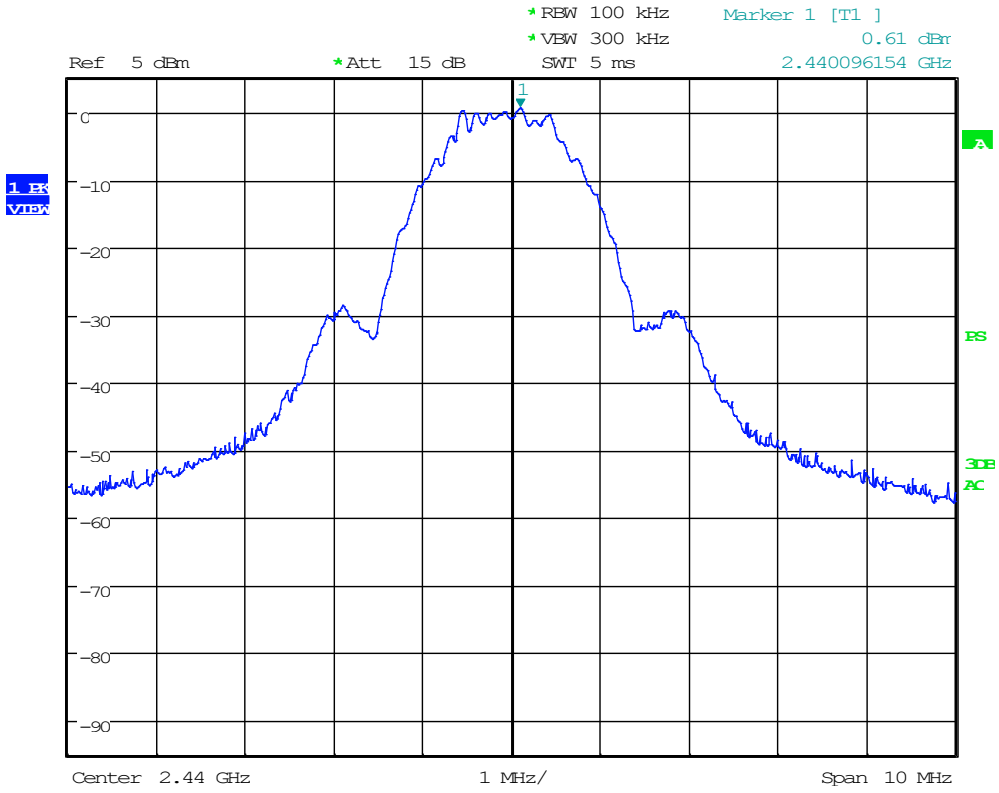
.



Date: 26.FEB.2025 15:51:50

2Mb, Mid Channel: Spur Reference

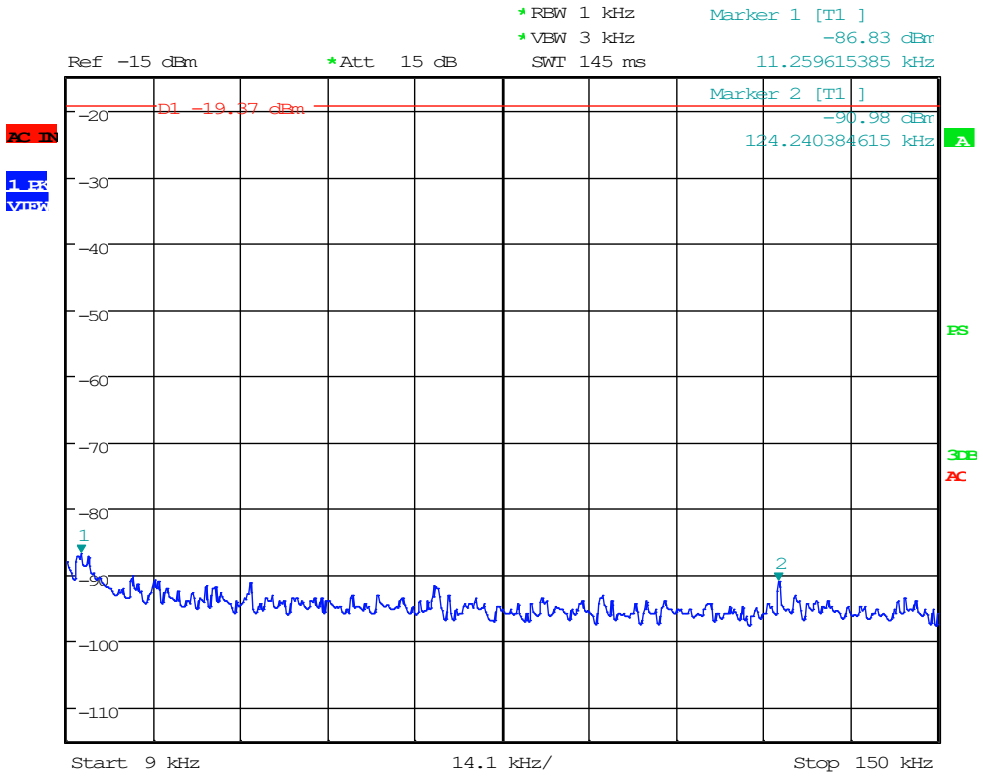
.



Date: 26.FEB.2025 15:46:40

2Mb, High Channel: 0.009 MHz to 0.15 MHz

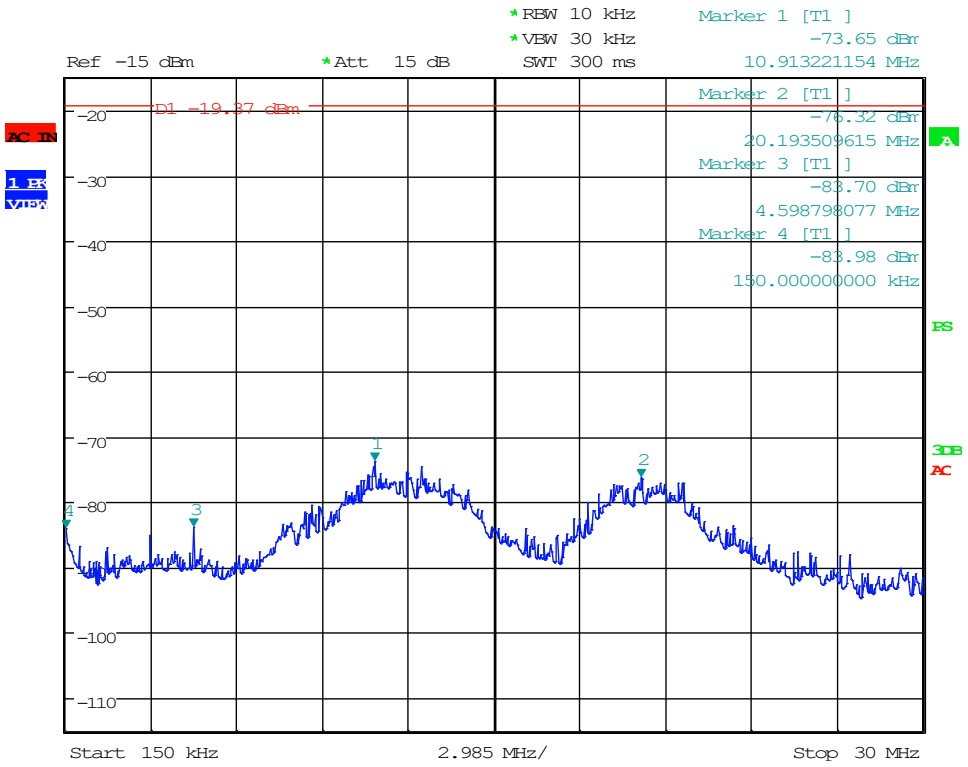
.



Date: 26.FEB.2025 15:54:43

2Mb, High Channel: 0.15 MHz to 30 MHz

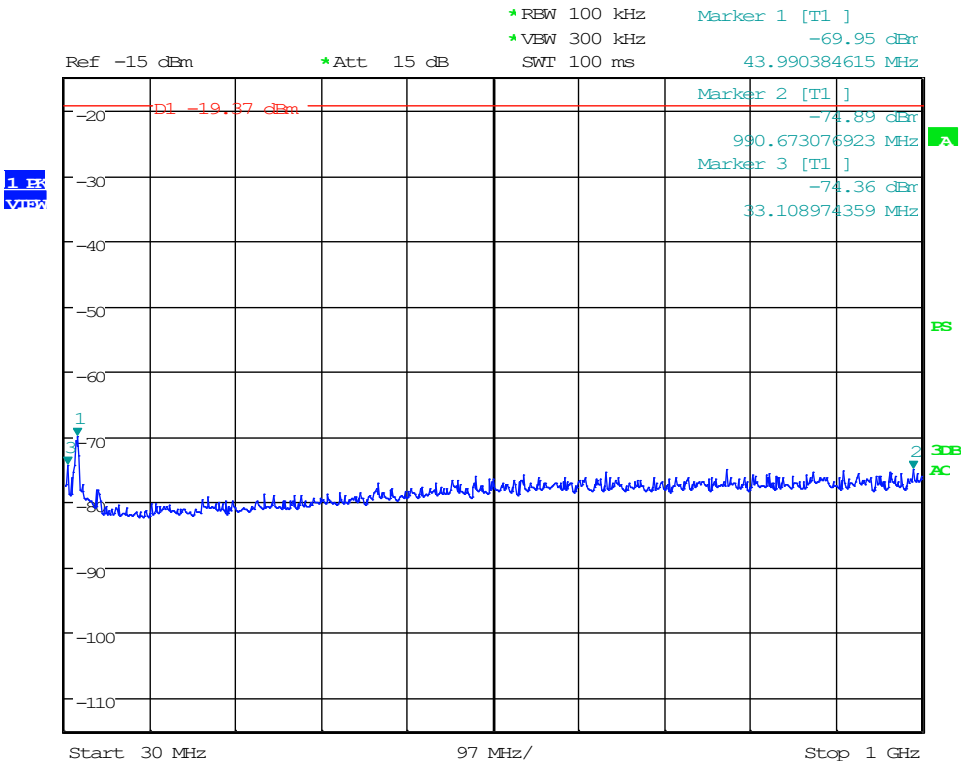
.



Date: 26.FEB.2025 15:55:28

2Mb, High Channel: 30 MHz to 1000 MHz

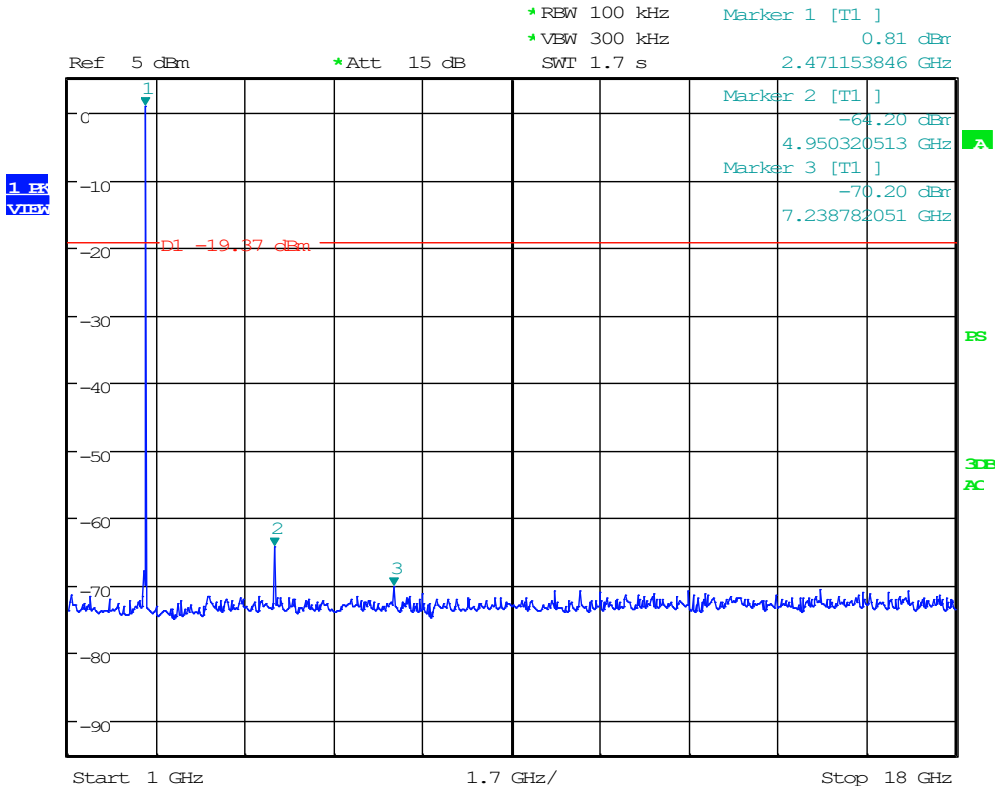
.



Date: 26.FEB.2025 15:56:21

2Mb, High Channel: 1 GHz to 18 GHz

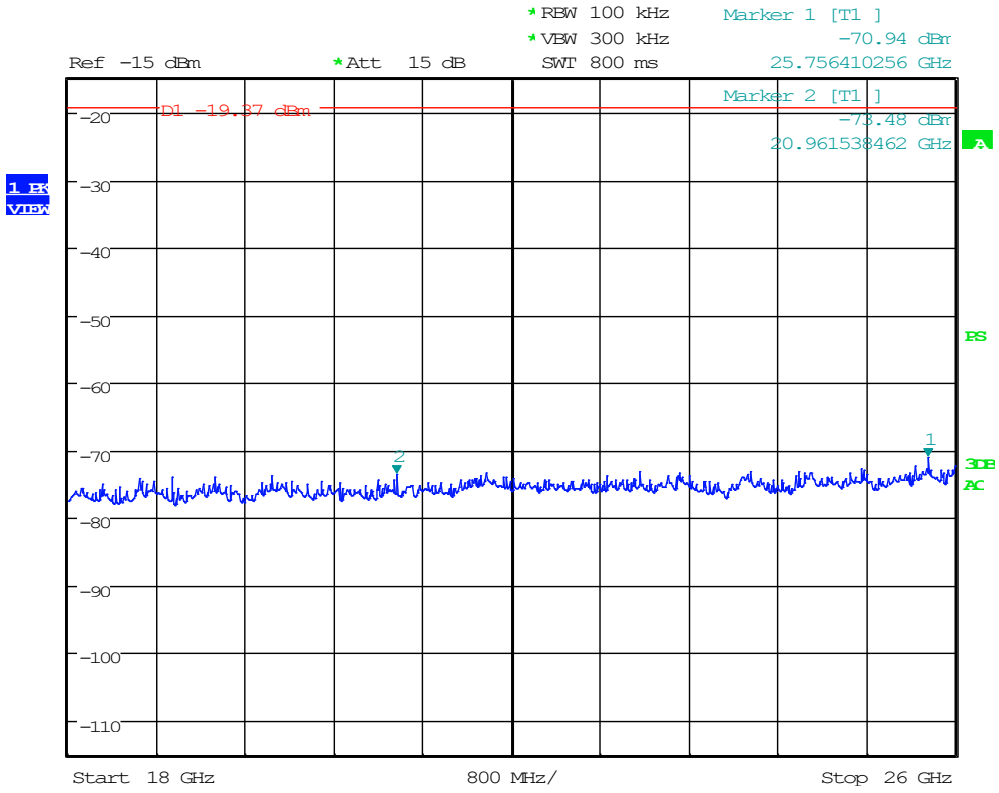
.



Date: 26.FEB.2025 15:57:19

2Mb, High Channel: 18 GHz to 26 GHz

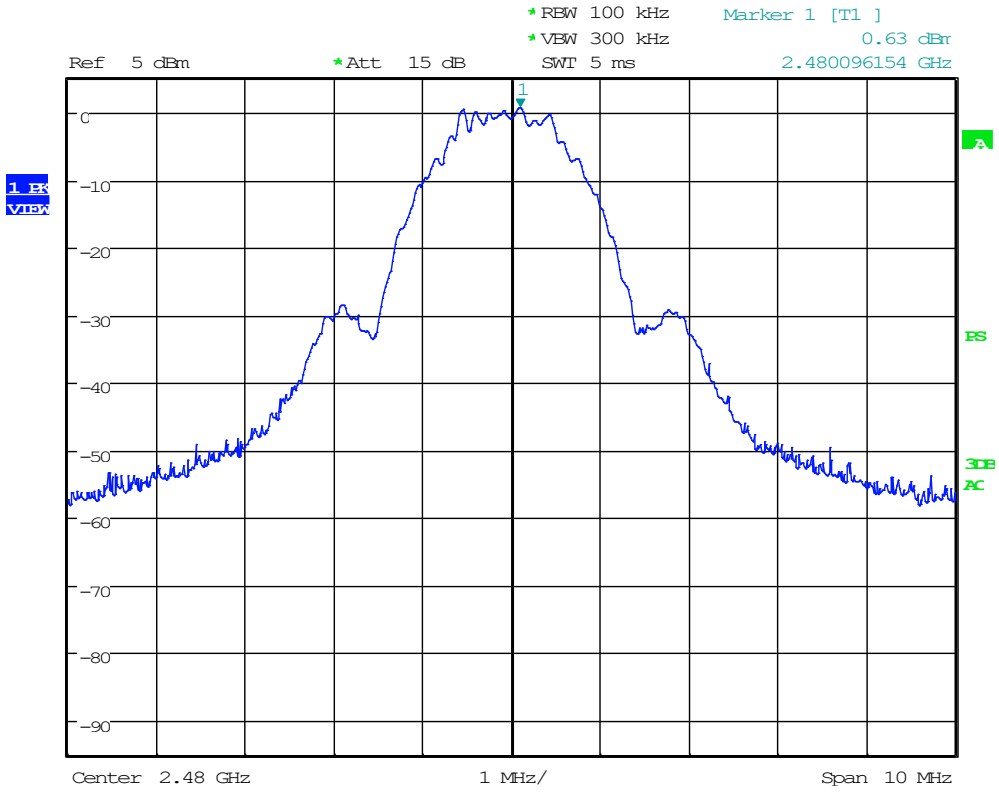
.



Date: 26.FEB.2025 15:58:03

2Mb, High Channel: Spur Reference

.



Date: 26.FEB.2025 15:52:53

10 RADIATED SPURIOUS EMISSIONS

The EUT antenna port was fitted with its 2.0dBi Gain Integral Antenna. Radiated emissions were measured in a Semi-Anechoic Chamber. All emissions generated that fall in the restricted bands per FCC Part 15.205 were examined.

10.1 Requirements:

All emissions that fall in the restricted bands defined in FCC Part 15.205 shall not exceed the maximum field strength listed in FCC Part 15.209(a).

Scans were performed from 9kHz to 26 GHz at the low, mid, and high channels and the low channel was determined to be the worst case. The tables of measured results follow in data presented and include measurements from all channels.

10.2 Radiated Spurious Emissions Test Data

Test Date(s):	2025-02-27	**Test Engineer:**	E. Tobin
Standards:	CFR 47 Part 15.247(d); Part 15.209 / KDB558074	**Air Temperature:**	21.5ºC
		Relative Humidity:	34%

Notes: Plots are peak, max hold prescan data included only to determine what frequencies to investigate and measure. The EUT was initially placed in a semi-anechoic chambe, and rotated in all three orthogonal positions to maximize the emissions. Characterization measurements were then performed to determine at which frequencies significant emissions occurred. These graphs are shown below.

The equipment was fully exercised with all cabling attached to the EUT and was positioned on the Semi-Anechoic Chamber for maximum emissions. While the equipment was energized, the receiving antenna was scanned from 1.0 meter to 4.0 meters in both vertical and horizontal polarities while the turntable was adjusted 360 degrees to determine the maximum field strength. EUT was tested in the position found to give worst-case emissions - horizontal. The tables of measured results can be found below.

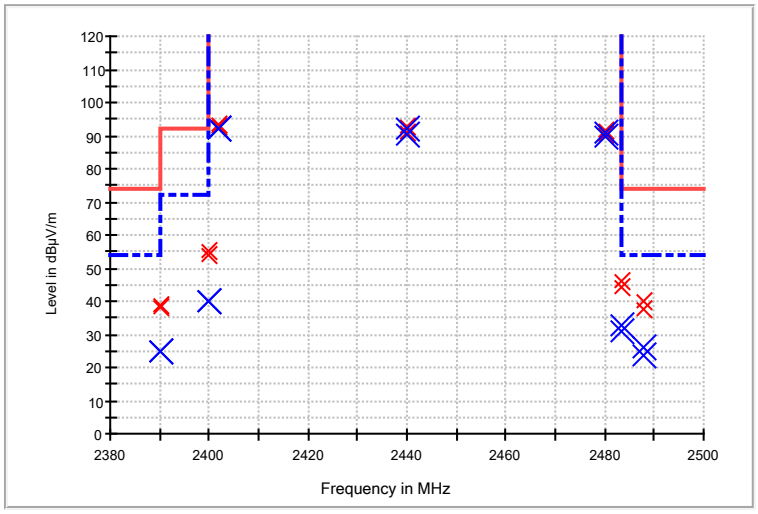
Some of the frequencies did not change with the EUT on or off. At those frequencies, the test distance was shortened to 1 meter and still no emissions from the EUT were visible or over the ambient or limit.

In the following plots, the black line indicates ambient noise and the red line indicates the measurement with the EUT on. Emissions to be found by the EUT were measured and listed in tables. The plots are for reference only and the limit lines are not actual limit lines but merely a guide.

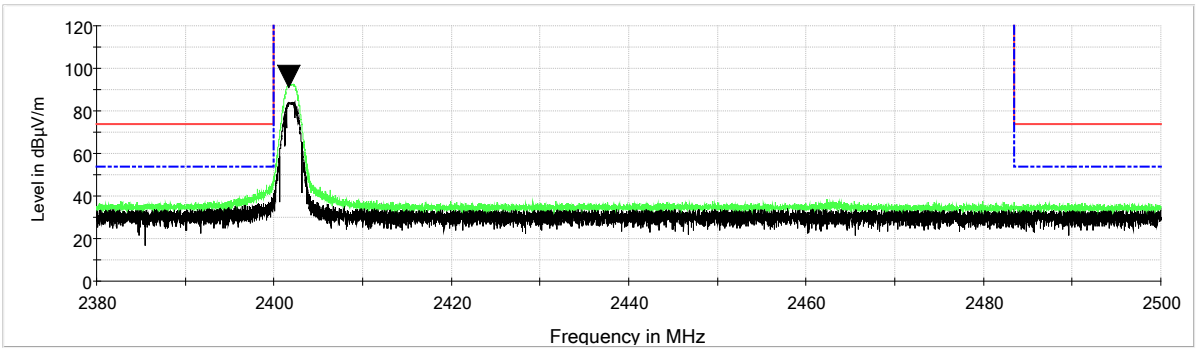
The 1Mb low channel was found to be the worst-case emissions.

1Mb, Band Edge Measurements (All Channels)

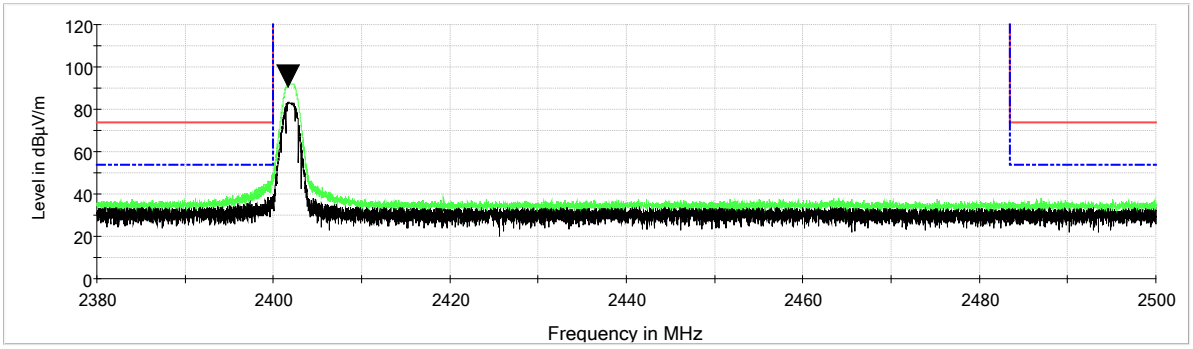
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
2390.000000	38.6	25.1	1000.000	140.0	H	150.0	-11.5	28.9	54.0	
2390.000000	38.1	25.1	1000.000	155.0	V	80.0	-11.5	28.9	54.0	
2400.000000	55.1	40.1	1000.000	155.0	V	80.0	-11.5	32.2	72.3	
2400.000000	53.7	39.8	1000.000	140.0	H	150.0	-11.5	32.5	72.3	
2402.000000	92.7	91.9	1000.000	140.0	H	150.0	-11.5	48.1	140.0	
2402.000000	93.1	92.3	1000.000	155.0	V	80.0	-11.5	47.7	140.0	
2440.000000	92.9	92.0	1000.000	150.0	V	105.0	-11.4	48.0	140.0	
2440.000000	91.0	90.2	1000.000	150.0	H	150.0	-11.4	49.8	140.0	
2480.000000	91.8	91.0	1000.000	145.0	V	105.0	-11.4	49.0	140.0	
2480.000000	90.4	89.6	1000.000	180.0	H	155.0	-11.4	50.4	140.0	
2483.500000	46.2	32.6	1000.000	145.0	V	105.0	-11.4	21.4	54.0	
2483.500000	44.1	31.0	1000.000	180.0	H	155.0	-11.4	23.0	54.0	
2488.000000	39.8	26.2	1000.000	145.0	V	105.0	-11.4	27.8	54.0	
2488.000000	37.6	23.7	1000.000	180.0	H	155.0	-11.4	30.3	54.0	



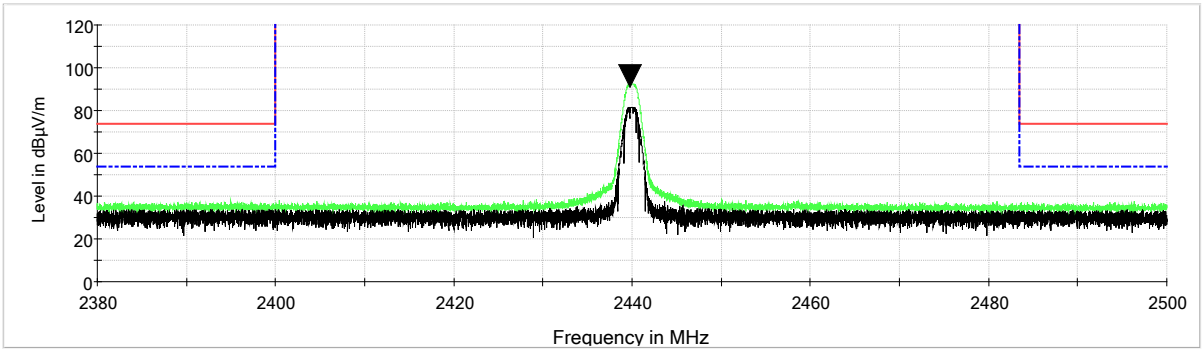
1 Mb, Low Channel: Band Edge – Vertical



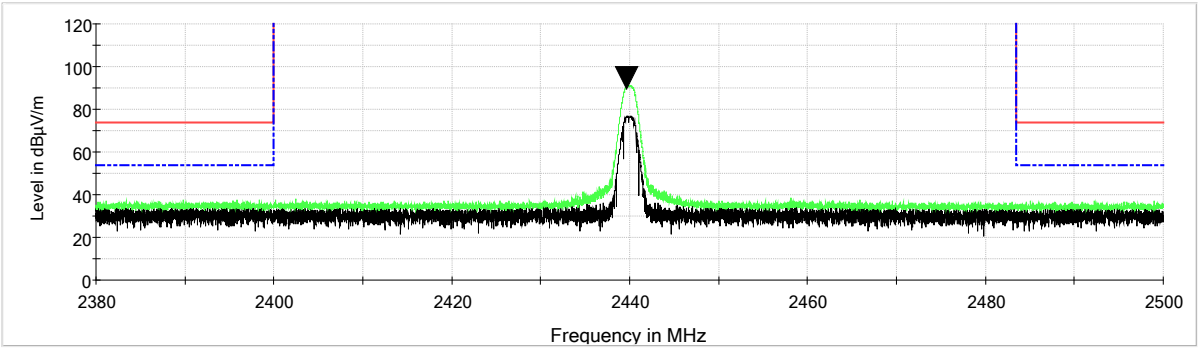
1 Mb, Low Channel: Band Edge – Horizontal



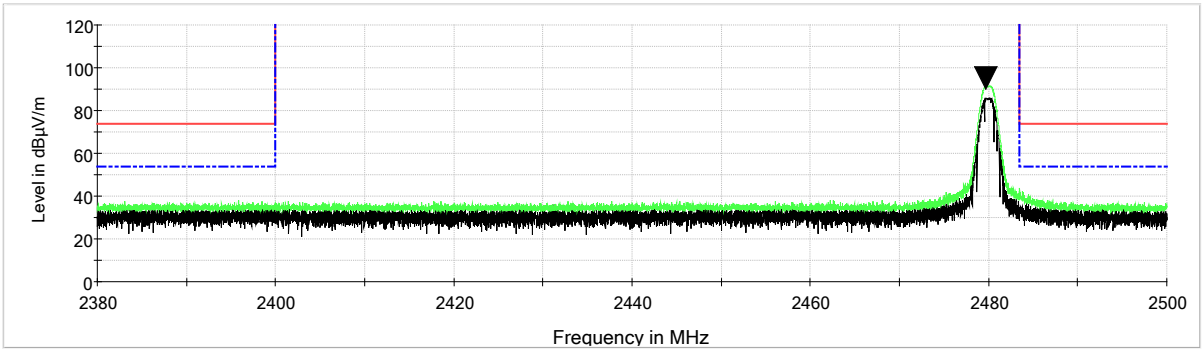
1 Mb, Mid Channel: Band Edge – Vertical



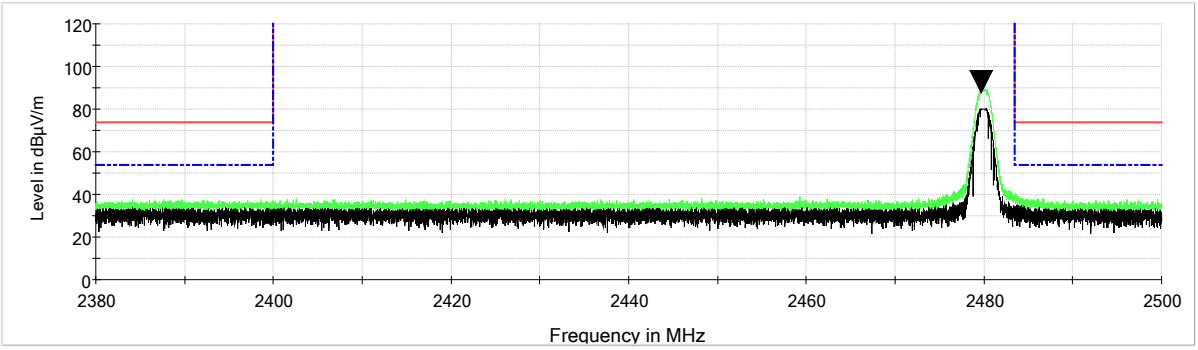
1 Mb, Mid Channel: Band Edge – Horizontal



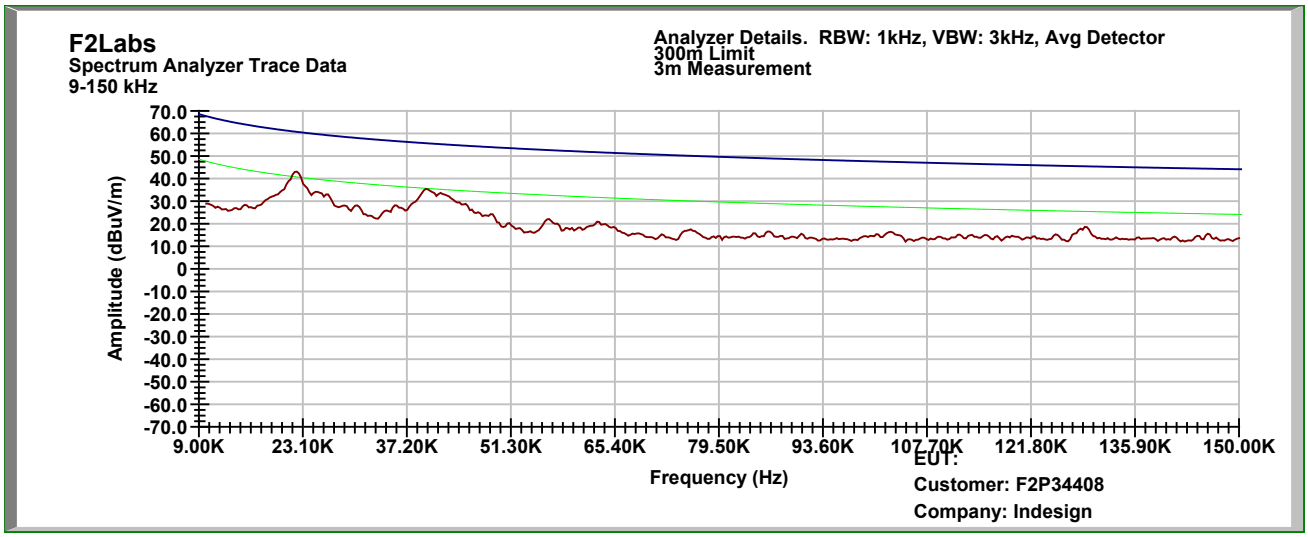
1 Mb, High Channel: Band Edge – Vertical



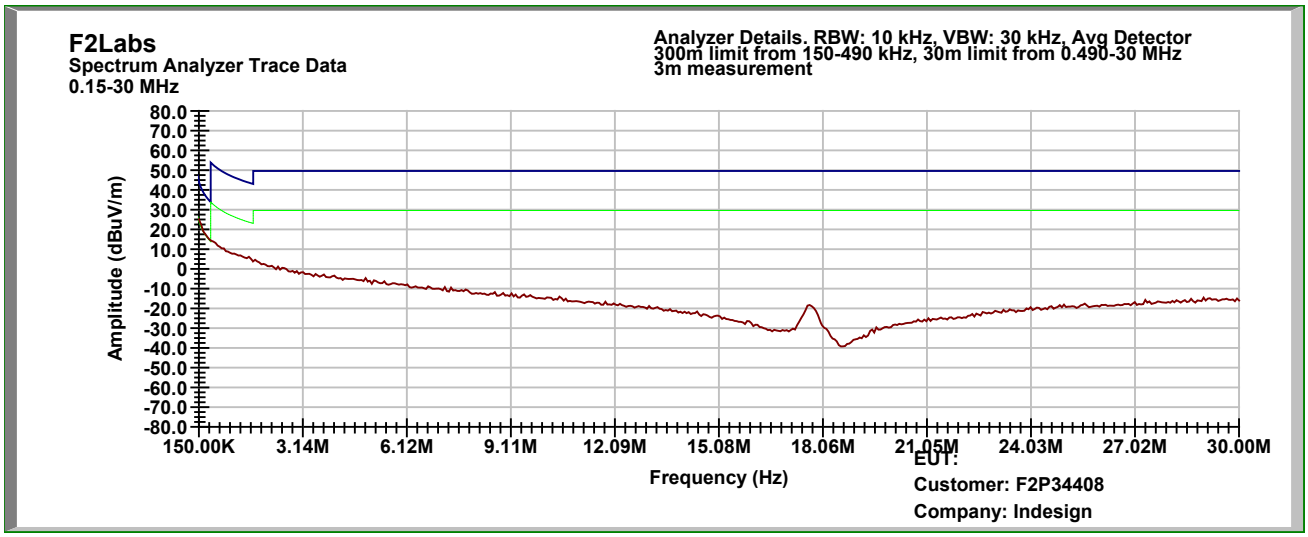
1 Mb, High Channel: Band Edge – Horizontal



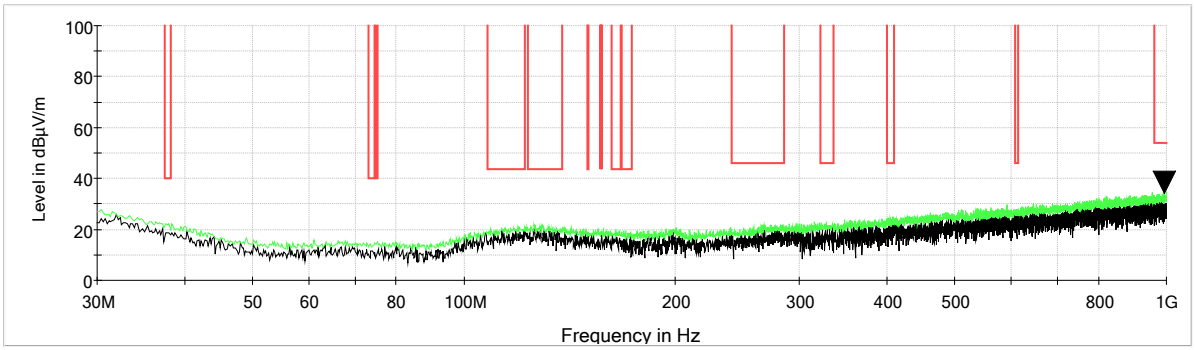
1Mb, Radiated Spurious Emissions: 0.009 MHz to 0.15 MHz



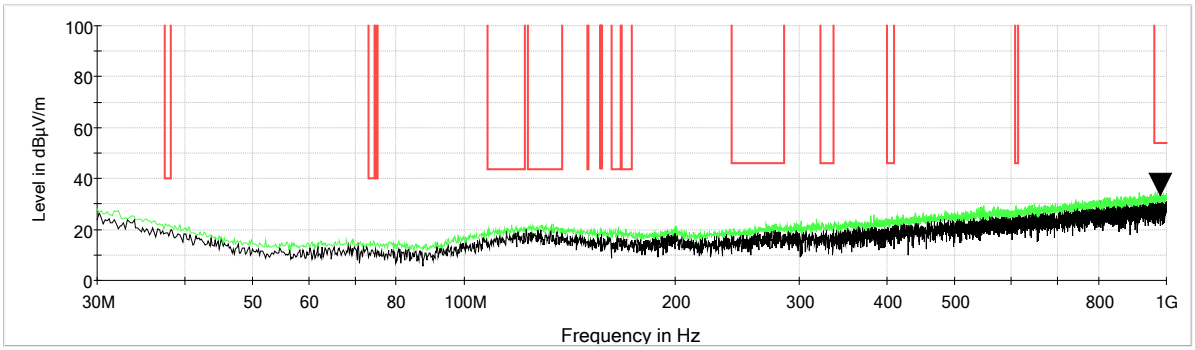
1Mb, Radiated Spurious Emissions: 0.15 MHz to 30 MHz



1Mb, Radiated Spurious Emissions: 30 MHz to 1000 MHz - Vertical

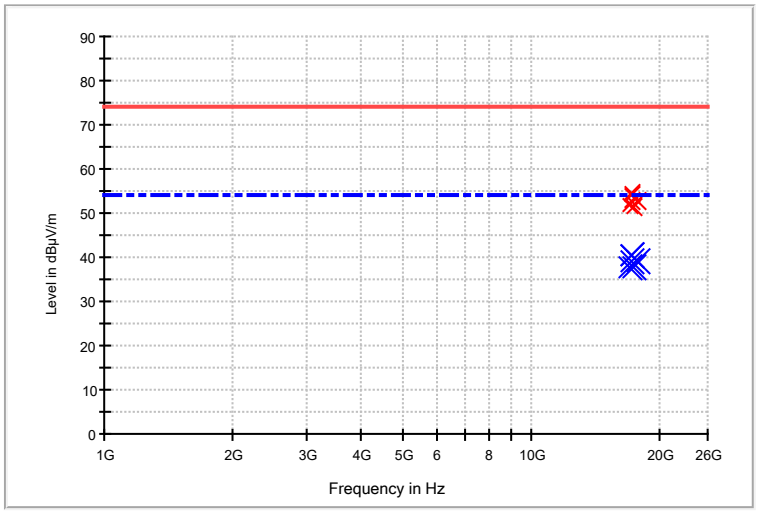


1Mb, Radiated Spurious Emissions: 30 MHz to 1000 MHz - Horizontal

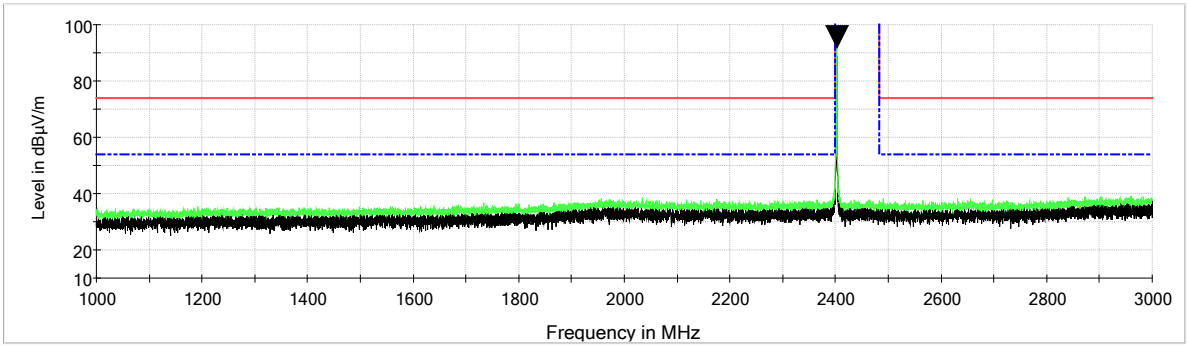


1Mb, Measurements: Greater Than 1 GHz

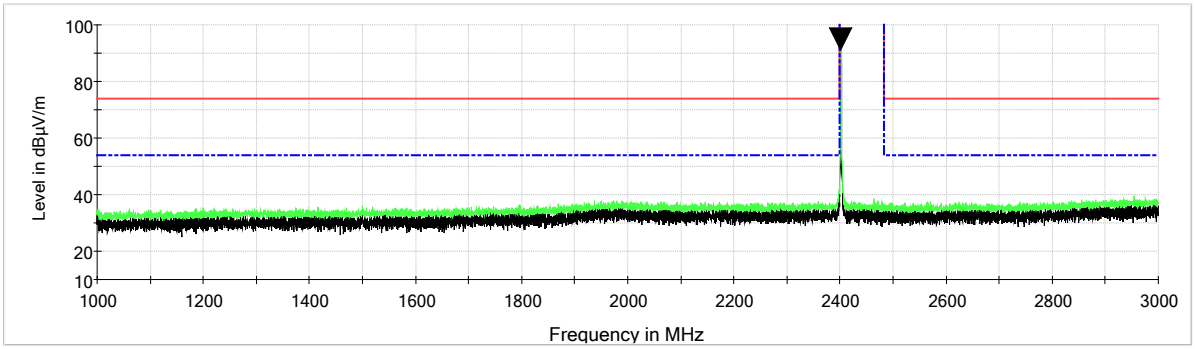
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
17033.000000	51.7	37.8	1000.000	150.0	V	343.0	7.4	16.2	54.0	
17242.000000	52.6	39.0	1000.000	150.0	V	6.0	8.0	15.0	54.0	
17289.000000	54.4	40.5	1000.000	150.0	H	0.0	8.0	13.5	54.0	
17316.000000	54.1	40.4	1000.000	150.0	V	351.0	8.0	13.6	54.0	
17384.500000	51.3	37.8	1000.000	150.0	H	9.0	8.0	16.2	54.0	
17867.500000	52.5	39.0	1000.000	150.0	H	0.0	6.3	15.0	54.0	



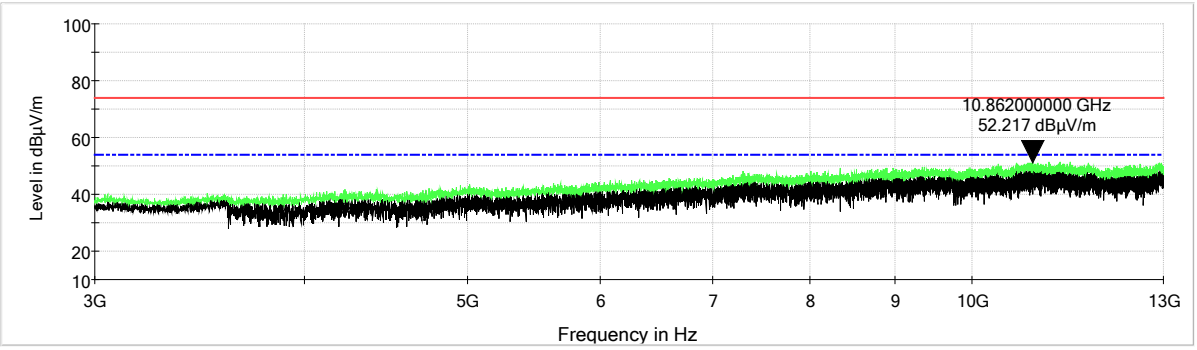
1Mb, Radiated Spurious Emissions: 1 GHz to 3 GHz - Vertical



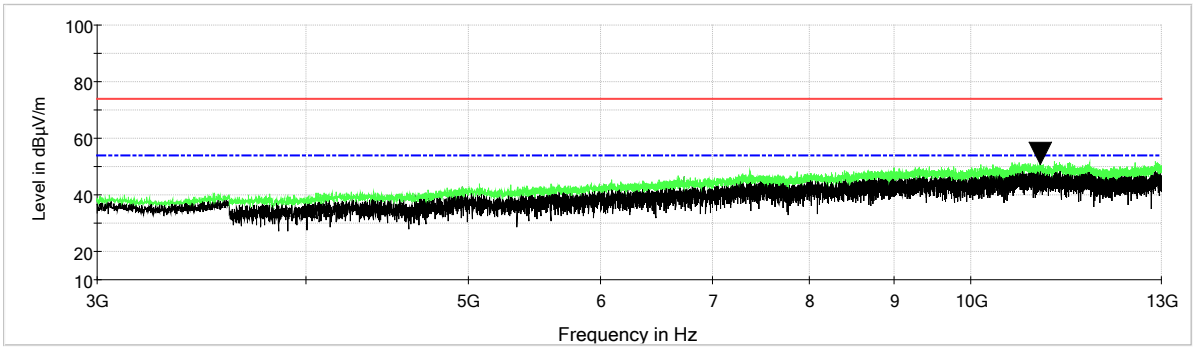
1Mb, Radiated Spurious Emissions: 1 GHz to 3 GHz - Horizontal



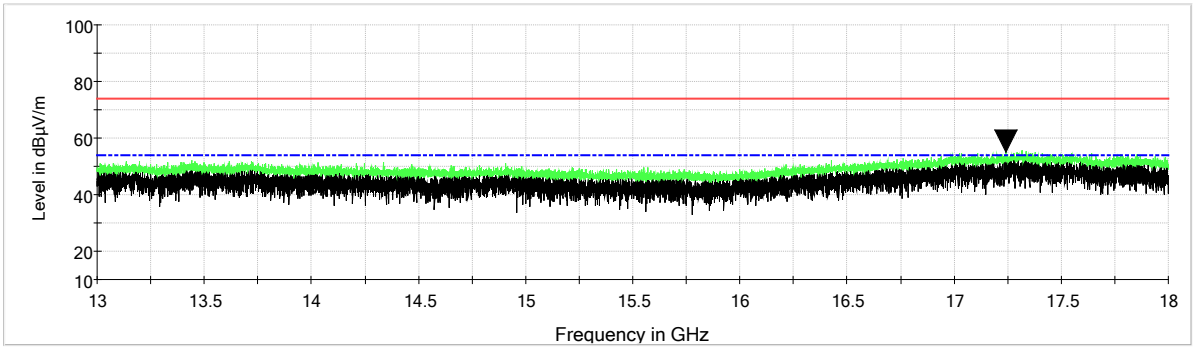
1Mb, Radiated Spurious Emissions: 3 GHz to 13 GHz - Vertical



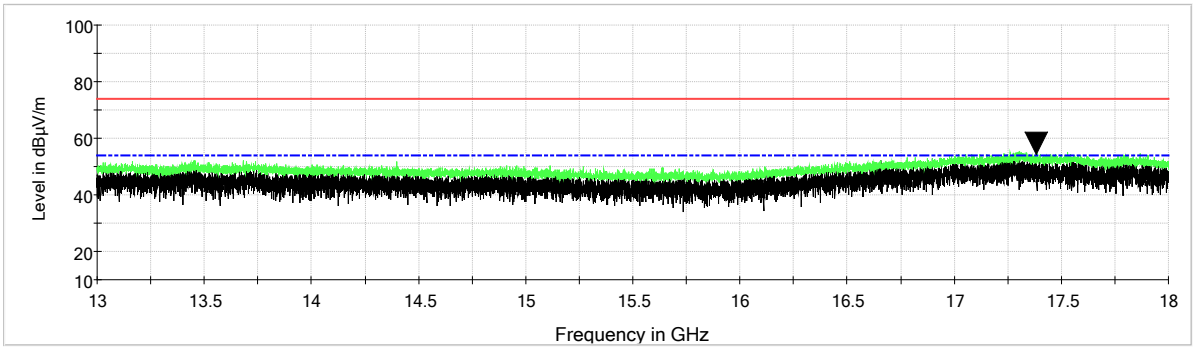
1Mb, Radiated Spurious Emissions: 3 GHz to 13 GHz - Horizontal



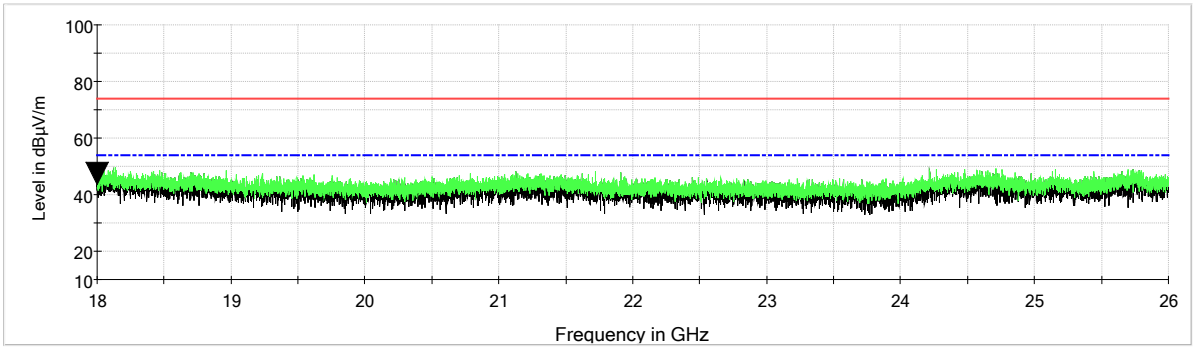
1Mb, Radiated Spurious Emissions: 13 GHz to 18 GHz - Vertical



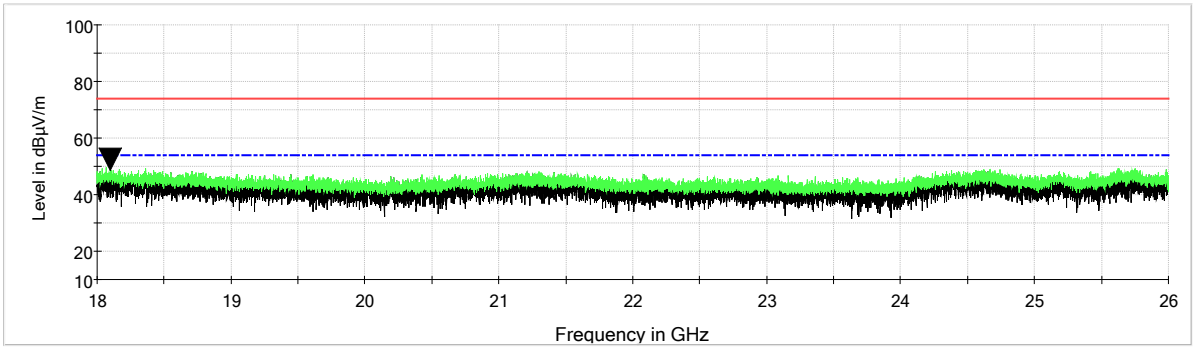
1Mb, Radiated Spurious Emissions: 13 GHz to 18 GHz - Horizontal



1Mb, Radiated Spurious Emissions: 18 GHz to 26 GHz - Vertical

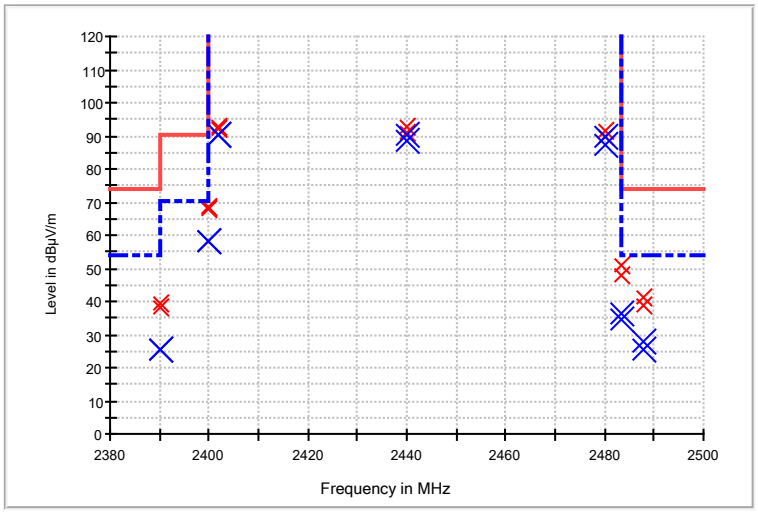


1Mb, Radiated Spurious Emissions: 18 GHz to 26 GHz - Horizontal

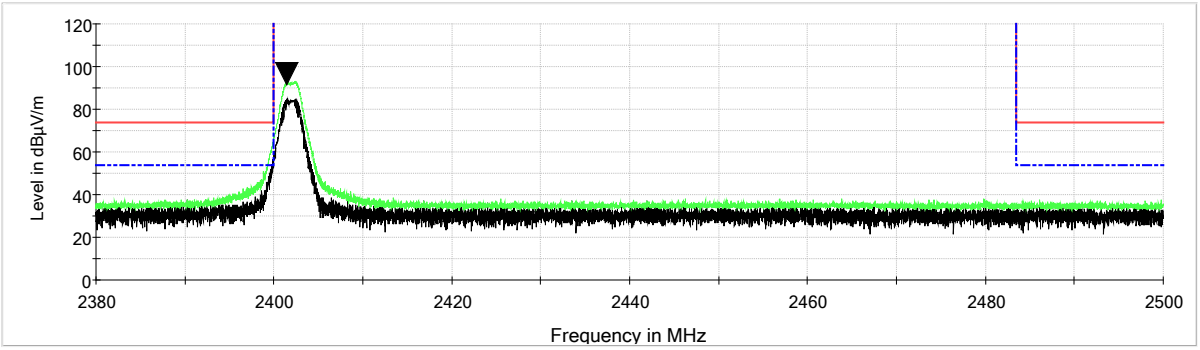


2Mb, Band Edge Measurements (All Channels)

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin - AVG (dB)	Limit - AVG (dBµV/m)	Comment
2390.000000	39.6	25.6	1000.000	140.0	H	150.0	-11.5	28.4	54.0	
2390.000000	38.1	25.3	1000.000	165.0	V	105.0	-11.5	28.7	54.0	
2400.000000	68.4	58.5	1000.000	165.0	V	105.0	-11.5	11.8	70.3	
2400.000000	68.1	58.4	1000.000	140.0	H	150.0	-11.5	11.9	70.3	
2402.000000	92.4	90.2	1000.000	140.0	H	150.0	-11.5	49.8	140.0	
2402.000000	92.5	90.3	1000.000	165.0	V	105.0	-11.5	49.7	140.0	
2440.000000	92.7	90.2	1000.000	150.0	V	105.0	-11.4	49.8	140.0	
2440.000000	90.9	88.7	1000.000	190.0	H	150.0	-11.4	51.3	140.0	
2480.000000	91.7	89.5	1000.000	145.0	V	105.0	-11.4	50.5	140.0	
2480.000000	89.6	87.4	1000.000	180.0	H	150.0	-11.4	52.6	140.0	
2483.500000	50.9	36.5	1000.000	145.0	V	105.0	-11.4	17.5	54.0	
2483.500000	47.9	34.3	1000.000	180.0	H	150.0	-11.4	19.7	54.0	
2488.000000	41.5	28.1	1000.000	145.0	V	105.0	-11.4	25.9	54.0	
2488.000000	38.6	25.3	1000.000	180.0	H	150.0	-11.4	28.7	54.0	

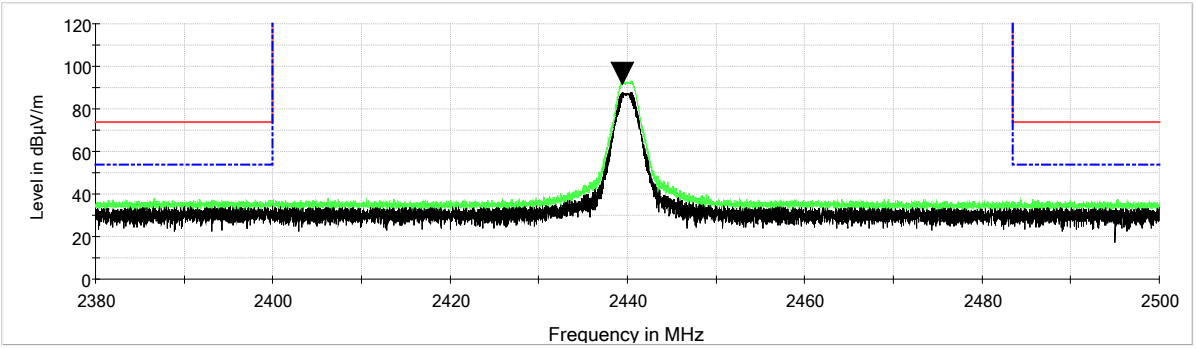


2 Mb, Low Channel: Band Edge – Vertical

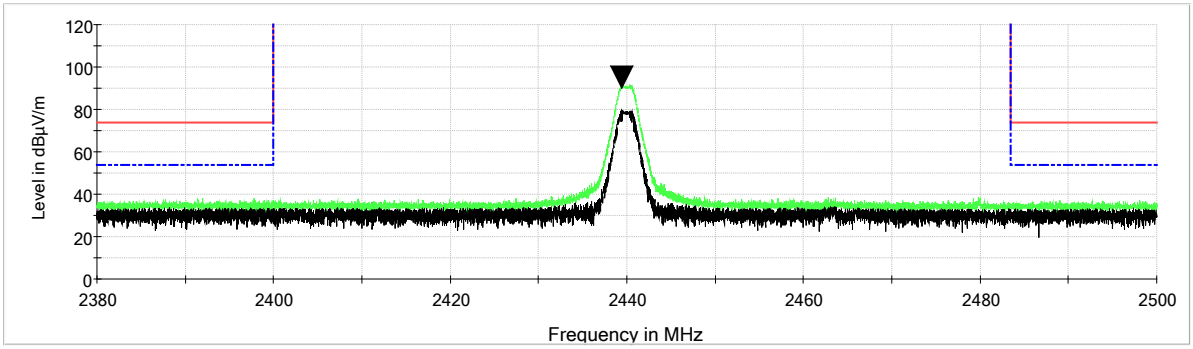


2 Mb, Low Channel: Band Edge – Horizontal

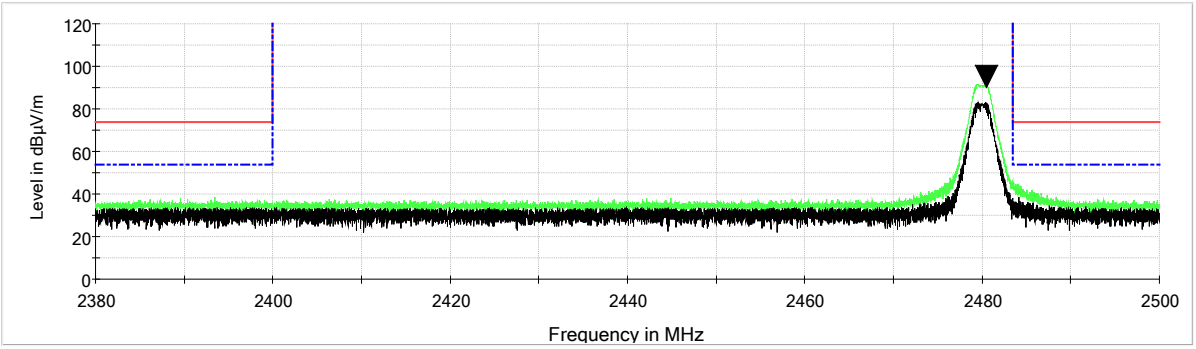
2 Mb, Mid Channel: Band Edge – Vertical



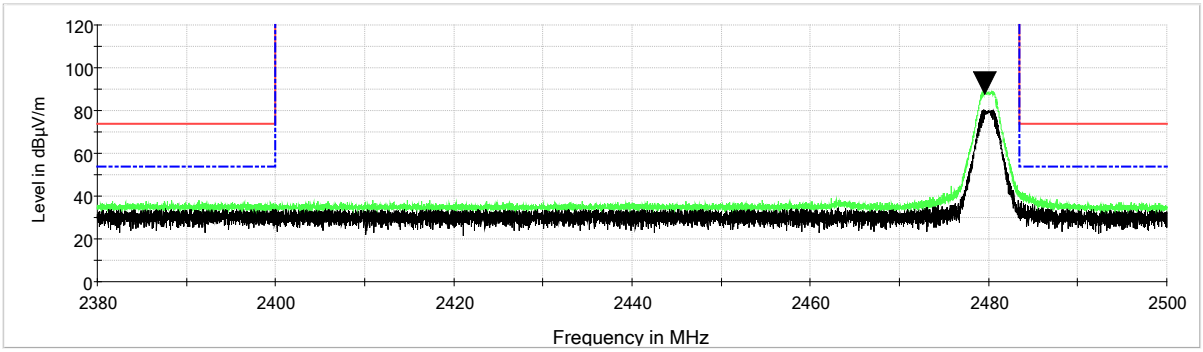
2 Mb, Mid Channel: Band Edge – Horizontal



2 Mb, High Channel: Band Edge – Vertical



2 Mb, High Channel: Band Edge – Horizontal



11 PEAK POWER SPECTRAL DENSITY (PSD)

Peak power spectral density measurements were performed.

11.1 Requirements:

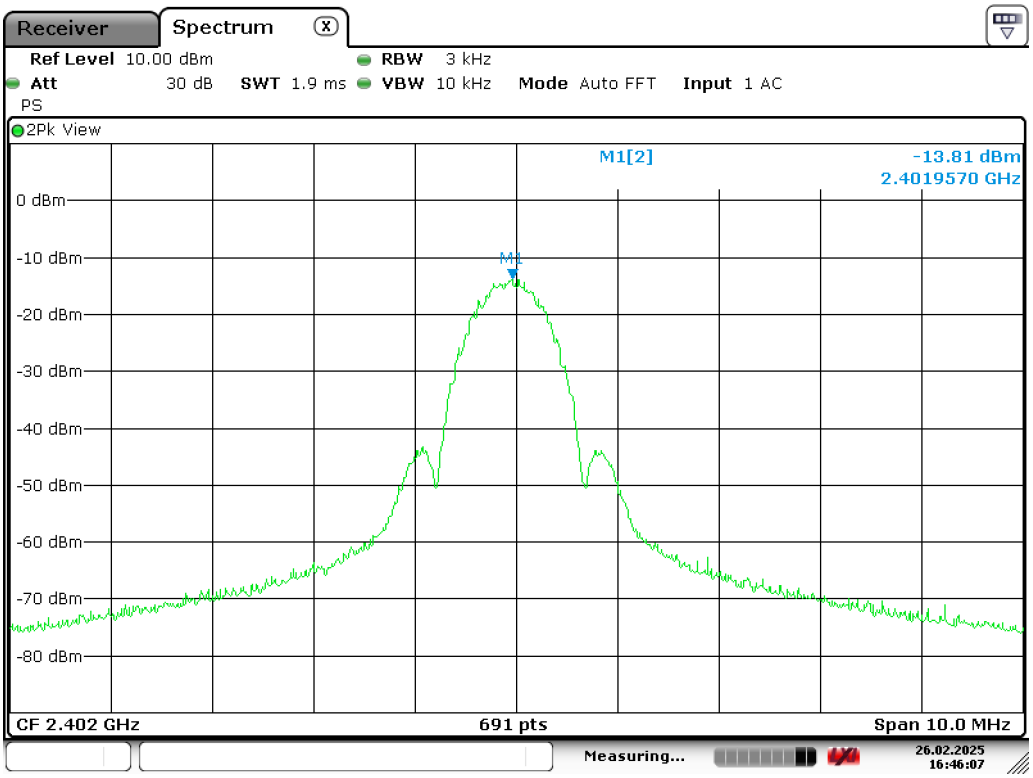
The peak power spectral density shall not exceed +8dBm in any 3 kHz band during any time interval of continuous transmission.

Power spectral density measurements were performed at a resolution bandwidth of 3 kHz (video bandwidth set at 10 KHz). The peak spectral densities were measured at the low, mid, and upper channels.

11.2 Peak Power Spectral Density Test Data

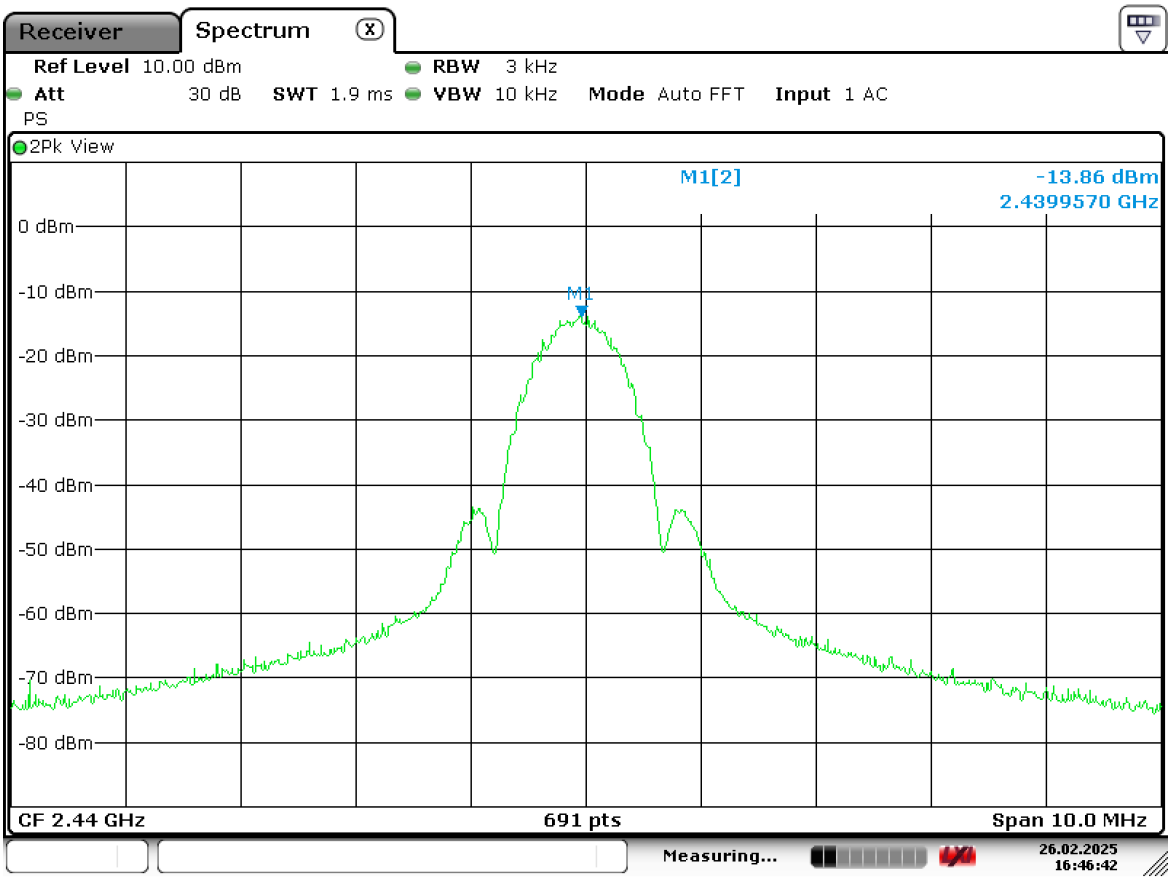
Test Date(s):	2025-02-26	Test Engineer:	E. Tobin
Standards:	CFR 47 Part 15.247(e); KDB558074	Air Temperature:	20.5ºC
		Relative Humidity:	32%

1Mb: Low Channel



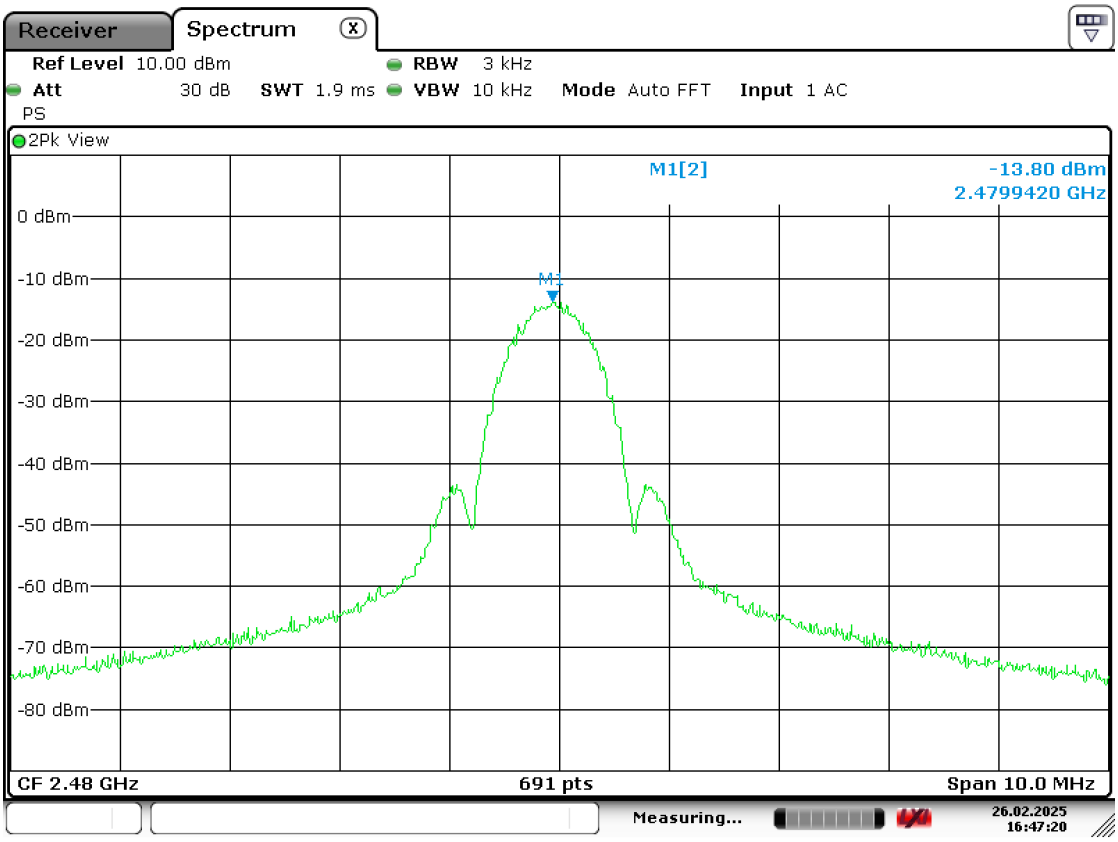
Date: 26.FEB.2025 16:46:07

1Mb: Mid Channel



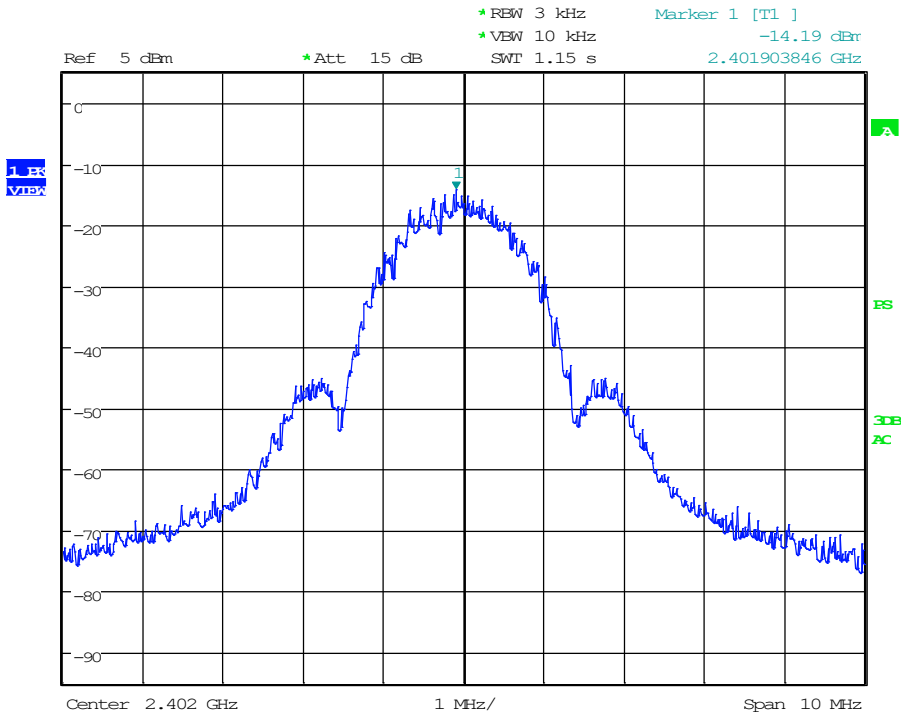
Date: 26.FEB.2025 16:46:43

1Mb: High Channel



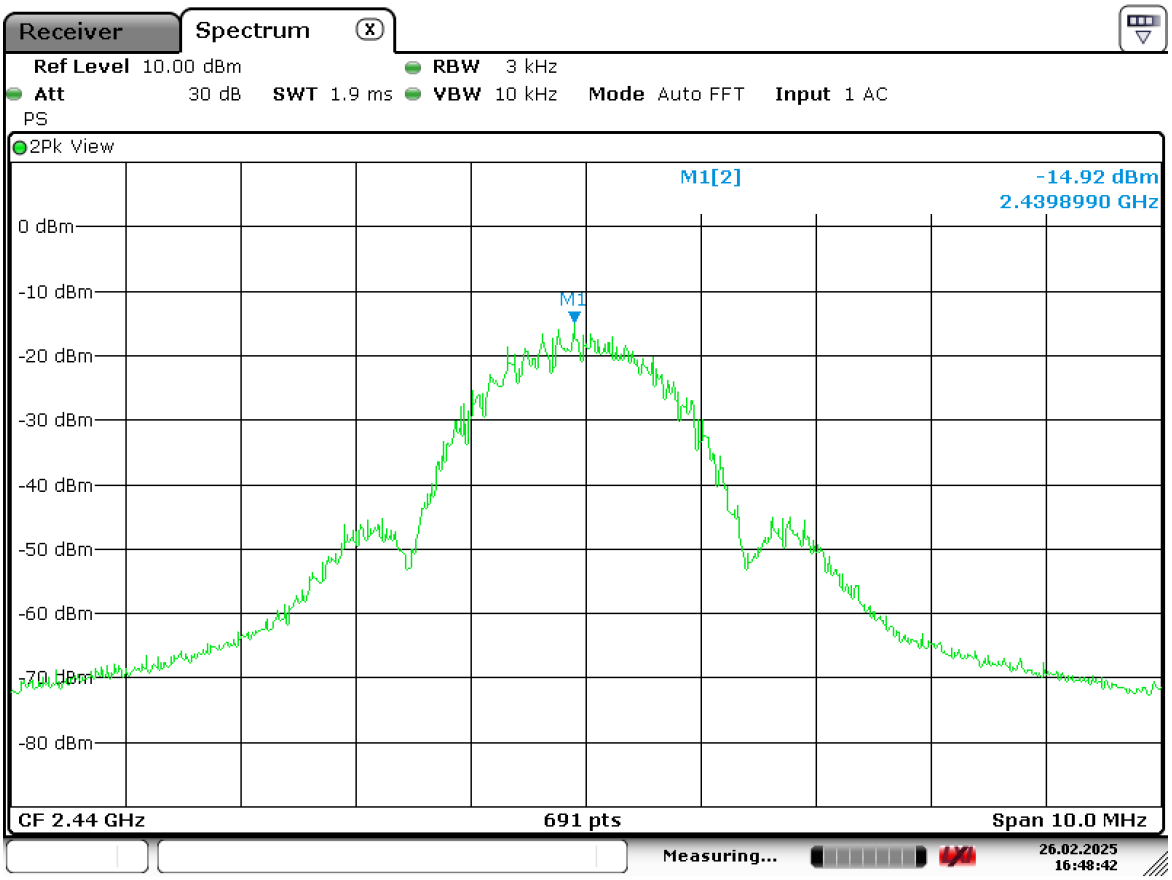
Date: 26.FEB.2025 16:47:20

2Mb: Low Channel



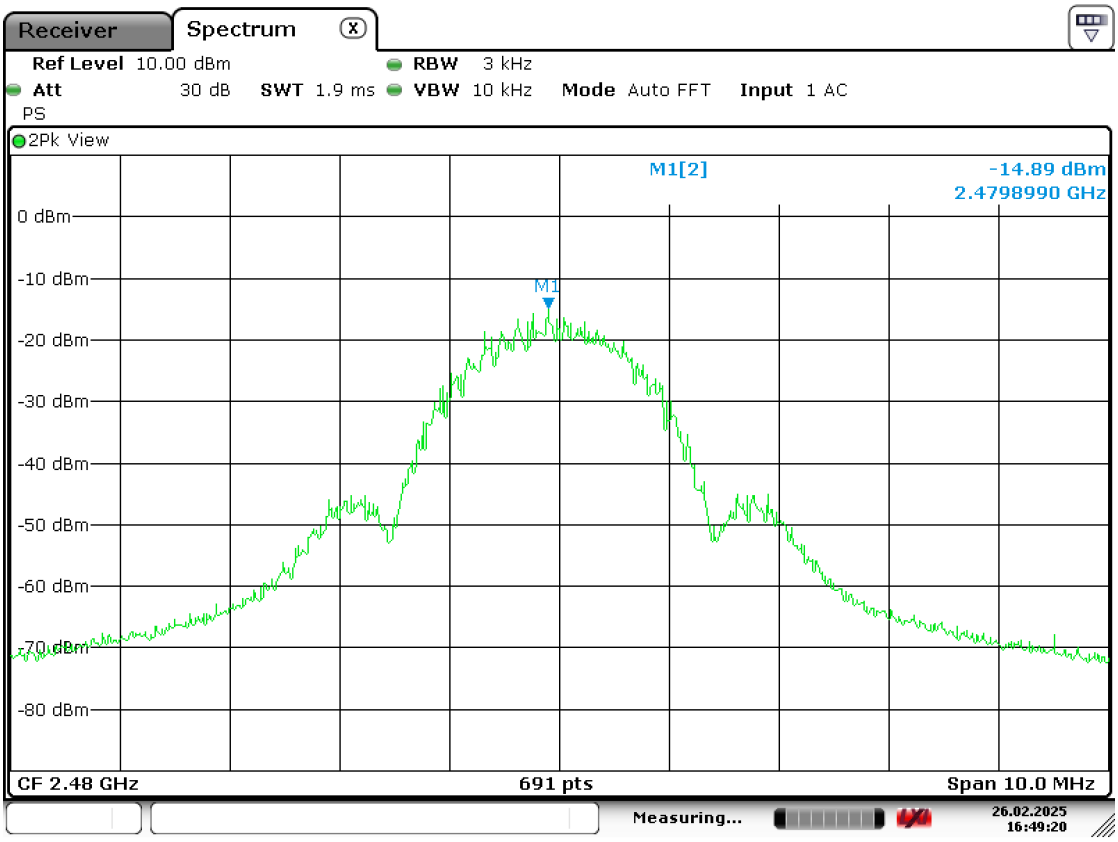
Date: 27.FEB.2025 09:03:26

2Mb: Mid Channel



Date: 26.FEB.2025 16:48:42

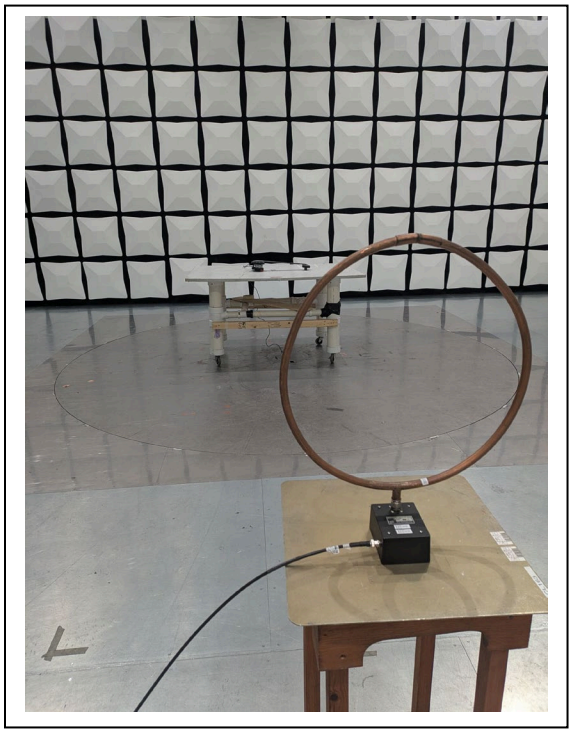
2Mb: High Channel



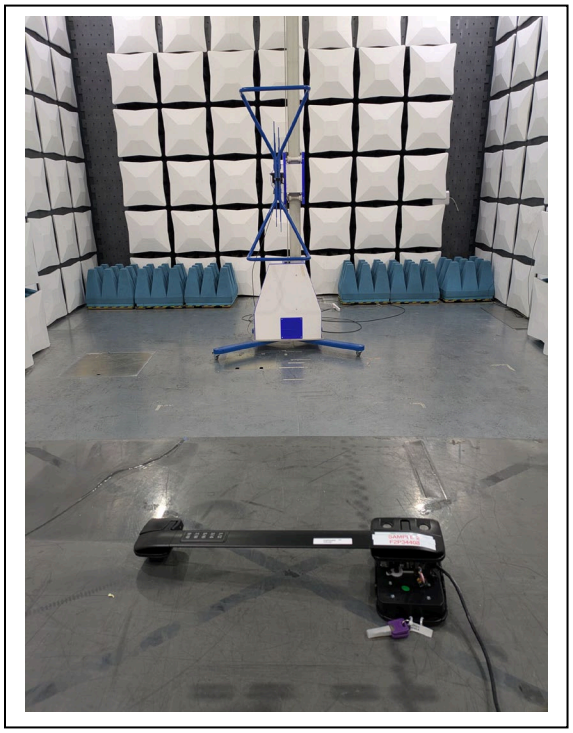
Date: 26.FEB.2025 16:49:20

12 TEST SETUP PHOTOGRAPH(S)

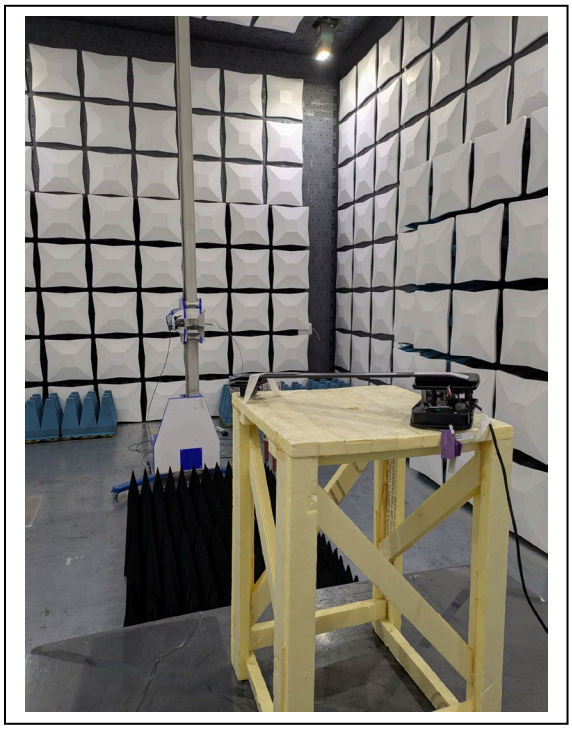
Radiated Spurious Emission: 0.009 MHz to 30 MHz



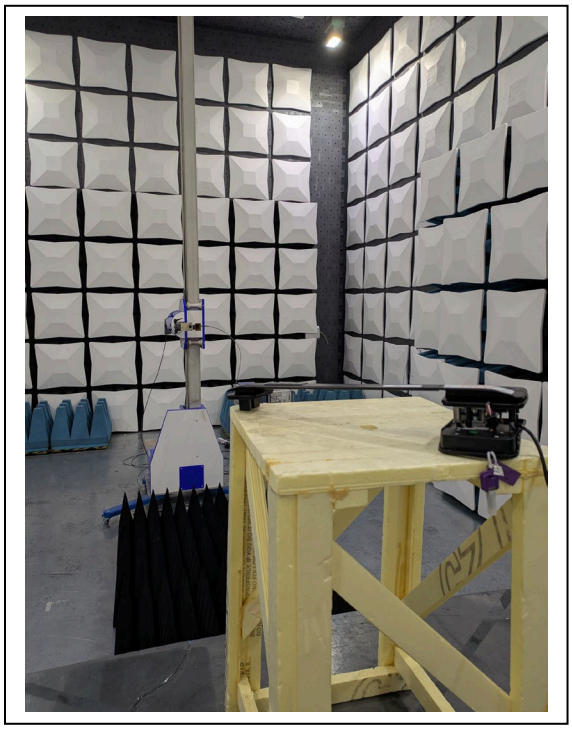
Radiated Spurious Emission: 30 MHz to 1000 MHz



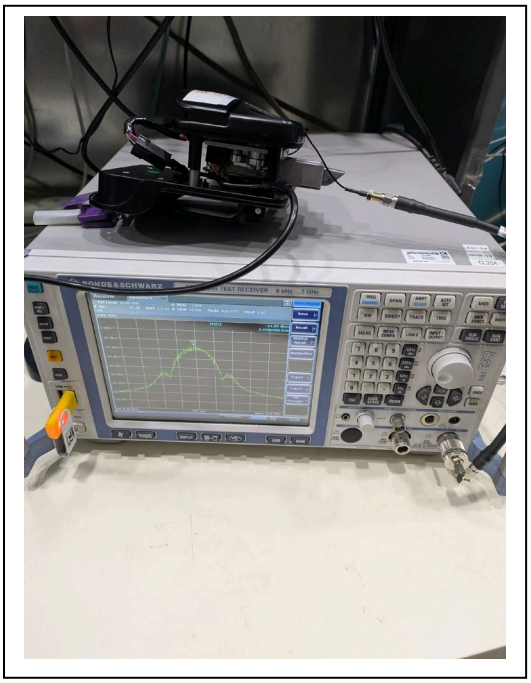
Radiated Spurious Emission: 1 GHz to 18 GHz

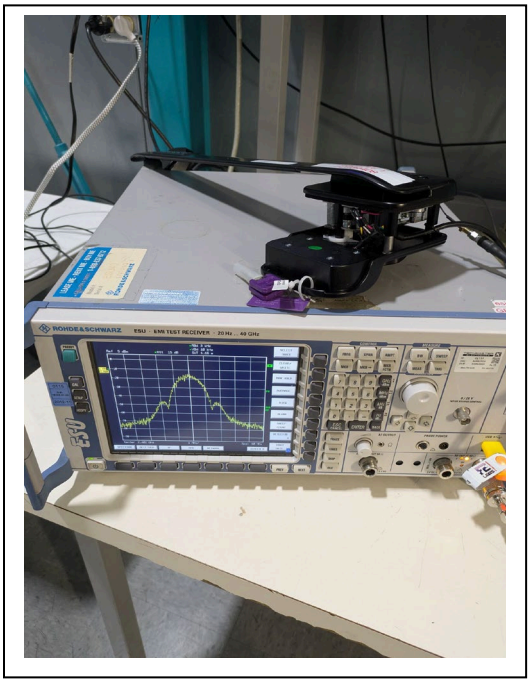


Radiated Spurious Emission: 18 GHz to 26 GHz



Conducted Output Power, Peak Power Spectral Density, 99% Occupied Bandwidth, and Conducted Spurious Emissions





-6dB / -20dB Occupied Bandwidth