



FCC TEST REPORT

FCC ID: 2A7ZC-FC2

On Behalf of

GEOMATE POSITIONING PTE. LTD.

Handheld GNSS Data Collector

Model No.: FC2

Prepared for : GEOMATE POSITIONING PTE. LTD.
Address : 808 FRENCH ROAD #04-167 KITCHENER COMPLEX
SINGAPORE (200808)

Prepared By : Shenzhen Alpha Product Testing Co., Ltd.
Address : Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103,
Shenzhen, Guangdong, China

Report Number : A2312102-C01-R04
Date of Receipt : December 25, 2023
Date of Test : December 25, 2023 - June 22, 2024
Date of Report : June 22, 2024
Version Number : V0
Test Result : Pass

TABLE OF CONTENTS

	Description	Page
1	TEST SUMMARY	5
1.1	MEASUREMENT UNCERTAINTY.....	5
2	GENERAL INFORMATION	6
2.1	GENERAL DESCRIPTION OF EUT	6
2.2	TEST MODE	7
2.3	TEST FACILITY	7
2.4	DESCRIPTION OF SUPPORT UNITS	7
2.5	DEVIATION FROM STANDARDS.....	7
2.6	ABNORMALITIES FROM STANDARD CONDITIONS.....	7
2.7	OTHER INFORMATION REQUESTED BY THE CUSTOMER	7
2.8	ADDITIONAL INSTRUCTIONS	7
3	TEST INSTRUMENTS LIST	8
4	TEST RESULTS AND MEASUREMENT DATA.....	9
4.1	ANTENNA REQUIREMENT:	9
4.2	CONDUCTED EMISSIONS	10
4.3	EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH.....	13
4.4	PEAK TRANSMIT POWER	78
4.5	POWER SPECTRAL DENSITY.....	111
4.6	BAND EDGE.....	143
4.7	RADIATED EMISSION	169
4.8	FREQUENCY STABILITY	177

TEST REPORT DECLARATION

Applicant : GEOMATE POSITIONING PTE. LTD.
Address : 808 FRENCH ROAD #04-167 KITCHENER COMPLEX SINGAPORE (200808)
Manufacturer : GEOMATE POSITIONING PTE. LTD.
Address : 808 FRENCH ROAD #04-167 KITCHENER COMPLEX SINGAPORE (200808)
EUT Description : Handheld GNSS Data Collector
(A) Model No. : FC2
(B) Trademark : 

Measurement Standard Used:

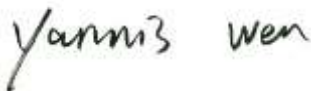
FCC Rules and Regulations Part 15 Subpart E

ANSI C63.10:2013, CISPR 16-1-4:2010

The device described above is tested by Shenzhen Alpha Product Testing Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart E limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen Alpha Product Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen Alpha Product Testing Co., Ltd.

Tested by (name + signature).....:	Yannis Wen Project Engineer	
Approved by (name + signature).....:	Jack Xu Project Manager	
Date of issue.....:	June 22, 2024	

Revision History

Revision	Issue Date	Revisions	Revised By
V0	June 22, 2024	Initial released Issue	Yannis Wen

1 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	Section 15.203 Section 7.1.4	PASS
AC Power Line Conducted Emission	Section 15.207 Section 7.2.4 ANSI C63.10	PASS
Peak Transmit Power	Section 15.407(a)	PASS
Power Spectral Density	Section 15.407(a)	PASS
Undesirable Emission	Section 15.407(b)	PASS
Radiated Emission	Section 15.407(b)&15.209 Section 5.5 ANSI C63.10	PASS
Band Edge	15.205, ANSI C63.10	PASS
Frequency Stability	15.407(f)	PASS

Remark:

1. Pass: The EUT complies with the essential requirements in the standard.
2. Frequency Stability: The manufacturer stated in the user's manual.
3. The conclusion of this test report is judged by actual test data without considering measurement uncertainty.

1.1 Measurement Uncertainty

Item	Uncertainty
Uncertainty for Power point Conducted Emissions Test	1.63dB
Uncertainty for Radiation Emission test in 3m chamber (below 30MHz)	3.5dB
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.74dB(Polarize: V)
	3.76dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	3.77dB(Polarize: V)
	3.80dB(Polarize: H)
Uncertainty for Radiation Emission test in 3m chamber (18GHz to 40GHz)	4.31 dB(Polarize: V)
	4.30 dB(Polarize: H)
Uncertainty for radio frequency	5.06×10^{-8} GHz
Uncertainty for conducted RF Power	0.40dB
Uncertainty for temperature	0.2°C
Uncertainty for humidity	1%
Uncertainty for DC and low frequency voltages	0.06%

2 General Information

2.1 General Description of EUT

EUT Name	: Handheld GNSS Data Collector
Model No.	: FC2
DIFF.	: N/A
Power supply	: DC 5V from adapter, DC 3.8V from battery.
Radio Technology	: 5G WIFI
Operation Frequency	: 802.11a/n(HT20)/ac(HT20): 5180~5240MHz; 5260-5320MHz; 5500-5700MHz;5745~5825MHz 802.11n(HT40)/ac(HT40): 5190~5230MHz; 5270-5310MHz; 5510- 5670MHz; 5755~5795MHz 802.11ac(HT80): 5210MHz, 5290MHz, 5530MHz, 5775MHz
Channel separation	: 20MHz for 802.11a/ 802.11ac20/ 802.11n(HT20) 40MHz for 802.11ac40/ 802.11n(HT40) 80MHz for 802.11ac80
Modulation technology:	: IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (64QAM, 16QAM, QPSK, BPSK)
Antenna Type	: Internal Antenna, max gain -4.05dBi Antenna information is provided by applicant.
Coaxial cable loss	: Max. coaxial cable loss:0.5dB (Cable lossvalue is provided by applicant.)
Software version	: V1.0
Hardware version	: V1.0
Intend use environment	: Residential, commercial and light industrial environment

2.2 Test mode

Transmitting mode Keep the EUT in transmitting with modulation.
EUT was test at its maximum power control level.

Remark: During the test, the test voltage was tuned from 85% to 115% of the nominal rated supply voltage, and found that the worst case was under the nominal rated supply condition. So the report just shows that condition's data.

2.3 Test Facility

Shenzhen Alpha Product Testing Co., Ltd
Building i, No.2, Lixin Road, Fuyong Street, Bao'an District, 518103, Shenzhen, Guangdong, China

June 21, 2018 File on Federal Communication Commission
Registration Number: 293961

July 25, 2017 Certificated by IC
Registration Number: 12135A

2.4 Description of Support Units

Accessories : AC Adapter
Manufacturer : EDAC POWER Electronics Co., Ltd
Model : EA1012AVRU-050
Ratings : Input: 100-240Vac~50/60Hz 1.0A
 Output: 5.0V=2.4A

2.5 Deviation from Standards

None.

2.6 Abnormalities from Standard Conditions

None.

2.7 Other Information Requested by the Customer

None.

2.8 Additional instructions

Software (Used for test) from client

Channel	Power level
Lowest	Default
Middle	Default
Highest	Default

3 Test Instruments list

Equipment	Manufacture	Model No.	Firmware version	Serial No.	Last cal.	Cal Interval
9*6*6 anechoic chamber	CHENYU	9*6*6	/	N/A	2022.05.17	3Year
Spectrum analyzer	ROHDE&SCHWARZ	FSV40-N	2.3	102137	2023.08.16	1Year
Spectrum analyzer	Agilent	N9020A	A.14.16	MY499100060	2023.08.16	1Year
Receiver	ROHDE&SCHWARZ	ESR	2.28 SP1	1316.3003K03-102082-Wa	2023.08.16	1Year
Receiver	R&S	ESCI	4.42 SP1	101165	2023.08.16	1Year
Bilog Antenna	Schwarzbeck	VULB 9168	/	VULB 9168#627	2023.08.28	1Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	/	2106	2023.08.19	1Year
Loop Antenna	SCHWARZBECK	FMZB 1519B	/	00128	2023.08.19	1Year
RF Cable	Resenberger	Cable 1	/	RE1	2023.08.16	1Year
RF Cable	Resenberger	Cable 2	/	RE2	2023.08.16	1Year
RF Cable	Resenberger	Cable 3	/	CE1	2023.08.16	1Year
Pre-amplifier	HP	HP8347A	/	2834A00455	2023.08.16	1Year
Pre-amplifier	Agilent	8449B	/	3008A02664	2023.08.16	1Year
L.I.S.N.#1	Schwarzbeck	NSLK8126	/	8126-466	2023.08.16	1Year
L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	101043	2023.08.16	1Year
Horn Antenna	SCHWARZBECK	BBHA 9170	/	00946	2023.08.19	1Year
Preamplifier	SKET	LNPA_1840 -50	/	SK2018101801	2023.08.16	1 Year
Power Meter	Agilent	E9300A	/	MY41496628	2023.08.16	1 Year
Power Sensor	DARE	RPR3006W	/	15100041SNO91	2023.08.16	1 Year
Temp. & Humid. Chamber	Teelong	TL-HW408S	/	TL-20191205-01	2023.07.25	1 Year
Switching Mode Power Supply	JUNKE	JK12010S	/	20140927-6	2023.08.16	1 Year
Adjustable attenuator	MWRFTest	N/A	/	N/A	N/A	N/A
10dB Attenuator	Mini-Circuits	DC-6G	/	N/A	N/A	N/A

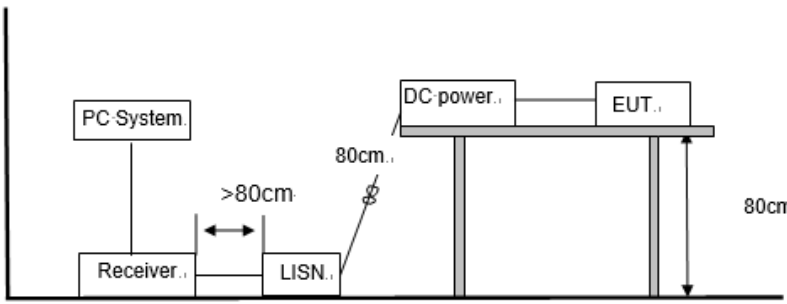
Software Information			
Test Item	Software Name	Manufacturer	Version
RE	EZ-EMC	Farad	Alpha-3A1
CE	EZ-EMC	Farad	Alpha-3A1
RF-CE	MTS 8310	MW	V2.0.0.0

4 Test results and Measurement Data

4.1 Antenna requirement:

Standard requirement:	FCC Part15 C Section 15.203
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.	
E.U.T Antenna:	
The antenna is internal antenna. The best case gain of the antenna is -4.05dBi for 5.15~5.25GHz, 5.25~5.35GHz, 5.50-5.70GHz, 5.725~5.85GHz	

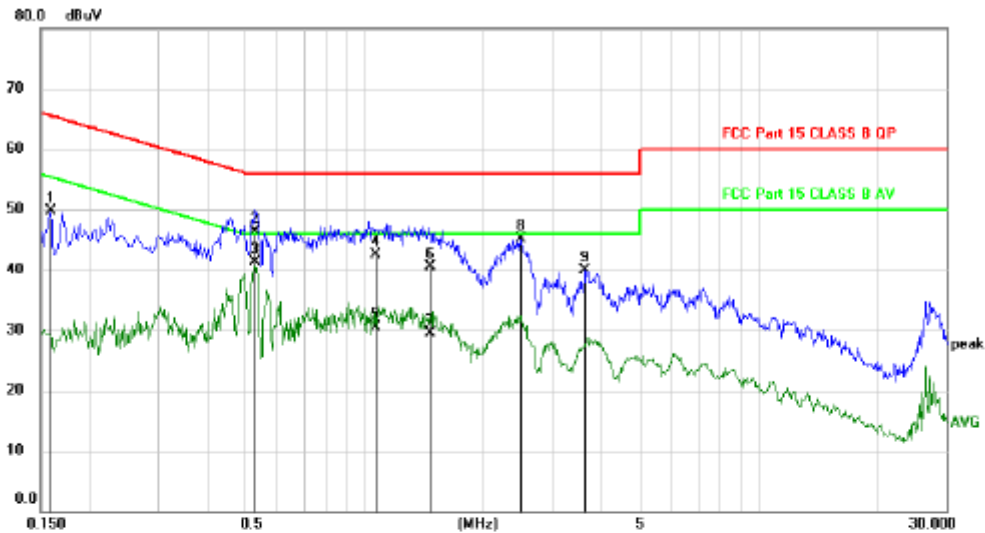
4.2 Conducted Emissions

Test Requirement:	FCC Part15 C Section 15.207		
Test Method:	ANSI C63.10:2013		
Test Frequency Range:	150KHz to 30MHz		
Receiver setup:	RBW=9KHz, VBW=30KHz		
Limit:	Frequency range (MHz)	Limit (dBuV)	
		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 procedure	The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs). Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2013 on conducted measurement.		
Test setup:			
Test Instruments:	Refer to section 3 for details		
Test mode:	Refer to section 2.2 for details		
Test results:	Pass		

Measurement Data

An initial pre-scan was performed on the line and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Line:

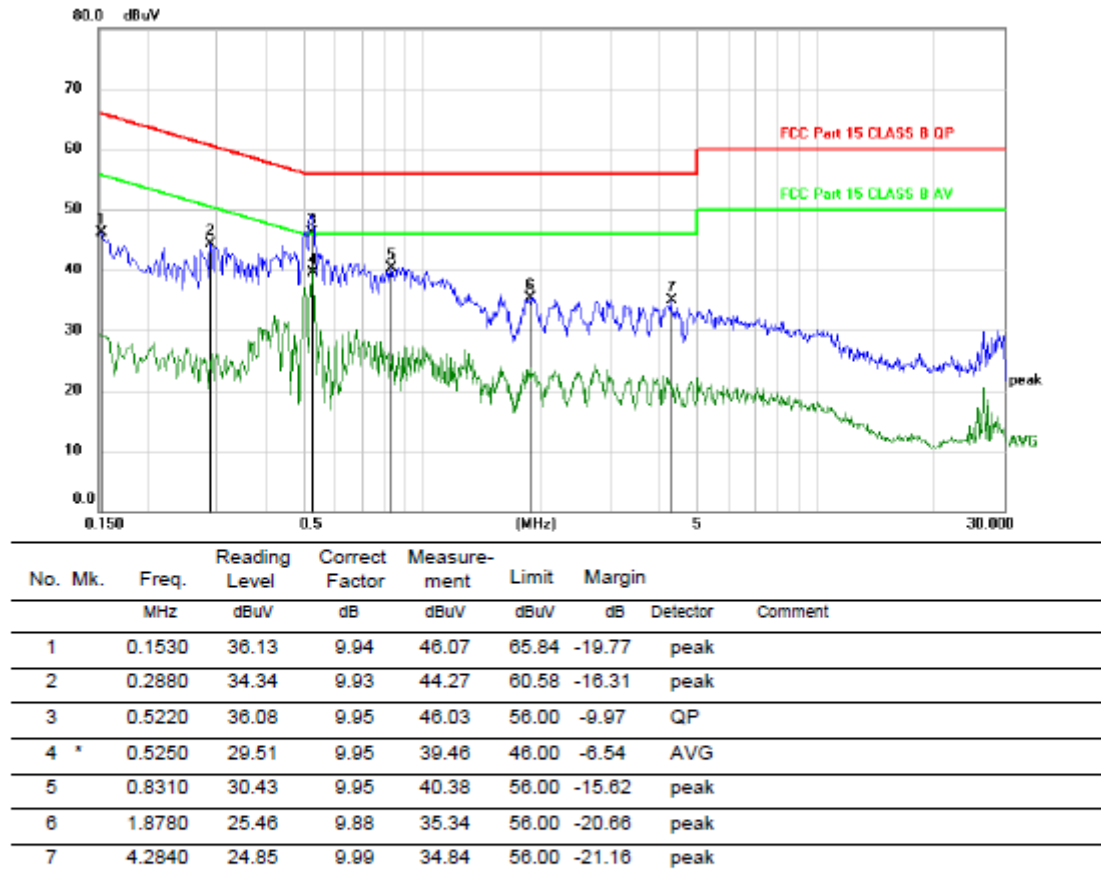


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1590	39.72	9.94	49.66	65.52	-15.86	peak	
2		0.5309	36.35	9.95	46.30	56.00	-9.70	QP	
3	*	0.5309	31.39	9.95	41.34	46.00	-4.66	AVG	
4		1.0735	32.67	9.91	42.58	56.00	-13.42	QP	
5		1.0735	20.60	9.91	30.51	46.00	-15.49	AVG	
6		1.4720	30.57	9.90	40.47	56.00	-15.53	QP	
7		1.4720	19.67	9.90	29.57	46.00	-16.43	AVG	
8		2.4980	35.27	9.91	45.18	56.00	-10.82	peak	
9		3.6390	29.90	9.96	39.86	56.00	-16.14	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

Neutral:

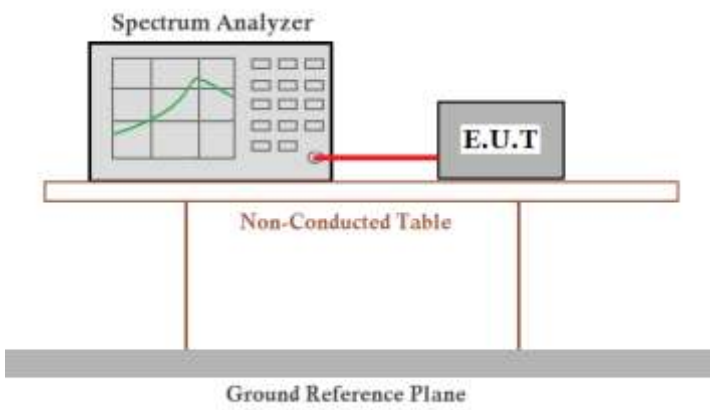
*:Maximum data x:Over limit !:over margin

(Reference Only)

Note: Measurement=Reading Level+Correc Factor. Factor=(LISN or ISN or PLC or Current Probe)Factor+Cable

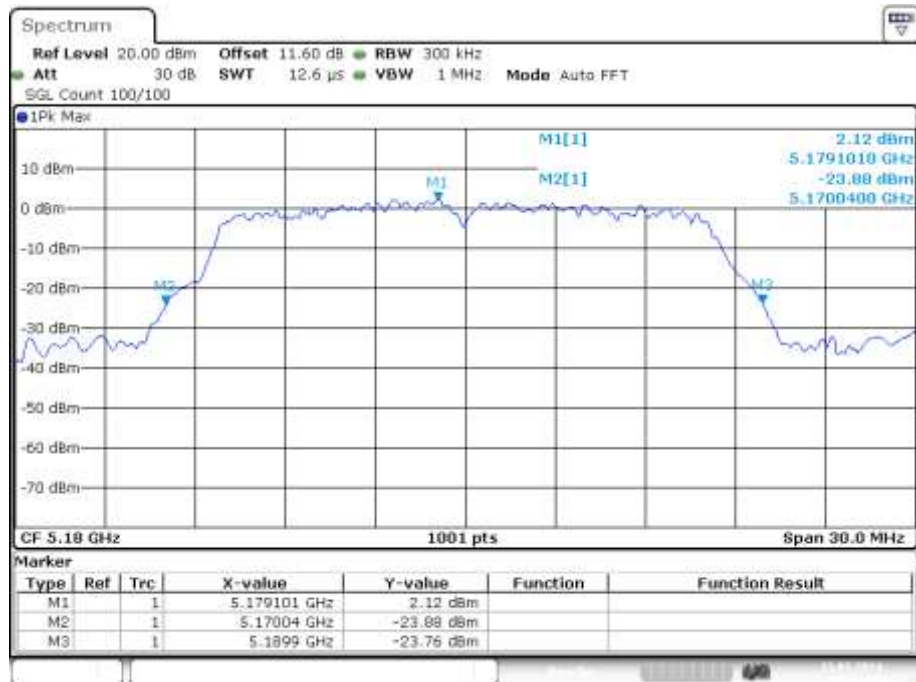
Note: All modes and channels have been tested and only the a 5180MHz mode with the worst data is listed.

4.3 Emission Bandwidth and 99% Occupied Bandwidth

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	N/A
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer, shown with a grid and a green curve on its screen, is connected to an E.U.T. (Equipment Under Test) box by a red cable. Both the Spectrum Analyzer and the E.U.T. are positioned on a 'Non-Conducted Table', which is a rectangular platform supported by two vertical legs. Below the table, a thick grey horizontal bar represents the 'Ground Reference Plane'.
Test procedure:	According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data:**Band 1 (5150-5250 MHz):
-26dB Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.86	/	Pass
NVNT	a	5200	Ant1	19.80	/	Pass
NVNT	a	5240	Ant1	19.92	/	Pass
NVNT	ac20	5180	Ant1	20.31	/	Pass
NVNT	ac20	5200	Ant1	20.04	/	Pass
NVNT	ac20	5240	Ant1	20.46	/	Pass
NVNT	ac40	5190	Ant1	40.08	/	Pass
NVNT	ac40	5230	Ant1	39.66	/	Pass
NVNT	ac80	5210	Ant1	79.20	/	Pass
NVNT	n20	5180	Ant1	20.10	/	Pass
NVNT	n20	5200	Ant1	20.22	/	Pass
NVNT	n20	5240	Ant1	20.22	/	Pass
NVNT	n40	5190	Ant1	39.36	/	Pass
NVNT	n40	5230	Ant1	39.78	/	Pass

-26dB Bandwidth NVNT a 5180MHz Ant1

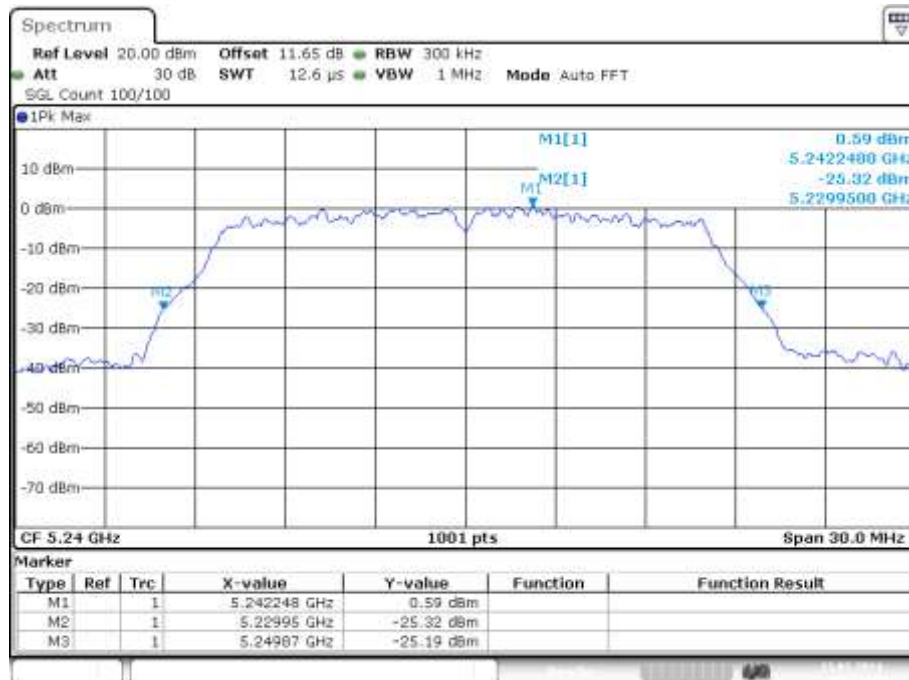
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-26dB Bandwidth NVNT a 5200MHz Ant1



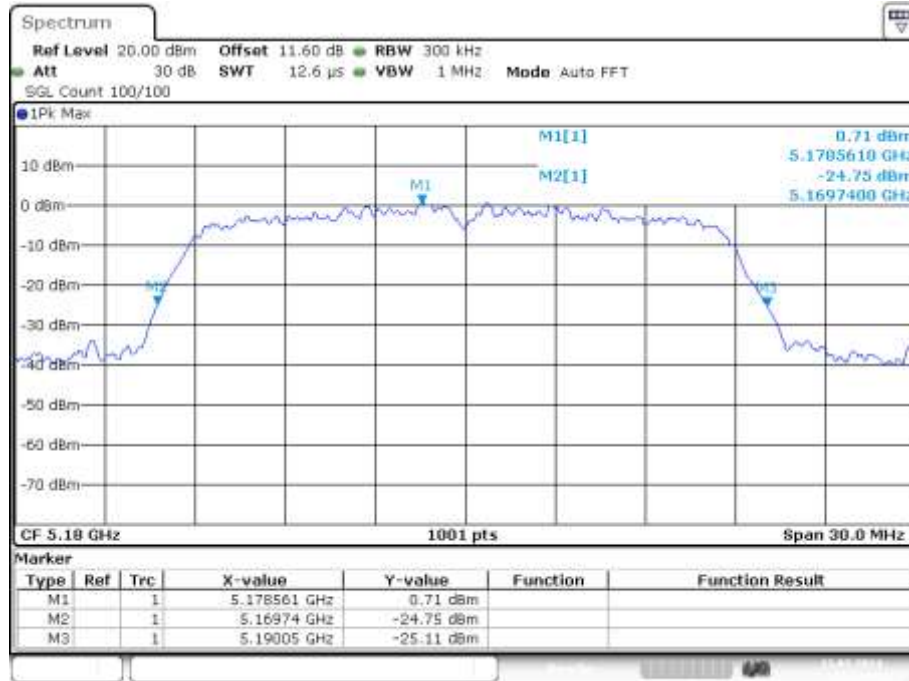
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-26dB Bandwidth NVNT a 5240MHz Ant1



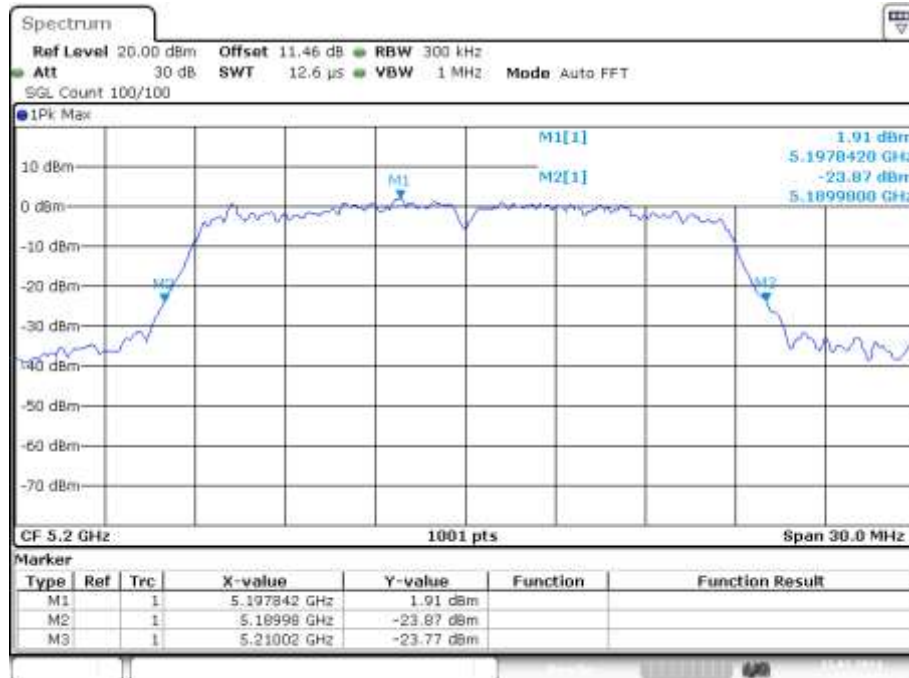
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-26dB Bandwidth NVNT ac20 5180MHz Ant1



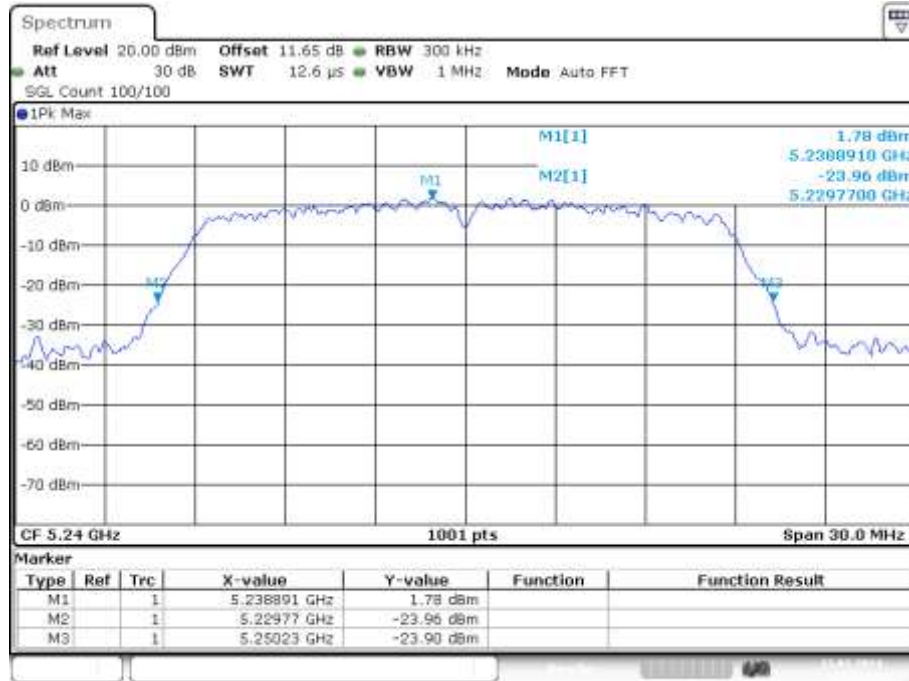
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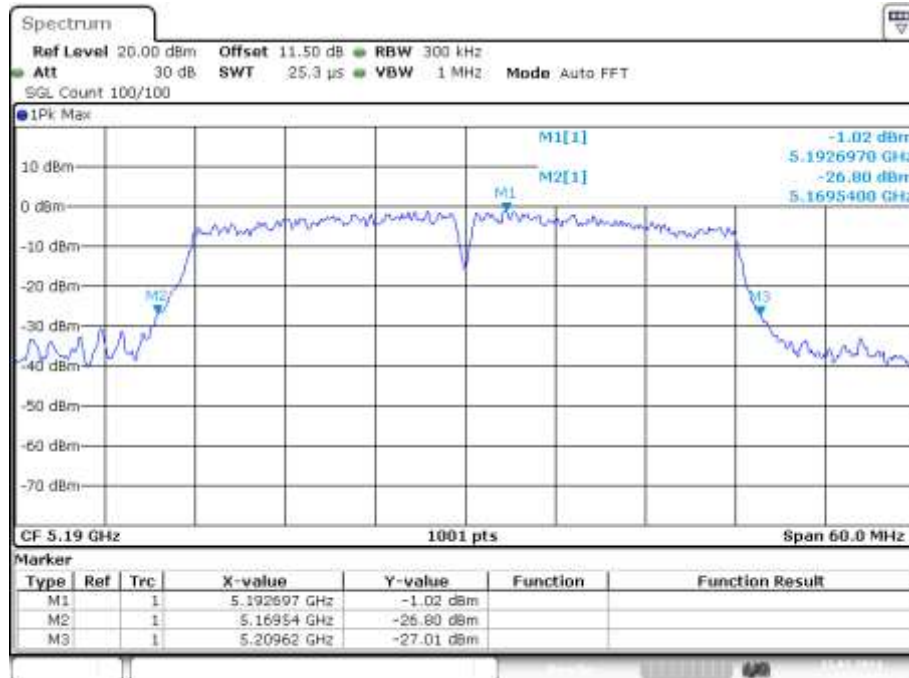
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-26dB Bandwidth NVNT ac20 5240MHz Ant1



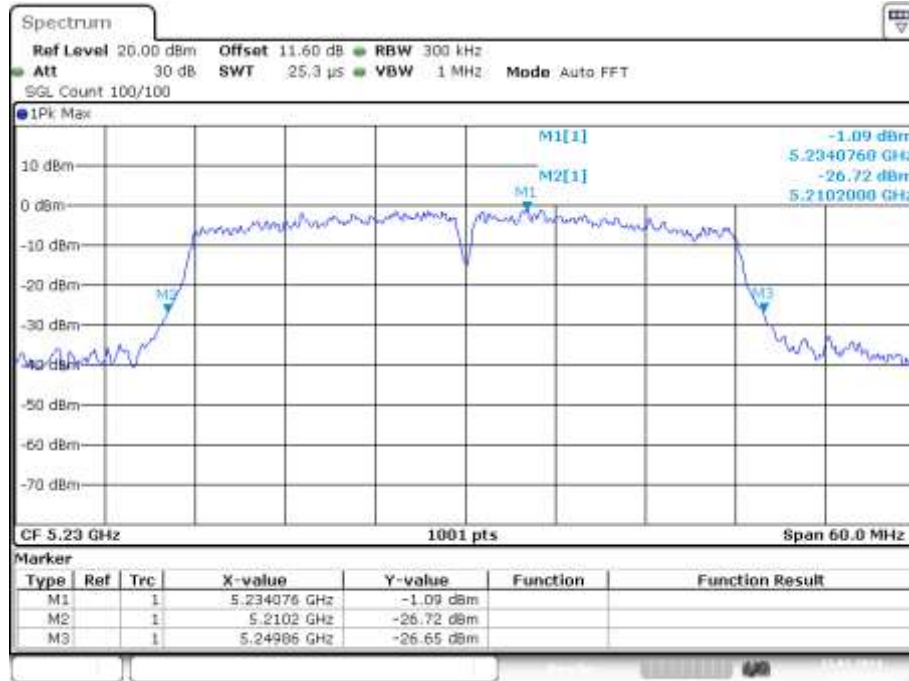
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-26dB Bandwidth NVNT ac40 5190MHz Ant1



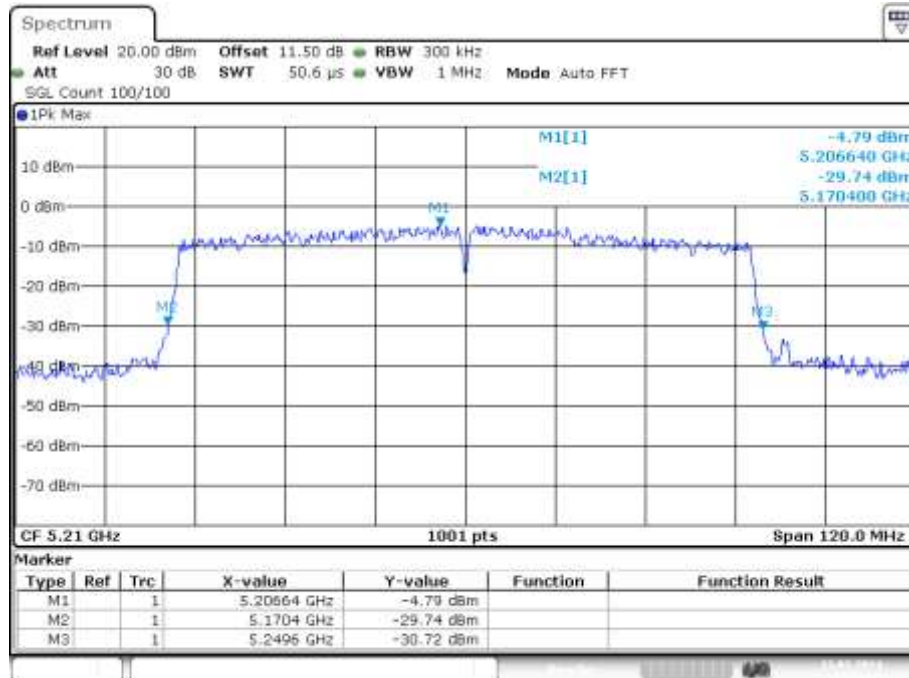
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-26dB Bandwidth NVNT ac40 5230MHz Ant1



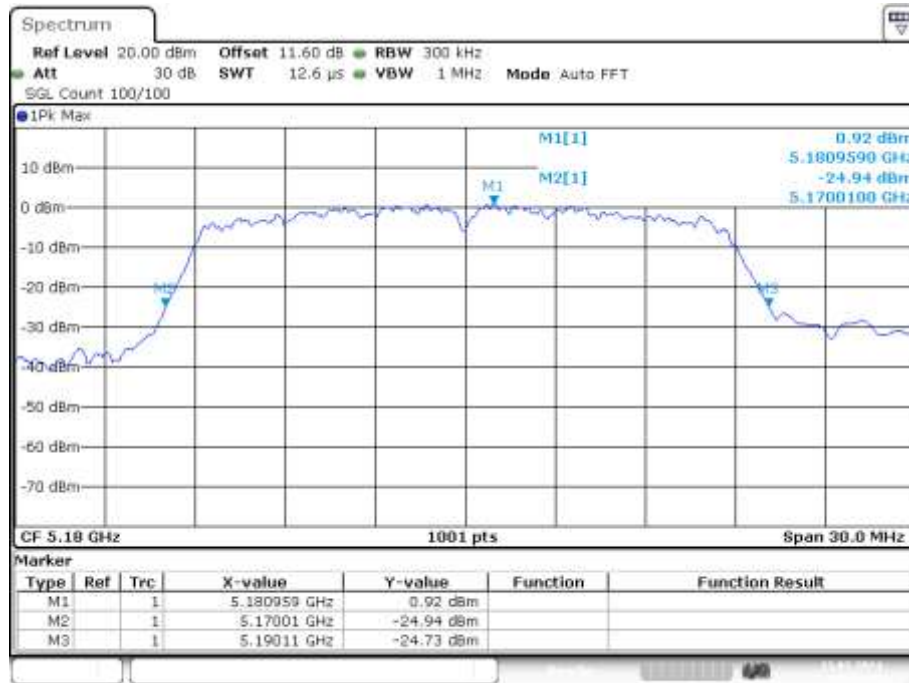
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-26dB Bandwidth NVNT ac80 5210MHz Ant1



Date: 13.MAR.2024 17:50:07

-26dB Bandwidth NVNT n20 5180MHz Ant1



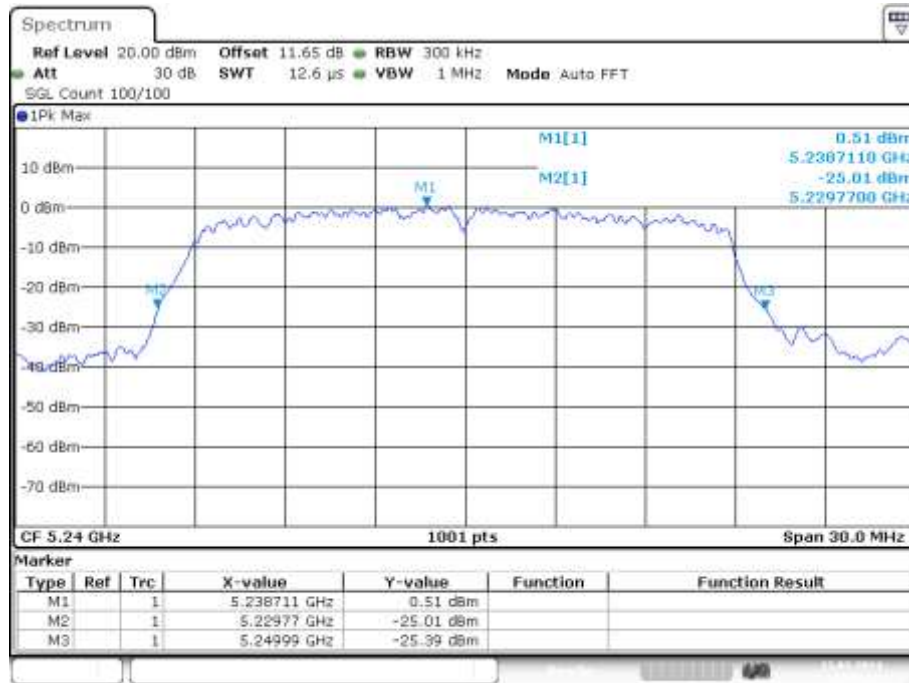
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-26dB Bandwidth NVNT n20 5200MHz Ant1



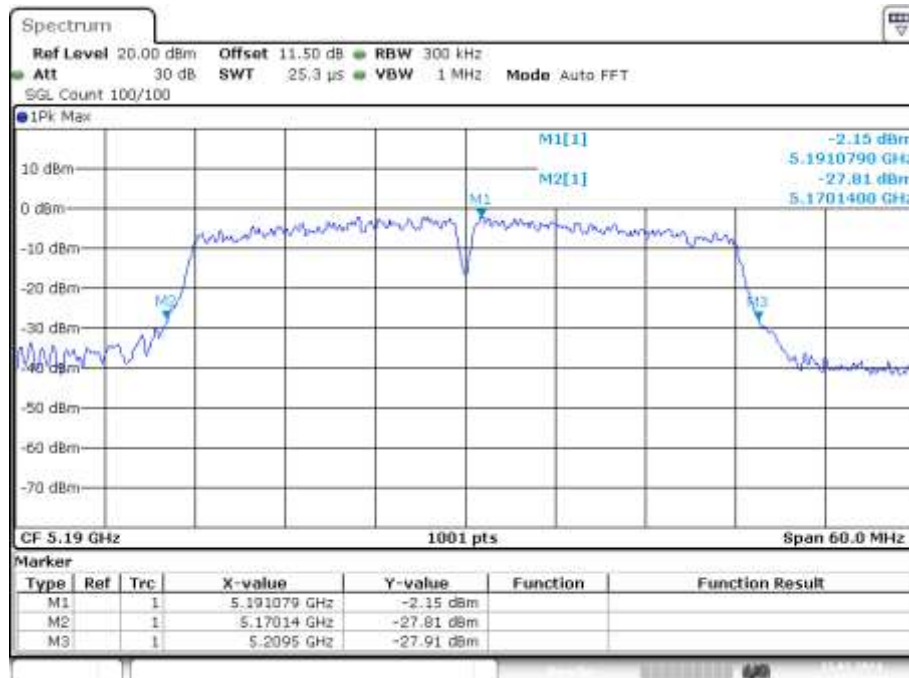
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-26dB Bandwidth NVNT n20 5240MHz Ant1



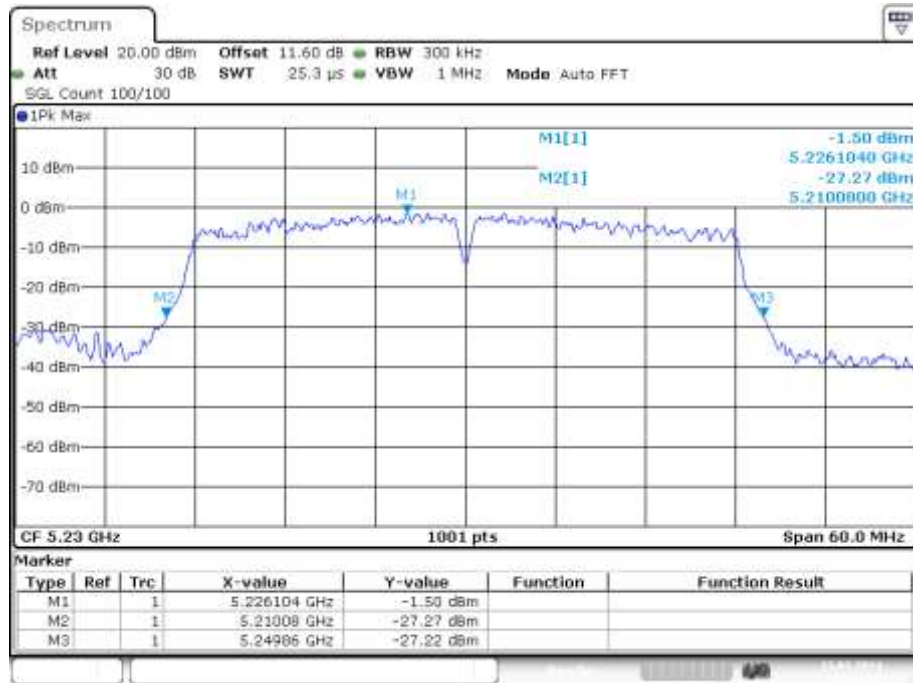
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-26dB Bandwidth NVNT n40 5190MHz Ant1



Date: 13.MAR.2024 17:27:16

-26dB Bandwidth NVNT n40 5230MHz Ant1

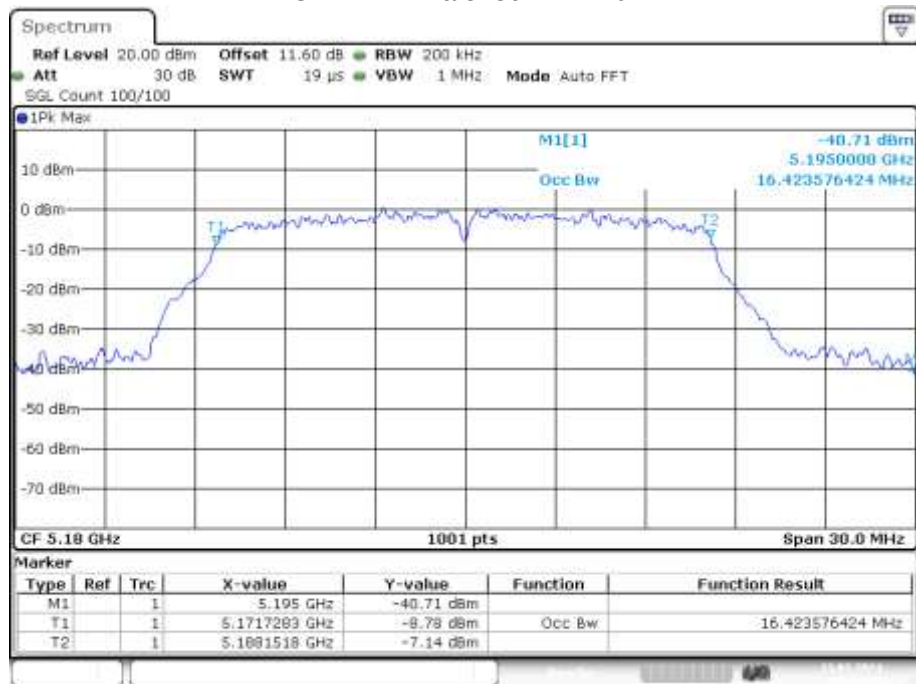


Date: 13.MAR.2024 17:33:57

Occupied Channel Bandwidth

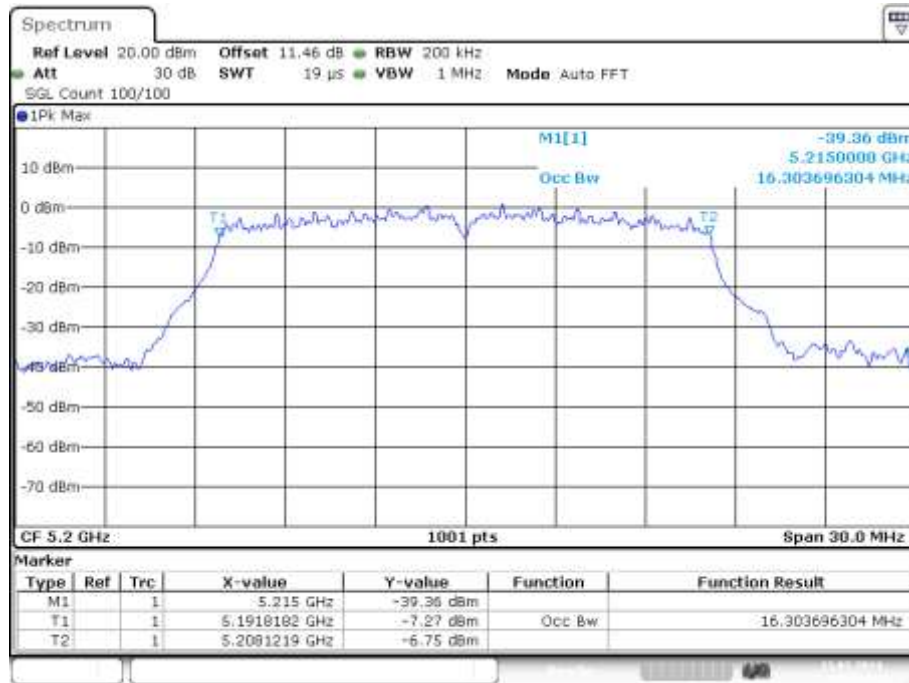
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.424
NVNT	a	5200	Ant1	16.304
NVNT	a	5240	Ant1	16.573
NVNT	ac20	5180	Ant1	17.532
NVNT	ac20	5200	Ant1	17.532
NVNT	ac20	5240	Ant1	17.652
NVNT	ac40	5190	Ant1	35.844
NVNT	ac40	5230	Ant1	35.784
NVNT	ac80	5210	Ant1	75.524
NVNT	n20	5180	Ant1	17.502
NVNT	n20	5200	Ant1	17.473
NVNT	n20	5240	Ant1	17.562
NVNT	n40	5190	Ant1	36.024
NVNT	n40	5230	Ant1	36.024

OBW NVNT a 5180MHz Ant1



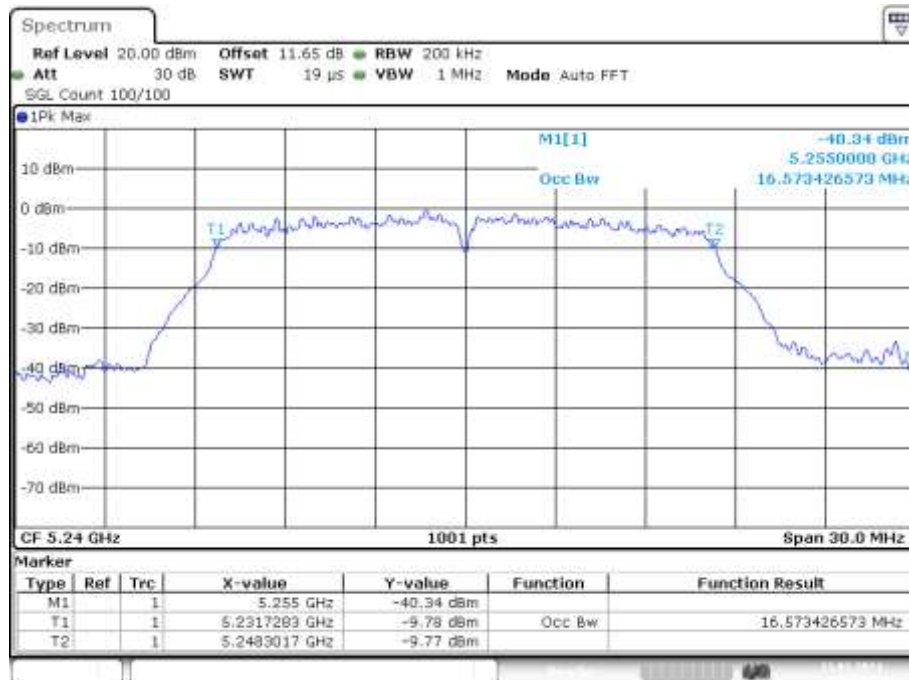
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OBW NVNT a 5200MHz Ant1



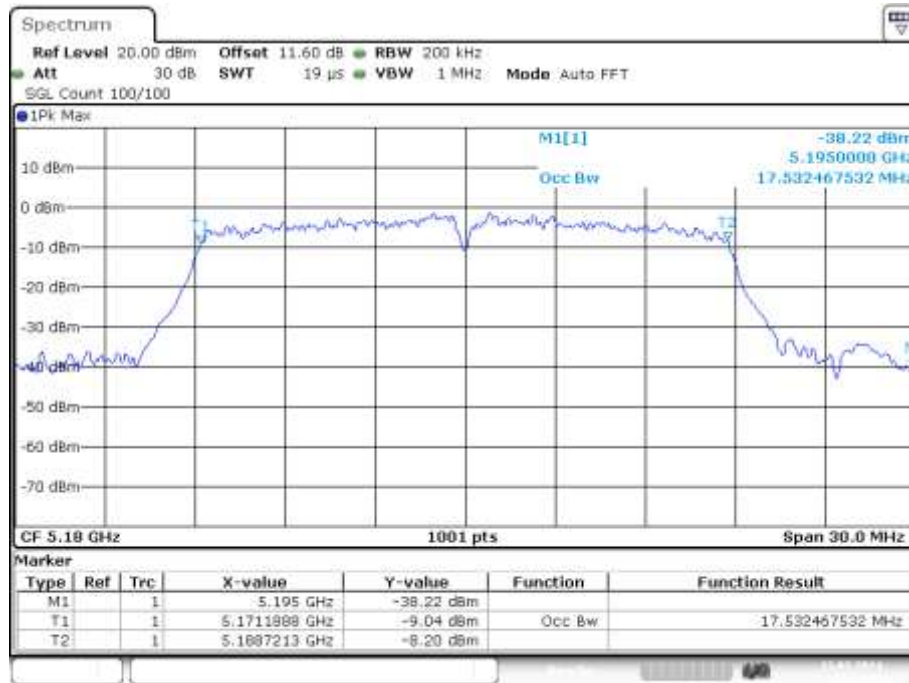
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OBW NVNT a 5240MHz Ant1



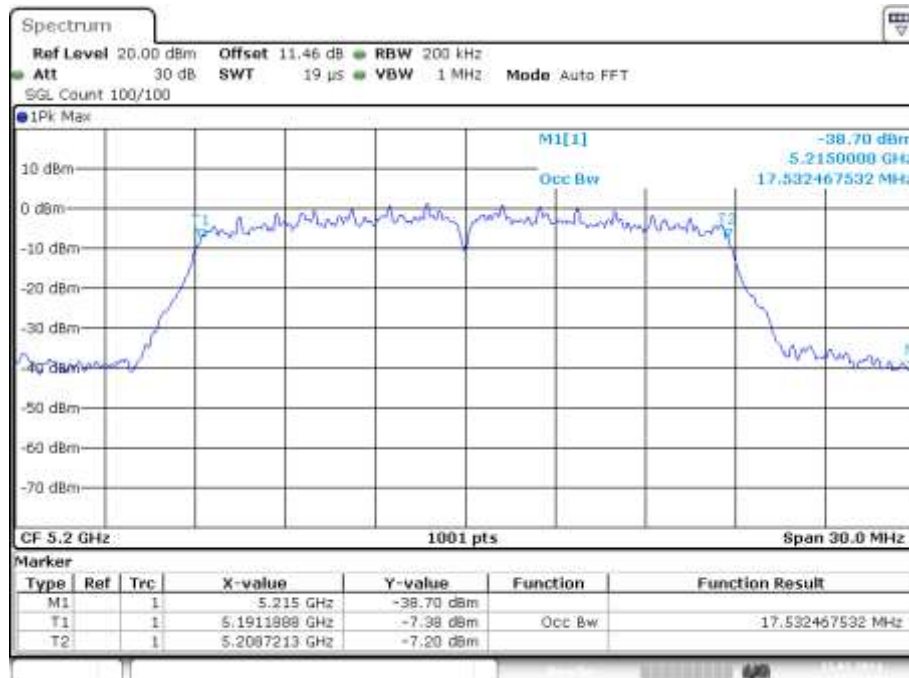
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OBW NVNT ac20 5180MHz Ant1



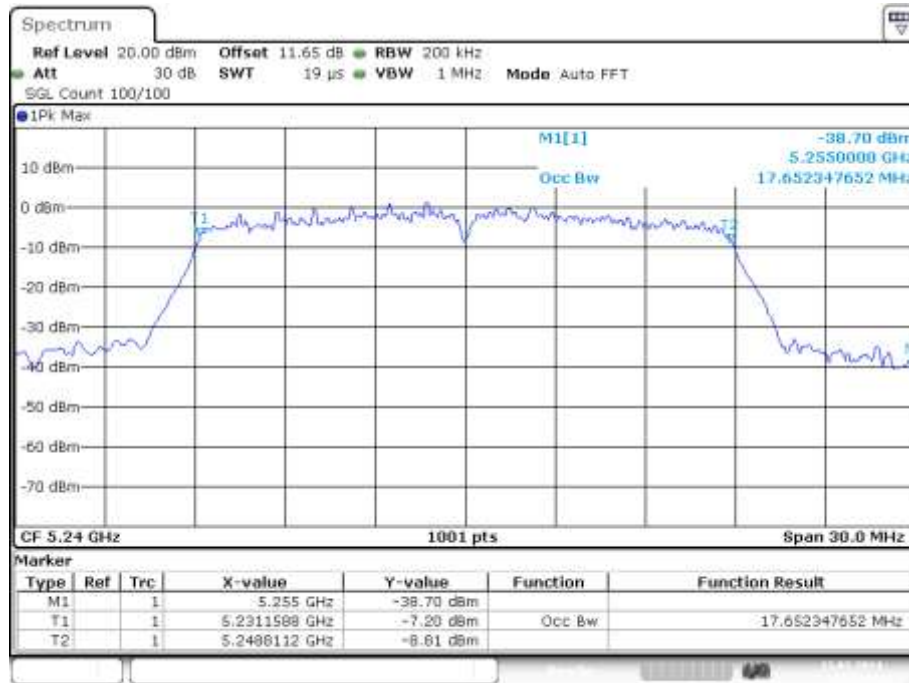
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OBW NVNT ac20 5200MHz Ant1



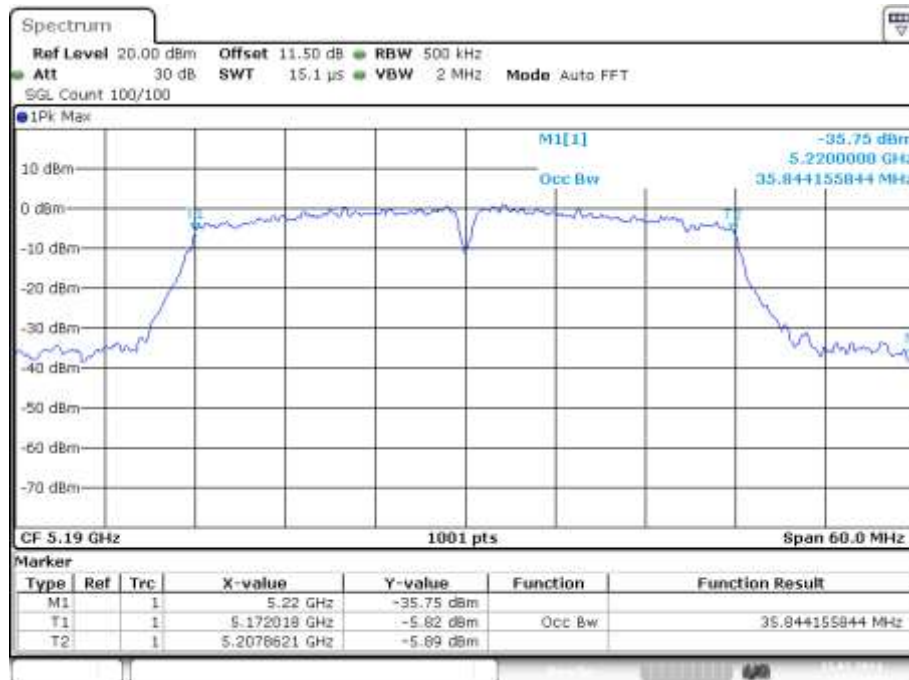
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OBW NVNT ac20 5240MHz Ant1



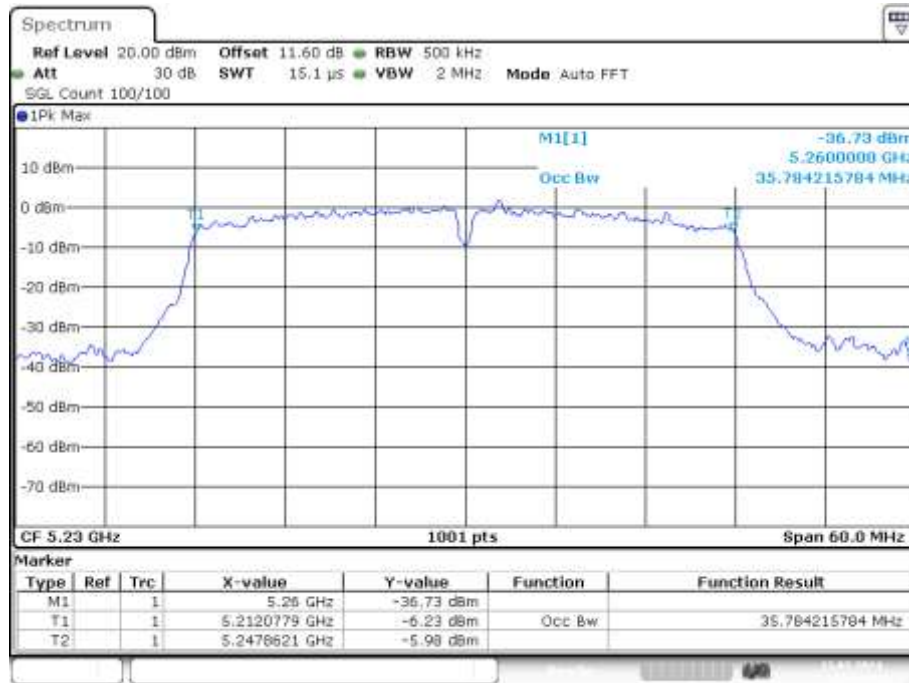
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OBW NVNT ac40 5190MHz Ant1



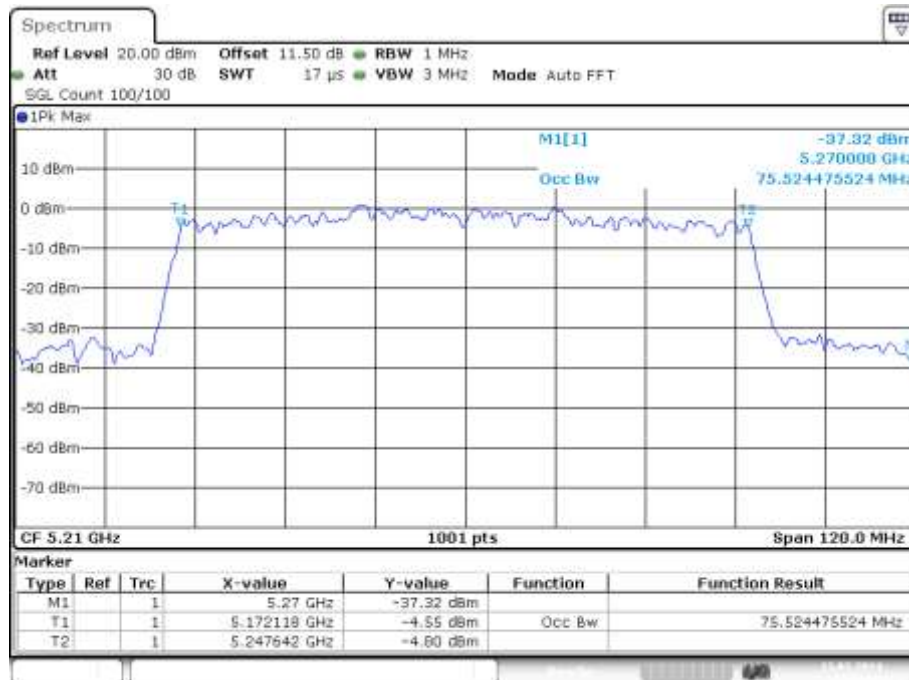
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OBW NVNT ac40 5230MHz Ant1



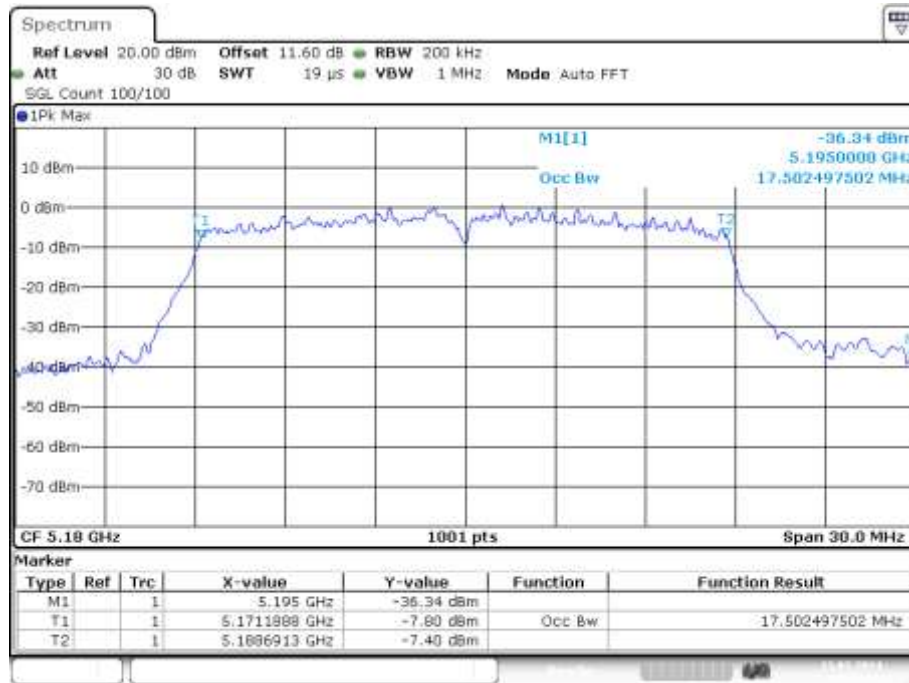
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OBW NVNT ac80 5210MHz Ant1



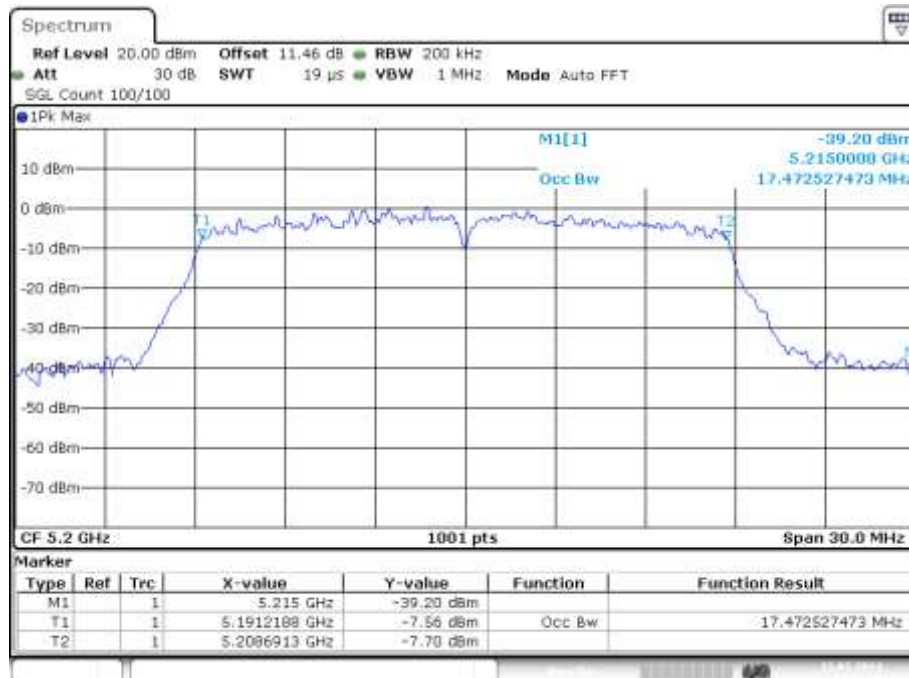
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OBW NVNT n20 5180MHz Ant1



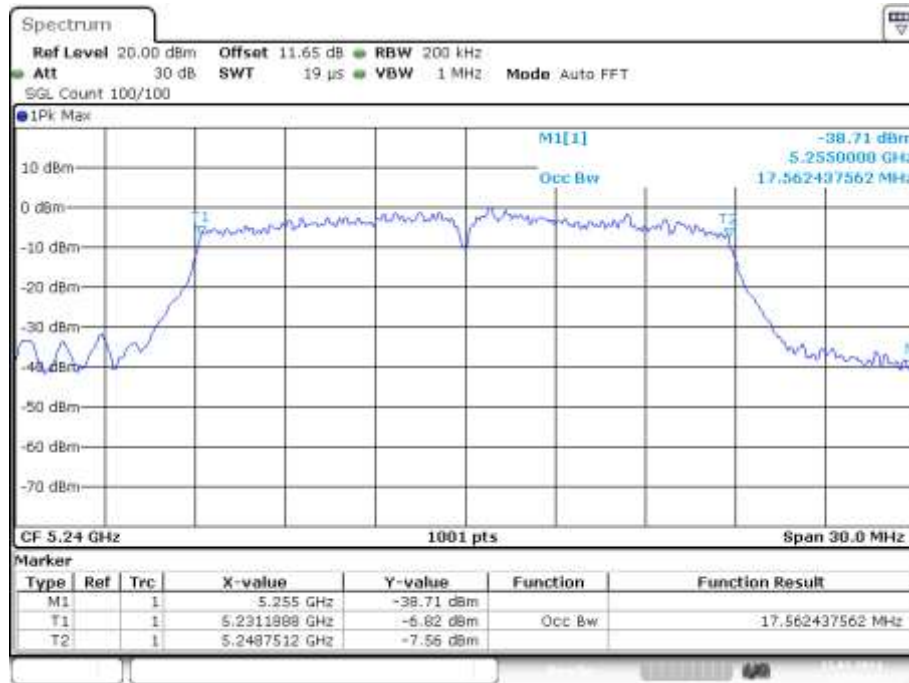
Date: 13.MAR.2024 16:58:35

OBW NVNT n20 5200MHz Ant1



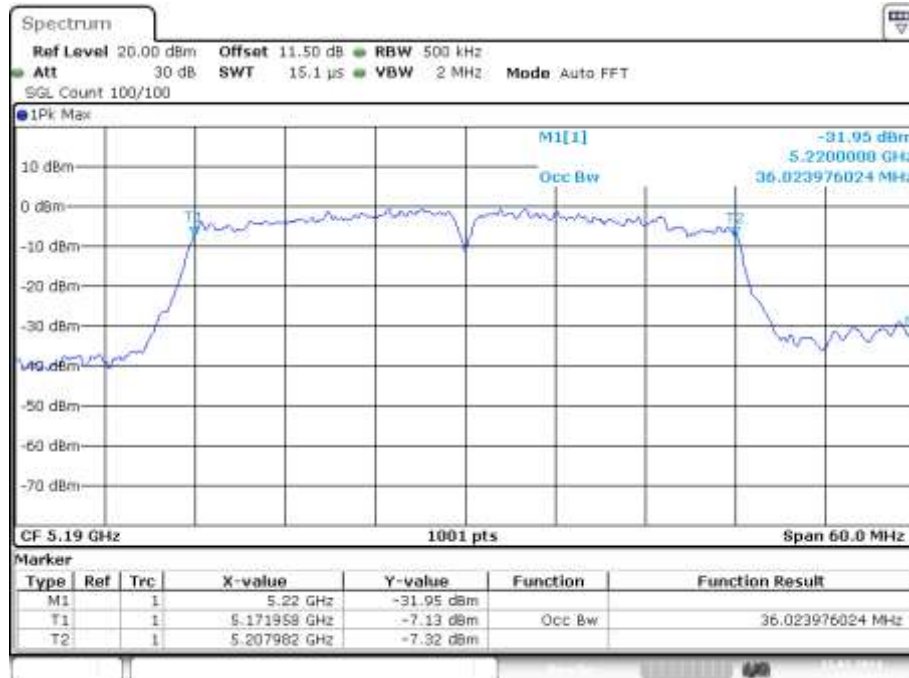
Date: 13.MAR.2024 17:03:37

OBW NVNT n20 5240MHz Ant1



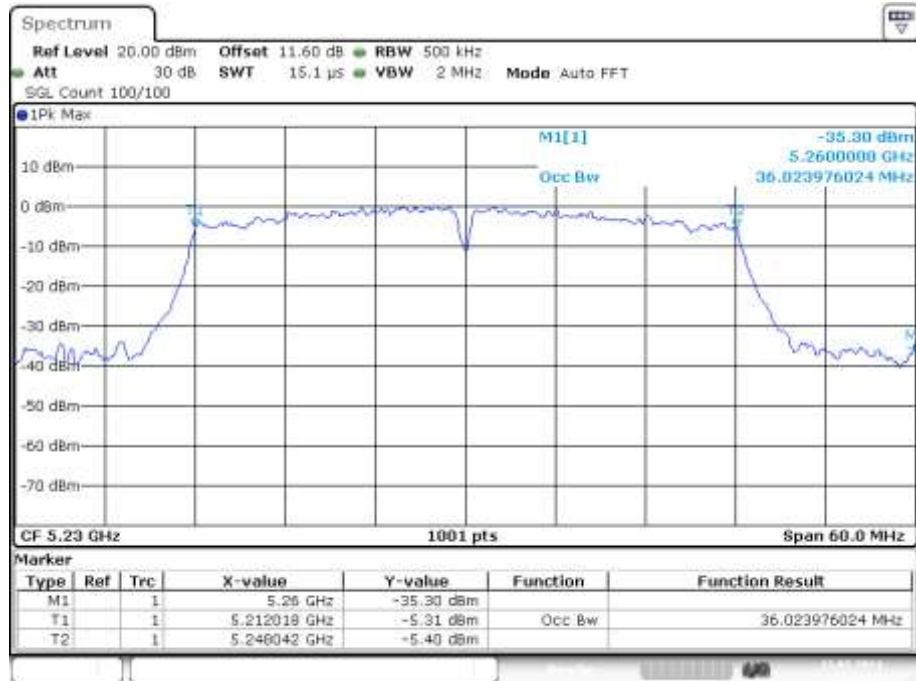
Date: 13.MAR.2024 17:08:07

OBW NVNT n40 5190MHz Ant1



Date: 13.MAR.2024 17:26:52

OBW NVNT n40 5230MHz Ant1



Date: 13.MAR.2024 17:33:27

Band 2 (5250-5350 MHz):
-26dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant1	19.95	/	Pass
NVNT	a	5280	Ant1	19.92	/	Pass
NVNT	a	5320	Ant1	20.04	/	Pass
NVNT	ac20	5260	Ant1	20.04	/	Pass
NVNT	ac20	5280	Ant1	20.43	/	Pass
NVNT	ac20	5320	Ant1	20.55	/	Pass
NVNT	ac40	5270	Ant1	39.42	/	Pass
NVNT	ac40	5310	Ant1	39.48	/	Pass
NVNT	ac80	5290	Ant1	78.72	/	Pass
NVNT	n20	5260	Ant1	20.46	/	Pass
NVNT	n20	5280	Ant1	20.34	/	Pass
NVNT	n20	5320	Ant1	20.43	/	Pass
NVNT	n40	5270	Ant1	39.48	/	Pass
NVNT	n40	5310	Ant1	39.84	/	Pass

-26dB Bandwidth NVNT a 5260MHz Ant1



Date: 13.MAR.2024 18:44:11

-26dB Bandwidth NVNT a 5280MHz Ant1



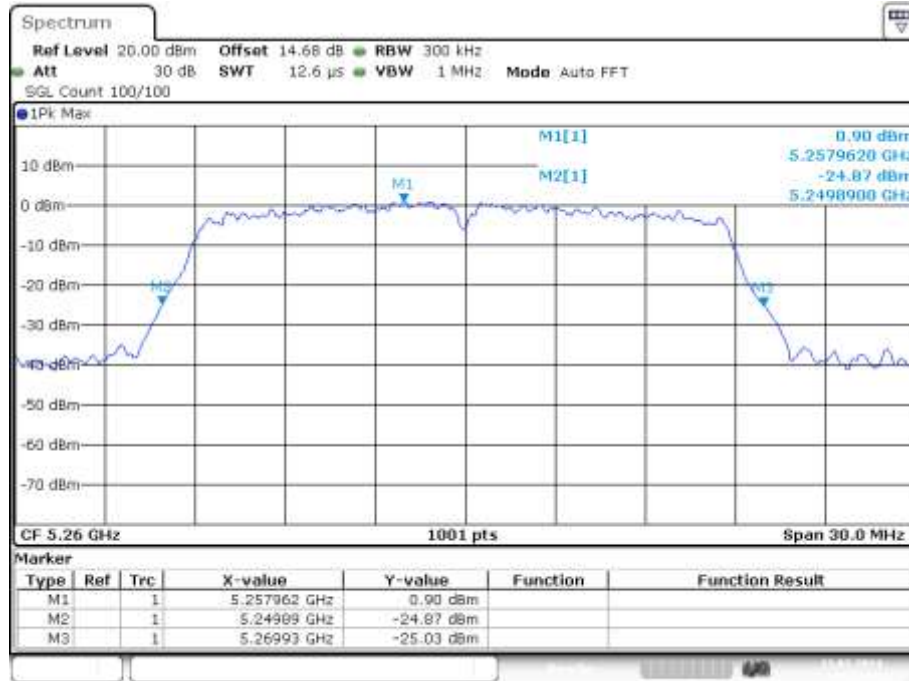
Date: 13.MAR.2024 18:51:45

-26dB Bandwidth NVNT a 5320MHz Ant1



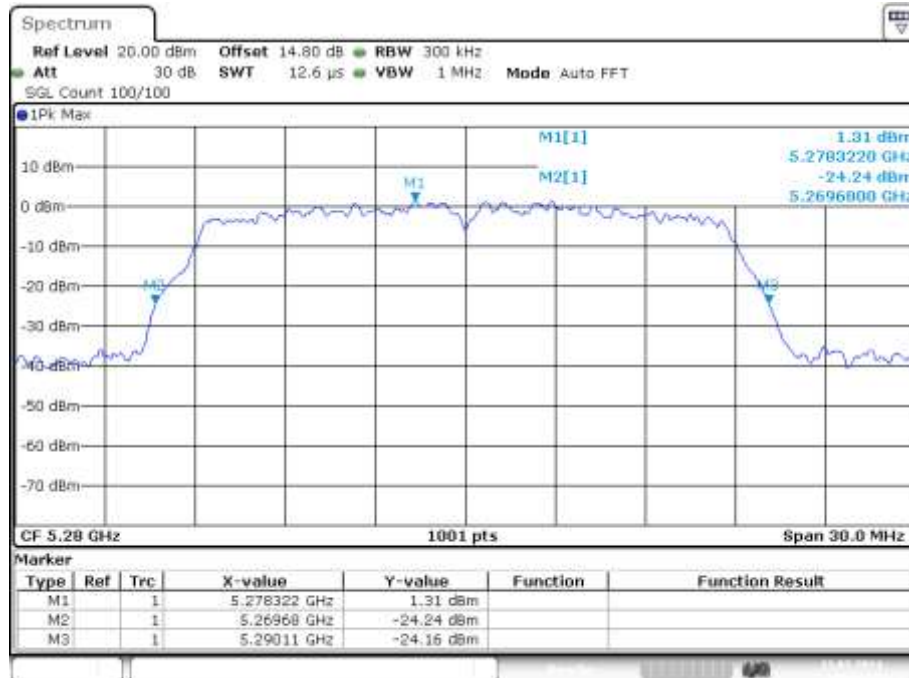
Date: 13.MAR.2024 18:55:49

-26dB Bandwidth NVNT ac20 5260MHz Ant1



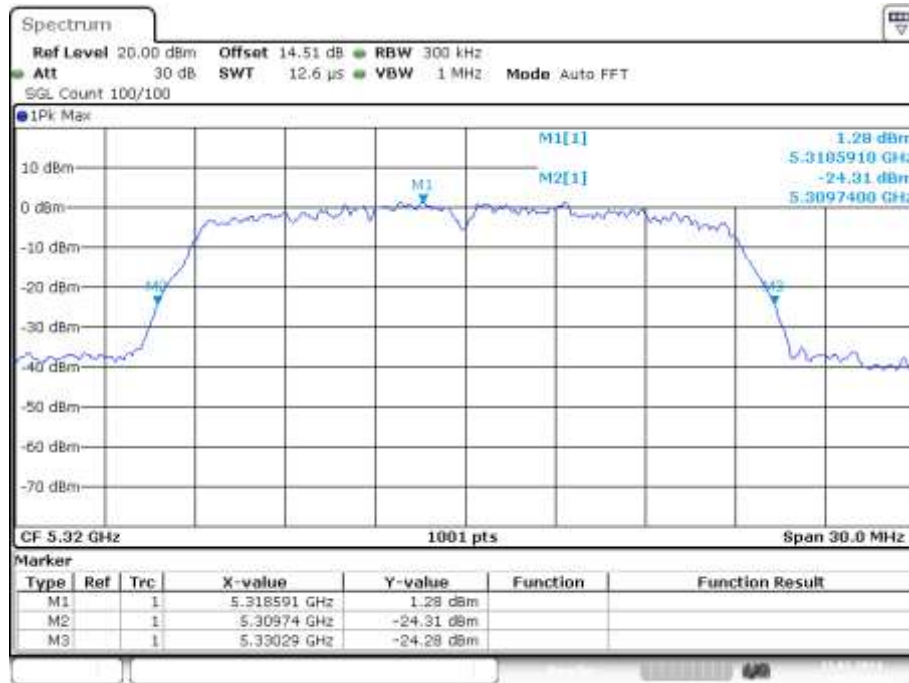
Date: 13.MAR.2024 19:37:45

-26dB Bandwidth NVNT ac20 5280MHz Ant1



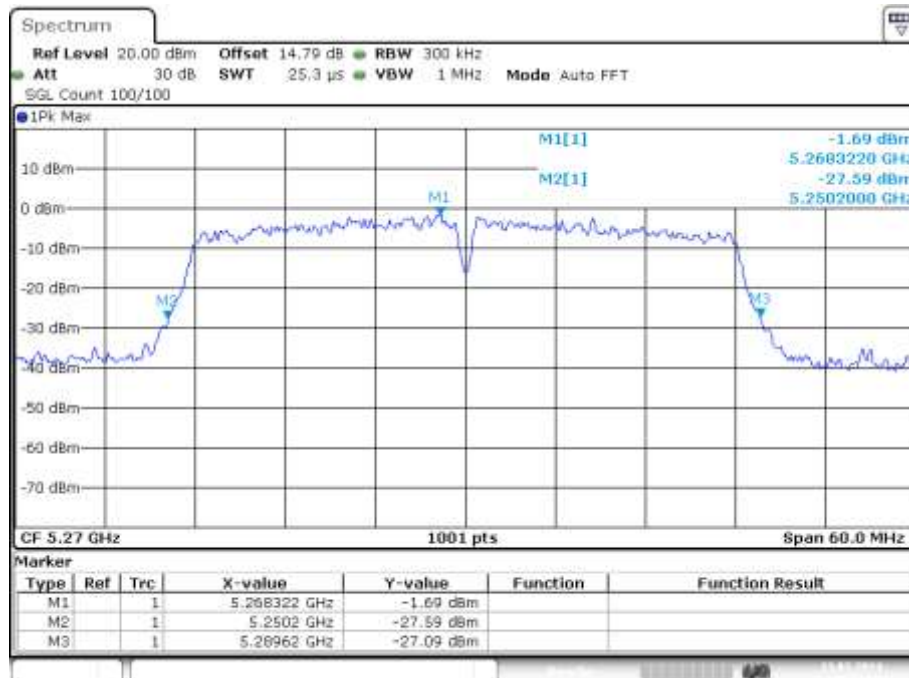
Date: 13.MAR.2024 19:42:27

-26dB Bandwidth NVNT ac20 5320MHz Ant1



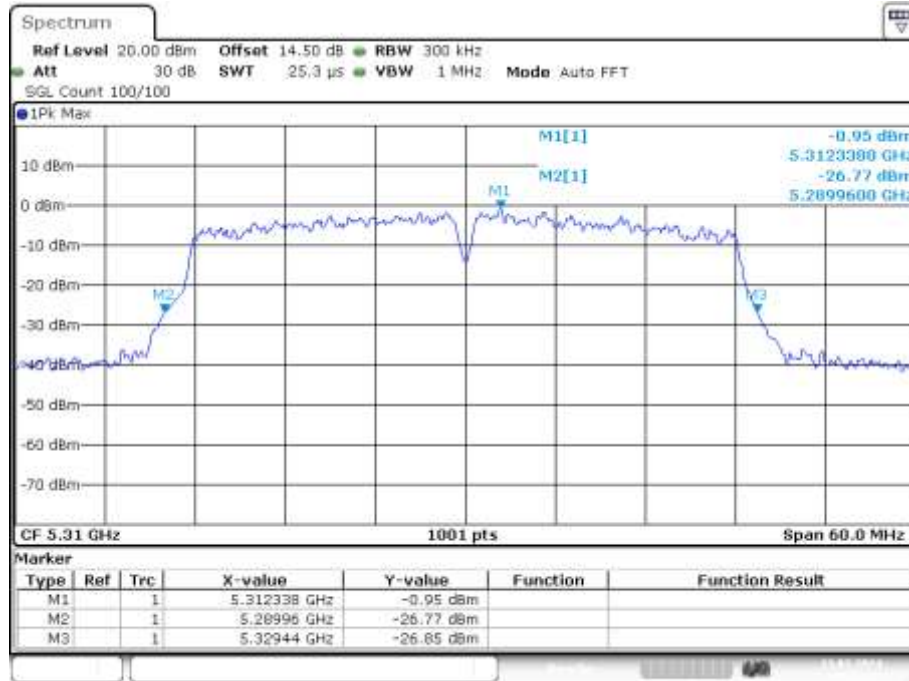
Date: 13.MAR.2024 19:53:35

-26dB Bandwidth NVNT ac40 5270MHz Ant1



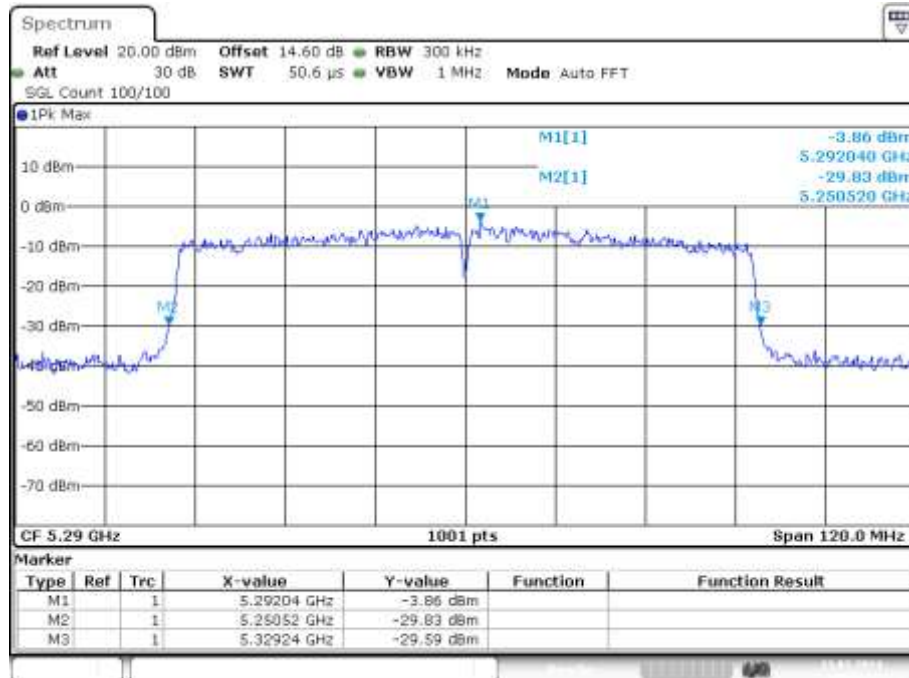
Date: 13.MAR.2024 20:26:56

-26dB Bandwidth NVNT ac40 5310MHz Ant1



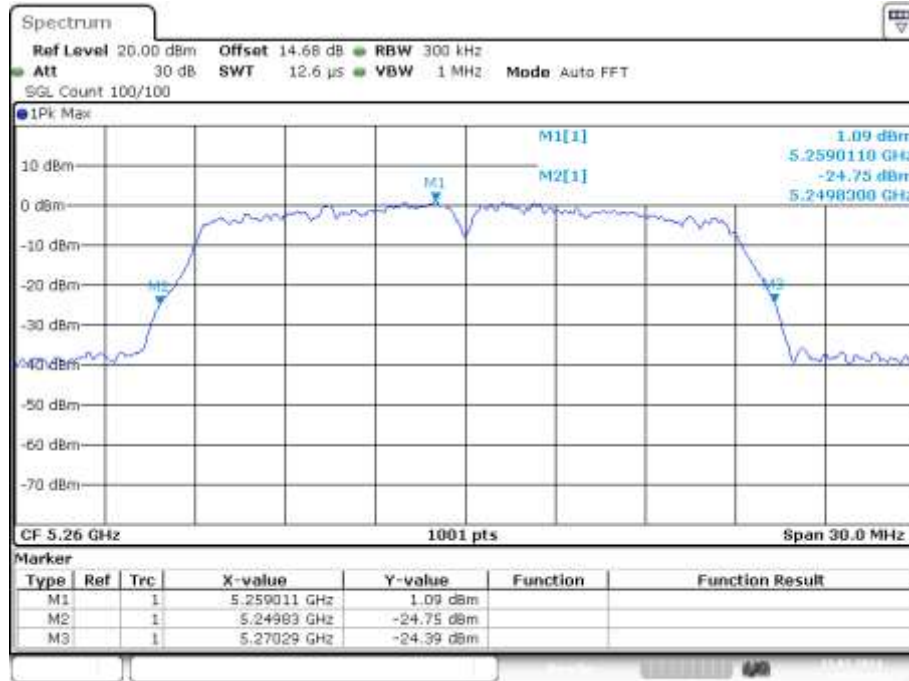
Date: 13.MAR.2024 20:31:12

-26dB Bandwidth NVNT ac80 5290MHz Ant1



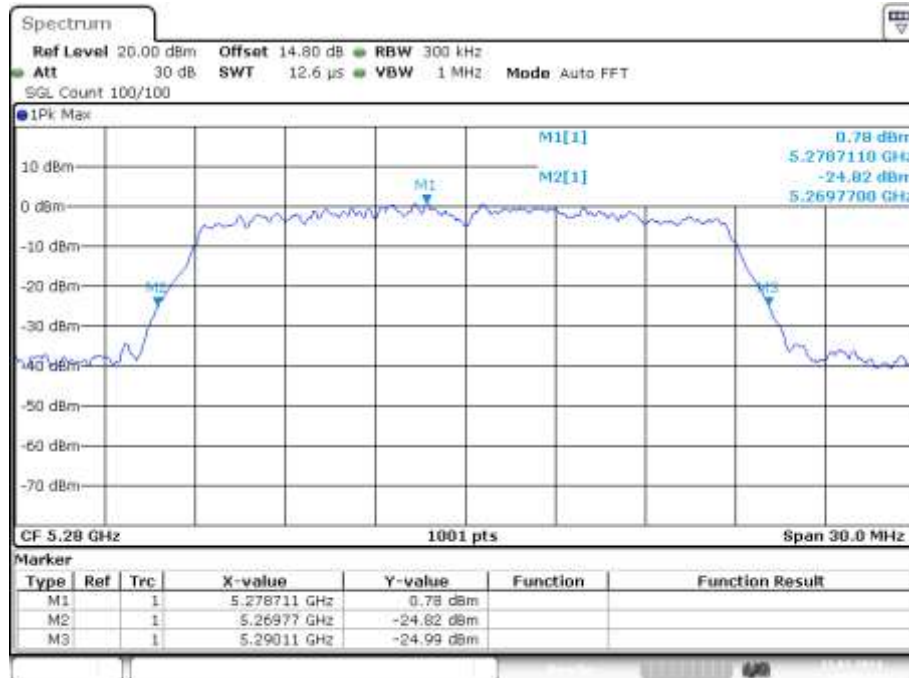
Date: 13.MAR.2024 20:40:23

-26dB Bandwidth NVNT n20 5260MHz Ant1



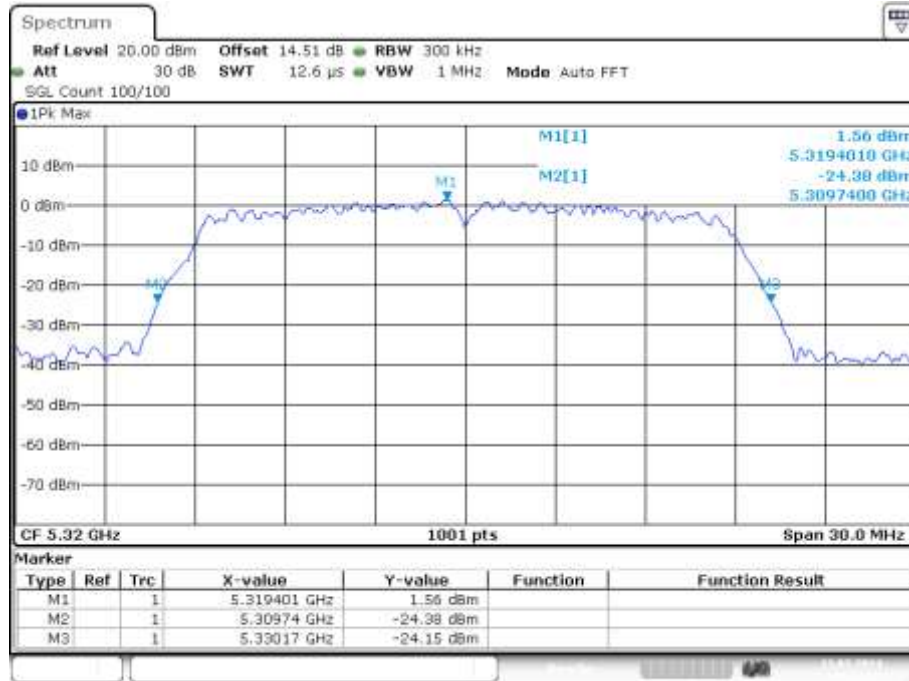
Date: 13.MAR.2024 19:02:00

-26dB Bandwidth NVNT n20 5280MHz Ant1



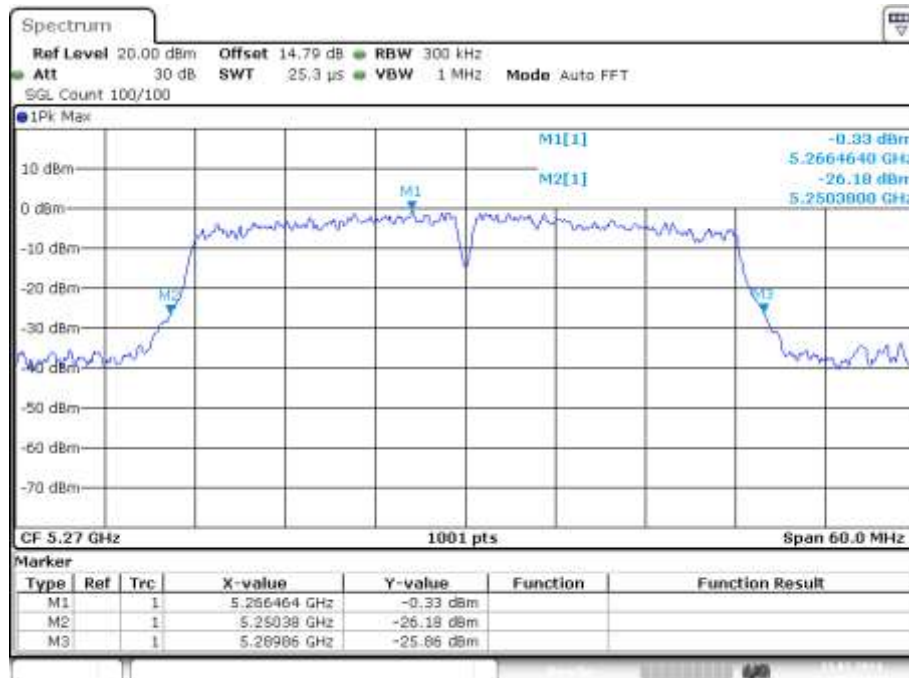
Date: 13.MAR.2024 19:08:13

-26dB Bandwidth NVNT n20 5320MHz Ant1



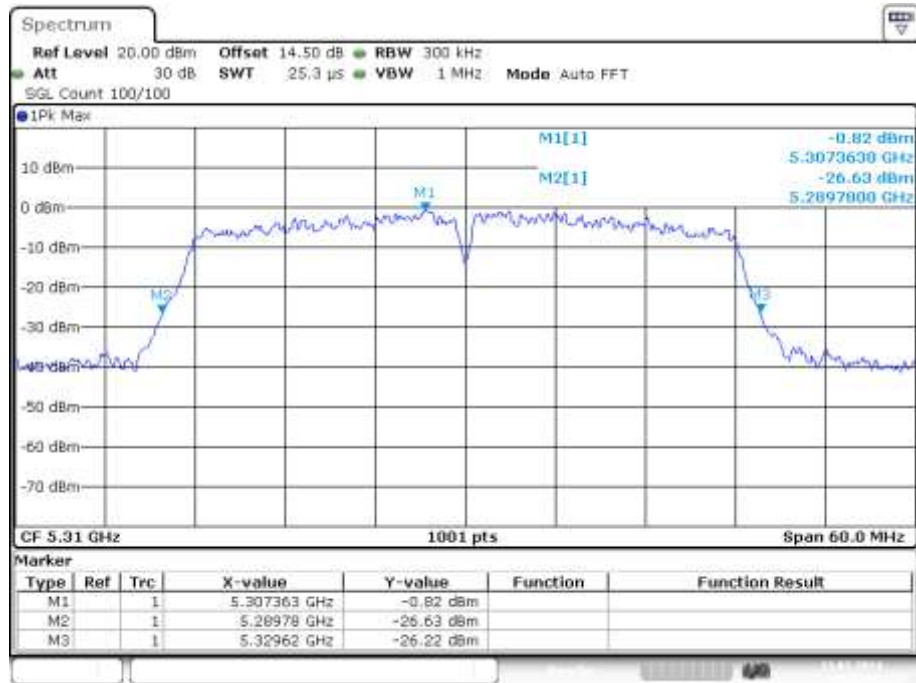
Date: 13.MAR.2024 19:32:51

-26dB Bandwidth NVNT n40 5270MHz Ant1



Date: 13.MAR.2024 20:02:33

-26dB Bandwidth NVNT n40 5310MHz Ant1

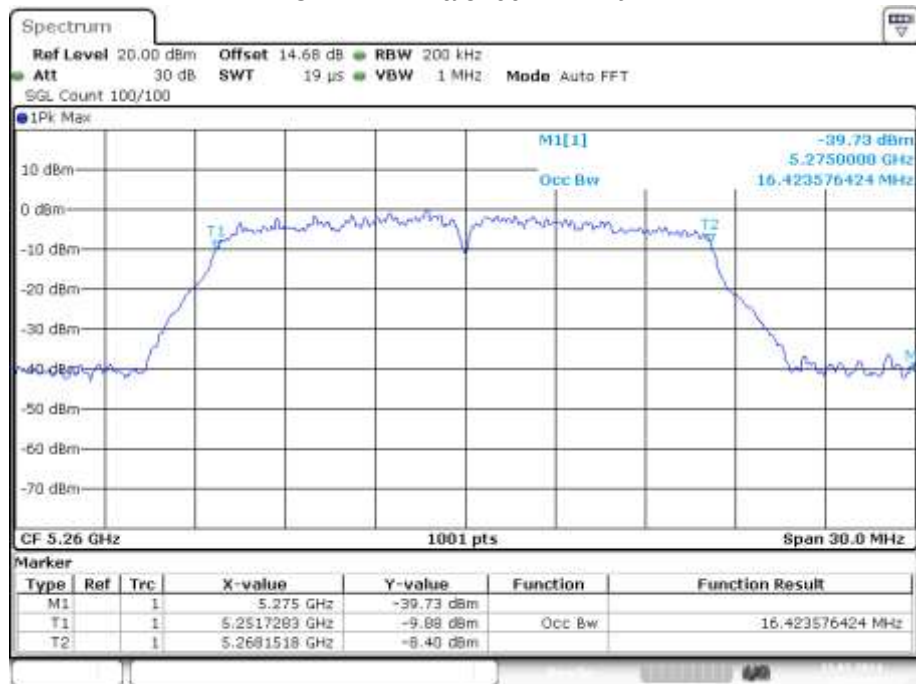


Date: 13.MAR.2024 20:18:01

Occupied Channel Bandwidth

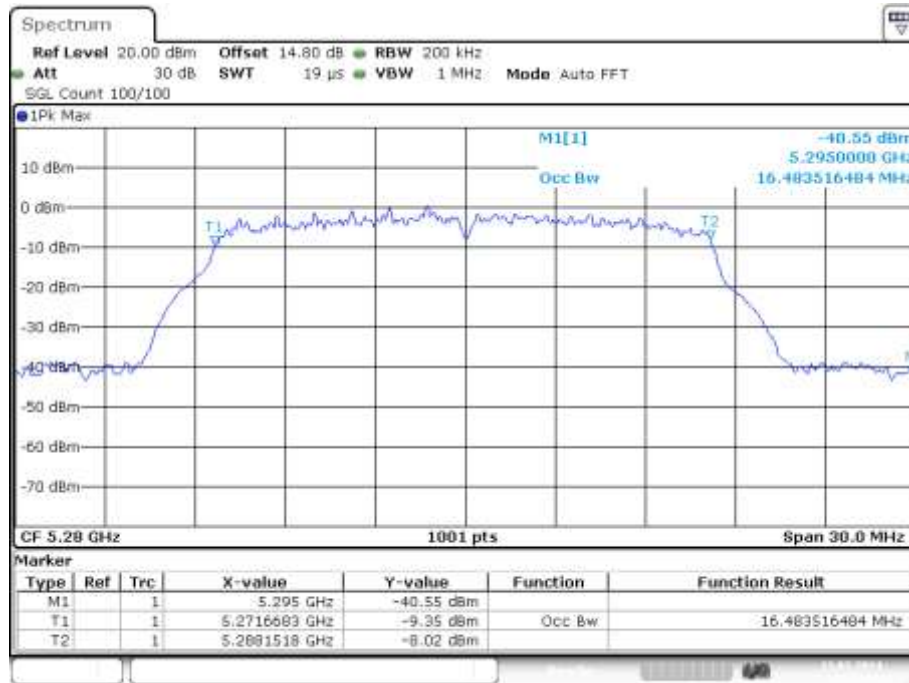
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5260	Ant1	16.424
NVNT	a	5280	Ant1	16.484
NVNT	a	5320	Ant1	16.364
NVNT	ac20	5260	Ant1	17.622
NVNT	ac20	5280	Ant1	17.562
NVNT	ac20	5320	Ant1	17.532
NVNT	ac40	5270	Ant1	35.904
NVNT	ac40	5310	Ant1	35.784
NVNT	ac80	5290	Ant1	75.405
NVNT	n20	5260	Ant1	17.502
NVNT	n20	5280	Ant1	17.532
NVNT	n20	5320	Ant1	17.502
NVNT	n40	5270	Ant1	35.964
NVNT	n40	5310	Ant1	35.844

OBW NVNT a 5260MHz Ant1



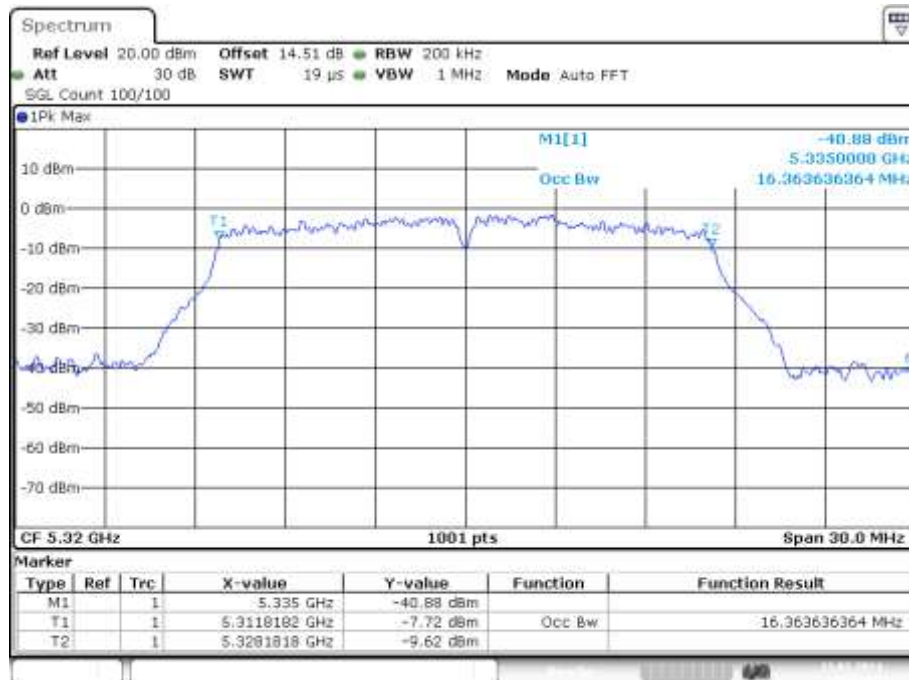
Date: 13.MAR.2024 18:44:02

OBW NVNT a 5280MHz Ant1



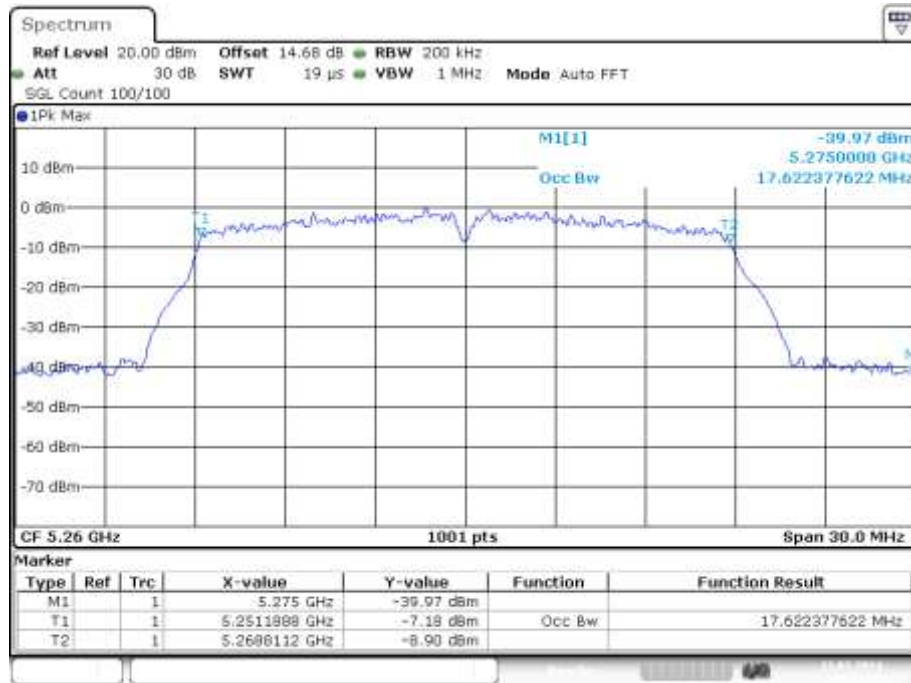
Date: 13.MAR.2024 18:51:36

OBW NVNT a 5320MHz Ant1



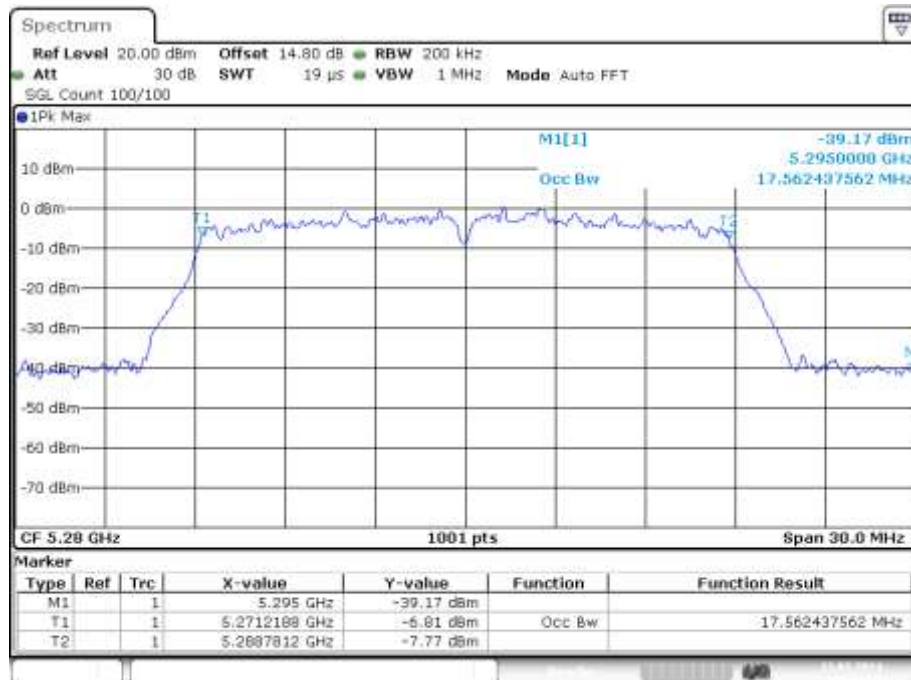
Date: 13.MAR.2024 18:55:37

OBW NVNT ac20 5260MHz Ant1



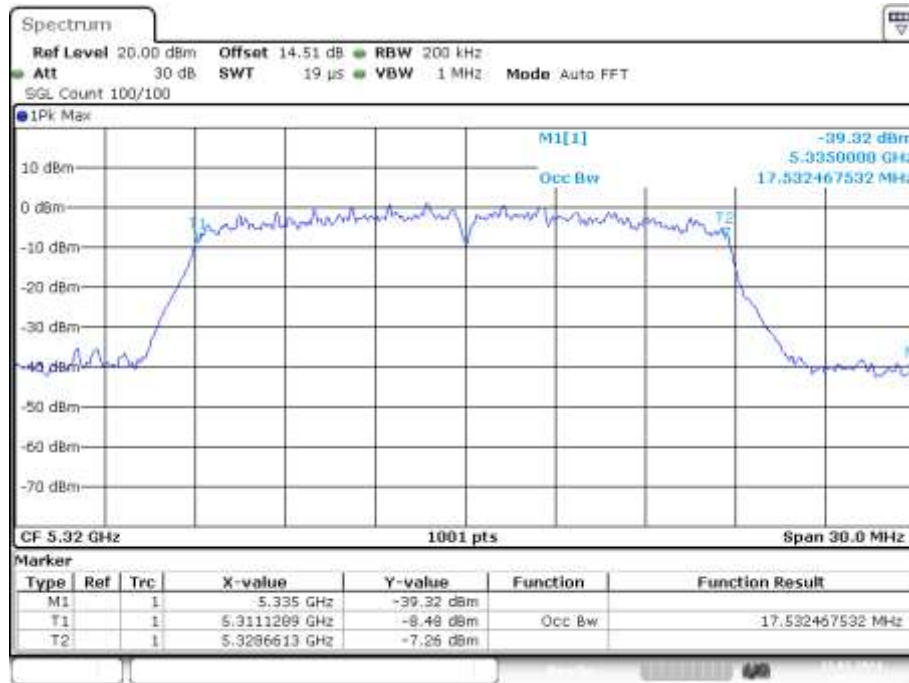
Date: 13.MAR.2024 19:37:19

OBW NVNT ac20 5280MHz Ant1



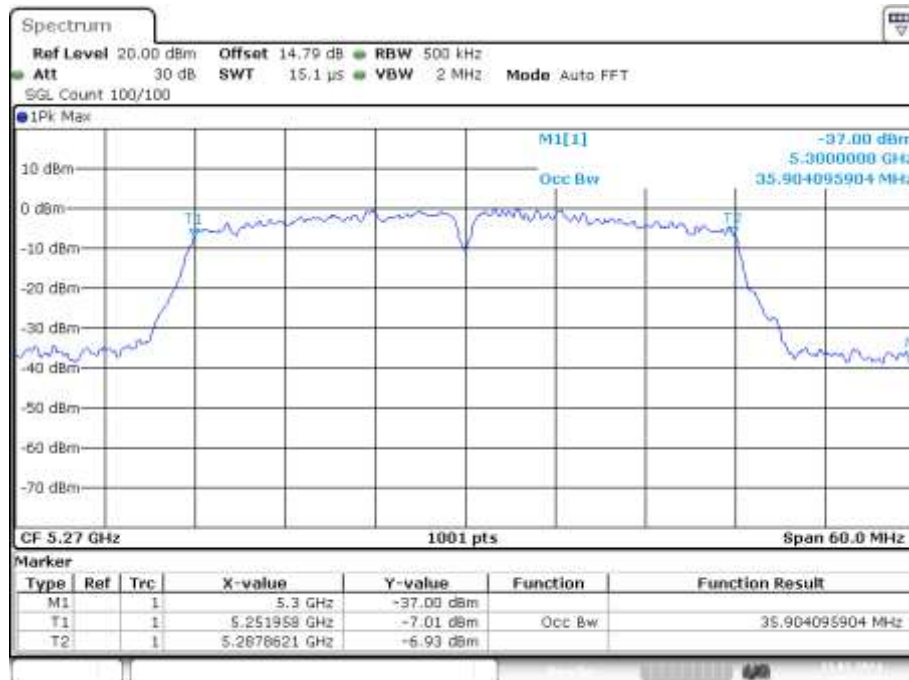
Date: 13.MAR.2024 19:42:10

OBW NVNT ac20 5320MHz Ant1



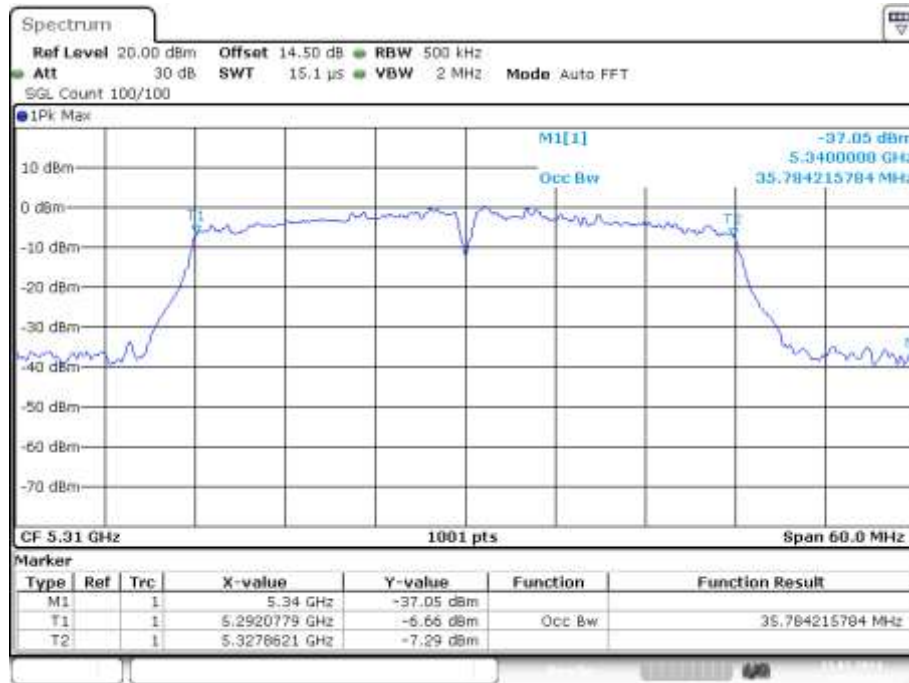
Date: 13.MAR.2024 19:53:10

OBW NVNT ac40 5270MHz Ant1



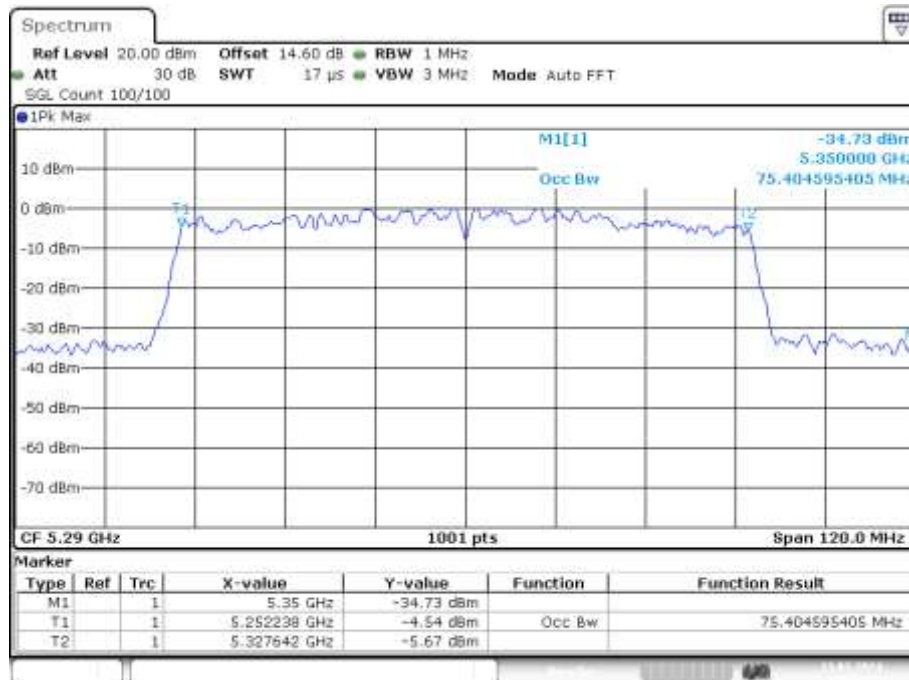
Date: 13.MAR.2024 20:26:37

OBW NVNT ac40 5310MHz Ant1



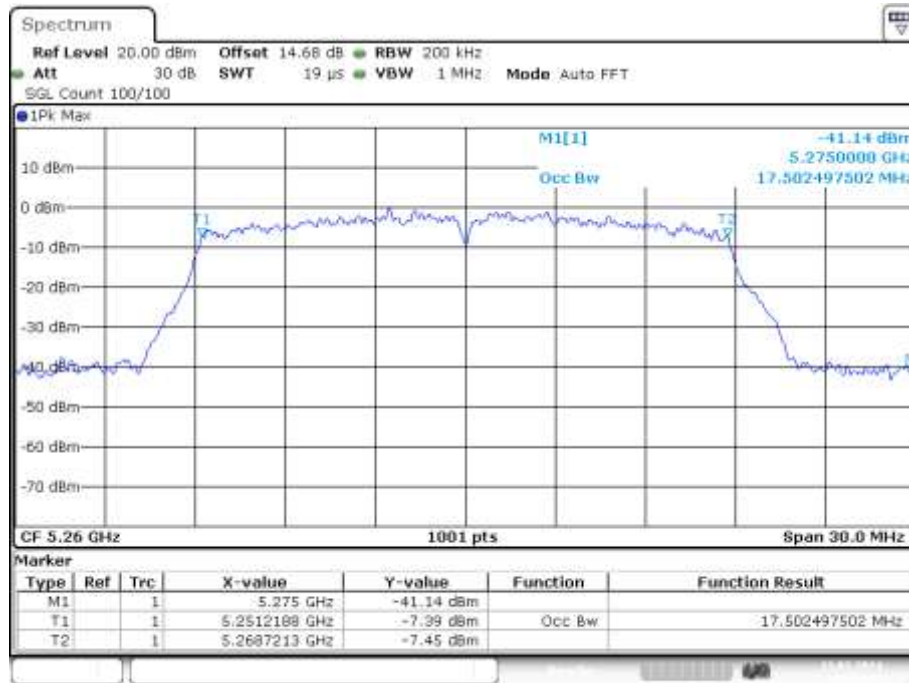
Date: 13.MAR.2024 20:30:53

OBW NVNT ac80 5290MHz Ant1



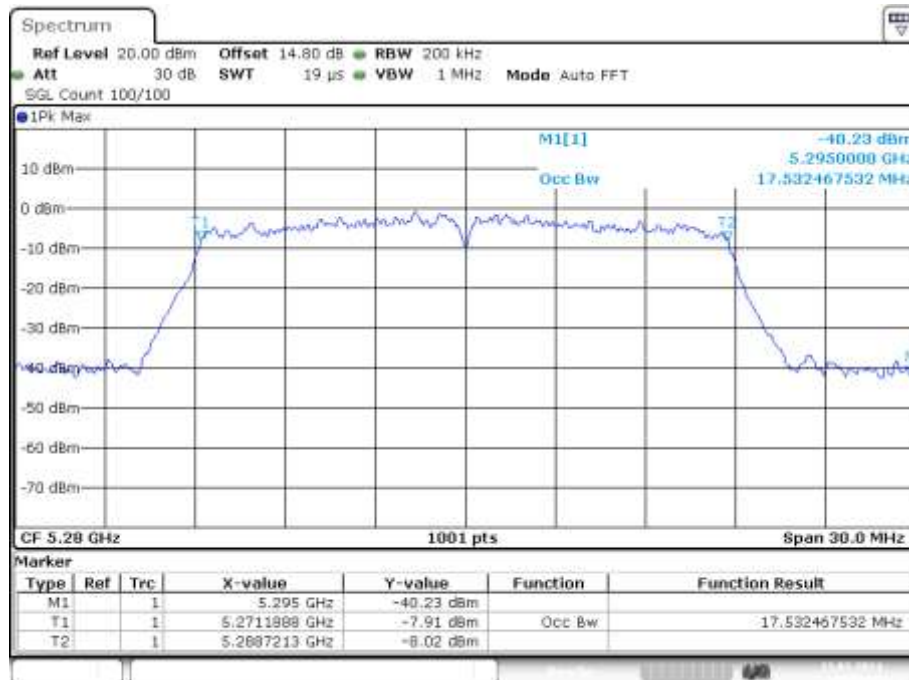
Date: 13.MAR.2024 20:40:11

OBW NVNT n20 5260MHz Ant1



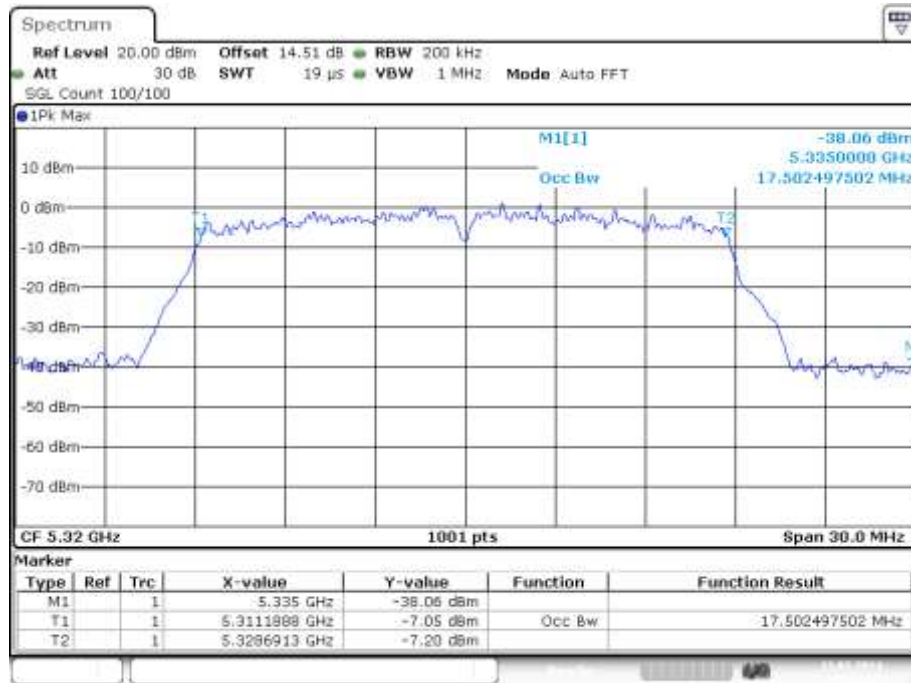
Date: 13.MAR.2024 19:01:47

OBW NVNT n20 5280MHz Ant1



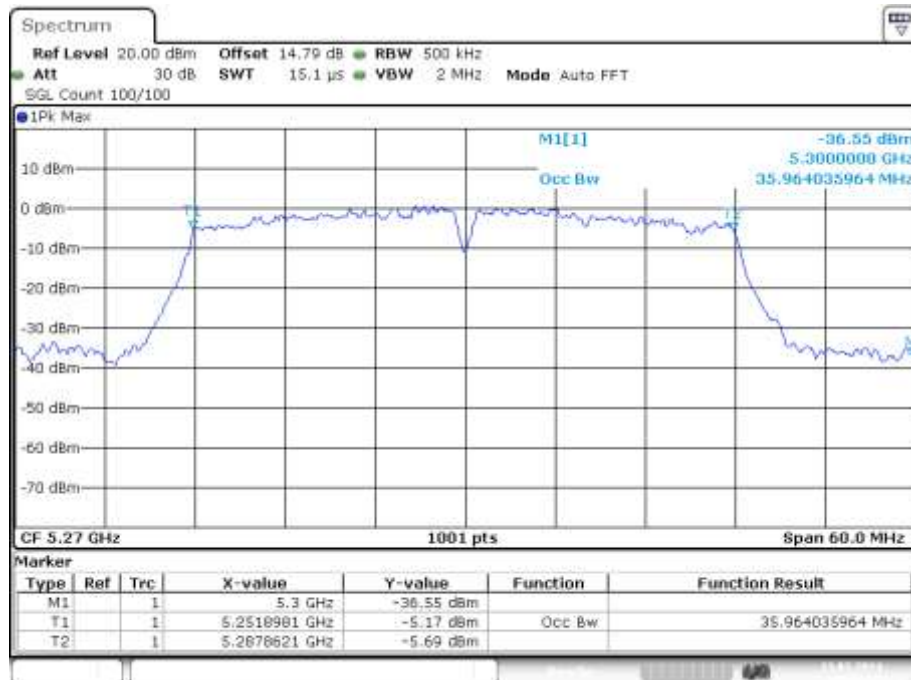
Date: 13.MAR.2024 19:07:59

OBW NVNT n20 5320MHz Ant1



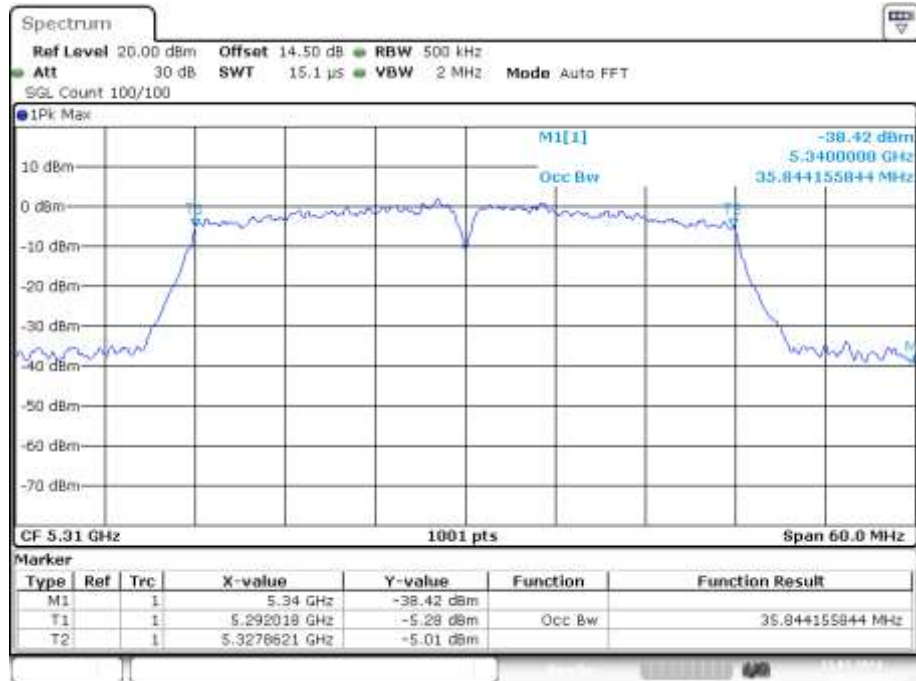
Date: 13.MAR.2024 19:32:37

OBW NVNT n40 5270MHz Ant1



Date: 13.MAR.2024 20:02:17

OBW NVNT n40 5310MHz Ant1

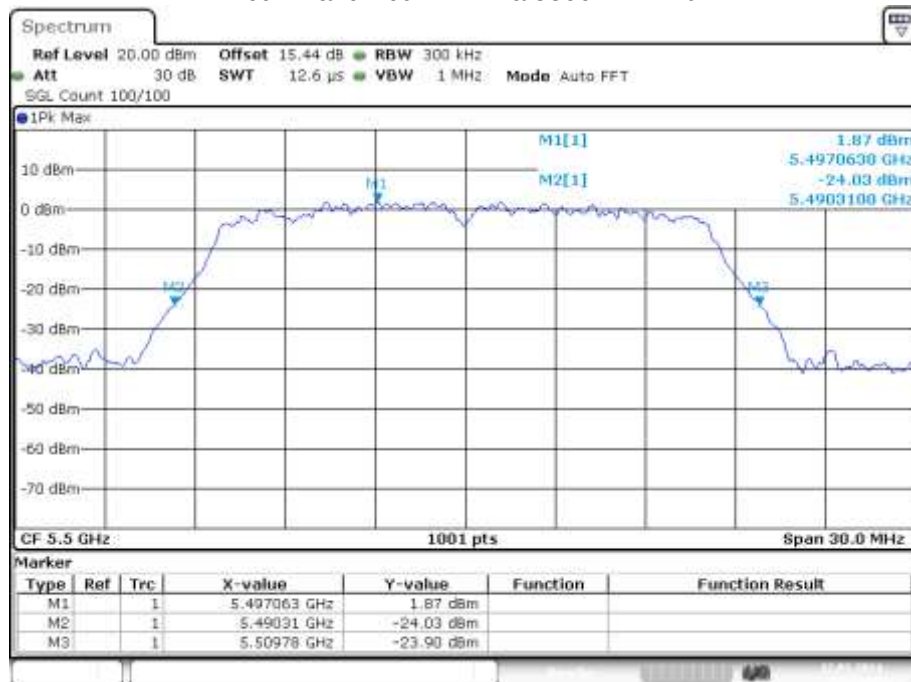


Date: 13.MAR.2024 20:17:44

**Band 3 (5500-5700 MHz):
-26dB Bandwidth**

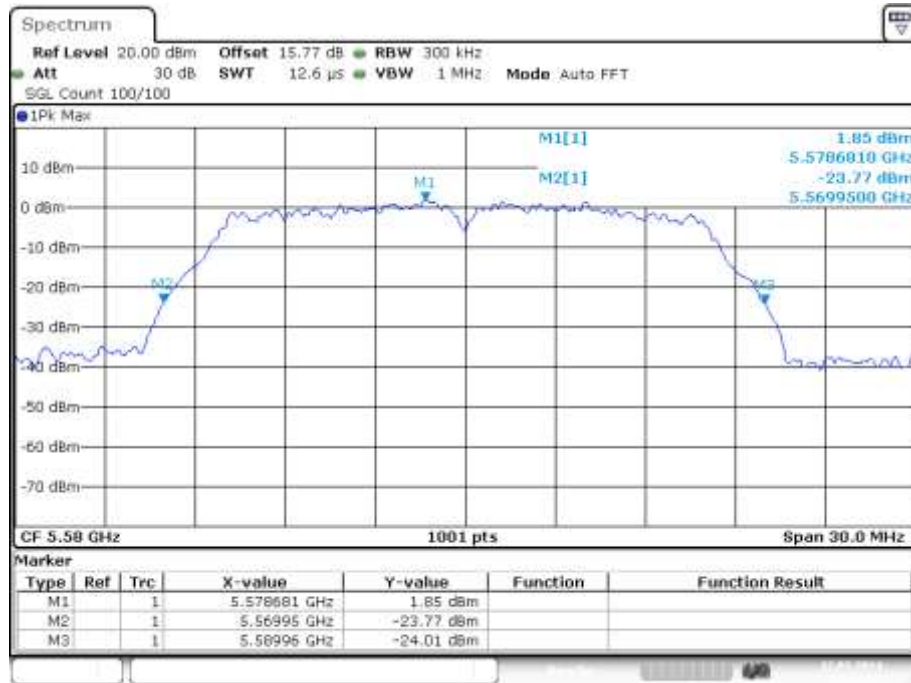
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant1	19.47	/	Pass
NVNT	a	5580	Ant1	20.01	/	Pass
NVNT	a	5700	Ant1	19.74	/	Pass
NVNT	ac20	5500	Ant1	20.31	/	Pass
NVNT	ac20	5580	Ant1	19.98	/	Pass
NVNT	ac20	5700	Ant1	20.28	/	Pass
NVNT	ac40	5510	Ant1	39.90	/	Pass
NVNT	ac40	5670	Ant1	39.72	/	Pass
NVNT	ac80	5530	Ant1	79.56	/	Pass
NVNT	n20	5500	Ant1	20.13	/	Pass
NVNT	n20	5580	Ant1	20.34	/	Pass
NVNT	n20	5700	Ant1	20.34	/	Pass
NVNT	n40	5510	Ant1	39.36	/	Pass
NVNT	n40	5670	Ant1	39.42	/	Pass

-26dB Bandwidth NVNT a 5500MHz Ant1



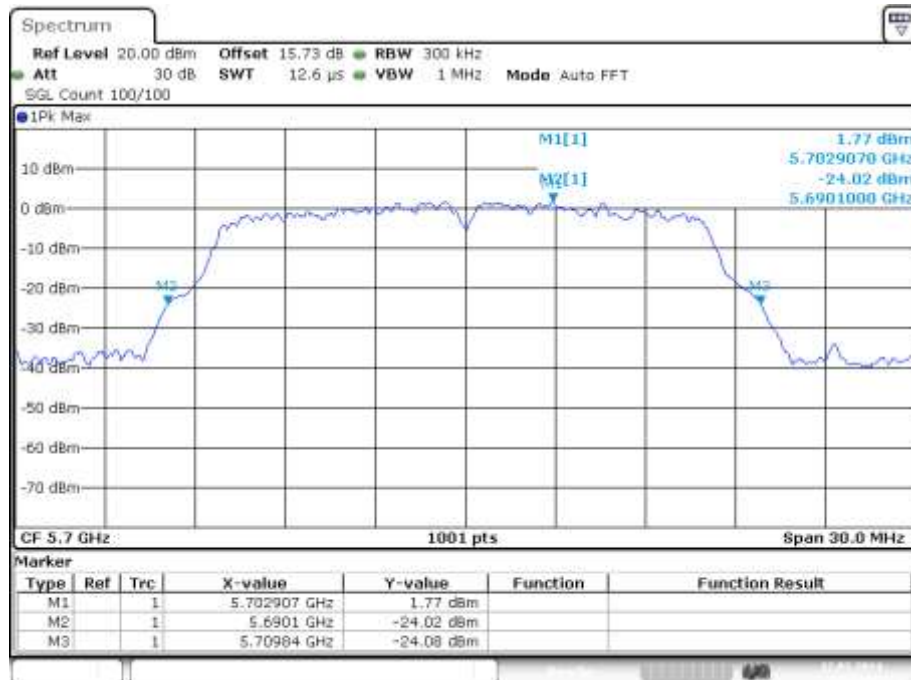
Date: 12.MAR.2024 11:19:08

-26dB Bandwidth NVNT a 5580MHz Ant1



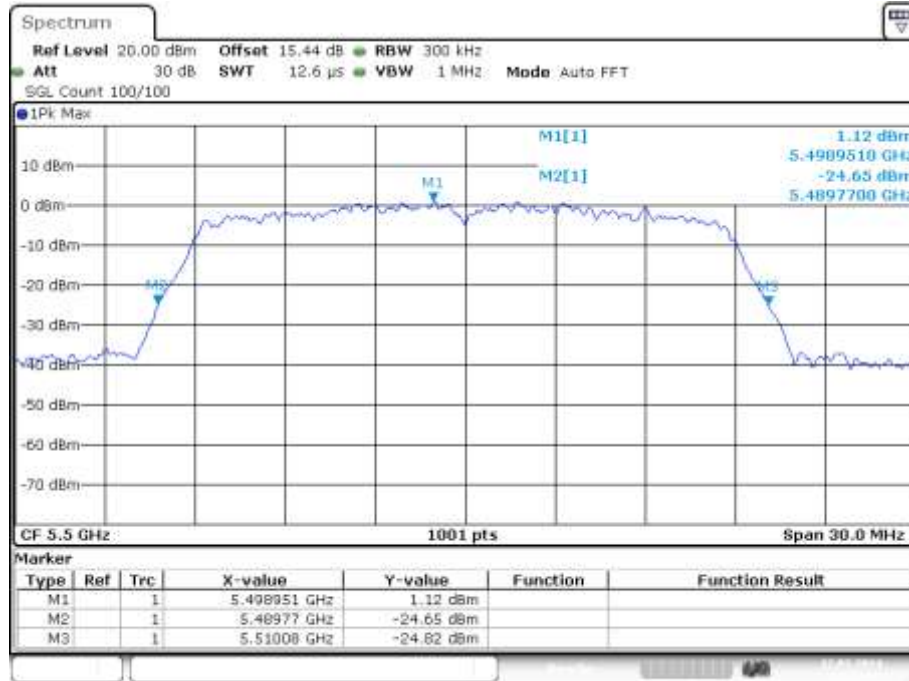
Date: 12.MAR.2024 11:22:51

-26dB Bandwidth NVNT a 5700MHz Ant1



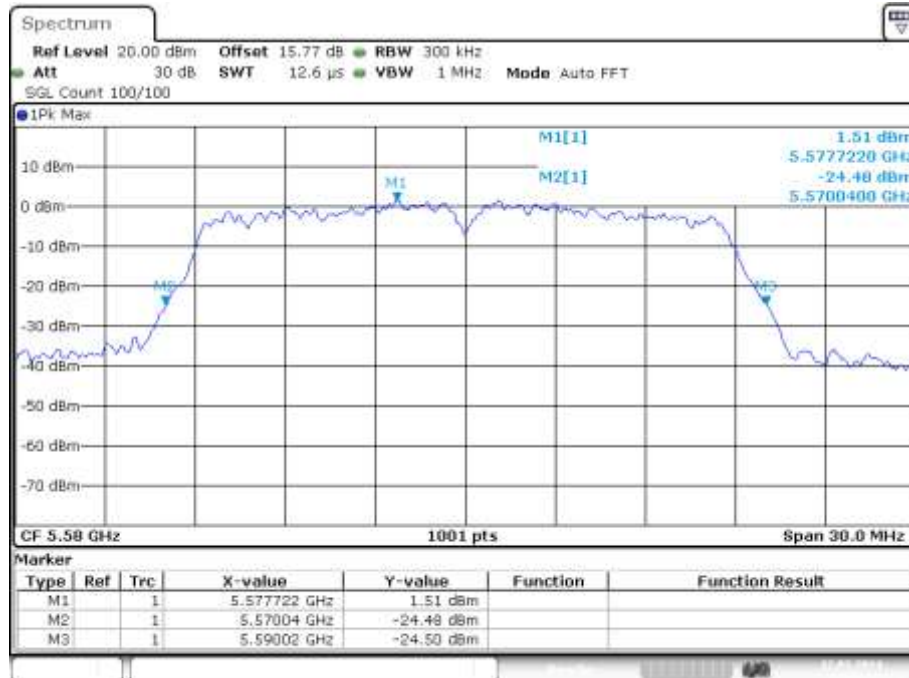
Date: 12.MAR.2024 11:25:32

-26dB Bandwidth NVNT ac20 5500MHz Ant1



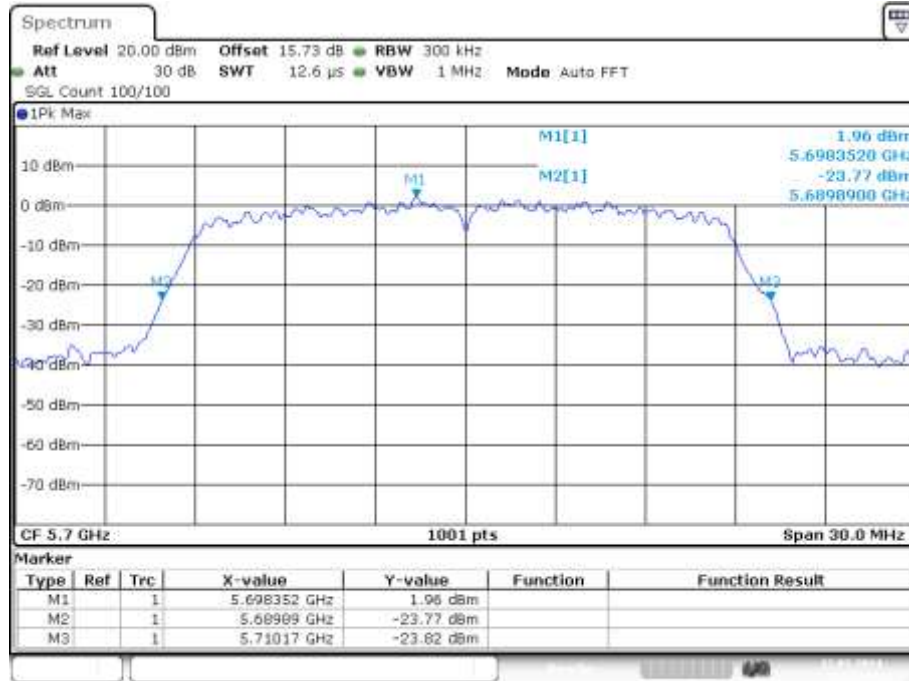
Date: 12.MAR.2024 11:39:50

-26dB Bandwidth NVNT ac20 5580MHz Ant1



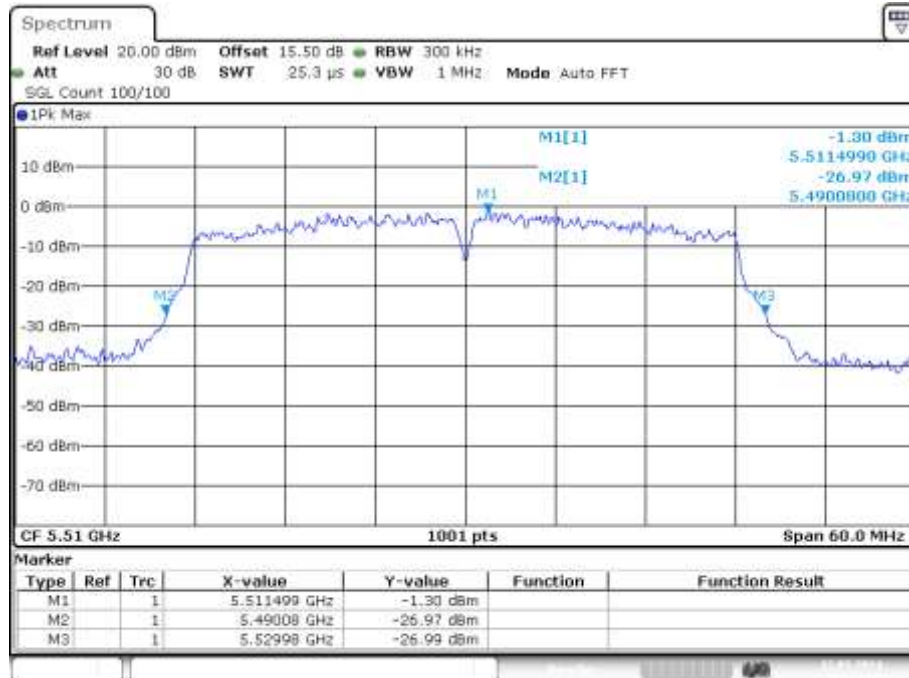
Date: 12.MAR.2024 11:45:22

-26dB Bandwidth NVNT ac20 5700MHz Ant1



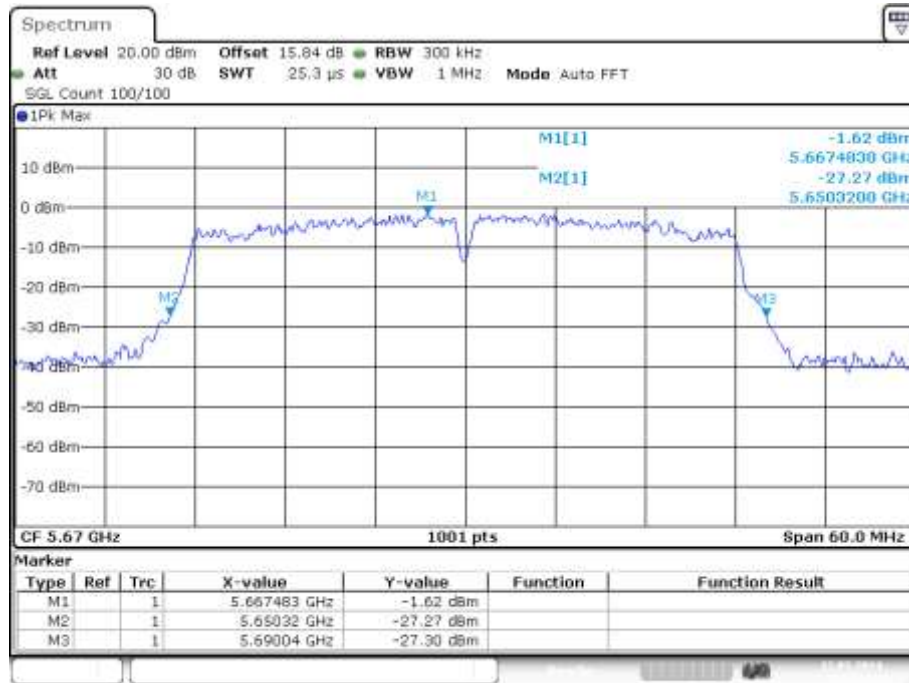
Date: 12.MAR.2024 13:20:36

-26dB Bandwidth NVNT ac40 5510MHz Ant1



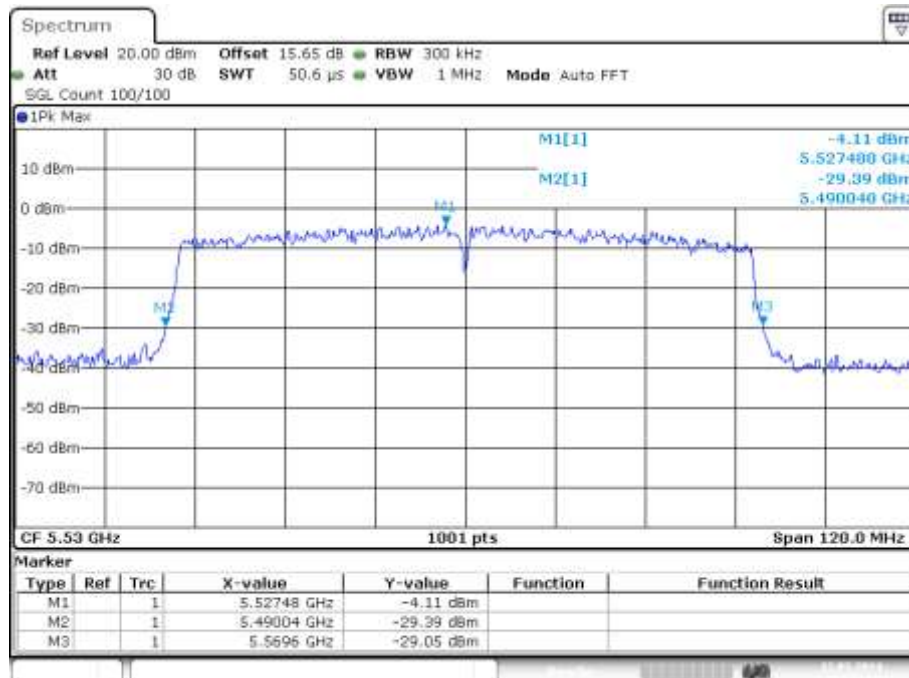
Date: 12.MAR.2024 13:33:57

-26dB Bandwidth NVNT ac40 5670MHz Ant1



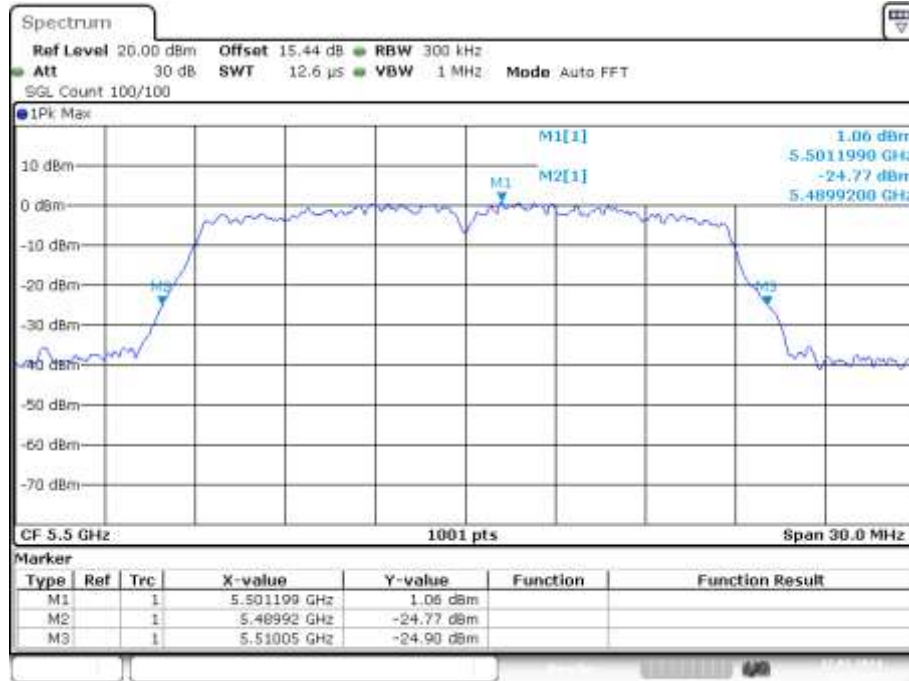
Date: 12.MAR.2024 13:37:24

-26dB Bandwidth NVNT ac80 5530MHz Ant1



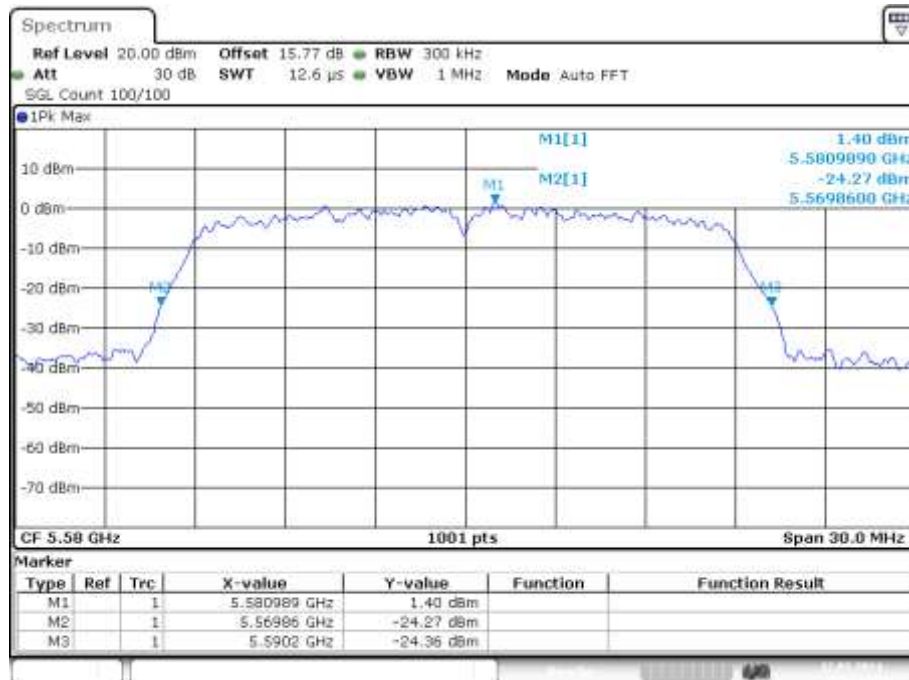
Date: 12.MAR.2024 13:48:03

-26dB Bandwidth NVNT n20 5500MHz Ant1



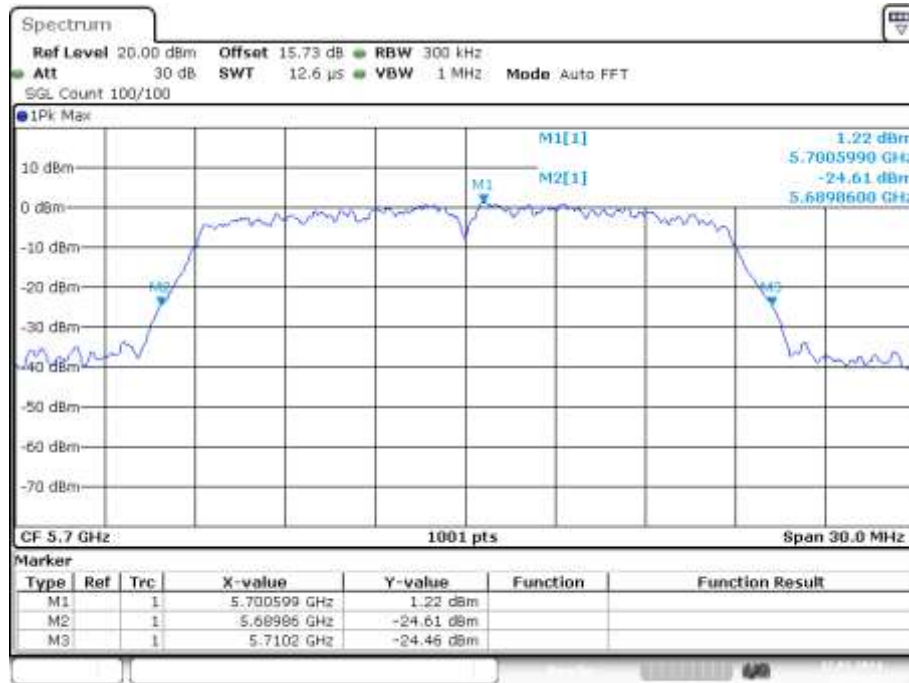
Date: 12.MAR.2024 11:29:41

-26dB Bandwidth NVNT n20 5580MHz Ant1



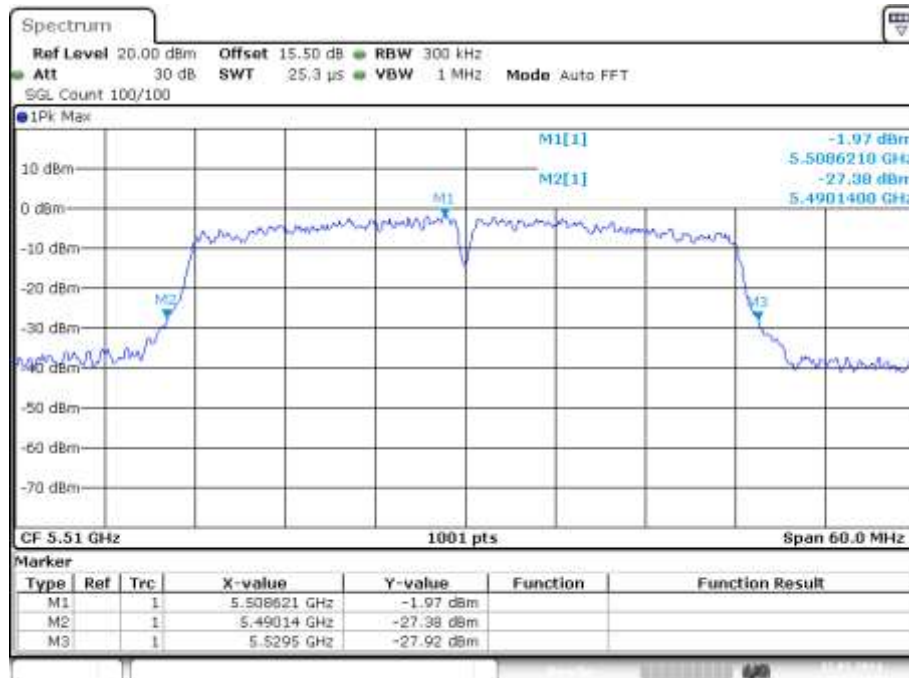
Date: 12.MAR.2024 11:33:29

-26dB Bandwidth NVNT n20 5700MHz Ant1



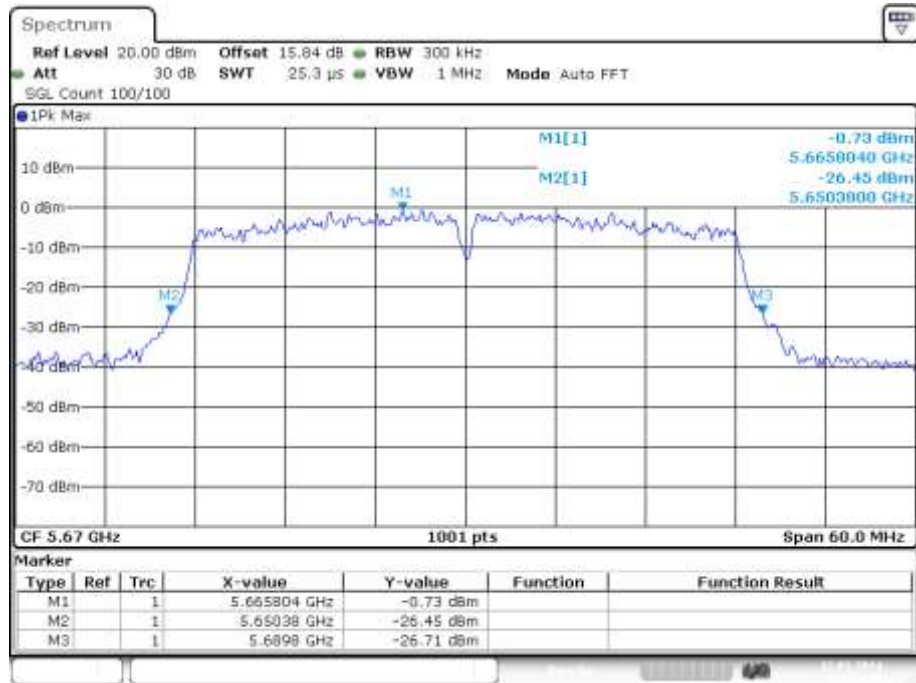
Date: 12.MAR.2024 11:36:21

-26dB Bandwidth NVNT n40 5510MHz Ant1



Date: 12.MAR.2024 13:25:38

-26dB Bandwidth NVNT n40 5670MHz Ant1

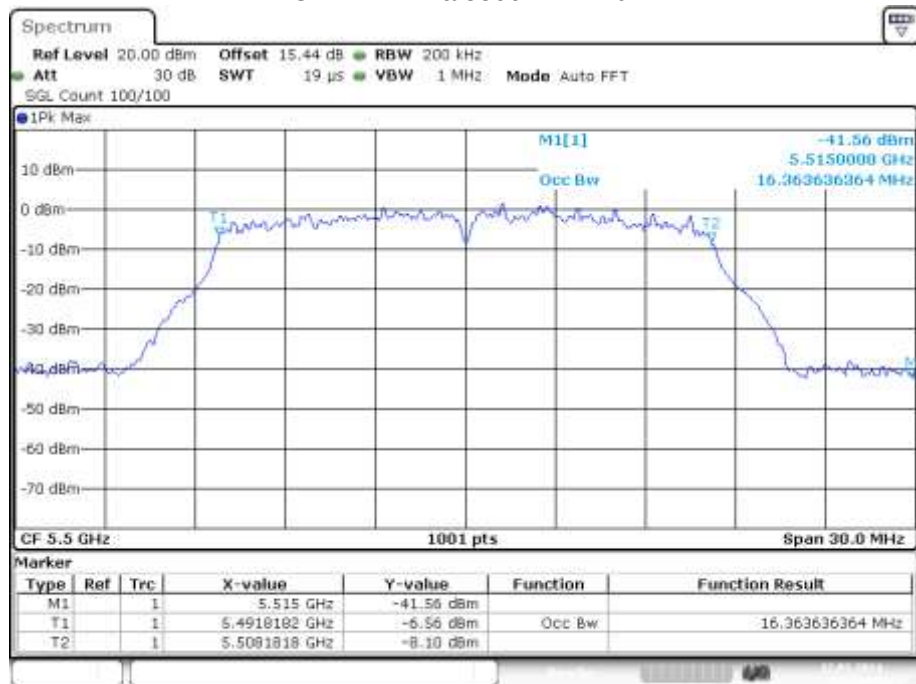


Date: 12.MAR.2024 13:31:48

Occupied Channel Bandwidth

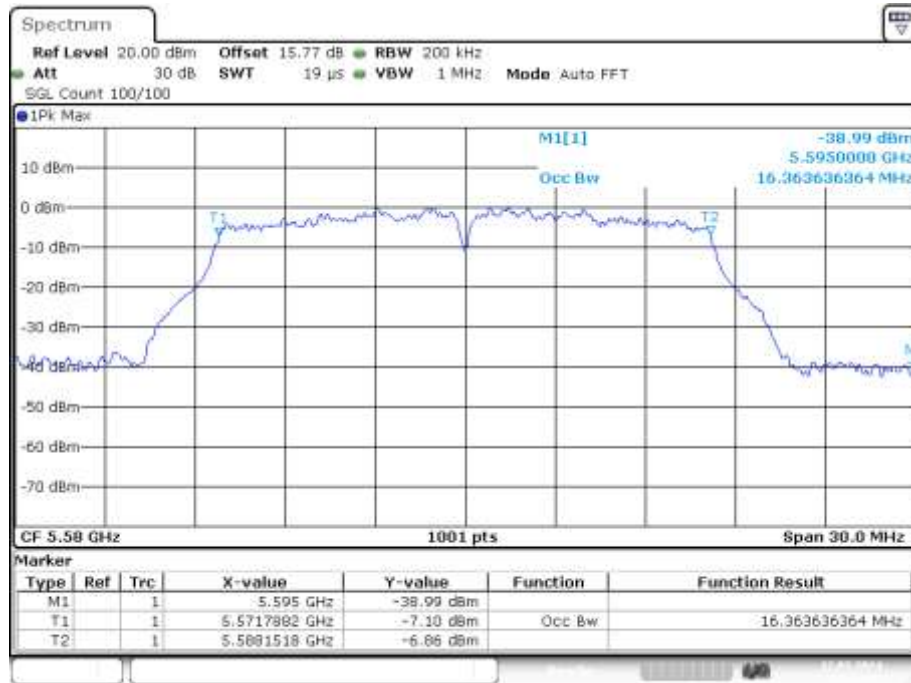
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant1	16.364
NVNT	a	5580	Ant1	16.364
NVNT	a	5700	Ant1	16.334
NVNT	ac20	5500	Ant1	17.562
NVNT	ac20	5580	Ant1	17.562
NVNT	ac20	5700	Ant1	17.532
NVNT	ac40	5510	Ant1	35.904
NVNT	ac40	5670	Ant1	35.904
NVNT	ac80	5530	Ant1	75.405
NVNT	n20	5500	Ant1	17.473
NVNT	n20	5580	Ant1	17.592
NVNT	n20	5700	Ant1	17.592
NVNT	n40	5510	Ant1	35.964
NVNT	n40	5670	Ant1	35.844

OBW NVNT a 5500MHz Ant1



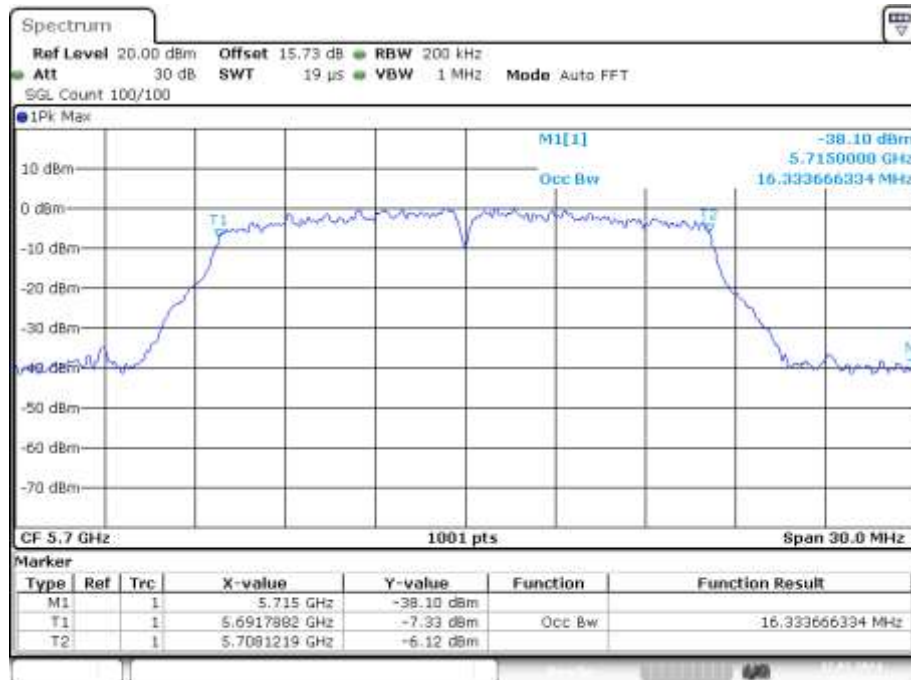
Date: 12.MAR.2024 11:18:59

OBW NVNT a 5580MHz Ant1



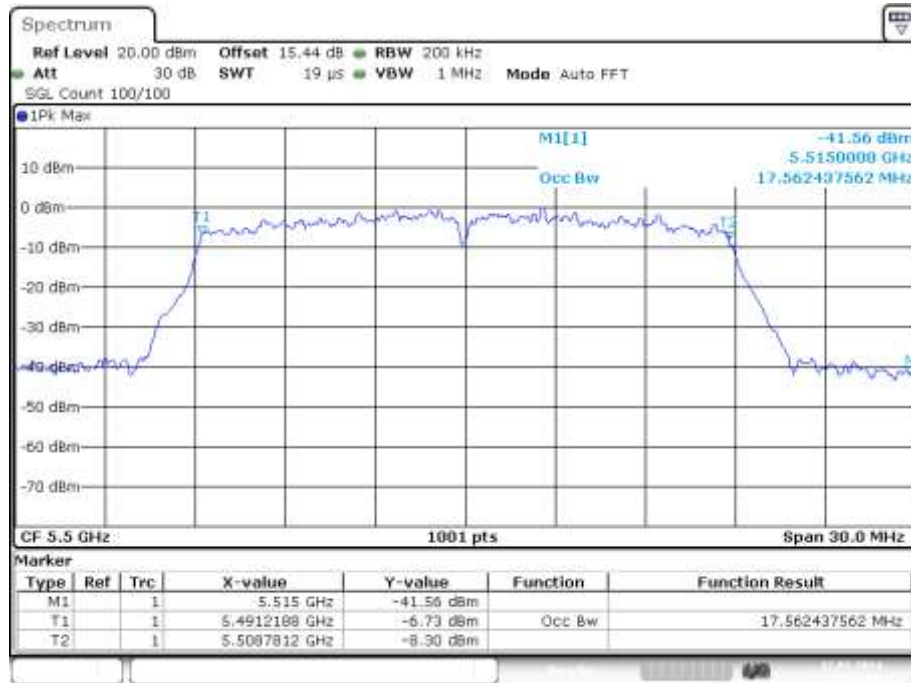
Date: 12.MAR.2024 11:22:42

OBW NVNT a 5700MHz Ant1

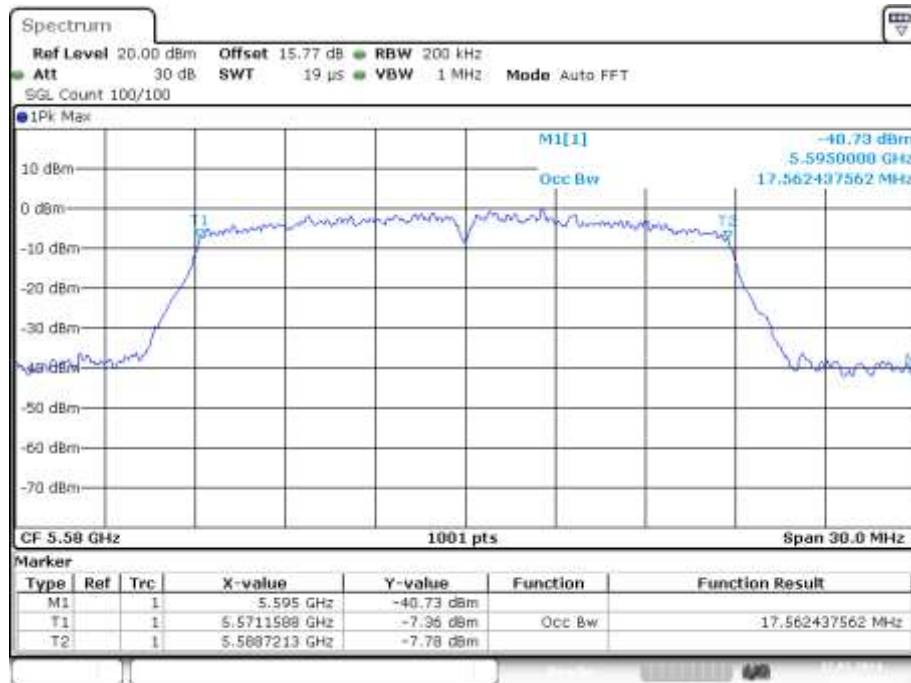


Date: 12.MAR.2024 11:25:21

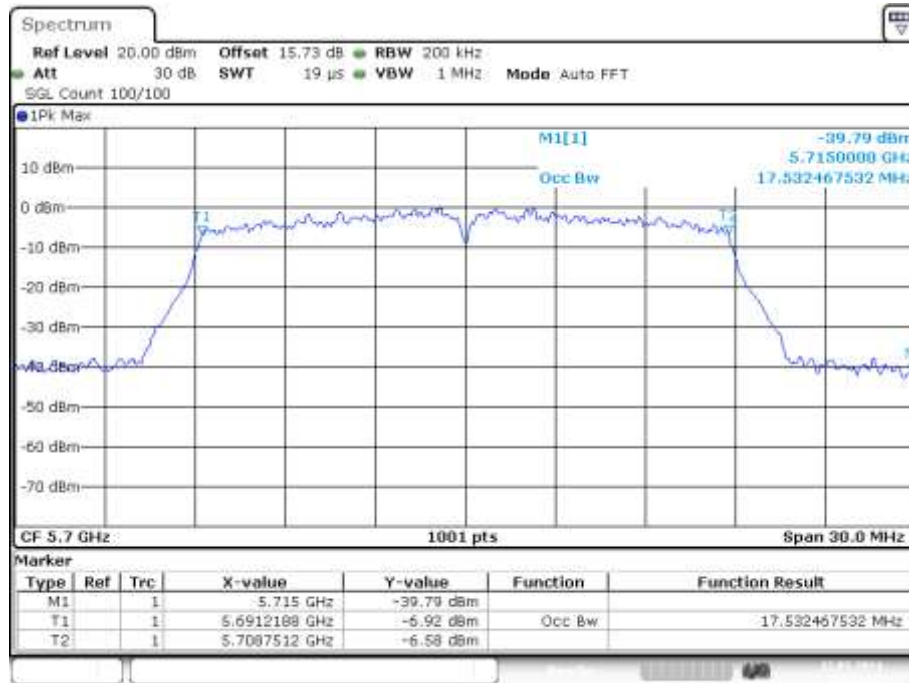
OBW NVNT ac20 5500MHz Ant1



OBW NVNT ac20 5580MHz Ant1

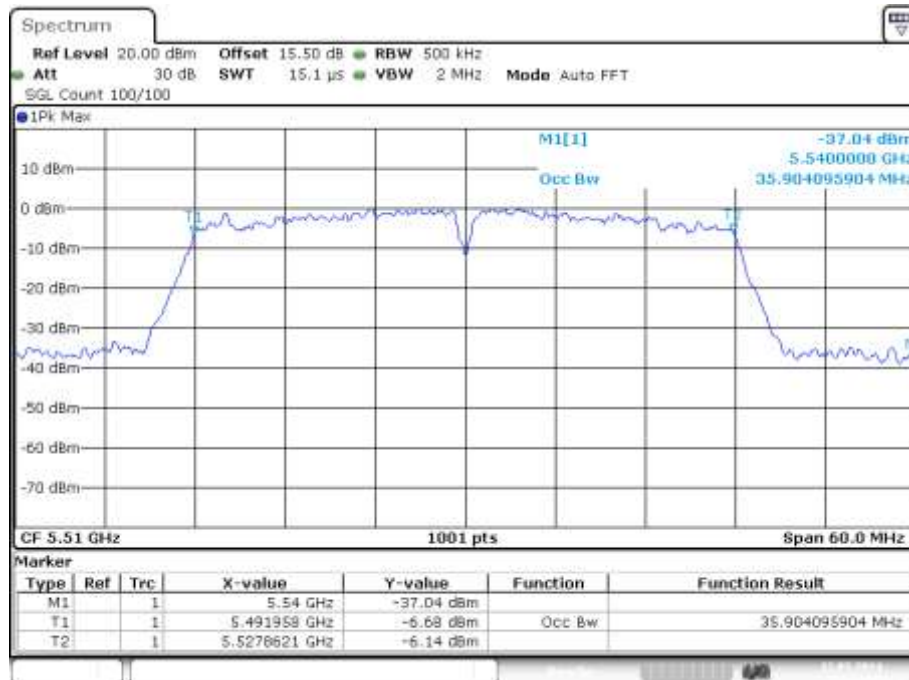


OBW NVNT ac20 5700MHz Ant1



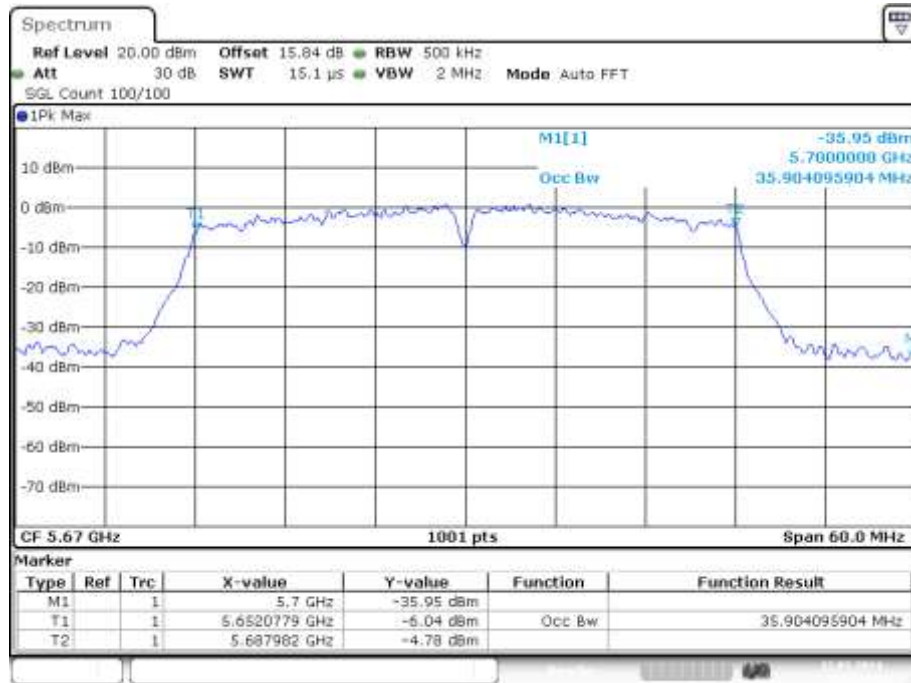
Date: 12.MAR.2024 13:20:17

OBW NVNT ac40 5510MHz Ant1



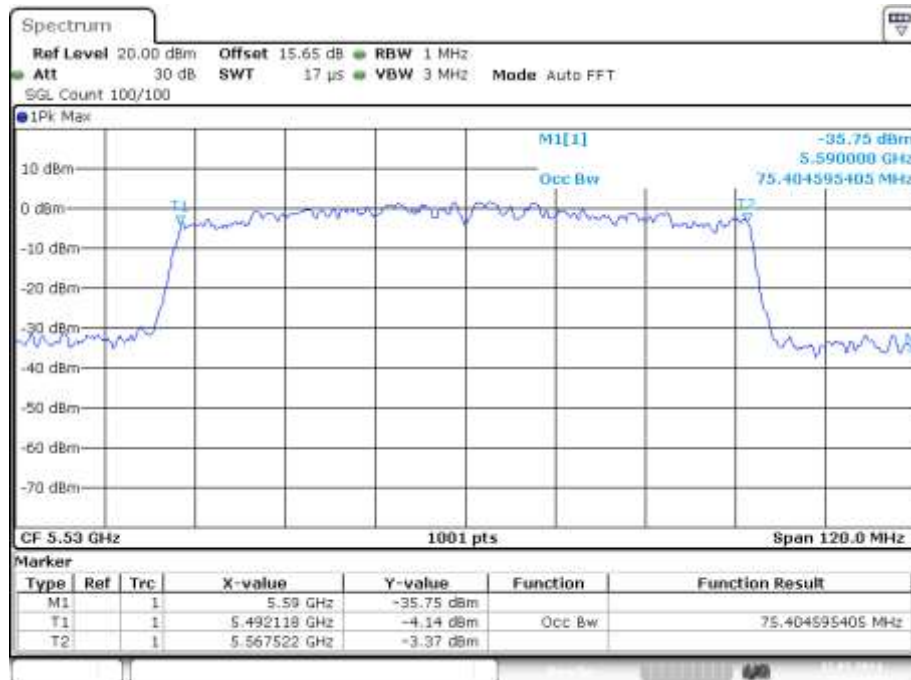
Date: 12.MAR.2024 13:33:38

OBW NVNT ac40 5670MHz Ant1



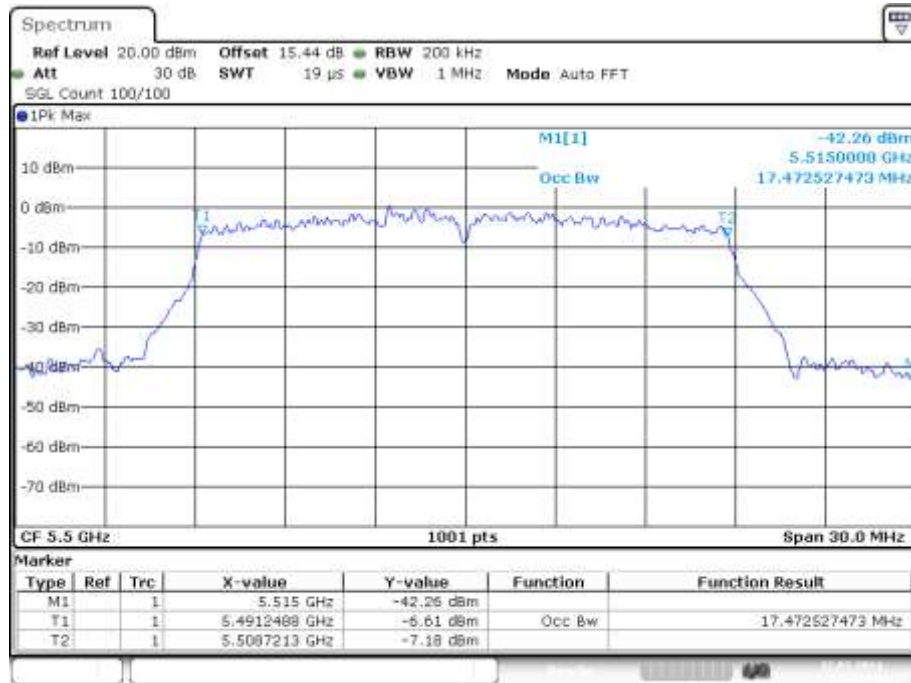
Date: 12.MAR.2024 13:37:05

OBW NVNT ac80 5530MHz Ant1



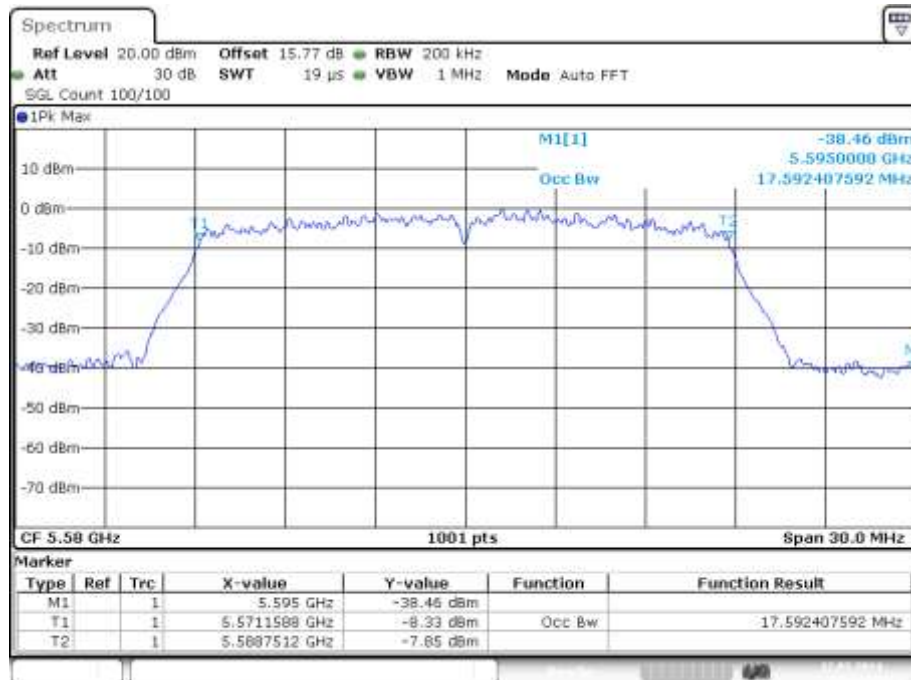
Date: 12.MAR.2024 13:47:50

OBW NVNT n20 5500MHz Ant1



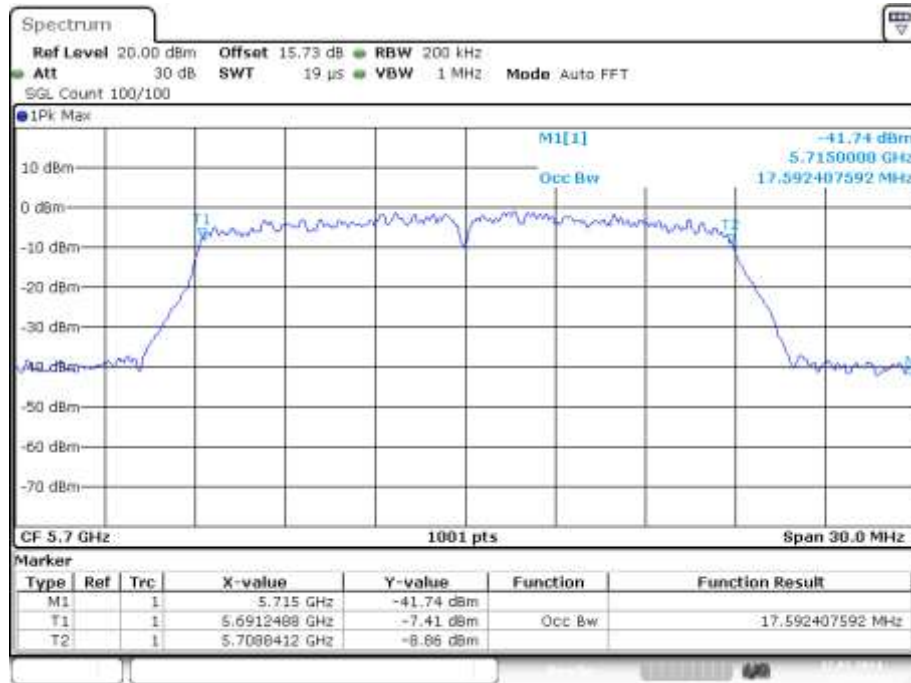
Date: 12.MAR.2024 11:29:19

OBW NVNT n20 5580MHz Ant1



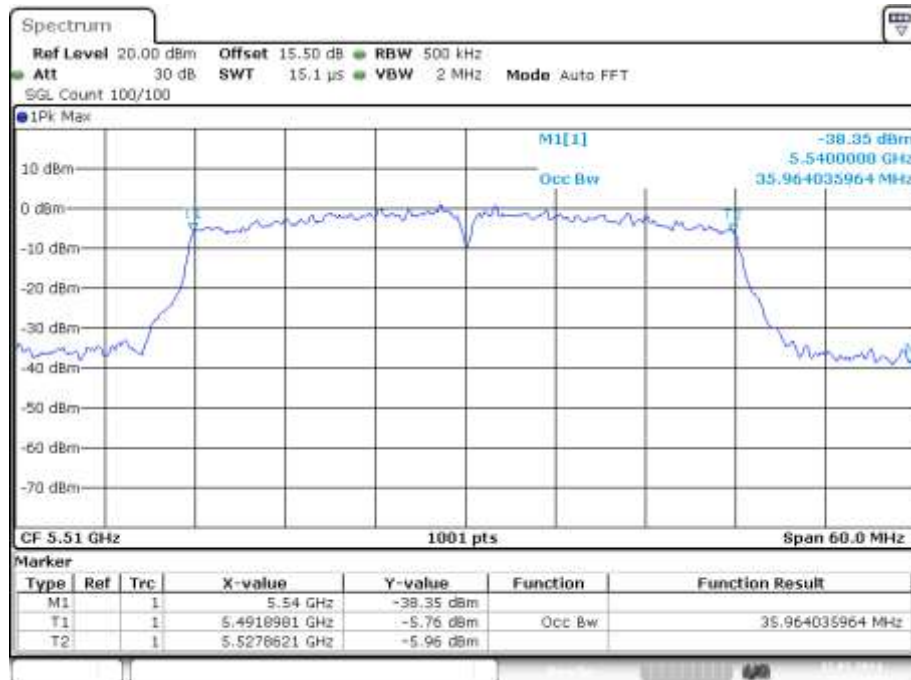
Date: 12.MAR.2024 11:33:15

OBW NVNT n20 5700MHz Ant1



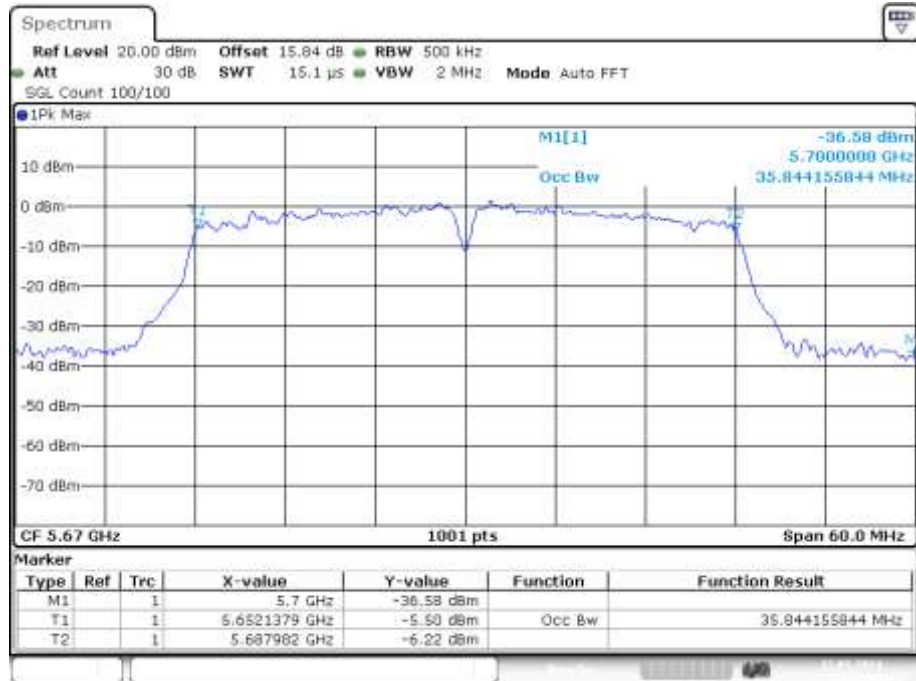
Date: 12.MAR.2024 11:36:06

OBW NVNT n40 5510MHz Ant1



Date: 12.MAR.2024 13:25:08

OBW NVNT n40 5670MHz Ant1

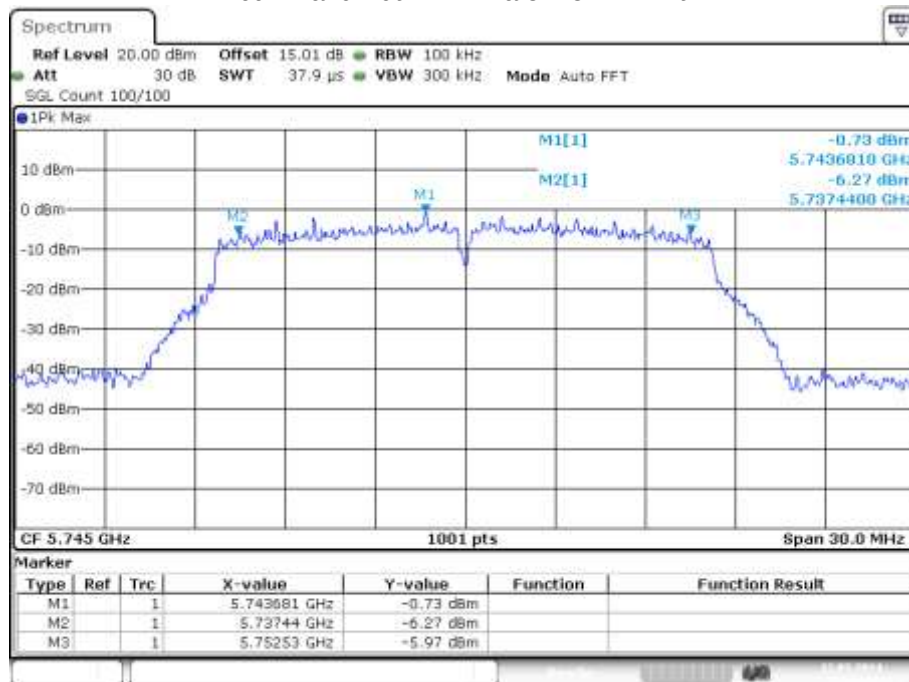


Date: 12.MAR.2024 13:29:09

**Band 4 (5725-5850 MHz):
-6dB Bandwidth**

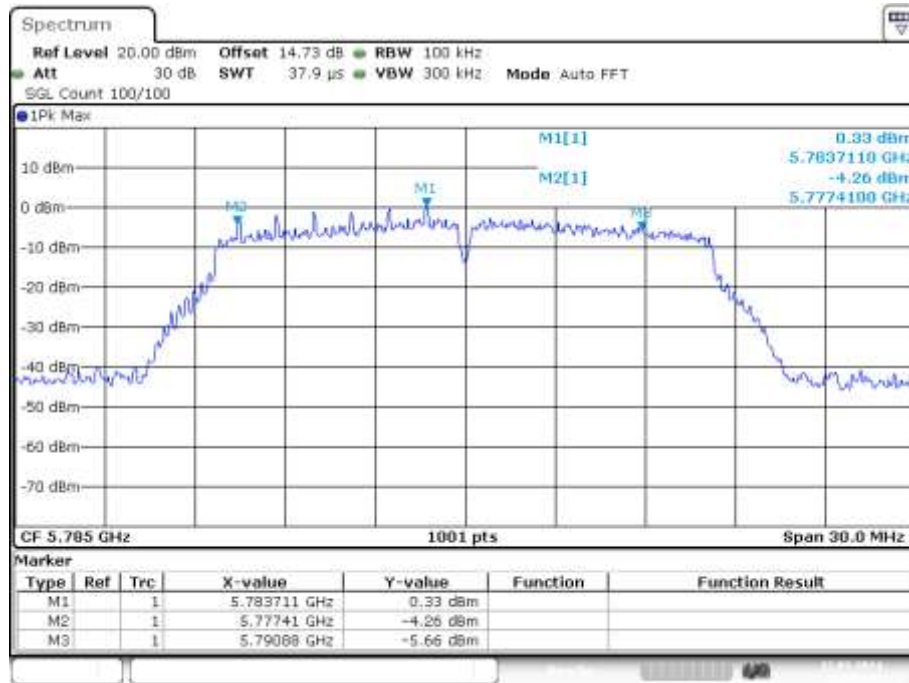
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	15.09	0.5	Pass
NVNT	a	5785	Ant1	13.47	0.5	Pass
NVNT	a	5825	Ant1	15.06	0.5	Pass
NVNT	ac20	5745	Ant1	14.22	0.5	Pass
NVNT	ac20	5785	Ant1	17.58	0.5	Pass
NVNT	ac20	5825	Ant1	17.58	0.5	Pass
NVNT	ac40	5755	Ant1	35.10	0.5	Pass
NVNT	ac40	5795	Ant1	31.32	0.5	Pass
NVNT	ac80	5775	Ant1	75.24	0.5	Pass
NVNT	n20	5745	Ant1	16.29	0.5	Pass
NVNT	n20	5785	Ant1	17.58	0.5	Pass
NVNT	n20	5825	Ant1	16.29	0.5	Pass
NVNT	n40	5755	Ant1	31.38	0.5	Pass
NVNT	n40	5795	Ant1	35.10	0.5	Pass

-6dB Bandwidth NVNT a 5745MHz Ant1



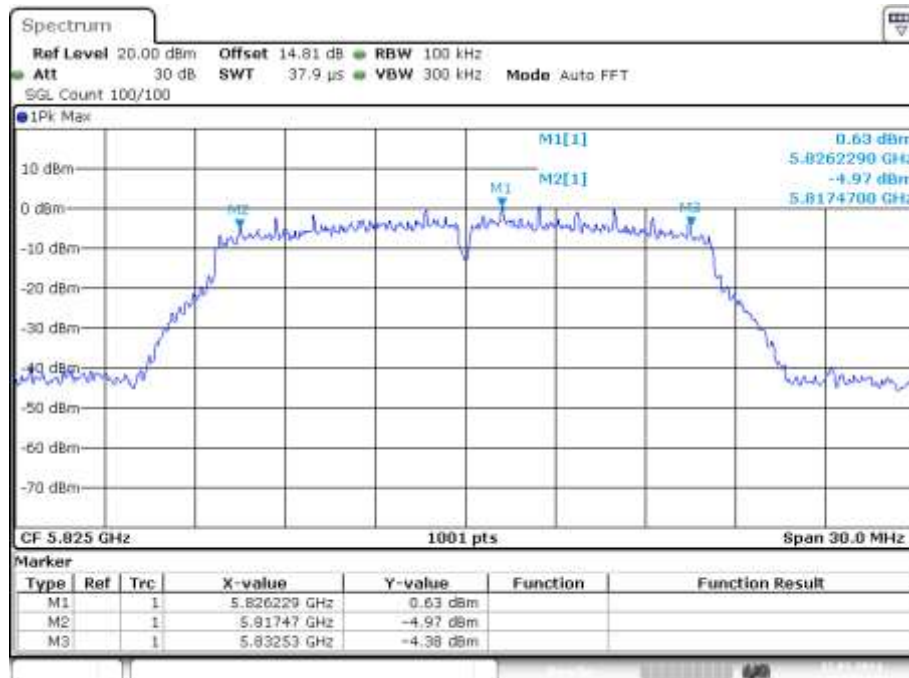
Date: 12.MAR.2024 14:04:45

-6dB Bandwidth NVNT a 5785MHz Ant1



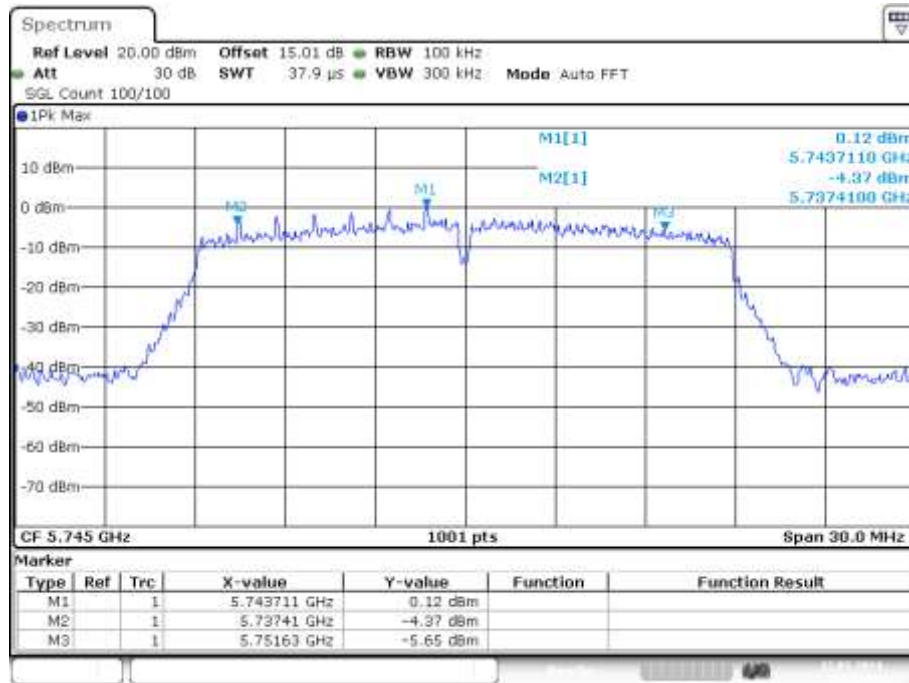
Date: 12.MAR.2024 14:06:47

-6dB Bandwidth NVNT a 5825MHz Ant1



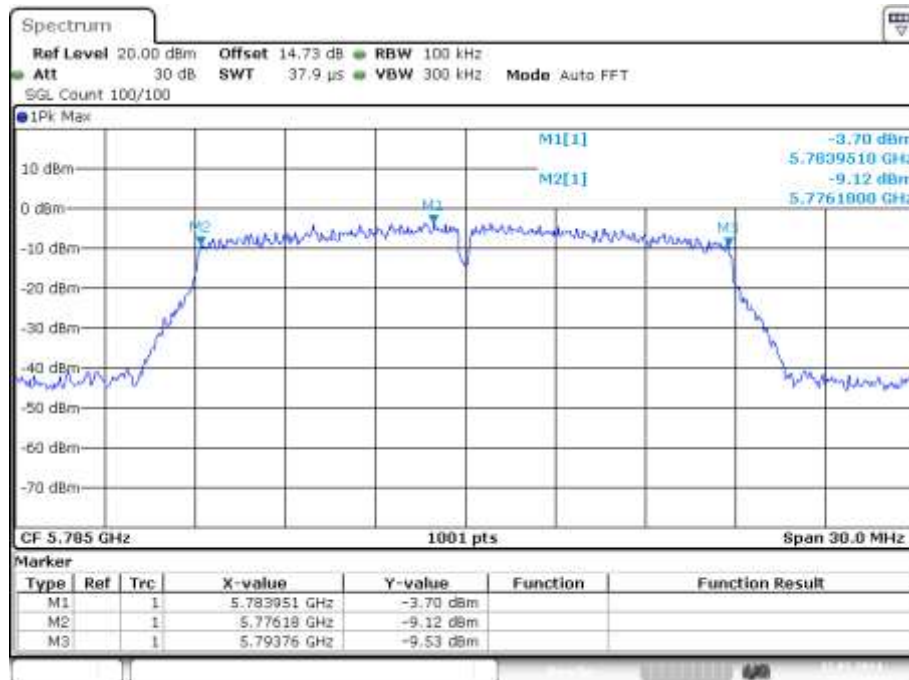
Date: 12.MAR.2024 14:08:59

-6dB Bandwidth NVNT ac20 5745MHz Ant1



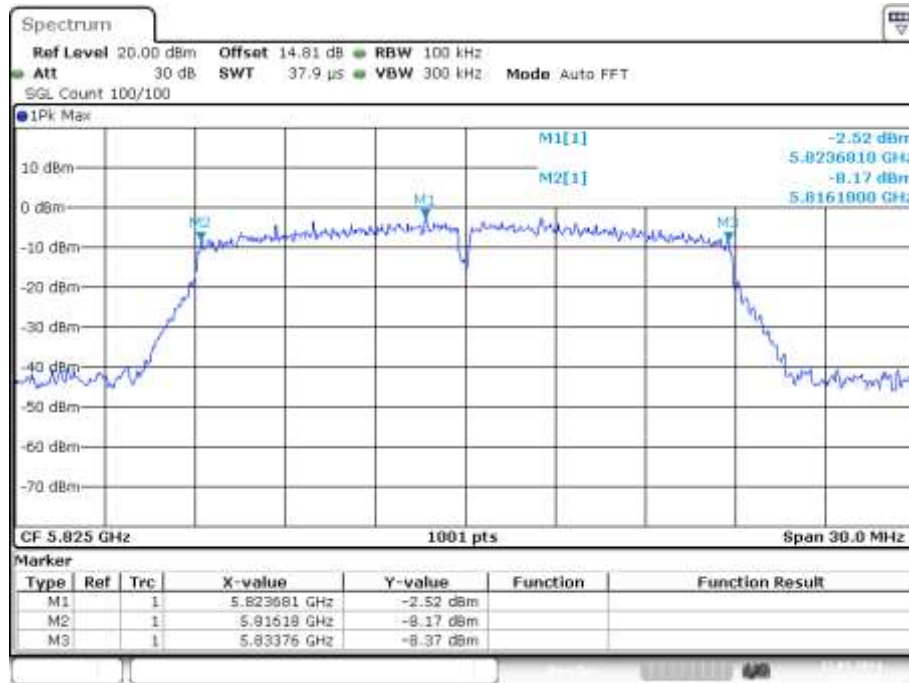
Date: 12.MAR.2024 14:20:04

-6dB Bandwidth NVNT ac20 5785MHz Ant1



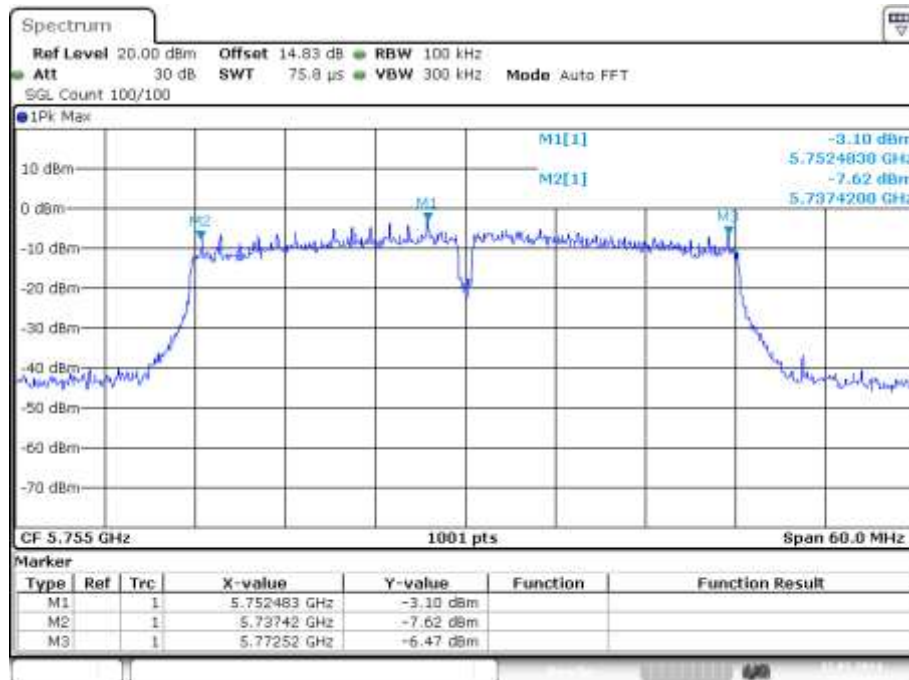
Date: 12.MAR.2024 14:25:25

-6dB Bandwidth NVNT ac20 5825MHz Ant1



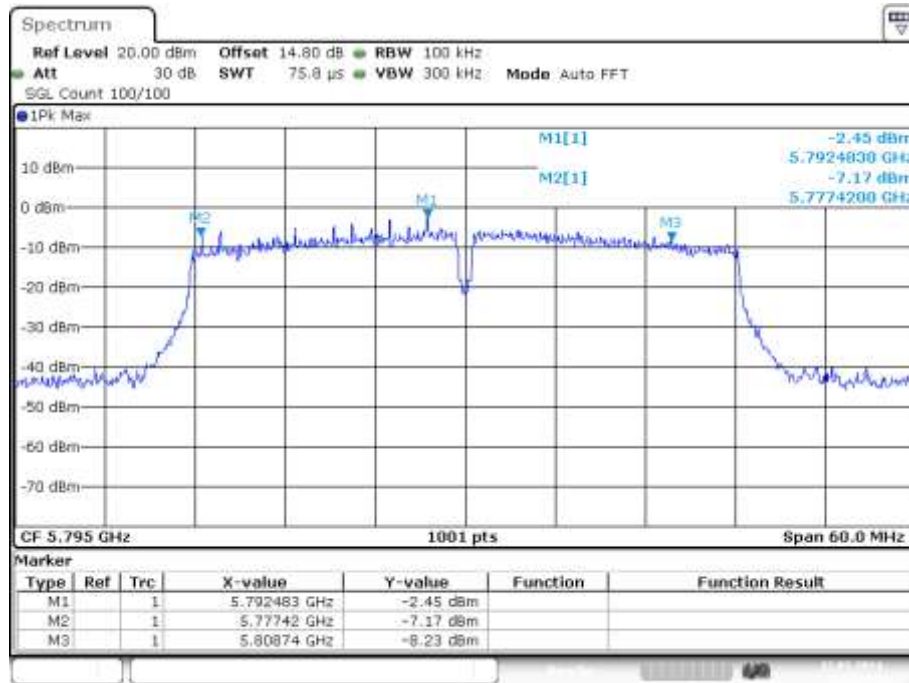
Date: 12.MAR.2024 14:29:27

-6dB Bandwidth NVNT ac40 5755MHz Ant1



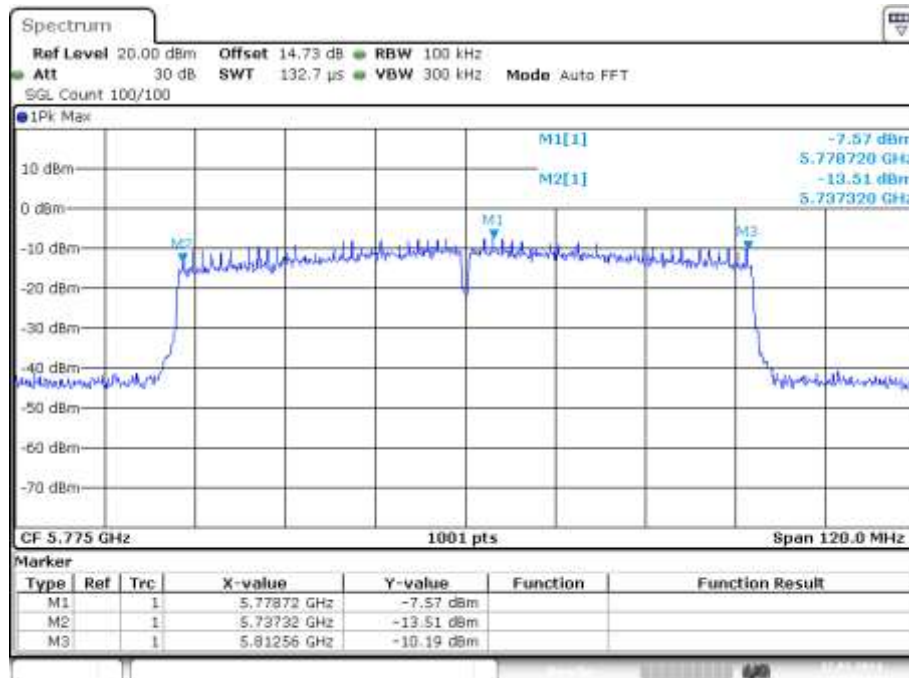
Date: 12.MAR.2024 14:50:11

-6dB Bandwidth NVNT ac40 5795MHz Ant1



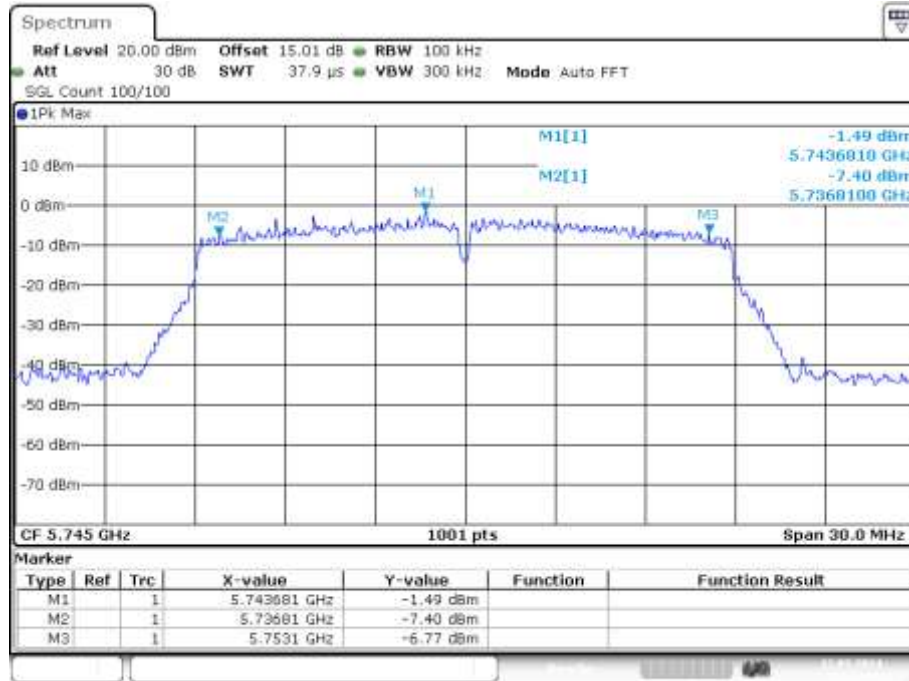
Date: 12.MAR.2024 14:55:58

-6dB Bandwidth NVNT ac80 5775MHz Ant1



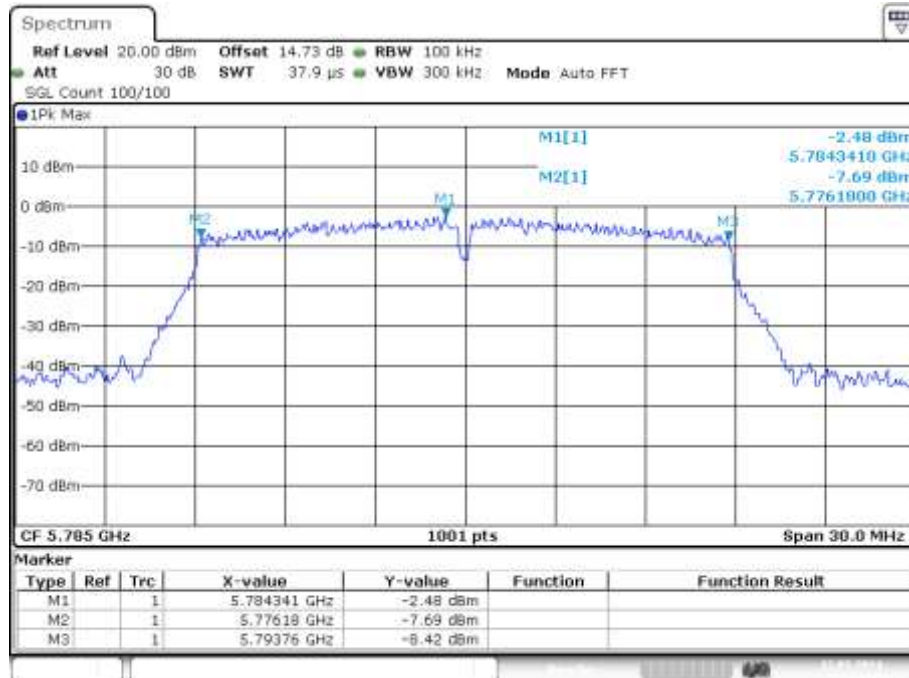
Date: 12.MAR.2024 15:06:52

-6dB Bandwidth NVNT n20 5745MHz Ant1



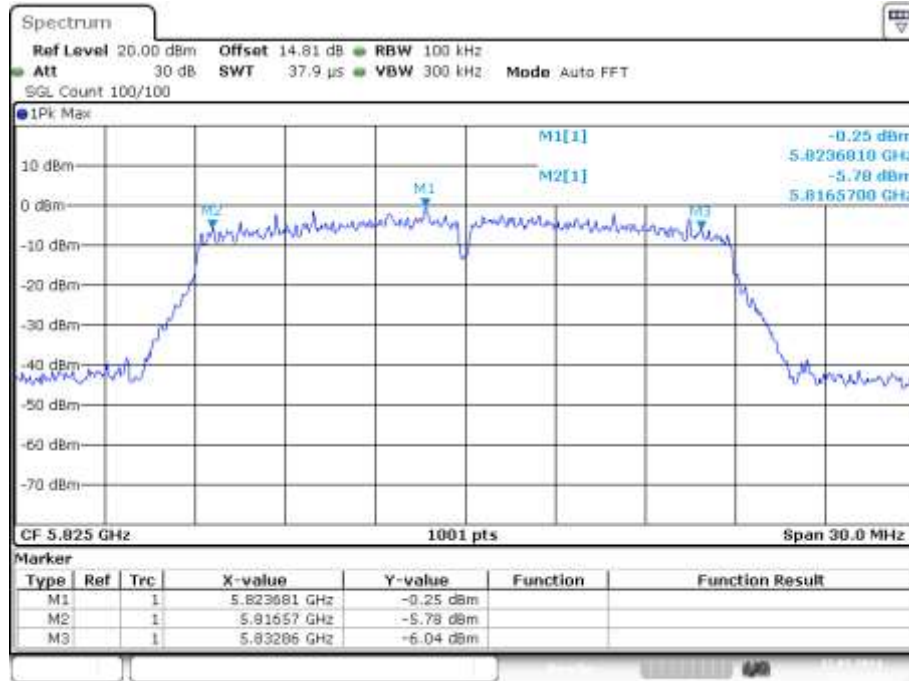
Date: 12.MAR.2024 14:12:05

-6dB Bandwidth NVNT n20 5785MHz Ant1



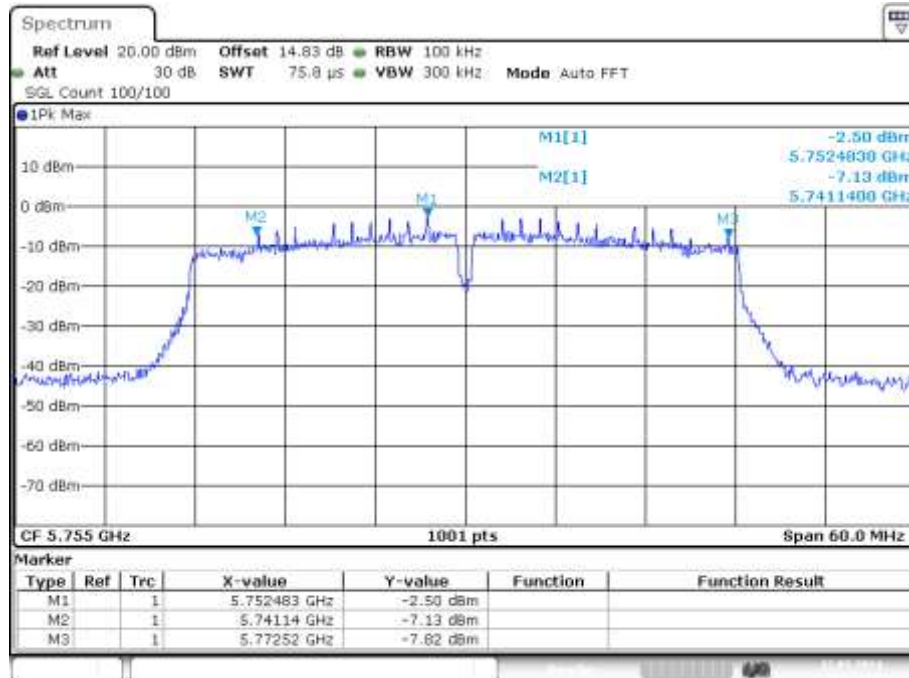
Date: 12.MAR.2024 14:14:50

-6dB Bandwidth NVNT n20 5825MHz Ant1



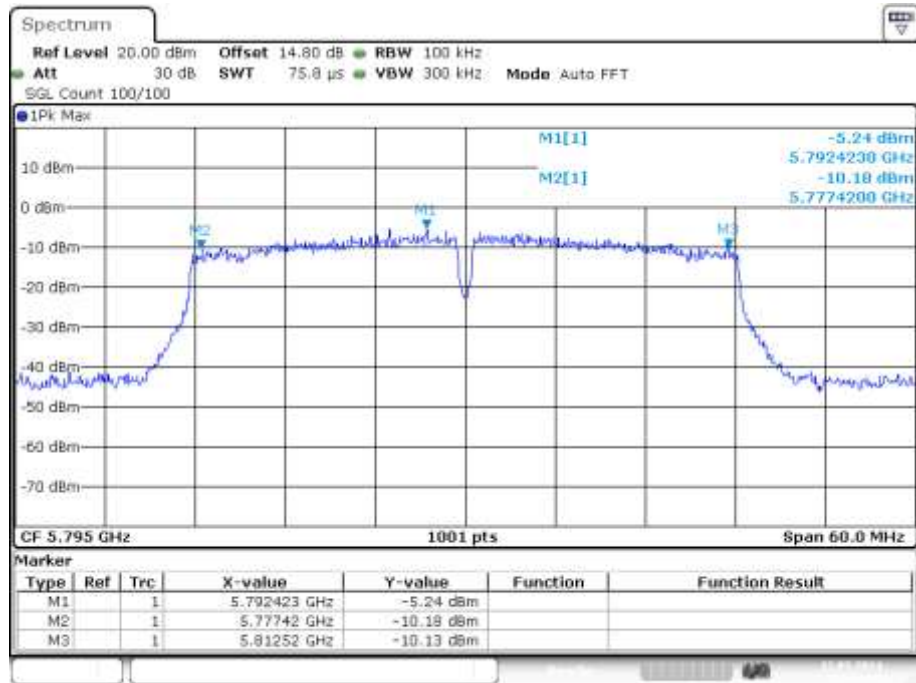
Date: 12.MAR.2024 14:17:21

-6dB Bandwidth NVNT n40 5755MHz Ant1



Date: 12.MAR.2024 14:32:56

-6dB Bandwidth NVNT n40 5795MHz Ant1

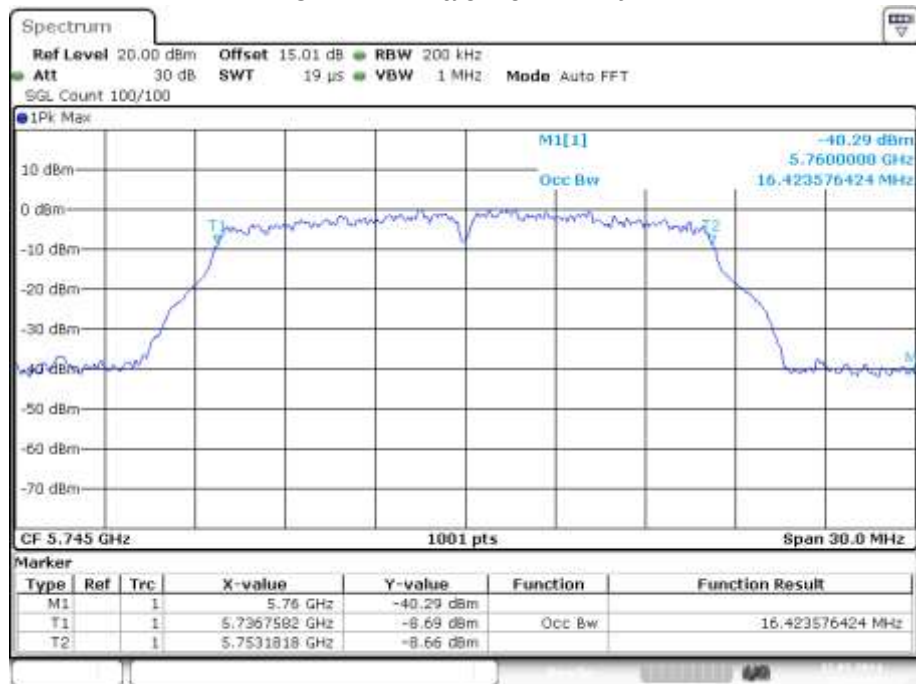


Date: 12.MAR.2024 14:47:08

Occupied Channel Bandwidth

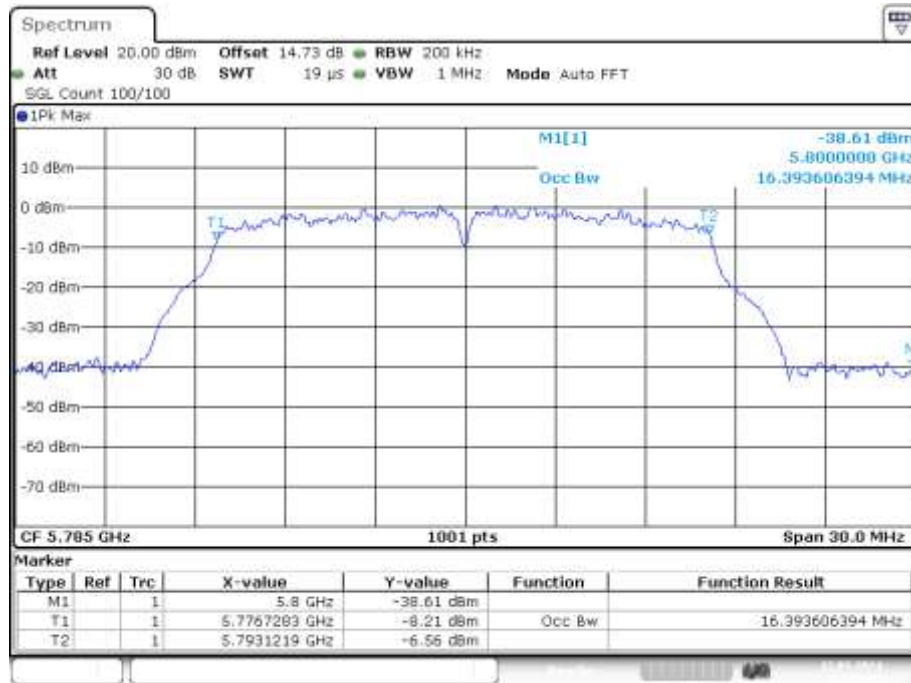
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.424
NVNT	a	5785	Ant1	16.394
NVNT	a	5825	Ant1	16.424
NVNT	ac20	5745	Ant1	17.592
NVNT	ac20	5785	Ant1	17.532
NVNT	ac20	5825	Ant1	17.532
NVNT	ac40	5755	Ant1	35.844
NVNT	ac40	5795	Ant1	35.844
NVNT	ac80	5775	Ant1	74.925
NVNT	n20	5745	Ant1	17.562
NVNT	n20	5785	Ant1	17.562
NVNT	n20	5825	Ant1	17.502
NVNT	n40	5755	Ant1	35.964
NVNT	n40	5795	Ant1	35.784

OBW NVNT a 5745MHz Ant1



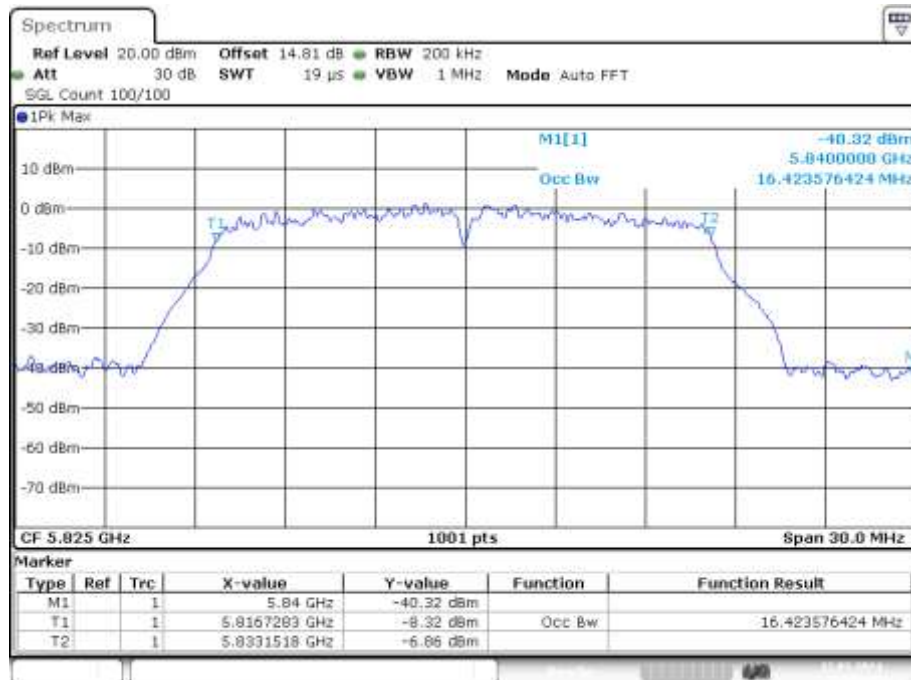
Date: 12.MAR.2024 14:04:36

OBW NVNT a 5785MHz Ant1



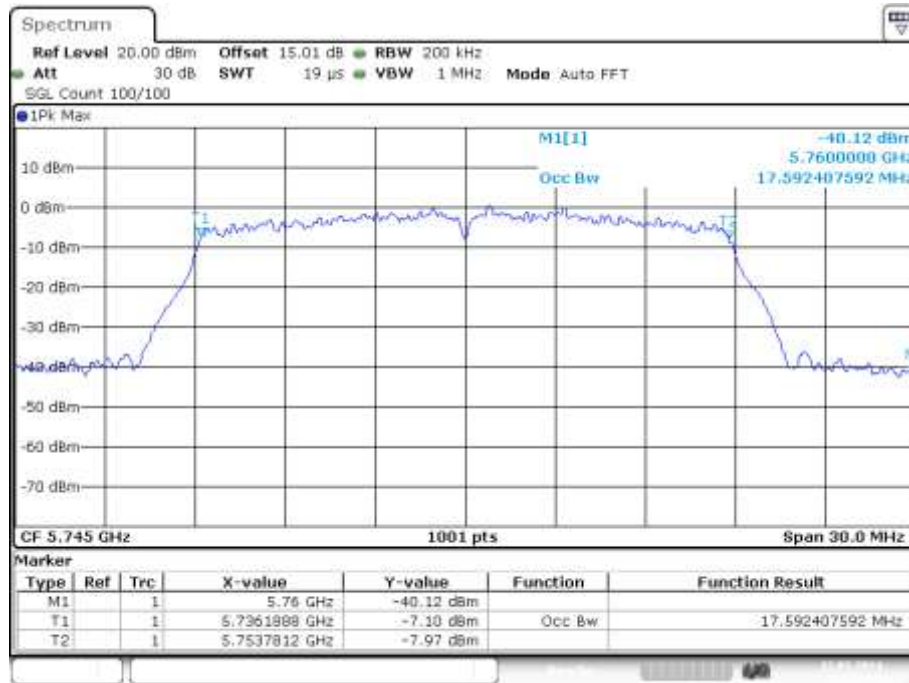
Date: 12.MAR.2024 14:06:37

OBW NVNT a 5825MHz Ant1

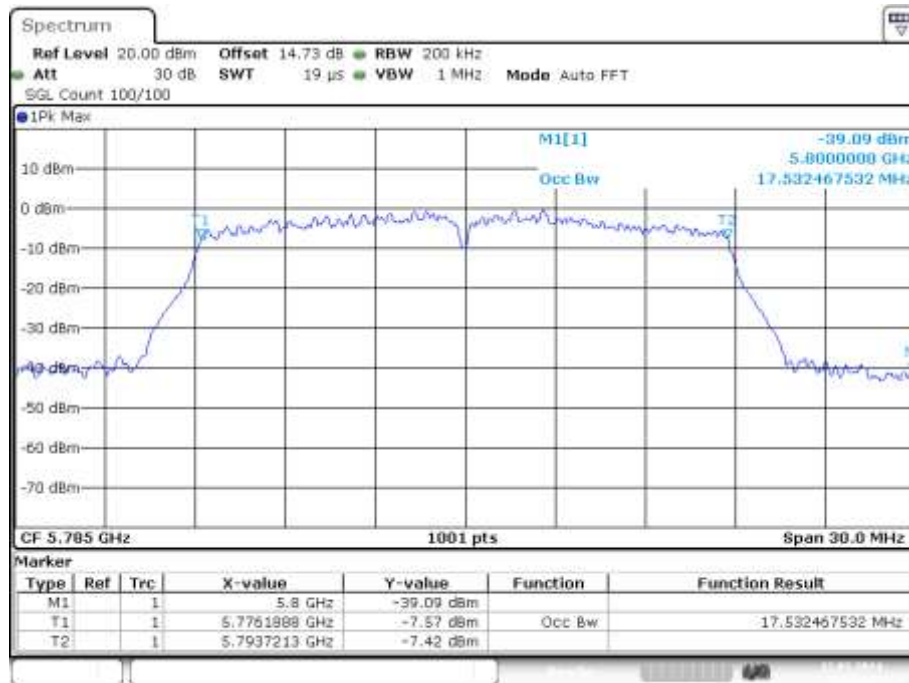


Date: 12.MAR.2024 14:08:48

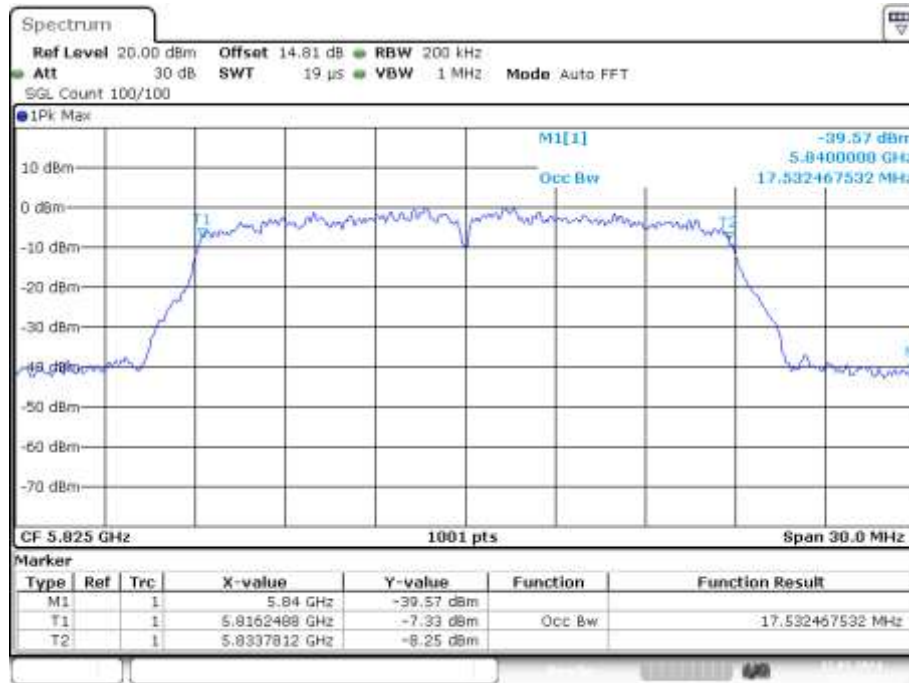
OBW NVNT ac20 5745MHz Ant1



OBW NVNT ac20 5785MHz Ant1

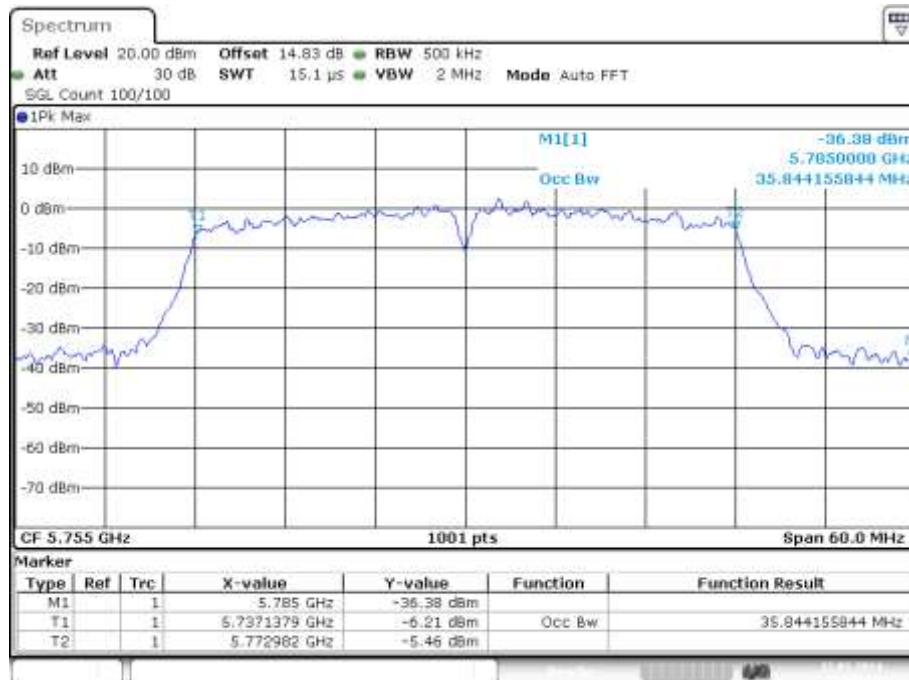


OBW NVNT ac20 5825MHz Ant1



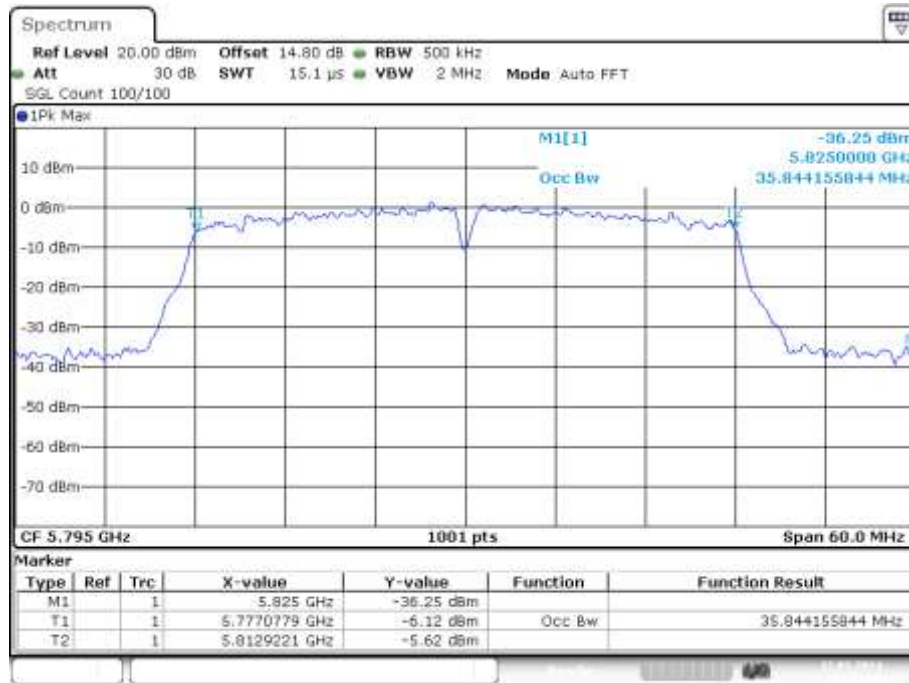
Date: 12.MAR.2024 14:29:11

OBW NVNT ac40 5755MHz Ant1



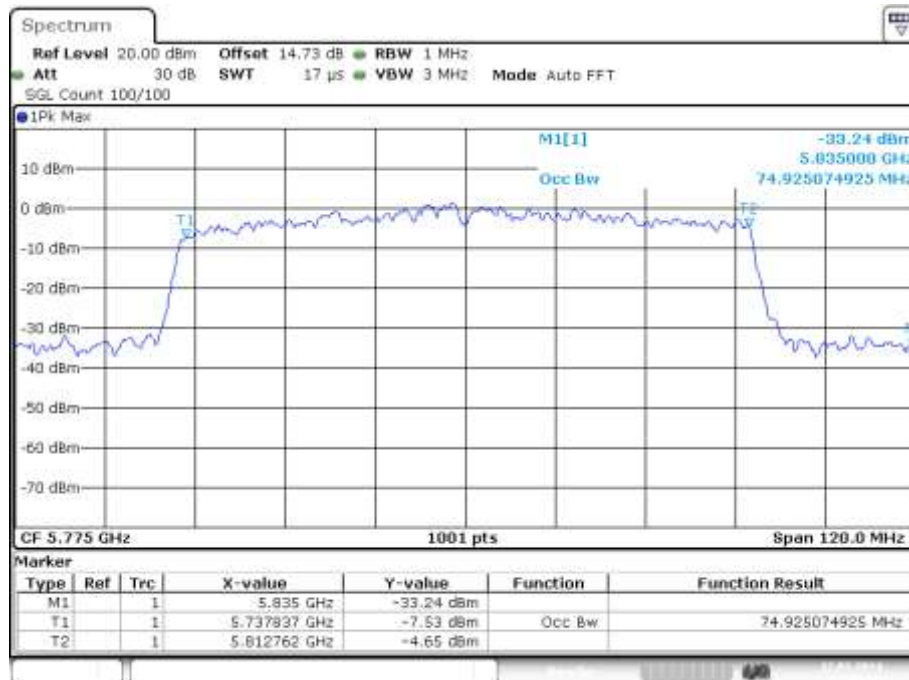
Date: 12.MAR.2024 14:50:13

OBW NVNT ac40 5795MHz Ant1



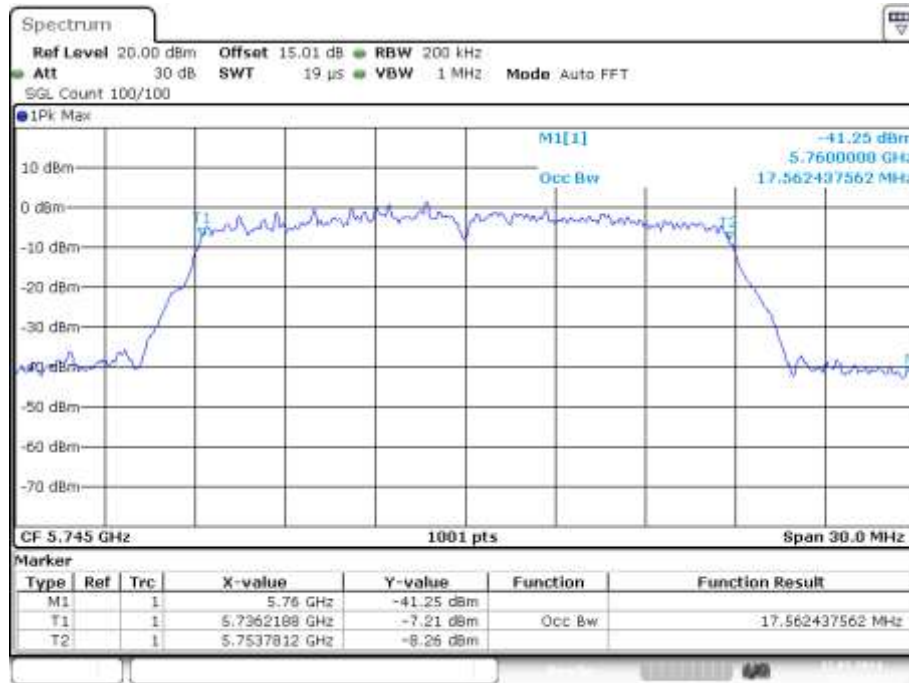
Date: 12.MAR.2024 14:55:38

OBW NVNT ac80 5775MHz Ant1



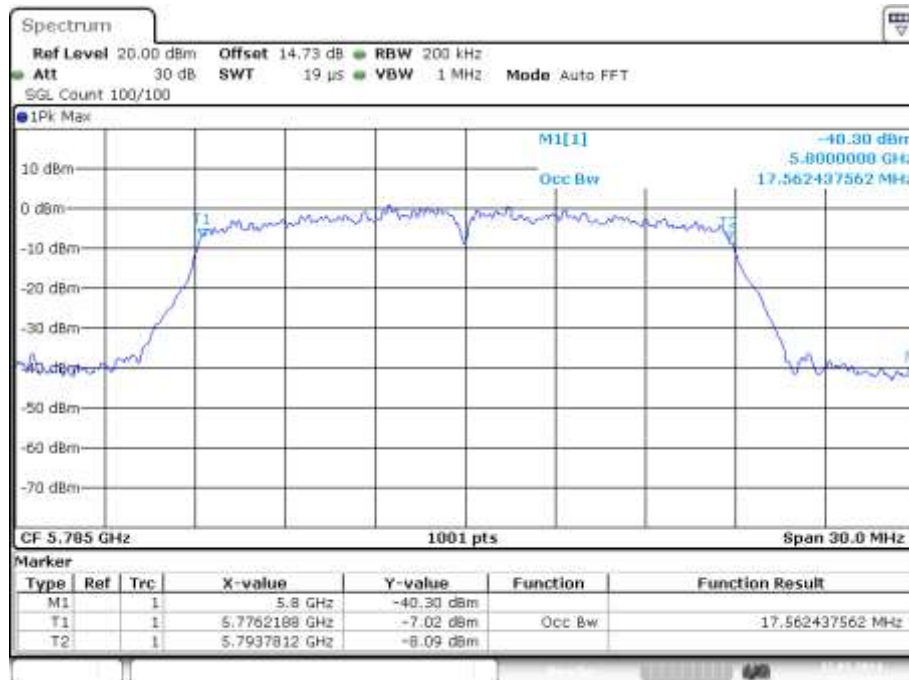
Date: 12.MAR.2024 15:00:11

OBW NVNT n20 5745MHz Ant1



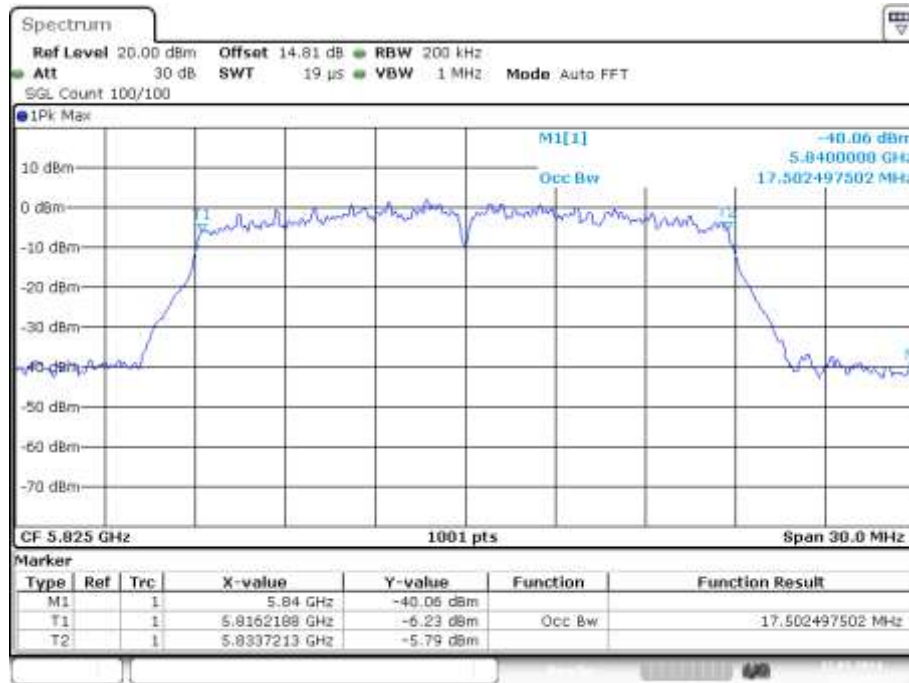
Date: 12.MAR.2024 14:11:52

OBW NVNT n20 5785MHz Ant1



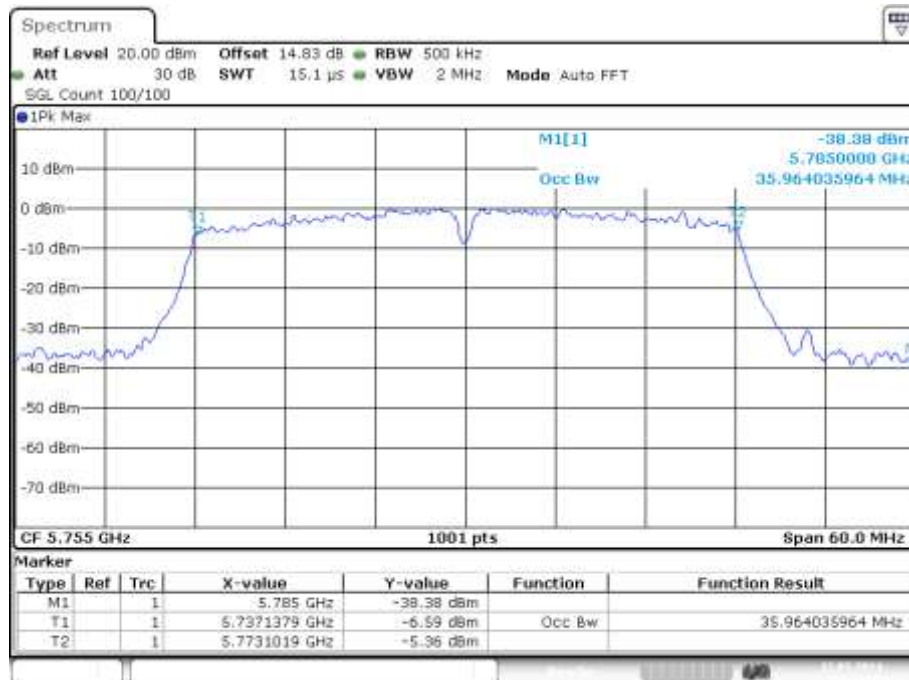
Date: 12.MAR.2024 14:14:35

OBW NVNT n20 5825MHz Ant1



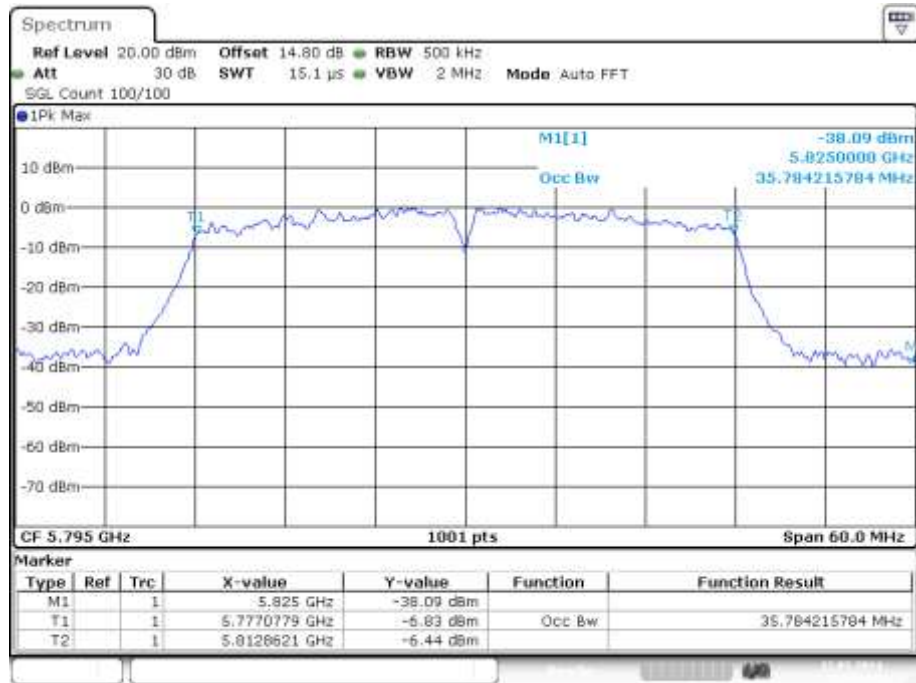
Date: 12.MAR.2024 14:17:03

OBW NVNT n40 5755MHz Ant1



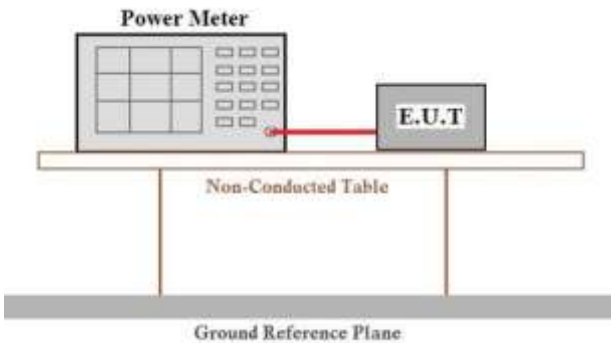
Date: 12.MAR.2024 14:32:39

OBW NVNT n40 5795MHz Ant1



Date: 12.MAR.2024 14:46:49

4.4 Peak Transmit Power

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	FCC Part15 E Section 15.407: For the band 5.15-5.25GHz, 5.25-5.35GHz, 5.50-5.70GHz, 5.47-5.725GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW. For the band 5.725-5.85GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 1W.
Test setup:	 The diagram illustrates the test setup. A 'Power Meter' is connected to an 'E.U.T.' (Equipment Under Test) by a red cable. Both devices are placed on a 'Non-Conducted Table'. The table is supported by two vertical legs. Below the table is a 'Ground Reference Plane'.
Test procedure:	Measurement using an RF average power meter (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle. b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level. c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five. (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section B). (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter. (iv) Adjust the measurement in dBm by adding $10 \log(1/x)$ where x is the duty cycle (e.g., $10 \log(1/0.25)$ if the duty cycle is 25 percent).
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

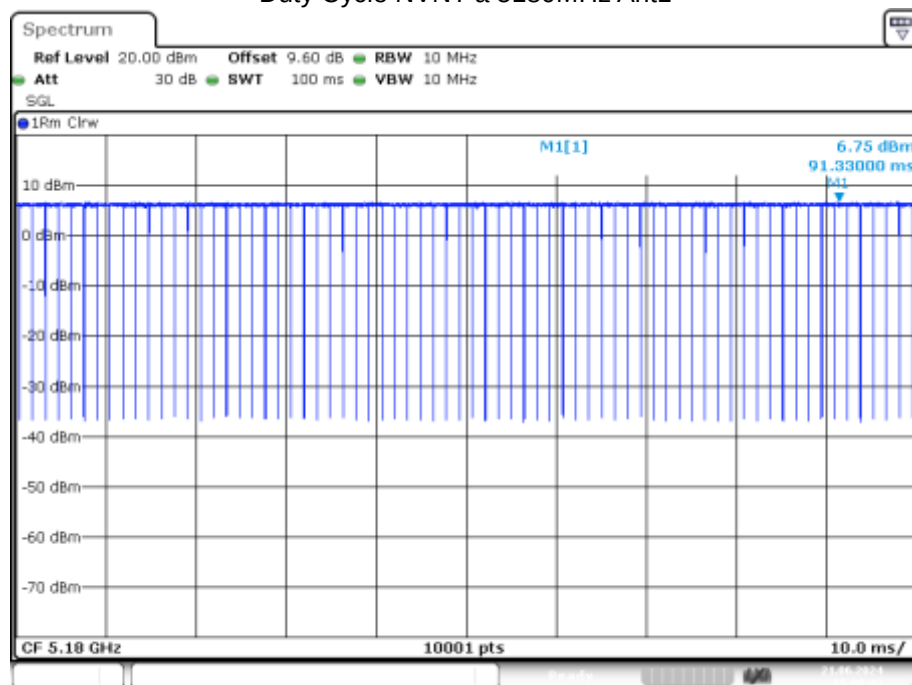
Measurement Data**Band 1 (5150-5250 MHz)**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	EIRP (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	23.046	0.11	19.106	24	Pass
NVNT	a	5200	Ant1	21.967	0.11	18.027	24	Pass
NVNT	a	5240	Ant1	21.404	0.11	17.464	24	Pass
NVNT	ac20	5180	Ant1	21.261	0.12	17.331	24	Pass
NVNT	ac20	5200	Ant1	22.116	0.11	18.176	24	Pass
NVNT	ac20	5240	Ant1	22.559	0.11	18.619	24	Pass
NVNT	ac40	5190	Ant1	22.758	0.23	18.938	24	Pass
NVNT	ac40	5230	Ant1	22.636	0.23	18.816	24	Pass
NVNT	ac80	5210	Ant1	21.480	0.46	17.89	24	Pass
NVNT	n20	5180	Ant1	22.070	0.12	18.14	24	Pass
NVNT	n20	5200	Ant1	22.380	0.11	18.44	24	Pass
NVNT	n20	5240	Ant1	21.995	0.12	18.065	24	Pass
NVNT	n40	5190	Ant1	21.358	0.23	17.538	24	Pass
NVNT	n40	5230	Ant1	21.825	0.23	18.005	24	Pass

Duty Cycle

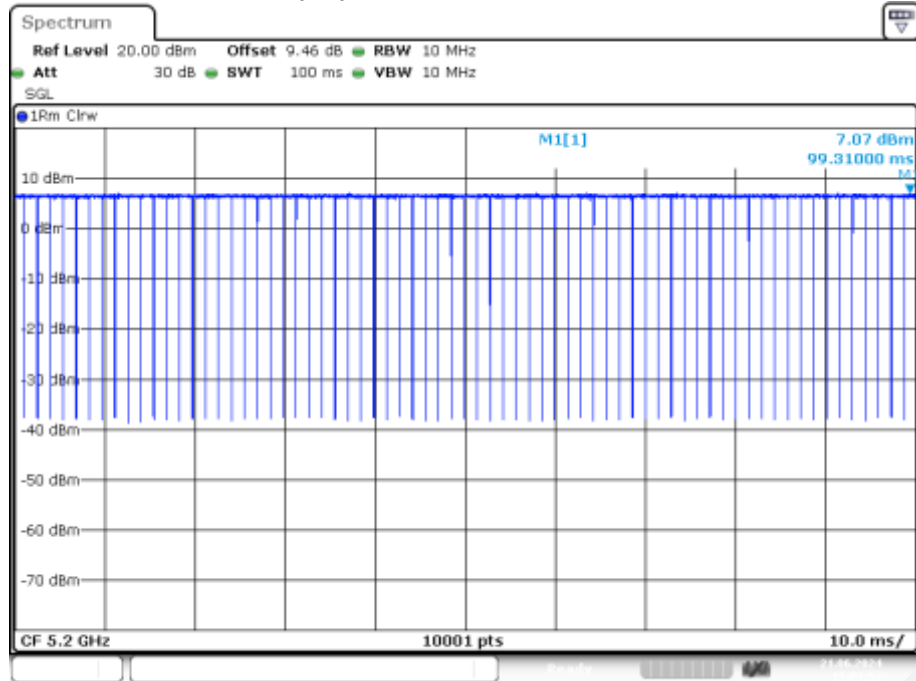
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	97.53	0.11
NVNT	a	5200	Ant1	97.6	0.11
NVNT	a	5240	Ant1	97.58	0.11
NVNT	ac20	5180	Ant1	97.38	0.12
NVNT	ac20	5200	Ant1	97.39	0.11
NVNT	ac20	5240	Ant1	97.44	0.11
NVNT	ac40	5190	Ant1	94.91	0.23
NVNT	ac40	5230	Ant1	94.92	0.23
NVNT	ac80	5210	Ant1	90.02	0.46
NVNT	n20	5180	Ant1	97.34	0.12
NVNT	n20	5200	Ant1	97.42	0.11
NVNT	n20	5240	Ant1	97.38	0.12
NVNT	n40	5190	Ant1	94.87	0.23
NVNT	n40	5230	Ant1	94.87	0.23

Duty Cycle NVNT a 5180MHz Ant1



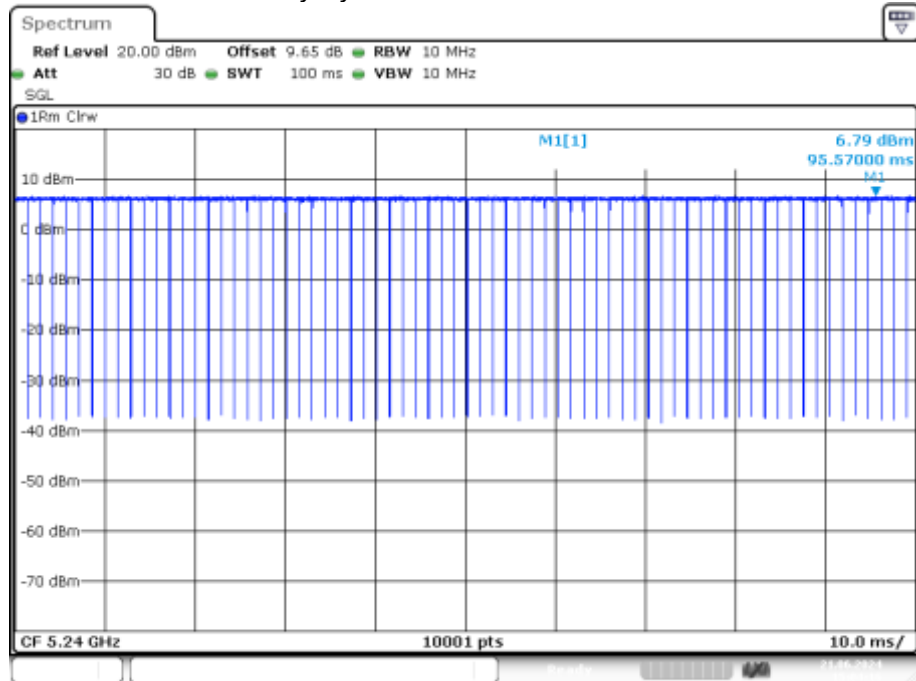
Date: 21 JUN 2024 15:00:43

Duty Cycle NVNT a 5200MHz Ant1



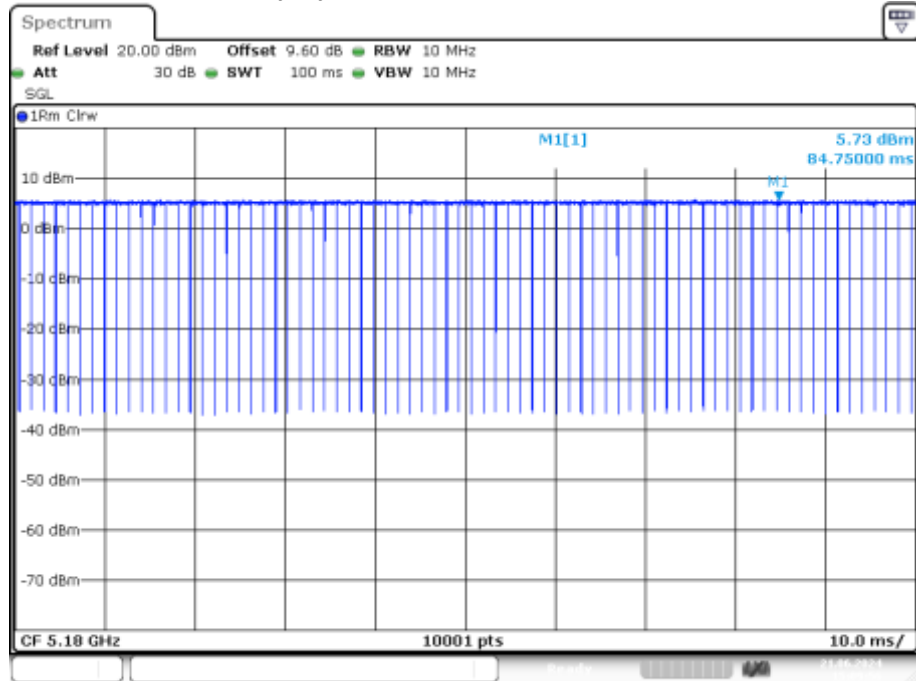
Date: 21.JUN.2024 15:03:51

Duty Cycle NVNT a 5240MHz Ant1



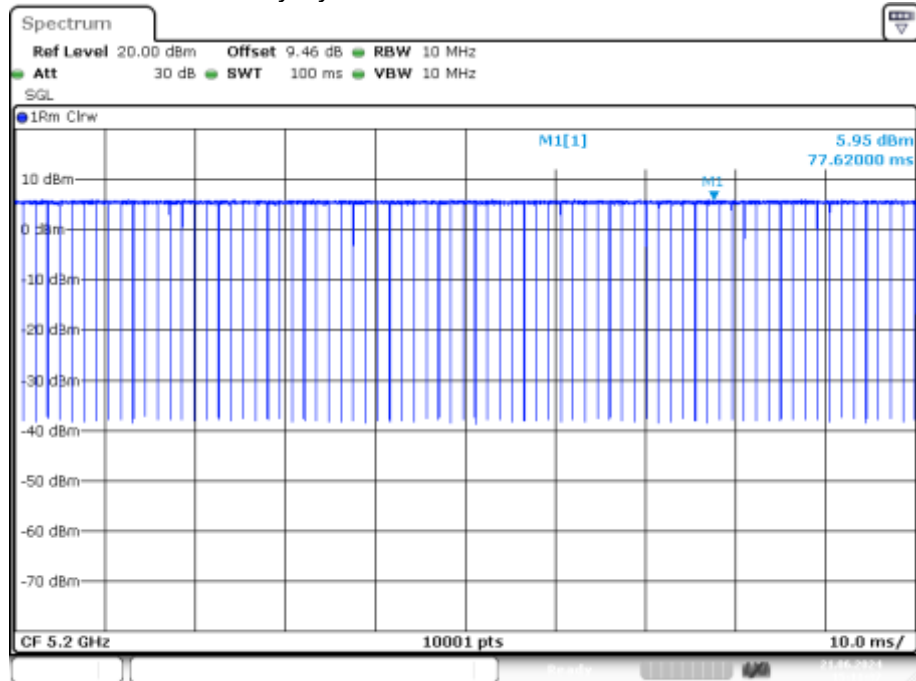
Date: 21.JUN.2024 15:04:16

Duty Cycle NVNT ac20 5180MHz Ant1



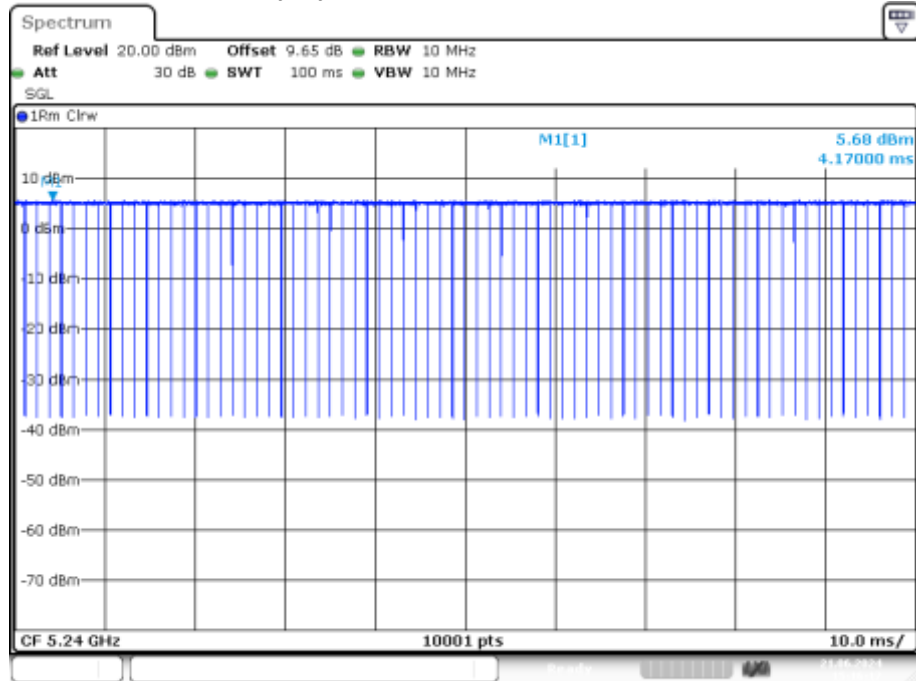
Date: 21.JUN.2024 15:09:56

Duty Cycle NVNT ac20 5200MHz Ant1



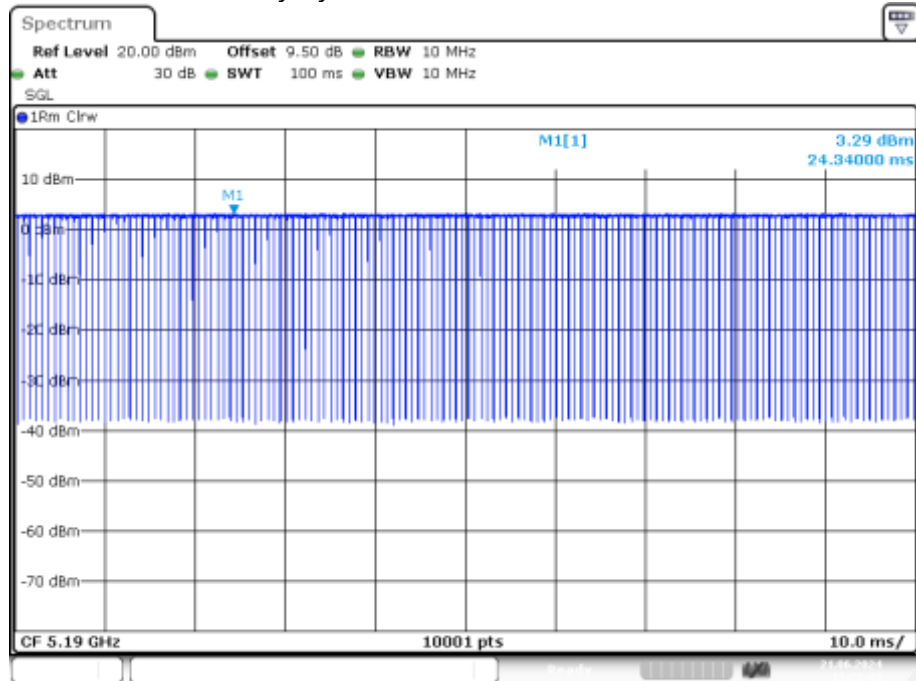
Date: 21.JUN.2024 15:11:38

Duty Cycle NVNT ac20 5240MHz Ant1



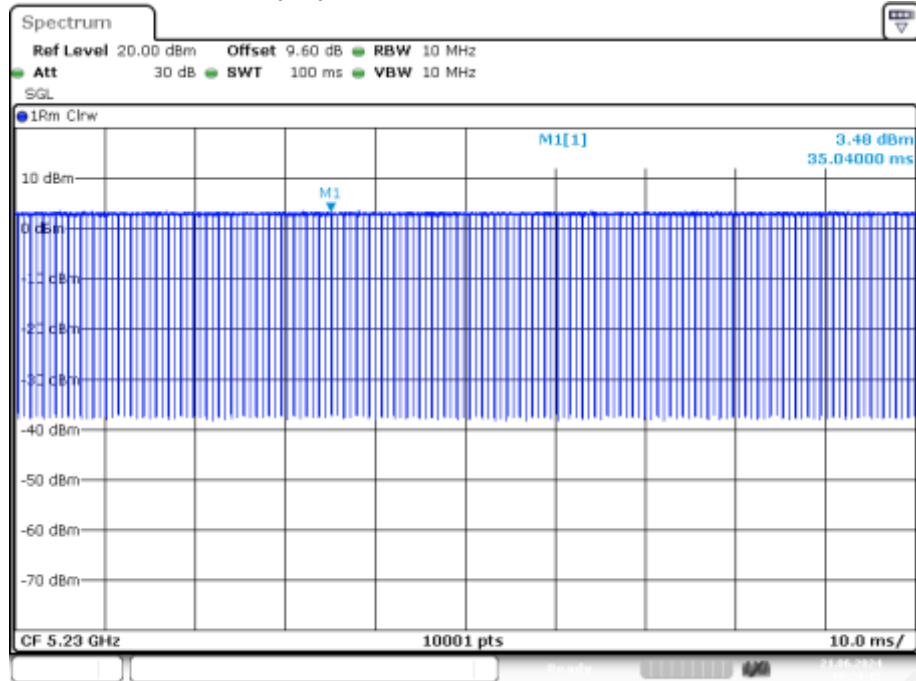
Date: 21.JUN.2024 15:16:17

Duty Cycle NVNT ac40 5190MHz Ant1



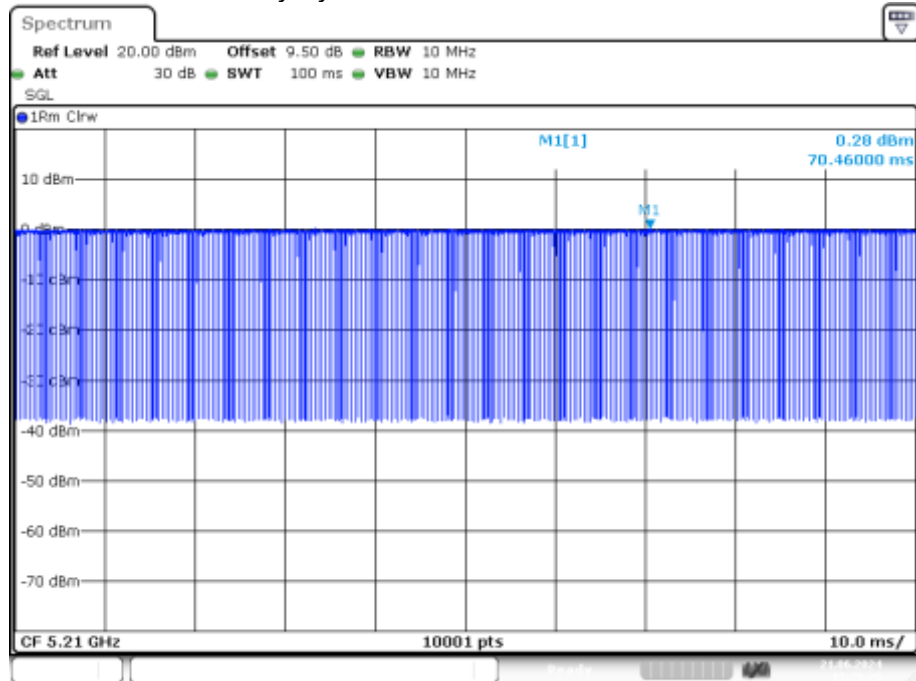
Date: 21.JUN.2024 15:22:43

Duty Cycle NVNT ac40 5230MHz Ant1



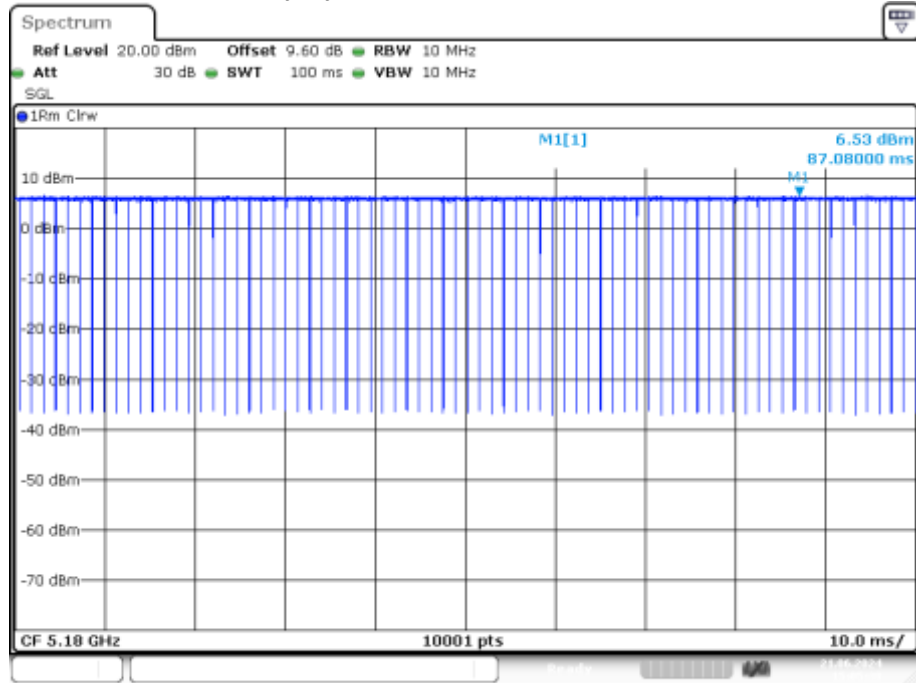
Date: 21.JUN.2024 15:24:13

Duty Cycle NVNT ac80 5210MHz Ant1



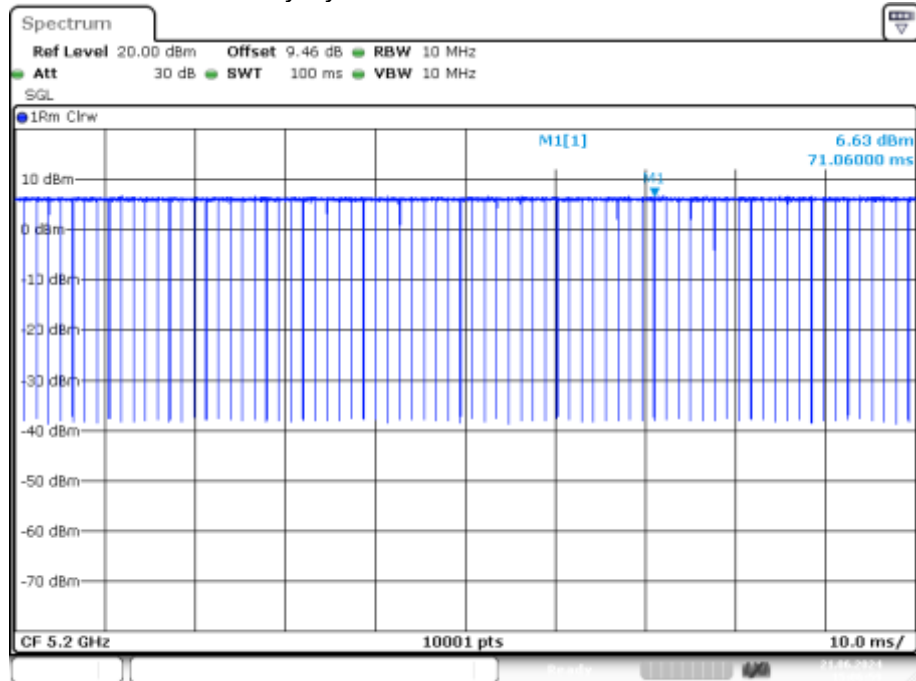
Date: 21.JUN.2024 15:25:26

Duty Cycle NVNT n20 5180MHz Ant1



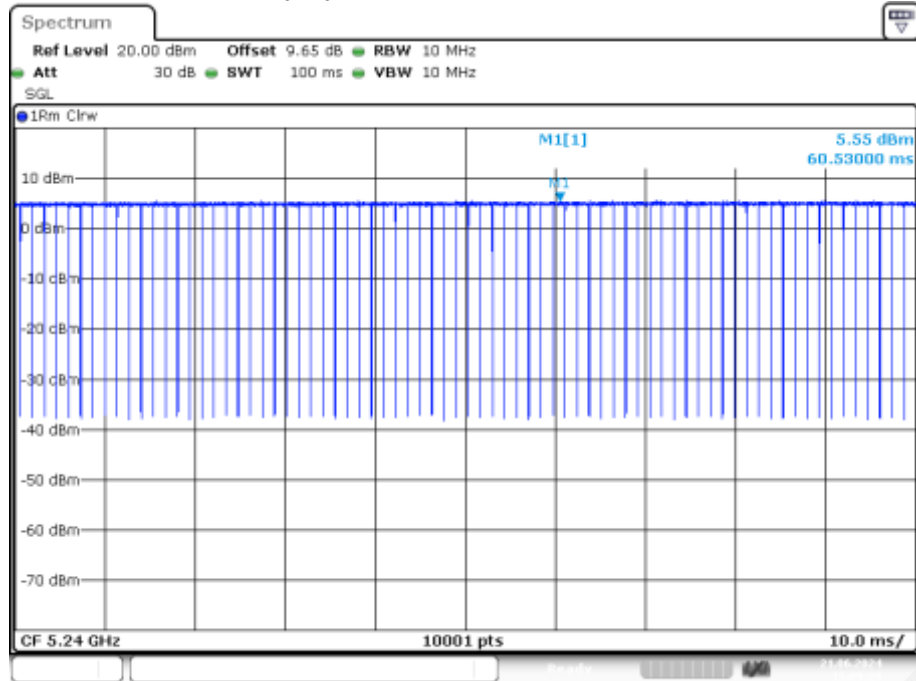
Date: 21.JUN.2024 15:05:37

Duty Cycle NVNT n20 5200MHz Ant1



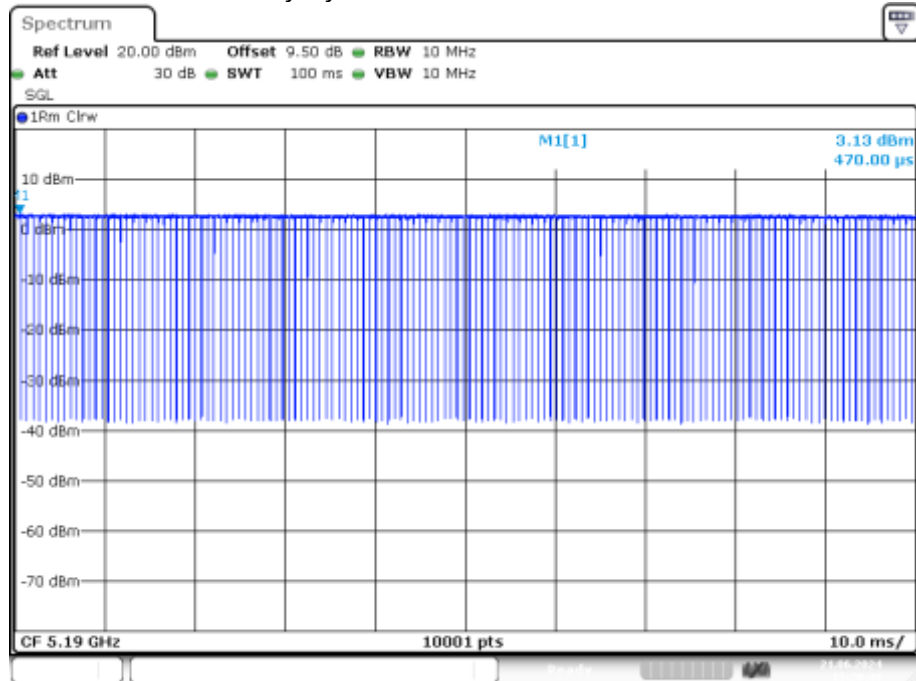
Date: 21.JUN.2024 15:06:59

Duty Cycle NVNT n20 5240MHz Ant1



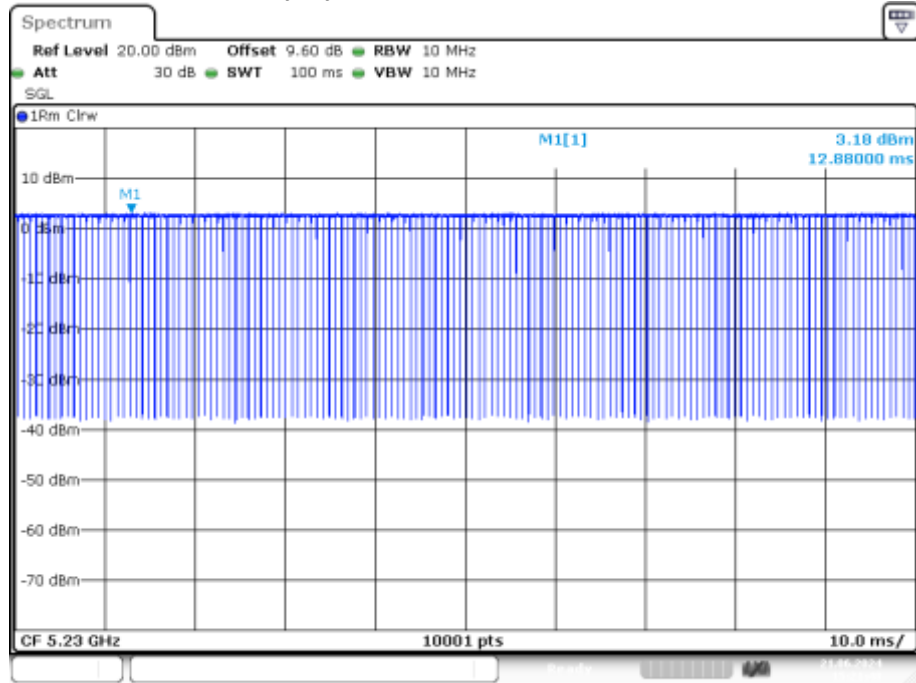
Date: 21.JUN.2024 15:09:29

Duty Cycle NVNT n40 5190MHz Ant1



Date: 21.JUN.2024 15:20:48

Duty Cycle NVNT n40 5230MHz Ant1



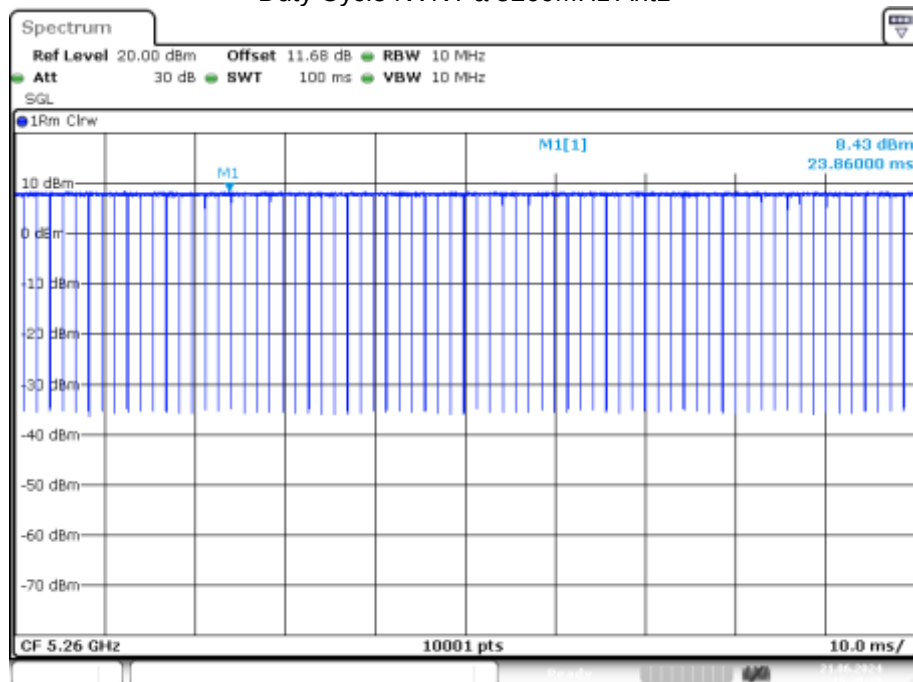
Band 2 (5250 -5350 MHz)

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	EIRP (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	21.612	0.11	17.672	24	Pass
NVNT	a	5280	Ant1	22.001	0.11	18.061	24	Pass
NVNT	a	5320	Ant1	21.384	0.11	17.444	24	Pass
NVNT	ac20	5260	Ant1	21.861	0.11	17.921	24	Pass
NVNT	ac20	5280	Ant1	22.061	0.11	18.121	24	Pass
NVNT	ac20	5320	Ant1	22.184	0.11	18.244	24	Pass
NVNT	ac40	5270	Ant1	21.684	0.22	17.854	24	Pass
NVNT	ac40	5310	Ant1	21.590	0.22	17.76	24	Pass
NVNT	ac80	5290	Ant1	21.129	0.44	17.519	24	Pass
NVNT	n20	5260	Ant1	21.884	0.11	17.944	24	Pass
NVNT	n20	5280	Ant1	21.377	0.12	17.447	24	Pass
NVNT	n20	5320	Ant1	22.255	0.11	18.315	24	Pass
NVNT	n40	5270	Ant1	21.748	0.23	17.928	24	Pass
NVNT	n40	5310	Ant1	21.708	0.22	17.878	24	Pass

Duty Cycle

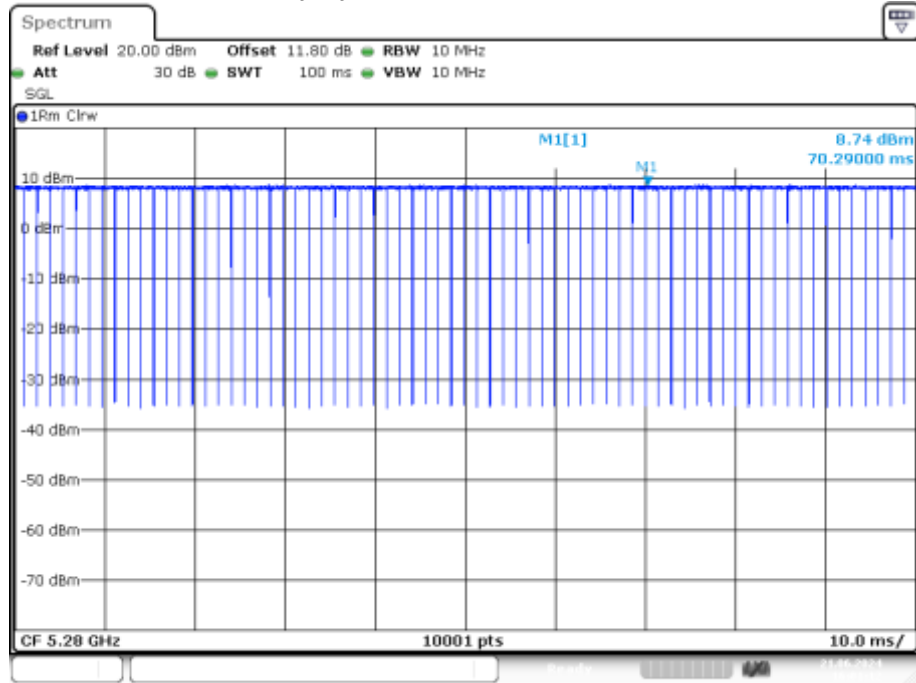
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5260	Ant1	97.58	0.11
NVNT	a	5280	Ant1	97.6	0.11
NVNT	a	5320	Ant1	97.54	0.11
NVNT	ac20	5260	Ant1	97.4	0.11
NVNT	ac20	5280	Ant1	97.42	0.11
NVNT	ac20	5320	Ant1	97.43	0.11
NVNT	ac40	5270	Ant1	95.02	0.22
NVNT	ac40	5310	Ant1	94.99	0.22
NVNT	ac80	5290	Ant1	90.36	0.44
NVNT	n20	5260	Ant1	97.4	0.11
NVNT	n20	5280	Ant1	97.38	0.12
NVNT	n20	5320	Ant1	97.41	0.11
NVNT	n40	5270	Ant1	94.95	0.23
NVNT	n40	5310	Ant1	95	0.22

Duty Cycle NVNT a 5260MHz Ant1



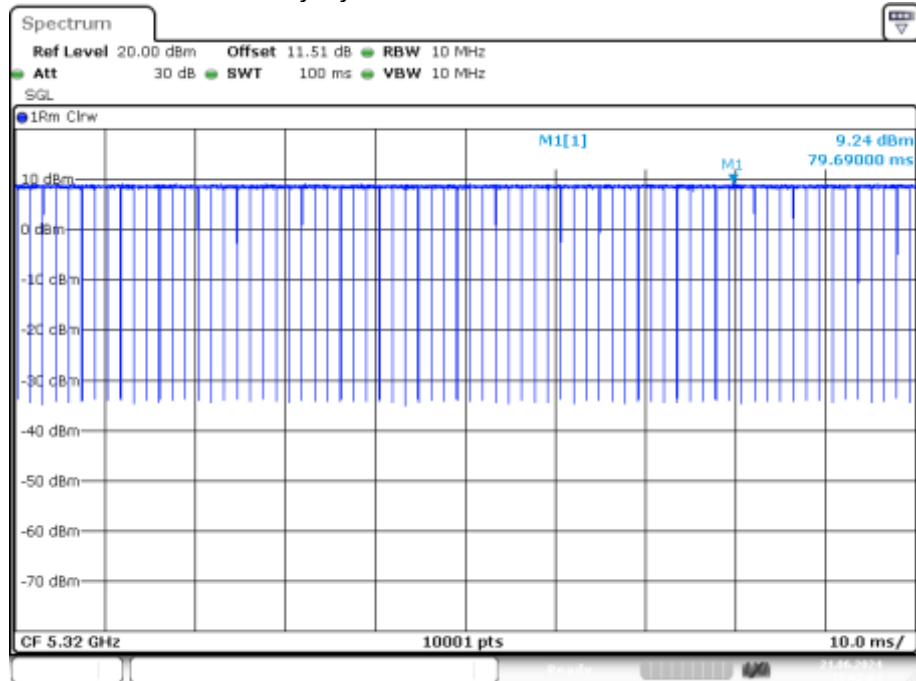
Date: 21.JUN.2024 15:30:20

Duty Cycle NVNT a 5280MHz Ant1



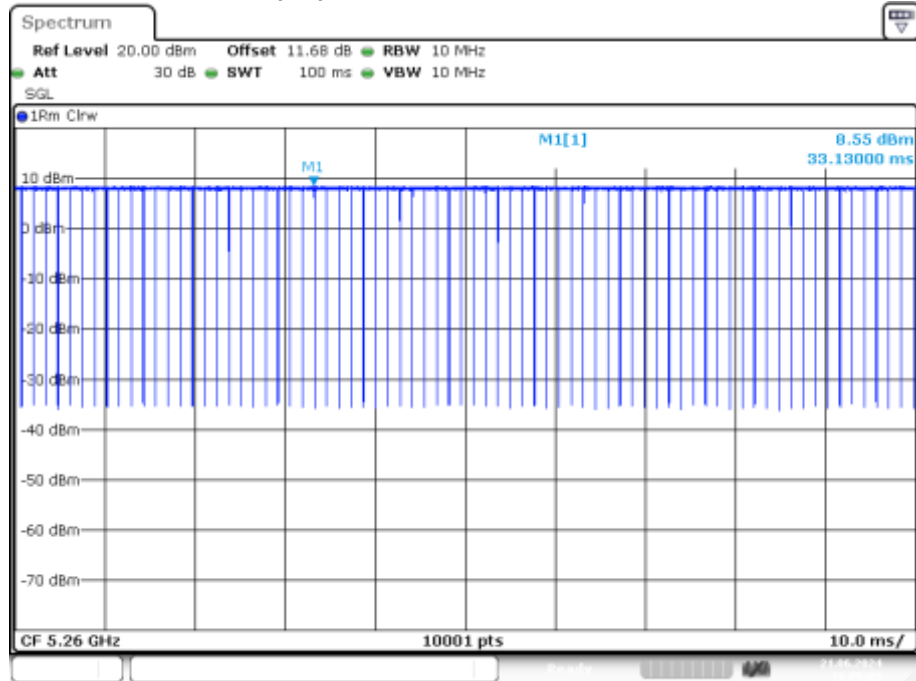
Date: 21.JUN.2024 16:01:11

Duty Cycle NVNT a 5320MHz Ant1



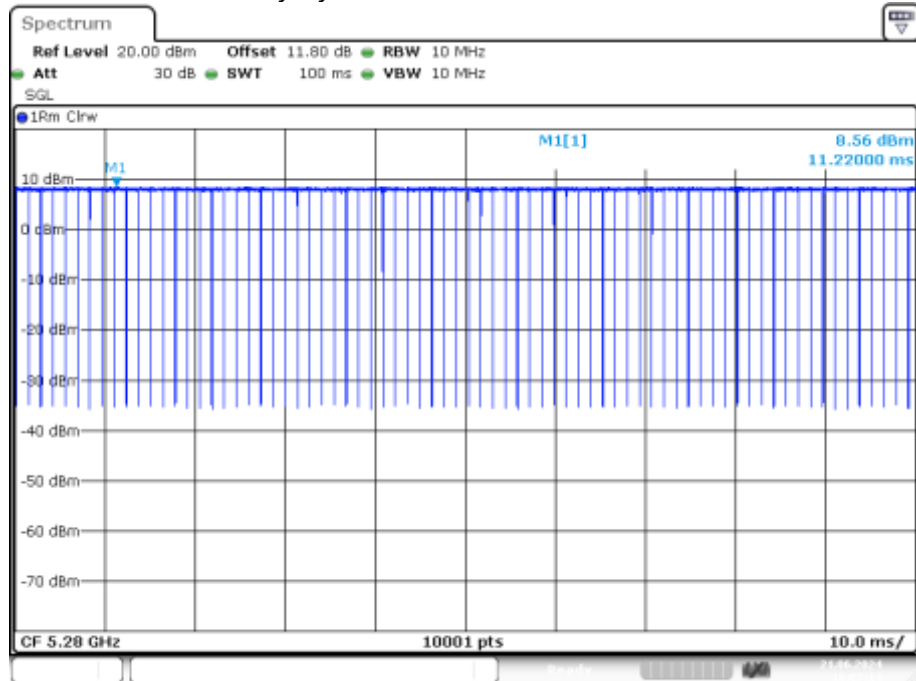
Date: 21.JUN.2024 16:02:03

Duty Cycle NVNT ac20 5260MHz Ant1



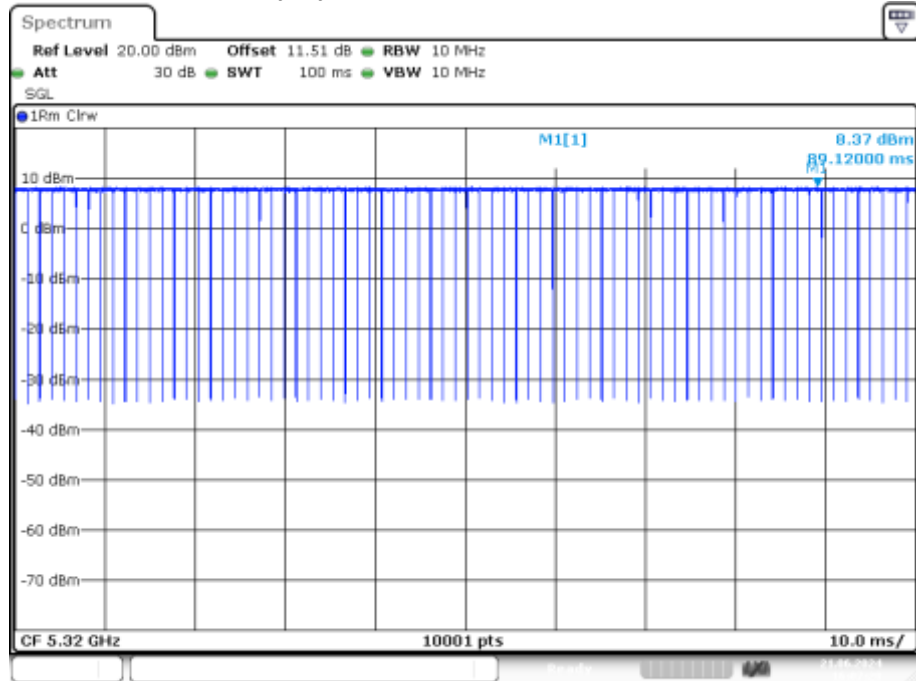
Date: 21.JUN.2024 16:06:06

Duty Cycle NVNT ac20 5280MHz Ant1



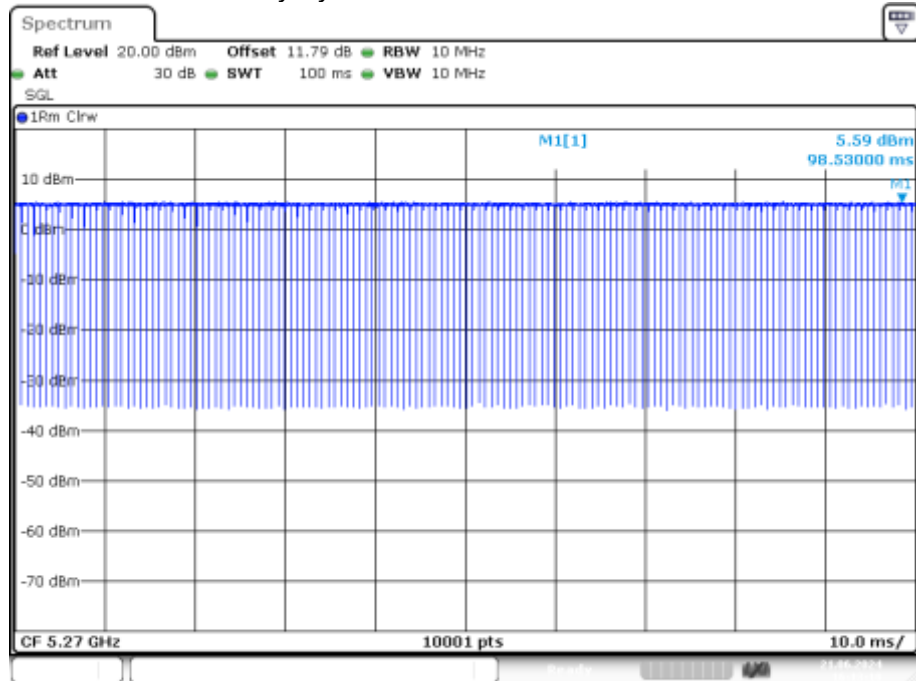
Date: 21.JUN.2024 16:07:15

Duty Cycle NVNT ac20 5320MHz Ant1



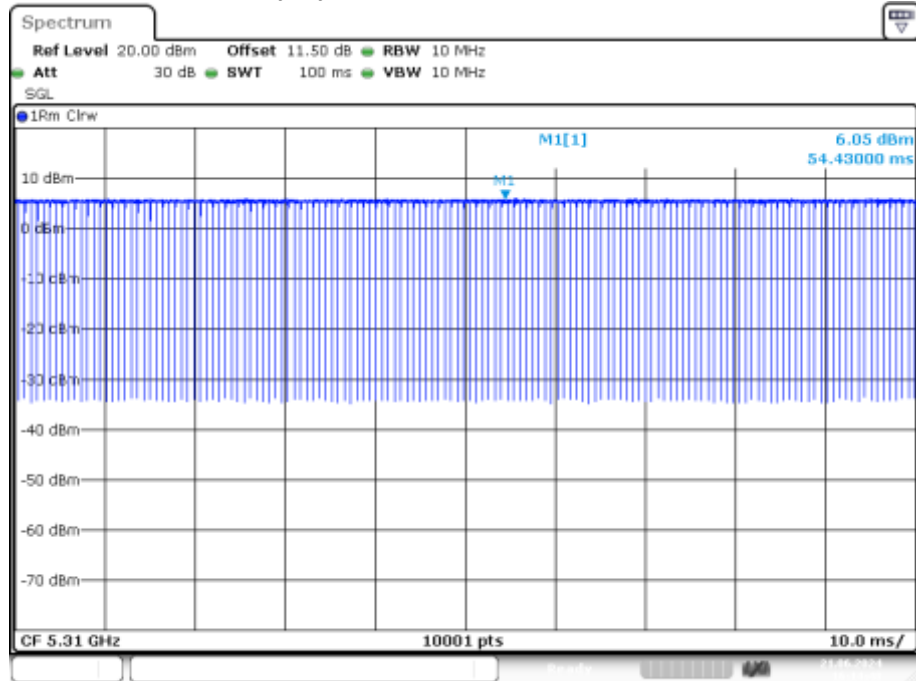
Date: 21.JUN.2024 16:07:28

Duty Cycle NVNT ac40 5270MHz Ant1



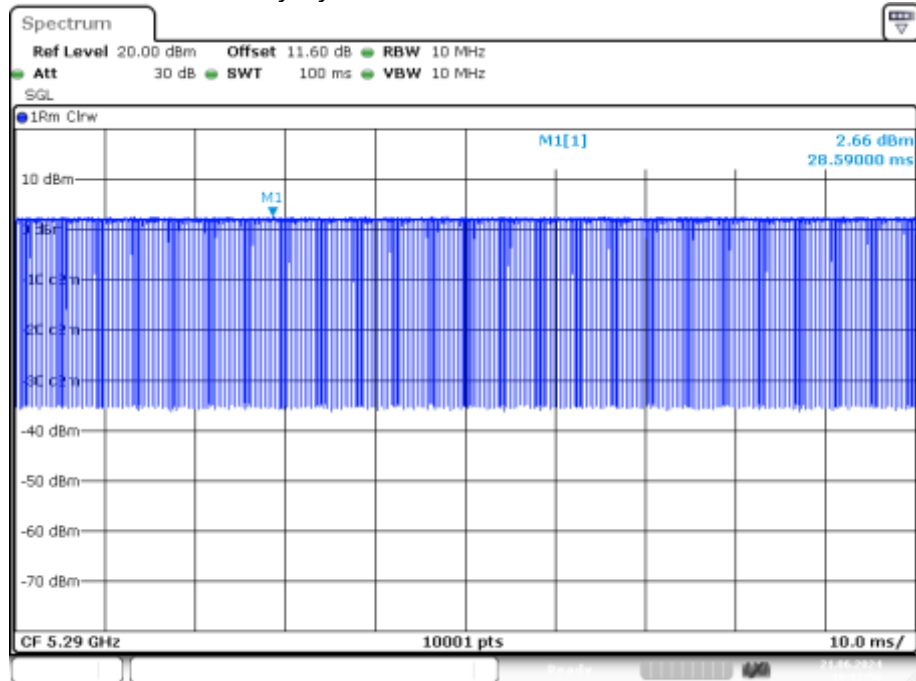
Date: 21.JUN.2024 16:13:09

Duty Cycle NVNT ac40 5310MHz Ant1



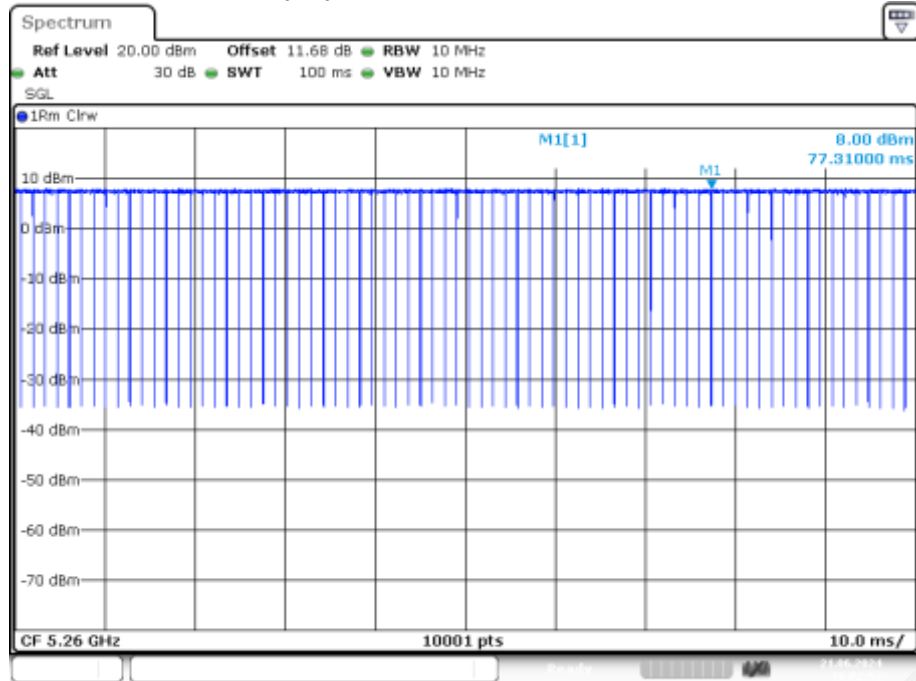
Date: 21.JUN.2024 16:14:47

Duty Cycle NVNT ac80 5290MHz Ant1



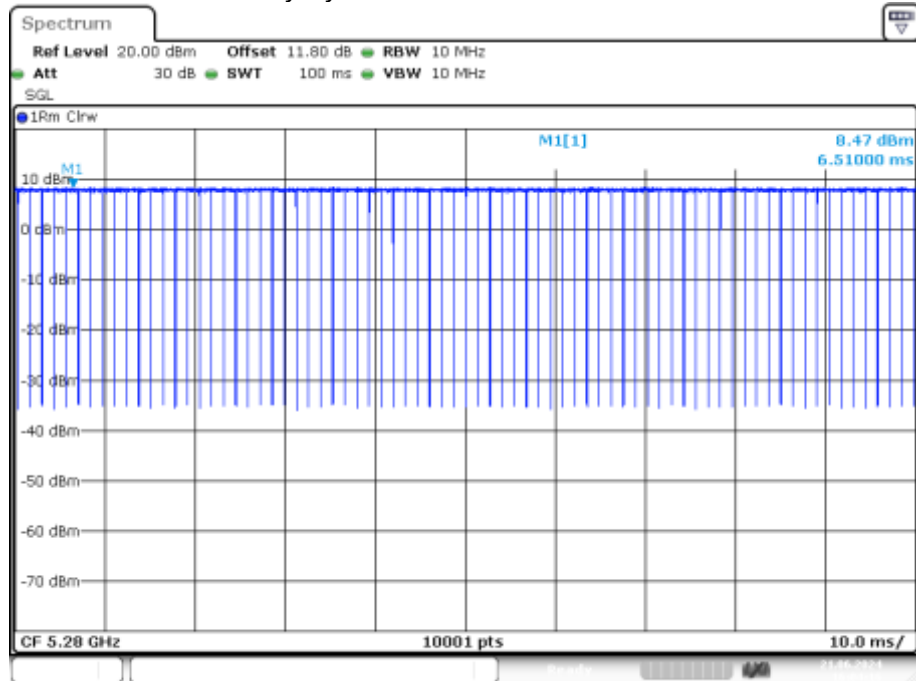
Date: 21.JUN.2024 16:17:56

Duty Cycle NVNT n20 5260MHz Ant1



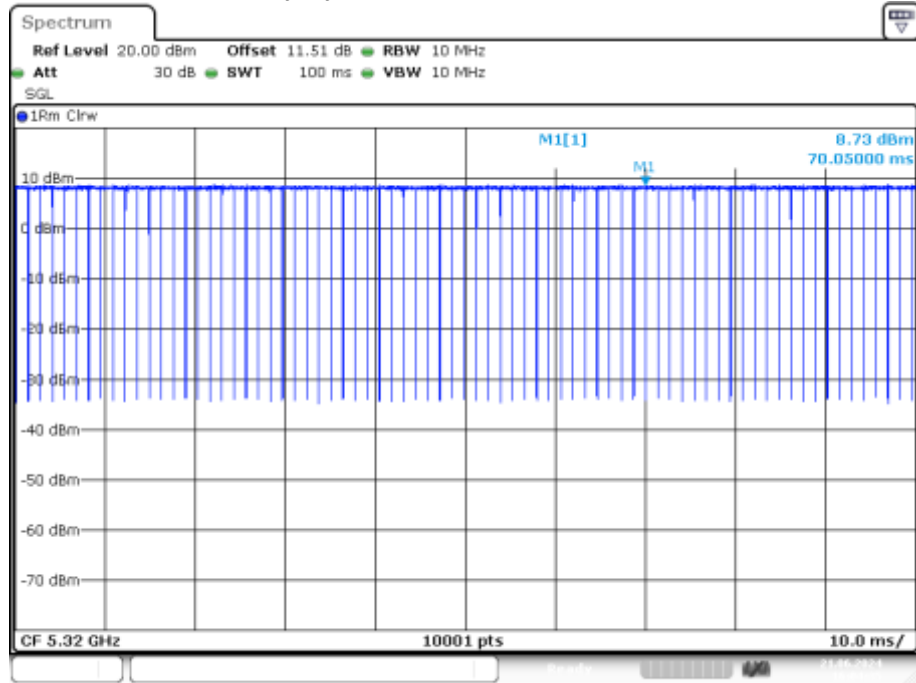
Date: 21.JUN.2024 16:02:52

Duty Cycle NVNT n20 5280MHz Ant1



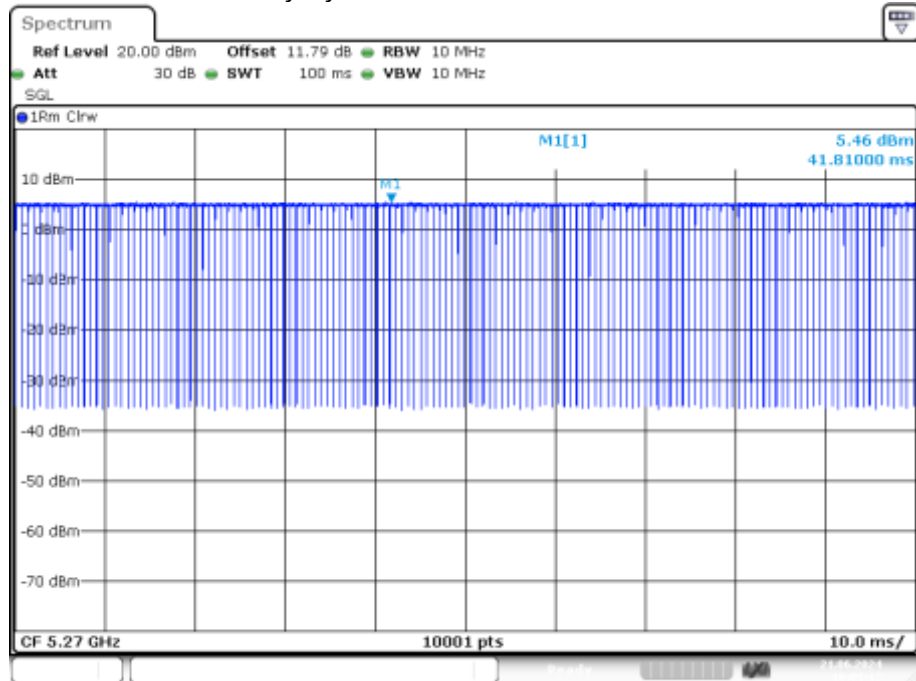
Date: 21.JUN.2024 16:04:16

Duty Cycle NVNT n20 5320MHz Ant1



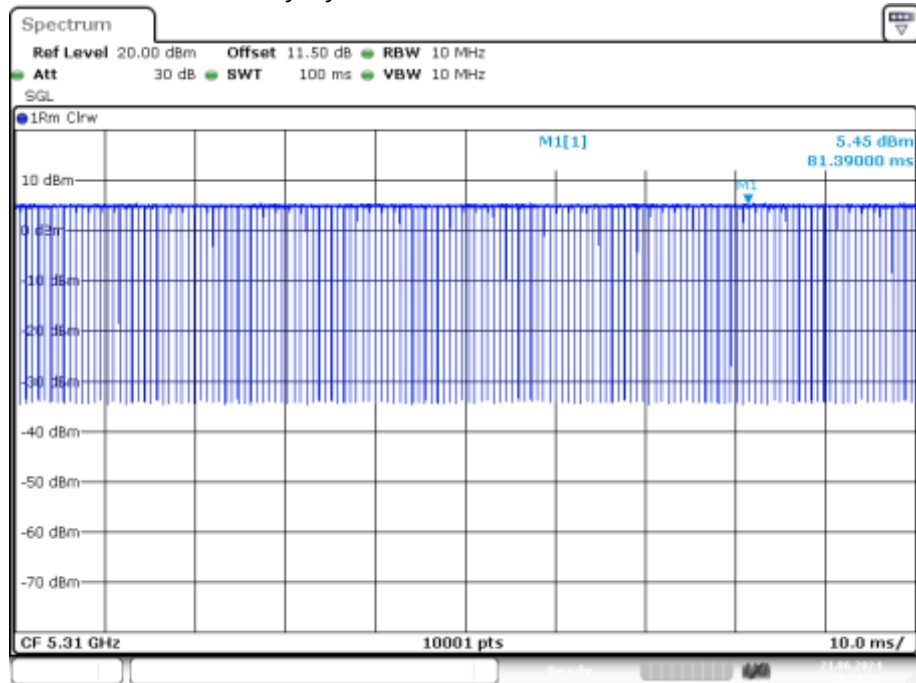
Date: 21.JUN.2024 16:04:35

Duty Cycle NVNT n40 5270MHz Ant1



Date: 21.JUN.2024 16:09:13

Duty Cycle NVNT n40 5310MHz Ant1



Date: 21.JUN.2024 16:10:28

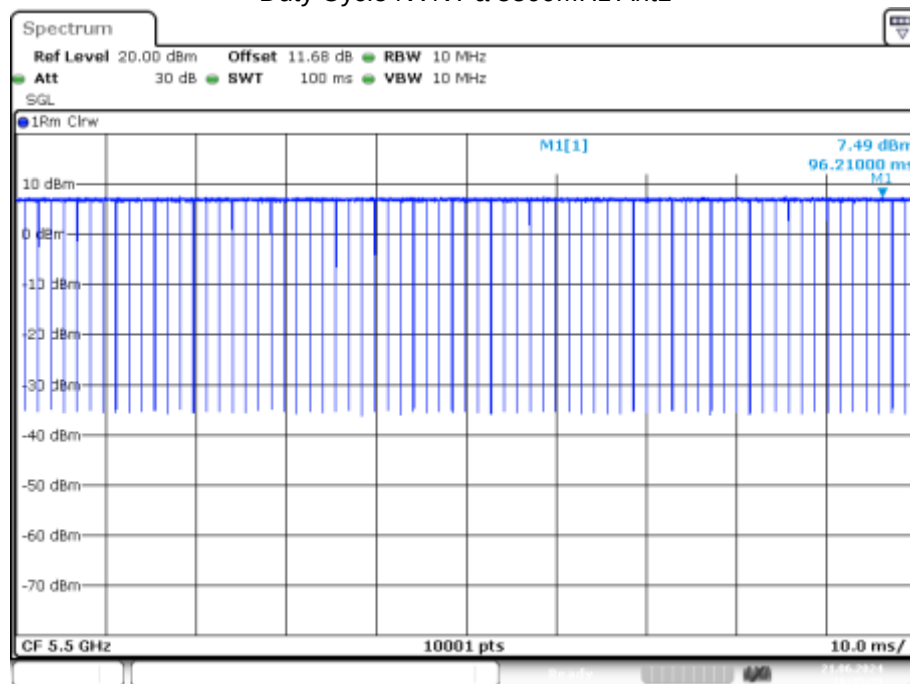
Band 3 (5500 – 5700 MHz)

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	22.444	0.11	18.504	24	Pass
NVNT	a	5580	Ant1	22.173	0.11	18.233	24	Pass
NVNT	a	5700	Ant1	22.653	0.11	18.713	24	Pass
NVNT	ac20	5500	Ant1	21.772	0.11	17.832	24	Pass
NVNT	ac20	5580	Ant1	21.564	0.11	17.624	24	Pass
NVNT	ac20	5700	Ant1	22.259	0.11	18.319	24	Pass
NVNT	ac40	5510	Ant1	22.094	0.23	18.274	24	Pass
NVNT	ac40	5670	Ant1	22.410	0.23	18.59	24	Pass
NVNT	ac80	5530	Ant1	22.294	0.45	18.694	24	Pass
NVNT	n20	5500	Ant1	21.495	0.11	17.555	24	Pass
NVNT	n20	5580	Ant1	21.464	0.11	17.524	24	Pass
NVNT	n20	5700	Ant1	21.412	0.12	17.482	24	Pass
NVNT	n40	5510	Ant1	22.368	0.22	18.538	24	Pass
NVNT	n40	5670	Ant1	22.709	0.22	18.879	24	Pass

Duty Cycle

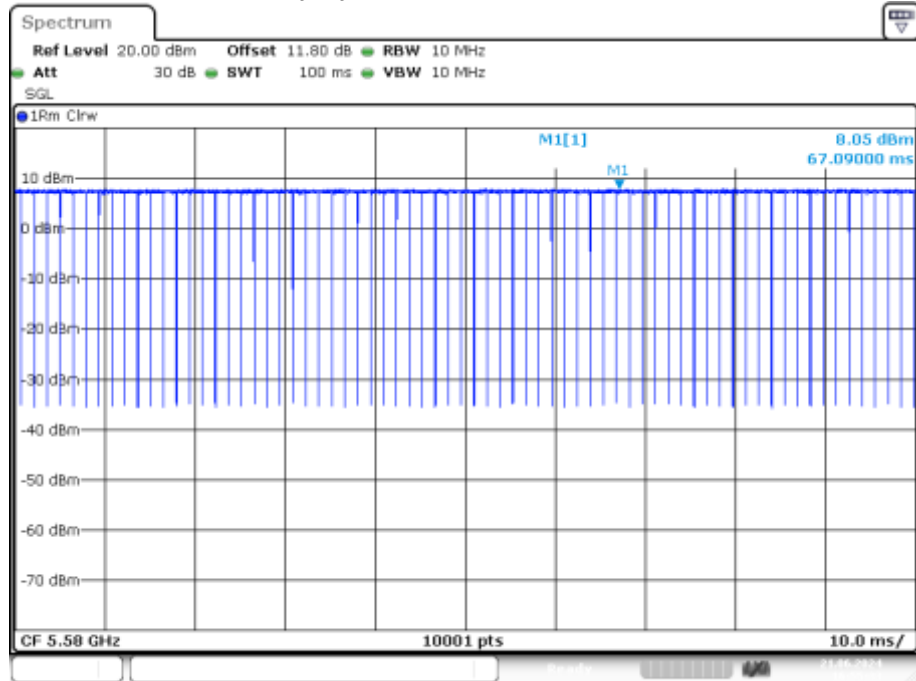
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5500	Ant1	97.6	0.11
NVNT	a	5580	Ant1	97.55	0.11
NVNT	a	5700	Ant1	97.55	0.11
NVNT	ac20	5500	Ant1	97.42	0.11
NVNT	ac20	5580	Ant1	97.44	0.11
NVNT	ac20	5700	Ant1	97.46	0.11
NVNT	ac40	5510	Ant1	94.94	0.23
NVNT	ac40	5670	Ant1	94.95	0.23
NVNT	ac80	5530	Ant1	90.24	0.45
NVNT	n20	5500	Ant1	97.42	0.11
NVNT	n20	5580	Ant1	97.4	0.11
NVNT	n20	5700	Ant1	97.38	0.12
NVNT	n40	5510	Ant1	94.96	0.22
NVNT	n40	5670	Ant1	94.96	0.22

Duty Cycle NVNT a 5500MHz Ant1



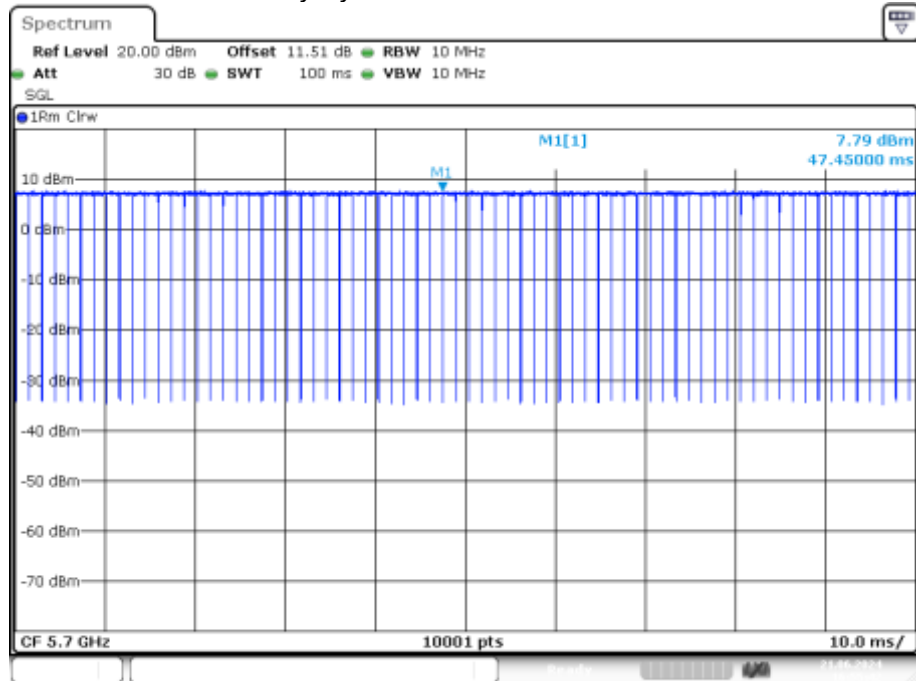
Date: 21.JUN.2024 16:55:19

Duty Cycle NVNT a 5580MHz Ant1



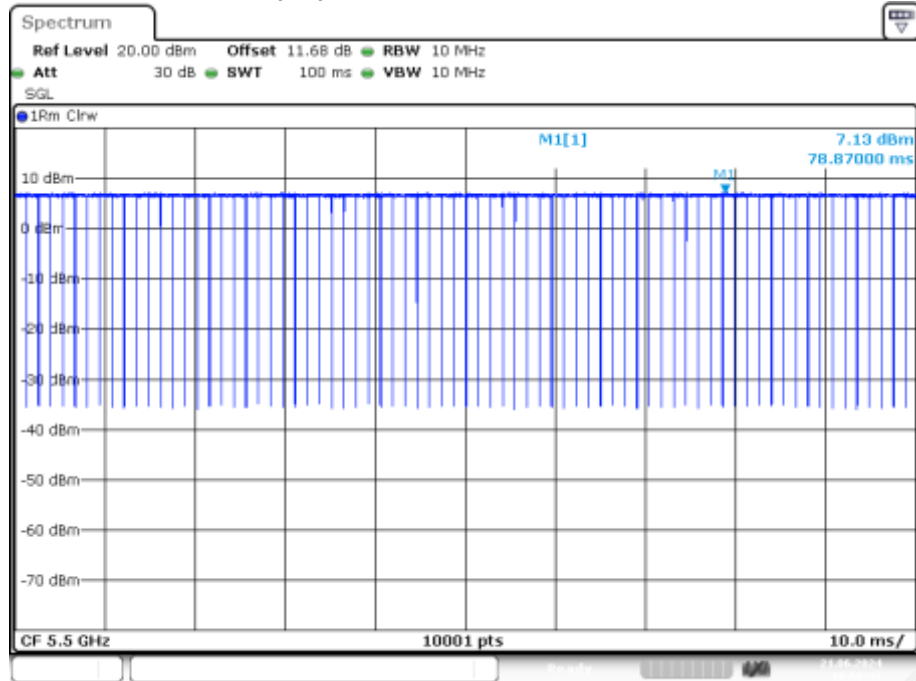
Date: 21.JUN.2024 16:55:33

Duty Cycle NVNT a 5700MHz Ant1



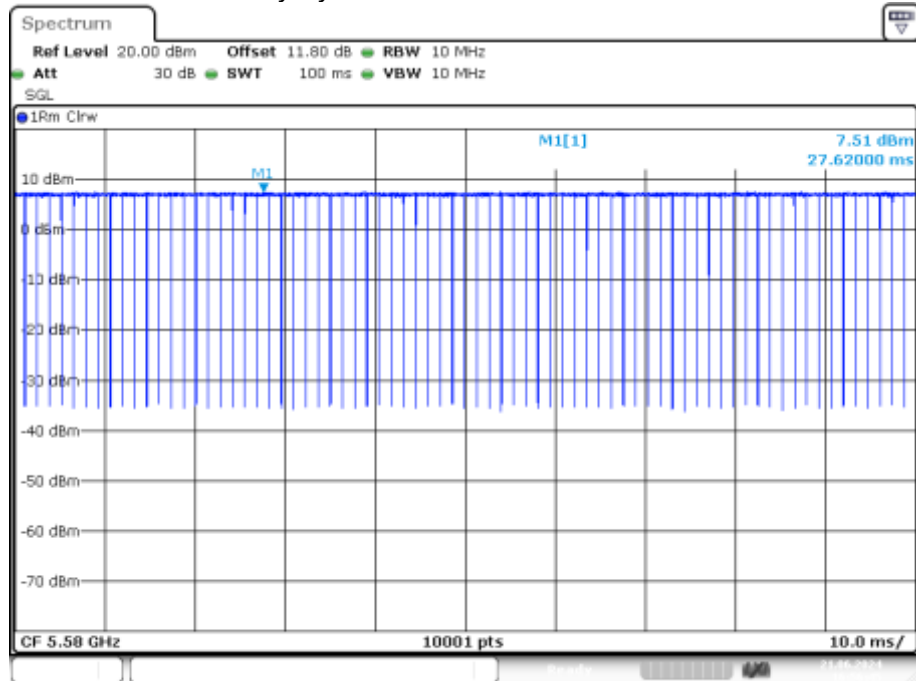
Date: 21.JUN.2024 16:55:42

Duty Cycle NVNT ac20 5500MHz Ant1



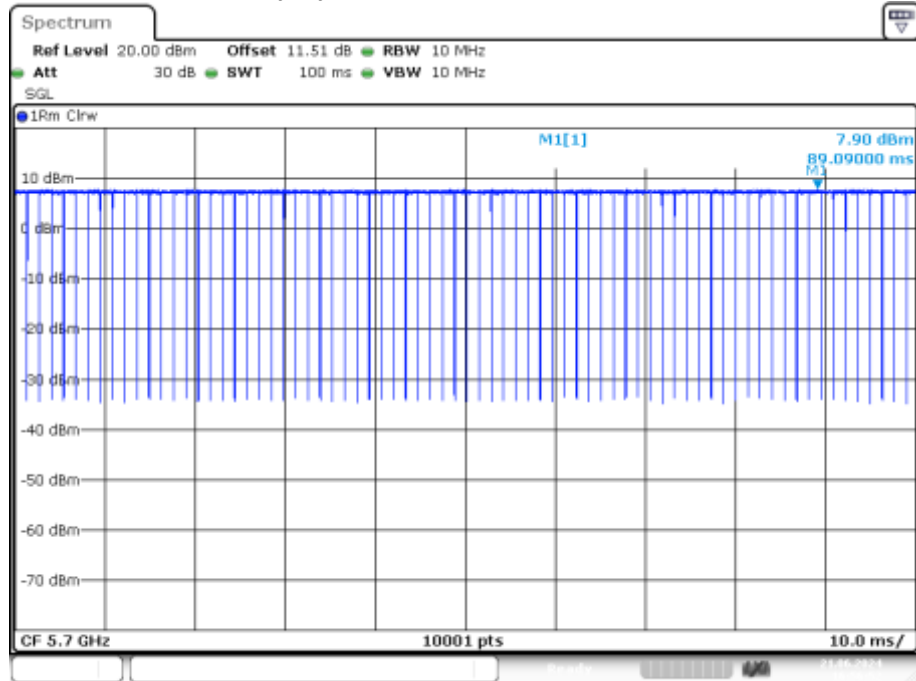
Date: 21.JUN.2024 16:56:37

Duty Cycle NVNT ac20 5580MHz Ant1



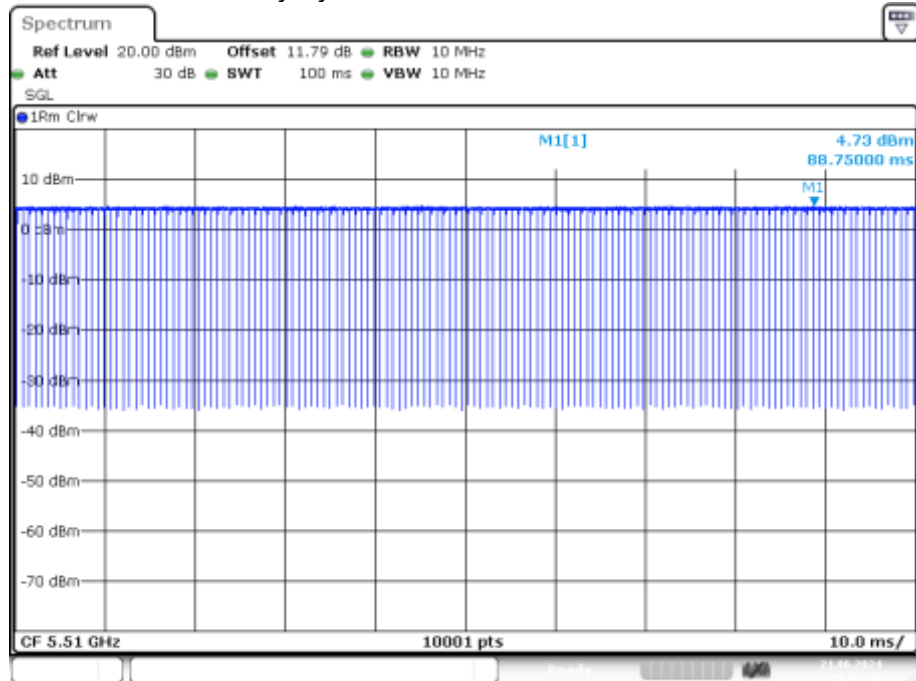
Date: 21.JUN.2024 16:56:45

Duty Cycle NVNT ac20 5700MHz Ant1



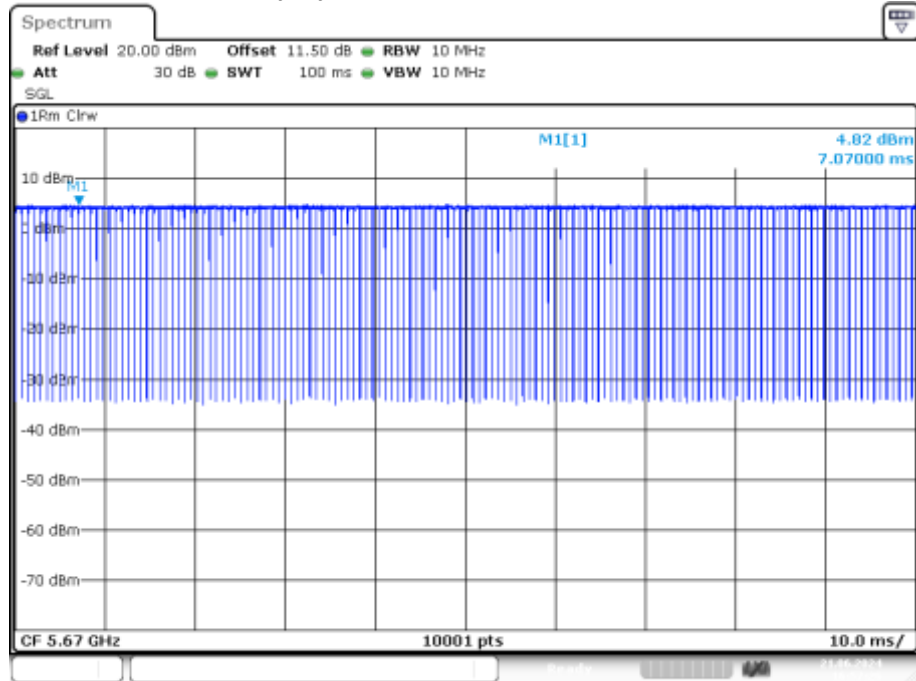
Date: 21.JUN.2024 16:56:52

Duty Cycle NVNT ac40 5510MHz Ant1



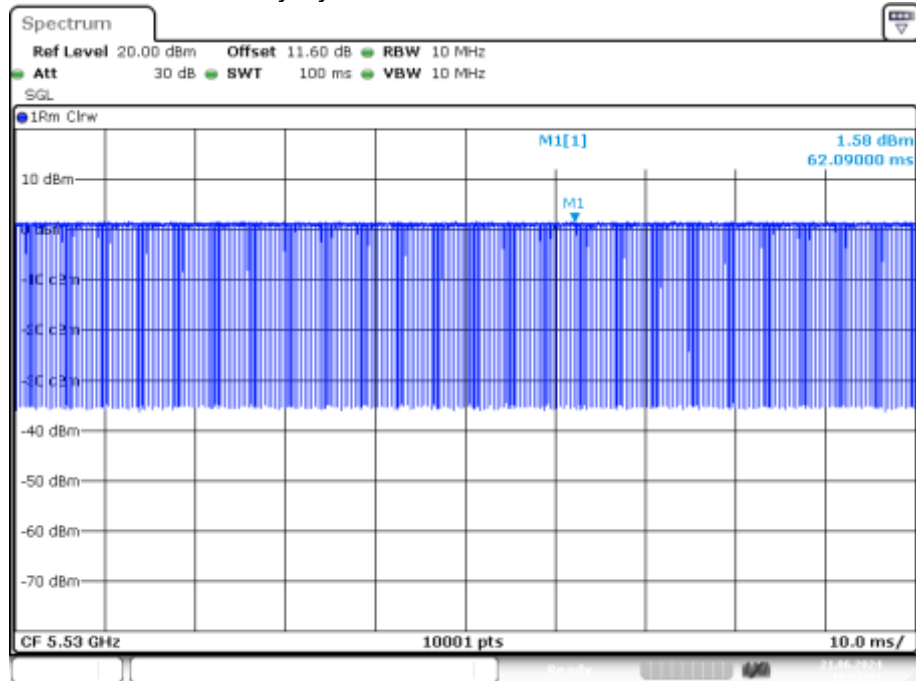
Date: 21.JUN.2024 16:57:17

Duty Cycle NVNT ac40 5670MHz Ant1



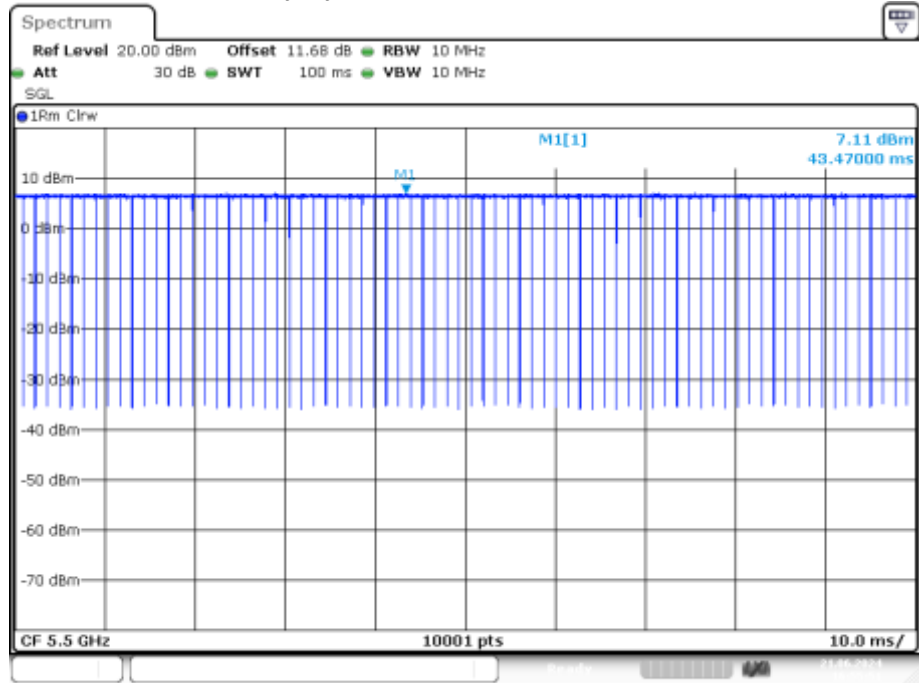
Date: 21.JUN.2024 16:57:26

Duty Cycle NVNT ac80 5530MHz Ant1



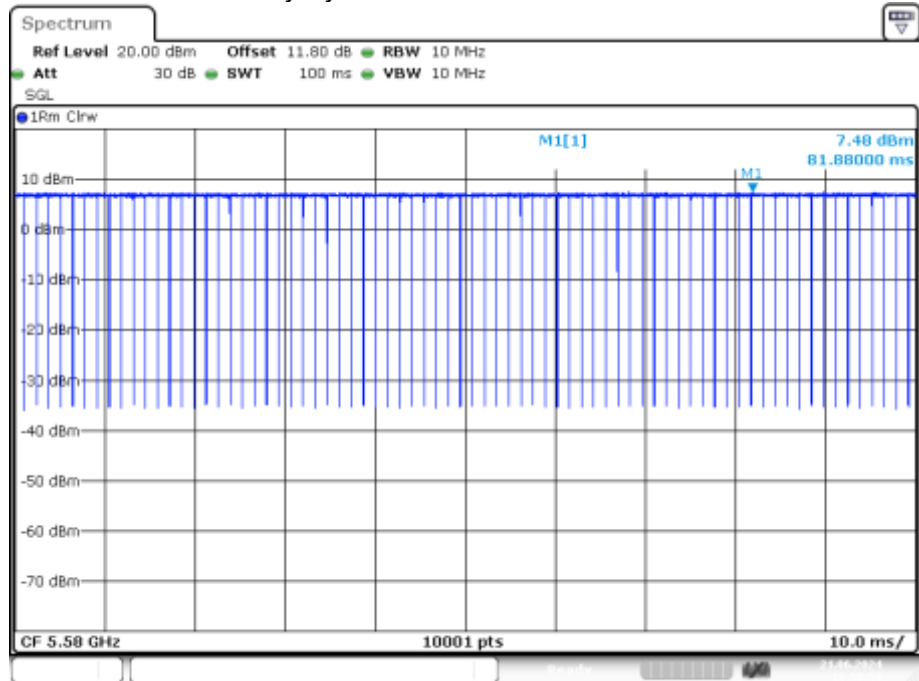
Date: 21.JUN.2024 16:57:34

Duty Cycle NVNT n20 5500MHz Ant1



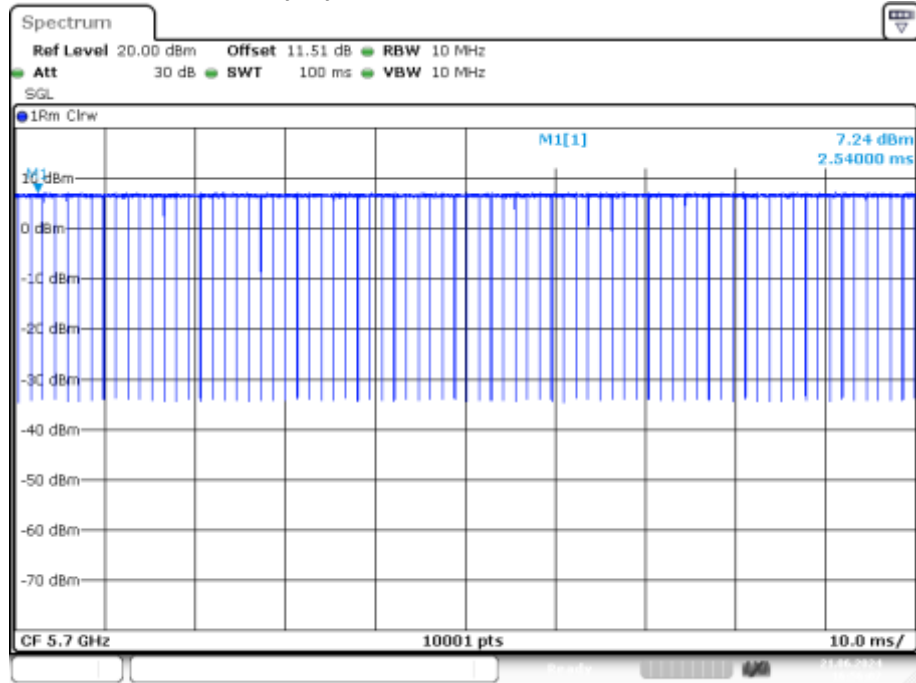
Date: 21.JUN.2024 16:55:51

Duty Cycle NVNT n20 5580MHz Ant1



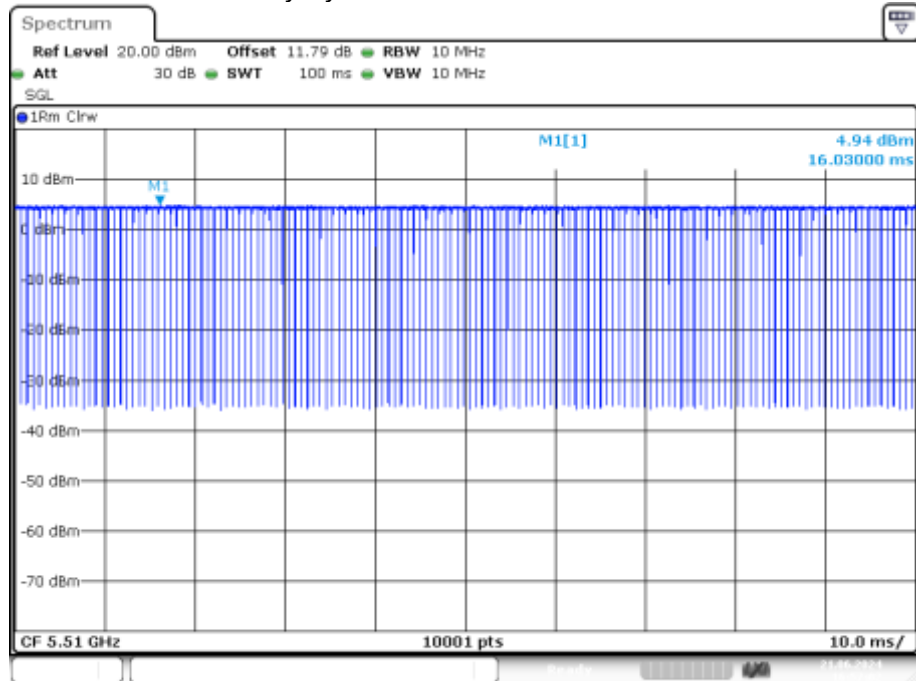
Date: 21.JUN.2024 16:55:59

Duty Cycle NVNT n20 5700MHz Ant1



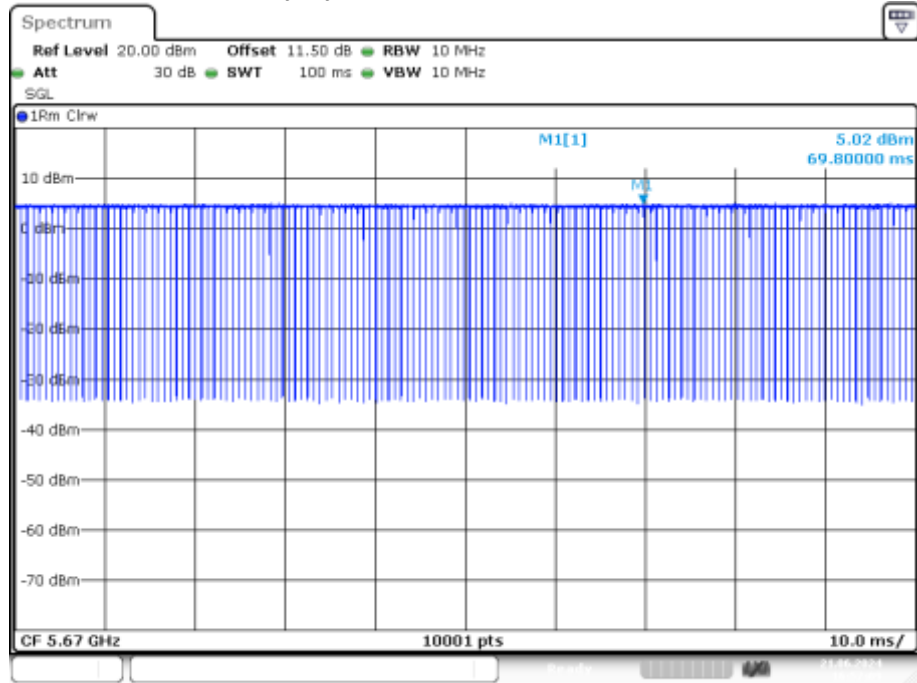
Date: 21.JUN.2024 16:56:07

Duty Cycle NVNT n40 5510MHz Ant1



Date: 21.JUN.2024 16:57:02

Duty Cycle NVNT n40 5670MHz Ant1



Date: 21.JUN.2024 16:57:09

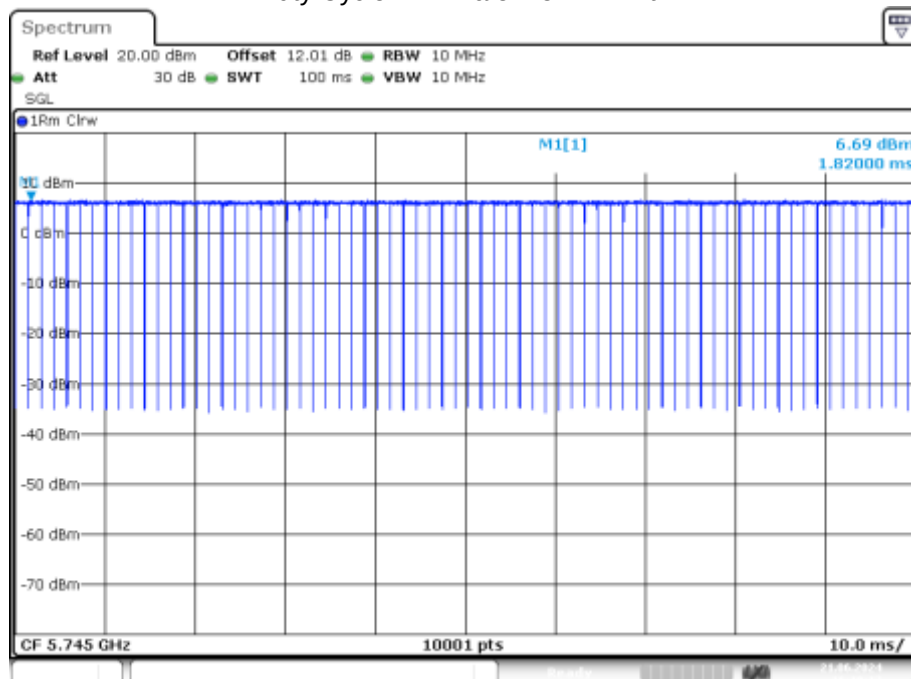
Band 4 (5725 – 5850 MHz)

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	22.330	0.11	18.39	30	Pass
NVNT	a	5785	Ant1	22.383	0.11	18.443	30	Pass
NVNT	a	5825	Ant1	22.930	0.11	18.99	30	Pass
NVNT	ac20	5745	Ant1	22.542	0.11	18.602	30	Pass
NVNT	ac20	5785	Ant1	21.577	0.11	17.637	30	Pass
NVNT	ac20	5825	Ant1	21.928	0.11	17.988	30	Pass
NVNT	ac40	5755	Ant1	22.407	0.23	18.587	30	Pass
NVNT	ac40	5795	Ant1	22.632	0.22	18.802	30	Pass
NVNT	ac80	5775	Ant1	21.213	0.44	17.603	30	Pass
NVNT	n20	5745	Ant1	22.290	0.11	18.35	30	Pass
NVNT	n20	5785	Ant1	22.655	0.12	18.725	30	Pass
NVNT	n20	5825	Ant1	22.945	0.11	19.005	30	Pass
NVNT	n40	5755	Ant1	22.247	0.22	18.417	30	Pass
NVNT	n40	5795	Ant1	21.584	0.22	17.754	30	Pass

Duty Cycle

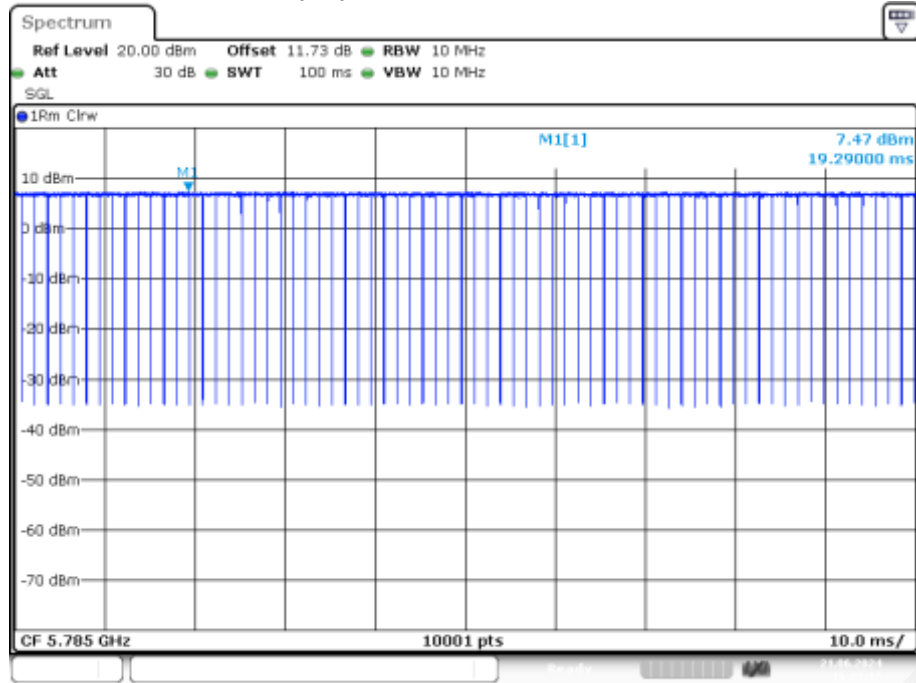
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5745	Ant1	97.53	0.11
NVNT	a	5785	Ant1	97.54	0.11
NVNT	a	5825	Ant1	97.55	0.11
NVNT	ac20	5745	Ant1	97.43	0.11
NVNT	ac20	5785	Ant1	97.41	0.11
NVNT	ac20	5825	Ant1	97.39	0.11
NVNT	ac40	5755	Ant1	94.94	0.23
NVNT	ac40	5795	Ant1	95	0.22
NVNT	ac80	5775	Ant1	90.26	0.44
NVNT	n20	5745	Ant1	97.39	0.11
NVNT	n20	5785	Ant1	97.36	0.12
NVNT	n20	5825	Ant1	97.4	0.11
NVNT	n40	5755	Ant1	94.96	0.22
NVNT	n40	5795	Ant1	94.96	0.22

Duty Cycle NVNT a 5745MHz Ant1



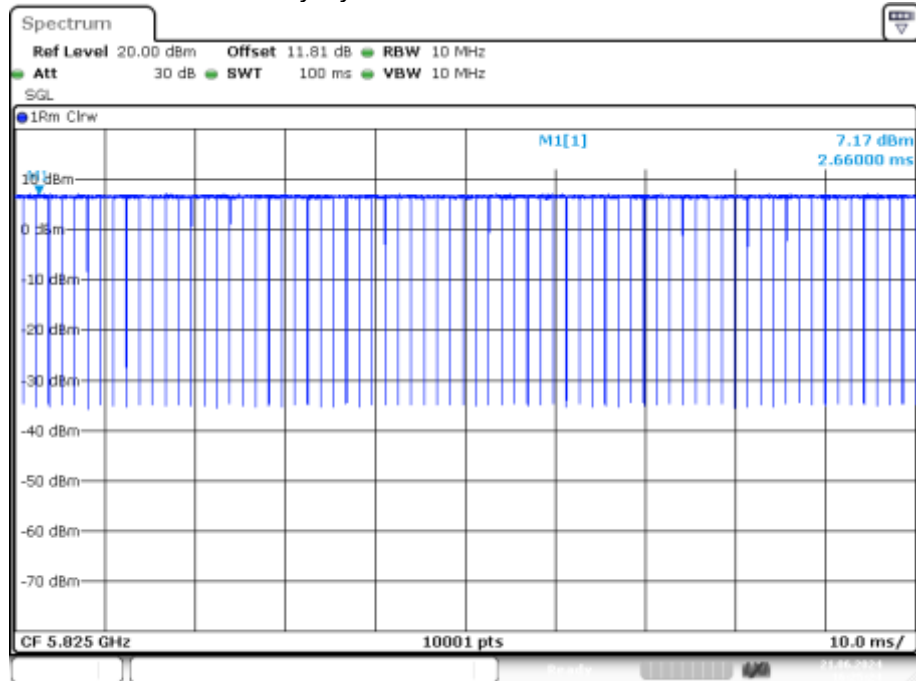
Date: 21.JUN.2024 16:19:17

Duty Cycle NVNT a 5785MHz Ant1



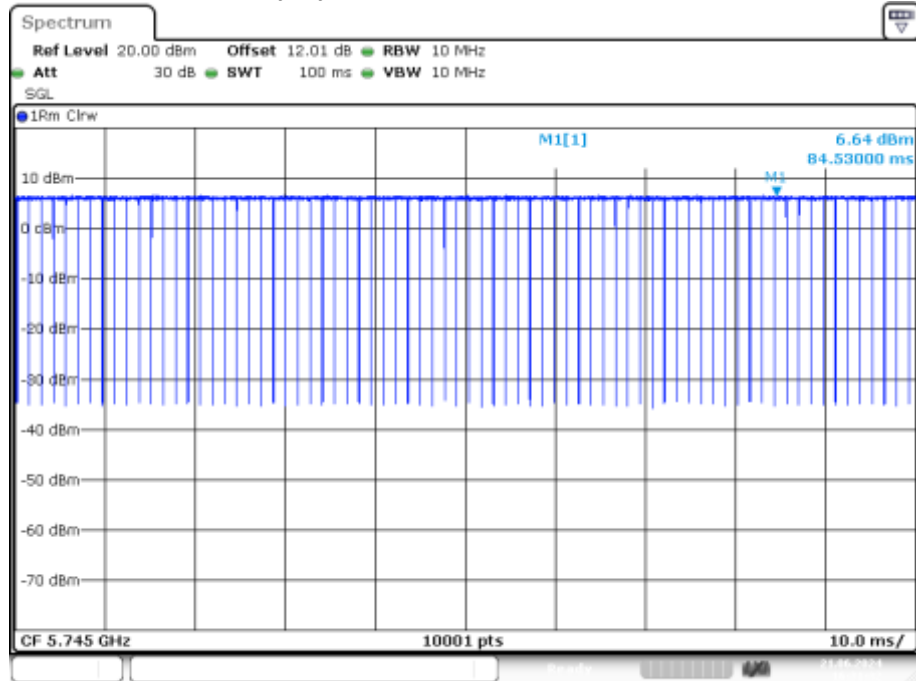
Date: 21.JUN.2024 16:23:17

Duty Cycle NVNT a 5825MHz Ant1



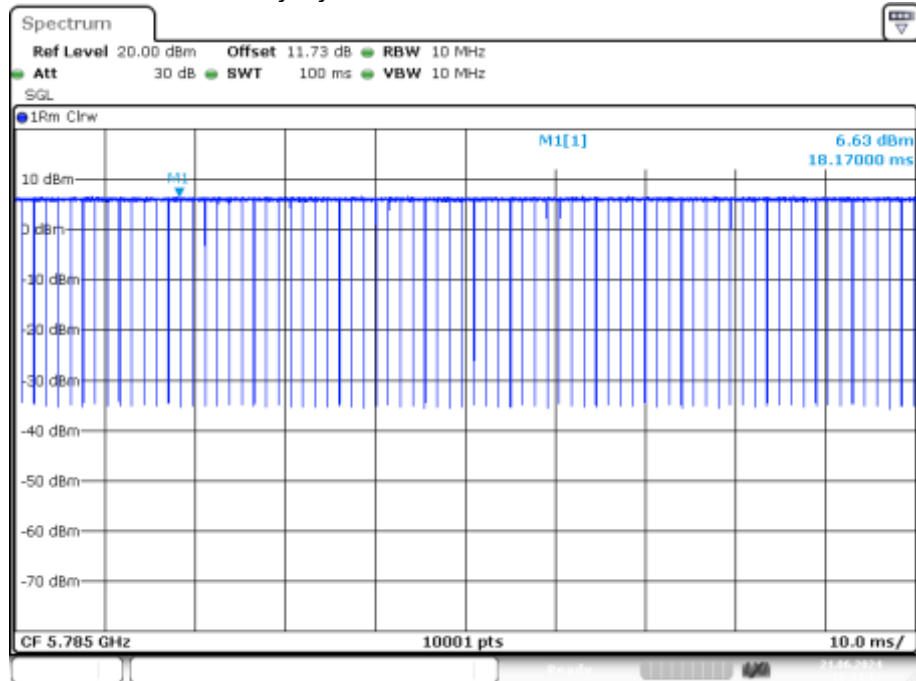
Date: 21.JUN.2024 16:25:24

Duty Cycle NVNT ac20 5745MHz Ant1



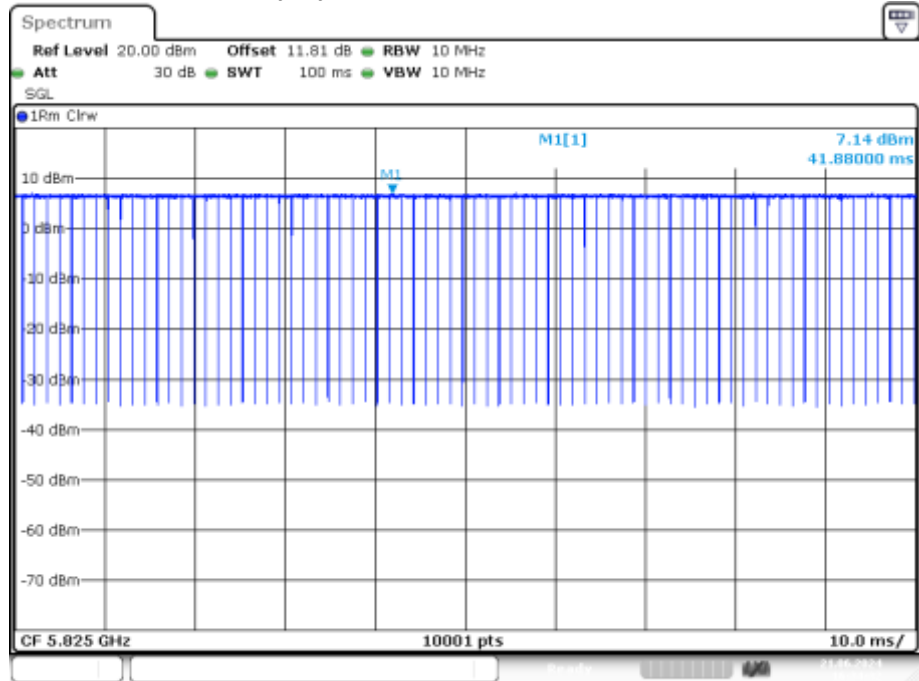
Date: 21.JUN.2024 16:31:33

Duty Cycle NVNT ac20 5785MHz Ant1



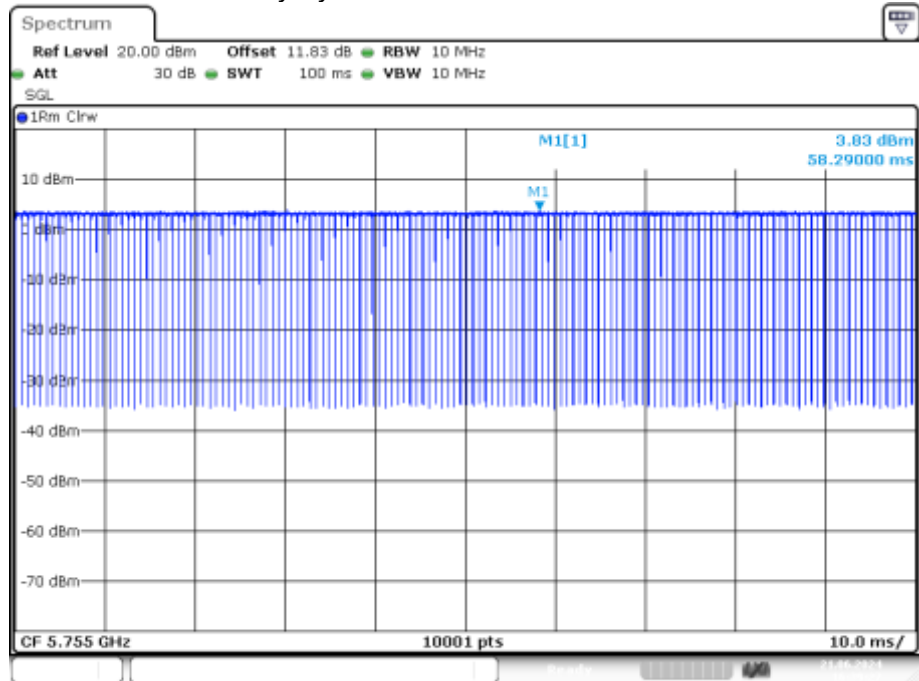
Date: 21.JUN.2024 16:34:17

Duty Cycle NVNT ac20 5825MHz Ant1



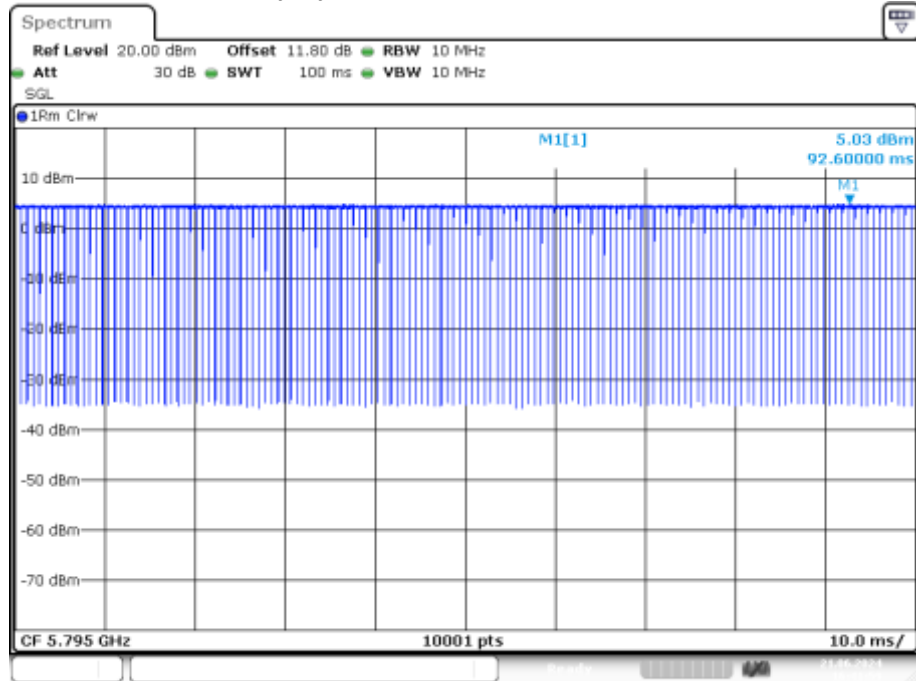
Date: 21.JUN.2024 16:34:32

Duty Cycle NVNT ac40 5755MHz Ant1



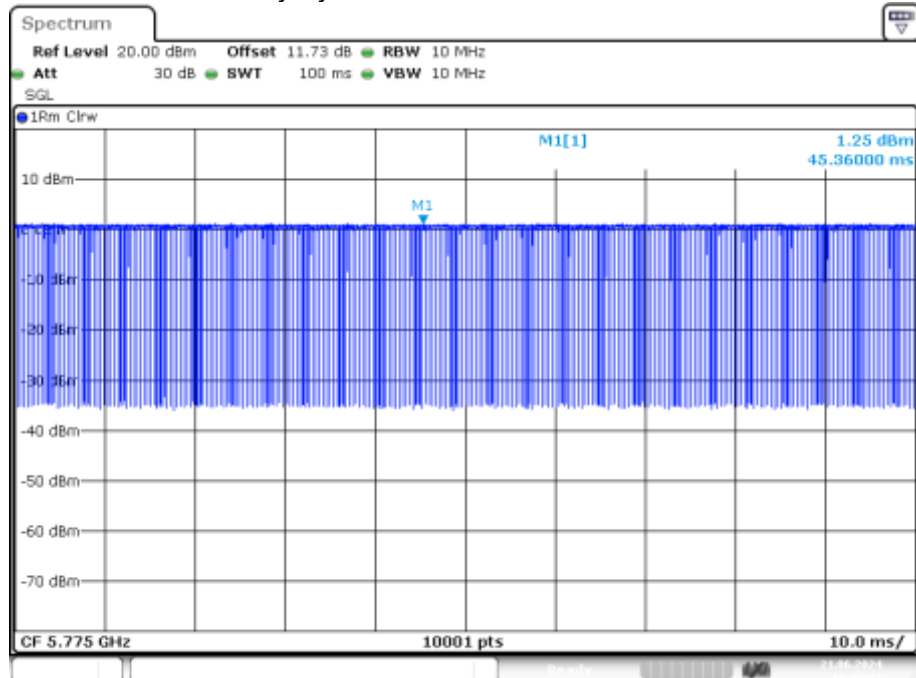
Date: 21.JUN.2024 16:39:27

Duty Cycle NVNT ac40 5795MHz Ant1



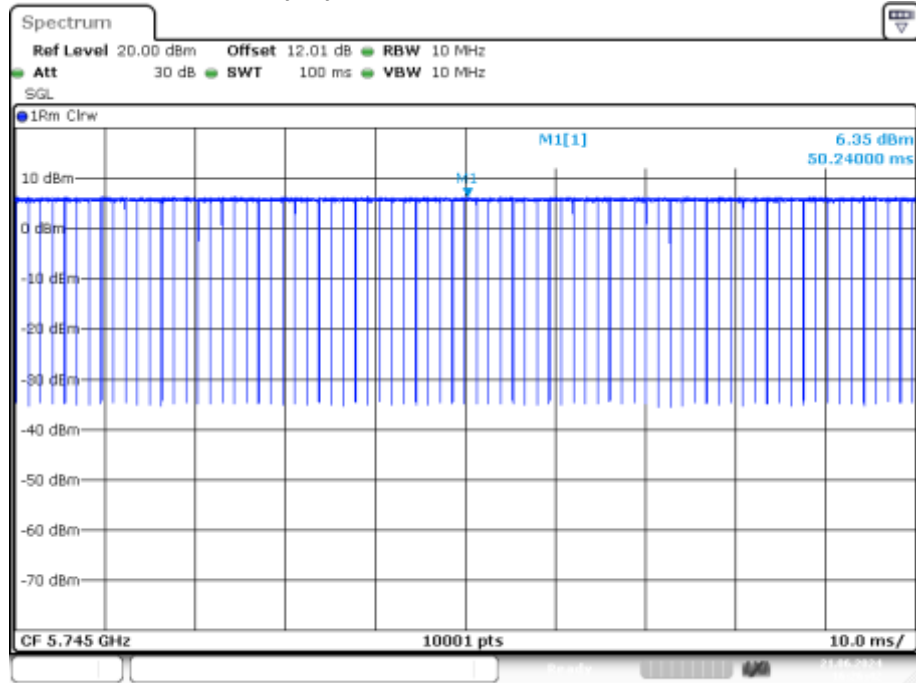
Date: 21.JUN.2024 16:42:00

Duty Cycle NVNT ac80 5775MHz Ant1



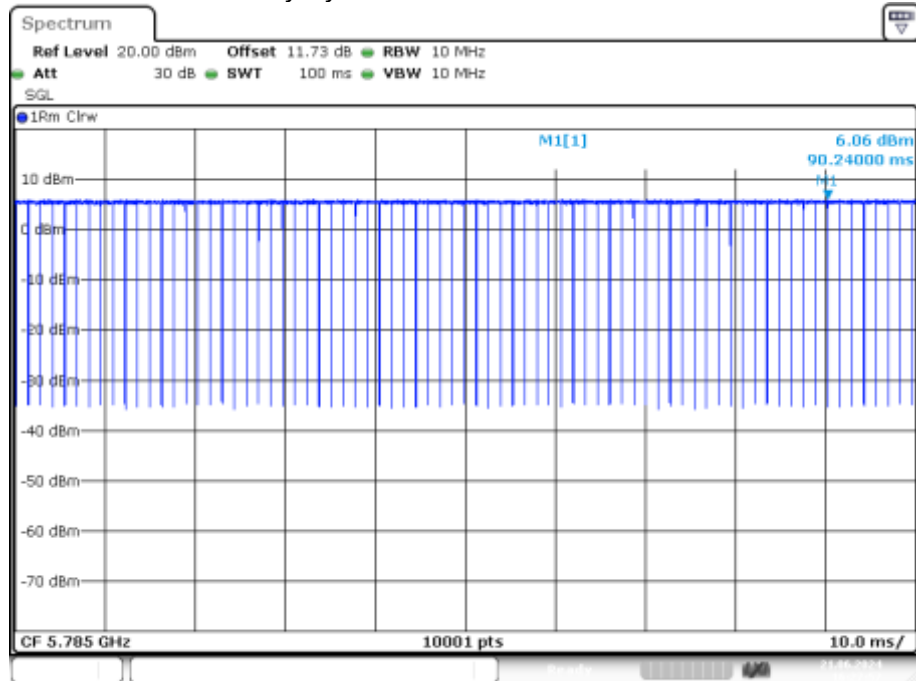
Date: 21.JUN.2024 16:42:22

Duty Cycle NVNT n20 5745MHz Ant1



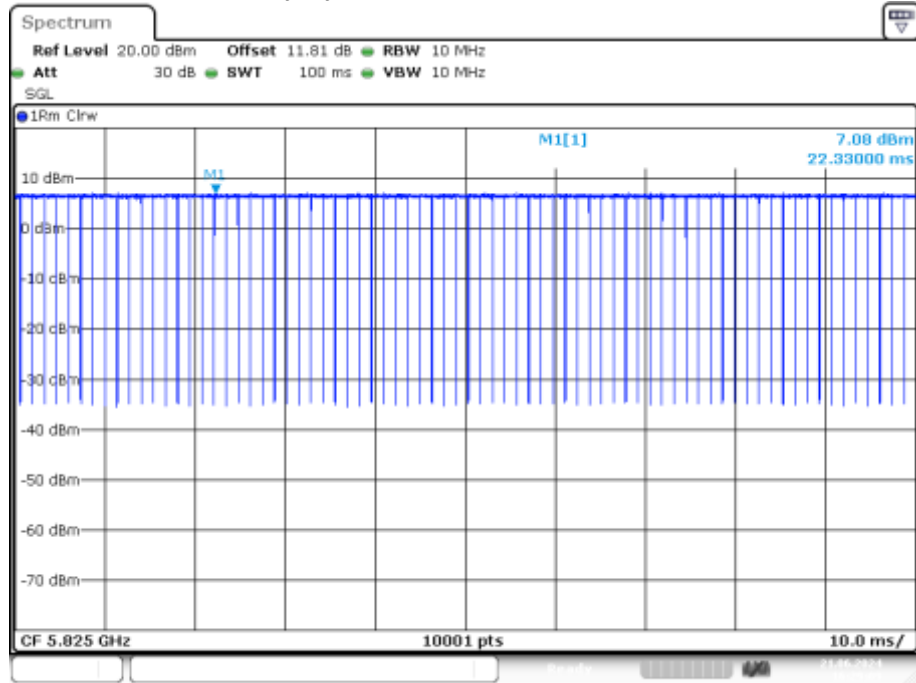
Date: 21.JUN.2024 16:26:42

Duty Cycle NVNT n20 5785MHz Ant1



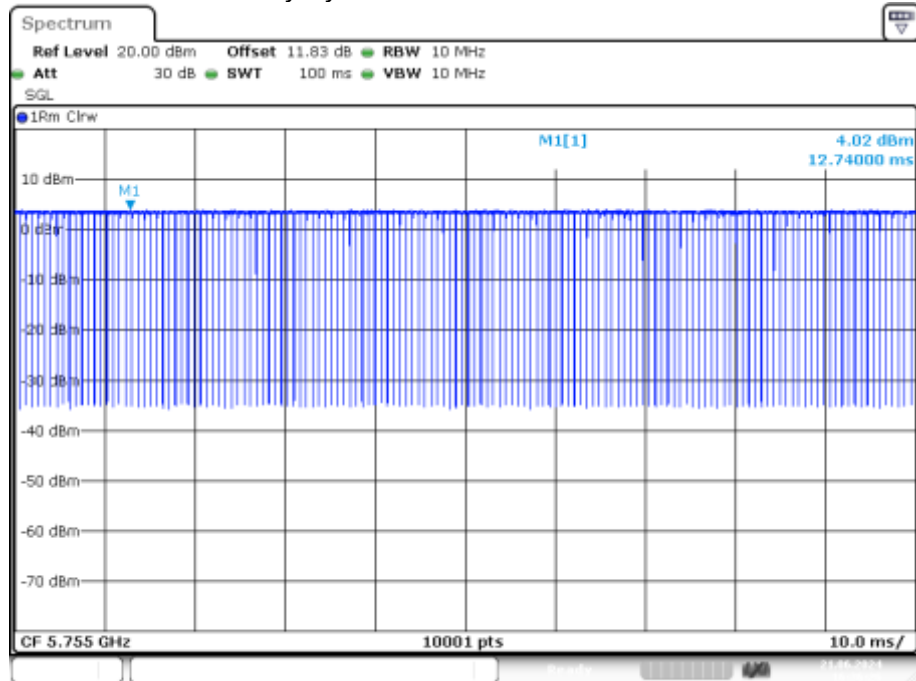
Date: 21.JUN.2024 16:27:57

Duty Cycle NVNT n20 5825MHz Ant1



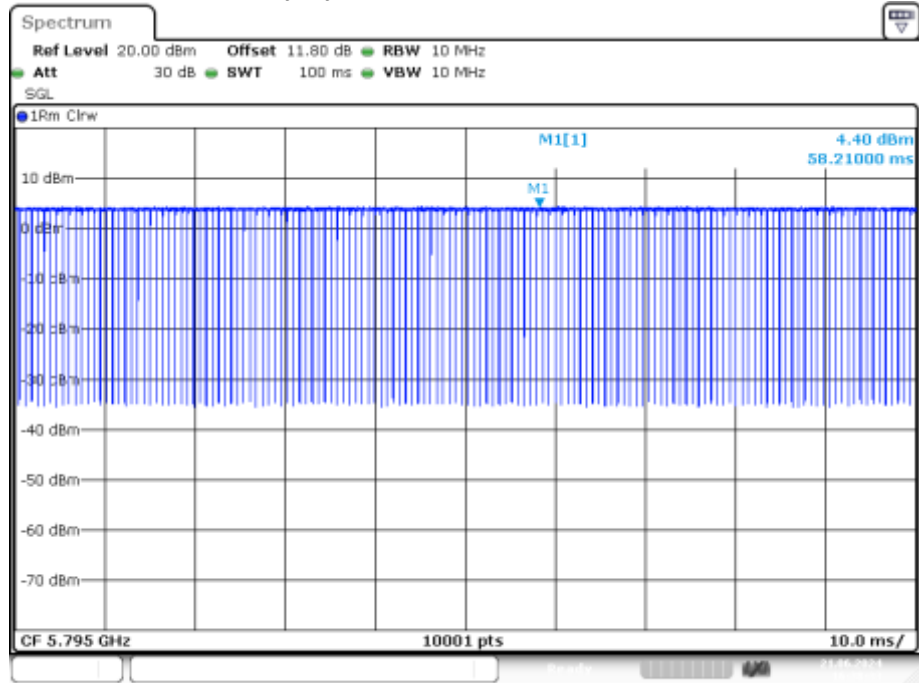
Date: 21.JUN.2024 16:29:09

Duty Cycle NVNT n40 5755MHz Ant1



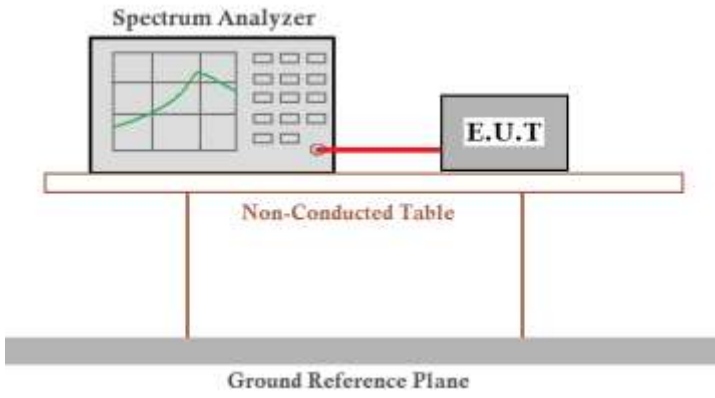
Date: 21.JUN.2024 16:36:25

Duty Cycle NVNT n40 5795MHz Ant1



Date: 21.JUN.2024 16:38:32

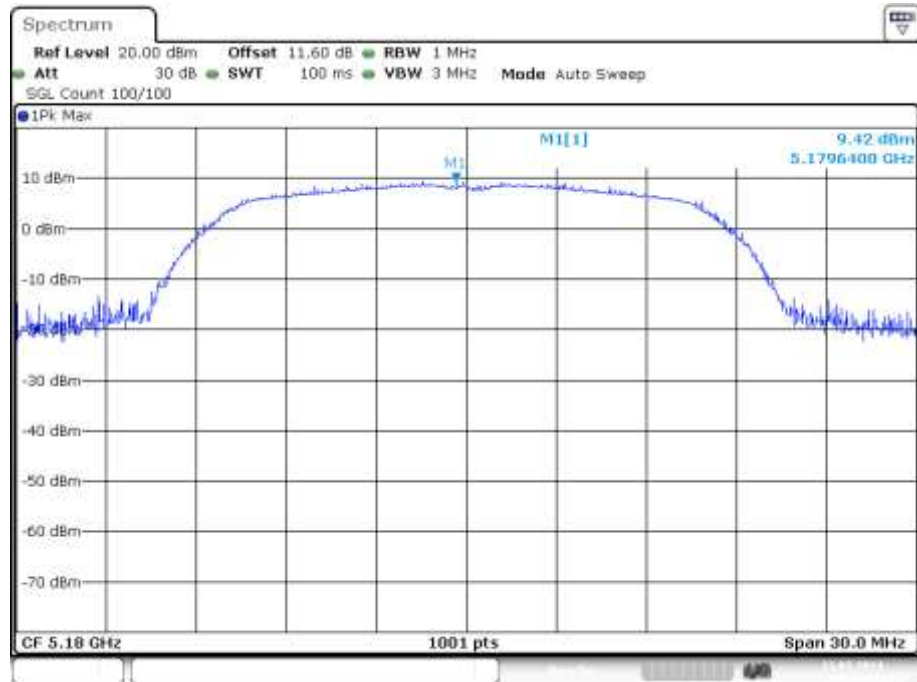
4.5 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	$\leq 11.00\text{dBm/MHz}$ for 5150MHz-5250MHz, 5250-5350MHz and 5470-5725 MHz $\leq 30.00\text{dBm/500KHz}$ for 5725MHz-5850MHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by two vertical legs. Below the table is a Ground Reference Plane.
Test procedure:	1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E2) for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power...". 2) Use the peak search function on the instrument to find the peak of the spectrum. 3) Make the following adjustments to the peak value of the spectrum, if applicable: a) If Method SA-2 or SA-2 Alternative was used, add $10 \log(1/x)$, where x is the duty cycle, to the peak of the spectrum. b) If Method SA-3 Alternative was used and the linear mode was used in step E2)g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging. 4) The result is the PSD.
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

Measurement Data**Band 1 (5150 - 5250 MHz)**

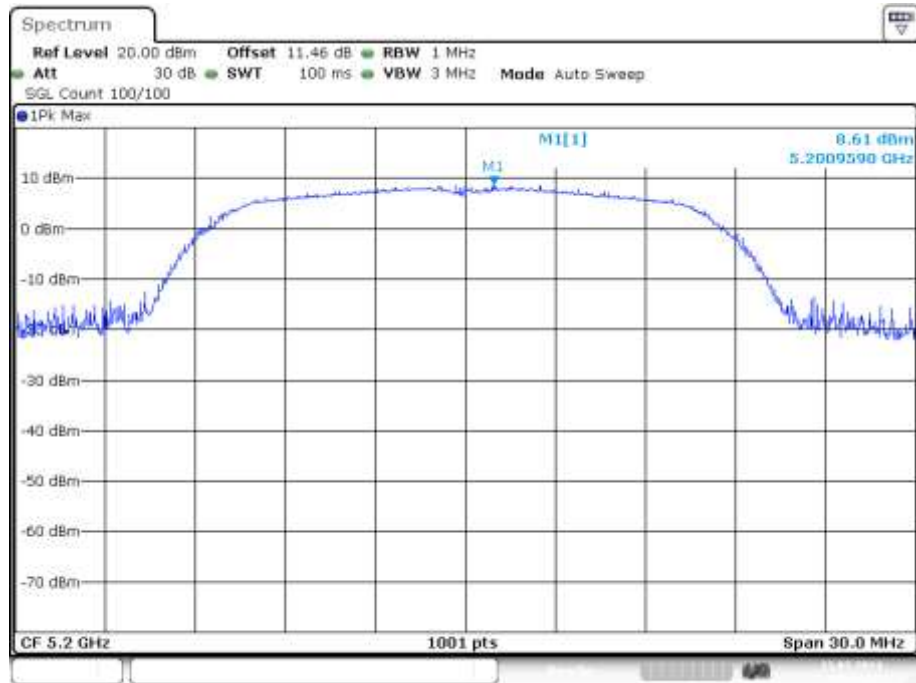
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5180	Ant1	9.423	11	Pass
NVNT	a	5200	Ant1	8.613	11	Pass
NVNT	a	5240	Ant1	7.444	11	Pass
NVNT	ac20	5180	Ant1	7.836	11	Pass
NVNT	ac20	5200	Ant1	8.686	11	Pass
NVNT	ac20	5240	Ant1	9.465	11	Pass
NVNT	ac40	5190	Ant1	6.362	11	Pass
NVNT	ac40	5230	Ant1	6.374	11	Pass
NVNT	ac80	5210	Ant1	3.124	11	Pass
NVNT	n20	5180	Ant1	8.166	11	Pass
NVNT	n20	5200	Ant1	8.392	11	Pass
NVNT	n20	5240	Ant1	8.146	11	Pass
NVNT	n40	5190	Ant1	5.823	11	Pass
NVNT	n40	5230	Ant1	5.779	11	Pass

PSD NVNT a 5180MHz Ant1



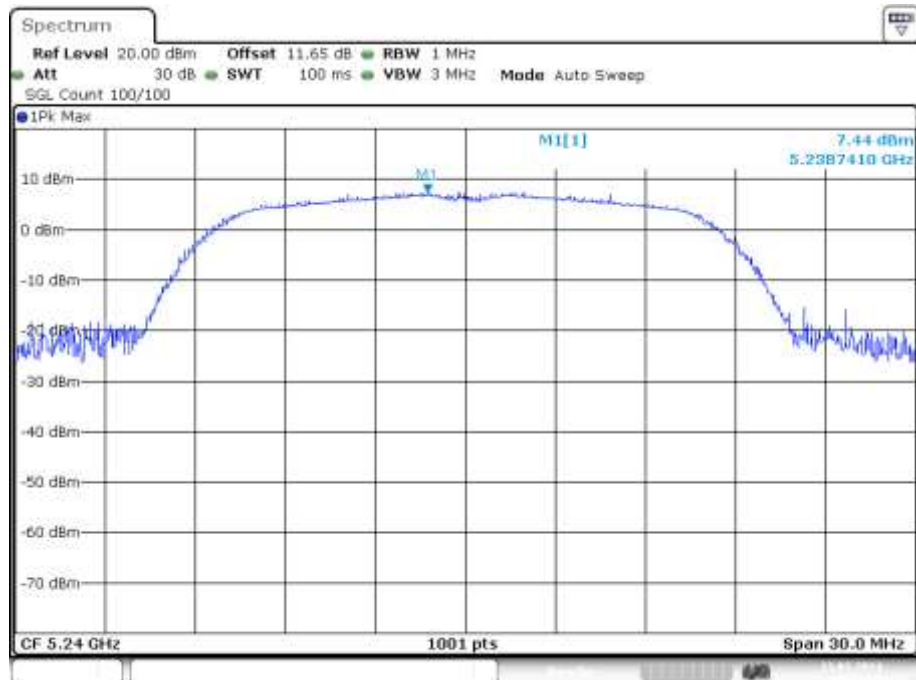
Date: 13.MAR.2024 16:44:17

PSD NVNT a 5200MHz Ant1



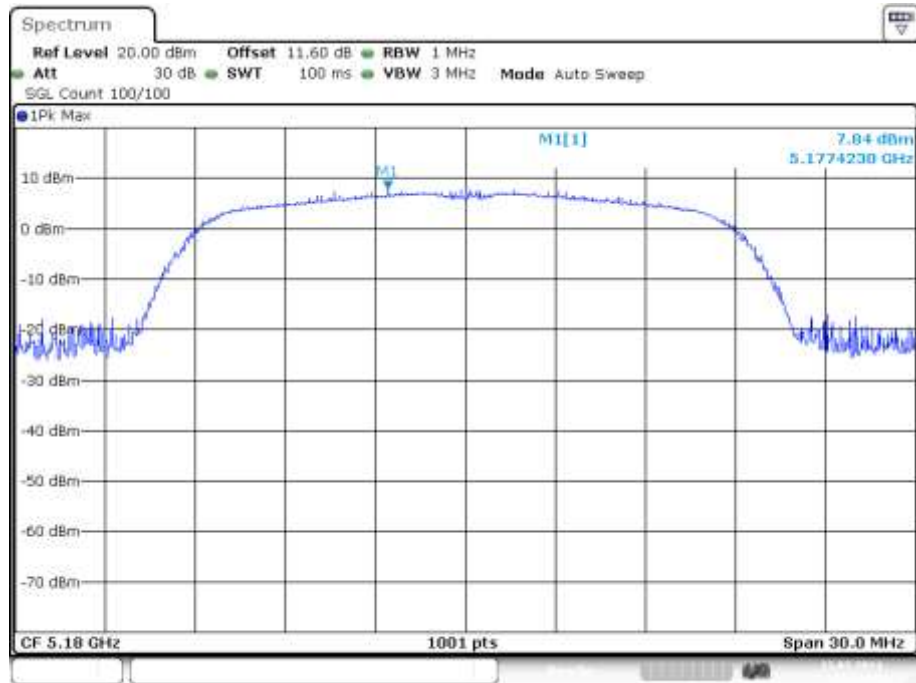
Date: 13.MAR.2024 16:47:22

PSD NVNT a 5240MHz Ant1



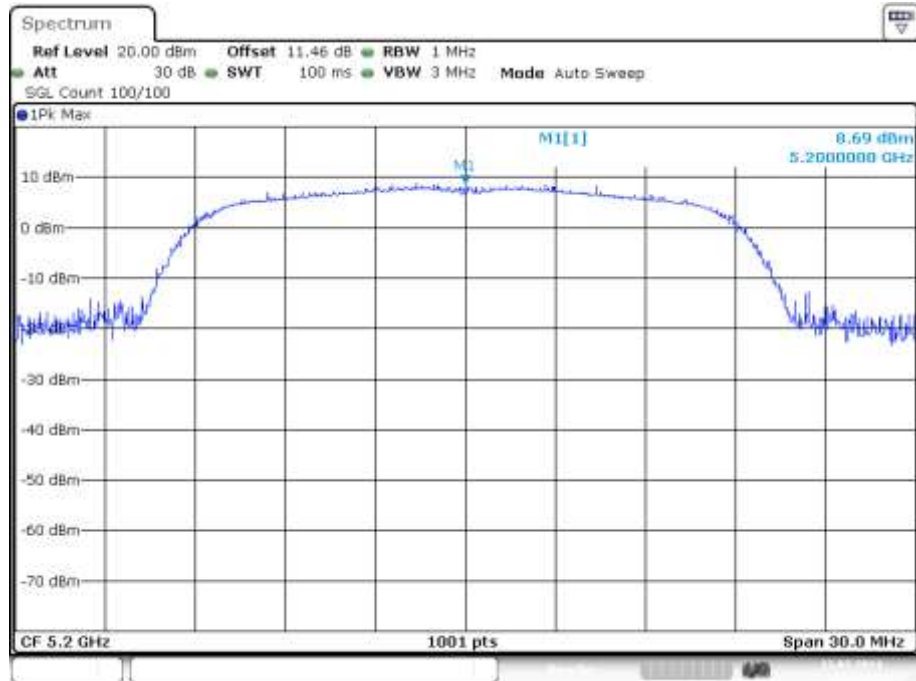
Date: 13.MAR.2024 16:52:18

PSD NVNT ac20 5180MHz Ant1



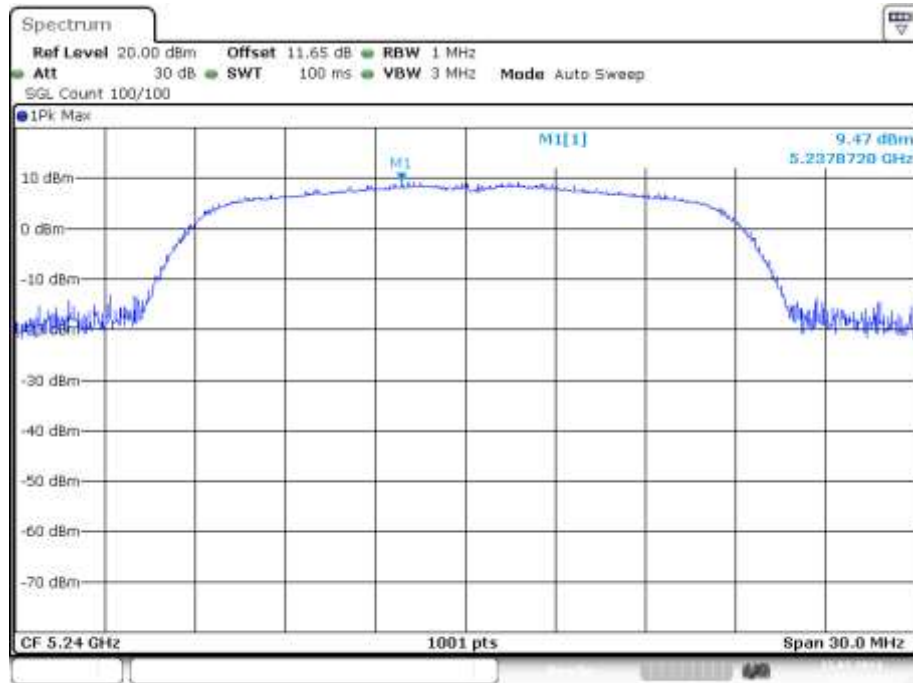
Date: 13.MAR.2024 17:12:30

PSD NVNT ac20 5200MHz Ant1



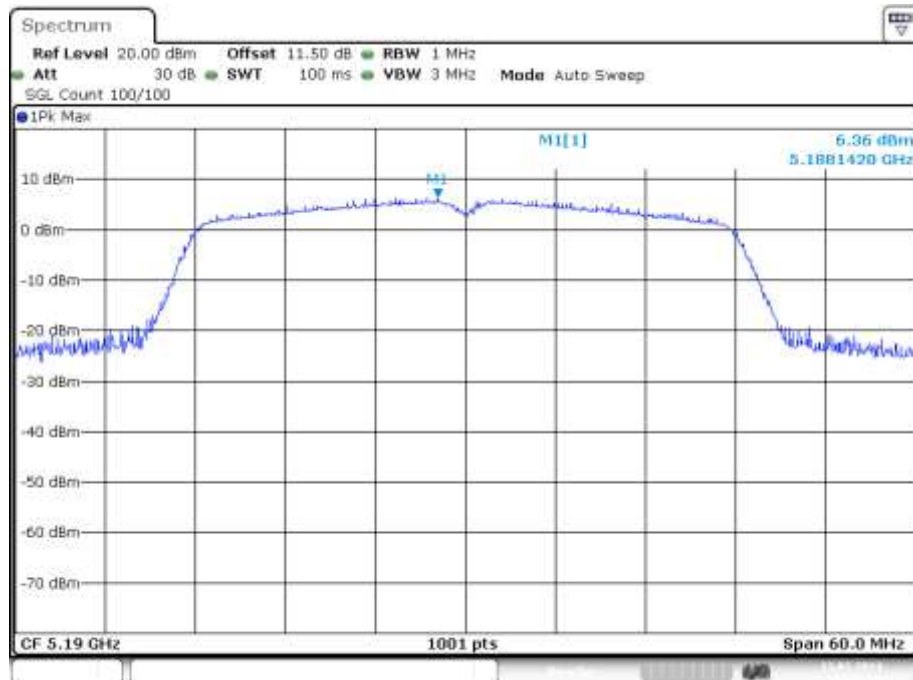
Date: 13.MAR.2024 17:17:23

PSD NVNT ac20 5240MHz Ant1



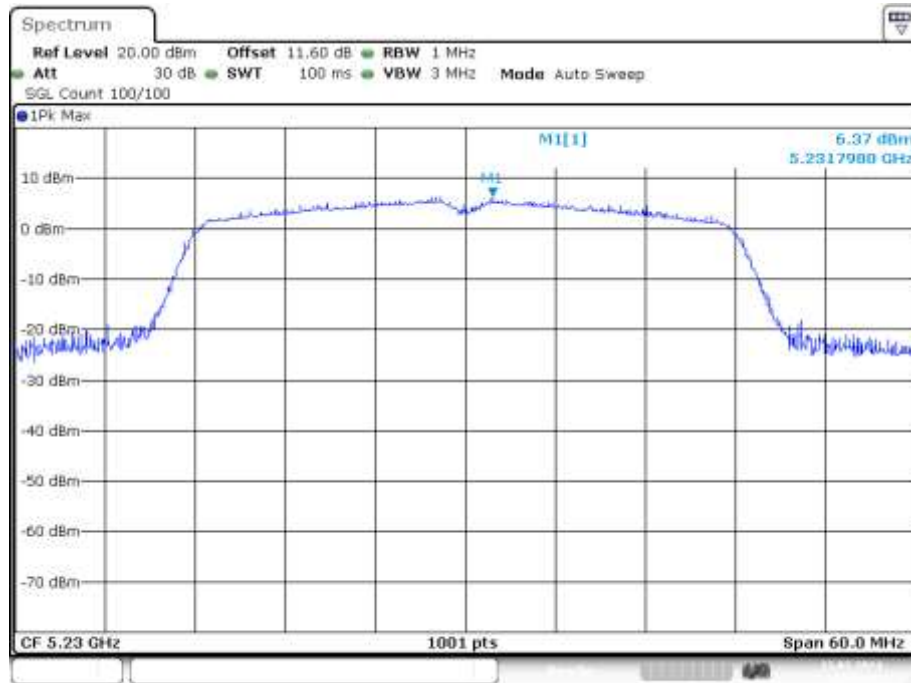
Date: 13.MAR.2024 17:22:23

PSD NVNT ac40 5190MHz Ant1



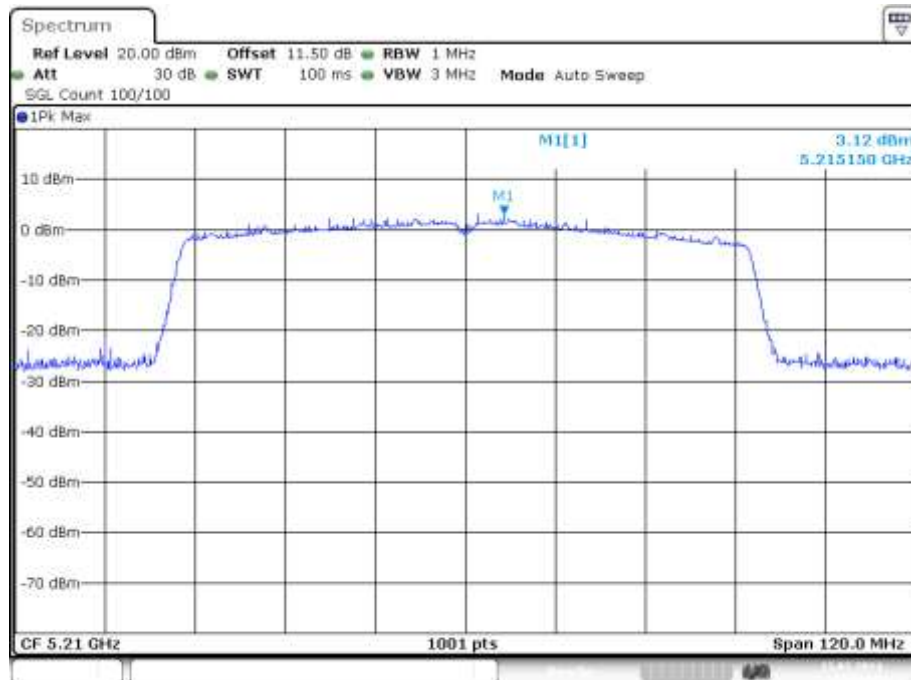
Date: 13.MAR.2024 17:40:24

PSD NVNT ac40 5230MHz Ant1



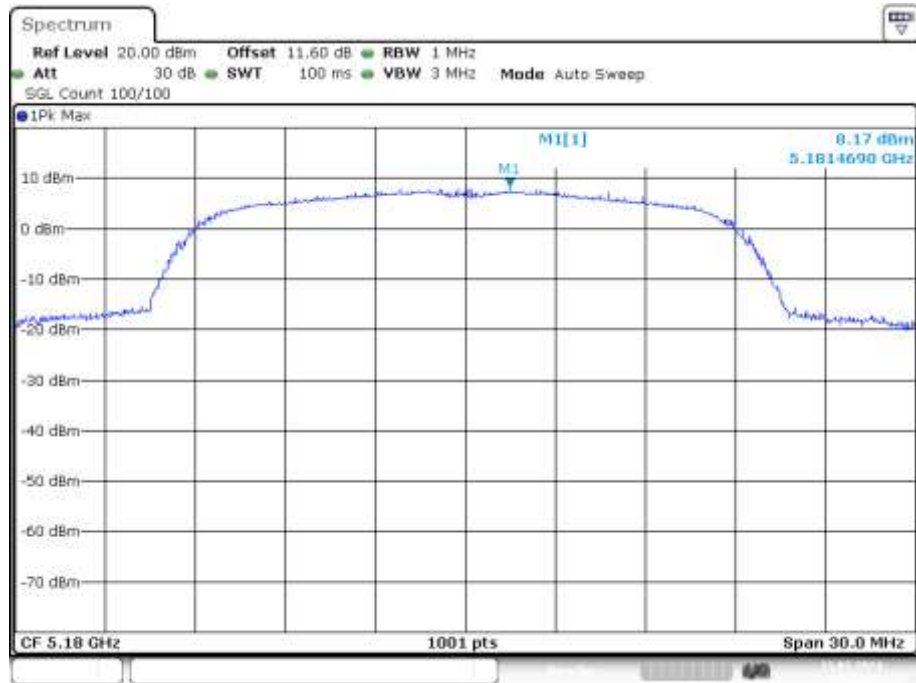
Date: 13.MAR.2024 17:45:12

PSD NVNT ac80 5210MHz Ant1



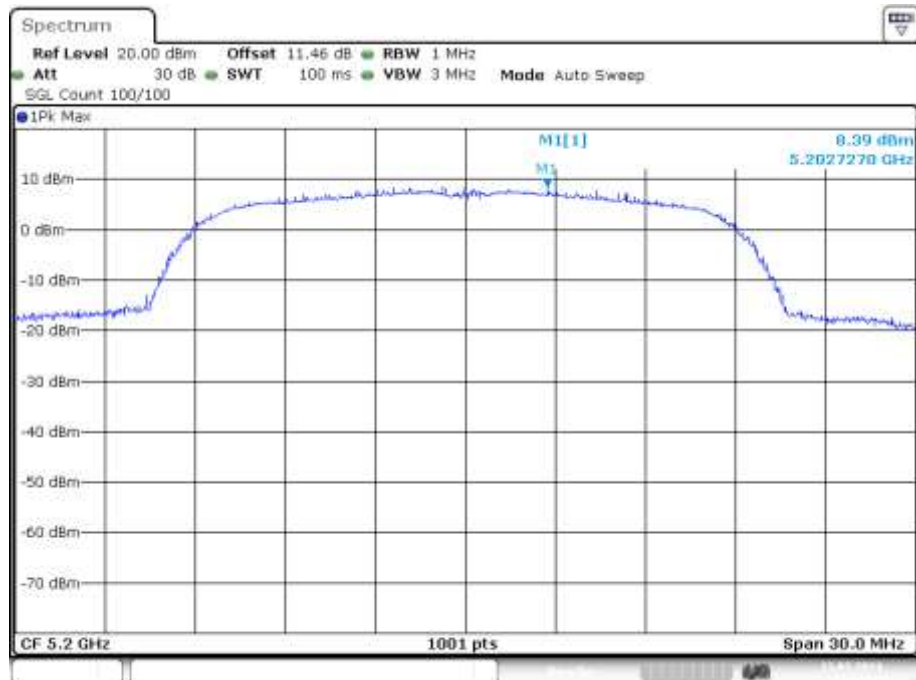
Date: 13.MAR.2024 17:50:18

PSD NVNT n20 5180MHz Ant1



Date: 13.MAR.2024 16:58:11

PSD NVNT n20 5200MHz Ant1



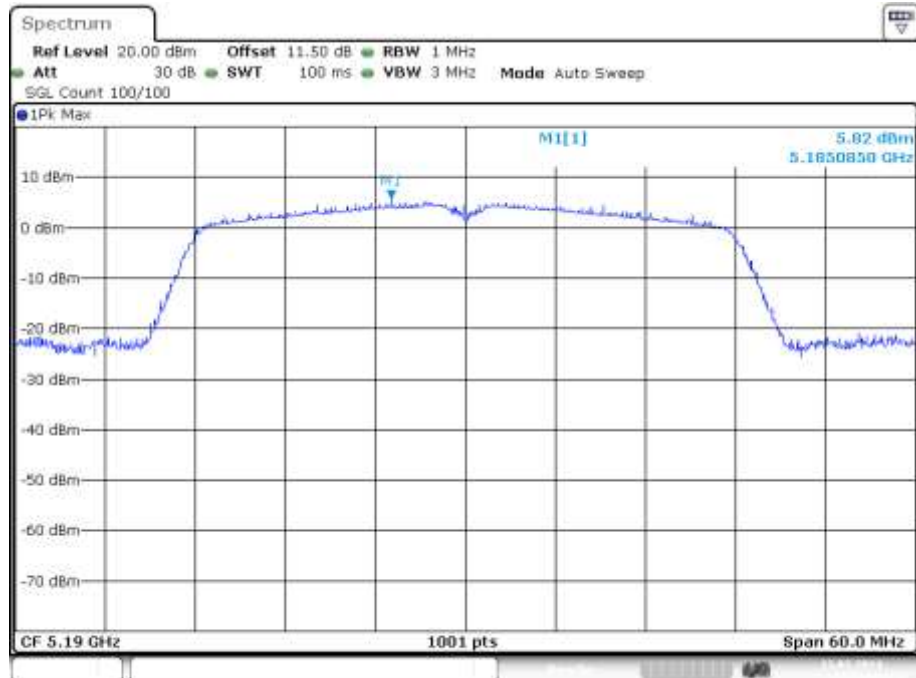
Date: 13.MAR.2024 17:04:14

PSD NVNT n20 5240MHz Ant1



Date: 13.MAR.2024 17:08:45

PSD NVNT n40 5190MHz Ant1



Date: 13.MAR.2024 17:27:45

PSD NVNT n40 5230MHz Ant1

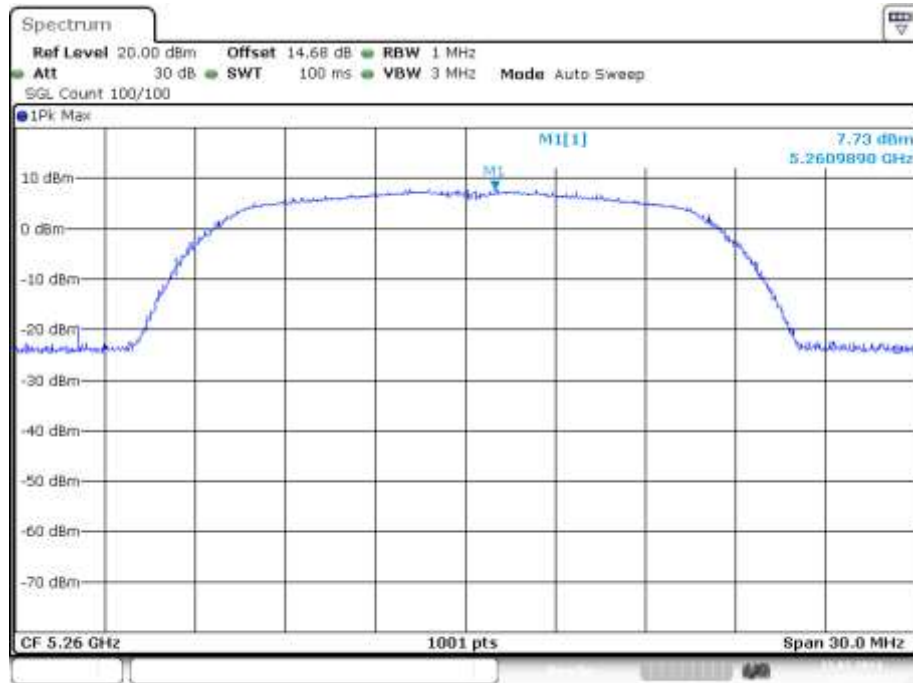


Date: 13.MAR.2024 17:34:38

Band 2 (5250 -5350 MHz)

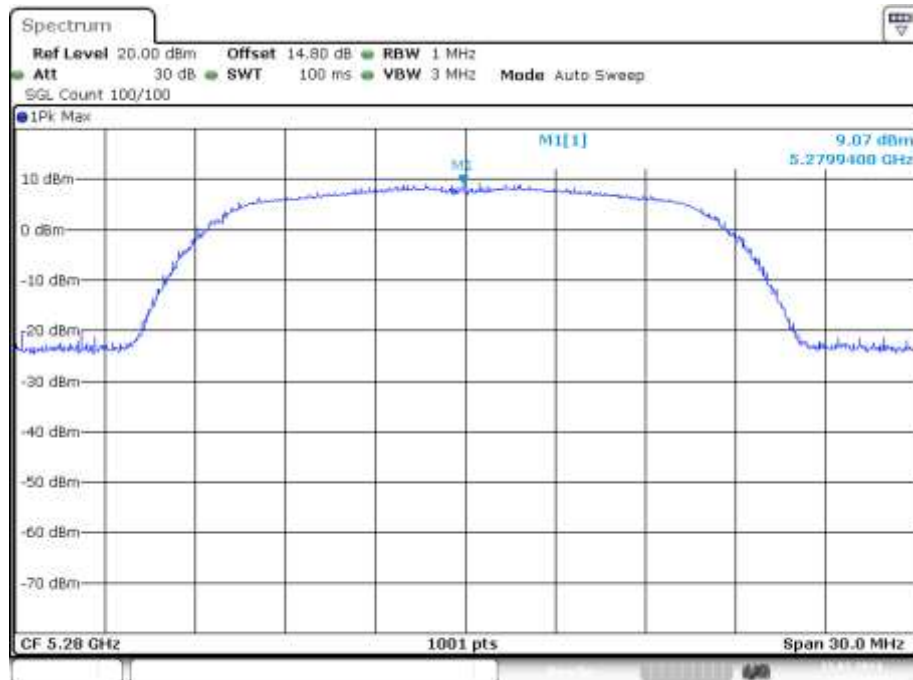
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5260	Ant1	7.735	11	Pass
NVNT	a	5280	Ant1	9.075	11	Pass
NVNT	a	5320	Ant1	8.638	11	Pass
NVNT	ac20	5260	Ant1	9.775	11	Pass
NVNT	ac20	5280	Ant1	7.283	11	Pass
NVNT	ac20	5320	Ant1	8.776	11	Pass
NVNT	ac40	5270	Ant1	5.508	11	Pass
NVNT	ac40	5310	Ant1	6.154	11	Pass
NVNT	ac80	5290	Ant1	2.625	11	Pass
NVNT	n20	5260	Ant1	8.938	11	Pass
NVNT	n20	5280	Ant1	8.727	11	Pass
NVNT	n20	5320	Ant1	8.9	11	Pass
NVNT	n40	5270	Ant1	5.263	11	Pass
NVNT	n40	5310	Ant1	4.838	11	Pass

PSD NVNT a 5260MHz Ant1



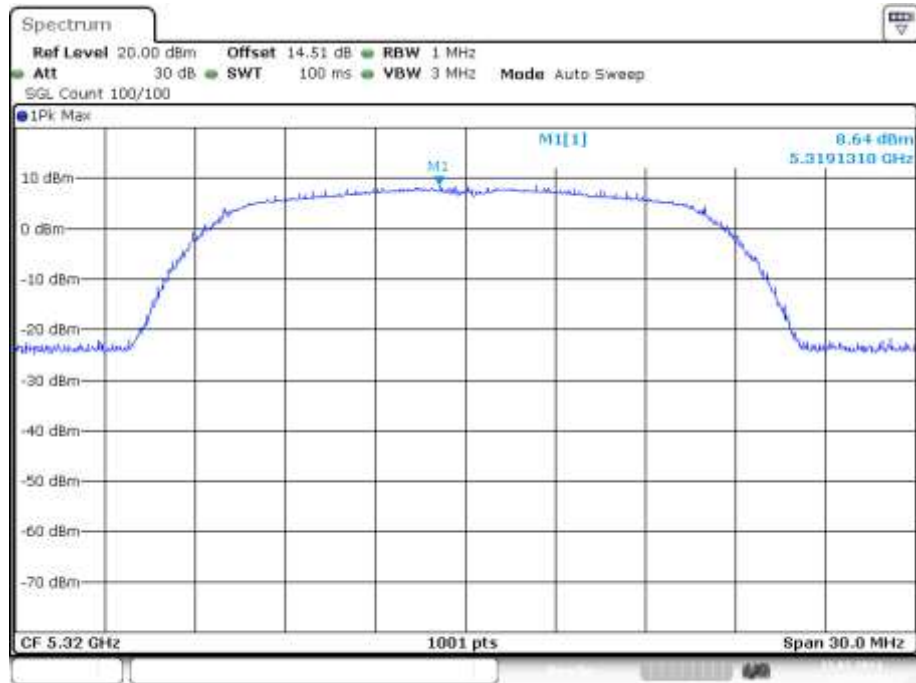
Date: 13.MAR.2024 18:50:33

PSD NVNT a 5280MHz Ant1



Date: 13.MAR.2024 18:52:04

PSD NVNT a 5320MHz Ant1



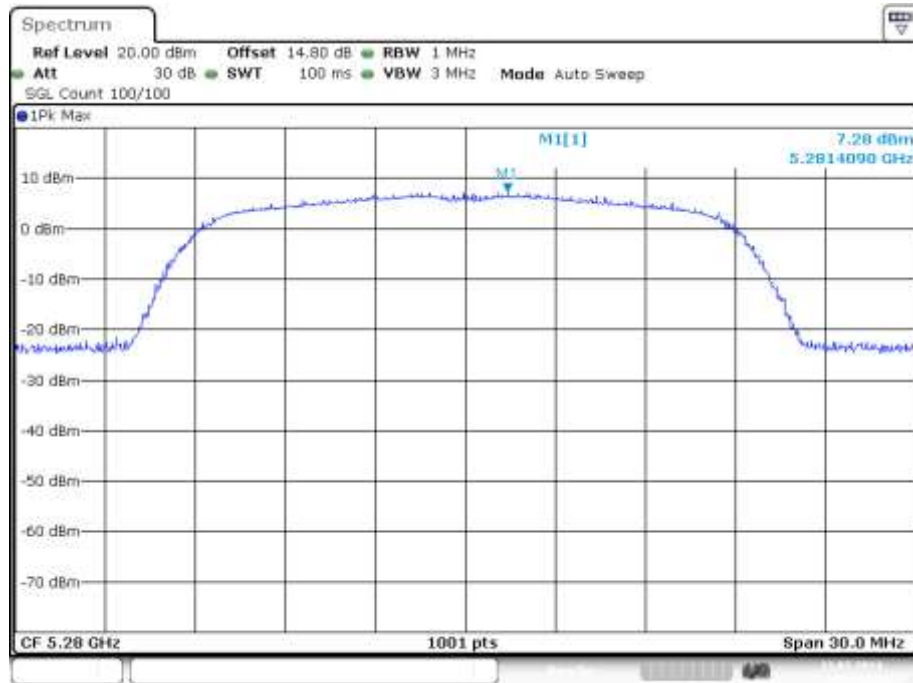
Date: 13.MAR.2024 18:56:10

PSD NVNT ac20 5260MHz Ant1



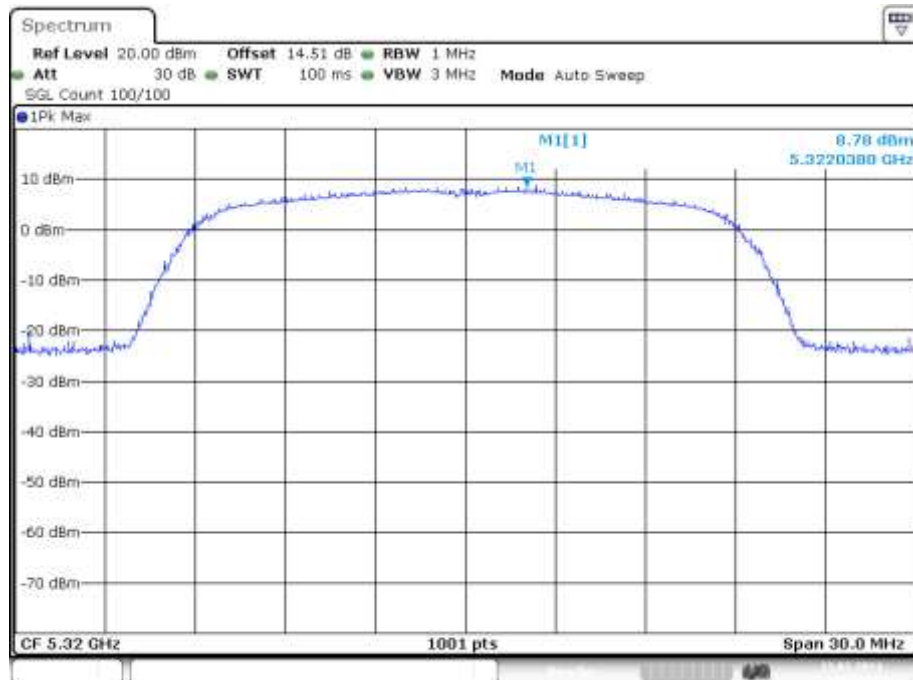
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PSD NVNT ac20 5280MHz Ant1



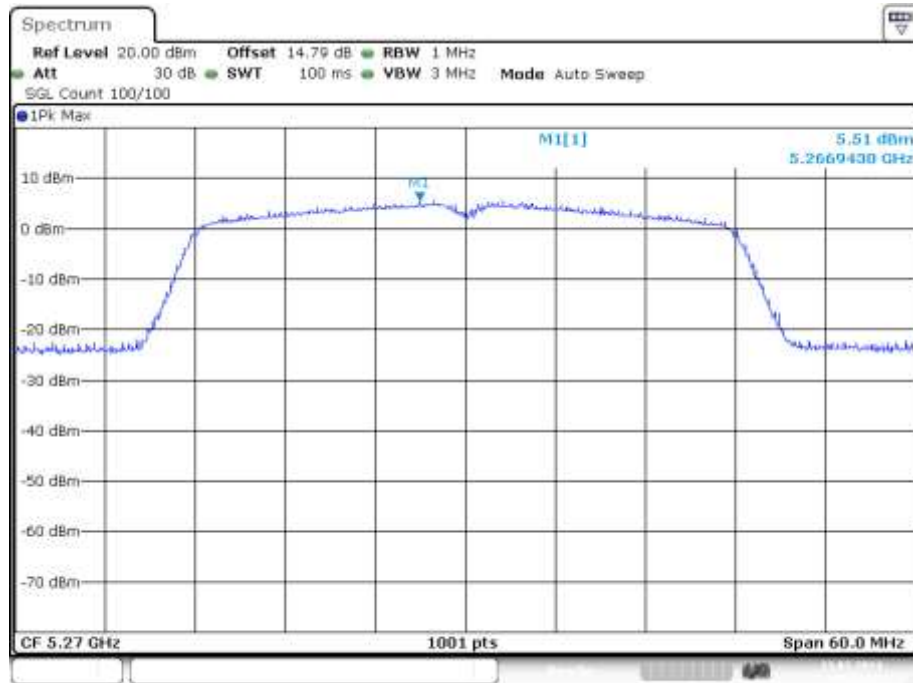
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PSD NVNT ac20 5320MHz Ant1



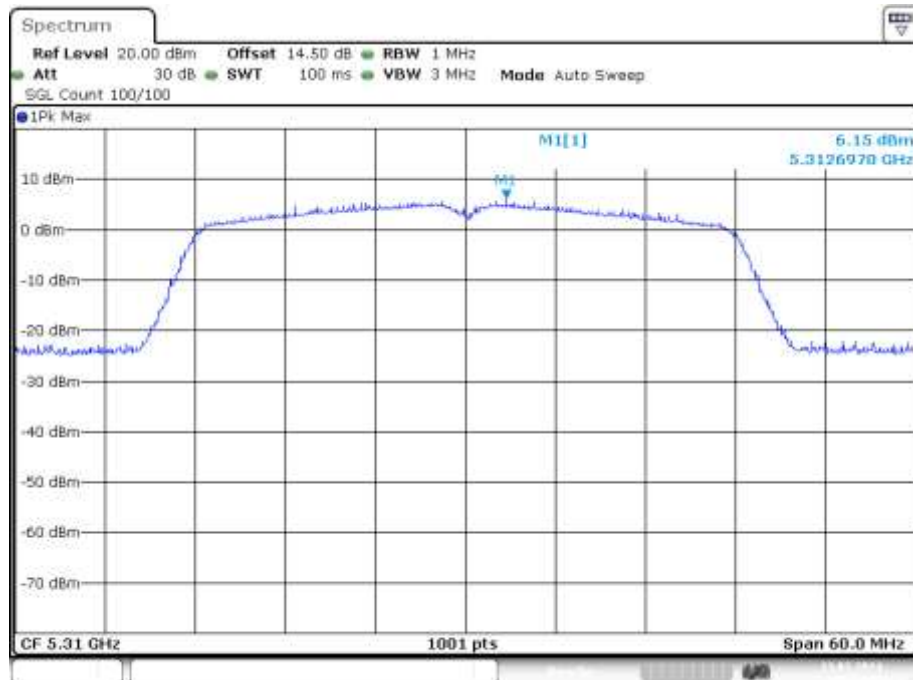
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PSD NVNT ac40 5270MHz Ant1



Date: 13.MAR.2024 20:27:22

PSD NVNT ac40 5310MHz Ant1



Date: 13.MAR.2024 20:31:40