FCC 47 CFR Part 15.407

TEST REPORT

For

Eagle

MODEL NUMBER: JMK1, JMK2

REPORT NUMBER: E04A24100876F00401

ISSUE DATE: December 19, 2024

FCC ID: 2BMIS-JMK1

Prepared for

Shenzhen Jimuyida Technology Co., Limited

21st Floor, Li-Ning Center, Shennan Avenue, Nanshan District, Shenzhen.

Prepared by

Guangdong Global Testing Technology Co., Ltd.

Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People's Republic of China, 523808

This report is based on a single evaluation of the submitted sample(s) of the above mentioned product, it does not imply an assessment of the production of the products. This report shall not be reproduced, except in full, without the written approval of Guangdong Global Testing Technology Co., Ltd.

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	December 19, 2024	Initial Issue	

Summary of Test Results

Test Item	Clause	Limit/Requirement	Result
Duty Cycle	ANSI C63.10-2013, Clause 12.2	None; for reporting purposes only.	Pass
26 dB emission bandwidth	KDB 789033 D02 v02r01 Section C.1	FCC Part 15.407 (a)(2)(5)	Pass
6 dB bandwidth	KDB 789033 D02 v02r01 Section C.2	FCC Part 15.407 (e)	Pass
Maximum conducted output power	KDB 789033 D02 v02r01 Section E.3.a (Method PM)	FCC Part 15.407 (a)(1)(2)(3)	Pass
Peak Power Spectral Density	KDB 789033 D02 v02r01 Section F	FCC Part 15.407 (a)(1)(2)(3)	Pass
Radiated Emissions and Band Edge Measurement	KDB 789033 D02 v02r01 Section G.3, G.4, G.5, and G.6	FCC Part 15.407 (b)(1)(2)(3)(4)(6), FCC Part 15.209/205	Pass
FREQUENCY STABILITY		FCC 15.407 (g),RSS-247 Issue 2 Clause6	Pass
AC Power Line Conducted Emission	ANSI C63.10-2013, Clause 6.2.	FCC Part 15.407 (b)(6), FCC Part 15.207	Pass
Antenna Requirement	N/A	FCC Part 15.203, FCC Part 15.407(a)(1) (2)	Pass

*This test report is only published to and used by the applicant, and it is not for evidence purpose in China.
*The measurement result for the sample received is <Pass> according to <FCC 47 CFR Part 15.407> when <Accuracy Method> decision rule is applied.

CONTENTS

1. ATTESTATION OF TEST RESULTS 5

2. TEST METHODOLOGY 6

3. FACILITIES AND ACCREDITATION 6

4. CALIBRATION AND UNCERTAINTY 7

4.1. MEASURING INSTRUMENT CALIBRATION 7

4.2. MEASUREMENT UNCERTAINTY 7

5. EQUIPMENT UNDER TEST 8

5.1. DESCRIPTION OF EUT 8

5.2. CHANNEL LIST 9

5.3. Maximum Average Conducted Power 9

5.4. THE WORSE CASE POWER SETTING PARAMETER 10

5.5. DESCRIPTION OF AVAILABLE ANTENNAS 11

5.6. EUT ACCESSORY 12

5.7. SUPPORT UNITS FOR SYSTEM TEST 13

5.8. SETUP DIAGRAM 13

6. MEASURING EQUIPMENT AND SOFTWARE USED 14

7. ANTENNA PORT TEST RESULTS 16

7.1. Duty Cycle 16

7.2. 26 dB emission bandwidth 17

7.3. 6 dB bandwidth 19

7.4. Maximum conducted output power 21

7.5. Peak Power Spectral Density 23

7.6. FREQUENCY STABILITY 25

8. RADIATED TEST RESULTS 27

8.1. Radiated Emissions and Band Edge Measurement 32

9. AC POWER LINE CONDUCTED EMISSION 50

10. ANTENNA REQUIREMENT 53

11. TEST DATA - Appendix A 54

1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	Shenzhen Jimuyida Technology Co., Limited
Address:	21st Floor, Li-Ning Center, Shennan Avenue, Nanshan District, Shenzhen.

Manufacturer Information

Company Name:	Wuhan Chizi Technology Co., Ltd
Address:	2F, Building B, HaiRongJi Incubation Park, Great Wall Park 3rd Road, WuDaYuan Road, Hongshan District, Wuhan

EUT Information

Product Description:	Eagle
Model:	JMK1
Series Model:	JMK2
Brand:	3DMAKERPRO
Sample Received Date:	November 12, 2024
Sample Status:	Normal
Sample ID:	A24100876 001
Date of Tested:	November 12, 2024 to December 19, 2024

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC 47 CFR Part 15.407	**Pass**

Prepared By:

Win Huang

Project Engineer

Checked By:

Alan He

Laboratory Leader

Approved By:

Shawn Wen

Laboratory Manager

Guangdong Global Testing Technology Co., Ltd. GTG CERTIFICATE

2. TEST METHODOLOGY

All tests were performed in accordance with the standard FCC 47 CFR Part 15.407

3. FACILITIES AND ACCREDITATION

Accreditation Certificate	**A2LA (Certificate No.: 6947.01)** Guangdong Global Testing Technology Co., Ltd. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1343)** Guangdong Global Testing Technology Co., Ltd. has been recognized to perform compliance testing on equipment subject to Supplier's Declaration of Conformity (SDoC) and Certification rules **ISED (Company No.: 30714)** Guangdong Global Testing Technology Co., Ltd. has been registered and fully described in a report filed with ISED. The Company Number is 30714 and the test lab Conformity Assessment Body Identifier (CABID) is CN0148.

Note: All tests measurement facilities use to collect the measurement data are located at Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People’s Republic of China, 523808

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Items	k	Uncertainty
Emission Bandwidth	1.96	±9.0 PPM
Conduct Output Power	1.96	± 1.12 dB
Power Spectral Density	1.96	± 2.1 dB
Conducted Spurious Emission	1.96	9 kHz-30 MHz: ± 0.95 dB 30 MHz-1 GHz: ± 1.5 dB 1GHz-12.75GHz: ± 1.8 dB 12.75 GHz-26.5 GHz: ± 2.1dB 26.5 GHz-40 GHz: ± 2.6 dB
Frequency Stability	1.96	±9.0 PPM
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.		

Test Item	Frequency Range	k	U(dB)
Conducted emissions from the AC mains power ports (AMN)	150 kHz ~ 30 MHz	2	3.37
Radiated emissions	9 kHz ~ 30 MHz	2	4.16
Radiated emissions	30 MHz ~ 1 GHz	2	3.79
Radiated emissions	1 GHz ~ 18 GHz	2	5.62
Radiated emissions	18 GHz ~ 40 GHz	2	5.54
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.			

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

EUT Name		Eagle
Model		JMK1
Series Model		JMK2
Model Difference		Structural difference: Compared with JMK1, the fisheye lens on the left, right and upper side of JMK2 is replaced with a glass cover to close the corresponding lens window, and other appearance shapes, colors and shipment matches are consistent. Module differences: JMK2 compared with JMK1, the left, right and upper side of the camera module are removed, and only the front side is retained. JMK1 and JMK2 all circuit boards and core modules, including motherboard, Lidar module, wifi module, GPS module, power module, data module, display module are all the same, data acquisition function, wifi function, GPS function, charging mode, output processing, display, etc.
Hardware Version		V1.0.002
Software Version		V1.0.001
Ratings		Input: 20V ⎓ 1.5A
Power Supply	AC	100-240V~ 50/60Hz 1.5A
	DC	20V
	Battery	DC 7.2V 6400mAh, 46.08Wh

Frequency Band:	5150 MHz to 5250 MHz (U-NII-1) 5725 MHz to 5850 MHz (U-NII-3)
Frequency Range:	5180 MHz to 5240 MHz 5745 MHz to 5825 MHz
Support Standards:	IEEE 802.11a/n/ac
Type of Modulation:	IEEE 802.11a: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM(256QAM, 64QAM, 16QAM, QPSK, BPSK)
Channel Spacing:	IEEE 802.11a/n-HT20/ac-VHT20: 20 MHz IEEE 802.11n-HT40/ac-VHT40: 40 MHz IEEE 802.11ac-VHT80: 80 MHz
Data Rate:	IEEE 802.11a: Up to 54 Mbps IEEE 802.11n-HT20: Up to MCS7 IEEE 802.11n-HT40: Up to MCS7 IEEE 802.11ac-VHT20: Up to MCS8 IEEE 802.11ac-VHT40: Up to MCS9 IEEE 802.11ac-VHT80: Up to MCS9
Number of Channels:	5150 MHz to 5250 MHz: 8 for 802.11a/n-HT20/ac-VHT20 4 for 802.11n-HT40)/ac-VHT40 2 for 802.11acVHT80 5725 MHz to 5850 MHz:

	5 for IEEE 802.11a/n HT20/ac VHT20 2 for IEEE 802.11n HT40/ac VHT40 1 for IEEE 802.11ac VHT80
Maximum Average Conducted Power:	U-NII-1 IEEE 802.11a: 14.74 dBm IEEE 802.11n-HT20: 14.95 dBm IEEE 802.11n-HT40: 13.81 dBm IEEE 802.11ac-VHT20: 13.66 dBm IEEE 802.11ac-VHT40: 12.96 dBm IEEE 802.11ac-VHT80: 12.56 dBm U-NII-3 IEEE 802.11a: 13.81 dBm IEEE 802.11n HT20: 14.82 dBm IEEE 802.11n HT40: 13.94 dBm IEEE 802.11ac VHT20: 13.78 dBm IEEE 802.11ac VHT40: 12.84 dBm IEEE 802.11ac VHT80: 12.63 dBm
Antenna Type:	Integral Antenna
Antenna Gain:	Antenna1/2(U-NII-1): 1.29 dBi Antenna1/2(U-NII-3): 2.02 dBi
Normal Test Voltage:	20 Vdc
EUT Test software:	MobaXterm
Note:	The Antenna Gain was provided by customer, and this information may affect the validity of the results, customer should be responsible for this.

5.2. CHANNEL LIST

UNII-1 (For Bandwidth = 20 MHz)		UNII-1 (For Bandwidth = 40 MHz)		UNII-1 (For Bandwidth = 80 MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

UNII-3 (For Bandwidth=20MHz)		UNII-3 (For Bandwidth=40MHz)		UNII-3 (For Bandwidth=80MHz)	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

5.3. MAXIMUM AVERAGE CONDUCTED POWER

UNII-1 BAND(FCC&ISED)

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power (dBm)	Max Average EIRP (dBm)

a	5150 ~ 5250	14.74	/
n HT20		14.95	/
n HT40		13.81	/
ac VHT20		13.66	/
ac VHT40		12.96	/
ac VHT80		12.56	/

UNII-3 BAND(FCC&ISED)

IEEE Std. 802.11	Frequency (MHz)	Maximum Average Conducted Power(dBm)	Max Average EIRP (dBm)
a	5725 ~ 5850	13.81	/
n HT20		14.82	/
n HT40		13.94	/
ac VHT20		13.78	/
ac VHT40		12.84	/
ac VHT80		12.63	/

5.4. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter	
Test Software	MobaXterm

UNII-1

Mode	Rate	Channel	Soft set value	
			ANT 1	ANT 2
11a	6M	36	85	80
		40	85	80
		48	85	75
11n HT20	MCS0	36	82	72
		40	82	72
		48	77	67
11n HT40	MCS0	38	72	77
		46	67	72
11ac VHT20	MCS0	36	72	67
		40	72	67
		48	72	62
11ac VHT40	MCS0	38	72	62
		46	67	62
11ac VHT80	MCS0	42	72	62

UNII-3

Mode	Rate	Channel	Soft set value	
			ANT 1	ANT 2
11a	6M	149	65	65
		157	65	65
		165	65	65
11n HT20	MCS0	149	62	62
		157	62	62
		165	62	62
11n HT40	MCS0	151	57	57

		159	57	57
11ac VHT20	MCS0	149	57	57
		157	57	57
		165	57	57
11ac VHT40	MCS0	151	52	52
		159	52	52
11ac VHT80	MCS0	155	52	57

THE WORSE CASE CONFIGURATIONS

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable a continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Test channels referring to section 5.4.

Maximum power setting referring to section 5.4.

Worst case Data Rates declared by the customer:

802.11a 20 mode: 6 Mbps
802.11n HT20 mode: MCS0
802.11n HT40 mode: MCS0
802.11ac VHT20 mode: MCS0
802.11ac VHT40 mode: MCS0
802.11ac VHT80 mode: MCS0

5.5. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna No.	Frequency Band	Antenna Type	Max Antenna Gain (dBi)
1	5150-5850	Integral	U-NII-1: 1.29 dBi U-NII-3: 2.02 dBi
2	5150-5850	Integral	U-NII-1: 1.29 dBi U-NII-3: 2.02 dBi

The EUT support Cyclic Shift Diversity(CDD) mode.

MIMO output power port and MIMO PSD port summing were performed in accordance with KDB 662911 D01. For the CDD results the Directional Gain was calculated in accordance with the following mothed.

U-NII-1:
For output power measurements:
Directional gain= GANT + Array Gain = 1.29dBi
GANT : equal to the gain of the antenna having the highest gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$

For power spectral density (PSD) measurements:
Directional gain= GANT + Array Gain = 4.30 dBi
Array Gain = 10 log(NANT/NSS) dB.
N_{ANT} : number of transmit antennas
N_{SS} : number of spatial streams, The worst case directional gain will occur when N_{SS} = 1

U-NII-3:
For output power measurements:
Directional gain= GANT + Array Gain = 2.02dBi
GANT : equal to the gain of the antenna having the highest gain
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$

For power spectral density (PSD) measurements:
Directional gain= GANT + Array Gain = 5.03 dBi
Array Gain = 10 log(NANT/NSS) dB.
N_{ANT} : number of transmit antennas
N_{SS} : number of spatial streams, The worst case directional gain will occur when $N_{SS} = 1$

IEE Std. 802.11	Transmit and Receive Mode	Description
802.11a	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11n HT20	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11n HT40	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT20	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT40	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
802.11ac VHT80	☒2TX, 2RX	ANT 1 and ANT 2 can be used as transmitting/receiving antenna.
Note:		

5.6. EUT ACCESSORY

Adapter	
Model No.:	RH-PD65W-1
Input:	100-240V~ 50/60Hz 1.5A
Output:	5V ⎓ 3A/9V ⎓ 3A/12V ⎓ 3A/15V ⎓ 3A/20V ⎓ 3.25A 65W max
AC Cable:	/
DC Cable:	/

Cable	
Accessory:	USB-C cable
Model No.:	/
Description:	USB Type-C Plug Cable
Cable Type:	Unshielded without ferrite
Length:	1.52 Meter

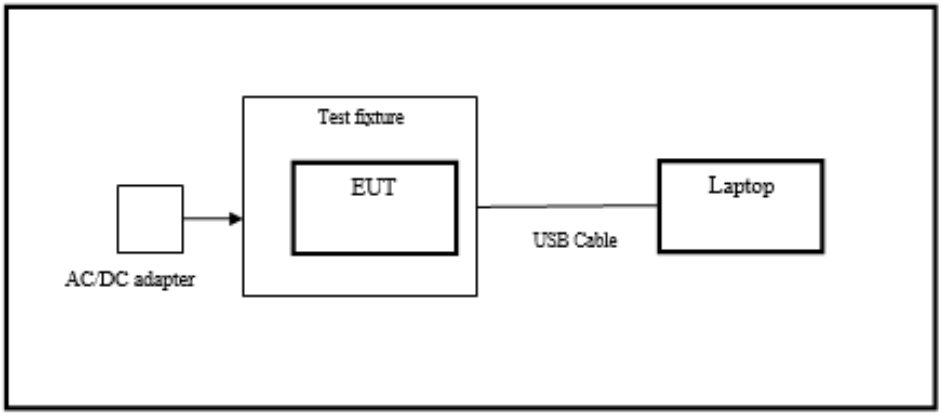
5.7. SUPPORT UNITS FOR SYSTEM TEST

The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
E-1	Laptop	Lenovo	Thinkpad T14	PF-3EAKYR	GTG Support

5.8. SETUP DIAGRAM

Radiated emissions & AC Power Line Conducted Emission:



6. MEASURING EQUIPMENT AND SOFTWARE USED

Test Equipment of Conducted RF					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Due Date**
Spectrum Analyzer	Rohde & Schwarz	FSV40	102257	2024/09/14	2025/09/13
Spectrum Analyzer	KEYSIGHT	N9020A	MY51285127	2024/09/14	2025/09/13
EXG Analog Signal Generator	KEYSIGHT	N5173B	MY61253075	2024/09/14	2025/09/13
Vector Signal Generator	Rohde & Schwarz	SMM100A	101899	2024/09/14	2025/09/13
RF Control box	MWRF-test	MW100-RFCB	MW220926GTG	2024/09/14	2025/09/13
Wideband Radio Communication Tester	Rohde & Schwarz	CMW270	102792	2024/09/14	2025/09/13
Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	103235	2024/09/14	2025/09/13
temperature humidity chamber	Espec	SH-241	SH-241-2014	2024/09/14	2025/09/13
RF Test Software	MWRF-test	MTS8310E (Ver. V2/0)	N/A	N/A	N/A

Test Equipment of Radiated emissions below 1GHz					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Due Date**
3m Semi-anechoic Chamber	ETS	9m*6m*6m	Q2146	2022/08/30	2025/08/29
EMI Test Receiver	Rohde & Schwarz	ESCI3	101409	2024/09/14	2025/09/13
Spectrum Analyzer	KEYSIGHT	N9020A	MY51283932	2024/09/14	2025/09/13
Pre-Amplifier	HzEMC	HPA-9K0130	HYPA21001	2024/09/14	2025/09/13
Biconilog Antenna	Schwarzbeck	VULB 9168	01315	2022/10/10	2025/10/09
Biconilog Antenna	ETS	3142E	00243646	2022/03/23	2025/03/22
Loop Antenna	ETS	6502	243668	2022/03/30	2025/03/29
Test Software	Farad	EZ-EMC (Ver.FA-03A2 RE)	N/A	N/A	N/A

Test Equipment of Radiated emissions above 1GHz					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Due Date**
3m Semi-anechoic Chamber	ETS	9m*6m*6m	Q2149	2022/08/30	2025/08/29
Spectrum Analyzer	Rohde & Schwarz	FSV40	101413	2024/09/14	2025/09/13
Spectrum Analyzer	KEYSIGHT	N9020A	MY51283932	2024/09/14	2025/09/13
Pre-Amplifier	A-INFO	HPA-1G1850	HYPA21003	2024/09/14	2025/09/13
Horn antenna	A-INFO	3117	246069	2022/03/11	2025/03/10
Pre-Amplifier	ZKJC	HPA-184057	HYPA21004	2024/09/14	2025/09/13

Horn antenna	ZKJC	3116C	246265	2022/03/29	2025/03/28
Test Software	Farad	EZ-EMC (Ver.FA-03A2 RE+)	N/A	N/A	N/A

Test Equipment of Conducted emissions					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Due Date**
Shielded Room	CHENG YU	8m*5m*4m	N/A	2022/10/29	2025/10/28
EMI Test Receiver	Rohde & Schwarz	ESR3	102647	2024/09/14	2025/09/13
LISN/AMN	Rohde & Schwarz	ENV216	102843	2024/09/14	2025/09/13
NNLK 8129 RC	Schwarzbeck	NNLK 8129 RC	5046	2024/09/14	2025/09/13
Test Software	Farad	EZ-EMC (Ver. EMC-con-3A1 1+)	N/A	N/A	N/A

7. ANTENNA PORT TEST RESULTS

7.1. DUTY CYCLE

LIMITS

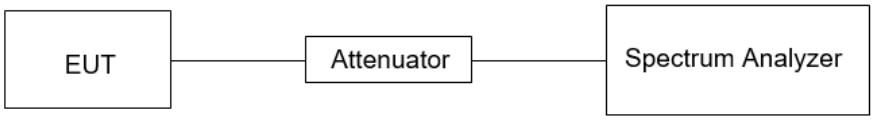
None; for reporting purposes only.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.B.

The zero-span mode on a spectrum analyzer or EMI receiver, if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal. Set the center frequency of the instrument to the center frequency of the transmission. Set RBW ≥ EBW if possible; otherwise, set RBW to the largest available value. Set VBW ≥ RBW. Set detector = peak or average. The zero-span measurement method shall not be used unless both RBW and VBW are > 50/T, where T is defined in II.B.1.a), and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if T ≤ 16.7 microseconds.)

TEST SETUP



TEST ENVIRONMENT

Temperature	22.7℃	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.2. 26 DB EMISSION BANDWIDTH

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
26 dB Emission Bandwidth	For reporting purposes only.	5150 ~ 5250
26 dB Emission Bandwidth	For reporting purposes only.	5250 ~ 5350
26 dB Emission Bandwidth	For reporting purposes only.	5470 ~ 5725

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.C1. for 26 dB Emission Bandwidth; section II.C2. for 6 dB Emission Bandwidth; section II.D. for 99 % Occupied Bandwidth.
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Emission Bandwidth: RBW=100 kHz For 26 dB Emission bandwidth: approximately 1 % of the EBW.
VBW	For 6 dB Bandwidth: ≥ 3*RBW For 26 dB Bandwidth: >3*RBW
Trace	Max hold
Sweep	Auto couple

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.
b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6/26 dB relative to the maximum level measured in the fundamental emission.

Calculation for 26 dB Bandwidth of UNII-2C Straddle Channel:

For Example: Fundamental frequency: 5720 MHz

26 dB BW: 20.00 MHz

FL: 5710.16 MHz

FH: 5730.16 MHz

Turning Frequency: 5725 MHz

26 dB Bandwidth of UNII-2C Band Portion = 5725-5710.16=14.84 MHz

Calculation for 6dB Bandwidth of UNII-3 Straddle Channel:

For Example: Fundamental frequency: 5720 MHz

6 dB BW: 16.44 MHz

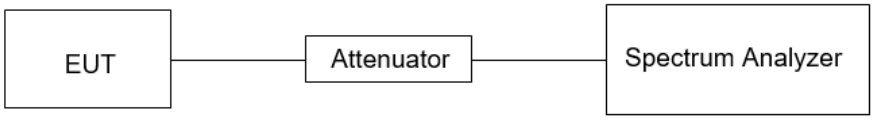
FL: 5711.76 MHz

FH: 5728.2 MHz

Turning Frequency: 5725 MHz

6 dB Bandwidth of UNII-3 band Portion = 5728.2-5725=3.2 MHz

TEST SETUP



TEST ENVIRONMENT

Temperature	22.7℃	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.3. 6 DB BANDWIDTH

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
6 dB Emission Bandwidth	The minimum 6 dB emission bandwidth shall be 500 kHz.	5725 ~ 5850

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.C2. for 6 dB Emission Bandwidth.
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	For 6 dB Emission Bandwidth: RBW=100 kHz
VBW	For 6 dB Bandwidth: ≥ 3*RBW
Trace	Max hold
Sweep	Auto couple

b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Calculation for 6dB Bandwidth of UNII-3 Straddle Channel:

For Example: Fundamental frequency: 5720 MHz

6 dB BW: 16.44 MHz

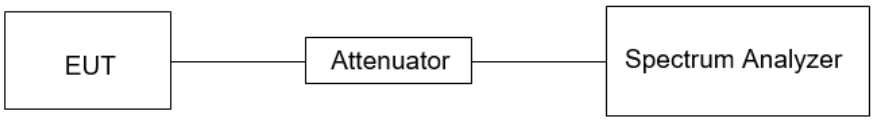
FL: 5711.76 MHz

FH: 5728.2 MHz

Turning Frequency: 5725 MHz

6 dB Bandwidth of UNII-3 band Portion = 5728.2-5725=3.2 MHz

TEST SETUP



TEST ENVIRONMENT

Temperature	22.7℃	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.4. MAXIMUM CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	☐ Outdoor Access Point: 1 W (30 dBm) ☐ Indoor Access Point: 1 W (30 dBm) ☐ Fixed Point-To-Point Access Points: 1 W (30 dBm) ☒ Client Devices: 250 mW (24 dBm)	5150 ~ 5250
	Shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.	5250 ~ 5350 5470 ~ 5725
	Shall not exceed 1 Watt (30 dBm).	5725 ~ 5850

Note:
The above limits are based upon the maximum antenna gain does not exceed 6 dBi.
If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.E.

Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep):
(i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.
(ii) Set RBW = 1 MHz.
(iii) Set VBW ≥ 3 MHz.
(iv) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)
(v) Sweep time = auto.
(vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
(vii) If transmit duty cycle < 98 %, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98 %, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to “free run.”
(viii) Trace average at least 100 traces in power averaging (rms) mode.
(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

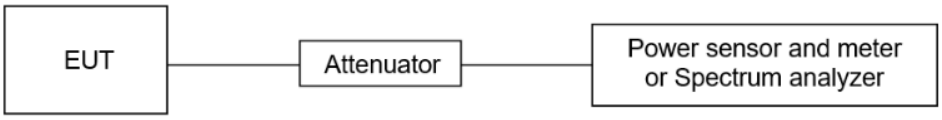
Method PM (Measurement using an RF average power meter):
(i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
a. The EUT is configured to transmit continuously or to transmit with a constant duty 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 II.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 %).

Method PM-G (Measurement using a gated RF average power meter):
Measurements may be performed using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

Straddle channel power was measured using spectrum analyzer.

TEST SETUP



TEST ENVIRONMENT

Temperature	22.7℃	Relative Humidity	51%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.5. PEAK POWER SPECTRAL DENSITY

LIMITS

CFR 47 FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	☐ Outdoor Access Point: 17 dBm/MHz ☐ Indoor Access Point: 17 dBm/MHz ☐ Fixed Point-To-Point Access Points: 17 dBm/MHz ☒ Client Devices: 11 dBm/MHz	5150 ~ 5250
	11 dBm/MHz	5250 ~ 5350 5470 ~ 5725
	30 dBm/500kHz	5725 ~ 5850

Note:
The above limits are based upon the maximum antenna gain does not exceed 6 dBi.
If transmitting antennas of directional gain greater than 6 dBi are used, maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST PROCEDURE

Refer to KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.F.

Connect the EUT to the spectrum analyser and use the following settings:

For U-NII-1, U-NII-2A and U-NII-2C band:

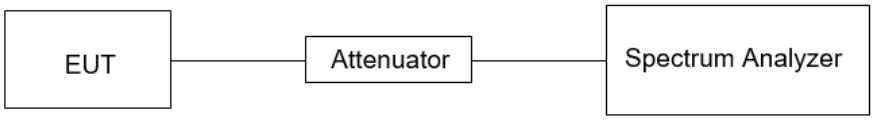
Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	1 MHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

For U-NII-3:

Center Frequency	The center frequency of the channel under test
Detector	RMS
RBW	500 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

Allow trace to fully stabilize and Use the peak search function on the instrument to find the peak of the spectrum and record its value.
Add 10 log (1/x), where x is the duty cycle, to the peak of the spectrum, the result is the Maximum PSD over 1 MHz / 500 kHz reference bandwidth.

TEST SETUP



TEST ENVIRONMENT

Temperature	22.7℃	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

7.6. FREQUENCY STABILITY

LIMITS

The frequency of the carrier signal shall be maintained within band of operation.

TEST PROCEDURE

1. The EUT was placed inside an environmental chamber as the temperature in the chamber was varied between 0 °C ~ 40 °C (declared by customer).

2. The temperature was incremented by 10 °C intervals and the unit allowed to stabilize at each temperature before each measurement. The center frequency of the transmitting channel was evaluated at each temperature and the frequency deviation from the channel's center frequency was recorded.

3. The primary supply voltage is varied from 85 % to 115 % of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

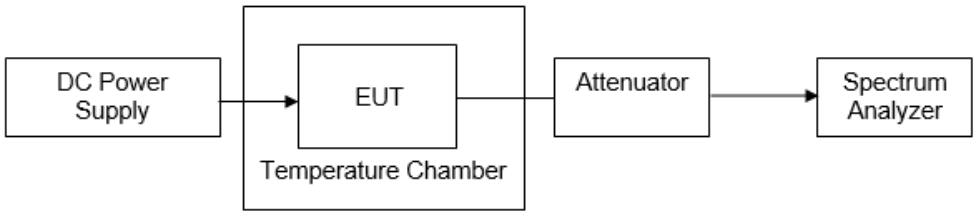
Connect the EUT to the spectrum analyser and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	10 kHz
VBW	≥3 × RBW
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

4. While maintaining a constant temperature inside the environmental chamber, turn the EUT on and record the operating frequency at startup, and at 2 minutes, 5minutes, and 10 minutes after the EUT is energized.

5. Allow the trace to stabilize, find the peak value of the power envelope and record the frequency, then calculated the frequency drift.

TEST SETUP



TEST ENVIRONMENT

Temperature	22.7℃	Relative Humidity	53%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data" - Appendix A

8. RADIATED TEST RESULTS

LIMITS

Refer to CFR 47 FCC §15.205, §15.209 and §15.407 (b).

Radiation Disturbance Test Limit for FCC (Class B) (9 kHz ~ 1 GHz)

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m	
		Quasi-Peak	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	
Above 1000	500	Peak	Average
		74	54

FCC Emissions radiated outside of the specified frequency bands below 30 MHz		
Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30

FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
[1]0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	([2])
13.36-13.41			

Note: [1]Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.
[2]Above 38.6c

Limits of unwanted/undesirable emission out of the restricted bands refer to CFR 47 FCC §15.407 (b).

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1GHz)		
Frequency Range (MHz)	EIRP Limit	Field Strength Limit (dBuV/m) at 3 m
5150~5250 MHz	PK: -27 (dBm/MHz)	PK:68.2(dBμV/m)
5250~5350 MHz		
5470~5725 MHz		
5725~5850 MHz	PK: -27 (dBm/MHz) *1 PK: 10 (dBm/MHz) *2 PK: 15.6 (dBm/MHz) *3 PK: 27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK: 105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK: 122.2 (dBμV/m) *4
Note: *1 beyond 75 MHz or more above of the band edge. *2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above. *3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above. *4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.		

TEST PROCEDURE

Below 30 MHz

The setting of the spectrum analyser

RBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
VBW	200 Hz (From 9 kHz to 0.15 MHz)/ 9 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.4.

2. The EUT was arranged to its worst case and then turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.

5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz Radiated emission limits in these three bands are based on measurements employing an average detector.

6. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.

7. Although these tests were performed other than open field site, adequate comparison measurements were confirmed against 30m open field site. Therefore sufficient tests were made

to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.

8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377Ω. For example, the measurement frequency X KHz resulted in a level of Y dBuV/m, which is equivalent to Y-51.5 = Z dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and above 30 MHz

The setting of the spectrum analyser

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2013 clause 6.5.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

3. The EUT was placed on a turntable with 80 cm above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement below 1 GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Above 1 GHz

The setting of the spectrum analyser

RBW	1 MHz
VBW	PEAK: 3 MHz AVG: see note 6
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in KDB 789033 D02 General U-NII Test Procedures New Rules v02r01 section II.G.3 ~ II.G.6.

2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

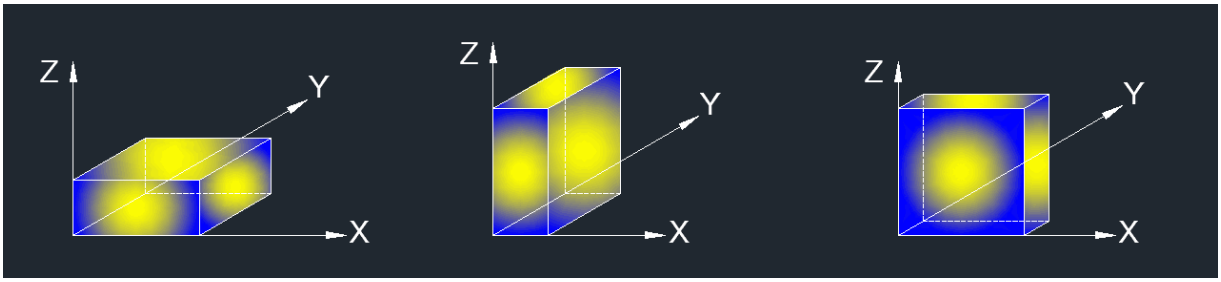
3. The EUT was placed on a turntable with 1.5 m above ground.

4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.

5. For measurement above 1 GHz, the emission measurement will be measured by the peak detector. This peak level, once corrected, must comply with the limit specified in Section 15.209.

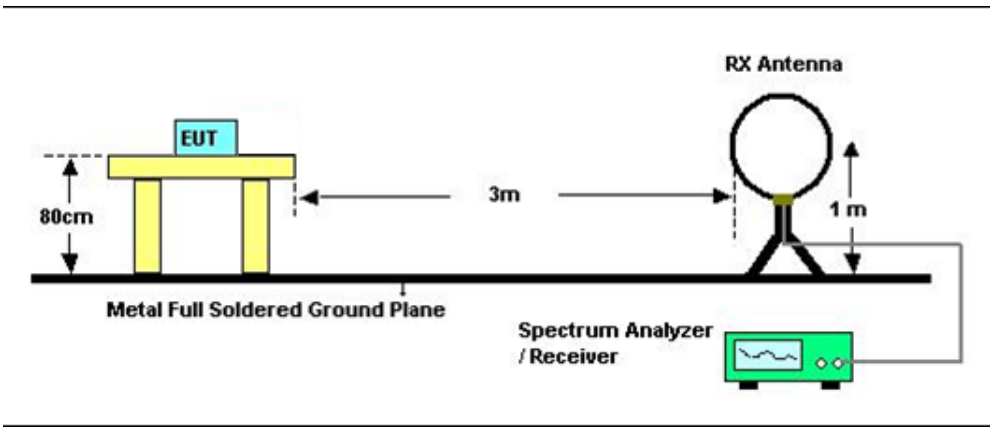
6. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T video bandwidth with peak detector for average measurements. For the Duty Cycle please refer to clause 7.1.ON TIME AND DUTY CYCLE.

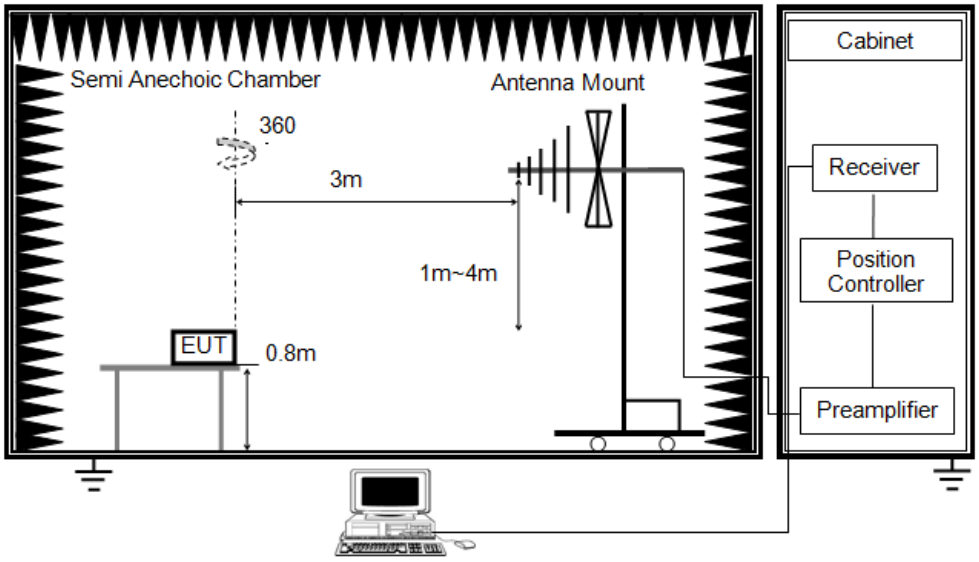
X axis, Y axis, Z axis positions:

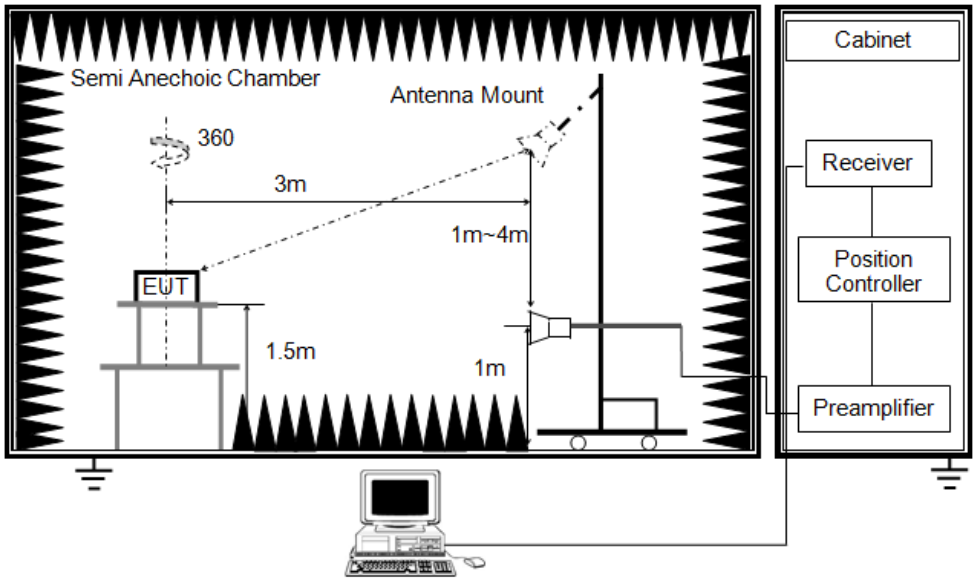


Note 1: For all radiated test, EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data recorded in the report.

TEST SETUP







TEST ENVIRONMENT

Temperature	22.1℃	Relative Humidity	51%
Atmosphere Pressure	101kPa		

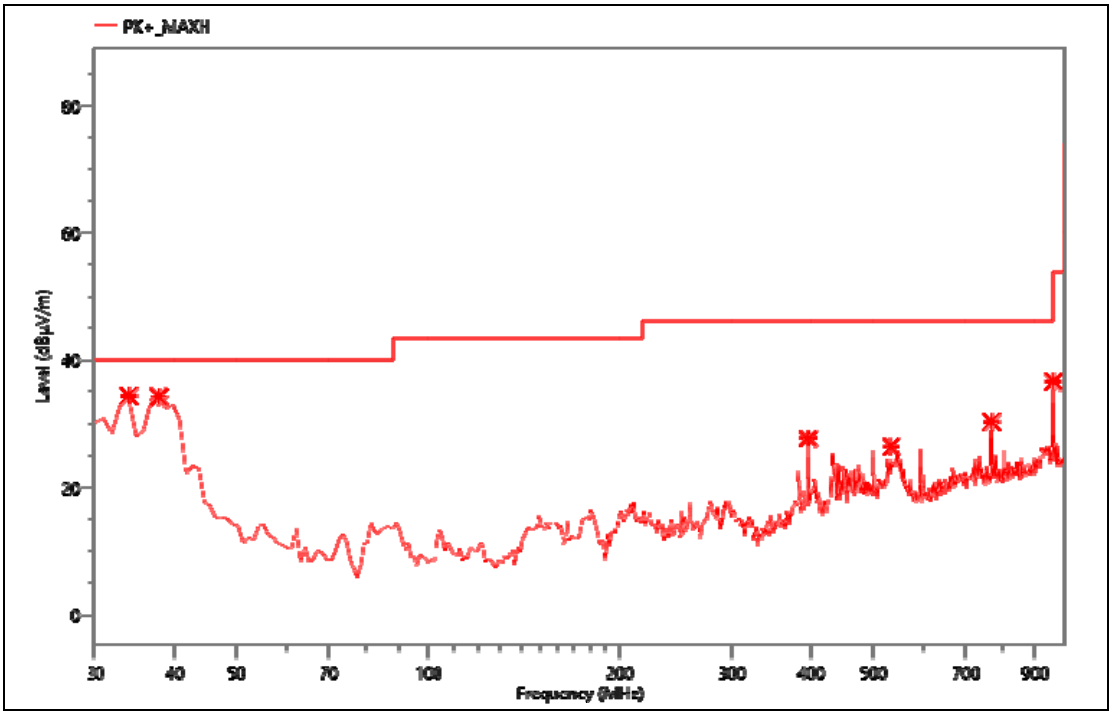
TEST RESULTS

8.1. RADIATED EMISSIONS AND BAND EDGE MEASUREMENT

Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)

All modes have been tested and the worst result as bellow:

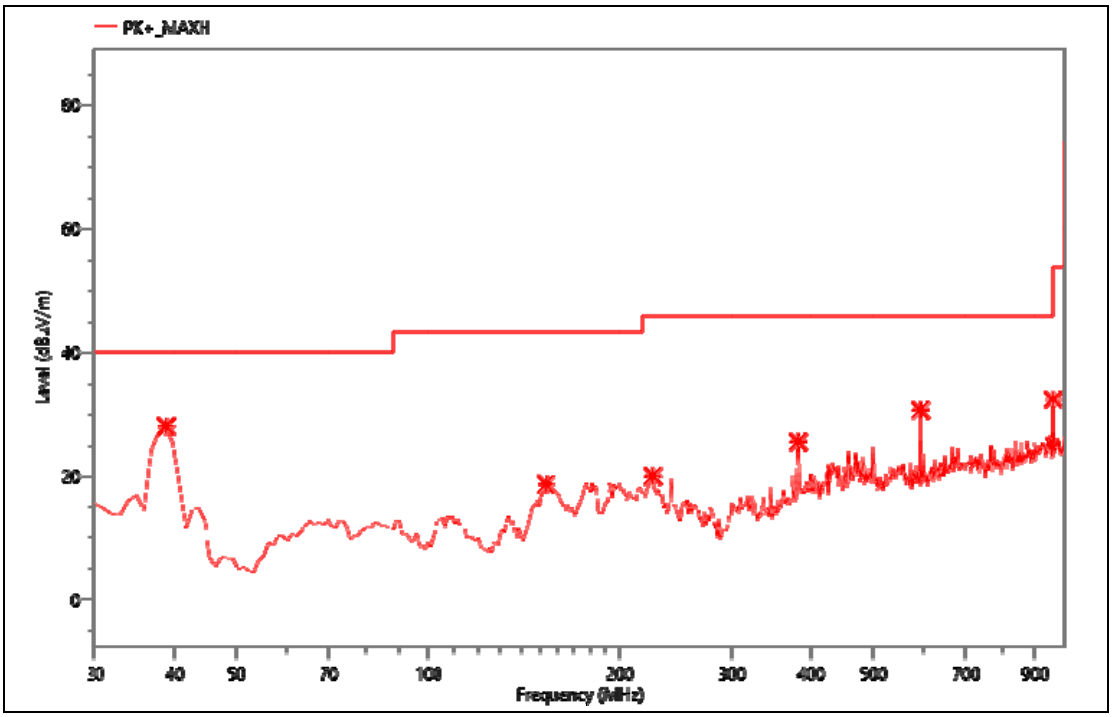
Mode:	11N20 5180
Power:	DC 5V
TE:	Big
Date	2024/12/09
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	33.880	50.80	-16.49	34.31	40.00	5.69	PK+	V
2	37.760	52.93	-18.76	34.17	40.00	5.83	PK+	V
3	395.690	41.79	-14.14	27.65	46.00	18.35	PK+	V
4	533.430	36.92	-10.61	26.31	46.00	19.69	PK+	V
5	766.230	37.52	-7.2	30.32	46.00	15.68	PK+	V
6	960.230	40.35	-3.82	36.53	53.90	17.37	PK+	V

Mode:	11N20 5180
Power:	DC 5V
TE:	Big
Date	2024/12/09
T/A/P	22.1℃/51%/101Kpa



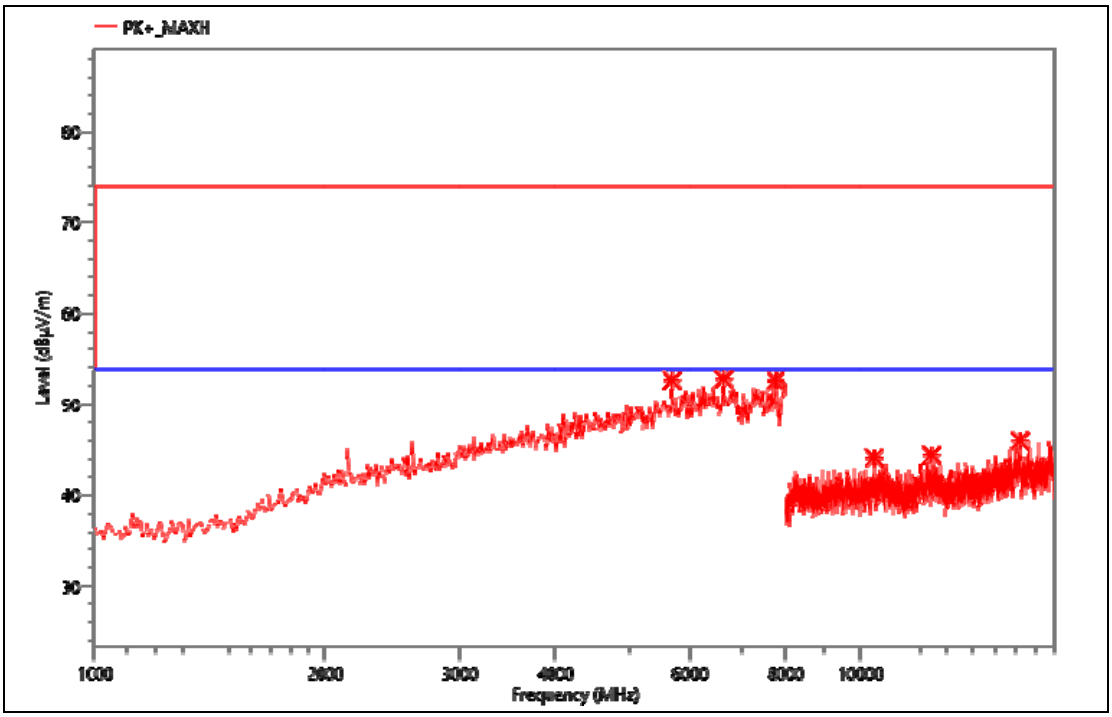
Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	38.730	47.38	-19.31	28.07	40.00	11.93	PK+	H
2	153.190	40.58	-21.91	18.67	43.50	24.83	PK+	H
3	224.970	40.50	-20.56	19.94	46.00	26.06	PK+	H
4	382.110	40.40	-14.79	25.61	46.00	20.39	PK+	H
5	594.540	40.64	-10.01	30.63	46.00	15.37	PK+	H
6	960.230	36.23	-3.82	32.41	53.90	21.49	PK+	H

Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

All modes have been tested and the worst result as bellow:

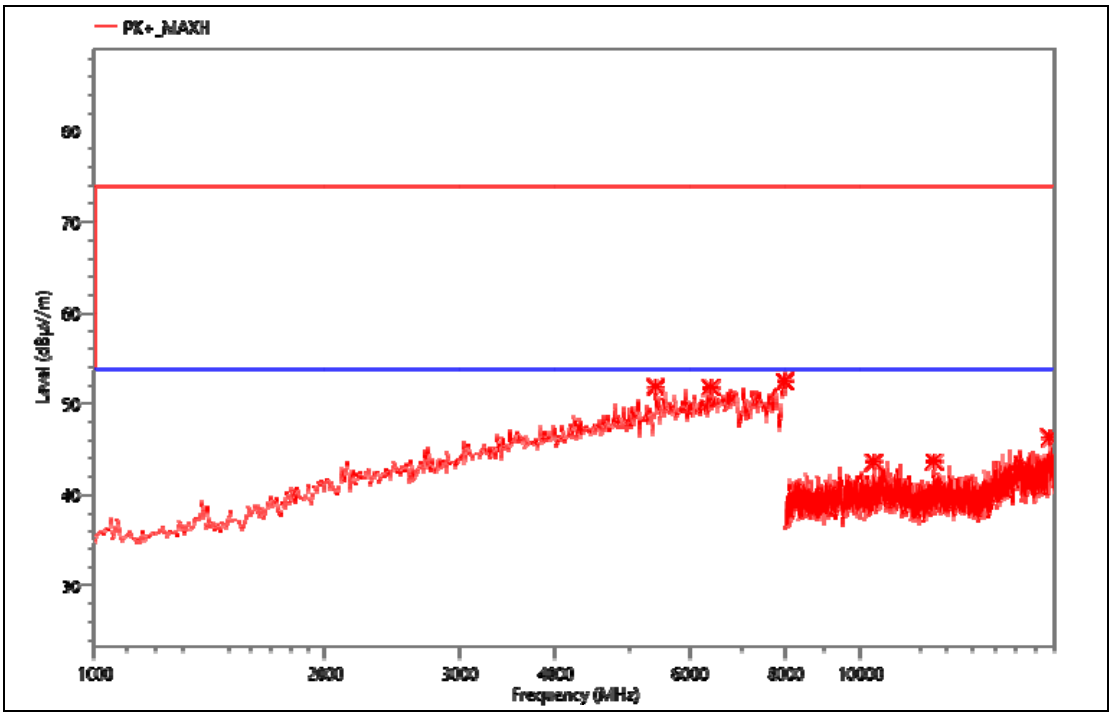
Mode:	11N20 5180
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5683.000	53.33	-0.71	52.62	74.00	21.38	PK+	H
2	6628.000	46.01	6.78	52.79	74.00	21.21	PK+	H
3	7748.000	39.98	12.6	52.58	74.00	21.42	PK+	H
4	10411.000	49.51	-5.4	44.11	74.00	29.89	PK+	H
5	12398.000	49.02	-4.59	44.43	74.00	29.57	PK+	H
6	16210.000	46.76	-0.78	45.98	74.00	28.02	PK+	H

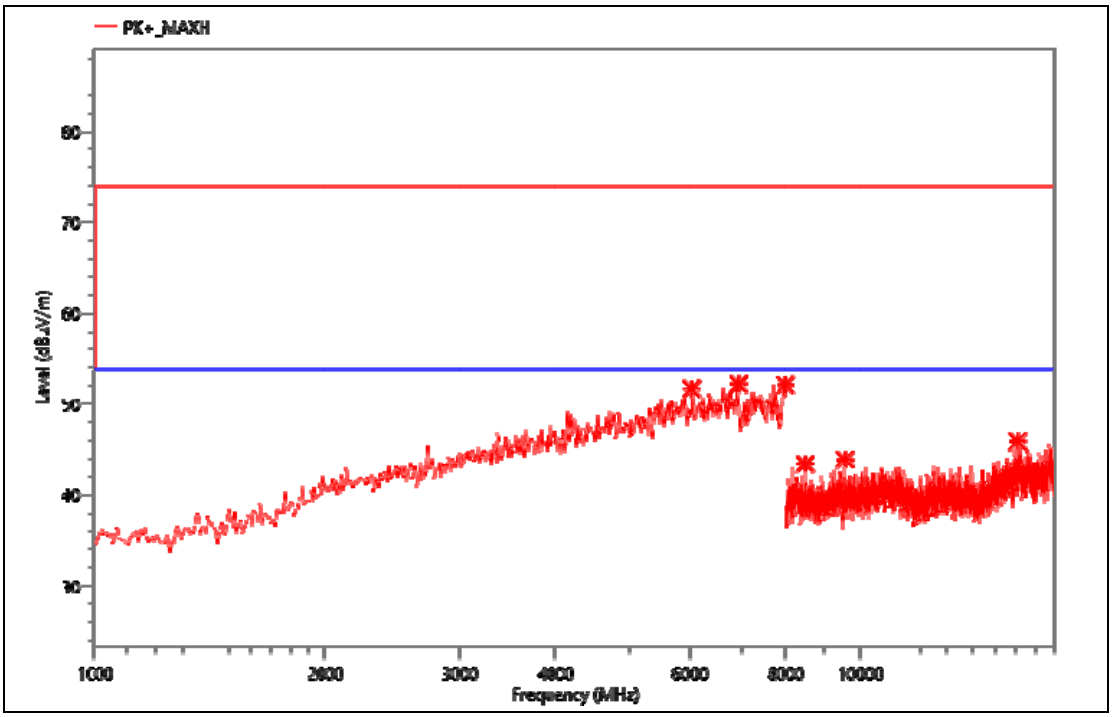
Mode:	11N20 5180
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5396.000	51.93	-0.06	51.87	74.00	22.13	PK+	V
2	6383.000	47.65	4.16	51.81	74.00	22.19	PK+	V
3	7979.000	35.80	16.74	52.54	74.00	21.46	PK+	V
4	10399.000	49.01	-5.45	43.56	74.00	30.44	PK+	V
5	12495.000	47.63	-4.02	43.61	74.00	30.39	PK+	V
6	17700.000	46.72	-0.42	46.30	74.00	27.70	PK+	V

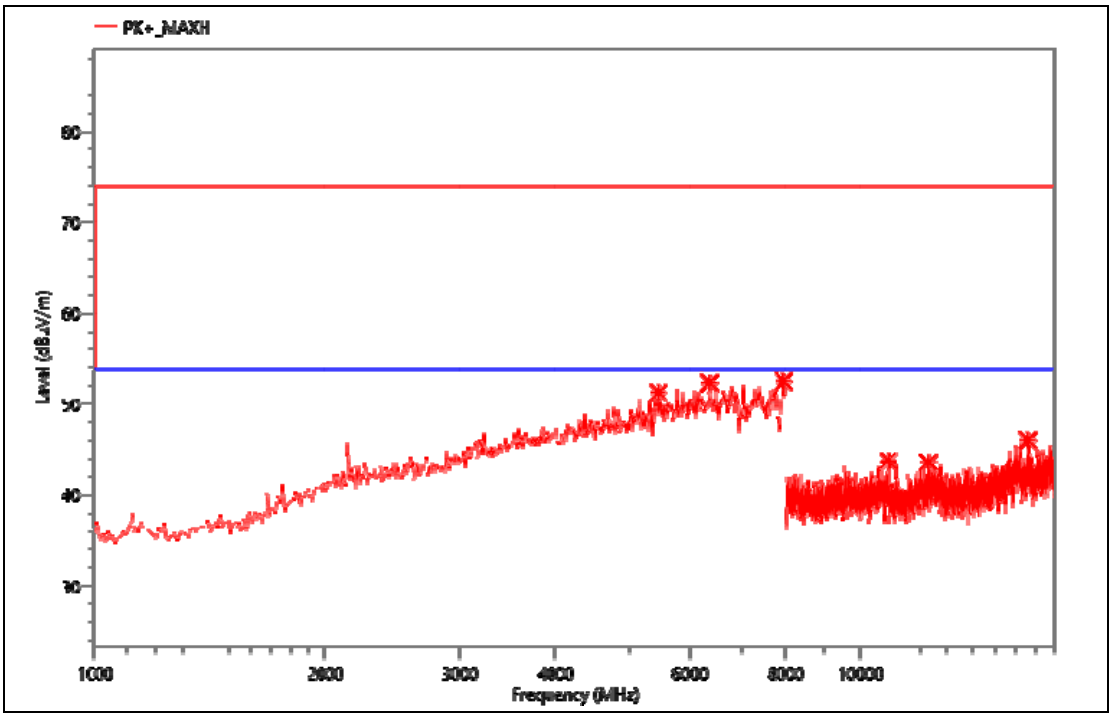
Mode:	11N20 5200
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	6026.000	52.34	-0.63	51.71	74.00	22.29	PK+	V
2	6929.000	44.02	8.22	52.24	74.00	21.76	PK+	V
3	7986.000	35.51	16.63	52.14	74.00	21.86	PK+	V
4	8480.000	51.35	-7.93	43.42	74.00	30.58	PK+	V
5	9550.000	50.65	-6.75	43.90	74.00	30.10	PK+	V
6	16092.000	47.42	-1.5	45.92	74.00	28.08	PK+	V

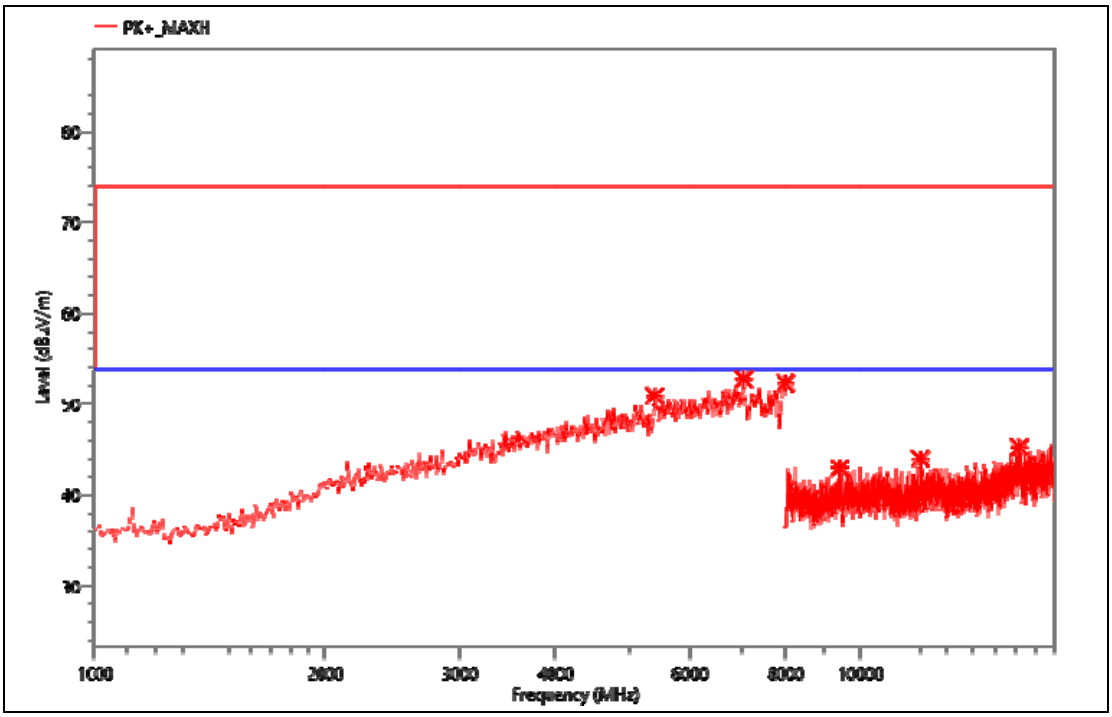
Mode:	11N20 5200
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5445.000	51.54	-0.27	51.27	74.00	22.73	PK+	H
2	6355.000	48.69	3.65	52.34	74.00	21.66	PK+	H
3	7944.000	35.04	17.48	52.52	74.00	21.48	PK+	H
4	10883.000	48.77	-5.05	43.72	74.00	30.28	PK+	H
5	12289.000	47.69	-4.12	43.57	74.00	30.43	PK+	H
6	16583.000	47.28	-1.27	46.01	74.00	27.99	PK+	H

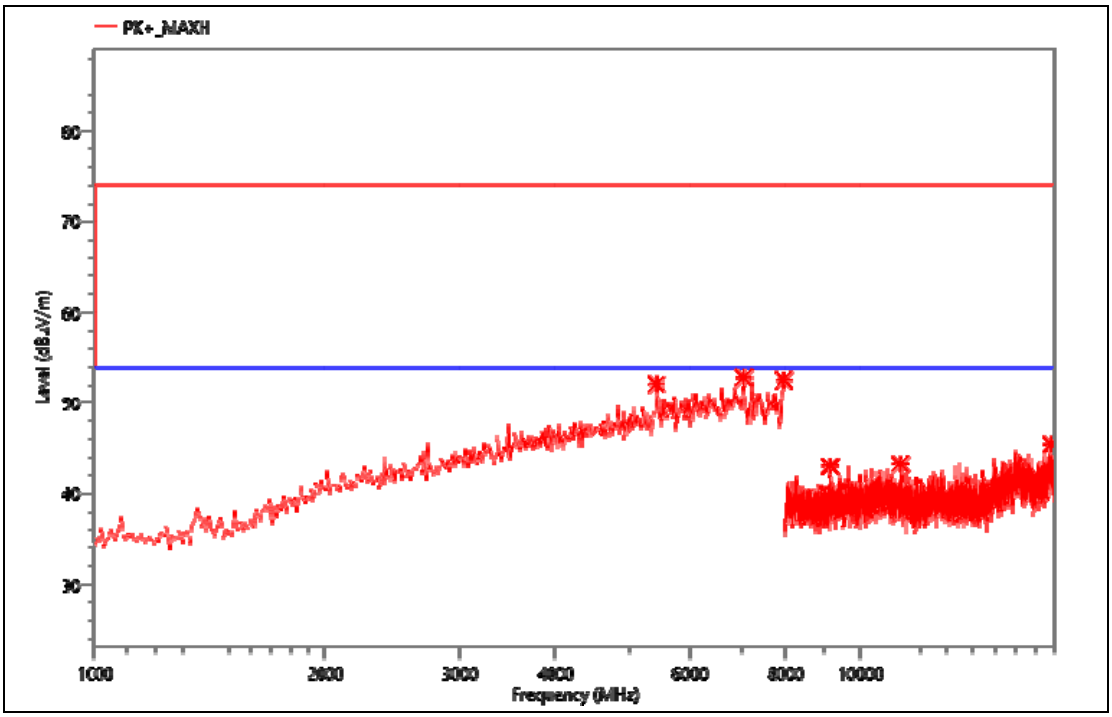
Mode:	11N20 5240
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5375.000	51.00	-0.09	50.91	74.00	23.09	PK+	H
2	7034.000	42.98	9.79	52.77	74.00	21.23	PK+	H
3	7993.000	35.81	16.53	52.34	74.00	21.66	PK+	H
4	9396.000	49.77	-6.81	42.96	74.00	31.04	PK+	H
5	12001.000	48.44	-4.46	43.98	74.00	30.02	PK+	H
6	16165.000	45.44	-0.18	45.26	74.00	28.74	PK+	H

Mode:	11N20 5240
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

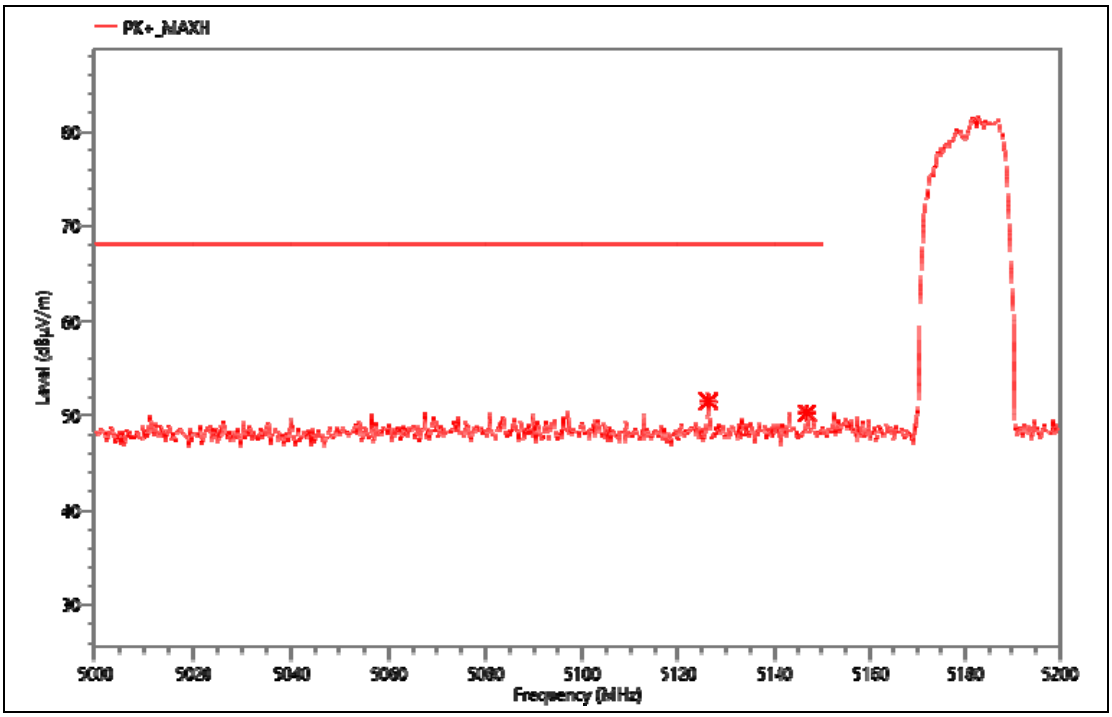
No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5410.000	52.15	-0.05	52.10	74.00	21.90	PK+	V
2	7041.000	42.64	10.17	52.81	74.00	21.19	PK+	V
3	7951.000	34.97	17.57	52.54	74.00	21.46	PK+	V
4	9132.000	49.94	-6.92	43.02	74.00	30.98	PK+	V
5	11305.000	47.76	-4.49	43.27	74.00	30.73	PK+	V
6	17786.000	45.45	0	45.45	74.00	28.55	PK+	V

For the frequency above 18 GHz, a pre-scan was performed, and the result was 20 dB lower than the limit line, the test data was not shown in the report.

Band Edge

All modes have been tested and the worst result as bellow:

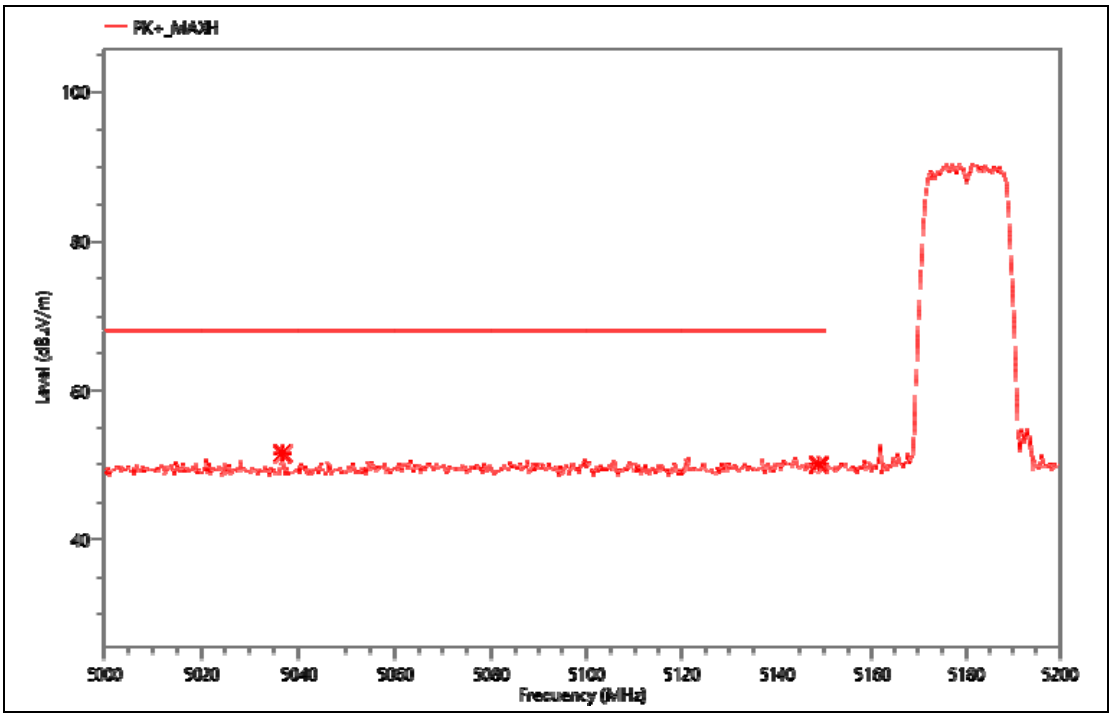
Mode:	11N20 5180
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5126.200	23.24	28.33	51.57	68.20	16.63	PK+	V
2	5146.800	21.77	28.49	50.26	68.20	17.94	PK+	V

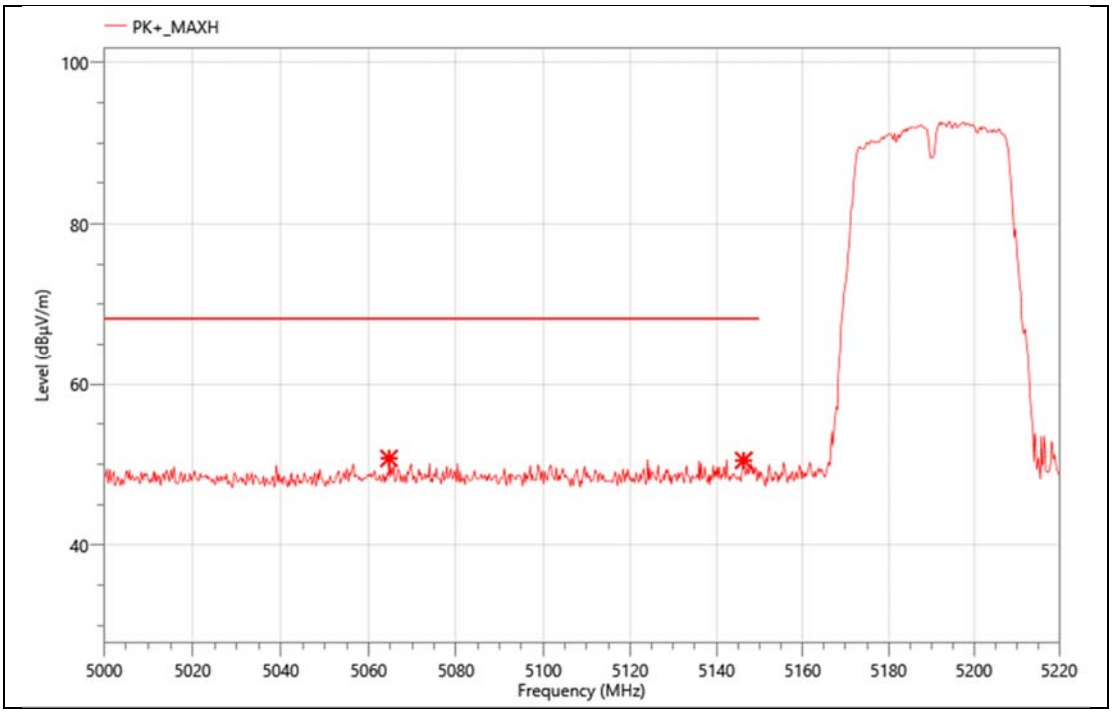
Mode:	11N20 5180
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5036.600	23.58	28.04	51.62	68.20	16.58	PK+	H
2	5148.800	21.58	28.47	50.05	68.20	18.15	PK+	H

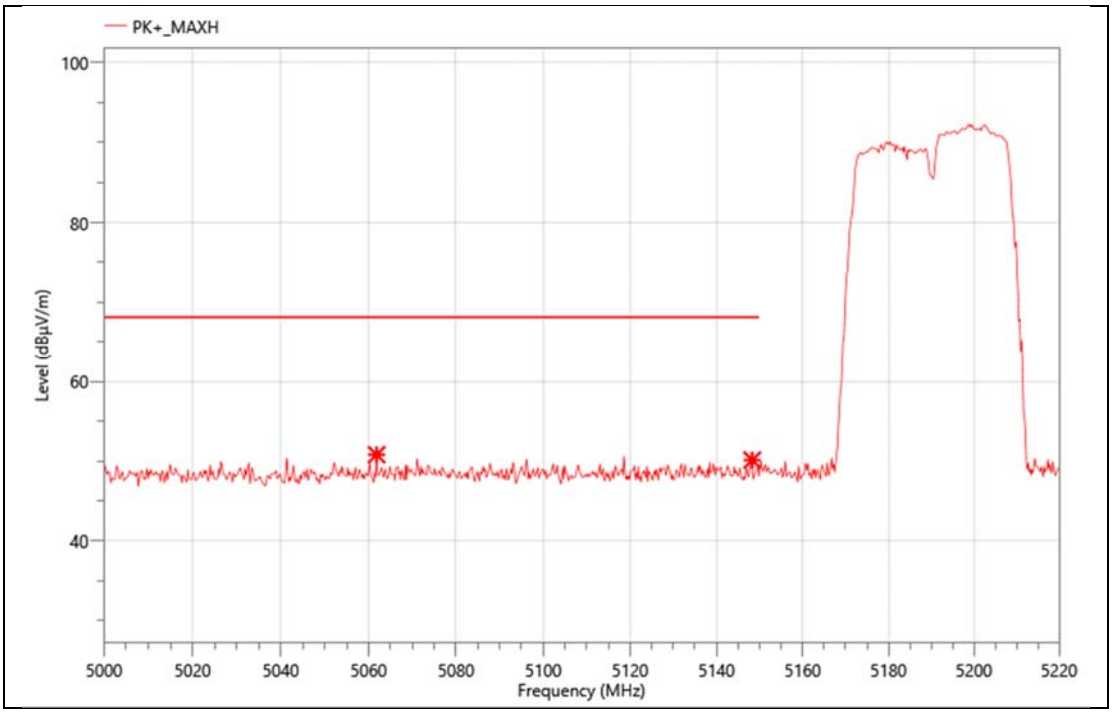
Mode:	11N40 5190
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5064.680	22.25	28.52	50.77	68.20	17.43	PK+	H
2	5146.300	22.02	28.5	50.52	68.20	17.68	PK+	H

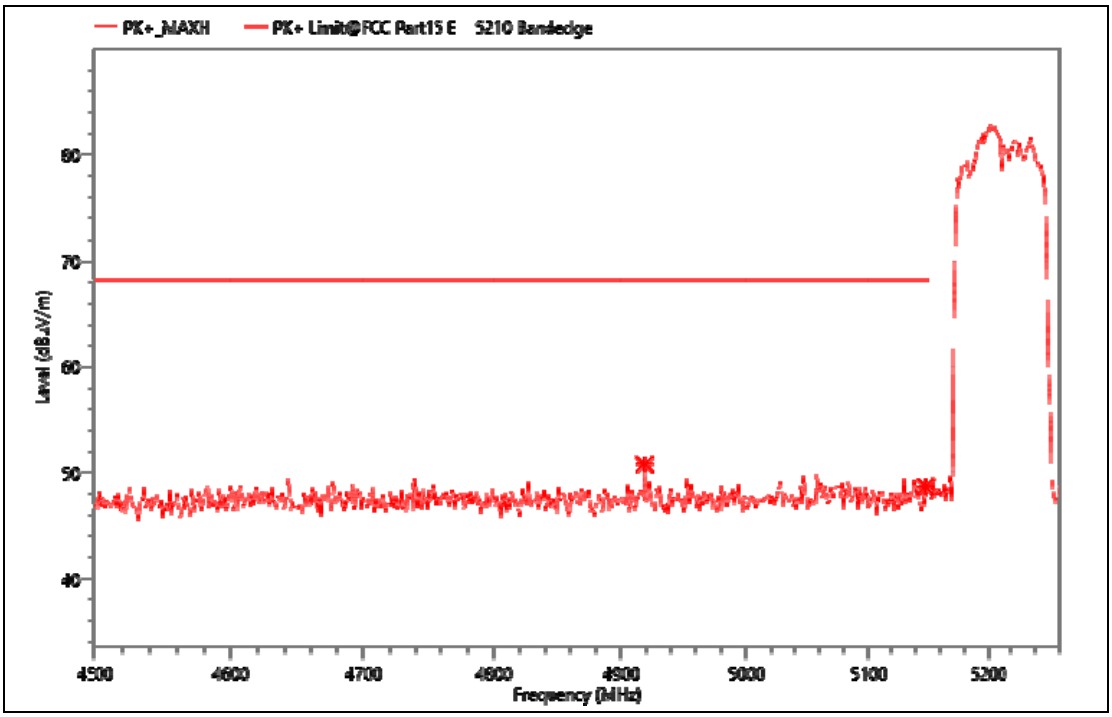
Mode:	11N40 5190
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5061.820	22.32	28.47	50.79	68.20	17.41	PK+	V
2	5148.280	21.64	28.47	50.11	68.20	18.09	PK+	V

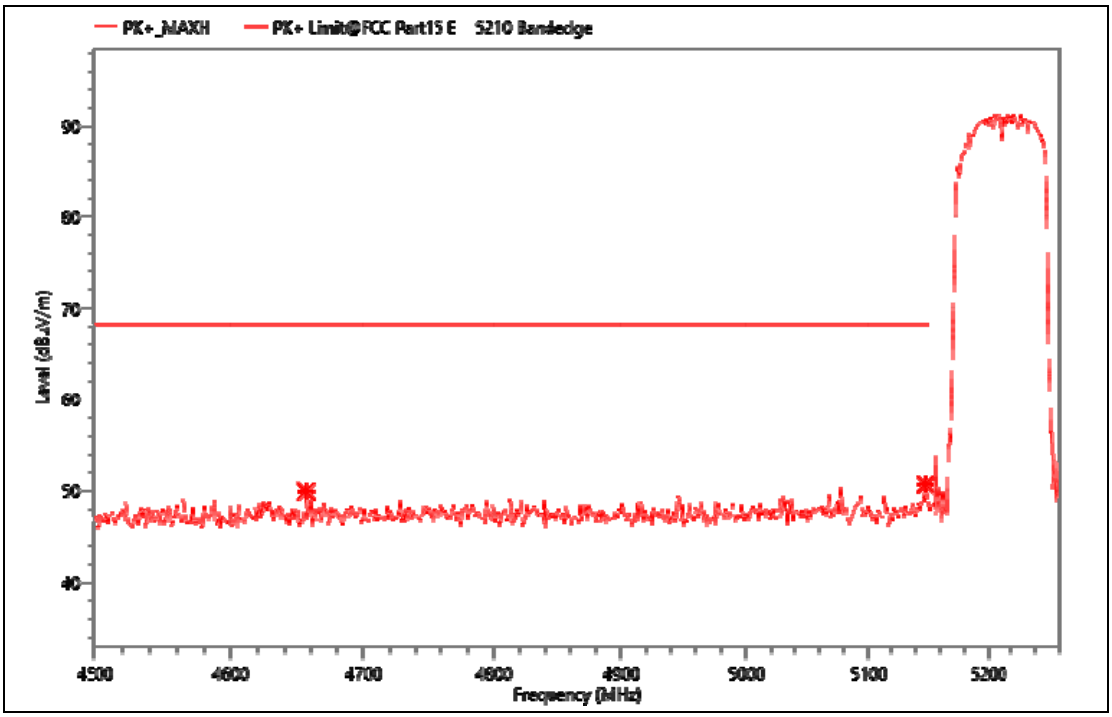
Mode:	11AC80 5210
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	4918.000	22.47	28.3	50.77	68.20	17.43	PK+	V
2	5147.520	20.15	28.48	48.63	68.20	19.57	PK+	V

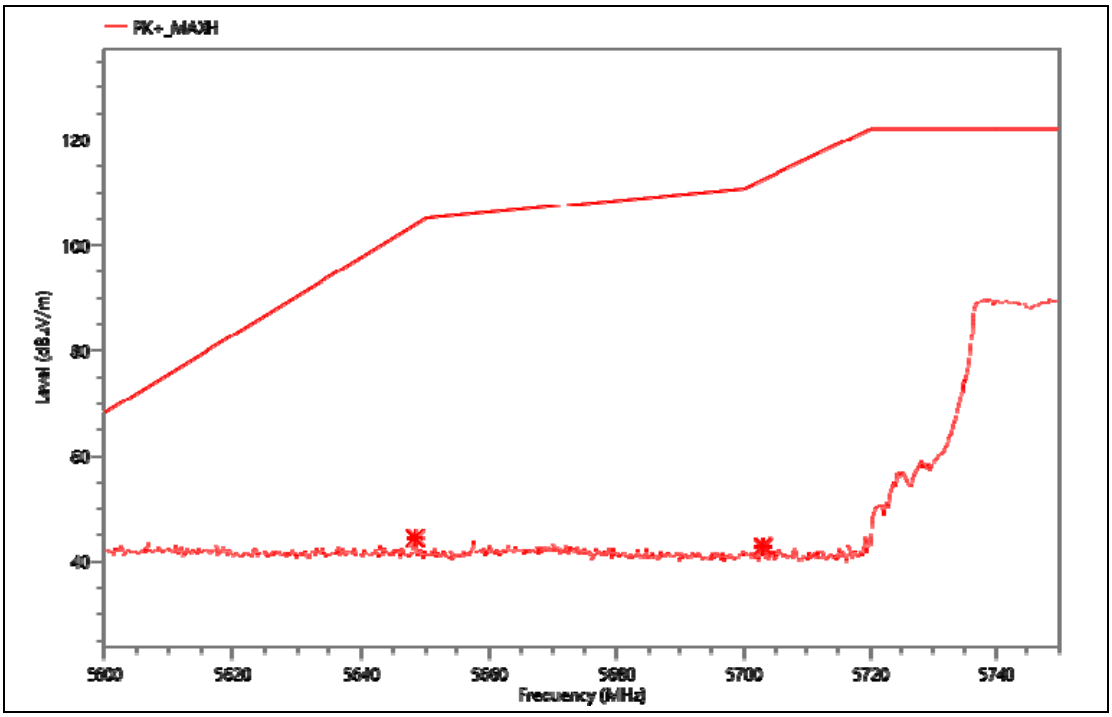
Mode:	11AC80 5210
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	4655.800	21.84	28.07	49.91	68.20	18.29	PK+	H
2	5147.520	22.19	28.48	50.67	68.20	17.53	PK+	H

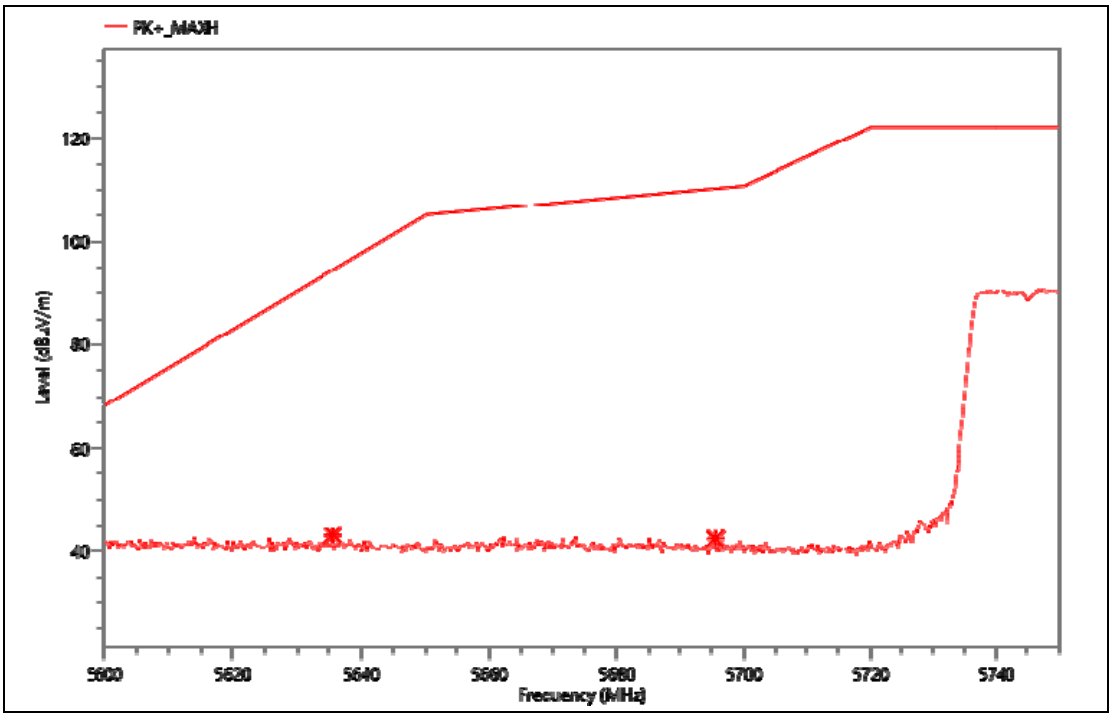
Mode:	11N20 5745
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5648.300	53.98	-9.66	44.32	103.95	59.63	PK+	H
2	5702.900	52.33	-9.6	42.73	112.46	69.73	PK+	H

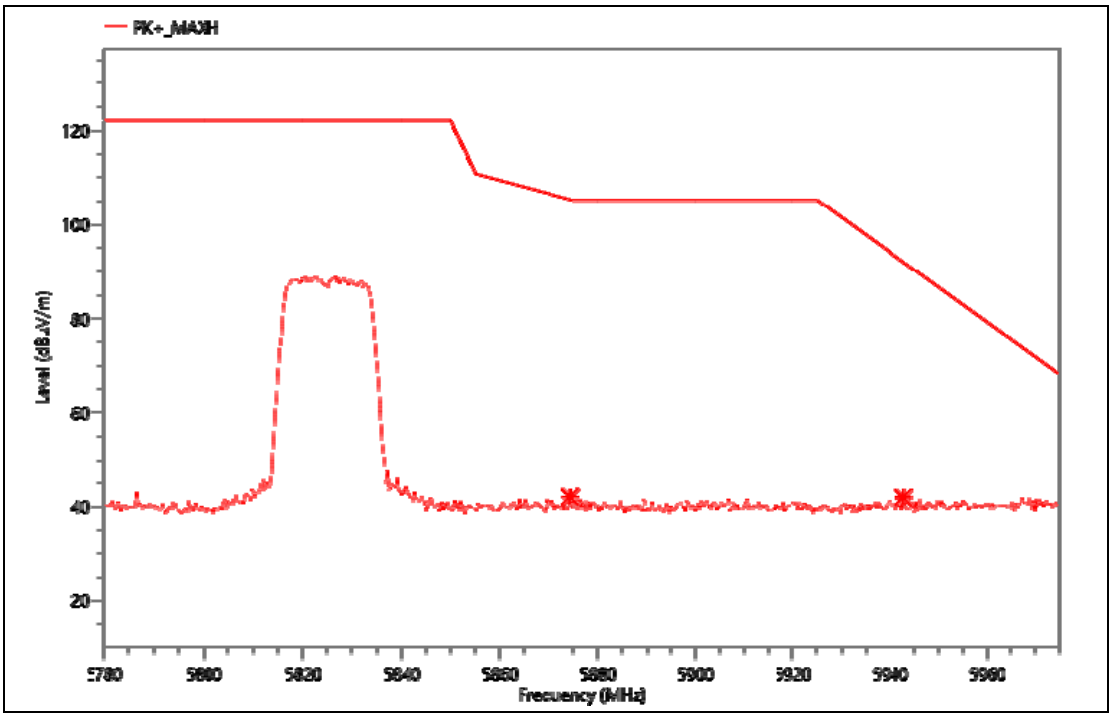
Mode:	11N20 5745
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5635.550	52.54	-9.51	43.03	94.54	51.51	PK+	V
2	5695.550	51.88	-9.59	42.29	110.30	68.01	PK+	V

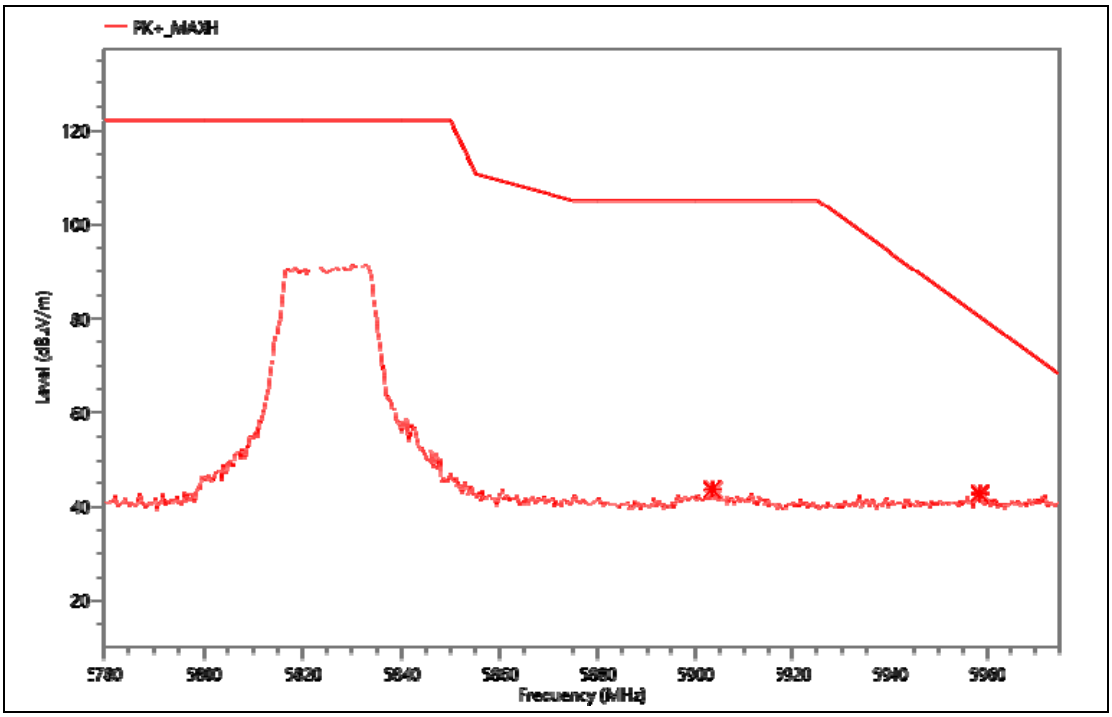
Mode:	11N20 5825
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5874.380	51.51	-9.46	42.05	105.37	63.32	PK+	V
2	5942.825	51.21	-9.25	41.96	91.97	50.01	PK+	V

Mode:	11N20 5825
Power:	DC 5V
TE:	Big
Date	2024/12/10
T/A/P	22.1℃/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	5903.435	53.15	-9.56	43.59	105.20	61.61	PK+	H
2	5958.425	51.74	-8.96	42.78	80.43	37.65	PK+	H

9. AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a)

FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

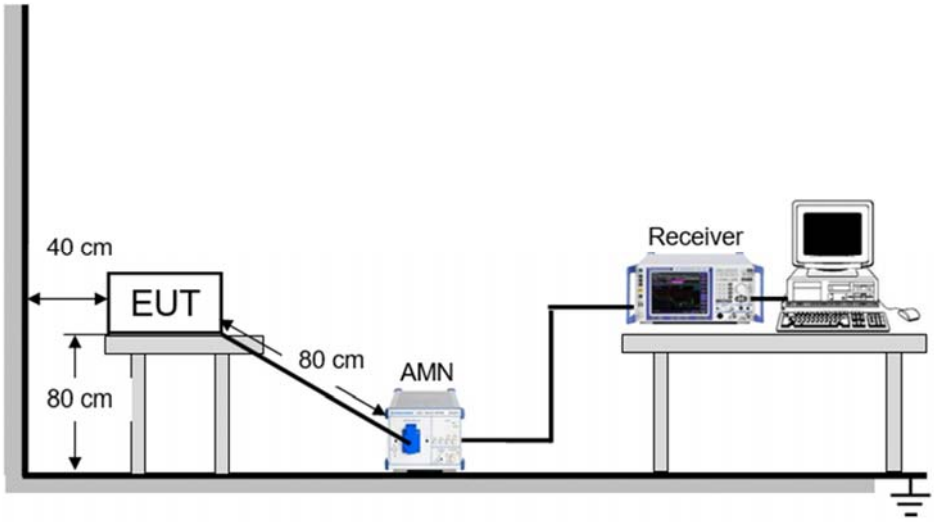
TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 6.2.

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2013.Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operating in a manner, which tends to maximize its emission characteristics in a normal application.

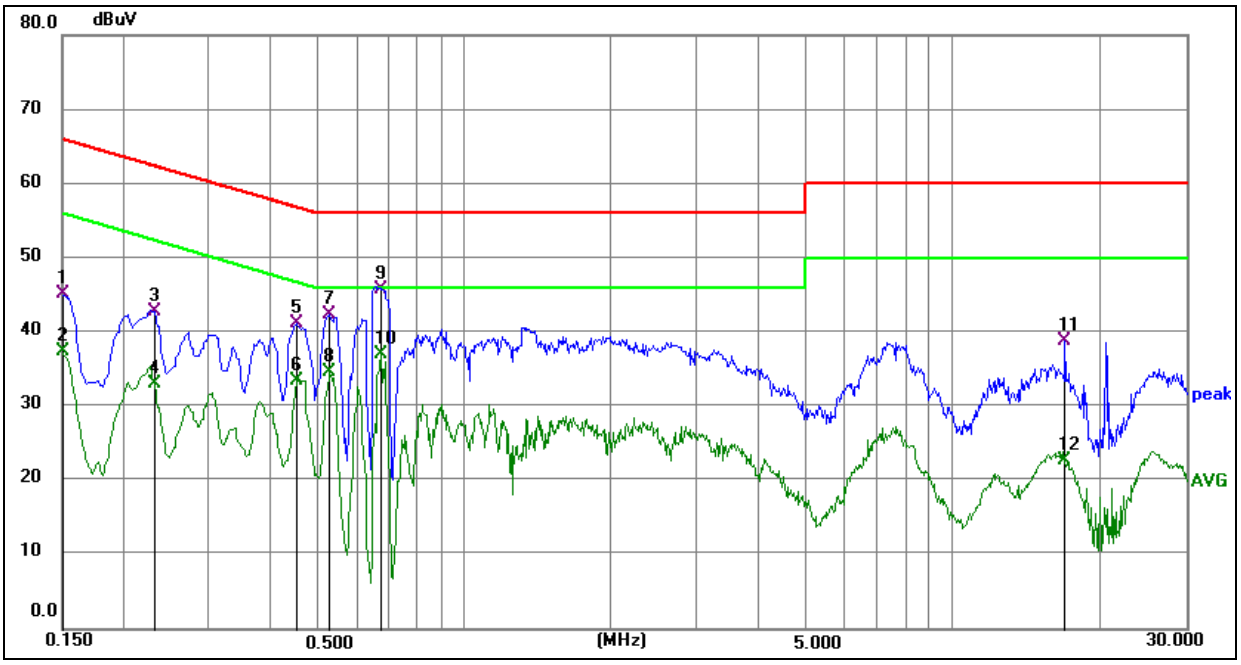
TEST SETUP



TEST ENVIRONMENT

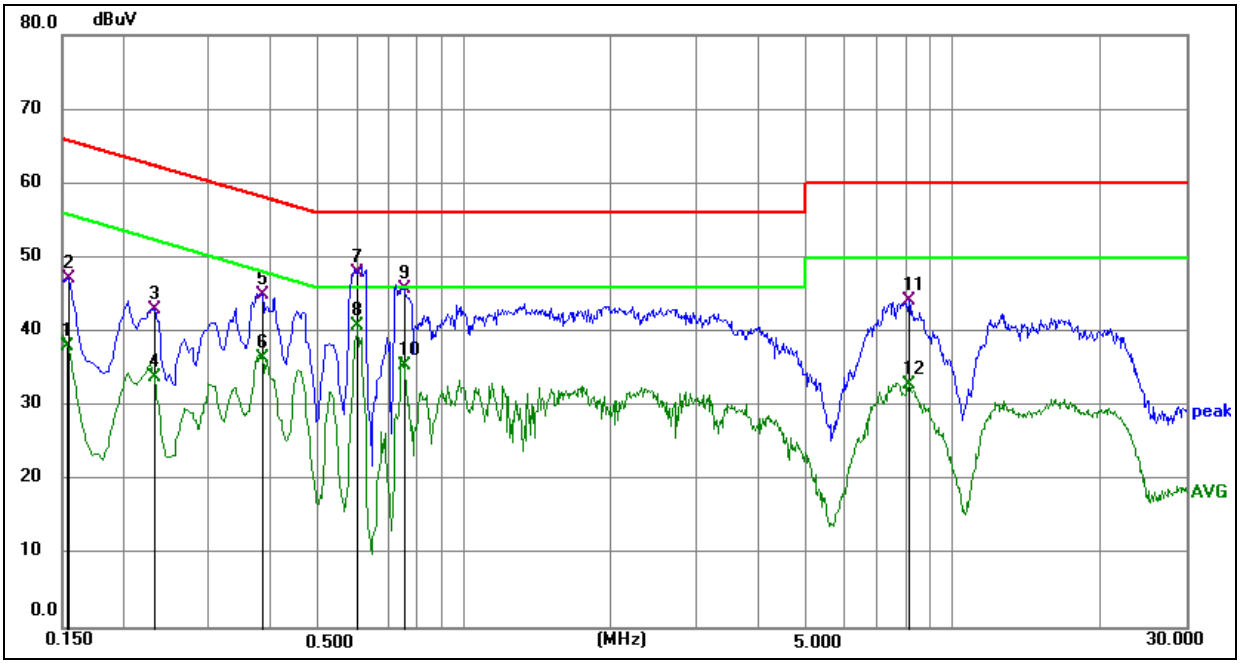
Temperature	25.3℃	Relative Humidity	52%
Atmosphere Pressure	101kPa		

TEST RESULTS



Phase: N	Mode: N20 5180MHz

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	35.41	9.67	45.08	66.00	-20.92	QP
2	0.1500	27.72	9.67	37.39	56.00	-18.61	AVG
3	0.2310	33.16	9.68	42.84	62.41	-19.57	QP
4	0.2310	23.28	9.68	32.96	52.41	-19.45	AVG
5	0.4515	31.52	9.69	41.21	56.85	-15.64	QP
6	0.4515	23.79	9.69	33.48	46.85	-13.37	AVG
7	0.5280	32.63	9.69	42.32	56.00	-13.68	QP
8	0.5280	25.00	9.69	34.69	46.00	-11.31	AVG
9	0.6765	35.98	9.70	45.68	56.00	-10.32	QP
10	0.6765	27.33	9.70	37.03	46.00	-8.97	AVG
11	16.9395	28.69	10.18	38.87	60.00	-21.13	QP
12	16.9395	12.59	10.18	22.77	50.00	-27.23	AVG



Phase: L1	Mode: N20 5180MHz

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1539	28.29	9.77	38.06	55.79	-17.73	AVG
2	0.1545	37.47	9.77	47.24	65.75	-18.51	QP
3	0.2310	33.17	9.78	42.95	62.41	-19.46	QP
4	0.2310	24.00	9.78	33.78	52.41	-18.63	AVG
5	0.3840	35.23	9.79	45.02	58.19	-13.17	QP
6	0.3840	26.60	9.79	36.39	48.19	-11.80	AVG
7	0.6045	38.20	9.79	47.99	56.00	-8.01	QP
8	0.6045	30.92	9.79	40.71	46.00	-5.29	AVG
9	0.7530	35.97	9.80	45.77	56.00	-10.23	QP
10	0.7530	25.61	9.80	35.41	46.00	-10.59	AVG
11	8.1240	34.22	10.00	44.22	60.00	-15.78	QP
12	8.1240	22.88	10.00	32.88	50.00	-17.12	AVG

10. ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC §15.203
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 shall be considered sufficient to comply with the provisions of this section. 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.

Please refer to FCC §15.407(a)(1)(2)(3)
If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

PASS

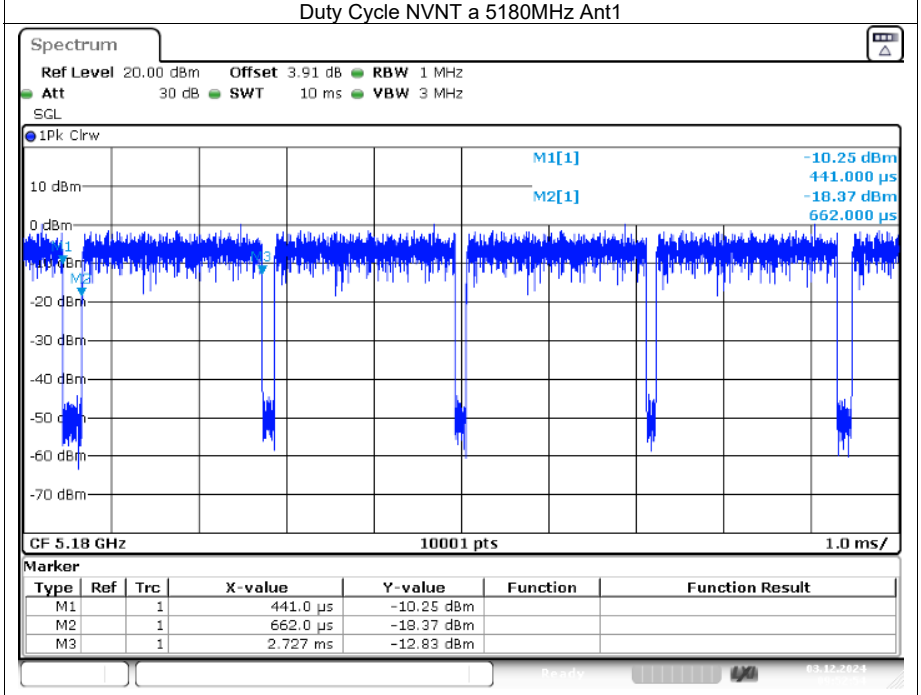
11. TEST DATA - Appendix A

Duty Cycle

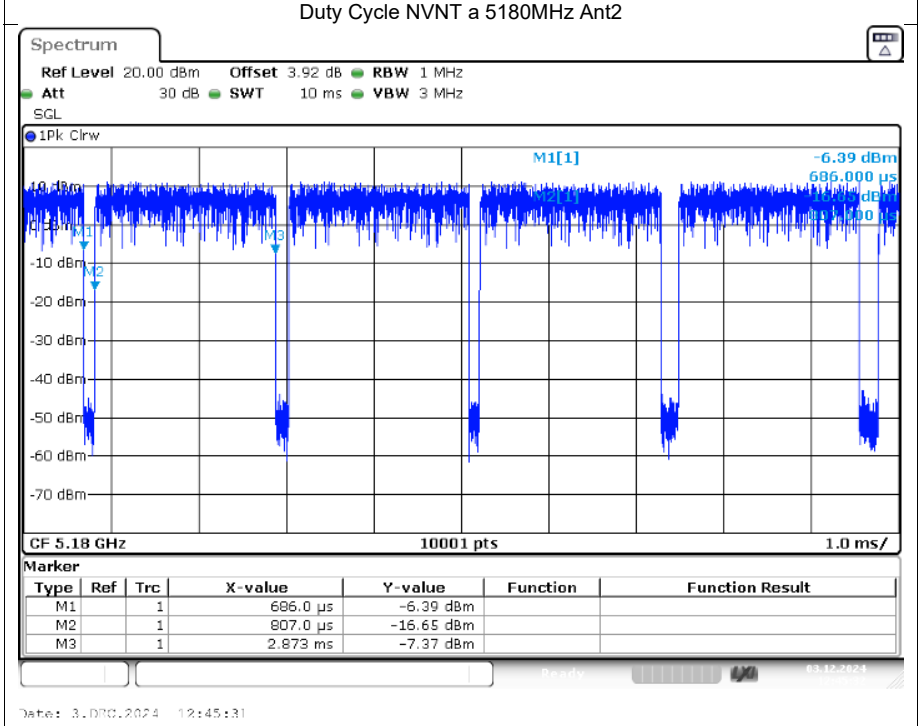
Condition	Mode	Frequency (MHz)	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)	Final settingFor VBW (kHz)
NVNT	a	5180	Ant1	2.07	2.29	90.39	0.44	0.48	1
NVNT	a	5180	Ant2	2.07	2.19	94.52	0.24	0.48	1
NVNT	a	5200	Ant1	2.07	2.24	92.41	0.34	0.48	1
NVNT	a	5200	Ant2	2.07	2.24	92.41	0.34	0.48	1
NVNT	a	5240	Ant1	2.07	2.26	91.59	0.38	0.48	1
NVNT	a	5240	Ant2	2.07	2.25	92	0.36	0.48	1
NVNT	a	5745	Ant1	2.07	2.17	95.39	0.2	0.48	1
NVNT	a	5745	Ant2	2.07	2.3	90	0.46	0.48	1
NVNT	a	5785	Ant1	2.07	2.21	93.67	0.28	0.48	1
NVNT	a	5785	Ant2	2.07	2.17	95.39	0.2	0.48	1
NVNT	a	5825	Ant1	2.07	2.21	93.67	0.28	0.48	1
NVNT	a	5825	Ant2	2.06	2.17	94.93	0.23	0.48	1
NVNT	n20	5180	Ant1	1.92	2.12	90.57	0.43	0.52	1
NVNT	n20	5180	Ant2	1.92	2.05	93.66	0.28	0.52	1
NVNT	n20	5200	Ant1	2.07	2.2	94.09	0.26	0.48	1
NVNT	n20	5200	Ant2	1.92	2.02	95.05	0.22	0.52	1
NVNT	n20	5240	Ant1	1.92	2.14	89.72	0.47	0.52	1
NVNT	n20	5240	Ant2	1.92	2.03	94.58	0.24	0.52	1
NVNT	n20	5745	Ant1	1.92	2.05	93.66	0.28	0.52	1
NVNT	n20	5745	Ant2	1.92	2.14	89.72	0.47	0.52	1
NVNT	n20	5785	Ant1	1.92	2.14	89.72	0.47	0.52	1
NVNT	n20	5785	Ant2	1.92	2.1	91.43	0.39	0.52	1
NVNT	n20	5825	Ant1	1.92	2.03	94.58	0.24	0.52	1
NVNT	n20	5825	Ant2	1.92	2.12	90.57	0.43	0.52	1
NVNT	n40	5190	Ant1	0.95	1.15	82.61	0.83	1.06	1
NVNT	n40	5190	Ant2	0.95	1.18	80.51	0.94	1.06	1
NVNT	n40	5230	Ant1	0.95	1.07	88.79	0.52	1.06	1
NVNT	n40	5230	Ant2	0.95	1.14	83.33	0.79	1.06	1
NVNT	n40	5755	Ant1	0.95	1.09	87.16	0.6	1.06	1
NVNT	n40	5755	Ant2	0.95	1.04	91.35	0.39	1.06	1
NVNT	n40	5795	Ant1	0.95	1.14	83.33	0.79	1.06	1
NVNT	n40	5795	Ant2	0.95	1.17	81.2	0.9	1.06	1
NVNT	ac20	5180	Ant1	1.93	2.08	92.79	0.32	0.52	1
NVNT	ac20	5180	Ant2	1.93	2.06	93.69	0.28	0.52	1
NVNT	ac20	5200	Ant1	1.94	2.14	90.65	0.43	0.52	1
NVNT	ac20	5200	Ant2	1.93	2.06	93.69	0.28	0.52	1
NVNT	ac20	5240	Ant1	1.93	2.17	88.94	0.51	0.52	1
NVNT	ac20	5240	Ant2	1.93	2.08	92.79	0.32	0.52	1
NVNT	ac20	5745	Ant1	1.93	2.13	90.61	0.43	0.52	1
NVNT	ac20	5745	Ant2	1.93	2.12	91.04	0.41	0.52	1
NVNT	ac20	5785	Ant1	1.93	2.13	90.61	0.43	0.52	1
NVNT	ac20	5785	Ant2	1.93	2.11	91.47	0.39	0.52	1
NVNT	ac20	5825	Ant1	1.93	2.15	89.77	0.47	0.52	1
NVNT	ac20	5825	Ant2	1.93	2.18	88.53	0.53	0.52	1
NVNT	ac40	5190	Ant1	0.95	1.2	79.17	1.01	1.05	1
NVNT	ac40	5190	Ant2	0.95	1.13	84.07	0.75	1.05	1
NVNT	ac40	5230	Ant1	0.95	1.14	83.33	0.79	1.05	1
NVNT	ac40	5230	Ant2	0.95	1.19	79.83	0.98	1.05	1
NVNT	ac40	5755	Ant1	0.95	1.11	85.59	0.68	1.05	1
NVNT	ac40	5755	Ant2	0.95	1.2	79.17	1.01	1.05	1
NVNT	ac40	5795	Ant1	0.95	1.11	85.59	0.68	1.05	1
NVNT	ac40	5795	Ant2	0.95	1.08	87.96	0.56	1.05	1
NVNT	ac80	5210	Ant1	0.46	0.7	65.71	1.82	2.16	1
NVNT	ac80	5210	Ant2	0.46	0.59	77.97	1.08	2.16	1
NVNT	ac80	5775	Ant1	0.46	0.62	74.19	1.3	2.17	1
NVNT	ac80	5775	Ant2	0.46	0.69	66.67	1.76	2.16	1

Test Graphs

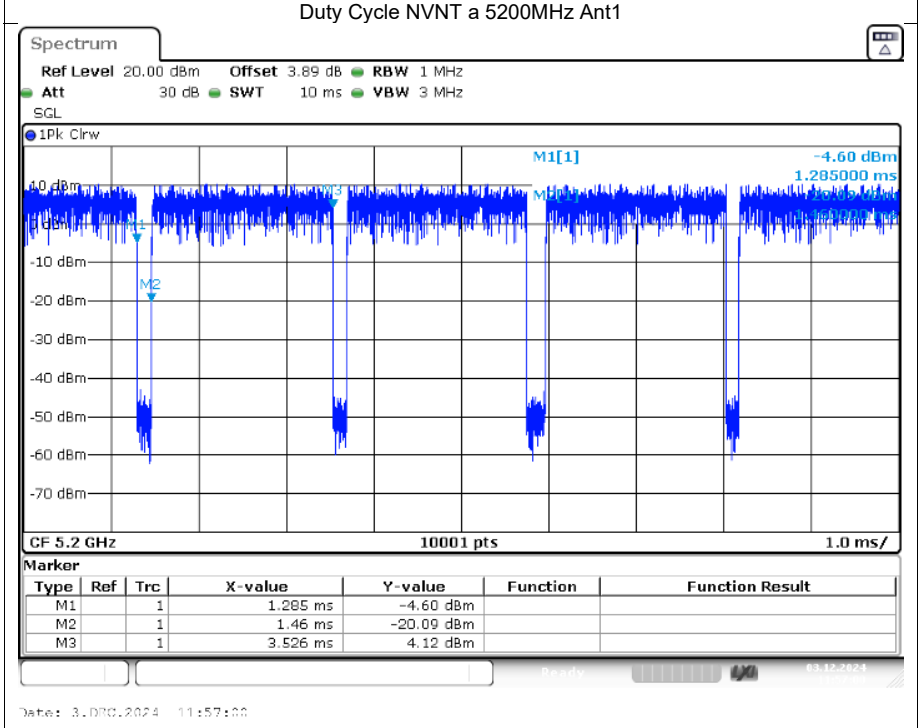
Duty Cycle NVNT a 5180MHz Ant1



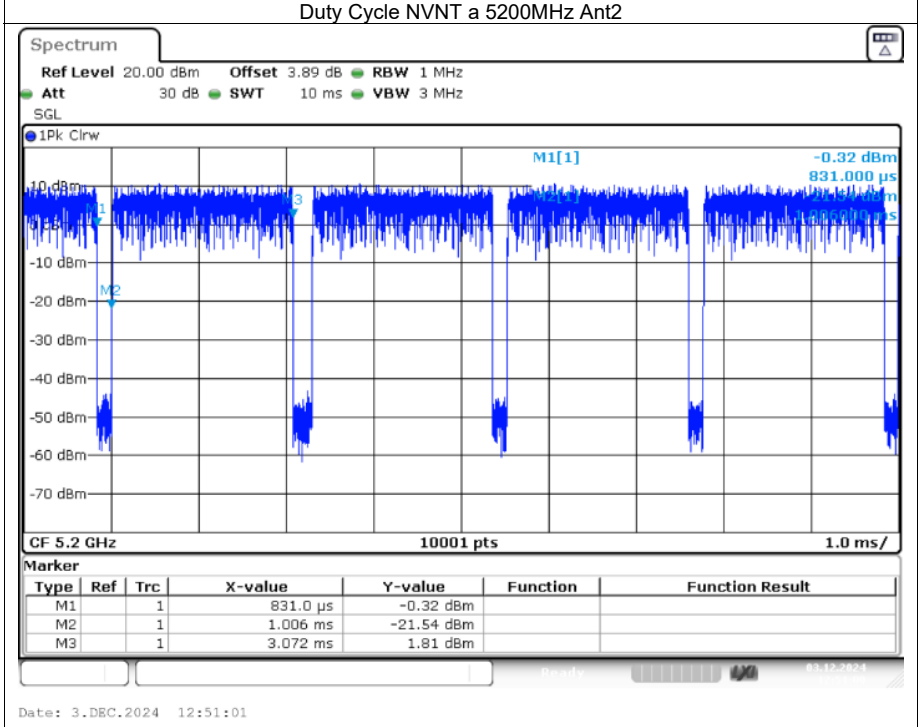
Duty Cycle NVNT a 5180MHz Ant2



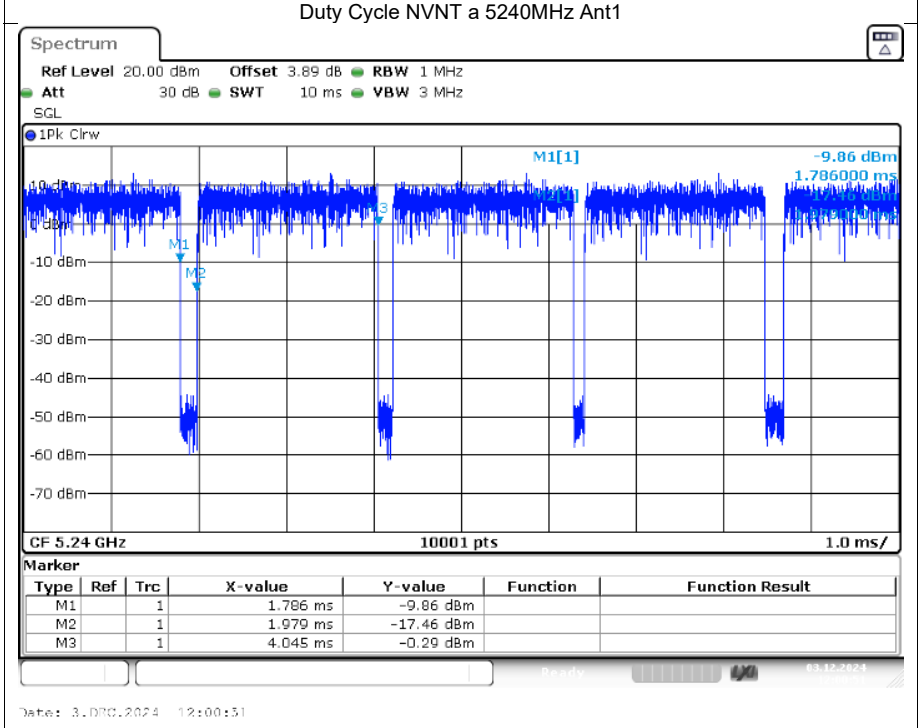
Duty Cycle NVNT a 5200MHz Ant1



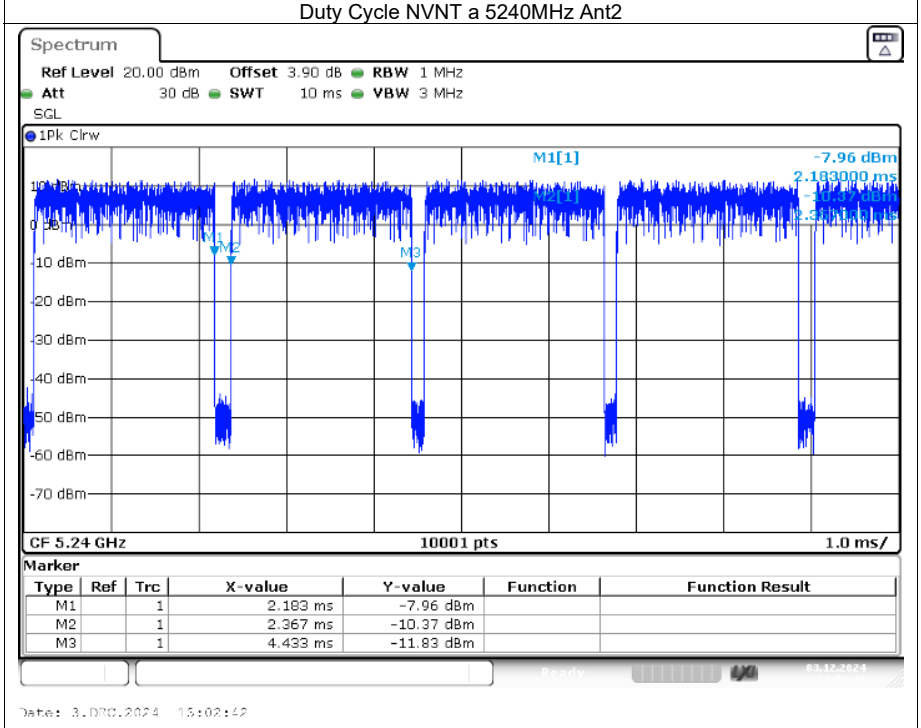
Duty Cycle NVNT a 5200MHz Ant2



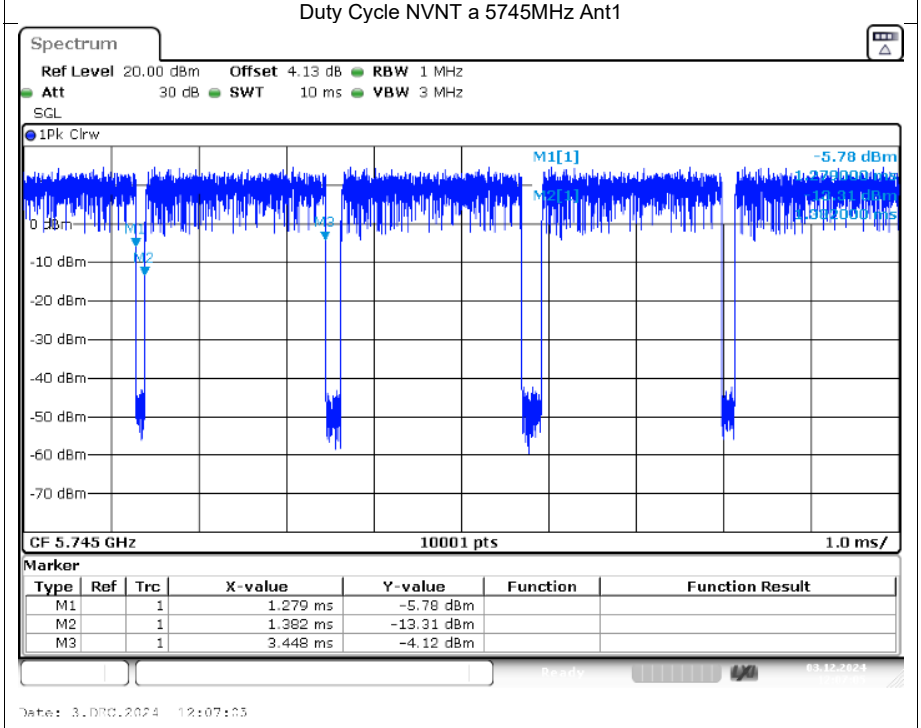
Duty Cycle NVNT a 5240MHz Ant1



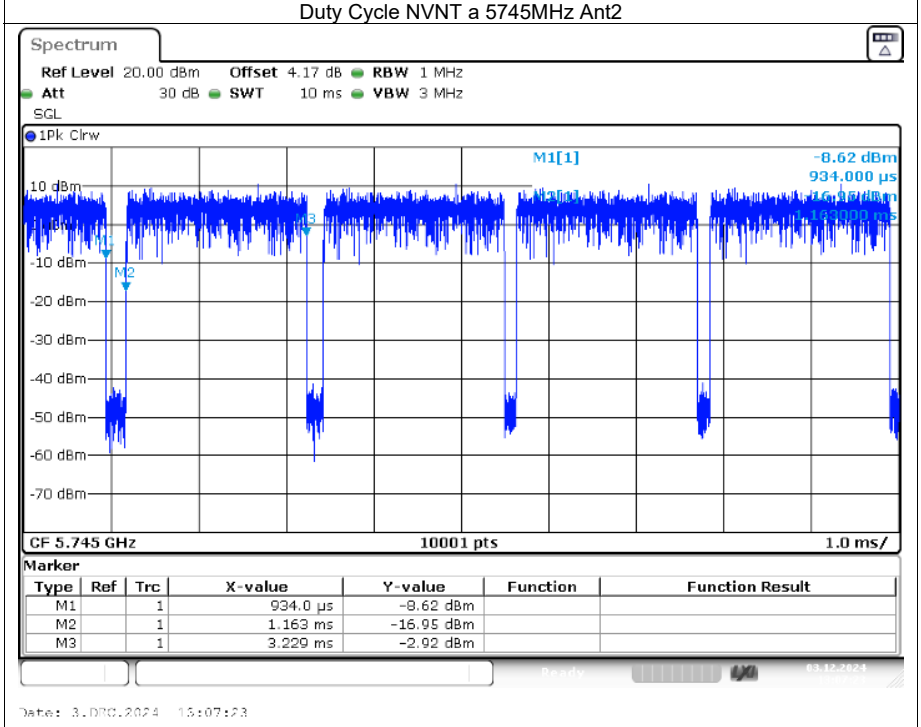
Duty Cycle NVNT a 5240MHz Ant2



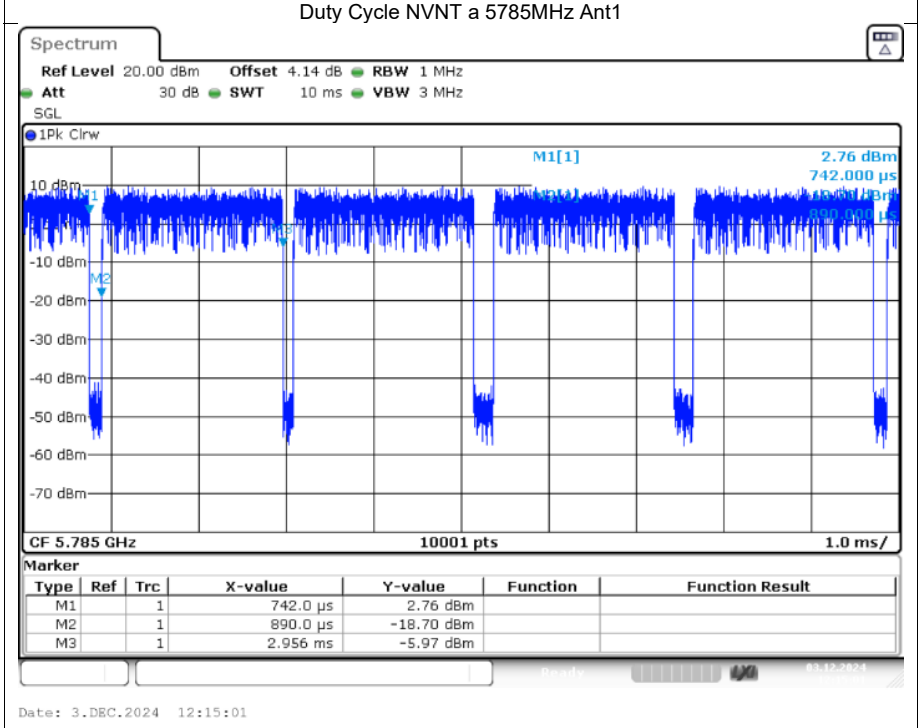
Duty Cycle NVNT a 5745MHz Ant1



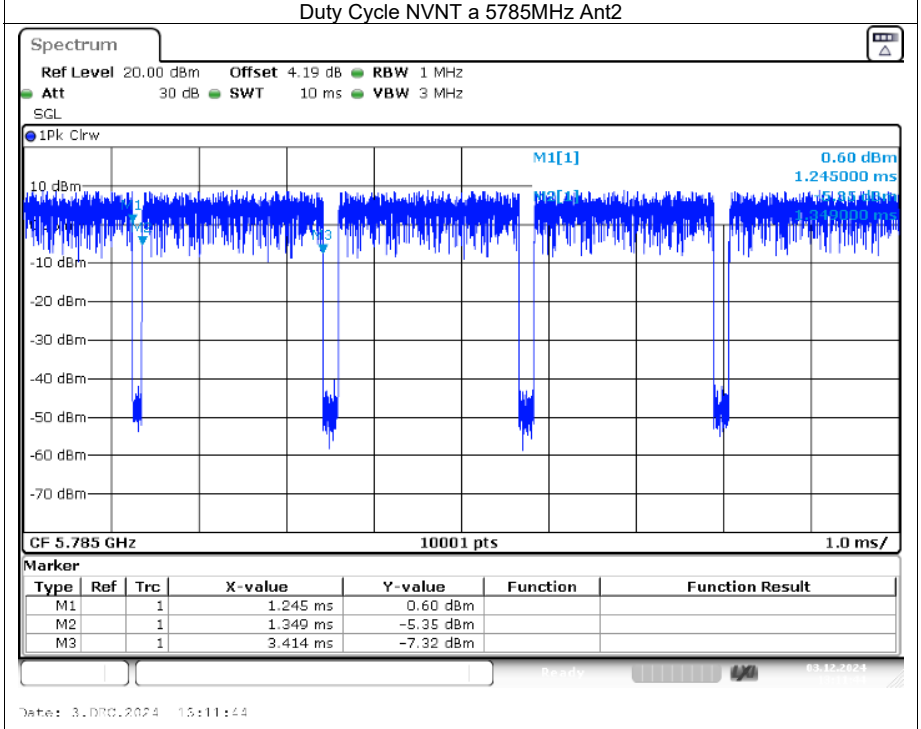
Duty Cycle NVNT a 5745MHz Ant2



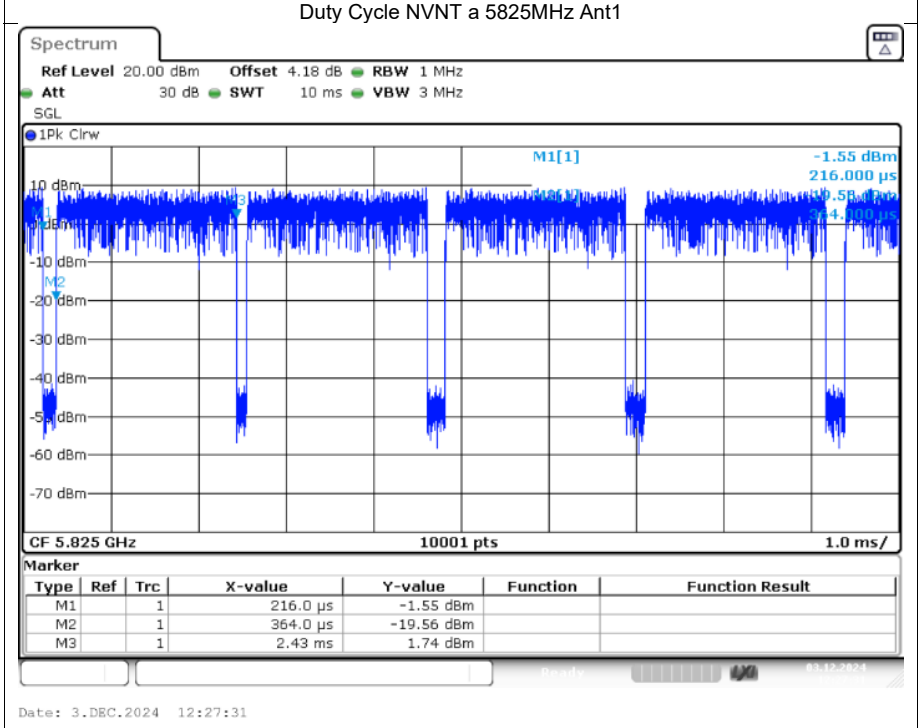
Duty Cycle NVNT a 5785MHz Ant1



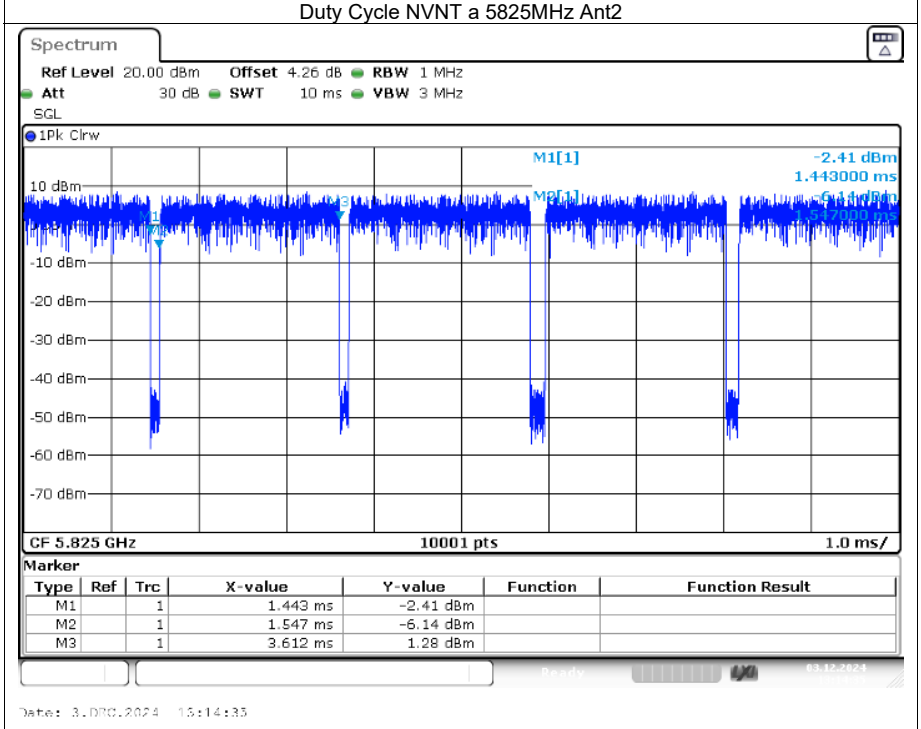
Duty Cycle NVNT a 5785MHz Ant2



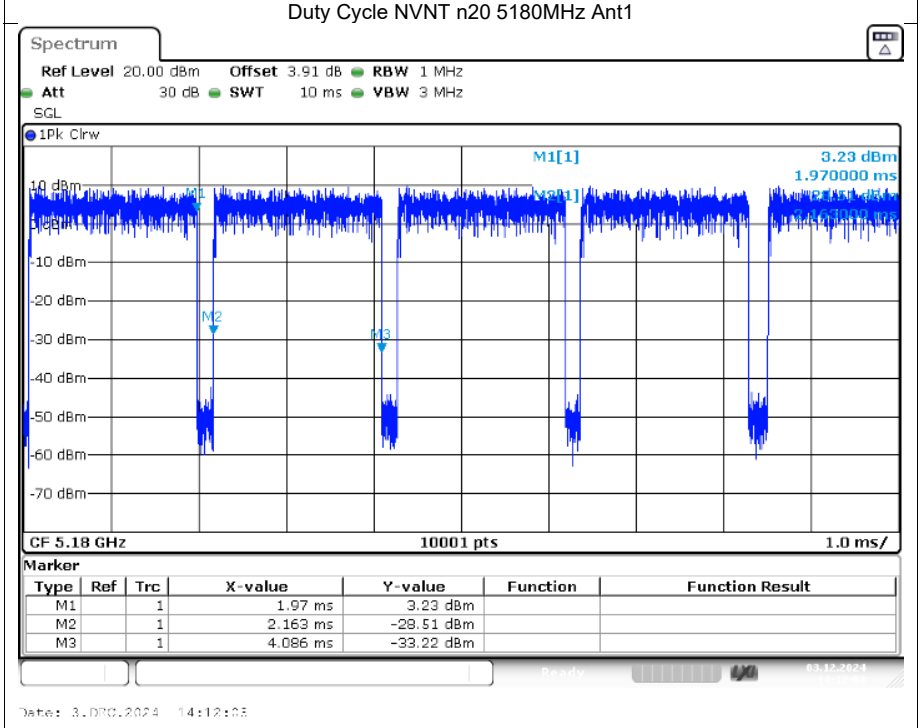
Duty Cycle NVNT a 5825MHz Ant1



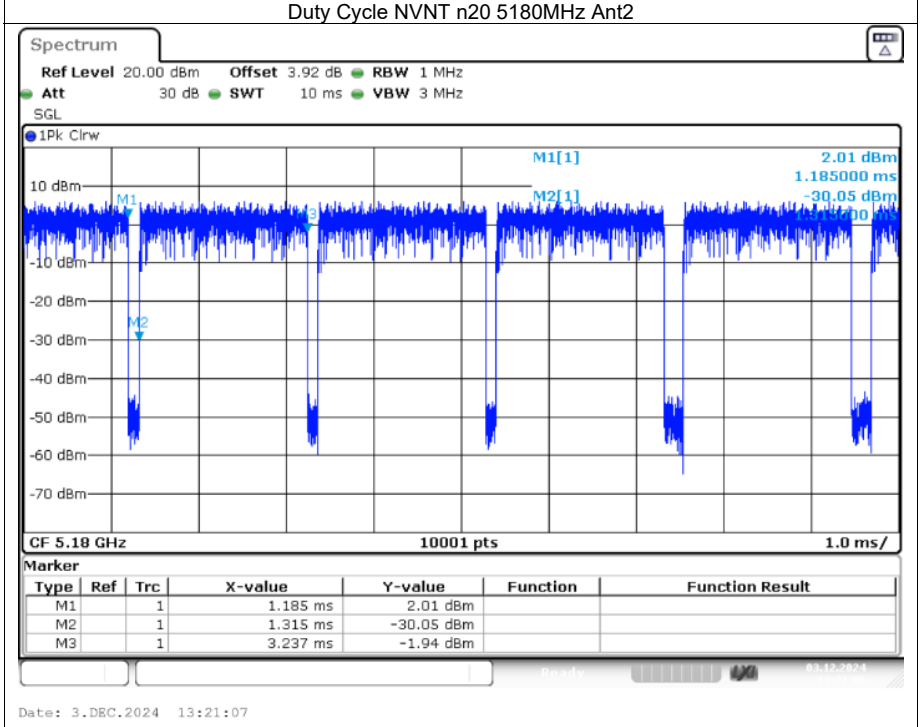
Duty Cycle NVNT a 5825MHz Ant2



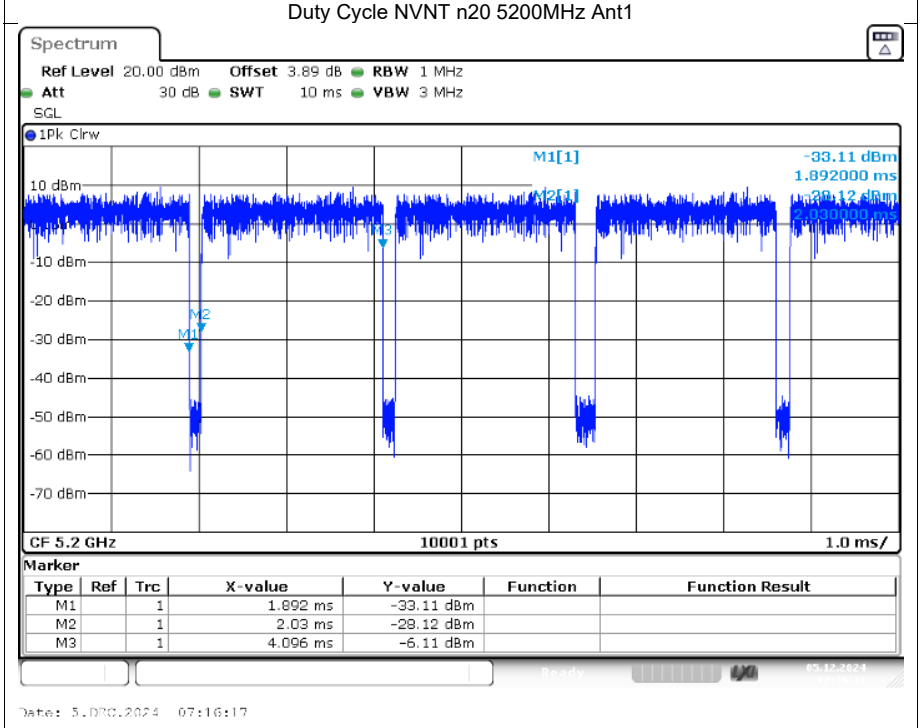
Duty Cycle NVNT n20 5180MHz Ant1



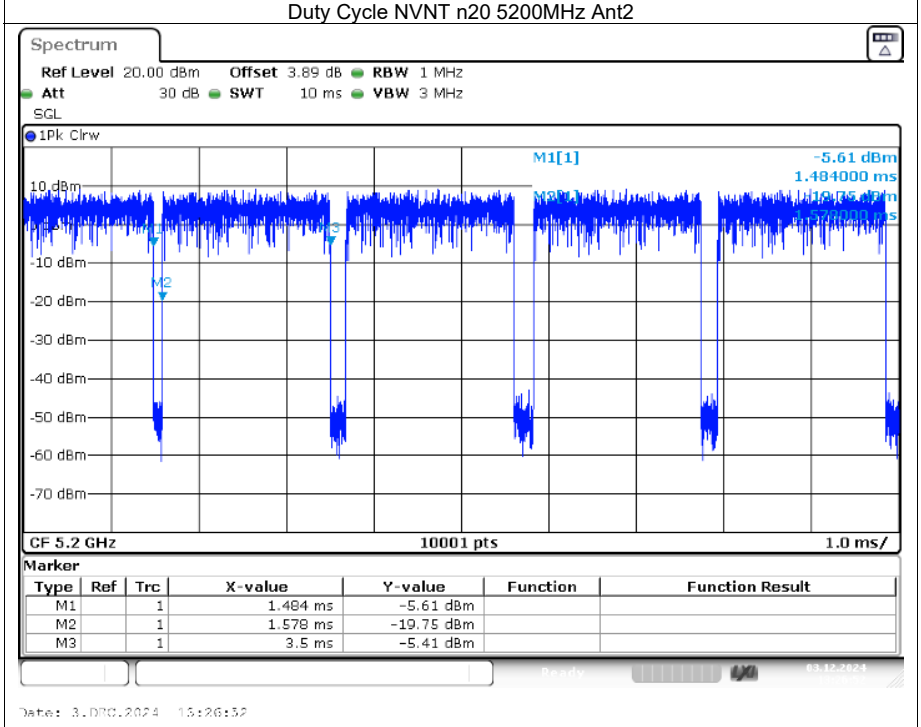
Duty Cycle NVNT n20 5180MHz Ant2



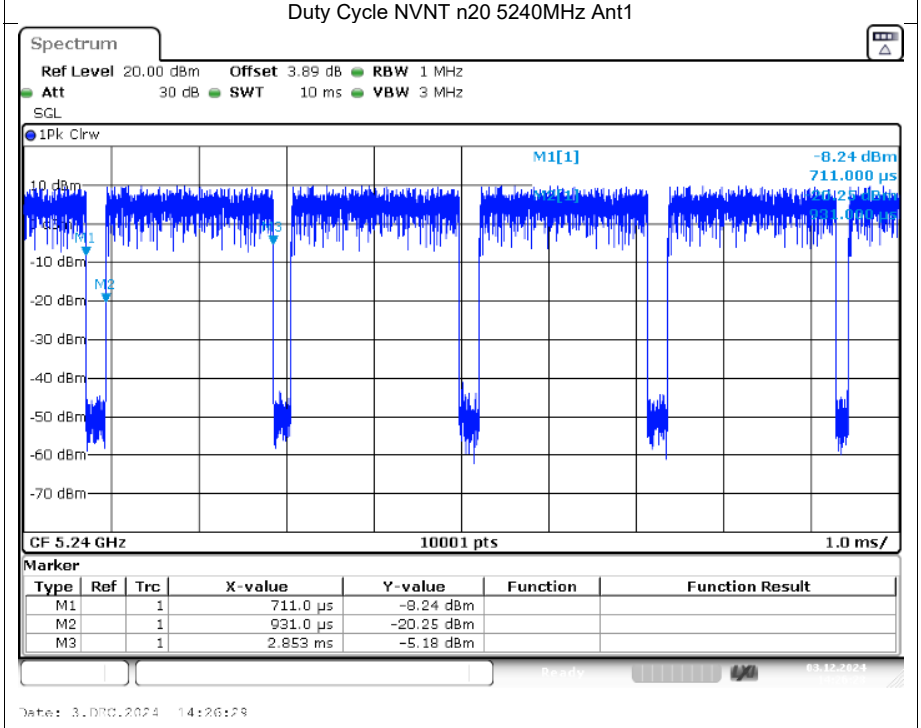
Duty Cycle NVNT n20 5200MHz Ant1



Duty Cycle NVNT n20 5200MHz Ant2

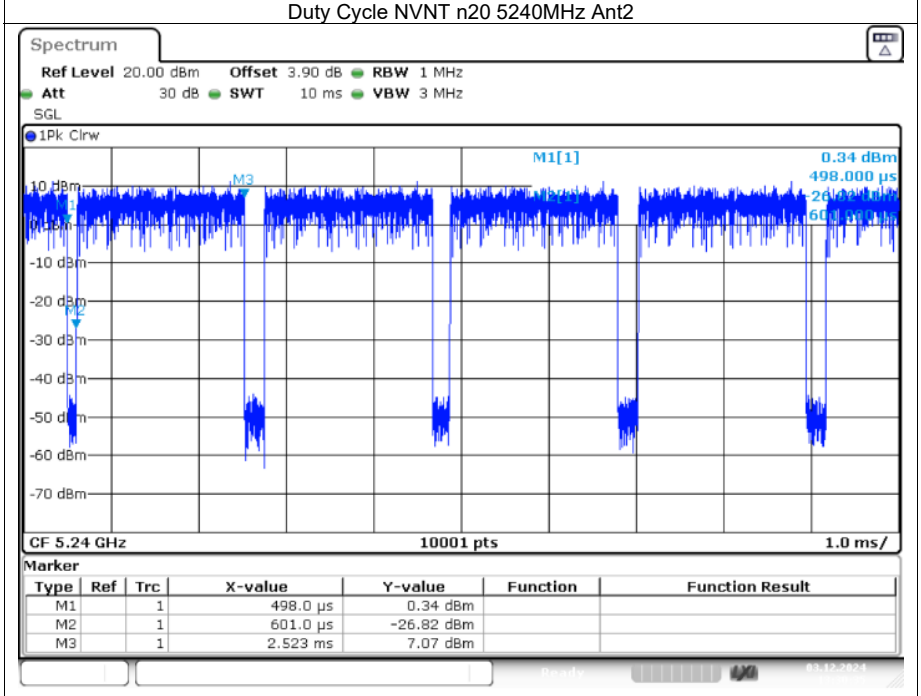


Duty Cycle NVNT n20 5240MHz Ant1



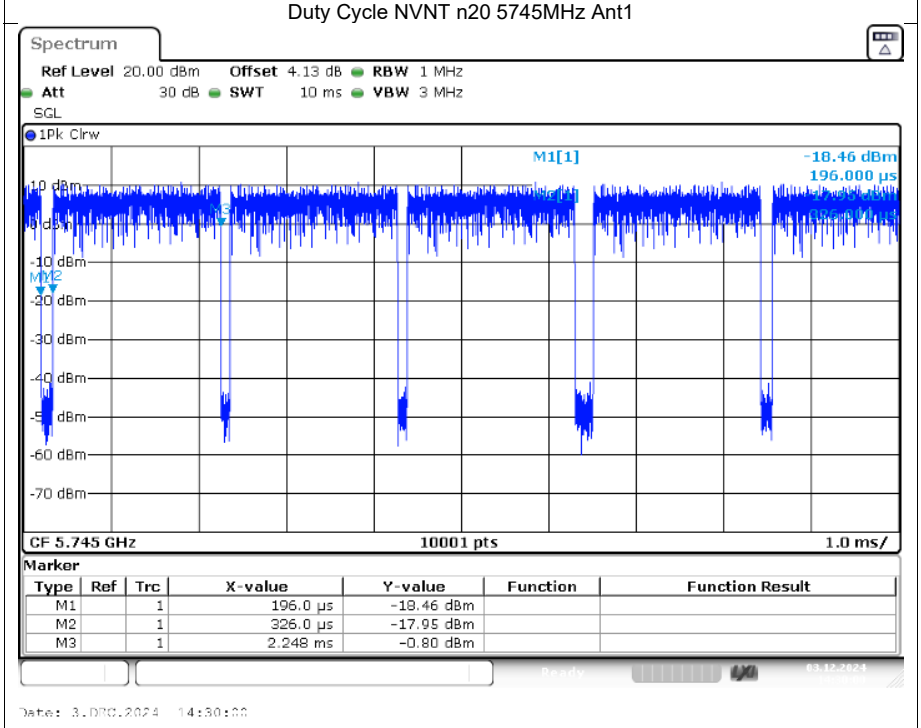
Date: 3.DEC.2024 14:26:29

Duty Cycle NVNT n20 5240MHz Ant2

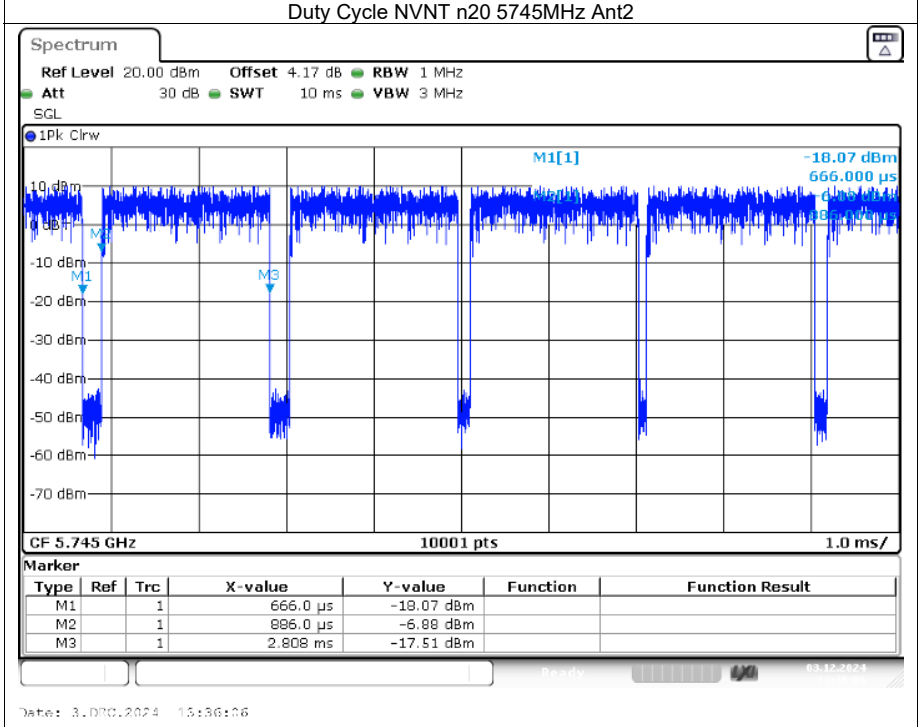


Date: 3.DEC.2024 13:30:35

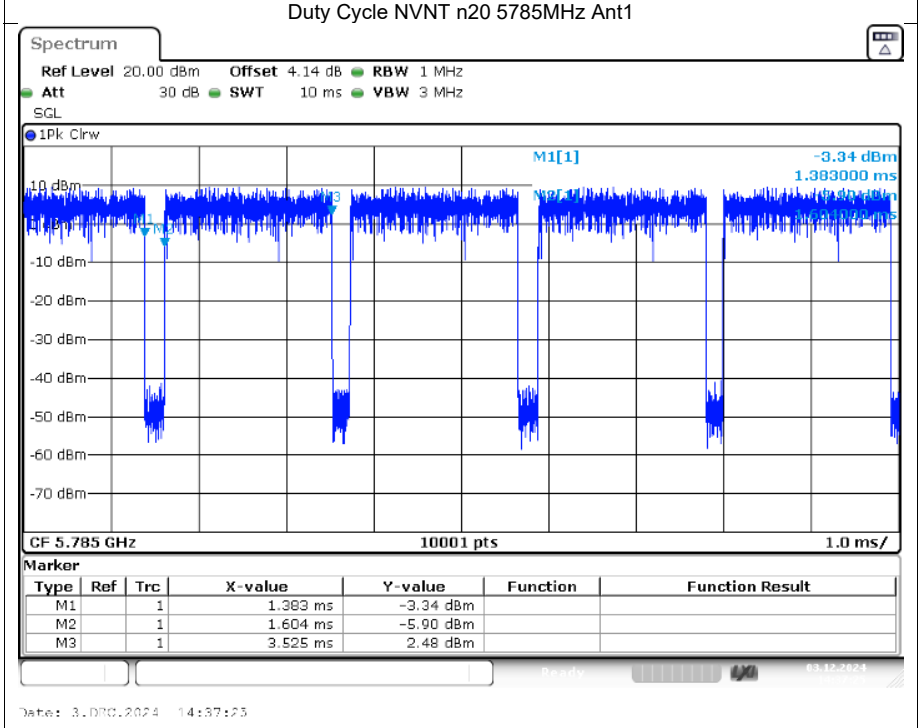
Duty Cycle NVNT n20 5745MHz Ant1



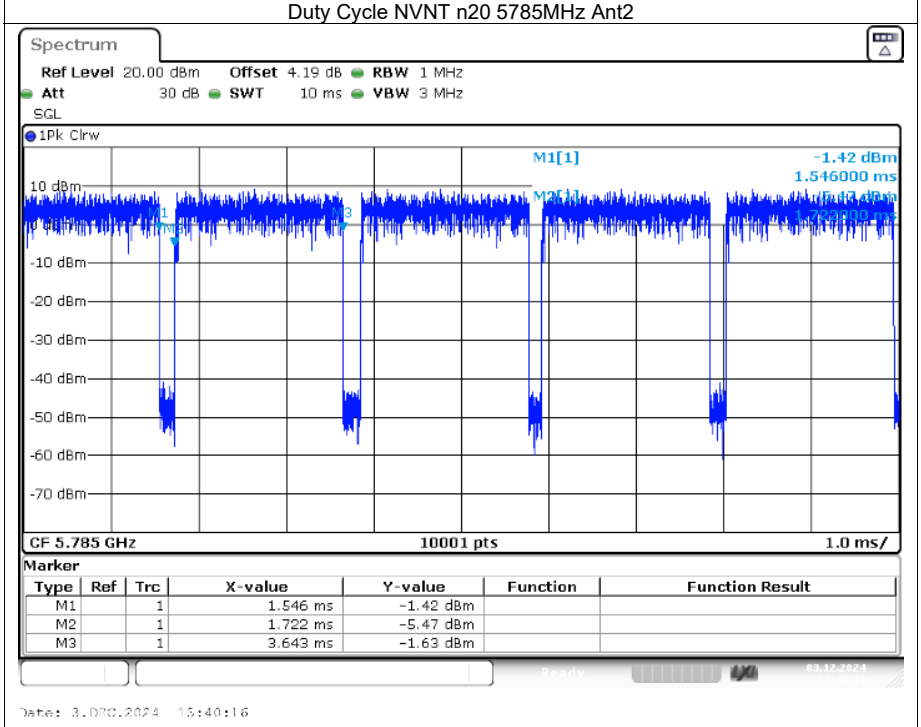
Duty Cycle NVNT n20 5745MHz Ant2



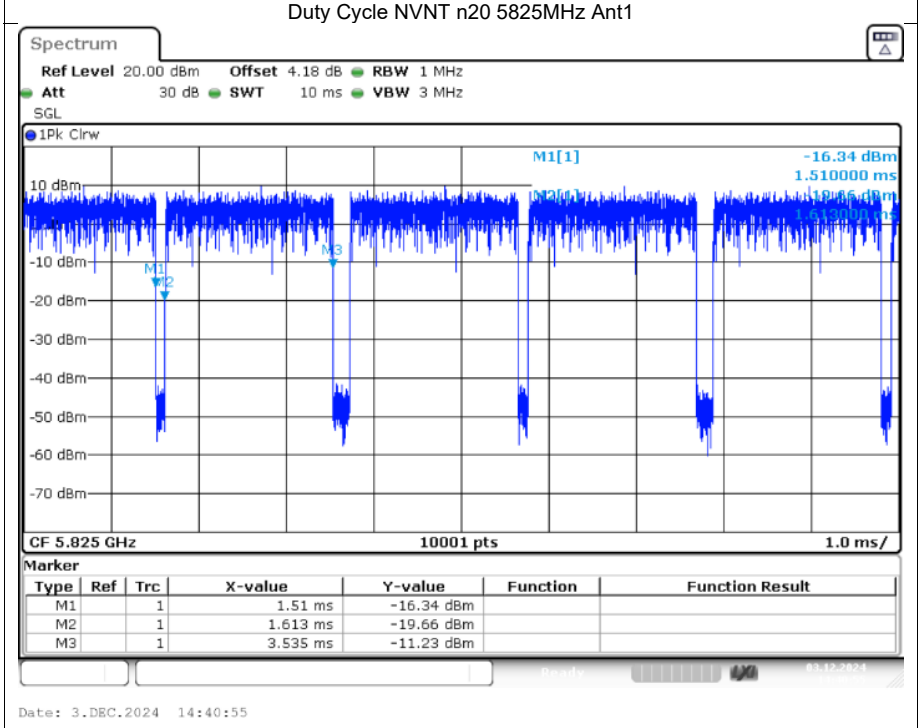
Duty Cycle NVNT n20 5785MHz Ant1



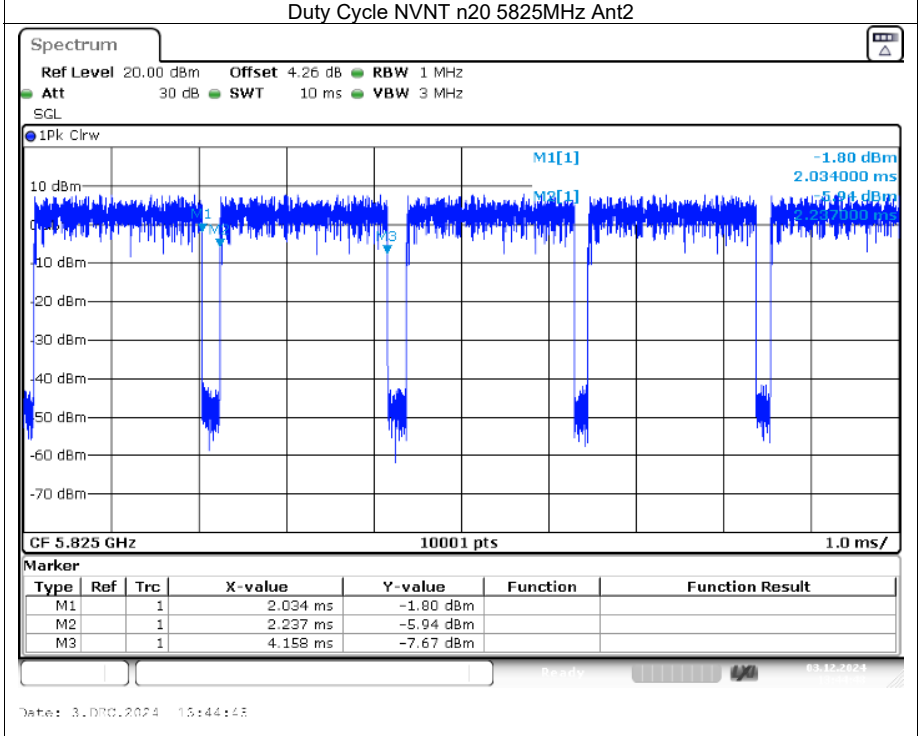
Duty Cycle NVNT n20 5785MHz Ant2



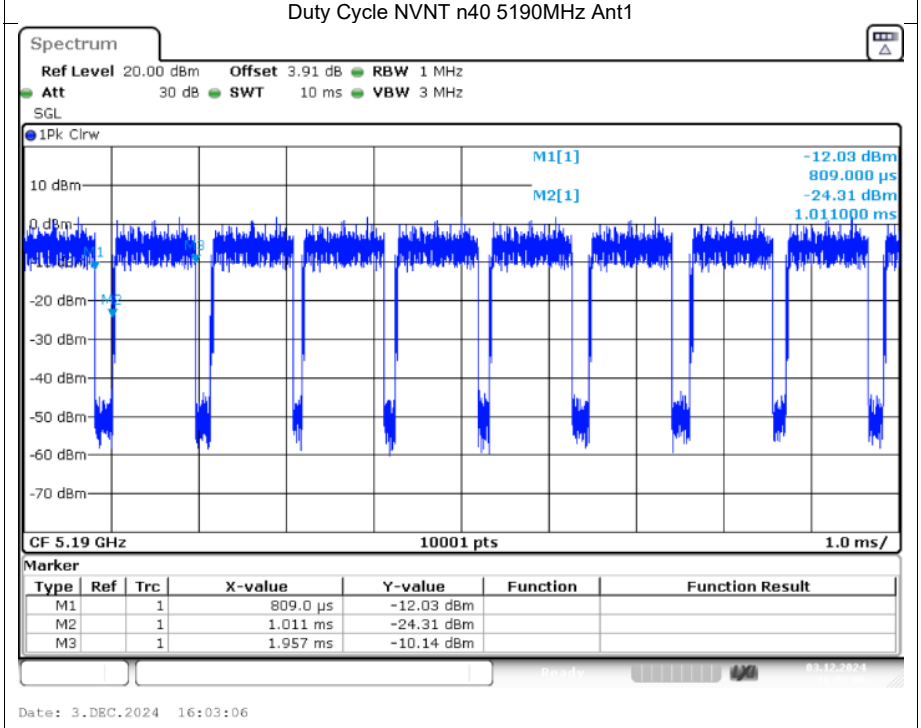
Duty Cycle NVNT n20 5825MHz Ant1



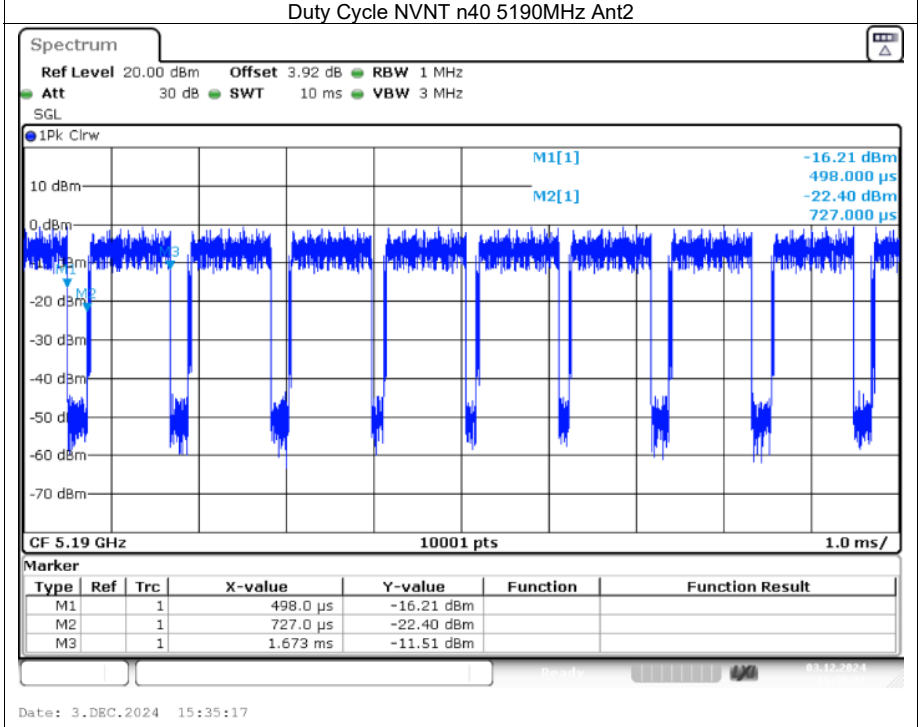
Duty Cycle NVNT n20 5825MHz Ant2



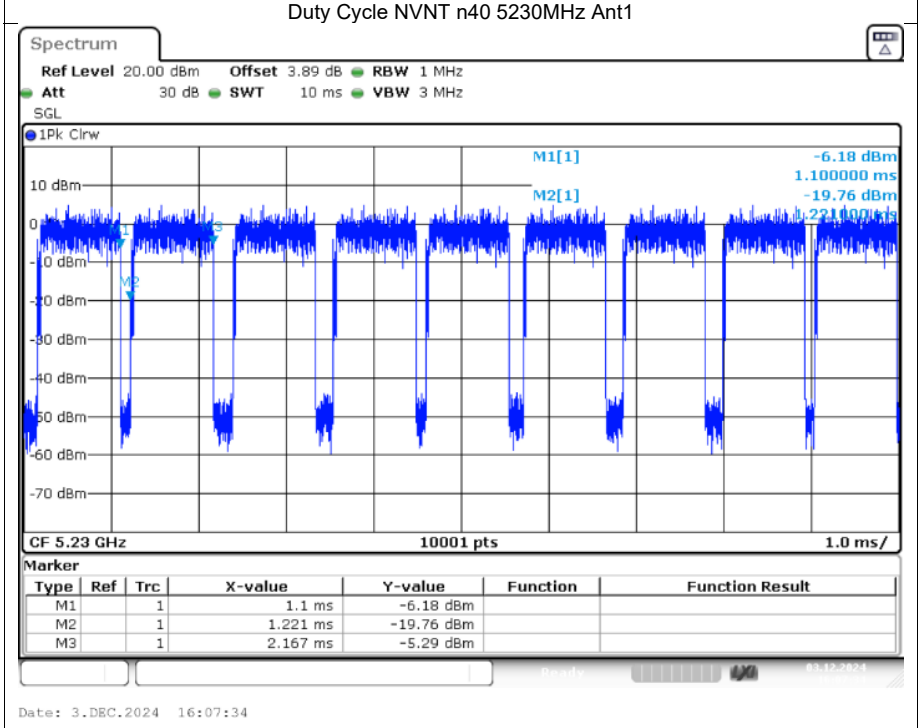
Duty Cycle NVNT n40 5190MHz Ant1



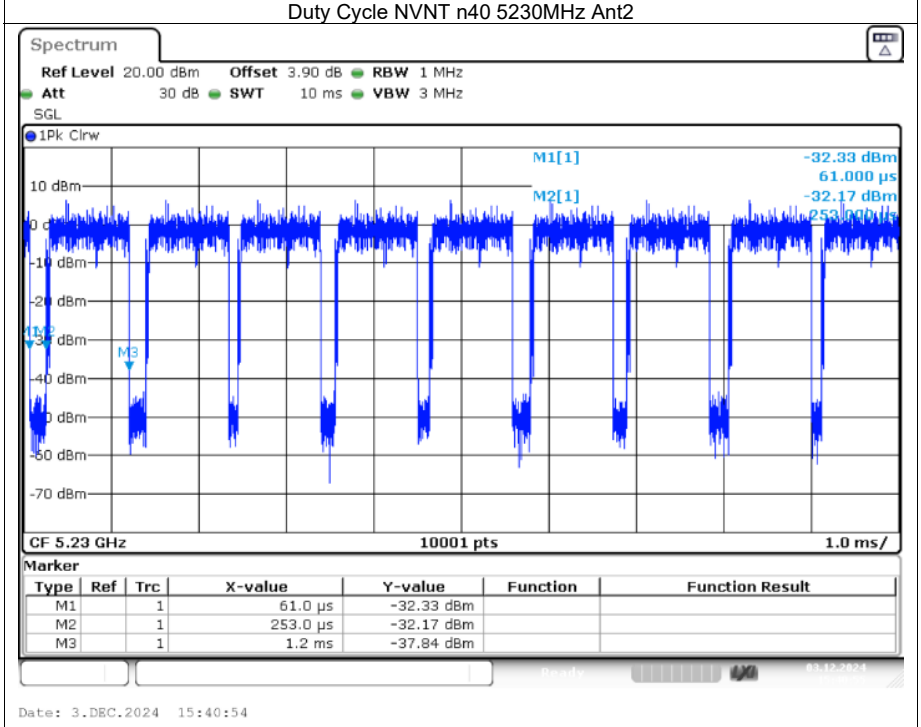
Duty Cycle NVNT n40 5190MHz Ant2



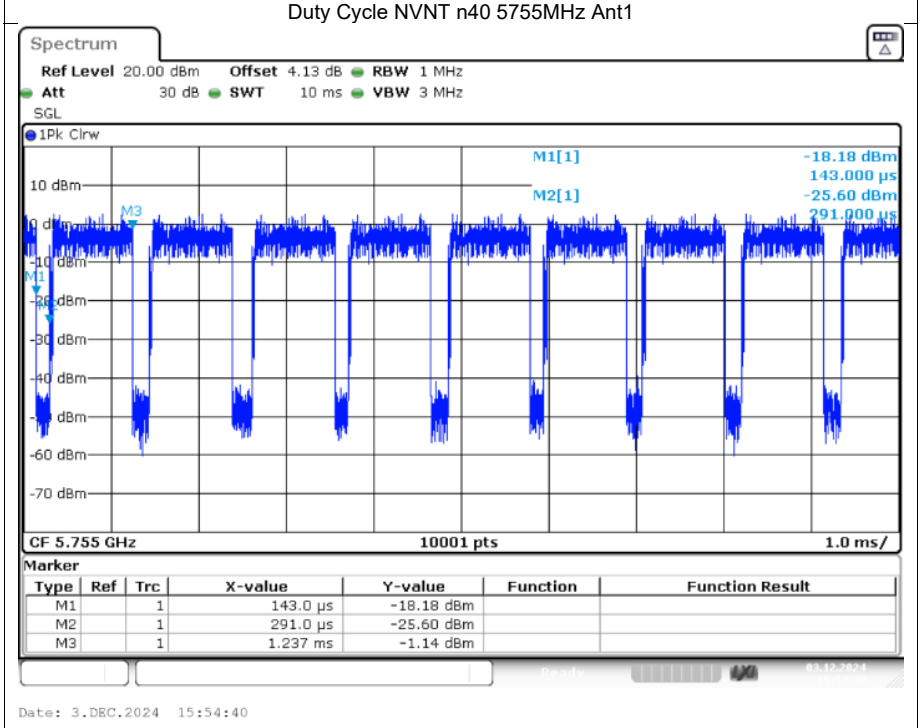
Duty Cycle NVNT n40 5230MHz Ant1



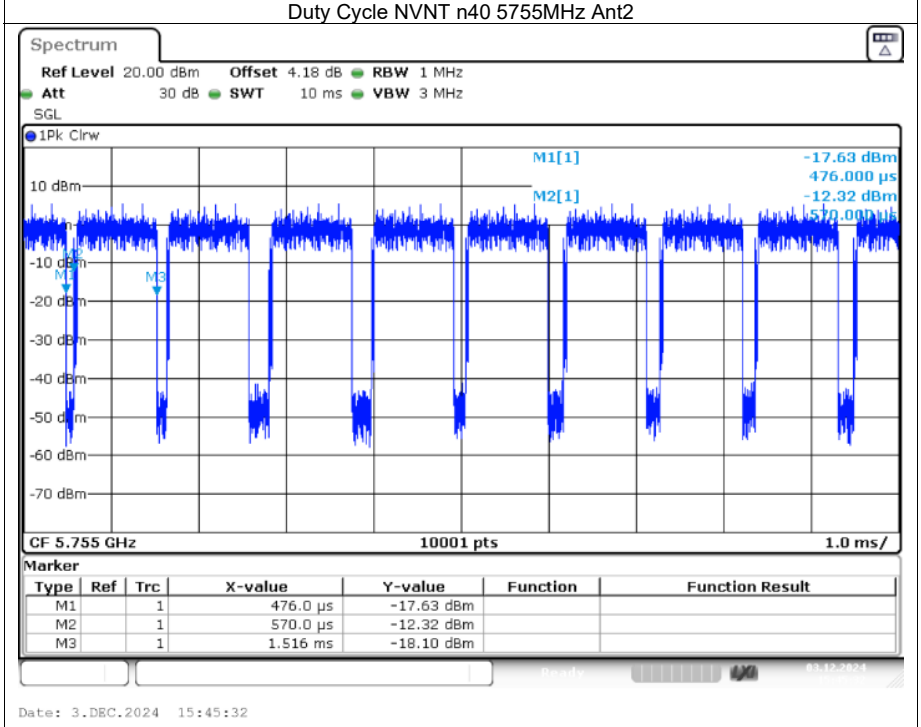
Duty Cycle NVNT n40 5230MHz Ant2



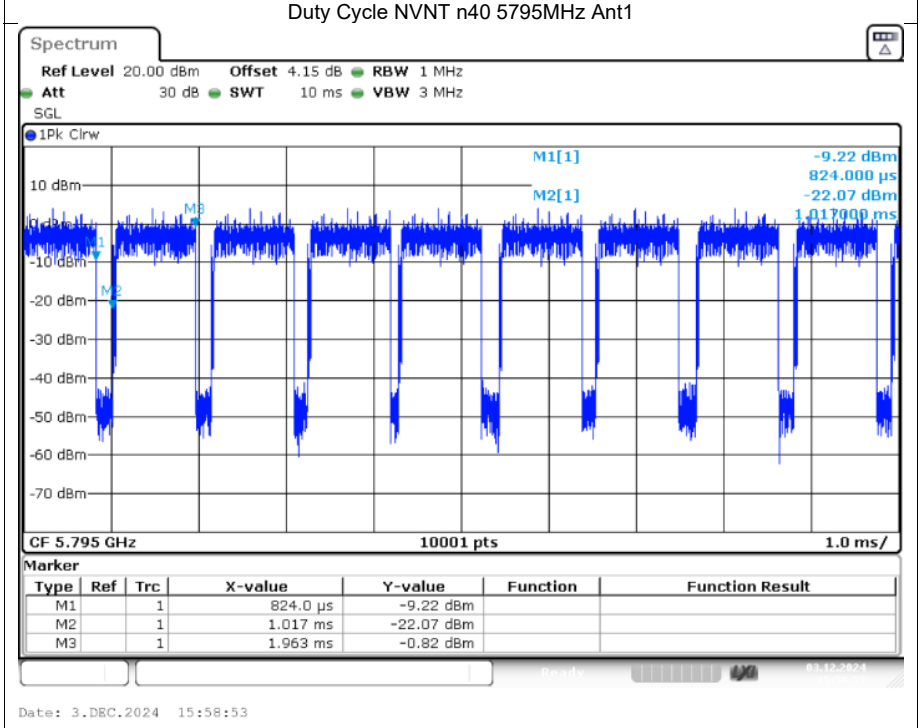
Duty Cycle NVNT n40 5755MHz Ant1



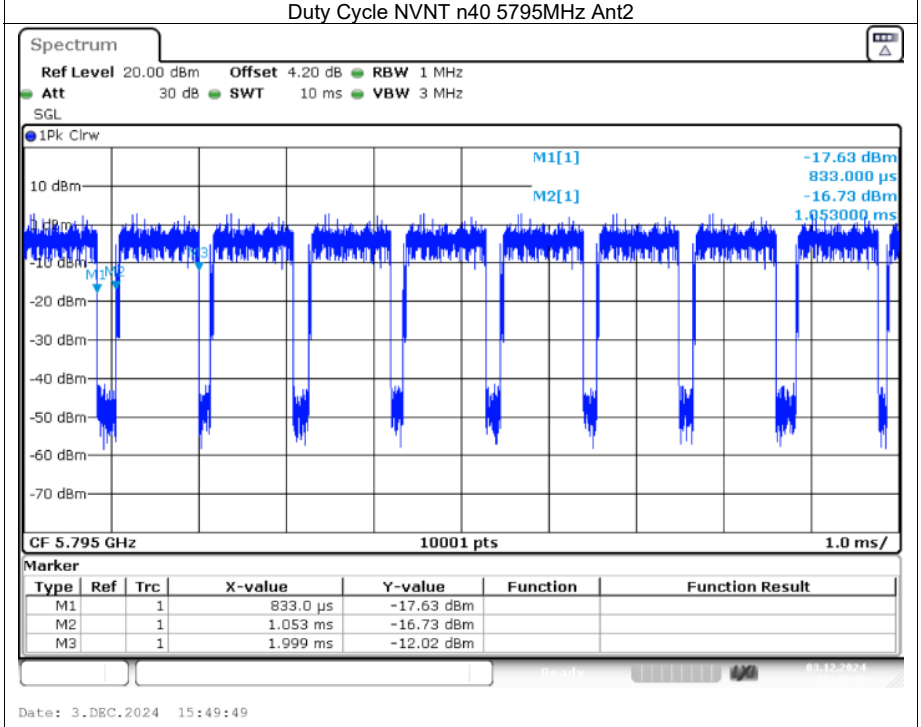
Duty Cycle NVNT n40 5755MHz Ant2



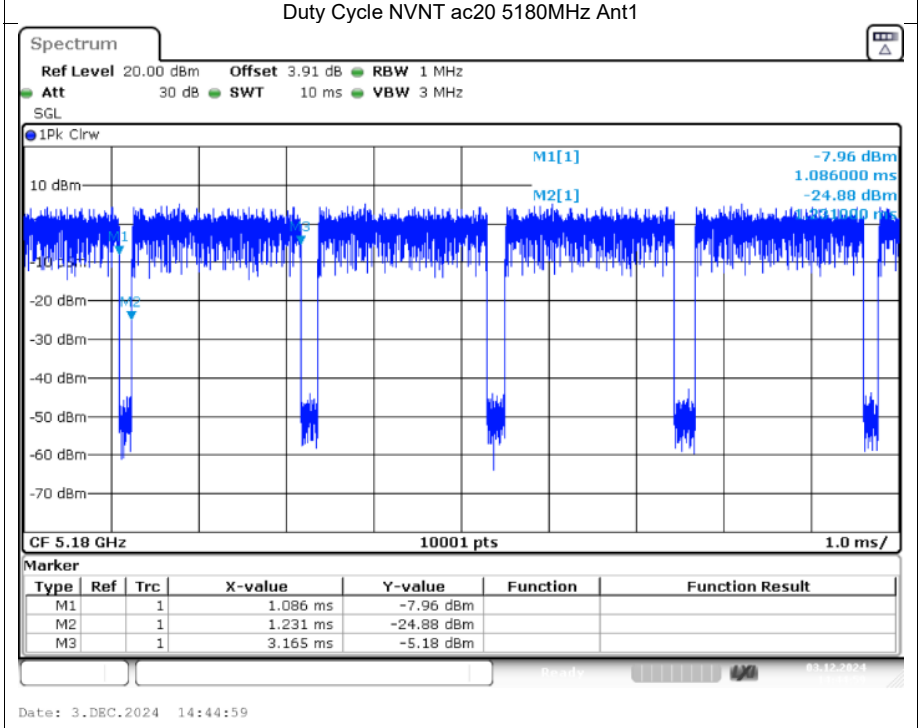
Duty Cycle NVNT n40 5795MHz Ant1



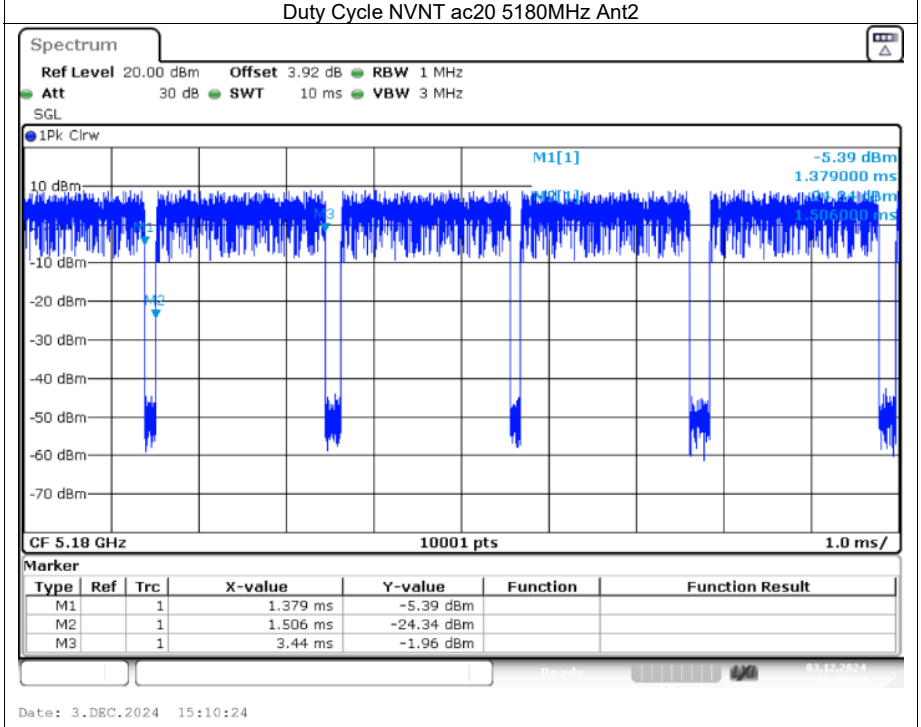
Duty Cycle NVNT n40 5795MHz Ant2



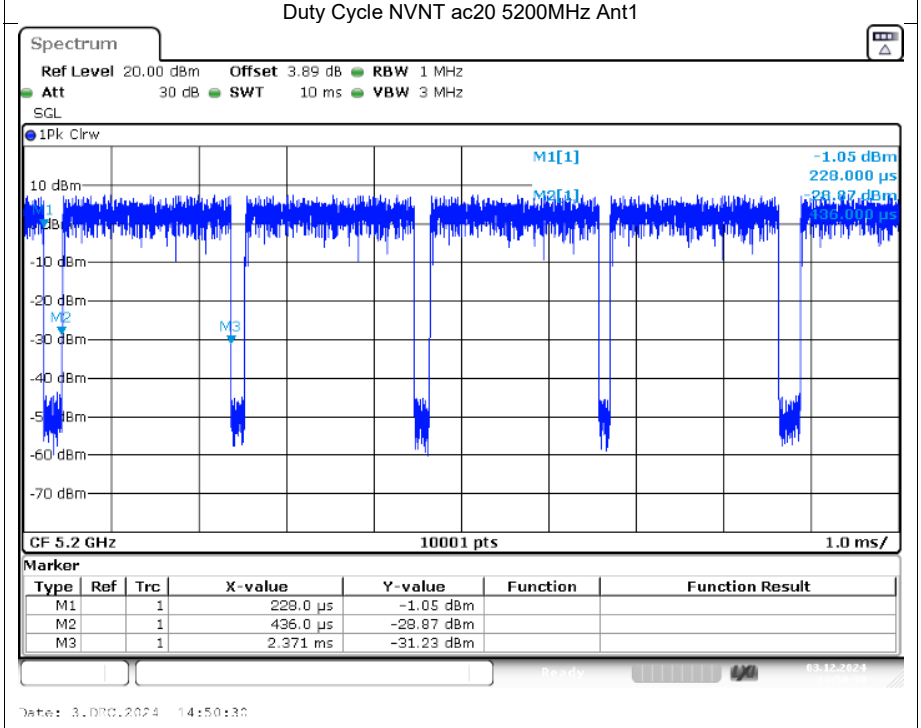
Duty Cycle NVNT ac20 5180MHz Ant1



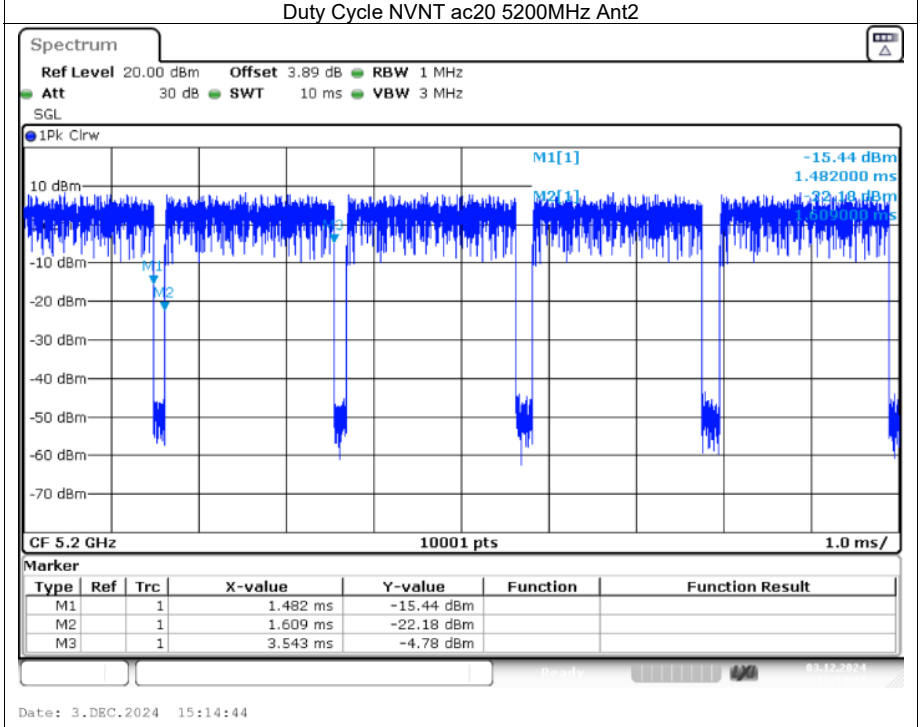
Duty Cycle NVNT ac20 5180MHz Ant2



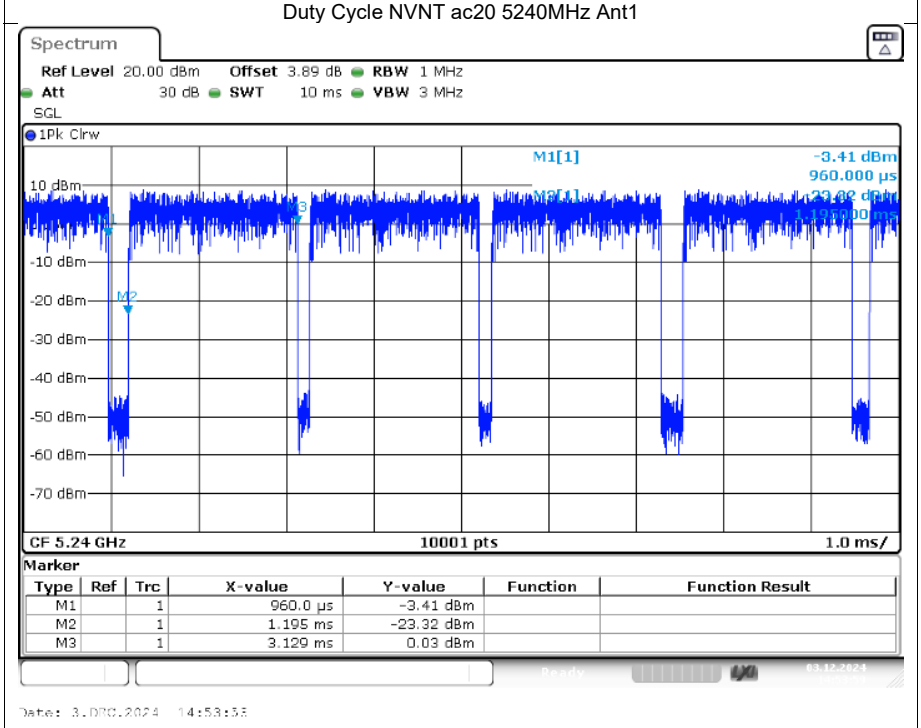
Duty Cycle NVNT ac20 5200MHz Ant1



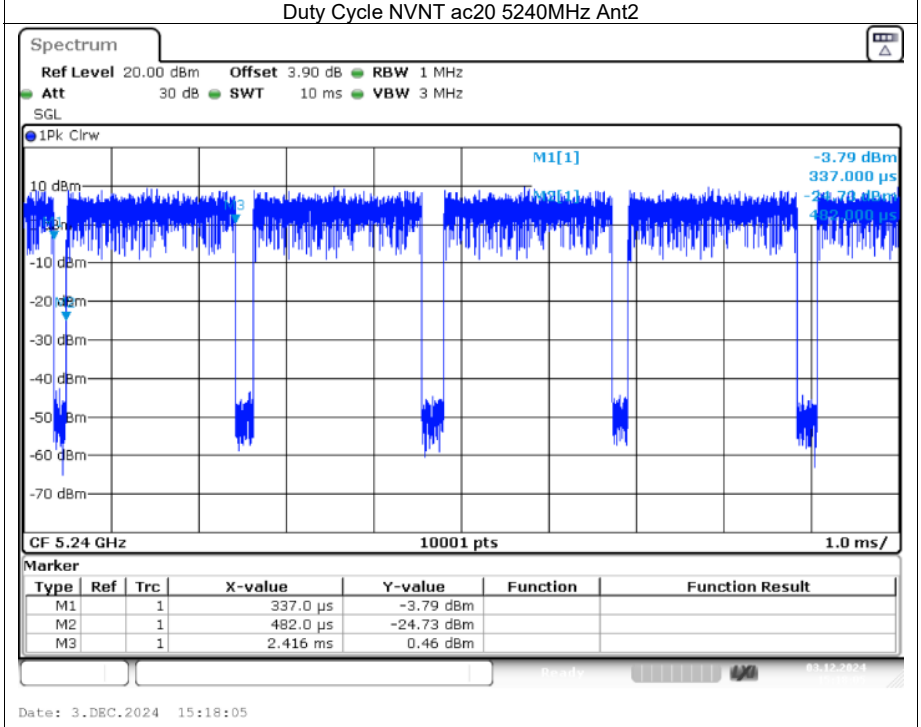
Duty Cycle NVNT ac20 5200MHz Ant2



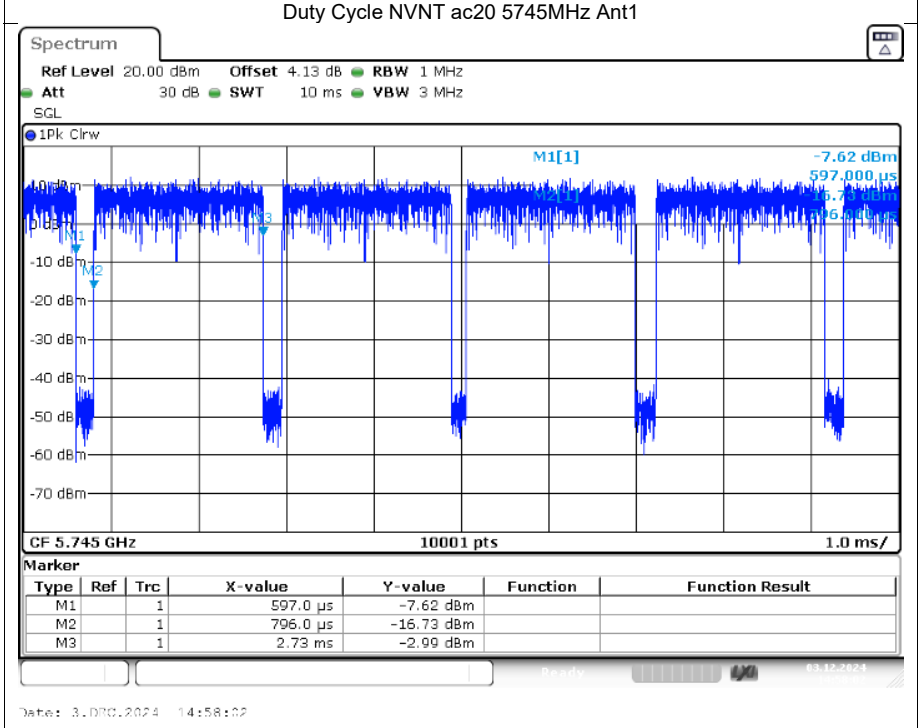
Duty Cycle NVNT ac20 5240MHz Ant1



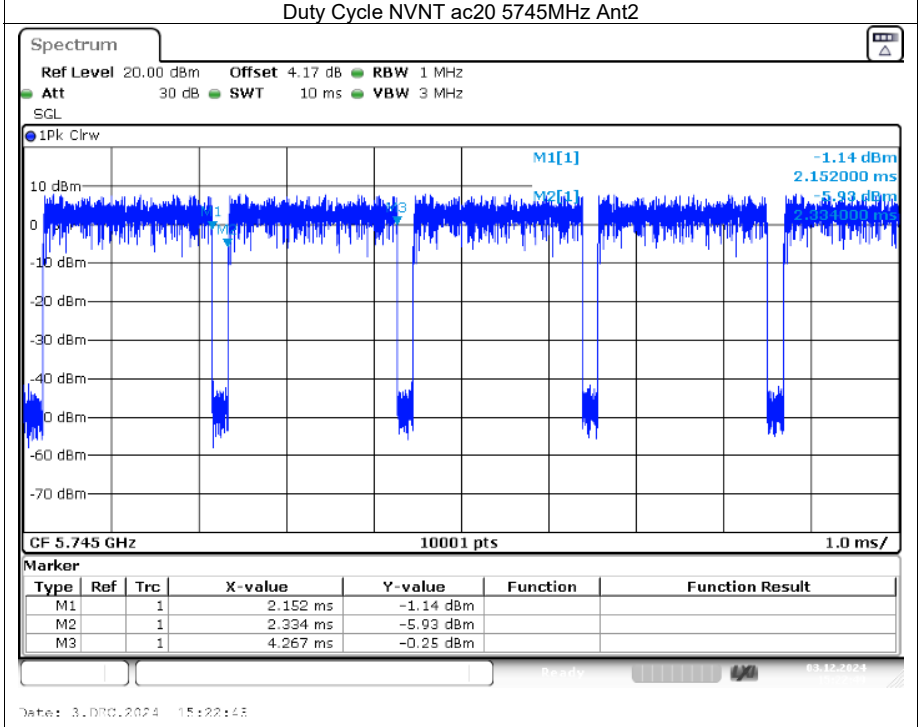
Duty Cycle NVNT ac20 5240MHz Ant2



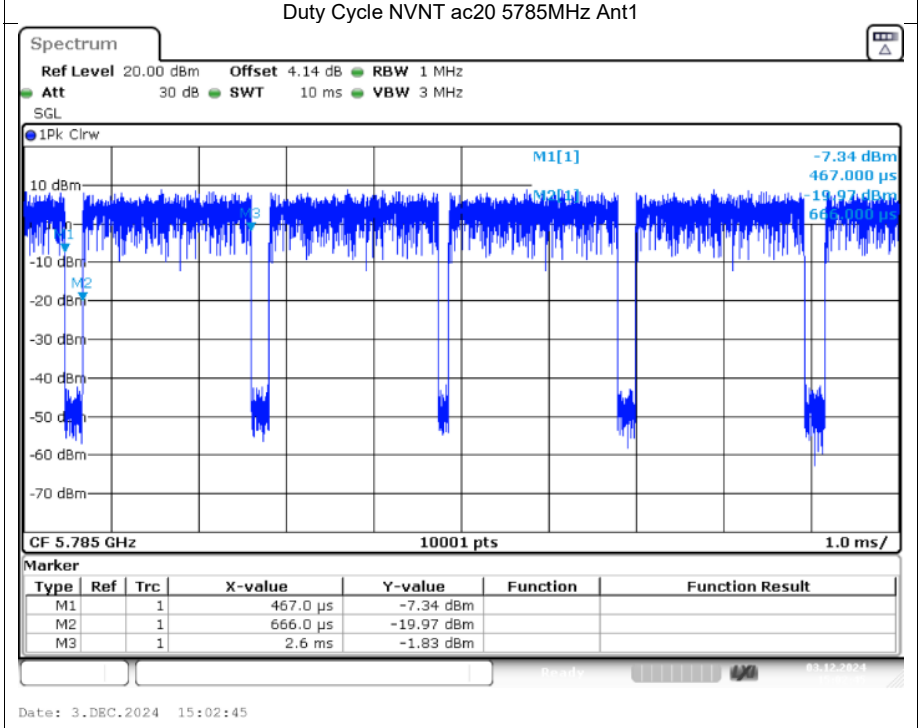
Duty Cycle NVNT ac20 5745MHz Ant1



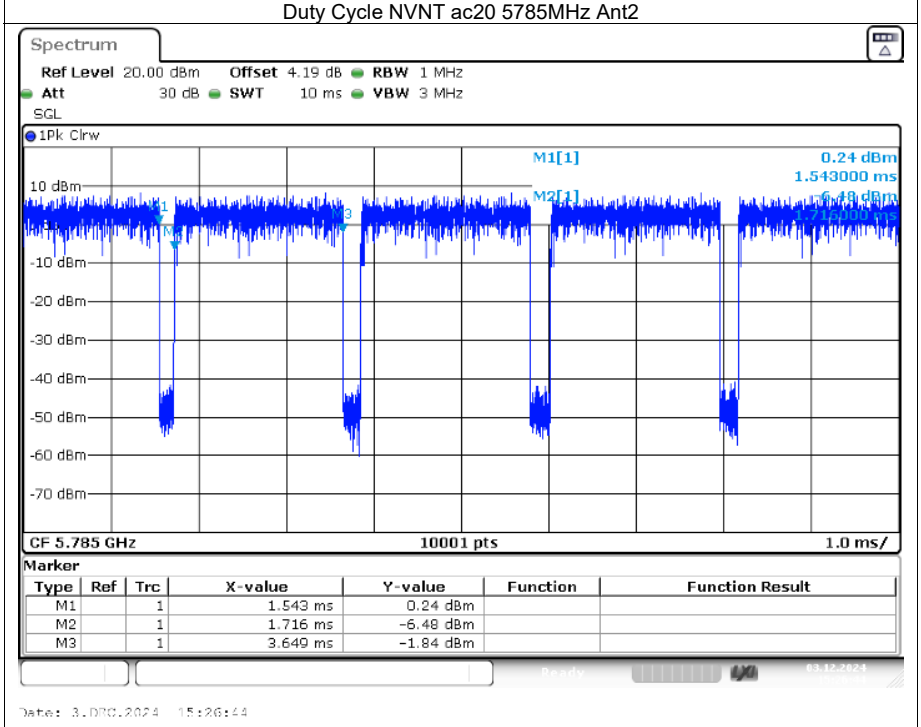
Duty Cycle NVNT ac20 5745MHz Ant2



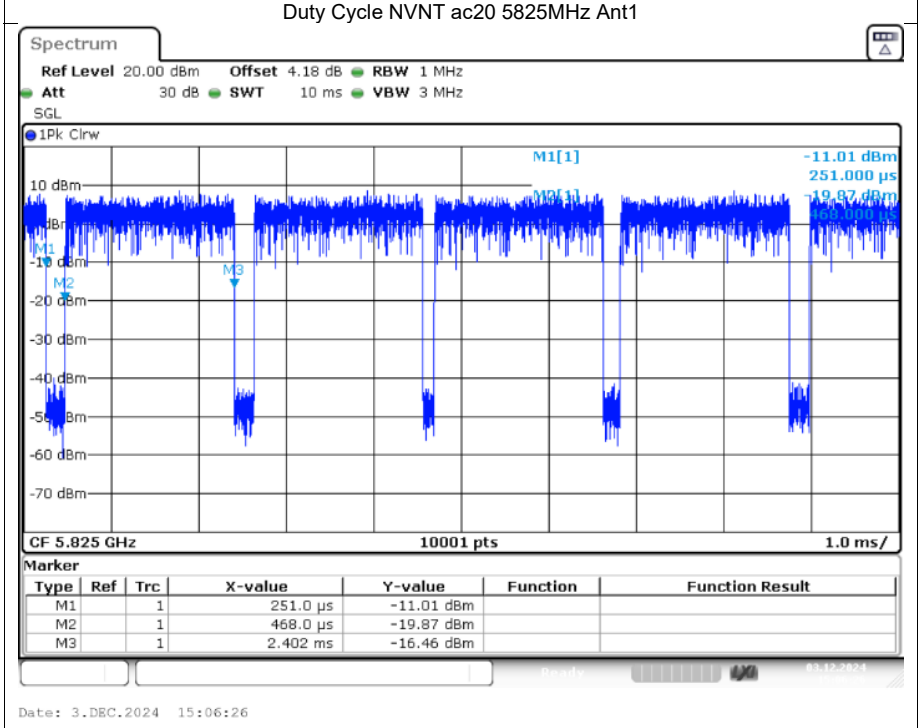
Duty Cycle NVNT ac20 5785MHz Ant1



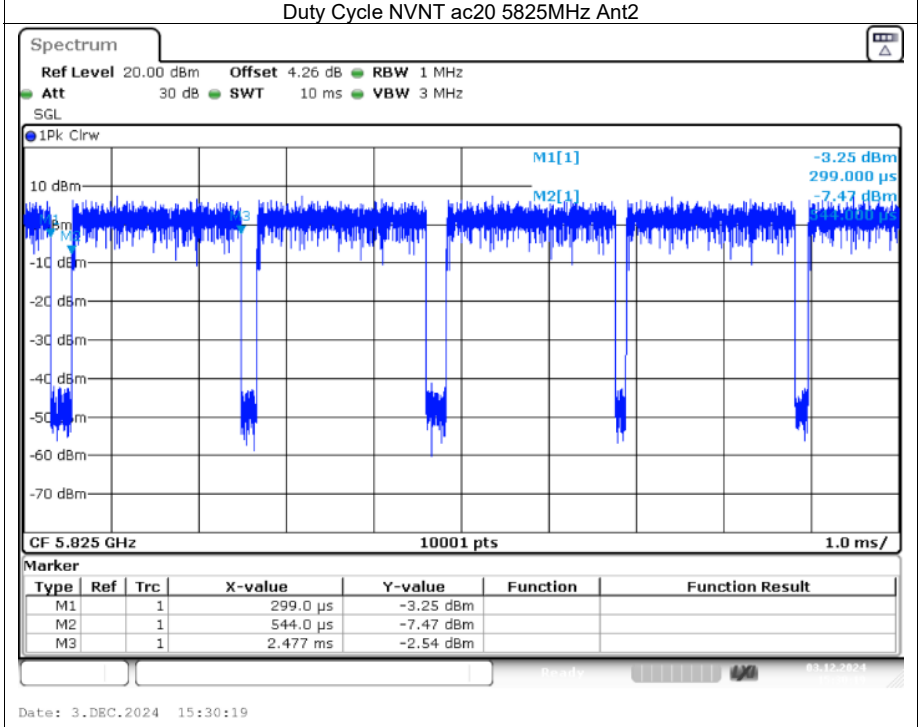
Duty Cycle NVNT ac20 5785MHz Ant2



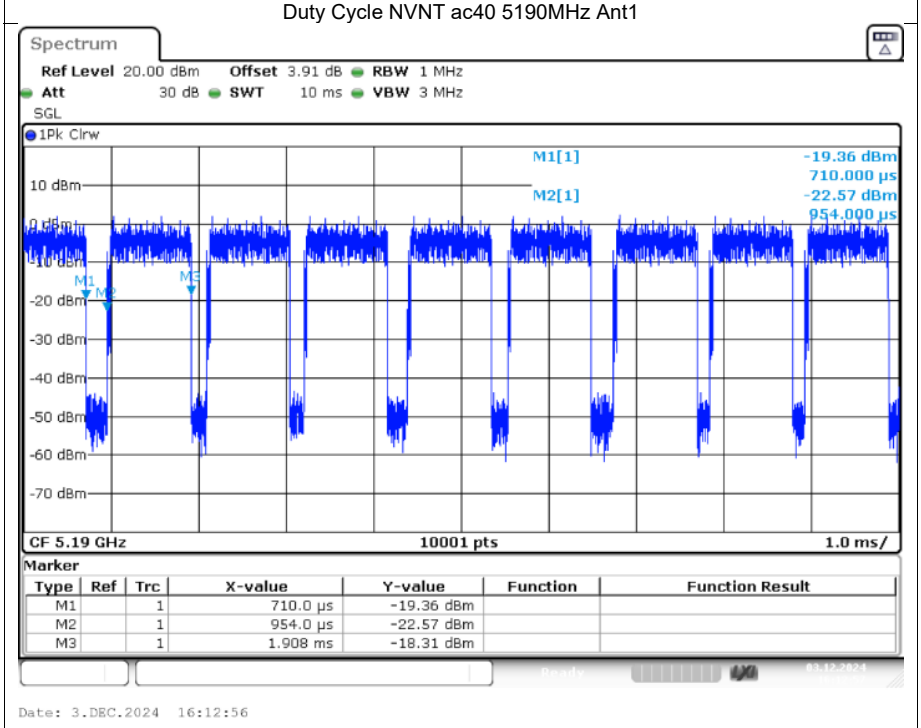
Duty Cycle NVNT ac20 5825MHz Ant1



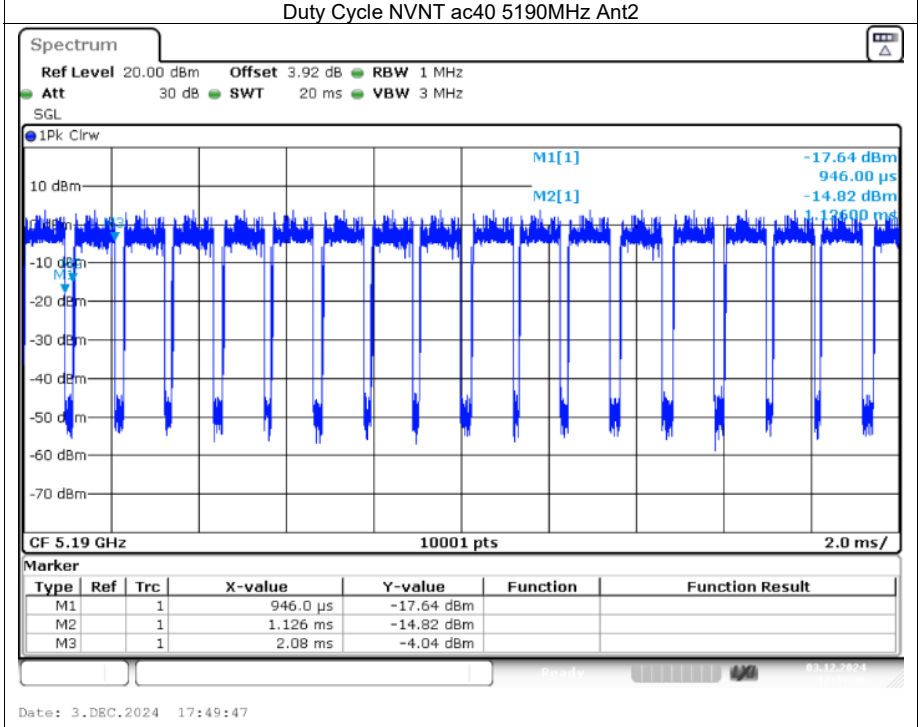
Duty Cycle NVNT ac20 5825MHz Ant2



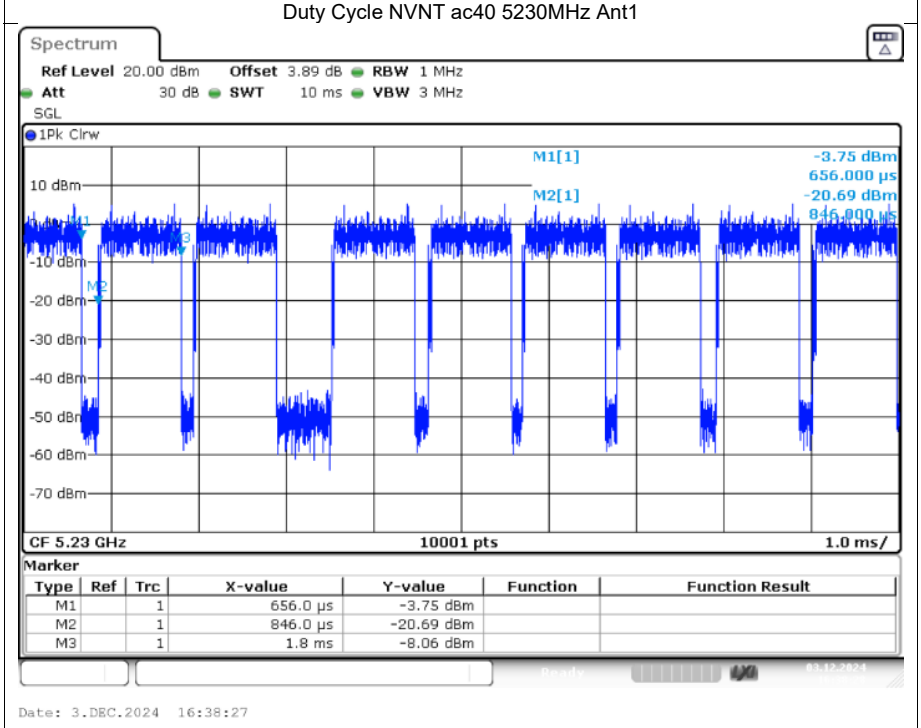
Duty Cycle NVNT ac40 5190MHz Ant1



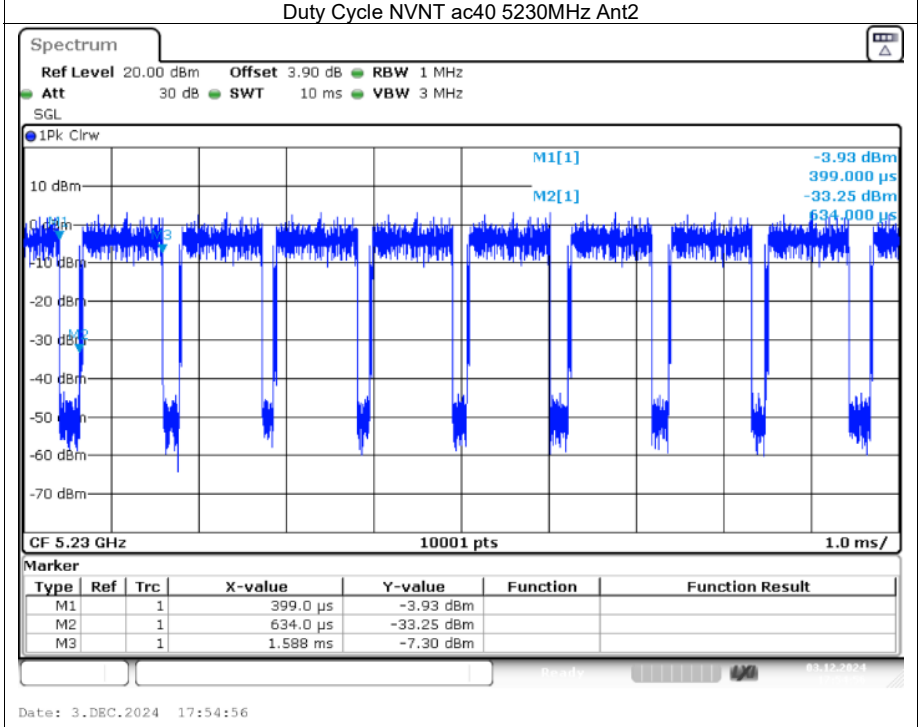
Duty Cycle NVNT ac40 5190MHz Ant2



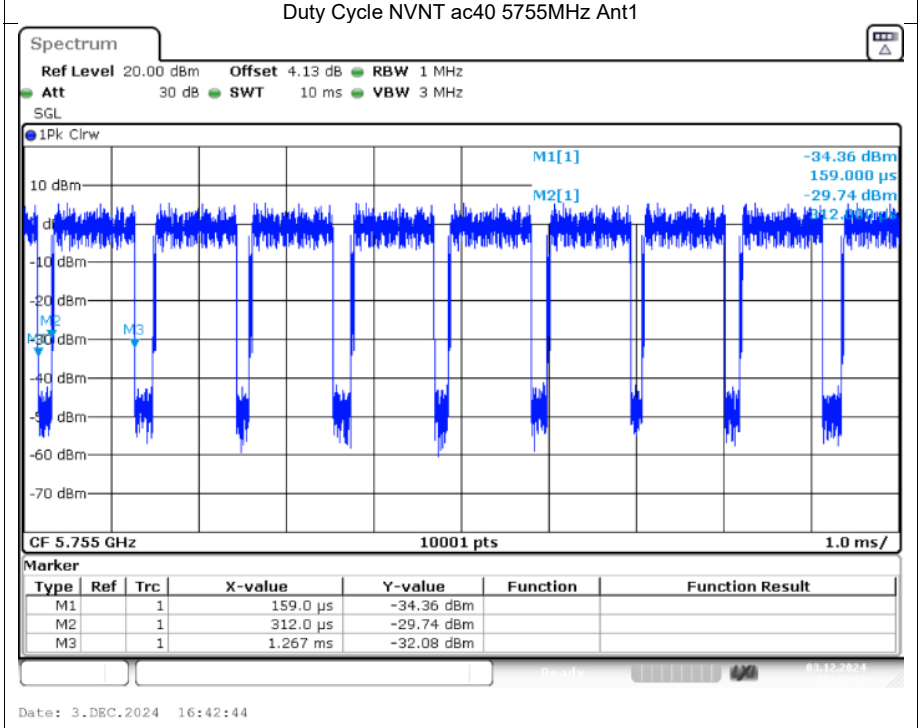
Duty Cycle NVNT ac40 5230MHz Ant1



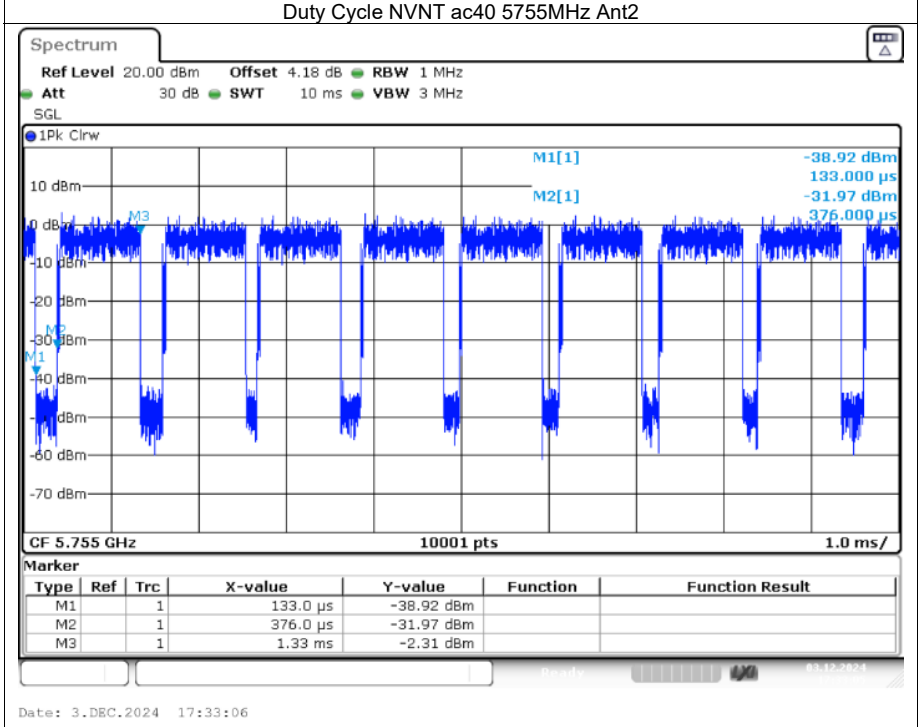
Duty Cycle NVNT ac40 5230MHz Ant2



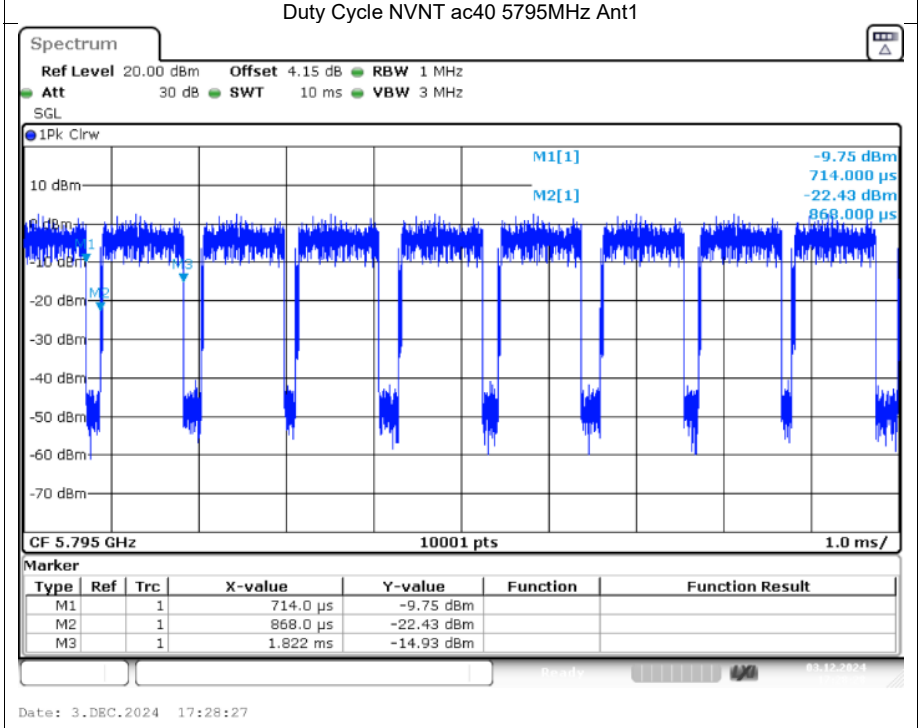
Duty Cycle NVNT ac40 5755MHz Ant1



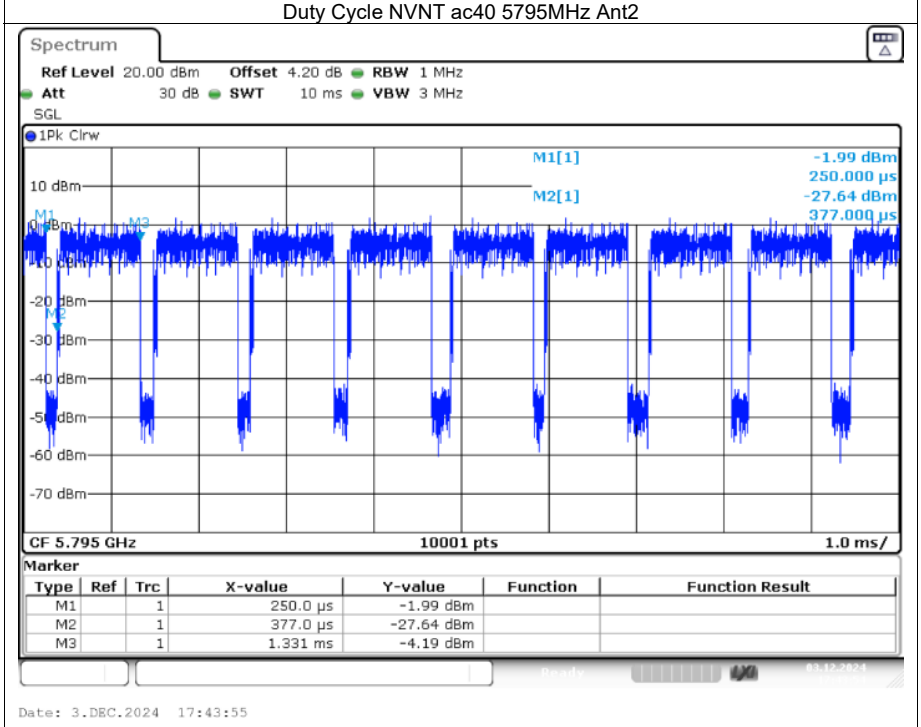
Duty Cycle NVNT ac40 5755MHz Ant2



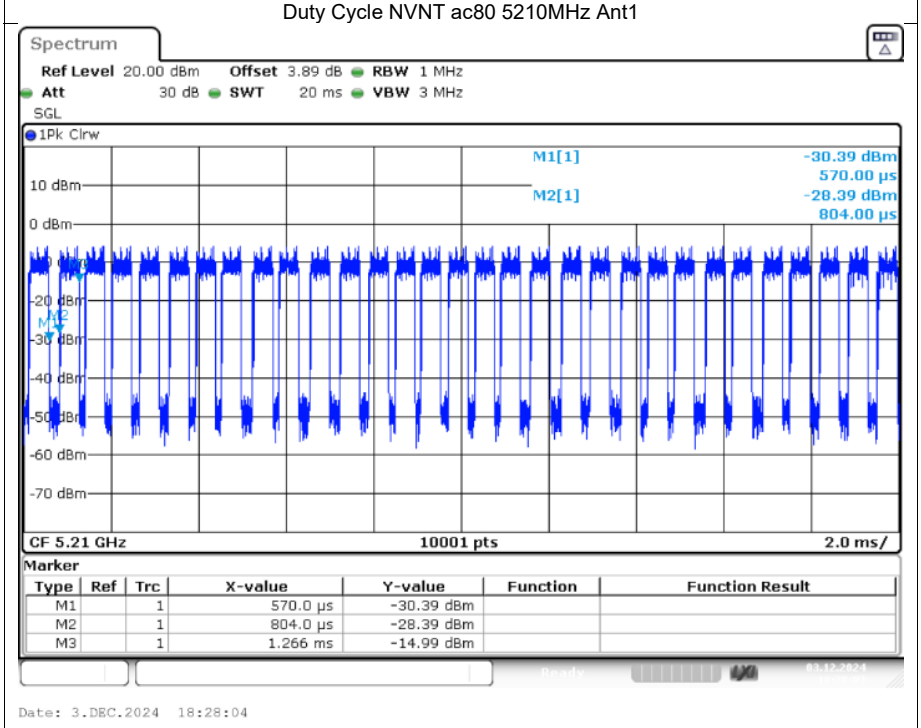
Duty Cycle NVNT ac40 5795MHz Ant1



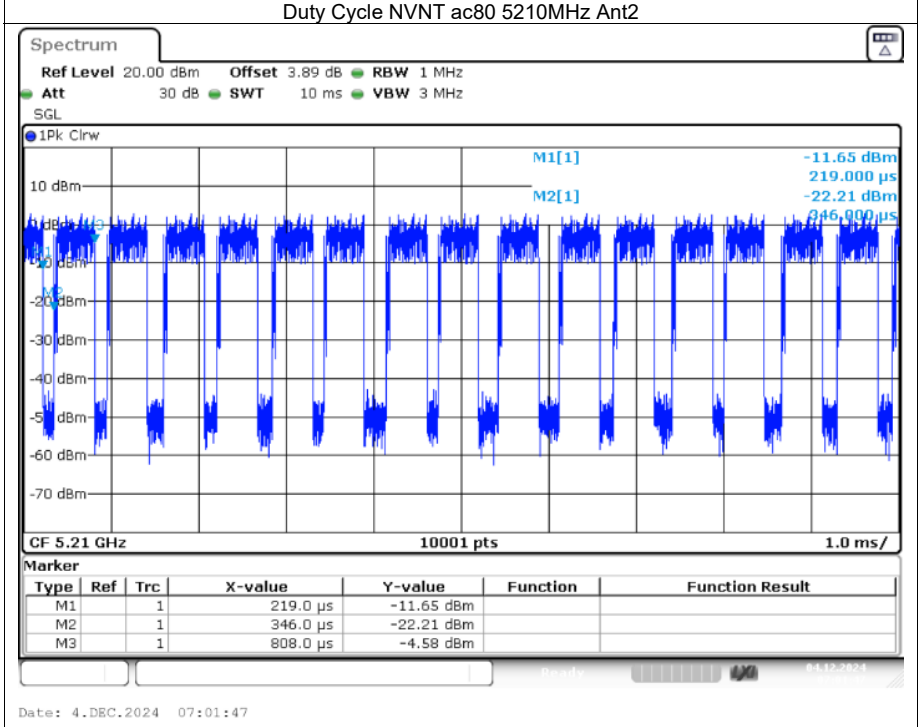
Duty Cycle NVNT ac40 5795MHz Ant2



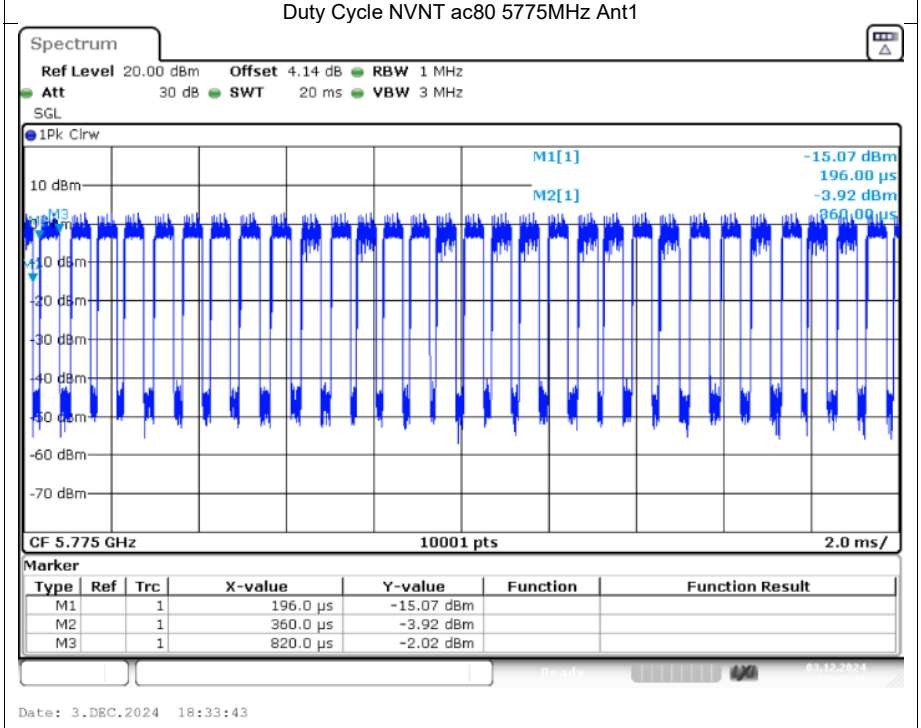
Duty Cycle NVNT ac80 5210MHz Ant1



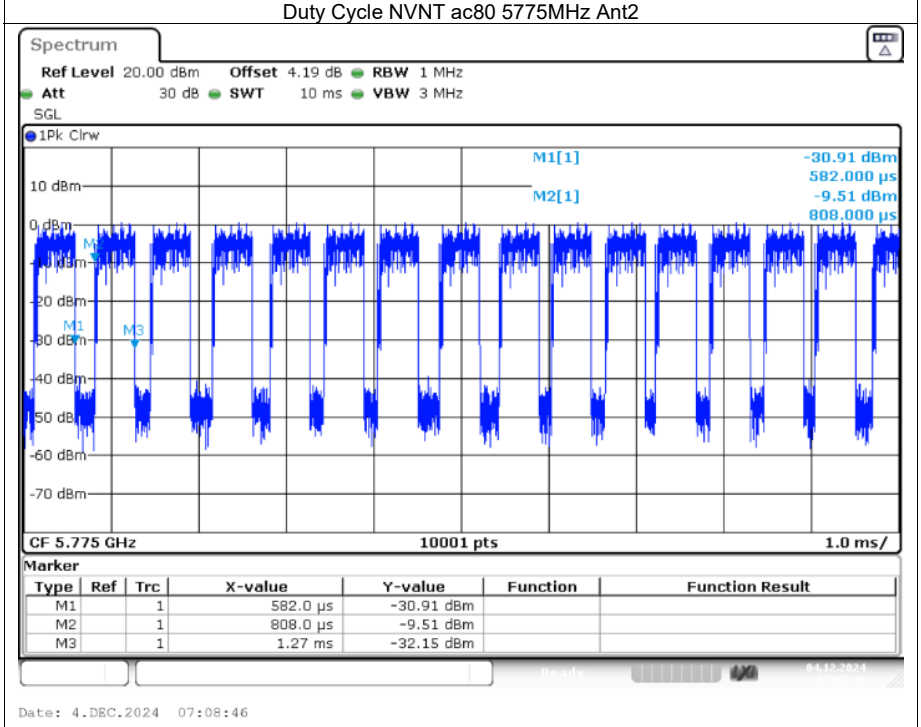
Duty Cycle NVNT ac80 5210MHz Ant2



Duty Cycle NVNT ac80 5775MHz Ant1



Duty Cycle NVNT ac80 5775MHz Ant2



Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	13.5	0.44	13.94	24	Pass
NVNT	a	5180	Ant2	14.3	0.24	14.54	24	Pass
NVNT	a	5200	Ant1	14.18	0.34	14.52	24	Pass
NVNT	a	5200	Ant2	14.28	0.34	14.72	24	Pass
NVNT	a	5240	Ant1	14.36	0.38	14.74	24	Pass
NVNT	a	5240	Ant2	14.14	0.36	14.5	24	Pass
NVNT	a	5745	Ant1	13.38	0.2	13.58	30	Pass
NVNT	a	5745	Ant2	13.15	0.46	13.61	30	Pass
NVNT	a	5785	Ant1	13.53	0.28	13.81	30	Pass
NVNT	a	5785	Ant2	13.53	0.2	13.73	30	Pass
NVNT	a	5825	Ant1	13.01	0.28	13.29	30	Pass
NVNT	a	5825	Ant2	12.85	0.23	13.08	30	Pass
NVNT	n20	5180	Ant1	11.6	0.43	12.03	24	Pass
NVNT	n20	5180	Ant2	11.56	0.28	11.84	24	Pass
NVNT	n20	5180	Sum	14.59	-	14.95	24	Pass
NVNT	n20	5200	Ant1	11.5	0.26	11.76	24	Pass
NVNT	n20	5200	Ant2	11.46	0.22	11.68	24	Pass
NVNT	n20	5200	Sum	14.49	-	14.73	24	Pass
NVNT	n20	5240	Ant1	11.62	0.47	12.09	24	Pass
NVNT	n20	5240	Ant2	11.44	0.24	11.68	24	Pass
NVNT	n20	5240	Sum	14.54	-	14.90	24	Pass
NVNT	n20	5745	Ant1	11.52	0.28	11.8	30	Pass
NVNT	n20	5745	Ant2	11.35	0.47	11.82	30	Pass
NVNT	n20	5745	Sum	14.45	-	14.82	30	Pass
NVNT	n20	5785	Ant1	11.33	0.47	11.8	30	Pass
NVNT	n20	5785	Ant2	11.42	0.39	11.81	30	Pass
NVNT	n20	5785	Sum	14.39	-	14.82	30	Pass
NVNT	n20	5825	Ant1	11.23	0.24	11.47	30	Pass
NVNT	n20	5825	Ant2	11.08	0.43	11.51	30	Pass
NVNT	n20	5825	Sum	14.17	-	14.50	30	Pass
NVNT	n40	5190	Ant1	9.56	0.83	10.39	24	Pass
NVNT	n40	5190	Ant2	10.23	0.94	11.17	24	Pass
NVNT	n40	5190	Sum	12.92	-	13.81	24	Pass
NVNT	n40	5230	Ant1	9.85	0.52	10.37	24	Pass
NVNT	n40	5230	Ant2	10.17	0.79	10.96	24	Pass
NVNT	n40	5230	Sum	13.02	-	13.69	24	Pass
NVNT	n40	5755	Ant1	10.11	0.6	10.71	30	Pass
NVNT	n40	5755	Ant2	10.03	0.39	10.42	30	Pass
NVNT	n40	5755	Sum	13.08	-	13.58	30	Pass
NVNT	n40	5795	Ant1	10.04	0.79	10.83	30	Pass
NVNT	n40	5795	Ant2	10.12	0.9	11.02	30	Pass
NVNT	n40	5795	Sum	13.09	-	13.94	30	Pass
NVNT	ac20	5180	Ant1	10.26	0.32	10.58	24	Pass
NVNT	ac20	5180	Ant2	10.36	0.28	10.64	24	Pass
NVNT	ac20	5180	Sum	13.32	-	13.62	24	Pass
NVNT	ac20	5200	Ant1	10.33	0.43	10.76	24	Pass
NVNT	ac20	5200	Ant2	10.17	0.28	10.45	24	Pass
NVNT	ac20	5200	Sum	13.26	-	13.62	24	Pass
NVNT	ac20	5240	Ant1	10.25	0.51	10.76	24	Pass
NVNT	ac20	5240	Ant2	10.21	0.32	10.53	24	Pass
NVNT	ac20	5240	Sum	13.24	-	13.66	24	Pass
NVNT	ac20	5745	Ant1	10.19	0.43	10.62	30	Pass
NVNT	ac20	5745	Ant2	10.31	0.41	10.72	30	Pass
NVNT	ac20	5745	Sum	13.26	-	13.68	30	Pass
NVNT	ac20	5785	Ant1	10.29	0.43	10.72	30	Pass
NVNT	ac20	5785	Ant2	10.18	0.39	10.57	30	Pass
NVNT	ac20	5785	Sum	13.25	-	13.66	30	Pass
NVNT	ac20	5825	Ant1	10.13	0.47	10.6	30	Pass
NVNT	ac20	5825	Ant2	10.4	0.53	10.93	30	Pass
NVNT	ac20	5825	Sum	13.28	-	13.78	30	Pass
NVNT	ac40	5190	Ant1	8.95	1.01	9.96	24	Pass
NVNT	ac40	5190	Ant2	9.12	0.75	9.87	24	Pass
NVNT	ac40	5190	Sum	12.05	-	12.93	24	Pass
NVNT	ac40	5230	Ant1	8.95	0.79	9.74	24	Pass
NVNT	ac40	5230	Ant2	9.17	0.98	10.15	24	Pass
NVNT	ac40	5230	Sum	12.07	-	12.96	24	Pass
NVNT	ac40	5755	Ant1	8.79	0.68	9.47	30	Pass
NVNT	ac40	5755	Ant2	9.16	1.01	10.17	30	Pass
NVNT	ac40	5755	Sum	11.99	-	12.84	30	Pass

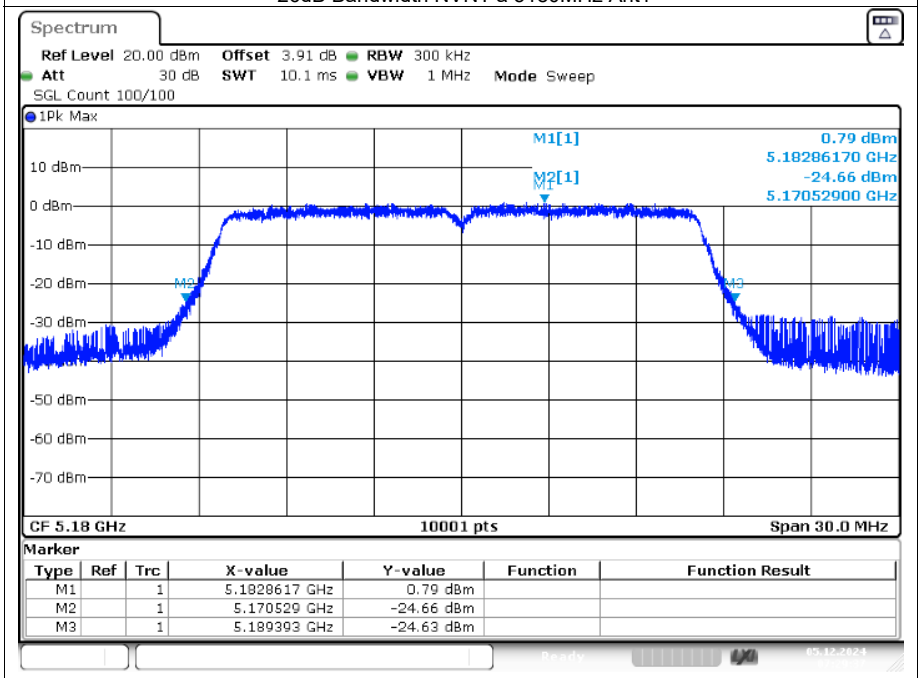
NVNT	ac40	5795	Ant1	9.12	0.68	9.8	30	Pass
NVNT	ac40	5795	Ant2	8.75	0.56	9.31	30	Pass
NVNT	ac40	5795	Sum	11.95	-	12.57	30	Pass
NVNT	ac80	5210	Ant1	7.95	1.82	9.77	24	Pass
NVNT	ac80	5210	Ant2	8.23	1.08	9.31	24	Pass
NVNT	ac80	5210	Sum	11.10	-	12.56	24	Pass
NVNT	ac80	5775	Ant1	8.02	1.3	9.32	30	Pass
NVNT	ac80	5775	Ant2	8.14	1.76	9.9	30	Pass
NVNT	ac80	5775	Sum	11.09	-	12.63	30	Pass

-26dB Bandwidth

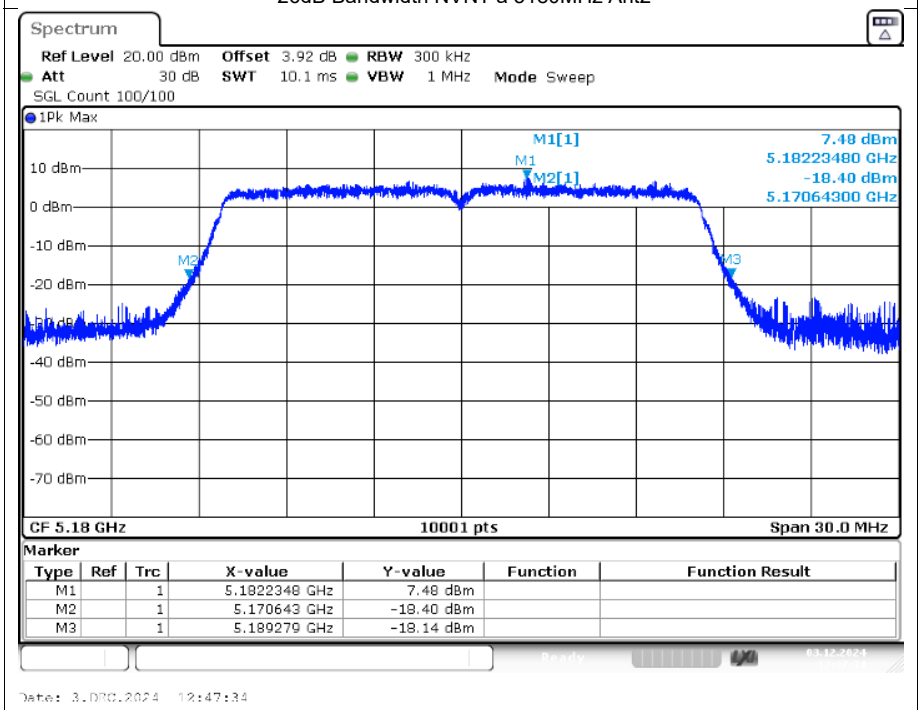
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	18.86	N/A	N/A
NVNT	a	5180	Ant2	18.64	N/A	N/A
NVNT	a	5200	Ant1	18.93	N/A	N/A
NVNT	a	5200	Ant2	18.91	N/A	N/A
NVNT	a	5240	Ant1	19.6	N/A	N/A
NVNT	a	5240	Ant2	18.83	N/A	N/A
NVNT	n20	5180	Ant1	19.72	N/A	N/A
NVNT	n20	5180	Ant2	19.59	N/A	N/A
NVNT	n20	5200	Ant1	19.86	N/A	N/A
NVNT	n20	5200	Ant2	19.71	N/A	N/A
NVNT	n20	5240	Ant1	19.88	N/A	N/A
NVNT	n20	5240	Ant2	19.91	N/A	N/A
NVNT	n40	5190	Ant1	40.51	N/A	N/A
NVNT	n40	5190	Ant2	39.94	N/A	N/A
NVNT	n40	5230	Ant1	40.8	N/A	N/A
NVNT	n40	5230	Ant2	40.42	N/A	N/A
NVNT	ac20	5180	Ant1	19.68	N/A	N/A
NVNT	ac20	5180	Ant2	19.63	N/A	N/A
NVNT	ac20	5200	Ant1	19.86	N/A	N/A
NVNT	ac20	5200	Ant2	19.71	N/A	N/A
NVNT	ac20	5240	Ant1	19.64	N/A	N/A
NVNT	ac20	5240	Ant2	19.63	N/A	N/A
NVNT	ac40	5190	Ant1	40.23	N/A	N/A
NVNT	ac40	5190	Ant2	40.85	N/A	N/A
NVNT	ac40	5230	Ant1	40.31	N/A	N/A
NVNT	ac40	5230	Ant2	40.66	N/A	N/A
NVNT	ac80	5210	Ant1	79	N/A	N/A
NVNT	ac80	5210	Ant2	79.33	N/A	N/A

Test Graphs

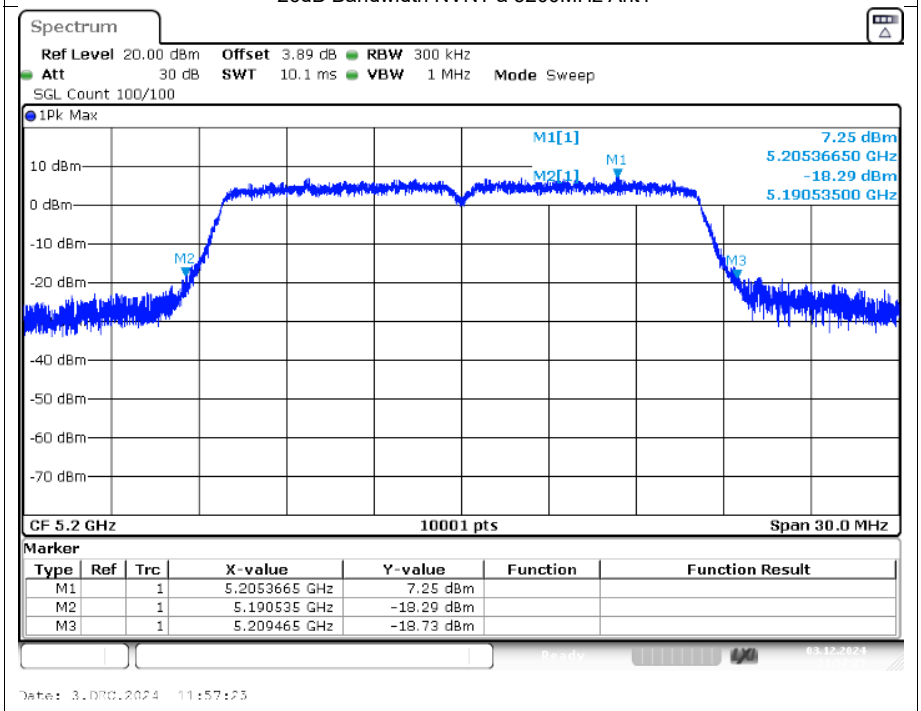
-26dB Bandwidth NVNT a 5180MHz Ant1



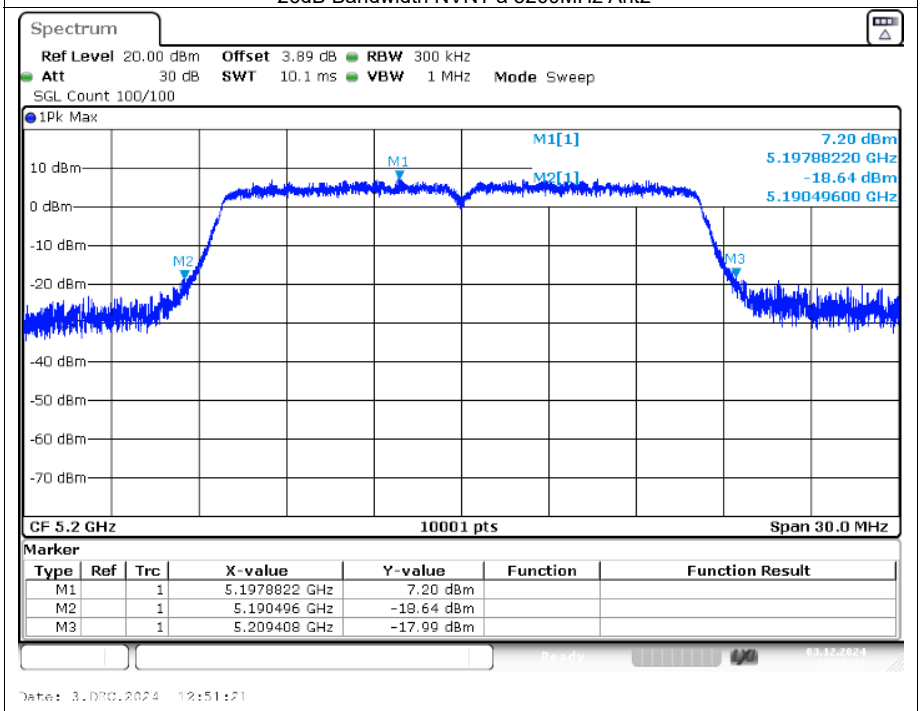
-26dB Bandwidth NVNT a 5180MHz Ant2



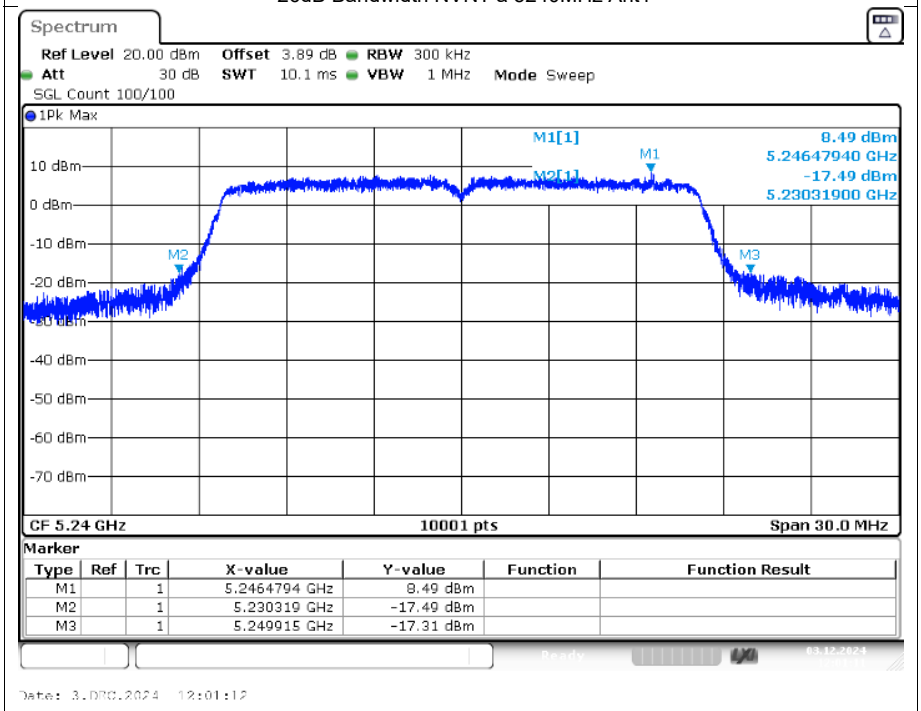
-26dB Bandwidth NVNT a 5200MHz Ant1



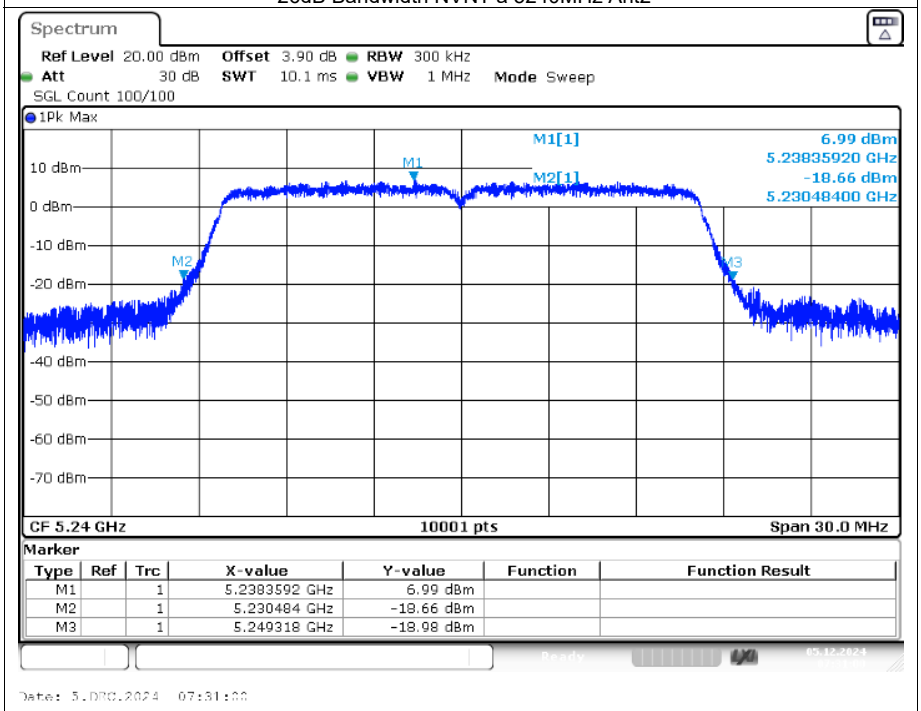
-26dB Bandwidth NVNT a 5200MHz Ant2



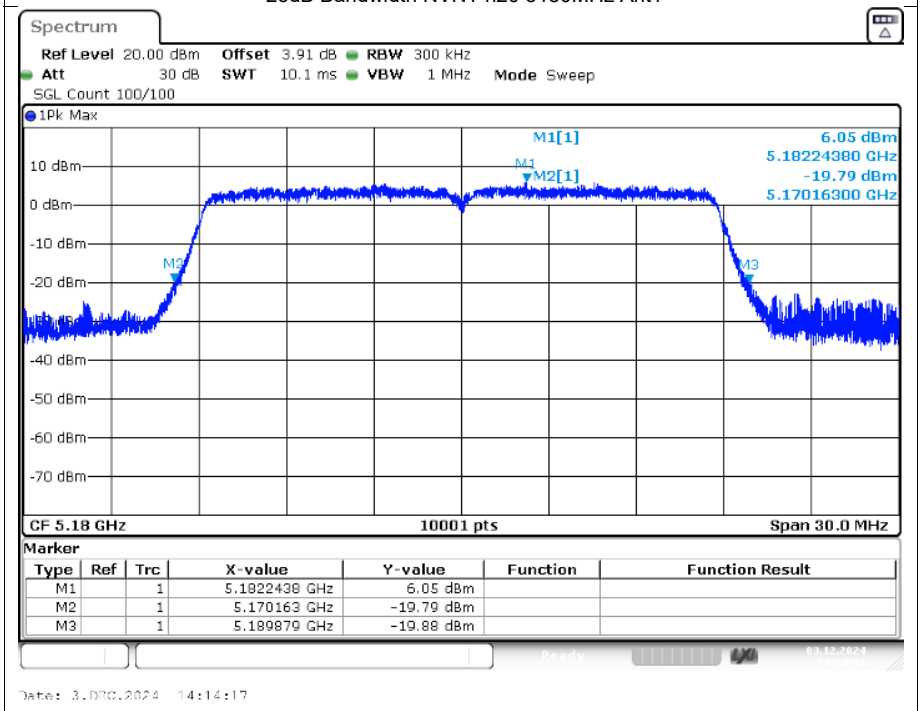
-26dB Bandwidth NVNT a 5240MHz Ant1



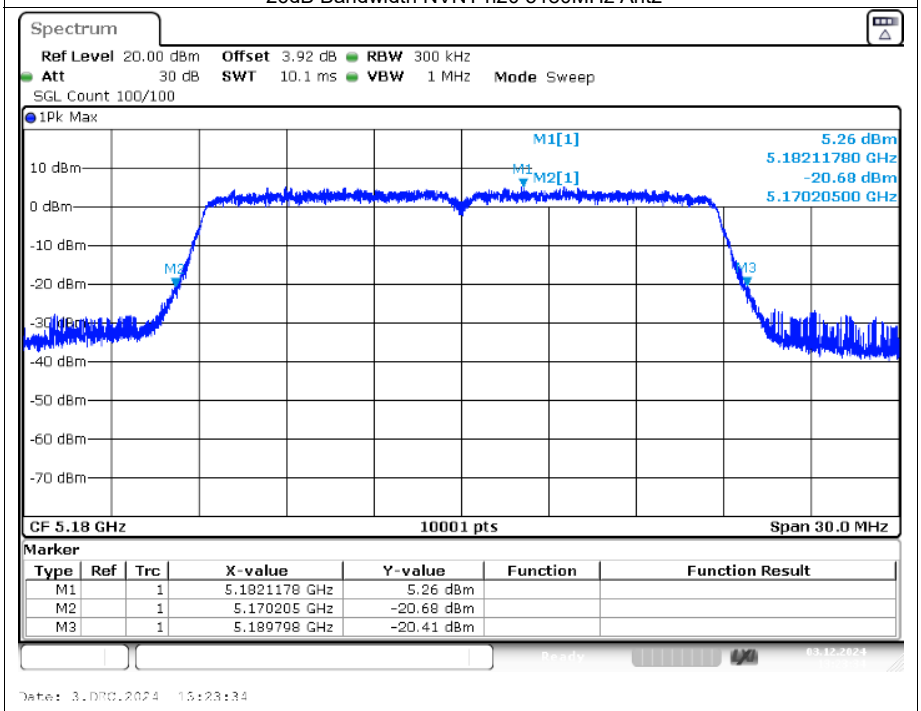
-26dB Bandwidth NVNT a 5240MHz Ant2



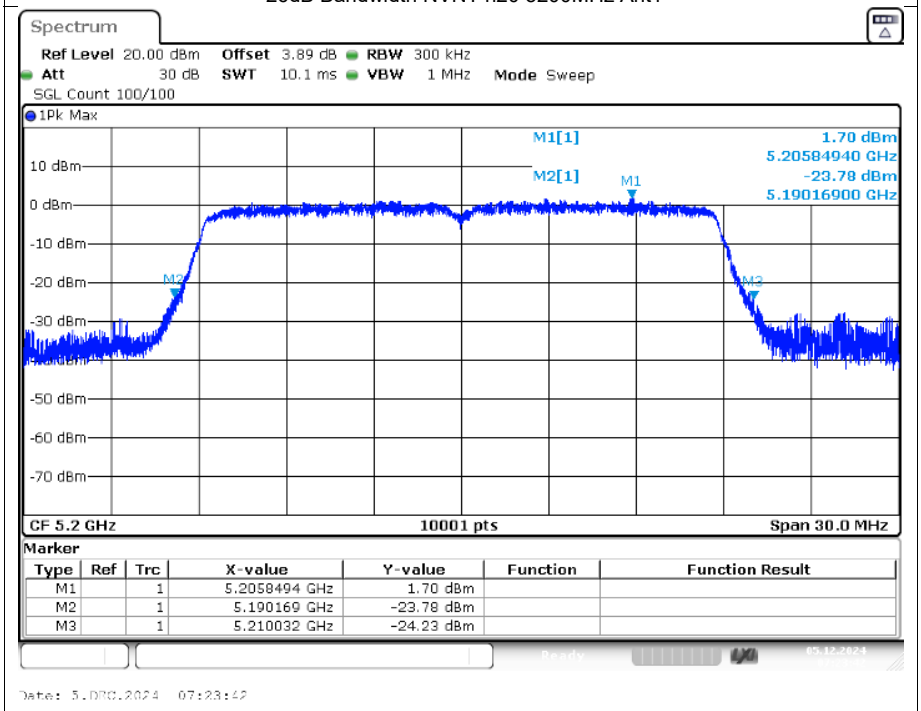
-26dB Bandwidth NVNT n20 5180MHz Ant1



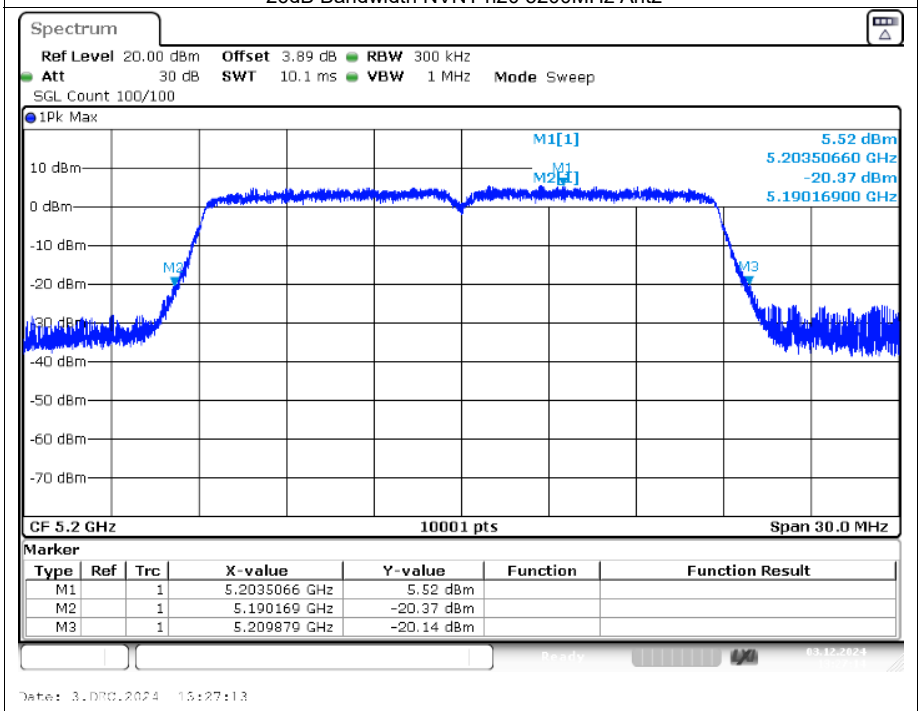
-26dB Bandwidth NVNT n20 5180MHz Ant2



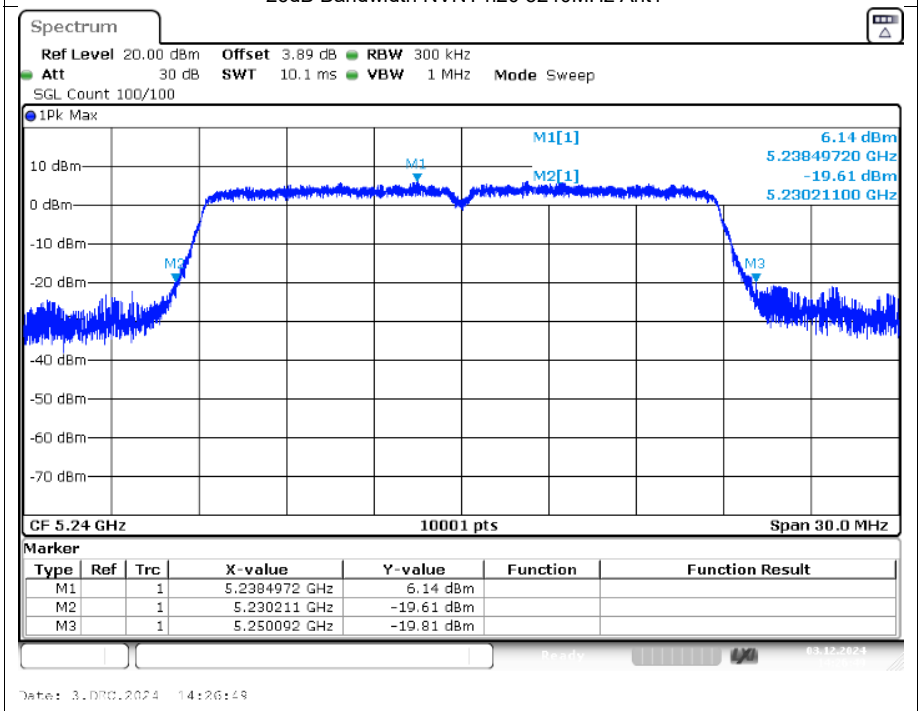
-26dB Bandwidth NVNT n20 5200MHz Ant1



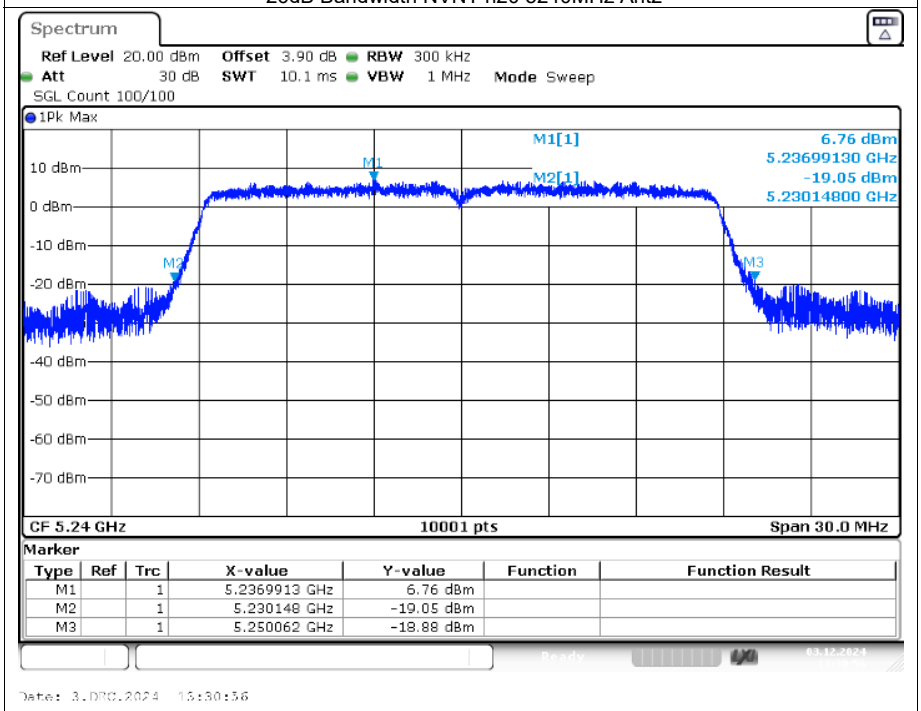
-26dB Bandwidth NVNT n20 5200MHz Ant2



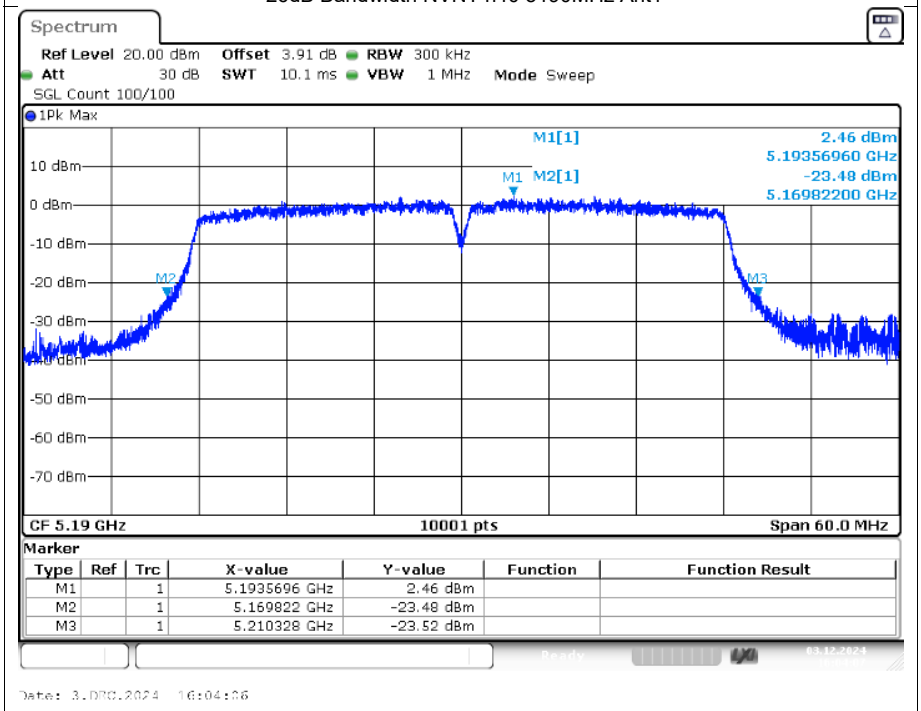
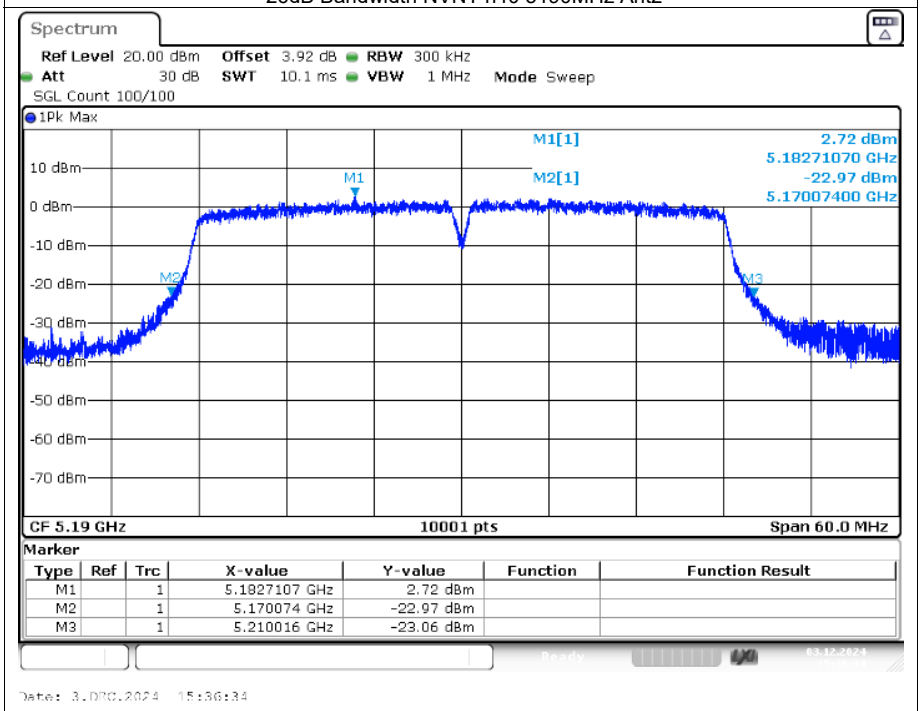
-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n20 5240MHz Ant2



-26dB Bandwidth NVNT n40 5190MHz Ant1



-26dB Bandwidth NVNT n40 5190MHz Ant2