CFR 47 FCC PART 15 SUBPART C(DTS)

TEST REPORT

For

Sky View Wellness Table Lamp

MODEL NUMBER: BH-SKY2-000-CBK001-1

REPORT NUMBER: E01A23060386F00301

ISSUE DATE: August 25, 2023

FCC ID:2BAZK-SKY2000

Prepared for

BIOLOGICAL INNOVATION AND OPTIMIZATION SYSTEMS LLC

274 E EAU GALLIE BLVD STE 116 INDN HBR BCH Florida United states

Prepared by

Dong Guan Anci Electronic Technology Co., Ltd.

No.2, Songlin East Road, Zeng Tian Village, Xin An District, Chang An Town Dongguan Guangdong 523883 China

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	August 55, 2023	Initial Issue	Luke

Summary of Test Results			
Test Item	**Clause**	**Limit/Requirement**	**Result**
Antenna Requirement	N/A	FCC Part 15.203/15.247 (c)	Pass
AC Power Line Conducted Emission	ANSI C63.10-2013, Clause 6.2	FCC Part 15.207	Pass
Conducted Output Power	ANSI C63.10-2013, Clause 11.9.1.3	FCC Part 15.247 (b)(3)	Pass
6dB Bandwidth and 99% Occupied Bandwidth	ANSI C63.10-2013, Clause 11.8.1	FCC Part 15.247 (a)(2)	Pass
Power Spectral Density	ANSI C63.10-2013, Clause 11.10.2	FCC Part 15.247 (e)	Pass
Conducted Band edge and spurious emission	ANSI C63.10-2013, Clause 11.11	FCC Part 15.247(d)	Pass
Radiated Band edge and Spurious Emission	ANSI C63.10-2013, Clause 11.11 & Clause 11.12	FCC Part 15.205/15.209	Pass
Duty Cycle	ANSI C63.10-2013, Clause 11.6	None; for reporting purposes only.	Pass

*The measurement result for the sample received is <Pass> according to <CFR 47 FCC PART 15 SUBPART C(DTS)> when <Accuracy Method> decision rule is applied.

CONTENTS

ATTESTATION OF TEST RESULTS

Applicant Information

Company Name:	BIOLOGICAL INNOVATION AND OPTIMIZATION SYSTEMS LLC
Address:	274 E EAU GALLIE BLVD STE 116 INDN HBR BCH Florida United states

Manufacturer Information

Company Name:	Meko Lighting Company Limited
Address:	No.2, Songlin East Road, Zeng Tian Village, Xin An District, Chang An Town Dongguan Guangdong 523883 China

EUT Information

EUT Name:	SkyView Pro Table Lamp
Model:	BH-SKY2-000-CBK001-1
Brand:	BIOS Lighting
Sample Received Date:	July 25, 2023
Sample Status:	Normal
Sample ID:	A23060386 003
Date of Tested:	July 26, 2023 to August 01, 2023
Hardware version:	V1.0
Software version:	V1.0

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 FCC PART 15 SUBPART C(DTS)	**Pass**

Date of Test : July 26, 2023 to August 01, 2023

Prepared by : Luke Li

Luke Li/Editor

Reviewer & Authorized Signer : Tiger Xu

Tiger Xu/ Supervisor

TEST METHODOLOGY

All tests were performed in accordance with the standard CFR 47 FCC PART 15 SUBPART C(DTS).

FACILITIES AND ACCREDITATION

Site Description

EMC Lab.	:	Accredited by A2LA, 2018.03.15 The Certificate Number is 4422.01. CAB identifier: CN0079 ISED Company number: 22768
Name of Firm	:	Dong Guan Anci Electronic Technology Co., Ltd.
Site Location	:	1-2 Floor, Building A, No.11, Headquarters 2 Road, Songshan, Lake Hi-tech Industrial Development Zone, Dongguan City, Guangdong Pr., China.

CALIBRATION AND UNCERTAINTY

1.1. 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.

1.2. MEASUREMENT UNCERTAINTY

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

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

Test Items	k	Uncertainty
DTS Bandwidth	1.96	±9.2 PPM
20dB Emission Bandwidth	1.96	±9.2 PPM
Carrier Frequency Separation	1.96	±9.2 PPM
Number of Hopping Channel	1.96	±9.2 PPM
Time of Occupancy	1.96	±0.57%
Maximum Conducted Output Power	1.96	± 0.73 dB
Max Peak Conducted Output Power	1.96	±1.5 dB
Maximum Power Spectral Density Level	1.96	±1.9 dB
Conducted Band edge	1.96	±9.2 PPM
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
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.		

Test Item	Measurement Frequency Range	K	U(dB)
Conducted emissions from the AC mains power ports (AMN)	150 kHz ~ 30 MHz	2	3.37
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.			

EQUIPMENT UNDER TEST

1.3. DESCRIPTION OF EUT

EUT Name	SkyView Pro Table Lamp
Model	BH-SKY2-000-CBK001-1
Ratings	100-240Vac, 50/60Hz
Test Power Supply	120Vac
Power Supply Information	Model: XY36SC-240150VQ-DW Input: 100-240Vac, 50/60Hz Output: 24Vdc 1.5A

Frequency Band:	2400 MHz to 2483.5 MHz
Frequency Range:	2412 MHz to 2462 MHz
Support Standards:	802.11 b/g/n
Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
Data Rate:	IEEE 802.11b: Up to 11 Mbps IEEE 802.11g: Up to 54 Mbps IEEE 802.11n: Up to MCS7
Number of Channels:	IEEE 802.11b/g/n-HT20: 11 IEEE 802.11n-HT40: 7
Maximum Peak Power:	IEEE 802.11b: 13.47dBm IEEE 802.11g: 12.52dBm IEEE 802.11n-HT20: 12.5 dBm IEEE 802.11n-HT40: 10.7 dBm
Antenna Type:	PCB Antenna
Antenna Gain:	2.2dBi

1.4. CHANNEL LIST

Channel List for 802.11b/g/n (20 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	4	2427	7	2442	10	2457
2	2417	5	2432	8	2447	11	2462
3	2422	6	2437	9	2452	/	/

Channel List for 802.11n (40 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	2422	5	2432	7	2442	9	2452
4	2427	6	2437	8	2447	/	/

1.5. MAXIMUM AVERAGE EIRP

IEEE Std. 802.11	Frequency (MHz)	Channel Number	Maximum Conducted AVG Output Power (dBm)	Maximum AVG EIRP (dBm)
b	2412 ~ 2462	1-11[11]	13.47	15.67
g	2412 ~ 2462	1-11[11]	12.52	14.72
n HT20	2412 ~ 2462	1-11[11]	12.5	14.7
n HT40	2422 ~ 2452	3-9[7]	10.7	12.9

1.6. TEST CHANNEL CONFIGURATION

IEEE Std. 802.11	Test Channel Number	Frequency
b	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
g	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT20	CH 1(Low Channel), CH 6(MID Channel), CH 11(High Channel)	2412 MHz, 2437 MHz, 2462 MHz
n HT40	CH 3(Low Channel), CH 6(MID Channel), CH 9(High Channel)	2422 MHz, 2437 MHz, 2452 MHz

1.7. THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5MHz Band							
Test Software		Beken Wi-Fi Tool V1.6.0					
Modulation Mode	Transmit Antenna Number	Test Channel					
		NCB: 20MHz			NCB: 40MHz		
		CH 1	CH 6	CH 11	CH 3	CH 6	CH 9
802.11b	1	30	30	30	/		
802.11g	1	15	15	15			
802.11n HT20	1	15	15	15			
802.11n HT40	1	/			15	15	15

WORST-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 5.5.

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps
802.11g mode: 6 Mbps
802.11n HT20 mode: MCS0
802.11n HT40 mode: MCS0

1.8. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	MAX Antenna Gain (dBi)
1	2412-2462	PCB Antenna	2.2dBi

Test Mode	Transmit and Receive Mode	Description
IEEE 802.11b	☒1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.
IEEE 802.11g	☒1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT20	☒1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.
IEEE 802.11n HT40	☒1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.

1.9. SUPPORT UNITS FOR SYSTEM TEST

The EUT has been tested as an independent unit

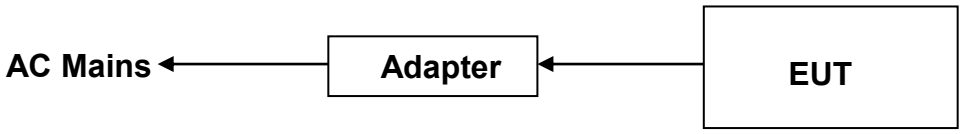
Item	Equipment	Trademark	Model No.	FCC ID	Note
1.	Sky View Wellness Table Lamp	BIOS	BH-SKY2-000-CBK001-1	2BAZK-SKY2000	***EUT***

Note:

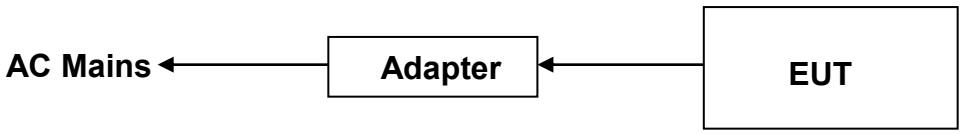
(1) Unless otherwise denoted as EUT in『Remark』column, device(s) used in tested system is a support equipment.

1.10. SETUP DIAGRAM

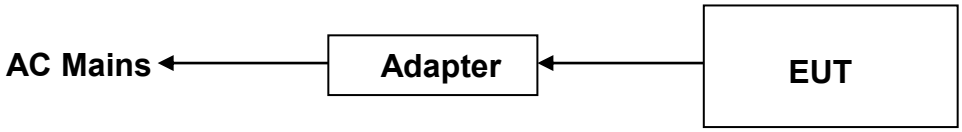
AC conducted emission :



Radiated Emission:



RF conducted:



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	US40240623	2022-10-29	2023-10-28
RF Test Software	MWRF-test	MTS 8310	N/A	N/A	N/A
Radio Frequency control box	MWRF-test	MW200-RFCB	MW220111ANCI	2023-05-10	2024-05-09
Radio Frequency control box	MWRF-test	MW200-RFCB 2#	/	2023-05-10	2024-05-09

Test Equipment of Radiated emissions below 1GHz					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Due Date**
EMI Test Receiver	ROHDE&SCHWARZ	ESCI	100302	2023-05-10	2024-05-09
Bilog Antenna	Schwarzbeck	VULB9163	VULB9163-1290	2022-12-12	2023-12-11
RF Cable	ZKJC	ZT06S-NJ-NJ-11M	19060398	2023-05-10	2024-05-09
RF Cable	ZKJC	ZT06S-NJ-NJ-0.5M	19060400	2023-05-10	2024-05-09
RF Cable	ZKJC	ZT06S-NJ-NJ-2.5M	19060404	2023-05-10	2024-05-09
EMI Test Receiver	ROHDE&SCHWARZ	ESPI7	100502	2022-10-08	2023-10-07
3m Semi-anechoic Chamber	Keysight	9m*6m*6m	N/A	2021-11-13	2024-11-12

Test Equipment of Radiated emissions above 1GHz					
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Last Cal.**	**Due Date**
Low noise Amplifiers	A-INFO	LA1018N4009	J1013130524001	2023-05-10	2024-05-09
Horn antenna	A-INFO	LB-10180-SF	J2031090612123	2023-05-10	2024-05-09
RF Cable	ZKJC	ZT26-NJ-NJ-11M	19060401	2023-05-10	2024-05-09
RF Cable	ZKJC	ZT26-NJ-NJ-2.5M	19060402	2023-05-10	2024-05-09
RF Cable	ZKJC	ZT26-NJ-NJ-0.5M	19060403	2023-05-10	2024-05-09
Spectrum Analyzer	Rohde & Schwarz	FSV40	US40240623	2022-10-29	2023-10-28
3m Semi-anechoic Chamber	Keysight	9m*6m*6m	N/A	2021-11-13	2024-11-12
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**
EMI Test Receiver	ROHDE&SCHWARZ	ESCI	101358	2023-05-10	2024-05-09
1# Shielded Room	chengyu	8m*4m*3.3m	N/A	2022-11-22	2025-11-21
LISN	ROHDE&SCHWARZ	ENV216	101413	2022-10-08	2023-10-07
Test Software	Farad	EZ-EMC (Ver.ANCI-3A1)	N/A	N/A	N/A
RF Cable	N/A	ZT06S-NJ-NJ-2.5M	19044022	2023-05-10	2024-05-09

ANTENNA PORT TEST RESULTS

1.11. CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3)	Peak Conduct Output Power	1 watt or 30 dBm	2400-2483.5

TEST PROCEDURE

Connect the EUT to a low loss RF cable from the antenna port to the power sensor (video bandwidth is greater than the occupied bandwidth).
Measure peak emission level, the indicated level is the peak output power, after any corrections for external attenuators and cables.

TEST ENVIRONMENT

Temperature	23.1℃	Relative Humidity	50%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data"

1.12. 6DB BANDWIDTH

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2)	6 dB Bandwidth	≥ 500 kHz	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth.

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

Center Frequency	The center frequency of the channel under test
Frequency Span	For 6 dB Bandwidth: Enough to capture all products of the modulation carrier emission
Detector	Peak
RBW	100 kHz
VBW	≥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 dB relative to the maximum level measured in the fundamental emission.

TEST ENVIRONMENT

Temperature	24℃	Relative Humidity	52%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data"

1.13. POWER SPECTRAL DENSITY

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.10.

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	3 kHz ≤ RBW ≤ 100 kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.
If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST ENVIRONMENT

Temperature	24℃	Relative Humidity	52%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data"

1.14. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

CFR 47 FCC Part15 (15.247) Subpart C		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d)	Conducted Bandedge and Spurious Emissions	at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

LIMITS

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.11 and 11.13.

Connect the EUT to the spectrum analyser and use the following settings for reference level measurement:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level.
Change the settings for emission level measurement:

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	≥3 × RBW
measurement points	≥span/RBW
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11.

TEST ENVIRONMENT

Temperature	23.5℃	Relative Humidity	52.6%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data"

1.15. DUTY CYCLE

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Refer to ANSI C63.10-2013 clause 11.6 Zero – Span Spectrum Analyzer method.

TEST ENVIRONMENT

Temperature	24℃	Relative Humidity	52%
Atmosphere Pressure	101kPa		

TEST RESULTS

Please refer to section "Test Data"

RADIATED TEST RESULTS

LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209.

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

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), 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.

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 1G

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 ANSI C63.10-2013 clause 6.6.

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.

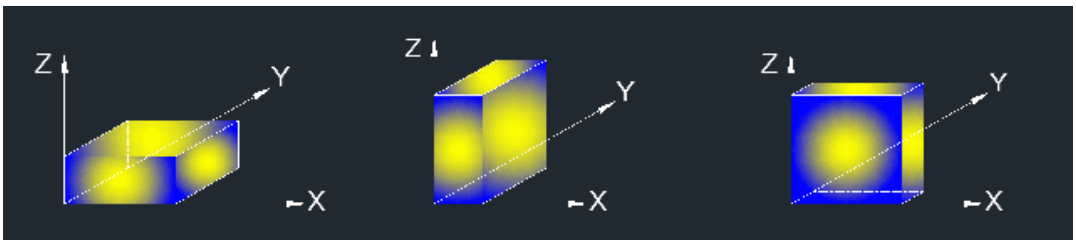
3. The EUT was placed on a turntable with 1.5 m above ground.

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.

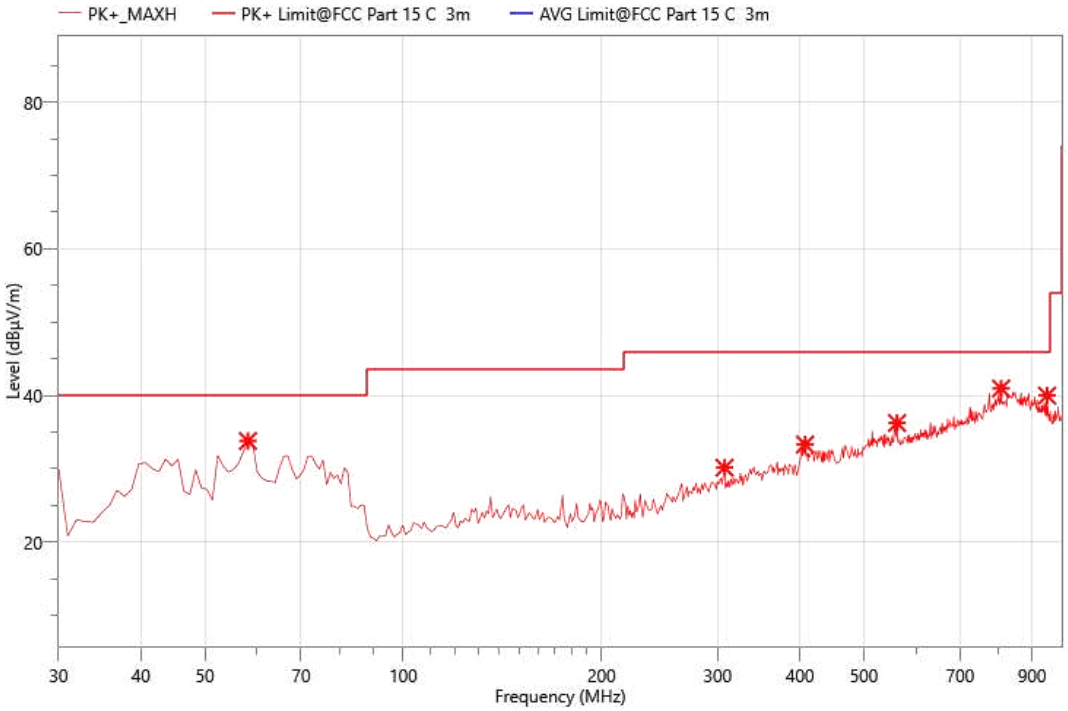
TEST ENVIRONMENT

Temperature	23℃	Relative Humidity	51%
Atmosphere Pressure	101kPa		

TEST RESULTS

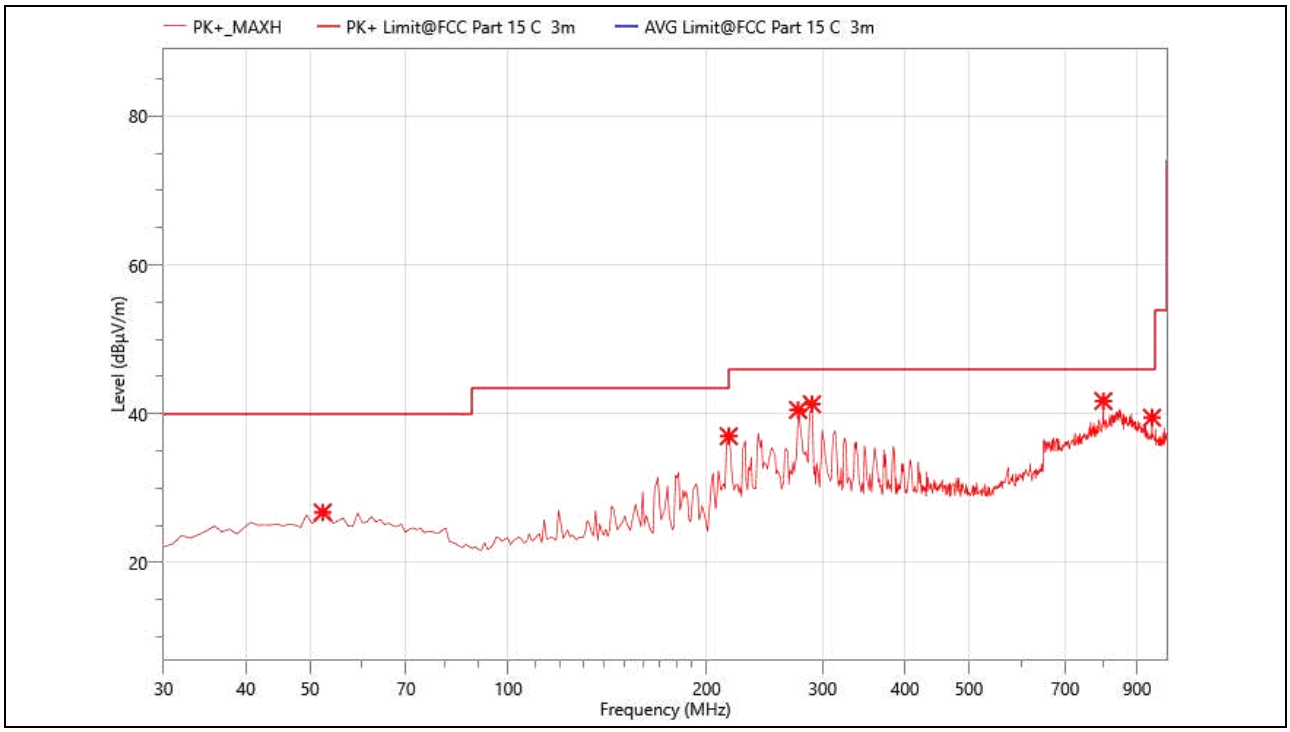
Radiated Spurious Emission :

The worst data of the mode (802.11n(HT40) 2437MHz) are recorded in the following pages.



Site:	**ChamberA-2**	**Antenna::Vertical**	**Temperature(C):23.9(C)**
Limit:	**FCC Part 15 C 3m Radiation(QP)**		**Humidity(%):50.8%**
EUT:	**SkyView Pro Table Lamp**	**Test Time:**	**2023-08-01**
M/N.:	**BH-SKY2-000-CBK001-1**	**Power Rating:**	**AC 120V 60Hz**
Mode:	**TX2437**	**Test Engineer:**	**Rock**
Note:			

No.	Freq. (MHz)	Reading (dBµV)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.	Corr. (dB)
1	58.130	37.42	33.78	40.00	6.22	PK+	V	-3.64
2	307.420	30.60	30.14	46.00	15.86	PK+	V	-0.46
3	407.330	30.13	33.30	46.00	12.70	PK+	V	3.17
4	561.560	29.29	36.24	46.00	9.76	PK+	V	6.95
5	807.940	28.11	40.94	46.00	5.06	PK+	V	12.83
6	948.590	28.21	39.98	46.00	6.02	PK+	V	11.77



Site:	**ChamberA-2**	**Antenna::Horizontal**	**Temperature(C):23.9(C)**
Limit:	**FCC Part 15 3m Radiation(QP)**		**Humidity(%):50.8%**
EUT:	**SkyView Pro Table Lamp**	**Test Time:**	**2023-08-01**
M/N.:	**BH-SKY2-000-CBK001-1**	**Power Rating:**	**AC 120V 60Hz**
Mode:	**TX2437**	**Test Engineer:**	**Rock**
Note:			

No.	Freq. (MHz)	Reading (dBµV)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.	Corr. (dB)
1	52.310	30.13	26.75	40.00	13.25	PK+	H	-3.38
2	216.240	41.65	37.00	46.00	9.00	PK+	H	-4.65
3	275.410	42.11	40.52	46.00	5.48	PK+	H	-1.59
4	288.990	42.32	41.29	46.00	4.71	PK+	H	-1.03
5	800.180	28.84	41.71	46.00	4.29	PK+	H	12.87
6	948.590	27.71	39.48	46.00	6.52	PK+	H	11.77

Above 1000MHz~10th Harmonics:

All the modulation modes were tested the data of the worst mode (TX 802.11n(HT40) are recorded in the following pages and the others modulation methods do not exceed the limits. The frequency range from 1GHz to 25GHz is investigated.

Operation Mode: 802.11b Lowest Test Date : 2023-08-01
Test Voltage: AC 120V 60Hz Test by: Rock

Freq.	Ant. Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
(MHz)	H/V	PK	AV	PK	AV	PK	AV
2360	V	64.25	44.37	74	54	-9.75	-9.63
2596	V	59.83	43.92	74	54	-14.17	-10.08
9237	V	58.13	40.39	74	54	-15.87	-13.61
13256	V	56.23	37.35	74	54	-17.77	-16.65
15897	V	55.32	36.17	74	54	-18.68	-17.83
17326	V	55.69	39.58	74	54	-18.31	-14.42
2360	H	64.09	45.21	74	54	-9.91	-8.79
2596	H	60.28	41.28	74	54	-13.72	-12.72
9237	H	57.63	38.44	74	54	-16.37	-15.56
13256	H	56.82	37.16	74	54	-17.18	-16.84
15897	H	55.32	36.48	74	54	-18.68	-17.52
17326	H	56.32	38.69	74	54	-17.68	-15.31

Operation Mode: 802.11b Middle Test Date : 2023-08-01
Test Voltage: AC 120V 60Hz Test by: Rock

Freq.	Ant. Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
(MHz)	H/V	PK	AV	PK	AV	PK	AV
4236	V	64.2	45.16	74	54	-9.8	-8.84
5265	V	60.25	41.25	74	54	-13.75	-12.75
9823	V	58.36	39.65	74	54	-15.64	-14.35
13263	V	56.14	37.45	74	54	-17.86	-16.55
16622	V	55.62	36.85	74	54	-18.38	-17.15
17350	V	56.23	37.55	74	54	-17.77	-16.45
4236	H	63.14	64.32	74	54	-10.86	10.32
5265	H	61.23	42.58	74	54	-12.77	-11.42
9823	H	59.65	41.32	74	54	-14.35	-12.68
13263	H	58.47	40.02	74	54	-15.53	-13.98
16622	H	56.2	37.26	74	54	-17.8	-16.74
17350	H	56.27	38.47	74	54	-17.73	-15.53

Operation Mode: 802.11b Highest
Test Voltage: AC 120V 60Hz
Test Date : 2023-08-01
Test by: Rock

Freq.	Ant. Pol.	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
(MHz)	H/V	PK	AV	PK	AV	PK	AV
3507	V	62.81	42.67	74	54	-11.19	-11.33
4692	V	59.63	40.2	74	54	-14.37	-13.8
7963	V	58.47	40.25	74	54	-15.53	-13.75
11206	V	59.3	40.55	74	54	-14.7	-13.45
13265	V	56.25	37.16	74	54	-17.75	-16.84
16873	V	56.39	37.45	74	54	-17.61	-16.55
3507	H	63.52	43.69	74	54	-10.48	-10.31
4692	H	60.23	41.36	74	54	-13.77	-12.64
7963	H	59.36	40.21	74	54	-14.64	-13.79
11206	H	58.32	39.14	74	54	-15.68	-14.86
13265	H	56.74	37.26	74	54	-17.26	-16.74
16873	H	56.36	37.15	74	54	-17.64	-16.85

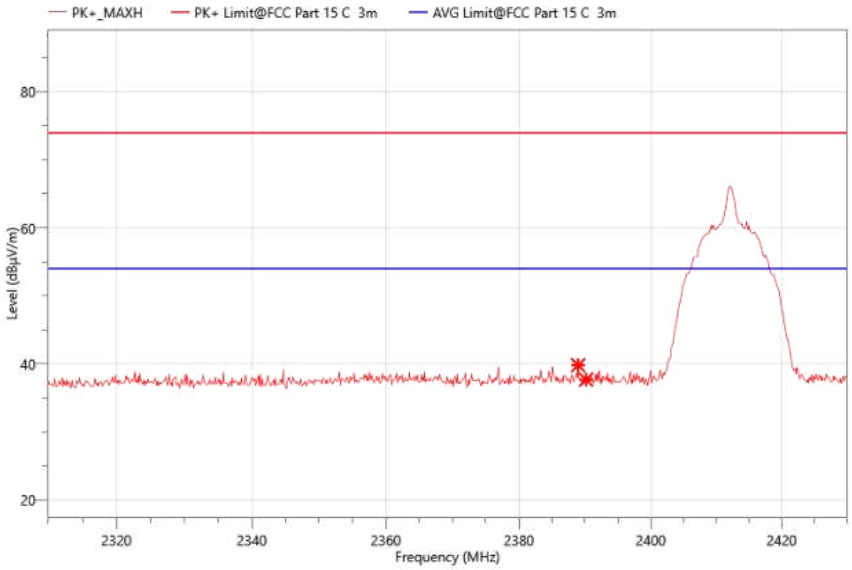
No others harmonics emissions are higher than 20 dB below the limits of 47 CFR Part 15.247.

Note: (1) All Readings are Peak Value and AV.
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) Data of measurement within this frequency range shown " – " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Band edge:

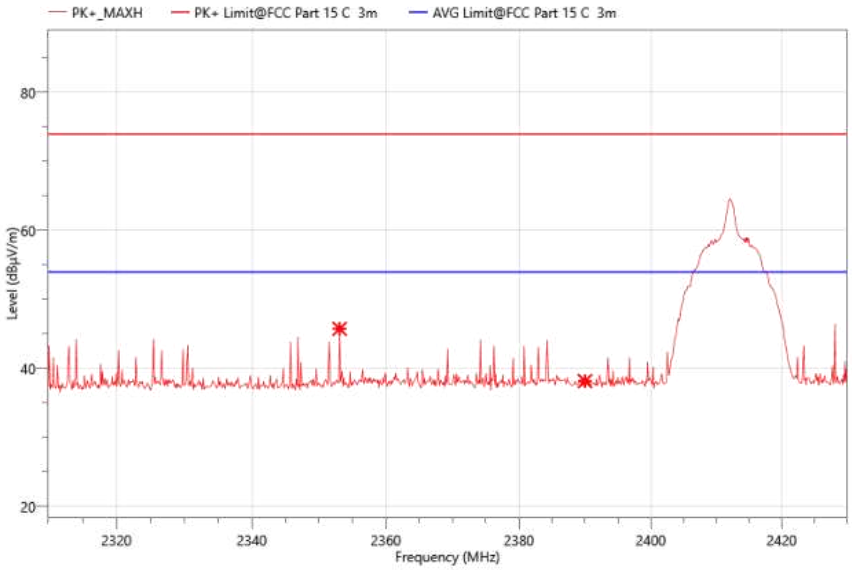
802.11b 2412MHz

Horizontal



No.	Freq. (MHz)	Reading (dBµV)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.	Corr. (dB)
1	2388.960	60.54	39.81	74.00	34.19	PK+	H	-20.73
2	2390.160	58.43	37.70	74.00	36.30	PK+	H	-20.73

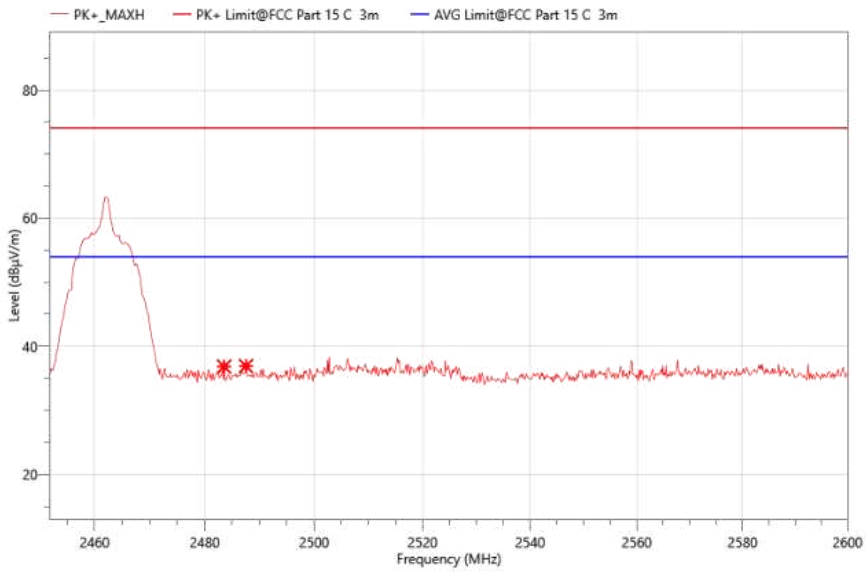
Vertical



No.	Freq. (MHz)	Reading (dBµV)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.	Corr. (dB)
1	2353.080	66.52	45.76	74.00	28.24	PK+	V	-20.76
2	2390.000	58.91	38.18	74.00	35.82	PK+	V	-20.73

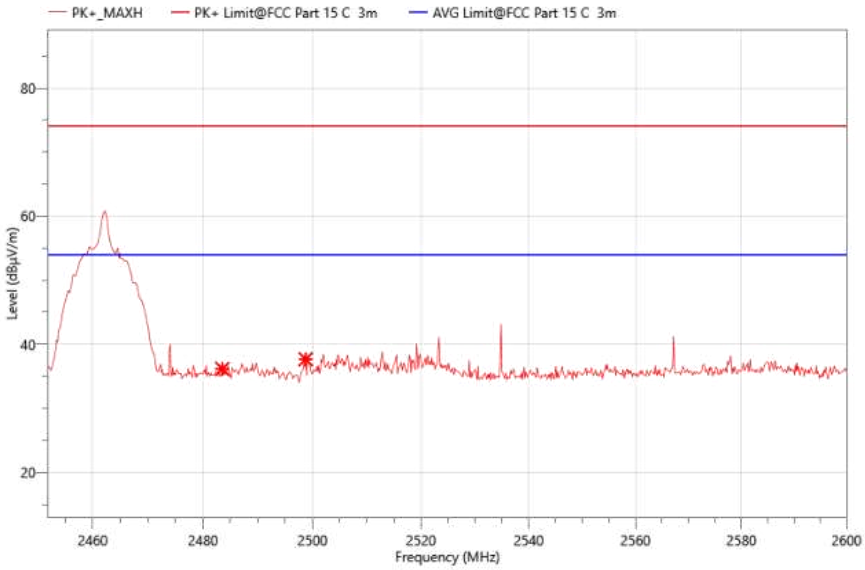
802.11b 2462MHz

Horizontal



No.	Freq. (MHz)	Reading (dBµV)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.	Corr. (dB)
1	2483.524	57.13	36.83	74.00	37.17	PK+	H	-20.3
2	2487.520	57.19	36.91	74.00	37.09	PK+	H	-20.28

Vertical



No.	Freq. (MHz)	Reading (dBµV)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.	Corr. (dB)
1	2483.524	56.45	36.15	74.00	37.85	PK+	V	-20.3
2	2498.768	57.92	37.66	74.00	36.34	PK+	V	-20.26

ANTENNA REQUIREMENT

REQUIREMENT

The EUT'S antenna is met the requirement of FCC part 15C section 15.203 and 15.247.

FCC part 15C section 15.247 requirements:

Systems operating in the 2402-2480MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum peak output power of the intentional radiator is reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

DESCRIPTION

Pass

AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8

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

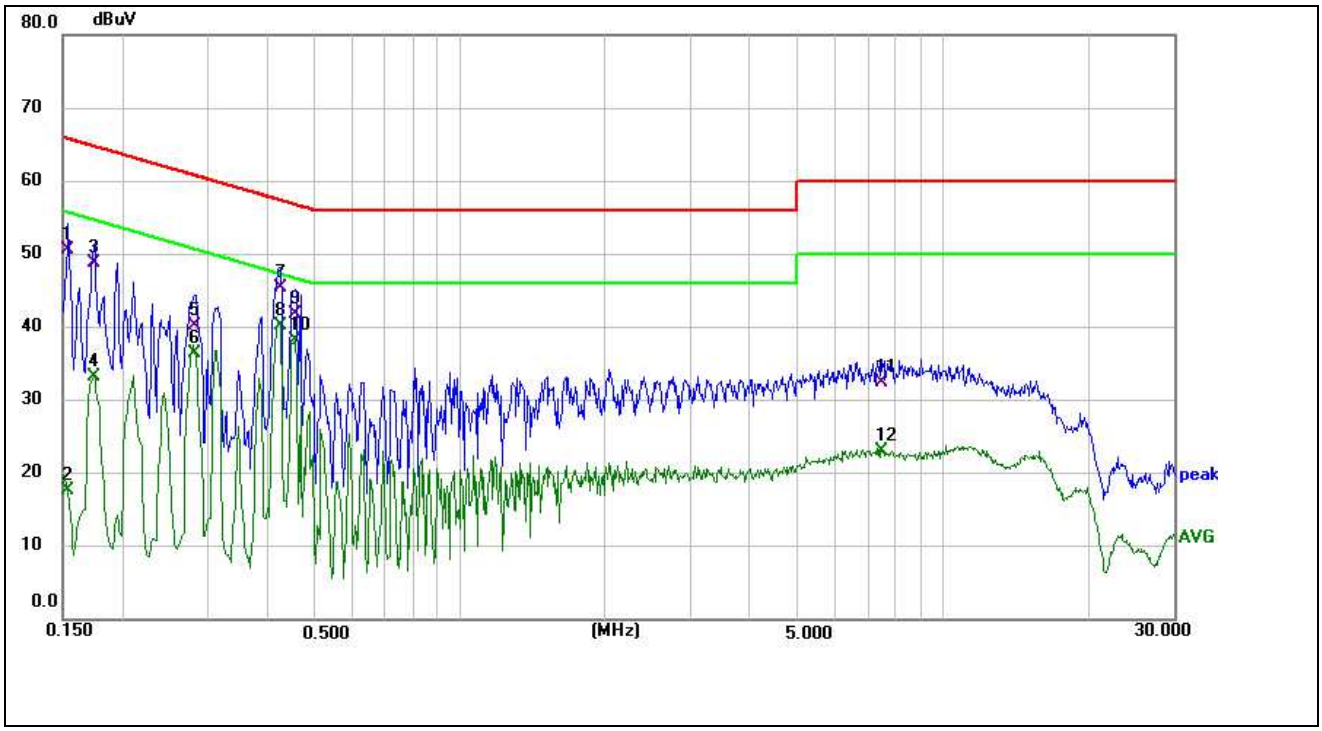
The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver 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 ENVIRONMENT

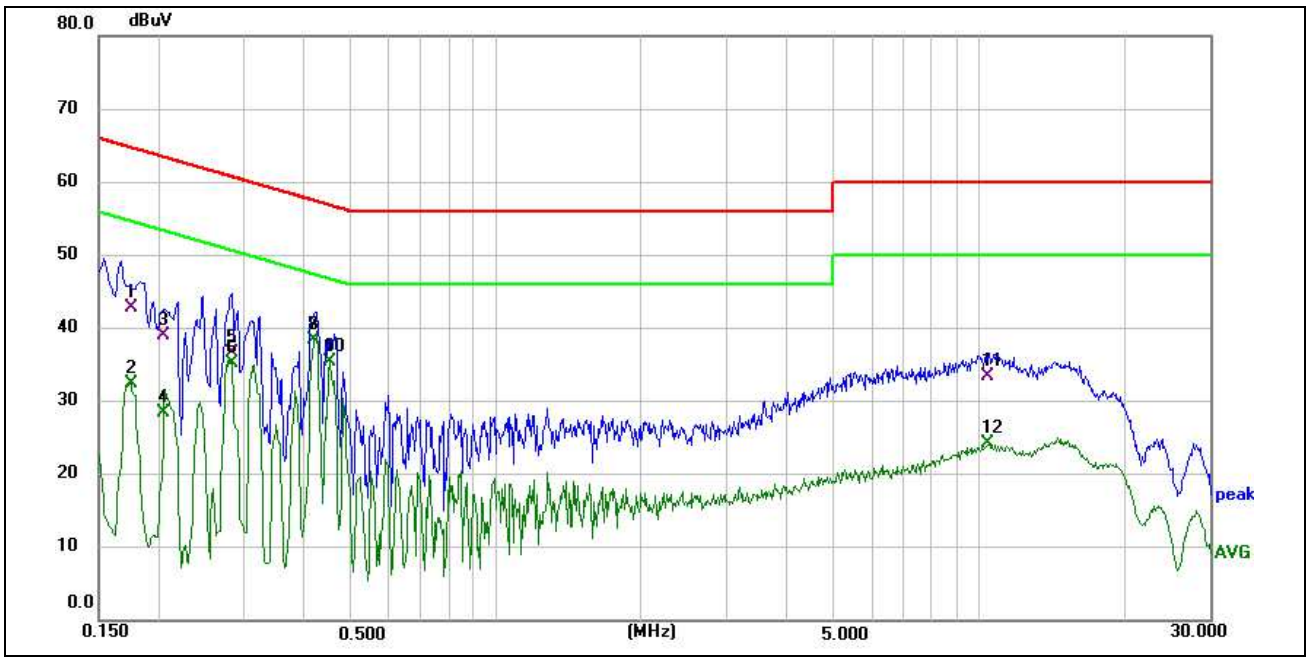
Temperature	23.5℃	Relative Humidity	52.6%
Atmosphere Pressure	101kPa		

TEST RESULTS



Site:		**Phase:L1**	**Temperature(C):24.5(C)**
Limit:	**FCC Part 15 C Conduction(QP)**		**Humidity(%):51.2%**
EUT:	**SkyView Pro Table Lamp**	**Test Time:**	**2023-07-26**
M/N.:	**BH-SKY2-000-CBK001-1**	**Power Rating:**	**AC 120V 60Hz**
Mode:	**2.4G WIFI mode**	**Test Engineer:**	**Rock**
Note:			

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
1	0.1539	40.81	9.84	50.65	65.79	-15.14	QP	
2	0.1539	7.85	9.84	17.69	55.79	-38.10	AVG	
3	0.1740	38.87	9.88	48.75	64.77	-16.02	QP	
4	0.1740	23.28	9.88	33.16	54.77	-21.61	AVG	
5	0.2819	30.01	10.12	40.13	60.76	-20.63	QP	
6	0.2819	26.25	10.12	36.37	50.76	-14.39	AVG	
7	0.4220	34.91	10.41	45.32	57.41	-12.09	QP	
8 *	0.4220	29.84	10.41	40.25	47.41	-7.16	AVG	
9	0.4540	31.42	10.47	41.89	56.80	-14.91	QP	
10	0.4540	27.75	10.47	38.22	46.80	-8.58	AVG	
11	7.4780	22.66	9.81	32.47	60.00	-27.53	QP	
12	7.4780	13.29	9.81	23.10	50.00	-26.90	AVG	



Site:		**Phase:N**	**Temperature(C):24.5(C)**
Limit:	**FCC Part 15 C Conduction(QP)**		**Humidity(%):51.2%**
EUT:	**SkyView Pro Table Lamp**	**Test Time:**	**2023-07-26**
M/N.:	**BH-SKY2-000-CBK001-1**	**Power Rating:**	**AC 120V 60Hz**
Mode:	**2.4G WIFI mode**	**Test Engineer:**	**Rock**
Note:			

No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measure-ment(dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
1	0.1741	32.96	9.89	42.85	64.76	-21.91	QP	
2	0.1741	22.49	9.89	32.38	54.76	-22.38	AVG	
3	0.2053	28.98	9.98	38.96	63.39	-24.43	QP	
4	0.2053	18.44	9.98	28.42	53.39	-24.97	AVG	
5	0.2821	26.51	10.12	36.63	60.75	-24.12	QP	
6	0.2821	25.06	10.12	35.18	50.75	-15.57	AVG	
7	0.4191	28.05	10.40	38.45	57.47	-19.02	QP	
8 *	0.4191	28.08	10.40	38.48	47.47	-8.99	AVG	
9	0.4516	24.95	10.47	35.42	56.85	-21.43	QP	
10	0.4516	24.98	10.47	35.45	46.85	-11.40	AVG	
11	10.4819	23.46	9.95	33.41	60.00	-26.59	QP	
12	10.4819	14.19	9.95	24.14	50.00	-25.86	AVG	

Note: 1. Result = Reading + Correct Factor.
2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Test setup: RBW: 200 Hz (9 kHz ~ 150 kHz), 9 kHz (150 kHz ~ 30 MHz).
4. Step size: 80 Hz (0.009 MHz ~ 0.15 MHz), 4 kHz (0.15 MHz ~ 30 MHz), Scan time: auto.

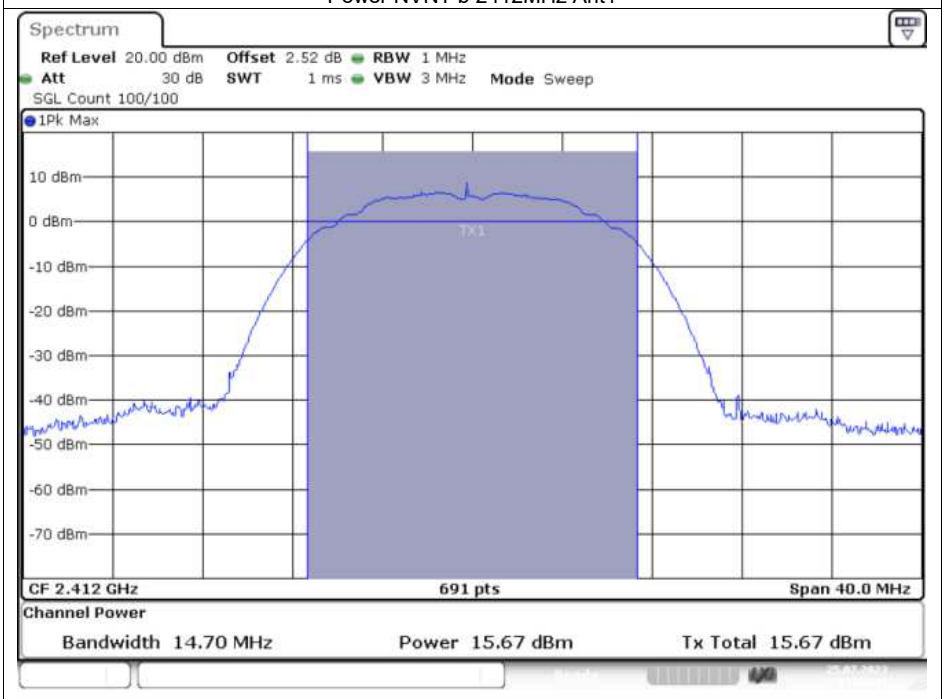
Note: All the modes have been tested, only the worst data was recorded in the report.

TEST DATA

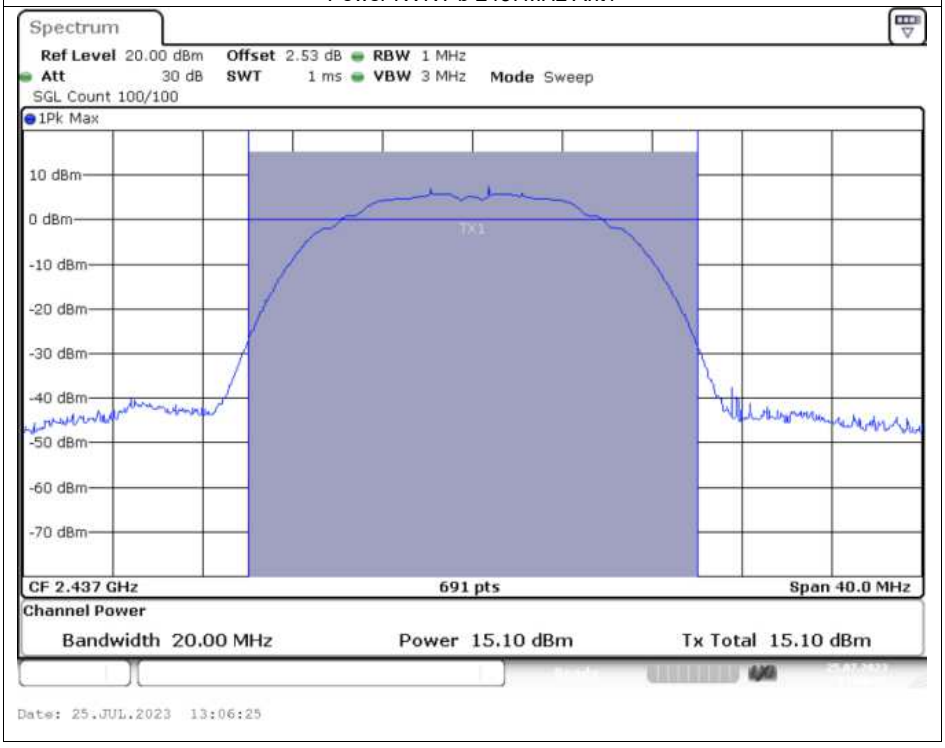
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	13.47	0	15.67	30	Pass
NVNT	b	2437	Ant1	12.9	0	15.1	30	Pass
NVNT	b	2462	Ant1	12.68	0	14.88	30	Pass
NVNT	g	2412	Ant1	12.52	0	14.72	30	Pass
NVNT	g	2437	Ant1	12.21	0	14.41	30	Pass
NVNT	g	2462	Ant1	11.86	0	14.06	30	Pass
NVNT	n20	2412	Ant1	12.5	0	14.7	30	Pass
NVNT	n20	2437	Ant1	12.03	0	14.23	30	Pass
NVNT	n20	2462	Ant1	11.93	0	14.13	30	Pass
NVNT	n40	2422	Ant1	10.7	0	12.9	30	Pass
NVNT	n40	2437	Ant1	10.52	0	12.72	30	Pass
NVNT	n40	2452	Ant1	10.57	0	12.77	30	Pass

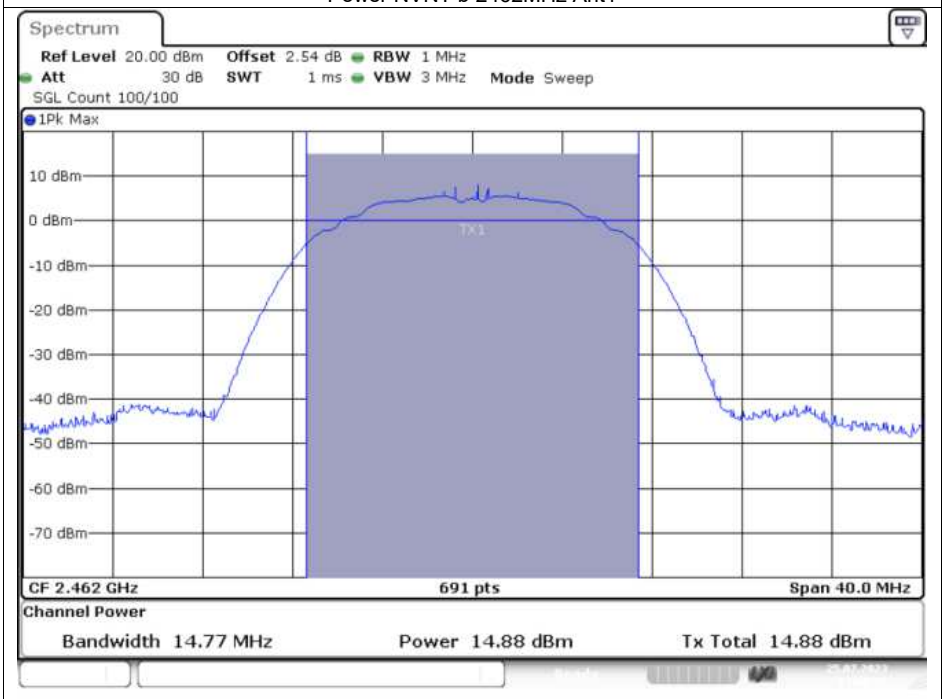
Test Graphs
Power NVNT b 2412MHz Ant1



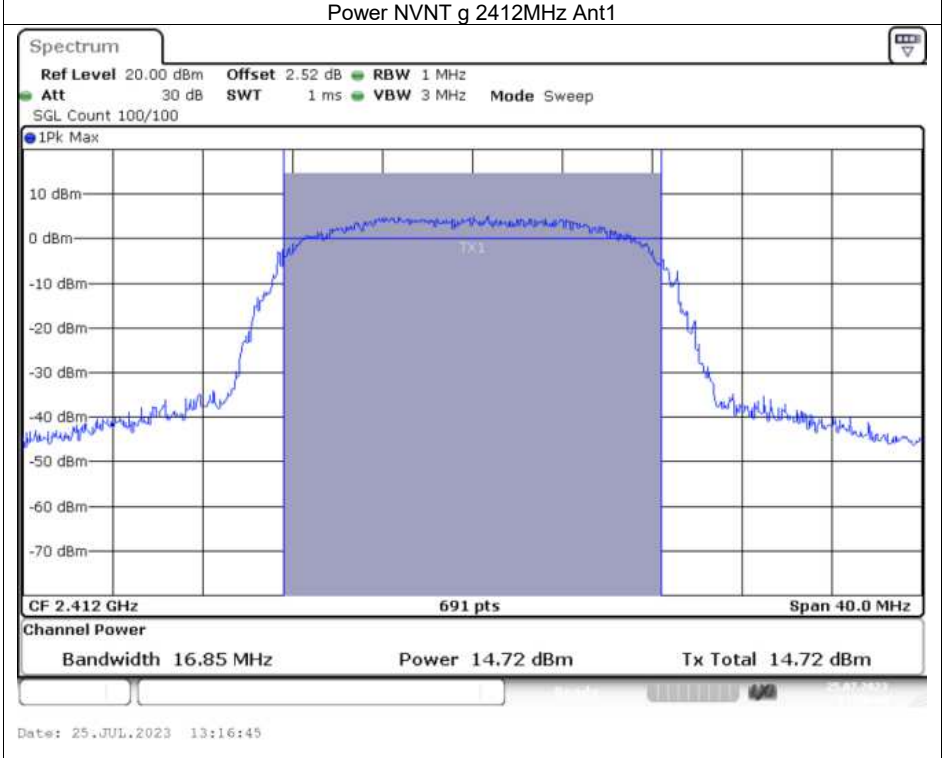
Power NVNT b 2437MHz Ant1



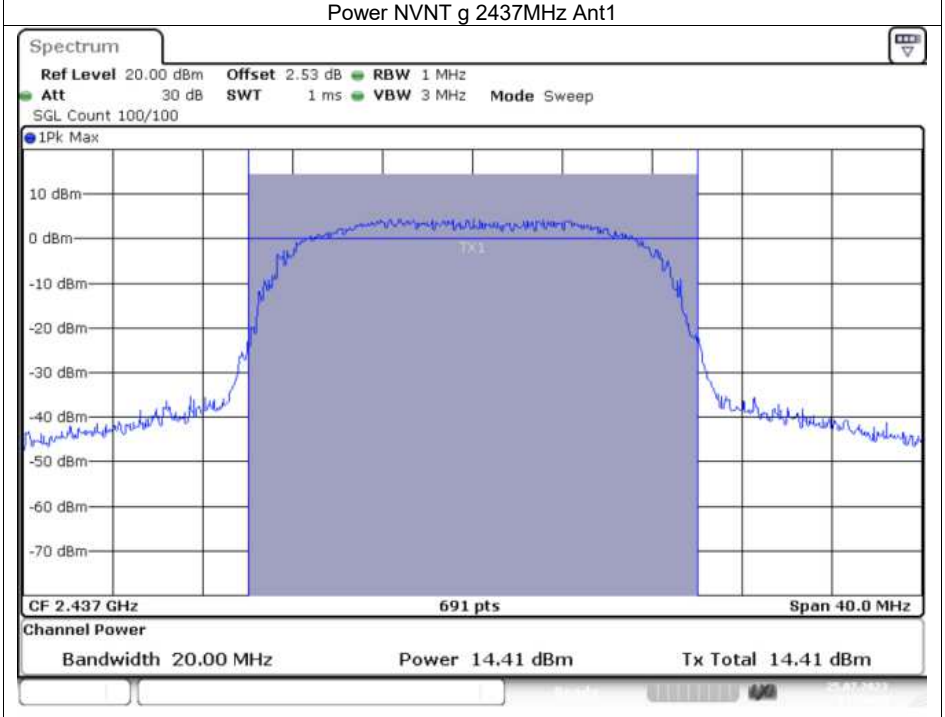
Power NVNT b 2462MHz Ant1



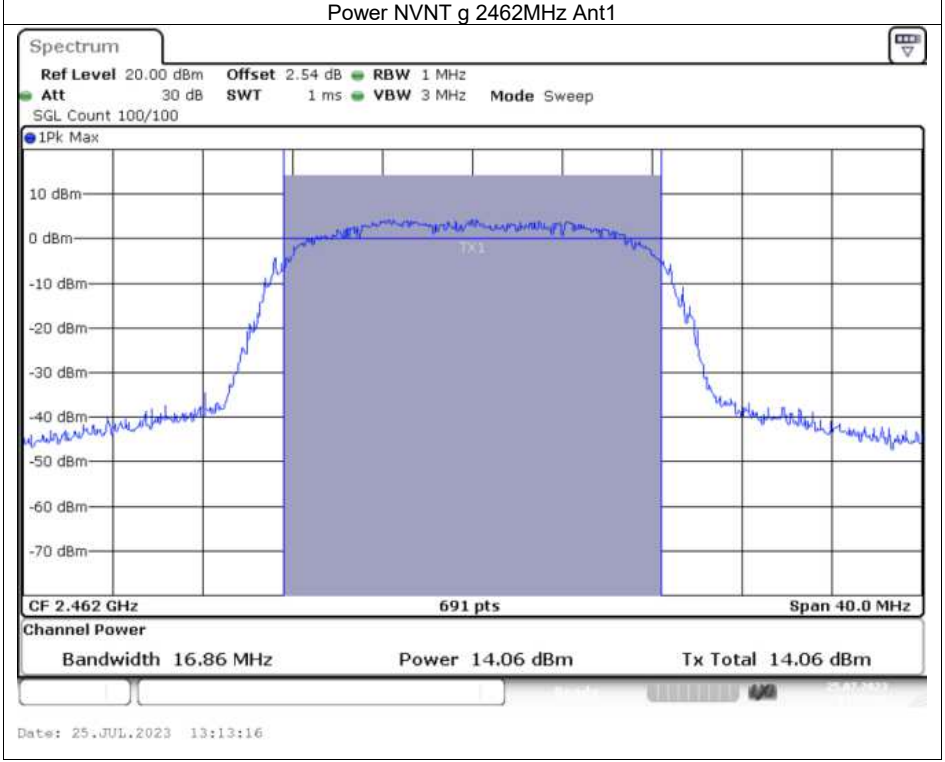
Power NVNT g 2412MHz Ant1



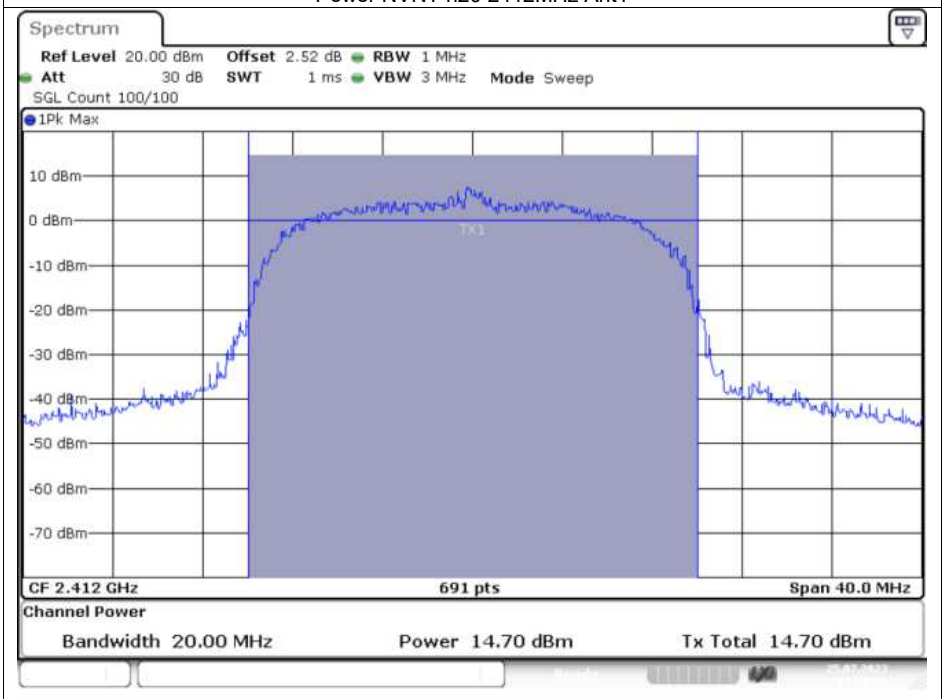
Power NVNT g 2437MHz Ant1



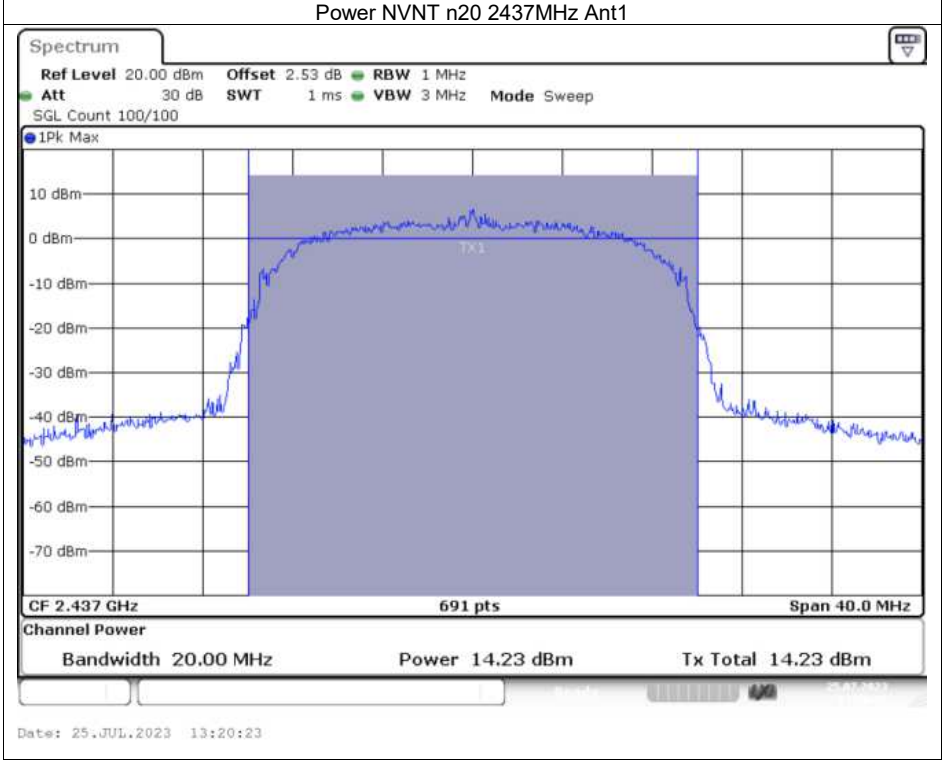
Power NVNT g 2462MHz Ant1



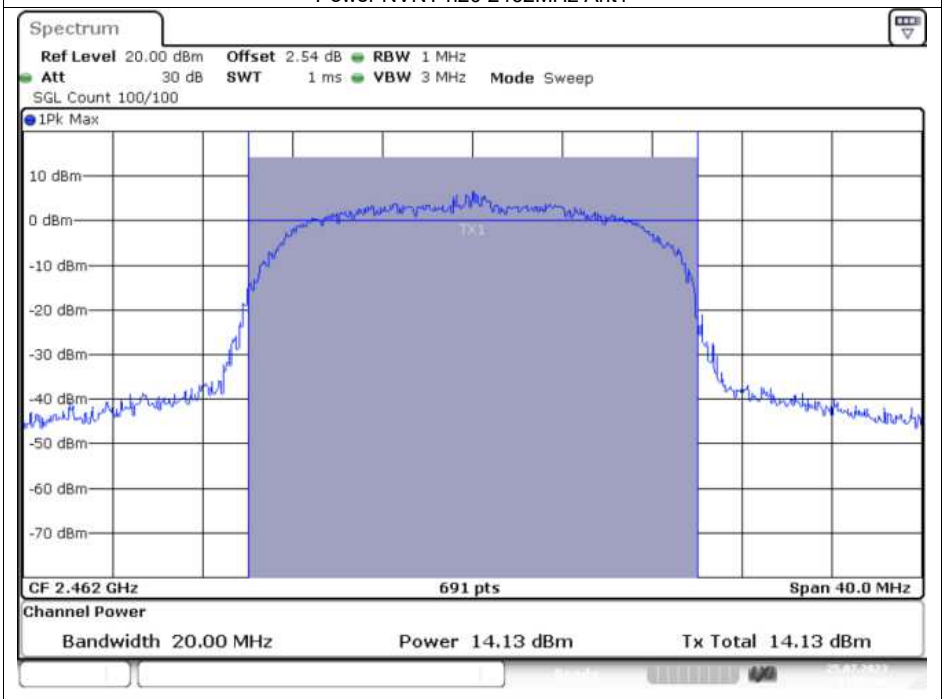
Power NVNT n20 2412MHz Ant1



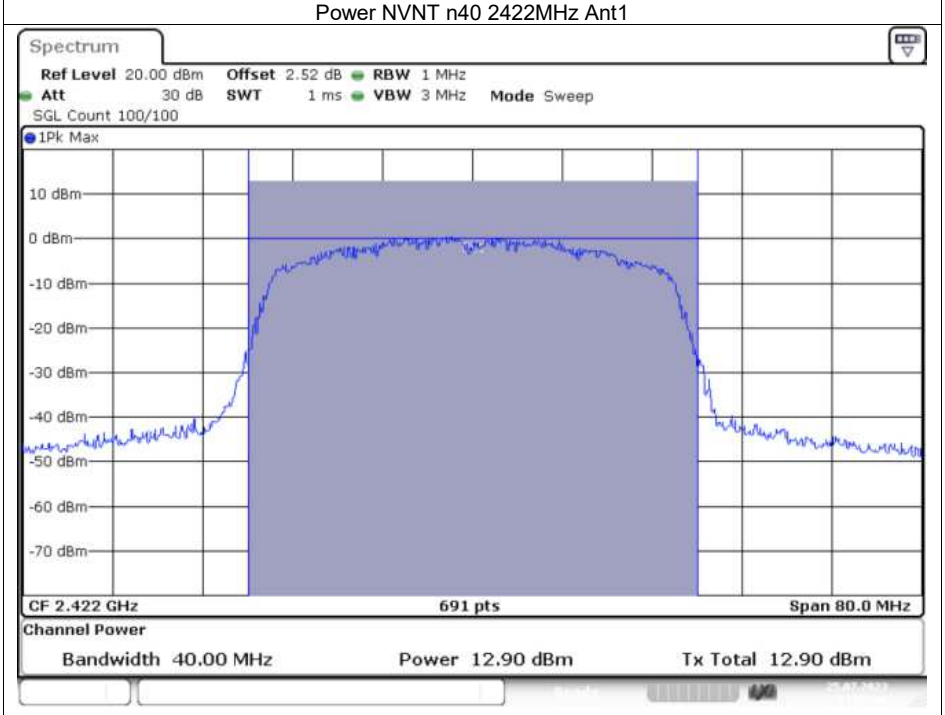
Power NVNT n20 2437MHz Ant1



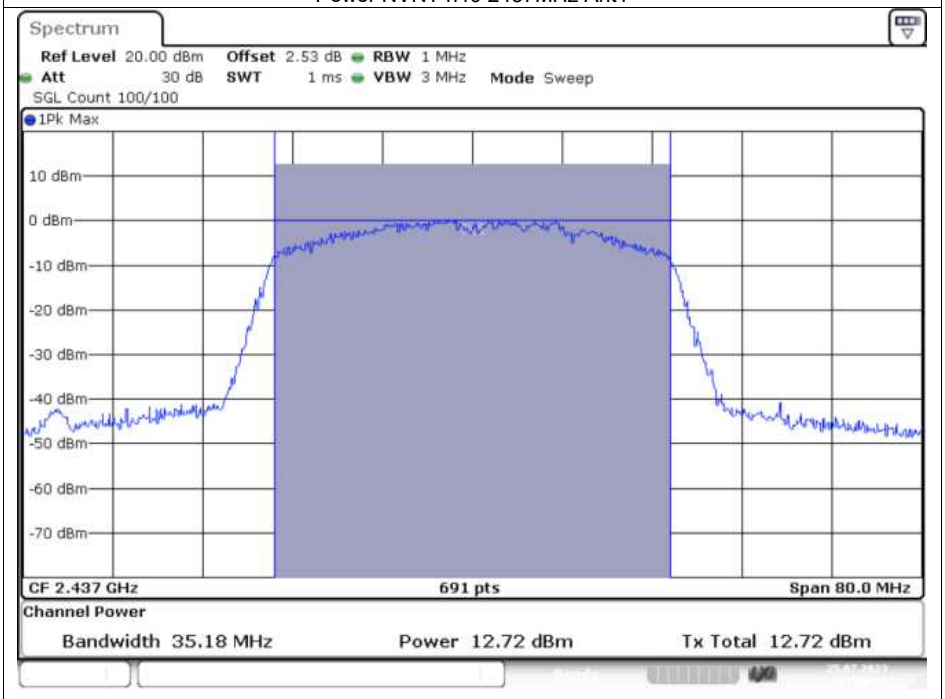
Power NVNT n20 2462MHz Ant1



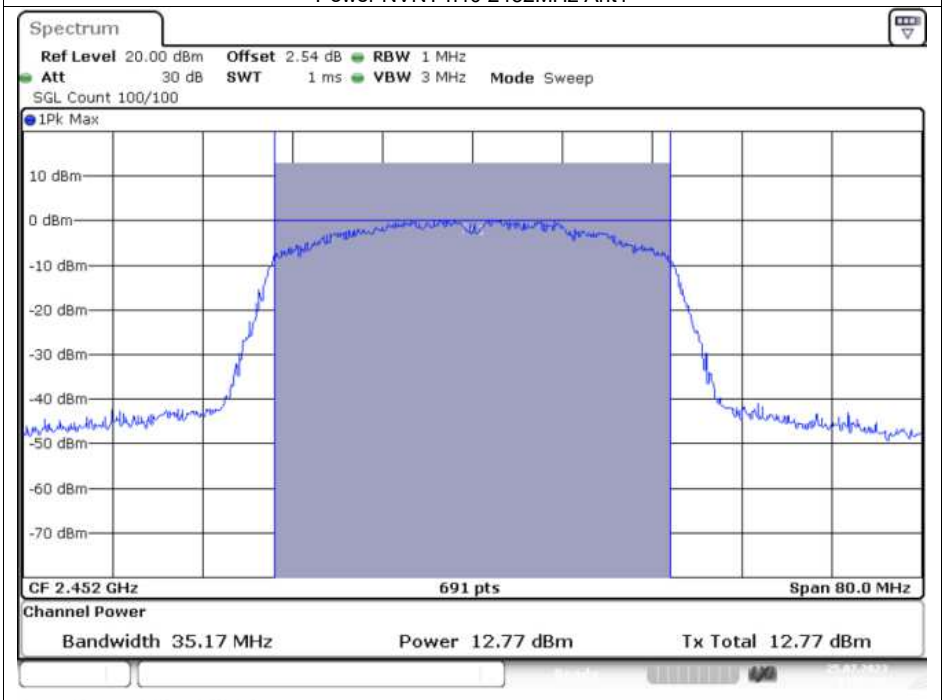
Power NVNT n40 2422MHz Ant1



Power NVNT n40 2437MHz Ant1



Power NVNT n40 2452MHz Ant1

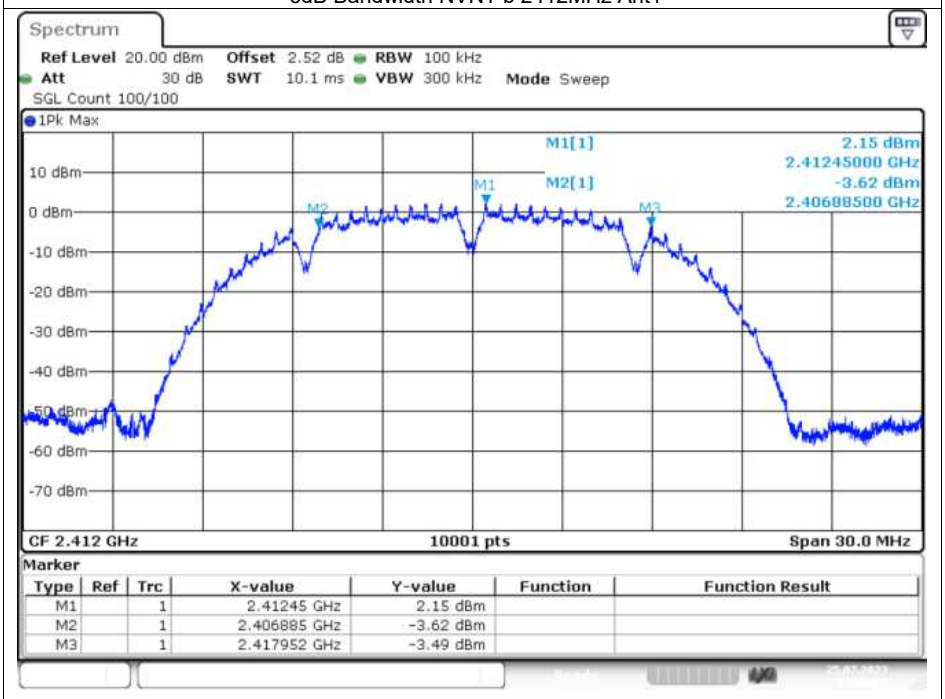


-6dB Bandwidth

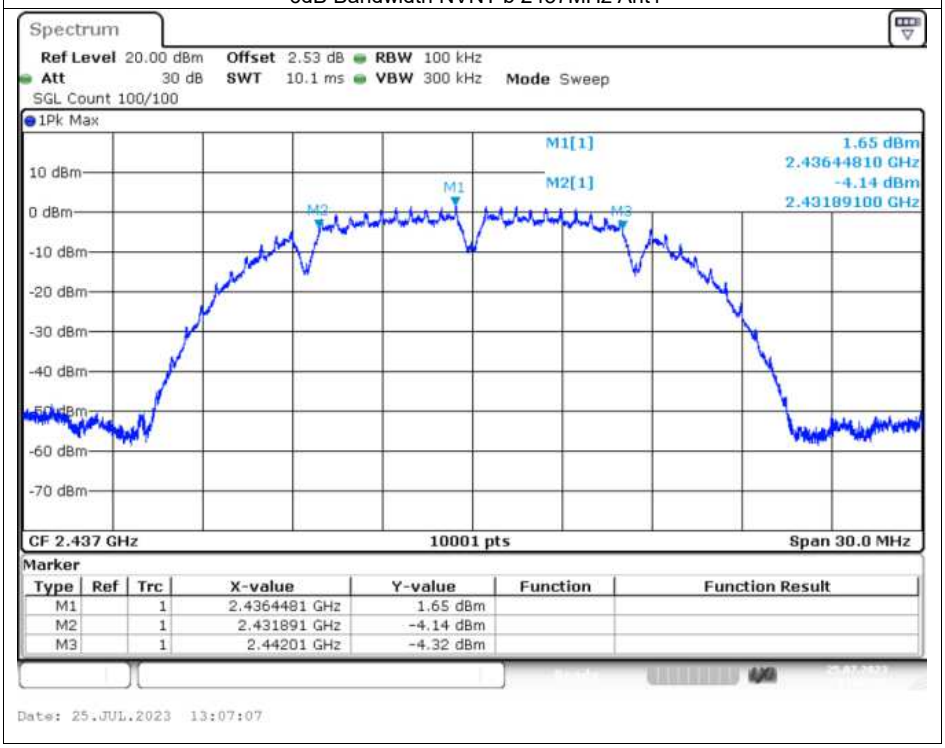
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	11.067	0.5	Pass
NVNT	b	2437	Ant1	10.119	0.5	Pass
NVNT	b	2462	Ant1	12.042	0.5	Pass
NVNT	g	2412	Ant1	13.794	0.5	Pass
NVNT	g	2437	Ant1	13.752	0.5	Pass
NVNT	g	2462	Ant1	13.746	0.5	Pass
NVNT	n20	2412	Ant1	11.274	0.5	Pass
NVNT	n20	2437	Ant1	11.283	0.5	Pass
NVNT	n20	2462	Ant1	11.28	0.5	Pass
NVNT	n40	2422	Ant1	31.302	0.5	Pass
NVNT	n40	2437	Ant1	31.308	0.5	Pass
NVNT	n40	2452	Ant1	31.26	0.5	Pass

Test Graphs

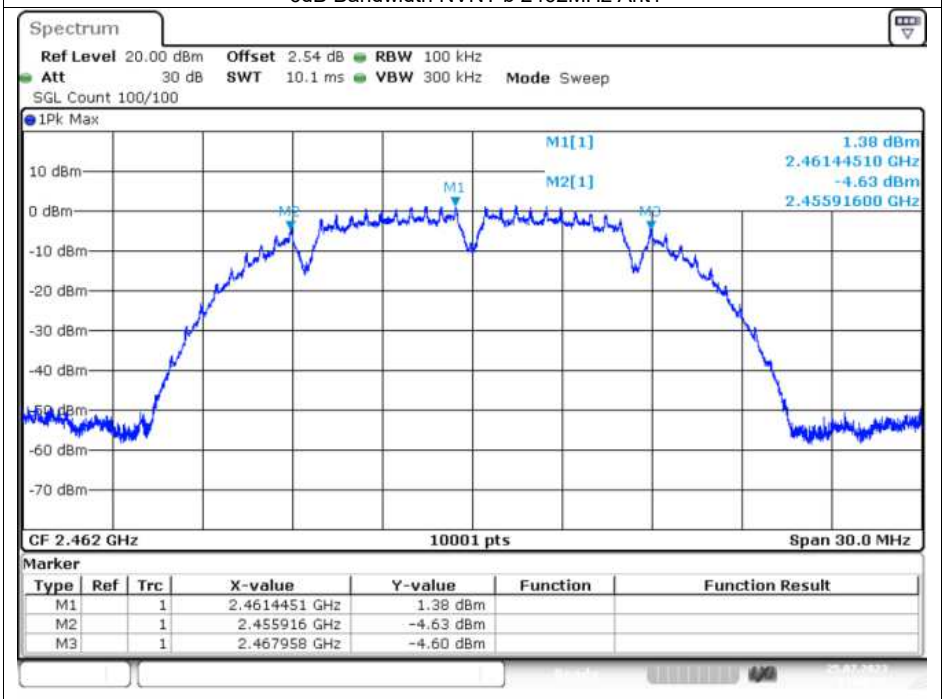
-6dB Bandwidth NVNT b 2412MHz Ant1



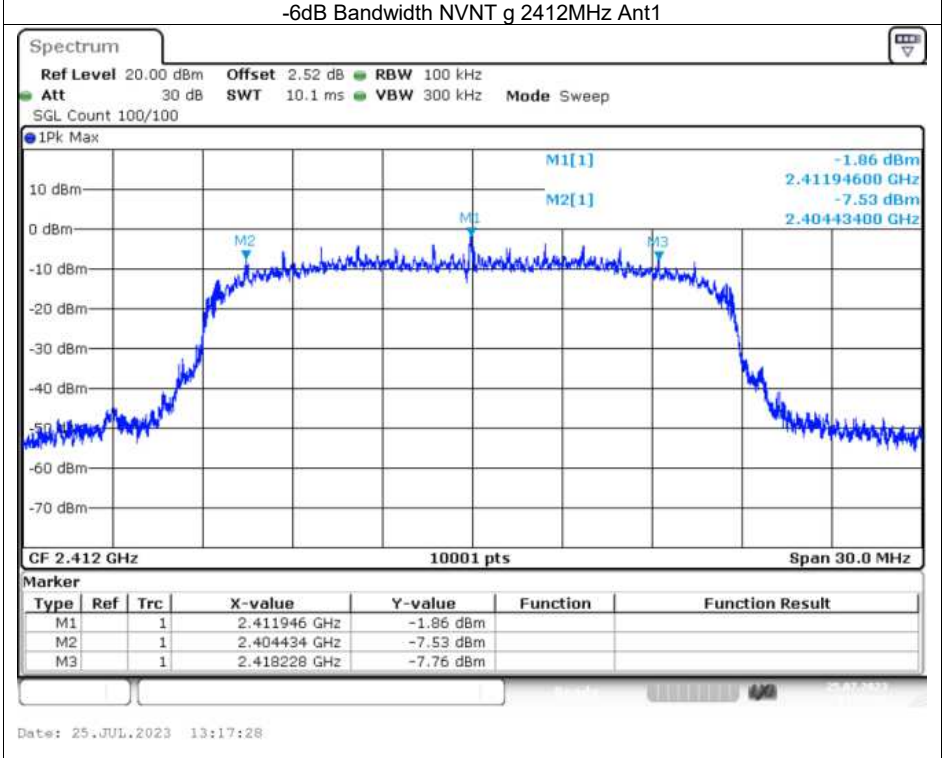
-6dB Bandwidth NVNT b 2437MHz Ant1



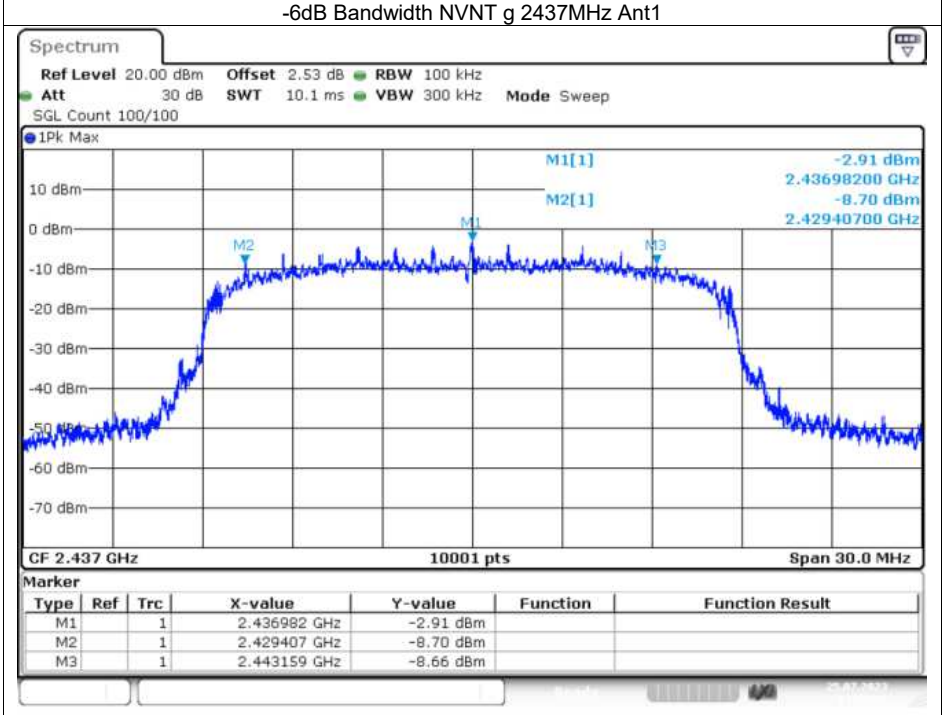
-6dB Bandwidth NVNT b 2462MHz Ant1



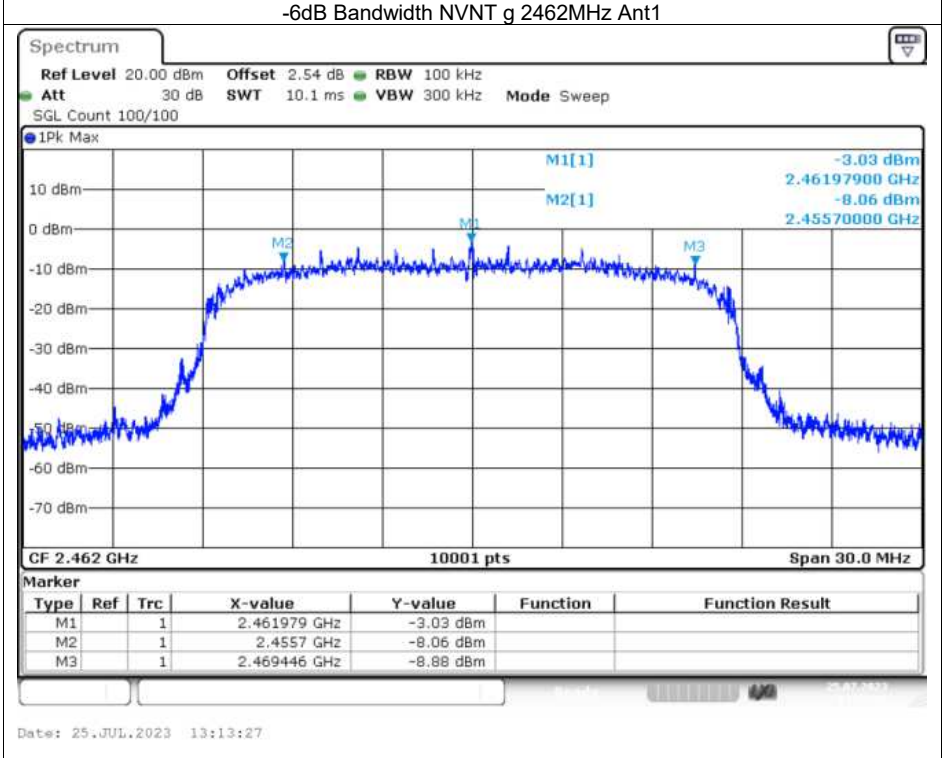
-6dB Bandwidth NVNT g 2412MHz Ant1



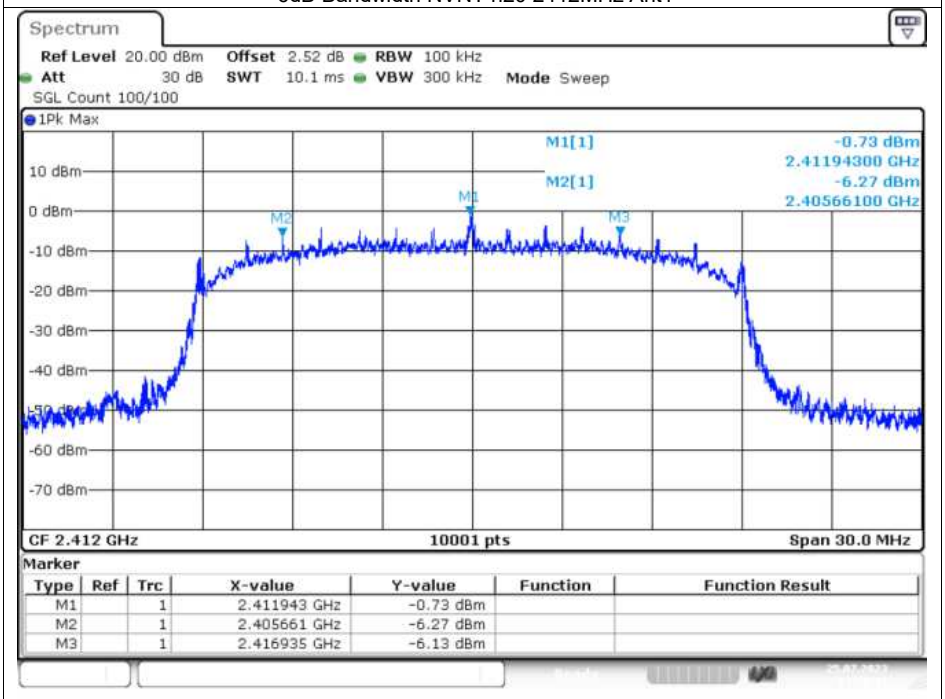
-6dB Bandwidth NVNT g 2437MHz Ant1



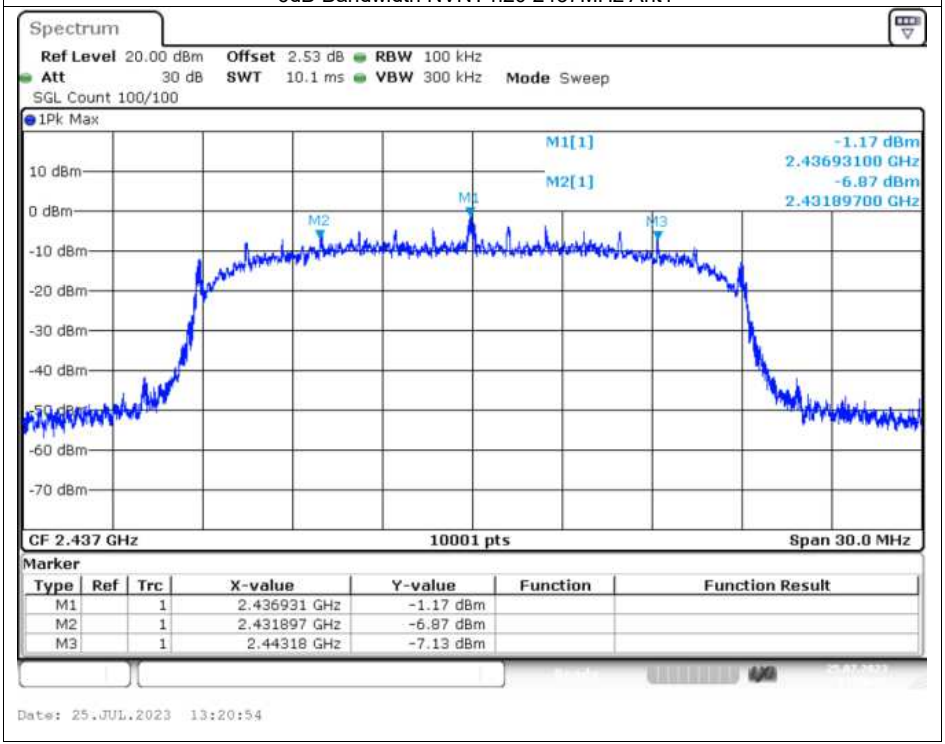
-6dB Bandwidth NVNT g 2462MHz Ant1



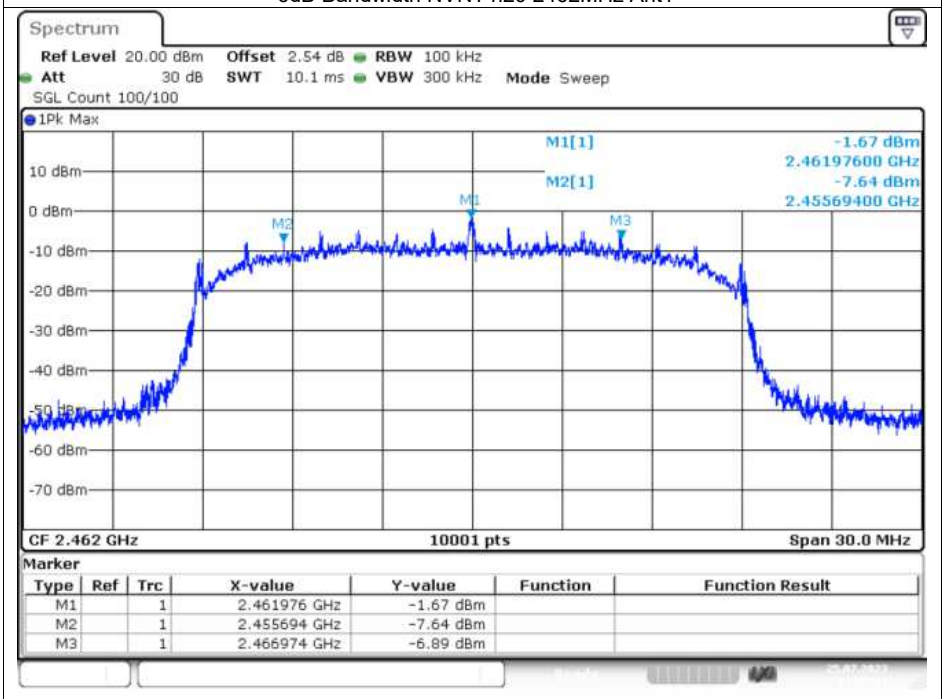
-6dB Bandwidth NVNT n20 2412MHz Ant1



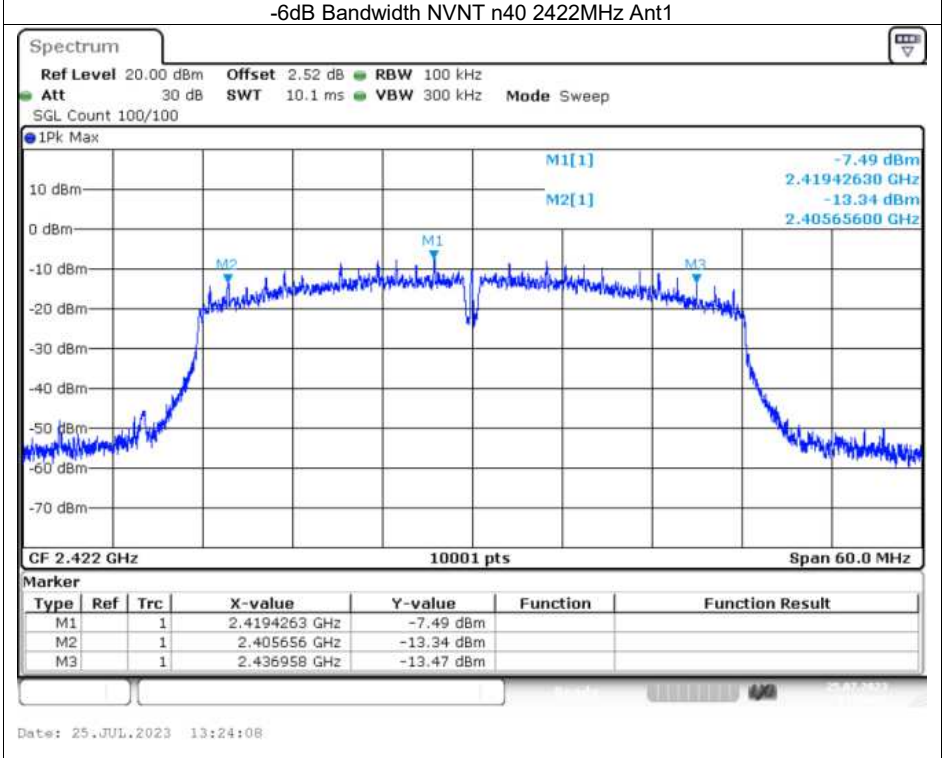
-6dB Bandwidth NVNT n20 2437MHz Ant1



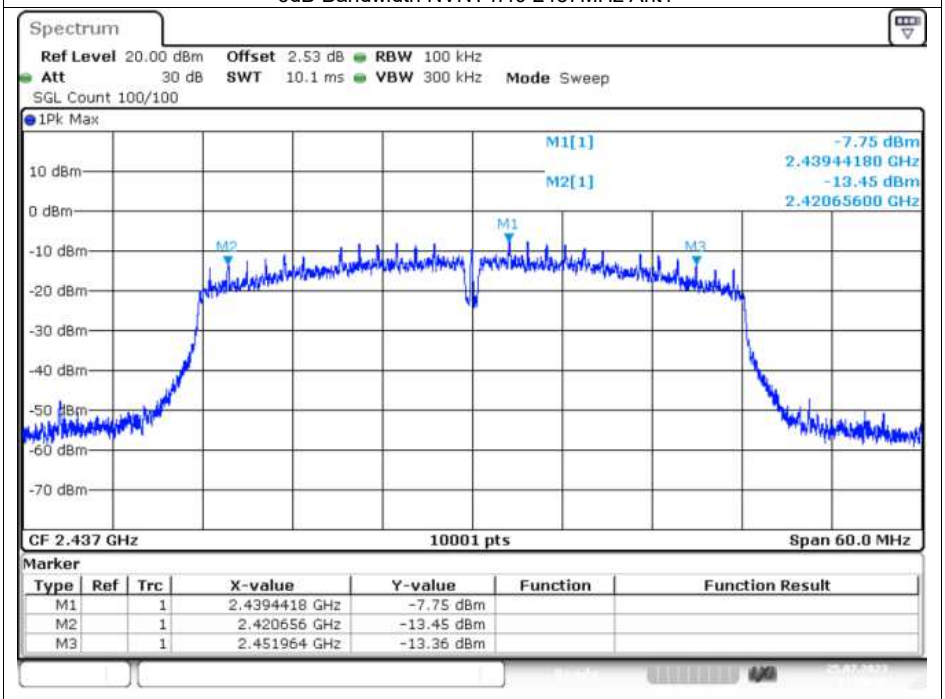
-6dB Bandwidth NVNT n20 2462MHz Ant1



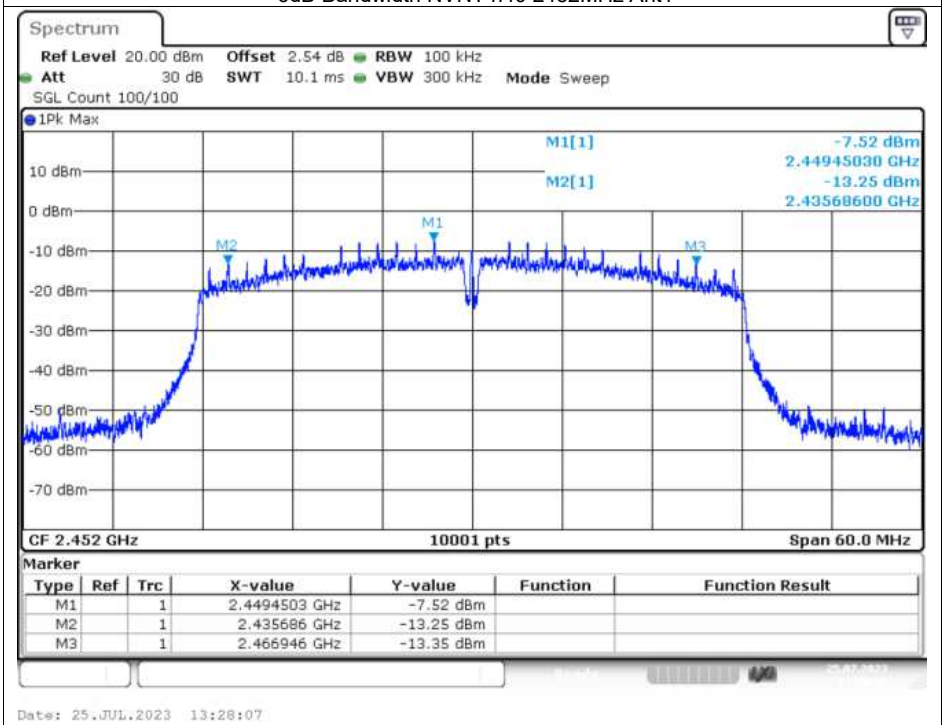
-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



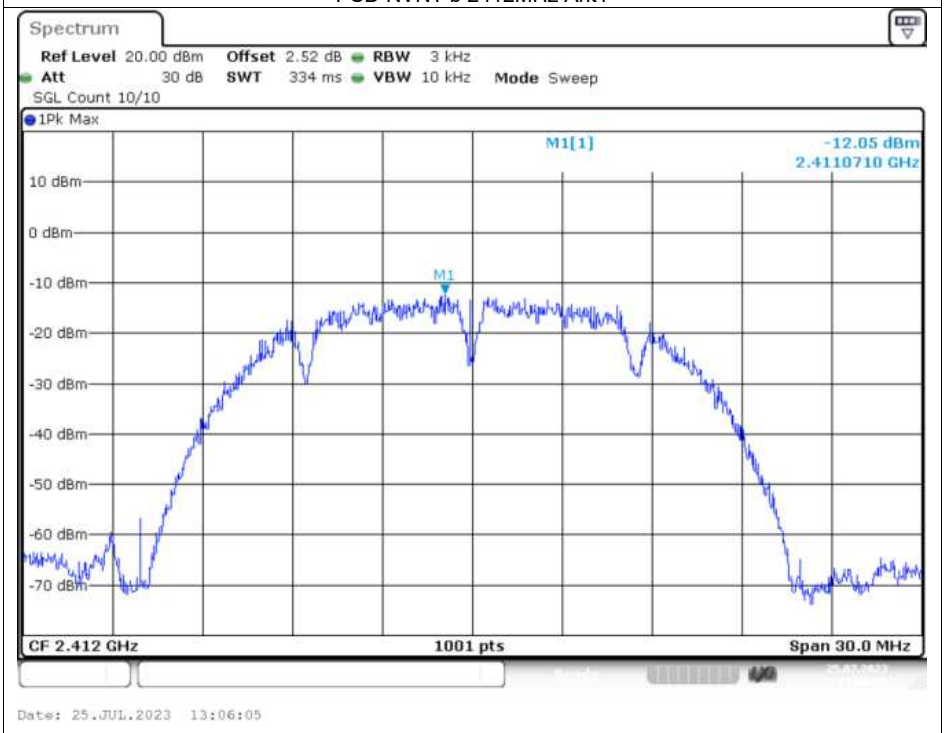
-6dB Bandwidth NVNT n40 2452MHz Ant1



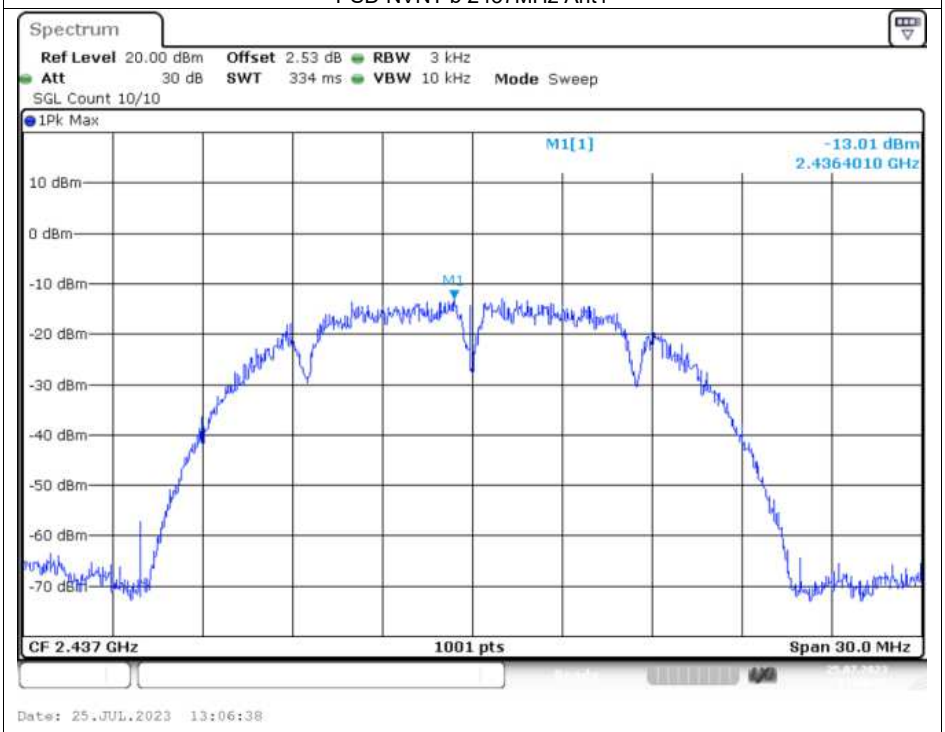
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-12.05	0	-12.05	8	Pass
NVNT	b	2437	Ant1	-13.01	0	-13.01	8	Pass
NVNT	b	2462	Ant1	-12.87	0	-12.87	8	Pass
NVNT	g	2412	Ant1	-10.54	0	-10.54	8	Pass
NVNT	g	2437	Ant1	-11.05	0	-11.05	8	Pass
NVNT	g	2462	Ant1	-11.34	0	-11.34	8	Pass
NVNT	n20	2412	Ant1	-10.02	0	-10.02	8	Pass
NVNT	n20	2437	Ant1	-10.38	0	-10.38	8	Pass
NVNT	n20	2462	Ant1	-10.63	0	-10.63	8	Pass
NVNT	n40	2422	Ant1	-11.39	0	-11.39	8	Pass
NVNT	n40	2437	Ant1	-11.08	0	-11.08	8	Pass
NVNT	n40	2452	Ant1	-11.03	0	-11.03	8	Pass

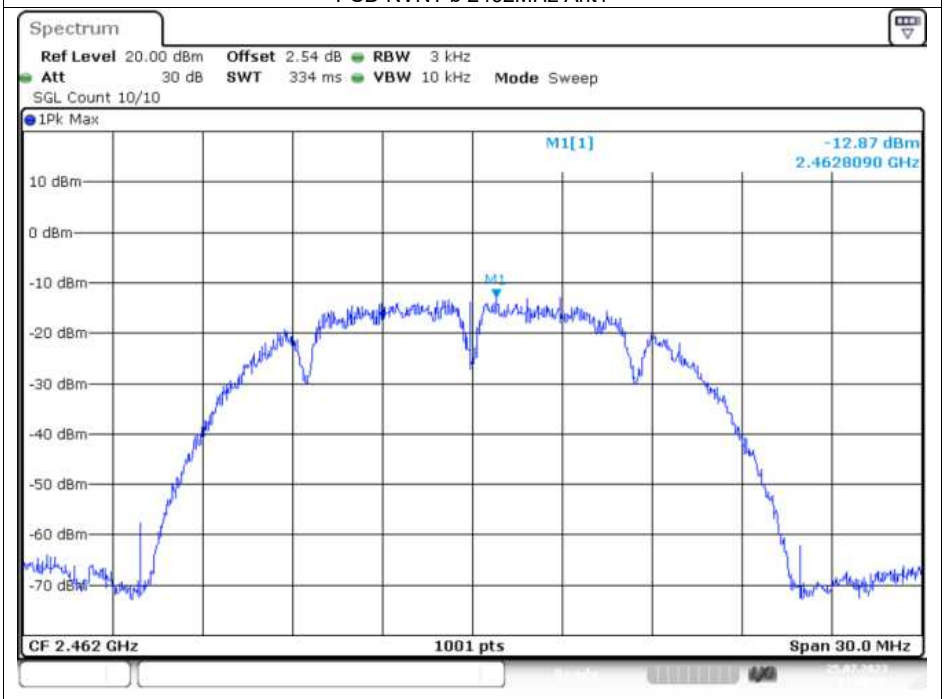
PSD NVNT b 2412MHz Ant1



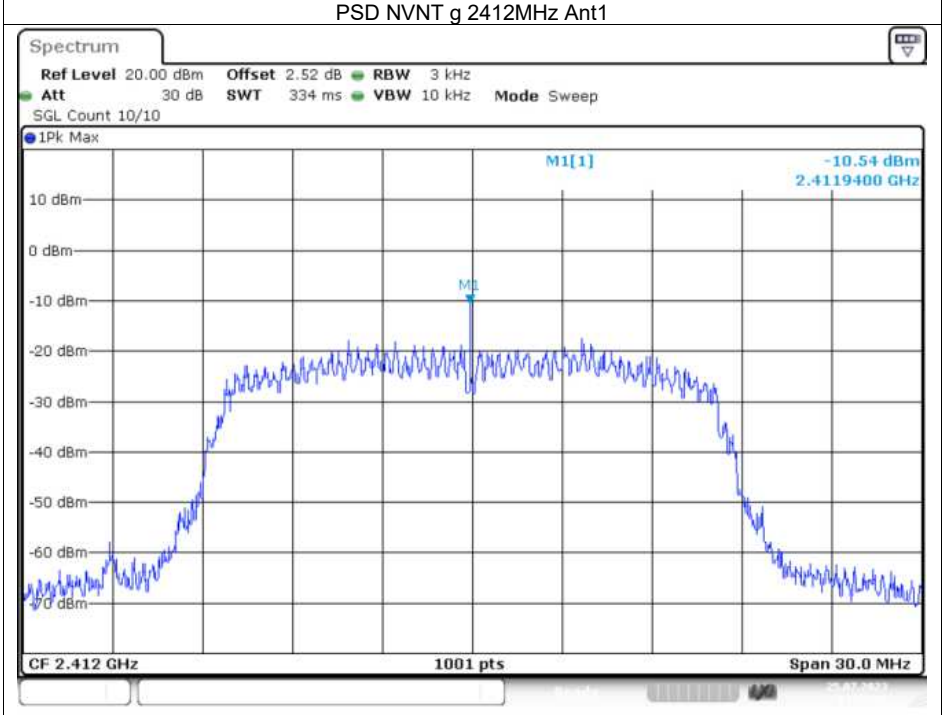
PSD NVNT b 2437MHz Ant1



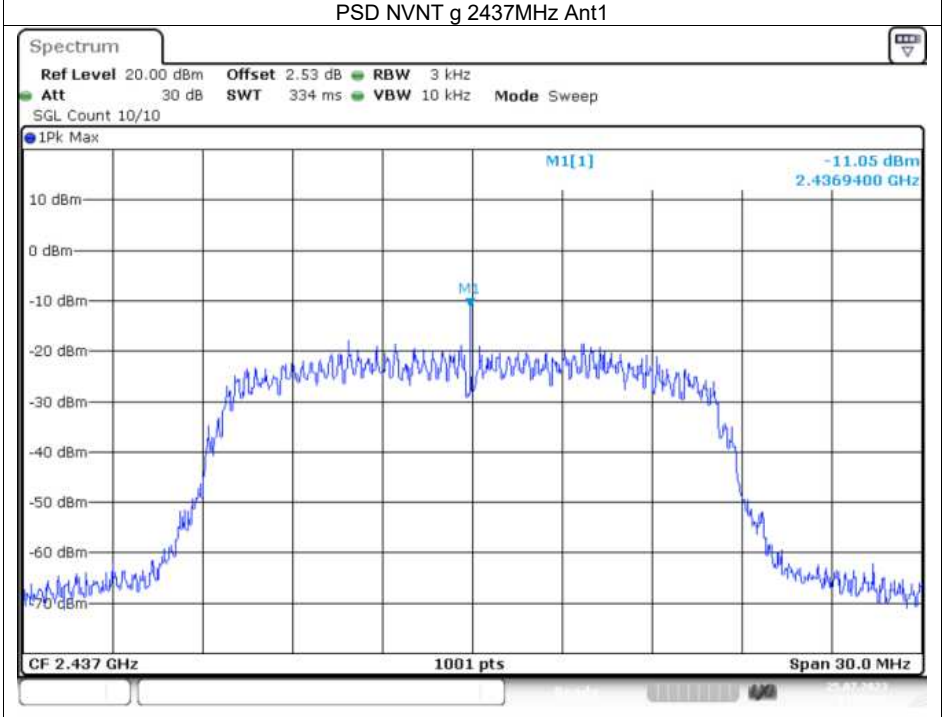
PSD NVNT b 2462MHz Ant1



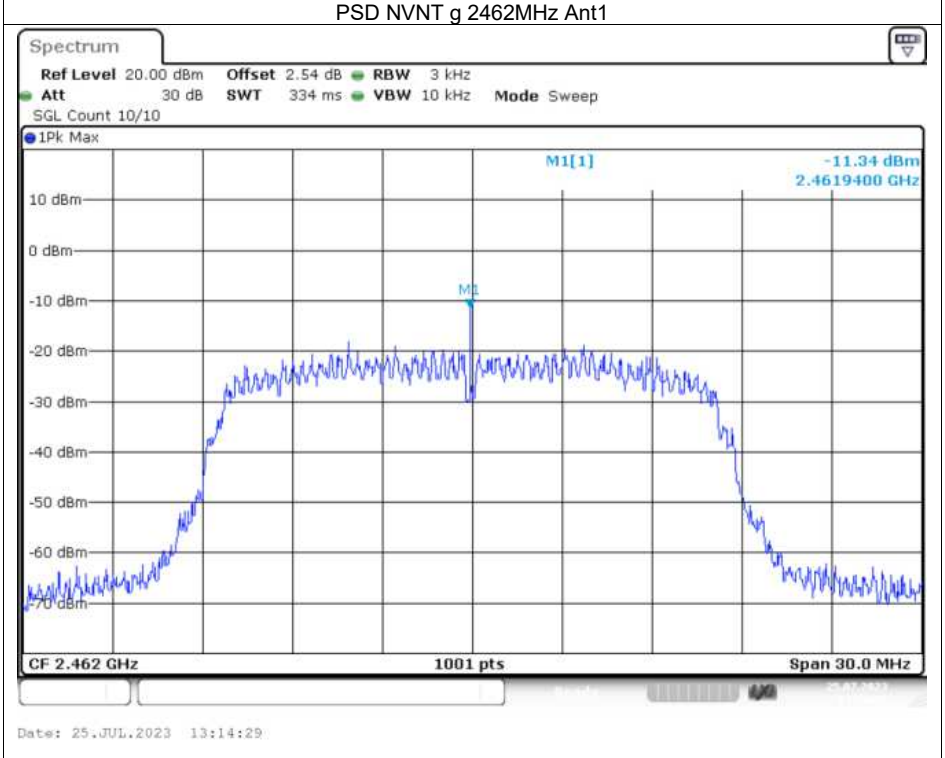
PSD NVNT g 2412MHz Ant1



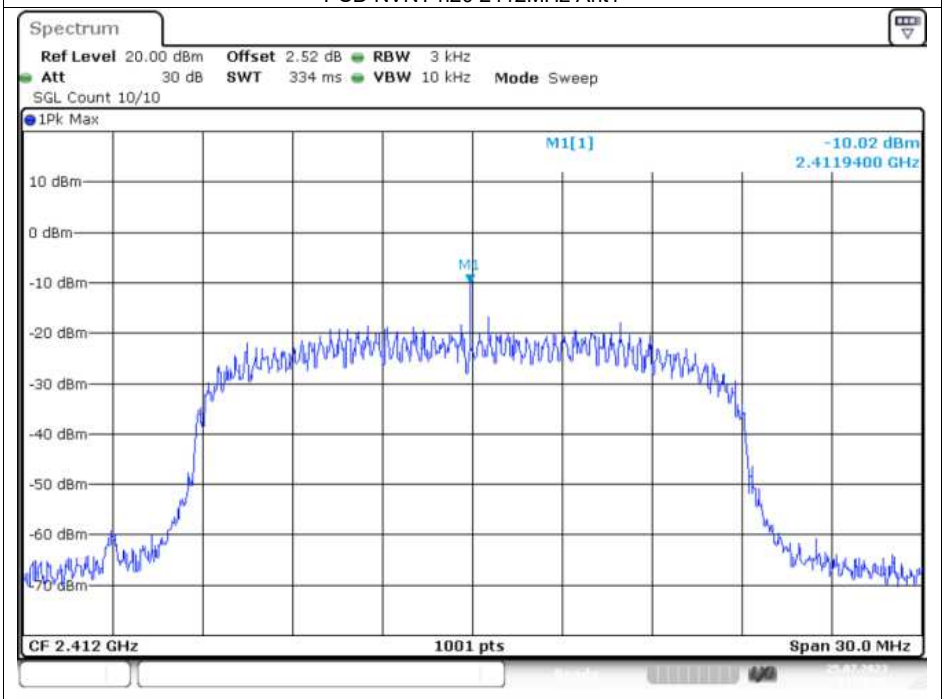
PSD NVNT g 2437MHz Ant1



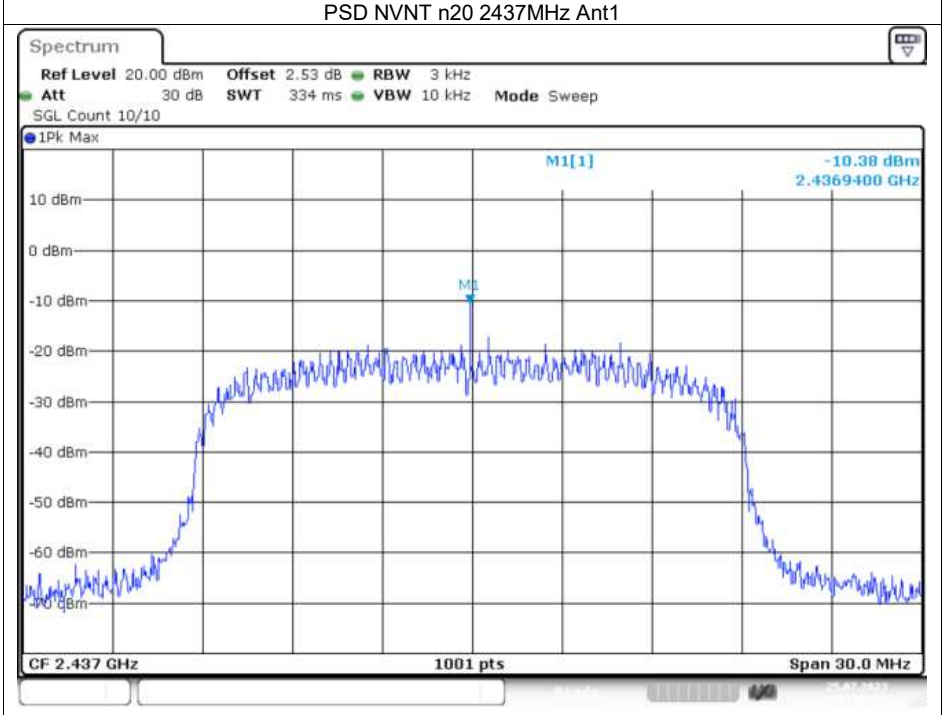
PSD NVNT g 2462MHz Ant1



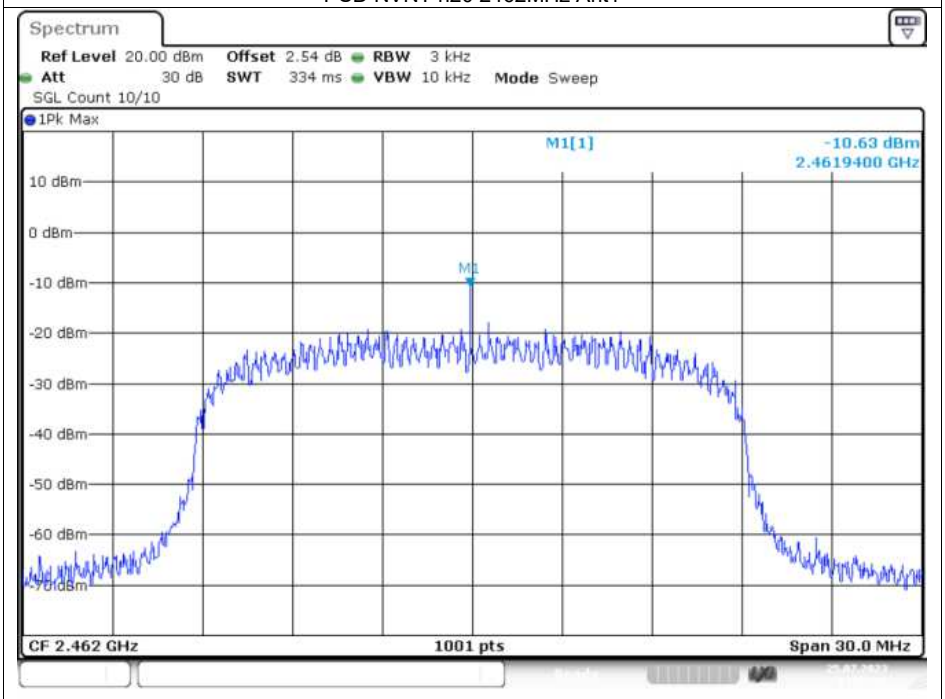
PSD NVNT n20 2412MHz Ant1



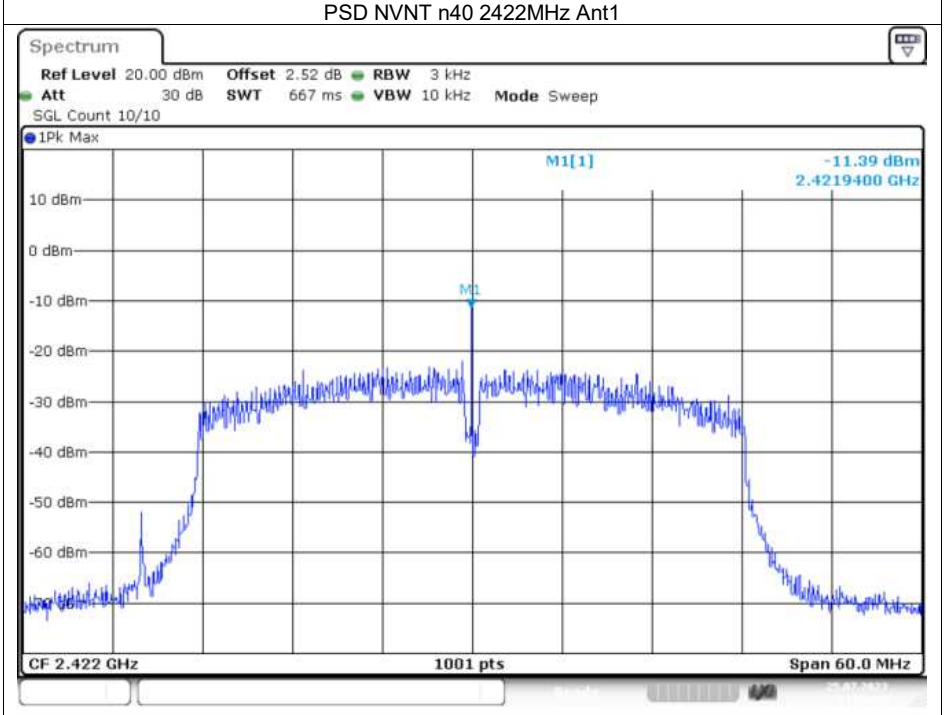
PSD NVNT n20 2437MHz Ant1



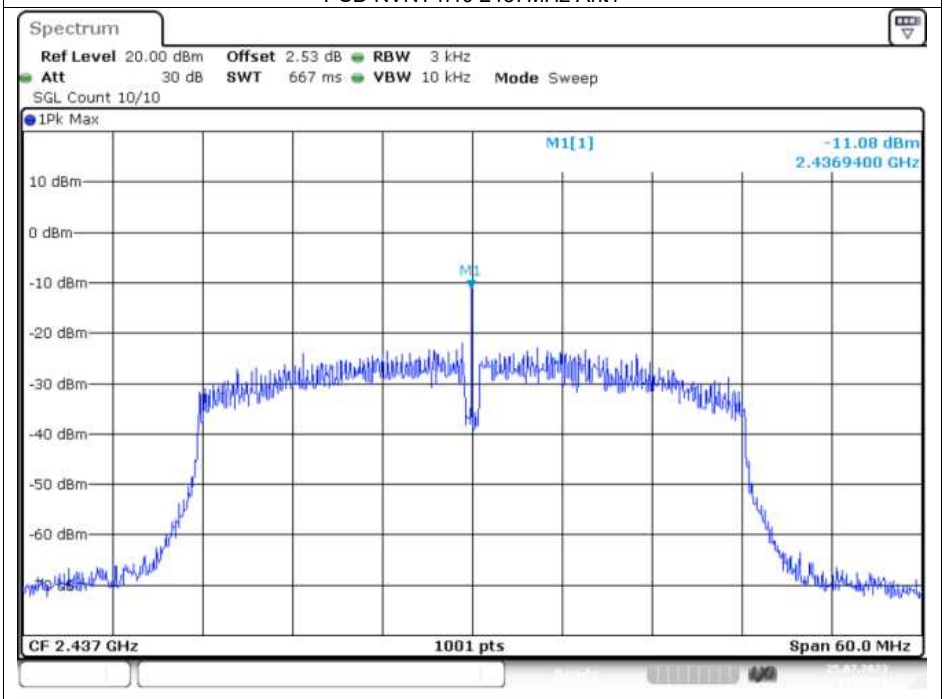
PSD NVNT n20 2462MHz Ant1



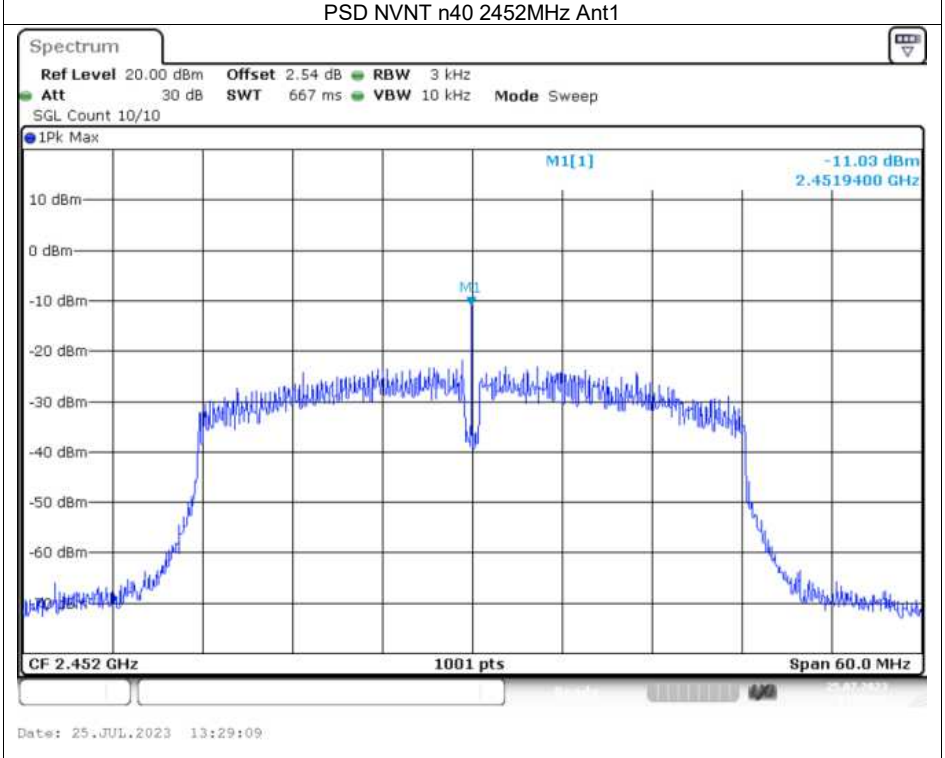
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2452MHz Ant1



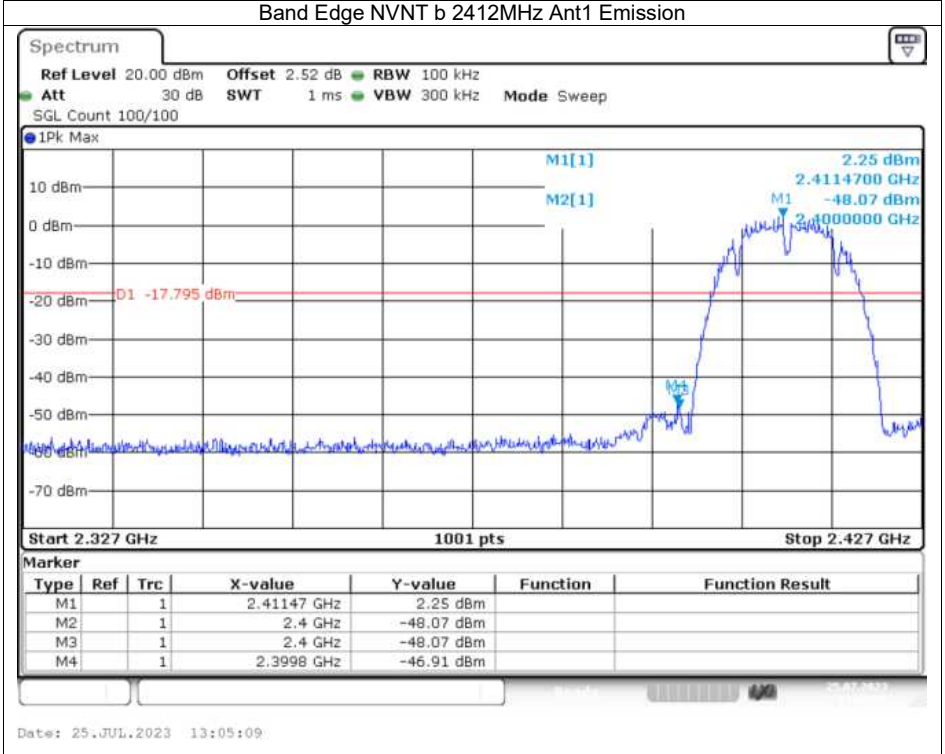
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-49.12	-20	Pass
NVNT	b	2462	Ant1	-56.85	-20	Pass
NVNT	g	2412	Ant1	-42.17	-20	Pass
NVNT	g	2462	Ant1	-50.27	-20	Pass
NVNT	n20	2412	Ant1	-44.64	-20	Pass
NVNT	n20	2462	Ant1	-53.93	-20	Pass
NVNT	n40	2422	Ant1	-37.55	-20	Pass
NVNT	n40	2452	Ant1	-46.01	-20	Pass

Test Graphs

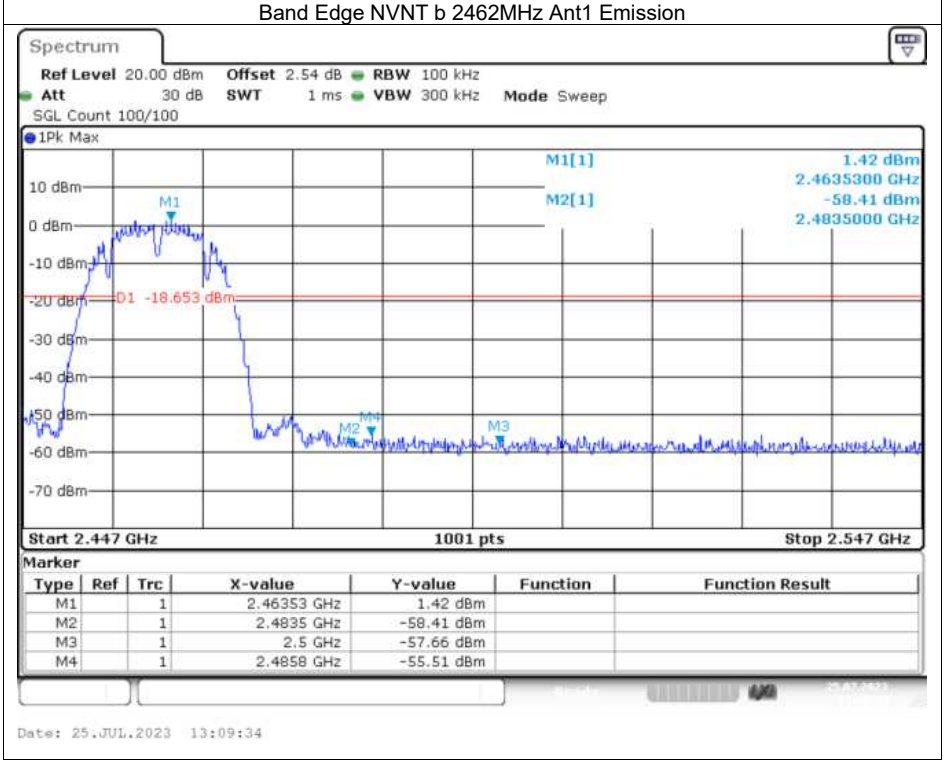
Band Edge NVNT b 2412MHz Ant1 Ref

Band Edge NVNT b 2412MHz Ant1 Emission

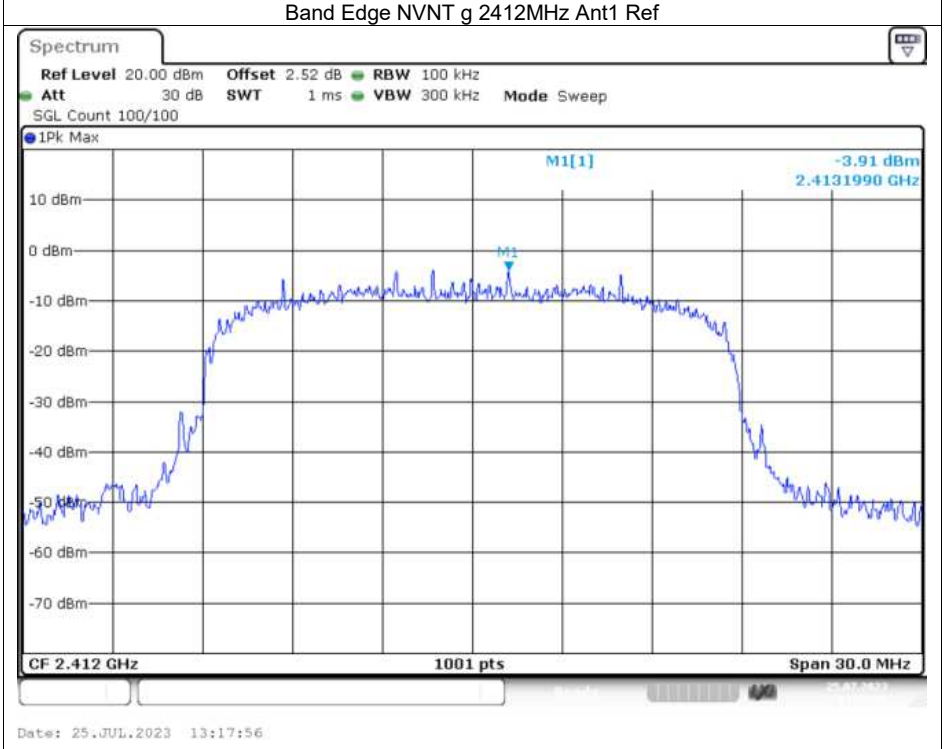


Band Edge NVNT b 2462MHz Ant1 Ref

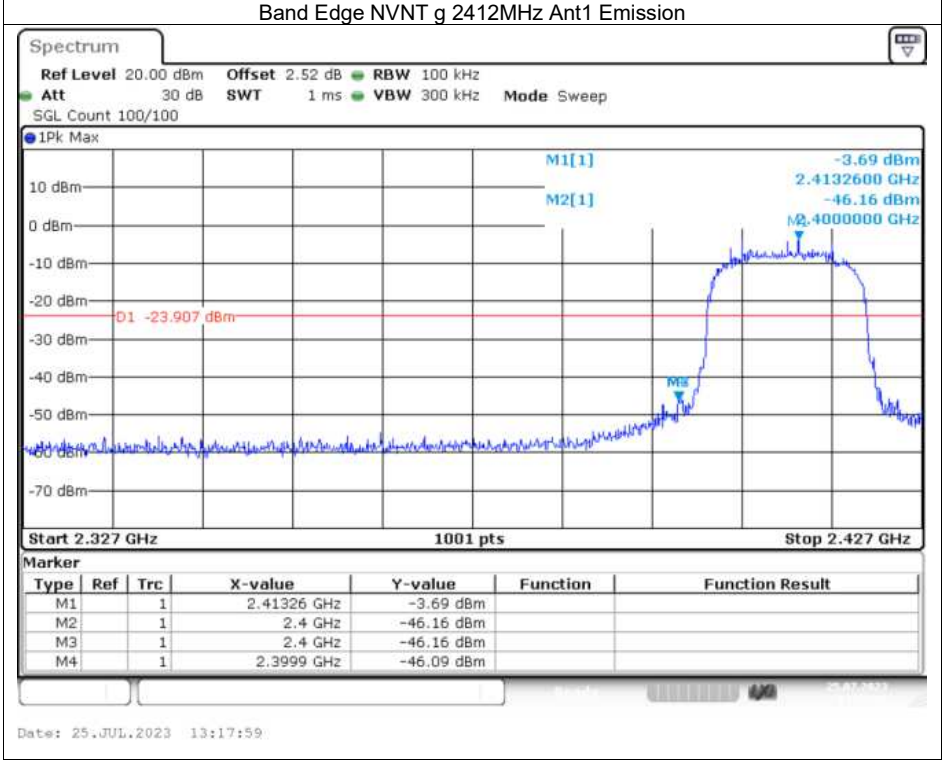
Band Edge NVNT b 2462MHz Ant1 Emission



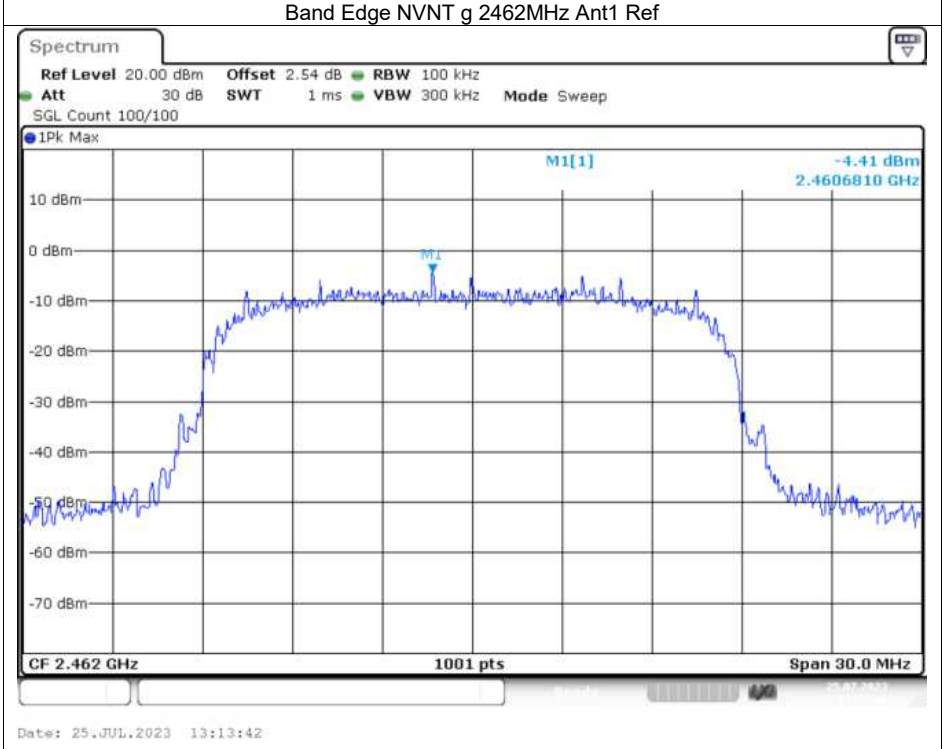
Band Edge NVNT g 2412MHz Ant1 Ref



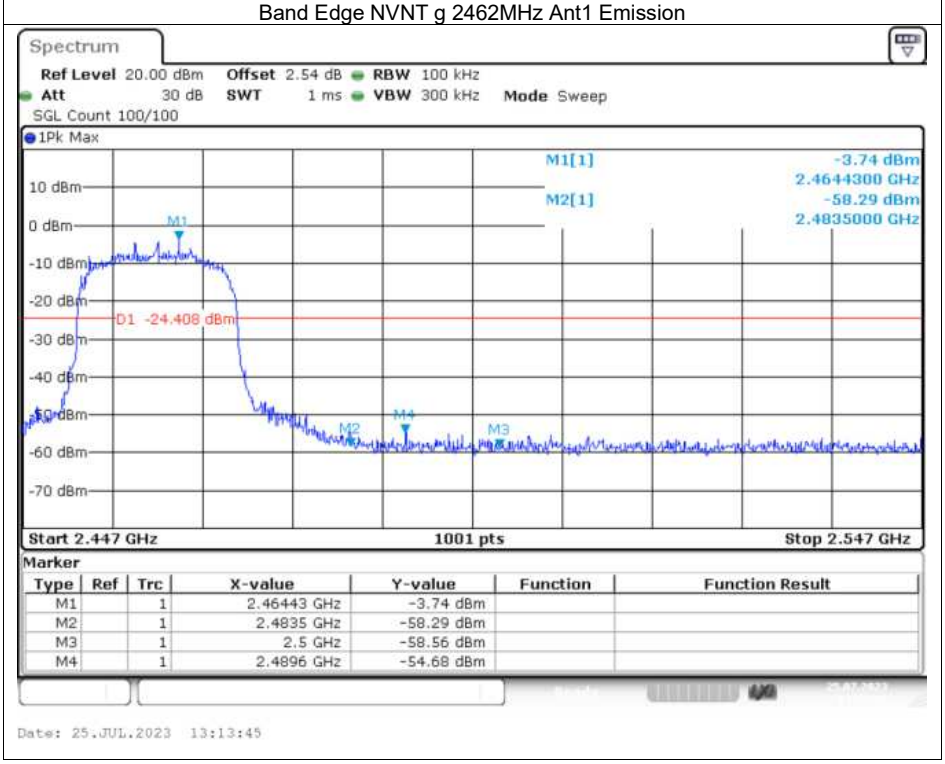
Band Edge NVNT g 2412MHz Ant1 Emission



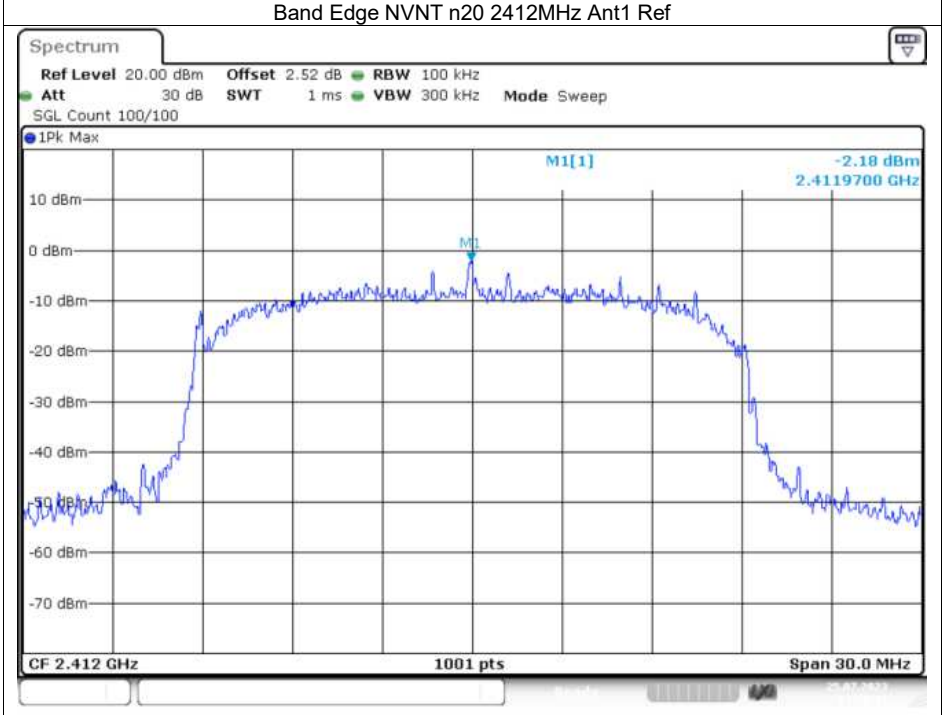
Band Edge NVNT g 2462MHz Ant1 Ref



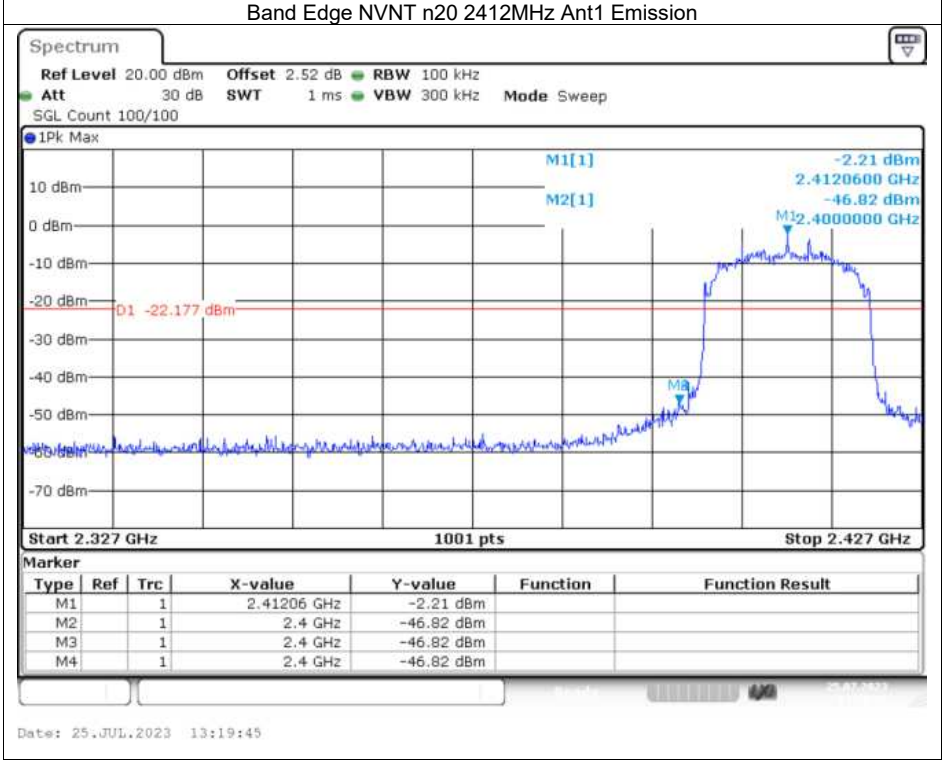
Band Edge NVNT g 2462MHz Ant1 Emission



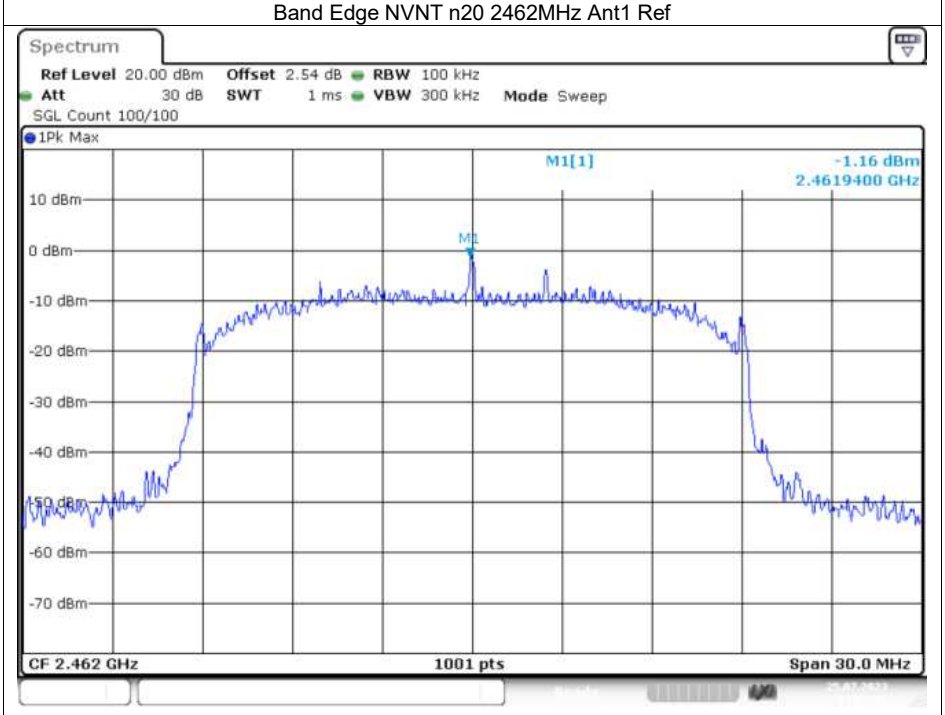
Band Edge NVNT n20 2412MHz Ant1 Ref



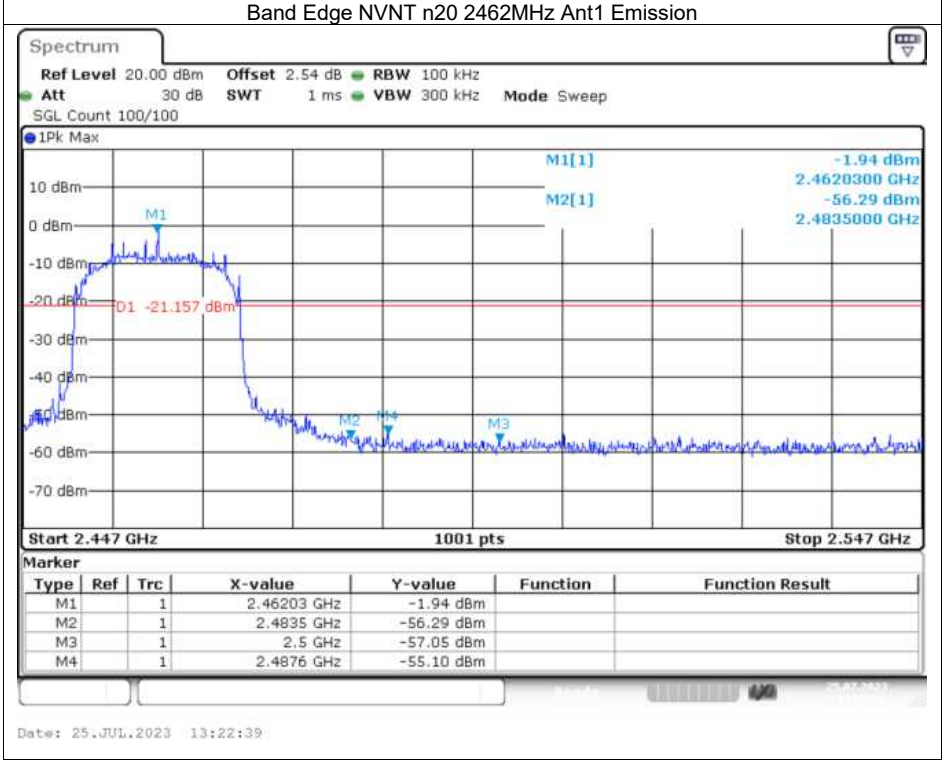
Band Edge NVNT n20 2412MHz Ant1 Emission



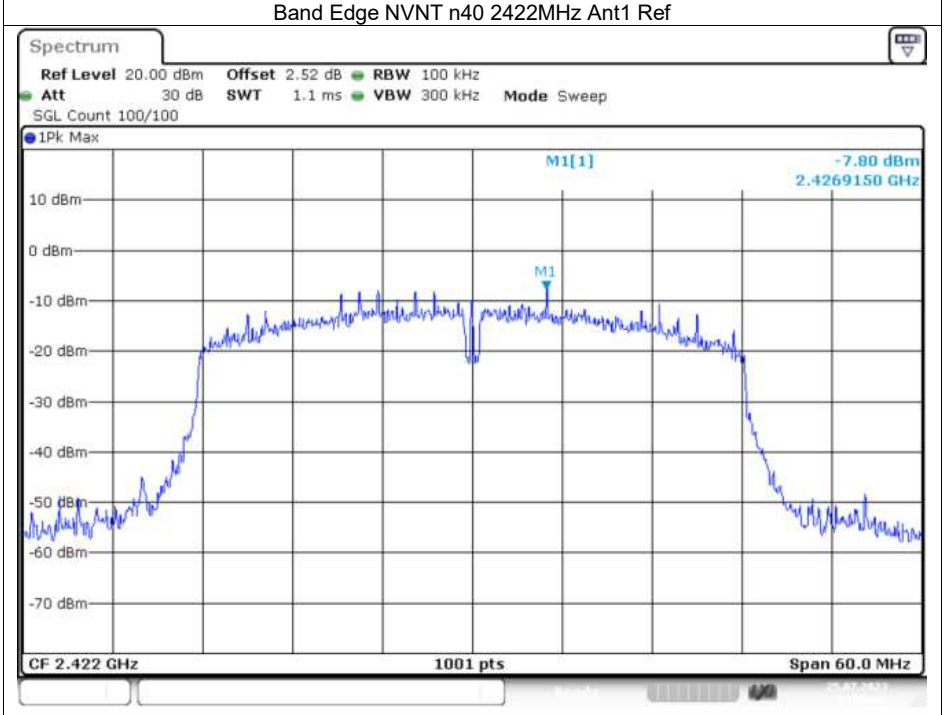
Band Edge NVNT n20 2462MHz Ant1 Ref



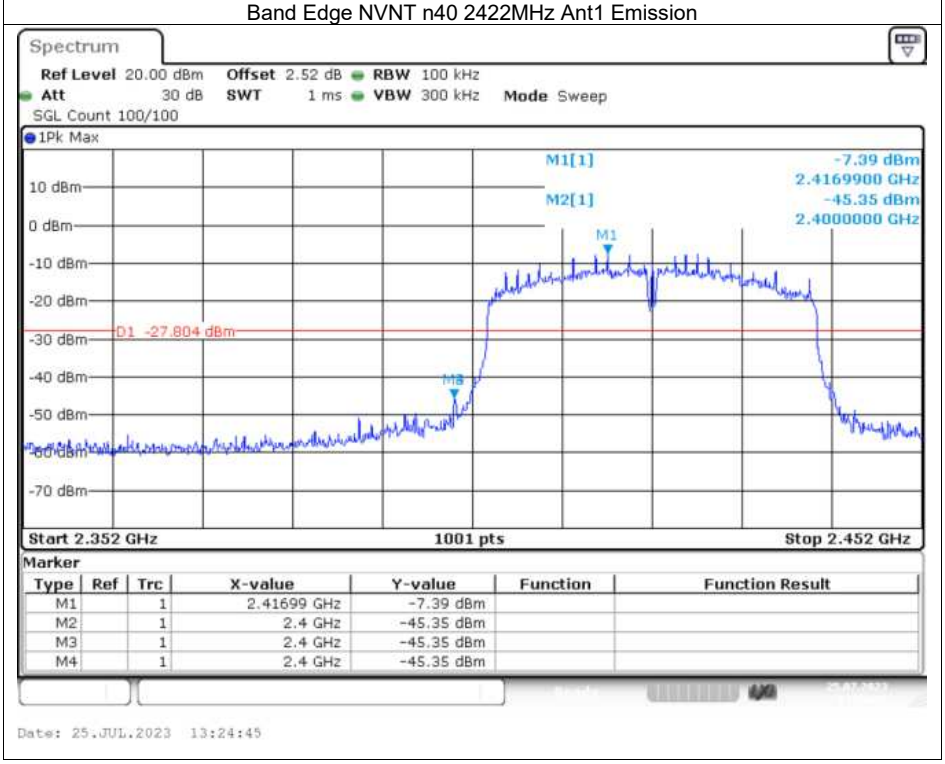
Band Edge NVNT n20 2462MHz Ant1 Emission



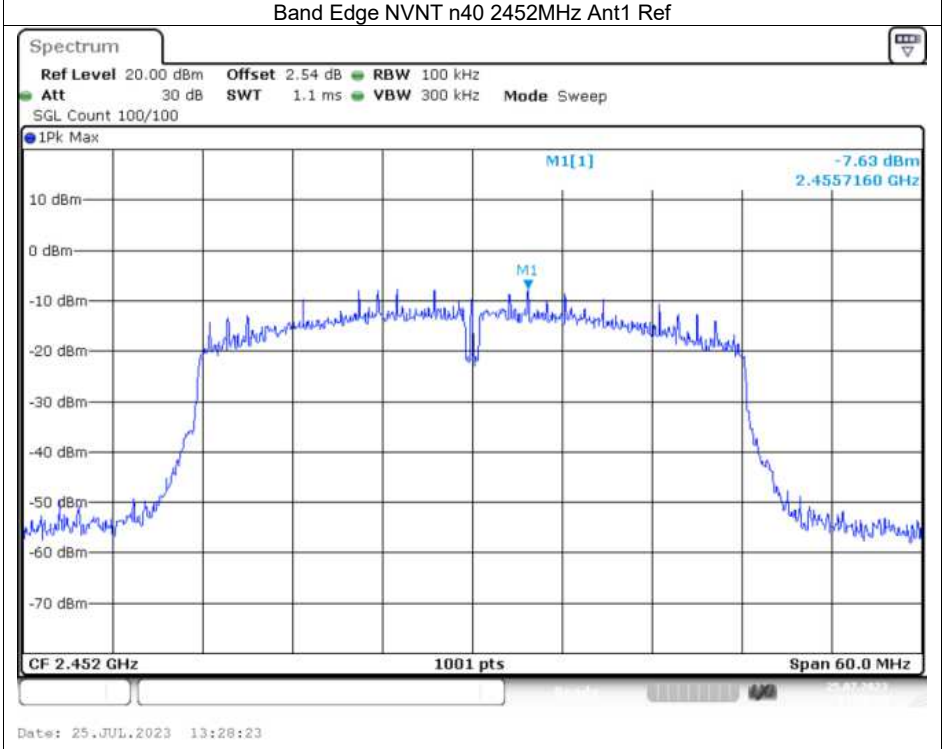
Band Edge NVNT n40 2422MHz Ant1 Ref



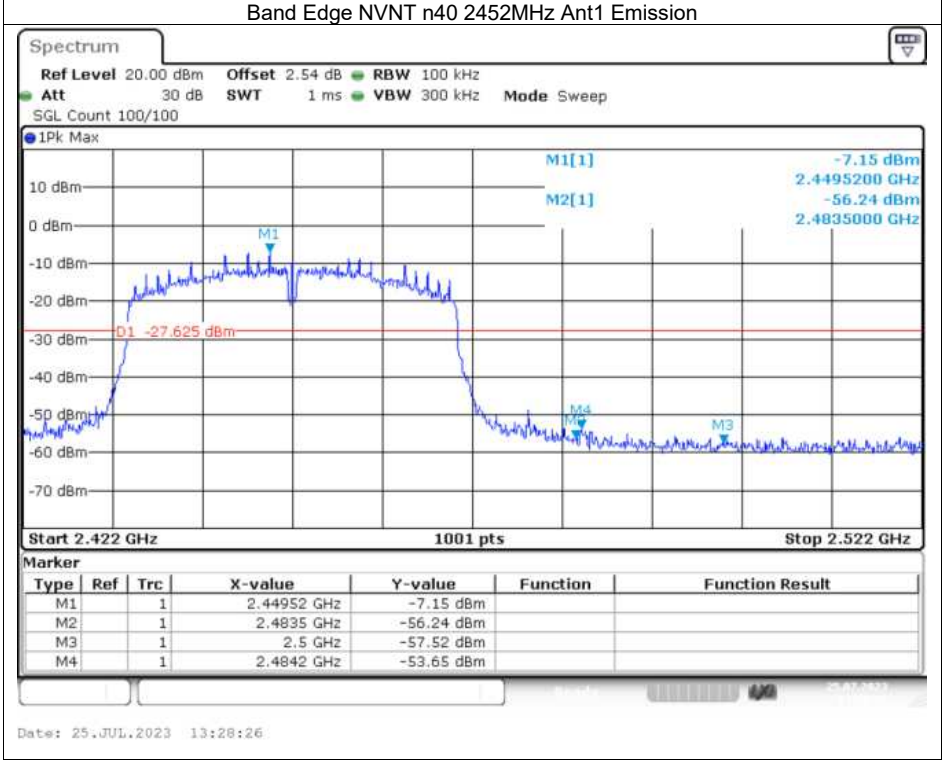
Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref



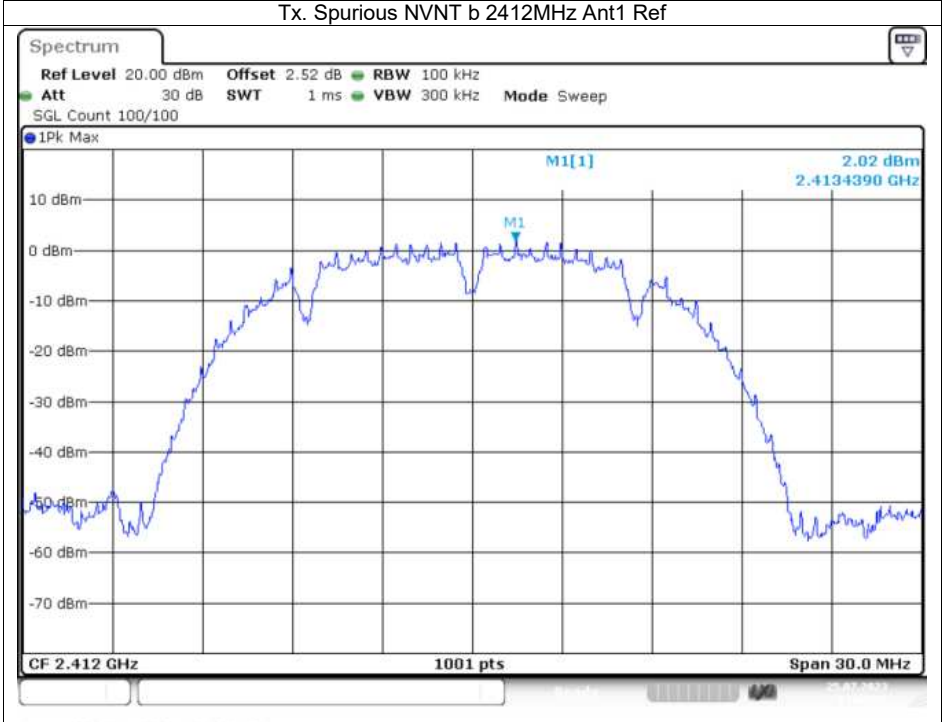
Band Edge NVNT n40 2452MHz Ant1 Emission



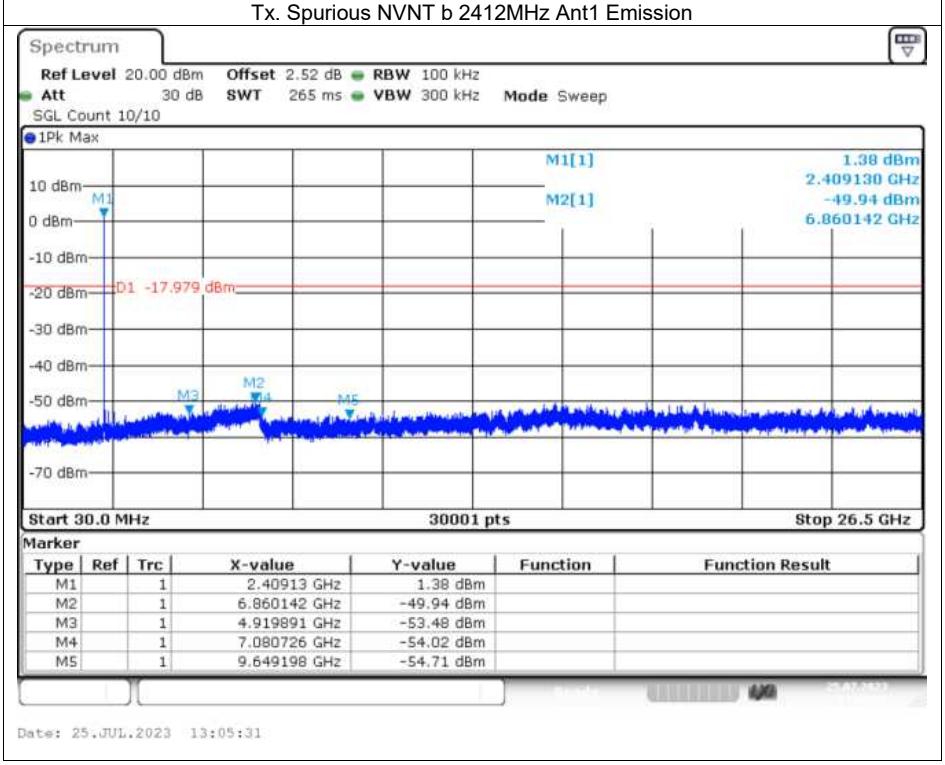
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-51.95	-20	Pass
NVNT	b	2437	Ant1	-50.66	-20	Pass
NVNT	b	2462	Ant1	-51.04	-20	Pass
NVNT	g	2412	Ant1	-45.74	-20	Pass
NVNT	g	2437	Ant1	-46.35	-20	Pass
NVNT	g	2462	Ant1	-44.92	-20	Pass
NVNT	n20	2412	Ant1	-48.31	-20	Pass
NVNT	n20	2437	Ant1	-48.22	-20	Pass
NVNT	n20	2462	Ant1	-47.69	-20	Pass
NVNT	n40	2422	Ant1	-42.44	-20	Pass
NVNT	n40	2437	Ant1	-42.37	-20	Pass
NVNT	n40	2452	Ant1	-42.07	-20	Pass

Test Graphs
Tx. Spurious NVNT b 2412MHz Ant1 Ref



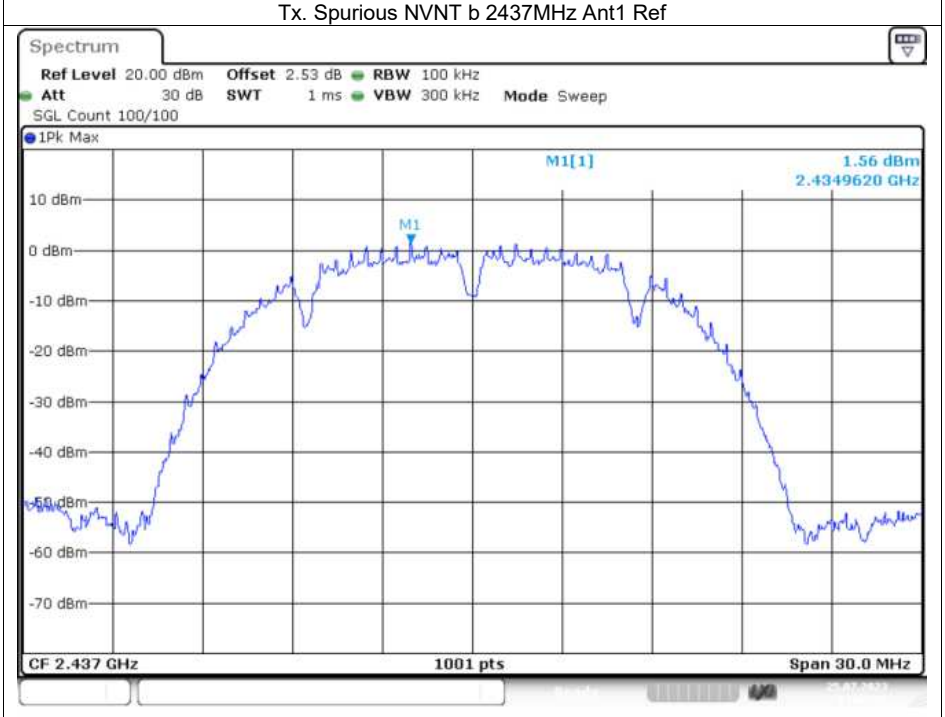
Tx. Spurious NVNT b 2412MHz Ant1 Emission



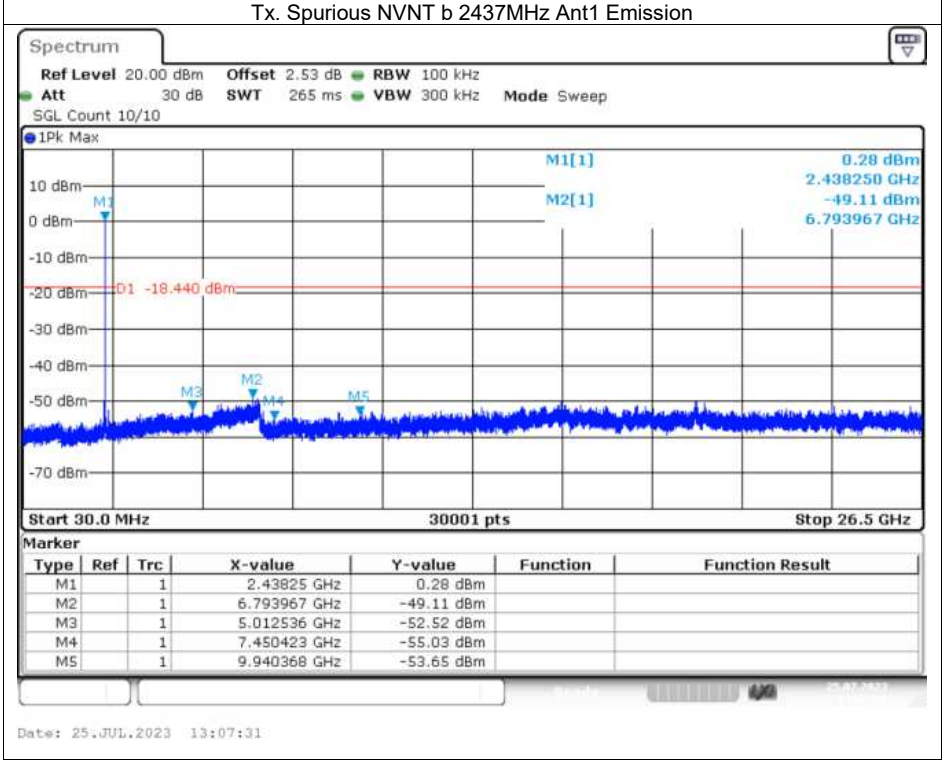
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40913 GHz	1.38 dBm		
M2		1	6.860142 GHz	-49.94 dBm		
M3		1	4.919891 GHz	-53.48 dBm		
M4		1	7.080726 GHz	-54.02 dBm		
M5		1	9.649198 GHz	-54.71 dBm		

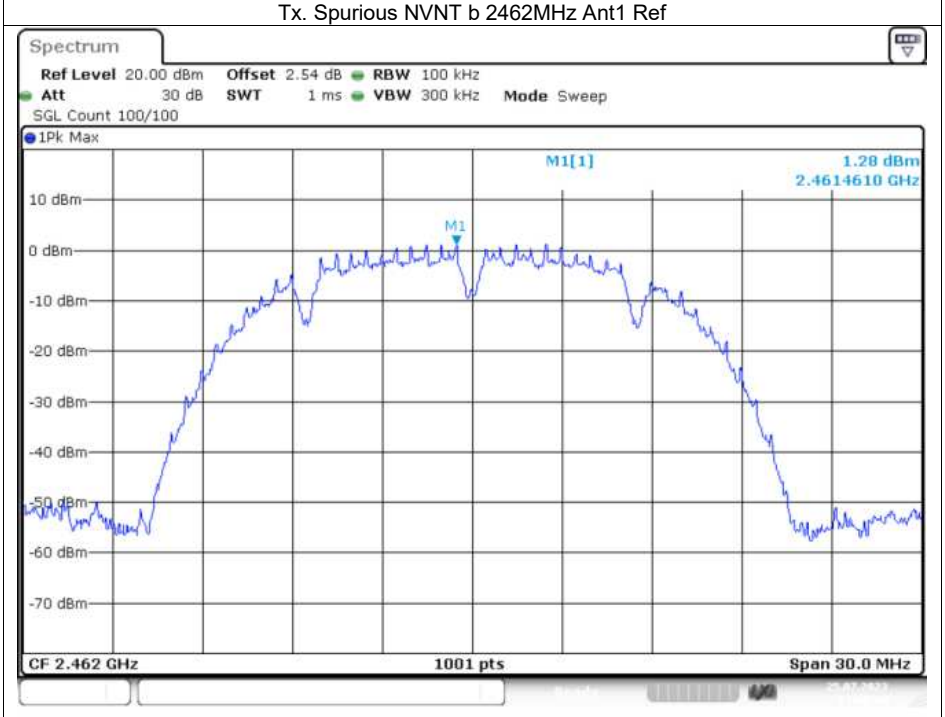
Tx. Spurious NVNT b 2437MHz Ant1 Ref



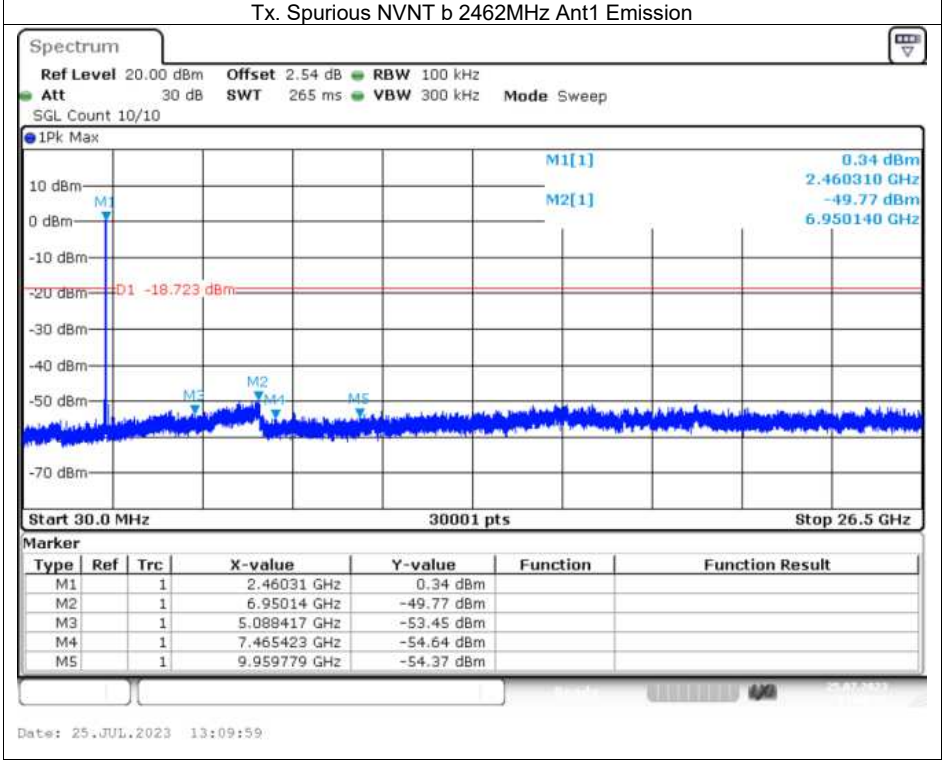
Tx. Spurious NVNT b 2437MHz Ant1 Emission



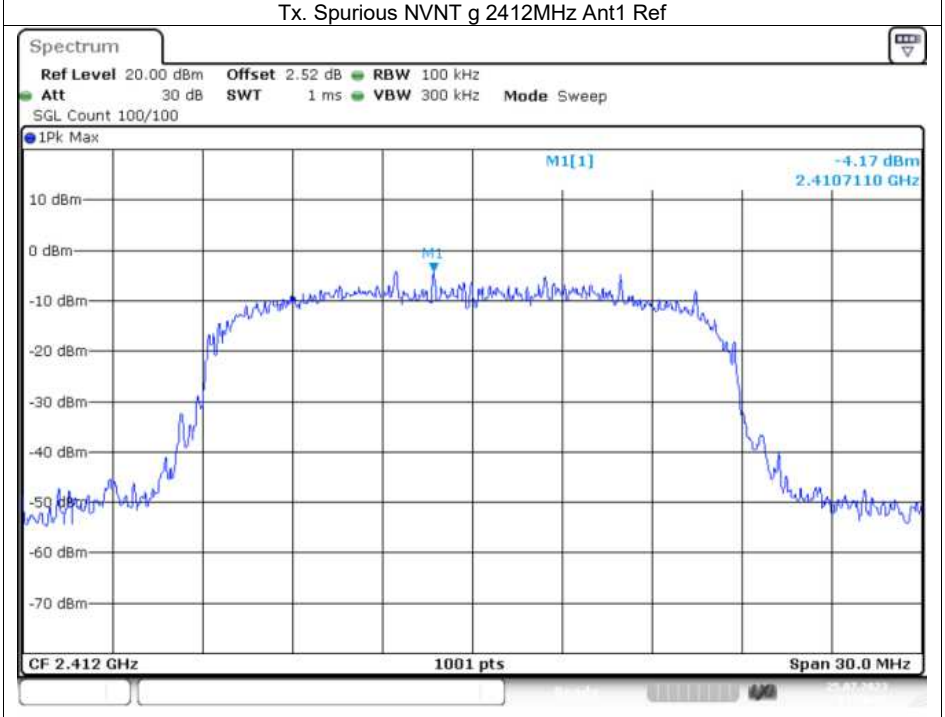
Tx. Spurious NVNT b 2462MHz Ant1 Ref



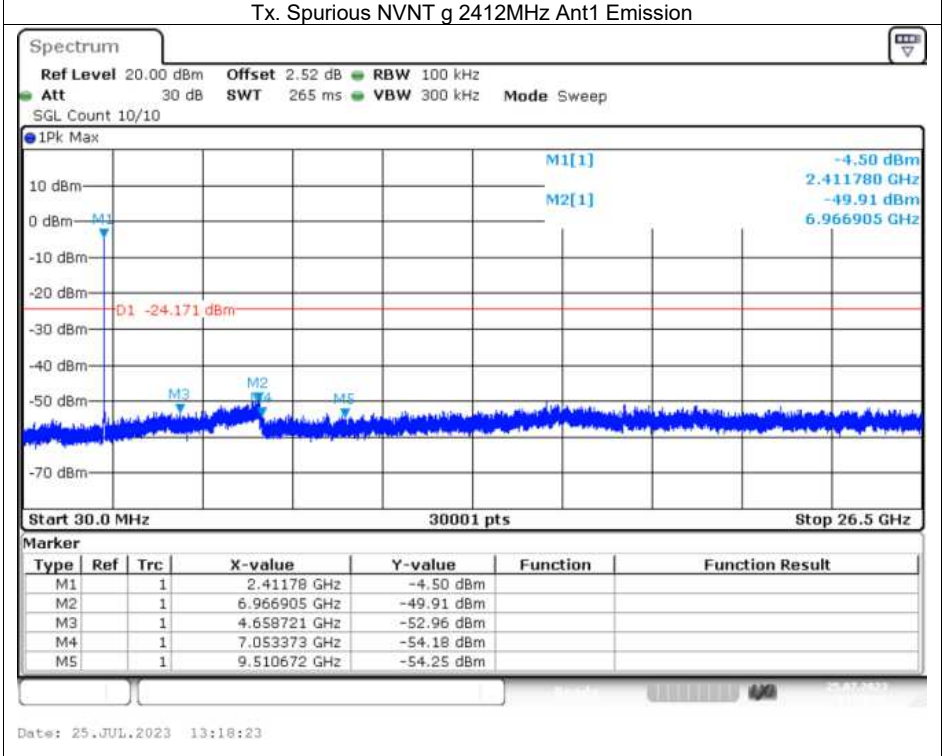
Tx. Spurious NVNT b 2462MHz Ant1 Emission



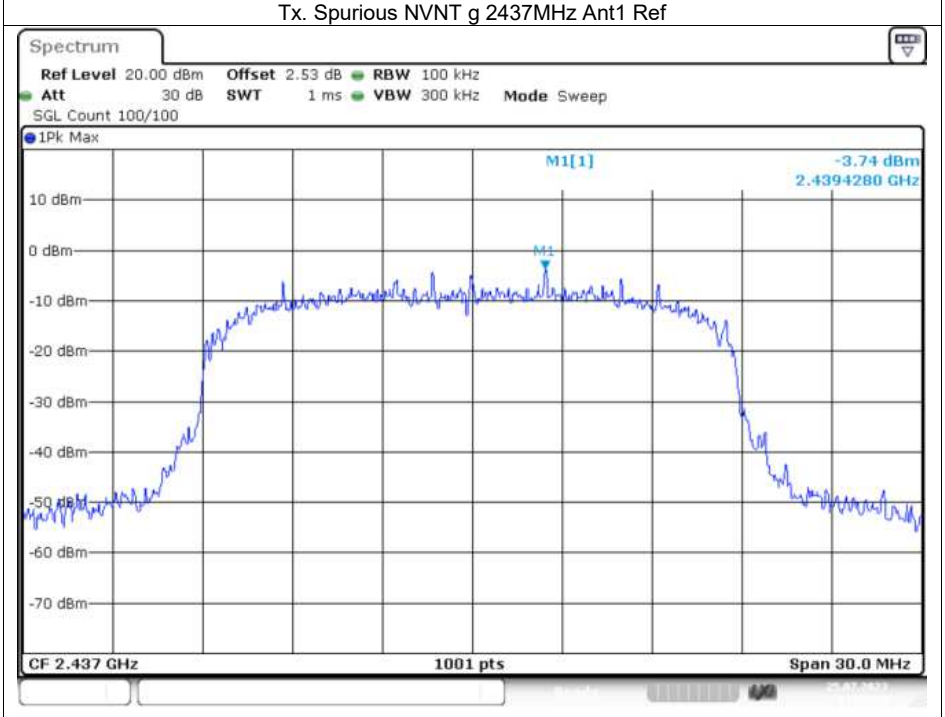
Tx. Spurious NVNT g 2412MHz Ant1 Ref



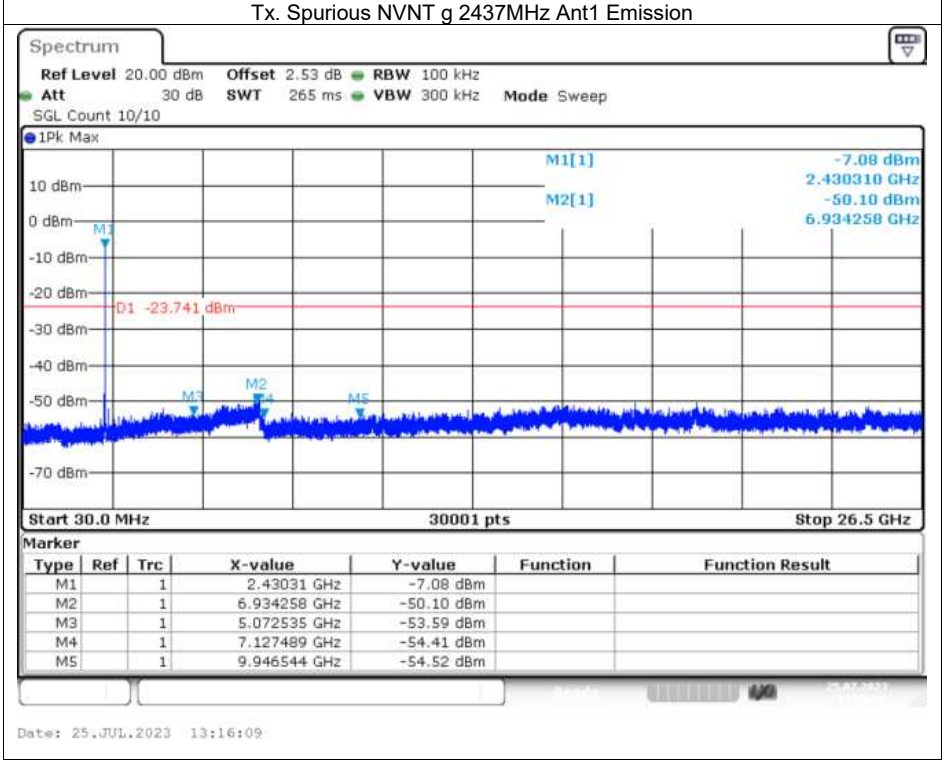
Tx. Spurious NVNT g 2412MHz Ant1 Emission



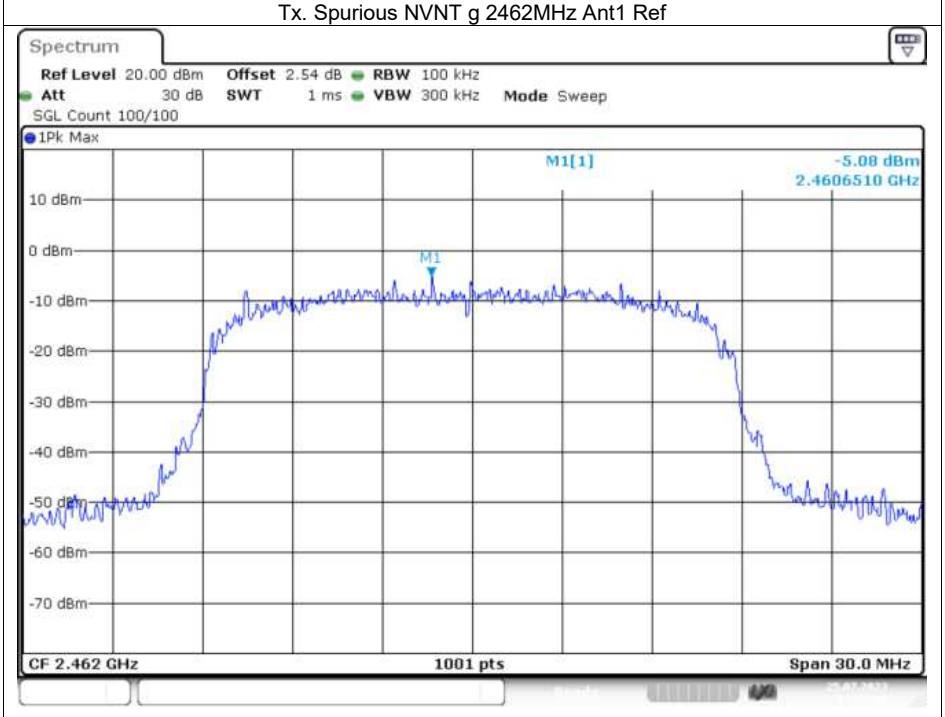
Tx. Spurious NVNT g 2437MHz Ant1 Ref



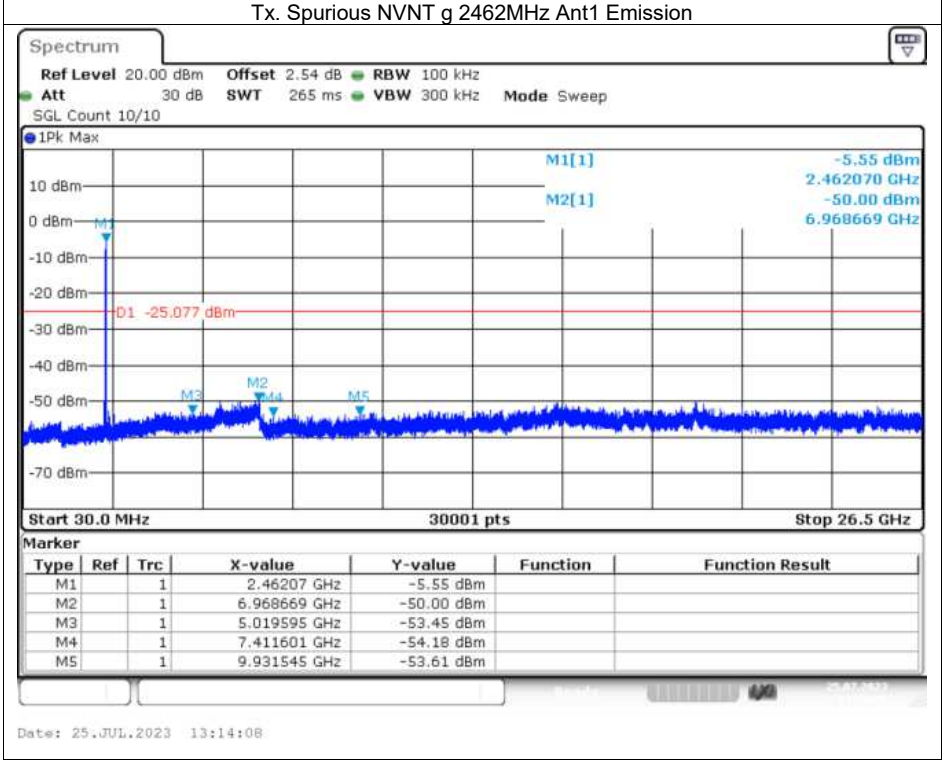
Tx. Spurious NVNT g 2437MHz Ant1 Emission



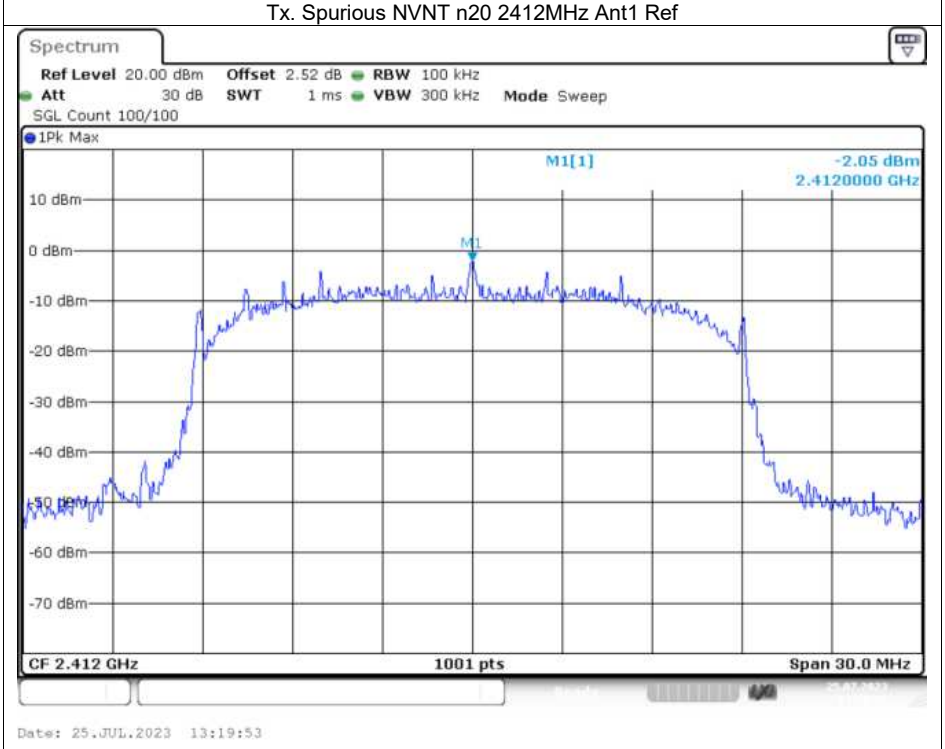
Tx. Spurious NVNT g 2462MHz Ant1 Ref



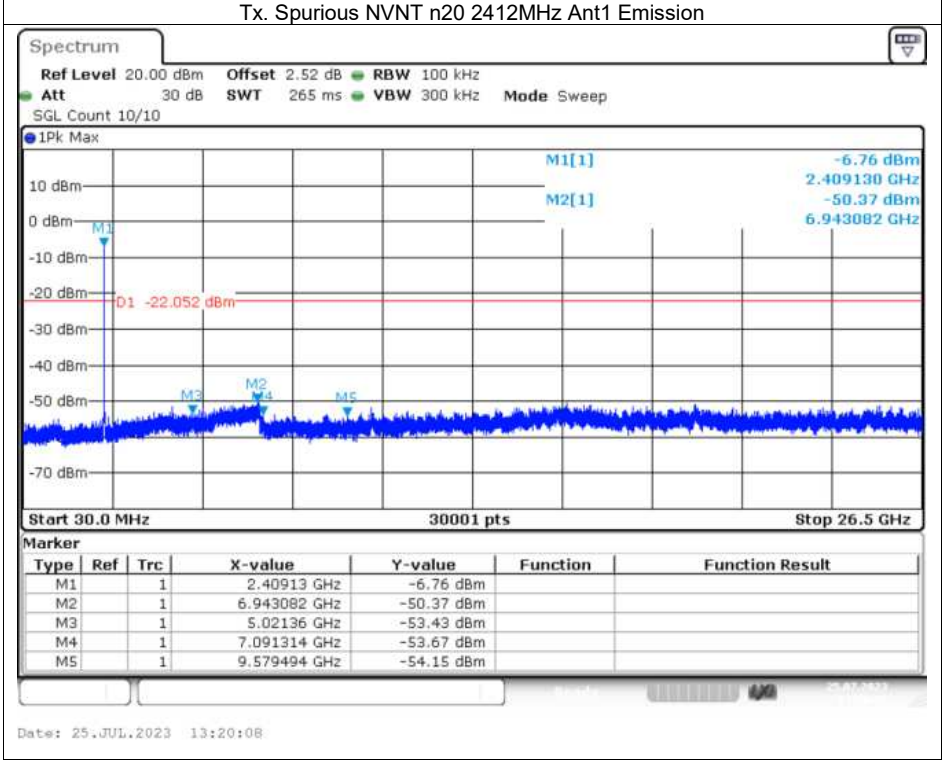
Tx. Spurious NVNT g 2462MHz Ant1 Emission



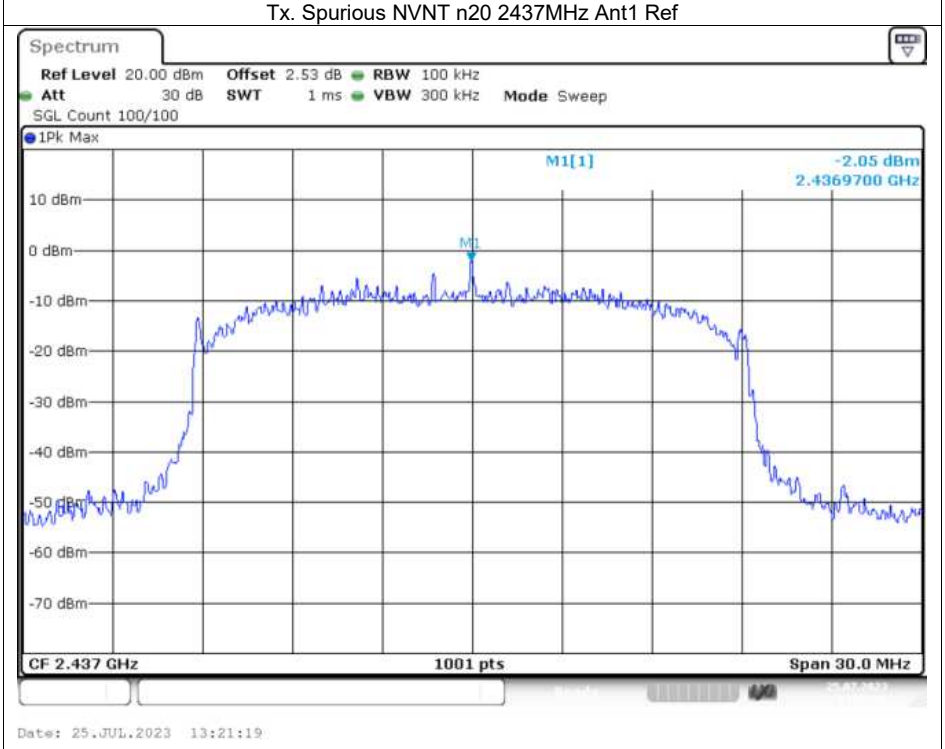
Tx. Spurious NVNT n20 2412MHz Ant1 Ref



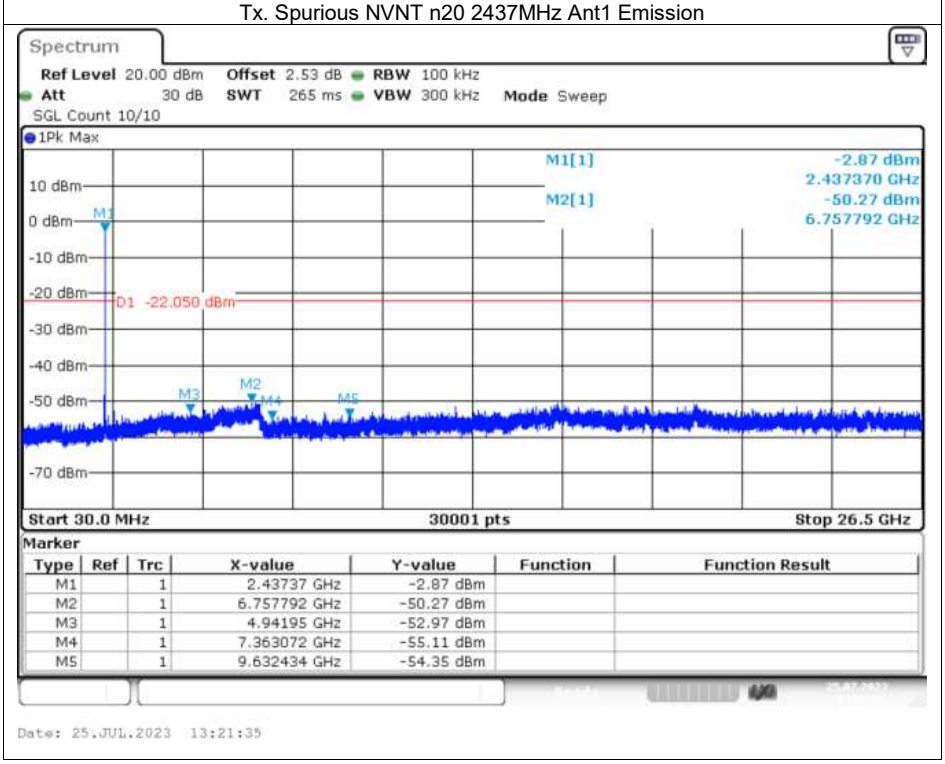
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



Tx. Spurious NVNT n20 2437MHz Ant1 Ref



Tx. Spurious NVNT n20 2437MHz Ant1 Emission



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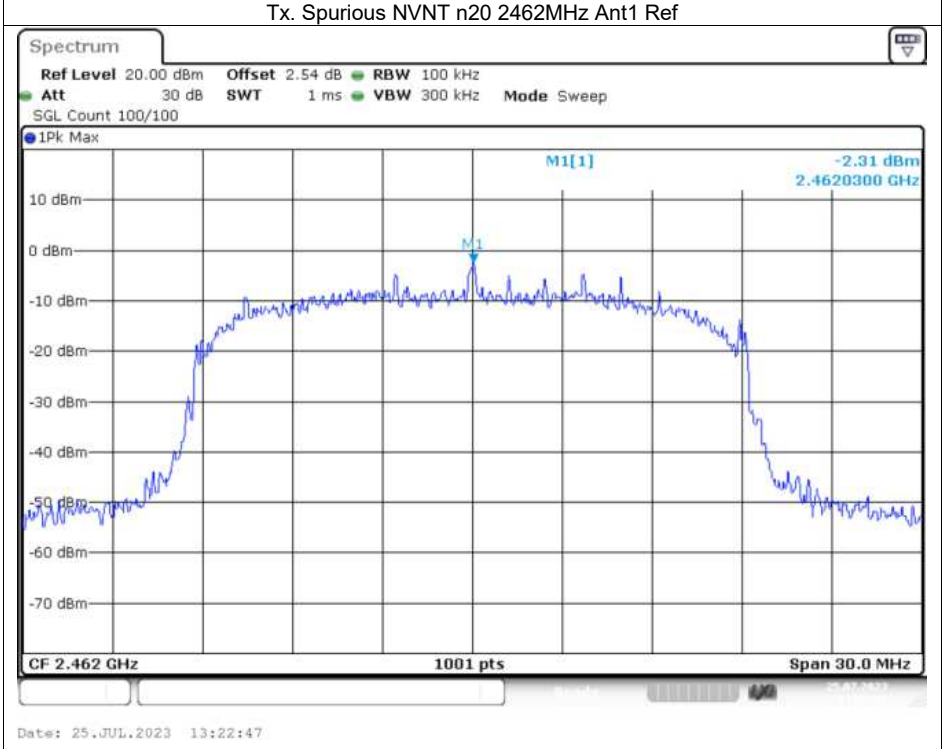

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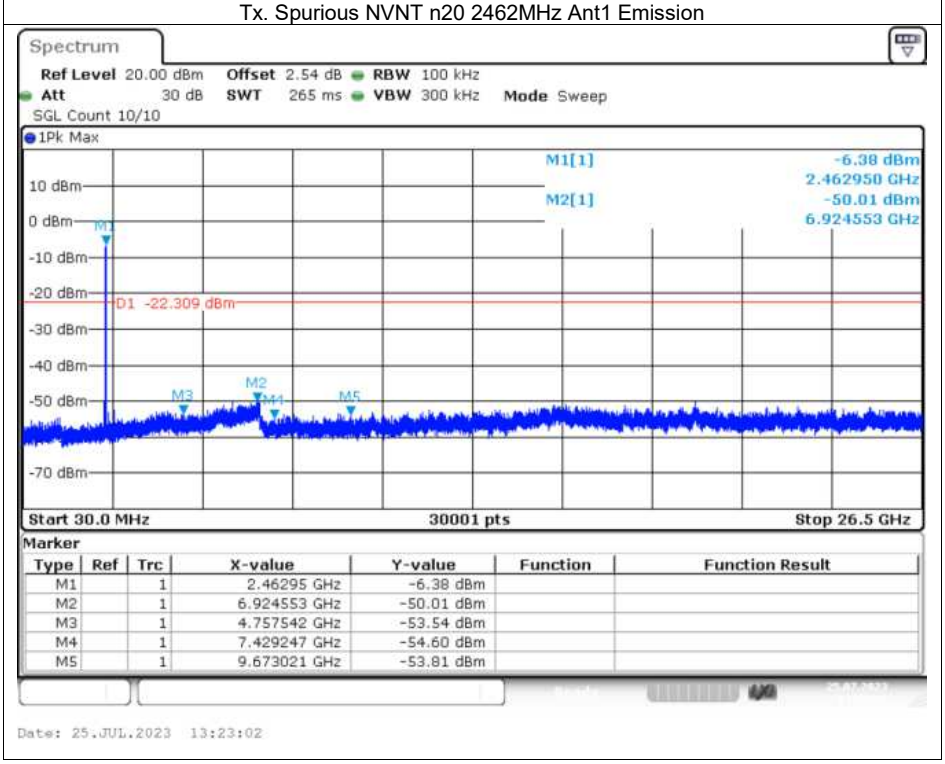
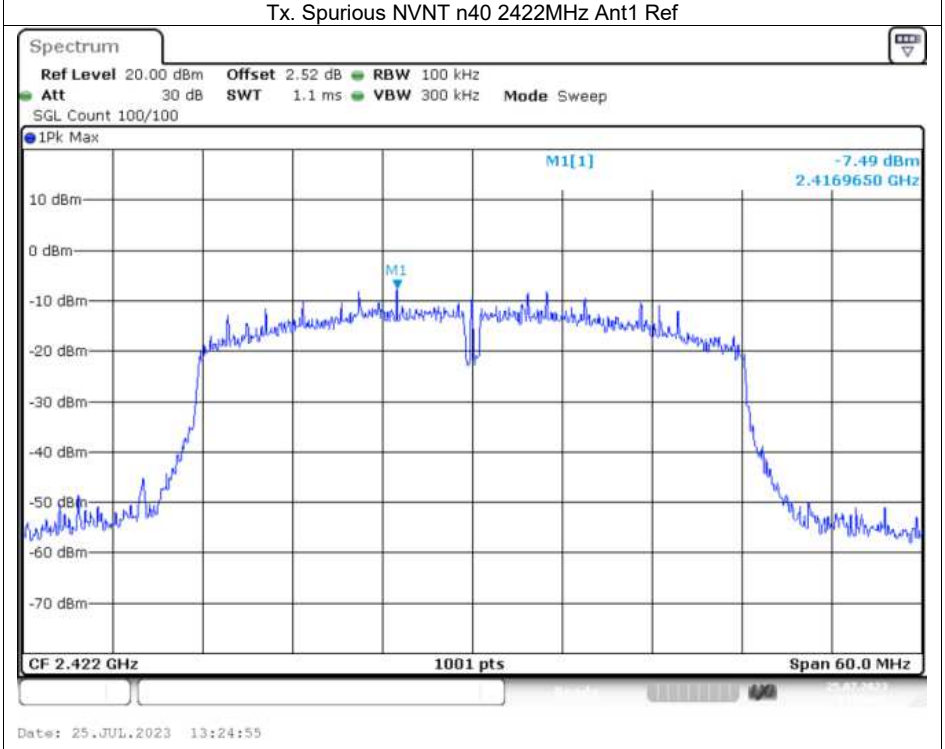
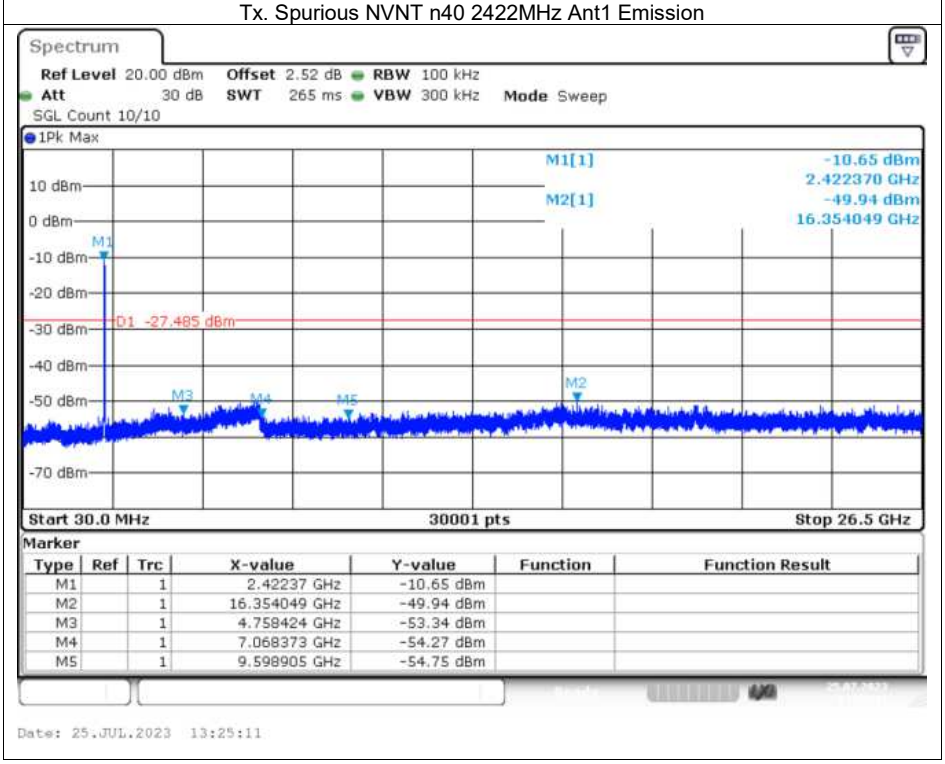


Tx. Spurious NVNT n40 2422MHz Ant1 Ref



Tx. Spurious NVNT n40 2422MHz Ant1 Emission



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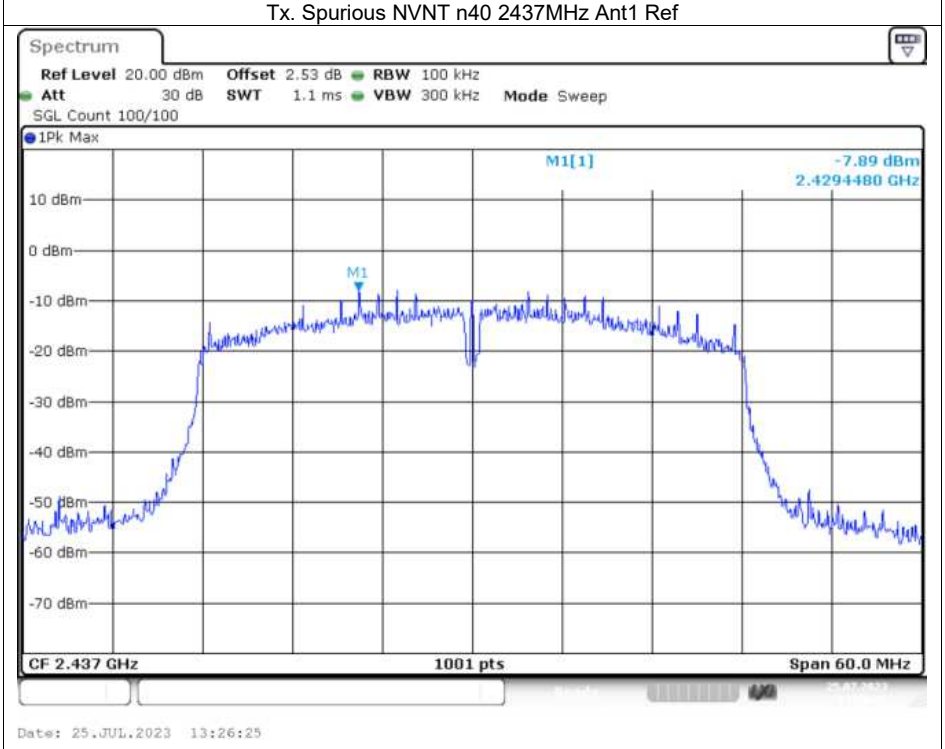

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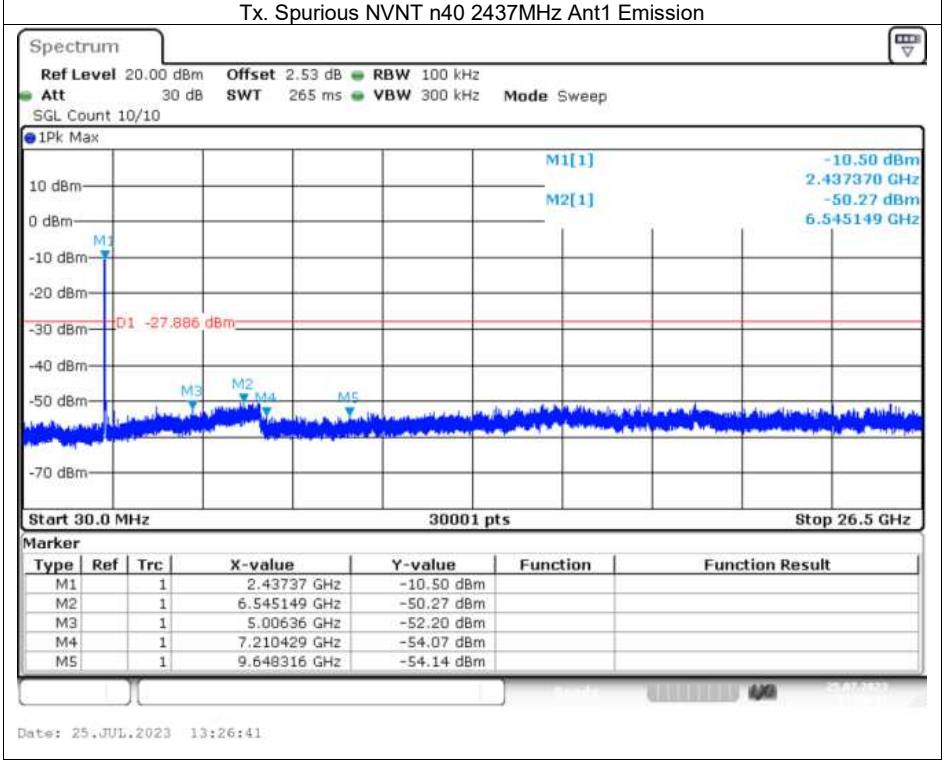
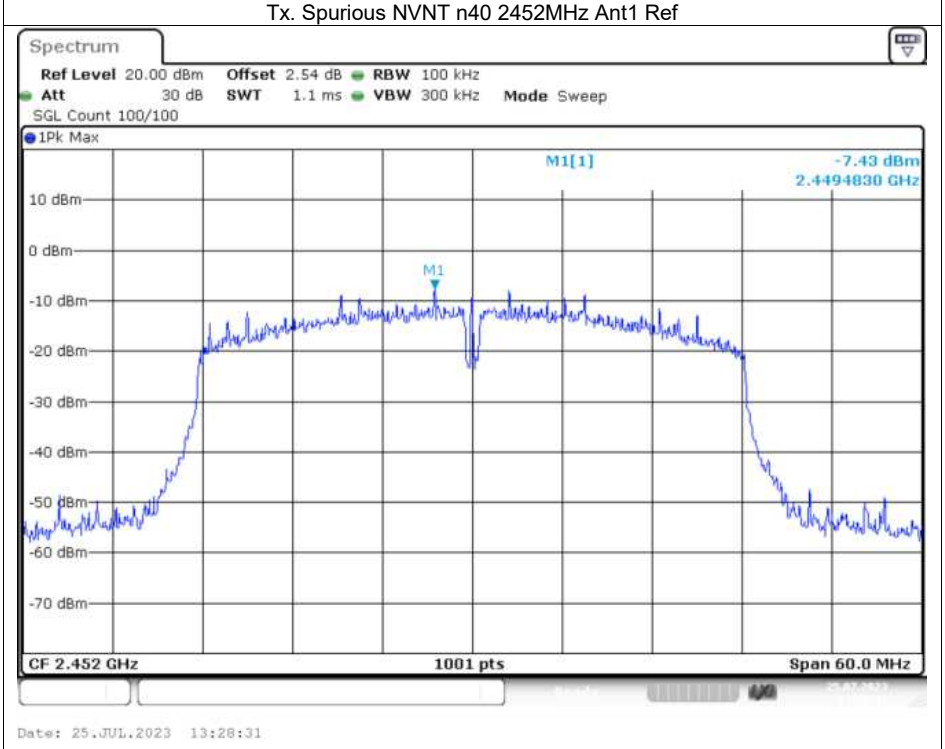
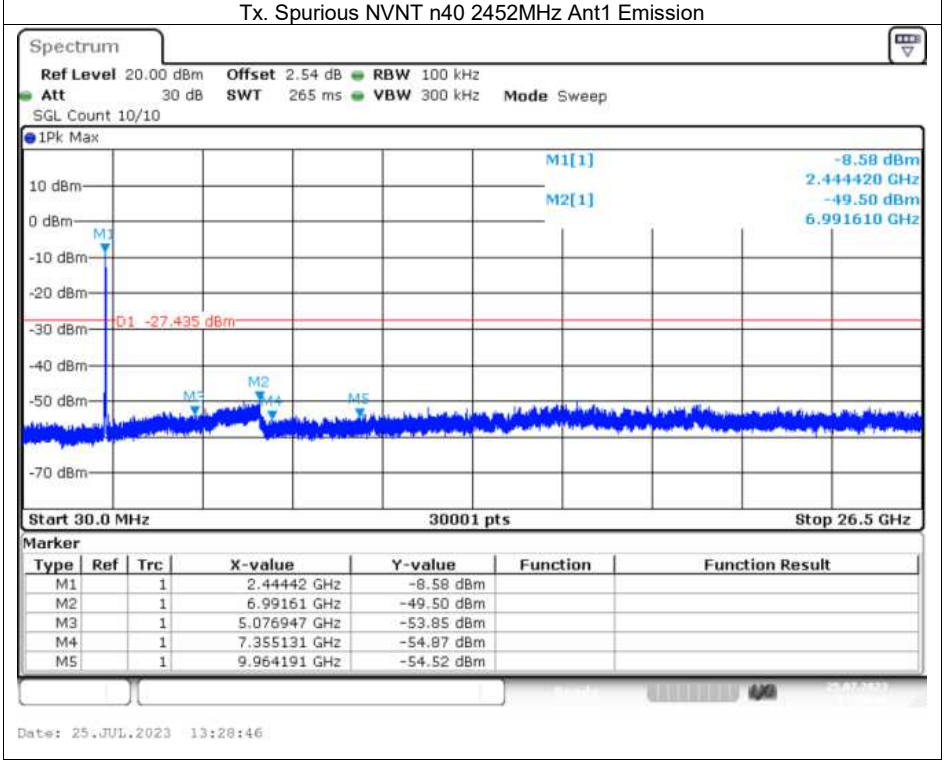


Tx. Spurious NVNT n40 2452MHz Ant1 Ref



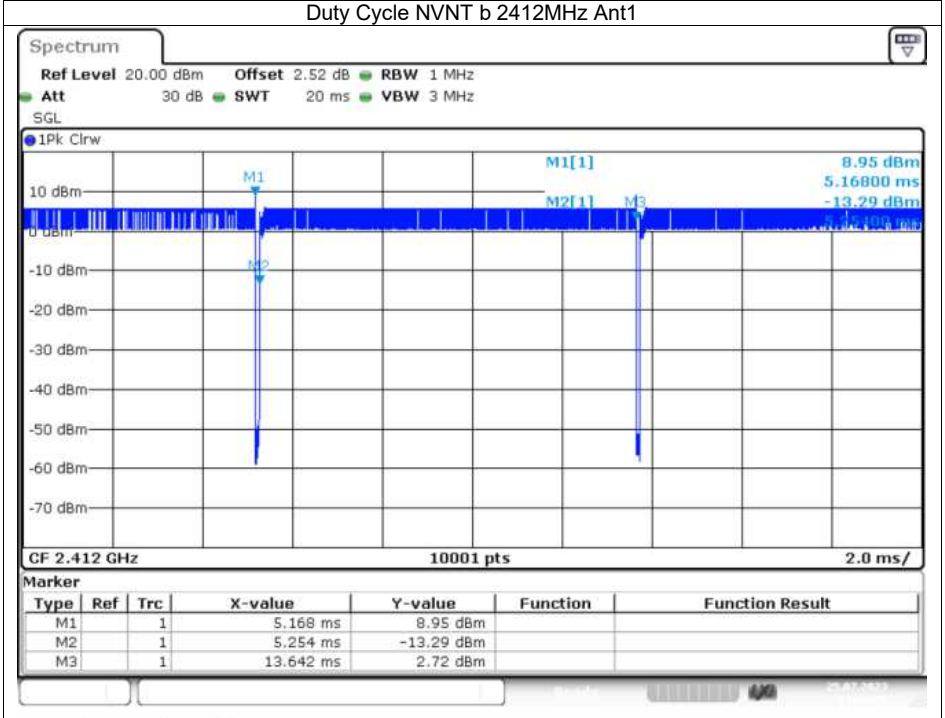
Tx. Spurious NVNT n40 2452MHz Ant1 Emission



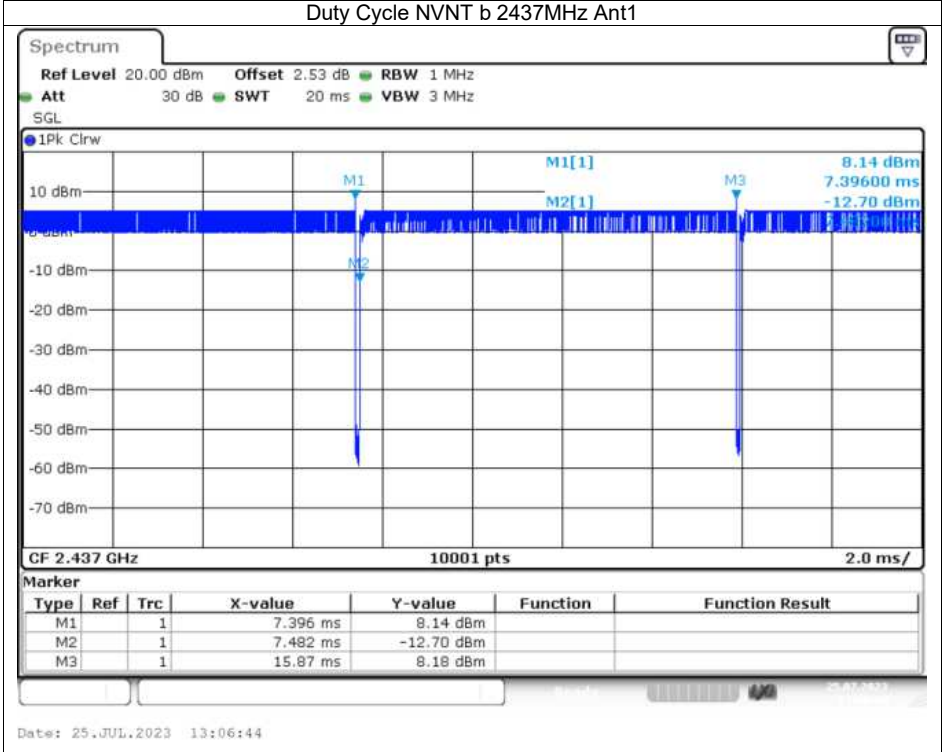
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	98.99	0	0.12
NVNT	b	2437	Ant1	98.99	0	0.12
NVNT	b	2462	Ant1	98.99	0	0.12
NVNT	g	2412	Ant1	98.87	0	0.72
NVNT	g	2437	Ant1	98.87	0	0.72
NVNT	g	2462	Ant1	98.87	0	0.72
NVNT	n20	2412	Ant1	98.94	0	0.77
NVNT	n20	2437	Ant1	98.94	0	0.77
NVNT	n20	2462	Ant1	98.94	0	0.77
NVNT	n40	2422	Ant1	99.09	0	1.53
NVNT	n40	2437	Ant1	98.78	0	1.54
NVNT	n40	2452	Ant1	99.09	0	1.53

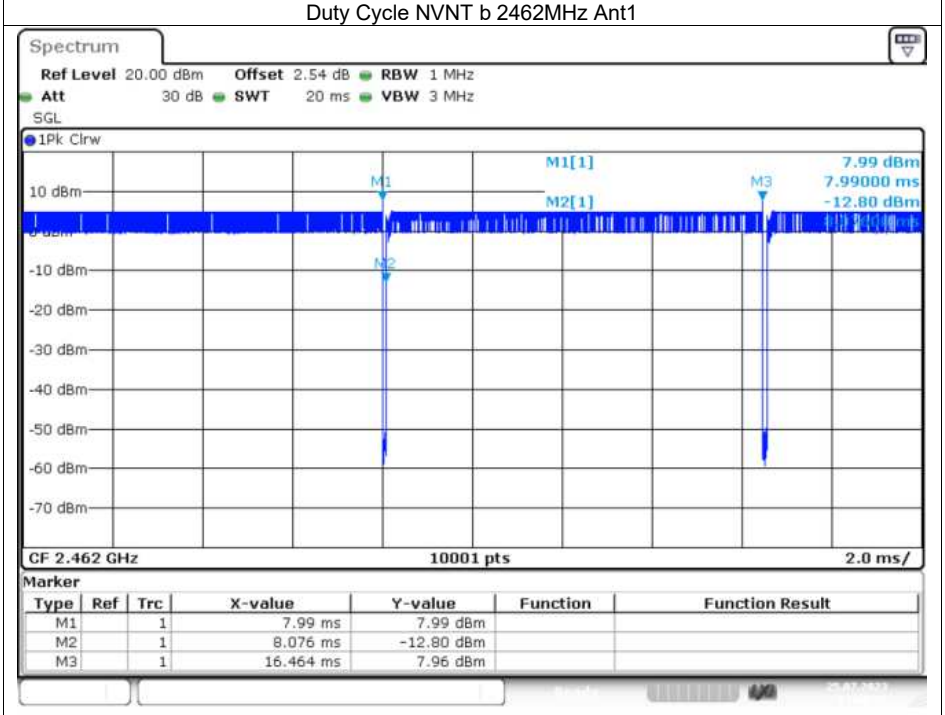
Test Graphs
Duty Cycle NVNT b 2412MHz Ant1



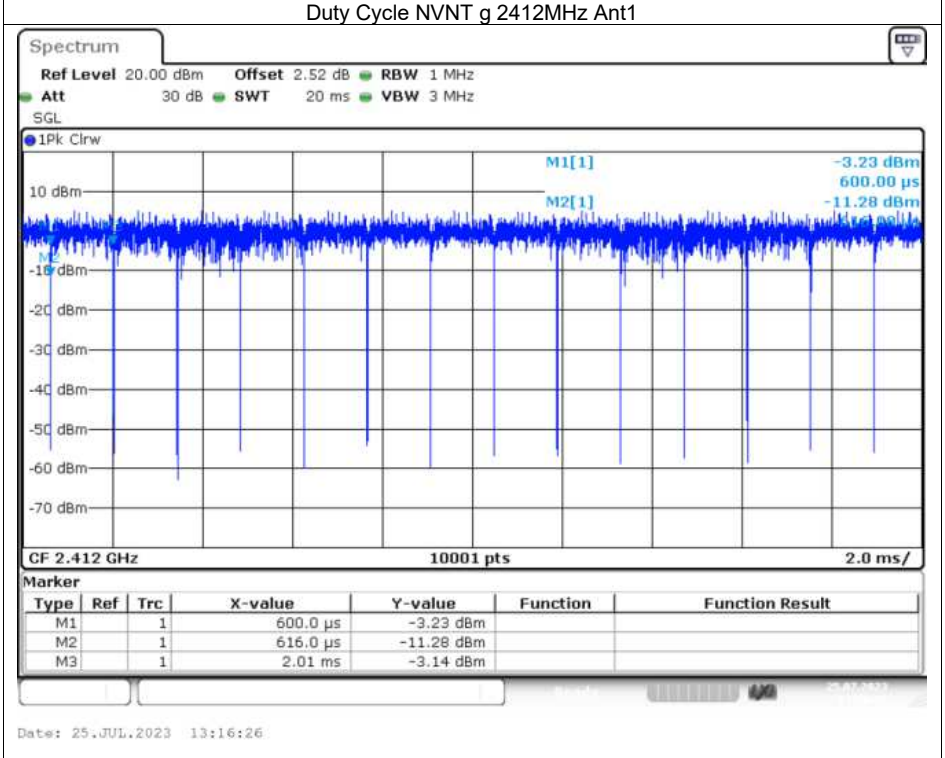
Duty Cycle NVNT b 2437MHz Ant1



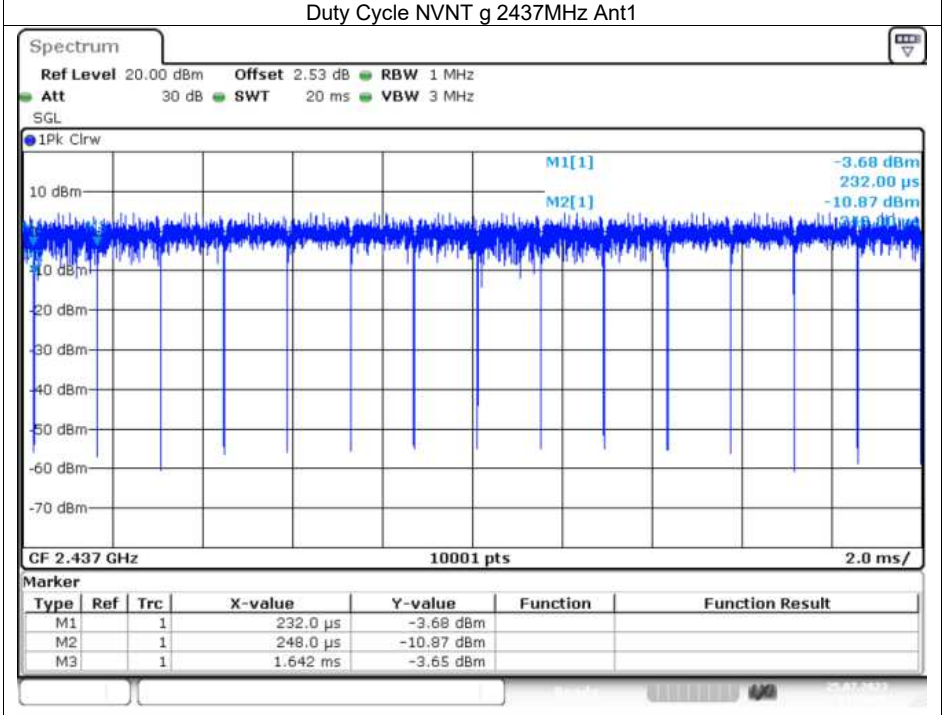
Duty Cycle NVNT b 2462MHz Ant1



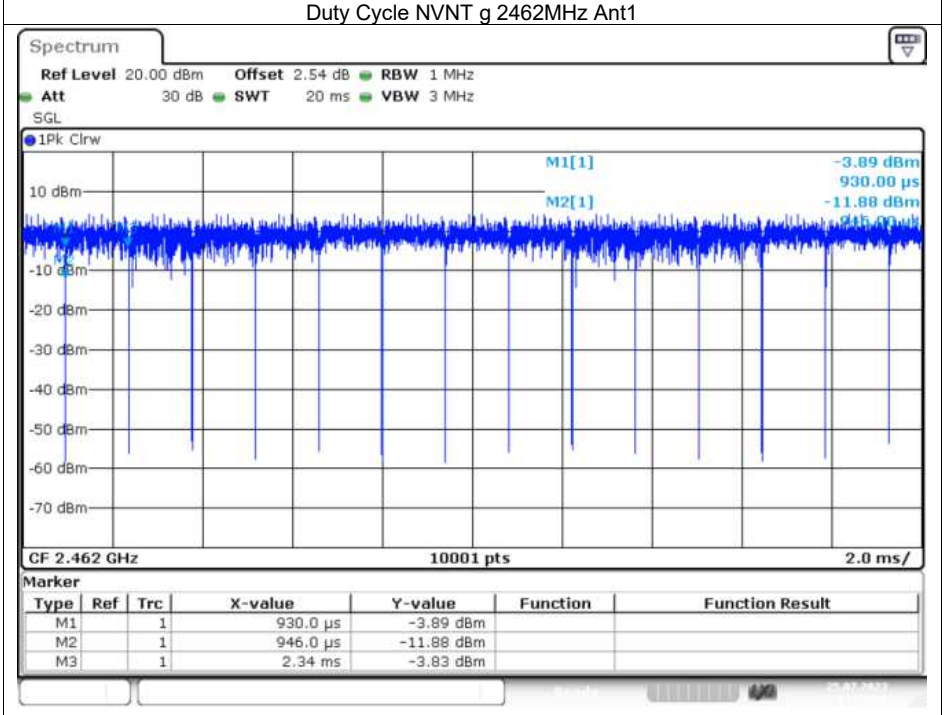
Duty Cycle NVNT g 2412MHz Ant1



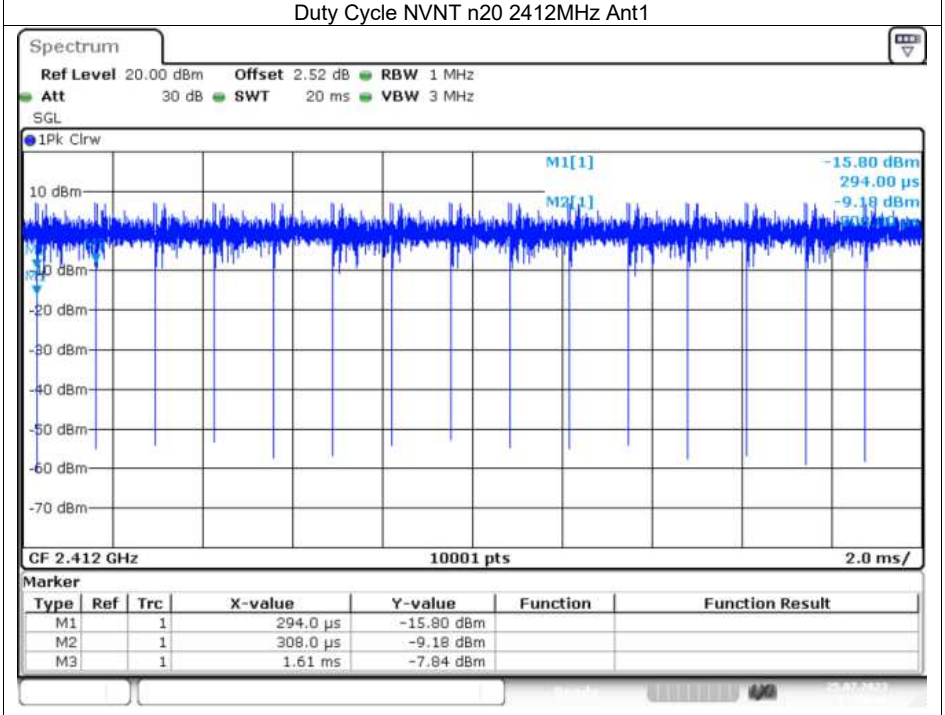
Duty Cycle NVNT g 2437MHz Ant1



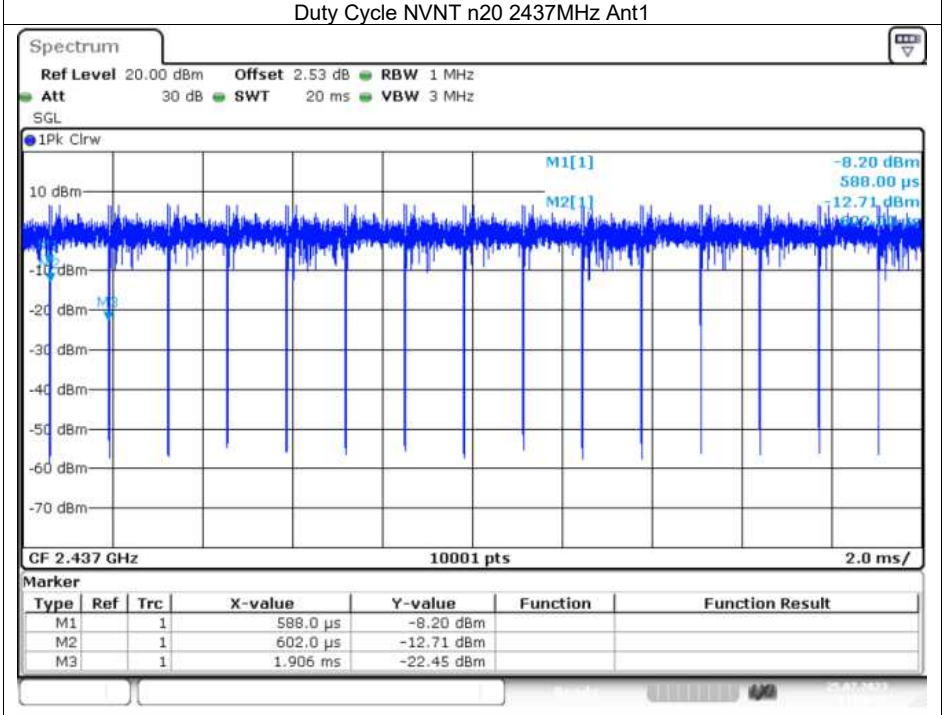
Duty Cycle NVNT g 2462MHz Ant1



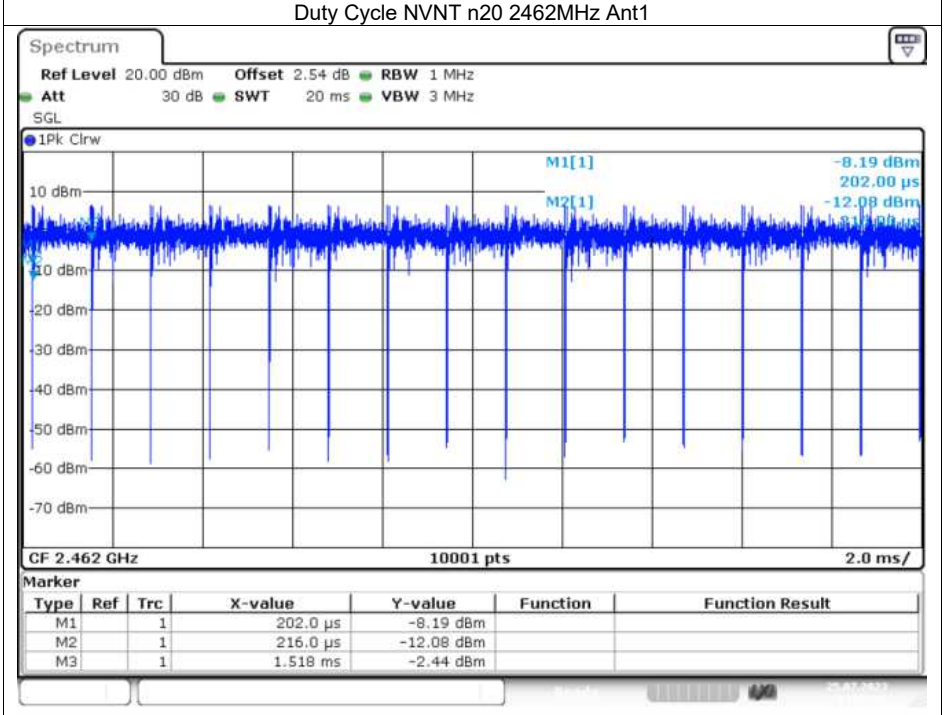
Duty Cycle NVNT n20 2412MHz Ant1



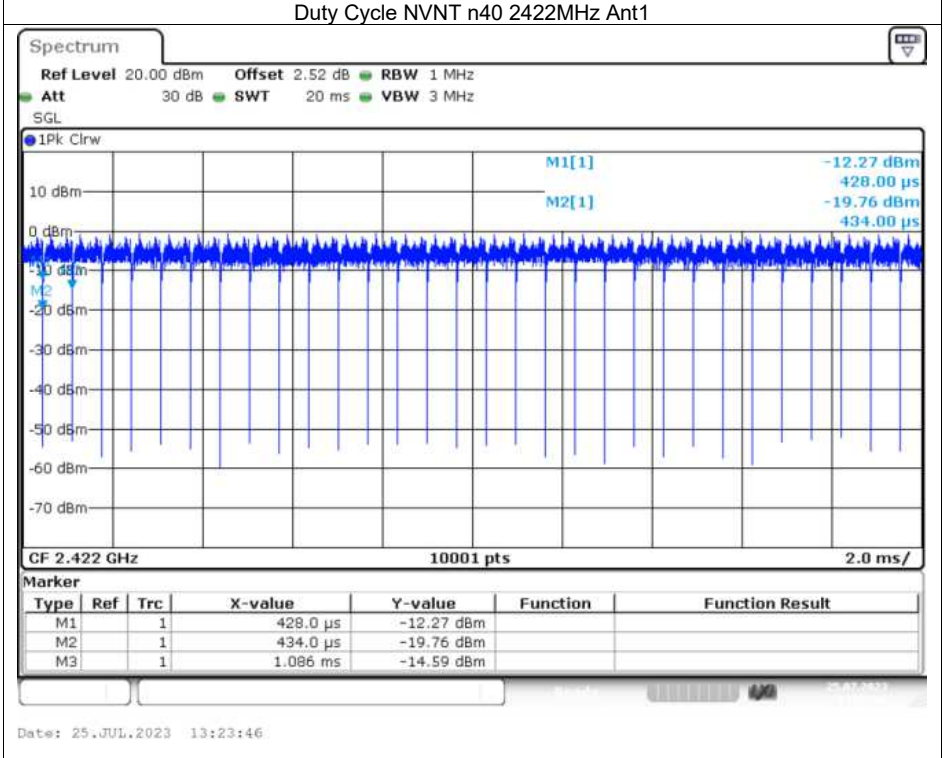
Duty Cycle NVNT n20 2437MHz Ant1



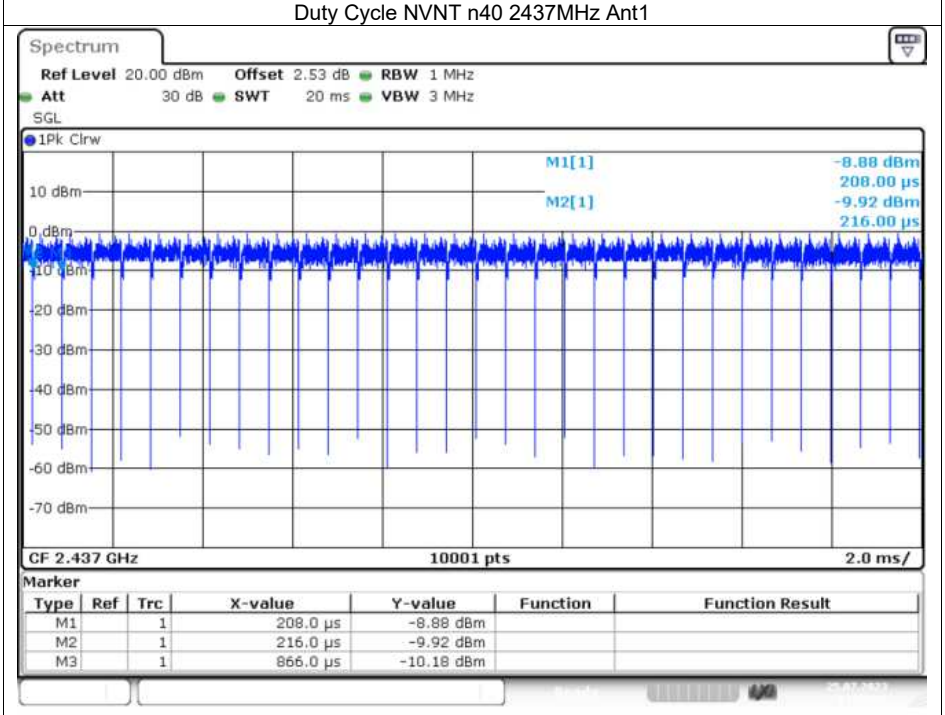
Duty Cycle NVNT n20 2462MHz Ant1



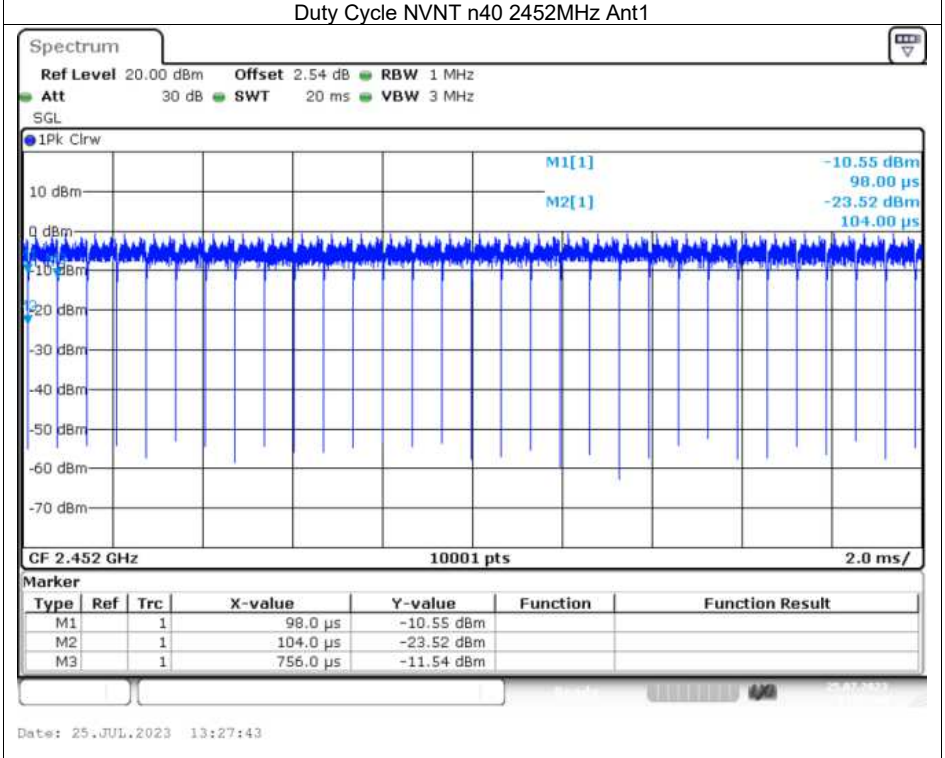
Duty Cycle NVNT n40 2422MHz Ant1



Duty Cycle NVNT n40 2437MHz Ant1



Duty Cycle NVNT n40 2452MHz Ant1



APPENDIX: PHOTOGRAPHS OF TEST CONFIGURATION

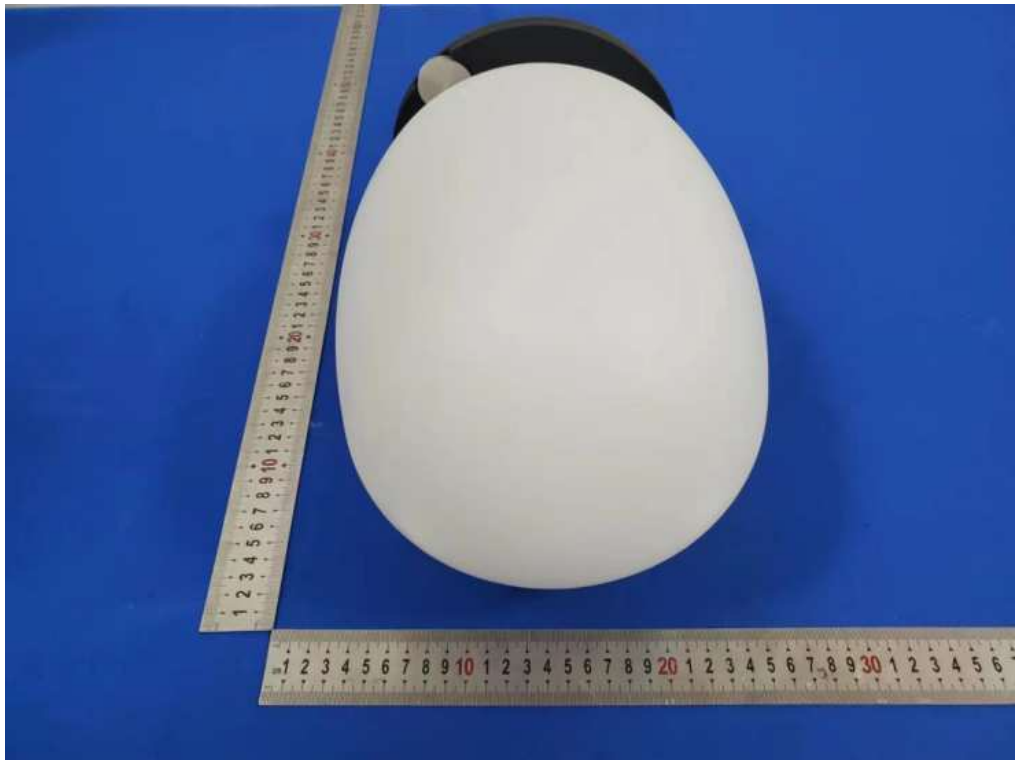
Radiated emissions below 1GHz

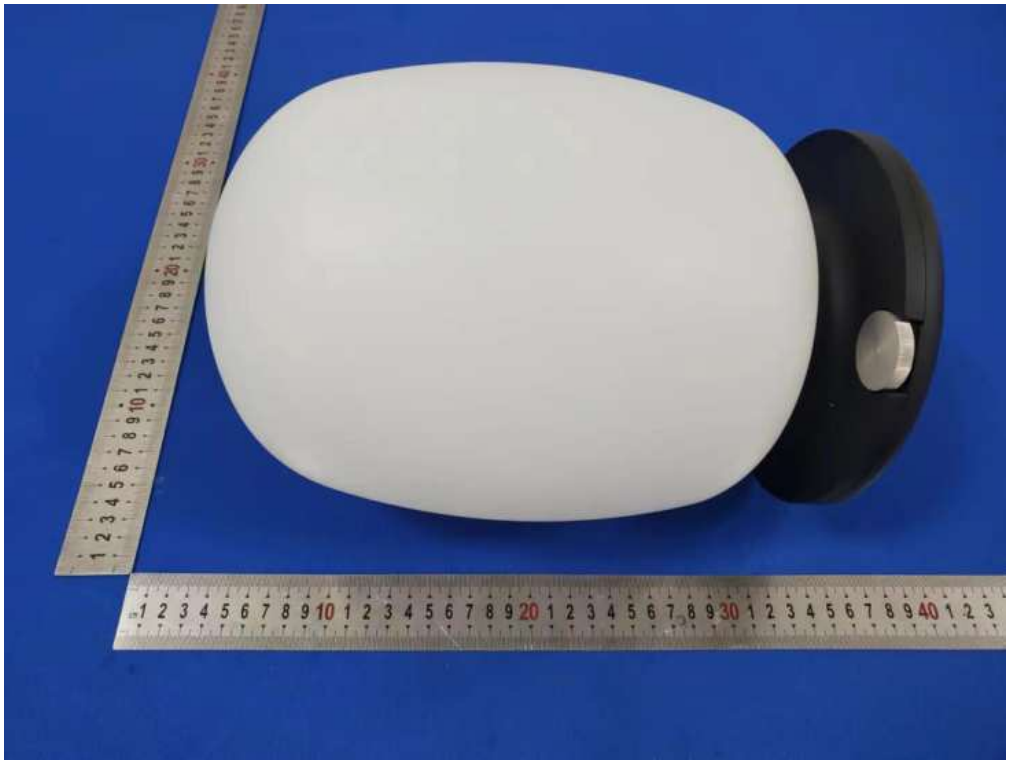
Radiated emissions above 1GHz

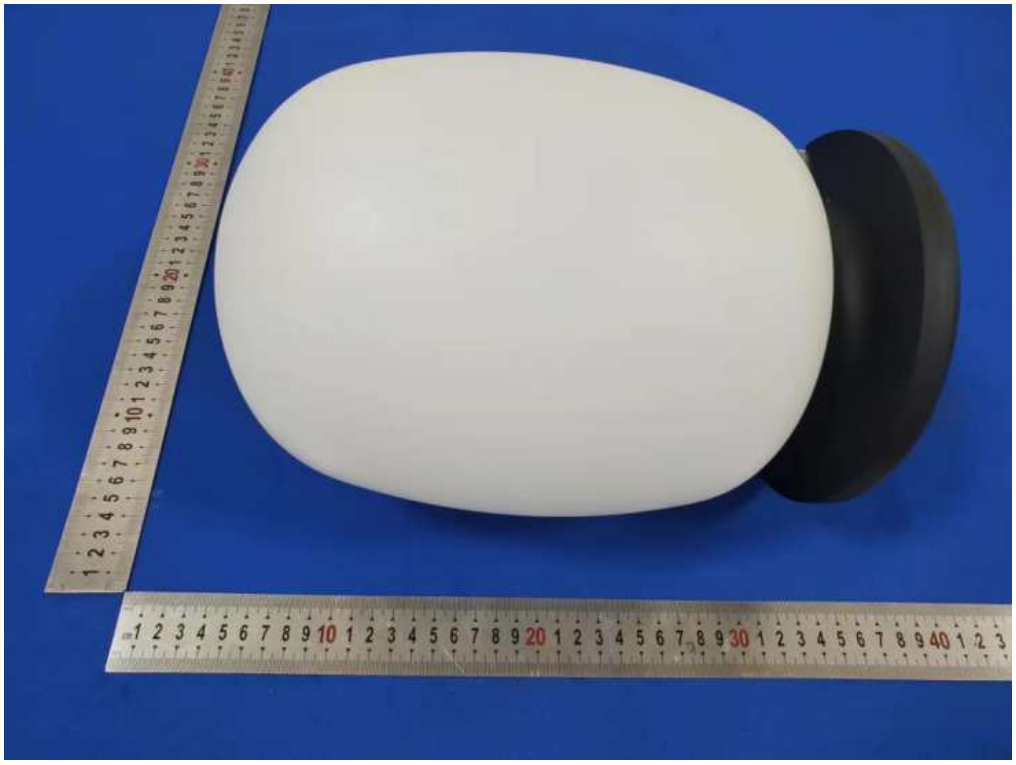
Conducted emissions

APPENDIX: PHOTOGRAPHS OF THE EUT

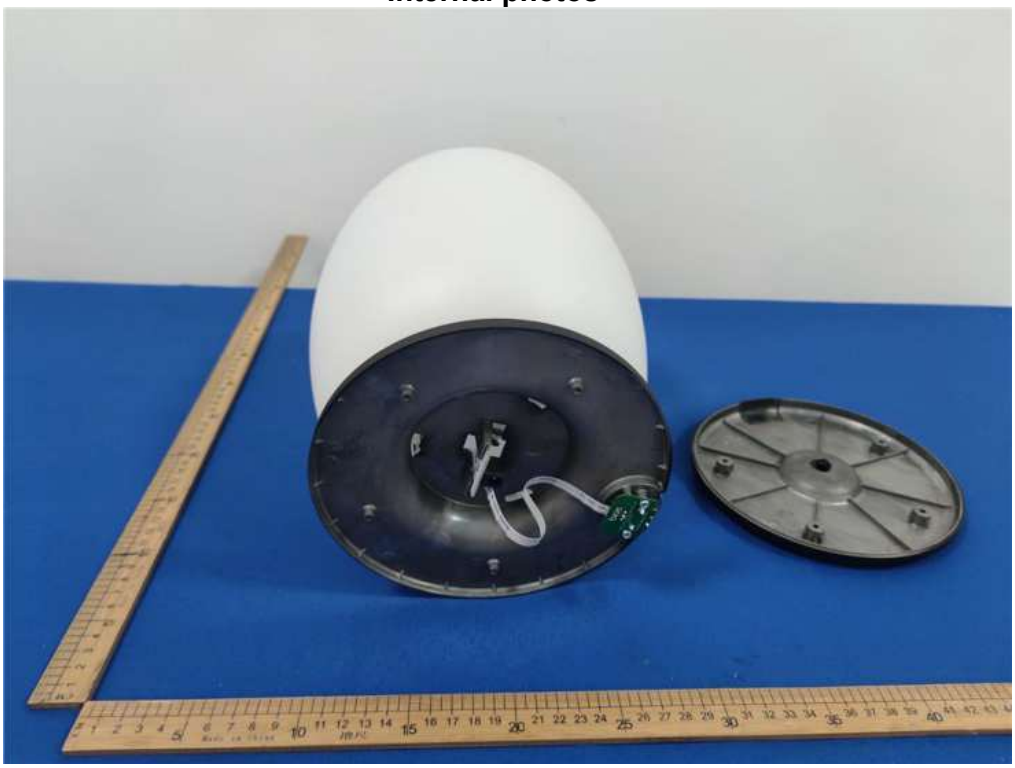
External photos

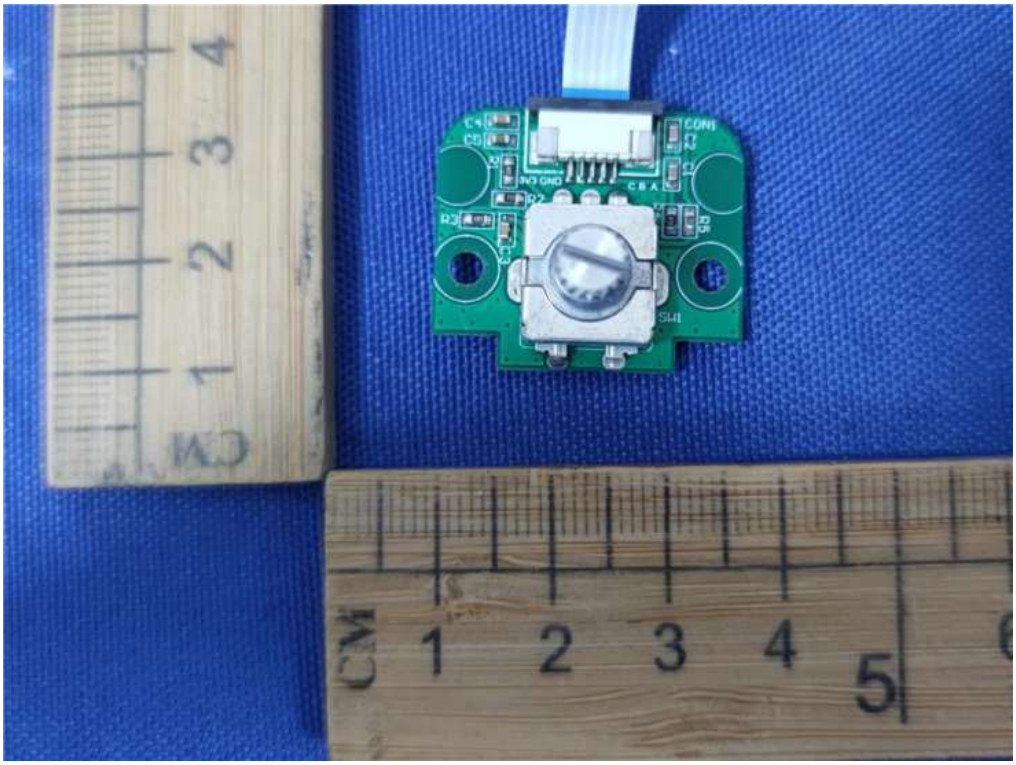


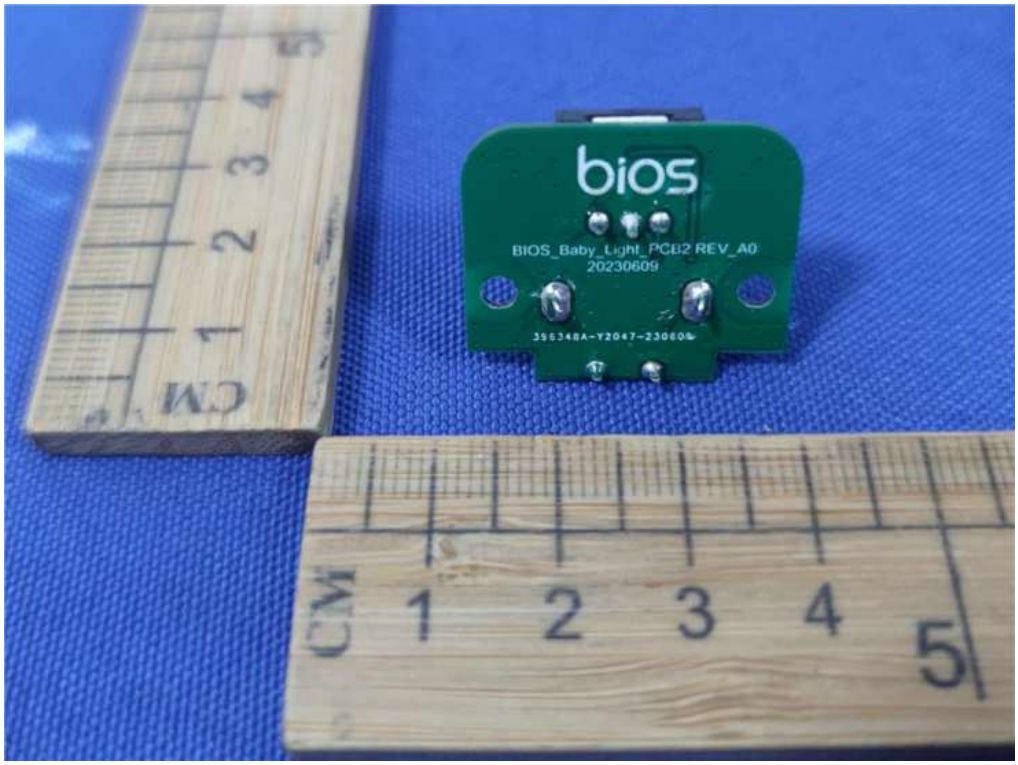


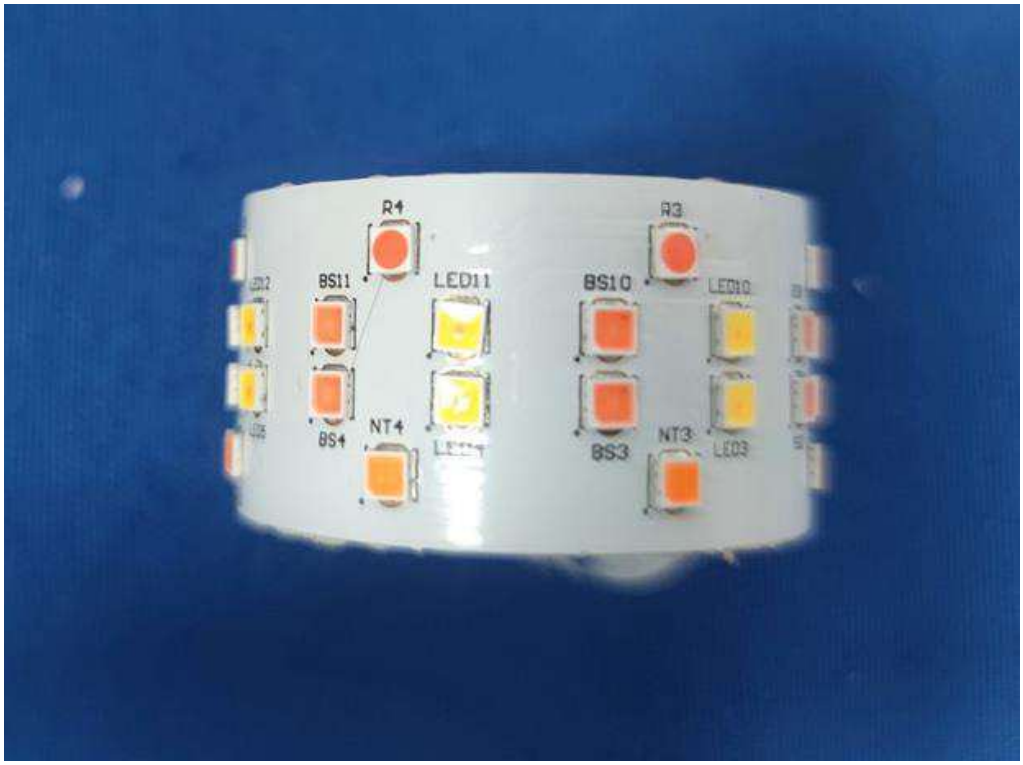


Internal photos

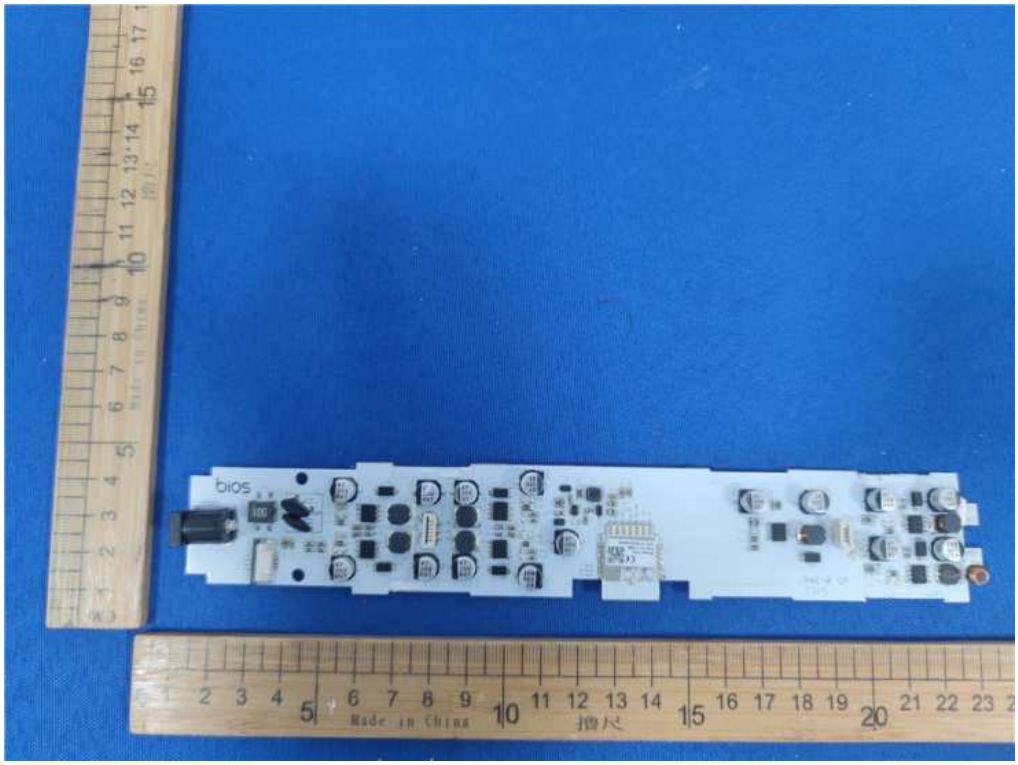


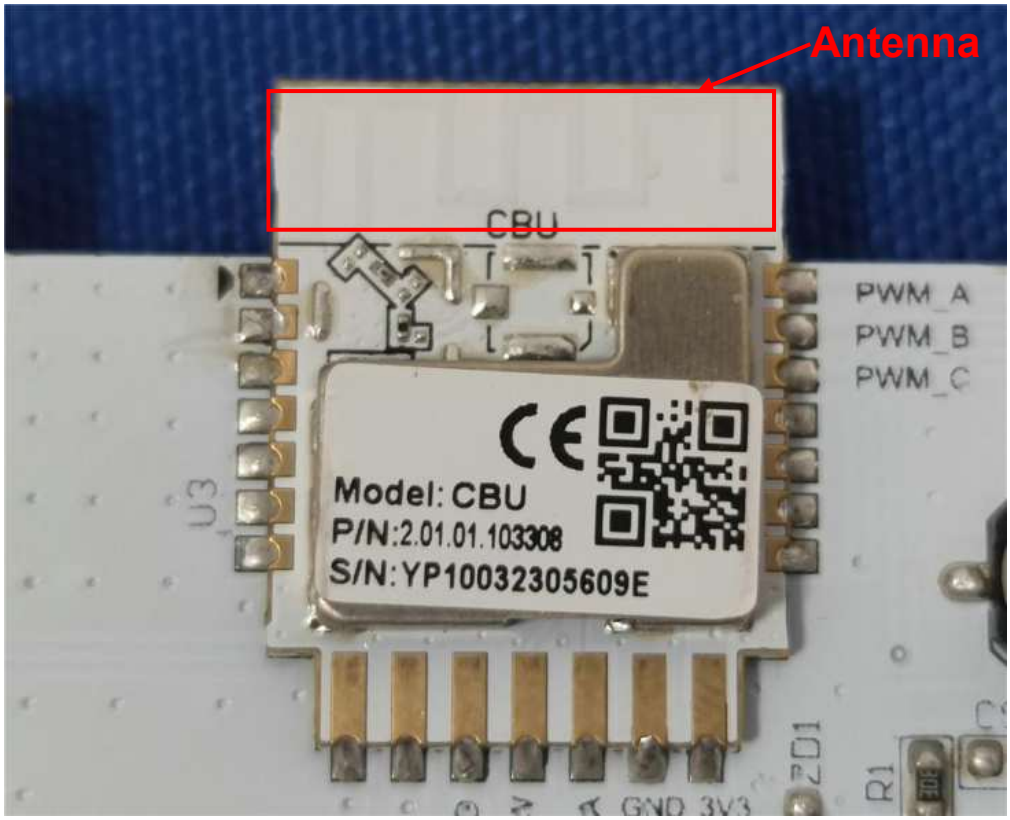


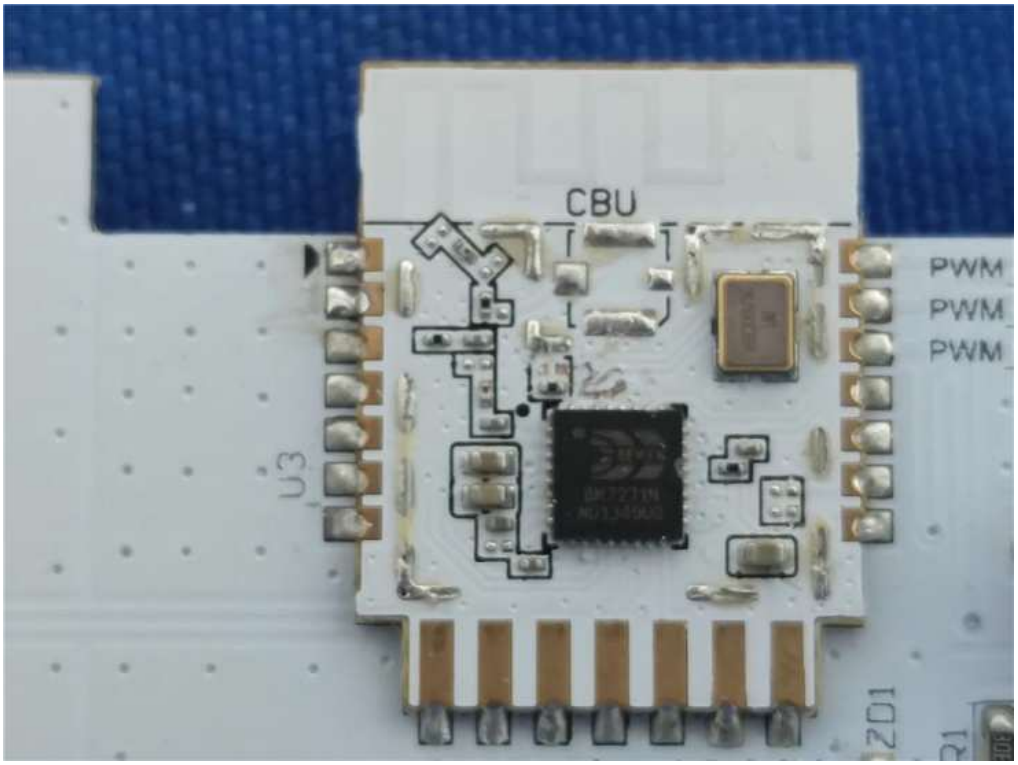

bios
BIOS_Baby_Light_PCB2 REV_A0
20230609

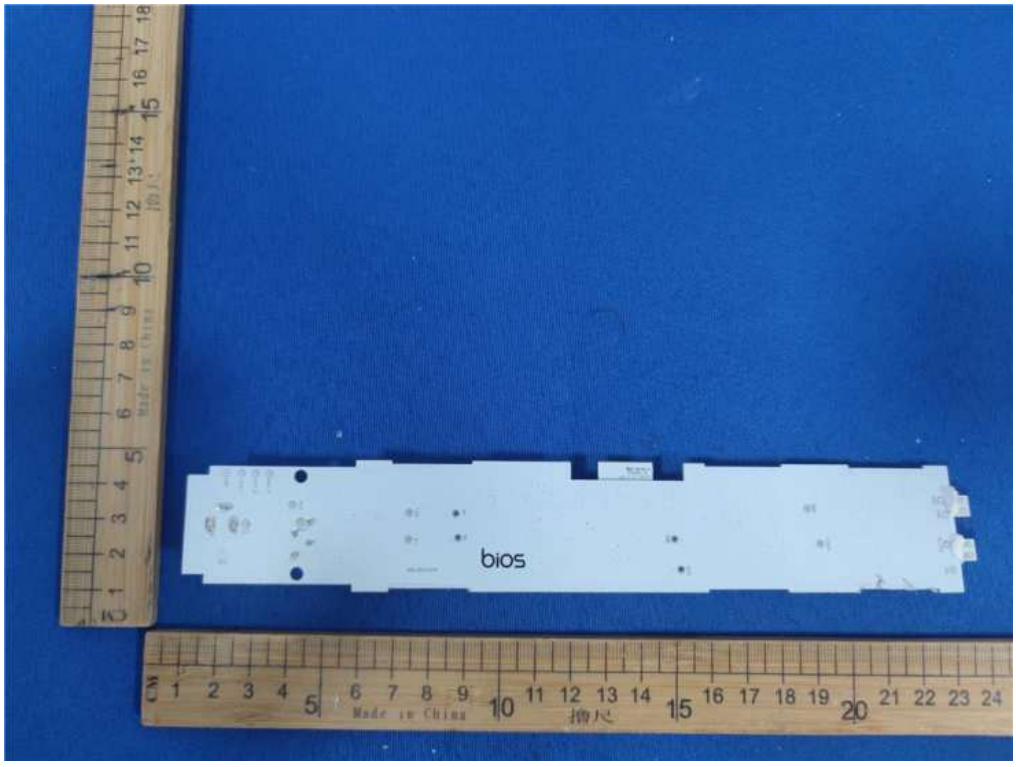

R4
R3
BS11
LED11
BS10
LED10
BS4
NT4
BS3
NT3
LED3


TW31
TW32
TW5
TW6
TW7
TW19
TW20
TW21
A LED:7C5B




Antenna
CBU
PWM_A
PWM_B
PWM_C
Model: CBU
P/N:2.01.01.103308
S/N:YP10032305609E
U3
GND 3V3
R1





--- End of Report ---