TEST REPORT

APPLICANT	:	Beijing Five Seasons Medical Technology Co., Ltd
PRODUCT NAME	:	Sleep Tracking Mat
MODEL NAME	:	WUJI-M2US
BRAND NAME	:	N/A
FCC ID	:	2BXO2WUJI-M2US
STANDARD(S)	:	47 CFR Part 15 Subpart C
RECEIPT DATE	:	2026-06-05
TEST DATE	:	2026-06-11 to 2026-08-04
ISSUE DATE	:	2026-09-20

Edited by: Zeng Xiaoying (Rapporteur)

Approved by: Shen Junsheng (Supervisor)

NOTE: This document is issued by Shenzhen Morlab Communications Technology Co., Ltd., the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.

MORLAB

Shenzhen Morlab Communications Technology Co., Ltd.
FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road,
Block67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

Tel: 86-755-36698555 Fax: 86-755-36698525
Http://www.morlab.cn E-mail: service@morlab.cn

DIRECTORY

1. Summary of Test Result ····· 4
1.1. Testing Applied Standards ····· 5
1.2. Test Equipment List ····· 6
1.3. Measurement Uncertainty ····· 8
1.4. Testing Laboratory ····· 8
2. General Description ····· 9
2.1. Information of Applicant and Manufacturer ····· 9
2.2. Information of EUT ····· 9
2.3. Channel List of EUT ····· 10
2.4. Test Configuration of EUT ····· 11
2.5. Test Conditions ····· 11
2.6. Test Setup Layout Diagram ····· 11
3. Test Results ····· 14
3.1. Antenna Requirement ····· 14
3.2. Hopping Mechanism ····· 15
3.3. Number of Hopping Frequency ····· 16
3.4. Duty Cycle of Test Signal ····· 17
3.5. Maximum Peak Conducted Output Power ····· 18
3.6. Maximum Average Conducted Output Power ····· 19
3.7. 20 dB Bandwidth ····· 20
3.8. Carried Frequency Separation ····· 21
3.9. Time of Occupancy (Dwell time) ····· 22
3.10. Conducted Spurious Emissions and Band Edge ····· 23
3.11. Conducted Emission ····· 24
3.12. Restricted Frequency Bands ····· 25
3.13. Radiated Emission ····· 26

Annex A Test Data and Result ····· **28**

Notes ····· **105**

Change History		
Version	**Date**	**Reason for change**
1.0	2026-09-20	First edition

1. Summary of Test Result

No.	Section	Description	Test Date	Test Engineer	Result	Remark
1	15.203	Antenna Requirement	N/A	N/A	PASS	/
2	15.247(a) 15.247(h)	Hopping Mechanism	N/A	N/A	PASS	/
3	15.247(a)	Number of Hopping Frequency	Jul. 27, 2026	Lin Haoyang	PASS	/
4	ANSI C63.10	Duty Cycle	Jul. 27, 2026	Lin Haoyang	PASS	/
5	15.247(b)	Maximum Peak Conducted Output Power	Jul. 27, 2026	Lin Haoyang	PASS	/
6	15.247(b)	Maximum Average Conducted Output Power	Jul. 27, 2026	Lin Haoyang	PASS	/
7	15.247(a)	20dB Bandwidth	Jul. 27, 2026	Lin Haoyang	PASS	/
8	15.247(a)	Carrier Frequency Separation	Jul. 27, 2026	Lin Haoyang	PASS	/
9	15.247(a)	Time of Occupancy (Dwell time)	Jul. 27, 2026	Lin Haoyang	PASS	/
10	15.247(d)	Conducted Spurious Emission and Band Edge	Jul. 27, 2026	Lin Haoyang	PASS	/
11	15.207	Conducted Emission	Jun. 11, 2026	Wang Yapeng	PASS	/
12	15.247(d)	Restricted Frequency Bands	Jun. 25, 2026	Xiong Xianhong	PASS	/
13	15.209, 15.247(d)	Radiated Emission	Jul. 25, 2026	Xiong Xianhong	PASS	/

Note 1: The tests were performed according to the method of measurements prescribed in ANSI C63.10-2020, KDB 558074 D01 v05r02 and DA 00-075.

Note 2: Any additions, deviation, or exclusions from the method shall be noted in the “Remark”.

1.1. Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

• 47 CFR Part 15 Subpart C Radio Frequency Devices

1.2. Test Equipment List

1.2.1 Conducted Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
EXA Signal Analzyer	MY53470836	N9010A	Agilent	2025.12.23	2026.12.22
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A

1.2.2 Conducted Emission Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	101052	ESPI	R&S	2026.05.07	2027.05.06
LISN	103131	ENV 216	R&S	2026.03.18	2027.03.17
RF Coaxial Cable (DC-100MHz)	EMC-CE-00514	N/A	N/A	2026.05.06	2027.05.05

1.2.3 List of Software Used

Description	Manufacturer	Software Version
Test System	MaiWei	2.0.0.0
JS32-RE	Tonscend	5.0.0
TS+ -[JS32-CE]	Tonscend	2.5.0.0

1.2.4 Radiated Test Equipment

Equipment	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Signal Analyzer	MY56060145	N9020A	Agilent	2026.04.28	2027.04.27
Test Antenna - Bi-Log	9163-274	VULB 9163	Schwarzbeck	2025.06.28	2026.06.27
				2026.06.28	2027.06.27
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2026.05.09	2027.05.08
Test Antenna – Horn	01774	BBHA 9120D	Schwarzbeck	2026.05.30	2027.05.29
Test Antenna – Horn	BBHA9170 #773	BBHA9170	Schwarzbeck	2026.05.30	2027.05.29
Preamplifier (10MHz-6GHz)	46732	S10M100L3802	LUCIX CORP.	2026.05.07	2027.05.06
Preamplifier (2GHz-18GHz)	61171/61172	S020180L3203	LUCIX CORP.	2026.05.07	2027.05.06
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-40C-S	Decentest	2026.05.07	2027.05.06
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2025.09.03	2026.09.02
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2025.09.03	2026.09.02
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2025.09.03	2026.09.02
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-KK-0.5	Qualwave	2025.09.03	2026.09.02
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-KKF-2	Qualwave	2025.09.03	2026.09.02
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-NN-5	Qualwave	2025.09.03	2026.09.02
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	N/A	N/A
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.06.21	2028.06.20
Anechoic Chamber	N/A	9m*6m*6m	CRT	2025.04.19	2028.04.18

1.3. Measurement Uncertainty

Test Items	Uncertainty	Remark
Number of Hopping Frequency	±5%	Confidence levels of 95%
Peak Output Power	±2.22dB	Confidence levels of 95%
Bandwidth	±5%	Confidence levels of 95%
Carrier Frequency Separation	±5%	Confidence levels of 95%
Time of Occupancy (Dwell time)	±5%	Confidence levels of 95%
Conducted Spurious Emission	±2.77dB	Confidence levels of 95%
Restricted Frequency Bands	±5%	Confidence levels of 95%
Radiated Emission	±2.95dB	Confidence levels of 95%
Conducted Emission	±2.44dB	Confidence levels of 95%

1.4. Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525
FCC Designation Number:	CN1192
FCC Test Firm Registration Number:	226174

2. General Description

2.1. Information of Applicant and Manufacturer

Applicant:	Beijing Five Seasons Medical Technology Co., Ltd
Applicant Address:	Room B1701, 15th Floor, Building 8, Yard 1, Zhongguancun East Road, Haidian District, Beijing, China
Manufacturer:	Beijing Five Seasons Medical Technology Co., Ltd
Manufacturer Address:	Room B1701, 15th Floor, Building 8, Yard 1, Zhongguancun East Road, Haidian District, Beijing, China

2.2. Information of EUT

Product Name:	Sleep Tracking Mat
Sample No.:	1#, 2#
Hardware Version:	M2_MB_V1.0
Software Version:	20522168
Equipment Type:	Bluetooth classic
Bluetooth Version:	4.0
Modulation Type:	FHSS (GFSK(1Mbps), π/4-DQPSK(EDR 2Mbps), 8-DPSK(EDR 3Mbps))
Operating Frequency Range:	2402MHz-2480MHz
Antenna Type:	PIFA Antenna
Antenna Gain:	1.00dBi

Note 1: The EUT description presented in the report are provided by applicant and/or manufacturer, and the test laboratory is not responsible for the accuracy of the information. For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

2.3. Channel List of EUT

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	**2402**	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	**78**	**2480**
19	2421	**39**	**2441**	59	2461		

Note 1: The black bold channels were selected for test.

2.4. Test Configuration of EUT

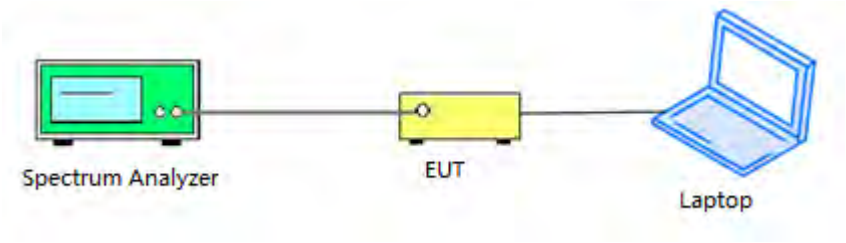
Test mode is used to control the EUT under the maximum power level during test.

2.5. Test Conditions

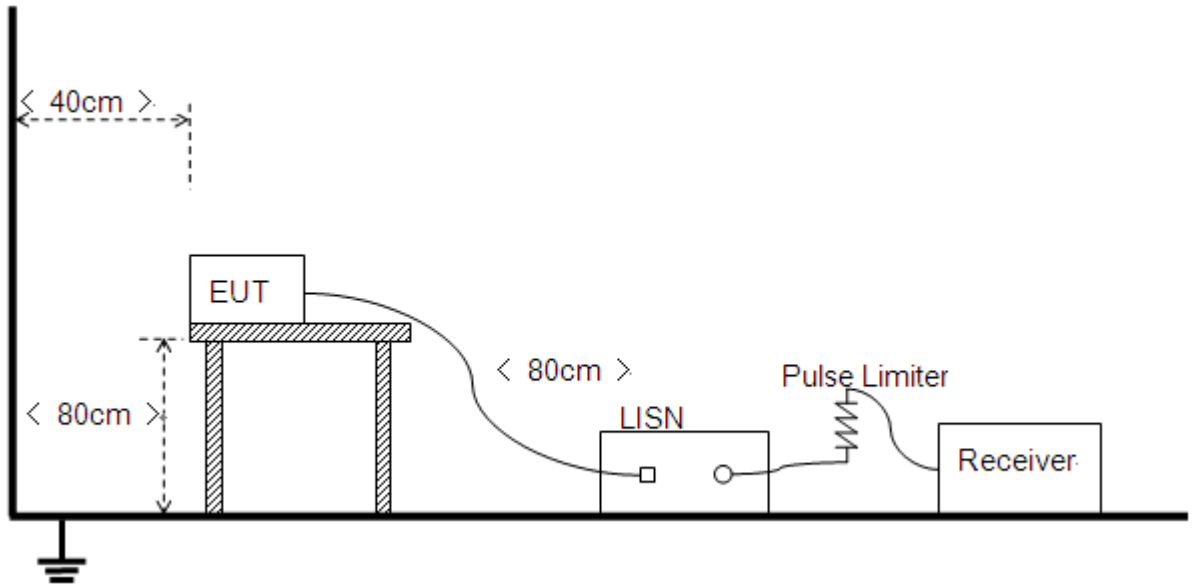
Temperature (°C):	15-35
Relative Humidity (%):	30-60
Atmospheric Pressure (kPa):	86-106

2.6. Test Setup Layout Diagram

2.6.1.Conducted Measurement

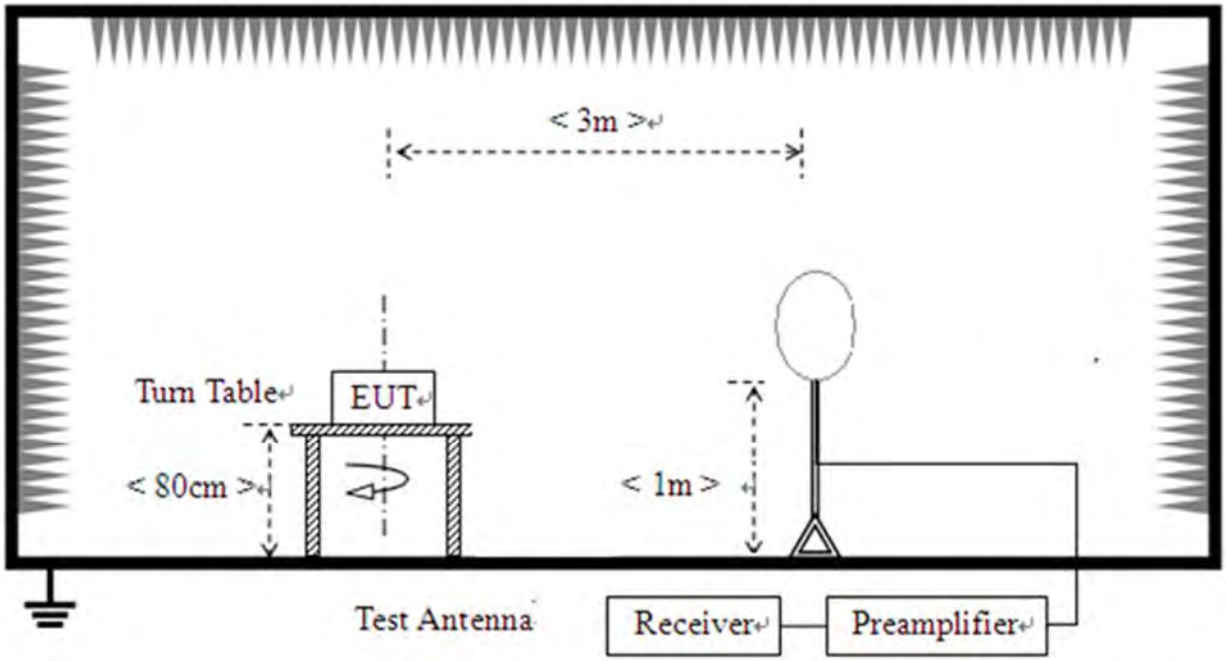


2.6.2.Conducted Emission Measurement

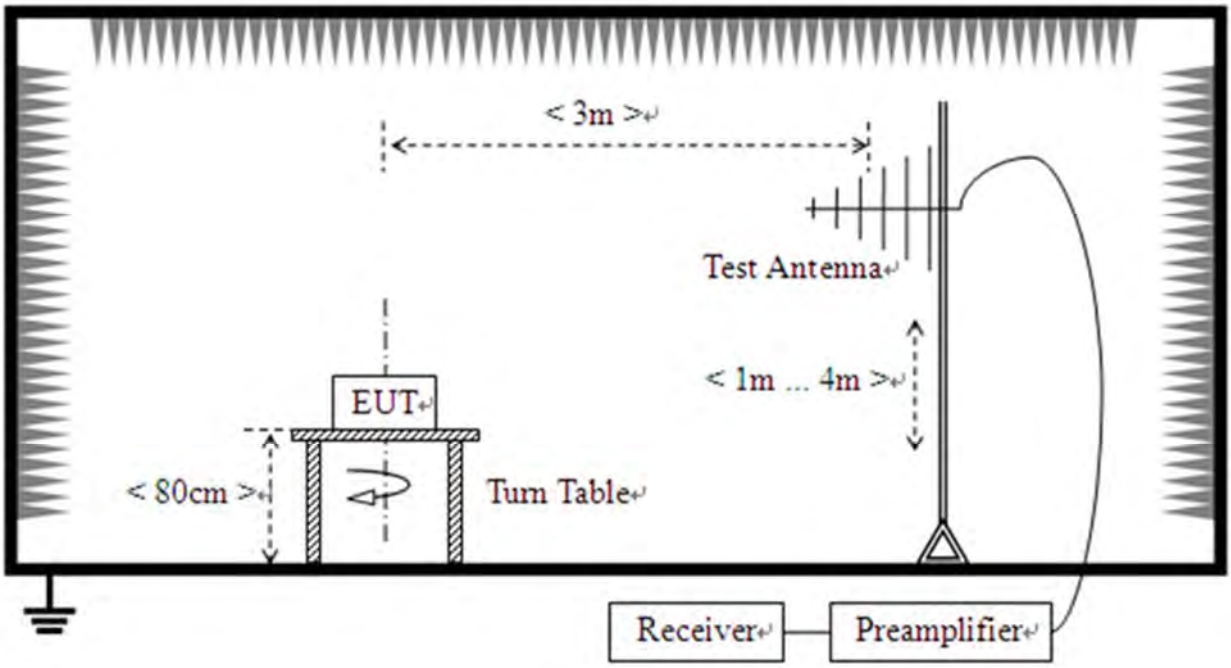


2.6.3.Radiation Measurement

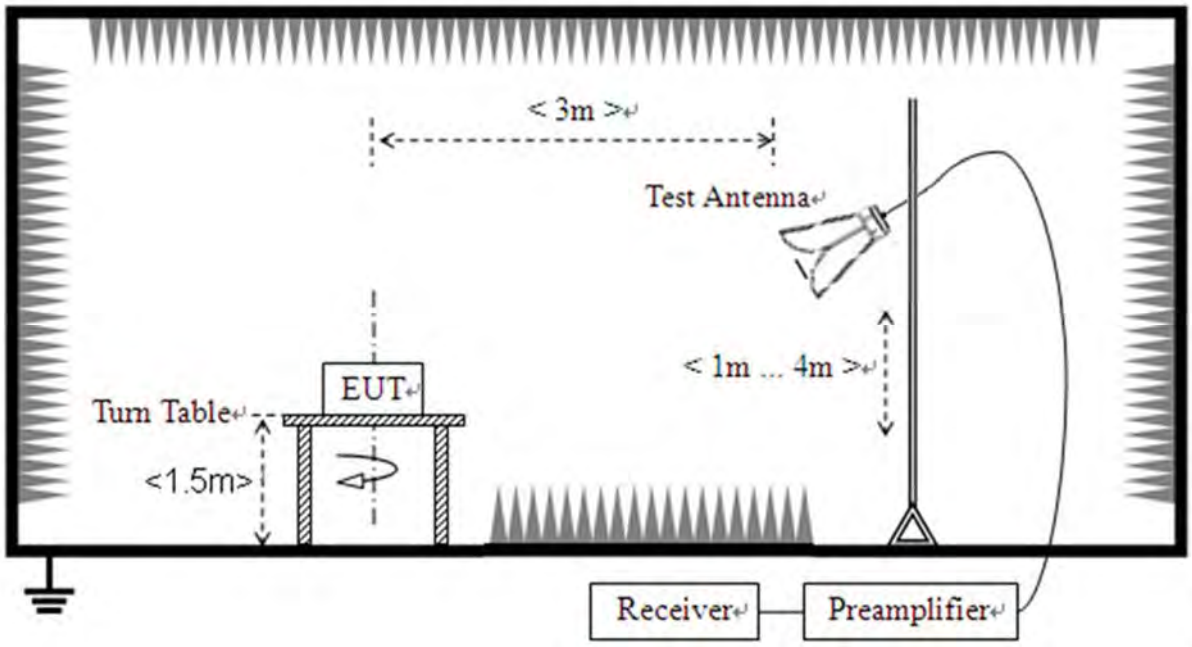
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to1GHz



3) For radiated emissions above 1GHz



3. Test Results

3.1. Antenna Requirement

3.1.1. Requirement

According 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.

3.1.2. Test Result

Antenna location	Antenna Type	Coupling Method
☒Internal ☐External	☐FPC Antenna ☐Spring Antenna ☐Ceramic Antenna ☐Integrated Antenna ☐Dipole Antenna ☐PCB Antenna ☒PIFA Antenna	☐I-PEX Connector ☐SMA Connector ☐RP-SMA Connector ☒Metal Shrapnel ☐Layout

3.2. Hopping Mechanism

3.2.1.Requirement

According to FCC section 15.247(a)(1), a frequency hopping spread spectrum system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

According to FCC section 15.247(h), the incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hop sets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

3.2.2.Test Result

The hopping mechanism of the EUT is in compliance with the document "***Bluetooth core specification v5.1***".

3.3. Number of Hopping Frequency

3.3.1.Requirement

According to FCC section 15.247(a)(1)(iii), frequency hopping systems operating in the 2400MHz to 2483.5MHz bands shall use at least 15 hopping frequencies.

3.3.2.Test Procedures

The EUT must have its hopping function enabled. Use the following spectrum analyzer settings:
Span = the frequency band of operation
RBW: To identify clearly the individual channels, set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller.
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold
Allow the trace to stabilize

3.3.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.3.4.Test Result

Refer to Annex A.1 in this report.

3.4. Duty Cycle of Test Signal

3.4.1.Requirement

Preferably, all measurements of maximum conducted (average) output power will be performed with the EUT transmitting continuously (i.e., with a duty cycle of greater than or equal to 98%).When continuous operation cannot be realized, then the use of sweep triggering/signal gating techniques can be used to ensure that measurements are made only during transmissions at the maximum power control level. Such sweep triggering/signal gating techniques will require knowledge of the minimum transmission duration(T) over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation. Sweep triggering/signal gating techniques can then be used if the measurement/sweep time of the analyzer can be set such that it does not exceed T at any time that data are being acquired (i.e.,no transmitter OFF-time is to be considered).
When continuous transmission cannot be achieved and sweep triggering/signal gating cannot be implemented, alternative procedures are provided that can be used to measure the average power; however, they will require an additional measurement of the transmitter duty cycle (D). Within this sub clause, the duty cycle refers to the fraction of time over which the transmitter is ON and is transmitting at its maximum power control level. The duty cycle is considered to be constant if variations are less than ±2%; otherwise, the duty cycle is considered to be non constant.

3.4.2.Test Result

Refer to Annex A.2 in this report.

3.5. Maximum Peak Conducted Output Power

3.5.1. Requirement

According to FCC section 15.247(b)(1), for frequency hopping systems that operates in the 2400MHz to 2483.5MHz band employing at least 75 hopping channels, the maximum peak output power of the intentional radiator shall not exceed 1Watt. For all other frequency hopping systems in the 2400MHz to 2483.5MHz band, it is 0.125Watts.

3.5.2. Test Procedures

KDB 558074 Section 8.3.1 was used in order to prove compliance.

3.5.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.5.4. Test Result

Refer to Annex A.3 in this report.

3.6. Maximum Average Conducted Output Power

3.6.1.Requirement

According to FCC section 15.247(b)(1), for frequency hopping systems that operates in the 2400MHz to 2483.5MHz band employing at least 75 hopping channels, the maximum peak output power of the intentional radiator shall not exceed 1Watt. For all other frequency hopping systems in the 2400MHz to 2483.5MHz band, it is 0.125Watts.

3.6.2.Test Procedures

KDB 558074 Section 8.3.2 was used in order to prove compliance.

3.6.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.6.4.Test Result

Refer to Annex A.4 in this report.

3.7. 20 dB Bandwidth

3.7.1.Requirement

According to FCC section 15.247(a)(1), the 20 dB bandwidth is known as the 99% emission bandwidth, or 20 dB bandwidth (10*log1% = 20 dB) taking the total RF output power.

3.7.1.Test Procedures

Use the following spectrum analyzer settings:
Span = between 2 to 5 times the OBW, centered on the test channel
RBW= 1% to 5% of the OBW
VBW ≥ 3 x RBW
Sweep = auto
Detector function = peak
Trace = max hold

3.7.2.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.7.3.Test Result

Refer to Annex A.5 in this report.

3.8. Carried Frequency Separation

3.8.1.Requirement

According to FCC section 15.247(a)(1), frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25kHz or two-thirds of the 20dB bandwidth of the hopping channel, whichever is greater.

3.8.2.Test Procedures

The EUT must have its hopping function enabled. According to DA 00-705, use the following spectrum analyzer settings:
Span = wide enough to capture the peaks of two adjacent channels
Resolution (or IF) Bandwidth (RBW) ≥ 1% of the span
Video (or Average) Bandwidth (VBW) ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold
Allow the trace to stabilize. Use the marker-delta function to determine the separation between the peaks of the adjacent channels.

3.8.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.8.4.Test Result

Refer to Annex A.6 in this report.

3.9. Time of Occupancy (Dwell time)

3.9.1.Requirement

According to FCC section 15.247(a) (1) (iii), frequency hopping systems in the 2400 - 2483.5MHz band shall use at least 15 non-overlapping channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

3.9.2.Test Procedures

Normal Mode:
DH1: Dwell time equal to Pulse time (ms) *(1600 / 2 /79)*31.6 Millisecond DH3: Dwell time equal to Pulse time (ms) * (1600 /4 /79) *31.6 Millisecond DH5: Dwell time equal to Pulse Time (ms)* (1600 / 6 /79) *31.6 Millisecond
AFH Mode:
DH1: Dwell time equal to Pulse time (ms) *(800 / 2 /20)*(0.4*20) Millisecond DH3: Dwell time equal to Pulse time (ms) * (800 / 4 /20)*(0.4*20) Millisecond DH5: Dwell time equal to Pulse Time (ms)* (800 / 6 /20)*(0.4*20) Millisecond.

3.9.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.9.4.Test Result

Refer to Annex A.7 in this report.

3.10. Conducted Spurious Emissions and Band Edge

3.10.1.Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

3.10.2.Test Procedures

Use the following spectrum analyzer settings:
Span = wide enough to capture the peak level of the in-band emission and all spurious emissions (e.g., harmonics) from the lowest frequency generated in the EUT up through the 10th harmonic. Typically, several plots are required to cover this entire span.
RBW = 100 kHz
VBW ≥ RBW
Sweep = auto
Detector function = peak
Trace = max hold
Allow the trace to stabilize.

3.10.3.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.10.4.Test Result

Refer to Annex A.8 and A.9 in this report.

3.11. Conducted Emission

3.11.1.Requirement

According to FCC section 15.207, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a 50μH/50Ω line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dBμV)	
	Quai-peak	Average
0.15 - 0.50	66 to 56	56 to 46
0.50 - 5	56	46
5 - 30	60	50

Note:

(a) The lower limit shall apply at the band edges.

(b) The limit decreases linearly with the logarithm of the frequency in the range 0.15 - 0.50MHz.

3.11.2.Test Procedures

The Table-top EUT was placed upon a non-metallic table 0.8m above the horizontal metal reference ground plane. EUT was connected to LISN and LISN was connected to reference Ground Plane. EUT was 80cm from LISN. The set-up and test methods were according to ANSI C63.10.

3.11.3.Test Setup Layout

Refer to chapter 2.6.2 in this report.

3.11.4.Test Result

Refer to Annex A.10 in this report.

3.12. Restricted Frequency Bands

3.12.1.Requirement

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in 15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

3.12.2.Test Procedures

The EUT is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading.
For the Test Antenna:
Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength.
Span = wide enough to fully capture the emission being measured
RBW = 1 MHz for f ≥ 1GHz, 100 kHz for f < 1GHz
VBW = 3 MHz
Sweep = auto
Detector function = peak/average
Trace = max hold
Allow the trace to stabilize

3.12.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.12.4.Test Result

Refer to Annex A.11 in this report.

3.13. Radiated Emission

3.13.1.Requirement

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in FCC section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in FCC section 15.205(a), must also comply with the radiated emission limits specified in FCC section 15.209(a).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

Note1: For above 1000MHz, the emission limit in this paragraph is based on measurement instrumentation employing an average detector, measurement using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit.
Note2: For above 1000MHz, limit field strength of harmonics: 54dBuV/m@3m (AV) and 74dBuV/m@3m (PK).In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), also should comply with the radiated emission limits specified in Section 15.209(a)(above table).

3.13.2.Test Procedures

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz.The antenna to EUT distance is 3meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 30MHz, the emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9kHz-90 kHz, 110kHz-490 kHz. Radiated emission limits in these two bands are based on measurements employing an average detector.

For measurements below 1GHz the resolution bandwidth is set to 100kHz for peak detection measurements or 120kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1GHz the resolution bandwidth is set to 1MHz, the video band width is set to 3MHz for peak measurements and as applicable for average measurements.

The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions. For measurements above 1 GHz, keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

3.13.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

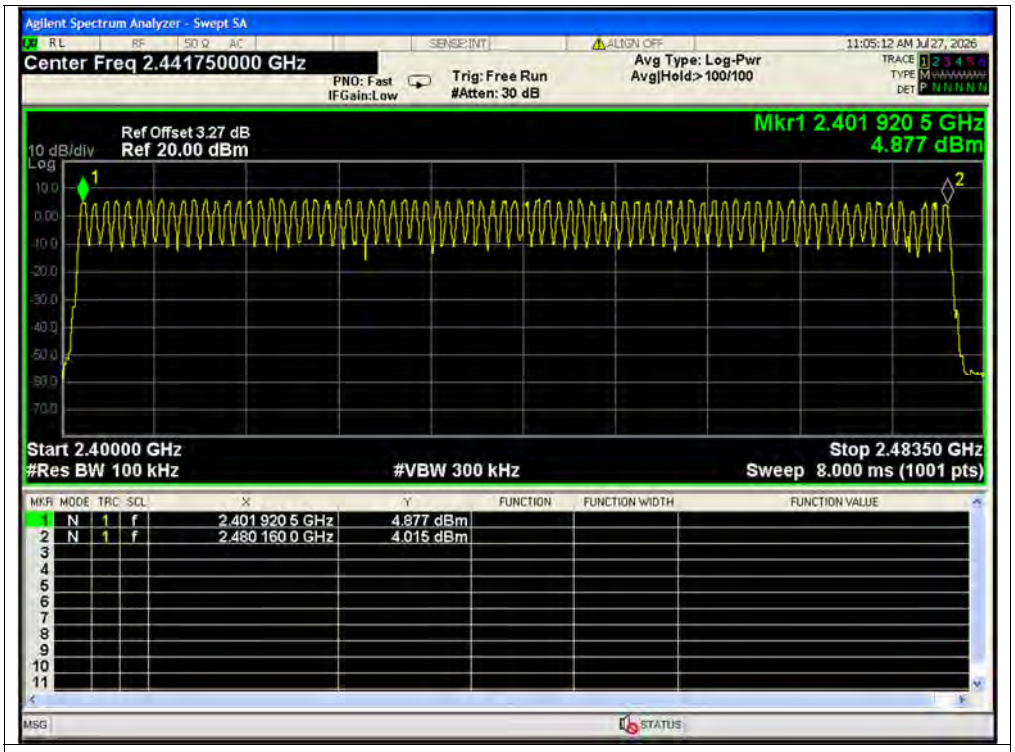
3.13.4.Test Result

Refer to Annex A.12 in this report.

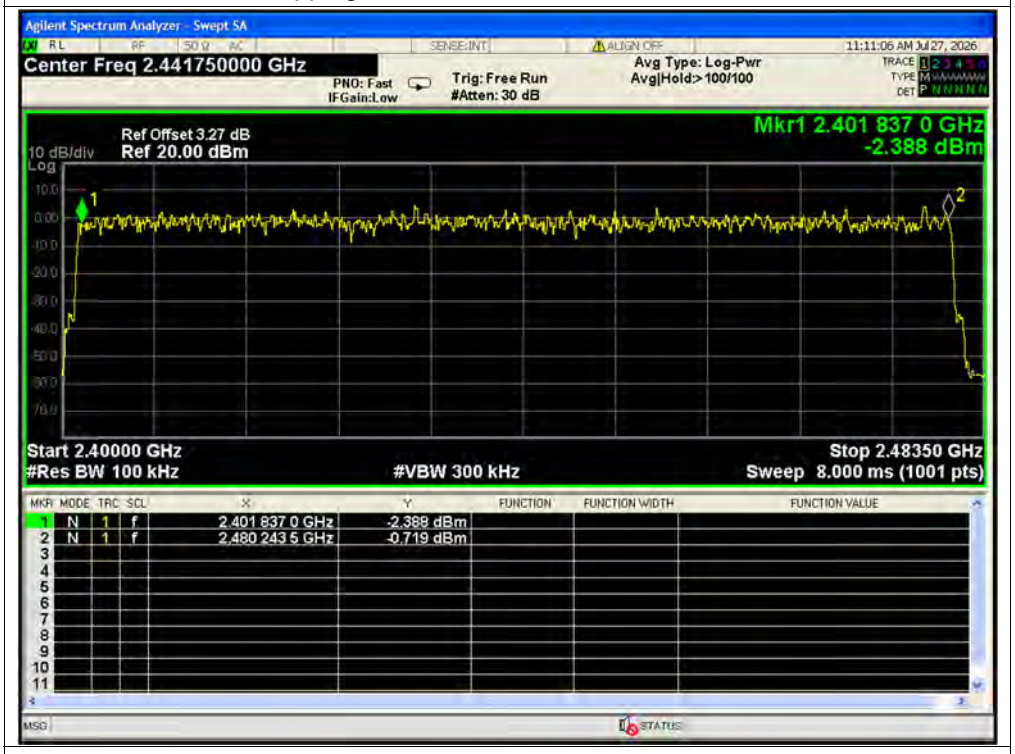
Annex A Test Data and Result

A.1. Number of Hopping Frequency

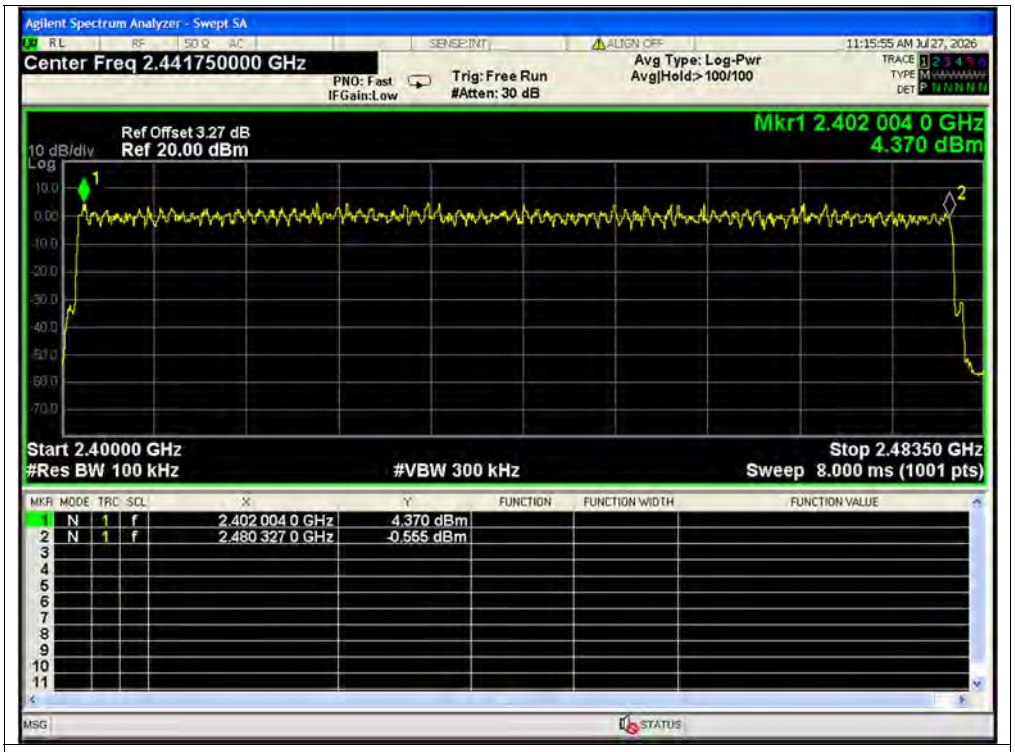
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



Hopping No. NVNT 1-DH5 2441MHz Ant1



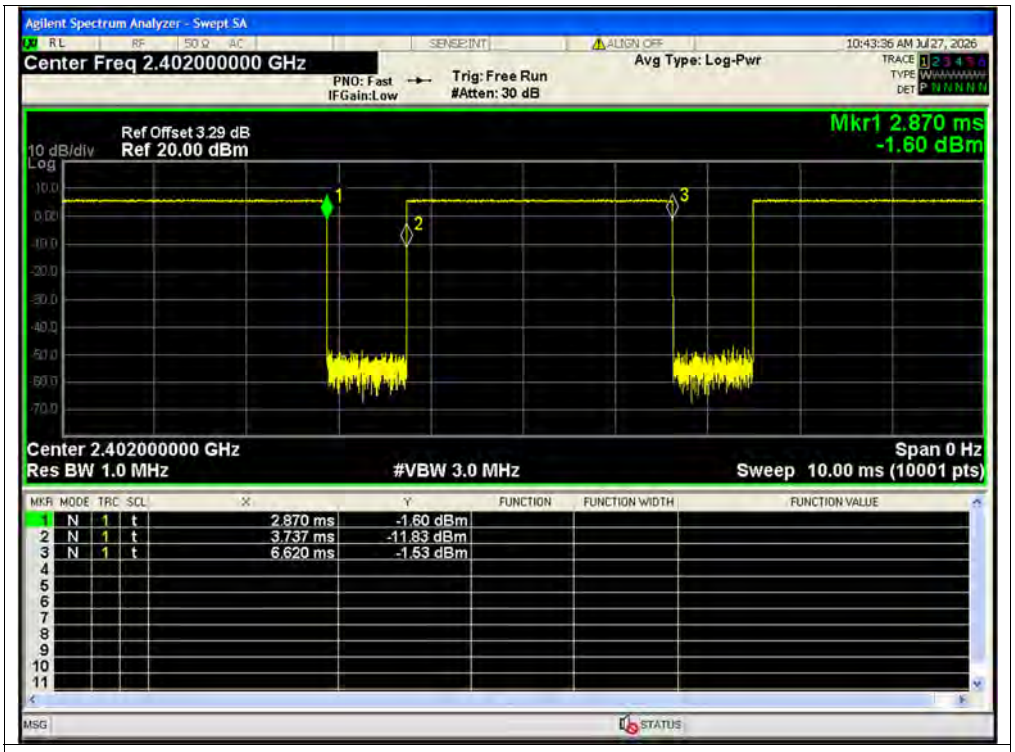
Hopping No. NVNT 2-DH5 2441MHz Ant1



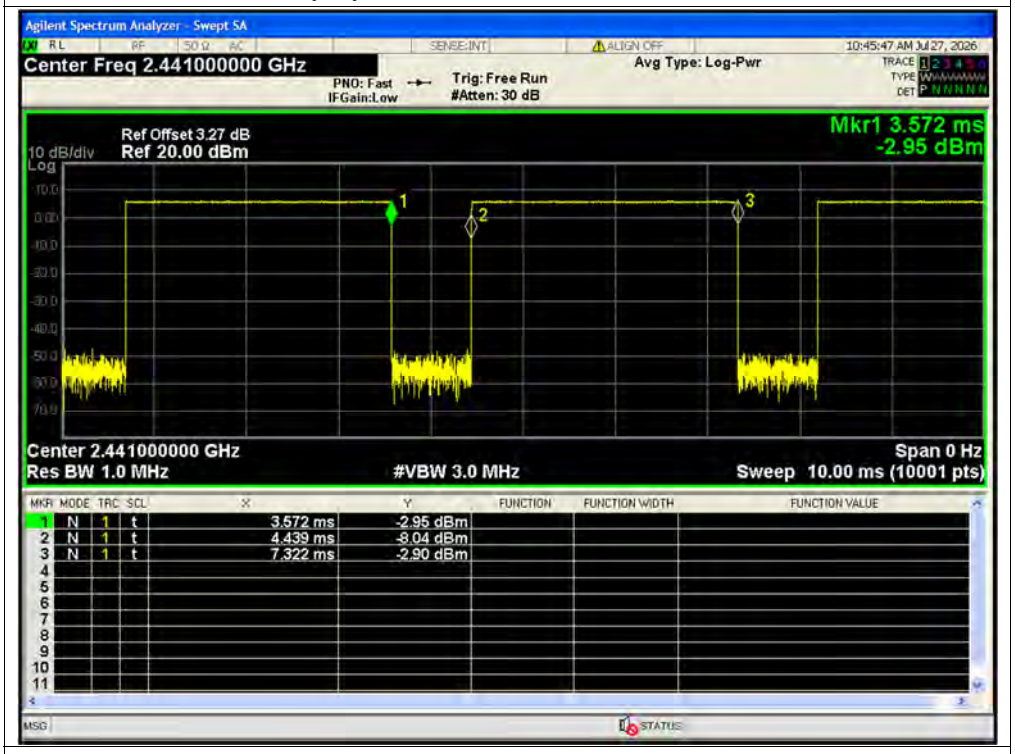
Hopping No. NVNT 3-DH5 2441MHz Ant1

A.2. Duty Cycle of Test Signal

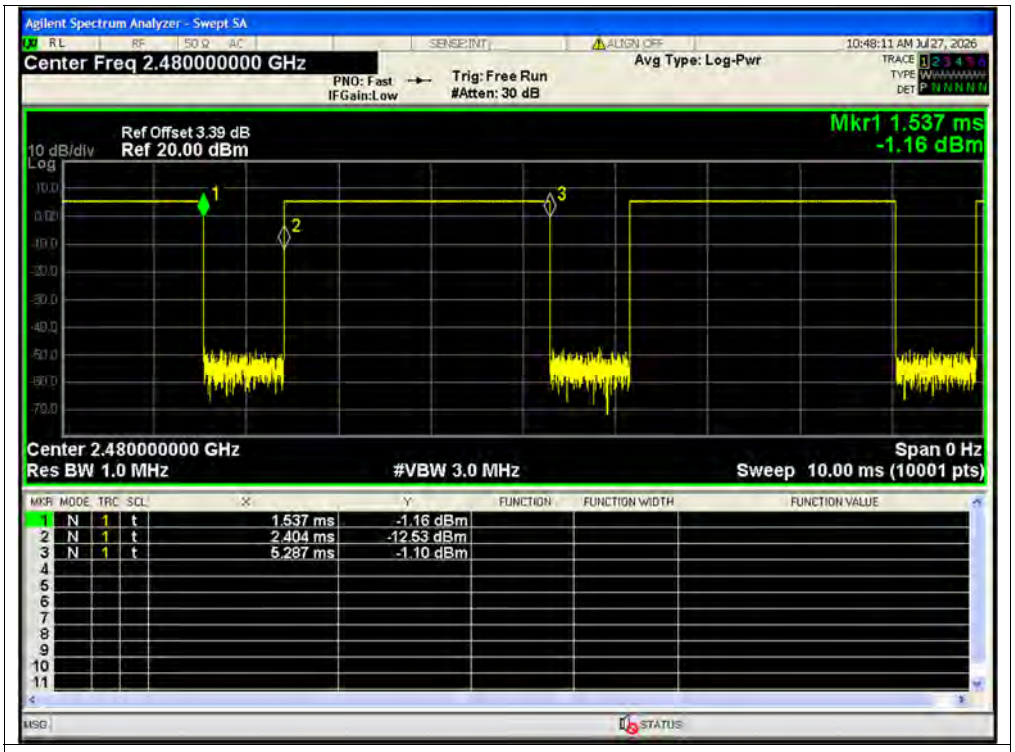
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2441	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2480	Ant1	76.88	1.14	0.35
NVNT	2-DH5	2402	Ant1	76.99	1.14	0.35
NVNT	2-DH5	2441	Ant1	76.99	1.14	0.35
NVNT	2-DH5	2480	Ant1	76.96	1.14	0.35
NVNT	3-DH5	2402	Ant1	77.04	1.13	0.35
NVNT	3-DH5	2441	Ant1	77.04	1.13	0.35
NVNT	3-DH5	2480	Ant1	77.04	1.13	0.35



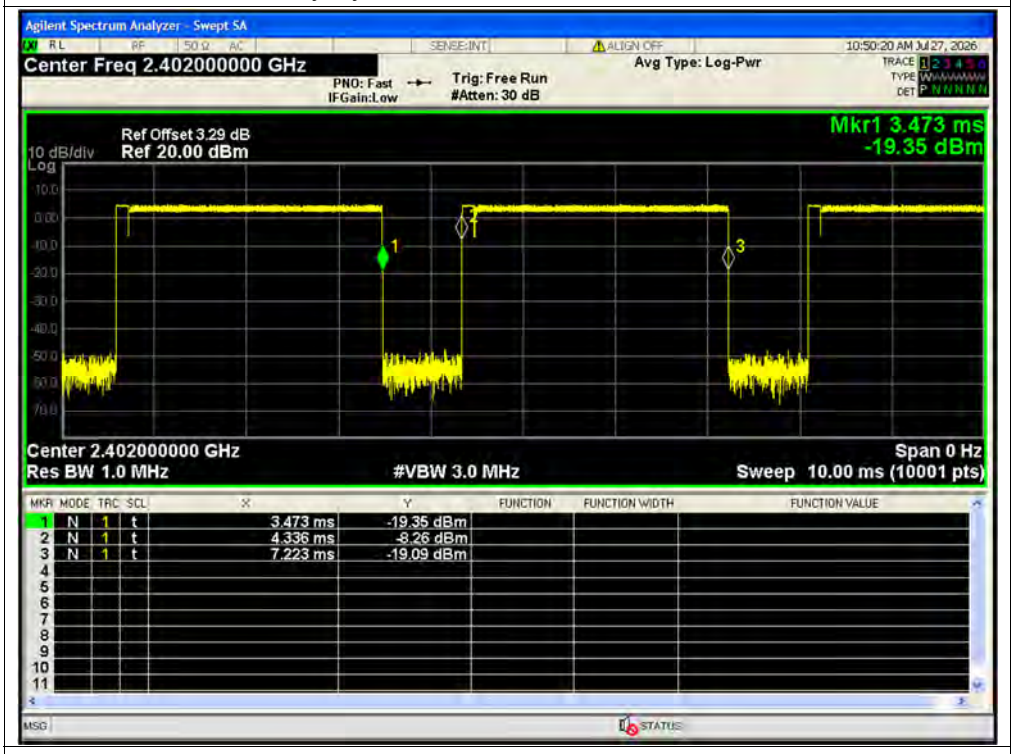
Duty Cycle NVNT 1-DH5 2402MHz Ant1



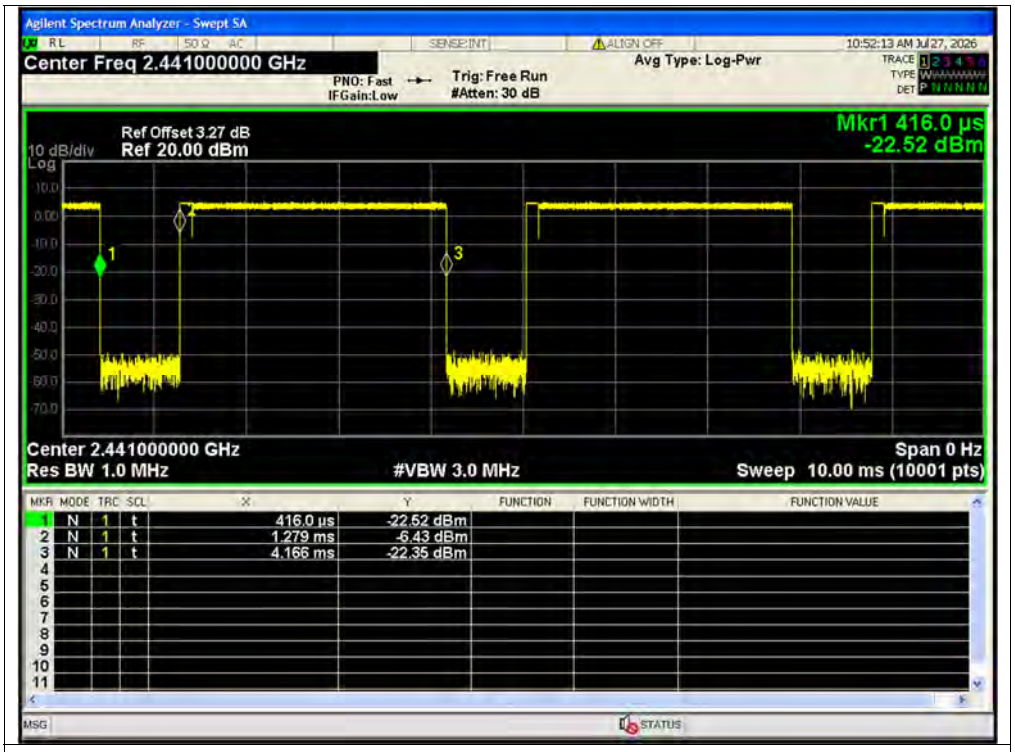
Duty Cycle NVNT 1-DH5 2441MHz Ant1



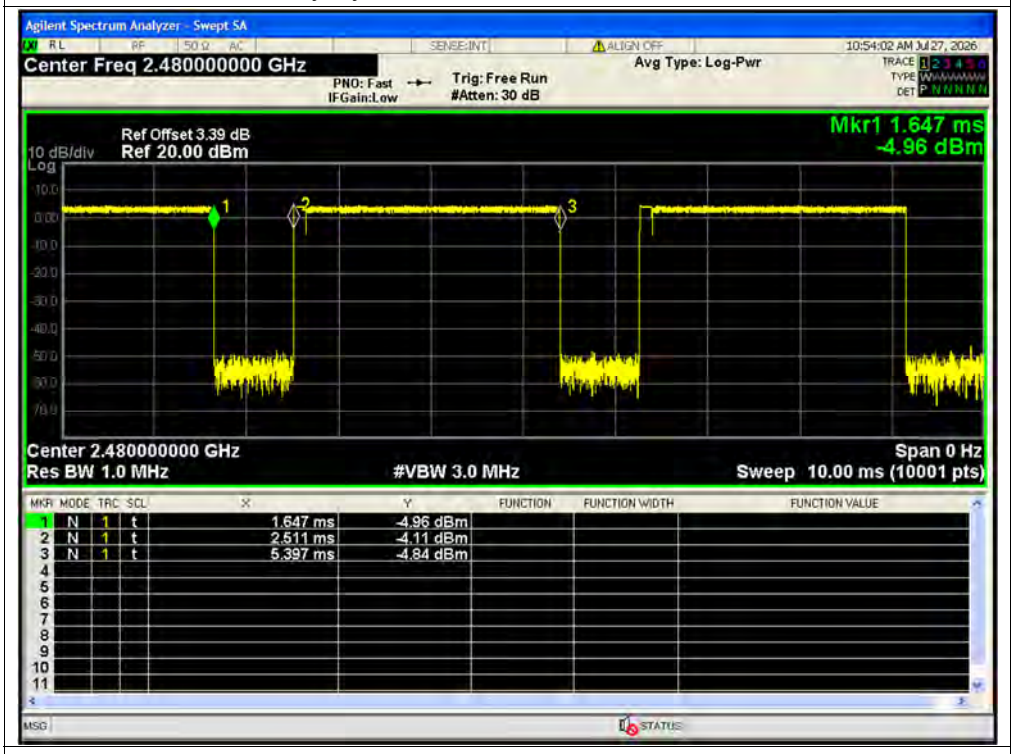
Duty Cycle NVNT 1-DH5 2480MHz Ant1



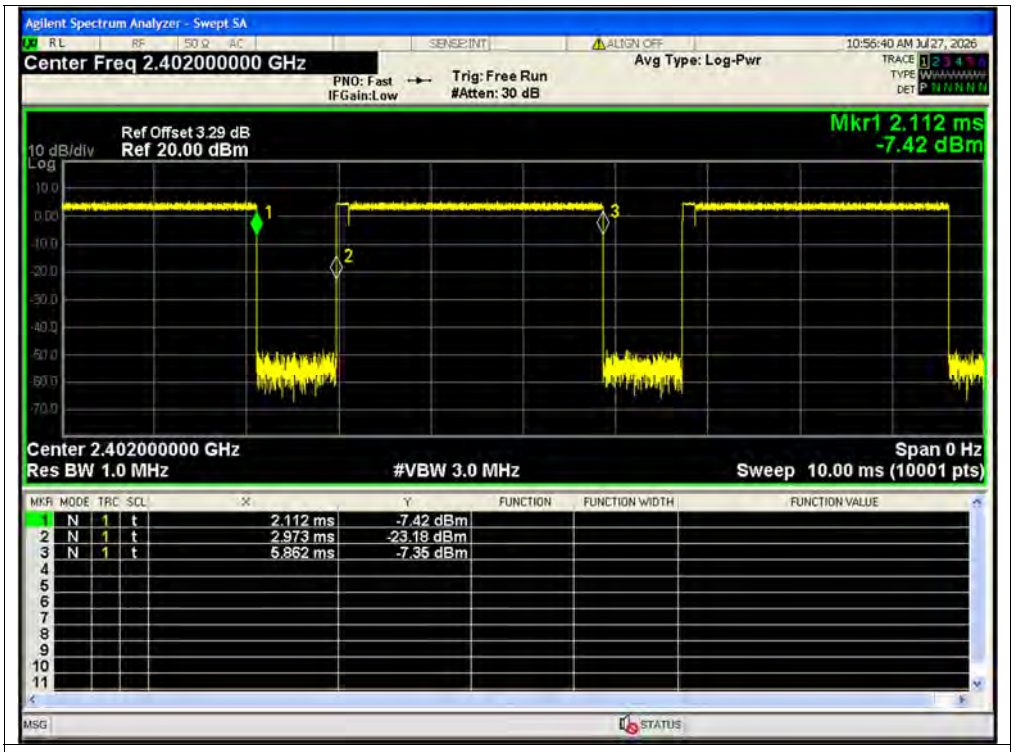
Duty Cycle NVNT 2-DH5 2402MHz Ant1



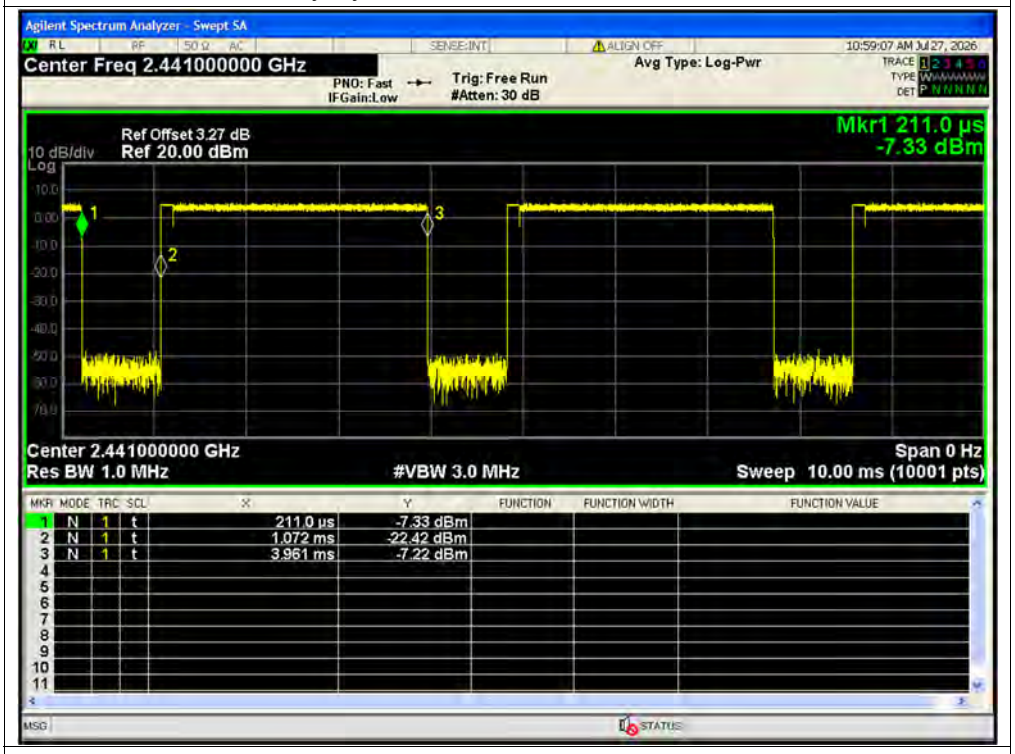
Duty Cycle NVNT 2-DH5 2441MHz Ant1



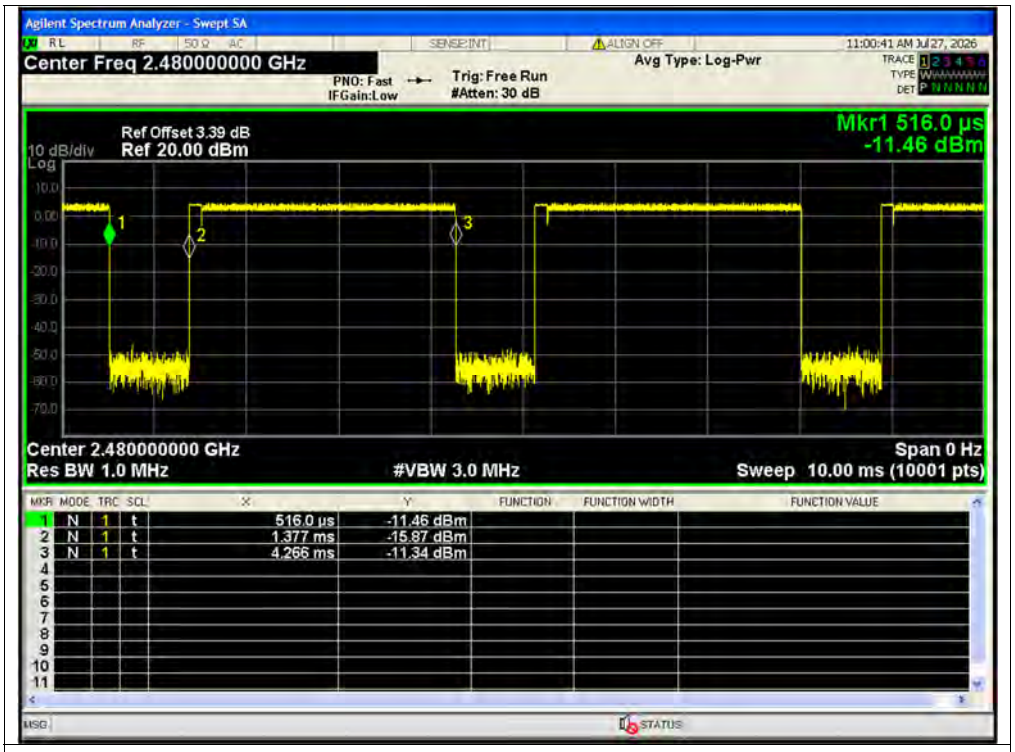
Duty Cycle NVNT 2-DH5 2480MHz Ant1



Duty Cycle NVNT 3-DH5 2402MHz Ant1



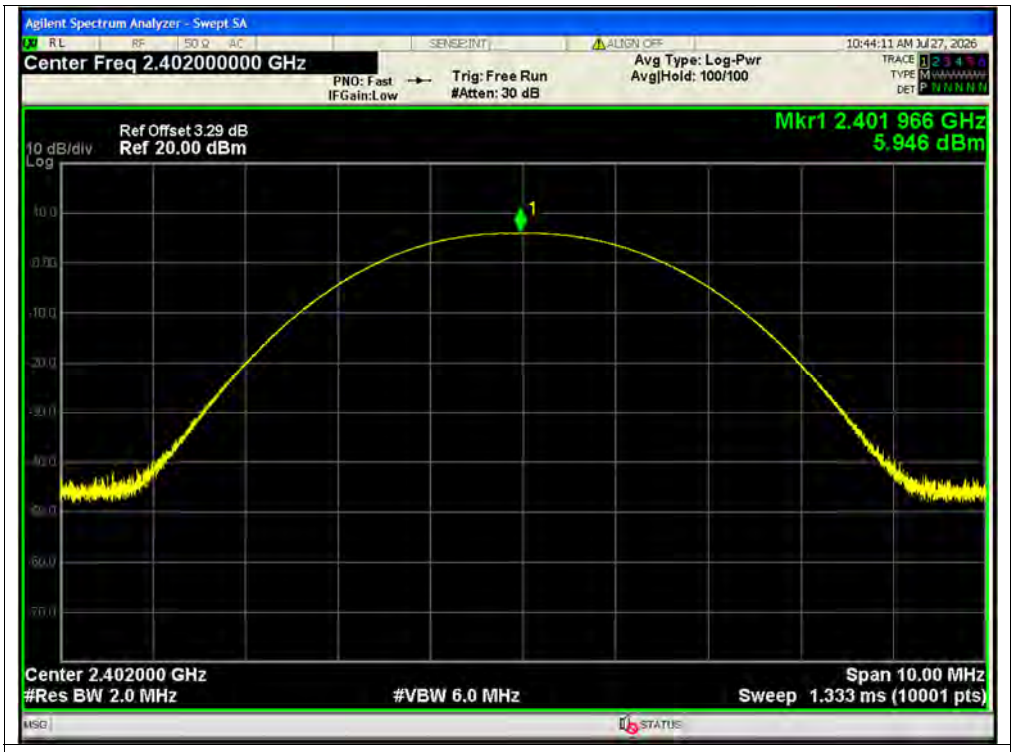
Duty Cycle NVNT 3-DH5 2441MHz Ant1



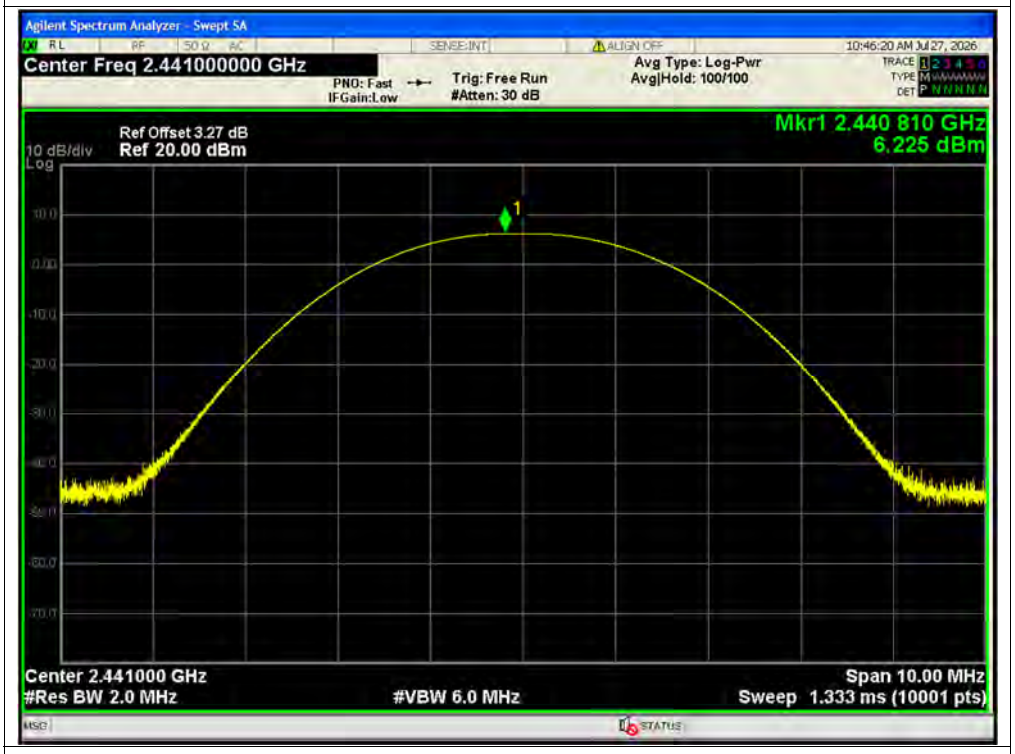
Duty Cycle NVNT 3-DH5 2480MHz Ant1

A.3. Maximum Peak Conducted Output Power

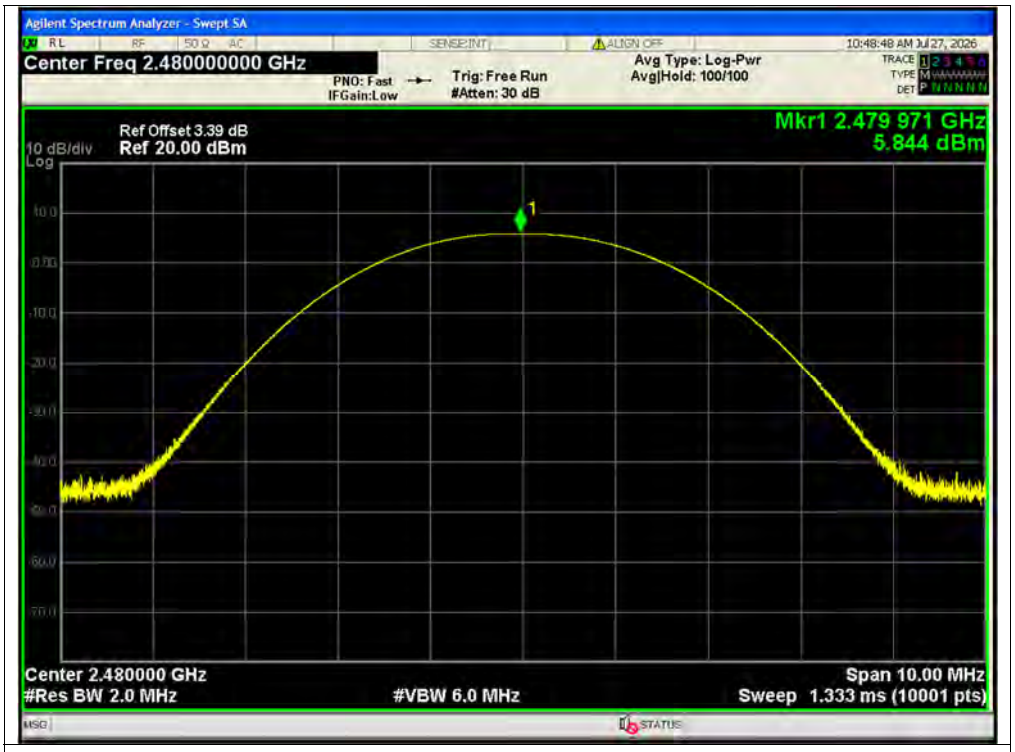
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	5.95	0	5.95	0.00394	30	Pass
NVNT	1-DH5	2441	Ant1	6.23	0	6.23	0.0042	30	Pass
NVNT	1-DH5	2480	Ant1	5.84	0	5.84	0.00384	30	Pass
NVNT	2-DH5	2402	Ant1	5.14	0	5.14	0.00327	30	Pass
NVNT	2-DH5	2441	Ant1	5.75	0	5.75	0.00376	30	Pass
NVNT	2-DH5	2480	Ant1	5.07	0	5.07	0.00321	30	Pass
NVNT	3-DH5	2402	Ant1	5.55	0	5.55	0.00359	30	Pass
NVNT	3-DH5	2441	Ant1	5.84	0	5.84	0.00384	30	Pass
NVNT	3-DH5	2480	Ant1	5.16	0	5.16	0.00328	30	Pass



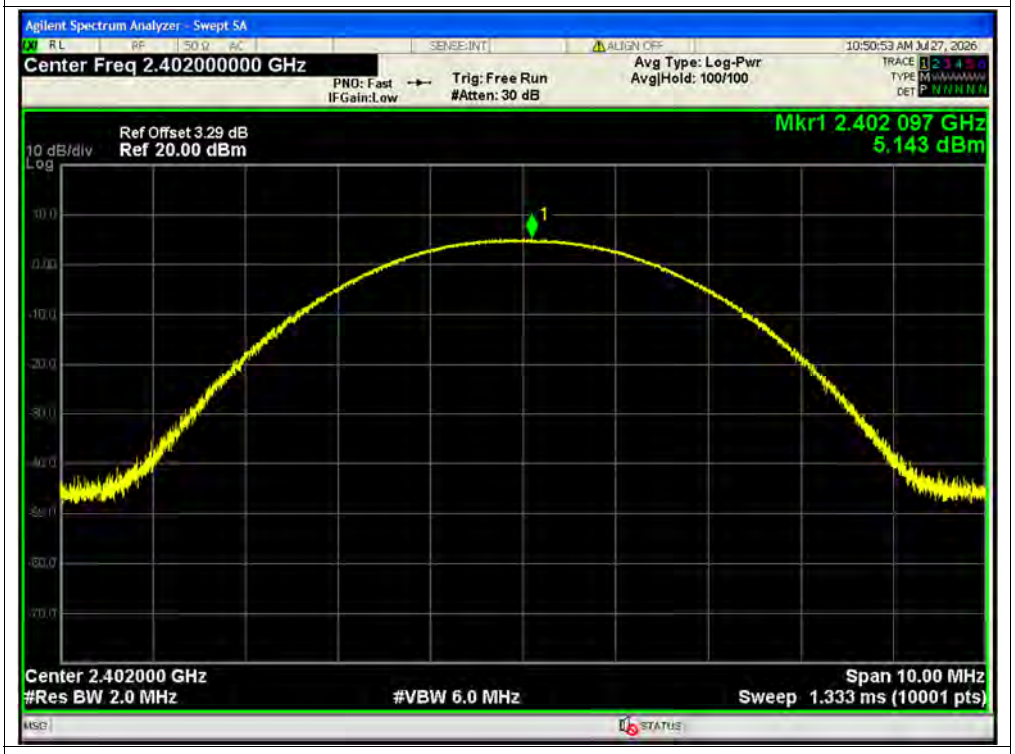
Peak Power NVNT 1-DH5 2402MHz Ant1



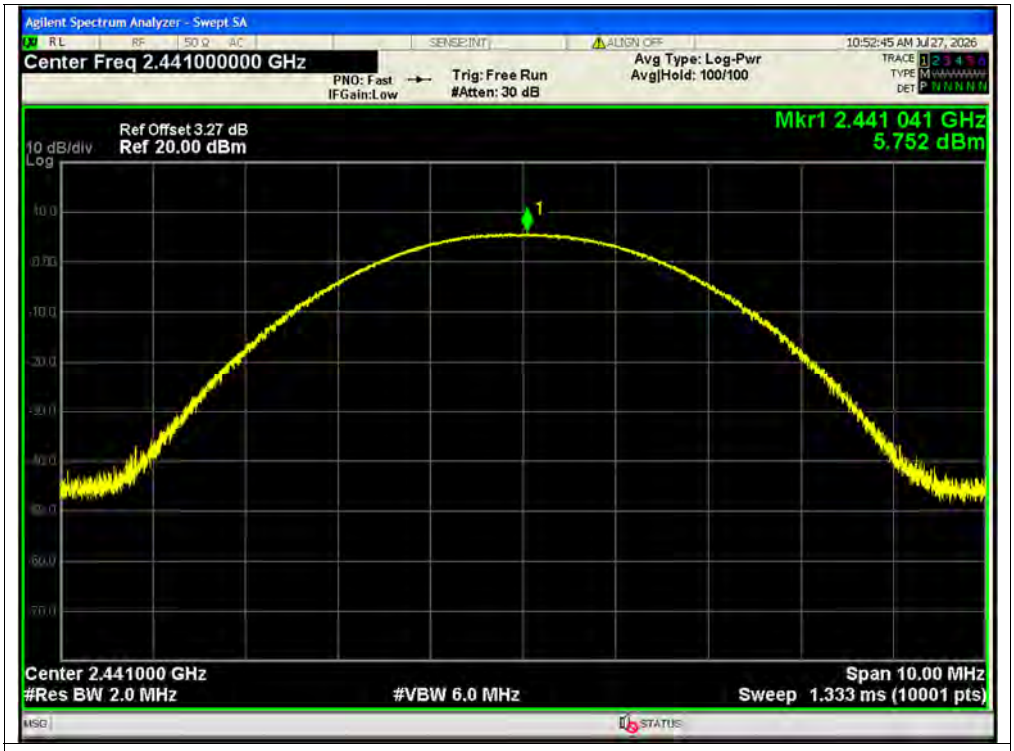
Peak Power NVNT 1-DH5 2441MHz Ant1



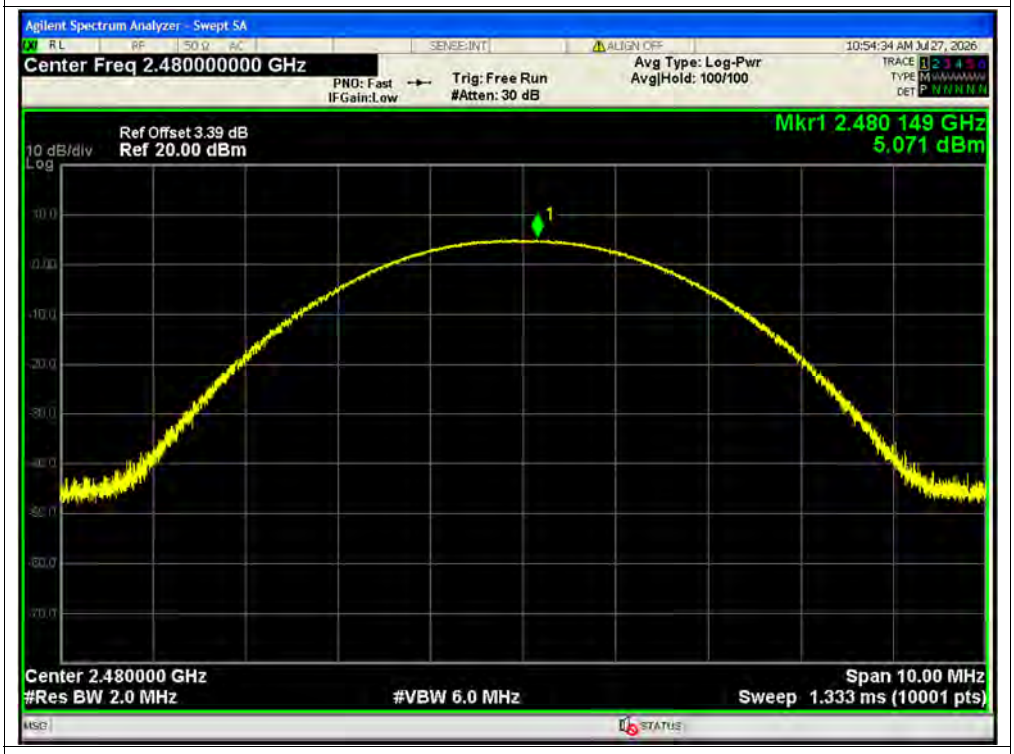
Peak Power NVNT 1-DH5 2480MHz Ant1



Peak Power NVNT 2-DH5 2402MHz Ant1

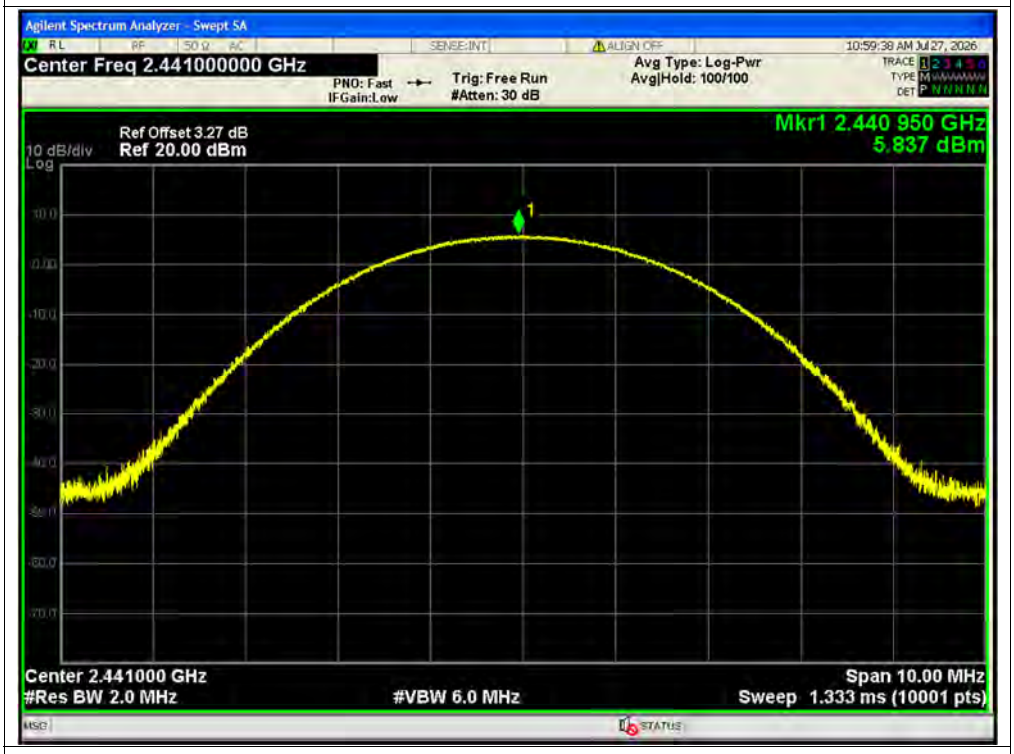


Peak Power NVNT 2-DH5 2441MHz Ant1

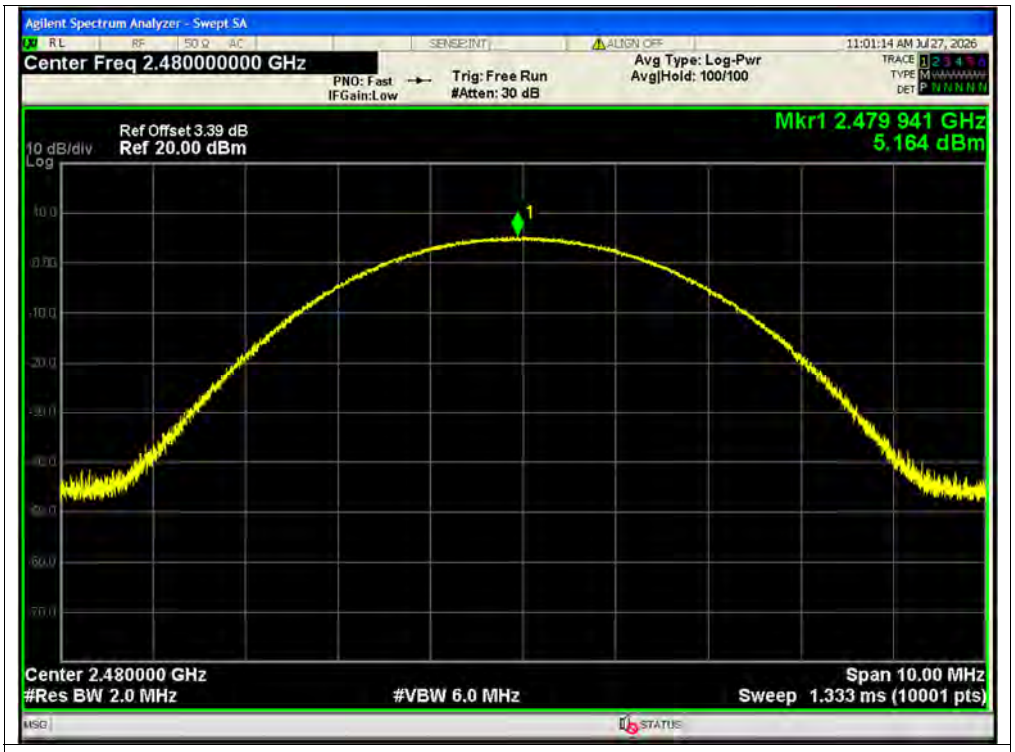


Peak Power NVNT 2-DH5 2480MHz Ant1

Peak Power NVNT 3-DH5 2402MHz Ant1



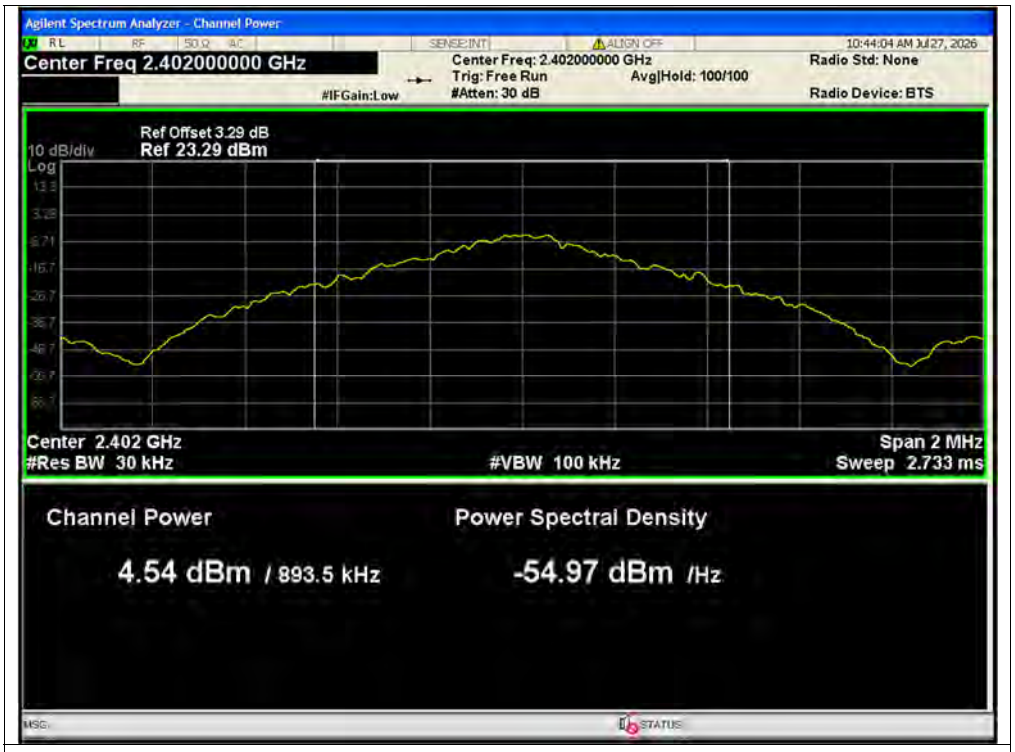
Peak Power NVNT 3-DH5 2441MHz Ant1



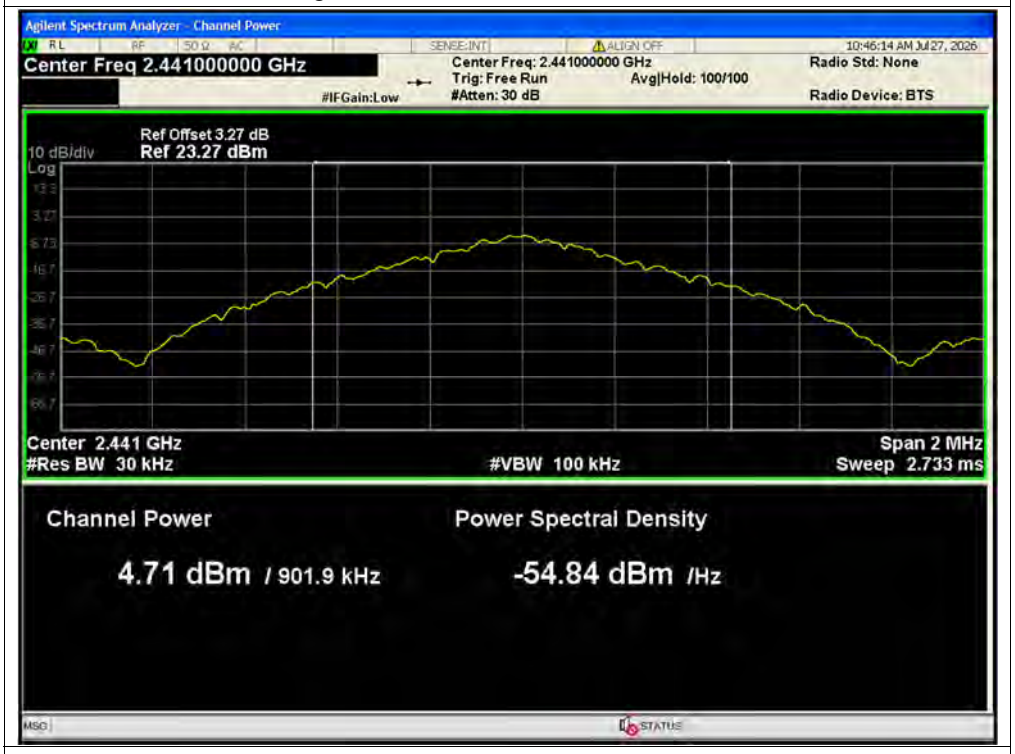
Peak Power NVNT 3-DH5 2480MHz Ant1

A.4. Maximum Average Conducted Output Power

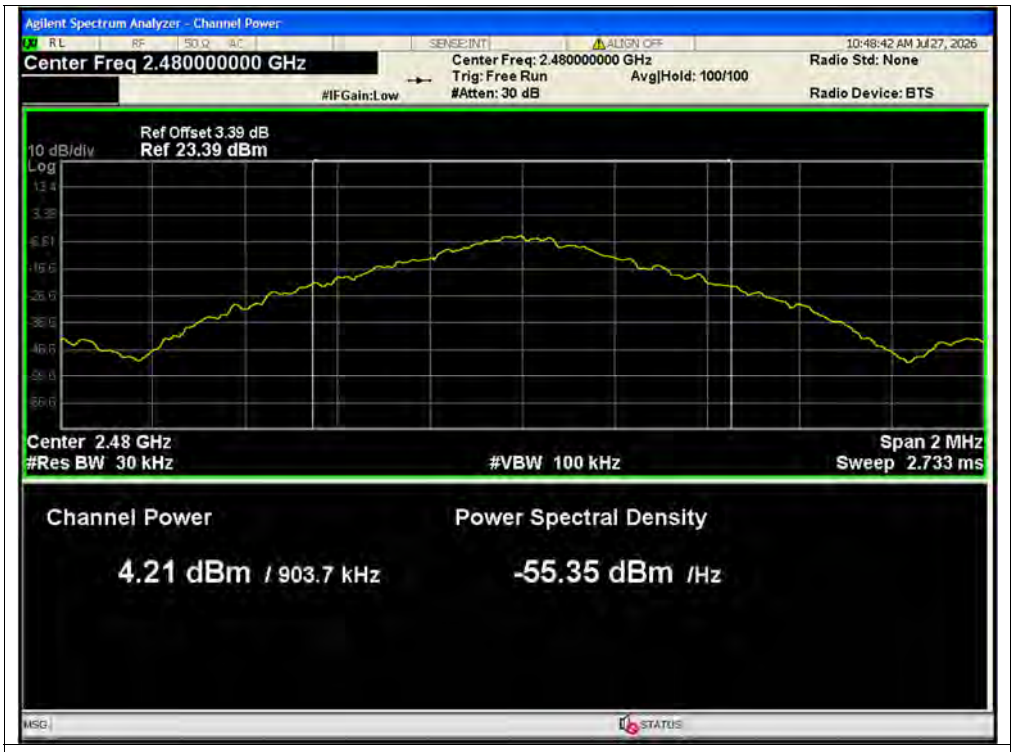
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	4.54	1.14	5.68	0.0037	30	Pass
NVNT	1-DH5	2441	Ant1	4.71	1.14	5.85	0.00385	30	Pass
NVNT	1-DH5	2480	Ant1	4.21	1.14	5.35	0.00343	30	Pass
NVNT	2-DH5	2402	Ant1	2.04	1.14	3.18	0.00208	30	Pass
NVNT	2-DH5	2441	Ant1	2.31	1.14	3.45	0.00221	30	Pass
NVNT	2-DH5	2480	Ant1	1.53	1.14	2.67	0.00185	30	Pass
NVNT	3-DH5	2402	Ant1	1.89	1.13	3.02	0.002	30	Pass
NVNT	3-DH5	2441	Ant1	2.26	1.13	3.39	0.00218	30	Pass
NVNT	3-DH5	2480	Ant1	1.71	1.13	2.84	0.00192	30	Pass



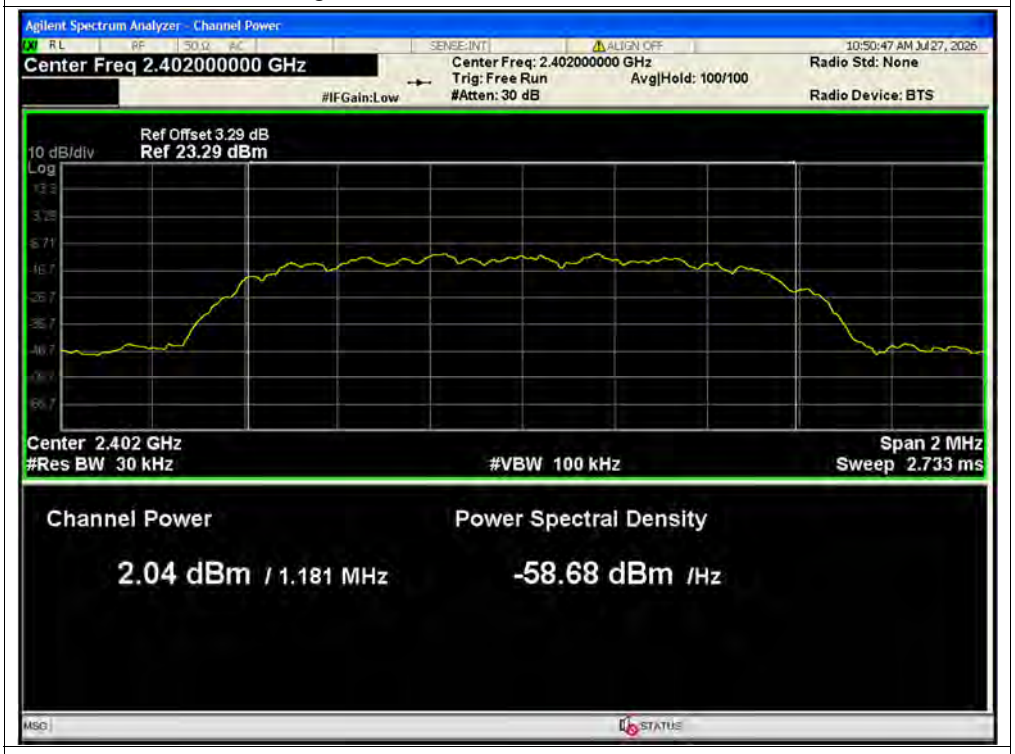
Average Power NVNT 1-DH5 2402MHz Ant1



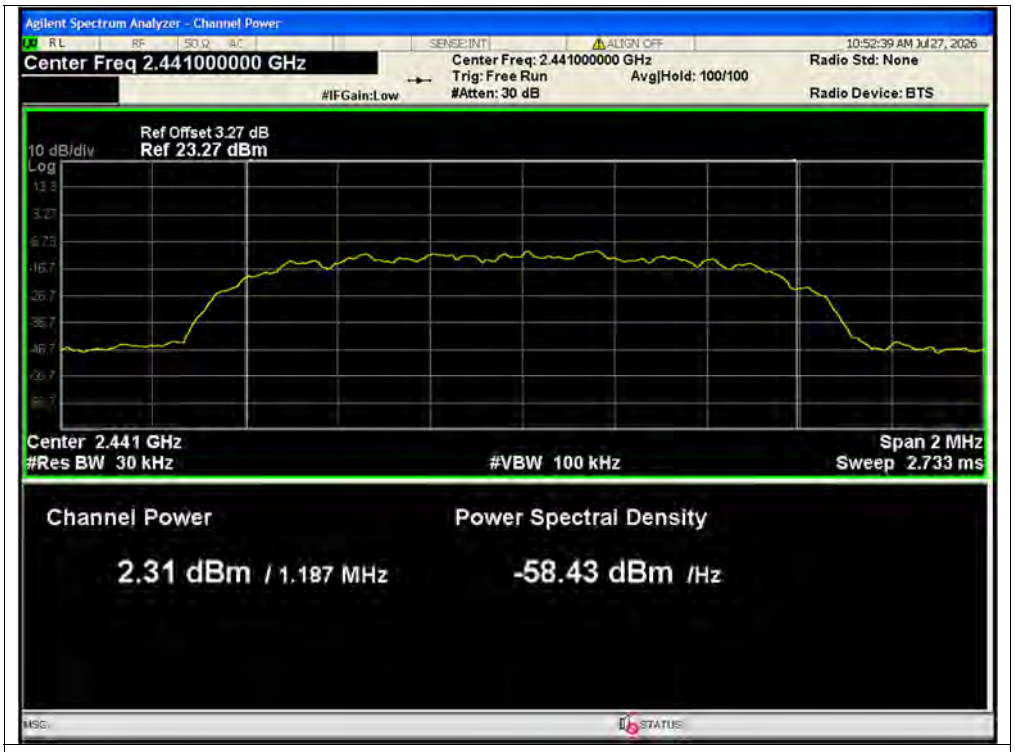
Average Power NVNT 1-DH5 2441MHz Ant1



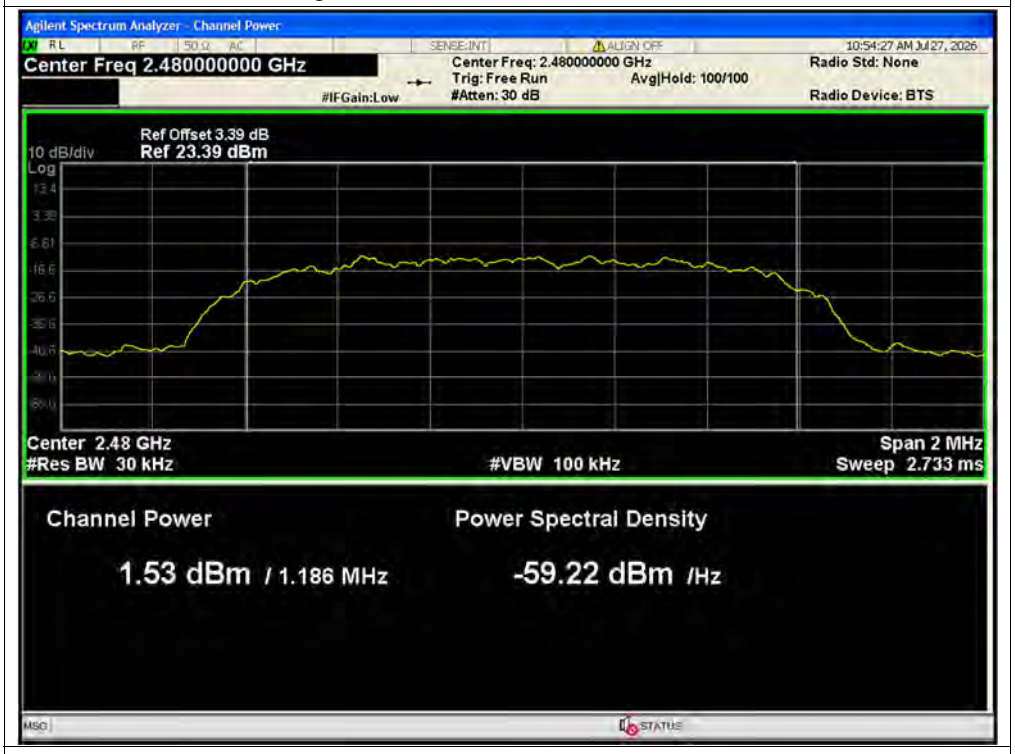
Average Power NVNT 1-DH5 2480MHz Ant1



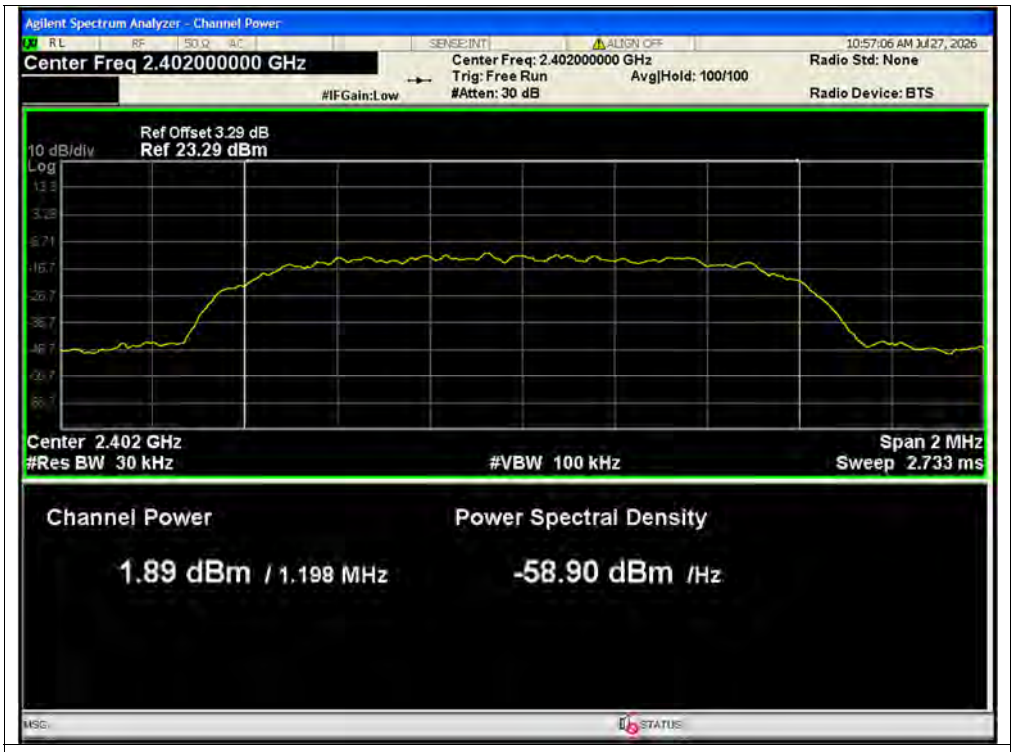
Average Power NVNT 2-DH5 2402MHz Ant1



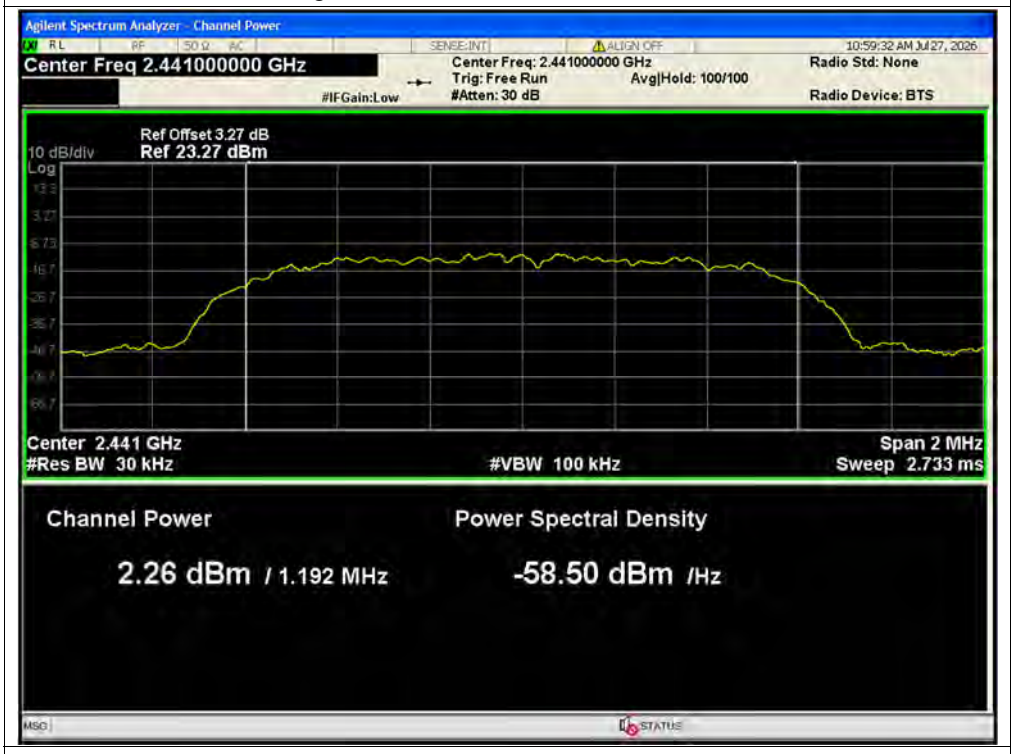
Average Power NVNT 2-DH5 2441MHz Ant1



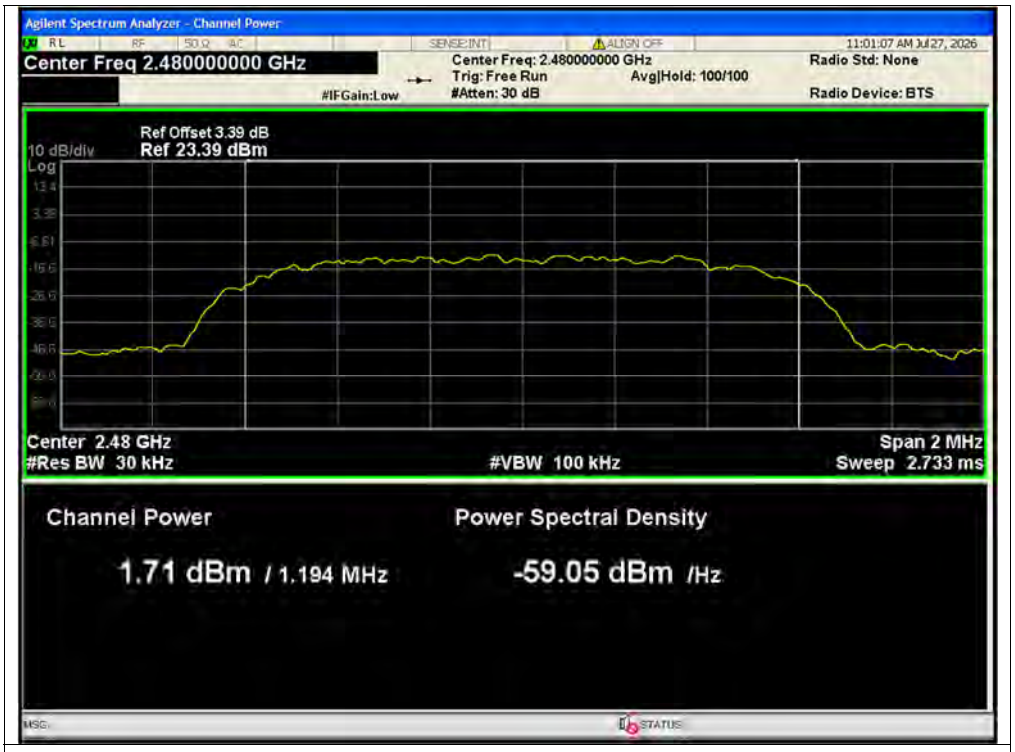
Average Power NVNT 2-DH5 2480MHz Ant1



Average Power NVNT 3-DH5 2402MHz Ant1



Average Power NVNT 3-DH5 2441MHz Ant1



Average Power NVNT 3-DH5 2480MHz Ant1

A.5. 20 dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)
NVNT	1-DH5	2402	Ant1	1.021
NVNT	1-DH5	2441	Ant1	0.9608
NVNT	1-DH5	2480	Ant1	1.034
NVNT	2-DH5	2402	Ant1	1.315
NVNT	2-DH5	2441	Ant1	1.321
NVNT	2-DH5	2480	Ant1	1.308
NVNT	3-DH5	2402	Ant1	1.306
NVNT	3-DH5	2441	Ant1	1.317
NVNT	3-DH5	2480	Ant1	1.29

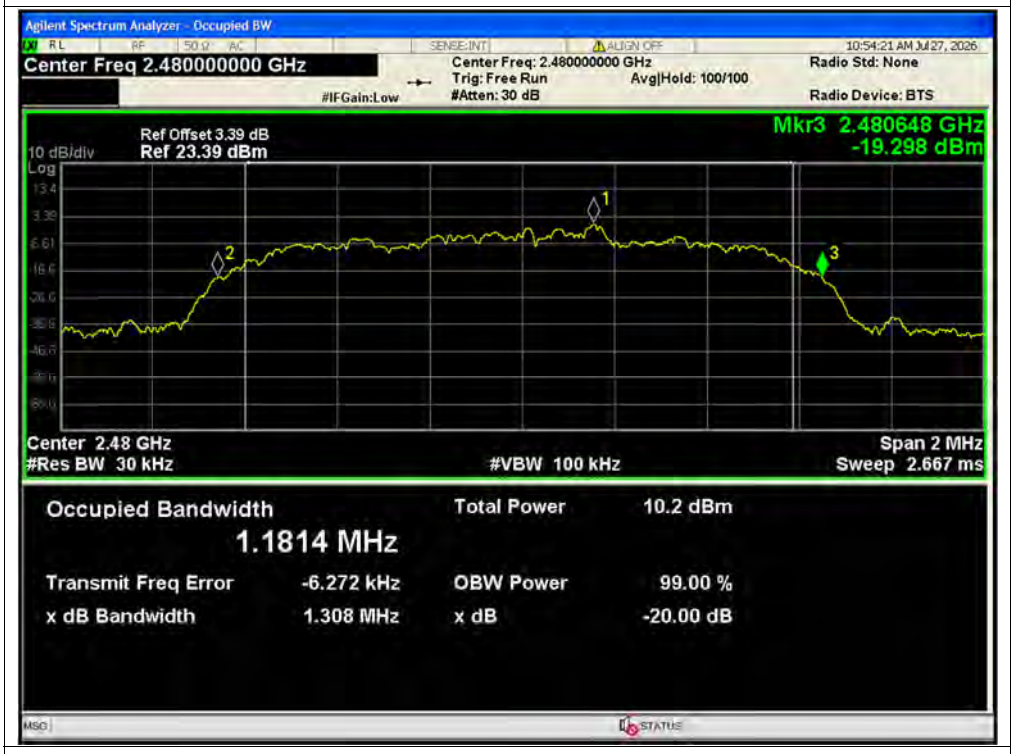
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

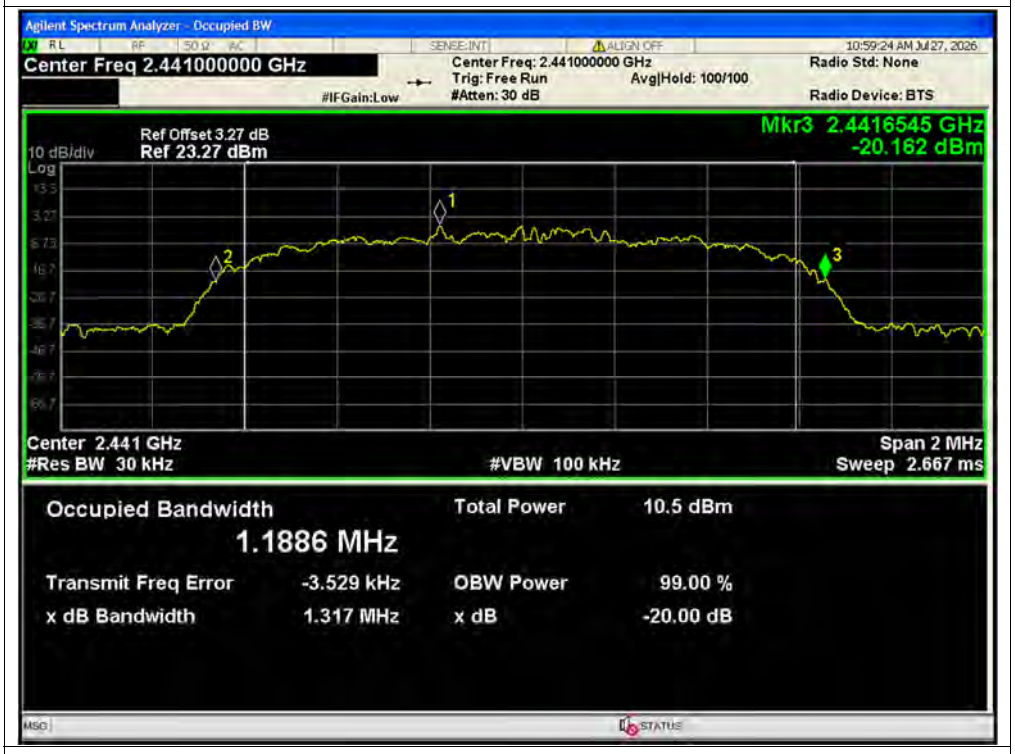
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

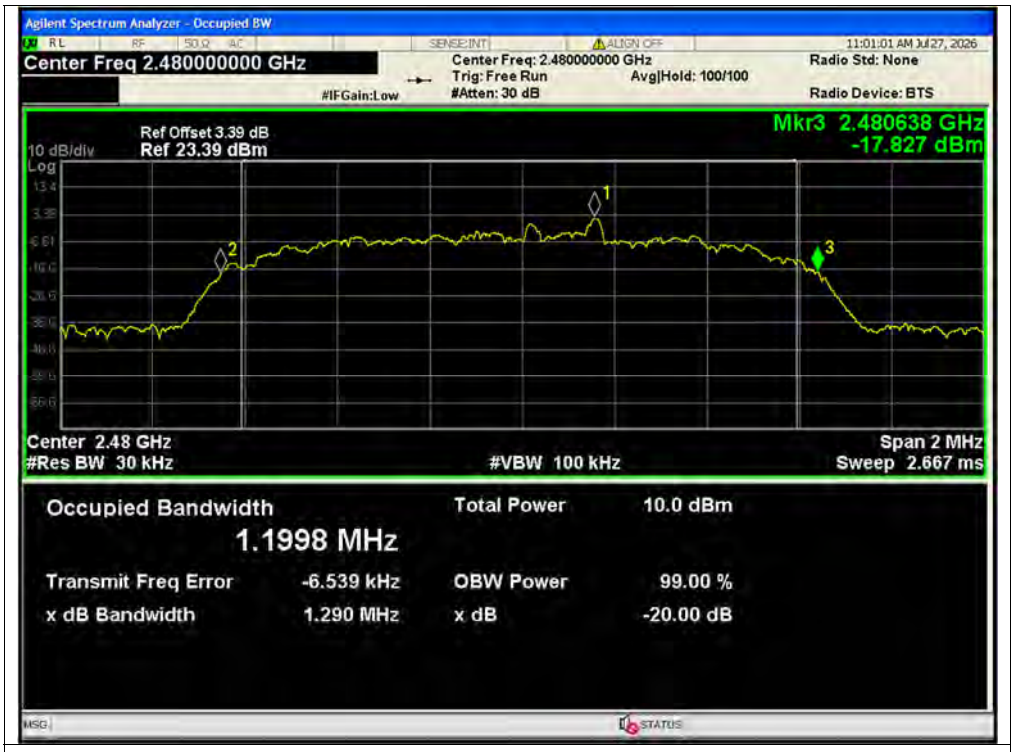


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1

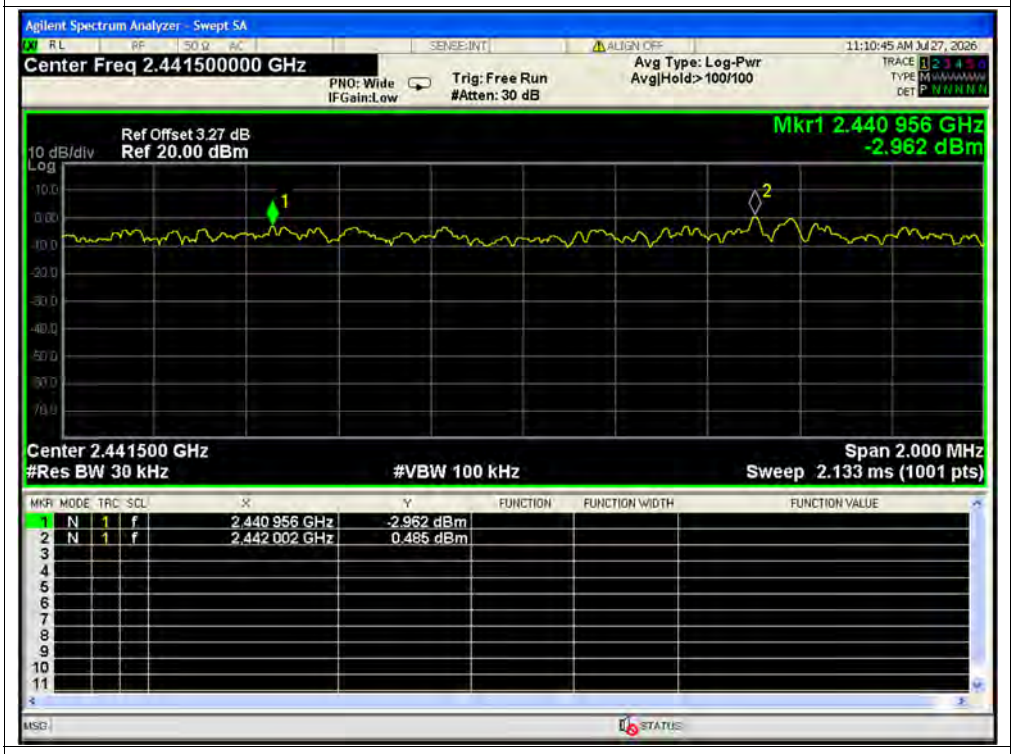


-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

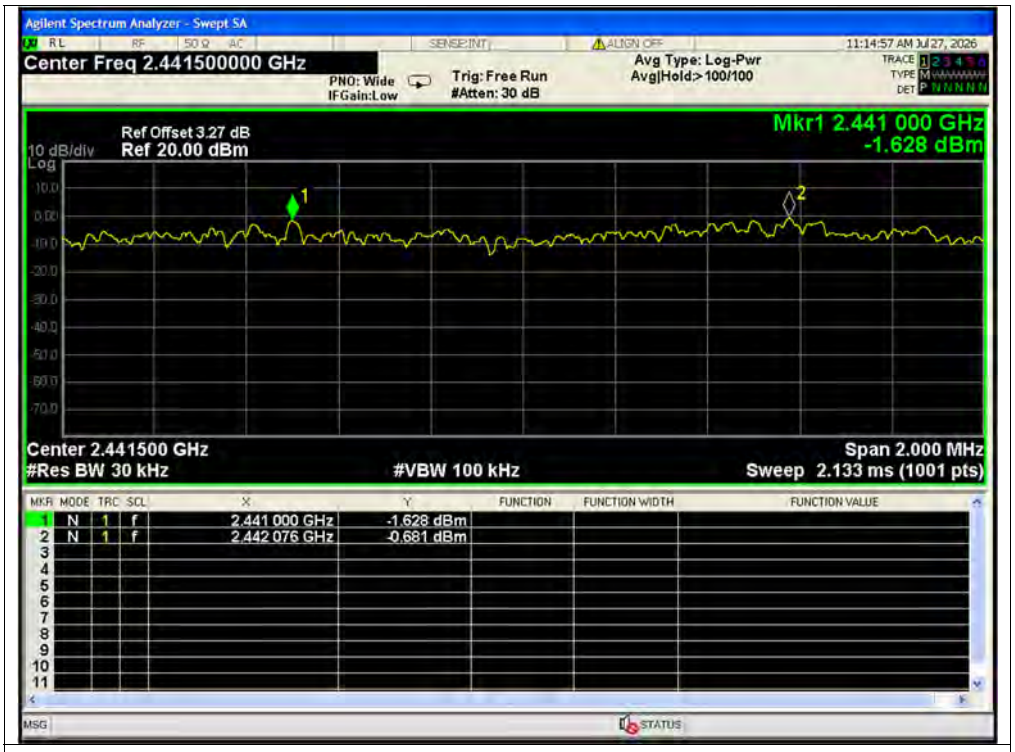
A.6. Carried Frequency Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2440.988	2442.006	1.018	0.641	Pass
NVNT	2-DH5	Ant1	2440.956	2442.002	1.046	0.881	Pass
NVNT	3-DH5	Ant1	2441	2442.076	1.076	0.878	Pass

CFS NVNT 1-DH5 2441MHz Ant1



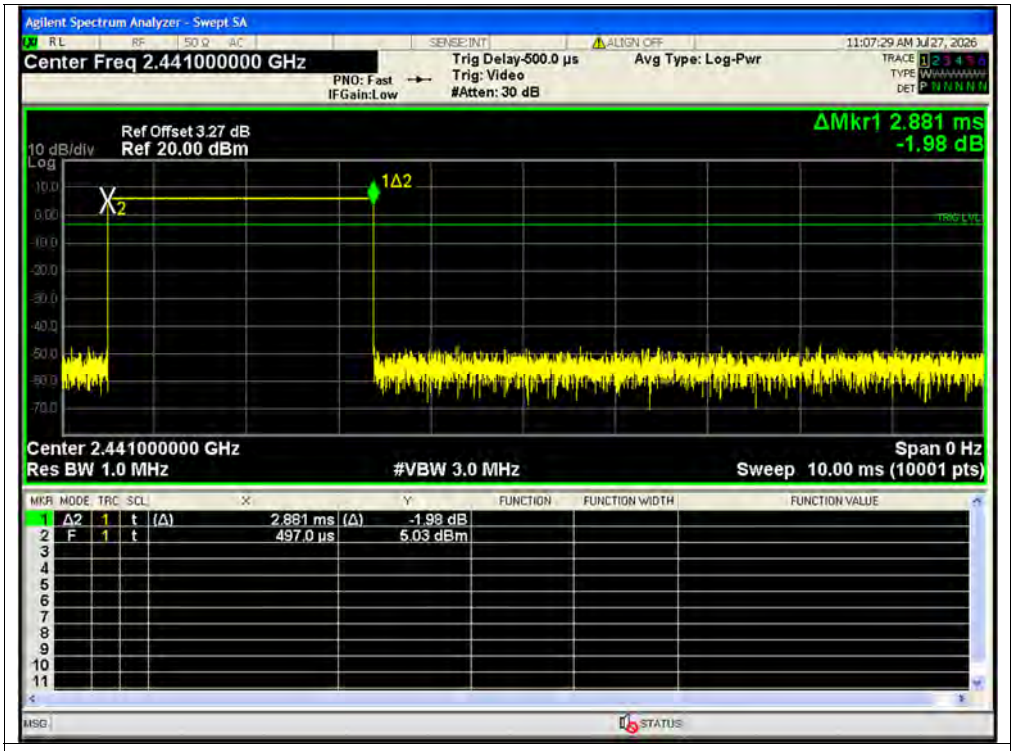
CFS NVNT 2-DH5 2441MHz Ant1



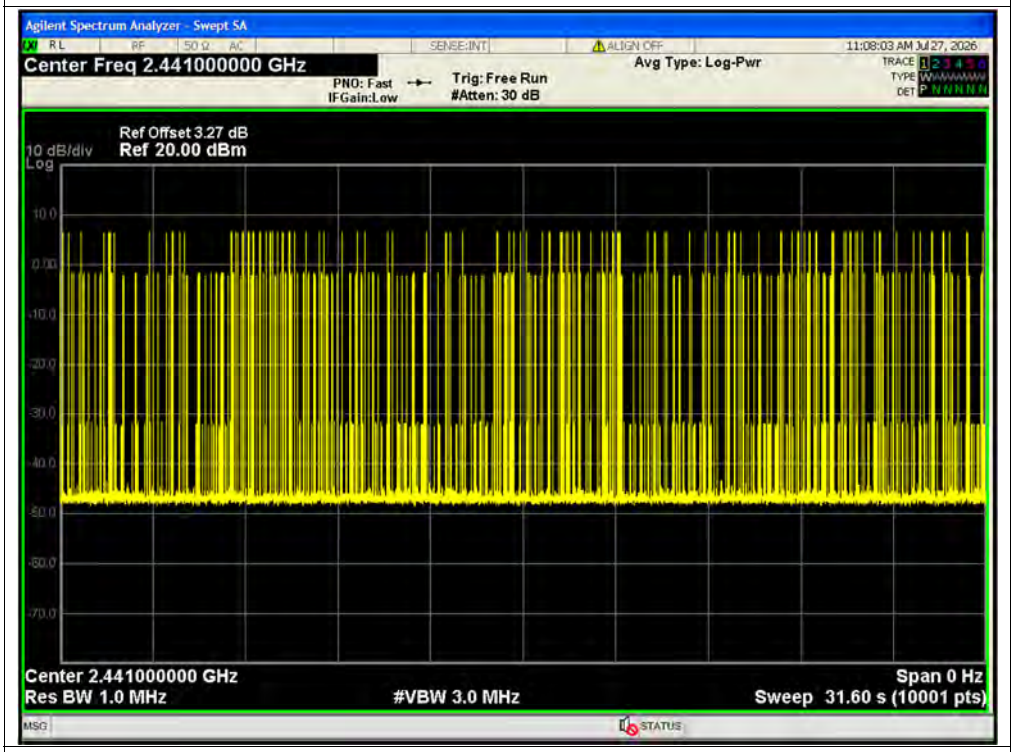
CFS NVNT 3-DH5 2441MHz Ant1

A.7. Time of Occupancy (Dwell time)

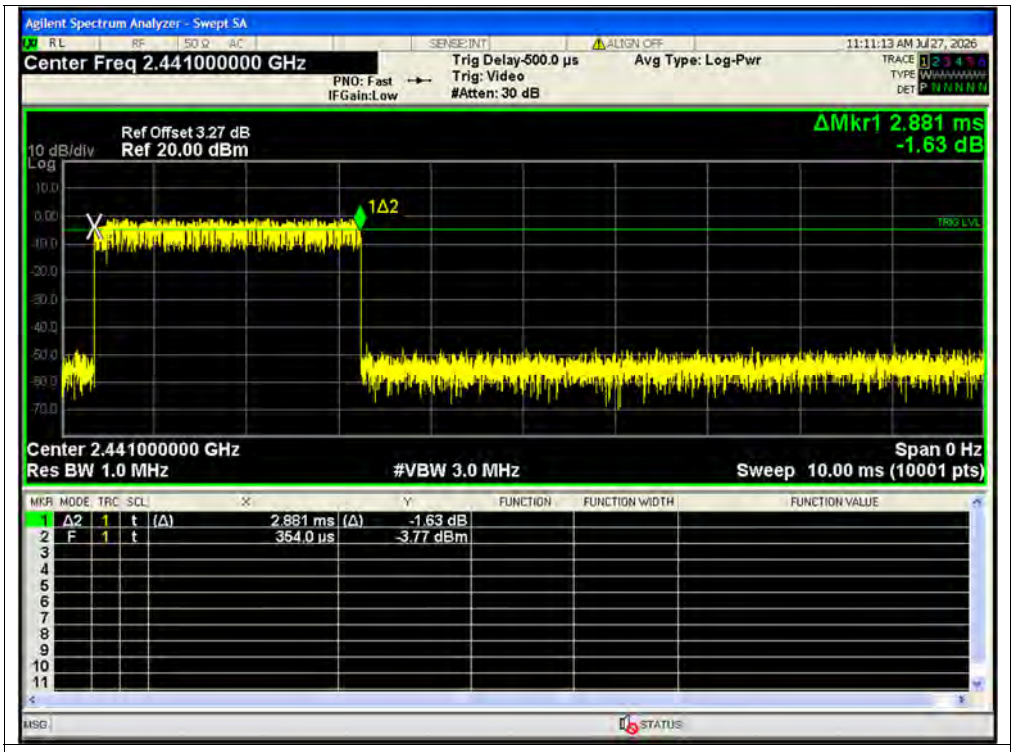
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2441	Ant1	2.881	305.386	106	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.881	319.791	111	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.875	284.625	99	31600	400	Pass



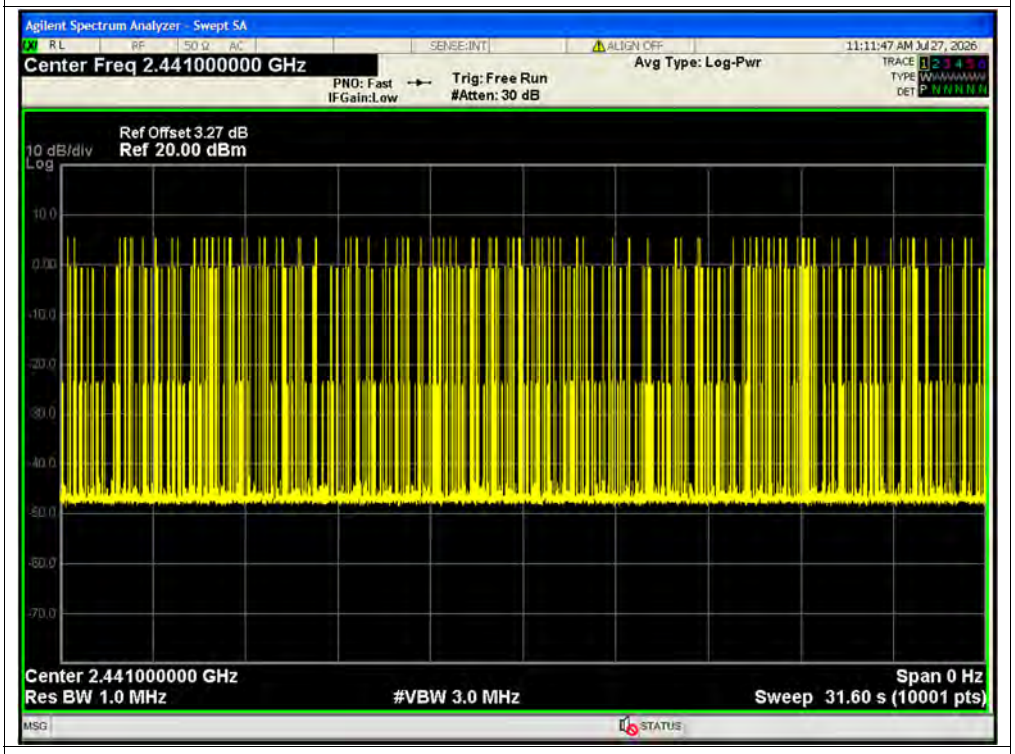
Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



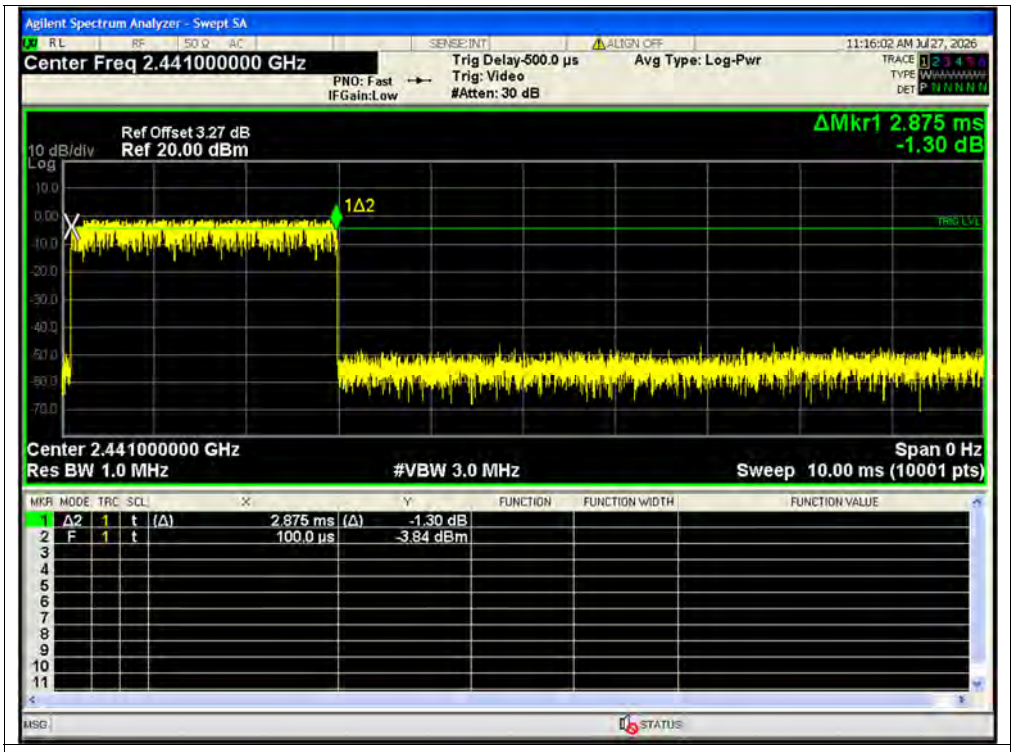
Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



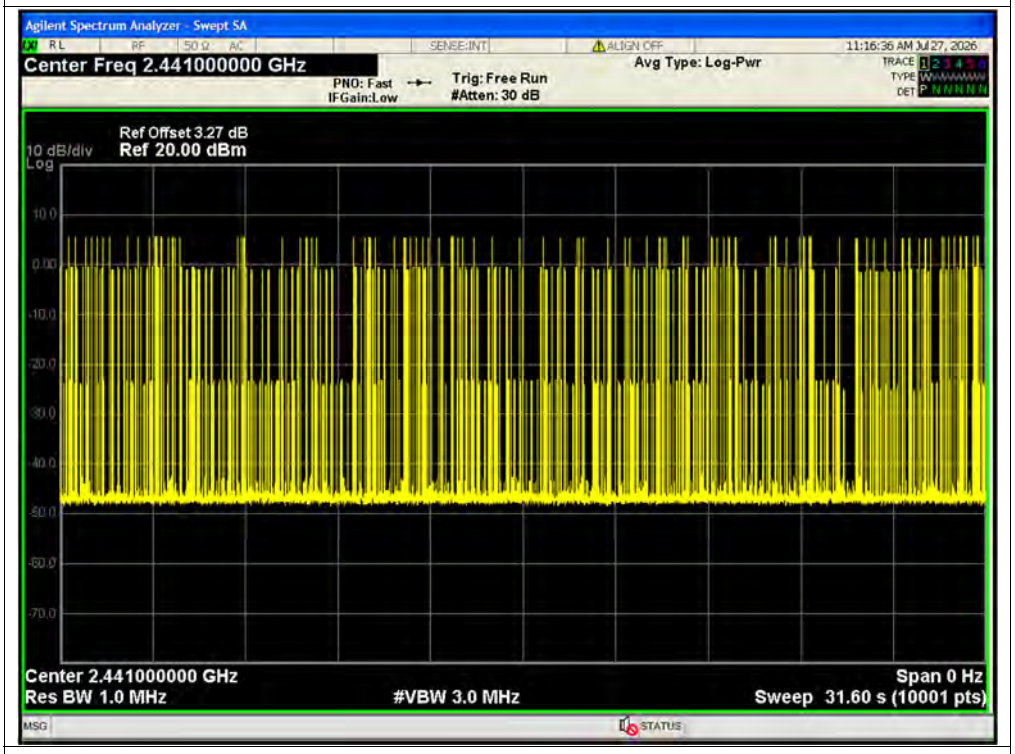
Dwell NVNT 2-DH5 2441MHz Ant1 One Burst



Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2441MHz Ant1 One Burst

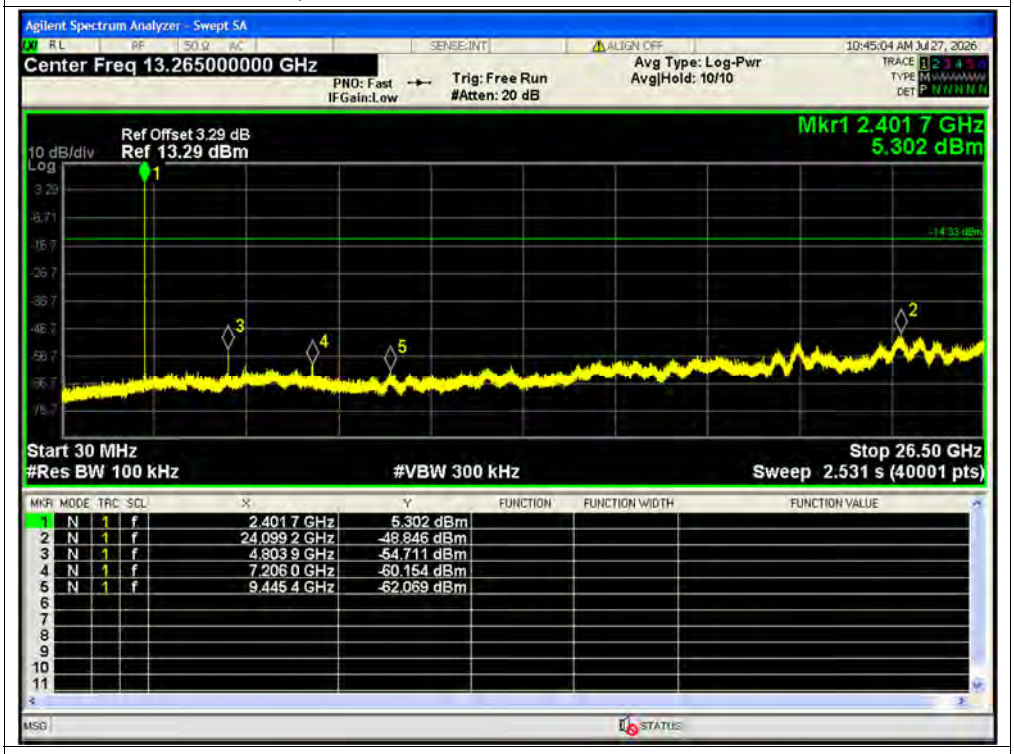


Dwell NVNT 3-DH5 2441MHz Ant1 Accumulated

A.8. Conducted Spurious Emissions

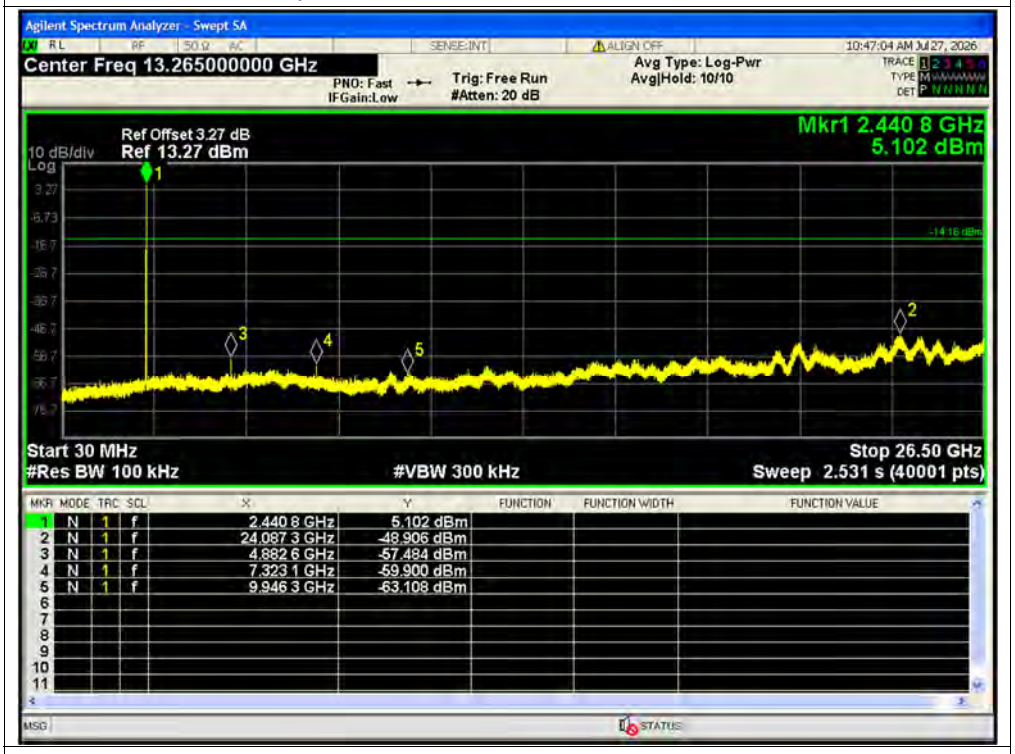
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-54.51	-20	Pass
NVNT	1-DH5	2441	Ant1	-54.74	-20	Pass
NVNT	1-DH5	2480	Ant1	-54.26	-20	Pass
NVNT	2-DH5	2402	Ant1	-52.93	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.84	-20	Pass
NVNT	2-DH5	2480	Ant1	-52.86	-20	Pass
NVNT	3-DH5	2402	Ant1	-53.1	-20	Pass
NVNT	3-DH5	2441	Ant1	-53.69	-20	Pass
NVNT	3-DH5	2480	Ant1	-52.98	-20	Pass

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



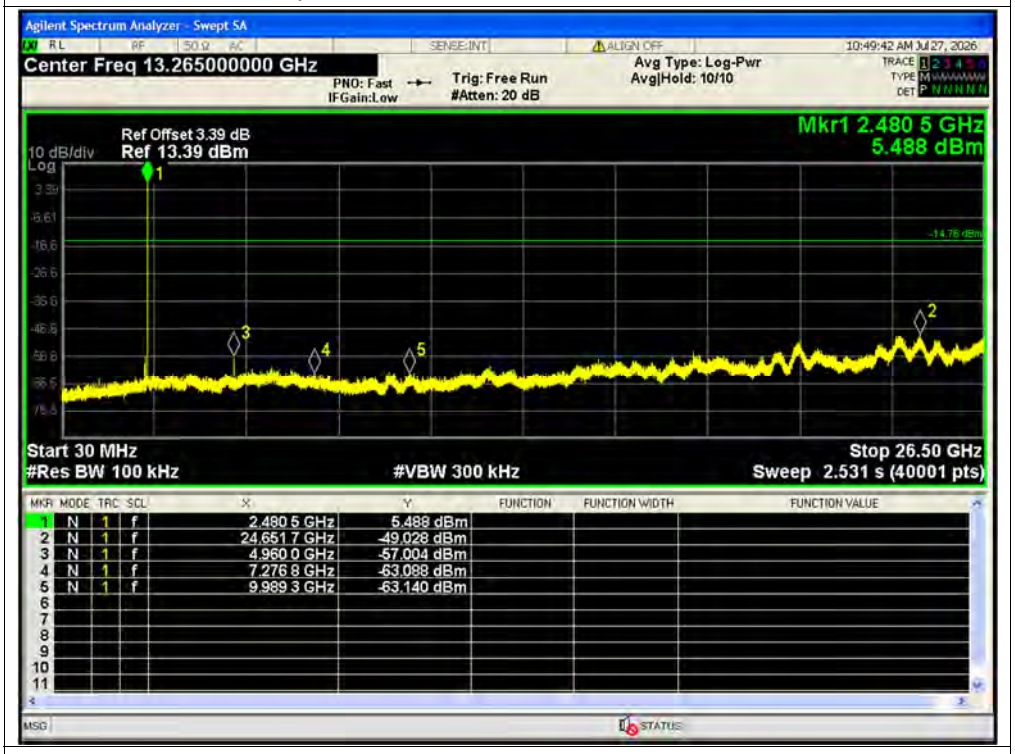
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



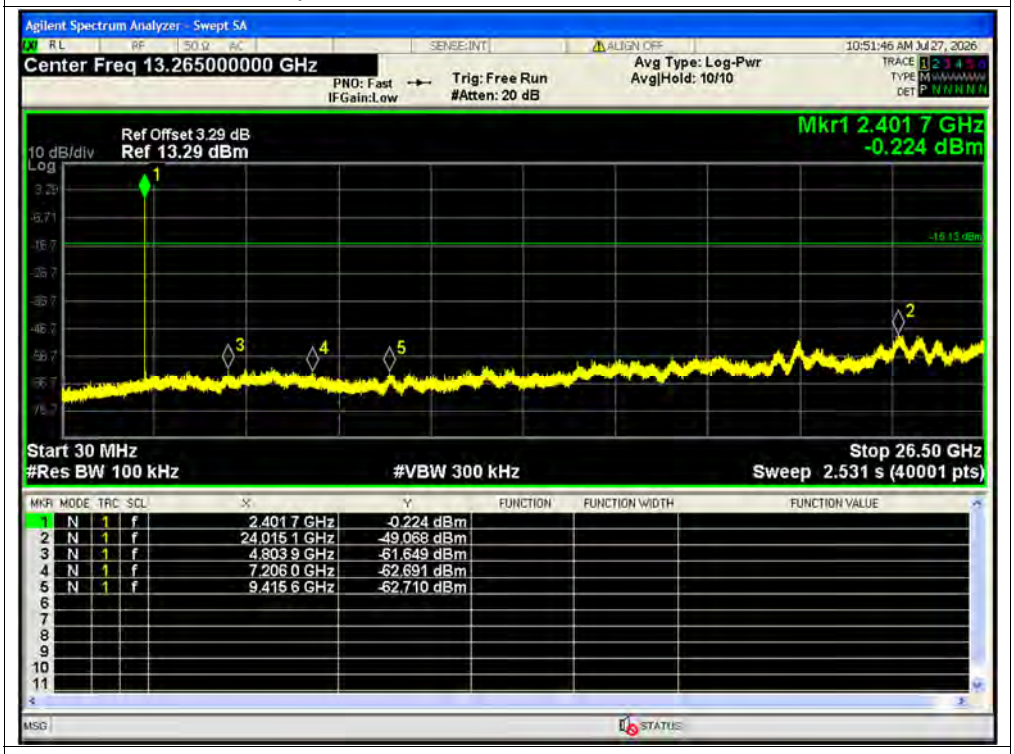
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



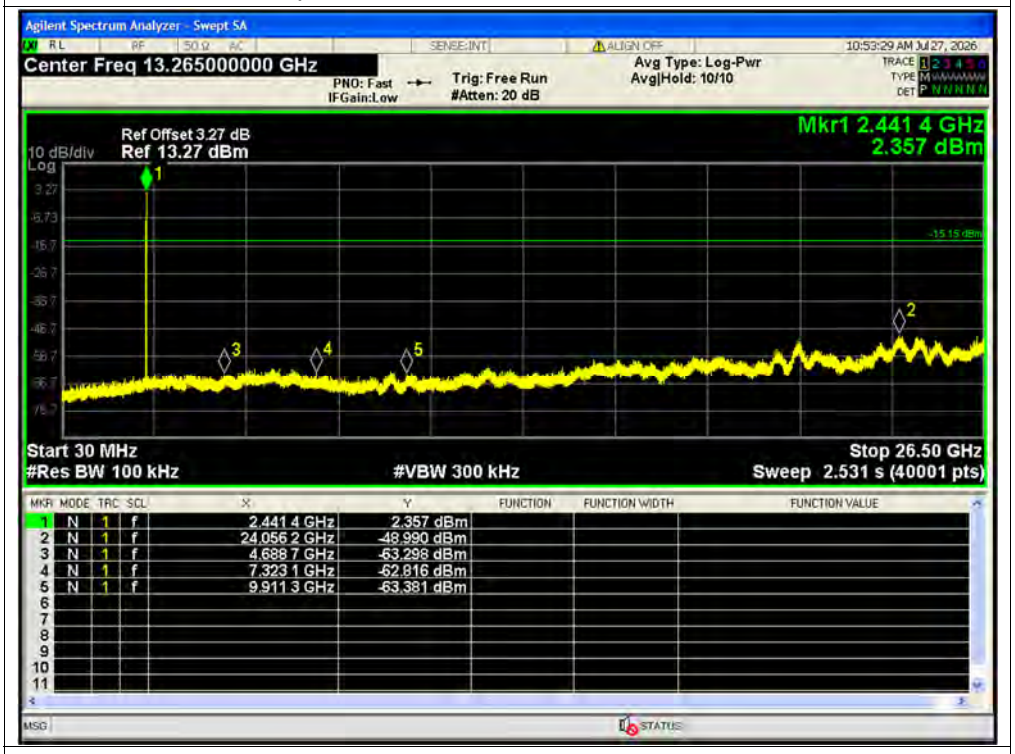
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



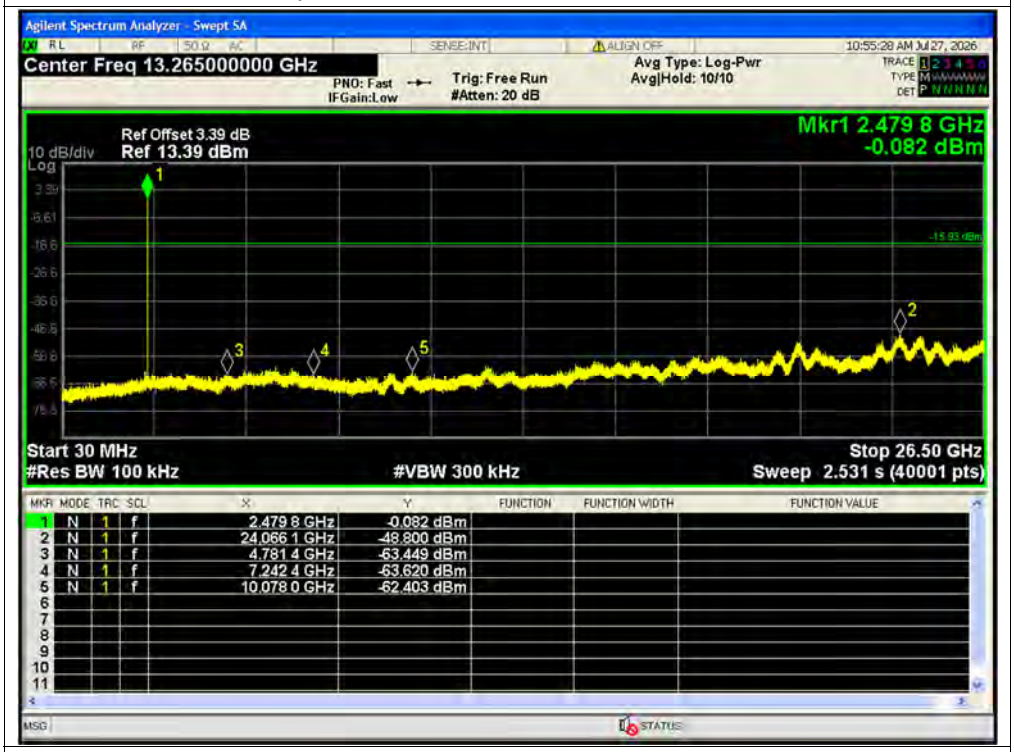
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



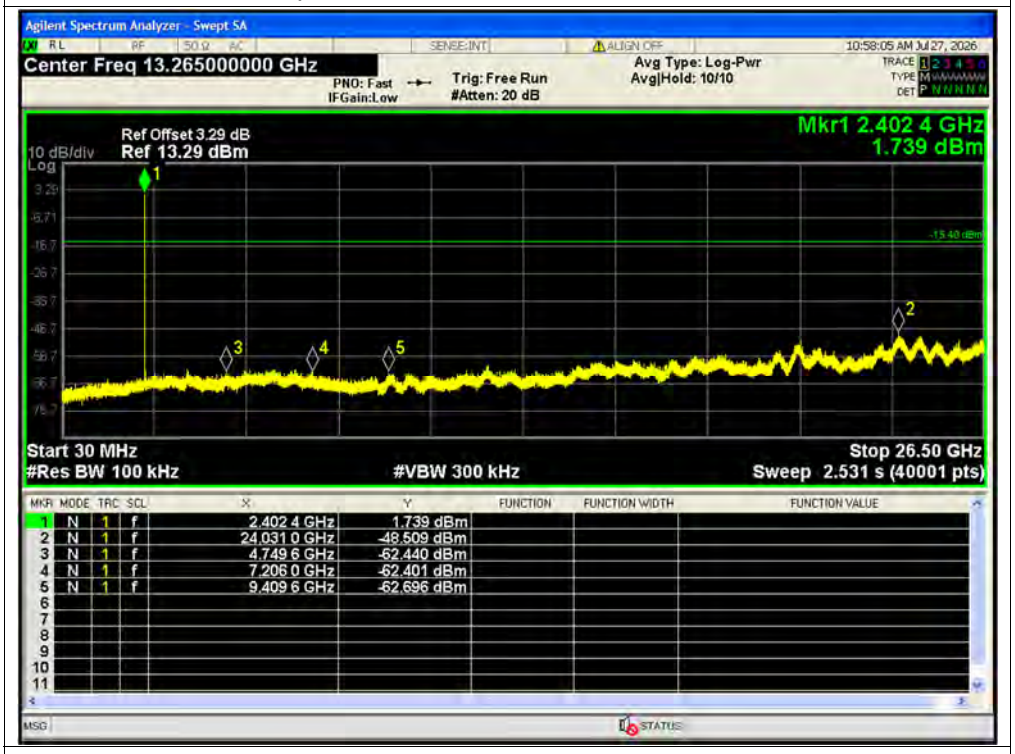
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



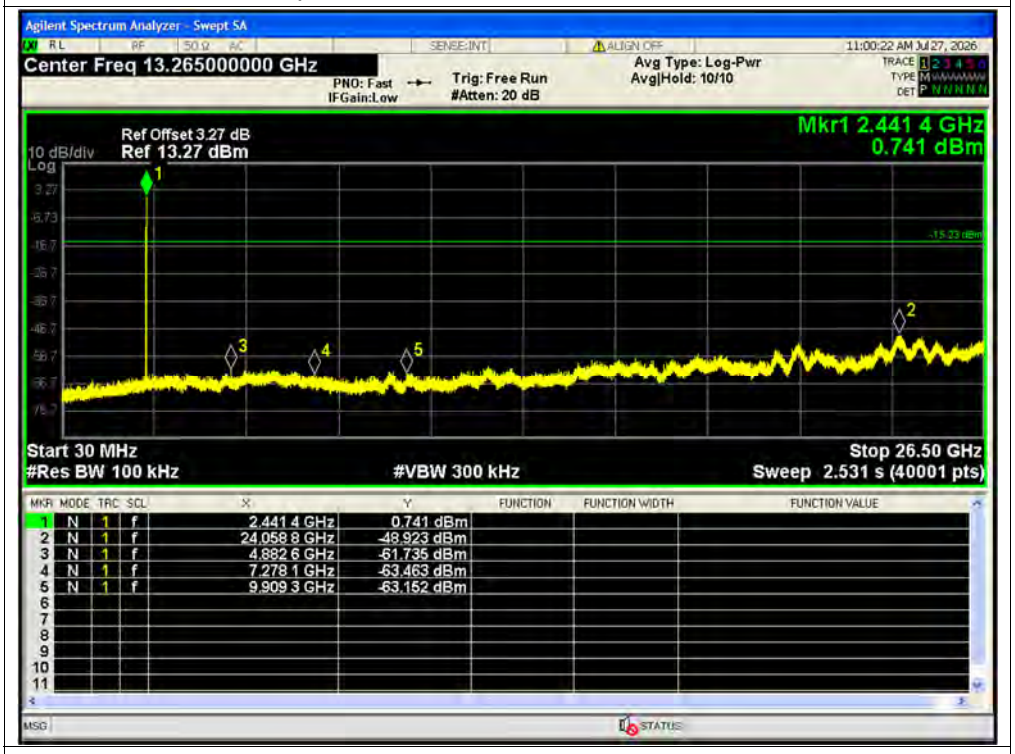
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission

Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



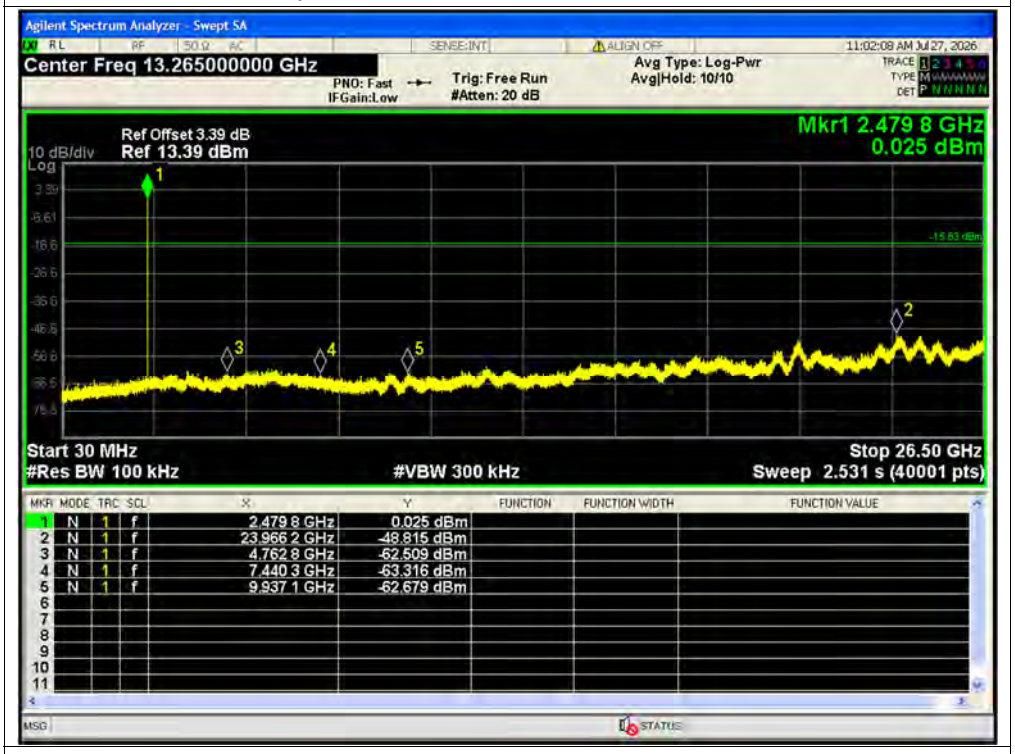
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission

Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission

Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref

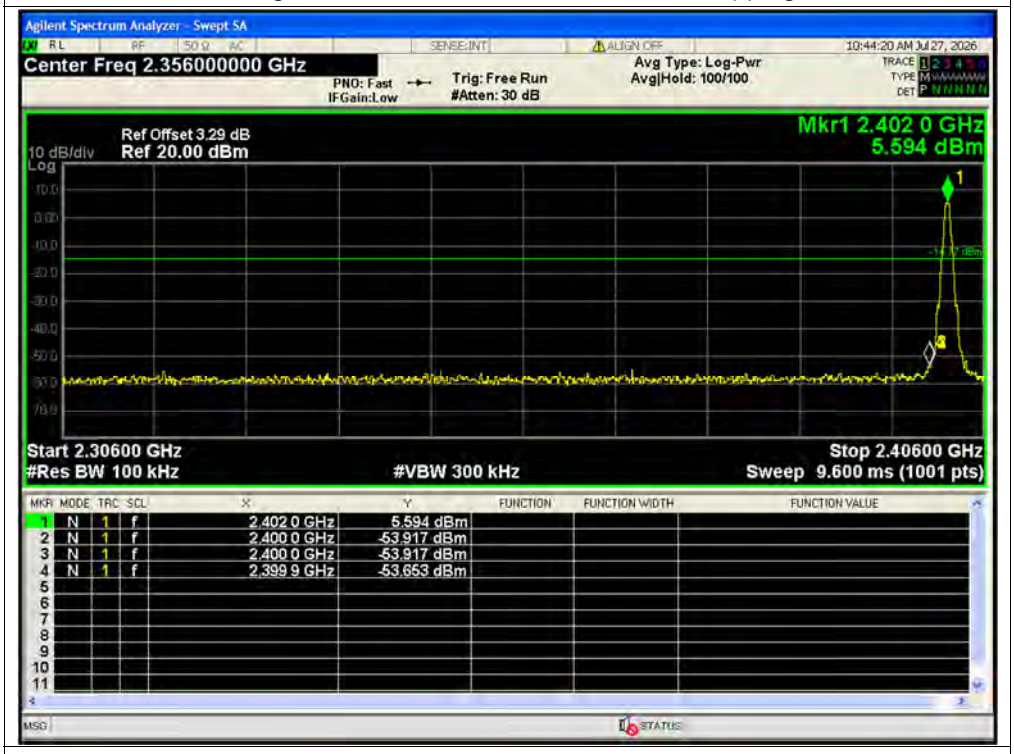


Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

A.9. Band Edge

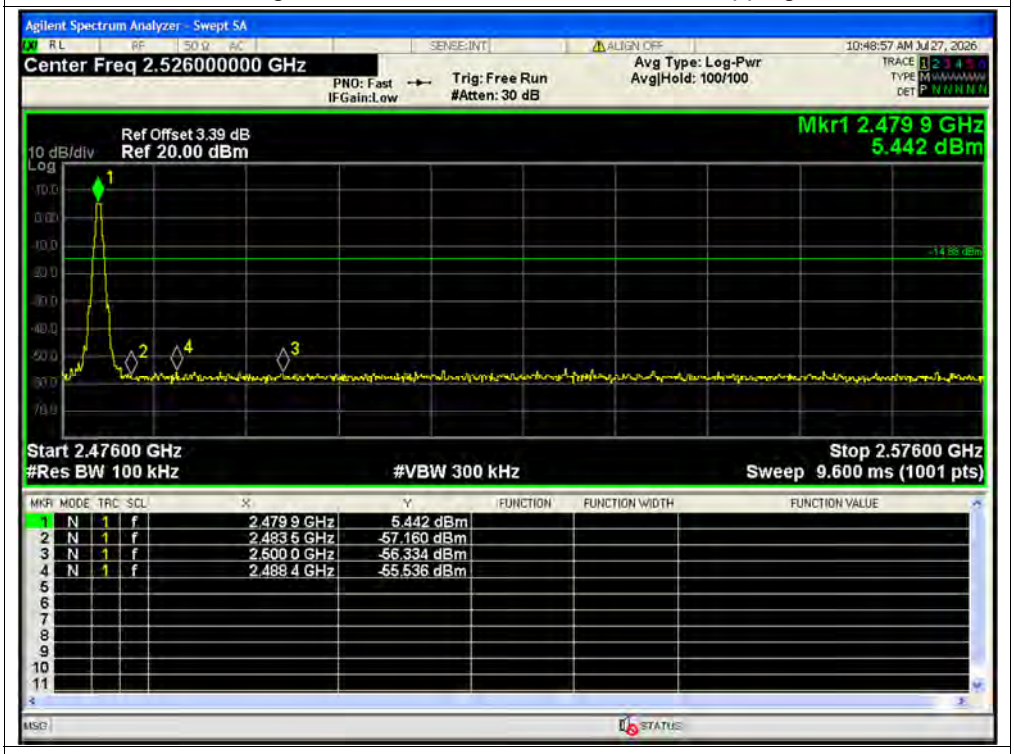
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-58.88	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-60.65	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-55.58	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-59.03	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-56.56	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-58.47	-20	Pass
NVNT	1-DH5	2402	Ant1	Hopping	-60.6	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-59.95	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-58.95	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-58.61	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-57.7	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-58	-20	Pass

Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



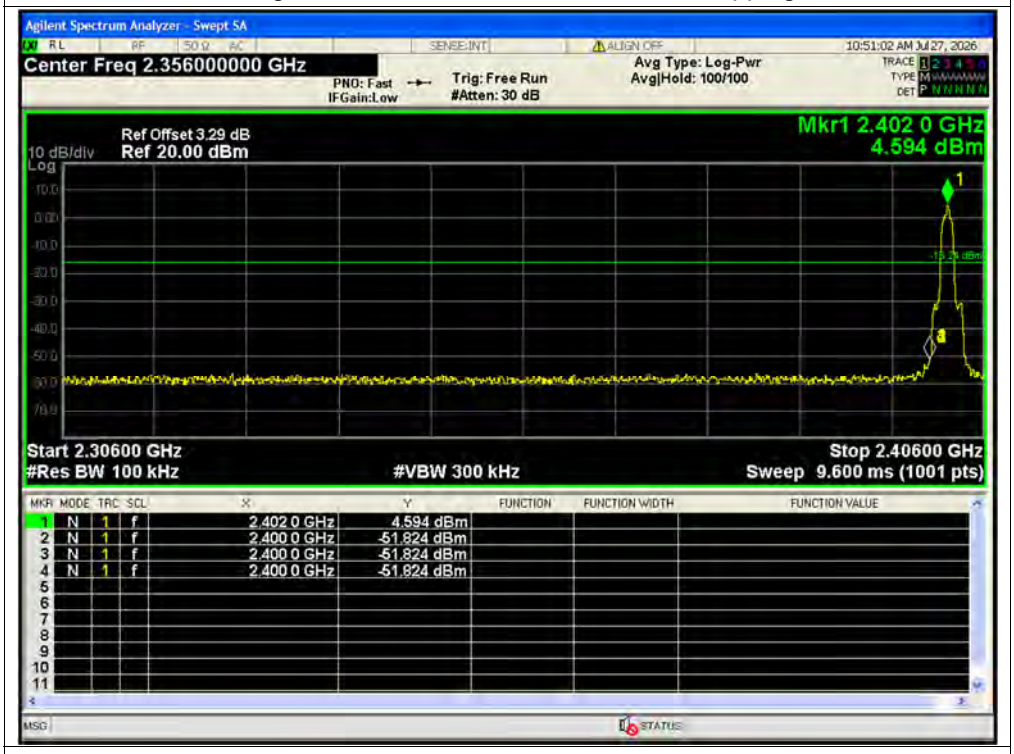
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



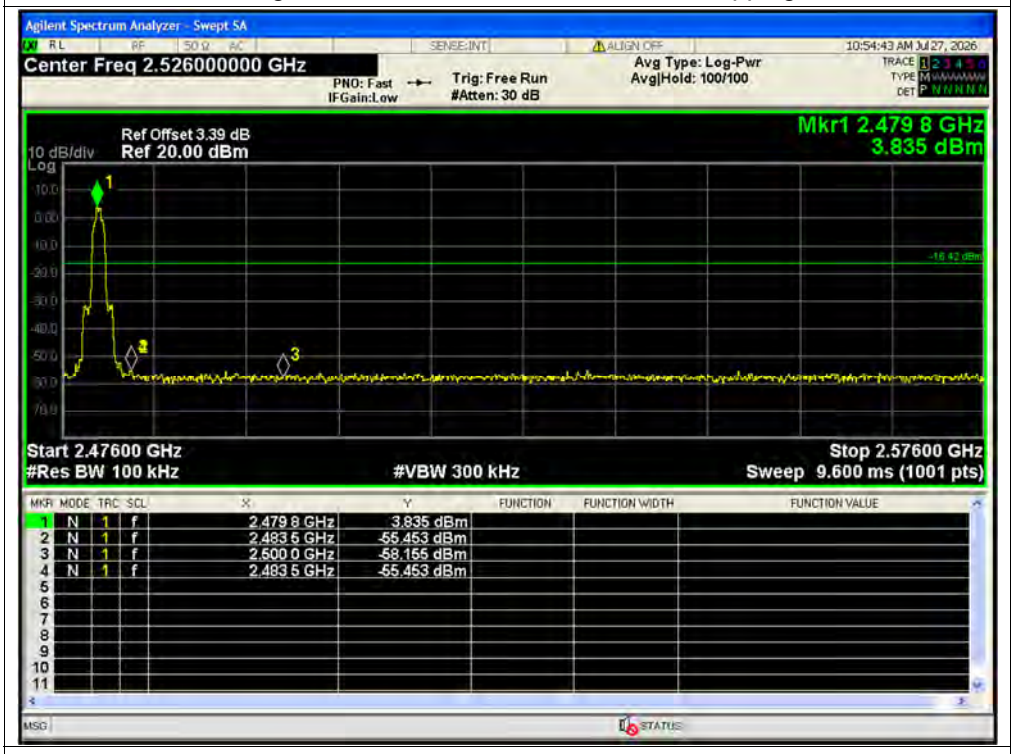
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



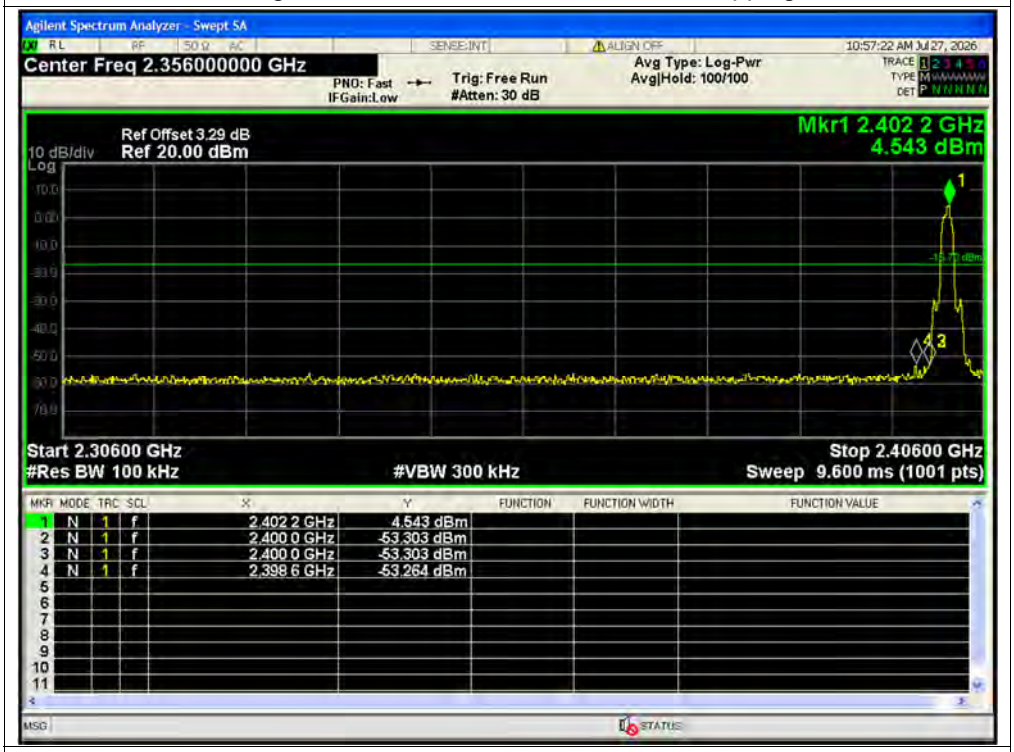
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



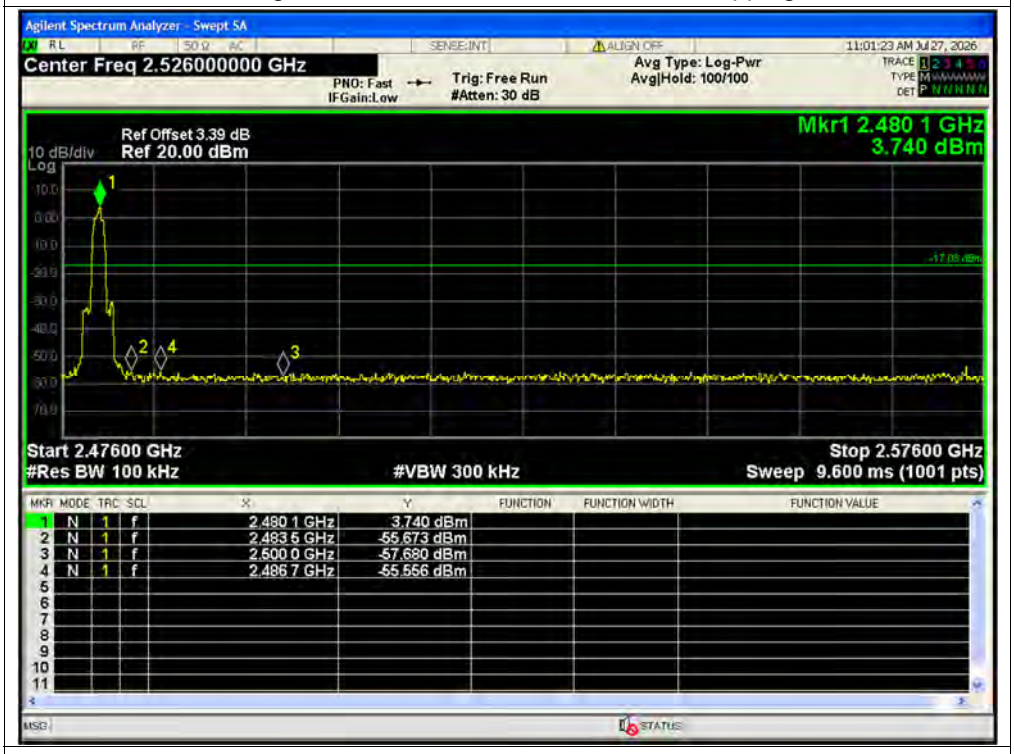
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



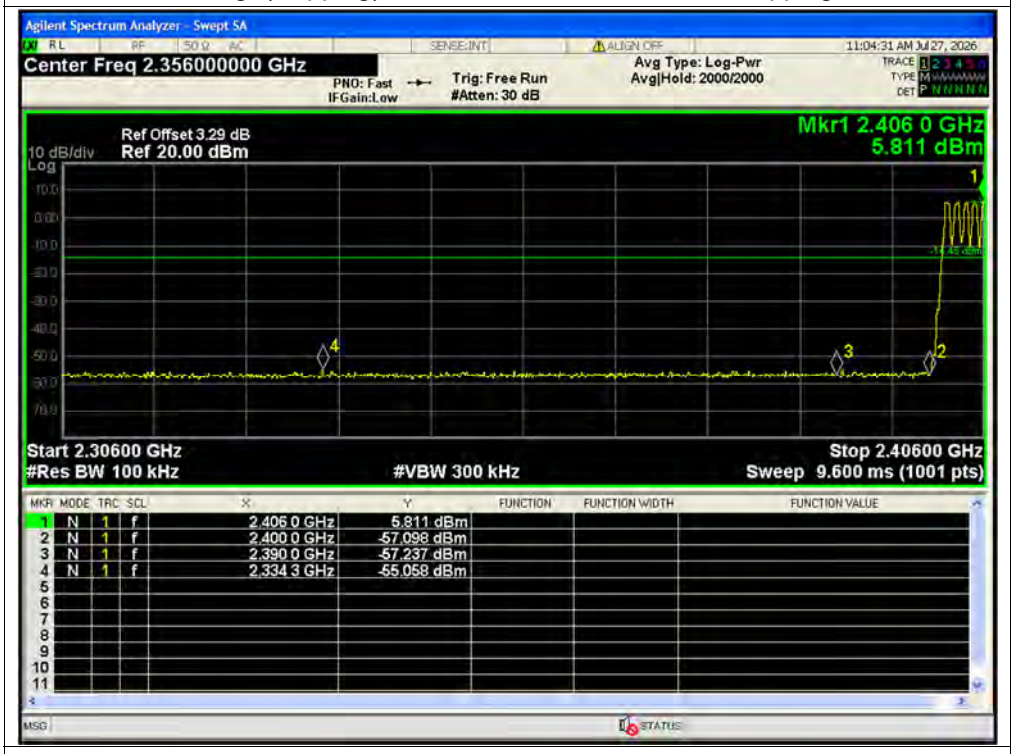
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission

Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



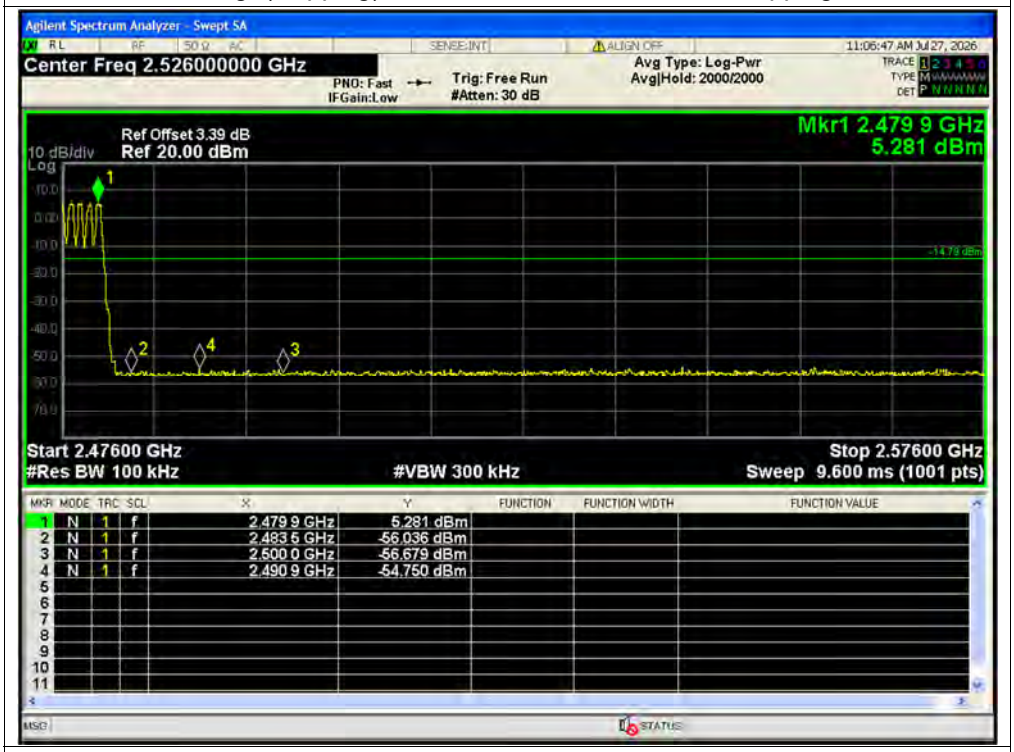
Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Emission

Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



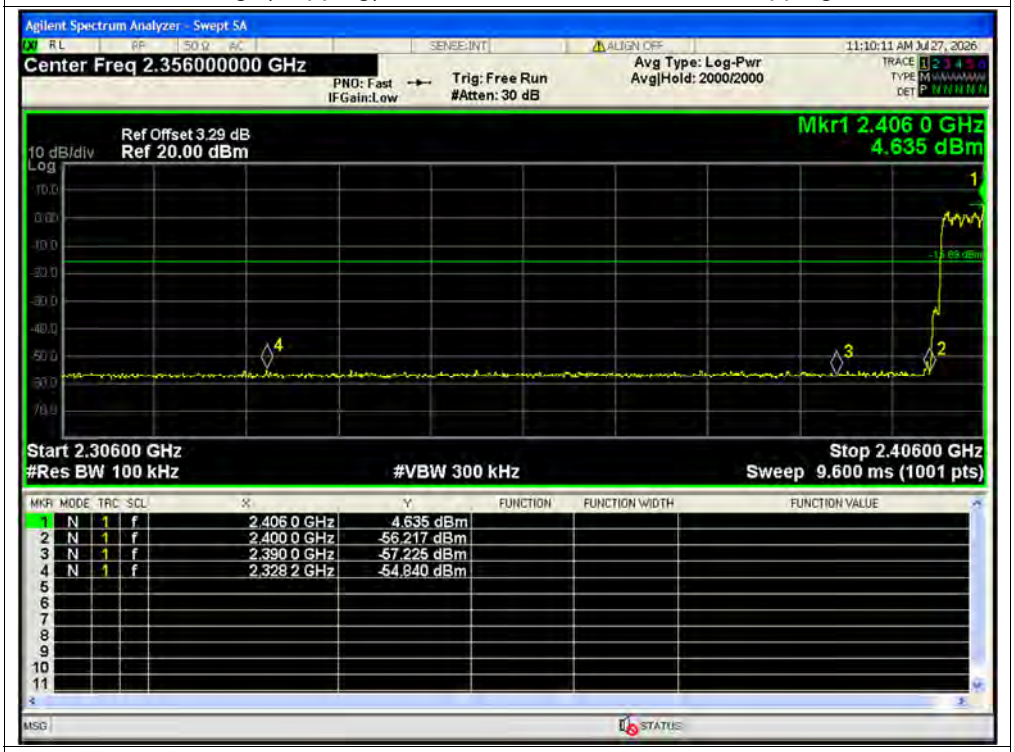
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



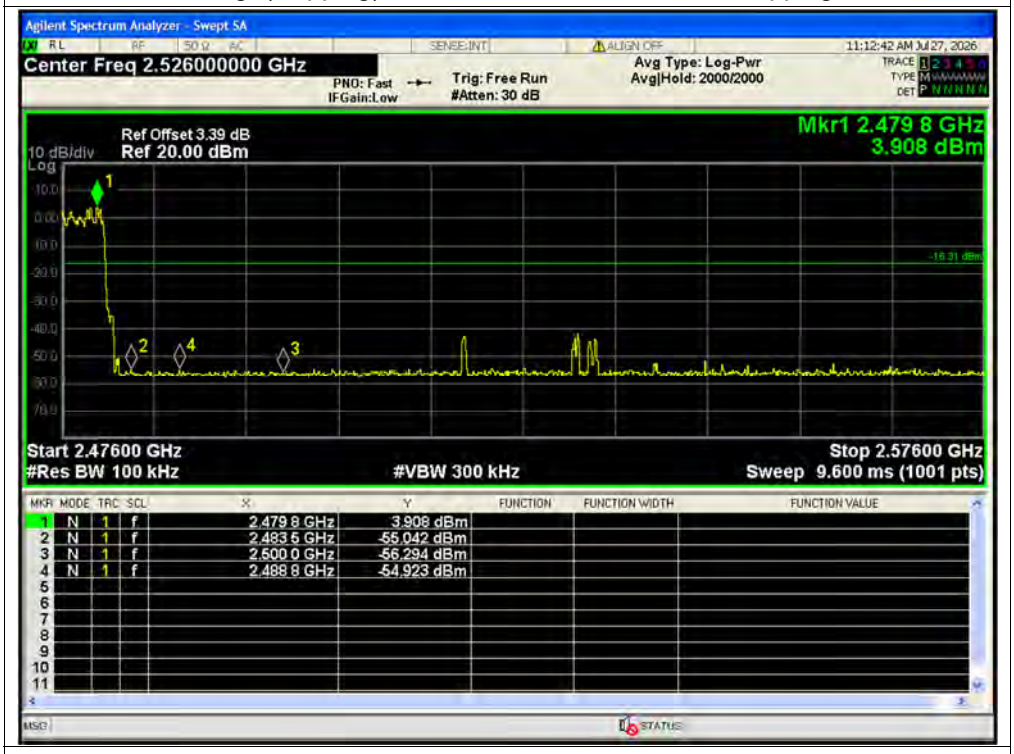
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission

Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



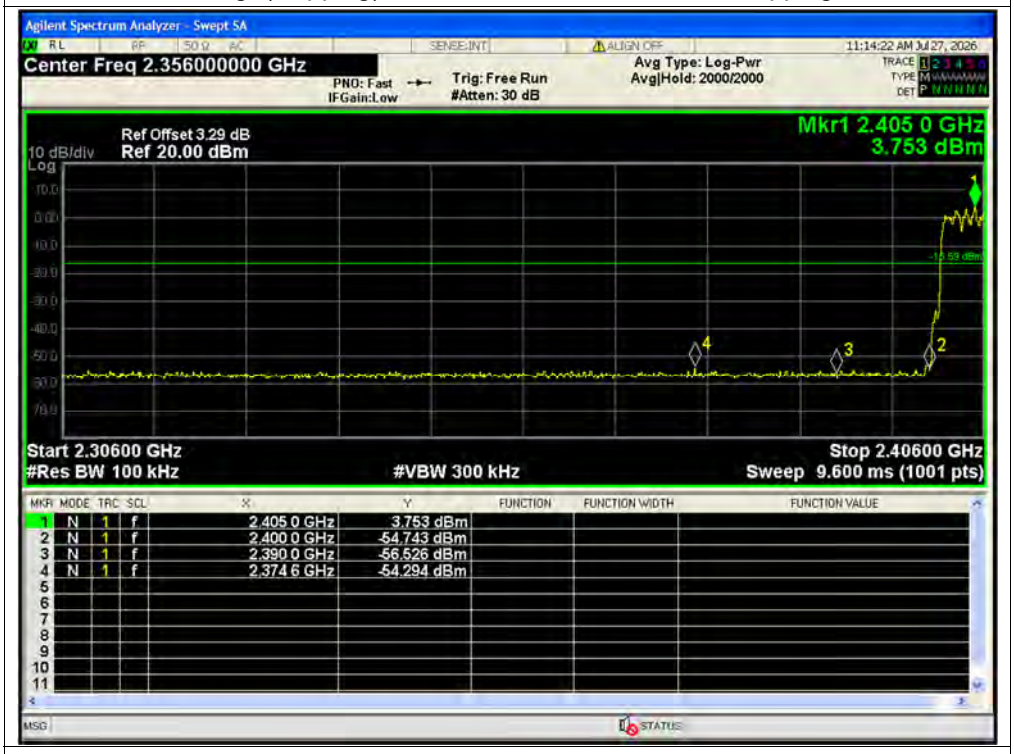
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission

Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



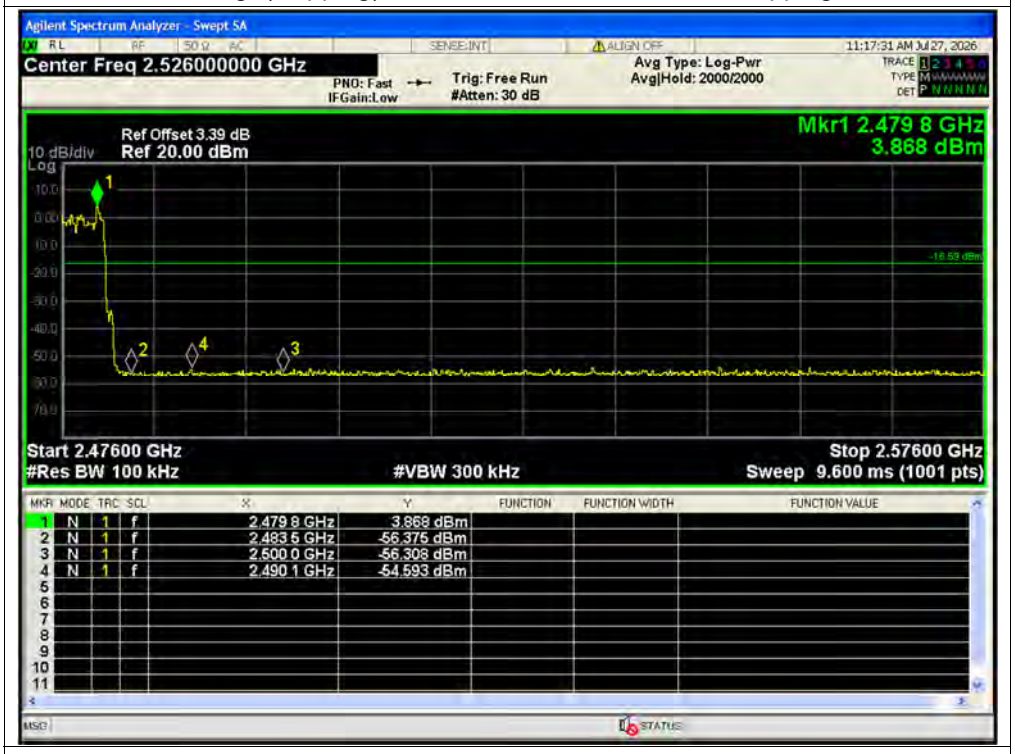
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission

Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission

Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission

A.10. Conducted Emission

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and plots below.

Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A. Test Setup:

Test Mode: EUT+Adapter+BT TX

Test voltage: AC 120V/60Hz

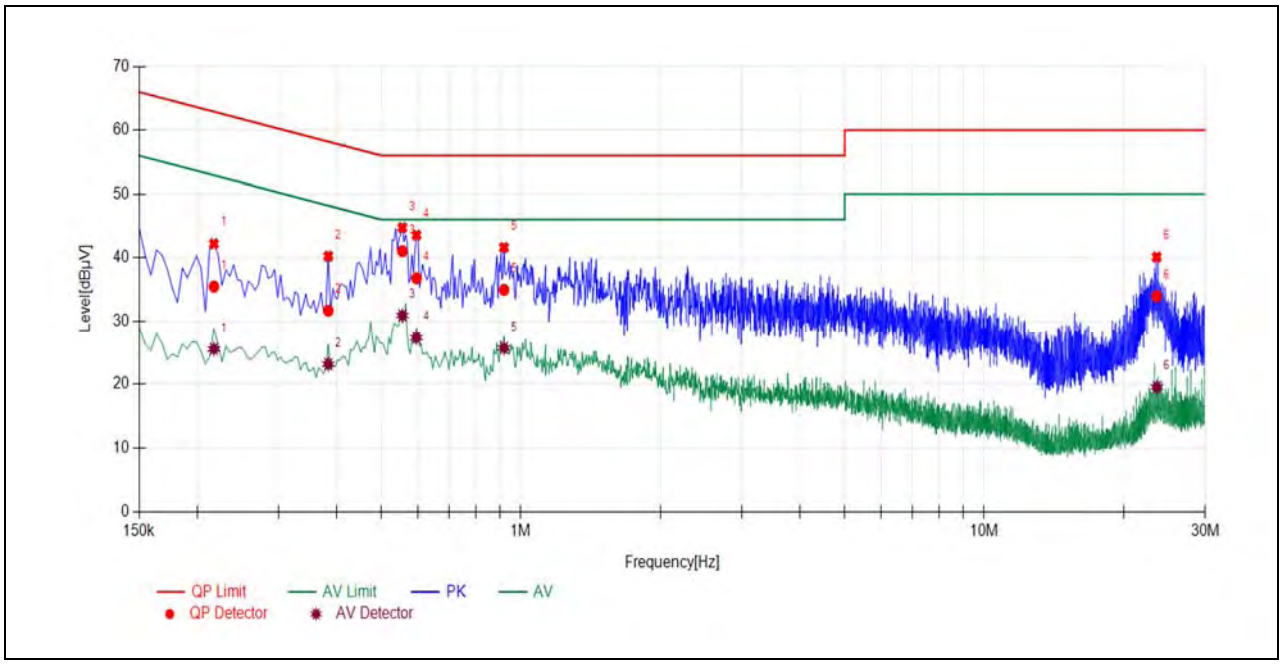
The measurement results are obtained as below:

E [dBμV] $=U_R + L_{Cable\ loss}$ [dB] + A_{Factor}

U_R: Receiver Reading

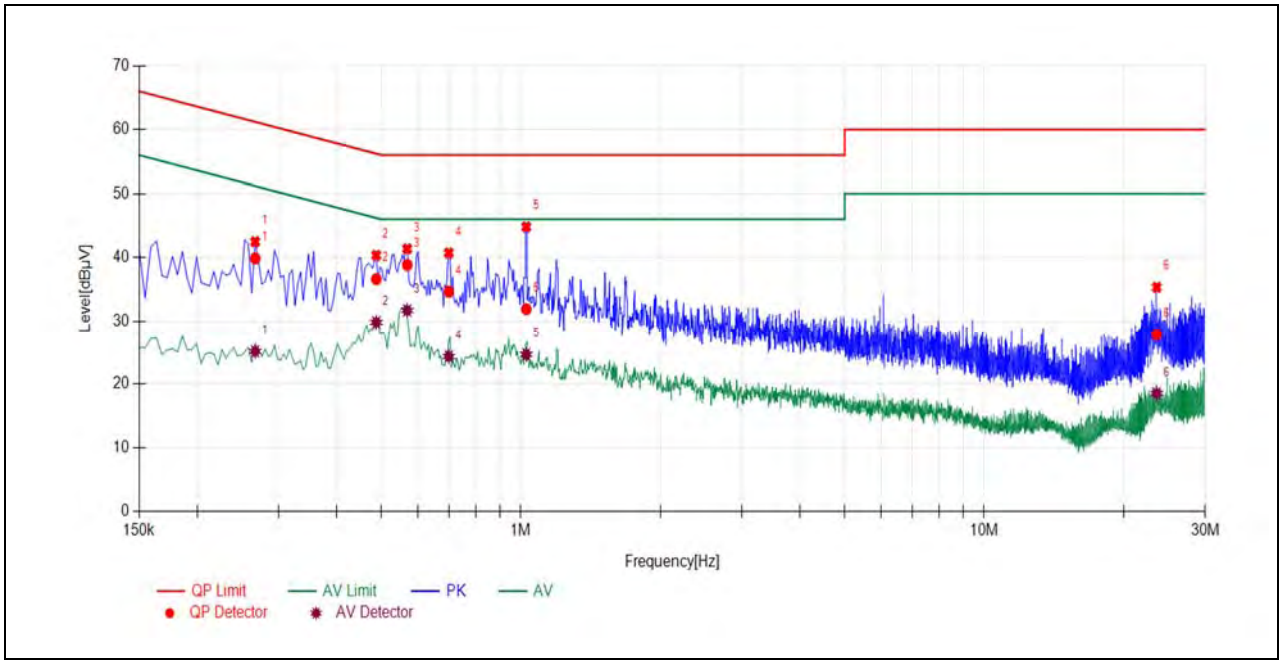
A_{Factor}: Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.2175	35.46	25.50	62.91	52.91	Line	PASS
2	0.3840	31.66	23.12	58.19	48.19		PASS
3	0.5550	41.05	30.91	56.00	46.00		PASS
4	0.5954	36.78	27.30	56.00	46.00		PASS
5	0.9195	34.94	25.67	56.00	46.00		PASS
6	23.5719	33.92	19.50	60.00	50.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.2670	39.86	25.12	61.21	51.21	Neutral	PASS
2	0.4875	36.61	29.82	56.21	46.21		PASS
3	0.5685	38.84	31.69	56.00	46.00		PASS
4	0.6990	34.65	24.31	56.00	46.00		PASS
5	1.0274	31.90	24.65	56.00	46.00		PASS
6	23.5778	27.84	18.49	60.00	50.00		PASS

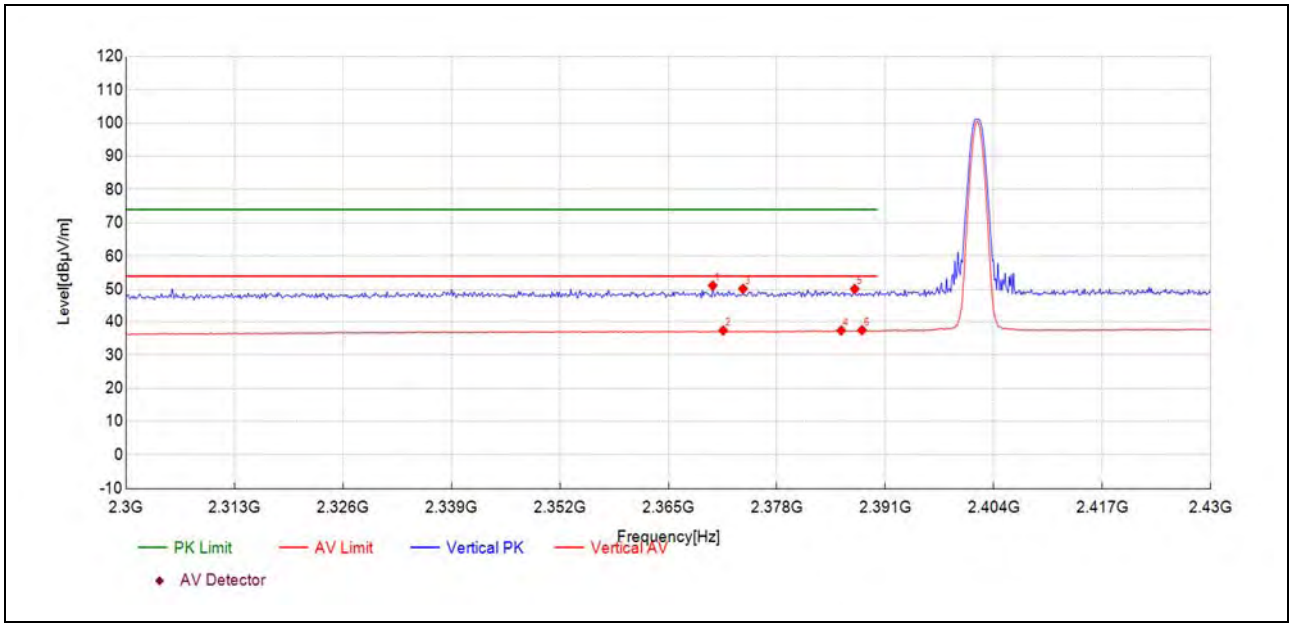
A.11. Restricted Frequency Bands

Note 1: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (Horizontal) was recorded in this test report.

Note 2: All test modes were considered and evaluated respectively by performing full test, only the worst data were recorded.

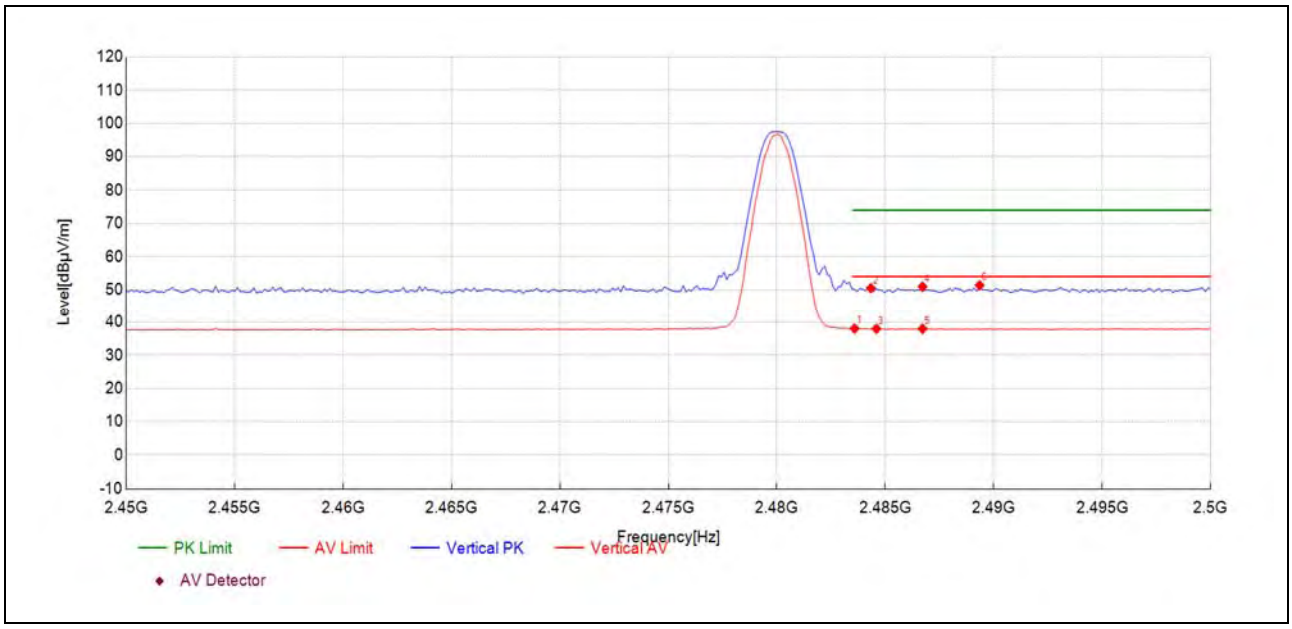
GFSK Mode

Plot for Channel 0



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2370.32	18.7	51.15	32.470	74.00	22.85	160	10	PK	PASS
2371.57	4.9	37.34	32.470	54.00	16.66	160	319	AV	PASS
2373.95	17.7	50.17	32.490	74.00	23.83	160	360	PK	PASS
2385.71	4.8	37.36	32.530	54.00	16.64	160	360	AV	PASS
2387.33	17.6	50.12	32.530	74.00	23.88	160	59	PK	PASS
2388.21	4.9	37.43	32.540	54.00	16.57	160	360	AV	PASS

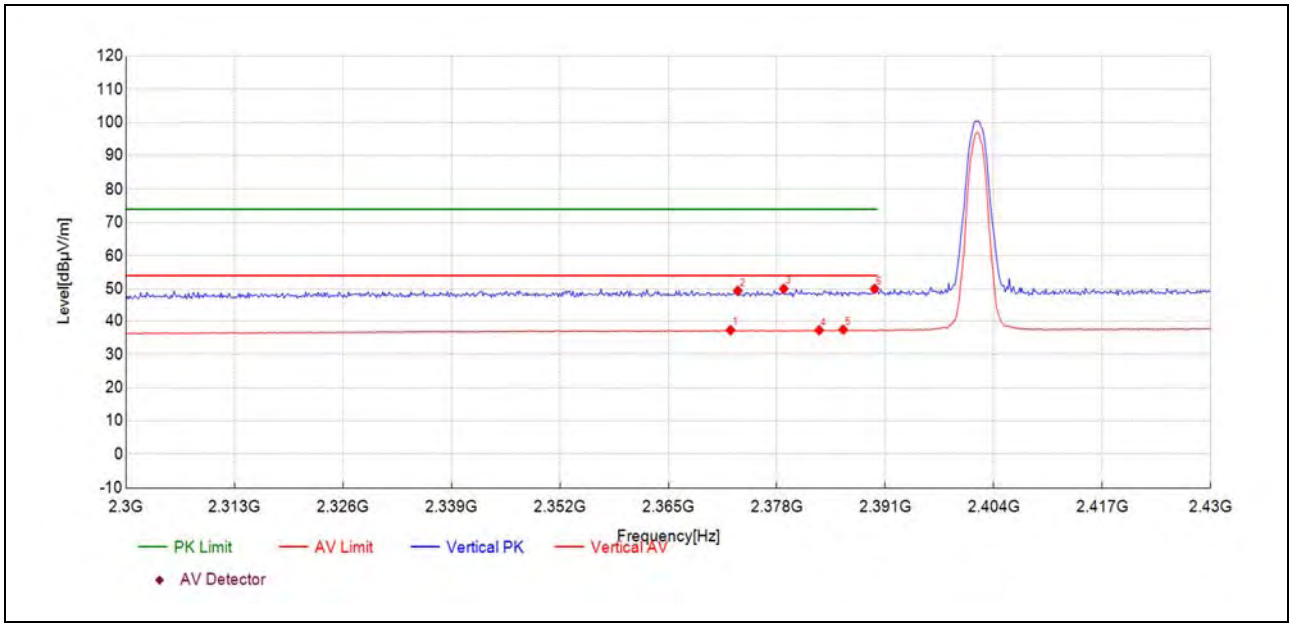
Plot for Channel 78



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2483.58	5.0	38.03	33.030	54.00	15.97	155	114	AV	PASS
2484.34	17.4	50.47	33.030	74.00	23.53	155	49	PK	PASS
2484.59	4.9	37.93	33.030	54.00	16.07	155	142	AV	PASS
2486.72	17.9	50.91	33.030	74.00	23.09	155	285	PK	PASS
2486.72	4.9	37.93	33.030	54.00	16.07	155	0	AV	PASS
2489.35	18.3	51.36	33.020	74.00	22.64	155	133	PK	PASS

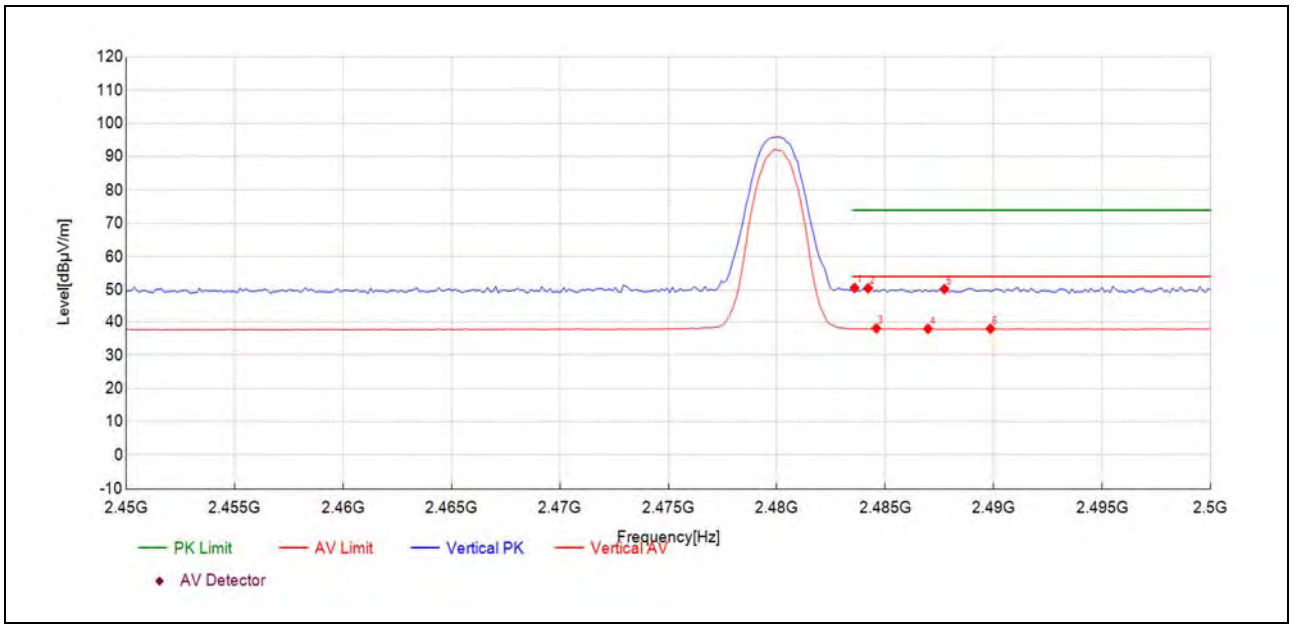
8-DPSK Mode

Plot for Channel 0



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2372.44	4.8	37.25	32.480	54.00	16.75	160	145	AV	PASS
2373.32	17.0	49.45	32.490	74.00	24.55	160	67	PK	PASS
2378.83	17.5	50.04	32.510	74.00	23.96	160	1	PK	PASS
2383.08	4.7	37.24	32.520	54.00	16.76	160	213	AV	PASS
2385.96	4.9	37.42	32.530	54.00	16.58	160	338	AV	PASS
2389.71	17.5	50.02	32.540	74.00	23.98	160	86	PK	PASS

Plot for Channel 78



Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2483.58	17.5	50.55	33.030	74.00	23.45	155	59	PK	PASS
2484.21	17.4	50.45	33.030	74.00	23.55	155	97	PK	PASS
2484.59	5.1	38.09	33.030	54.00	15.91	155	124	AV	PASS
2486.97	4.9	37.96	33.030	54.00	16.04	155	218	AV	PASS
2487.72	17.2	50.21	33.020	74.00	23.79	155	161	PK	PASS
2489.85	4.9	37.95	33.020	54.00	16.05	155	115	AV	PASS

A.12. Radiated Emission

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak (or average) limit, it is unnecessary to perform an quasi-peak measurement (or average).

The measurement results are obtained as below:

E [dBμV/m] $=U_R + A_T + A_{Factor}$ [dB]; $A_T = L_{Cable\ loss}$ [dB]$-G_{preamp}$ [dB]

A_T: Total correction Factor except Antenna

U_R: Receiver Reading

G_{preamp}: Preamplifier Gain

A_{Factor}: Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

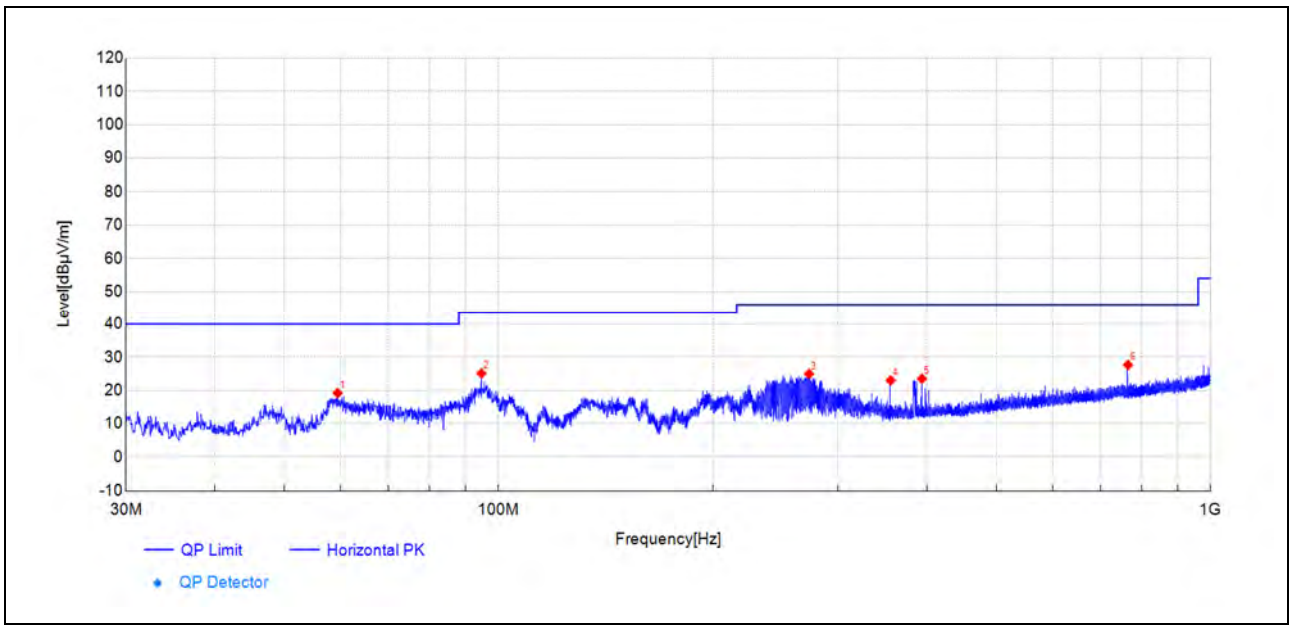
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 10th harmonic of the highest frequency, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note 4: All test modes were considered and evaluated respectively by performing full test, only the worst data were recorded.

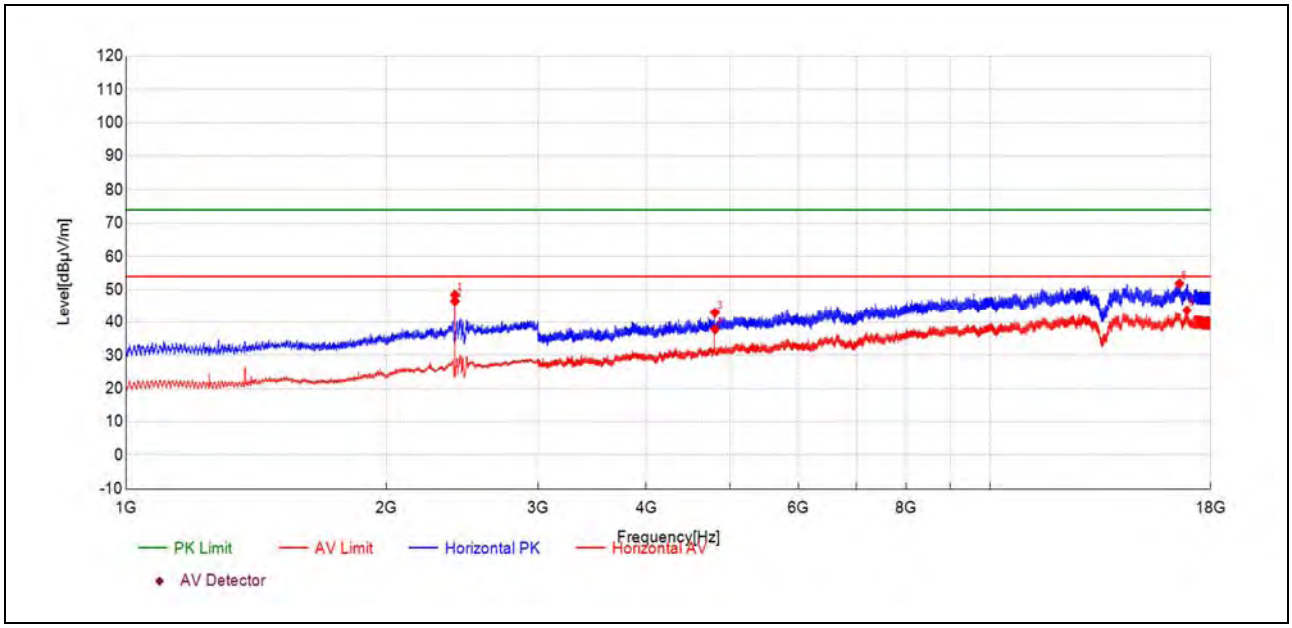
GFSK Mode

Plot for Channel 0



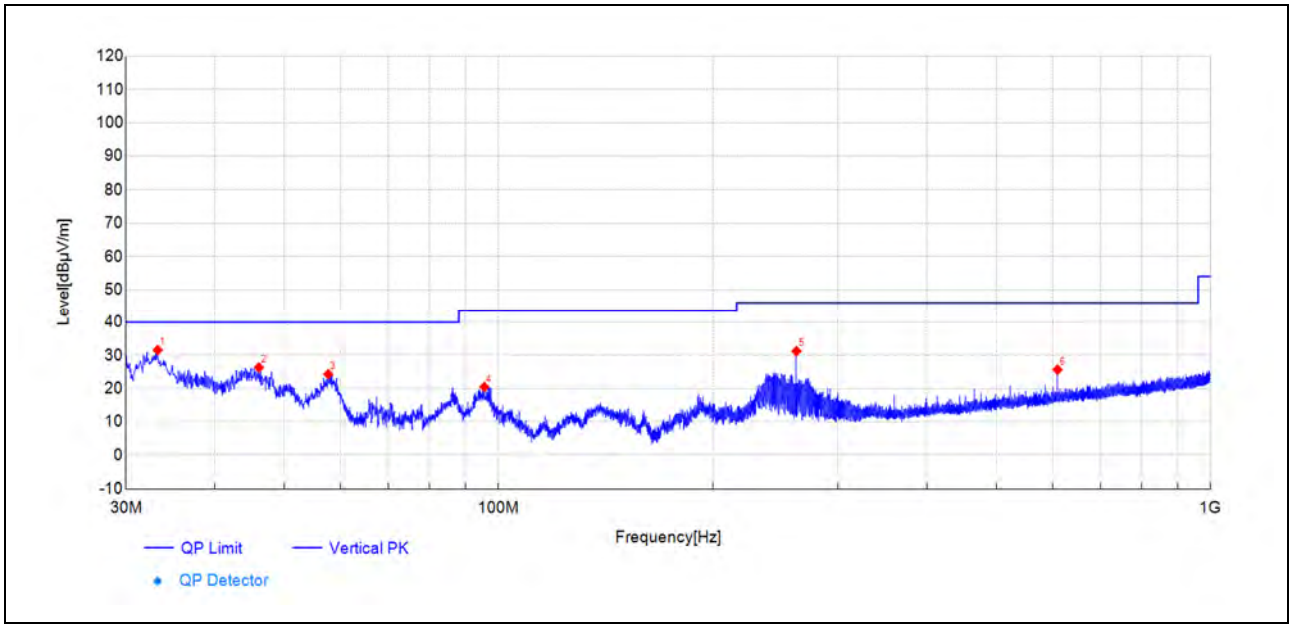
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
59.45	50.0	19.22	-30.760	40.00	20.78	155	11	PK	PASS
94.67	55.9	25.14	-30.760	43.50	18.36	155	176	PK	PASS
272.93	52.7	24.98	-27.750	46.00	21.02	155	201	PK	PASS
355.41	48.4	23.03	-25.380	46.00	22.97	155	289	PK	PASS
393.21	47.8	23.52	-24.290	46.00	22.48	155	289	PK	PASS
765.36	44.7	27.68	-16.980	46.00	18.32	155	189	PK	PASS



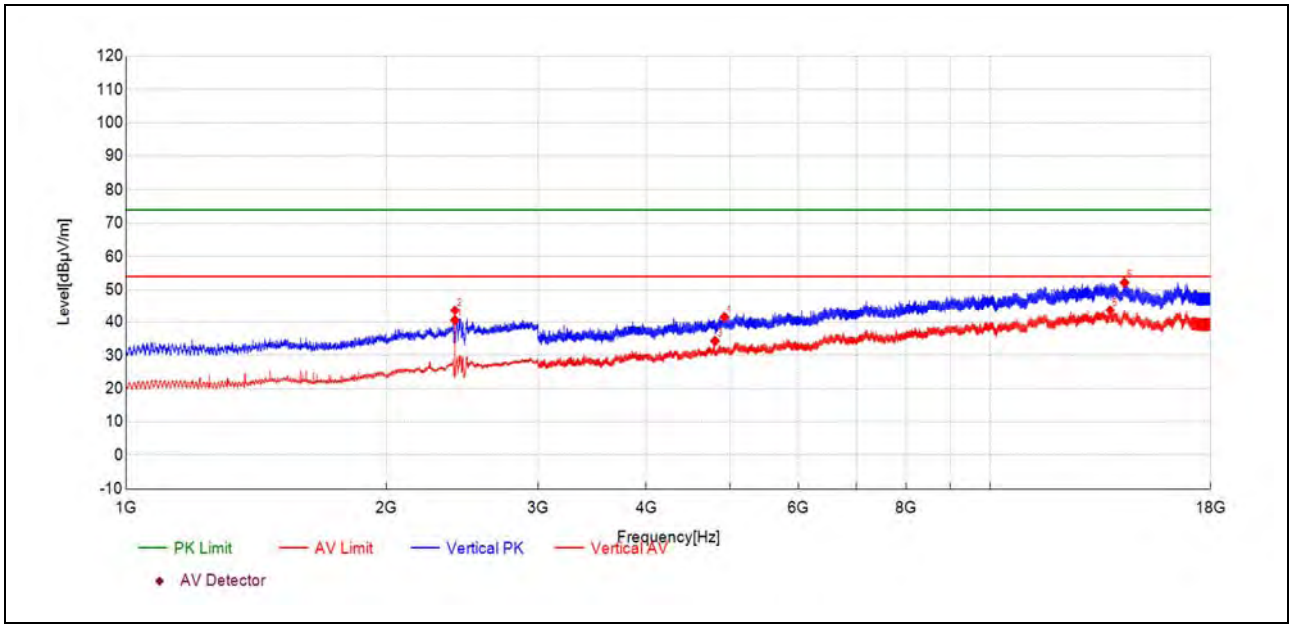
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2402.20	47.7	48.45	0.750	-	-	155	95	PK	NA
2402.20	45.8	46.54	0.750	-	-	155	95	AV	NA
4803.91	53.7	42.95	-10.720	74.00	31.05	155	138	PK	PASS
4803.91	48.5	37.82	-10.720	54.00	16.18	155	10	AV	PASS
16562.53	45.8	51.83	6.010	74.00	22.17	155	341	PK	PASS
16898.97	36.4	43.66	7.270	54.00	10.34	155	292	AV	PASS



(Antenna Vertical, 30MHz to 1GHz)

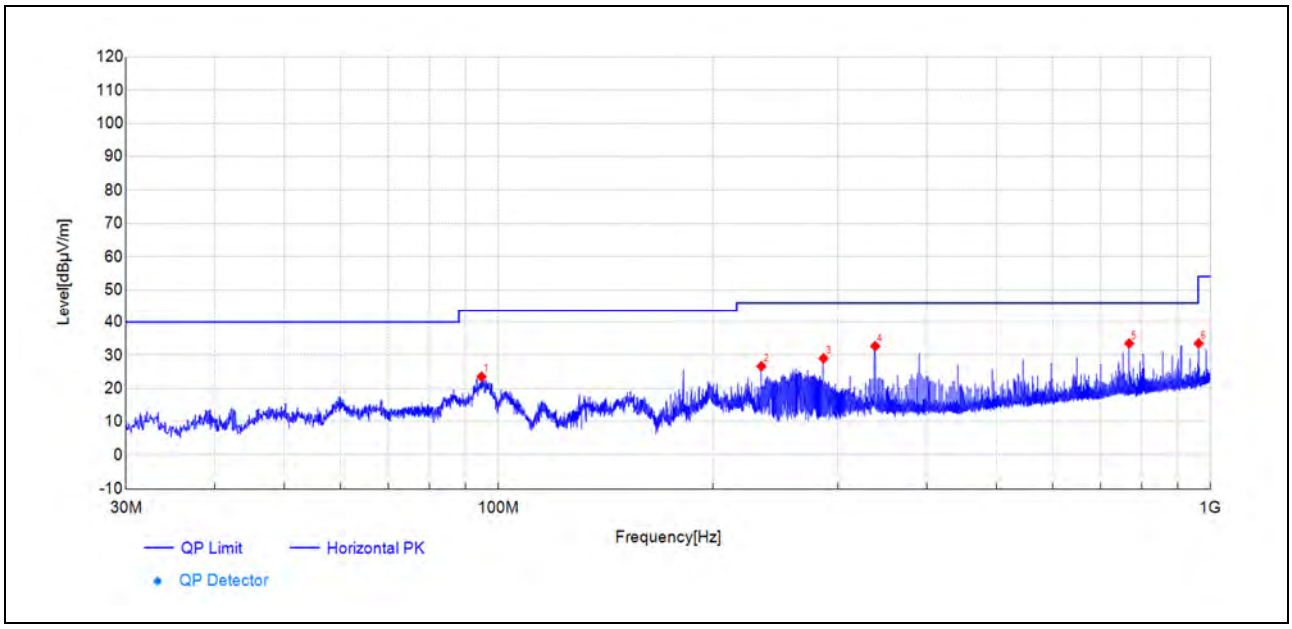
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
33.23	63.4	31.57	-31.870	40.00	8.43	155	0	PK	PASS
46.11	54.6	26.33	-28.310	40.00	13.67	155	0	PK	PASS
57.69	54.5	24.33	-30.140	40.00	15.67	155	0	PK	PASS
95.55	51.1	20.50	-30.600	43.50	23.00	155	240	PK	PASS
262.11	59.2	31.25	-27.920	46.00	14.75	155	337	PK	PASS
609.39	45.3	25.69	-19.630	46.00	20.31	155	6	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

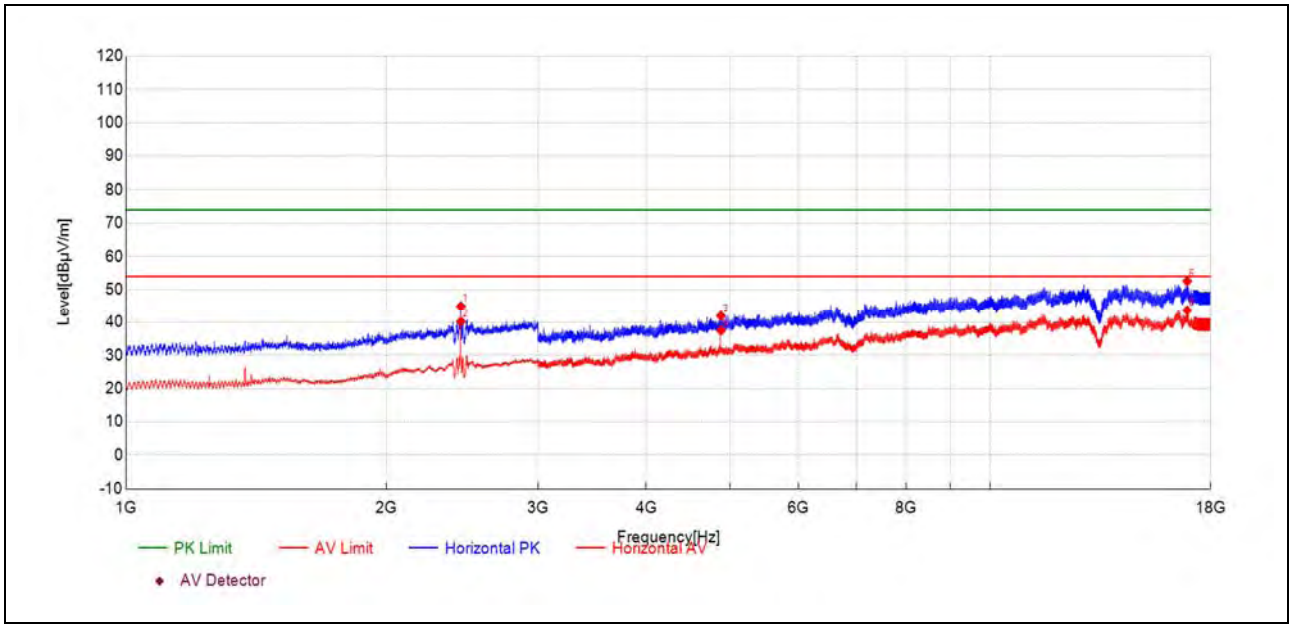
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2402.20	39.9	40.60	0.750	-	-	155	117	AV	NA
2402.20	42.9	43.65	0.750	-	-	155	105	PK	NA
4803.91	45.0	34.29	-10.720	54.00	19.71	155	242	AV	PASS
4926.06	51.5	41.49	-9.990	74.00	32.51	155	242	PK	PASS
13767.74	38.5	43.72	5.230	54.00	10.28	155	11	AV	PASS
14308.18	47.3	52.14	4.850	74.00	21.86	155	355	PK	PASS

Plot for Channel 39



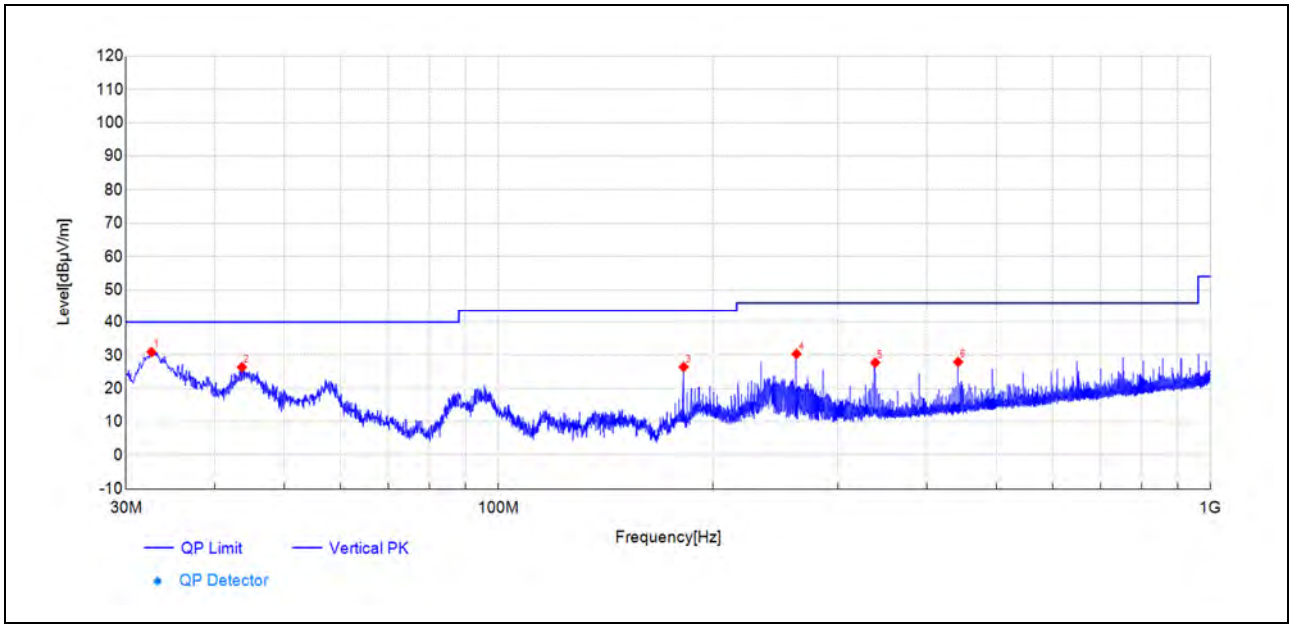
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
94.67	54.3	23.54	-30.760	43.50	19.96	155	326	PK	PASS
234.01	55.2	26.70	-28.510	46.00	19.30	155	138	PK	PASS
285.98	56.4	29.06	-27.370	46.00	16.94	155	124	PK	PASS
338.01	58.0	32.74	-25.210	46.00	13.26	155	313	PK	PASS
768.42	50.5	33.56	-16.980	46.00	12.44	155	61	PK	PASS
962.02	47.6	33.58	-13.990	54.00	20.42	155	237	PK	PASS



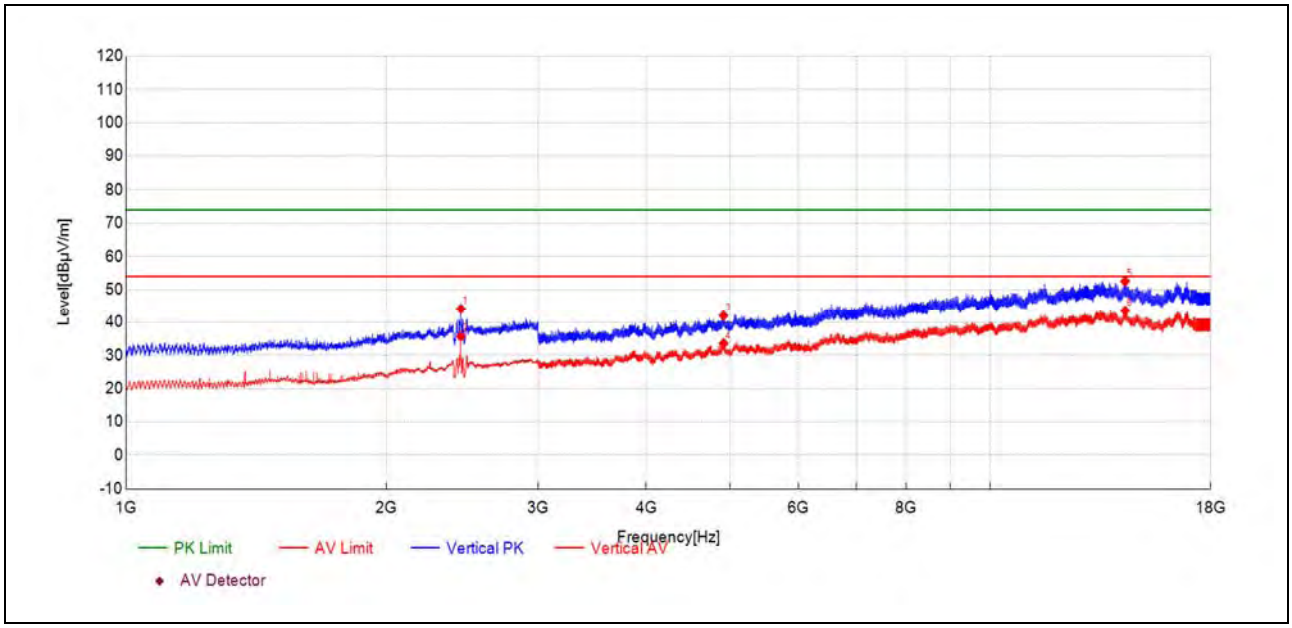
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2440.78	43.9	44.92	1.020	-	-	155	93	PK	NA
2441.27	39.2	40.18	1.010	-	-	155	103	AV	NA
4880.20	51.9	41.91	-10.010	74.00	32.09	155	189	PK	PASS
4881.91	47.5	37.50	-9.990	54.00	16.50	155	163	AV	PASS
16904.54	36.5	43.65	7.190	54.00	10.35	155	355	AV	PASS
16909.68	45.5	52.55	7.080	74.00	21.45	155	360	PK	PASS



(Antenna Vertical, 30MHz to 1GHz)

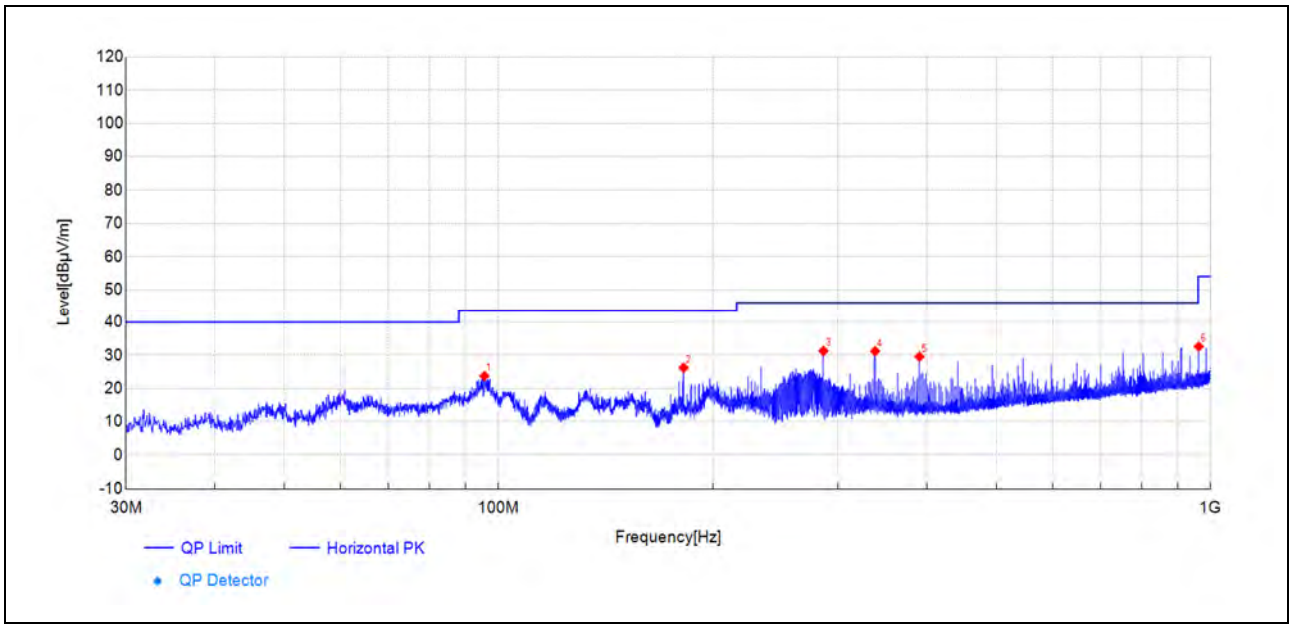
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
32.59	63.2	30.95	-32.210	40.00	9.05	155	3	PK	PASS
43.64	54.8	26.41	-28.390	40.00	13.59	155	187	PK	PASS
181.98	57.9	26.51	-31.360	43.50	16.99	155	274	PK	PASS
262.11	58.4	30.43	-27.920	46.00	15.57	155	350	PK	PASS
338.01	53.0	27.80	-25.210	46.00	18.20	155	1	PK	PASS
442.01	51.3	28.01	-23.290	46.00	17.99	155	172	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

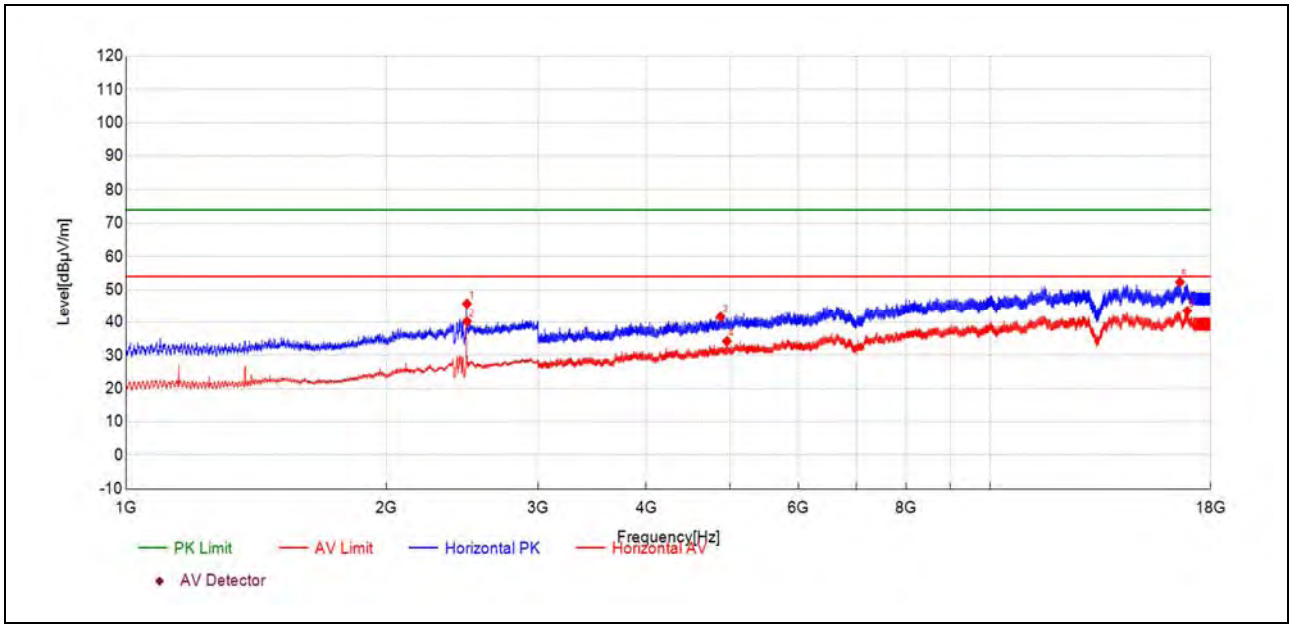
Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2441.27	43.1	44.11	1.010	-	-	155	79	PK	NA
2441.27	34.7	35.73	1.010	-	-	155	67	AV	NA
4914.05	51.9	41.98	-9.900	74.00	32.02	155	10	PK	PASS
4916.20	43.5	33.59	-9.920	54.00	20.41	155	111	AV	PASS
14328.32	47.7	52.52	4.870	74.00	21.48	155	354	PK	PASS
14331.75	38.7	43.59	4.880	54.00	10.41	155	162	AV	PASS

Plot for Channel 78



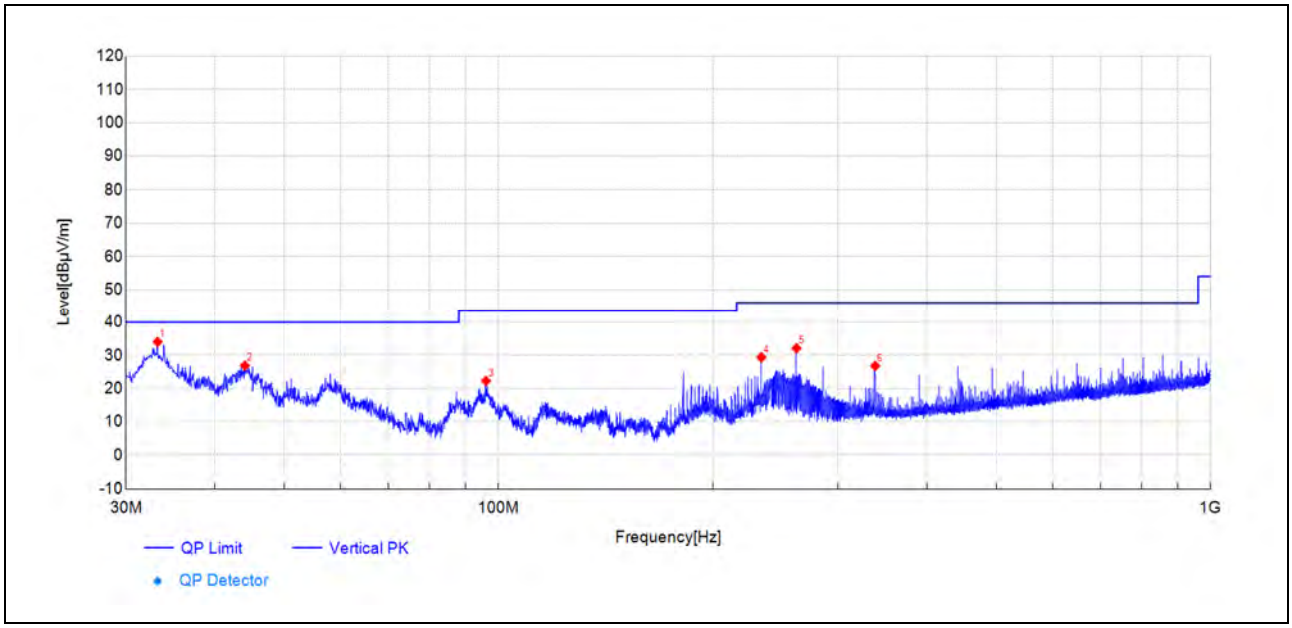
(Antenna Horizontal, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
95.55	54.4	23.77	-30.600	43.50	19.73	155	162	PK	PASS
181.98	57.6	26.22	-31.360	43.50	17.28	155	324	PK	PASS
285.98	58.7	31.28	-27.370	46.00	14.72	155	200	PK	PASS
337.95	56.4	31.23	-25.210	46.00	14.77	155	324	PK	PASS
389.98	53.9	29.58	-24.350	46.00	16.42	155	213	PK	PASS
962.02	46.6	32.63	-13.990	54.00	21.37	155	238	PK	PASS



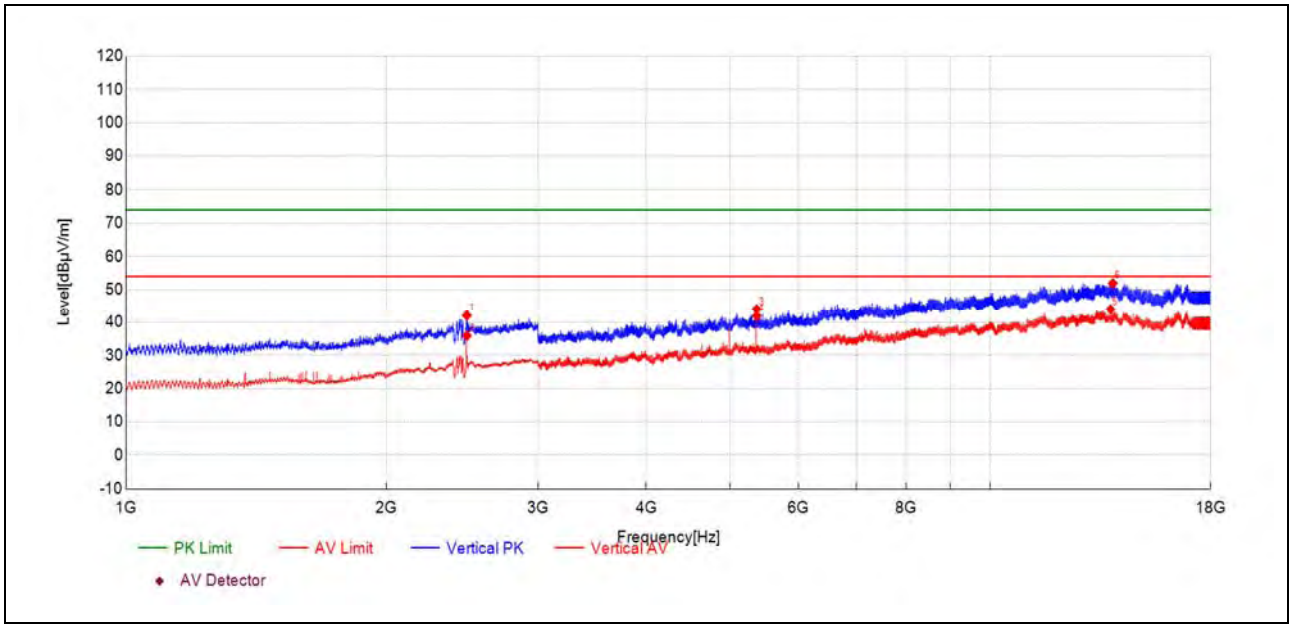
(Antenna Horizontal, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2480.34	44.8	45.72	0.920	-	-	155	261	PK	NA
2480.34	39.3	40.18	0.920	-	-	155	261	AV	NA
4876.34	51.7	41.60	-10.050	74.00	32.40	155	355	PK	PASS
4959.91	44.3	34.20	-10.130	54.00	19.80	155	162	AV	PASS
16580.96	46.2	52.29	6.060	74.00	21.71	155	293	PK	PASS
16909.68	36.4	43.50	7.080	54.00	10.50	155	293	AV	PASS



(Antenna Vertical, 30MHz to 1GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
33.23	65.9	34.05	-31.870	40.00	5.95	155	147	PK	PASS
44.05	55.2	26.87	-28.340	40.00	13.13	155	135	PK	PASS
96.08	52.8	22.30	-30.490	43.50	21.20	155	147	PK	PASS
234.01	57.9	29.41	-28.510	46.00	16.59	155	224	PK	PASS
262.11	60.1	32.14	-27.920	46.00	13.86	155	349	PK	PASS
338.01	52.0	26.81	-25.210	46.00	19.19	155	2	PK	PASS



(Antenna Vertical, 1GHz to 18GHz)

Fre. (MHz)	Reading [dBµV]	Level [dBµV/m]	Factor [dB/m]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Detector	Verdict
2479.85	41.1	42.04	0.920	-	-	155	263	PK	NA
2479.85	35.0	35.89	0.920	-	-	155	105	AV	NA
5368.35	52.8	43.99	-8.830	74.00	30.01	155	139	PK	PASS
5368.35	50.7	41.87	-8.830	54.00	12.13	155	112	AV	PASS
13784.45	38.5	43.95	5.410	54.00	10.05	155	88	AV	PASS
13866.31	47.0	51.92	4.890	74.00	22.08	155	62	PK	PASS

Notes

1. The report shall have report stamp or our company stamp.
2. The report shall be invalid without all the signatures of the editor and approver.
3. The report shall not be changed.
4. Any objections must be raised to Morlab within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.
5.Conformity declaration:

☑ Morlab issues a statement of conformity based on the corresponding standards (default)

☐ Morlab issues a statement of conformity based on the applicant requirement

6.Use of uncertainty of measurement for decisions on conformity (decision rule):

No decision rule is specified by the testing standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty (“simple acceptance” decision rule).

——— END OF REPORT ———