



REPORT No.: SZ22100099W04

TEST REPORT

APPLICANT : Shanghai BroadMobi
Communication Technology Co., Ltd.

PRODUCT NAME : RX50

MODEL NAME : RX50

BRAND NAME : BroadMobi

FCC ID : 2AON8RX50

STANDARD(S) : 47 CFR Part 15 Subpart C

RECEIPT DATE : 2022-10-28

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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	11
2.4. Test Configuration of EUT	12
2.5. Test Conditions	13
2.6. Test Setup Layout Diagram	13
3. Test Results	16
3.1. Antenna Requirement	16
3.2. Duty Cycle of Test Signal	17
3.3. Maximum Peak and Average Conducted Output Power	18
3.4. 6 dB Bandwidth	19
3.5. Conducted Spurious Emissions and Band Edge	20
3.6. Power Spectral Density	21
3.7. Conducted Emission	22
3.8. Restricted Frequency Bands	23
3.9. Radiated Emission	24
Annex A Test Data and Result	26



REPORT No.: SZ22100099W04

Change History		
Version	Date	Reason for change
1.0	2023-01-11	First edition

1. Summary of Test Result

No.	Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
1	15.203	Antenna Requirement	N/A	N/A	PASS	No deviation
2	N/A	Duty Cycle of Test Signal	Nov. 11, 2022	Su Xiaoxian	PASS	No deviation
3	15.247(b)	Maximum Peak Conducted Output Power	Nov. 11, 2022	Su Xiaoxian	PASS	No deviation
4	15.247(b)	Maximum Average Conducted Output Power	Nov. 11, 2022	Su Xiaoxian	PASS	No deviation
5	15.247(a)	Bandwidth	Nov. 15, 2022	Su Xiaoxian	PASS	No deviation
6	15.247(d)	Conducted Spurious Emission and Band Edge	Nov. 29, 2022	Su Xiaoxian	PASS	No deviation
7	15.247(e)	Power Spectral Density	Nov. 29, 2022	Su Xiaoxian	PASS	No deviation
8	15.207	Conducted Emission	Dec. 01, 2022	Fan Zehang	PASS	No deviation
9	15.247(d)	Restricted Frequency Bands	Dec. 08&11, 2022	Gao Jianrou	PASS	No deviation
10	15.209, 15.247(d)	Radiated Emission	Dec. 09&12, 2022	Gao Jianrou	PASS	No deviation

Note 1: The tests were performed according to the method of measurements prescribed in ANSIC63.10-2013 and KDB558074 D01 v05r02.

Note 2: Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

Note 3: When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.



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 Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
EXA Signal Analyzer	MY53470836	N9010A	Agilent	2022.03.01	2023.02.28
Power Sensor	MY54180008	U2021XA	Agilent	2022.10.11	2023.10.10
Attenuator	MTJ6004-20	VAT-10+	MTJ Cooperation	N/A	N/A
RF Cable (30MHz-26GHz)	CB01	RF01	Morlab	N/A	N/A
Coaxial Cable	CB02	RF02	Morlab	N/A	N/A
SMA Connector	CN01	RF03	HUBER-SUHNER	N/A	N/A

1.2.2 Conducted Emission Test Equipments

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY56400093	N9038A	KEYSIGHT	2022.03.03	2023.03.02
LISN	8127449	NSLK 8127	Schwarzbeck	2022.03.03	2023.03.02
Pulse Limiter (10dB)	VTSD 9561 F-B #206	VTSD 9561-F	Schwarzbeck	2022.07.06	2023.07.05
RF Coaxial Cable (DC-100MHz)	BNC	MRE04	Qualwave	2022.07.08	2023.07.07

1.2.3 List of Software Used

Description	Manufacturer	Software Version
Test System	MaiWei	2.0.0.0
Morlab EMCR V1.2	Morlab	V1.0
TS+ -[JS32-CE]	Tonscend	V2.5.0.0

**1.2.4 Radiated Test Equipments**

Equipment Name	Serial No.	Type	Manufacturer	Cal. Date	Due Date
Receiver	MY54130016	N9038A	Agilent	2022.07.06	2023.07.05
Test Antenna - Bi-Log	9163-519	VULB 9163	Schwarzbeck	2022.05.25	2025.05.24
Test Antenna - Loop	1519-022	FMZB1519	Schwarzbeck	2022.02.11	2025.02.10
Test Antenna – Horn	01774	BBHA 9120D	Schwarzbeck	2022.07.13	2025.07.12
Test Antenna – Horn	BBHA9170 #773	BBHA9170	Schwarzbeck	2022.07.14	2025.07.13
Preamplifier (10MHz-6GHz)	46732	S10M100L38 02	LUCIX CORP.	2022.07.08	2023.07.07
Preamplifier (2GHz-18GHz)	61171/61172	S020180L32 03	LUCIX CORP.	2022.07.08	2023.07.07
Preamplifier (18GHz-40GHz)	DS77209	DCLNA0118-40C-S	Decentest	2022.07.23	2023.07.22
RF Coaxial Cable (DC-18GHz)	MRE001	PE330	Pasternack	2022.07.08	2023.07.07
RF Coaxial Cable (DC-18GHz)	MRE002	CLU18	Pasternack	2022.07.08	2023.07.07
RF Coaxial Cable (DC-18GHz)	MRE003	CLU18	Pasternack	2022.07.08	2023.07.07
RF Coaxial Cable (DC-40GHz)	22290045	QA360-40-K K-0.5	Qualwave	2022.07.08	2023.07.07
RF Coaxial Cable (DC-40GHz)	22290046	QA360-40-K KF-2	Qualwave	2022.07.08	2023.07.07
RF Coaxial Cable (DC-18GHz)	22120181	QA500-18-N N-5	Qualwave	2022.07.08	2023.07.07
Notch Filter	N/A	WRCG-2400-2483.5-60SS	Wainwright	2022.07.08	2023.07.07
Anechoic Chamber	N/A	9m*6m*6m	CRT	2022.05.10	2025.05.09



1.3. Measurement Uncertainty

Test Items	Uncertainty	Remark
Peak Output Power	$\pm 2.22\text{dB}$	Confidence levels of 95%
Power Spectral Density	$\pm 2.22\text{dB}$	Confidence levels of 95%
Bandwidth	$\pm 5\%$	Confidence levels of 95%
Conducted Spurious Emission	$\pm 2.77\text{dB}$	Confidence levels of 95%
Restricted Frequency Bands	$\pm 5\%$	Confidence levels of 95%
Radiated Emission	$\pm 2.95\text{dB}$	Confidence levels of 95%
Conducted Emission	$\pm 2.44\text{dB}$	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
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2. General Description

2.1. Information of Applicant and Manufacturer

Applicant	Shanghai BroadMobi Communication Technology Co., Ltd.
Applicant Address	15F,Building 9,No. 99,Tianzhou Rd.,Xuhui District, Shanghai
Manufacturer	Shanghai BroadMobi Communication Technology Co., Ltd.
Manufacturer Address	15F,Building 9,No. 99,Tianzhou Rd.,Xuhui District, Shanghai

2.2. Information of EUT

Product Name:	RX50	
Sample No.:	7#	
Hardware Version:	RX50A_MB_V4.0	
Software Version:	1.01	
Device Type:	Indoor Access Point	
Modulation Technology:	DSSS, OFDM	
Modulation Type:	Refer to section1.3	
Wireless Technology:	802.11b, 802.11g, 802.11n (HT20), 802.11n (HT40) 802.11ax (HEW20), 802.11ax (HEW40)	
Operating Frequency Range:	2412MHz–2462MHz	
Antenna Type:	Dipole Antenna	
Antenna Gain:	ANT 0: 2.03dBi; ANT 1: 2.02dBi ANT 2: 2.05dBi; ANT 3: 2.01dBi _{Note 3}	
Directional Gain:	8.07dBi _{Note 2}	
Accessory Information:	AC Adapter	
	Brand Name:	GuRong Electronics
	Model No.:	GQ24-120200-AU
	Serial No.:	N/A
	Rated Output:	12V=2A
	Rated Input:	100-240V~50/60Hz, 1A
	Manufacturer:	DONGGUAN GANGQI ELECTRONIC CO.,LTD



Note 1: The EUT supports a MIMO function. Physically, the EUT provides four completed transmitters and four receivers for 802.11n and 802.11ax modulation mode.

Modulation Mode:	TX Function
802.11b/g	1TX
802.11n	4TX
802.11ax	4TX

Note 2: According to KDB 662911 D01, the directional gain = $G_{ANT} + 10\log(N_{ANT})$ dBi, where G_{ANT} is the maximum antenna gain in dBi, N_{ANT} is the number of outputs.

Note 3: The antennas (ANT1/2/3/4) in conducted test data represent antennas (ANT0/1/2/3) in the EUT information.

Note 4: For conducted test items of each modulation mode, we recorded the test results of four antennas separately, except for Conducted Spurious Emissions and Band Edge test item all of the four antennas were tested separately, we only recorded the worst test result (ANT 3) in this report.

Note 5: All radiation test items for 802.11n and 802.11 ax modulation mode operate at MIMO mode during the test. Other modulation mode operate at SISO mode, all of the four antennas were tested separately, we only recorded the worst test result(ANT 3) in this report.

Note 6: 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

Test Mode	Channel	Frequency (MHz)	Channel	Frequency (MHz)
802.11b/g/n (HT20)	1	2412	8	2447
	2	2417	9	2452
	3	2422	10	2457
	4	2427	11	2462
	5	2432		
	6	2437		
	7	2442		
Test Mode	Channel	Frequency (MHz)	Channel	Frequency (MHz)
802.11n (HT40)	3	2422	8	2447
	4	2427	9	2452
	5	2432		
	6	2437		
	7	2442		

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

2.4. Test Configuration of EUT

2.4.1. Modulation Type and Data Rate of EUT

Mode	Bandwidth (MHz)	Modulation Technology	Modulation Type	Data Rate	RU Size
802.11b	20	DSSS	DBPSK	1/2/5.5/11Mbps	N/A
			DQPSK		
			CCK		
802.11g	20	OFDM	BPSK	6/9/12/18/24/36/48/54 Mbps	N/A
			QPSK		
			16QAM		
			64QAM		
802.11n	20 (HT20)	OFDM	BPSK	MCS0~MCS7	N/A
			QPSK		
			16QAM		
			64QAM		
802.11ax	20/40 (HEW20/40)	OFDMA	BPSK	MSC0~MCS11	N/A
			QPSK		
			16QAM		
			64QAM		
			256QAM		
			1024QAM		

Note1: The worst-case mode (bold face) in all data rates has been determined during the pre-scan, only the test data of the worst-case were recorded in this report.

2.4.2. Power Setting

Mode	ANT1	ANT2	ANT3	ANT4	MIMO
B	21	21	21	21	\
G	21	22	22	22	\
N20	21	22	22	22	15
N40	21	22	22	22	15
AX20	21	22	22	21	15
AX40	21	22	22	21	15

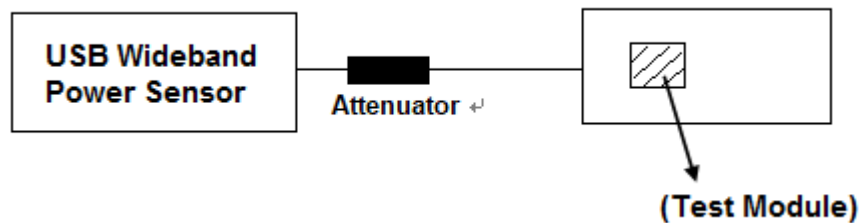
2.5. Test Conditions

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

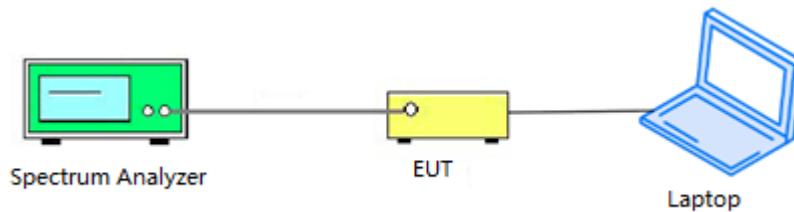
2.6. Test Setup Layout Diagram

2.6.1. Conducted Measurement

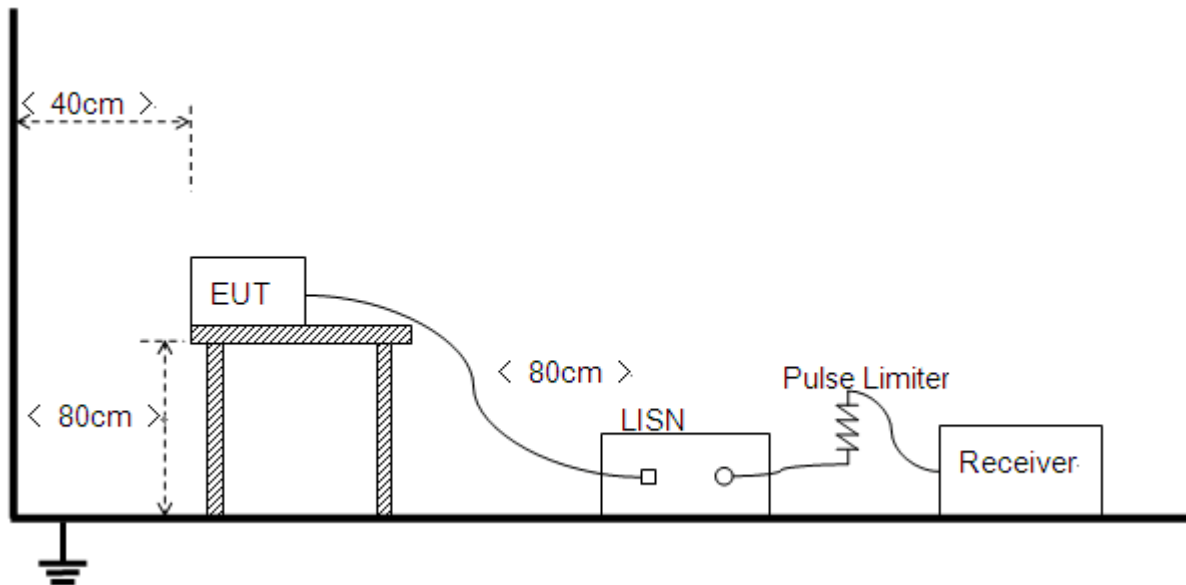
Power item



Other items

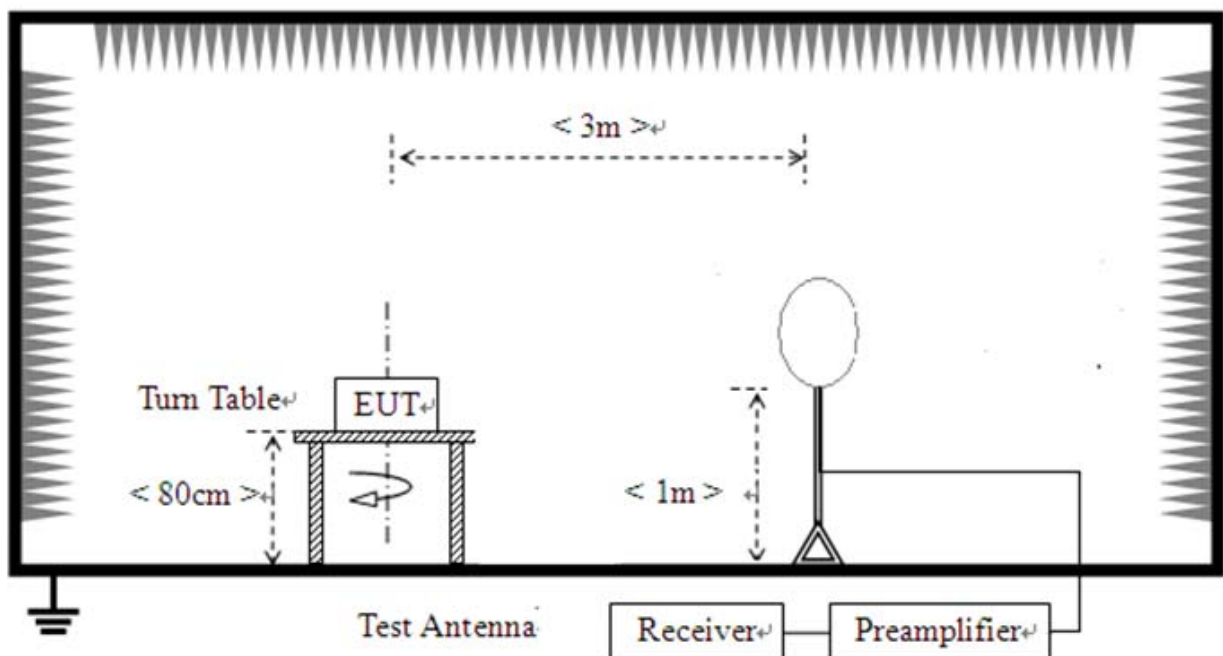


2.6.2. Conducted Emission Measurement

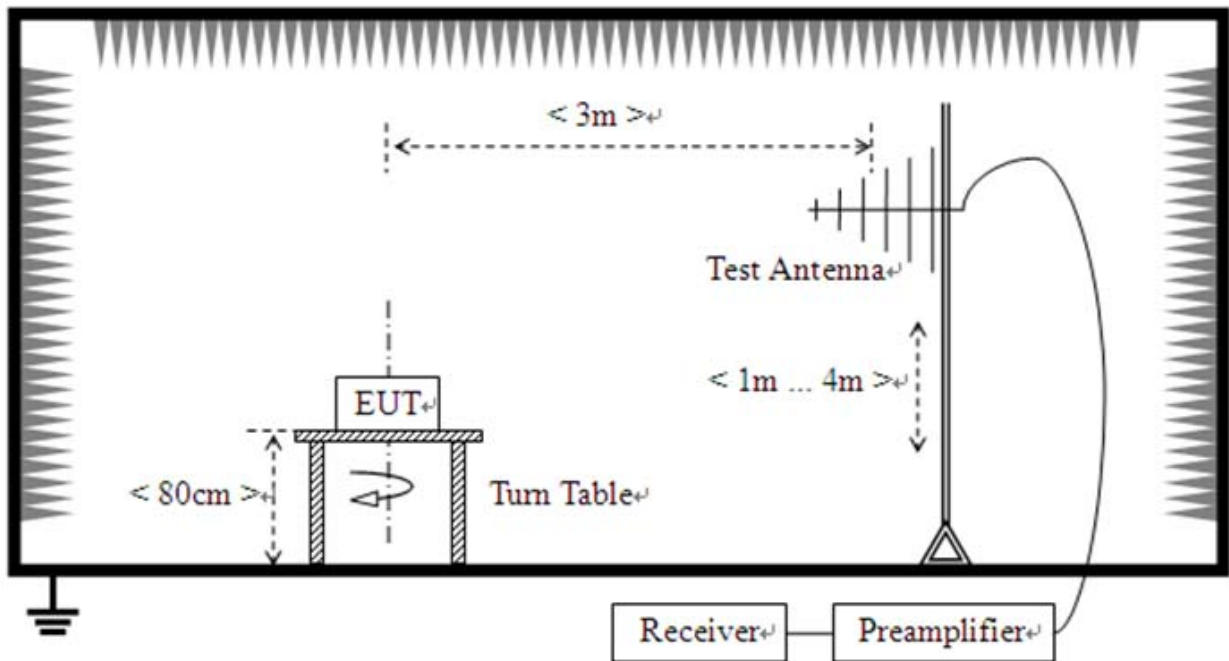


2.6.3. Radiation Measurement

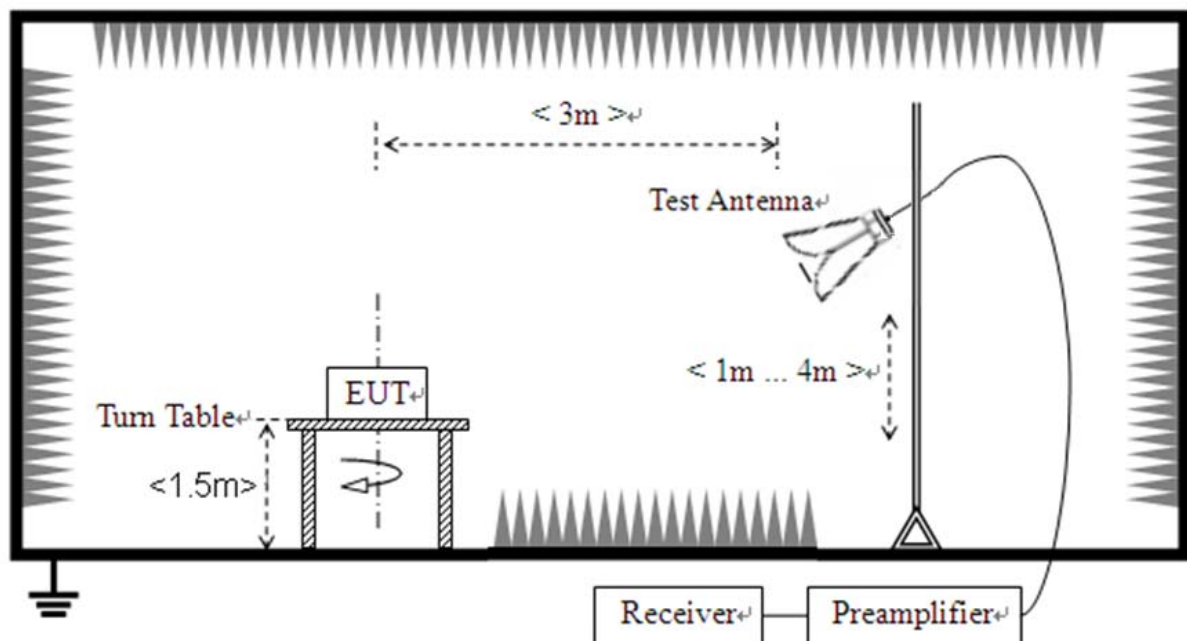
1) For radiated emissions from 9kHz to 30MHz



2) For radiated emissions from 30MHz to 1GHz



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

The EUT has a permanently and irreplaceable attached antenna. Please refer to the EUT internal photos.

3.2. Duty Cycle of Test Signal

3.2.1. 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 $\pm 2\%$; otherwise, the duty cycle is considered to be non constant.

3.2.2. Test Result

Refer to Annex A.1 in this report.

3.3. Maximum Peak and Average Conducted Output Power

3.3.1. Requirement

According to FCC section 15.247(b)(3), For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: The maximum conducted output power of the intentional radiator shall not exceed 1 Watt. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in above of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

According to FCC section 15.247(c)(2)(ii), if the transmitter employs an antenna system that emits multiple directional beams but does not do emit multiple directional beams simultaneously, the total output power conducted to the array or arrays that comprise the device, i.e., the sum of the power supplied to all antennas, antenna elements, staves, etc. and summed across all carriers or frequency channels, shall not exceed the limit specified in paragraph (b)(1) or (b)(3) of this section, as applicable. However, the total conducted output power shall be reduced by 1 dB below the specified limits for each 3 dB that the directional gain of the antenna/antenna array exceeds 6 dBi. The directional antenna gain shall be computed as follows:

The directional gain shall be calculated as the sum of $10 \log$ (number of array elements or staves) plus the directional gain of the element or stave having the highest gain.

3.3.2. Test Procedures

The EUT (Equipment under the test) which is coupled to the USB Wideband Power Sensor; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading.

3.3.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.3.4. Test Result

Refer to Annex A.2 and A.3 in this report.



3.4.6 dB Bandwidth

3.4.1.Requirement

According to FCC section 15.247(a) (2), systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz.

3.4.1.Test Procedures

KDB 558074 Section 8.2 was used in order to prove compliance.

3.4.2.Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.4.3.Test Result

Refer to Annex A.4 in this report.



3.5. Conducted Spurious Emissions and Band Edge

3.5.1. 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.

3.5.2. Test Procedures

KDB 558074 Section 8.5 and 8.7 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.5 and A.6 in this report.

3.6. Power Spectral Density

3.6.1. Requirement

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

3.6.2. Test Procedures

The measured power spectral density was calculated by the reading of the spectrum analyzer and calibration. Following is the test procedure for PSD test:

- a) Set analyzer center frequency to channel center frequency
- b) Set span to 1.5 times DTS
- c) Set RBW to 30kHz
- d) Set VBW to 100kHz
- e) Detector = peak
- f) Sweep time = auto couple
- g) Trace mode = max hold
- h) Allow trace to fully stabilize
- i) Use the peak marker function to determine the maximum amplitude level and recorded as PD
- j) Use below formula to calculate the Conducted PSD value that at specified RBW:

Conducted PSD = PD - 10lg(30k/3k)

3.6.3. Test Setup Layout

Refer to chapter 2.6.1 in this report.

3.6.4. Test Result

Refer to Annex A.7 in this report.

3.7. Conducted Emission

3.7.1. 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 50 μ H/50 Ω line impedance stabilization network (LISN).

Frequency Range (MHz)	Conducted Limit (dB μ V)	
	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.

3.7.2. 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: 2013.

3.7.3. Test Setup Layout

Refer to chapter 2.6.2 in this report.

3.7.4. Test Result

Refer to Annex A.8 in this report.

3.8. Restricted Frequency Bands

3.8.1. 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).

3.8.2. 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 $f \geq 1\text{GHz}$, 100 kHz for $f < 1\text{GHz}$

VBW = 3 MHz

Sweep = auto

Detector function = peak/average

Trace = max hold

Allow the trace to stabilize

3.8.3. Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.8.4. Test Result

Refer to Annex A.9 in this report.

3.9. Radiated Emission

3.9.1. 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 ($\mu\text{V/m}$)	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).



3.9.2.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.

3.9.3.Test Setup Layout

Refer to chapter 2.6.3 in this report.

3.9.4.Test Result

Refer to Annex A.10 in this report.



Annex A Test Data and Result

A.1. Duty Cycle of Test Signal

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	72.95	1.37	1.54
NVNT	b	2412	Ant2	53.46	2.72	1.54
NVNT	b	2412	Ant3	53.46	2.72	1.54
NVNT	b	2412	Ant4	72.92	1.37	1.54
NVNT	b	2437	Ant1	53.42	2.72	1.54
NVNT	b	2437	Ant2	53.86	2.69	1.54
NVNT	b	2437	Ant3	53.42	2.72	1.54
NVNT	b	2437	Ant4	53.84	2.69	1.54
NVNT	b	2462	Ant1	53.44	2.72	1.54
NVNT	b	2462	Ant2	53.46	2.72	1.54
NVNT	b	2462	Ant3	53.44	2.72	1.54
NVNT	b	2462	Ant4	53.46	2.72	1.54
NVNT	g	2412	Ant1	91.79	0.37	0.65
NVNT	g	2412	Ant2	91.82	0.37	0.65
NVNT	g	2412	Ant3	91.9	0.37	0.64
NVNT	g	2412	Ant4	91.82	0.37	0.65
NVNT	g	2437	Ant1	91.79	0.37	0.65
NVNT	g	2437	Ant2	91.79	0.37	0.65
NVNT	g	2437	Ant3	91.9	0.37	0.64
NVNT	g	2437	Ant4	91.82	0.37	0.65
NVNT	g	2462	Ant1	91.79	0.37	0.65
NVNT	g	2462	Ant2	92.31	0.35	0.65
NVNT	g	2462	Ant3	91.9	0.37	0.64
NVNT	g	2462	Ant4	91.82	0.37	0.65
NVNT	n20	2412	Ant1	93.64	0.29	0.19
NVNT	n20	2412	Ant2	95.49	0.2	0.19
NVNT	n20	2412	Ant3	92.87	0.32	0.19
NVNT	n20	2412	Ant4	95.49	0.2	0.19
NVNT	n20	2412	Sum	93.5	0.29	0.19
NVNT	n20	2437	Ant1	95.31	0.21	0.19
NVNT	n20	2437	Ant2	92.27	0.35	0.19
NVNT	n20	2437	Ant3	93.5	0.29	0.19
NVNT	n20	2437	Ant4	95.35	0.21	0.19



NVNT	n20	2437	Sum	90.42	0.44	0.19
NVNT	n20	2462	Ant1	95.16	0.22	0.19
NVNT	n20	2462	Ant2	94.25	0.26	0.19
NVNT	n20	2462	Ant3	94.08	0.27	0.19
NVNT	n20	2462	Ant4	92.44	0.34	0.19
NVNT	n20	2462	Sum	95	0.22	0.19
NVNT	n40	2422	Ant1	92.87	0.32	0.19
NVNT	n40	2422	Ant2	89.03	0.5	0.19
NVNT	n40	2422	Ant3	95	0.22	0.19
NVNT	n40	2422	Ant4	88.87	0.51	0.19
NVNT	n40	2422	Sum	88.87	0.51	0.19
NVNT	n40	2437	Ant1	93.04	0.31	0.19
NVNT	n40	2437	Ant2	95.18	0.21	0.19
NVNT	n40	2437	Ant3	93.03	0.31	0.19
NVNT	n40	2437	Ant4	93.03	0.31	0.19
NVNT	n40	2437	Sum	89.15	0.5	0.19
NVNT	n40	2452	Ant1	90.99	0.41	0.19
NVNT	n40	2452	Ant2	90.54	0.43	0.19
NVNT	n40	2452	Ant3	93.04	0.31	0.19
NVNT	n40	2452	Ant4	90.42	0.44	0.19
NVNT	n40	2452	Sum	89.18	0.5	0.19
NVNT	ax20	2412	Ant1	94.23	0.26	0.19
NVNT	ax20	2412	Ant2	93.96	0.27	0.19
NVNT	ax20	2412	Ant3	94.27	0.26	0.19
NVNT	ax20	2412	Ant4	94.1	0.26	0.19
NVNT	ax20	2412	Sum	94.71	0.24	0.19
NVNT	ax20	2437	Ant1	94.23	0.26	0.19
NVNT	ax20	2437	Ant2	95.37	0.21	0.19
NVNT	ax20	2437	Ant3	94.1	0.26	0.19
NVNT	ax20	2437	Ant4	93.96	0.27	0.19
NVNT	ax20	2437	Sum	94.98	0.22	0.19
NVNT	ax20	2462	Ant1	93.93	0.27	0.19
NVNT	ax20	2462	Ant2	93.96	0.27	0.19
NVNT	ax20	2462	Ant3	95.33	0.21	0.19
NVNT	ax20	2462	Ant4	95.33	0.21	0.19
NVNT	ax20	2462	Sum	95.33	0.21	0.19
NVNT	ax40	2422	Ant1	93.93	0.27	0.19
NVNT	ax40	2422	Ant2	93.96	0.27	0.19



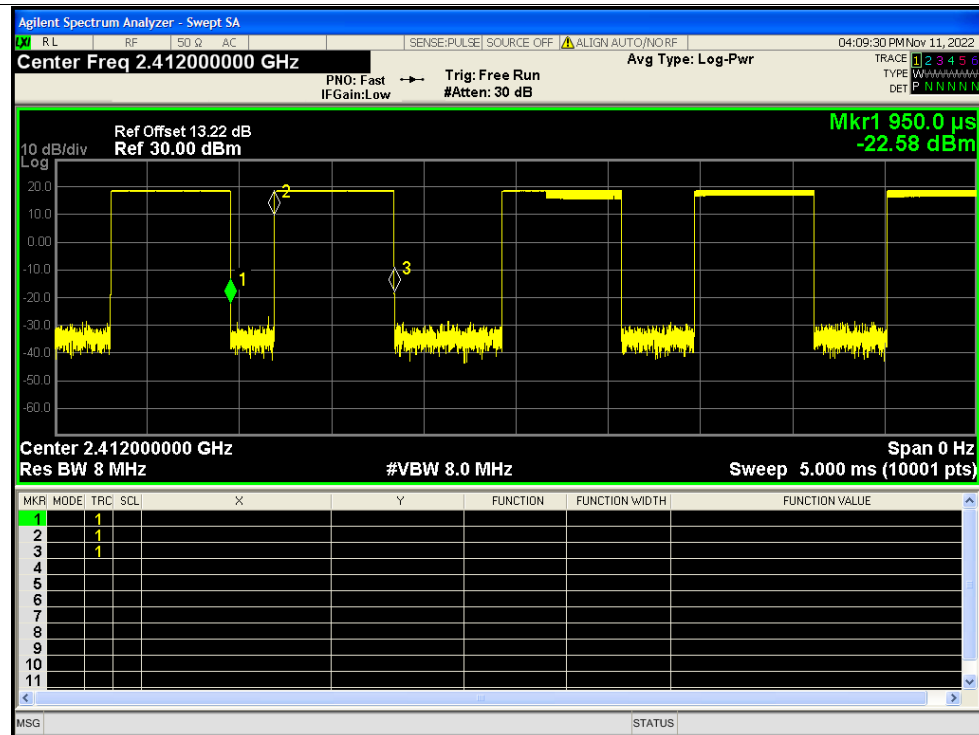
REPORT No.: SZ22100099W04

NVNT	ax40	2422	Ant3	93.96	0.27	0.19
NVNT	ax40	2422	Ant4	95.19	0.21	0.19
NVNT	ax40	2422	Sum	94.1	0.26	0.19
NVNT	ax40	2437	Ant1	95.19	0.21	0.19
NVNT	ax40	2437	Ant2	94.88	0.23	0.19
NVNT	ax40	2437	Ant3	93.93	0.27	0.19
NVNT	ax40	2437	Ant4	95.16	0.22	0.19
NVNT	ax40	2437	Sum	93.83	0.28	0.19
NVNT	ax40	2452	Ant1	95.19	0.21	0.19
NVNT	ax40	2452	Ant2	95.33	0.21	0.19
NVNT	ax40	2452	Ant3	93.79	0.28	0.19
NVNT	ax40	2452	Ant4	94.1	0.26	0.19
NVNT	ax40	2452	Sum	95.37	0.21	0.19

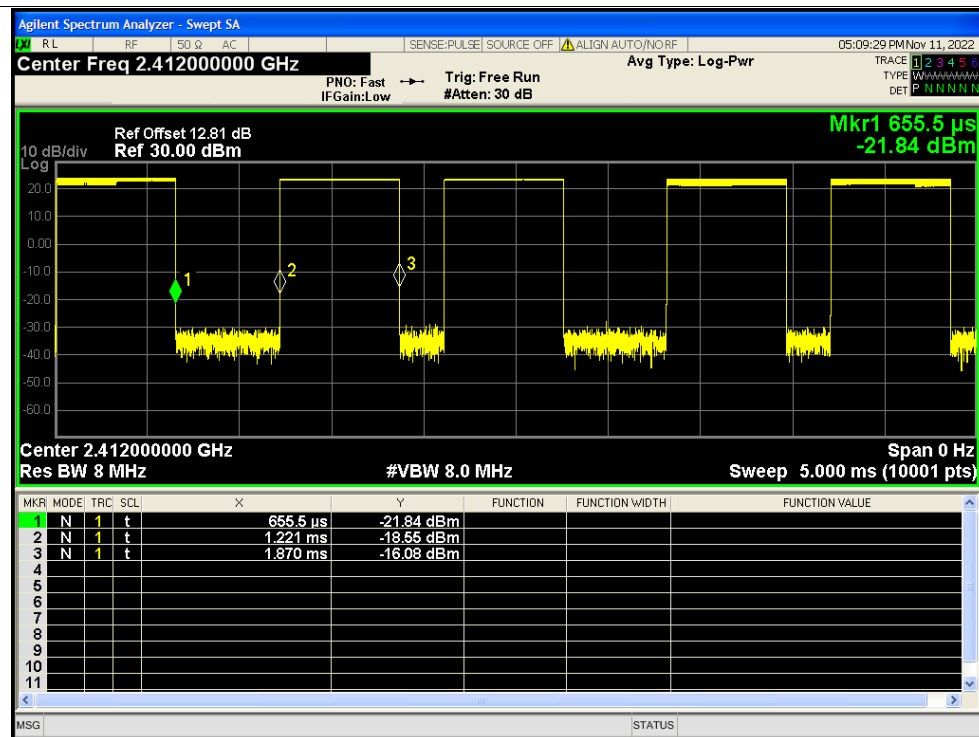


Test Graphs

Duty Cycle NVNT b 2412MHz Ant1

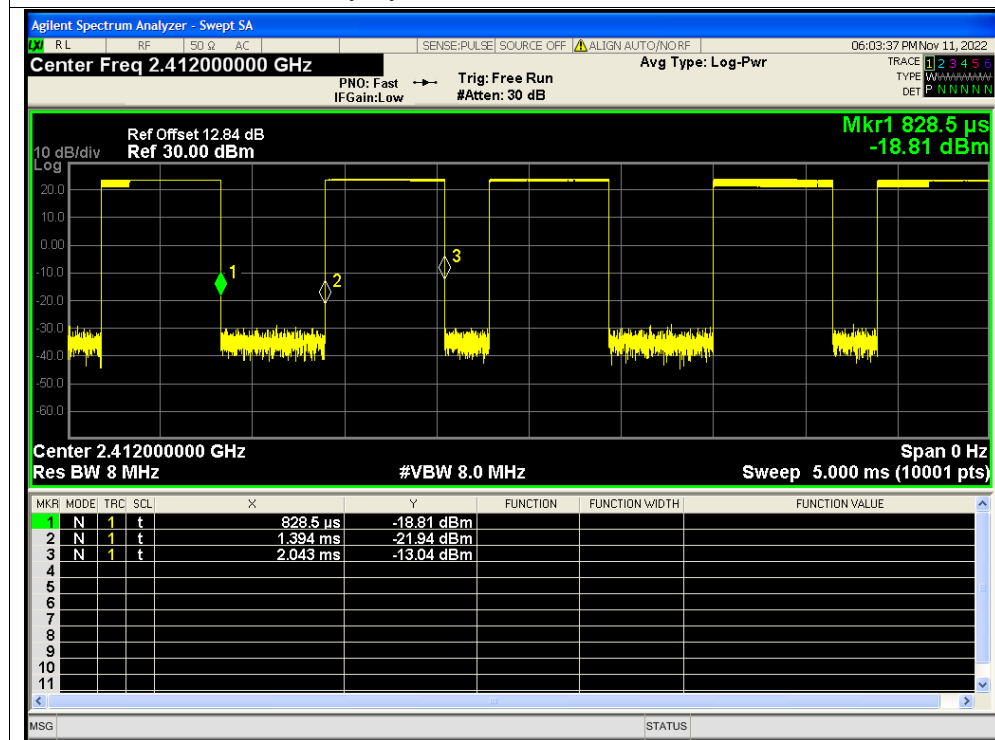


Duty Cycle NVNT b 2412MHz Ant2

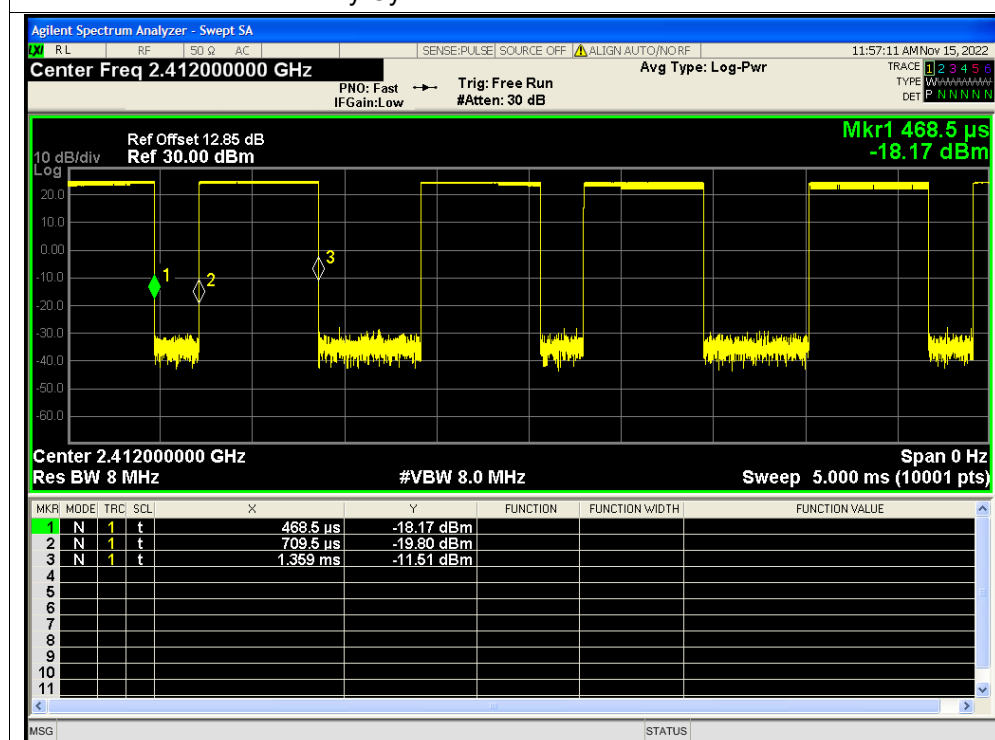




Duty Cycle NVNT b 2412MHz Ant3

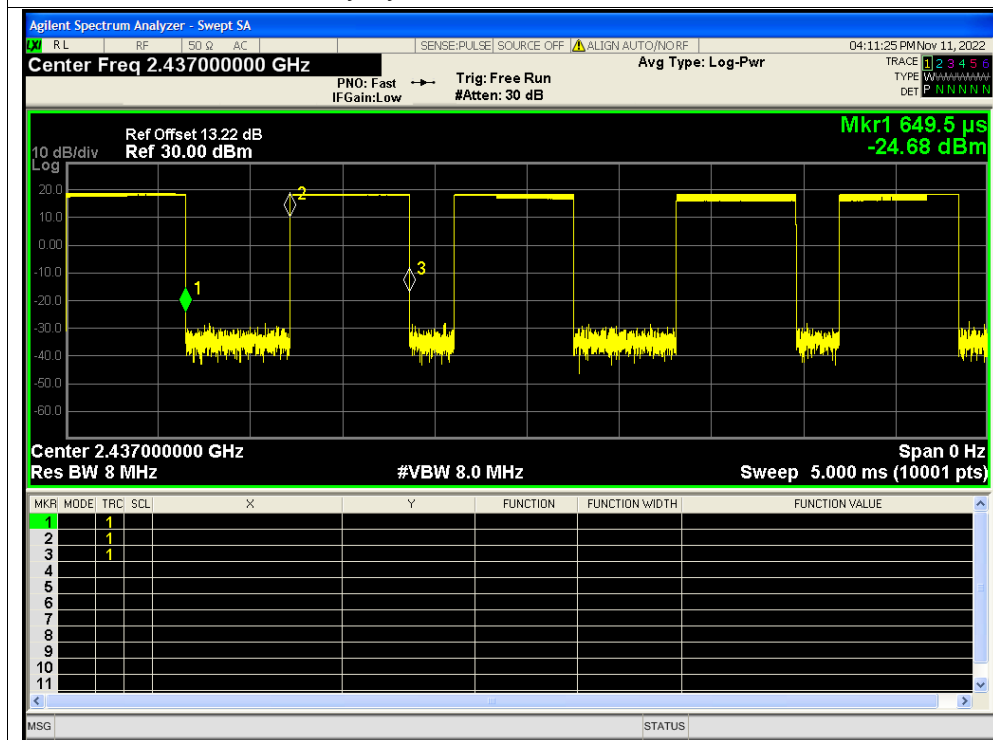


Duty Cycle NVNT b 2412MHz Ant4

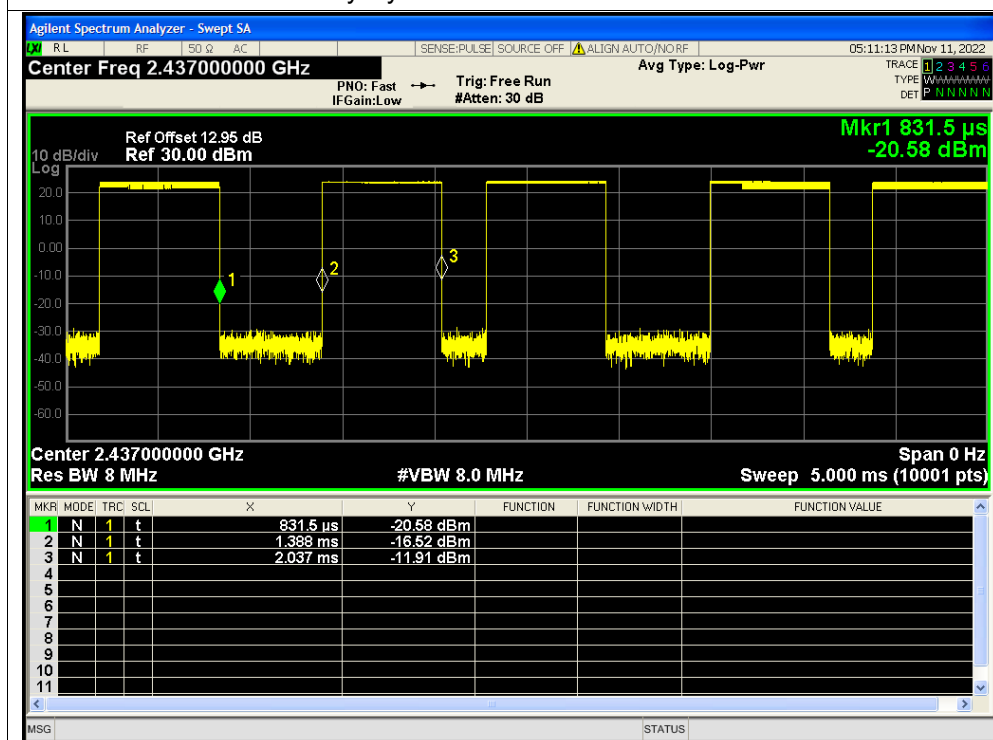




Duty Cycle NVNT b 2437MHz Ant1

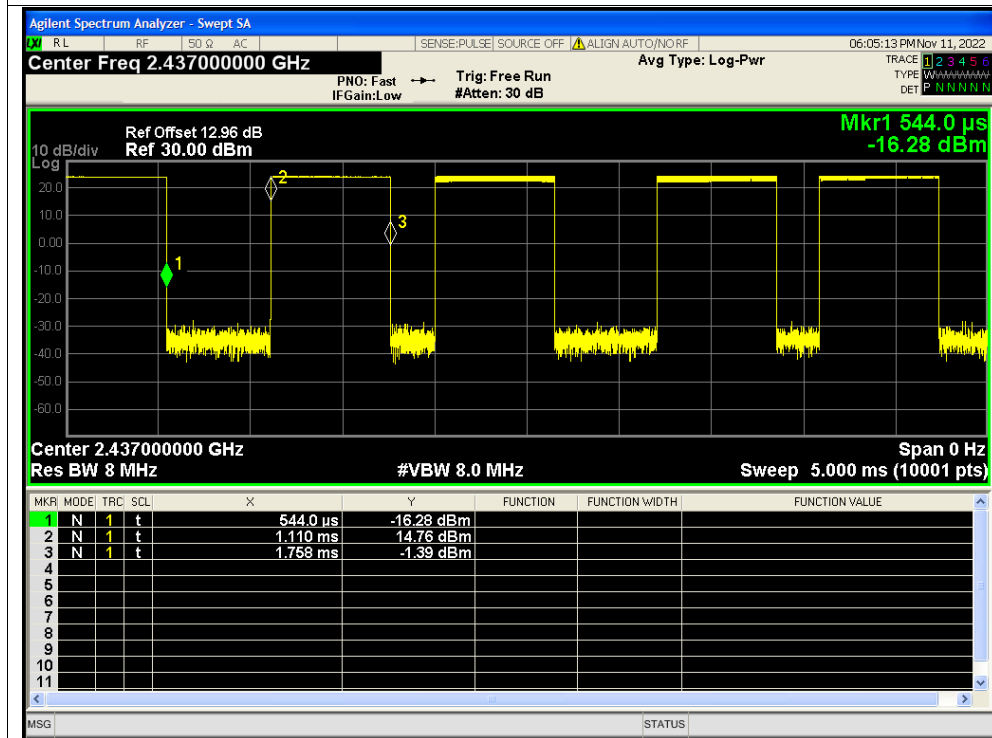


Duty Cycle NVNT b 2437MHz Ant2

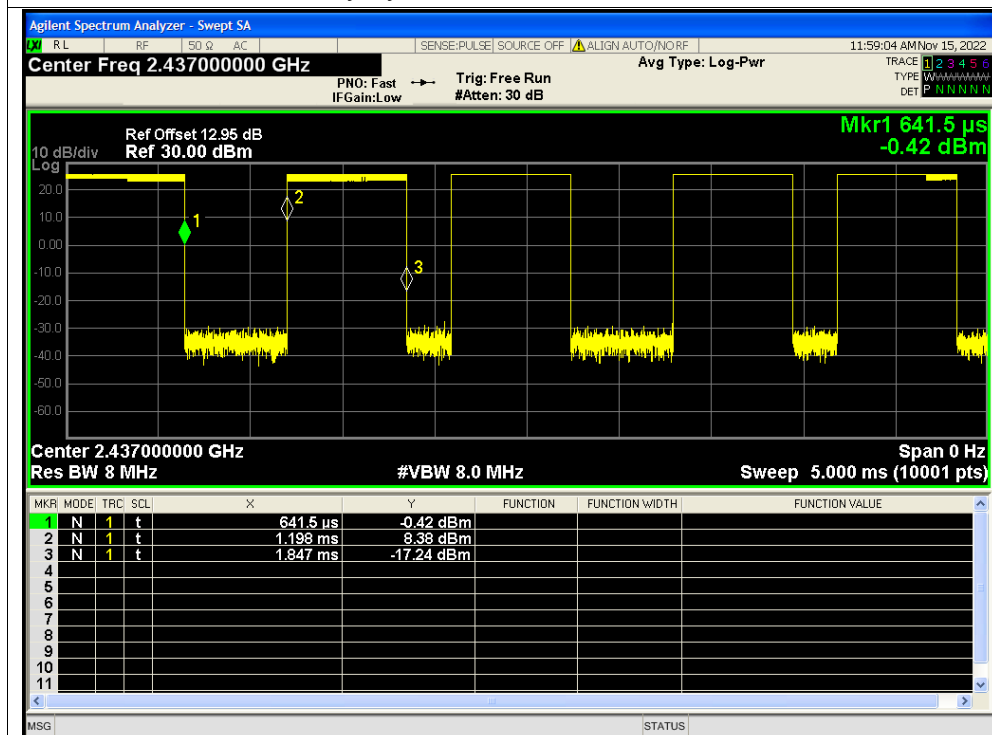




Duty Cycle NVNT b 2437MHz Ant3

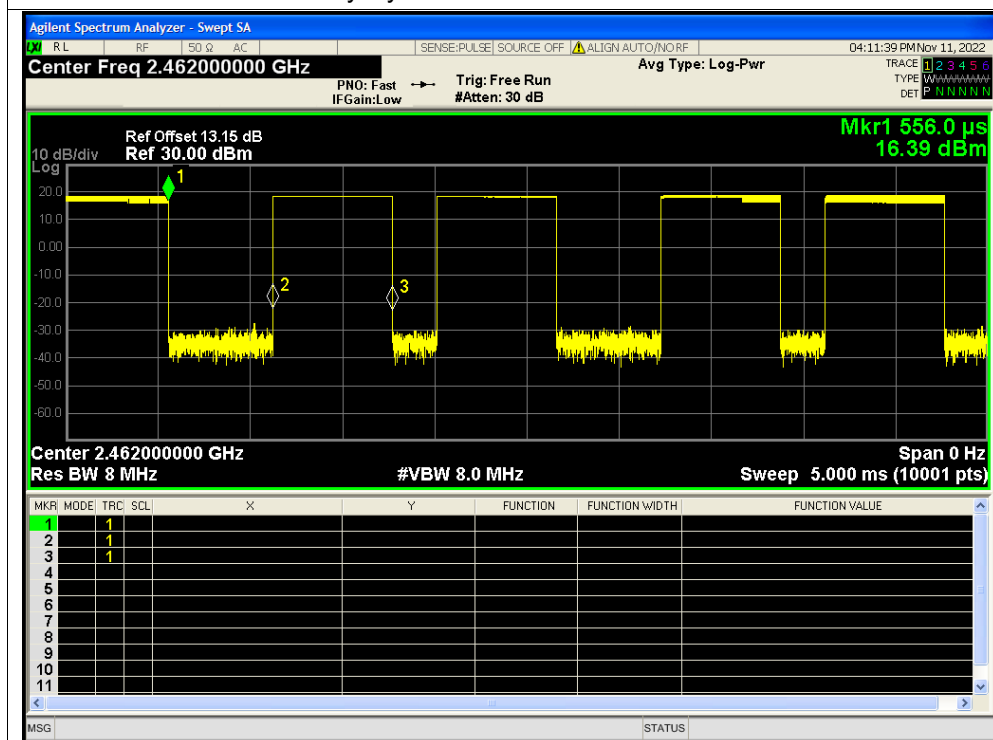


Duty Cycle NVNT b 2437MHz Ant4

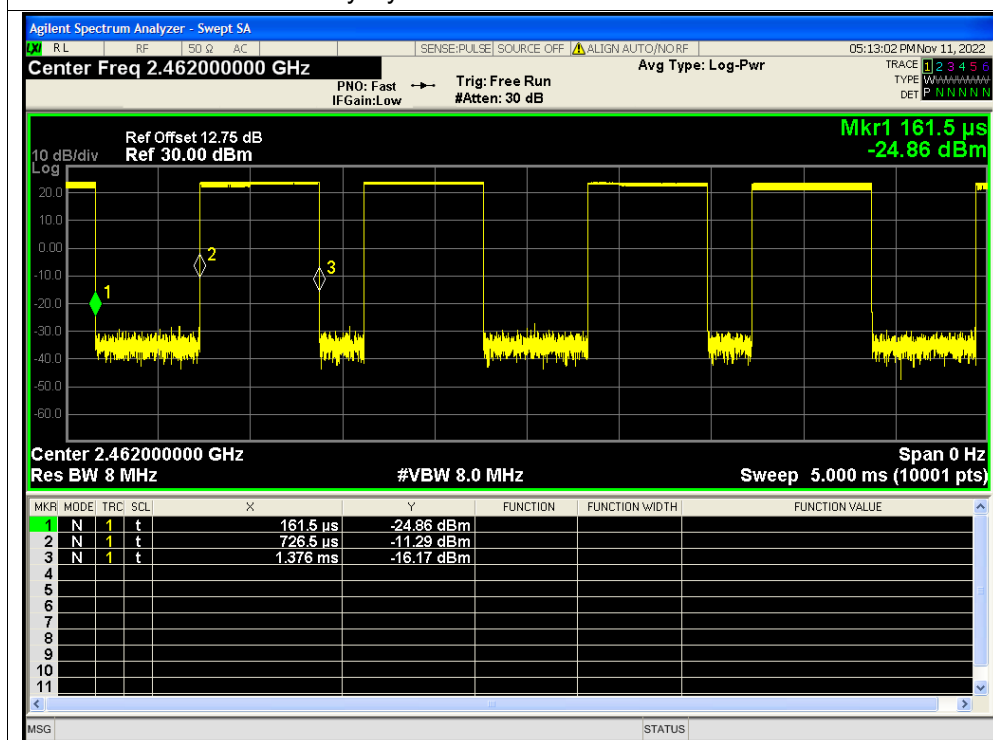




Duty Cycle NVNT b 2462MHz Ant1

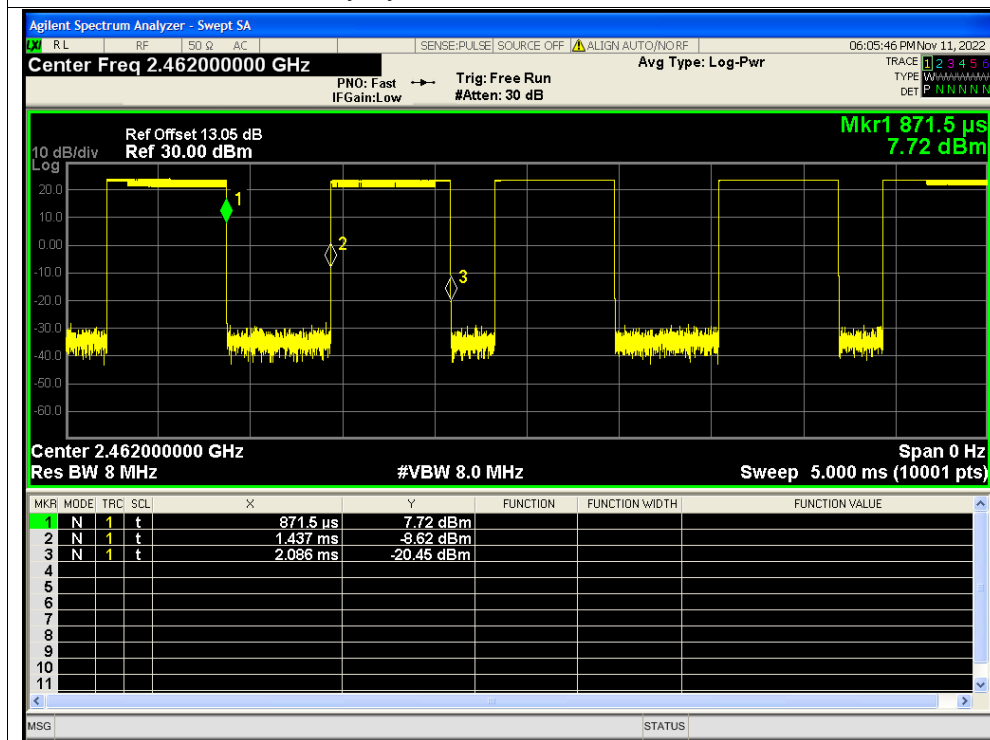


Duty Cycle NVNT b 2462MHz Ant2

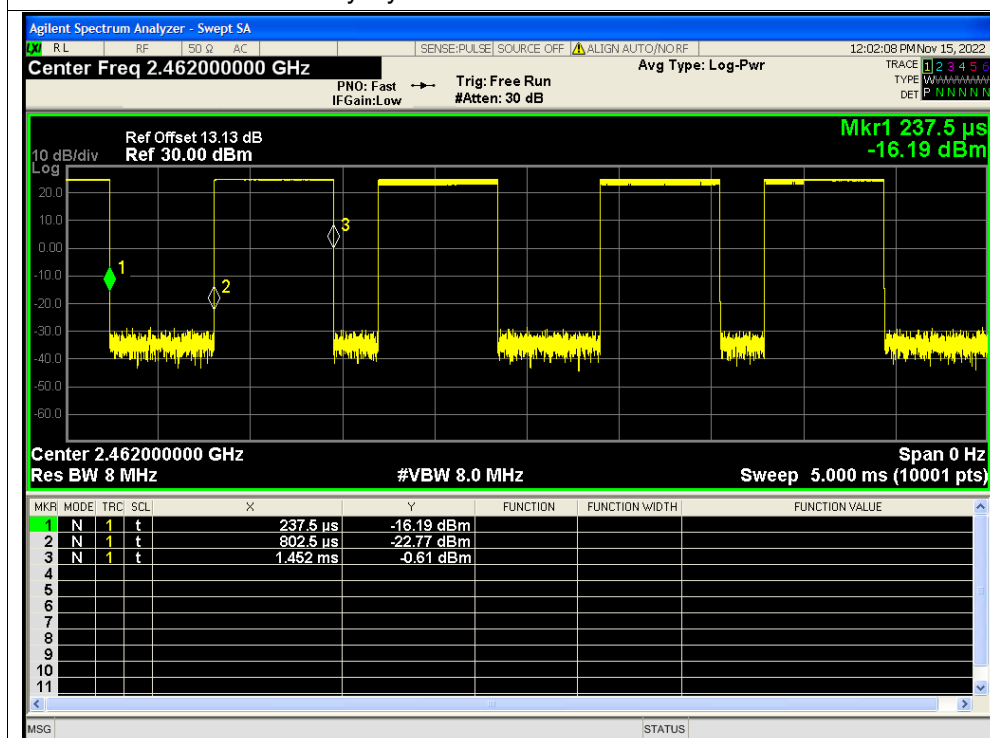




Duty Cycle NVNT b 2462MHz Ant3

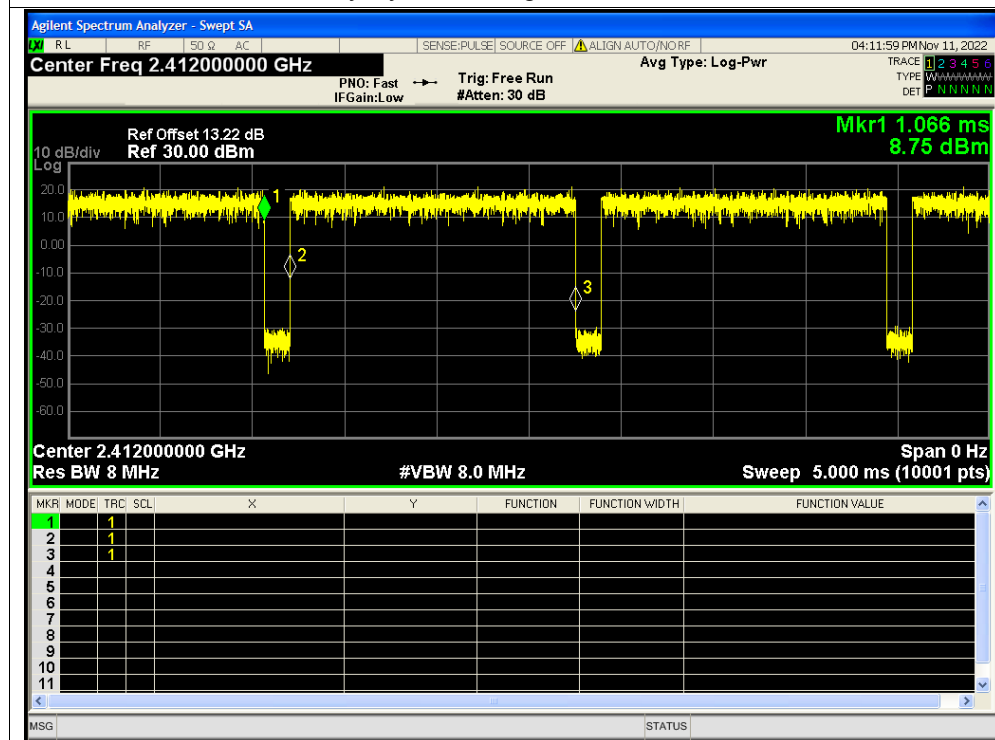


Duty Cycle NVNT b 2462MHz Ant4

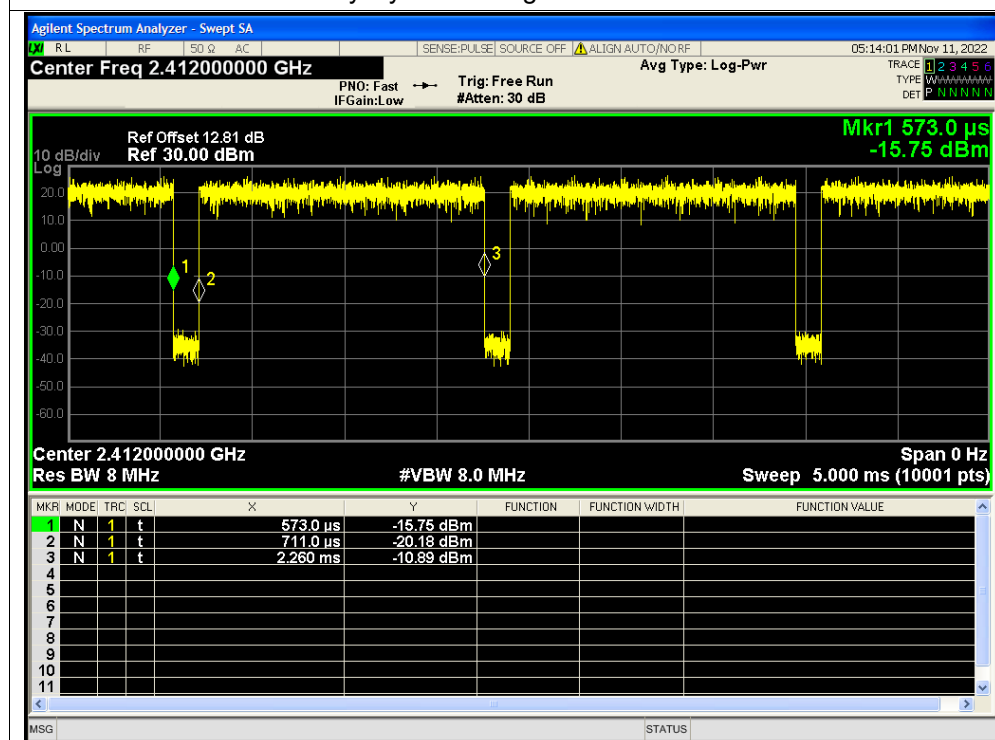




Duty Cycle NVNT g 2412MHz Ant1

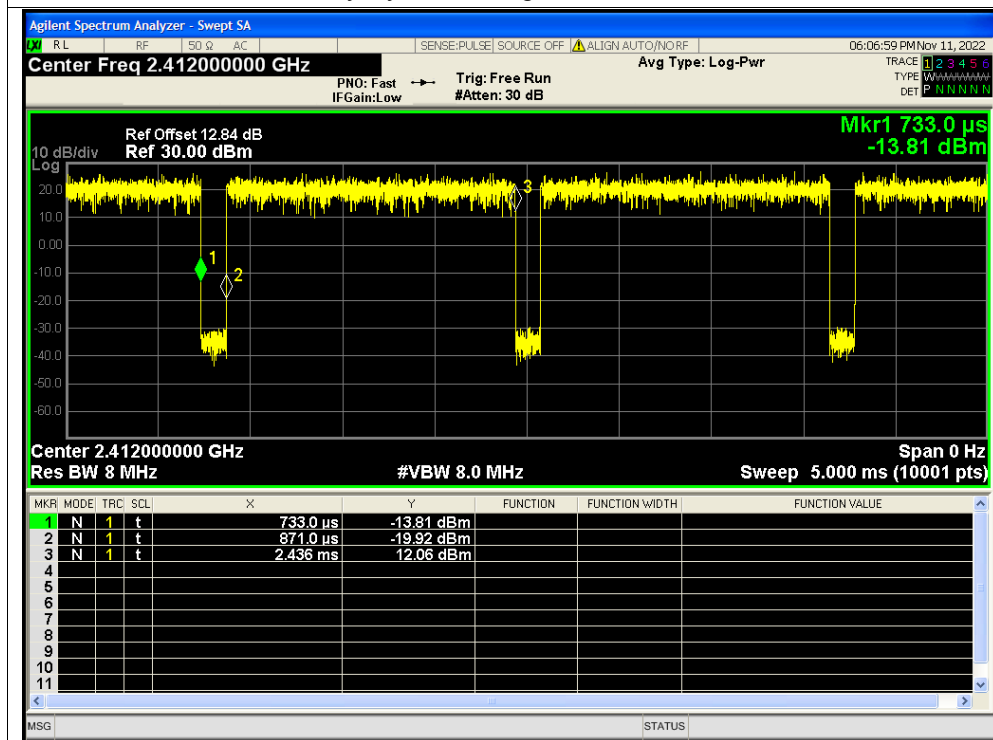


Duty Cycle NVNT g 2412MHz Ant2

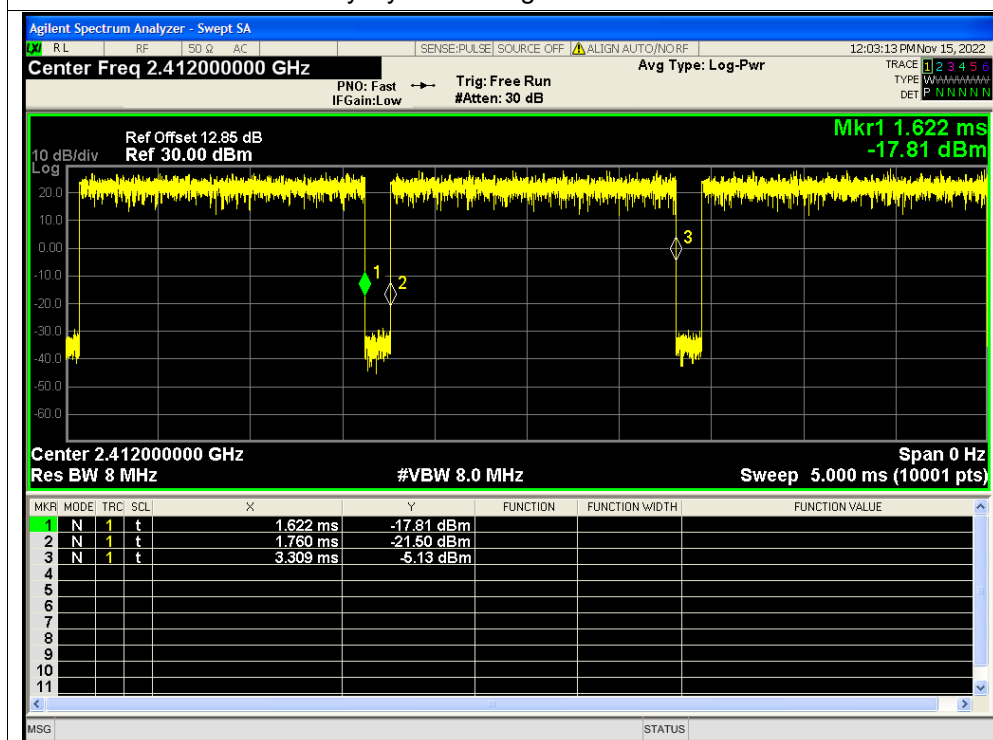




Duty Cycle NVNT g 2412MHz Ant3

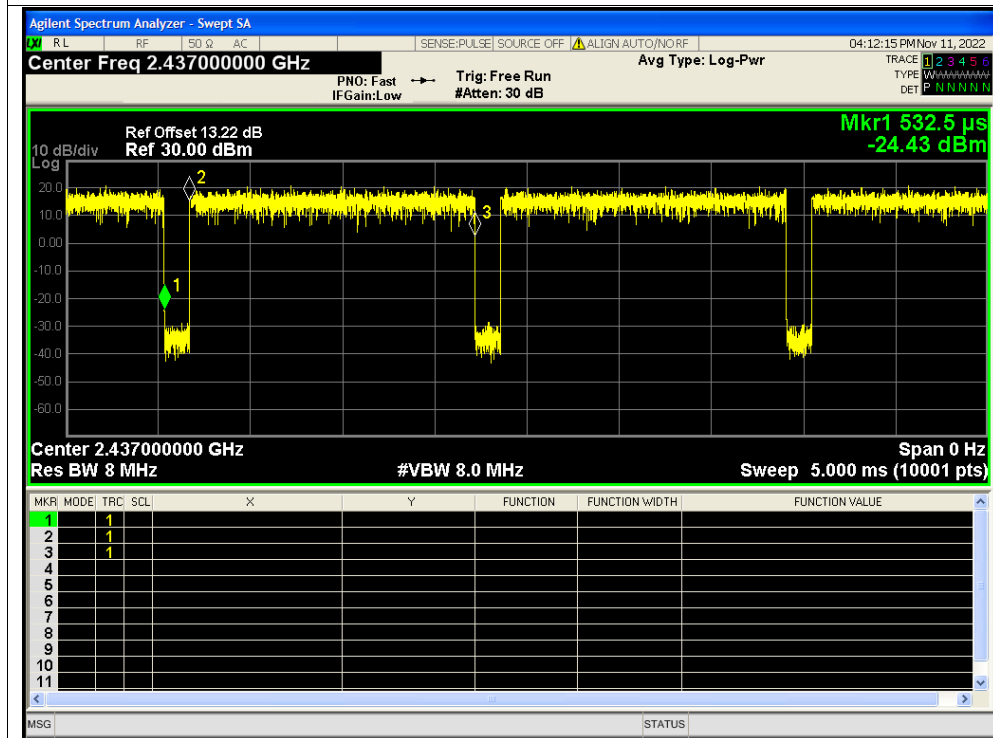


Duty Cycle NVNT g 2412MHz Ant4

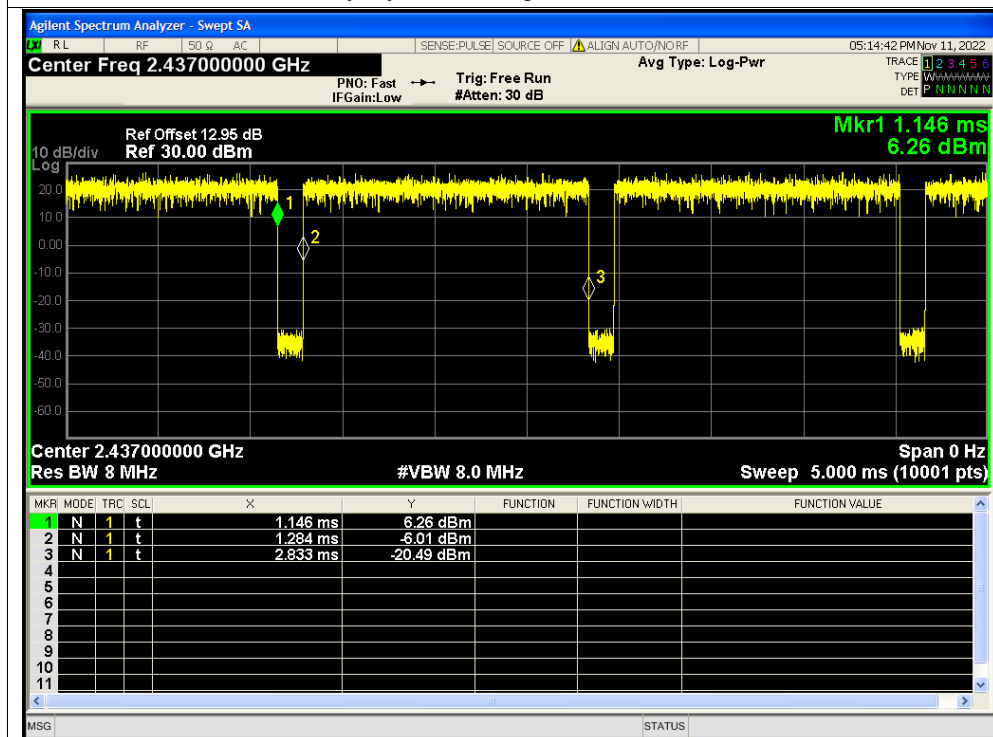




Duty Cycle NVNT g 2437MHz Ant1

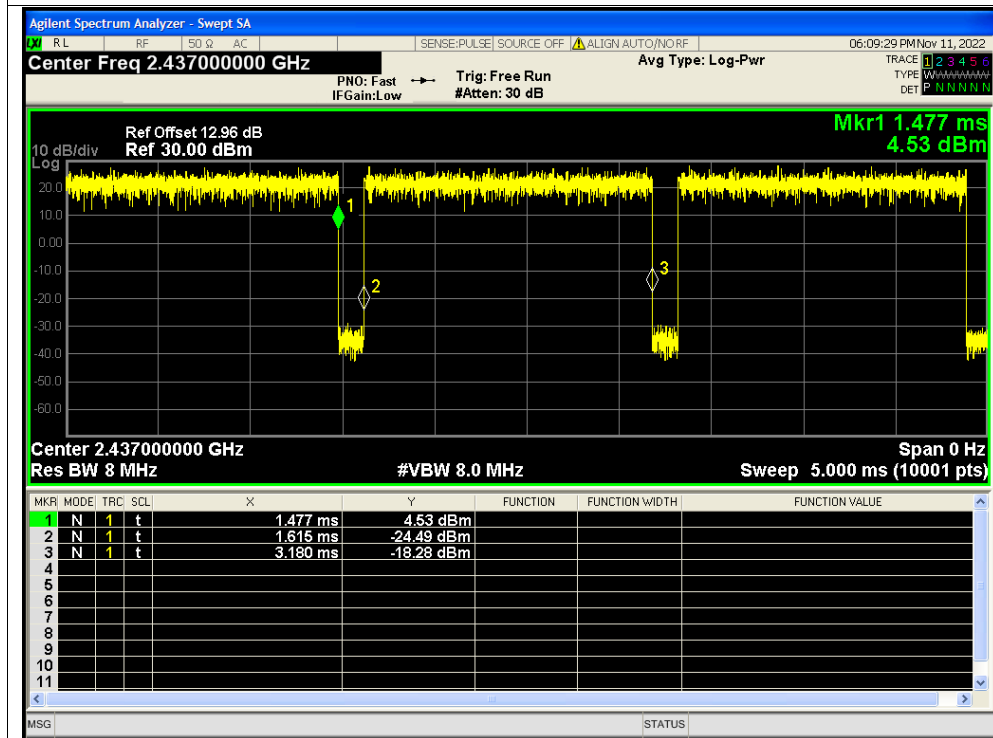


Duty Cycle NVNT g 2437MHz Ant2

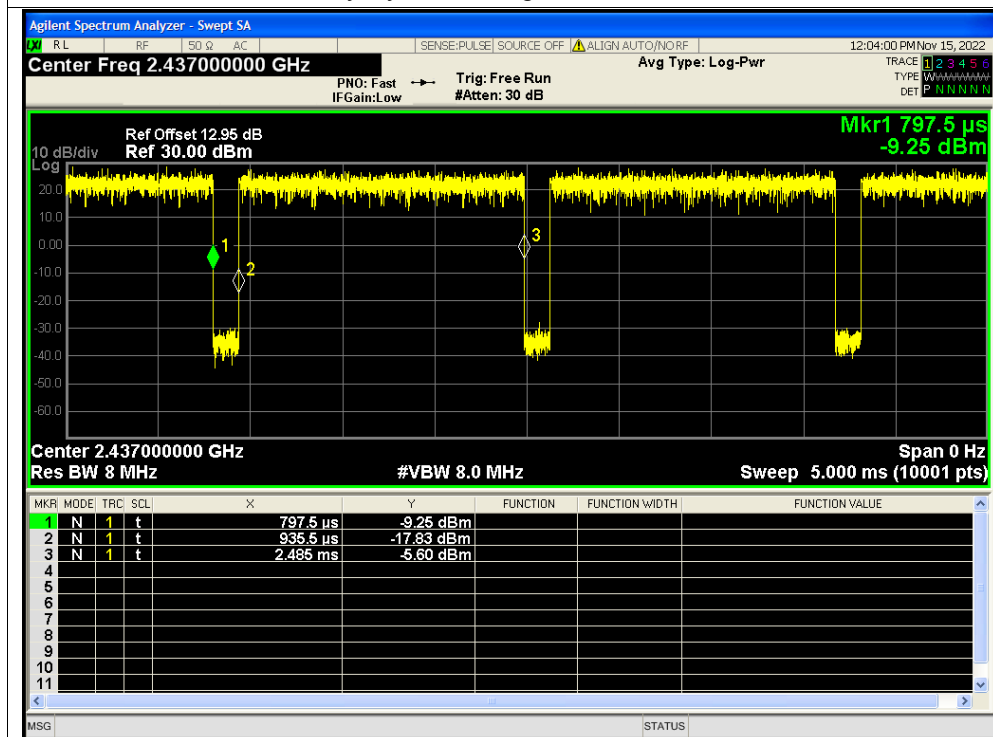




Duty Cycle NVNT g 2437MHz Ant3

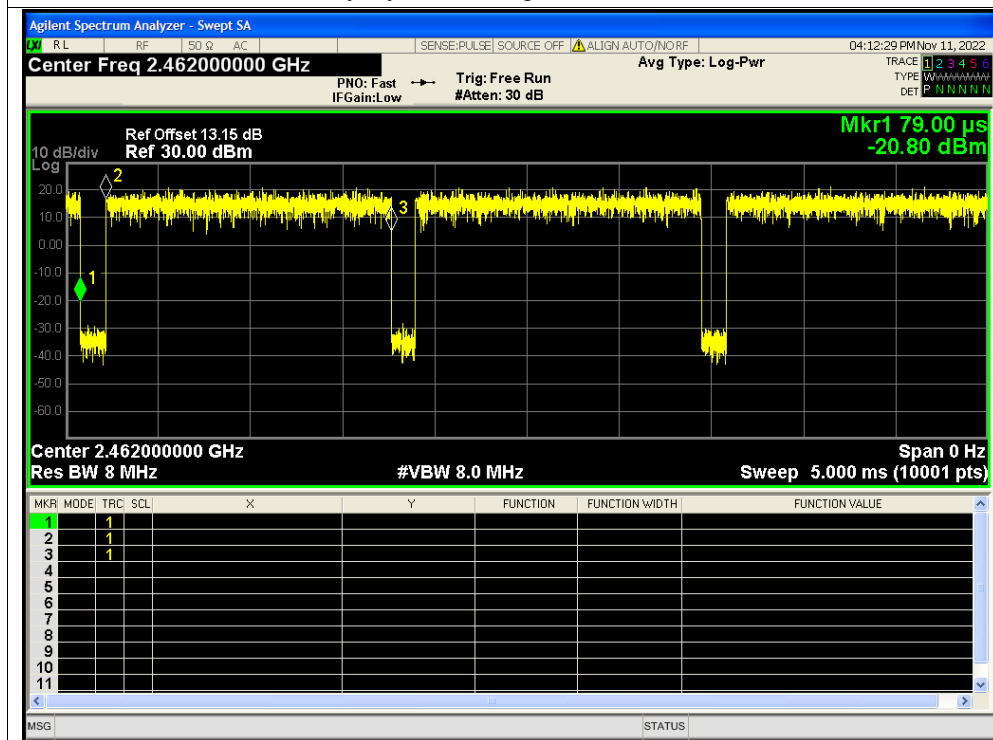


Duty Cycle NVNT g 2437MHz Ant4

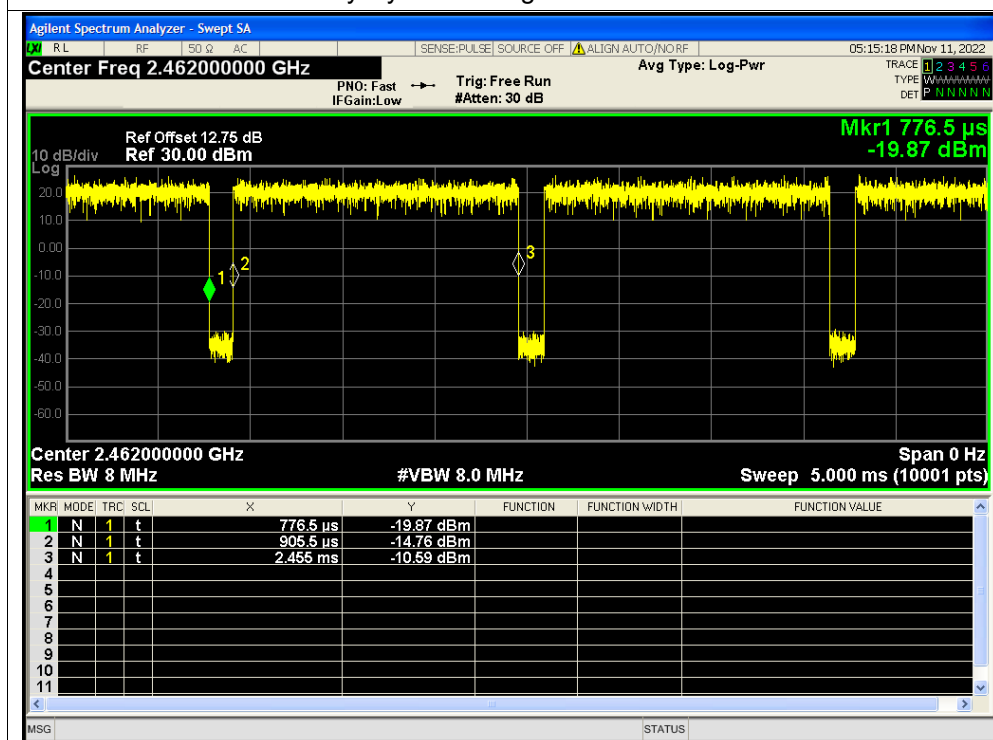




Duty Cycle NVNT g 2462MHz Ant1

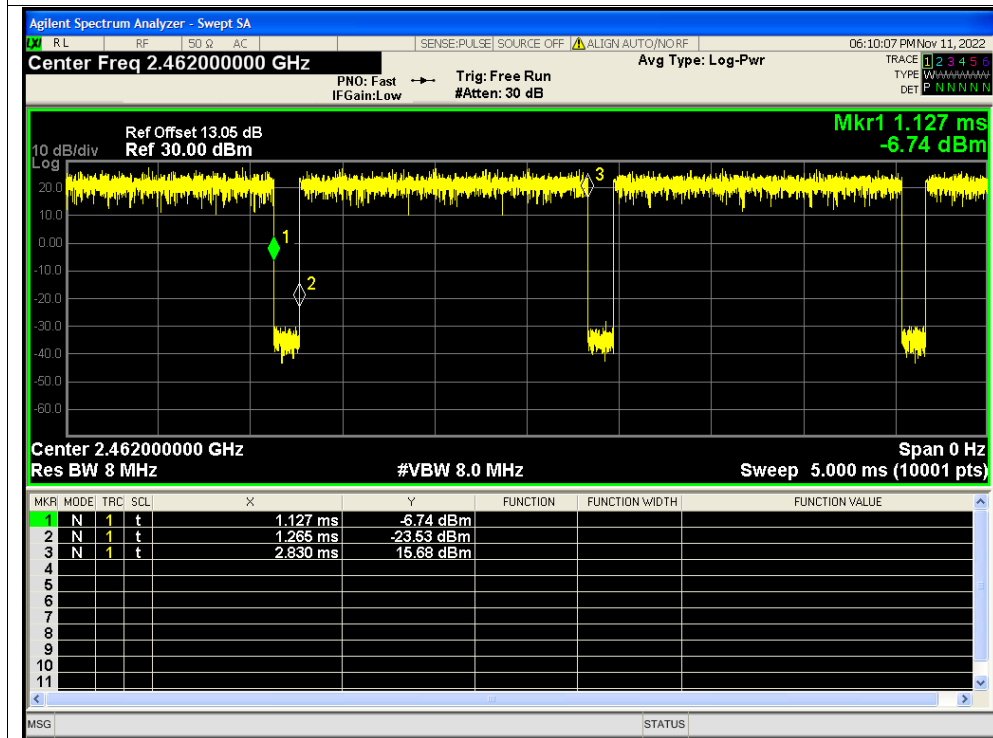


Duty Cycle NVNT g 2462MHz Ant2

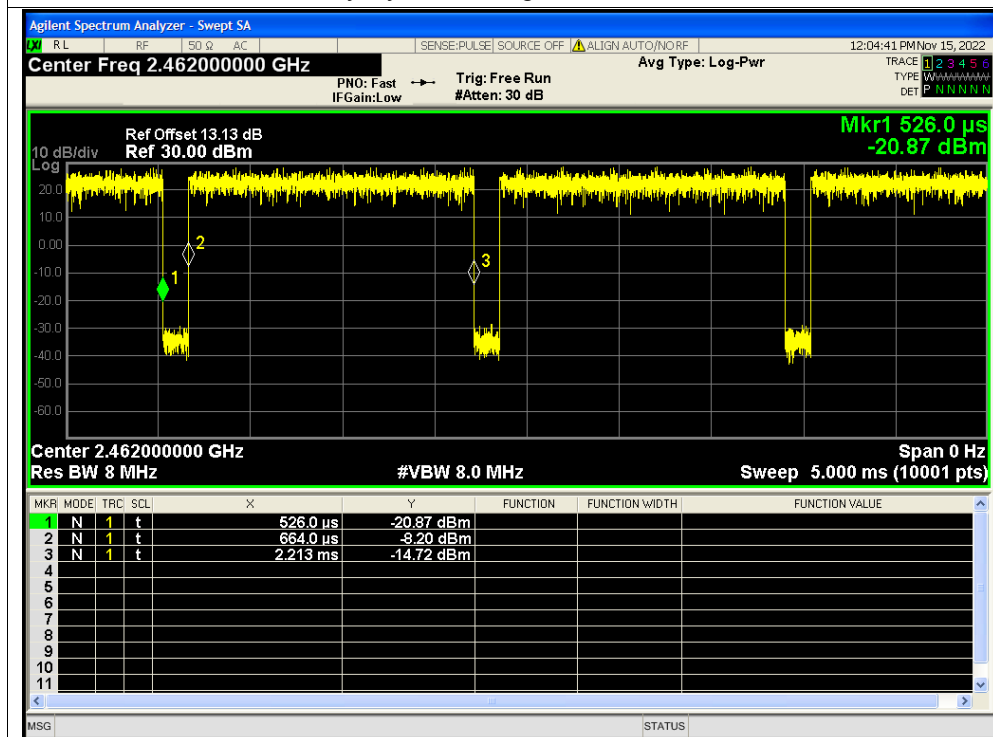




Duty Cycle NVNT g 2462MHz Ant3

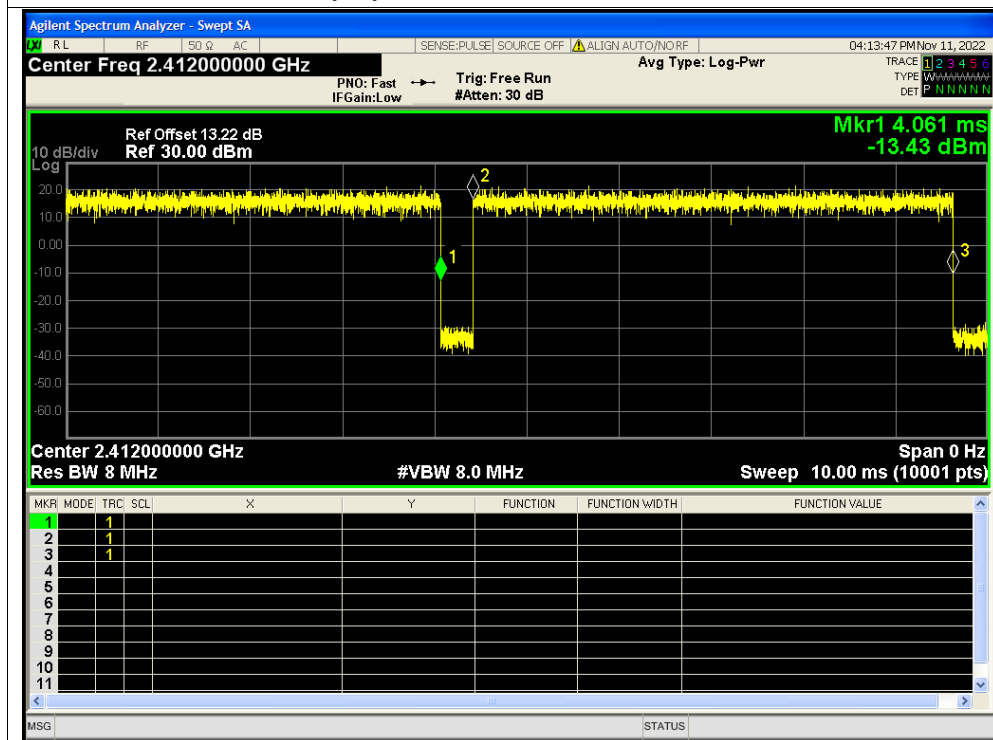


Duty Cycle NVNT g 2462MHz Ant4

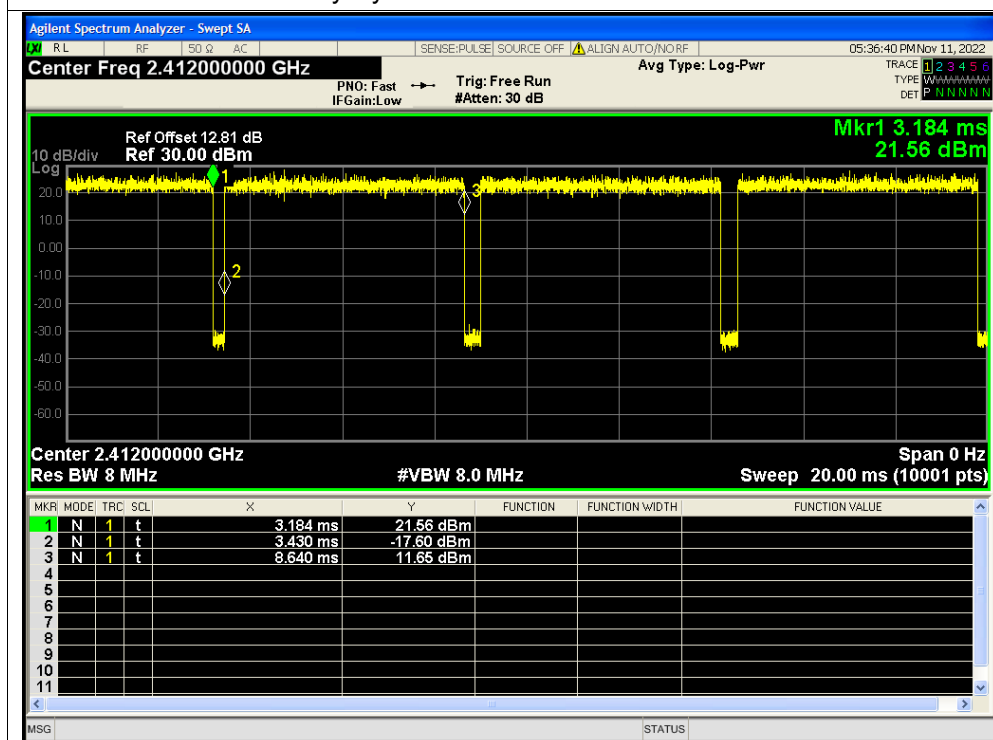




Duty Cycle NVNT n20 2412MHz Ant1

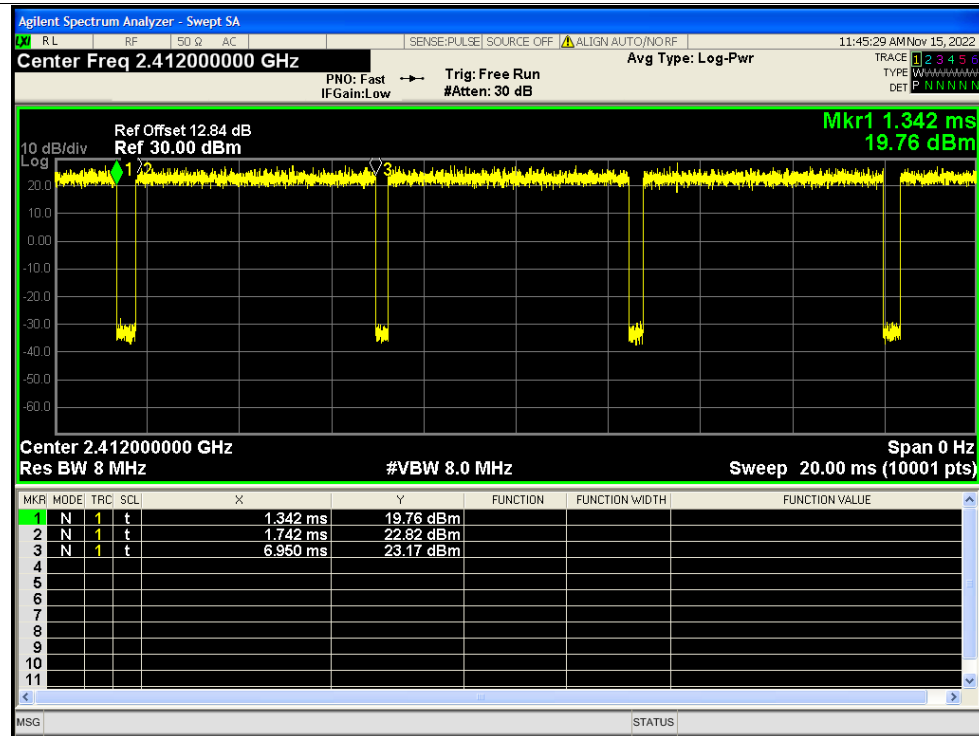


Duty Cycle NVNT n20 2412MHz Ant2

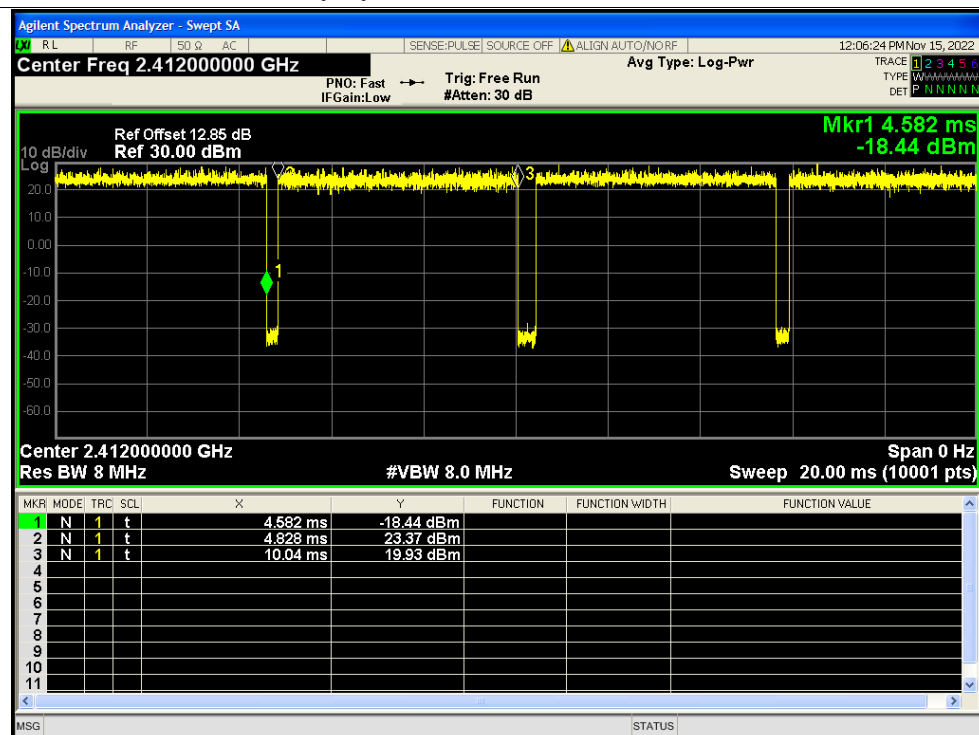




Duty Cycle NVNT n20 2412MHz Ant3

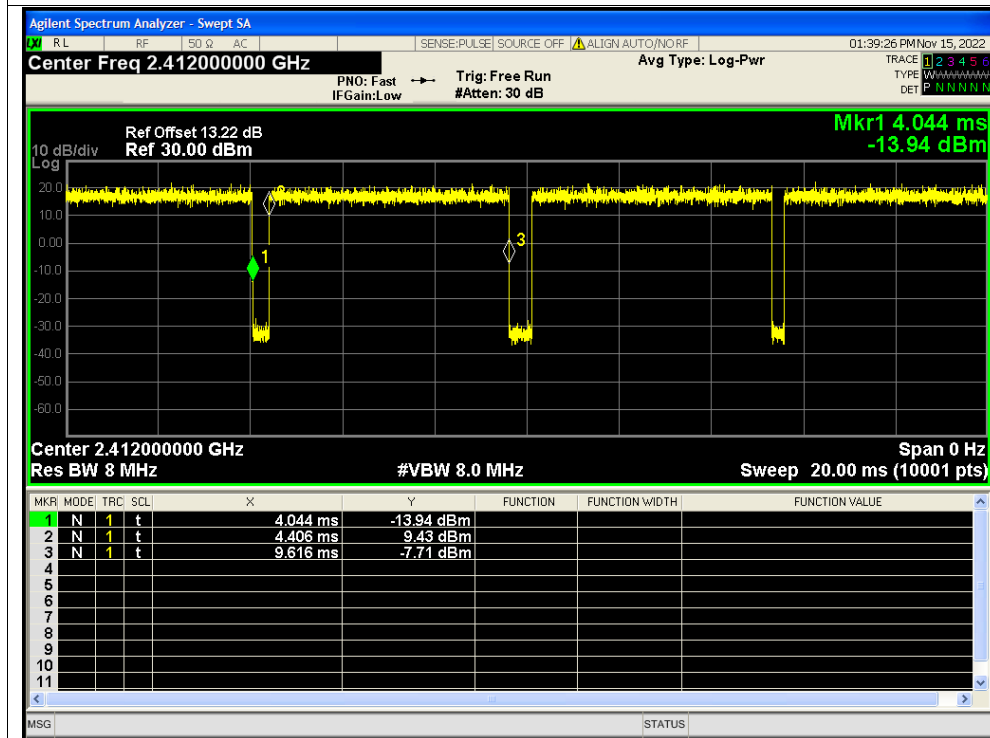


Duty Cycle NVNT n20 2412MHz Ant4

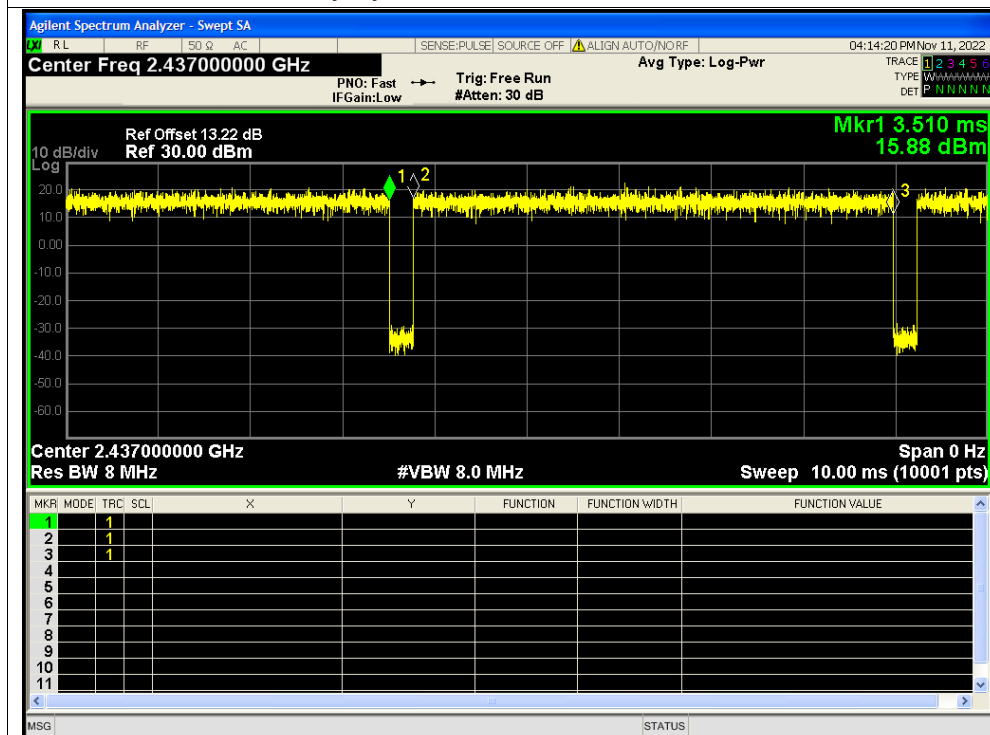




Duty Cycle NVNT n20 2412MHz Sum

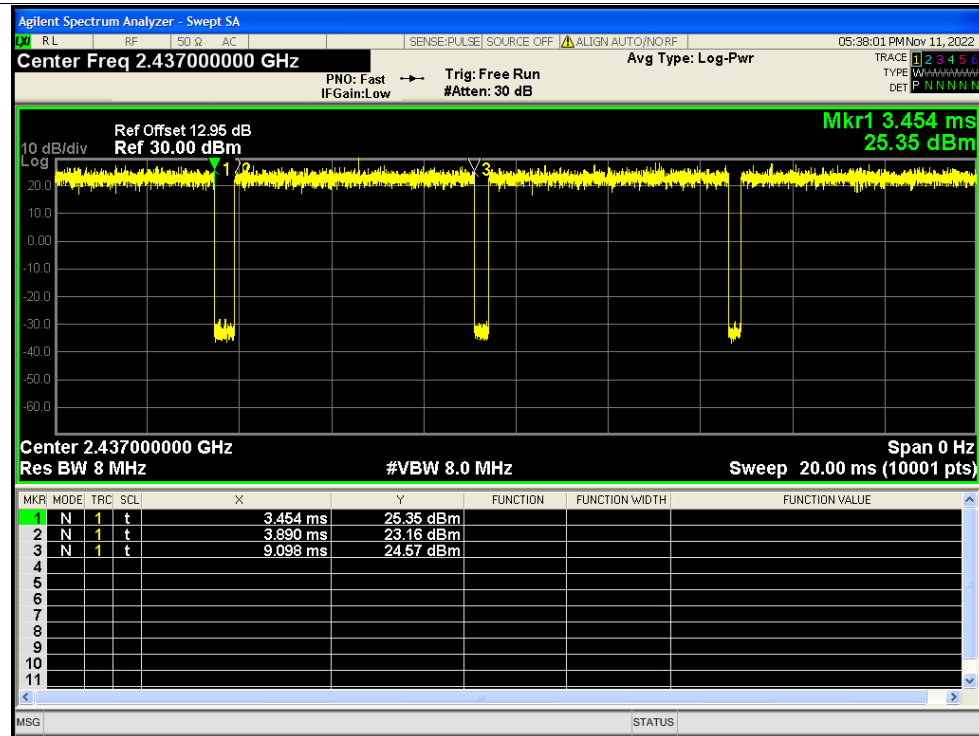


Duty Cycle NVNT n20 2437MHz Ant1

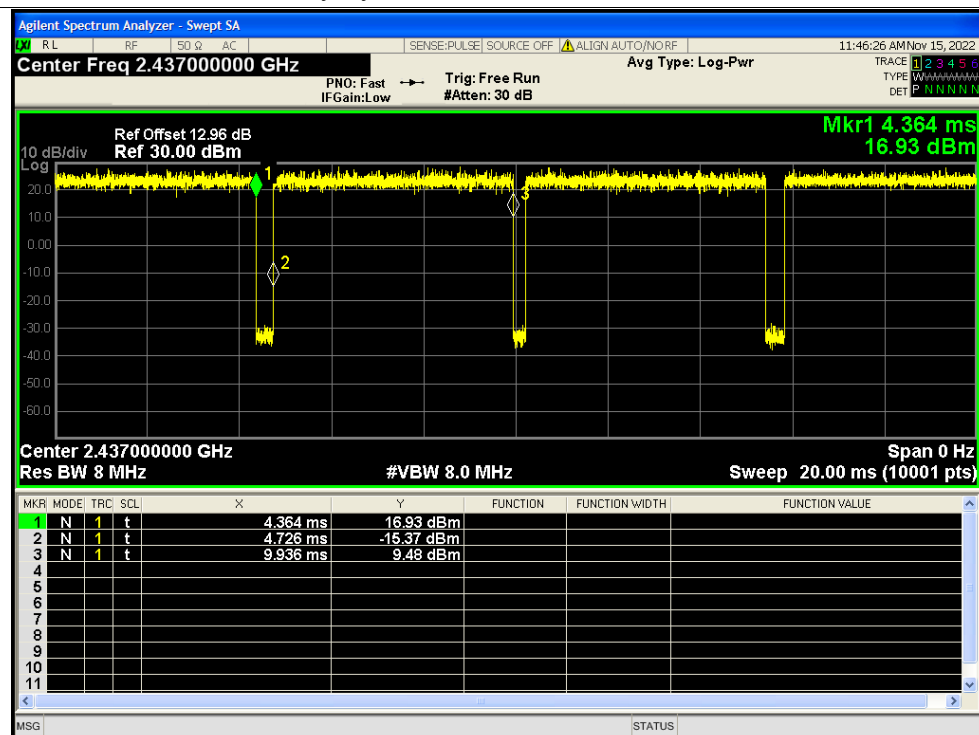




Duty Cycle NVNT n20 2437MHz Ant2

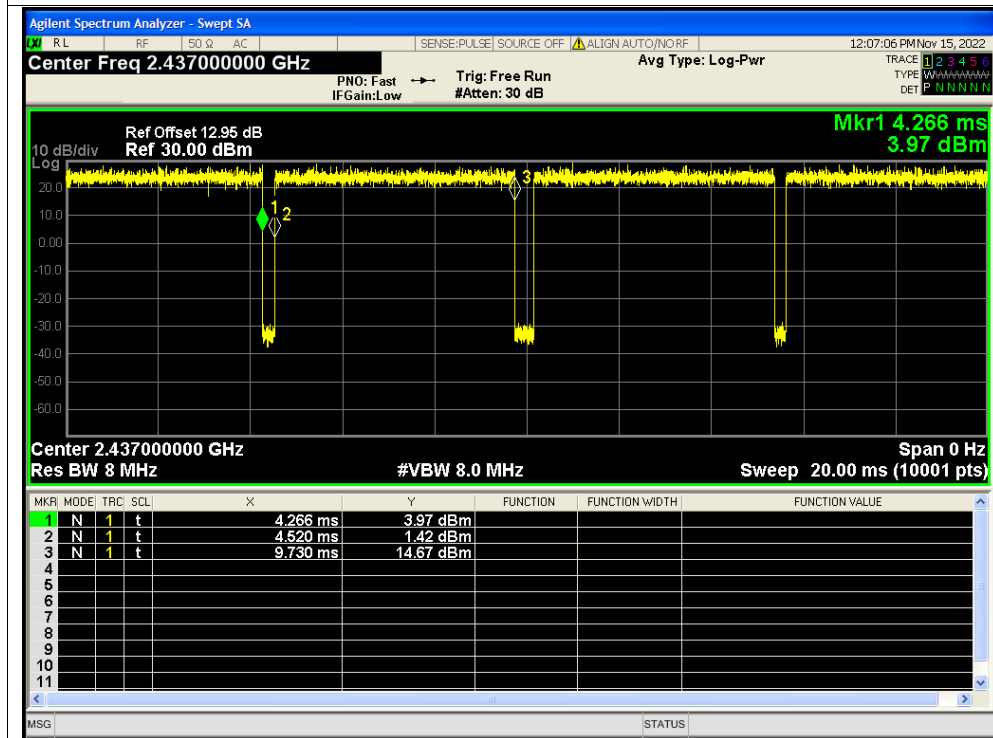


Duty Cycle NVNT n20 2437MHz Ant3

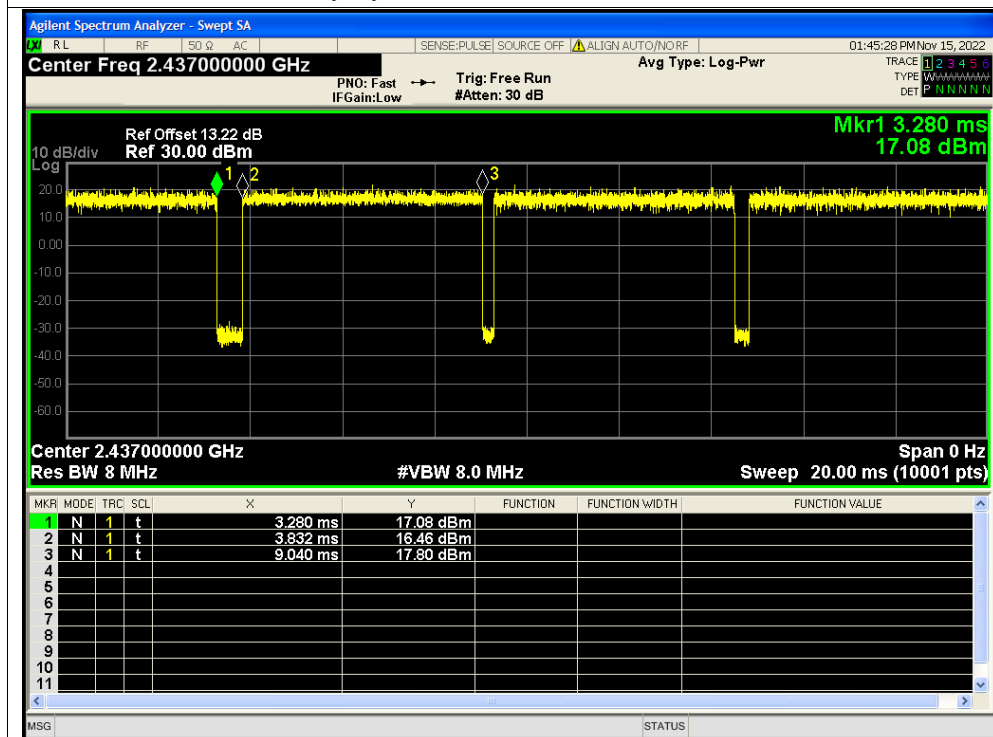




Duty Cycle NVNT n20 2437MHz Ant4

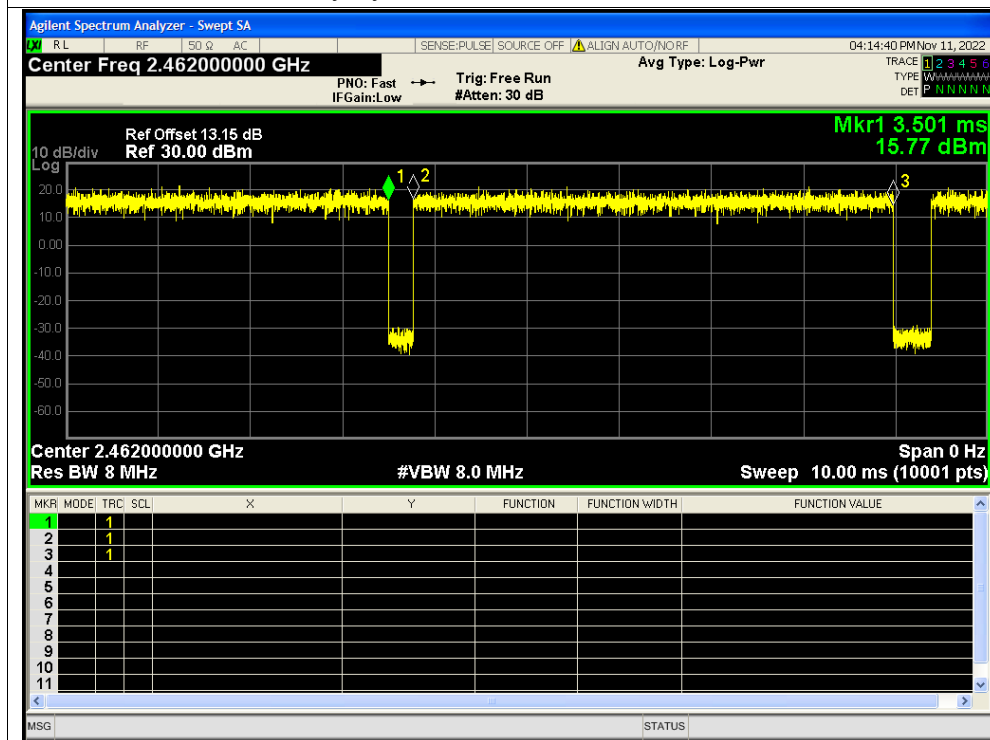


Duty Cycle NVNT n20 2437MHz Sum

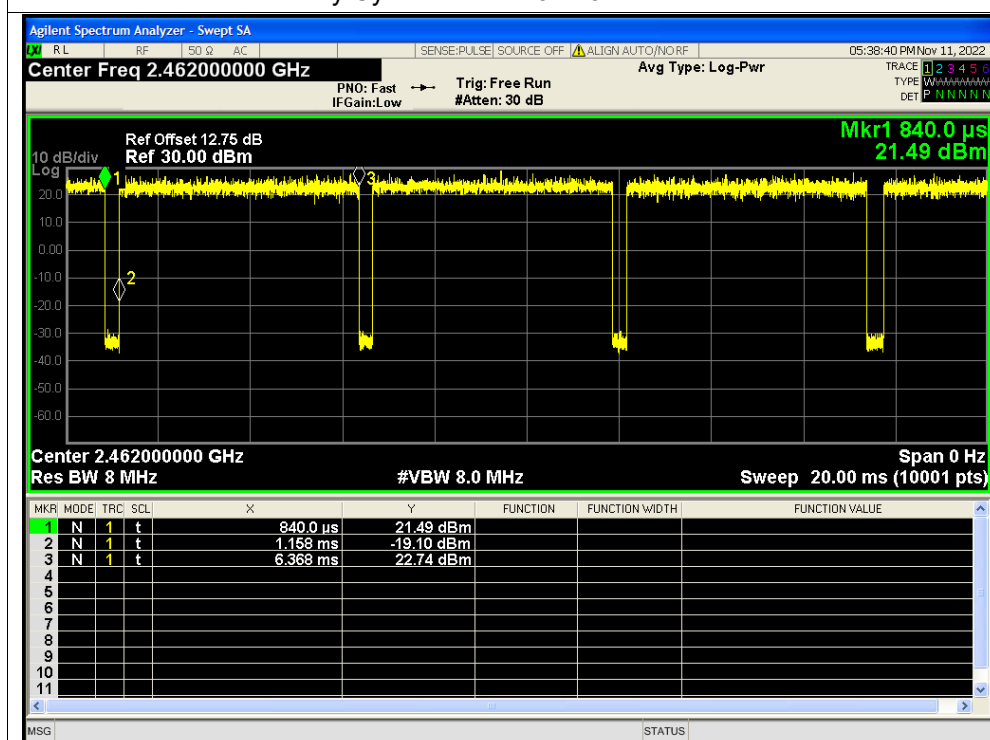




Duty Cycle NVNT n20 2462MHz Ant1

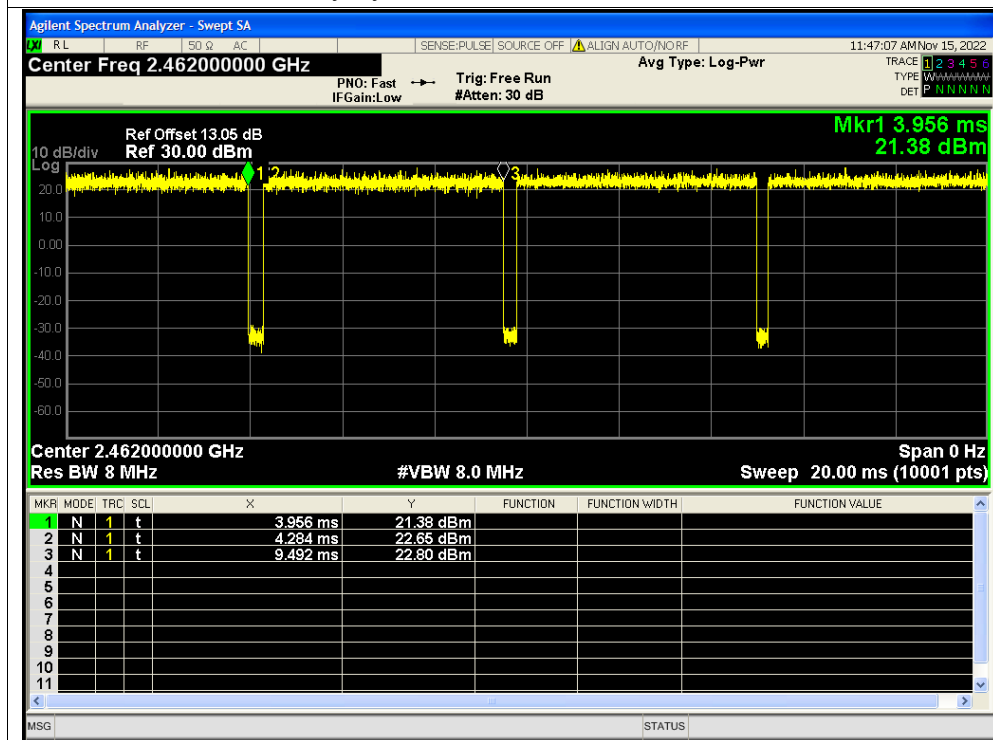


Duty Cycle NVNT n20 2462MHz Ant2

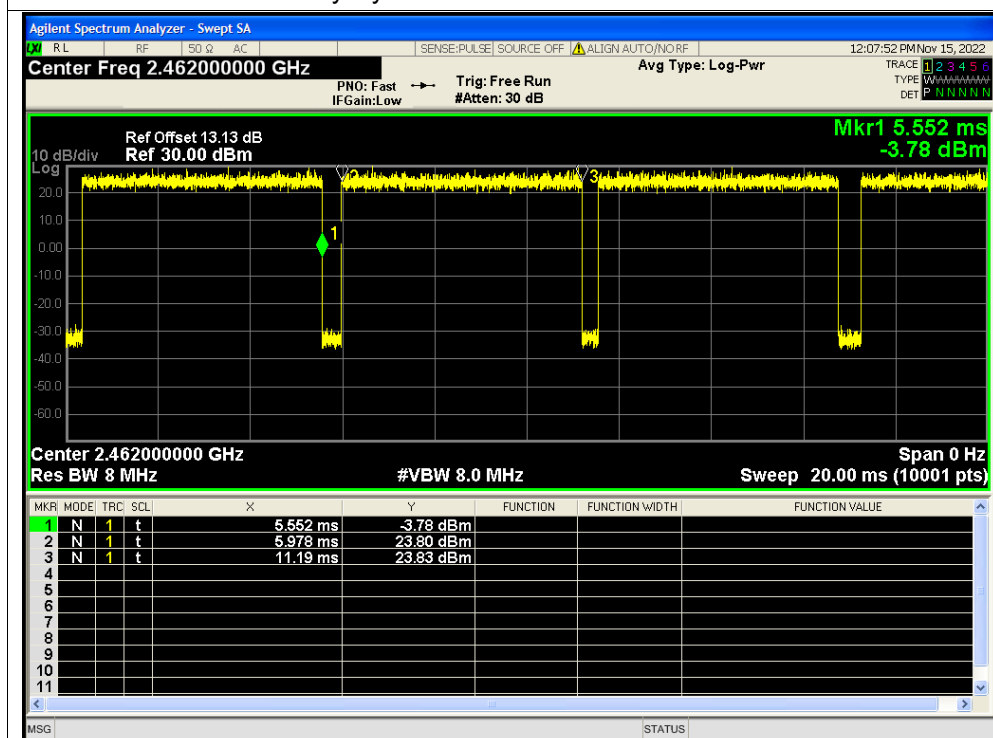




Duty Cycle NVNT n20 2462MHz Ant3

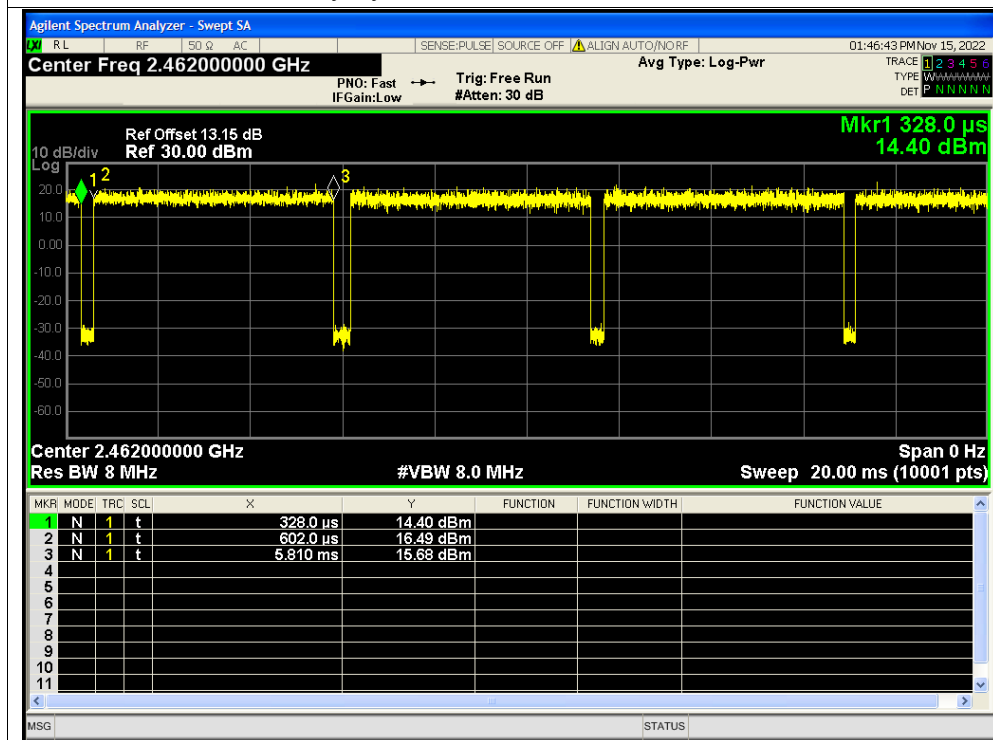


Duty Cycle NVNT n20 2462MHz Ant4

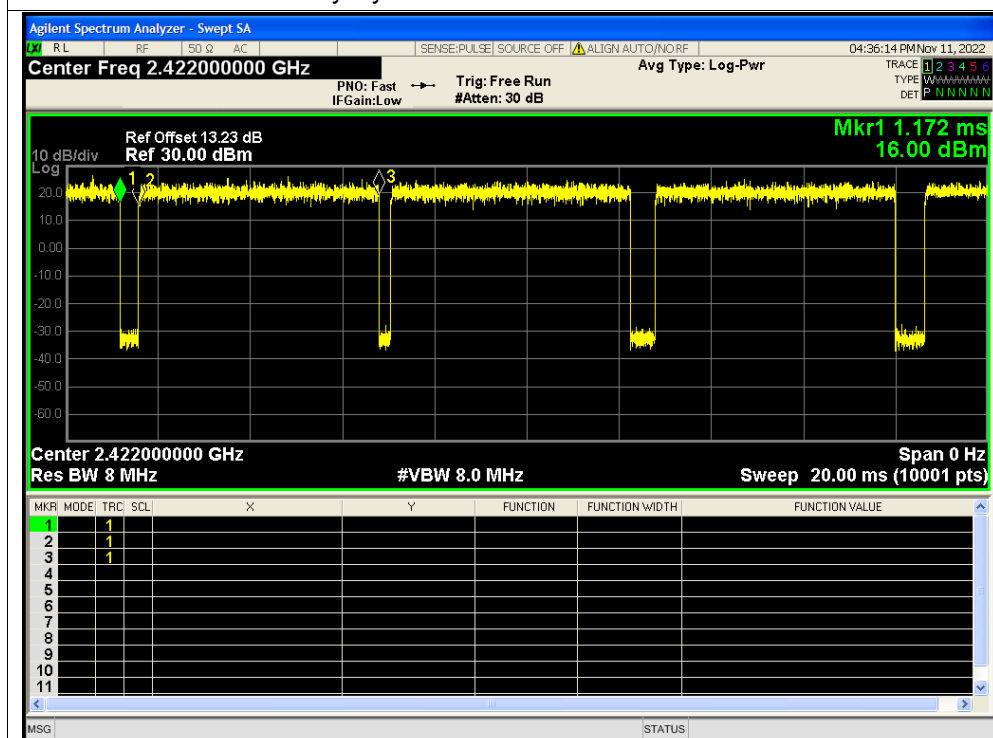




Duty Cycle NVNT n20 2462MHz Sum

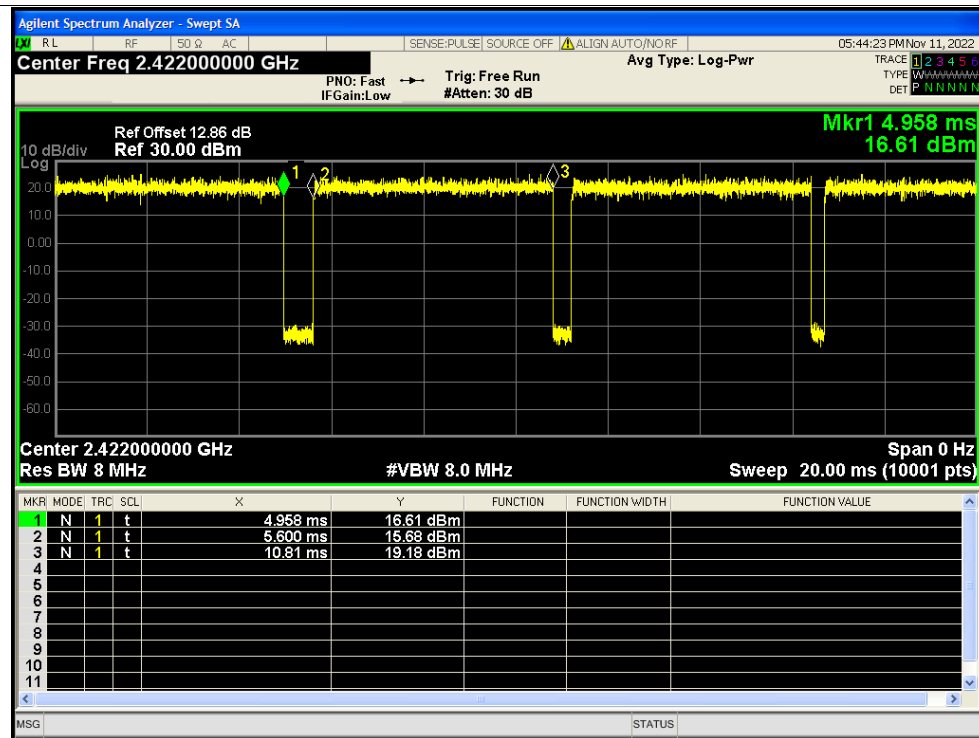


Duty Cycle NVNT n40 2422MHz Ant1

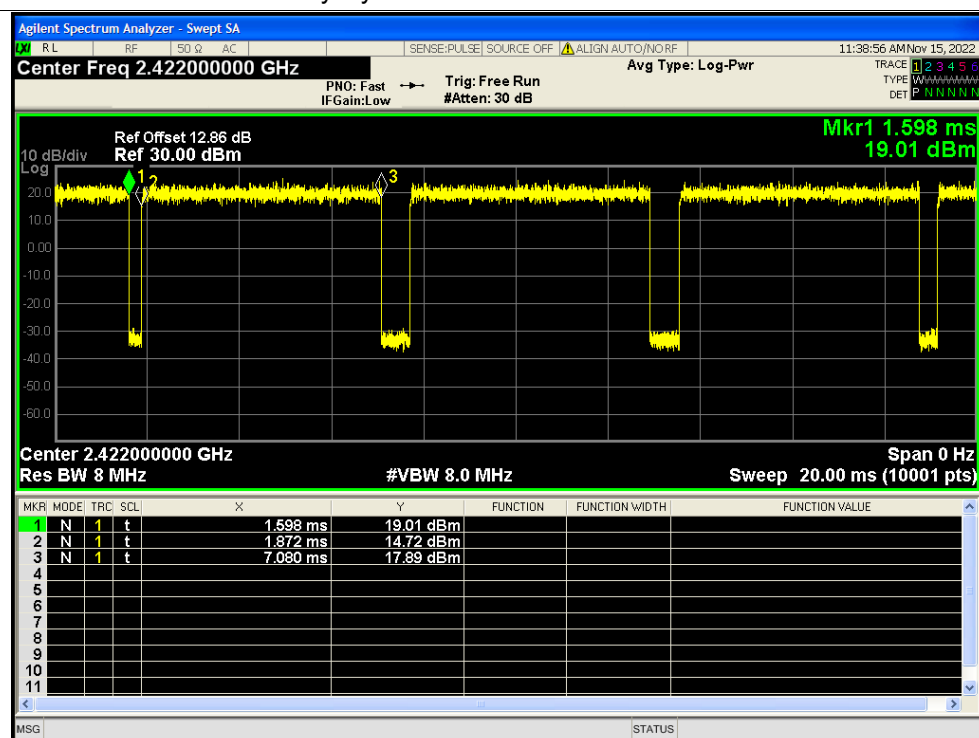




Duty Cycle NVNT n40 2422MHz Ant2

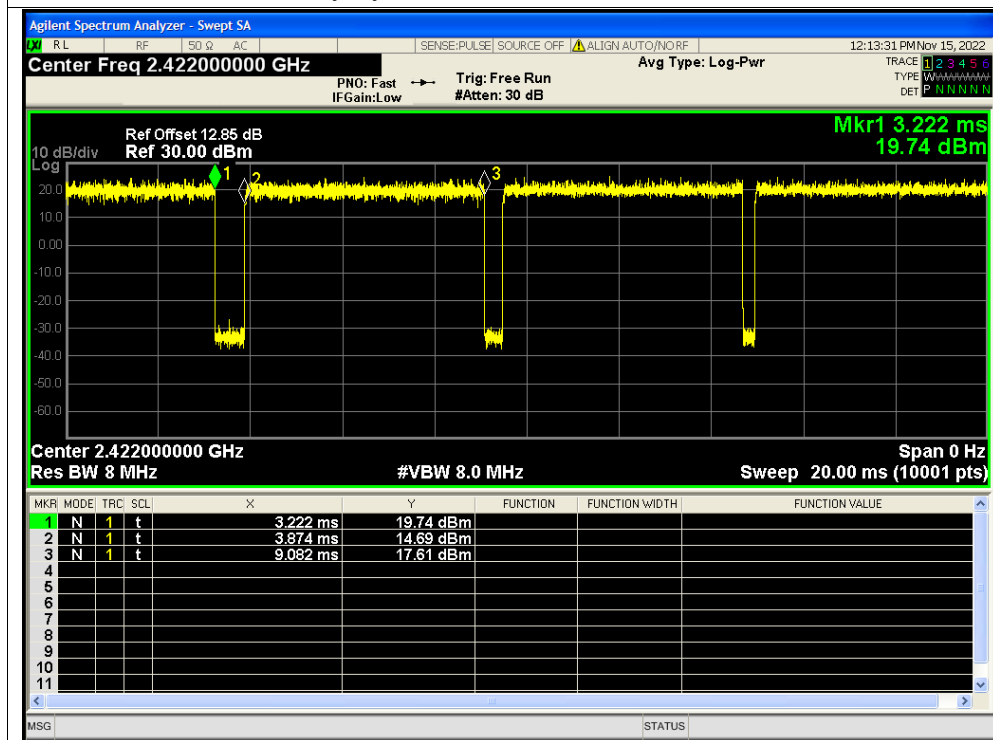


Duty Cycle NVNT n40 2422MHz Ant3

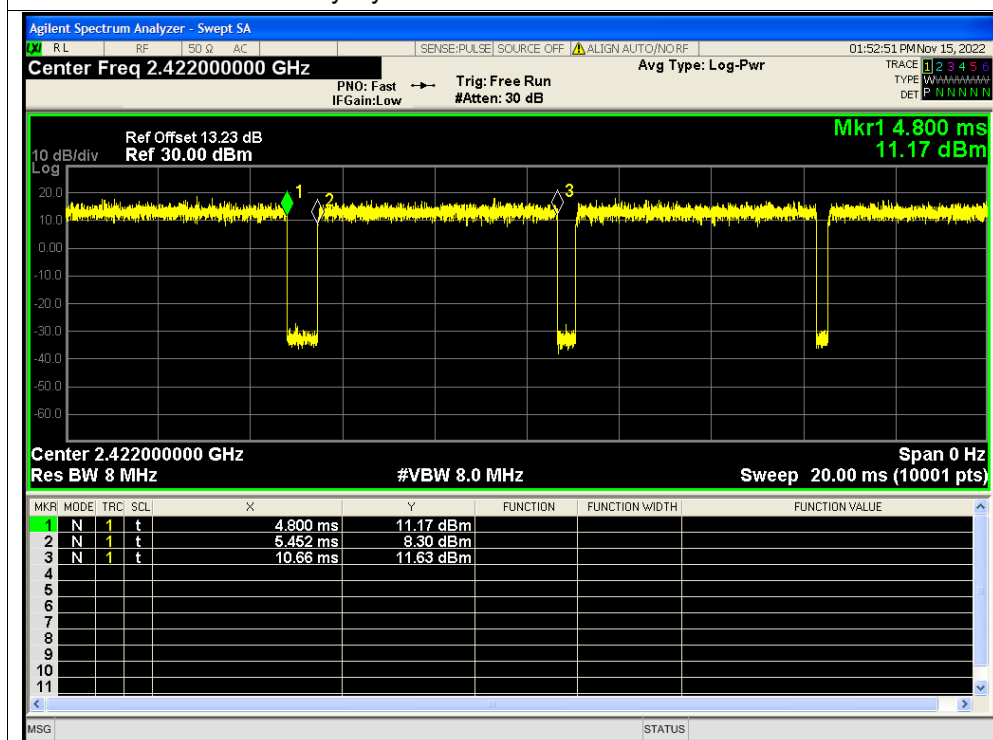




Duty Cycle NVNT n40 2422MHz Ant4

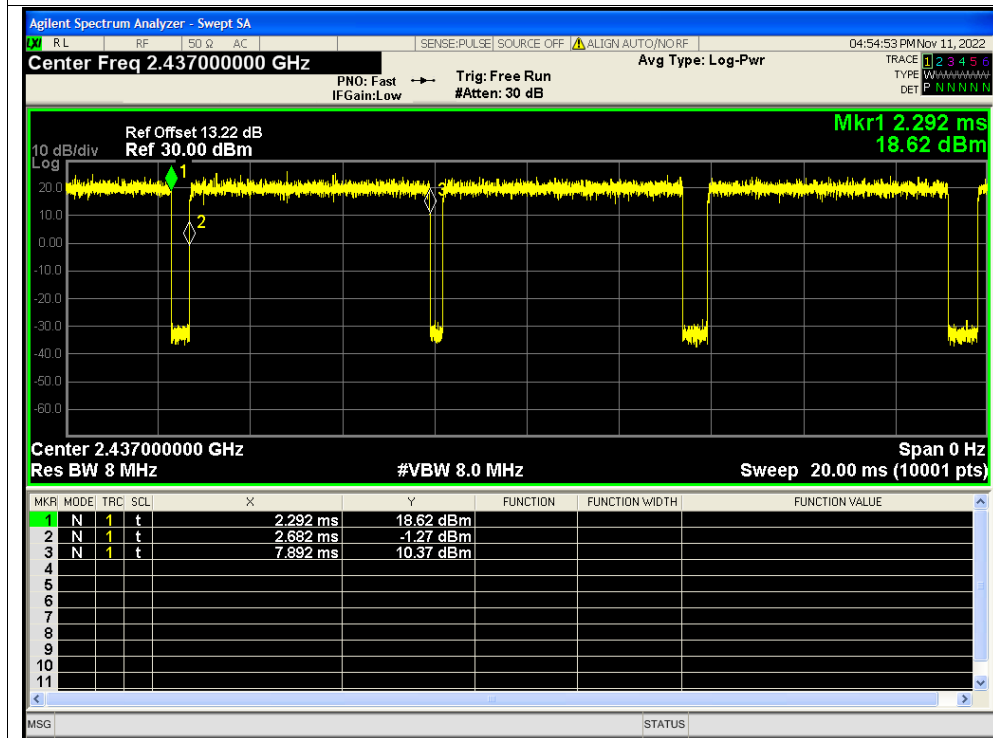


Duty Cycle NVNT n40 2422MHz Sum

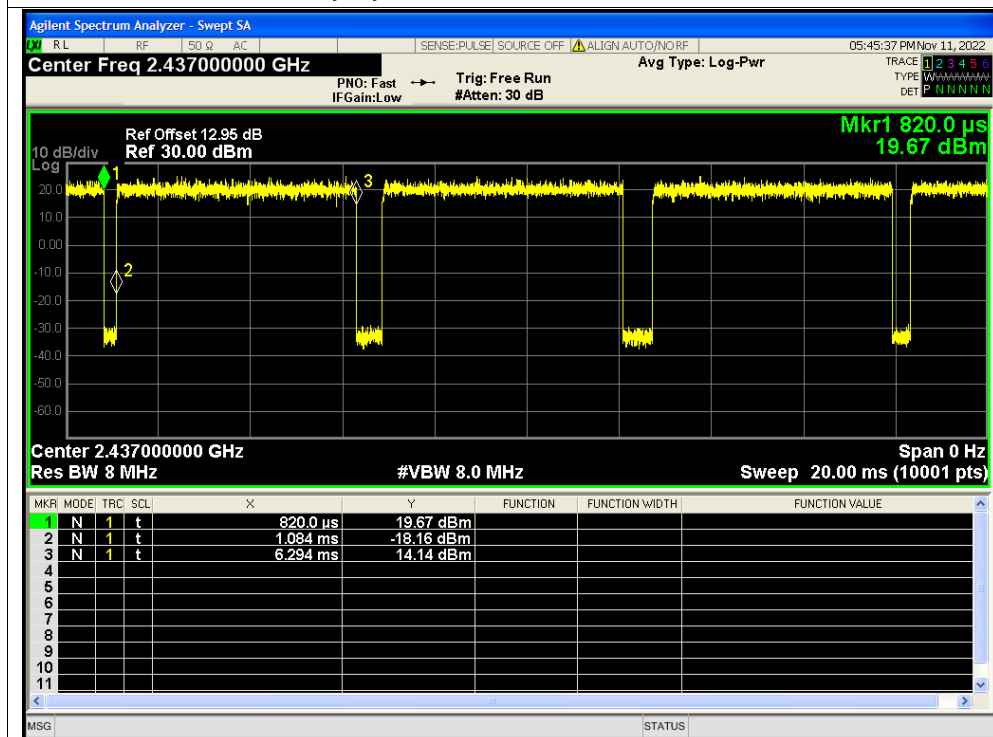




Duty Cycle NVNT n40 2437MHz Ant1

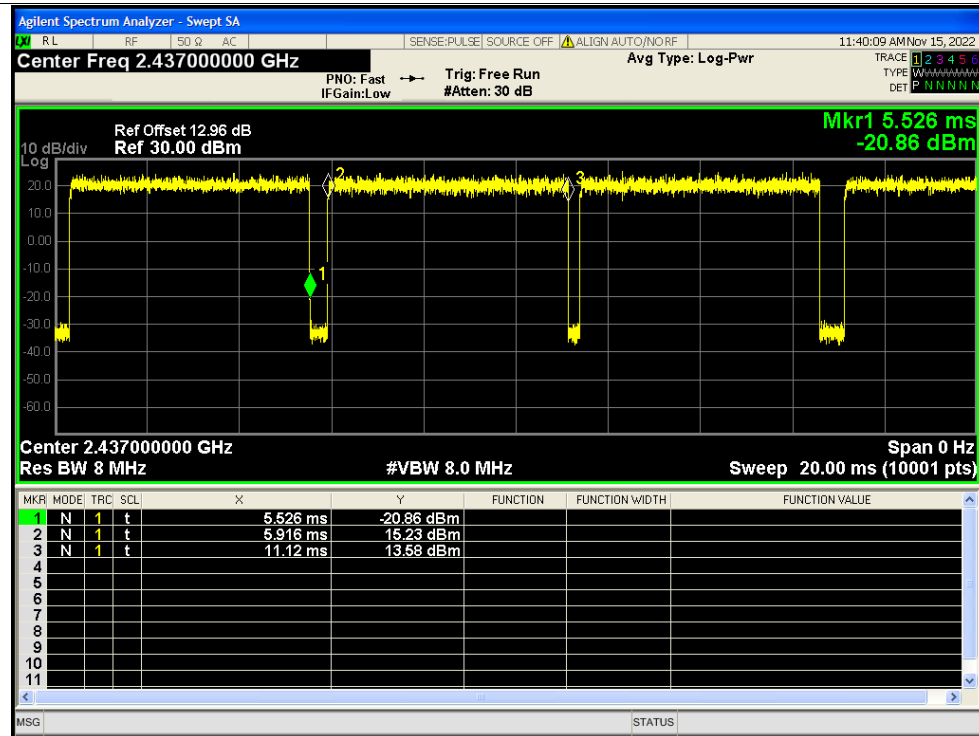


Duty Cycle NVNT n40 2437MHz Ant2

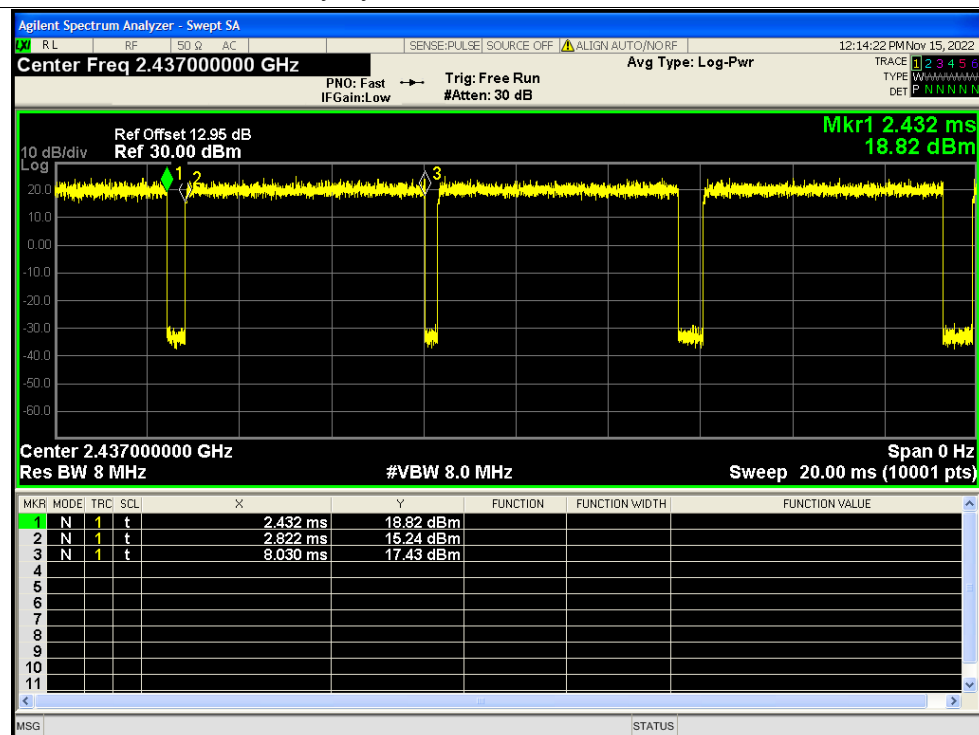




Duty Cycle NVNT n40 2437MHz Ant3

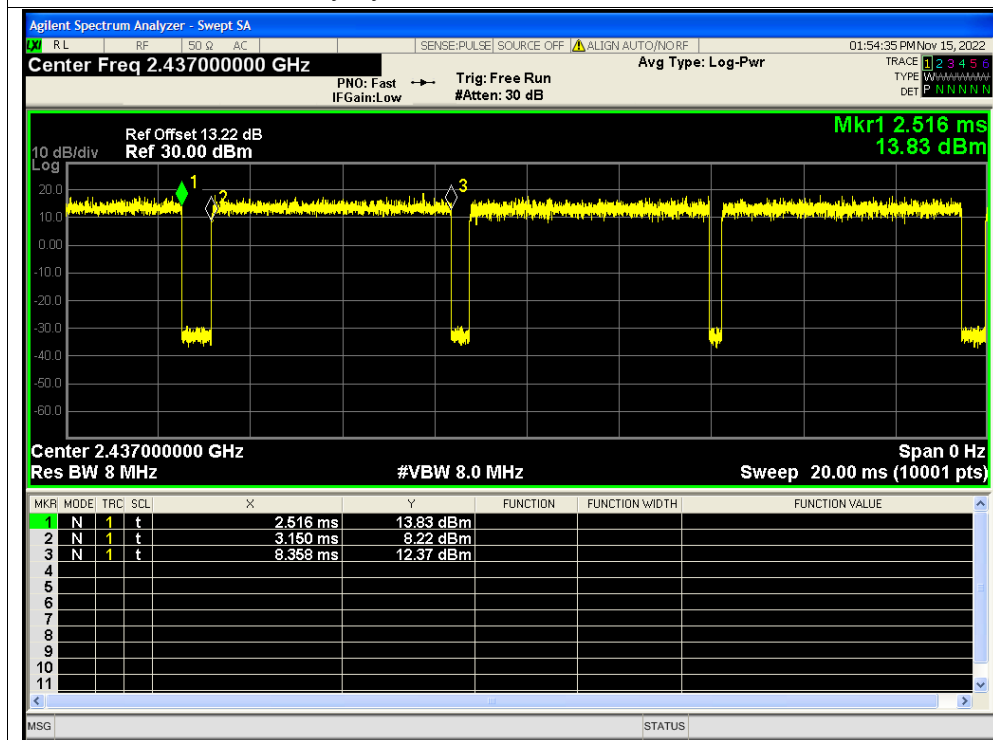


Duty Cycle NVNT n40 2437MHz Ant4

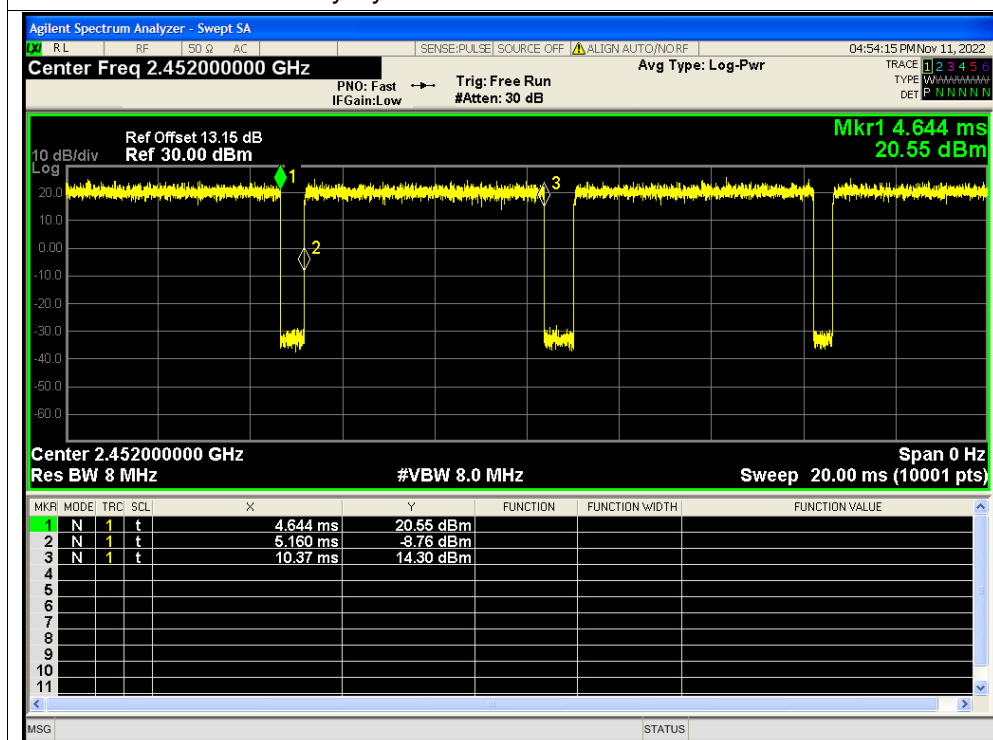




Duty Cycle NVNT n40 2437MHz Sum

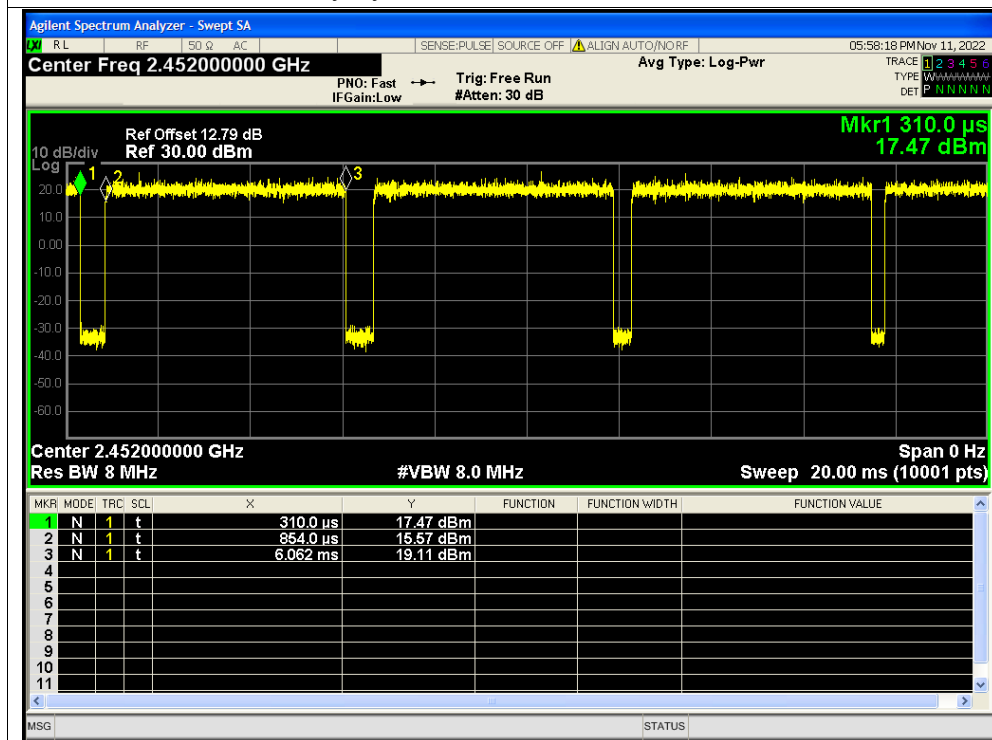


Duty Cycle NVNT n40 2452MHz Ant1

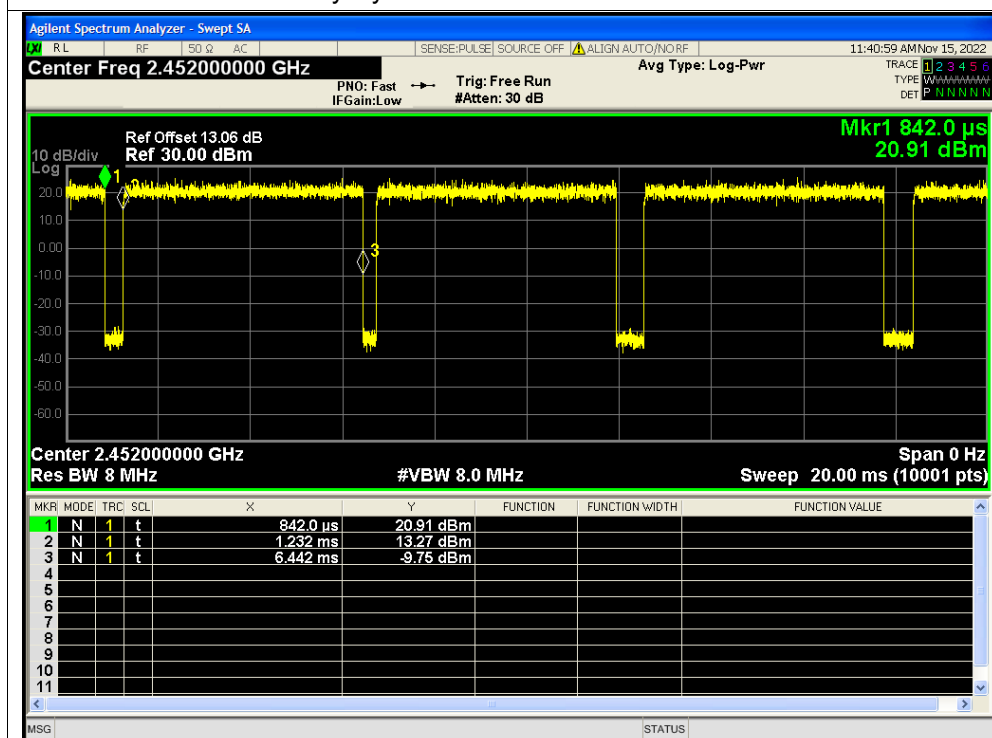




Duty Cycle NVNT n40 2452MHz Ant2

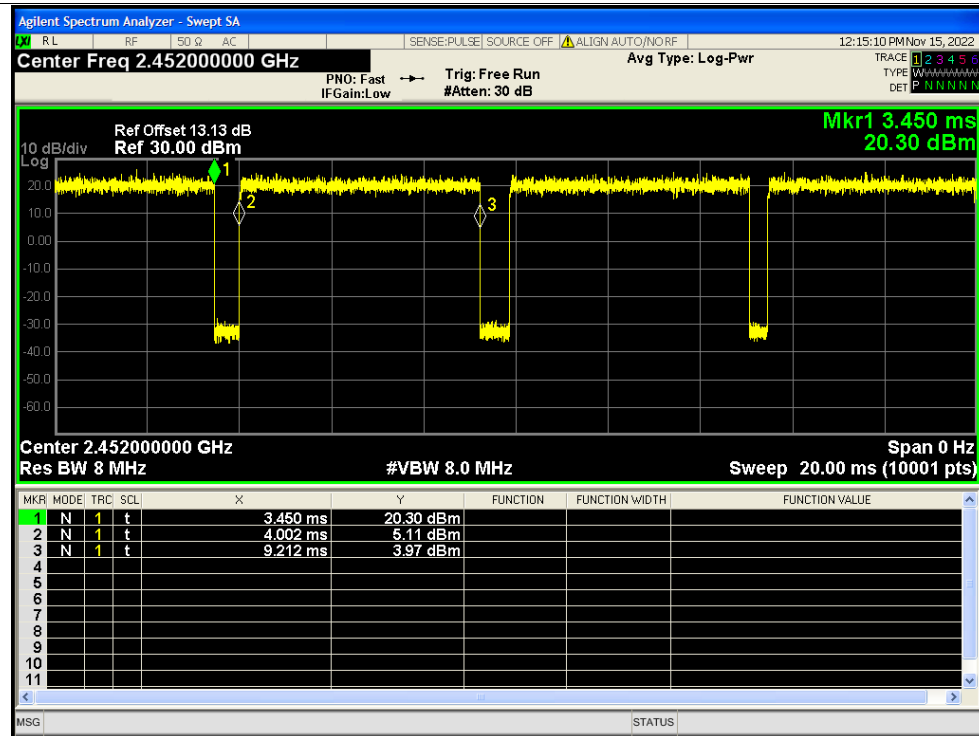


Duty Cycle NVNT n40 2452MHz Ant3

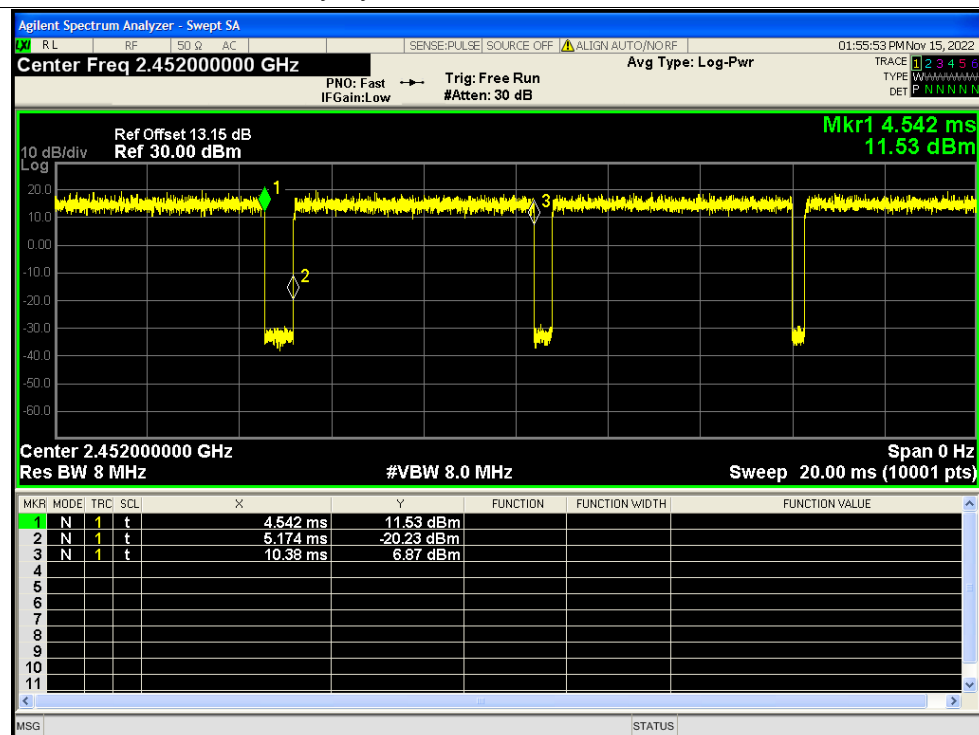




Duty Cycle NVNT n40 2452MHz Ant4

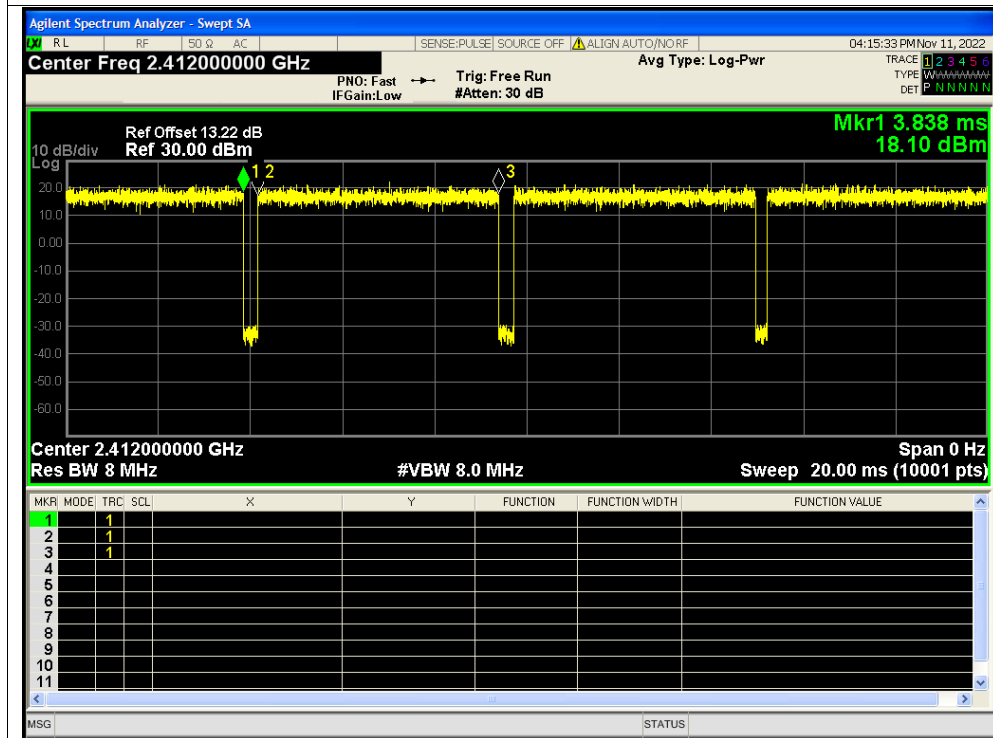


Duty Cycle NVNT n40 2452MHz Sum

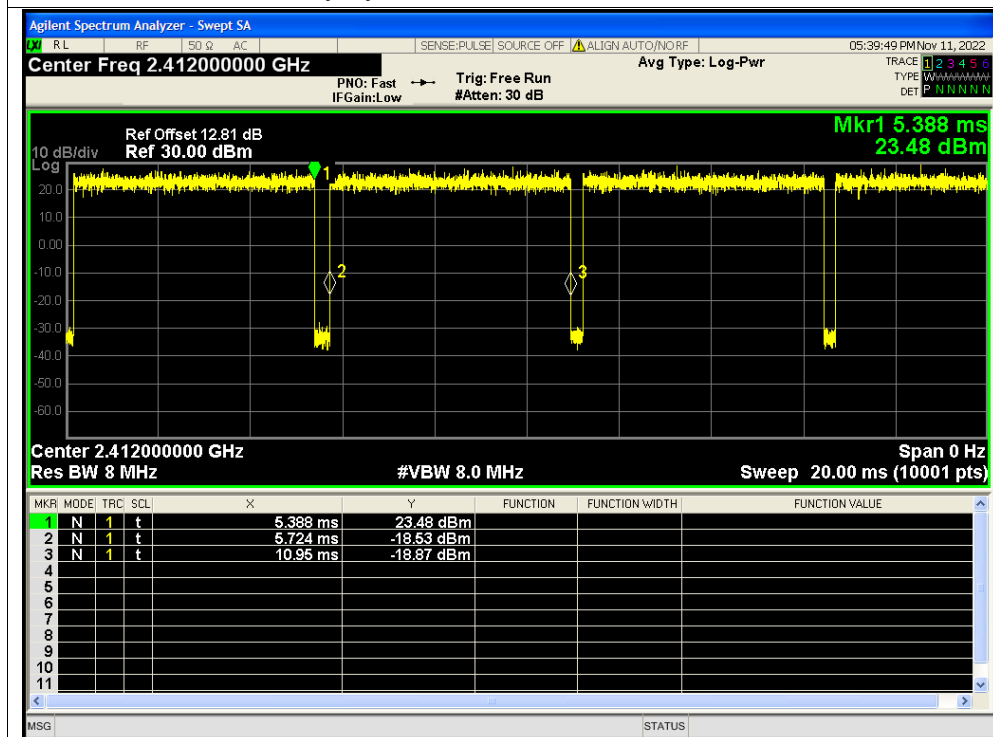




Duty Cycle NVNT ax20 2412MHz Ant1

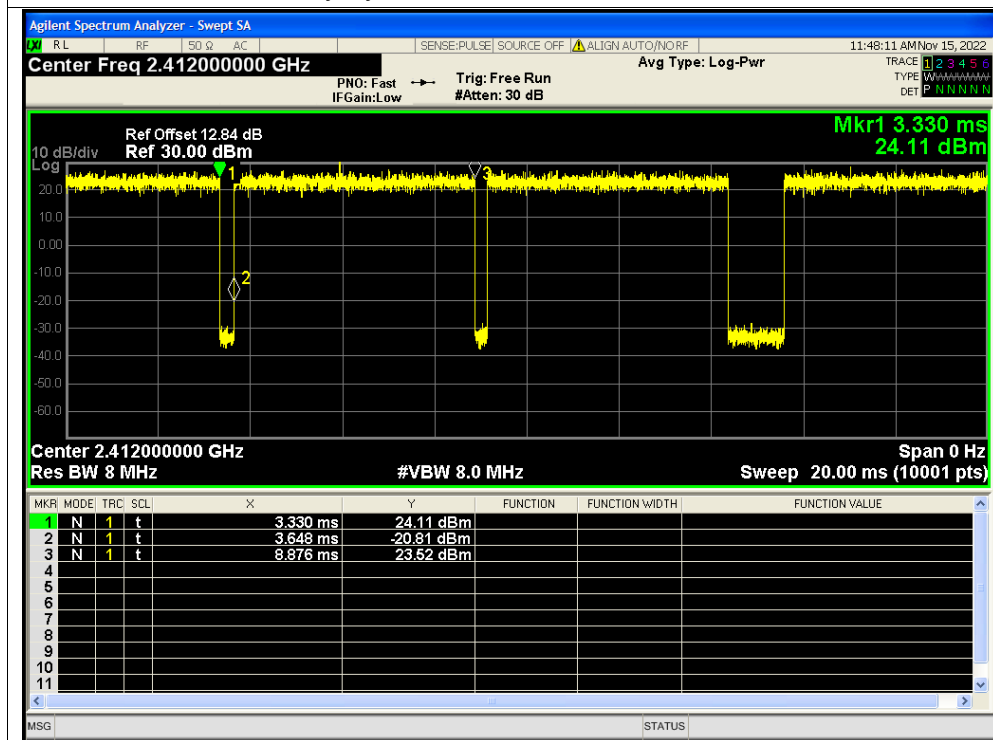


Duty Cycle NVNT ax20 2412MHz Ant2

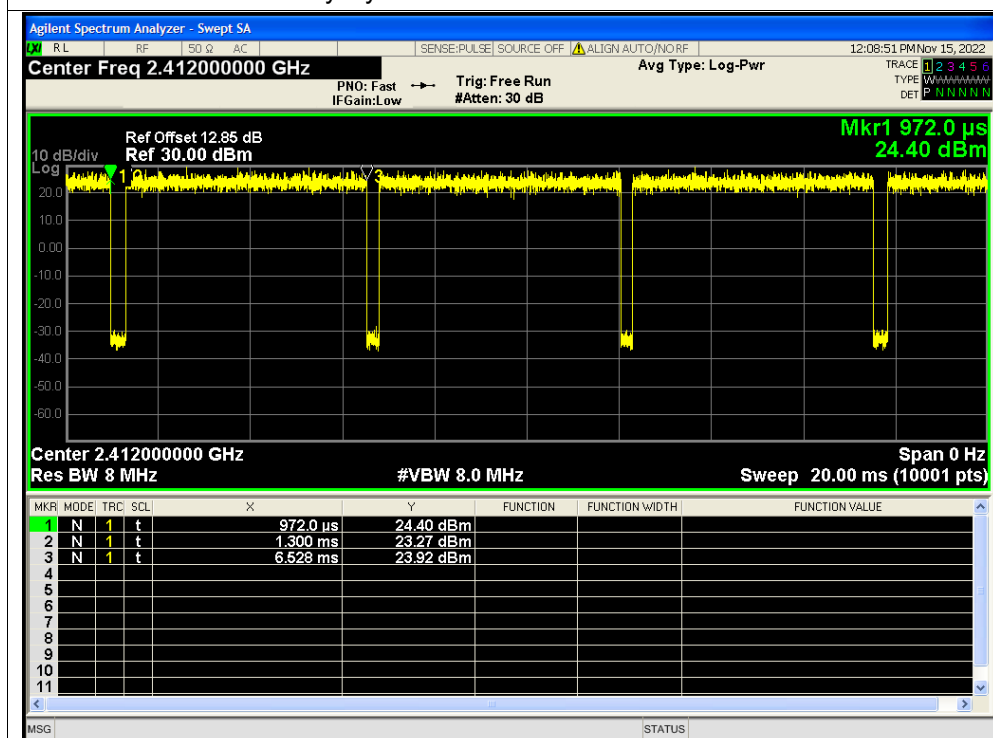




Duty Cycle NVNT ax20 2412MHz Ant3

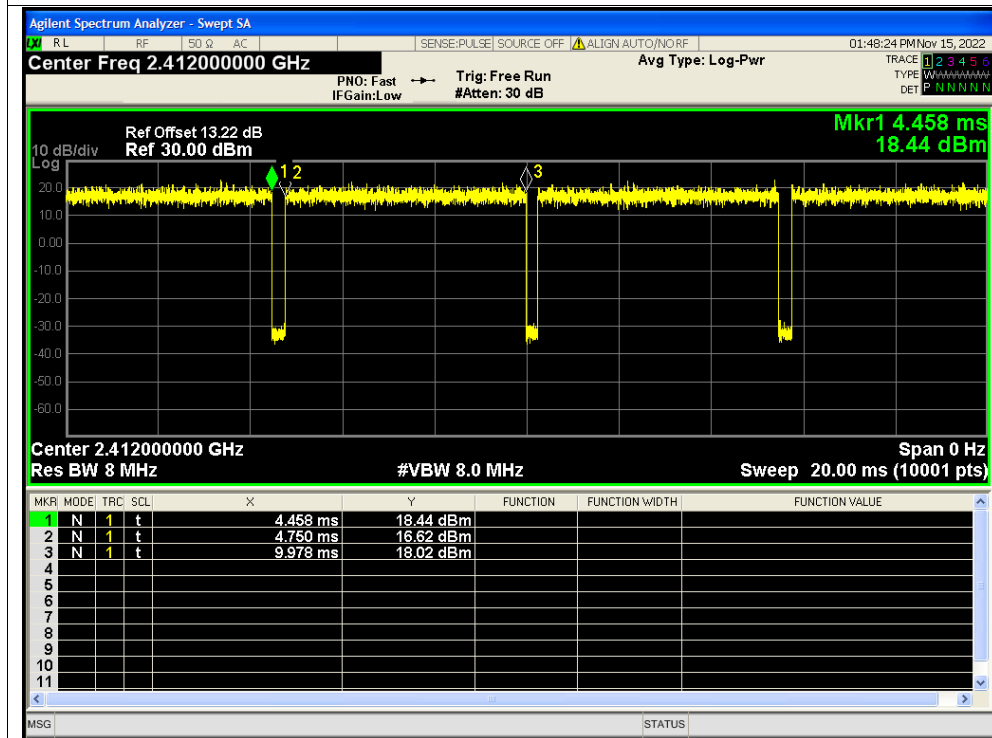


Duty Cycle NVNT ax20 2412MHz Ant4

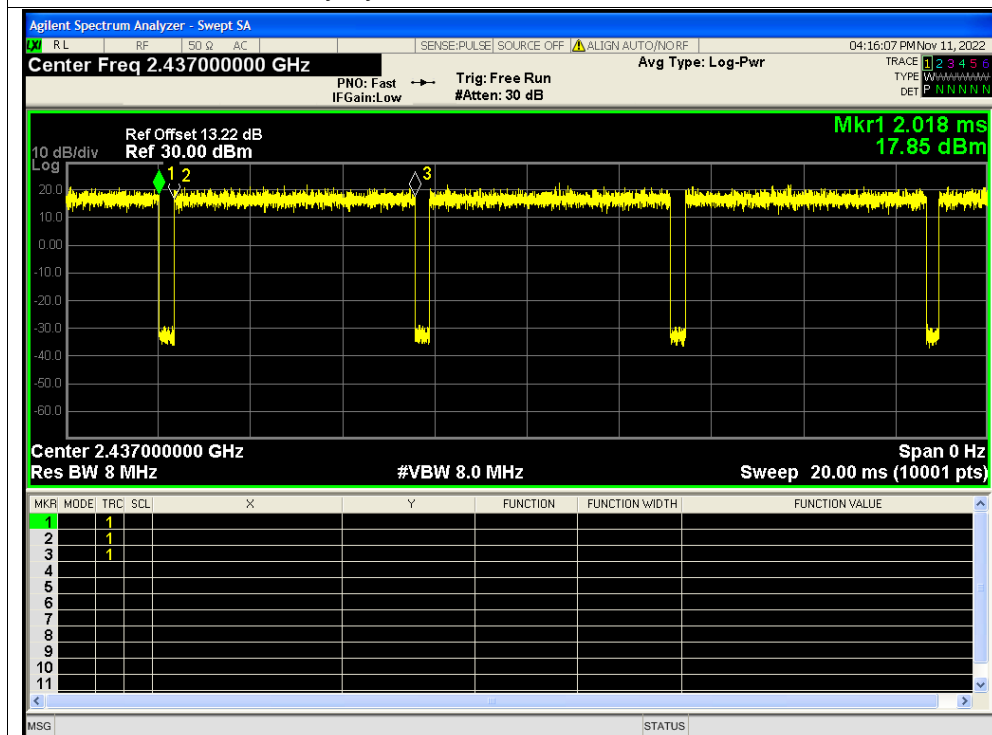




Duty Cycle NVNT ax20 2412MHz Sum

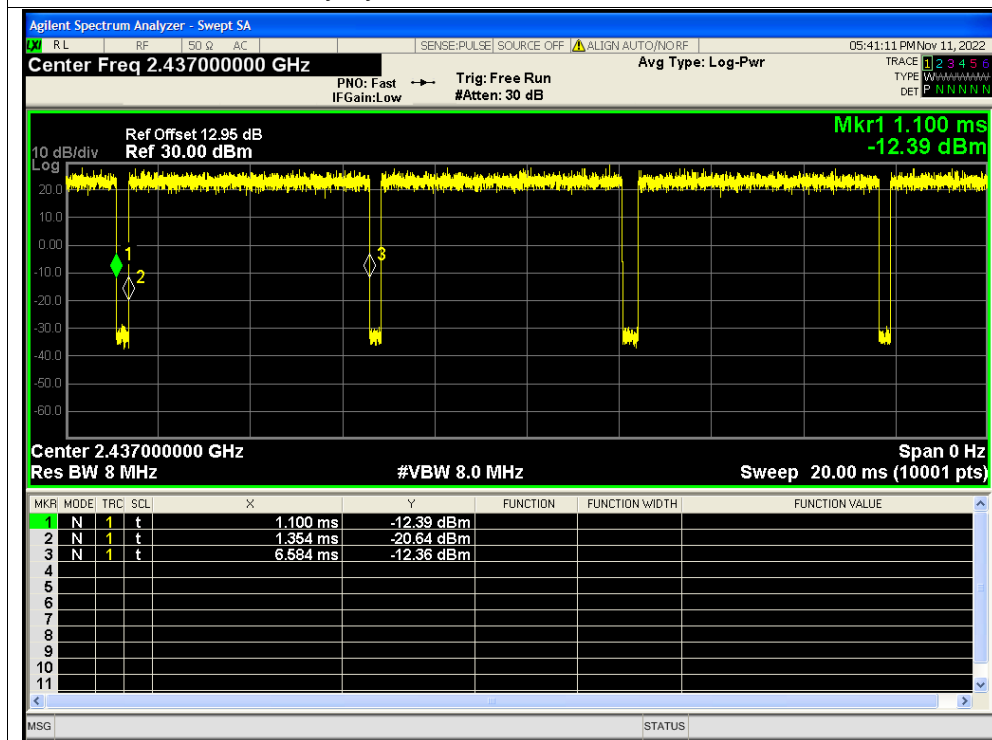


Duty Cycle NVNT ax20 2437MHz Ant1

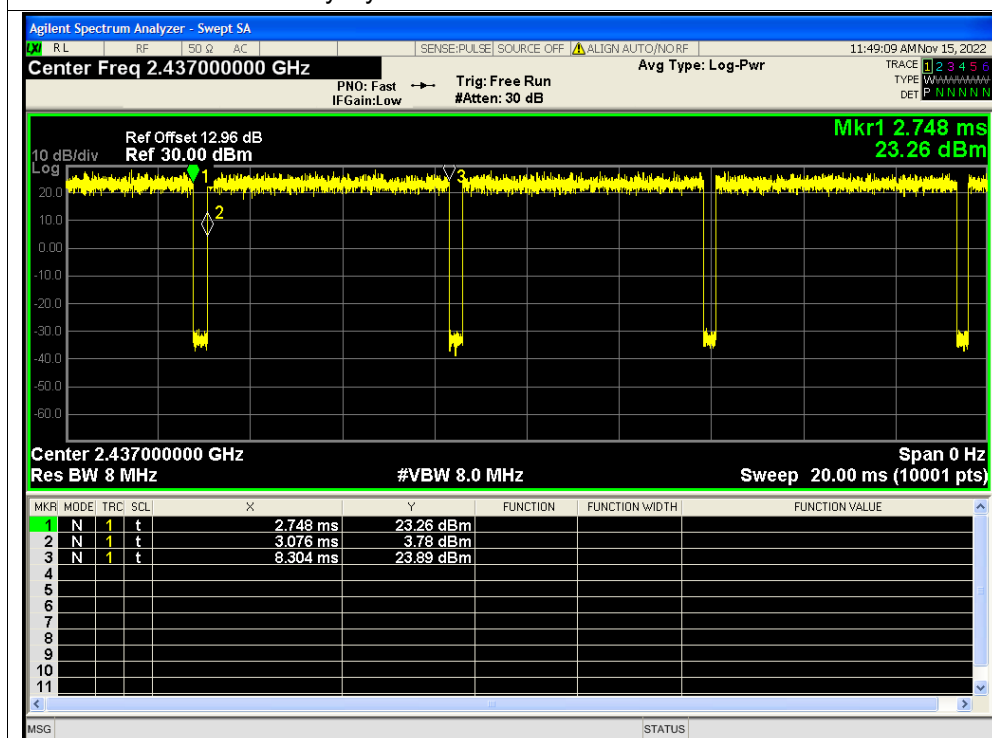




Duty Cycle NVNT ax20 2437MHz Ant2

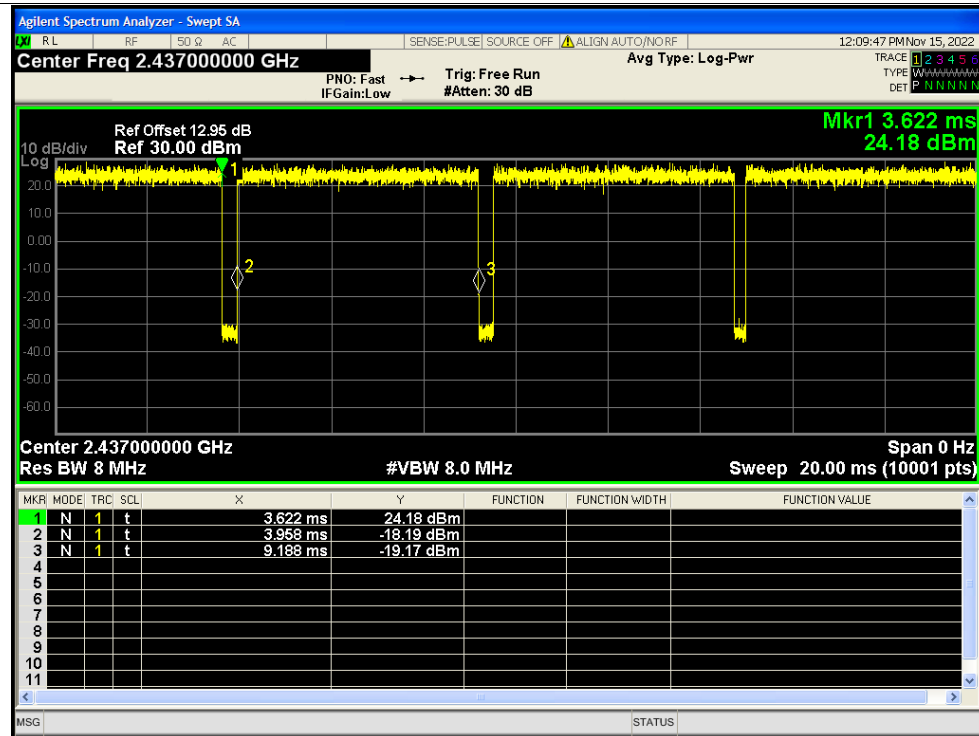


Duty Cycle NVNT ax20 2437MHz Ant3

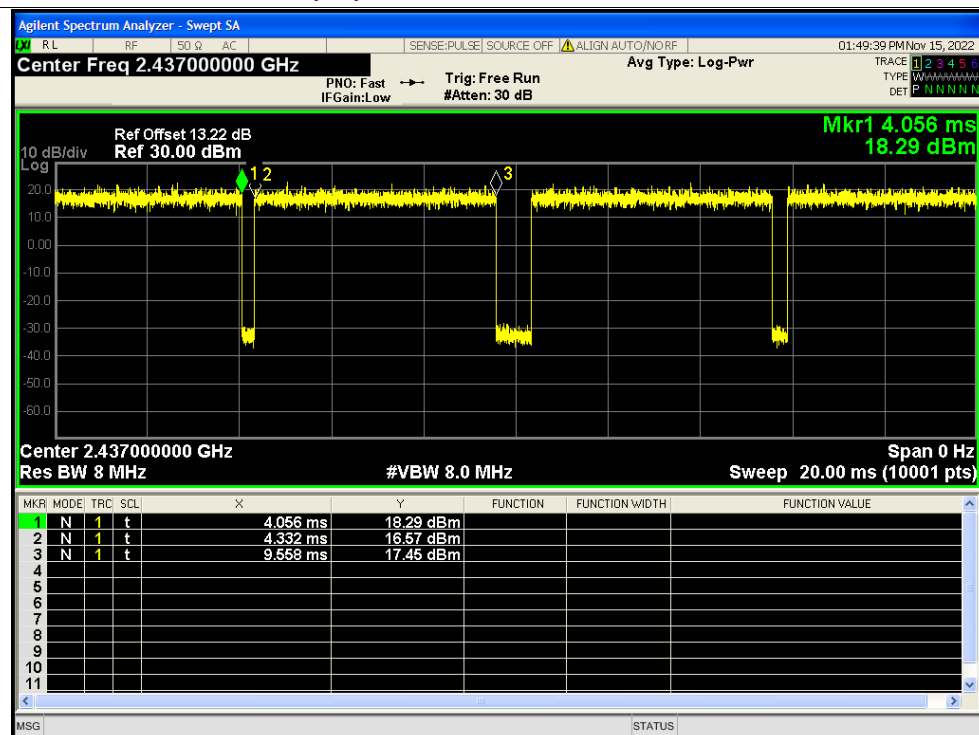




Duty Cycle NVNT ax20 2437MHz Ant4

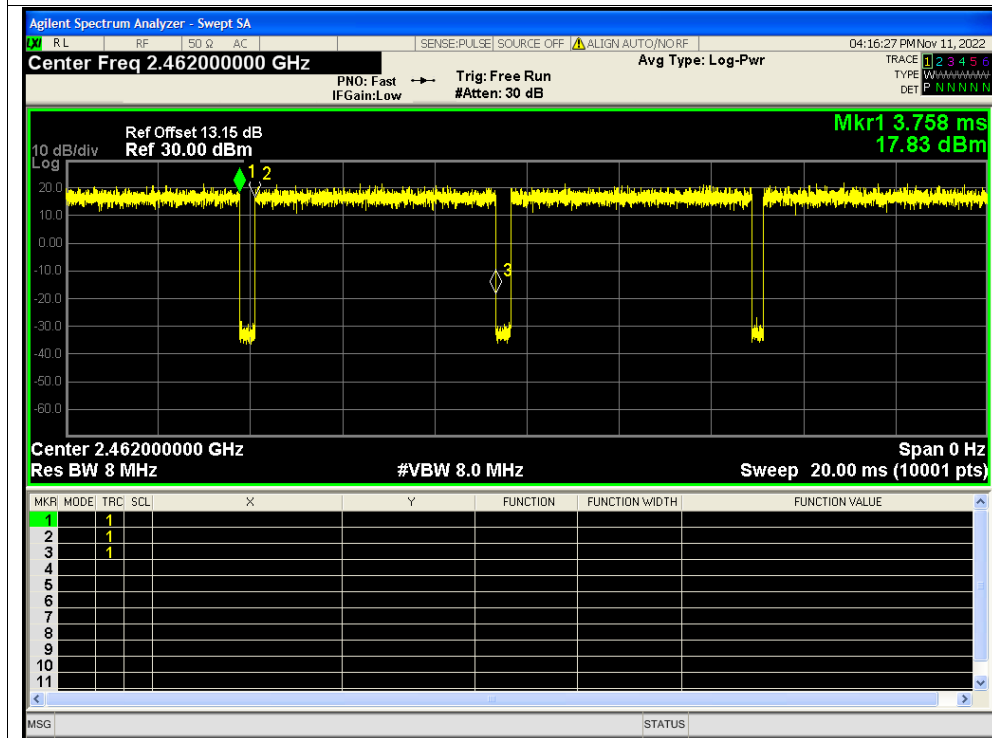


Duty Cycle NVNT ax20 2437MHz Sum

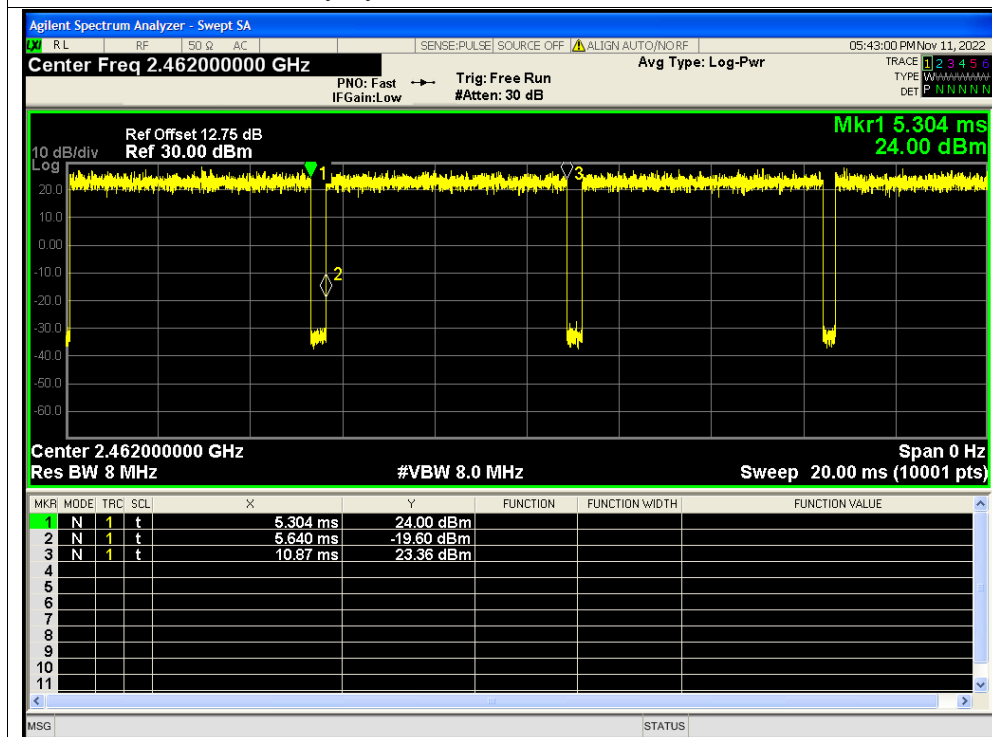




Duty Cycle NVNT ax20 2462MHz Ant1

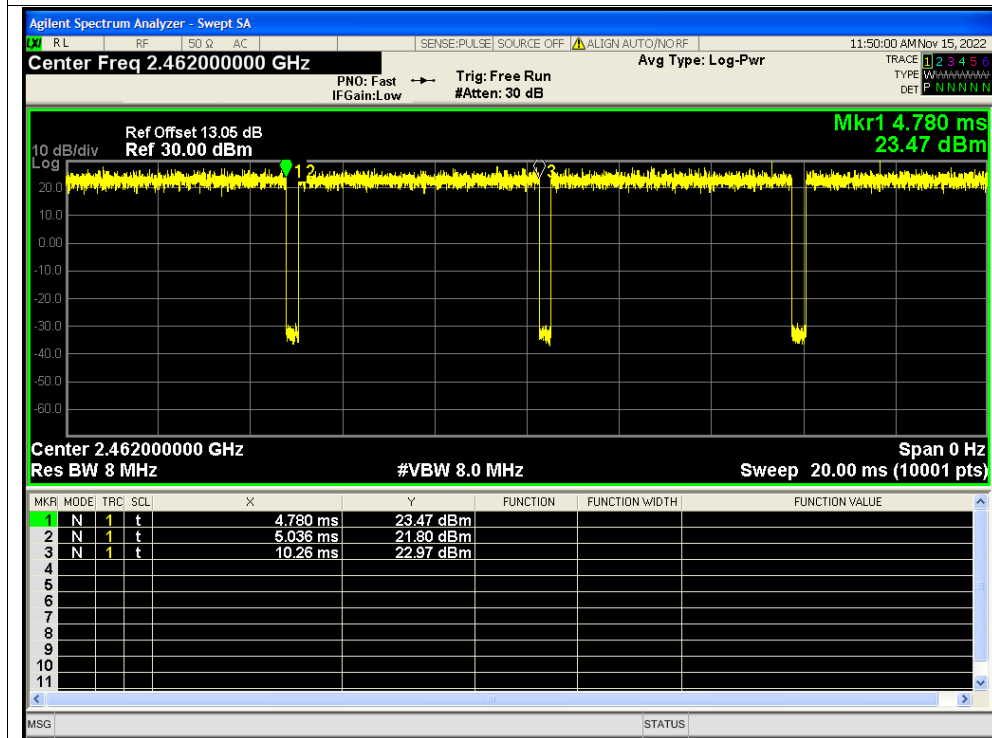


Duty Cycle NVNT ax20 2462MHz Ant2

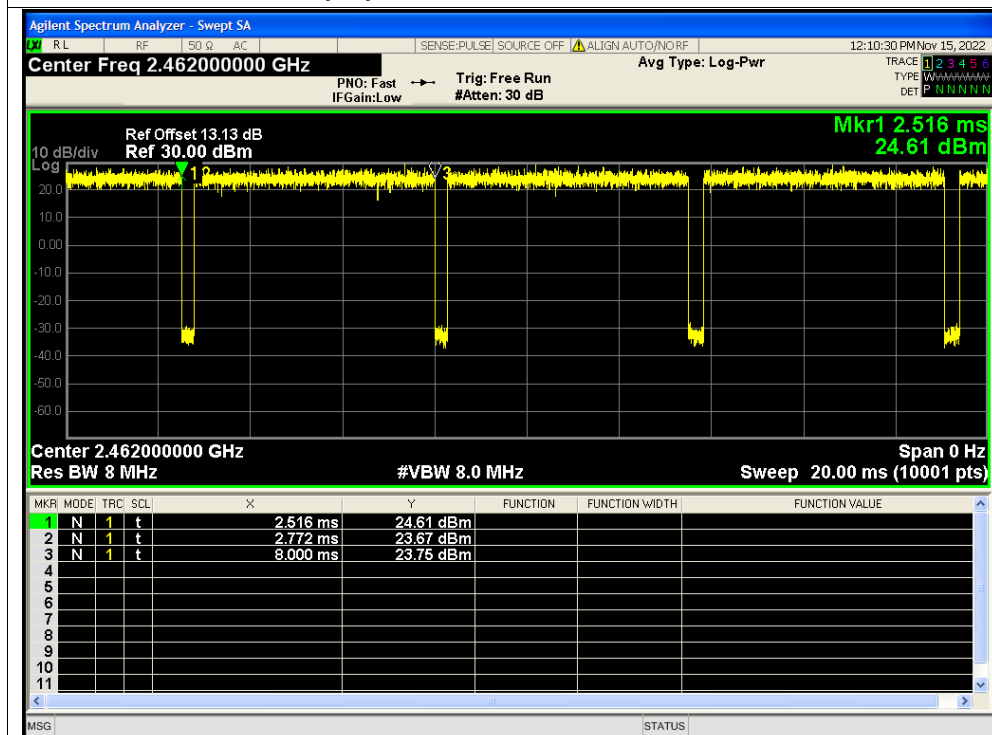




Duty Cycle NVNT ax20 2462MHz Ant3

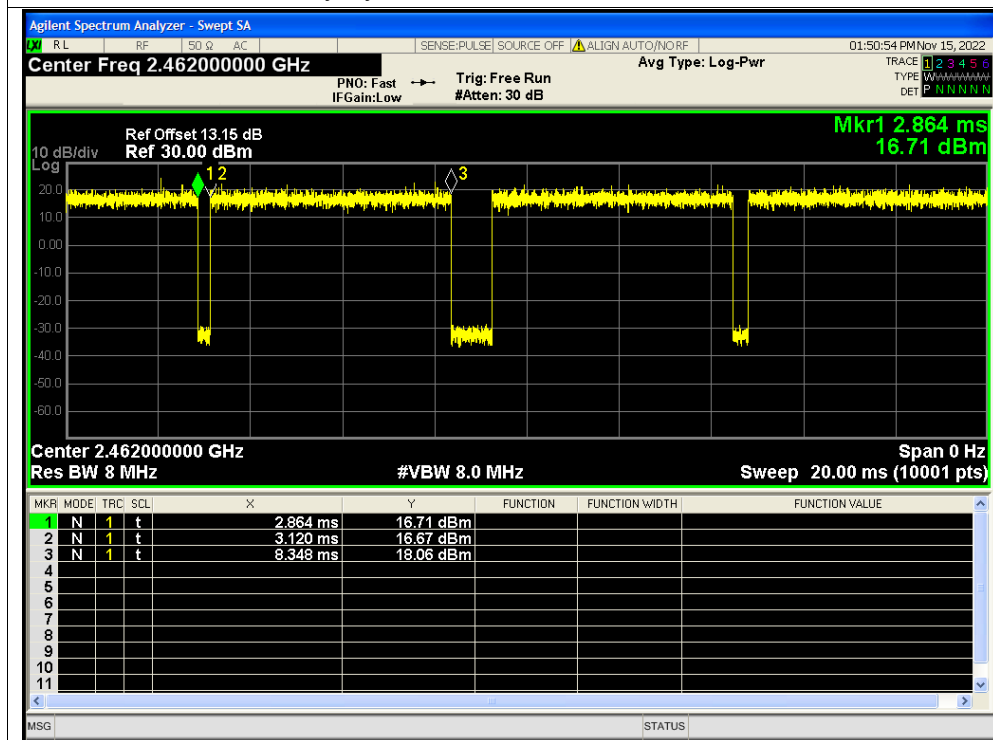


Duty Cycle NVNT ax20 2462MHz Ant4

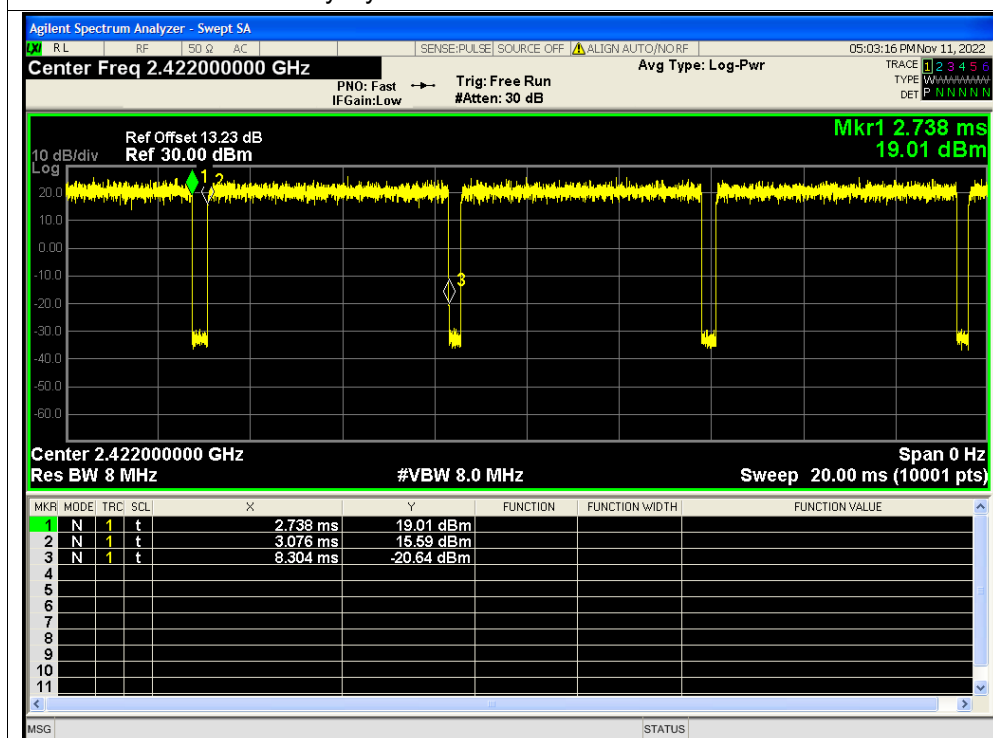




Duty Cycle NVNT ax20 2462MHz Sum

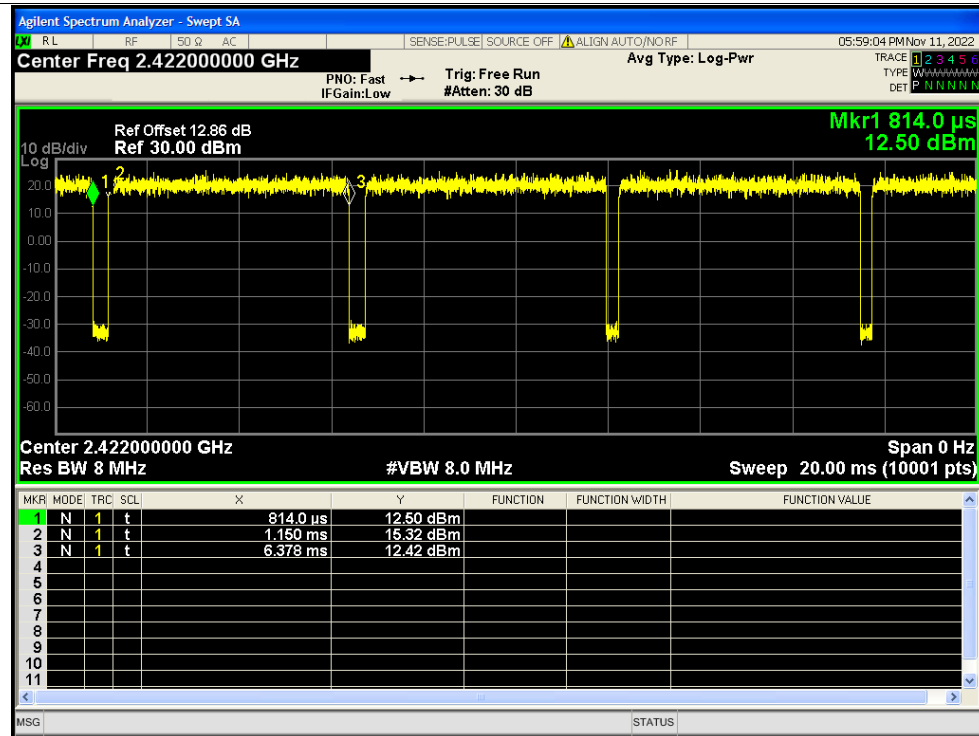


Duty Cycle NVNT ax40 2422MHz Ant1

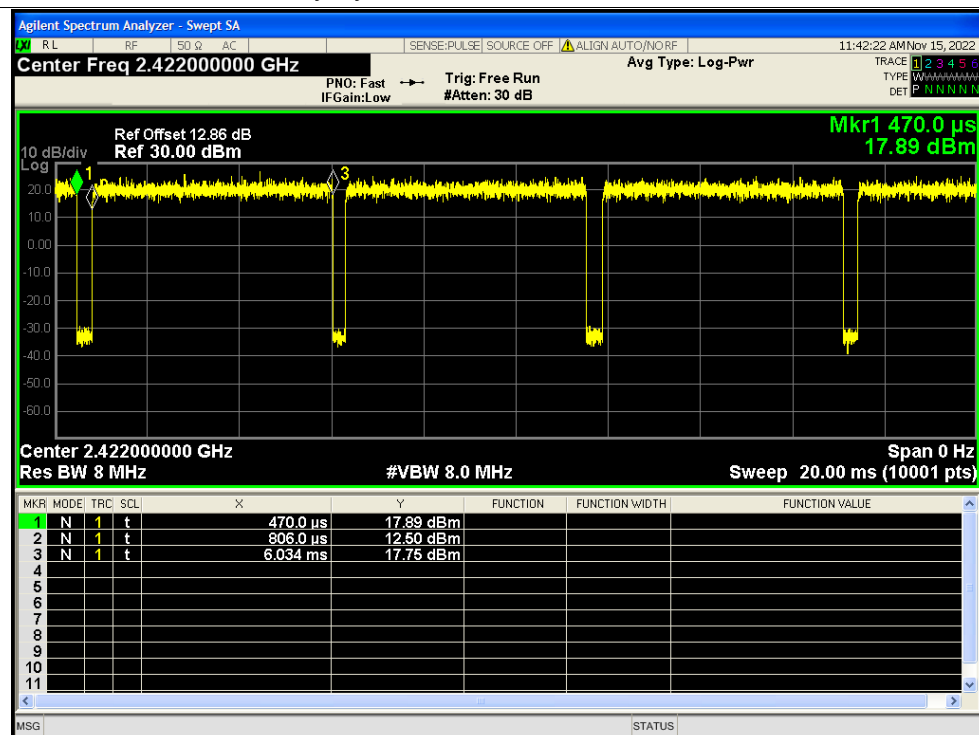




Duty Cycle NVNT ax40 2422MHz Ant2

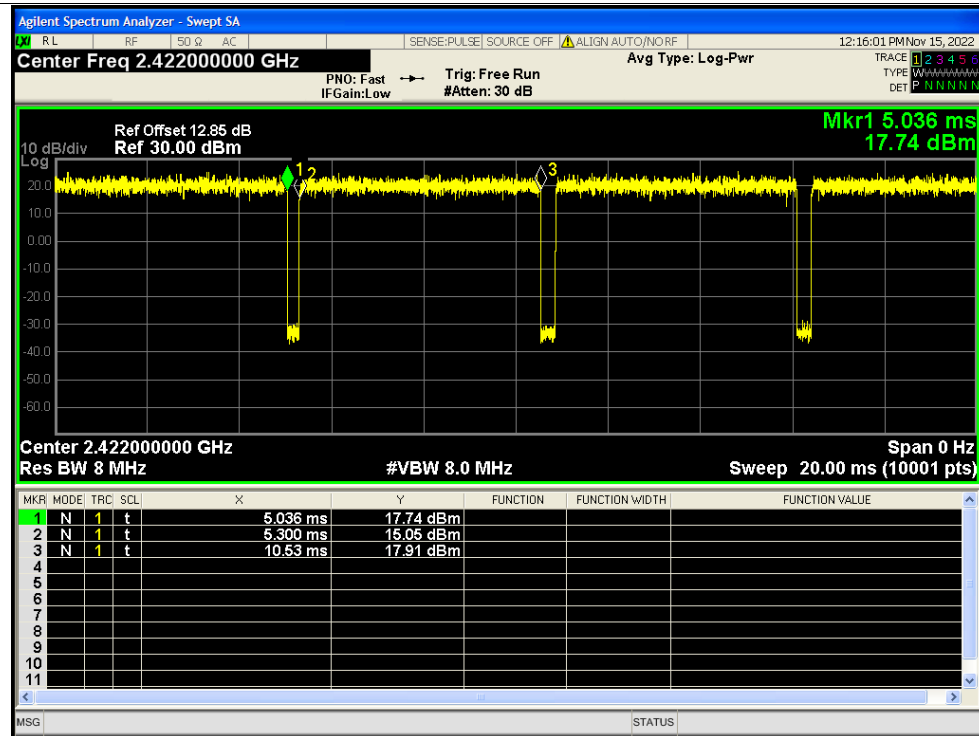


Duty Cycle NVNT ax40 2422MHz Ant3

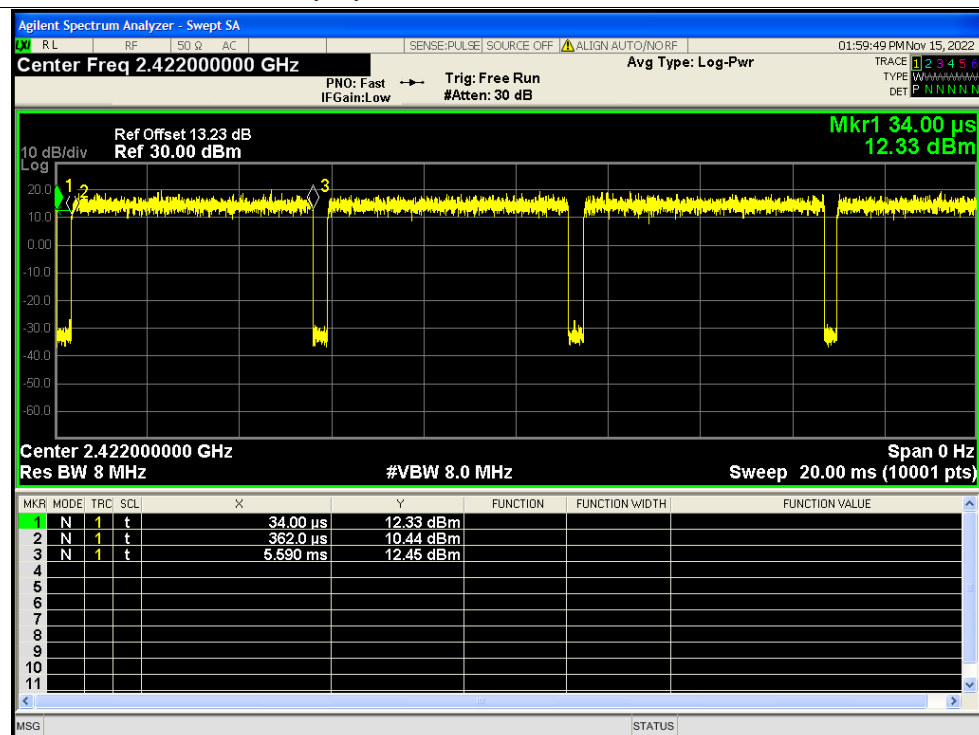




Duty Cycle NVNT ax40 2422MHz Ant4

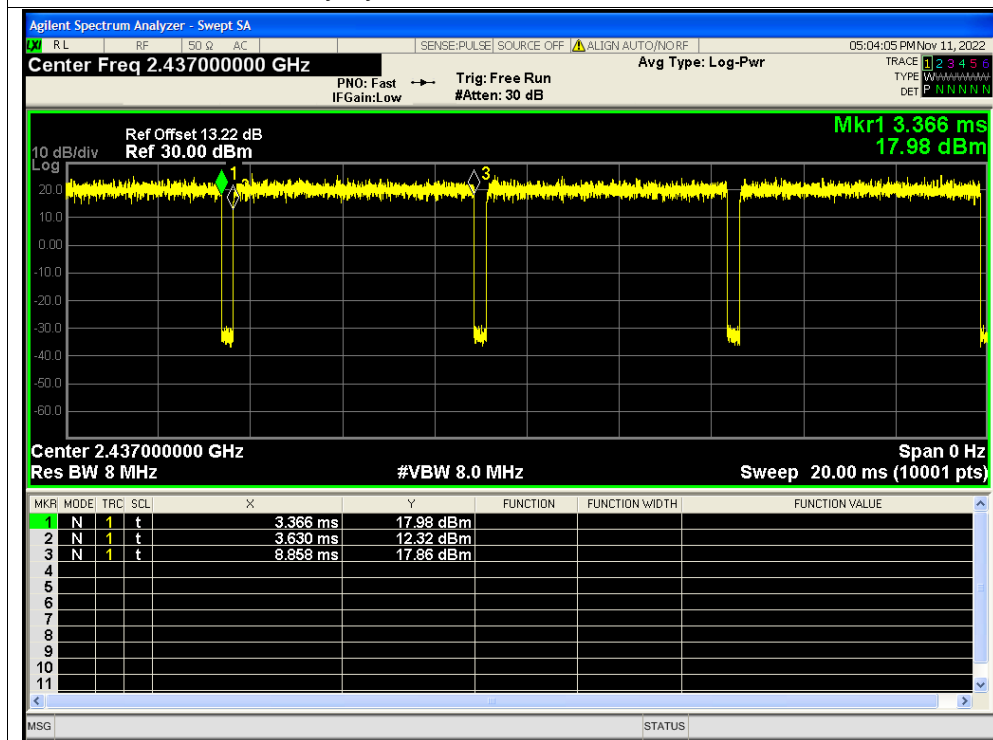


Duty Cycle NVNT ax40 2422MHz Sum

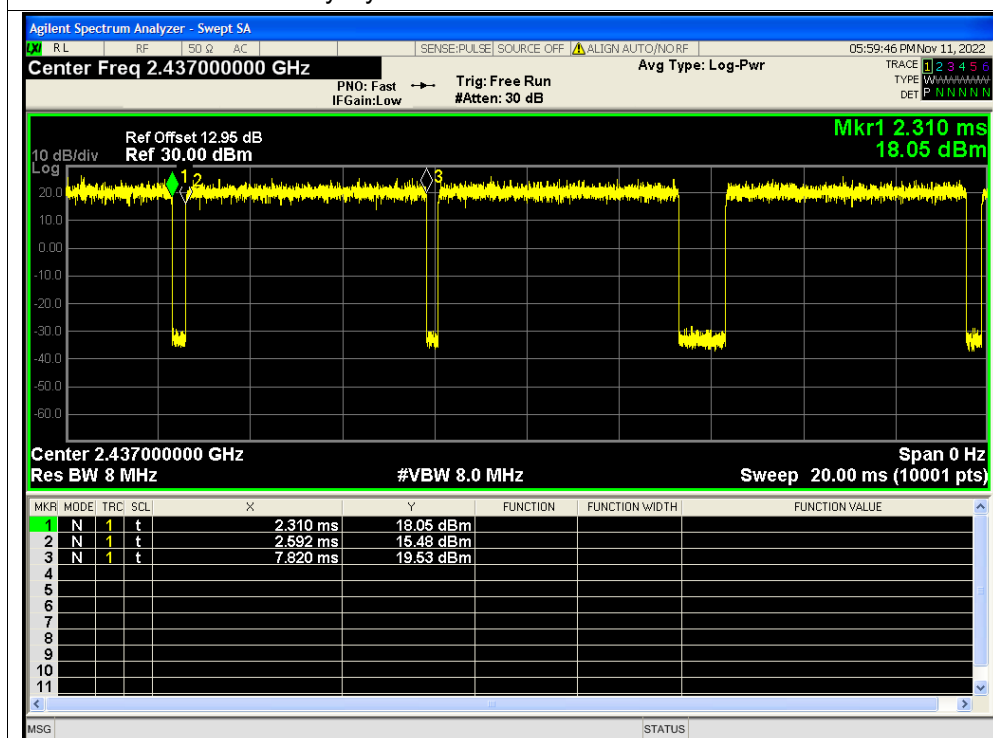




Duty Cycle NVNT ax40 2437MHz Ant1

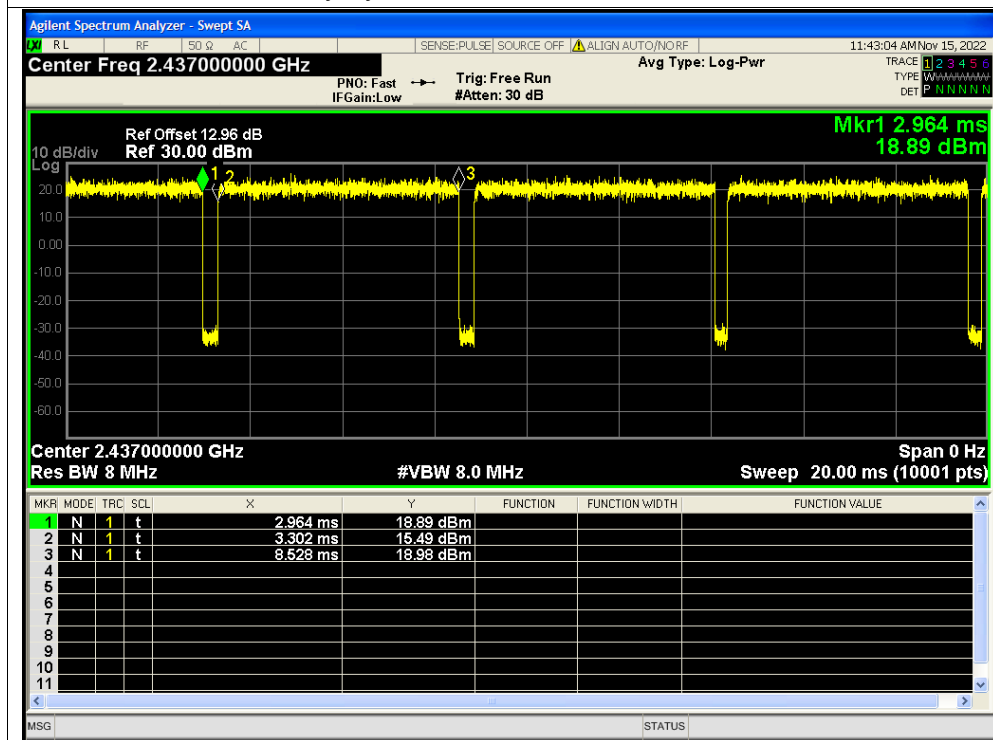


Duty Cycle NVNT ax40 2437MHz Ant2

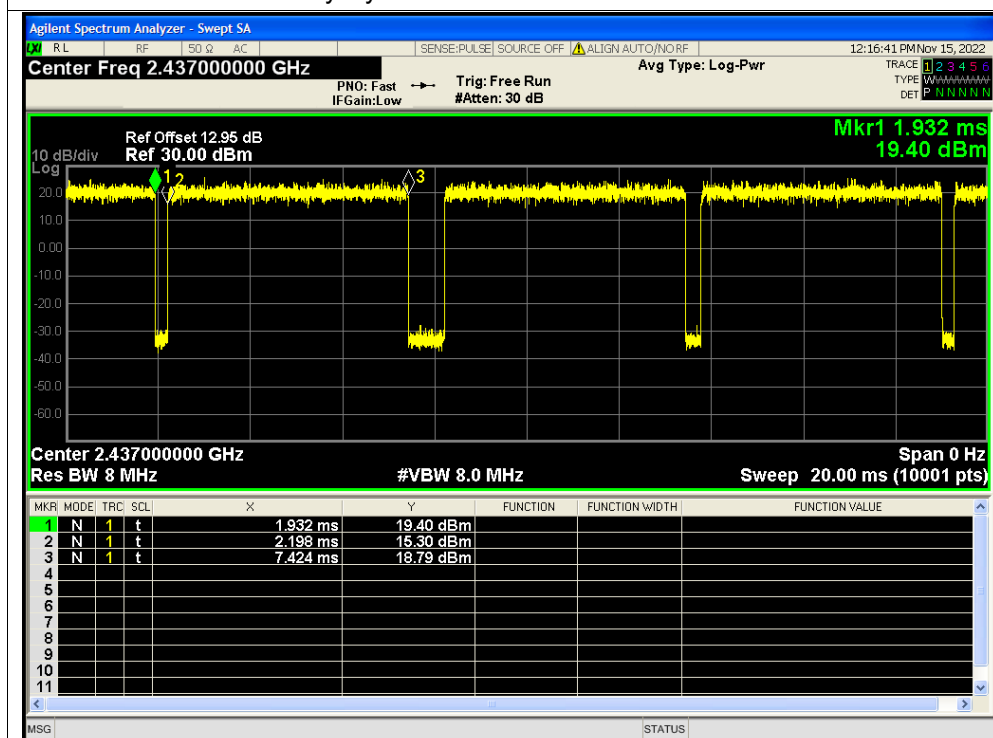




Duty Cycle NVNT ax40 2437MHz Ant3

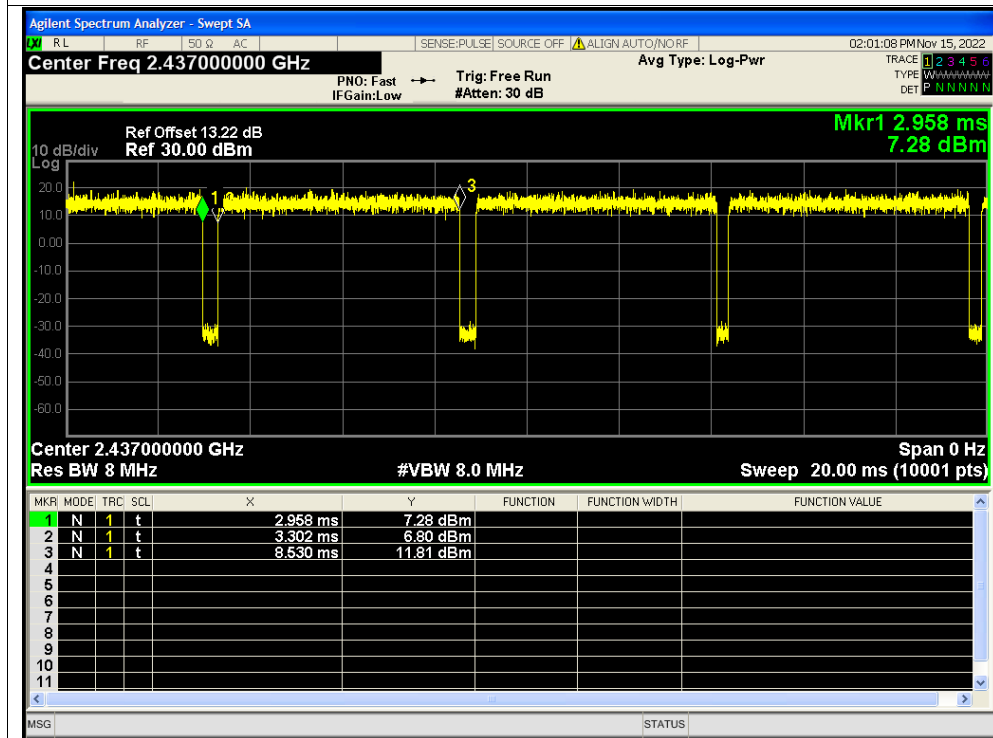


Duty Cycle NVNT ax40 2437MHz Ant4

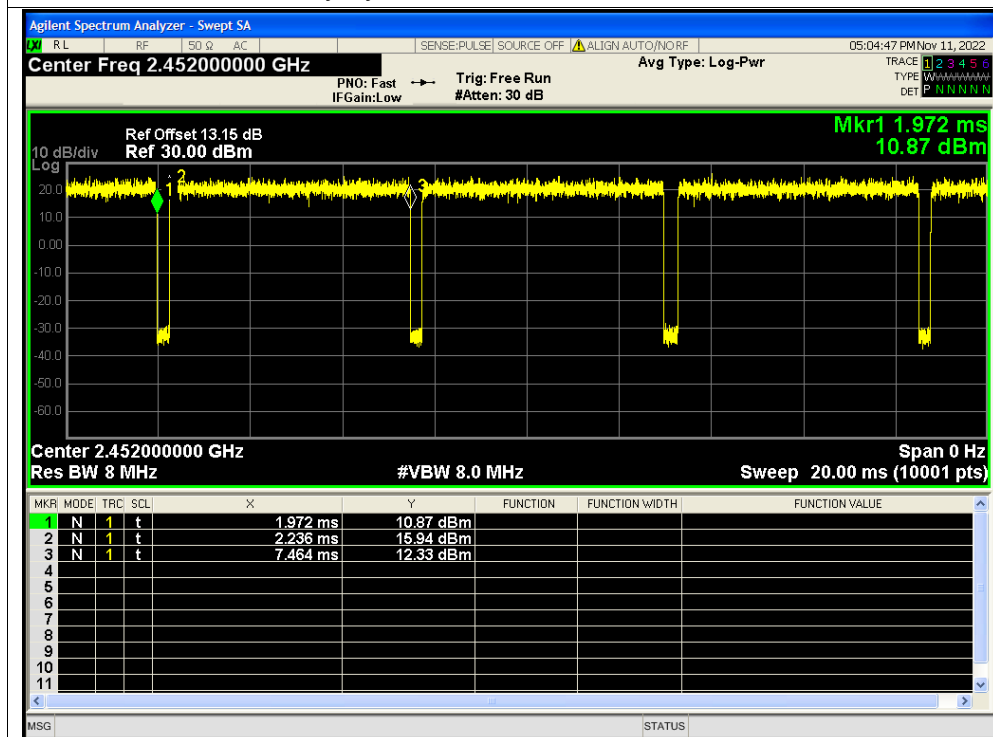




Duty Cycle NVNT ax40 2437MHz Sum

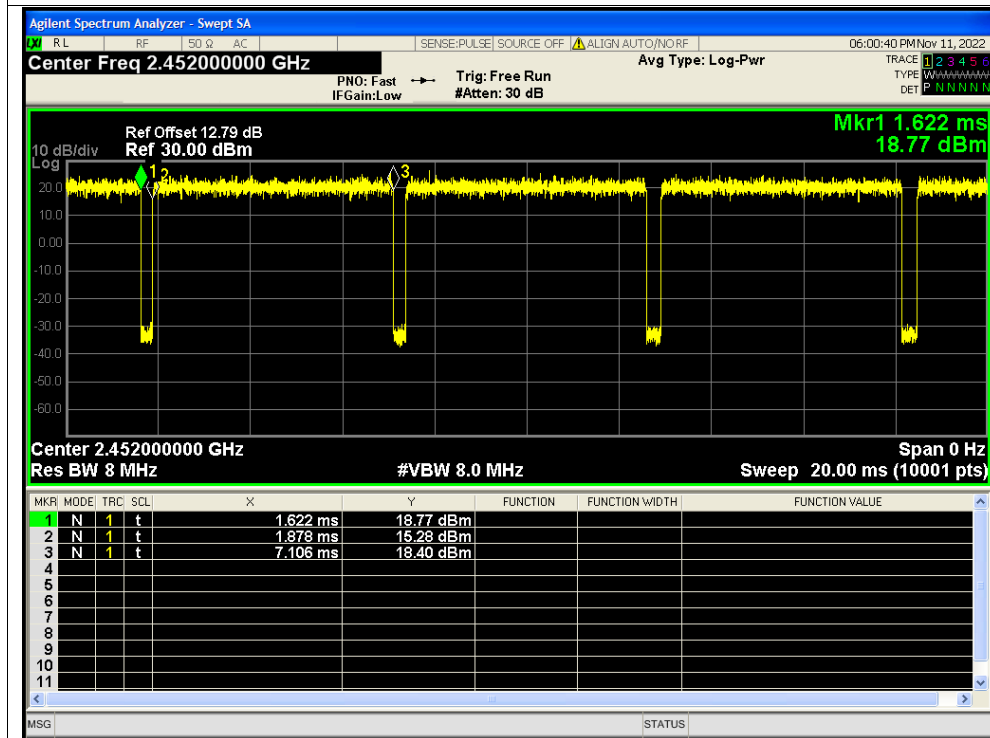


Duty Cycle NVNT ax40 2452MHz Ant1

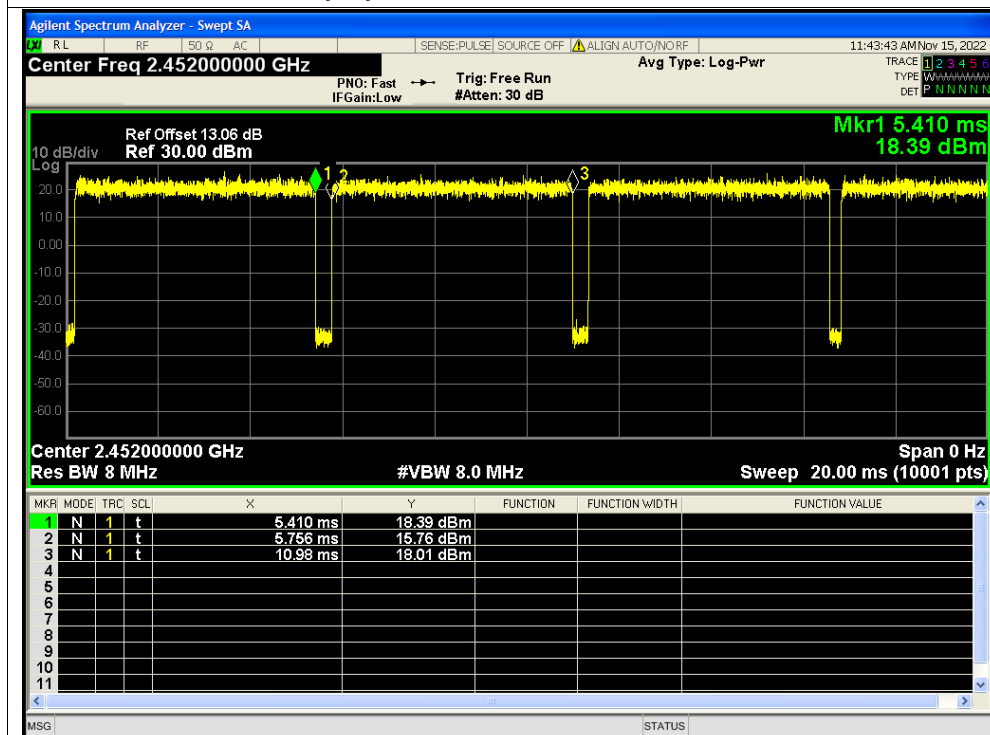




Duty Cycle NVNT ax40 2452MHz Ant2

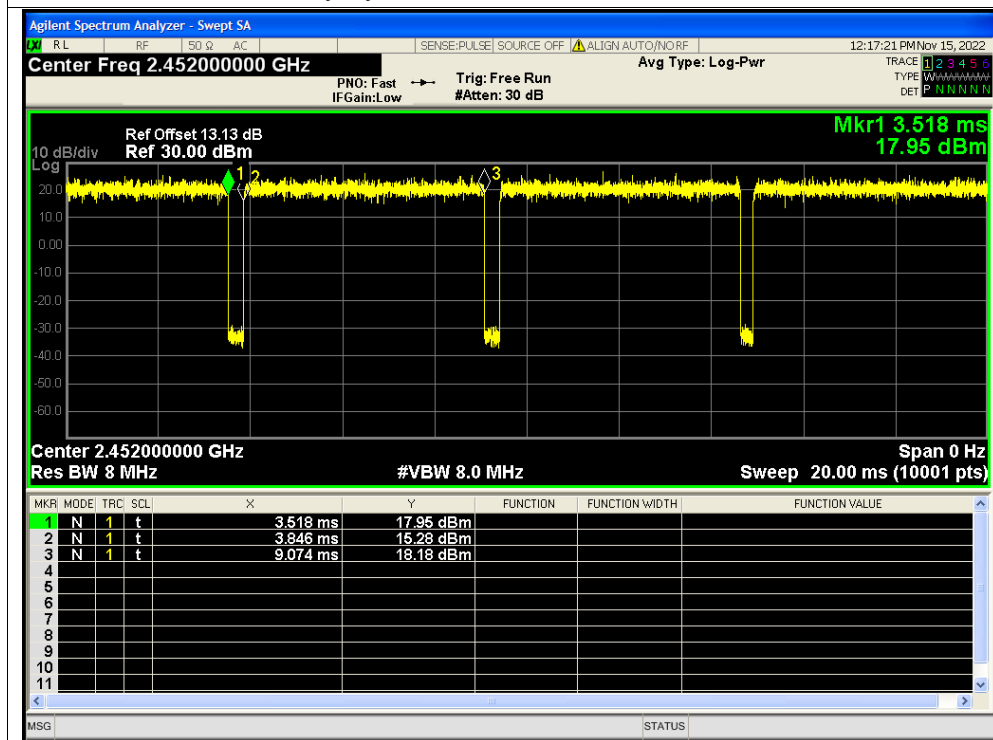


Duty Cycle NVNT ax40 2452MHz Ant3

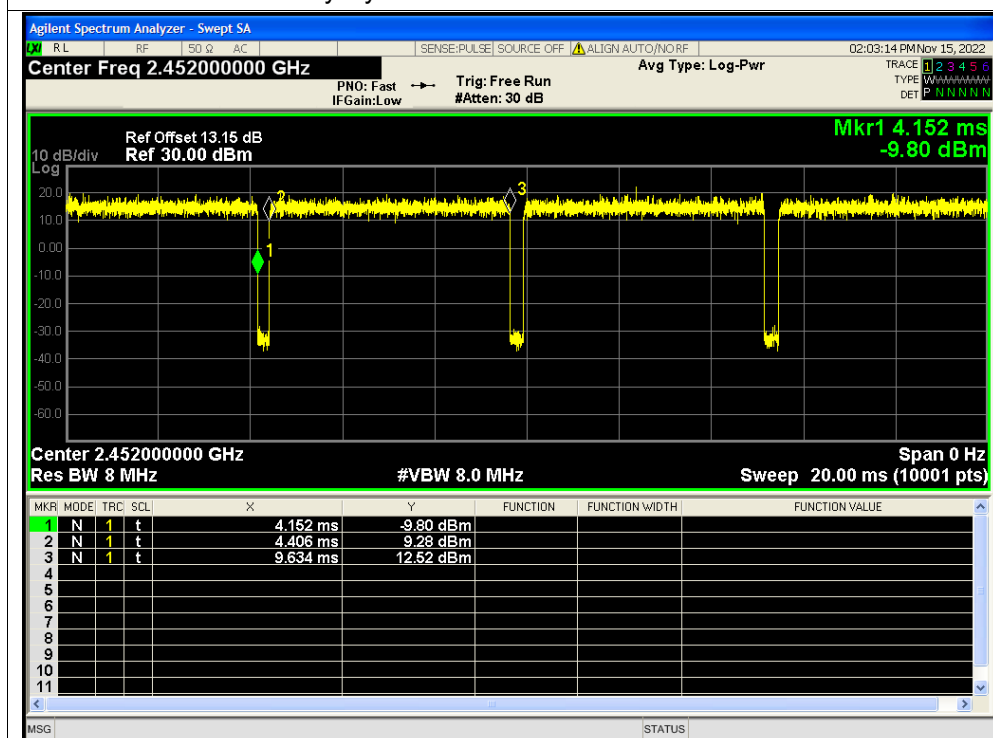




Duty Cycle NVNT ax40 2452MHz Ant4



Duty Cycle NVNT ax40 2452MHz Sum



**A.2. Maximum Peak Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	23.45	0	23.45	30	Pass
NVNT	b	2412	Ant2	22.13	0	22.13	30	Pass
NVNT	b	2412	Ant3	22.34	0	22.34	30	Pass
NVNT	b	2412	Ant4	22.95	0	22.95	30	Pass
NVNT	b	2437	Ant1	23.48	0	23.48	30	Pass
NVNT	b	2437	Ant2	22.14	0	22.14	30	Pass
NVNT	b	2437	Ant3	22.68	0	22.68	30	Pass
NVNT	b	2437	Ant4	23.3	0	23.3	30	Pass
NVNT	b	2462	Ant1	23.5	0	23.5	30	Pass
NVNT	b	2462	Ant2	22.45	0	22.45	30	Pass
NVNT	b	2462	Ant3	22.01	0	22.01	30	Pass
NVNT	b	2462	Ant4	23.57	0	23.57	30	Pass
NVNT	g	2412	Ant1	27.83	0	27.83	30	Pass
NVNT	g	2412	Ant2	27.7	0	27.7	30	Pass
NVNT	g	2412	Ant3	27.7	0	27.7	30	Pass
NVNT	g	2412	Ant4	28.58	0	28.58	30	Pass
NVNT	g	2437	Ant1	27.73	0	27.73	30	Pass
NVNT	g	2437	Ant2	27.95	0	27.95	30	Pass
NVNT	g	2437	Ant3	28.1	0	28.1	30	Pass
NVNT	g	2437	Ant4	28.68	0	28.68	30	Pass
NVNT	g	2462	Ant1	27.84	0	27.84	30	Pass
NVNT	g	2462	Ant2	27.7	0	27.7	30	Pass
NVNT	g	2462	Ant3	27.73	0	27.73	30	Pass
NVNT	g	2462	Ant4	28.81	0	28.81	30	Pass
NVNT	n20	2412	Ant1	27.99	0	27.99	30	Pass
NVNT	n20	2412	Ant2	27.79	0	27.79	30	Pass
NVNT	n20	2412	Ant3	27.85	0	27.85	30	Pass
NVNT	n20	2412	Ant4	28.49	0	28.49	30	Pass
NVNT	n20	2412	Ant1	22	0	22	30	Pass
NVNT	n20	2412	Ant2	21.1	0	21.1	30	Pass
NVNT	n20	2412	Ant3	21	0	21	30	Pass
NVNT	n20	2412	Ant4	21.82	0	21.82	30	Pass
NVNT	n20	2412	Sum	27.52	0	27.52	30	Pass
NVNT	n20	2437	Ant1	27.8	0	27.8	30	Pass



REPORT No.: SZ22100099W04

NVNT	n20	2437	Ant2	27.8	0	27.8	30	Pass
NVNT	n20	2437	Ant3	28.2	0	28.2	30	Pass
NVNT	n20	2437	Ant4	28.77	0	28.77	30	Pass
NVNT	n20	2437	Ant1	21.78	0	21.78	30	Pass
NVNT	n20	2437	Ant2	21.34	0	21.34	30	Pass
NVNT	n20	2437	Ant3	21.29	0	21.29	30	Pass
NVNT	n20	2437	Ant4	21.86	0	21.86	30	Pass
NVNT	n20	2437	Sum	27.6	0	27.6	30	Pass
NVNT	n20	2462	Ant1	27.91	0	27.91	30	Pass
NVNT	n20	2462	Ant2	27.91	0	27.91	30	Pass
NVNT	n20	2462	Ant3	27.87	0	27.87	30	Pass
NVNT	n20	2462	Ant4	28.9	0	28.9	30	Pass
NVNT	n20	2462	Ant1	21.9	0	21.9	30	Pass
NVNT	n20	2462	Ant2	21.03	0	21.03	30	Pass
NVNT	n20	2462	Ant3	21.01	0	21.01	30	Pass
NVNT	n20	2462	Ant4	21.9	0	21.9	30	Pass
NVNT	n20	2462	Sum	27.5	0	27.5	30	Pass
NVNT	n40	2422	Ant1	28.47	0	28.47	30	Pass
NVNT	n40	2422	Ant2	28.35	0	28.35	30	Pass
NVNT	n40	2422	Ant3	28.22	0	28.22	30	Pass
NVNT	n40	2422	Ant4	27.91	0	27.91	30	Pass
NVNT	n40	2422	Ant1	22.66	0	22.66	30	Pass
NVNT	n40	2422	Ant2	21.59	0	21.59	30	Pass
NVNT	n40	2422	Ant3	21.44	0	21.44	30	Pass
NVNT	n40	2422	Ant4	21.93	0	21.93	30	Pass
NVNT	n40	2422	Sum	27.95	0	27.95	30	Pass
NVNT	n40	2437	Ant1	28.02	0	28.02	30	Pass
NVNT	n40	2437	Ant2	28.17	0	28.17	30	Pass
NVNT	n40	2437	Ant3	28.44	0	28.44	30	Pass
NVNT	n40	2437	Ant4	28.24	0	28.24	30	Pass
NVNT	n40	2437	Ant1	22.29	0	22.29	30	Pass
NVNT	n40	2437	Ant2	21.66	0	21.66	30	Pass
NVNT	n40	2437	Ant3	21.57	0	21.57	30	Pass
NVNT	n40	2437	Ant4	22.3	0	22.3	30	Pass
NVNT	n40	2437	Sum	27.99	0	27.99	30	Pass
NVNT	n40	2452	Ant1	28.48	0	28.48	30	Pass
NVNT	n40	2452	Ant2	28.41	0	28.41	30	Pass
NVNT	n40	2452	Ant3	28.59	0	28.59	30	Pass



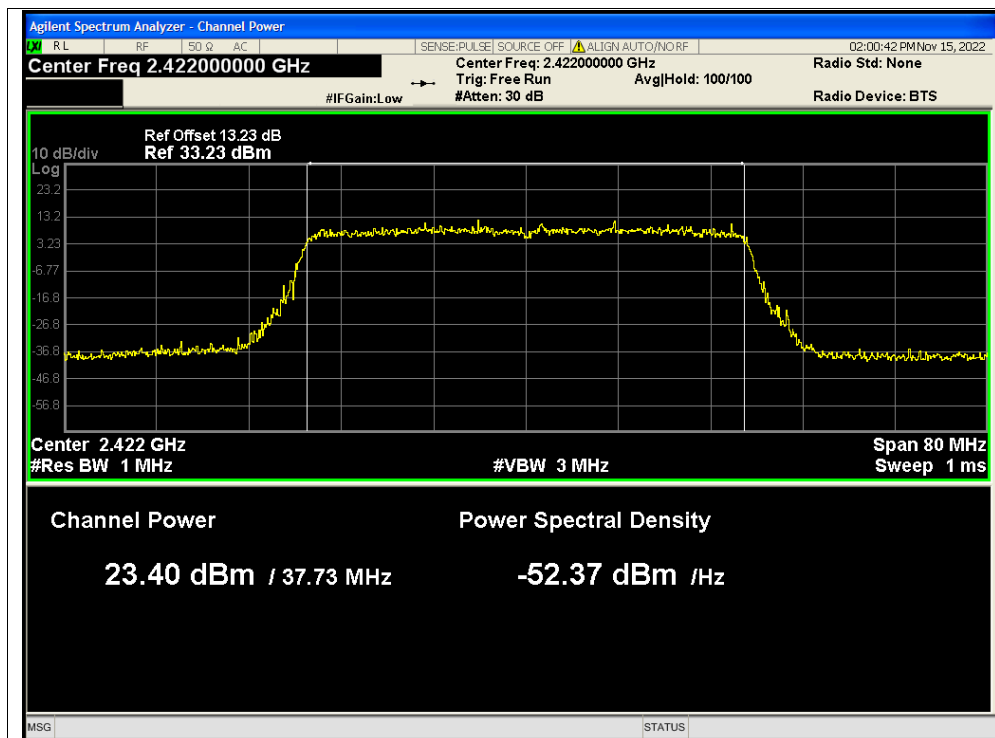
REPORT No.: SZ22100099W04

NVNT	n40	2452	Ant4	28.38	0	28.38	30	Pass
NVNT	n40	2452	Ant1	22.68	0	22.68	30	Pass
NVNT	n40	2452	Ant2	21.72	0	21.72	30	Pass
NVNT	n40	2452	Ant3	21.55	0	21.55	30	Pass
NVNT	n40	2452	Ant4	22.37	0	22.37	30	Pass
NVNT	n40	2452	Sum	28.13	0	28.13	30	Pass
NVNT	ax20	2412	Ant1	28.64	0	28.64	30	Pass
NVNT	ax20	2412	Ant2	28.6	0	28.6	30	Pass
NVNT	ax20	2412	Ant3	28.47	0	28.47	30	Pass
NVNT	ax20	2412	Ant4	28.34	0	28.34	30	Pass
NVNT	ax20	2412	Ant1	22.96	0	22.96	30	Pass
NVNT	ax20	2412	Ant2	21.77	0	21.77	30	Pass
NVNT	ax20	2412	Ant3	21.76	0	21.76	30	Pass
NVNT	ax20	2412	Ant4	22.46	0	22.46	30	Pass
NVNT	ax20	2412	Sum	28.29	0	28.29	30	Pass
NVNT	ax20	2437	Ant1	28.55	0	28.55	30	Pass
NVNT	ax20	2437	Ant2	28.89	0	28.89	30	Pass
NVNT	ax20	2437	Ant3	28.95	0	28.95	30	Pass
NVNT	ax20	2437	Ant4	28.6	0	28.6	30	Pass
NVNT	ax20	2437	Ant1	22.68	0	22.68	30	Pass
NVNT	ax20	2437	Ant2	22.15	0	22.15	30	Pass
NVNT	ax20	2437	Ant3	22.1	0	22.1	30	Pass
NVNT	ax20	2437	Ant4	22.6	0	22.6	30	Pass
NVNT	ax20	2437	Sum	28.41	0	28.41	30	Pass
NVNT	ax20	2462	Ant1	28.7	0	28.7	30	Pass
NVNT	ax20	2462	Ant2	28.76	0	28.76	30	Pass
NVNT	ax20	2462	Ant3	28.6	0	28.6	30	Pass
NVNT	ax20	2462	Ant4	28.76	0	28.76	30	Pass
NVNT	ax20	2462	Ant1	22.56	0	22.56	30	Pass
NVNT	ax20	2462	Ant2	21.69	0	21.69	30	Pass
NVNT	ax20	2462	Ant3	21.78	0	21.78	30	Pass
NVNT	ax20	2462	Ant4	22.75	0	22.75	30	Pass
NVNT	ax20	2462	Sum	28.24	0	28.24	30	Pass
NVNT	ax40	2422	Ant1	29.08	0	29.08	30	Pass
NVNT	ax40	2422	Ant2	29.12	0	29.12	30	Pass
NVNT	ax40	2422	Ant3	28.86	0	28.86	30	Pass
NVNT	ax40	2422	Ant4	28.68	0	28.68	30	Pass
NVNT	ax40	2422	Ant1	23.4	0	23.4	30	Pass

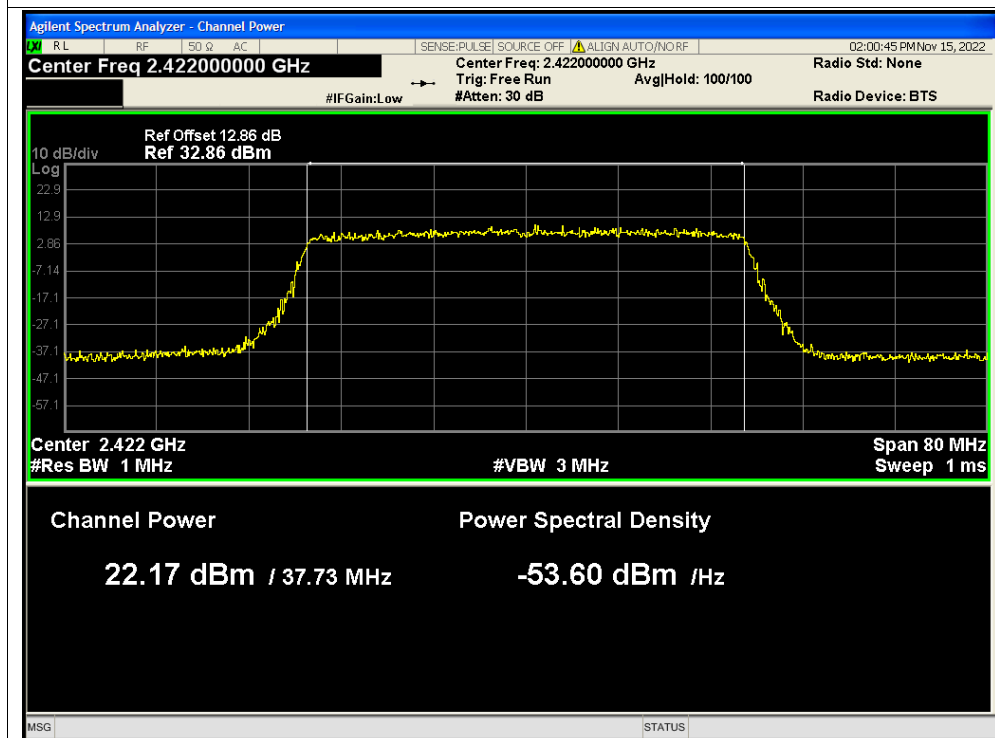


NVNT	ax40	2422	Ant2	22.17	0	22.17	30	Pass
NVNT	ax40	2422	Ant3	22.15	0	22.15	30	Pass
NVNT	ax40	2422	Ant4	22.55	0	22.55	30	Pass
NVNT	ax40	2422	Sum	28.62	0	28.62	30	Pass
NVNT	ax40	2437	Ant1	28.98	0	28.98	30	Pass
NVNT	ax40	2437	Ant2	29.05	0	29.05	30	Pass
NVNT	ax40	2437	Ant3	29.18	0	29.18	30	Pass
NVNT	ax40	2437	Ant4	29.02	0	29.02	30	Pass
NVNT	ax40	2437	Ant1	22.97	0	22.97	30	Pass
NVNT	ax40	2437	Ant2	22.29	0	22.29	30	Pass
NVNT	ax40	2437	Ant3	22.29	0	22.29	30	Pass
NVNT	ax40	2437	Ant4	22.99	0	22.99	30	Pass
NVNT	ax40	2437	Sum	28.67	0	28.67	30	Pass
NVNT	ax40	2452	Ant1	29.17	0	29.17	30	Pass
NVNT	ax40	2452	Ant2	29.25	0	29.25	30	Pass
NVNT	ax40	2452	Ant3	29.36	0	29.36	30	Pass
NVNT	ax40	2452	Ant4	28.82	0	28.82	30	Pass
NVNT	ax40	2452	Ant1	23.34	0	23.34	30	Pass
NVNT	ax40	2452	Ant2	22.42	0	22.42	30	Pass
NVNT	ax40	2452	Ant3	22.28	0	22.28	30	Pass
NVNT	ax40	2452	Ant4	23.04	0	23.04	30	Pass
NVNT	ax40	2452	Sum	28.81	0	28.81	30	Pass

Note: Directional gain = $2.05\text{dBi} + 10\log(4) = 8.07\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (8.07 - 6) = 27.93\text{dBm}$.

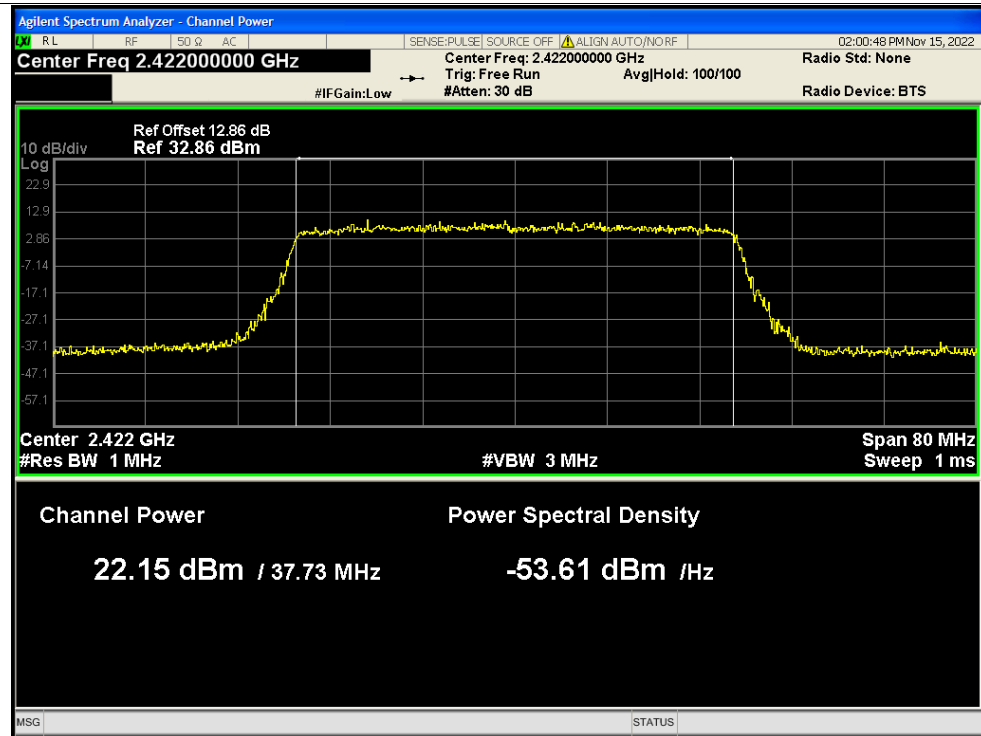


Peak Power NVNT ax40 2422MHz Ant2

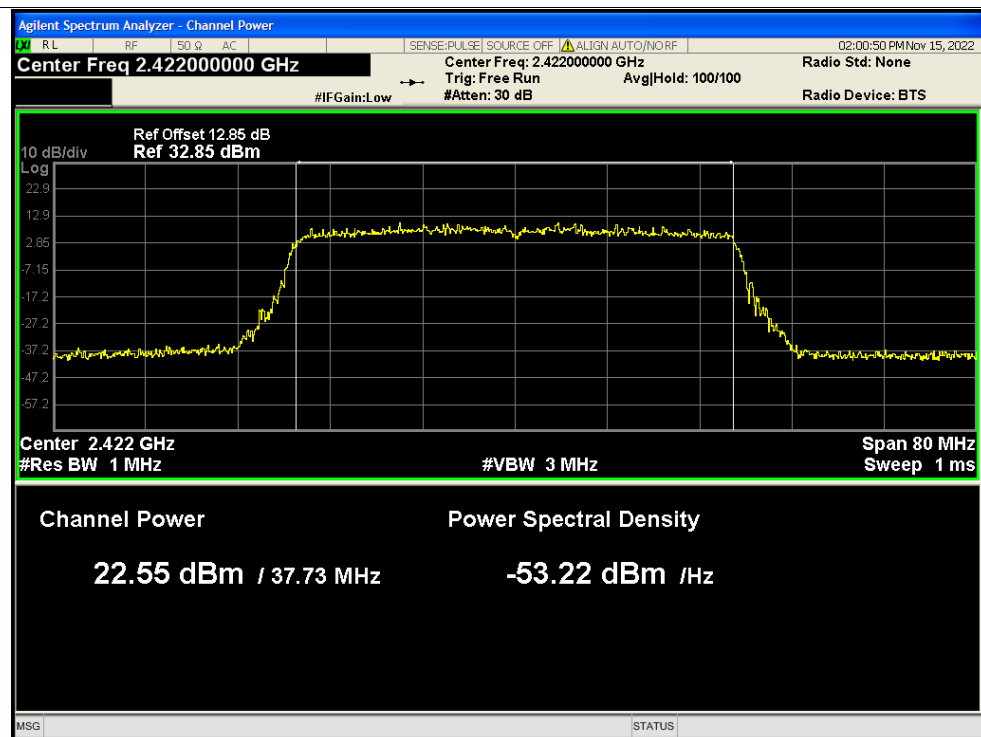




Peak Power NVNT ax40 2422MHz Ant3

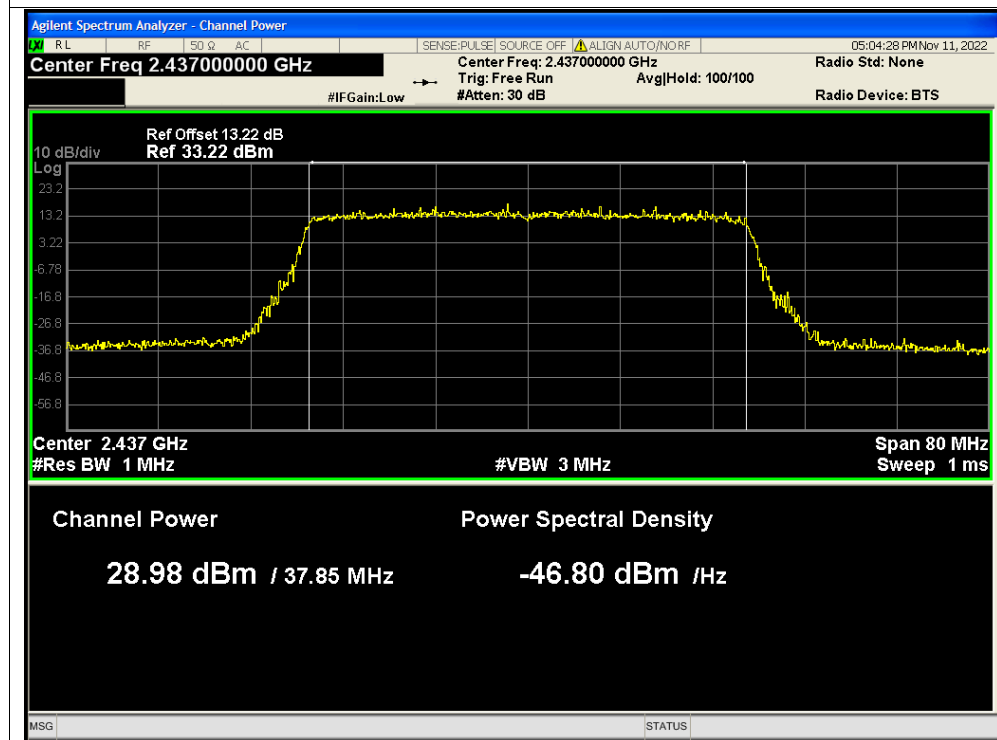


Peak Power NVNT ax40 2422MHz Ant4

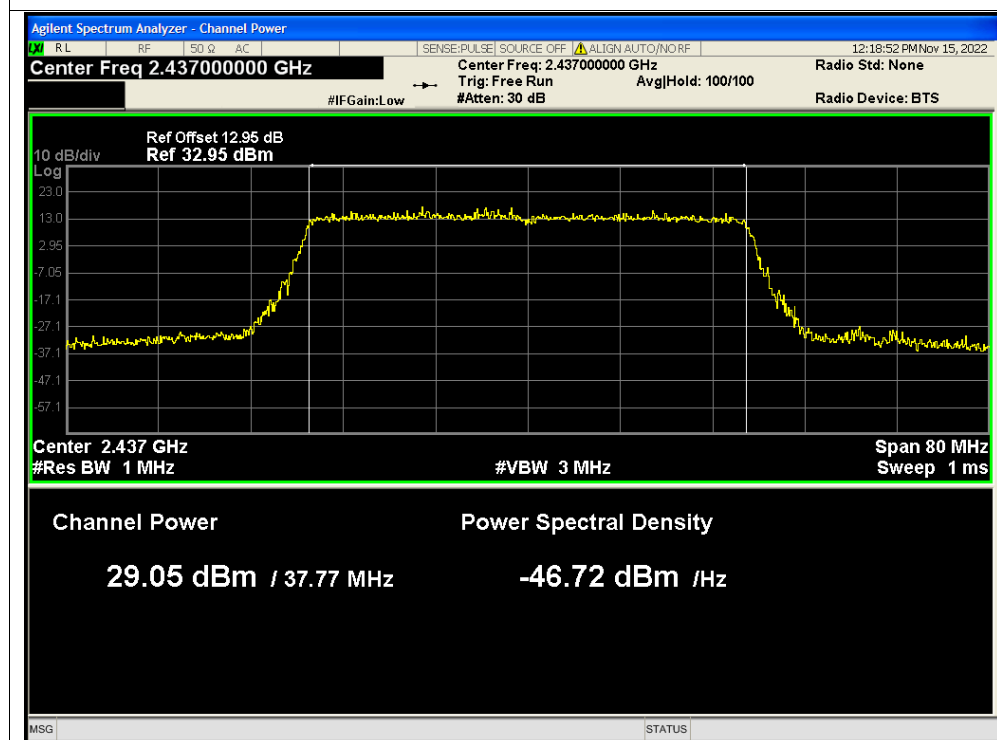




Peak Power NVNT ax40 2437MHz Ant1

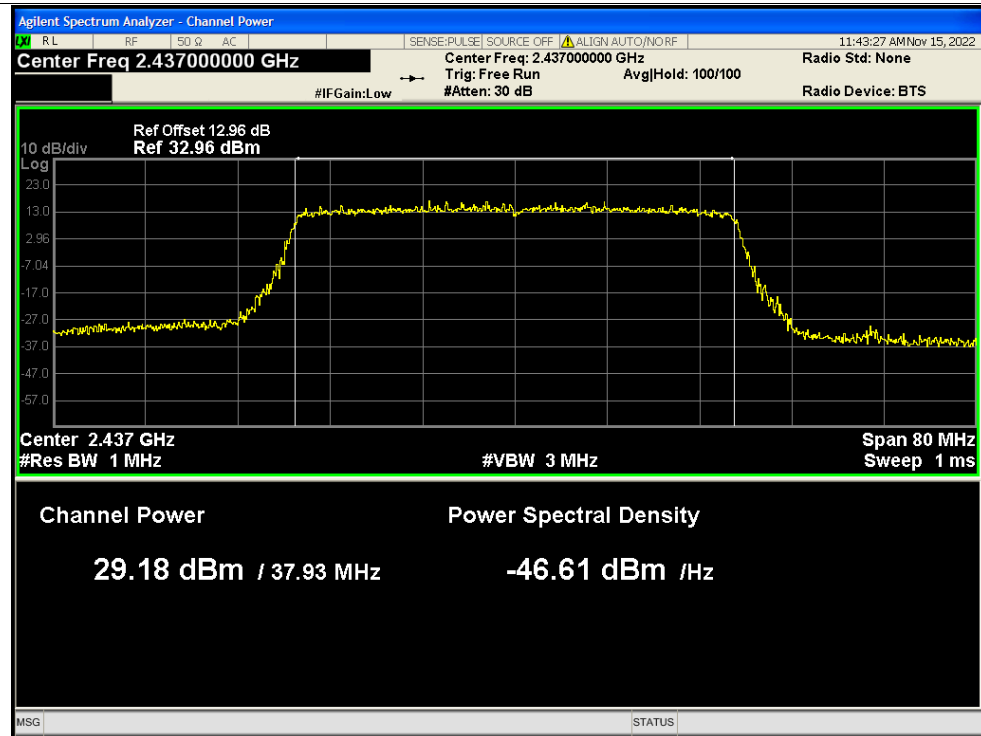


Peak Power NVNT ax40 2437MHz Ant2

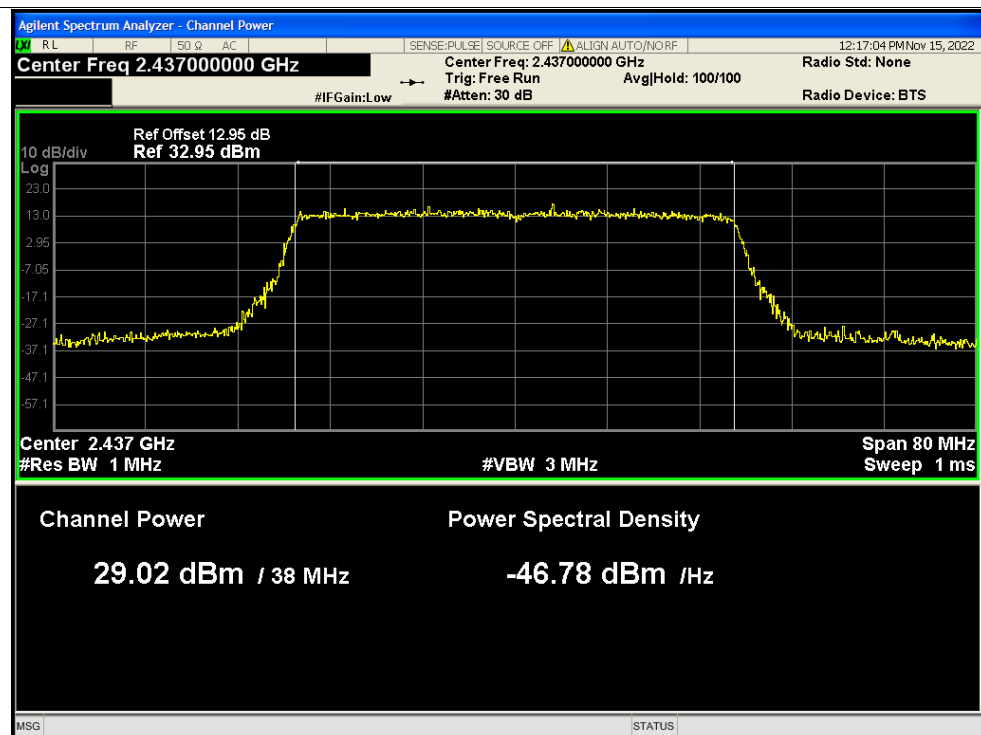




Peak Power NVNT ax40 2437MHz Ant3

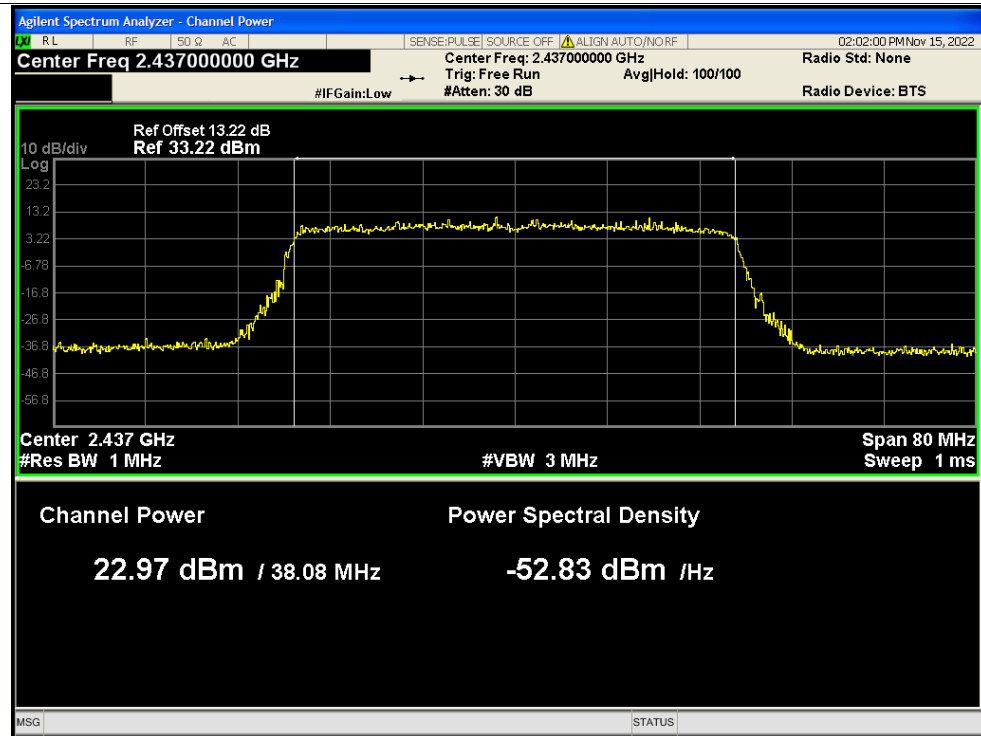


Peak Power NVNT ax40 2437MHz Ant4

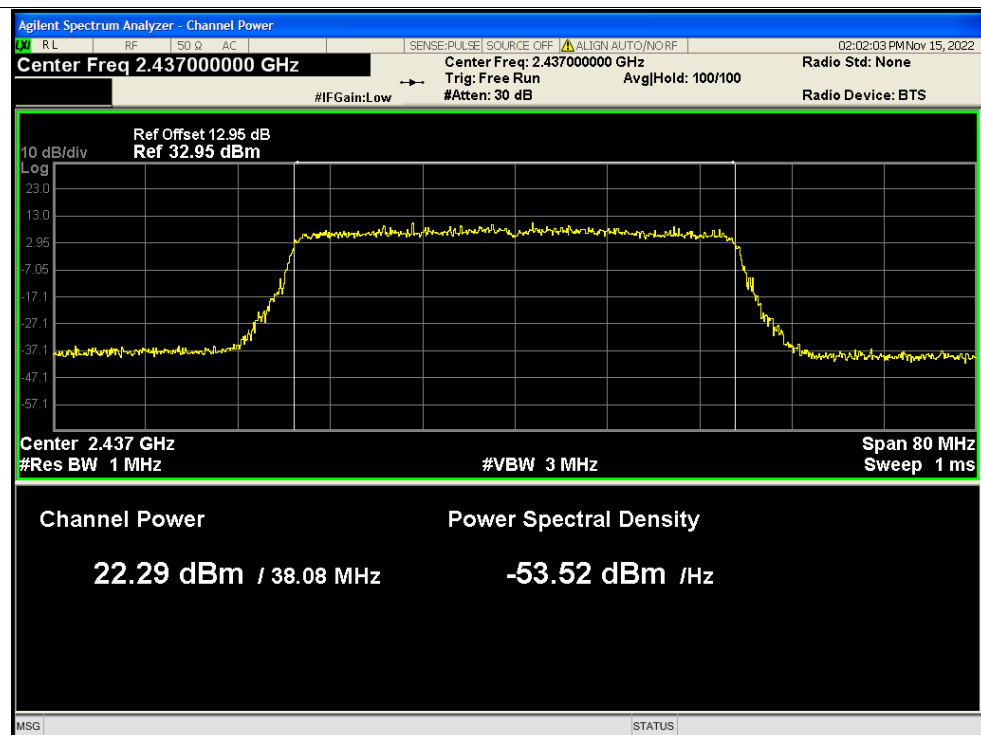




Peak Power NVNT ax40 2437MHz Ant1

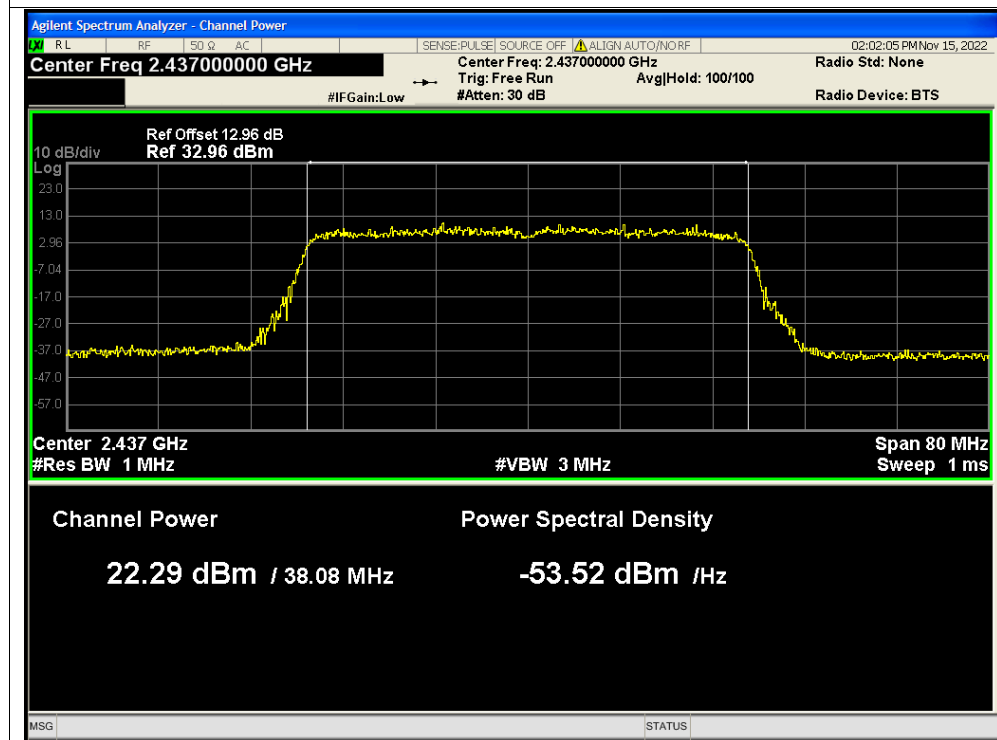


Peak Power NVNT ax40 2437MHz Ant2

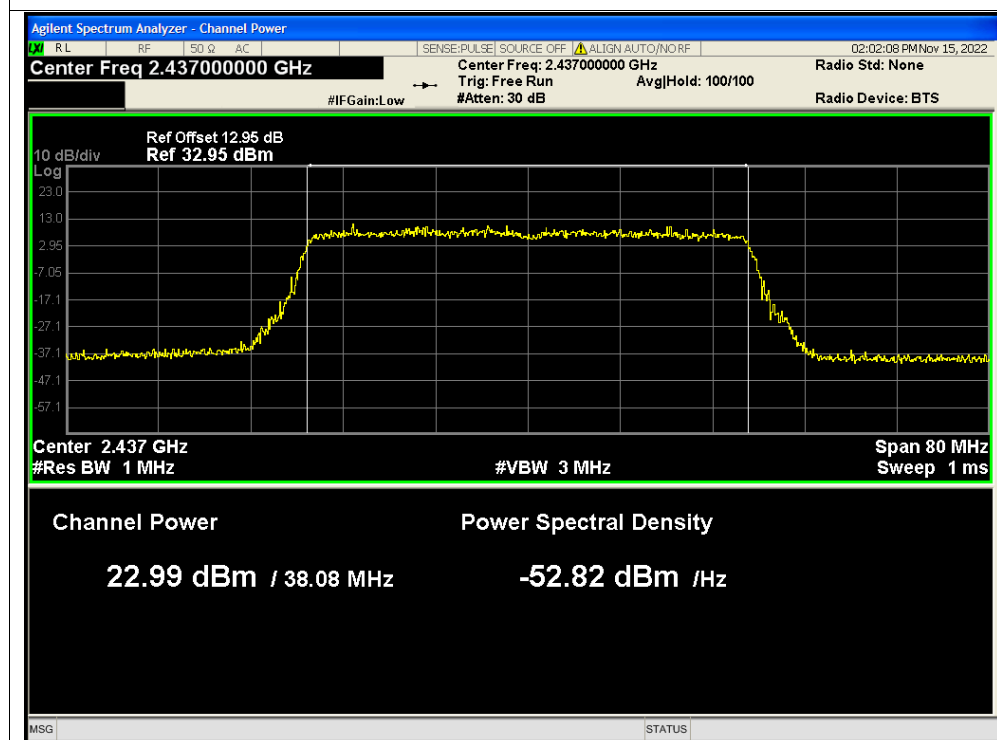




Peak Power NVNT ax40 2437MHz Ant3

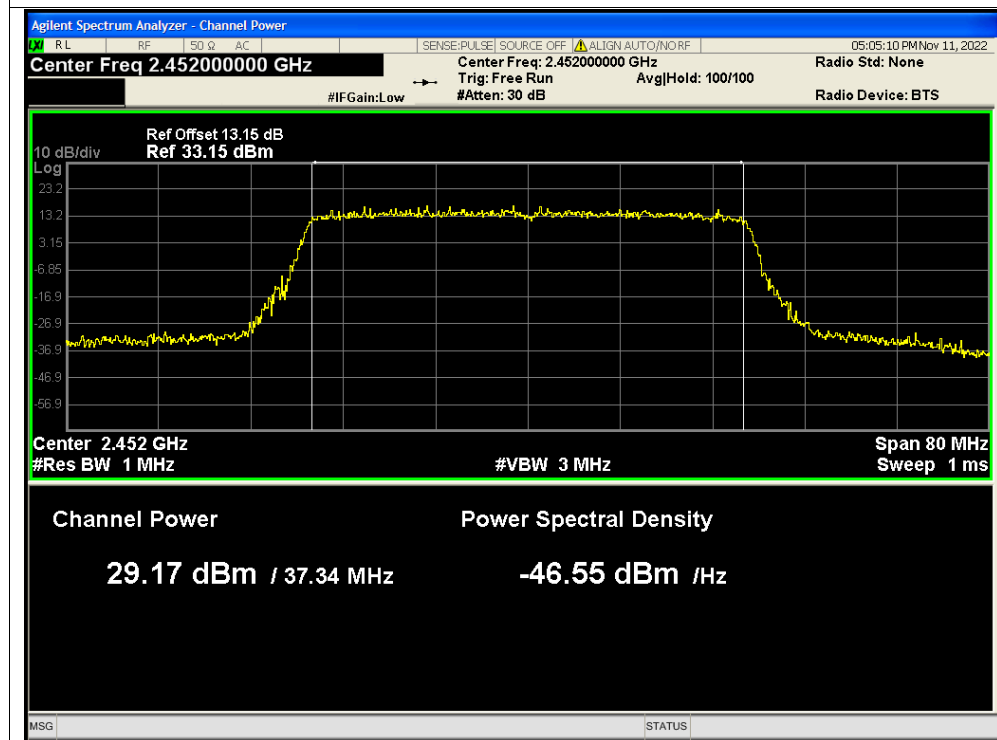


Peak Power NVNT ax40 2437MHz Ant4

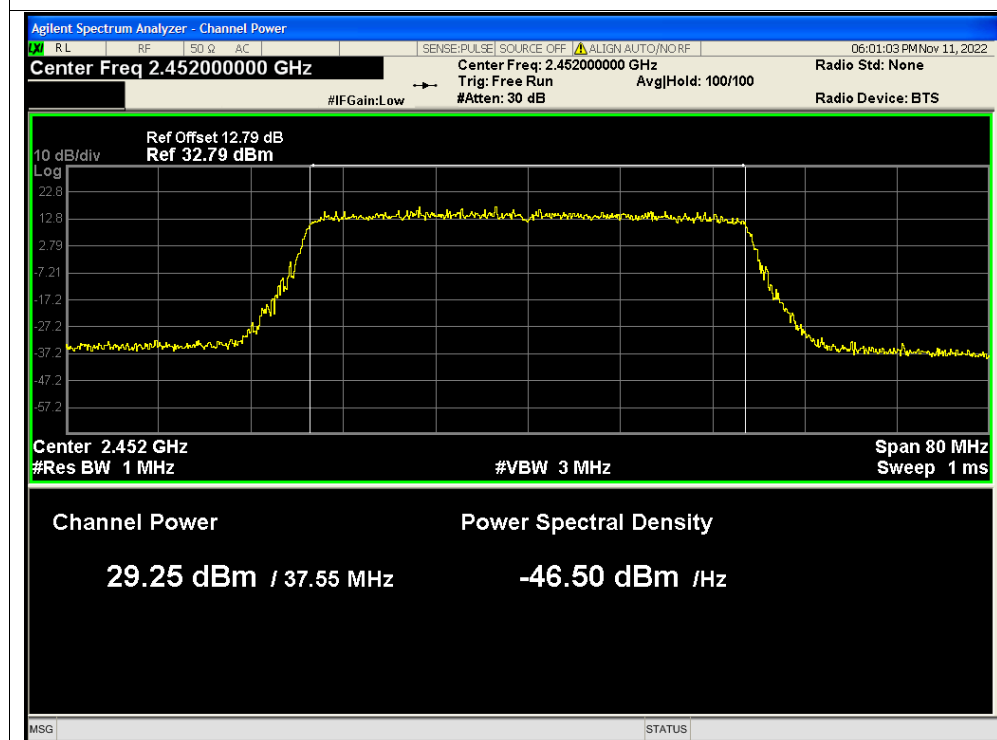




Peak Power NVNT ax40 2452MHz Ant1

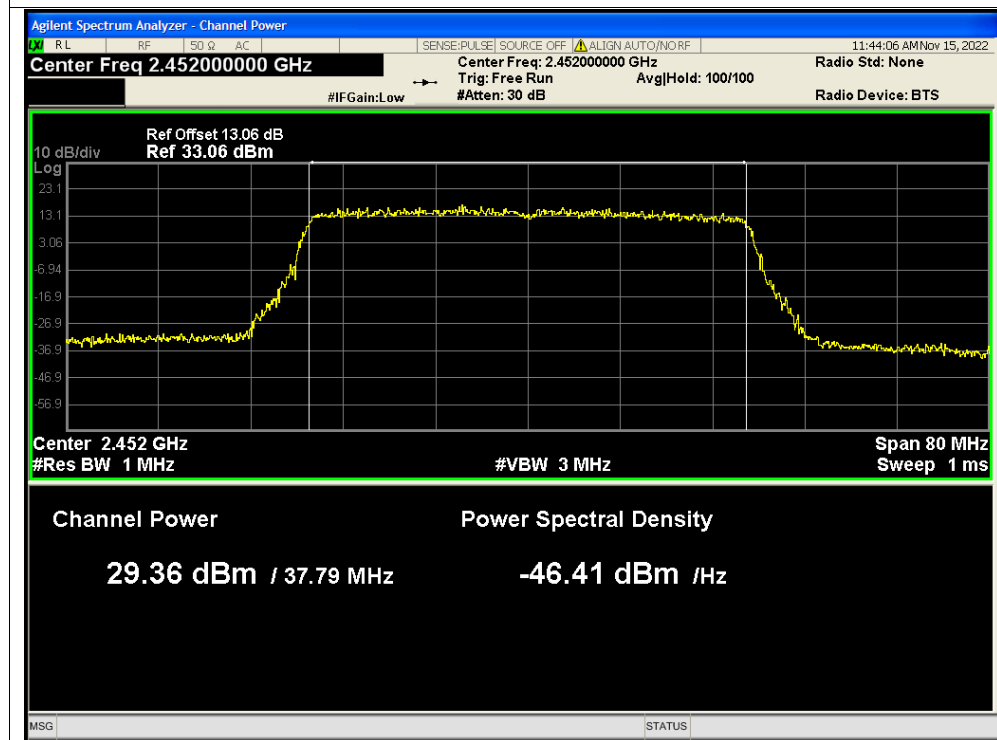


Peak Power NVNT ax40 2452MHz Ant2

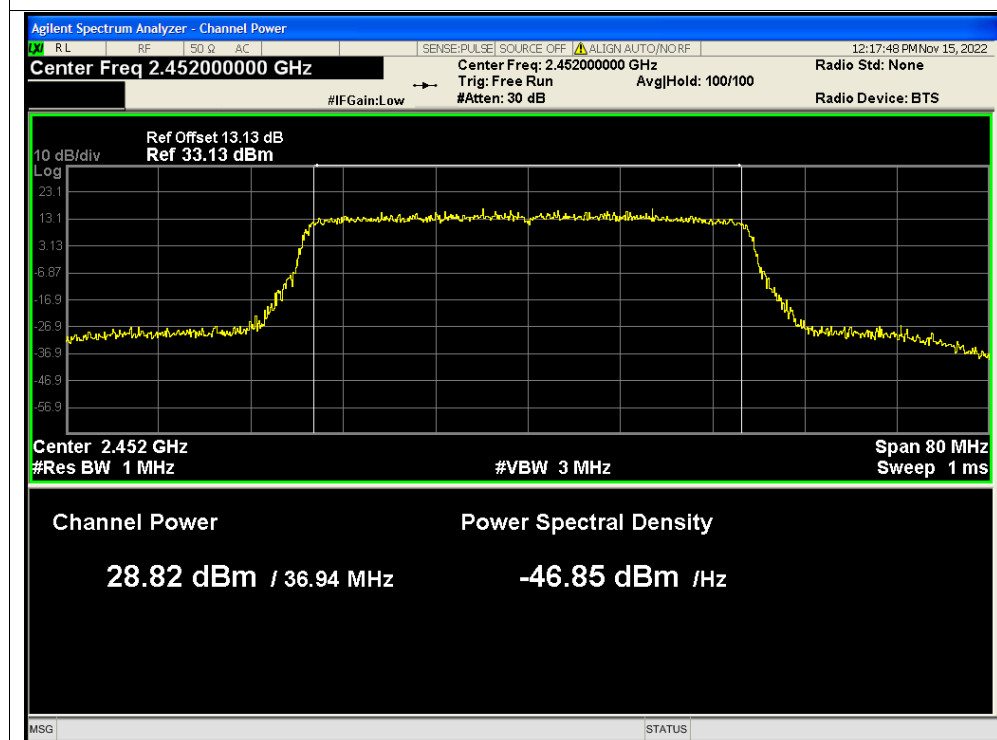




Peak Power NVNT ax40 2452MHz Ant3

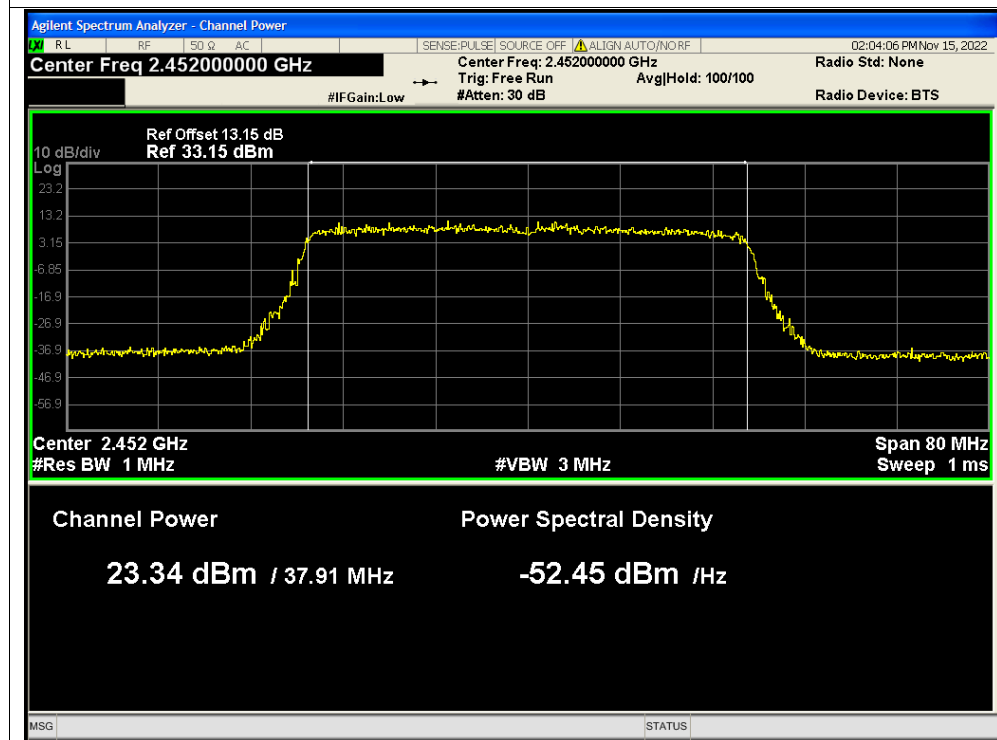


Peak Power NVNT ax40 2452MHz Ant4

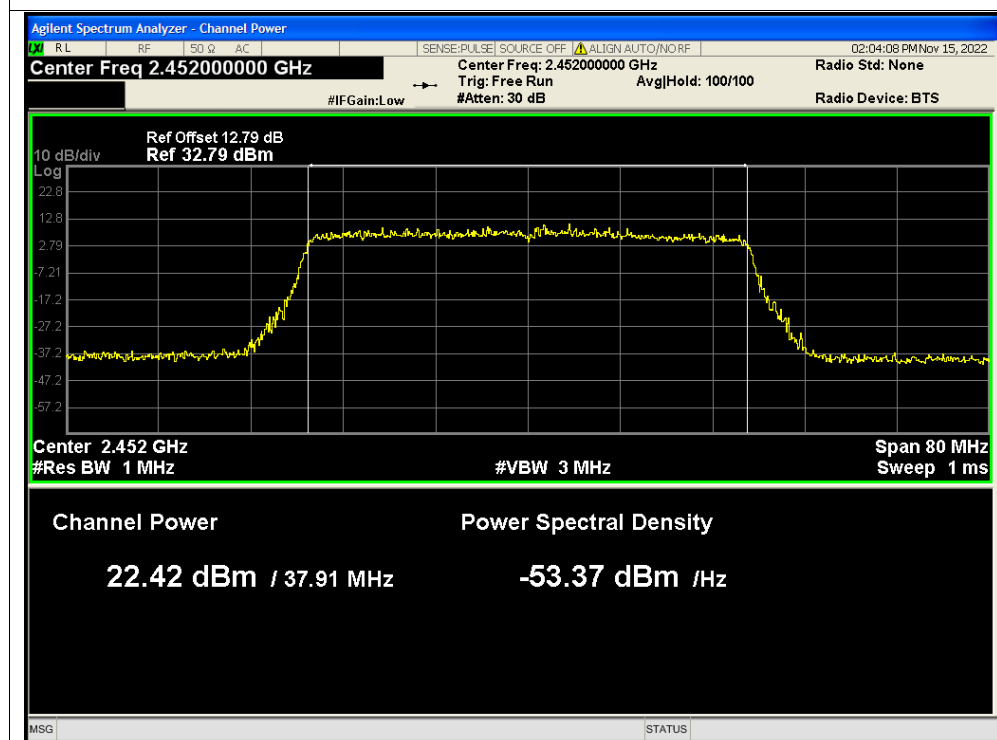




Peak Power NVNT ax40 2452MHz Ant1

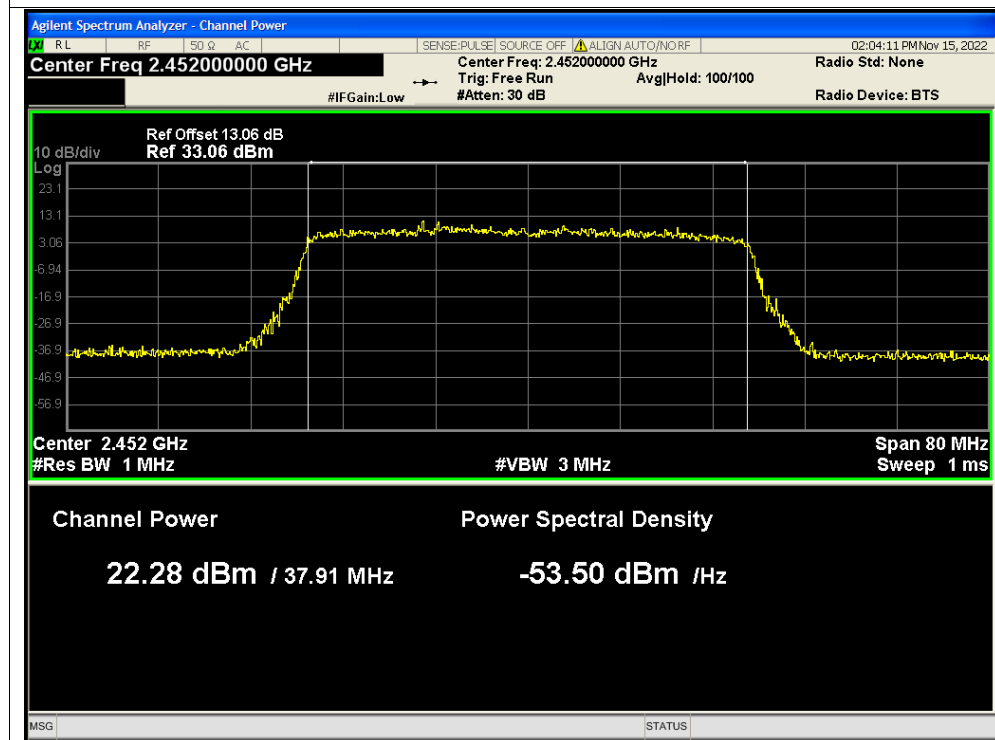


Peak Power NVNT ax40 2452MHz Ant2

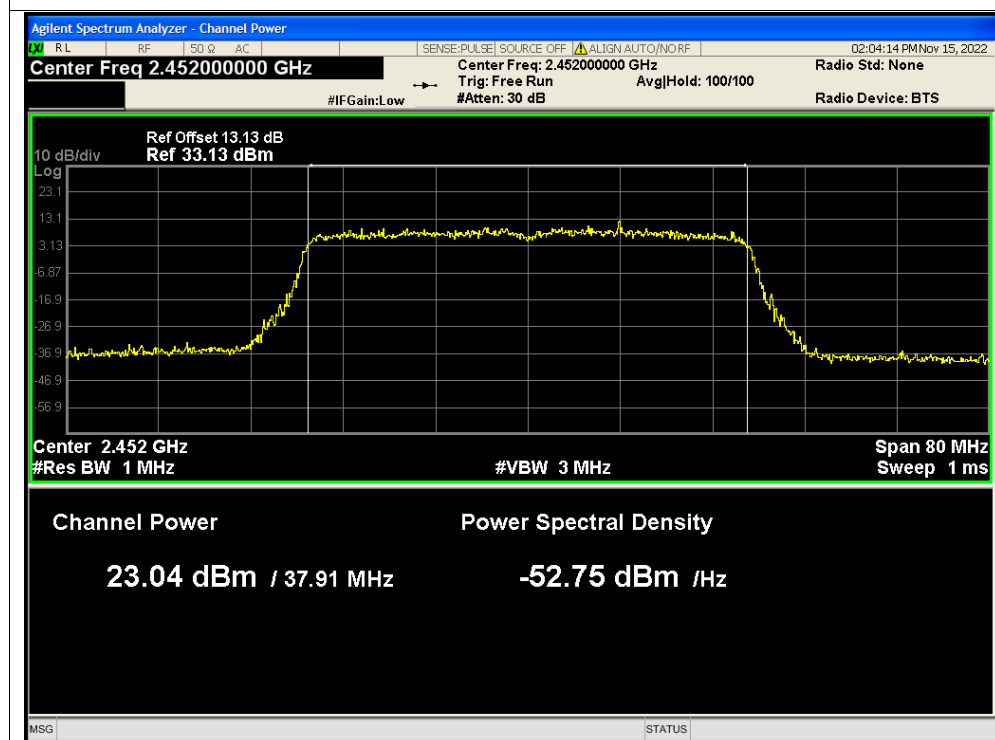




Peak Power NVNT ax40 2452MHz Ant3



Peak Power NVNT ax40 2452MHz Ant4



**A.3. Maximum Average Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	18.83	1.37	20.2	30	Pass
NVNT	b	2412	Ant2	17.9	2.72	20.62	30	Pass
NVNT	b	2412	Ant3	17.75	2.72	20.47	30	Pass
NVNT	b	2412	Ant4	18.77	1.37	20.14	30	Pass
NVNT	b	2437	Ant1	18.4	2.72	21.12	30	Pass
NVNT	b	2437	Ant2	18	2.69	20.69	30	Pass
NVNT	b	2437	Ant3	18.46	2.72	21.18	30	Pass
NVNT	b	2437	Ant4	18.56	2.69	21.25	30	Pass
NVNT	b	2462	Ant1	18.68	2.72	21.4	30	Pass
NVNT	b	2462	Ant2	17.62	2.72	20.34	30	Pass
NVNT	b	2462	Ant3	17.94	2.72	20.66	30	Pass
NVNT	b	2462	Ant4	19.02	2.72	21.74	30	Pass
NVNT	g	2412	Ant1	20.48	0.37	20.85	30	Pass
NVNT	g	2412	Ant2	20.27	0.37	20.64	30	Pass
NVNT	g	2412	Ant3	20.23	0.37	20.6	30	Pass
NVNT	g	2412	Ant4	21.17	0.37	21.54	30	Pass
NVNT	g	2437	Ant1	20.28	0.37	20.65	30	Pass
NVNT	g	2437	Ant2	20.62	0.37	20.99	30	Pass
NVNT	g	2437	Ant3	20.59	0.37	20.96	30	Pass
NVNT	g	2437	Ant4	21.23	0.37	21.6	30	Pass
NVNT	g	2462	Ant1	20.39	0.37	20.76	30	Pass
NVNT	g	2462	Ant2	20.36	0.35	20.71	30	Pass
NVNT	g	2462	Ant3	20.35	0.37	20.72	30	Pass
NVNT	g	2462	Ant4	21.49	0.37	21.86	30	Pass
NVNT	n20	2412	Ant1	20.41	0.29	20.7	30	Pass
NVNT	n20	2412	Ant2	20.26	0.2	20.46	30	Pass
NVNT	n20	2412	Ant3	20.22	0.32	20.54	30	Pass
NVNT	n20	2412	Ant4	21.18	0.2	21.38	30	Pass
NVNT	n20	2412	Ant1	14.51	0.29	14.8	30	Pass
NVNT	n20	2412	Ant2	13.53	0.29	13.82	30	Pass
NVNT	n20	2412	Ant3	13.66	0.29	13.95	30	Pass
NVNT	n20	2412	Ant4	14.21	0.29	14.5	30	Pass
NVNT	n20	2412	Sum	20.02	0.29	20.31	30	Pass
NVNT	n20	2437	Ant1	20.43	0.21	20.64	30	Pass



REPORT No.: SZ22100099W04

NVNT	n20	2437	Ant2	20.41	0.35	20.76	30	Pass
NVNT	n20	2437	Ant3	20.64	0.29	20.93	30	Pass
NVNT	n20	2437	Ant4	21.26	0.21	21.47	30	Pass
NVNT	n20	2437	Ant1	14.41	0.44	14.85	30	Pass
NVNT	n20	2437	Ant2	13.88	0.44	14.32	30	Pass
NVNT	n20	2437	Ant3	13.81	0.44	14.25	30	Pass
NVNT	n20	2437	Ant4	14.28	0.44	14.72	30	Pass
NVNT	n20	2437	Sum	20.12	0.44	20.56	30	Pass
NVNT	n20	2462	Ant1	20.52	0.22	20.74	30	Pass
NVNT	n20	2462	Ant2	20.28	0.26	20.54	30	Pass
NVNT	n20	2462	Ant3	20.45	0.27	20.72	30	Pass
NVNT	n20	2462	Ant4	21.35	0.34	21.69	30	Pass
NVNT	n20	2462	Ant1	14.32	0.22	14.54	30	Pass
NVNT	n20	2462	Ant2	13.38	0.22	13.6	30	Pass
NVNT	n20	2462	Ant3	13.58	0.22	13.8	30	Pass
NVNT	n20	2462	Ant4	14.33	0.22	14.55	30	Pass
NVNT	n20	2462	Sum	19.94	0.22	20.16	30	Pass
NVNT	n40	2422	Ant1	20.82	0.32	21.14	30	Pass
NVNT	n40	2422	Ant2	20.77	0.5	21.27	30	Pass
NVNT	n40	2422	Ant3	20.5	0.22	20.72	30	Pass
NVNT	n40	2422	Ant4	20.39	0.51	20.9	30	Pass
NVNT	n40	2422	Ant1	14.96	0.51	15.47	30	Pass
NVNT	n40	2422	Ant2	13.84	0.51	14.35	30	Pass
NVNT	n40	2422	Ant3	13.69	0.51	14.2	30	Pass
NVNT	n40	2422	Ant4	14.33	0.51	14.84	30	Pass
NVNT	n40	2422	Sum	20.25	0.51	20.76	30	Pass
NVNT	n40	2437	Ant1	20.48	0.31	20.79	30	Pass
NVNT	n40	2437	Ant2	20.27	0.21	20.48	30	Pass
NVNT	n40	2437	Ant3	20.94	0.31	21.25	30	Pass
NVNT	n40	2437	Ant4	20.72	0.31	21.03	30	Pass
NVNT	n40	2437	Ant1	14.59	0.5	15.09	30	Pass
NVNT	n40	2437	Ant2	13.86	0.5	14.36	30	Pass
NVNT	n40	2437	Ant3	14.01	0.5	14.51	30	Pass
NVNT	n40	2437	Ant4	14.58	0.5	15.08	30	Pass
NVNT	n40	2437	Sum	20.29	0.5	20.79	30	Pass
NVNT	n40	2452	Ant1	21.19	0.41	21.6	30	Pass
NVNT	n40	2452	Ant2	20.61	0.43	21.04	30	Pass
NVNT	n40	2452	Ant3	20.89	0.31	21.2	30	Pass



REPORT No.: SZ22100099W04

NVNT	n40	2452	Ant4	20.78	0.44	21.22	30	Pass
NVNT	n40	2452	Ant1	15.1	0.5	15.6	30	Pass
NVNT	n40	2452	Ant2	14.19	0.5	14.69	30	Pass
NVNT	n40	2452	Ant3	14	0.5	14.5	30	Pass
NVNT	n40	2452	Ant4	14.65	0.5	15.15	30	Pass
NVNT	n40	2452	Sum	20.53	0.5	21.03	30	Pass
NVNT	ax20	2412	Ant1	20.59	0.26	20.85	30	Pass
NVNT	ax20	2412	Ant2	20.61	0.27	20.88	30	Pass
NVNT	ax20	2412	Ant3	20.48	0.26	20.74	30	Pass
NVNT	ax20	2412	Ant4	20.22	0.26	20.48	30	Pass
NVNT	ax20	2412	Ant1	15.05	0.24	15.29	30	Pass
NVNT	ax20	2412	Ant2	13.72	0.24	13.96	30	Pass
NVNT	ax20	2412	Ant3	13.6	0.24	13.84	30	Pass
NVNT	ax20	2412	Ant4	14.36	0.24	14.6	30	Pass
NVNT	ax20	2412	Sum	20.24	0.24	20.48	30	Pass
NVNT	ax20	2437	Ant1	20.72	0.26	20.98	30	Pass
NVNT	ax20	2437	Ant2	20.77	0.21	20.98	30	Pass
NVNT	ax20	2437	Ant3	20.89	0.26	21.15	30	Pass
NVNT	ax20	2437	Ant4	20.53	0.27	20.8	30	Pass
NVNT	ax20	2437	Ant1	14.62	0.22	14.84	30	Pass
NVNT	ax20	2437	Ant2	13.89	0.22	14.11	30	Pass
NVNT	ax20	2437	Ant3	14	0.22	14.22	30	Pass
NVNT	ax20	2437	Ant4	14.56	0.22	14.78	30	Pass
NVNT	ax20	2437	Sum	20.3	0.22	20.52	30	Pass
NVNT	ax20	2462	Ant1	20.61	0.27	20.88	30	Pass
NVNT	ax20	2462	Ant2	20.51	0.27	20.78	30	Pass
NVNT	ax20	2462	Ant3	20.55	0.21	20.76	30	Pass
NVNT	ax20	2462	Ant4	20.69	0.21	20.9	30	Pass
NVNT	ax20	2462	Ant1	14.56	0.21	14.77	30	Pass
NVNT	ax20	2462	Ant2	13.69	0.21	13.9	30	Pass
NVNT	ax20	2462	Ant3	13.78	0.21	13.99	30	Pass
NVNT	ax20	2462	Ant4	14.63	0.21	14.84	30	Pass
NVNT	ax20	2462	Sum	20.21	0.21	20.42	30	Pass
NVNT	ax40	2422	Ant1	20.96	0.27	21.23	30	Pass
NVNT	ax40	2422	Ant2	21	0.27	21.27	30	Pass
NVNT	ax40	2422	Ant3	20.82	0.27	21.09	30	Pass
NVNT	ax40	2422	Ant4	20.75	0.21	20.96	30	Pass
NVNT	ax40	2422	Ant1	15.31	0.26	15.57	30	Pass



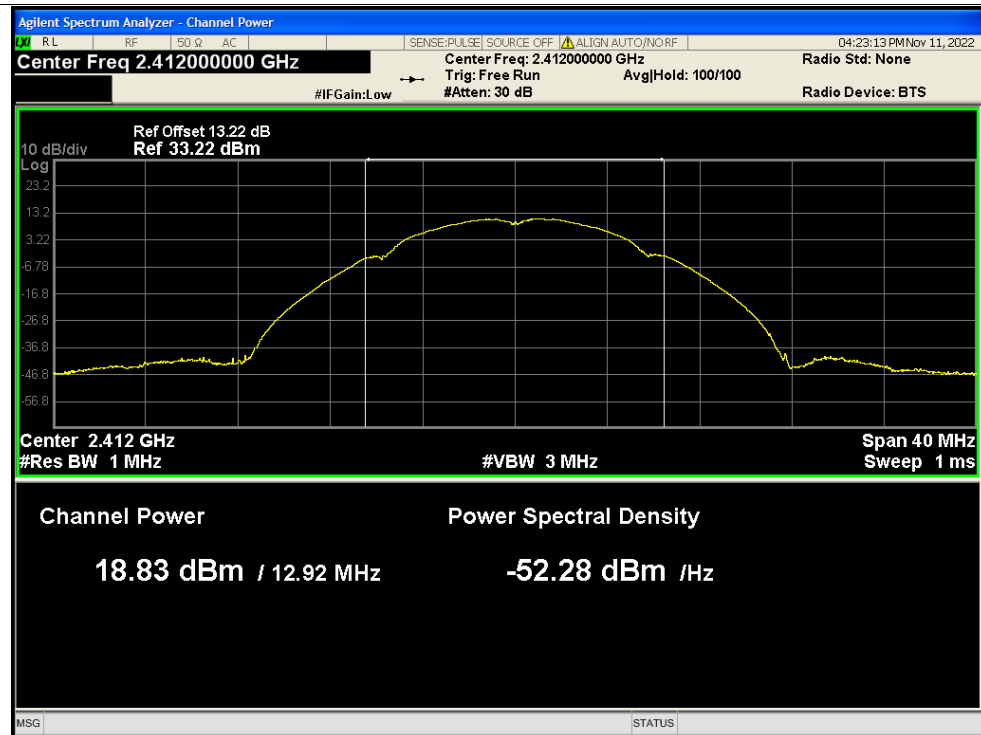
NVNT	ax40	2422	Ant2	13.98	0.26	14.24	30	Pass
NVNT	ax40	2422	Ant3	14.07	0.26	14.33	30	Pass
NVNT	ax40	2422	Ant4	14.5	0.26	14.76	30	Pass
NVNT	ax40	2422	Sum	20.52	0.26	20.78	30	Pass
NVNT	ax40	2437	Ant1	20.83	0.21	21.04	30	Pass
NVNT	ax40	2437	Ant2	21.04	0.23	21.27	30	Pass
NVNT	ax40	2437	Ant3	20.97	0.27	21.24	30	Pass
NVNT	ax40	2437	Ant4	21.02	0.22	21.24	30	Pass
NVNT	ax40	2437	Ant1	14.98	0.28	15.26	30	Pass
NVNT	ax40	2437	Ant2	14.03	0.28	14.31	30	Pass
NVNT	ax40	2437	Ant3	14.17	0.28	14.45	30	Pass
NVNT	ax40	2437	Ant4	14.81	0.28	15.09	30	Pass
NVNT	ax40	2437	Sum	20.54	0.28	20.82	30	Pass
NVNT	ax40	2452	Ant1	21.17	0.21	21.38	30	Pass
NVNT	ax40	2452	Ant2	21.13	0.21	21.34	30	Pass
NVNT	ax40	2452	Ant3	21.23	0.28	21.51	30	Pass
NVNT	ax40	2452	Ant4	20.85	0.26	21.11	30	Pass
NVNT	ax40	2452	Ant1	15.36	0.21	15.57	30	Pass
NVNT	ax40	2452	Ant2	14.26	0.21	14.47	30	Pass
NVNT	ax40	2452	Ant3	14.22	0.21	14.43	30	Pass
NVNT	ax40	2452	Ant4	14.8	0.21	15.01	30	Pass
NVNT	ax40	2452	Sum	20.71	0.21	20.92	30	Pass

Note: Directional gain = $2.05\text{dBi} + 10\log(4) = 8.07\text{dBi} > 6\text{dBi}$, so the power limit shall be reduced to $30 - (8.07 - 6) = 27.93\text{dBm}$.

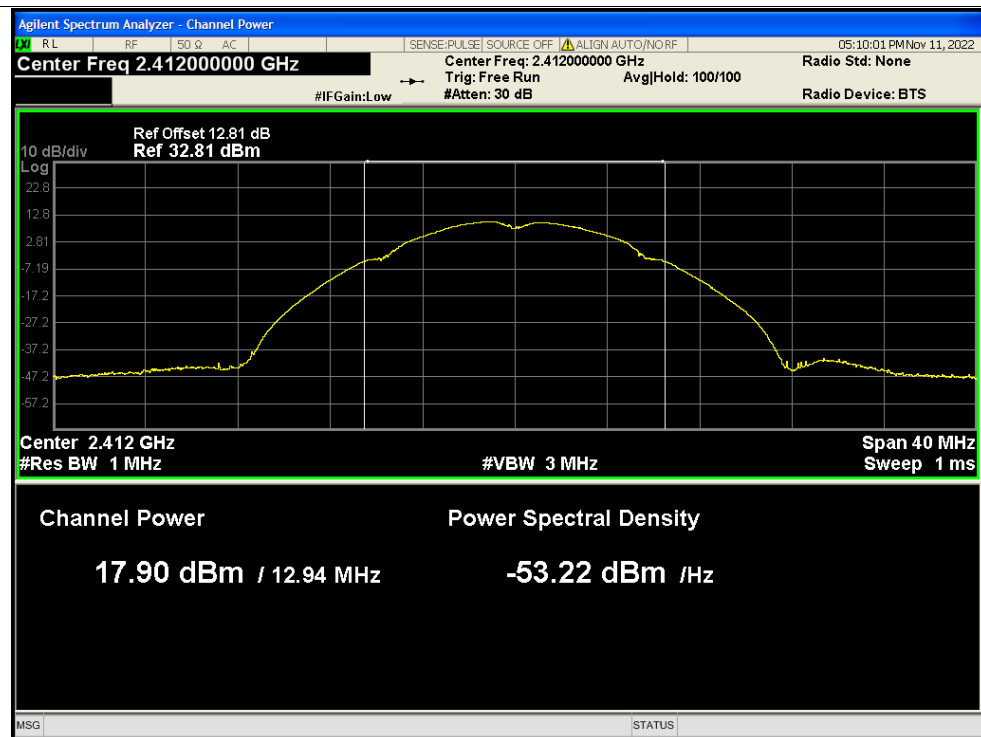


Test Graphs

Average Power NVNT b 2412MHz Ant1

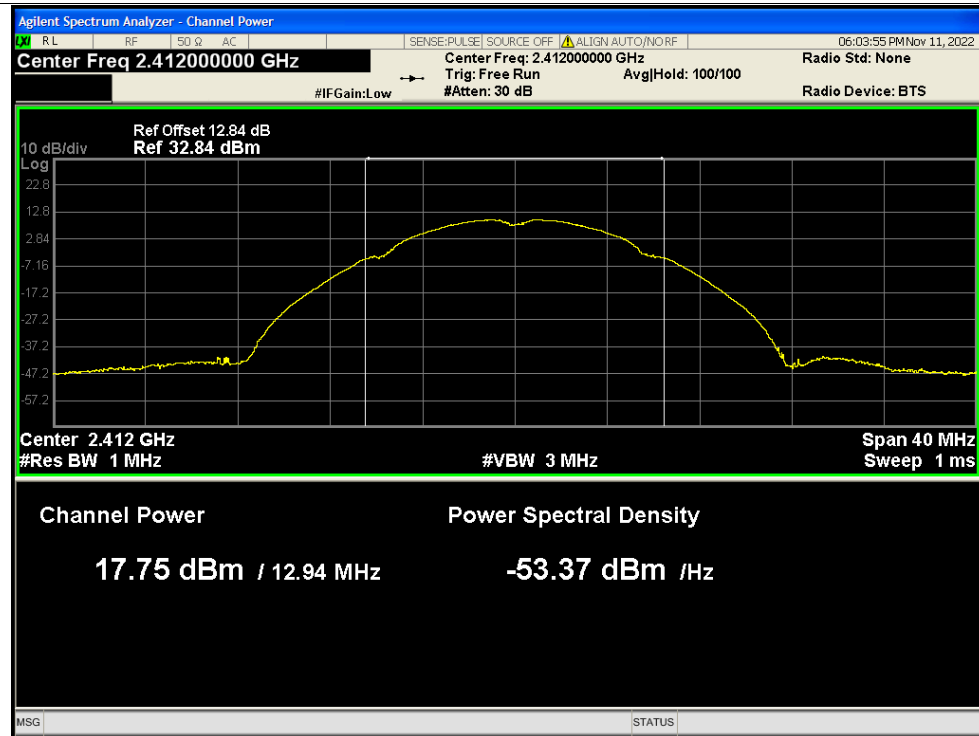


Average Power NVNT b 2412MHz Ant2

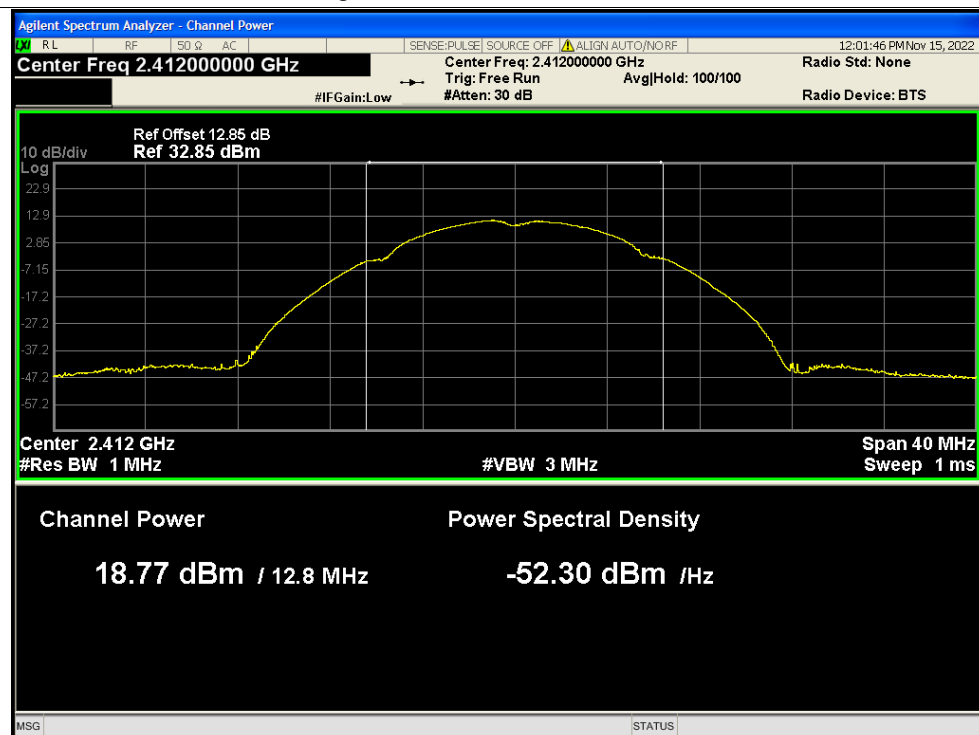




Average Power NVNT b 2412MHz Ant3

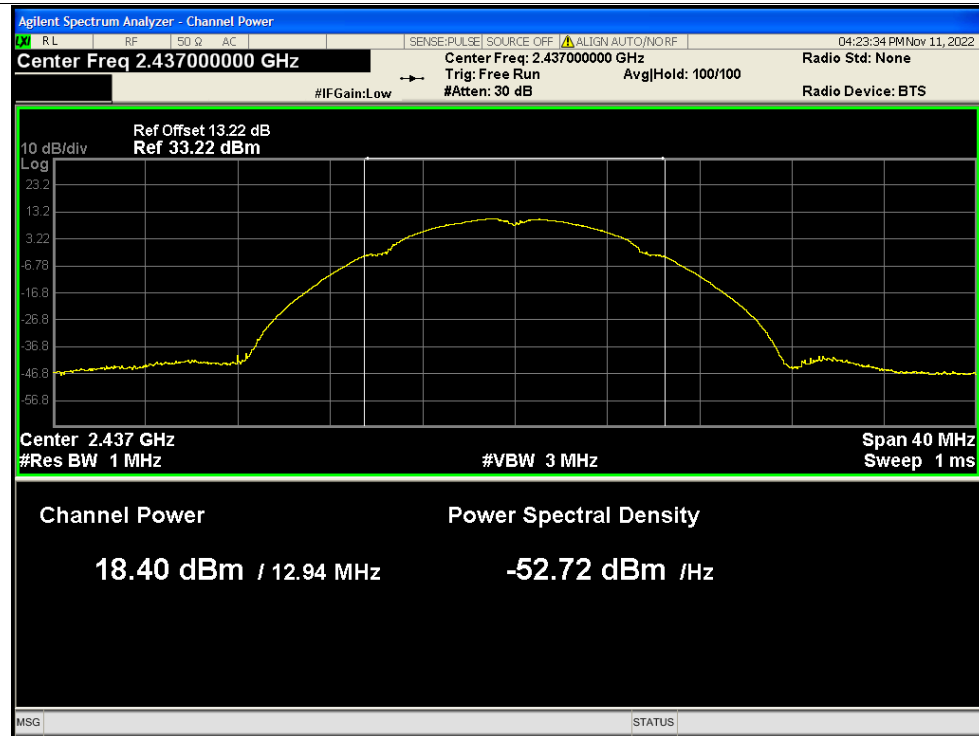


Average Power NVNT b 2412MHz Ant4

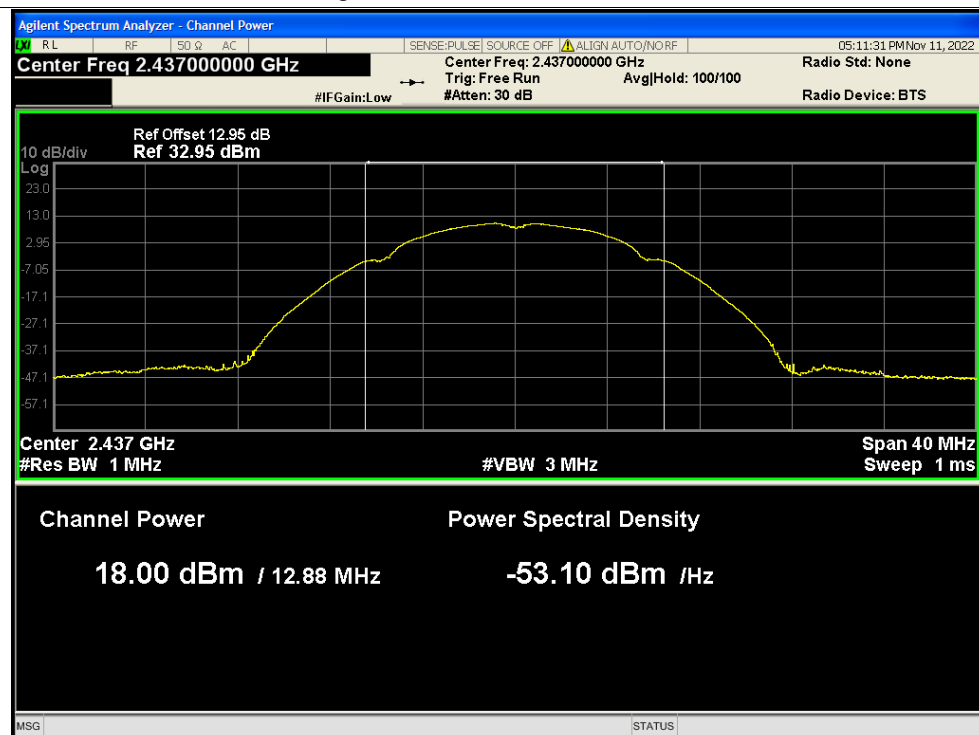




Average Power NVNT b 2437MHz Ant1

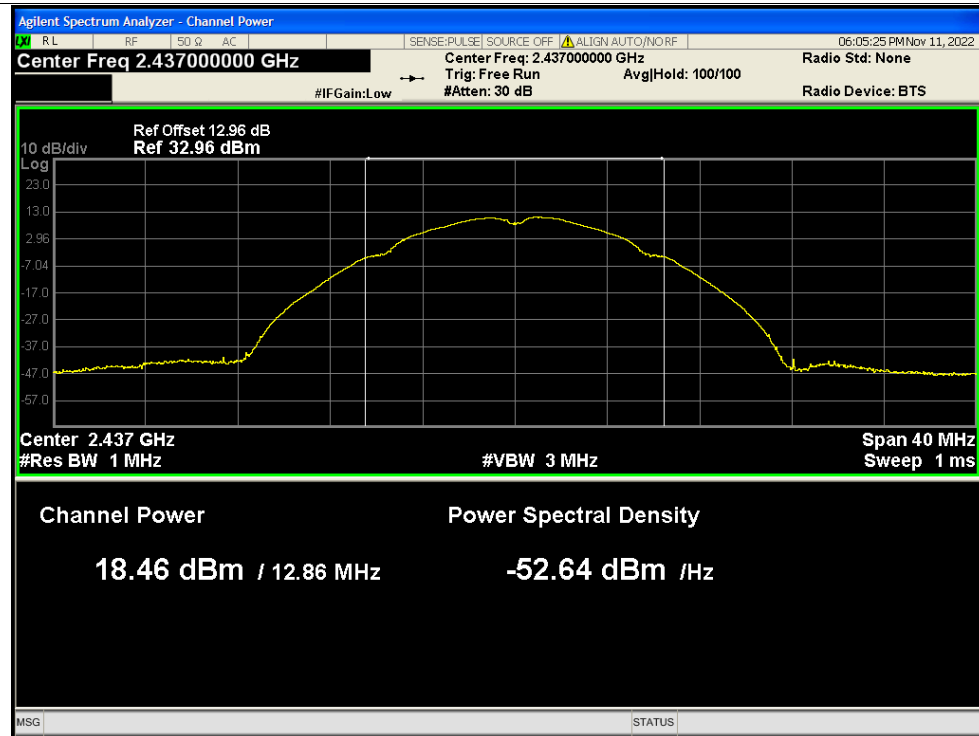


Average Power NVNT b 2437MHz Ant2

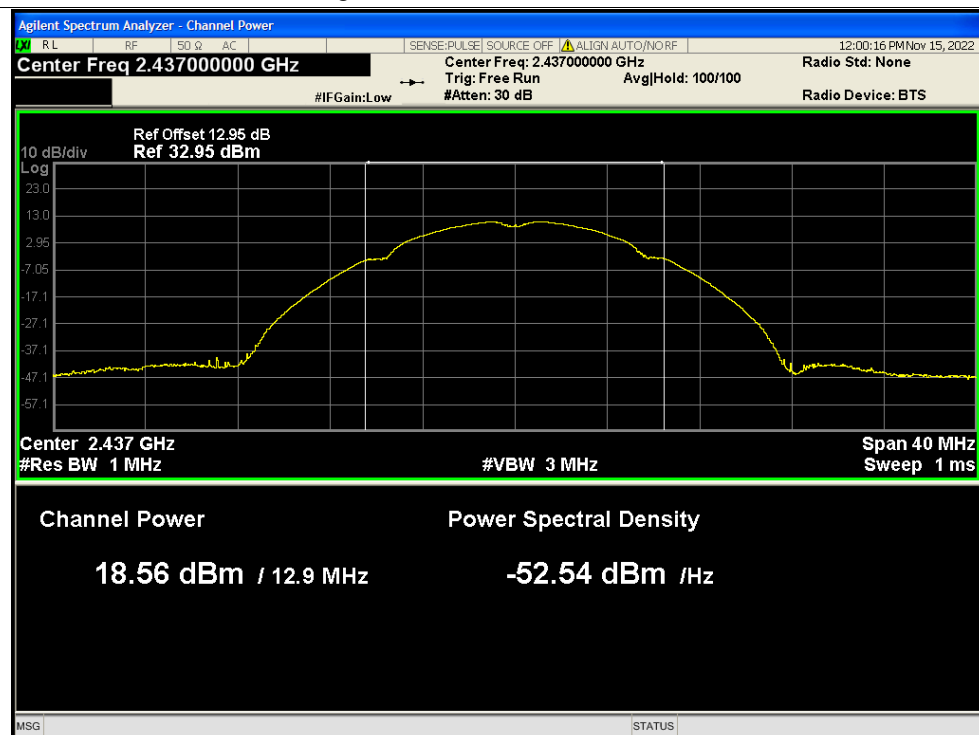




Average Power NVNT b 2437MHz Ant3

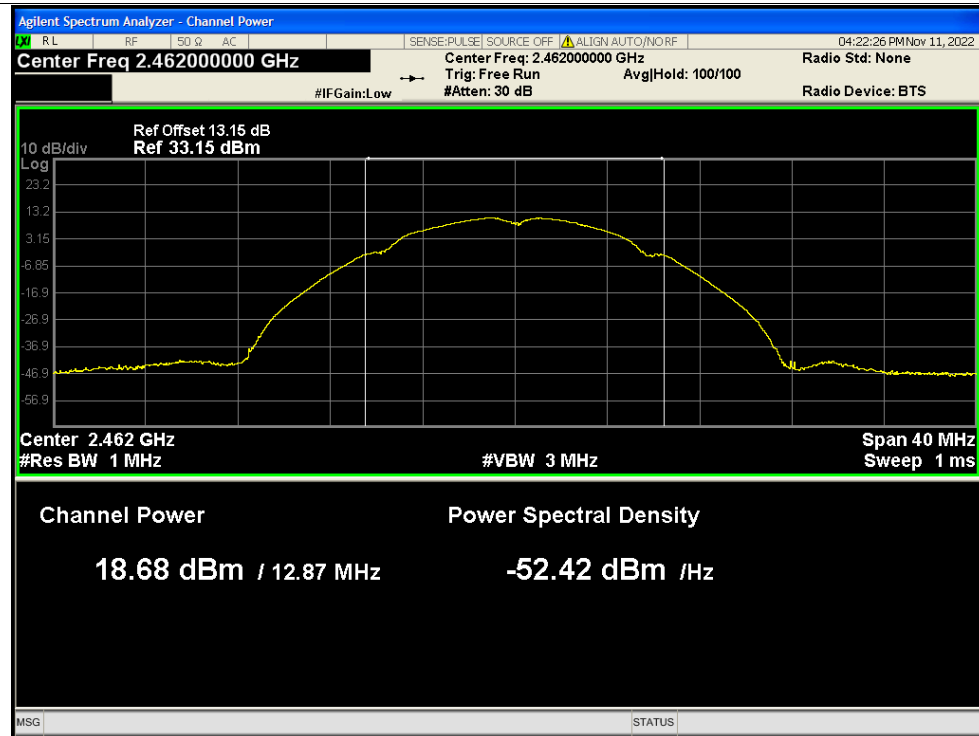


Average Power NVNT b 2437MHz Ant4

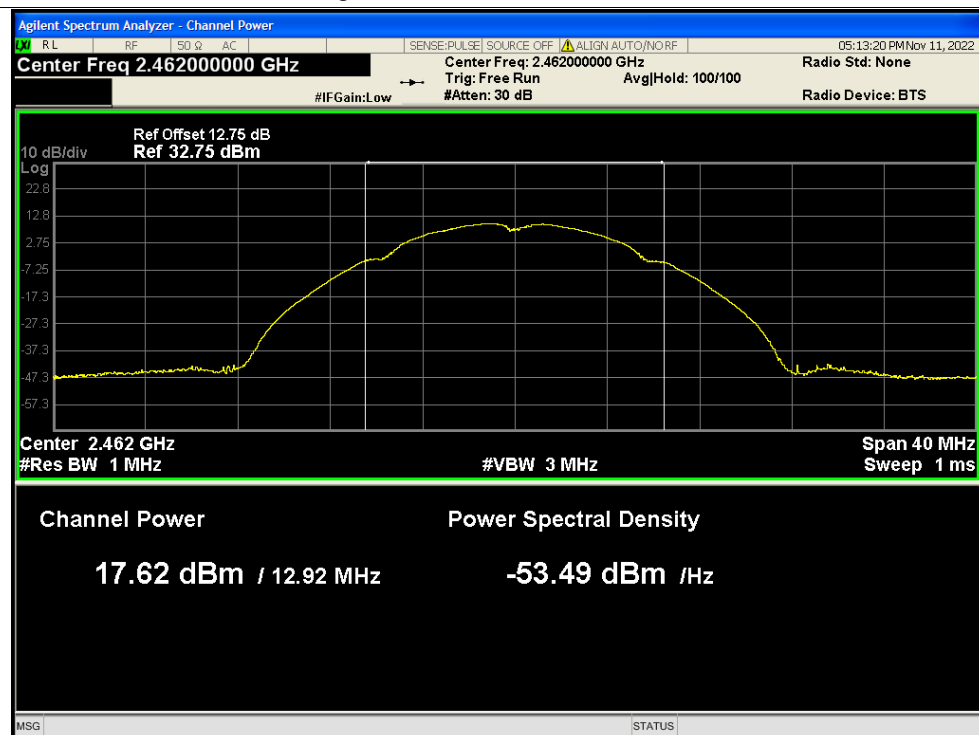




Average Power NVNT b 2462MHz Ant1

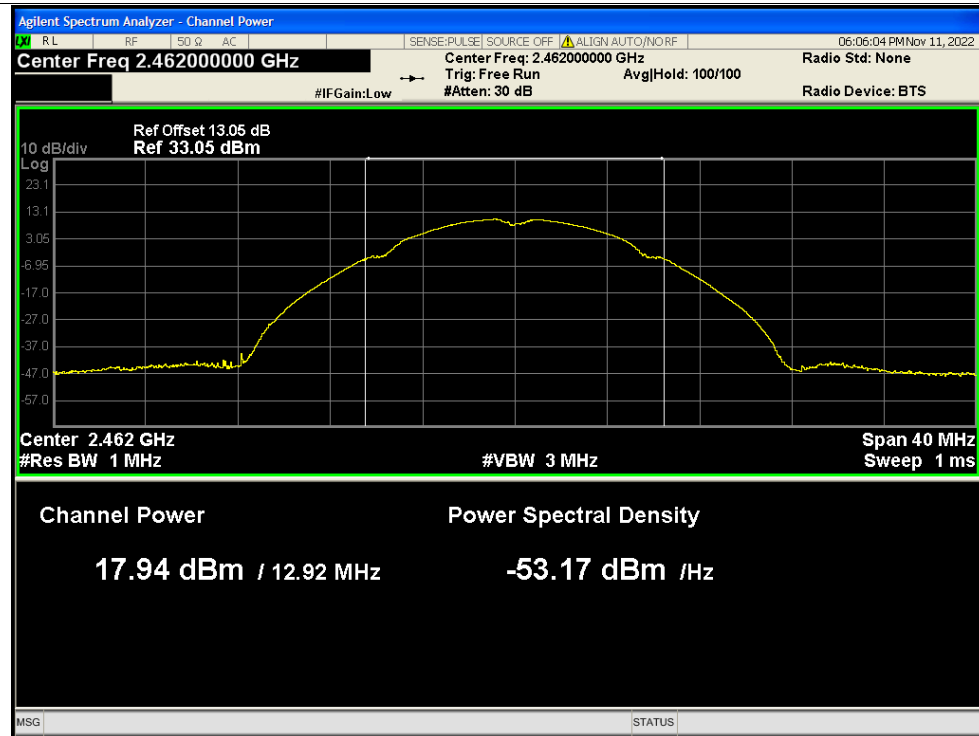


Average Power NVNT b 2462MHz Ant2

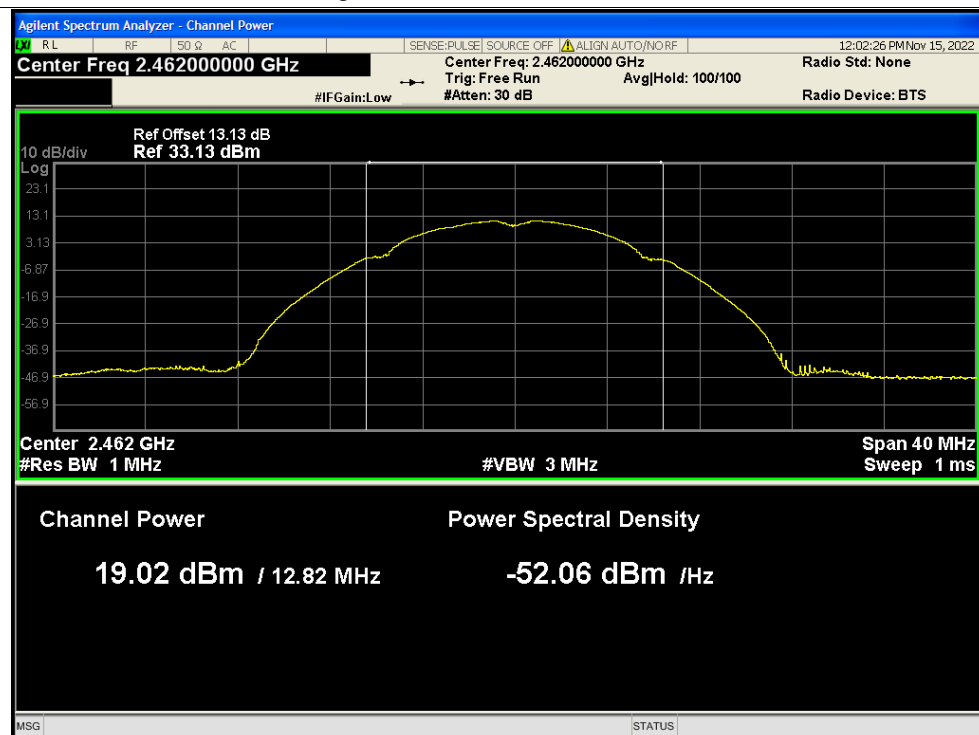




Average Power NVNT b 2462MHz Ant3

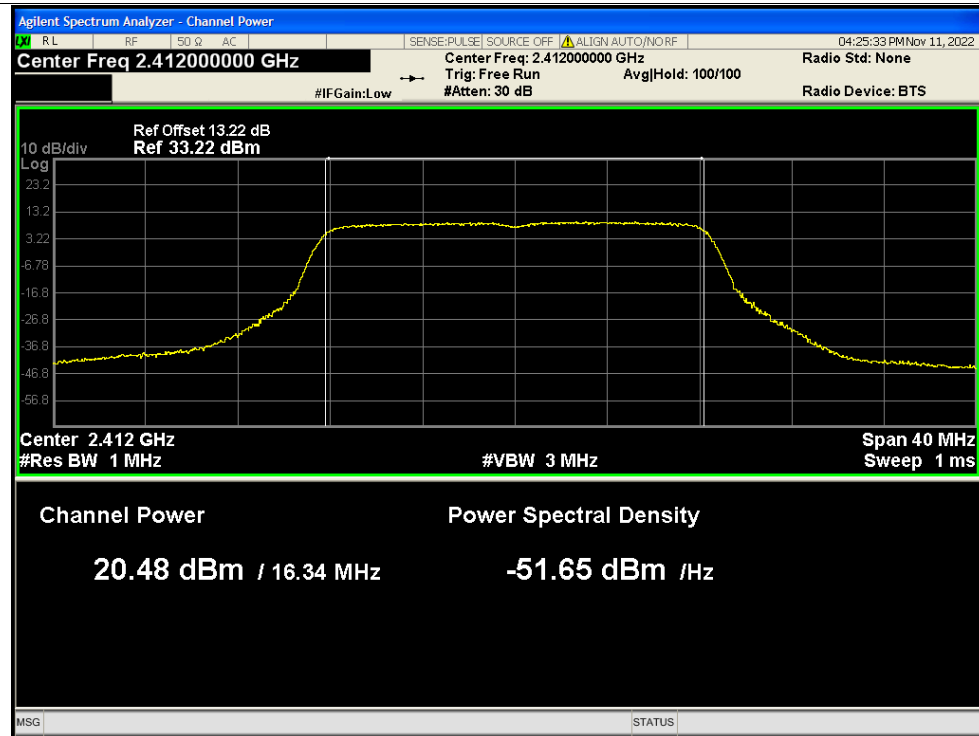


Average Power NVNT b 2462MHz Ant4

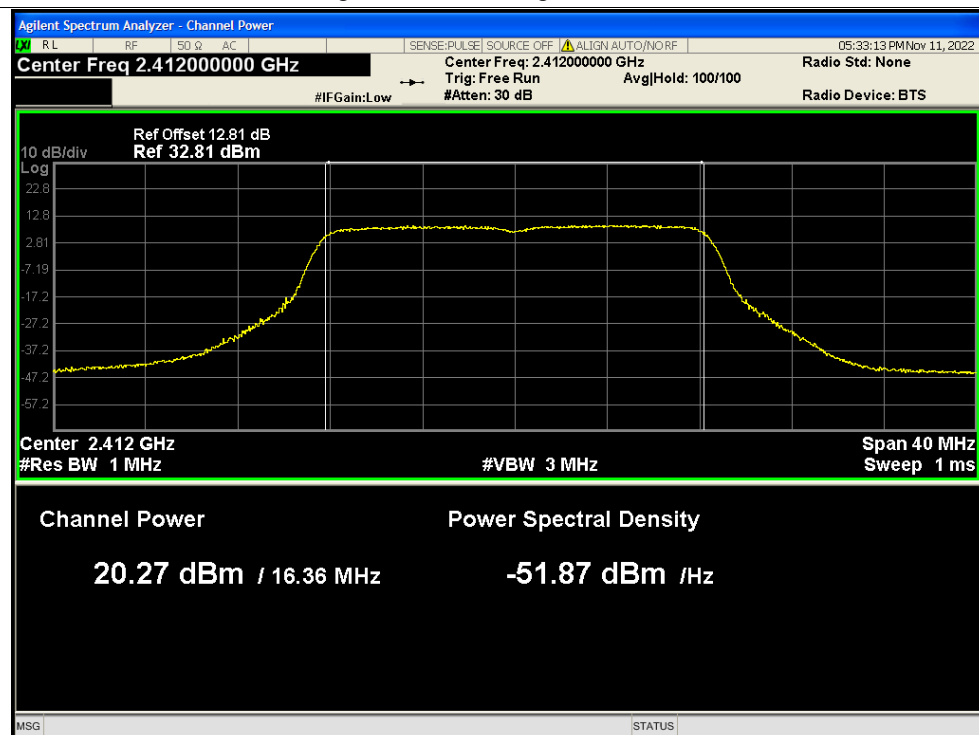




Average Power NVNT g 2412MHz Ant1

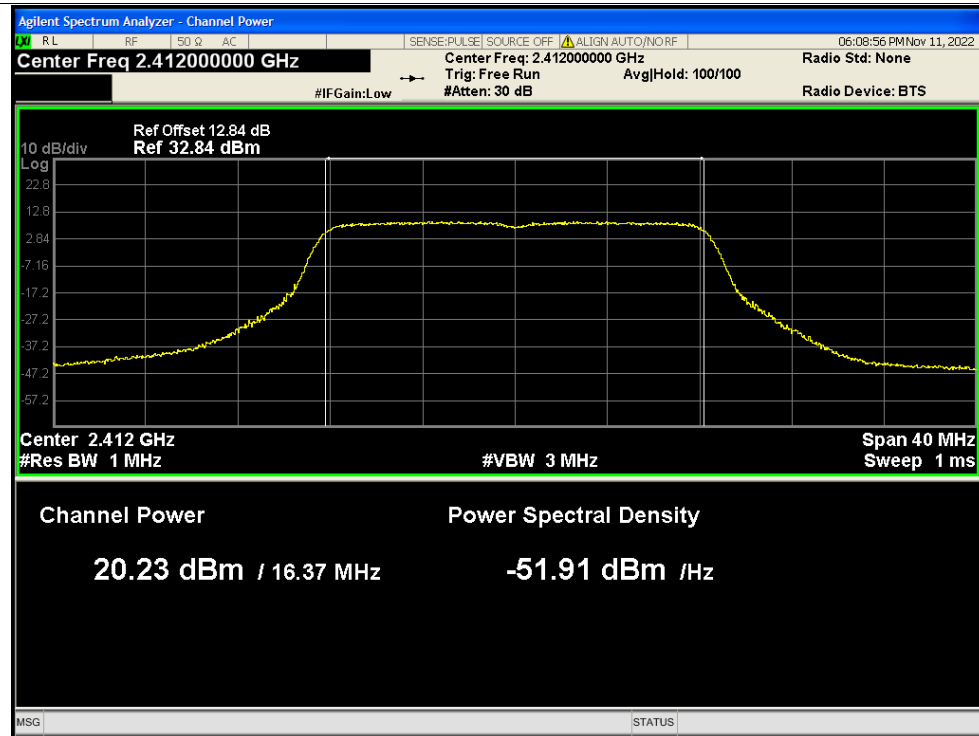


Average Power NVNT g 2412MHz Ant2

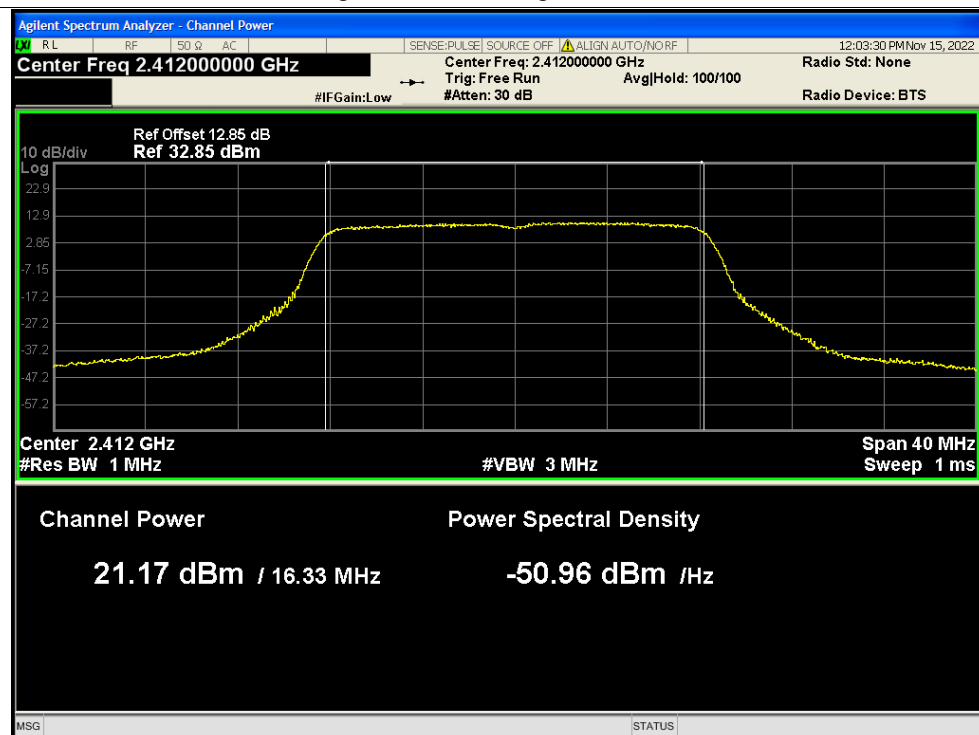




Average Power NVNT g 2412MHz Ant3

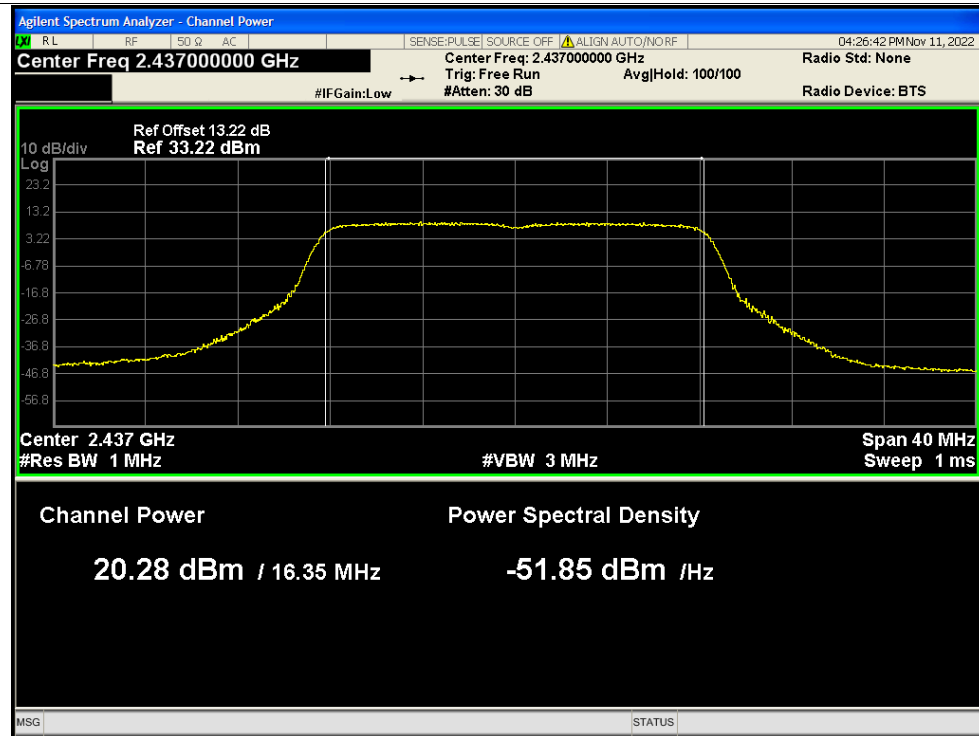


Average Power NVNT g 2412MHz Ant4

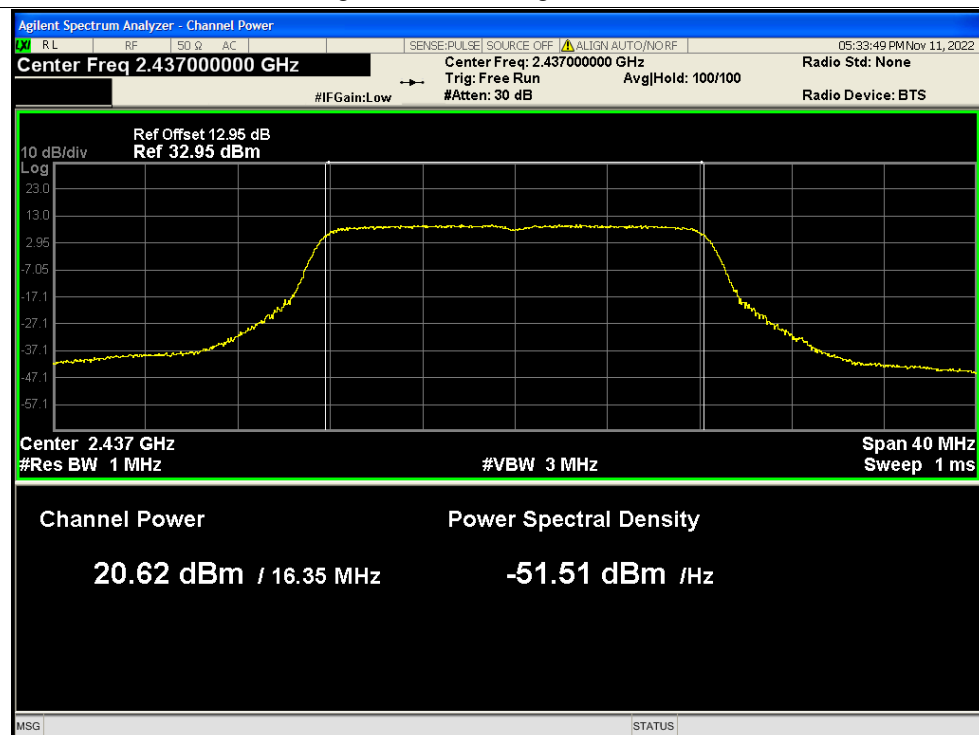




Average Power NVNT g 2437MHz Ant1

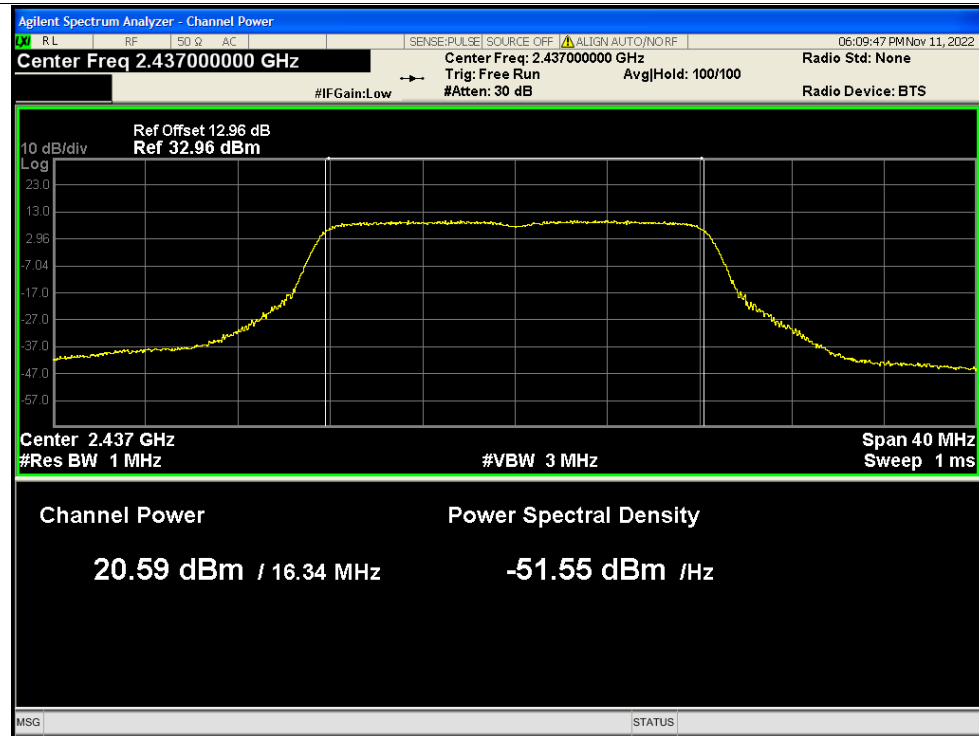


Average Power NVNT g 2437MHz Ant2

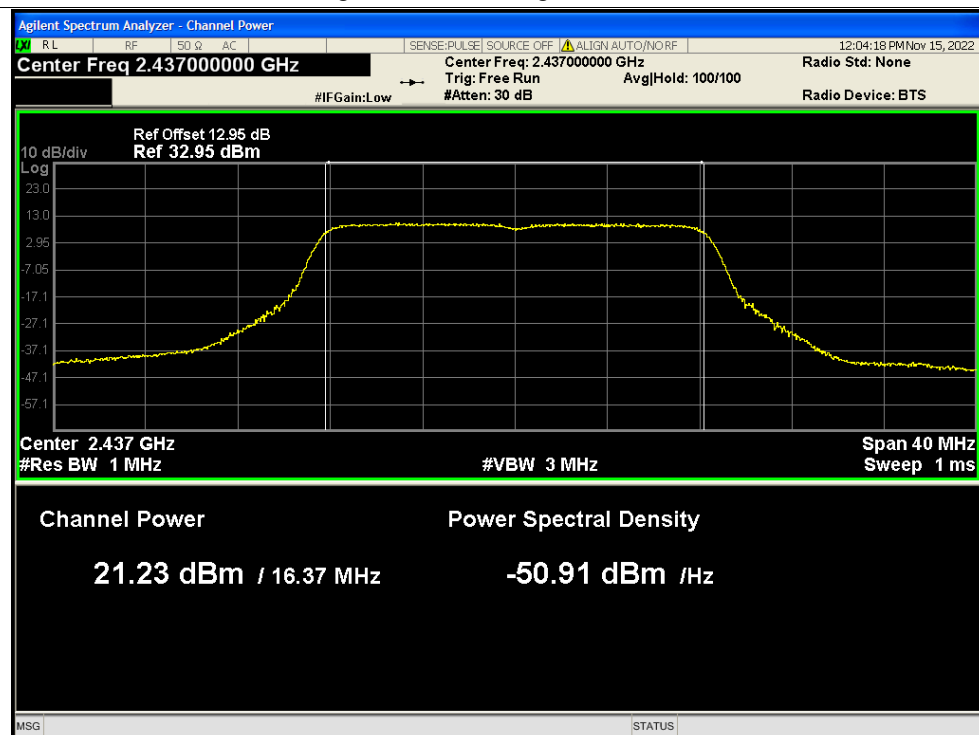




Average Power NVNT g 2437MHz Ant3

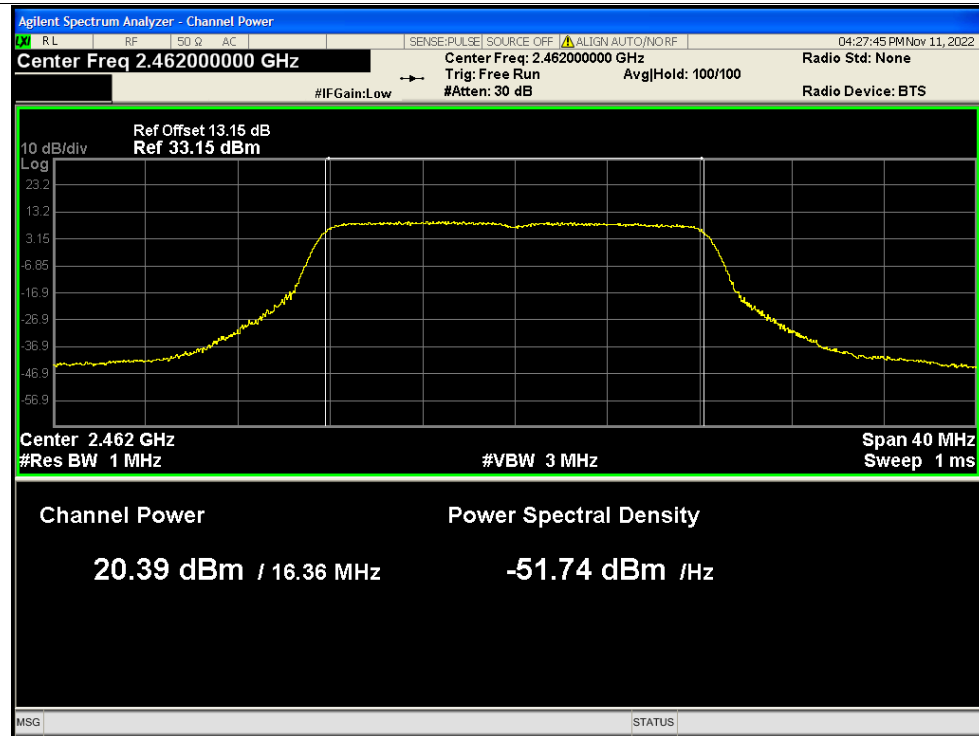


Average Power NVNT g 2437MHz Ant4

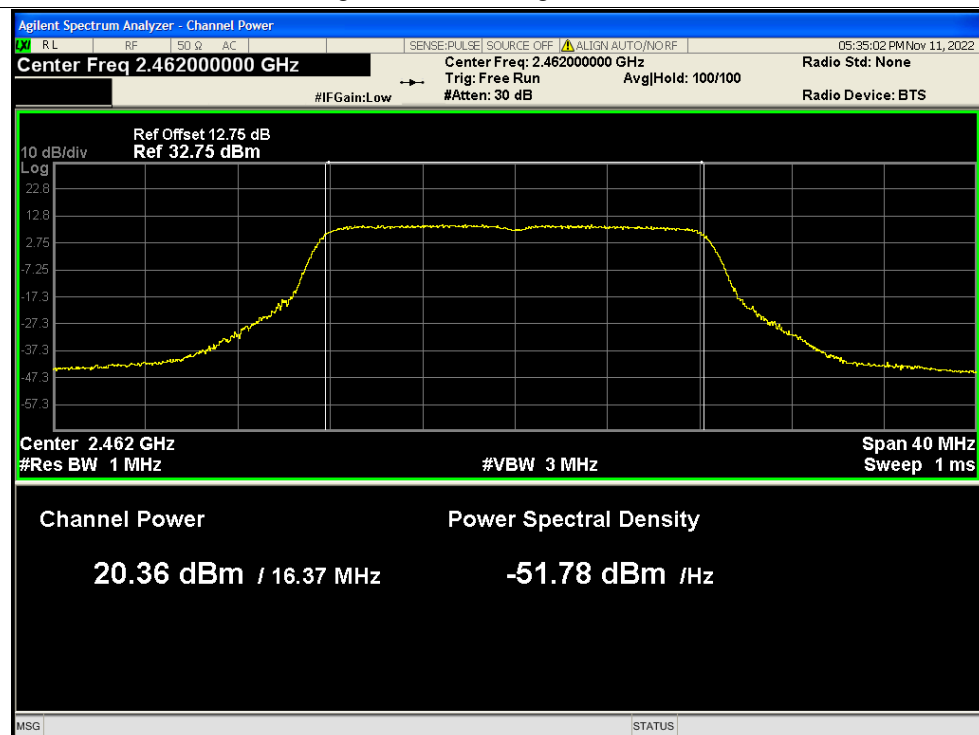




Average Power NVNT g 2462MHz Ant1

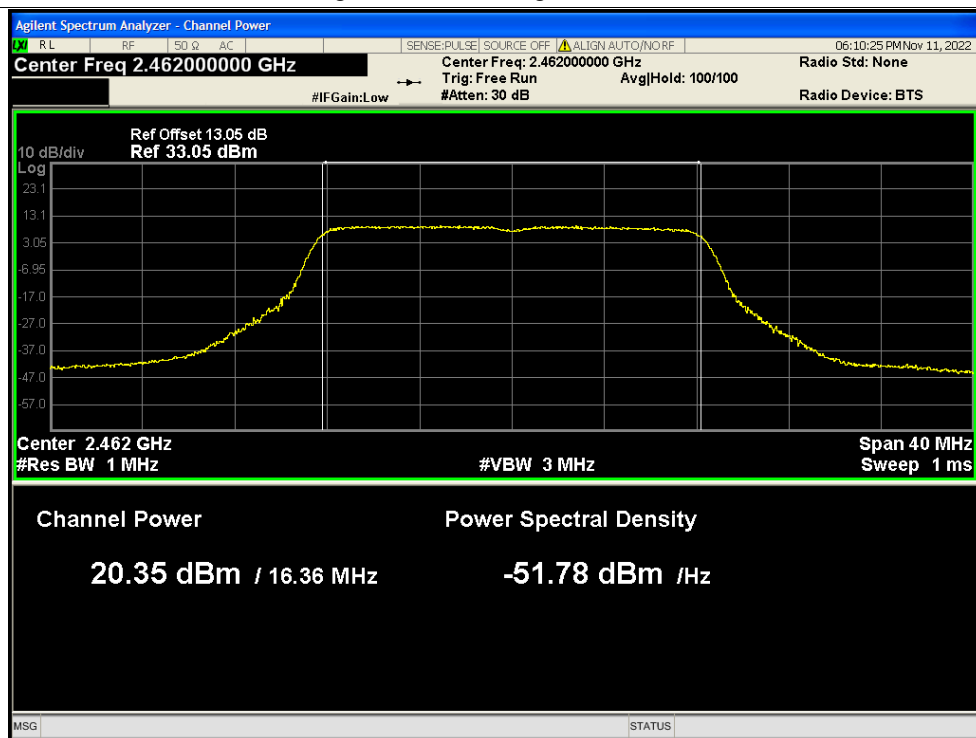


Average Power NVNT g 2462MHz Ant2

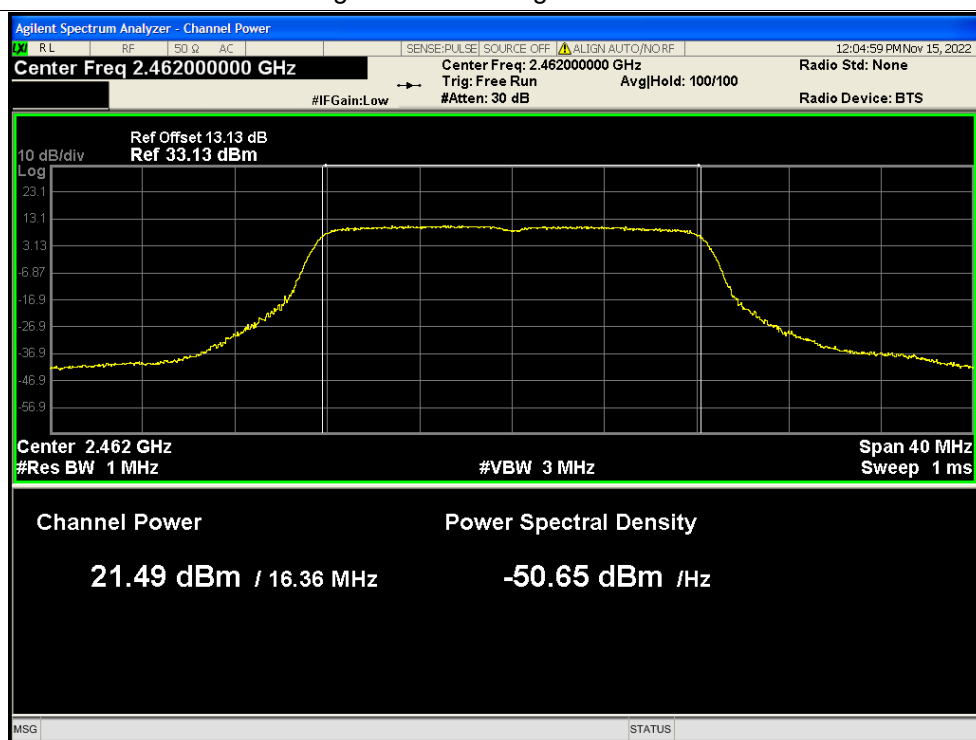




Average Power NVNT g 2462MHz Ant3

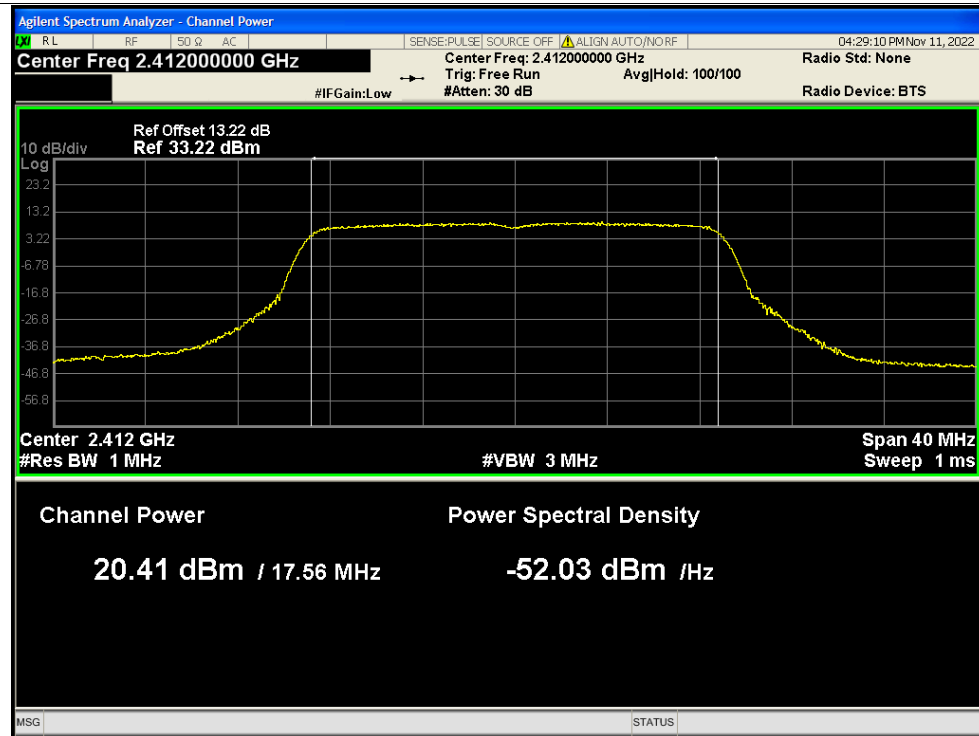


Average Power NVNT g 2462MHz Ant4

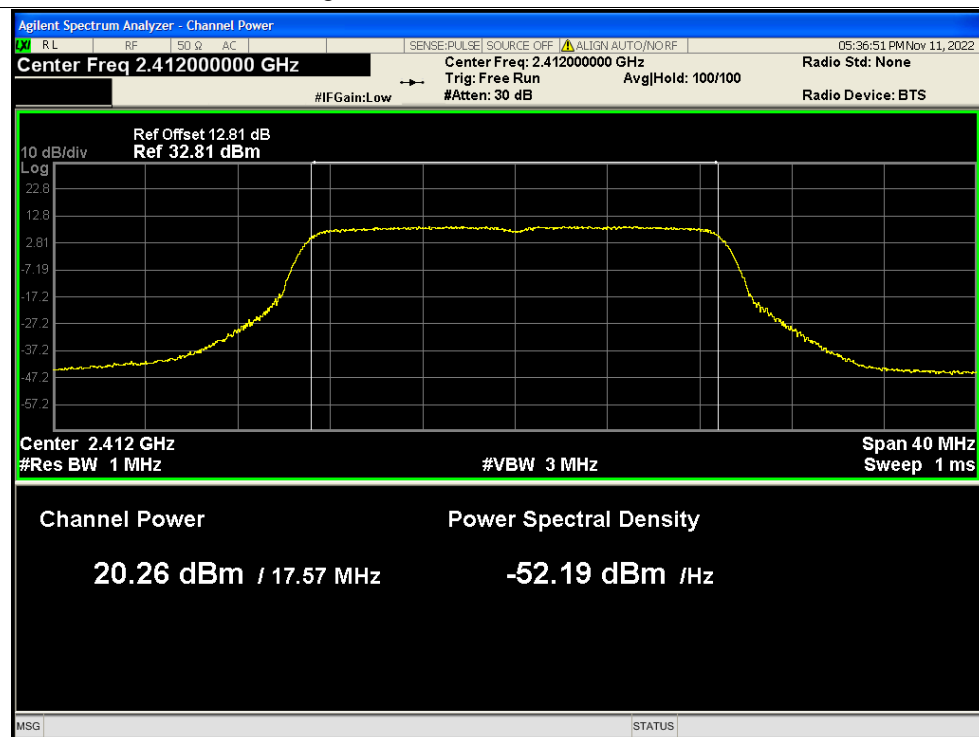




Average Power NVNT n20 2412MHz Ant1

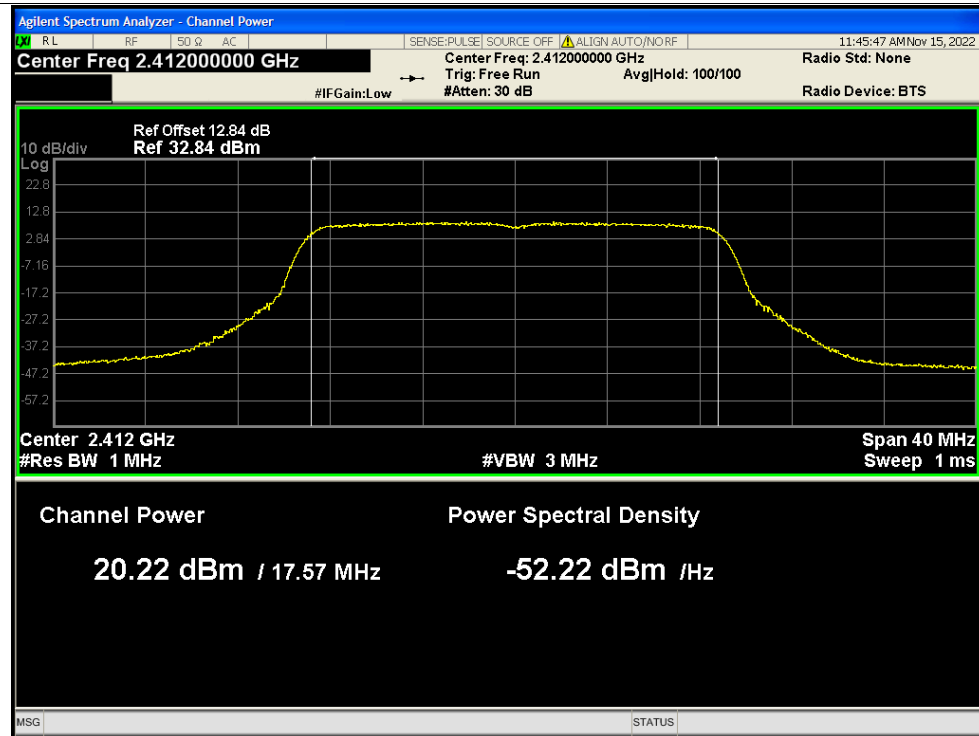


Average Power NVNT n20 2412MHz Ant2

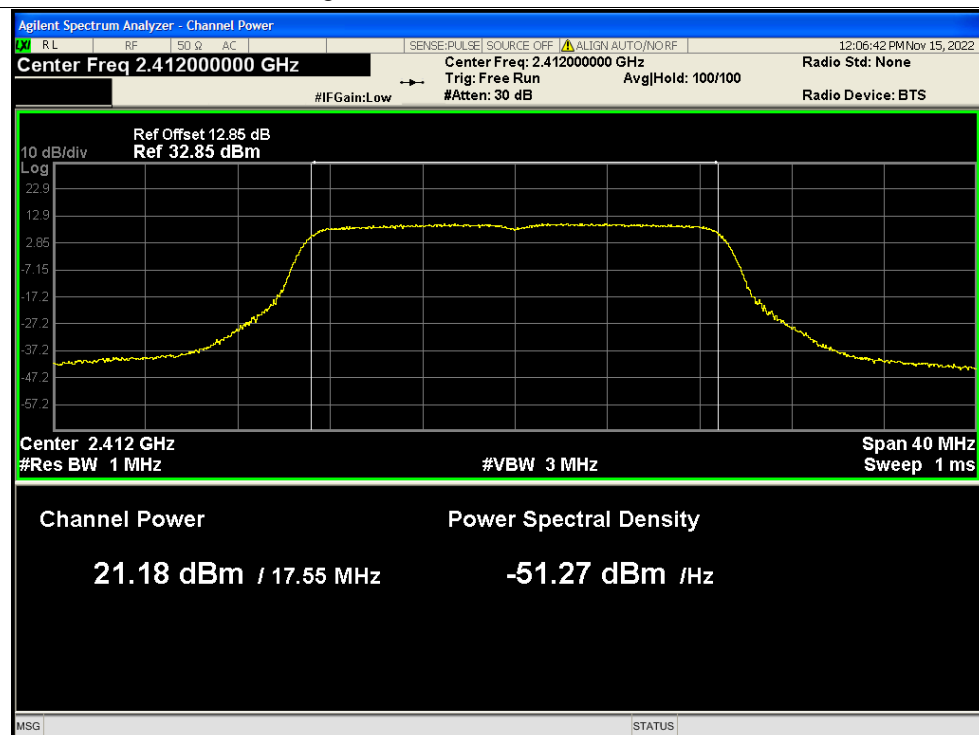




Average Power NVNT n20 2412MHz Ant3

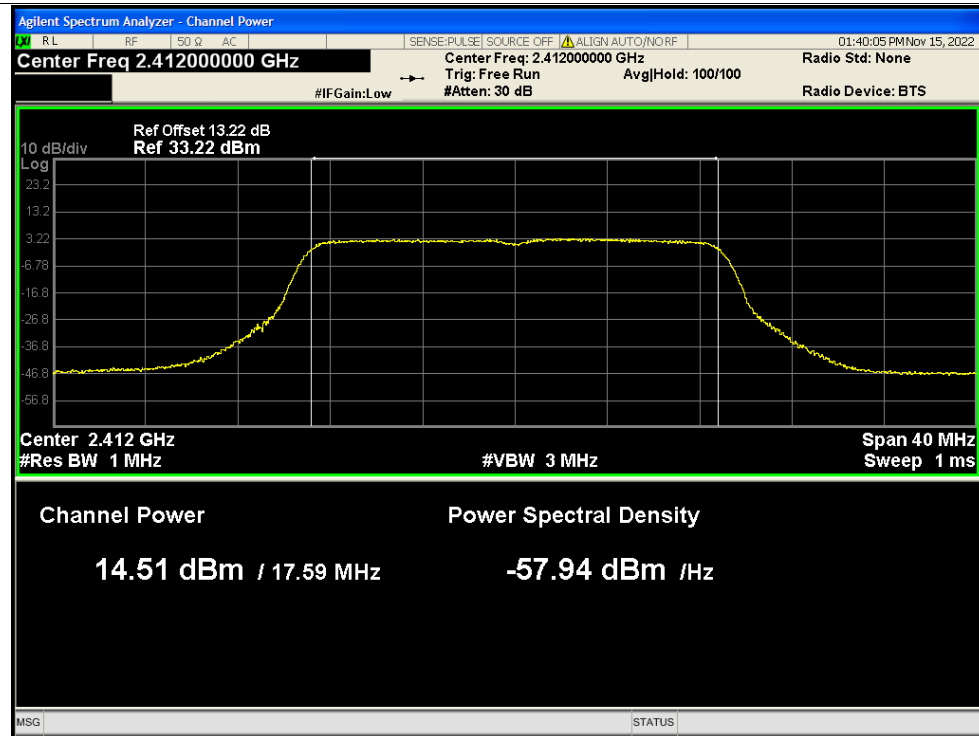


Average Power NVNT n20 2412MHz Ant4

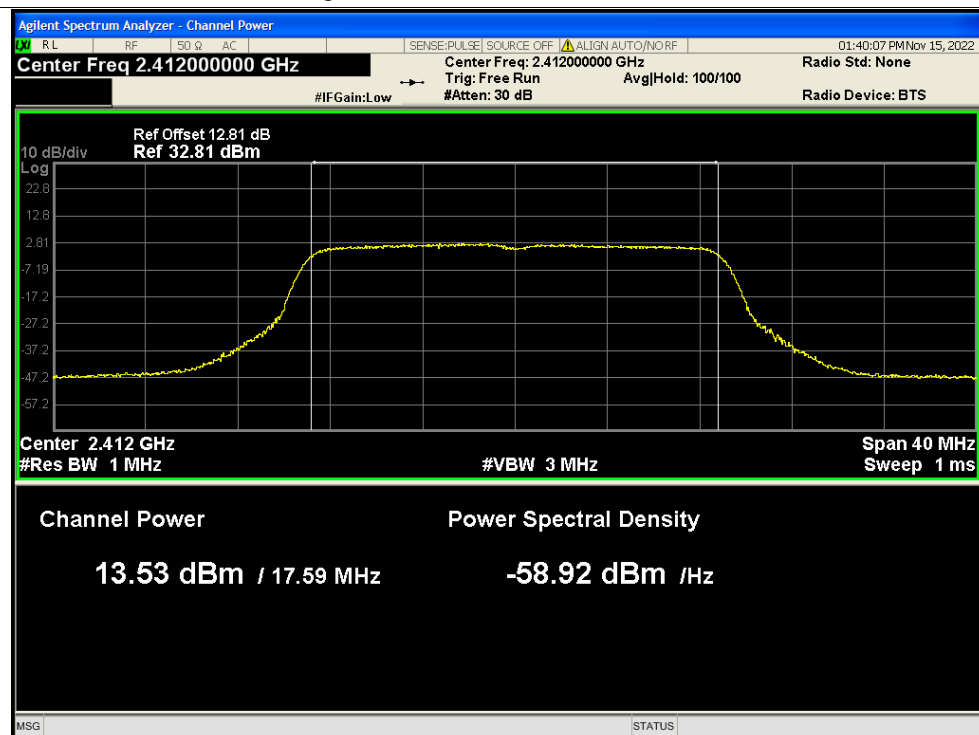




Average Power NVNT n20 2412MHz Ant1

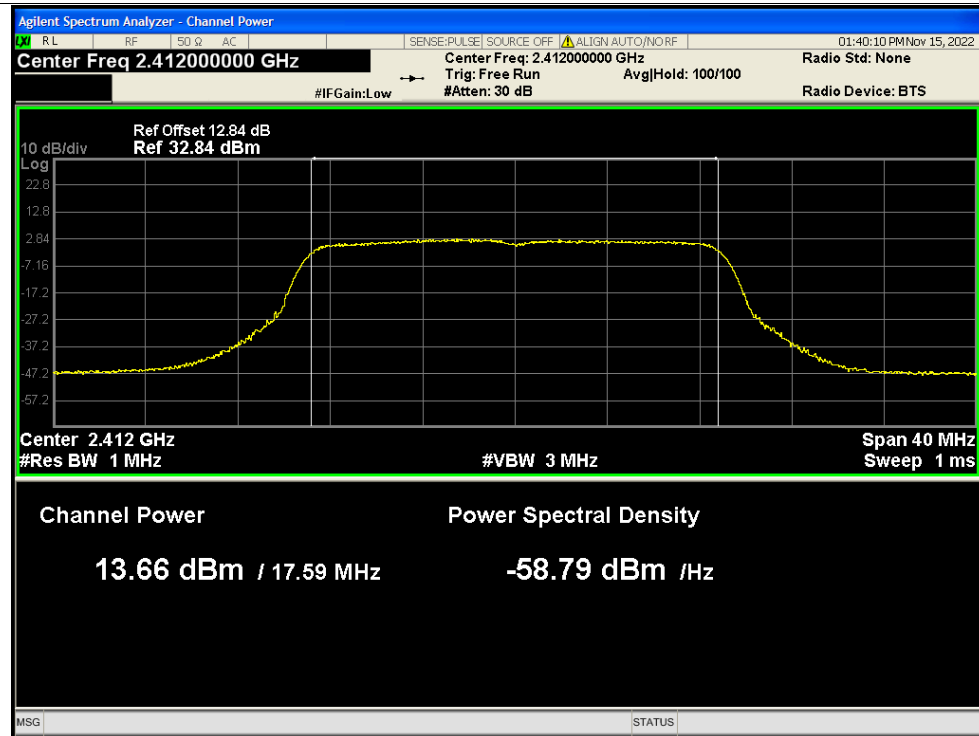


Average Power NVNT n20 2412MHz Ant2

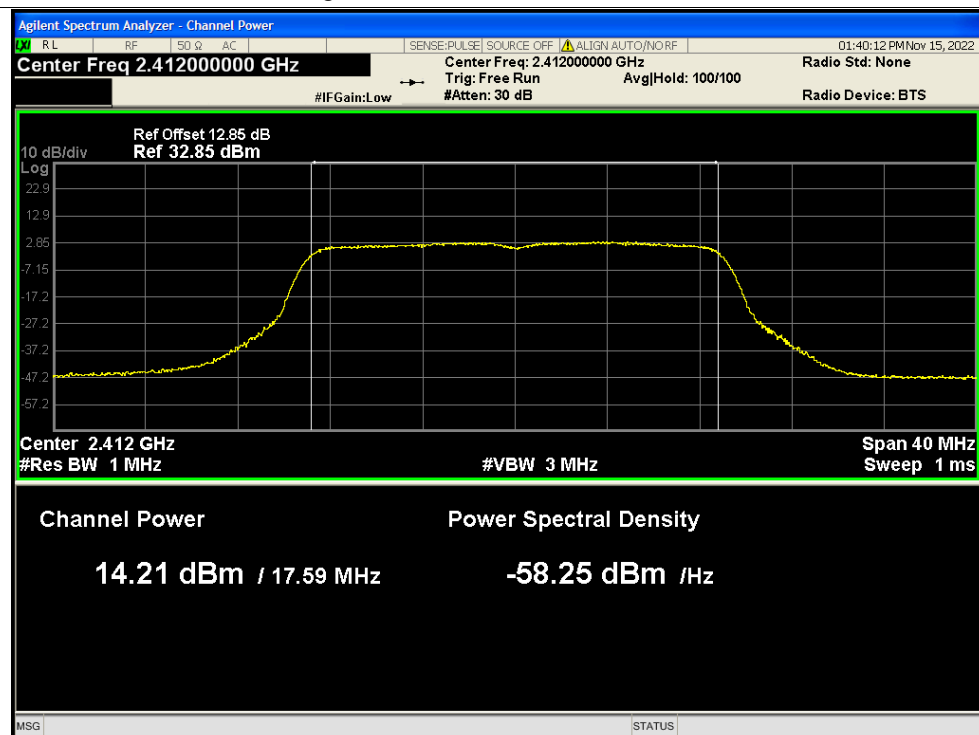




Average Power NVNT n20 2412MHz Ant3

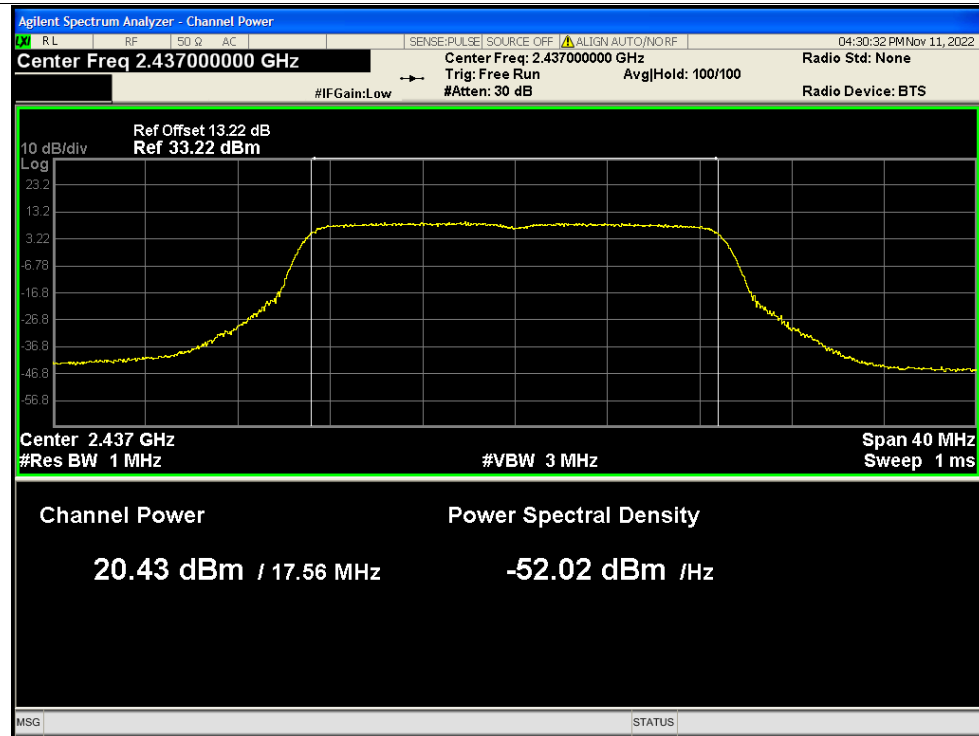


Average Power NVNT n20 2412MHz Ant4

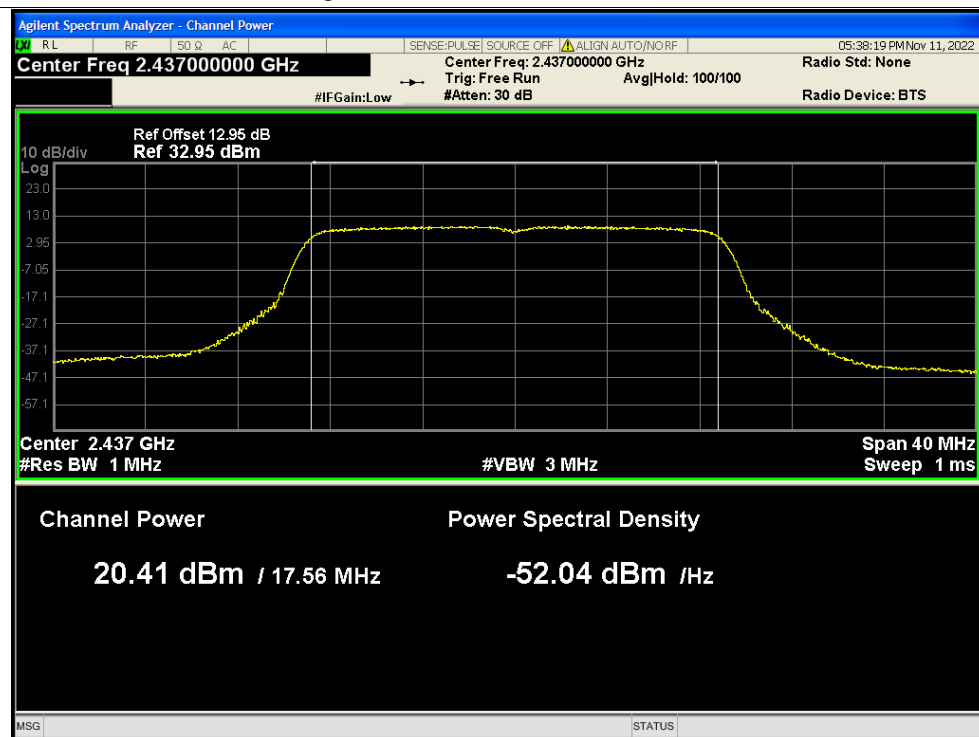




Average Power NVNT n20 2437MHz Ant1

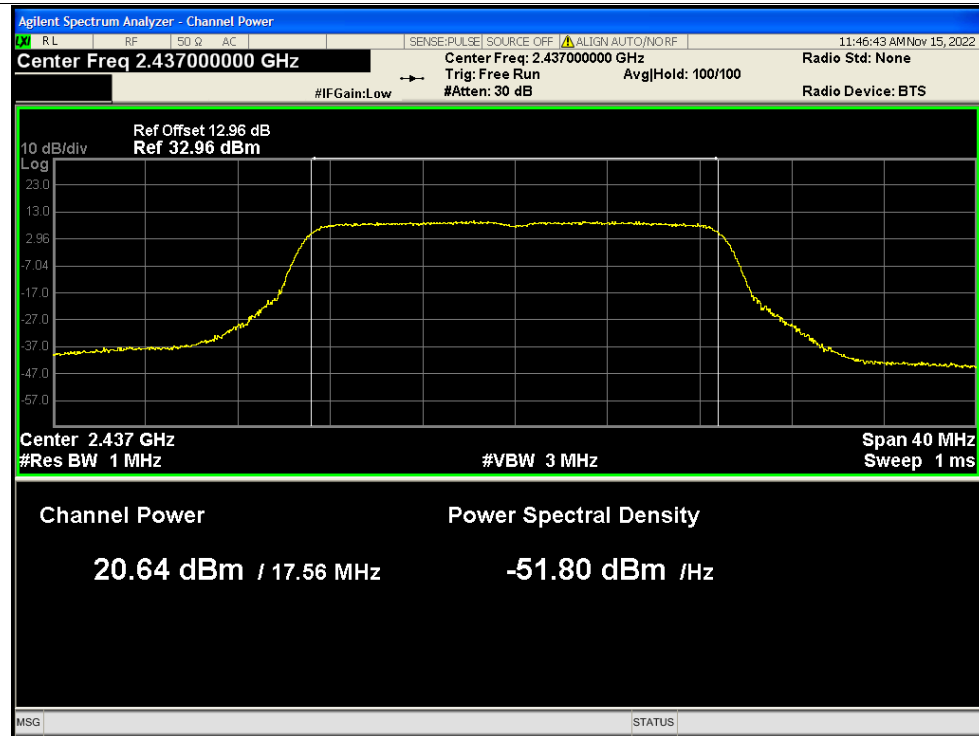


Average Power NVNT n20 2437MHz Ant2

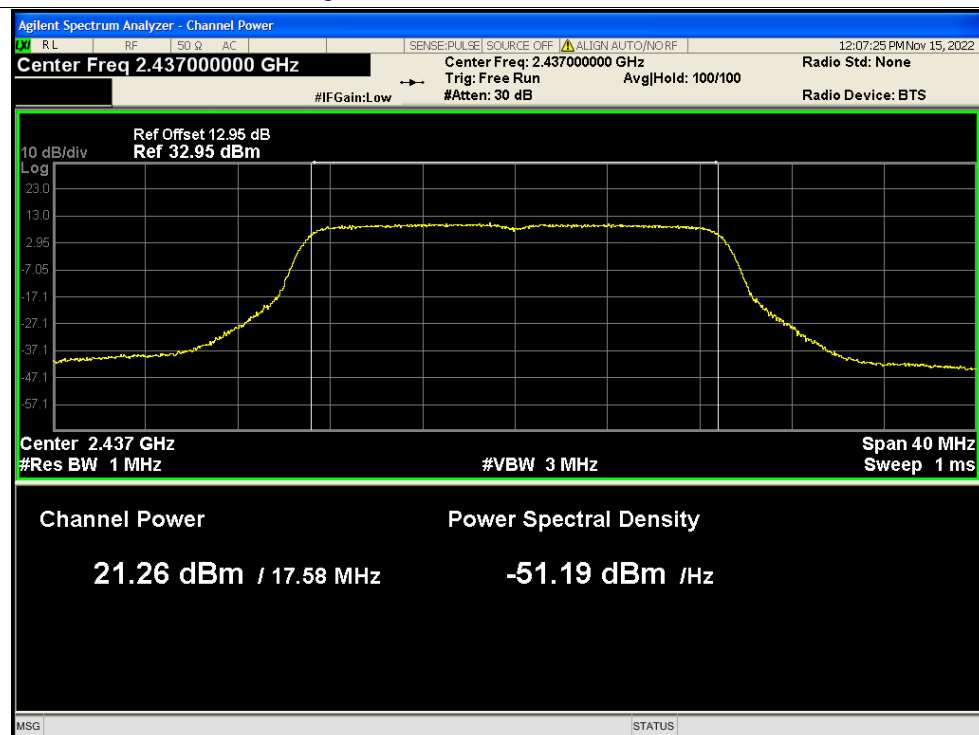




Average Power NVNT n20 2437MHz Ant3

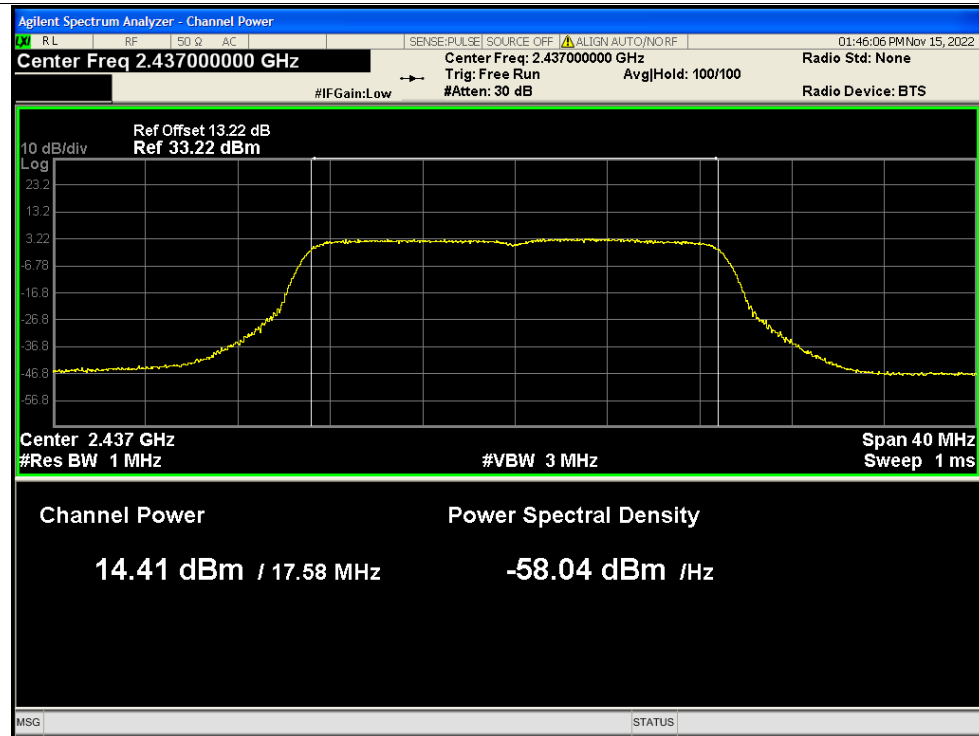


Average Power NVNT n20 2437MHz Ant4

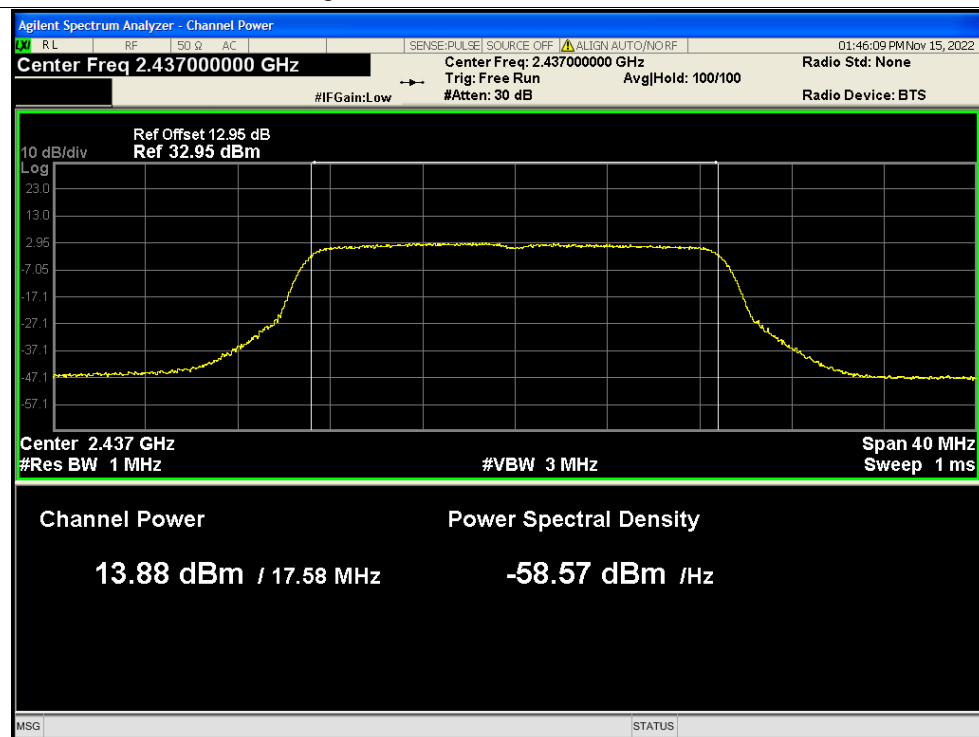




Average Power NVNT n20 2437MHz Ant1

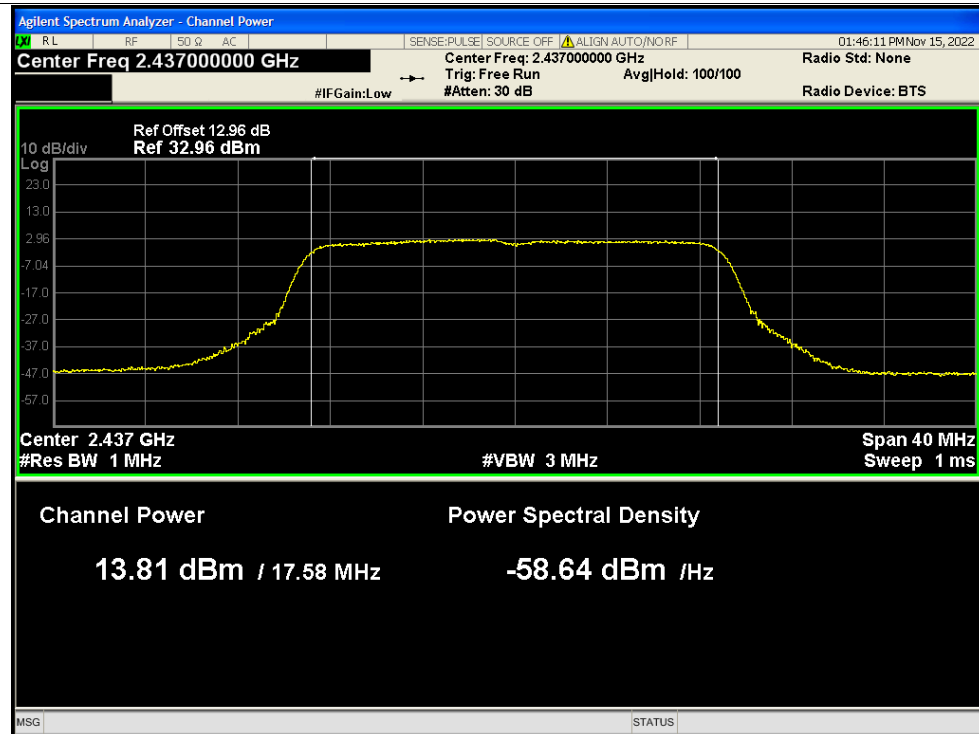


Average Power NVNT n20 2437MHz Ant2

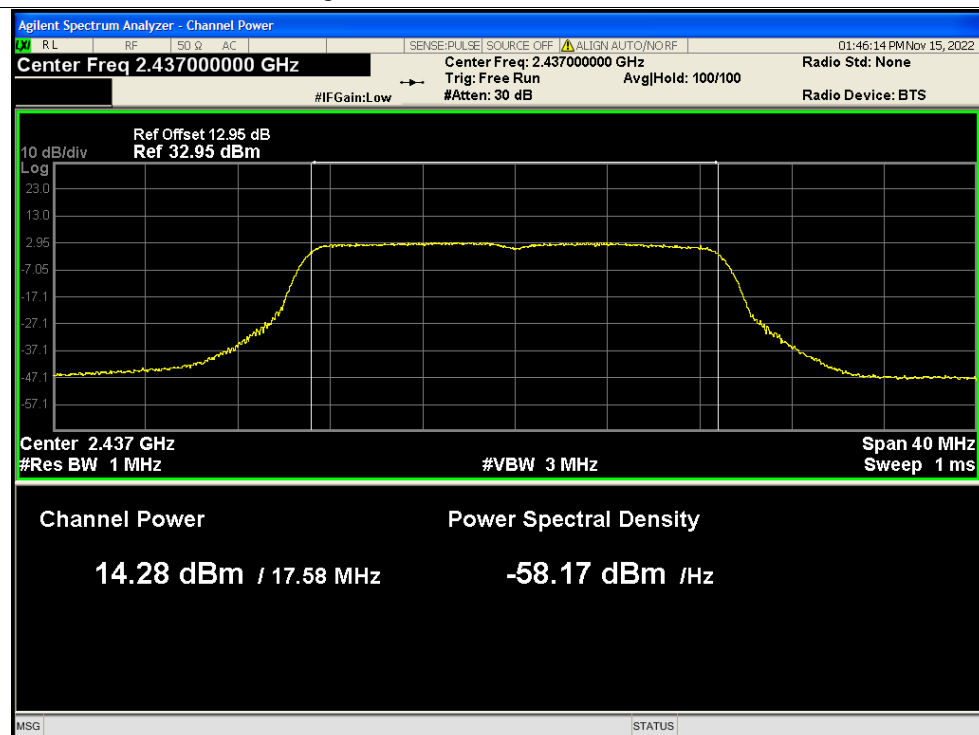




Average Power NVNT n20 2437MHz Ant3

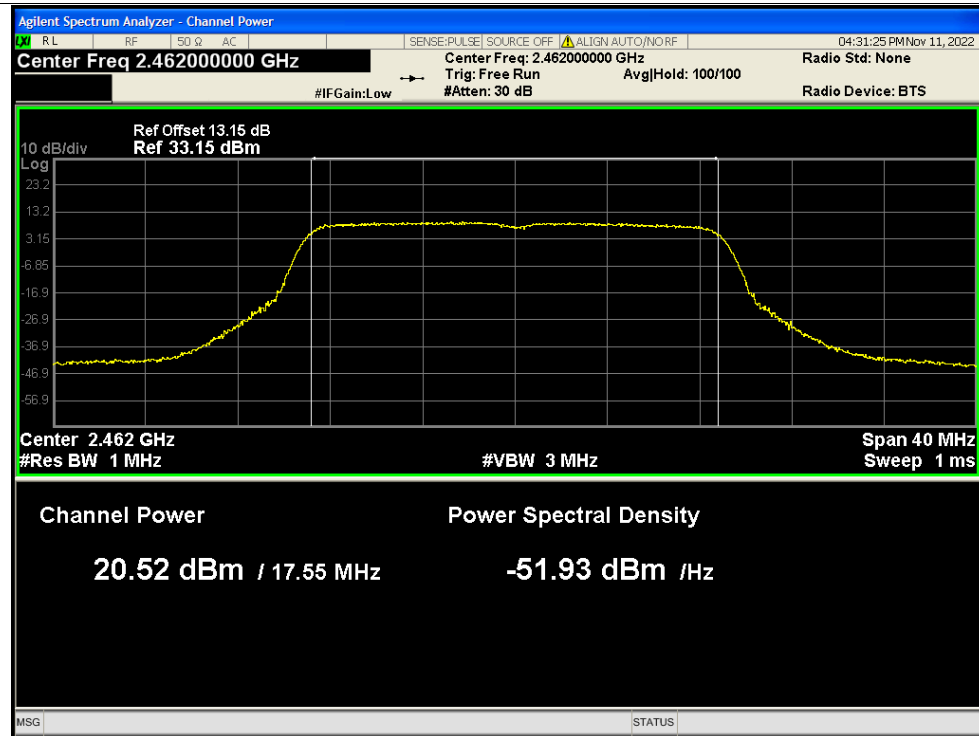


Average Power NVNT n20 2437MHz Ant4

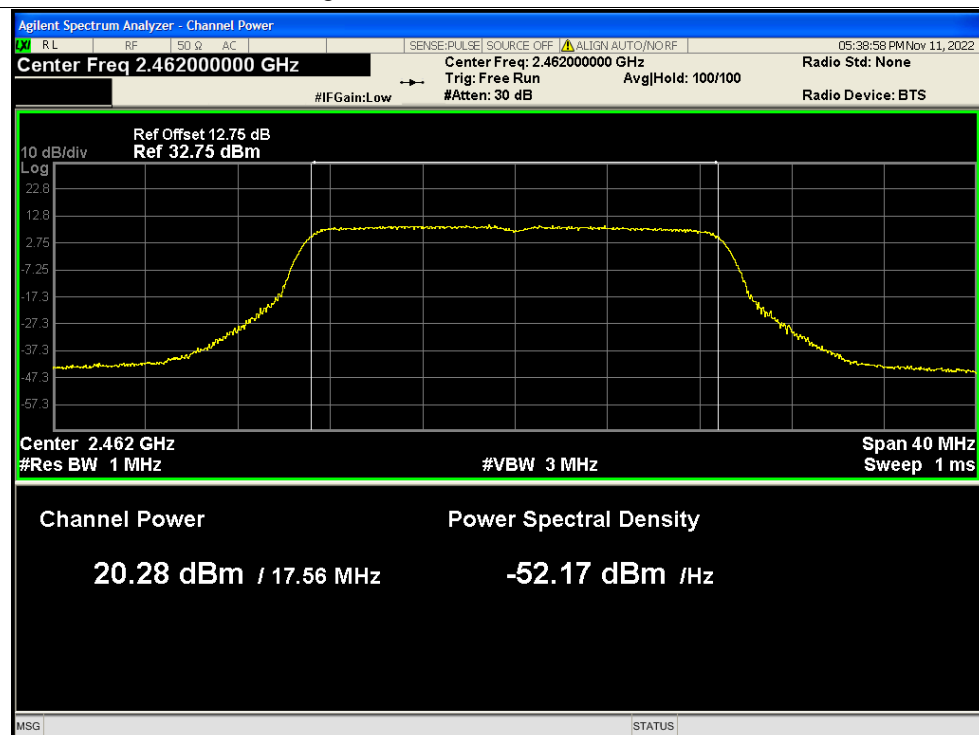




Average Power NVNT n20 2462MHz Ant1

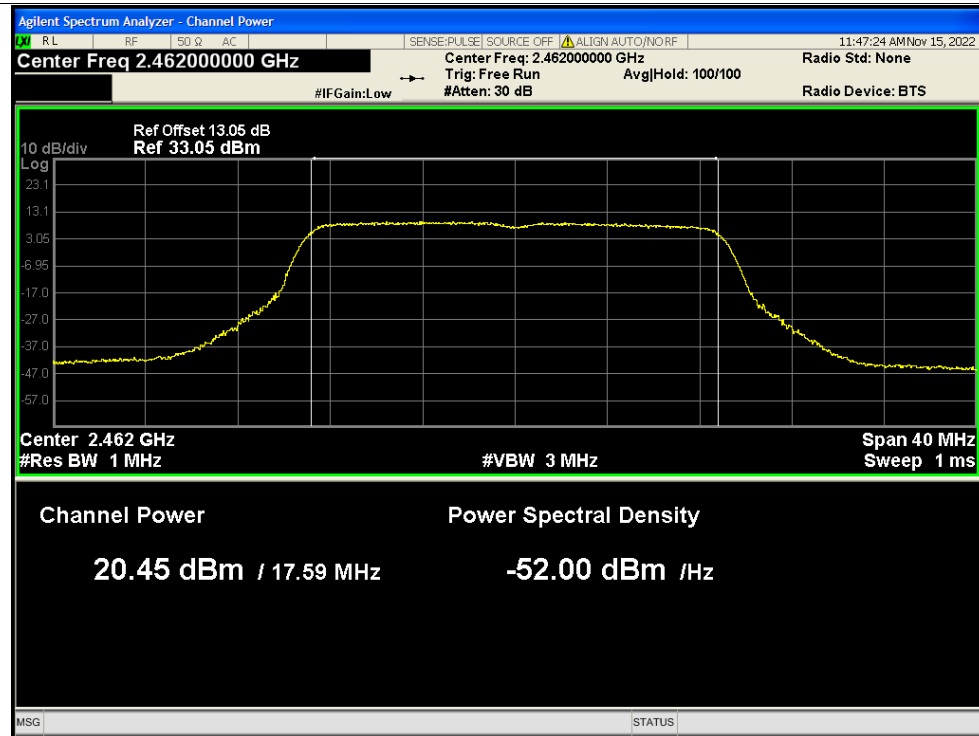


Average Power NVNT n20 2462MHz Ant2





Average Power NVNT n20 2462MHz Ant3



Average Power NVNT n20 2462MHz Ant4

