10.5 Test Result

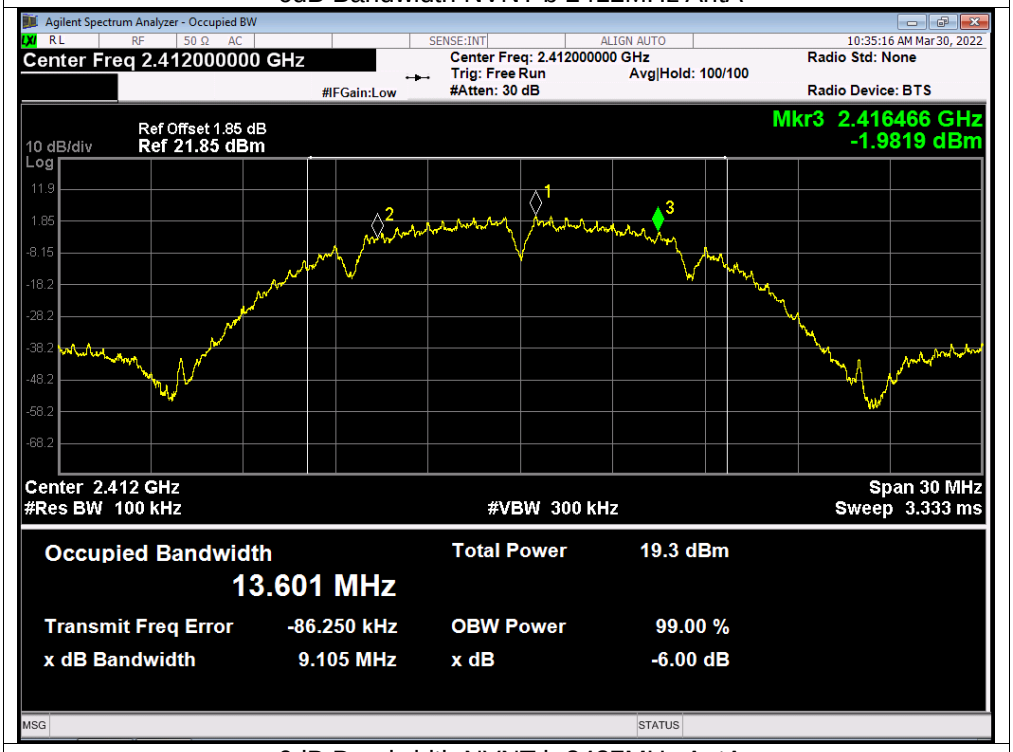
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz

Test Mode	Frequency (MHz)	Ant. A -6dB bandwidth (MHz)	Ant. B -6dB bandwidth (MHz)	Limit (kHz)	Result
TX b Mode	2412	9.105	9.092	500	Pass
	2437	9.089	9.067	500	Pass
	2462	9.109	9.100	500	Pass
TX g Mode	2412	16.481	16.414	500	Pass
	2437	16.439	16.432	500	Pass
	2462	16.528	16.417	500	Pass
TX n Mode(20M)	2412	17.581	17.591	500	Pass
	2437	17.617	17.604	500	Pass
	2462	17.610	17.594	500	Pass
TX n Mode(40M)	2422	36.394	36.436	500	Pass
	2437	36.455	36.418	500	Pass
	2452	36.467	36.431	500	Pass

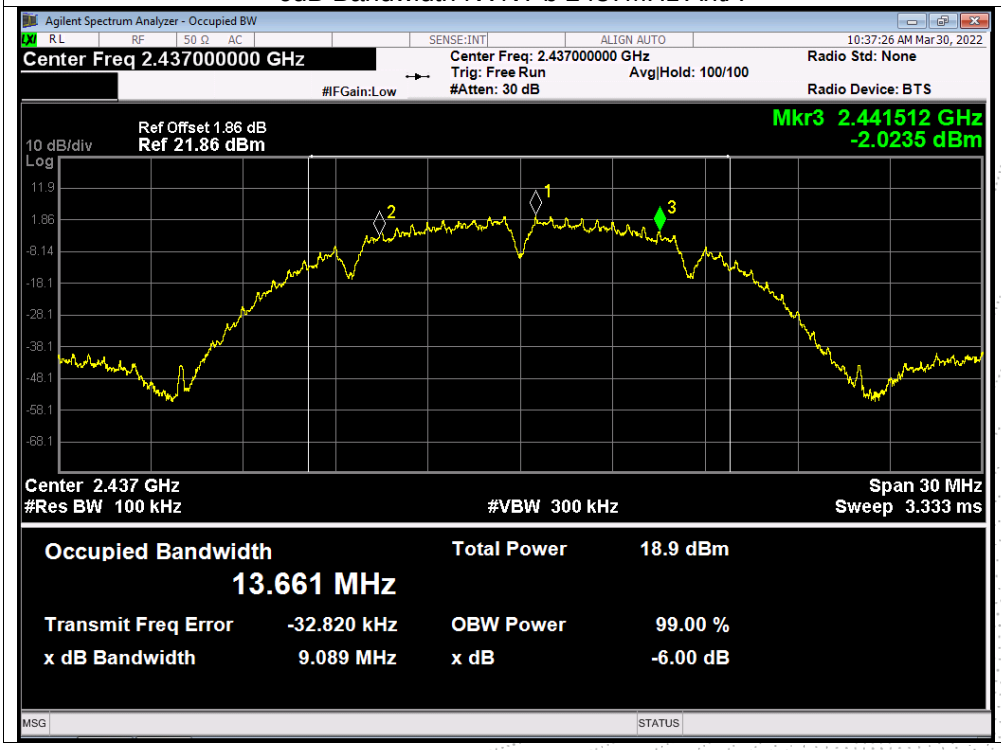
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs

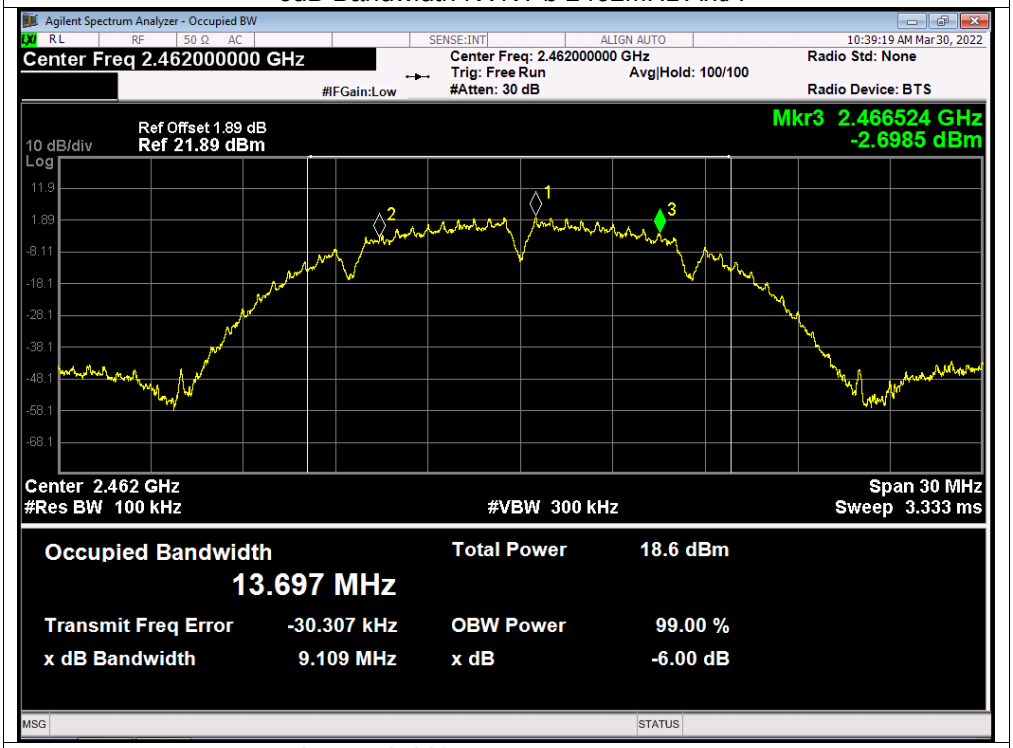
-6dB Bandwidth NVNT b 2412MHz AntA



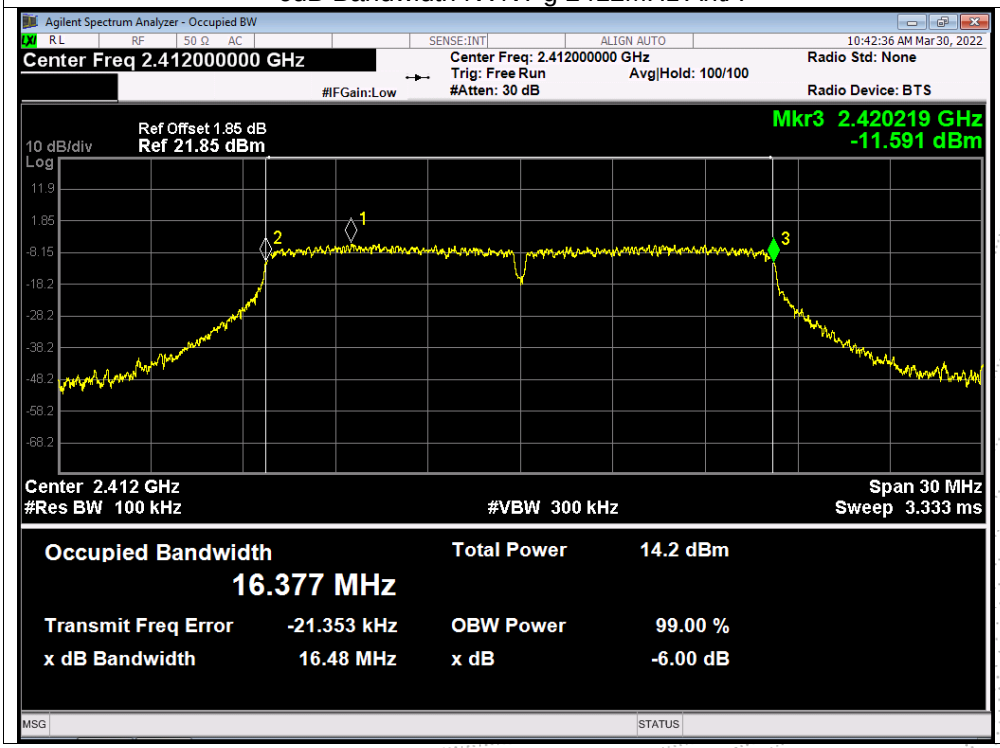
-6dB Bandwidth NVNT b 2437MHz AntA



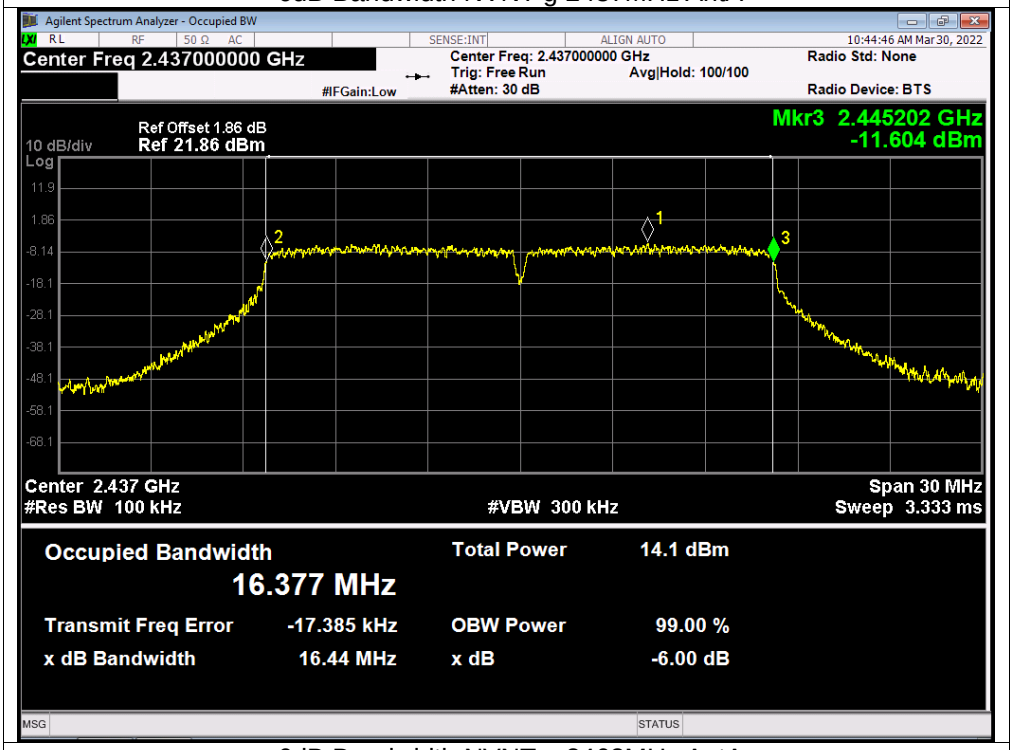
-6dB Bandwidth NVNT b 2462MHz AntA



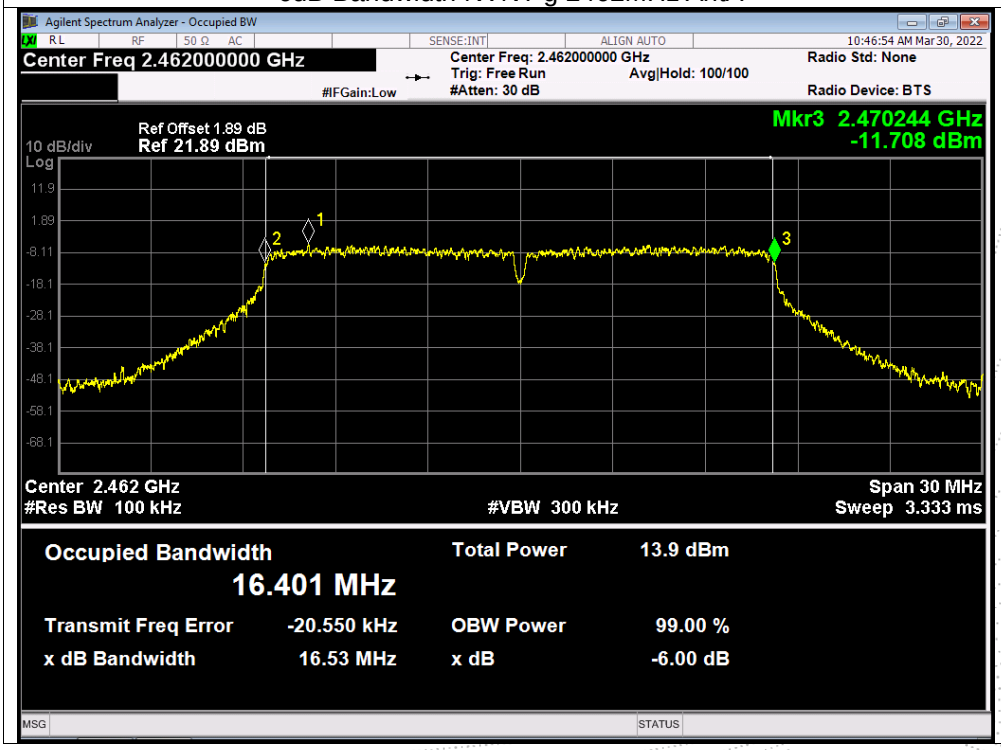
-6dB Bandwidth NVNT g 2412MHz AntA



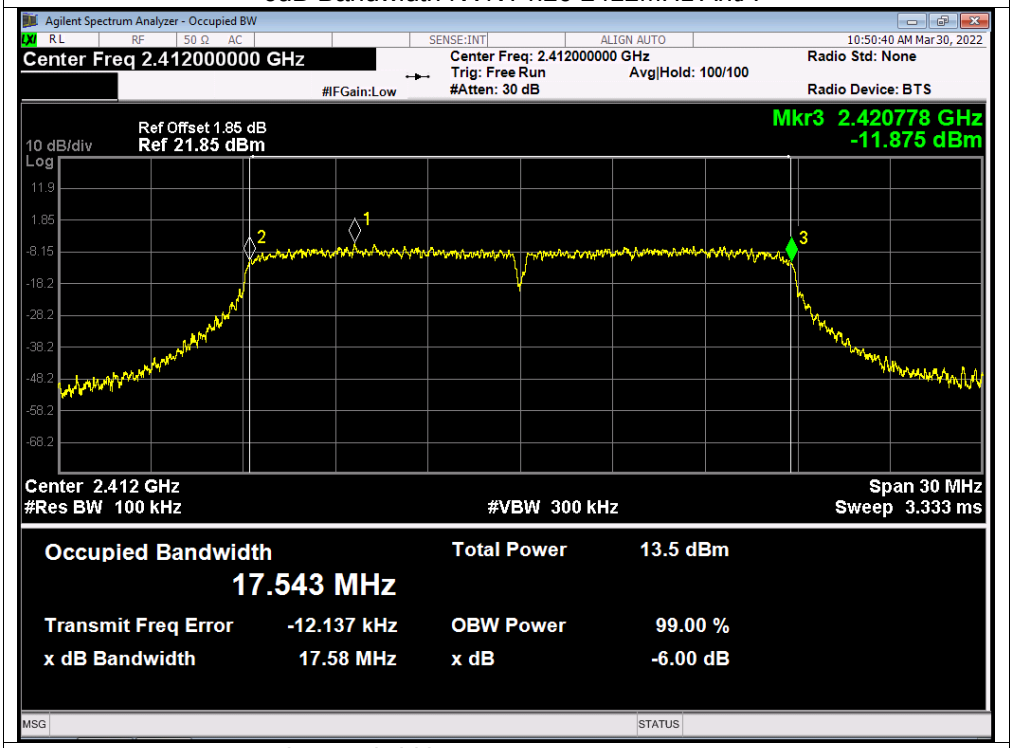
-6dB Bandwidth NVNT g 2437MHz AntA



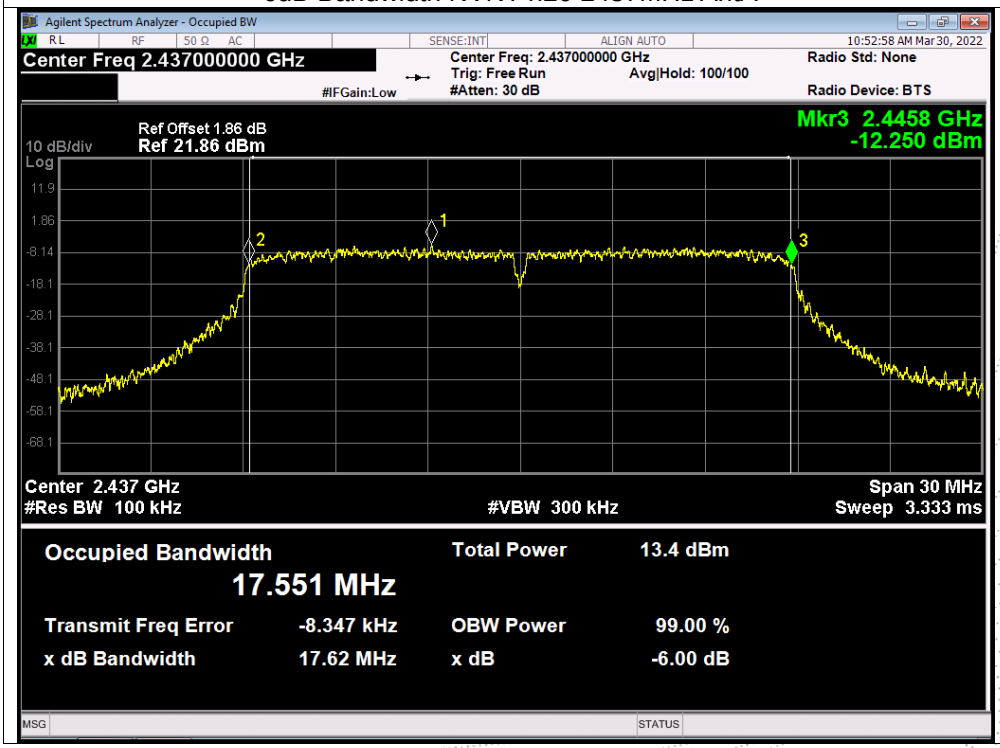
-6dB Bandwidth NVNT g 2462MHz AntA



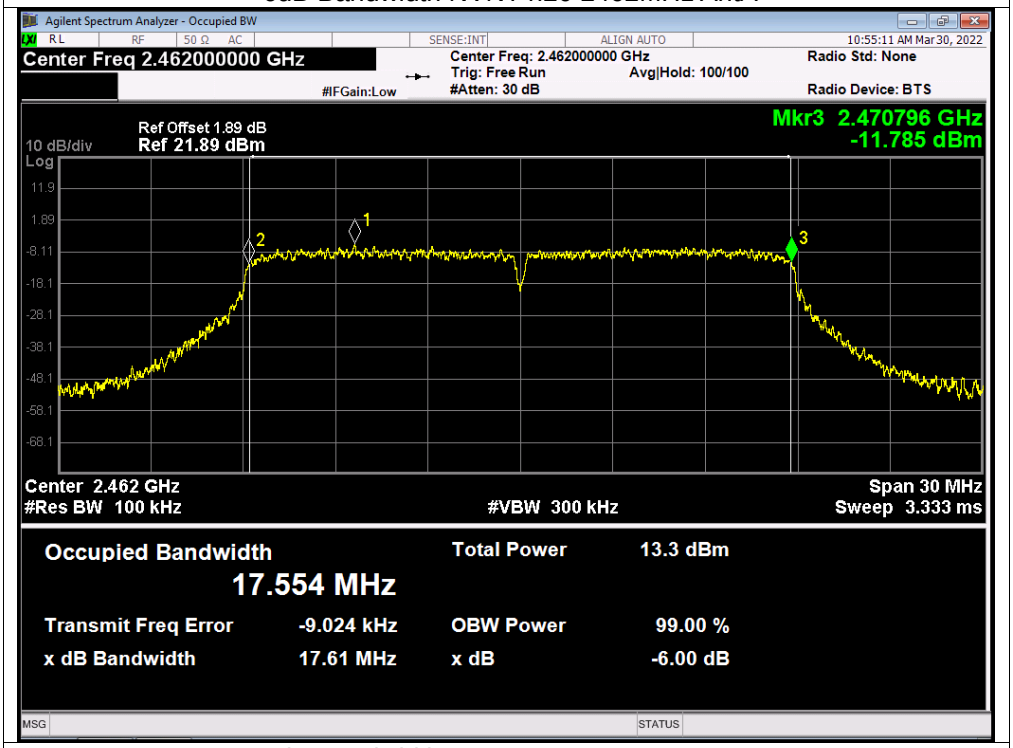
-6dB Bandwidth NVNT n20 2412MHz AntA



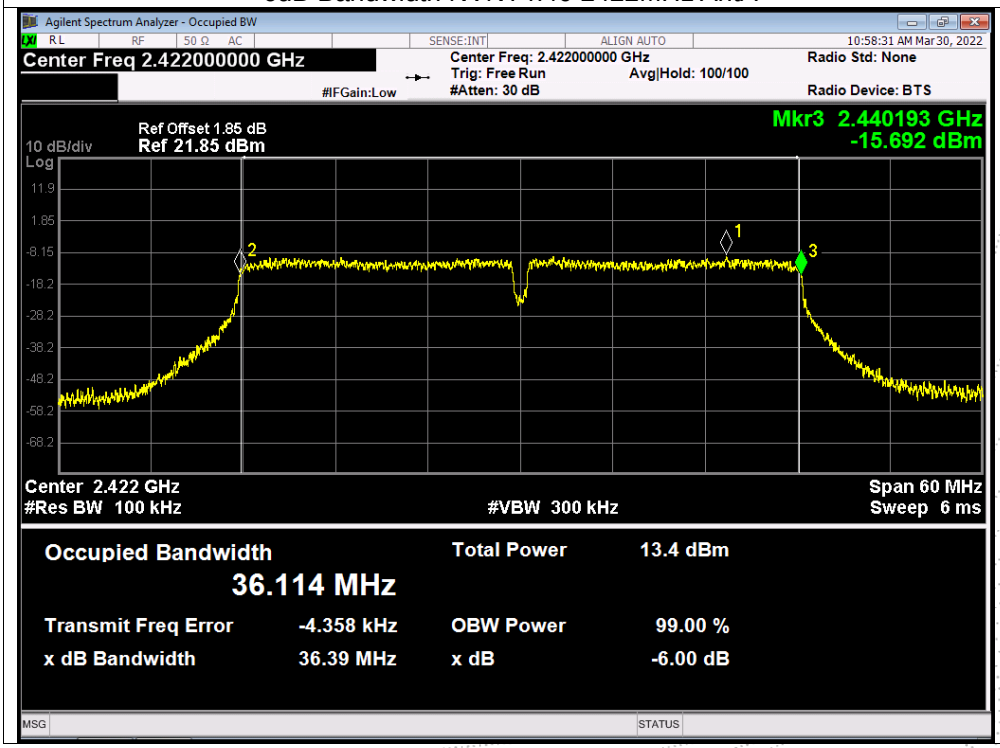
-6dB Bandwidth NVNT n20 2437MHz AntA



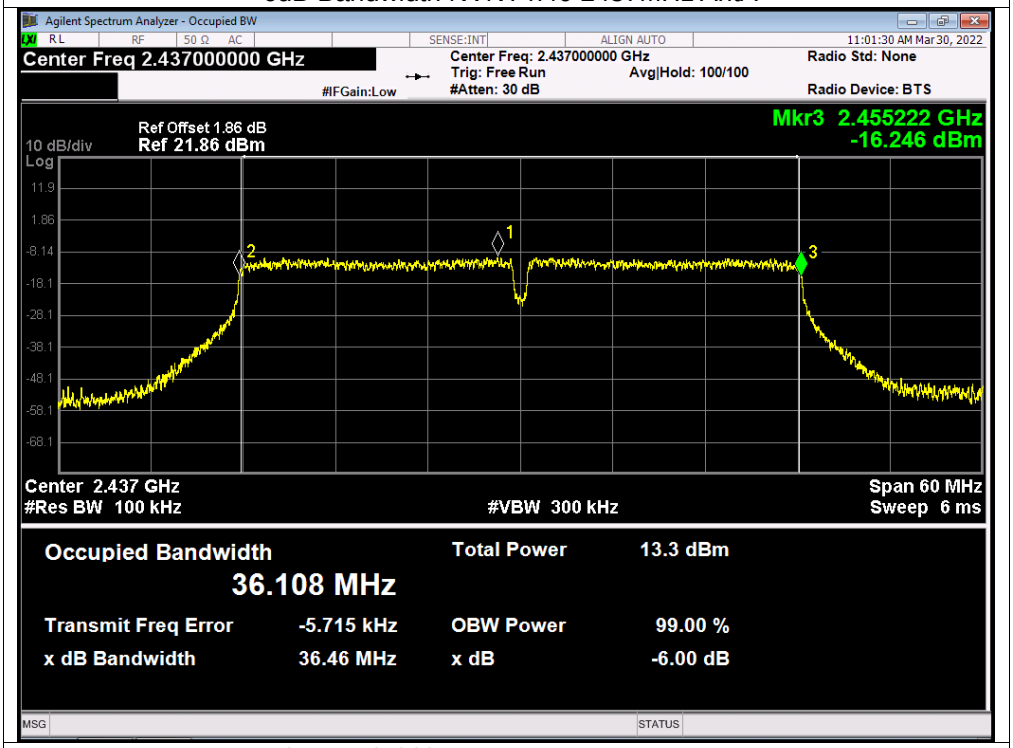
-6dB Bandwidth NVNT n20 2462MHz AntA



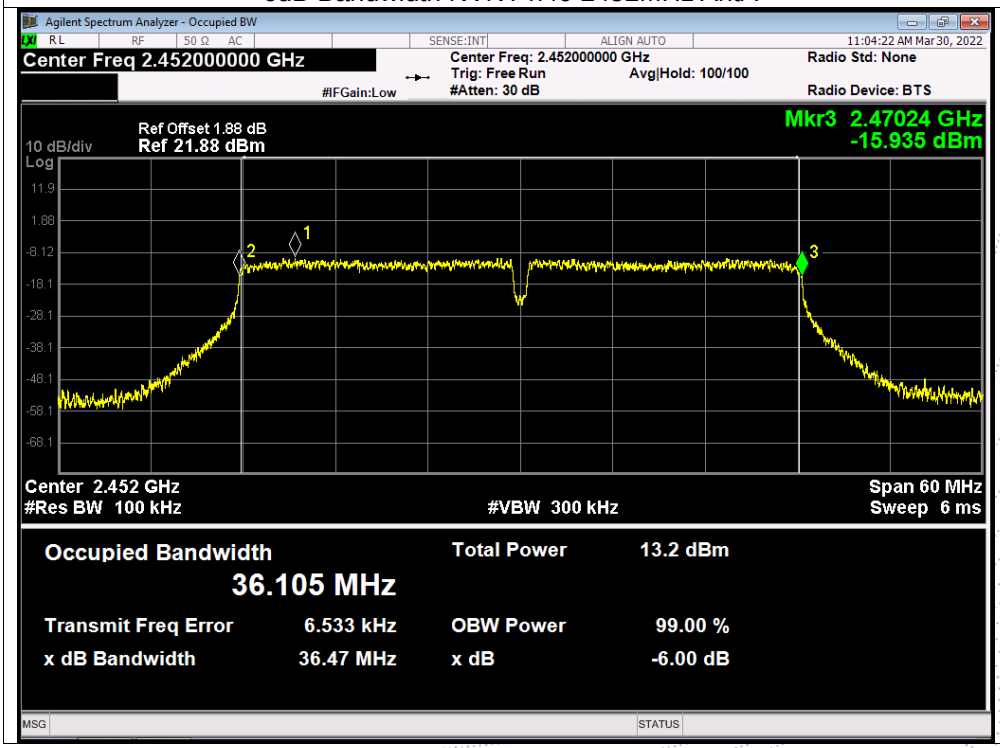
-6dB Bandwidth NVNT n40 2422MHz AntA



-6dB Bandwidth NVNT n40 2437MHz AntA

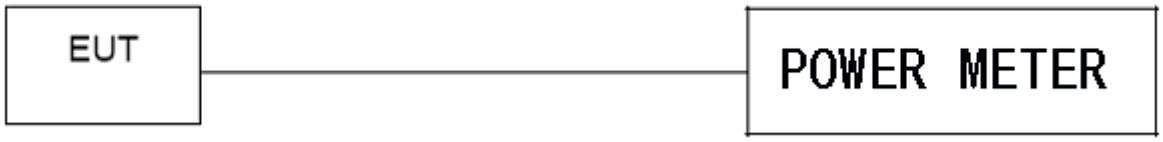


-6dB Bandwidth NVNT n40 2452MHz AntA



11. Peak Output Power Test

11.1 Block Diagram Of Test Setup



11.2 Limit

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

11.3 Test Procedure

a. The EUT was directly connected to the Power meter

11.4 EUT Operating Conditions

The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.
Note: Power Spectral Density(dBm)=Reading+Cable Loss

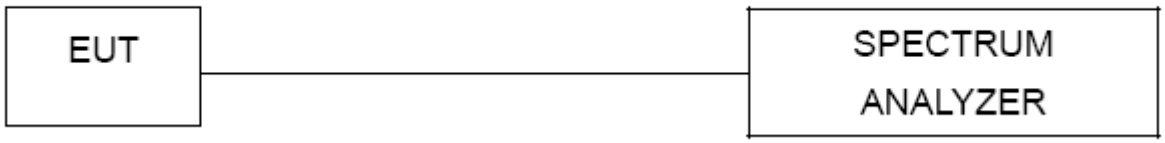
11.5 Test Result

Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC120V/60Hz

Test Mode	Frequency(MHz)	Ant A Maximum Conducted Output Power(PK) (dBm)	Ant B Maximum Conducted Output Power(PK) (dBm)	Total Power Conducted Output Power(PK) (dBm)	Limit (dBm)
802.11b	2412	14.50	13.05	/	30
	2437	14.12	12.95	/	30
	2462	13.73	12.83	/	30
802.11g	2412	13.18	12.17	/	30
	2437	13.07	12.20	/	30
	2462	12.90	12.03	/	30
802.11n20	2412	12.84	11.41	15.19	30
	2437	12.71	11.21	15.03	30
	2462	12.56	11.10	14.90	30
802.11n40	2422	12.20	10.37	14.39	30
	2437	12.14	10.31	14.33	30
	2452	12.08	10.34	14.31	30

12. 100 kHz Bandwidth Of Frequency Band Edge

12.1 Block Diagram Of Test Setup



12.2 Limit

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

12.3 Test Procedure

Using the following spectrum analyzer setting:
a) Set the RBW = 100KHz.
b) Set the VBW = 300KHz.
c) Sweep time = auto couple.
d) Detector function = peak.
e) Trace mode = max hold.
f) Allow trace to fully stabilize..

12.4 EUT Operating Conditions

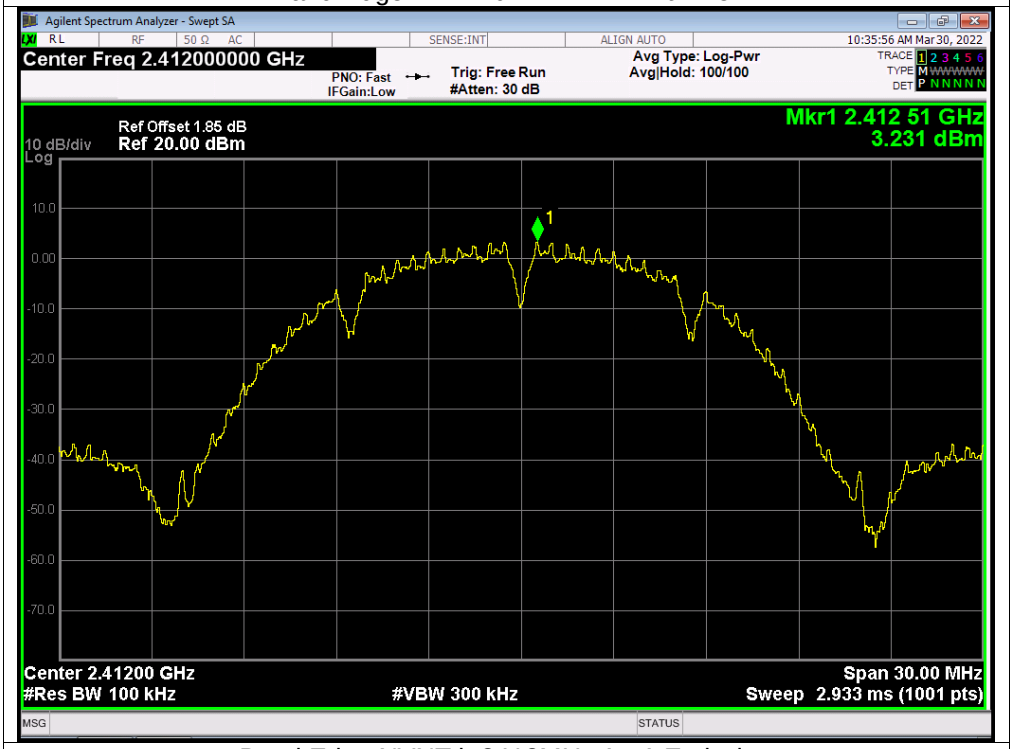
The EUT tested system was configured as the statements of 4.6 Unless otherwise a special operating condition is specified in the follows during the testing.
Note: Power Spectral Density(dBm)=Reading+Cable Loss

12.5 Test Result

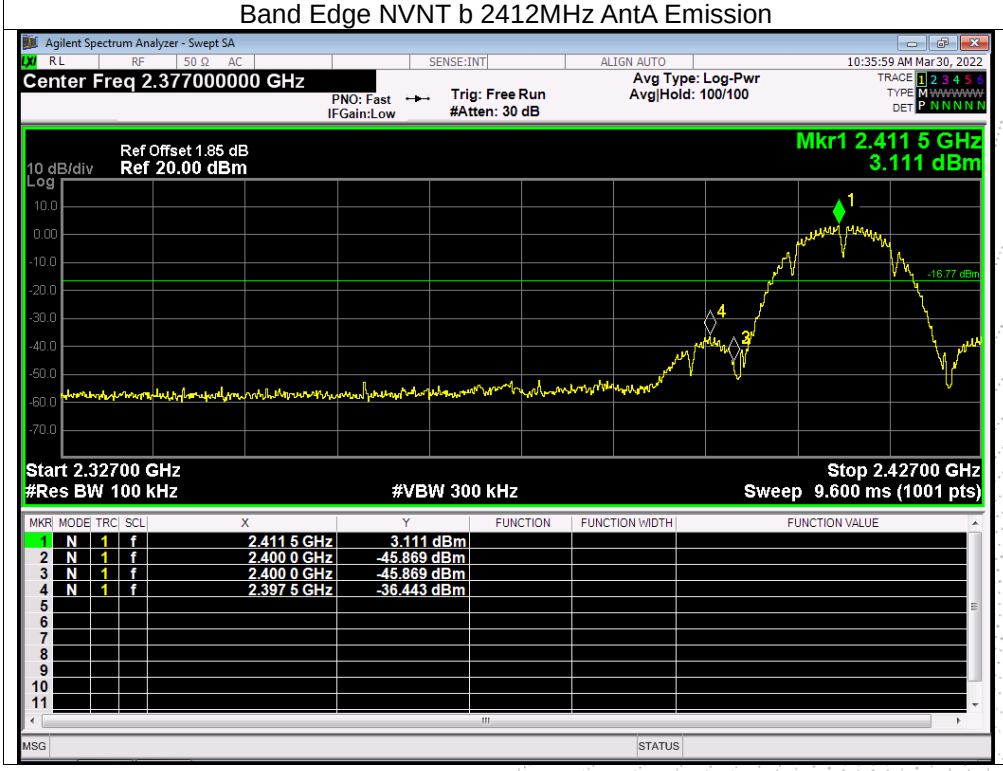
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

Test Graphs

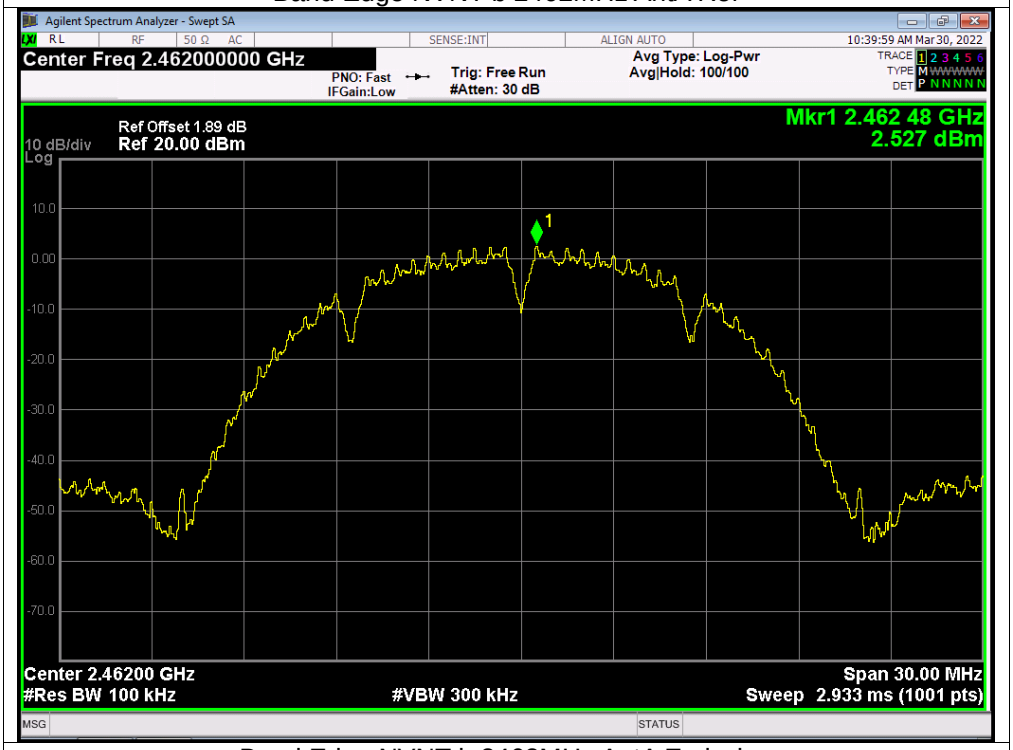
Band Edge NVNT b 2412MHz AntA Ref



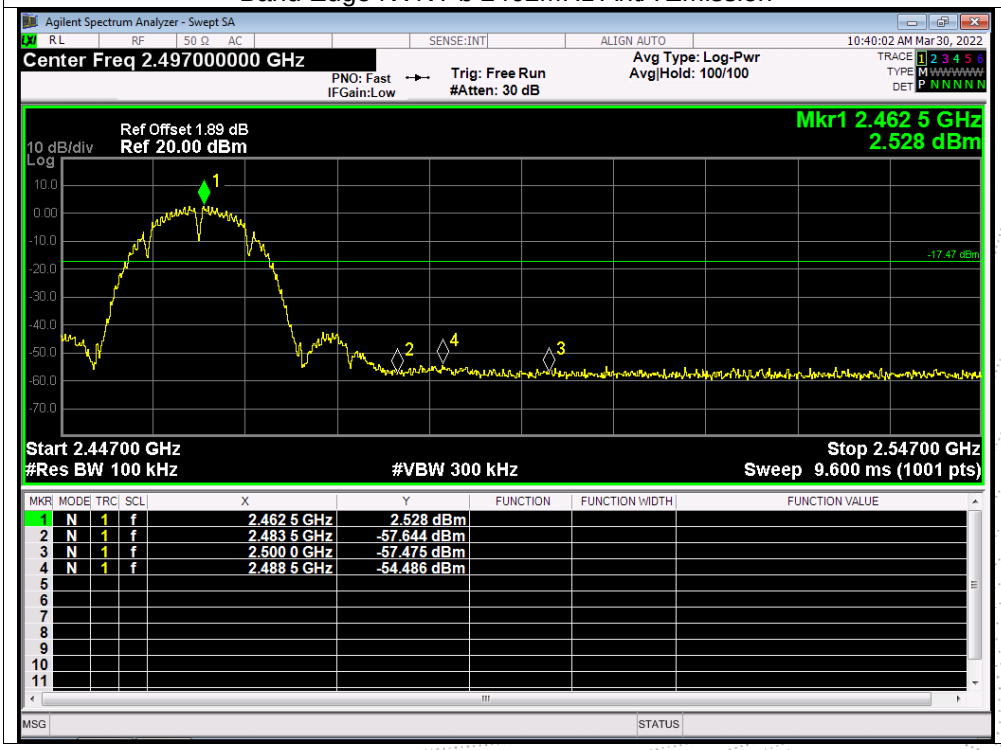
Band Edge NVNT b 2412MHz AntA Emission



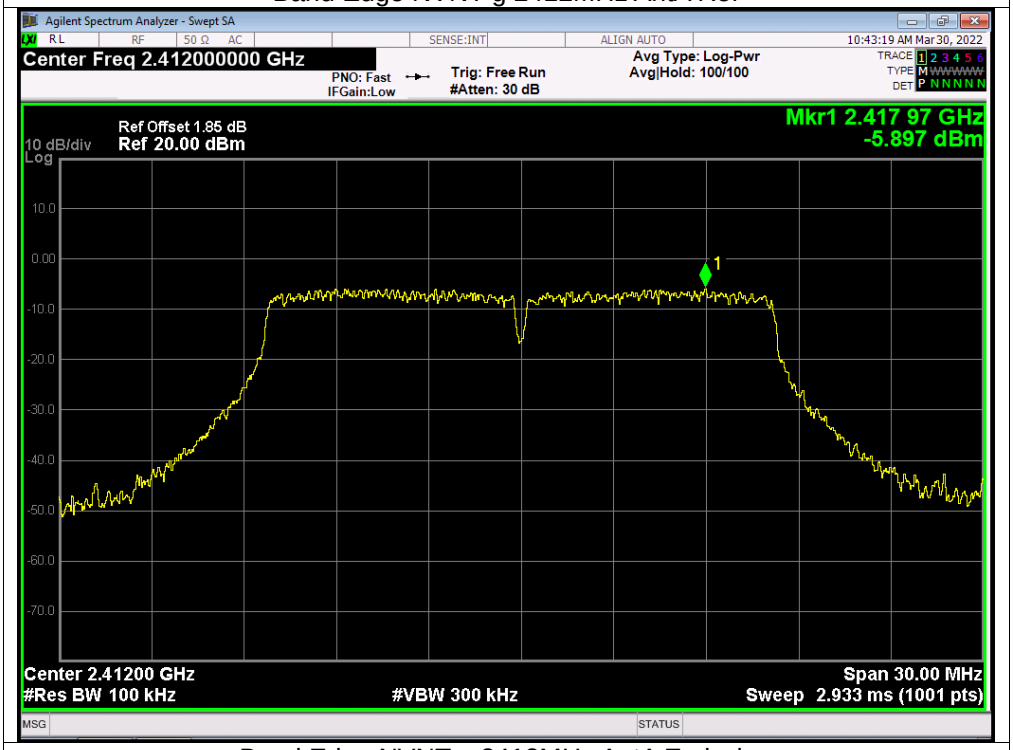
Band Edge NVNT b 2462MHz AntA Ref



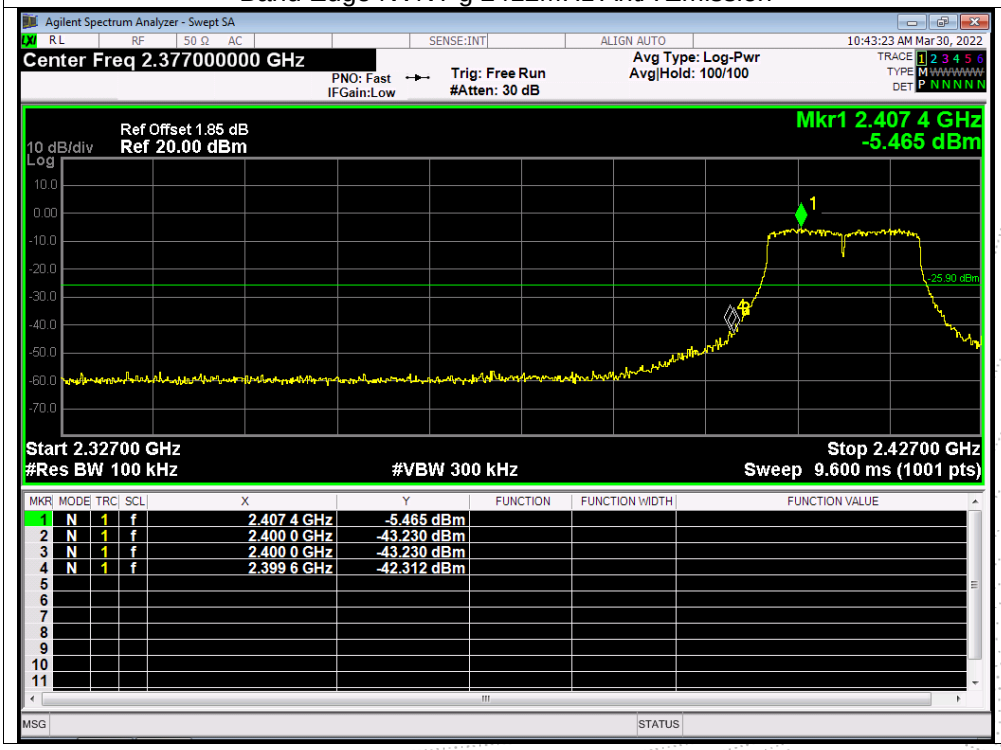
Band Edge NVNT b 2462MHz AntA Emission



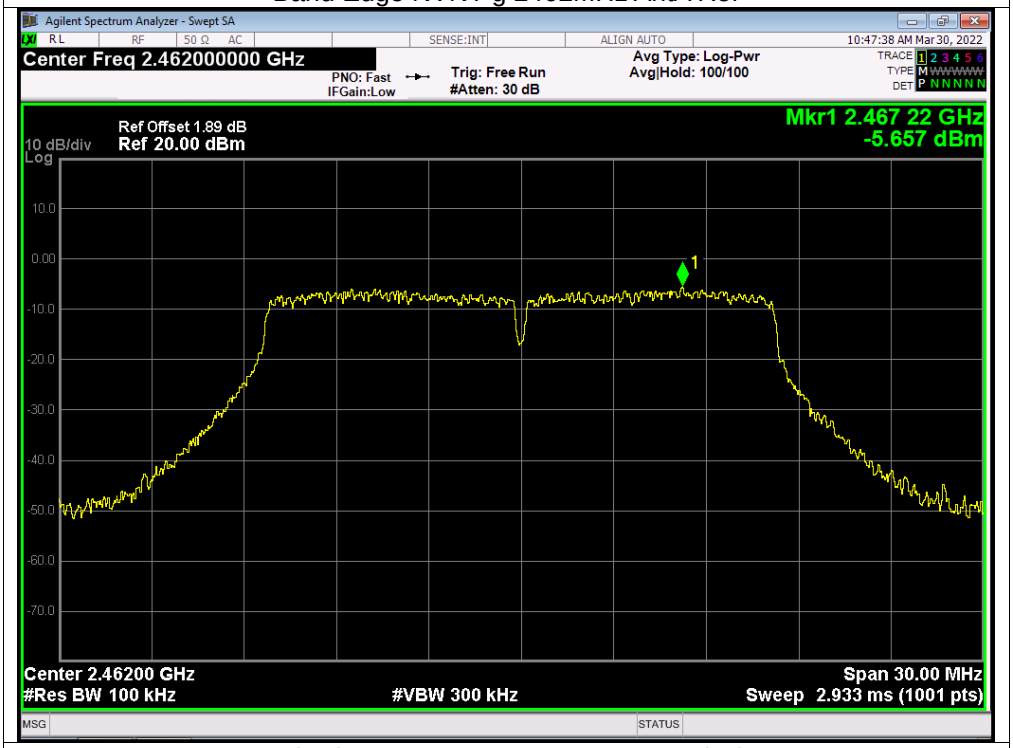
Band Edge NVNT g 2412MHz AntA Ref



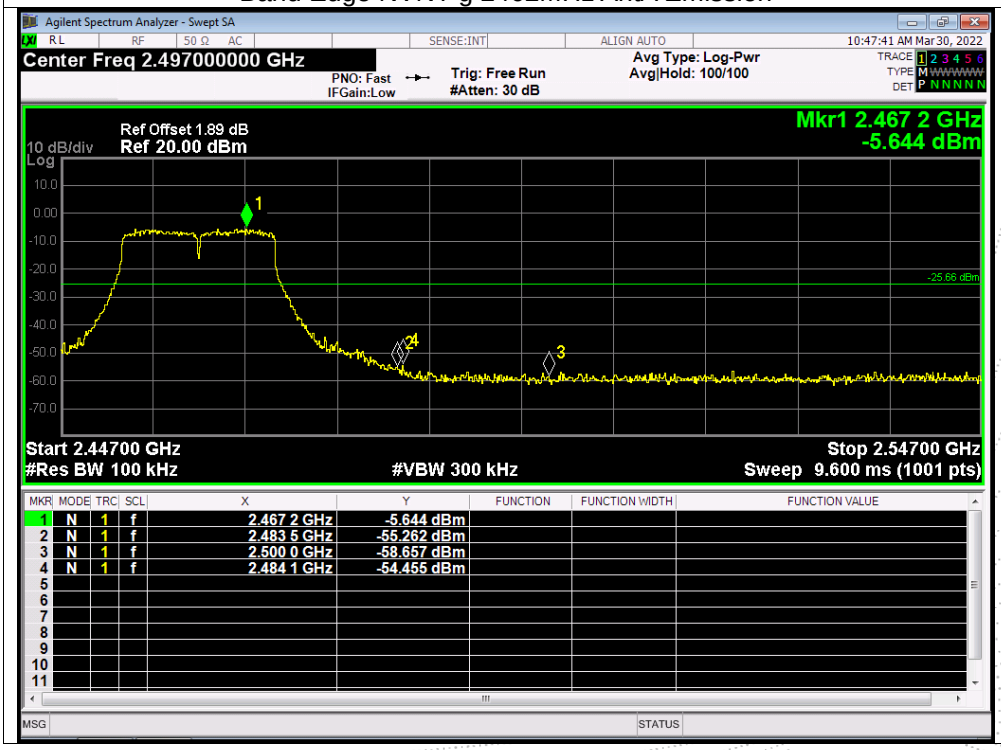
Band Edge NVNT g 2412MHz AntA Emission



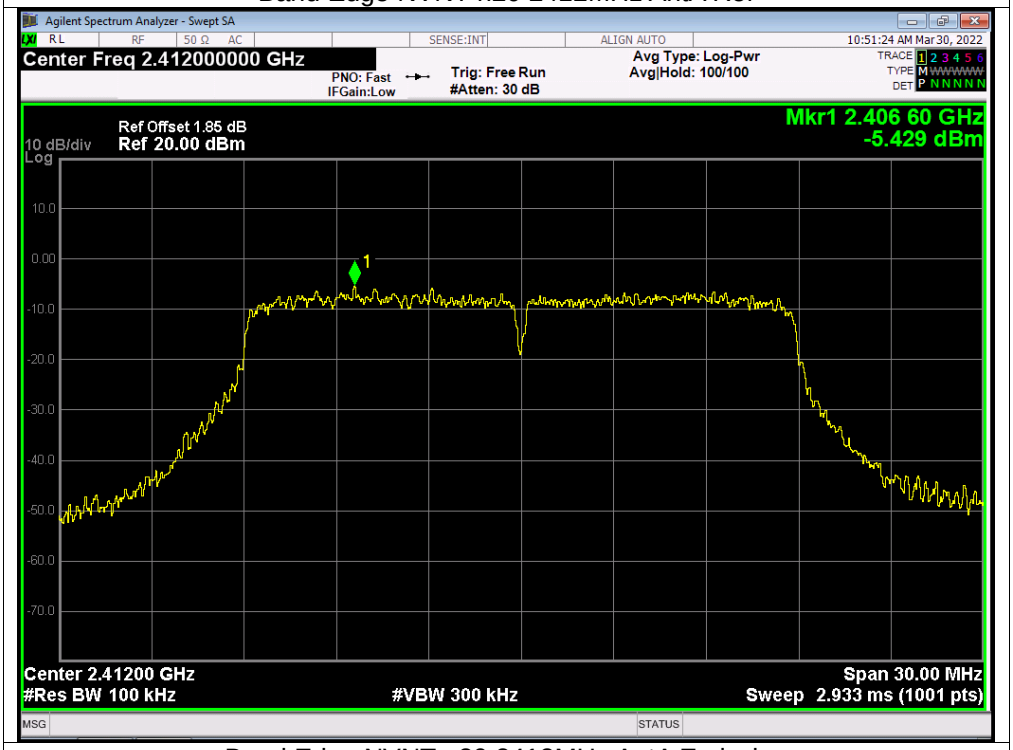
Band Edge NVNT g 2462MHz AntA Ref



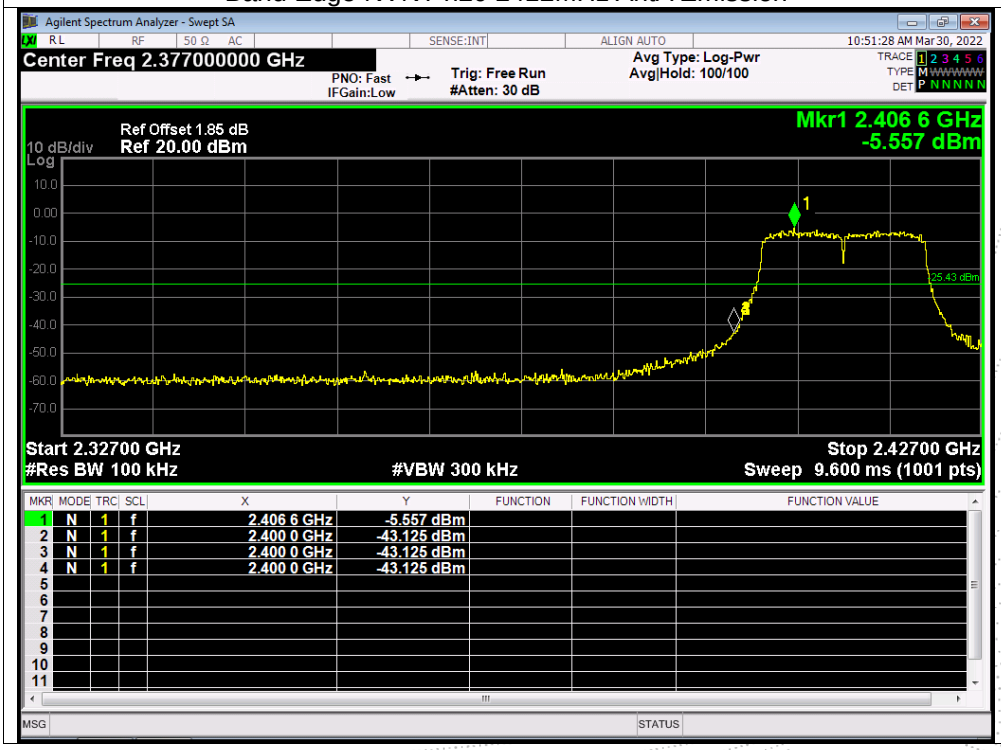
Band Edge NVNT g 2462MHz AntA Emission



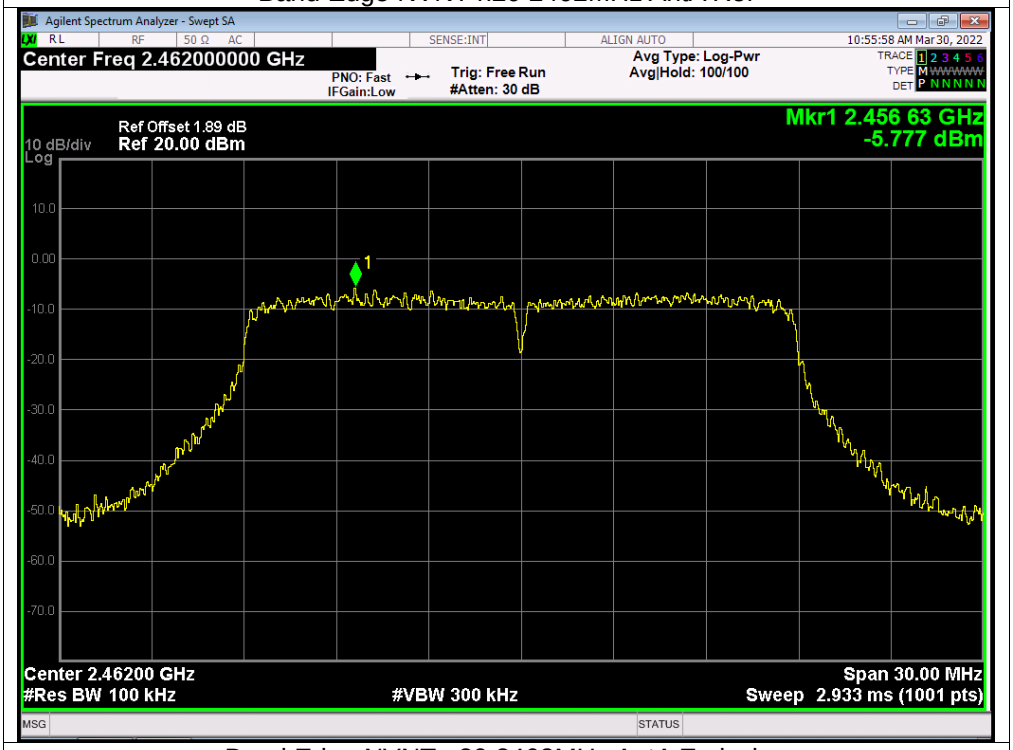
Band Edge NVNT n20 2412MHz AntA Ref



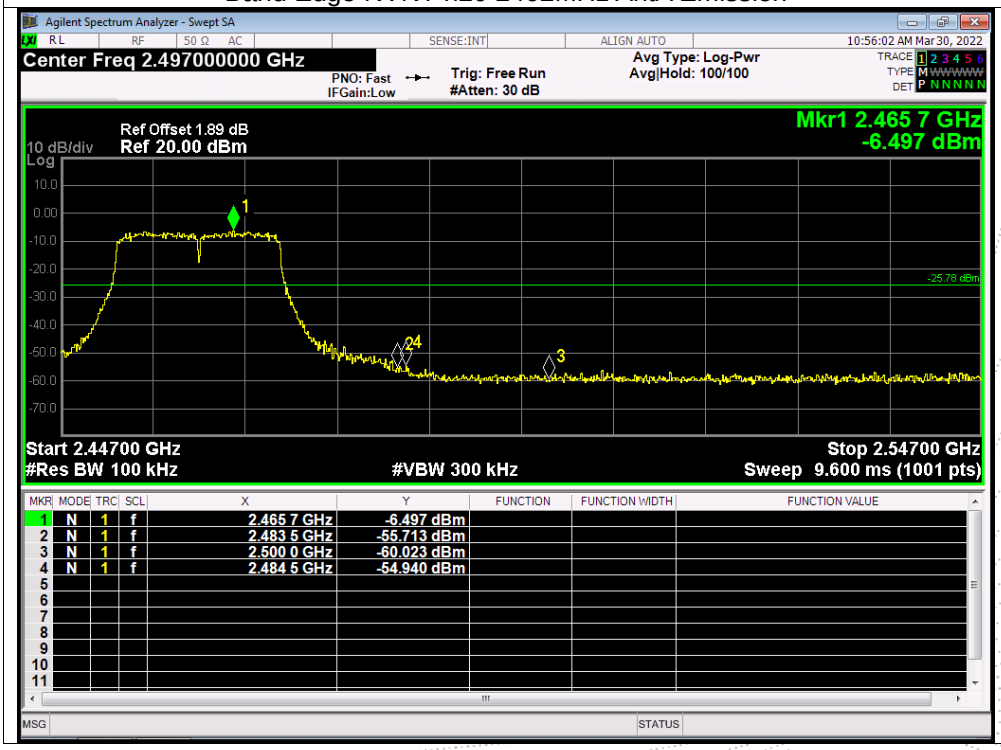
Band Edge NVNT n20 2412MHz AntA Emission



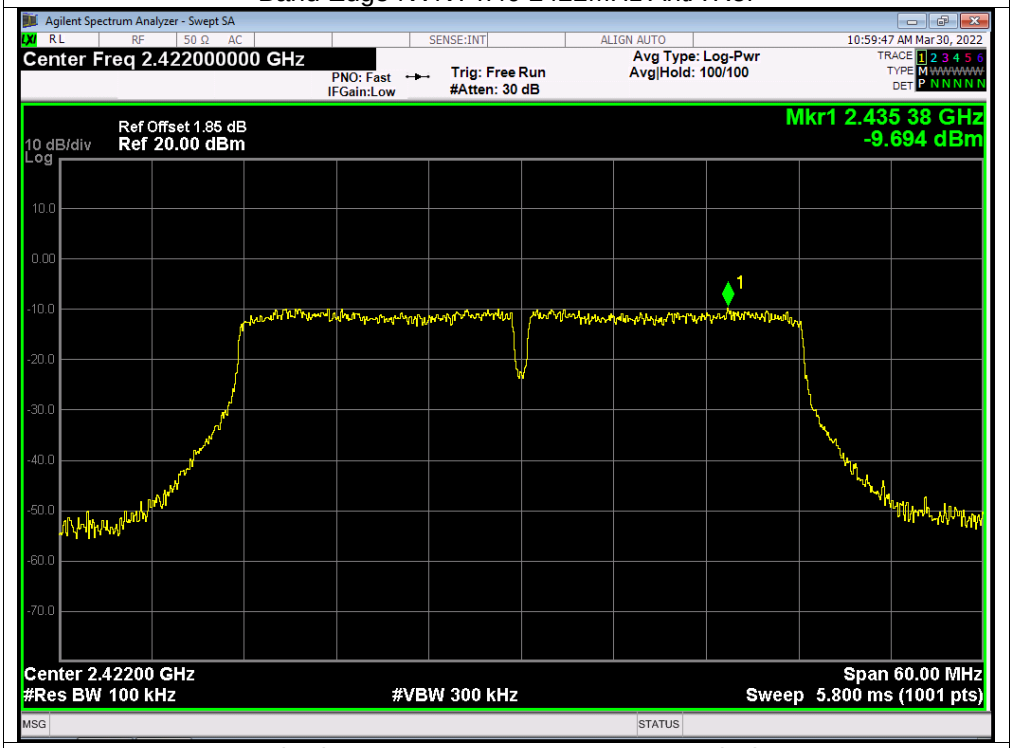
Band Edge NVNT n20 2462MHz AntA Ref



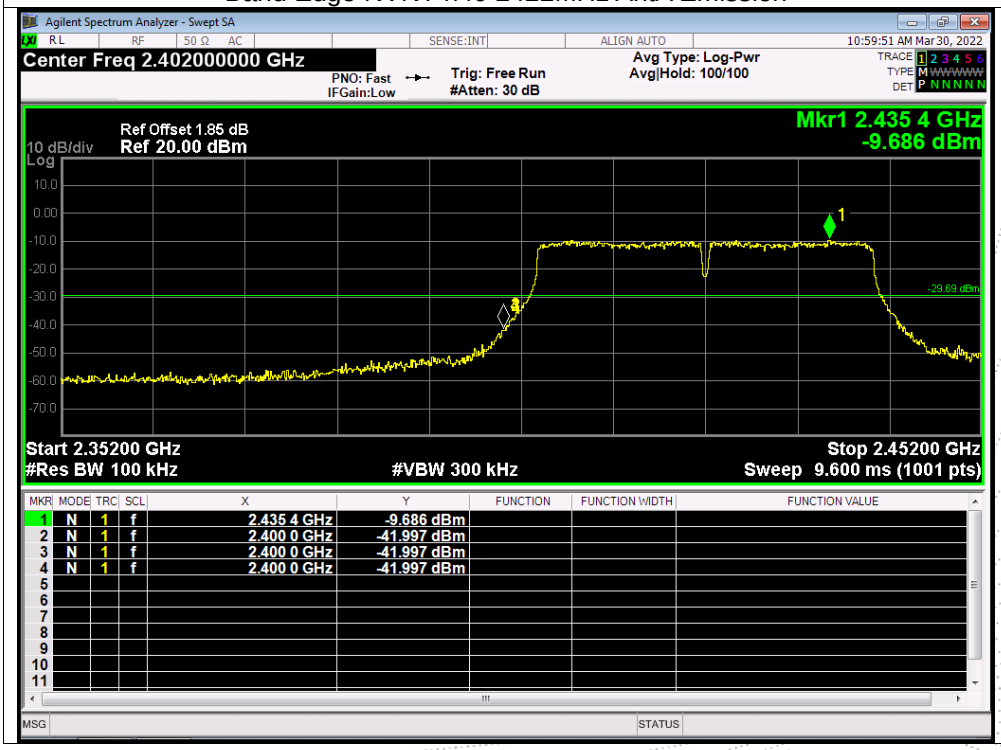
Band Edge NVNT n20 2462MHz AntA Emission



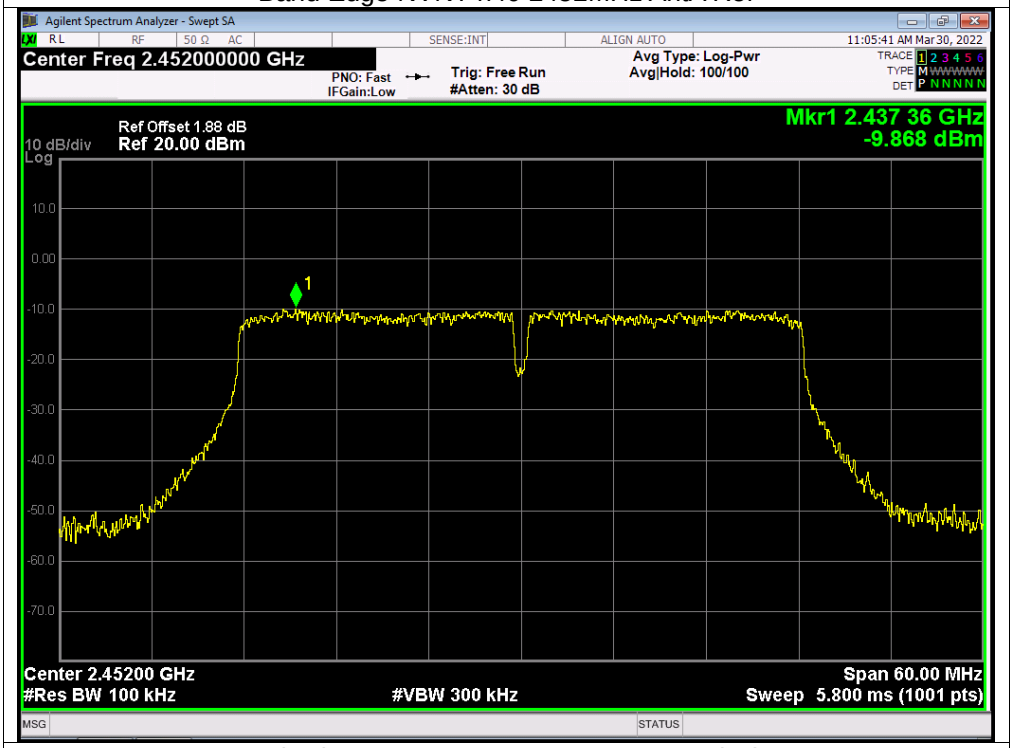
Band Edge NVNT n40 2422MHz AntA Ref



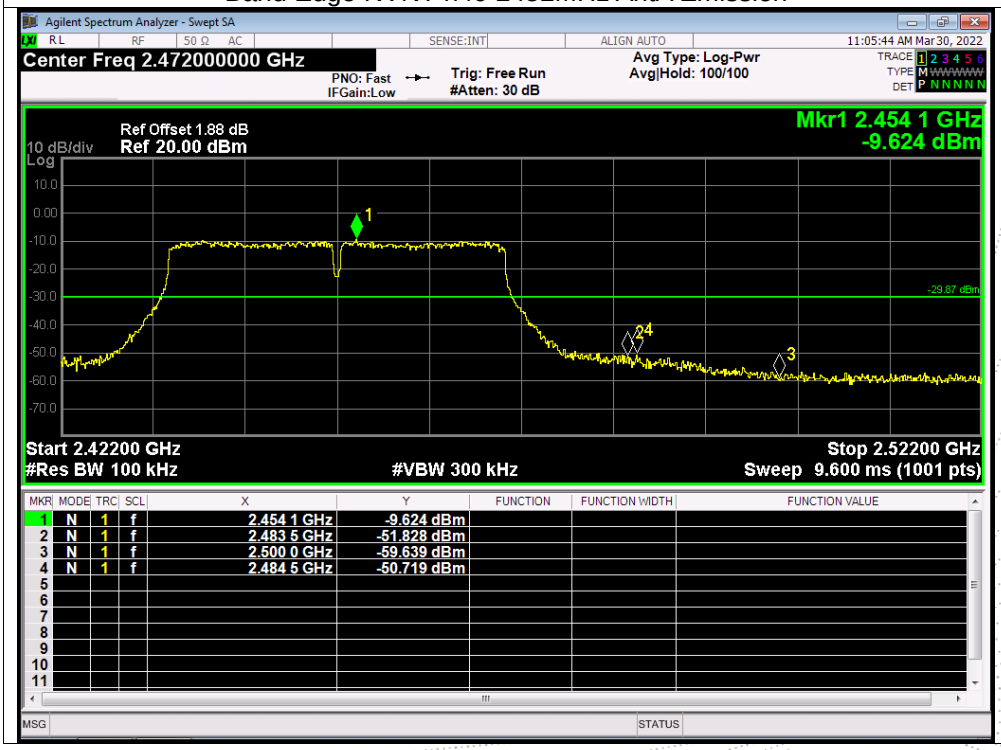
Band Edge NVNT n40 2422MHz AntA Emission



Band Edge NVNT n40 2452MHz AntA Ref

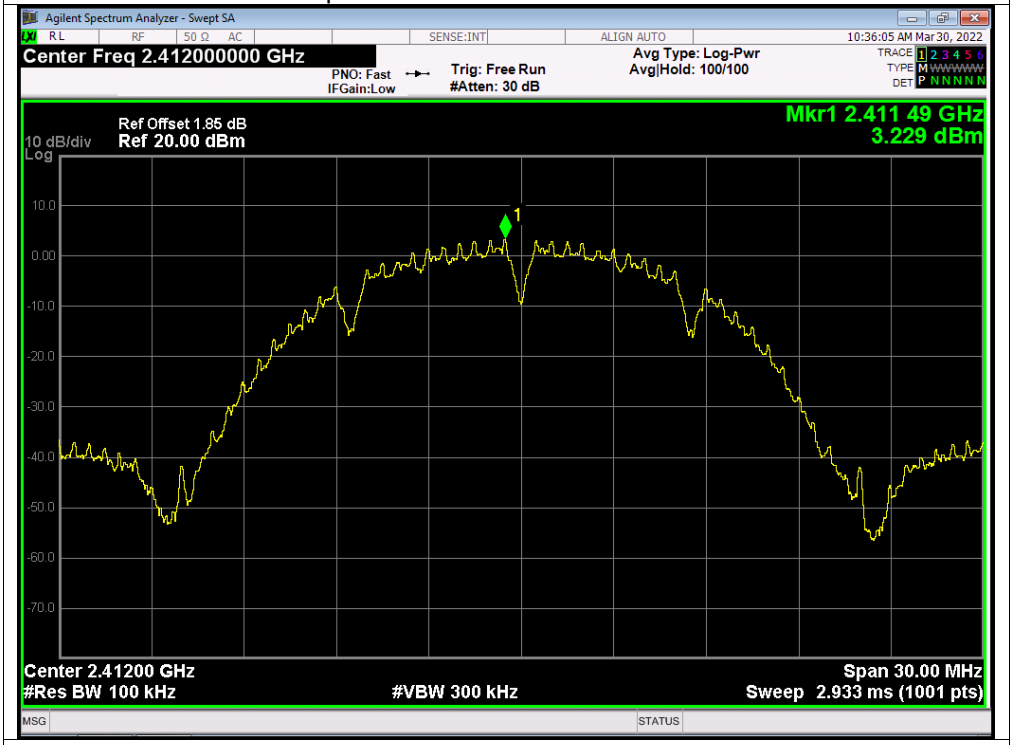


Band Edge NVNT n40 2452MHz AntA Emission

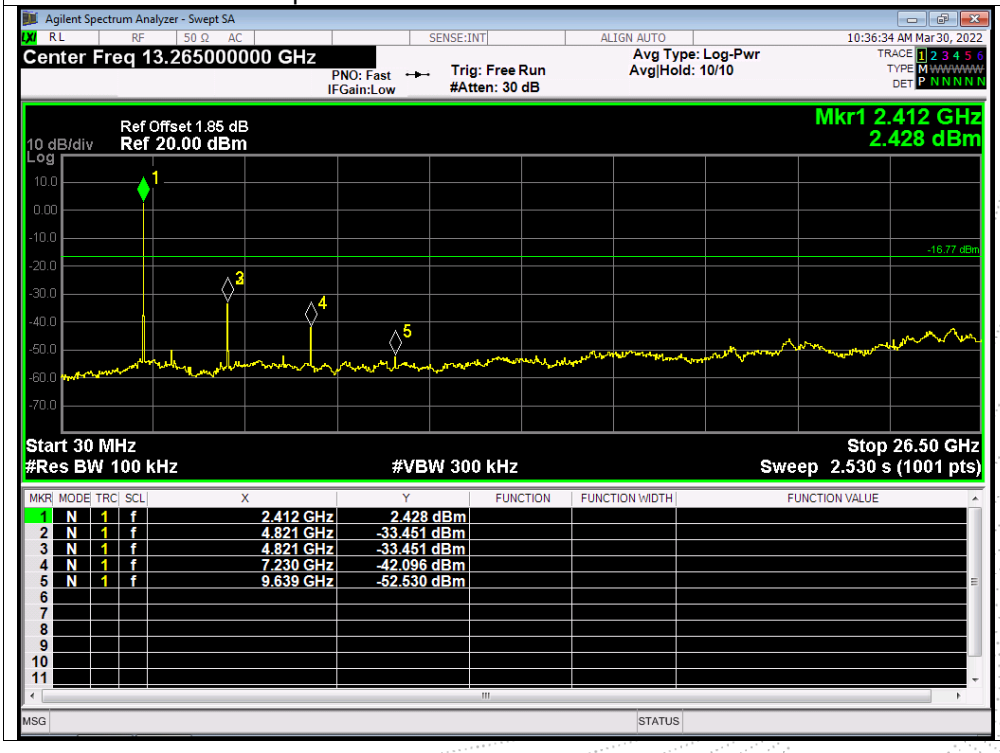


Test Graphs

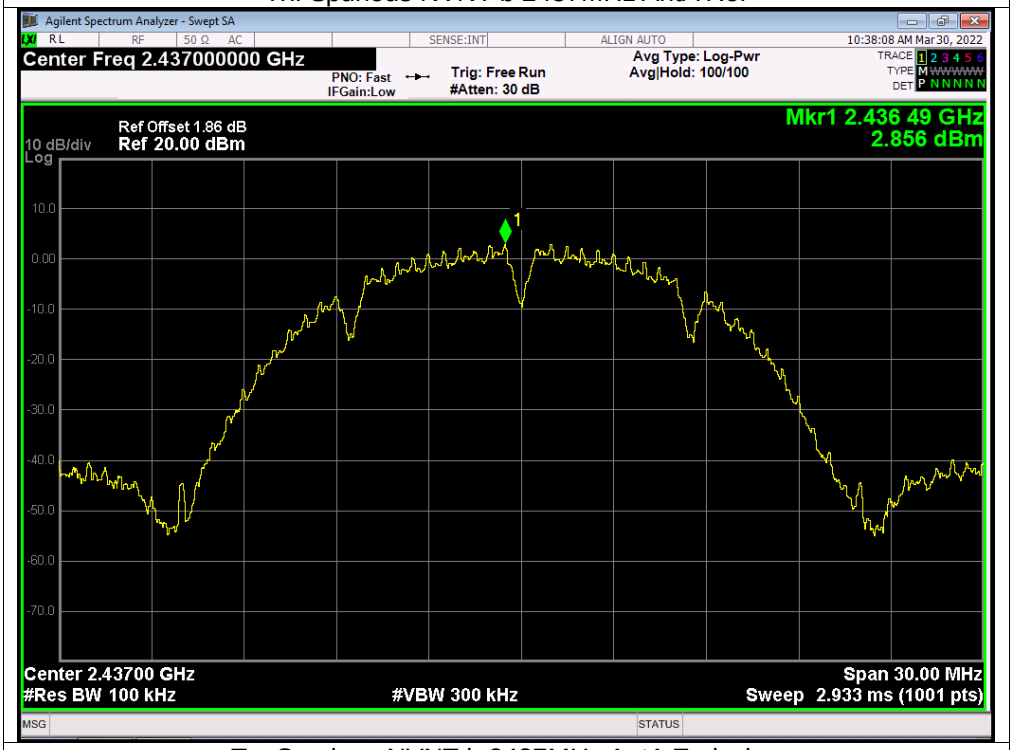
Tx. Spurious NVNT b 2412MHz AntA Ref



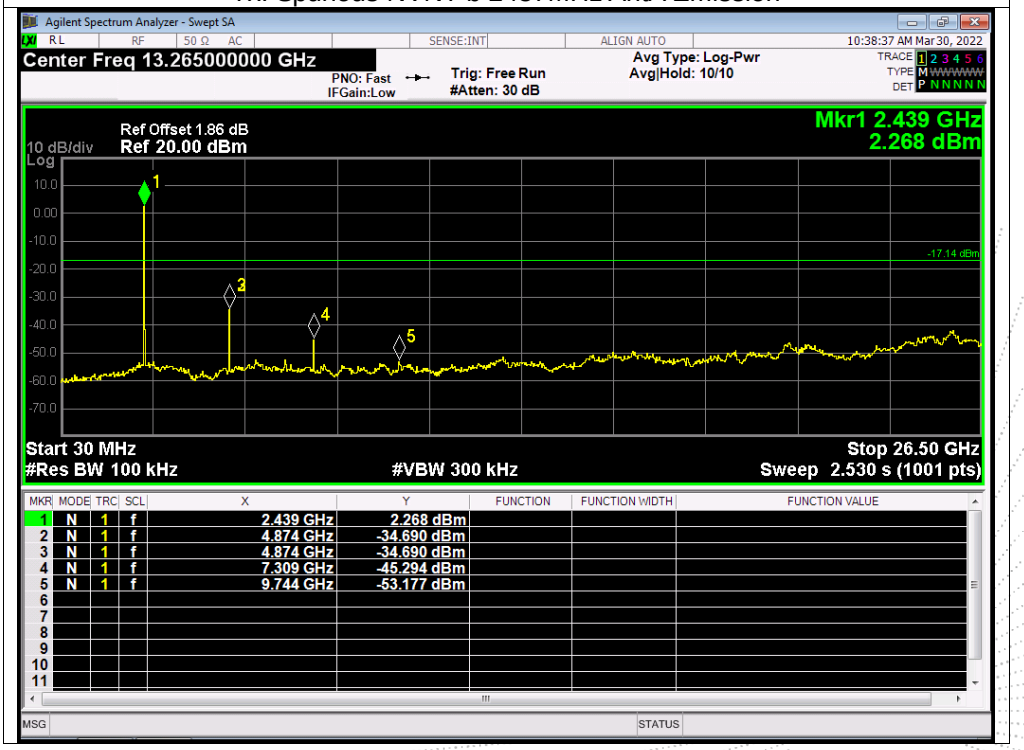
Tx. Spurious NVNT b 2412MHz AntA Emission



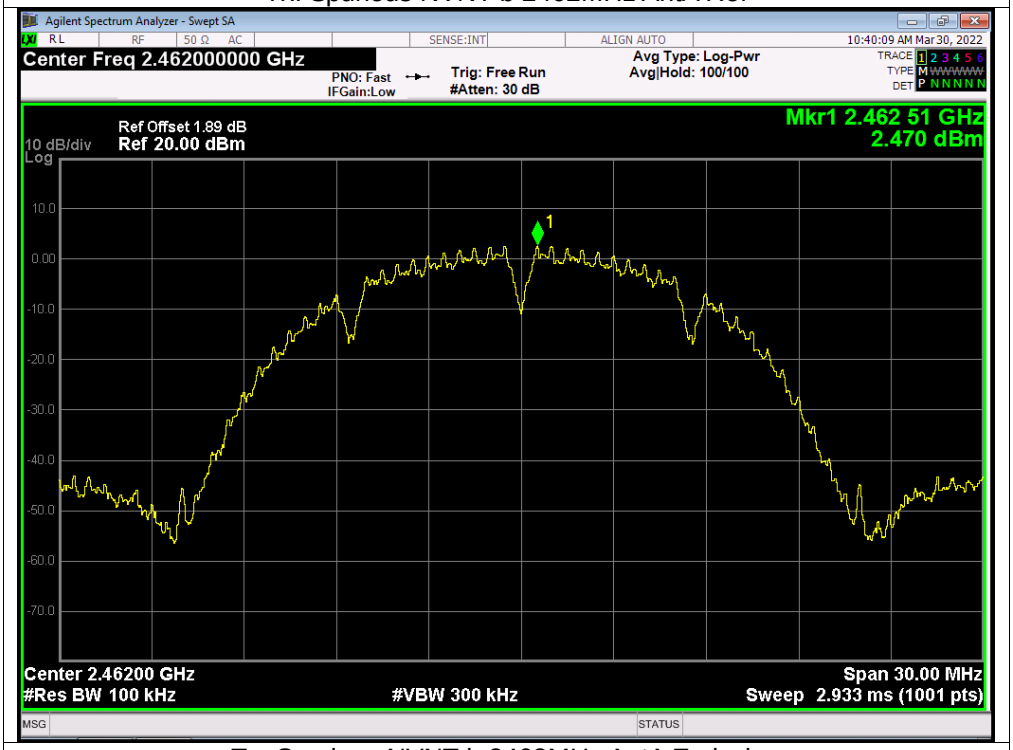
Tx. Spurious NVNT b 2437MHz AntA Ref



Tx. Spurious NVNT b 2437MHz AntA Emission



Tx. Spurious NVNT b 2462MHz AntA Ref



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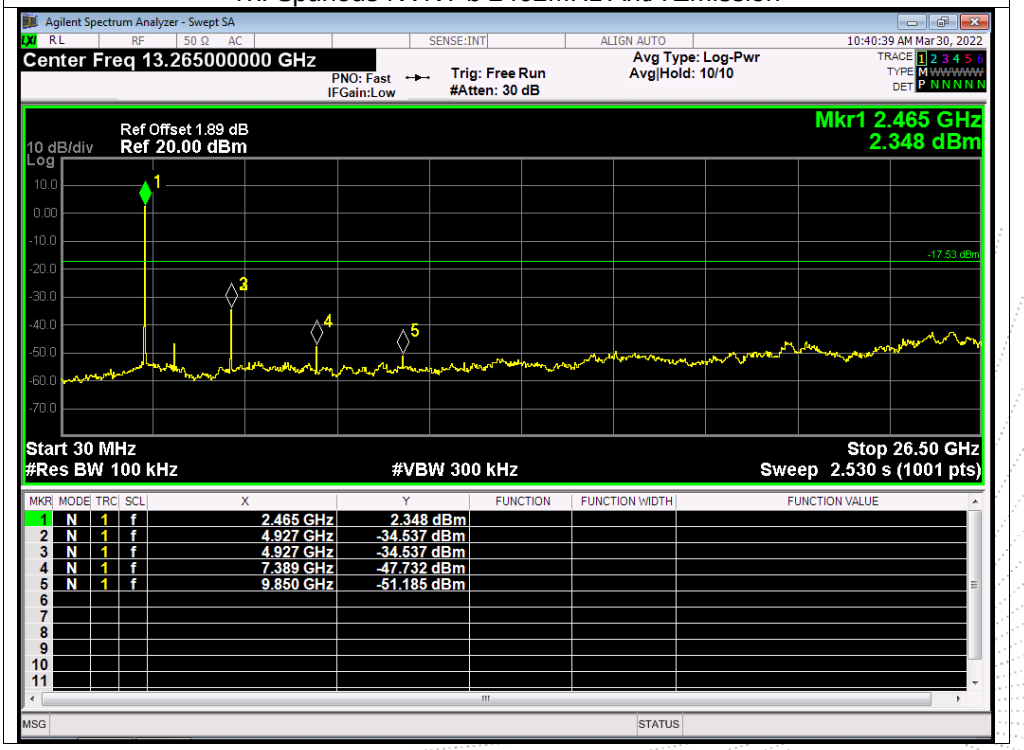
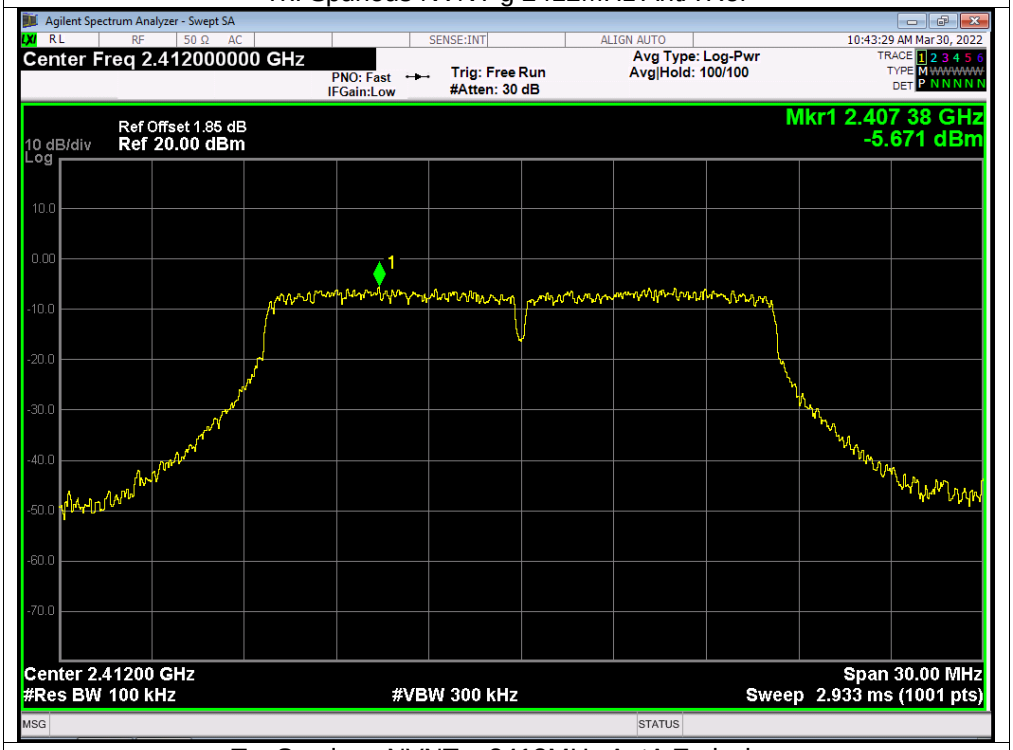
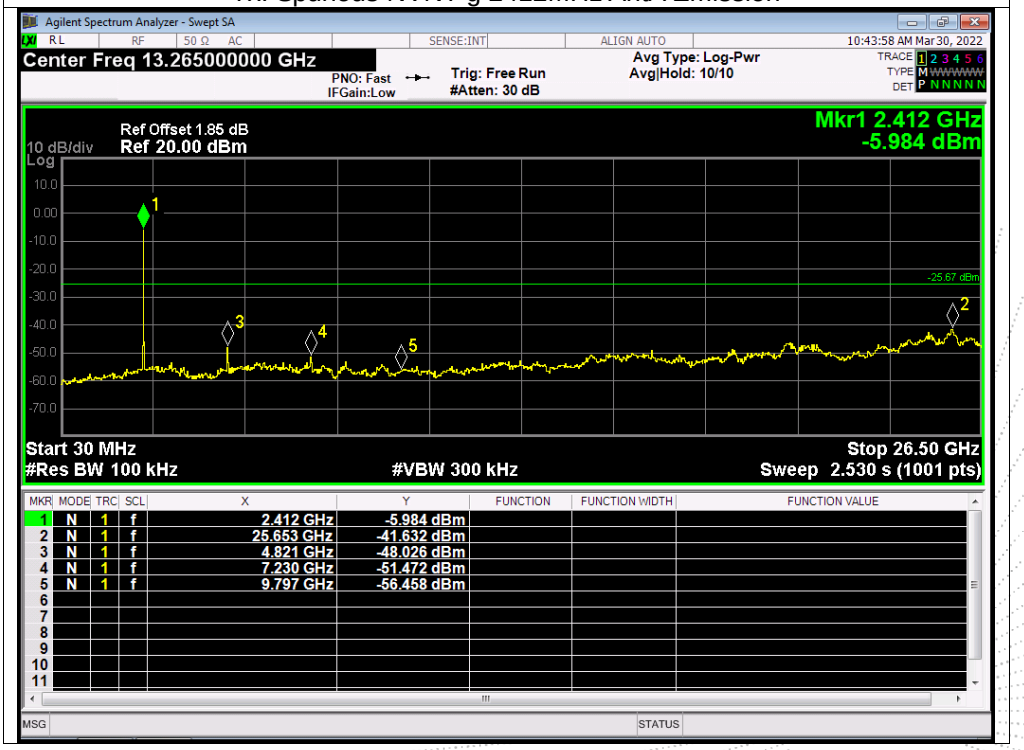


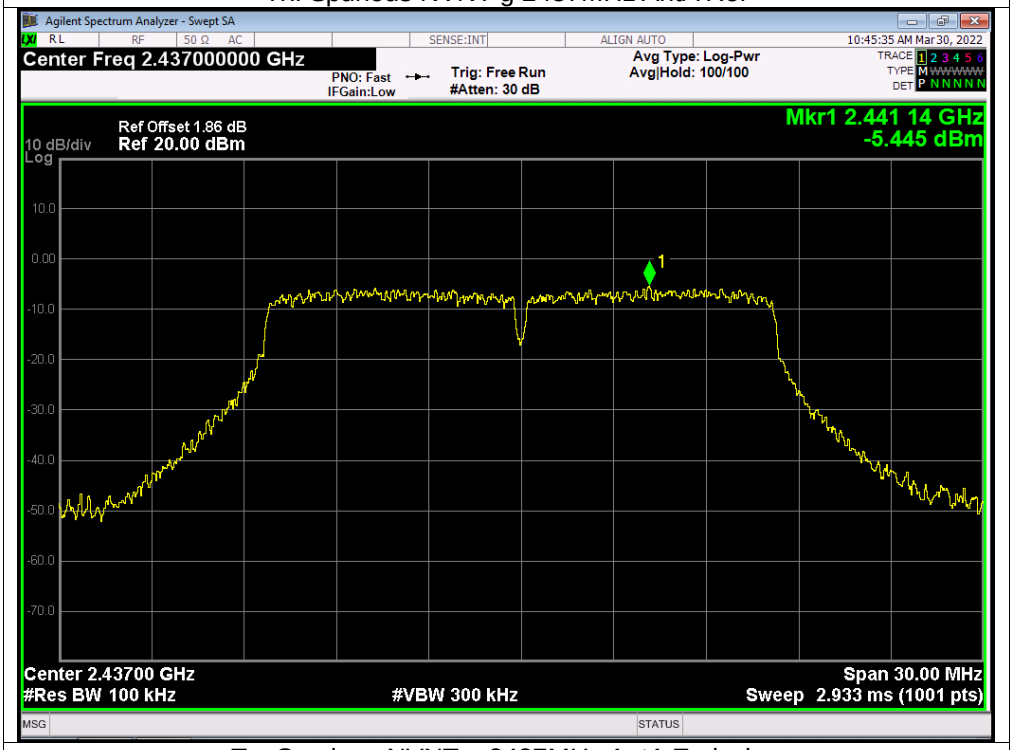
Tx. Spurious NVNT g 2412MHz AntA Ref



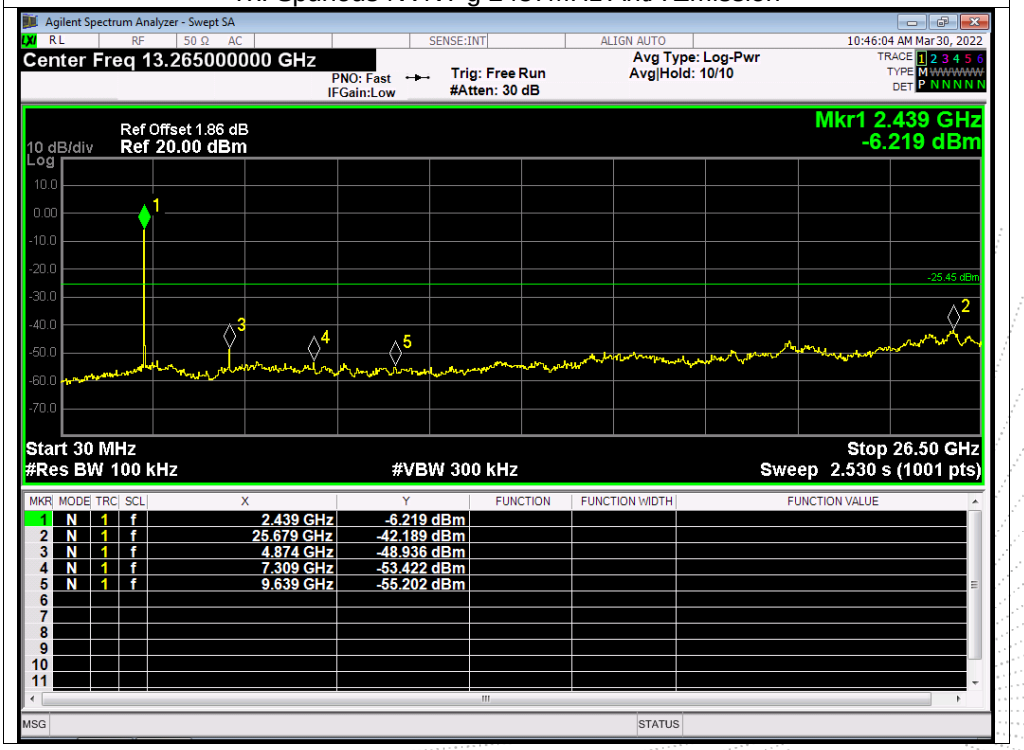
Tx. Spurious NVNT g 2412MHz AntA Emission



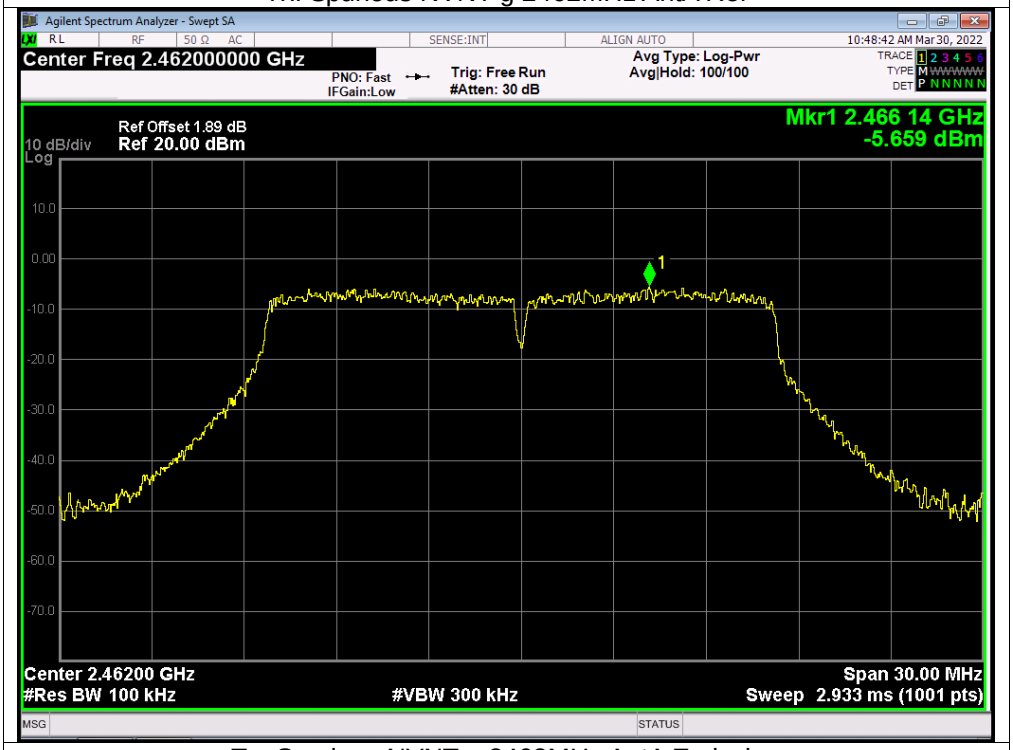
Tx. Spurious NVNT g 2437MHz AntA Ref



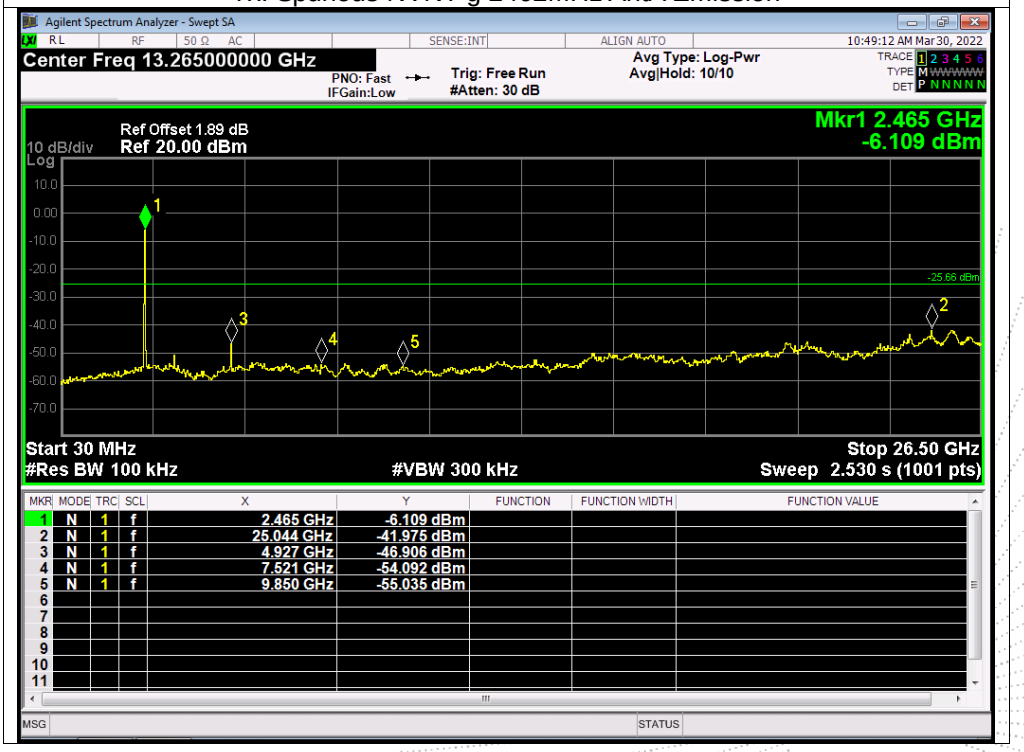
Tx. Spurious NVNT g 2437MHz AntA Emission



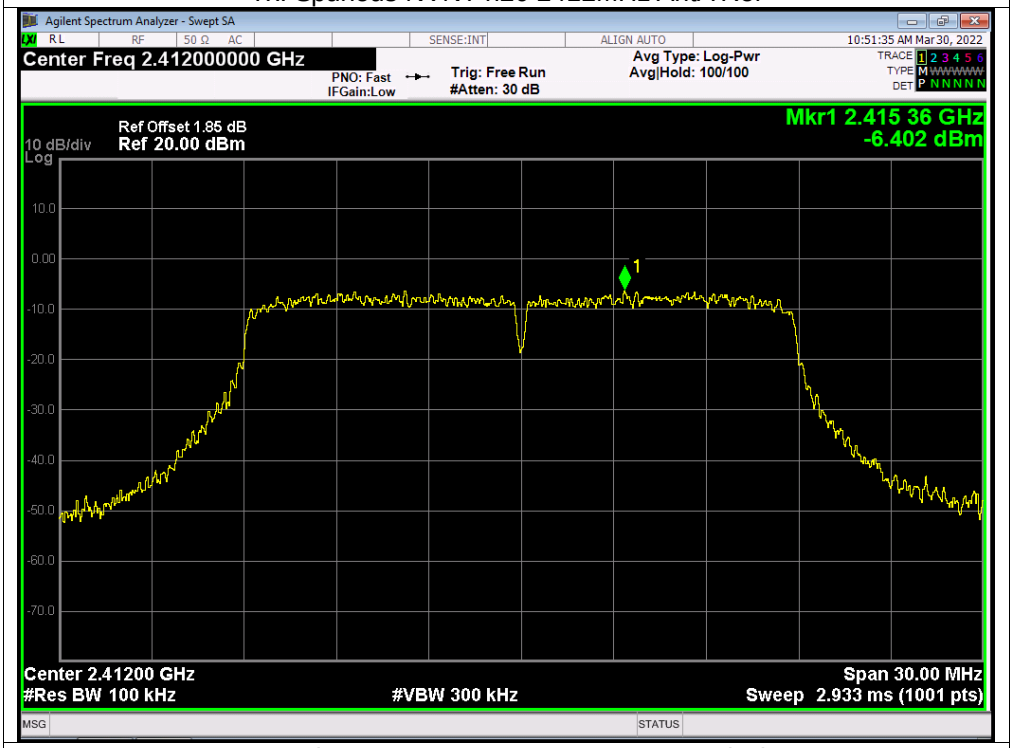
Tx. Spurious NVNT g 2462MHz AntA Ref



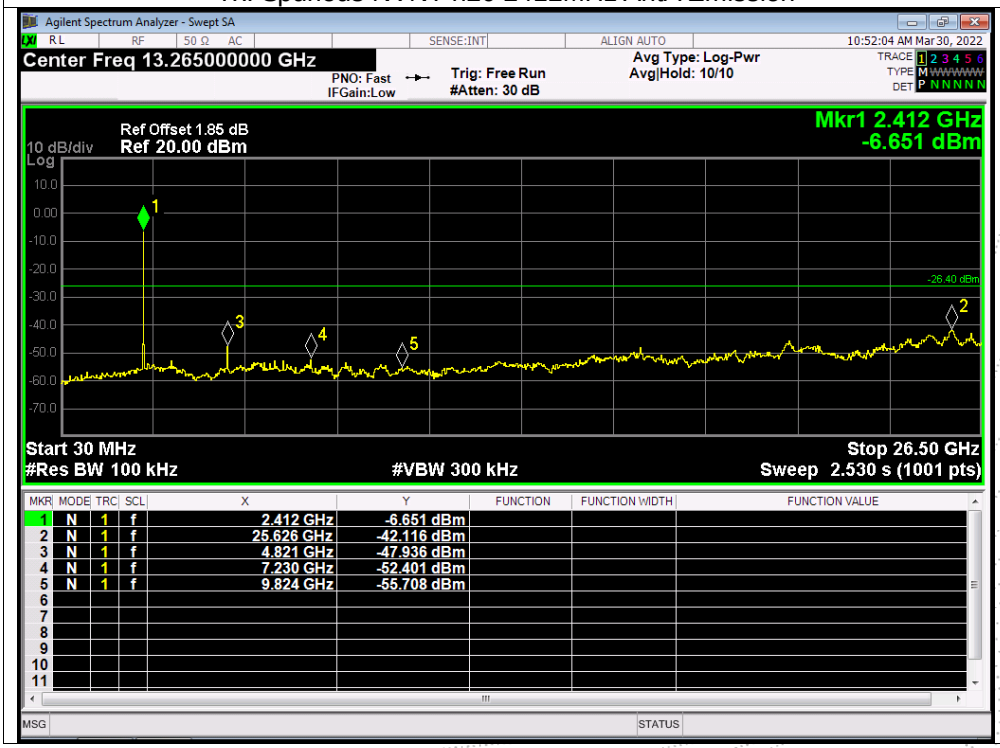
Tx. Spurious NVNT g 2462MHz AntA Emission



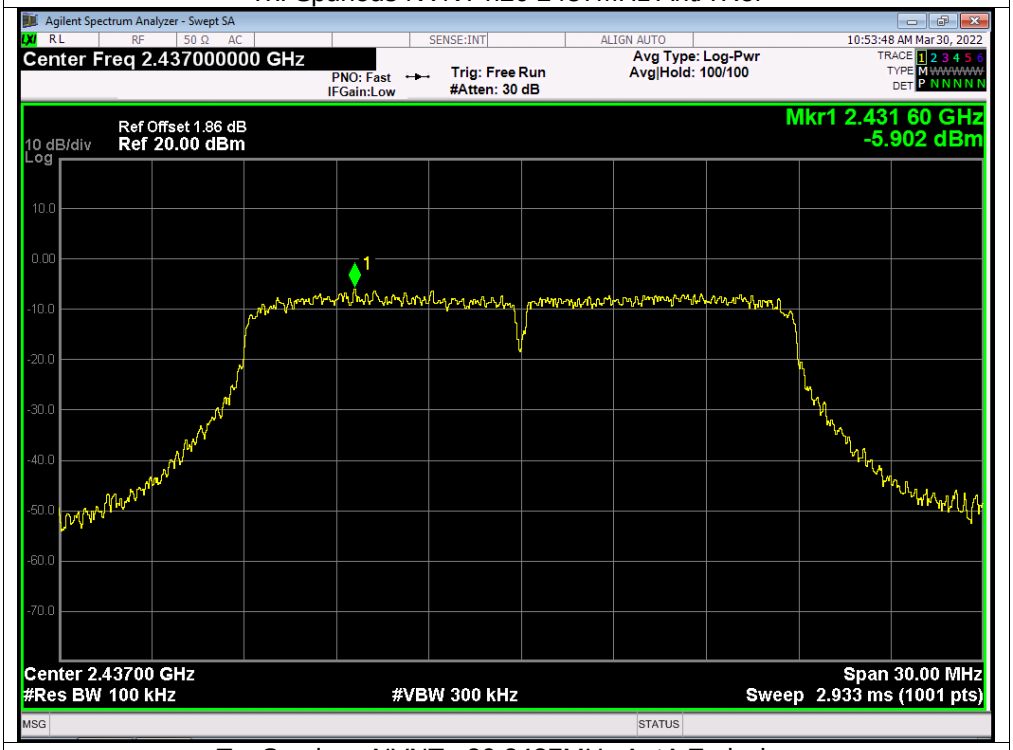
Tx. Spurious NVNT n20 2412MHz AntA Ref



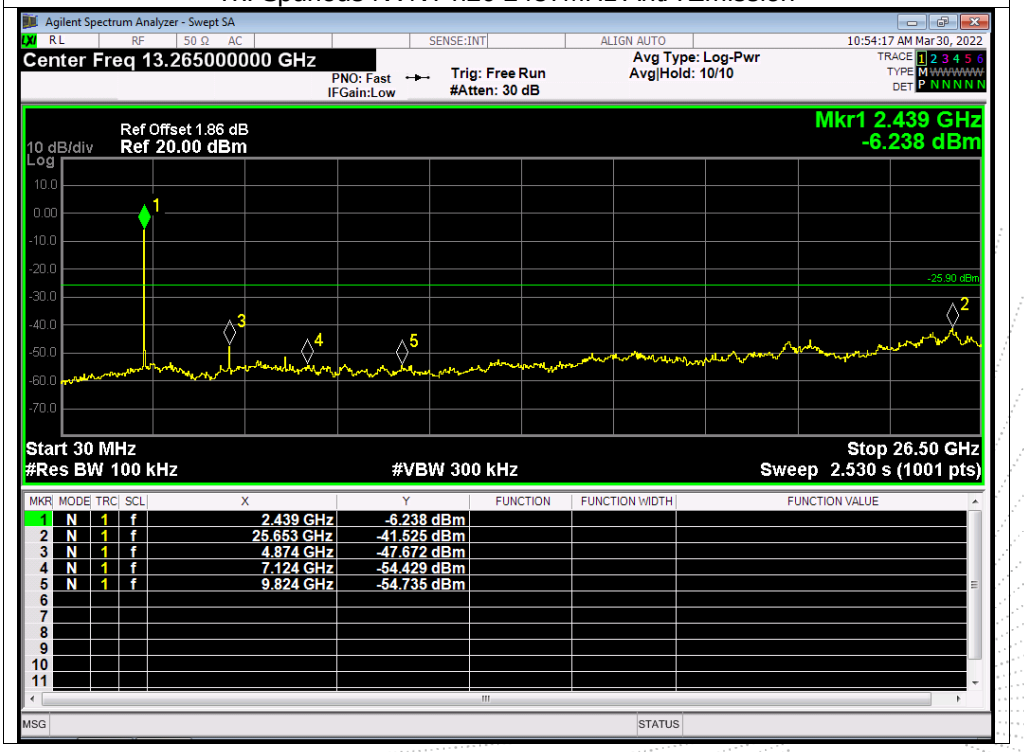
Tx. Spurious NVNT n20 2412MHz AntA Emission



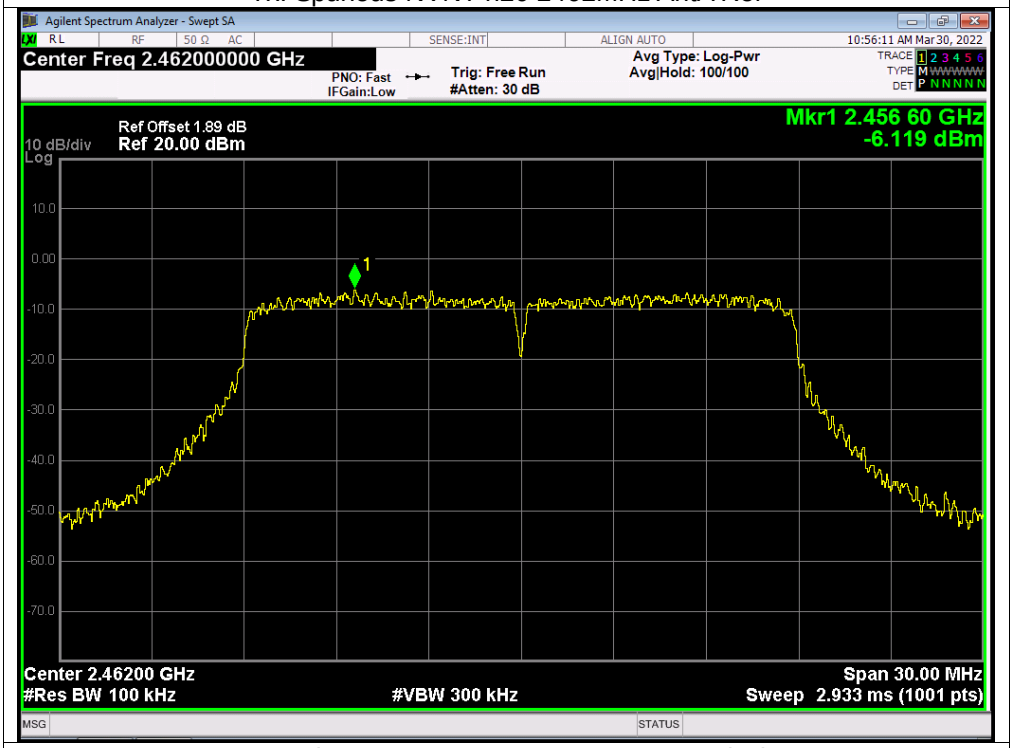
Tx. Spurious NVNT n20 2437MHz AntA Ref



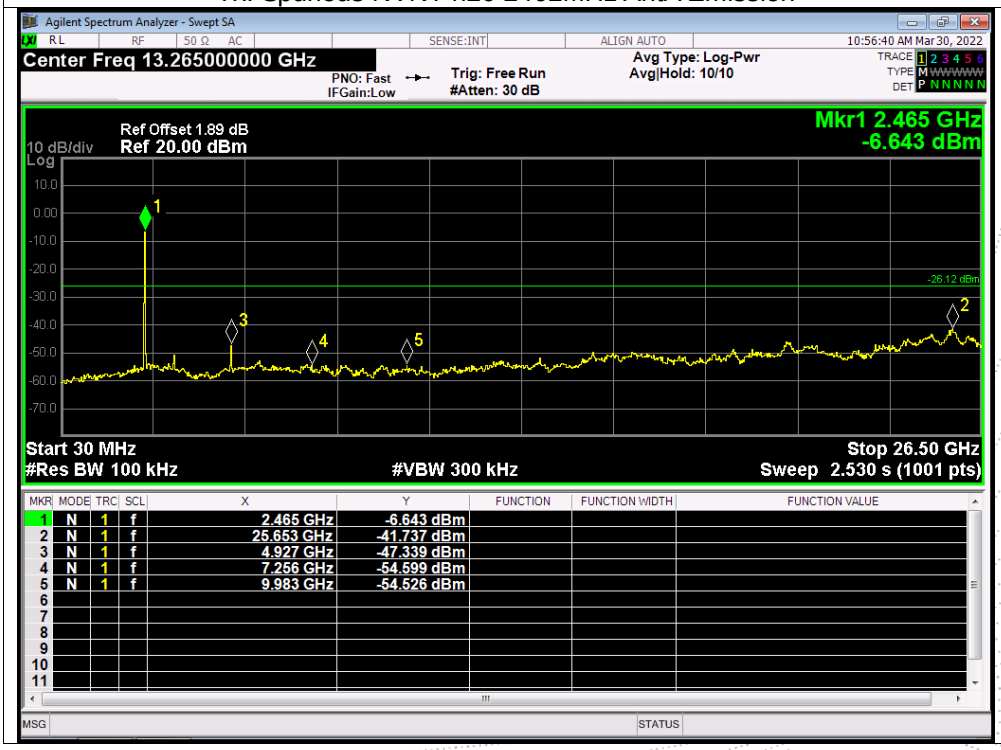
Tx. Spurious NVNT n20 2437MHz AntA Emission



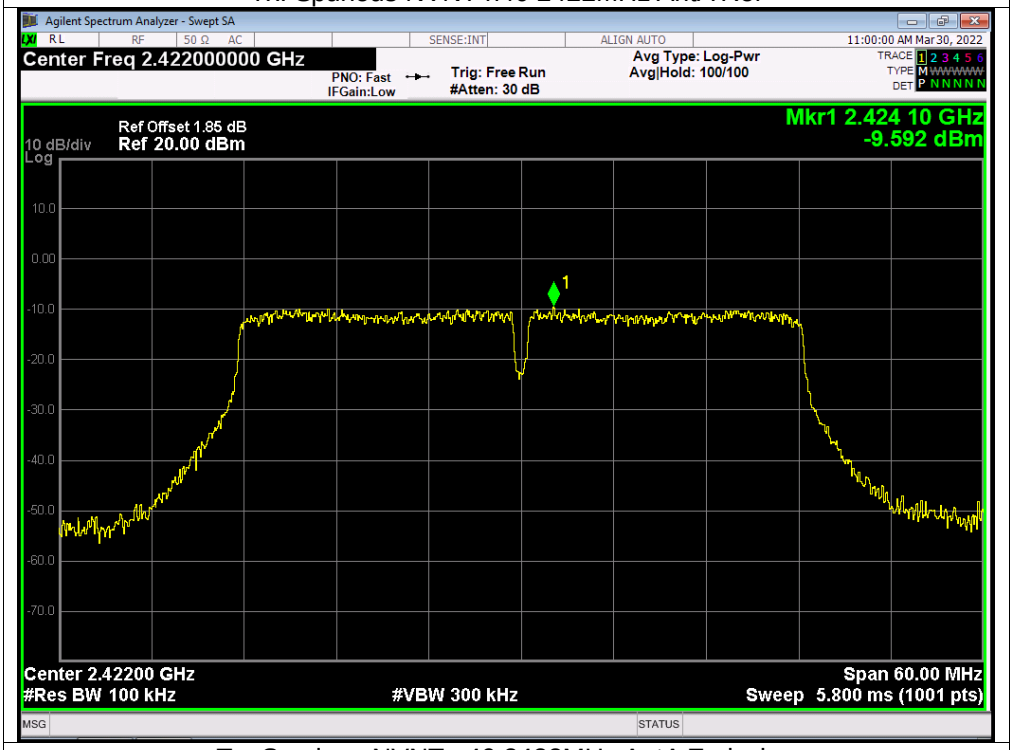
Tx. Spurious NVNT n20 2462MHz AntA Ref



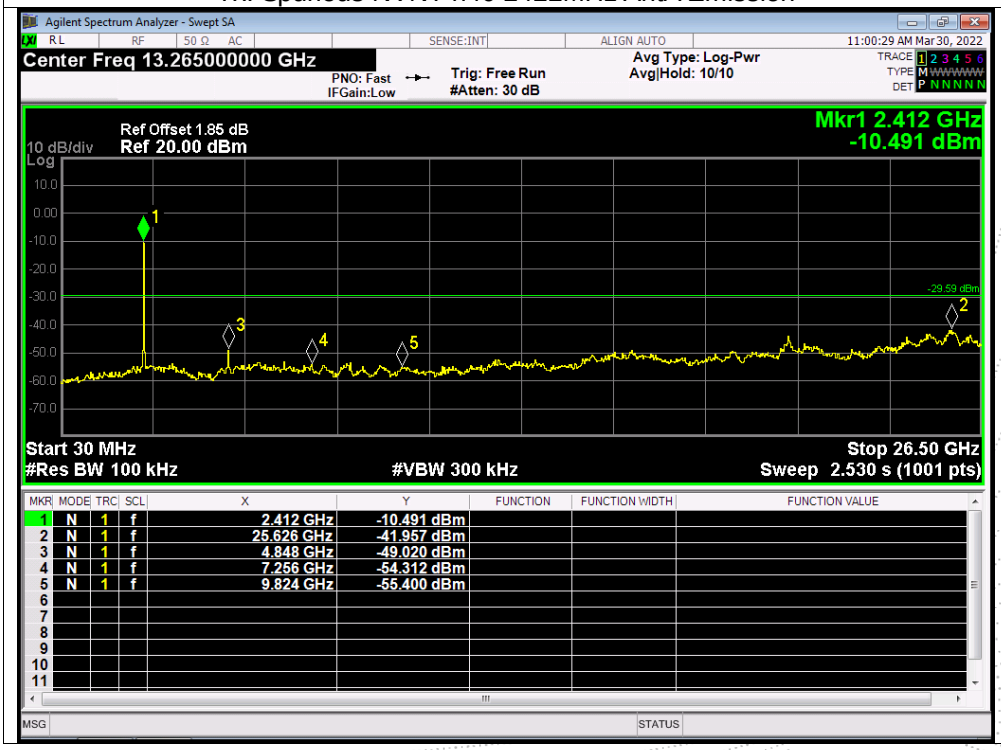
Tx. Spurious NVNT n20 2462MHz AntA Emission



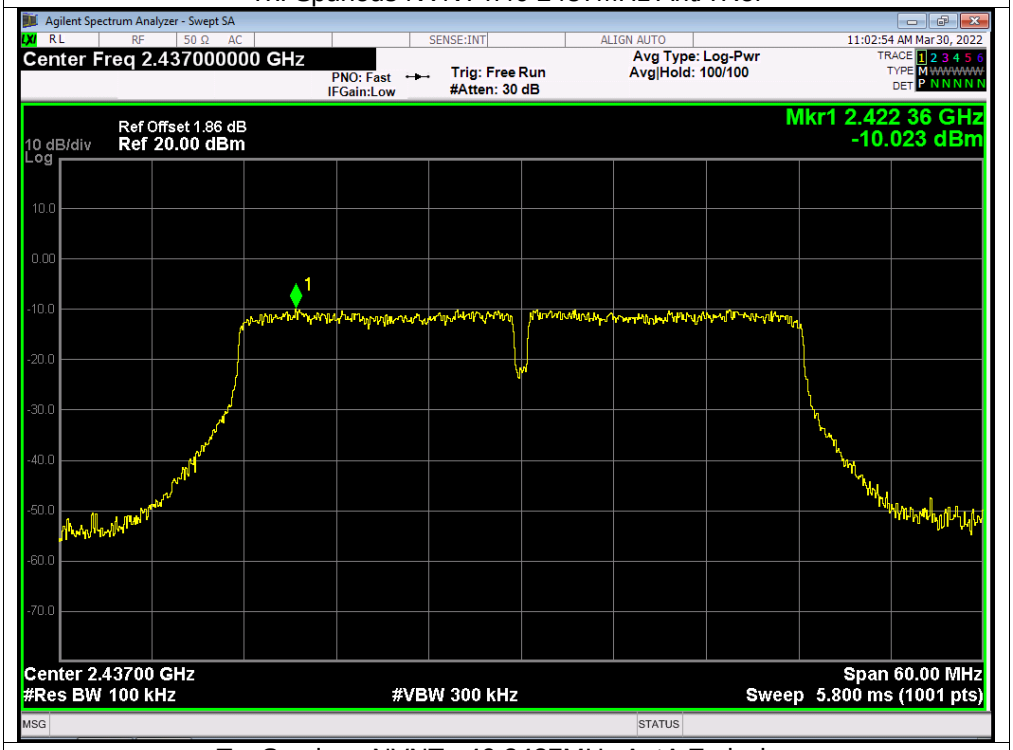
Tx. Spurious NVNT n40 2422MHz AntA Ref



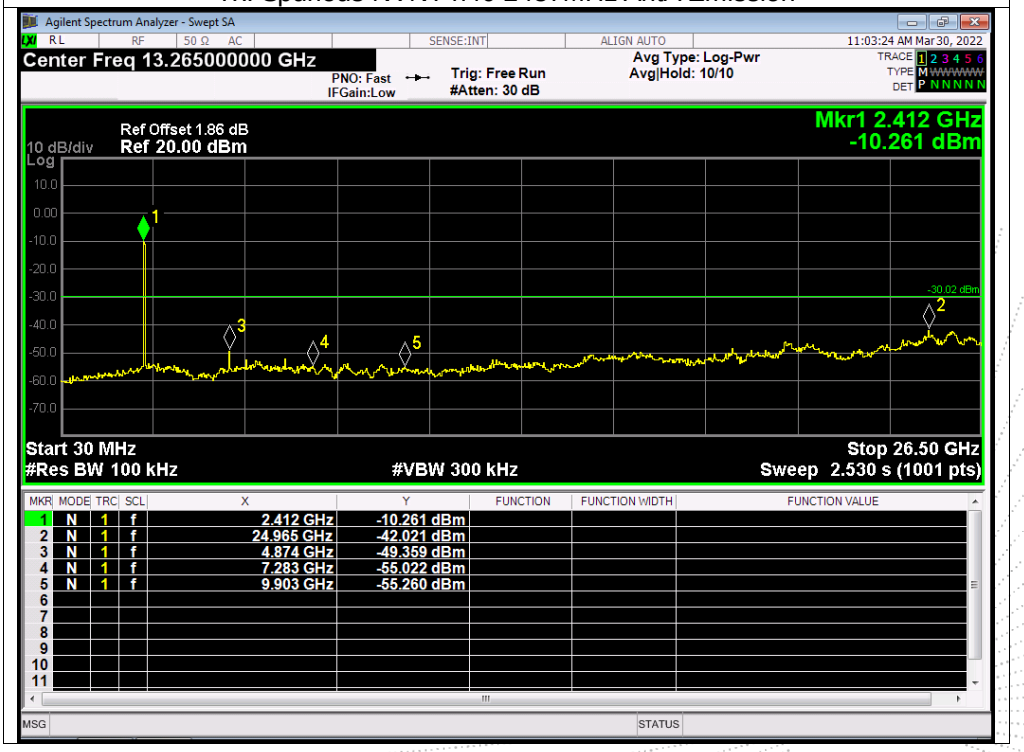
Tx. Spurious NVNT n40 2422MHz AntA Emission



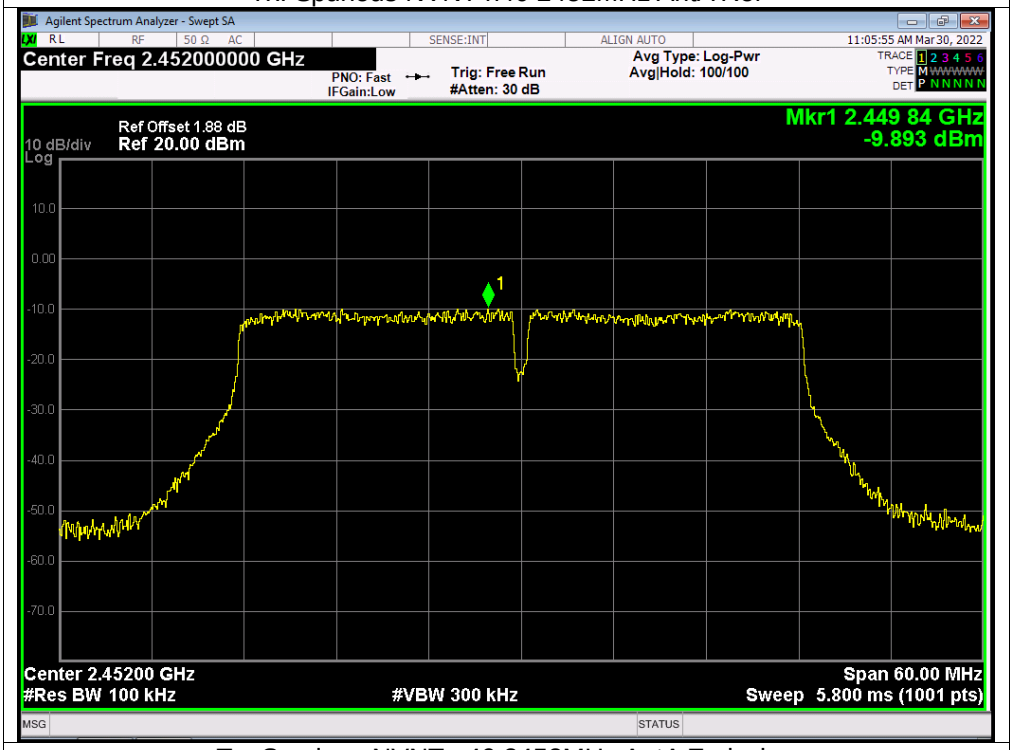
Tx. Spurious NVNT n40 2437MHz AntA Ref



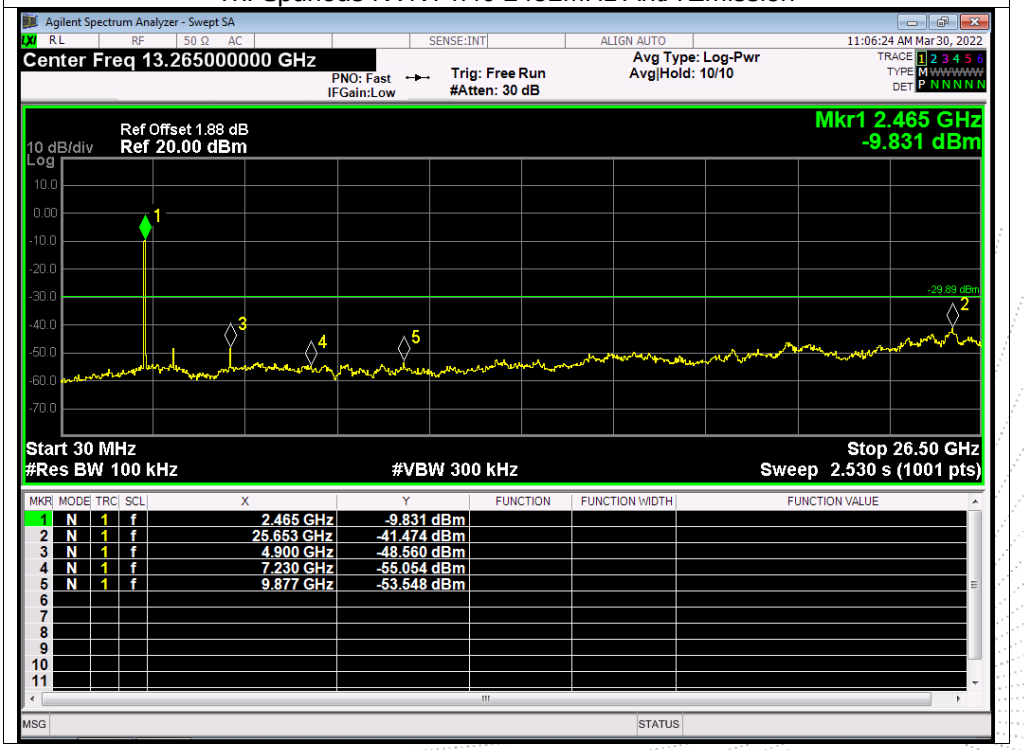
Tx. Spurious NVNT n40 2437MHz AntA Emission



Tx. Spurious NVNT n40 2452MHz AntA Ref



Tx. Spurious NVNT n40 2452MHz AntA Emission



13. Duty Cycle Of Test Signal

13.1 Standard Requirement

Pre-analysis Check: While conducting average power measurement, duty cycle of each mode shall be checked to ensure its duty cycle in order to compensate for the loss due to insufficient ratio of duty cycle.

All duty cycle is pre-scanned, and result as obtained below shows only the most representative ones where duty cycle is conducted as the given transmission with given virtual operation that expresses the percentage.

13.2 Formula

Duty Cycle = Ton / (Ton+Toff)

13.3 Test Procedure

1.Set span = Zero

2. RBW = 8MHz

3. VBW = 8MHz,

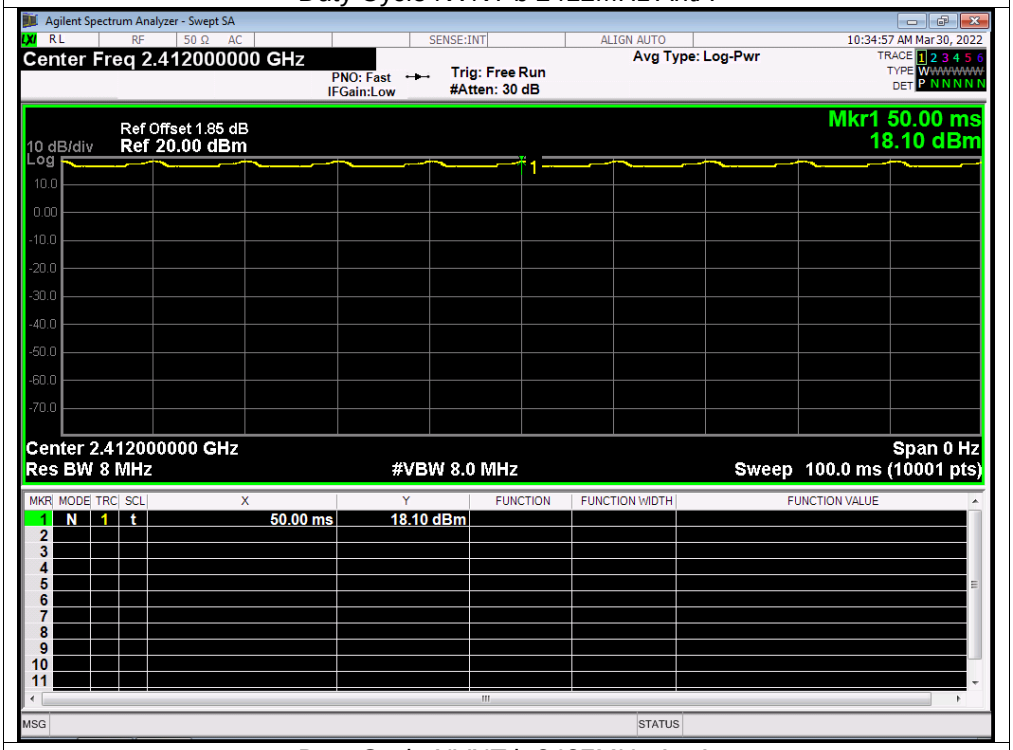
4. Detector = Peak

13.4 Test Result

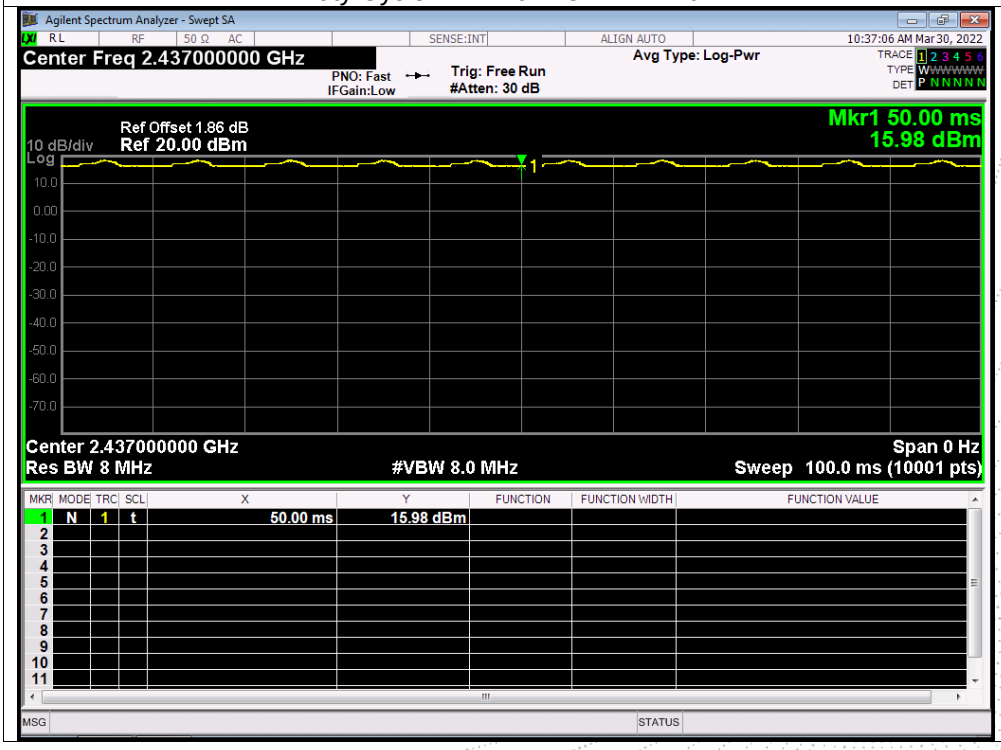
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	AntA	100	0	0
NVNT	b	2437	AntA	100	0	0
NVNT	b	2462	AntA	100	0	0
NVNT	g	2412	AntA	100	0	0
NVNT	g	2437	AntA	100	0	0
NVNT	g	2462	AntA	100	0	0
NVNT	n20	2412	AntA	100	0	0
NVNT	n20	2437	AntA	100	0	0
NVNT	n20	2462	AntA	100	0	0
NVNT	n40	2422	AntA	100	0	0
NVNT	n40	2437	AntA	100	0	0
NVNT	n40	2452	AntA	100	0	0

Test Graphs

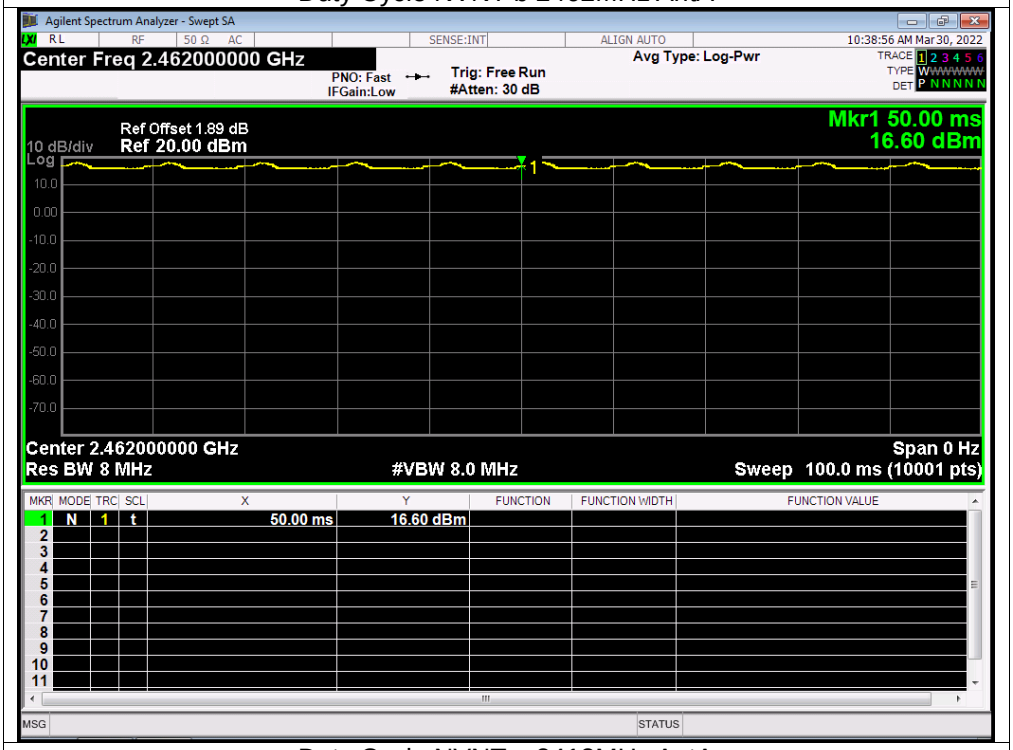
Duty Cycle NVNT b 2412MHz AntA



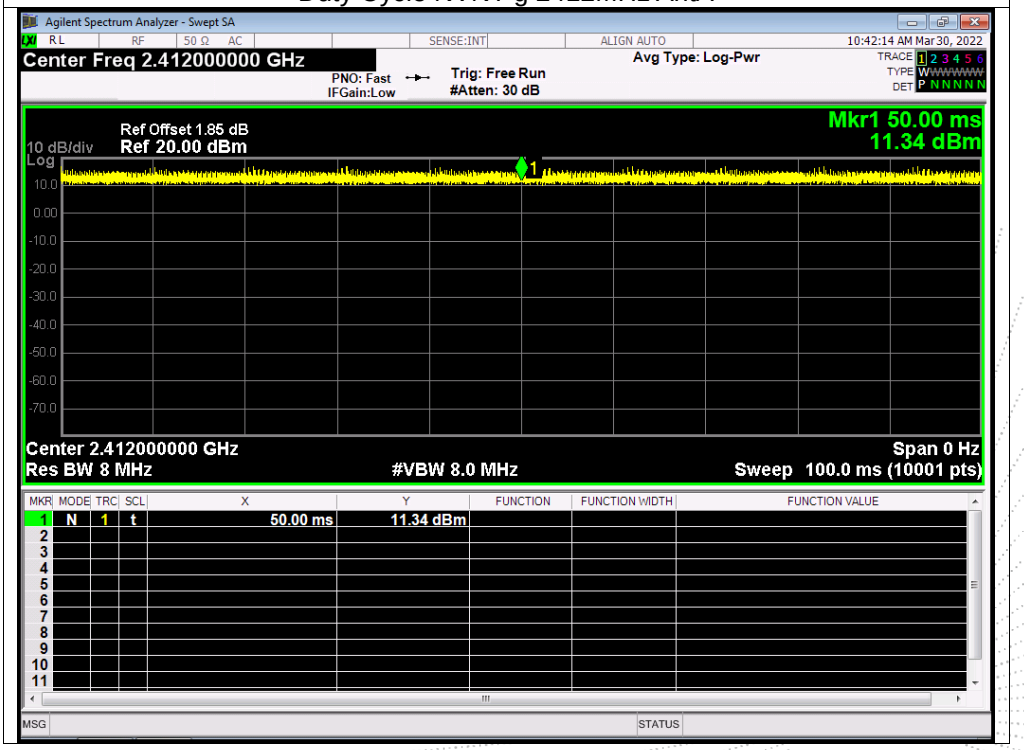
Duty Cycle NVNT b 2437MHz AntA



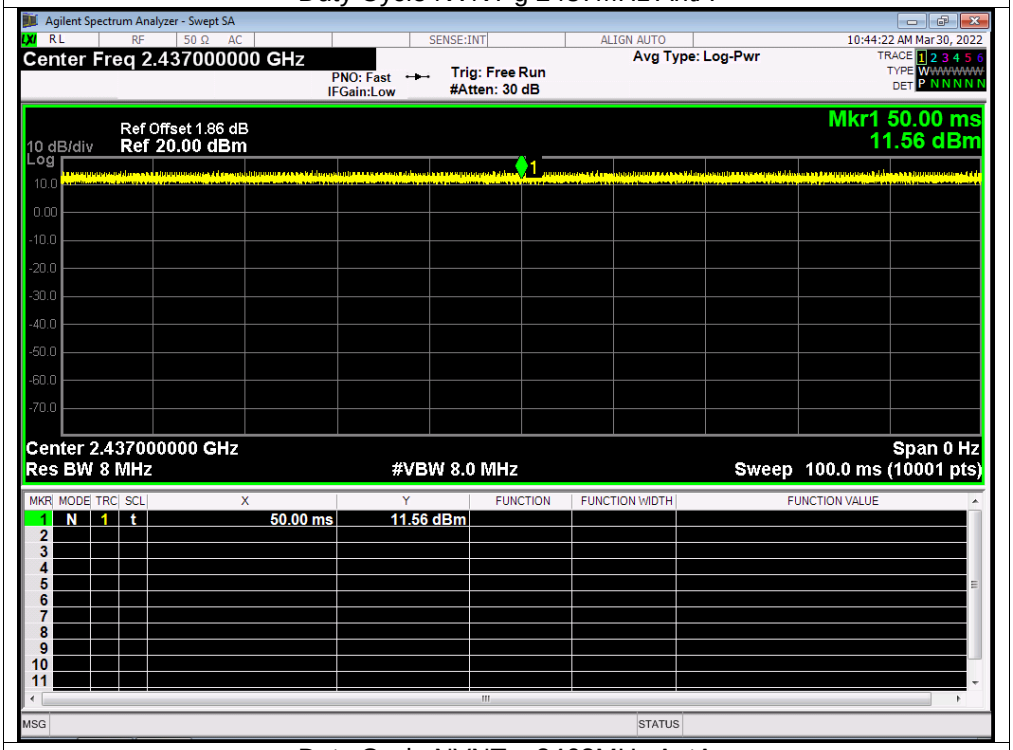
Duty Cycle NVNT b 2462MHz AntA



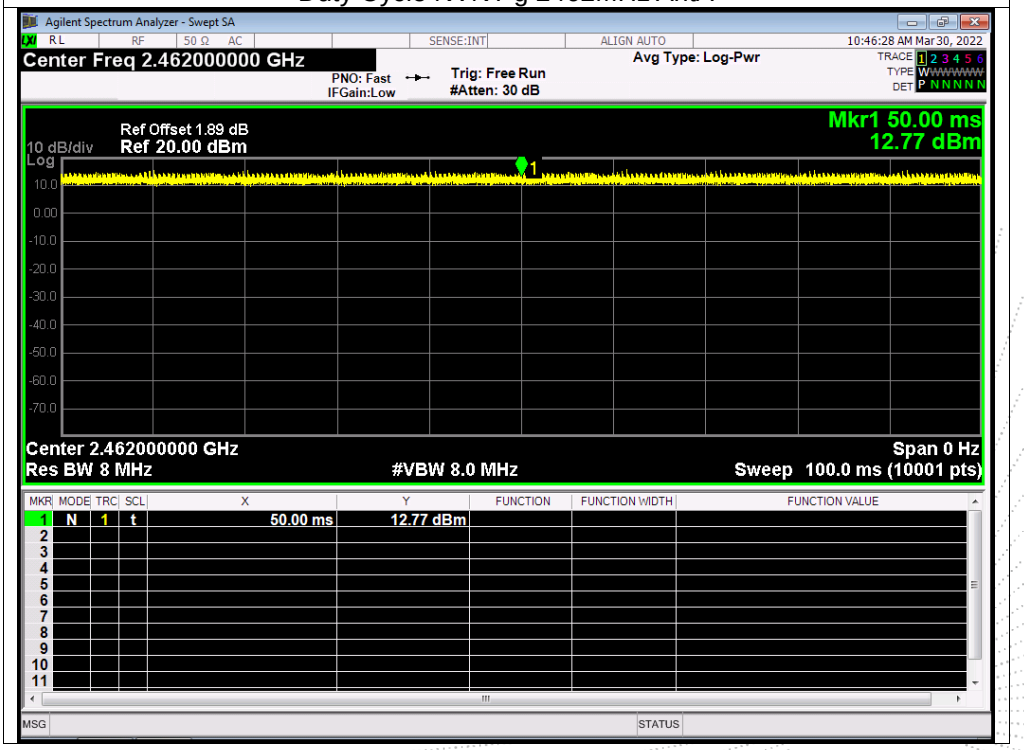
Duty Cycle NVNT g 2412MHz AntA



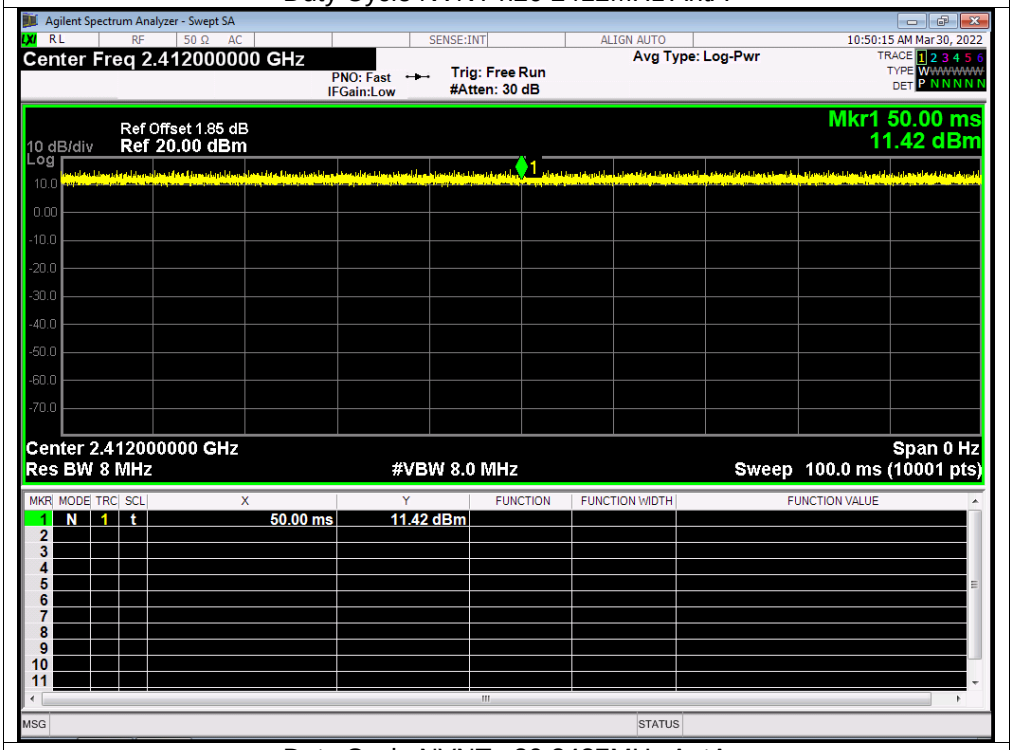
Duty Cycle NVNT g 2437MHz AntA



Duty Cycle NVNT g 2462MHz AntA



Duty Cycle NVNT n20 2412MHz AntA



Duty Cycle NVNT n20 2437MHz AntA