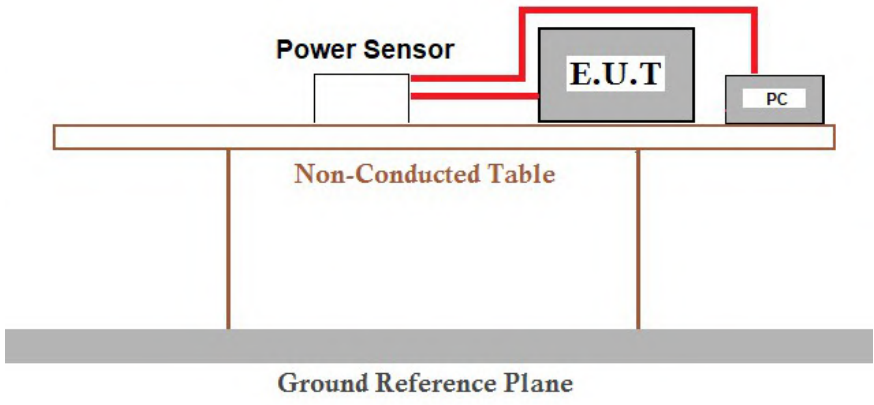


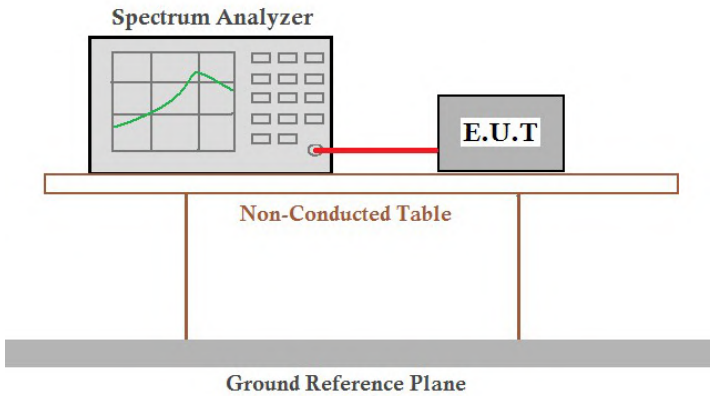
4.4 Conducted Output Power

Test Requirement :	FCC Part15 C Section 15.247 (b)(3)
Test Method :	ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 § 11.9.1.2 KDB558074 D01 15.247 Meas Guidance v05r02
Limit:	30dBm for peak conducted output power
Test setup:	 The diagram illustrates the test setup. A Power Sensor is connected to the E.U.T. (Equipment Under Test) and a PC. The setup is placed on a Non-Conducted Table, which is supported by a Ground Reference Plane.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test environment:	Temp.: 24.2°C Humid.: 53%RH
Test voltage:	DC 14.8V from battery
Test results:	Pass

Measurement Result

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	14.19	30	Pass
NVNT	b	2437	14.11	30	Pass
NVNT	b	2462	13.80	30	Pass
NVNT	g	2412	14.31	30	Pass
NVNT	g	2437	14.89	30	Pass
NVNT	g	2462	14.44	30	Pass
NVNT	n20	2412	14.12	30	Pass
NVNT	n20	2437	14.86	30	Pass
NVNT	n20	2462	14.32	30	Pass
NVNT	n40	2422	13.80	30	Pass
NVNT	n40	2437	13.63	30	Pass
NVNT	n40	2452	13.42	30	Pass

4.5 6dB Bandwidth

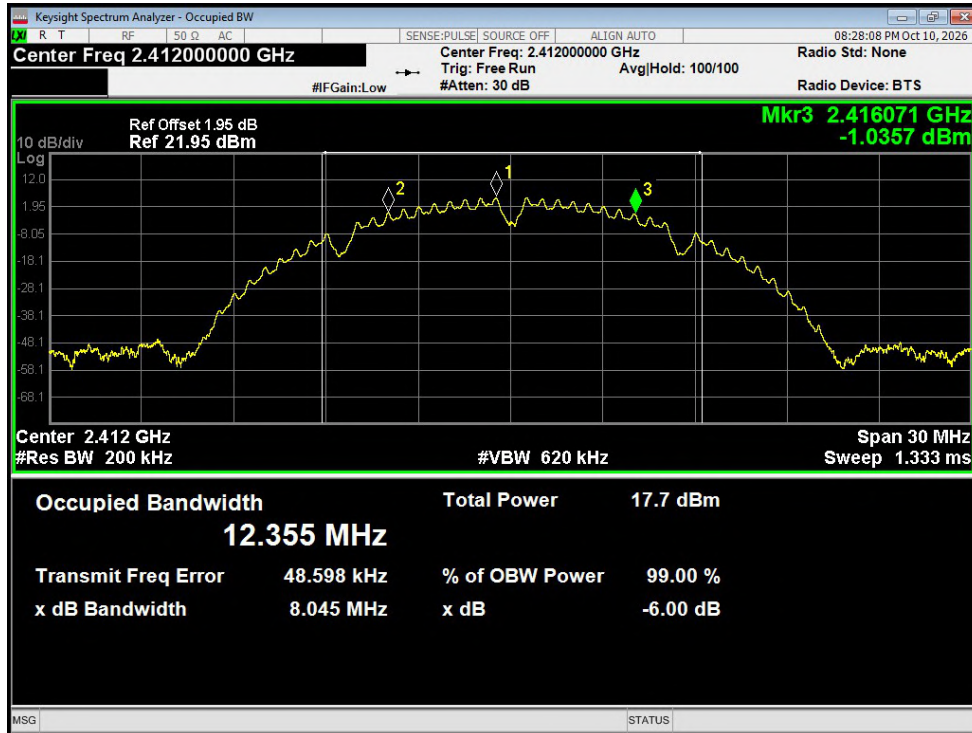
Test Requirement :	47CFR Part 15.247 (a)(2)	
Test Method :	ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024§11.8.2	
Limit:	>500KHz	
Test setup:		
Test Instruments:	Refer to section 3.0 for details	
Test mode:	Refer to section 2.2 for details	
Test environment:	Temp.: 24.2°C	Humid.: 53%RH
Test voltage:	DC 11.4V from battery	
Test results:	Pass	

Measurement Result

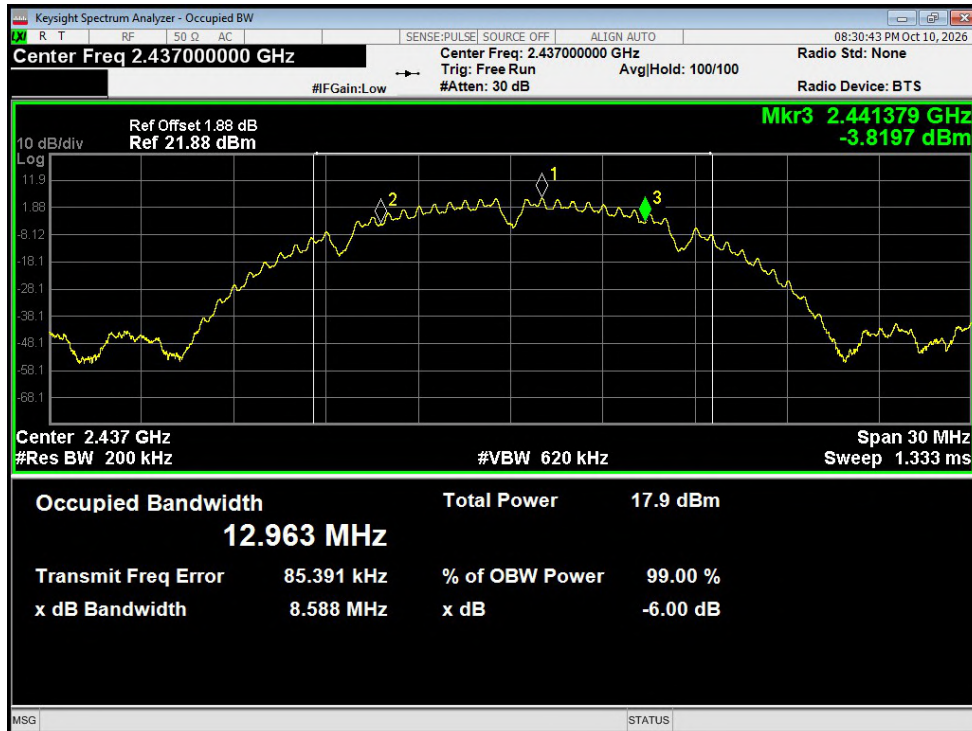
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	8.045	0.5	Pass
NVNT	b	2437	8.588	0.5	Pass
NVNT	b	2462	8.088	0.5	Pass
NVNT	g	2412	15.81	0.5	Pass
NVNT	g	2437	16.26	0.5	Pass
NVNT	g	2462	14.00	0.5	Pass
NVNT	n20	2412	16.49	0.5	Pass
NVNT	n20	2437	17.44	0.5	Pass
NVNT	n20	2462	15.31	0.5	Pass
NVNT	n40	2422	30.17	0.5	Pass
NVNT	n40	2437	36.04	0.5	Pass
NVNT	n40	2452	19.73	0.5	Pass

-6 Bandwidth dB Test plot as follows

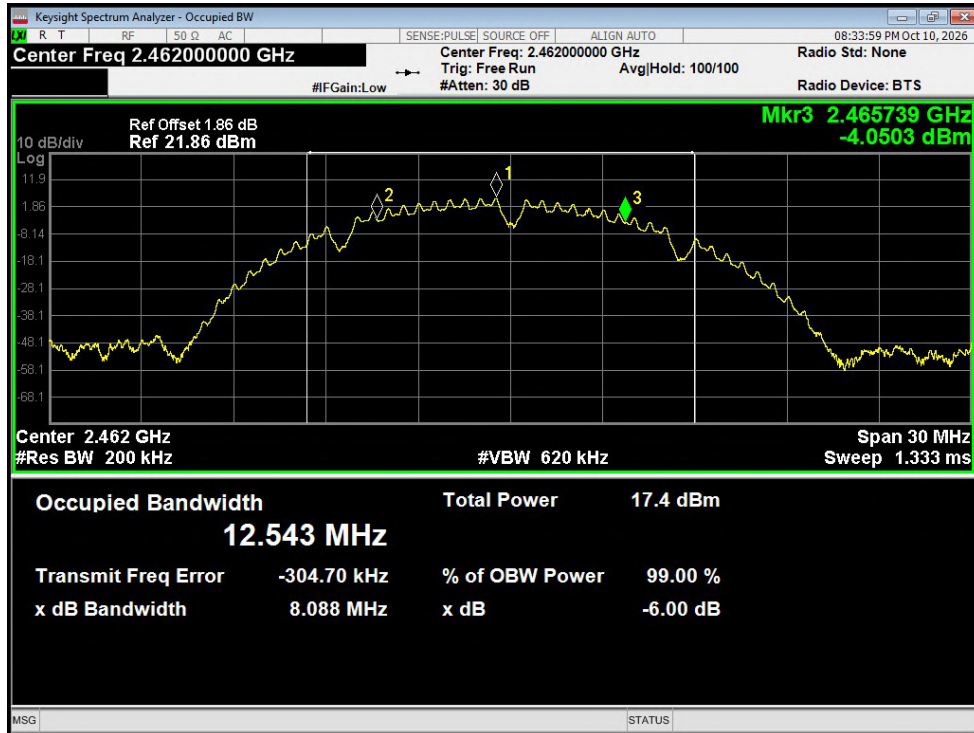
-6dB Bandwidth NVNT b 2412MHz Ant1



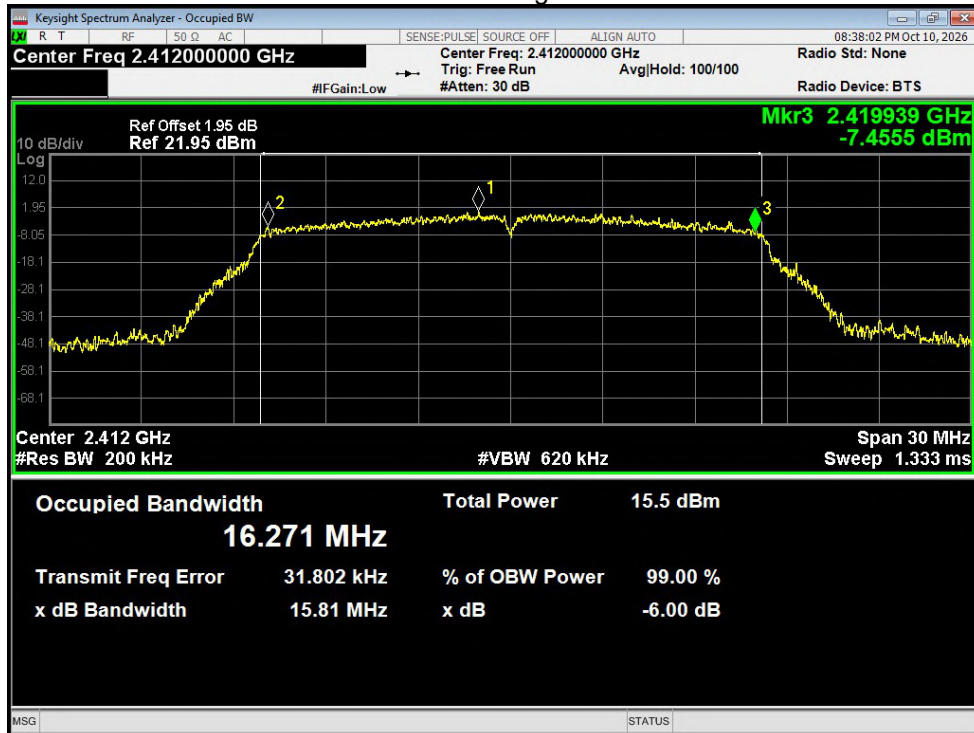
-6dB Bandwidth NVNT b 2437MHz Ant1



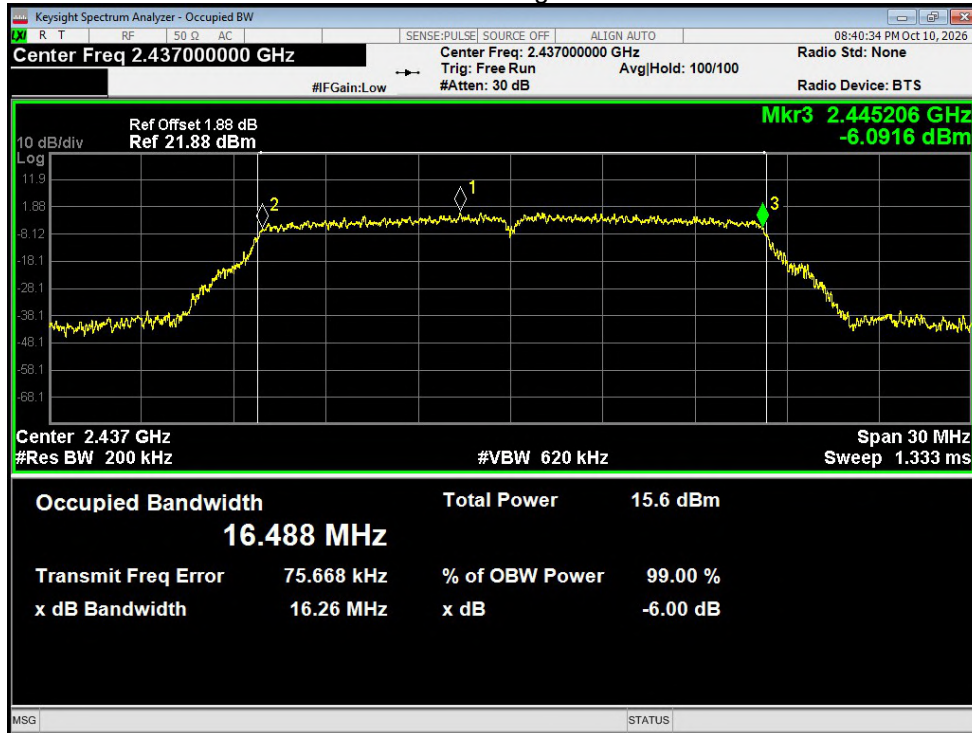
-6dB Bandwidth NVNT b 2462MHz Ant1



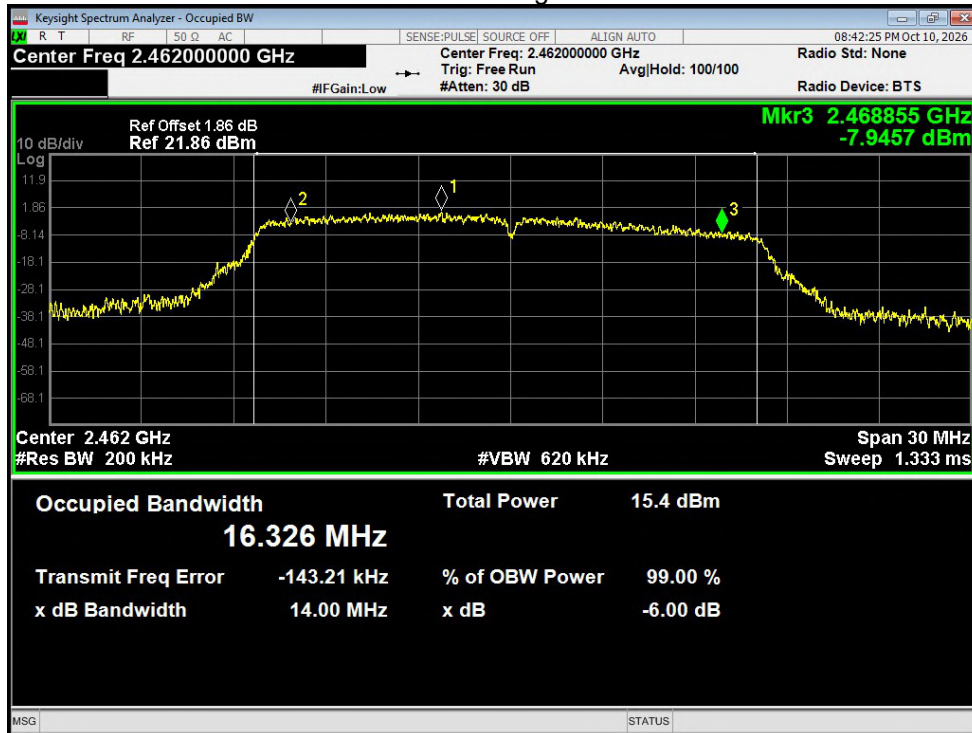
-6dB Bandwidth NVNT g 2412MHz Ant1



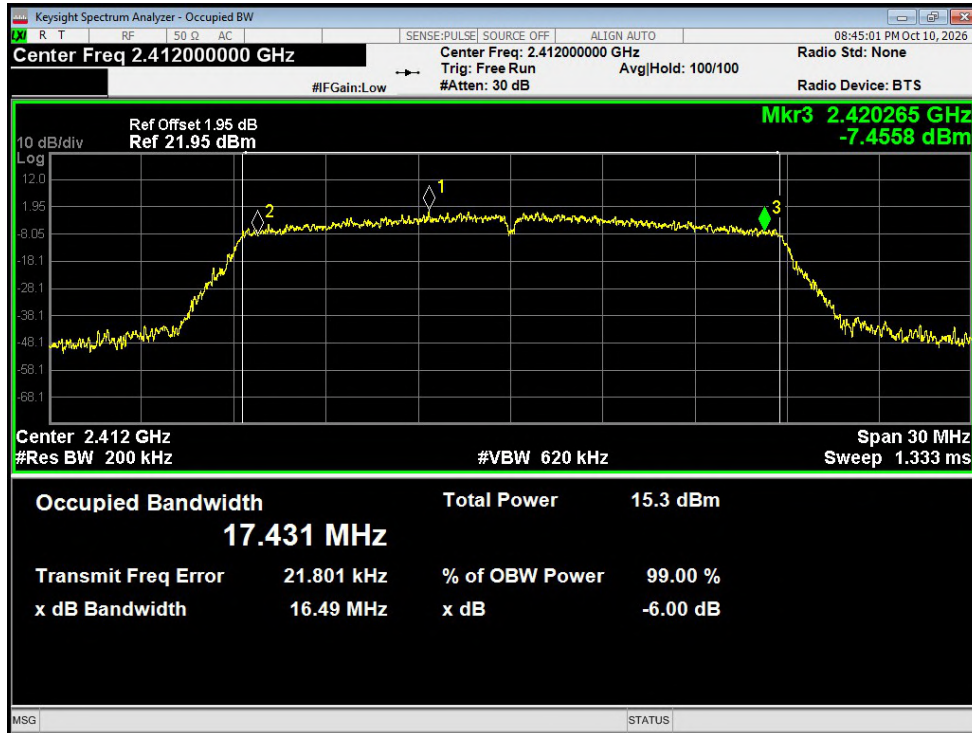
-6dB Bandwidth NVNT g 2437MHz Ant1



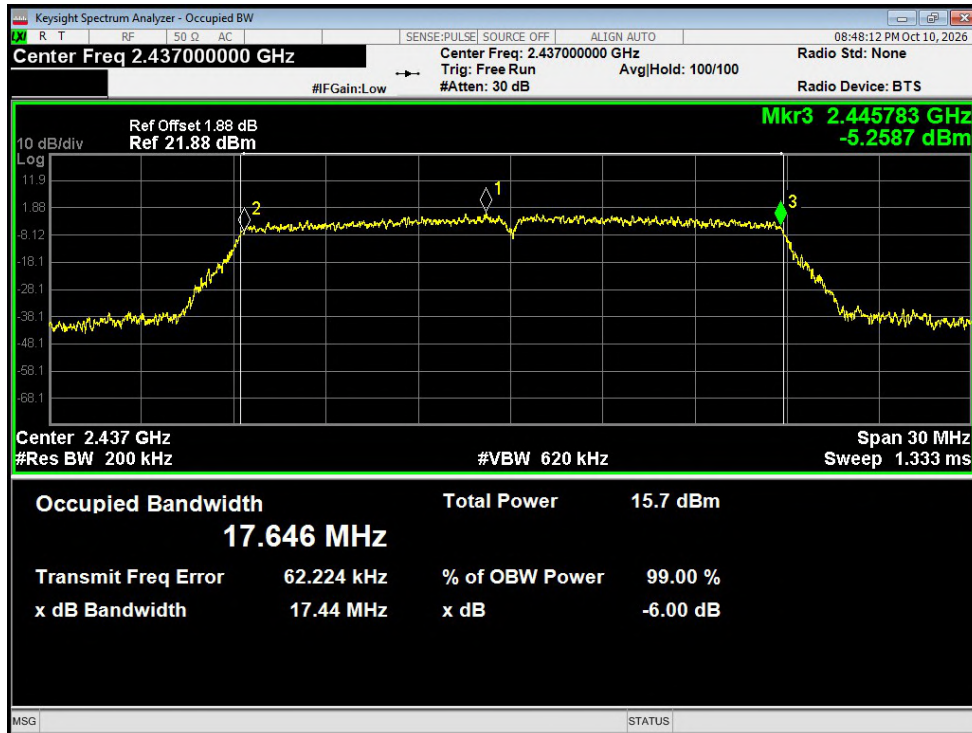
-6dB Bandwidth NVNT g 2462MHz Ant1



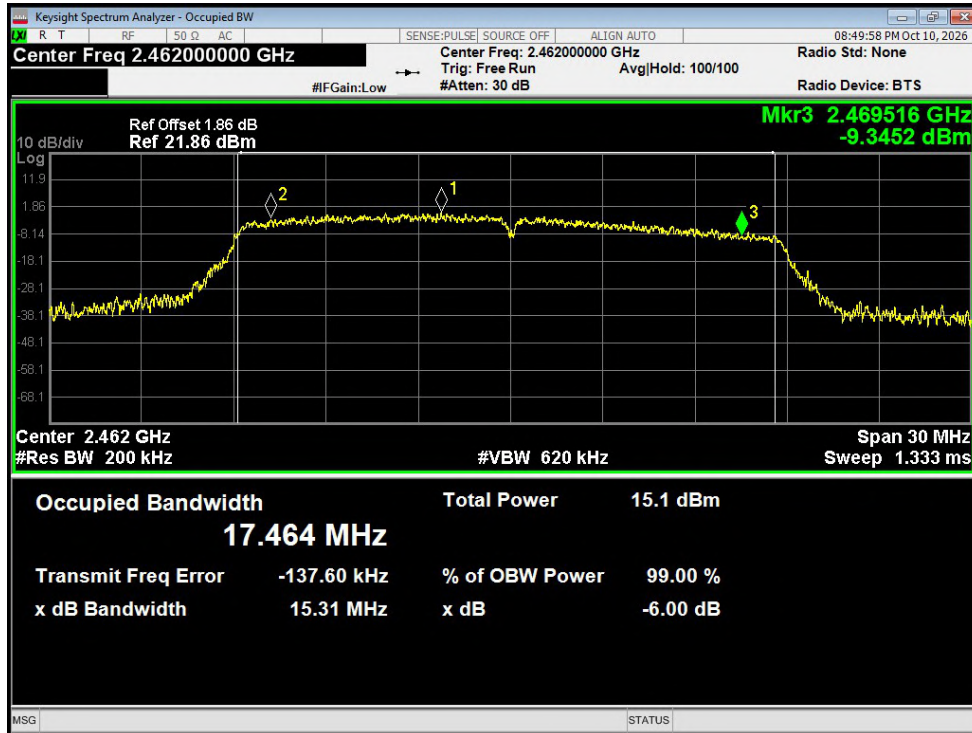
-6dB Bandwidth NVNT n20 2412MHz Ant1



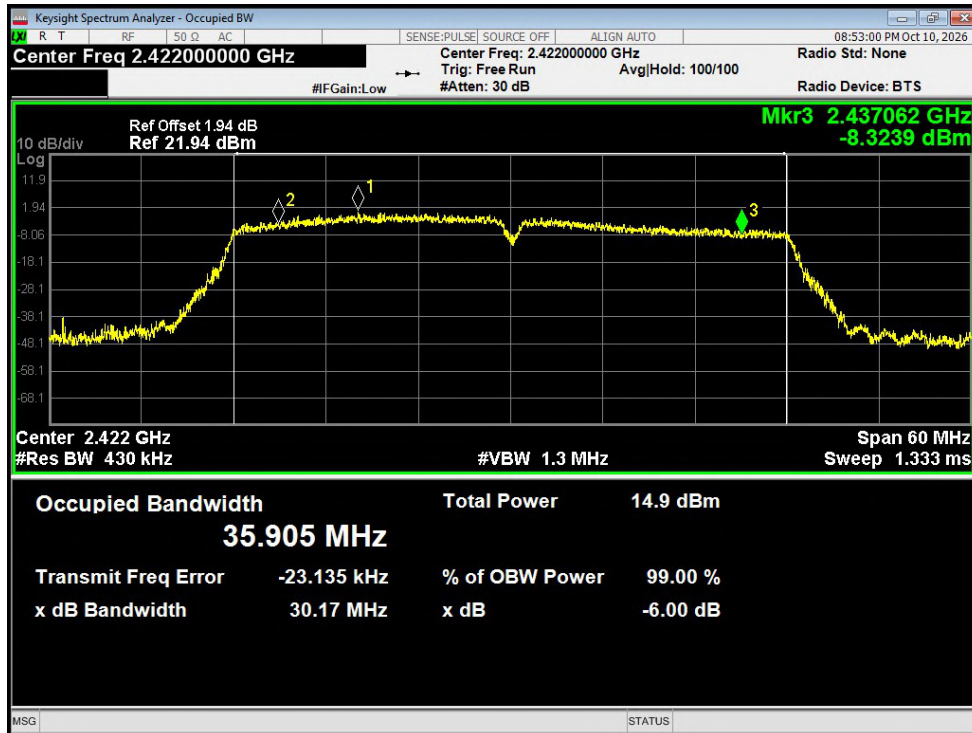
-6dB Bandwidth NVNT n20 2437MHz Ant1



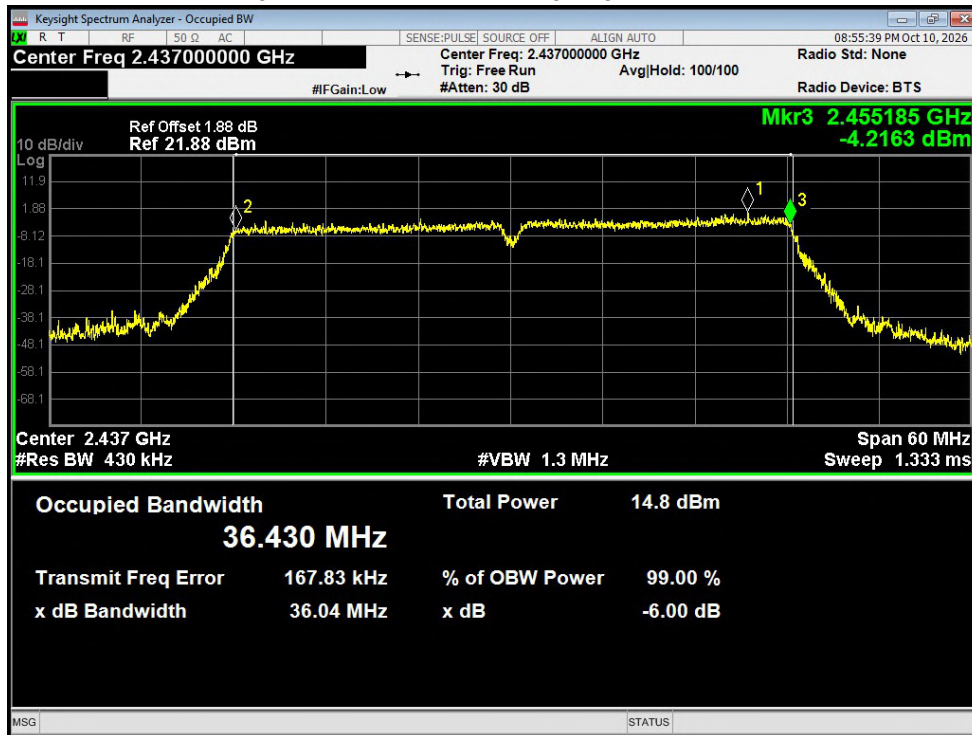
-6dB Bandwidth NVNT n20 2462MHz Ant1



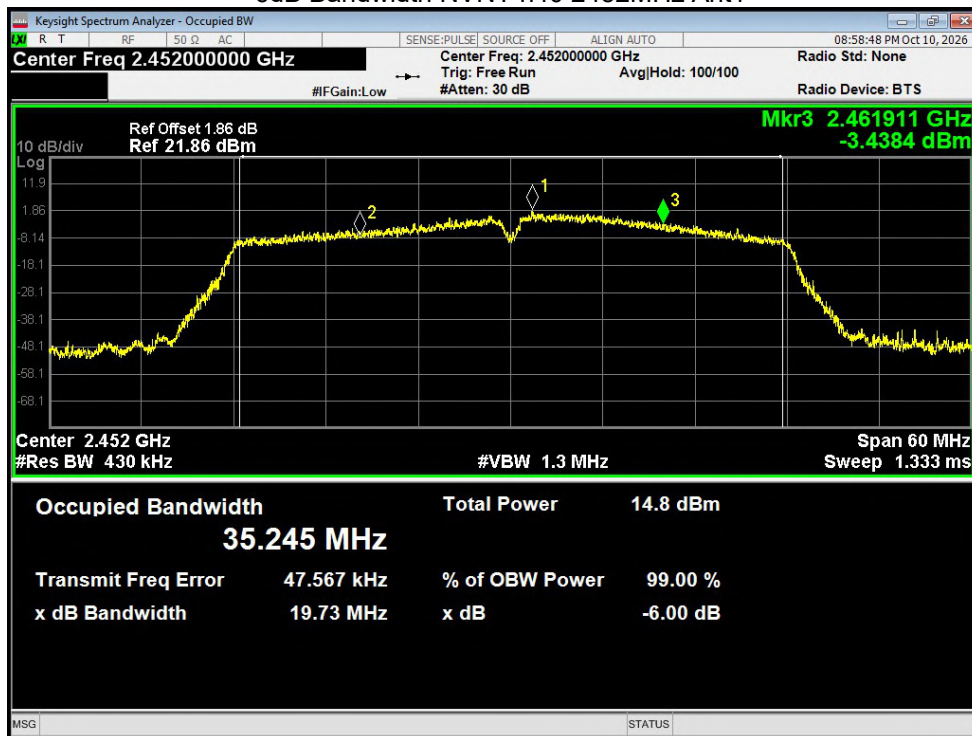
-6dB Bandwidth NVNT n40 2422MHz Ant1



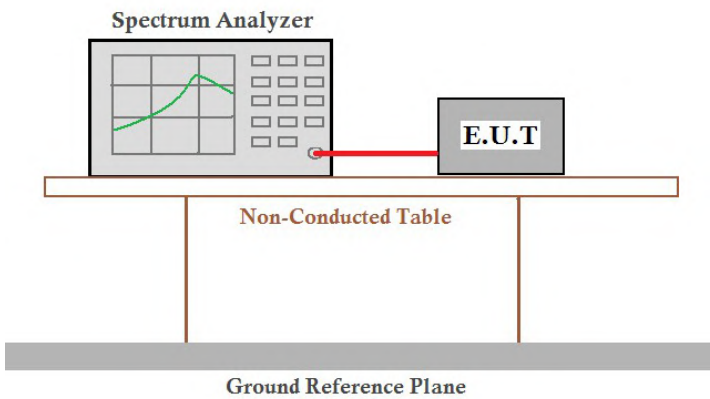
-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1



4.6 Power Spectral Density

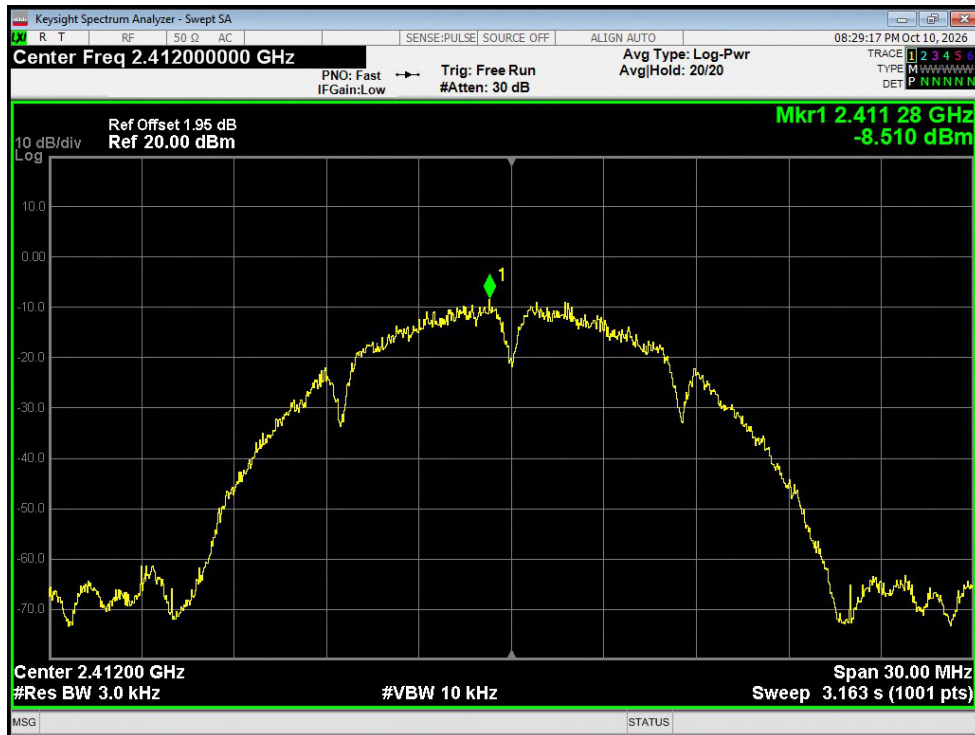
Test Requirement:	47CFR Part 15.247 (e)	
Test Method:	ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 § 11.10.2 KDB558074 D01 15.247 Meas Guidance v05r02	
Limit:	8dBm/3kHz	
Test setup:		
Test Instruments:	Refer to section 3.0 for details	
Test mode:	Refer to section 2.2 for details	
Test environment:	Temp.: 24.2°C	Humid.: 53%RH
Test voltage:	DC 14.8V from battery	
Test results:	Pass	

Measurement Result

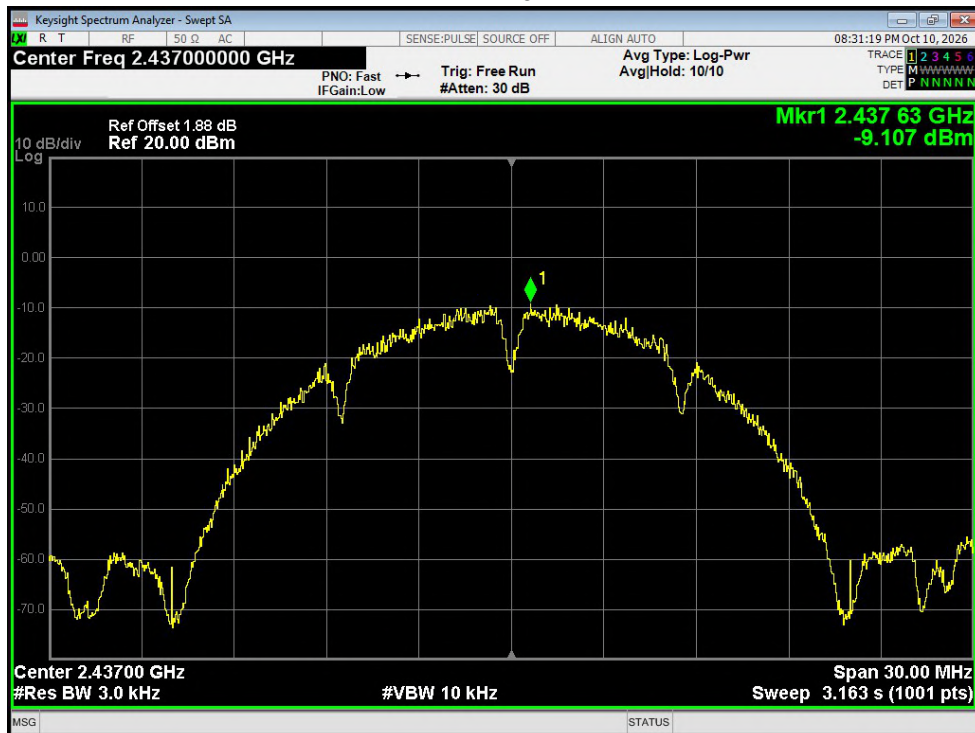
Condition	Mode	Frequency (MHz)	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	-8.510	8	Pass
NVNT	b	2437	-9.107	8	Pass
NVNT	b	2462	-9.781	8	Pass
NVNT	g	2412	-13.546	8	Pass
NVNT	g	2437	-14.311	8	Pass
NVNT	g	2462	-13.646	8	Pass
NVNT	n20	2412	-14.137	8	Pass
NVNT	n20	2437	-14.716	8	Pass
NVNT	n20	2462	-13.180	8	Pass
NVNT	n40	2422	-17.919	8	Pass
NVNT	n40	2437	-18.322	8	Pass
NVNT	n40	2452	-16.285	8	Pass

Test plot as follows:

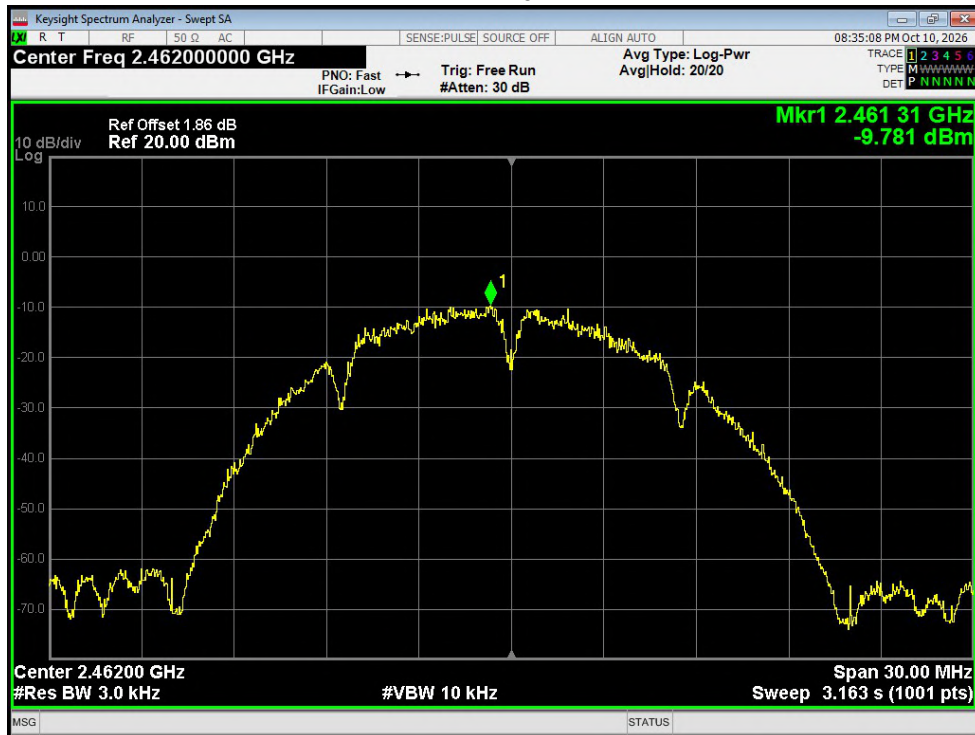
PSD NVNT b 2412MHz Ant1



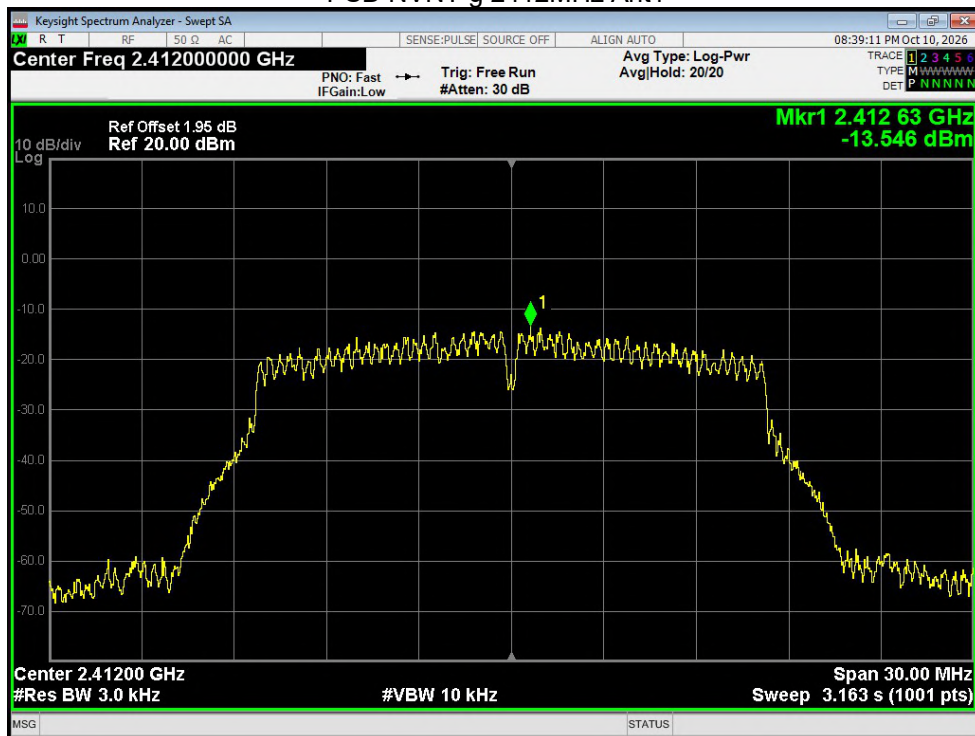
PSD NVNT b 2437MHz Ant1



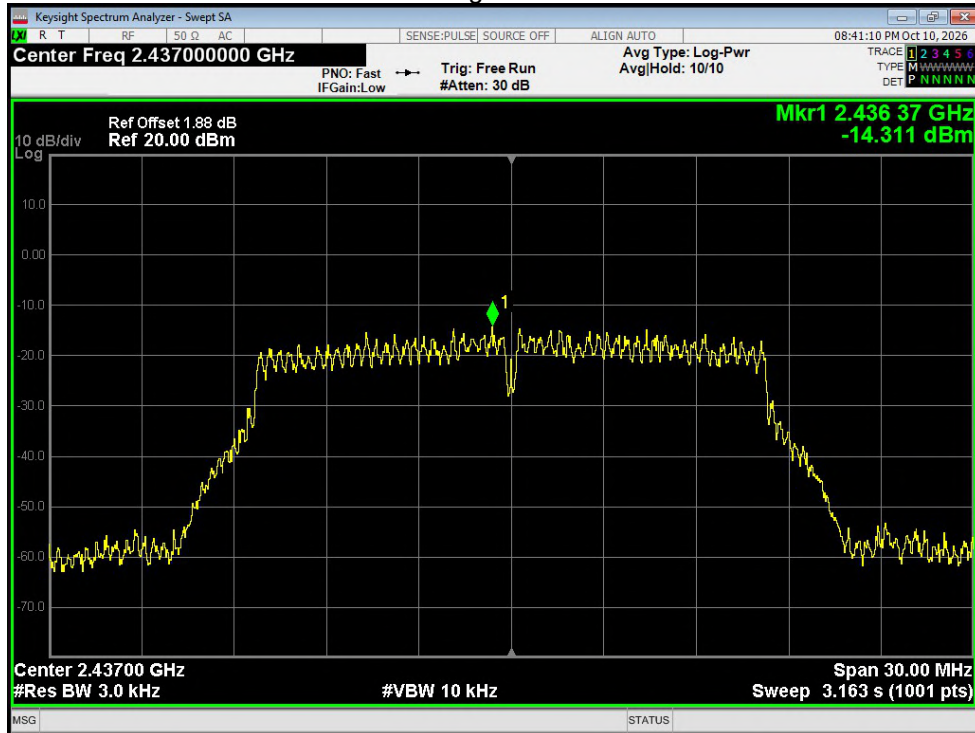
PSD NVNT b 2462MHz Ant1



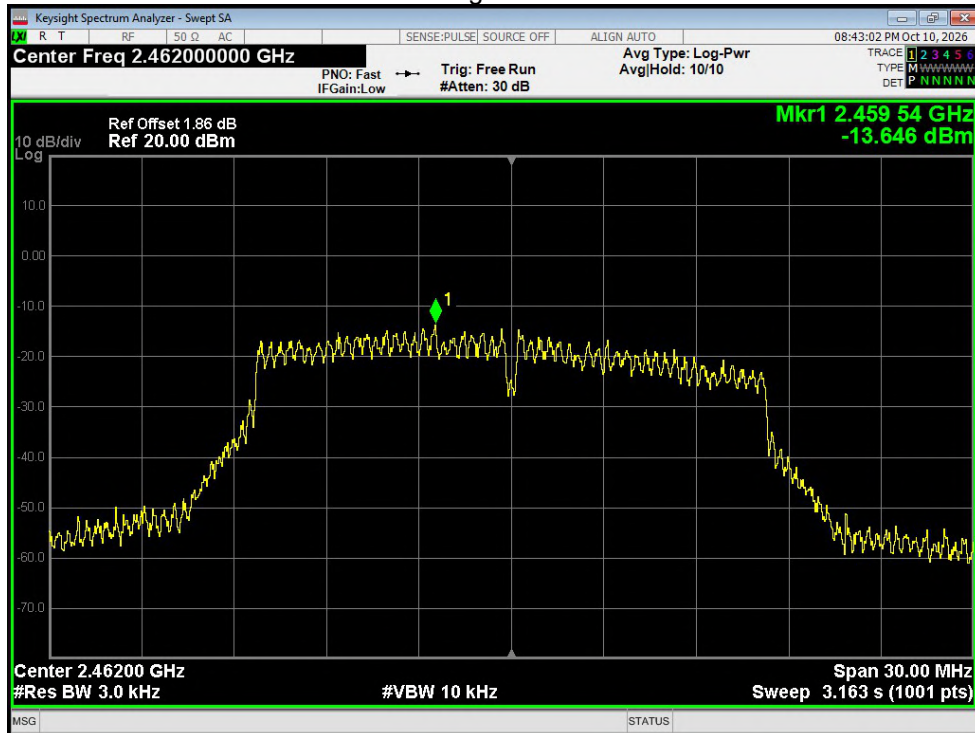
PSD NVNT g 2412MHz Ant1



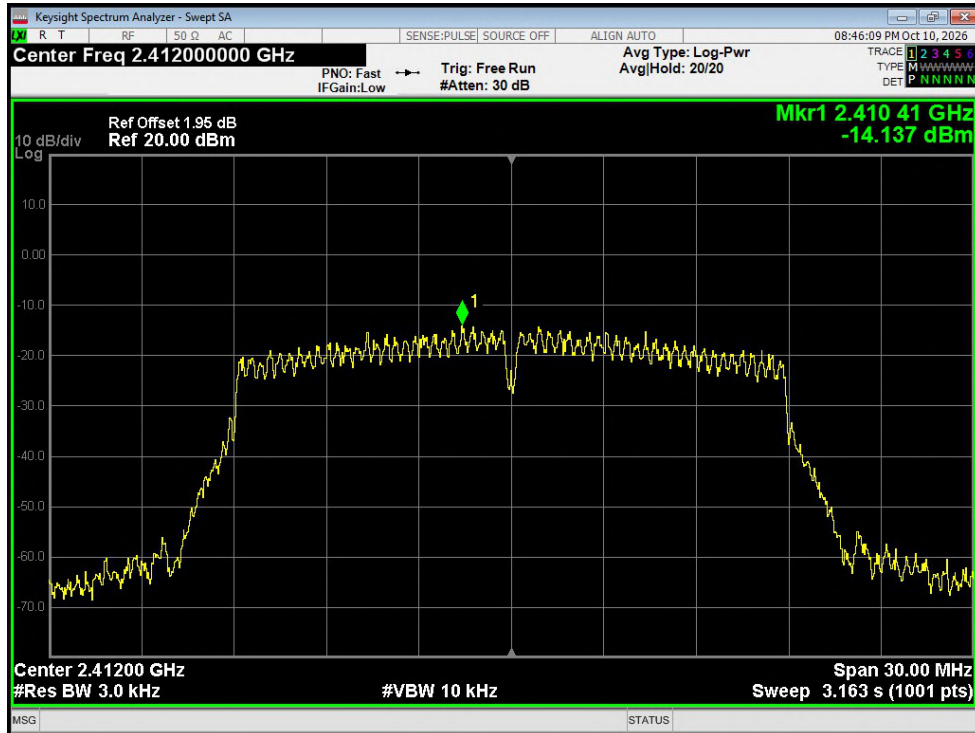
PSD NVNT g 2437MHz Ant1



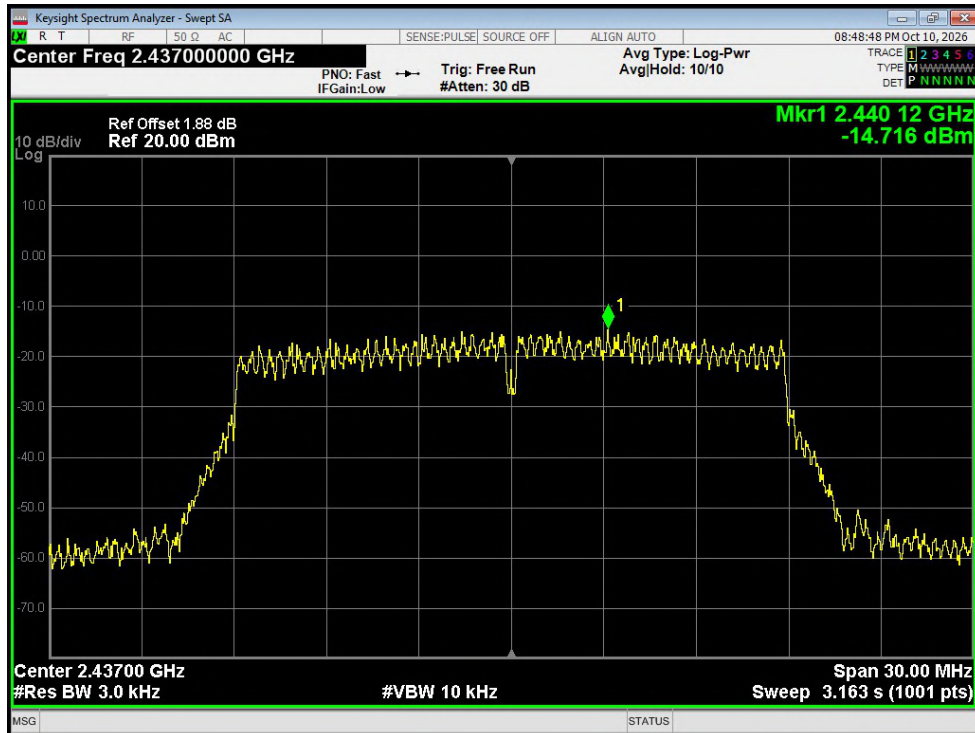
PSD NVNT g 2462MHz Ant1



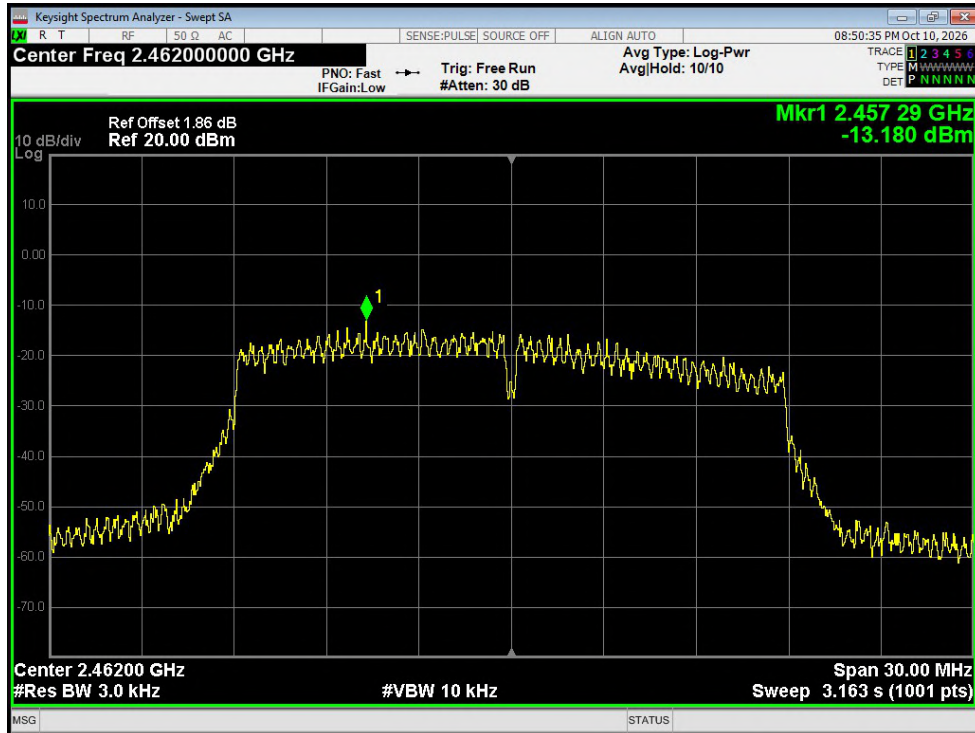
PSD NVNT n20 2412MHz Ant1



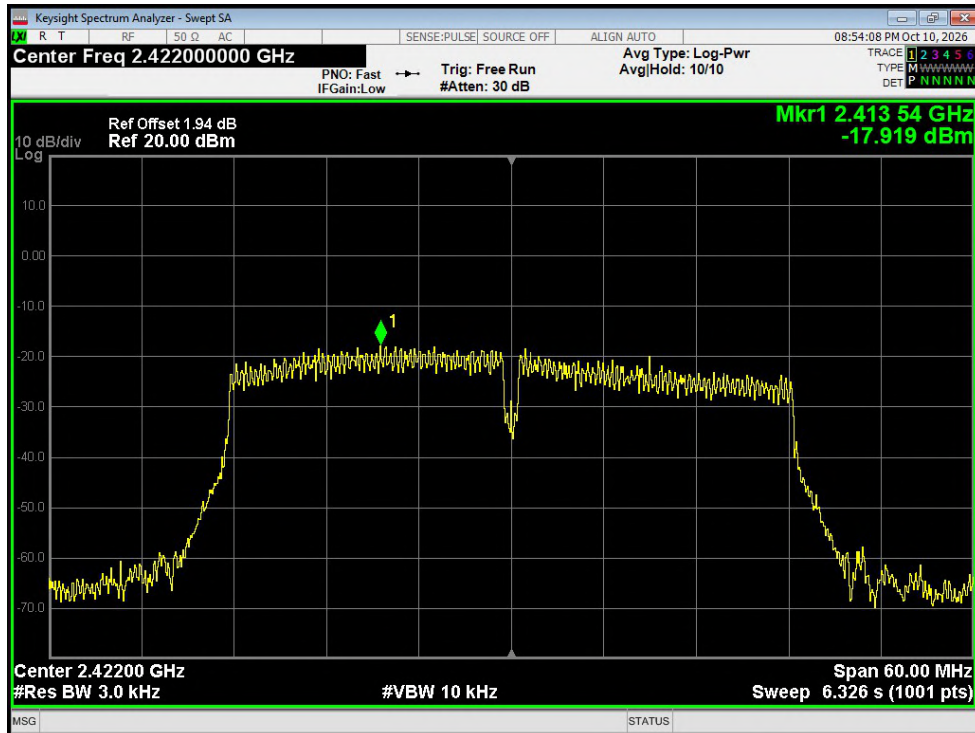
PSD NVNT n20 2437MHz Ant1



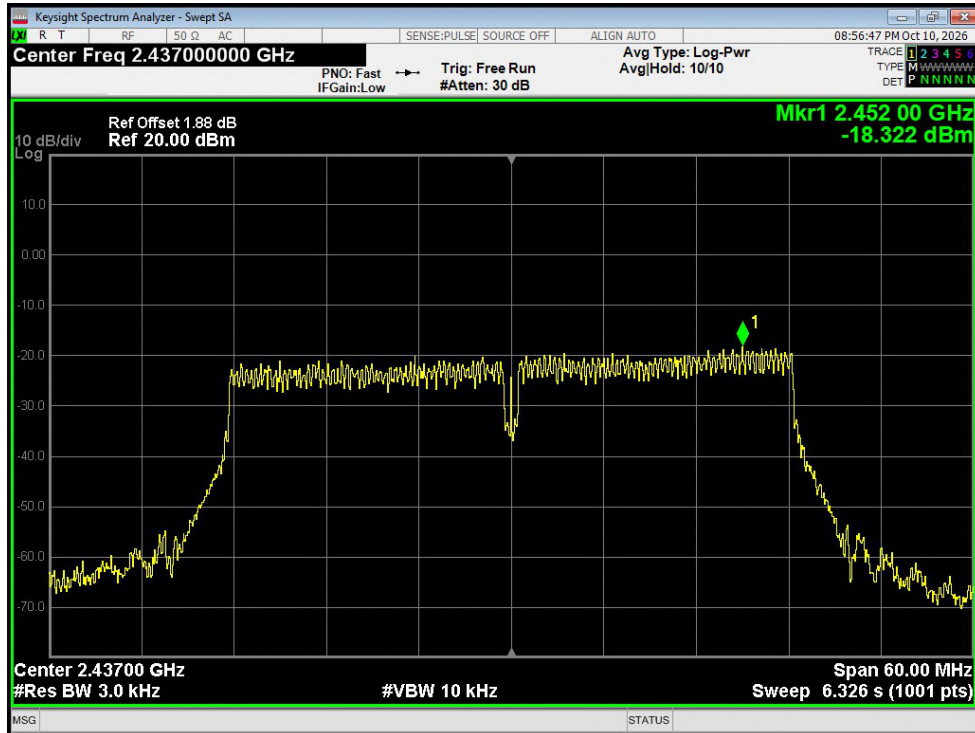
PSD NVNT n20 2462MHz Ant1



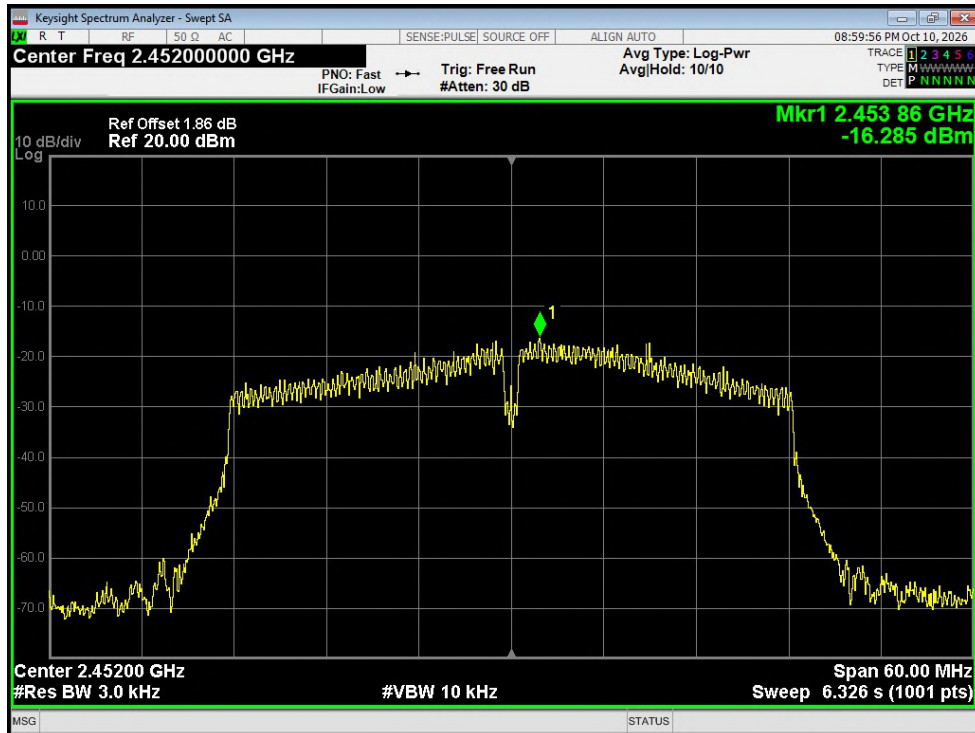
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1

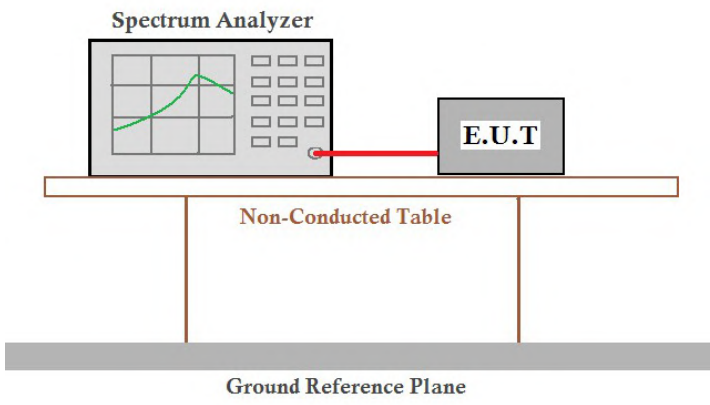


PSD NVNT n40 2452MHz Ant1



4.7 Band edges

Conducted Emission Method

Test Requirement:	47CFR Part 15.247 (d)	
Test Method:	ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024 § 6.10.2	
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.	
Test setup:		
Test Instruments:	Refer to section 3.0 for details	
Test mode:	Refer to section 2.2 for details	
Test environment:	Temp.: 24.2°C	Humid.: 53%RH
Test voltage:	DC 14.8V from battery	
Test results:	Pass	

Band Edge

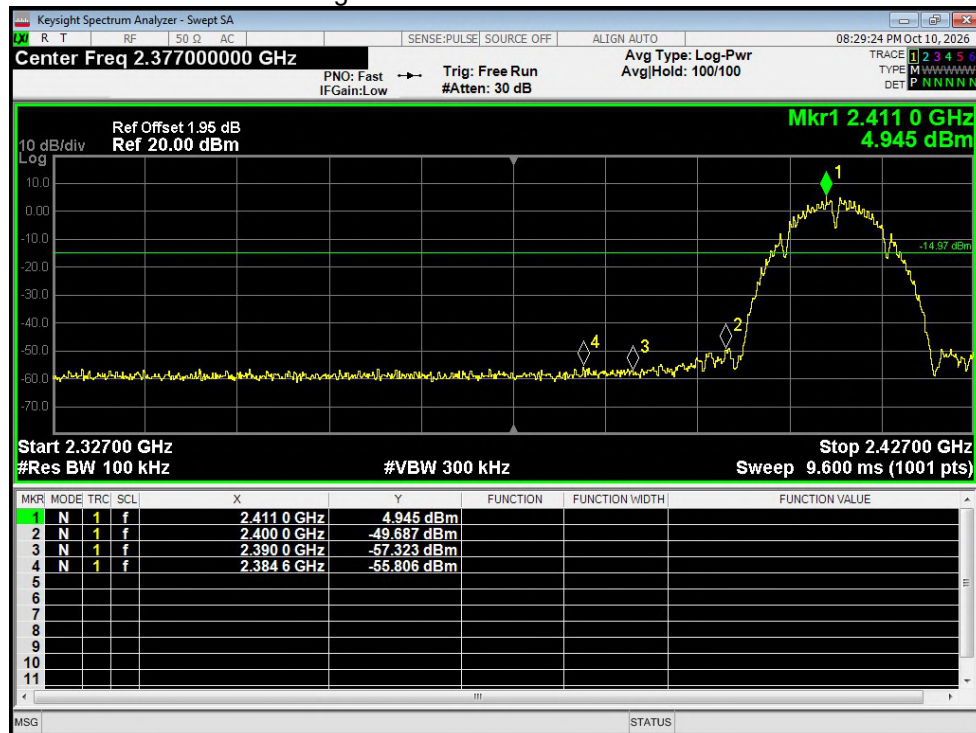
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-60.83	-20	Pass
NVNT	b	2462	Ant1	-59.87	-20	Pass
NVNT	g	2412	Ant1	-51.68	-20	Pass
NVNT	g	2462	Ant1	-42.88	-20	Pass
NVNT	n20	2412	Ant1	-50.85	-20	Pass
NVNT	n20	2462	Ant1	-43.48	-20	Pass
NVNT	n40	2422	Ant1	-43.24	-20	Pass
NVNT	n40	2452	Ant1	-47.14	-20	Pass

Test plot as follows:

Band Edge NVNT b 2412MHz Ant1 Ref



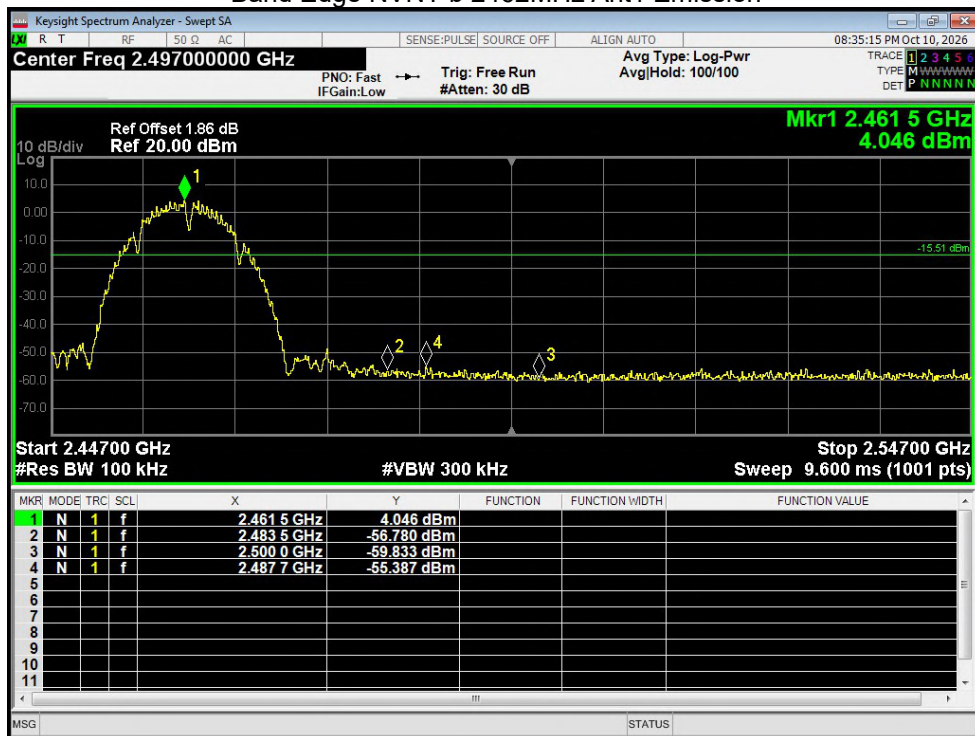
Band Edge NVNT b 2412MHz Ant1 Emission



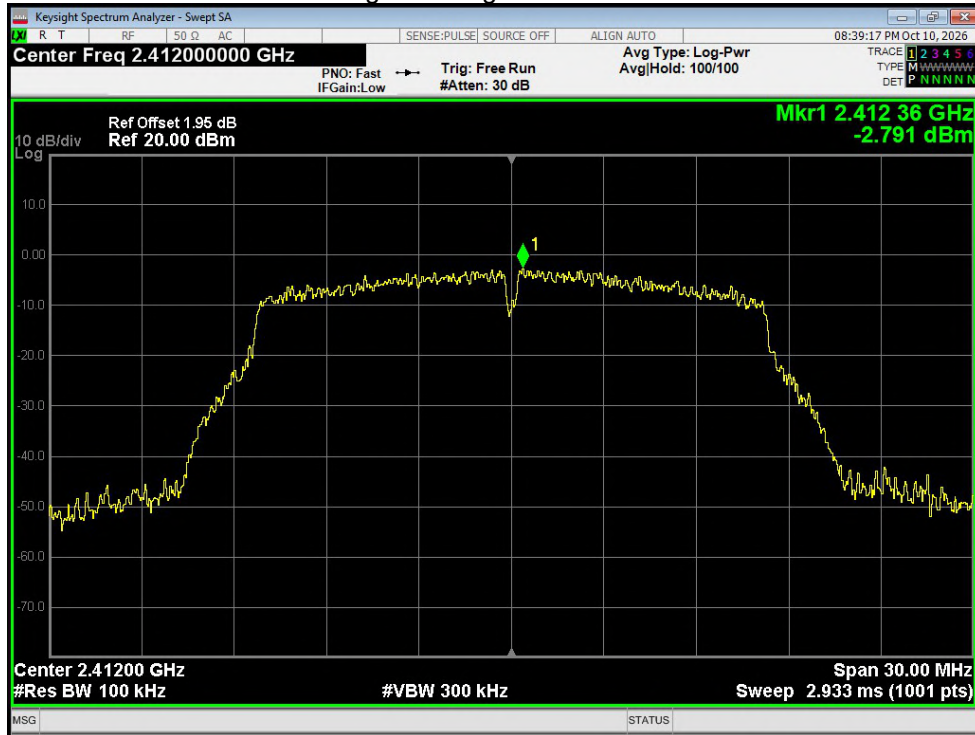
Band Edge NVNT b 2462MHz Ant1 Ref



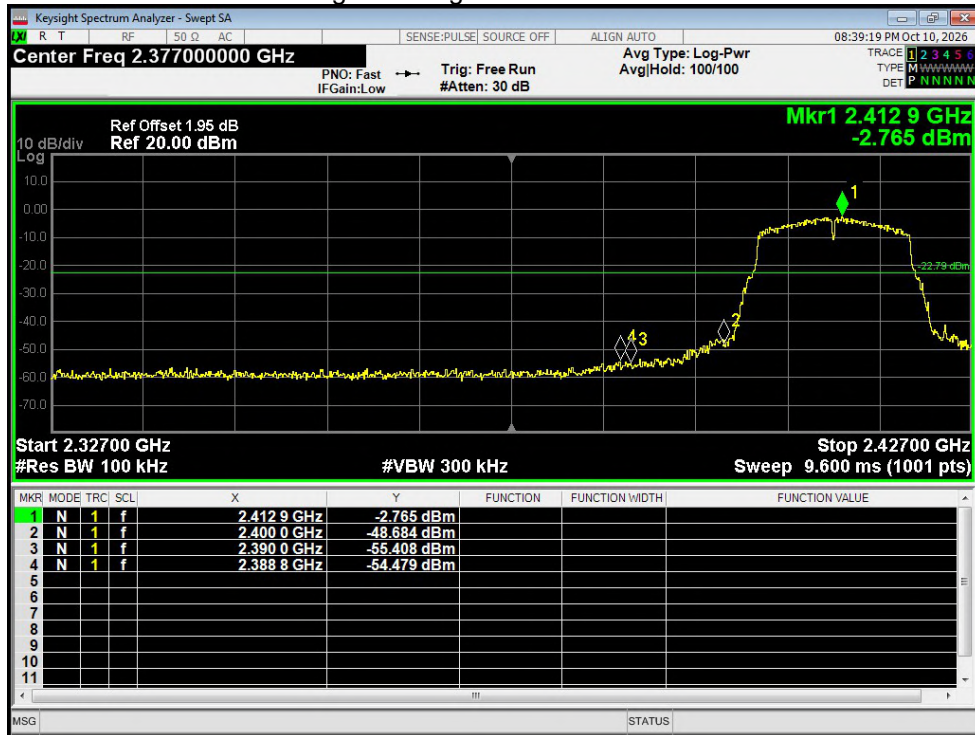
Band Edge NVNT b 2462MHz Ant1 Emission



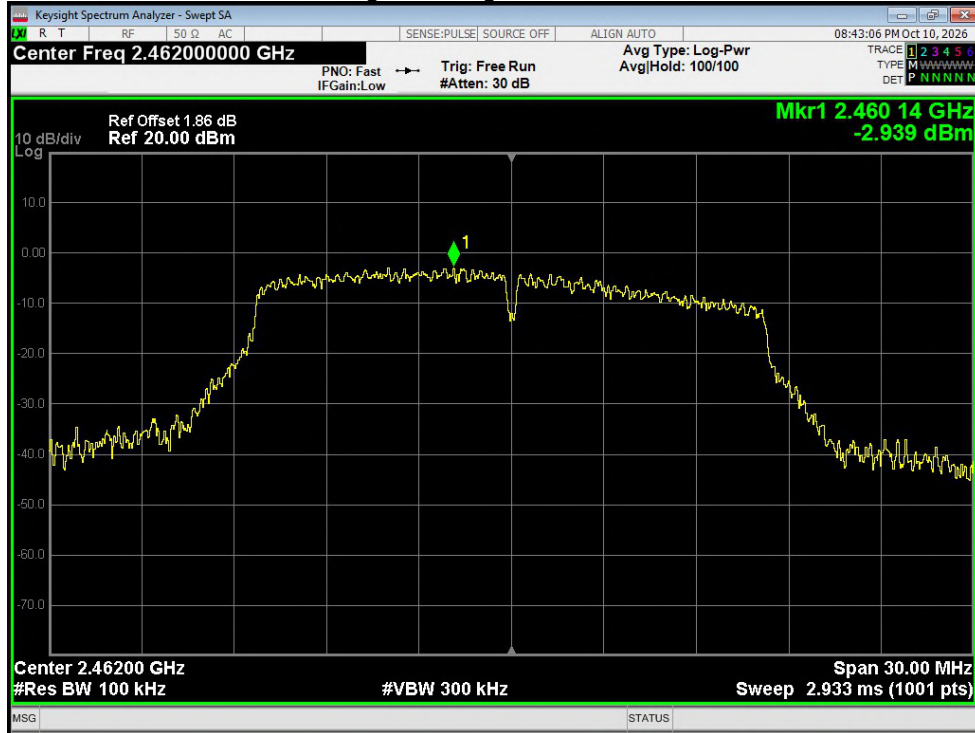
Band Edge NVNT g 2412MHz Ant1 Ref



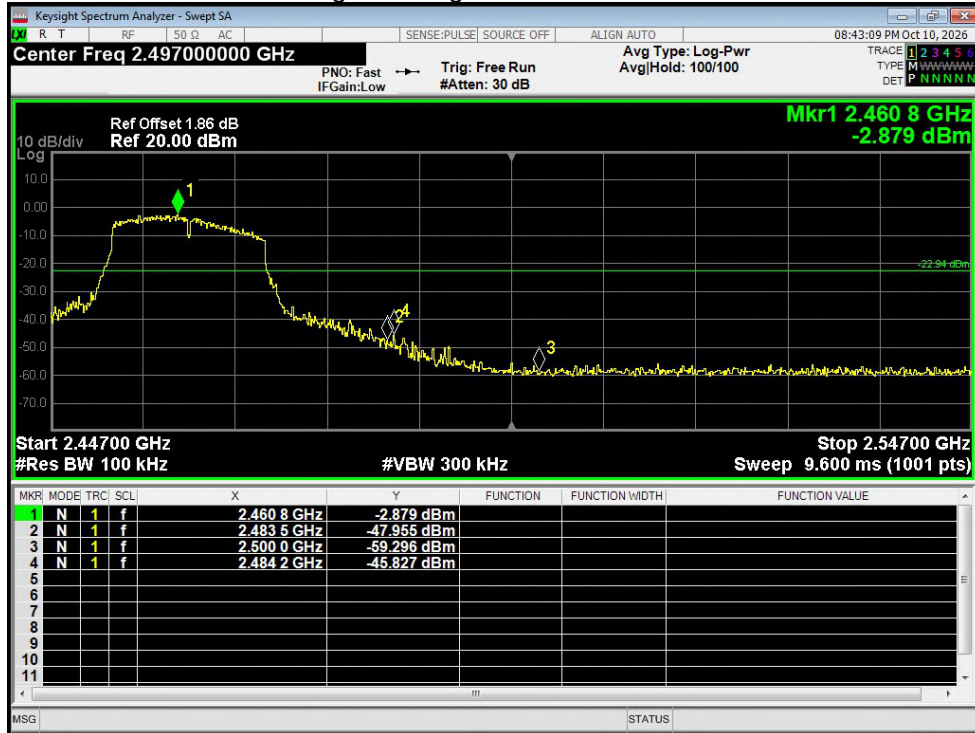
Band Edge NVNT g 2412MHz Ant1 Emission



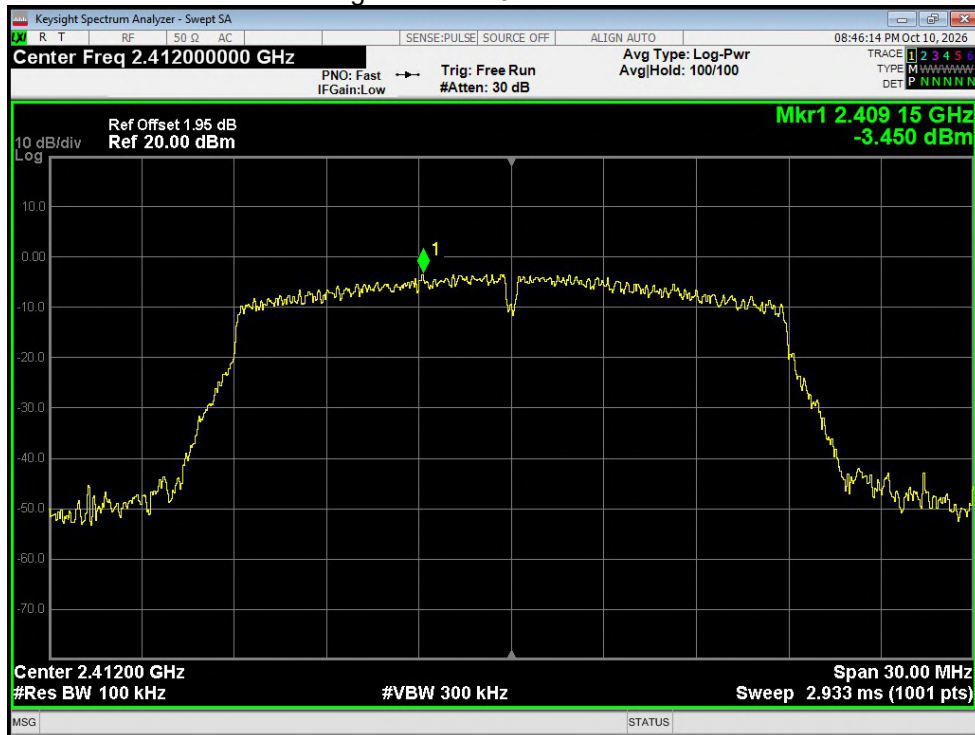
Band Edge NVNT g 2462MHz Ant1 Ref



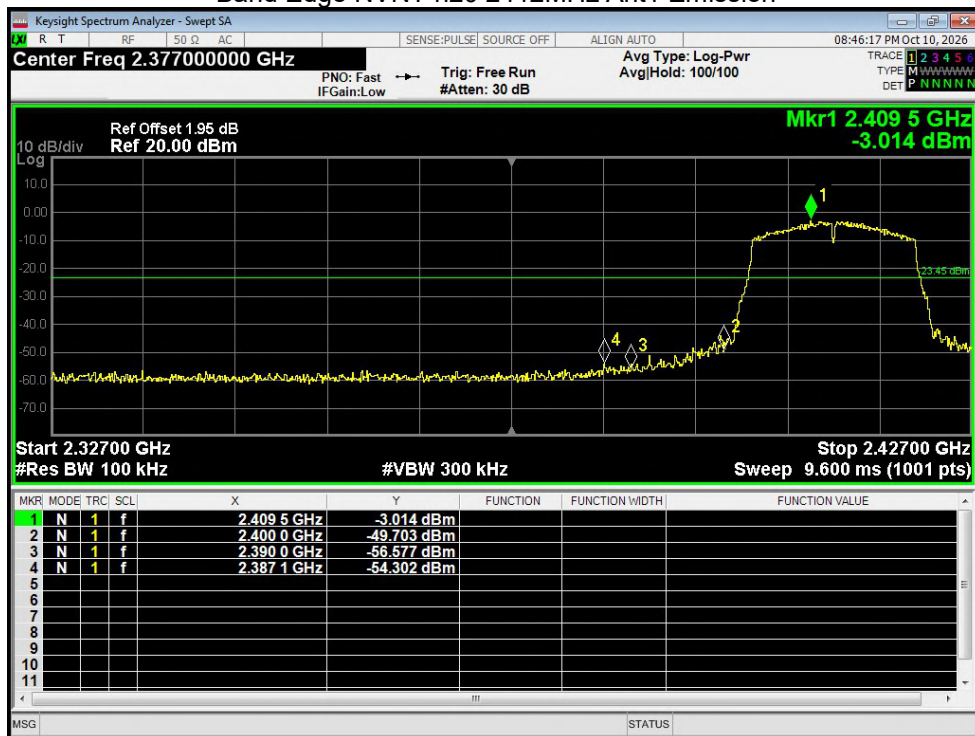
Band Edge NVNT g 2462MHz Ant1 Emission



Band Edge NVNT n20 2412MHz Ant1 Ref



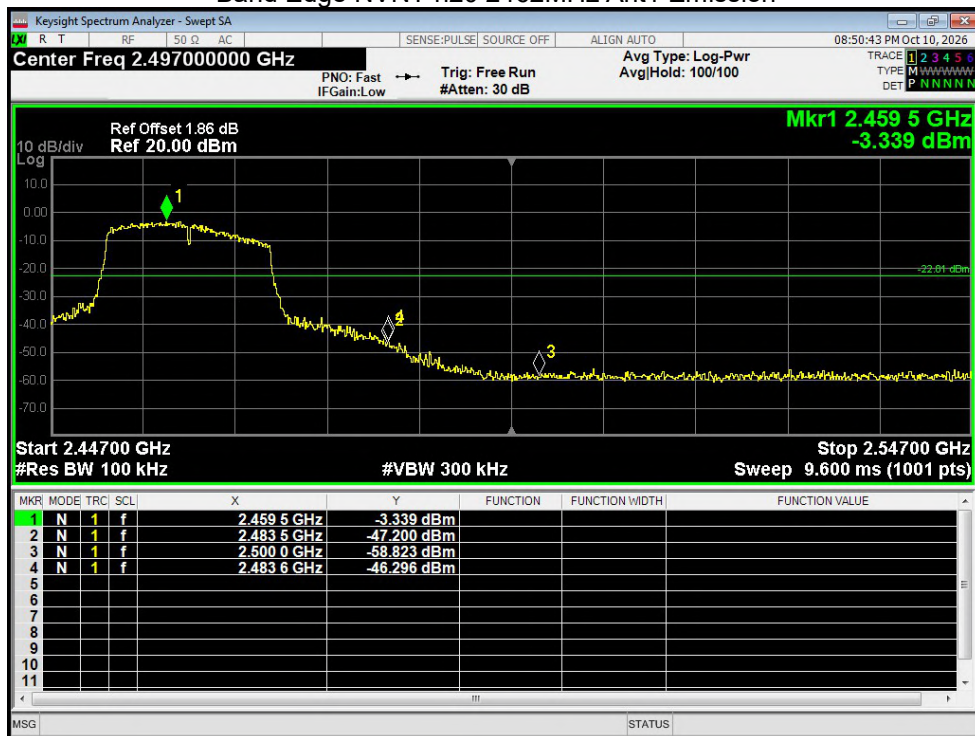
Band Edge NVNT n20 2412MHz Ant1 Emission



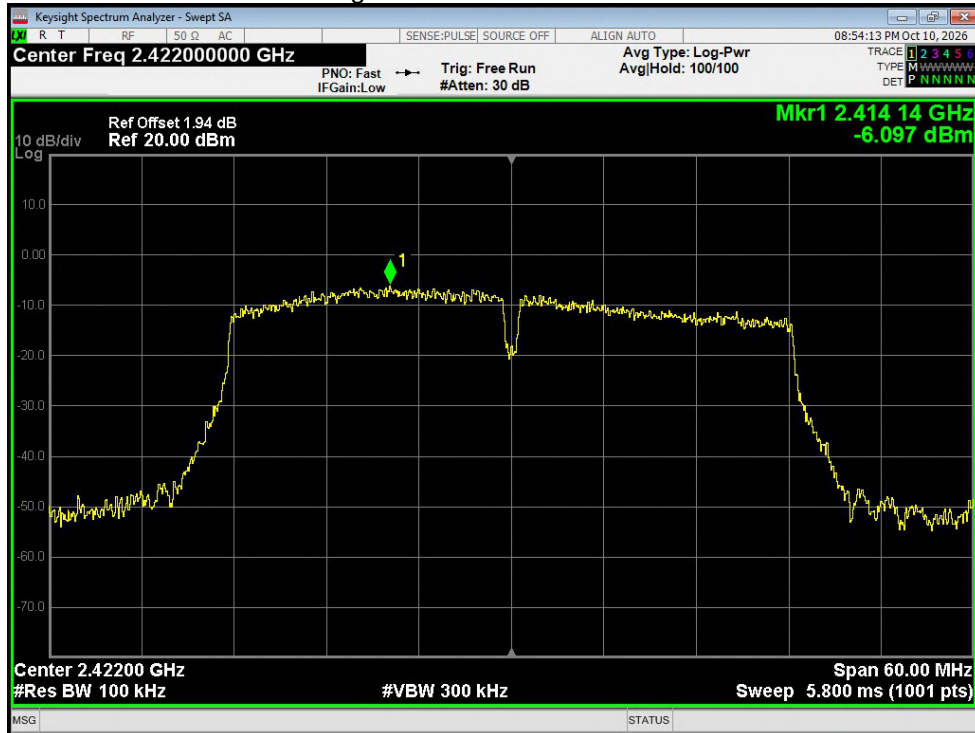
Band Edge NVNT n20 2462MHz Ant1 Ref



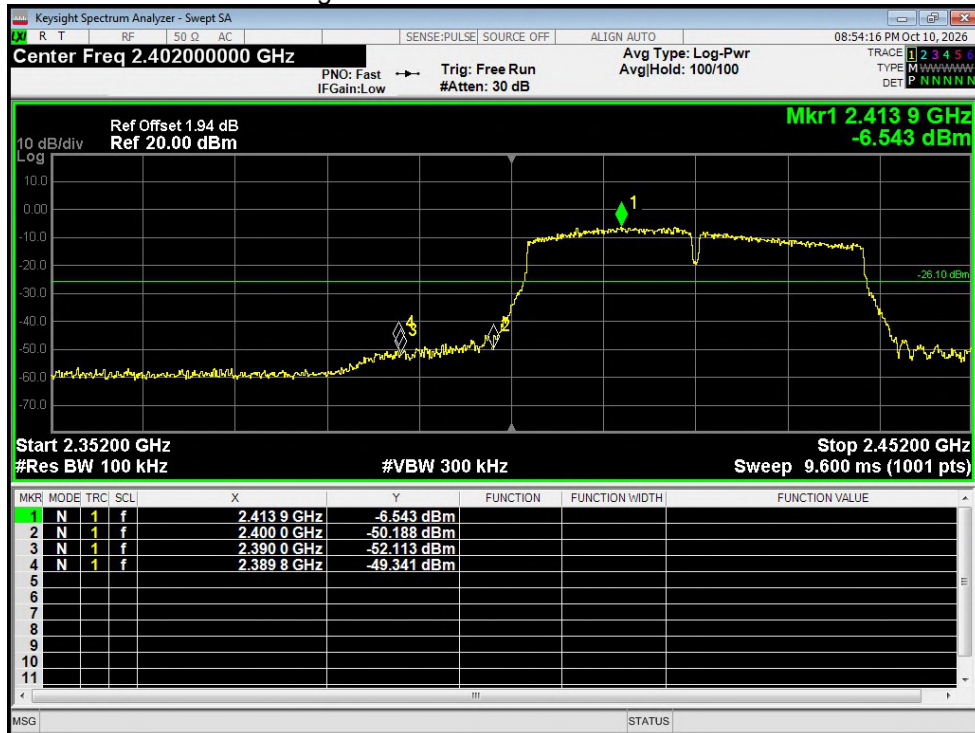
Band Edge NVNT n20 2462MHz Ant1 Emission



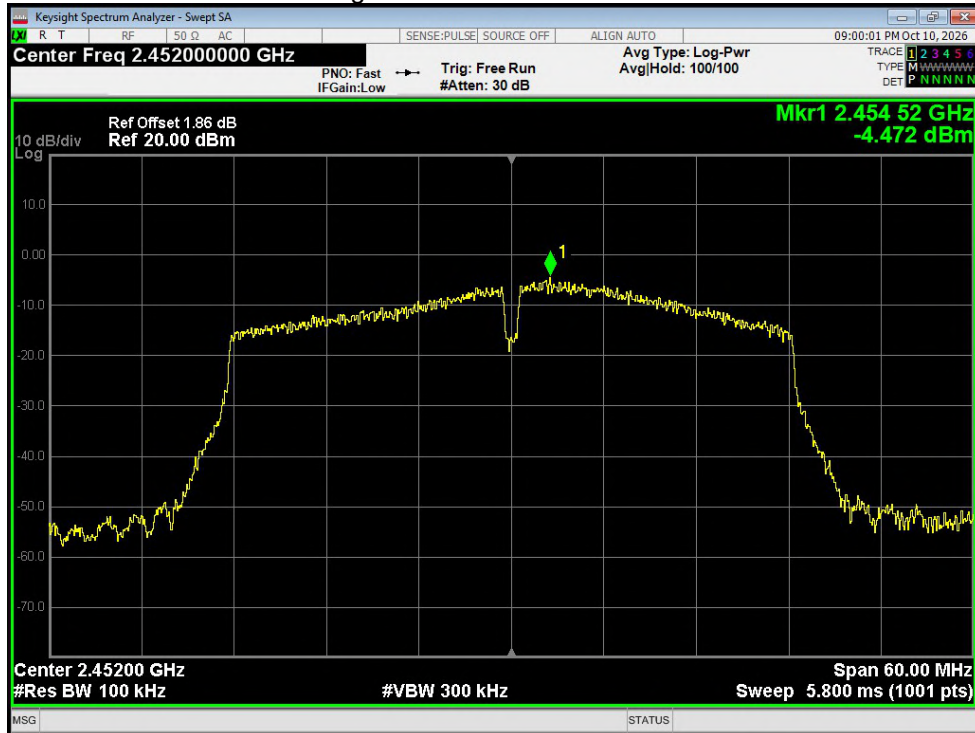
Band Edge NVNT n40 2422MHz Ant1 Ref



Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission

