

ANNEX 1

FCC Part 15C Test Report

FCC ID:2BBKV-TC111-CA1Z3

Applicant: Dagro(Shenzhen) Electronic Technology Limited

Address: Floor 4, Building A, No.3, East Area of Shangxue Science and Technology Industry, Xuexiang Community, Bantian Street, Longgang District, Shenzhen, China

Manufacturer: Dagro(Shenzhen) Electronic Technology Limited

Address: Floor 4, Building A, No.3, East Area of Shangxue Science and Technology Industry, Xuexiang Community, Bantian Street, Longgang District, Shenzhen, China

EUT: Ball Camera

Trade Mark: N/A

Model Number: TC111-CA1Z3, TC102, TC103, TC107, TC109, TC9, TC110, TC111, TC112, TC117, TC121, TC2, TC13, TC116, TC10, TC101, TC96, TC21, TC19, TC129, TC159, TC160, TC20, TC25, TC26, TC27, TC35, TC38, TC39, TC52, TC55, TC56, TC59, TC60, TC62, TC69, TC92, TC93, TC98

Date of Receipt: May. 13, 2023

Test Date: May. 13, 2023 – May. 26, 2023

Date of Report: May. 26, 2023

Prepared By: Shenzhen DL Testing Technology Co., Ltd.

Address: 101-201, Building C, Shuanghuan, No.8, Baoqing Road, Baolong Industrial Zone, Baolong Street, Longgang District, Shenzhen, Guangdong, China

Applicable Standards: FCC PART 15 C 15.247
ANSI C63.10:2013

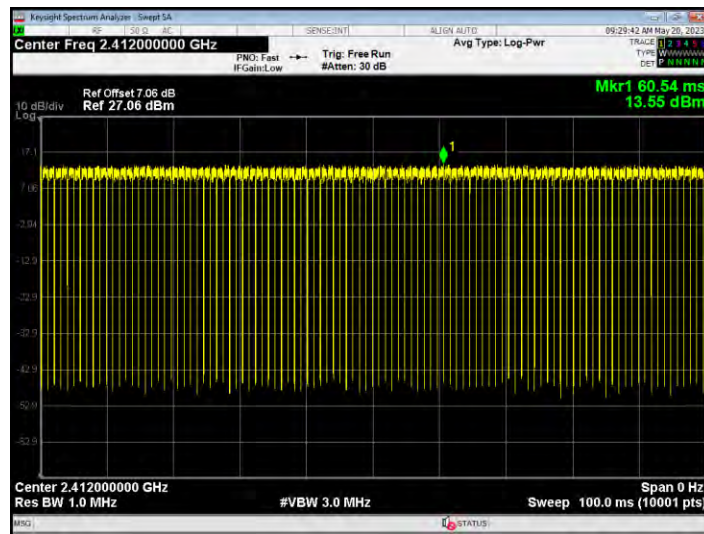
Test Result: Pass

Report Number: DL-20230525026E

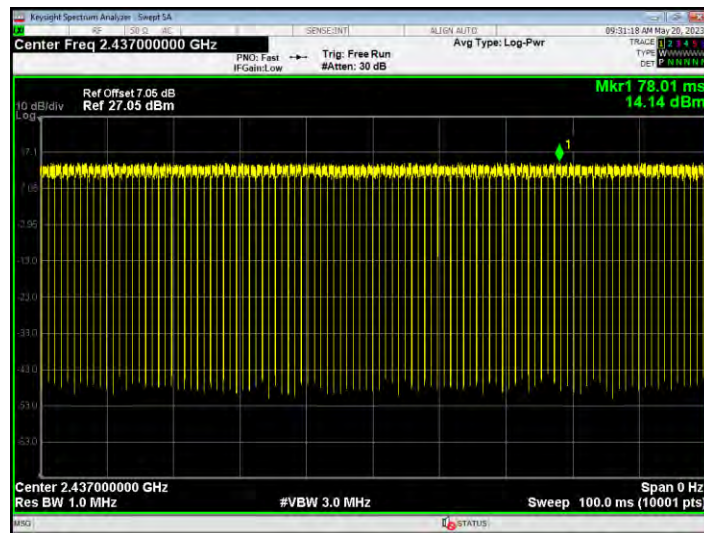
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	97.29	0.12
NVNT	b	2437	Ant1	97.27	0.12
NVNT	b	2462	Ant1	97.29	0.12
NVNT	g	2412	Ant1	85.08	0.7
NVNT	g	2437	Ant1	84.93	0.71
NVNT	g	2462	Ant1	84.96	0.71
NVNT	n20	2412	Ant1	97.56	0.11
NVNT	n20	2437	Ant1	97.61	0.11
NVNT	n20	2462	Ant1	97.61	0.11
NVNT	n40	2422	Ant1	95.3	0.21
NVNT	n40	2437	Ant1	95.34	0.21
NVNT	n40	2452	Ant1	95.3	0.21

Duty Cycle NVNT b 2412MHz Ant1



Duty Cycle NVNT b 2437MHz Ant1



Duty Cycle NVNT b 2462MHz Ant1



Duty Cycle NVNT g 2412MHz Ant1



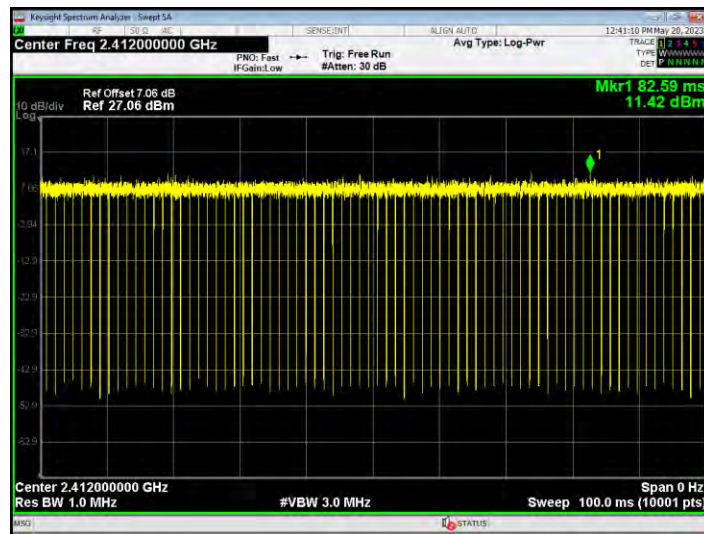
Duty Cycle NVNT g 2437MHz Ant1



Duty Cycle NVNT g 2462MHz Ant1



Duty Cycle NVNT n20 2412MHz Ant1



Duty Cycle NVNT n20 2437MHz Ant1



Duty Cycle NVNT n20 2462MHz Ant1



Duty Cycle NVNT n40 2422MHz Ant1



Duty Cycle NVNT n40 2437MHz Ant1



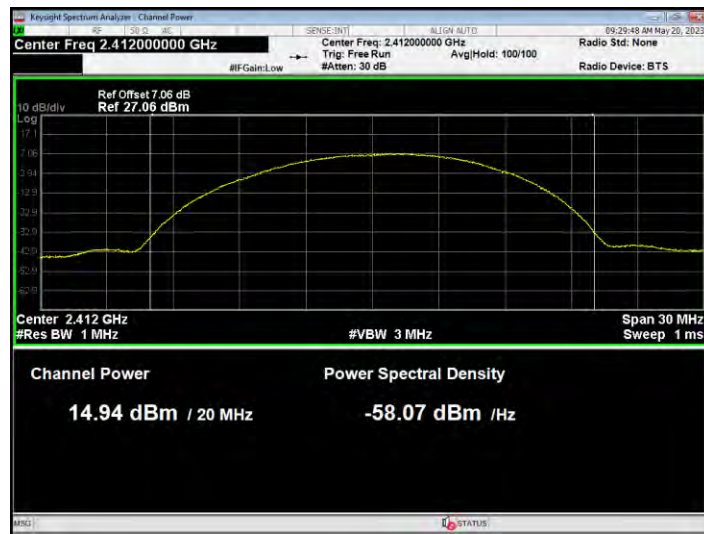
Duty Cycle NVNT n40 2452MHz Ant1



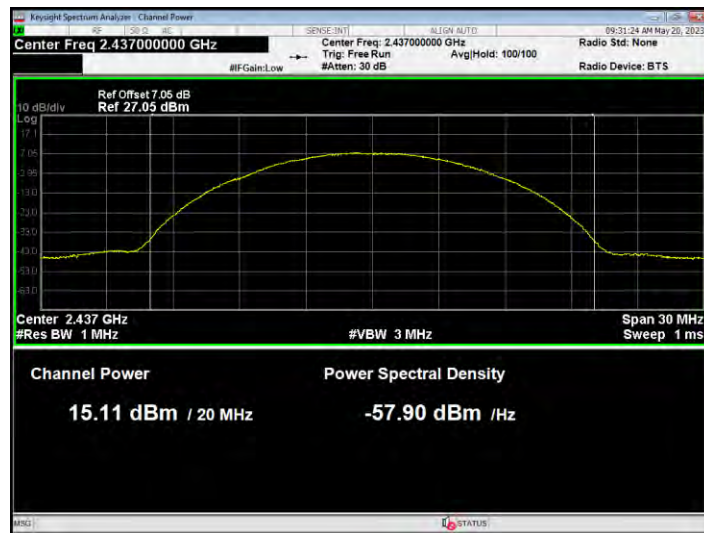
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.937	0.12	15.057	30	Pass
NVNT	b	2437	Ant1	15.108	0.12	15.228	30	Pass
NVNT	b	2462	Ant1	14.472	0.12	14.592	30	Pass
NVNT	g	2412	Ant1	13.333	0.7	14.033	30	Pass
NVNT	g	2437	Ant1	13.513	0.71	14.223	30	Pass
NVNT	g	2462	Ant1	12.689	0.71	13.399	30	Pass
NVNT	n20	2412	Ant1	14.388	0.11	14.498	30	Pass
NVNT	n20	2437	Ant1	14.563	0.11	14.673	30	Pass
NVNT	n20	2462	Ant1	13.77	0.11	13.88	30	Pass
NVNT	n40	2422	Ant1	13.982	0.21	14.192	30	Pass
NVNT	n40	2437	Ant1	14.056	0.21	14.266	30	Pass
NVNT	n40	2452	Ant1	13.307	0.21	13.517	30	Pass

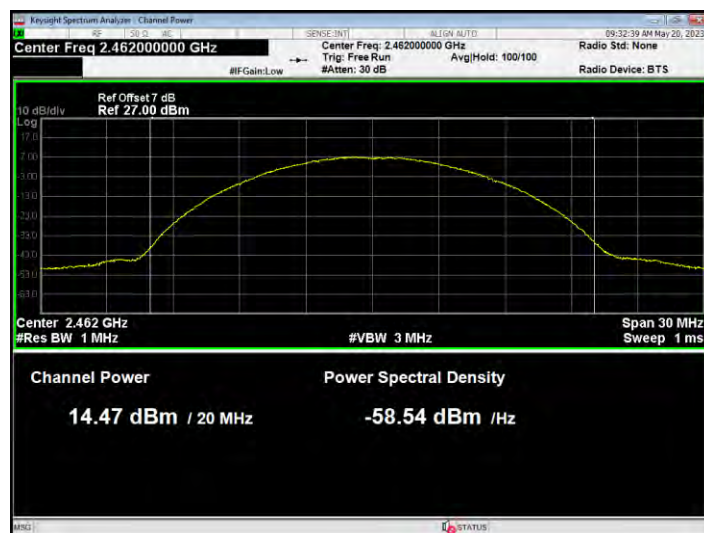
Power NVNT b 2412MHz Ant1



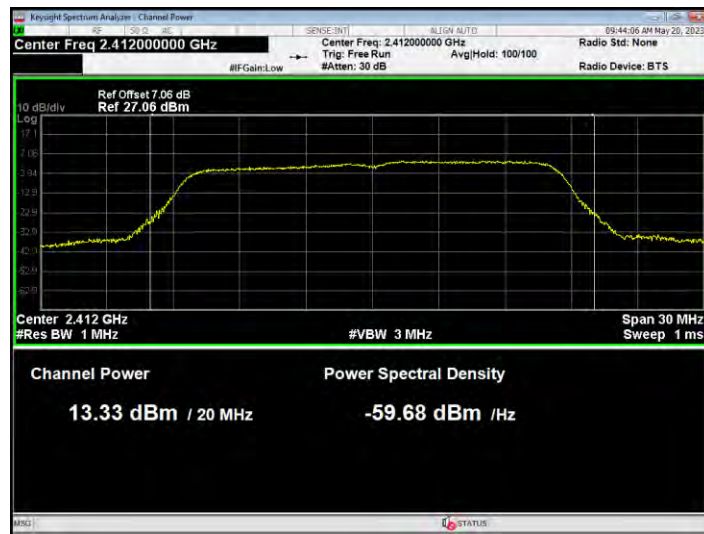
Power NVNT b 2437MHz Ant1



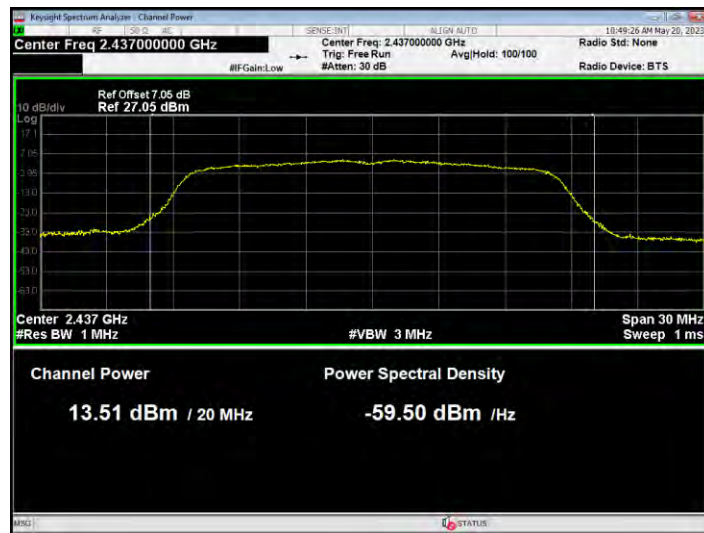
Power NVNT b 2462MHz Ant1



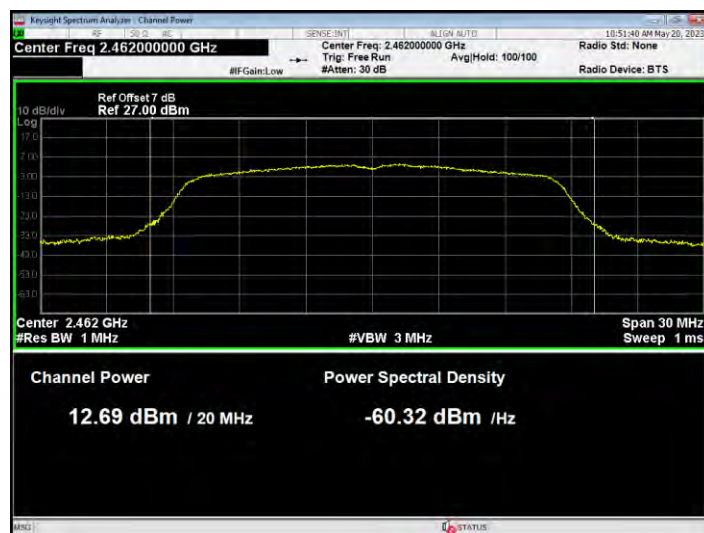
Power NVNT g 2412MHz Ant1



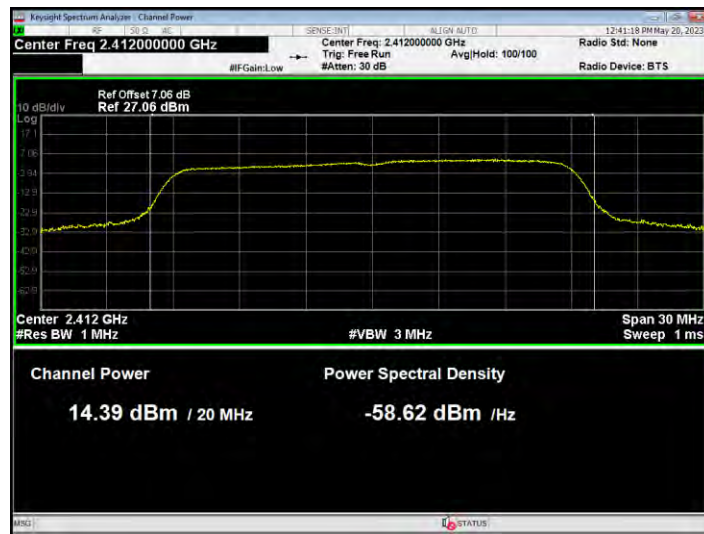
Power NVNT g 2437MHz Ant1



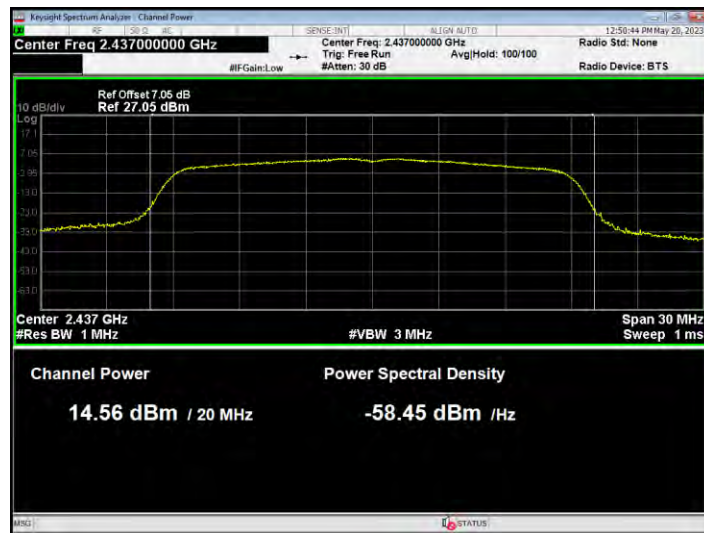
Power NVNT g 2462MHz Ant1



Power NVNT n20 2412MHz Ant1



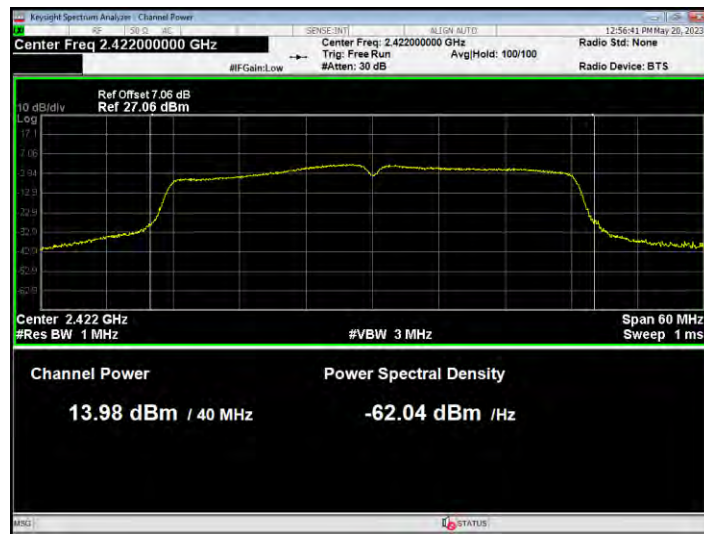
Power NVNT n20 2437MHz Ant1



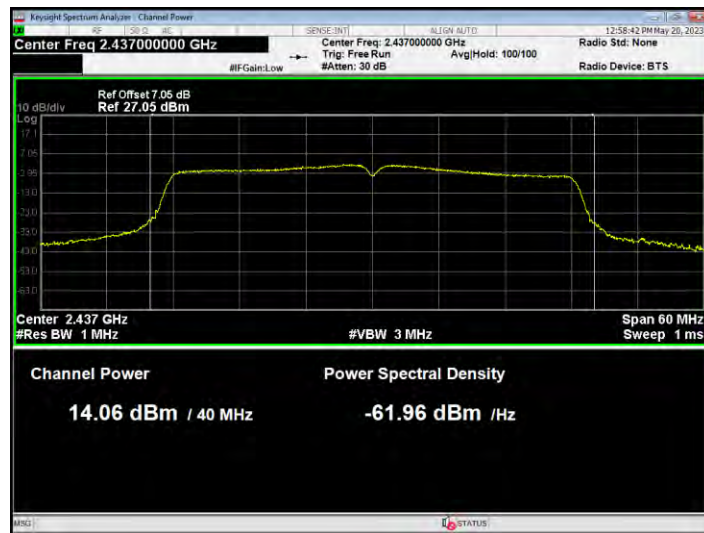
Power NVNT n20 2462MHz Ant1



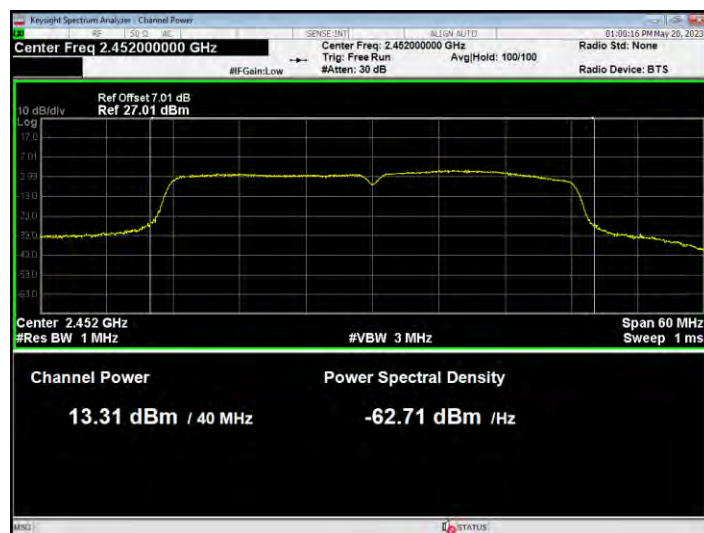
Power NVNT n40 2422MHz Ant1



Power NVNT n40 2437MHz Ant1



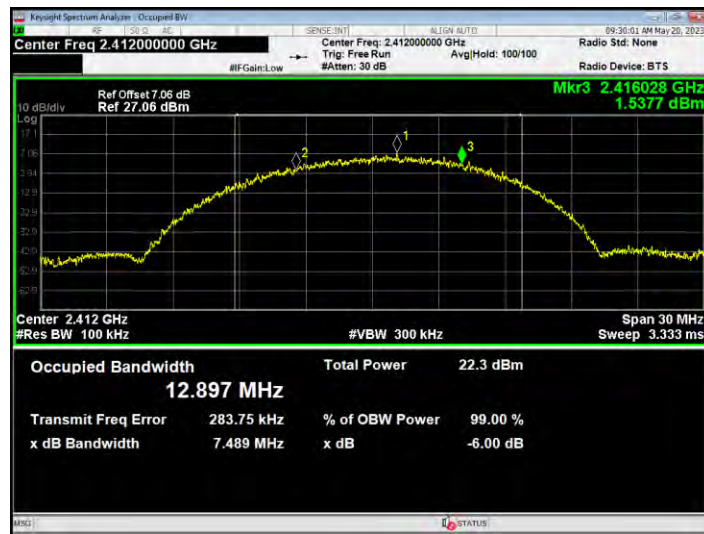
Power NVNT n40 2452MHz Ant1



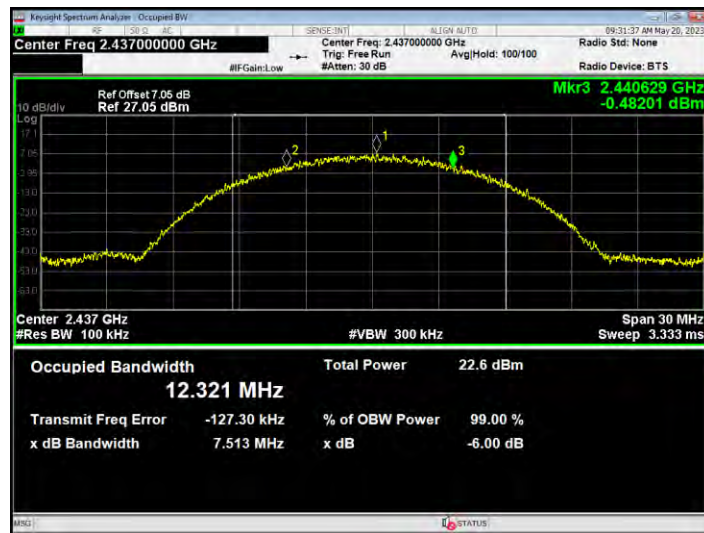
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	7.489	0.5	Pass
NVNT	b	2437	Ant1	7.513	0.5	Pass
NVNT	b	2462	Ant1	7.386	0.5	Pass
NVNT	g	2412	Ant1	15.738	0.5	Pass
NVNT	g	2437	Ant1	15.327	0.5	Pass
NVNT	g	2462	Ant1	13.831	0.5	Pass
NVNT	n20	2412	Ant1	15.082	0.5	Pass
NVNT	n20	2437	Ant1	15.099	0.5	Pass
NVNT	n20	2462	Ant1	14.994	0.5	Pass
NVNT	n40	2422	Ant1	28.857	0.5	Pass
NVNT	n40	2437	Ant1	35.08	0.5	Pass
NVNT	n40	2452	Ant1	35.134	0.5	Pass

-6dB Bandwidth NVNT b 2412MHz Ant1



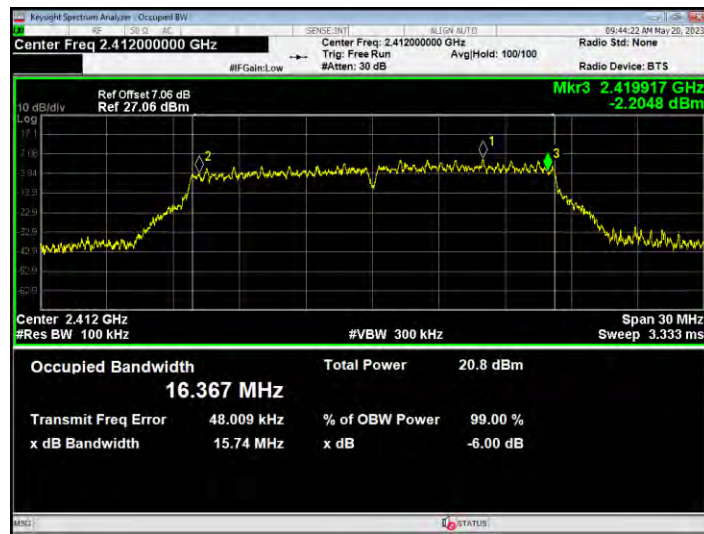
-6dB Bandwidth NVNT b 2437MHz Ant1



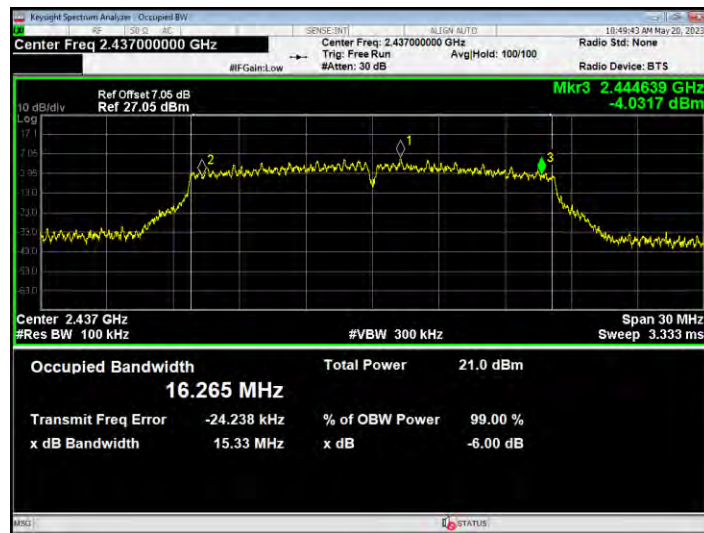
-6dB Bandwidth NVNT b 2462MHz Ant1



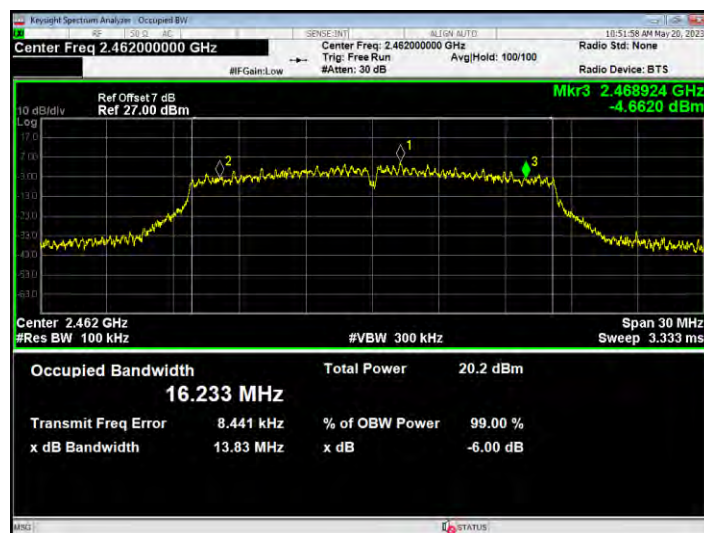
-6dB Bandwidth NVNT g 2412MHz Ant1



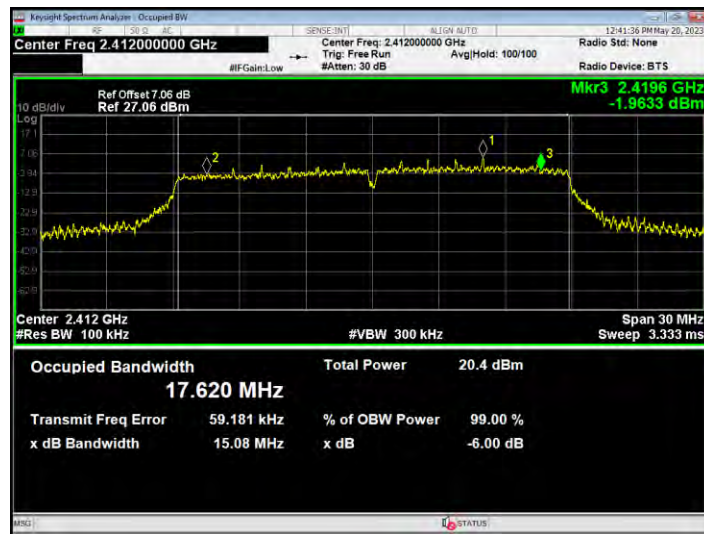
-6dB Bandwidth NVNT g 2437MHz Ant1



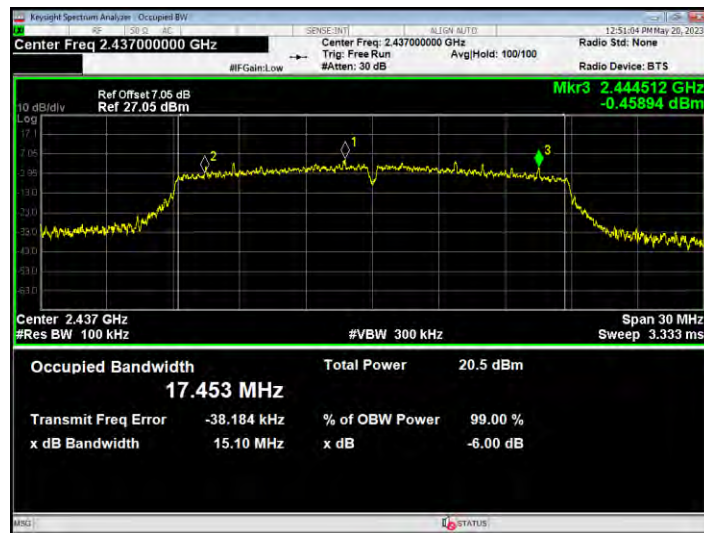
-6dB Bandwidth NVNT g 2462MHz Ant1



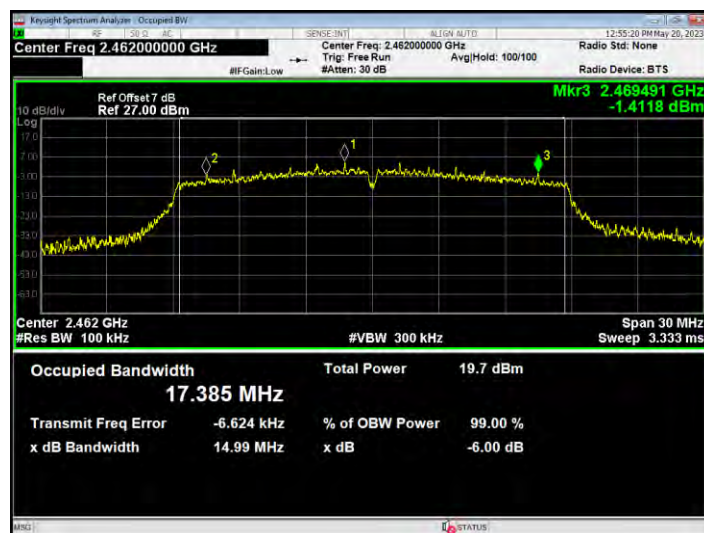
-6dB Bandwidth NVNT n20 2412MHz Ant1



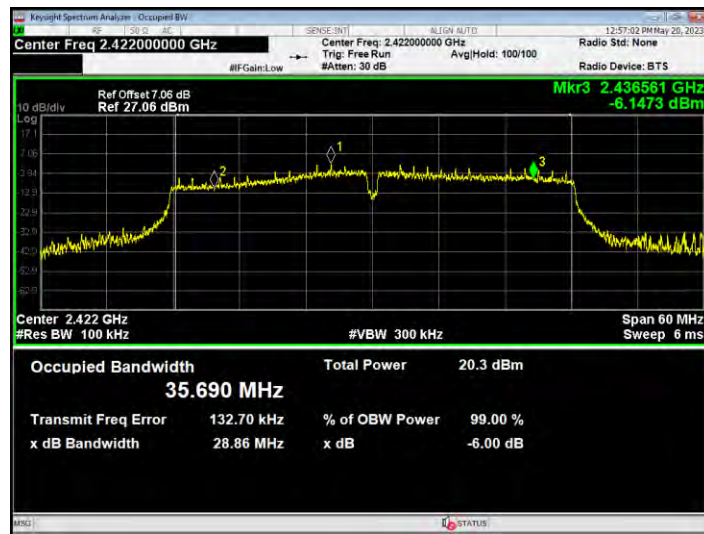
-6dB Bandwidth NVNT n20 2437MHz Ant1



-6dB Bandwidth NVNT n20 2462MHz Ant1



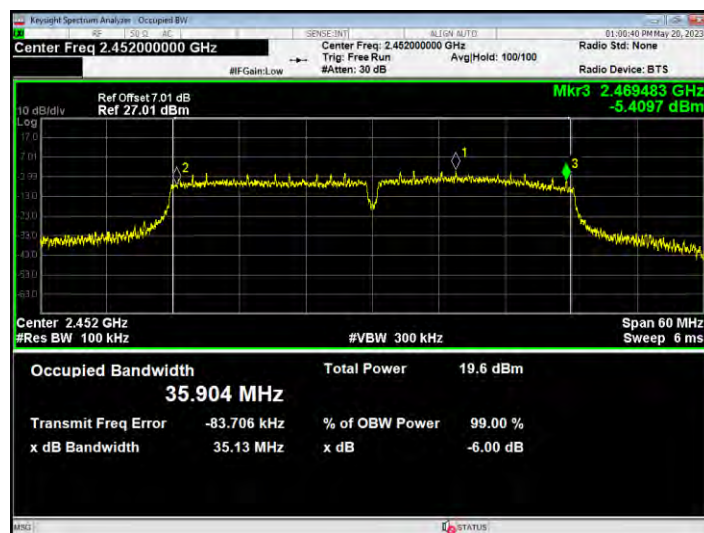
-6dB Bandwidth NVNT n40 2422MHz Ant1



-6dB Bandwidth NVNT n40 2437MHz Ant1



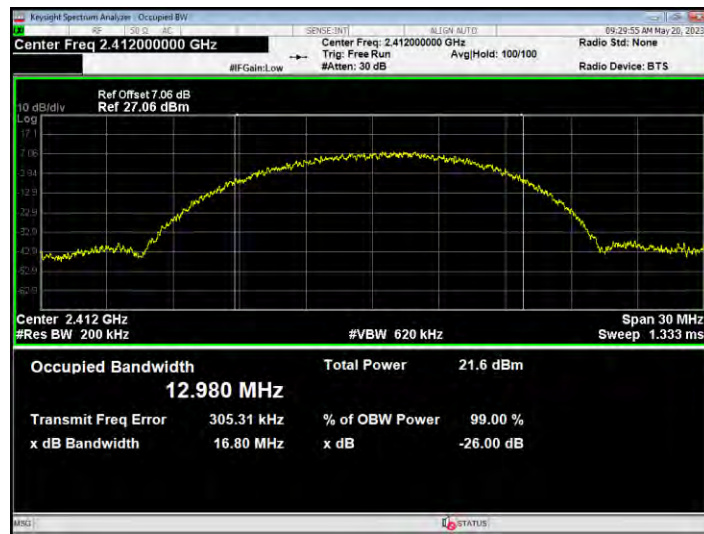
-6dB Bandwidth NVNT n40 2452MHz Ant1



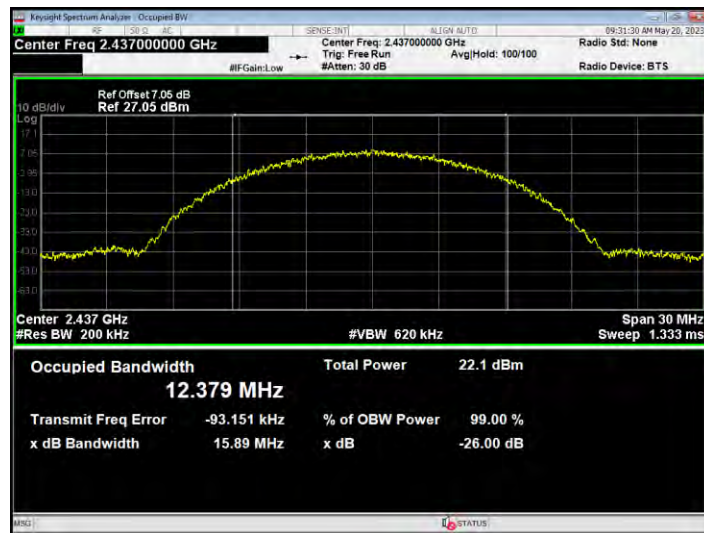
Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	12.98021148
NVNT	b	2437	Ant1	12.37885707
NVNT	b	2462	Ant1	12.04653316
NVNT	g	2412	Ant1	16.43650018
NVNT	g	2437	Ant1	16.28410045
NVNT	g	2462	Ant1	16.25186664
NVNT	n20	2412	Ant1	17.69779214
NVNT	n20	2437	Ant1	17.43184445
NVNT	n20	2462	Ant1	17.35490889
NVNT	n40	2422	Ant1	35.82258688
NVNT	n40	2437	Ant1	36.05442379
NVNT	n40	2452	Ant1	35.99656059

OBW NVNT b 2412MHz Ant1



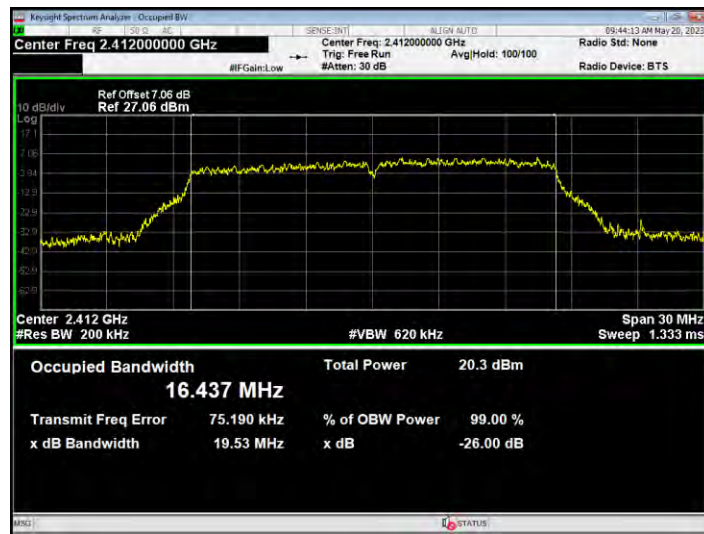
OBW NVNT b 2437MHz Ant1



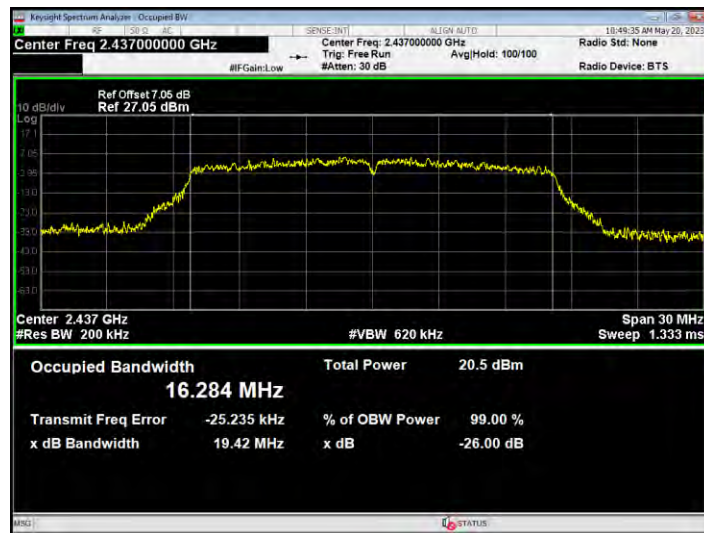
OBW NVNT b 2462MHz Ant1



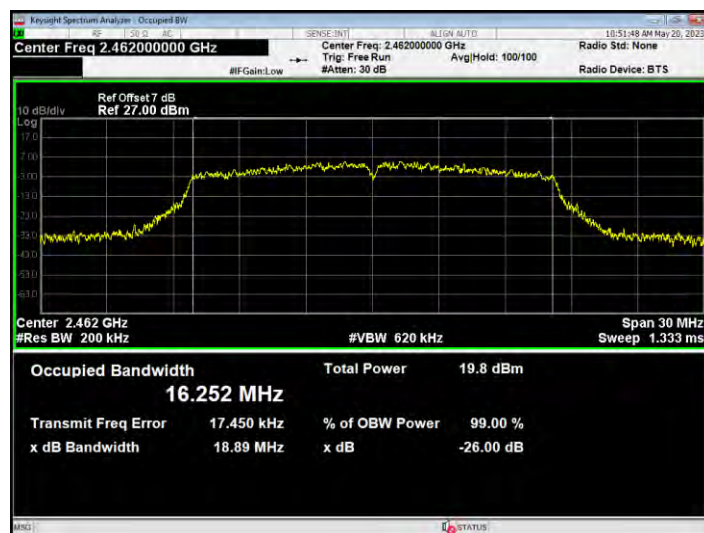
OBW NVNT g 2412MHz Ant1



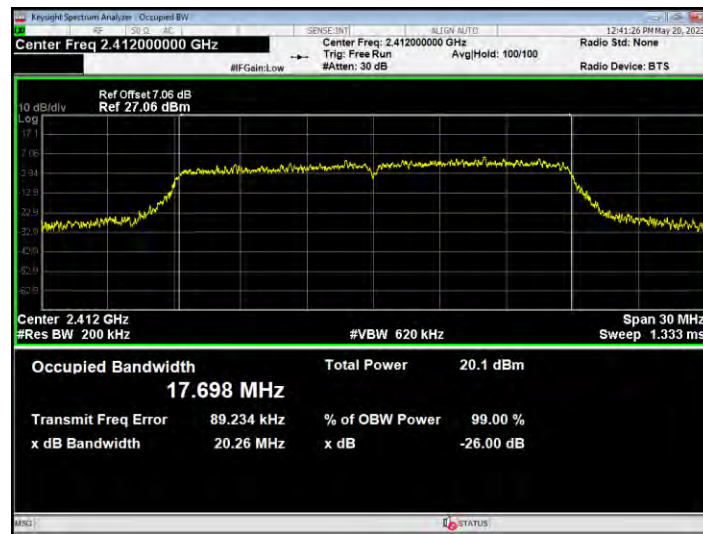
OBW NVNT g 2437MHz Ant1



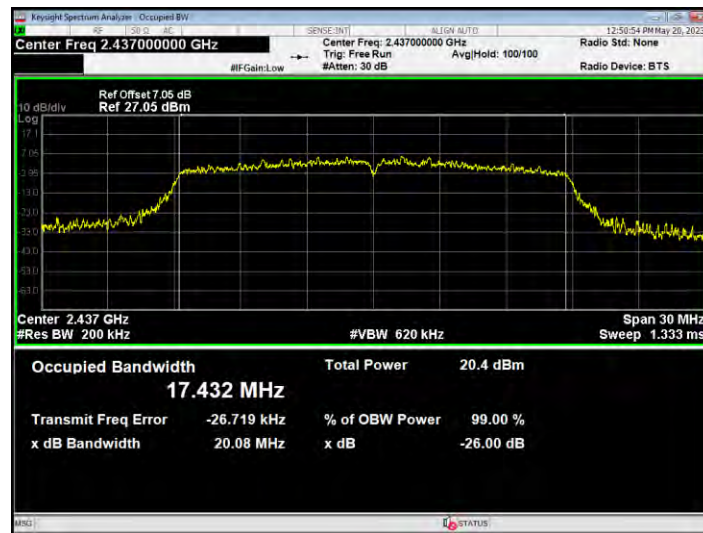
OBW NVNT g 2462MHz Ant1



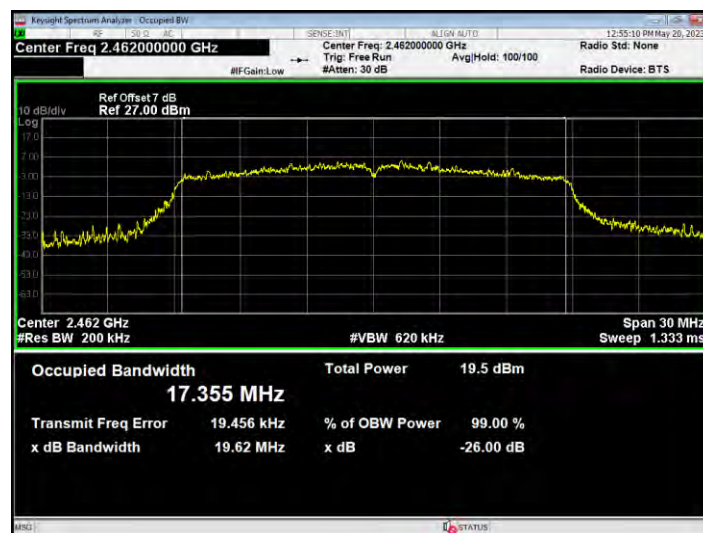
OBW NVNT n20 2412MHz Ant1



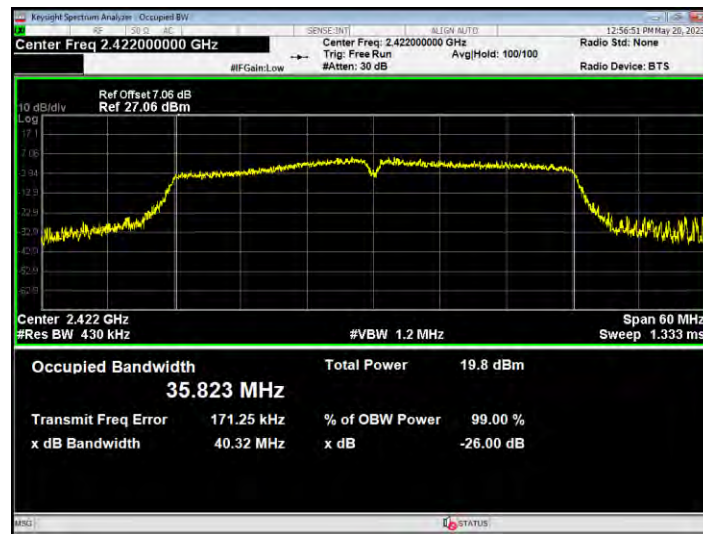
OBW NVNT n20 2437MHz Ant1



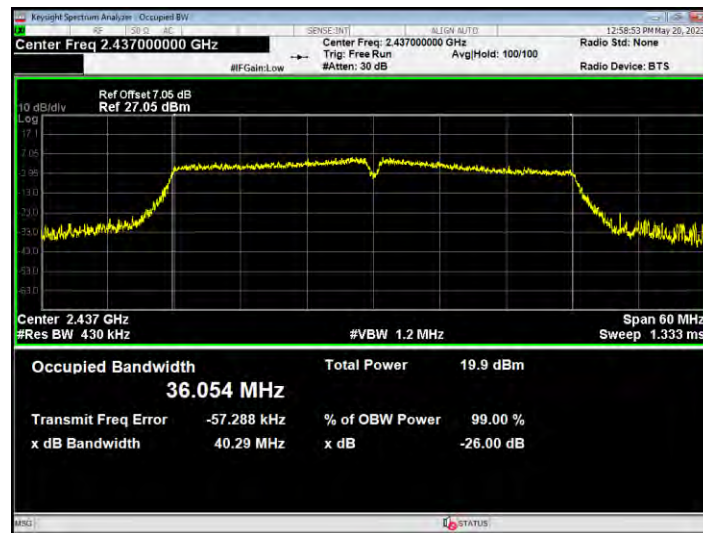
OBW NVNT n20 2462MHz Ant1



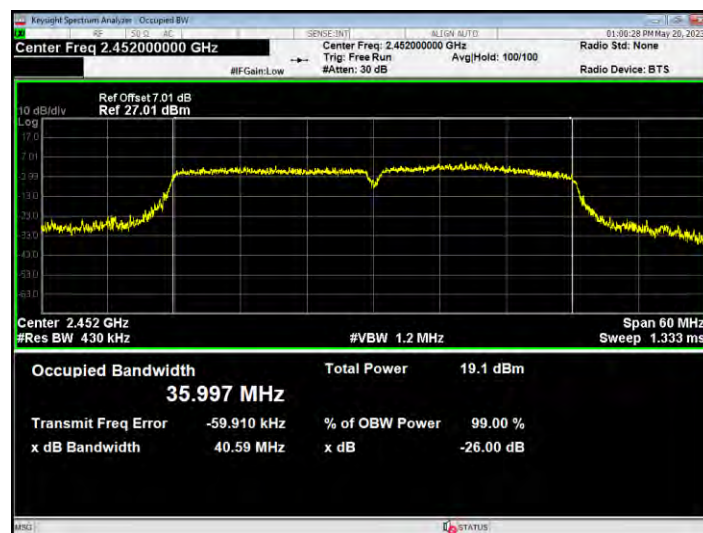
OBW NVNT n40 2422MHz Ant1



OBW NVNT n40 2437MHz Ant1



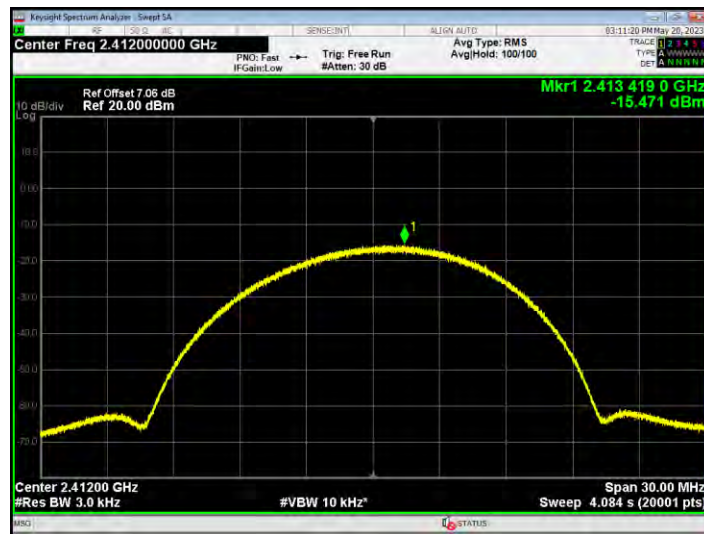
OBW NVNT n40 2452MHz Ant1



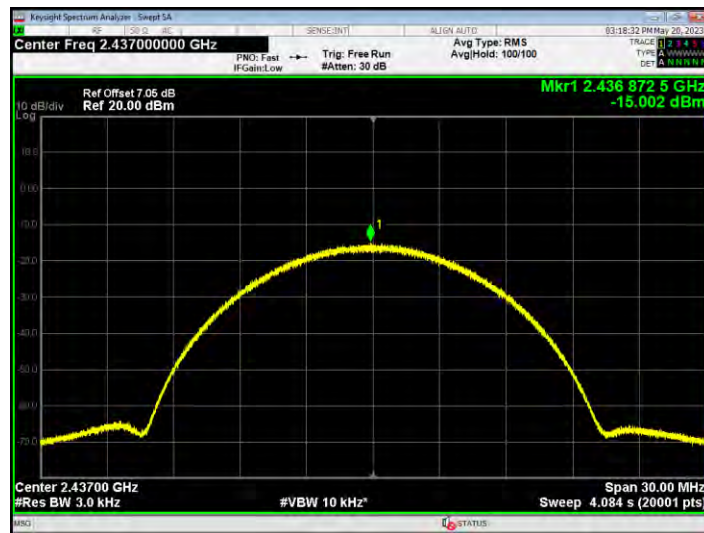
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-15.471	8	Pass
NVNT	b	2437	Ant1	-15.002	8	Pass
NVNT	b	2462	Ant1	-15.797	8	Pass
NVNT	g	2412	Ant1	-19.268	8	Pass
NVNT	g	2437	Ant1	-18.857	8	Pass
NVNT	g	2462	Ant1	-19.251	8	Pass
NVNT	n20	2412	Ant1	-19.491	8	Pass
NVNT	n20	2437	Ant1	-18.65	8	Pass
NVNT	n20	2462	Ant1	-19.415	8	Pass
NVNT	n40	2422	Ant1	-19.535	8	Pass
NVNT	n40	2437	Ant1	-19.723	8	Pass
NVNT	n40	2452	Ant1	-21.077	8	Pass

PSD NVNT b 2412MHz Ant1



PSD NVNT b 2437MHz Ant1



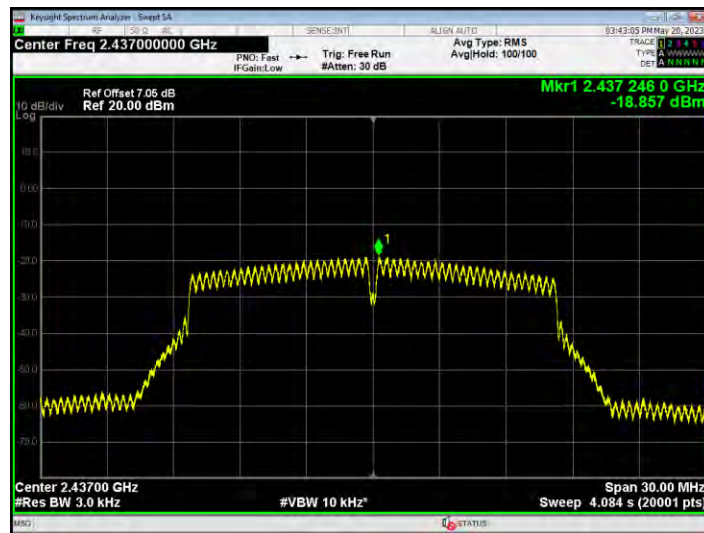
PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1



PSD NVNT g 2437MHz Ant1



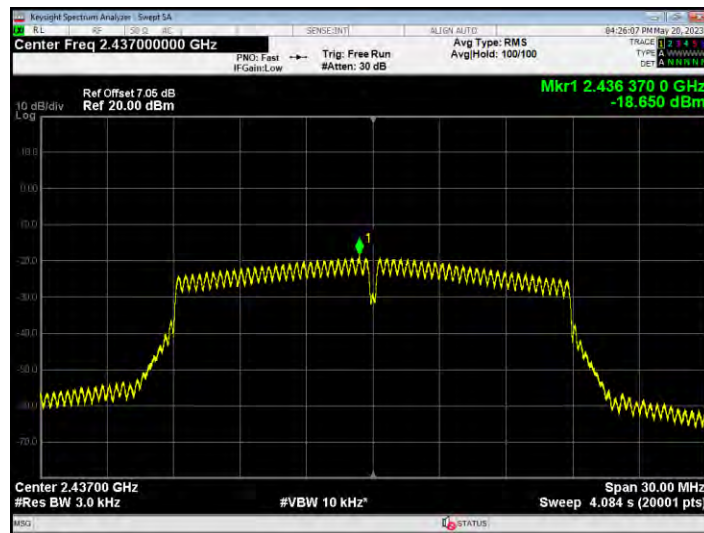
PSD NVNT g 2462MHz Ant1



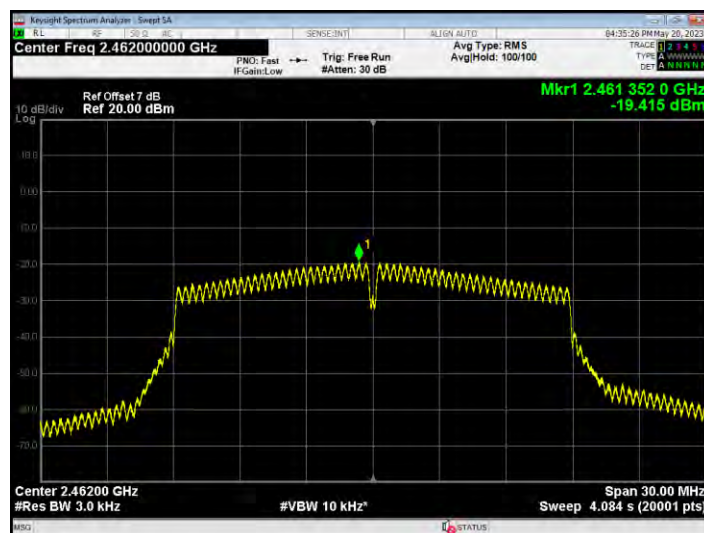
PSD NVNT n20 2412MHz Ant1



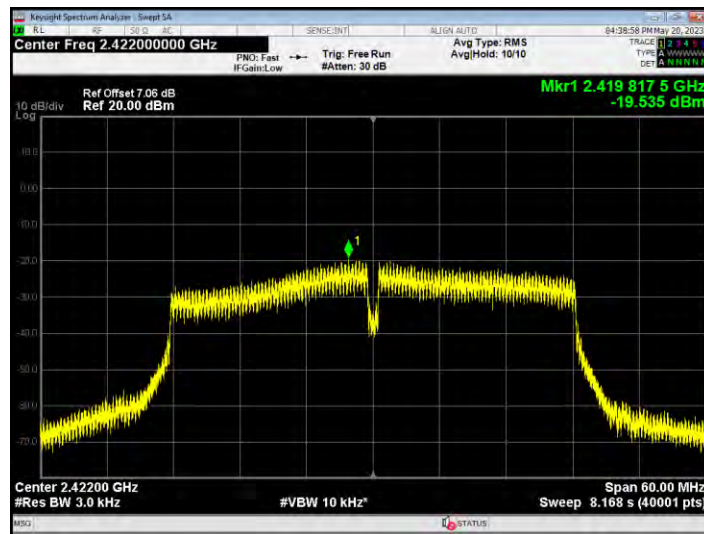
PSD NVNT n20 2437MHz Ant1



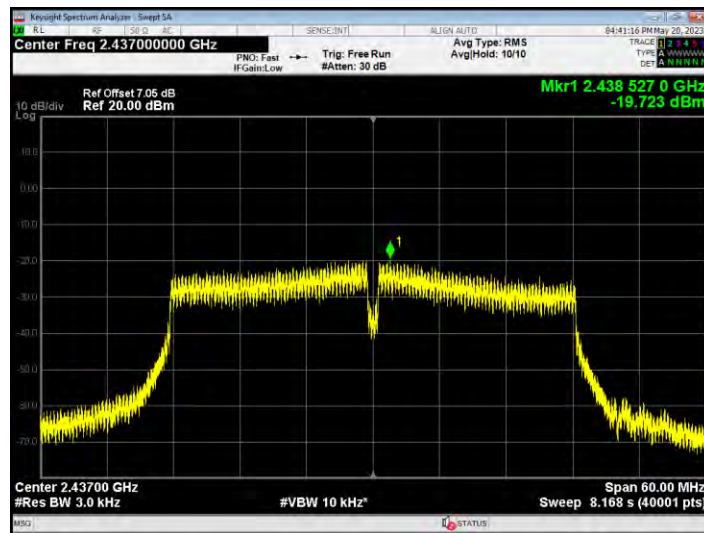
PSD NVNT n20 2462MHz Ant1



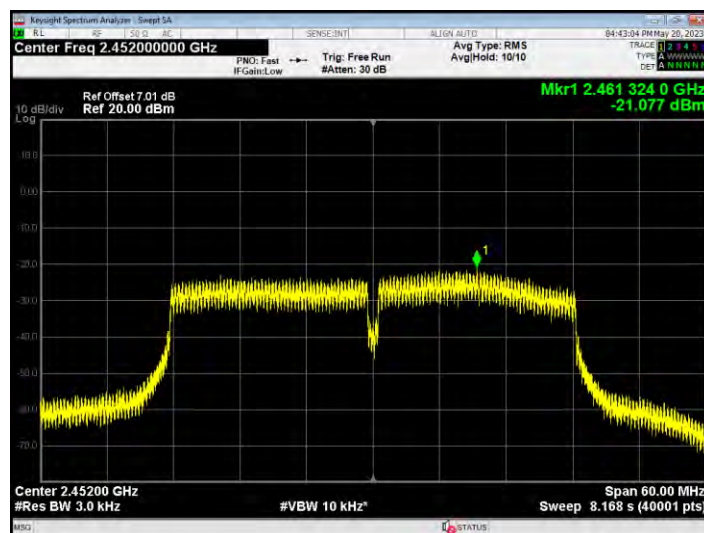
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2452MHz Ant1



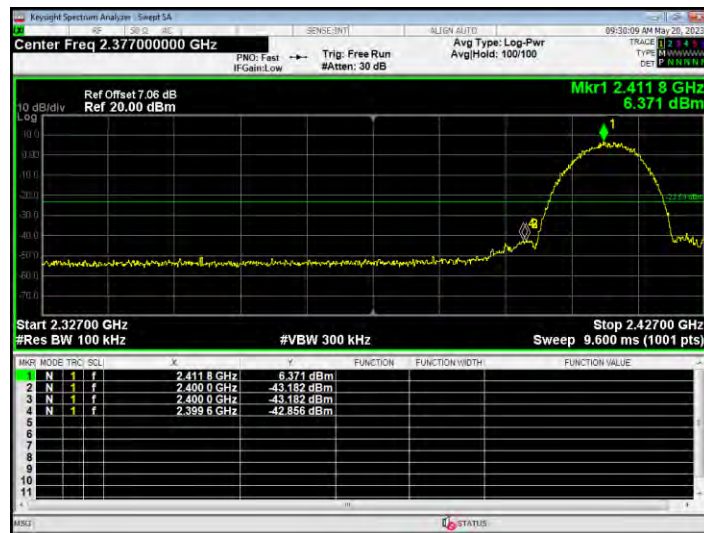
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-49.27	-30	Pass
NVNT	b	2462	Ant1	-57.82	-30	Pass
NVNT	g	2412	Ant1	-37.95	-30	Pass
NVNT	g	2462	Ant1	-53.24	-30	Pass
NVNT	n20	2412	Ant1	-32.23	-30	Pass
NVNT	n20	2462	Ant1	-54.03	-30	Pass
NVNT	n40	2422	Ant1	-33.54	-30	Pass
NVNT	n40	2452	Ant1	-45.47	-30	Pass

Band Edge NVNT b 2412MHz Ant1 Ref



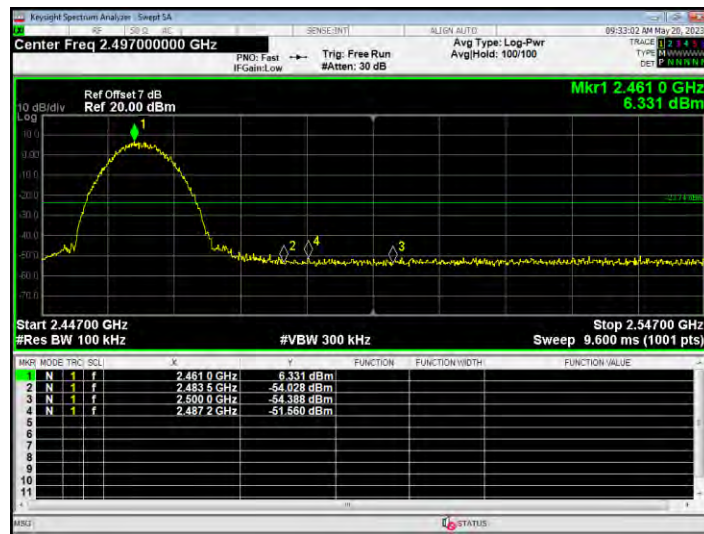
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



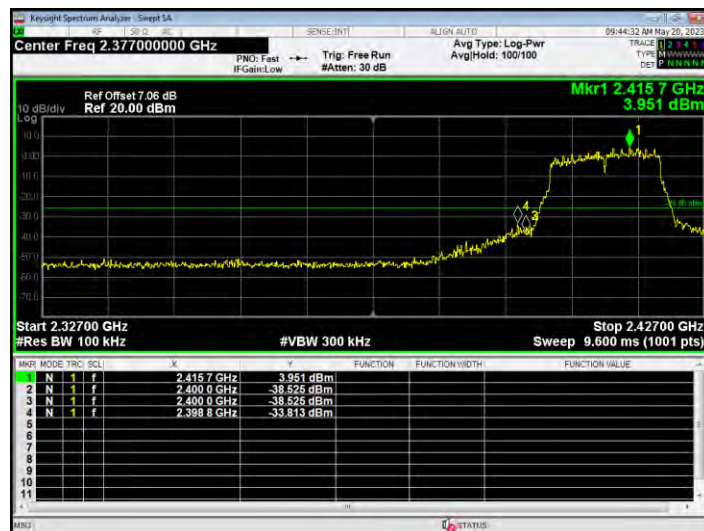
Band Edge NVNT b 2462MHz Ant1 Emission



Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission



Band Edge NVNT g 2462MHz Ant1 Ref



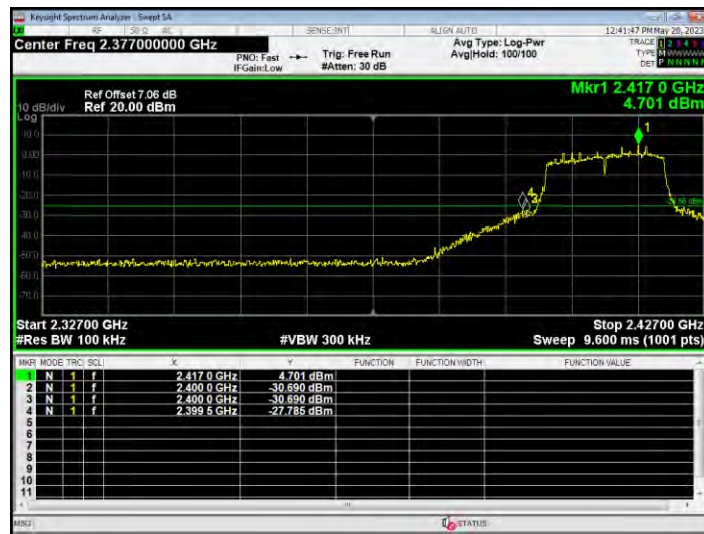
Band Edge NVNT g 2462MHz Ant1 Emission



Band Edge NVNT n20 2412MHz Ant1 Ref



Band Edge NVNT n20 2412MHz Ant1 Emission



Band Edge NVNT n20 2462MHz Ant1 Ref



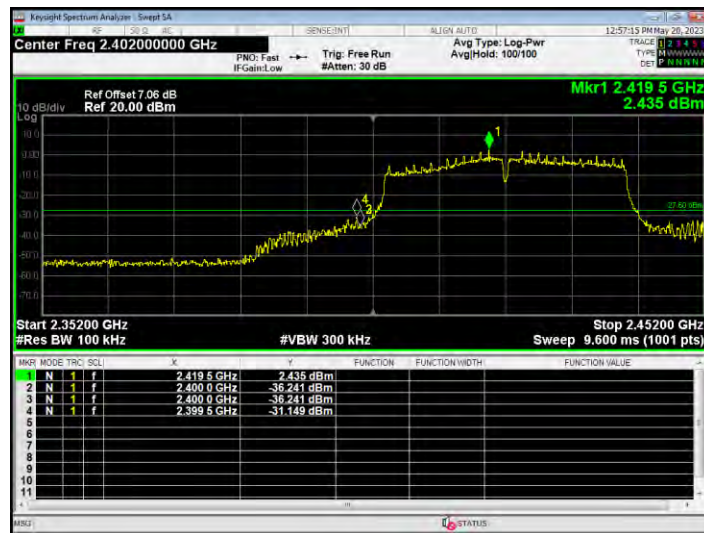
Band Edge NVNT n20 2462MHz Ant1 Emission



Band Edge NVNT n40 2422MHz Ant1 Ref



Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission



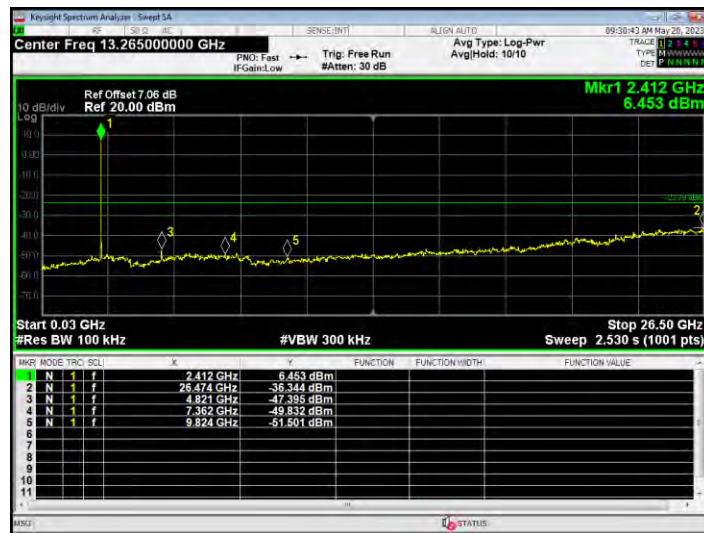
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-42.56	-30	Pass
NVNT	b	2437	Ant1	-43.16	-30	Pass
NVNT	b	2462	Ant1	-43.46	-30	Pass
NVNT	g	2412	Ant1	-39.65	-30	Pass
NVNT	g	2437	Ant1	-41.08	-30	Pass
NVNT	g	2462	Ant1	-40.19	-30	Pass
NVNT	n20	2412	Ant1	-41.18	-30	Pass
NVNT	n20	2437	Ant1	-40.79	-30	Pass
NVNT	n20	2462	Ant1	-39.69	-30	Pass
NVNT	n40	2422	Ant1	-37.76	-30	Pass
NVNT	n40	2437	Ant1	-38.37	-30	Pass
NVNT	n40	2452	Ant1	-37.04	-30	Pass

Tx. Spurious NVNT b 2412MHz Ant1 Ref



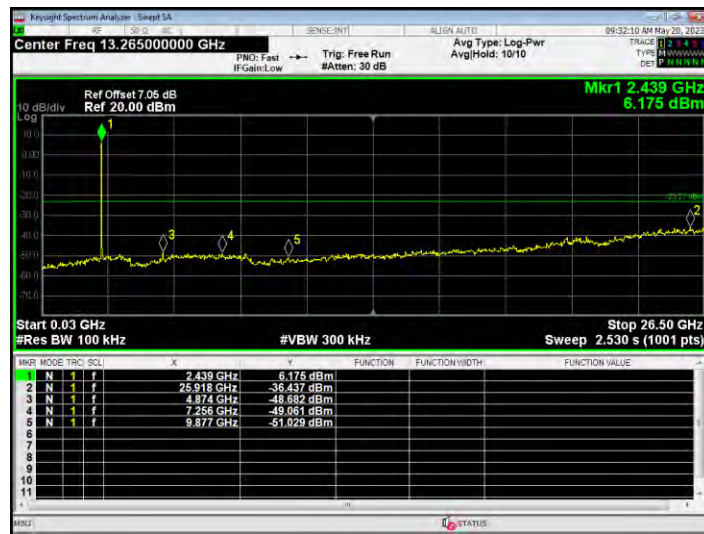
Tx. Spurious NVNT b 2412MHz Ant1 Emission



Tx. Spurious NVNT b 2437MHz Ant1 Ref



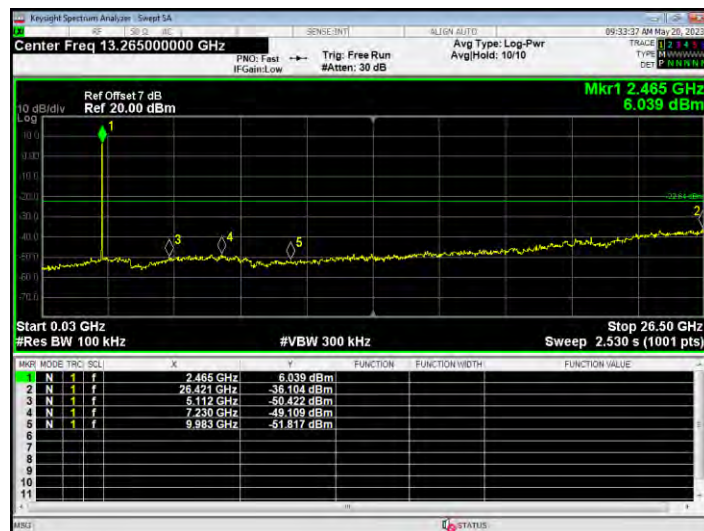
Tx. Spurious NVNT b 2437MHz Ant1 Emission



Tx. Spurious NVNT b 2462MHz Ant1 Ref



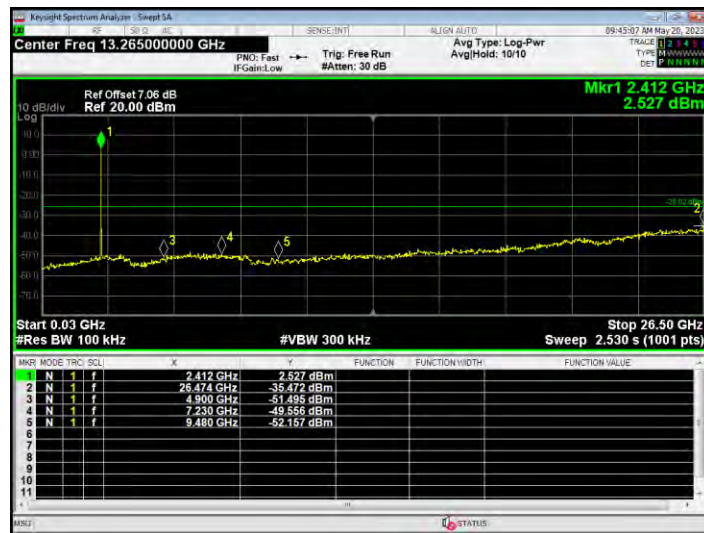
Tx. Spurious NVNT b 2462MHz Ant1 Emission



Tx. Spurious NVNT g 2412MHz Ant1 Ref



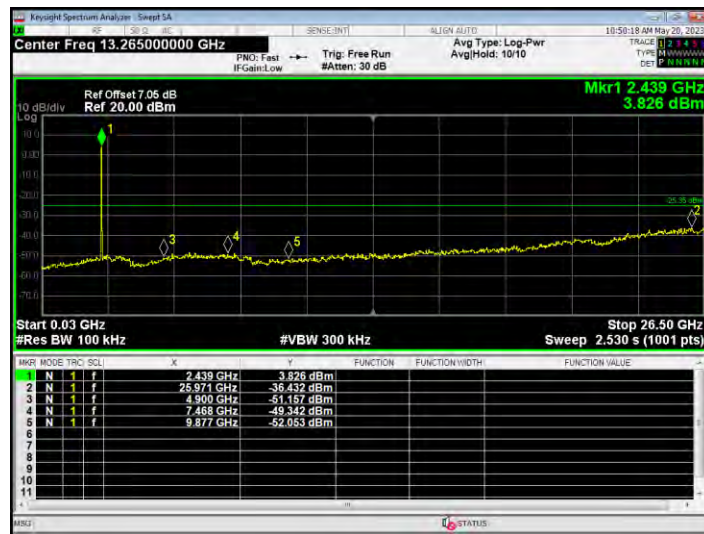
Tx. Spurious NVNT g 2412MHz Ant1 Emission



Tx. Spurious NVNT g 2437MHz Ant1 Ref



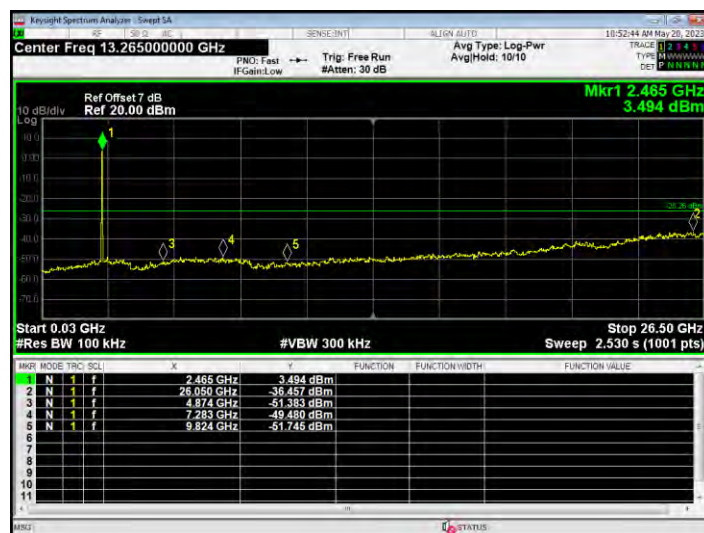
Tx. Spurious NVNT g 2437MHz Ant1 Emission



Tx. Spurious NVNT g 2462MHz Ant1 Ref



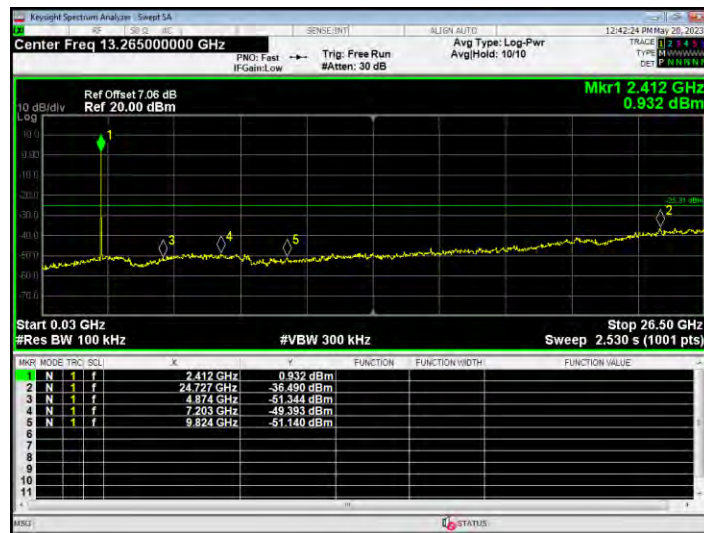
Tx. Spurious NVNT g 2462MHz Ant1 Emission



Tx. Spurious NVNT n20 2412MHz Ant1 Ref



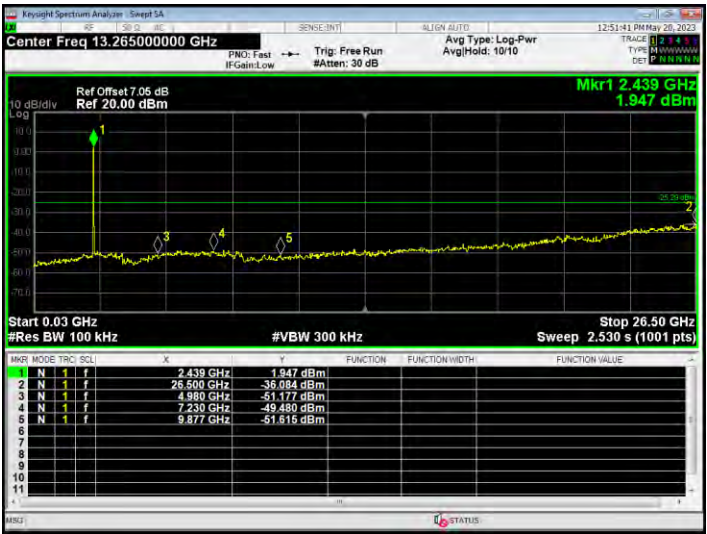
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



Tx. Spurious NVNT n20 2437MHz Ant1 Ref



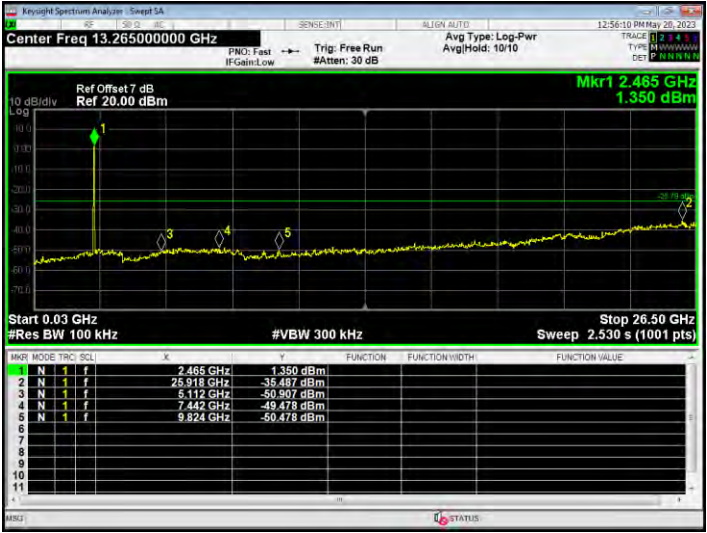
Tx. Spurious NVNT n20 2437MHz Ant1 Emission



Tx. Spurious NVNT n20 2462MHz Ant1 Ref



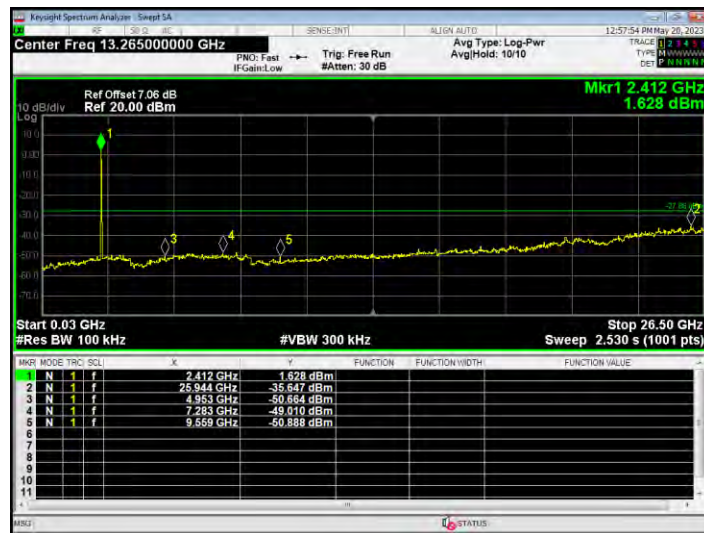
Tx. Spurious NVNT n20 2462MHz Ant1 Emission



Tx. Spurious NVNT n40 2422MHz Ant1 Ref



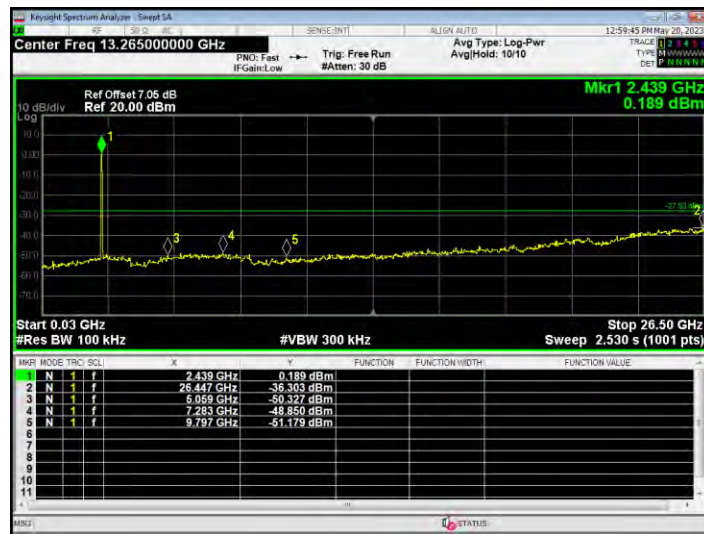
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



Tx. Spurious NVNT n40 2437MHz Ant1 Ref



Tx. Spurious NVNT n40 2437MHz Ant1 Emission



Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission

