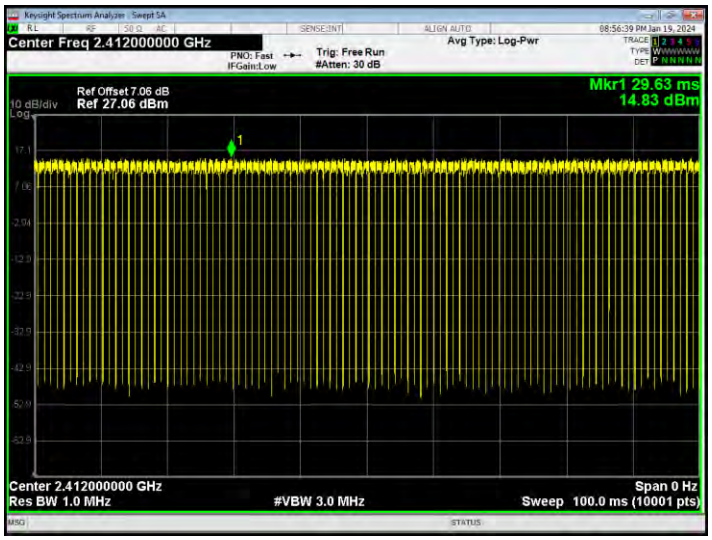
ANNEX 1
FCC Part 15C Test Report
FCC ID: 2BD2Q-CUSTOS

Applicant:	Vernte Technologies
Address:	9222 Alloway Dr Hagerstown, Maryland, USA (21740)
Manufacturer:	Zhongshan Saier Intelligent Technology Co., Ltd
Address:	Area A, Floor 4, NO.1 Factory Building, NO.77 Huanzhou North Road, Tanzhou Town, Zhongshan City, Guangdong, China
EUT:	Custos Smart Headphones
Trade Mark:	Vernte
Model Number:	Custos
Date of Receipt:	Jan. 14, 2024
Test Date:	Jan. 14, 2024 - Jan. 28, 2024
Date of Report:	Jan. 28, 2024
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

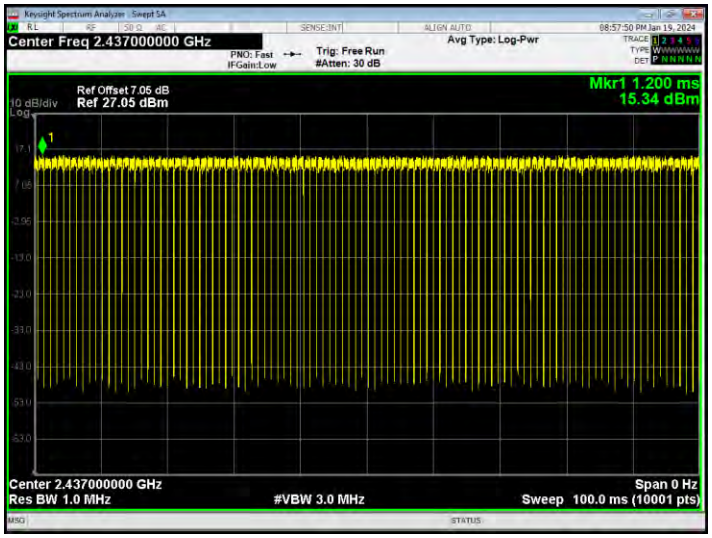
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	b	2412	Ant1	97.3	0.12
NVNT	b	2437	Ant1	97.29	0.12
NVNT	b	2462	Ant1	97.28	0.12
NVNT	g	2412	Ant1	84.92	0.71
NVNT	g	2437	Ant1	85.2	0.7
NVNT	g	2462	Ant1	85.17	0.7
NVNT	n20	2412	Ant1	97.53	0.11
NVNT	n20	2437	Ant1	97.55	0.11
NVNT	n20	2462	Ant1	97.57	0.11
NVNT	n40	2422	Ant1	95.35	0.21
NVNT	n40	2437	Ant1	95.28	0.21
NVNT	n40	2452	Ant1	95.31	0.21

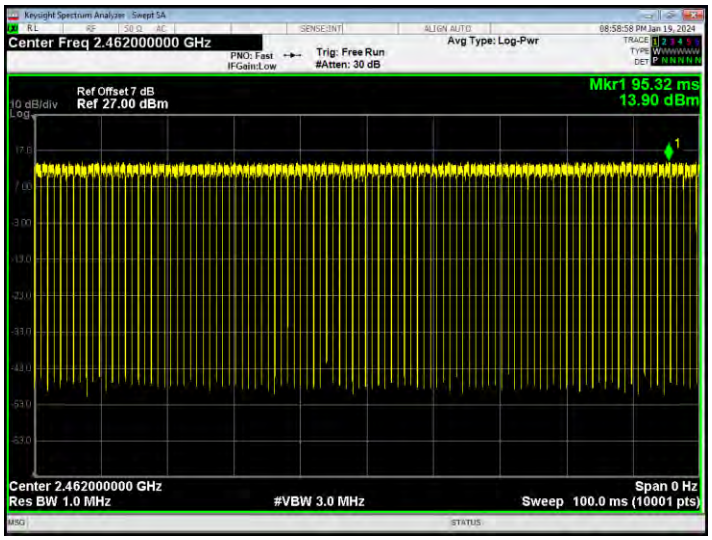
Duty Cycle NVNT b 2412MHz Ant1



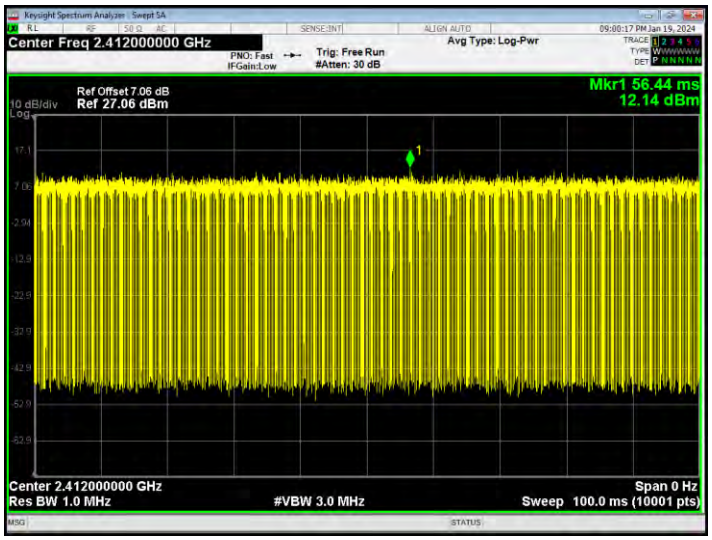
Duty Cycle NVNT b 2437MHz Ant1



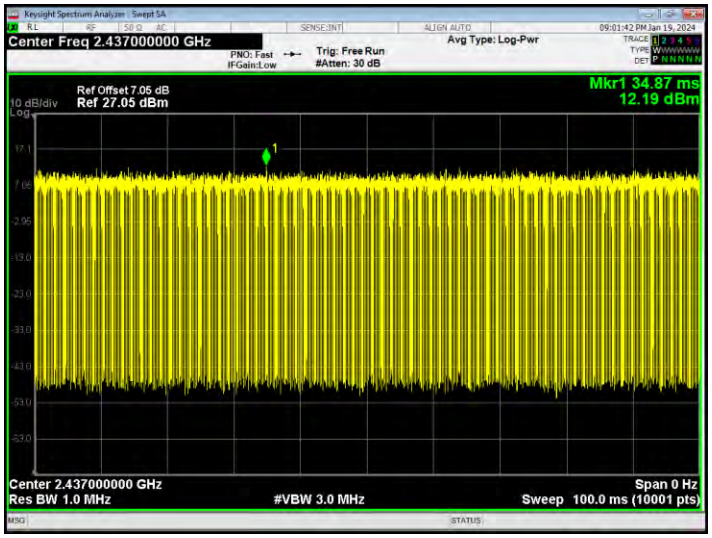
Duty Cycle NVNT b 2462MHz Ant1



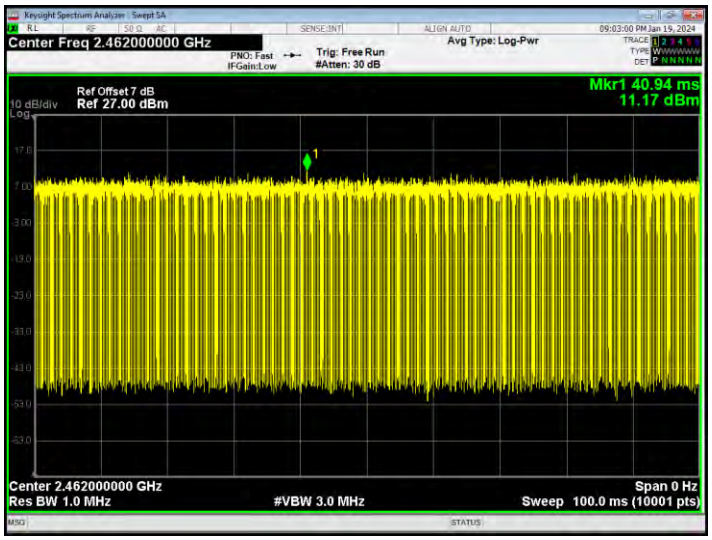
Duty Cycle NVNT g 2412MHz Ant1



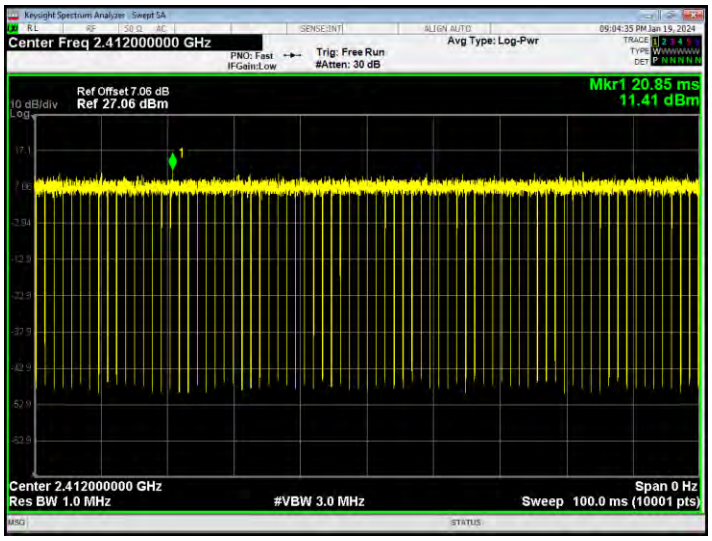
Duty Cycle NVNT g 2437MHz Ant1



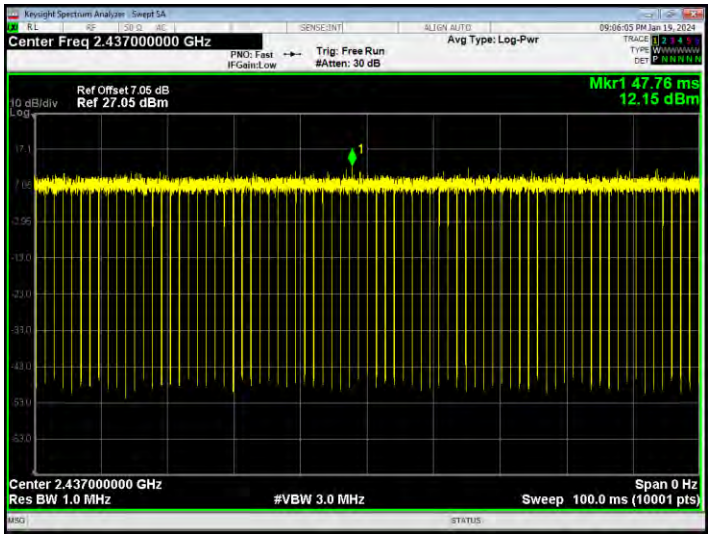
Duty Cycle NVNT g 2462MHz Ant1



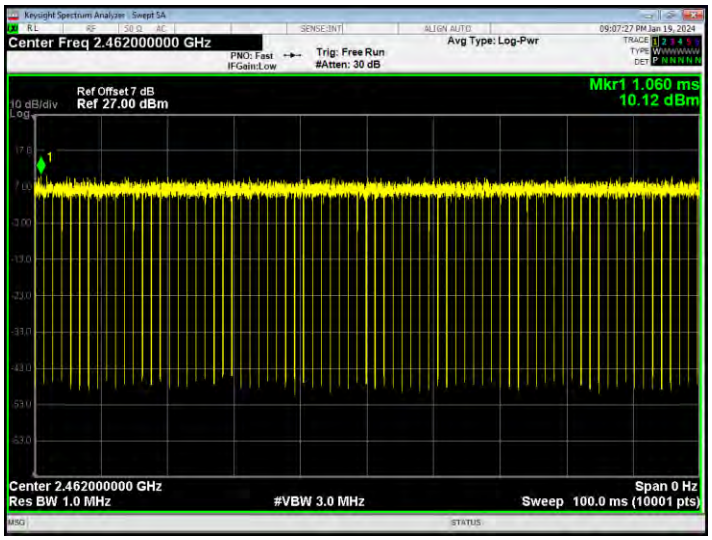
Duty Cycle NVNT n20 2412MHz Ant1



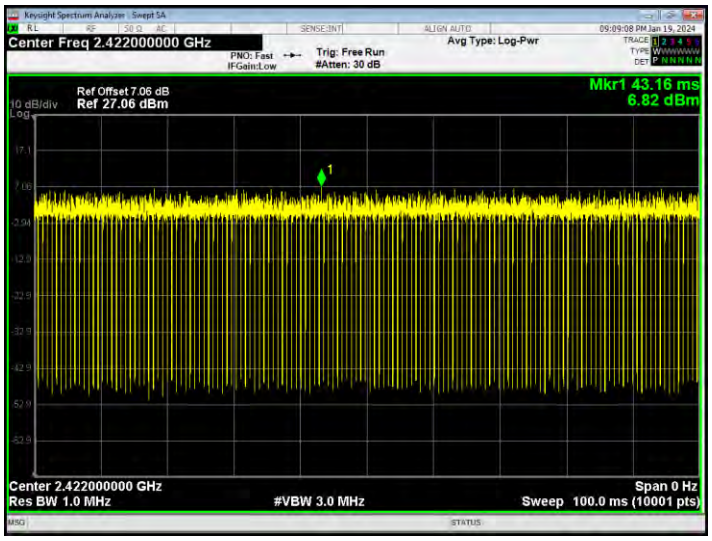
Duty Cycle NVNT n20 2437MHz Ant1



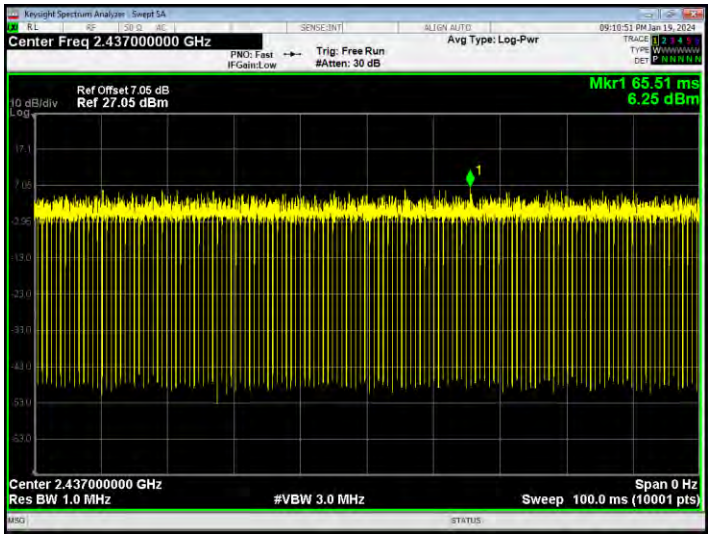
Duty Cycle NVNT n20 2462MHz Ant1



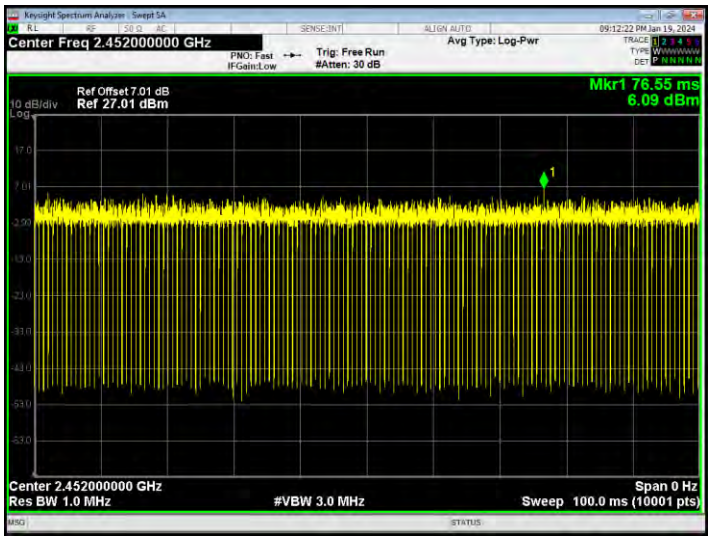
Duty Cycle NVNT n40 2422MHz Ant1



Duty Cycle NVNT n40 2437MHz Ant1



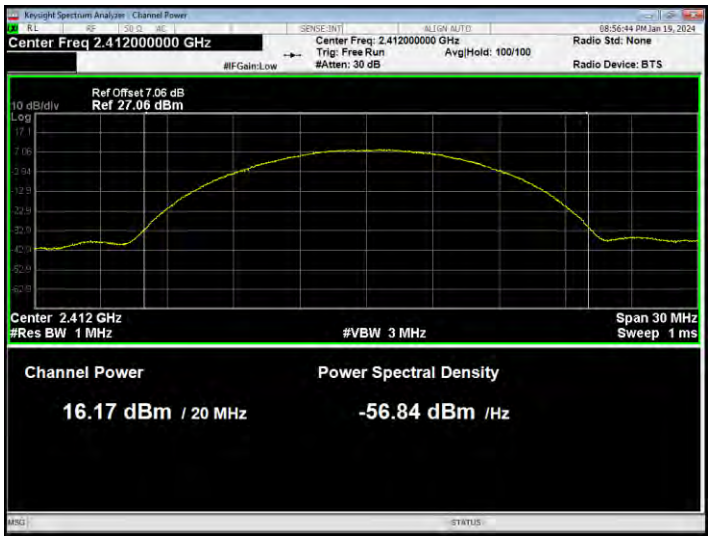
Duty Cycle NVNT n40 2452MHz Ant1



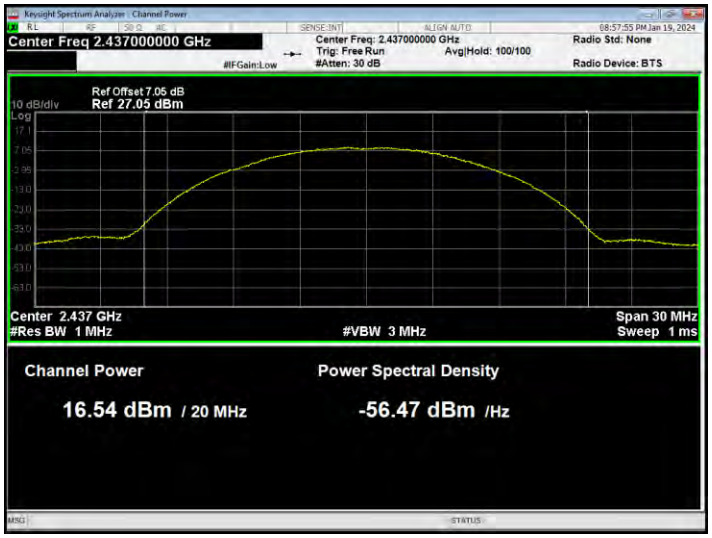
Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.169	0.12	16.289	30	Pass
NVNT	b	2437	Ant1	16.544	0.12	16.664	30	Pass
NVNT	b	2462	Ant1	14.943	0.12	15.063	30	Pass
NVNT	g	2412	Ant1	12.869	0.71	13.579	30	Pass
NVNT	g	2437	Ant1	13.191	0.7	13.891	30	Pass
NVNT	g	2462	Ant1	11.548	0.7	12.248	30	Pass
NVNT	n20	2412	Ant1	14.071	0.11	14.181	30	Pass
NVNT	n20	2437	Ant1	13.959	0.11	14.069	30	Pass
NVNT	n20	2462	Ant1	12.424	0.11	12.534	30	Pass
NVNT	n40	2422	Ant1	13.066	0.21	13.276	24	Pass
NVNT	n40	2437	Ant1	13.02	0.21	13.23	30	Pass
NVNT	n40	2452	Ant1	12.233	0.21	12.443	30	Pass

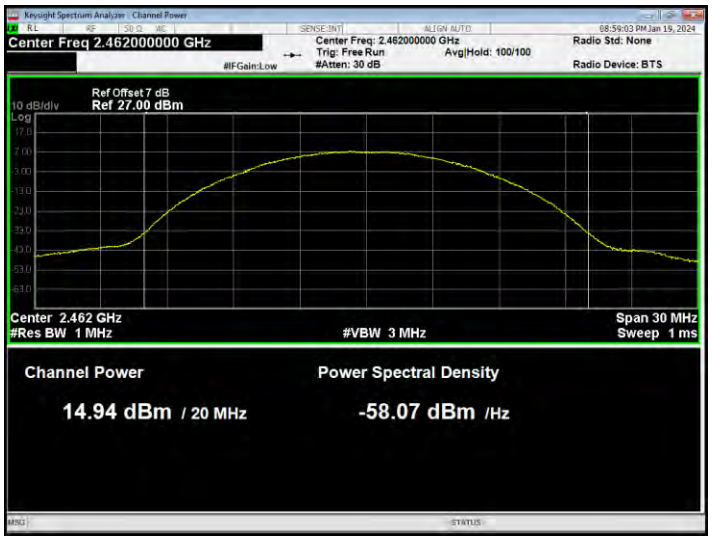
Power NVNT b 2412MHz Ant1



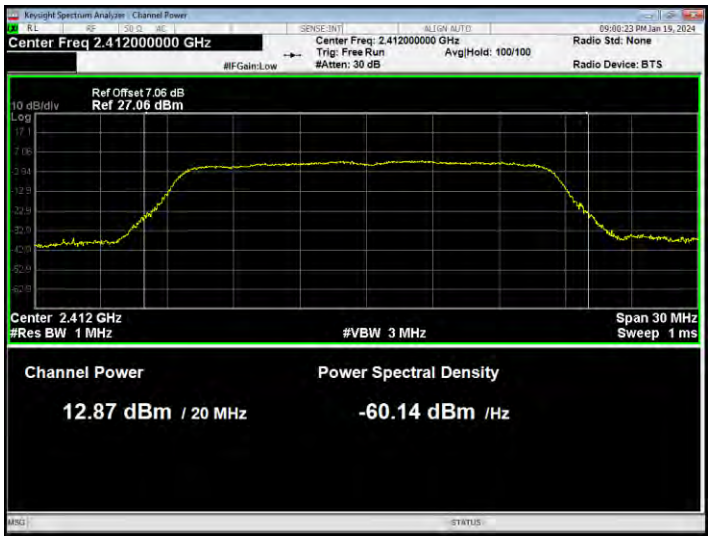
Power NVNT b 2437MHz Ant1



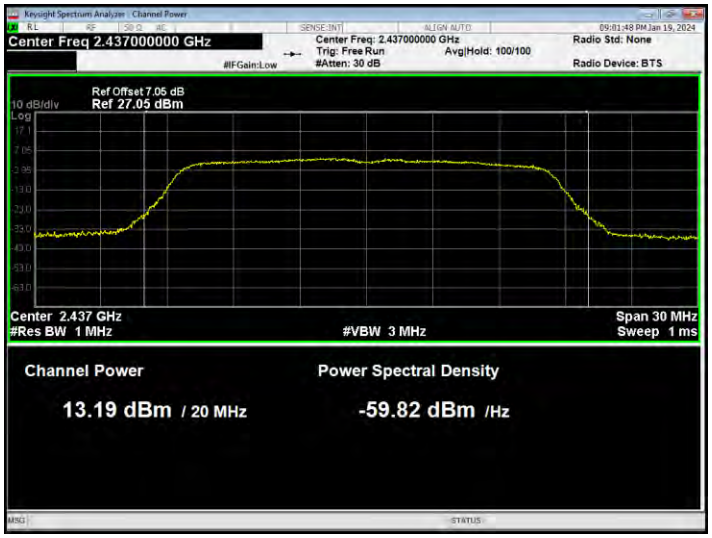
Power NVNT b 2462MHz Ant1



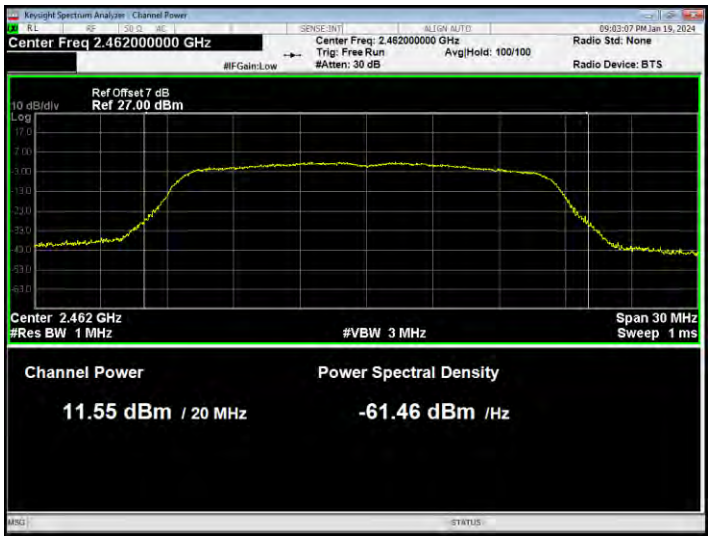
Power NVNT g 2412MHz Ant1



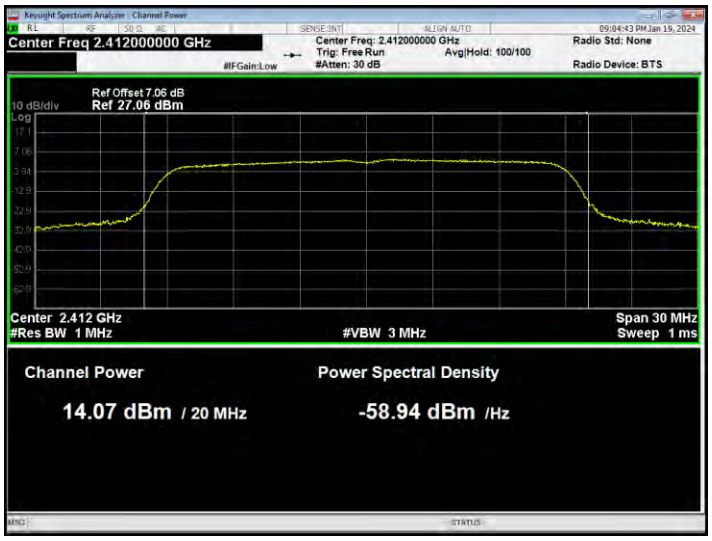
Power NVNT g 2437MHz Ant1



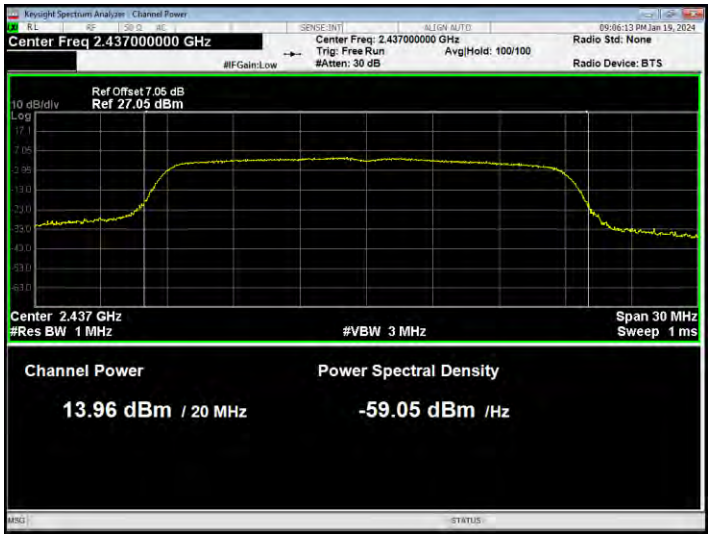
Power NVNT g 2462MHz Ant1



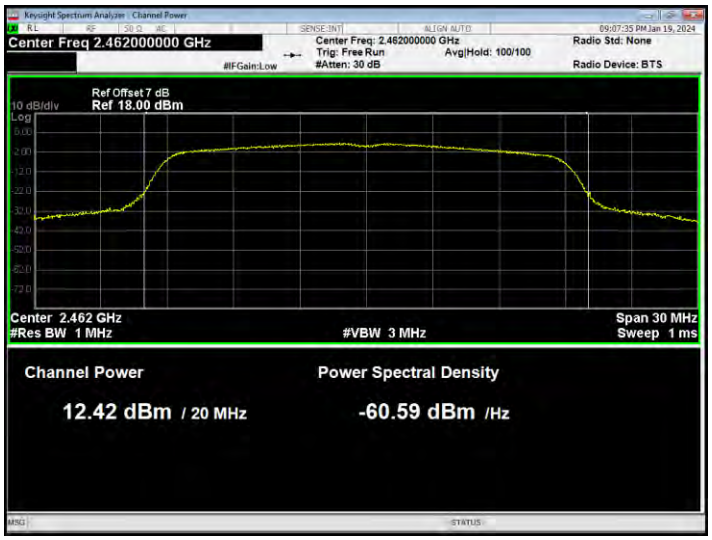
Power NVNT n20 2412MHz Ant1



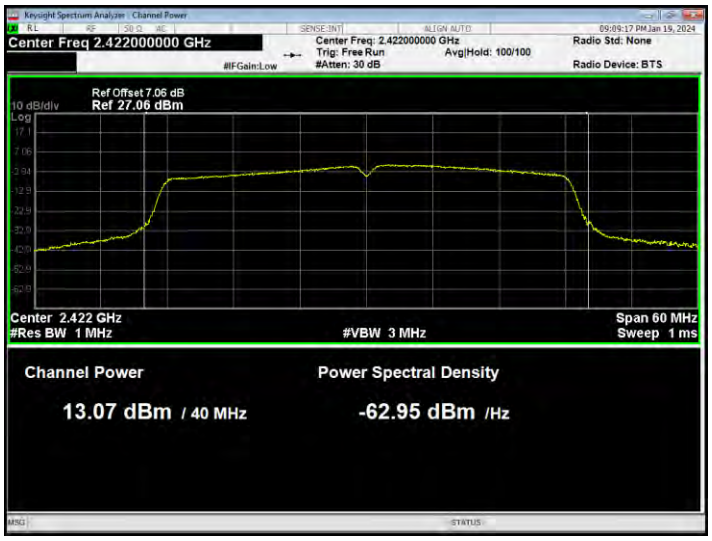
Power NVNT n20 2437MHz Ant1



Power NVNT n20 2462MHz Ant1

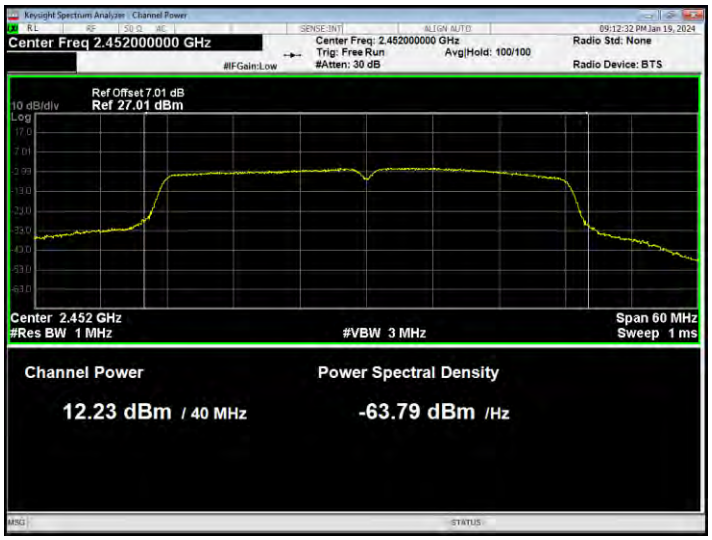


Power NVNT n40 2422MHz Ant1



Power NVNT n40 2437MHz Ant1

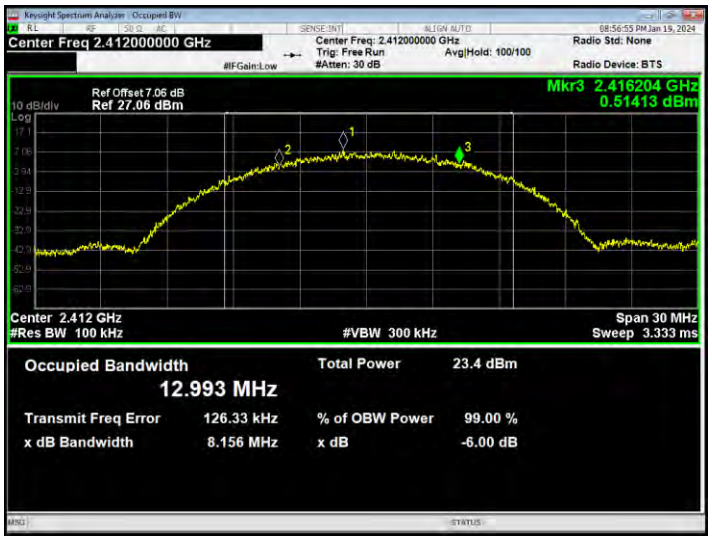
Power NVNT n40 2452MHz Ant1



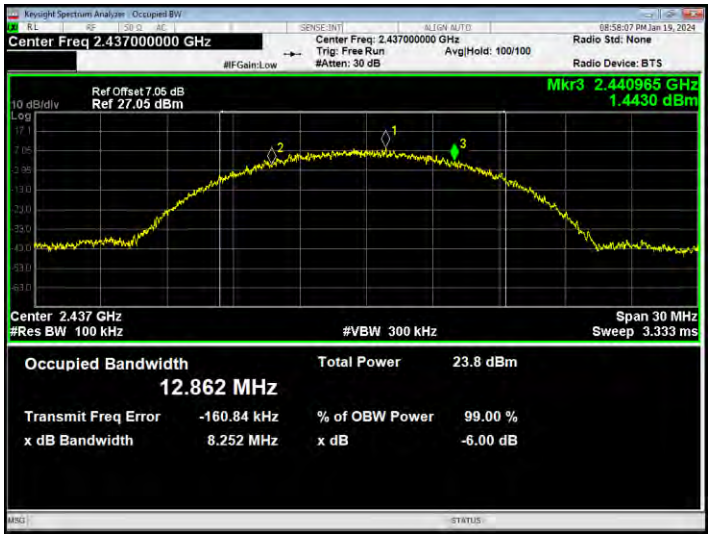
-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.156	0.5	Pass
NVNT	b	2437	Ant1	8.252	0.5	Pass
NVNT	b	2462	Ant1	7.23	0.5	Pass
NVNT	g	2412	Ant1	16.306	0.5	Pass
NVNT	g	2437	Ant1	15.743	0.5	Pass
NVNT	g	2462	Ant1	15.337	0.5	Pass
NVNT	n20	2412	Ant1	16.324	0.5	Pass
NVNT	n20	2437	Ant1	15.648	0.5	Pass
NVNT	n20	2462	Ant1	15.073	0.5	Pass
NVNT	n40	2422	Ant1	31.24	0.5	Pass
NVNT	n40	2437	Ant1	33.859	0.5	Pass
NVNT	n40	2452	Ant1	35.103	0.5	Pass

-6dB Bandwidth NVNT b 2412MHz Ant1

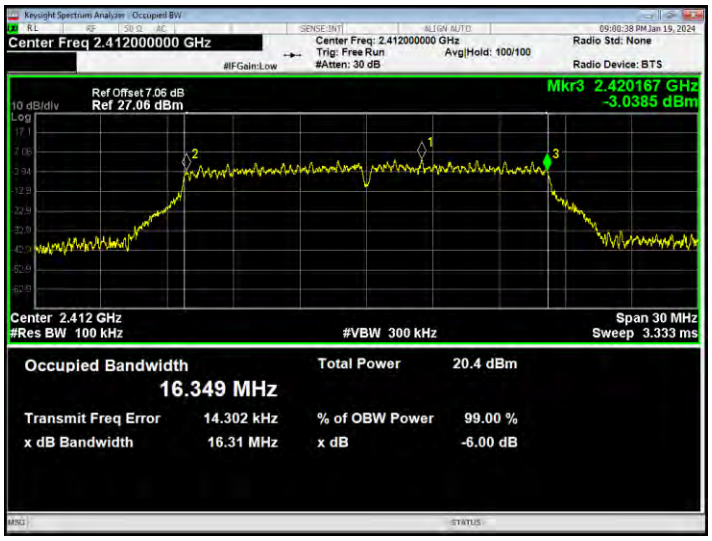


-6dB Bandwidth NVNT b 2437MHz Ant1

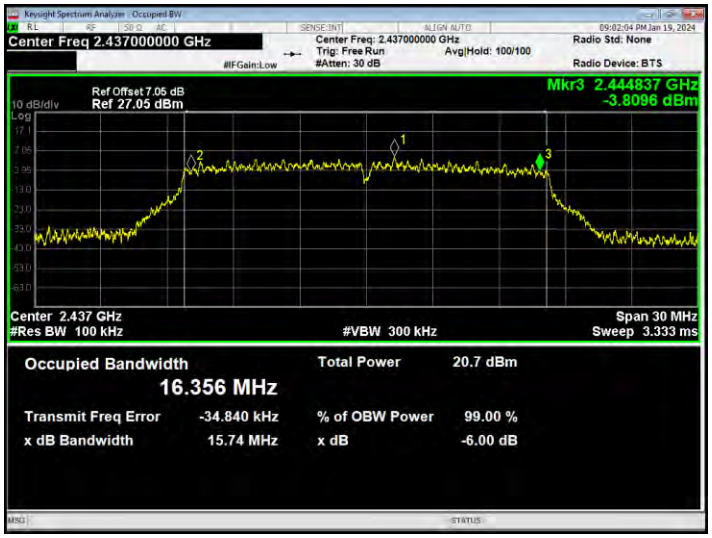


-6dB Bandwidth NVNT b 2462MHz Ant1

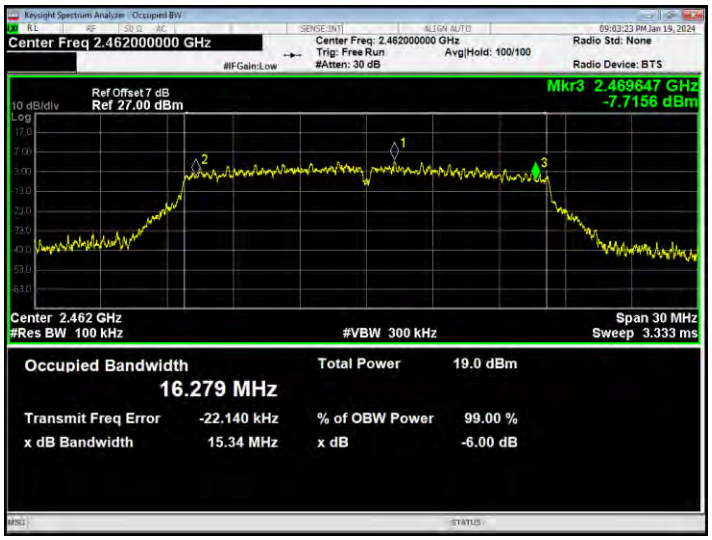
-6dB Bandwidth NVNT g 2412MHz Ant1



-6dB Bandwidth NVNT g 2437MHz Ant1

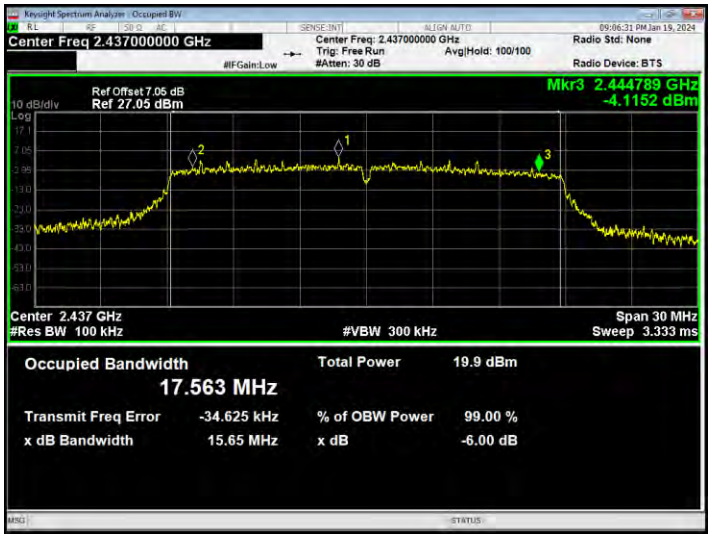


-6dB Bandwidth NVNT g 2462MHz Ant1



-6dB Bandwidth NVNT n20 2412MHz Ant1

-6dB Bandwidth NVNT n20 2437MHz Ant1

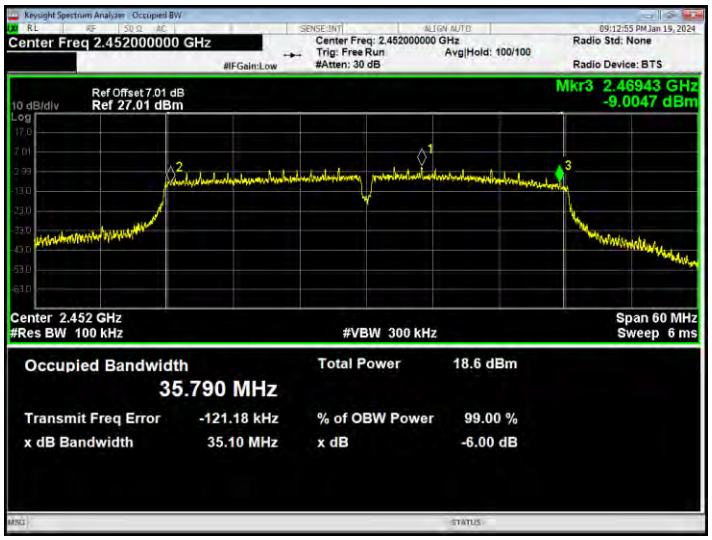


-6dB Bandwidth NVNT n20 2462MHz Ant1

-6dB Bandwidth NVNT n40 2422MHz Ant1

-6dB Bandwidth NVNT n40 2437MHz Ant1

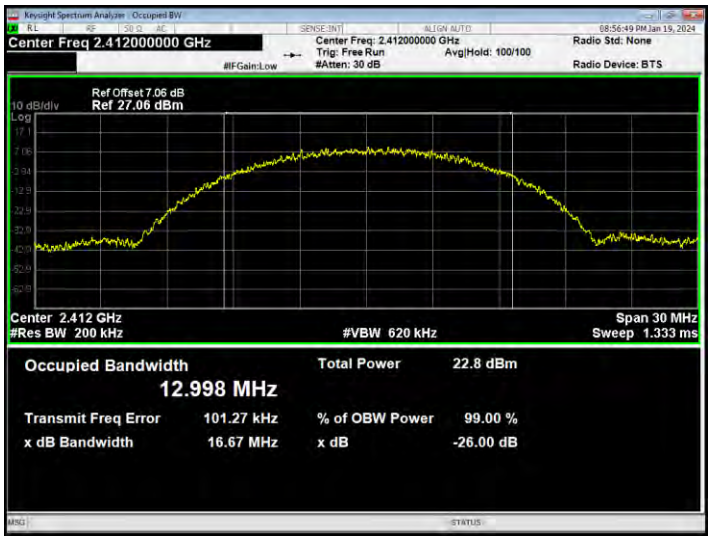
-6dB Bandwidth NVNT n40 2452MHz Ant1



Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	12.99813371
NVNT	b	2437	Ant1	12.80634701
NVNT	b	2462	Ant1	12.55741247
NVNT	g	2412	Ant1	16.46117591
NVNT	g	2437	Ant1	16.40847108
NVNT	g	2462	Ant1	16.29093419
NVNT	n20	2412	Ant1	17.714681
NVNT	n20	2437	Ant1	17.60882105
NVNT	n20	2462	Ant1	17.44448516
NVNT	n40	2422	Ant1	35.80918005
NVNT	n40	2437	Ant1	35.96960368
NVNT	n40	2452	Ant1	35.89151079

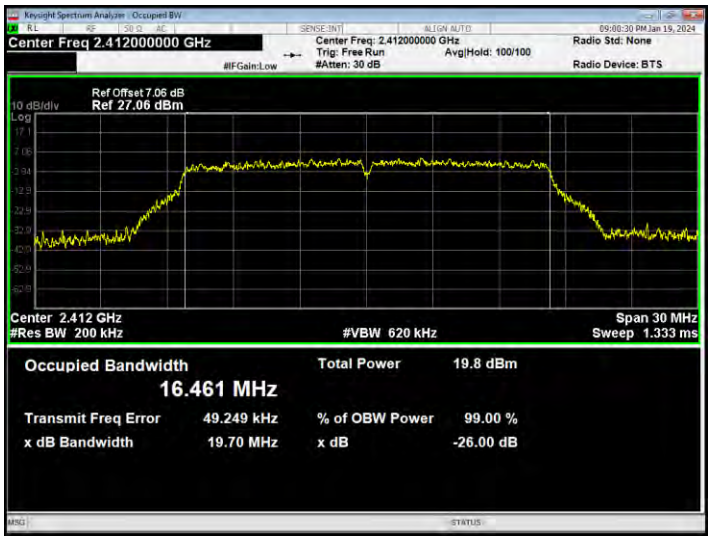
OBW NVNT b 2412MHz Ant1



OBW NVNT b 2437MHz Ant1

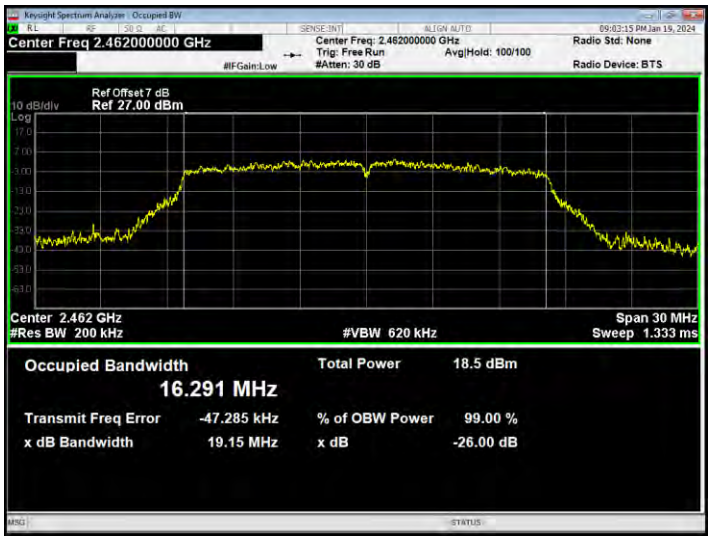
OBW NVNT b 2462MHz Ant1

OBW NVNT g 2412MHz Ant1

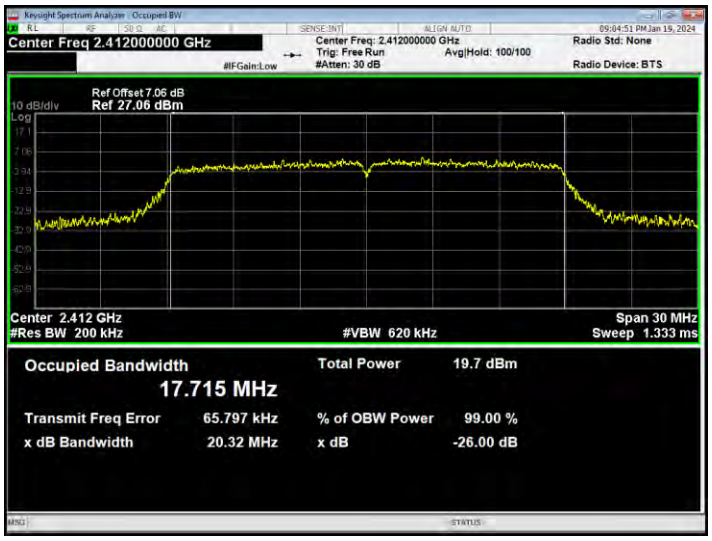


OBW NVNT g 2437MHz Ant1

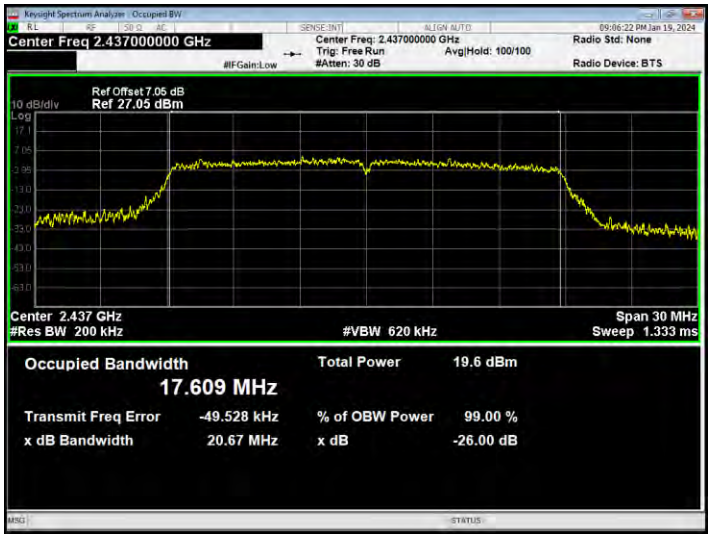
OBW NVNT g 2462MHz Ant1



OBW NVNT n20 2412MHz Ant1



OBW NVNT n20 2437MHz Ant1

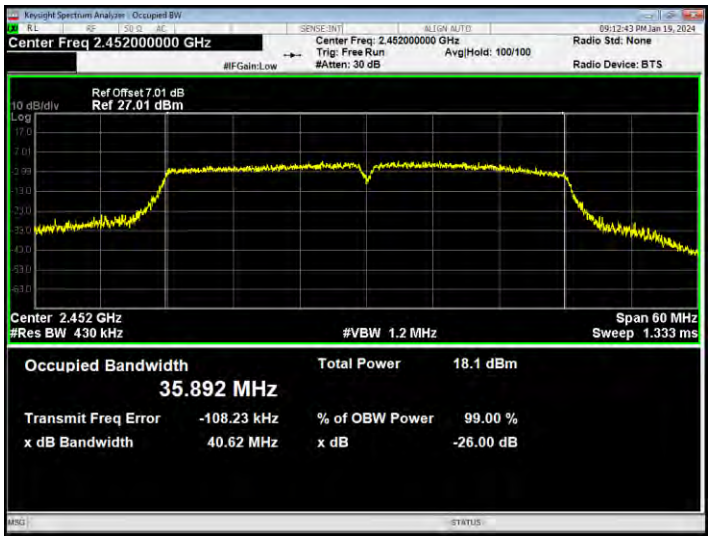


OBW NVNT n20 2462MHz Ant1

OBW NVNT n40 2422MHz Ant1

OBW NVNT n40 2437MHz Ant1

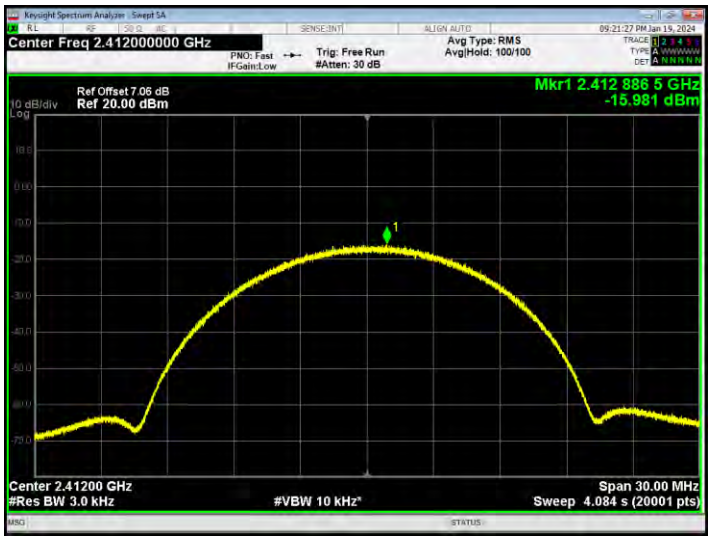
OBW NVNT n40 2452MHz Ant1



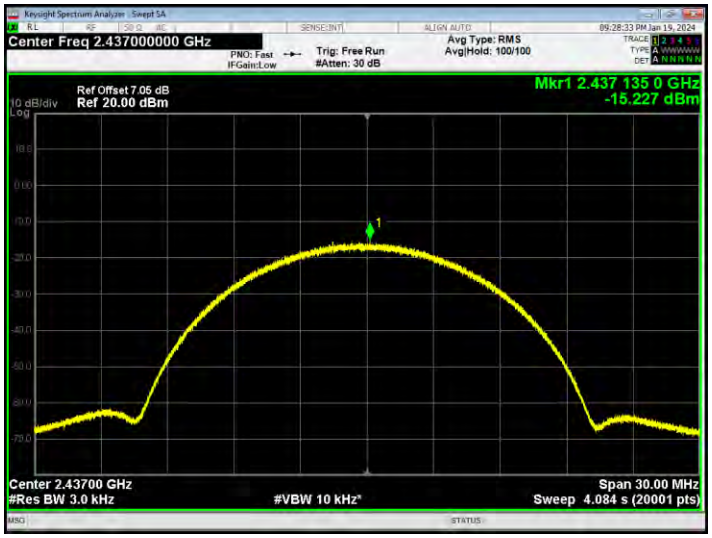
Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-15.981	0.12	-15.861	8	Pass
NVNT	b	2437	Ant1	-15.227	0.12	-15.107	8	Pass
NVNT	b	2462	Ant1	-17.541	0	-17.541	8	Pass
NVNT	g	2412	Ant1	-20.596	0	-20.596	8	Pass
NVNT	g	2437	Ant1	-19.879	0	-19.879	8	Pass
NVNT	g	2462	Ant1	-21.118	0	-21.118	8	Pass
NVNT	n20	2412	Ant1	-20.625	0	-20.625	8	Pass
NVNT	n20	2437	Ant1	-20.214	0	-20.214	8	Pass
NVNT	n20	2462	Ant1	-21.071	0	-21.071	8	Pass
NVNT	n40	2422	Ant1	-20.998	0	-20.998	8	Pass
NVNT	n40	2437	Ant1	-21.842	0	-21.842	8	Pass
NVNT	n40	2452	Ant1	-22.808	0	-22.808	8	Pass

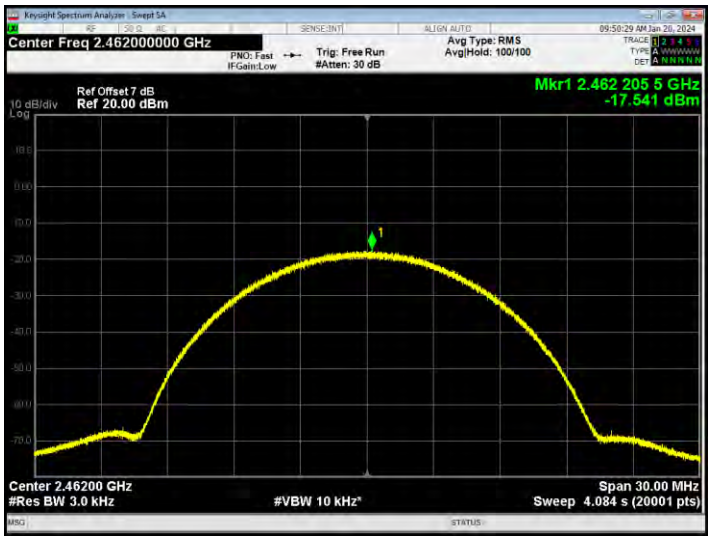
PSD NVNT b 2412MHz Ant1



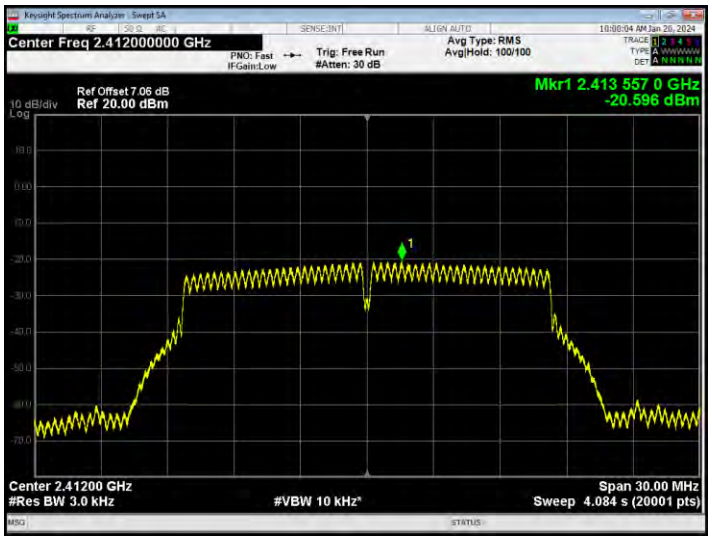
PSD NVNT b 2437MHz Ant1



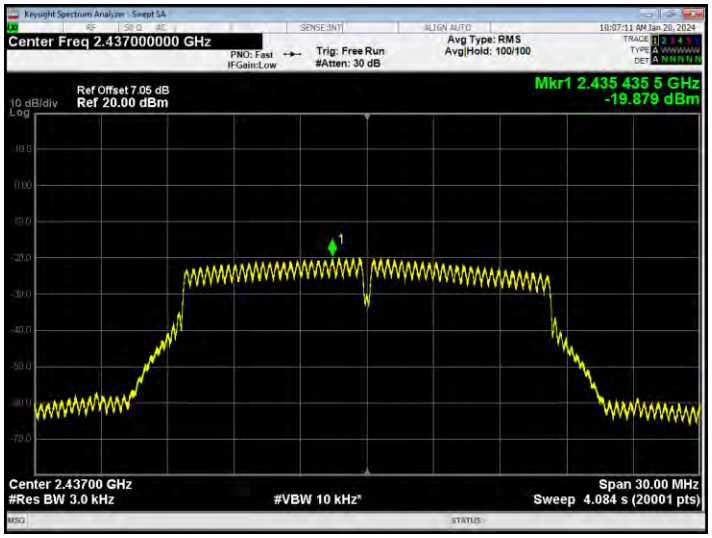
PSD NVNT b 2462MHz Ant1



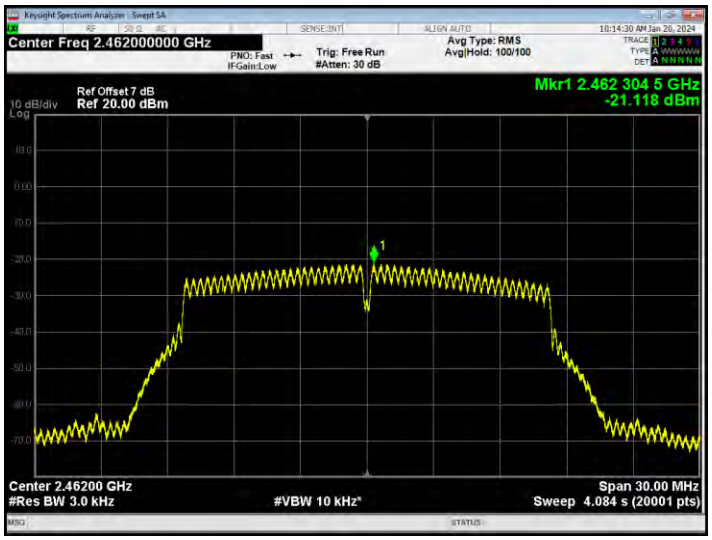
PSD NVNT g 2412MHz Ant1



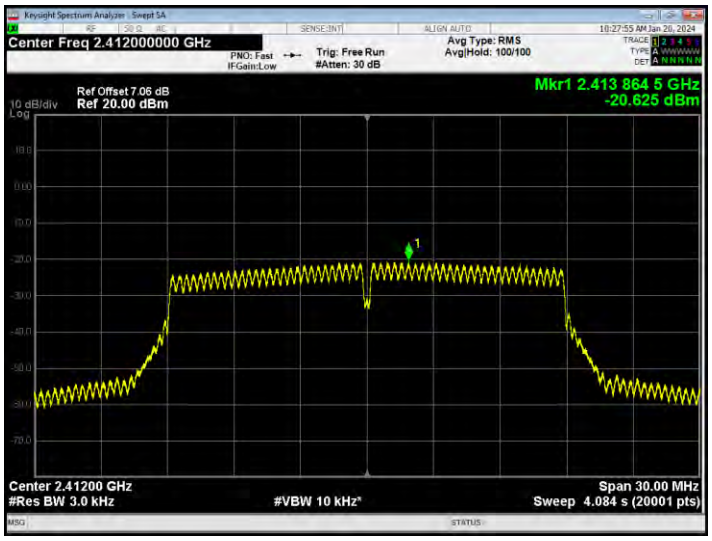
PSD NVNT g 2437MHz Ant1



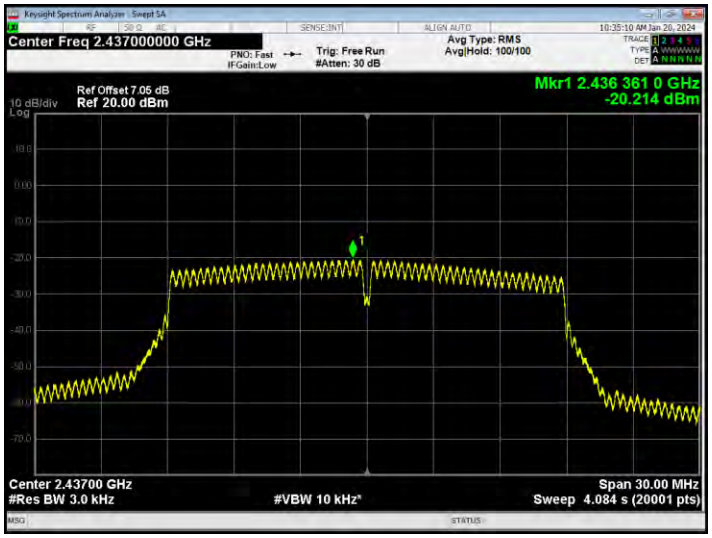
PSD NVNT g 2462MHz Ant1



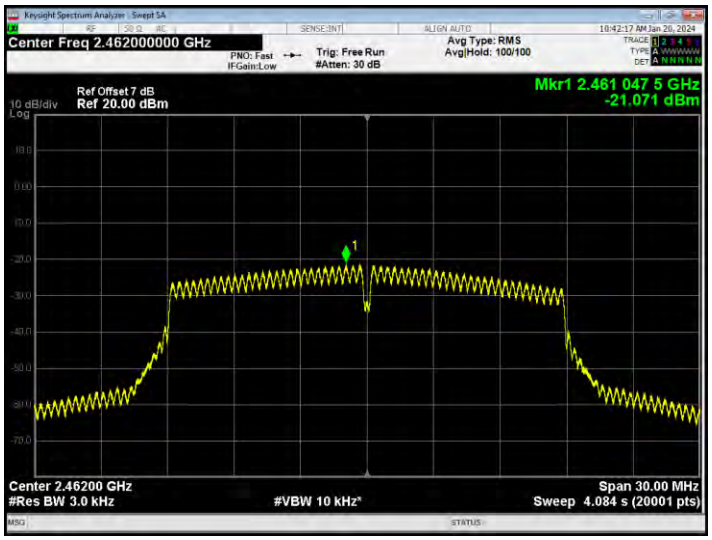
PSD NVNT n20 2412MHz Ant1



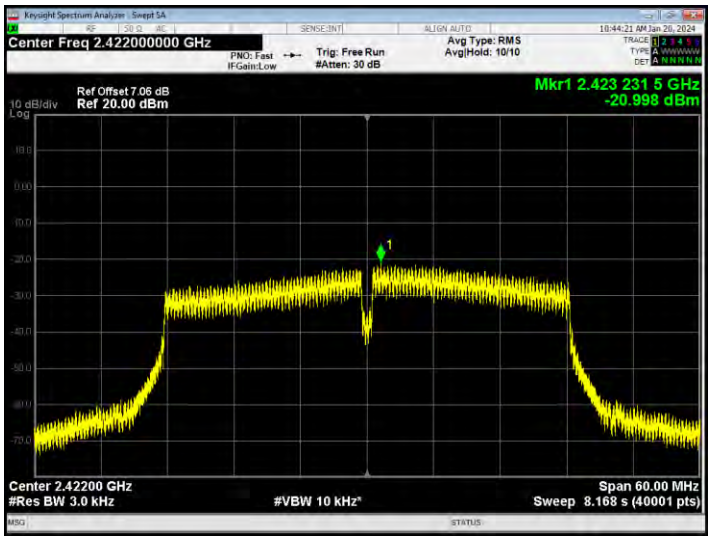
PSD NVNT n20 2437MHz Ant1



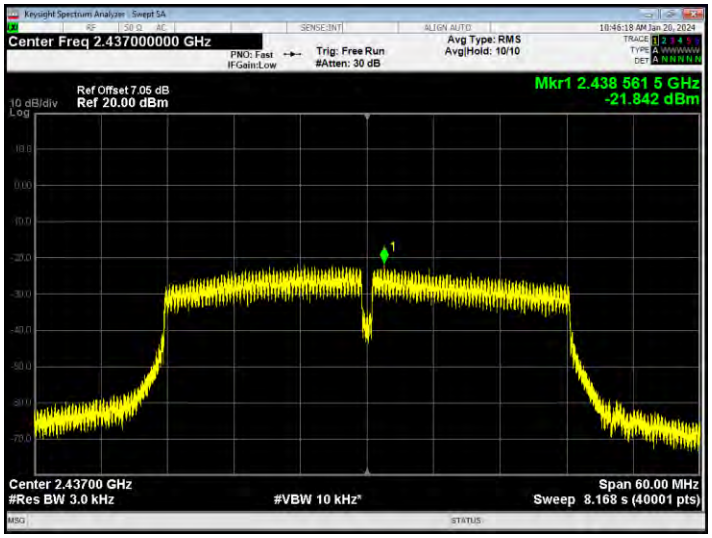
PSD NVNT n20 2462MHz Ant1



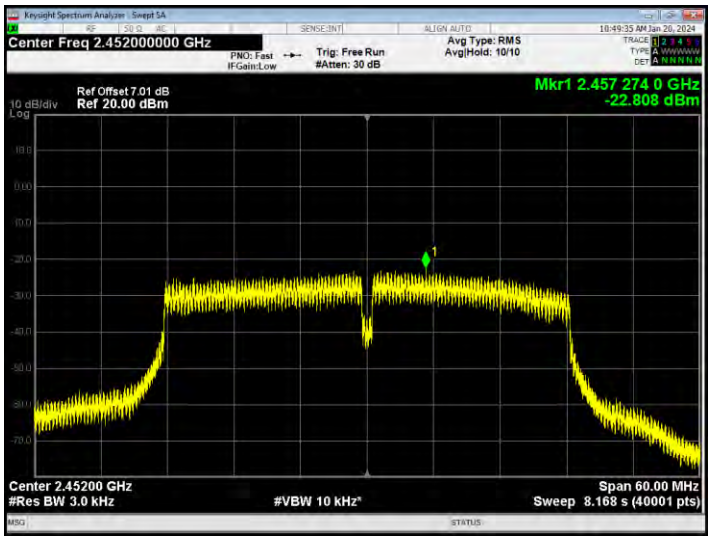
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



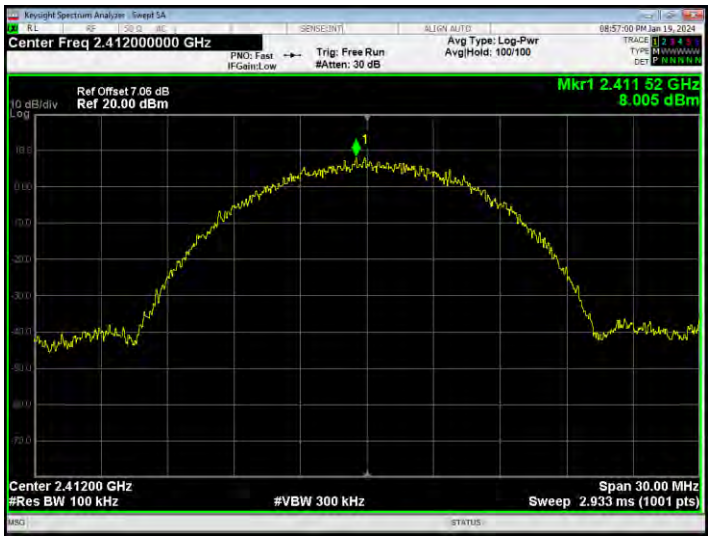
PSD NVNT n40 2452MHz Ant1



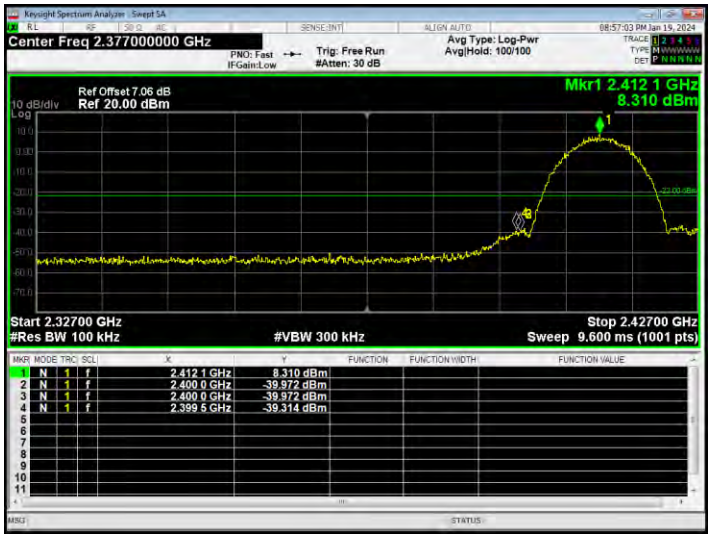
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-47.32	-30	Pass
NVNT	b	2462	Ant1	-57.11	-30	Pass
NVNT	g	2412	Ant1	-39.64	-30	Pass
NVNT	g	2462	Ant1	-52.28	-30	Pass
NVNT	n20	2412	Ant1	-32.01	-30	Pass
NVNT	n20	2462	Ant1	-51.61	-30	Pass
NVNT	n40	2422	Ant1	-36.18	-30	Pass
NVNT	n40	2452	Ant1	-46.8	-30	Pass

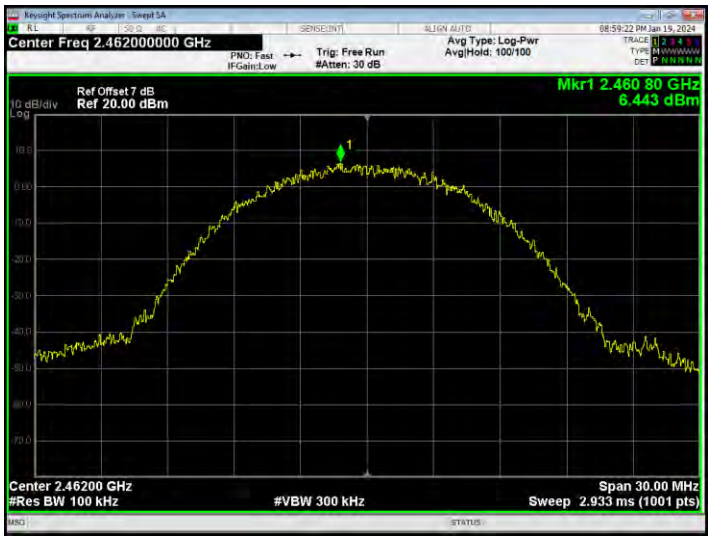
Band Edge NVNT b 2412MHz Ant1 Ref



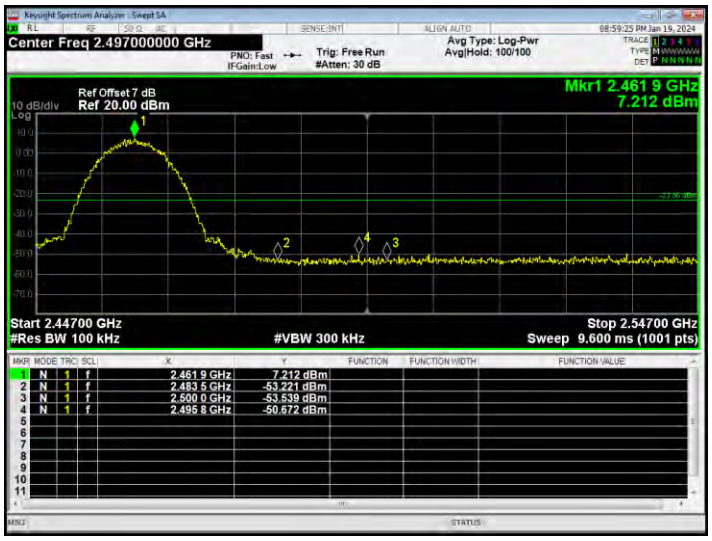
Band Edge NVNT b 2412MHz Ant1 Emission



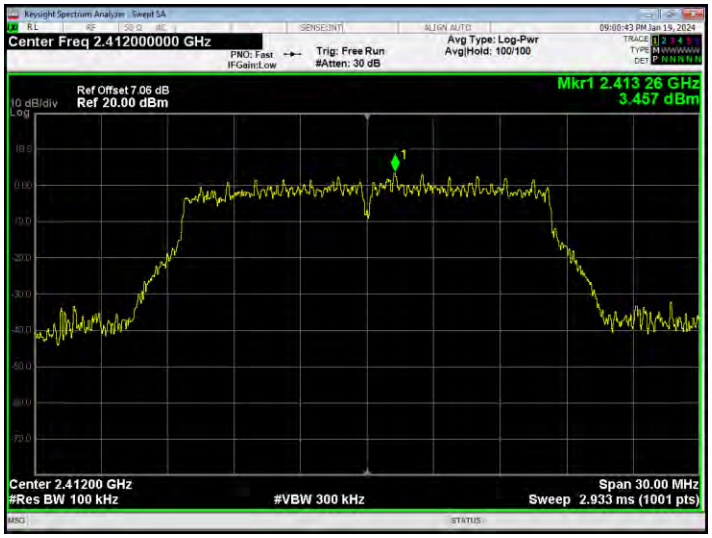
Band Edge NVNT b 2462MHz Ant1 Ref



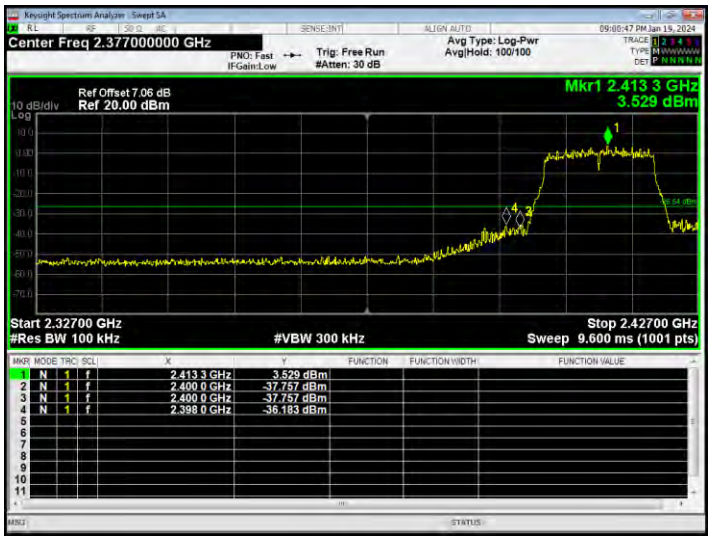
Band Edge NVNT b 2462MHz Ant1 Emission



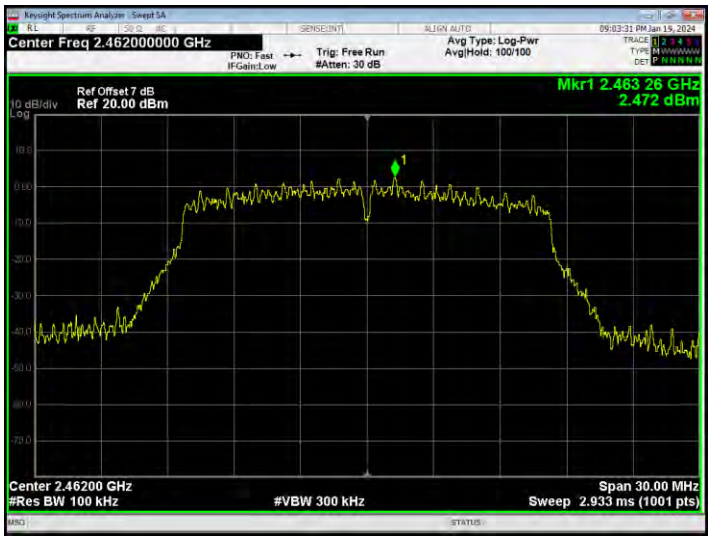
Band Edge NVNT g 2412MHz Ant1 Ref



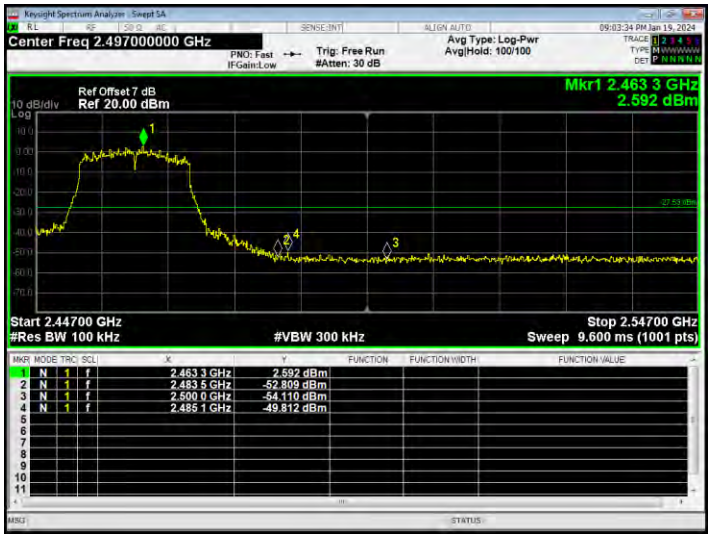
Band Edge NVNT g 2412MHz Ant1 Emission



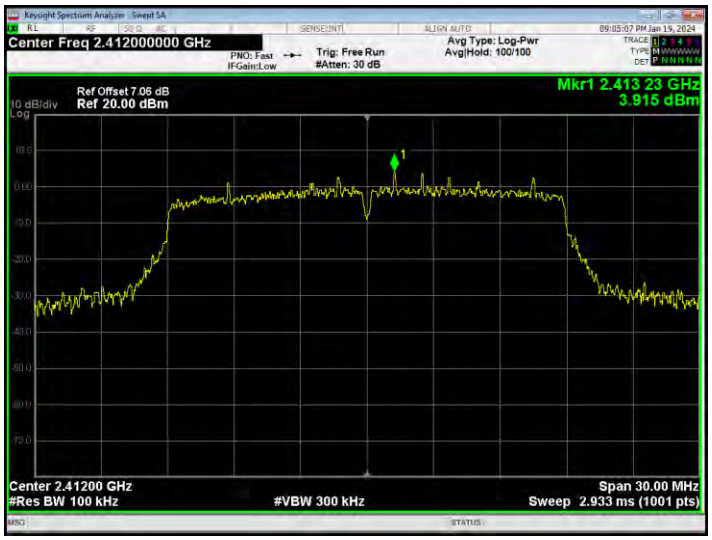
Band Edge NVNT g 2462MHz Ant1 Ref



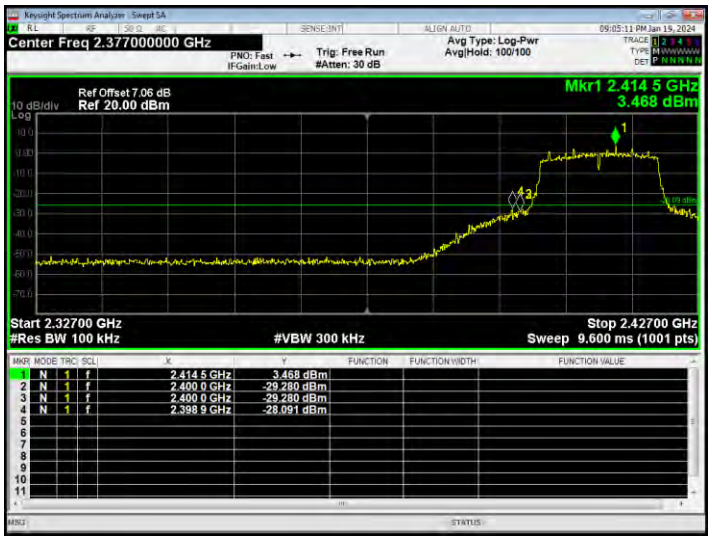
Band Edge NVNT g 2462MHz Ant1 Emission



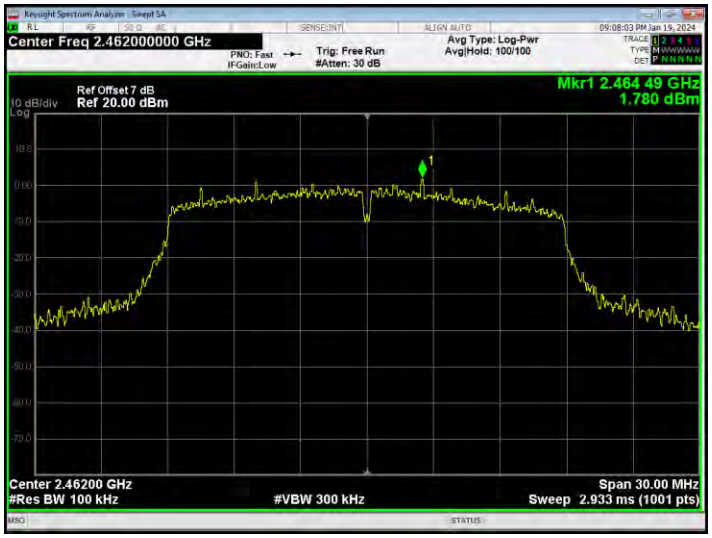
Band Edge NVNT n20 2412MHz Ant1 Ref



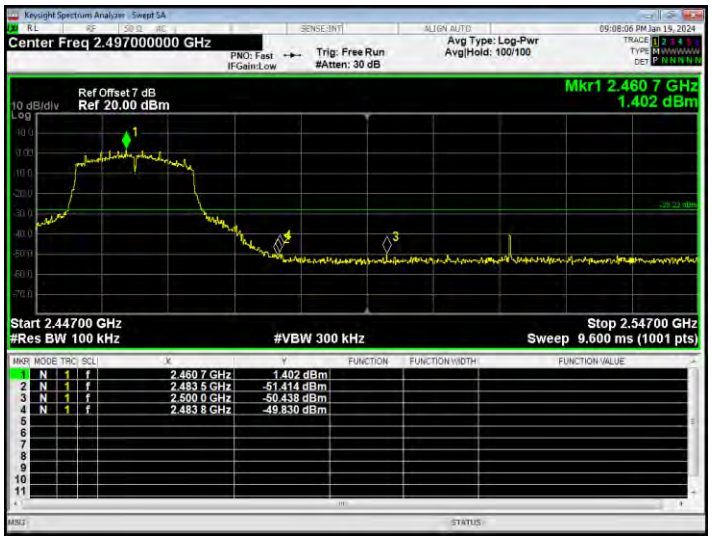
Band Edge NVNT n20 2412MHz Ant1 Emission



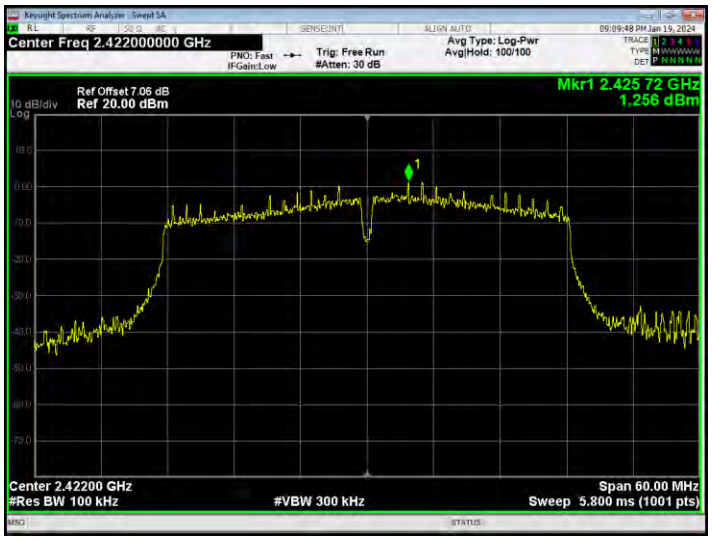
Band Edge NVNT n20 2462MHz Ant1 Ref



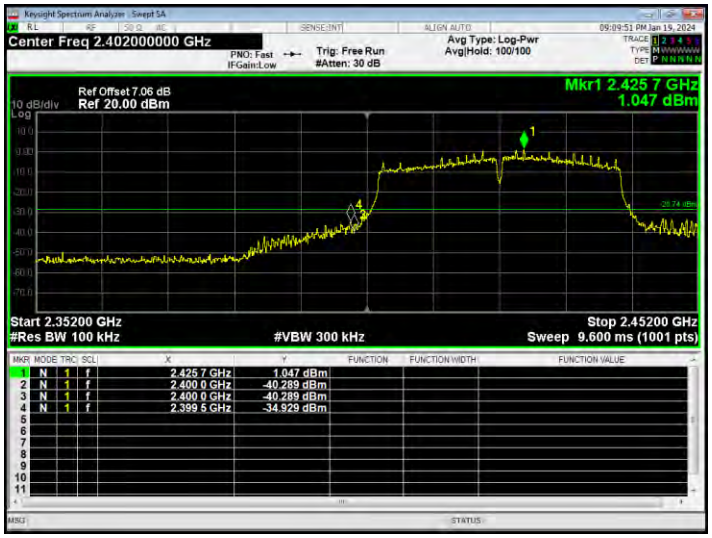
Band Edge NVNT n20 2462MHz Ant1 Emission



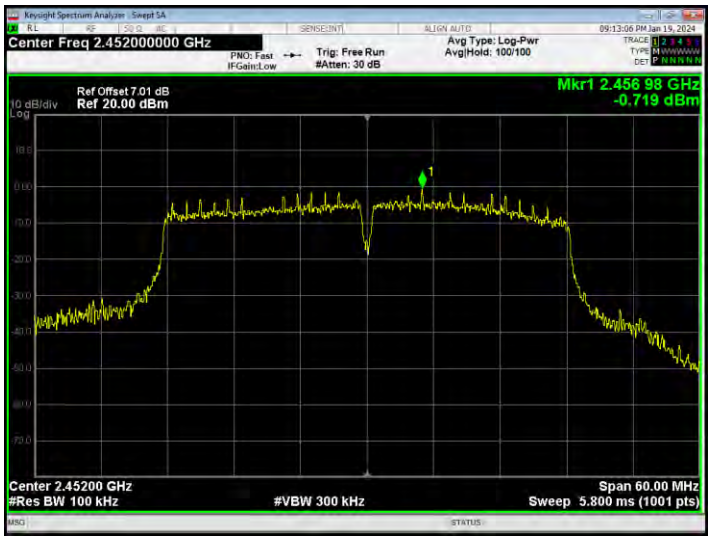
Band Edge NVNT n40 2422MHz Ant1 Ref



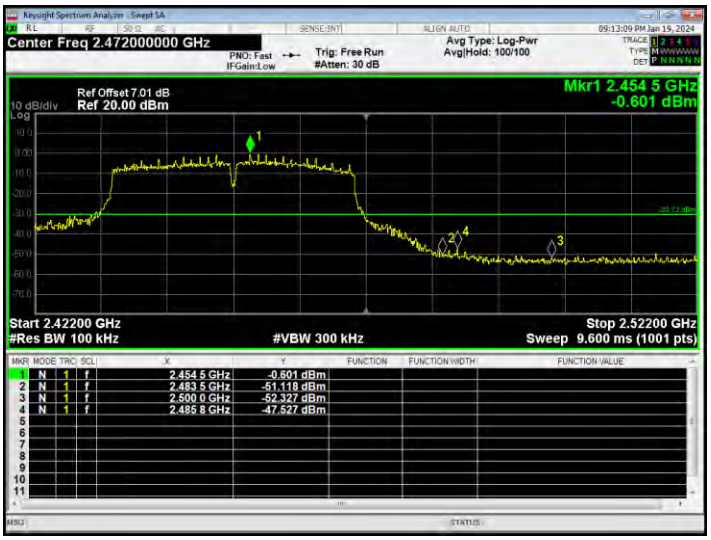
Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission

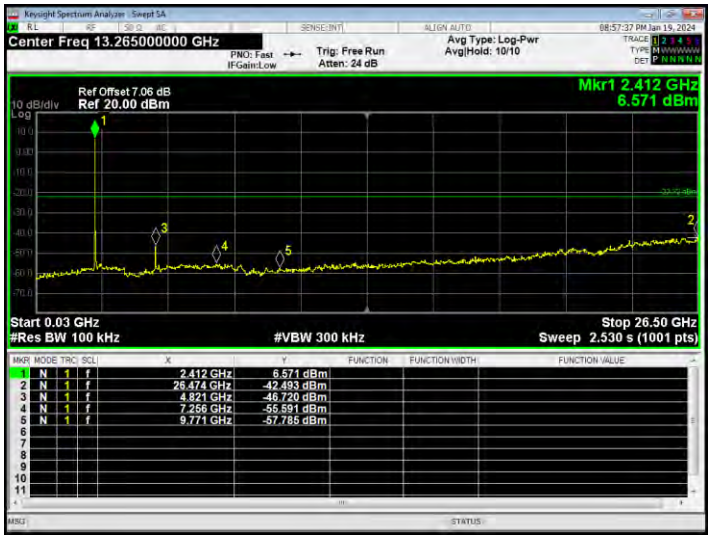


Conducted RF Spurious Emission

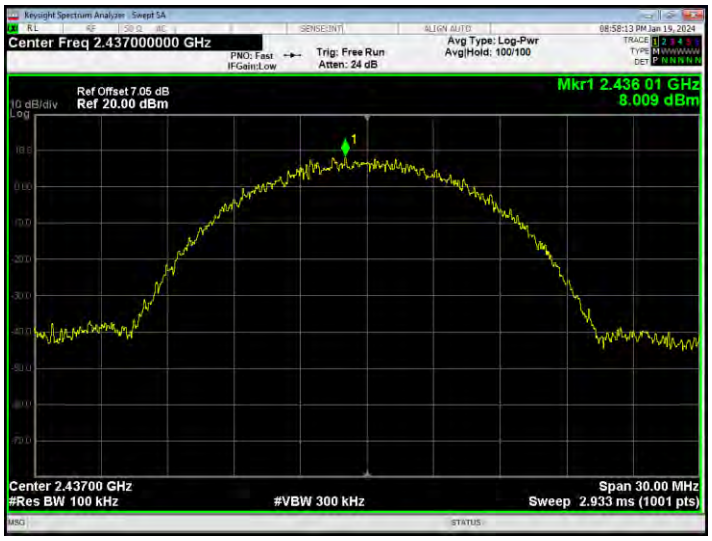
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-50.17	-30	Pass
NVNT	b	2437	Ant1	-50.04	-30	Pass
NVNT	b	2462	Ant1	-44.63	-30	Pass
NVNT	g	2412	Ant1	-45.6	-30	Pass
NVNT	g	2437	Ant1	-46.3	-30	Pass
NVNT	g	2462	Ant1	-45.18	-30	Pass
NVNT	n20	2412	Ant1	-46.66	-30	Pass
NVNT	n20	2437	Ant1	-45.6	-30	Pass
NVNT	n20	2462	Ant1	-42.39	-30	Pass
NVNT	n40	2422	Ant1	-43.93	-30	Pass
NVNT	n40	2437	Ant1	-42.79	-30	Pass
NVNT	n40	2452	Ant1	-42.02	-30	Pass

Tx. Spurious NVNT b 2412MHz Ant1 Ref

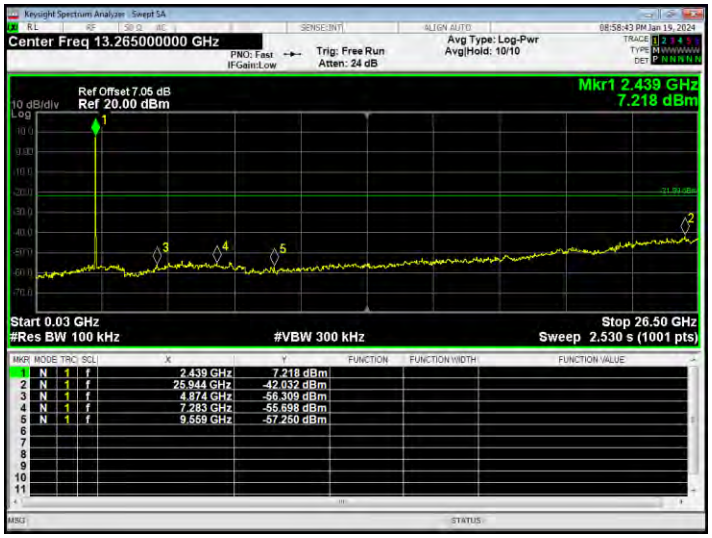
Tx. Spurious NVNT b 2412MHz Ant1 Emission



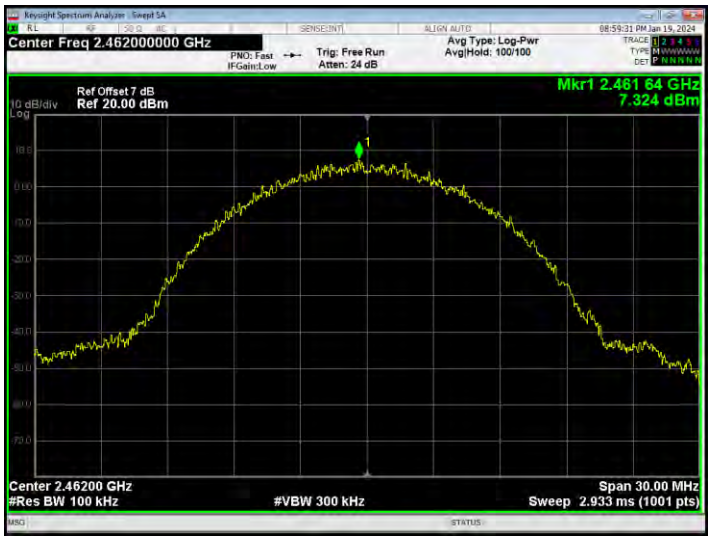
Tx. Spurious NVNT b 2437MHz Ant1 Ref



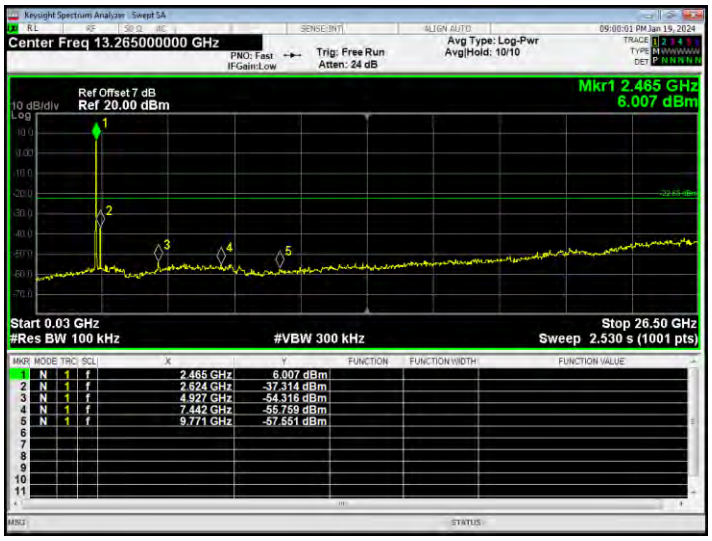
Tx. Spurious NVNT b 2437MHz Ant1 Emission



Tx. Spurious NVNT b 2462MHz Ant1 Ref

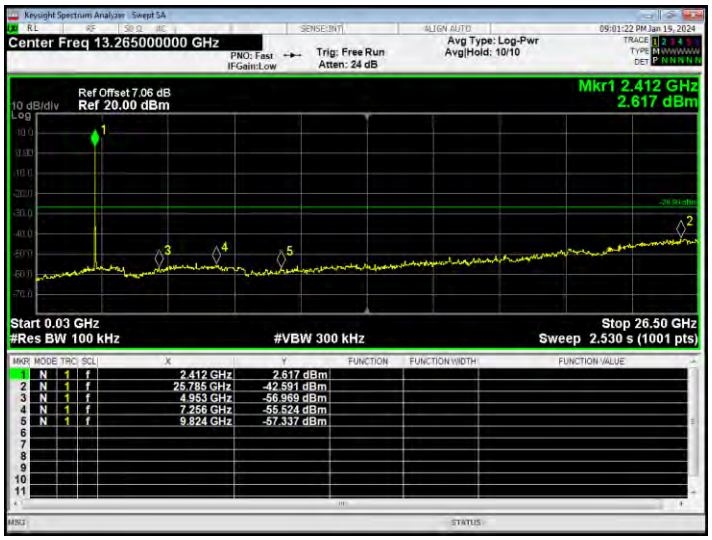


Tx. Spurious NVNT b 2462MHz Ant1 Emission

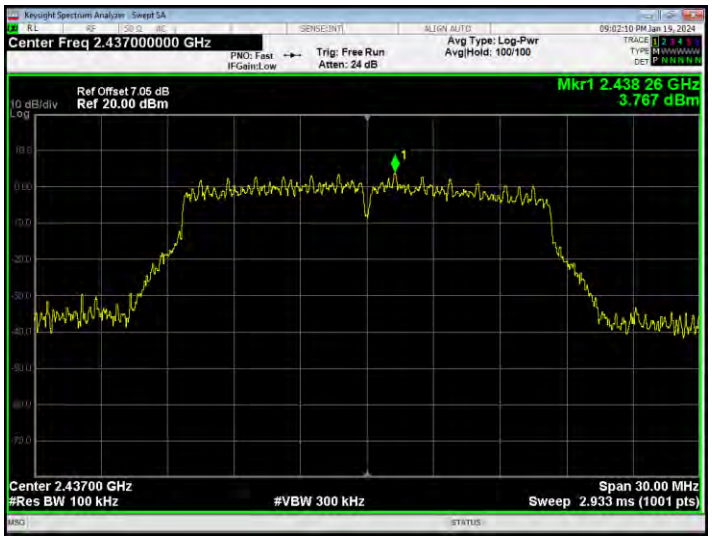


Tx. Spurious NVNT g 2412MHz Ant1 Ref

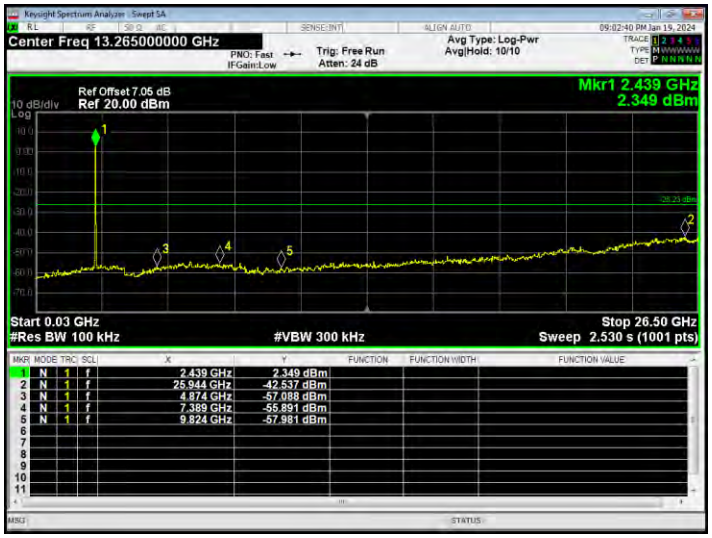
Tx. Spurious NVNT g 2412MHz Ant1 Emission



Tx. Spurious NVNT g 2437MHz Ant1 Ref

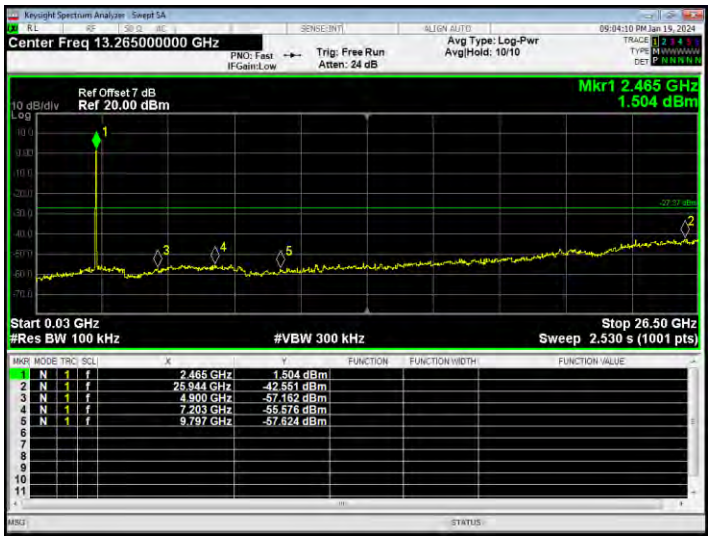


Tx. Spurious NVNT g 2437MHz Ant1 Emission

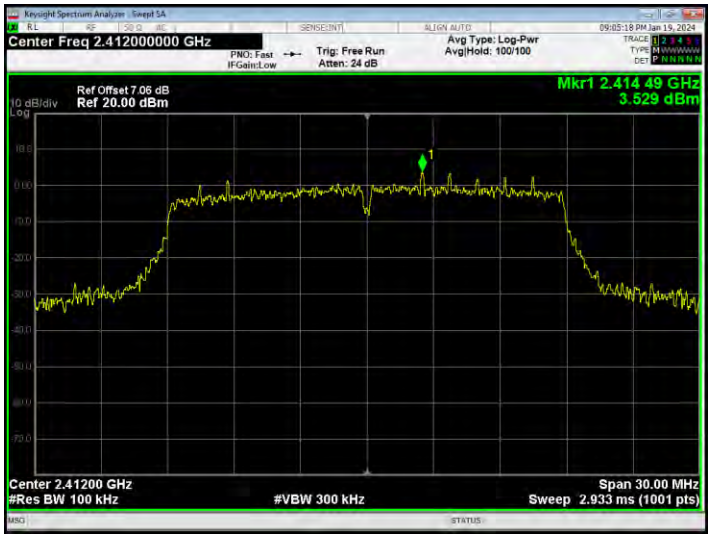


Tx. Spurious NVNT g 2462MHz Ant1 Ref

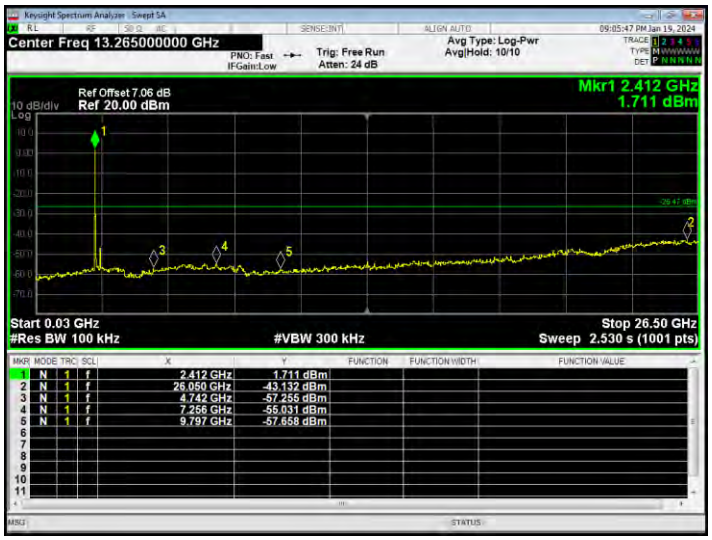
Tx. Spurious NVNT g 2462MHz Ant1 Emission



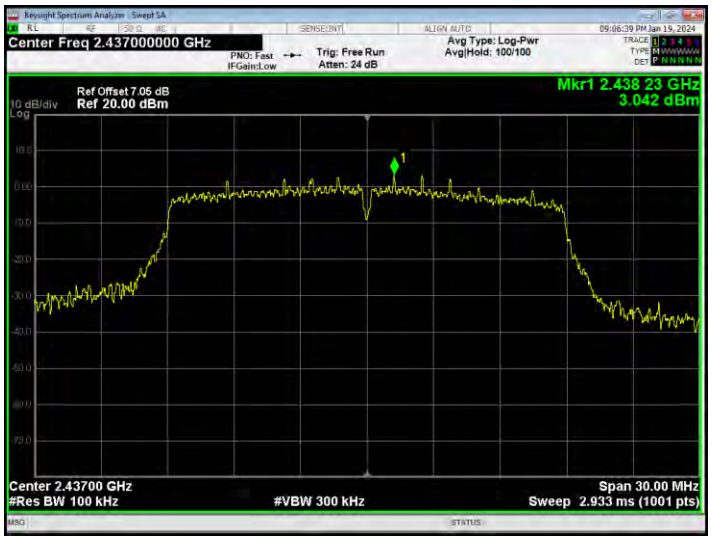
Tx. Spurious NVNT n20 2412MHz Ant1 Ref



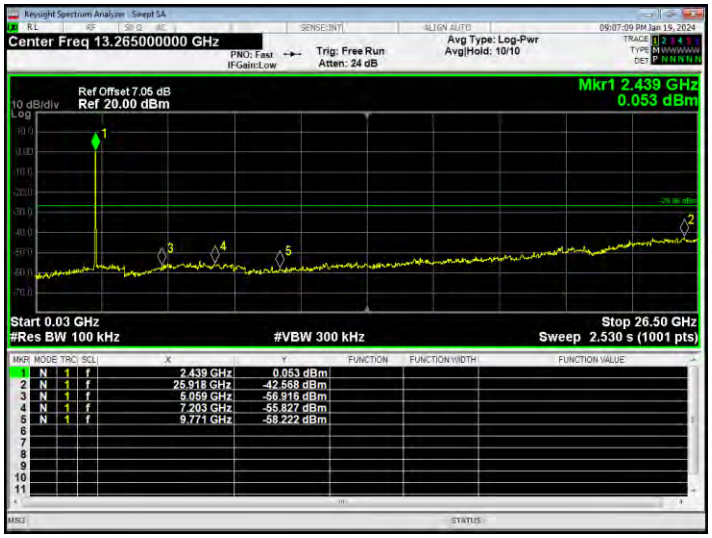
Tx. Spurious NVNT n20 2412MHz Ant1 Emission



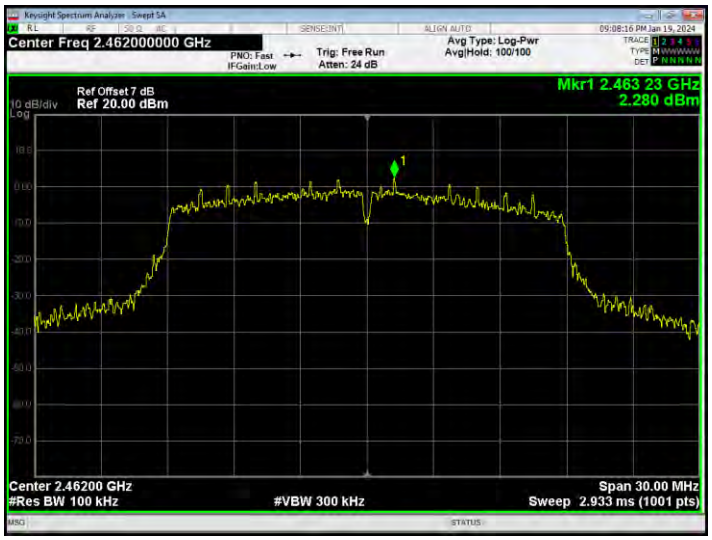
Tx. Spurious NVNT n20 2437MHz Ant1 Ref



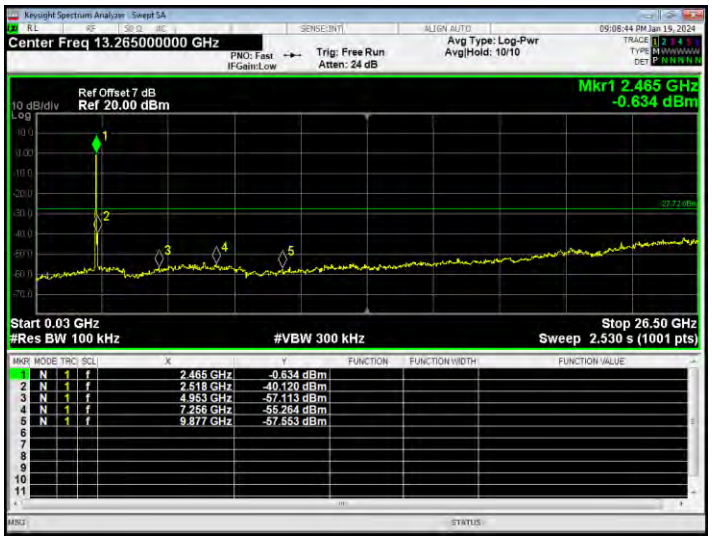
Tx. Spurious NVNT n20 2437MHz Ant1 Emission



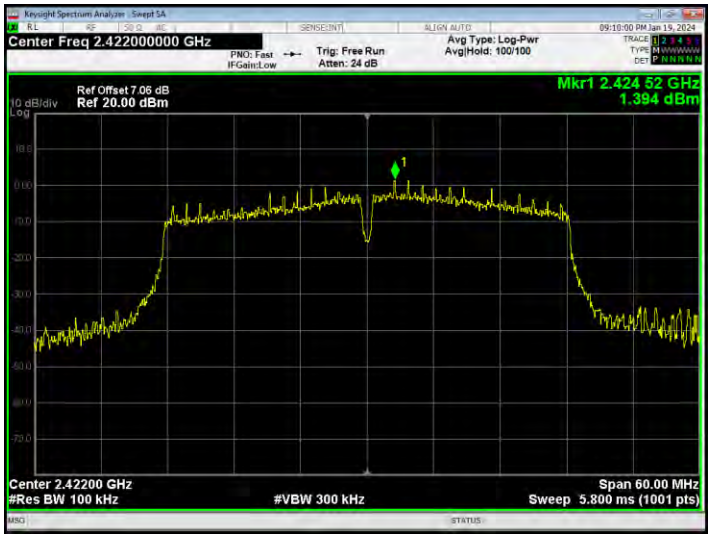
Tx. Spurious NVNT n20 2462MHz Ant1 Ref



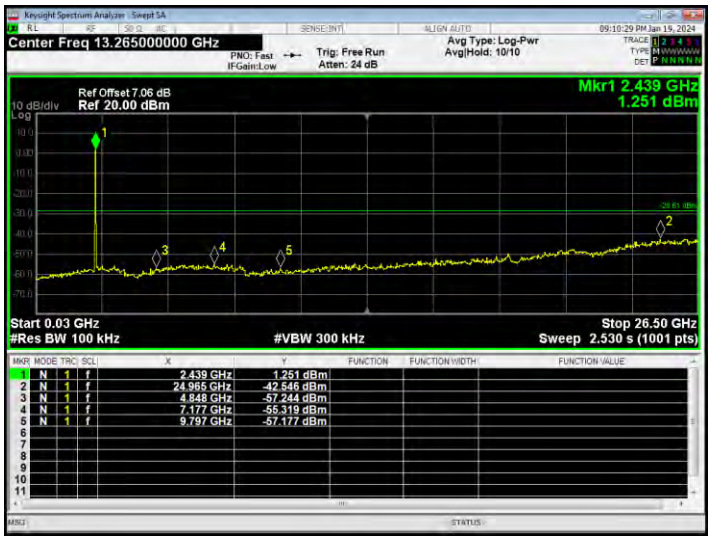
Tx. Spurious NVNT n20 2462MHz Ant1 Emission



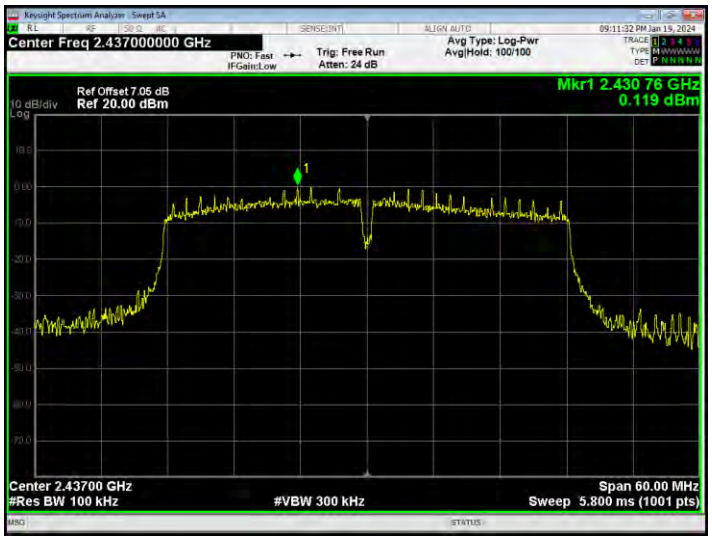
Tx. Spurious NVNT n40 2422MHz Ant1 Ref



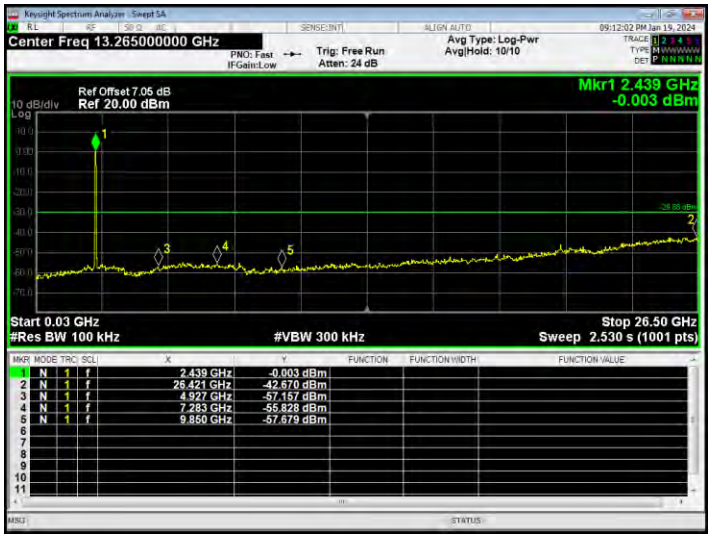
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



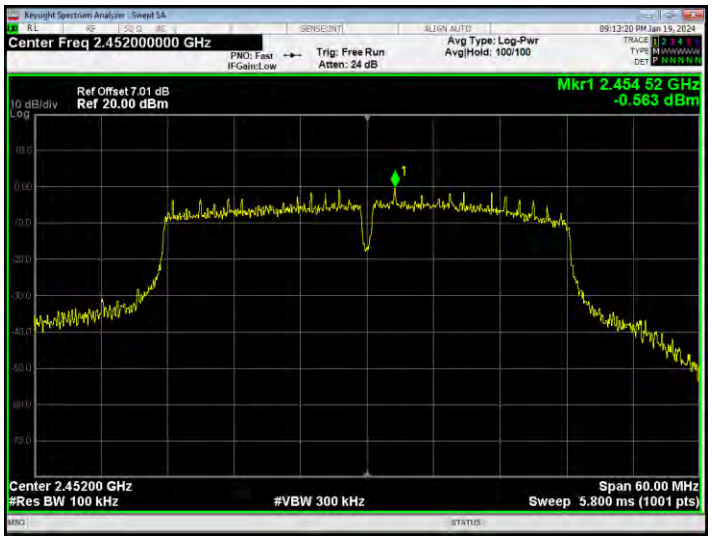
Tx. Spurious NVNT n40 2437MHz Ant1 Ref



Tx. Spurious NVNT n40 2437MHz Ant1 Emission



Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission