

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	Doorbell
Test Model:	DB-DBW2-B
Sample ID:	HC-C-202404-0342-01-01
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	ZKN Zhou
Note: For a more detailed features description, please refer to the report TBR-C-202404-0342-3 The report only show the worst case data.	

Contents

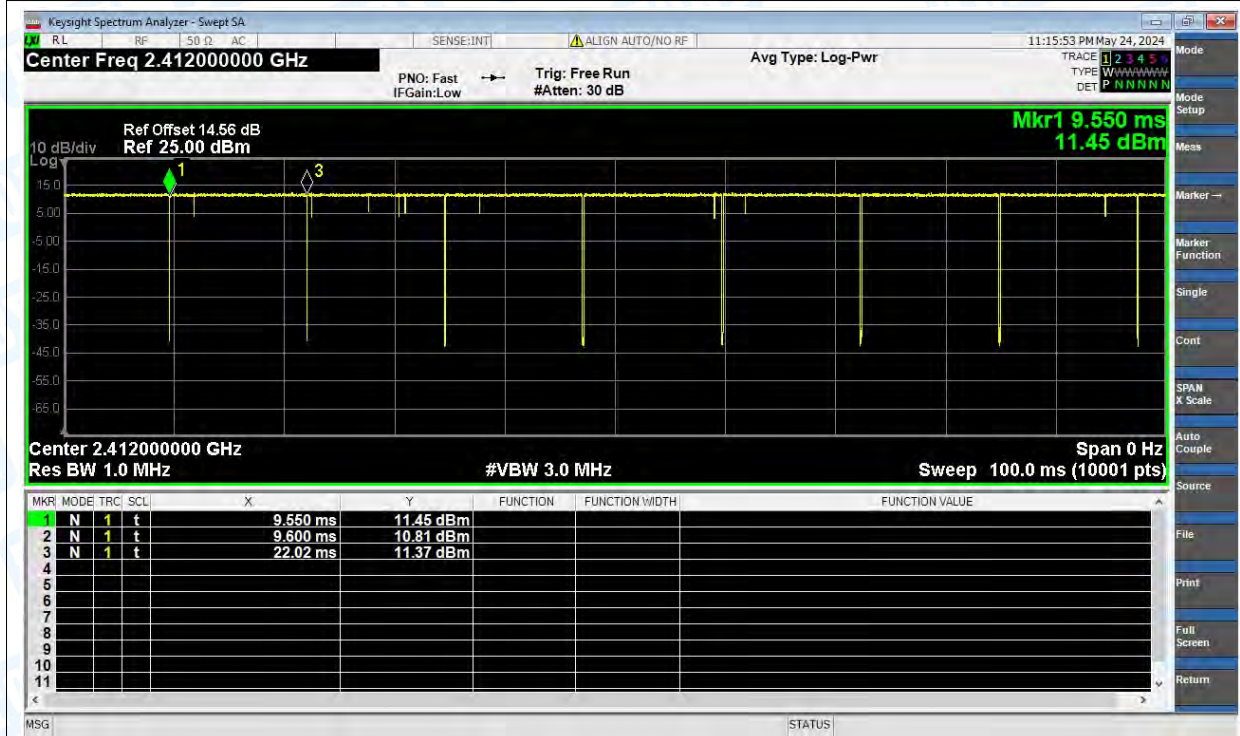
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1. Duty Cycle

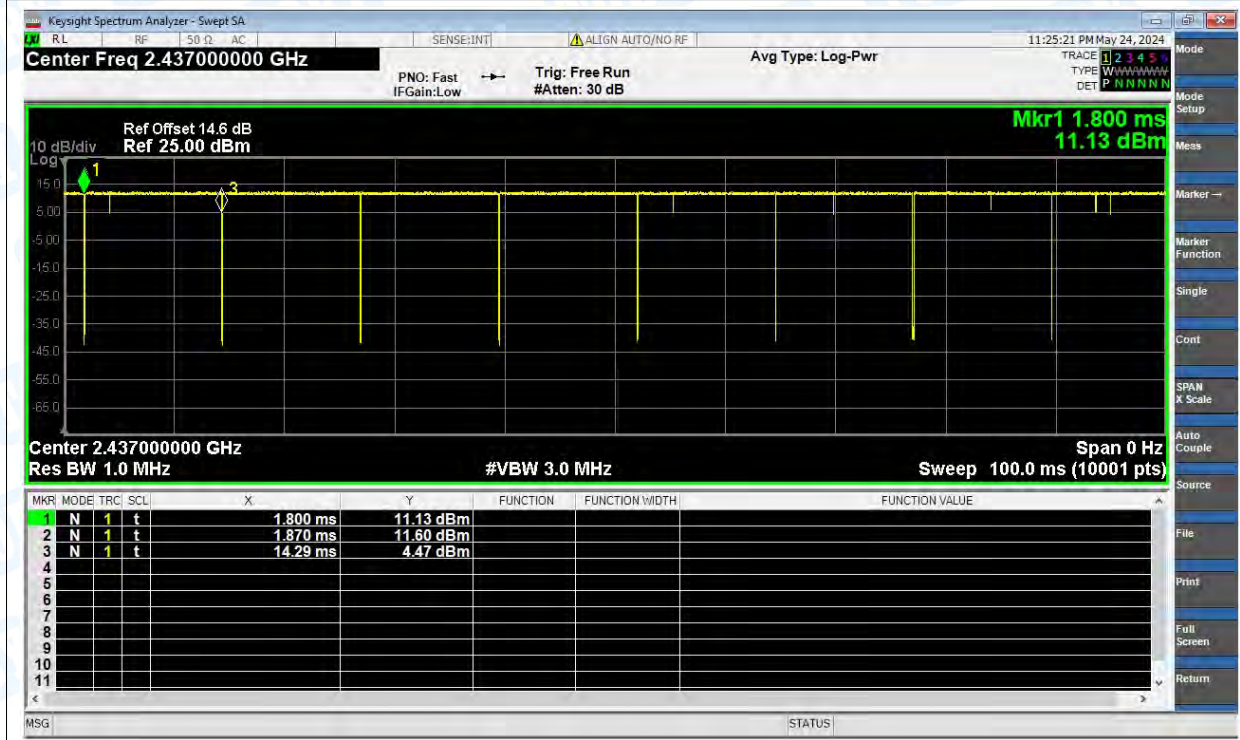
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.60	0.02	0.08
NVNT	b	2437	Ant1	99.44	0.02	0.08
NVNT	b	2462	Ant1	98.73	0.06	0.08
NVNT	g	2412	Ant1	92.41	0.34	0.48
NVNT	g	2437	Ant1	92.38	0.34	0.49
NVNT	g	2462	Ant1	94.09	0.26	0.48
NVNT	n(HT20)	2412	Ant1	93.66	0.28	0.52
NVNT	n(HT20)	2437	Ant1	95.05	0.22	0.52
NVNT	n(HT20)	2462	Ant1	93.66	0.28	0.52
NVNT	n(HT40)	2422	Ant1	92.16	0.35	1.06
NVNT	n(HT40)	2437	Ant1	87.85	0.56	1.06
NVNT	n(HT40)	2452	Ant1	87.96	0.56	1.05

Test Graphs

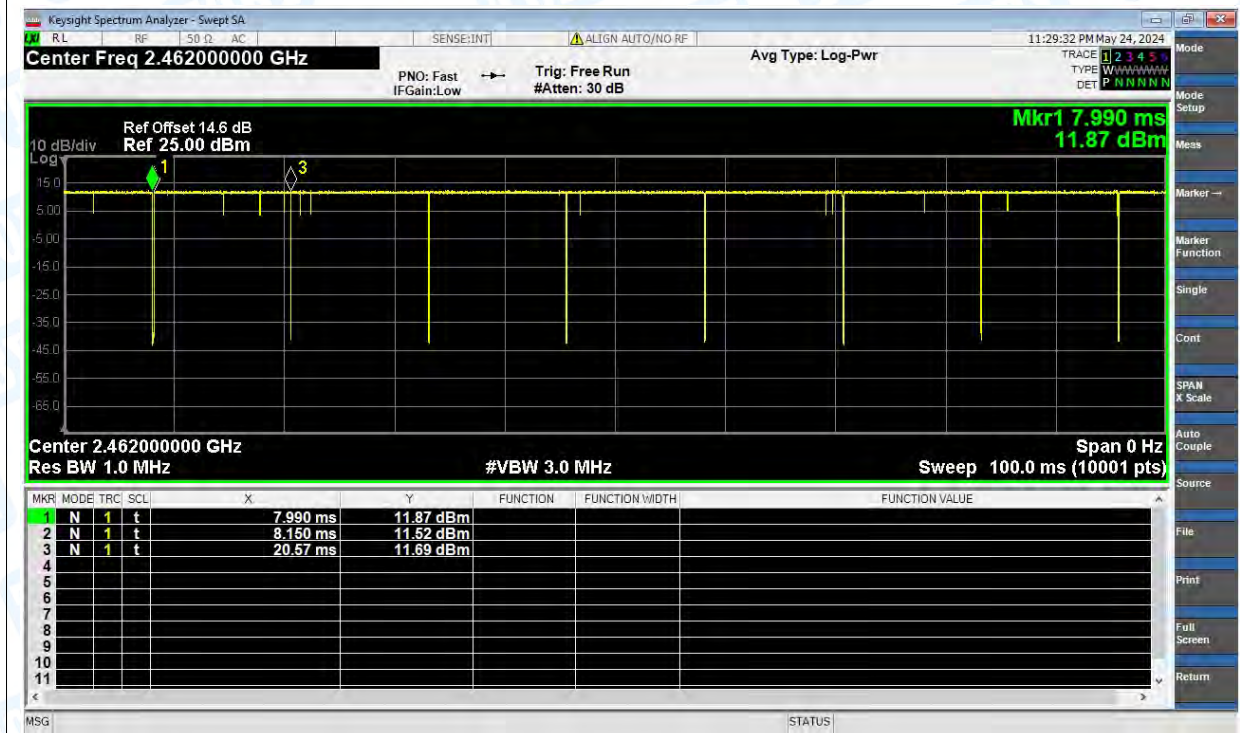
Duty Cycle NVNT b 2412MHz Ant1



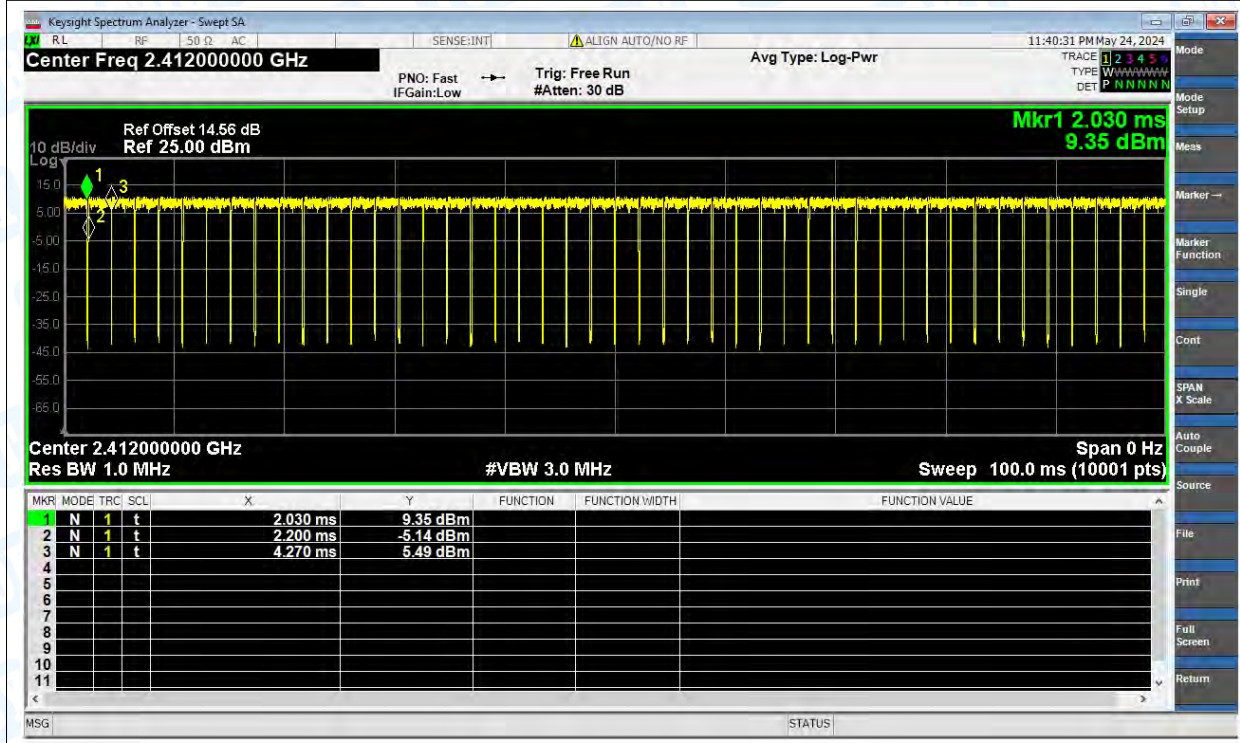
Duty Cycle NVNT b 2437MHz Ant1



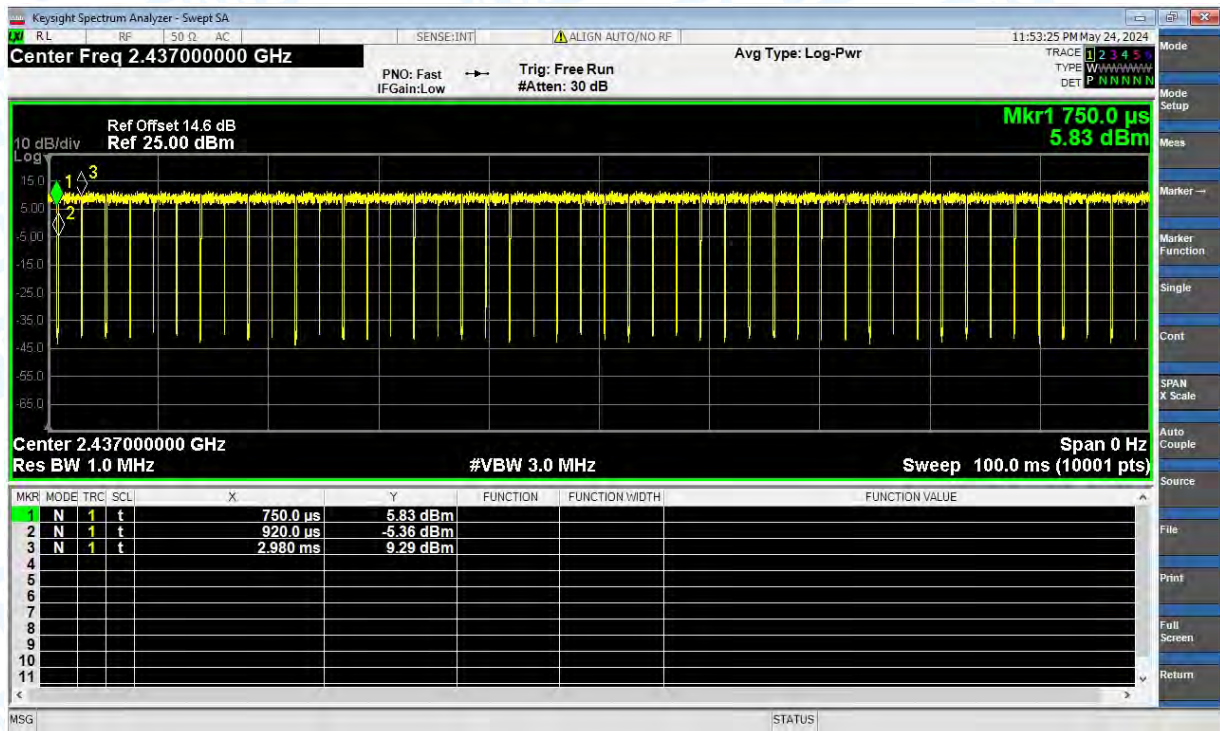
Duty Cycle NVNT b 2462MHz Ant1



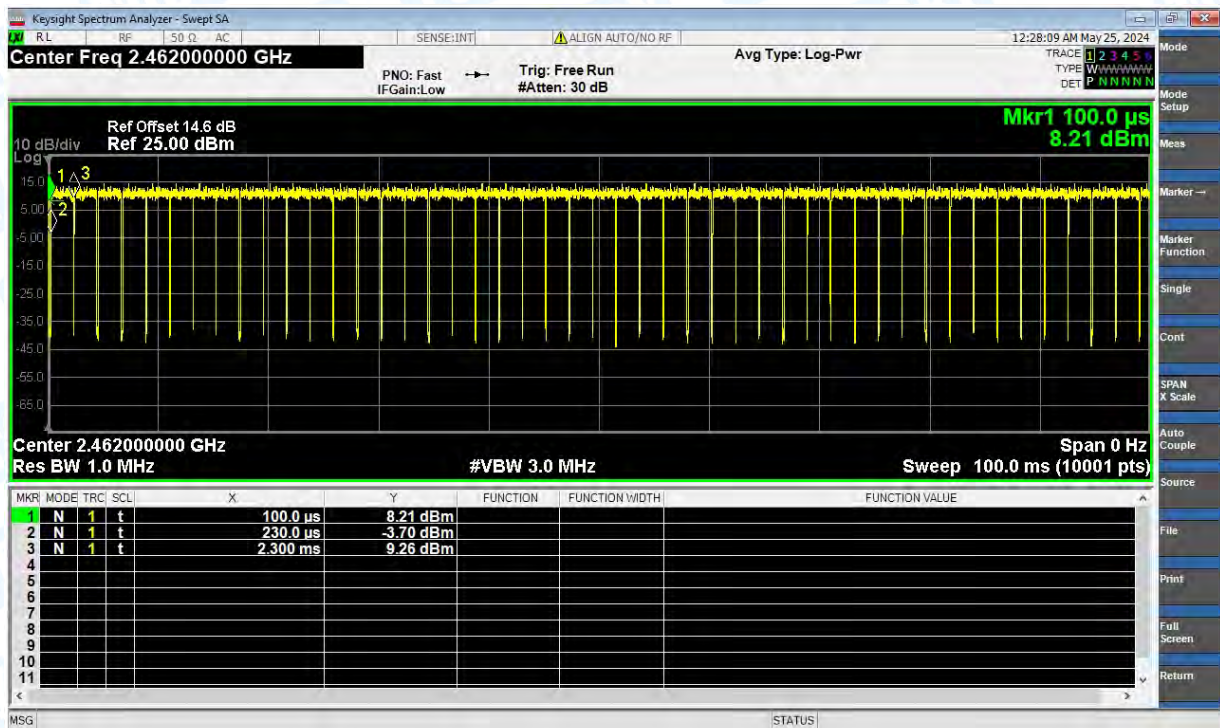
Duty Cycle NVNT g 2412MHz Ant1



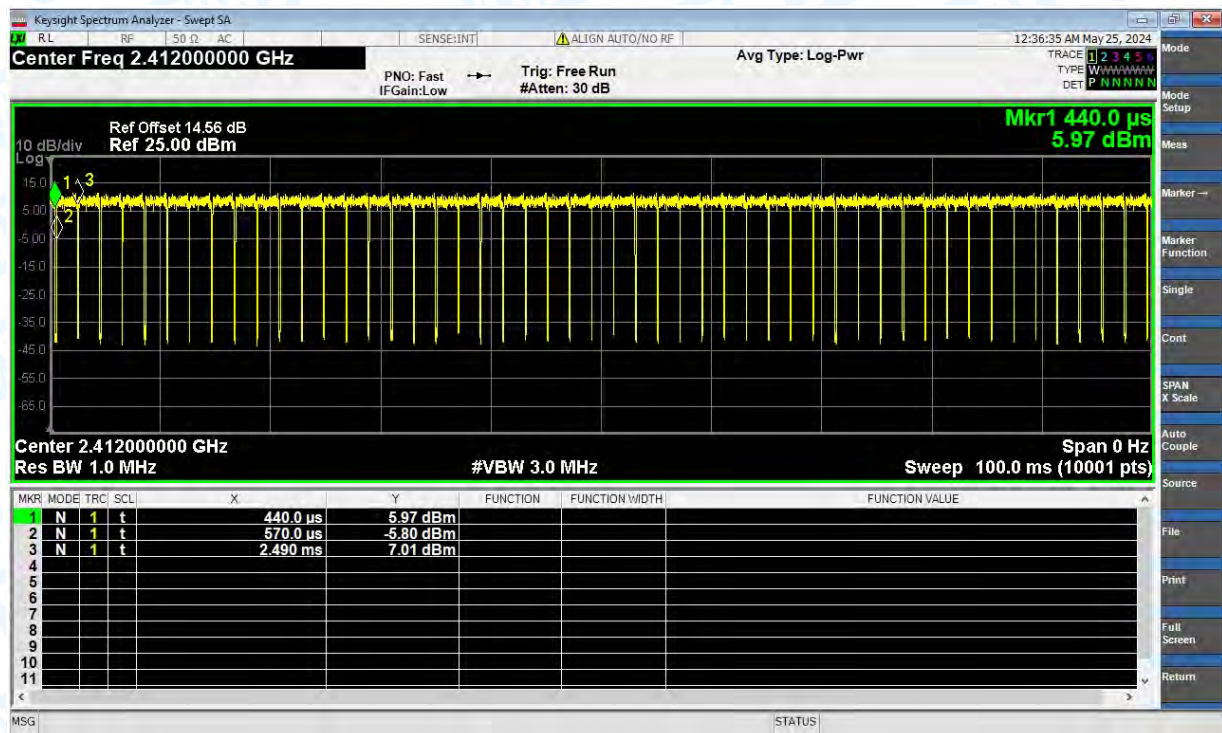
Duty Cycle NVNT g 2437MHz Ant1



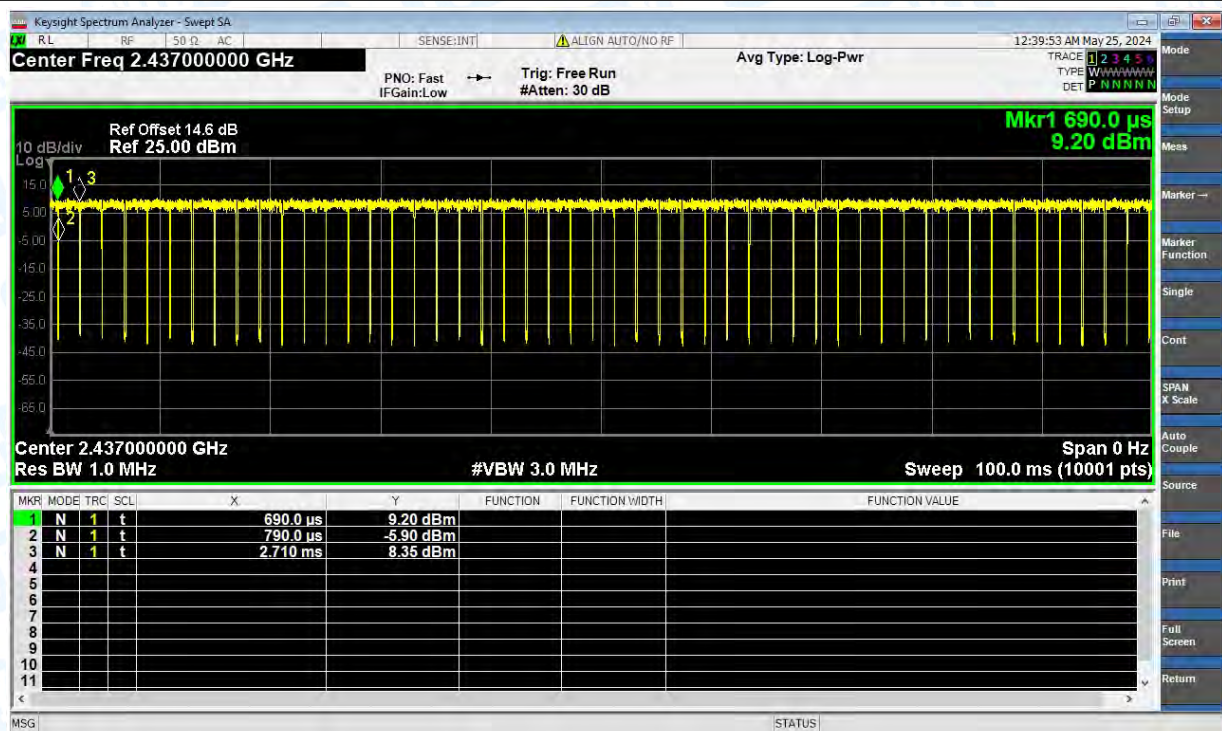
Duty Cycle NVNT g 2462MHz Ant1



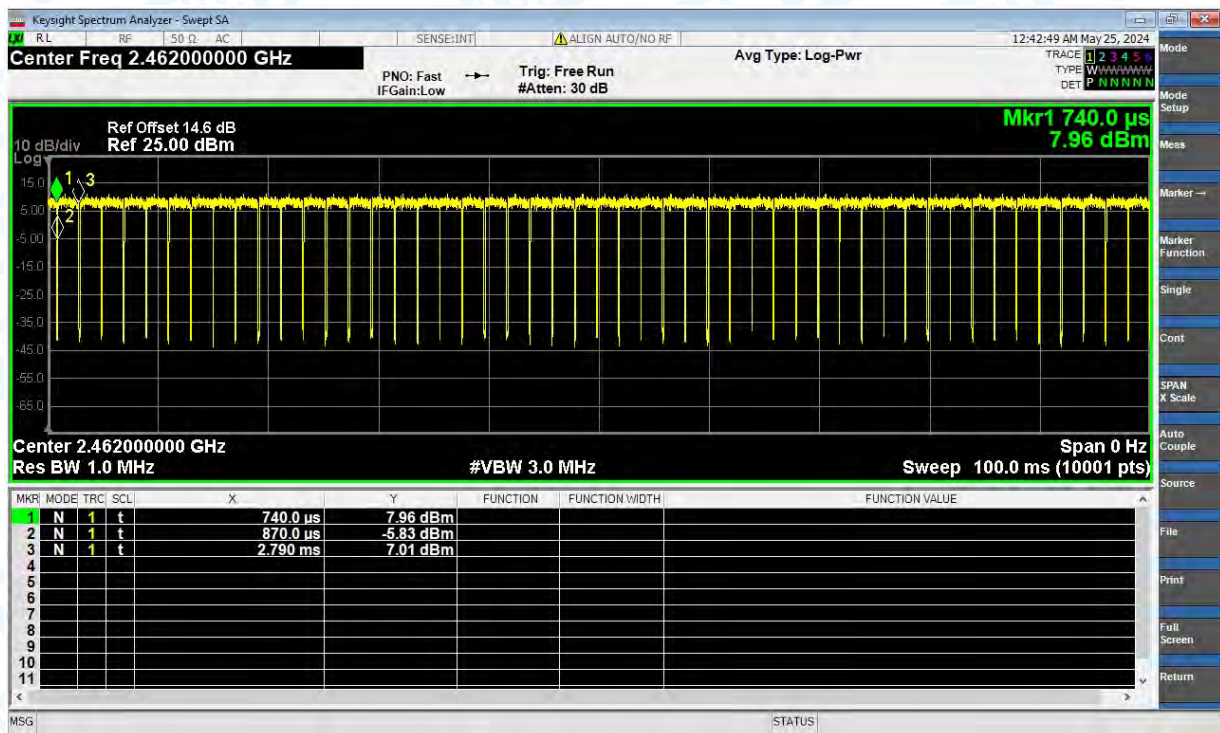
Duty Cycle NVNT n(HT20) 2412MHz Ant1



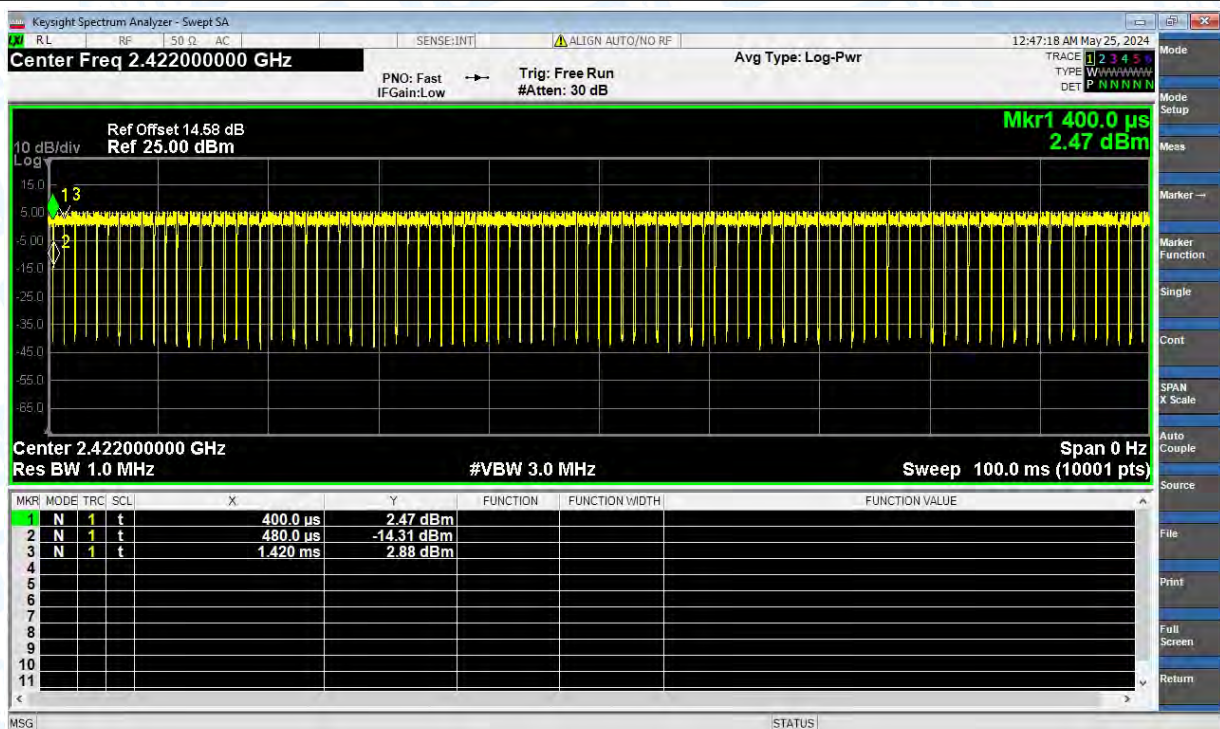
Duty Cycle NVNT n(HT20) 2437MHz Ant1



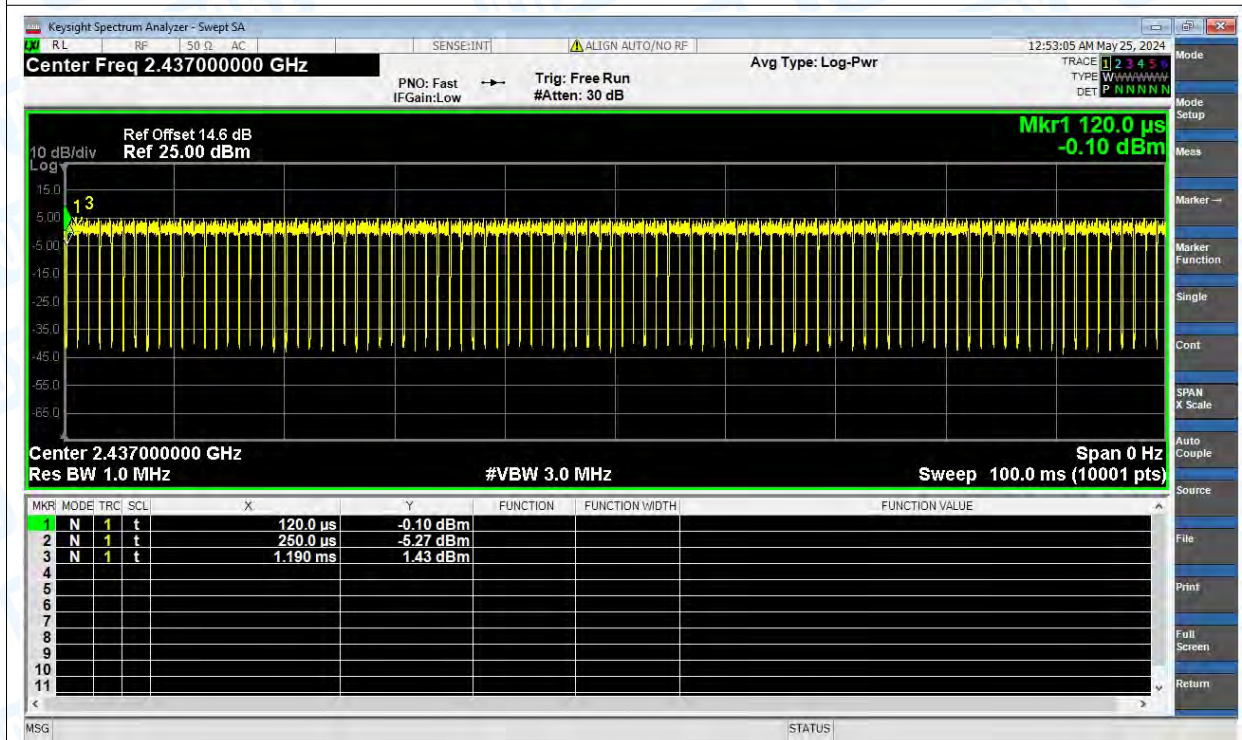
Duty Cycle NVNT n(HT20) 2462MHz Ant1



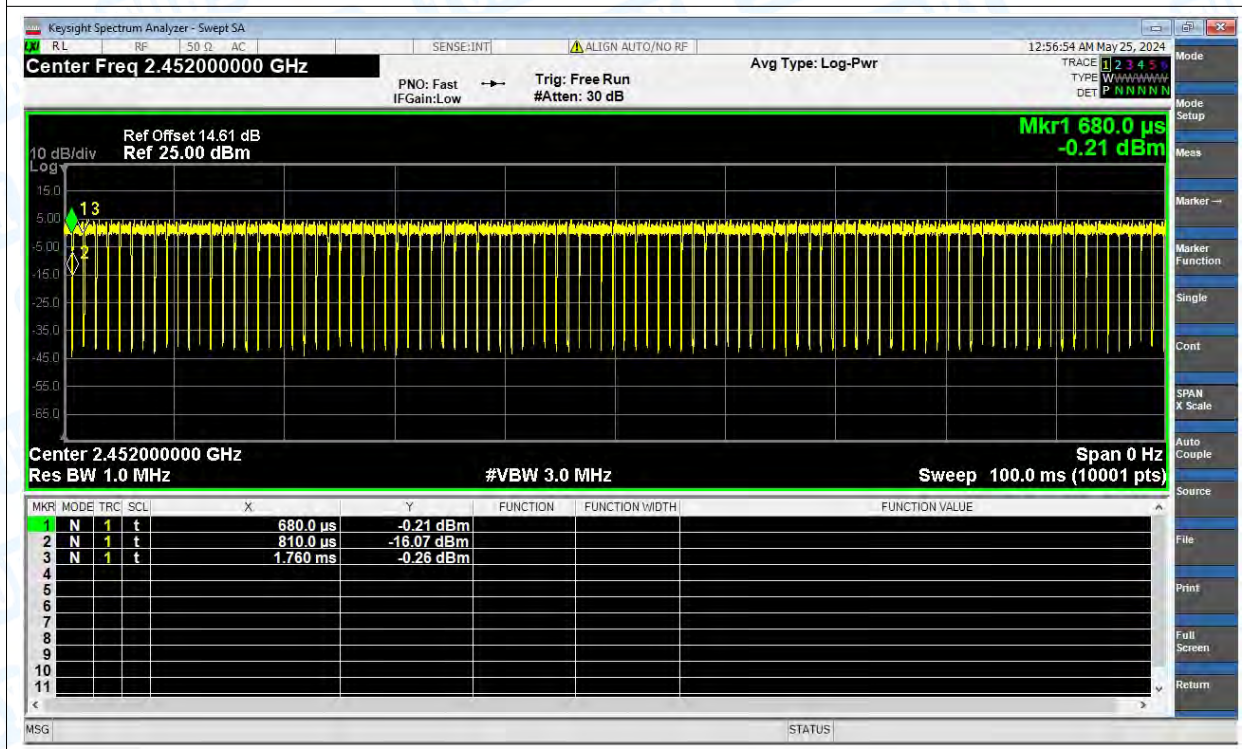
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	15.92	30	Pass
NVNT	b	2437	Ant1	15.93	30	Pass
NVNT	b	2462	Ant1	15.79	30	Pass
NVNT	g	2412	Ant1	15.57	30	Pass
NVNT	g	2437	Ant1	15.46	30	Pass
NVNT	g	2462	Ant1	14.70	30	Pass
NVNT	n(HT20)	2412	Ant1	15.66	30	Pass
NVNT	n(HT20)	2437	Ant1	15.26	30	Pass
NVNT	n(HT20)	2462	Ant1	15.25	30	Pass
NVNT	n(HT40)	2422	Ant1	14.50	30	Pass
NVNT	n(HT40)	2437	Ant1	15.09	30	Pass
NVNT	n(HT40)	2452	Ant1	13.64	30	Pass

3. -6dB Bandwidth

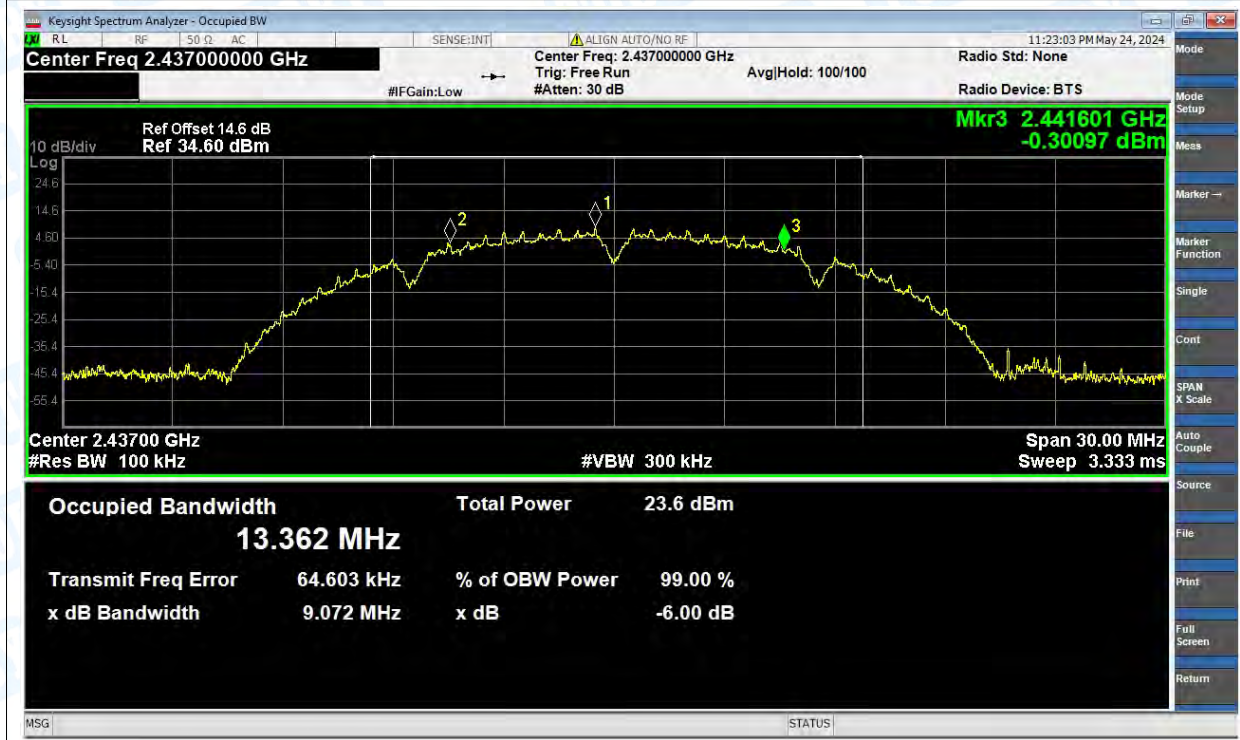
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.56	0.5	Pass
NVNT	b	2437	Ant1	9.07	0.5	Pass
NVNT	b	2462	Ant1	9.07	0.5	Pass
NVNT	g	2412	Ant1	16.35	0.5	Pass
NVNT	g	2437	Ant1	16.34	0.5	Pass
NVNT	g	2462	Ant1	16.35	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.31	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.56	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.57	0.5	Pass
NVNT	n(HT40)	2422	Ant1	36.07	0.5	Pass
NVNT	n(HT40)	2437	Ant1	36.29	0.5	Pass
NVNT	n(HT40)	2452	Ant1	36.09	0.5	Pass

Test Graphs

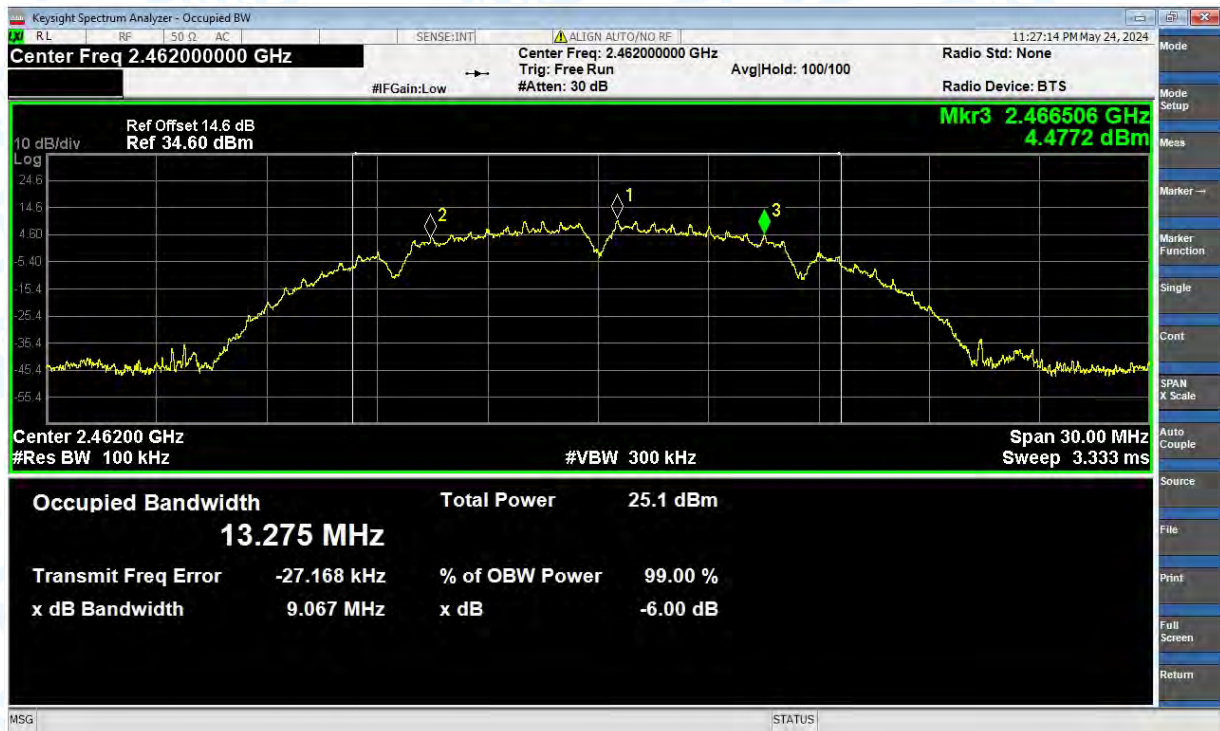
-6dB Bandwidth NVNT b 2412MHz Ant1



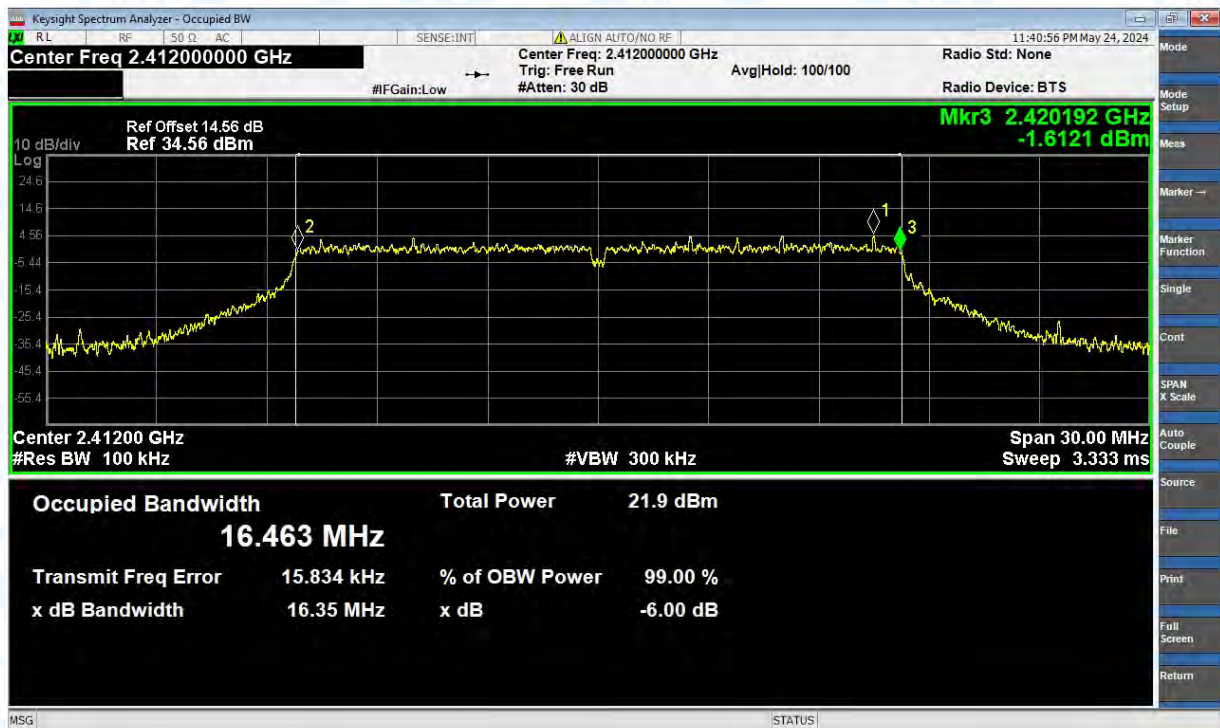
-6dB Bandwidth NVNT b 2437MHz Ant1



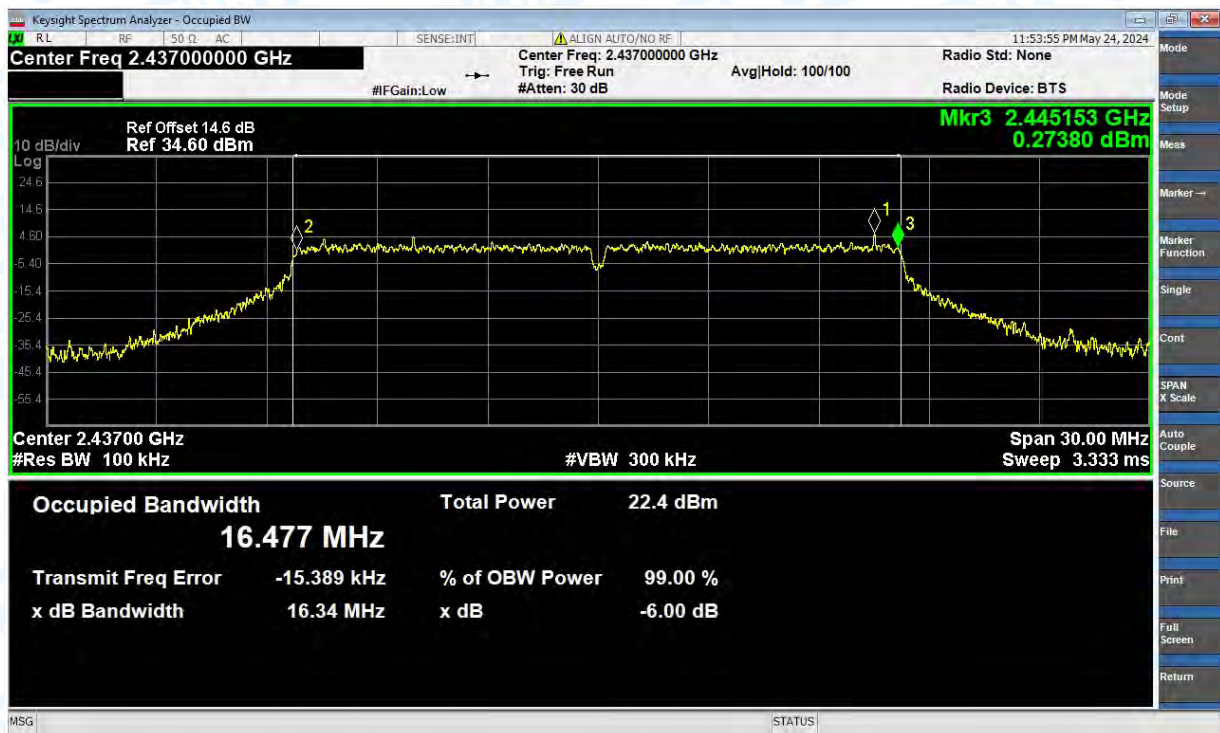
-6dB Bandwidth NVNT b 2462MHz Ant1



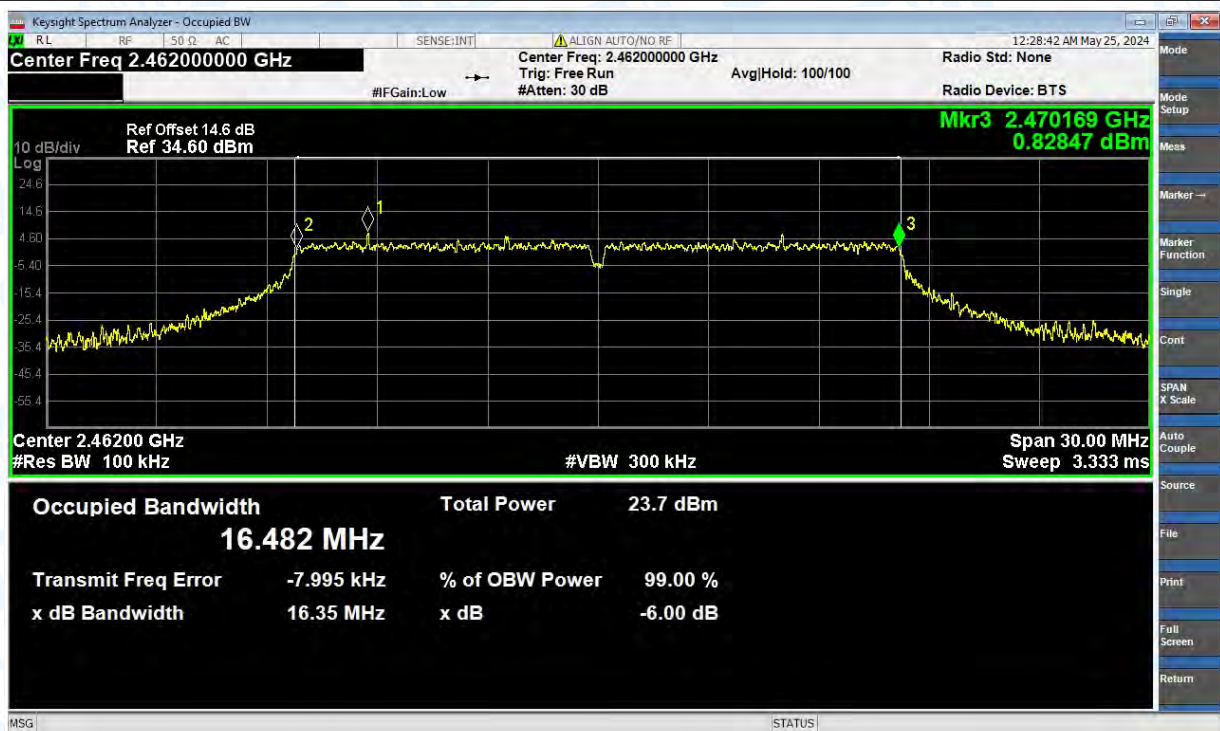
-6dB Bandwidth NVNT g 2412MHz Ant1



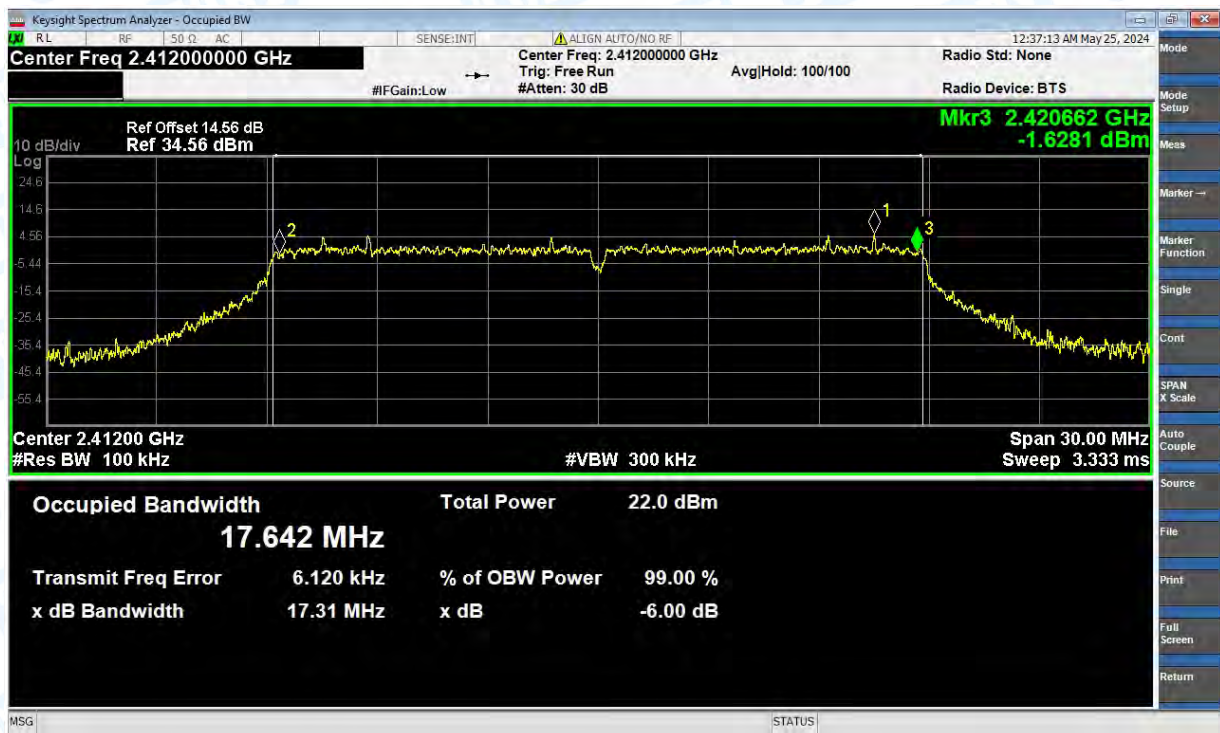
-6dB Bandwidth NVNT g 2437MHz Ant1



-6dB Bandwidth NVNT g 2462MHz Ant1



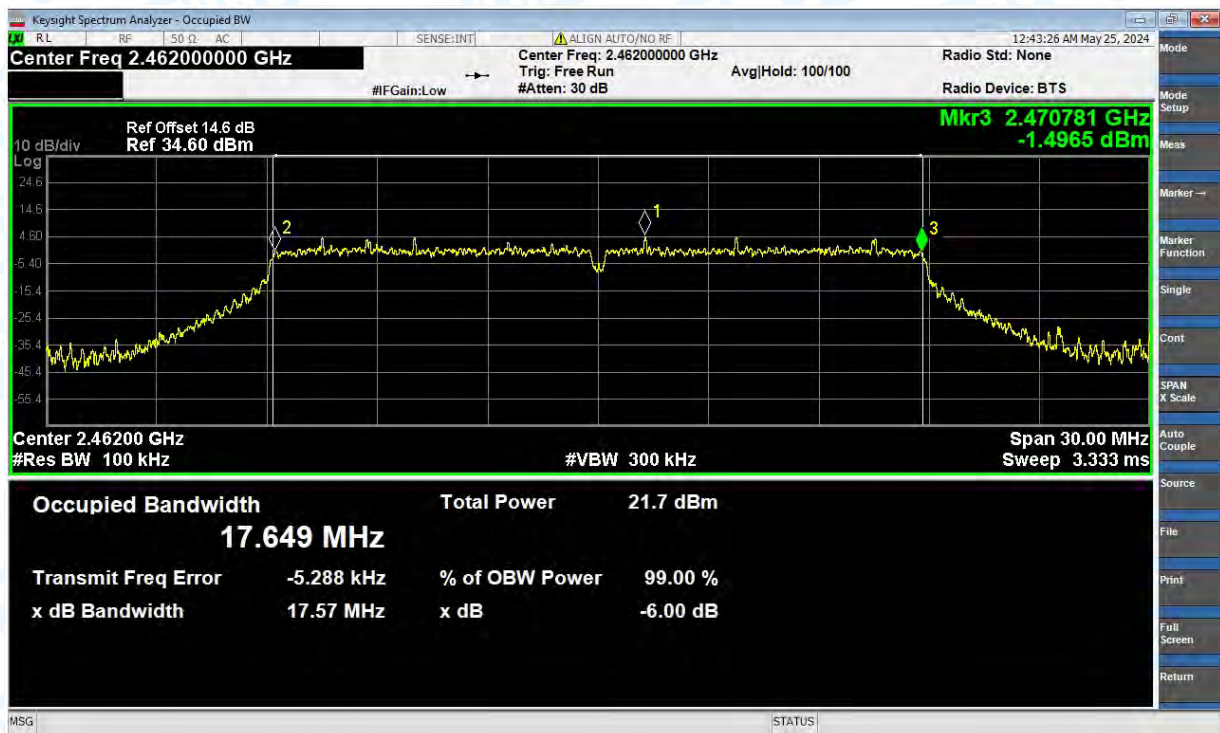
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



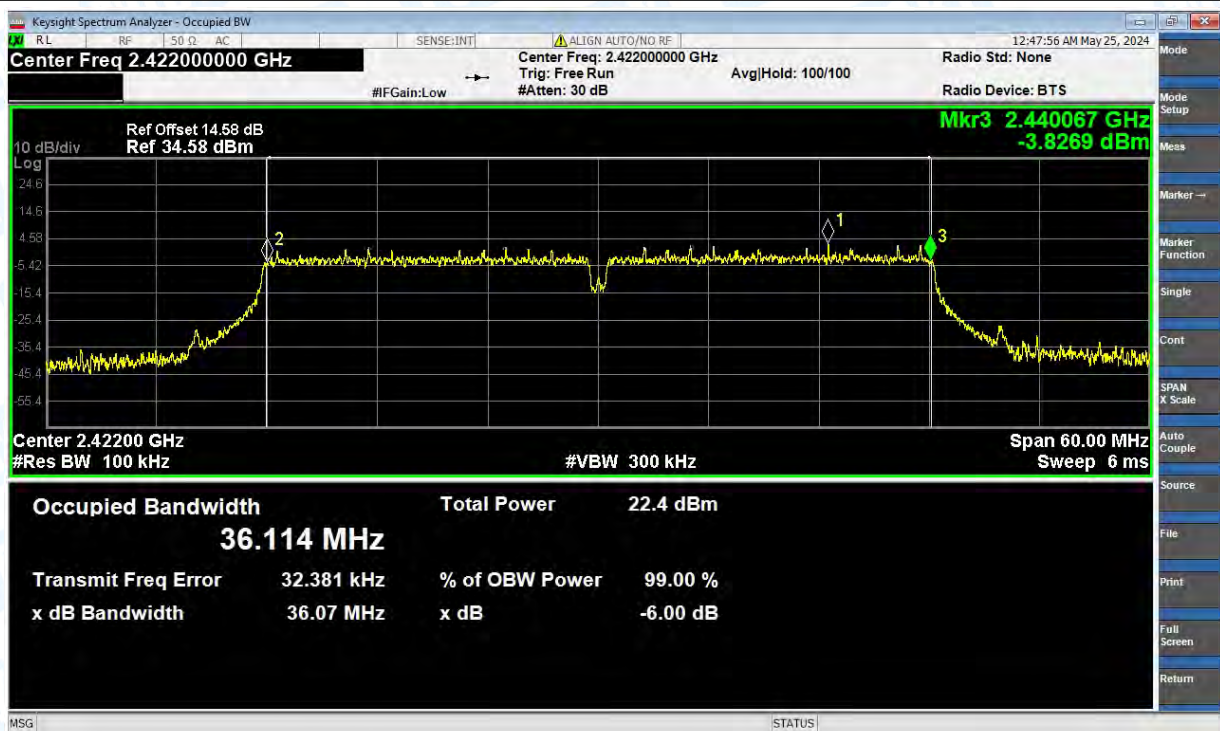
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



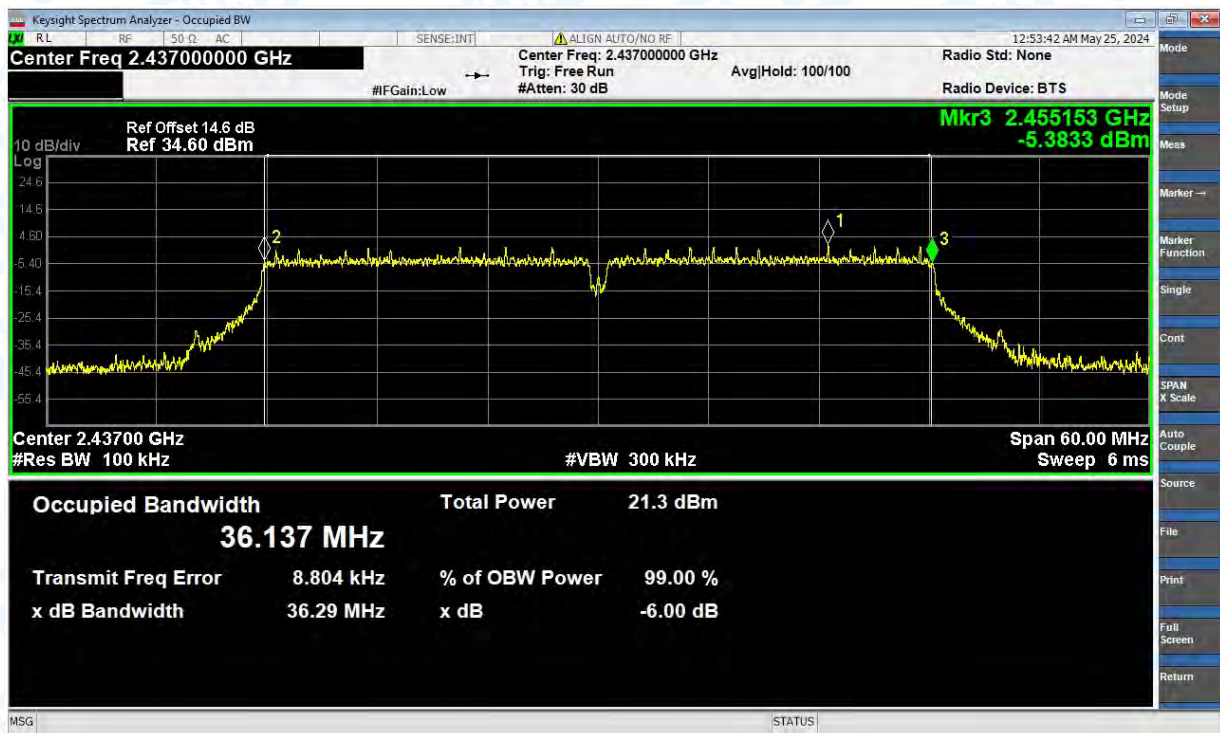
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



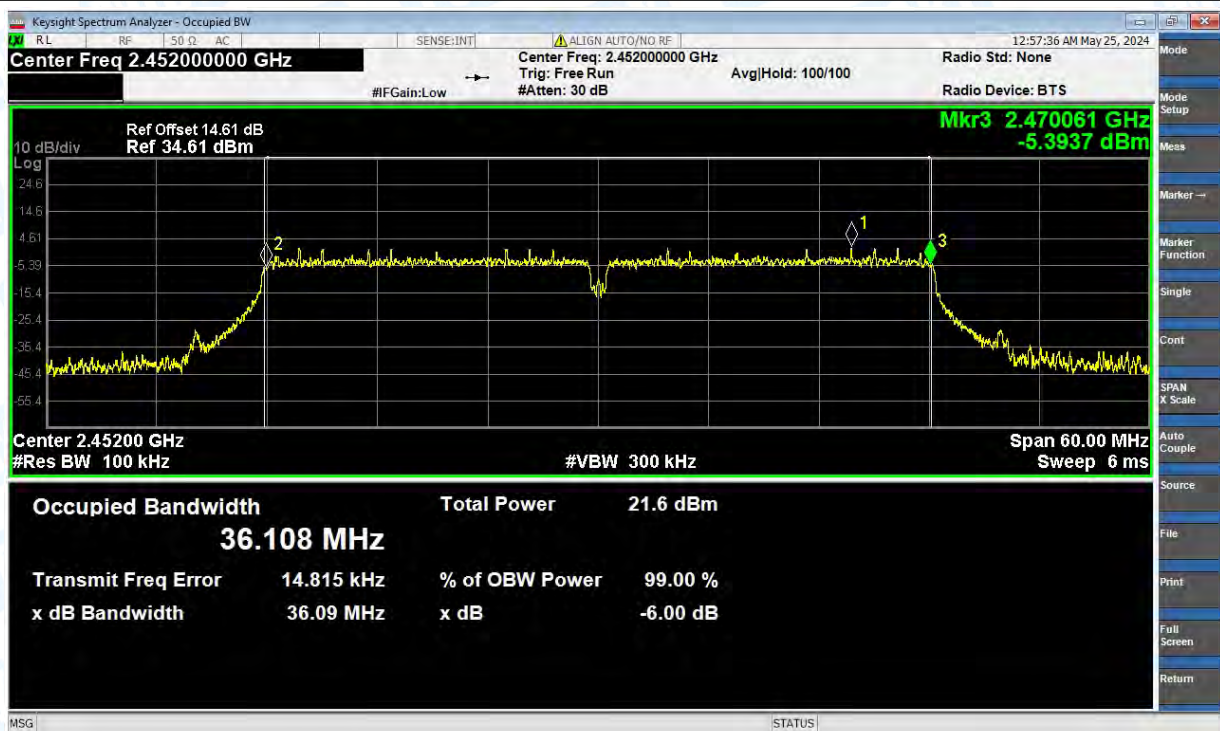
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant1

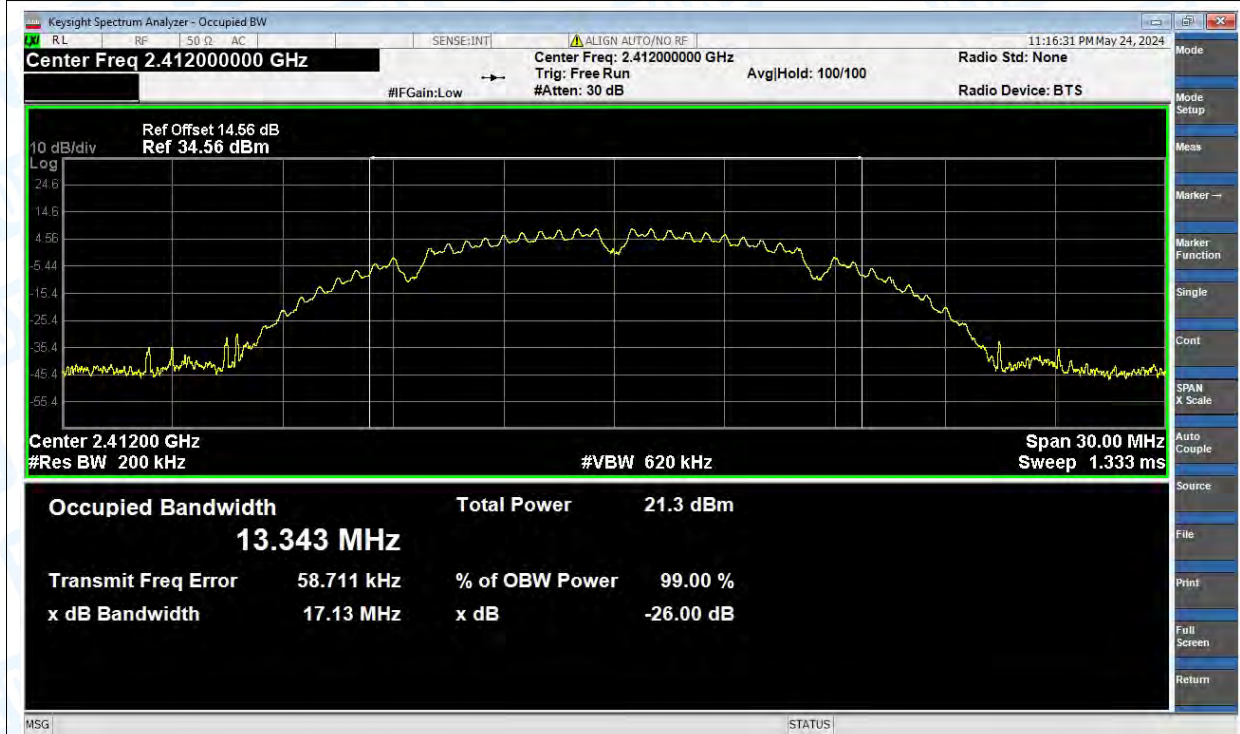


4. Occupied Channel Bandwidth

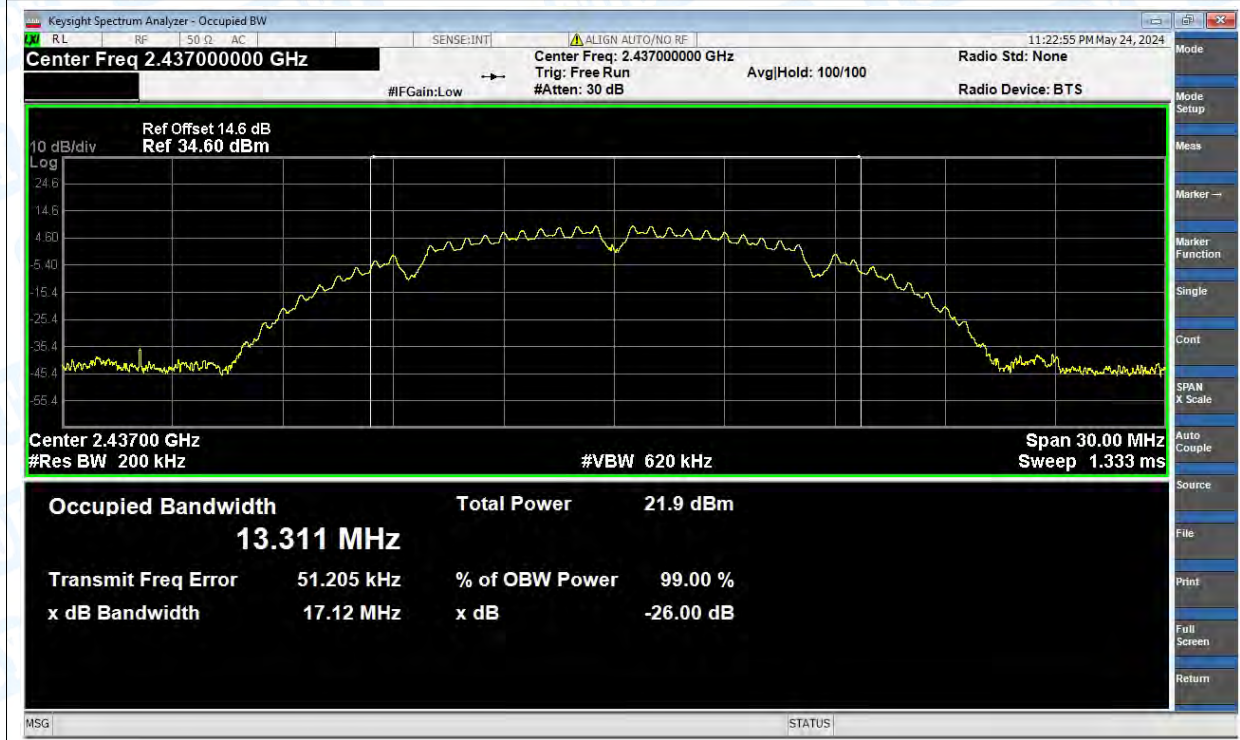
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	13.343
NVNT	b	2437	Ant1	13.311
NVNT	b	2462	Ant1	13.297
NVNT	g	2412	Ant1	16.578
NVNT	g	2437	Ant1	16.641
NVNT	g	2462	Ant1	16.62
NVNT	n(HT20)	2412	Ant1	17.689
NVNT	n(HT20)	2437	Ant1	17.758
NVNT	n(HT20)	2462	Ant1	17.737
NVNT	n(HT40)	2422	Ant1	36.293
NVNT	n(HT40)	2437	Ant1	36.259
NVNT	n(HT40)	2452	Ant1	36.232

Test Graphs

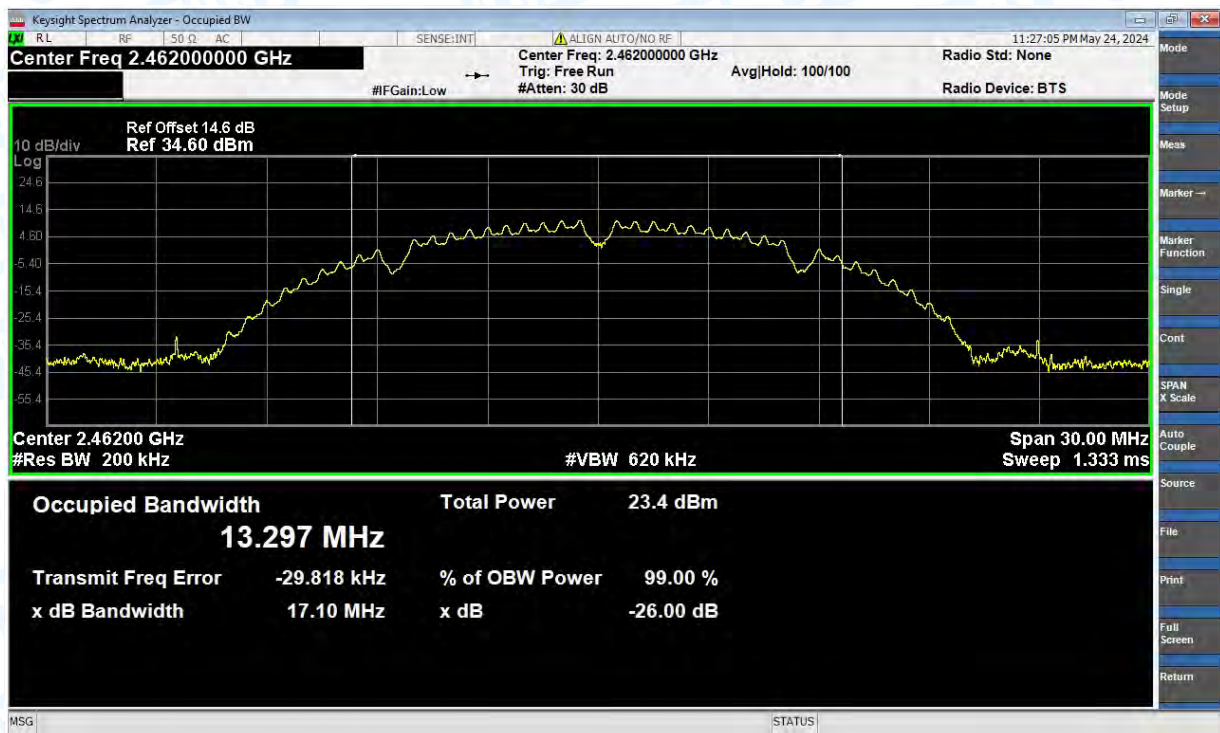
OBW NVNT b 2412MHz Ant1



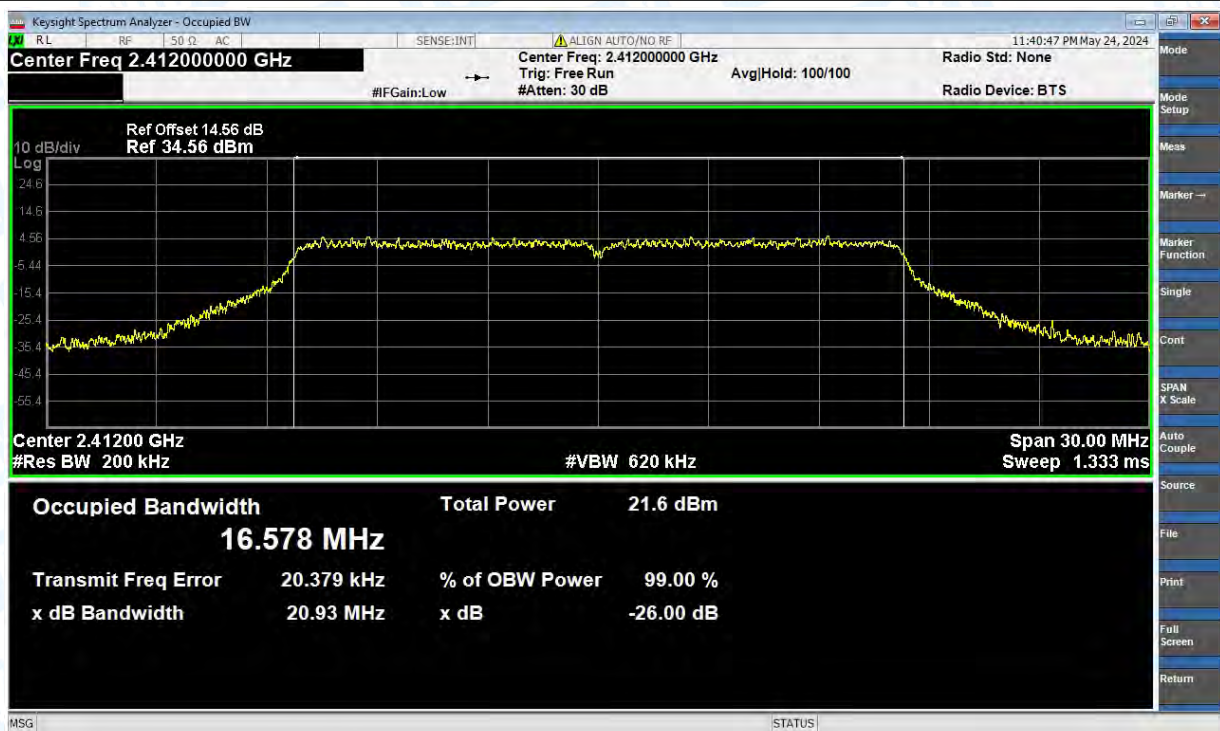
OBW NVNT b 2437MHz Ant1



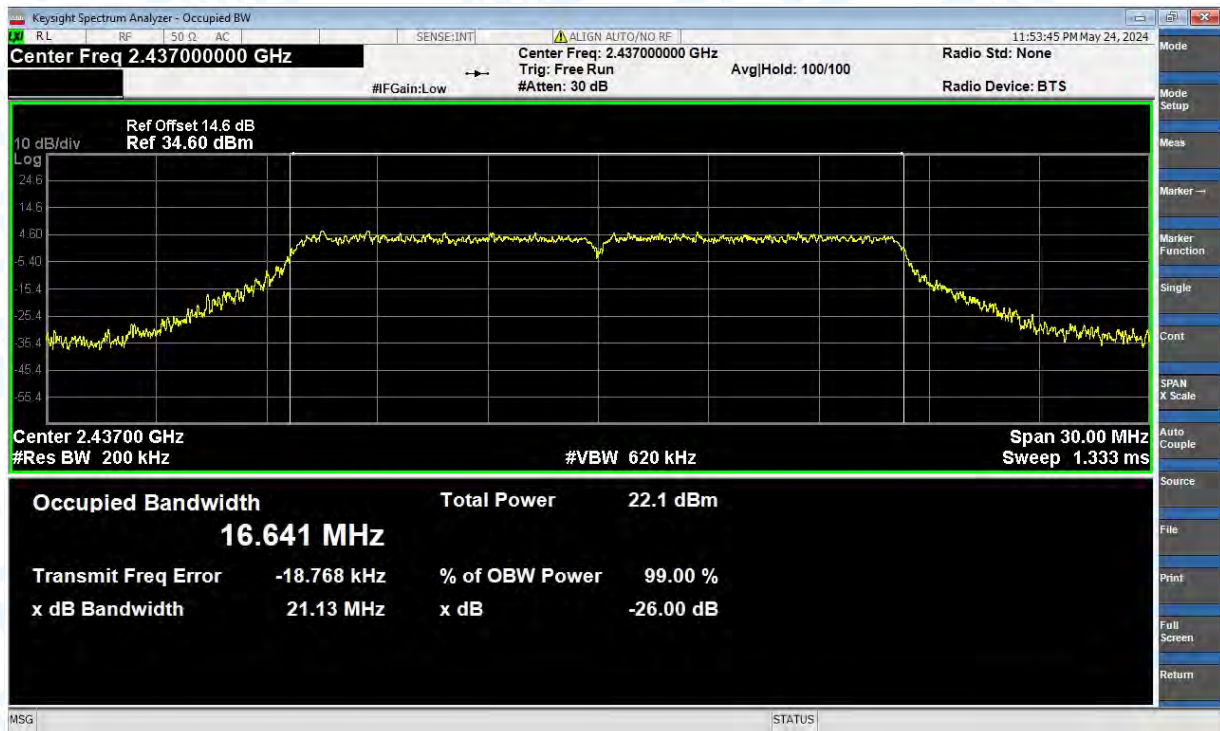
OBW NVNT b 2462MHz Ant1



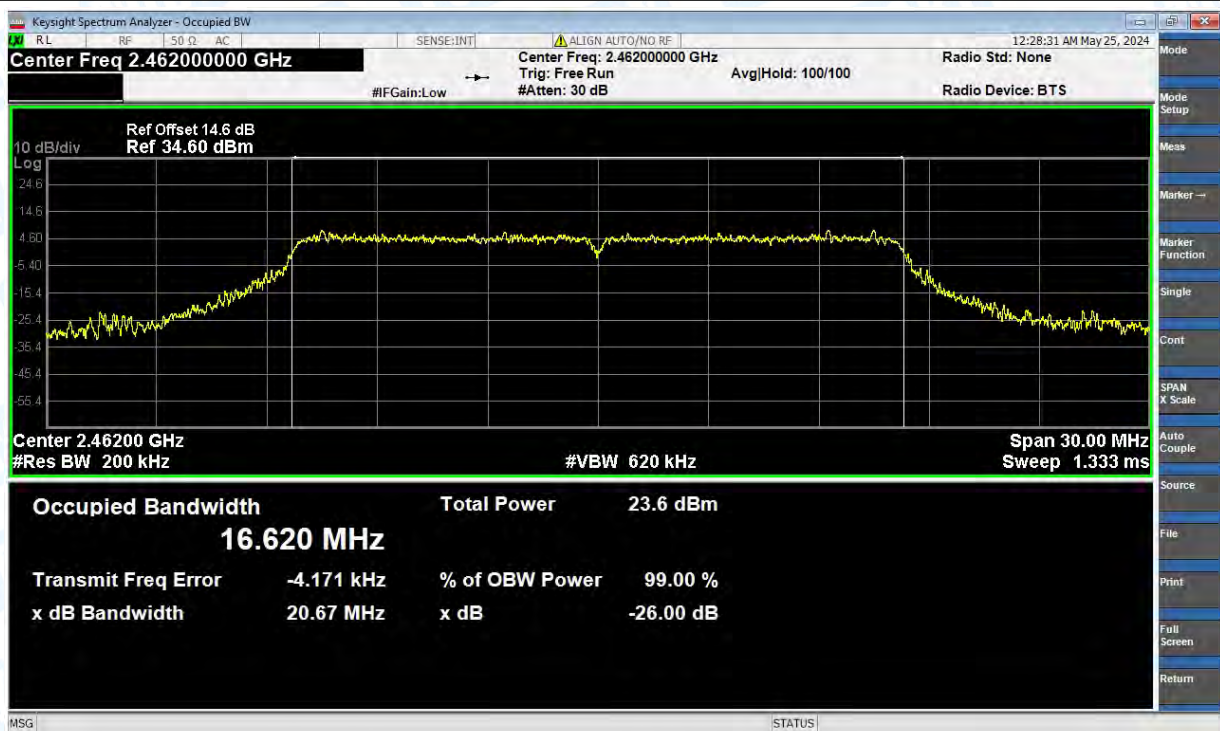
OBW NVNT g 2412MHz Ant1



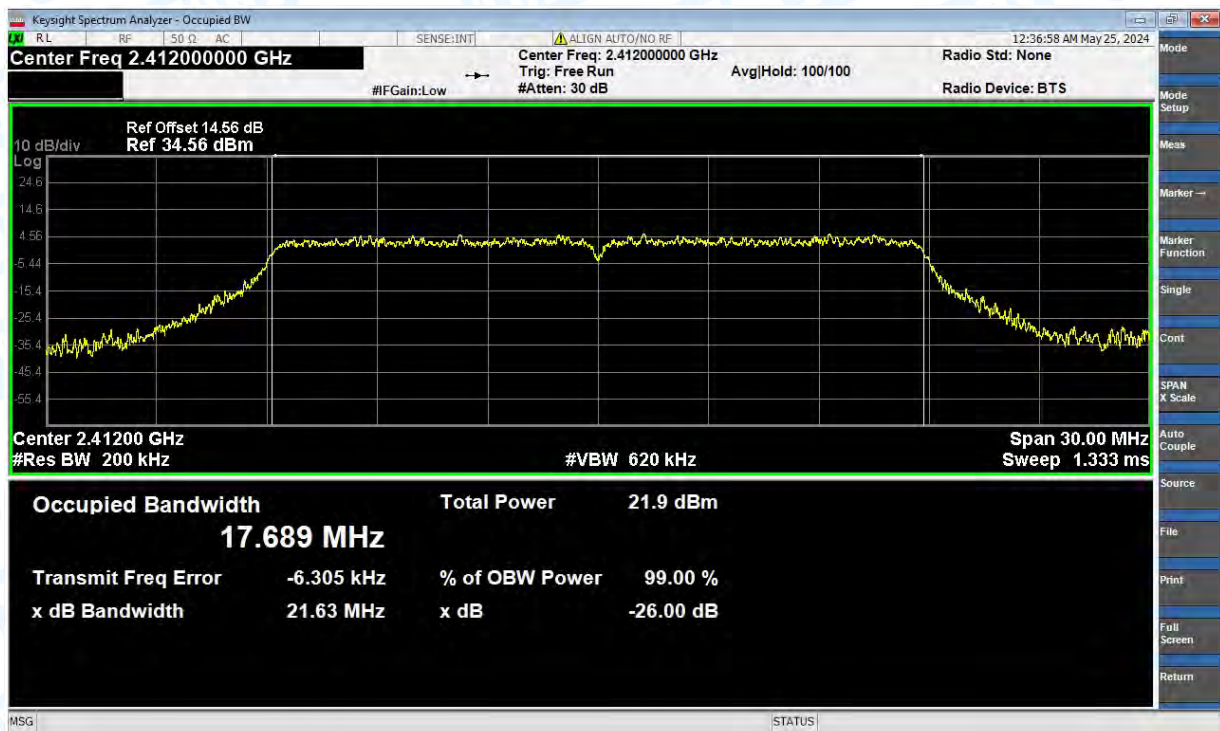
OBW NVNT g 2437MHz Ant1



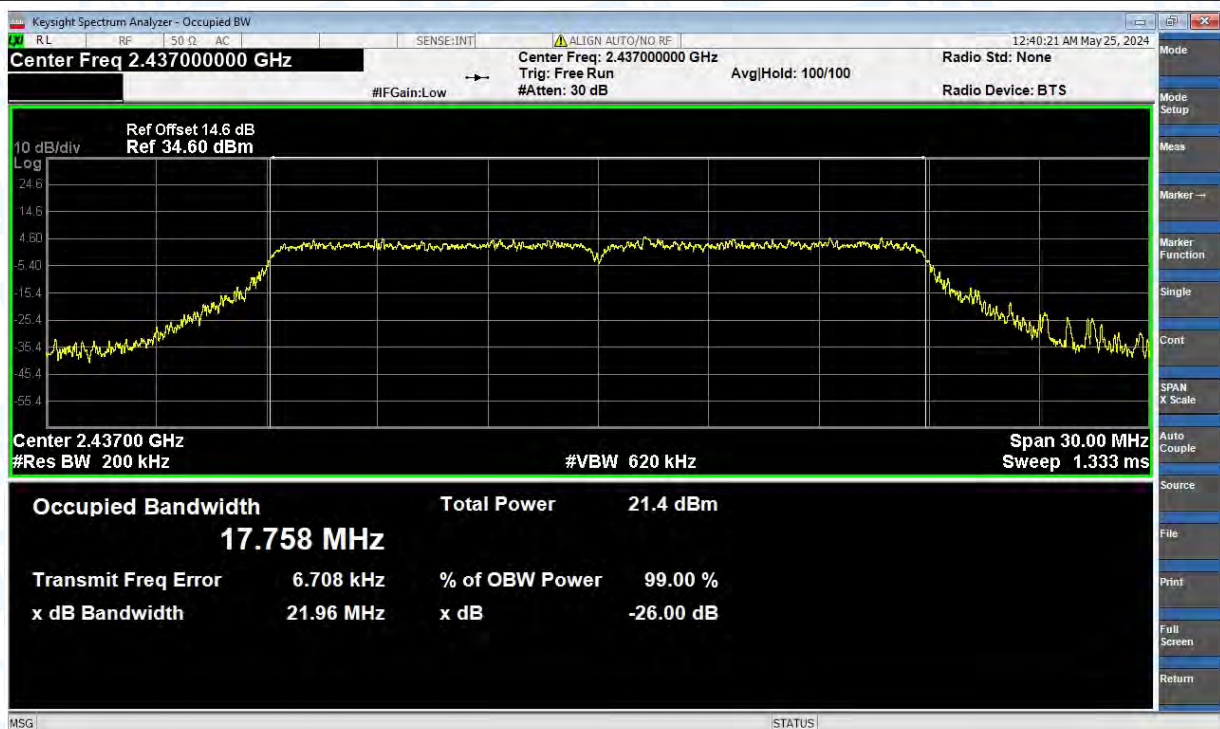
OBW NVNT g 2462MHz Ant1



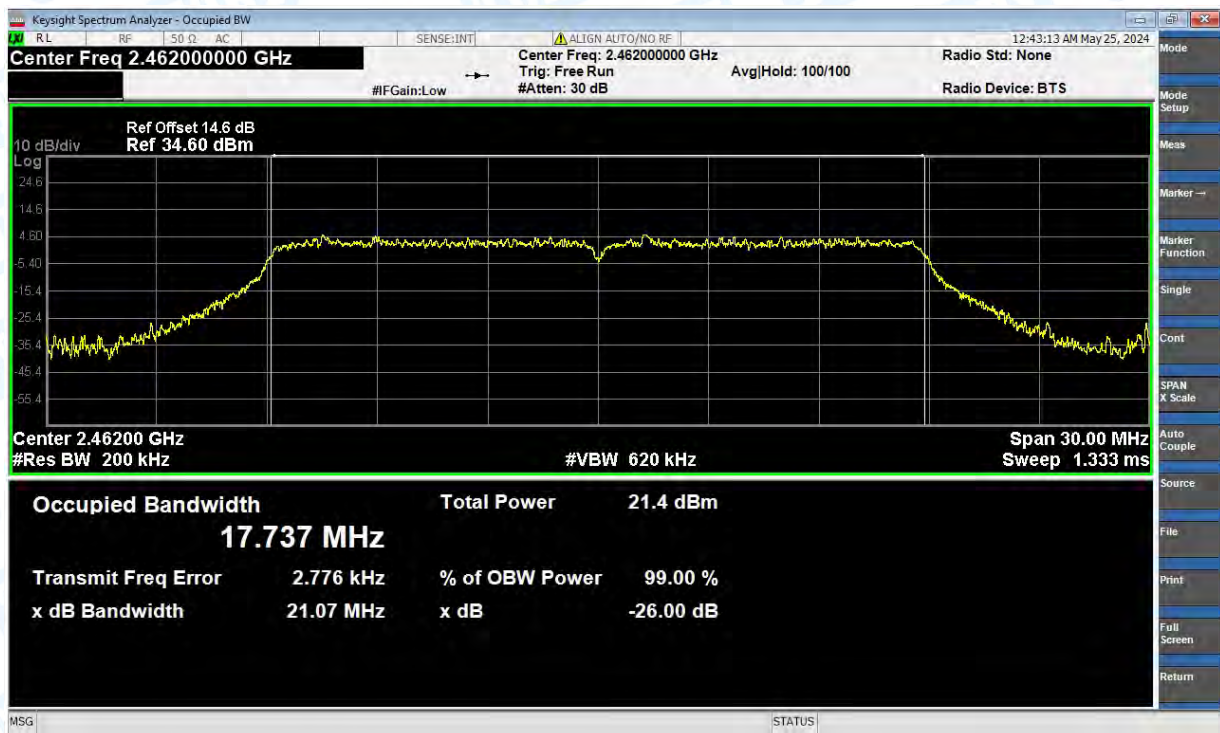
OBW NVNT n(HT20) 2412MHz Ant1



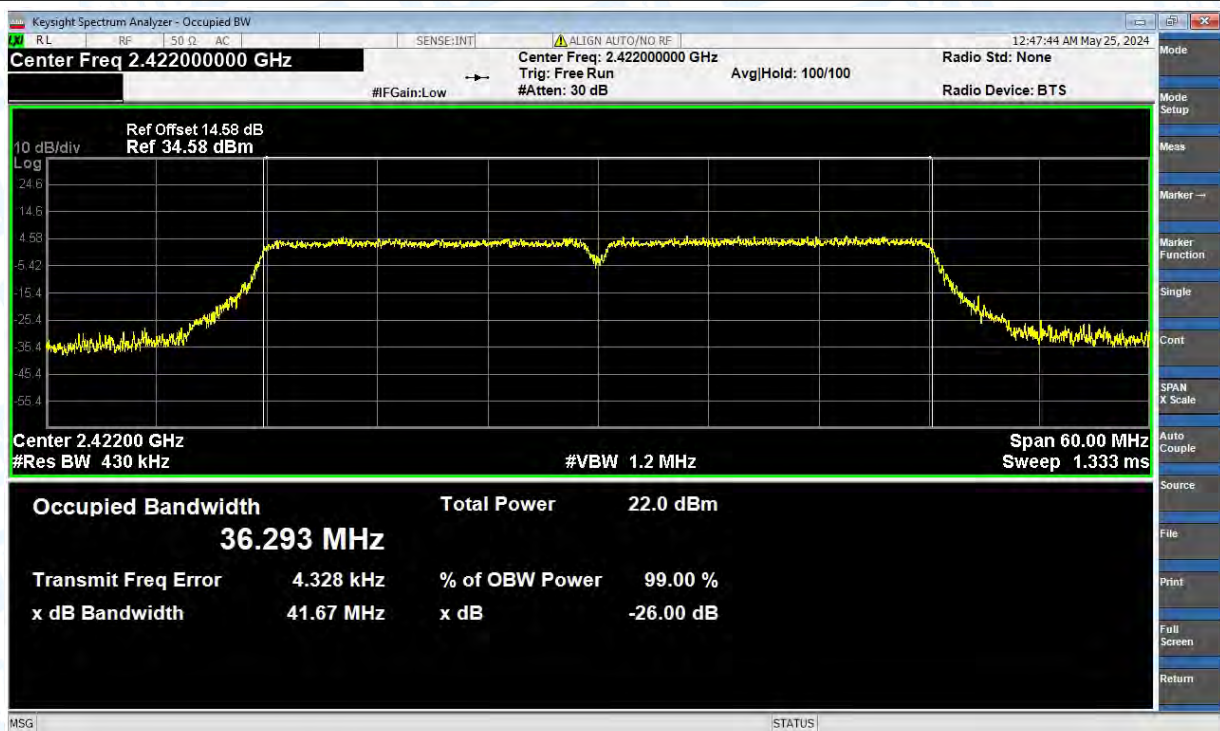
OBW NVNT n(HT20) 2437MHz Ant1



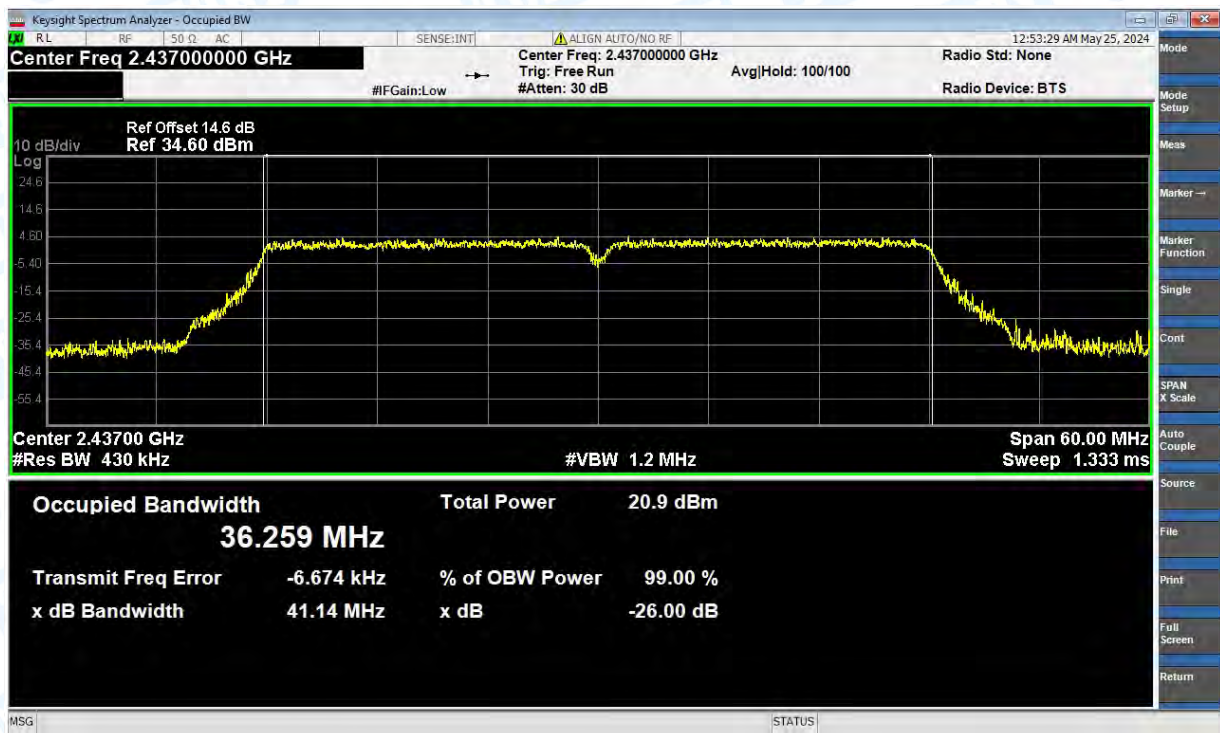
OBW NVNT n(HT20) 2462MHz Ant1



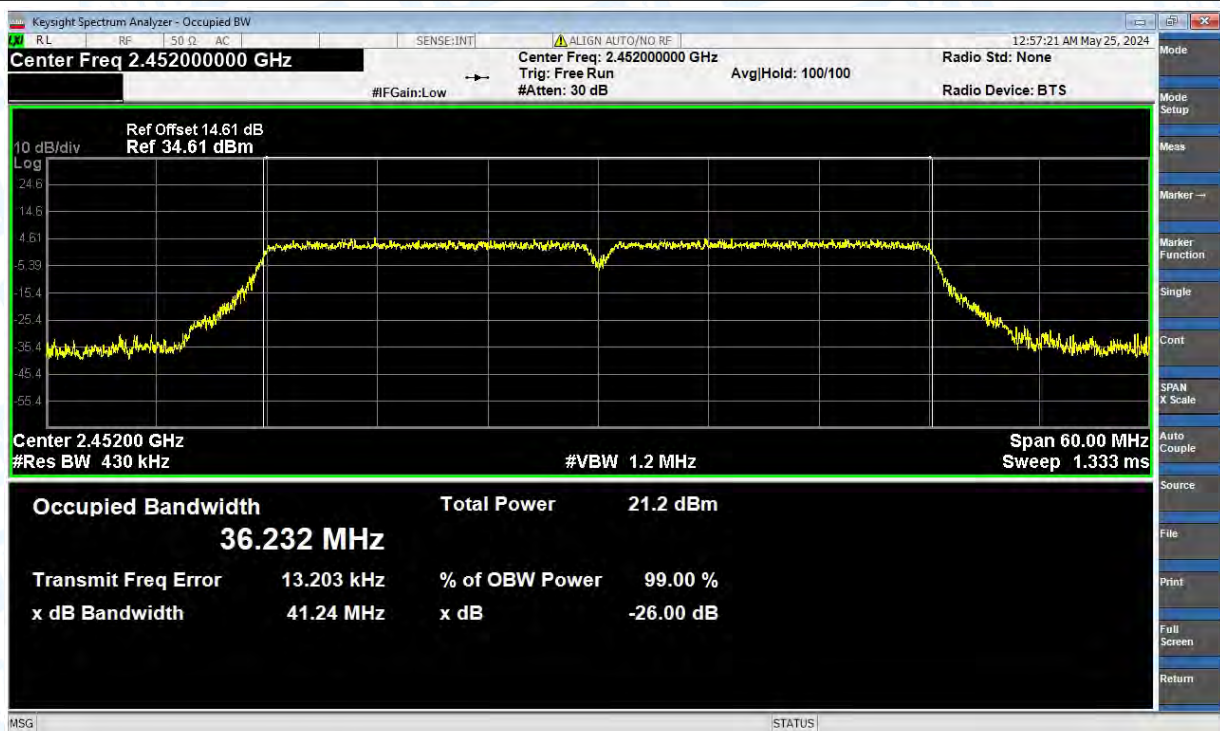
OBW NVNT n(HT40) 2422MHz Ant1



OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1



5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-15.08	8	Pass
NVNT	b	2437	Ant1	-15.103	8	Pass
NVNT	b	2462	Ant1	-15.191	8	Pass
NVNT	g	2412	Ant1	-18.544	8	Pass
NVNT	g	2437	Ant1	-18.605	8	Pass
NVNT	g	2462	Ant1	-18.18	8	Pass
NVNT	n(HT20)	2412	Ant1	-18.762	8	Pass
NVNT	n(HT20)	2437	Ant1	-18.46	8	Pass
NVNT	n(HT20)	2462	Ant1	-18.168	8	Pass
NVNT	n(HT40)	2422	Ant1	-22.544	8	Pass
NVNT	n(HT40)	2437	Ant1	-22.252	8	Pass
NVNT	n(HT40)	2452	Ant1	-23.448	8	Pass

Test Graphs

PSD NVNT b 2412MHz Ant1



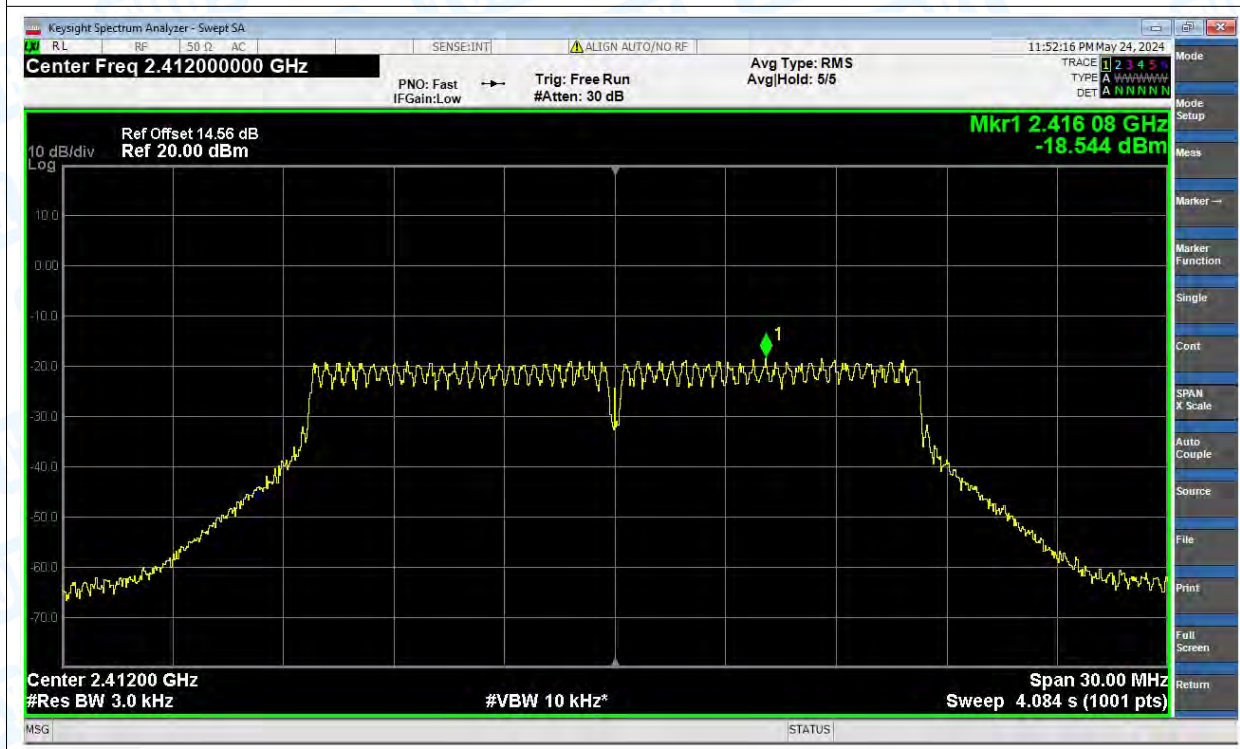
PSD NVNT b 2437MHz Ant1



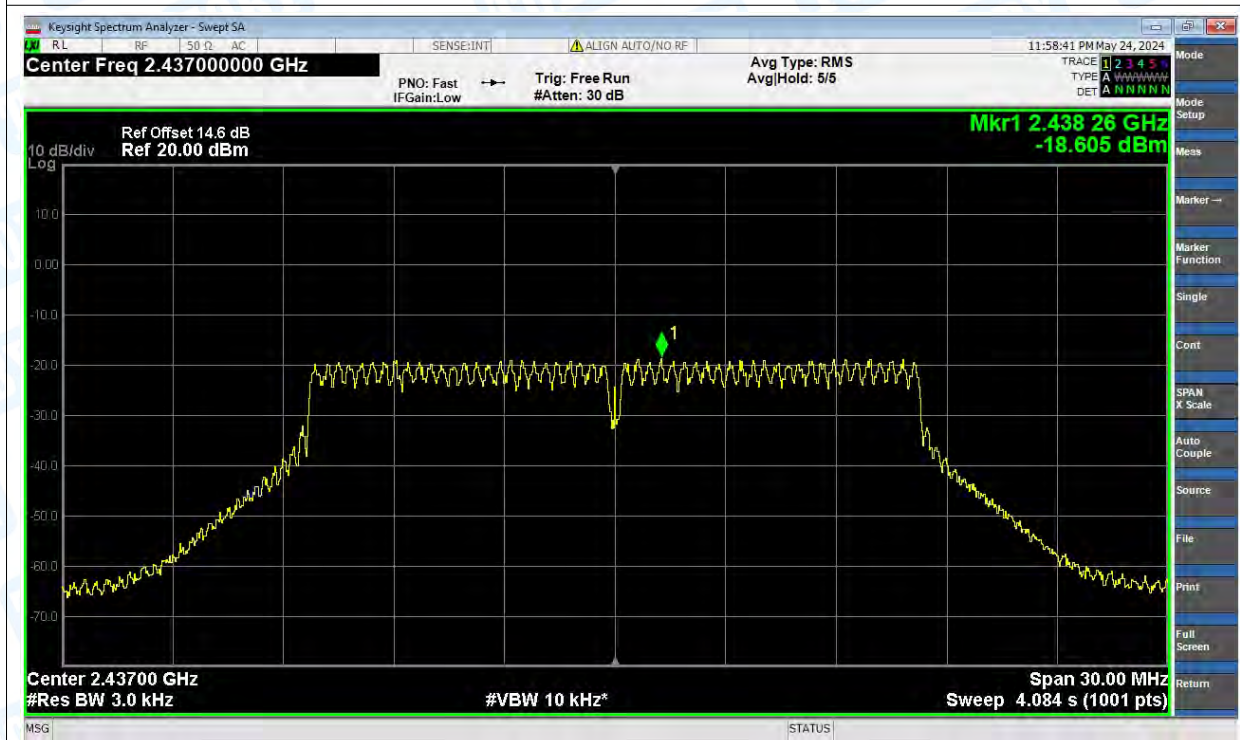
PSD NVNT b 2462MHz Ant1



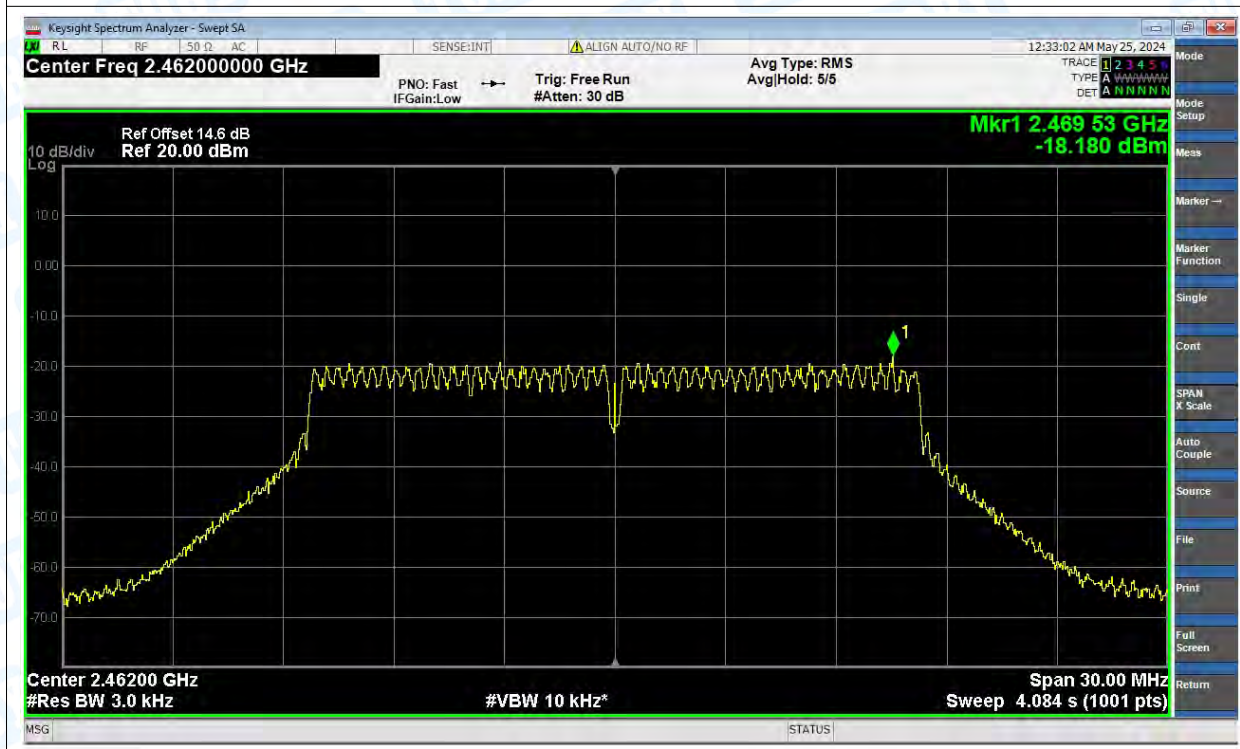
PSD NVNT g 2412MHz Ant1



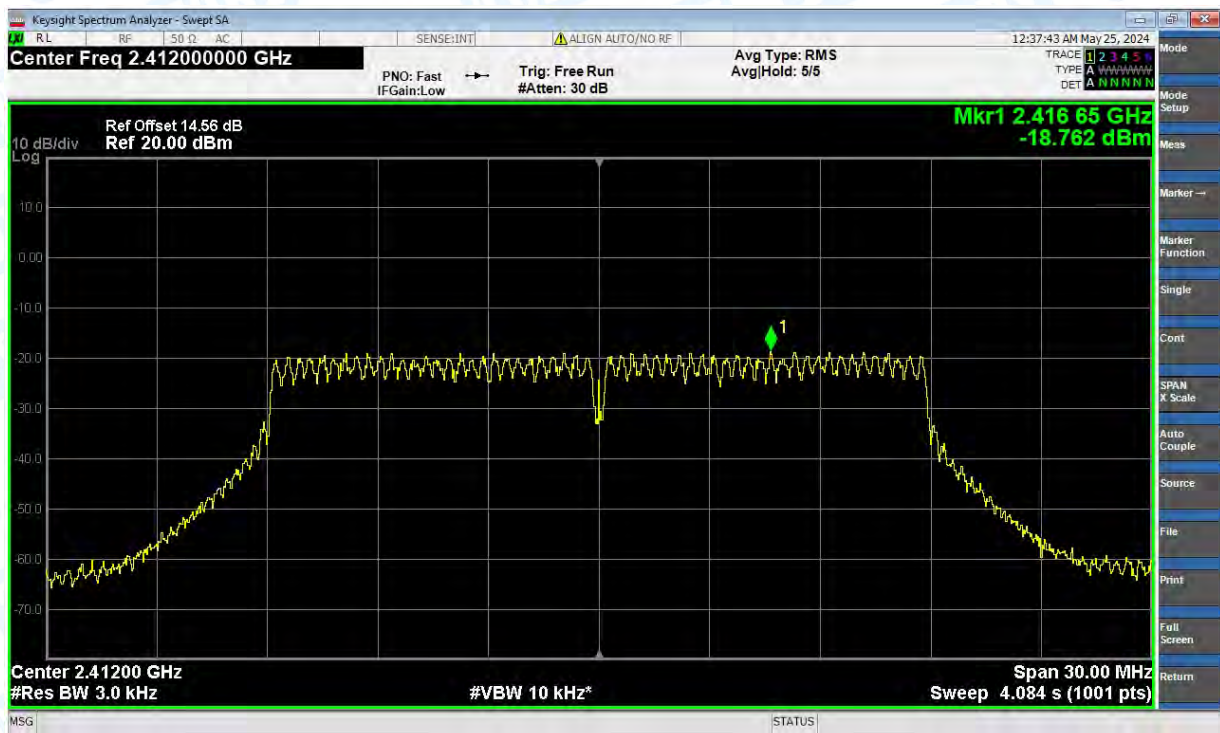
PSD NVNT g 2437MHz Ant1



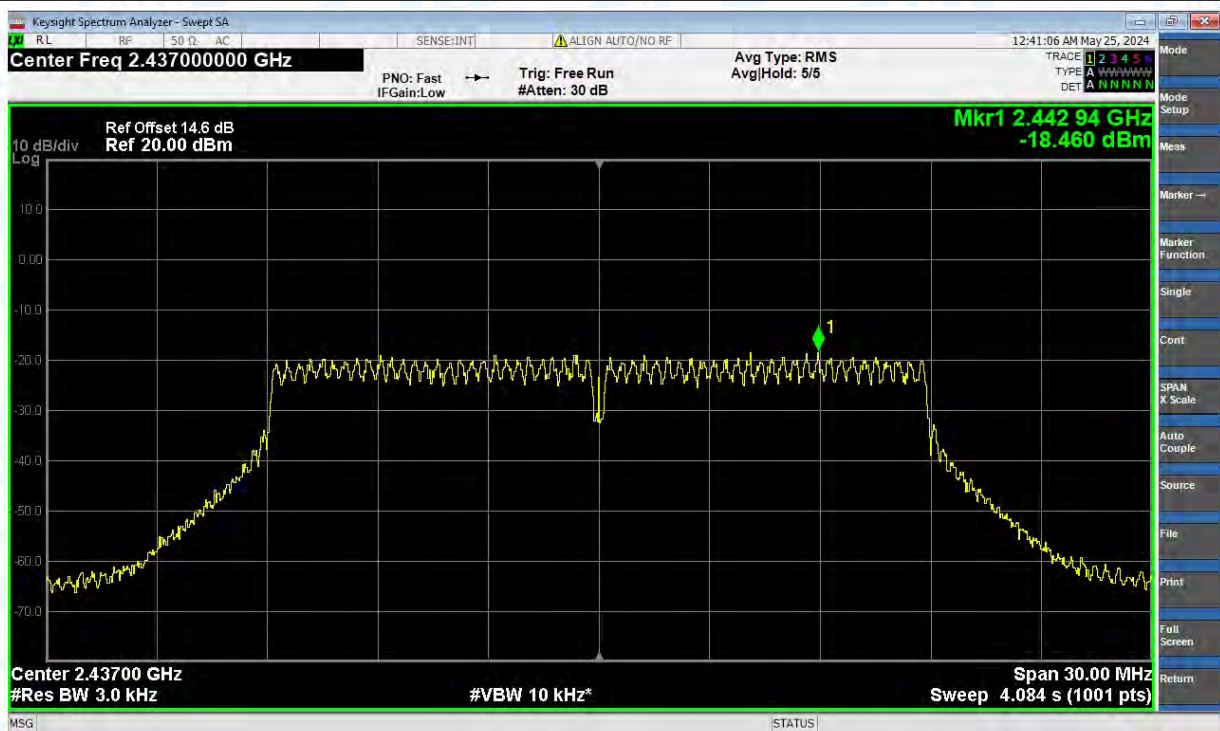
PSD NVNT g 2462MHz Ant1



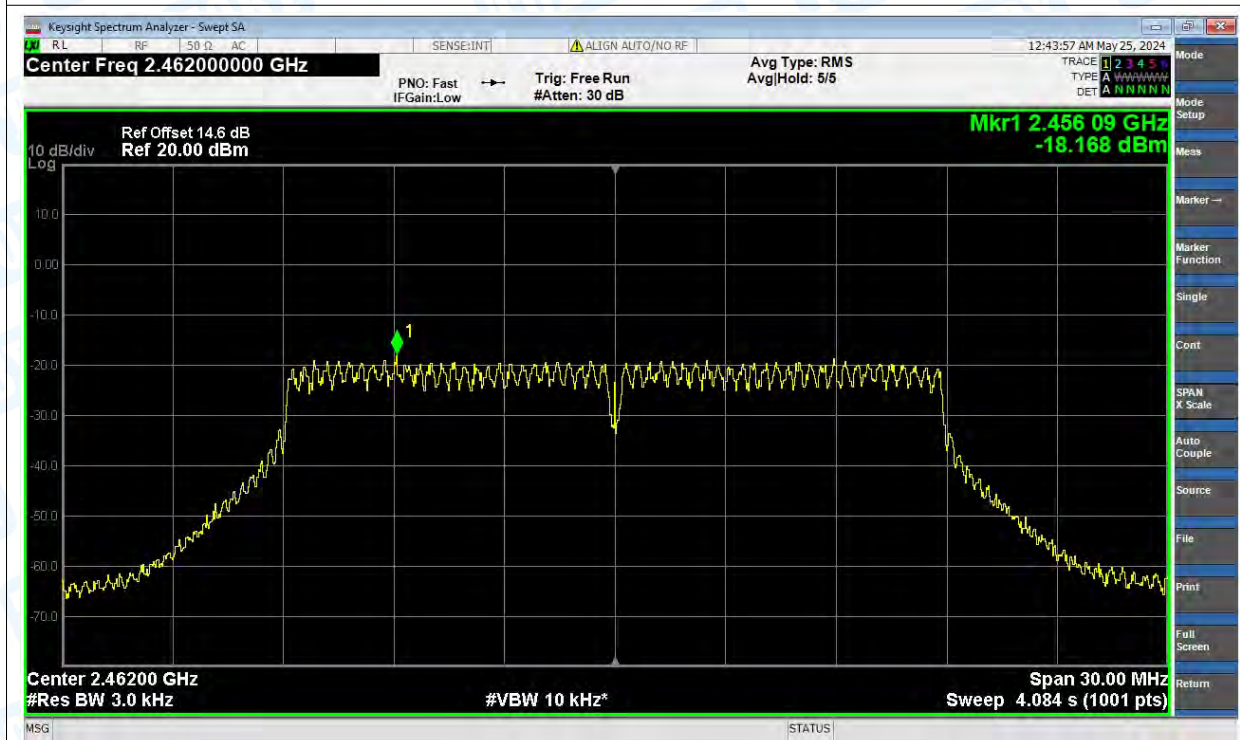
PSD NVNT n(HT20) 2412MHz Ant1



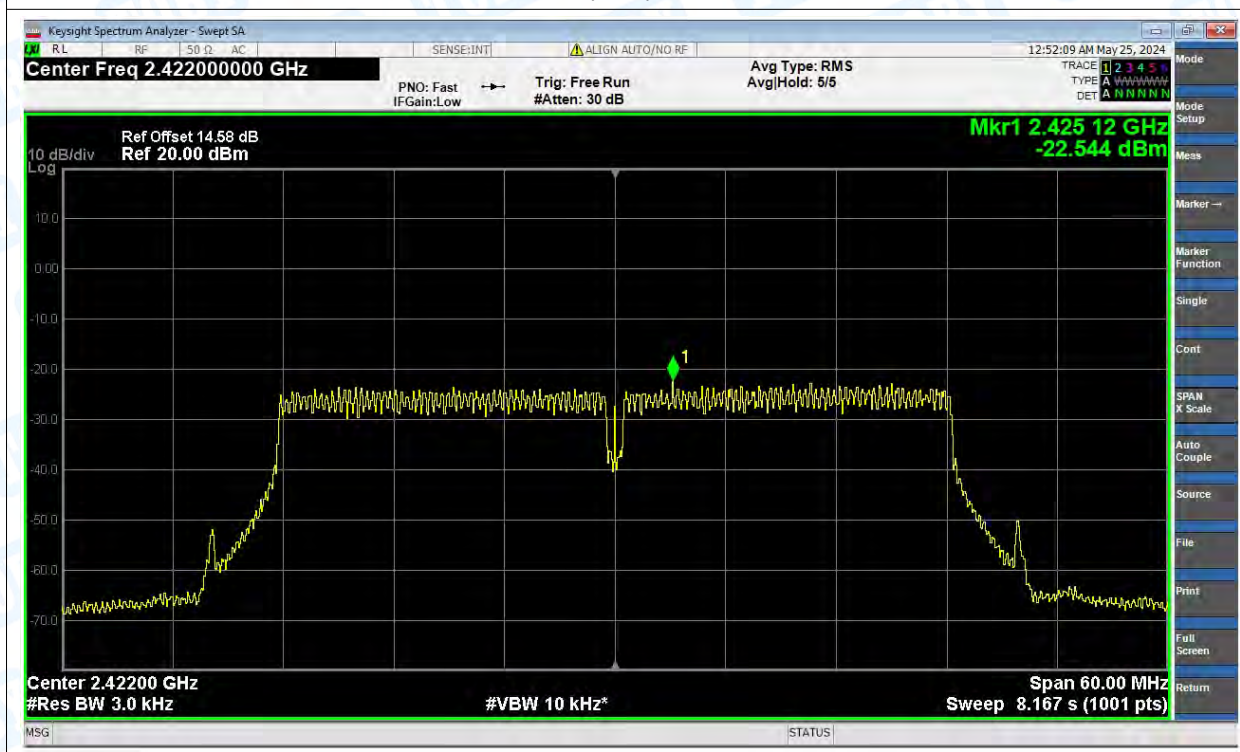
PSD NVNT n(HT20) 2437MHz Ant1

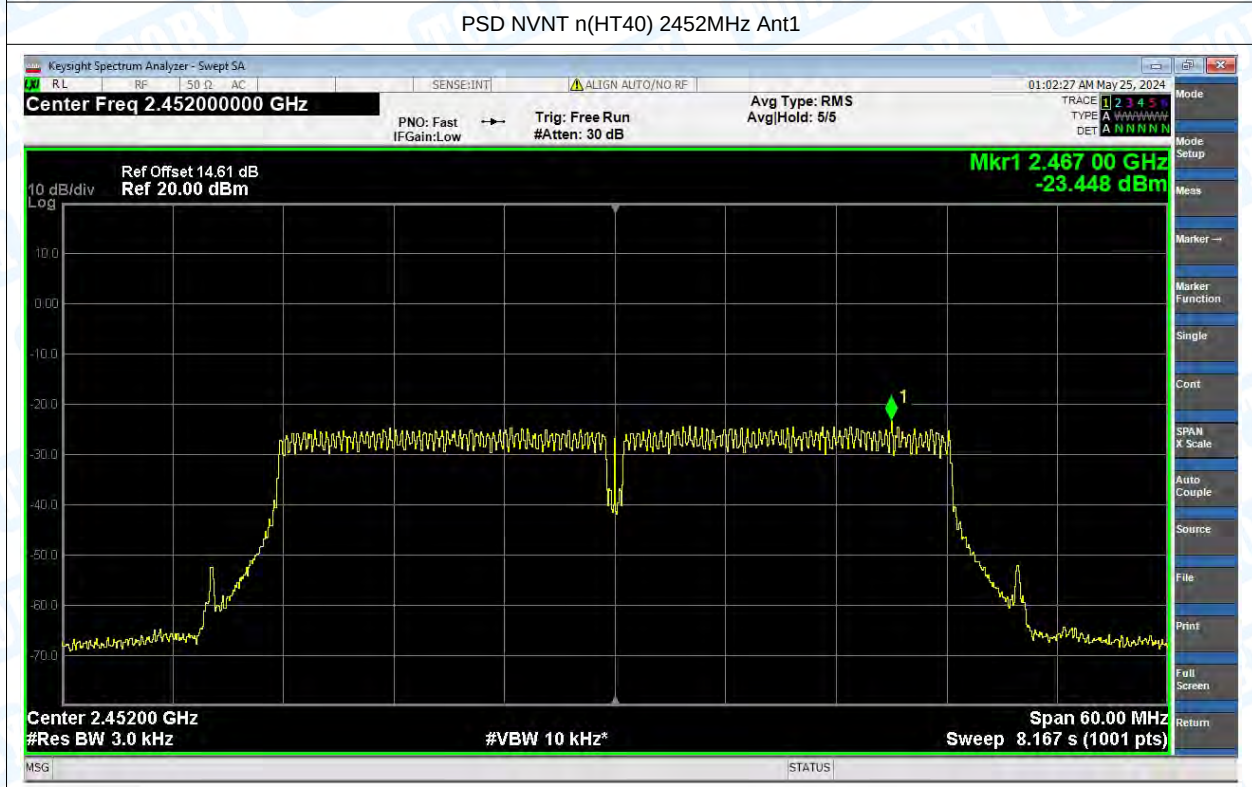
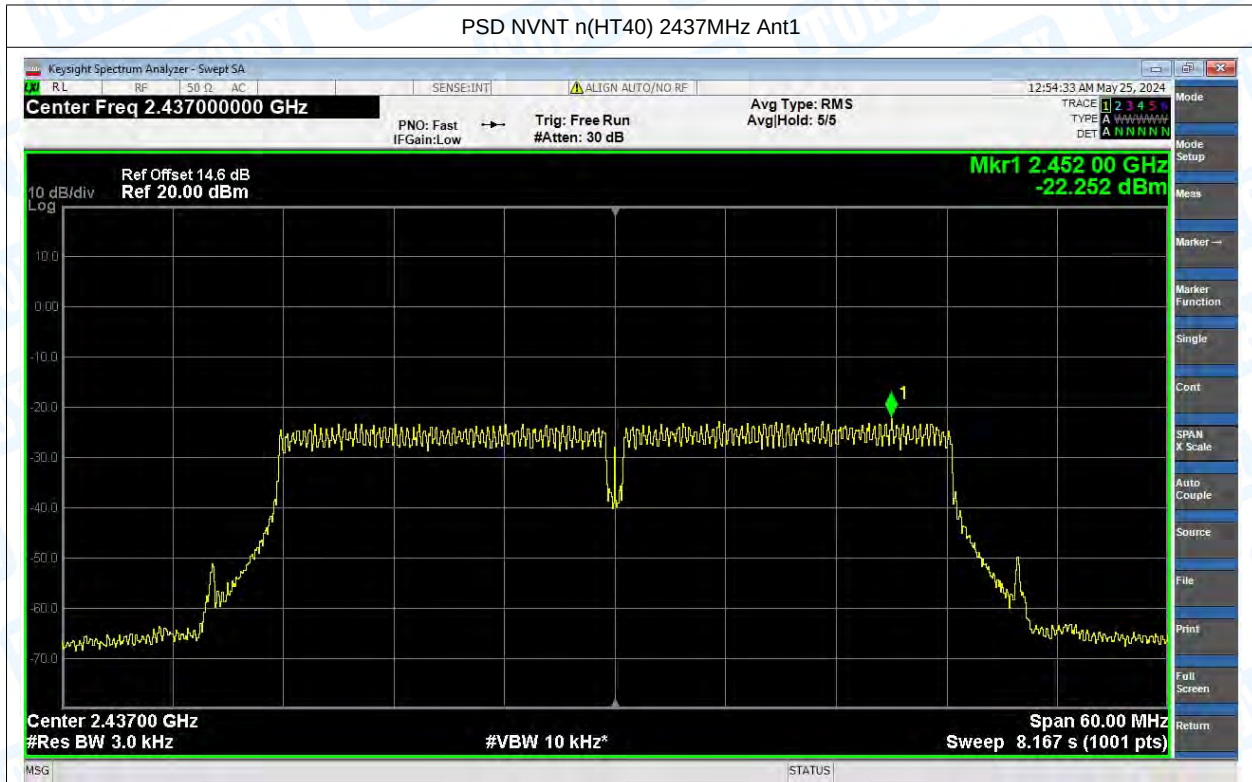


PSD NVNT n(HT20) 2462MHz Ant1



PSD NVNT n(HT40) 2422MHz Ant1





6. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-52.93	-30	Pass
NVNT	b	2462	Ant1	-53.77	-30	Pass
NVNT	g	2412	Ant1	-43.82	-30	Pass
NVNT	g	2462	Ant1	-43.61	-30	Pass
NVNT	n(HT20)	2412	Ant1	-46.02	-30	Pass
NVNT	n(HT20)	2462	Ant1	-44.33	-30	Pass
NVNT	n(HT40)	2422	Ant1	-41.61	-30	Pass
NVNT	n(HT40)	2452	Ant1	-38.66	-30	Pass