

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	IPCam
Test Model:	BWNIP-4TA-BS
Sample ID:	HC-C-202404-0341-01-01-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202404-0341-4 The report only show the worst case data.	

Contents

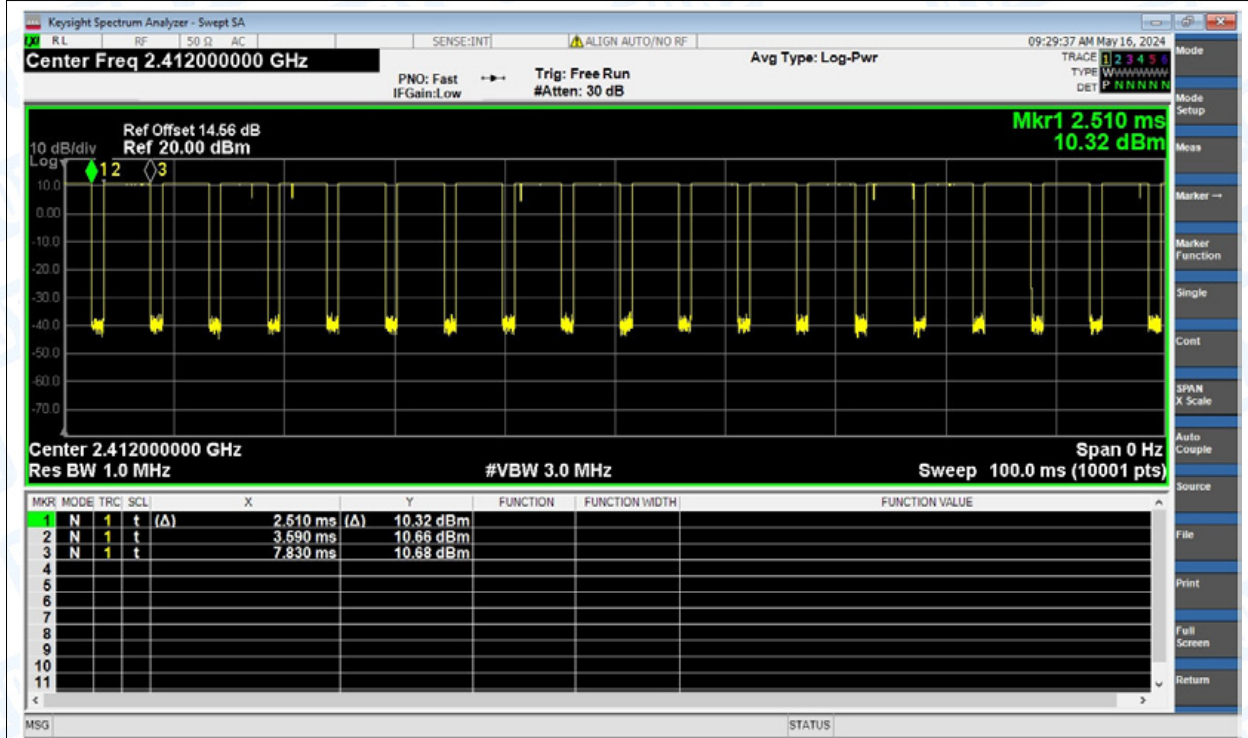
1.	Duty Cycle	3
2.	Maximum Conducted Output Power	9
3.	-6dB Bandwidth	10
4.	Occupied Channel Bandwidth	16
5.	Maximum Power Spectral Density Level	22
6.	Band Edge	28
7.	Conducted RF Spurious Emission	35
8.	Restrict Band	45

1. Duty Cycle

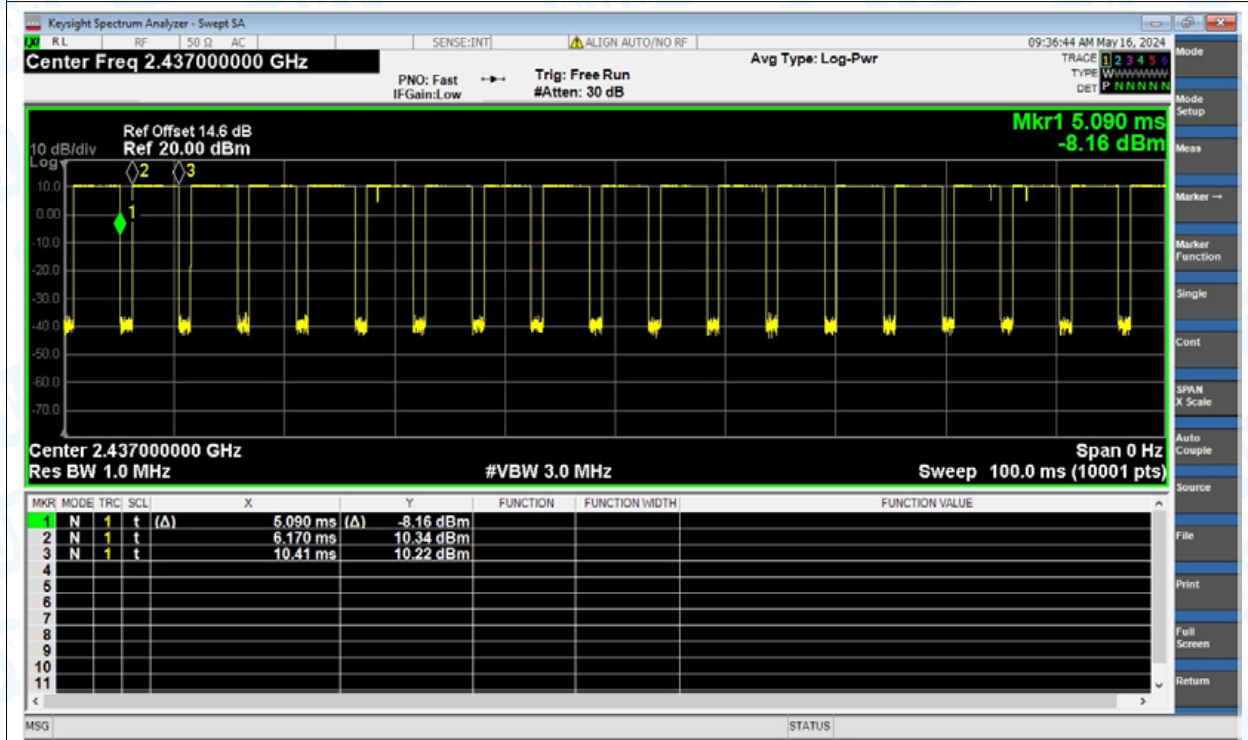
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	79.7	0.99	0.24
NVNT	b	2437	Ant1	79.7	0.99	0.24
NVNT	b	2462	Ant1	79.7	0.99	0.24
NVNT	g	2412	Ant1	32.08	4.94	1.96
NVNT	g	2437	Ant1	32.28	4.91	1.96
NVNT	g	2462	Ant1	32.28	4.91	1.96
NVNT	n(HT20)	2412	Ant1	30.77	5.12	2.08
NVNT	n(HT20)	2437	Ant1	30.97	5.09	2.08
NVNT	n(HT20)	2462	Ant1	30.97	5.09	2.08

Test Graphs

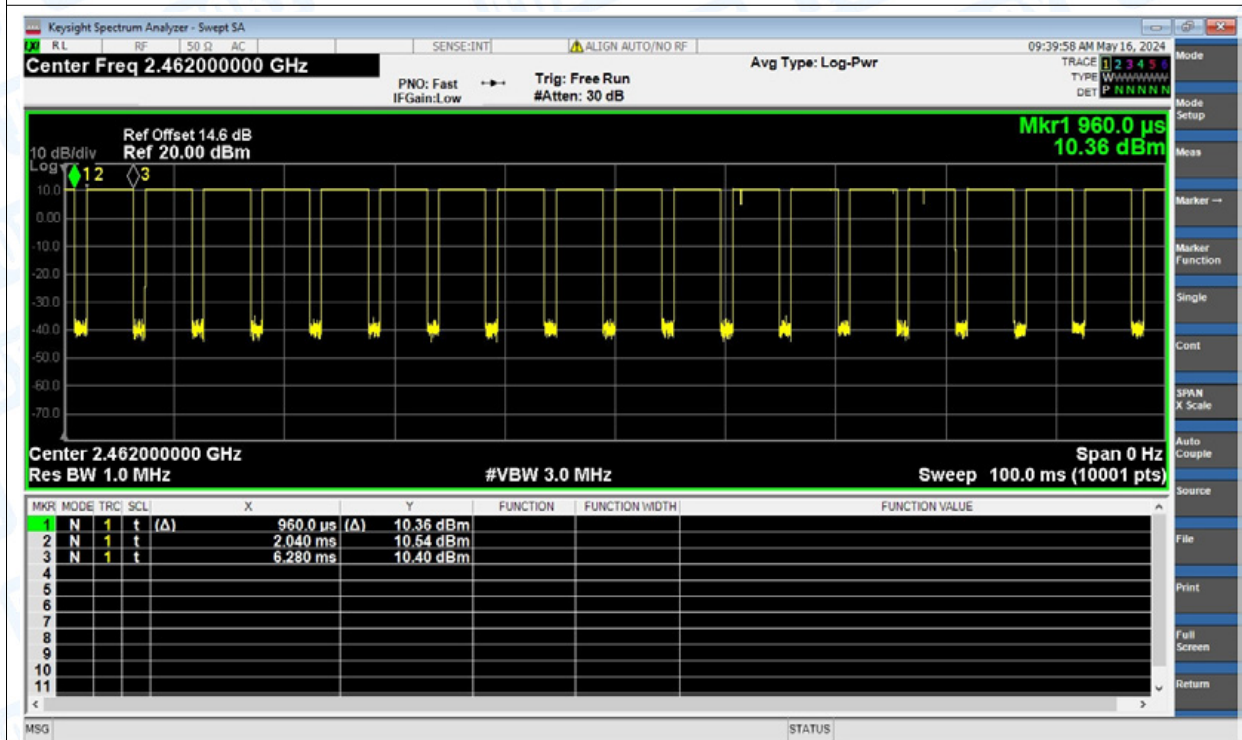
Duty Cycle NVNT b 2412MHz Ant1



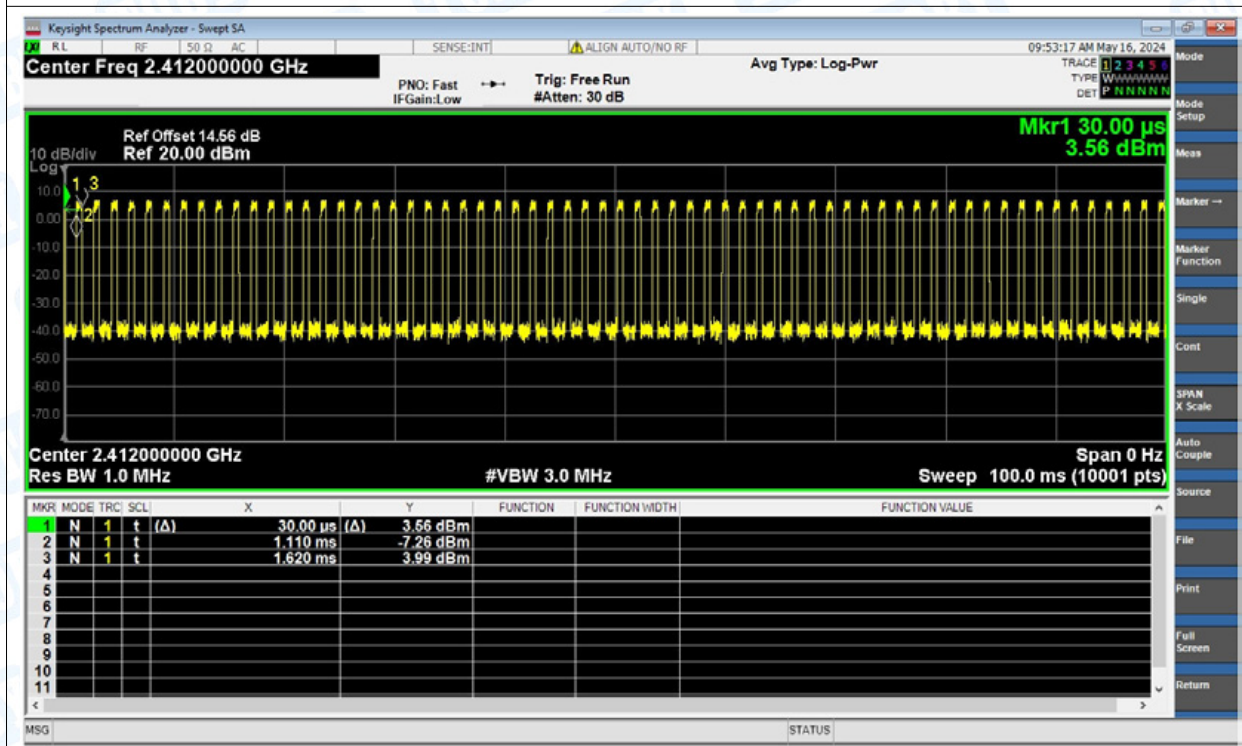
Duty Cycle NVNT b 2437MHz Ant1



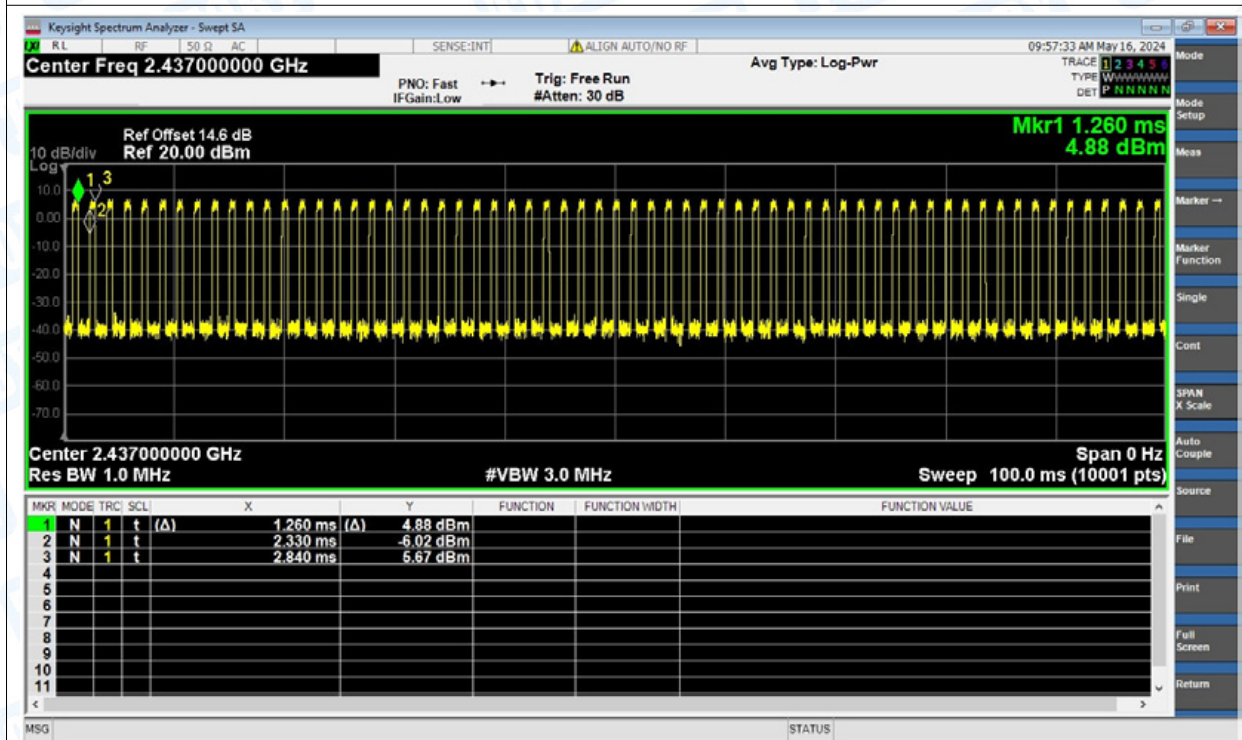
Duty Cycle NVNT b 2462MHz Ant1



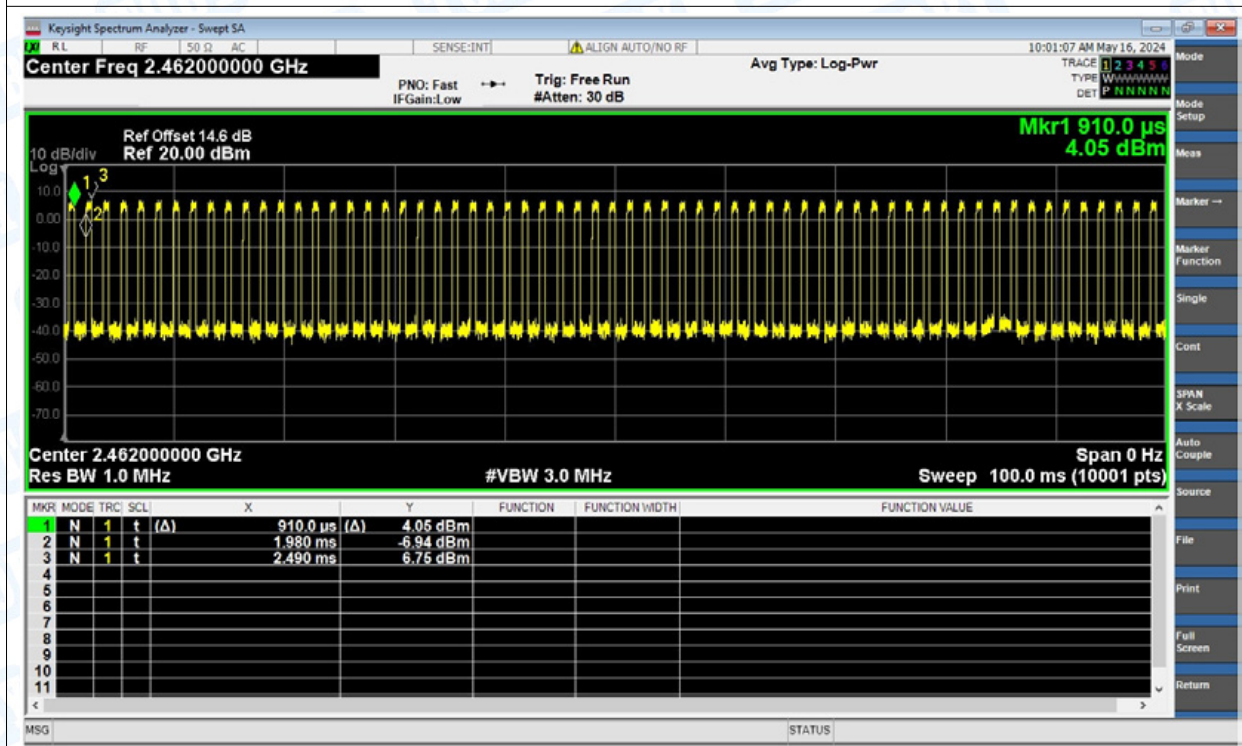
Duty Cycle NVNT g 2412MHz Ant1



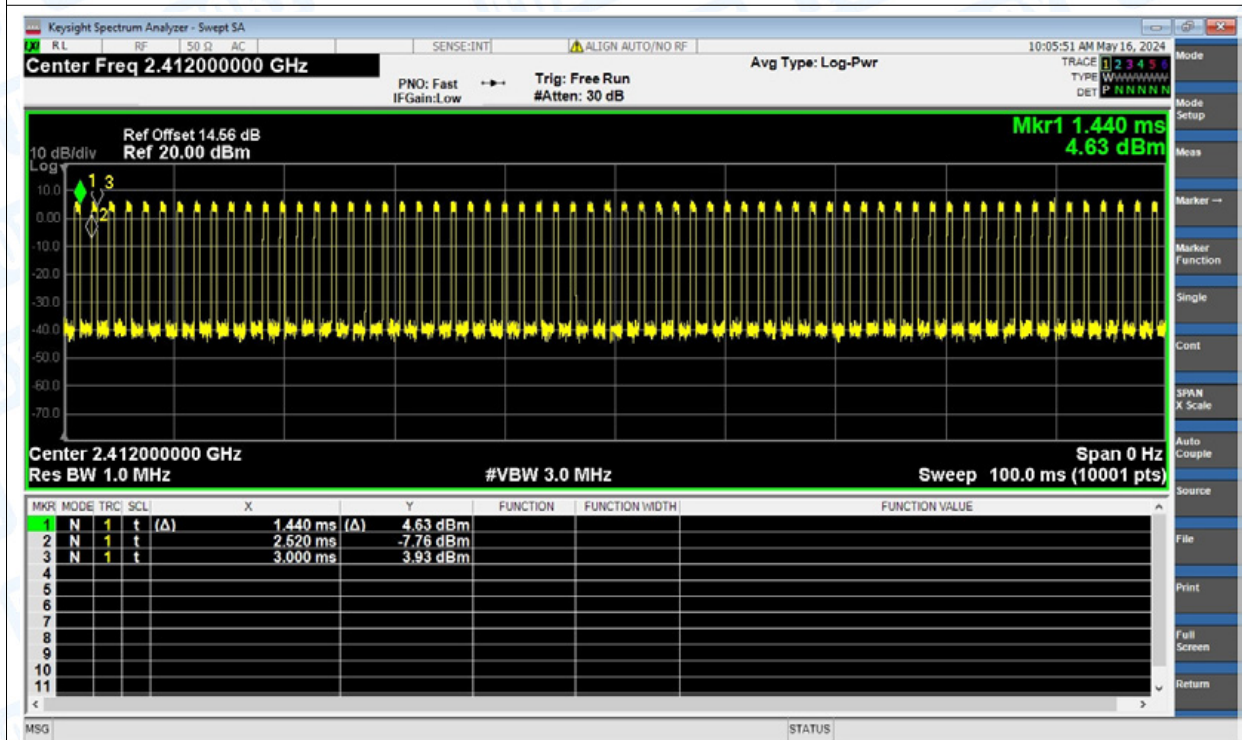
Duty Cycle NVNT g 2437MHz Ant1



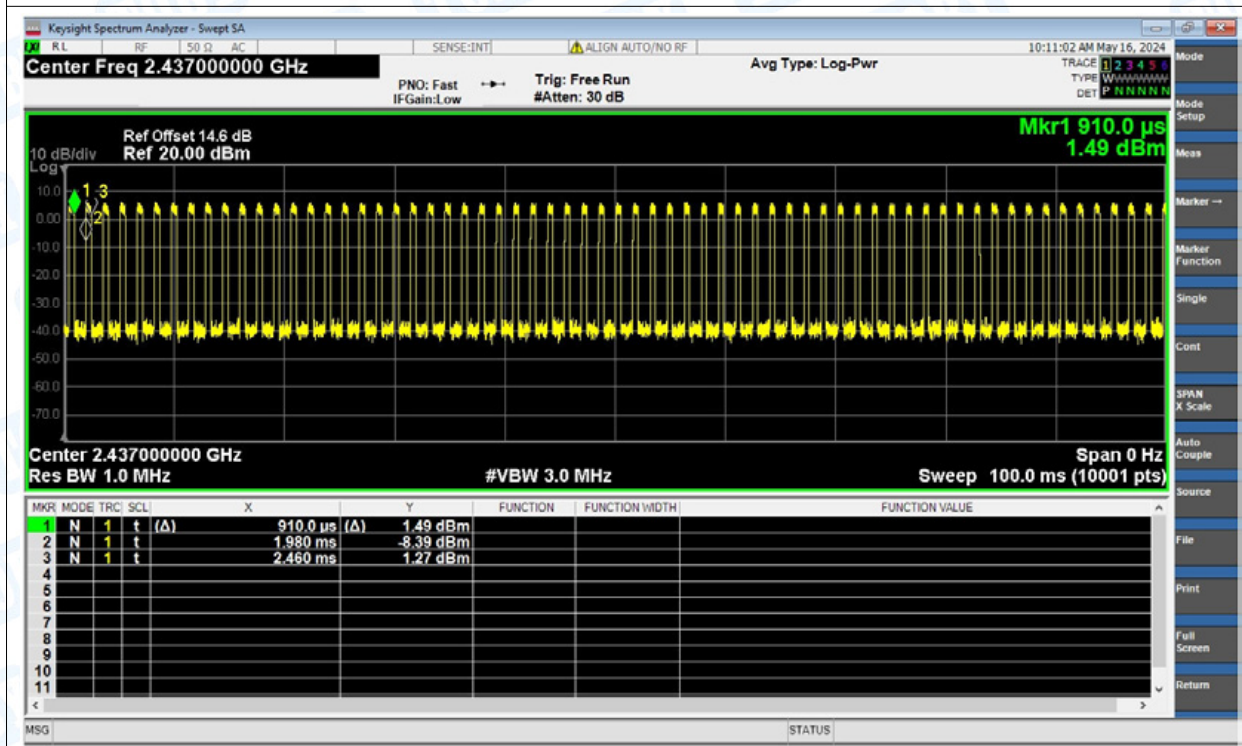
Duty Cycle NVNT g 2462MHz Ant1

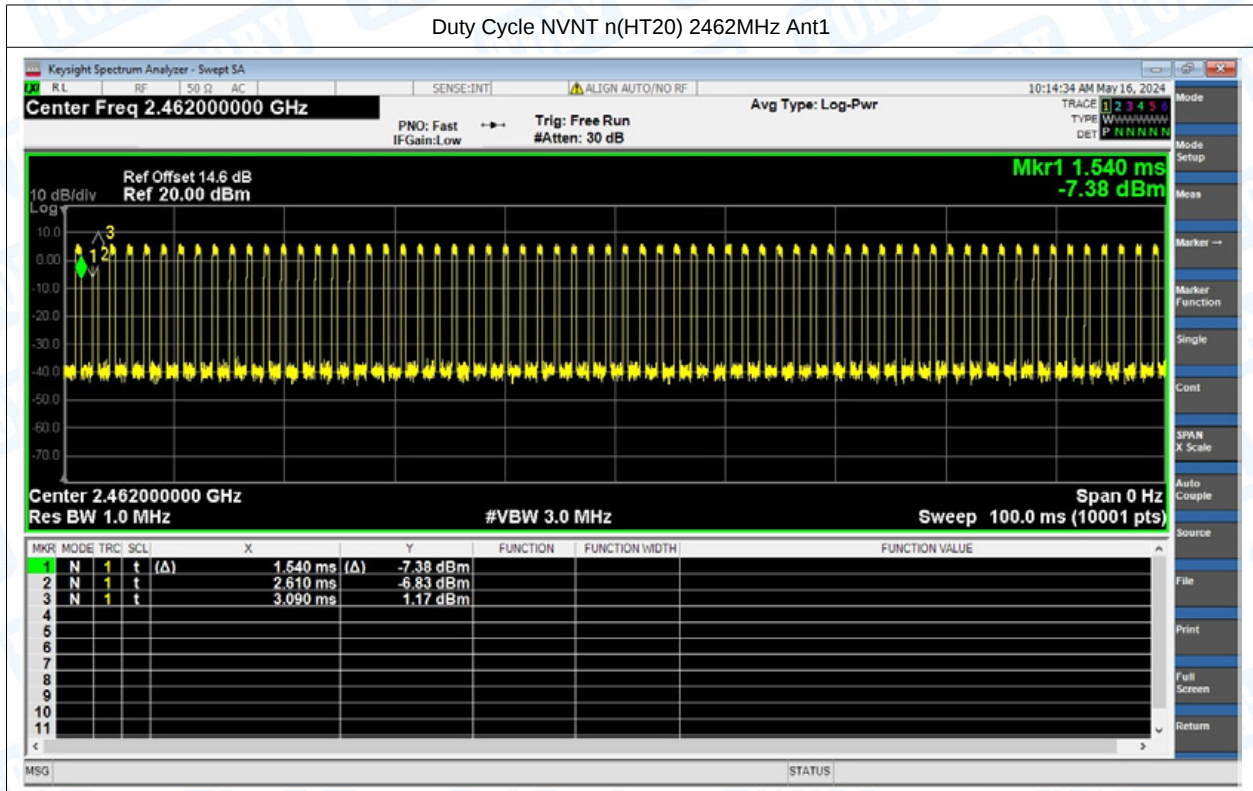


Duty Cycle NVNT n(HT20) 2412MHz Ant1



Duty Cycle NVNT n(HT20) 2437MHz Ant1





2. Maximum Conducted AVG Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.39	30	Pass
NVNT	b	2437	Ant1	15.97	30	Pass
NVNT	b	2462	Ant1	16.14	30	Pass
NVNT	g	2412	Ant1	11.64	30	Pass
NVNT	g	2437	Ant1	11.38	30	Pass
NVNT	g	2462	Ant1	11.30	30	Pass
NVNT	n(HT20)	2412	Ant1	11.30	30	Pass
NVNT	n(HT20)	2437	Ant1	10.91	30	Pass
NVNT	n(HT20)	2462	Ant1	10.89	30	Pass

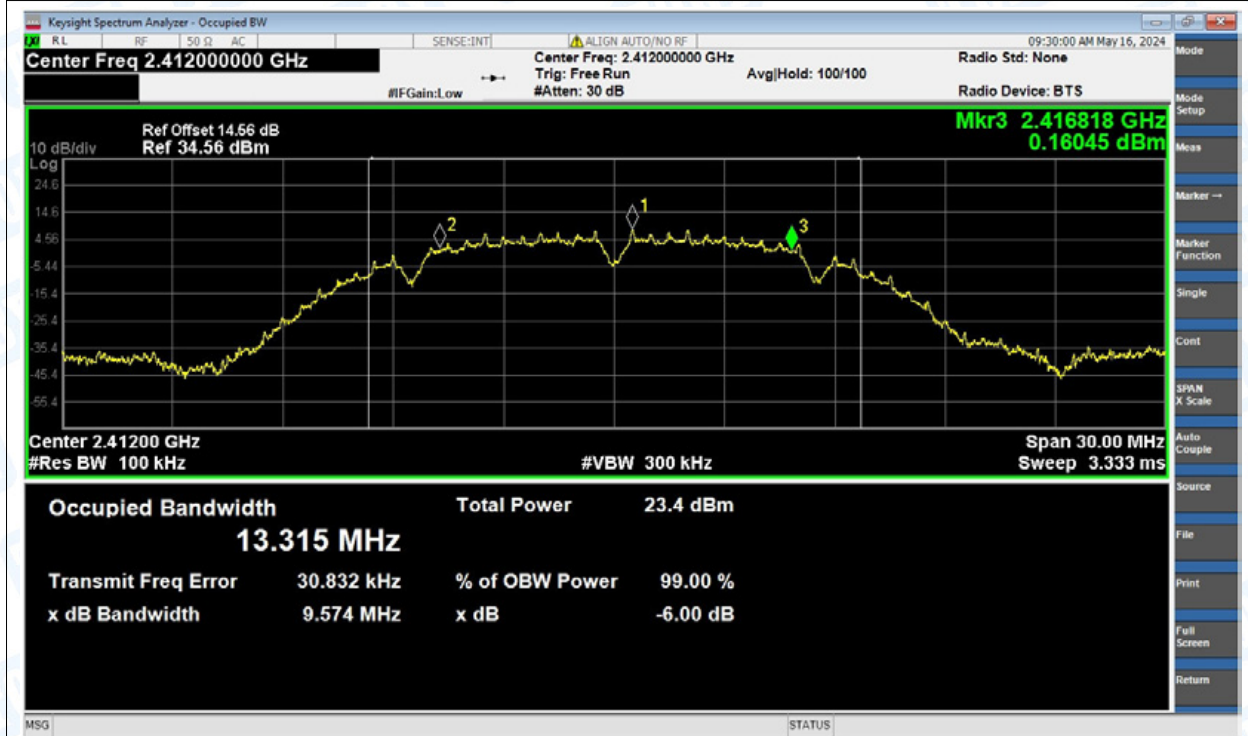
Note: The Duty Cycle Factor is compensated in the data.

3. -6dB Bandwidth

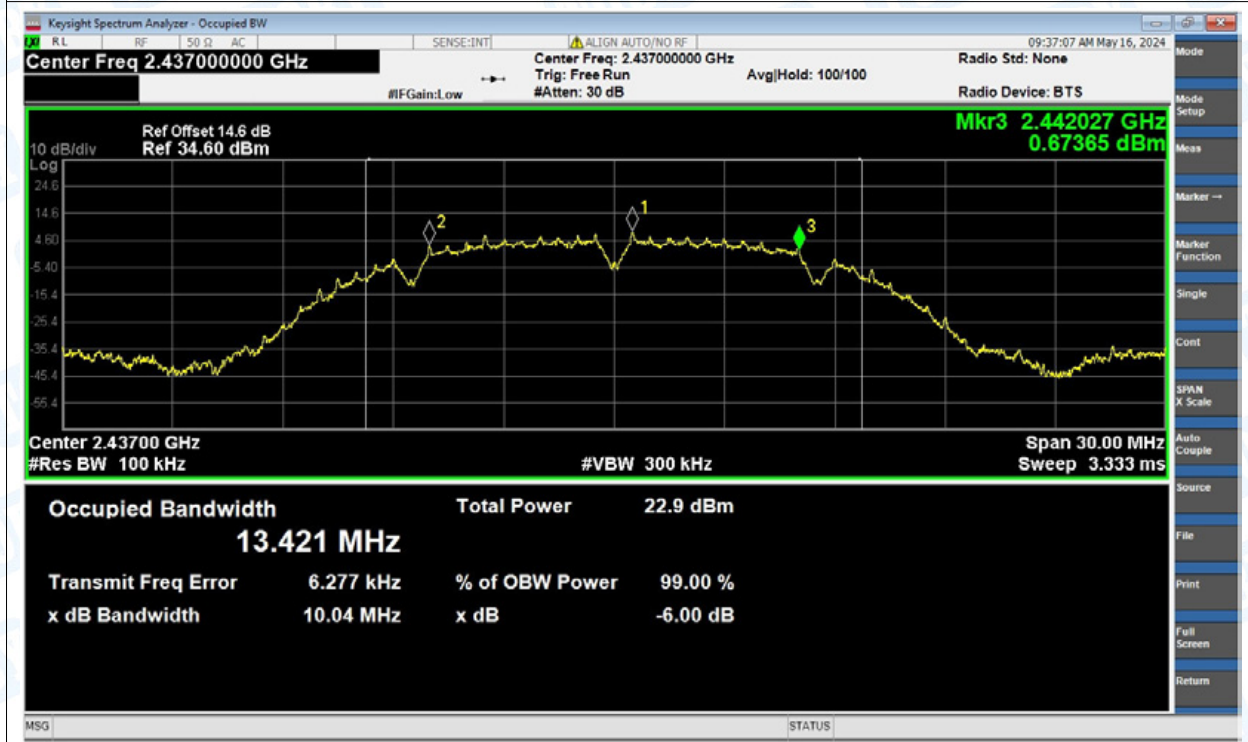
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.57	0.5	Pass
NVNT	b	2437	Ant1	10.04	0.5	Pass
NVNT	b	2462	Ant1	10.01	0.5	Pass
NVNT	g	2412	Ant1	16.37	0.5	Pass
NVNT	g	2437	Ant1	16.35	0.5	Pass
NVNT	g	2462	Ant1	16.33	0.5	Pass
NVNT	n(HT20)	2412	Ant1	16.82	0.5	Pass
NVNT	n(HT20)	2437	Ant1	16.95	0.5	Pass
NVNT	n(HT20)	2462	Ant1	16.83	0.5	Pass

Test Graphs

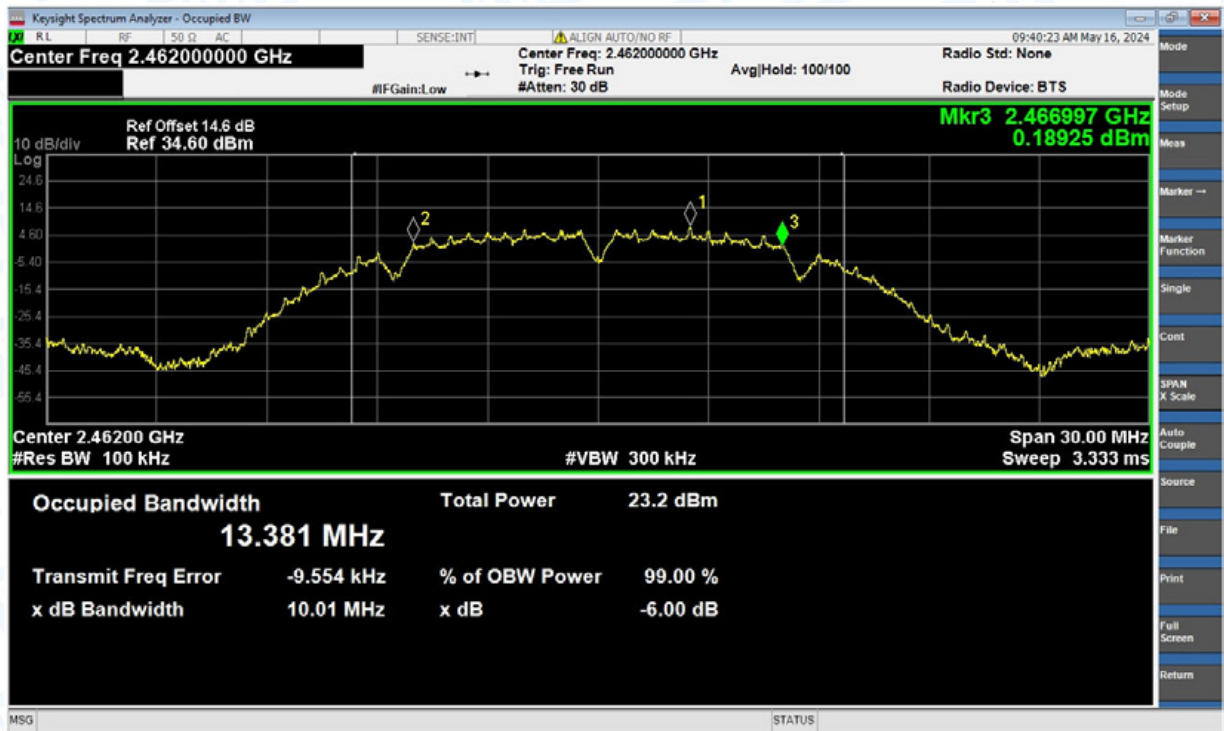
-6dB Bandwidth NVNT b 2412MHz Ant1



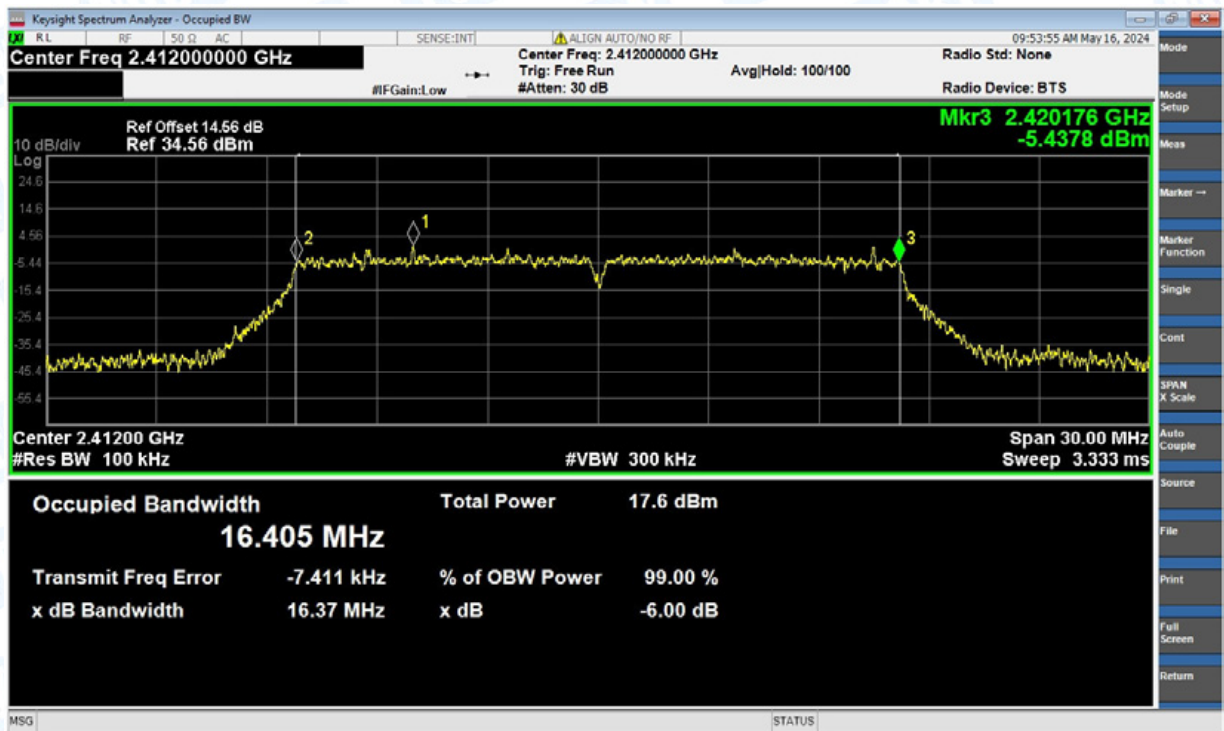
-6dB Bandwidth NVNT b 2437MHz Ant1



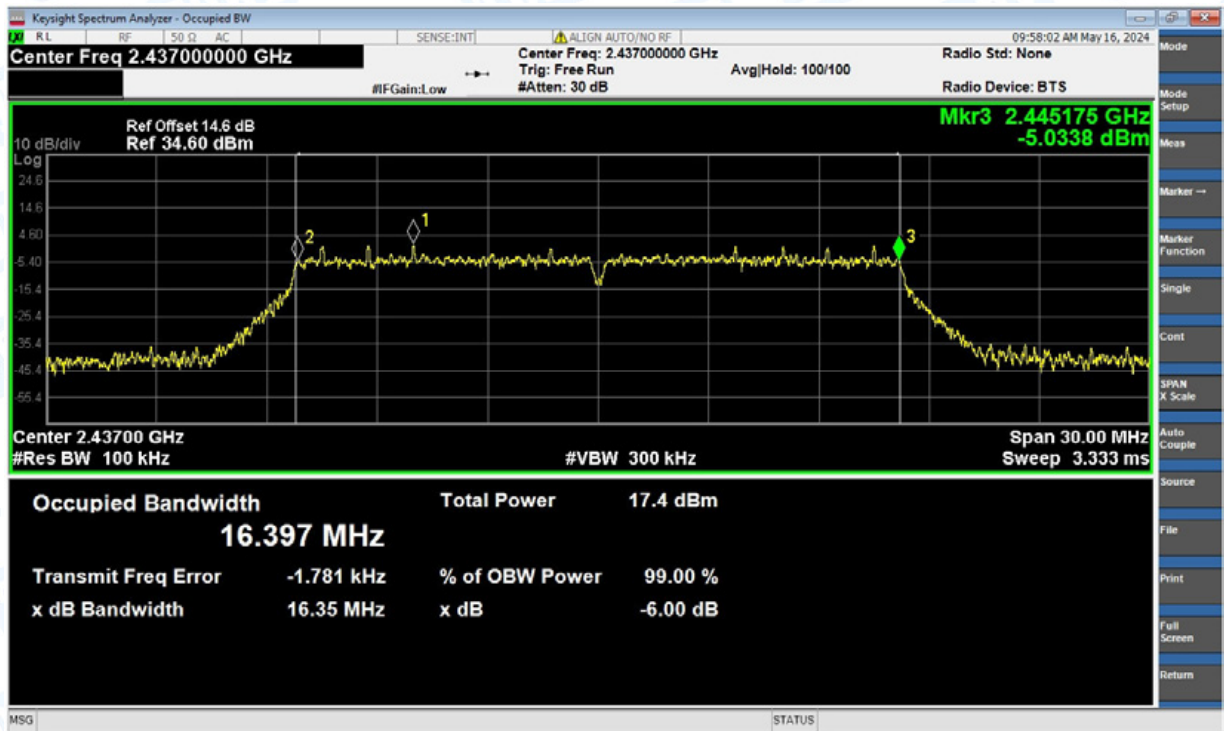
-6dB Bandwidth NVNT b 2462MHz Ant1



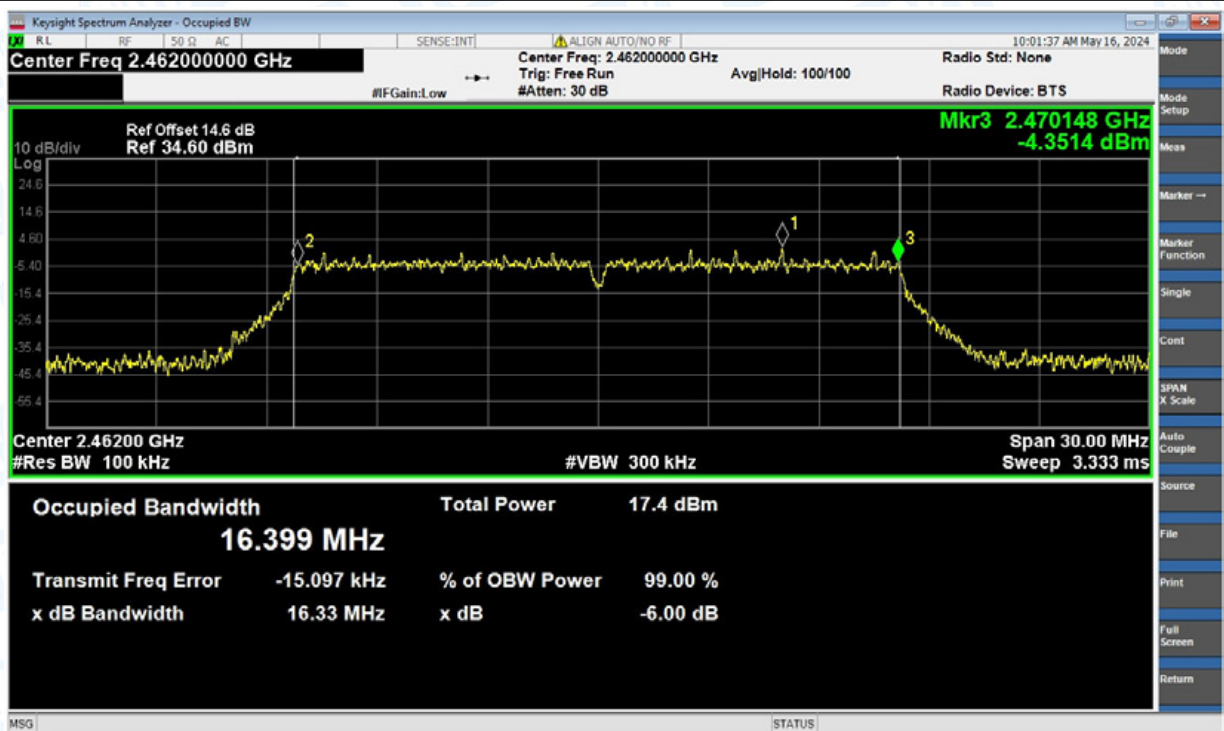
-6dB Bandwidth NVNT g 2412MHz Ant1



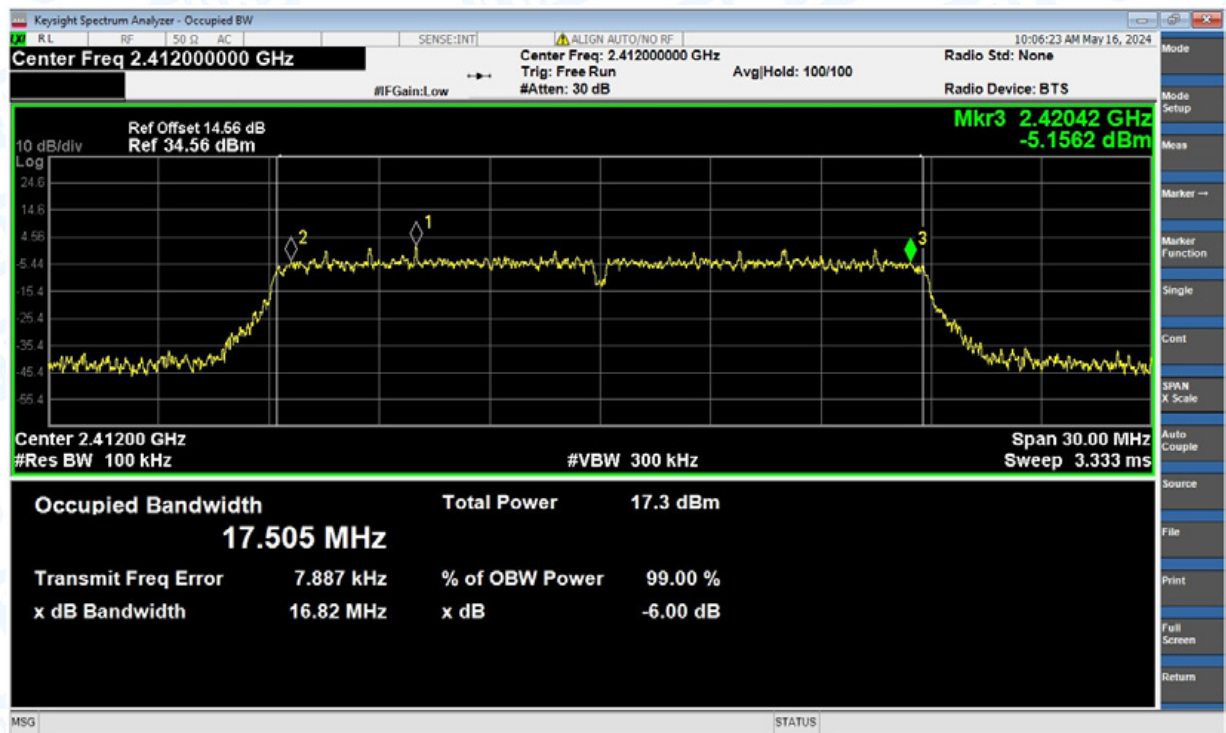
-6dB Bandwidth NVNT g 2437MHz Ant1



-6dB Bandwidth NVNT g 2462MHz Ant1

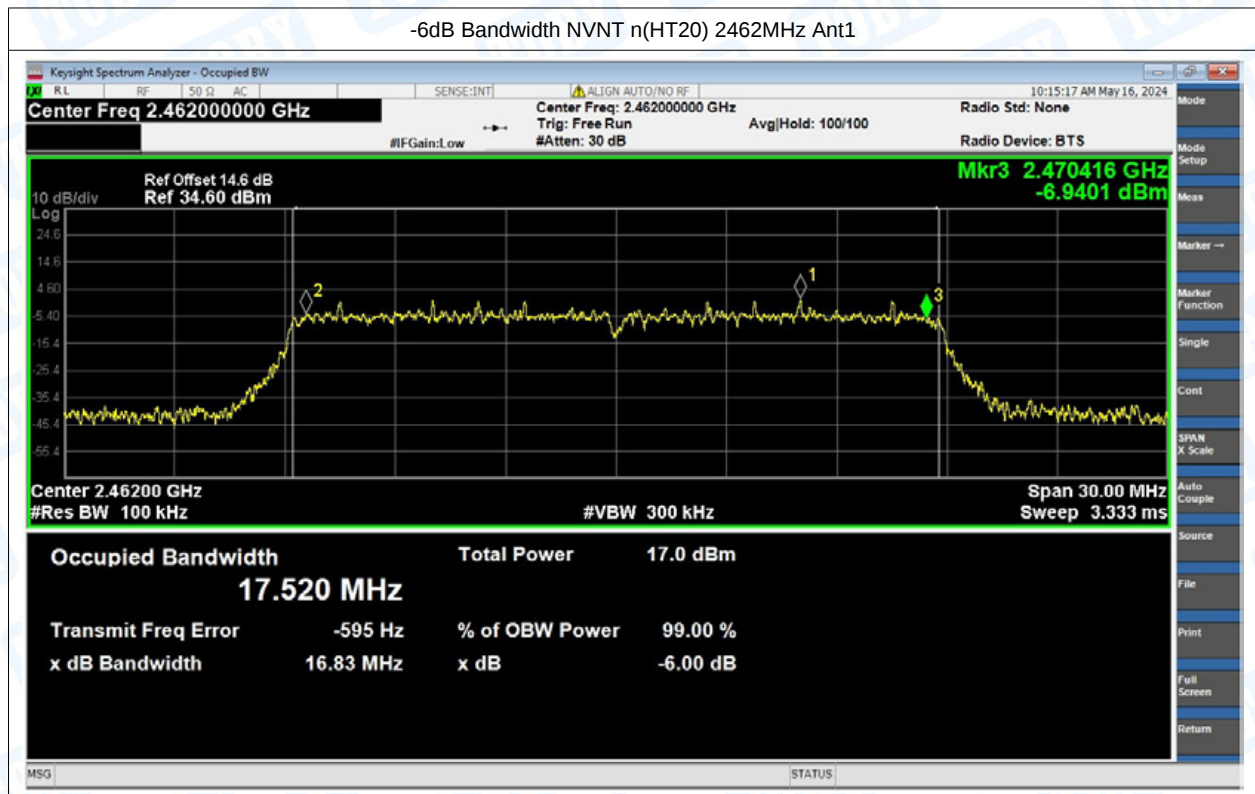


-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



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



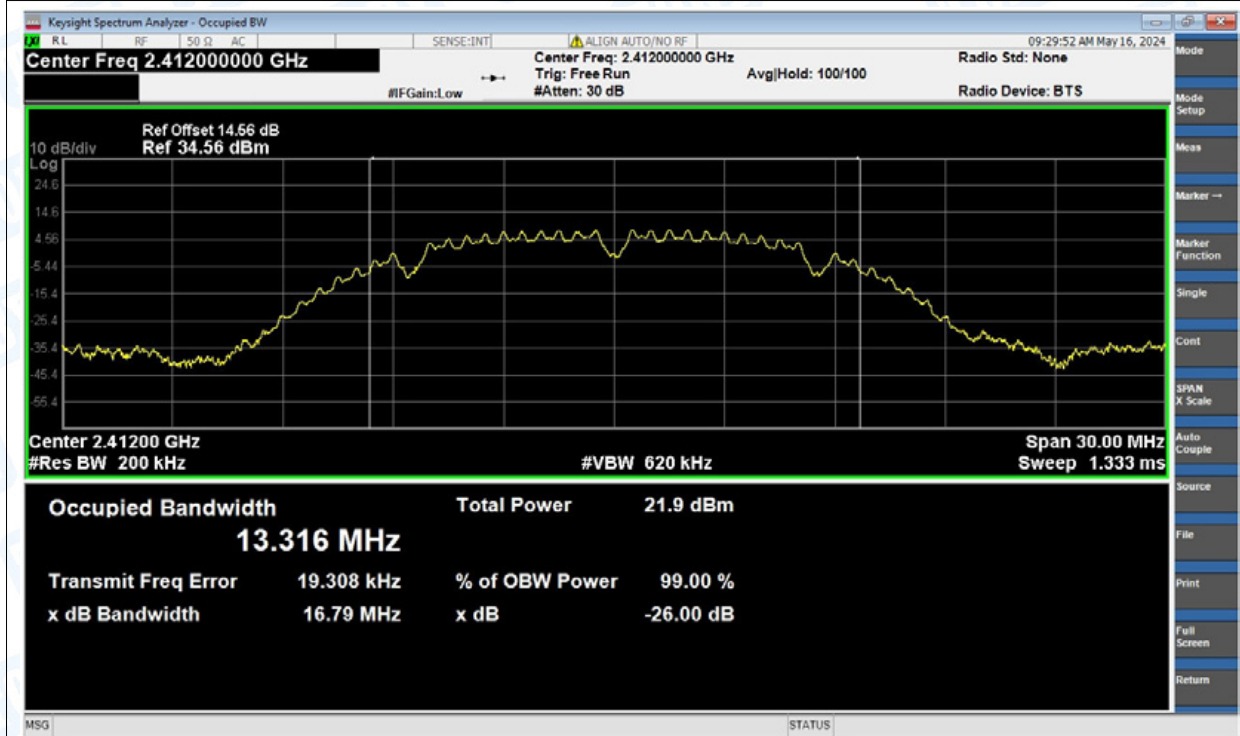


4. Occupied Channel Bandwidth

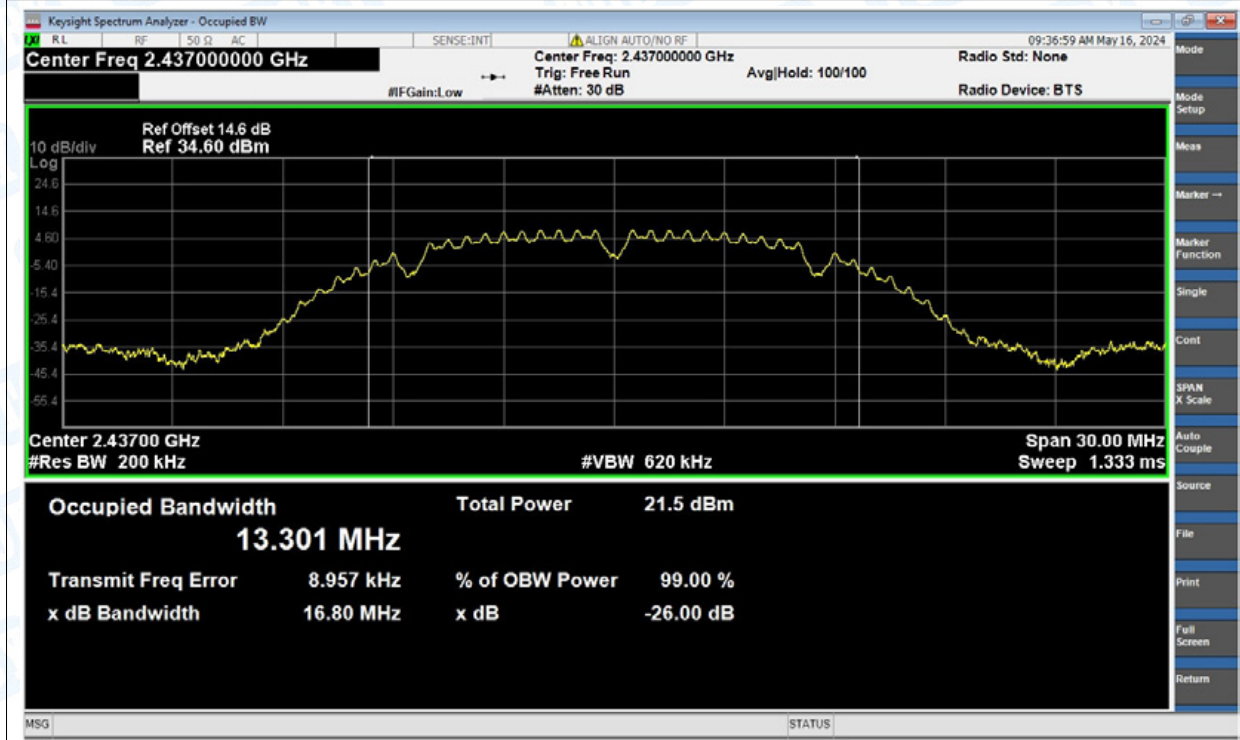
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	13.316
NVNT	b	2437	Ant1	13.301
NVNT	b	2462	Ant1	13.366
NVNT	g	2412	Ant1	16.481
NVNT	g	2437	Ant1	16.429
NVNT	g	2462	Ant1	16.476
NVNT	n(HT20)	2412	Ant1	17.491
NVNT	n(HT20)	2437	Ant1	17.473
NVNT	n(HT20)	2462	Ant1	17.517

Test Graphs

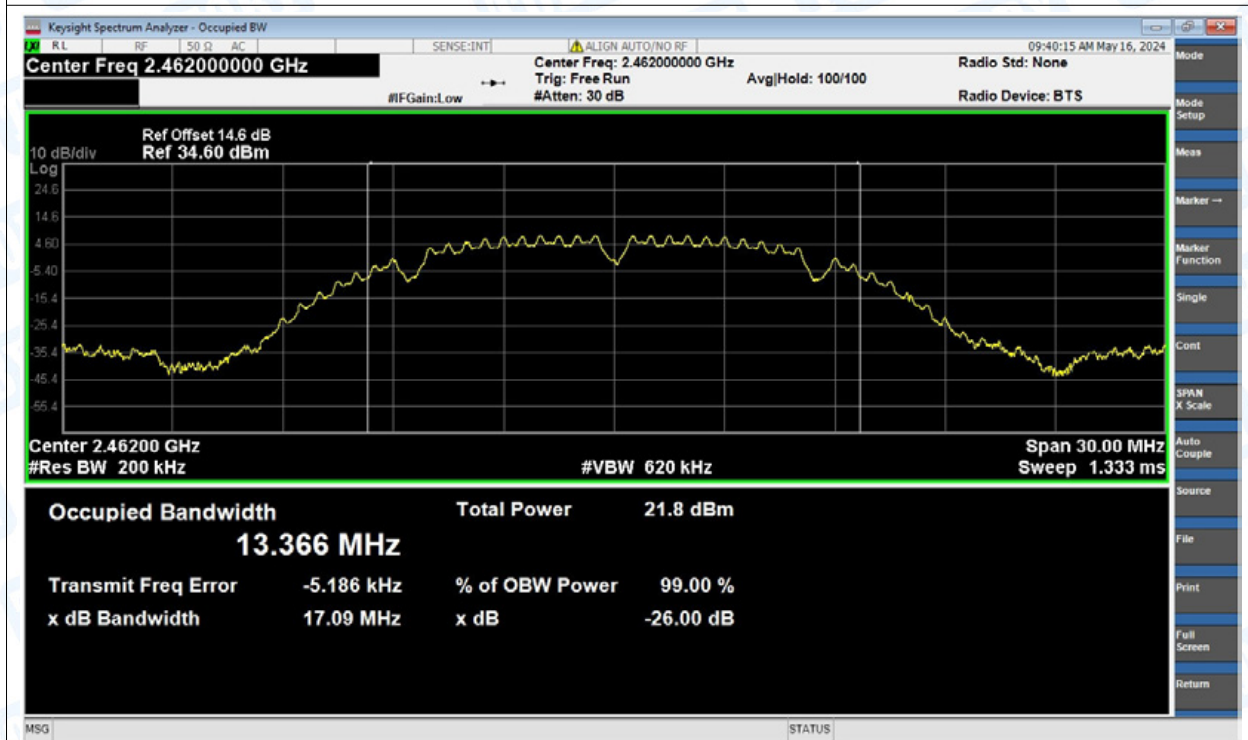
OBW NVNT b 2412MHz Ant1



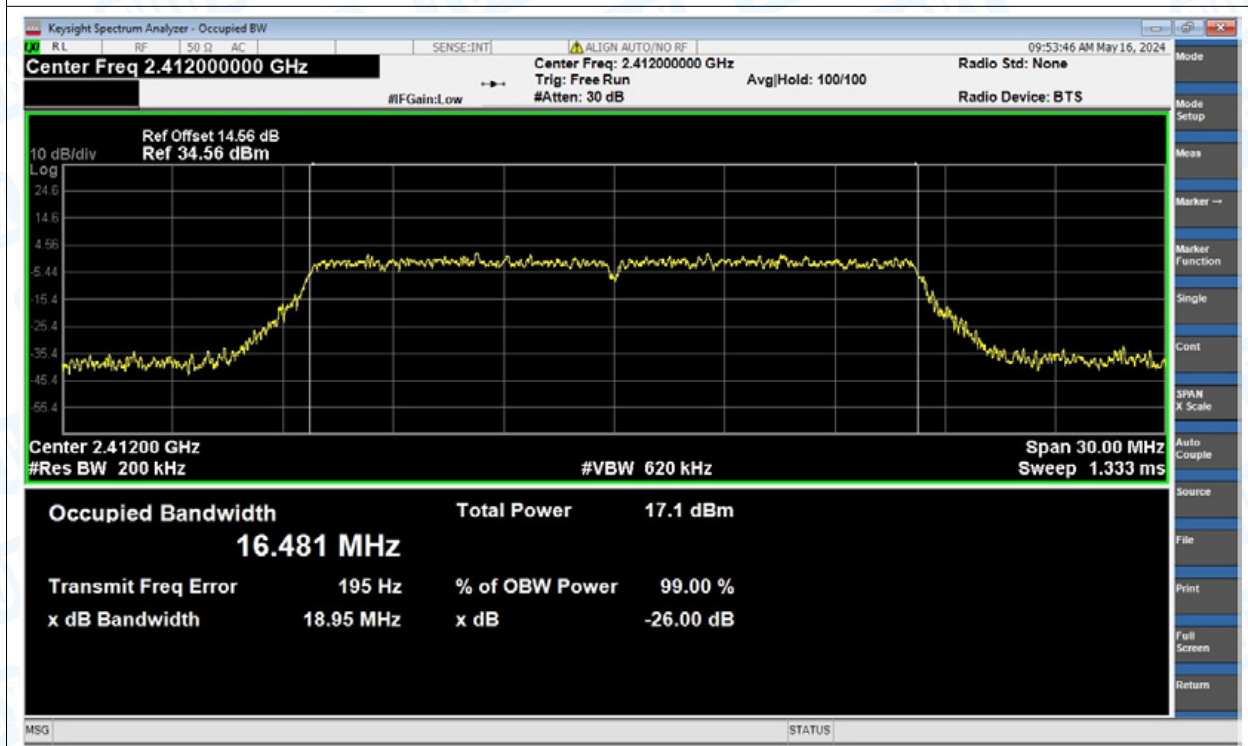
OBW NVNT b 2437MHz Ant1



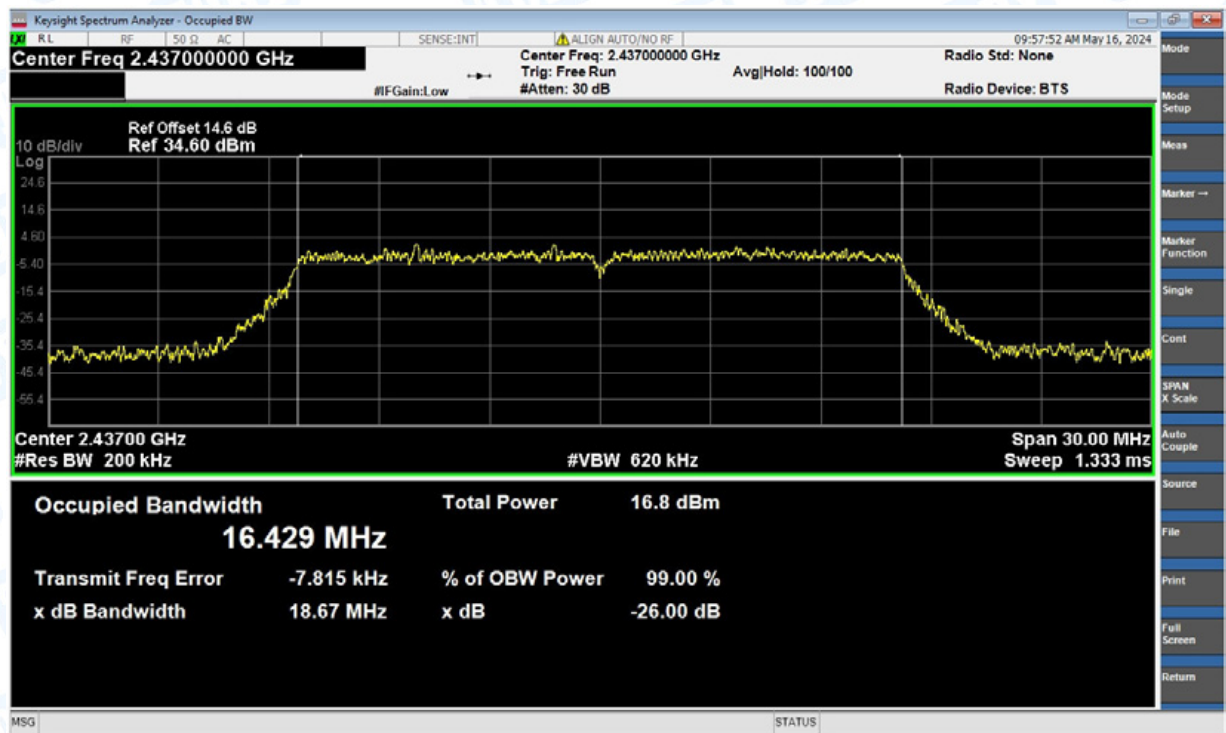
OBW NVNT b 2462MHz Ant1



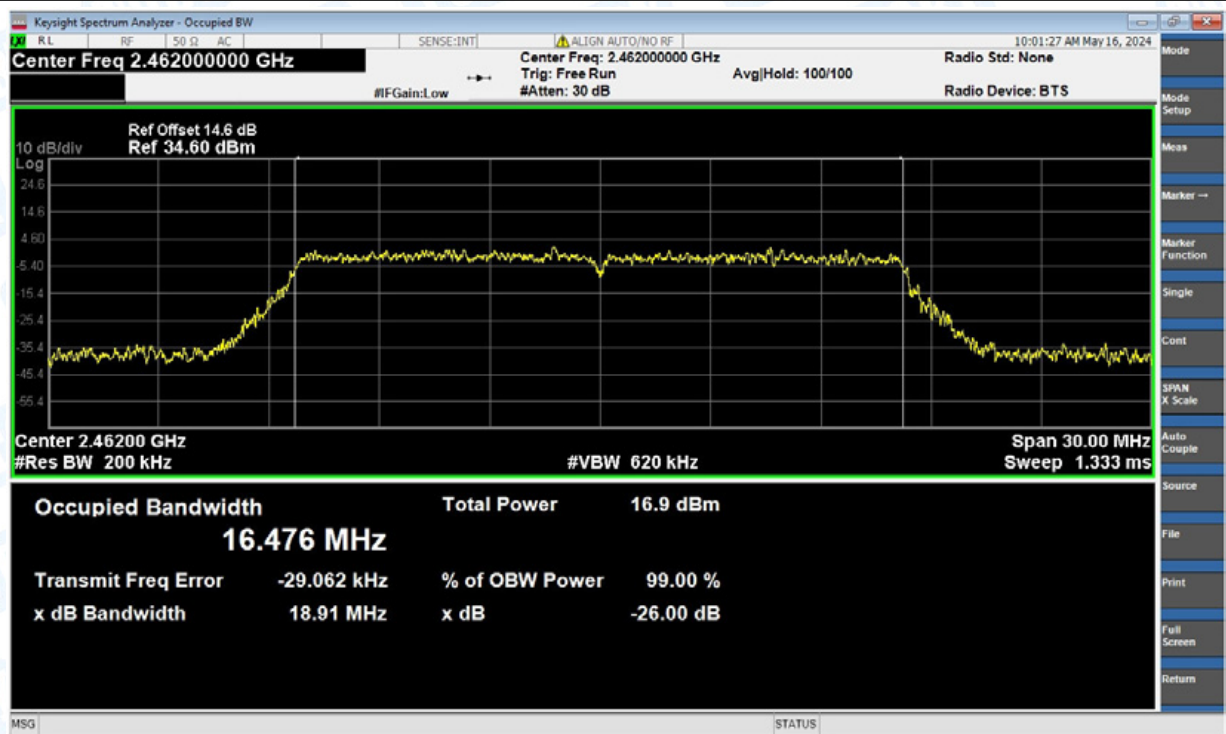
OBW NVNT g 2412MHz Ant1



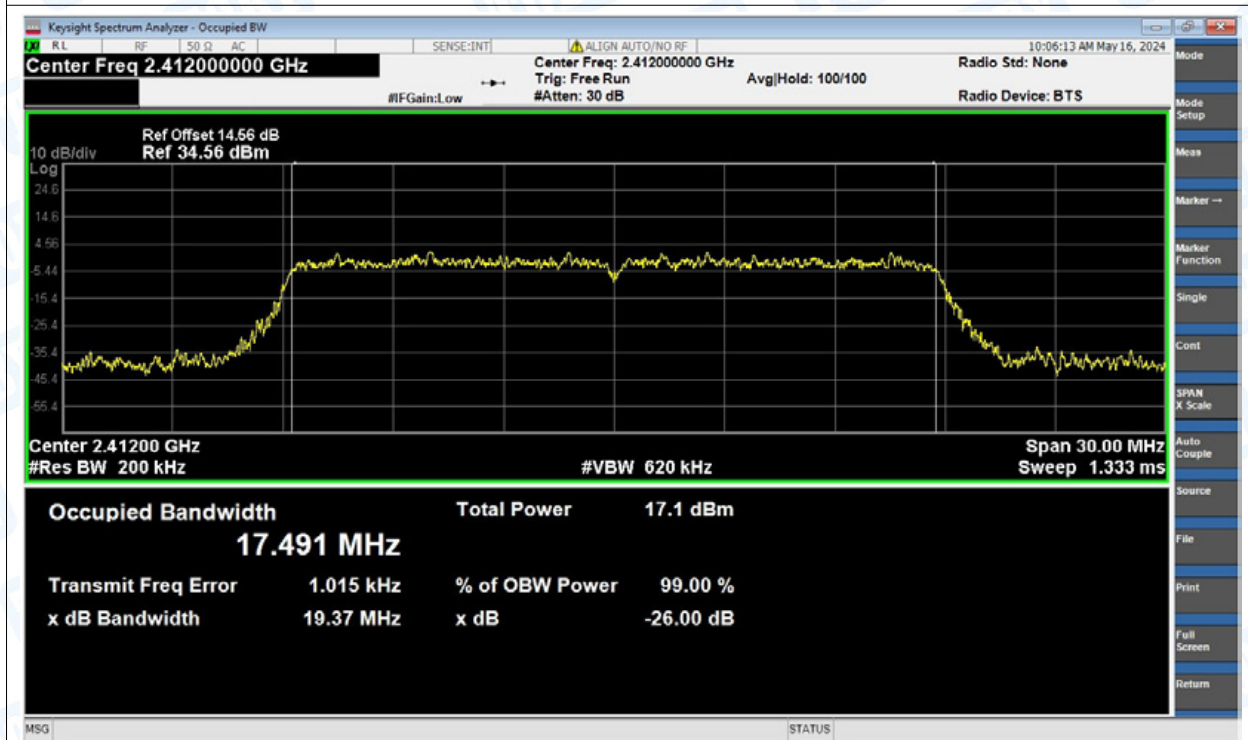
OBW NVNT g 2437MHz Ant1



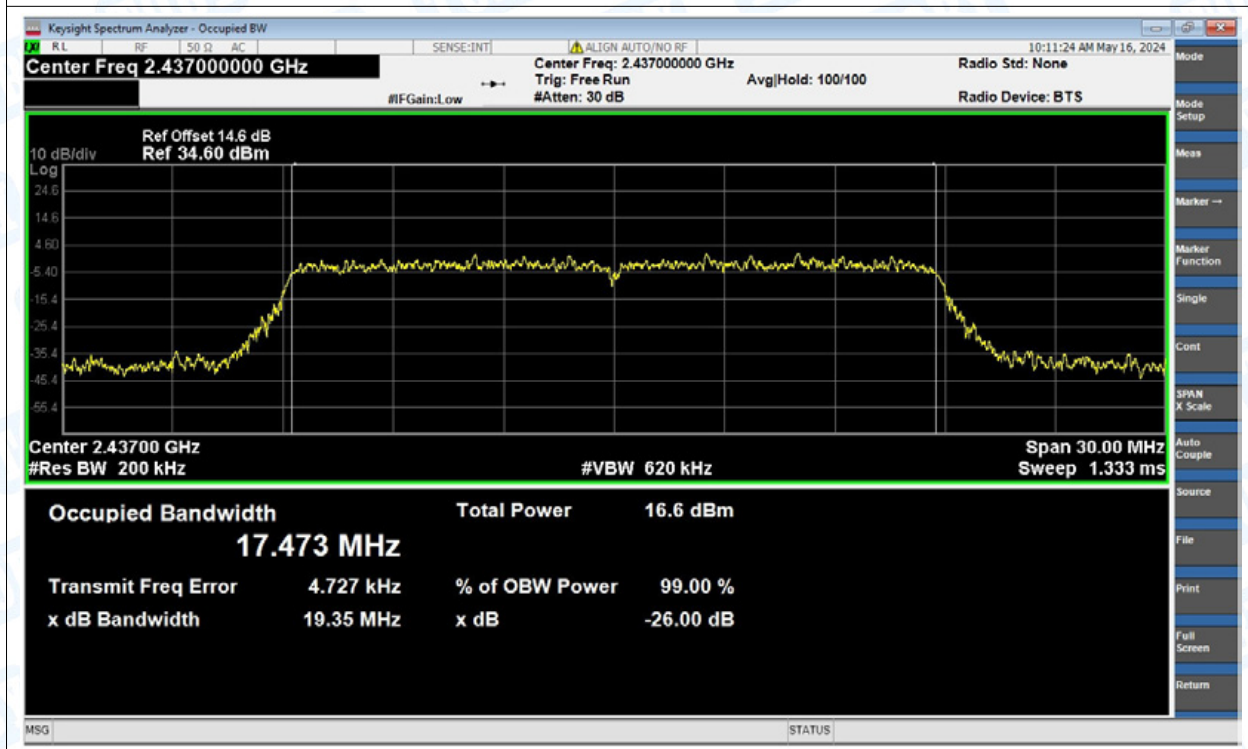
OBW NVNT g 2462MHz Ant1

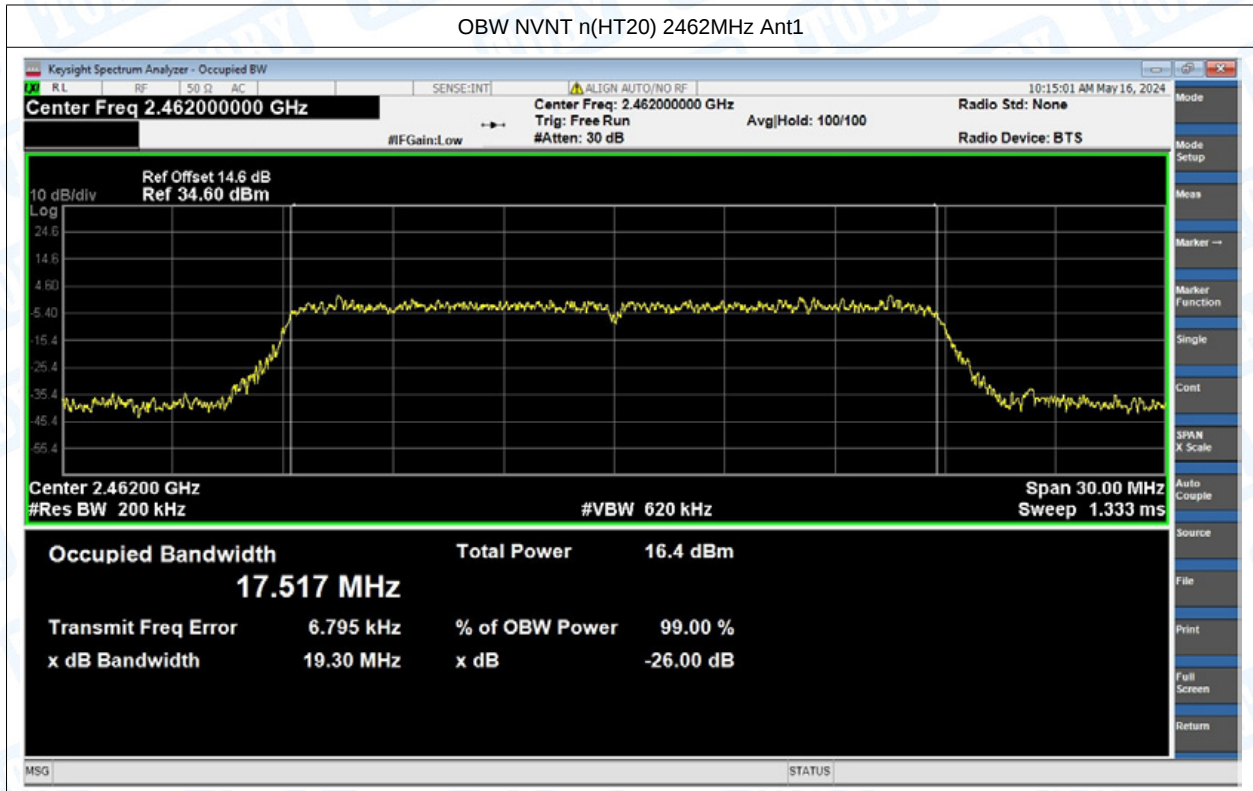


OBW NVNT n(HT20) 2412MHz Ant1



OBW NVNT n(HT20) 2437MHz Ant1





5. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-16.370	8	Pass
NVNT	b	2437	Ant1	-16.662	8	Pass
NVNT	b	2462	Ant1	-16.698	8	Pass
NVNT	g	2412	Ant1	-24.768	8	Pass
NVNT	g	2437	Ant1	-25.668	8	Pass
NVNT	g	2462	Ant1	-25.925	8	Pass
NVNT	n(HT20)	2412	Ant1	-26.492	8	Pass
NVNT	n(HT20)	2437	Ant1	-26.003	8	Pass
NVNT	n(HT20)	2462	Ant1	-26.786	8	Pass

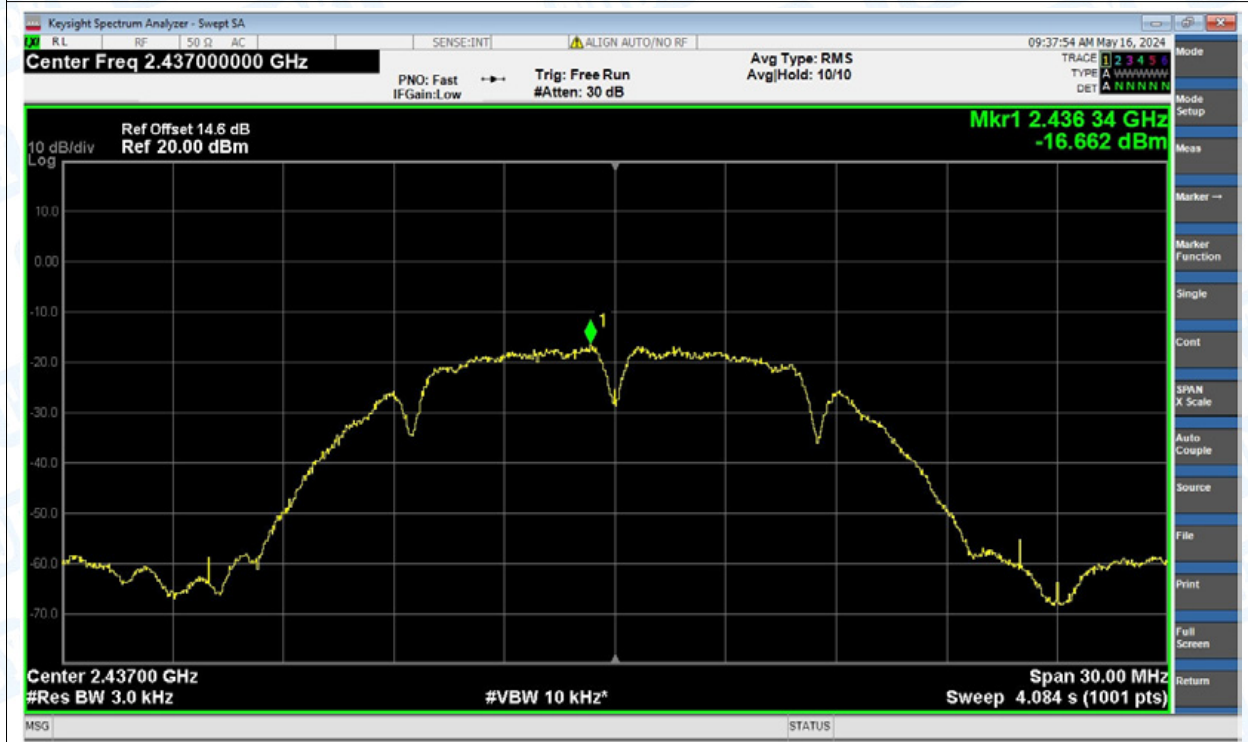
Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs

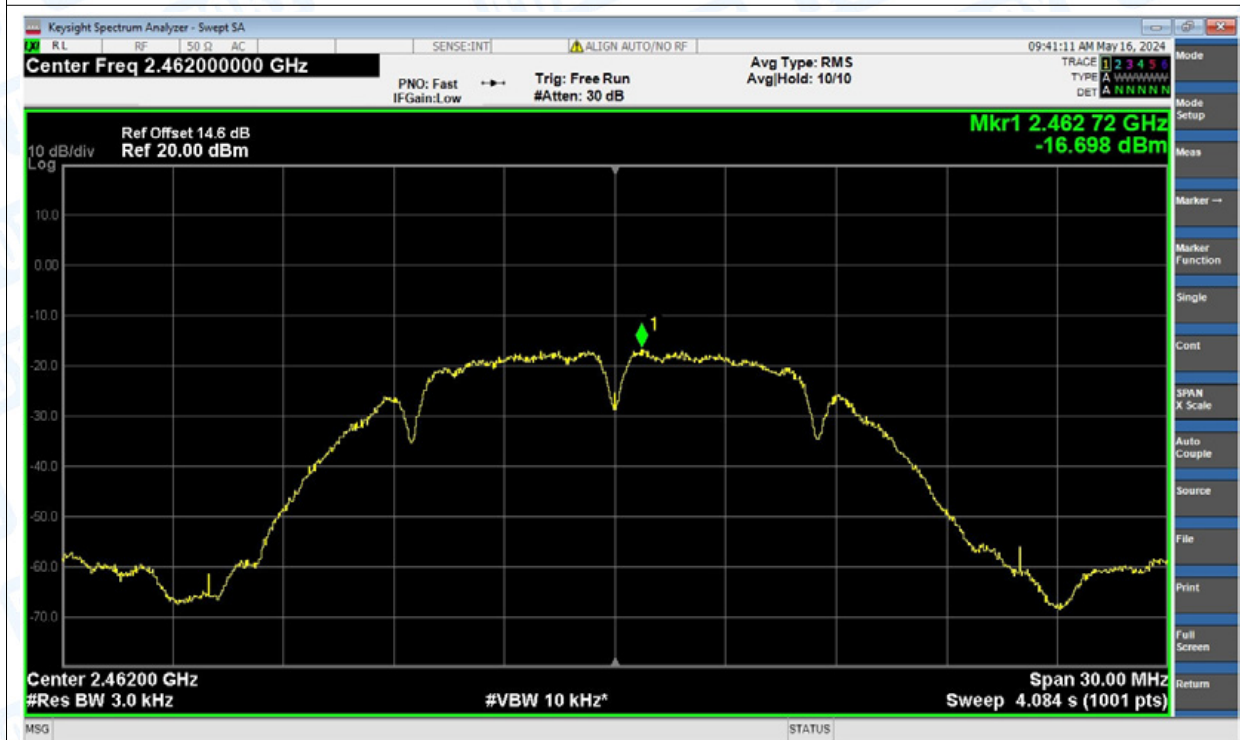
PSD NVNT b 2412MHz Ant1



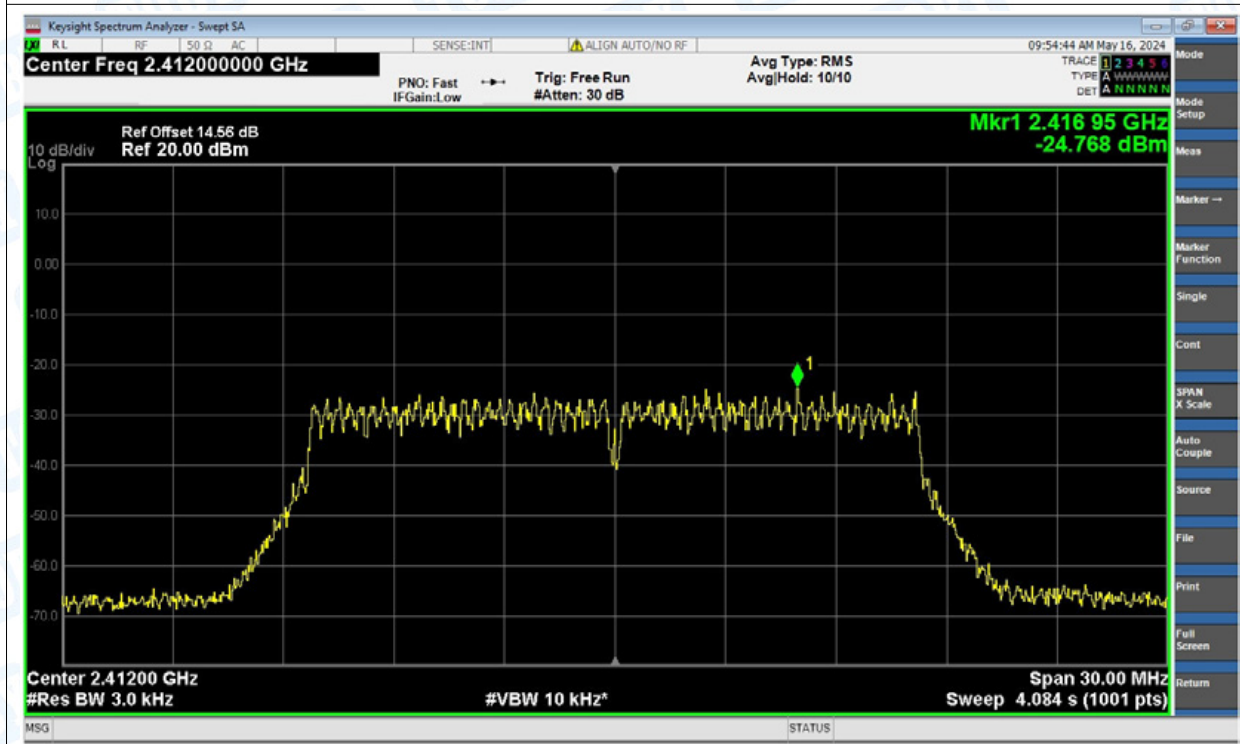
PSD NVNT b 2437MHz Ant1



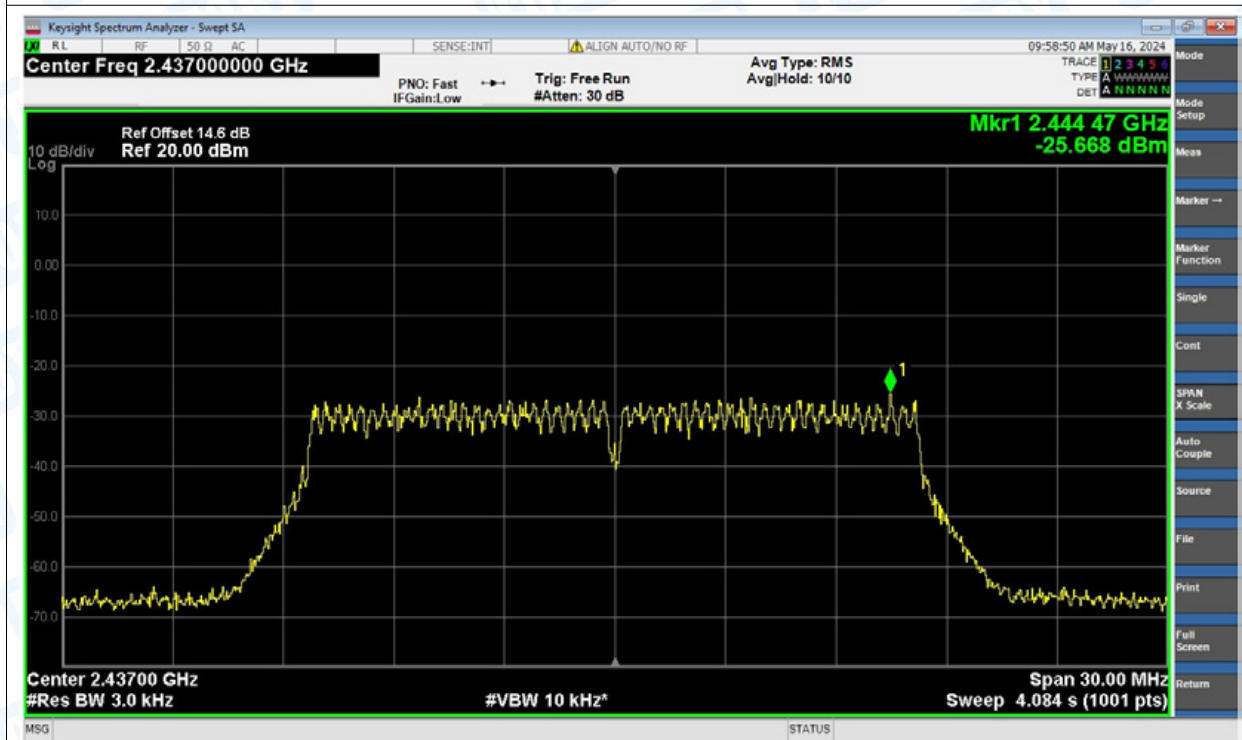
PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1



PSD NVNT g 2437MHz Ant1



PSD NVNT g 2462MHz Ant1

