

[Test mode: TX High channel]; [Polarity: Horizontal]

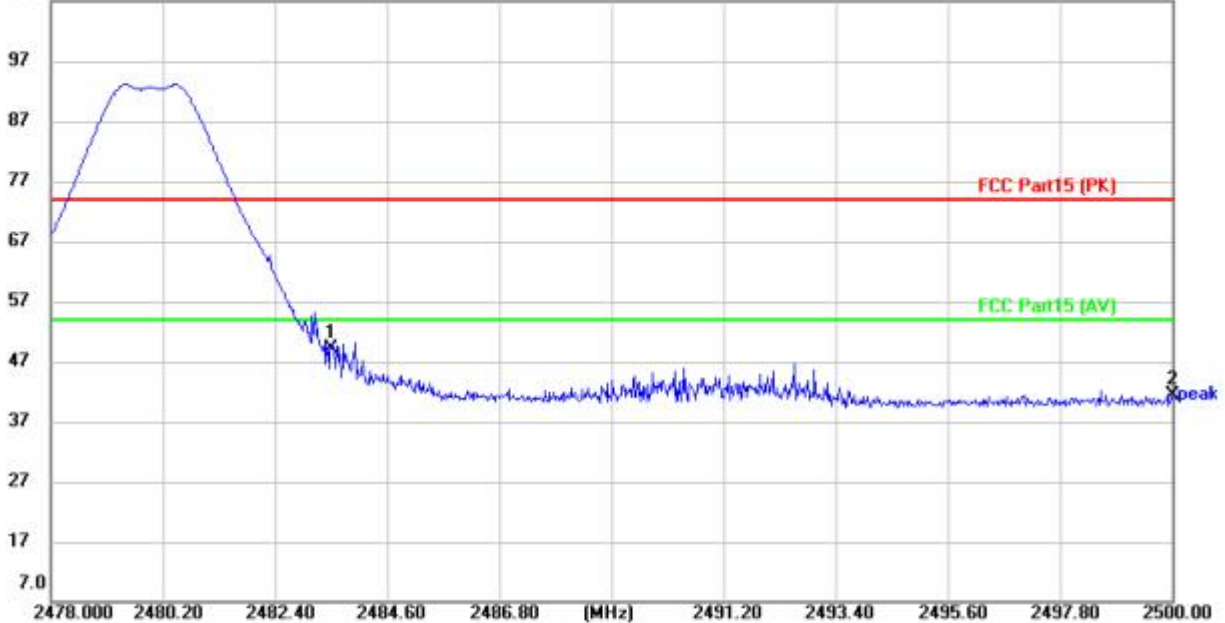
Radiated Emission Measurement

Project No.: REH

Data: #7

2025/11/13

107.0 dBuV/m



Site

Polarization: **Horizontal**

Temperature: (C)

Limit: FCC Part15 (PK)

Power:

Humidity: %RH

EUT: LED Controller

M/N: EXTEC-FHM

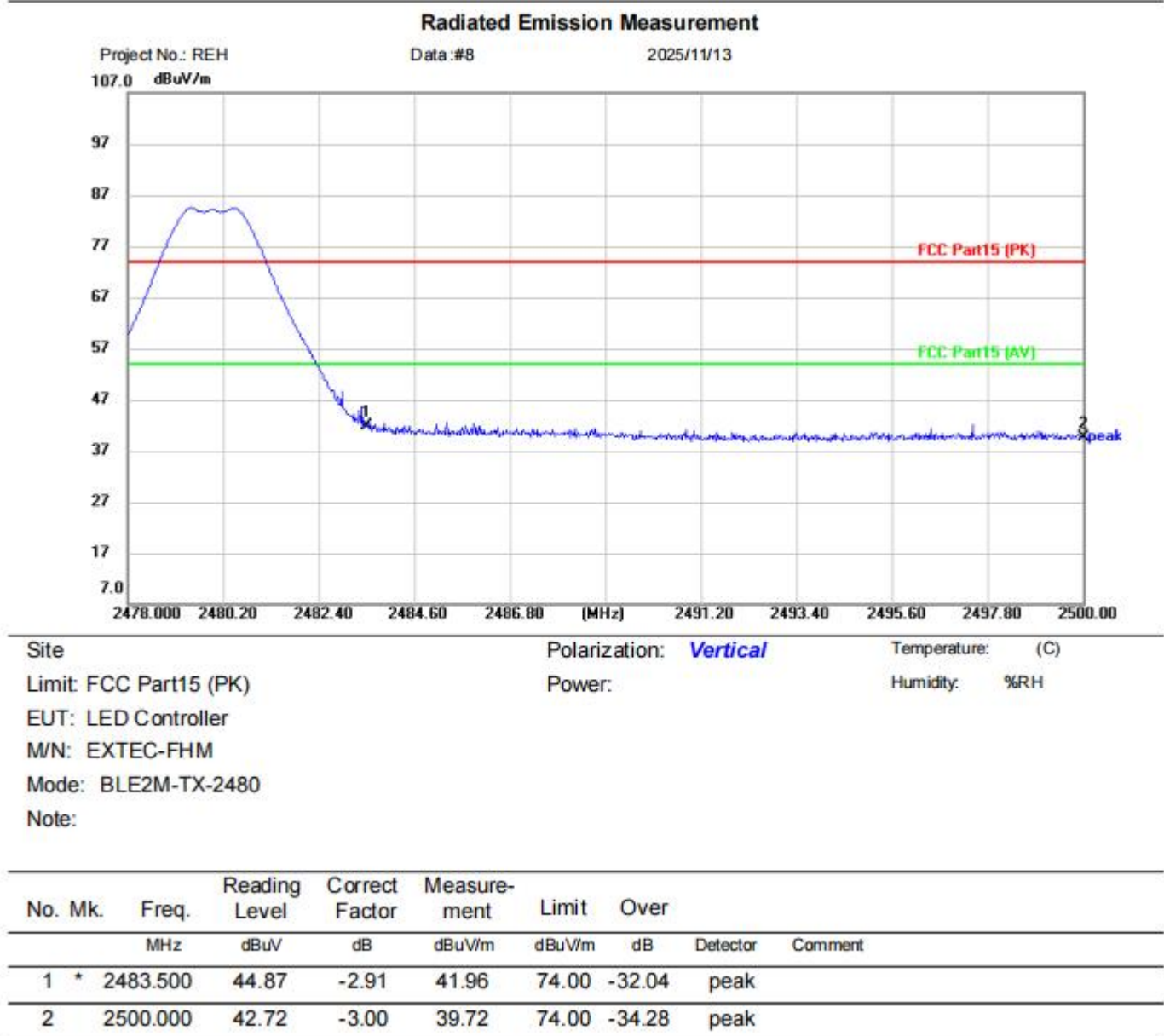
Mode: BLE2M-TX-2480

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2483.500	52.02	-2.91	49.11	74.00	-24.89	peak	
2		2500.000	44.29	-3.00	41.29	74.00	-32.71	peak	

Test Result: Pass

[Test mode:TX High channel]; [Polarity: Vertical]



Test Result: Pass

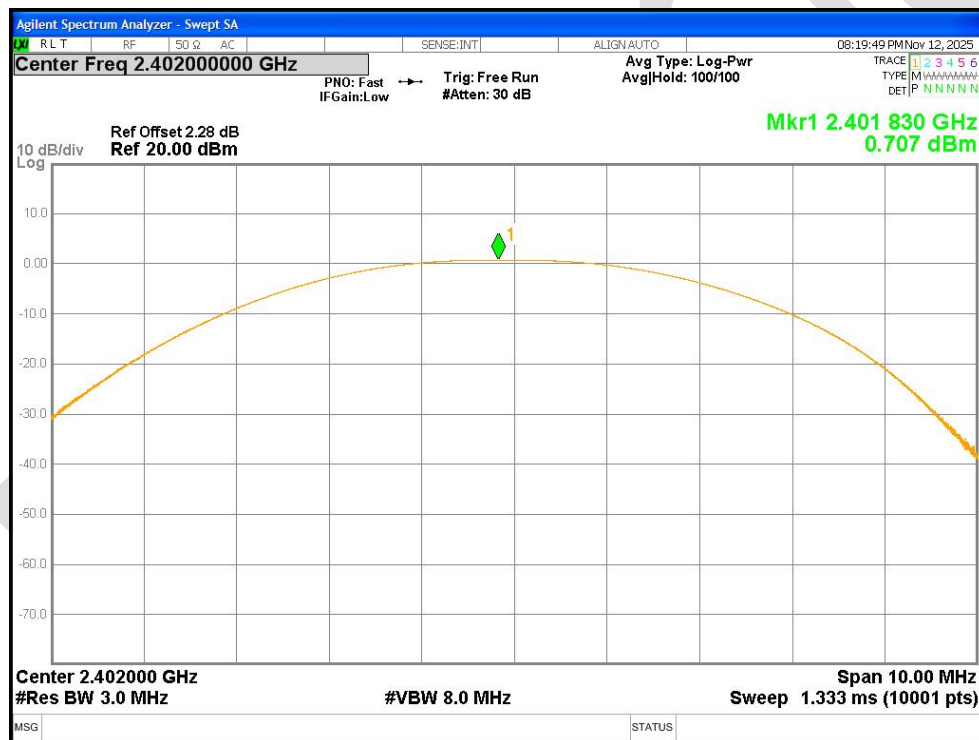
For Radiated emission, 1Mbps and 2Mbps mode all have been tested, only worse case 2Mbps mode is reported.

7 Appendix A

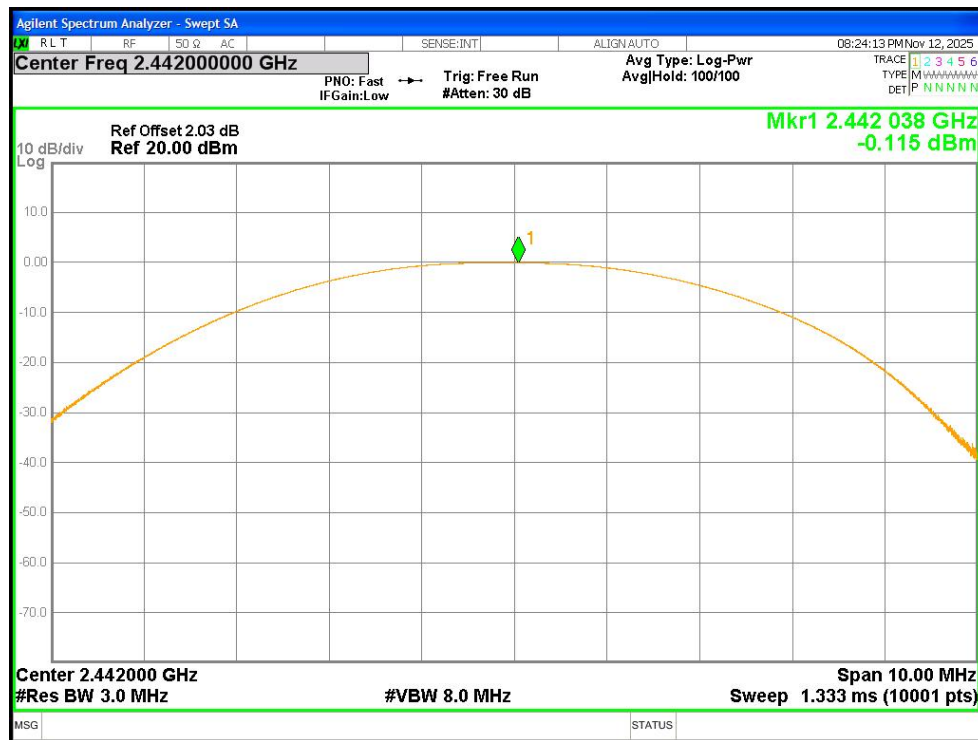
7.1 Maximum PK Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	0.707	30	Pass
NVNT	BLE 1M	2442	Ant1	-0.115	30	Pass
NVNT	BLE 1M	2480	Ant1	0.767	30	Pass
NVNT	BLE 2M	2402	Ant1	0.826	30	Pass
NVNT	BLE 2M	2442	Ant1	-0.074	30	Pass
NVNT	BLE 2M	2480	Ant1	0.82	30	Pass

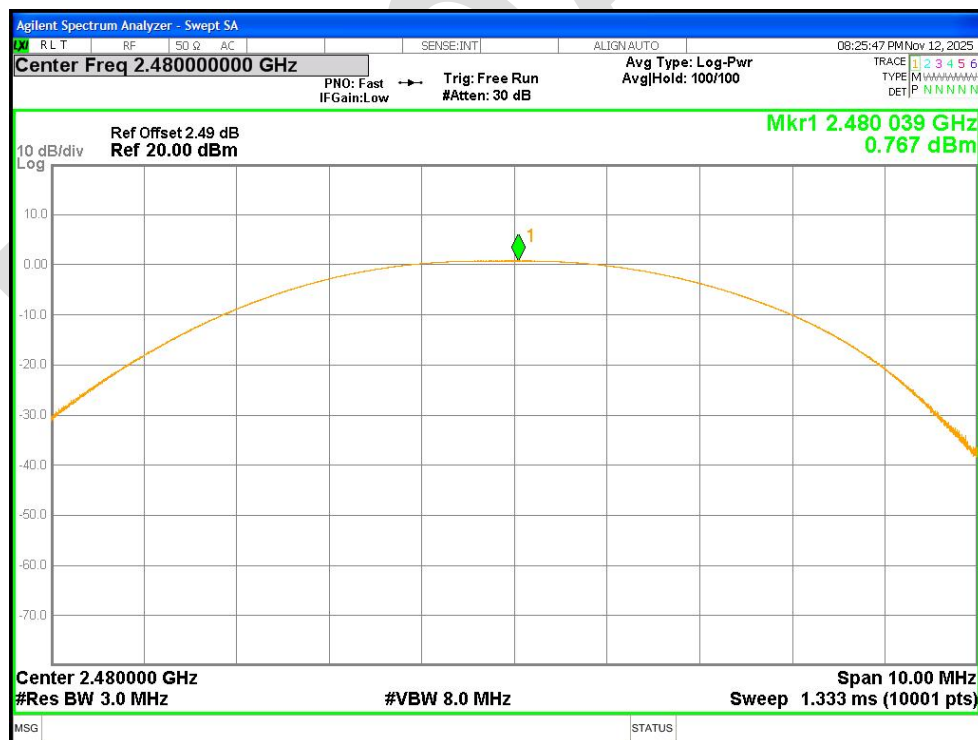
Power NVNT BLE 1M 2402MHz Ant1



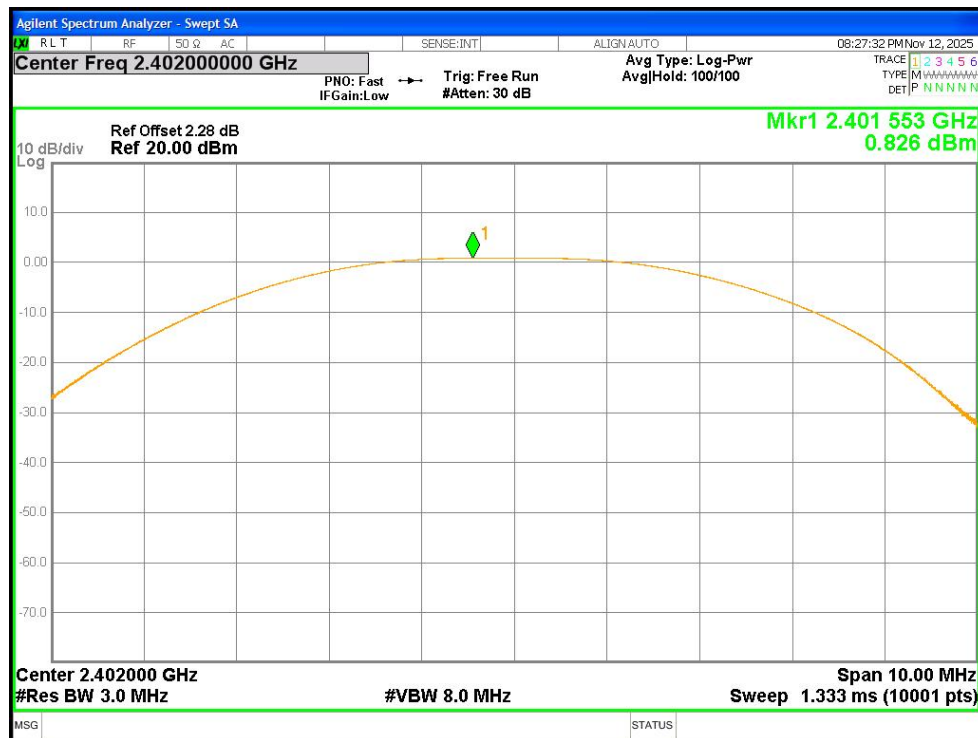
Power NVNT BLE 1M 2442MHz Ant1



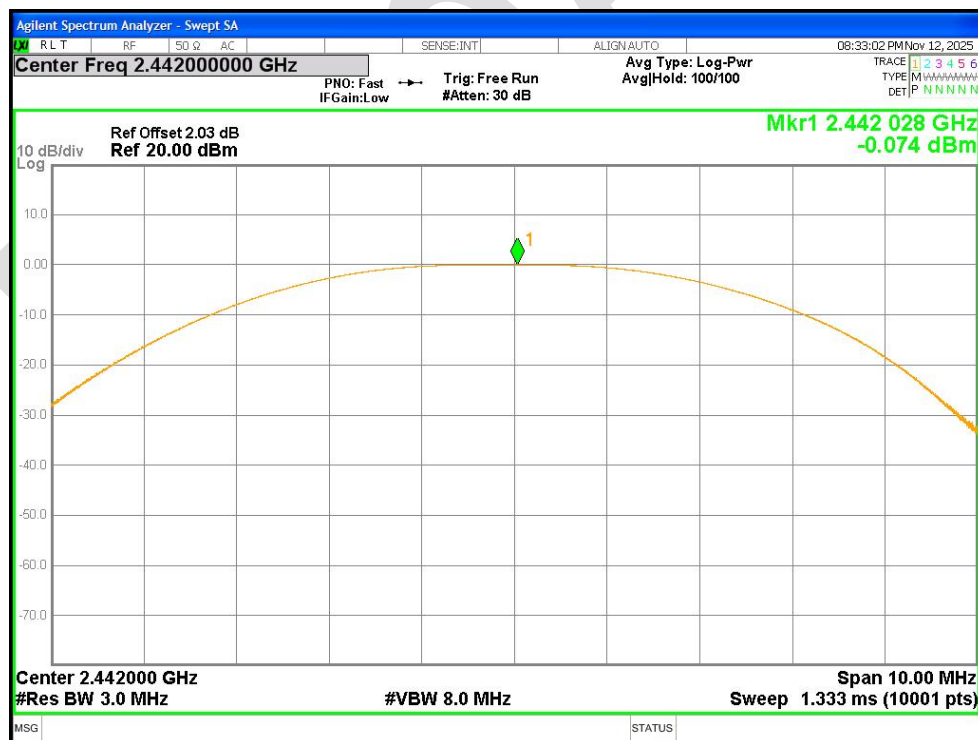
Power NVNT BLE 1M 2480MHz Ant1



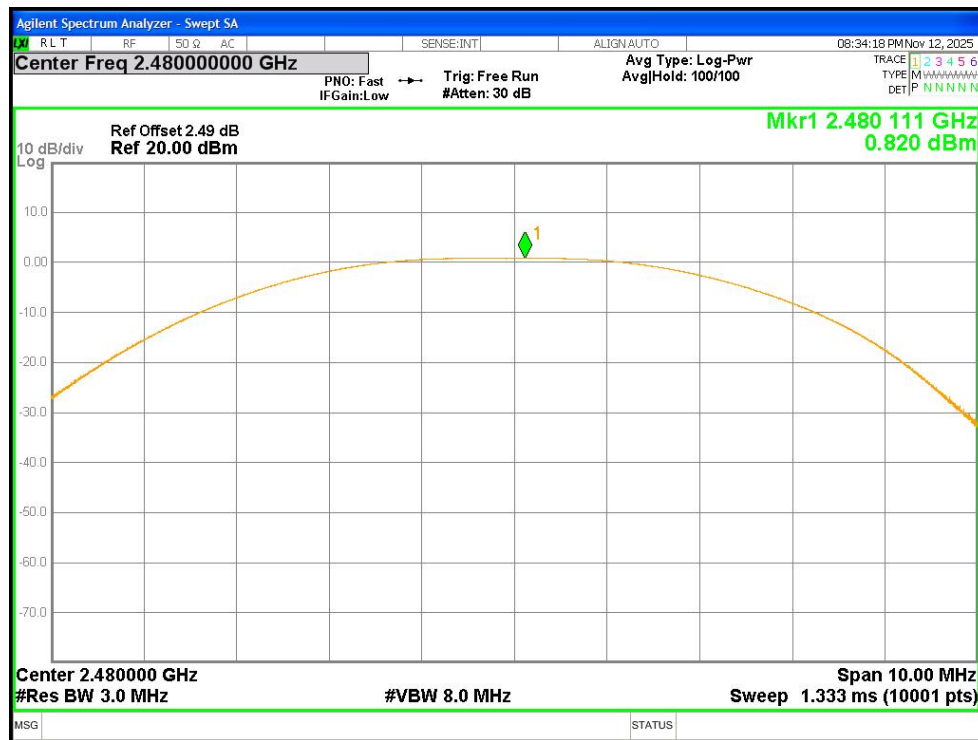
Power NVNT BLE 2M 2402MHz Ant1



Power NVNT BLE 2M 2442MHz Ant1



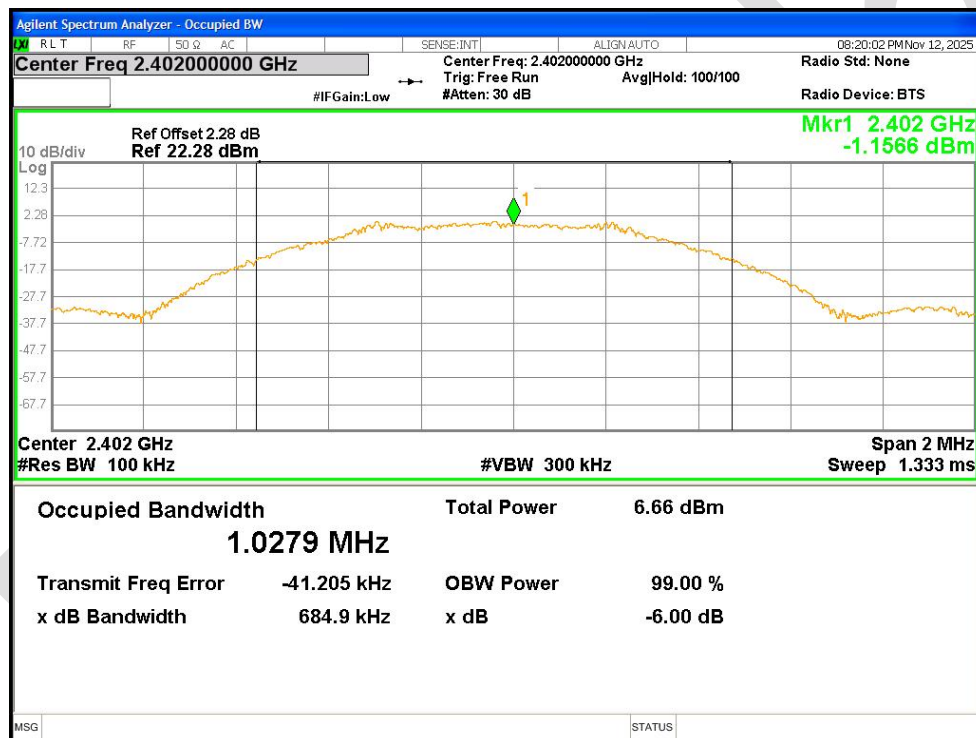
Power NVNT BLE 2M 2480MHz Ant1



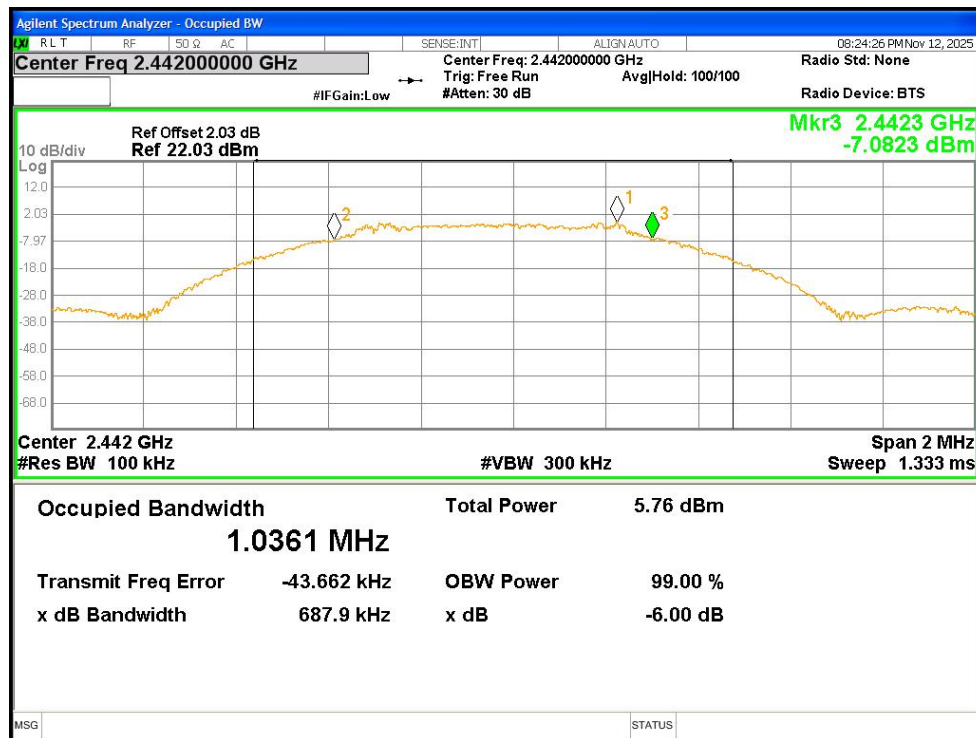
7.2 -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.685	0.5	Pass
NVNT	BLE 1M	2442	Ant1	0.688	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.666	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.252	0.5	Pass
NVNT	BLE 2M	2442	Ant1	1.369	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.336	0.5	Pass

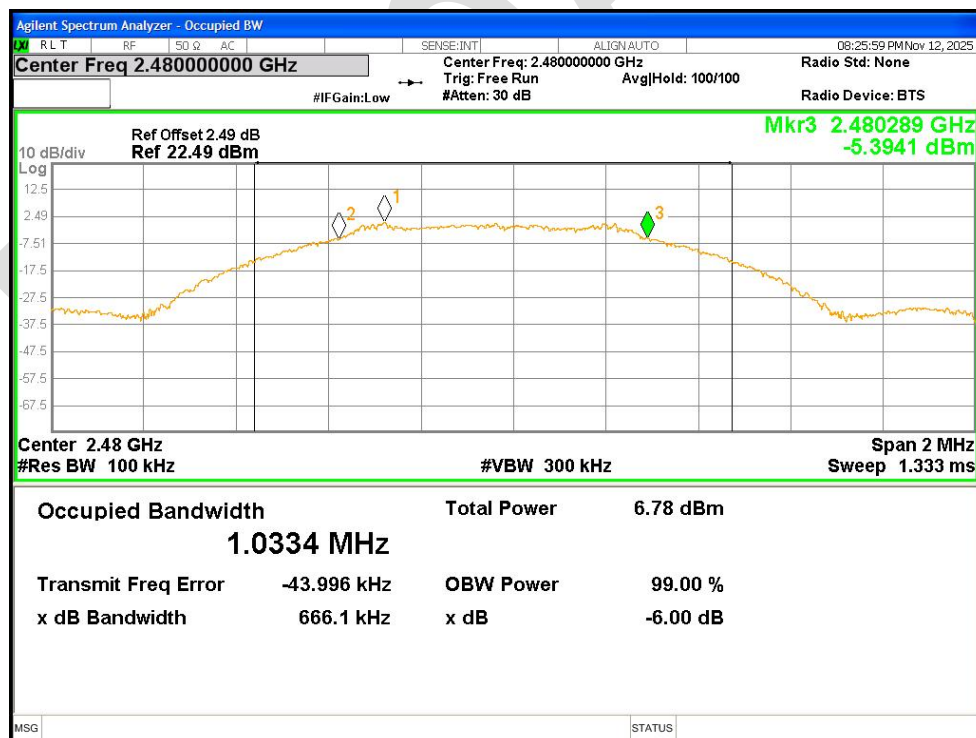
-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



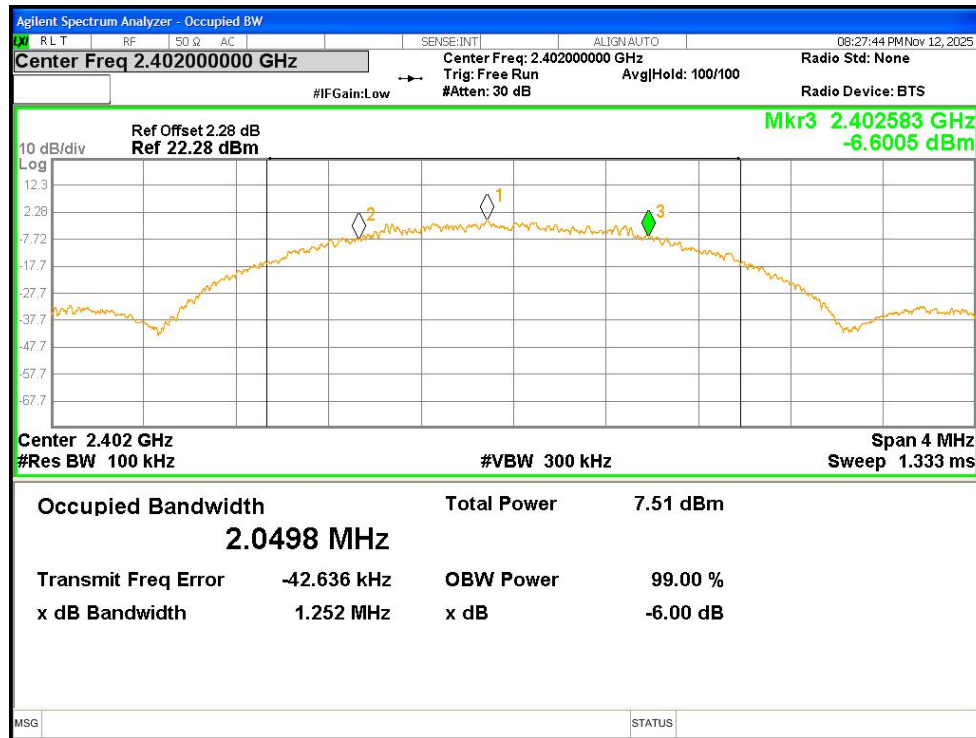
-6dB Bandwidth NVNT BLE 1M 2442MHz Ant1



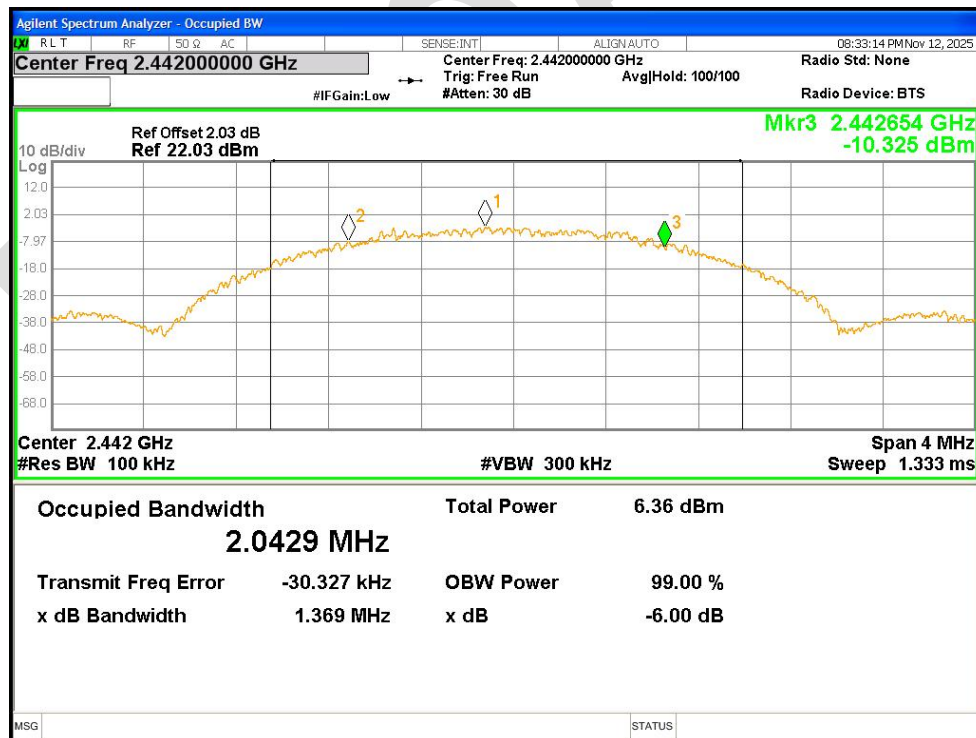
-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1



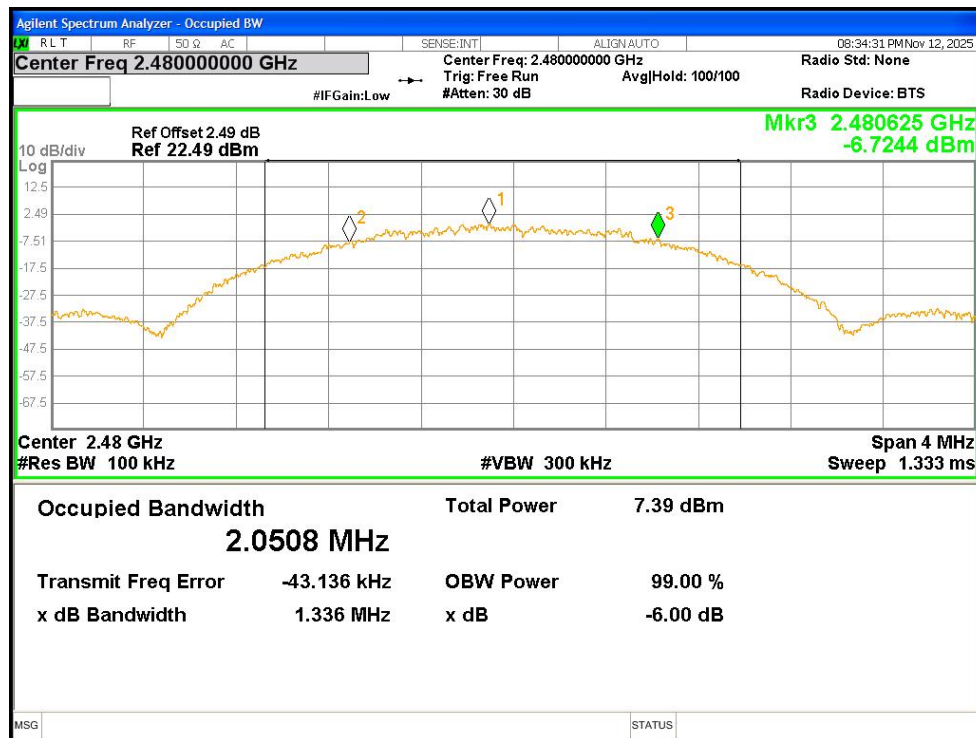
-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2442MHz Ant1



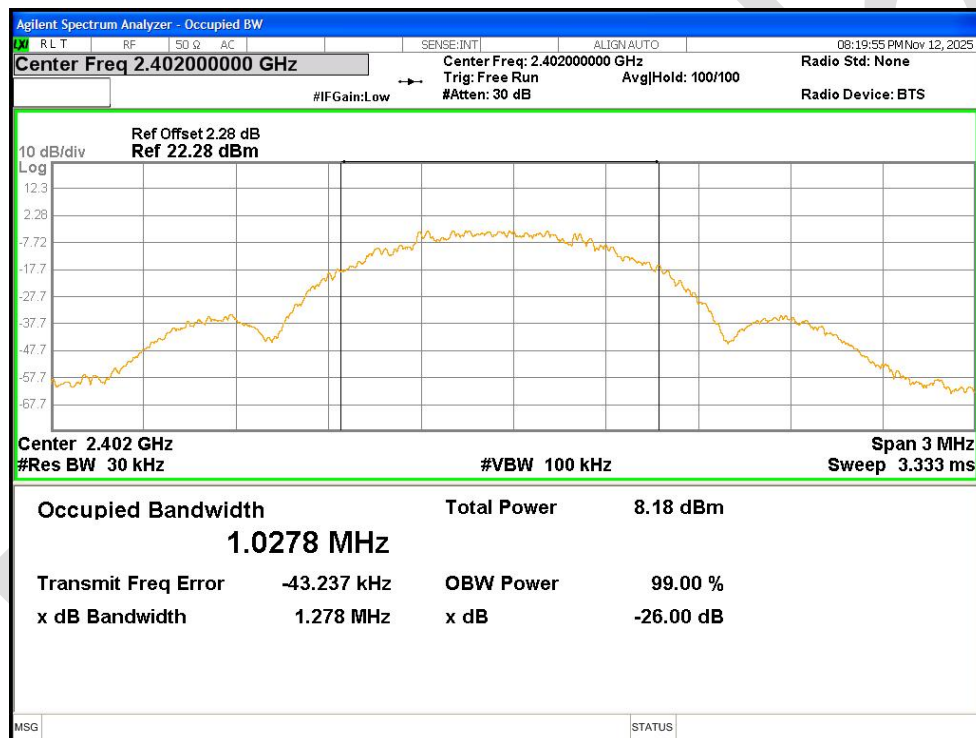
-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1



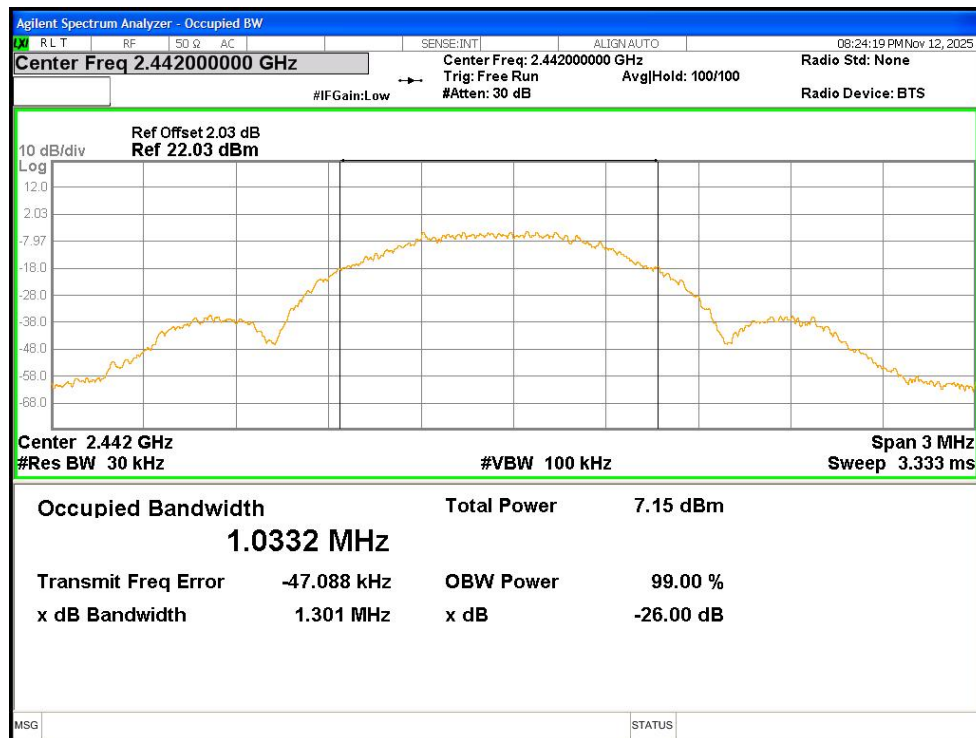
7.3 Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.0278
NVNT	BLE 1M	2442	Ant1	1.0332
NVNT	BLE 1M	2480	Ant1	1.0146
NVNT	BLE 2M	2402	Ant1	2.0534
NVNT	BLE 2M	2442	Ant1	2.0302
NVNT	BLE 2M	2480	Ant1	2.0377

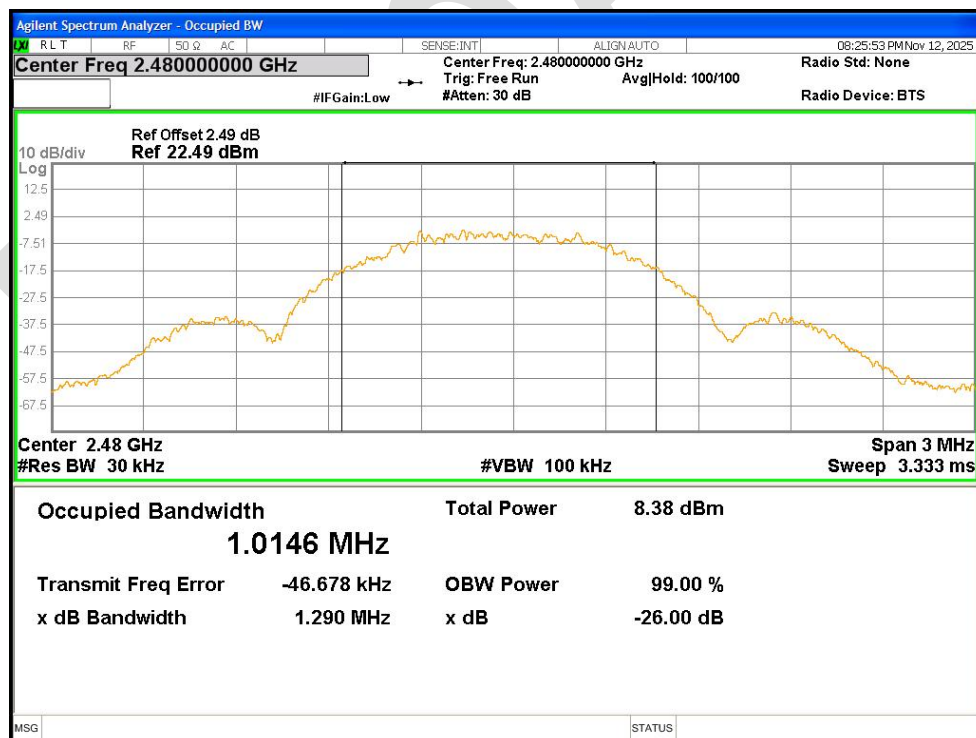
OBW NVNT BLE 1M 2402MHz Ant1



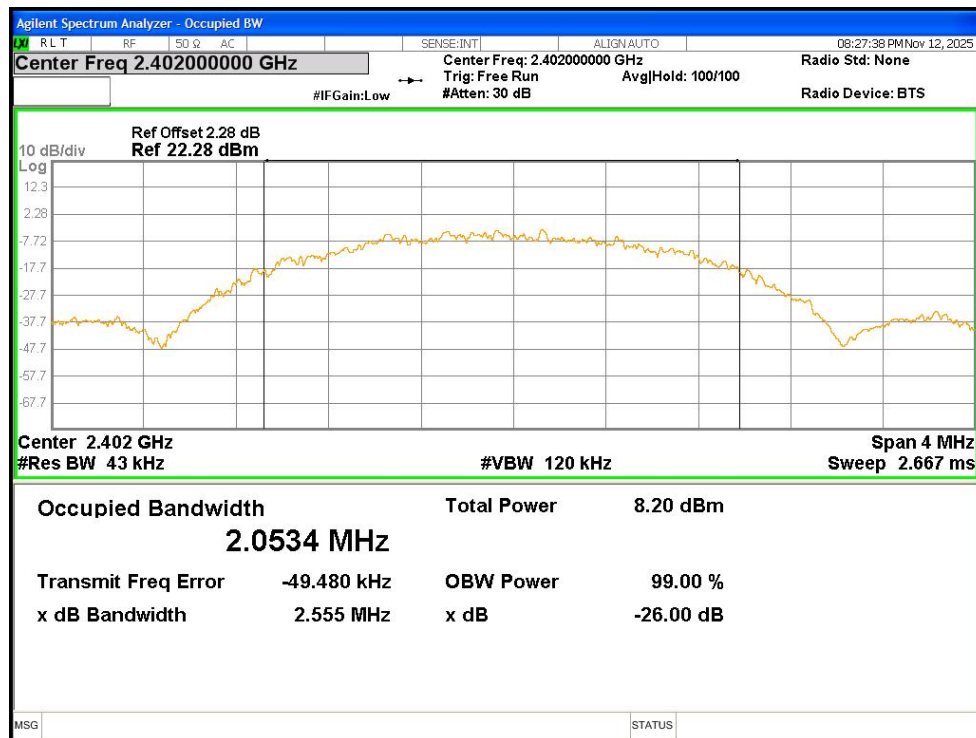
OBW NVNT BLE 1M 2442MHz Ant1



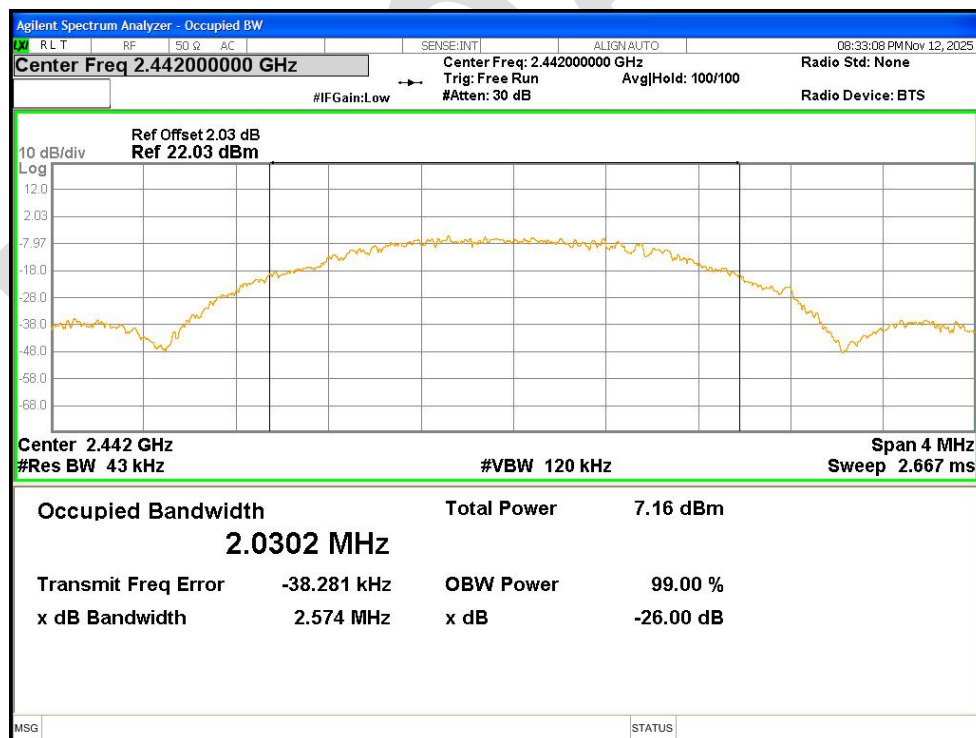
OBW NVNT BLE 1M 2480MHz Ant1



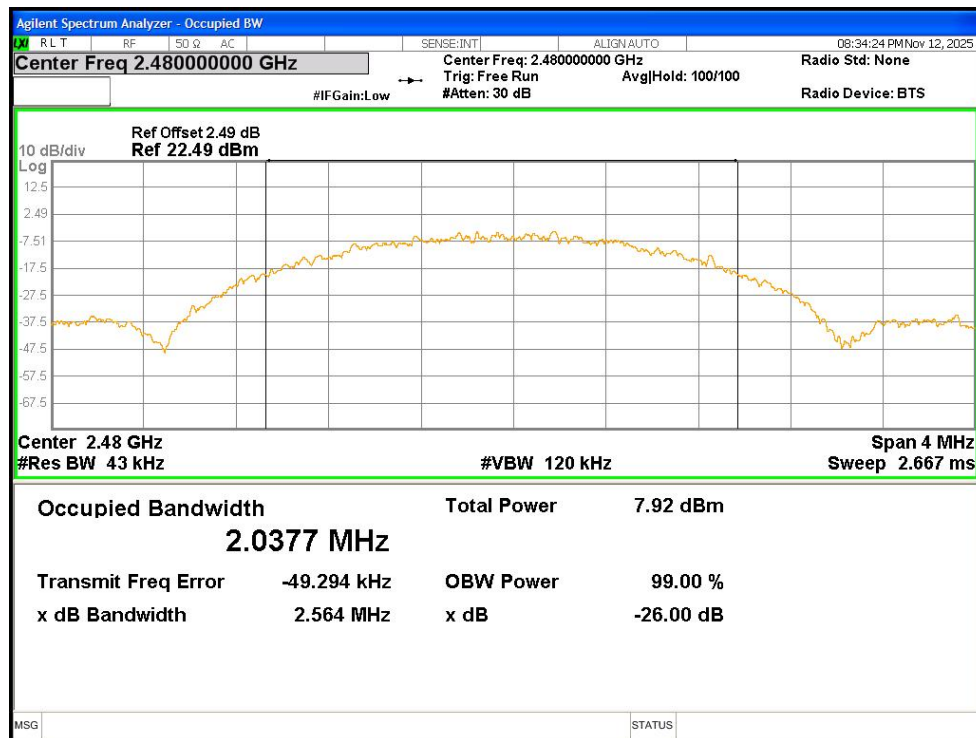
OBW NVNT BLE 2M 2402MHz Ant1



OBW NVNT BLE 2M 2442MHz Ant1



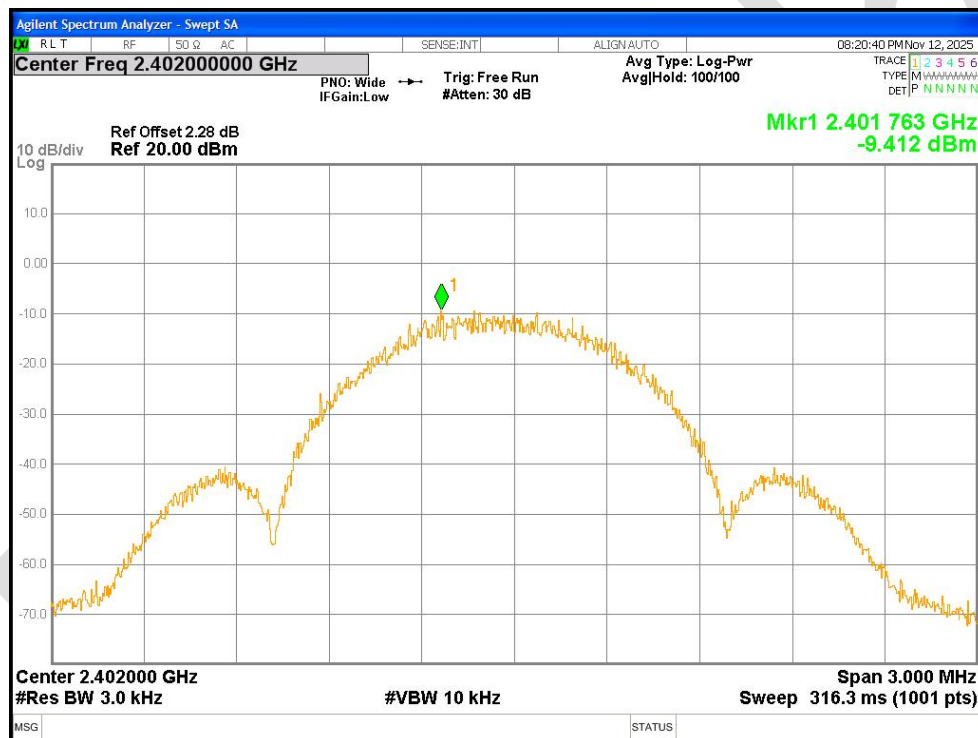
OBW NVNT BLE 2M 2480MHz Ant1



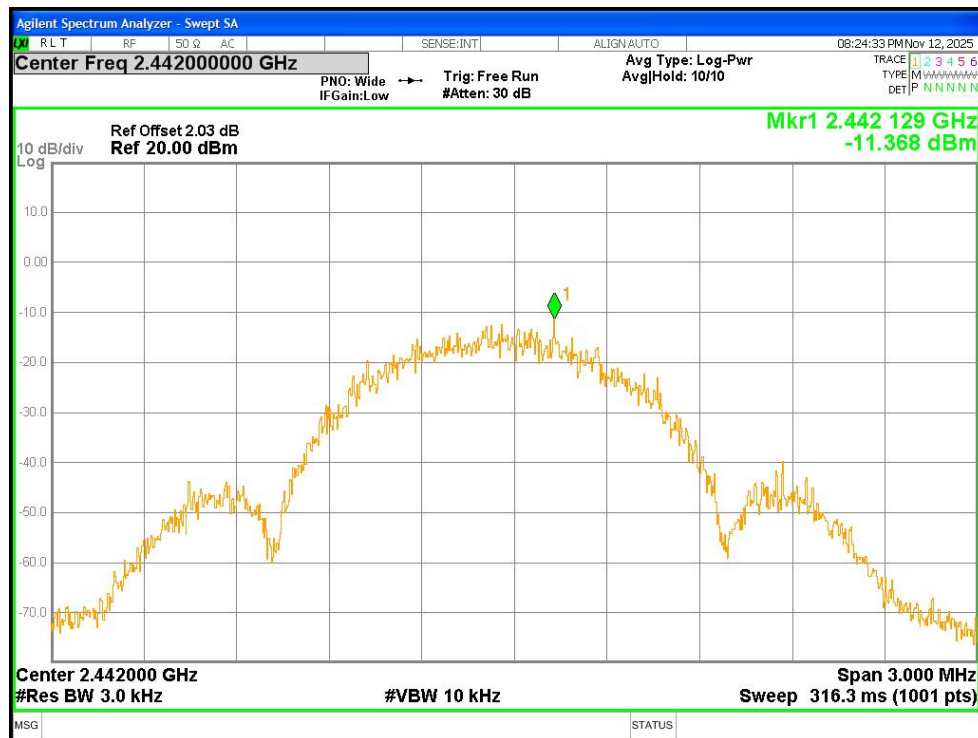
7.4 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-9.412	8	Pass
NVNT	BLE 1M	2442	Ant1	-11.368	8	Pass
NVNT	BLE 1M	2480	Ant1	-9.586	8	Pass
NVNT	BLE 2M	2402	Ant1	-13.903	8	Pass
NVNT	BLE 2M	2442	Ant1	-12.756	8	Pass
NVNT	BLE 2M	2480	Ant1	-13.663	8	Pass

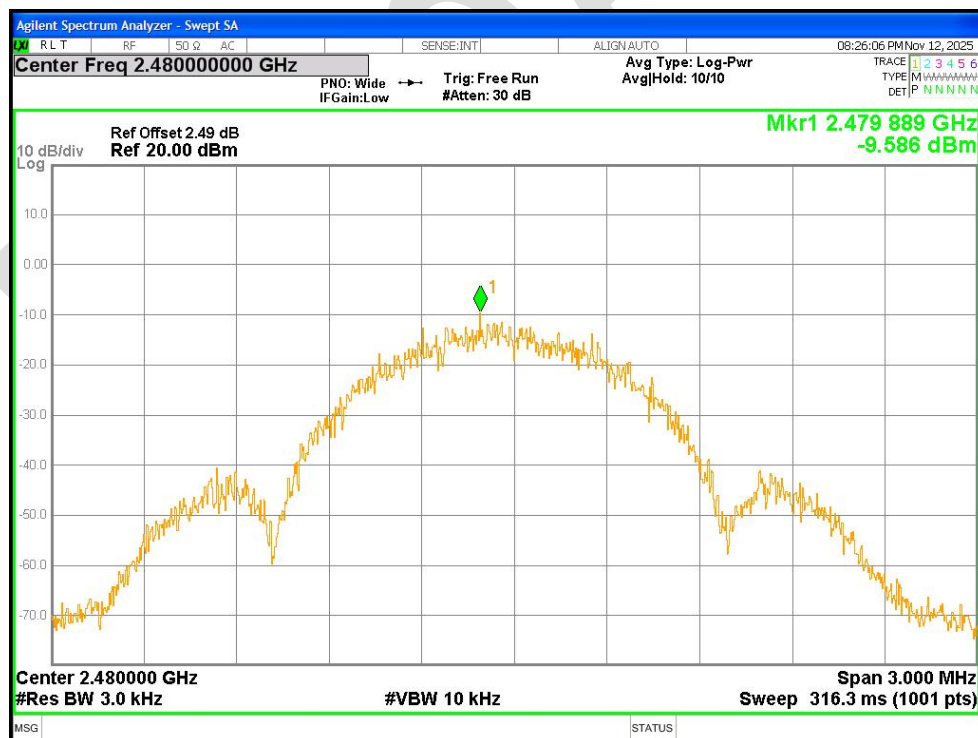
PSD NVNT BLE 1M 2402MHz Ant1



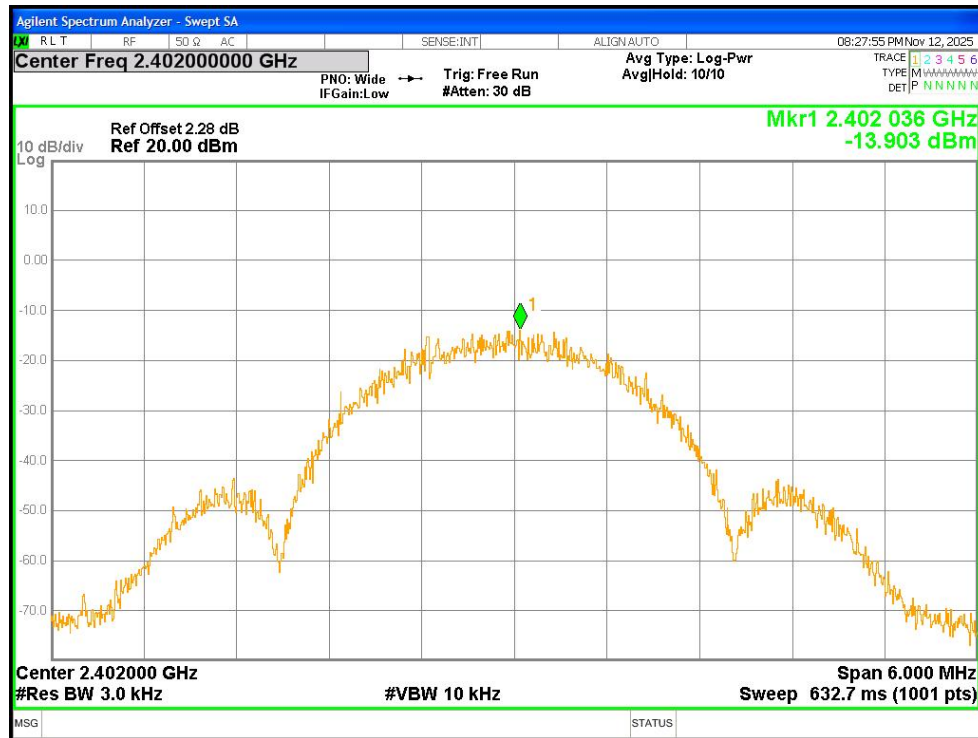
PSD NVNT BLE 1M 2442MHz Ant1



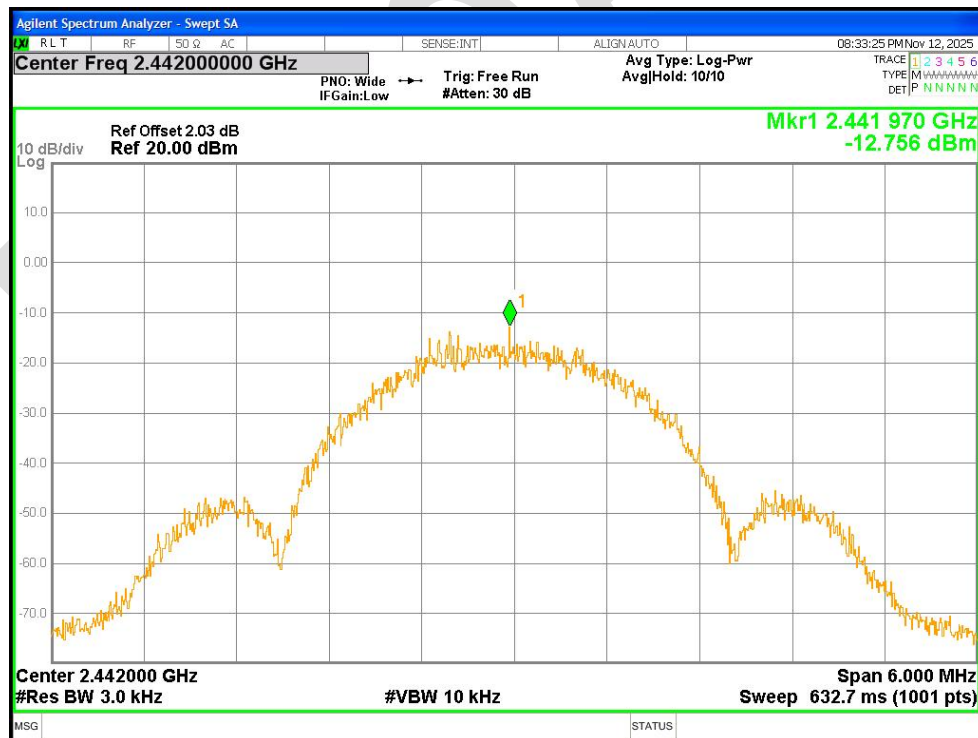
PSD NVNT BLE 1M 2480MHz Ant1



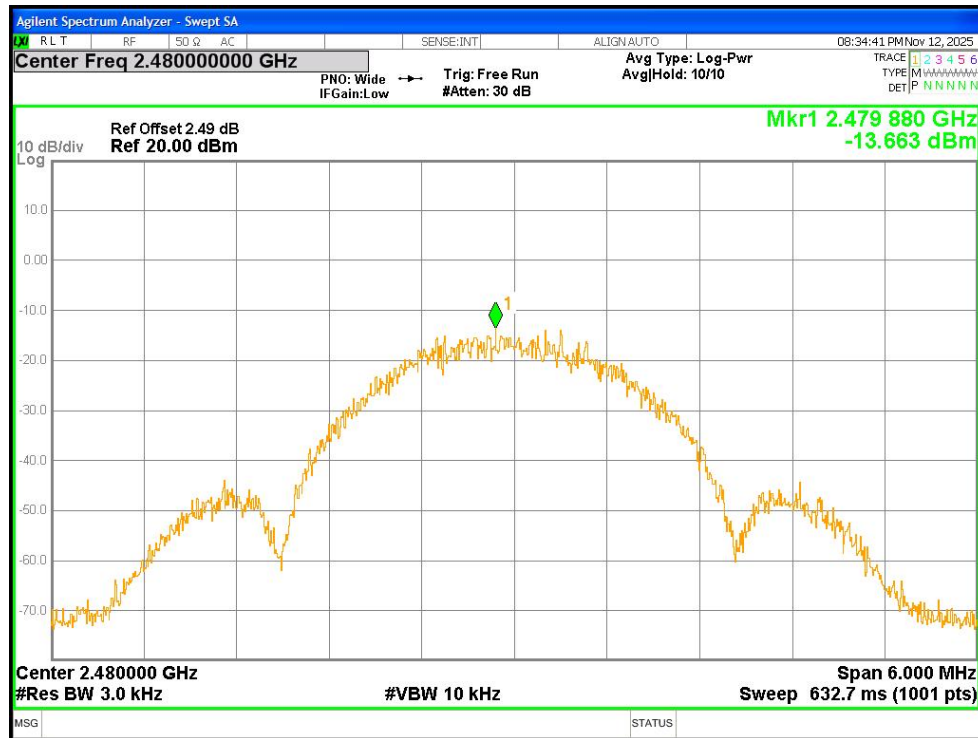
PSD NVNT BLE 2M 2402MHz Ant1



PSD NVNT BLE 2M 2442MHz Ant1



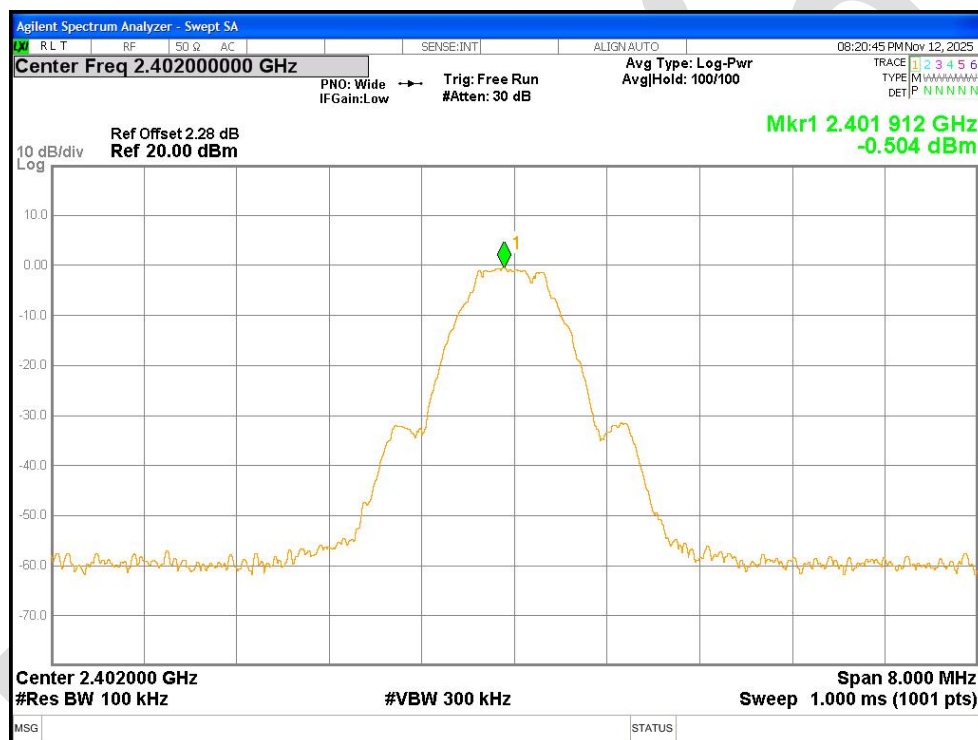
PSD NVNT BLE 2M 2480MHz Ant1



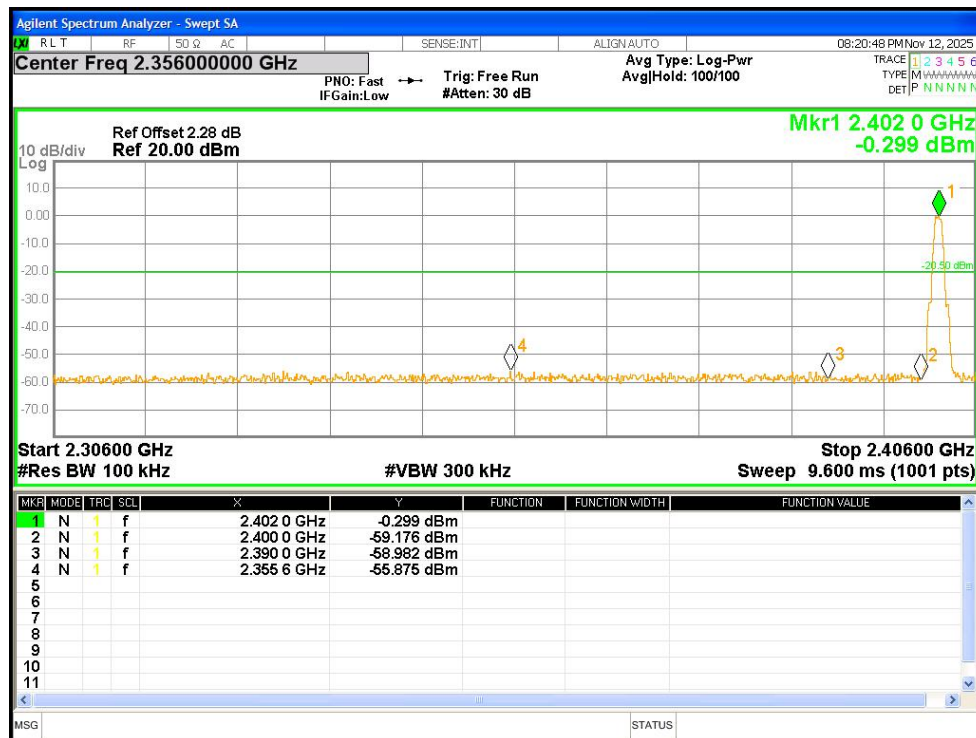
7.5 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-55.37	-20	Pass
NVNT	BLE 1M	2480	Ant1	-55.15	-20	Pass
NVNT	BLE 2M	2402	Ant1	-54	-20	Pass
NVNT	BLE 2M	2480	Ant1	-53.19	-20	Pass

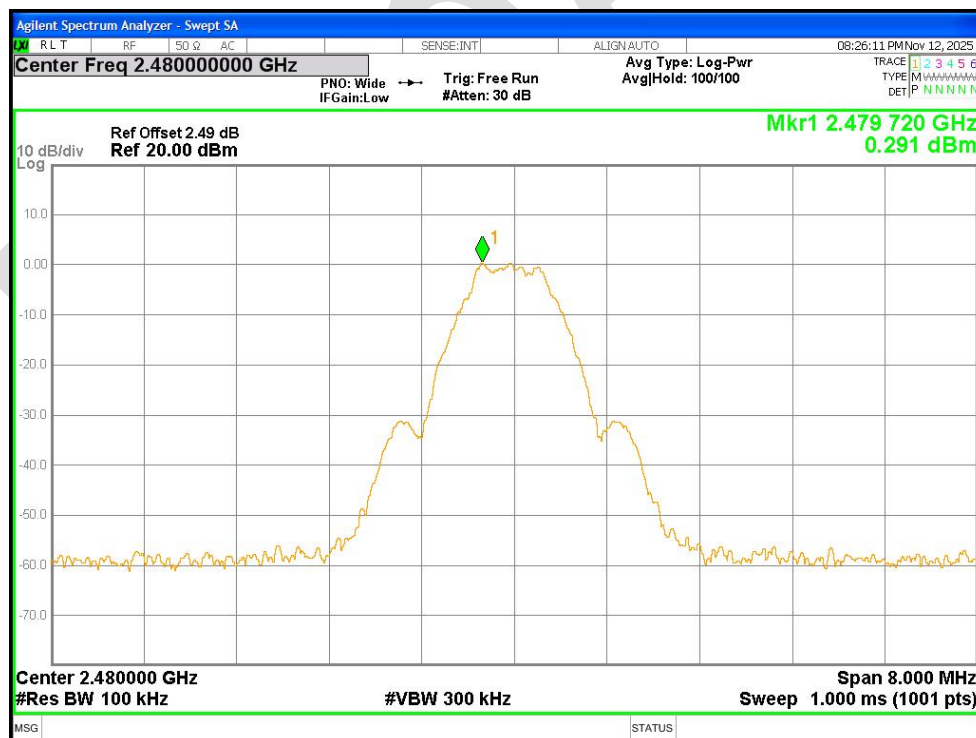
Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission