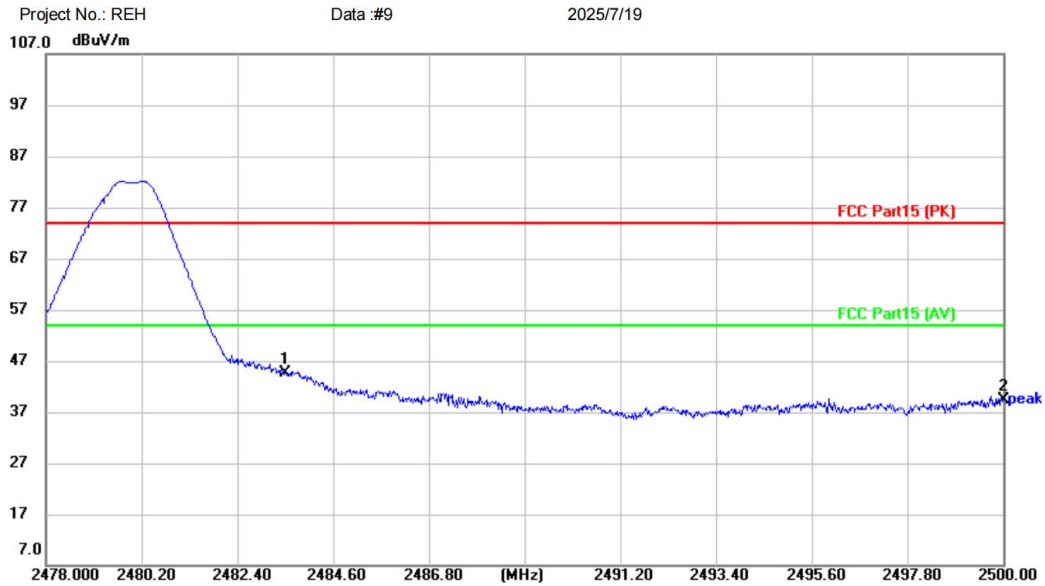


[Test mode: TX High channel]; [Polarity: Horizontal]

Radiated Emission Measurement


Site: Polarization: **Horizontal** Temperature: (C)

Limit: FCC Part15 (PK) Power: Humidity: %RH

EUT: SK509-W-2S-A

M/N: 50333

Mode: BLE1M-2480

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2483.500	47.61	-2.91	44.70	74.00	-29.30	peak	
2		2500.000	42.50	-3.00	39.50	74.00	-34.50	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

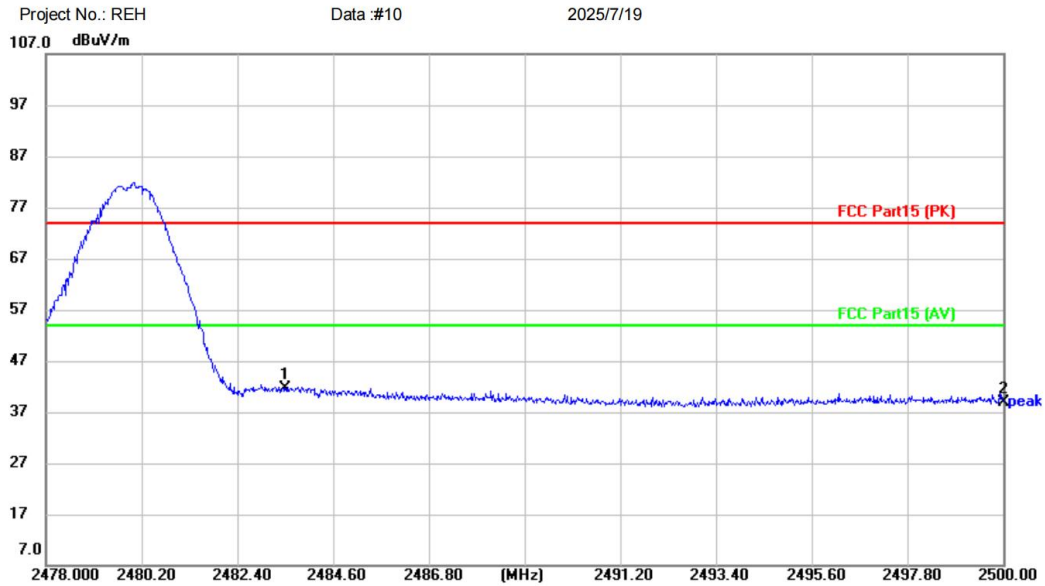
Receiver: ESR_1

Spectrum Analyzer: FSP40

Test Result: Pass

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

Radiated Emission Measurement



Site Polarization: **Vertical** Temperature: (C)
Limit: FCC Part15 (PK) Power: Humidity: %RH
EUT: SK509-W-2S-A
M/N: 50333
Mode: BLE1M-2480
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2483.500	44.66	-2.91	41.75	74.00	-32.25	peak	
2		2500.000	41.80	-3.00	38.80	74.00	-35.20	peak	

*:Maximum data x:Over limit !:over margin

<Reference Only

Receiver: ESR_1

Spectrum Analyzer: FSP40

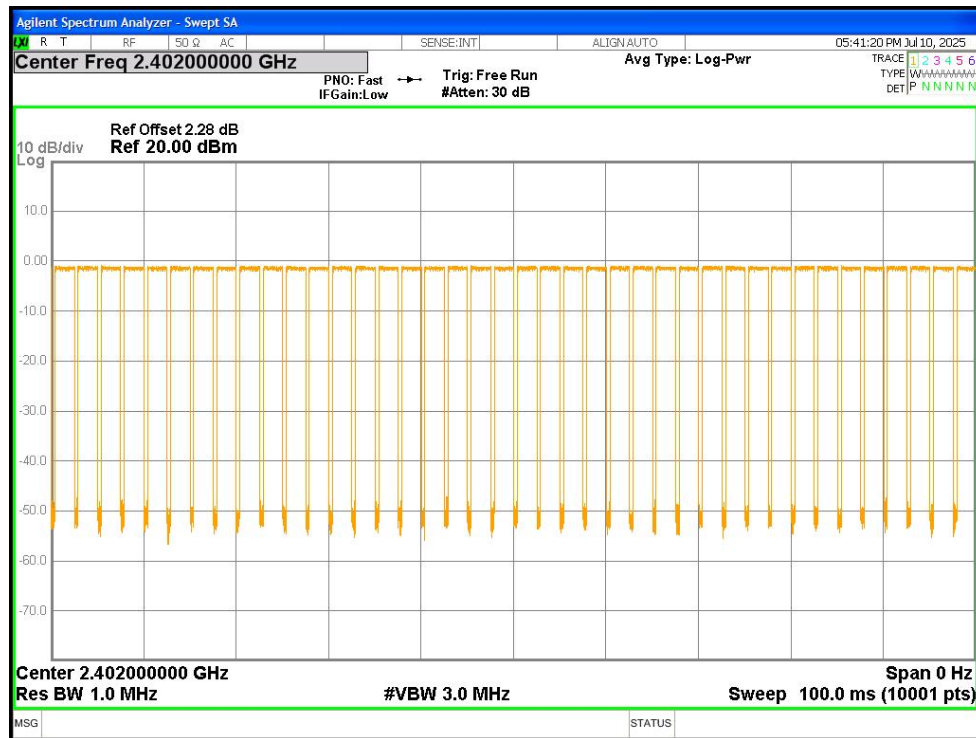
Test Result: Pass

7 Appendix A

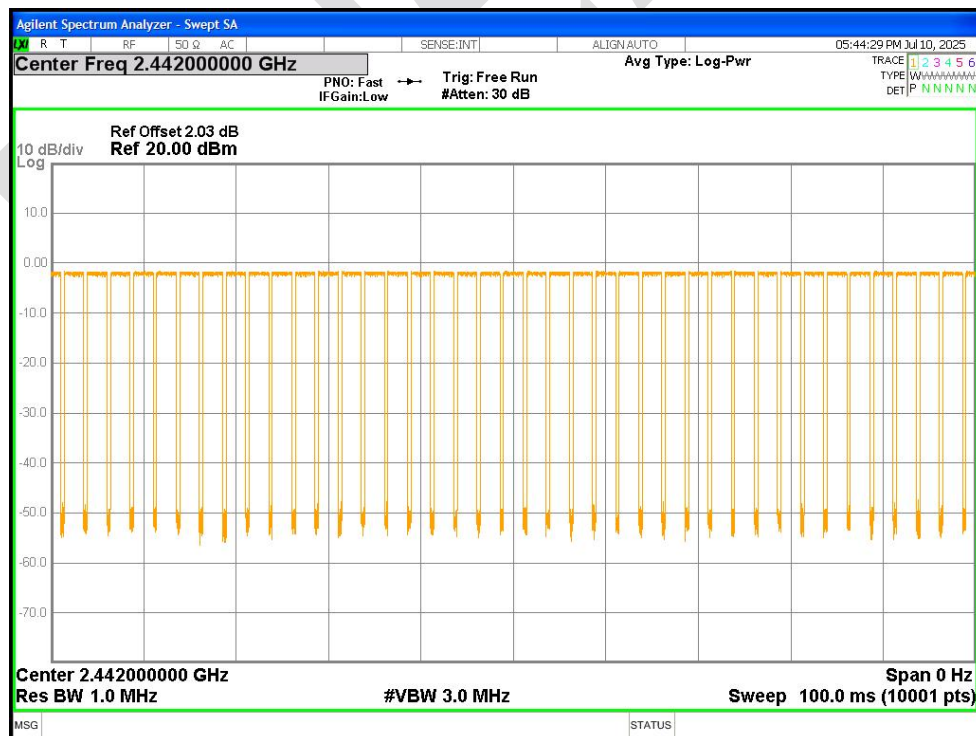
7.1 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	BLE 1M	2402	Ant1	84.4	0.74
NVNT	BLE 1M	2442	Ant1	84.4	0.74
NVNT	BLE 1M	2480	Ant1	84.4	0.74
NVNT	BLE 2M	2402	Ant1	57.42	2.41
NVNT	BLE 2M	2442	Ant1	57.15	2.43
NVNT	BLE 2M	2480	Ant1	57.6	2.4

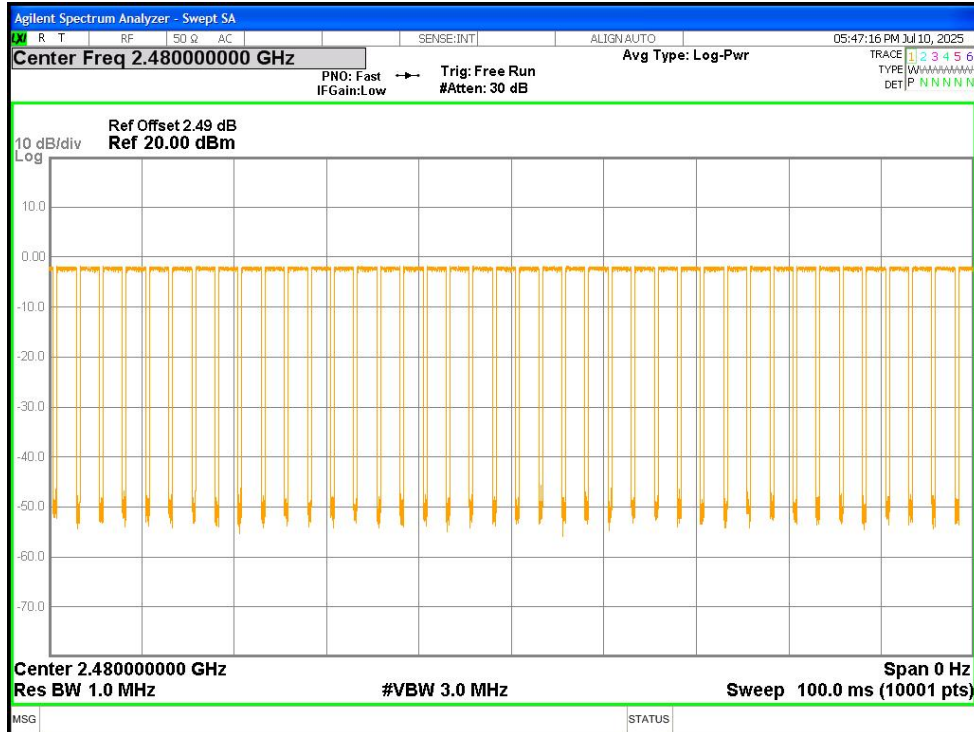
Duty Cycle NVNT BLE 1M 2402MHz Ant1



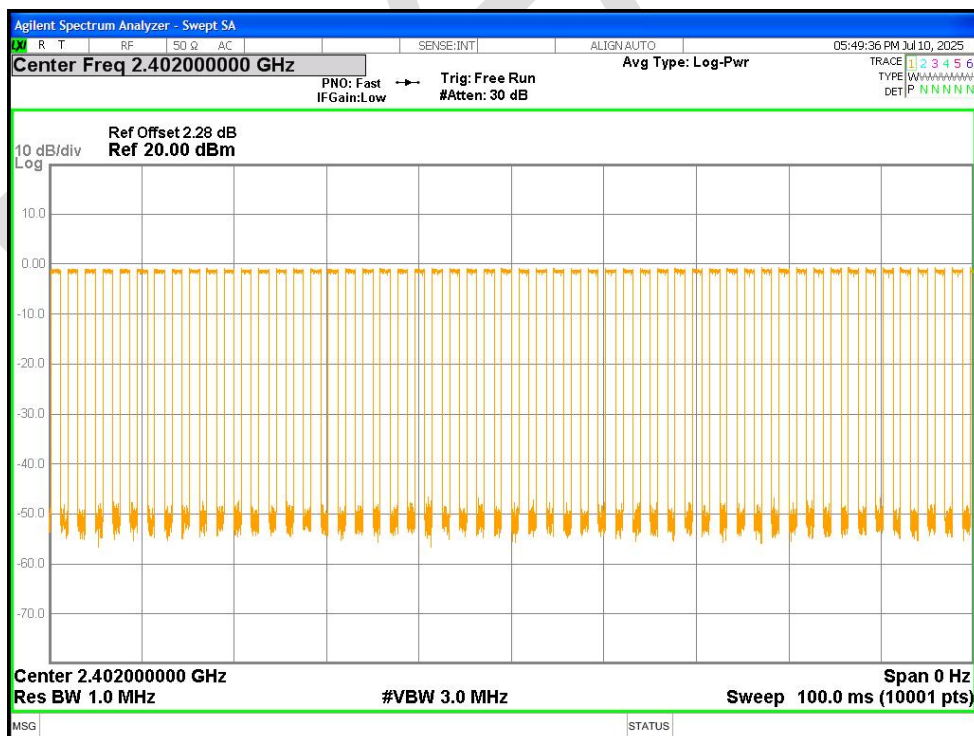
Duty Cycle NVNT BLE 1M 2442MHz Ant1



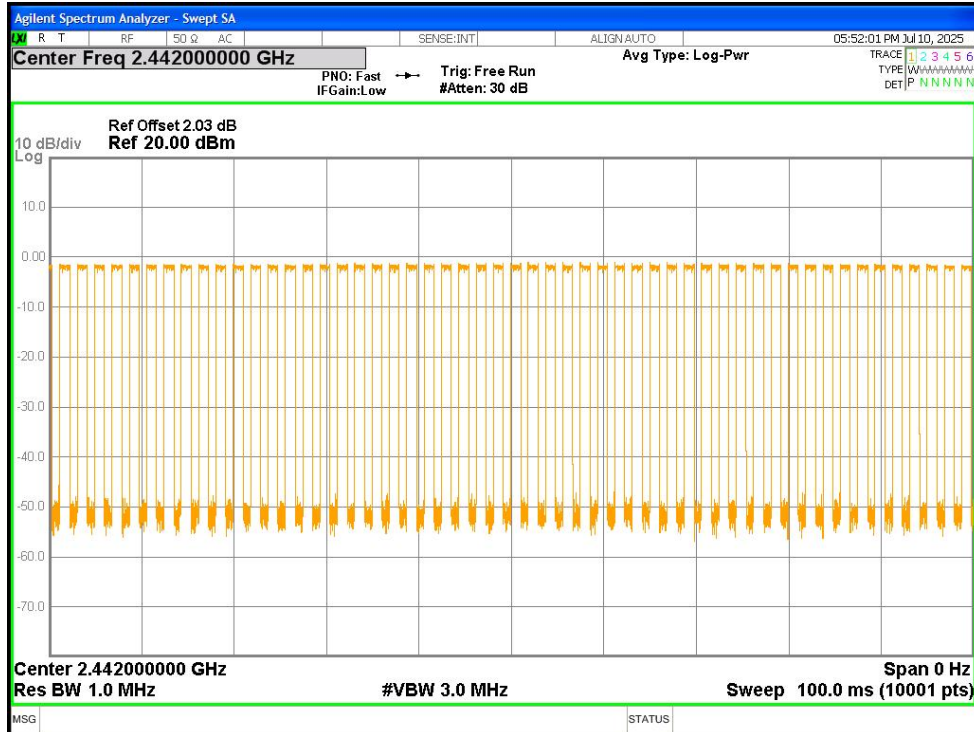
Duty Cycle NVNT BLE 1M 2480MHz Ant1



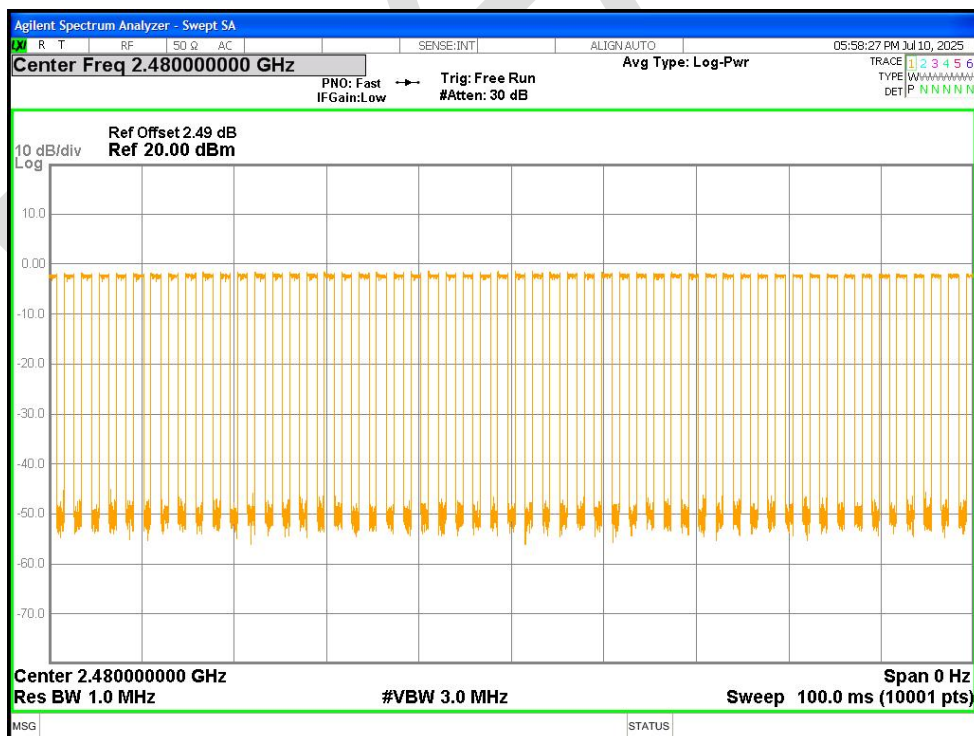
Duty Cycle NVNT BLE 2M 2402MHz Ant1



Duty Cycle NVNT BLE 2M 2442MHz Ant1



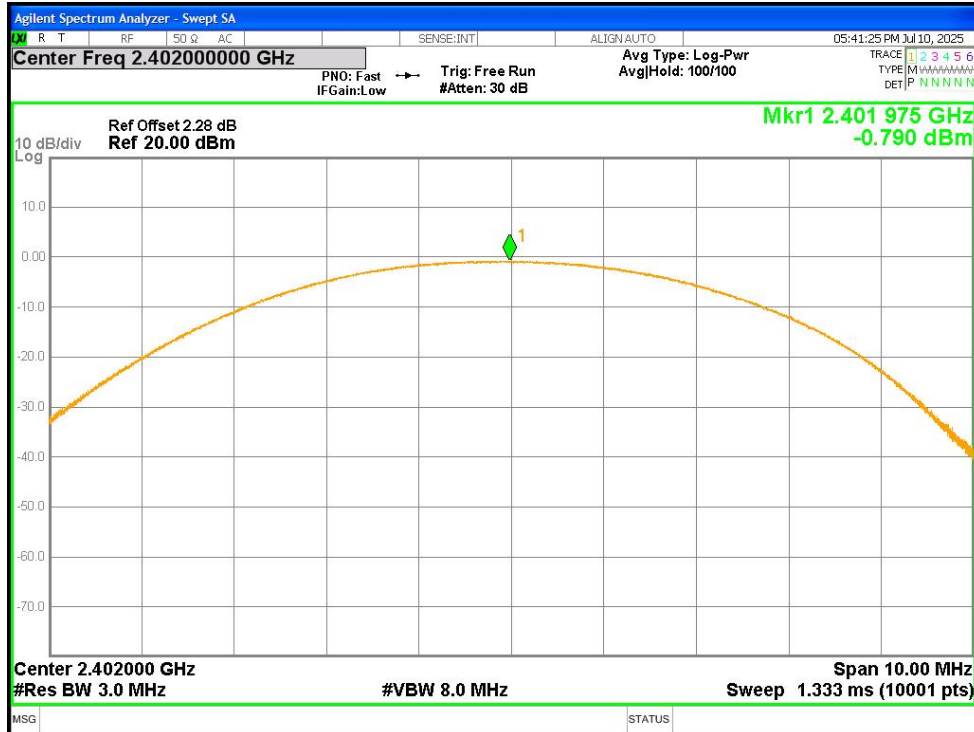
Duty Cycle NVNT BLE 2M 2480MHz Ant1



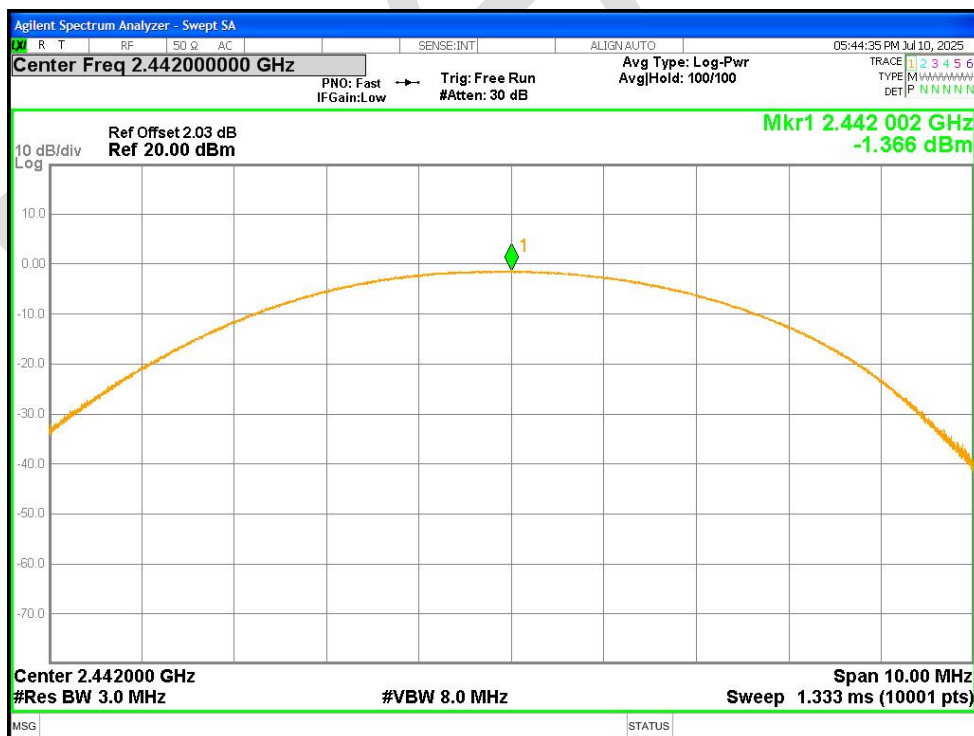
7.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-0.79	30	Pass
NVNT	BLE 1M	2442	Ant1	-1.366	30	Pass
NVNT	BLE 1M	2480	Ant1	-1.607	30	Pass
NVNT	BLE 2M	2402	Ant1	-0.493	30	Pass
NVNT	BLE 2M	2442	Ant1	-1.042	30	Pass
NVNT	BLE 2M	2480	Ant1	-1.403	30	Pass

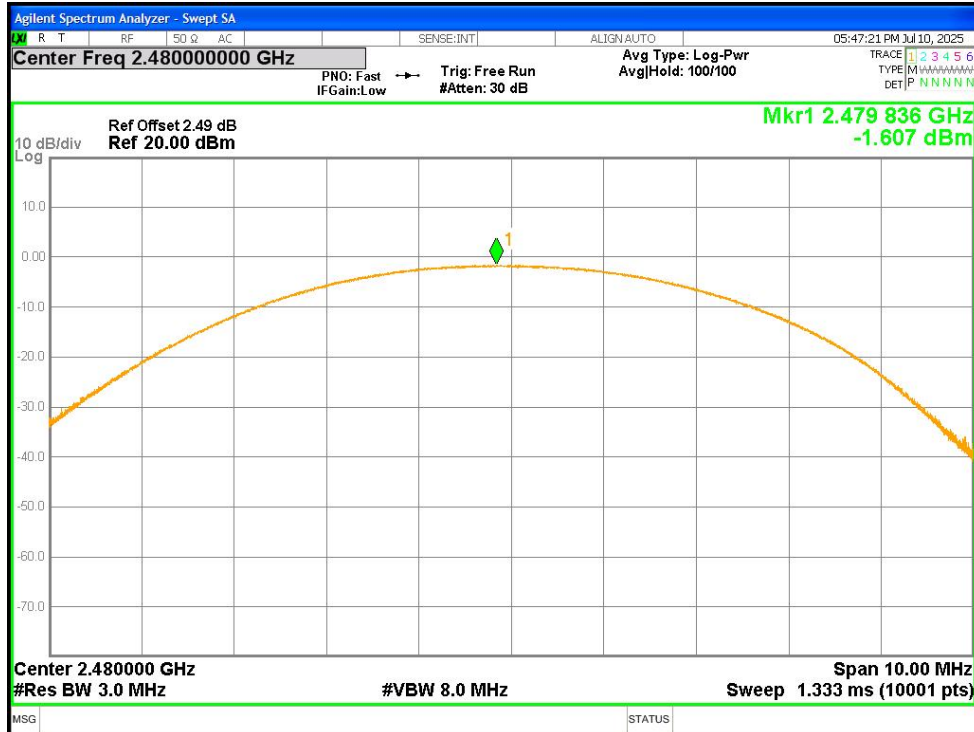
Power NVNT BLE 1M 2402MHz Ant1



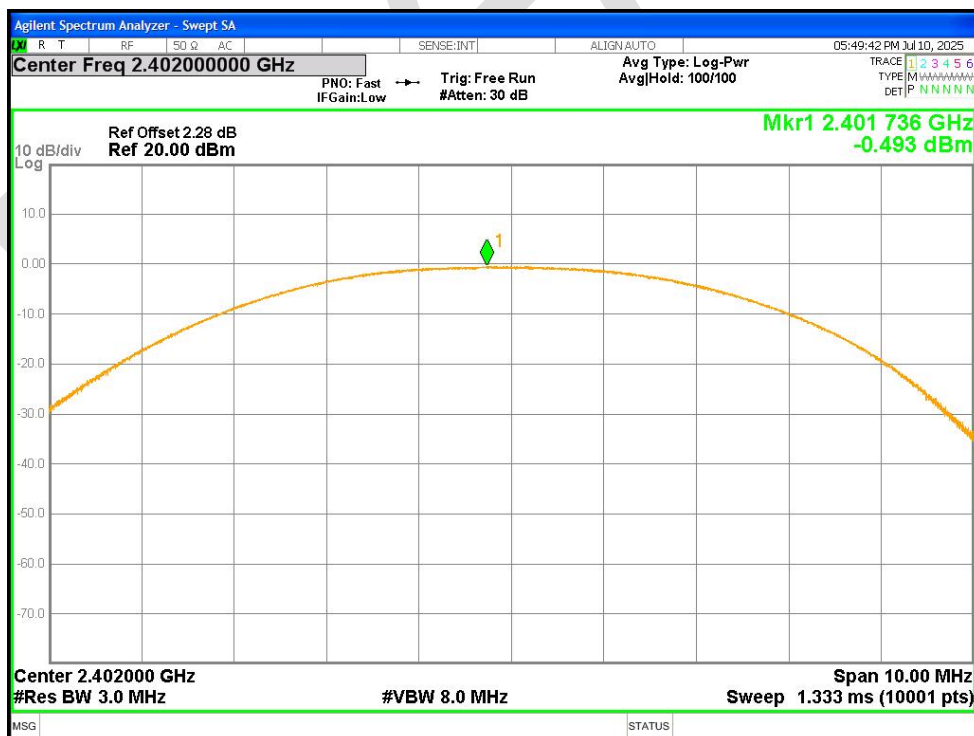
Power NVNT BLE 1M 2442MHz Ant1



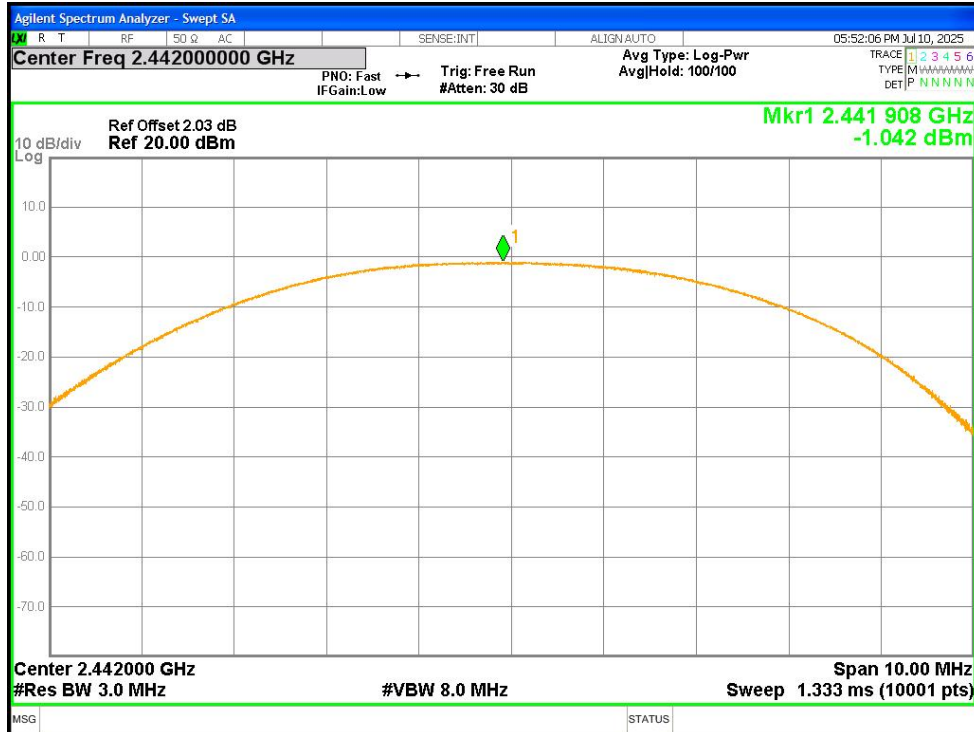
Power NVNT BLE 1M 2480MHz Ant1



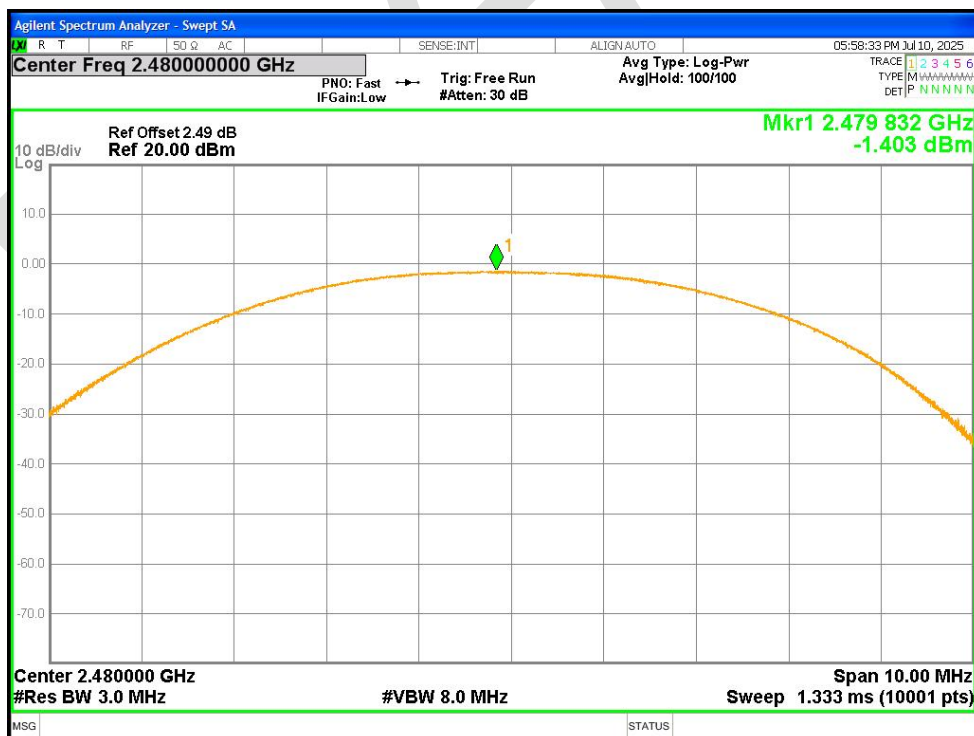
Power NVNT BLE 2M 2402MHz Ant1



Power NVNT BLE 2M 2442MHz Ant1



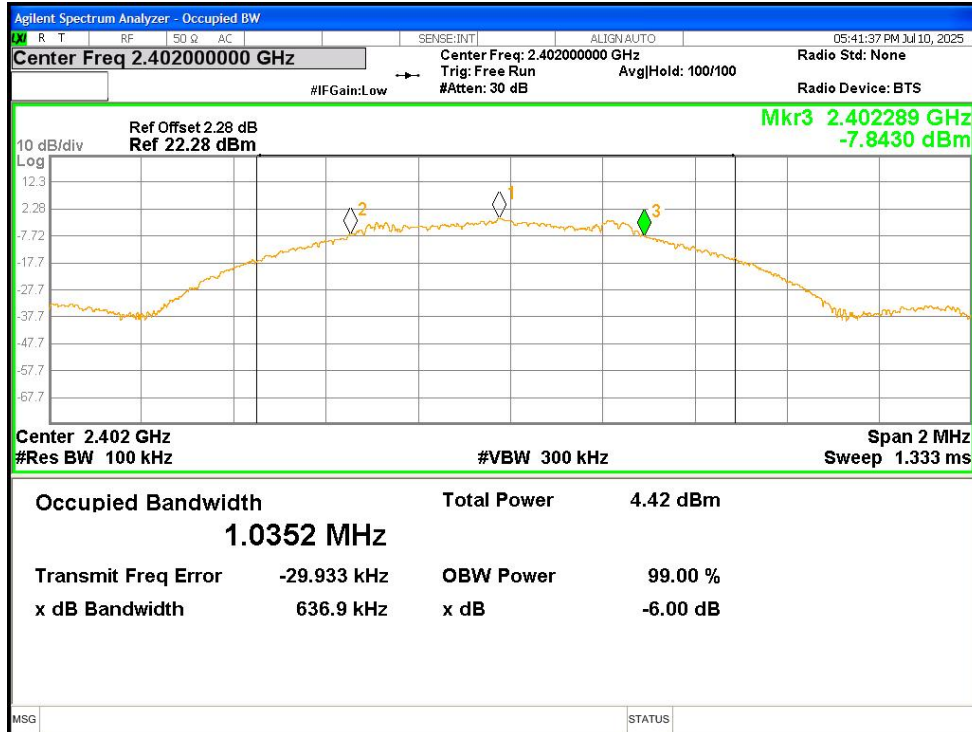
Power NVNT BLE 2M 2480MHz Ant1



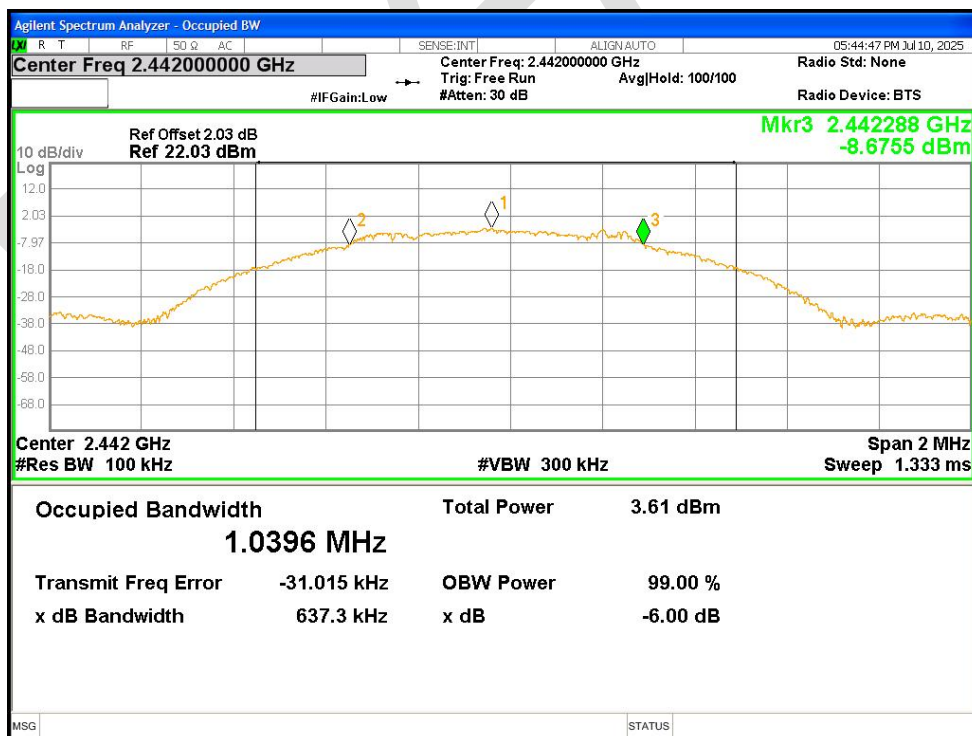
7.3 -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.637	0.5	Pass
NVNT	BLE 1M	2442	Ant1	0.637	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.639	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.133	0.5	Pass
NVNT	BLE 2M	2442	Ant1	1.164	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.131	0.5	Pass

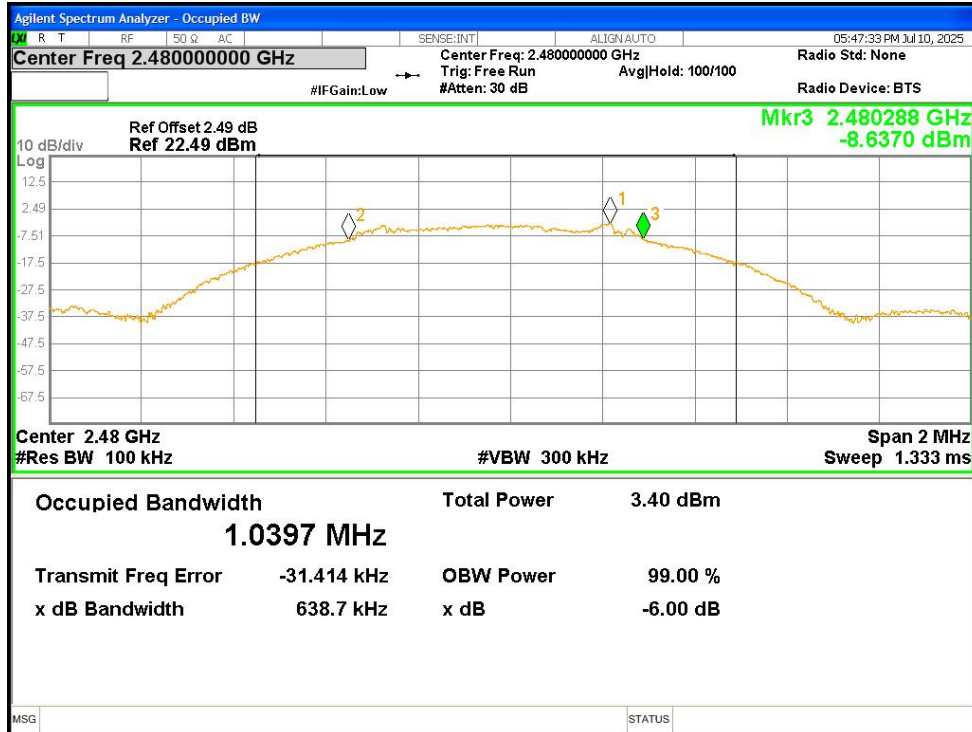
-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



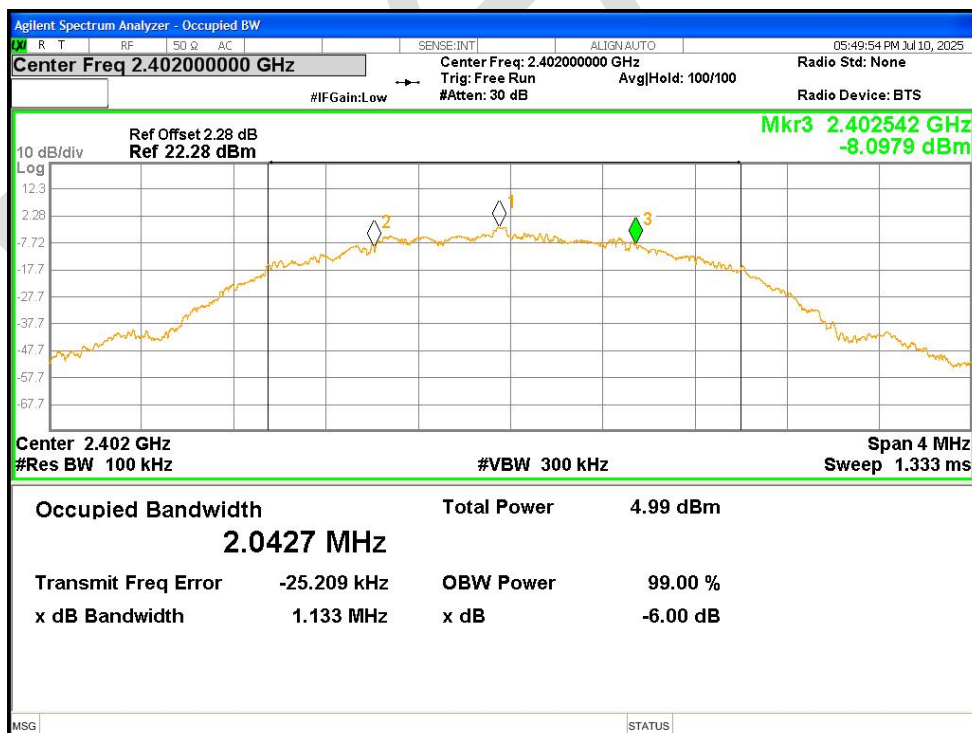
-6dB Bandwidth NVNT BLE 1M 2442MHz Ant1



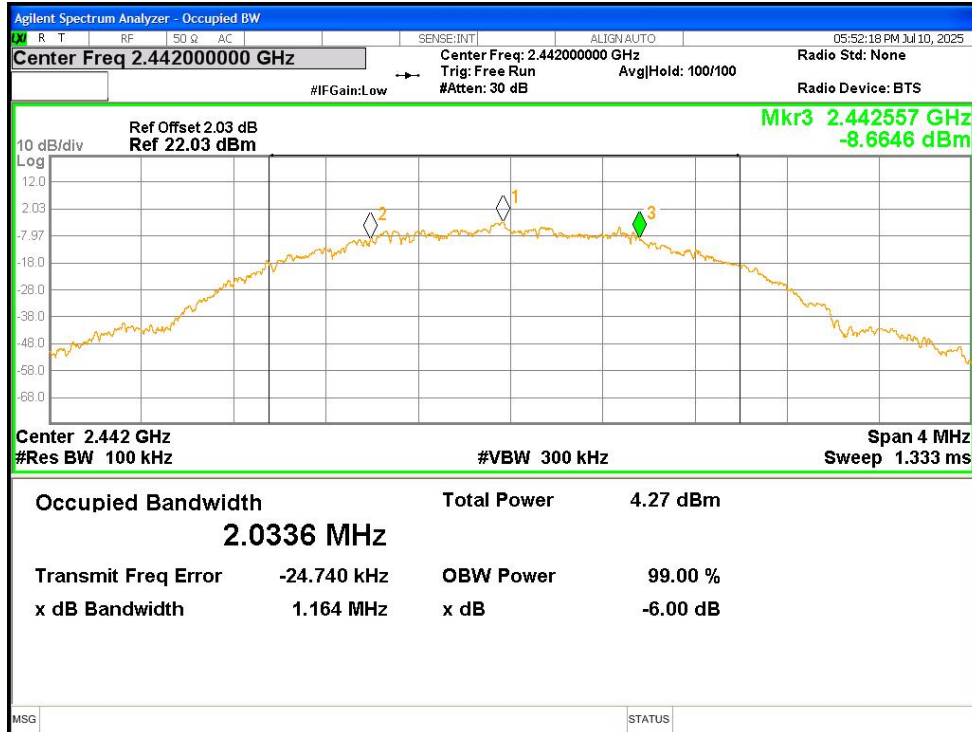
-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1



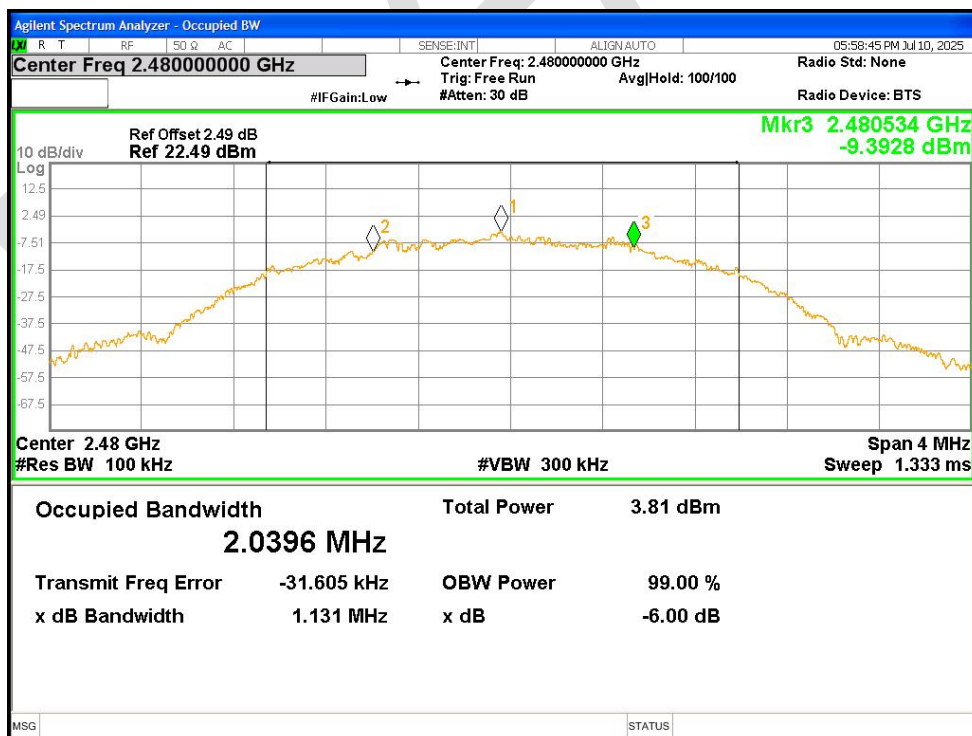
-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2442MHz Ant1



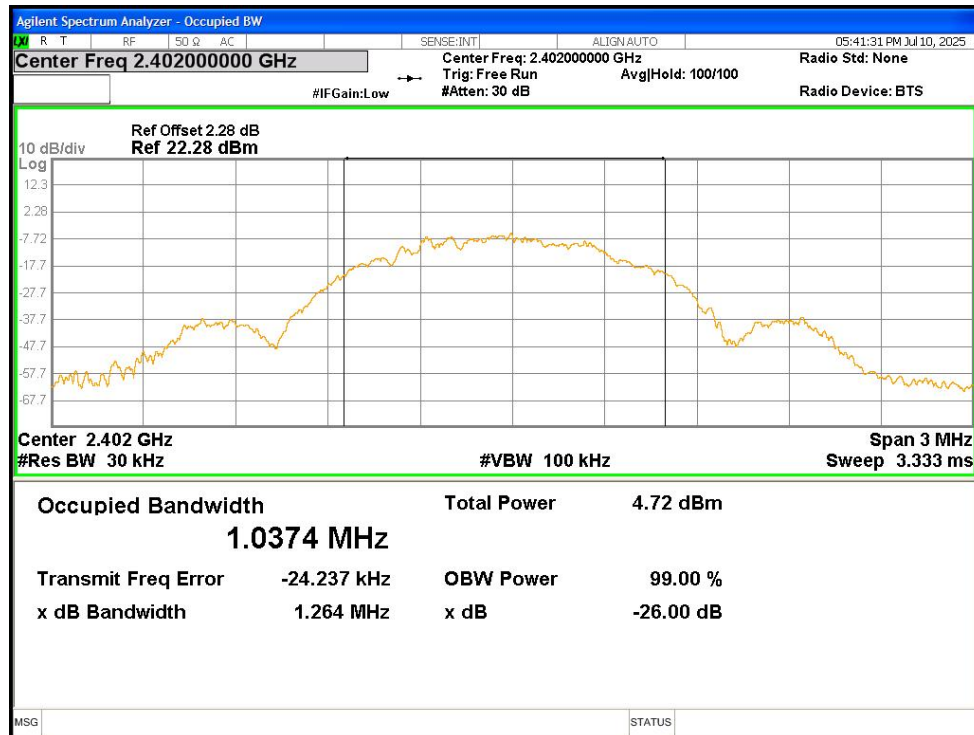
-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1



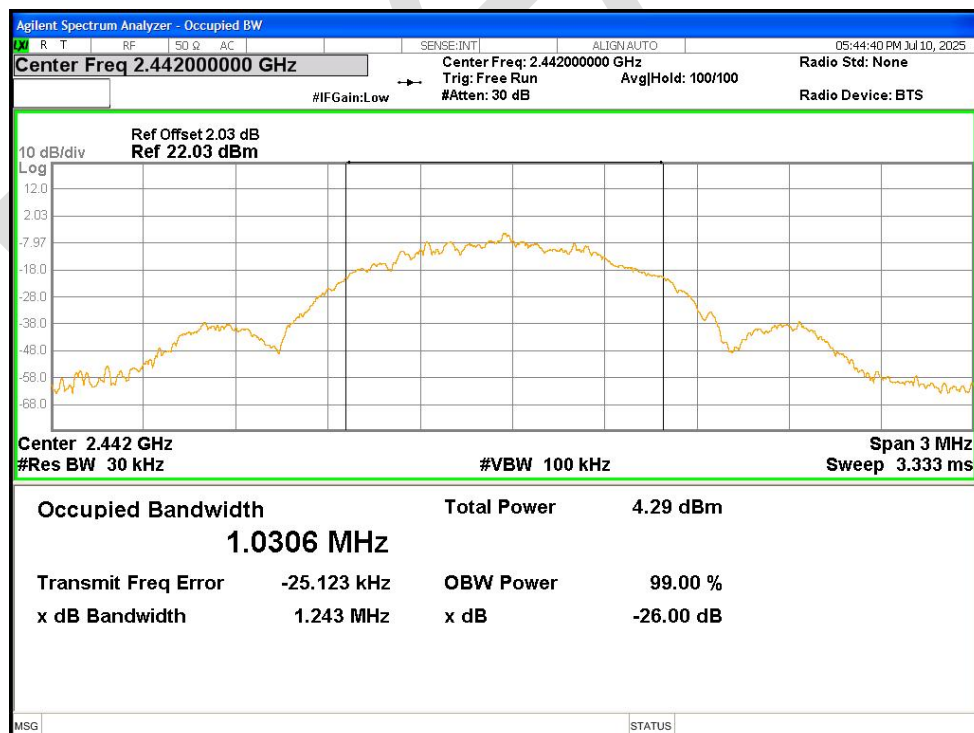
7.4 Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.0374
NVNT	BLE 1M	2442	Ant1	1.0306
NVNT	BLE 1M	2480	Ant1	1.0340
NVNT	BLE 2M	2402	Ant1	2.0488
NVNT	BLE 2M	2442	Ant1	2.0404
NVNT	BLE 2M	2480	Ant1	2.0512

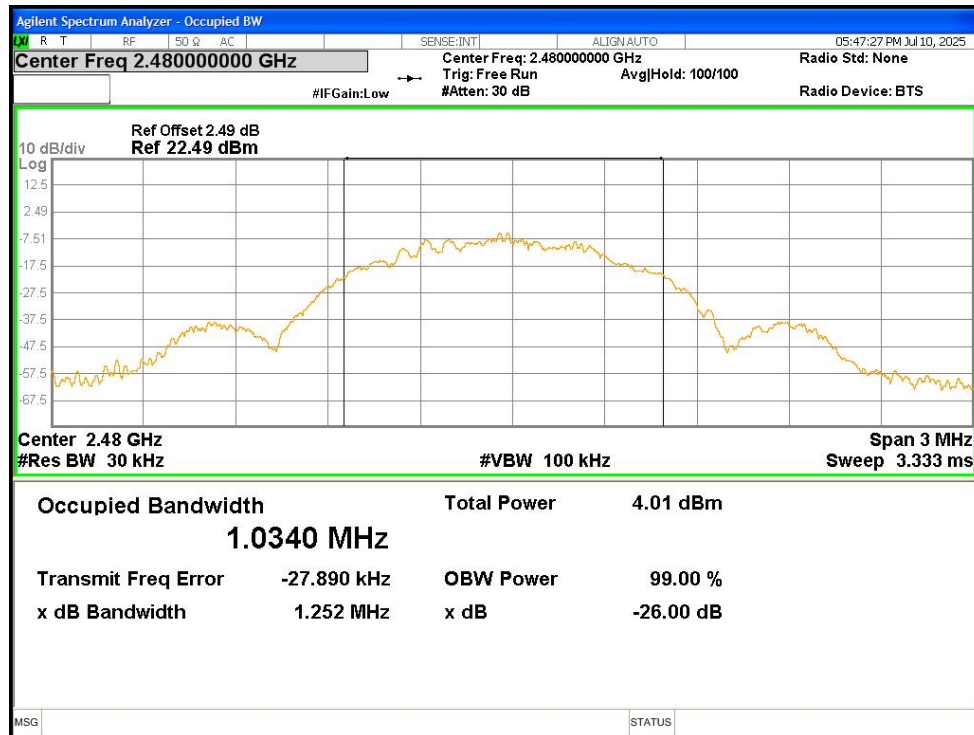
OBW NVNT BLE 1M 2402MHz Ant1



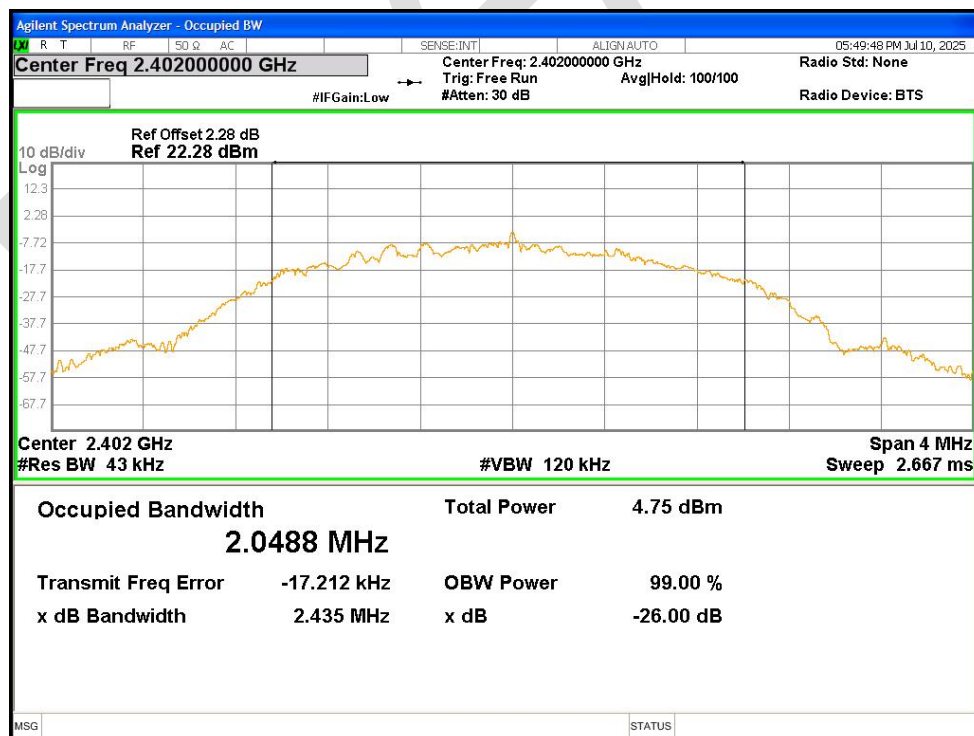
OBW NVNT BLE 1M 2442MHz Ant1



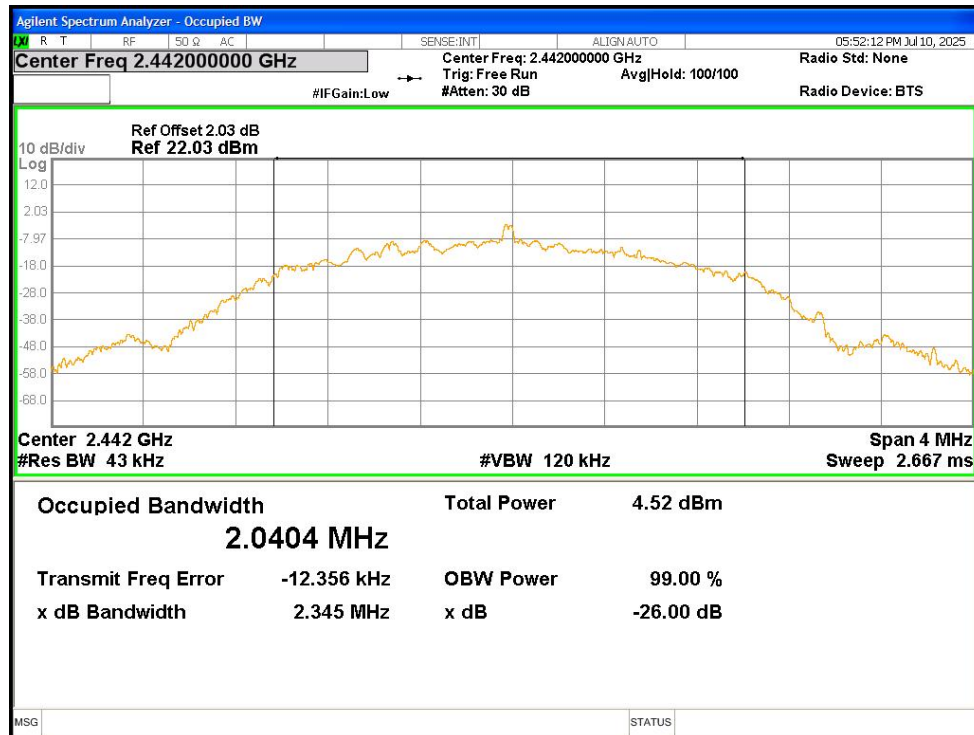
OBW NVNT BLE 1M 2480MHz Ant1



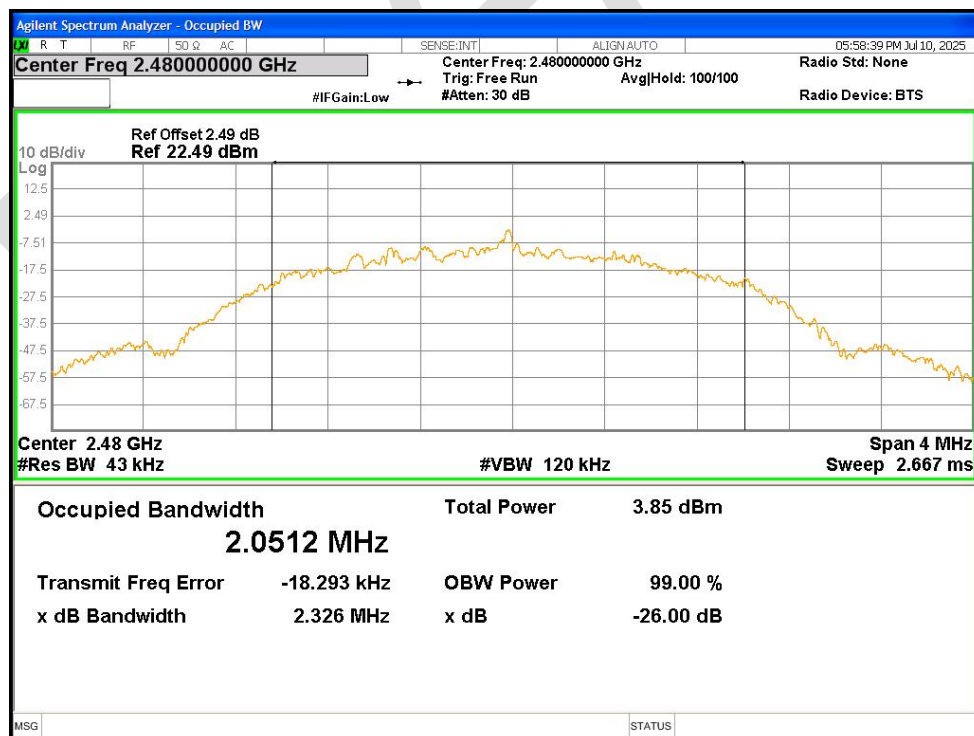
OBW NVNT BLE 2M 2402MHz Ant1



OBW NVNT BLE 2M 2442MHz Ant1



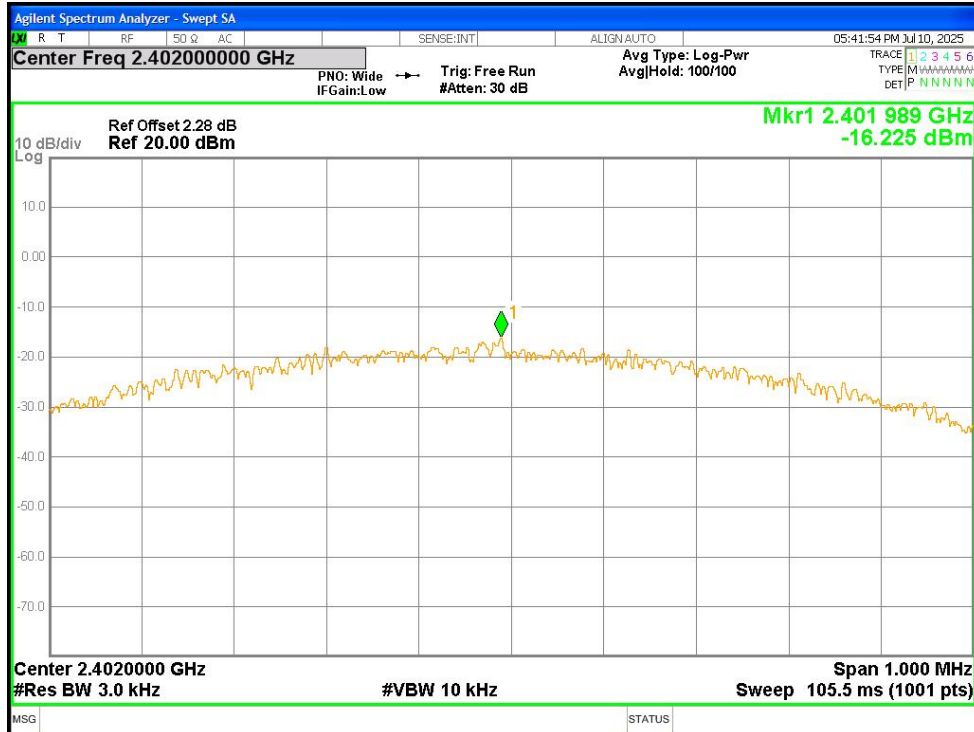
OBW NVNT BLE 2M 2480MHz Ant1



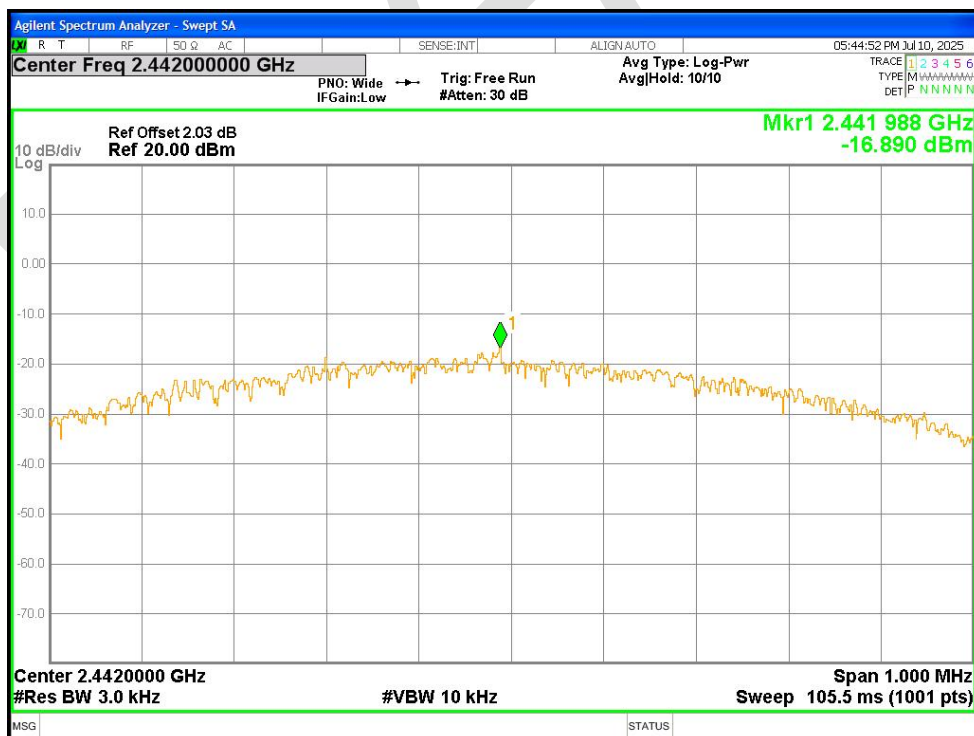
7.5 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3KHz)	Limit (dBm/3KHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-16.225	8	Pass
NVNT	BLE 1M	2442	Ant1	-16.89	8	Pass
NVNT	BLE 1M	2480	Ant1	-17.385	8	Pass
NVNT	BLE 2M	2402	Ant1	-18.243	8	Pass
NVNT	BLE 2M	2442	Ant1	-18.737	8	Pass
NVNT	BLE 2M	2480	Ant1	-19.287	8	Pass

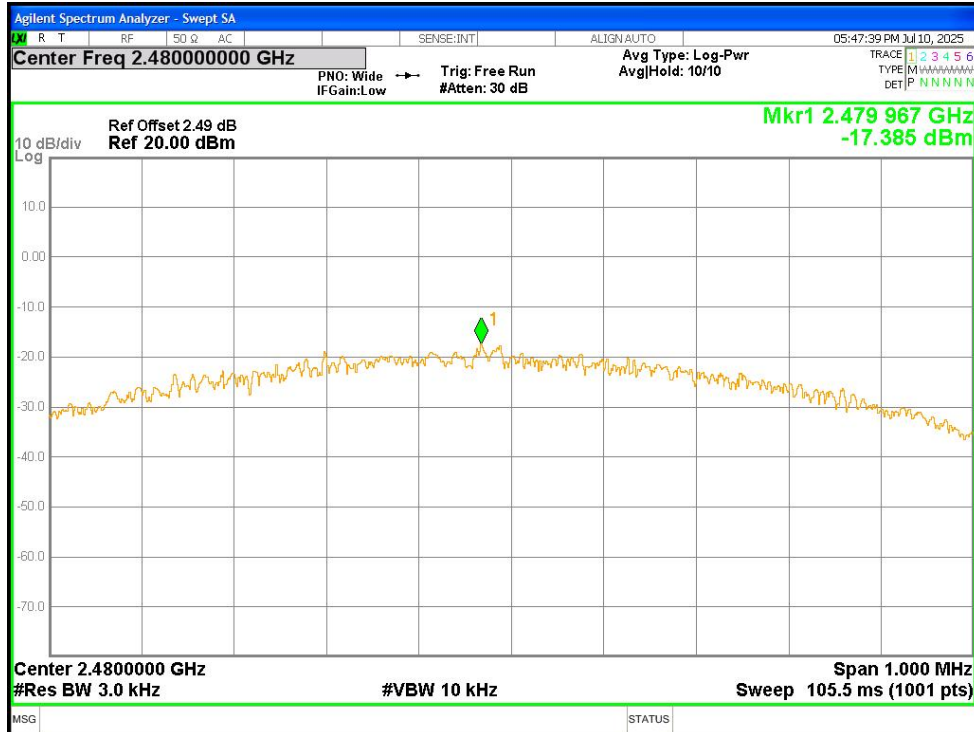
PSD NVNT BLE 1M 2402MHz Ant1



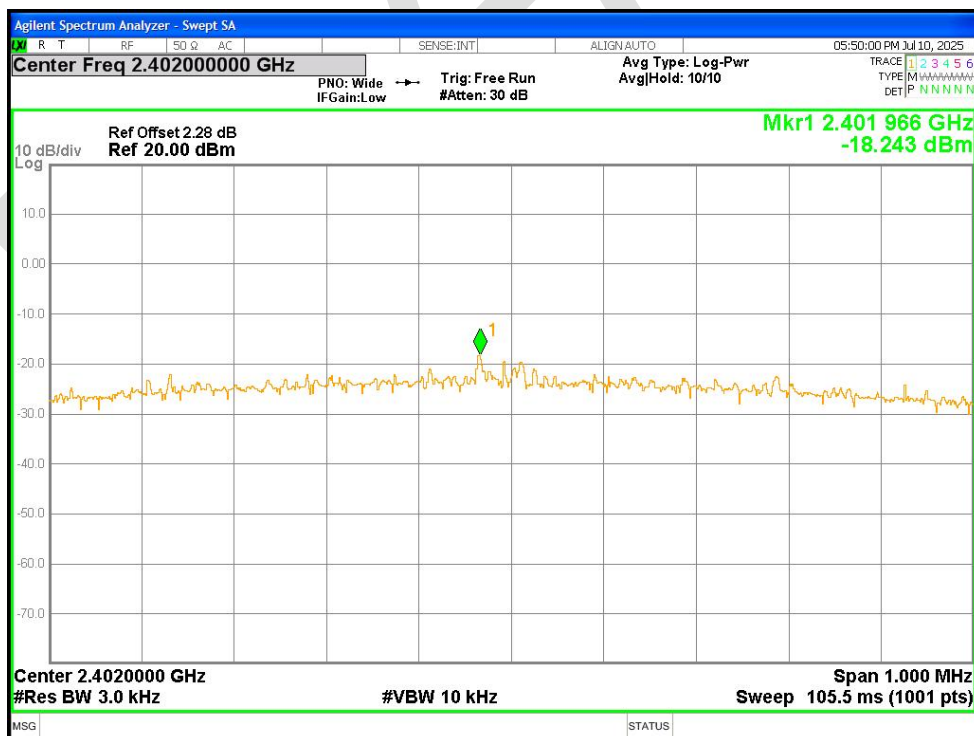
PSD NVNT BLE 1M 2442MHz Ant1



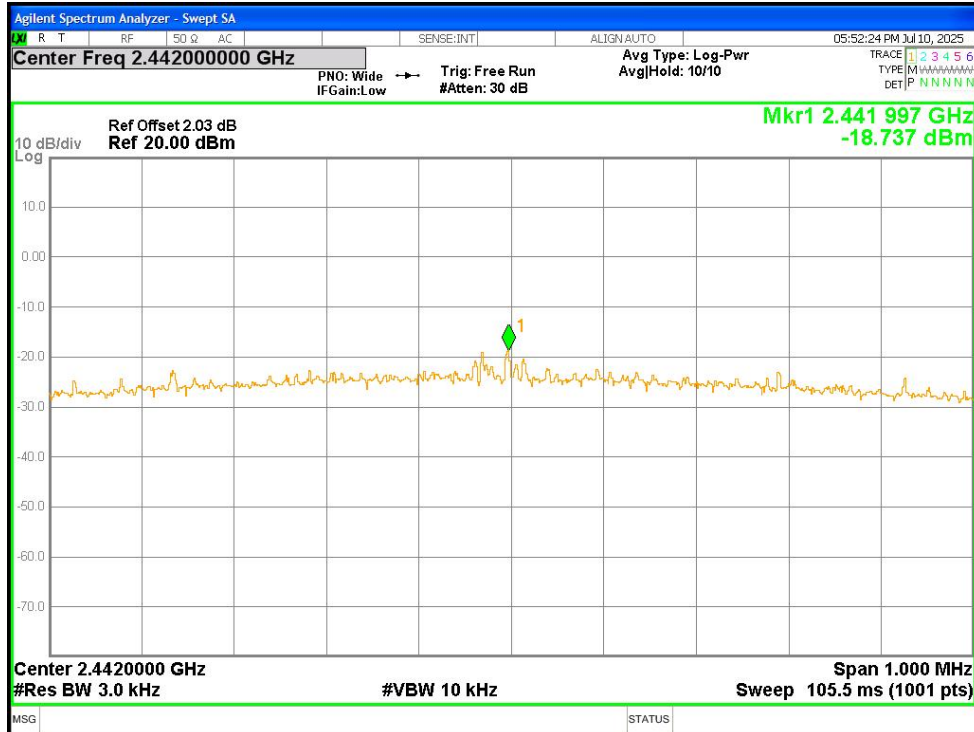
PSD NVNT BLE 1M 2480MHz Ant1



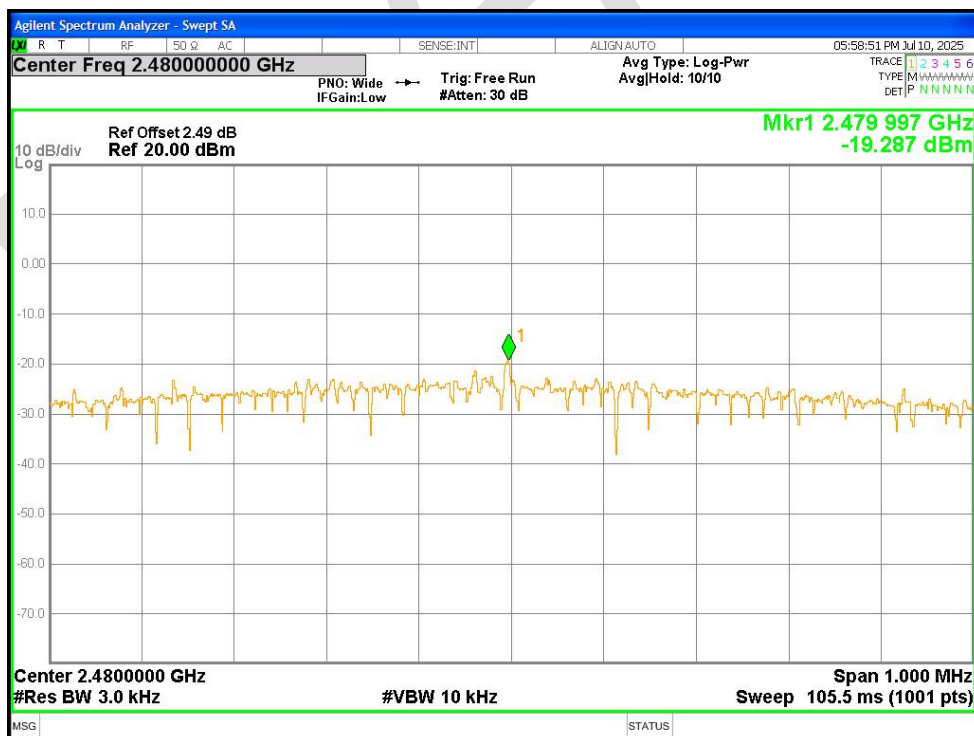
PSD NVNT BLE 2M 2402MHz Ant1



PSD NVNT BLE 2M 2442MHz Ant1



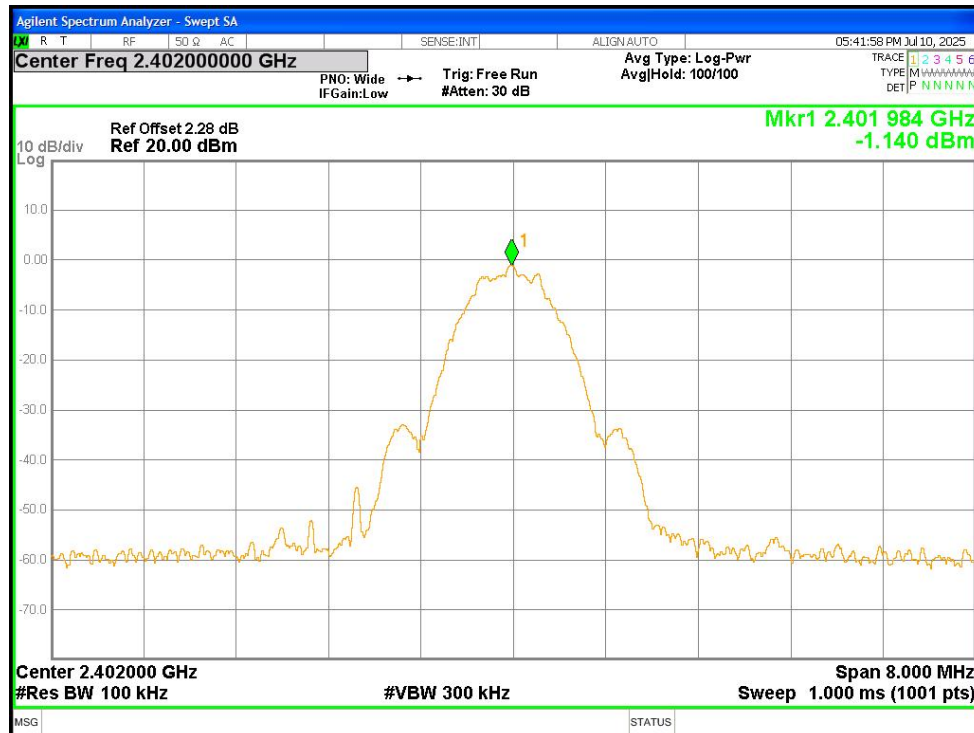
PSD NVNT BLE 2M 2480MHz Ant1



7.6 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-54.28	-20	Pass
NVNT	BLE 1M	2480	Ant1	-52.11	-20	Pass
NVNT	BLE 2M	2402	Ant1	-51.52	-20	Pass
NVNT	BLE 2M	2480	Ant1	-51.67	-20	Pass

Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



Band Edge NVNT BLE 1M 2402MHz Ant1 Emission

