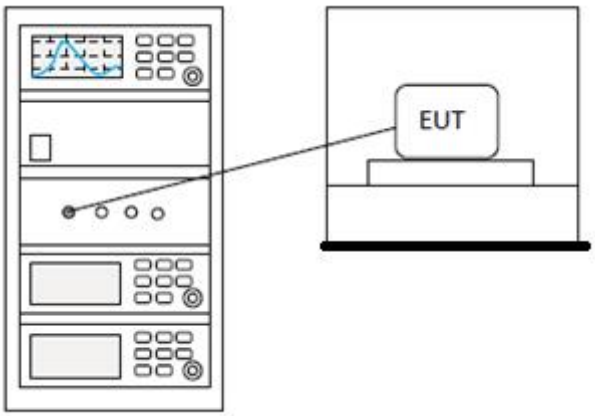
18 CONDUCTED PEAK OUTPUT POWER

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.5
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	William
Temperature	25℃
Humidity	60%

18.1 LIMITS

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥50 hopping channels
	0.25 for 25≤ hopping channels <50
	1 for digital modulation
2400-2483.5	1 for ≥75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

18.2 BLOCK DIAGRAM OF TEST SETUP



18.3 EST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

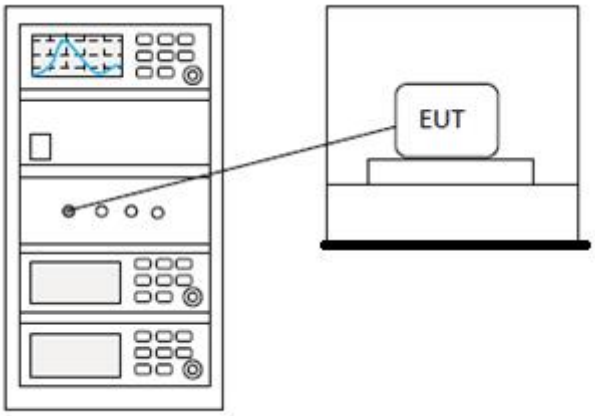
19 POWER SPECTRUM DENSITY

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.10.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	William
Temperature	25℃
Humidity	60%

19.1 LIMITS

Limit:	≤8dBm in any 3 kHz band during any time interval of continuous transmission

19.2 BLOCK DIAGRAM OF TEST SETUP



19.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

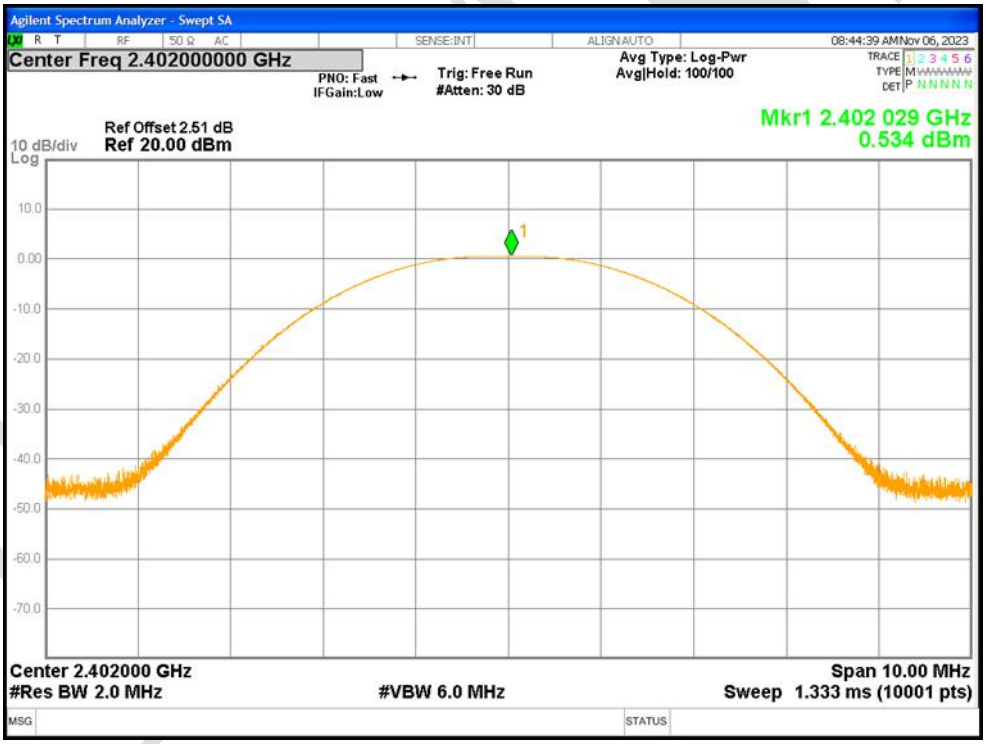
20 APPENDIX

Appendix1

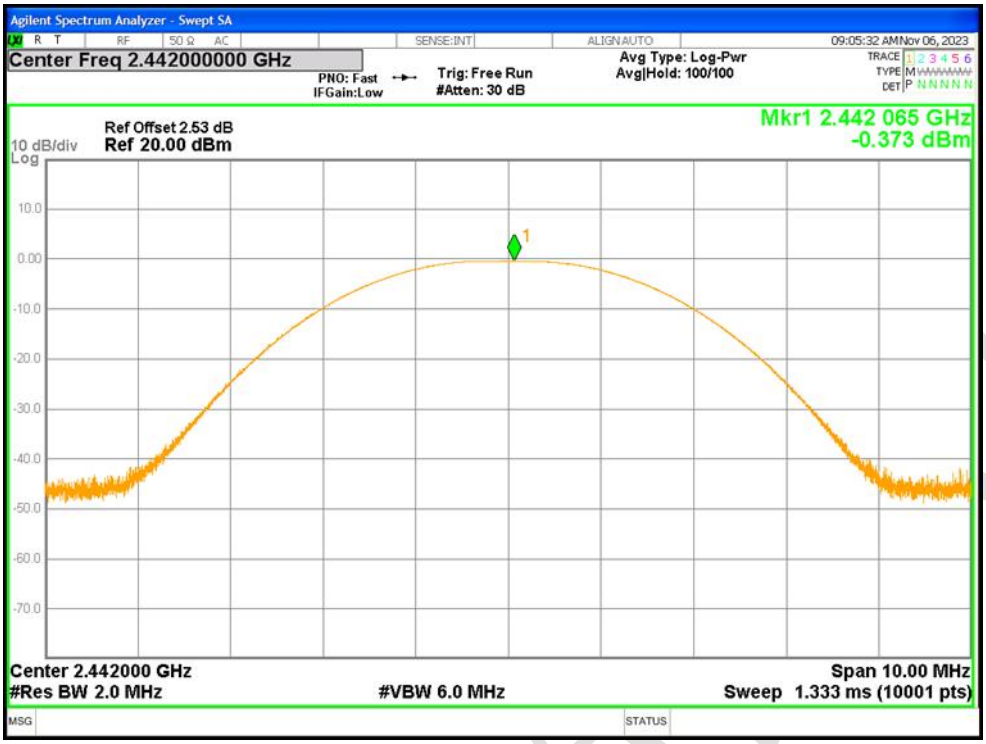
20.1 MAXIMUM CONDUCTED OUTPUT POWER

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	0.534	30	Pass
NVNT	BLE 1M	2442	Ant1	-0.373	30	Pass
NVNT	BLE 1M	2480	Ant1	-0.308	30	Pass
NVNT	BLE 2M	2402	Ant1	0.493	30	Pass
NVNT	BLE 2M	2442	Ant1	-0.400	30	Pass
NVNT	BLE 2M	2480	Ant1	-0.352	30	Pass

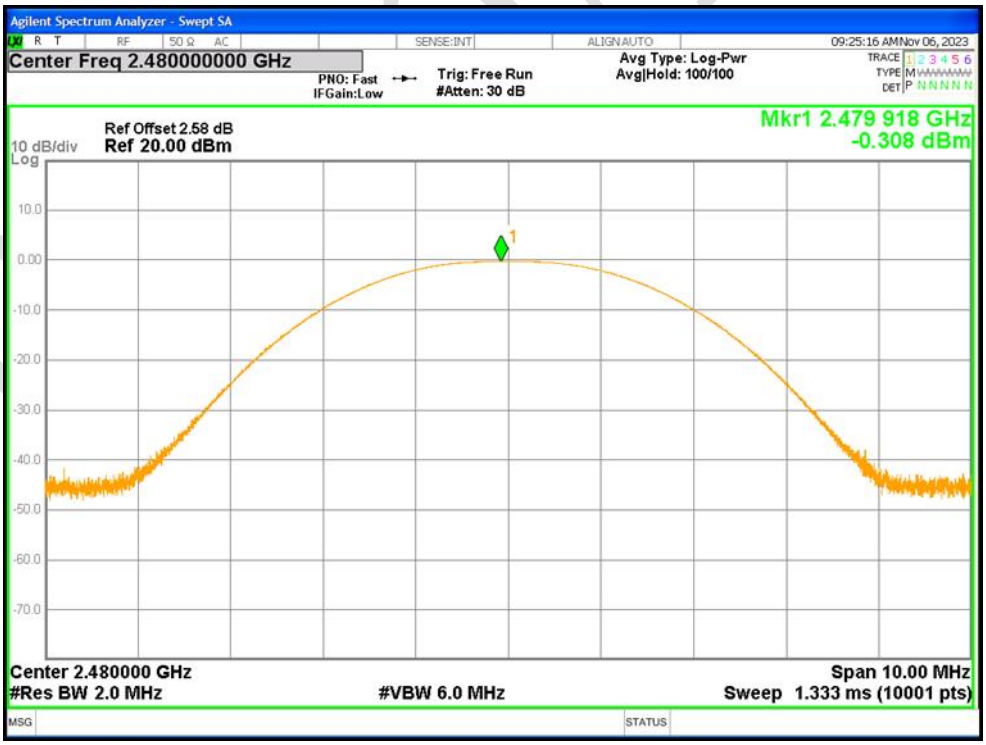
Power NVNT BLE 1M 2402MHz Ant1



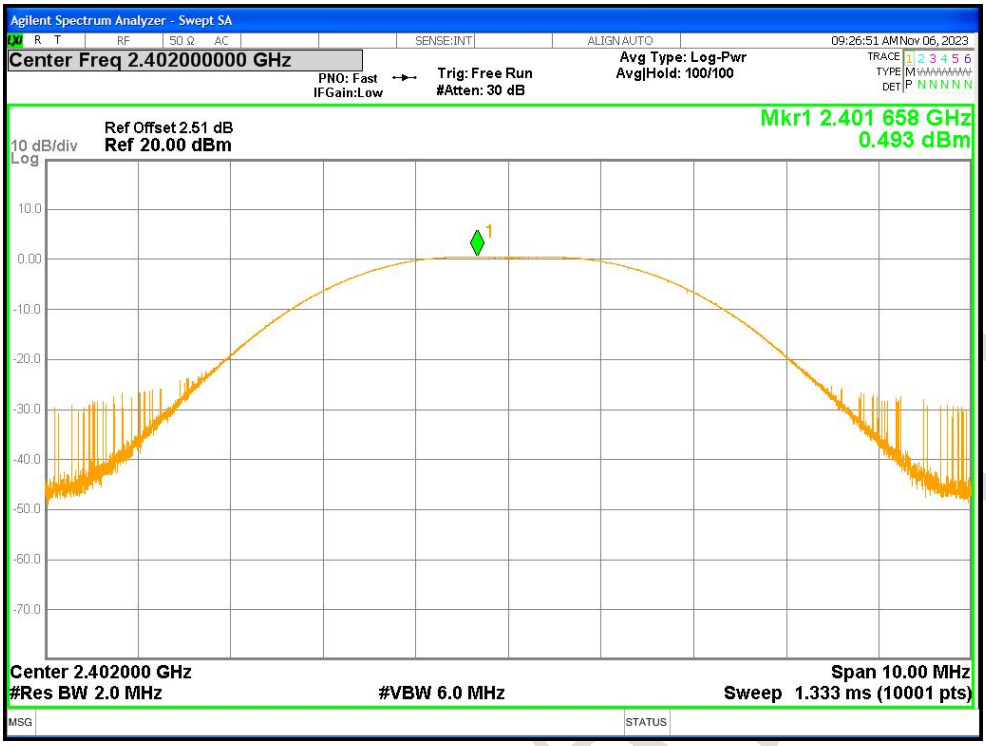
Power NVNT BLE 1M 2442MHz Ant1



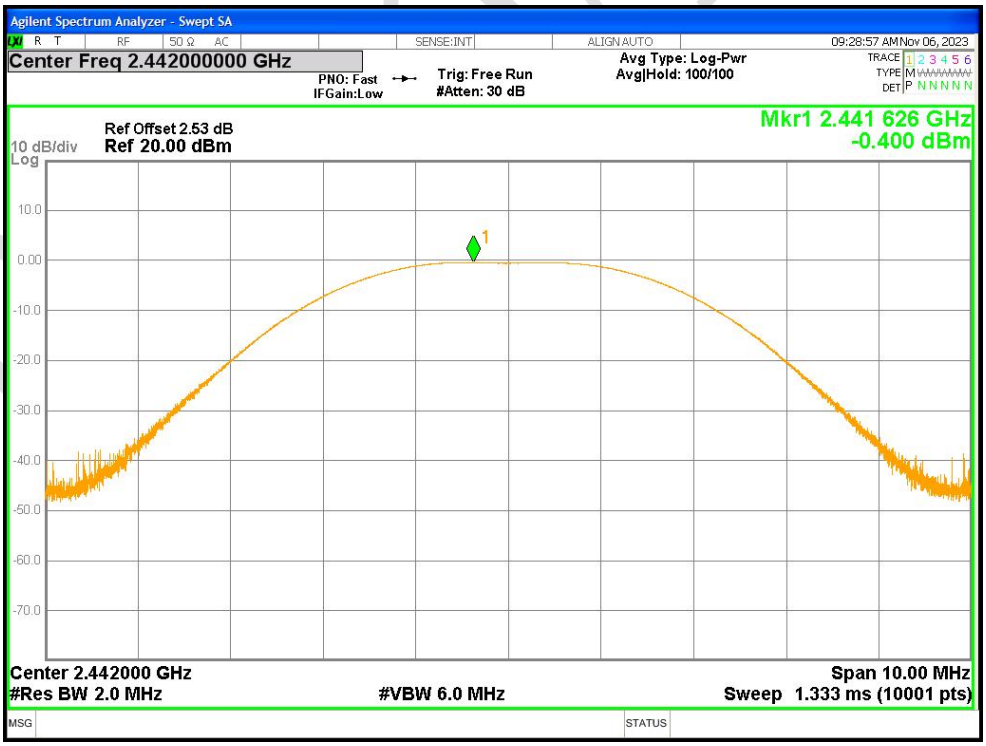
Power NVNT BLE 1M 2480MHz Ant1



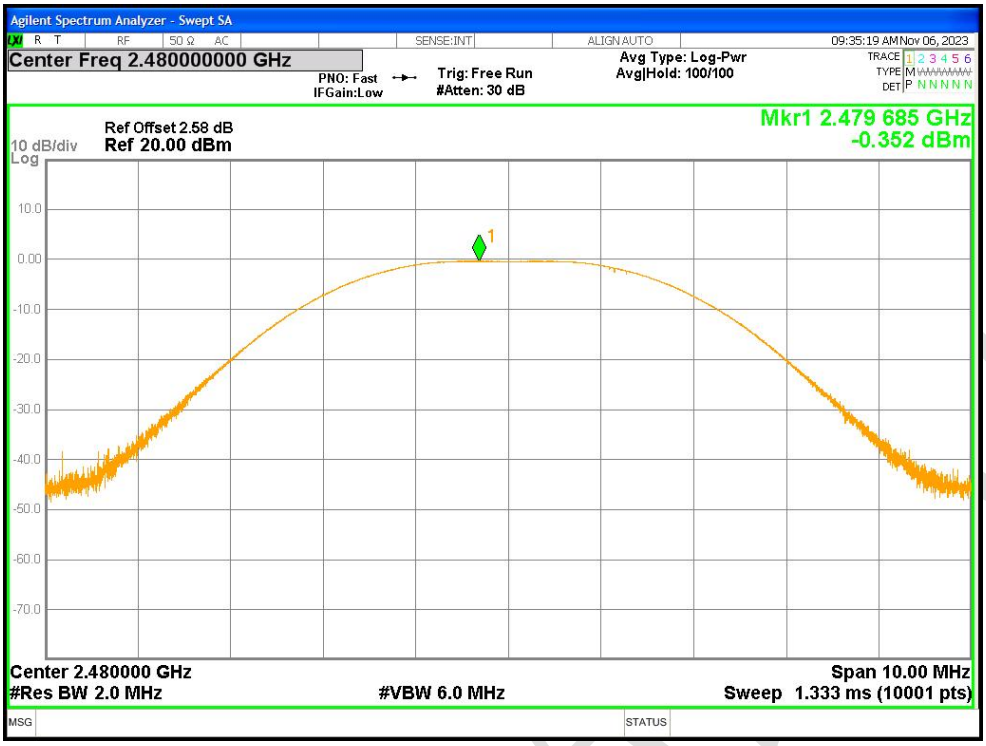
Power NVNT BLE 2M 2402MHz Ant1



Power NVNT BLE 2M 2442MHz Ant1



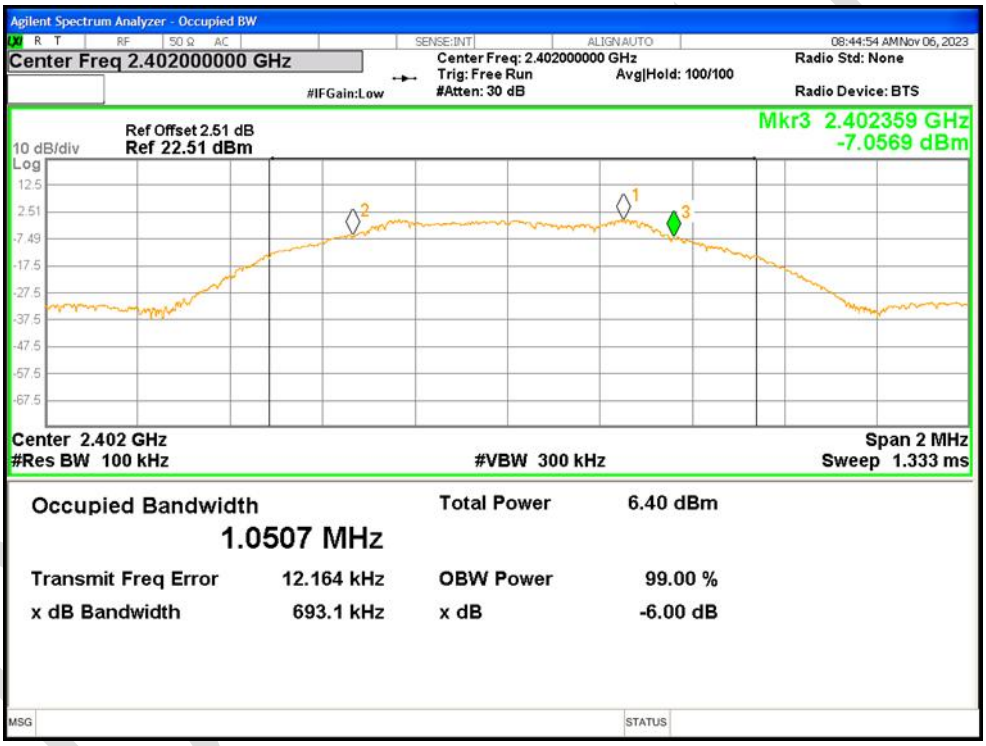
Power NVNT BLE 2M 2480MHz Ant1



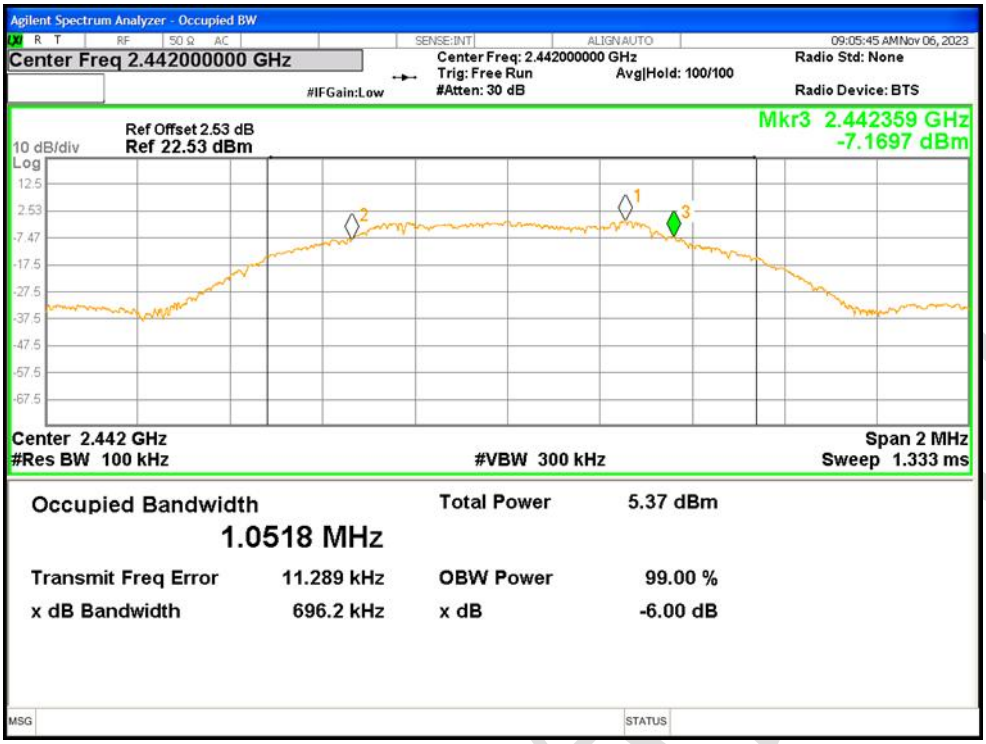
20.2 -6DB BANDWIDTH

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.6931	0.5	Pass
NVNT	BLE 1M	2442	Ant1	0.6962	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.6944	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.239	0.5	Pass
NVNT	BLE 2M	2442	Ant1	1.232	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.217	0.5	Pass

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1

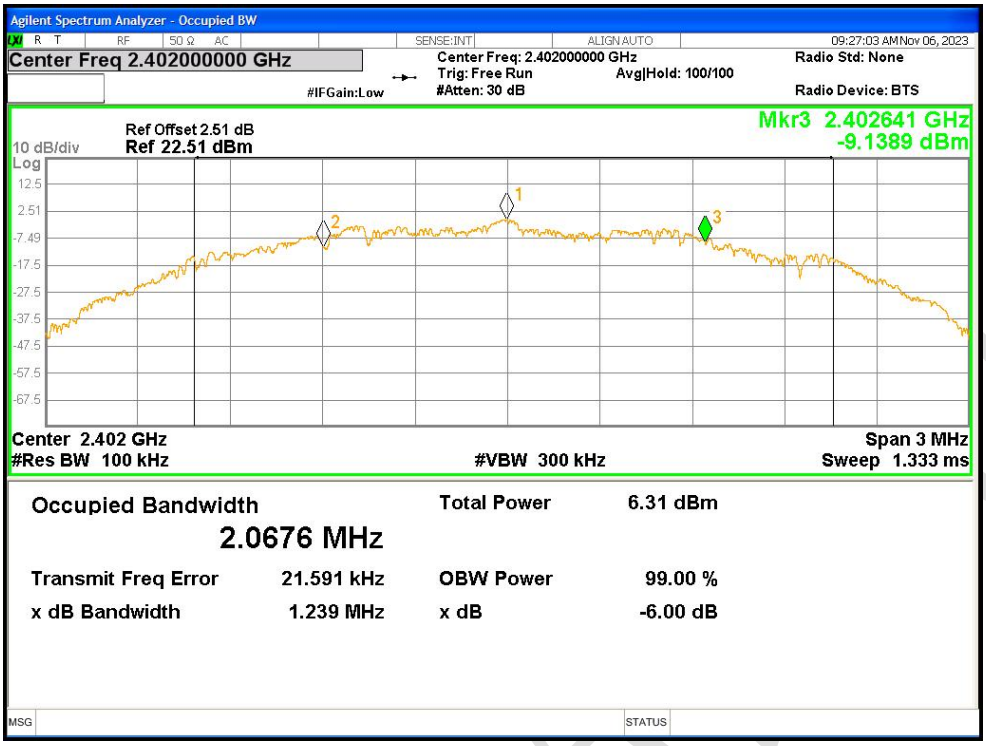


-6dB Bandwidth NVNT BLE 1M 2442MHz Ant1

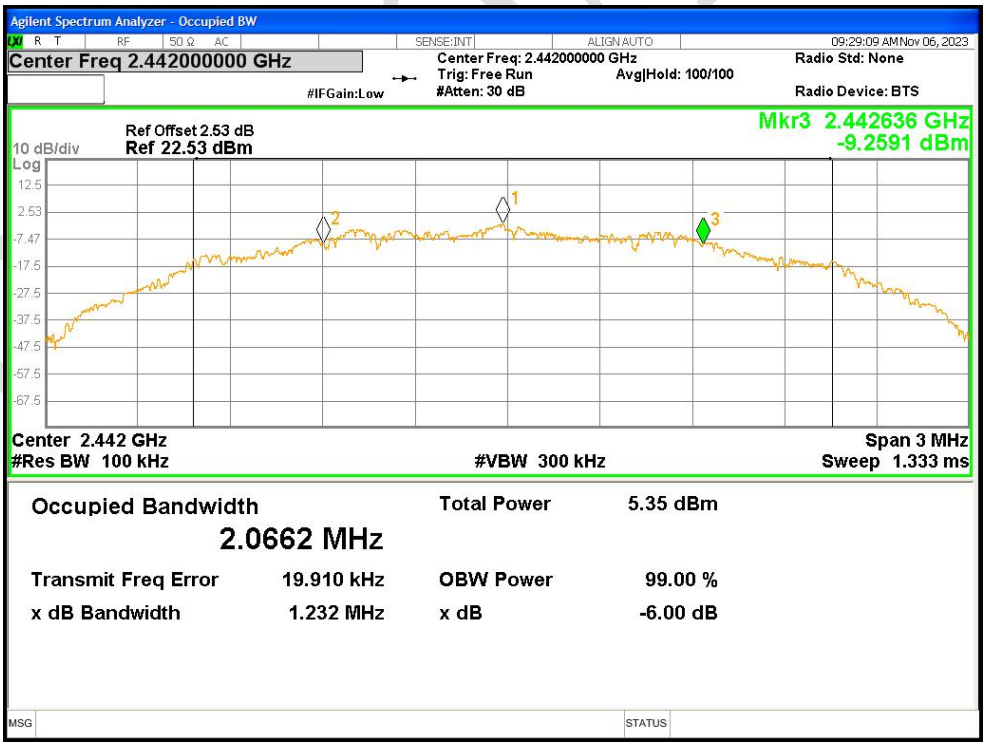


-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1

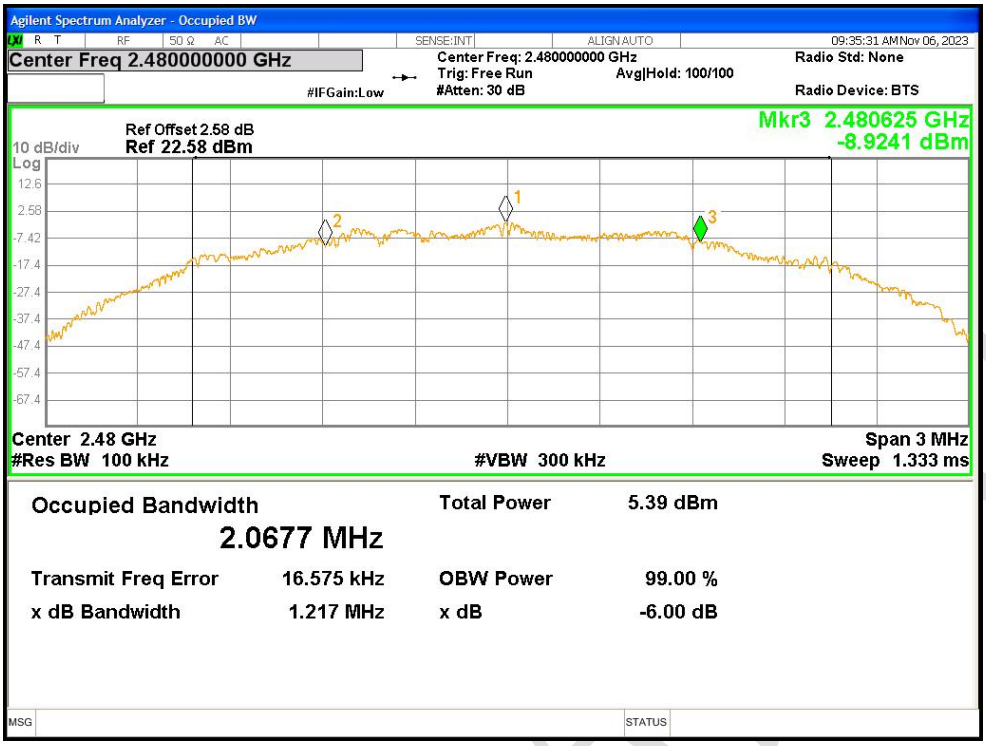
-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2442MHz Ant1



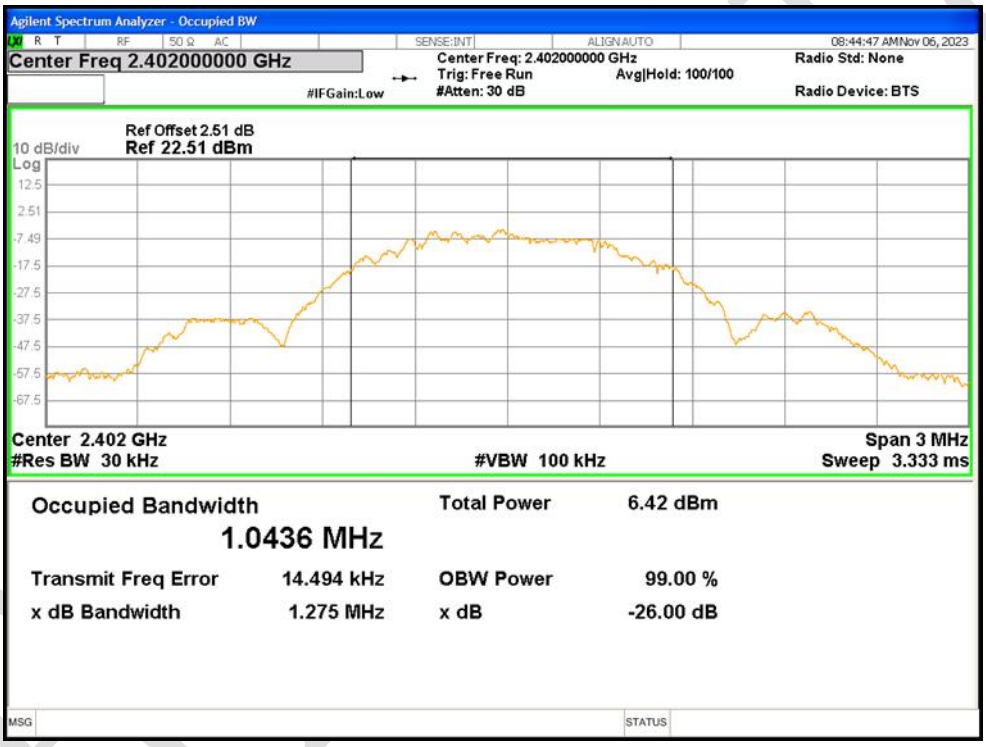
-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1



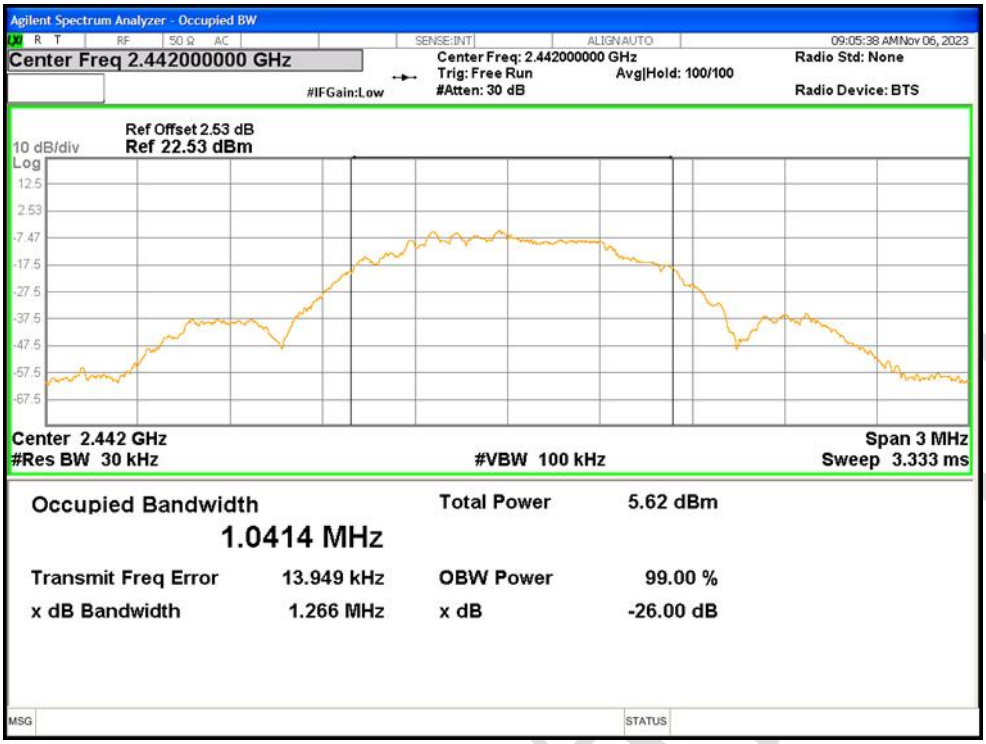
20.3 OCCUPIED CHANNEL BANDWIDTH

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.0436
NVNT	BLE 1M	2442	Ant1	1.0414
NVNT	BLE 1M	2480	Ant1	1.0412
NVNT	BLE 2M	2402	Ant1	2.0546
NVNT	BLE 2M	2442	Ant1	2.0598
NVNT	BLE 2M	2480	Ant1	2.0596

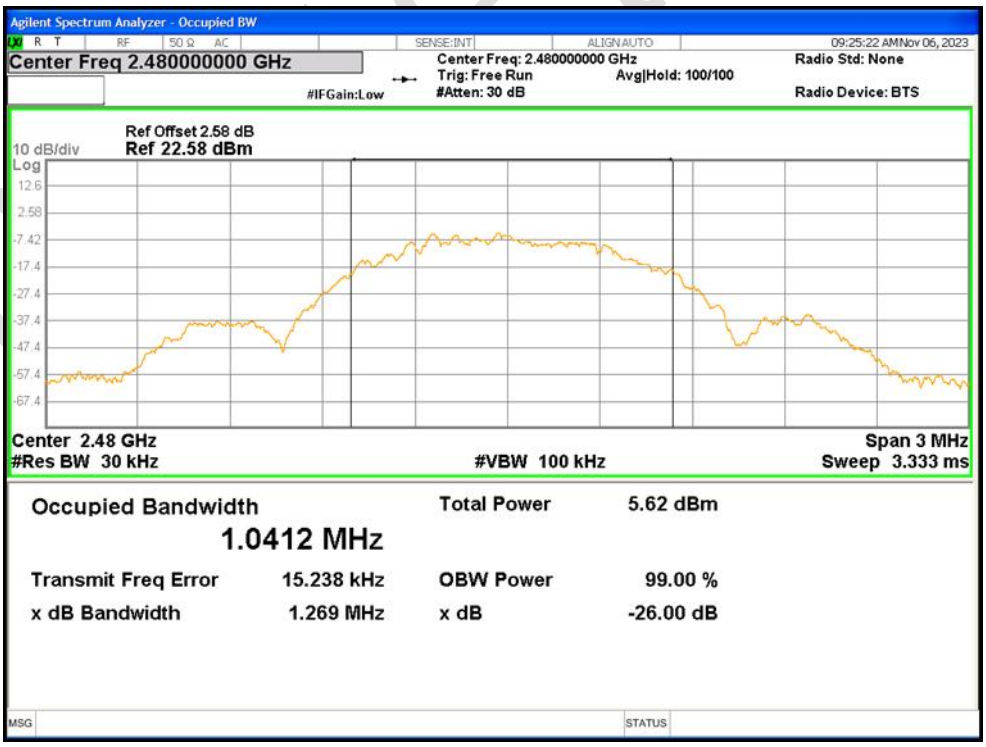
OBW NVNT BLE 1M 2402MHz Ant1



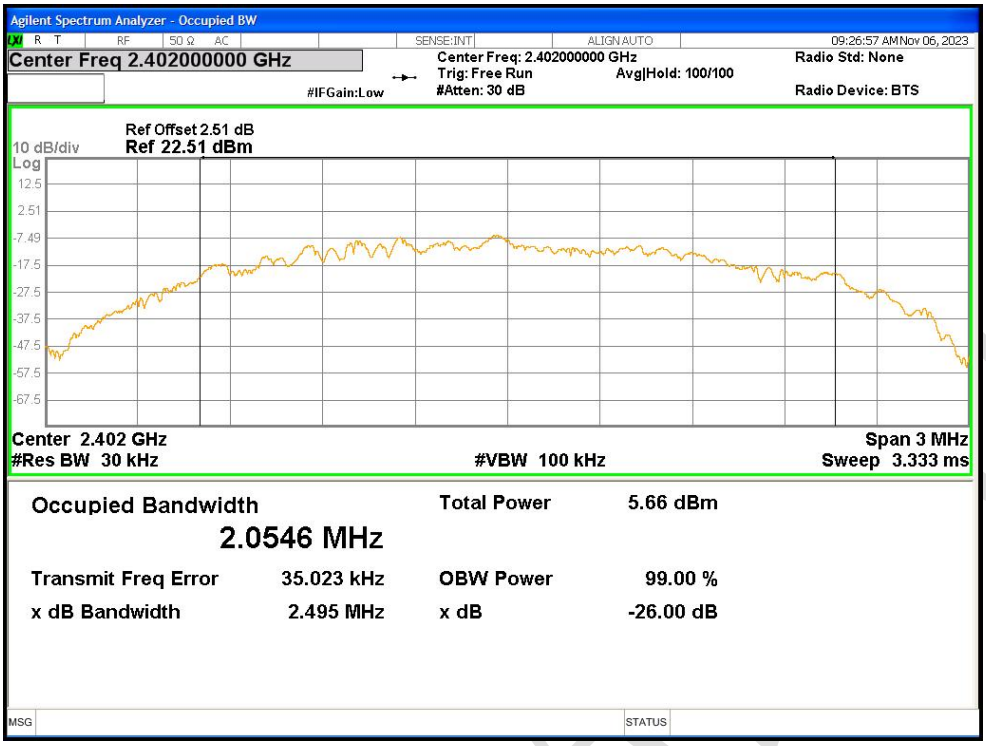
OBW NVNT BLE 1M 2442MHz Ant1



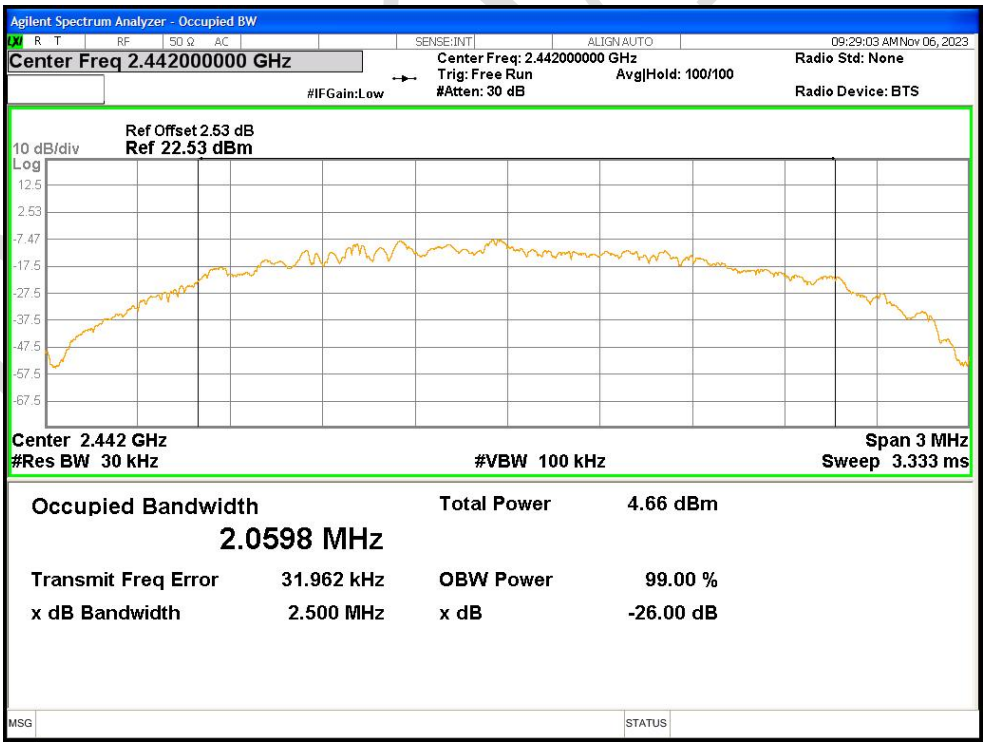
OBW NVNT BLE 1M 2480MHz Ant1



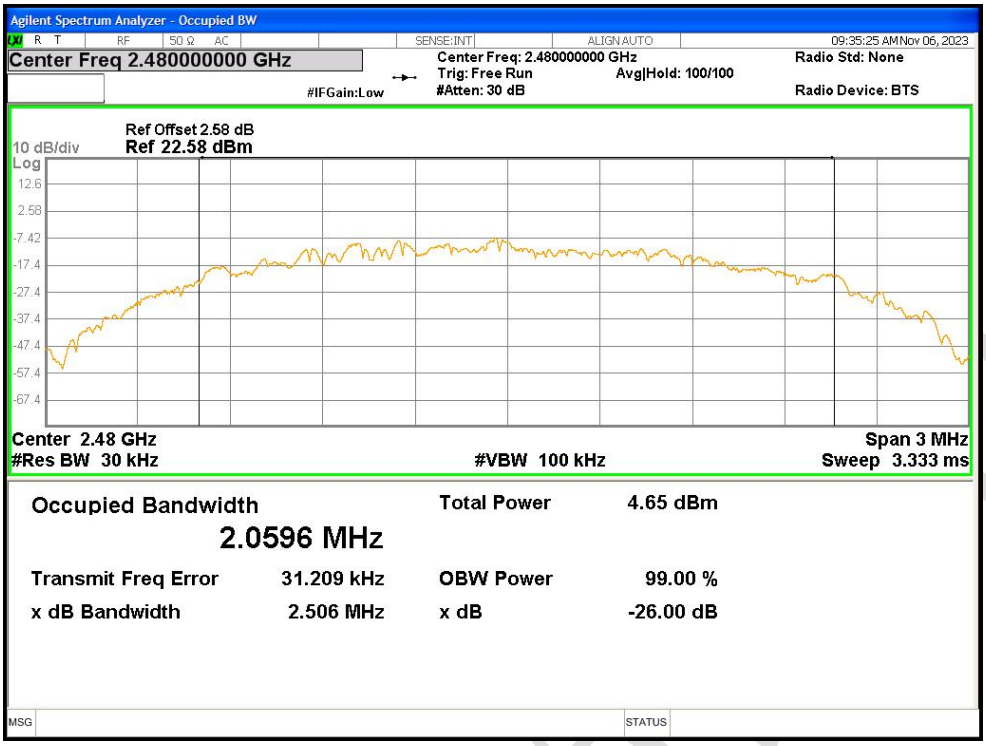
OBW NVNT BLE 2M 2402MHz Ant1



OBW NVNT BLE 2M 2442MHz Ant1



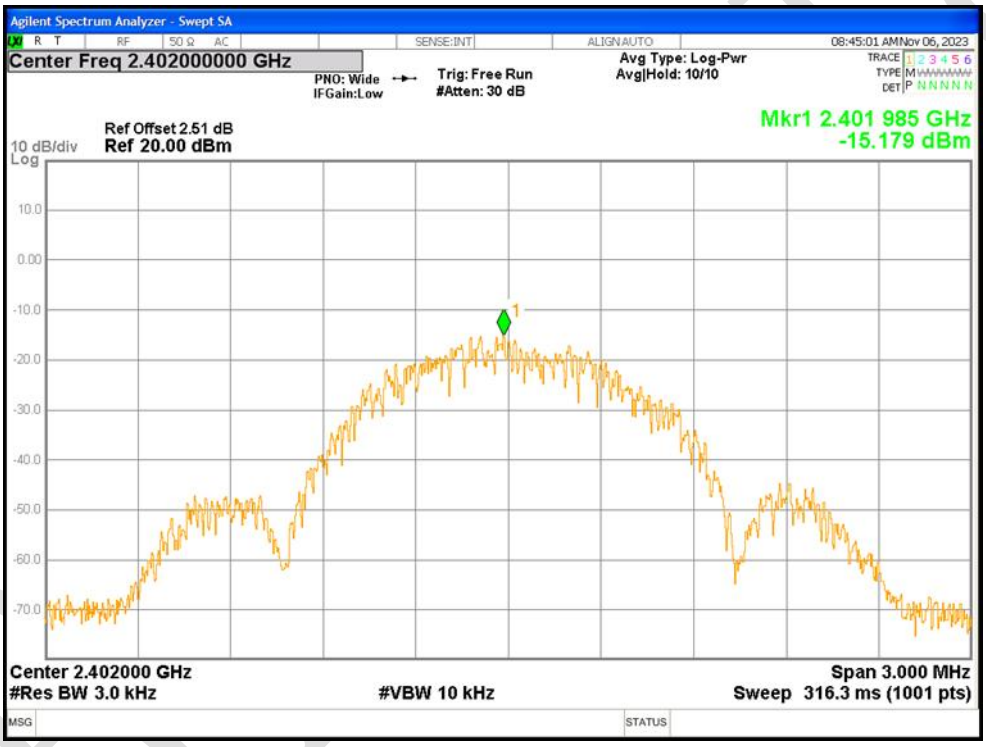
OBW NVNT BLE 2M 2480MHz Ant1



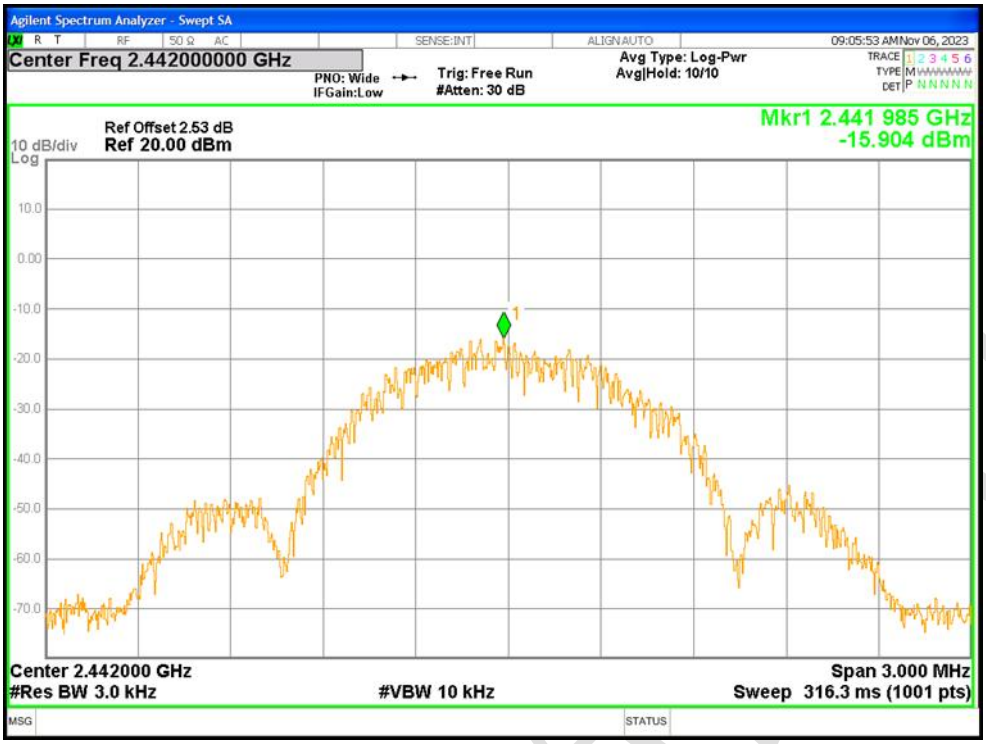
20.4 MAXIMUM POWER SPECTRAL DENSITY LEVEL

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-15.179	8	Pass
NVNT	BLE 1M	2442	Ant1	-15.904	8	Pass
NVNT	BLE 1M	2480	Ant1	-15.746	8	Pass
NVNT	BLE 2M	2402	Ant1	-16.936	8	Pass
NVNT	BLE 2M	2442	Ant1	-18.015	8	Pass
NVNT	BLE 2M	2480	Ant1	-18.099	8	Pass

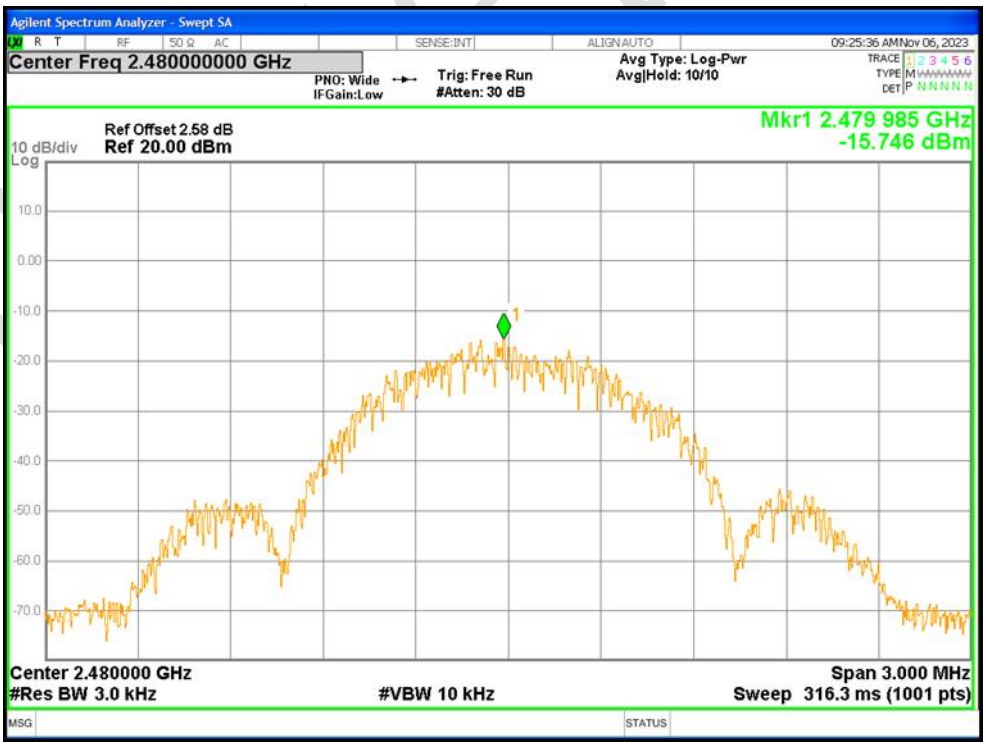
PSD NVNT BLE 1M 2402MHz Ant1



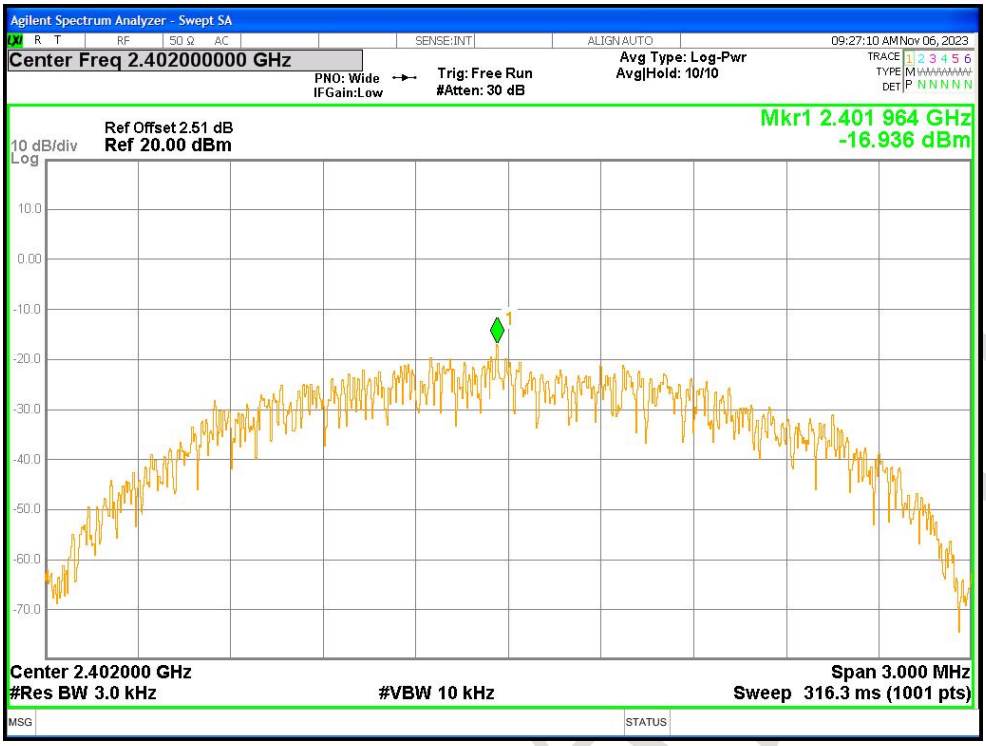
PSD NVNT BLE 1M 2442MHz Ant1



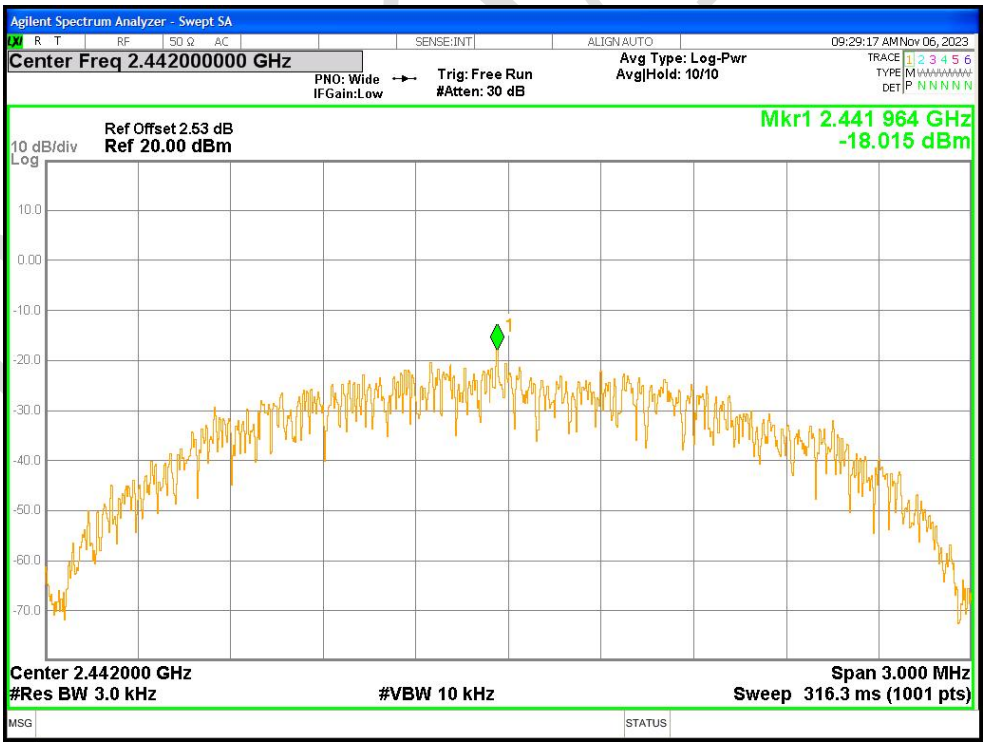
PSD NVNT BLE 1M 2480MHz Ant1



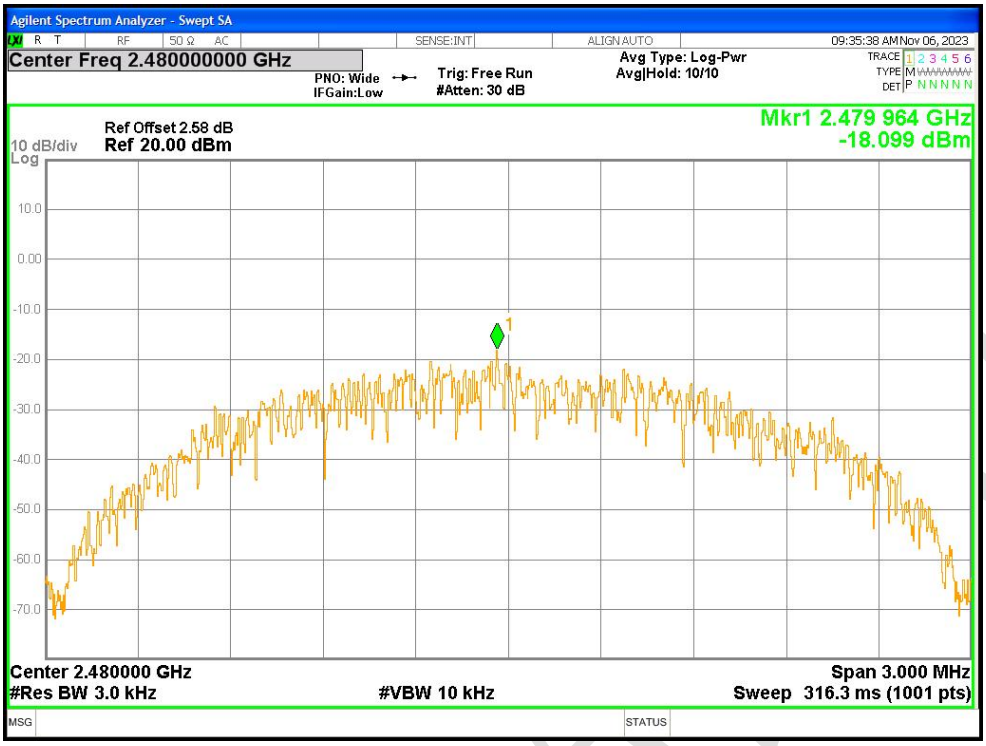
PSD NVNT BLE 2M 2402MHz Ant1



PSD NVNT BLE 2M 2442MHz Ant1



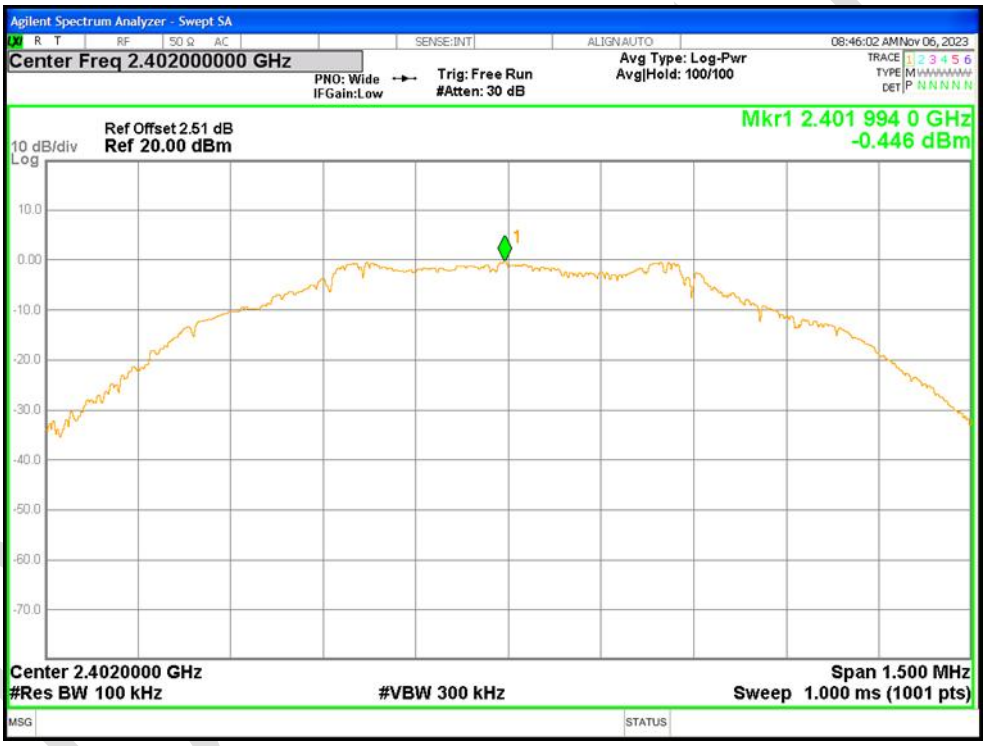
PSD NVNT BLE 2M 2480MHz Ant1



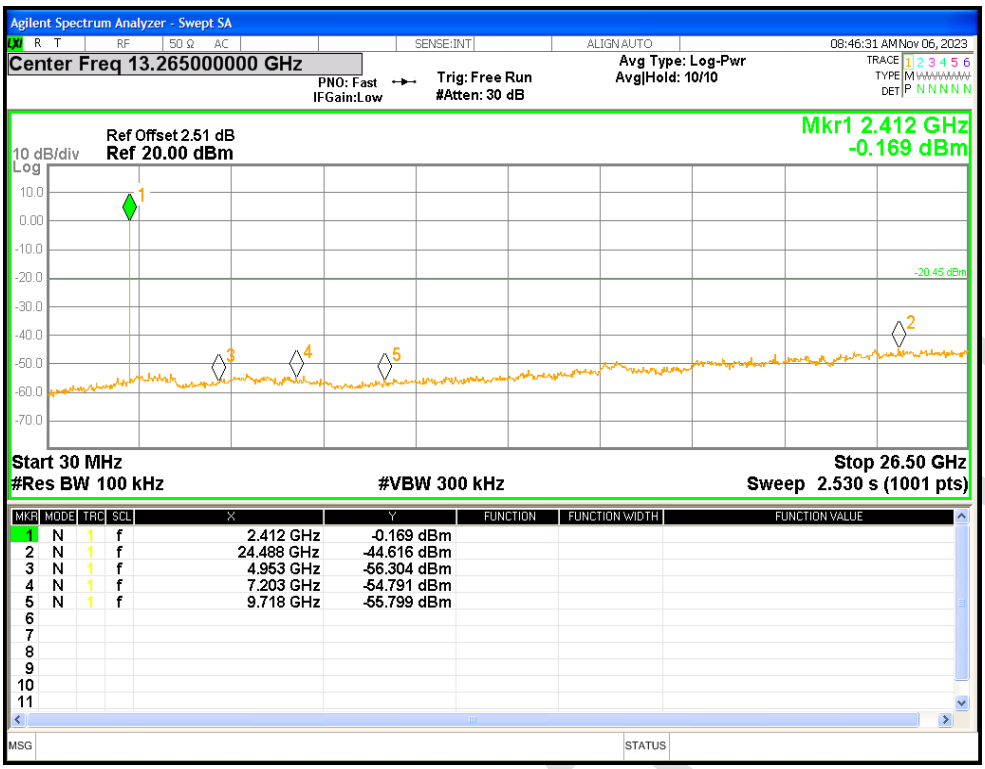
20.5 CONDUCTED RF SPURIOUS EMISSION

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-44.17	-20	Pass
NVNT	BLE 1M	2442	Ant1	-42.23	-20	Pass
NVNT	BLE 1M	2480	Ant1	-43.59	-20	Pass
NVNT	BLE 2M	2402	Ant1	-43.24	-20	Pass
NVNT	BLE 2M	2442	Ant1	-41.88	-20	Pass
NVNT	BLE 2M	2480	Ant1	-42.41	-20	Pass

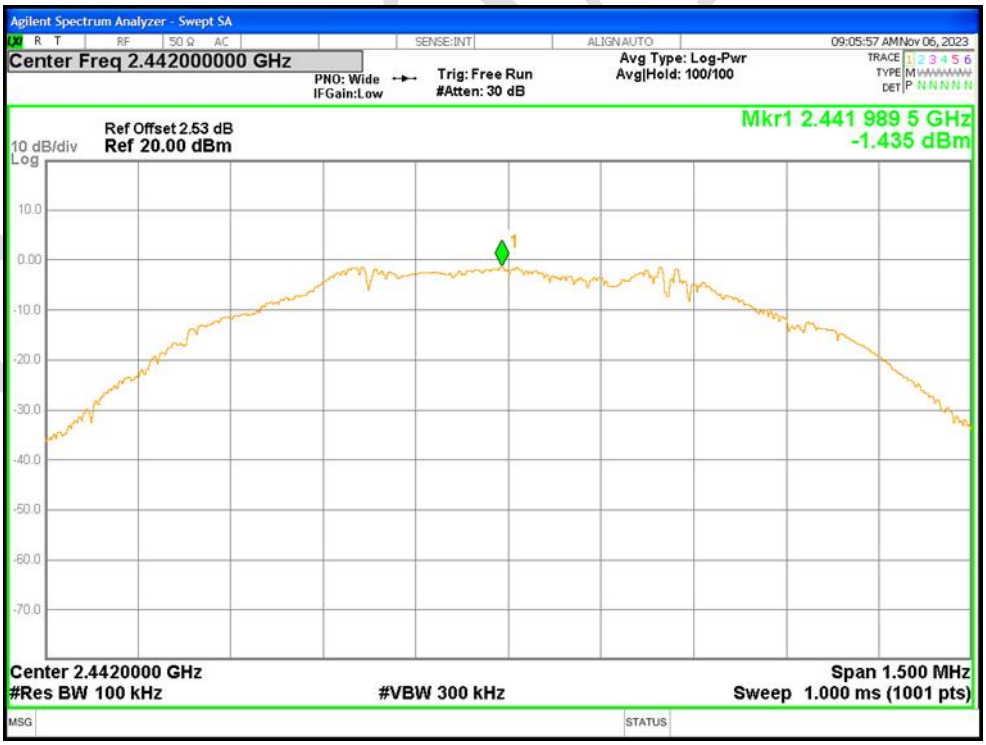
Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



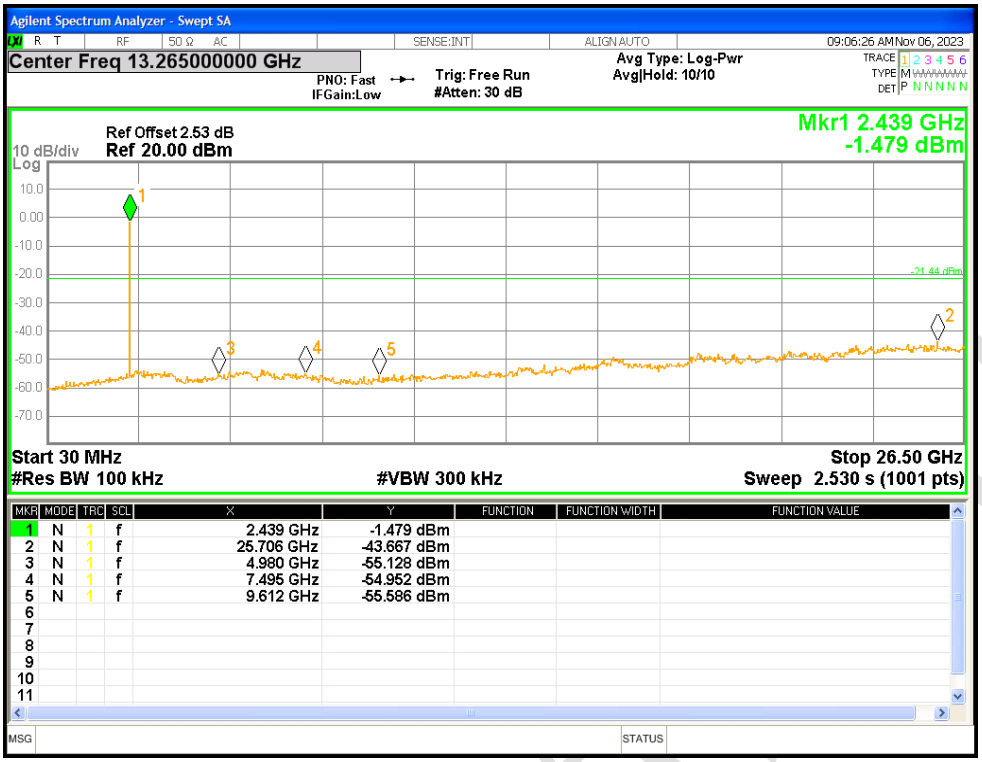
Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



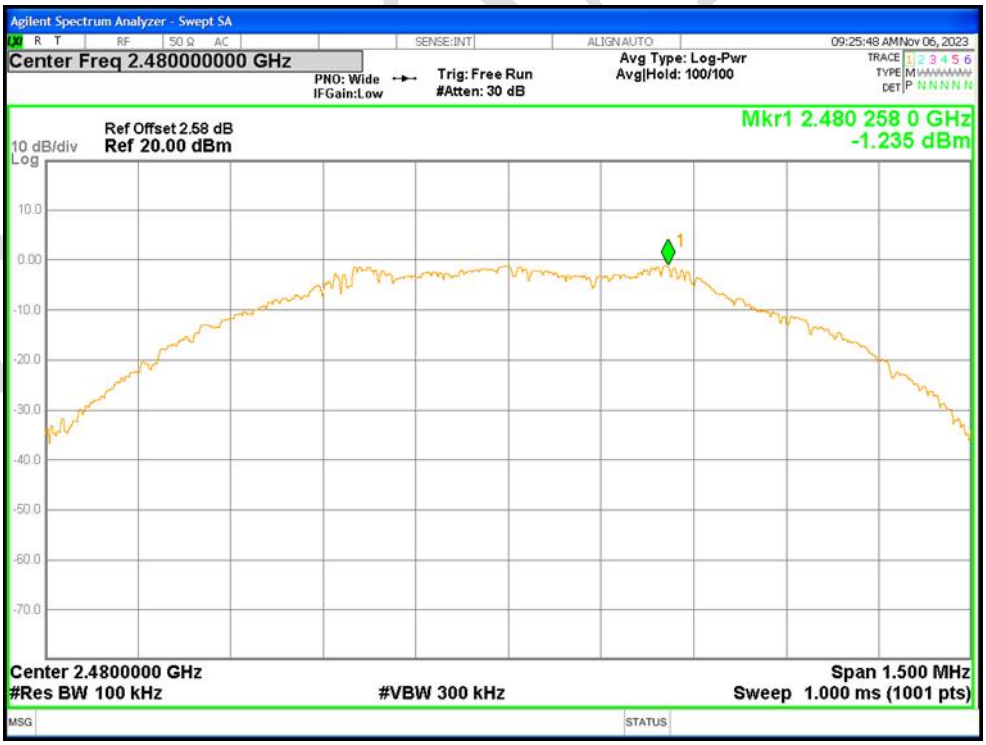
Tx. Spurious NVNT BLE 1M 2442MHz Ant1 Ref



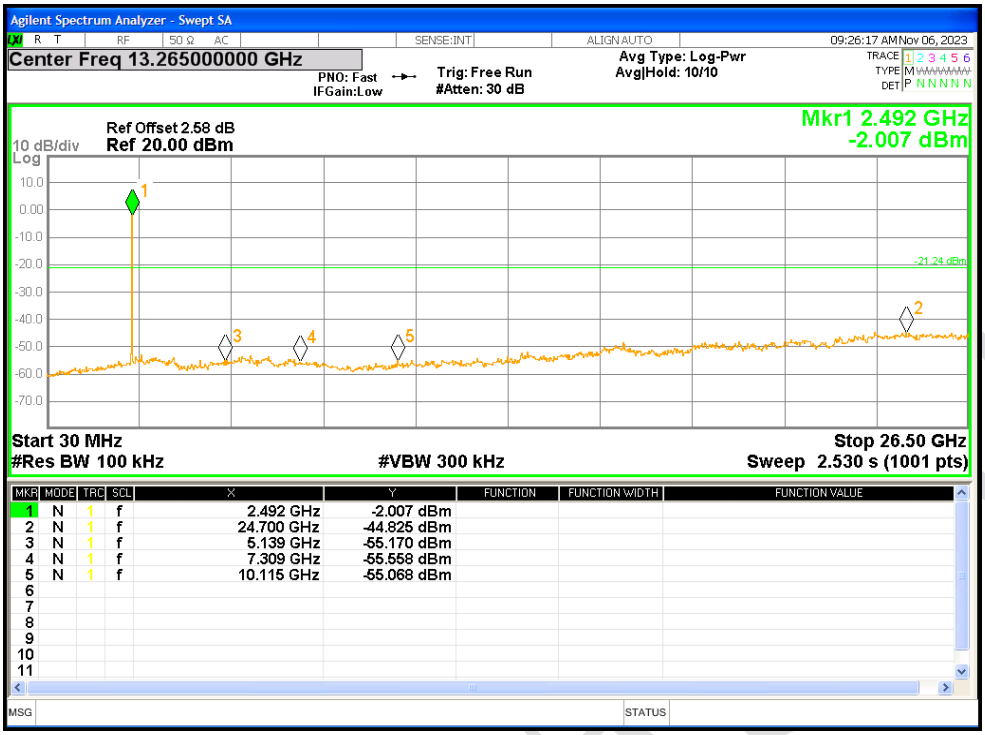
Tx. Spurious NVNT BLE 1M 2442MHz Ant1 Emission



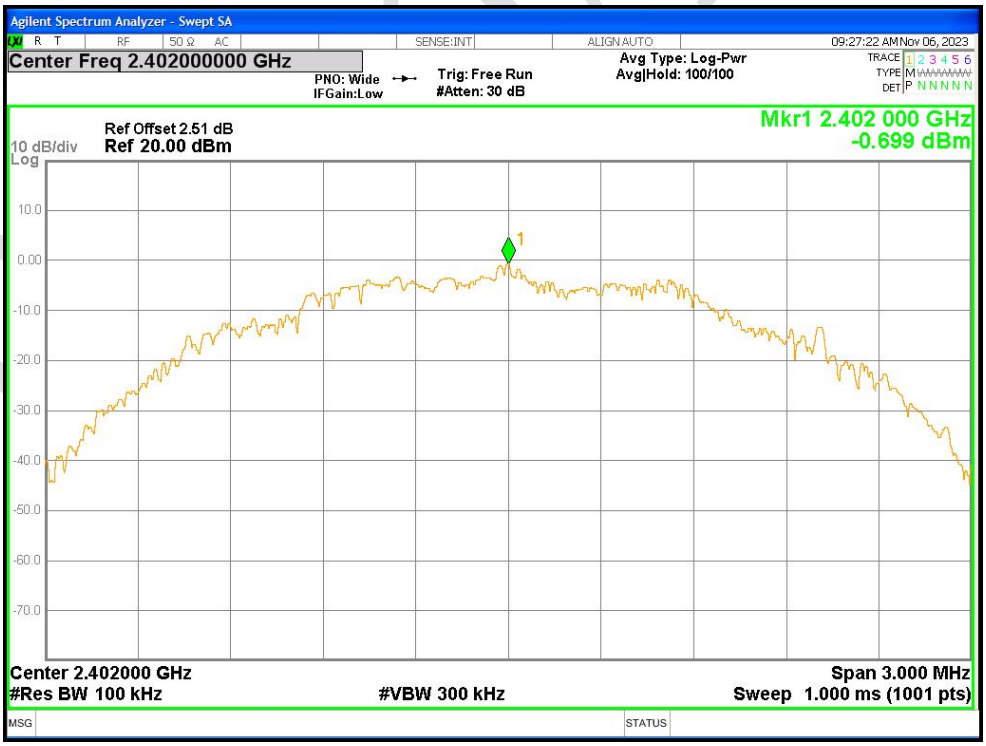
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



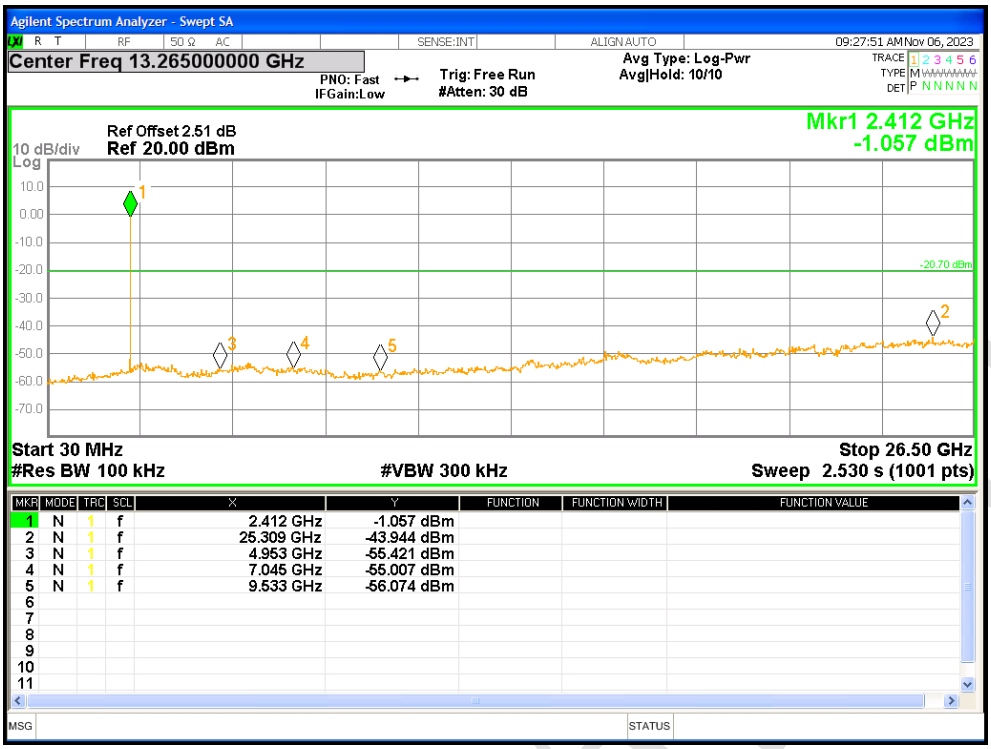
Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



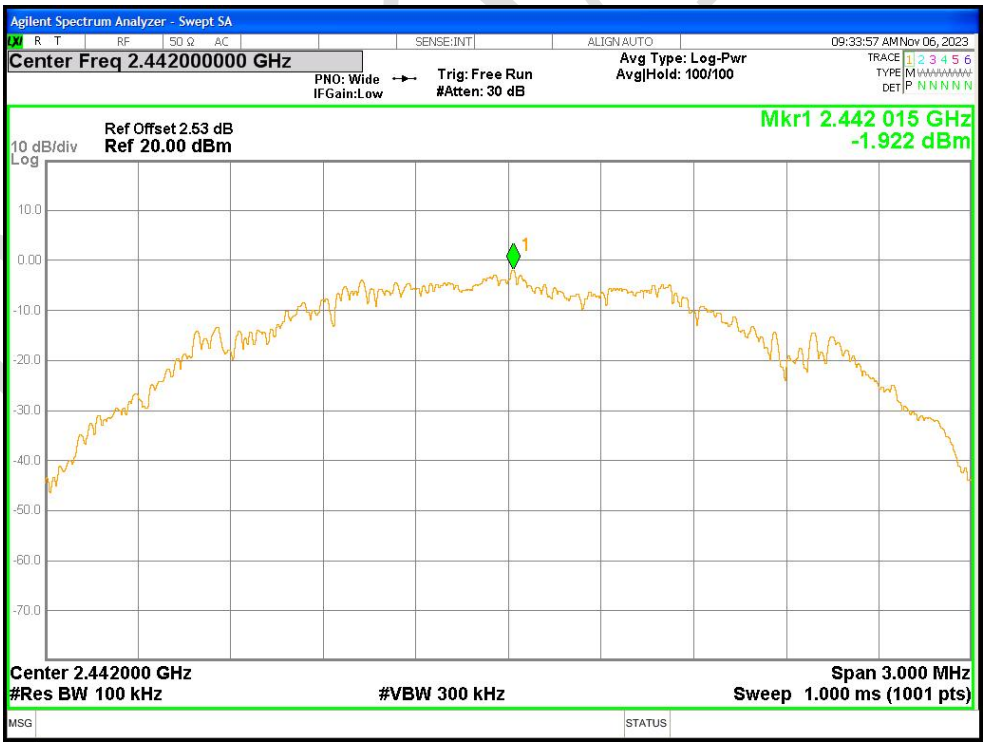
Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Ref



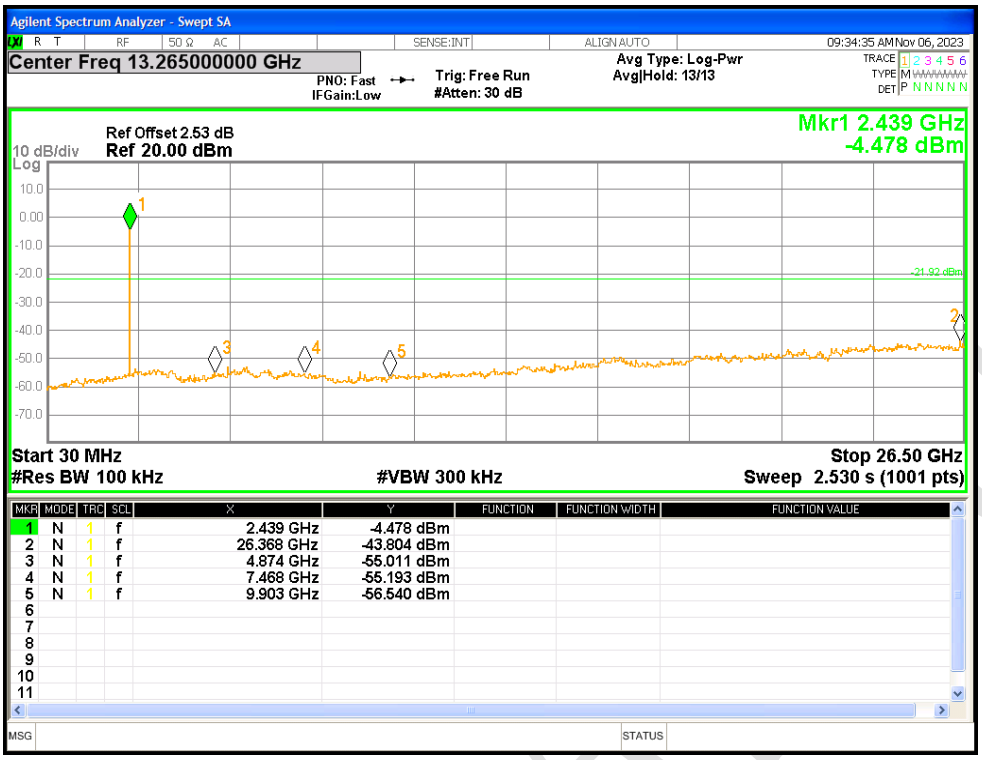
Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Emission



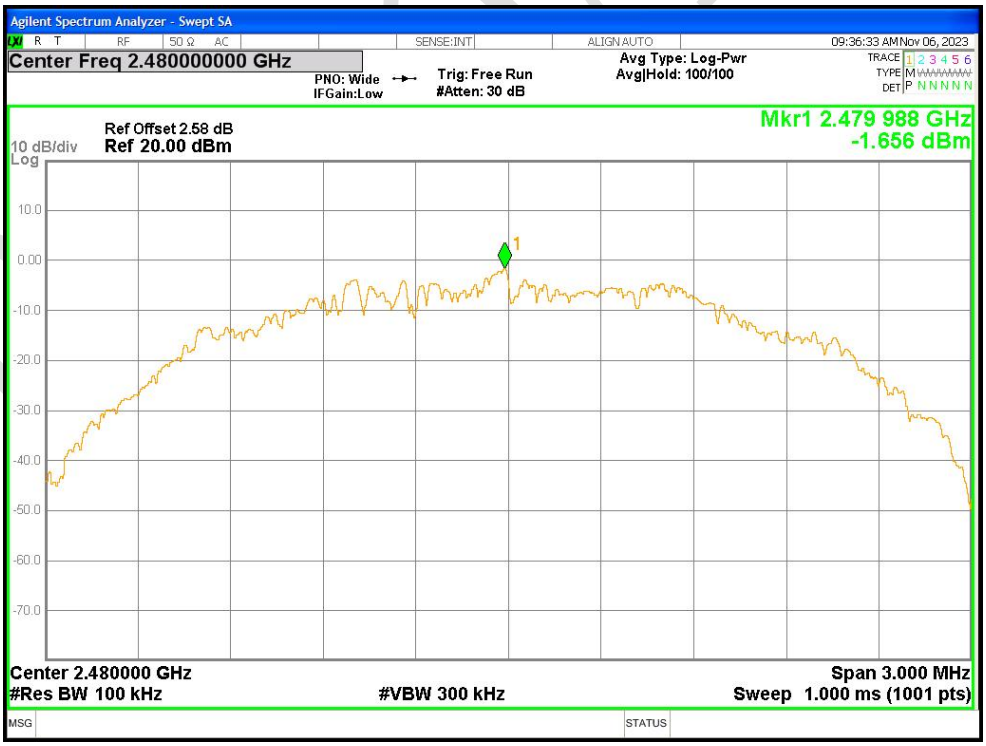
Tx. Spurious NVNT BLE 2M 2442MHz Ant1 Ref



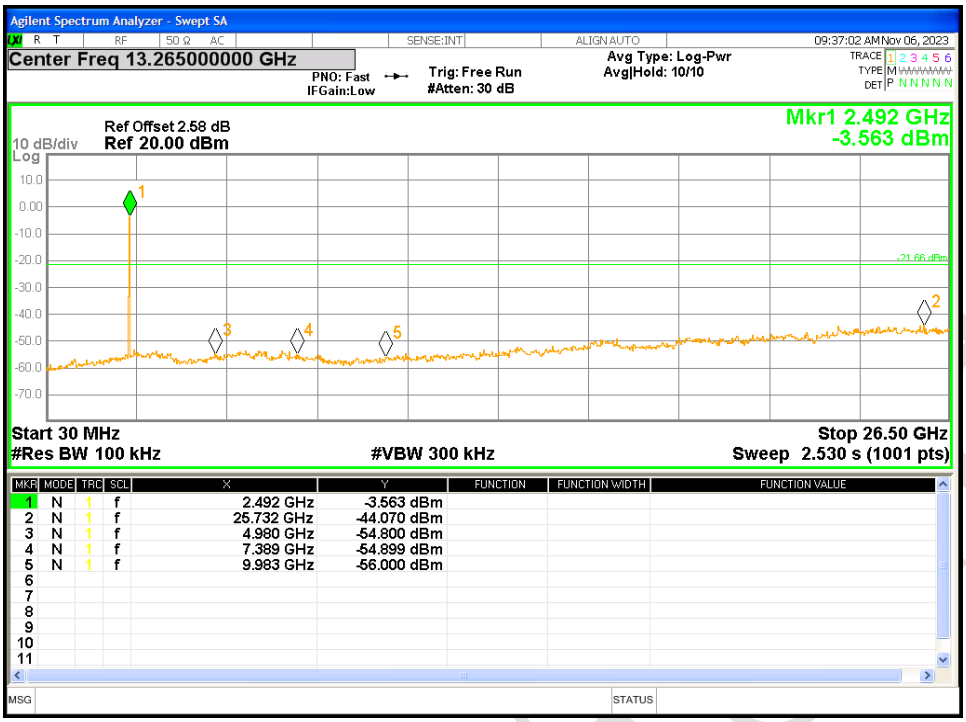
Tx. Spurious NVNT BLE 2M 2442MHz Ant1 Emission



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Ref



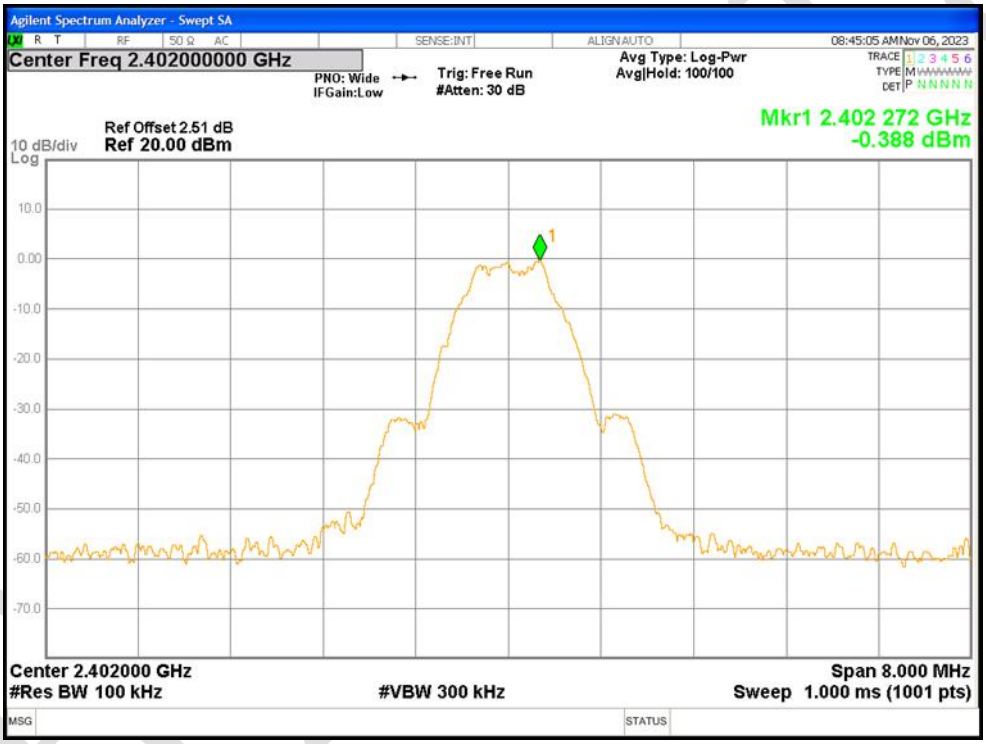
Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Emission



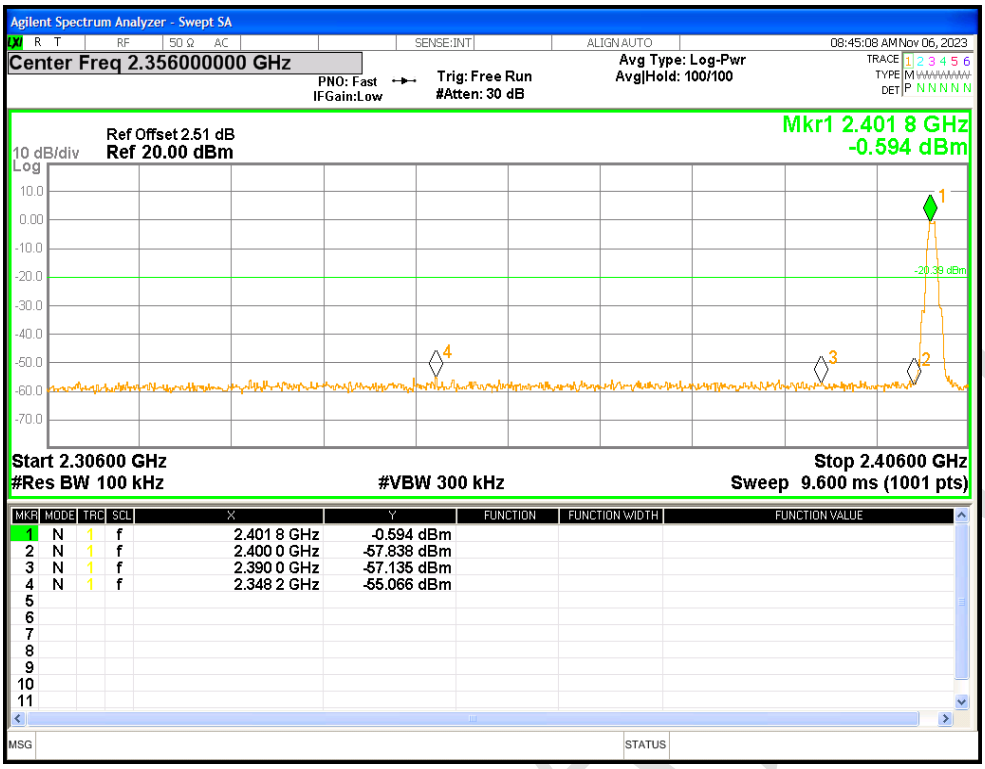
20.6 BAND EDGE

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-54.68	-30	Pass
NVNT	BLE 1M	2480	Ant1	-53.87	-30	Pass
NVNT	BLE 2M	2402	Ant1	-31.38	-30	Pass
NVNT	BLE 2M	2480	Ant1	-52.68	-30	Pass

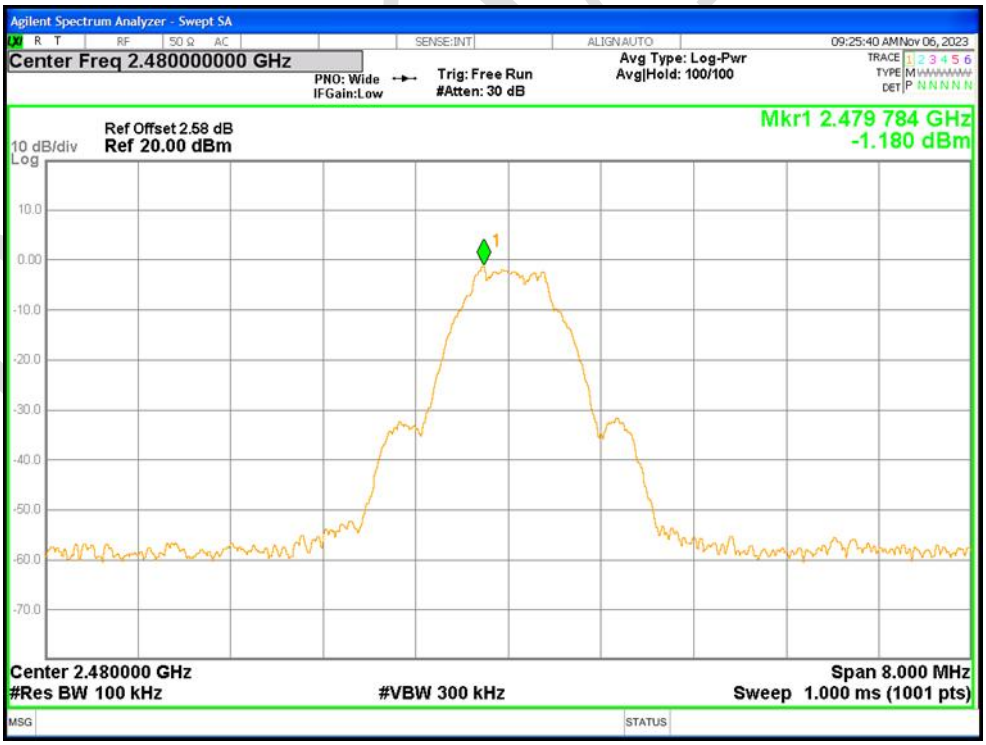
Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



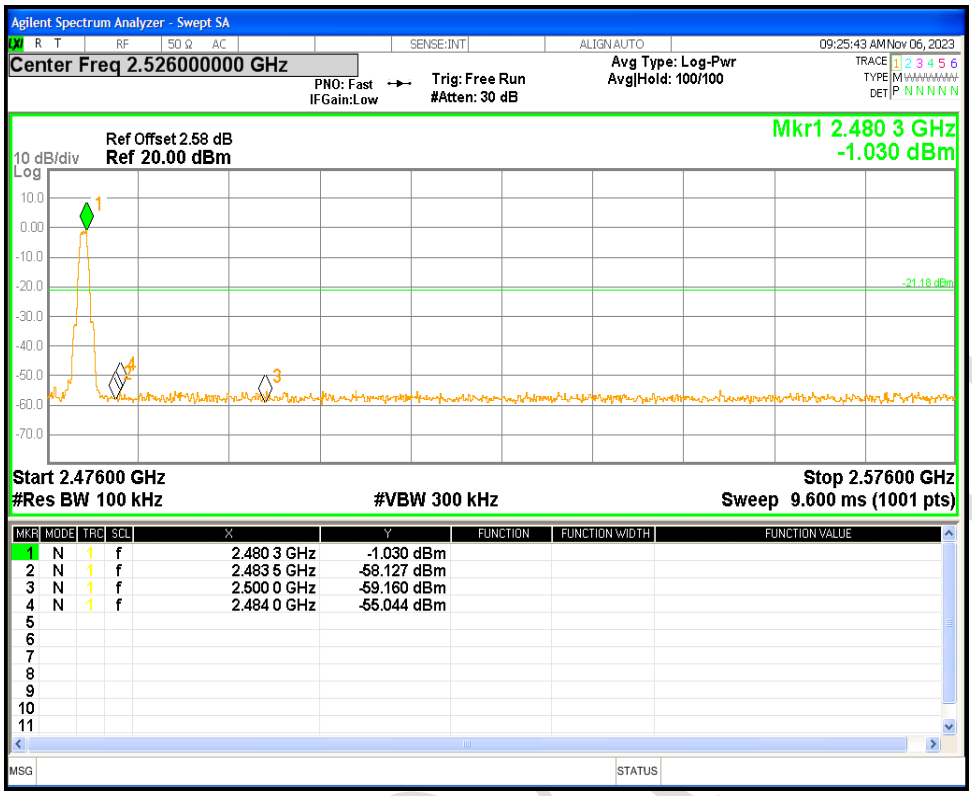
Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



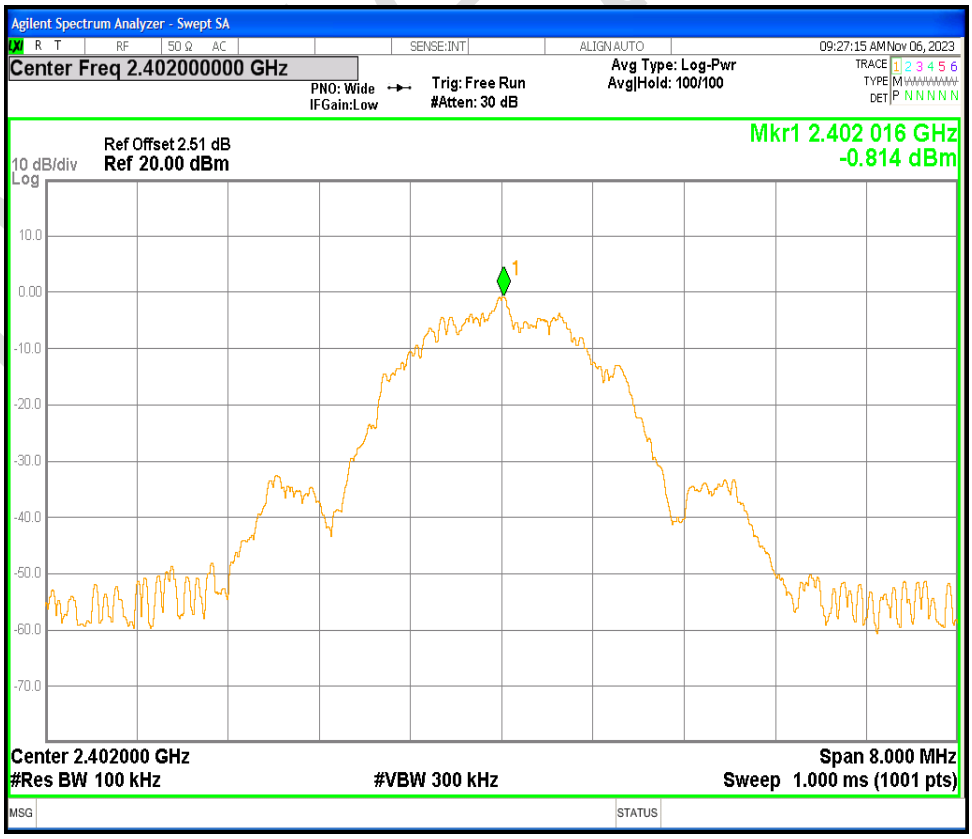
Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



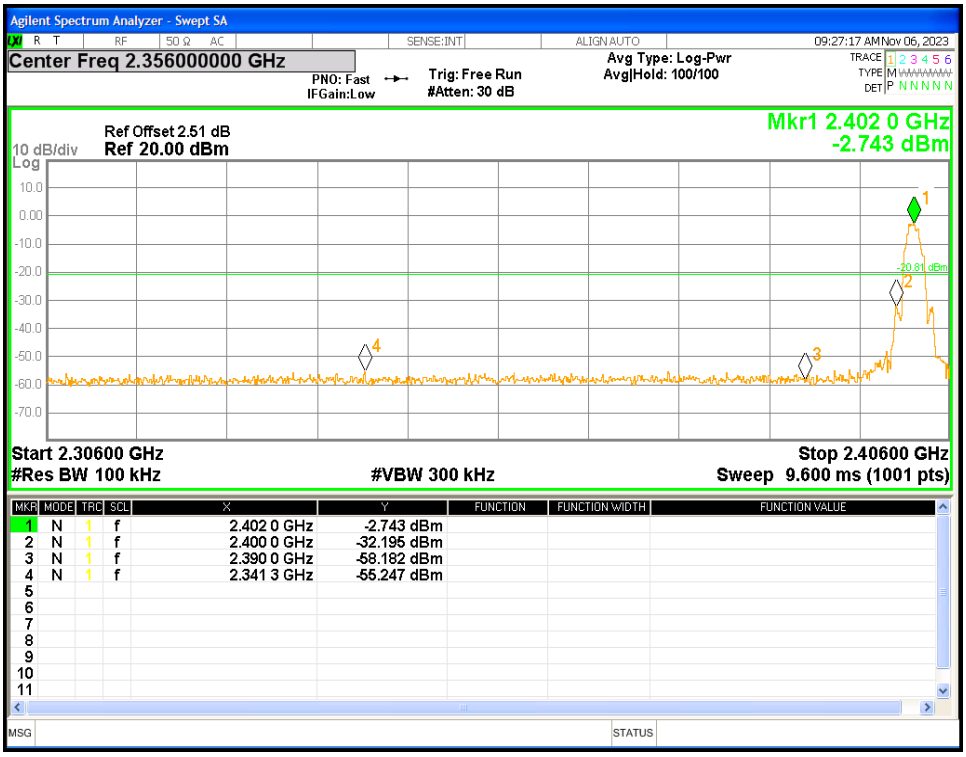
Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



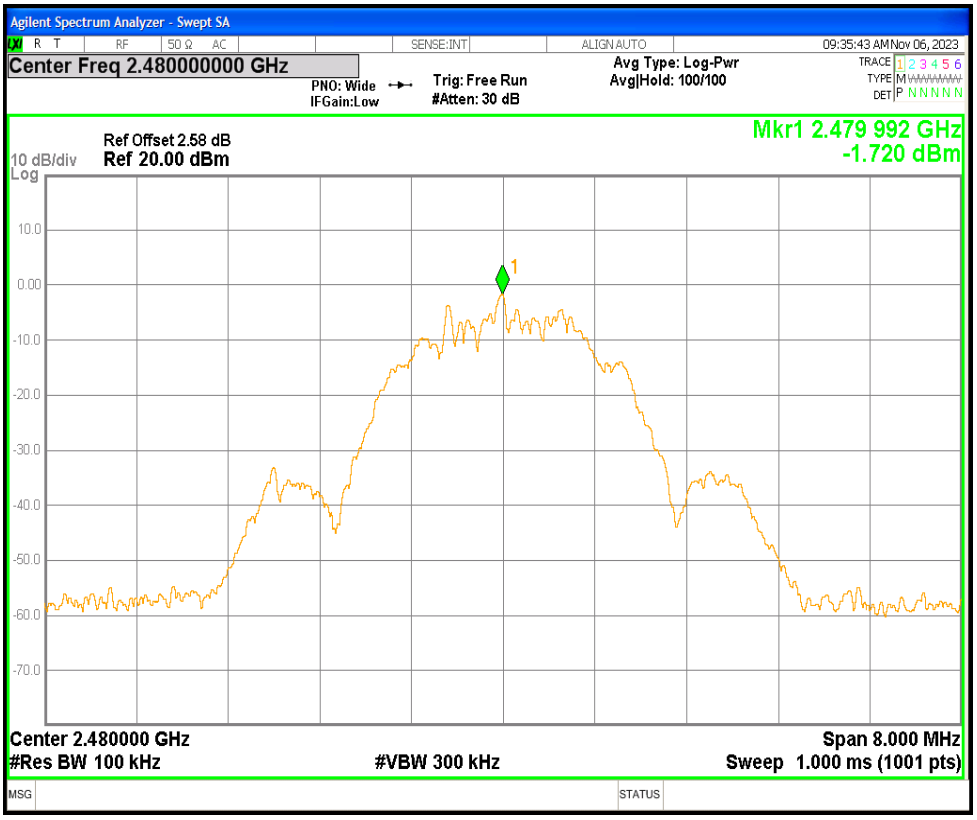
Band Edge NVNT BLE 2M 2402MHz Ant1 Ref



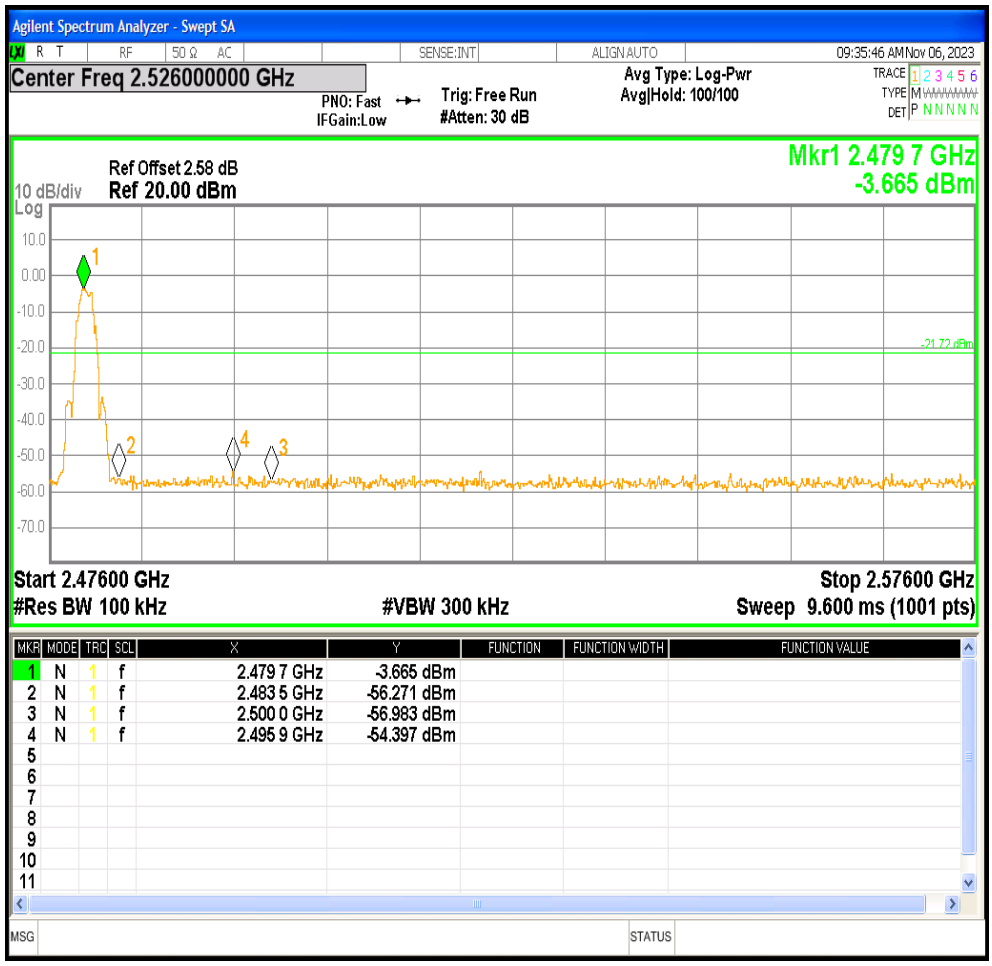
Band Edge NVNT BLE 2M 2402MHz Ant1 Emission



Band Edge NVNT BLE 2M 2480MHz Ant1 Ref

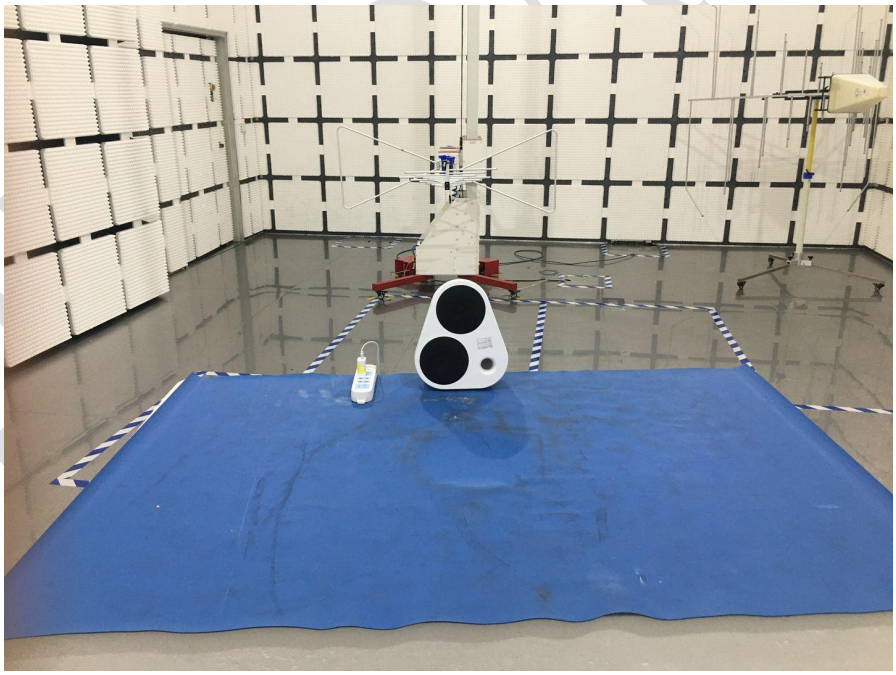


Band Edge NVNT BLE 2M 2480MHz Ant1 Emission



APPENDIX A: PHOTOGRAPHS OF TEST SETUP

Radiated Spurious Emissions



Conducted Emissions at AC Power Line (150kHz-30MHz)

APPENDIX B: PHOTOGRAPHS OF EUT

Reference to the test report No. BLA-EMC-202311-A0601

----END OF REPORT----

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