



Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: Cell Phone Signal Booster

Test Model: AN-USF5-01

Environmental Conditions

Temperature:	23.5°C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li Huan





A.1 -6dB Bandwidth

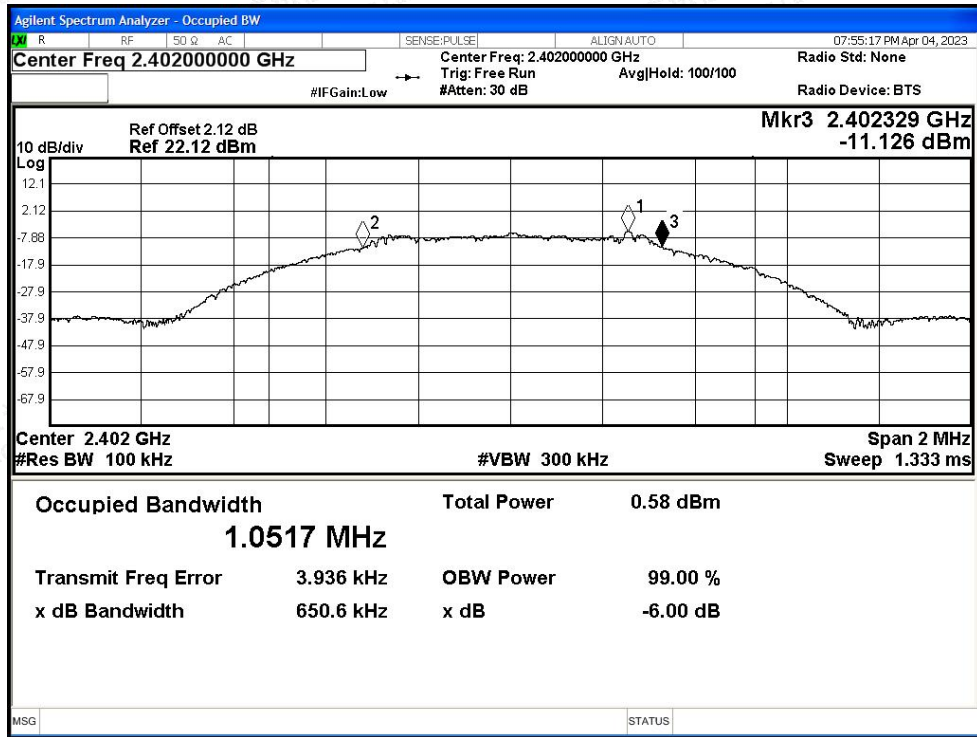
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVLT	BLE 1M	2402	Ant1	0.651	≥ 0.5	Pass
NVLT	BLE 1M	2440	Ant1	0.676	≥ 0.5	Pass
NVLT	BLE 1M	2480	Ant1	0.7	≥ 0.5	Pass



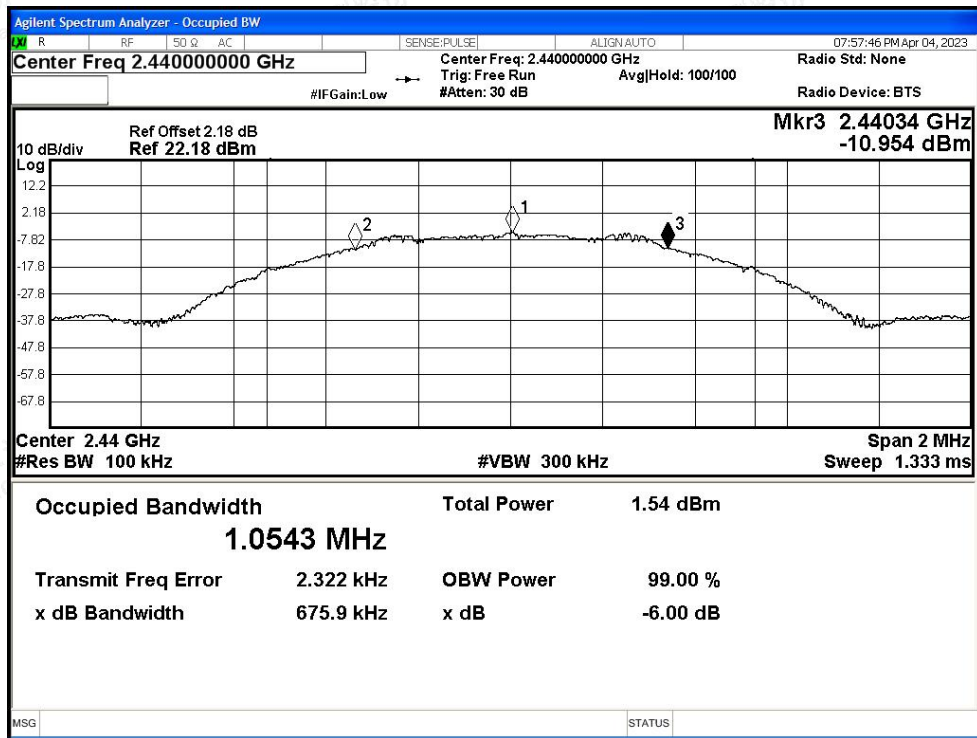


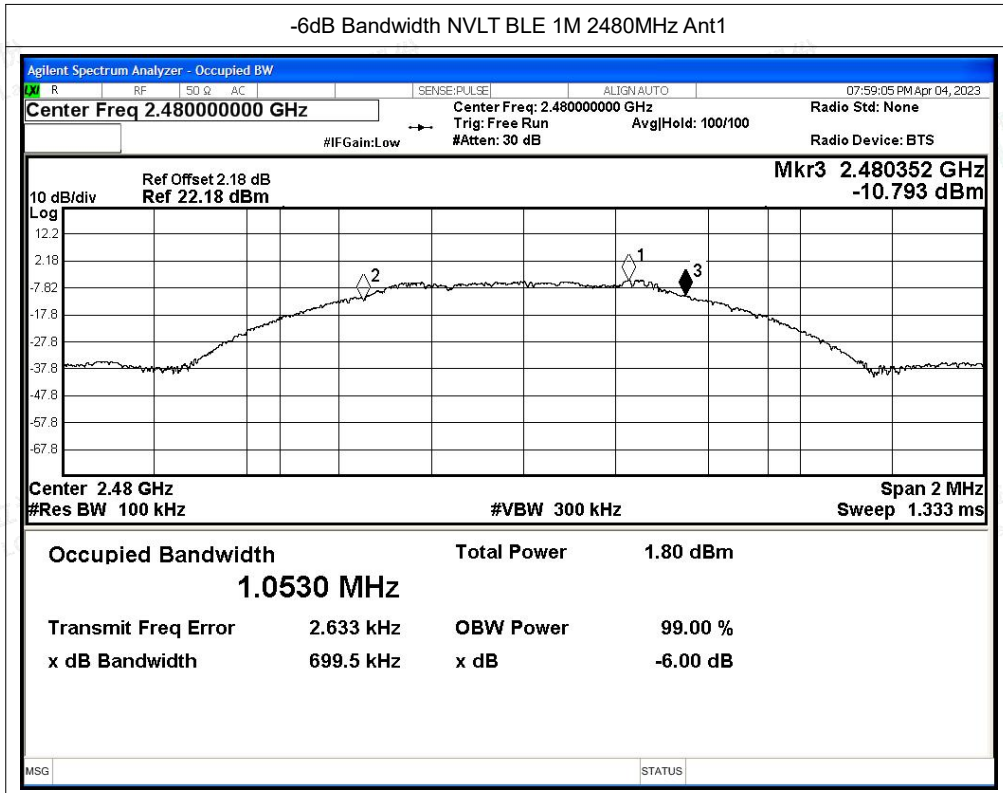
Test Graphs

-6dB Bandwidth NVLT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVLT BLE 1M 2440MHz Ant1







A.2 Maximum Conducted Output Power

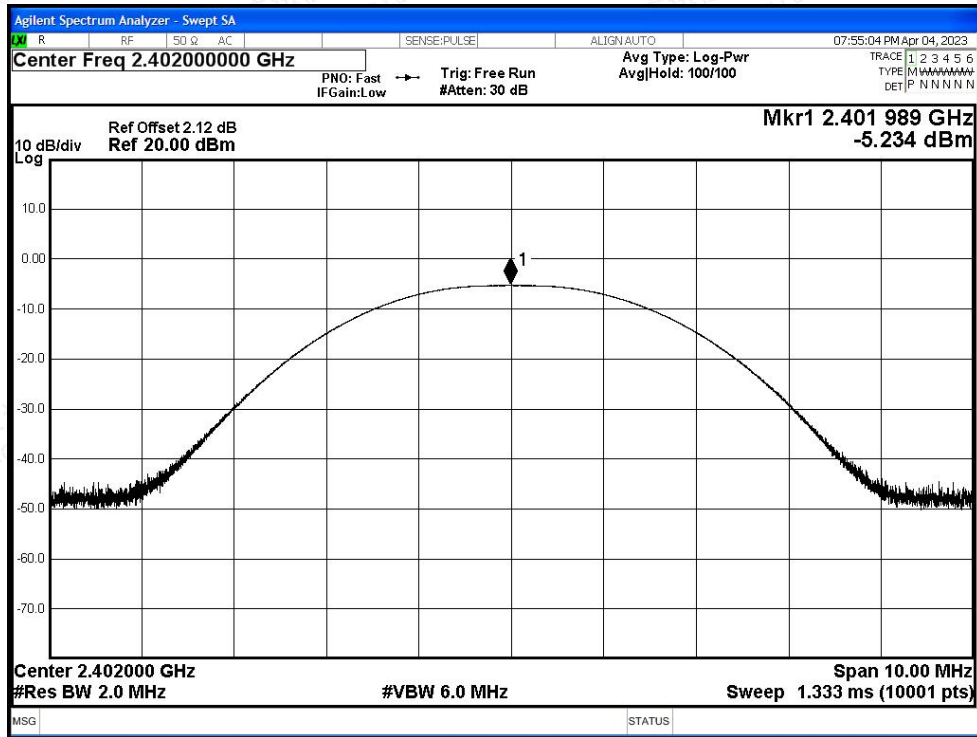
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVLT	BLE 1M	2402	Ant1	-5.23	30	Pass
NVLT	BLE 1M	2440	Ant1	-4.31	30	Pass
NVLT	BLE 1M	2480	Ant1	-3.93	30	Pass



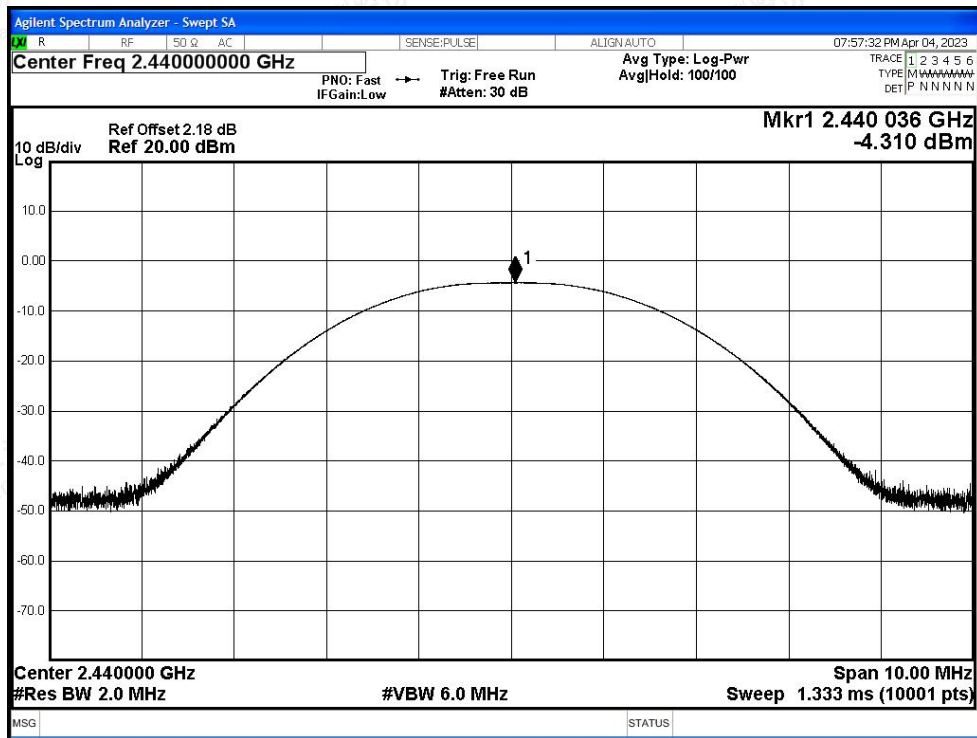


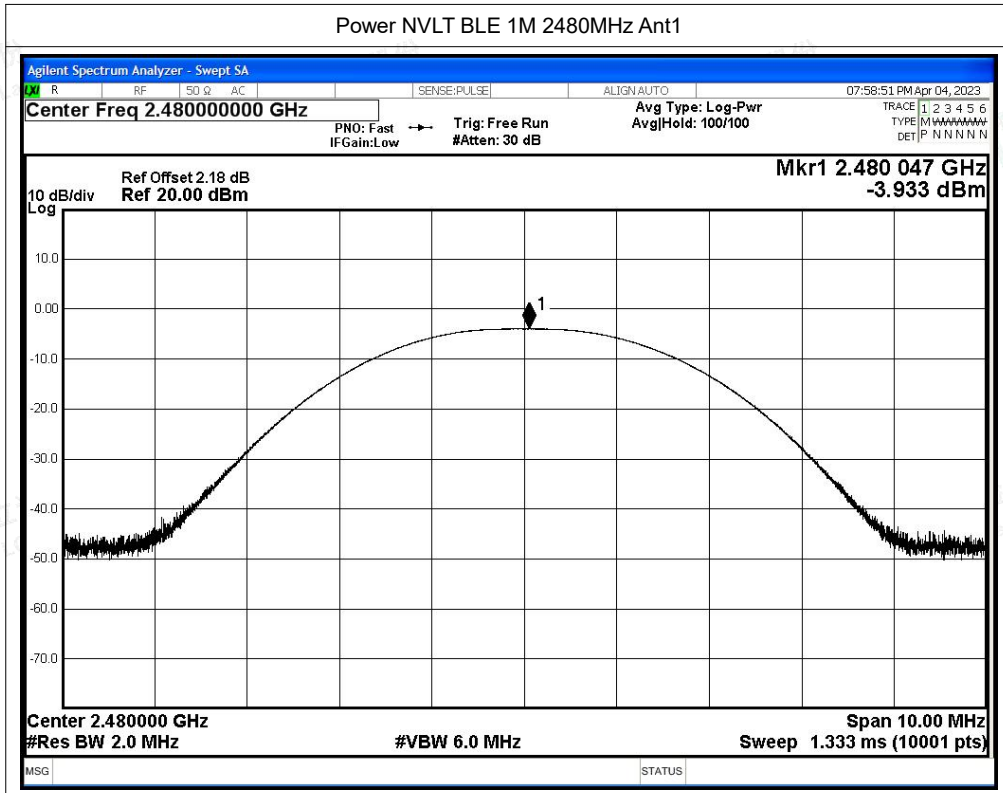
Test Graphs

Power NVLT BLE 1M 2402MHz Ant1



Power NVLT BLE 1M 2440MHz Ant1







A.3 Maximum Power Spectral Density Level

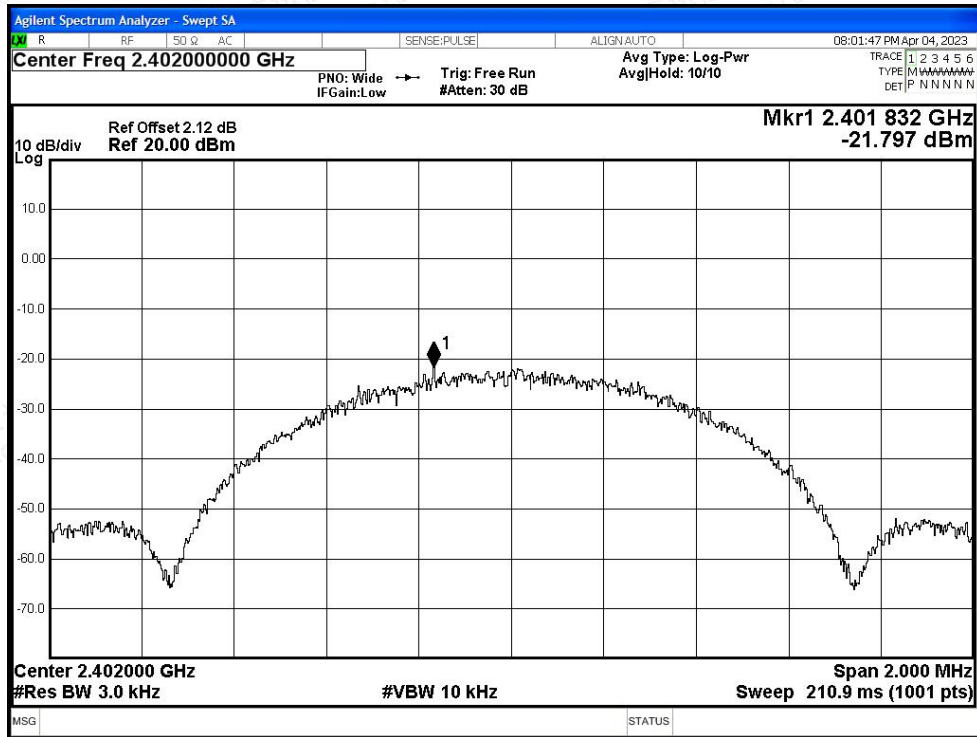
Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVLT	BLE 1M	2402	Ant1	-21.8	8	Pass
NVLT	BLE 1M	2440	Ant1	-20.66	8	Pass
NVLT	BLE 1M	2480	Ant1	-20.52	8	Pass



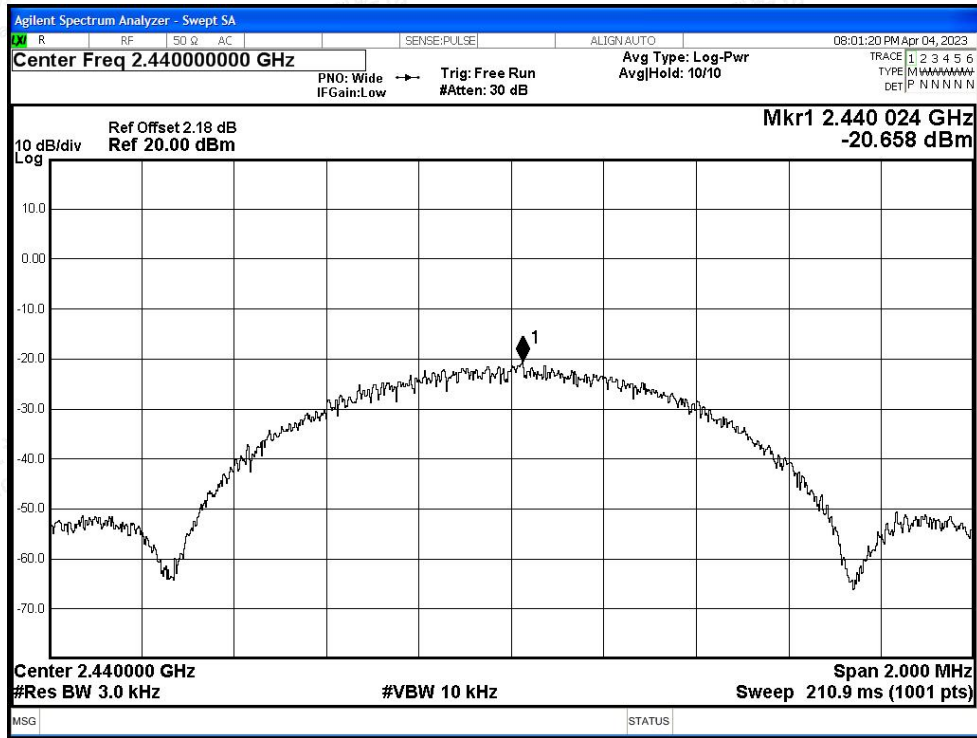


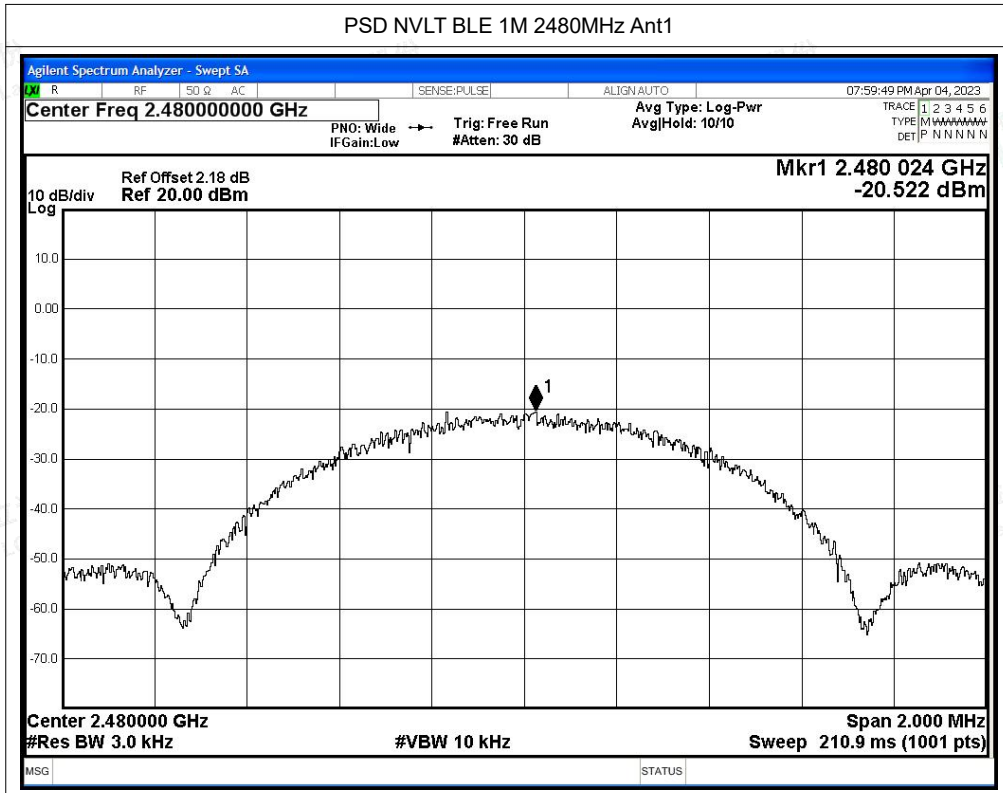
Test Graphs

PSD NVLT BLE 1M 2402MHz Ant1



PSD NVLT BLE 1M 2440MHz Ant1







A.4 Band Edge

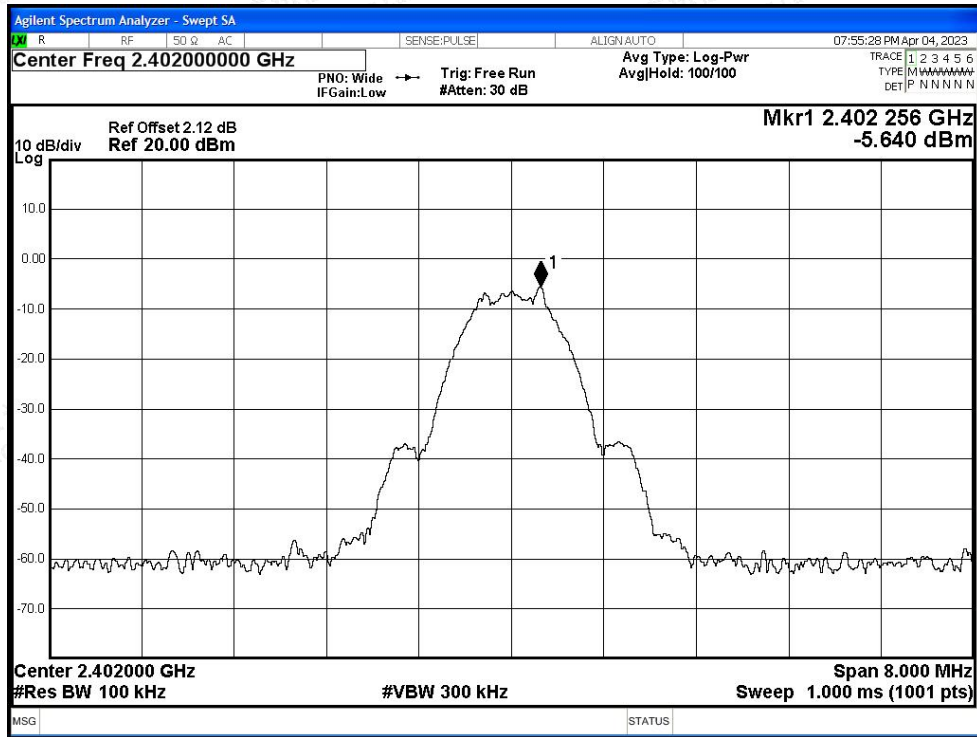
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVLT	BLE 1M	2402	Ant1	-51.04	-20	Pass
NVLT	BLE 1M	2480	Ant1	-52.48	-20	Pass



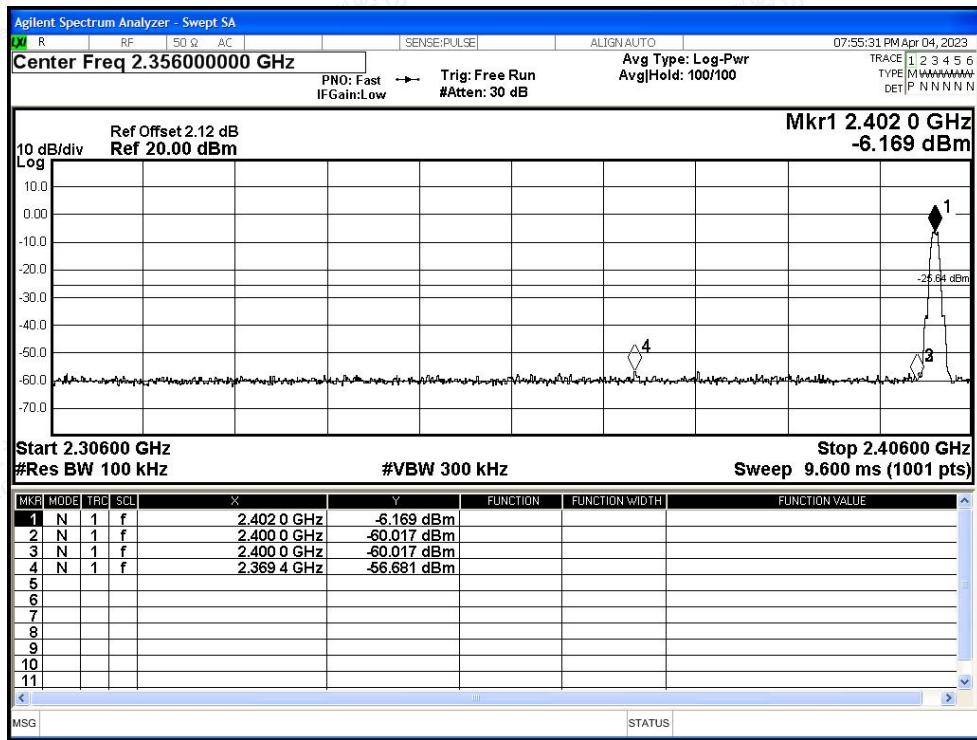


Test Graphs

Band Edge NVLT BLE 1M 2402MHz Ant1 Ref

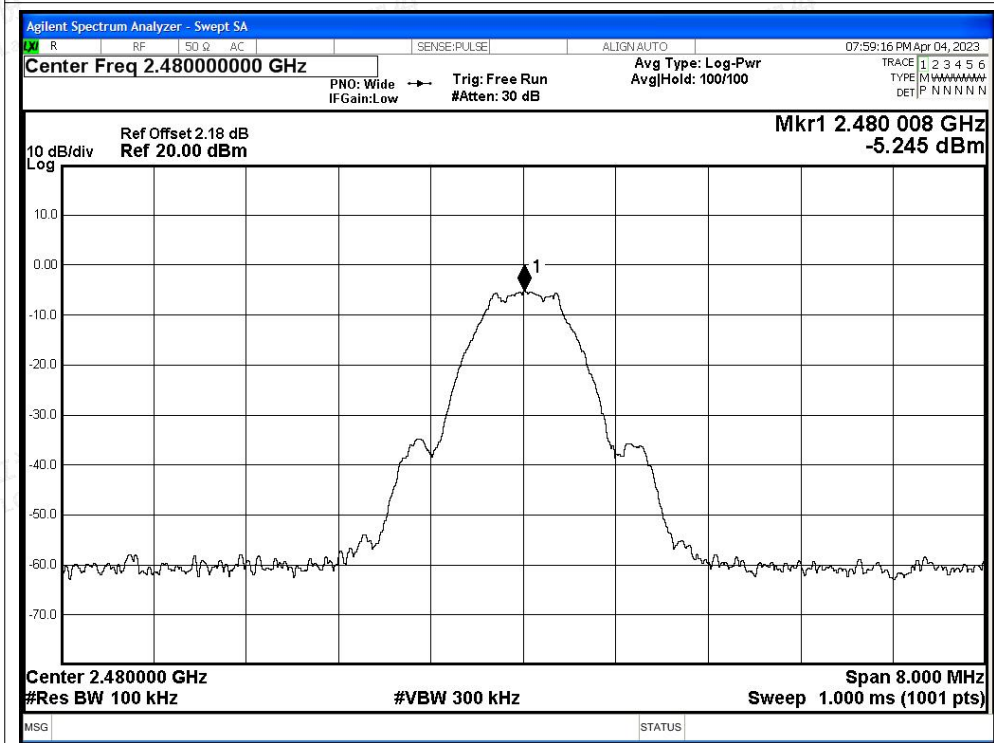


Band Edge NVLT BLE 1M 2402MHz Ant1 Emission

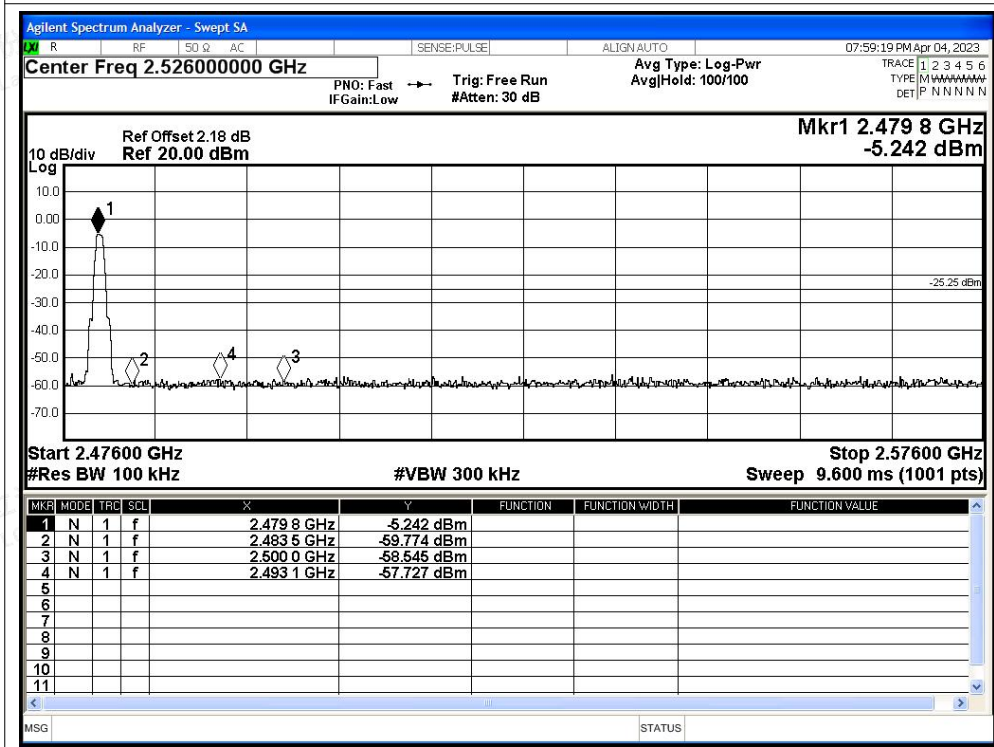




Band Edge NVLT BLE 1M 2480MHz Ant1 Ref



Band Edge NVLT BLE 1M 2480MHz Ant1 Emission





A.5 Conducted RF Spurious Emission

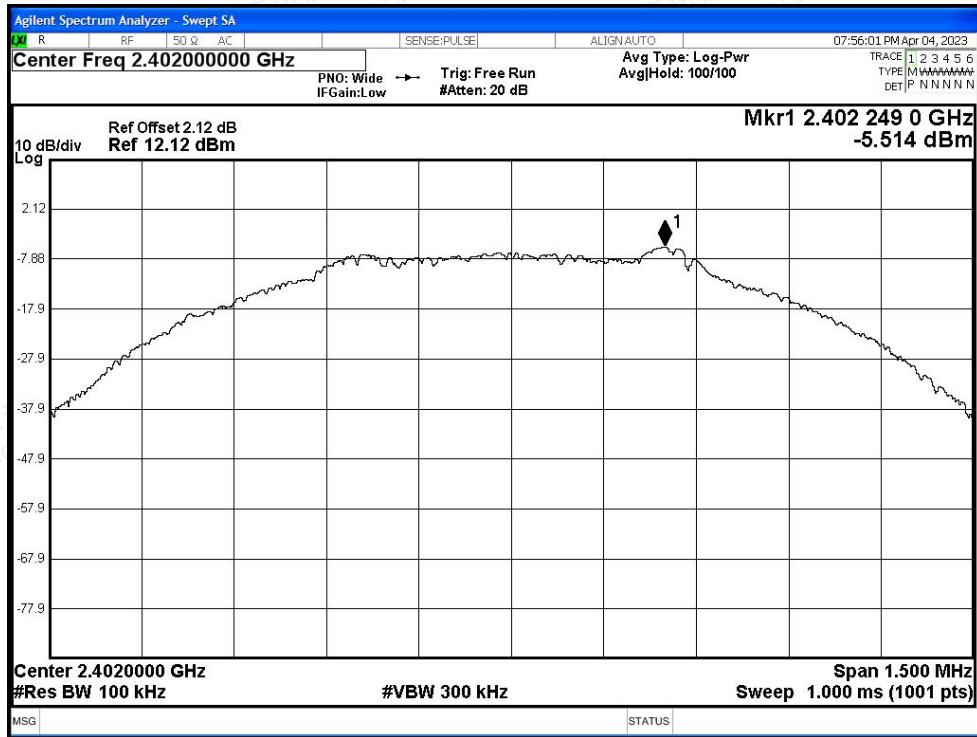
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVLT	BLE 1M	2402	Ant1	-50.32	-20	Pass
NVLT	BLE 1M	2440	Ant1	-50.19	-20	Pass
NVLT	BLE 1M	2480	Ant1	-51.19	-20	Pass



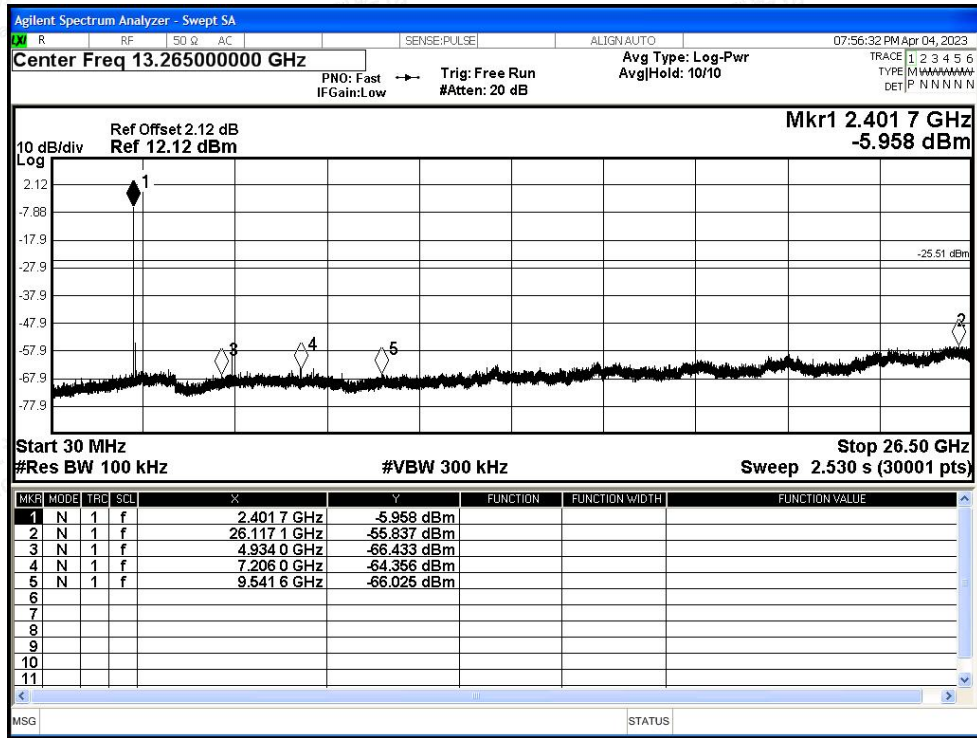


Test Graphs

Tx. Spurious NVLT BLE 1M 2402MHz Ant1 Ref

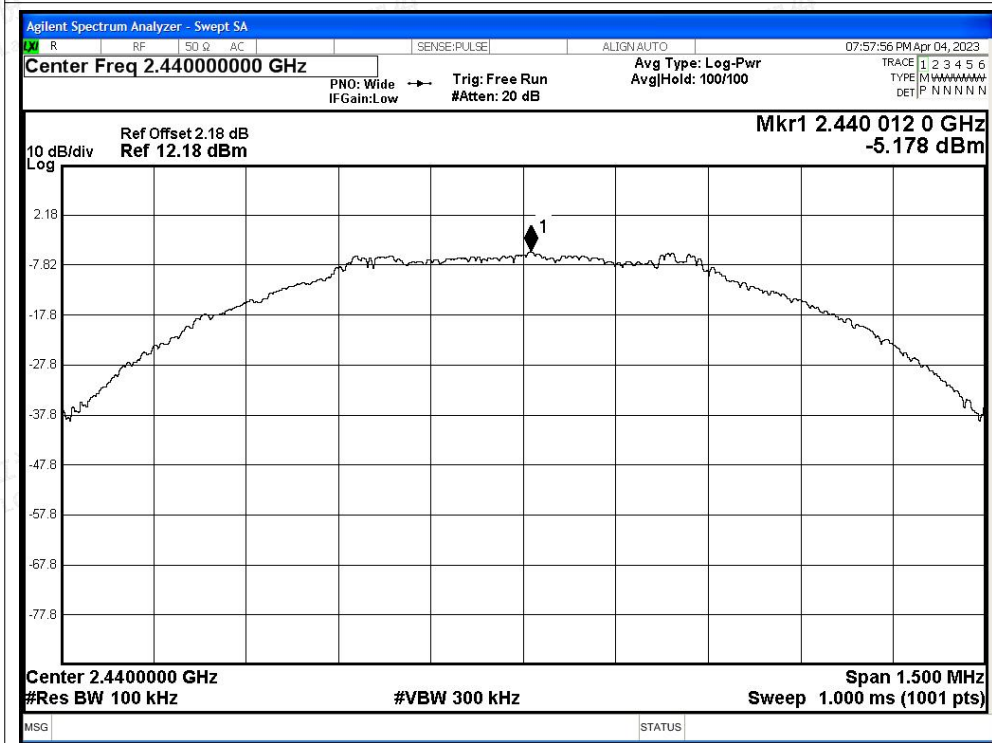


Tx. Spurious NVLT BLE 1M 2402MHz Ant1 Emission

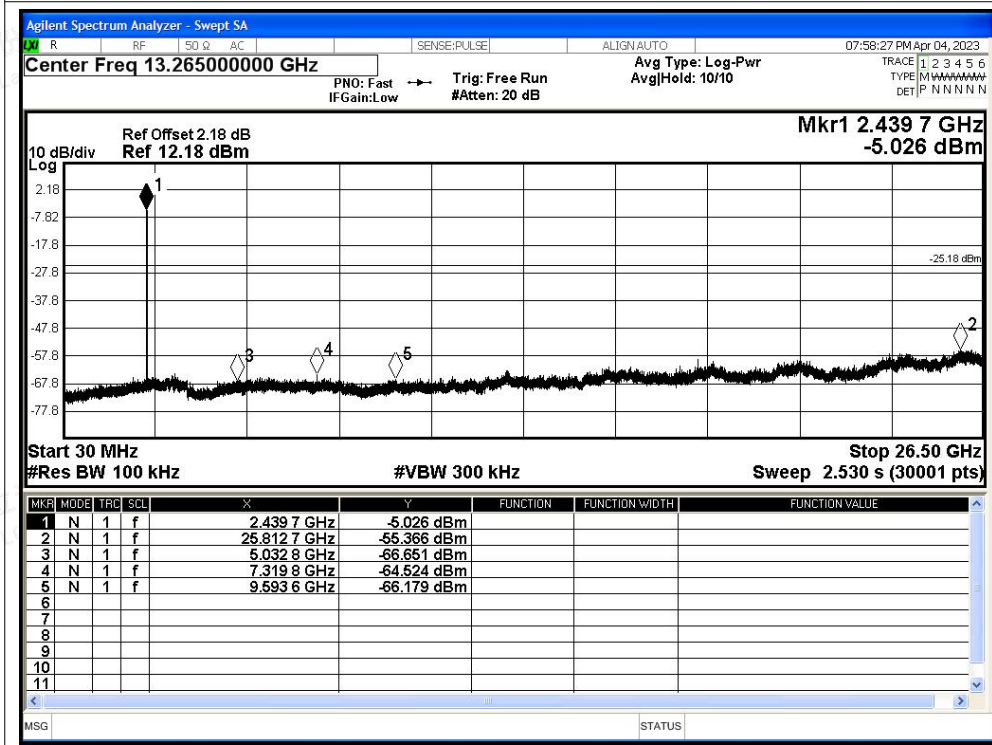




Tx. Spurious NVLT BLE 1M 2440MHz Ant1 Ref

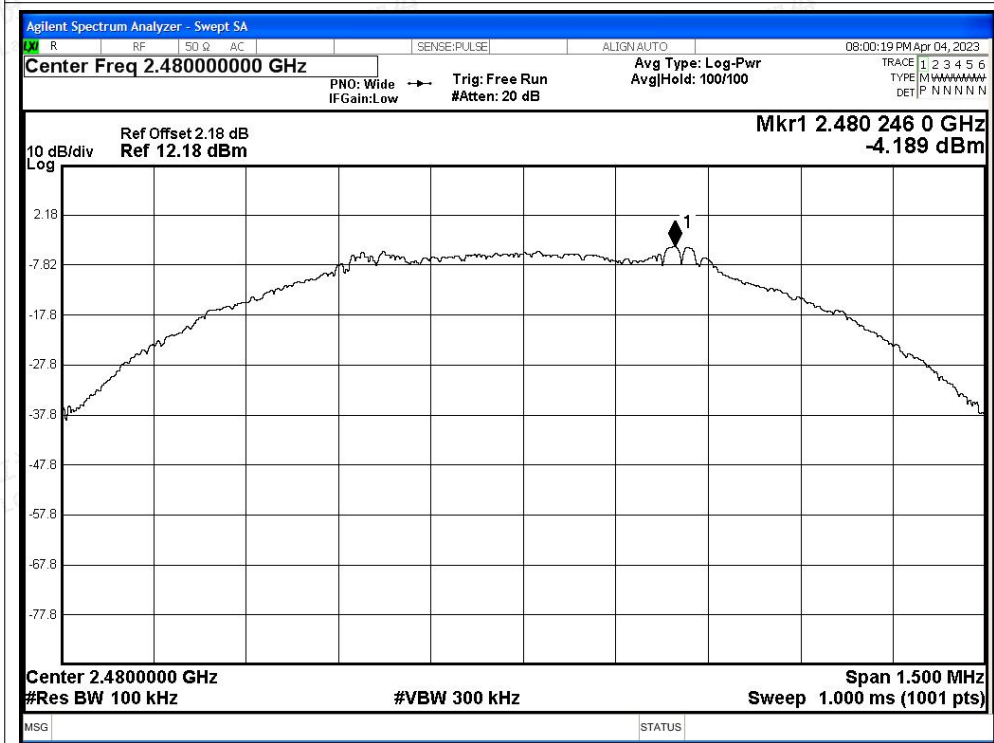


Tx. Spurious NVLT BLE 1M 2440MHz Ant1 Emission

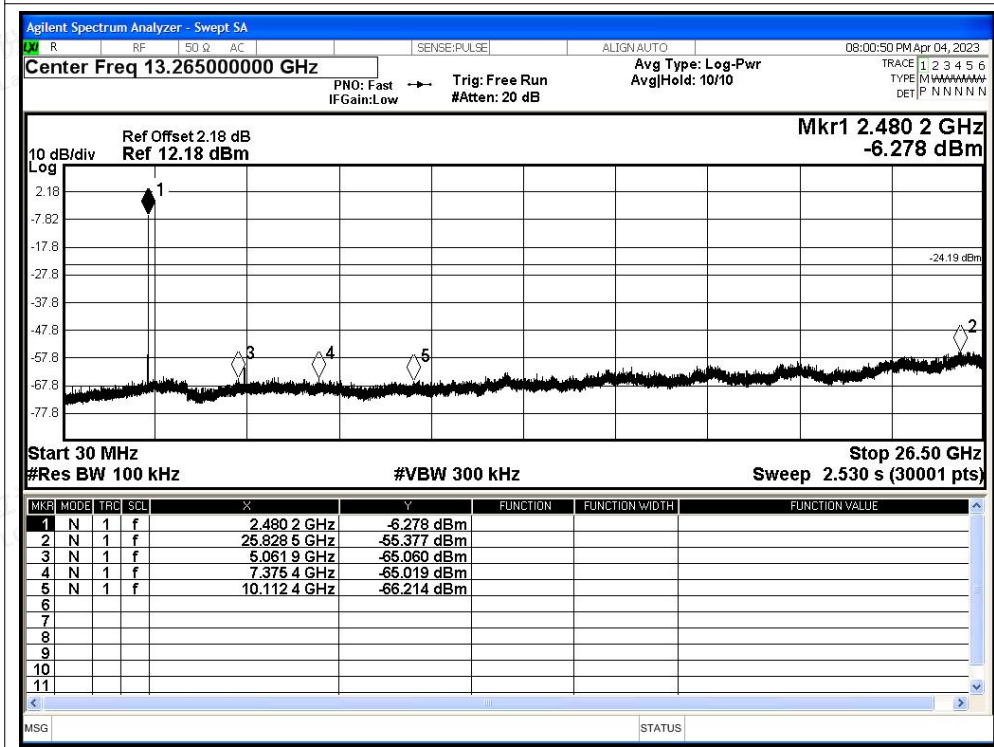




Tx. Spurious NVLT BLE 1M 2480MHz Ant1 Ref



Tx. Spurious NVLT BLE 1M 2480MHz Ant1 Emission





A.6 Duty Cycle

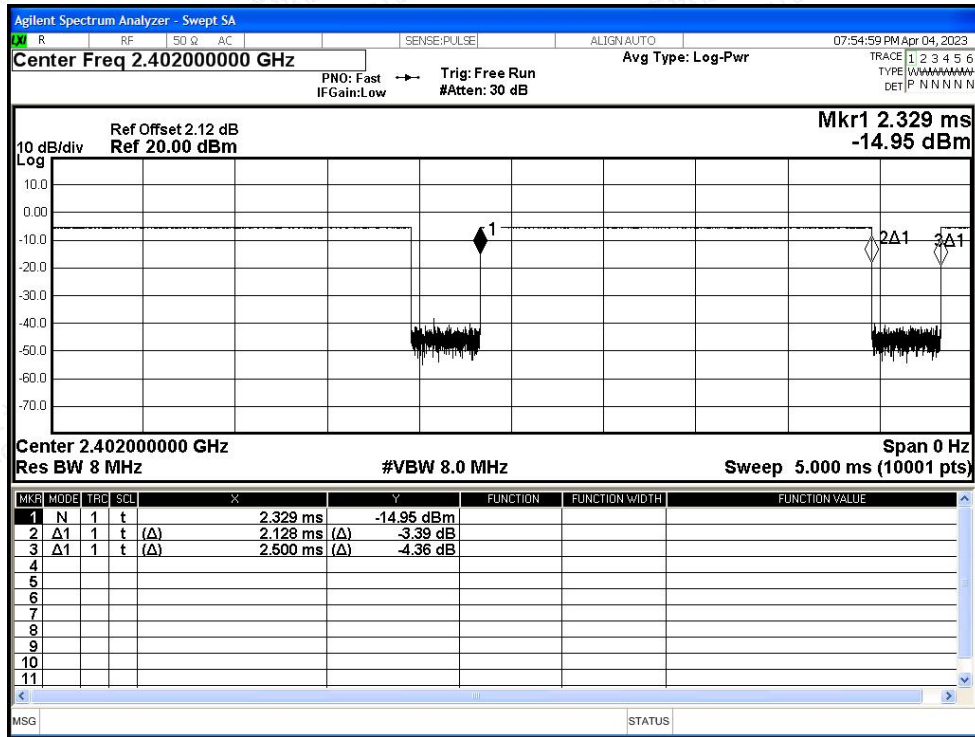
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVLT	BLE 1M	2402	Ant1	85.1	0.7	0.47
NVLT	BLE 1M	2440	Ant1	85.1	0.7	0.47
NVLT	BLE 1M	2480	Ant1	85.1	0.7	0.47



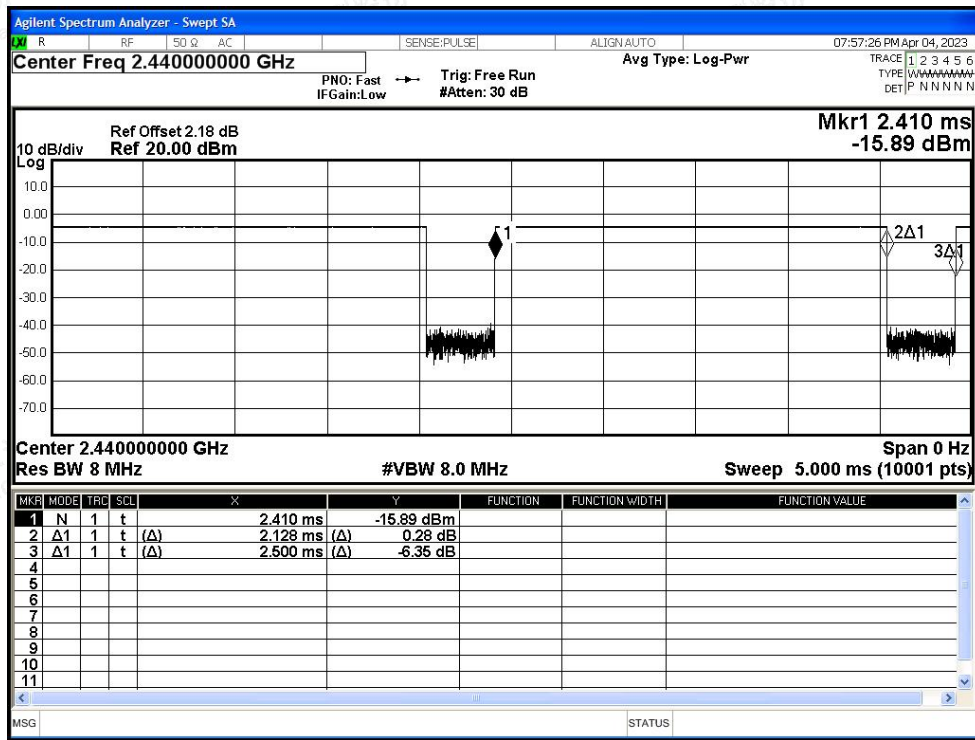


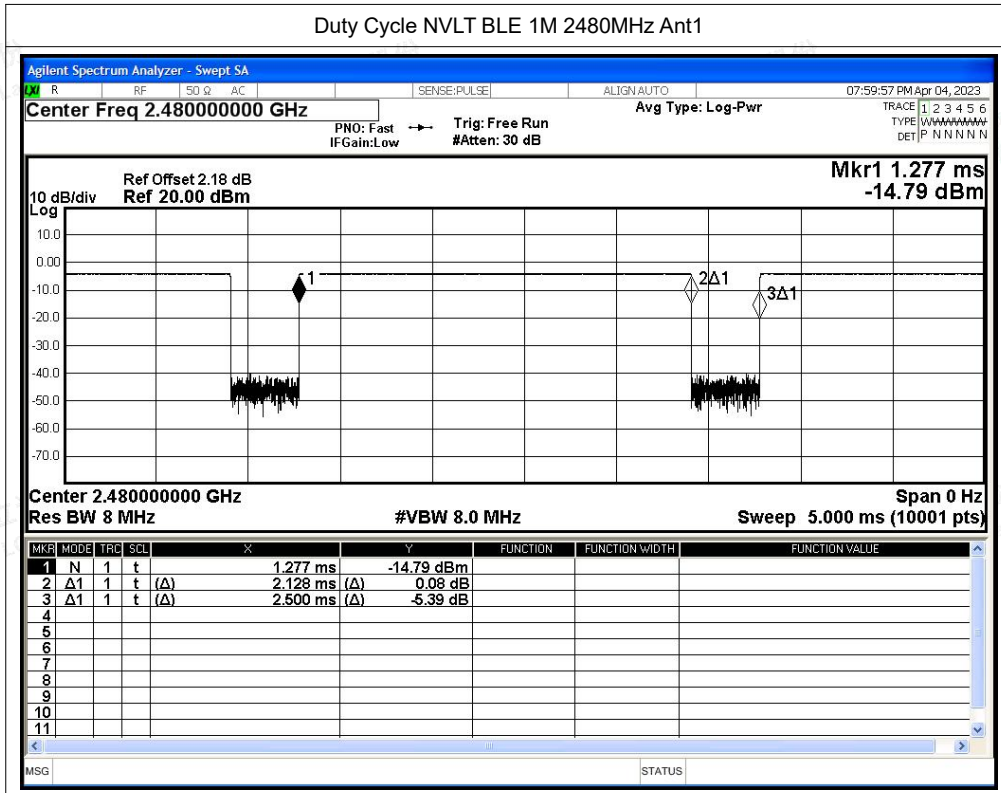
Test Graphs

Duty Cycle NVLT BLE 1M 2402MHz Ant1



Duty Cycle NVLT BLE 1M 2440MHz Ant1







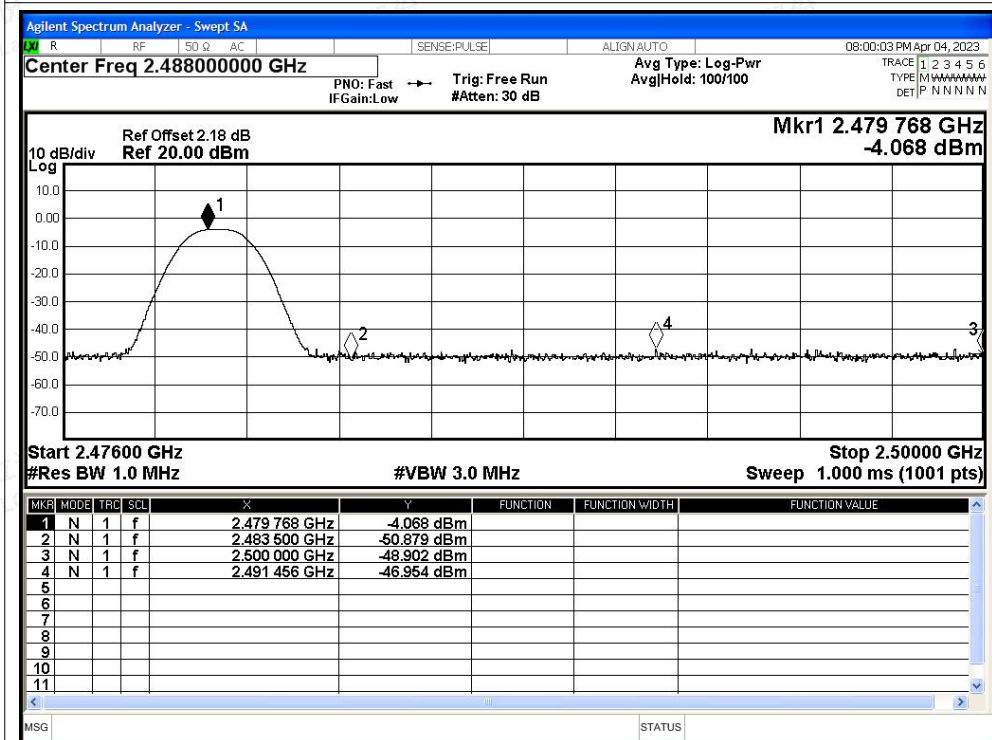
A.7 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVLT	BLE 1M	2402	Ant1	2310	-51.22	2	46.04	Peak	74	Pass
NVLT	BLE 1M	2402	Ant1	2310	-60.11	2	37.15	Average	54	Pass
NVLT	BLE 1M	2402	Ant1	2359.152	-47.87	2	49.39	Peak	74	Pass
NVLT	BLE 1M	2402	Ant1	2385.456	-59.61	2	37.65	Average	54	Pass
NVLT	BLE 1M	2402	Ant1	2390	-49.78	2	47.48	Peak	74	Pass
NVLT	BLE 1M	2402	Ant1	2390	-59.89	2	37.37	Average	54	Pass
NVLT	BLE 1M	2480	Ant1	2483.5	-50.88	2	46.38	Peak	74	Pass
NVLT	BLE 1M	2480	Ant1	2483.5	-59.48	2	37.78	Average	54	Pass
NVLT	BLE 1M	2480	Ant1	2491.456	-46.95	2	50.31	Peak	74	Pass
NVLT	BLE 1M	2480	Ant1	2486.8	-59.4	2	37.86	Average	54	Pass
NVLT	BLE 1M	2480	Ant1	2500	-48.9	2	48.36	Peak	74	Pass
NVLT	BLE 1M	2480	Ant1	2500	-59.55	2	37.71	Average	54	Pass





Restrict Band NVLT BLE 1M 2480MHz Ant1 Peak



Restrict Band NVLT BLE 1M 2480MHz Ant1 Average

