



Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: SplitFast Timing Gate

Test Model: SFBTG843

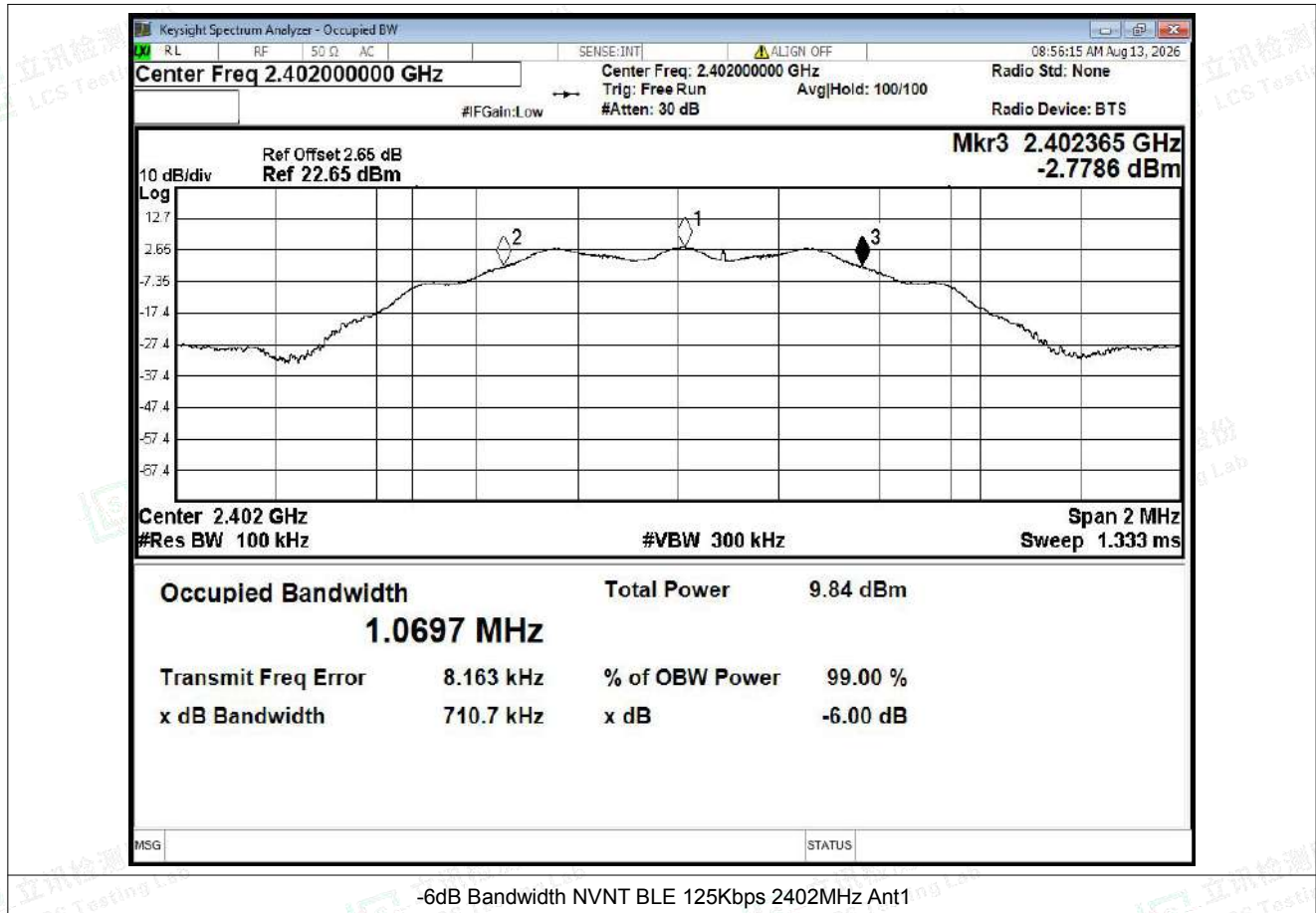
Environmental Conditions

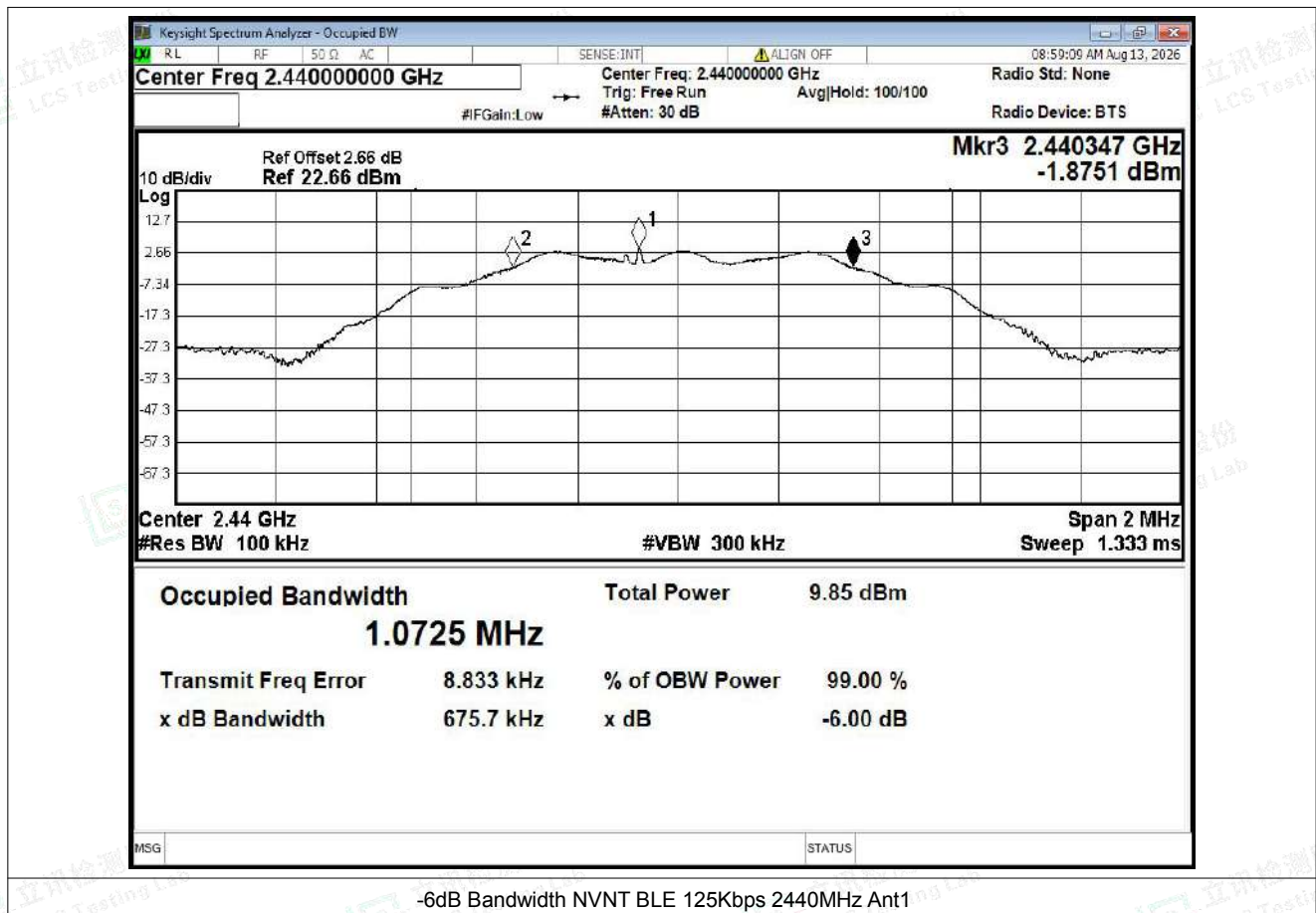
Temperature:	24.6°C
Relative Humidity:	53.9%
ATM Pressure:	100.0 kPa
Test Engineer:	Faith Li
Supervised by:	Can Kun

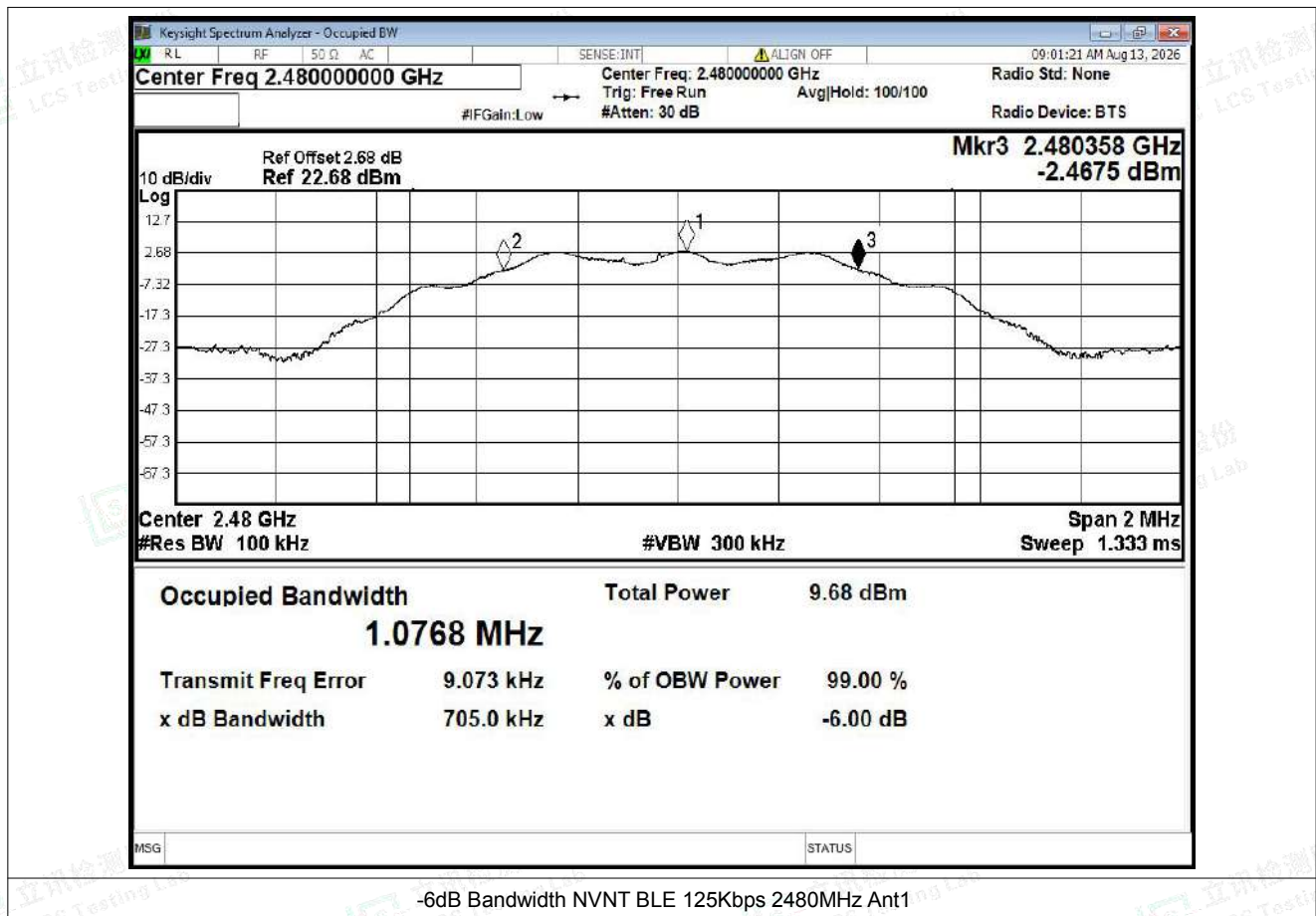


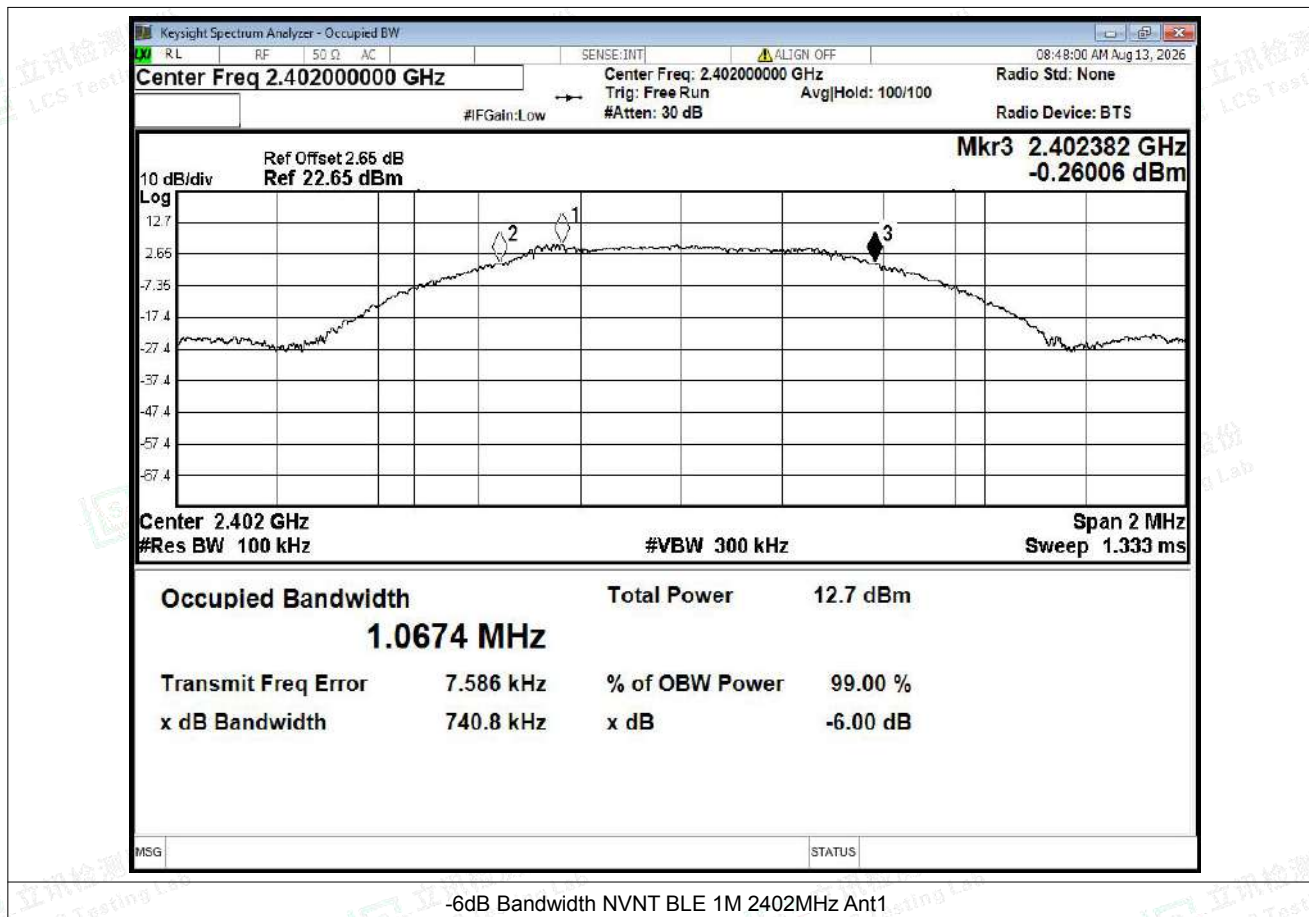
A.1 -6dB Bandwidth

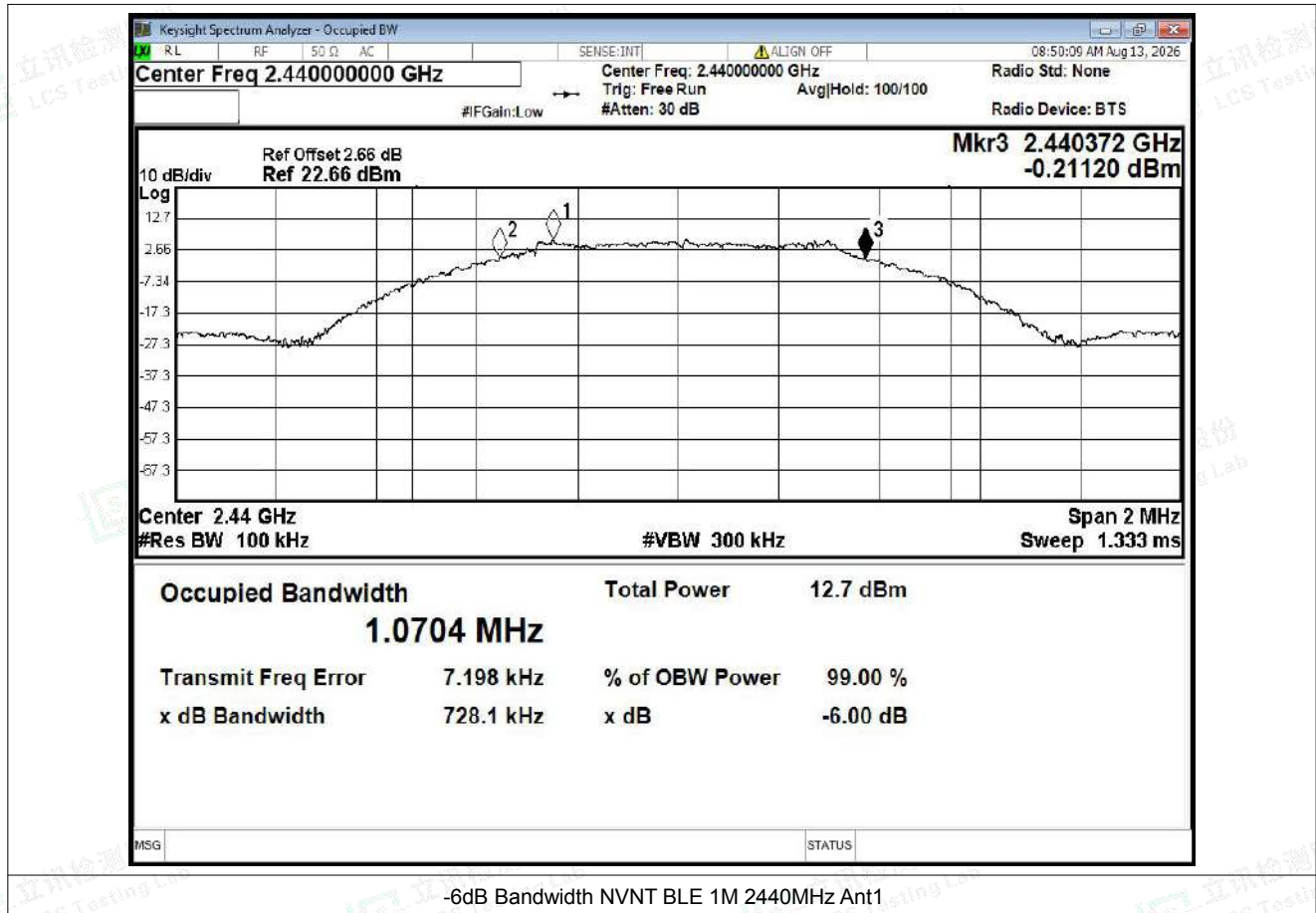
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 125Kbps	2402	Ant1	0.7107	0.5	Pass
NVNT	BLE 125Kbps	2440	Ant1	0.6757	0.5	Pass
NVNT	BLE 125Kbps	2480	Ant1	0.705	0.5	Pass
NVNT	BLE 1M	2402	Ant1	0.7408	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.7281	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.6995	0.5	Pass

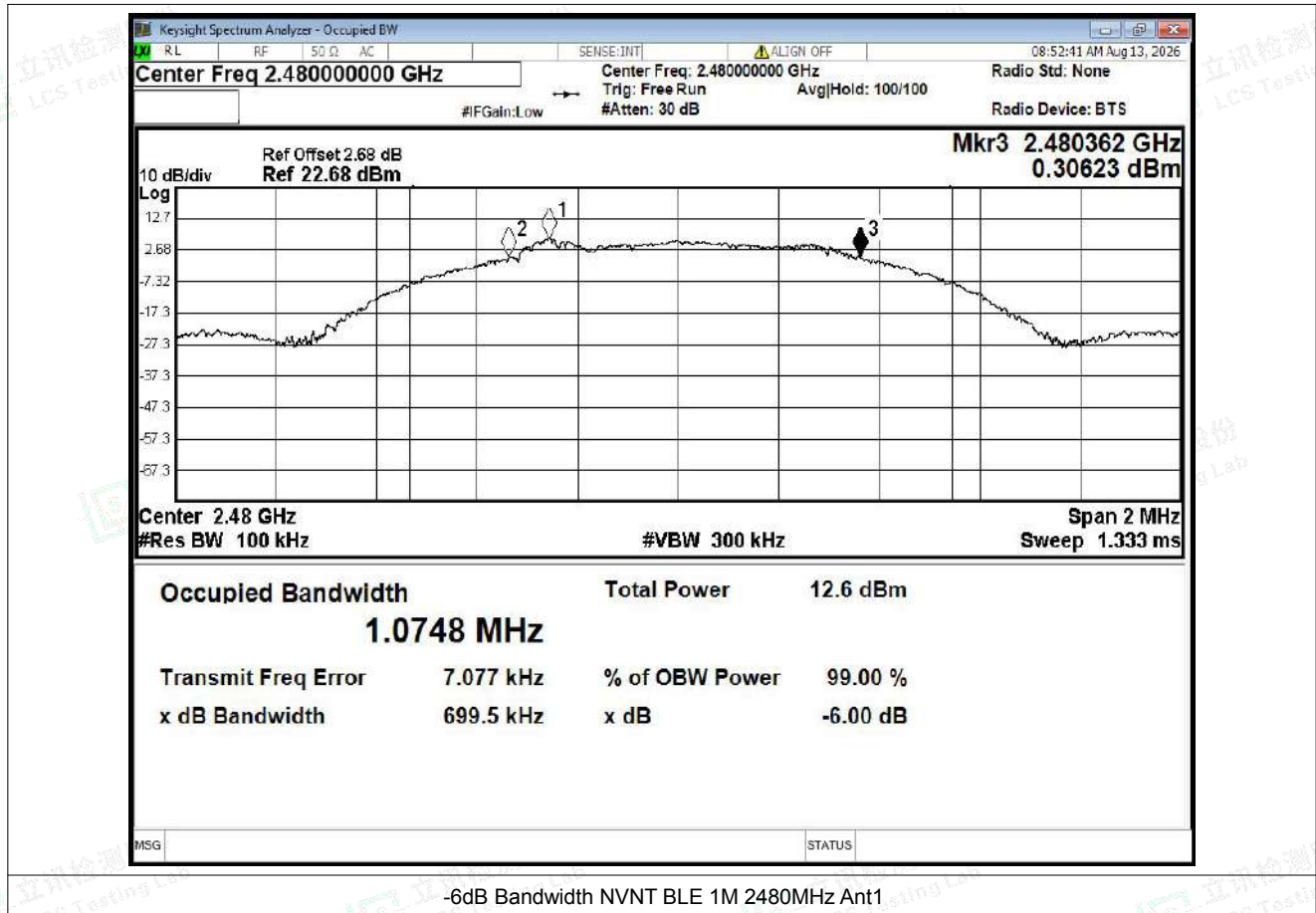








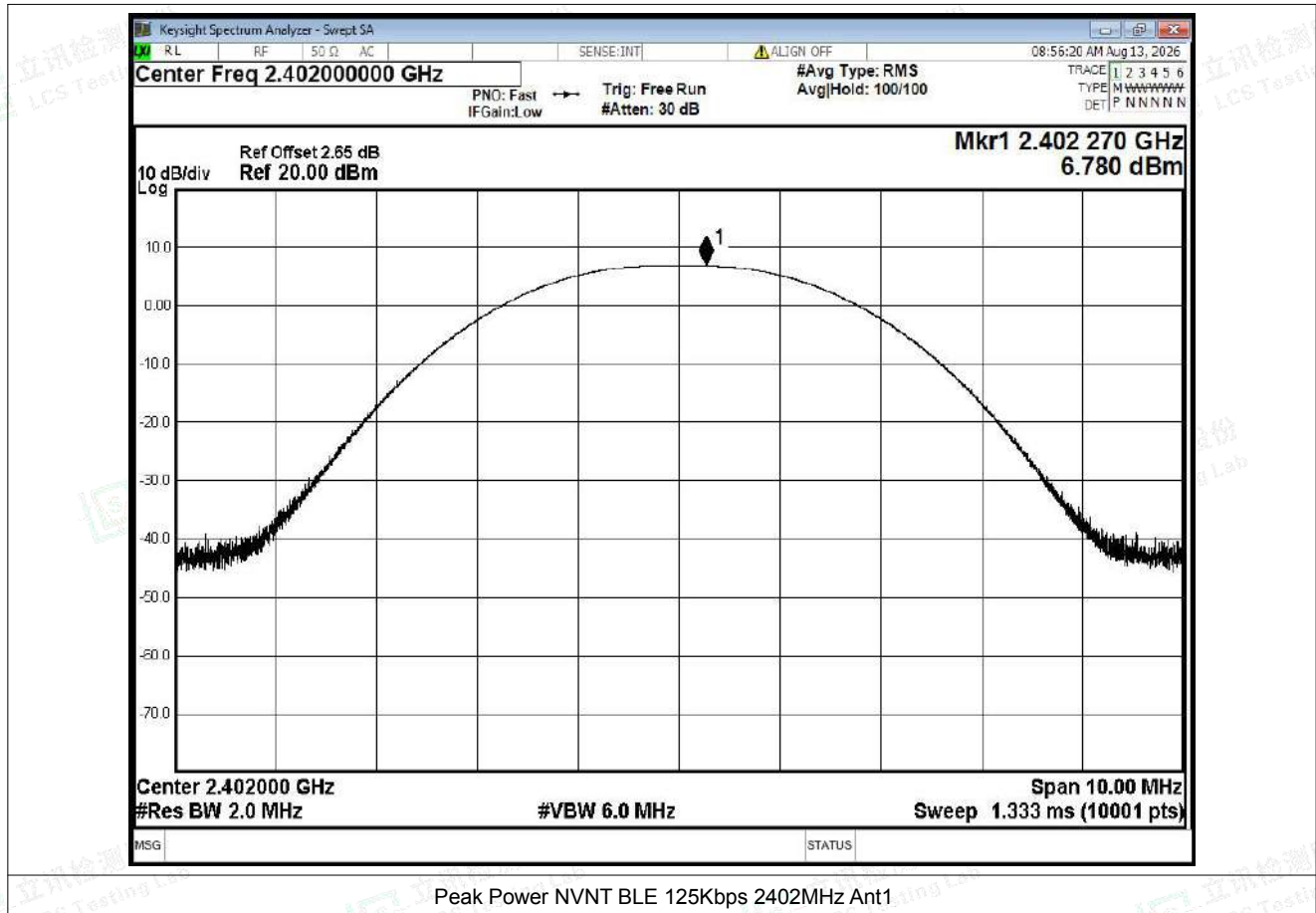


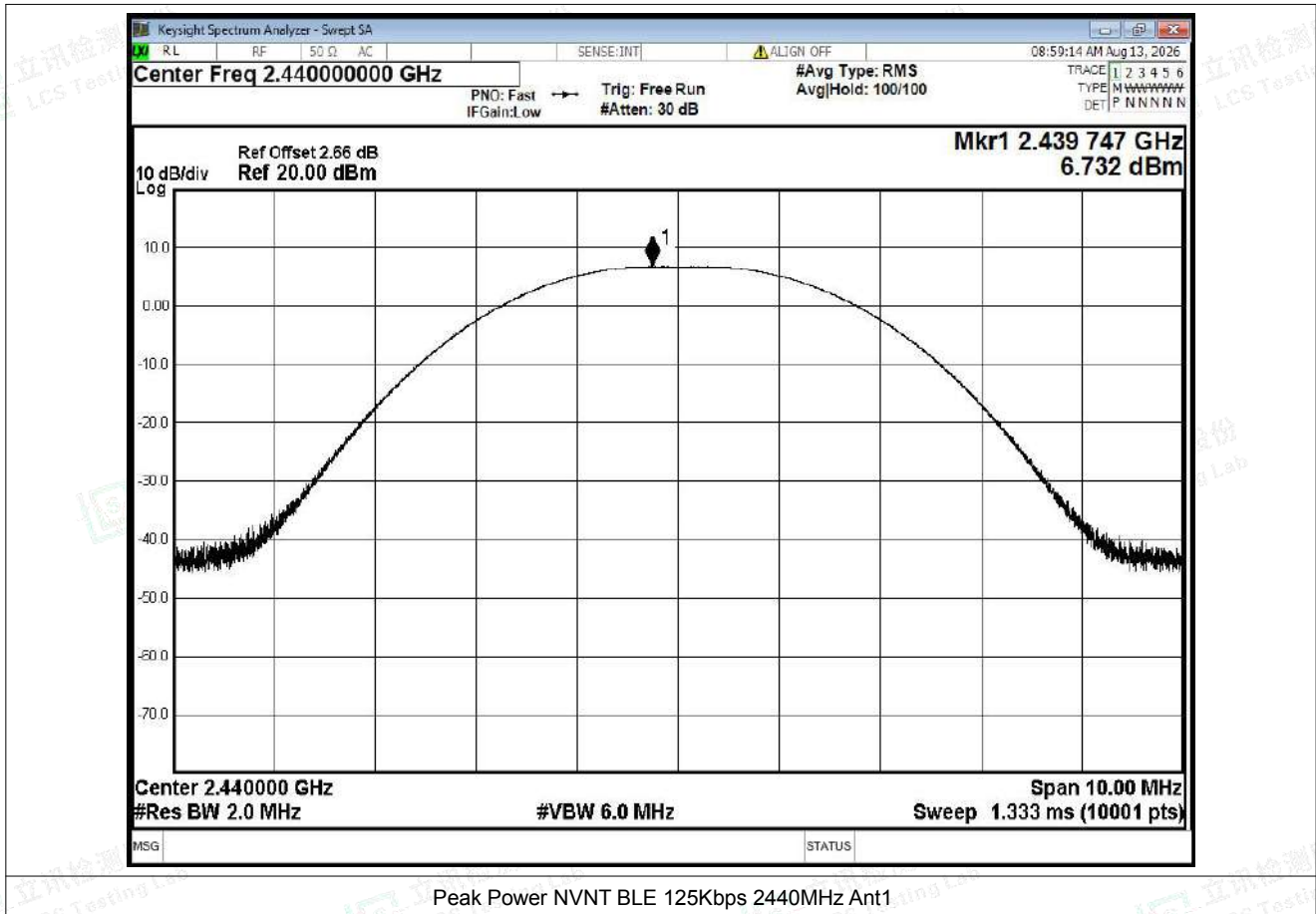


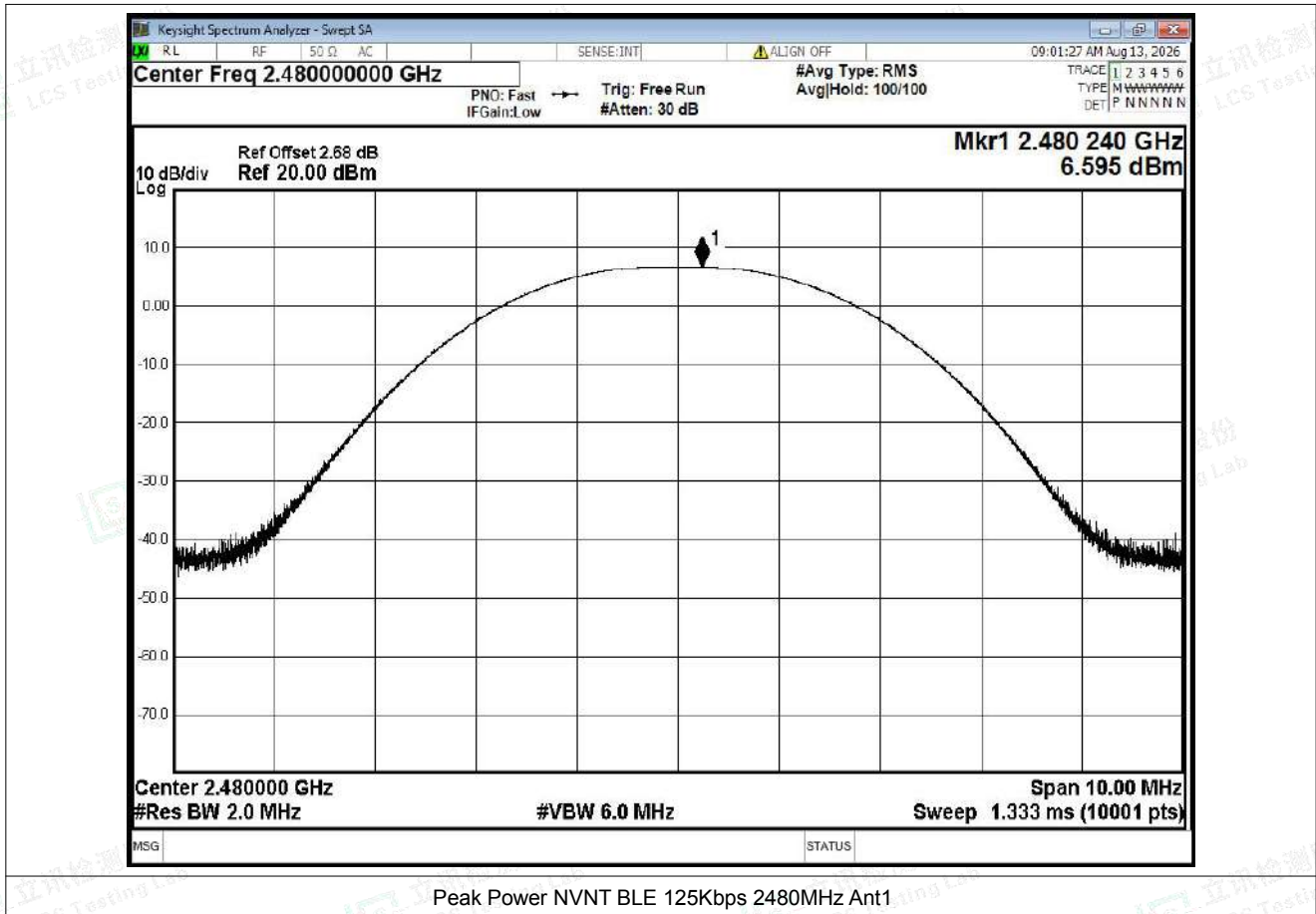


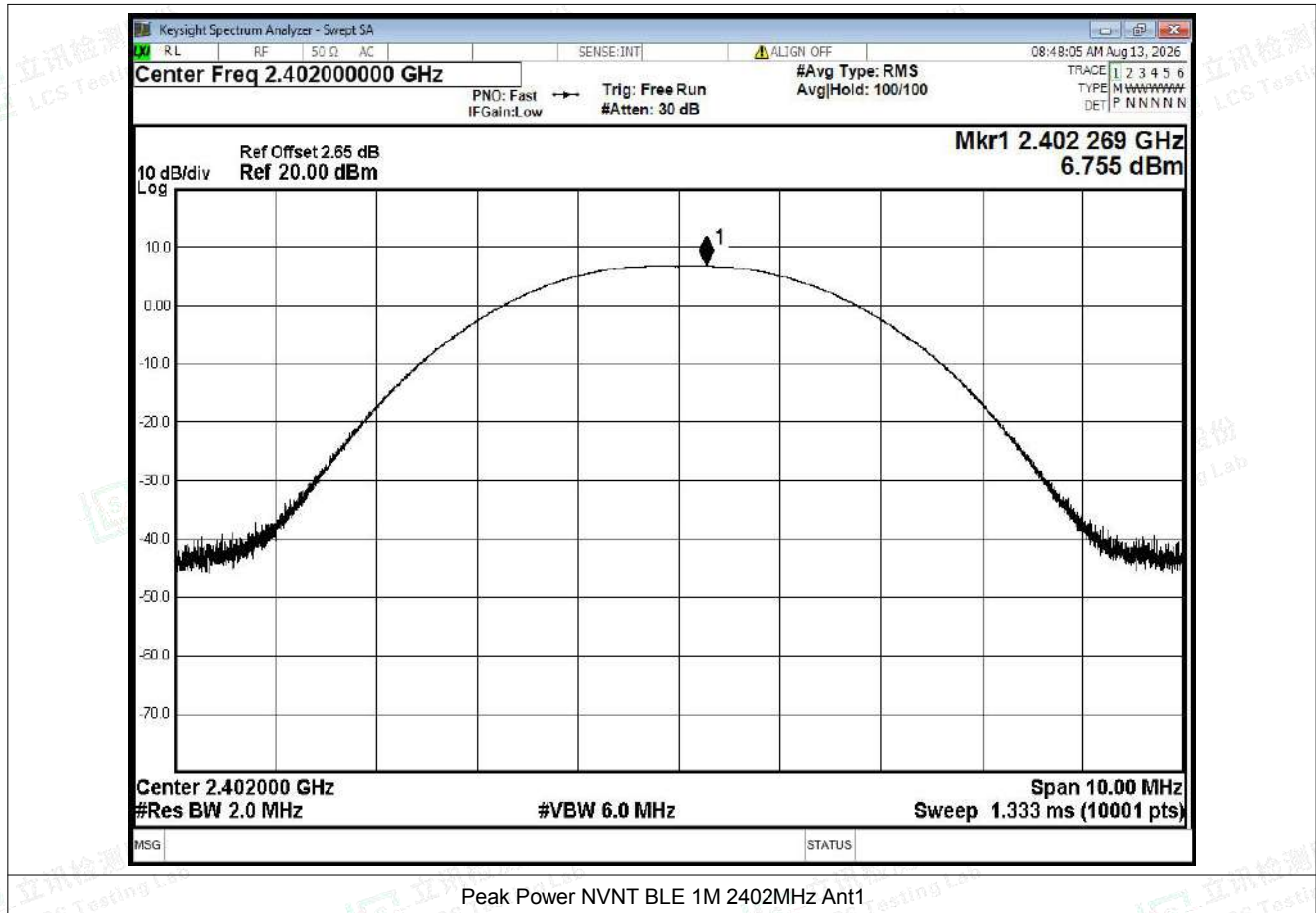
A.2 Maximum Peak Conducted Output Power

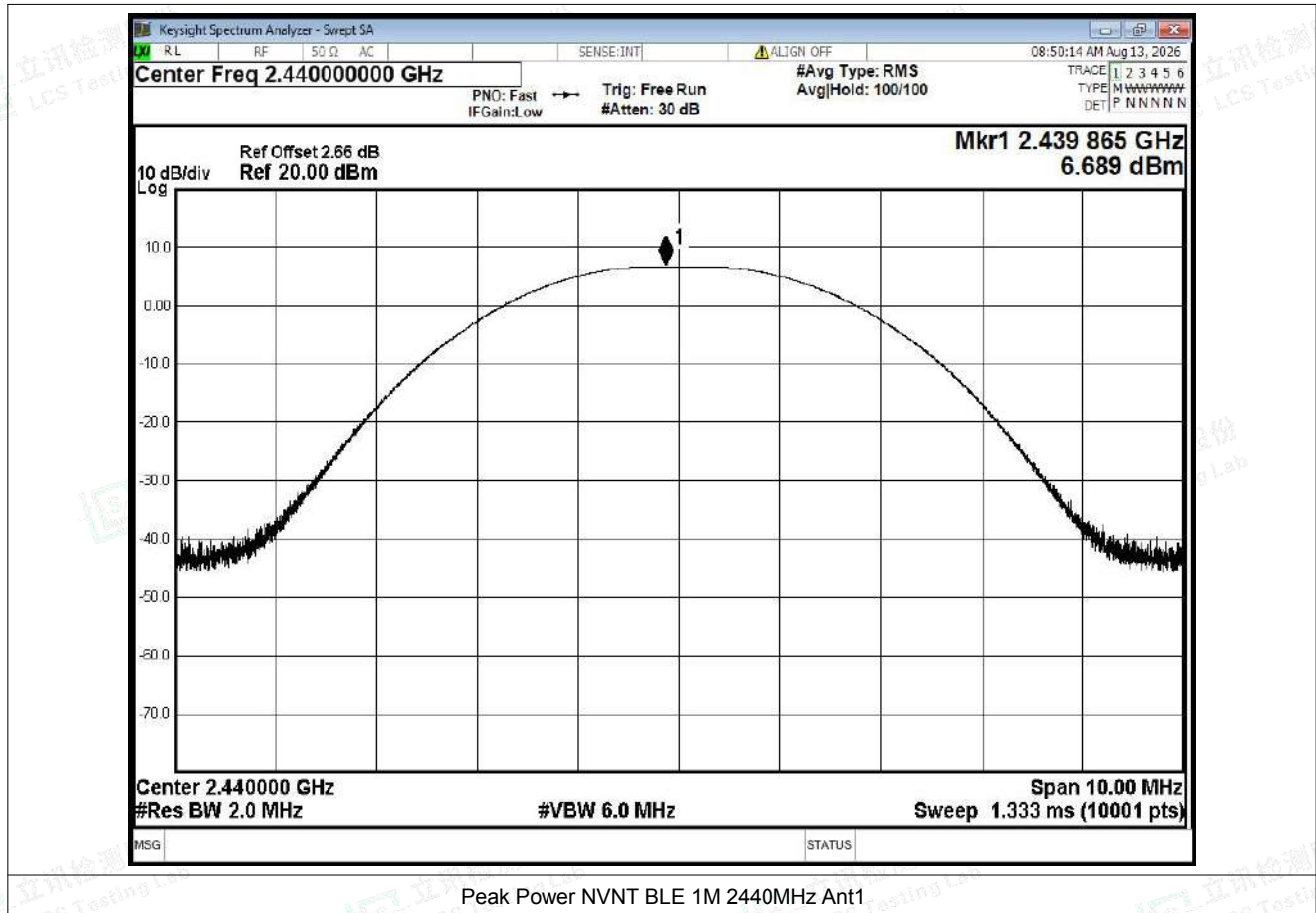
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit Conducted(dBm)	Verdict
NVNT	BLE 125Kbps	2402	Ant1	6.78	30	Pass
NVNT	BLE 125Kbps	2440	Ant1	6.73	30	Pass
NVNT	BLE 125Kbps	2480	Ant1	6.6	30	Pass
NVNT	BLE 1M	2402	Ant1	6.76	30	Pass
NVNT	BLE 1M	2440	Ant1	6.69	30	Pass
NVNT	BLE 1M	2480	Ant1	6.57	30	Pass

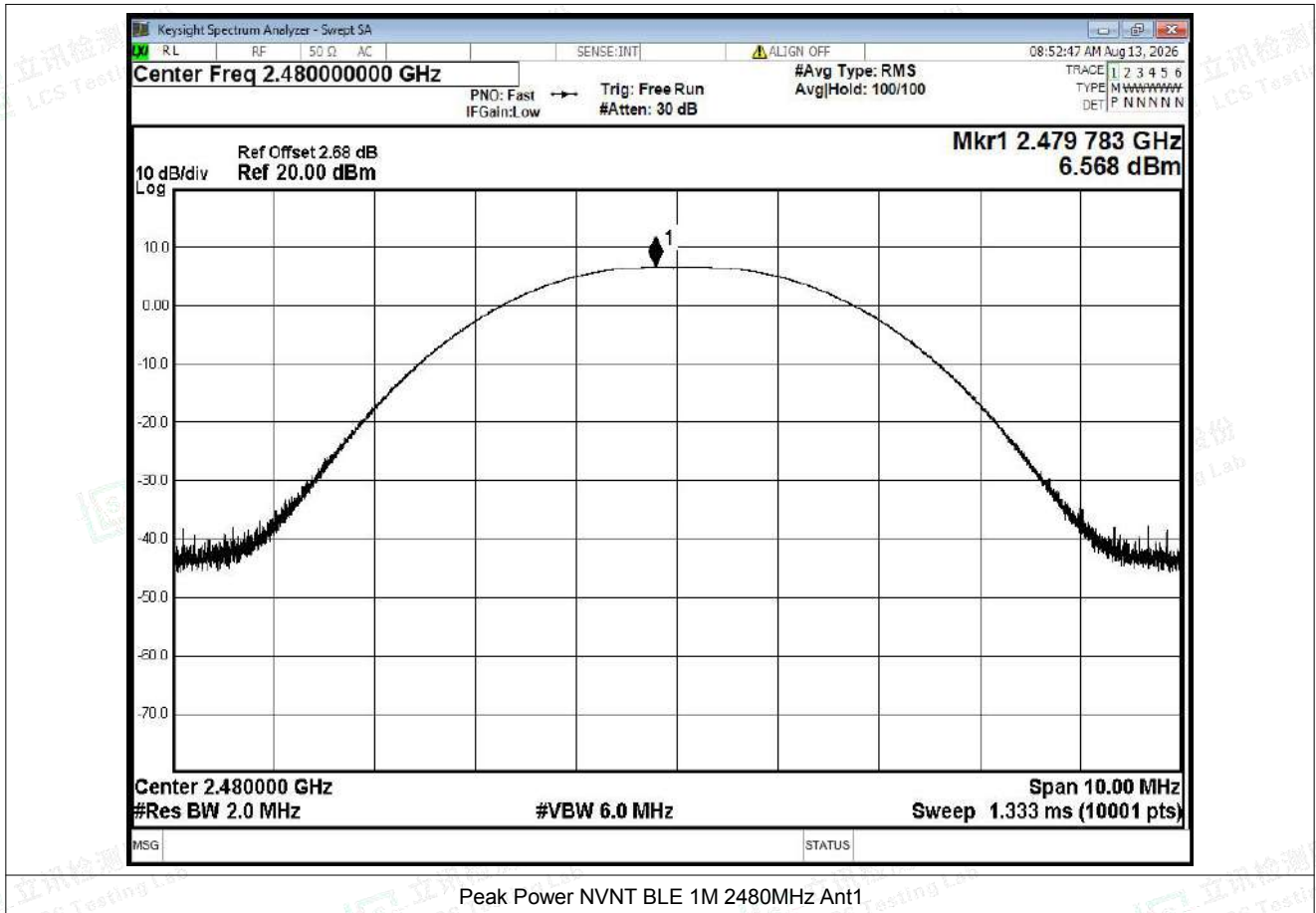








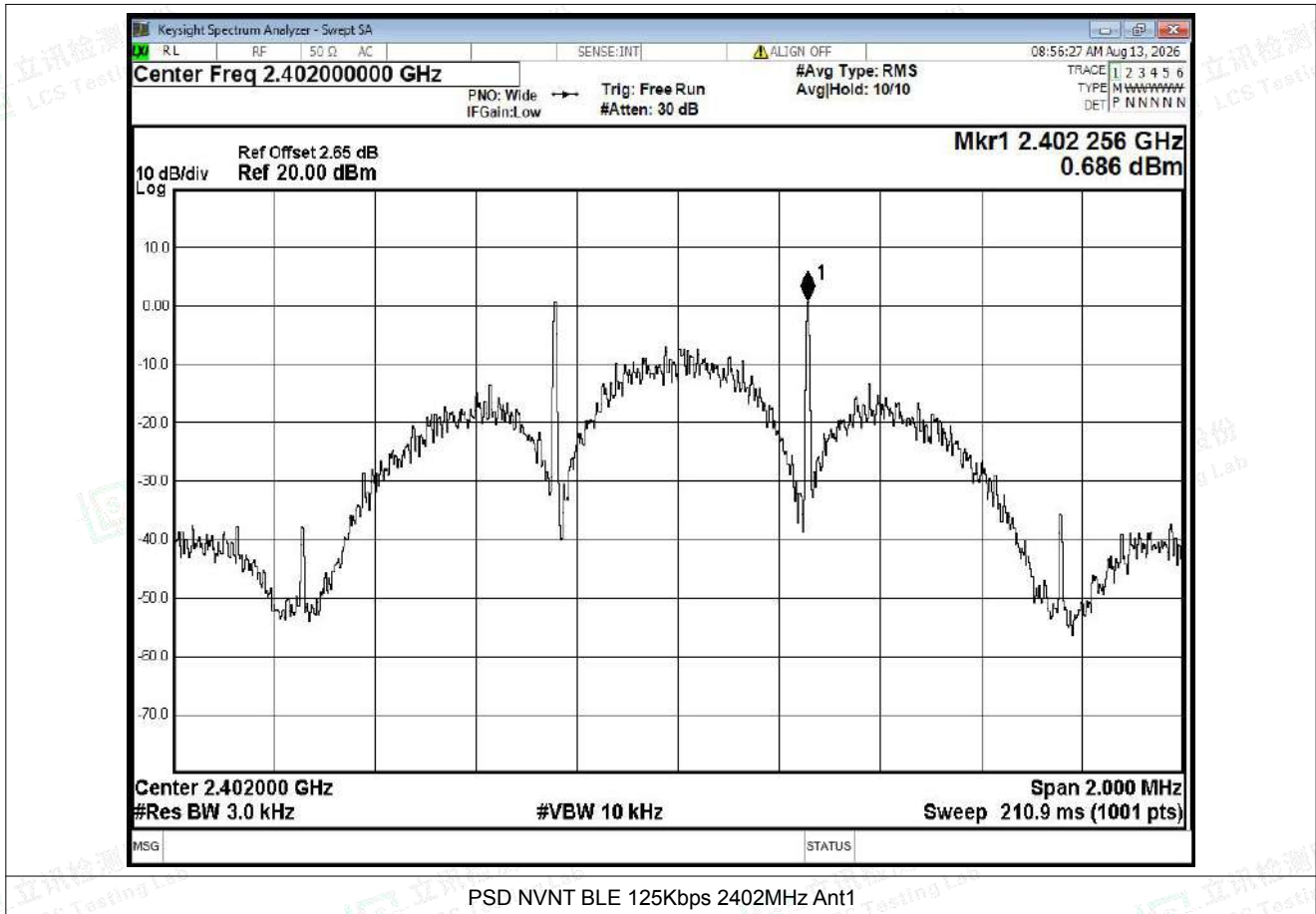


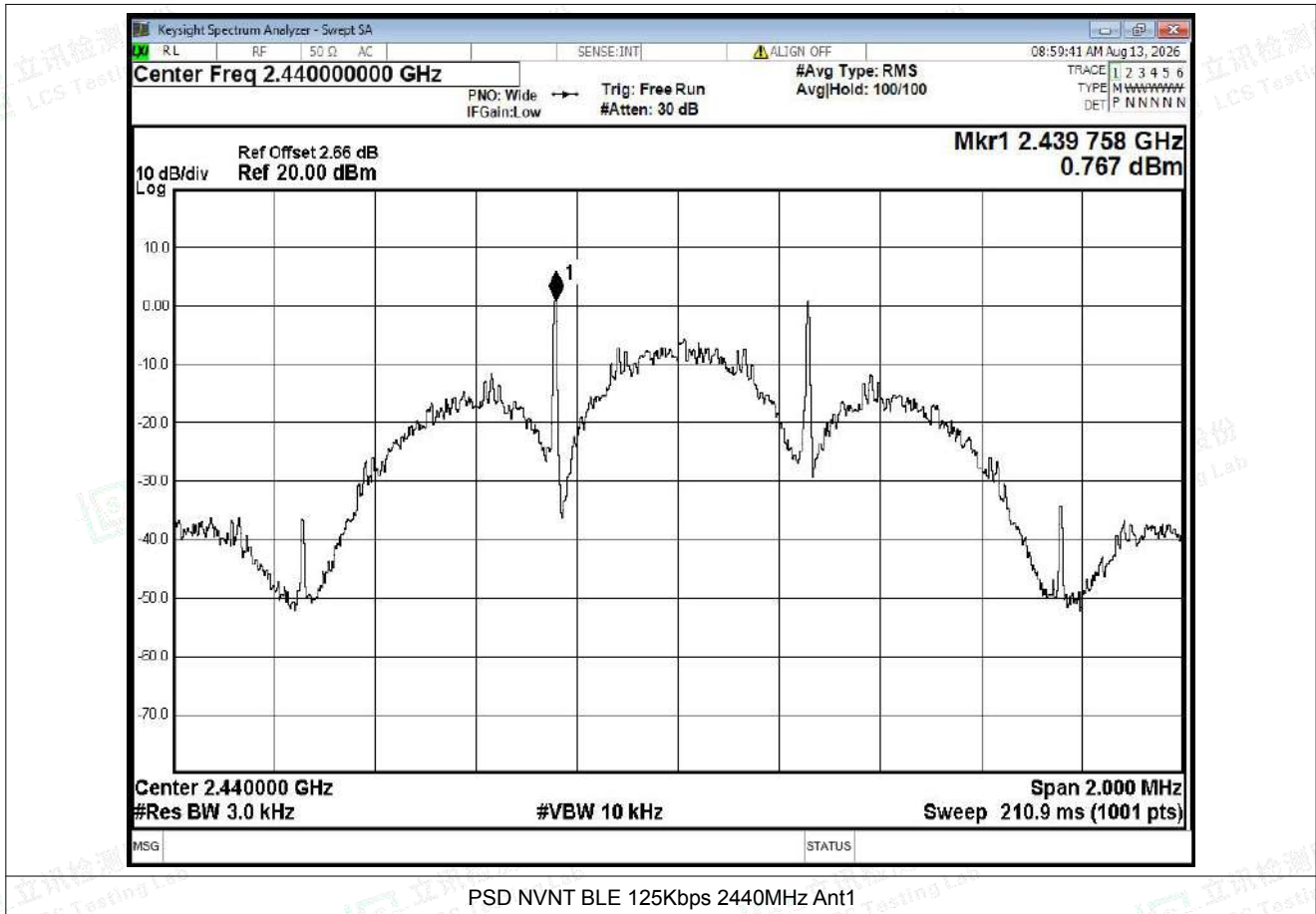


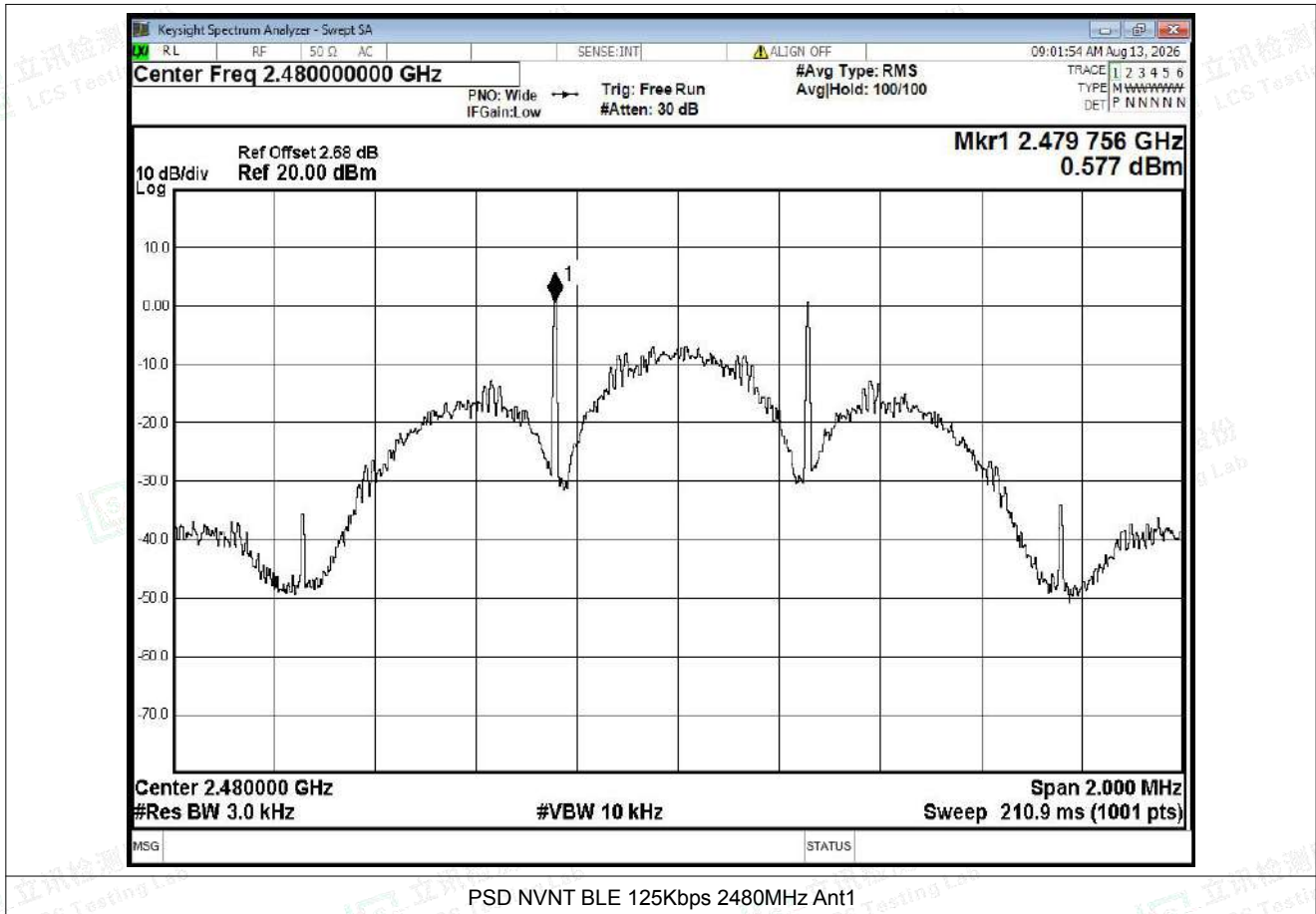


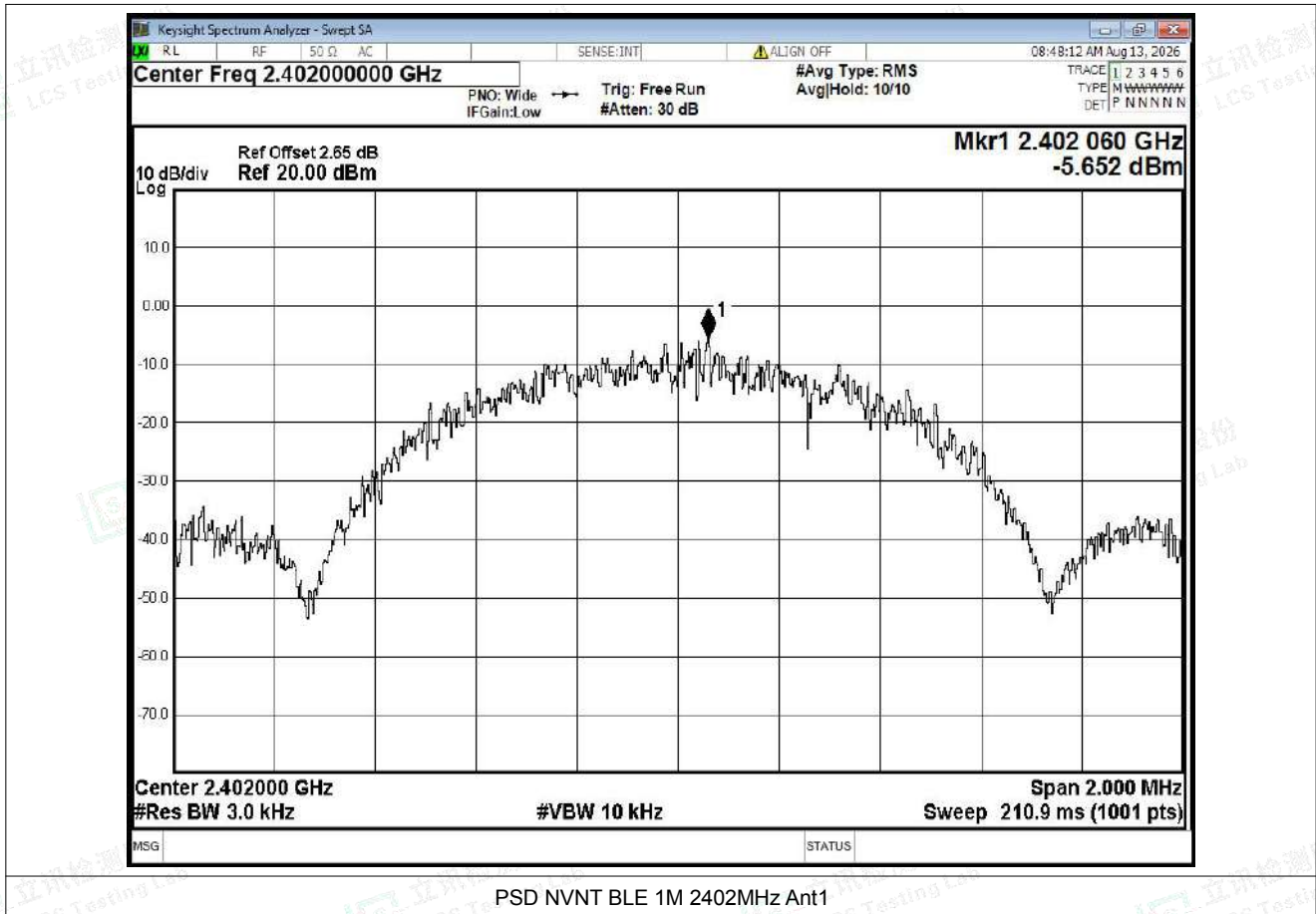
A.3 Maximum Power Spectral Density Level

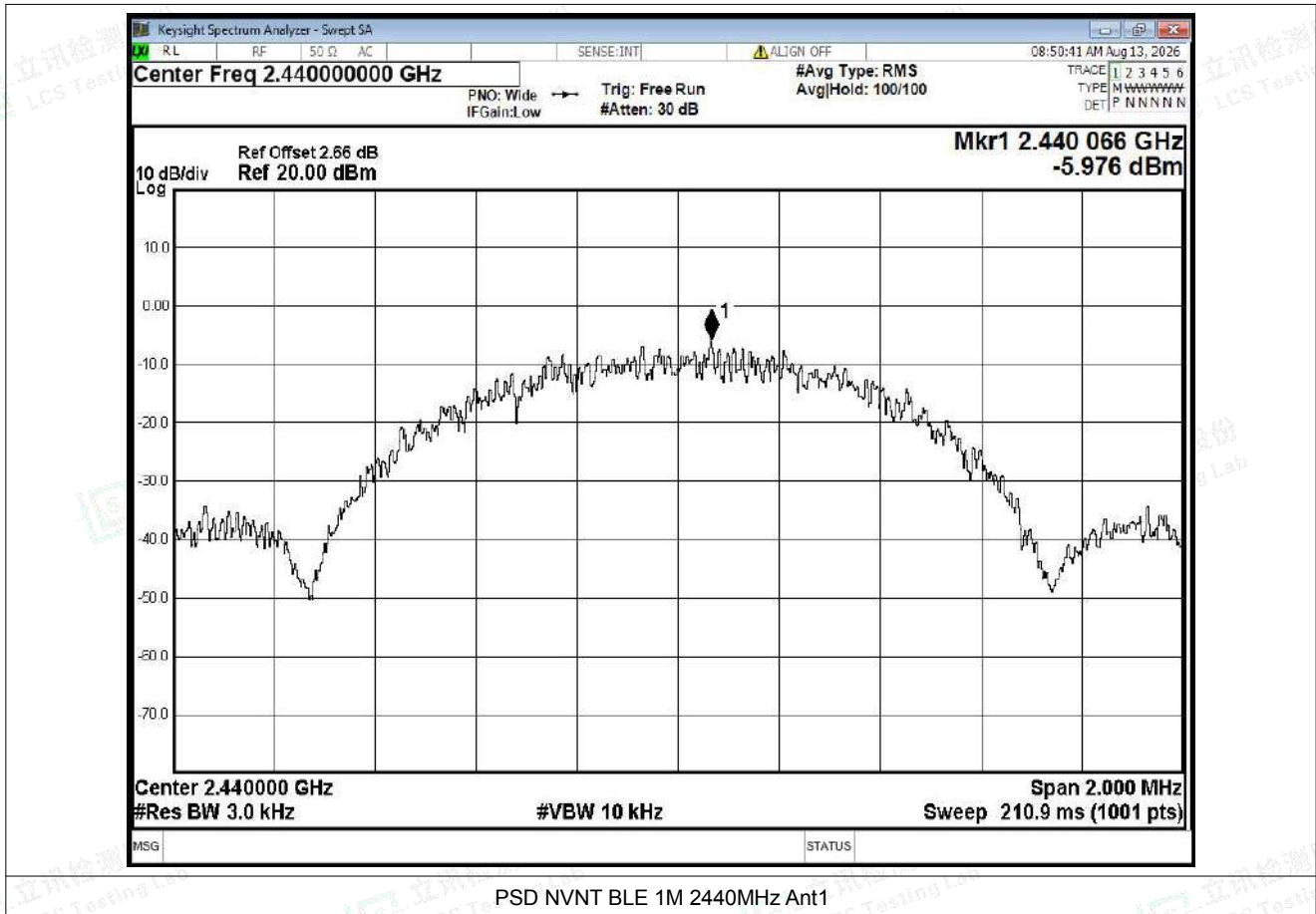
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 125Kbps	2402	Ant1	0.69	8	Pass
NVNT	BLE 125Kbps	2440	Ant1	0.77	8	Pass
NVNT	BLE 125Kbps	2480	Ant1	0.58	8	Pass
NVNT	BLE 1M	2402	Ant1	-5.65	8	Pass
NVNT	BLE 1M	2440	Ant1	-5.98	8	Pass
NVNT	BLE 1M	2480	Ant1	-6.43	8	Pass

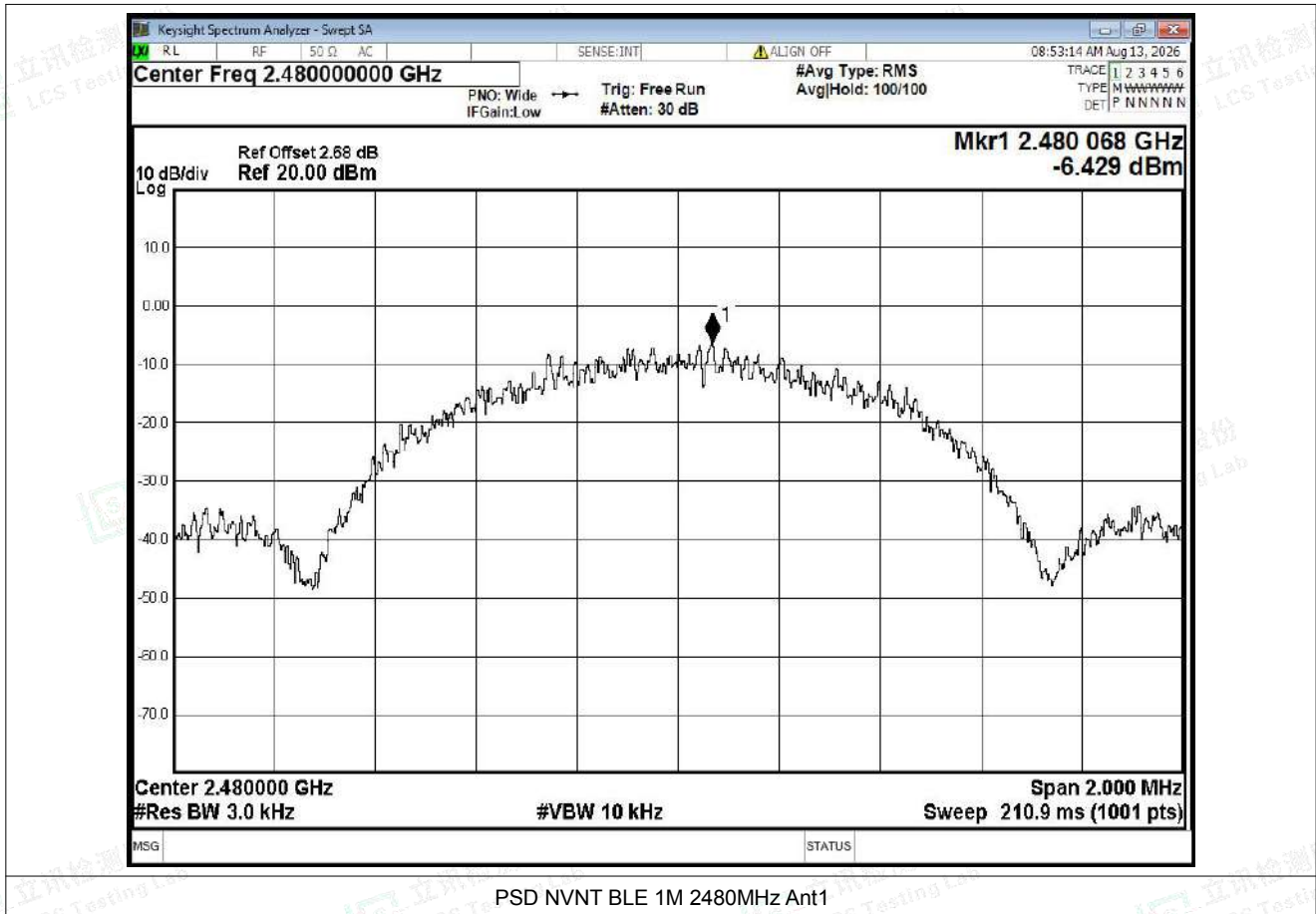








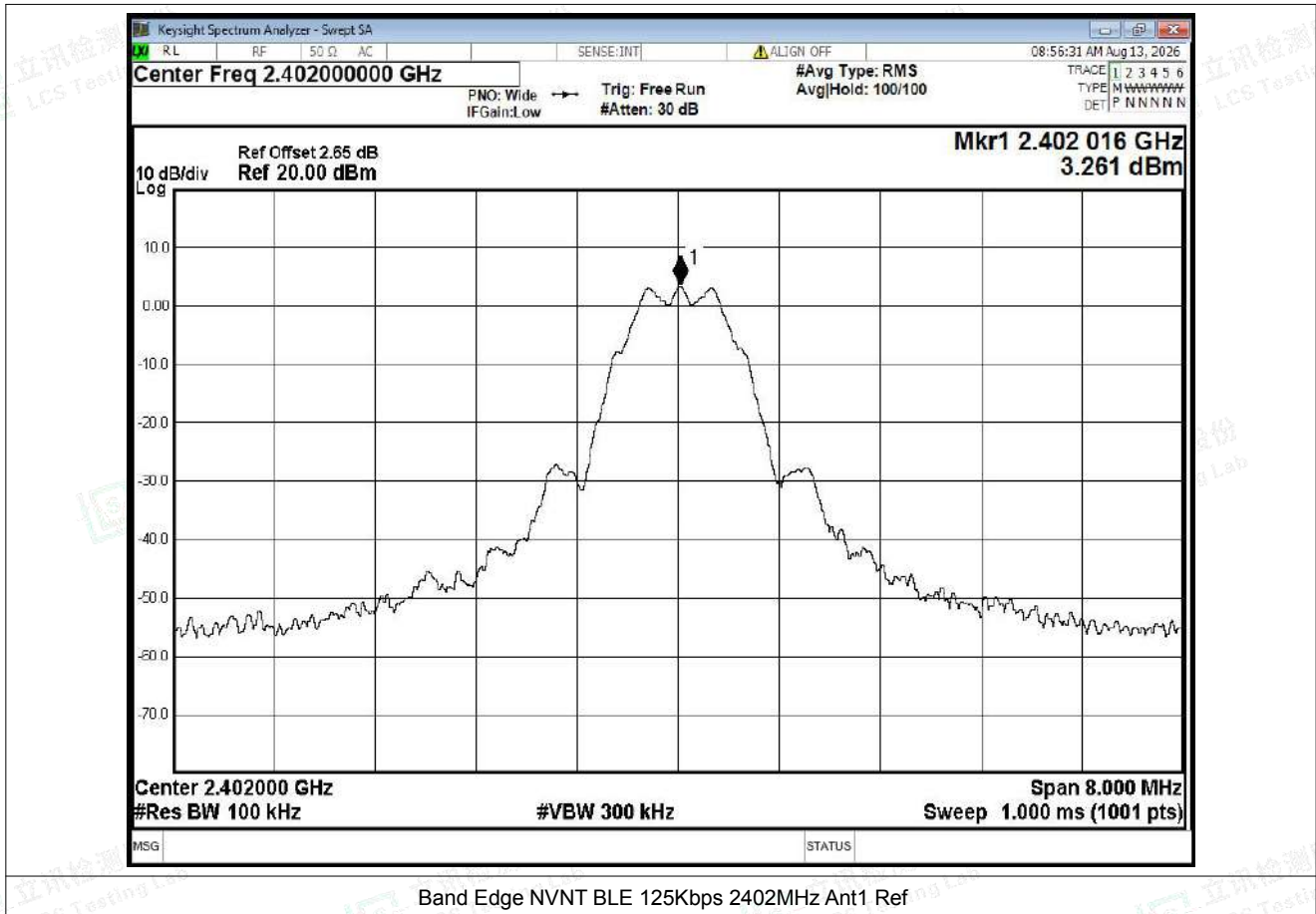


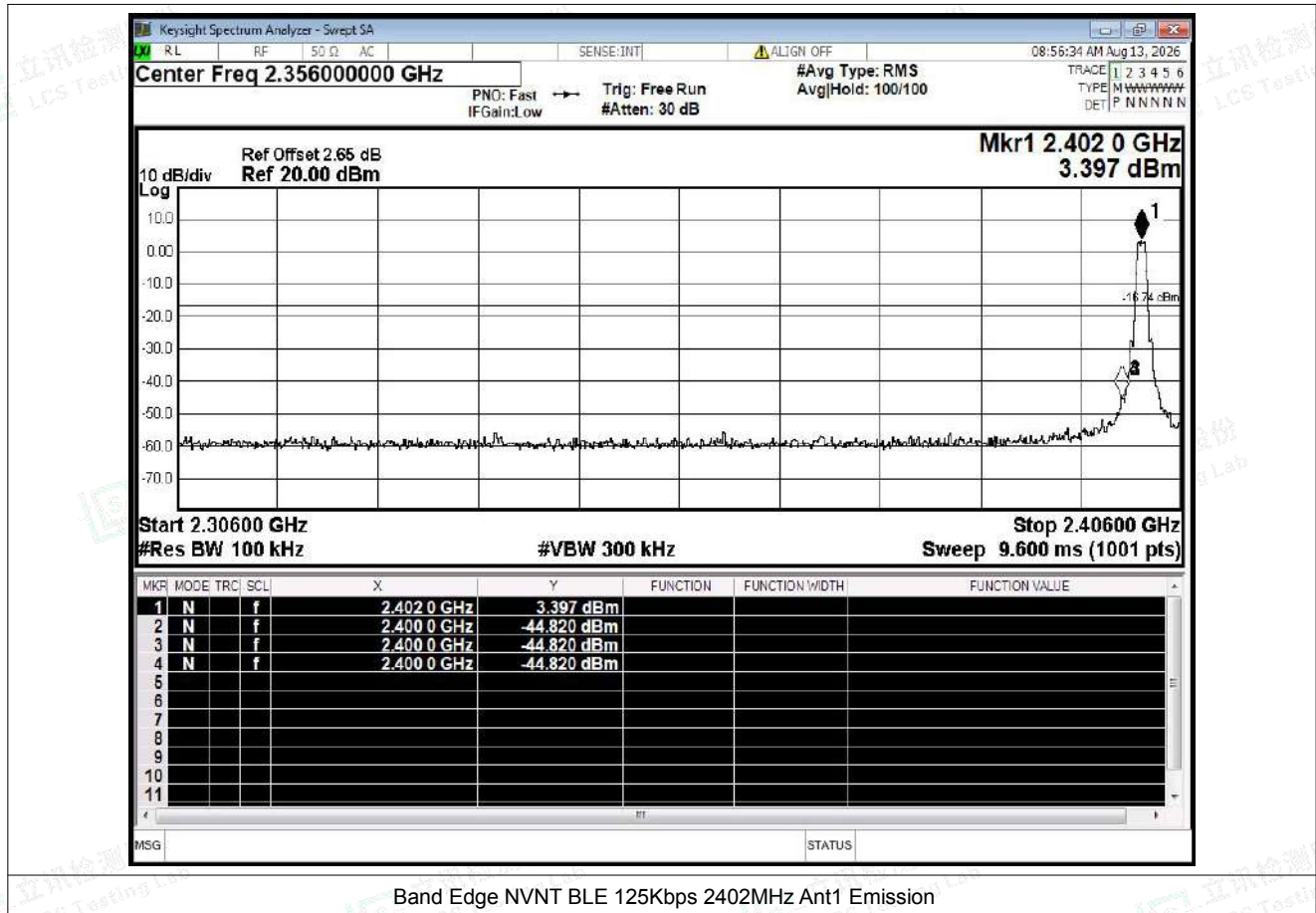


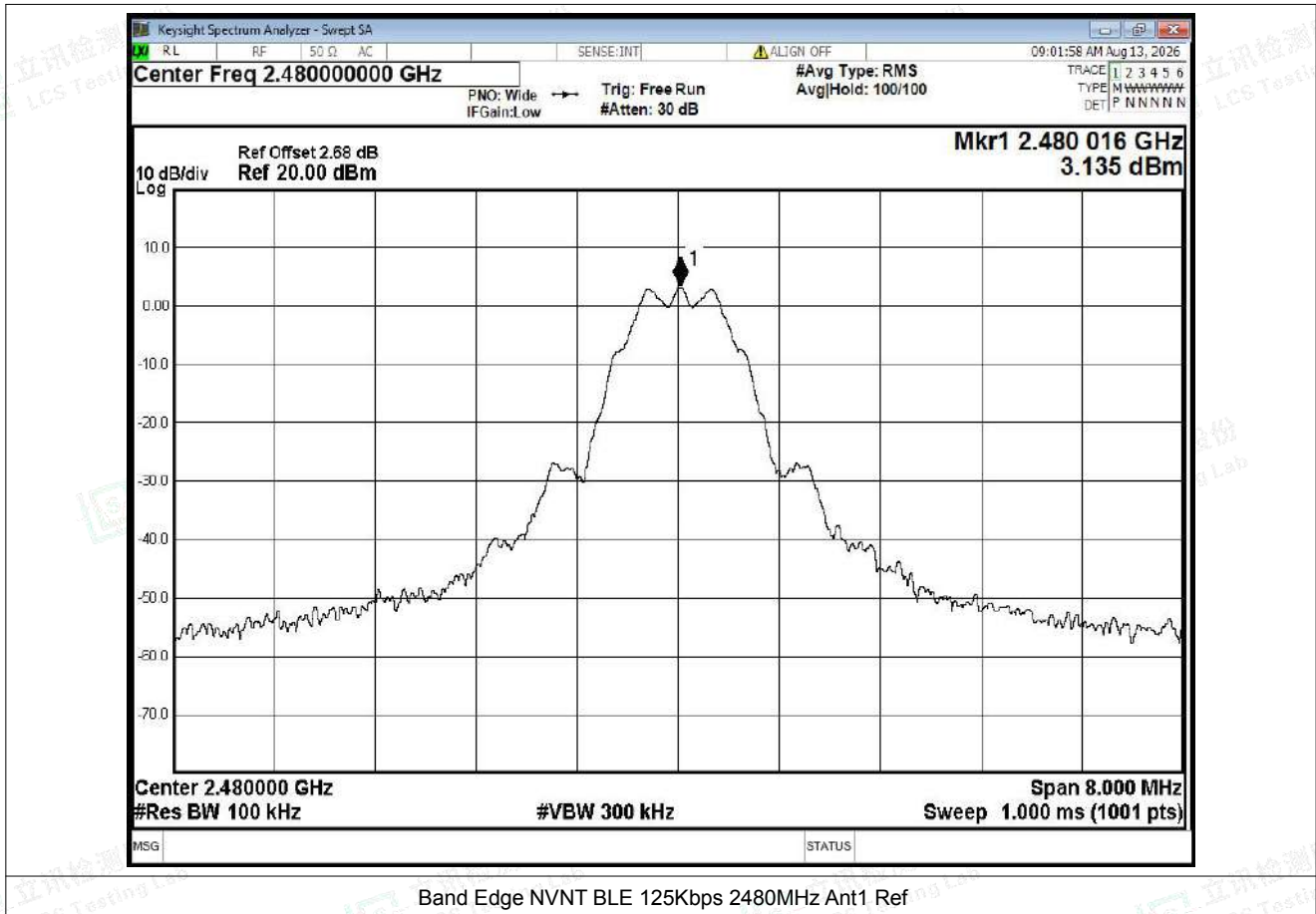


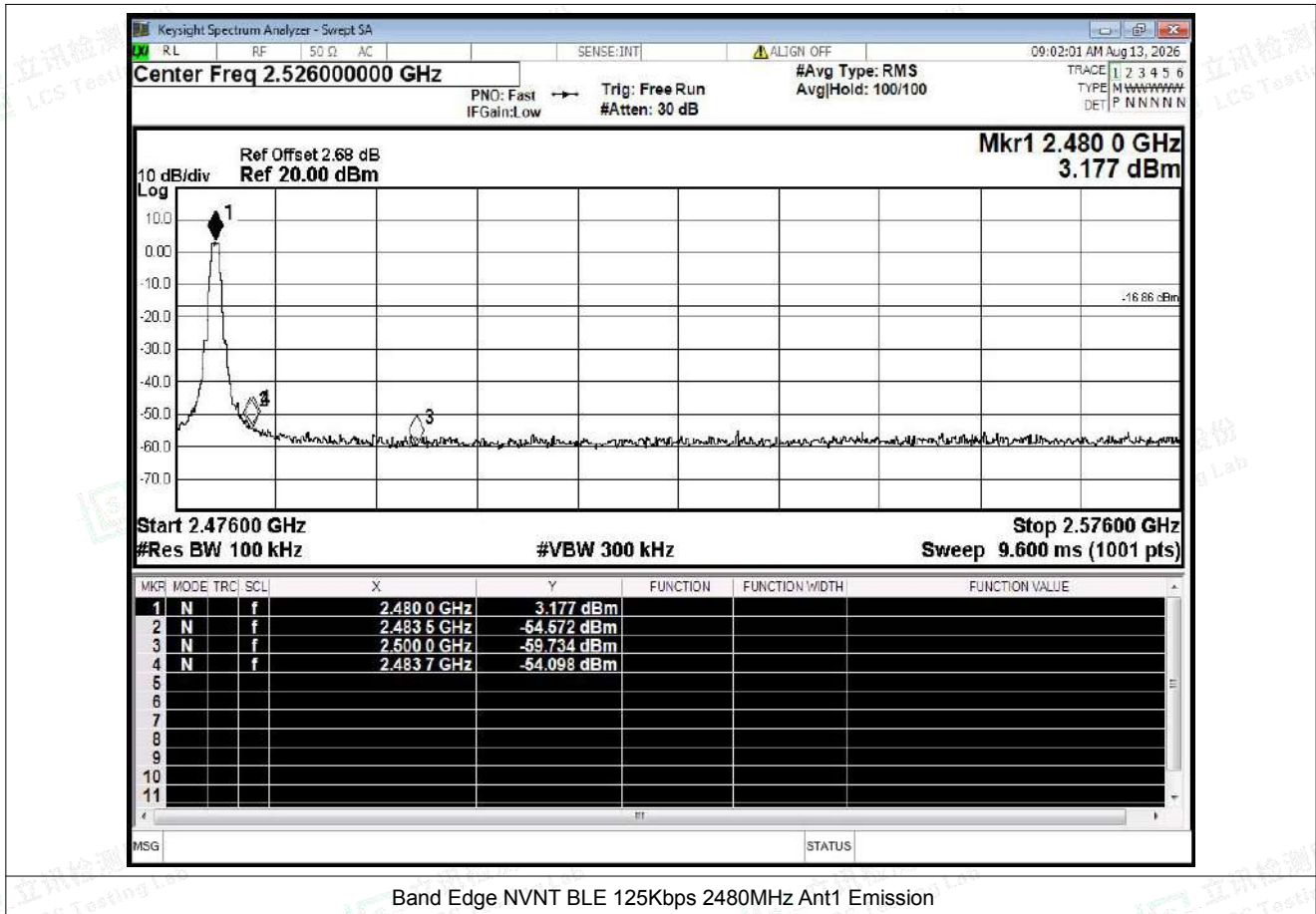
A.4 Band Edge

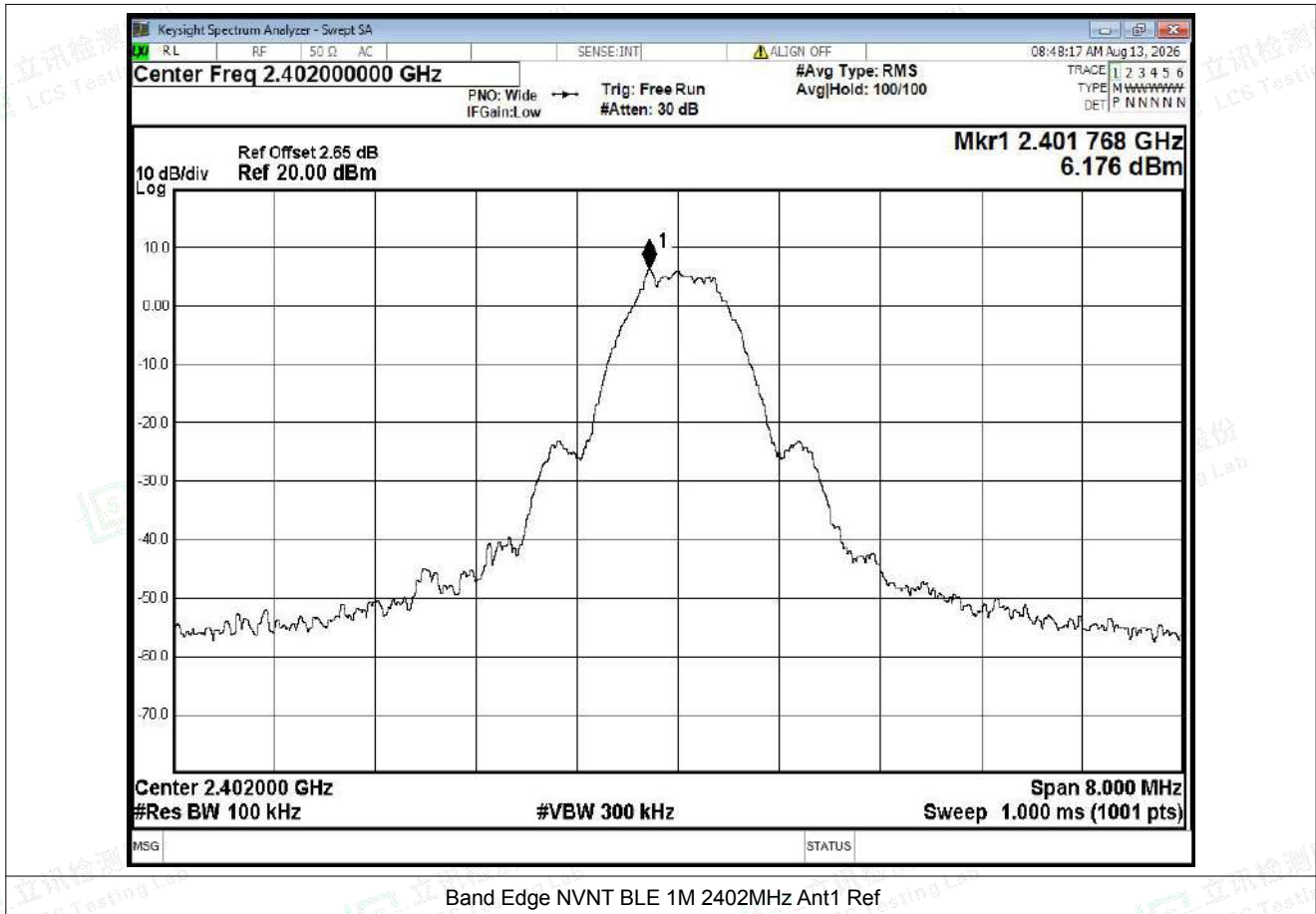
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 125Kbps	2402	Ant1	-48.07	-20	Pass
NVNT	BLE 125Kbps	2480	Ant1	-57.23	-20	Pass
NVNT	BLE 1M	2402	Ant1	-50.53	-20	Pass
NVNT	BLE 1M	2480	Ant1	-59.07	-20	Pass

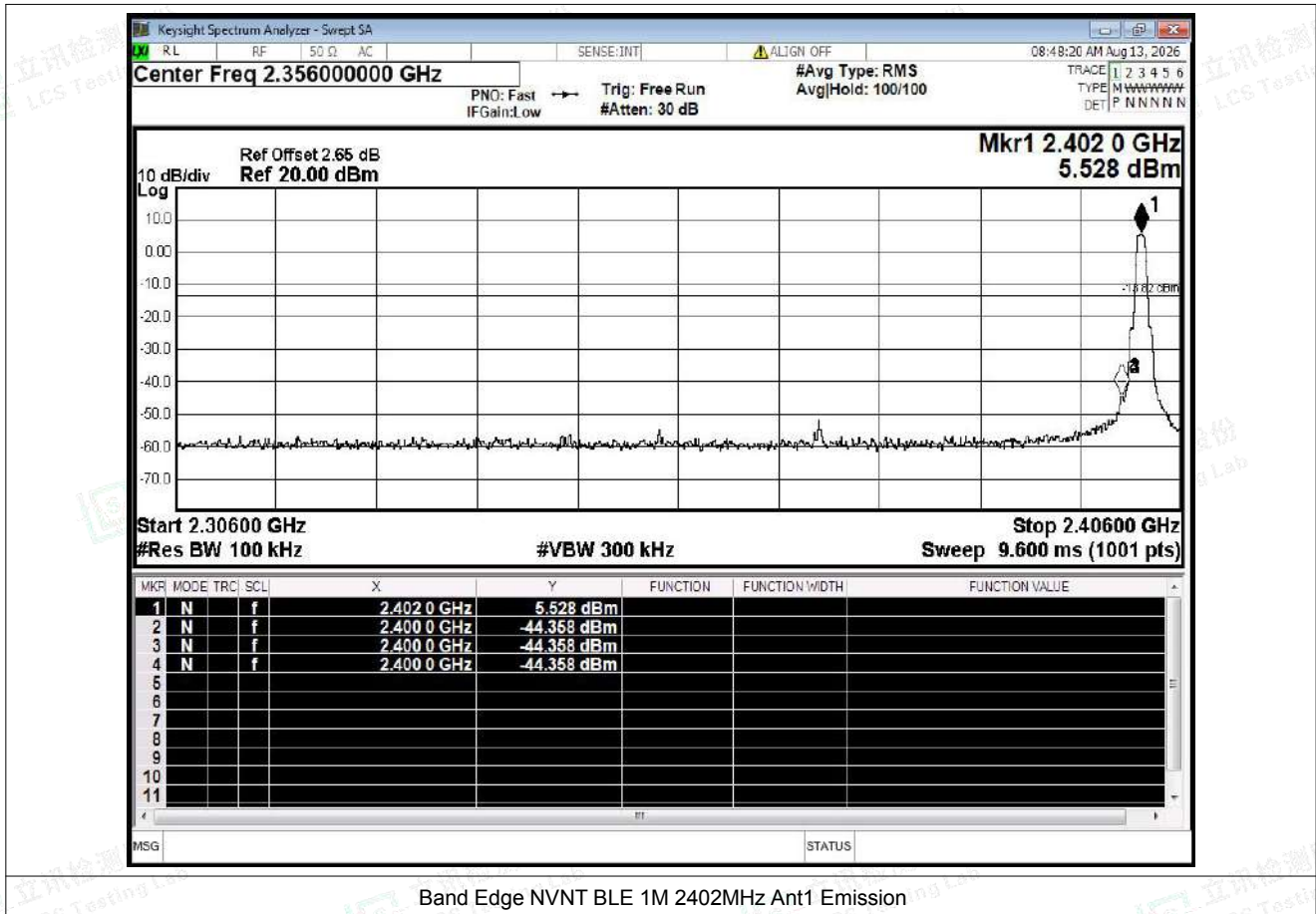


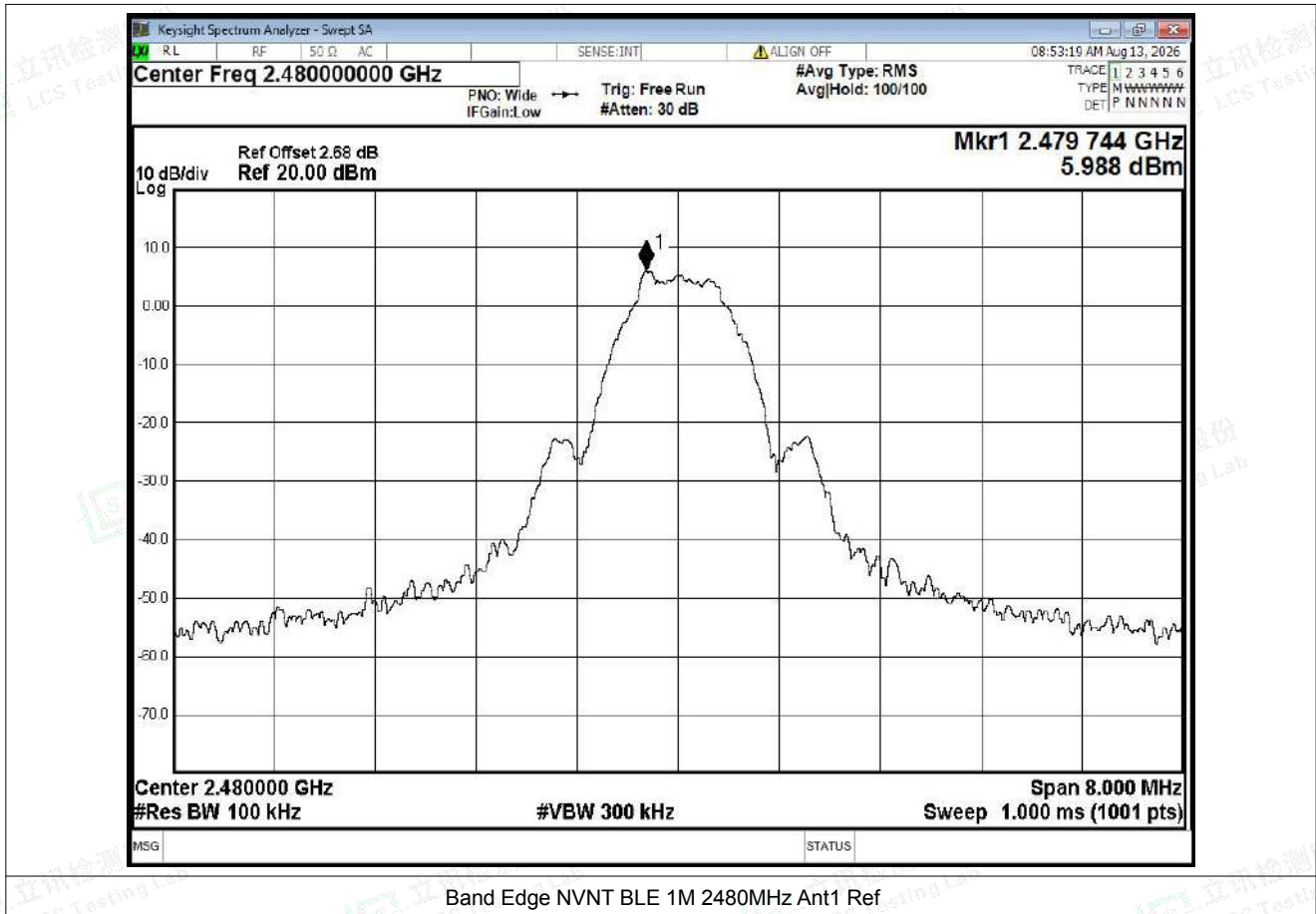


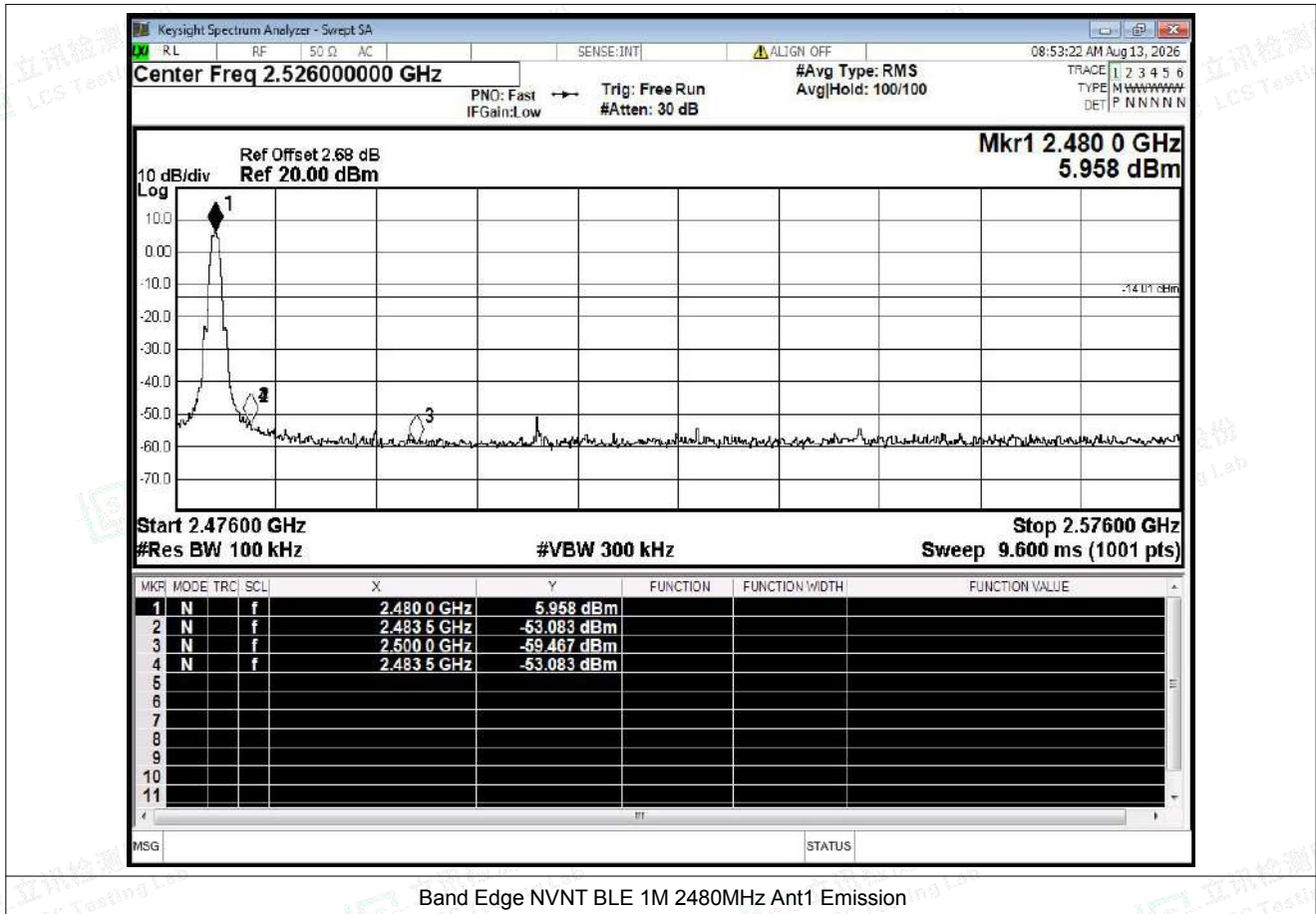








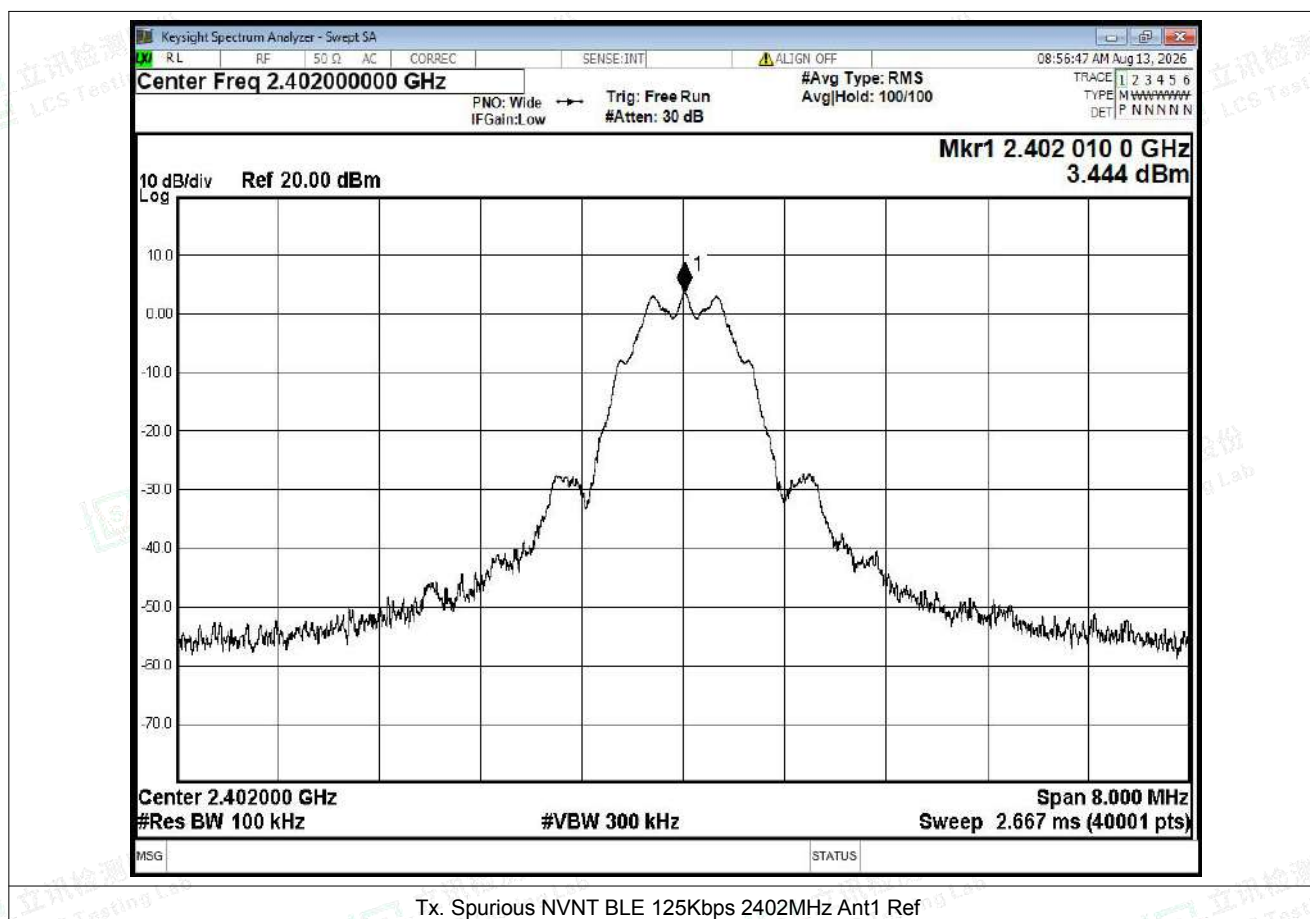




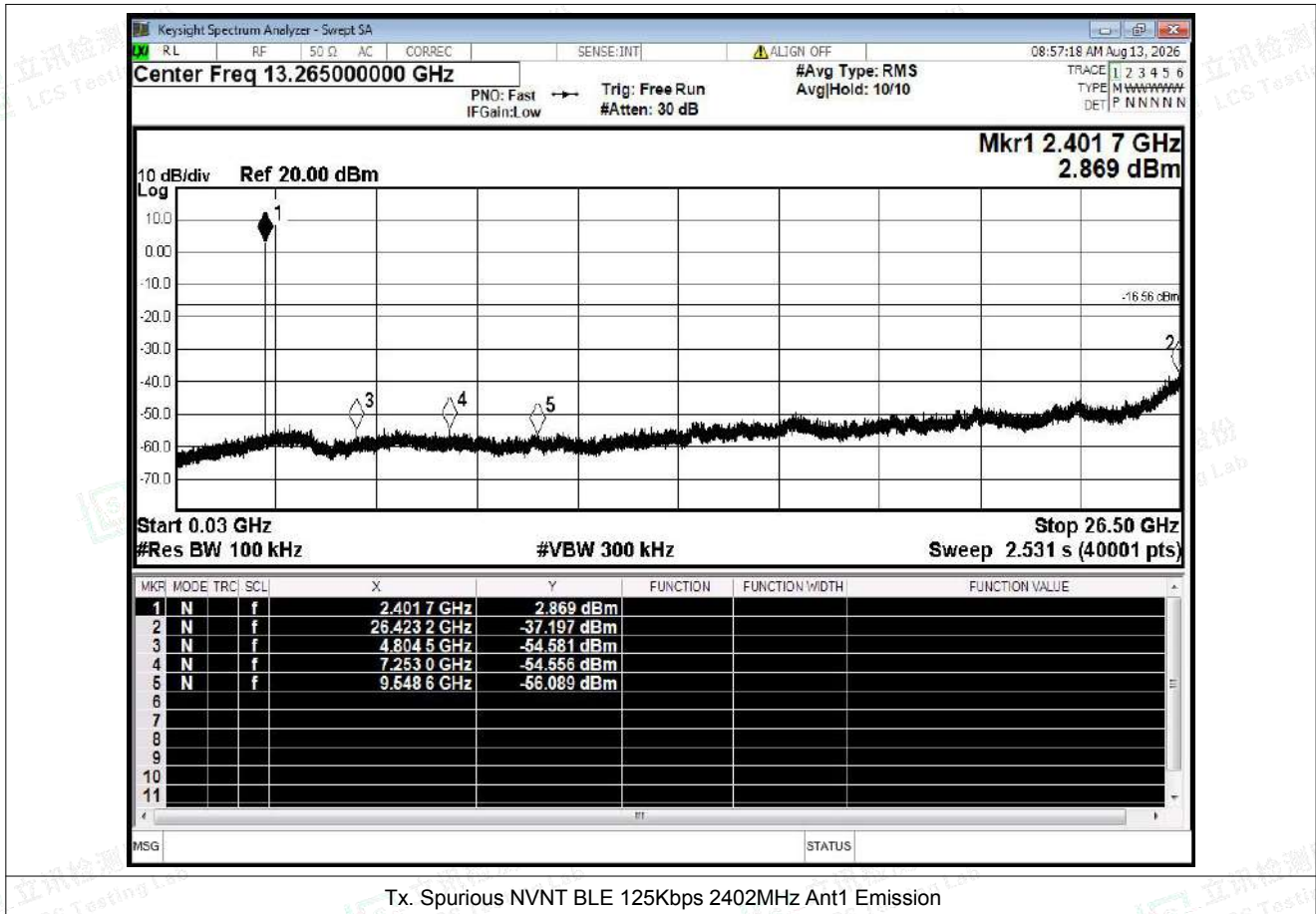


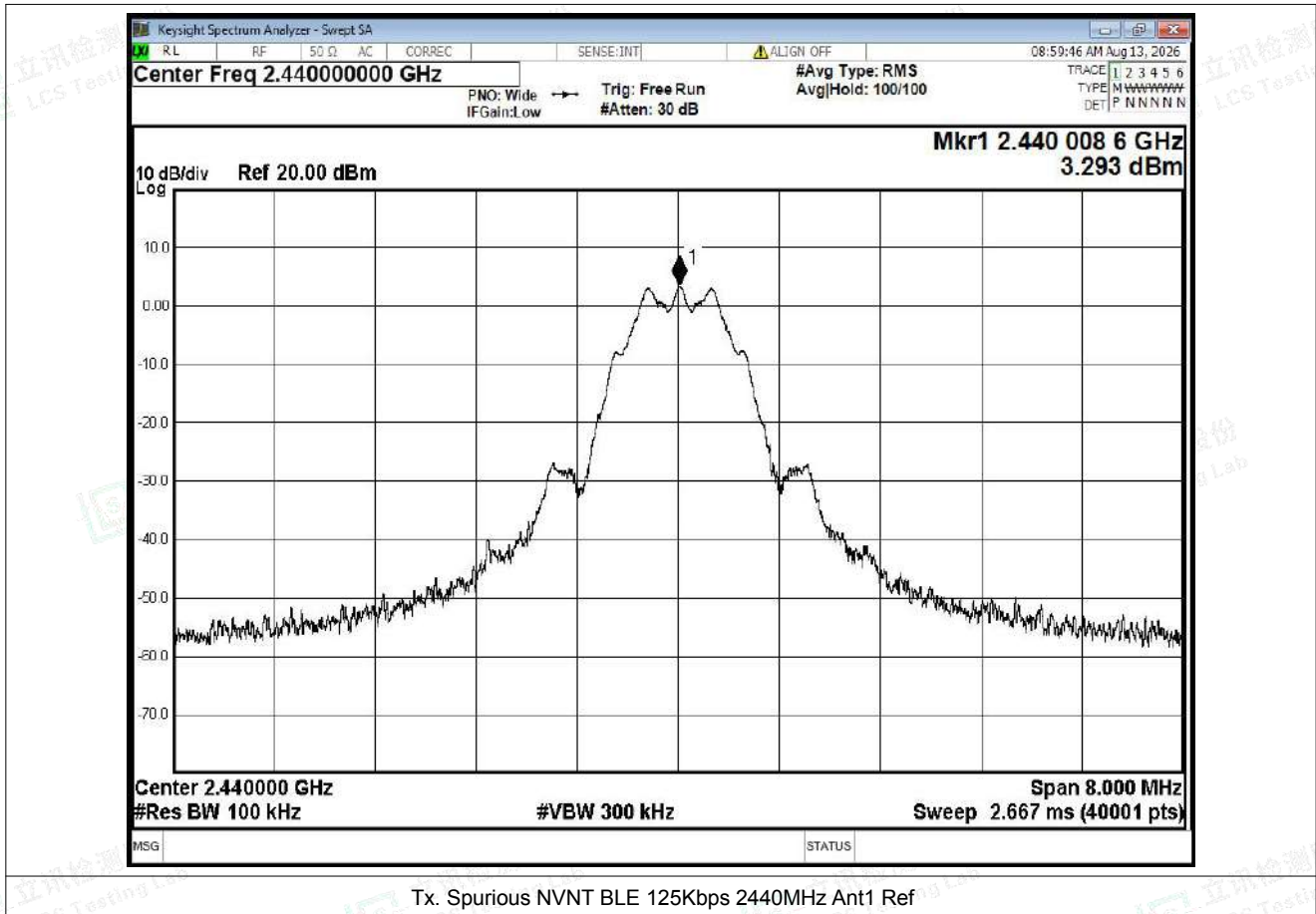
A.5 Conducted RF Spurious Emission

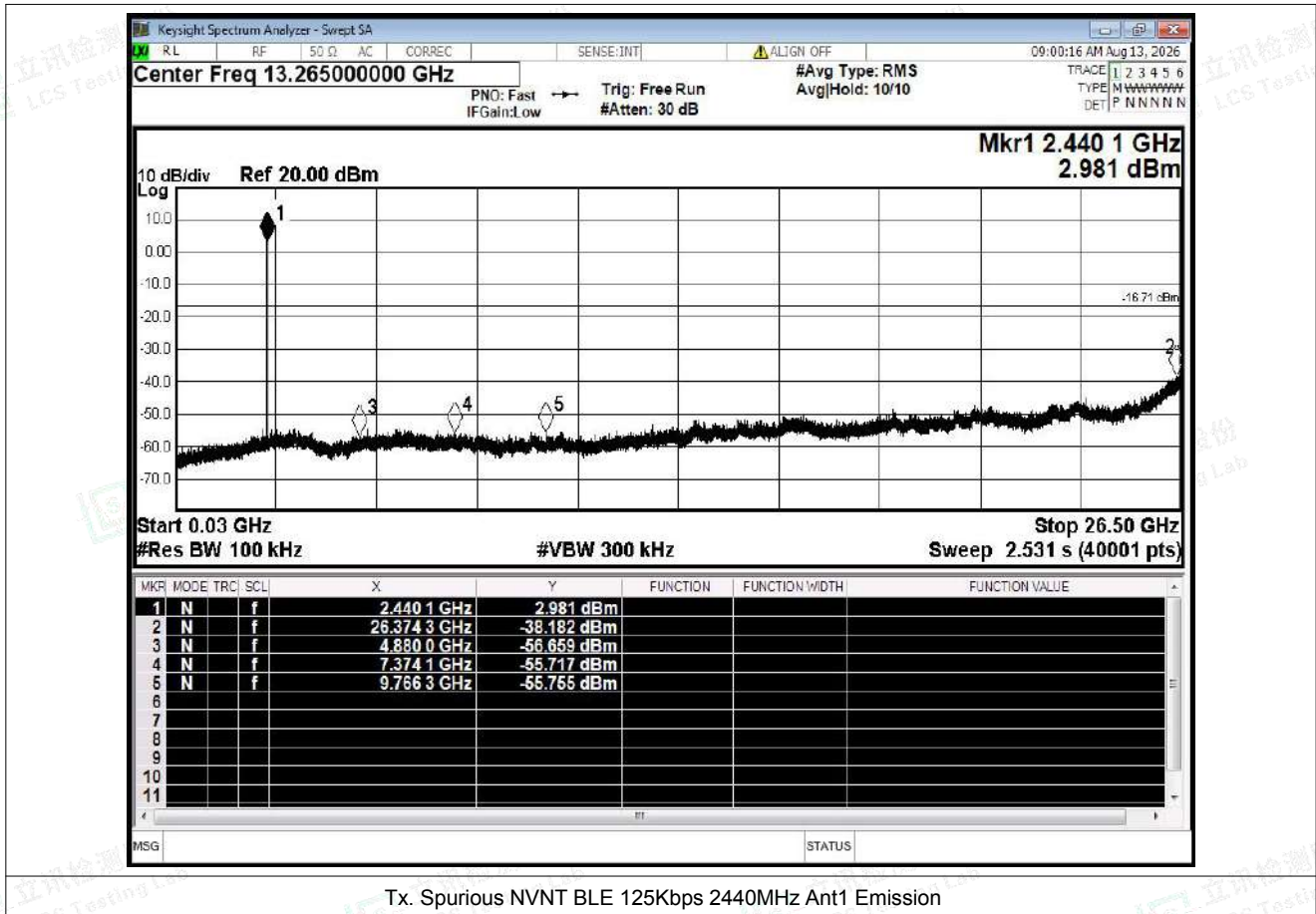
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 125Kbps	2402	Ant1	-40.63	-20	Pass
NVNT	BLE 125Kbps	2440	Ant1	-41.47	-20	Pass
NVNT	BLE 125Kbps	2480	Ant1	-41.36	-20	Pass
NVNT	BLE 1M	2402	Ant1	-42.39	-20	Pass
NVNT	BLE 1M	2440	Ant1	-44.91	-20	Pass
NVNT	BLE 1M	2480	Ant1	-44.07	-20	Pass

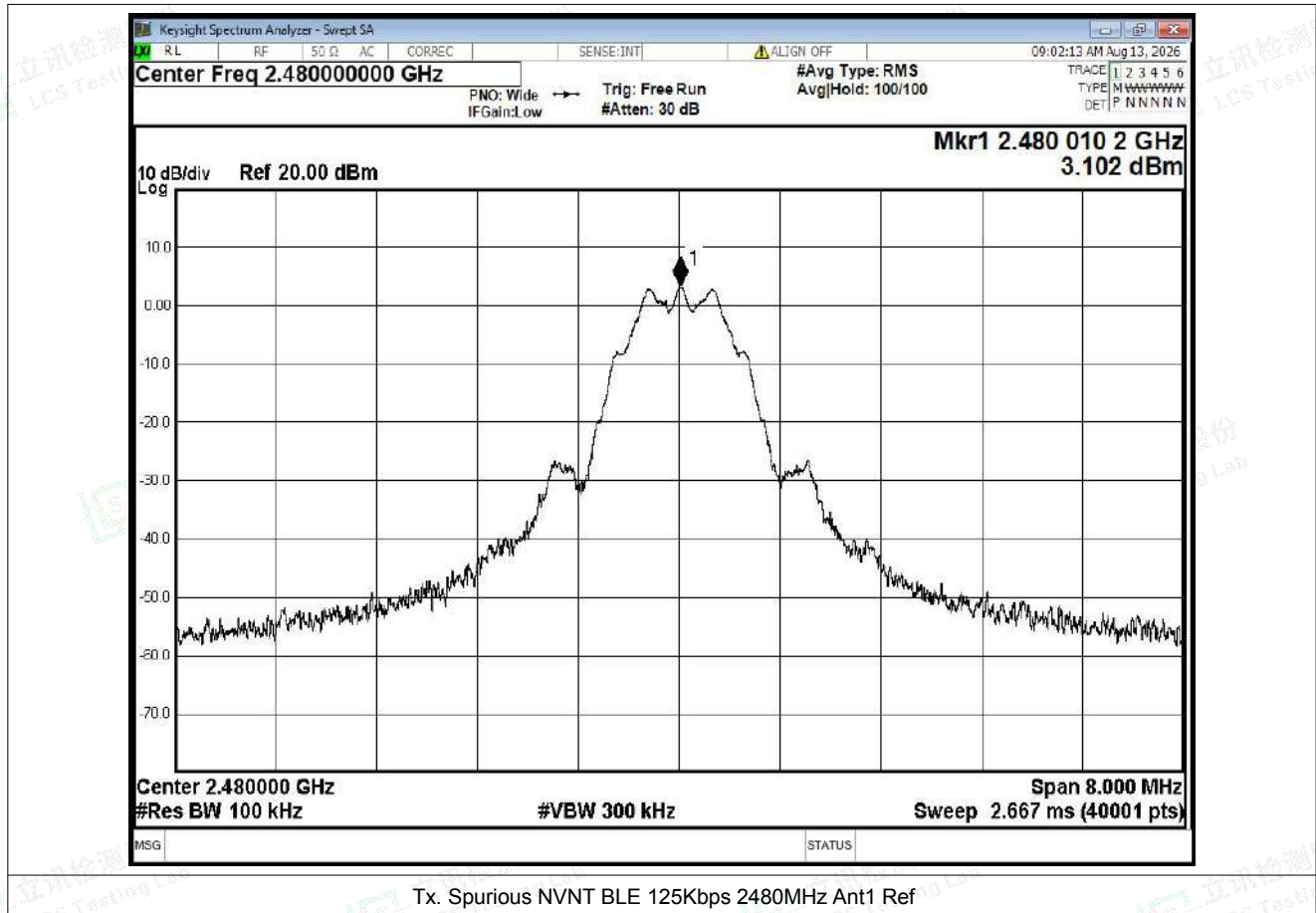


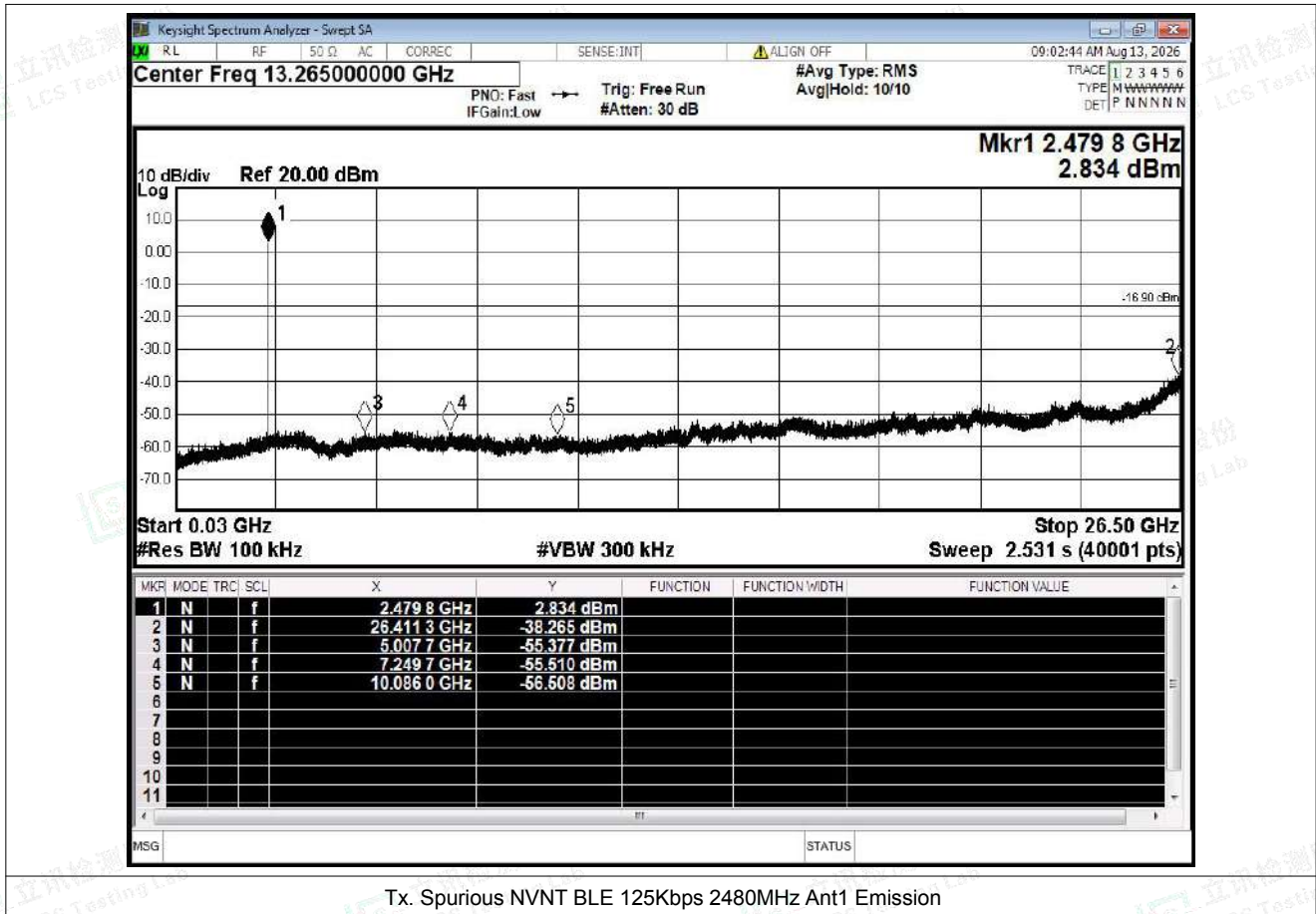
Tx. Spurious NVNT BLE 125Kbps 2402MHz Ant1 Ref

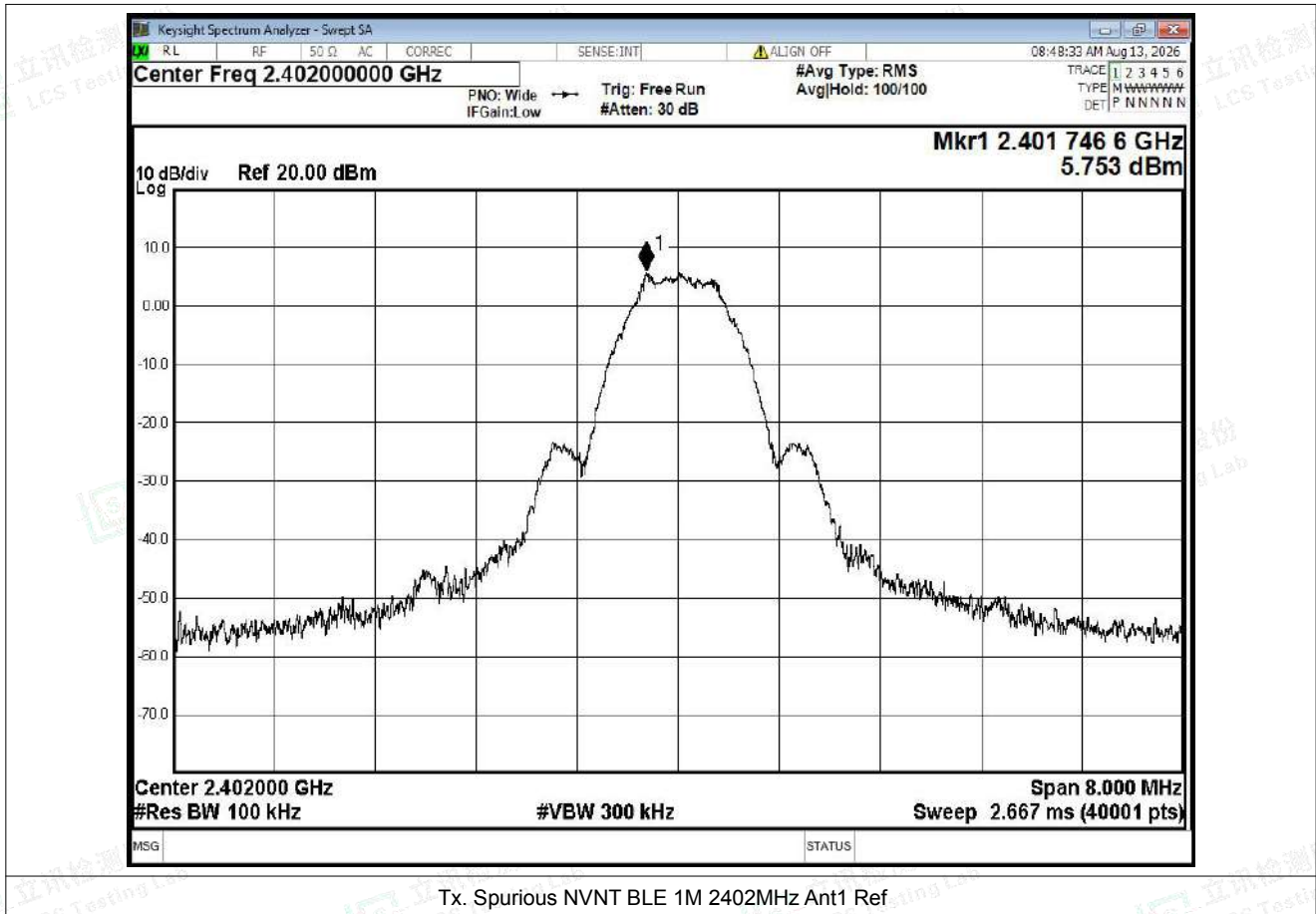


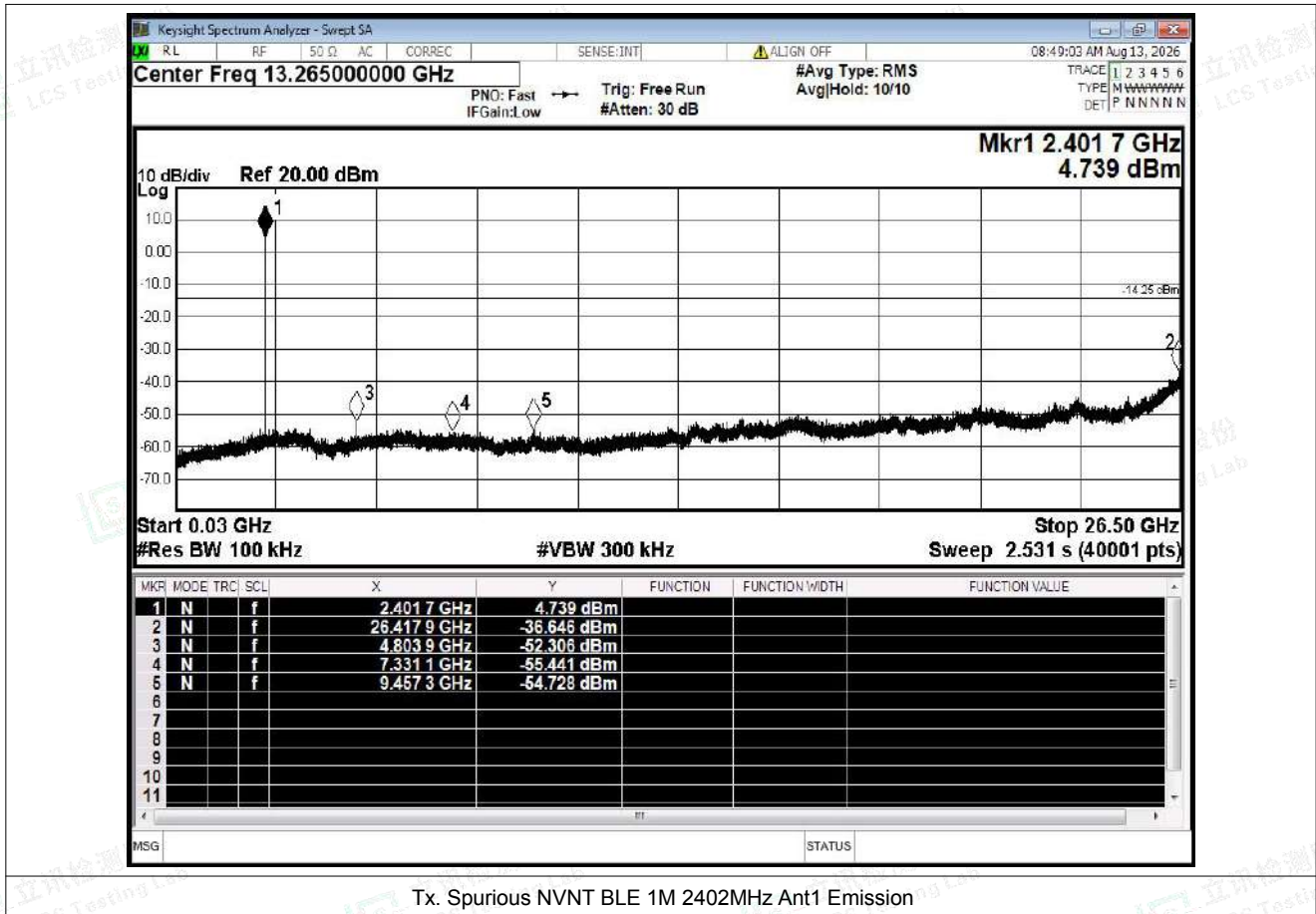


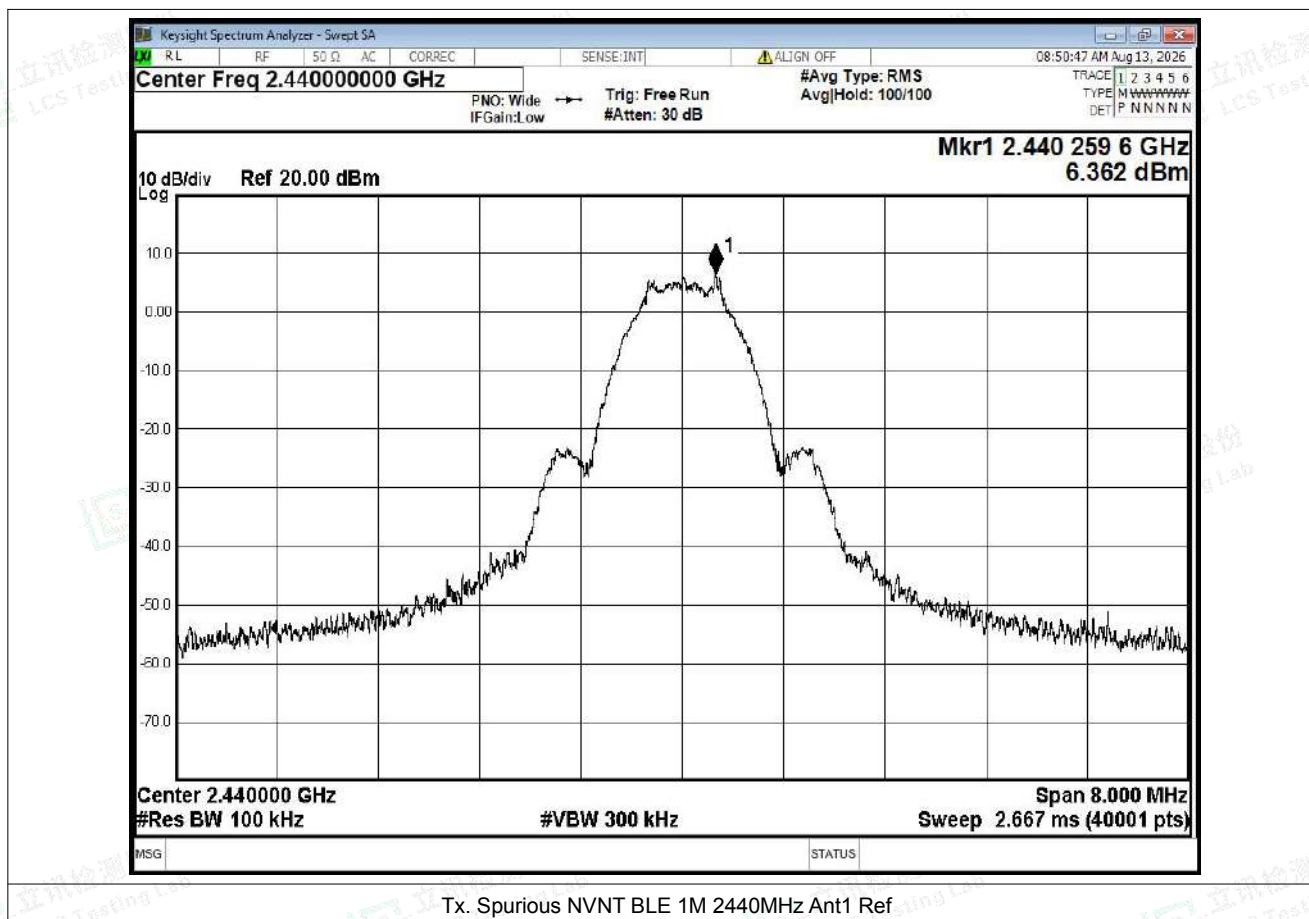


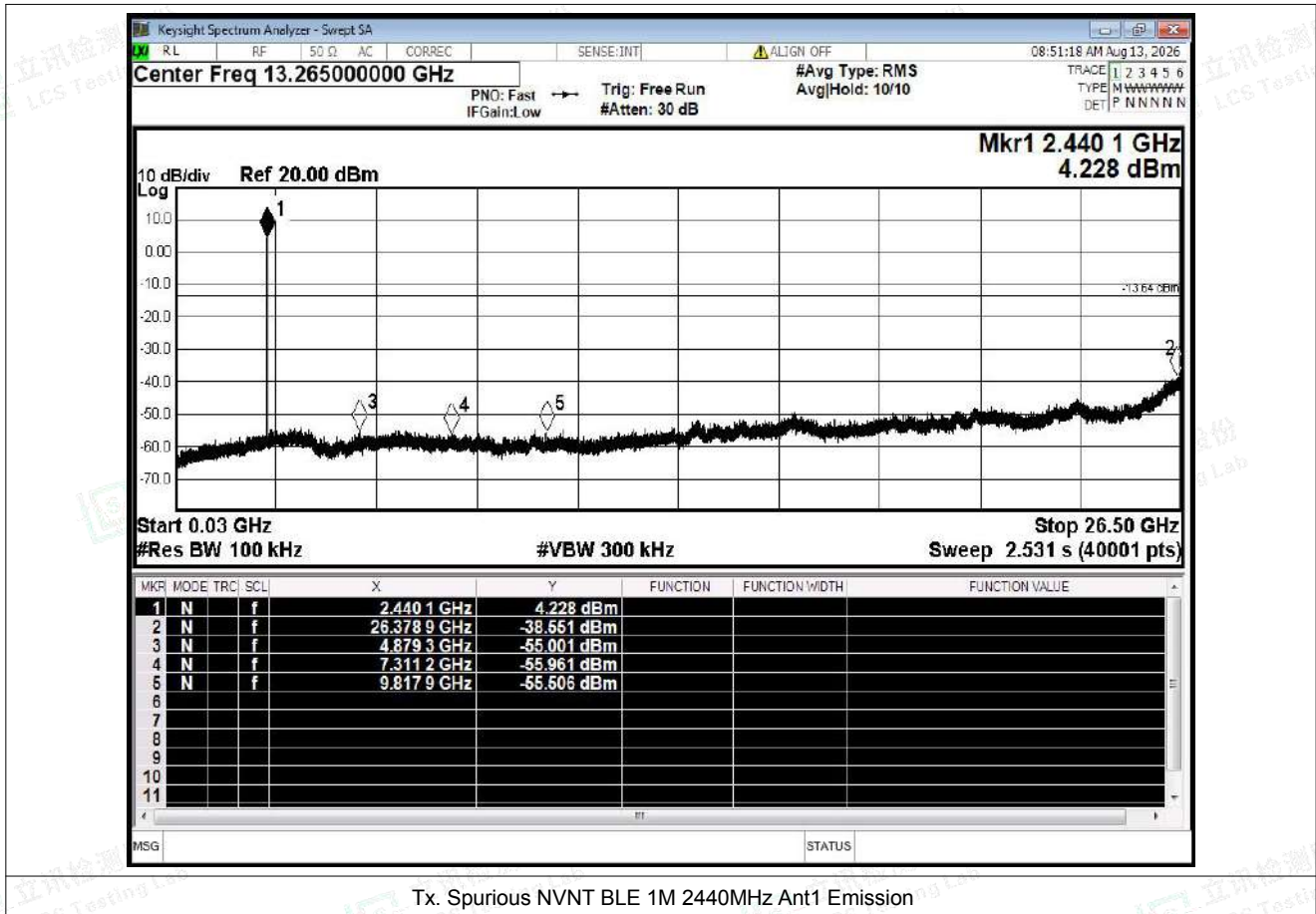


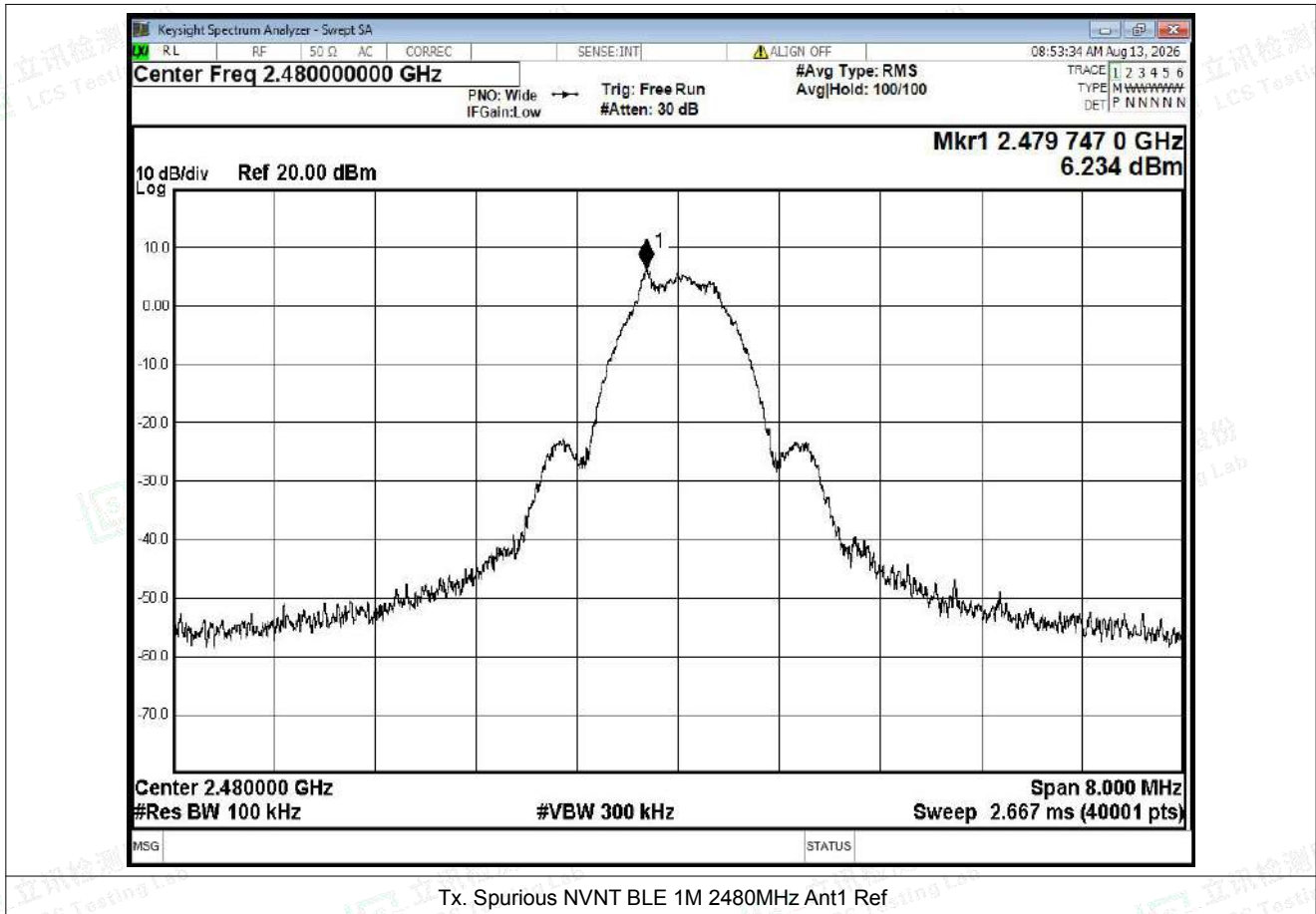


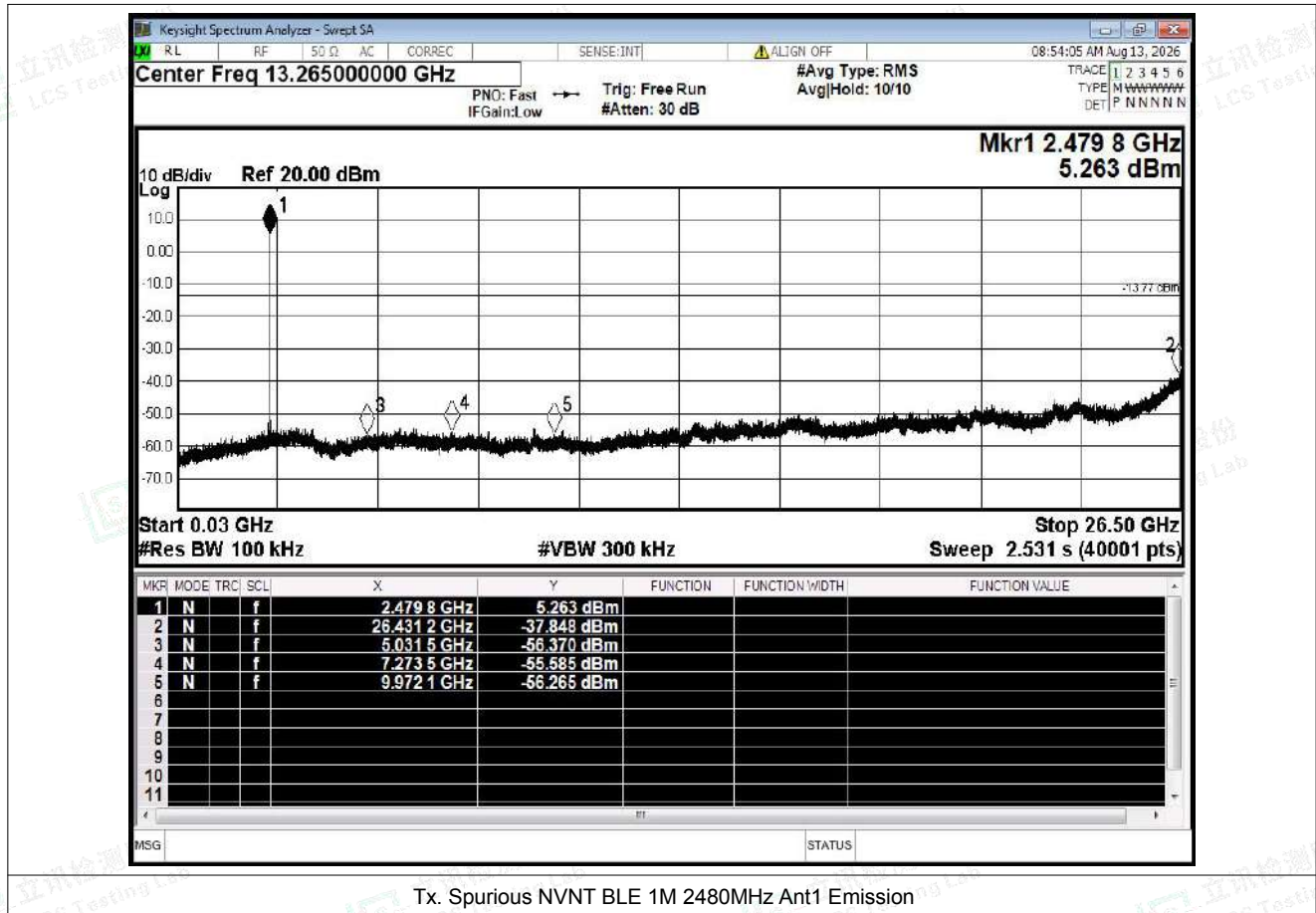








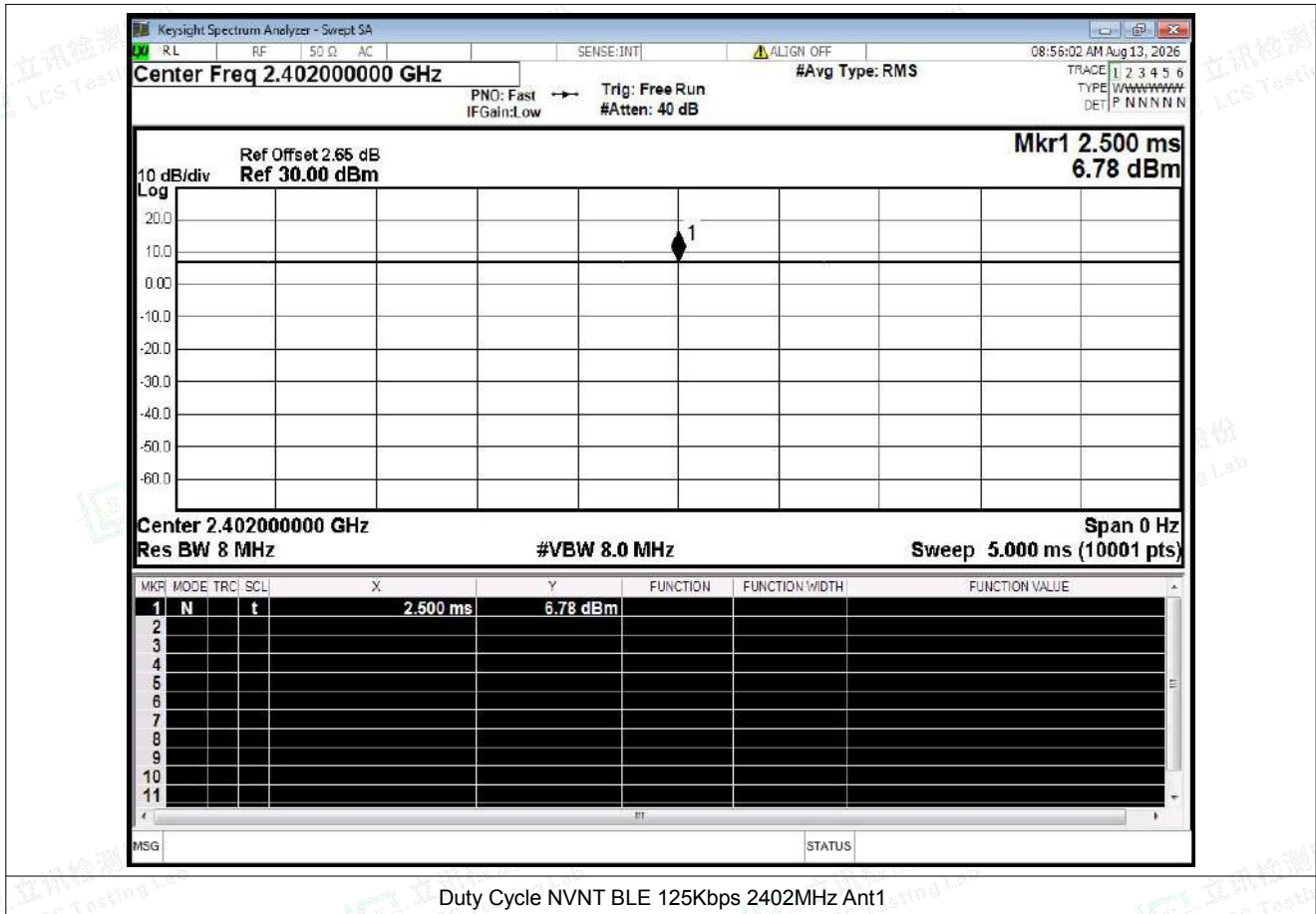


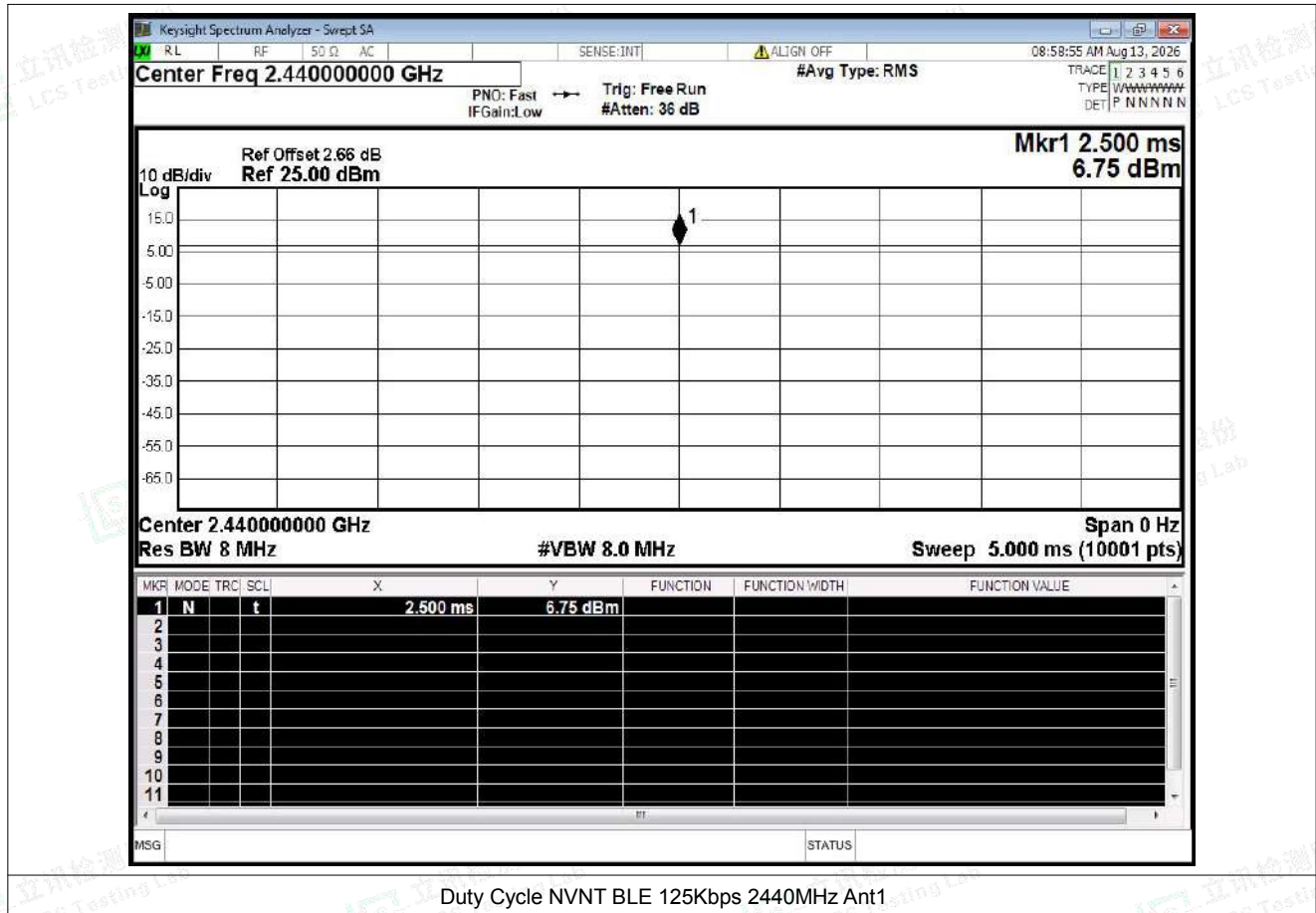


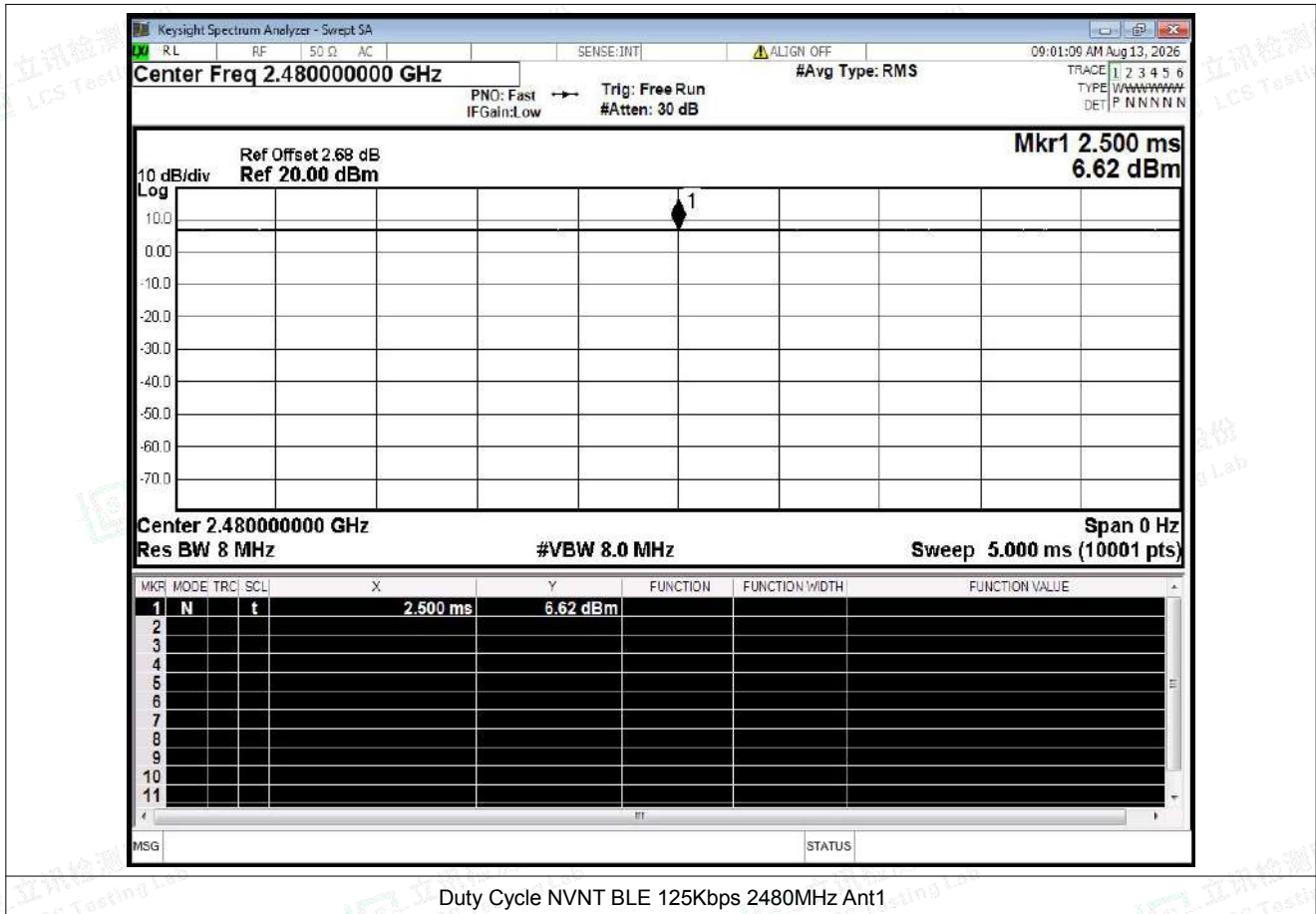


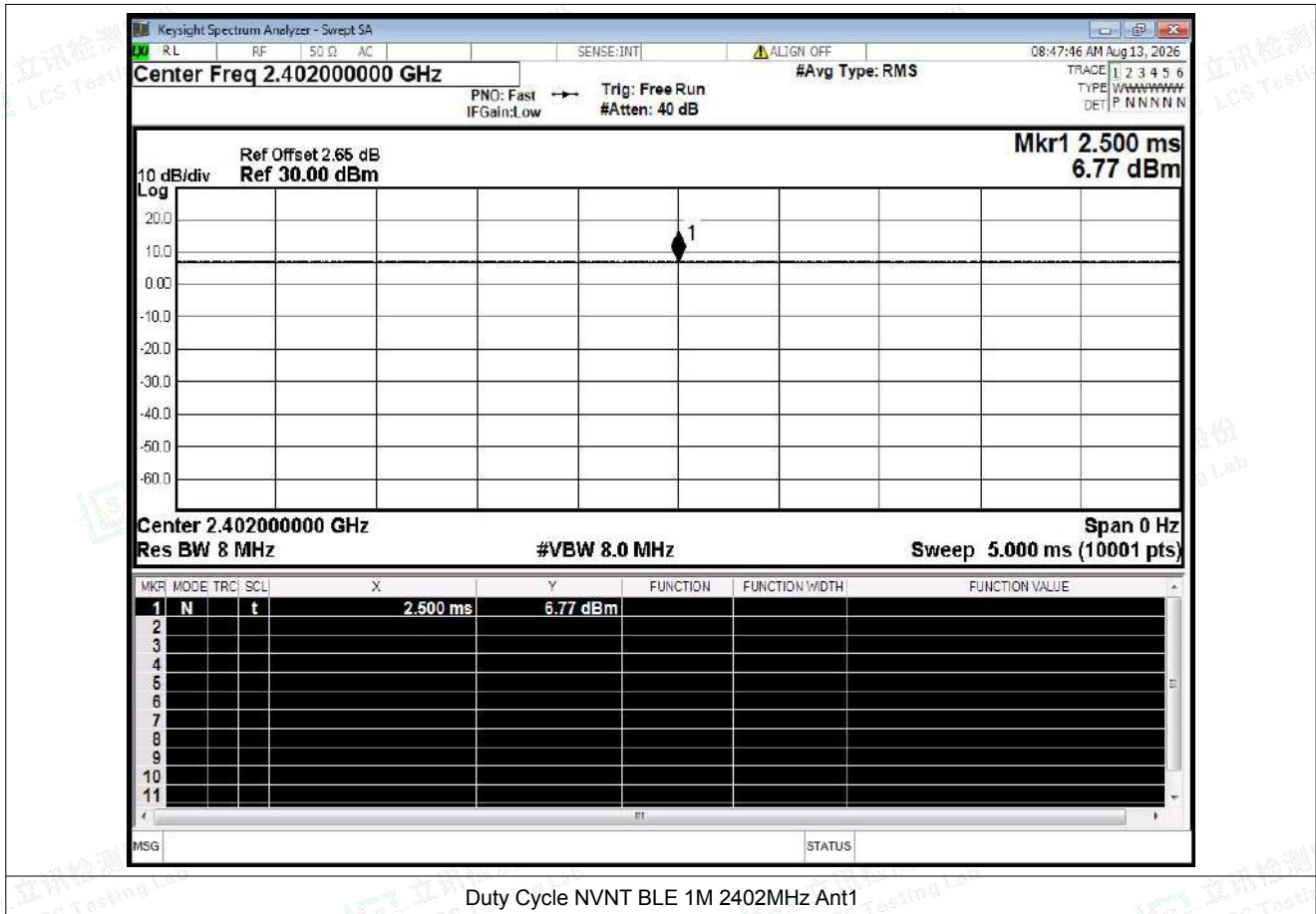
A.6 Duty Cycle

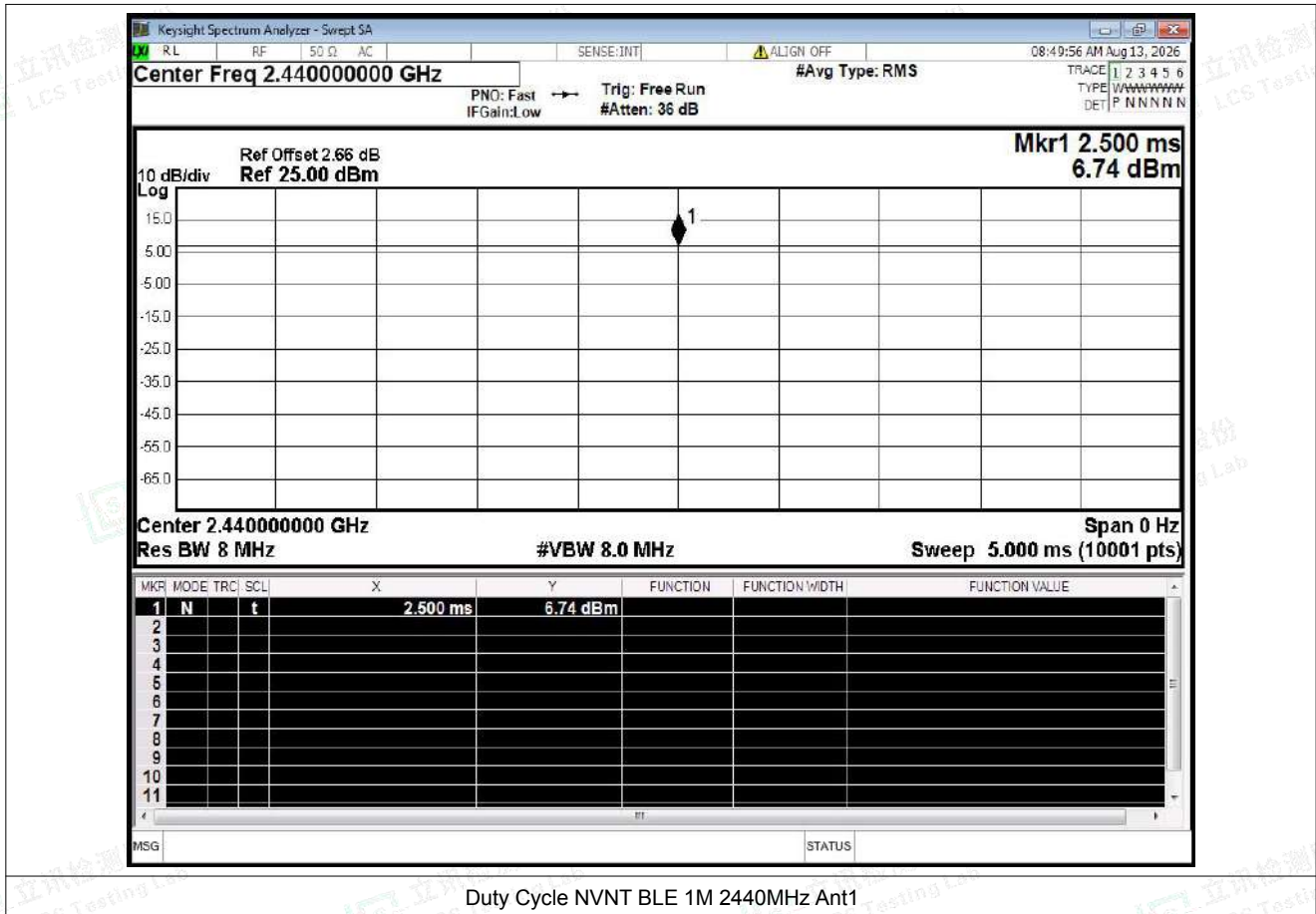
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 125Kbps	2402	Ant1	100	0	0
NVNT	BLE 125Kbps	2440	Ant1	100	0	0
NVNT	BLE 125Kbps	2480	Ant1	100	0	0
NVNT	BLE 1M	2402	Ant1	100	0	0
NVNT	BLE 1M	2440	Ant1	100	0	0
NVNT	BLE 1M	2480	Ant1	100	0	0

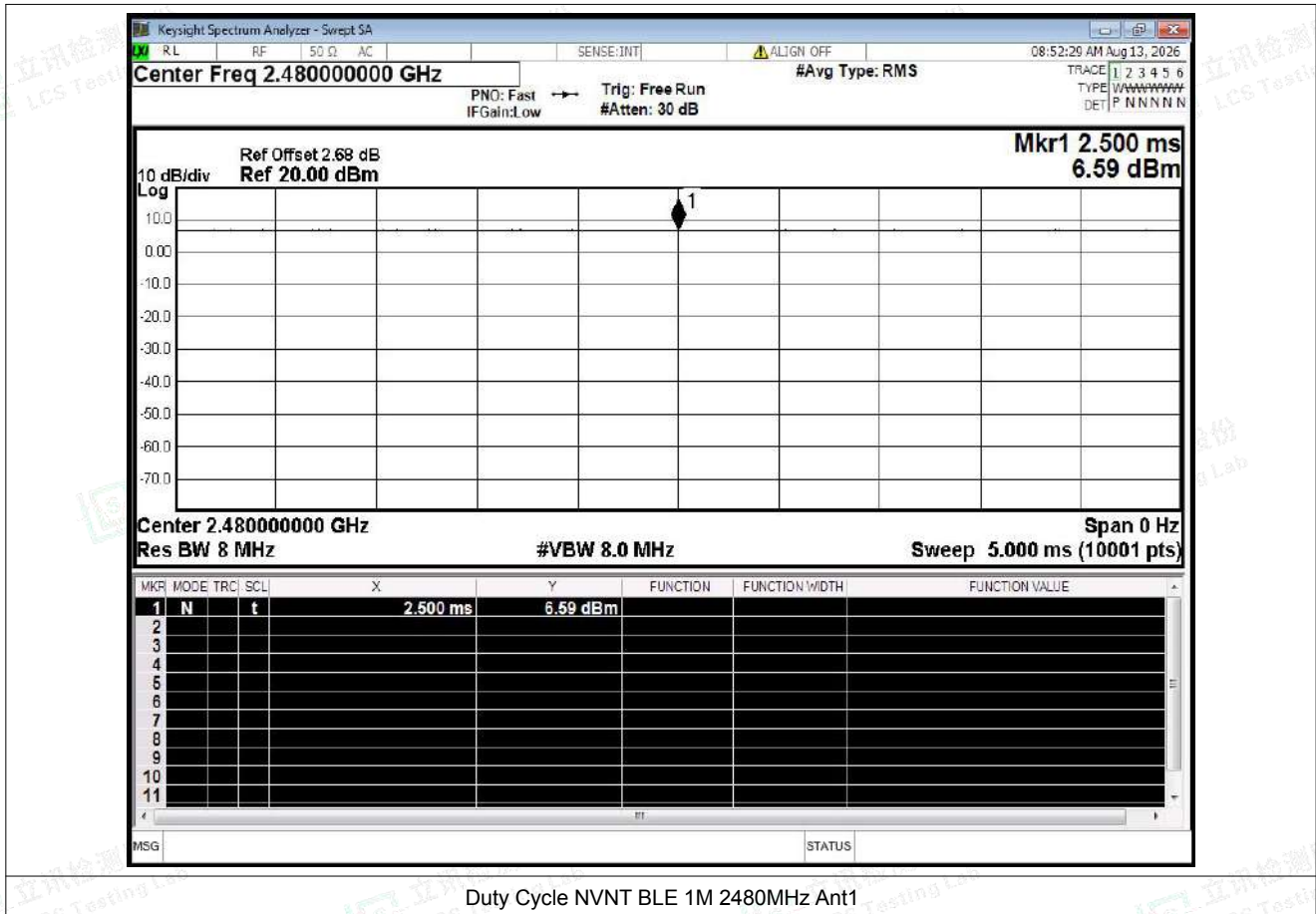














A.7 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 125Kbps	2402	Ant1	2310	-49.86	5.30	50.70	Peak	74	Pass
NVNT	BLE 125Kbps	2402	Ant1	2310	-56.56	5.30	44.00	Average	54	Pass
NVNT	BLE 125Kbps	2402	Ant1	2369.808	-44.37	5.30	56.19	Peak	74	Pass
NVNT	BLE 125Kbps	2402	Ant1	2370	-55.01	5.30	45.55	Average	54	Pass
NVNT	BLE 125Kbps	2402	Ant1	2390	-49.54	5.30	51.02	Peak	74	Pass
NVNT	BLE 125Kbps	2402	Ant1	2390	-55.97	5.30	44.59	Average	54	Pass
NVNT	BLE 125Kbps	2480	Ant1	2483.5	-42.54	5.30	58.02	Peak	74	Pass
NVNT	BLE 125Kbps	2480	Ant1	2483.5	-47.79	5.30	52.77	Average	54	Pass
NVNT	BLE 125Kbps	2480	Ant1	2483.512	-42.54	5.30	58.02	Peak	74	Pass
NVNT	BLE 125Kbps	2480	Ant1	2483.512	-47.79	5.30	52.77	Average	54	Pass
NVNT	BLE 125Kbps	2480	Ant1	2500	-49.23	5.30	51.33	Peak	74	Pass
NVNT	BLE 125Kbps	2480	Ant1	2500	-56.43	5.30	44.13	Average	54	Pass
NVNT	BLE 1M	2402	Ant1	2310	-49.58	5.30	50.98	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2310	-56.28	5.30	44.28	Average	54	Pass
NVNT	BLE 1M	2402	Ant1	2385.36	-46.04	5.30	54.52	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2370.384	-53.97	5.30	46.59	Average	54	Pass
NVNT	BLE 1M	2402	Ant1	2390	-47.11	5.30	53.45	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2390	-56.03	5.30	44.53	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2483.5	-42.7	5.30	57.86	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2483.5	-47.91	5.30	52.65	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2483.512	-42.7	5.30	57.86	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2483.512	-47.91	5.30	52.65	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2500	-48.36	5.30	52.20	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2500	-55.62	5.30	44.94	Average	54	Pass

