



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: LED PROJECTOR

Test Model: L003A

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	<i>Nick Peng</i> Nick Peng
Supervised by:	<i>Li Huan</i> Li Huan





B.1 -6dB Bandwidth

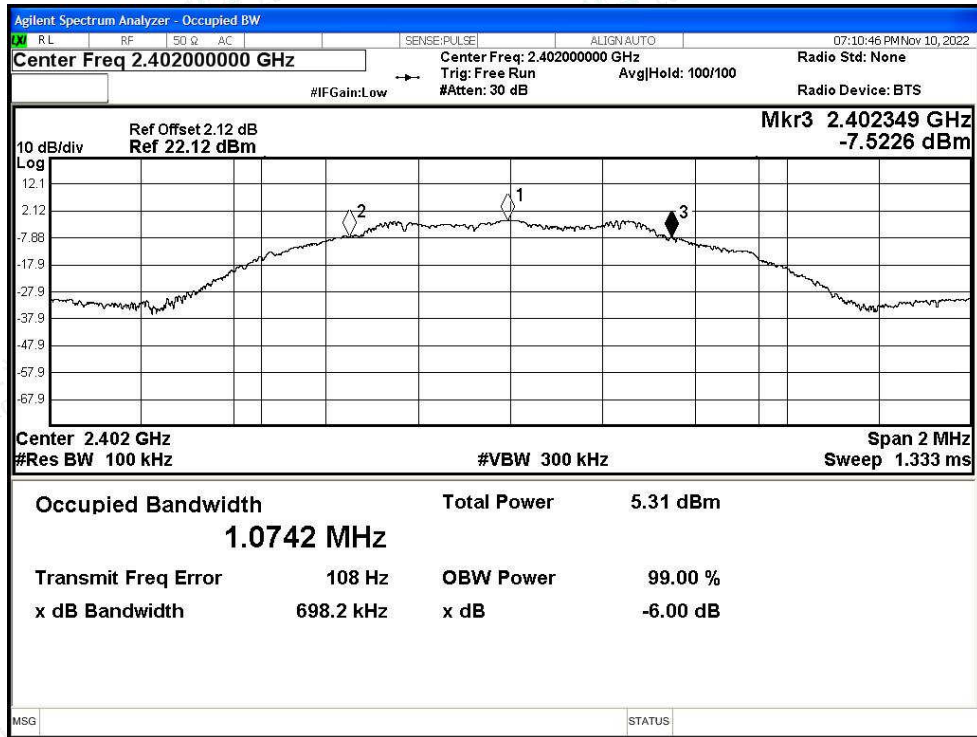
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.698	≥ 0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.699	≥ 0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.709	≥ 0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.086	≥ 0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.077	≥ 0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.084	≥ 0.5	Pass



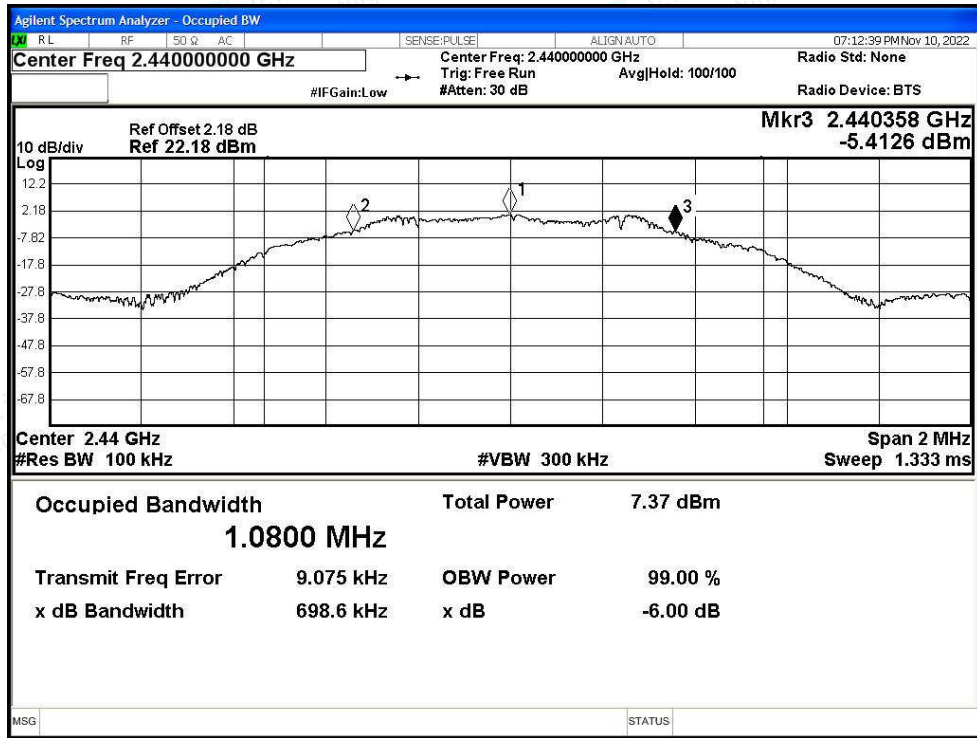


Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1

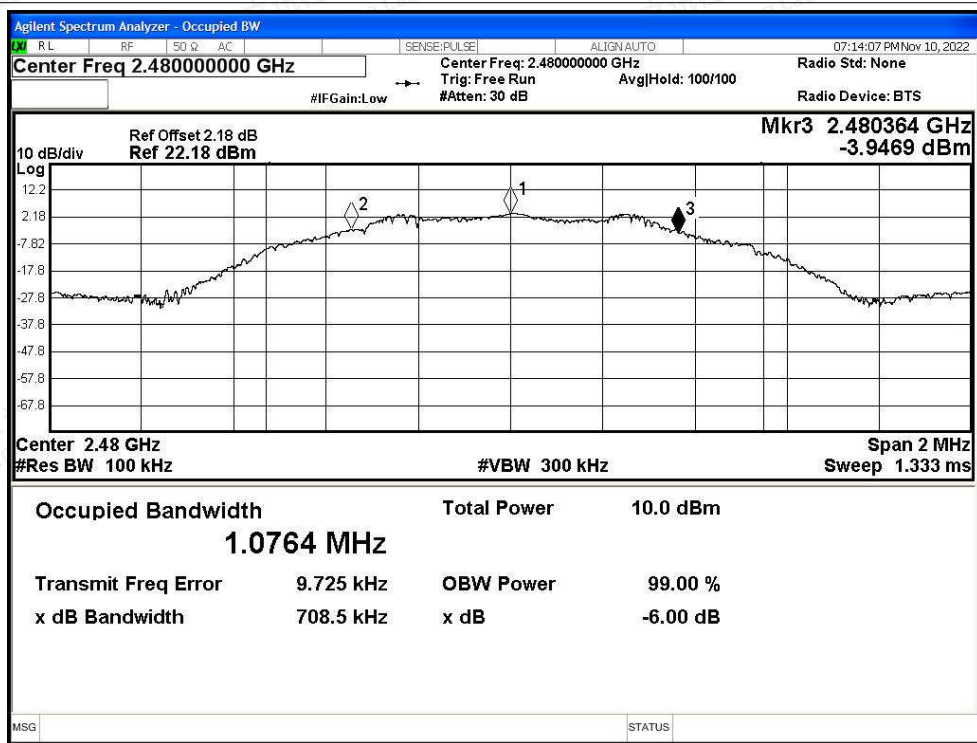


-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1

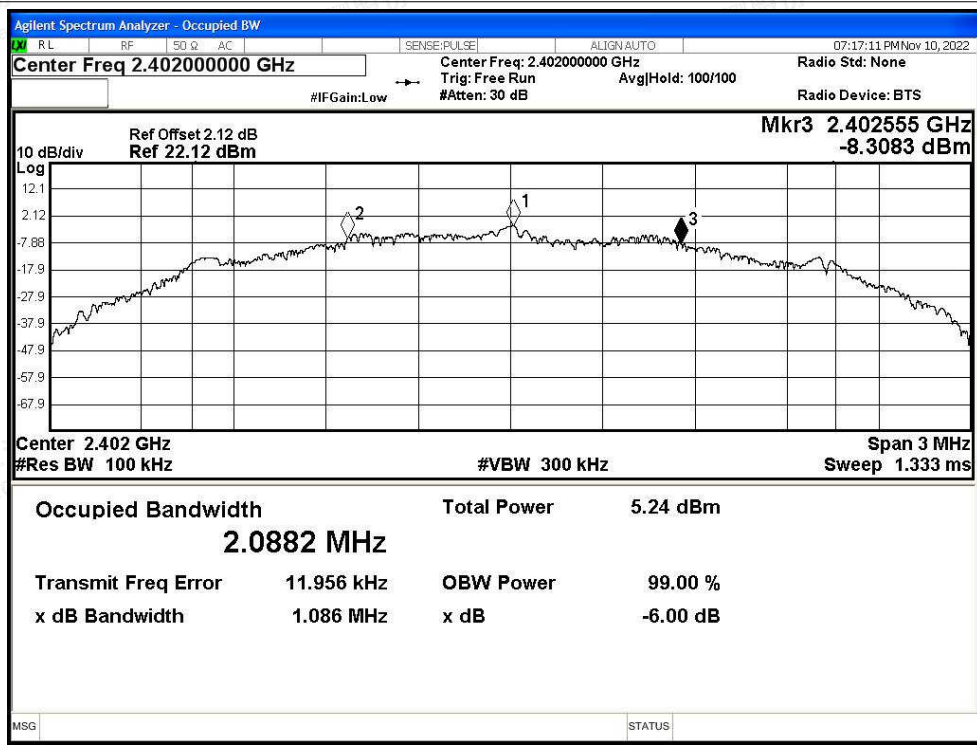




-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1

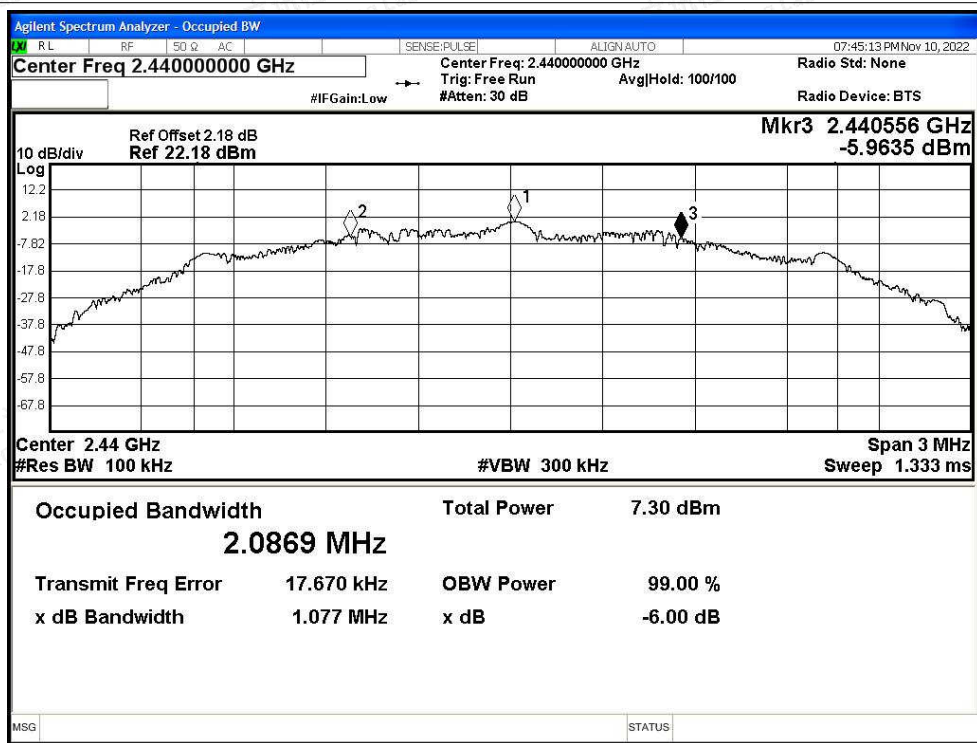


-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1

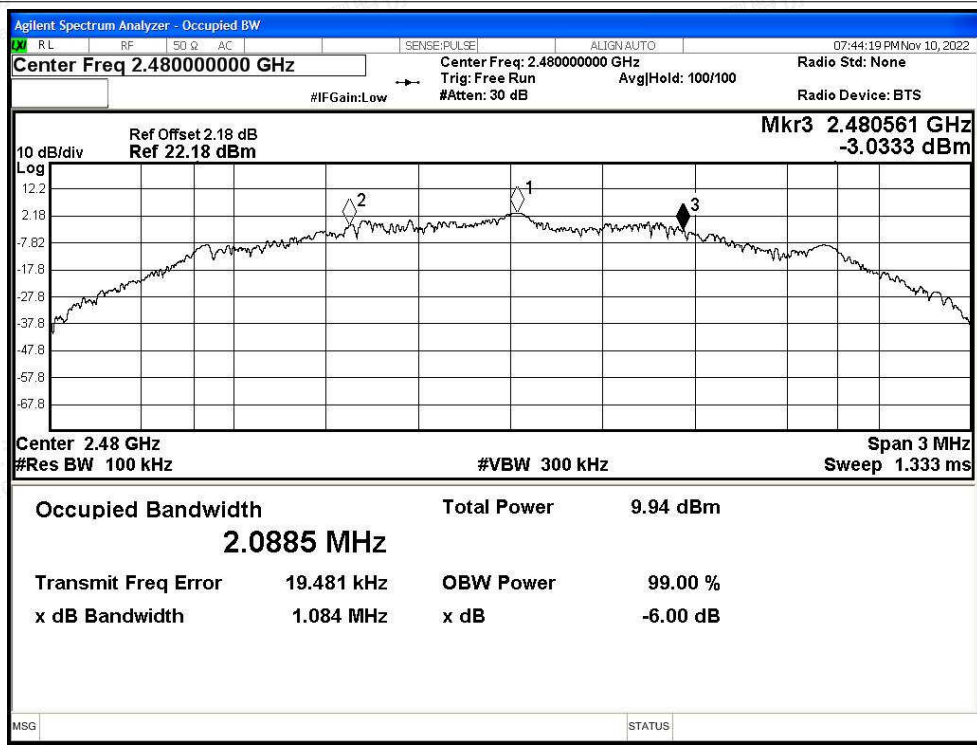




-6dB Bandwidth NVNT BLE 2M 2440MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1





B.2 Maximum Conducted Output Power

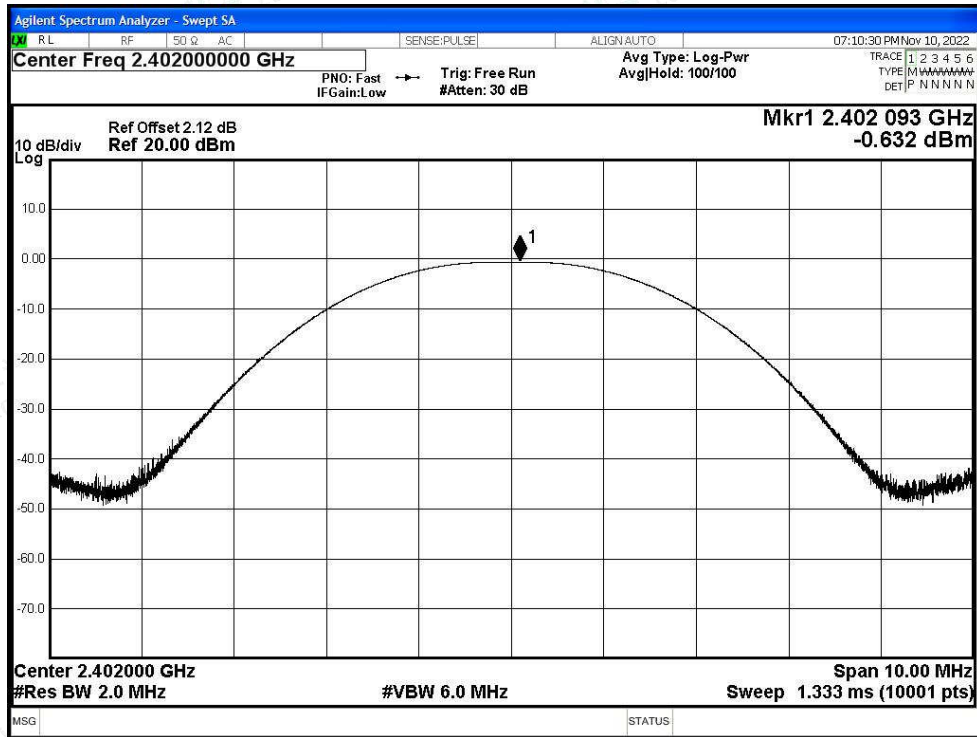
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-0.63	30	Pass
NVNT	BLE 1M	2440	Ant1	1.47	30	Pass
NVNT	BLE 1M	2480	Ant1	0.58	30	Pass
NVNT	BLE 2M	2402	Ant1	-0.69	30	Pass
NVNT	BLE 2M	2440	Ant1	1.45	30	Pass
NVNT	BLE 2M	2480	Ant1	0.61	30	Pass



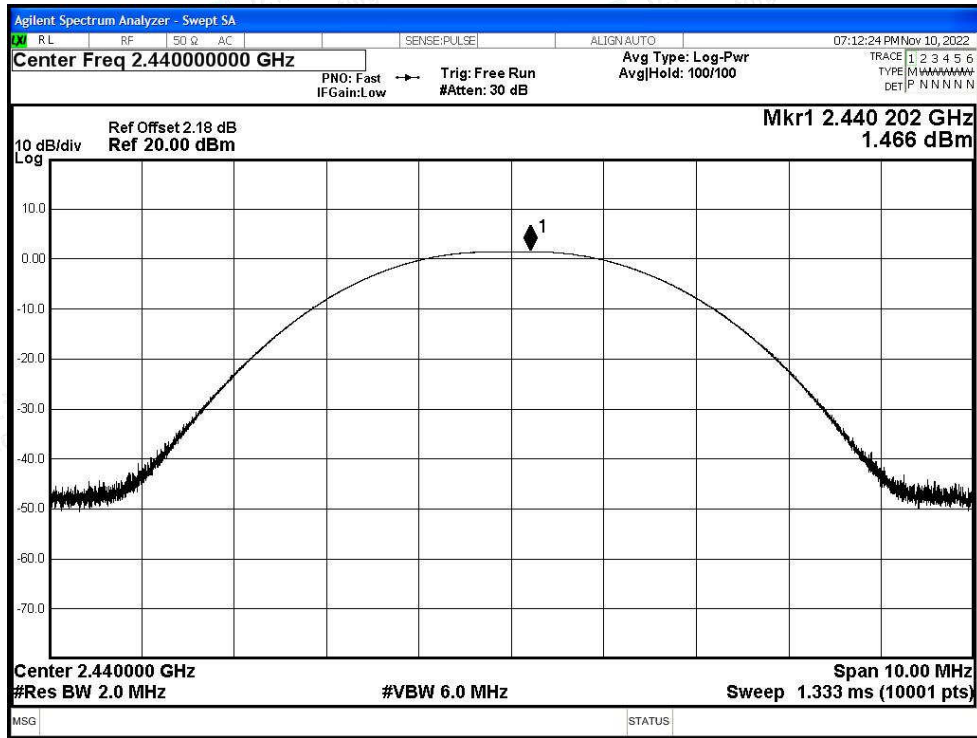


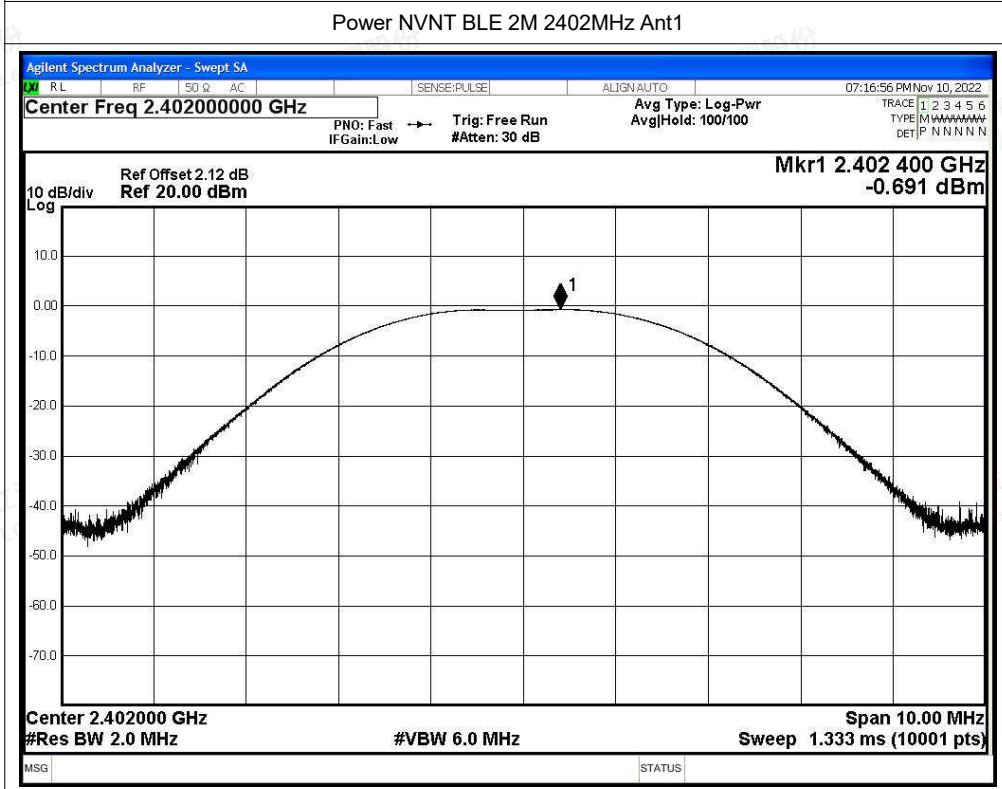
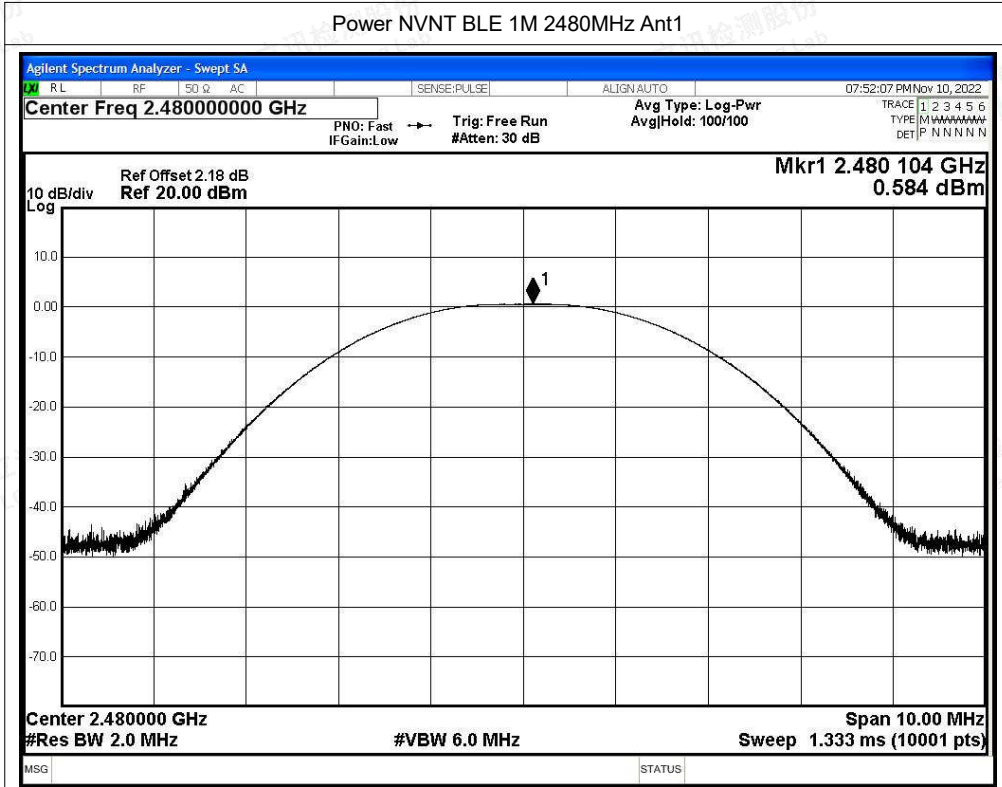
Test Graphs

Power NVNT BLE 1M 2402MHz Ant1



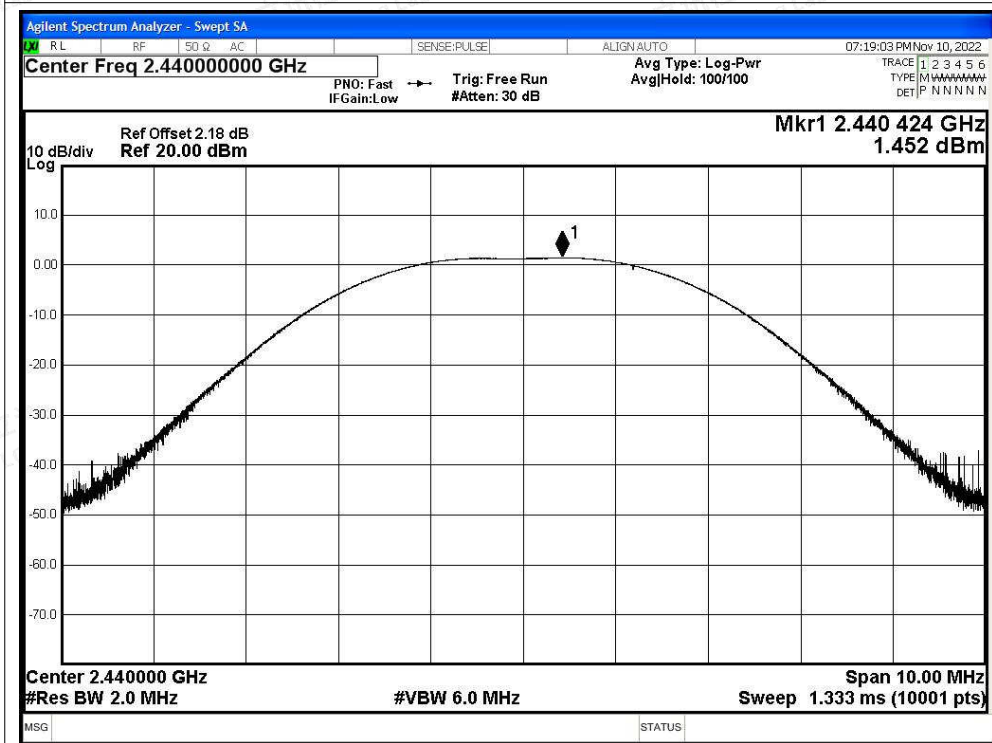
Power NVNT BLE 1M 2440MHz Ant1



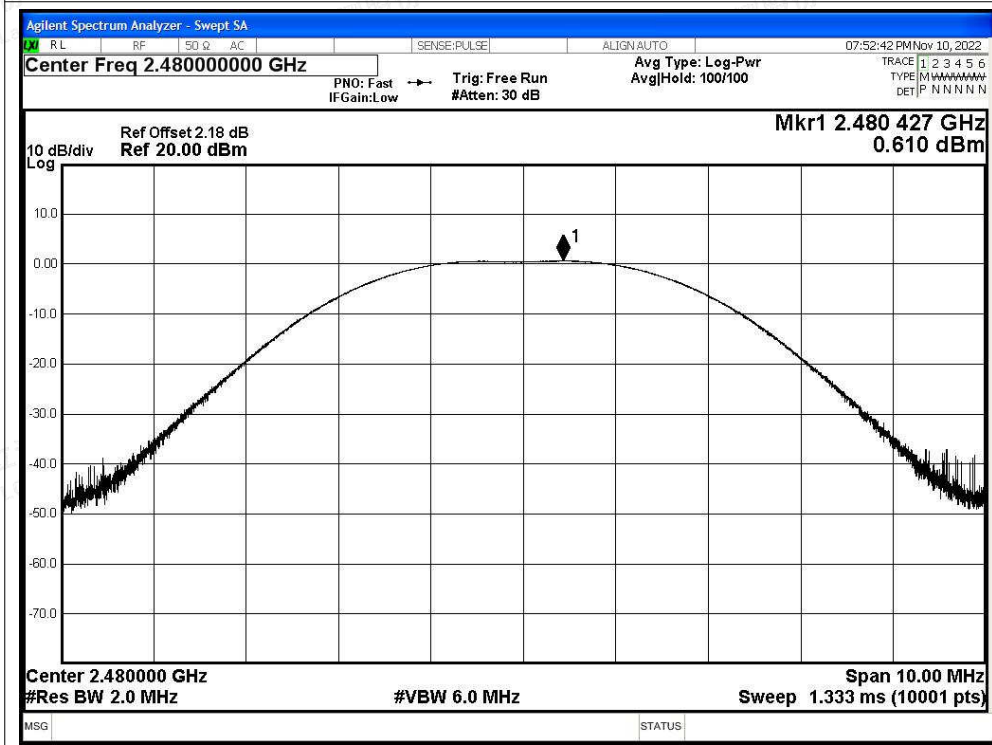




Power NVNT BLE 2M 2440MHz Ant1



Power NVNT BLE 2M 2480MHz Ant1





B.3 Maximum Power Spectral Density Level

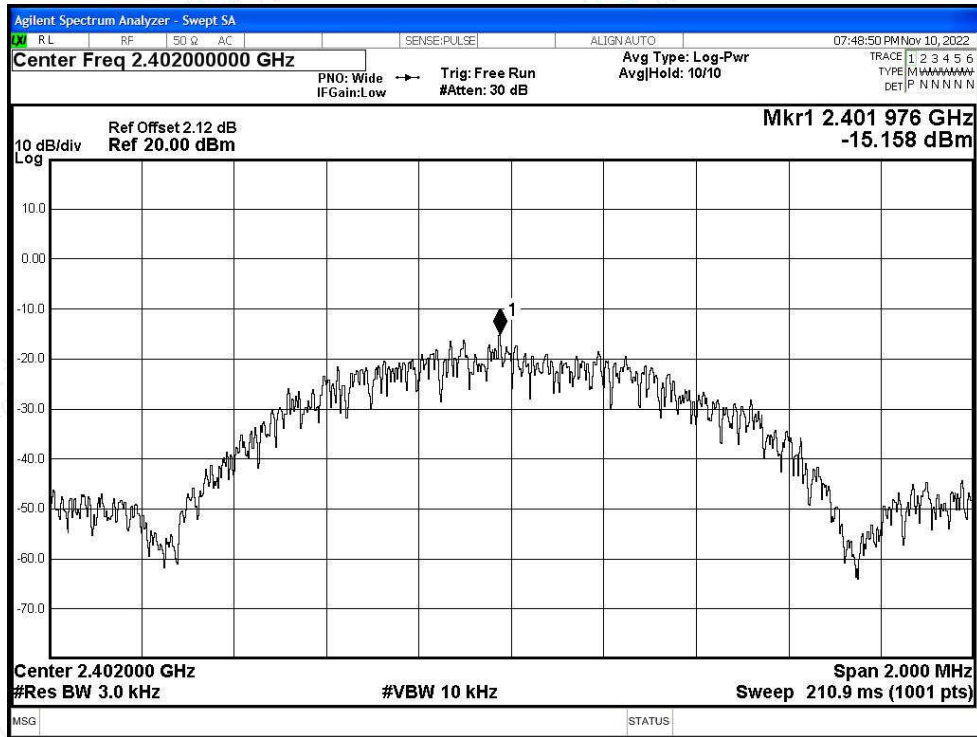
Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-15.16	8	Pass
NVNT	BLE 1M	2440	Ant1	-13.12	8	Pass
NVNT	BLE 1M	2480	Ant1	-13.83	8	Pass
NVNT	BLE 2M	2402	Ant1	-17.56	8	Pass
NVNT	BLE 2M	2440	Ant1	-15.77	8	Pass
NVNT	BLE 2M	2480	Ant1	-16.8	8	Pass



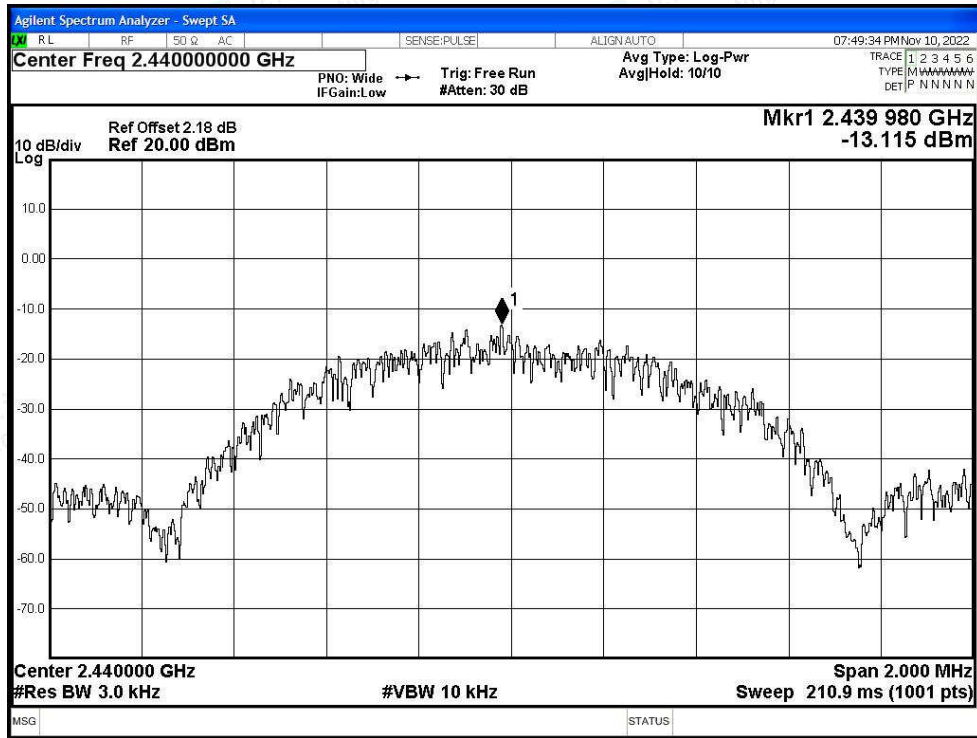


Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1

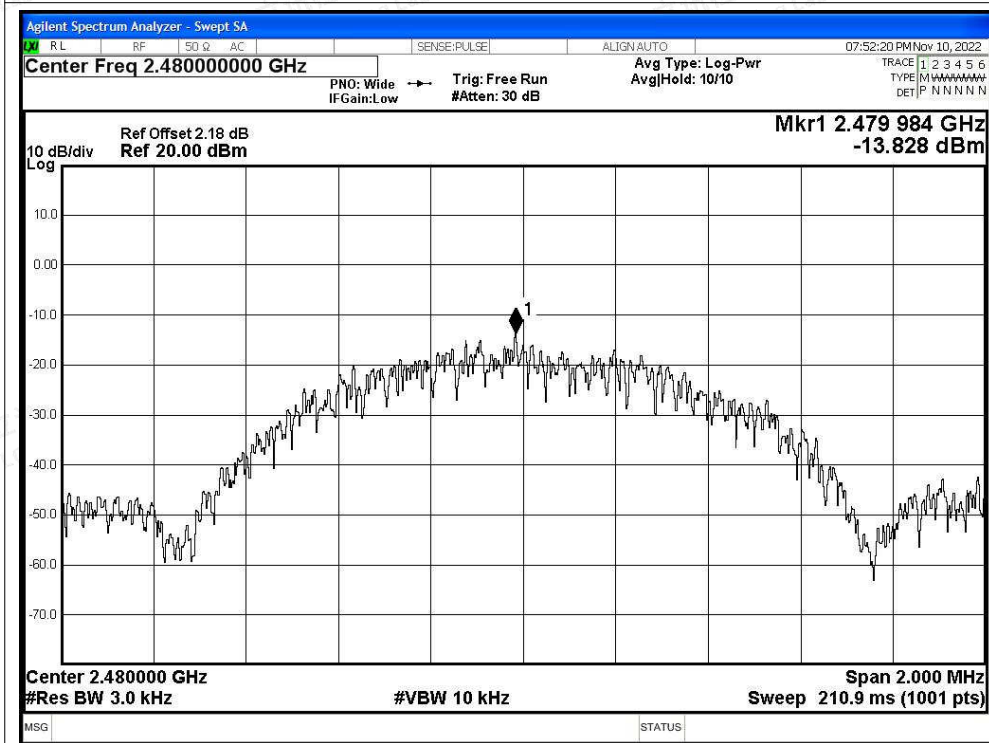


PSD NVNT BLE 1M 2440MHz Ant1

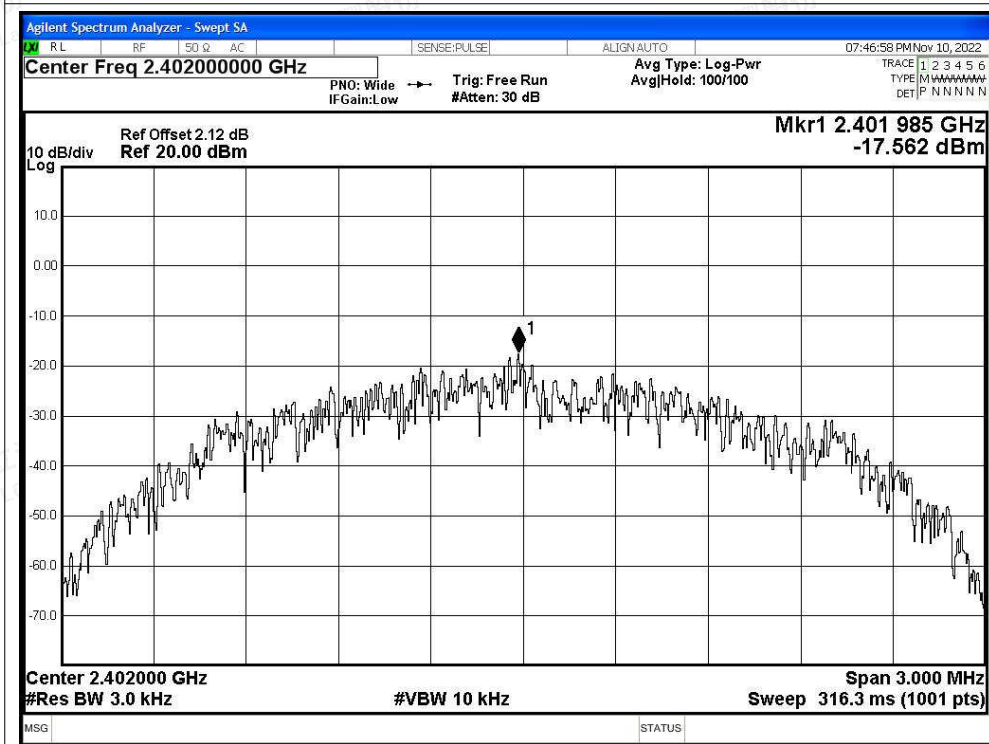




PSD NVNT BLE 1M 2480MHz Ant1

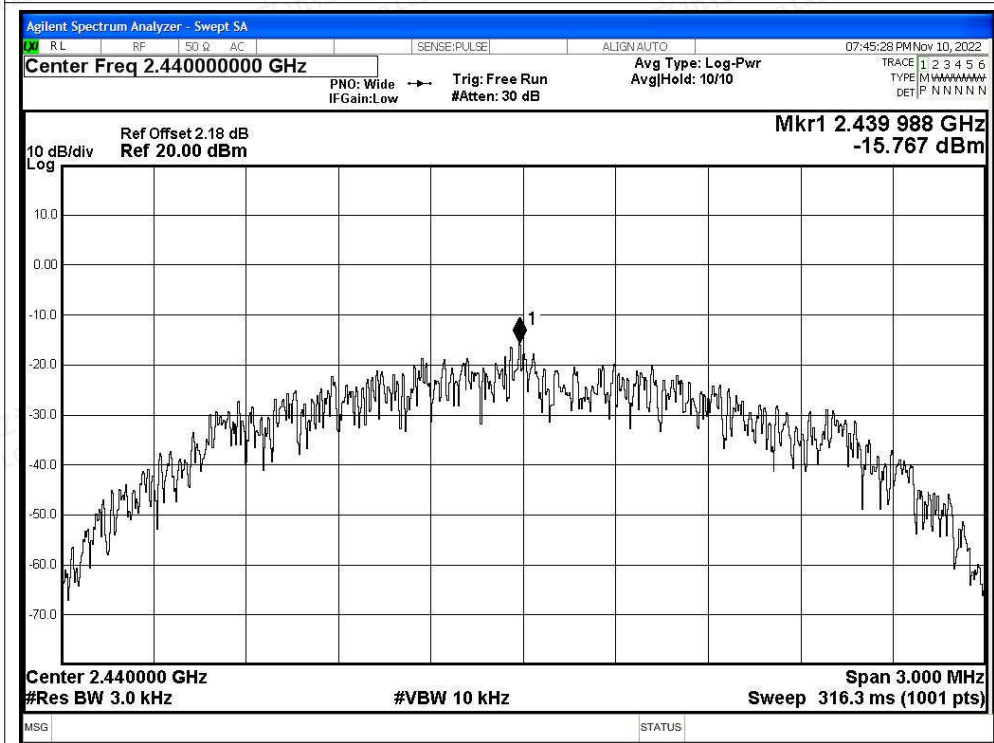


PSD NVNT BLE 2M 2402MHz Ant1

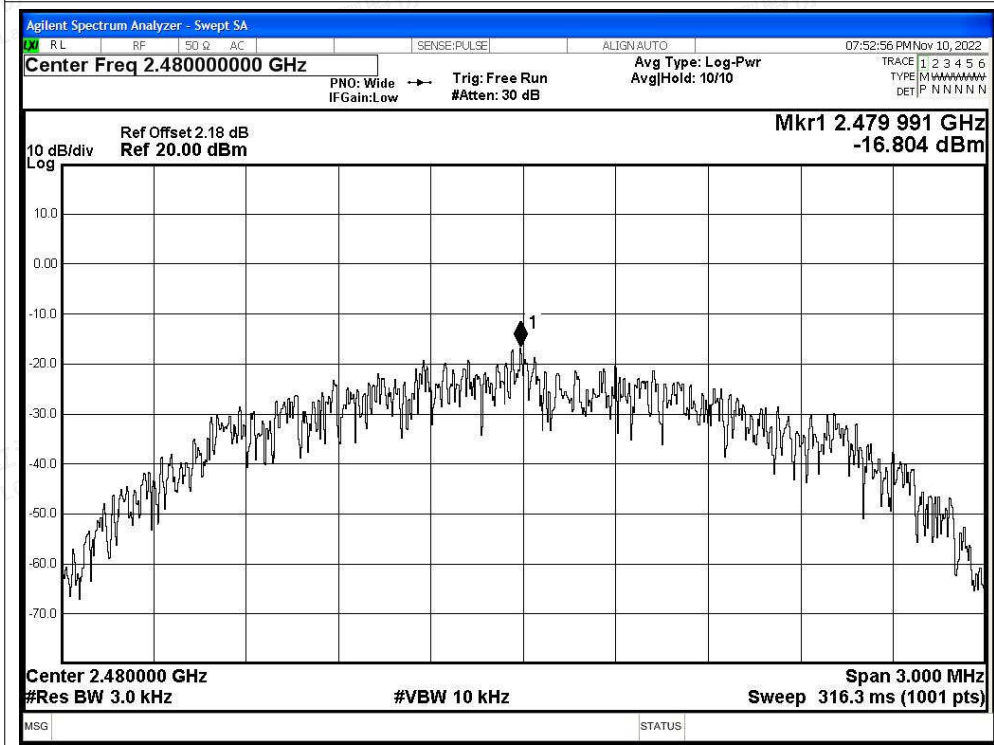




PSD NVNT BLE 2M 2440MHz Ant1



PSD NVNT BLE 2M 2480MHz Ant1





B.4 Band Edge

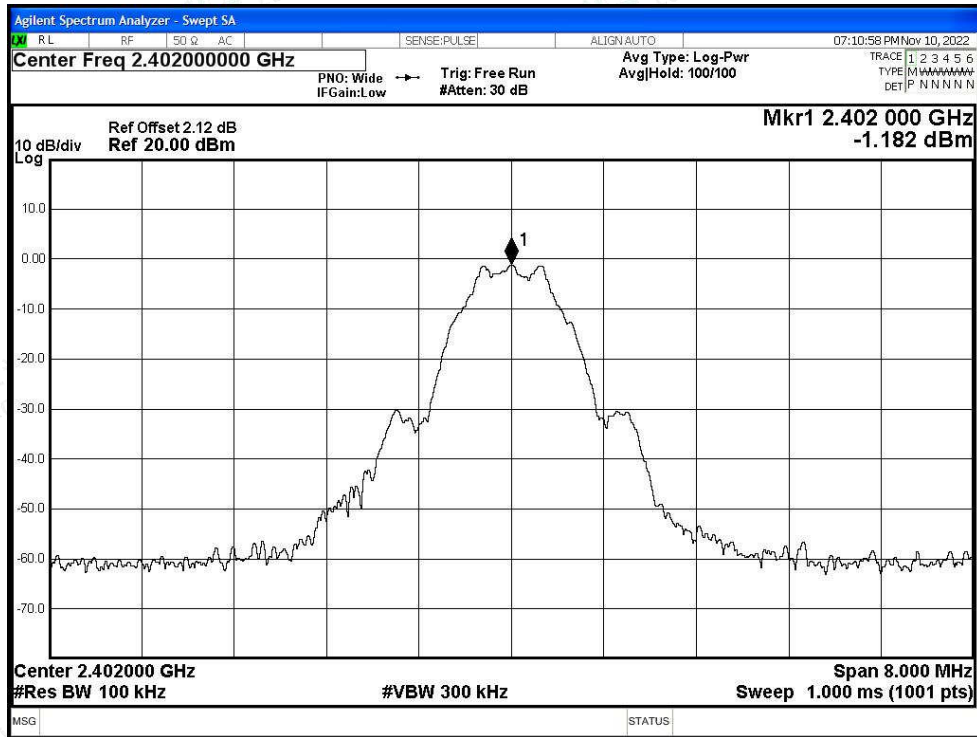
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-41.49	-20	Pass
NVNT	BLE 1M	2480	Ant1	-60.03	-20	Pass
NVNT	BLE 2M	2402	Ant1	-35.06	-20	Pass
NVNT	BLE 2M	2480	Ant1	-59.9	-20	Pass



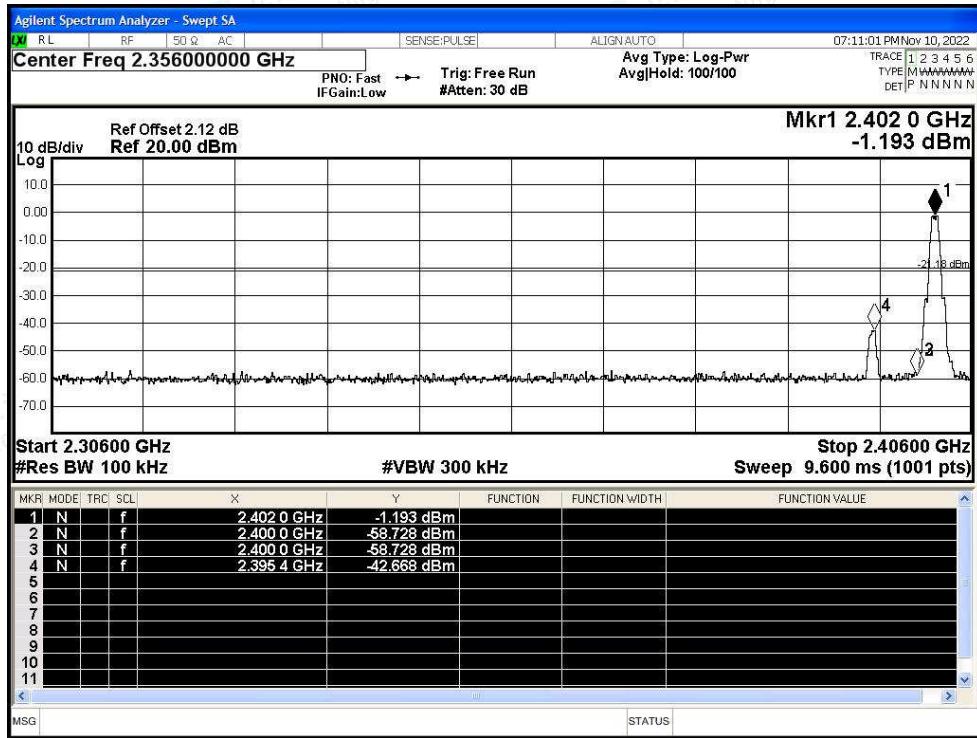


Test Graphs

Band Edge NVNT BLE 1M 2402MHz Ant1 Ref

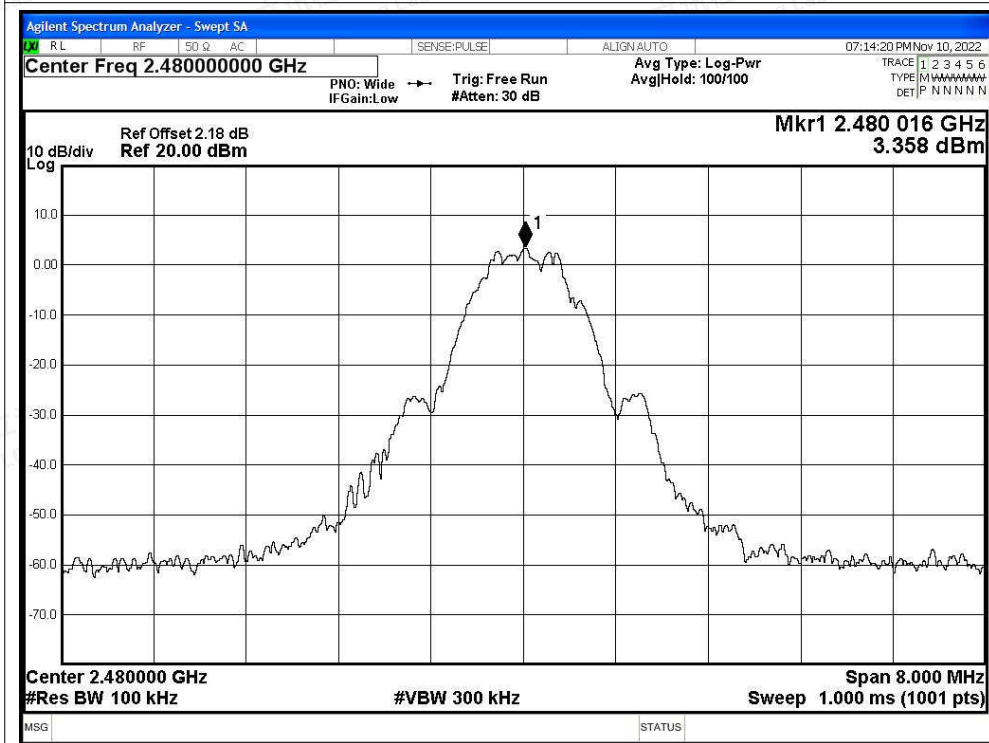


Band Edge NVNT BLE 1M 2402MHz Ant1 Emission

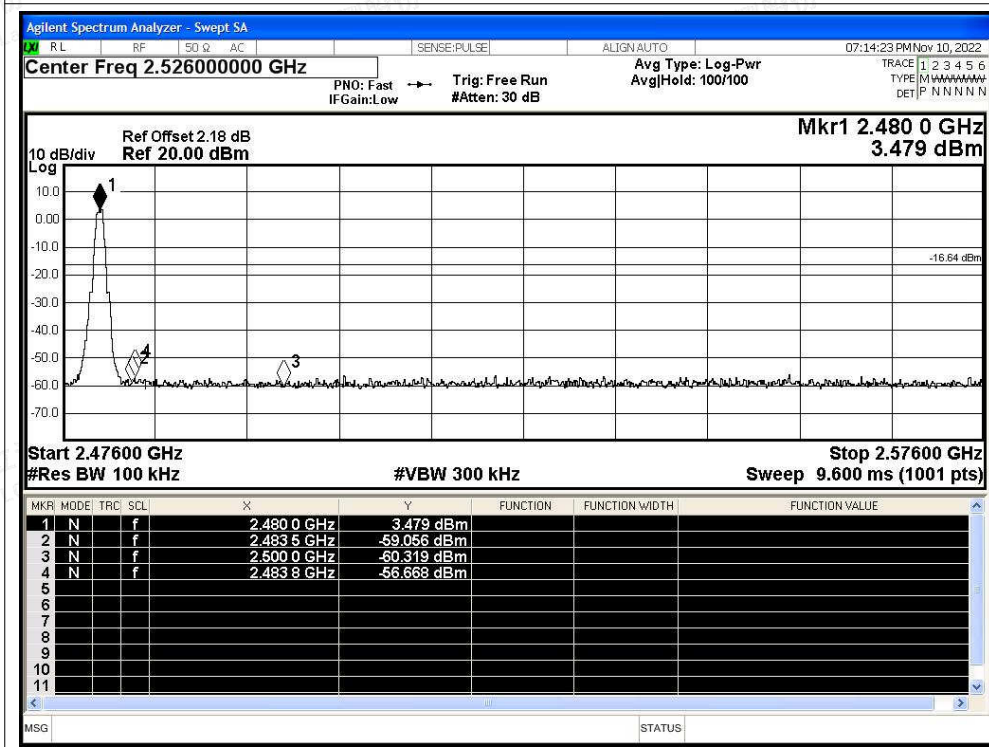




Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission

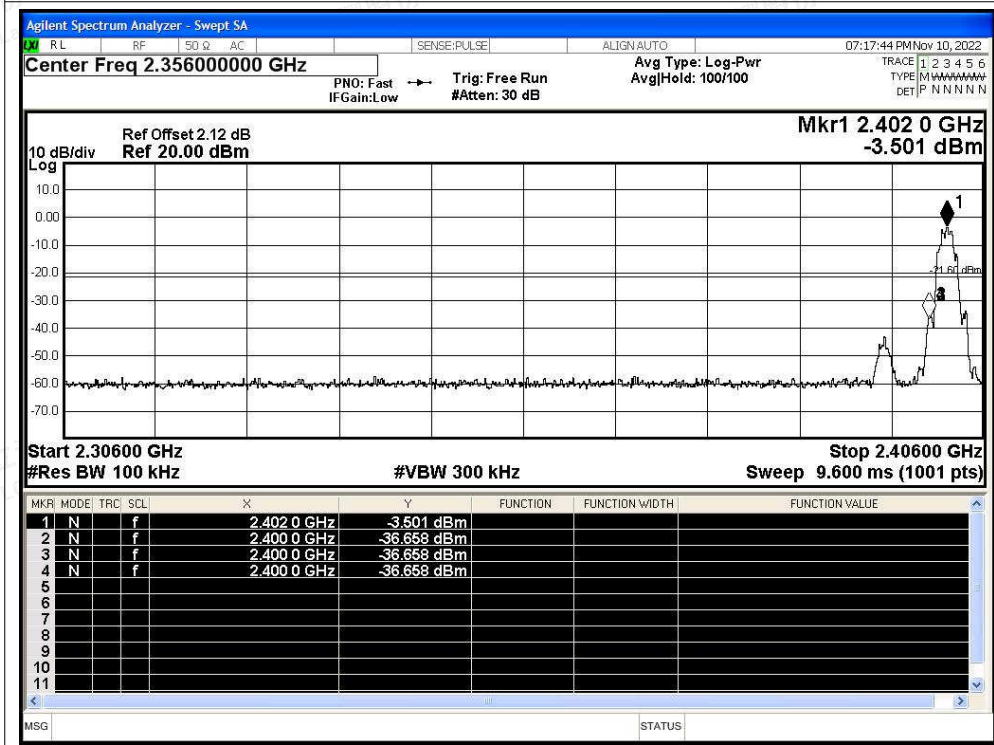




Band Edge NVNT BLE 2M 2402MHz Ant1 Ref



Band Edge NVNT BLE 2M 2402MHz Ant1 Emission

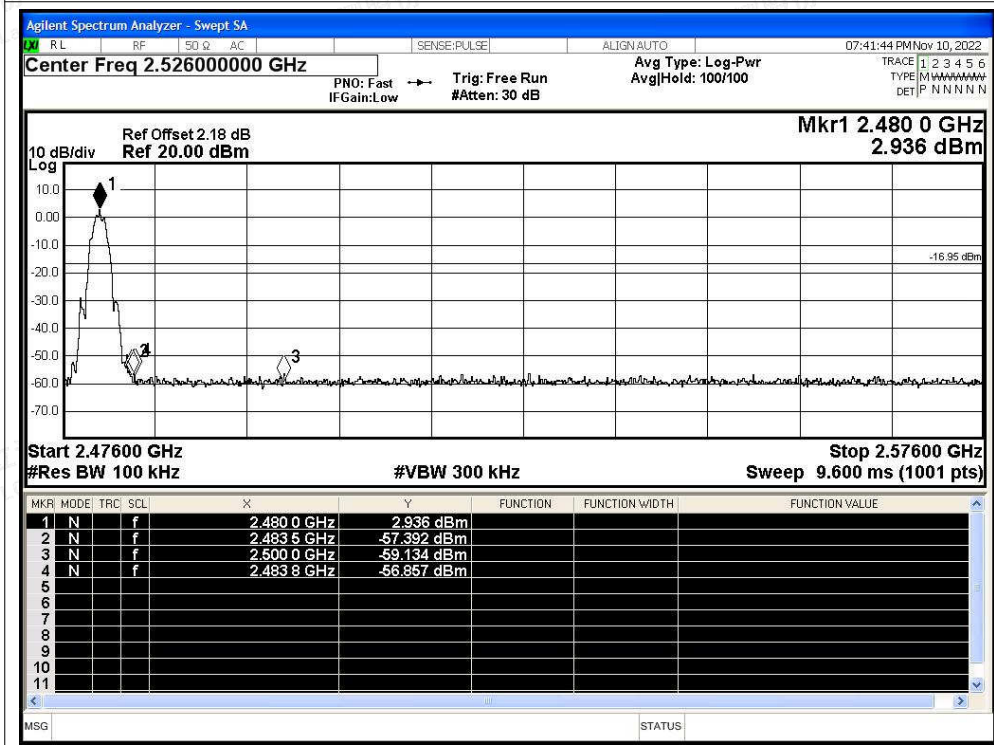




Band Edge NVNT BLE 2M 2480MHz Ant1 Ref



Band Edge NVNT BLE 2M 2480MHz Ant1 Emission





B.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-54.79	-20	Pass
NVNT	BLE 1M	2440	Ant1	-56.5	-20	Pass
NVNT	BLE 1M	2480	Ant1	-58.71	-20	Pass
NVNT	BLE 2M	2402	Ant1	-54.5	-20	Pass
NVNT	BLE 2M	2440	Ant1	-55.63	-20	Pass
NVNT	BLE 2M	2480	Ant1	-58.78	-20	Pass

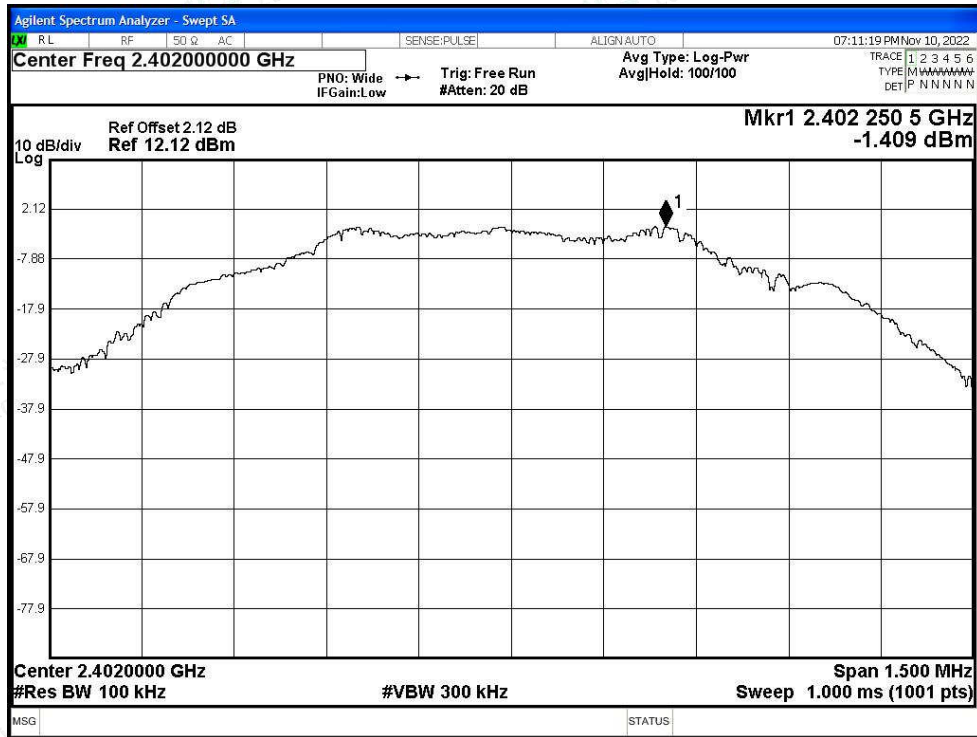


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

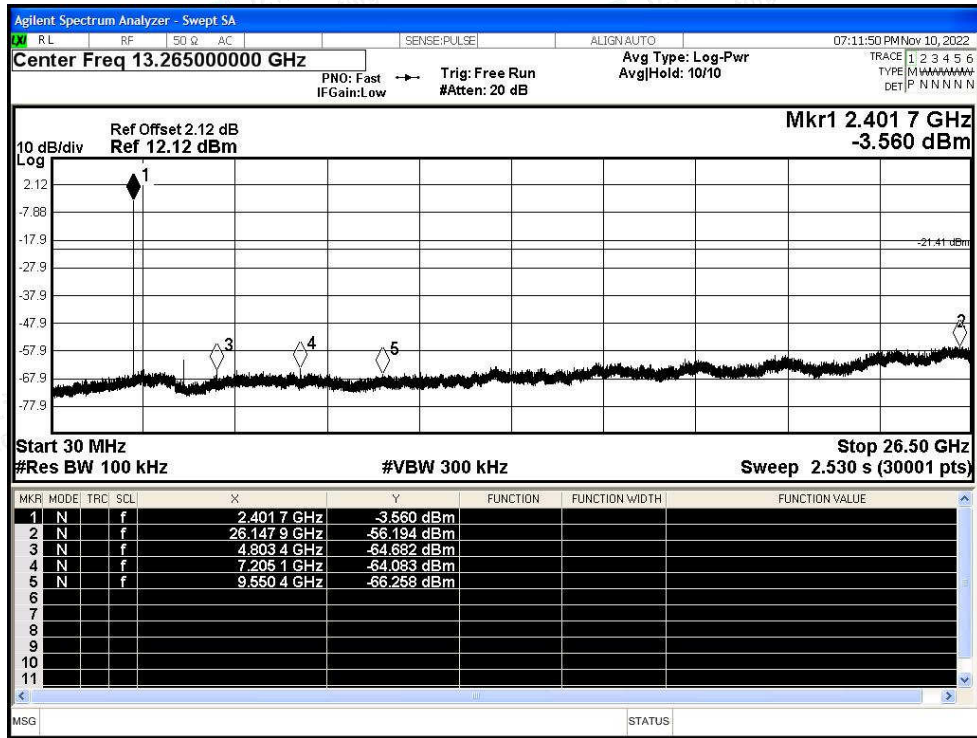


Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref

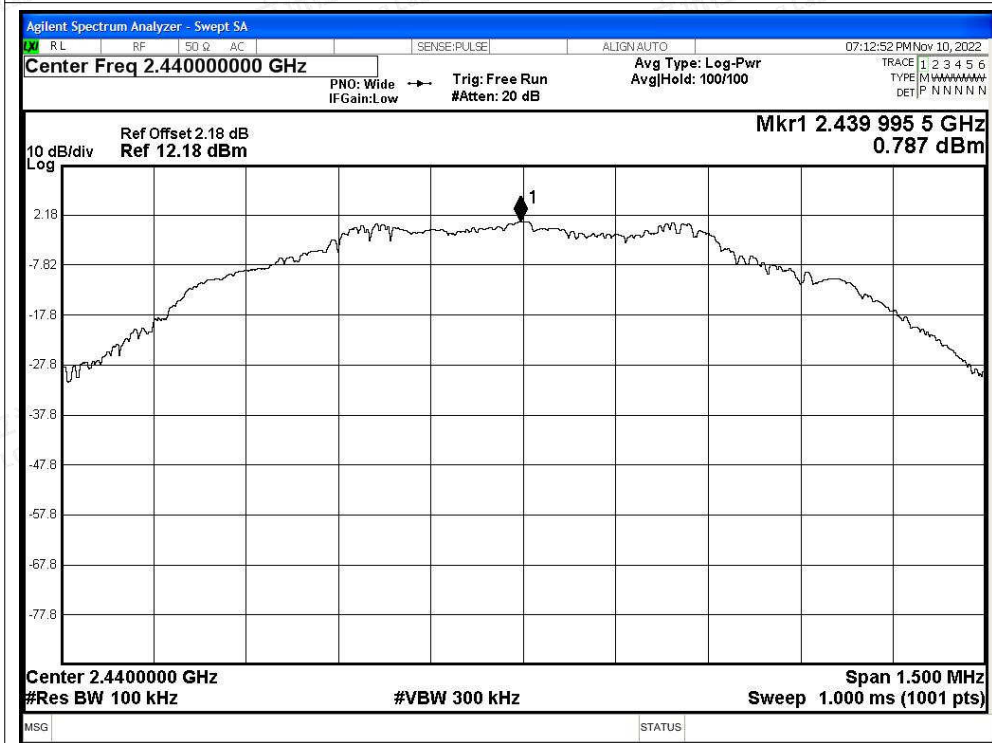


Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission

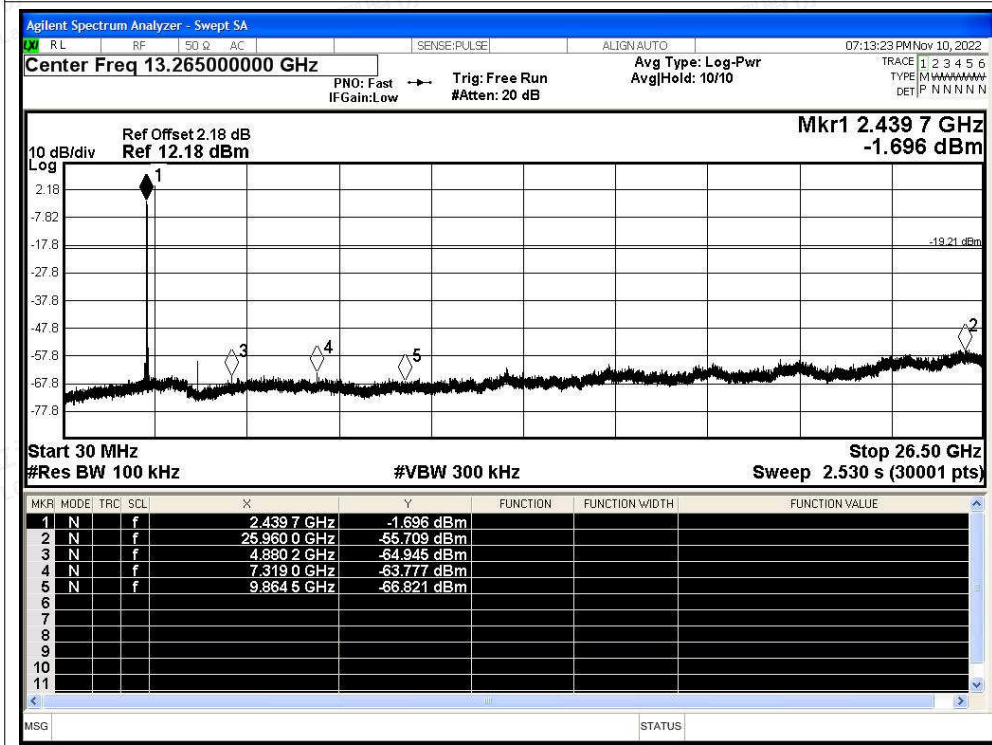




Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref

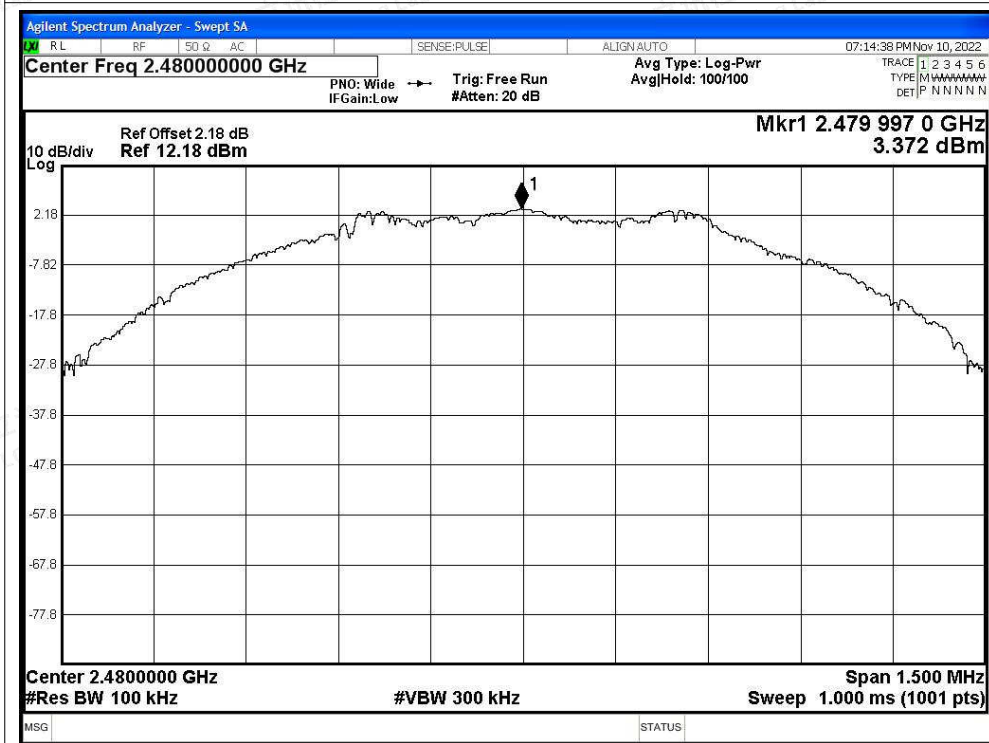


Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission

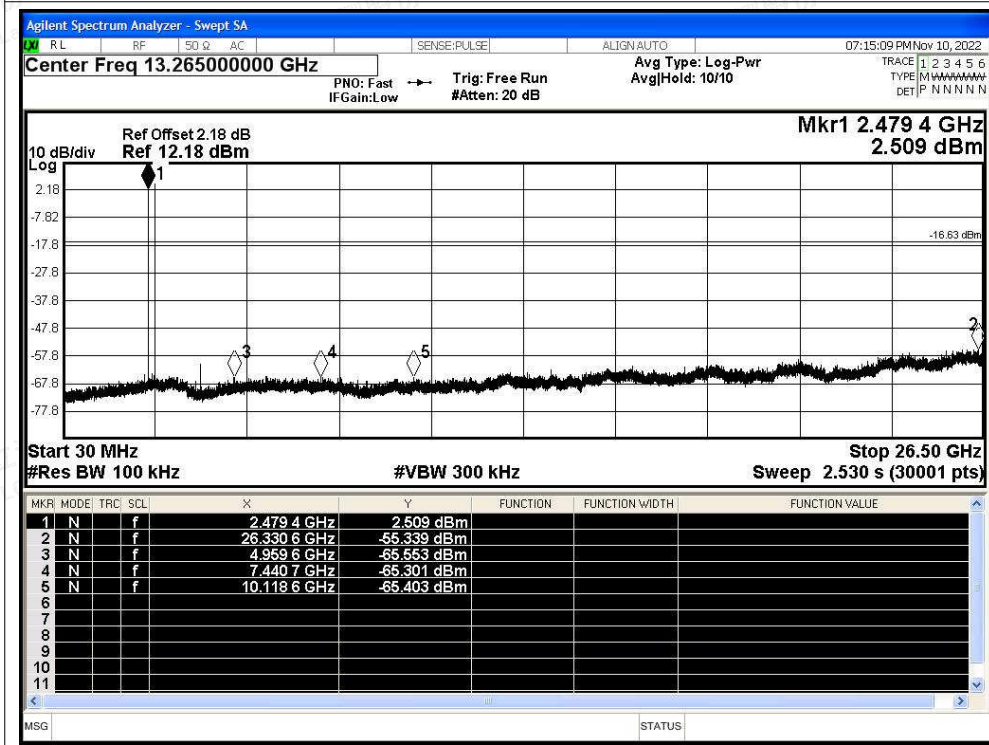




Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref

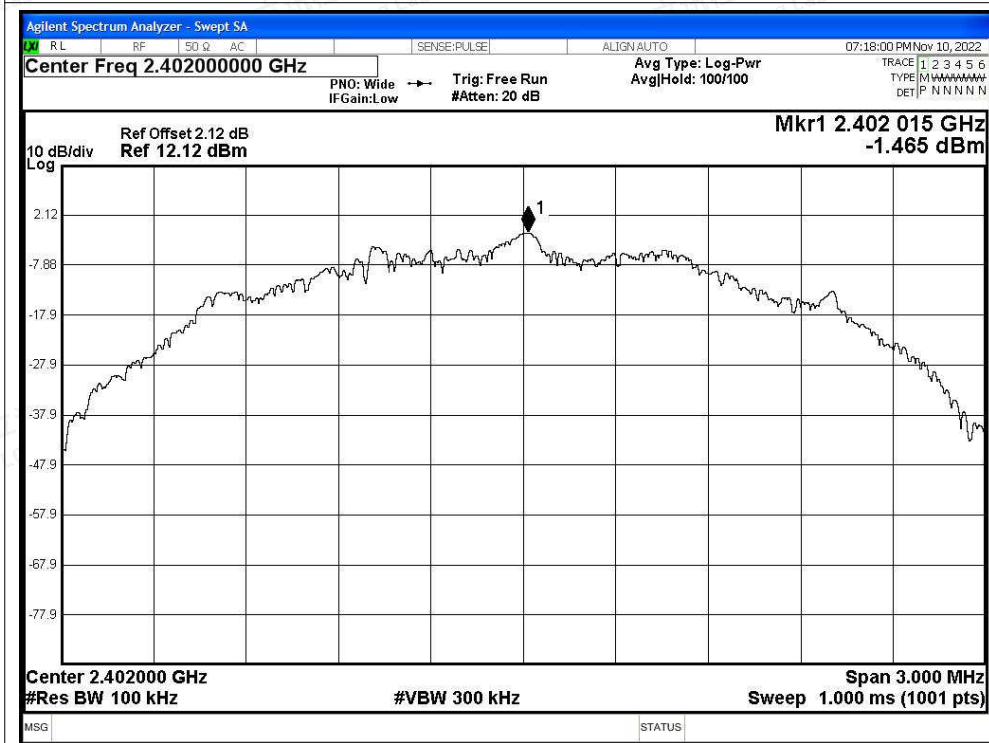


Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission

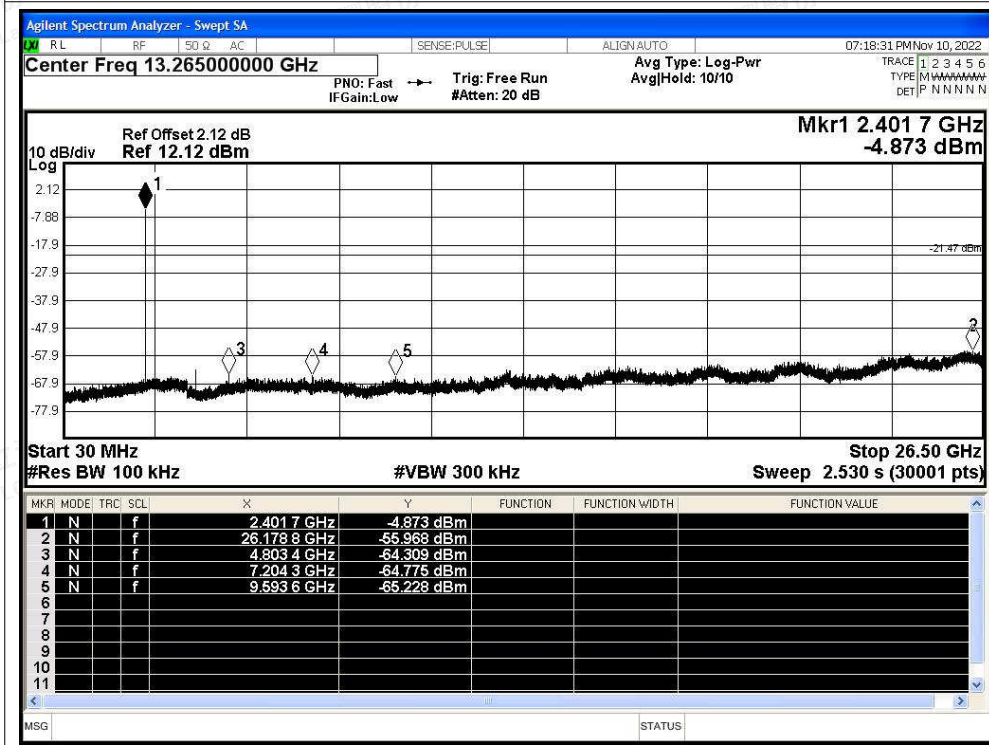




Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Ref

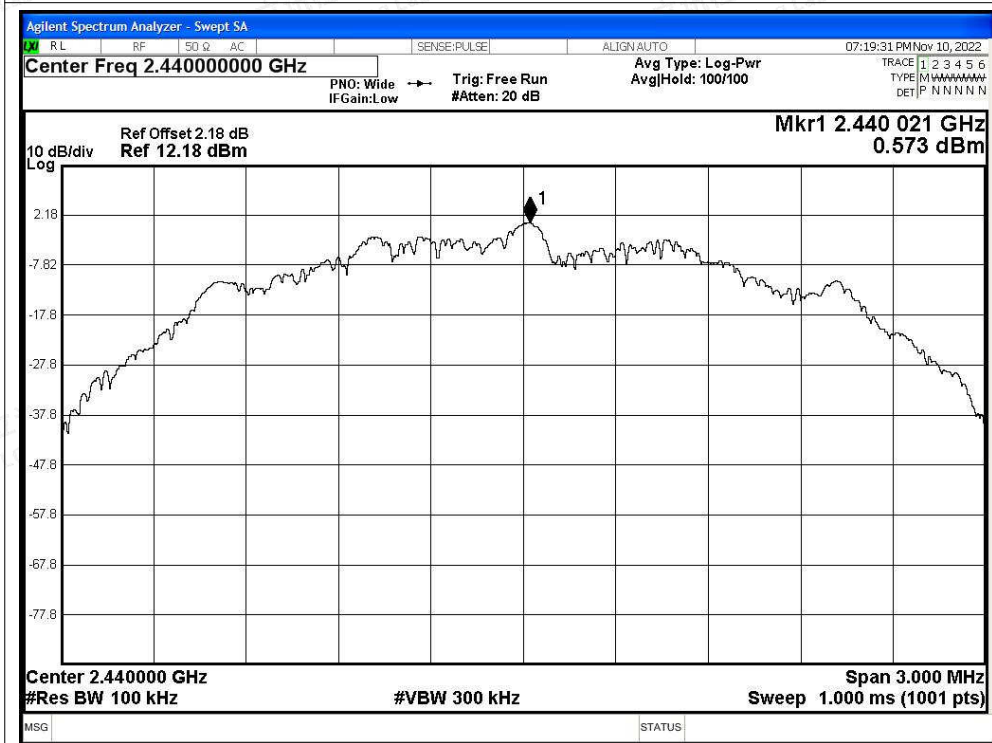


Tx. Spurious NVNT BLE 2M 2402MHz Ant1 Emission





Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Emission

