



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Diagnostic Tool

Test Model: DP55

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Ling Zhu





B.1 -6dB Bandwidth

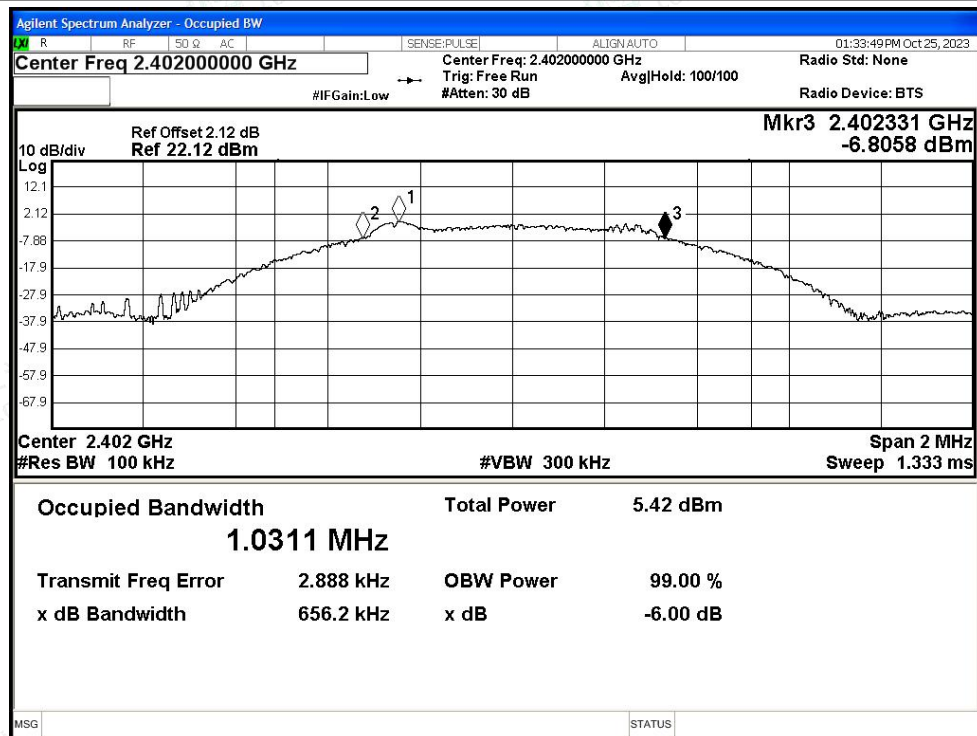
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.656	≥ 0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.649	≥ 0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.661	≥ 0.5	Pass



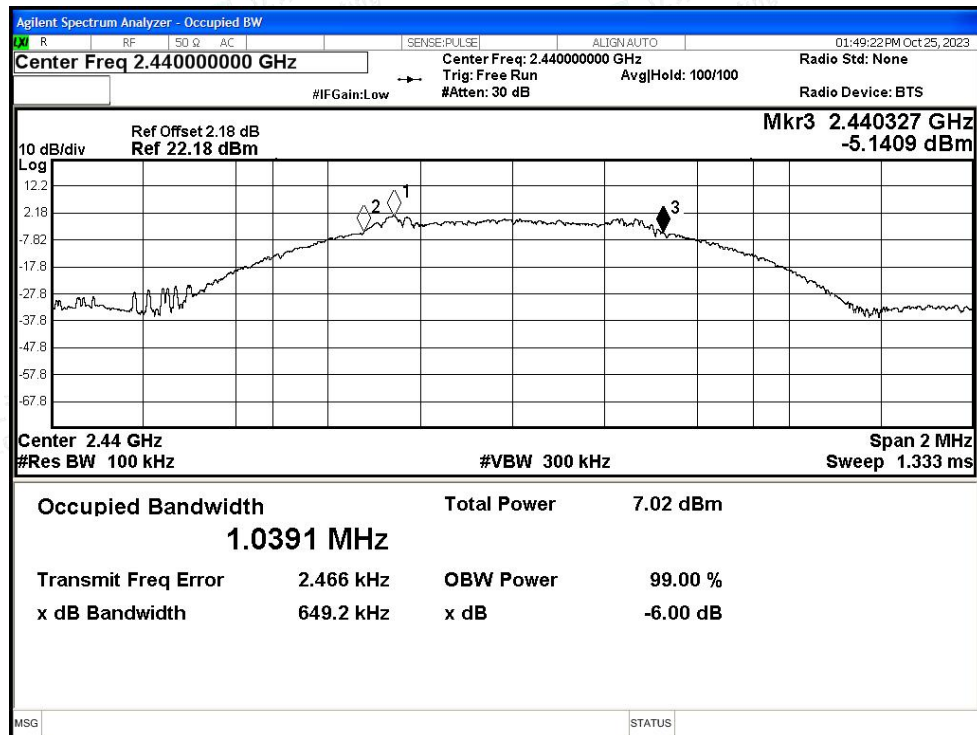


Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1

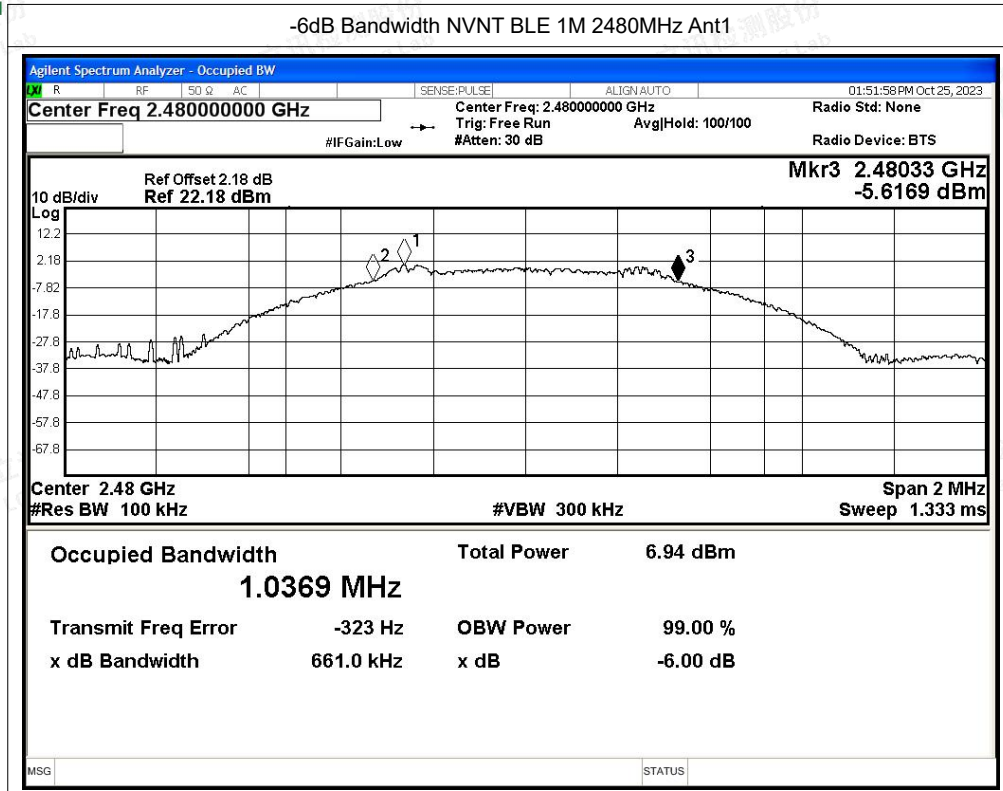


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B.2 Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-0.58	30	Pass
NVNT	BLE 1M	2440	Ant1	1.19	30	Pass
NVNT	BLE 1M	2480	Ant1	1.02	30	Pass

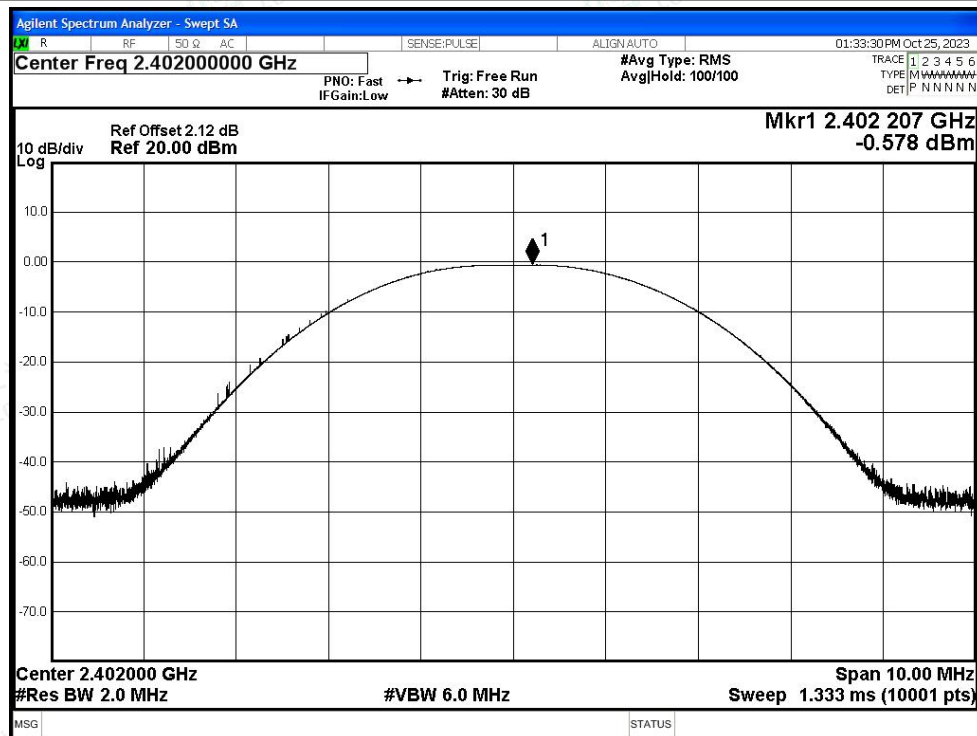


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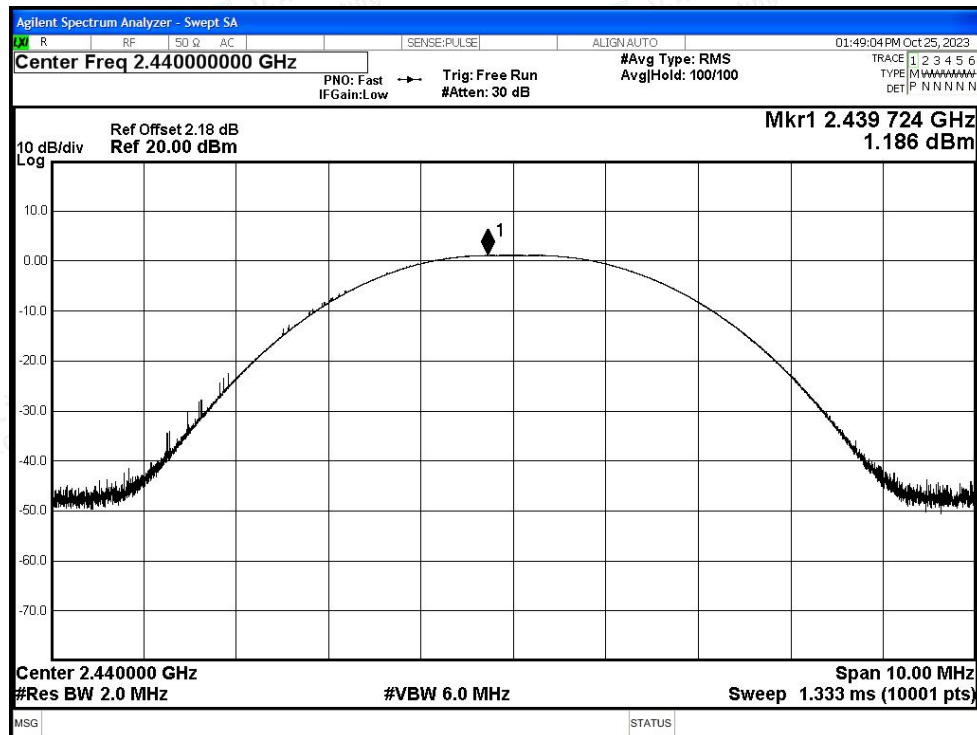


Test Graphs

Power NVNT BLE 1M 2402MHz Ant1



Power NVNT BLE 1M 2440MHz Ant1

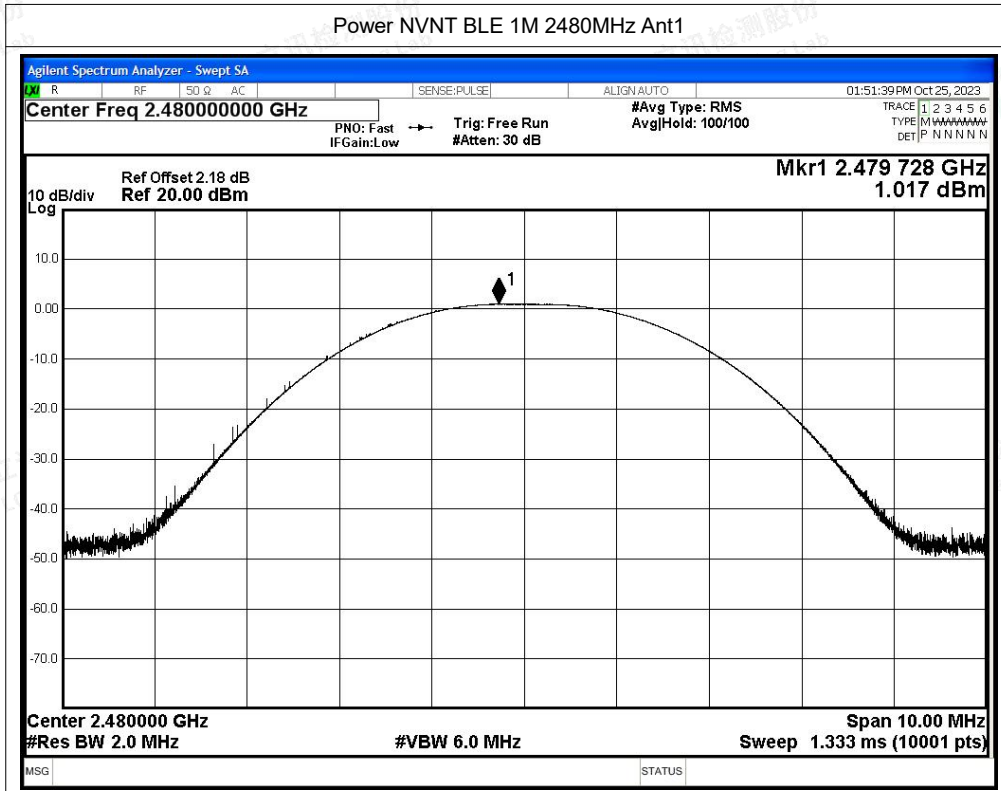


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B.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-17.37	8	Pass
NVNT	BLE 1M	2440	Ant1	-15.02	8	Pass
NVNT	BLE 1M	2480	Ant1	-15.5	8	Pass

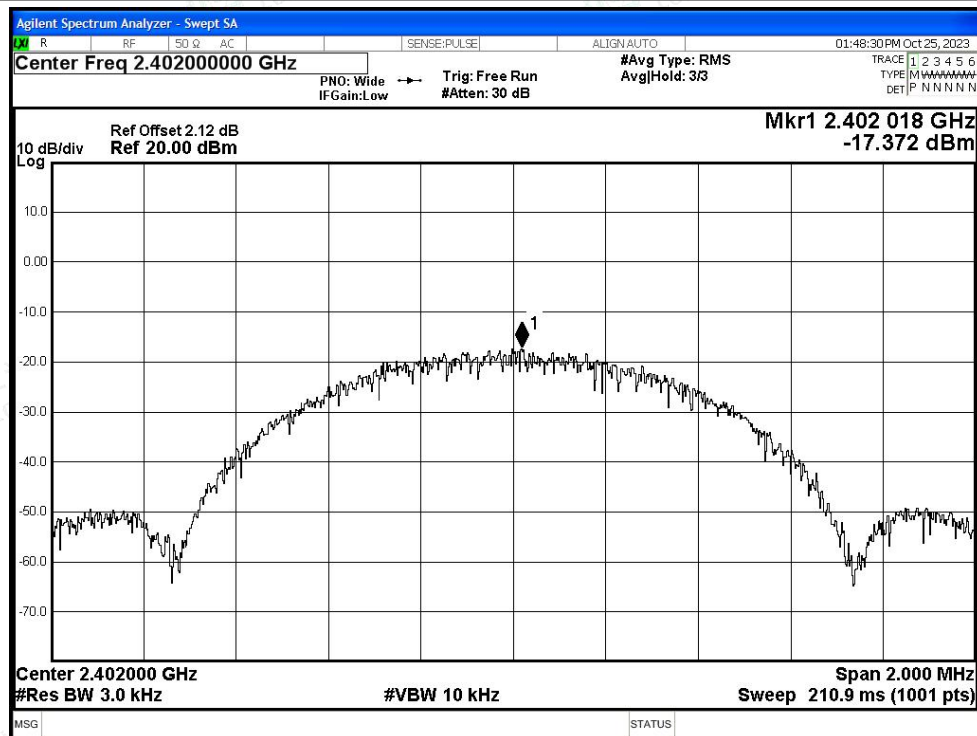


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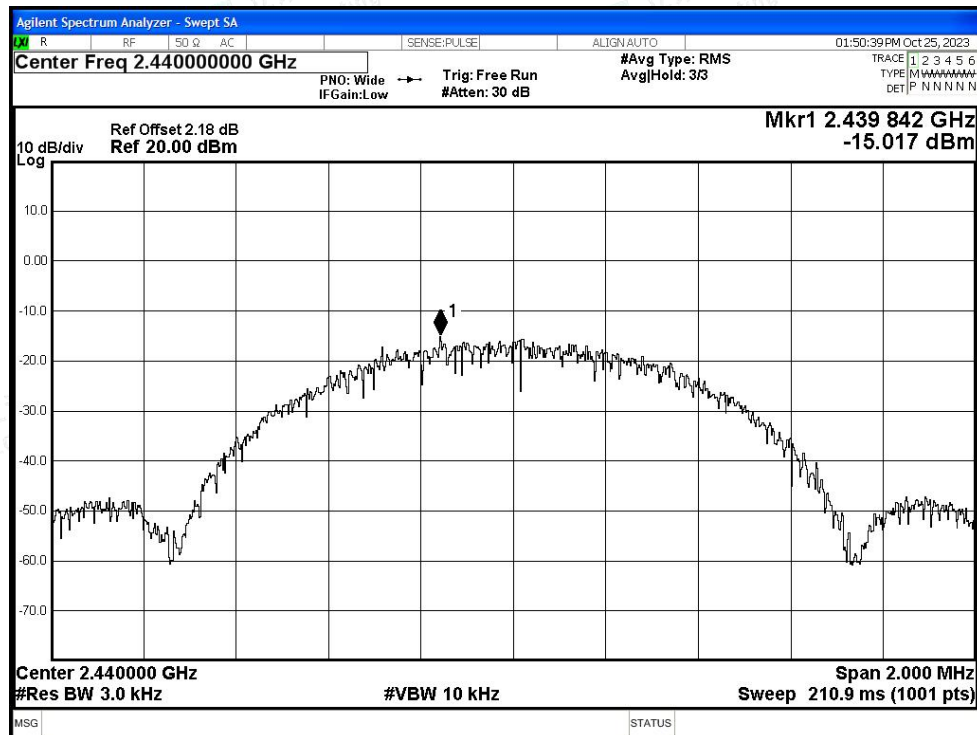


Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1



PSD NVNT BLE 1M 2440MHz Ant1

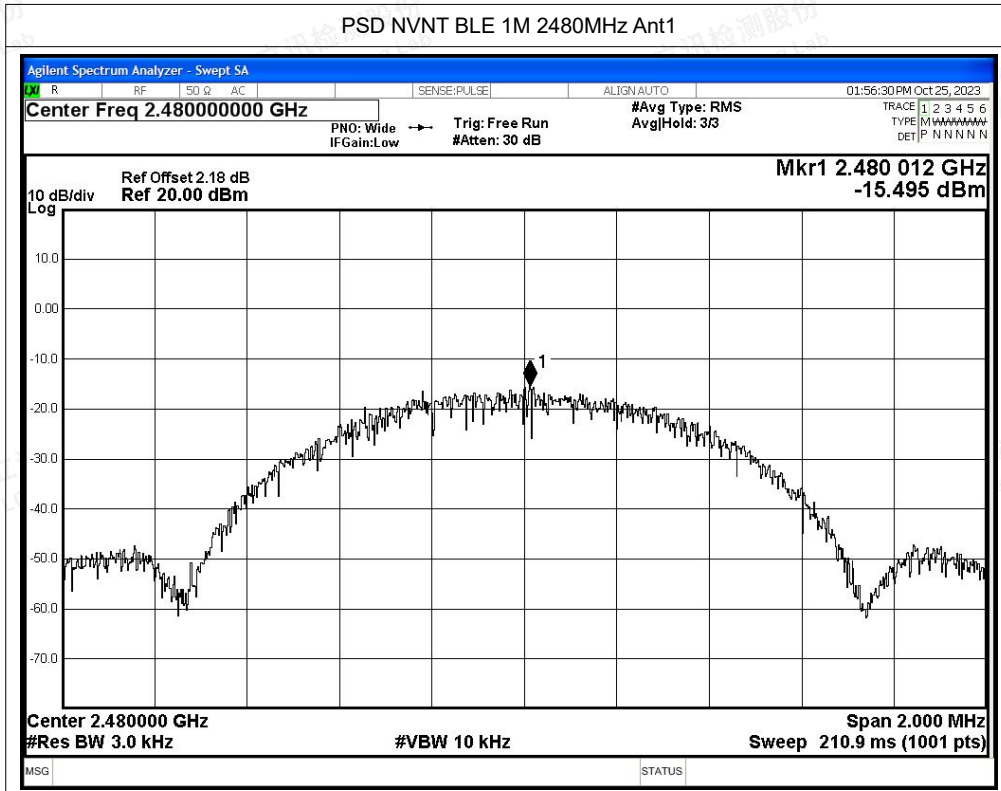


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B.4 Band Edge

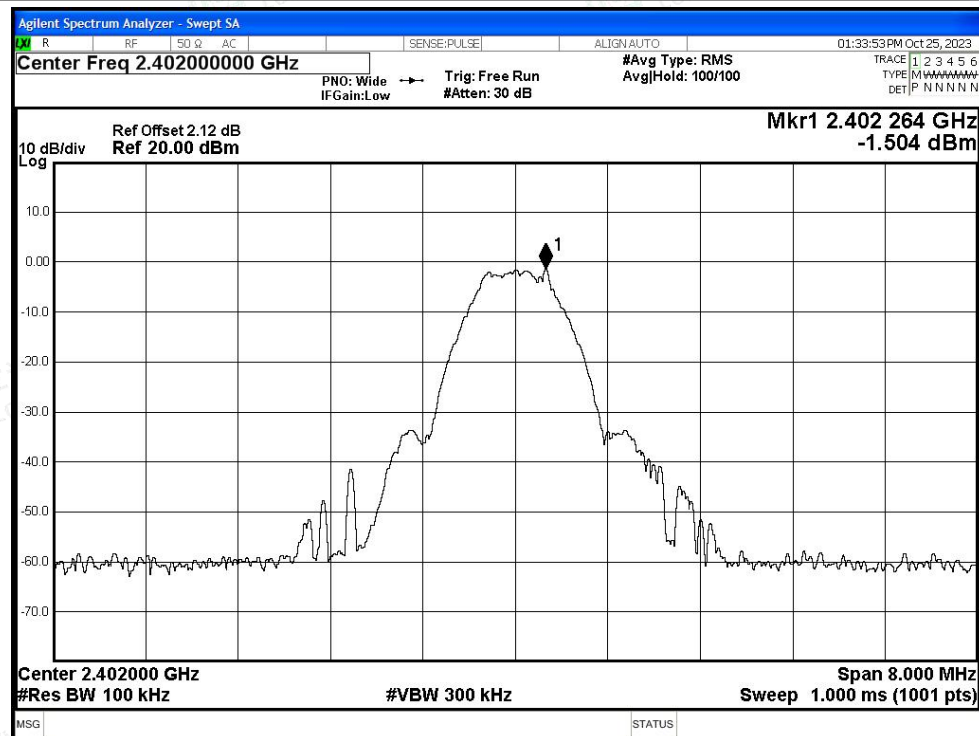
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-54.7	-20	Pass
NVNT	BLE 1M	2480	Ant1	-57.61	-20	Pass



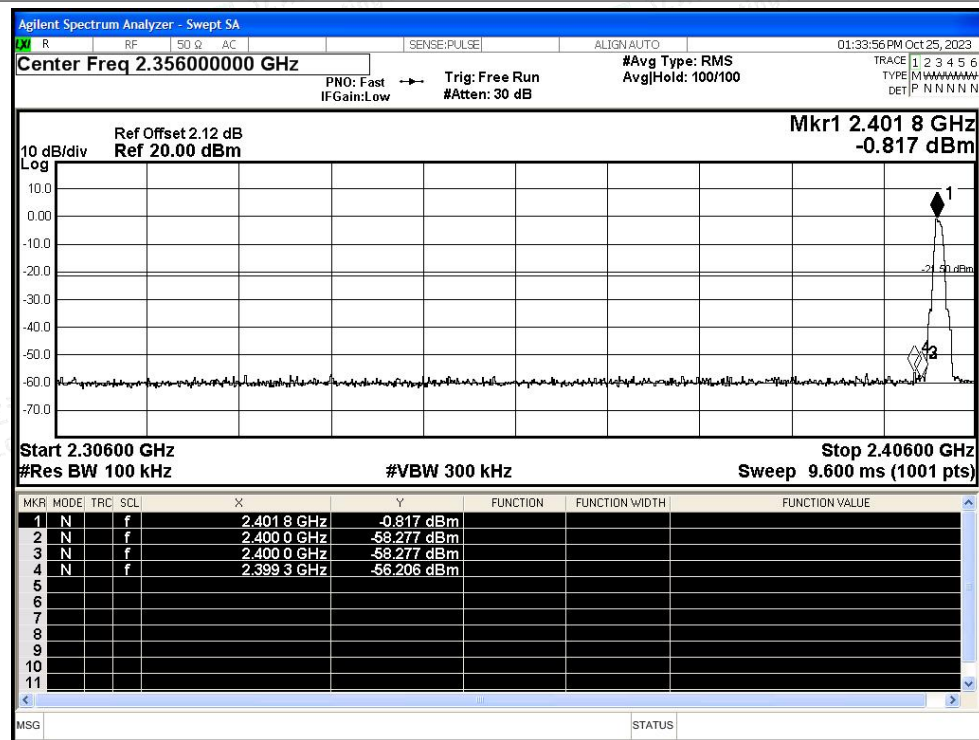


Test Graphs

Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



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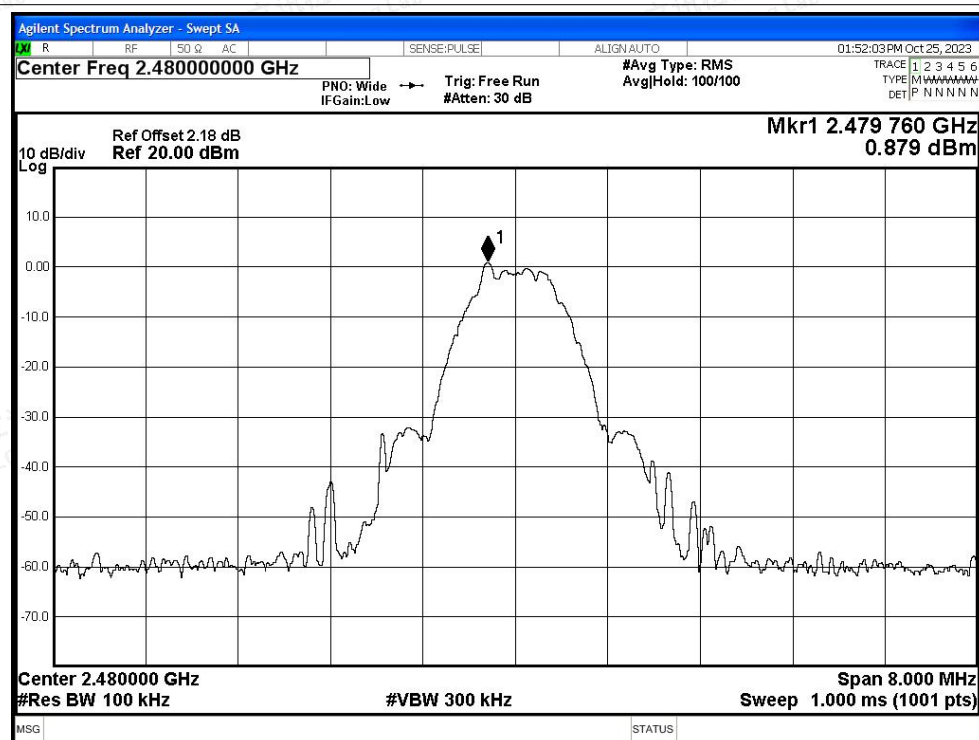
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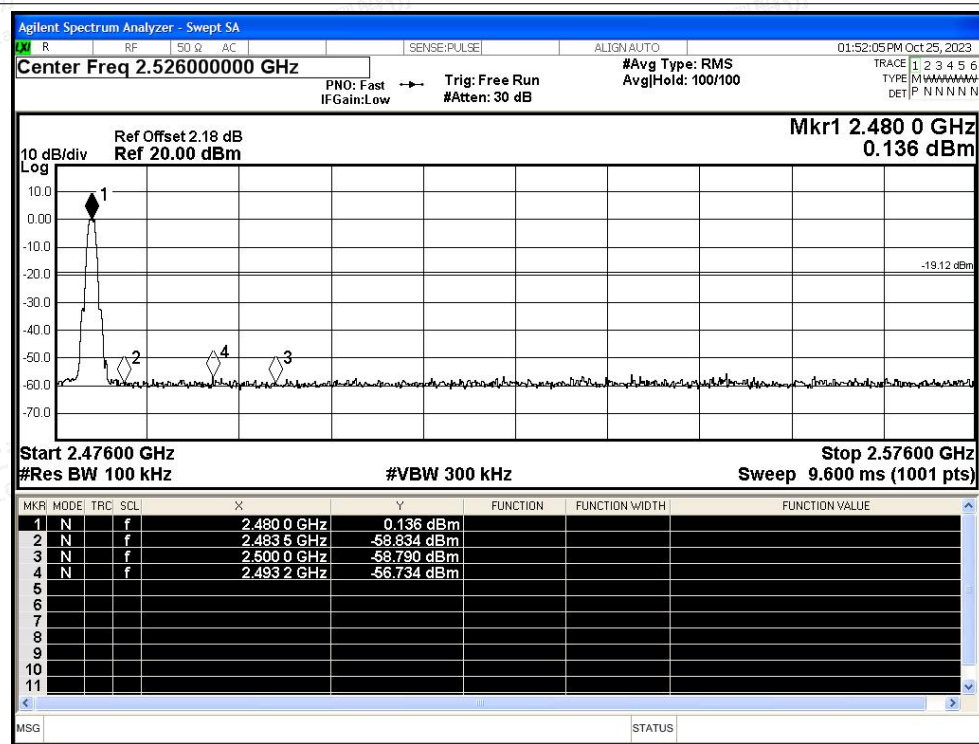
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Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



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B.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-54.84	-20	Pass
NVNT	BLE 1M	2440	Ant1	-56.24	-20	Pass
NVNT	BLE 1M	2480	Ant1	-56.6	-20	Pass

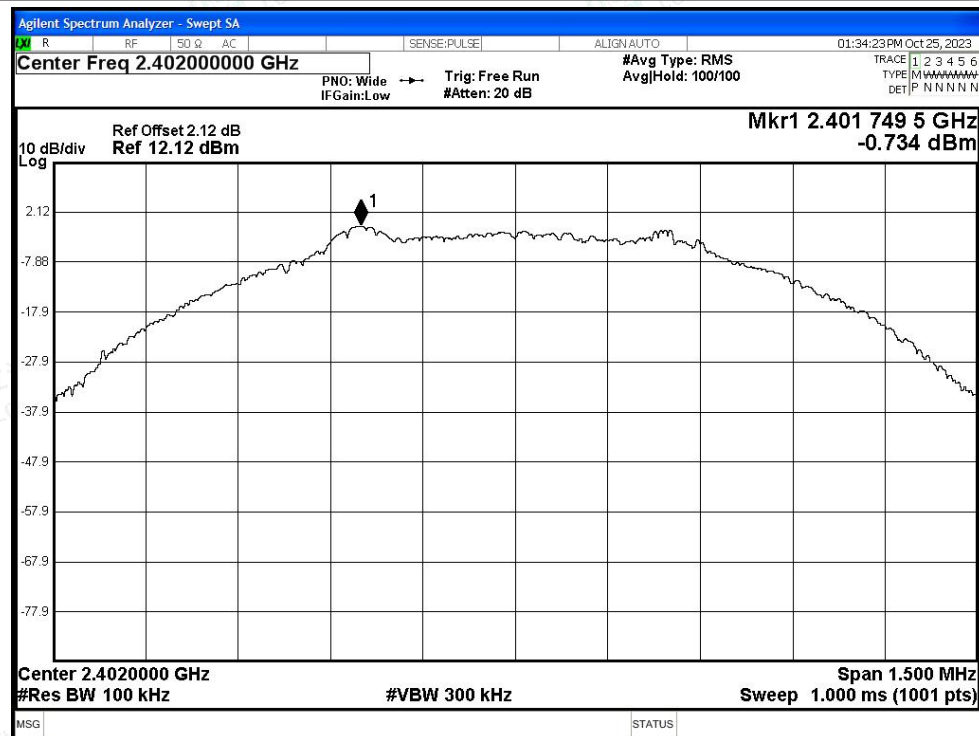


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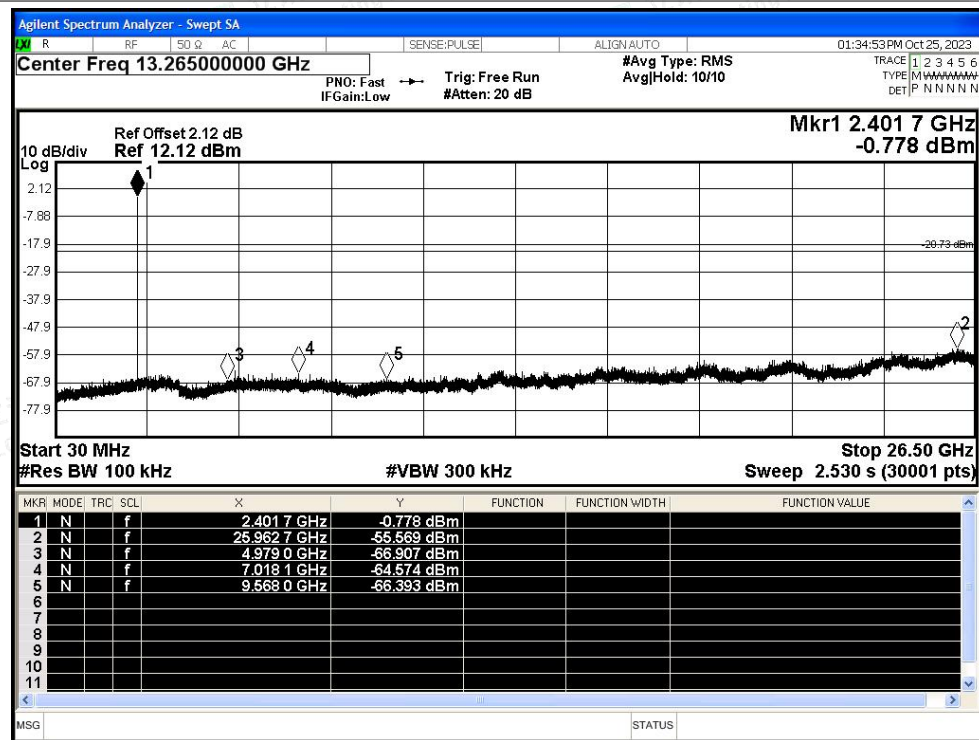


Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

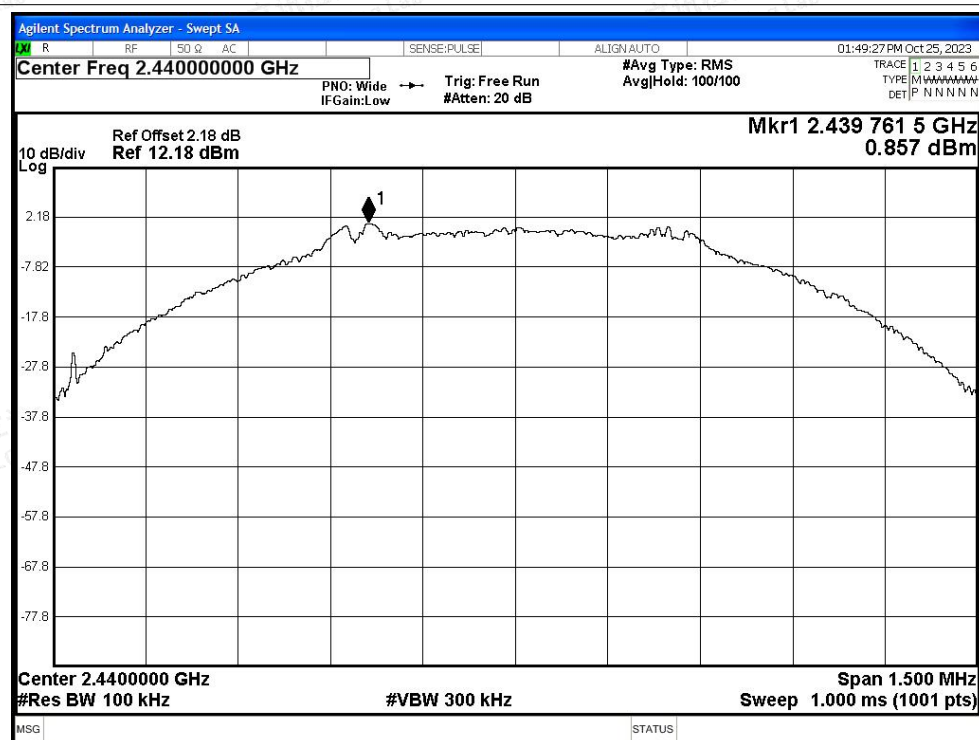
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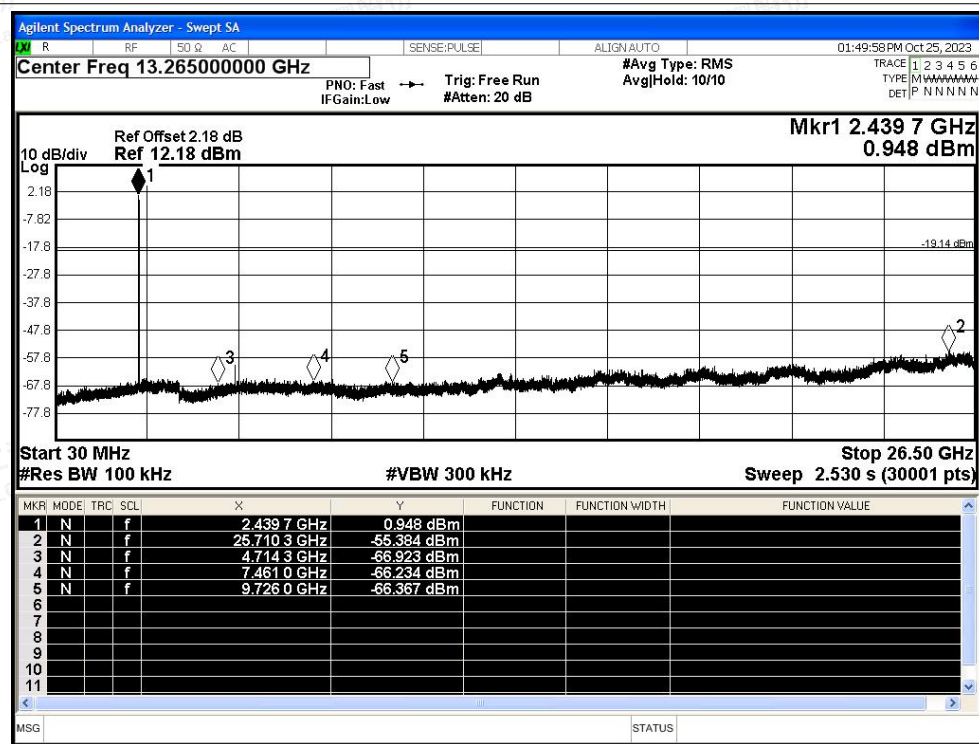
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Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



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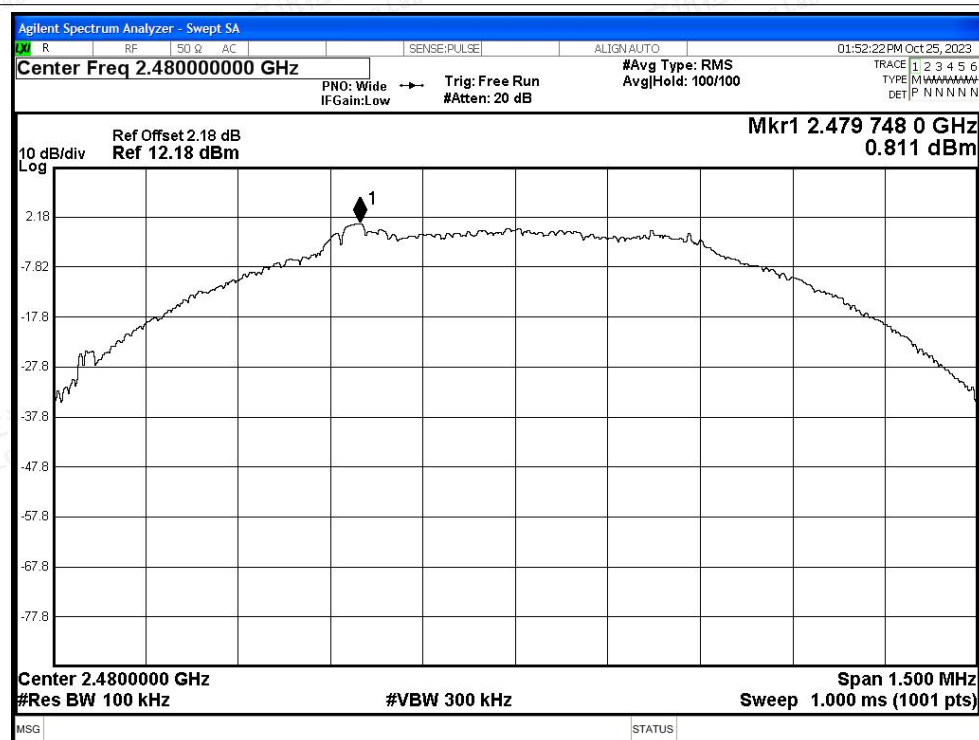
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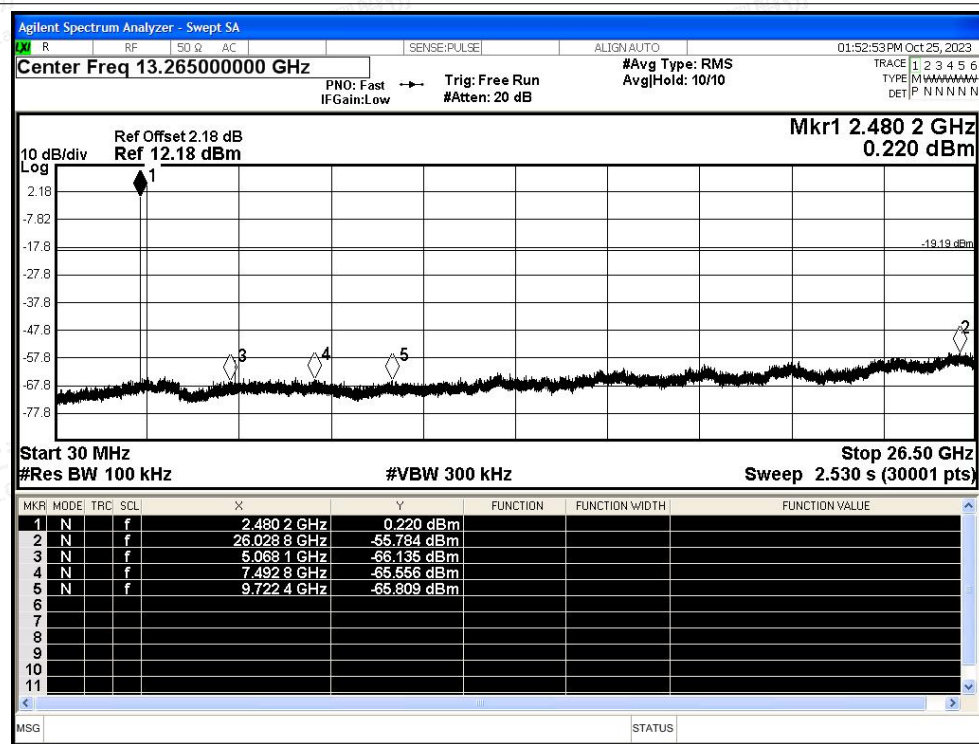
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Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



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B.6 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	87.15	0.6	0.61
NVNT	BLE 1M	2440	Ant1	87.17	0.6	0.61
NVNT	BLE 1M	2480	Ant1	87.18	0.6	0.61

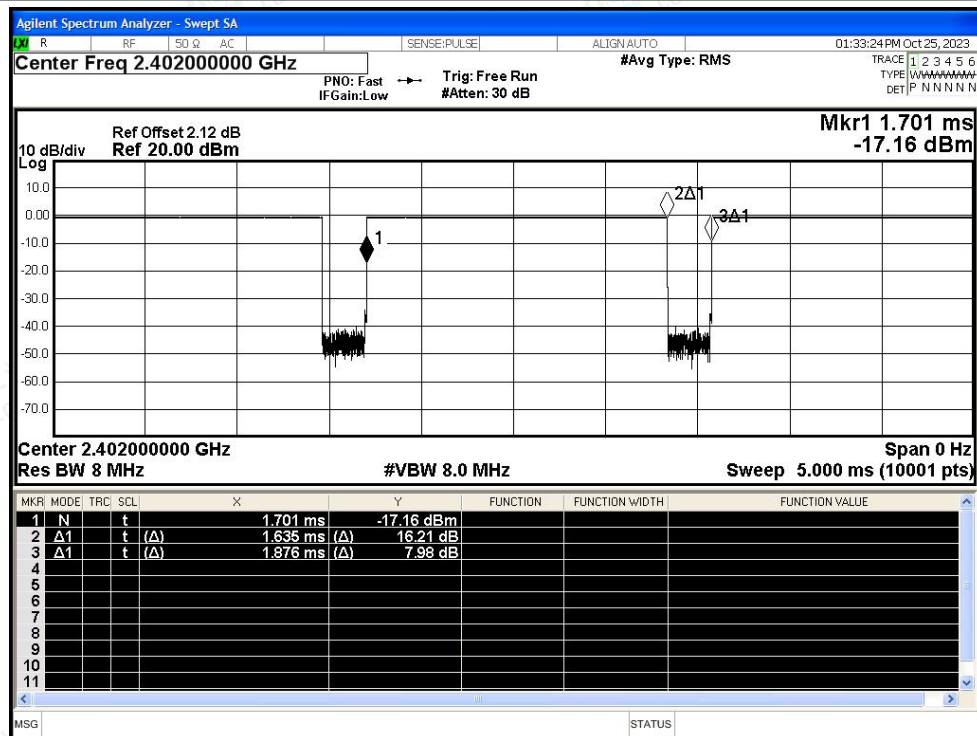


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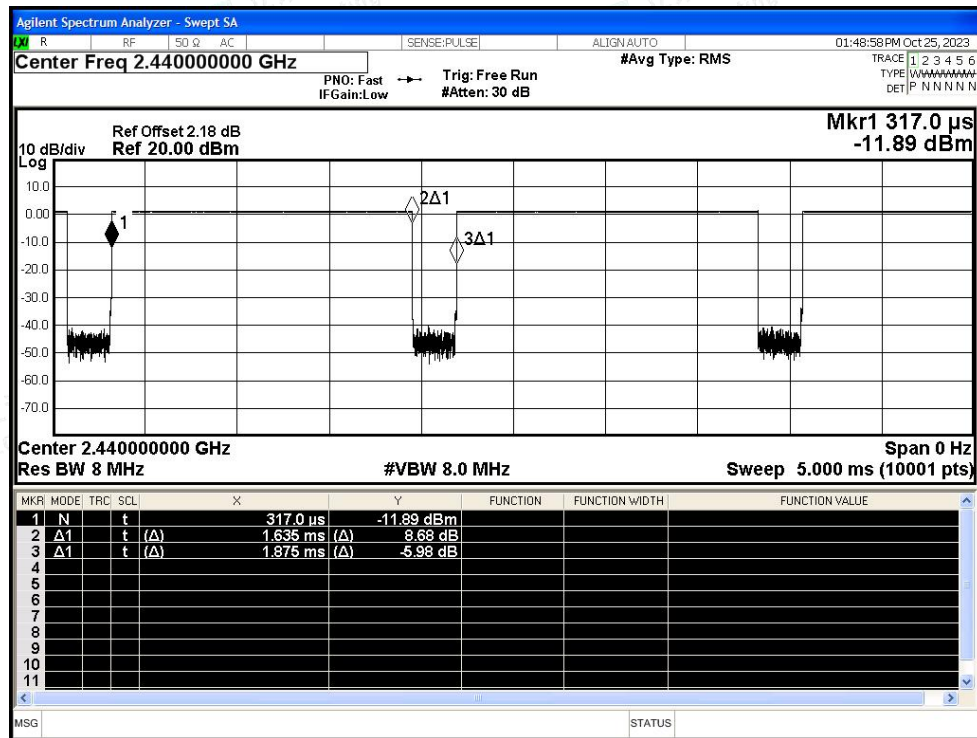


Test Graphs

Duty Cycle NVNT BLE 1M 2402MHz Ant1



Duty Cycle NVNT BLE 1M 2440MHz Ant1

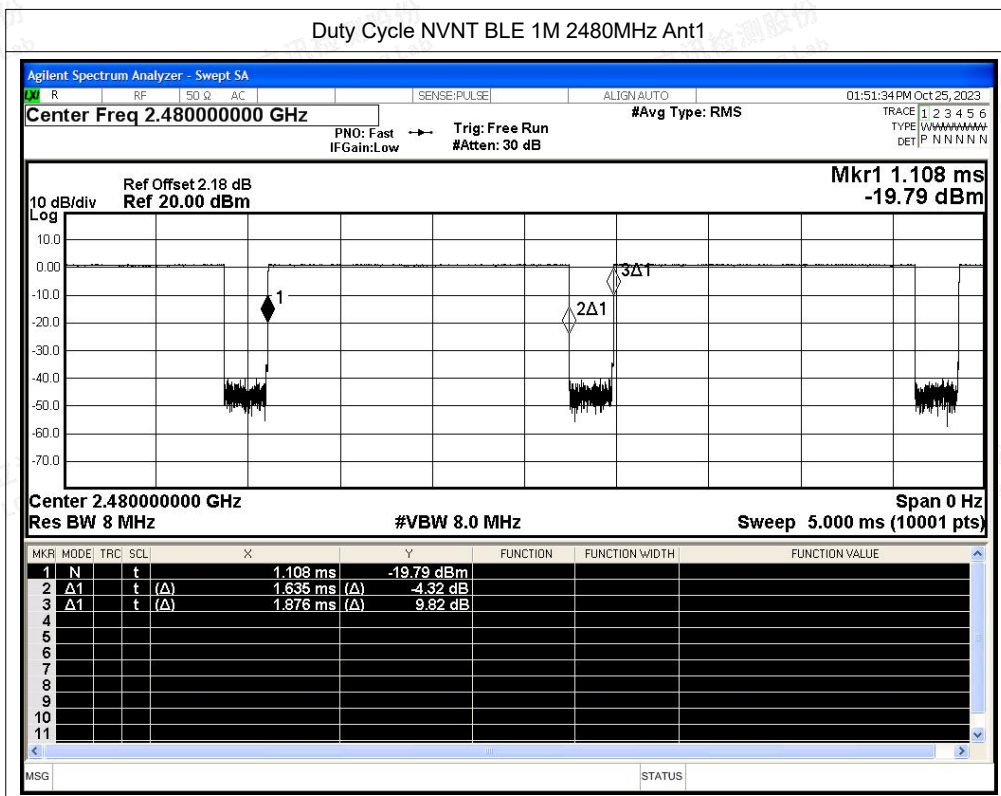


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B.7 Restrict Band

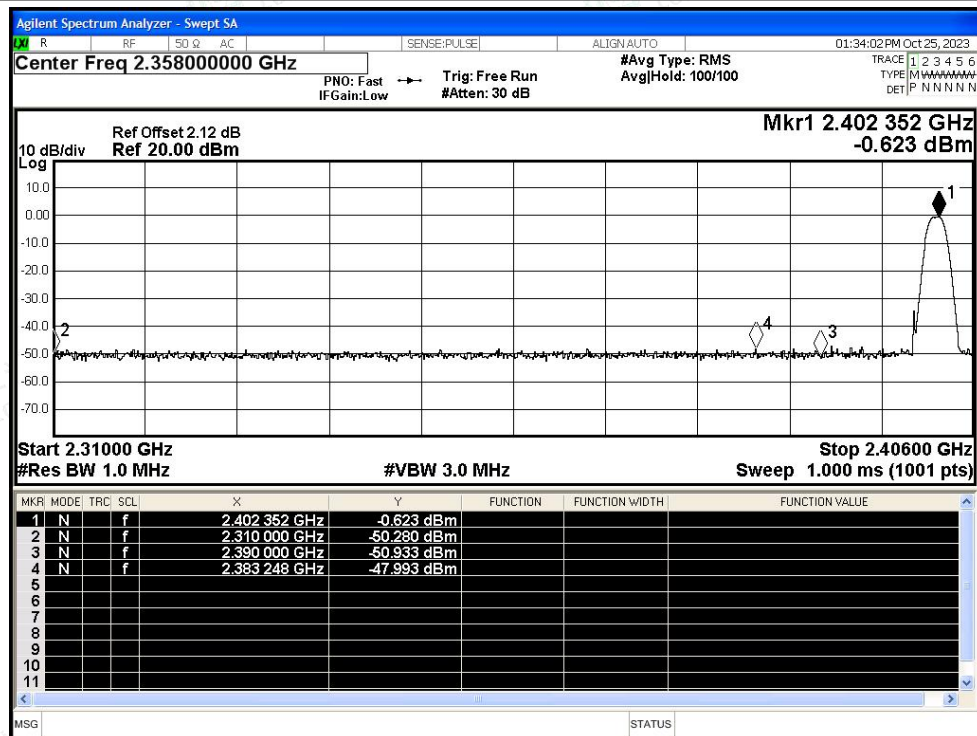
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 1M	2402	Ant1	2310	-50.28	2	46.98	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2310	-57.79	2	39.47	Average	54	Pass
NVNT	BLE 1M	2402	Ant1	2383.248	-47.99	2	49.27	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2387.376	-57.15	2	40.11	Average	54	Pass
NVNT	BLE 1M	2402	Ant1	2390	-50.93	2	46.33	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2390	-57.4	2	39.86	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2483.5	-49.99	2	47.27	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2483.5	-54.66	2	42.6	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2485.072	-46.47	2	50.79	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2483.512	-54.66	2	42.6	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2500	-49.32	2	47.94	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2500	-57.16	2	40.1	Average	54	Pass



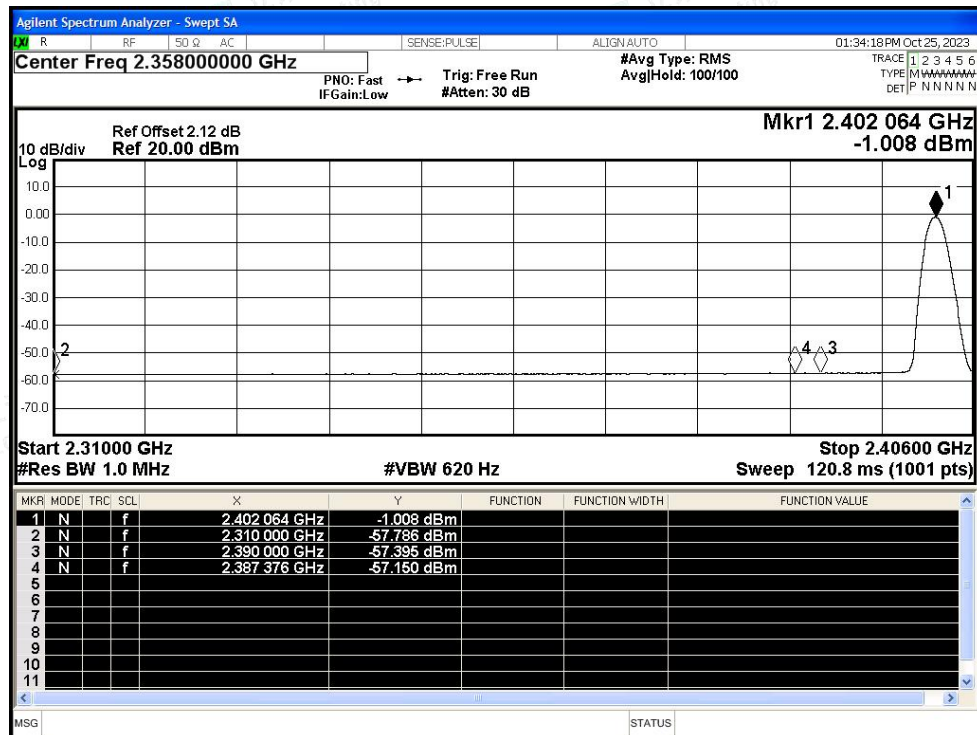


Test Graphs

Restrict Band NVNT BLE 1M 2402MHz Ant1 Peak



Restrict Band NVNT BLE 1M 2402MHz Ant1 Average



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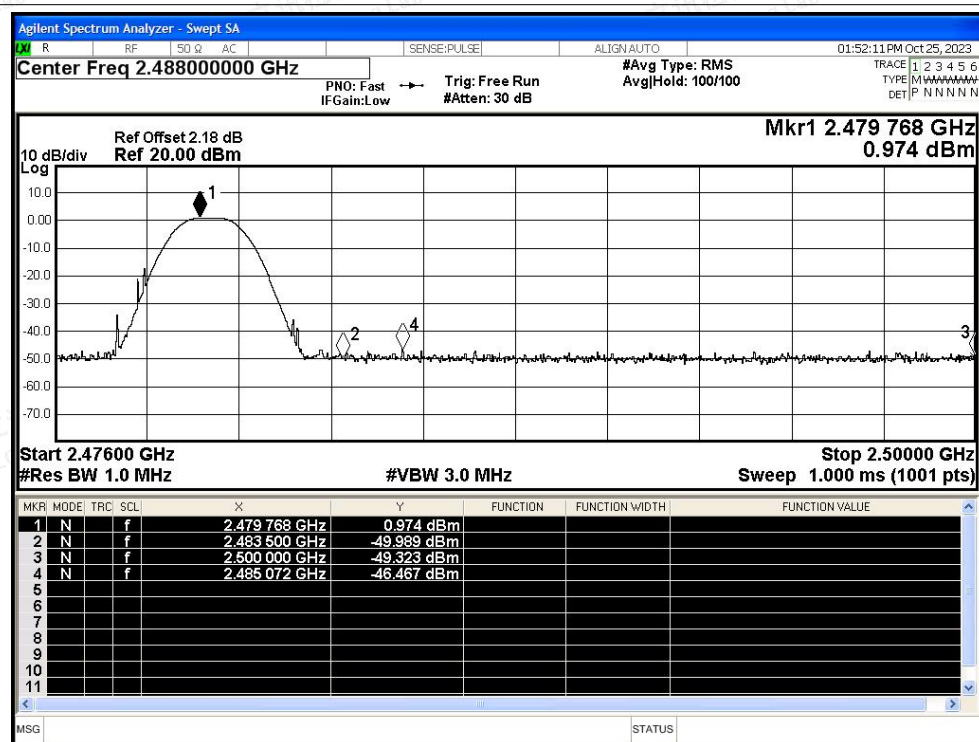
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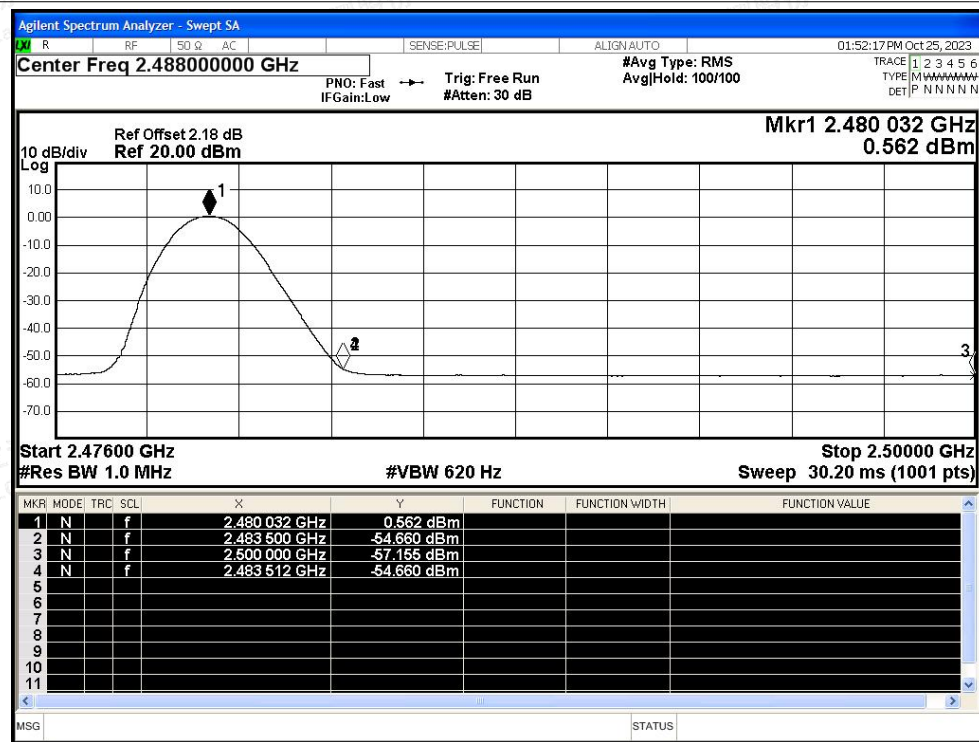
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Restrict Band NVNT BLE 1M 2480MHz Ant1 Peak



Restrict Band NVNT BLE 1M 2480MHz Ant1 Average



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