



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: SMART BACKING CYBER-G GUITAR

Test Model: CYBER-G

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Luo
Supervised by:	Nick Peng



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B.1 -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.651	≥ 0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.653	≥ 0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.656	≥ 0.5	Pass

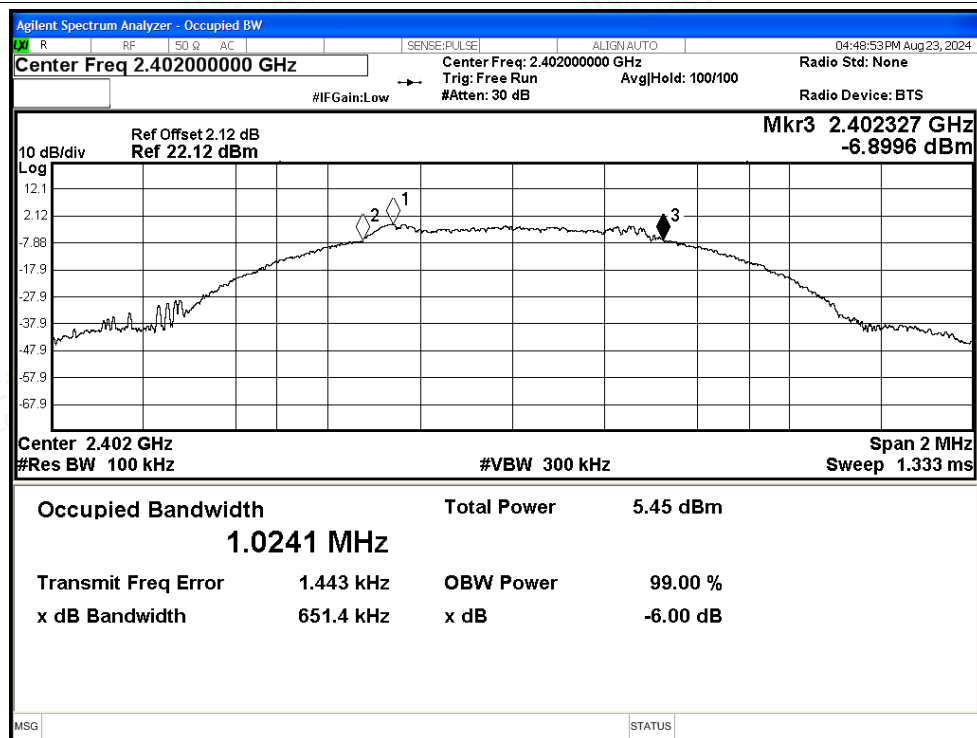


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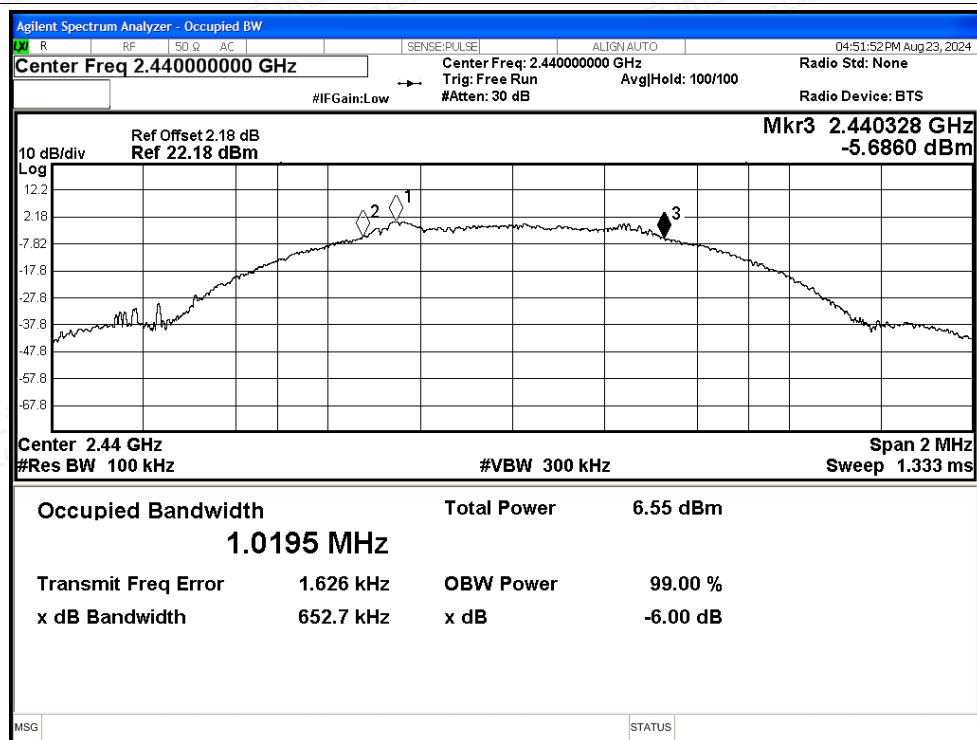


Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1

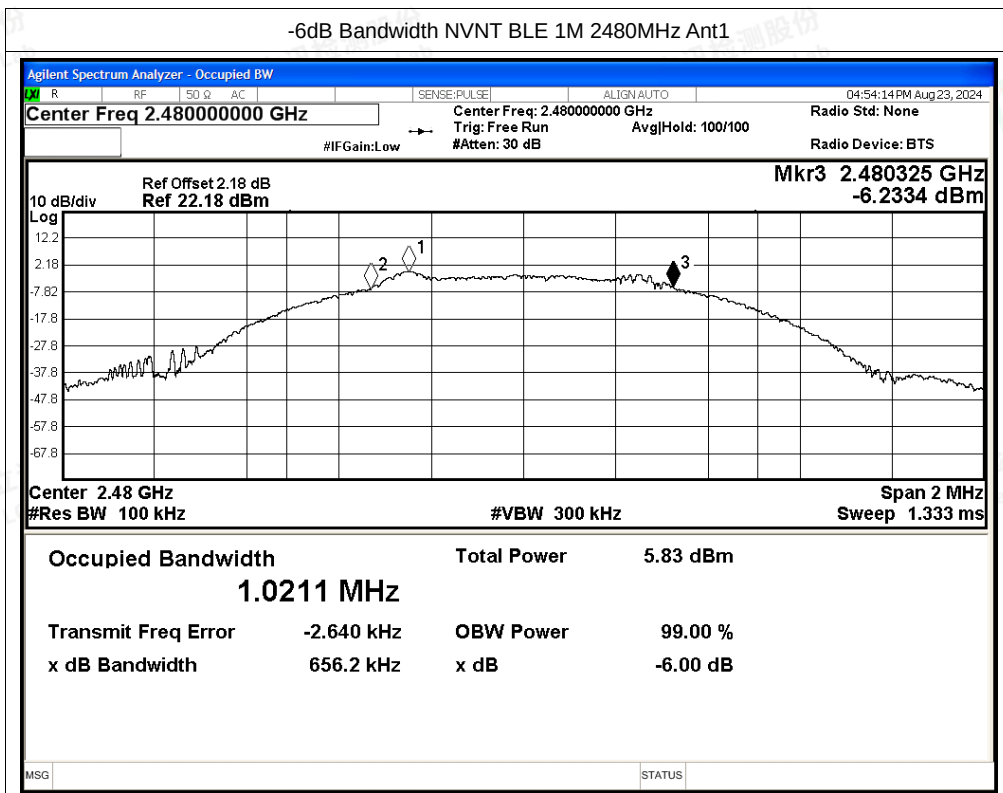


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B.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-0.32	30	Pass
NVNT	BLE 1M	2440	Ant1	0.77	30	Pass
NVNT	BLE 1M	2480	Ant1	0.00	30	Pass

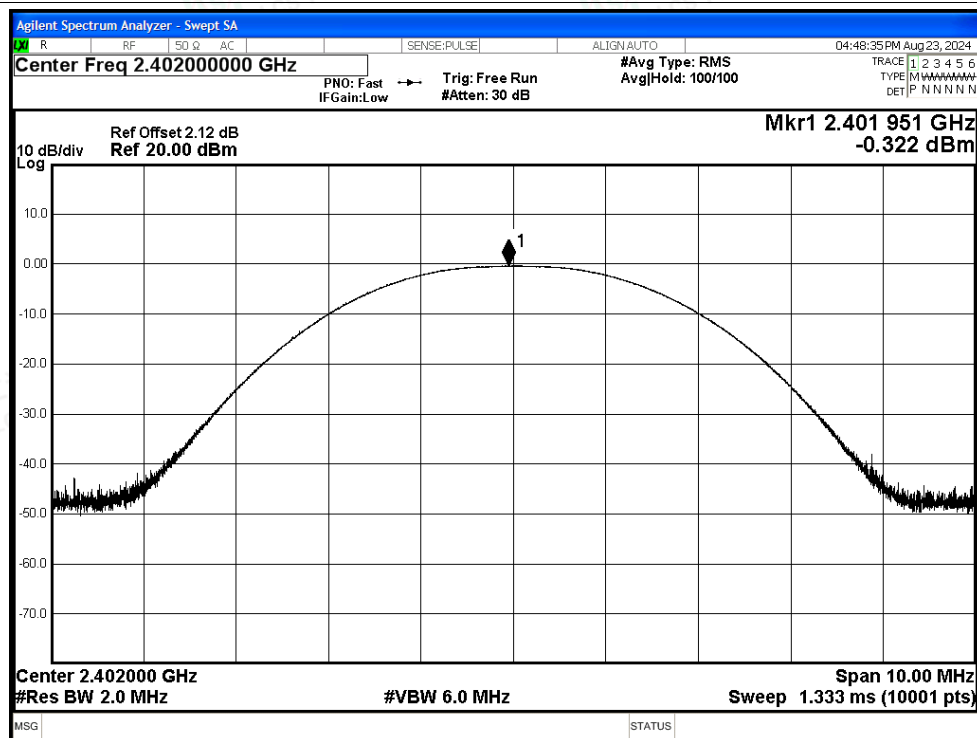


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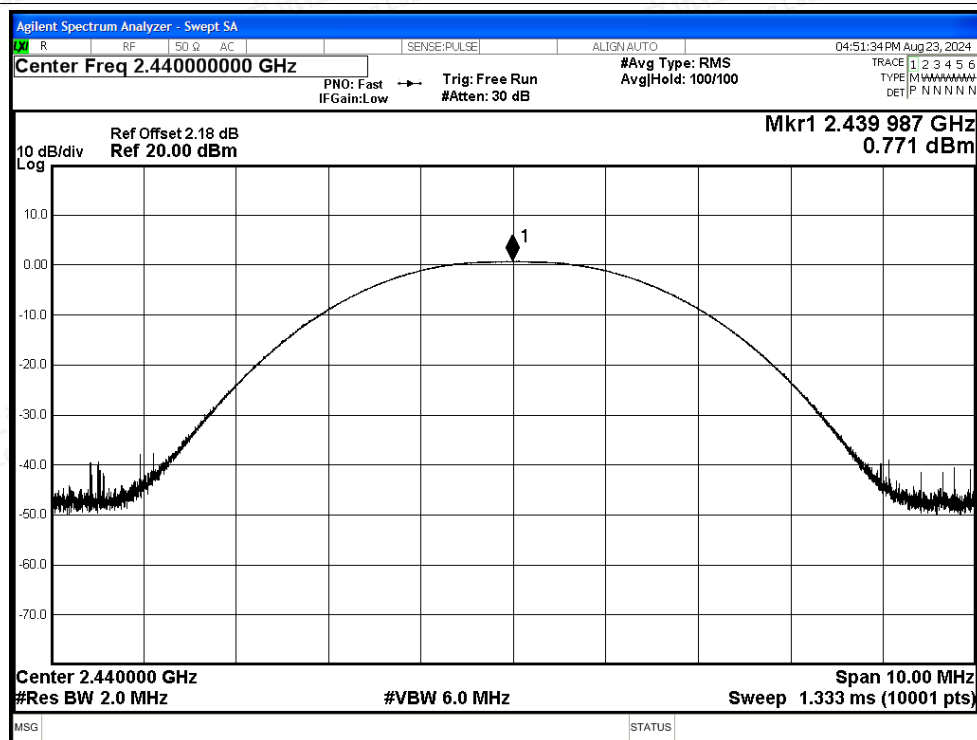


Test Graphs

Power NVNT BLE 1M 2402MHz Ant1



Power NVNT BLE 1M 2440MHz Ant1

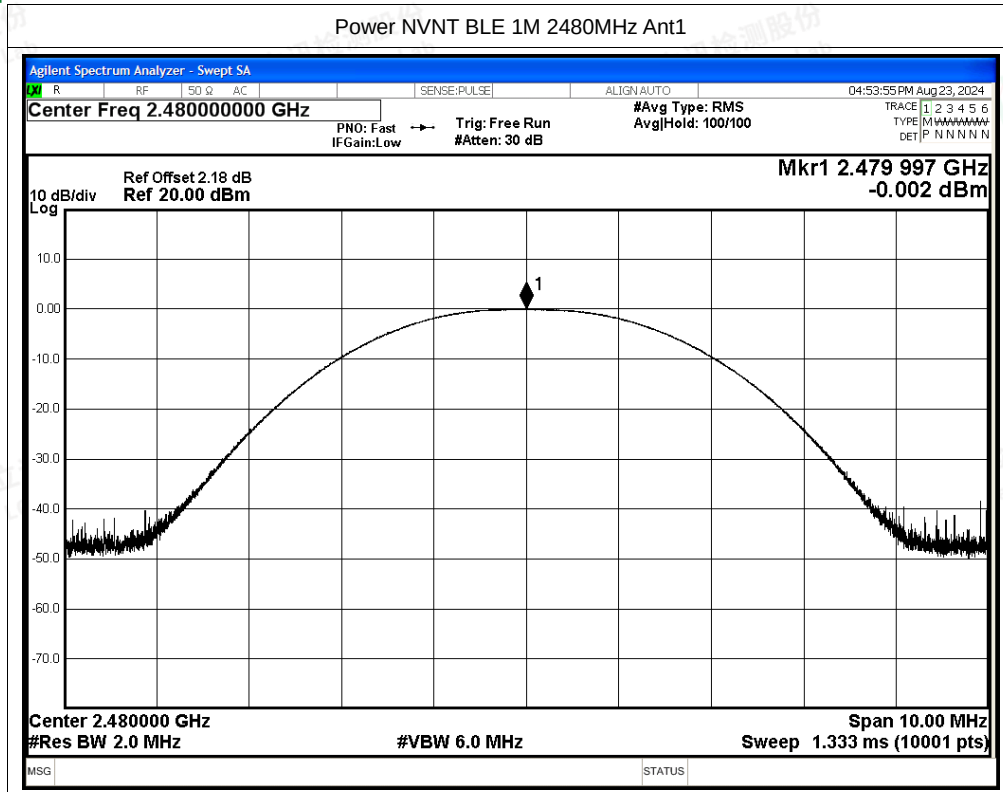


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B.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-16.92	8	Pass
NVNT	BLE 1M	2440	Ant1	-15.76	8	Pass
NVNT	BLE 1M	2480	Ant1	-16.78	8	Pass

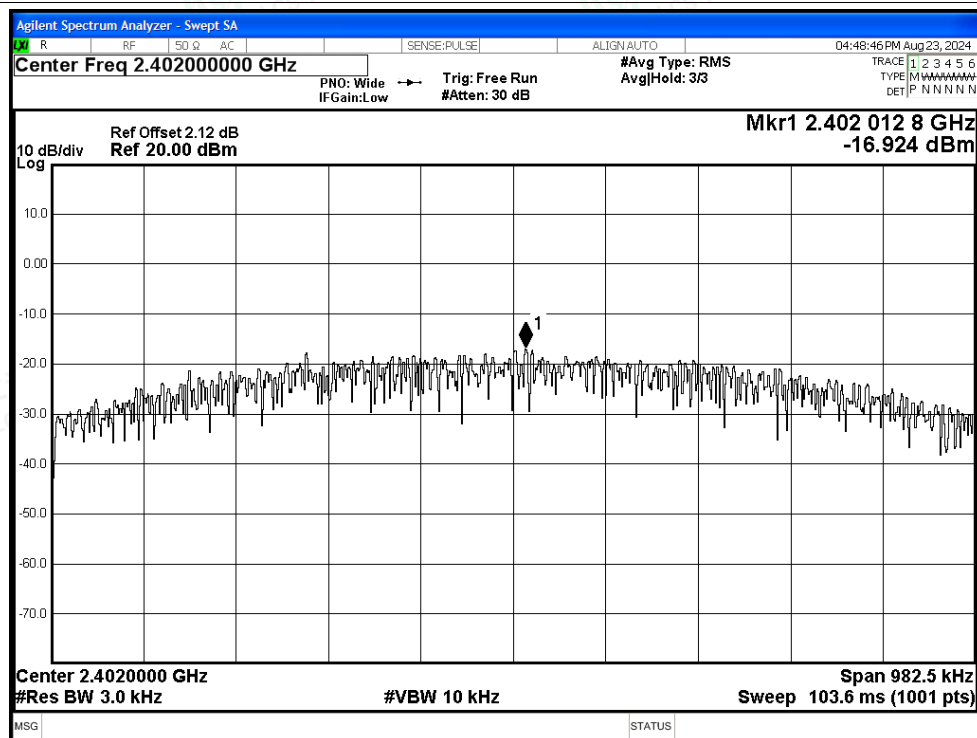


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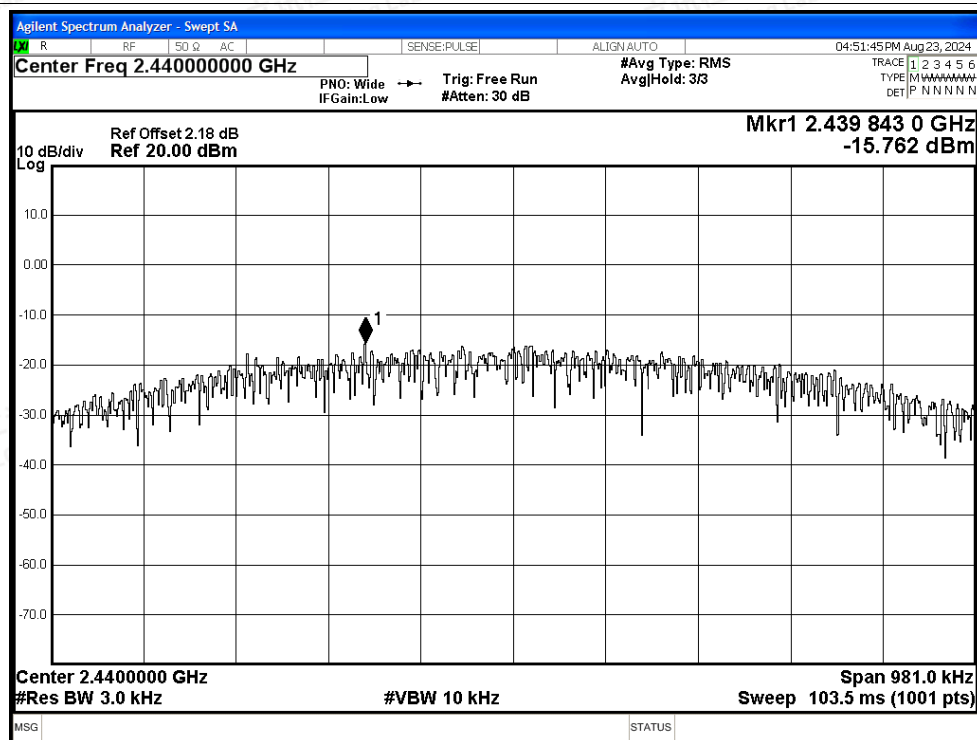


Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1



PSD NVNT BLE 1M 2440MHz Ant1

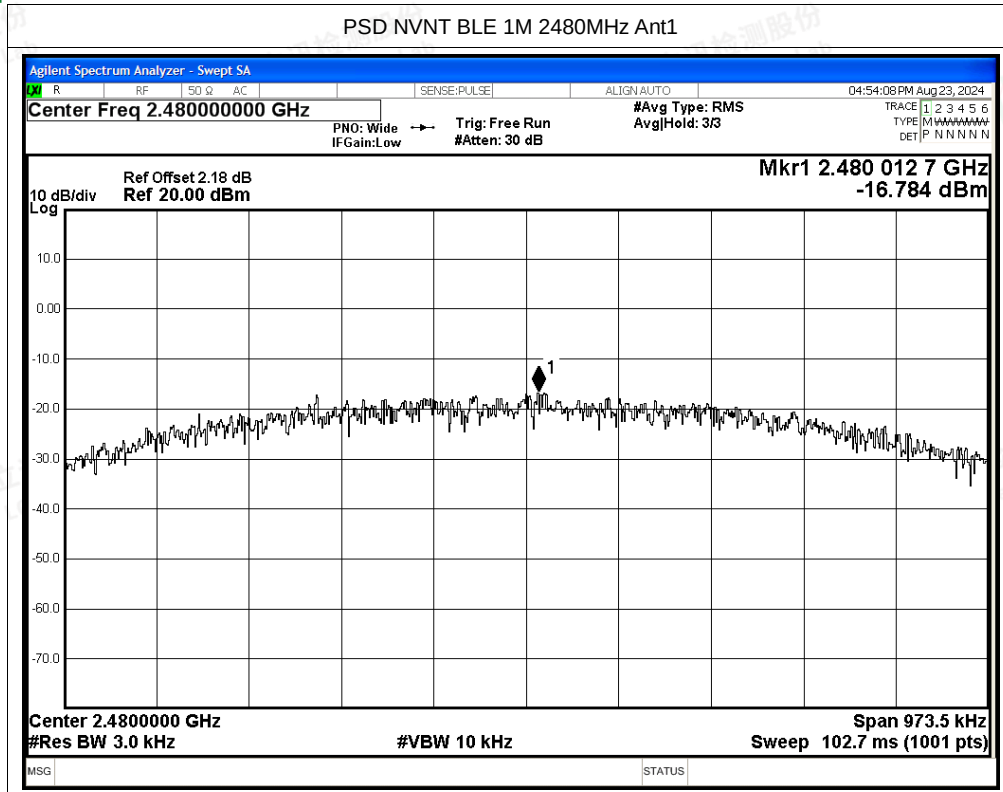


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B.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-55.22	-20	Pass
NVNT	BLE 1M	2480	Ant1	-55.75	-20	Pass

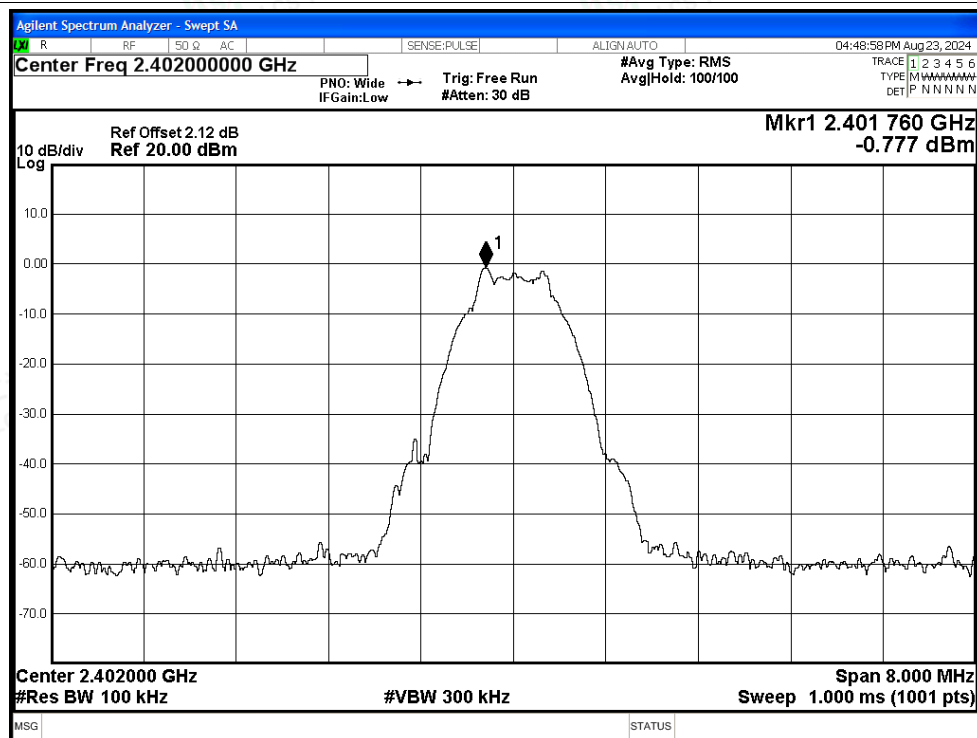


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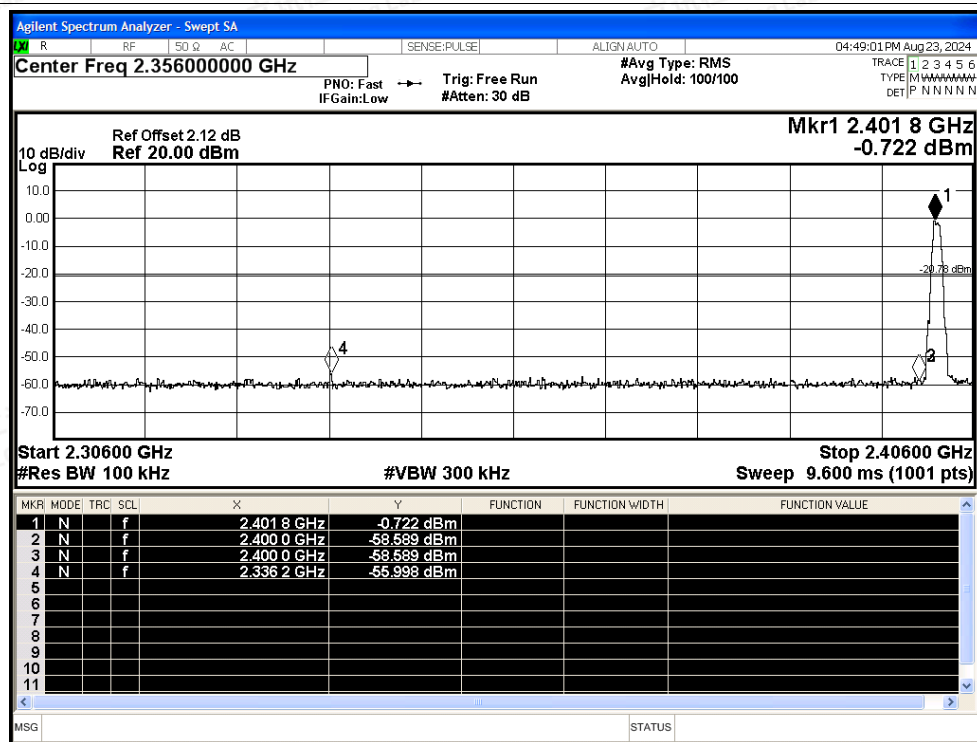


Test Graphs

Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

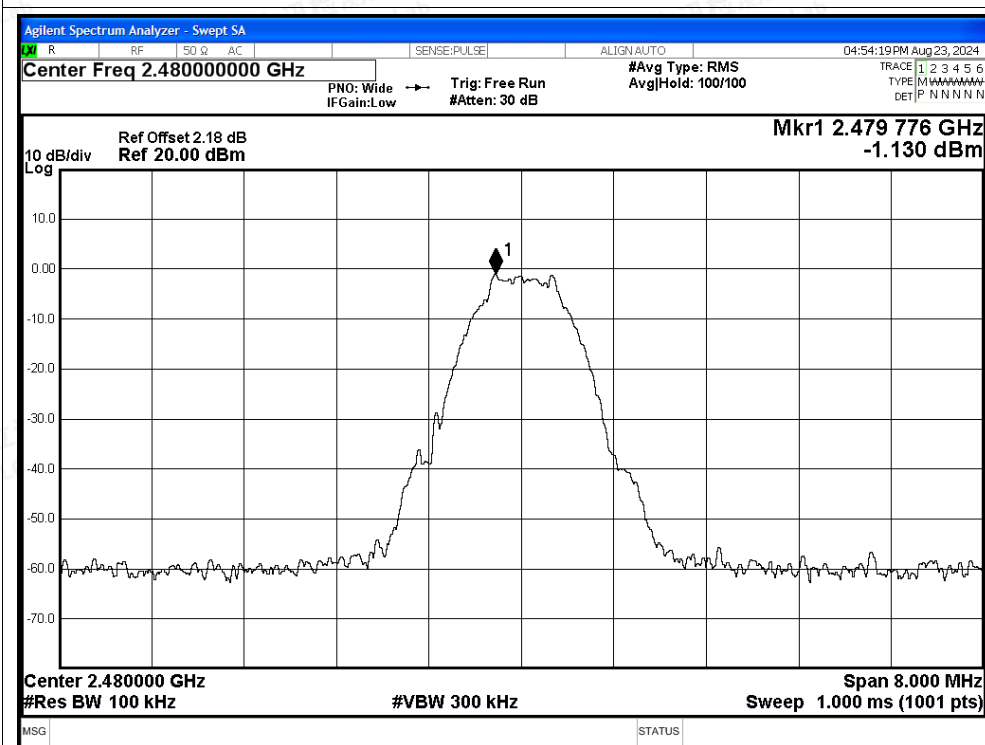
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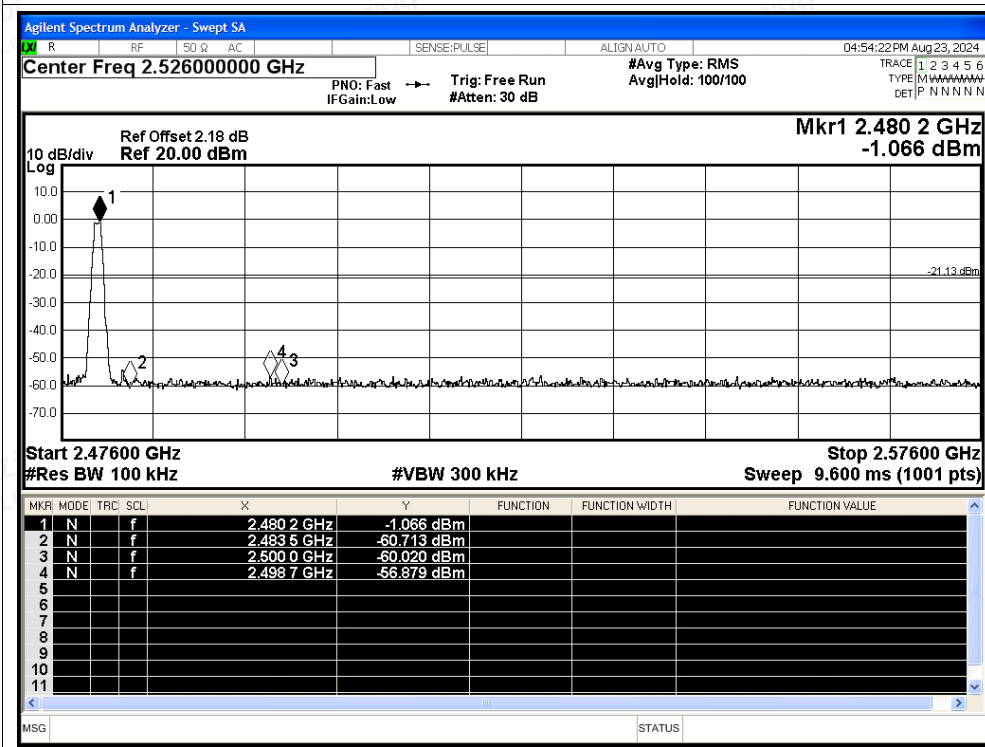
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Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



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	-54.48	-20	Pass
NVNT	BLE 1M	2440	Ant1	-55.19	-20	Pass
NVNT	BLE 1M	2480	Ant1	-50.71	-20	Pass

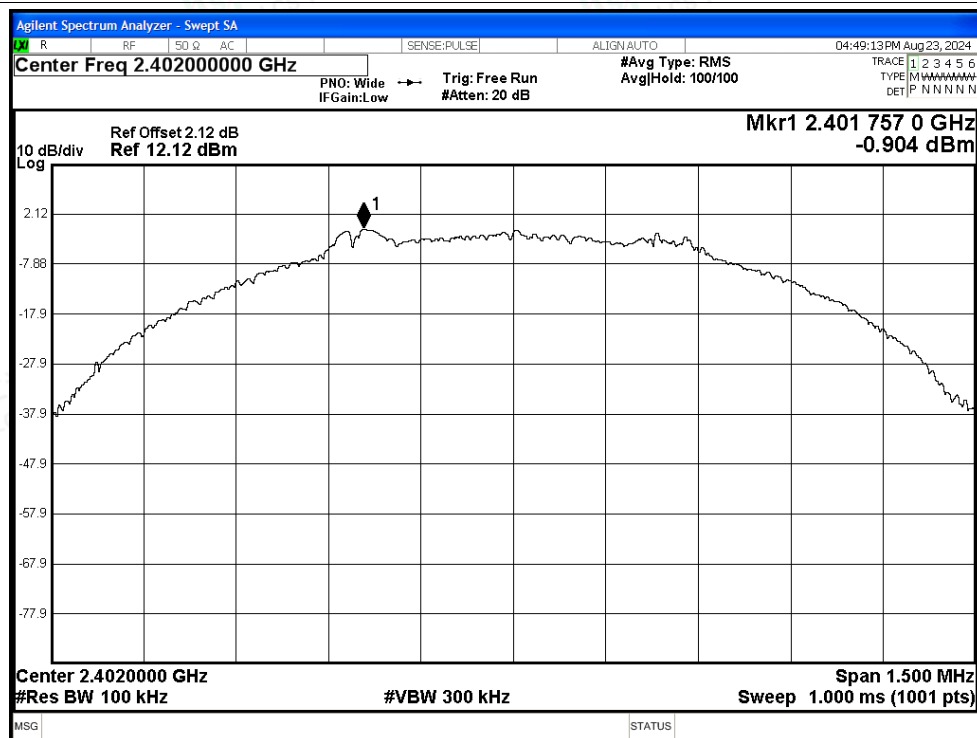


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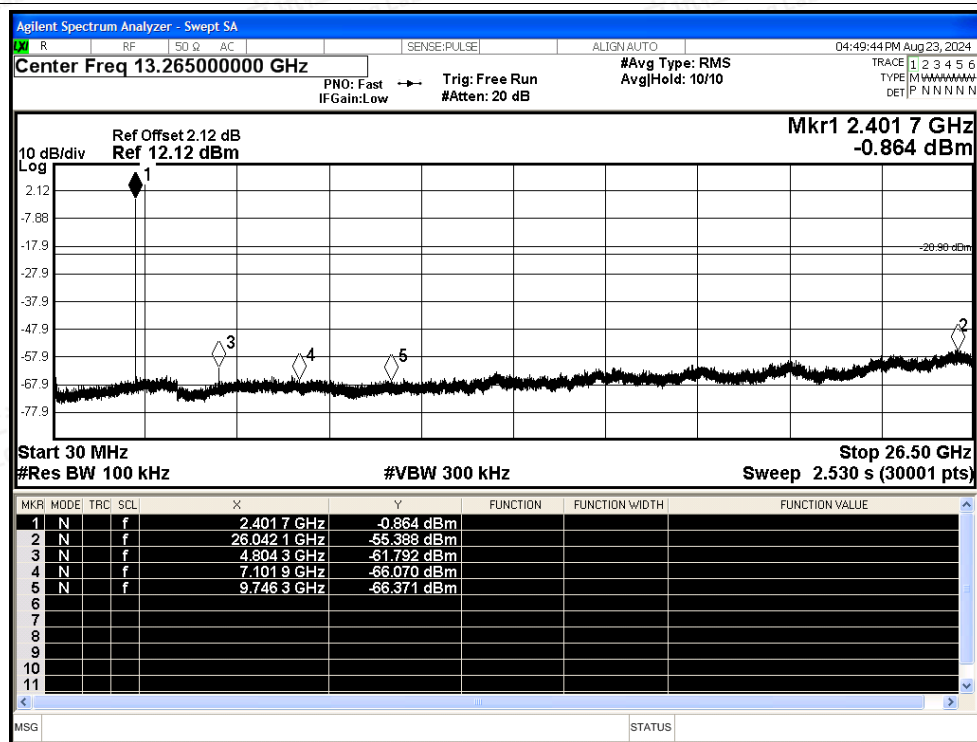


Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

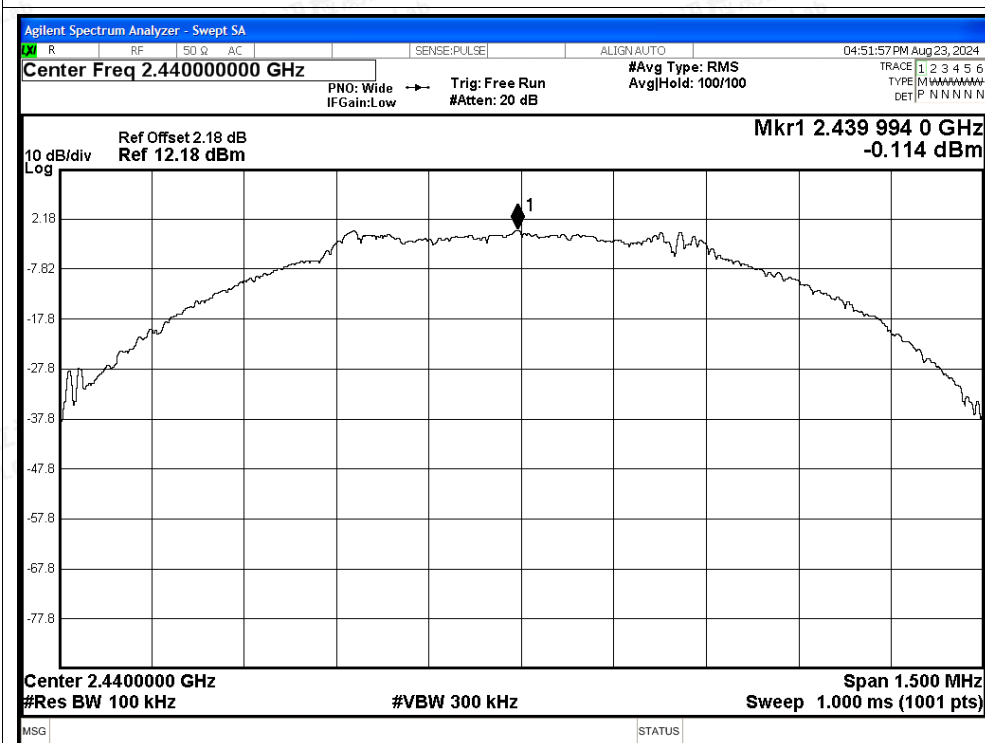
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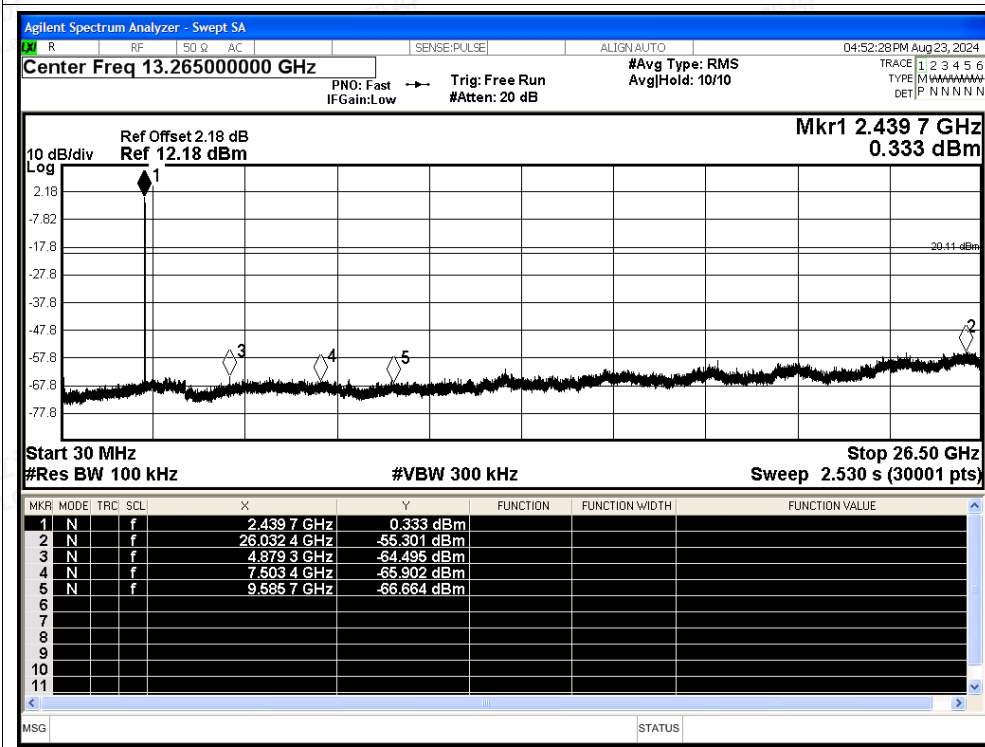
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Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



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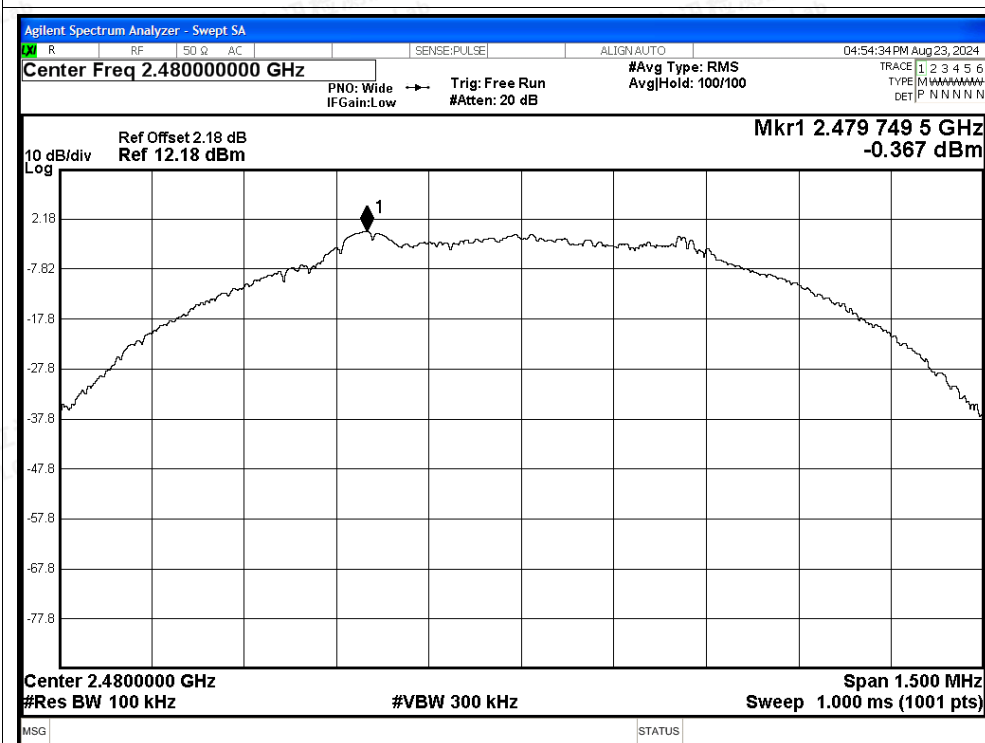
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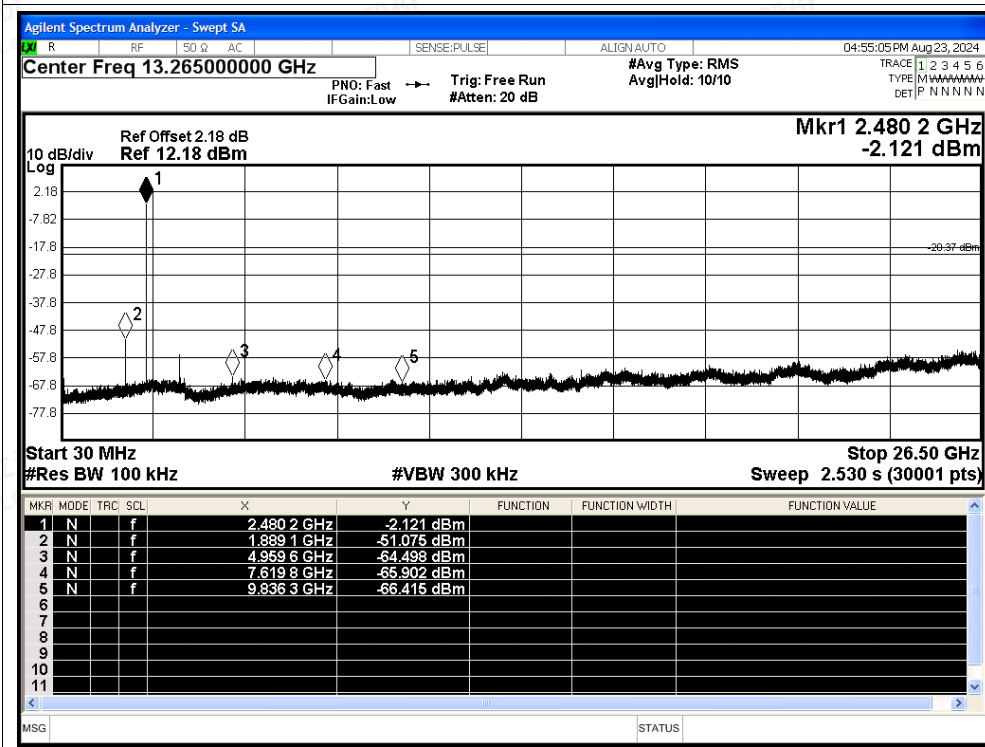
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Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



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	87.39	0.59	0.61
NVNT	BLE 1M	2440	Ant1	87.39	0.59	0.61
NVNT	BLE 1M	2480	Ant1	87.39	0.59	0.61

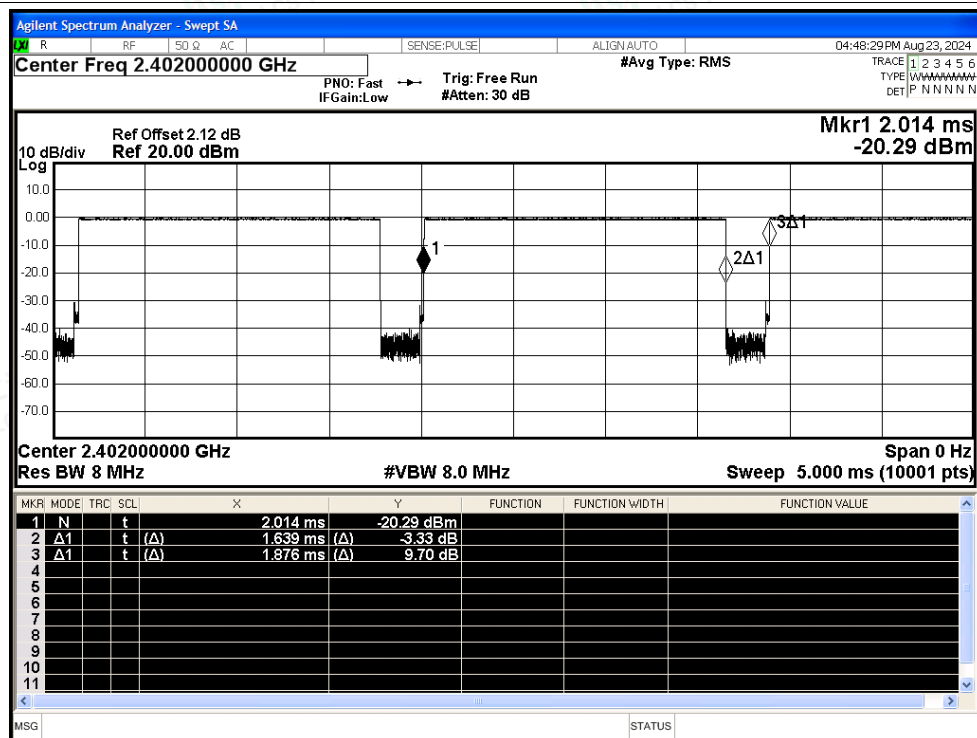


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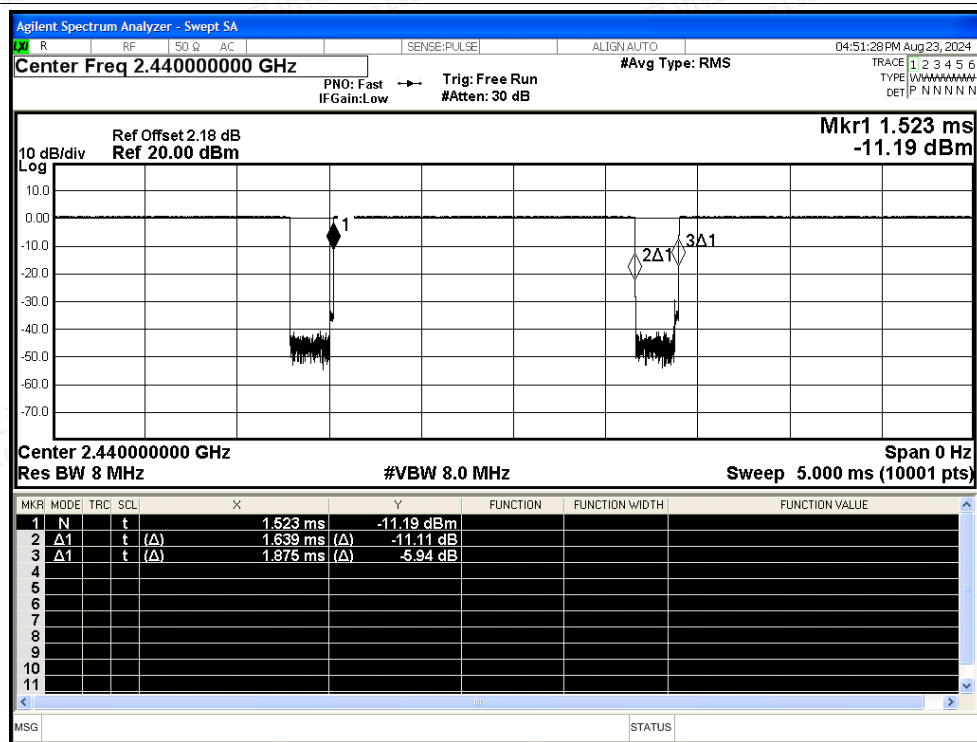


Test Graphs

Duty Cycle NVNT BLE 1M 2402MHz Ant1



Duty Cycle NVNT BLE 1M 2440MHz Ant1

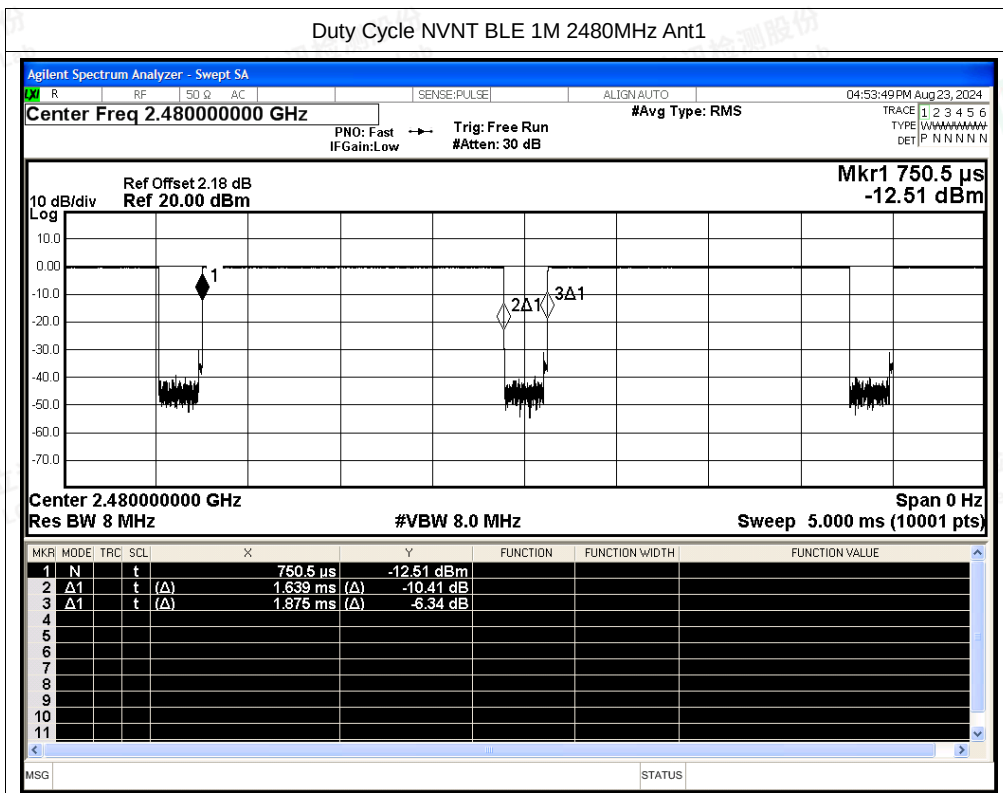


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B.7 Restrict Band

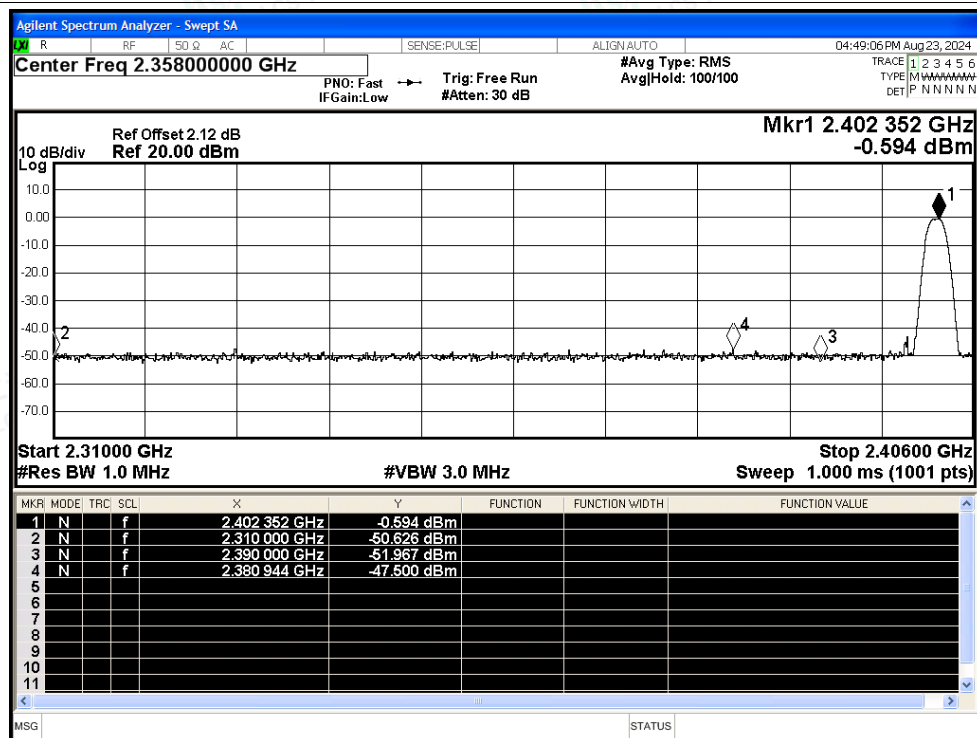
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 1M	2402	Ant1	2310	-50.63	2	-	46.63	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2310	-58.8	2	0.59	39.05	Average	54	Pass
NVNT	BLE 1M	2402	Ant1	2380.944	-47.5	2	-	49.76	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2324.784	-57.52	2	0.59	40.33	Average	54	Pass
NVNT	BLE 1M	2402	Ant1	2390	-51.97	2	-	45.29	Peak	74	Pass
NVNT	BLE 1M	2402	Ant1	2390	-58.14	2	0.59	39.71	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2483.5	-49.77	2	-	47.49	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2483.5	-58.03	2	0.59	39.82	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2486.128	-46.01	2	-	51.25	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2483.56	-56.77	2	0.59	41.08	Average	54	Pass
NVNT	BLE 1M	2480	Ant1	2500	-49.5	2	-	47.76	Peak	74	Pass
NVNT	BLE 1M	2480	Ant1	2500	-57.52	2	0.59	40.33	Average	54	Pass



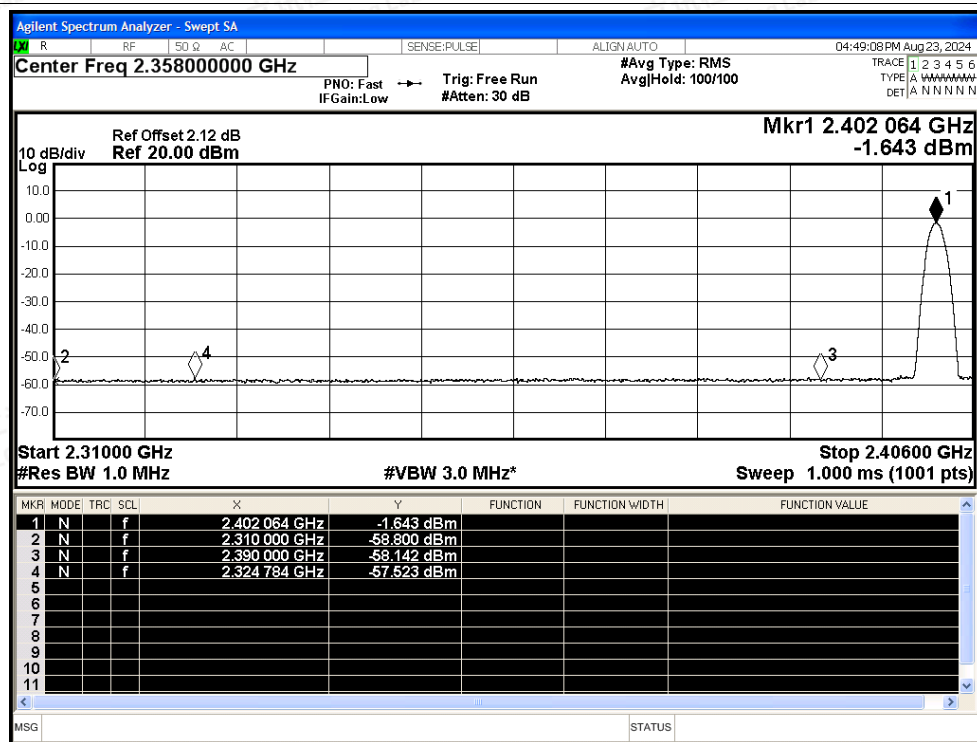


Test Graphs

Restrict Band NVNT BLE 1M 2402MHz Ant1 Peak



Restrict Band NVNT BLE 1M 2402MHz Ant1 Average



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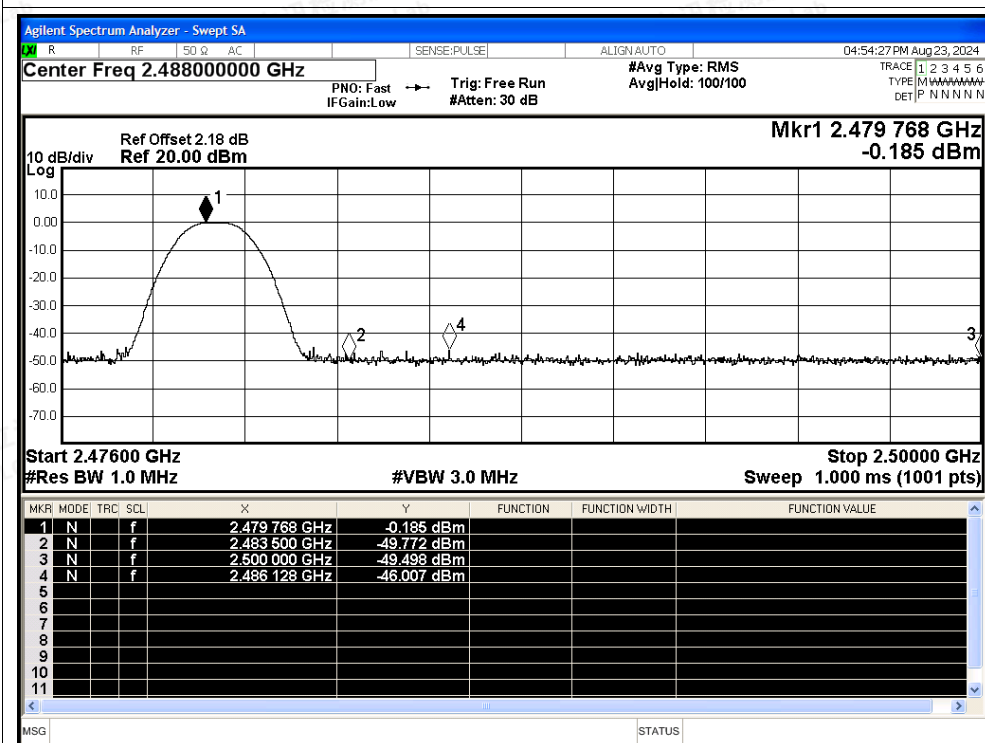
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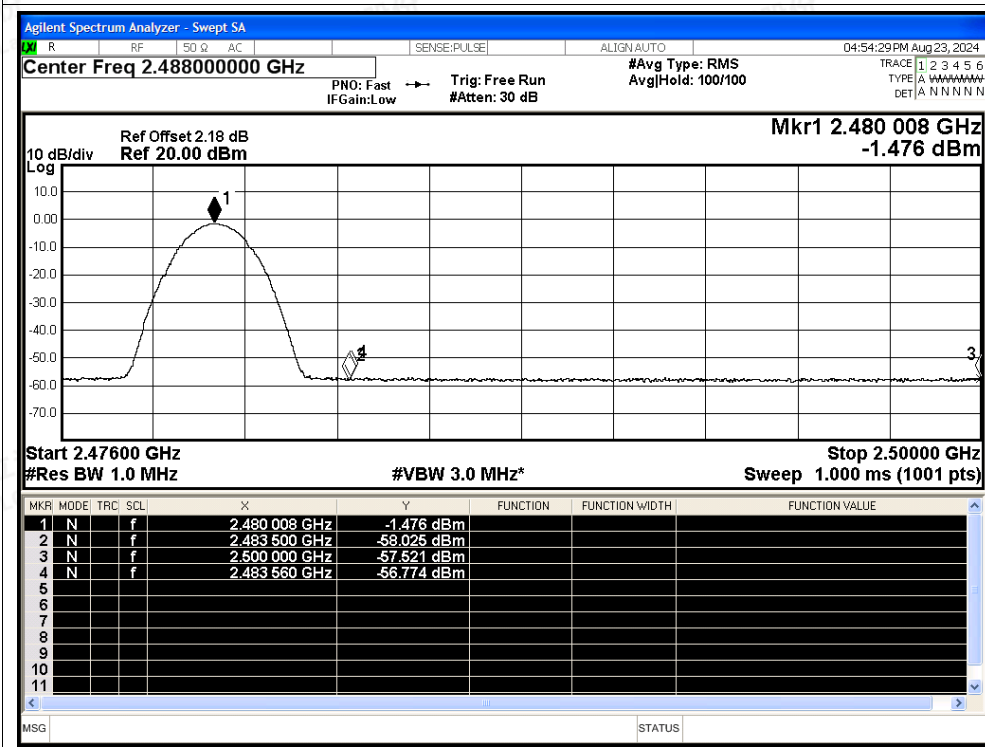
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Restrict Band NVNT BLE 1M 2480MHz Ant1 Peak



Restrict Band NVNT BLE 1M 2480MHz Ant1 Average



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