



Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: An air drum set

Test Model: GRA2

Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	Jack Cheng



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A.1 -6dB Bandwidth

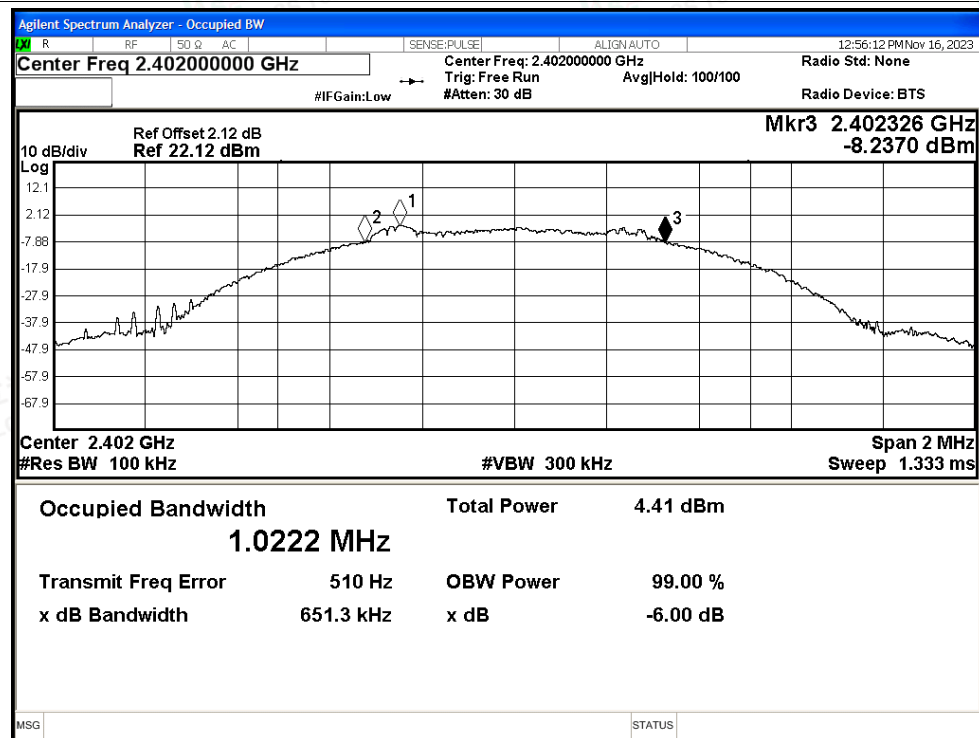
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE	2402	Ant	0.651	≥ 0.5	Pass
NVNT	BLE	2440	Ant	0.656	≥ 0.5	Pass
NVNT	BLE	2480	Ant	0.649	≥ 0.5	Pass



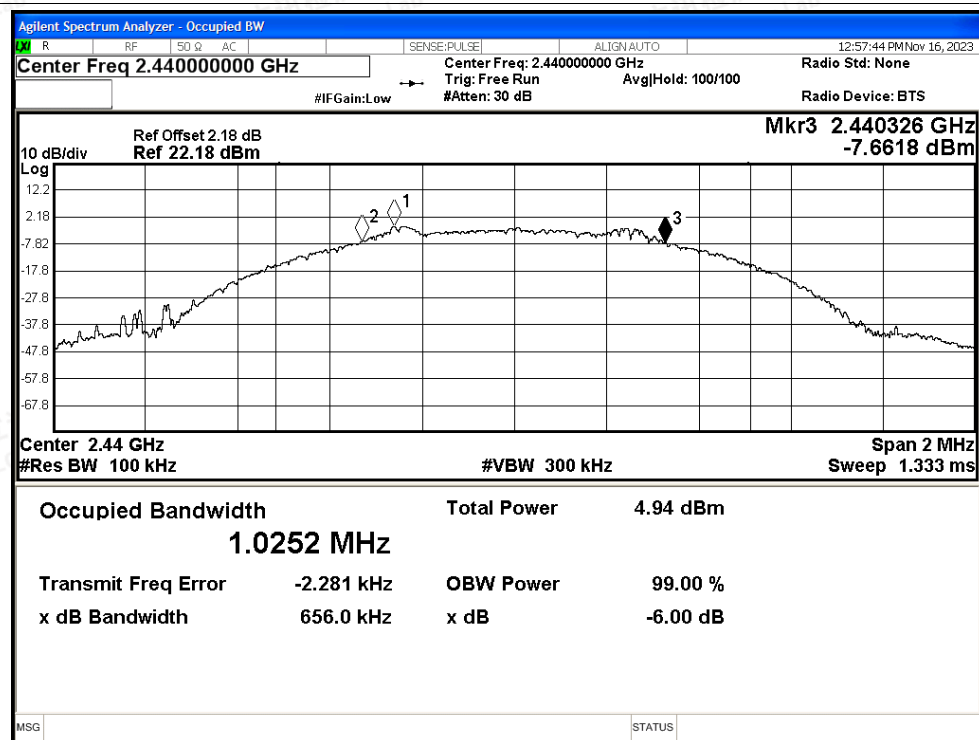


Test Graphs

-6dB Bandwidth NVNT BLE 2402MHz Ant



-6dB Bandwidth NVNT BLE 2440MHz Ant

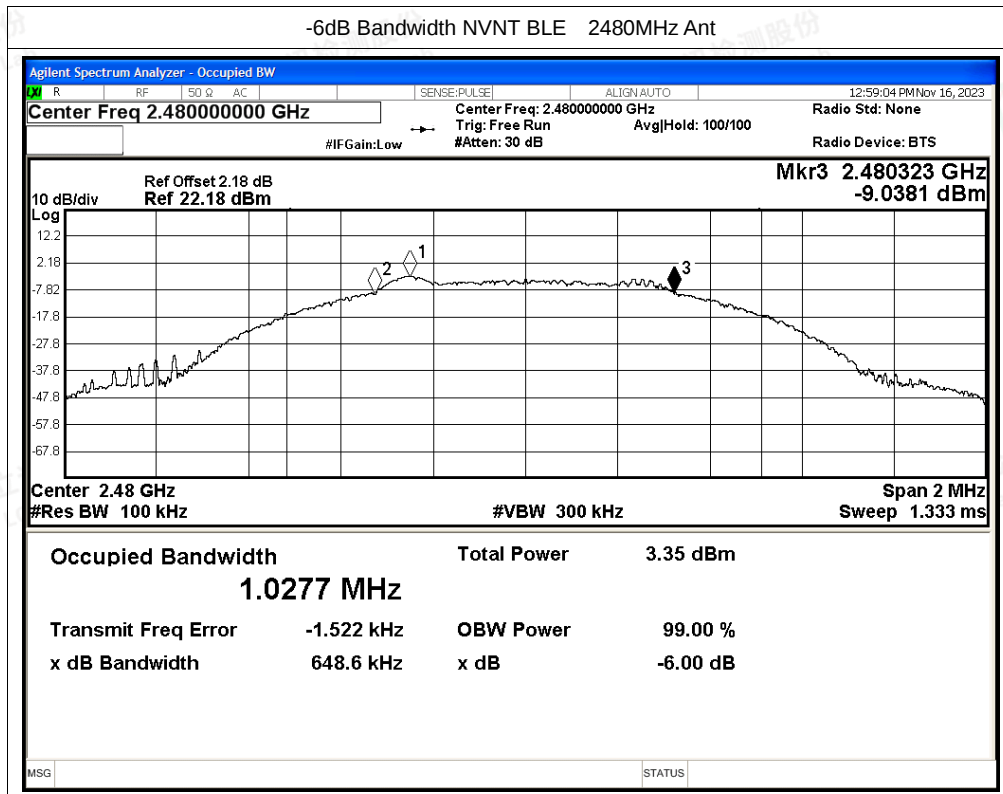


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A.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant	-1.33	30	Pass
NVNT	BLE	2440	Ant	-0.75	30	Pass
NVNT	BLE	2480	Ant	-2.39	30	Pass



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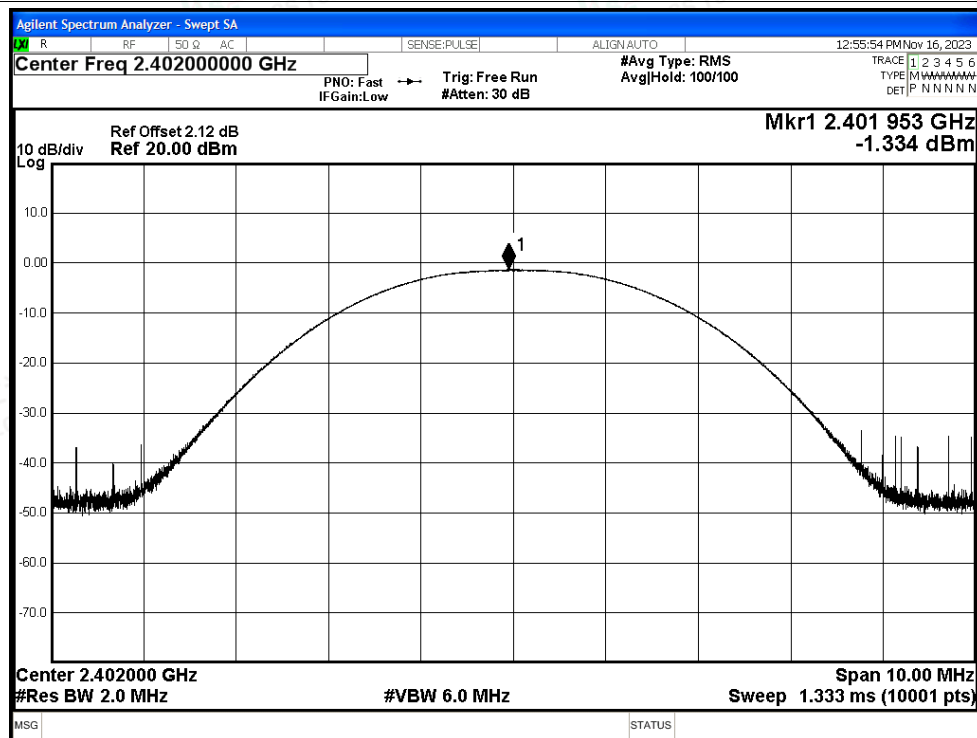
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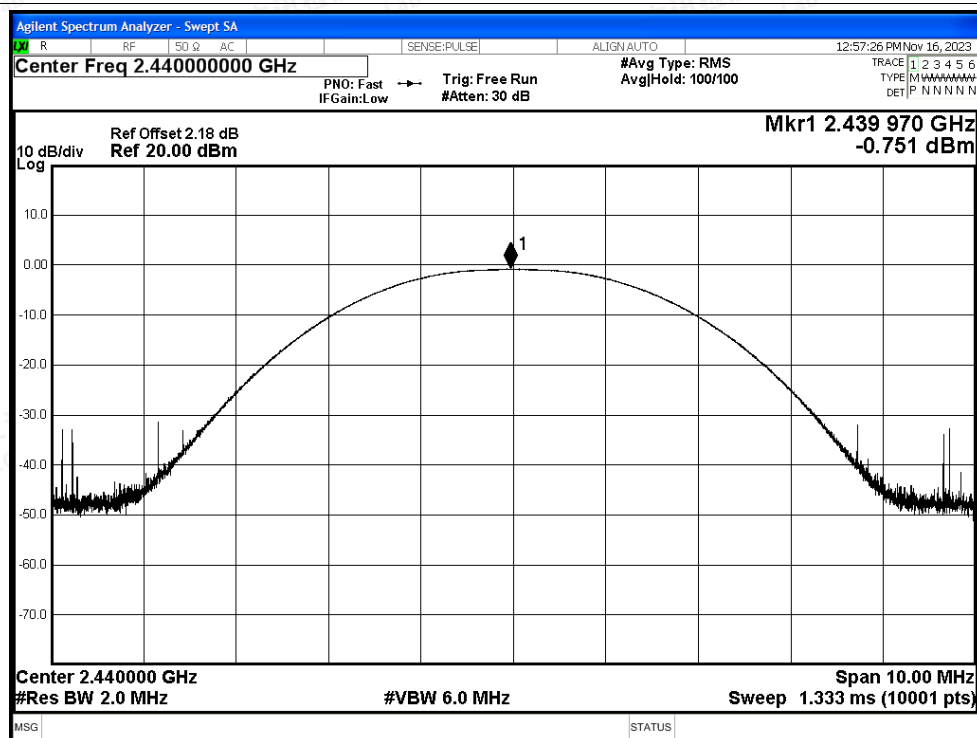


Test Graphs

Power NVNT BLE 2402MHz Ant



Power NVNT BLE 2440MHz Ant

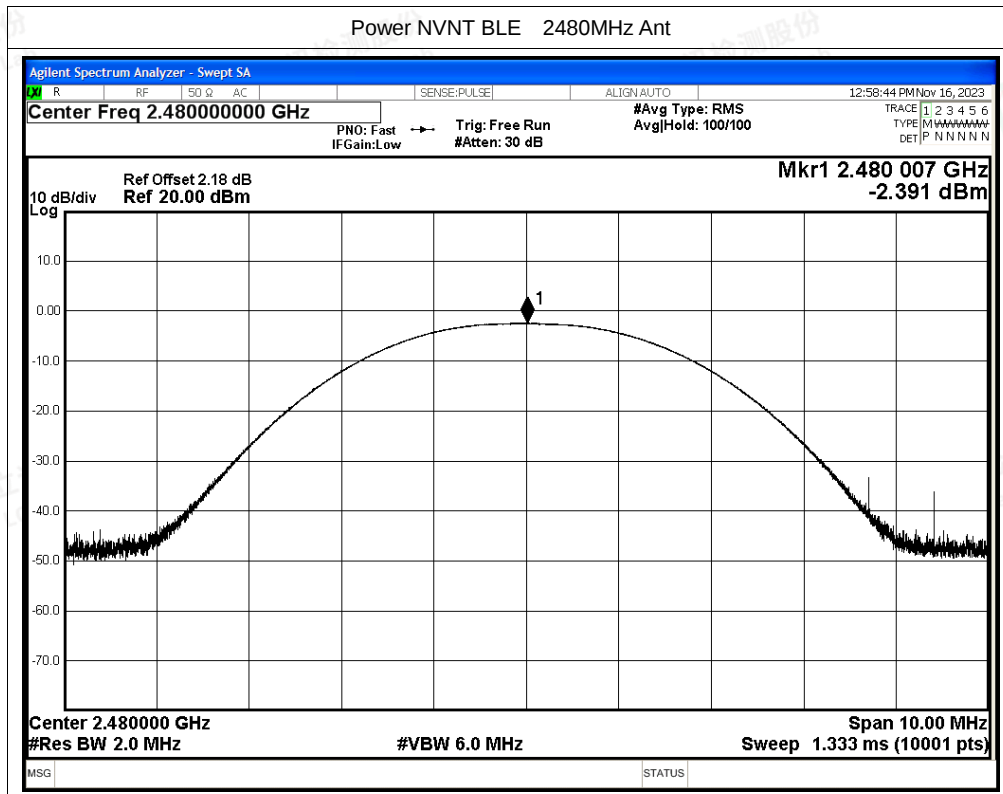


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A.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE	2402	Ant	-18.39	8	Pass
NVNT	BLE	2440	Ant	-17.7	8	Pass
NVNT	BLE	2480	Ant	-19.02	8	Pass



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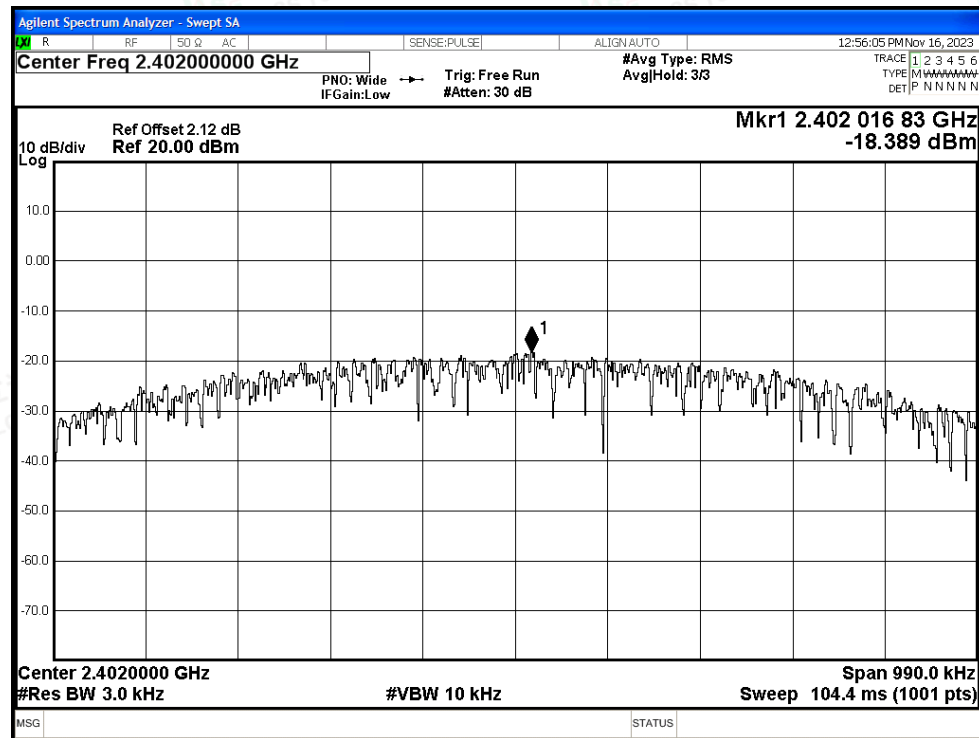
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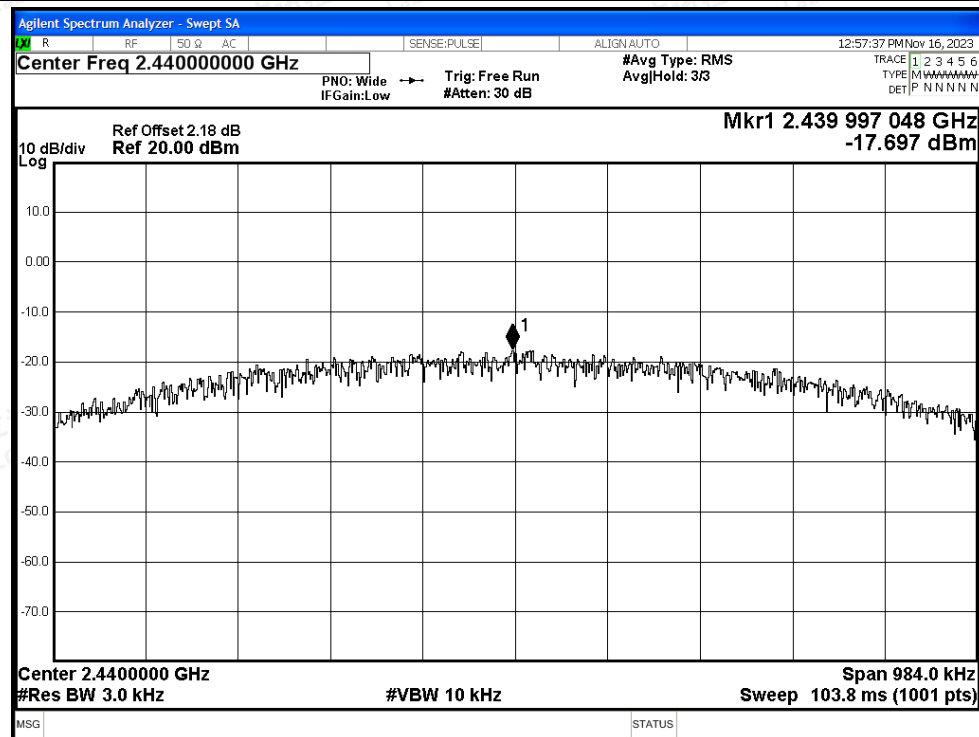


Test Graphs

PSD NVNT BLE 2402MHz Ant



PSD NVNT BLE 2440MHz Ant

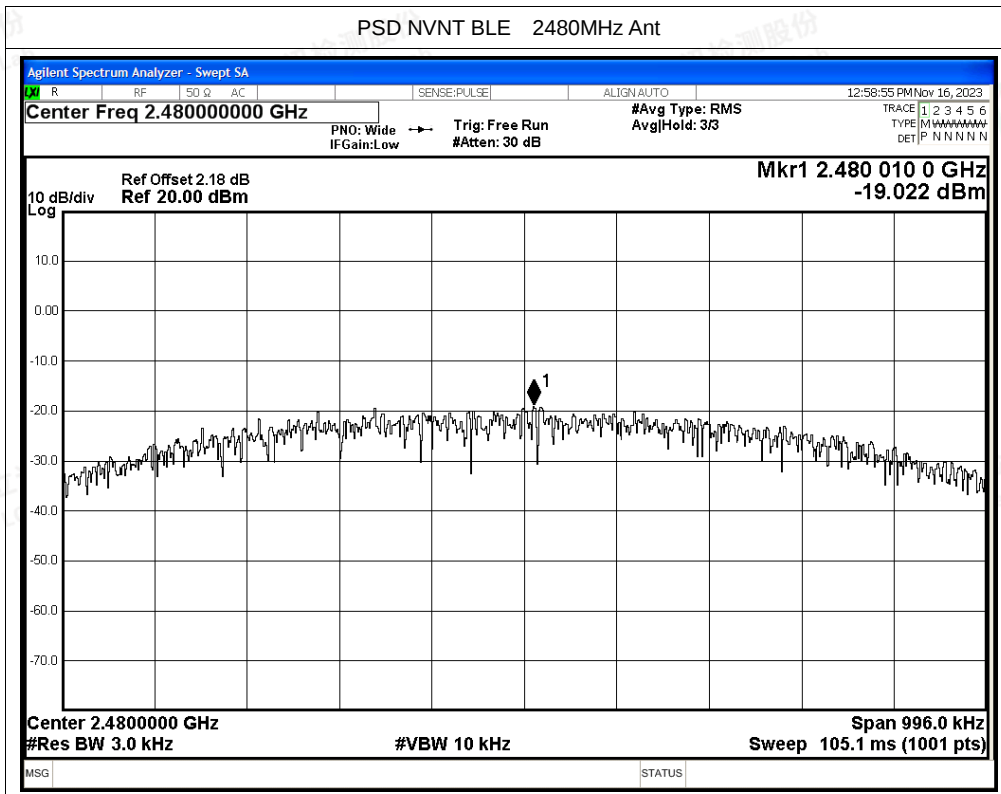


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A.4 Band Edge

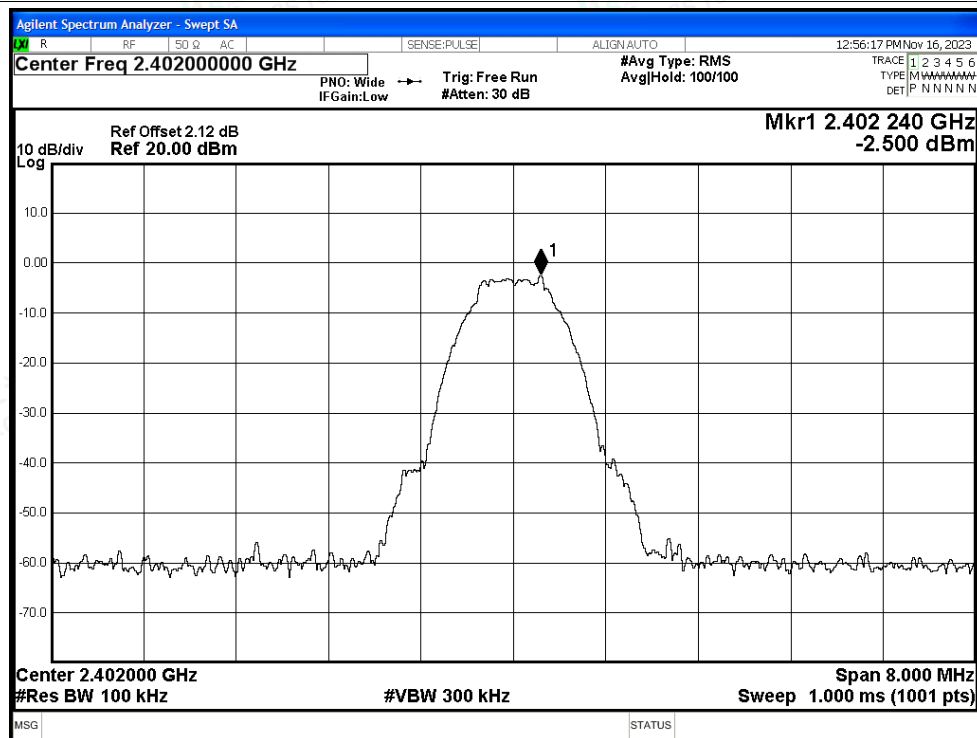
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant	-54.33	-20	Pass
NVNT	BLE	2480	Ant	-53.78	-20	Pass



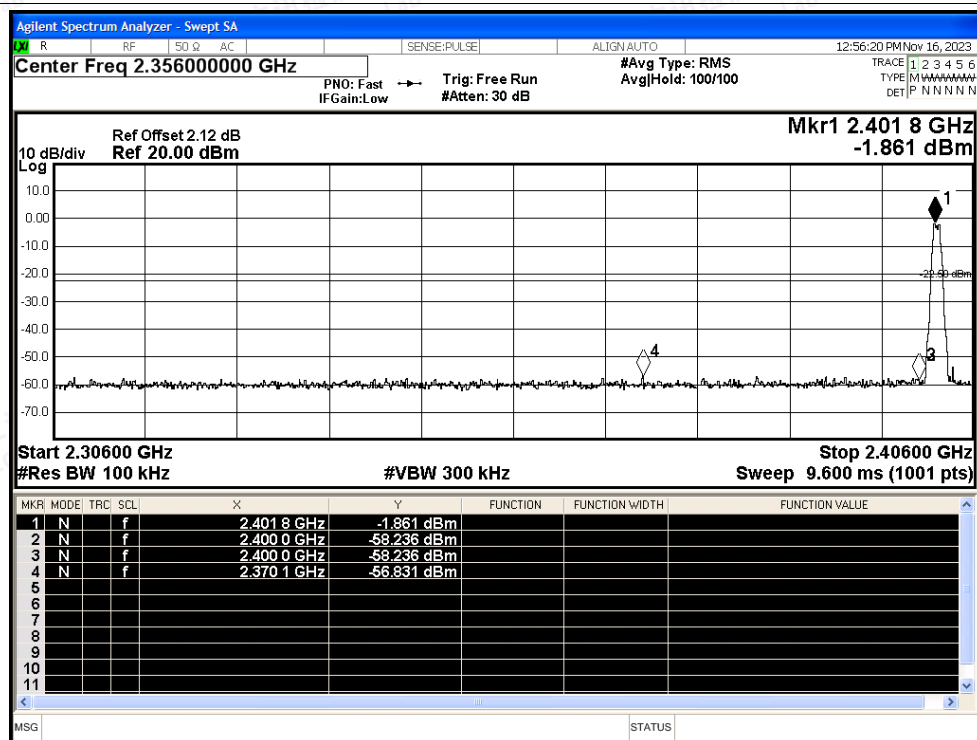


Test Graphs

Band Edge NVNT BLE 2402MHz Ant Ref



Band Edge NVNT BLE 2402MHz Ant Emission

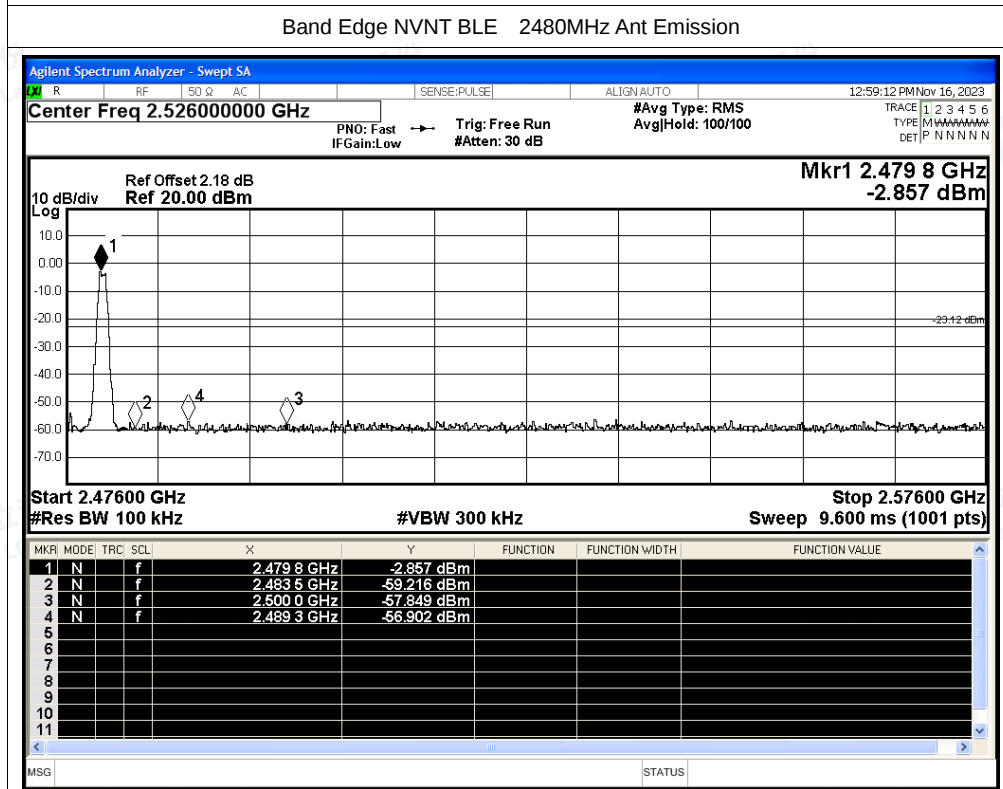
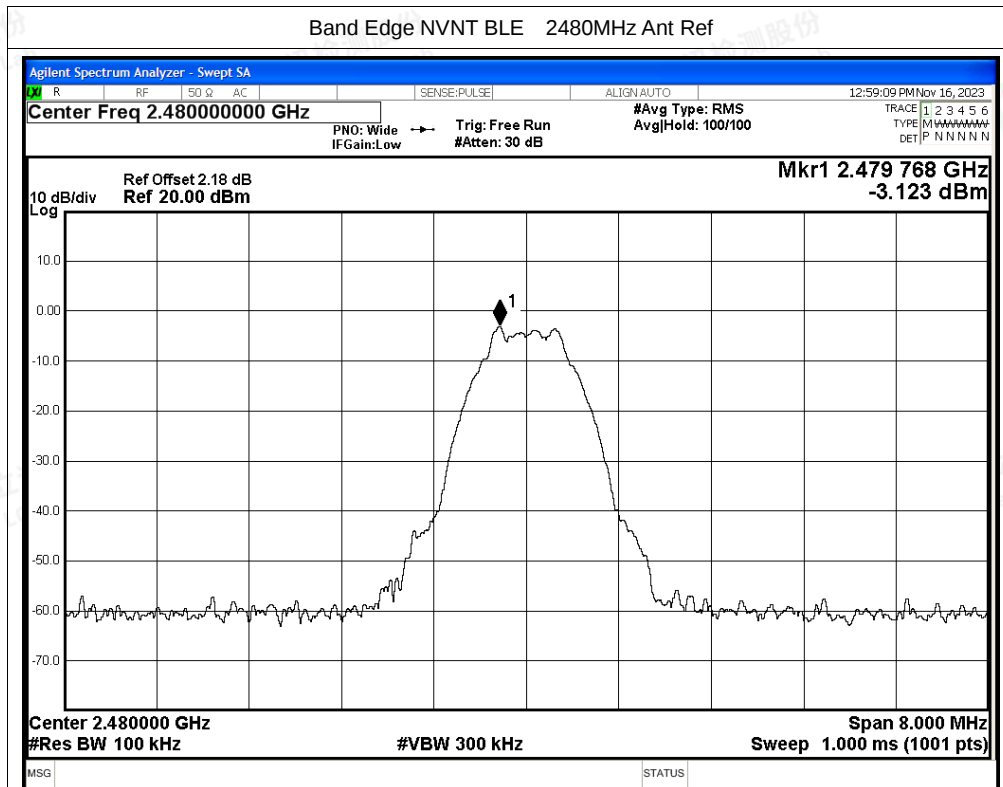


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A.5 Conducted RF Spurious Emission

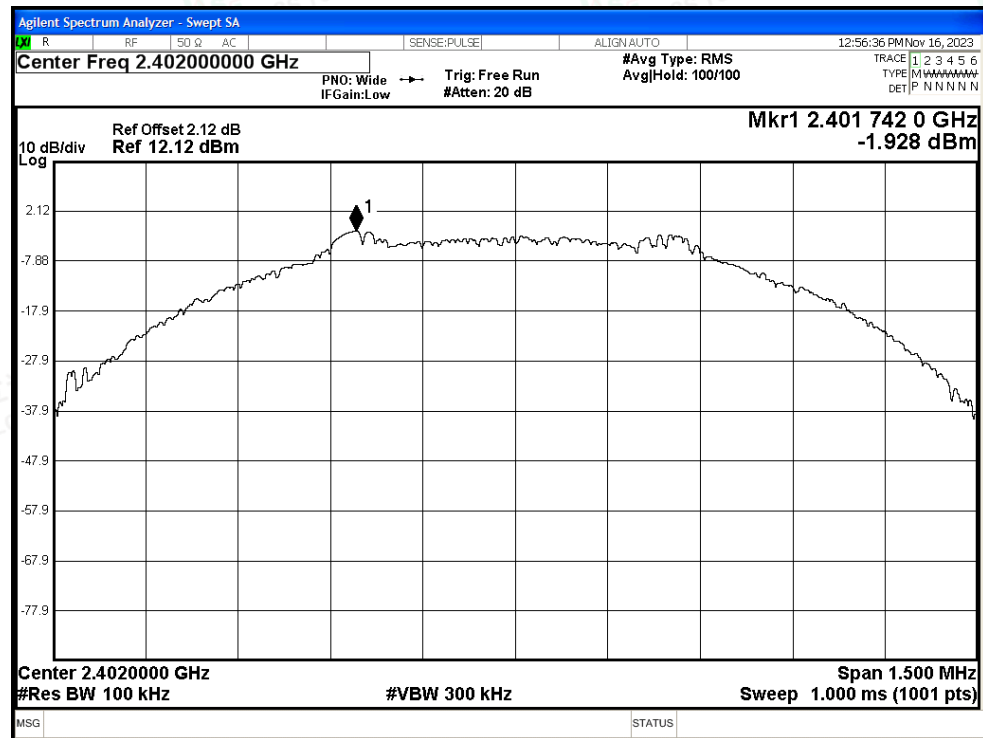
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant	-53.5	-20	Pass
NVNT	BLE	2440	Ant	-53.07	-20	Pass
NVNT	BLE	2480	Ant	-52.88	-20	Pass



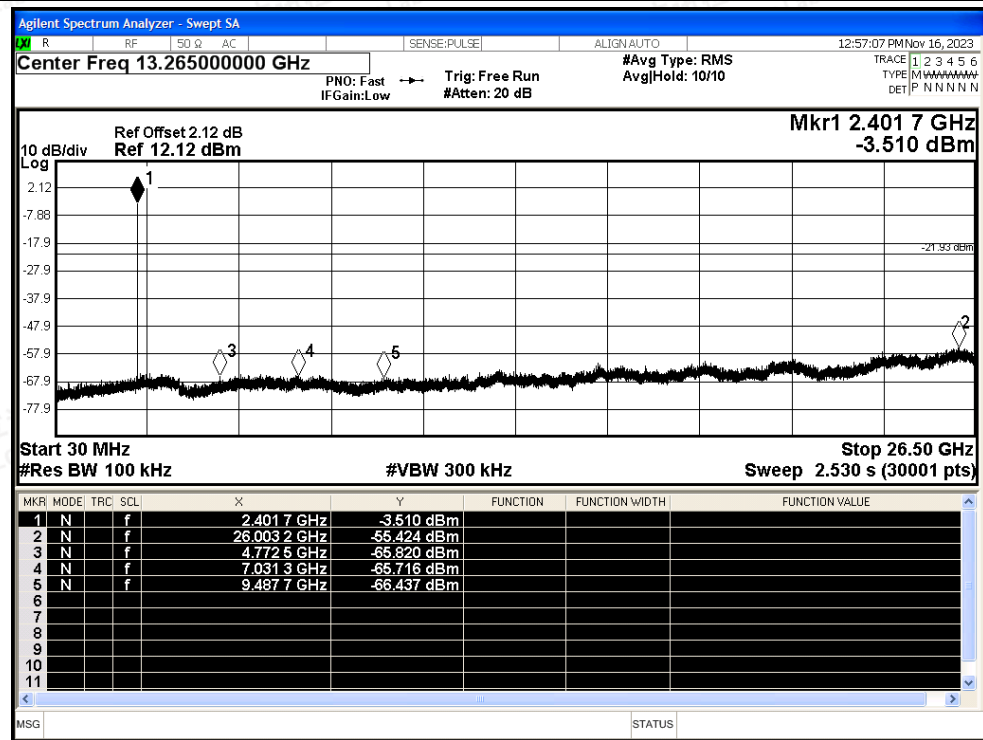


Test Graphs

Tx. Spurious NVNT BLE 2402MHz Ant Ref



Tx. Spurious NVNT BLE 2402MHz Ant Emission

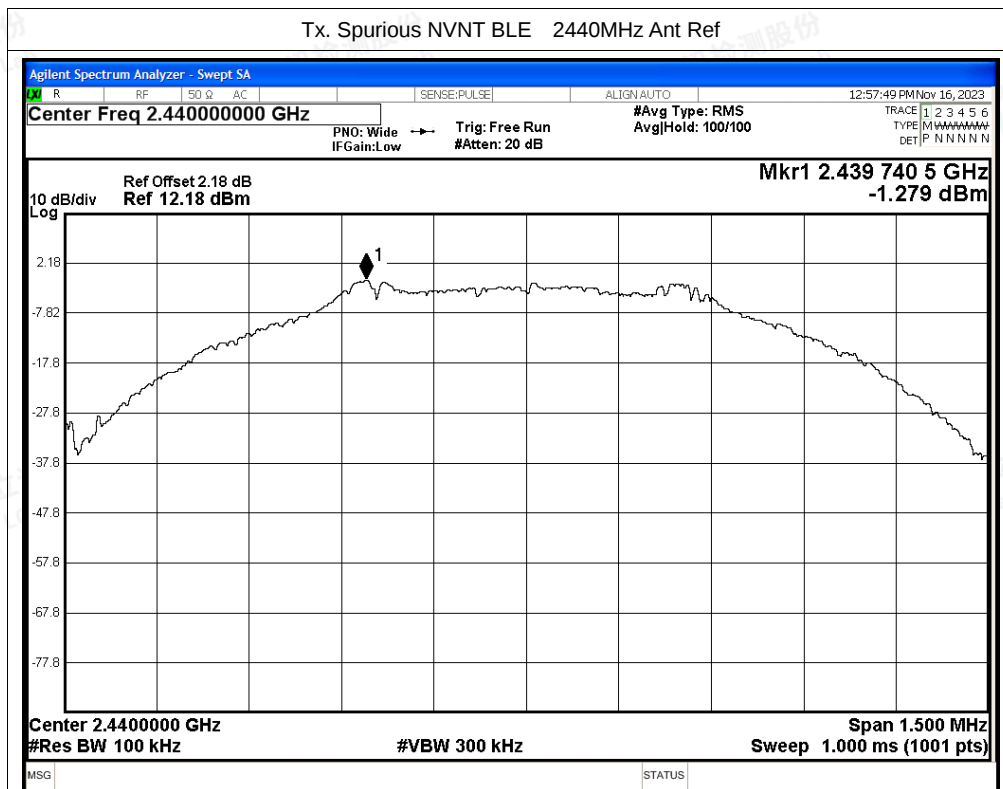


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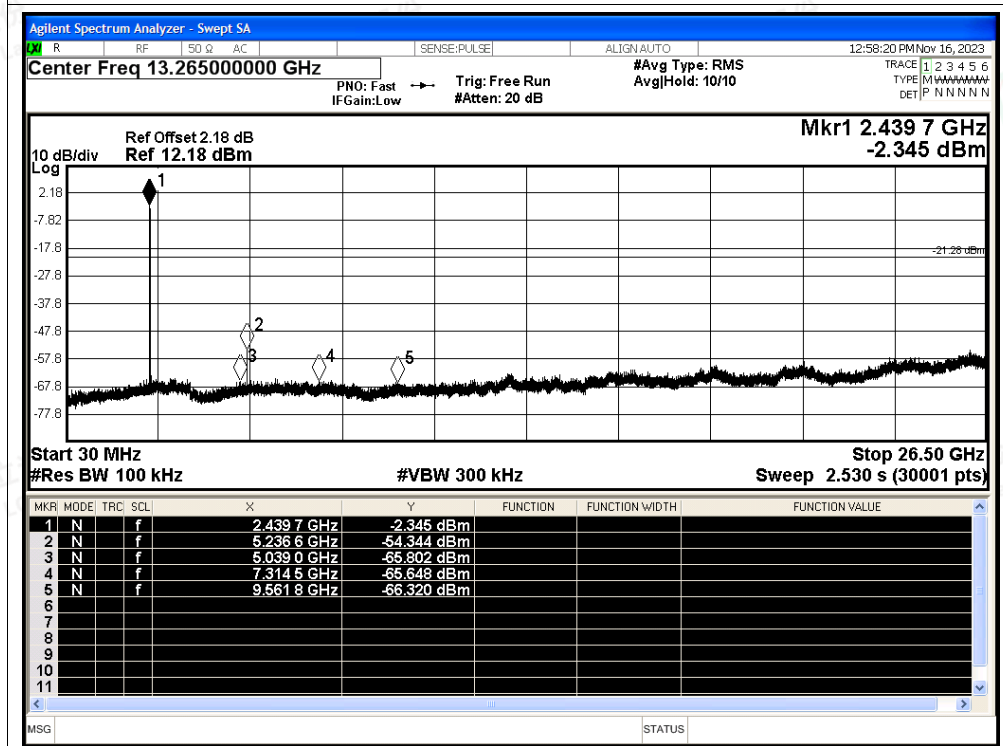
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Tx. Spurious NVNT BLE 2440MHz Ant Emission

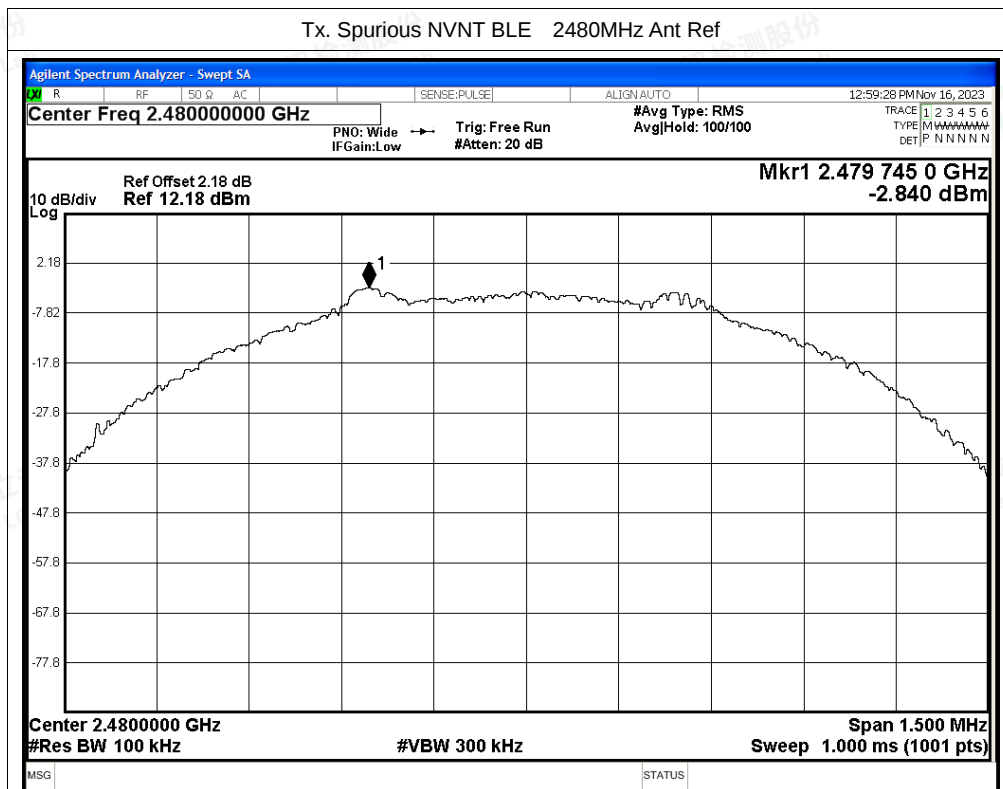


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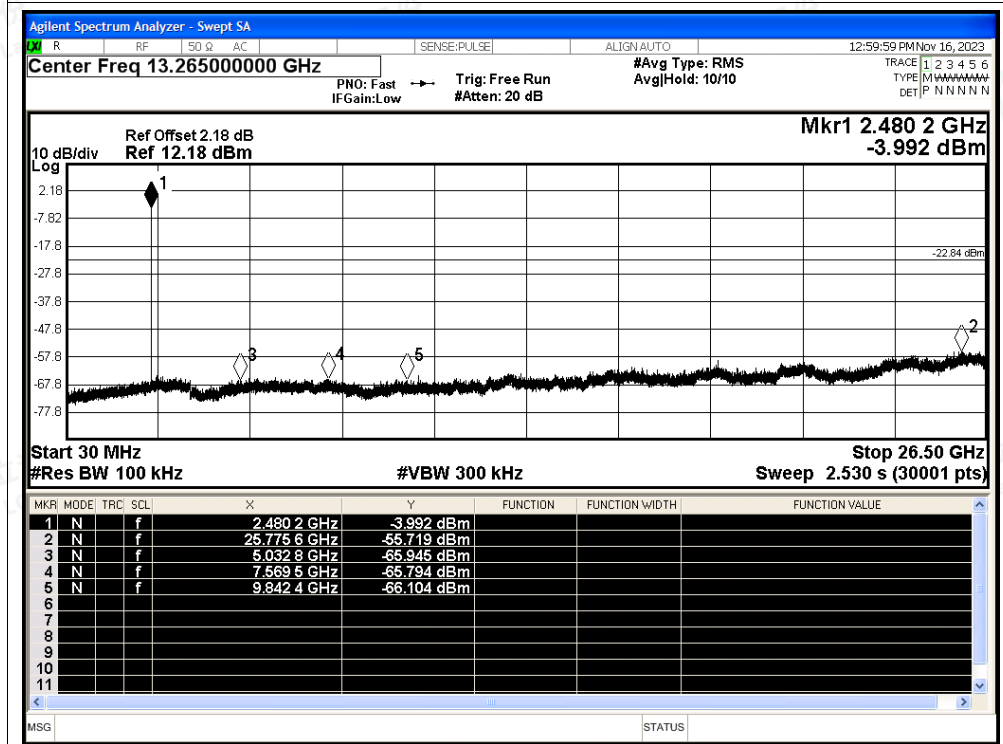
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Tx. Spurious NVNT BLE 2480MHz Ant Emission



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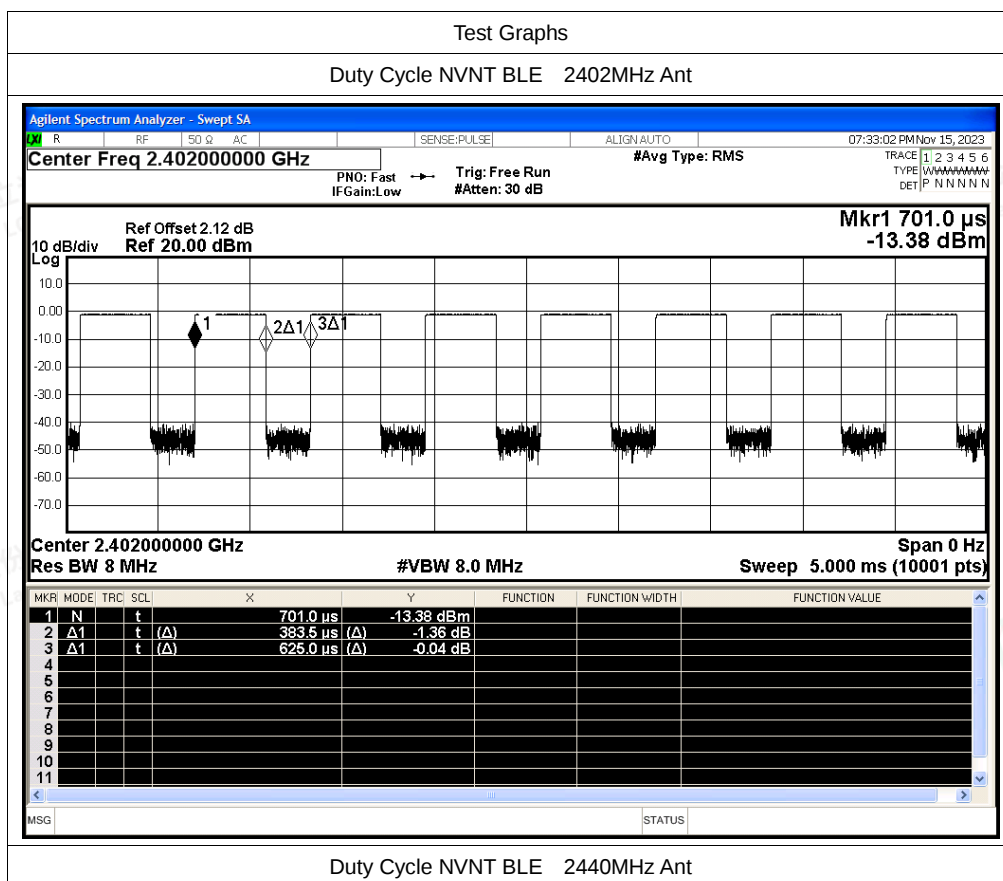
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A.6 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE	2402	Ant	61.36	2.12	2.61
NVNT	BLE	2440	Ant	61.36	2.12	2.61
NVNT	BLE	2480	Ant	61.44	2.12	2.6

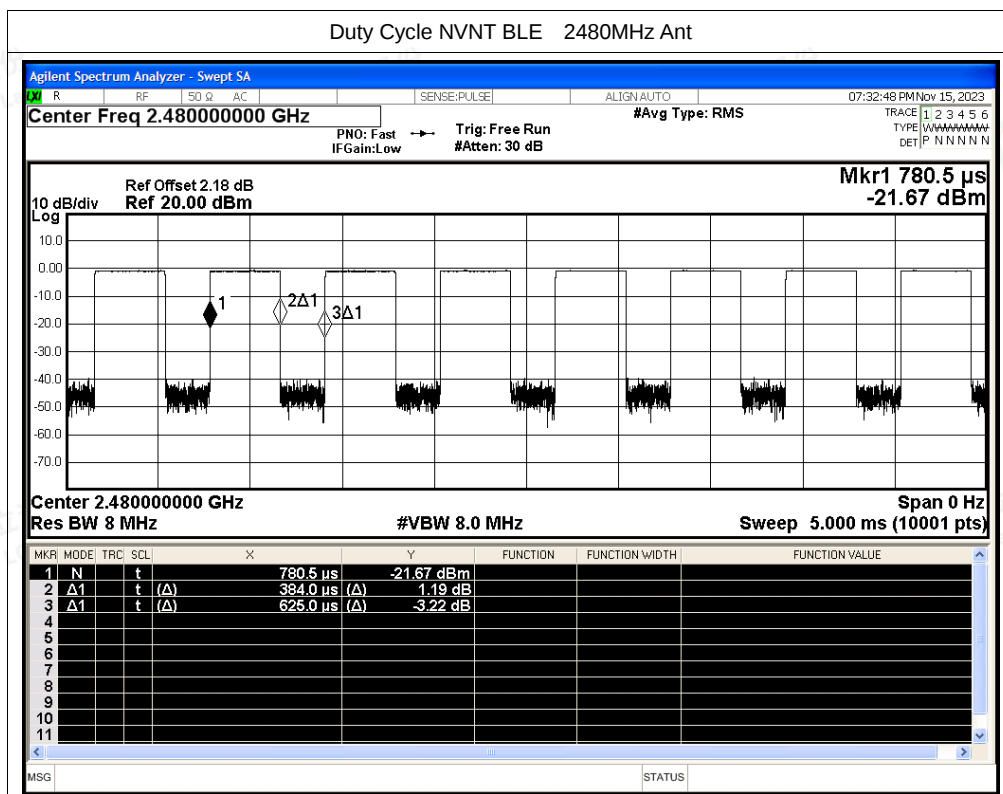
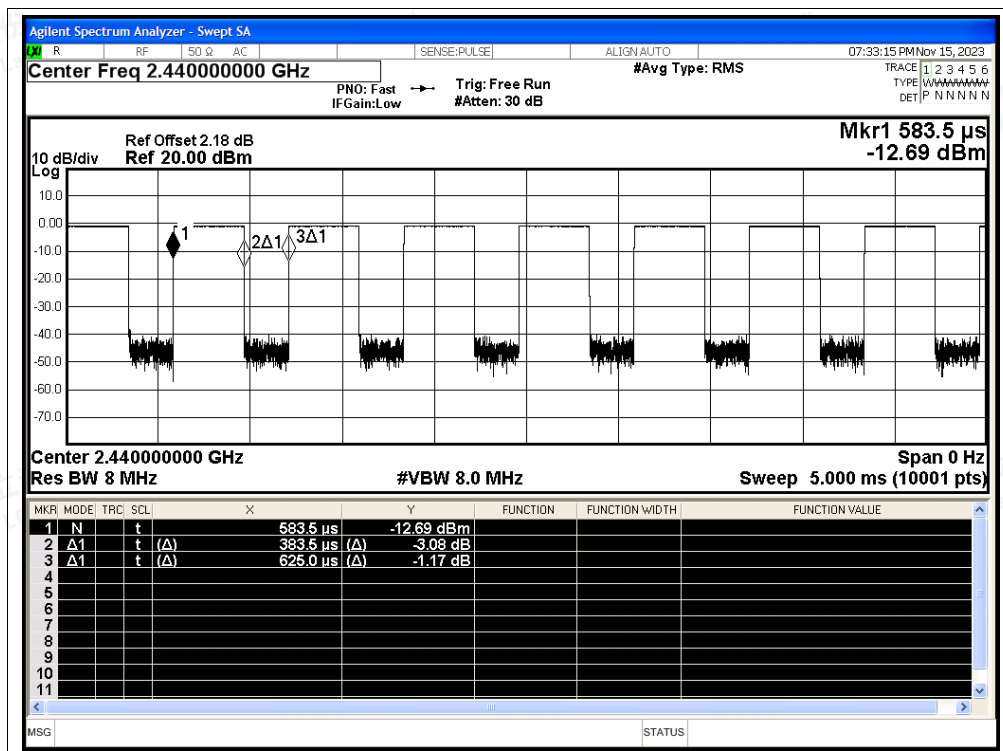


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A.7 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE	2402	Ant	2310	-51.06	2	46.2	Peak	74	Pass
NVNT	BLE	2402	Ant	2310	-57.6	2	39.66	Average	54	Pass
NVNT	BLE	2402	Ant	2336.112	-46.31	2	50.95	Peak	74	Pass
NVNT	BLE	2402	Ant	2366.064	-56.61	2	40.65	Average	54	Pass
NVNT	BLE	2402	Ant	2390	-47.96	2	49.3	Peak	74	Pass
NVNT	BLE	2402	Ant	2390	-57.06	2	40.2	Average	54	Pass
NVNT	BLE	2480	Ant	2483.5	-49.93	2	47.33	Peak	74	Pass
NVNT	BLE	2480	Ant	2483.5	-55.71	2	41.55	Average	54	Pass
NVNT	BLE	2480	Ant	2483.944	-39.84	2	57.42	Peak	74	Pass
NVNT	BLE	2480	Ant	2483.512	-55.71	2	41.55	Average	54	Pass
NVNT	BLE	2480	Ant	2500	-50.73	2	46.53	Peak	74	Pass
NVNT	BLE	2480	Ant	2500	-57.03	2	40.23	Average	54	Pass



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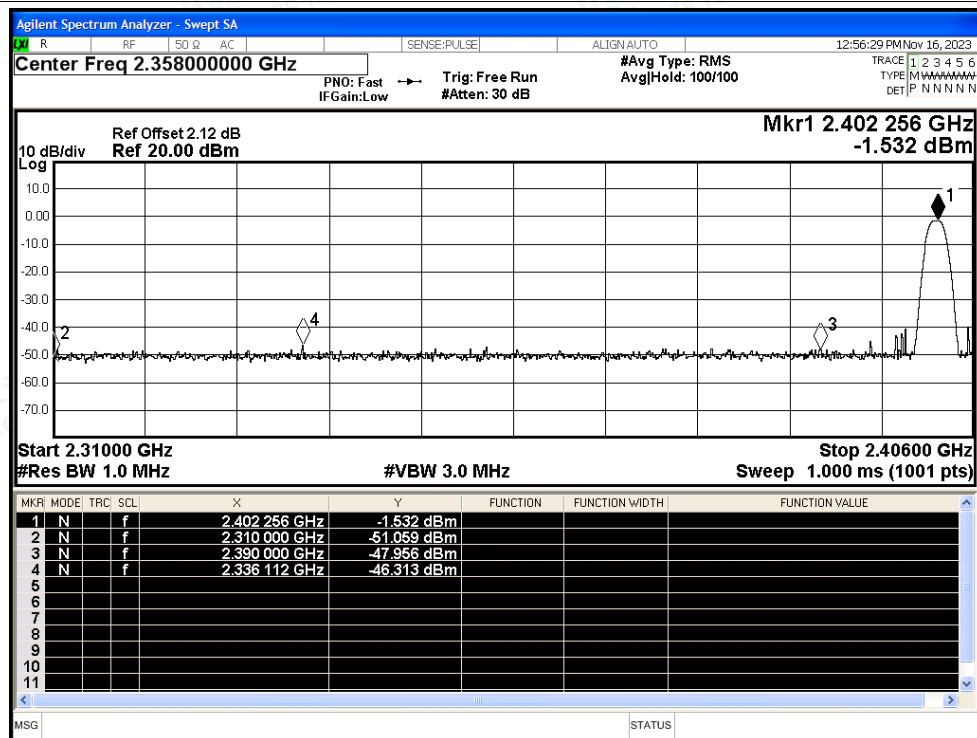
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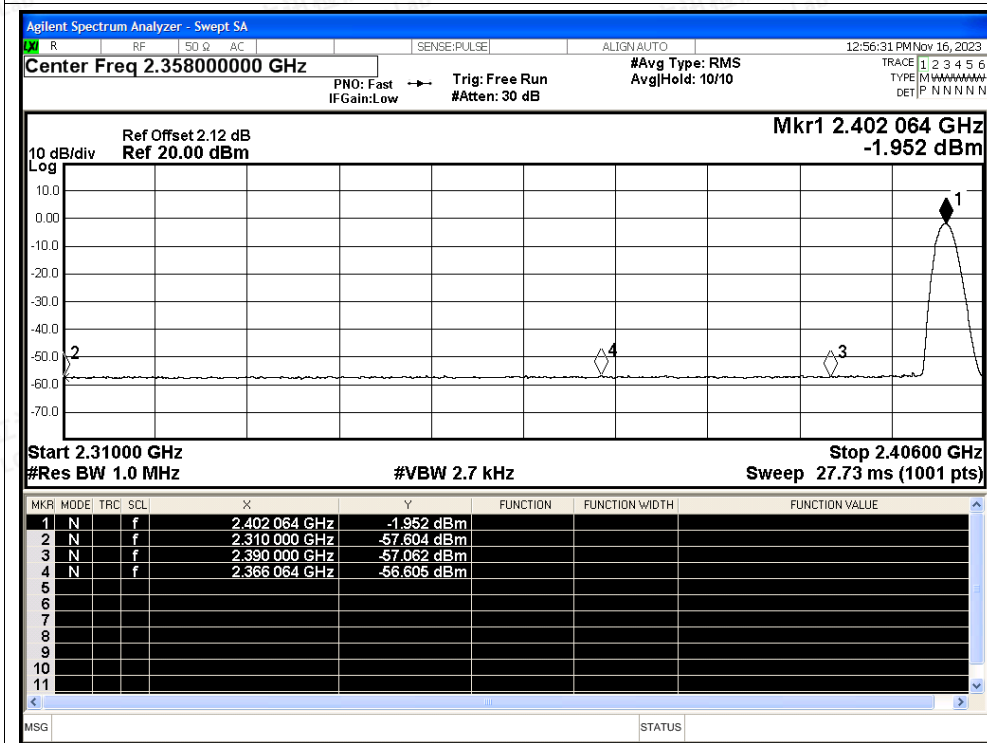


Test Graphs

Restrict Band NVNT BLE 2402MHz Ant Peak



Restrict Band NVNT BLE 2402MHz Ant Average

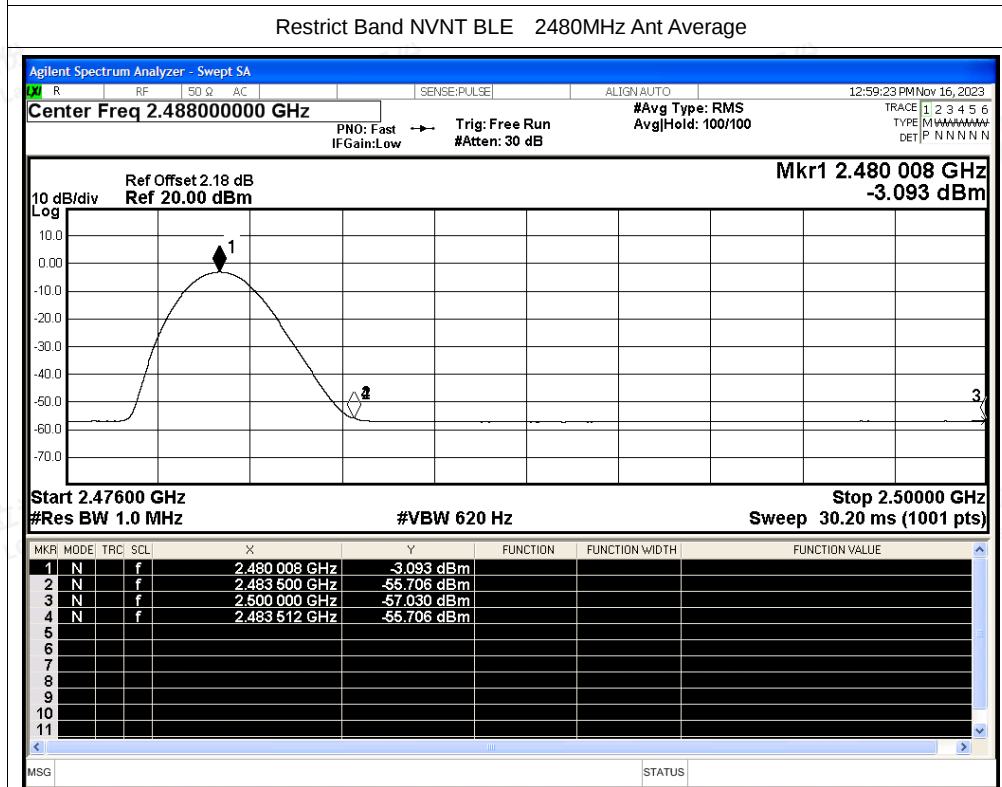
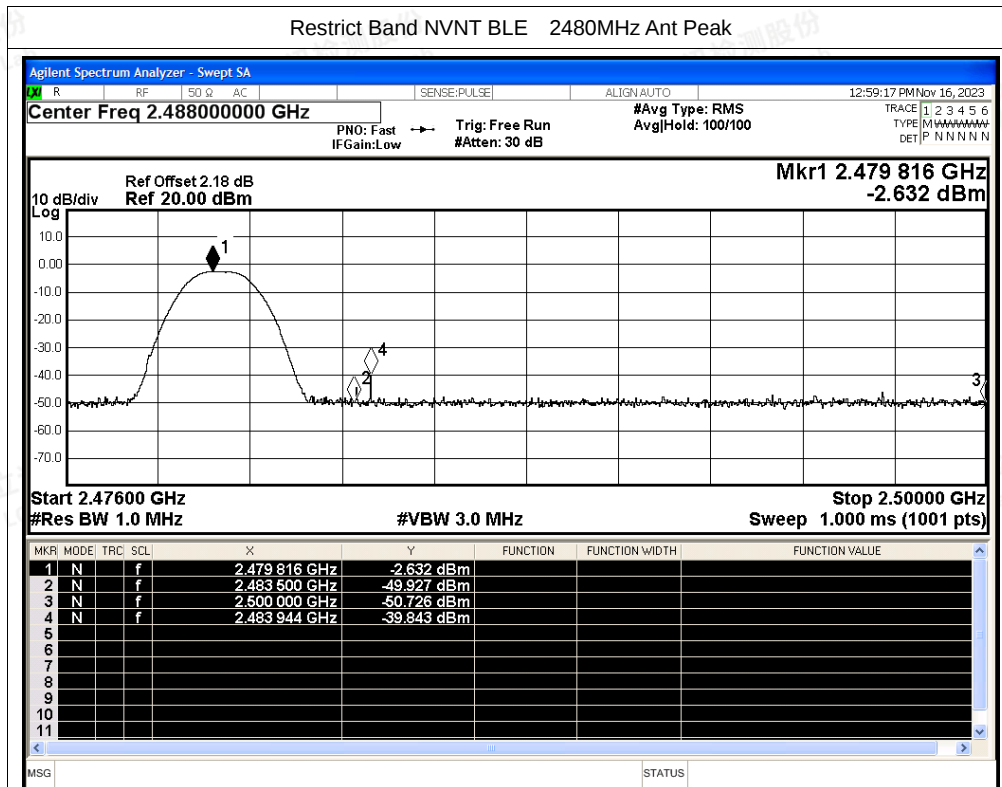


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