



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





A.1 -6dB Bandwidth

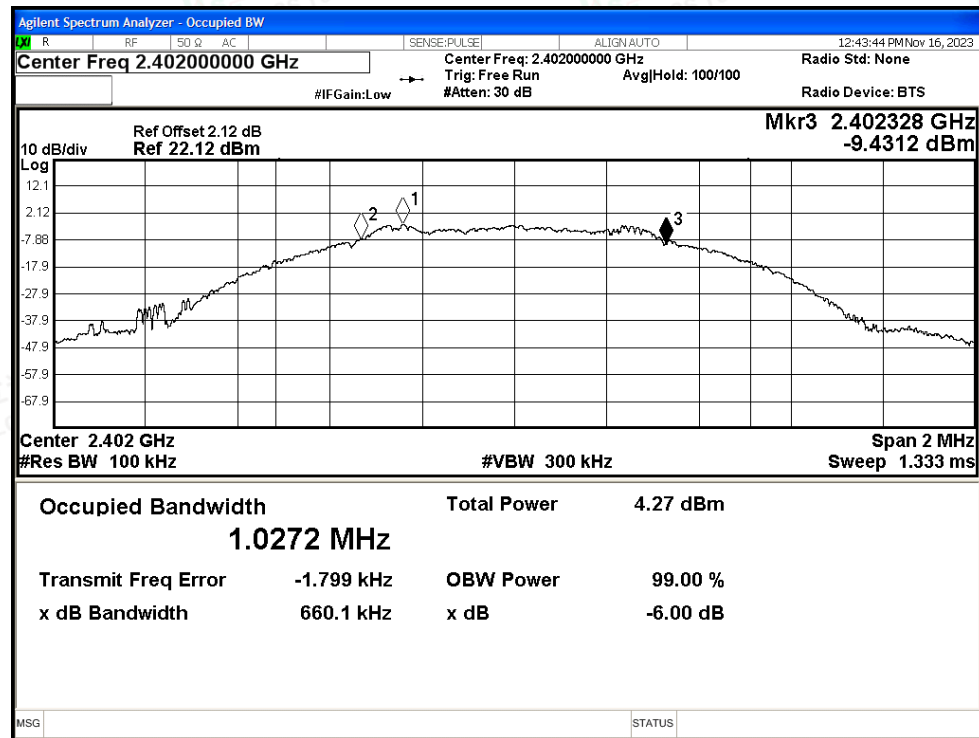
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE	2402	Ant	0.66	≥ 0.5	Pass
NVNT	BLE	2440	Ant	0.656	≥ 0.5	Pass
NVNT	BLE	2480	Ant	0.664	≥ 0.5	Pass



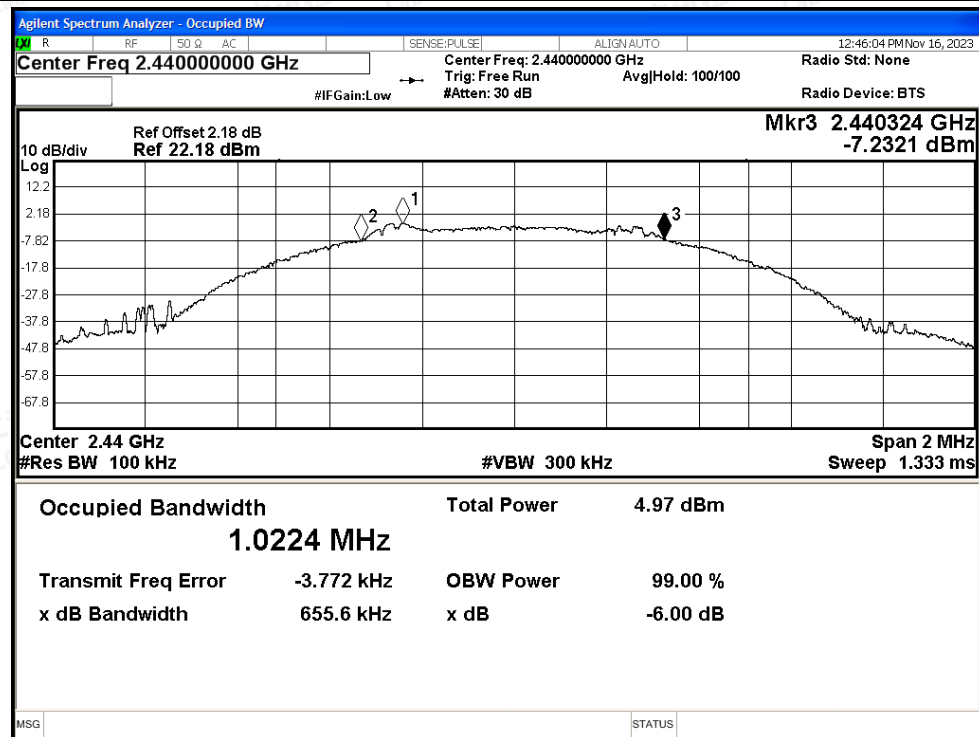


Test Graphs

-6dB Bandwidth NVNT BLE 2402MHz Ant



-6dB Bandwidth NVNT BLE 2440MHz Ant

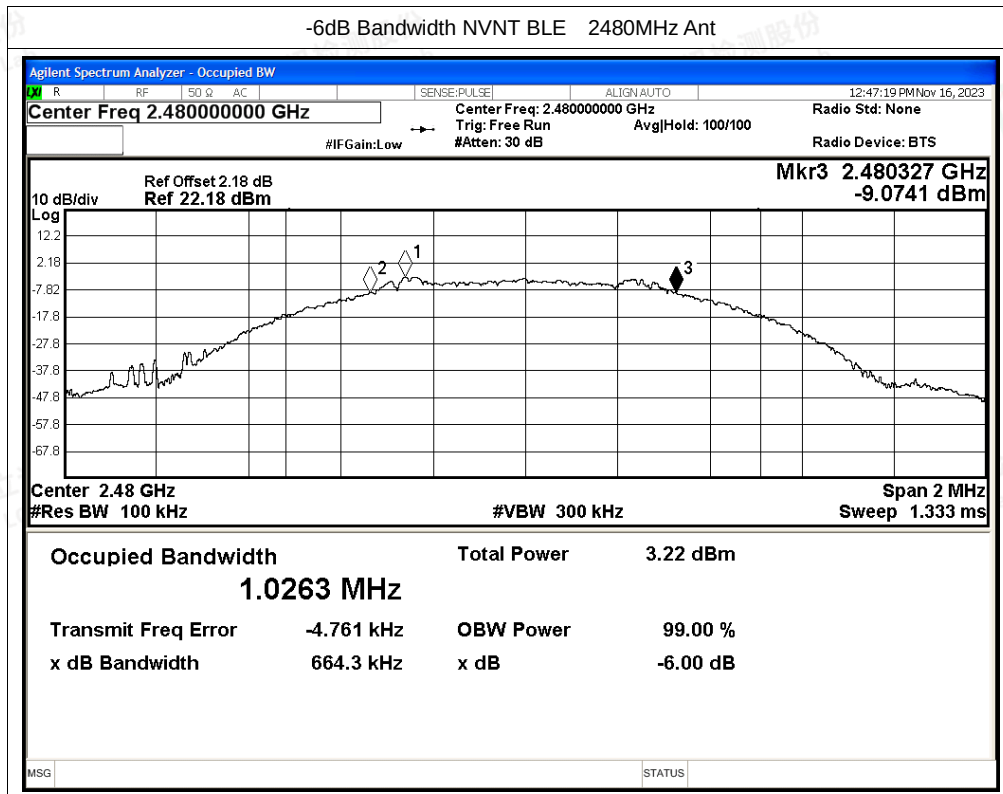


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A.2 Maximum Conducted Output Power

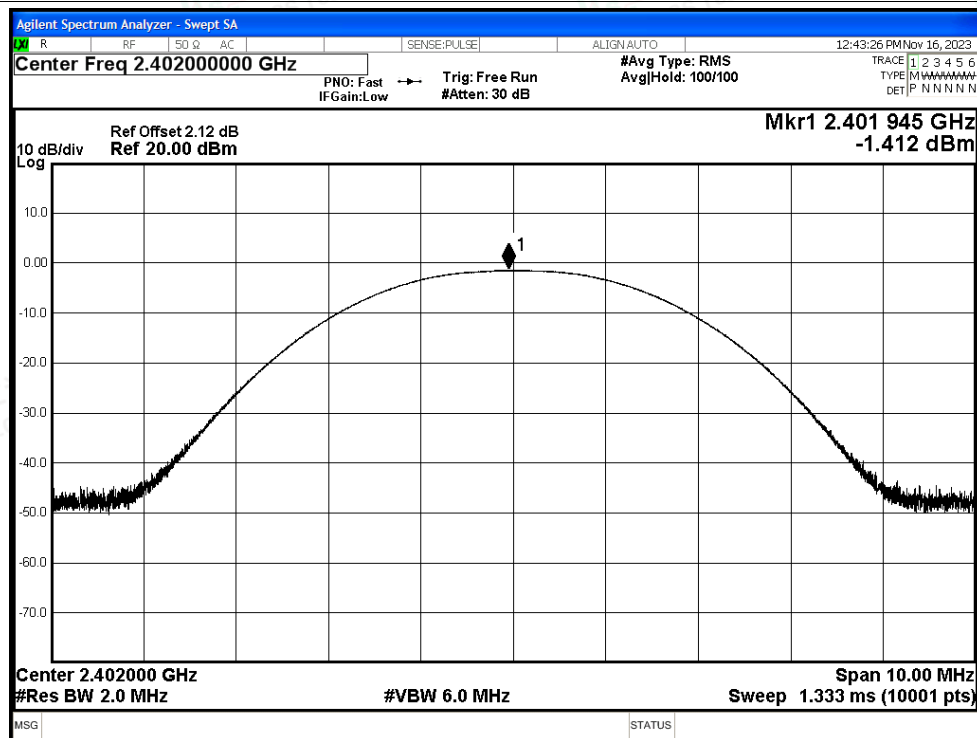
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE	2402	Ant	-1.41	30	Pass
NVNT	BLE	2440	Ant	-0.83	30	Pass
NVNT	BLE	2480	Ant	-2.43	30	Pass



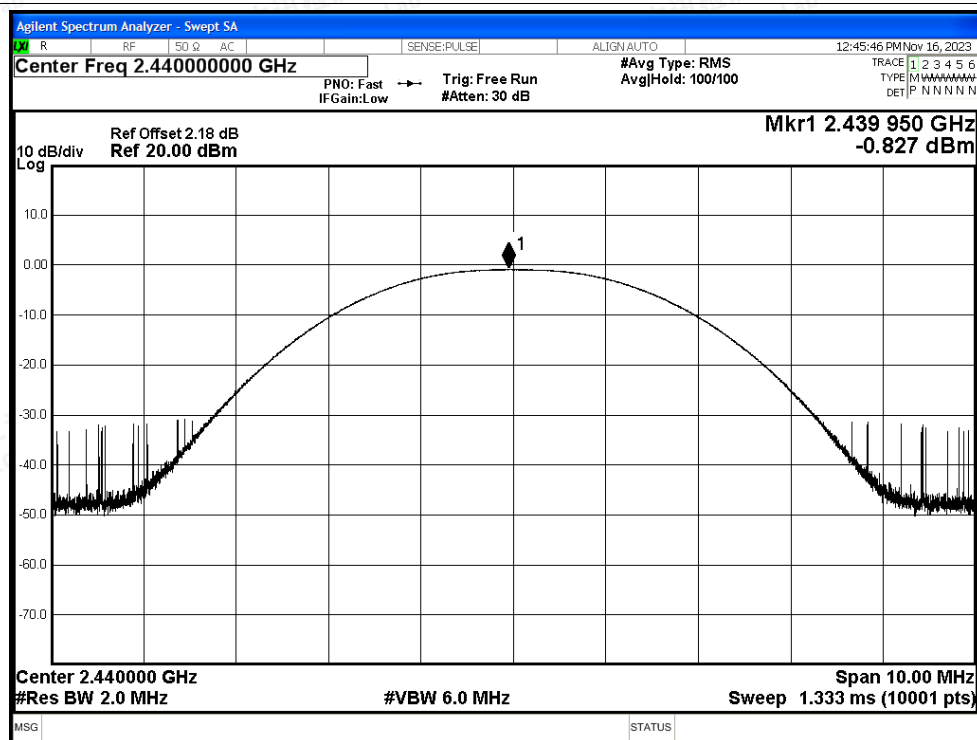


Test Graphs

Power NVNT BLE 2402MHz Ant



Power NVNT BLE 2440MHz Ant

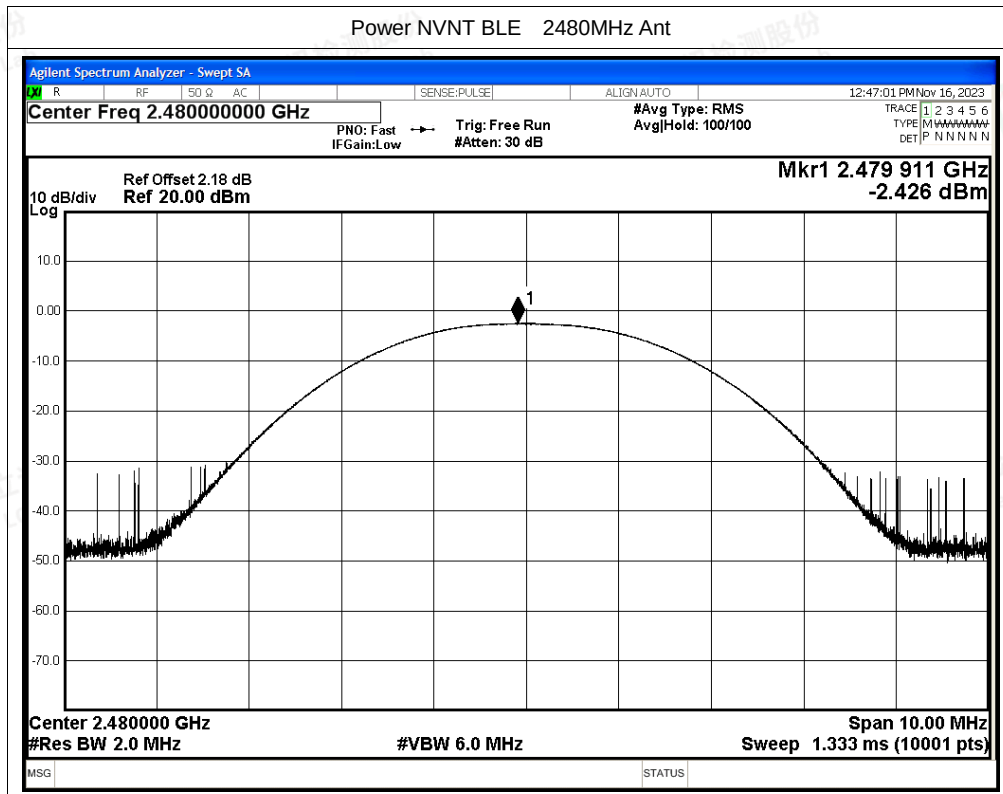


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A.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE	2402	Ant	-18.14	8	Pass
NVNT	BLE	2440	Ant	-17.59	8	Pass
NVNT	BLE	2480	Ant	-19.42	8	Pass



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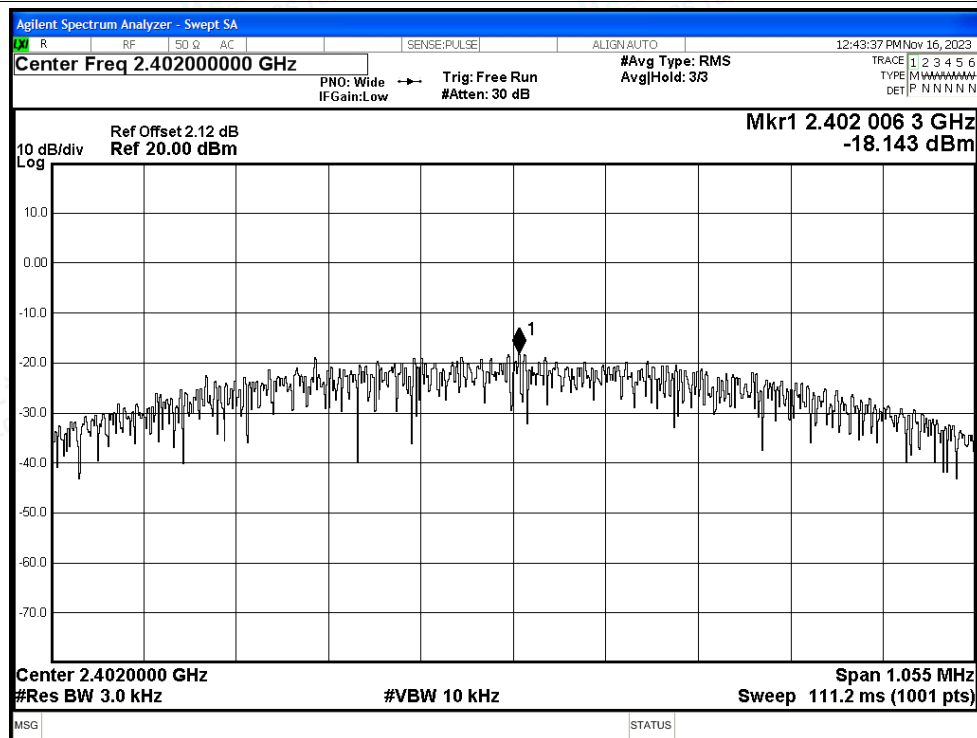
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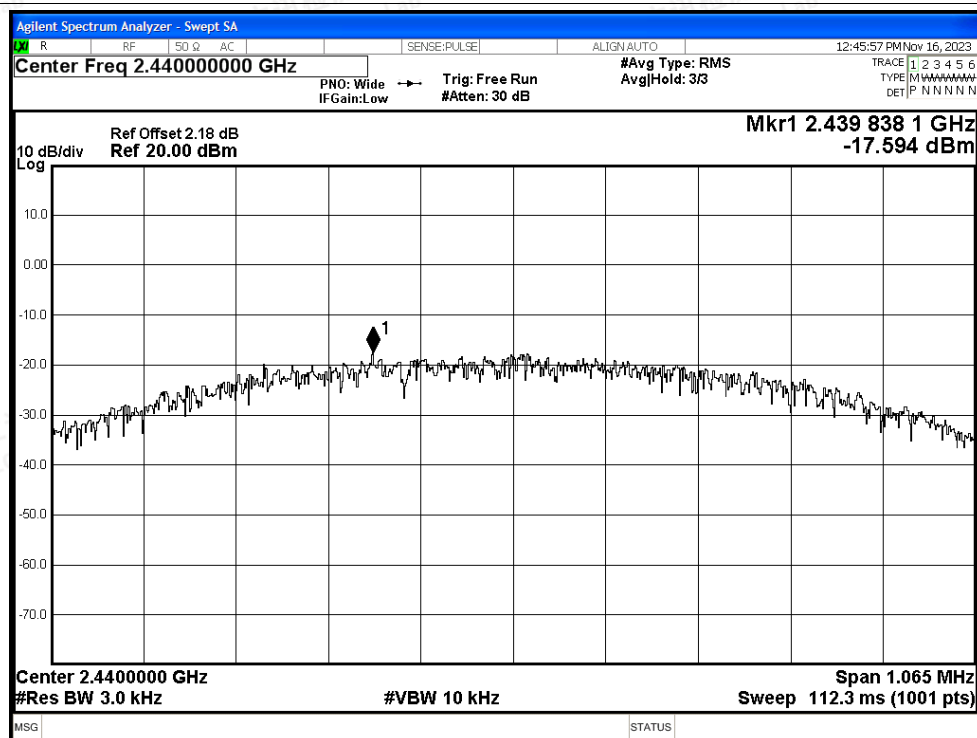


Test Graphs

PSD NVNT BLE 2402MHz Ant



PSD NVNT BLE 2440MHz Ant

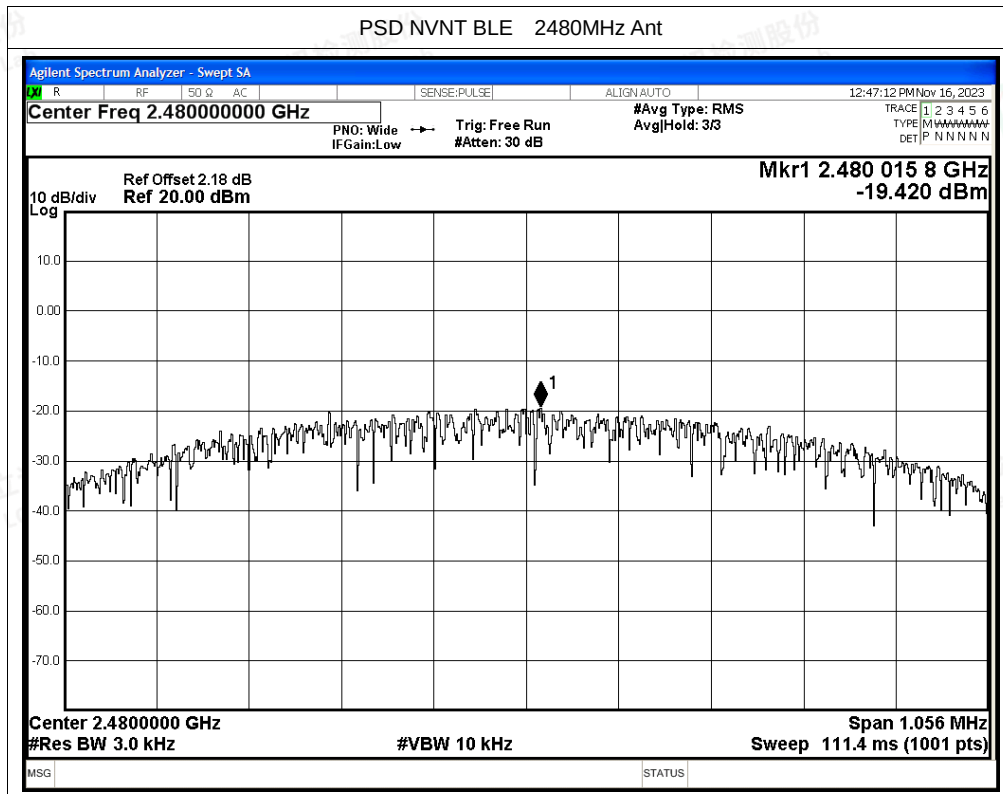


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A.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant	-54.68	-20	Pass
NVNT	BLE	2480	Ant	-52.07	-20	Pass



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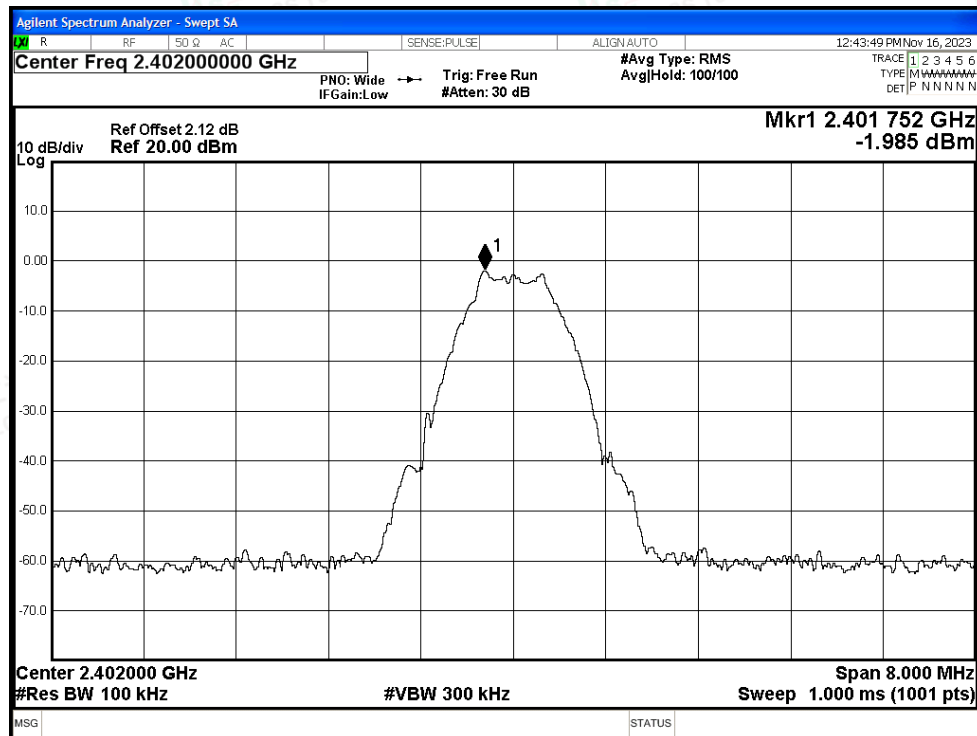
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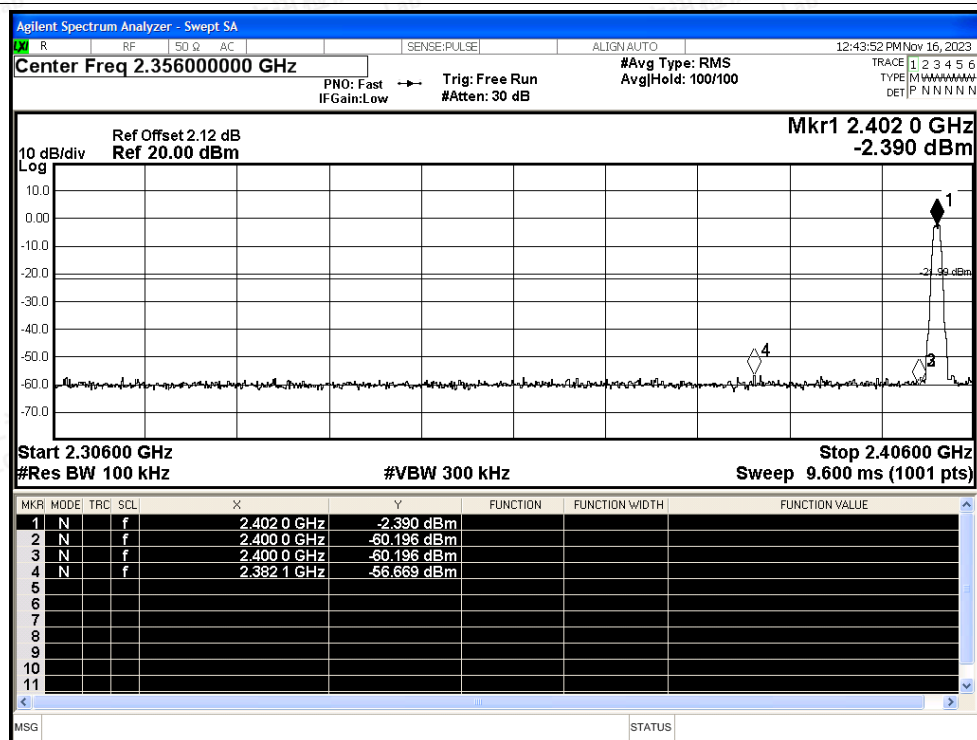


Test Graphs

Band Edge NVNT BLE 2402MHz Ant Ref



Band Edge NVNT BLE 2402MHz Ant Emission

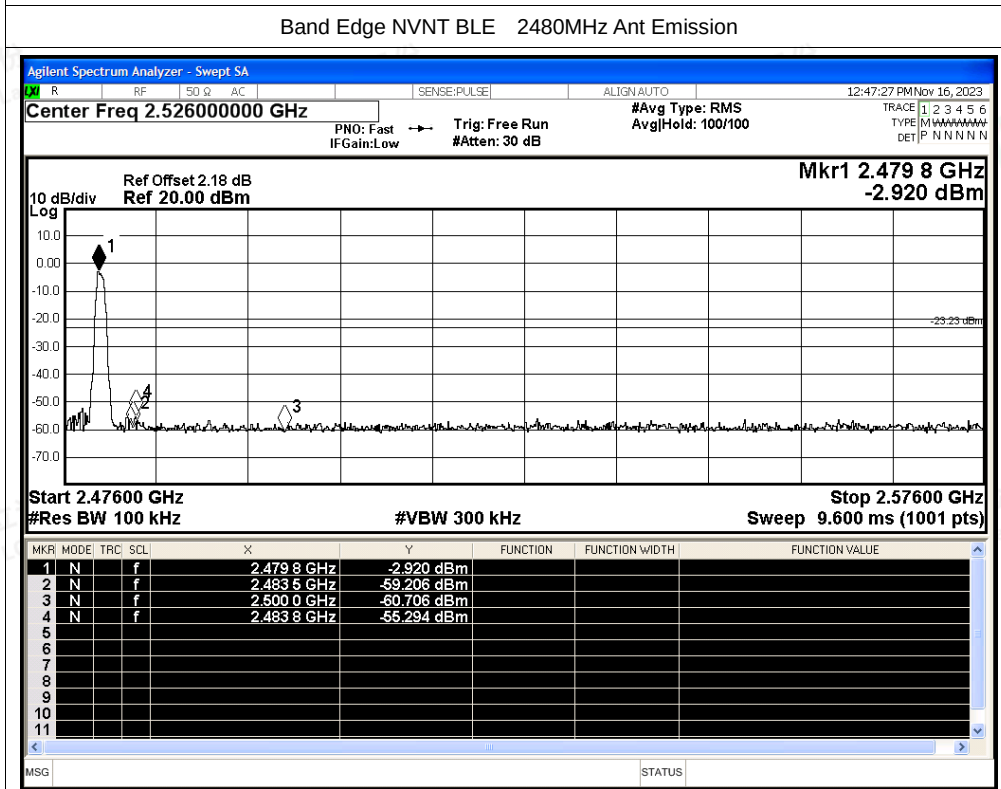
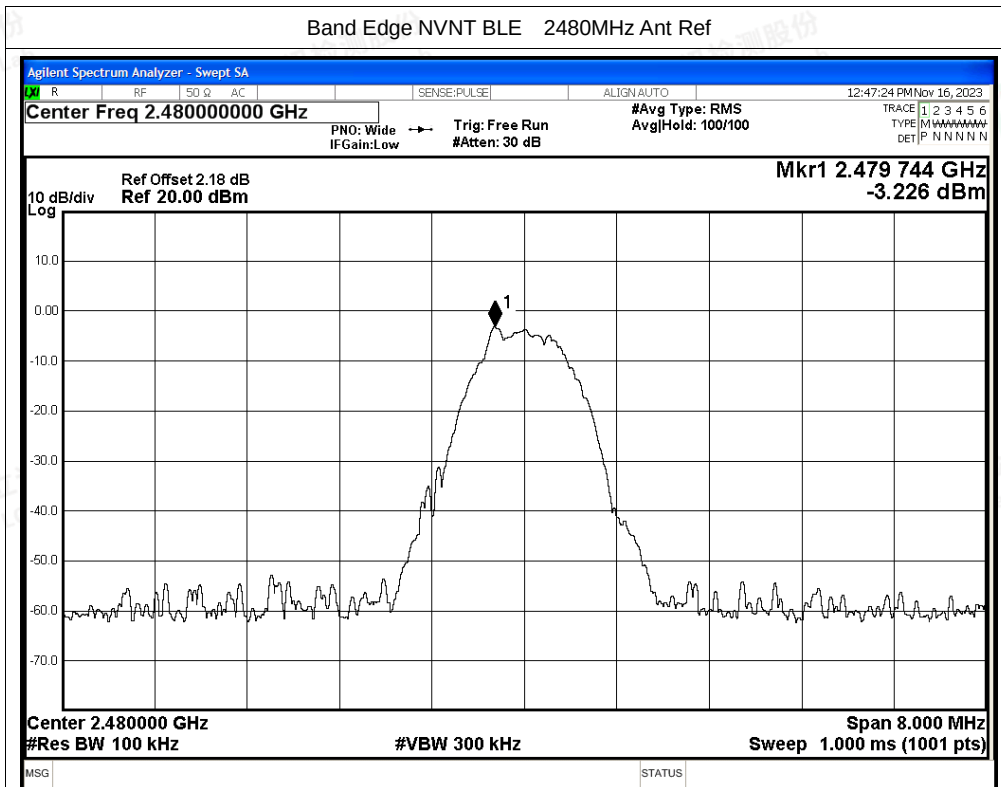


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A.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE	2402	Ant	-53.44	-20	Pass
NVNT	BLE	2440	Ant	-53.63	-20	Pass
NVNT	BLE	2480	Ant	-52.49	-20	Pass



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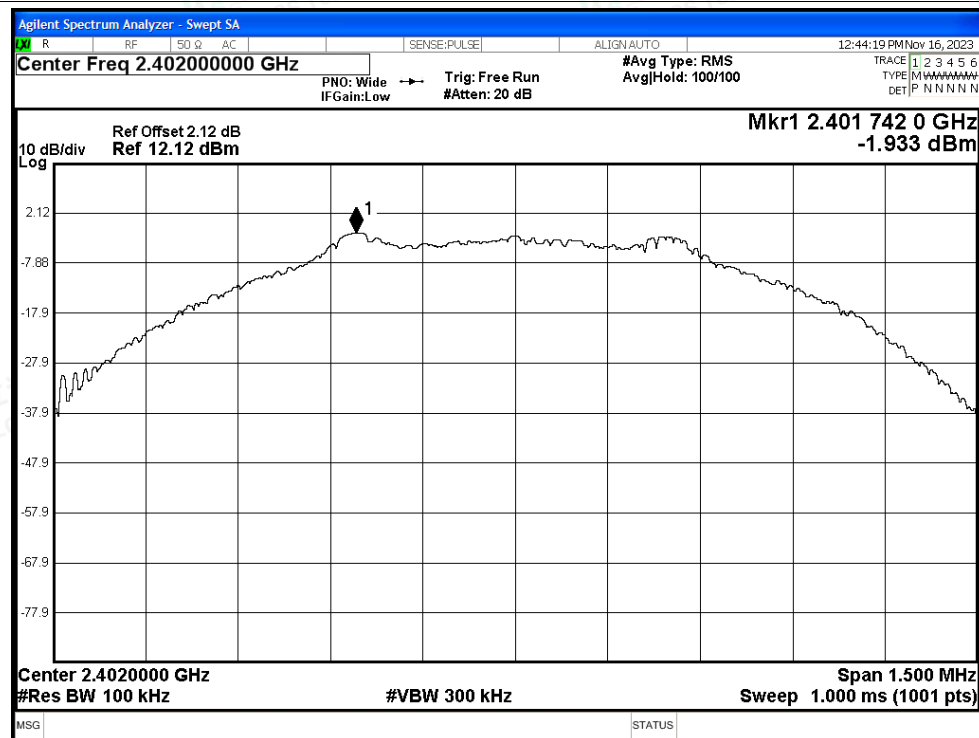
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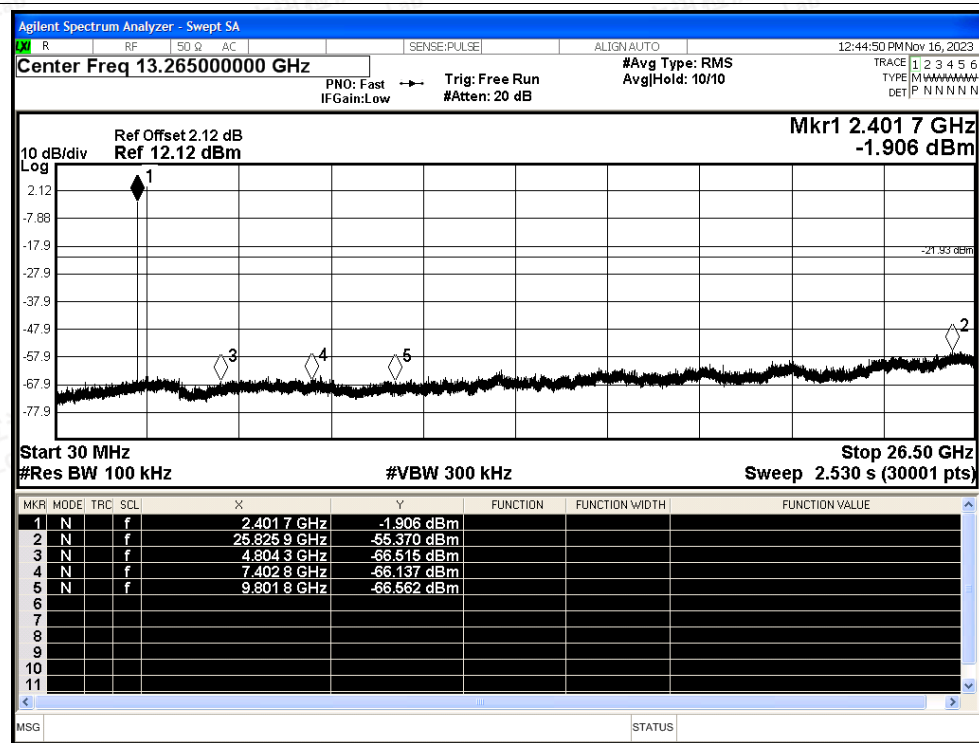


Test Graphs

Tx. Spurious NVNT BLE 2402MHz Ant Ref



Tx. Spurious NVNT BLE 2402MHz Ant Emission

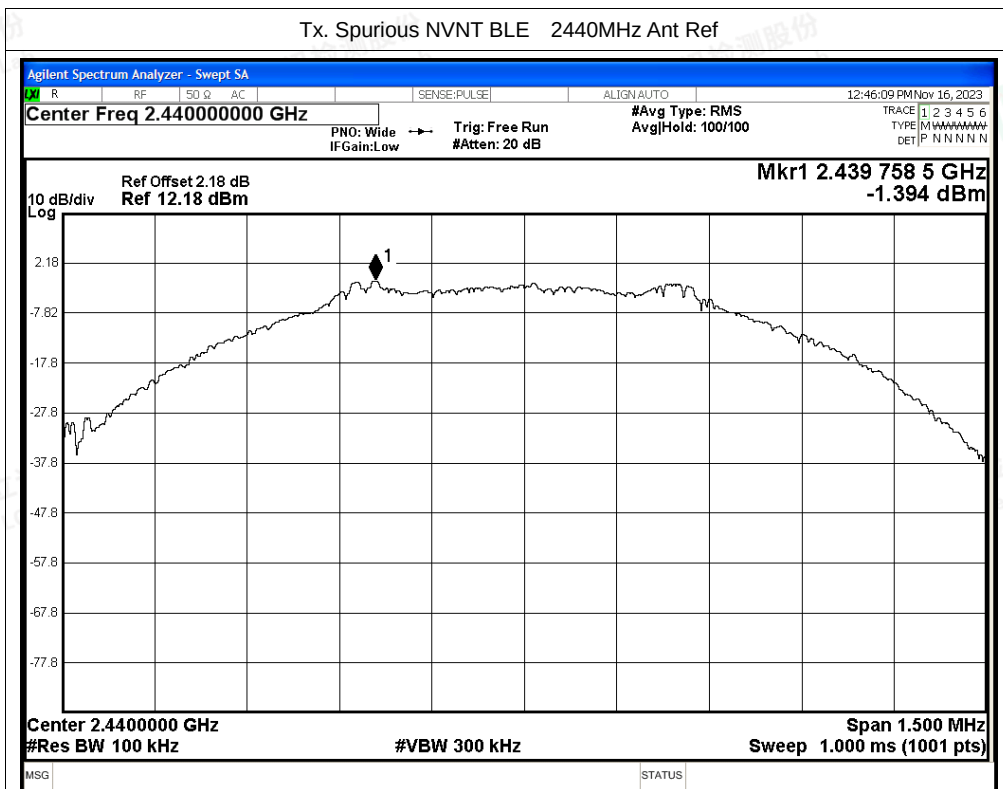


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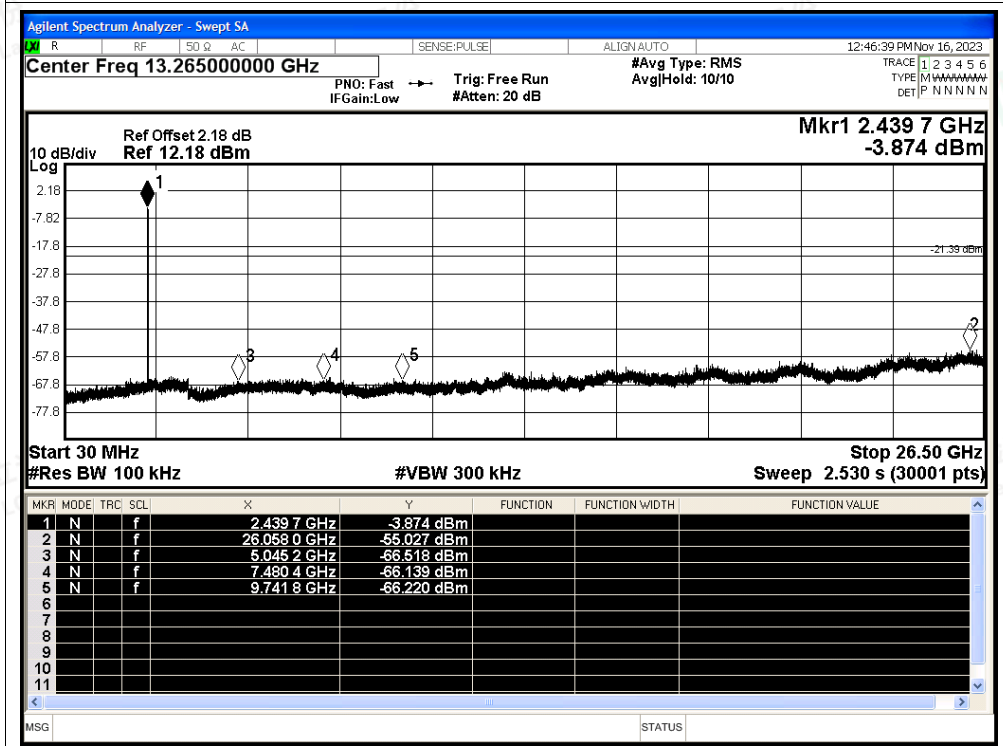
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Tx. Spurious NVNT BLE 2440MHz Ant Emission

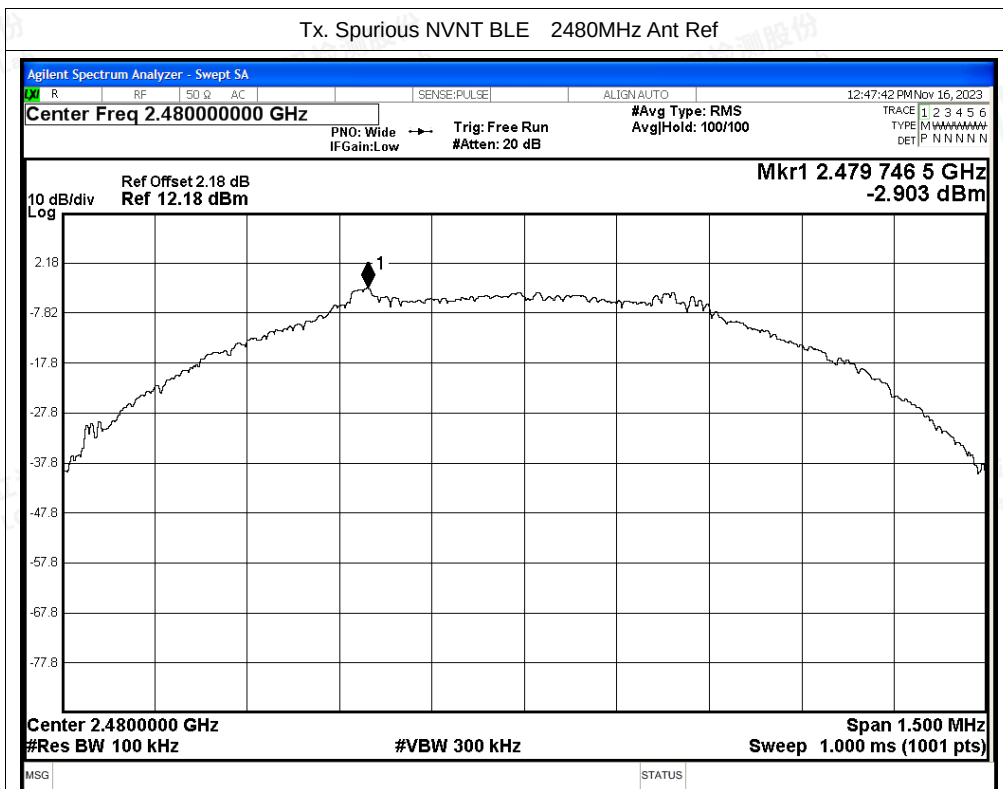


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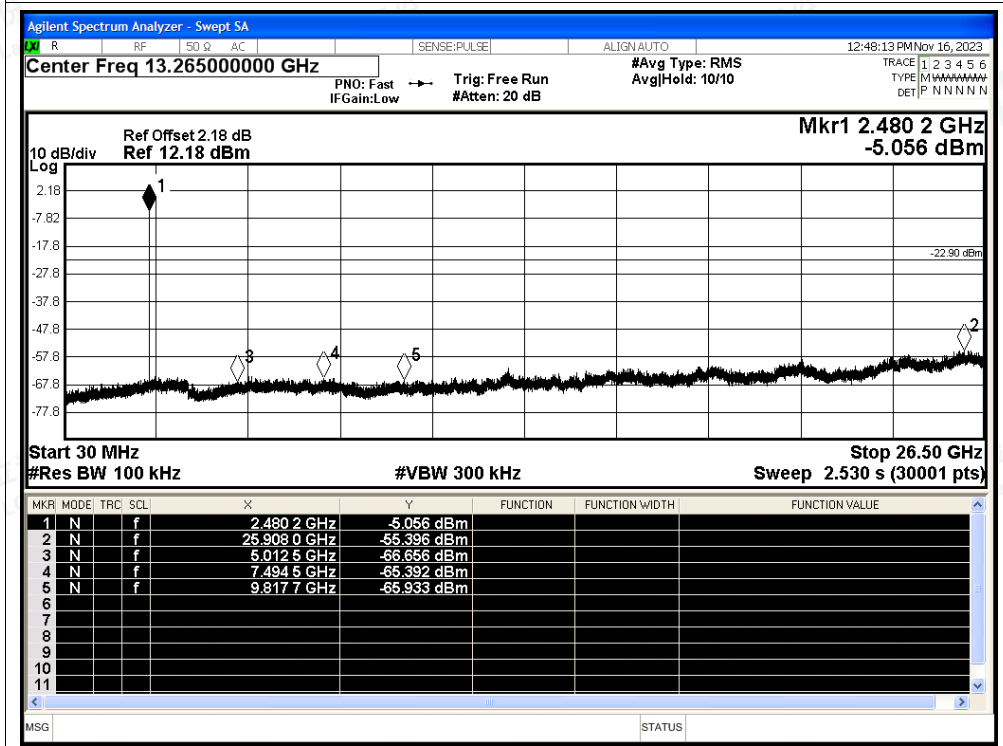
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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Tx. Spurious NVNT BLE 2480MHz Ant Emission



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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	61.36	2.12	2.61



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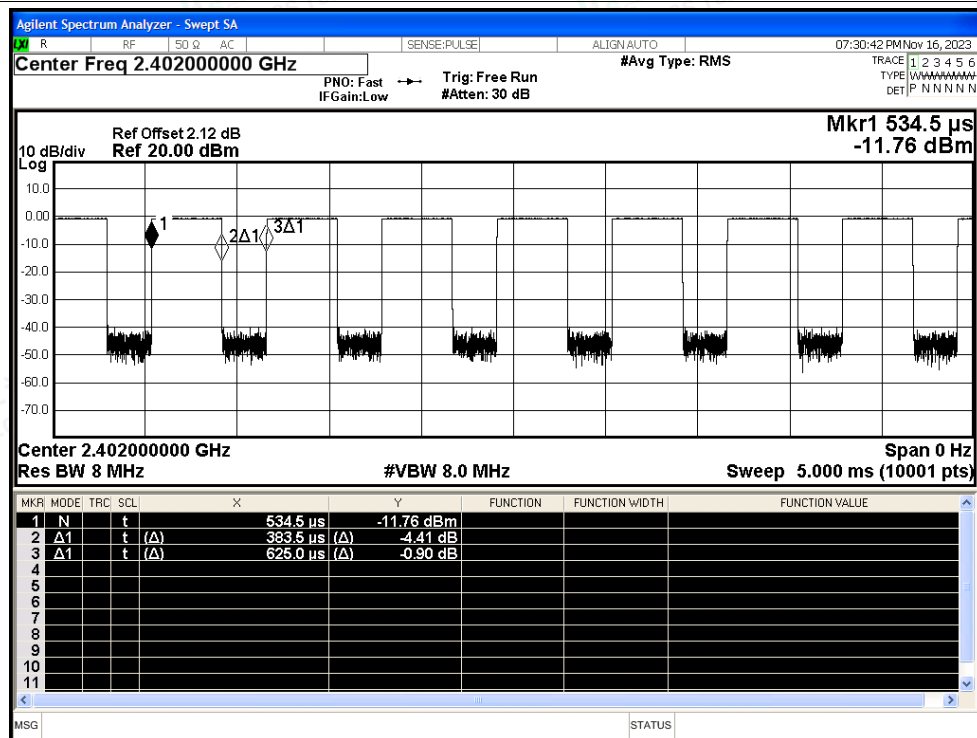
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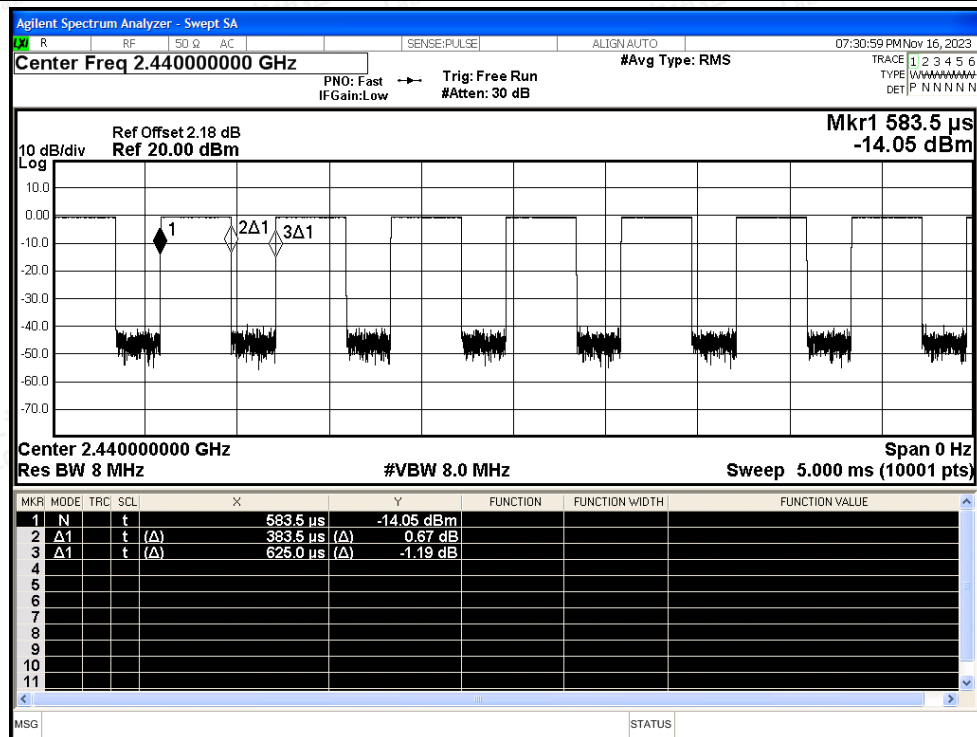


Test Graphs

Duty Cycle NVNT BLE 2402MHz Ant



Duty Cycle NVNT BLE 2440MHz Ant

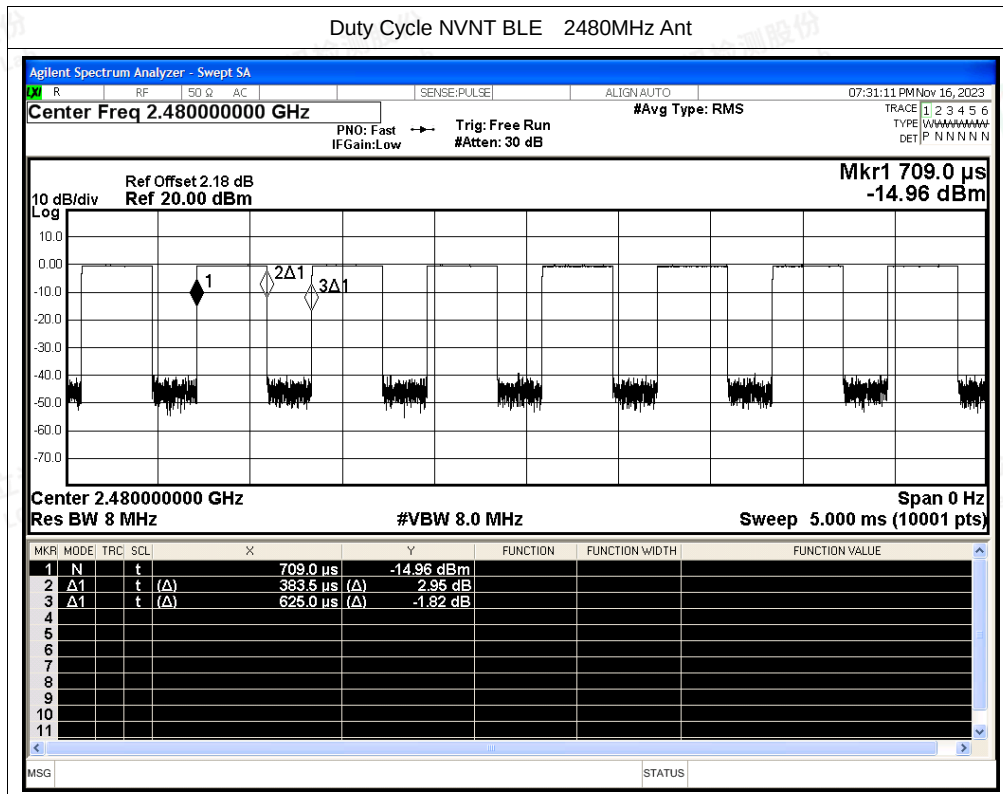


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A.7 Restrict Band

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	-49.63	2	47.63	Peak	74	Pass
NVNT	BLE	2402	Ant	2310	-57.63	2	39.63	Average	54	Pass
NVNT	BLE	2402	Ant	2348.016	-47.18	2	50.08	Peak	74	Pass
NVNT	BLE	2402	Ant	2389.872	-57.23	2	40.03	Average	54	Pass
NVNT	BLE	2402	Ant	2390	-49.33	2	47.93	Peak	74	Pass
NVNT	BLE	2402	Ant	2390	-57.28	2	39.98	Average	54	Pass
NVNT	BLE	2480	Ant	2483.5	-49.71	2	47.55	Peak	74	Pass
NVNT	BLE	2480	Ant	2483.5	-55.58	2	41.68	Average	54	Pass
NVNT	BLE	2480	Ant	2483.728	-38.41	2	58.85	Peak	74	Pass
NVNT	BLE	2480	Ant	2483.512	-55.58	2	41.68	Average	54	Pass
NVNT	BLE	2480	Ant	2500	-50.52	2	46.74	Peak	74	Pass
NVNT	BLE	2480	Ant	2500	-56.76	2	40.5	Average	54	Pass



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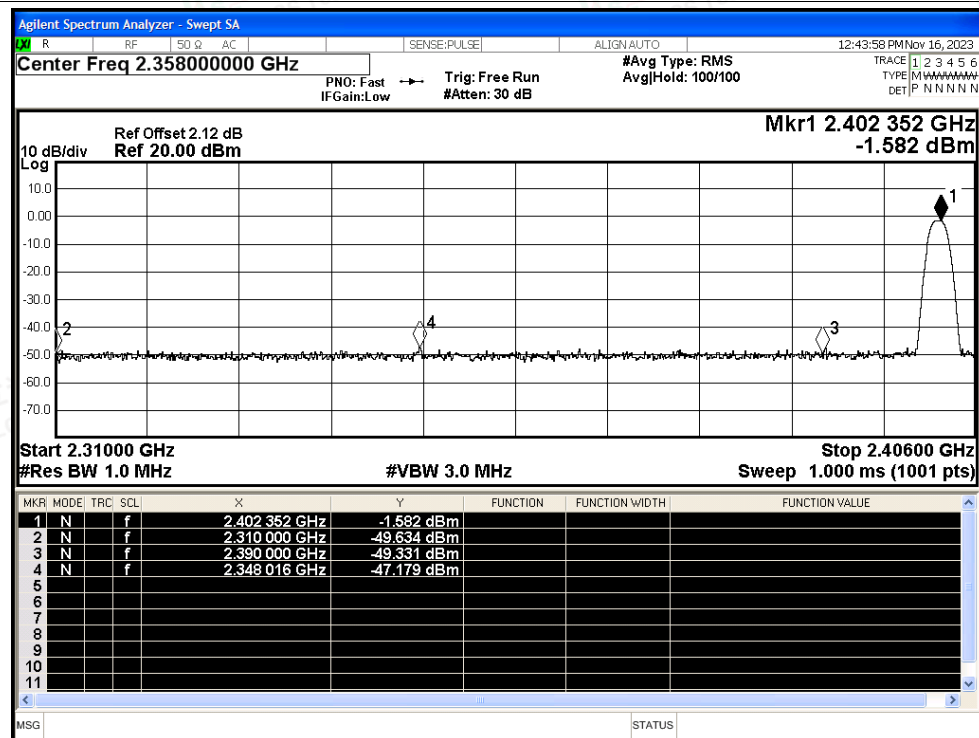
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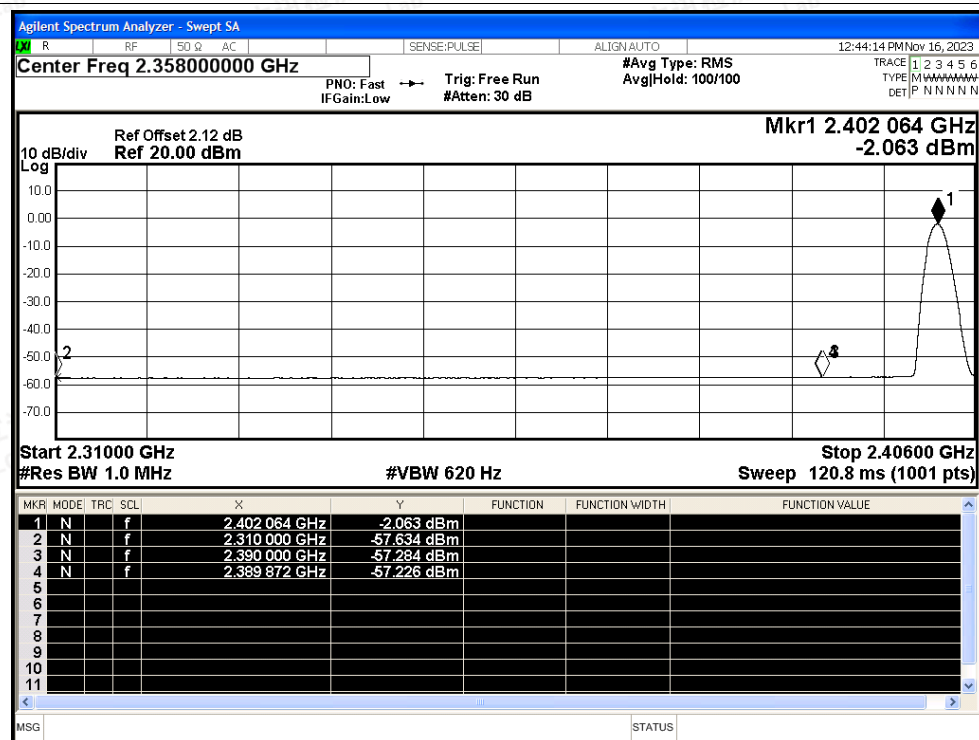


Test Graphs

Restrict Band NVNT BLE 2402MHz Ant Peak



Restrict Band NVNT BLE 2402MHz Ant Average

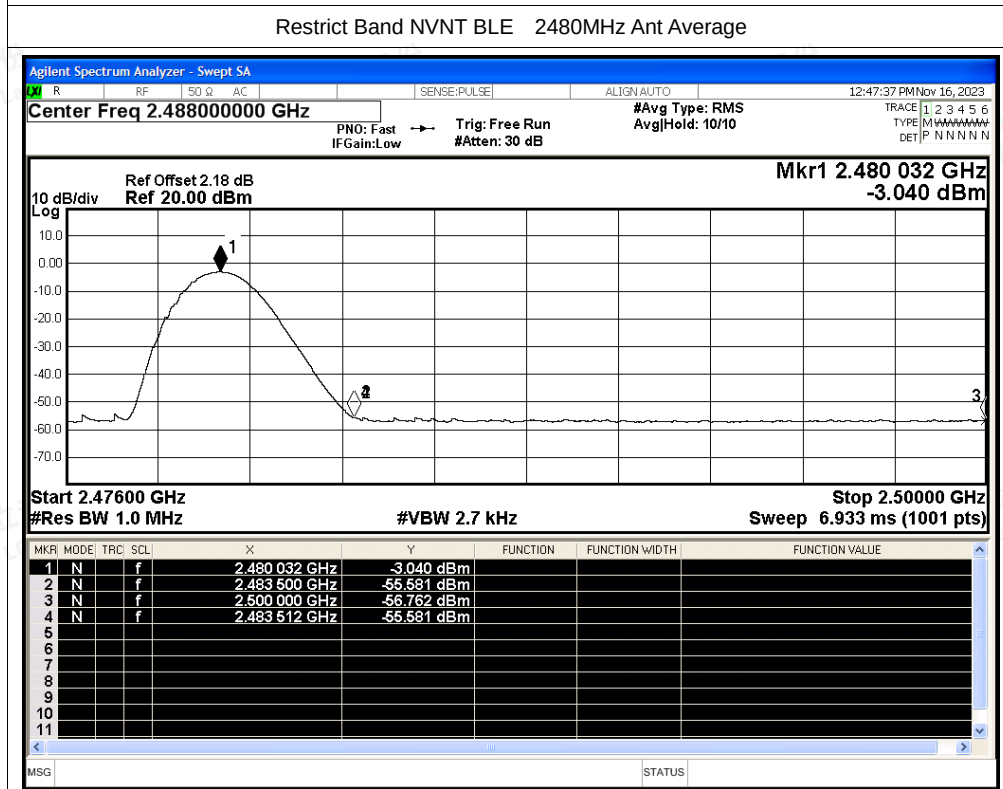
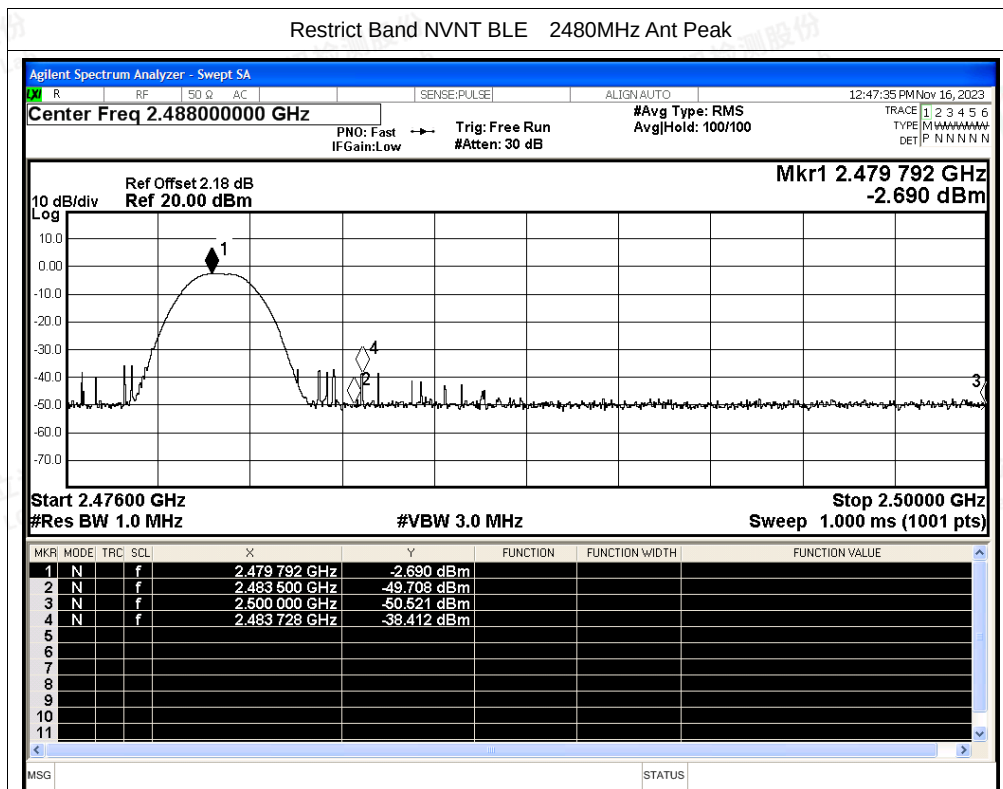


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