



Appendix A

RF Test Data for 2.4G (Conducted Measurement)

Product Name: RGB dual system three mode mechanical keyboard

Test Model: MK870

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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A.1 -6dB Bandwidth

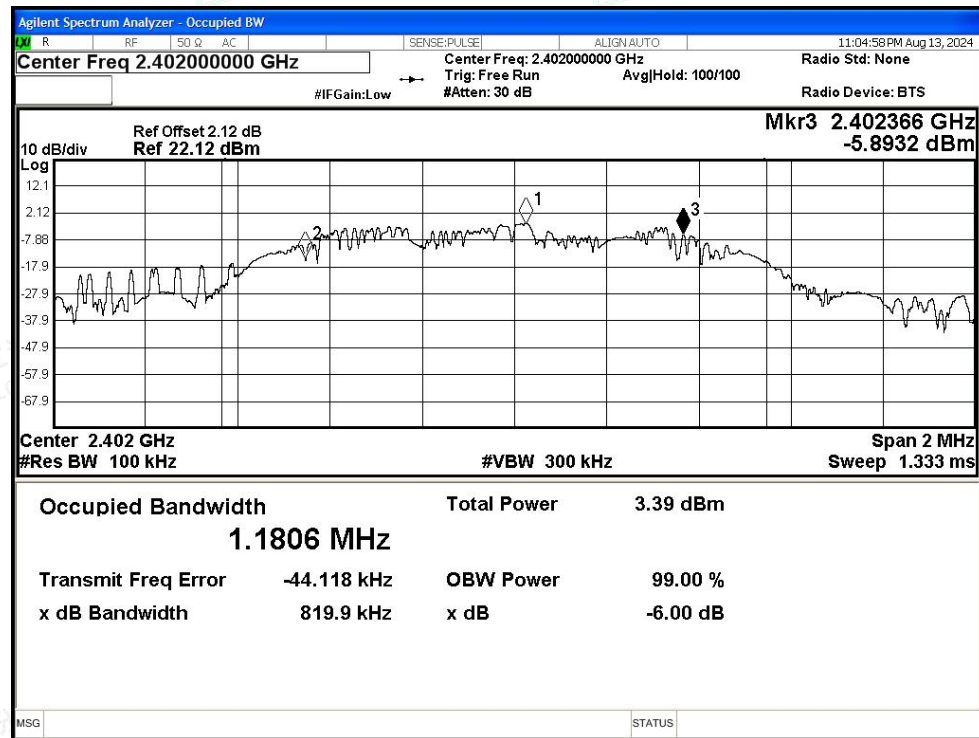
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	2.4G	2402	Ant1	0.82	≥ 0.5	Pass
NVNT	2.4G	2446	Ant1	0.816	≥ 0.5	Pass
NVNT	2.4G	2479	Ant1	0.779	≥ 0.5	Pass



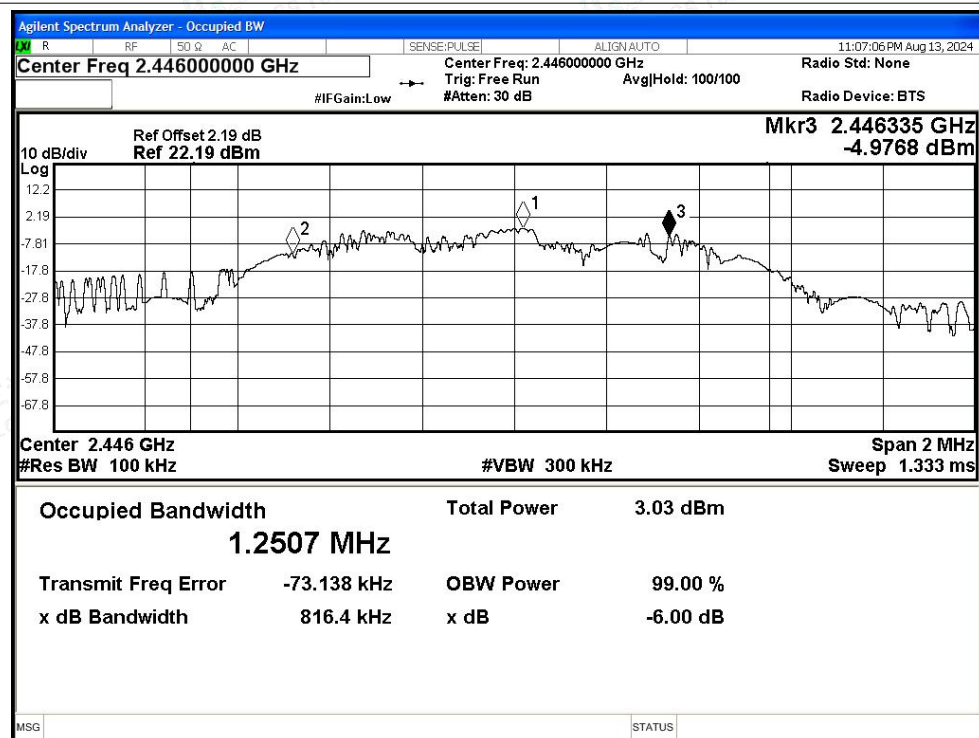


Test Graphs

-6dB Bandwidth NVNT 2.4G 2402MHz Ant1



-6dB Bandwidth NVNT 2.4G 2446MHz Ant1

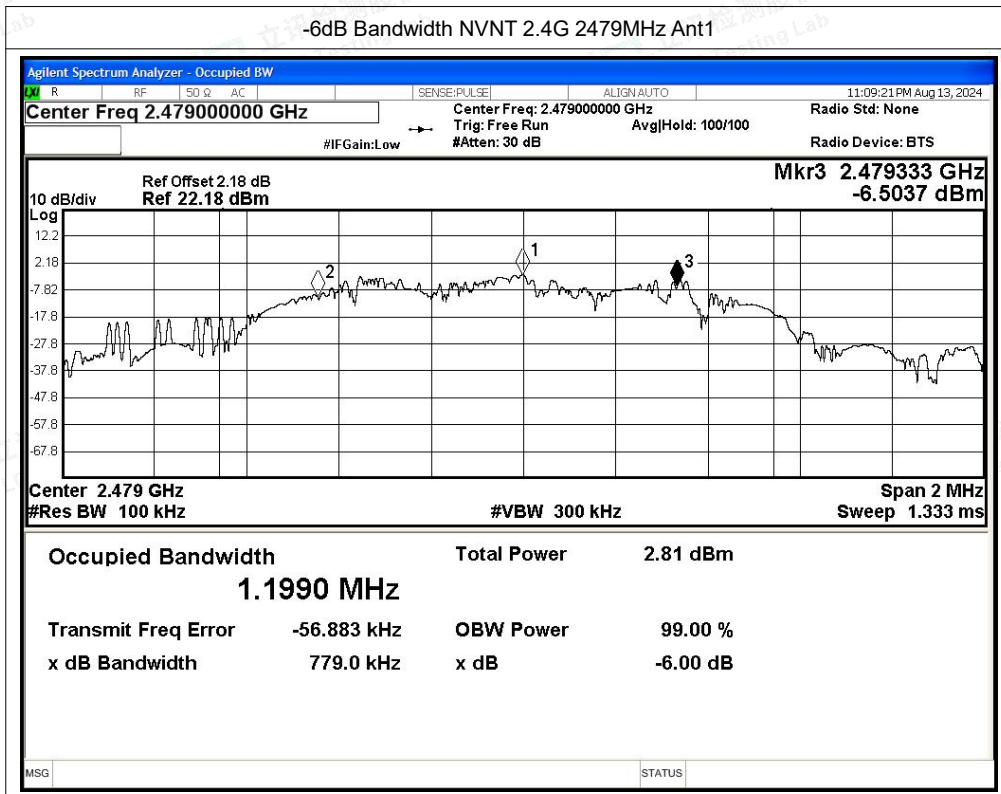


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A.2 Maximum Conducted Output Power

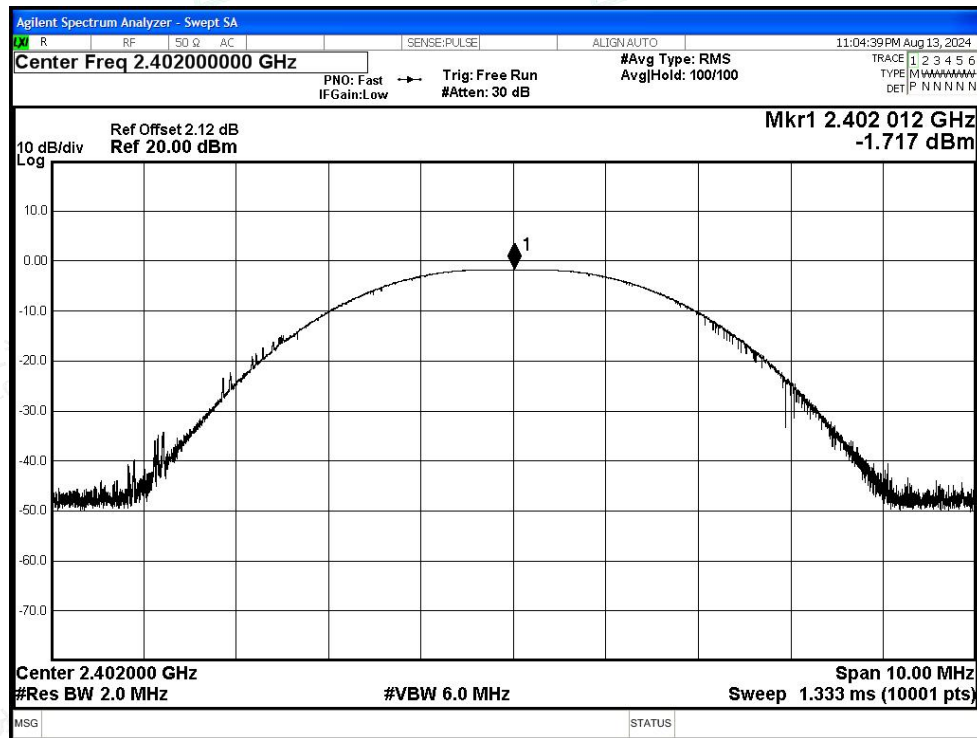
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2402	Ant1	-1.72	30	Pass
NVNT	2.4G	2446	Ant1	-1.94	30	Pass
NVNT	2.4G	2479	Ant1	-2.02	30	Pass



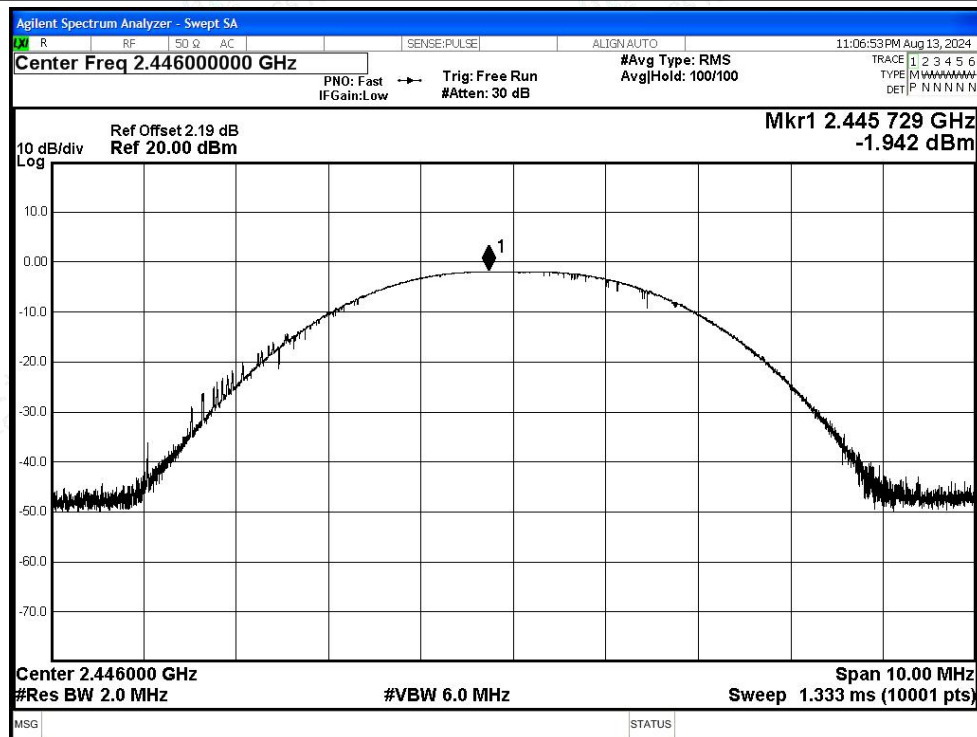


Test Graphs

Power NVNT 2.4G 2402MHz Ant1



Power NVNT 2.4G 2446MHz Ant1

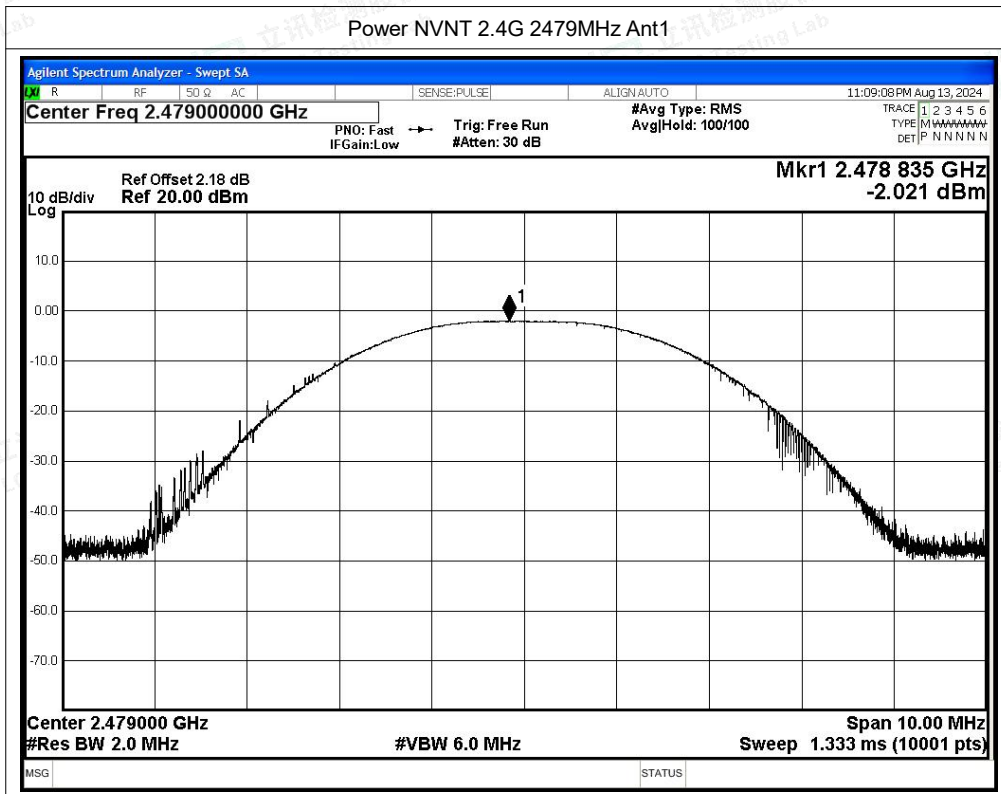


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A.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	2.4G	2402	Ant1	-13.26	8	Pass
NVNT	2.4G	2446	Ant1	-12.73	8	Pass
NVNT	2.4G	2479	Ant1	-12.84	8	Pass



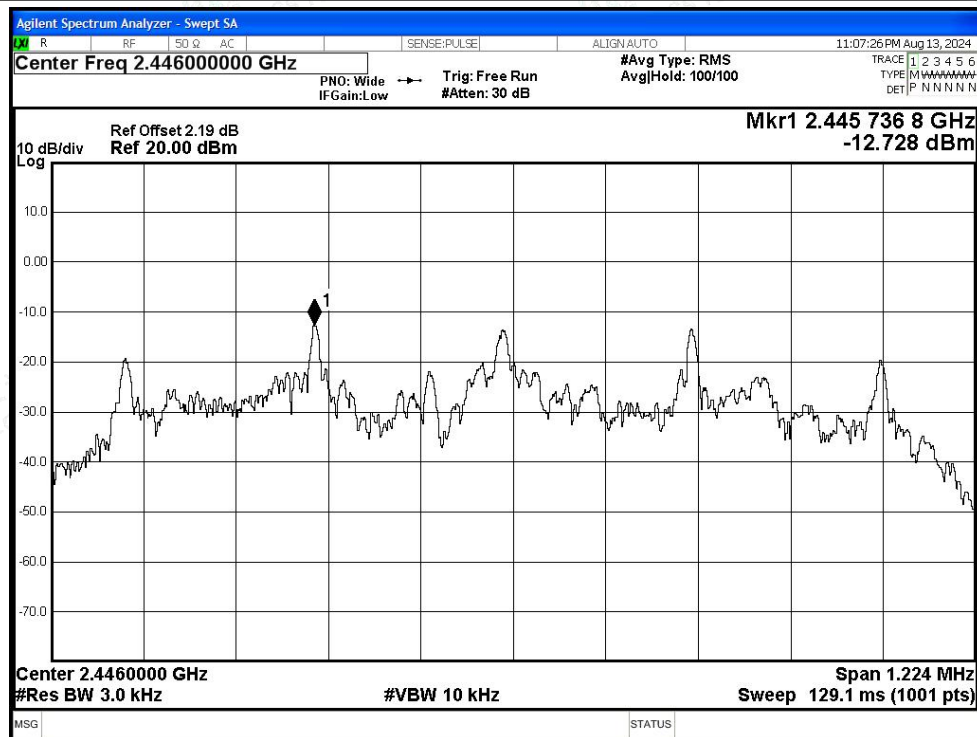


Test Graphs

PSD NVNT 2.4G 2402MHz Ant1



PSD NVNT 2.4G 2446MHz Ant1

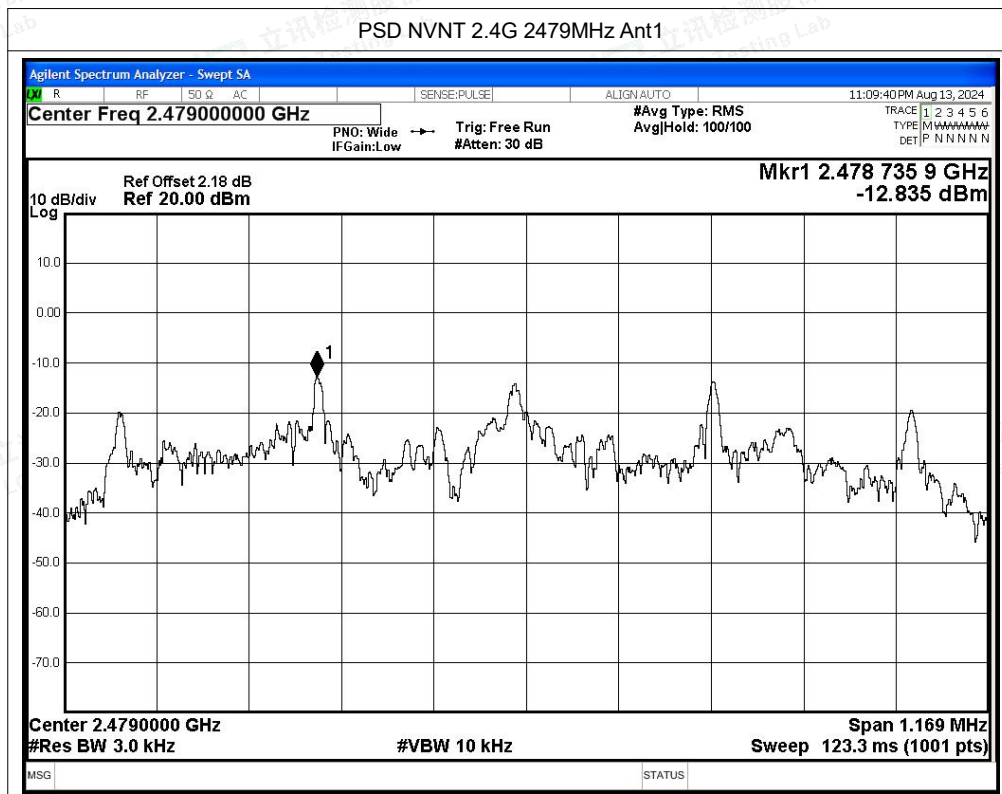


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A.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2402	Ant1	-52.14	-20	Pass
NVNT	2.4G	2479	Ant1	-52.14	-20	Pass

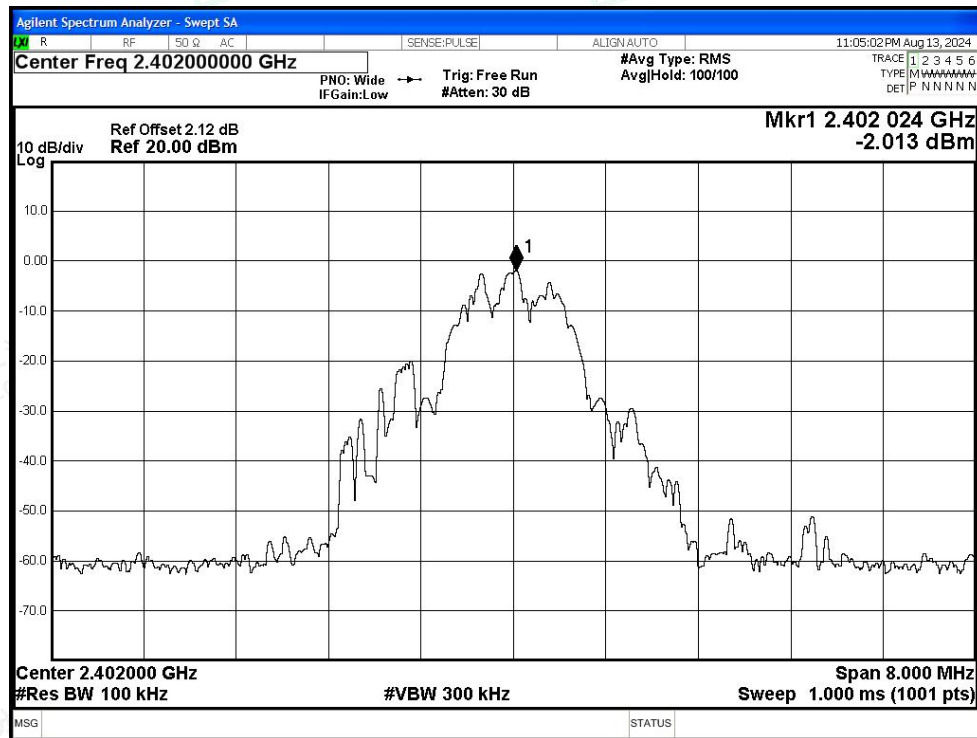


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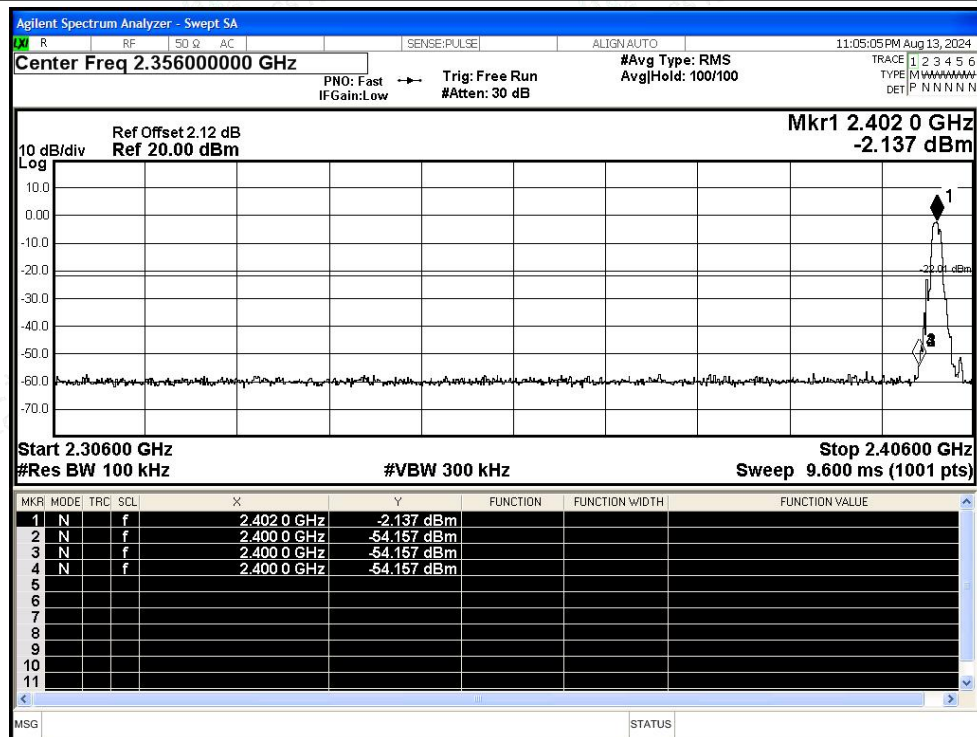


Test Graphs

Band Edge NVNT 2.4G 2402MHz Ant1 Ref



Band Edge NVNT 2.4G 2402MHz Ant1 Emission



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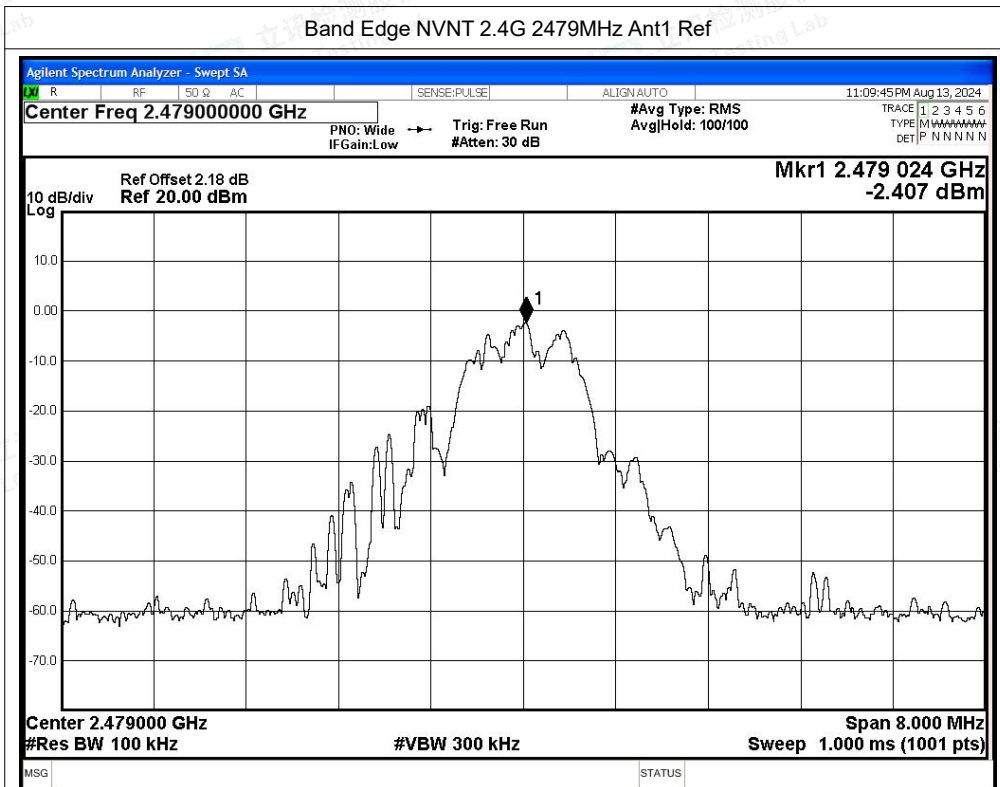
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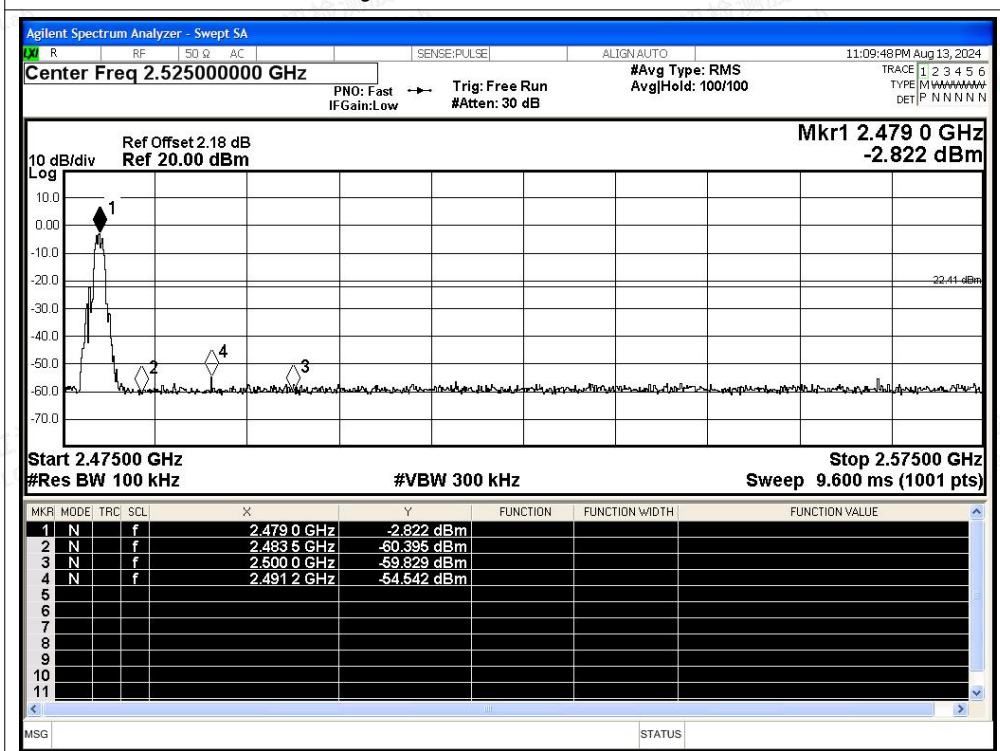
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Band Edge NVNT 2.4G 2479MHz Ant1 Ref



Band Edge NVNT 2.4G 2479MHz Ant1 Emission



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A.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2402	Ant1	-53.24	-20	Pass
NVNT	2.4G	2446	Ant1	-47.72	-20	Pass
NVNT	2.4G	2479	Ant1	-52.26	-20	Pass

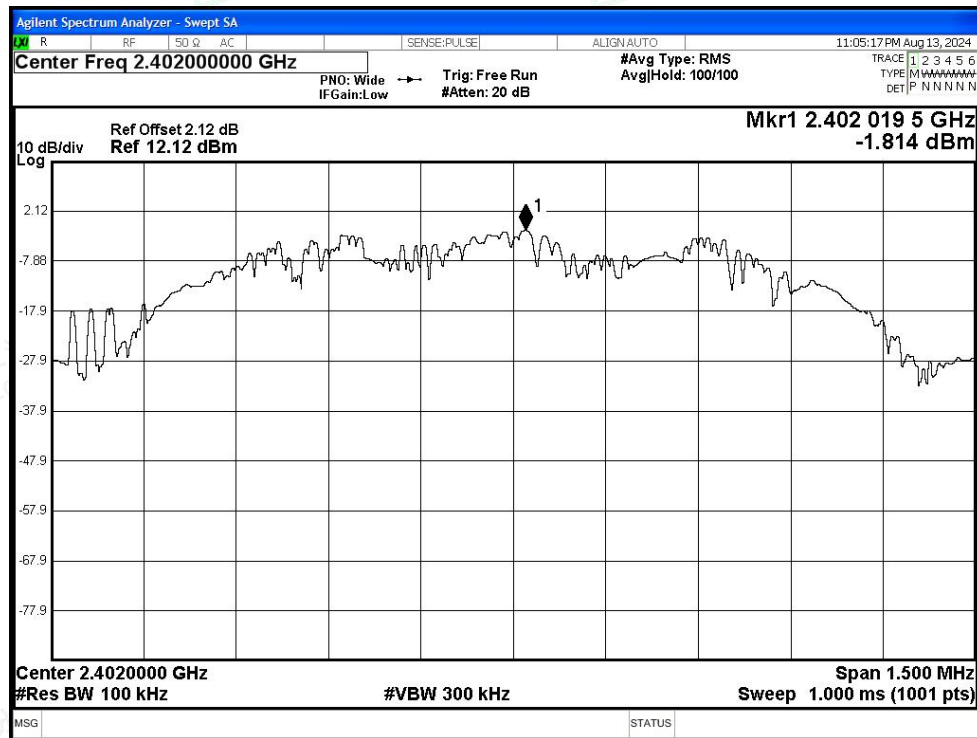


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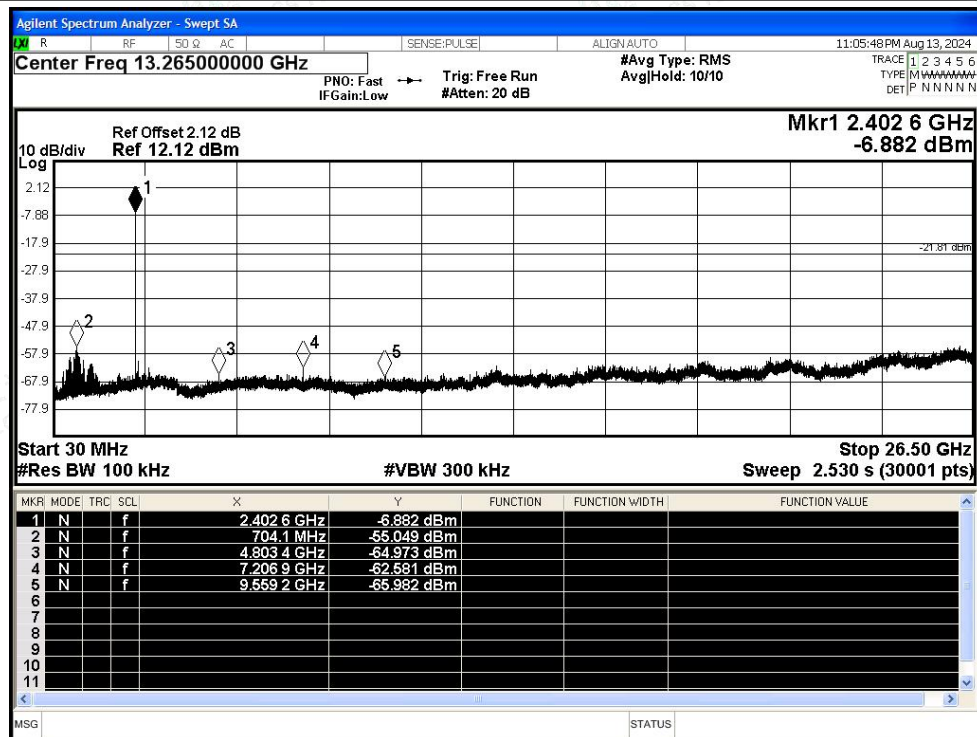


Test Graphs

Tx. Spurious NVNT 2.4G 2402MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2402MHz Ant1 Emission



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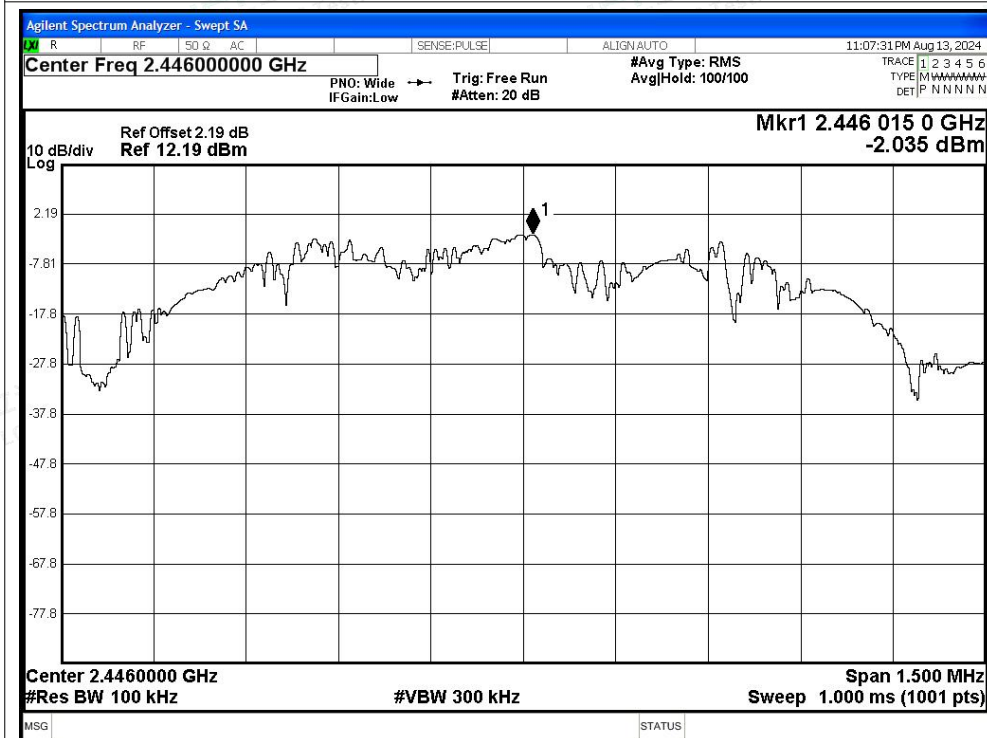
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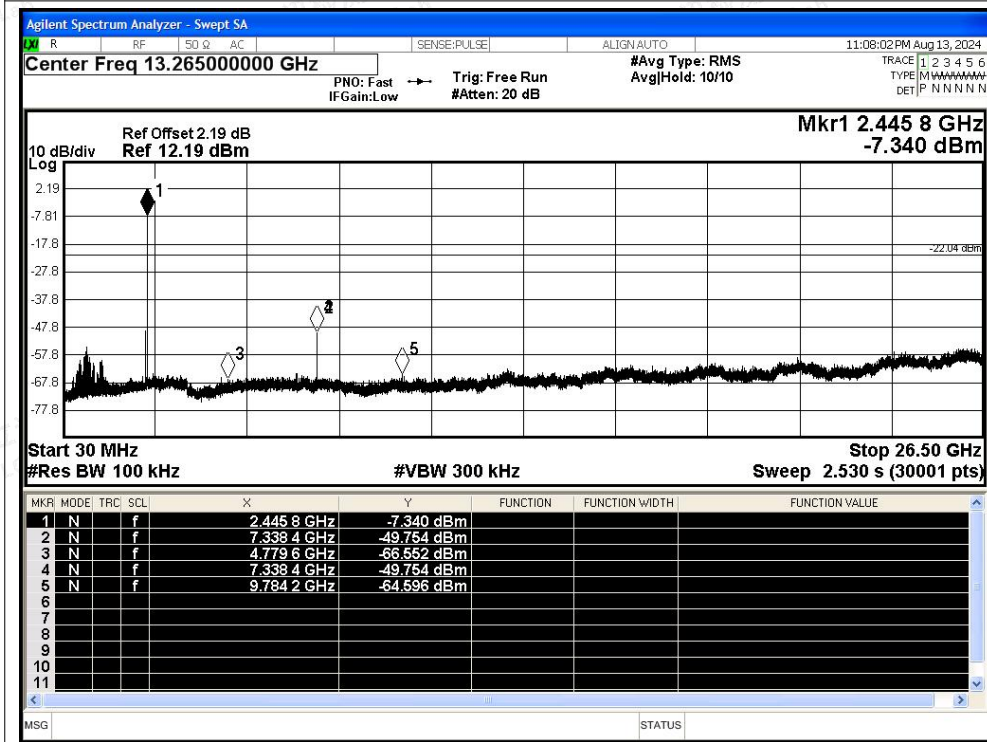
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Tx. Spurious NVNT 2.4G 2446MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2446MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

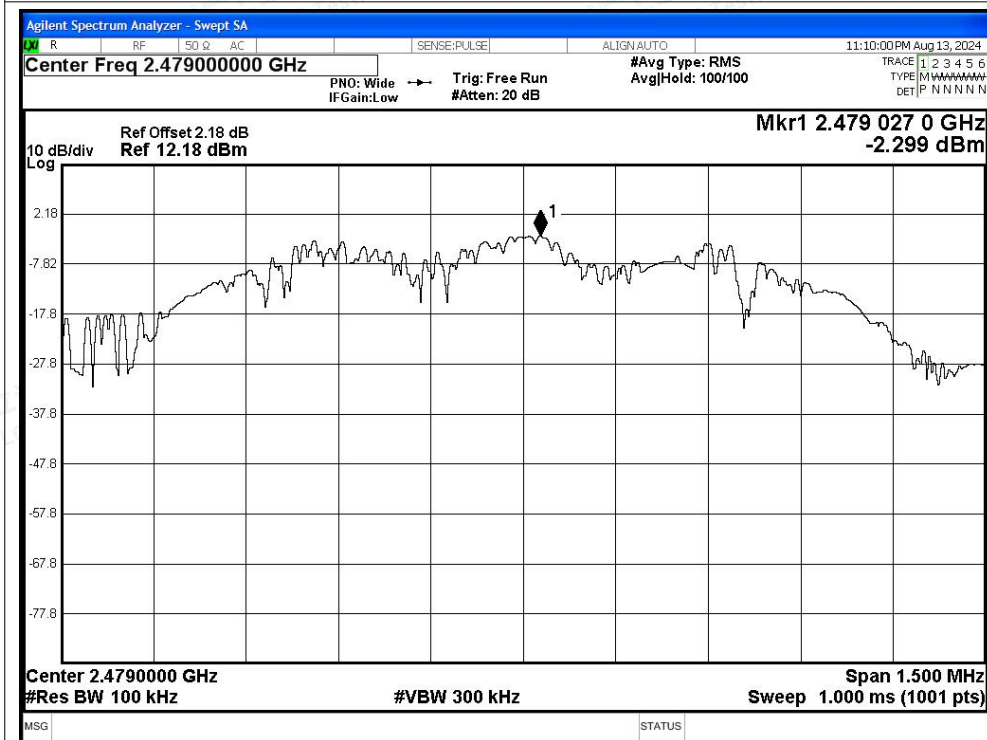
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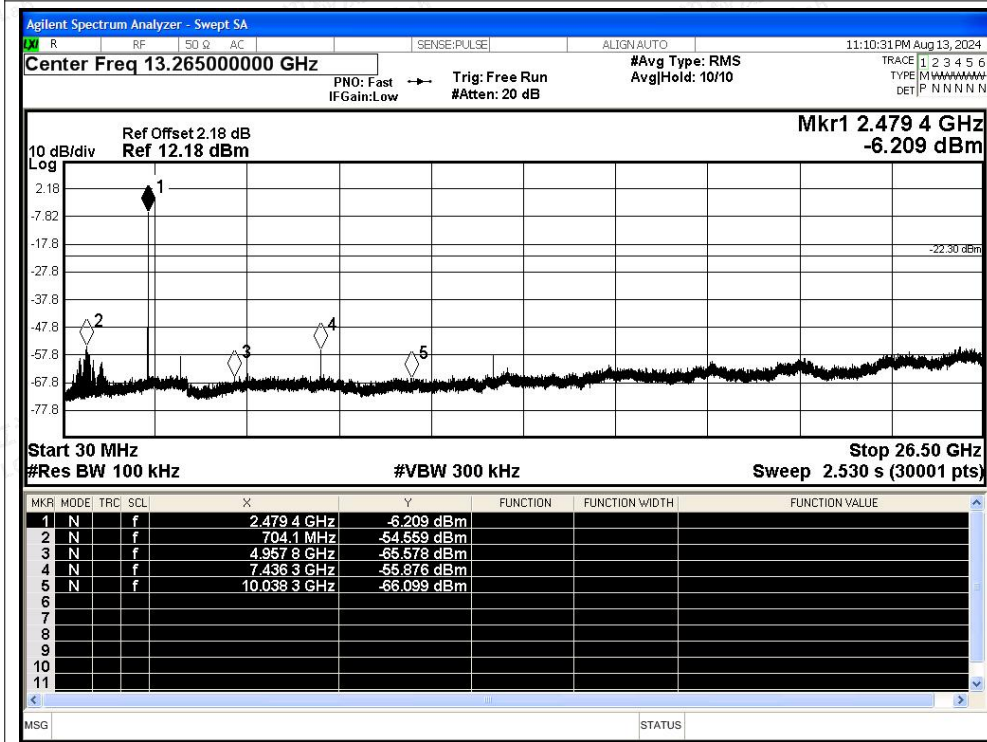
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Tx. Spurious NVNT 2.4G 2479MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2479MHz Ant1 Emission



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A.6 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	2.4G	2402	Ant1	19.25	7.16	4.47
NVNT	2.4G	2446	Ant1	19.12	7.19	4.5
NVNT	2.4G	2479	Ant1	19.09	7.19	4.51

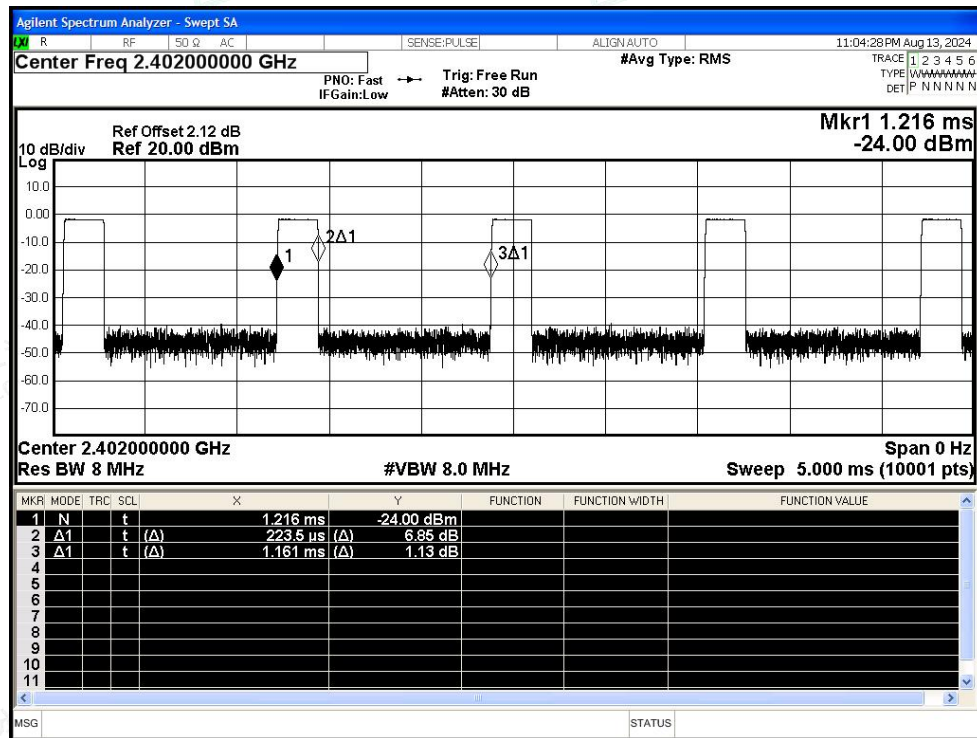


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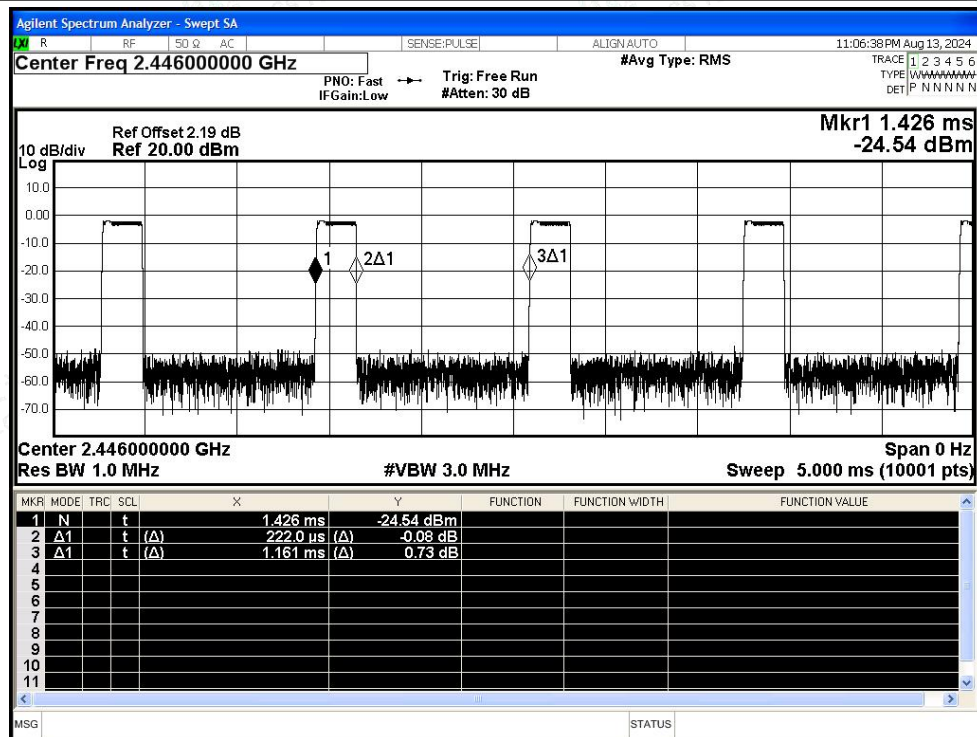


Test Graphs

Duty Cycle NVNT 2.4G 2402MHz Ant1



Duty Cycle NVNT 2.4G 2446MHz Ant1

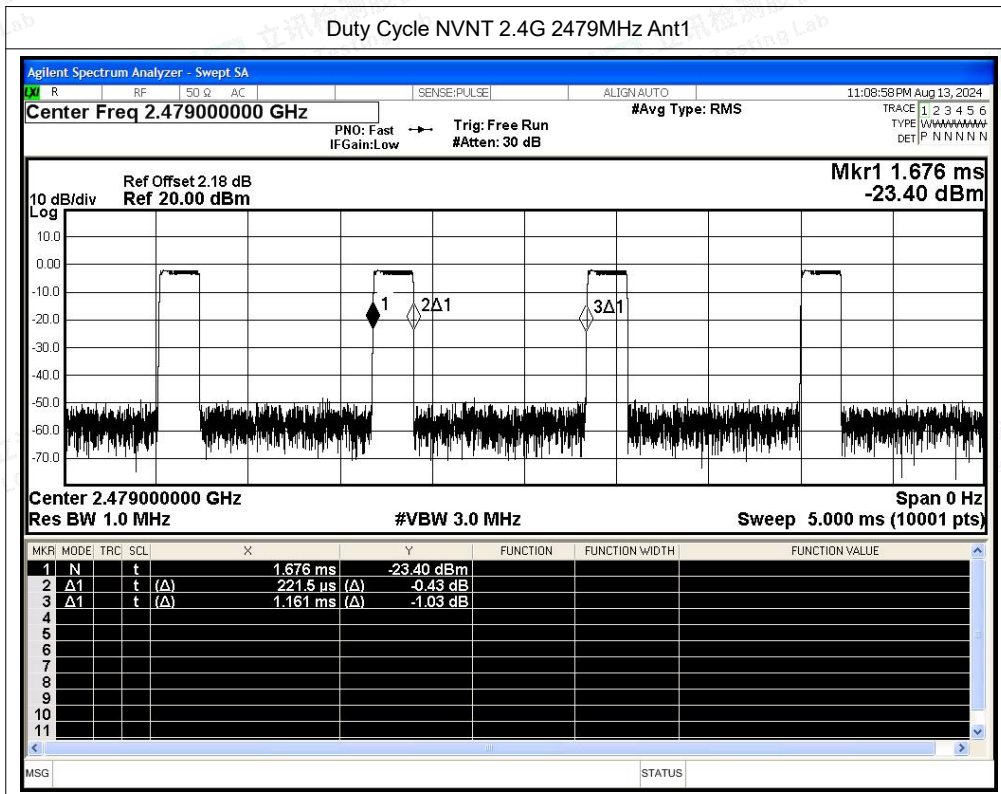


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A.7 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	2.4G	2402	Ant1	2310	-50.61	2	-	46.65	Peak	74	Pass
NVNT	2.4G	2402	Ant1	2310	-58.7	2	7.16	45.72	Average	54	Pass
NVNT	2.4G	2402	Ant1	2362.896	-47.57	2	-	49.69	Peak	74	Pass
NVNT	2.4G	2402	Ant1	2320.848	-57.77	2	7.16	46.65	Average	54	Pass
NVNT	2.4G	2402	Ant1	2390	-49.91	2	-	47.35	Peak	74	Pass
NVNT	2.4G	2402	Ant1	2390	-58.6	2	7.16	45.82	Average	54	Pass
NVNT	2.4G	2479	Ant1	2483.5	-50.68	2	-	46.58	Peak	74	Pass
NVNT	2.4G	2479	Ant1	2483.5	-58.09	2	7.19	46.36	Average	54	Pass
NVNT	2.4G	2479	Ant1	2492.275	-47	2	-	50.26	Peak	74	Pass
NVNT	2.4G	2479	Ant1	2492.975	-57.11	2	7.19	47.34	Average	54	Pass
NVNT	2.4G	2479	Ant1	2500	-50.25	2	-	47.01	Peak	74	Pass
NVNT	2.4G	2479	Ant1	2500	-57.94	2	7.19	46.51	Average	54	Pass



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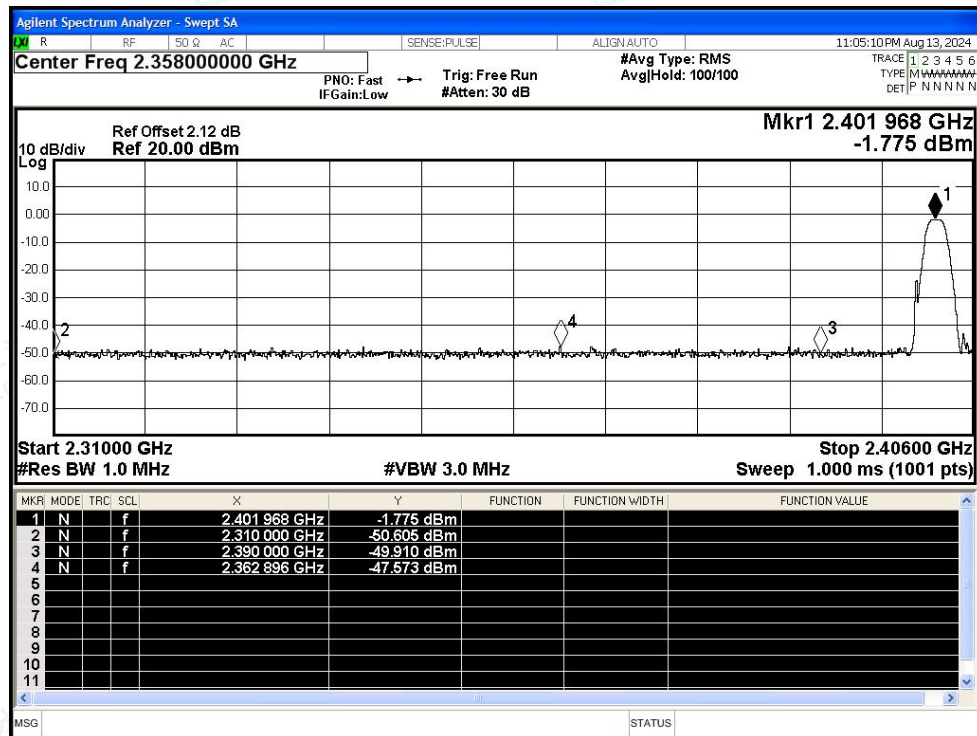
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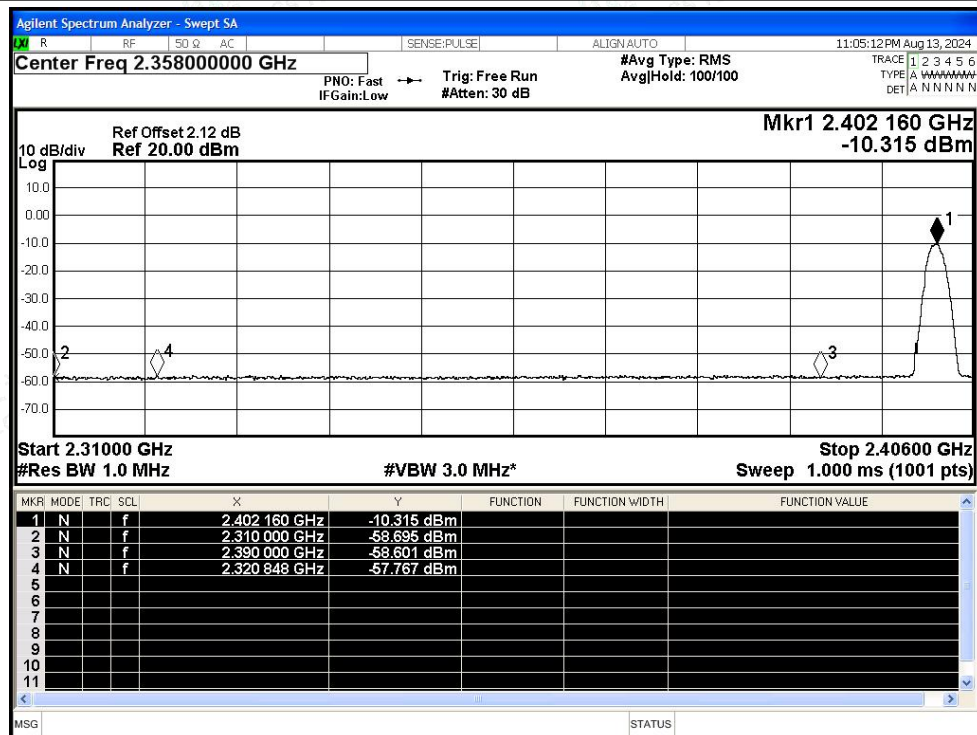


Test Graphs

Restrict Band NVNT 2.4G 2402MHz Ant1 Peak



Restrict Band NVNT 2.4G 2402MHz Ant1 Average



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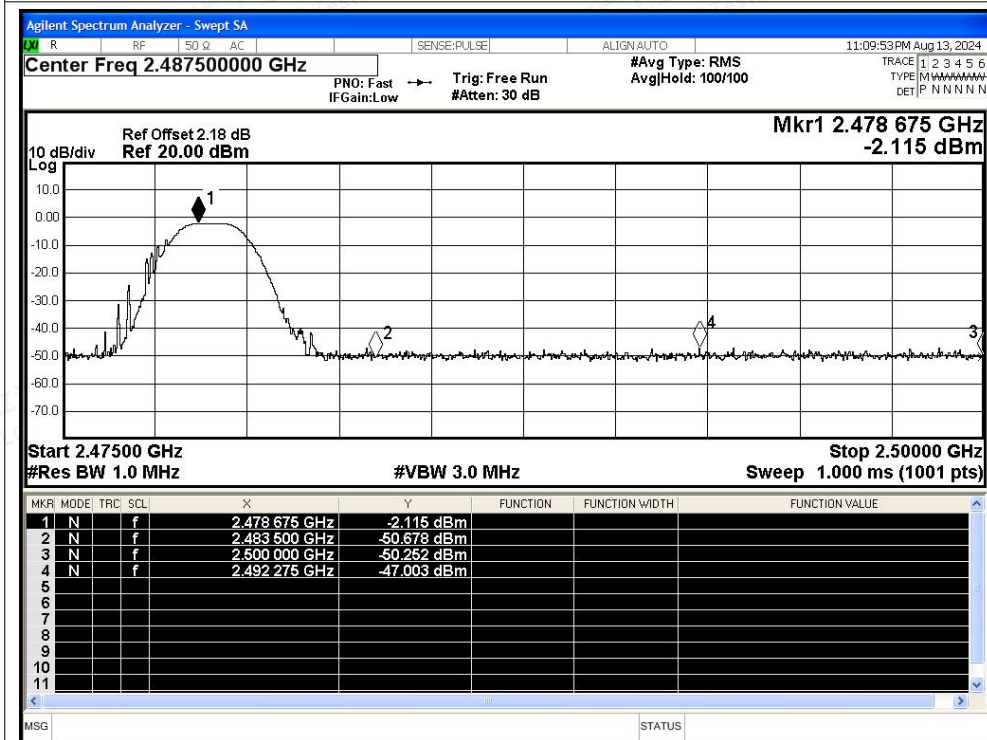
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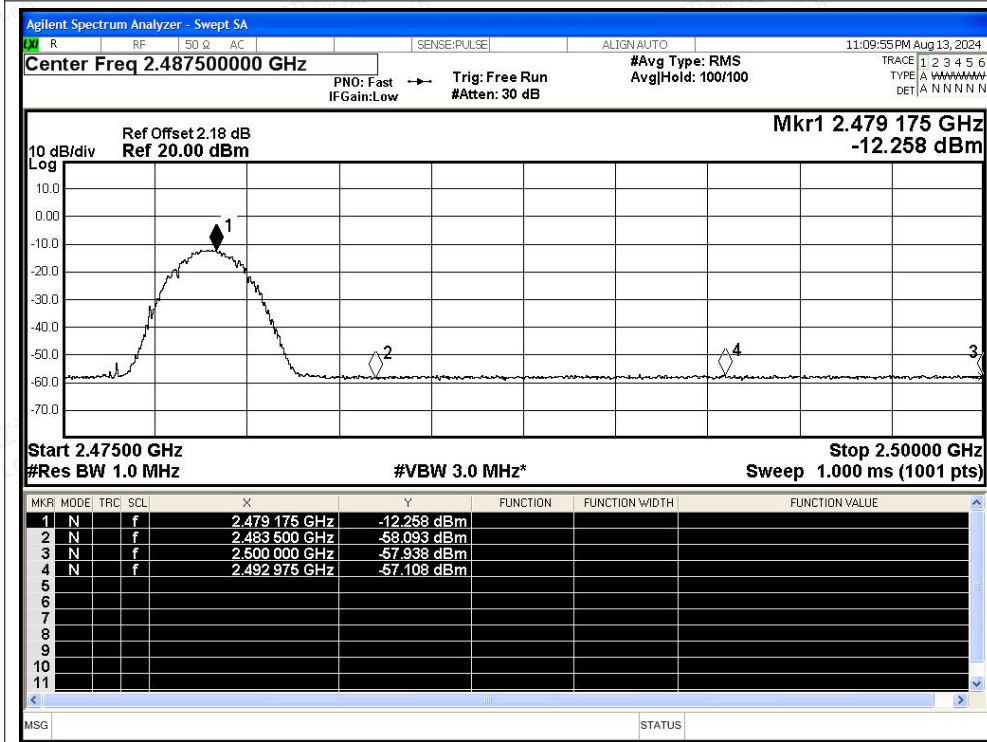
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Restrict Band NVNT 2.4G 2479MHz Ant1 Peak



Restrict Band NVNT 2.4G 2479MHz Ant1 Average



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