



Appendix C

RF Test Data for 2.4G (Conducted Measurement)

Product Name: Mechanical keyboard

Test Model: K99

Environmental Conditions

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



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C.1 -6dB Bandwidth

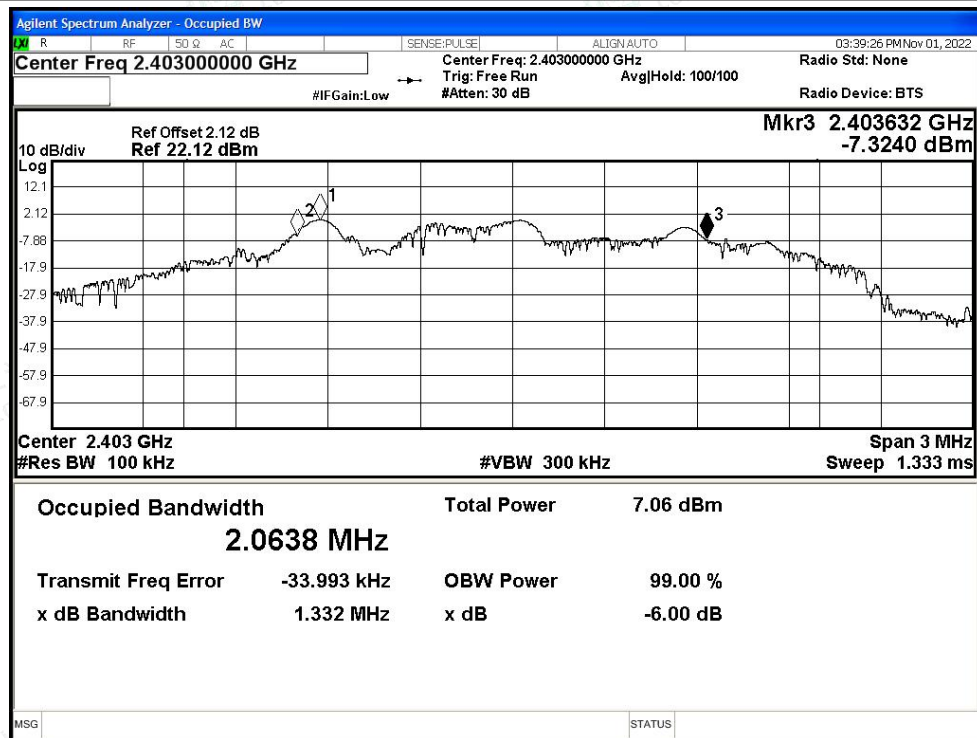
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	2.4G	2403	Ant1	1.332	≥ 0.5	Pass
NVNT	2.4G	2441	Ant1	1.329	≥ 0.5	Pass
NVNT	2.4G	2480	Ant1	1.329	≥ 0.5	Pass





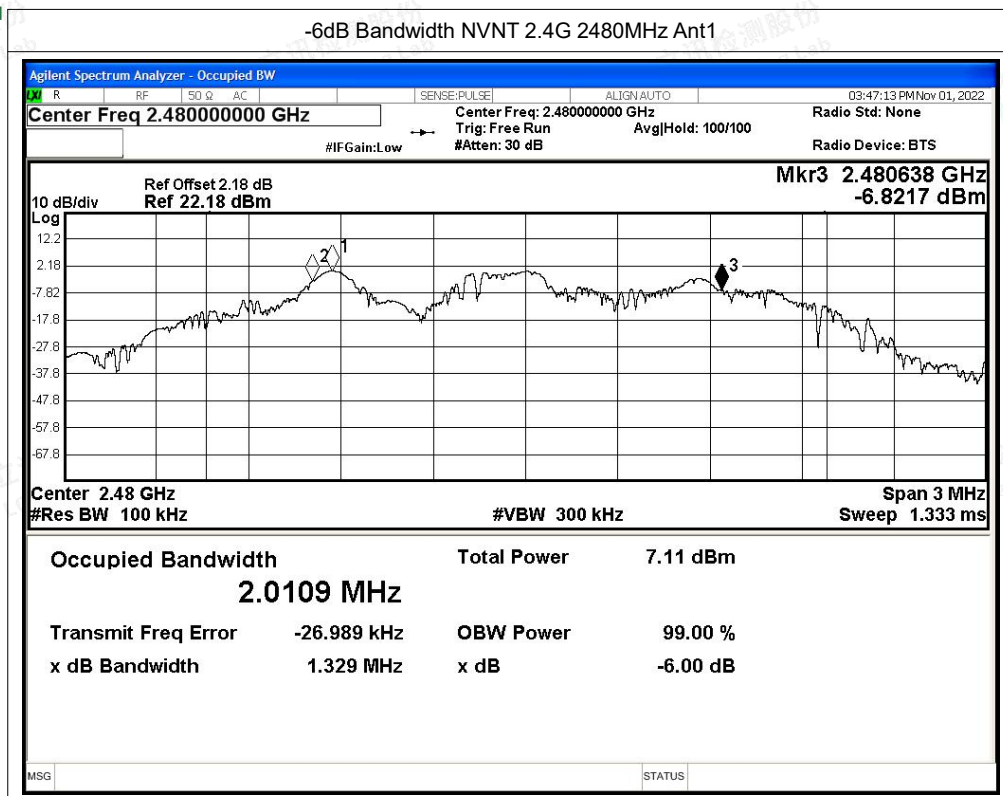
Test Graphs

-6dB Bandwidth NVNT 2.4G 2403MHz Ant1



-6dB Bandwidth NVNT 2.4G 2441MHz Ant1







C.2 Maximum Conducted Output Power

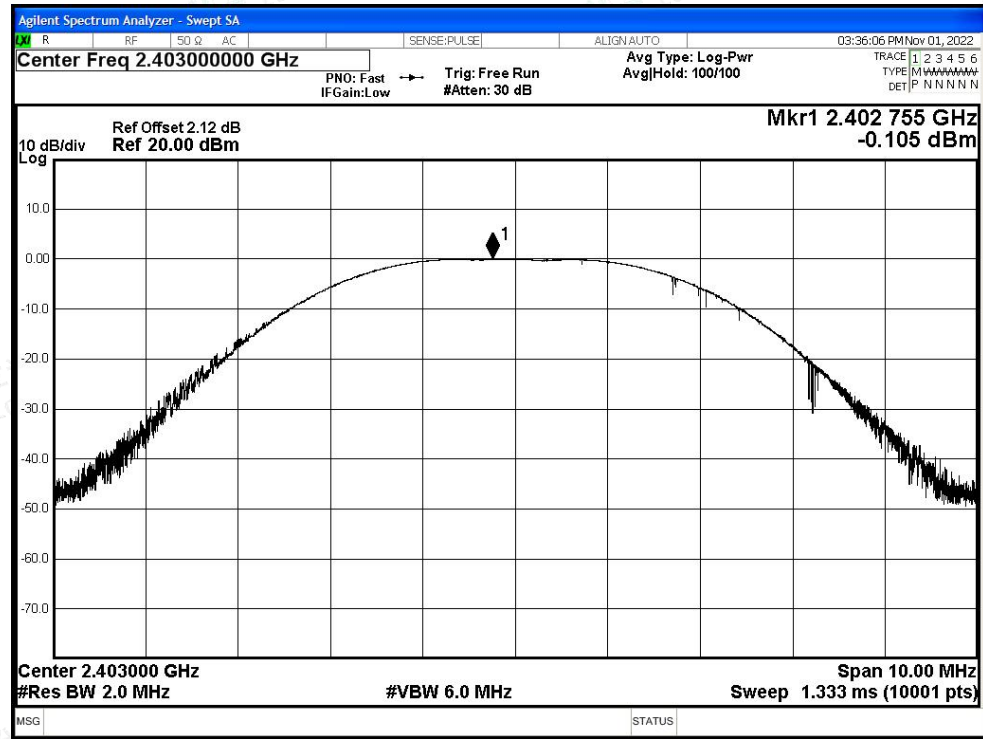
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2403	Ant1	-0.11	30	Pass
NVNT	2.4G	2441	Ant1	0.16	30	Pass
NVNT	2.4G	2480	Ant1	0.30	30	Pass





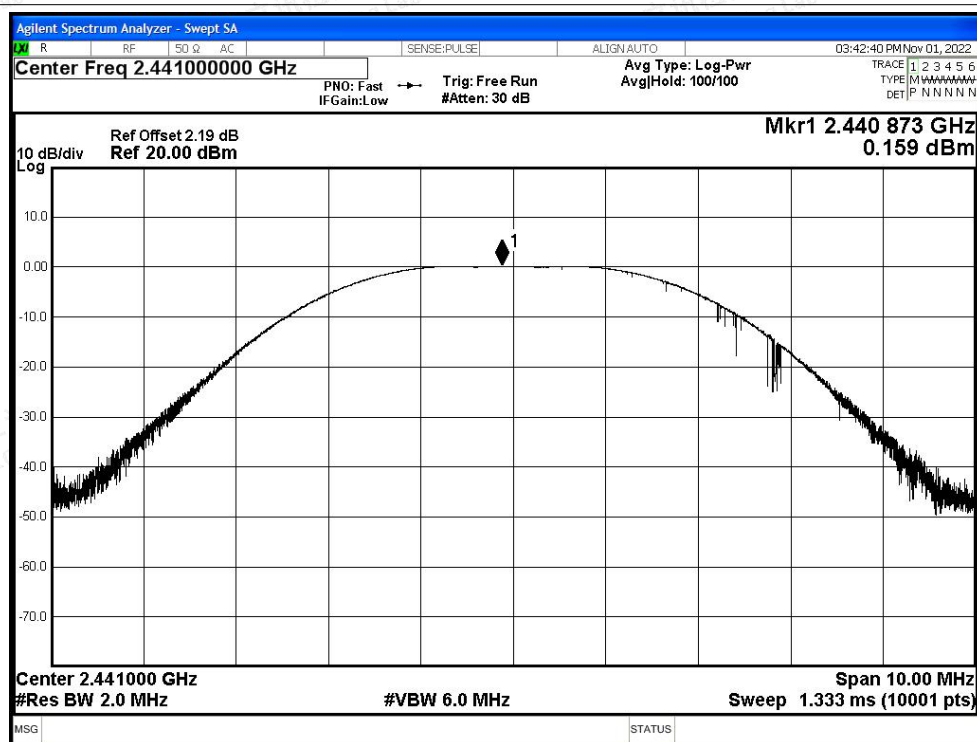
Test Graphs

Power NVNT 2.4G 2403MHz Ant1

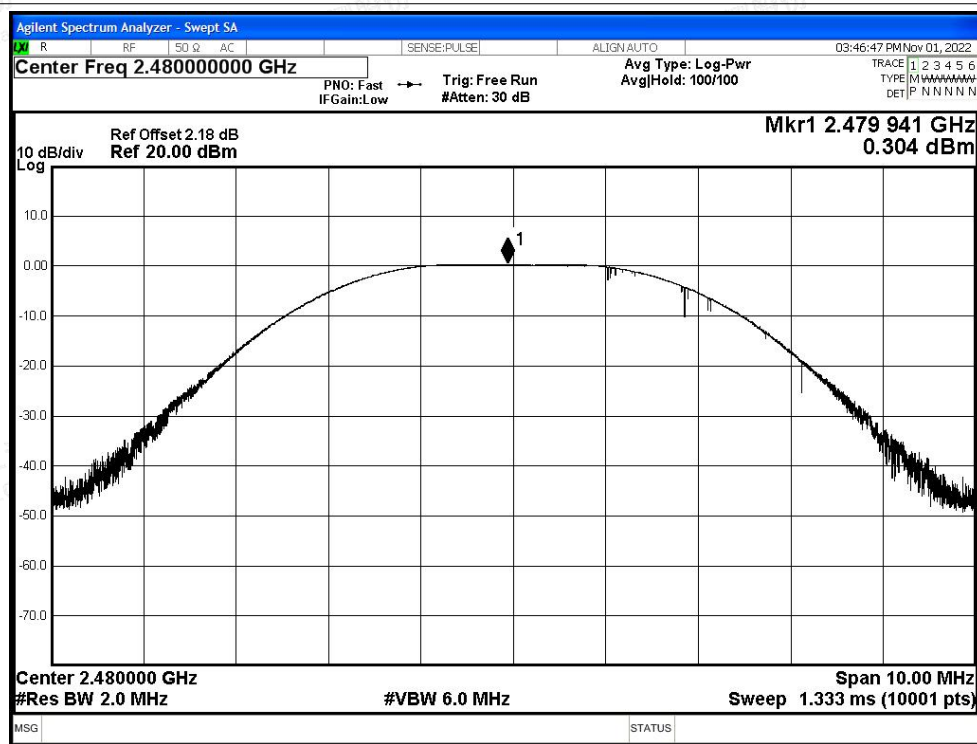




Power NVNT 2.4G 2441MHz Ant1



Power NVNT 2.4G 2480MHz Ant1





C.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	2.4G	2403	Ant1	-5.39	8	Pass
NVNT	2.4G	2441	Ant1	-5.01	8	Pass
NVNT	2.4G	2480	Ant1	-5.07	8	Pass

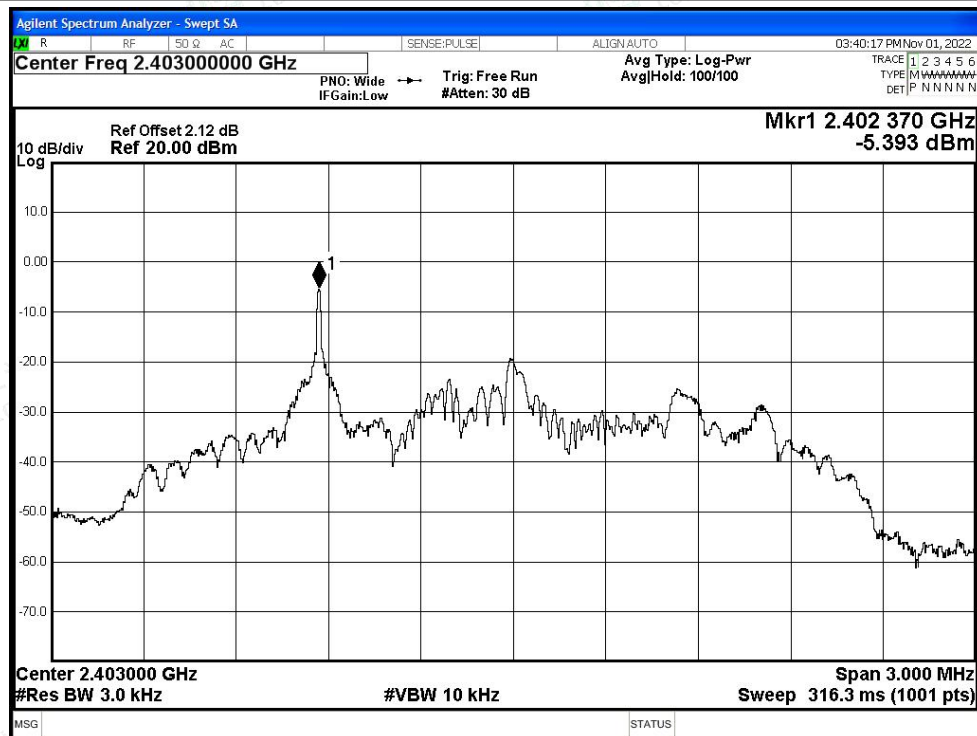


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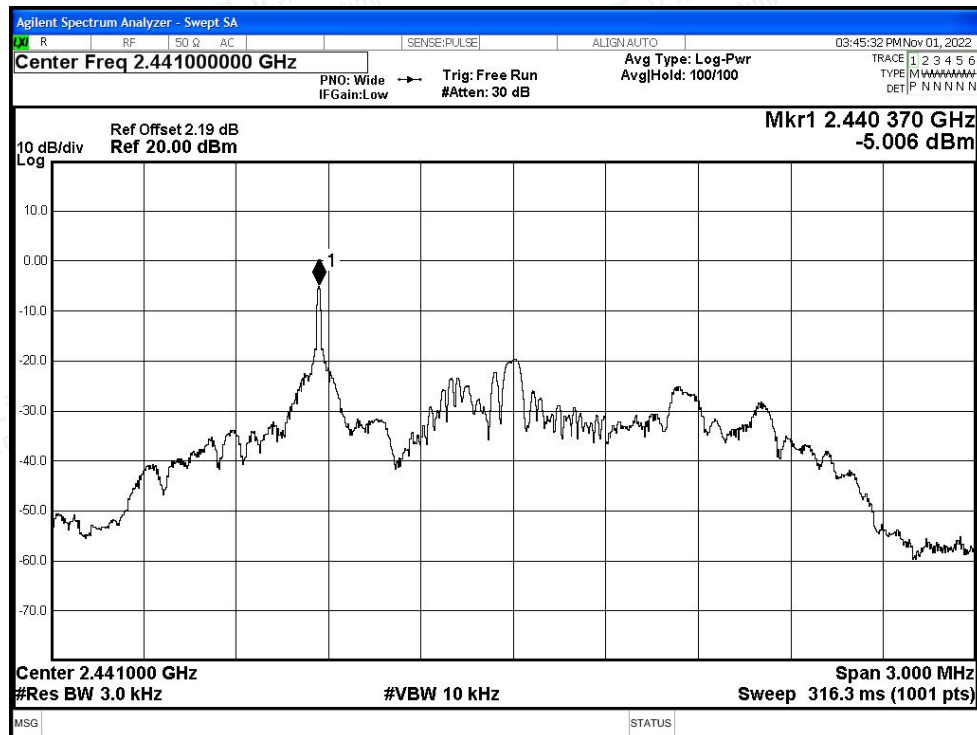


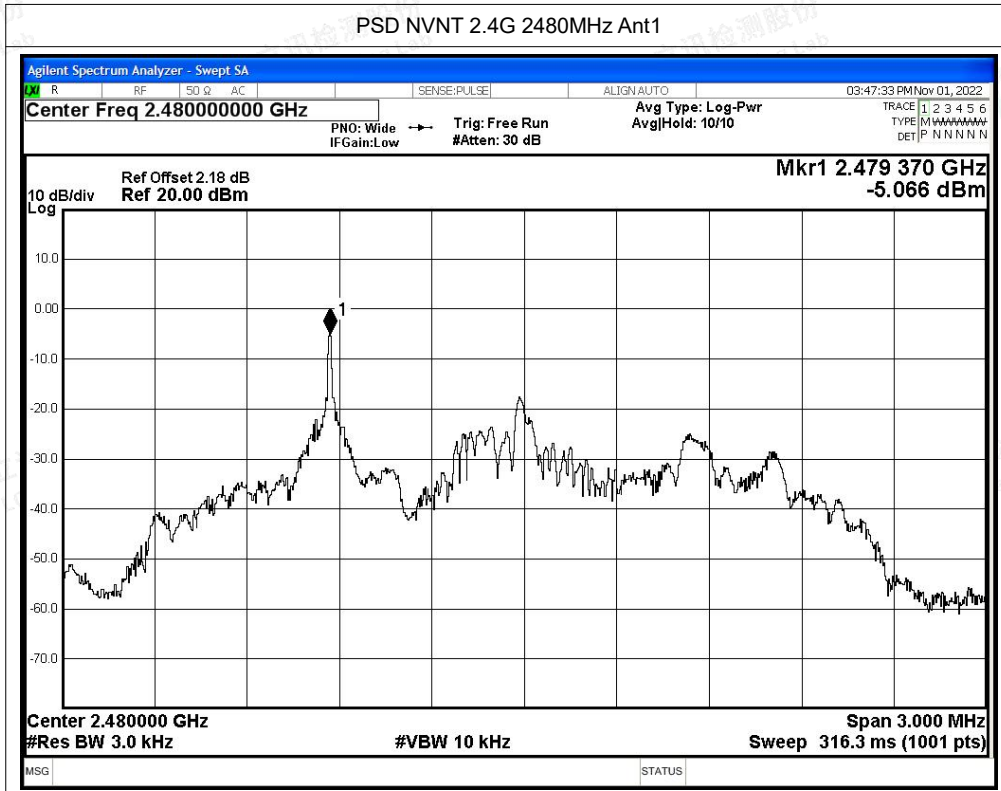
Test Graphs

PSD NVNT 2.4G 2403MHz Ant1



PSD NVNT 2.4G 2441MHz Ant1







C.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2403	Ant1	-56.47	-20	Pass
NVNT	2.4G	2480	Ant1	-57.55	-20	Pass



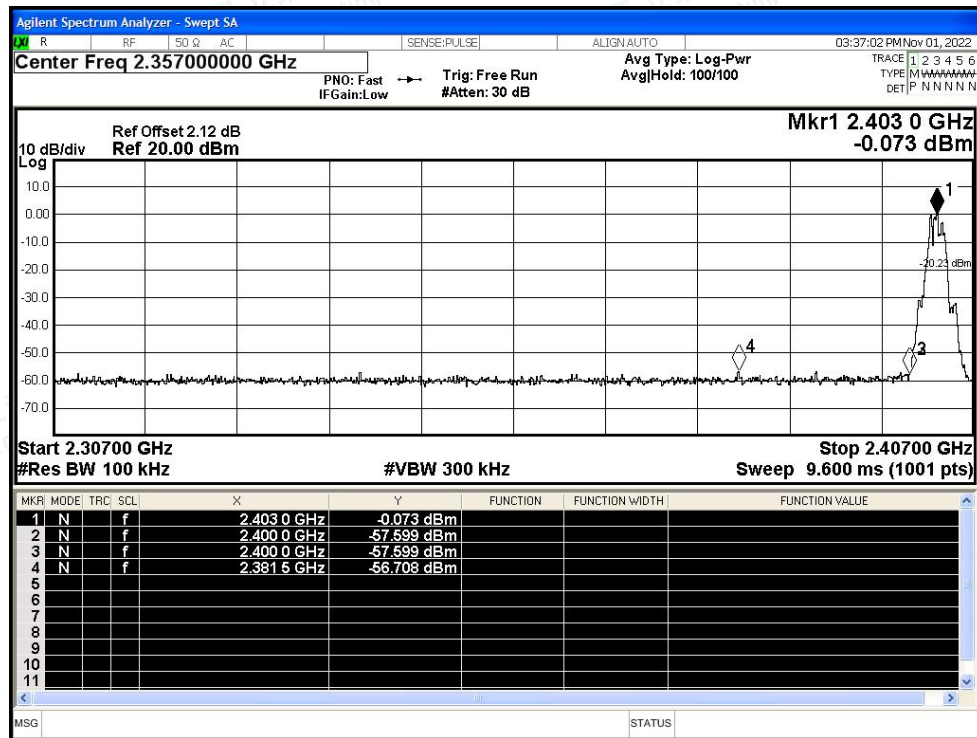


Test Graphs

Band Edge NVNT 2.4G 2403MHz Ant1 Ref



Band Edge NVNT 2.4G 2403MHz Ant1 Emission



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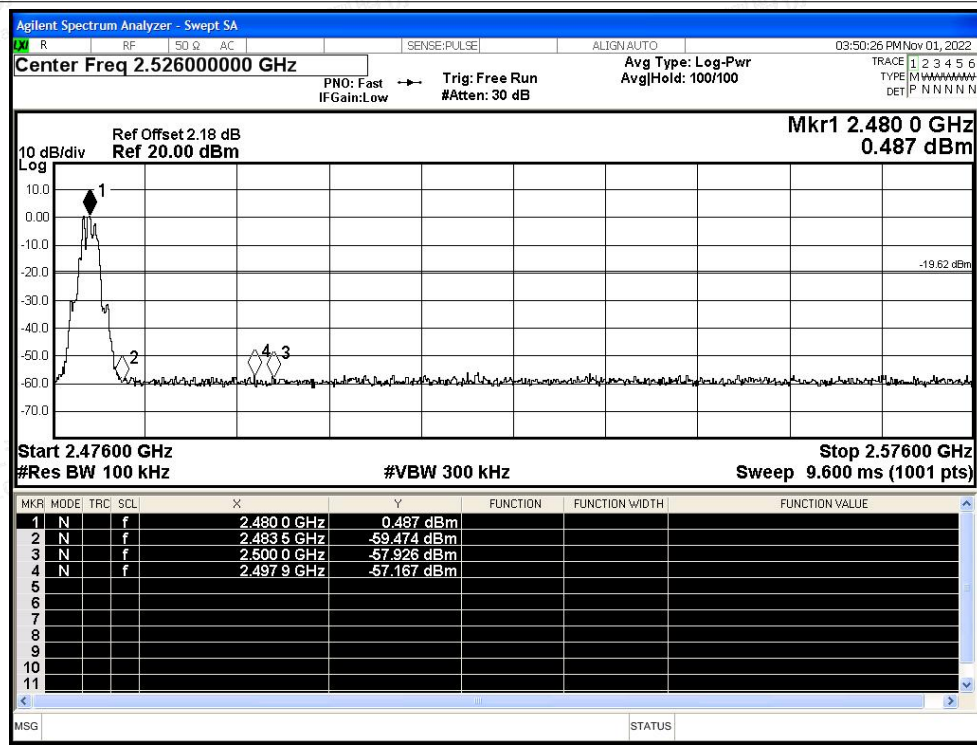
Scan code to check authenticity



Band Edge NVNT 2.4G 2480MHz Ant1 Ref



Band Edge NVNT 2.4G 2480MHz Ant1 Emission





C.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2403	Ant1	-36.36	-20	Pass
NVNT	2.4G	2441	Ant1	-37.46	-20	Pass
NVNT	2.4G	2480	Ant1	-37.84	-20	Pass



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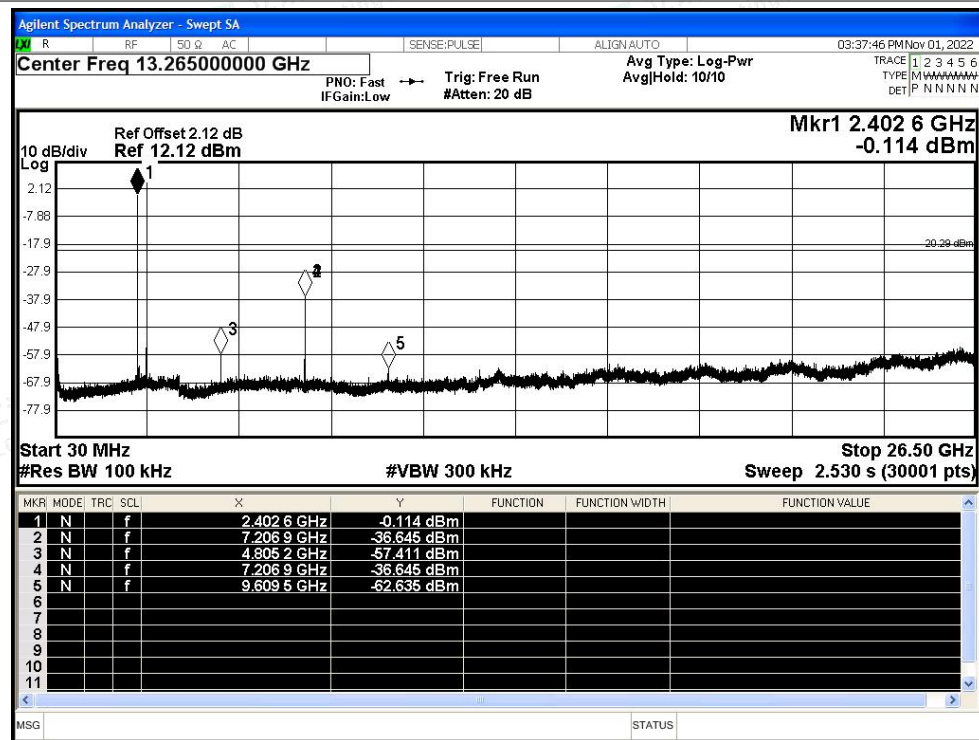


Test Graphs

Tx. Spurious NVNT 2.4G 2403MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2403MHz Ant1 Emission

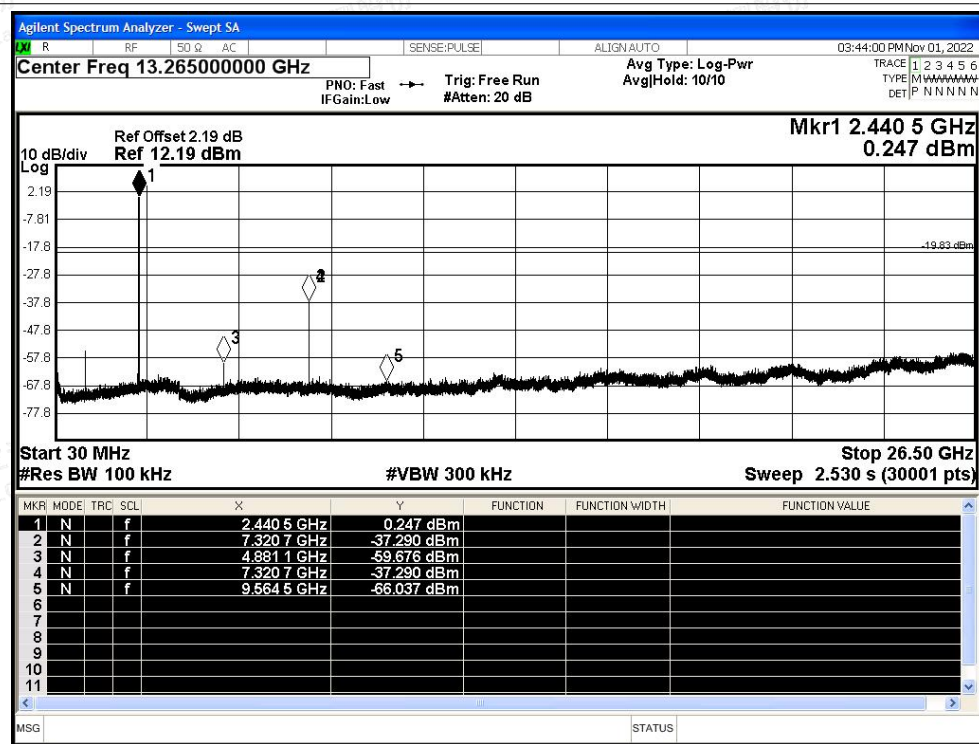




Tx. Spurious NVNT 2.4G 2441MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2441MHz Ant1 Emission

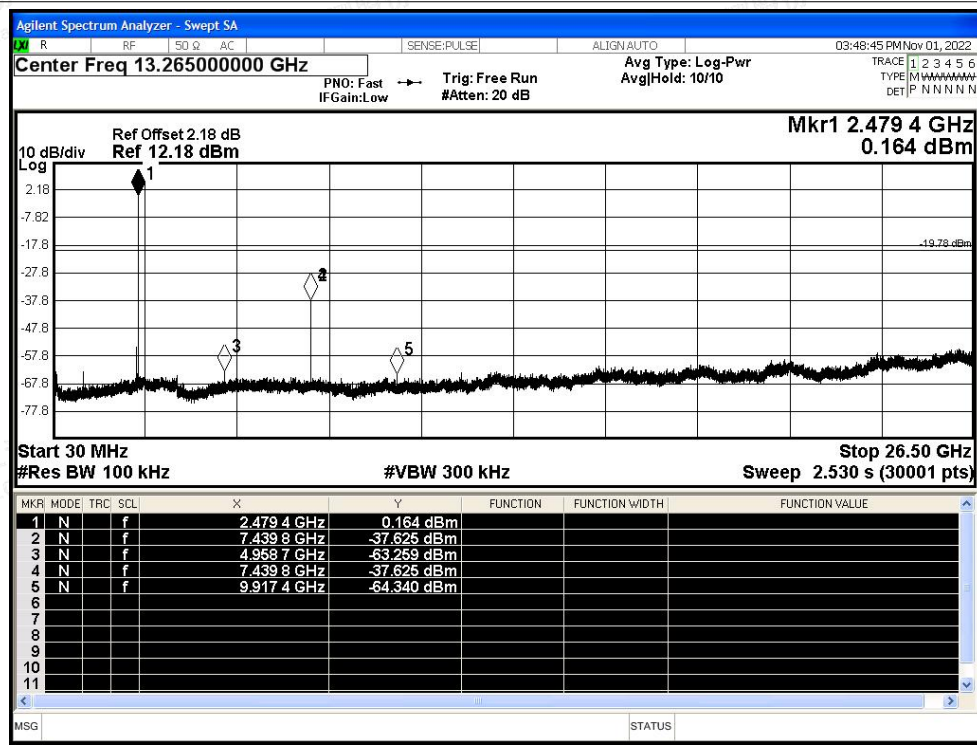




Tx. Spurious NVNT 2.4G 2480MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2480MHz Ant1 Emission



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C.6 Duty Cycle

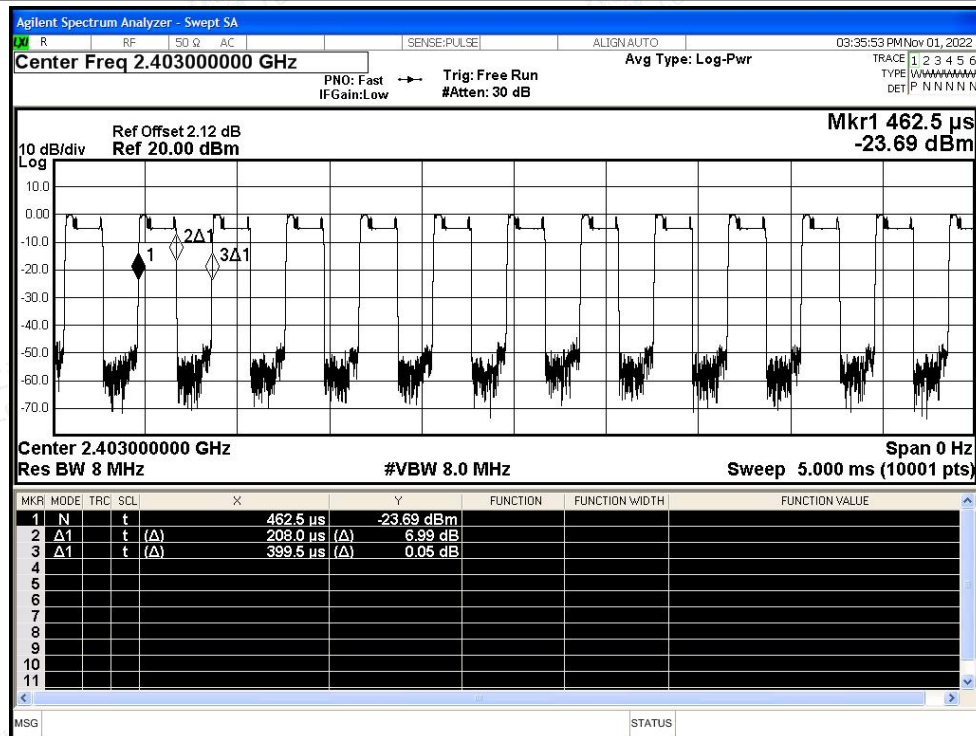
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	1/T (kHz)
NVNT	2.4G	2403	Ant1	52.07	4.81
NVNT	2.4G	2441	Ant1	52.13	4.8
NVNT	2.4G	2480	Ant1	52.19	4.8



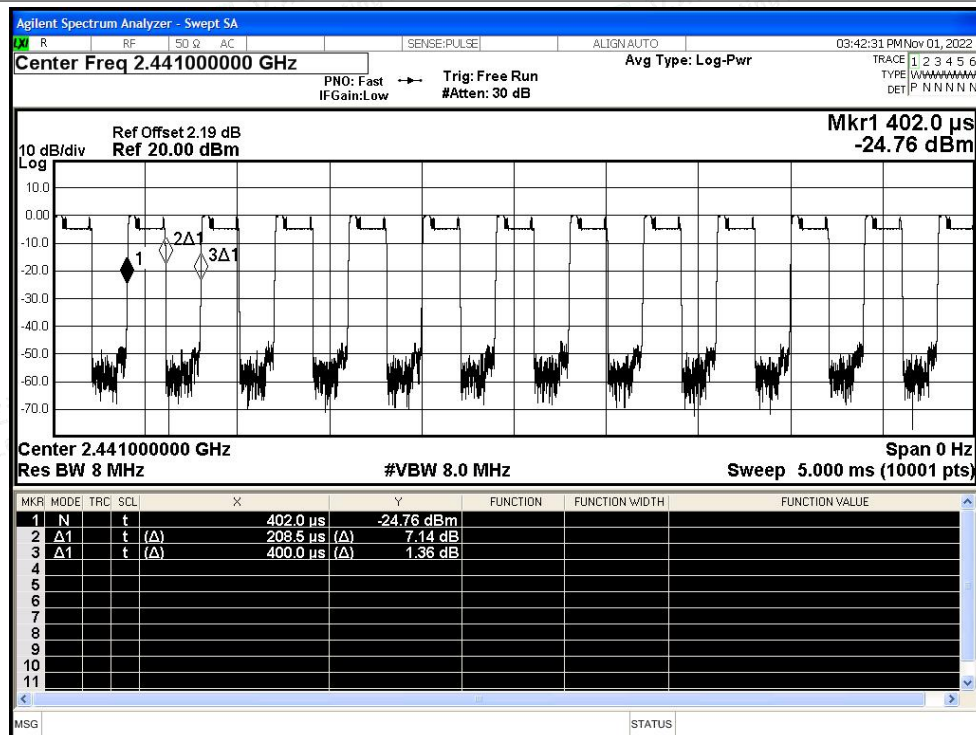


Test Graphs

Duty Cycle NVNT 2.4G 2403MHz Ant1

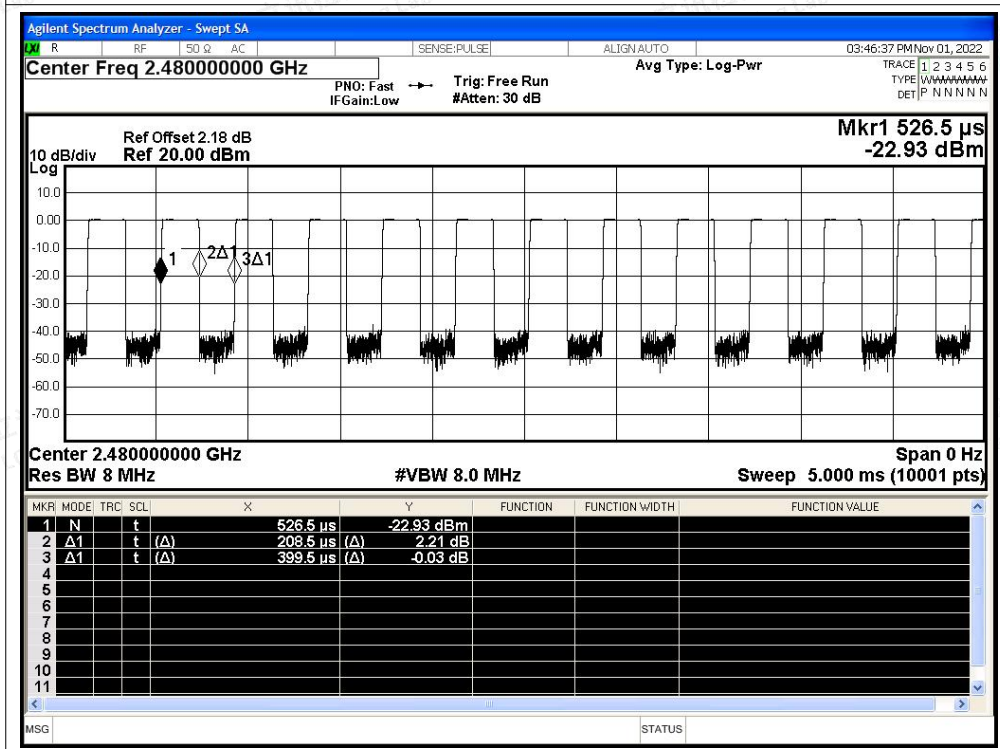


Duty Cycle NVNT 2.4G 2441MHz Ant1





Duty Cycle NVNT 2.4G 2480MHz Ant1





C.7 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	2.4G	2403	Ant1	2310	-49.39	2.43	48.27	Peak	74	Pass
NVNT	2.4G	2403	Ant1	2310	-57.93	2.43	39.73	Average	54	Pass
NVNT	2.4G	2403	Ant1	2370.722	-45.82	2.43	51.84	Peak	74	Pass
NVNT	2.4G	2403	Ant1	2381.295	-56.79	2.43	40.87	Average	54	Pass
NVNT	2.4G	2403	Ant1	2390	-47.99	2.43	49.67	Peak	74	Pass
NVNT	2.4G	2403	Ant1	2390	-57.21	2.43	40.45	Average	54	Pass
NVNT	2.4G	2480	Ant1	2483.5	-46.91	2.43	50.75	Peak	74	Pass
NVNT	2.4G	2480	Ant1	2483.5	-54.77	2.43	42.89	Average	54	Pass
NVNT	2.4G	2480	Ant1	2497.144	-43.49	2.43	54.17	Peak	74	Pass
NVNT	2.4G	2480	Ant1	2483.536	-54.72	2.43	42.94	Average	54	Pass
NVNT	2.4G	2480	Ant1	2500	-48.34	2.43	49.32	Peak	74	Pass
NVNT	2.4G	2480	Ant1	2500	-56.95	2.43	40.71	Average	54	Pass

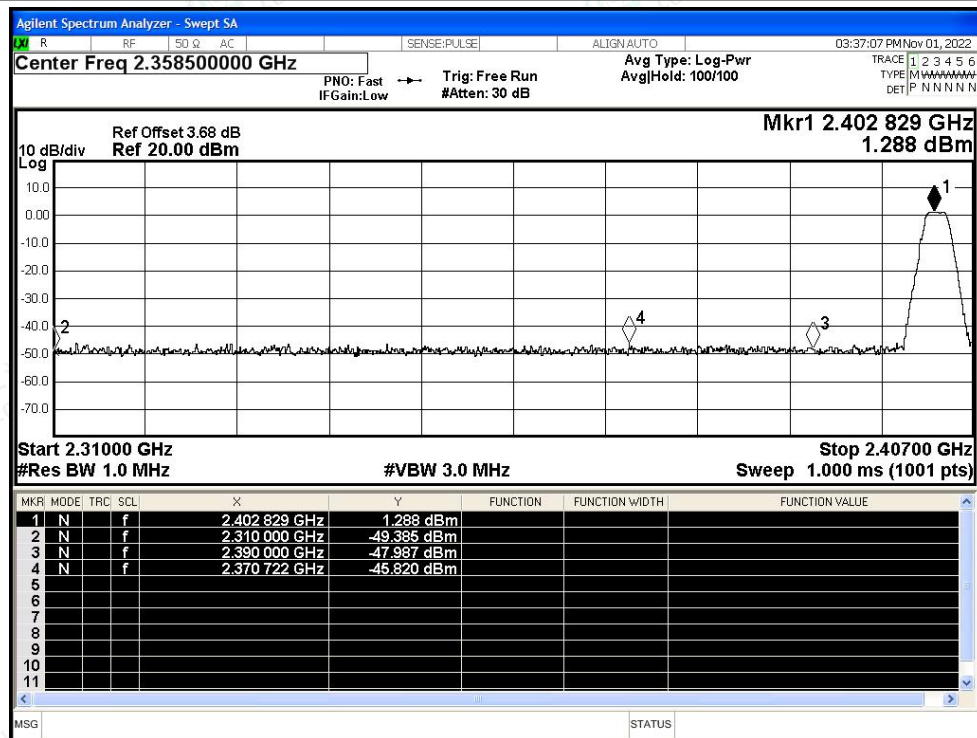


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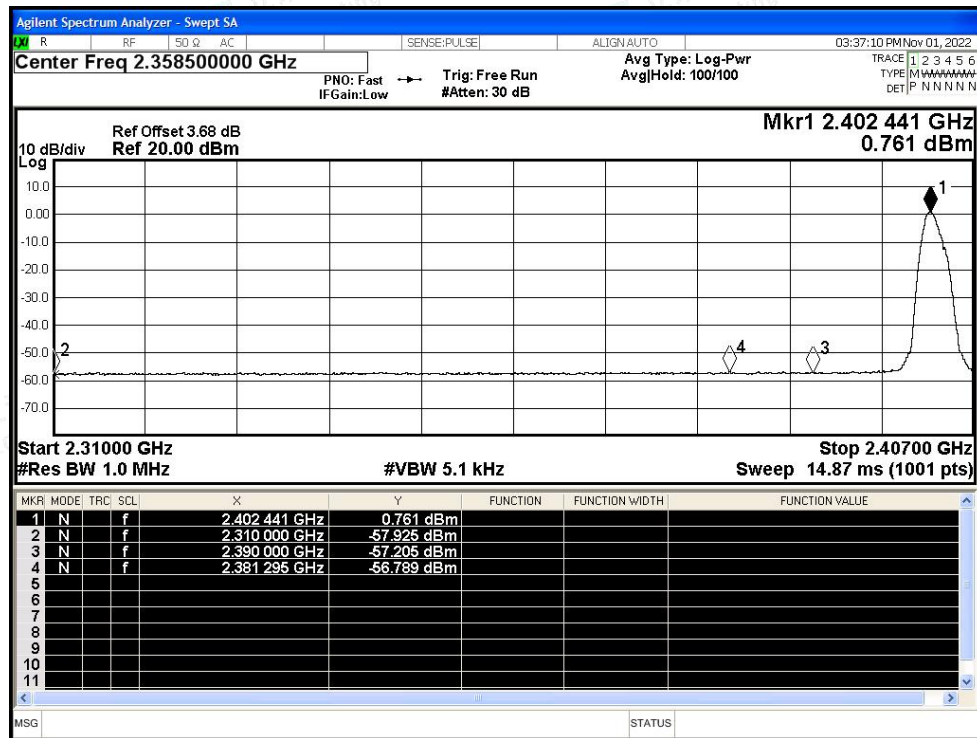


Test Graphs

Restrict Band NVNT 2.4G 2403MHz Ant1 Peak

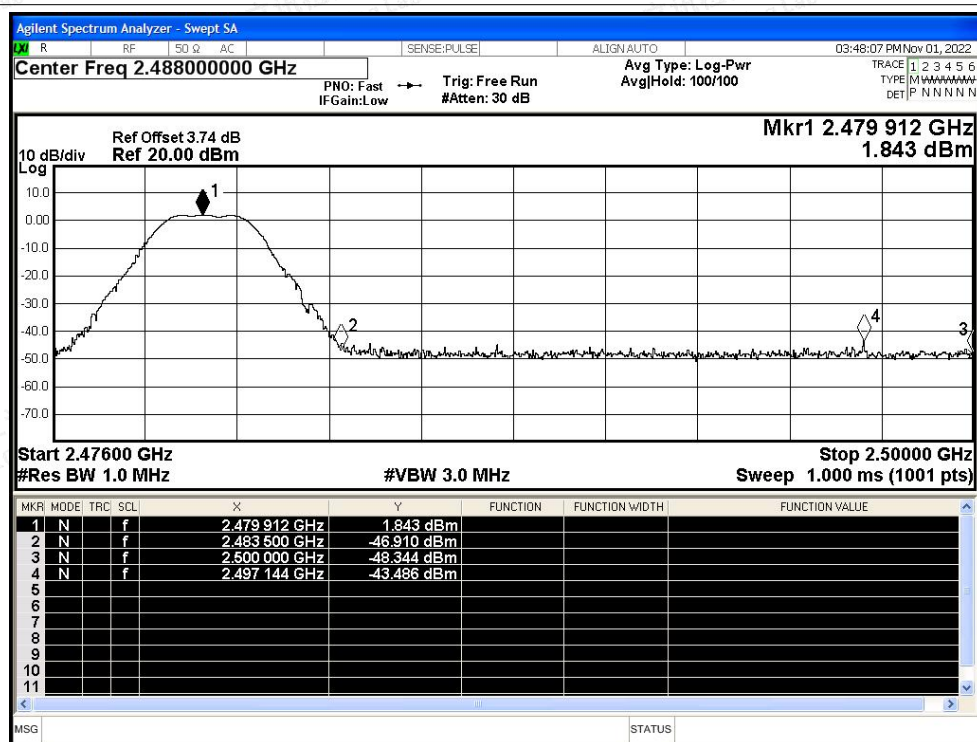


Restrict Band NVNT 2.4G 2403MHz Ant1 Average

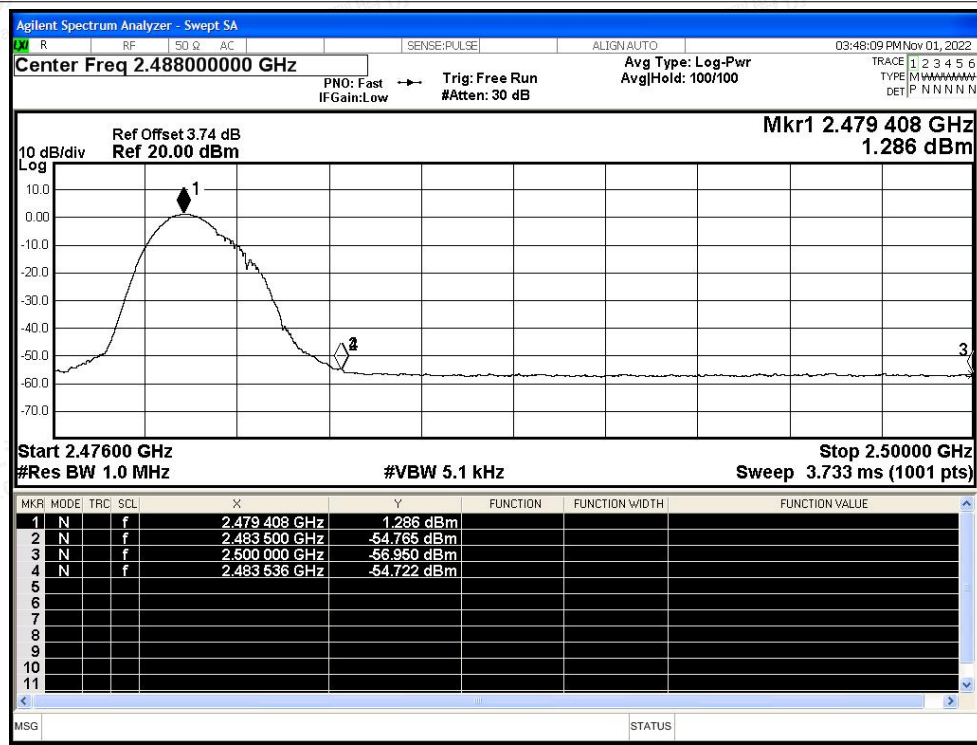




Restrict Band NVNT 2.4G 2480MHz Ant1 Peak



Restrict Band NVNT 2.4G 2480MHz Ant1 Average



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