



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Dance robot speaker

Test Model: RS01

Environmental Conditions

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





A.1 -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.925	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.926	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.929	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.275	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.275	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.272	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.28	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.288	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.284	N/A	Pass





Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

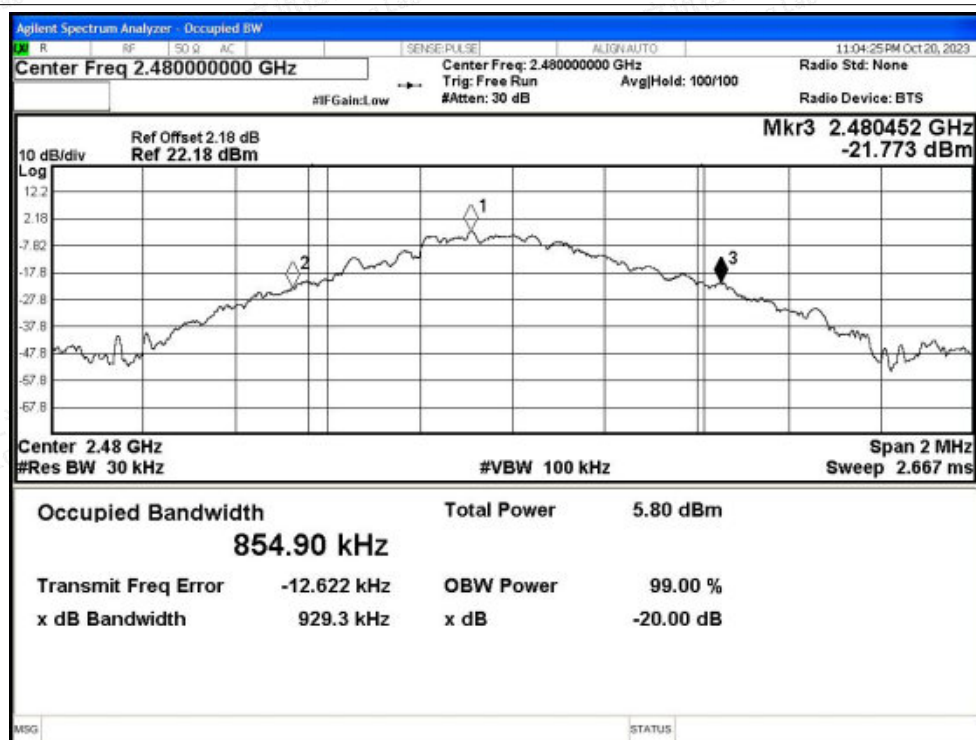


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1





-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

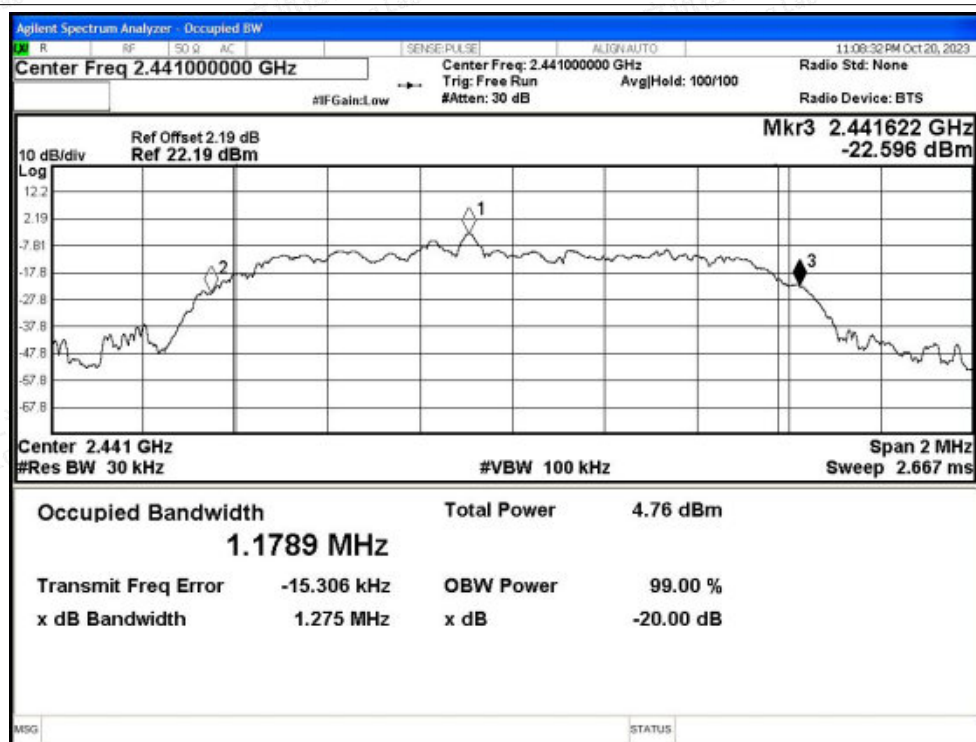


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1





-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

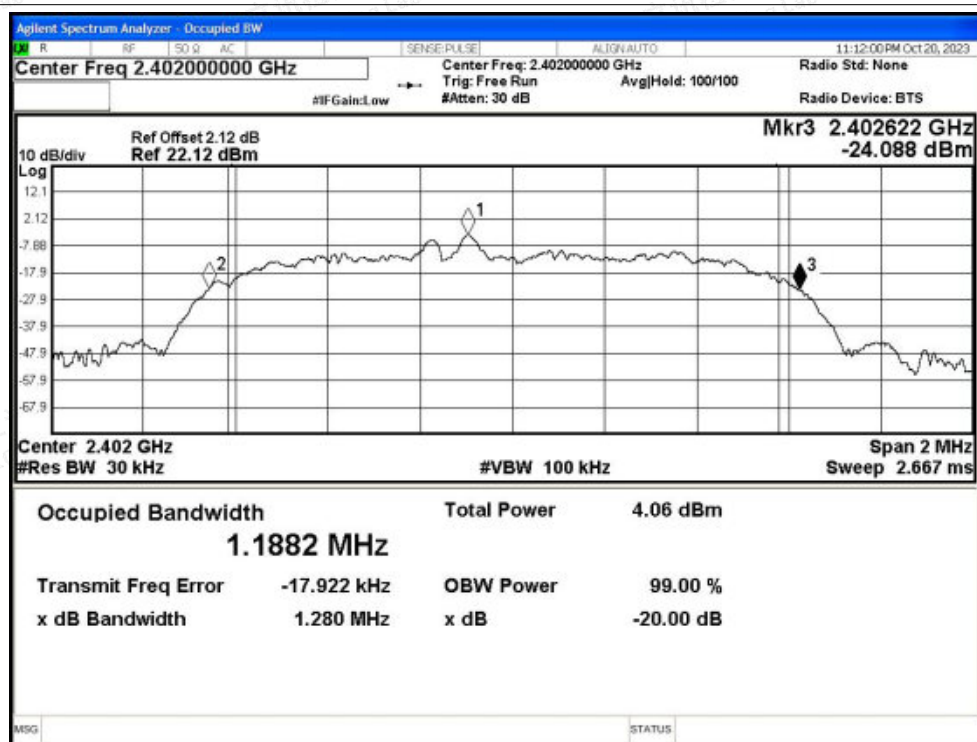


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

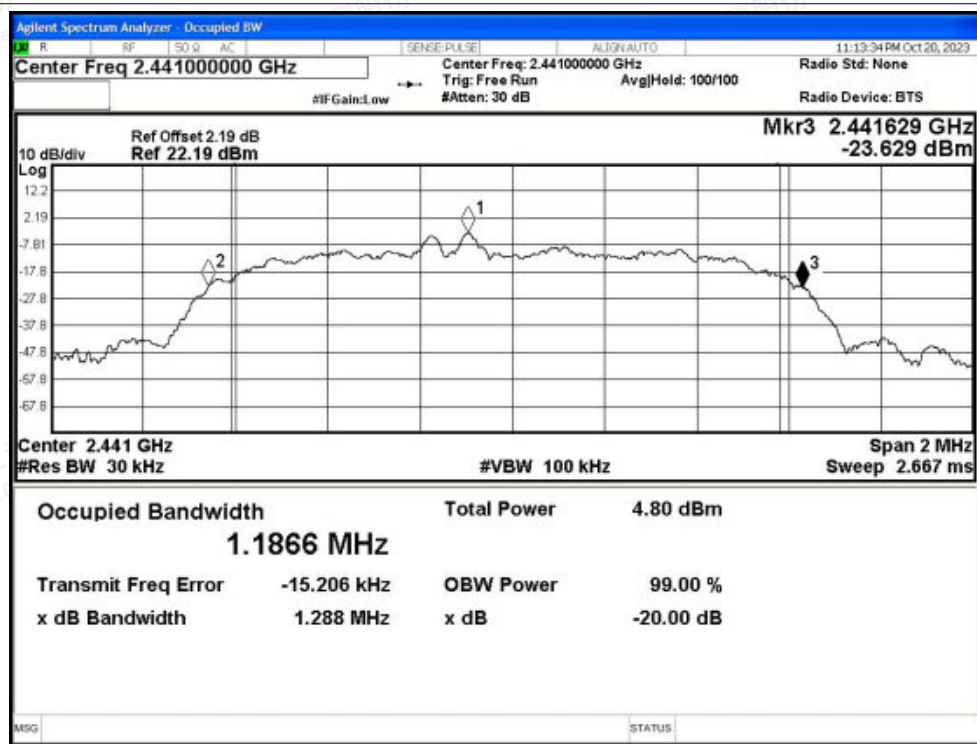




-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1

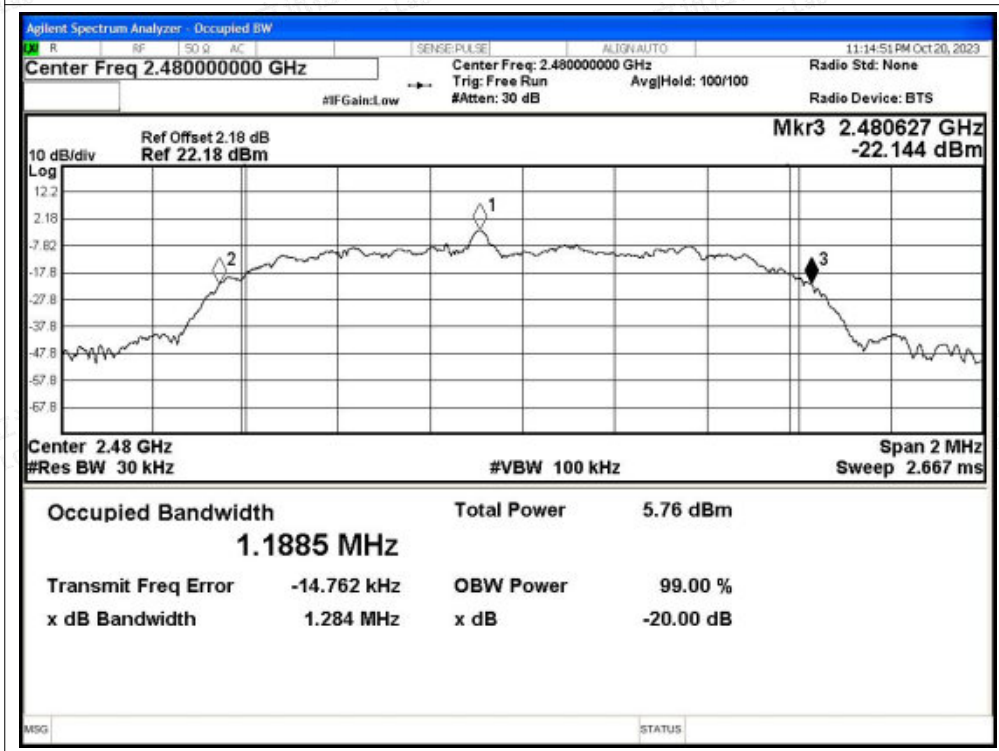


-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1





-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1





A.2 Maximum Conducted Output Power

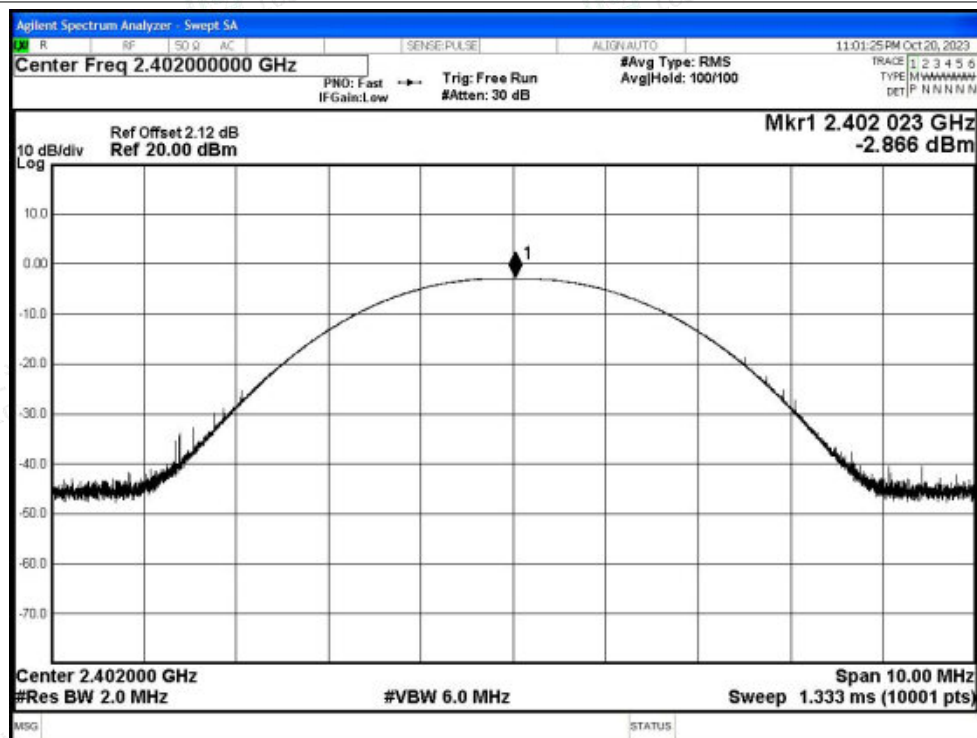
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-2.87	21	Pass
NVNT	1-DH5	2441	Ant1	-2.24	21	Pass
NVNT	1-DH5	2480	Ant1	-1.03	21	Pass
NVNT	2-DH5	2402	Ant1	-0.16	21	Pass
NVNT	2-DH5	2441	Ant1	0.43	21	Pass
NVNT	2-DH5	2480	Ant1	1.76	21	Pass
NVNT	3-DH5	2402	Ant1	0.29	21	Pass
NVNT	3-DH5	2441	Ant1	0.97	21	Pass
NVNT	3-DH5	2480	Ant1	2.18	21	Pass



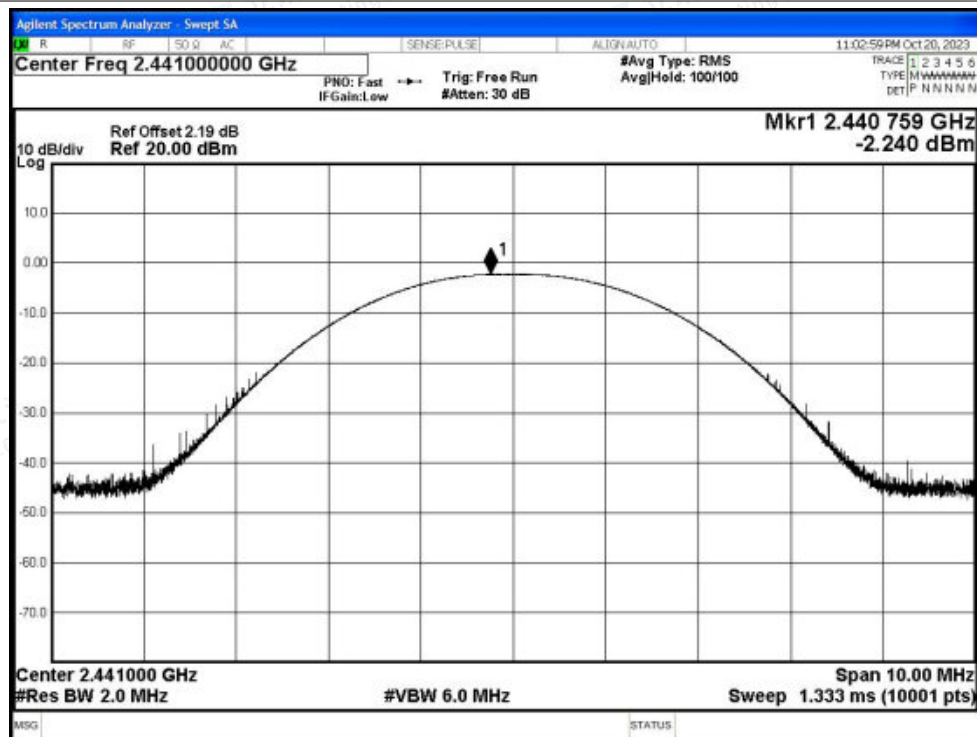


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

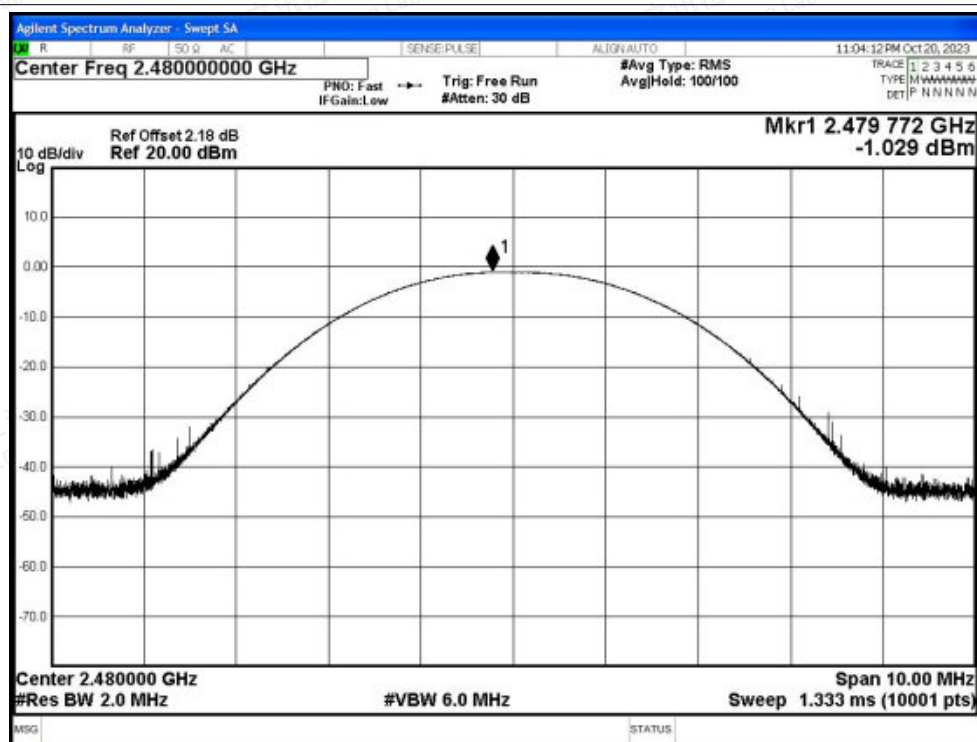


Power NVNT 1-DH5 2441MHz Ant1

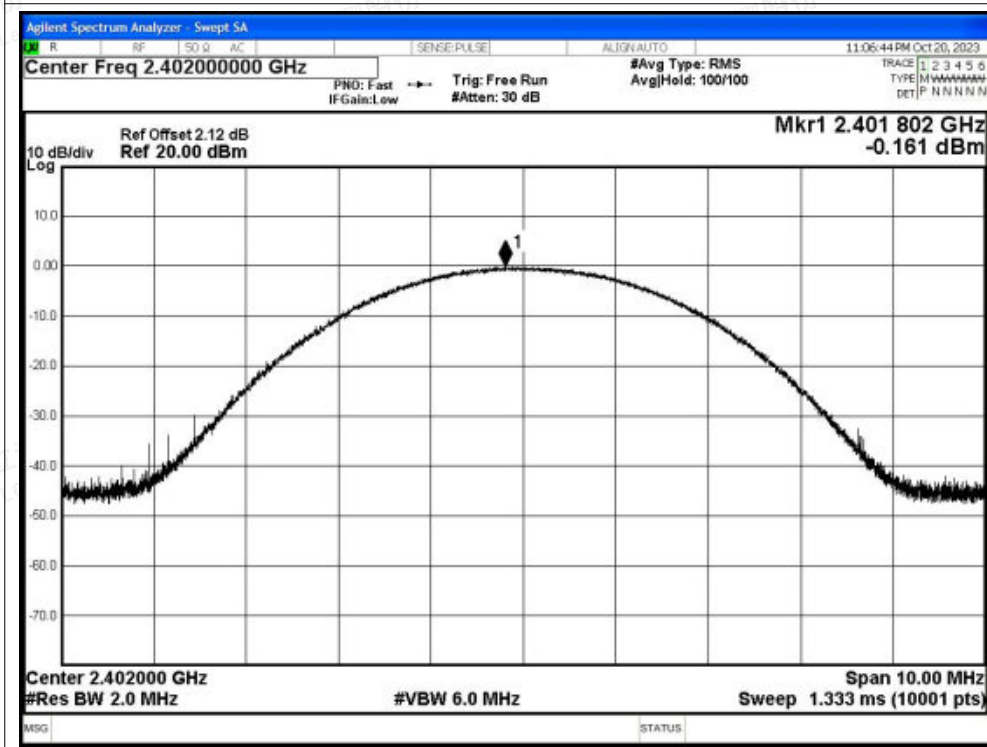




Power NVNT 1-DH5 2480MHz Ant1

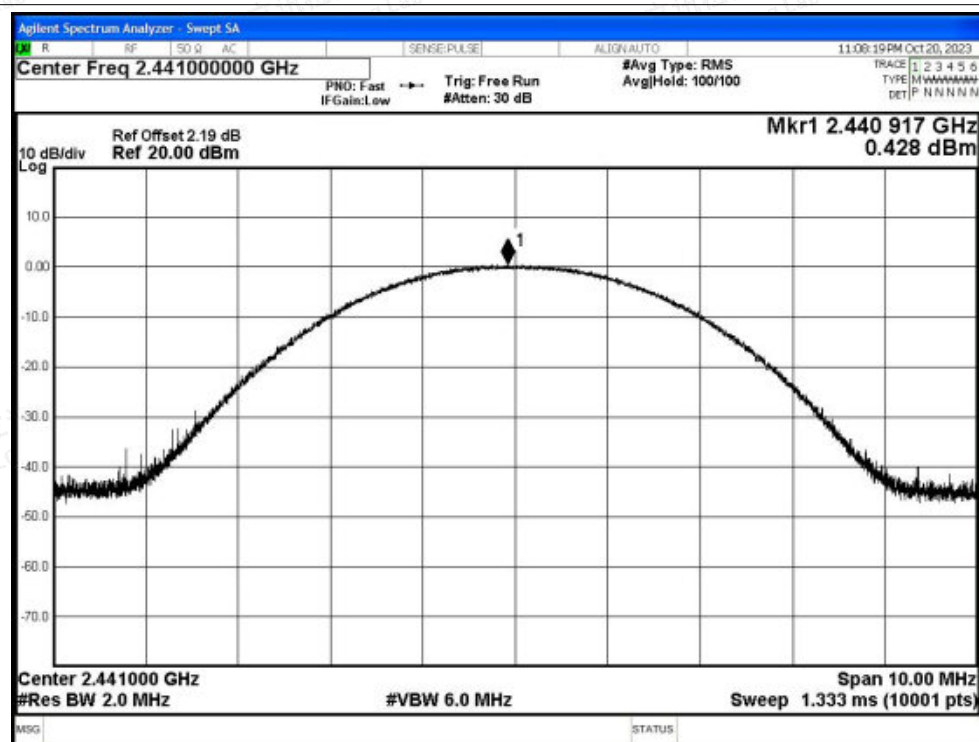


Power NVNT 2-DH5 2402MHz Ant1

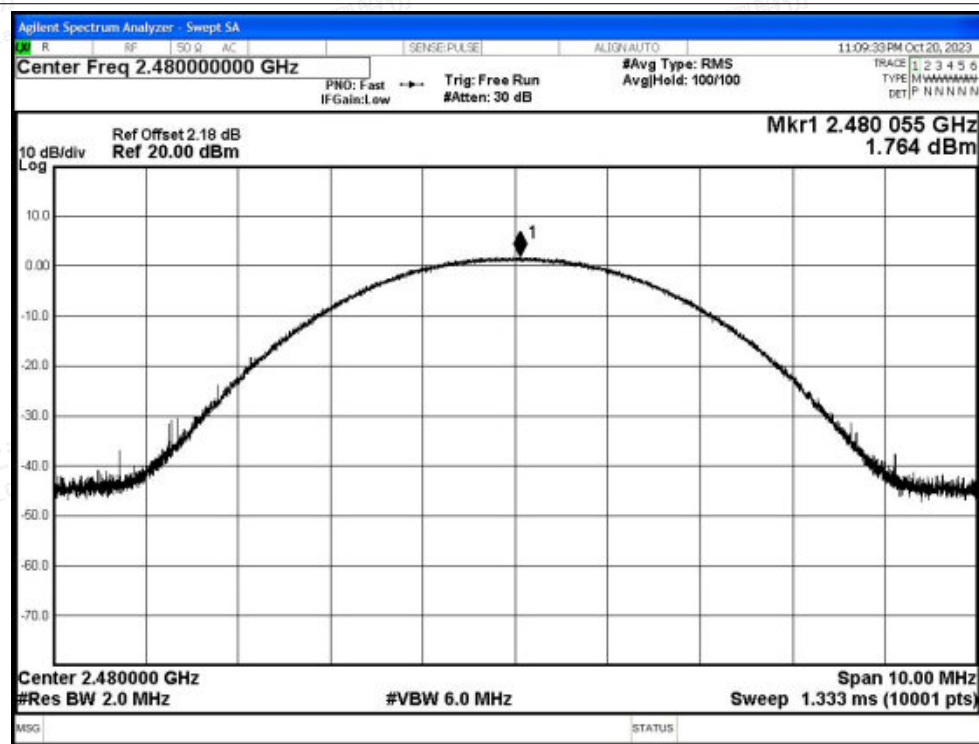




Power NVNT 2-DH5 2441MHz Ant1

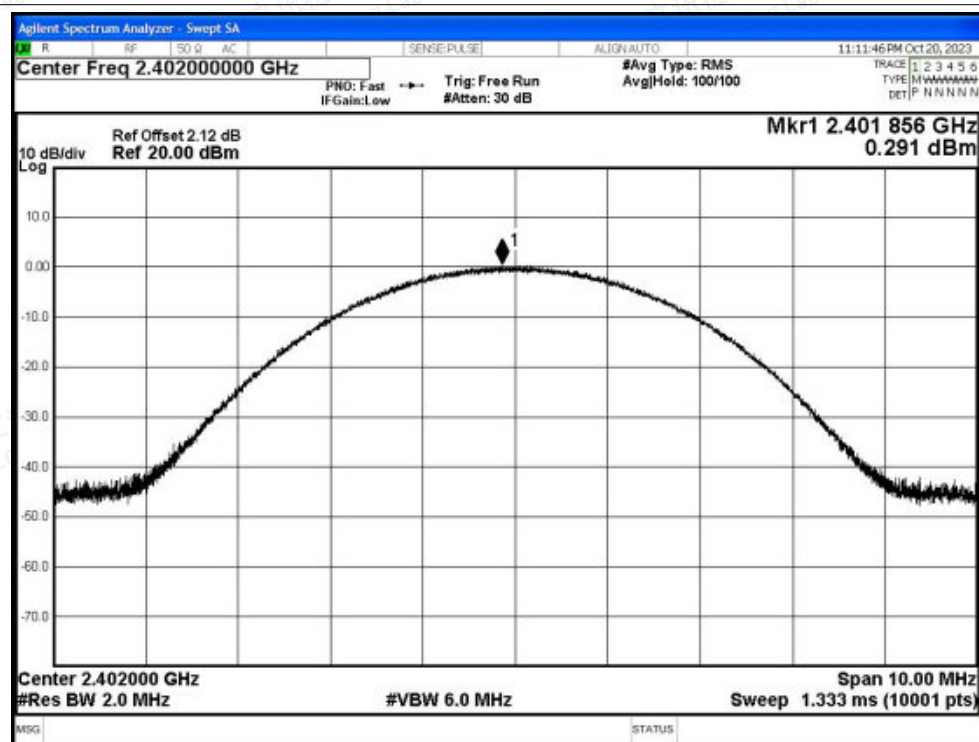


Power NVNT 2-DH5 2480MHz Ant1

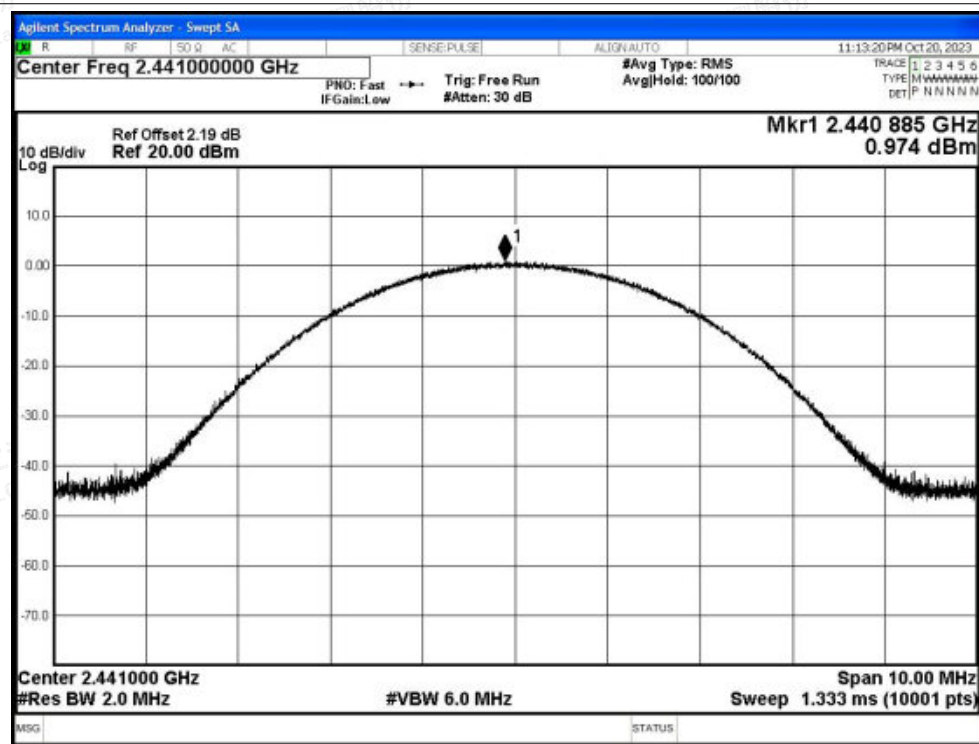




Power NVNT 3-DH5 2402MHz Ant1

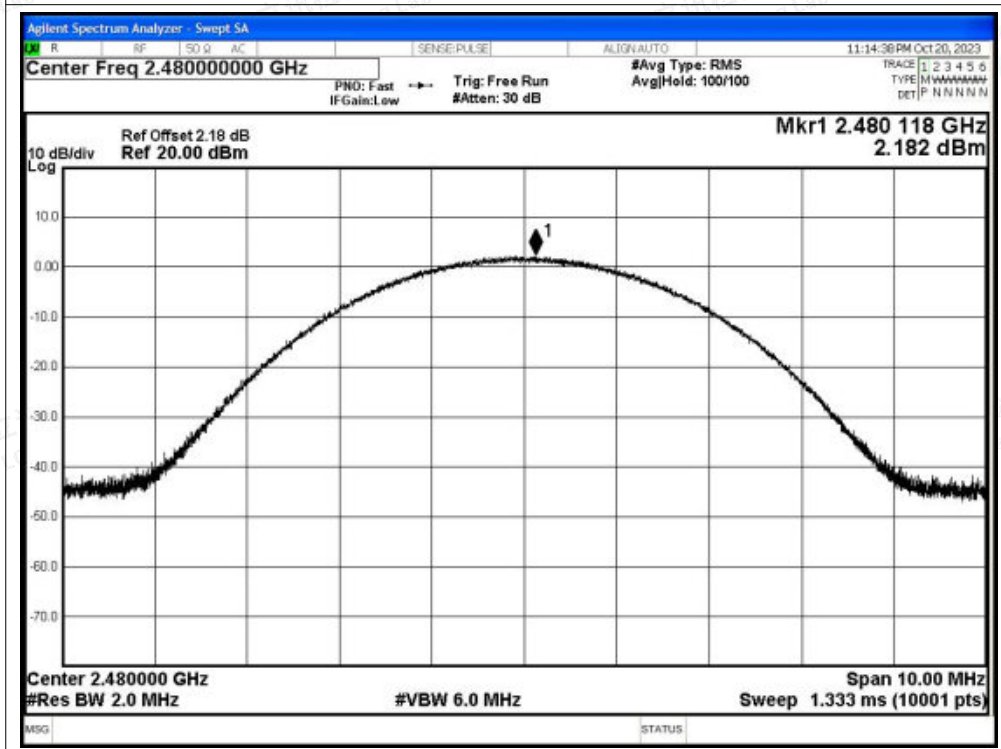


Power NVNT 3-DH5 2441MHz Ant1





Power NVNT 3-DH5 2480MHz Ant1





A.3 Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.012	2403.014	1.002	0.619	Pass
NVNT	2-DH5	Ant1	2401.986	2402.94	0.954	0.850	Pass
NVNT	3-DH5	Ant1	2402.166	2403.154	0.988	0.859	Pass



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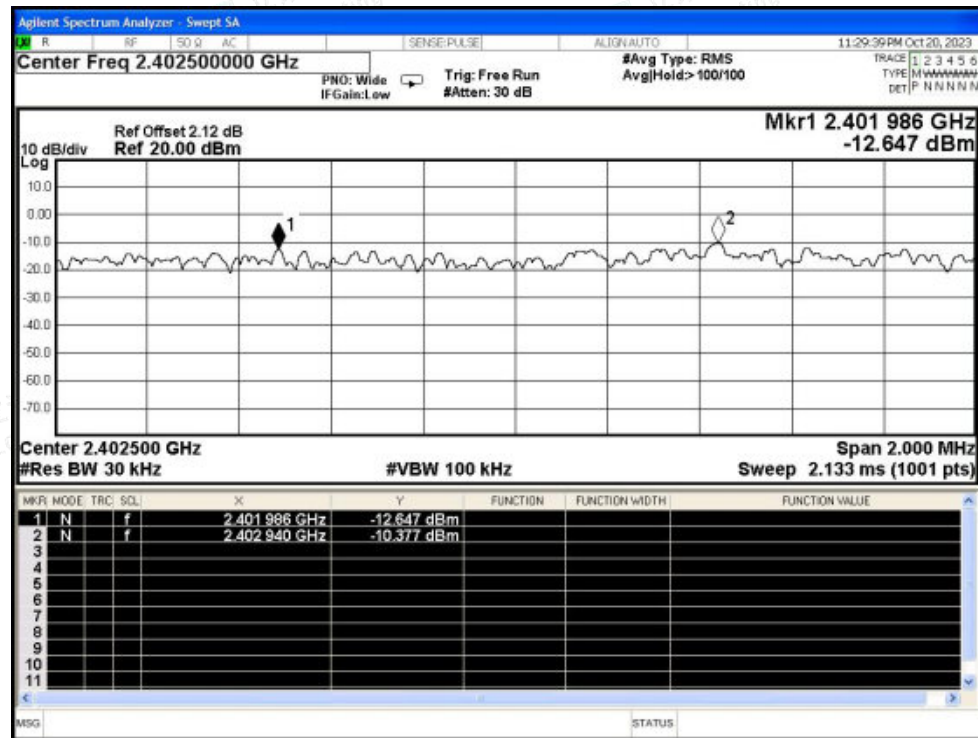


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1

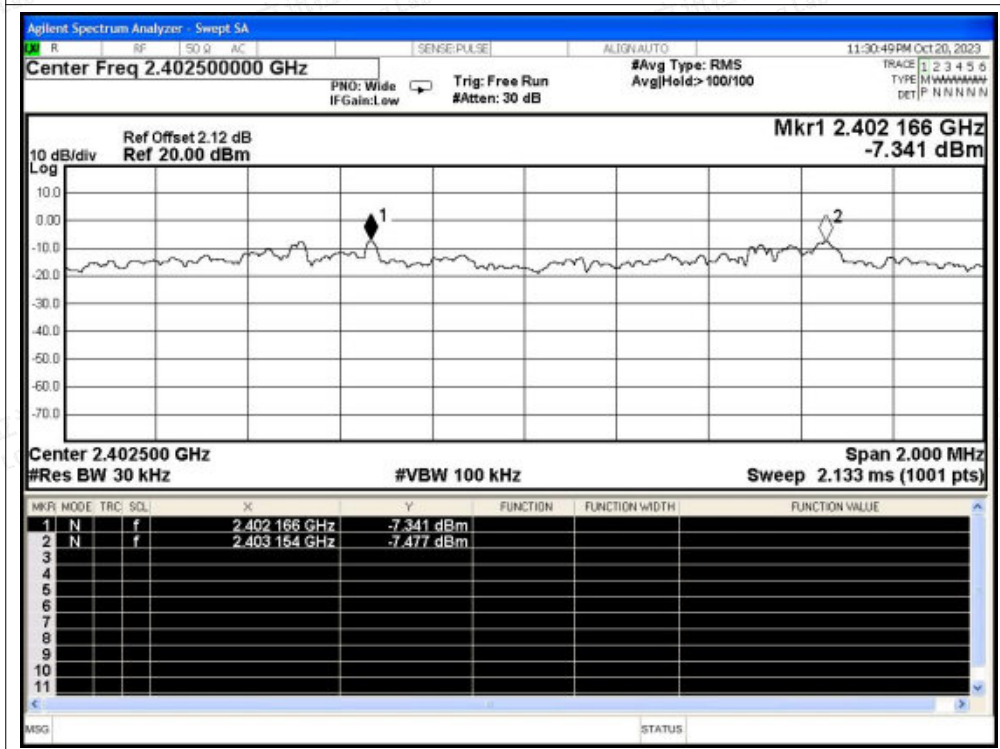


CFS NVNT 2-DH5 2402MHz Ant1





CFS NVNT 3-DH5 2402MHz Ant1





A.4 Dwell Time

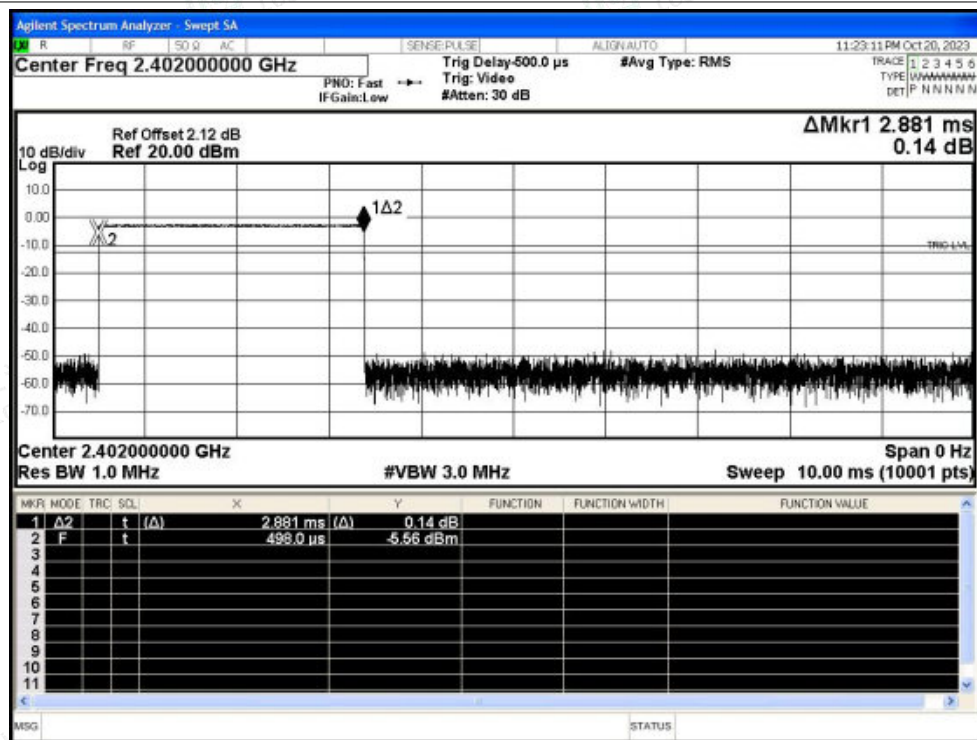
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.881	311.148	108	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.88	290.88	101	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.886	300.144	104	31600	400	Pass



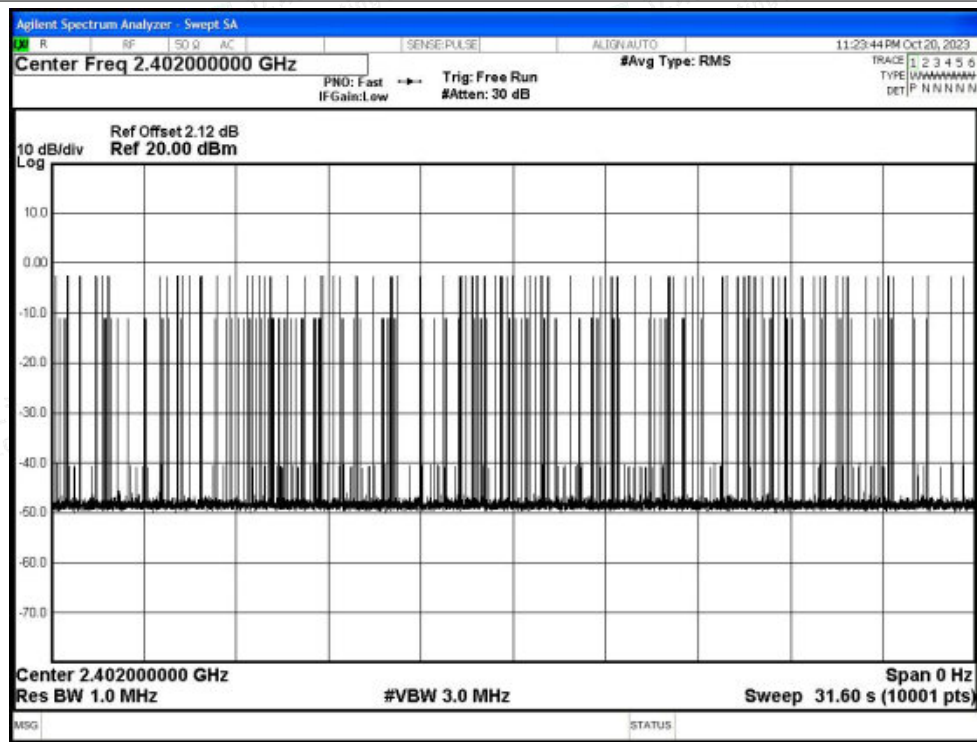


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

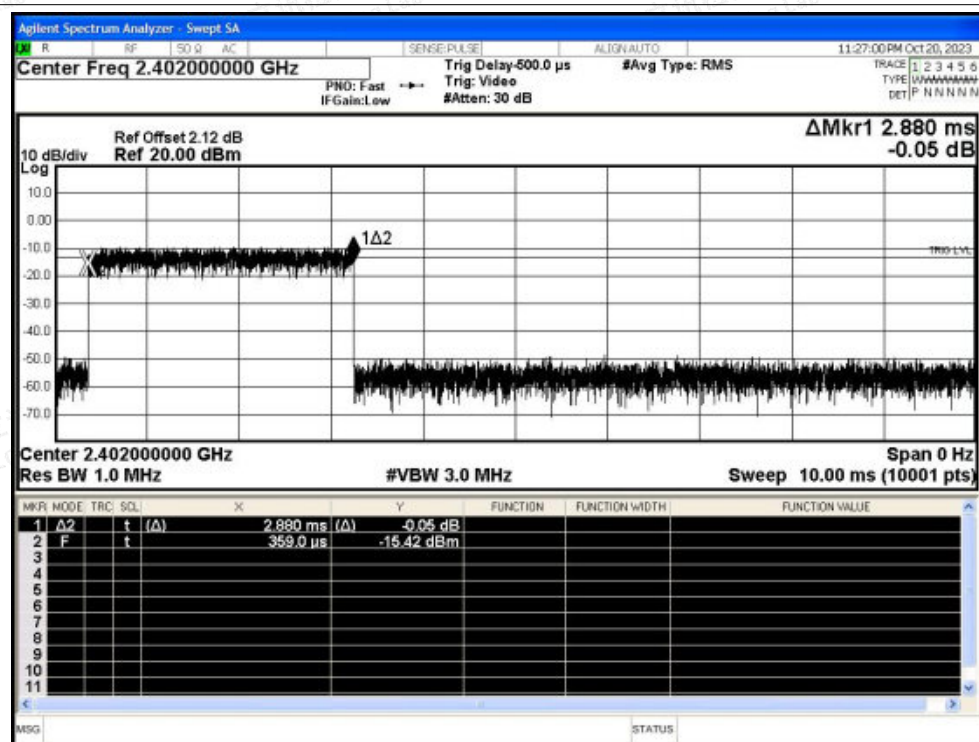


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

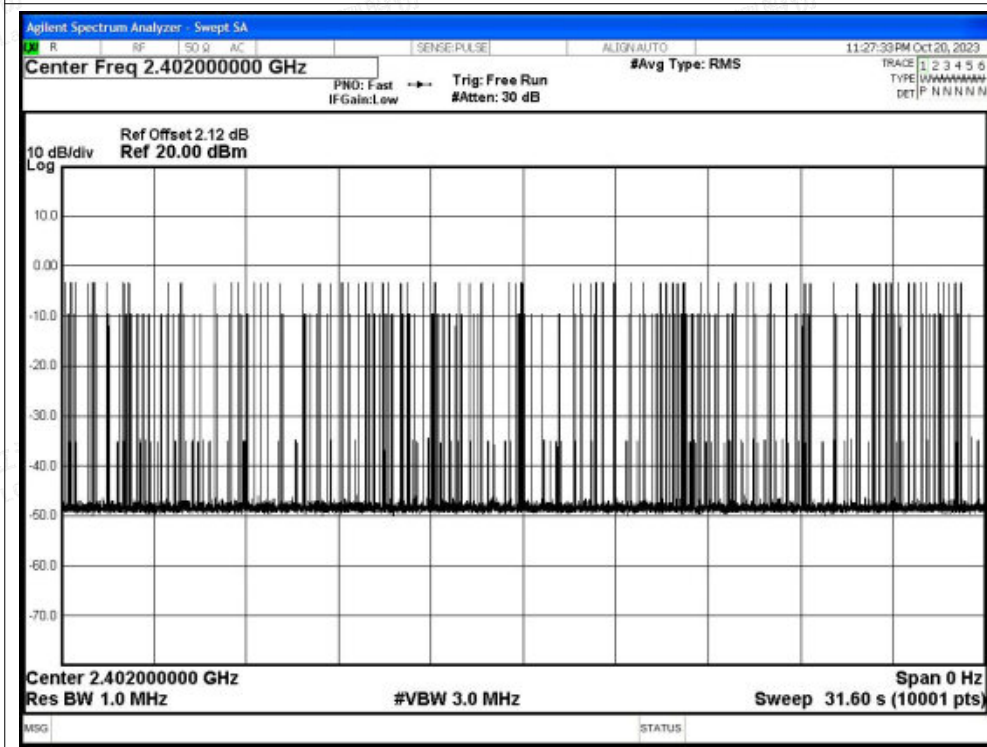




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst

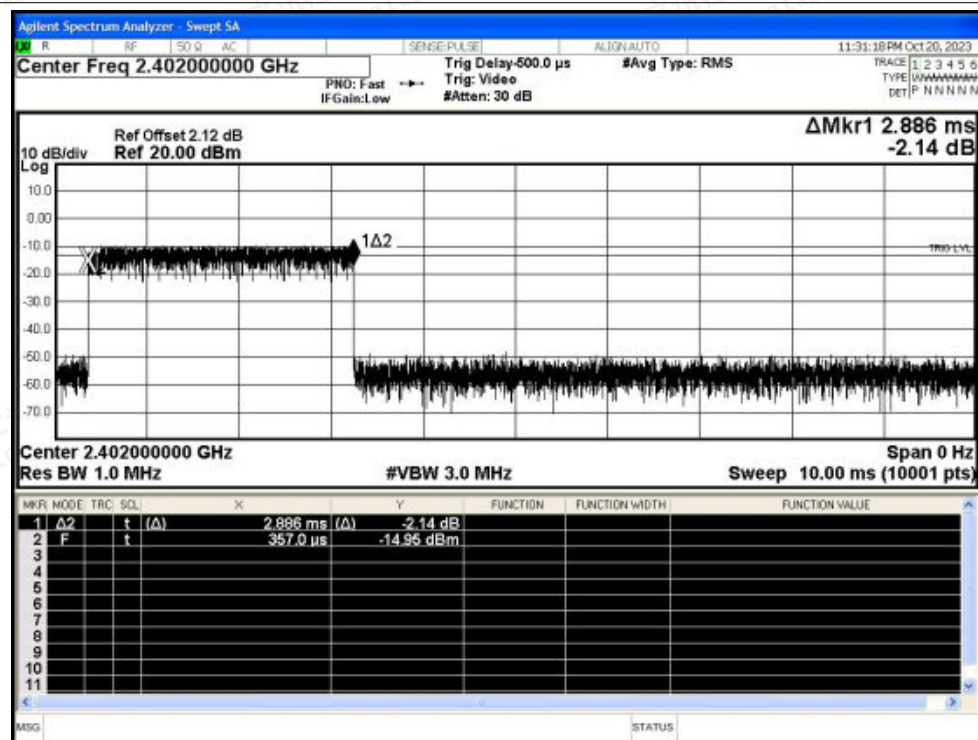


Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated

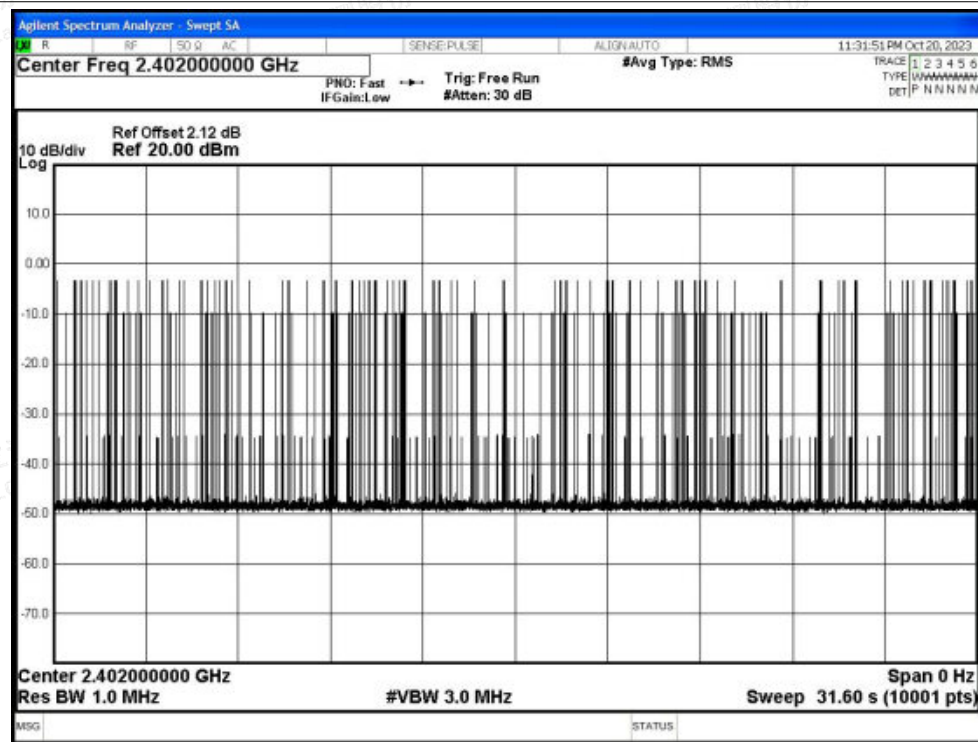




Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated





A.5 Number of Hopping Channel

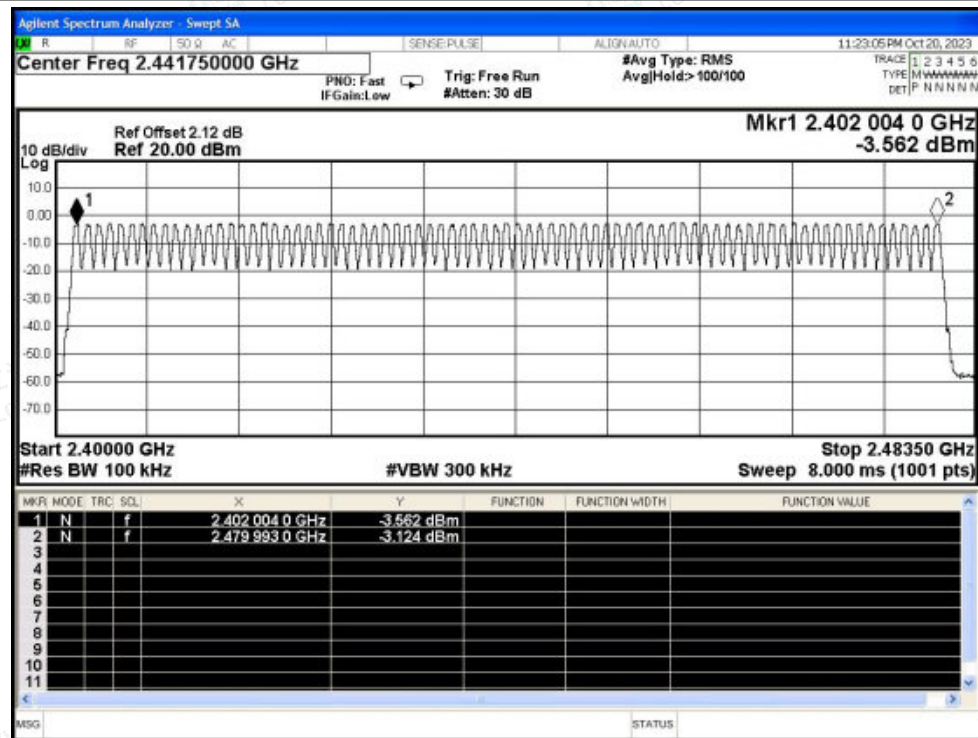
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



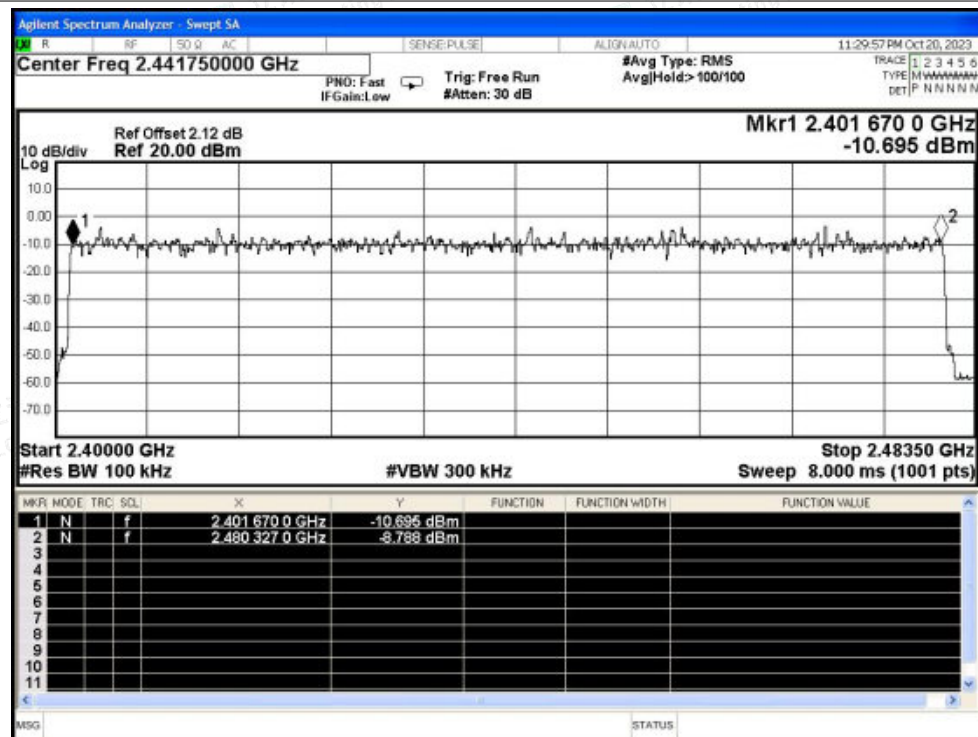


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1

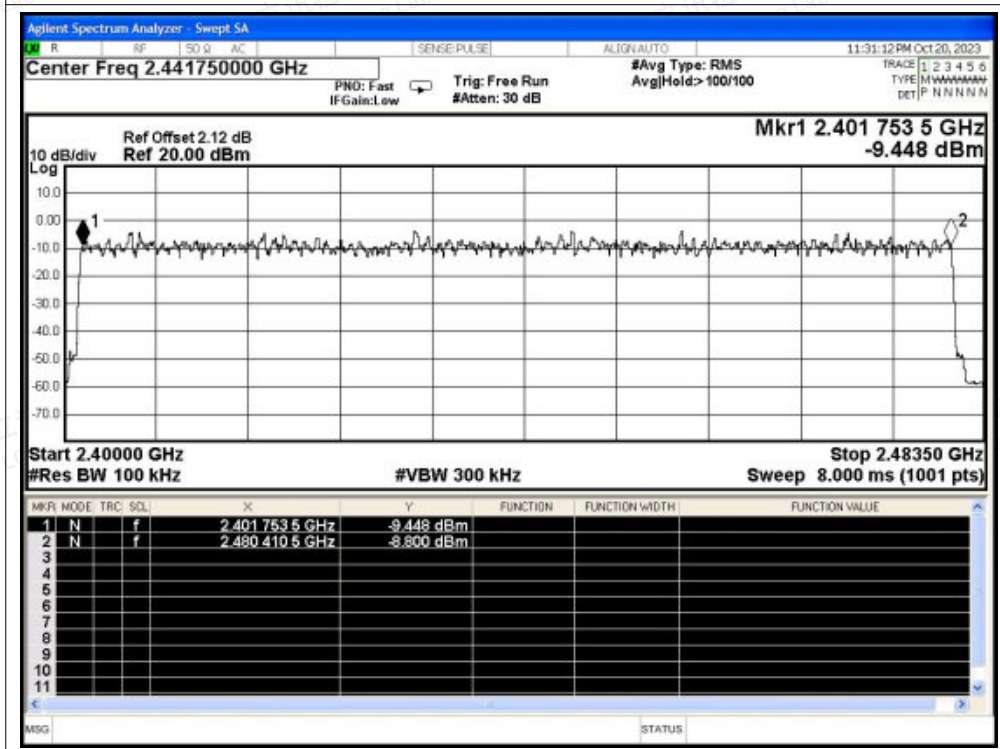


Hopping No. NVNT 2-DH5 2402MHz Ant1





Hopping No. NVNT 3-DH5 2402MHz Ant1





A.6 Band Edge

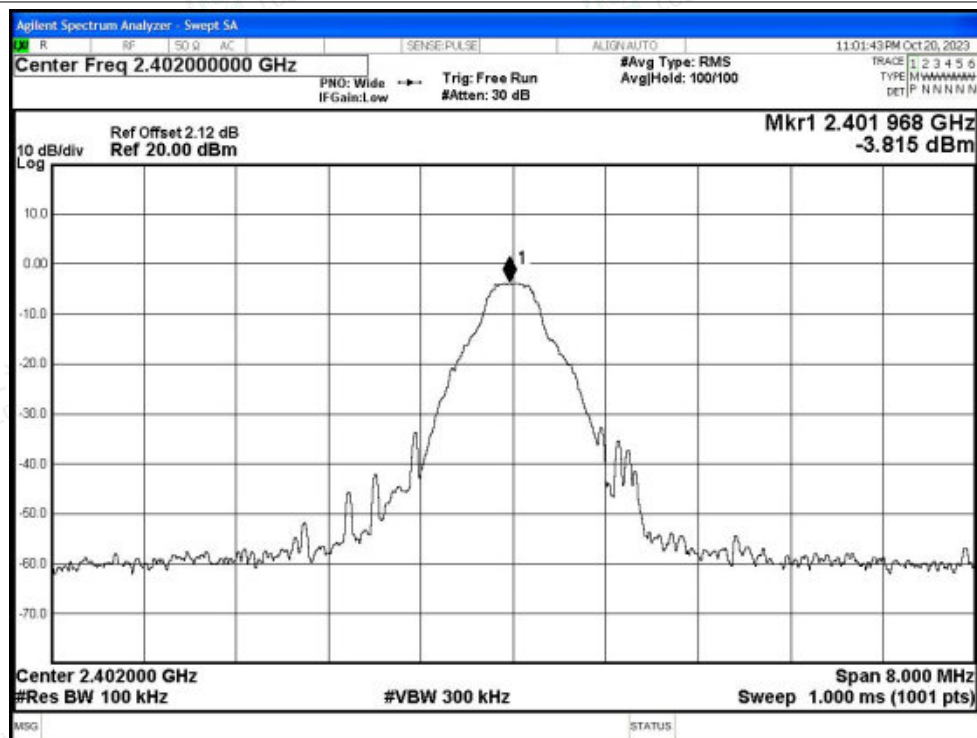
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-48.2	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-50.26	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-50.22	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-50.25	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-49.49	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-52.72	-20	Pass



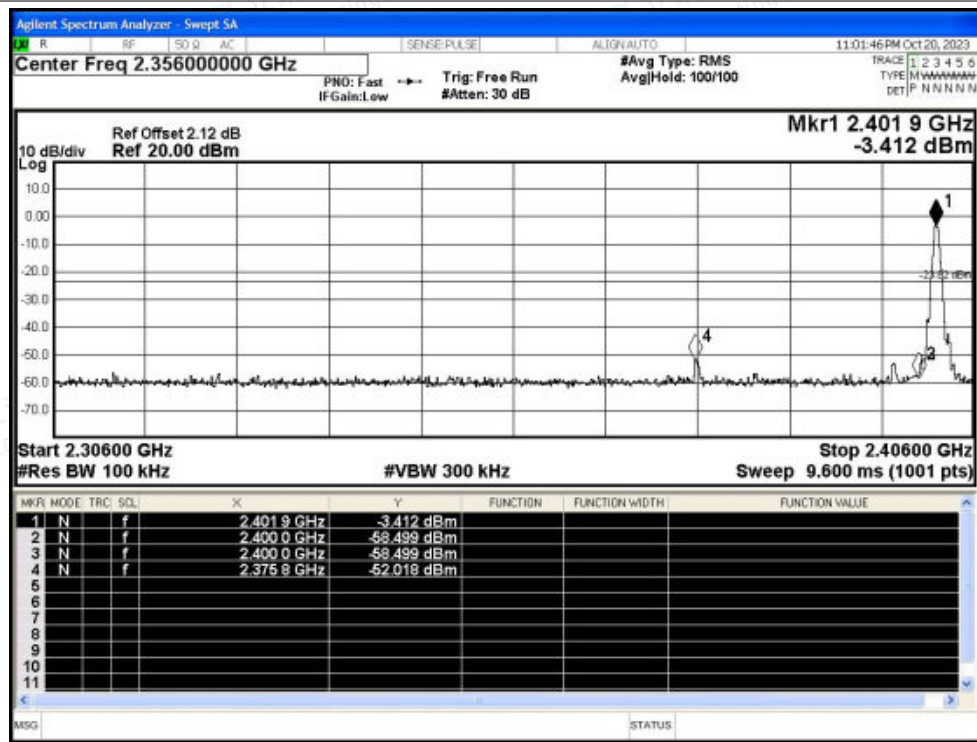


Test Graphs

Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref

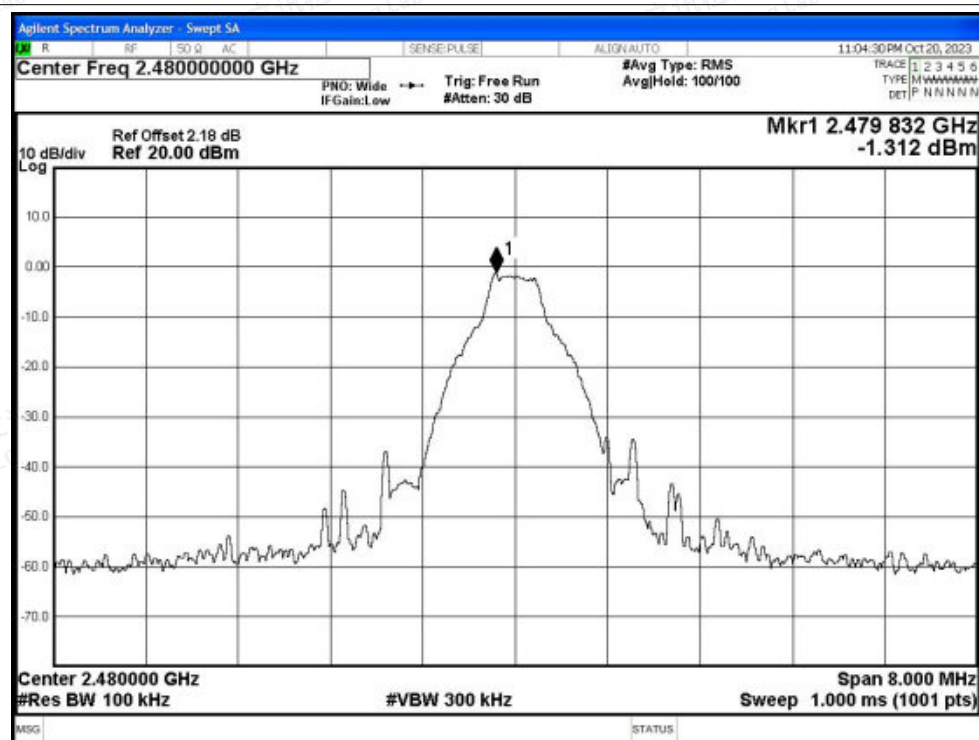


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

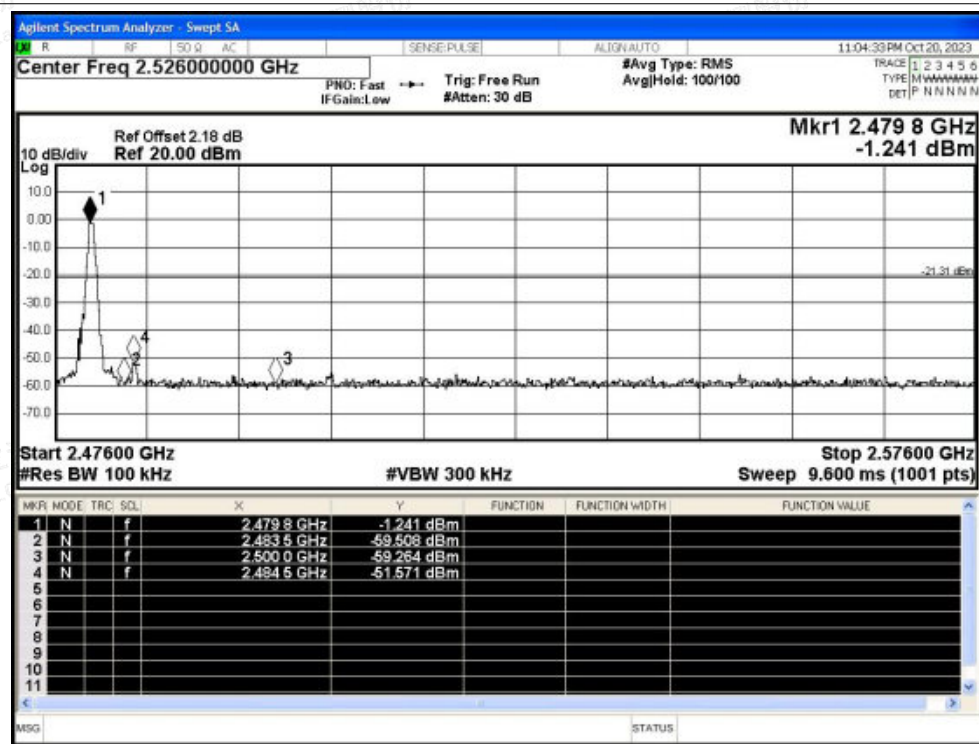




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

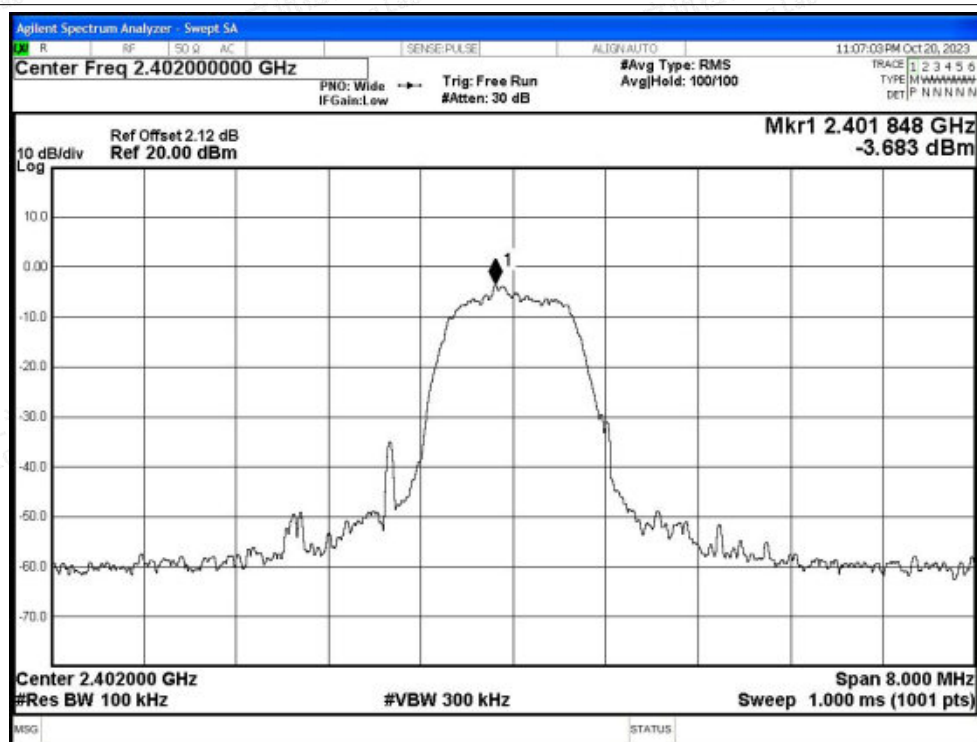


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

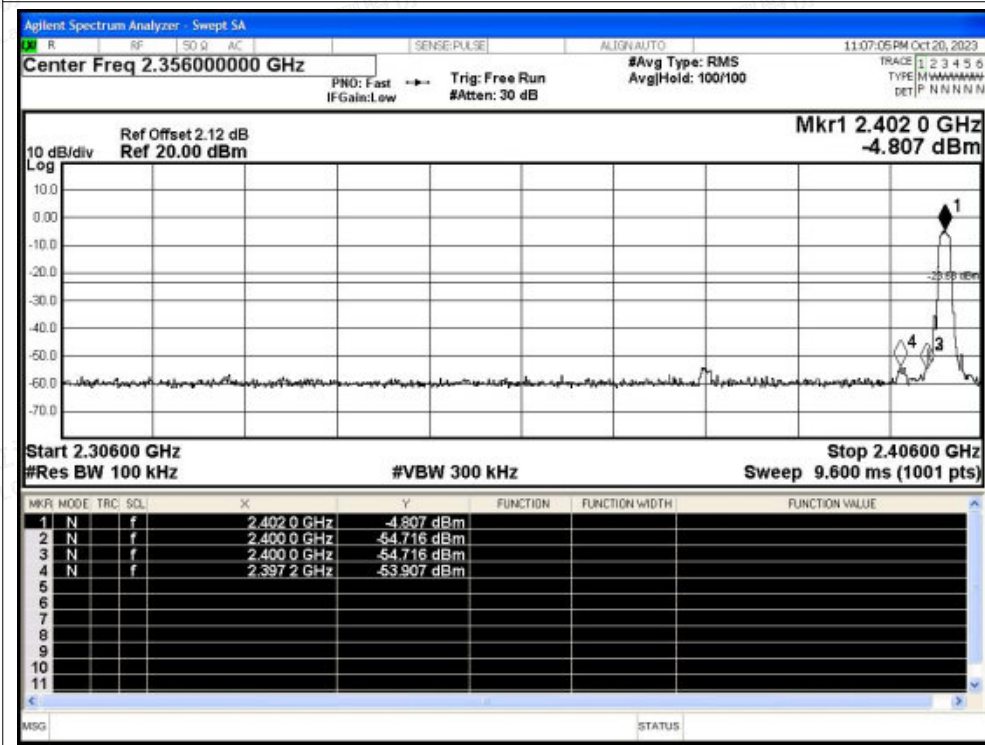




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

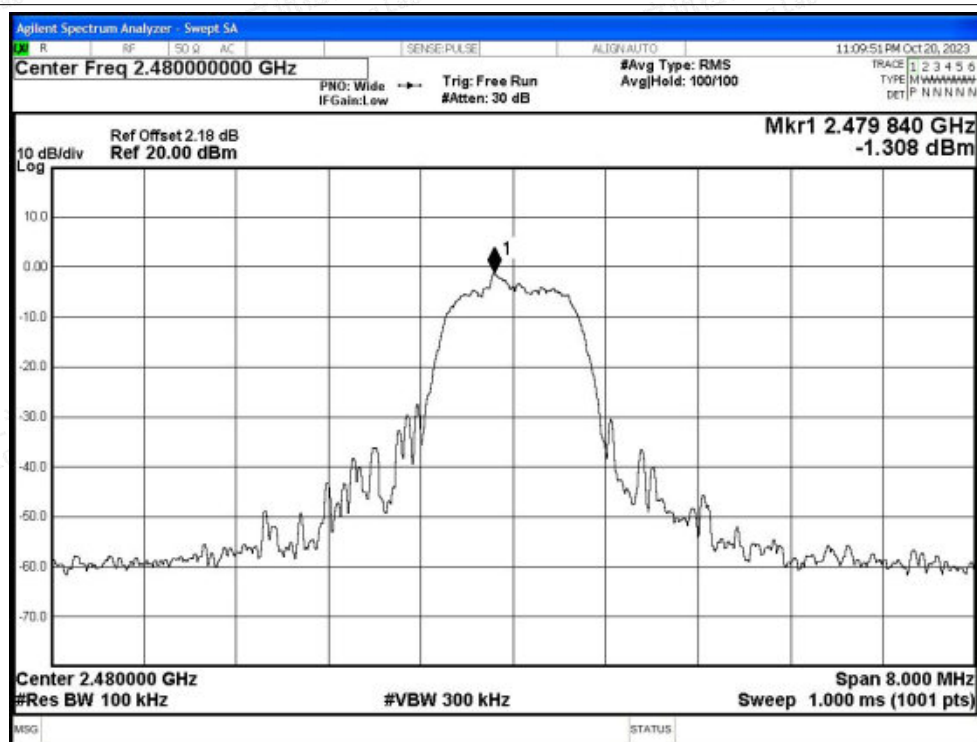


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

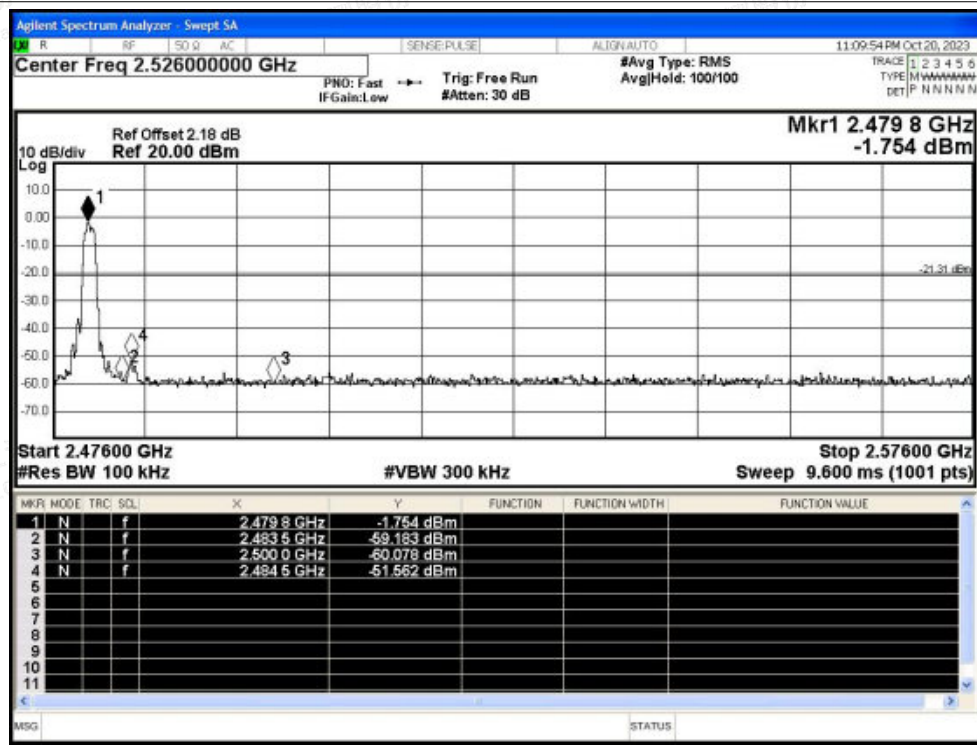




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref

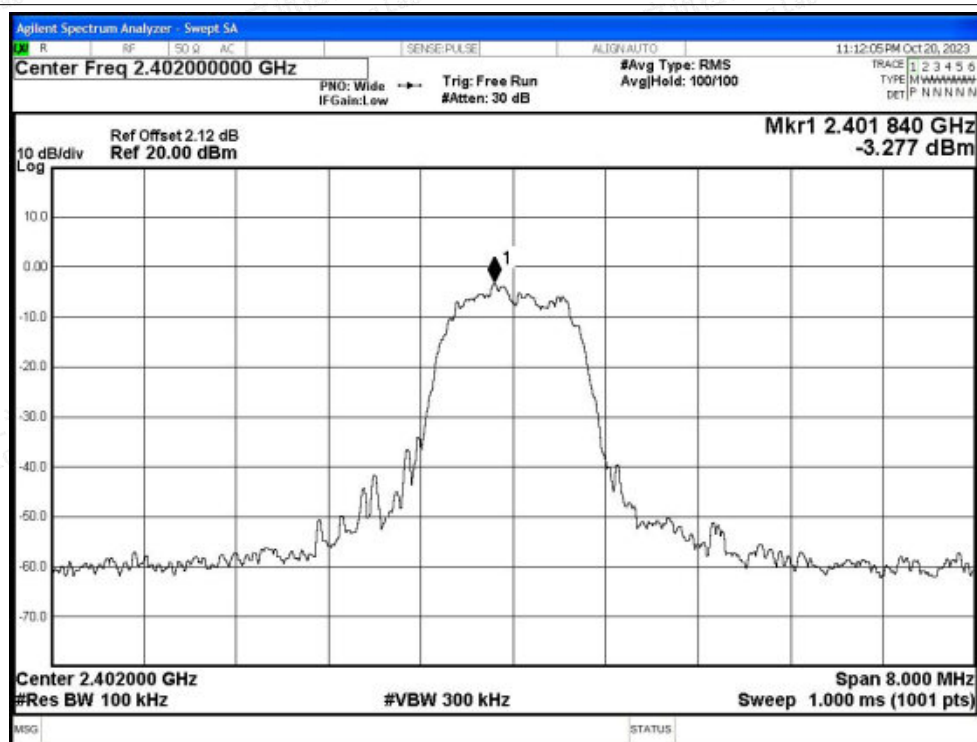


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

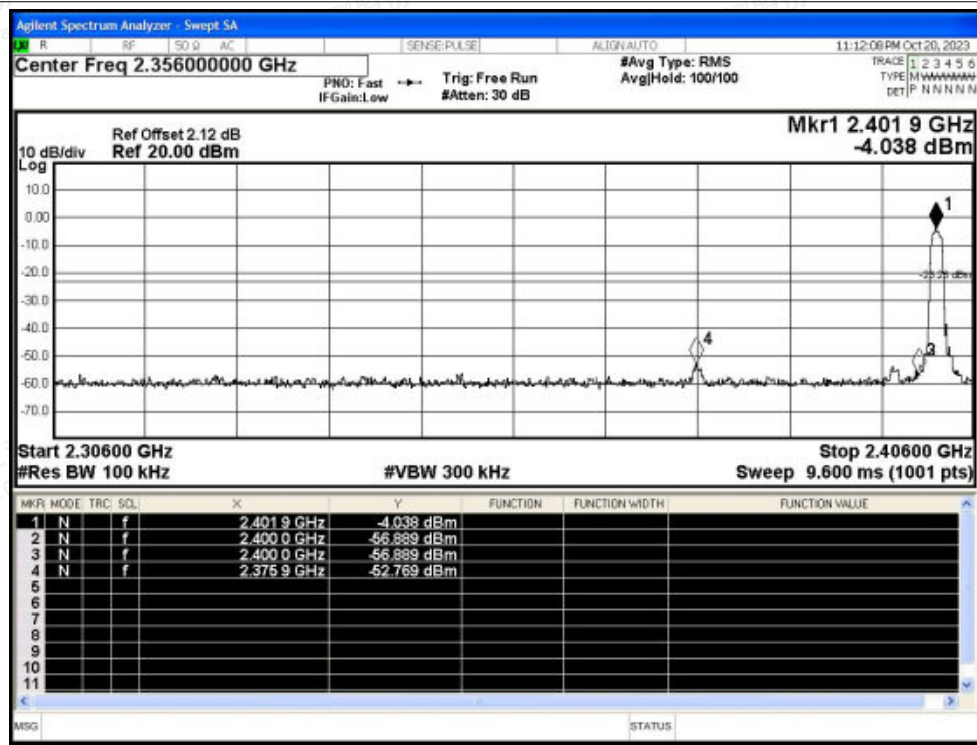




Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref

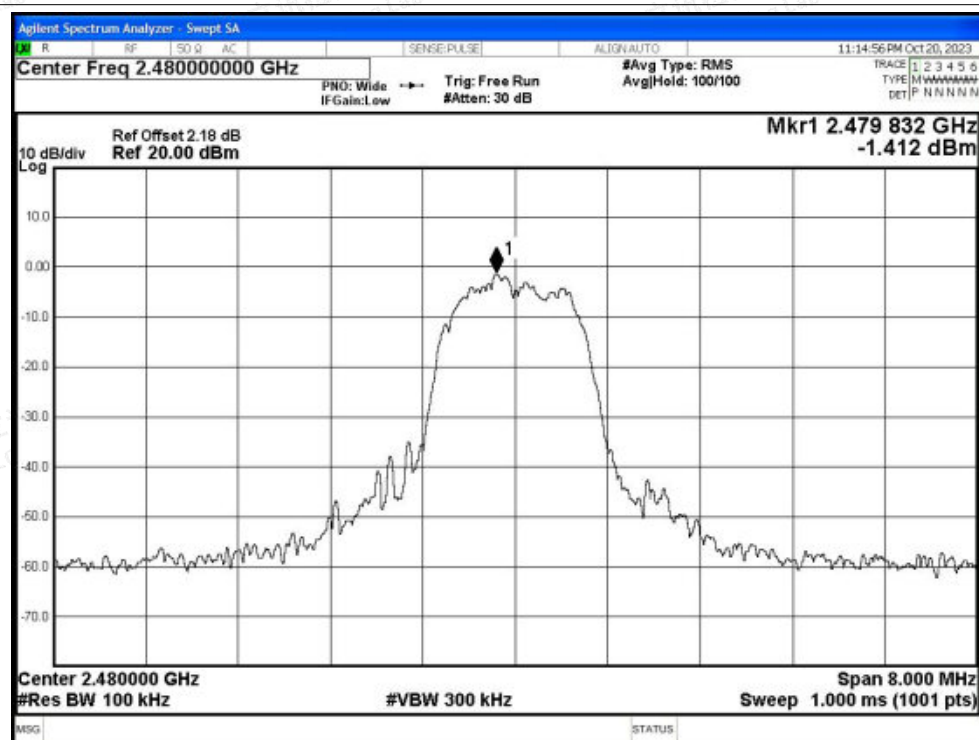


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission

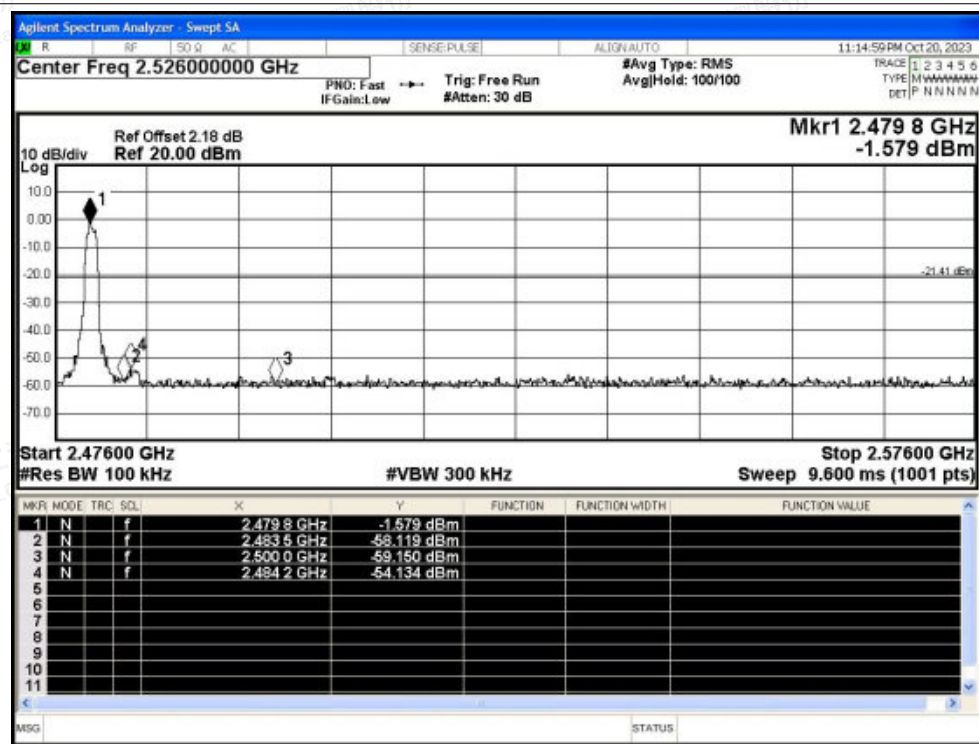




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Emission





(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-52.37	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-53.17	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-51.05	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-52.1	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-51.57	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-49.87	-20	Pass

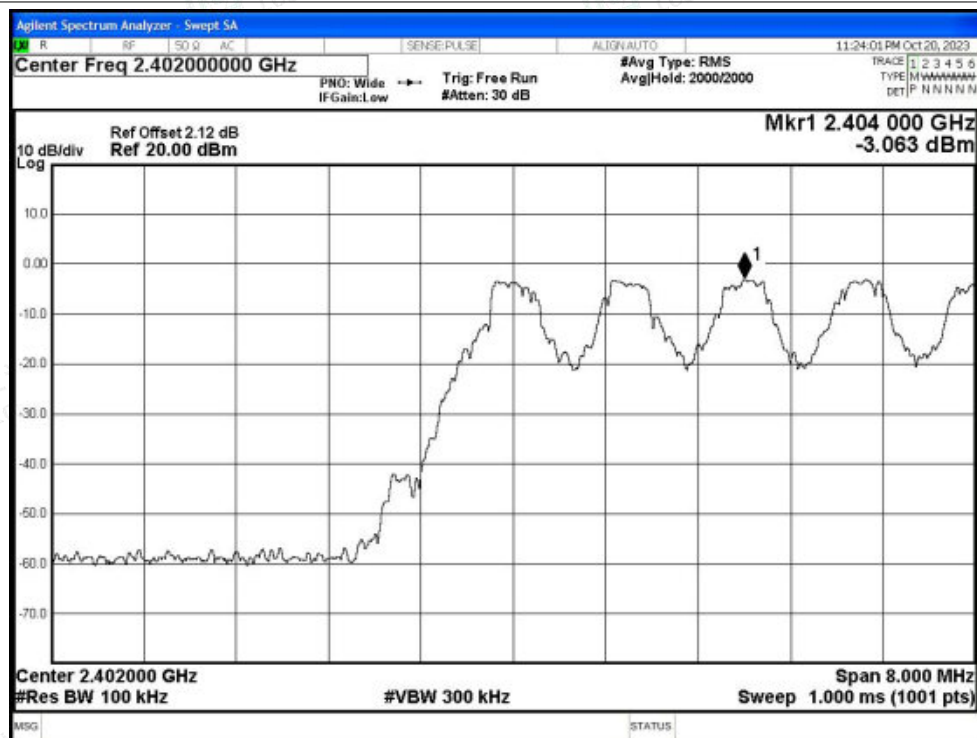


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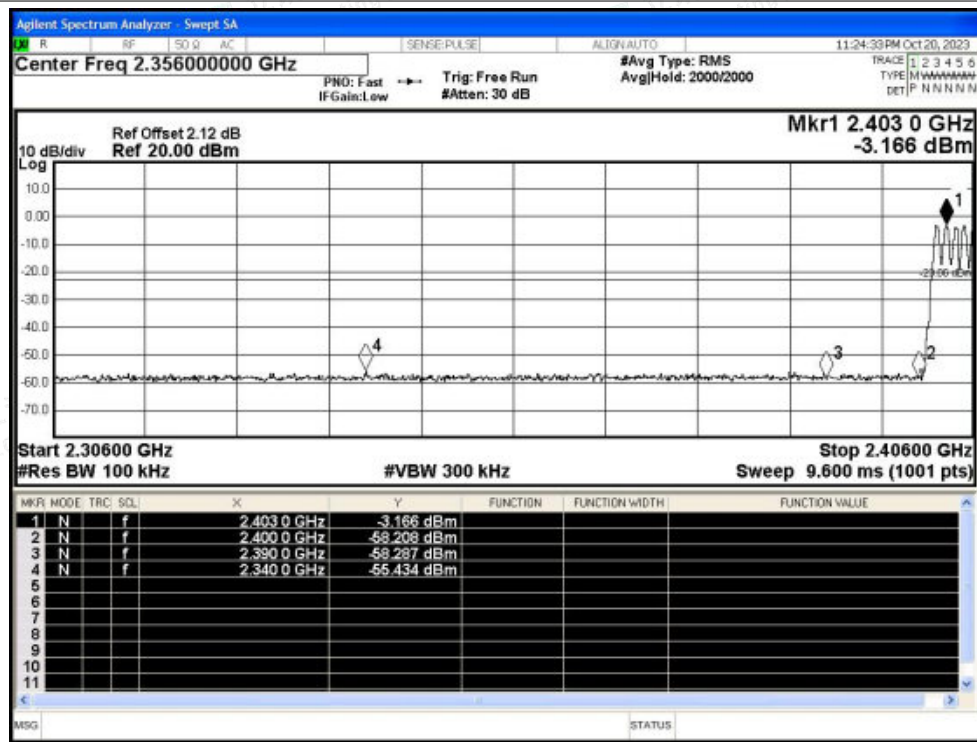


Test Graphs

Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

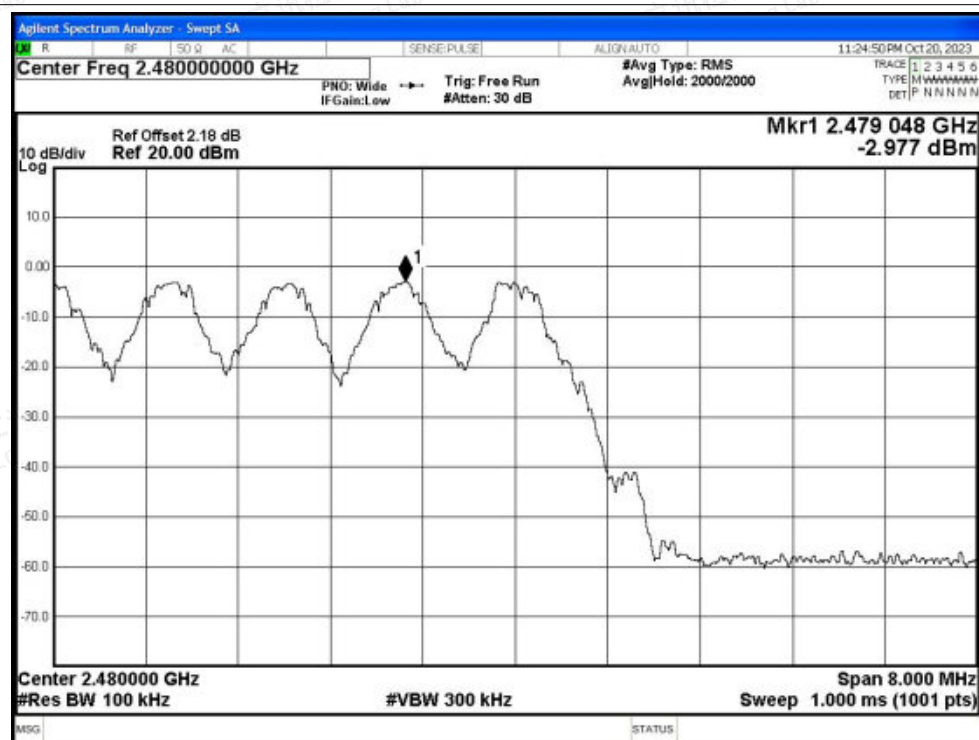


Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

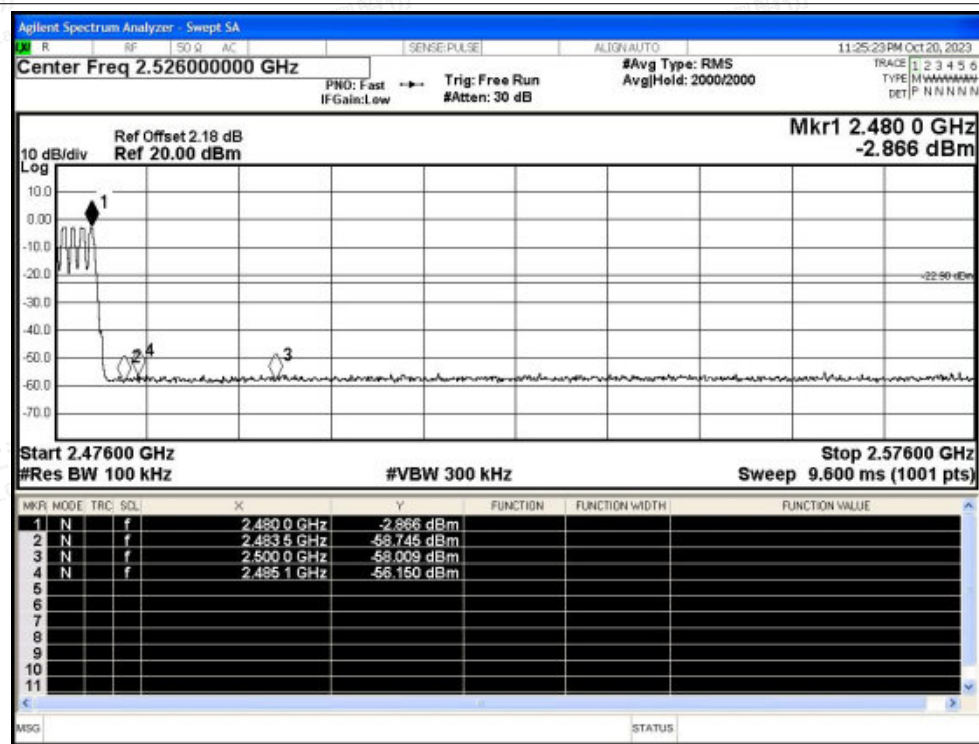




Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref

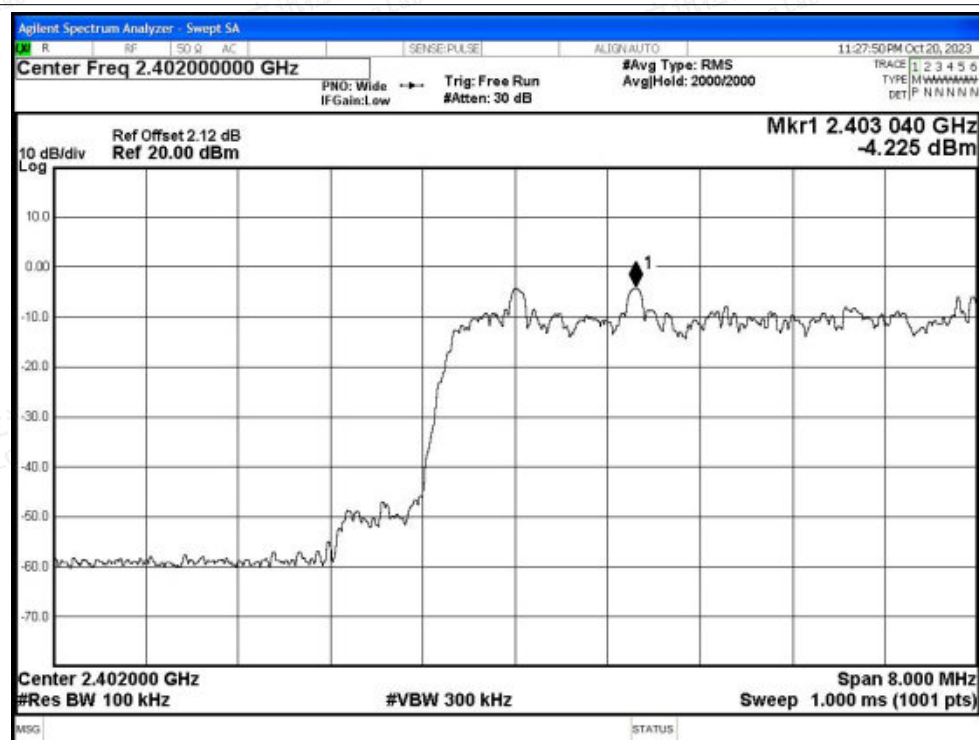


Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission

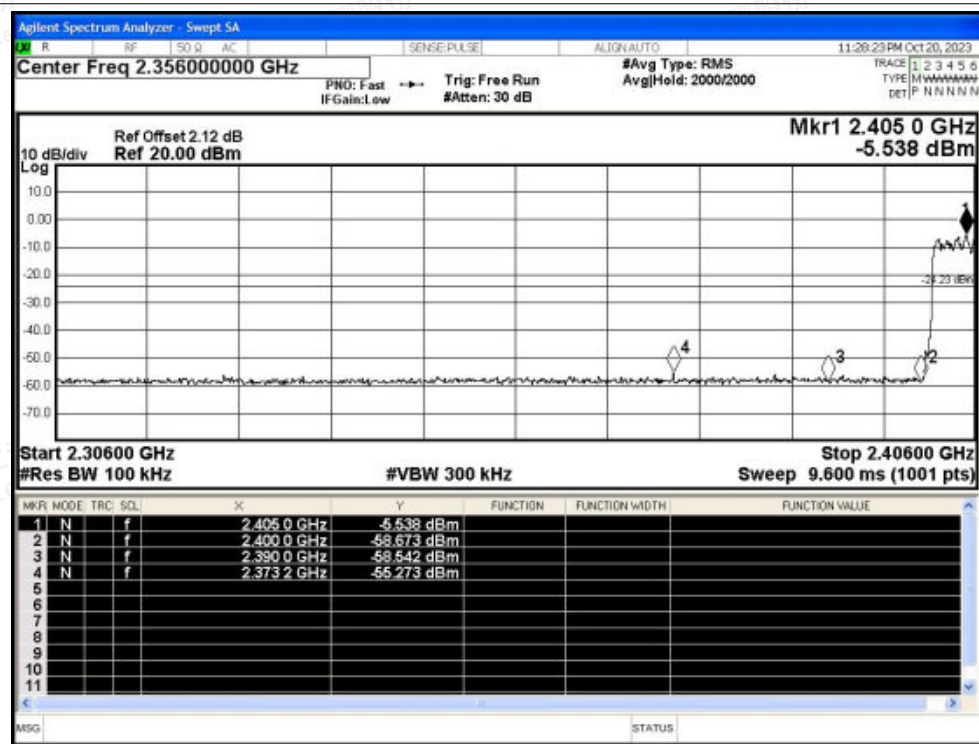




Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref

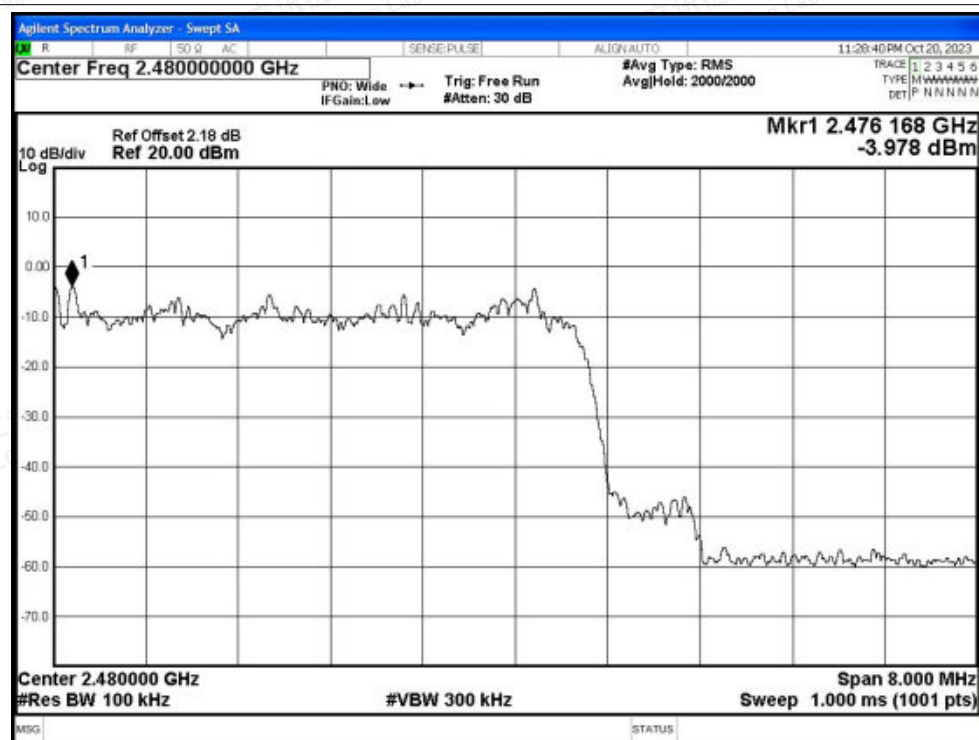


Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission

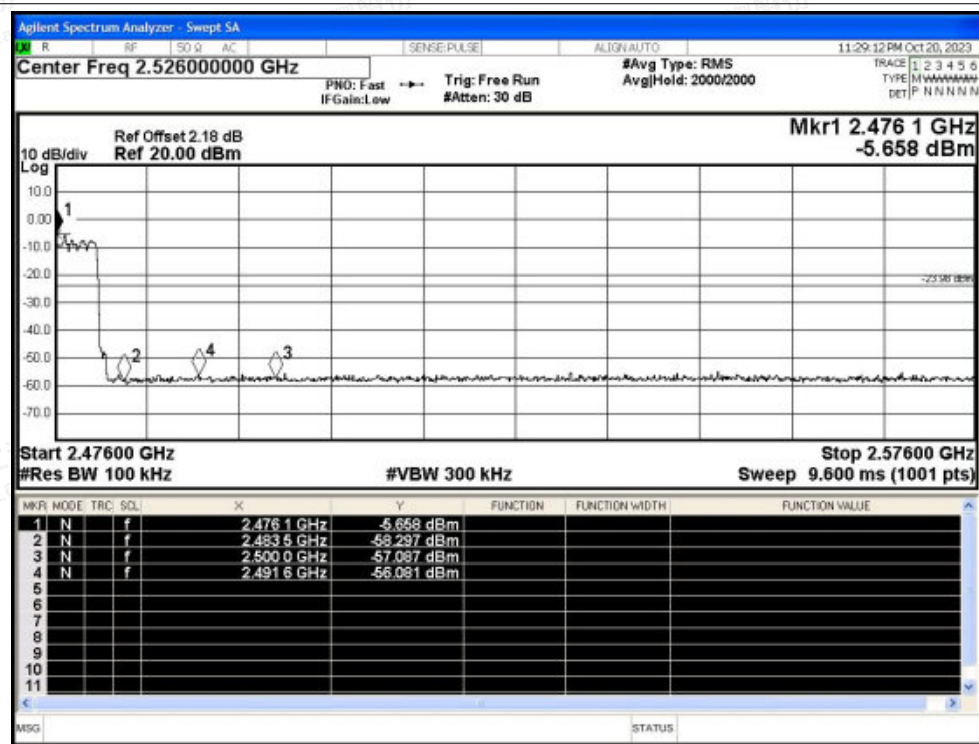




Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref

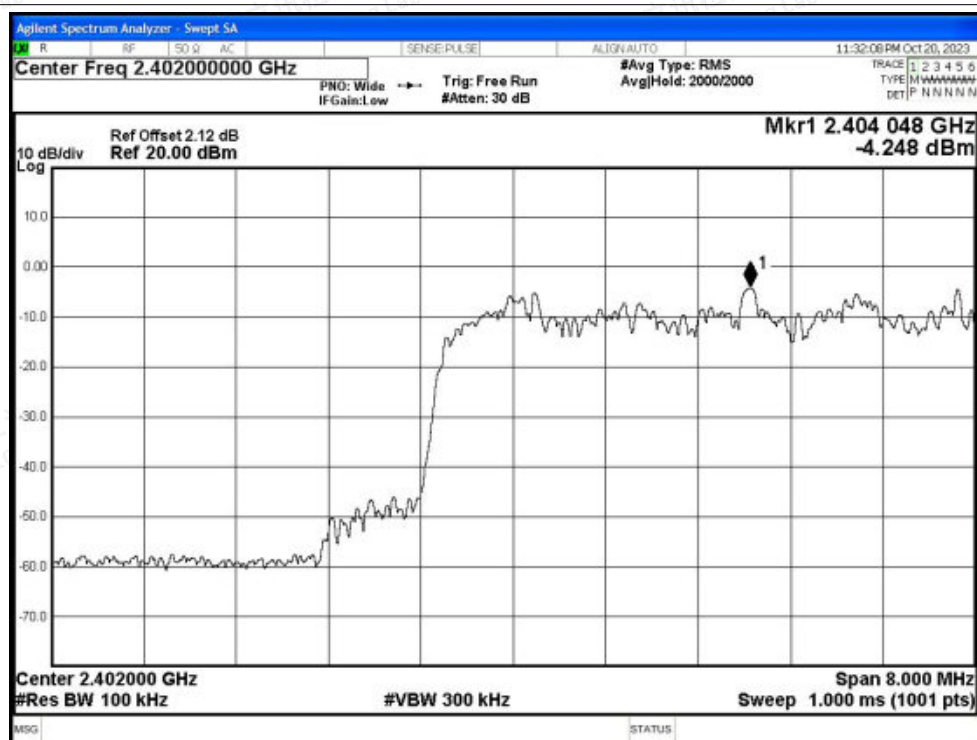


Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission

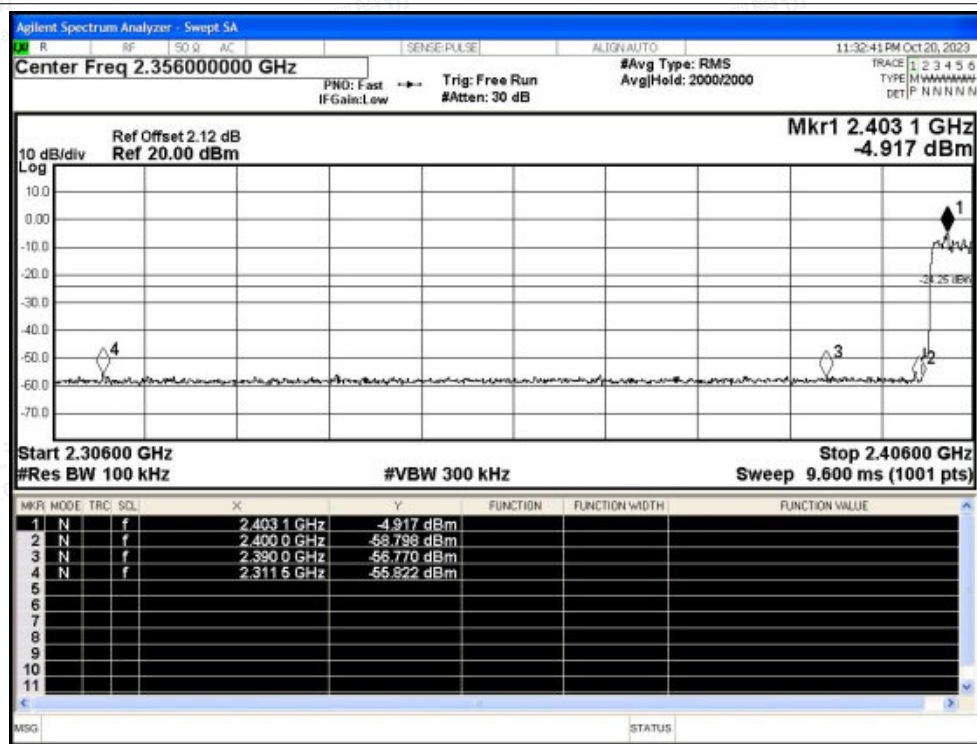




Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref

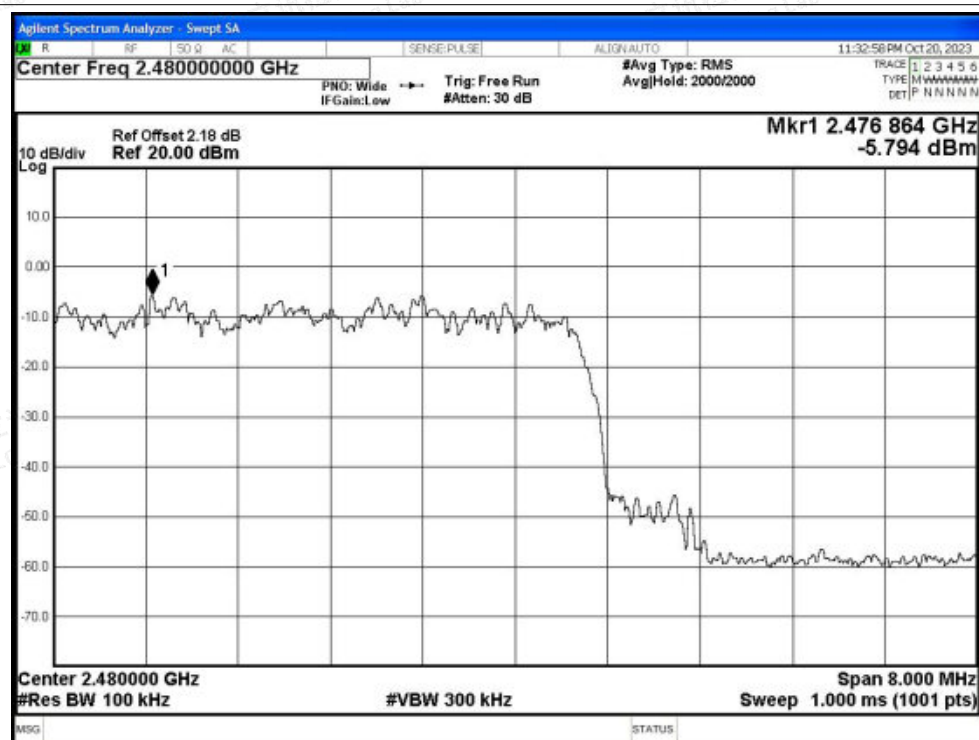


Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission

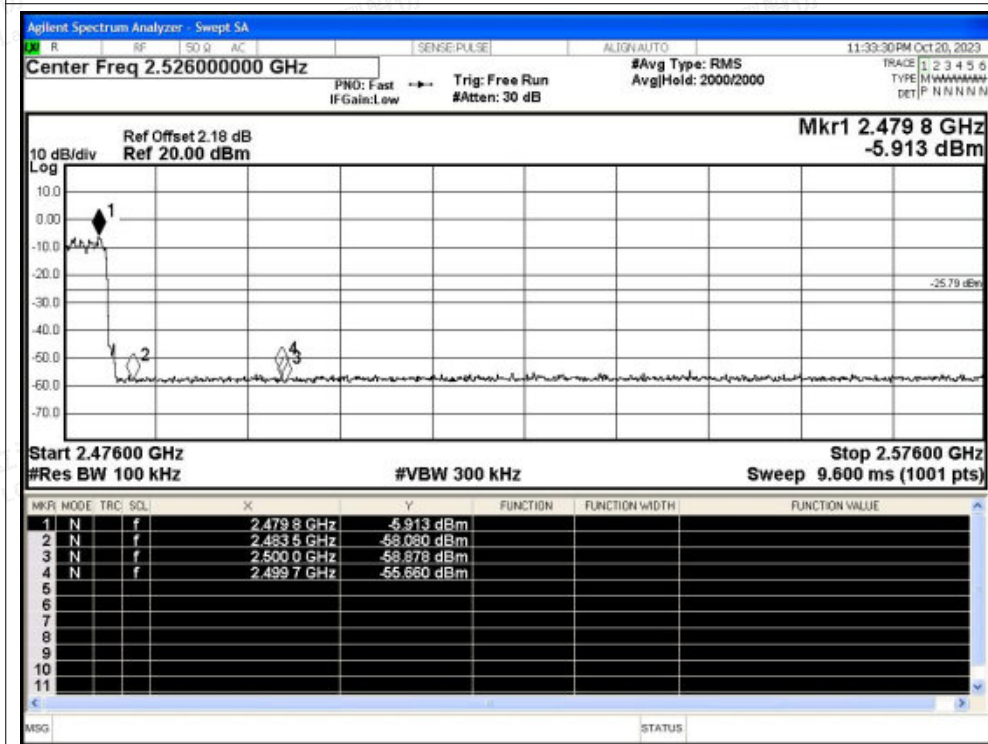




Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission



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A.7 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-36	-20	Pass
NVNT	1-DH5	2441	Ant1	-36.01	-20	Pass
NVNT	1-DH5	2480	Ant1	-37.15	-20	Pass
NVNT	2-DH5	2402	Ant1	-36.13	-20	Pass
NVNT	2-DH5	2441	Ant1	-37.49	-20	Pass
NVNT	2-DH5	2480	Ant1	-37.45	-20	Pass
NVNT	3-DH5	2402	Ant1	-36.85	-20	Pass
NVNT	3-DH5	2441	Ant1	-34.51	-20	Pass
NVNT	3-DH5	2480	Ant1	-36.54	-20	Pass

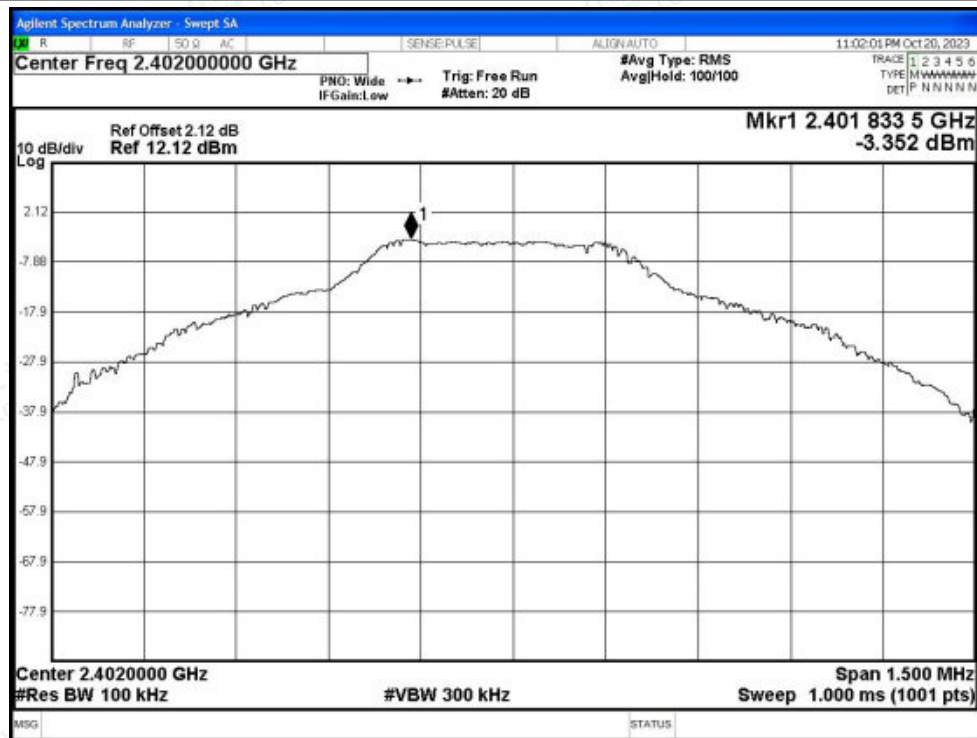


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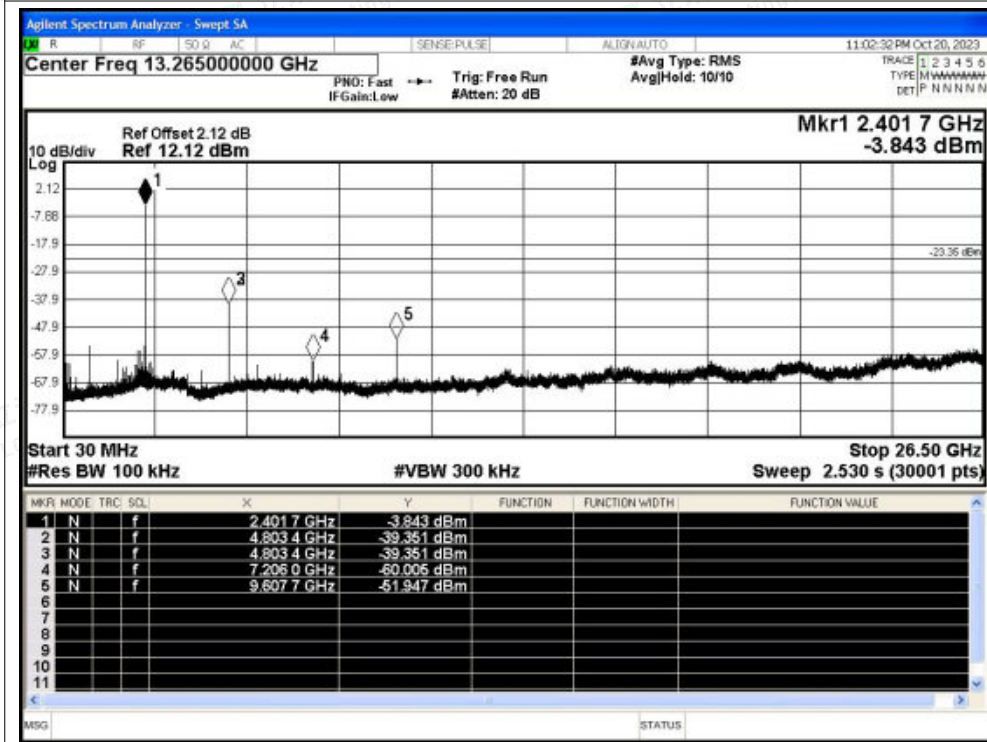


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

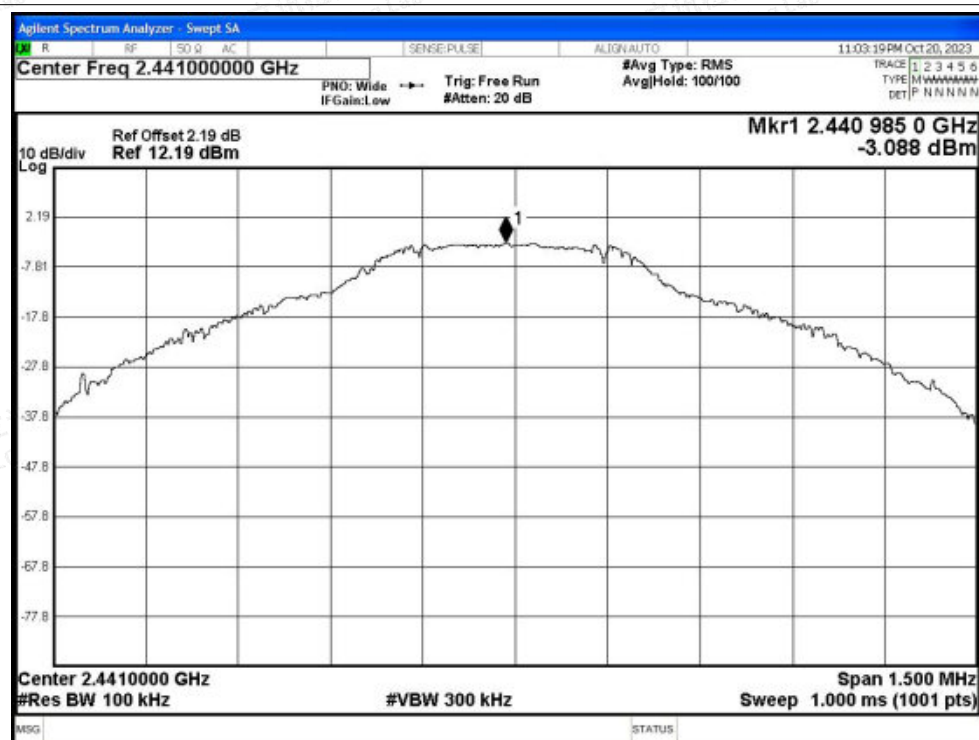


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

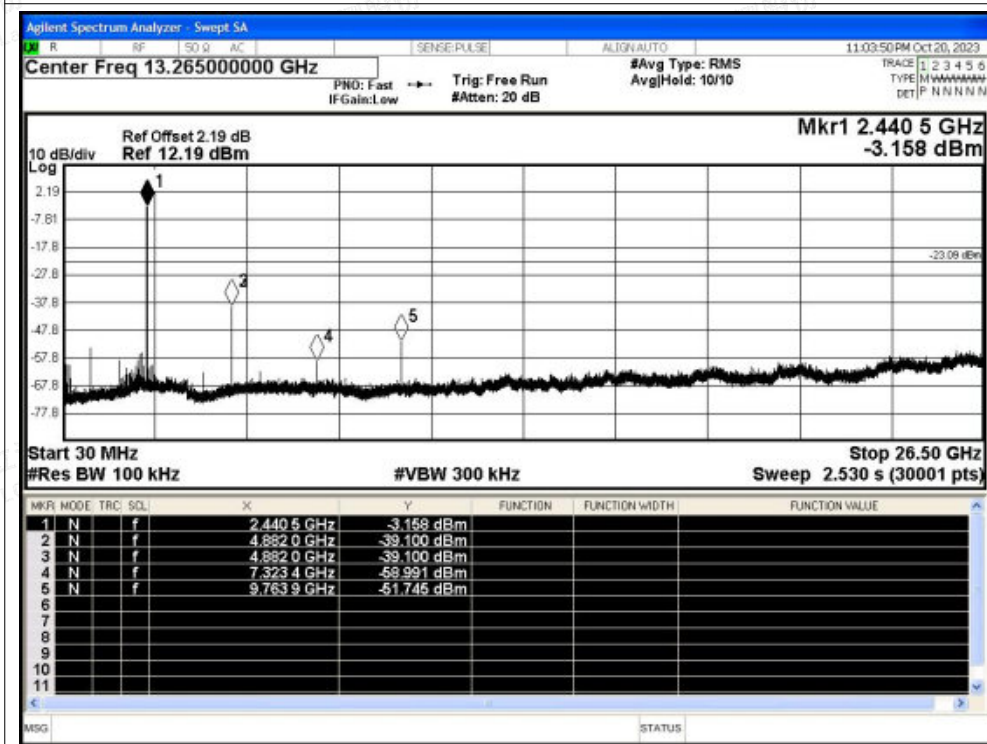




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

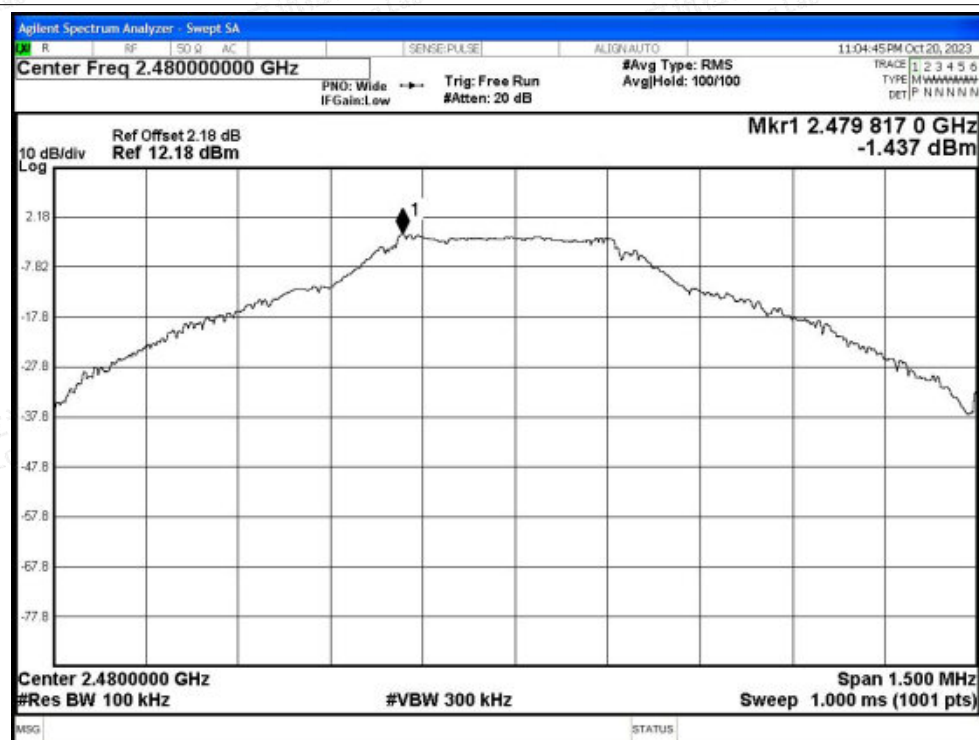


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

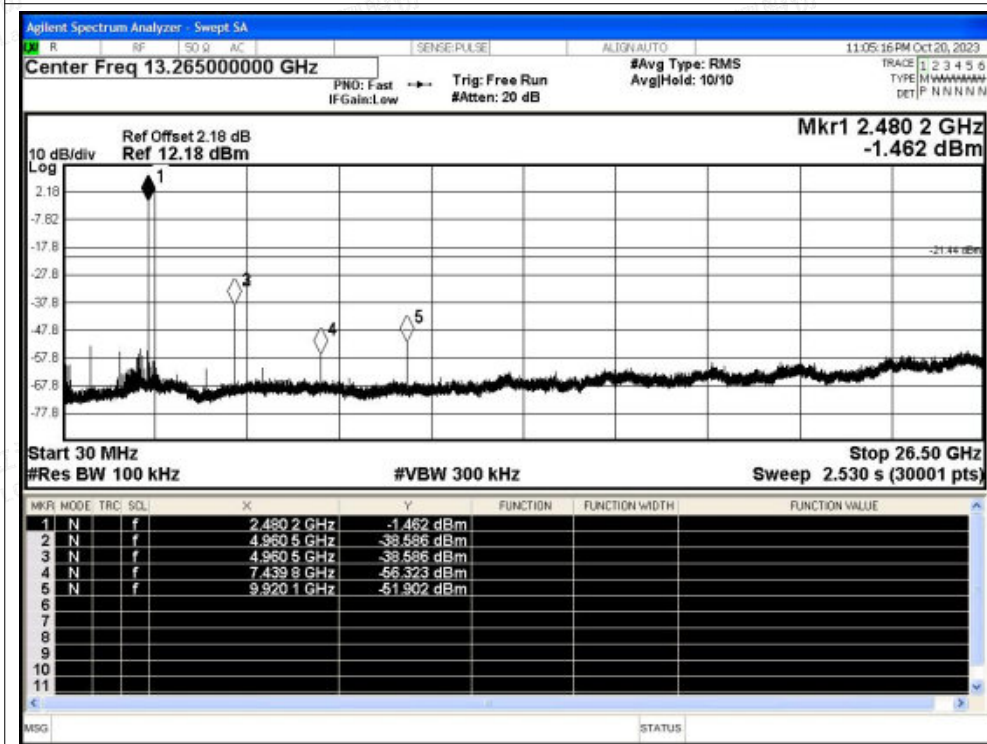




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

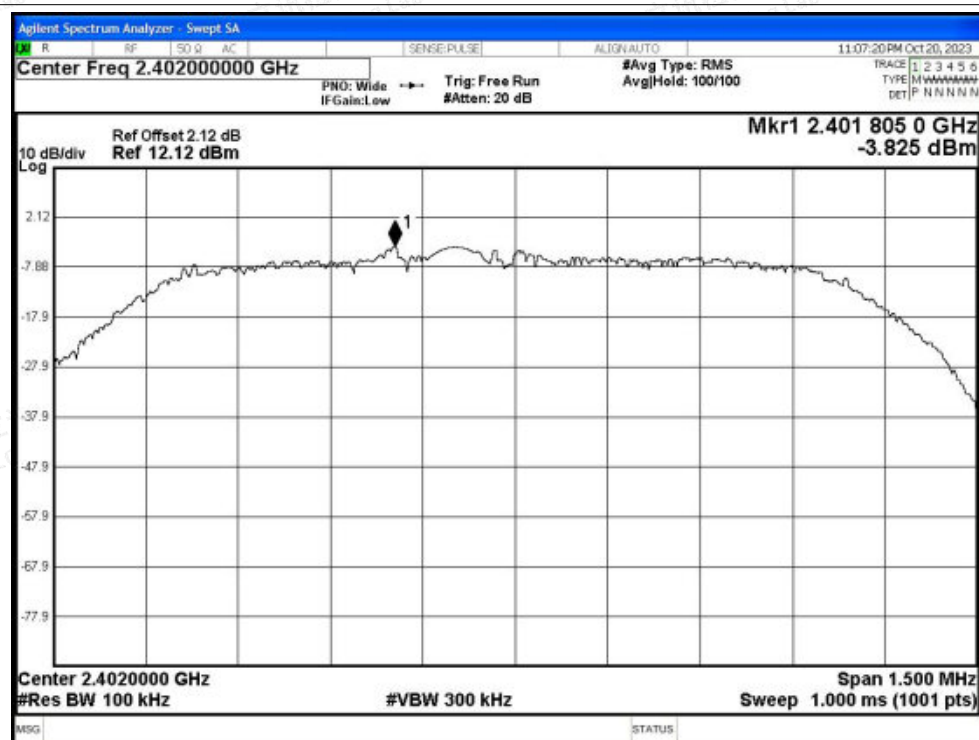


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

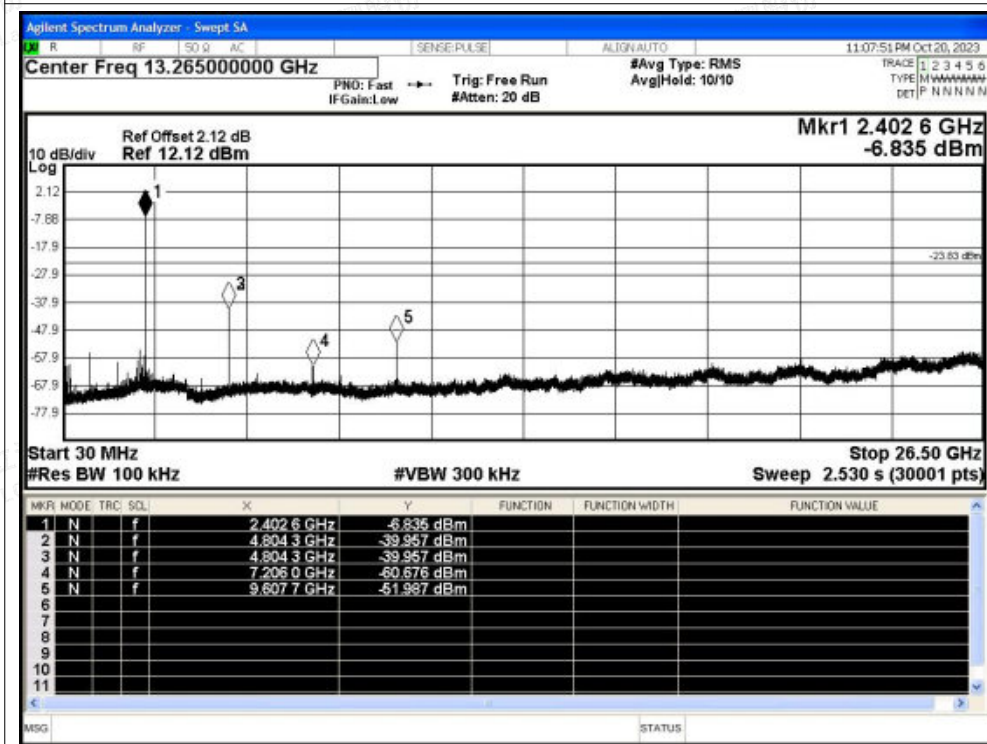




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

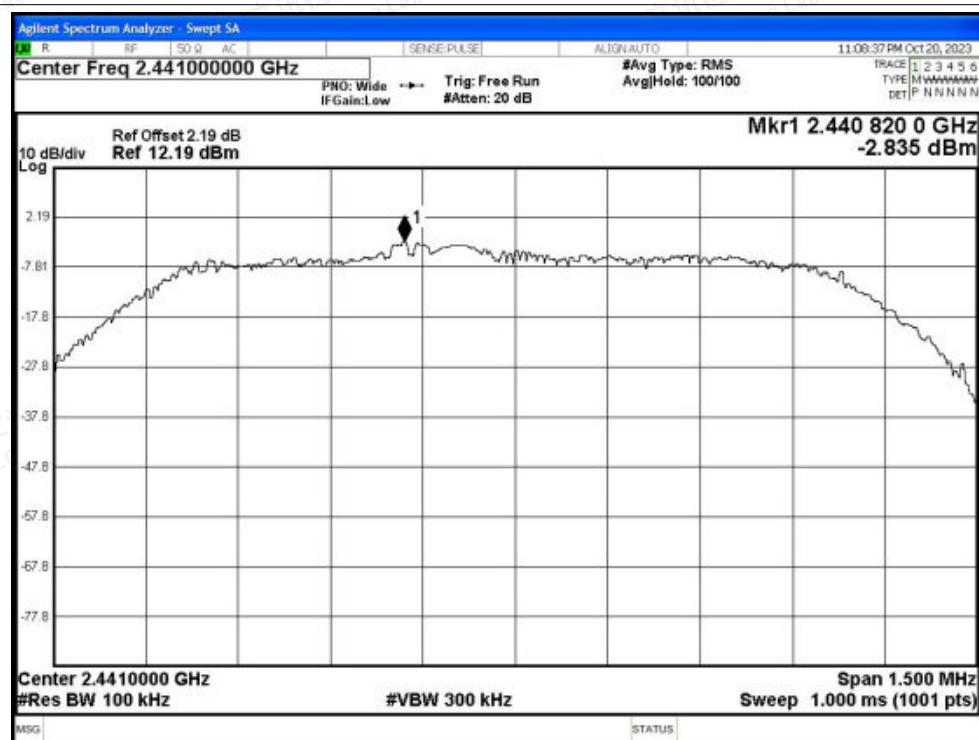


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

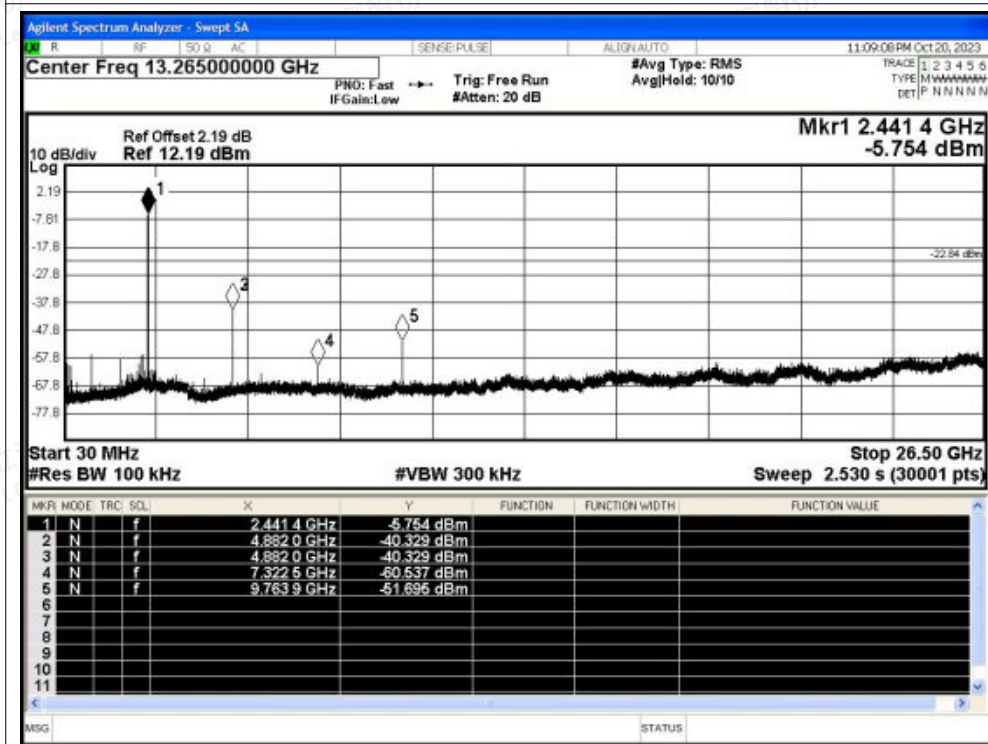




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

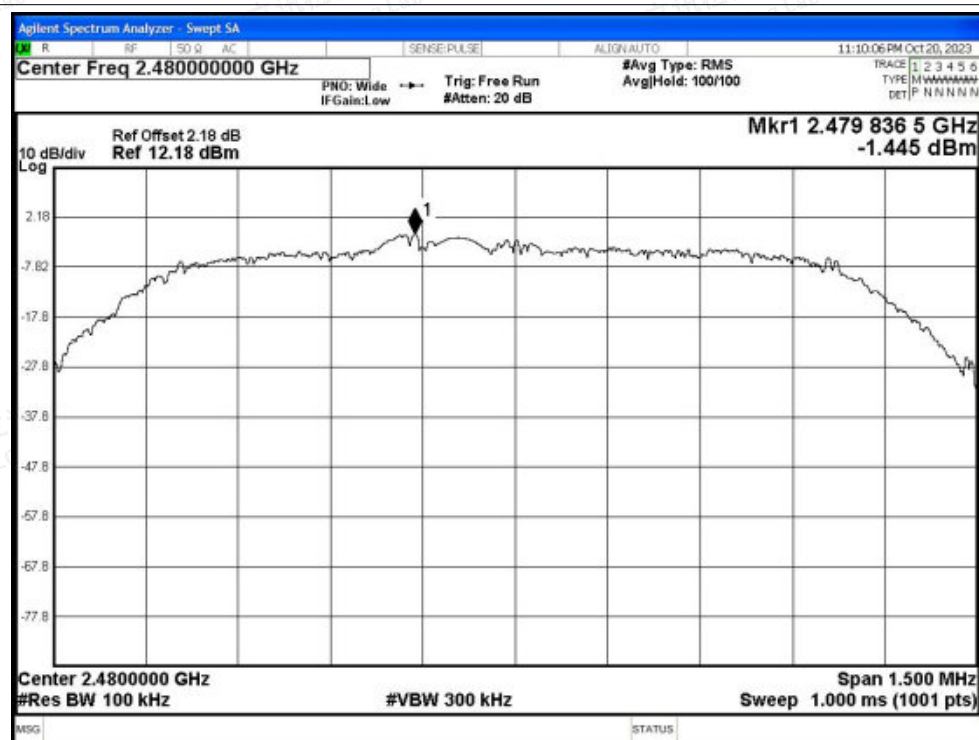


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

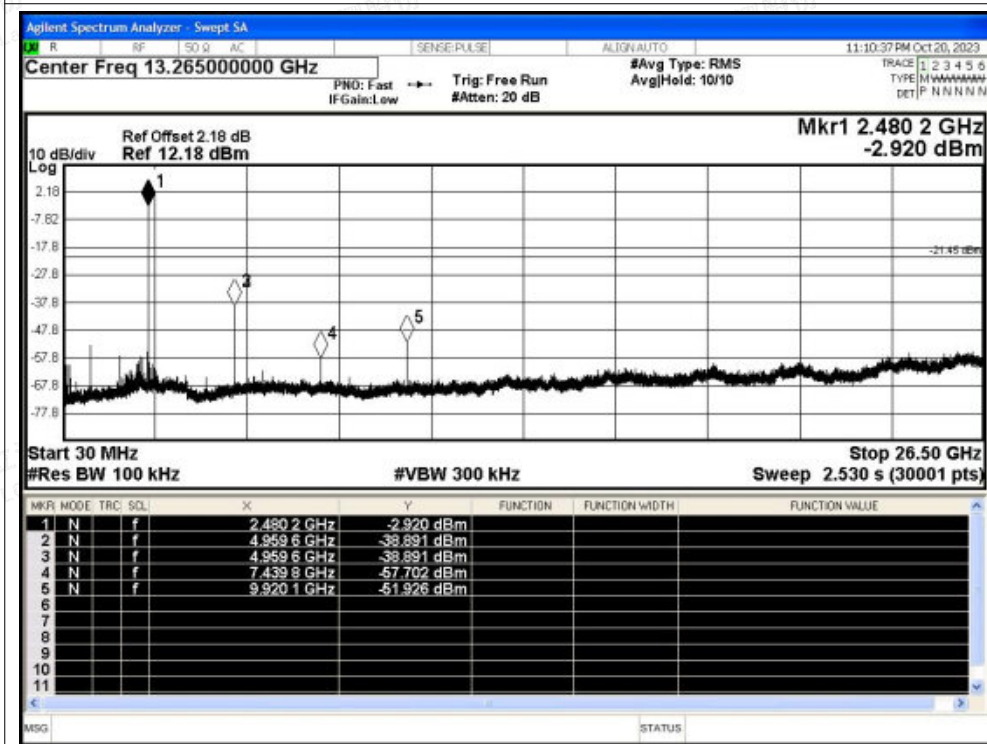




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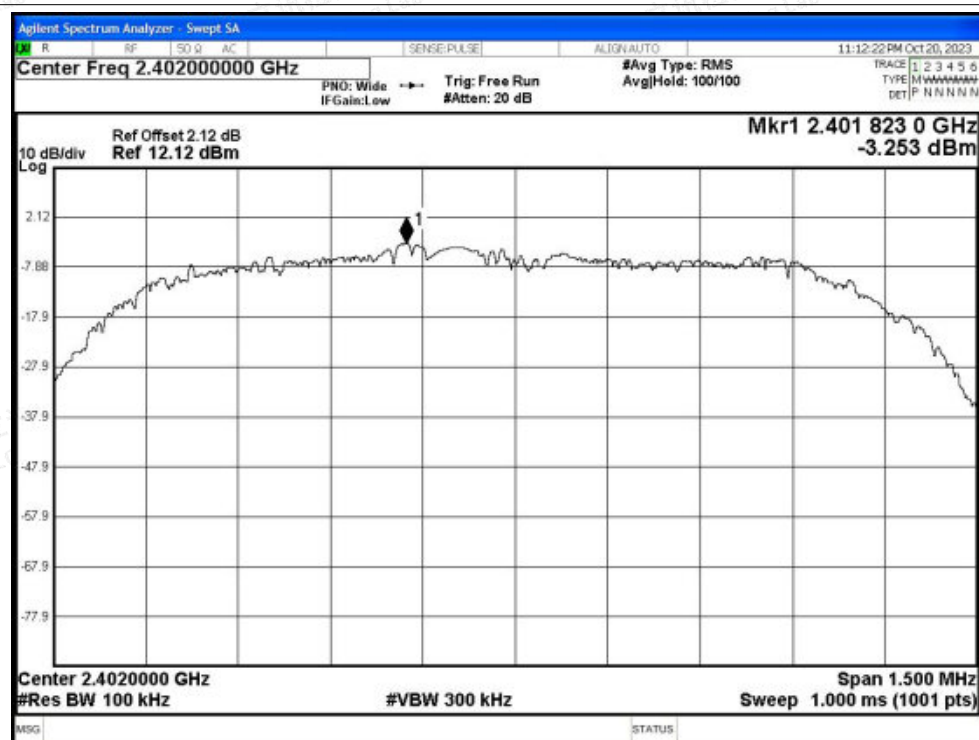


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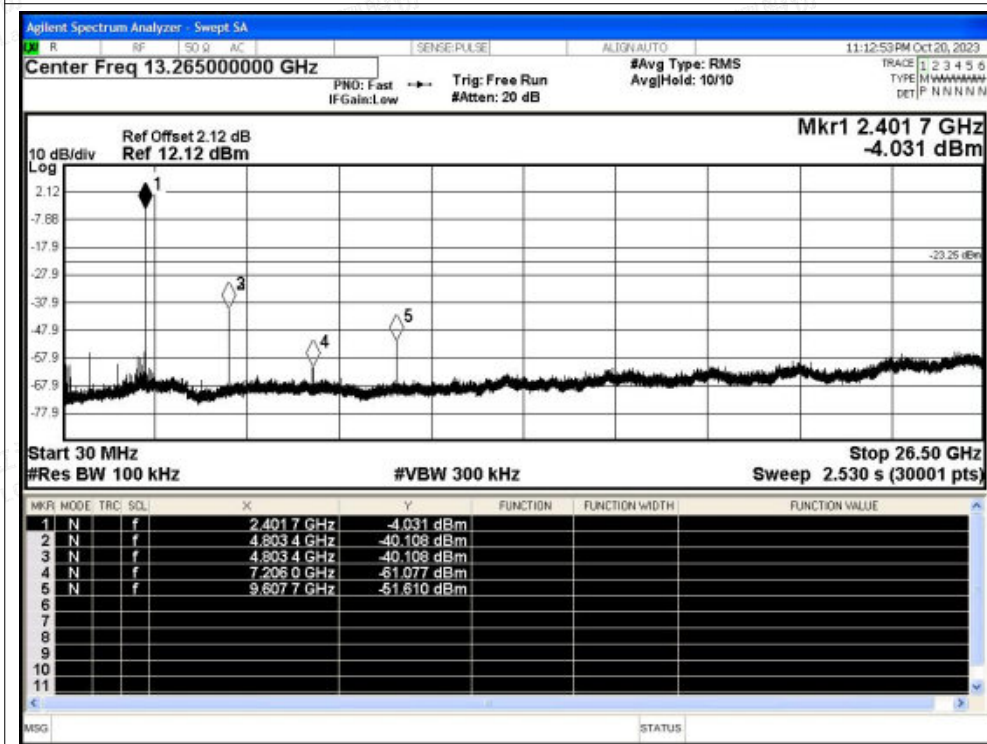




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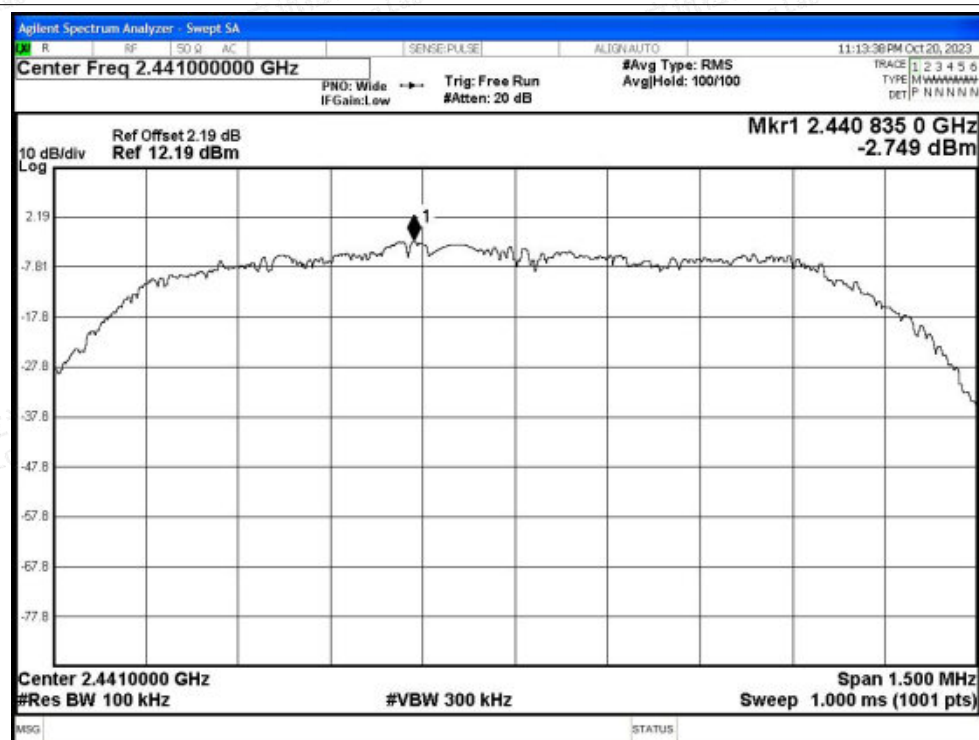


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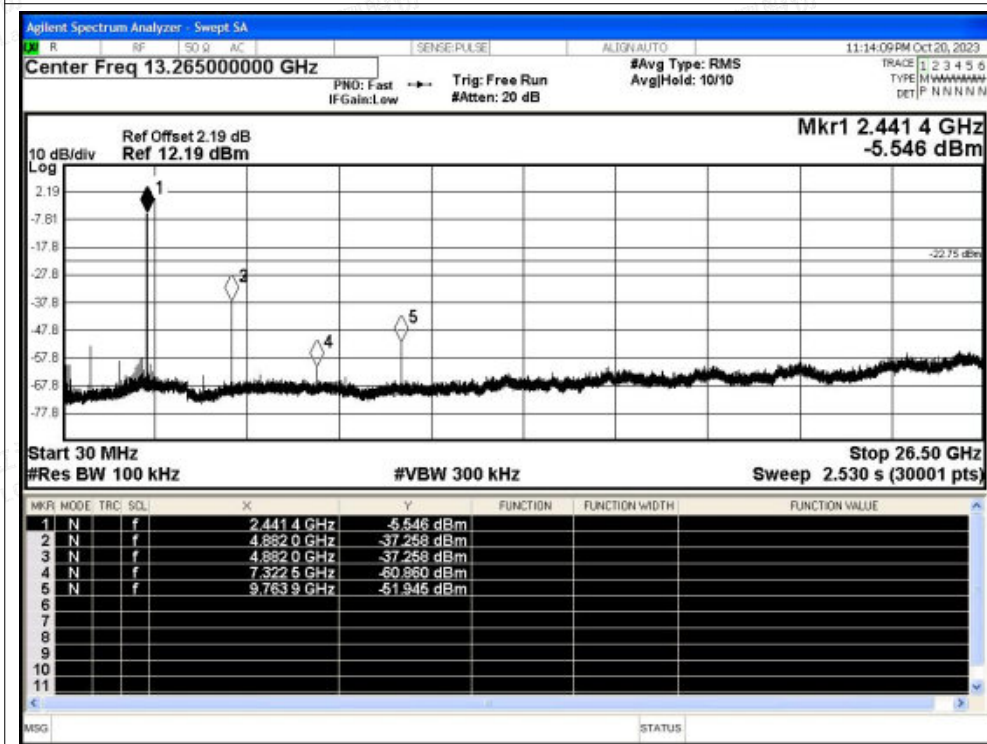




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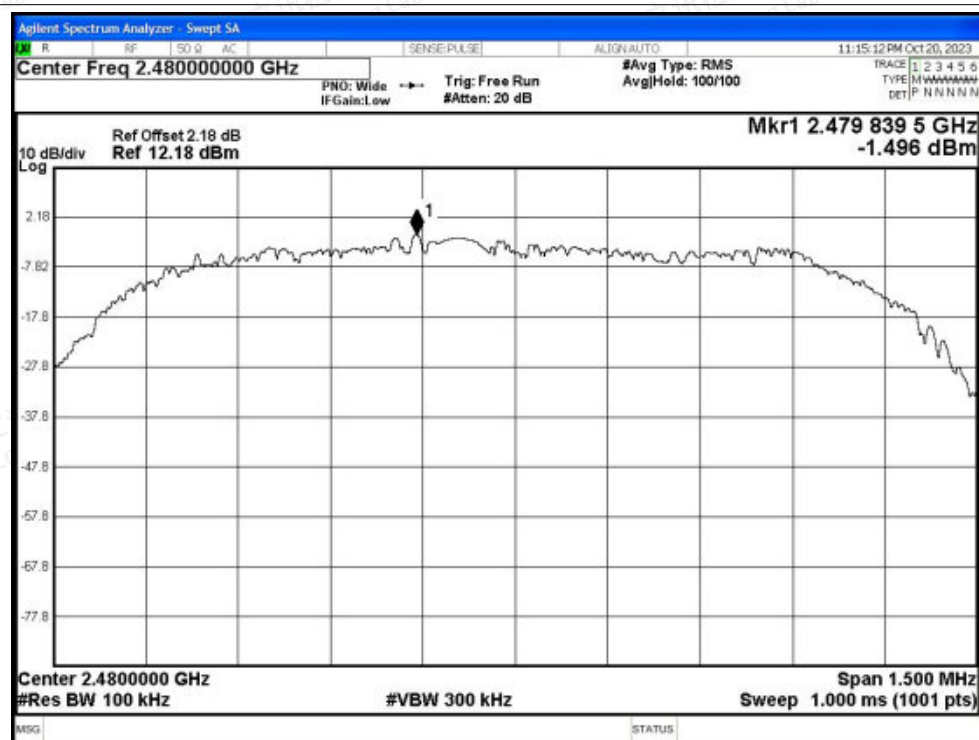


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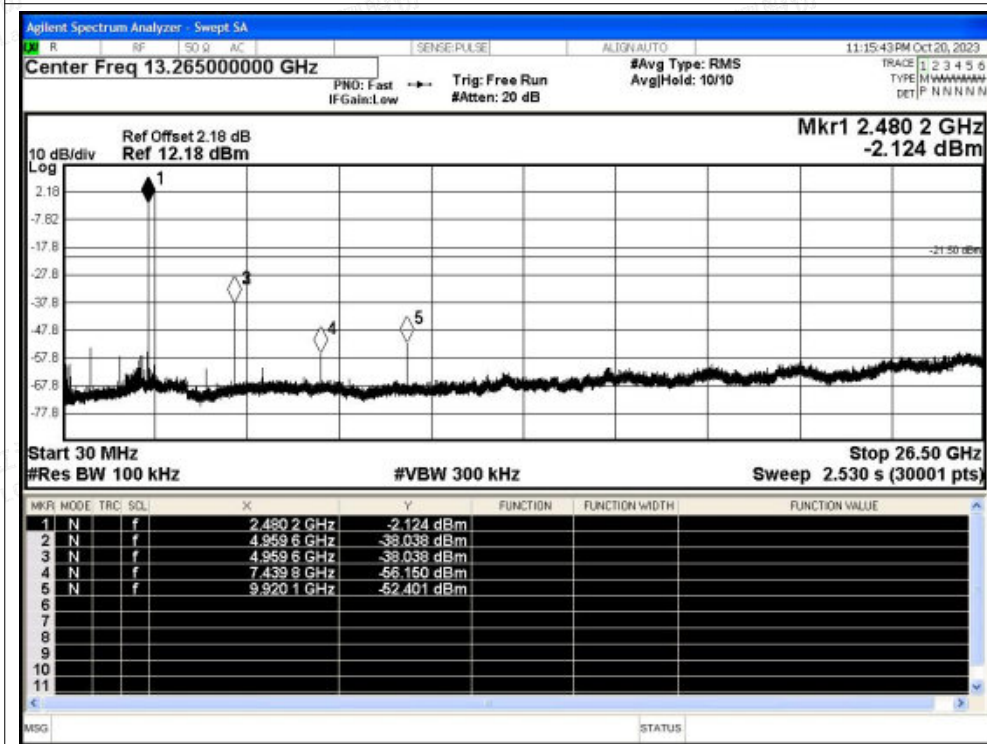




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission





A.8 Restrict Band

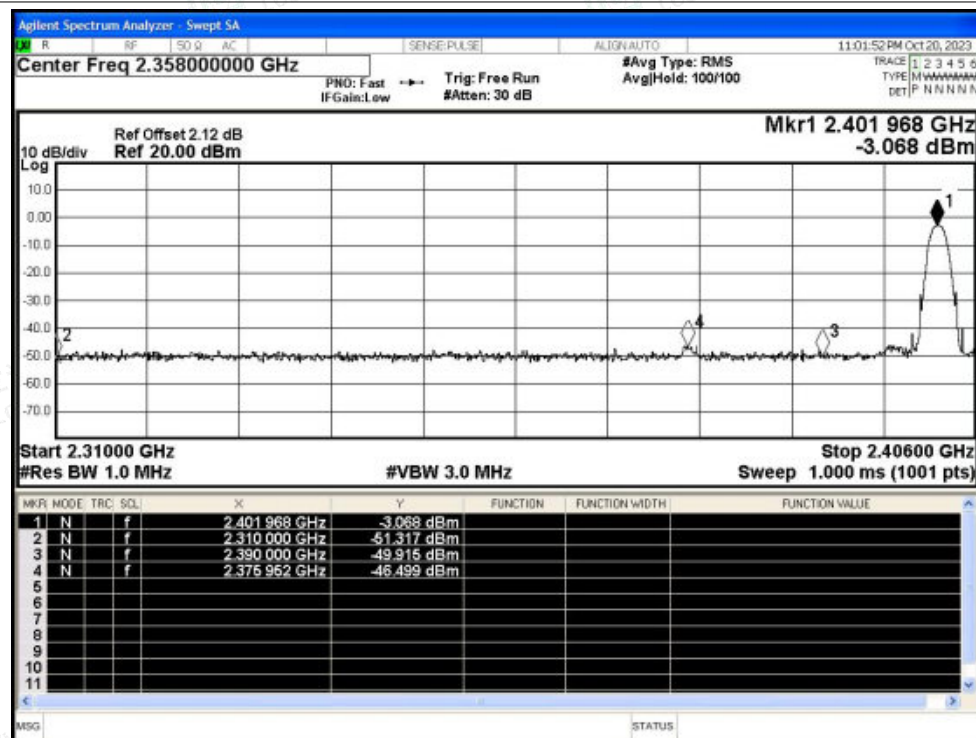
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-51.32	2	45.94	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-57.74	2	39.52	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2375.952	-46.5	2	50.76	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2375.952	-52.87	2	44.39	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.92	2	47.34	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-57.45	2	39.81	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-48.64	2	48.62	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-55.11	2	42.15	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2484.664	-44.97	2	52.29	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2484.616	-52.53	2	44.73	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.93	2	47.33	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-57.06	2	40.2	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.54	2	45.72	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-57.48	2	39.78	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2375.952	-46.04	2	51.22	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2375.952	-53.17	2	44.09	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-49.27	2	47.99	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-57.44	2	39.82	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-47.13	2	50.13	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-54.09	2	43.17	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.4	-44.01	2	53.25	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.664	-52.76	2	44.5	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-48.24	2	49.02	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.15	2	40.11	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-50.66	2	46.6	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-57.67	2	39.59	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2375.856	-45.68	2	51.58	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2375.856	-53.23	2	44.03	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-50.21	2	47.05	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-57.4	2	39.86	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-47.74	2	49.52	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-54.13	2	43.13	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2484.28	-45.01	2	52.25	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2484.664	-52.88	2	44.38	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-50.35	2	46.91	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-57.23	2	40.03	Average	54	Pass



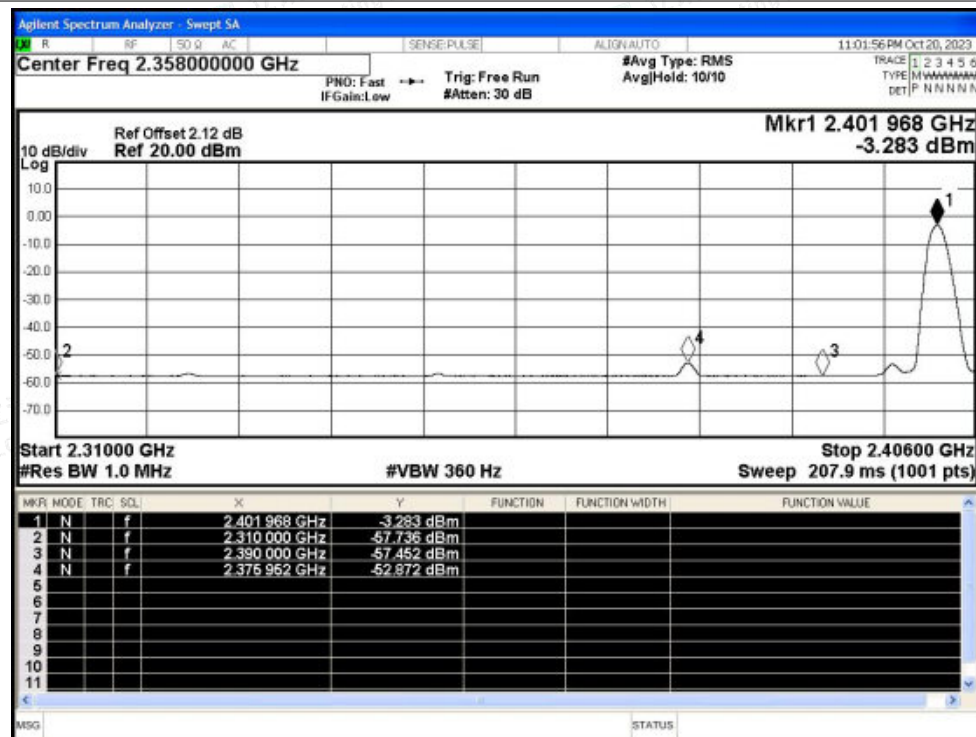


Test Graphs

Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak

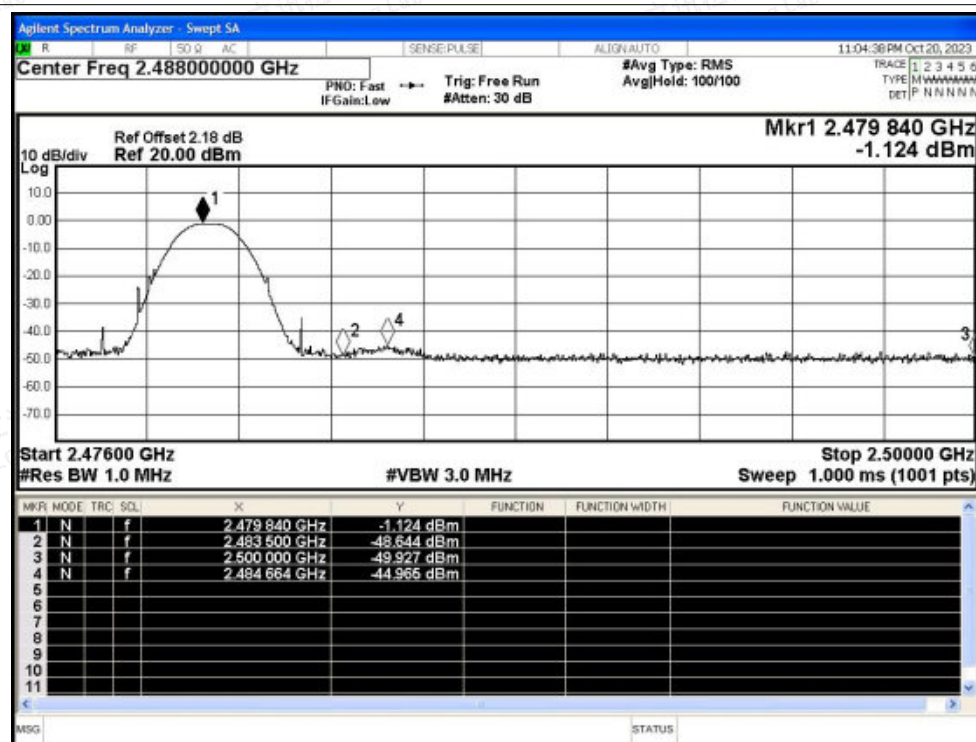


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

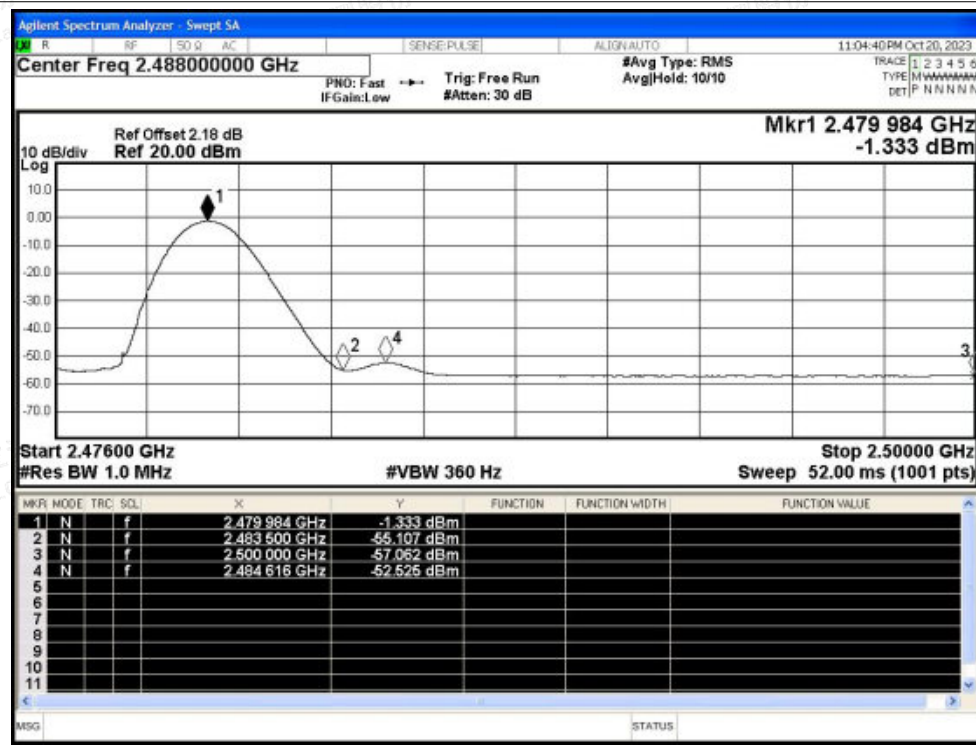




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

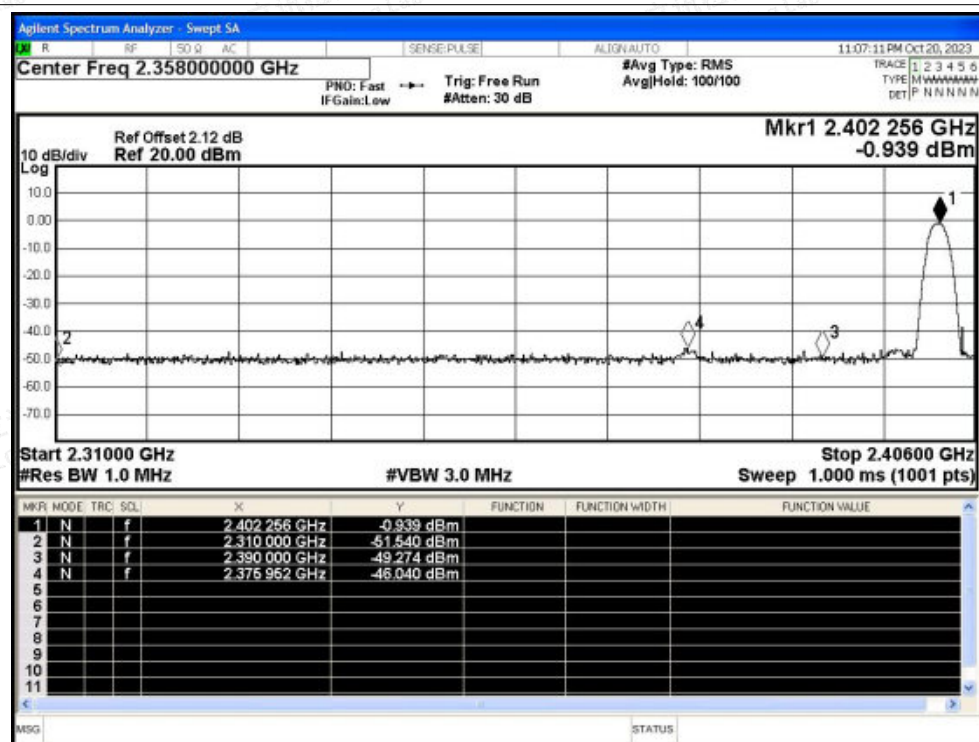


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

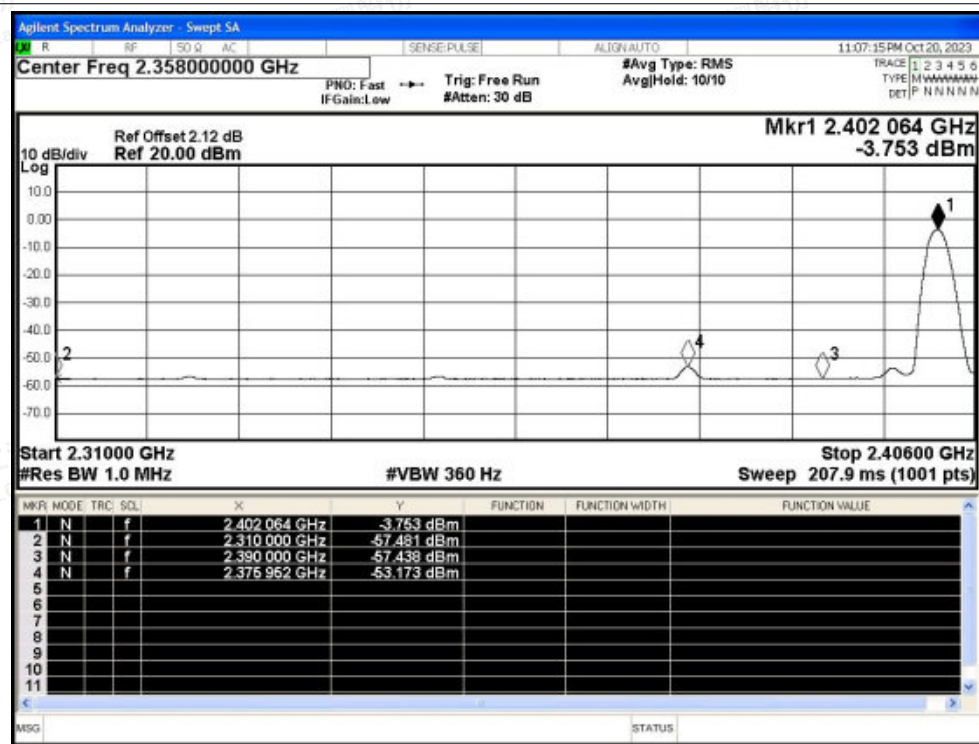




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

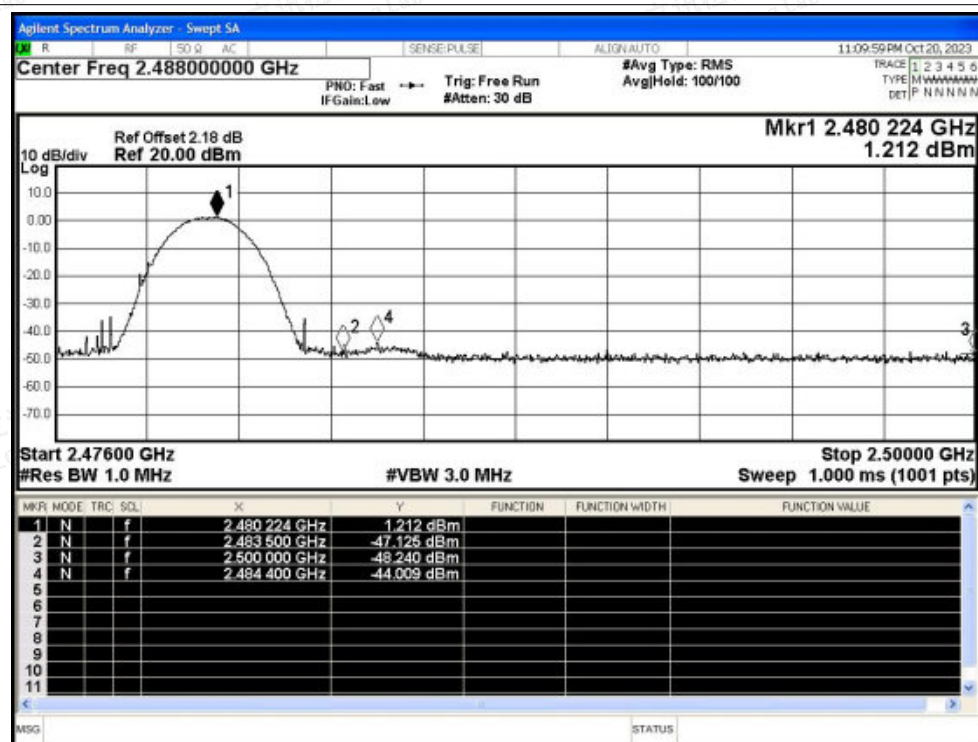


Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average

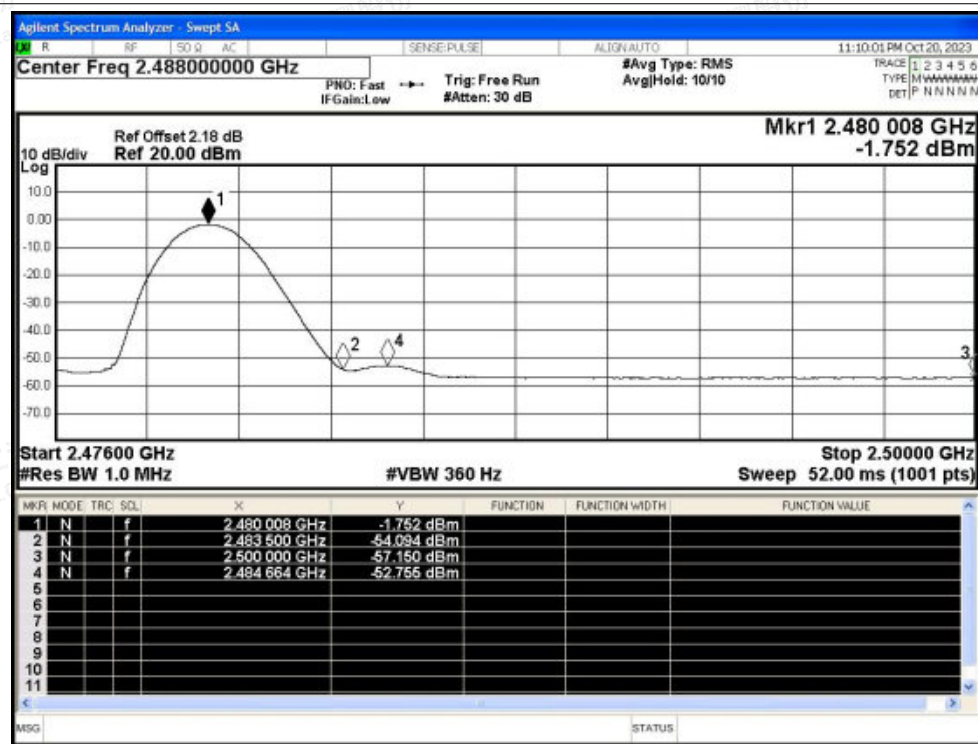




Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak

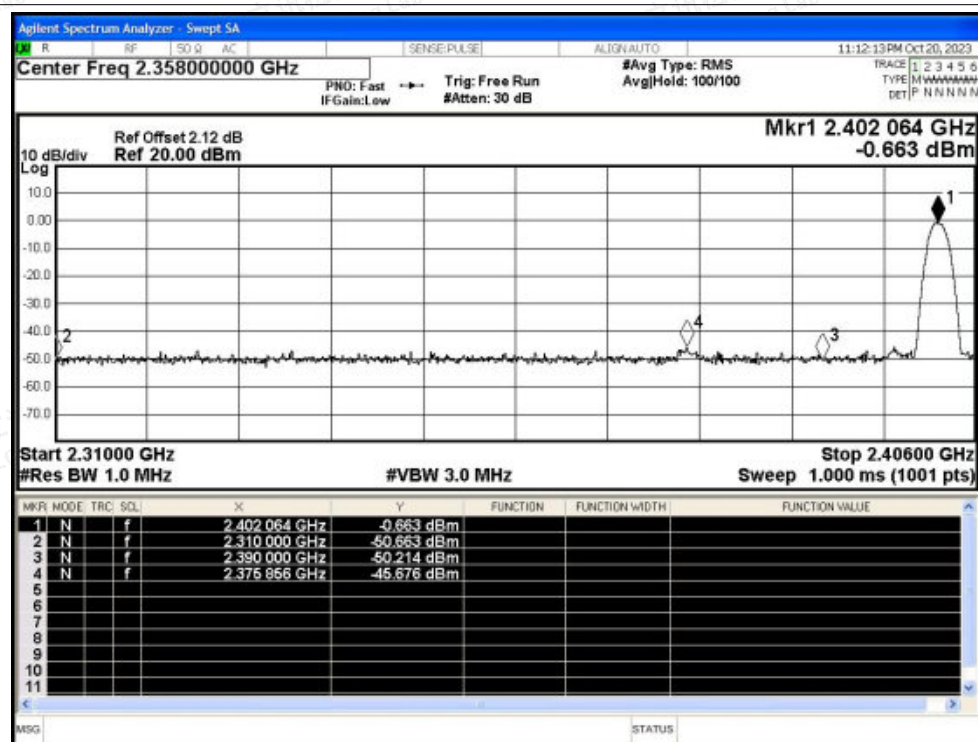


Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average

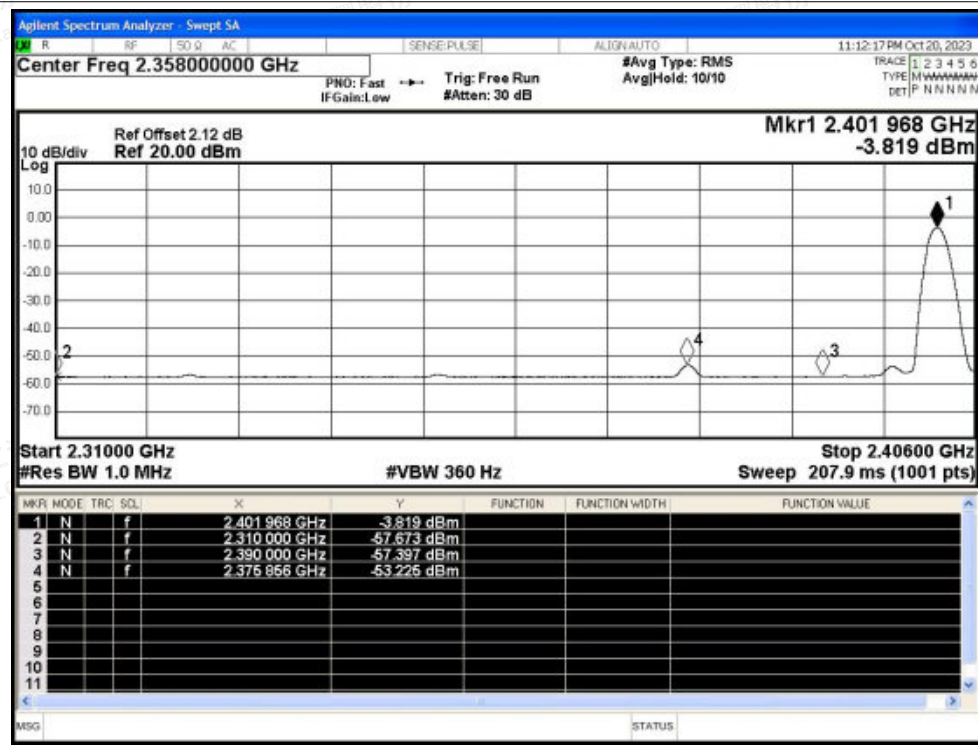




Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak

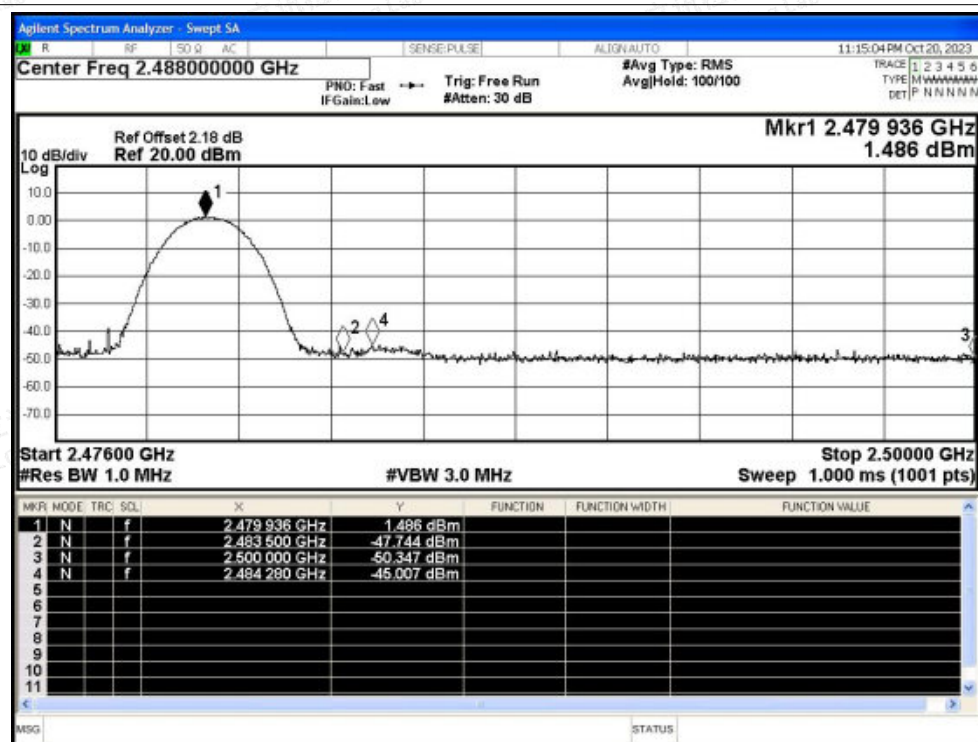


Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average





Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Average

