

Appendix A

RF Test Data for BT(Conducted Measurement)

Product Name: Projector

Test Model: J12C Mate

Environmental Conditions

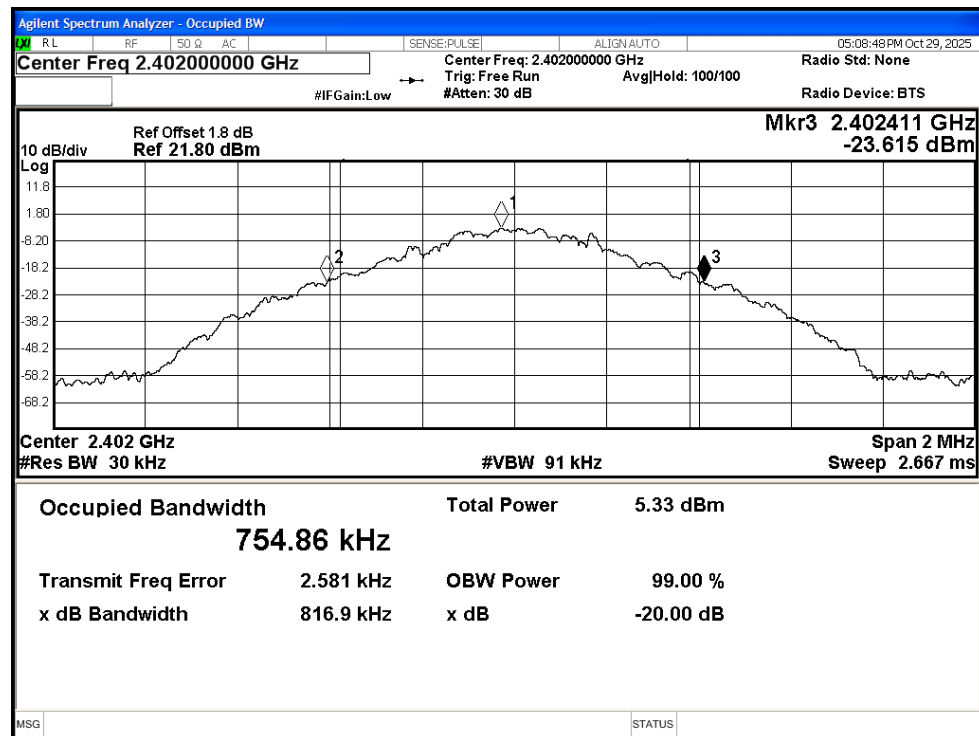
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Suichao Lai
Supervised by:	Yan Chen

A.1 -20dB Bandwidth

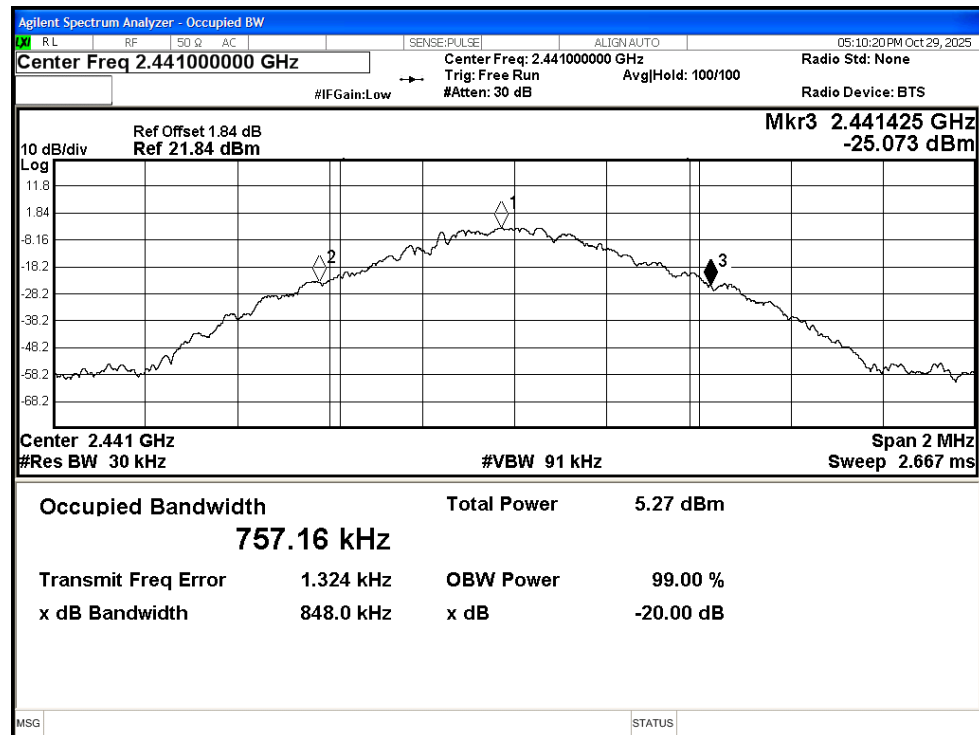
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.817	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.848	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.874	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.272	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.266	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.277	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.269	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.28	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.284	N/A	Pass

Test Graphs

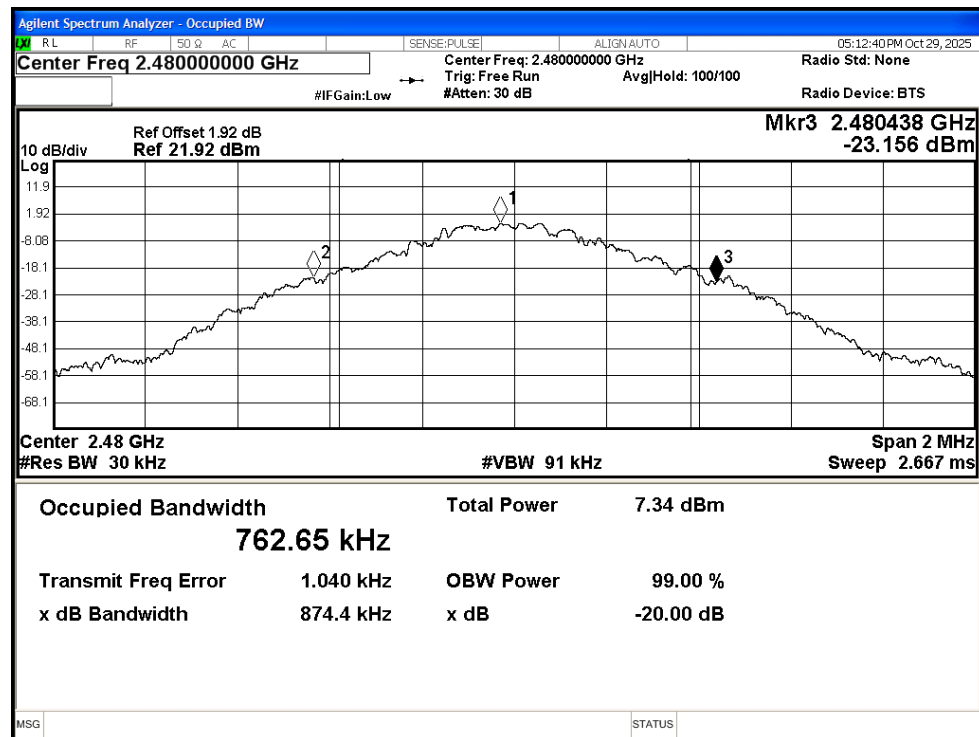
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



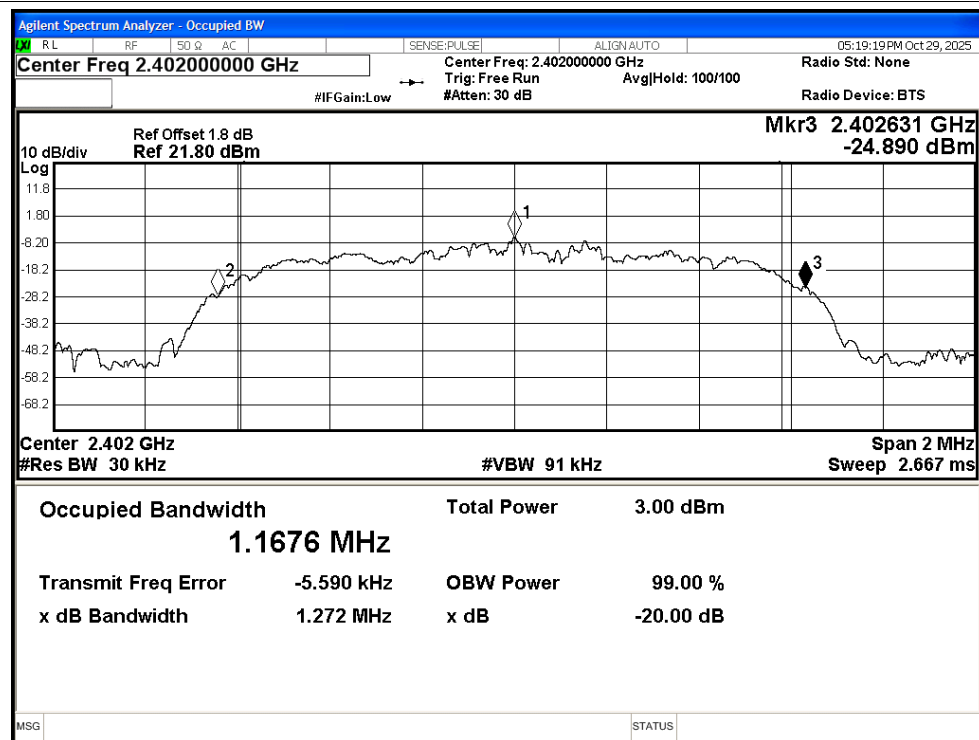
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



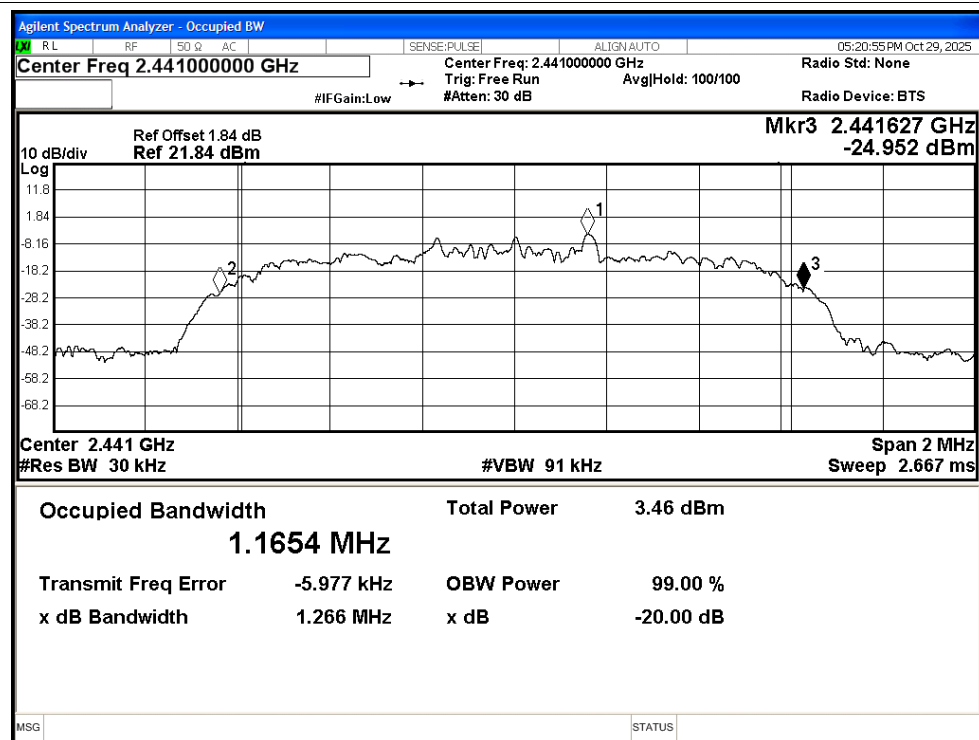
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



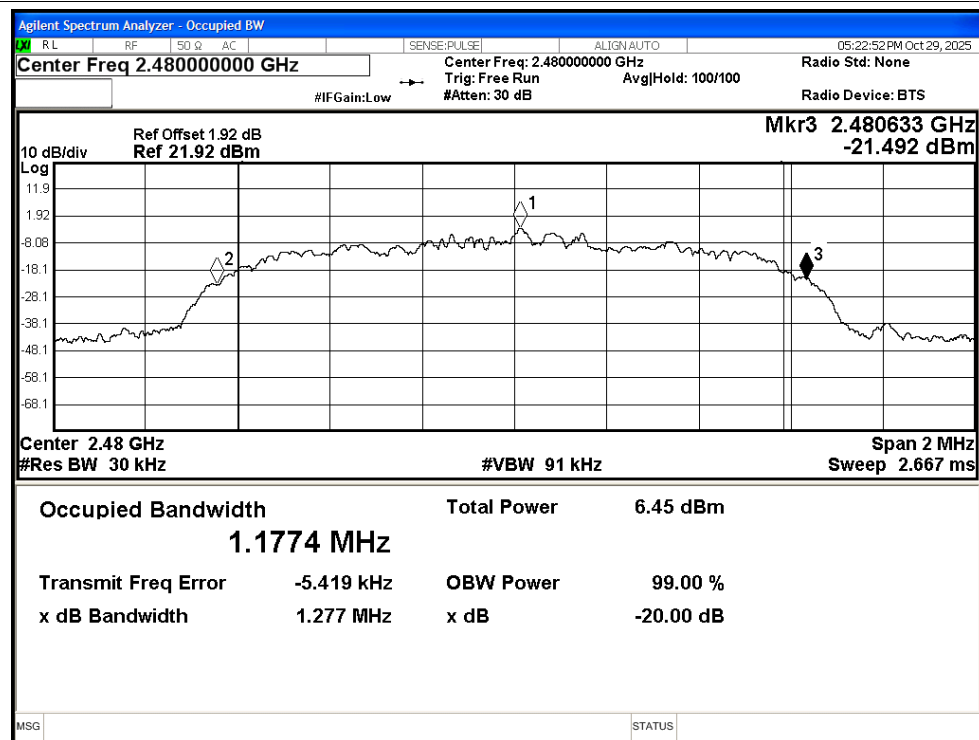
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



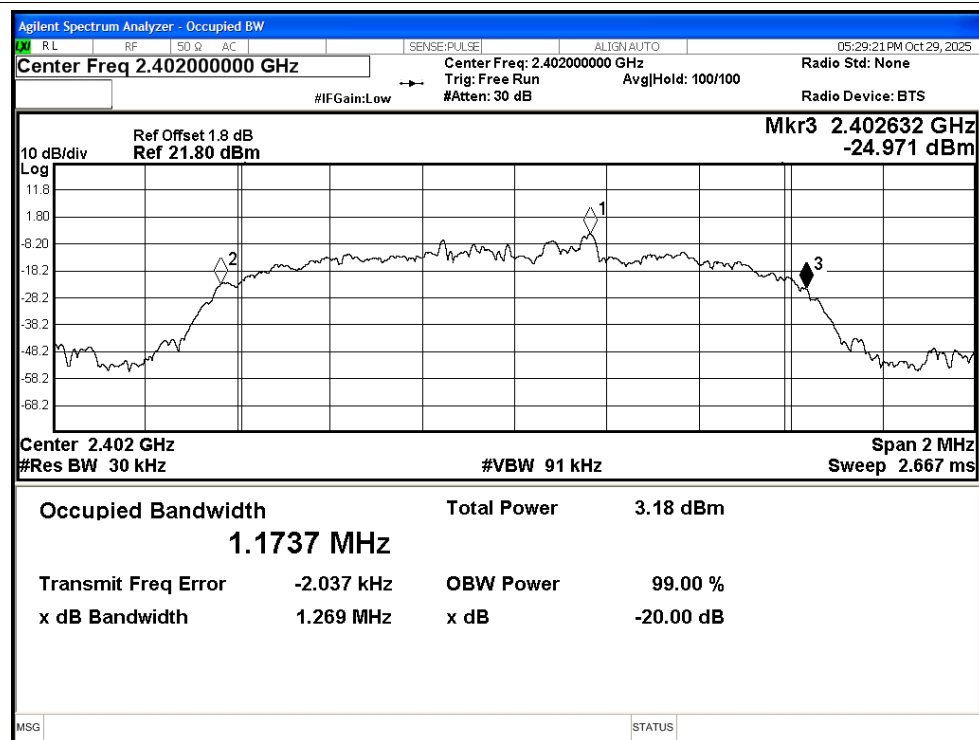
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



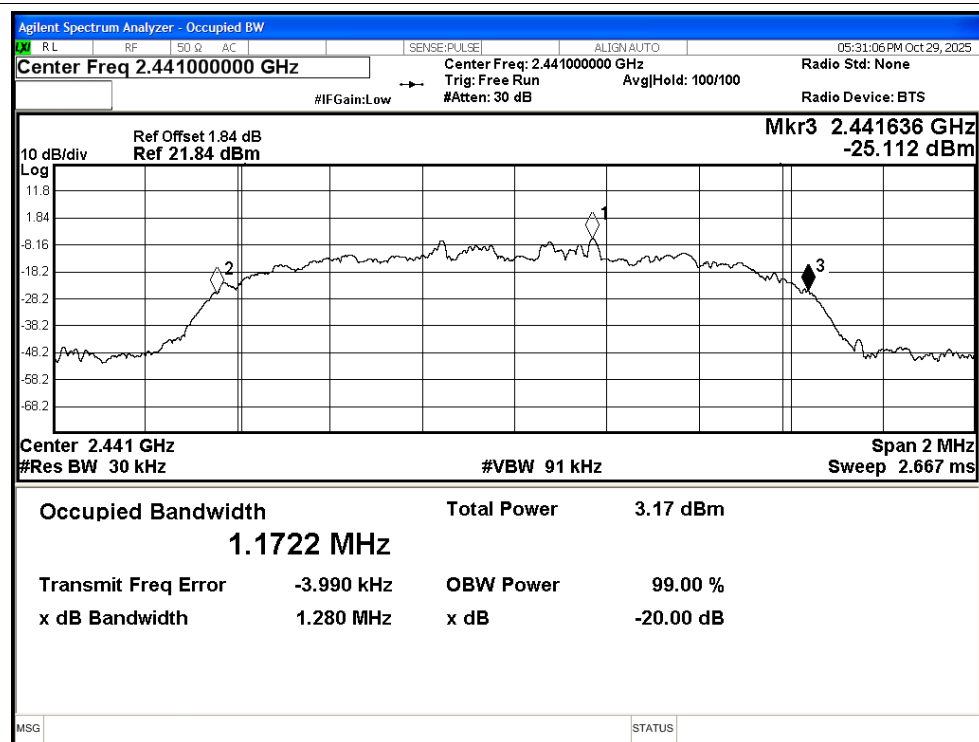
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

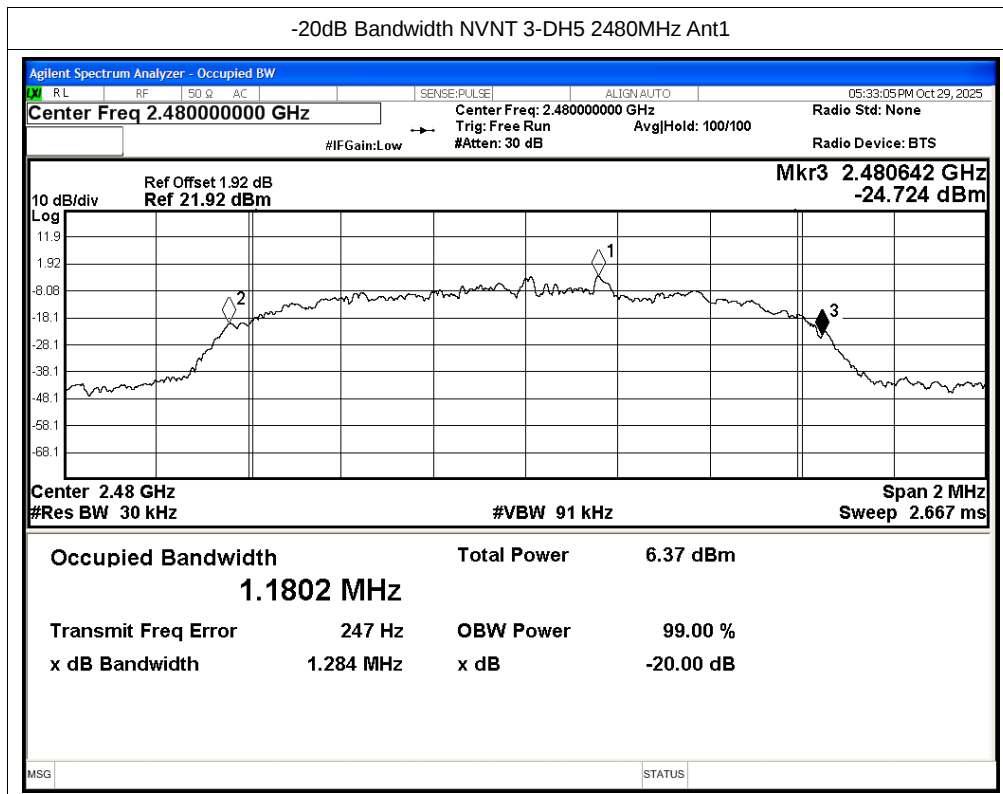


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



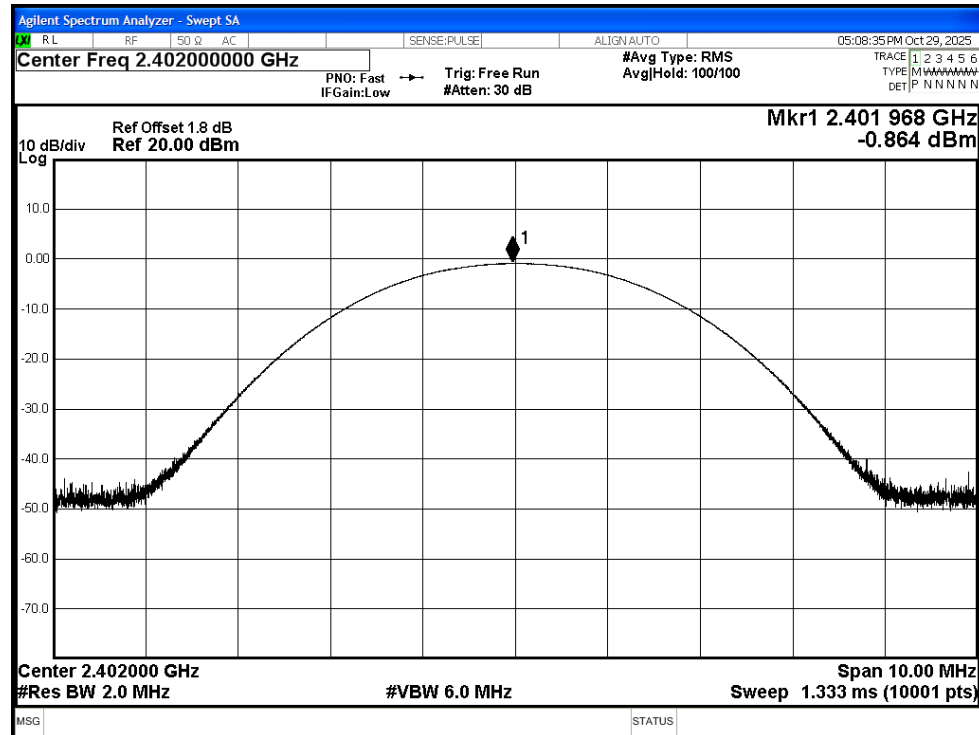


A.2 Maximum Peak Conducted Output Power

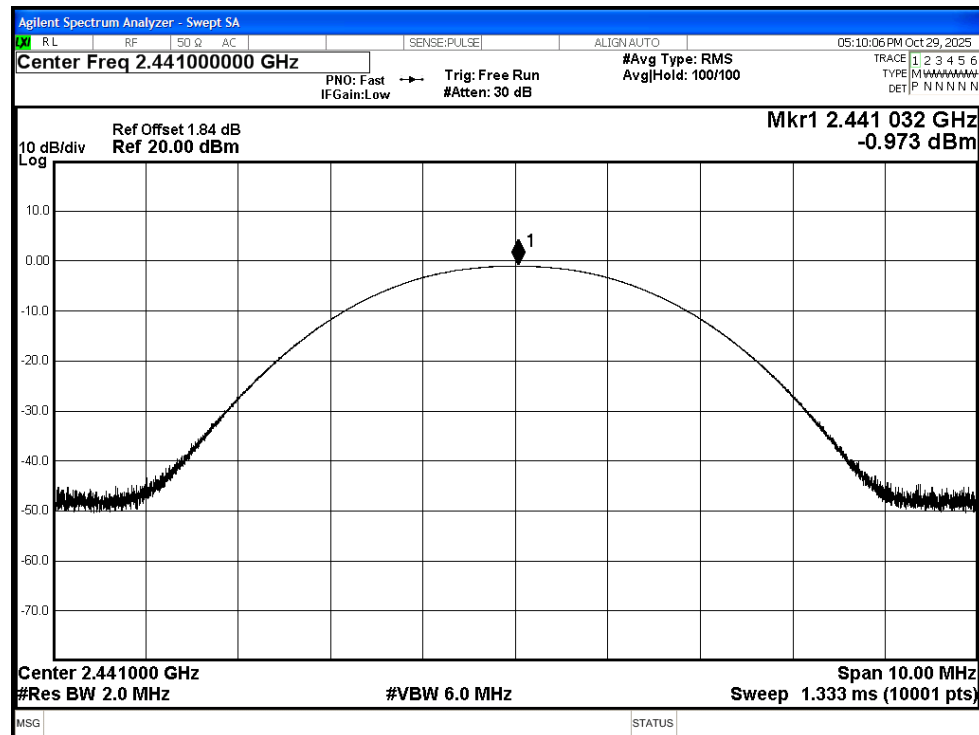
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-0.86	21	Pass
NVNT	1-DH5	2441	Ant1	-0.97	21	Pass
NVNT	1-DH5	2480	Ant1	1.51	21	Pass
NVNT	2-DH5	2402	Ant1	-1.52	21	Pass
NVNT	2-DH5	2441	Ant1	-1.62	21	Pass
NVNT	2-DH5	2480	Ant1	1.63	21	Pass
NVNT	3-DH5	2402	Ant1	-1.5	21	Pass
NVNT	3-DH5	2441	Ant1	-1.6	21	Pass
NVNT	3-DH5	2480	Ant1	1.54	21	Pass

Test Graphs

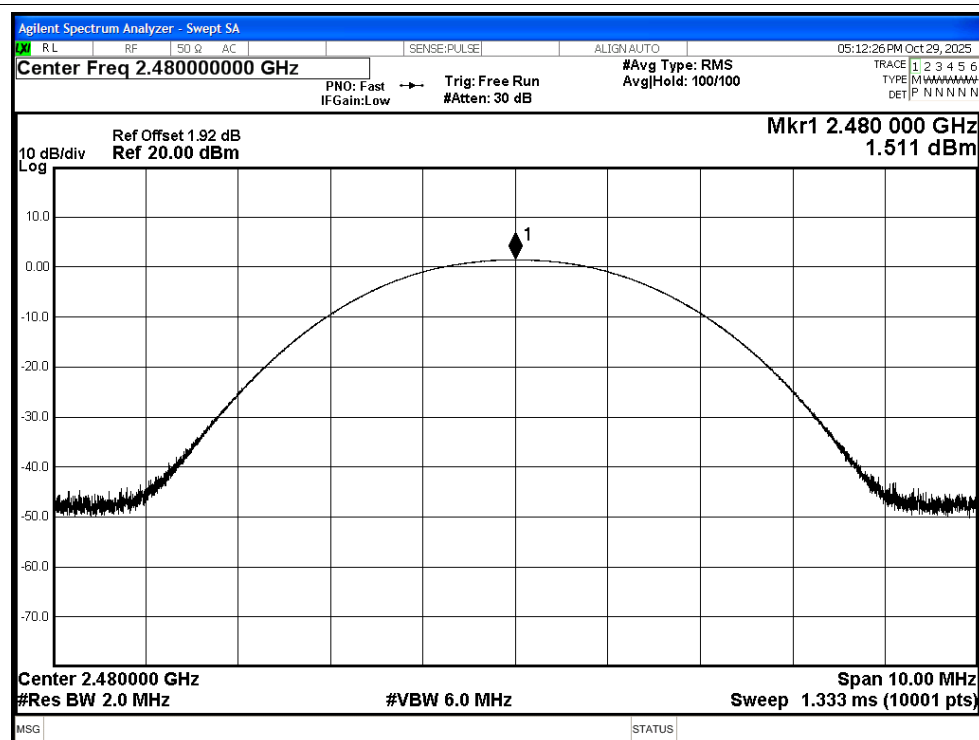
Power NVNT 1-DH5 2402MHz Ant1



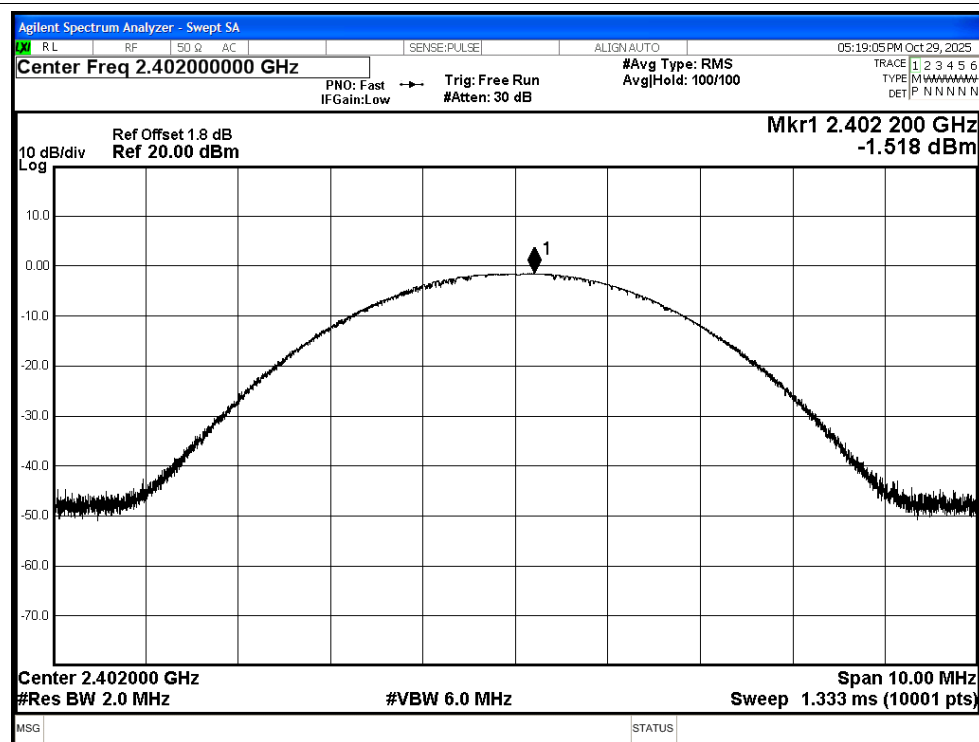
Power NVNT 1-DH5 2441MHz Ant1



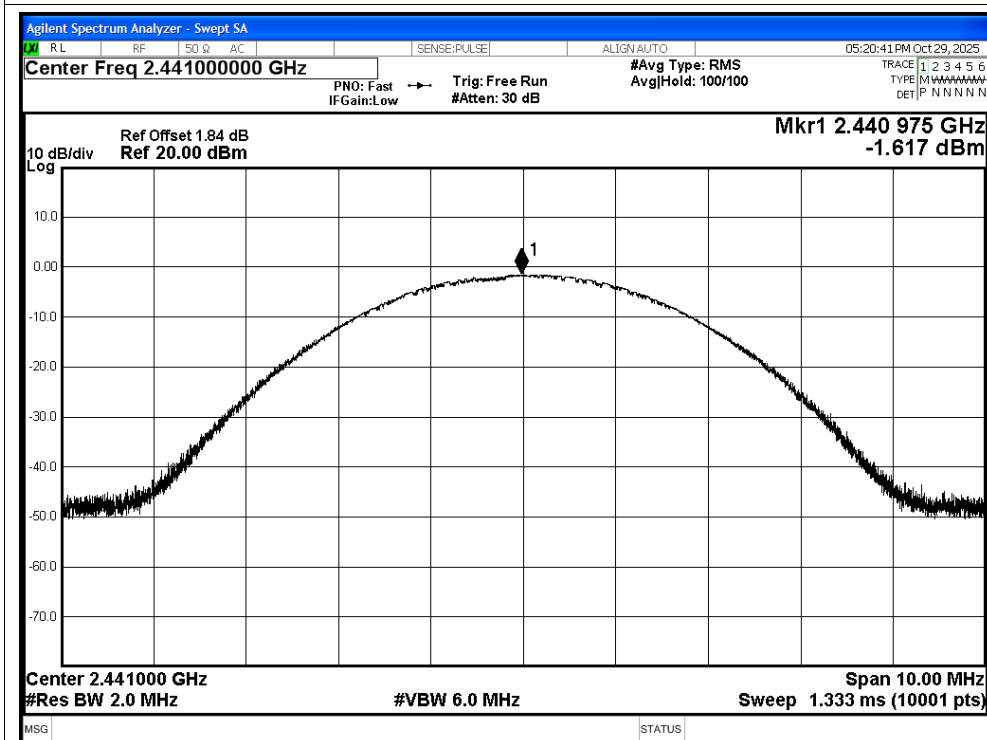
Power NVNT 1-DH5 2480MHz Ant1



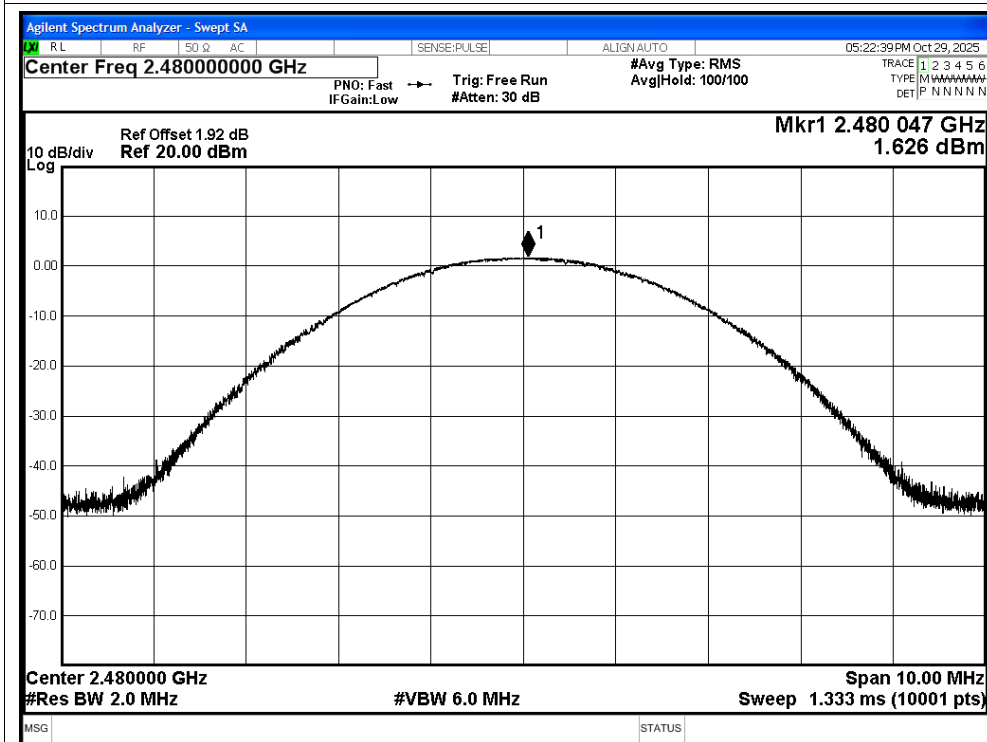
Power NVNT 2-DH5 2402MHz Ant1



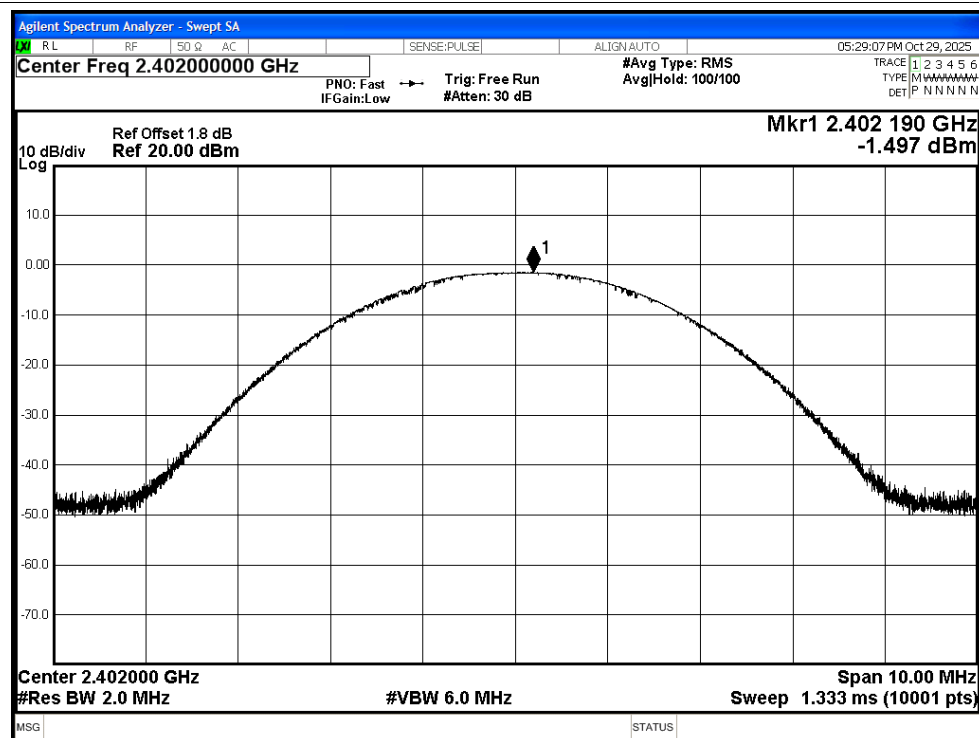
Power NVNT 2-DH5 2441MHz Ant1



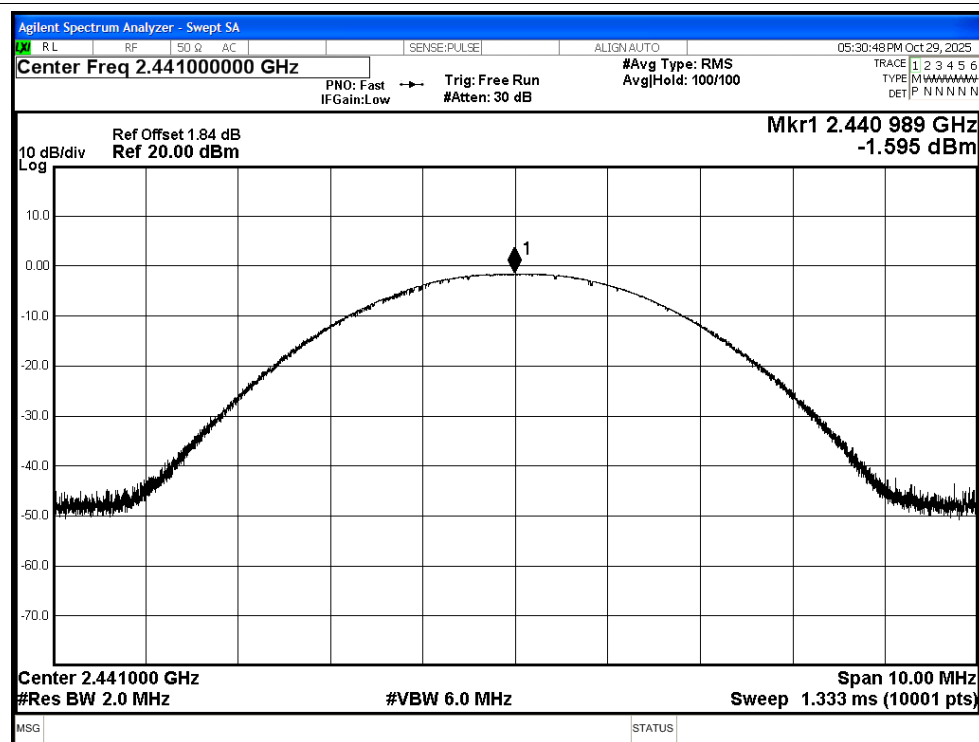
Power NVNT 2-DH5 2480MHz Ant1

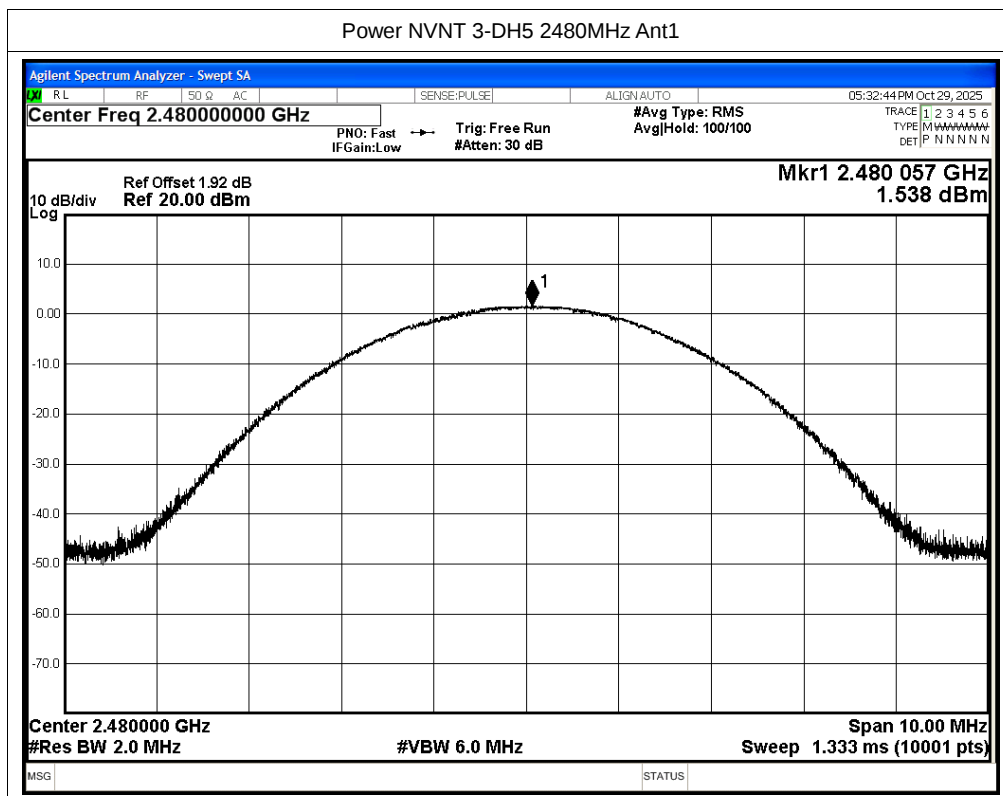


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



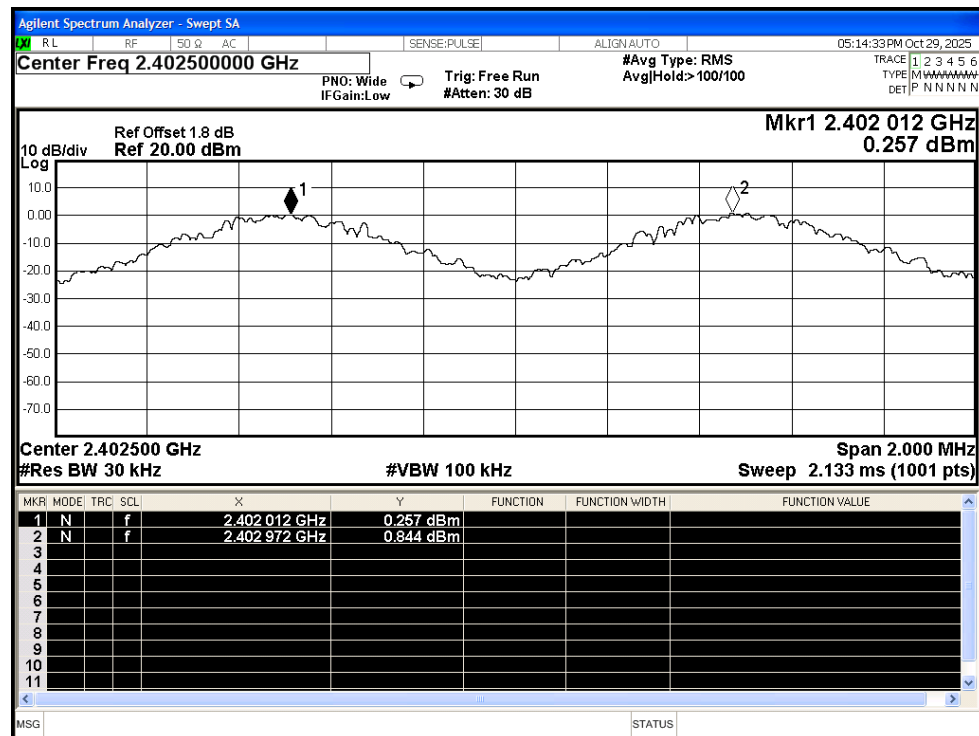


A.3 Carrier Frequencies Separation

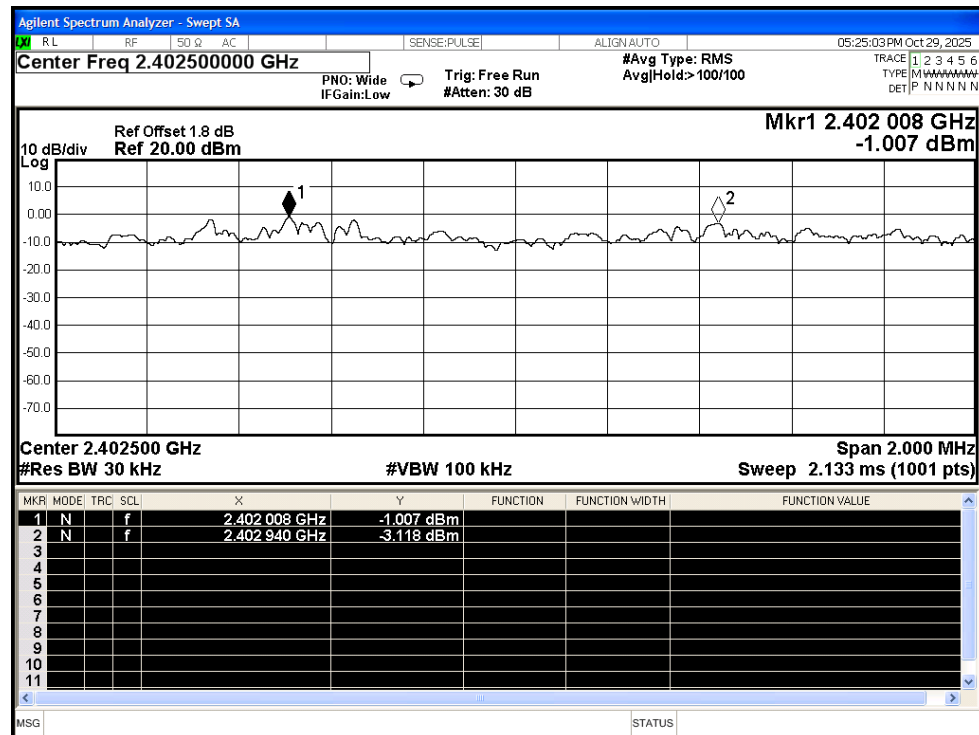
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402.012	2402.972	0.96	0.583	Pass
NVNT	2-DH5	Ant1	2402.008	2402.94	0.932	0.851	Pass
NVNT	3-DH5	Ant1	2402.01	2403	0.99	0.856	Pass

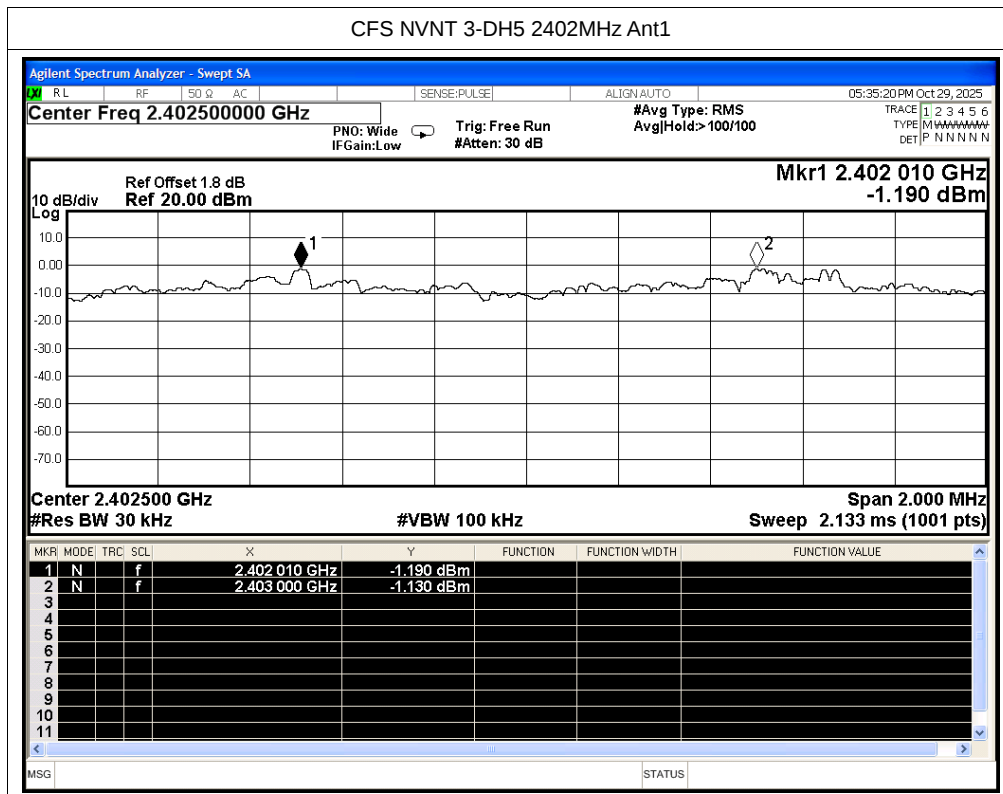
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1



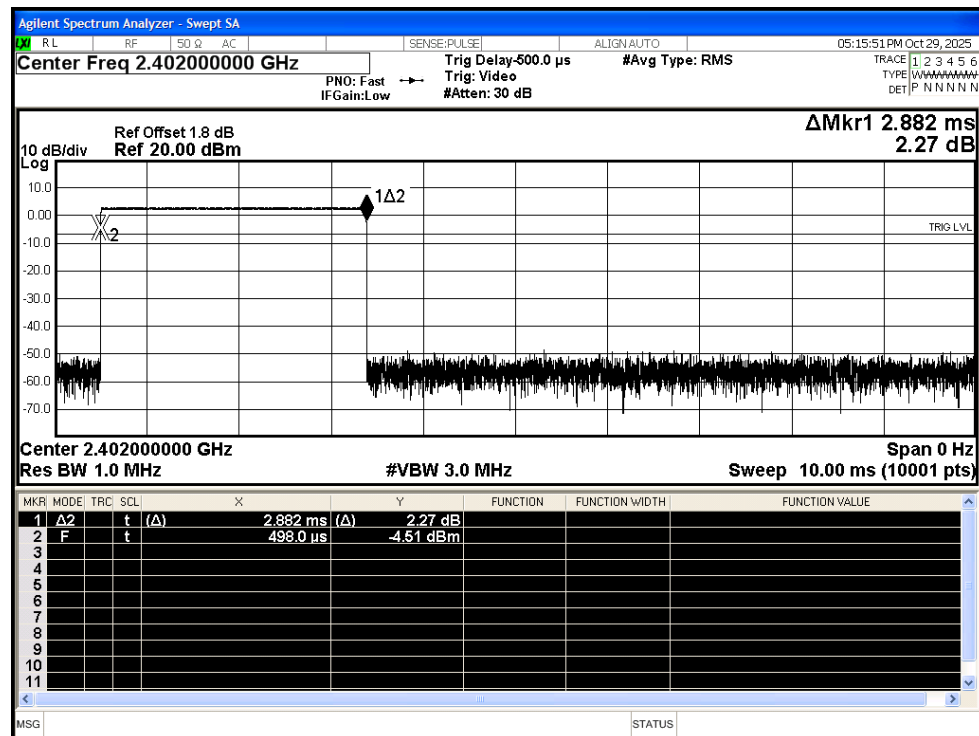


A.4 Dwell Time

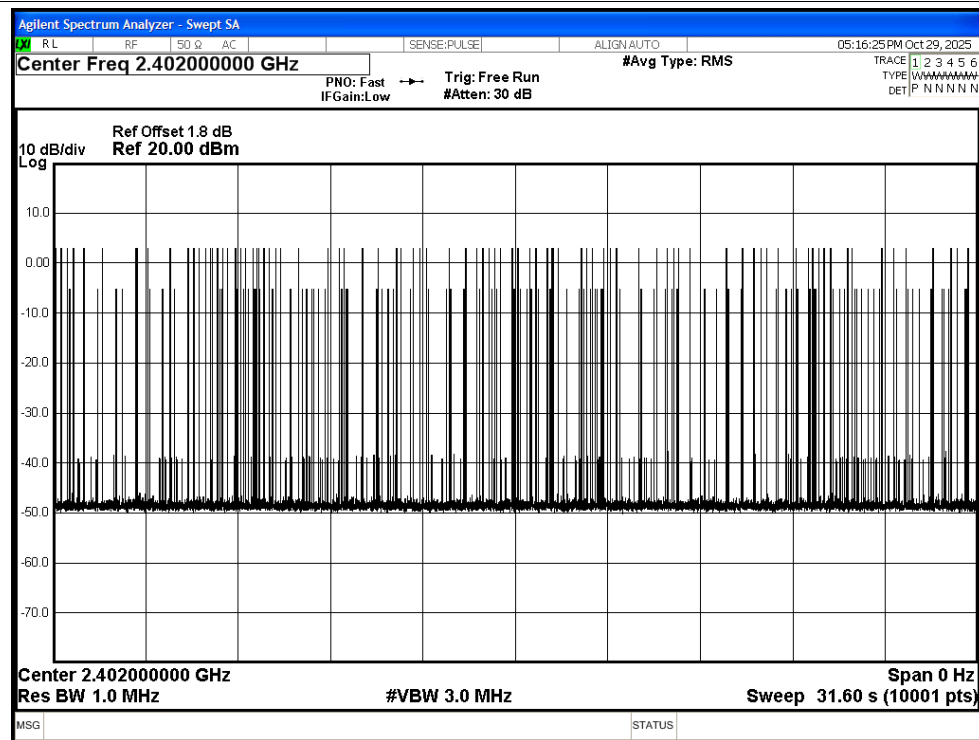
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.882	293.964	102	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.881	328.434	114	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	337.779	117	31600	400	Pass

Test Graphs

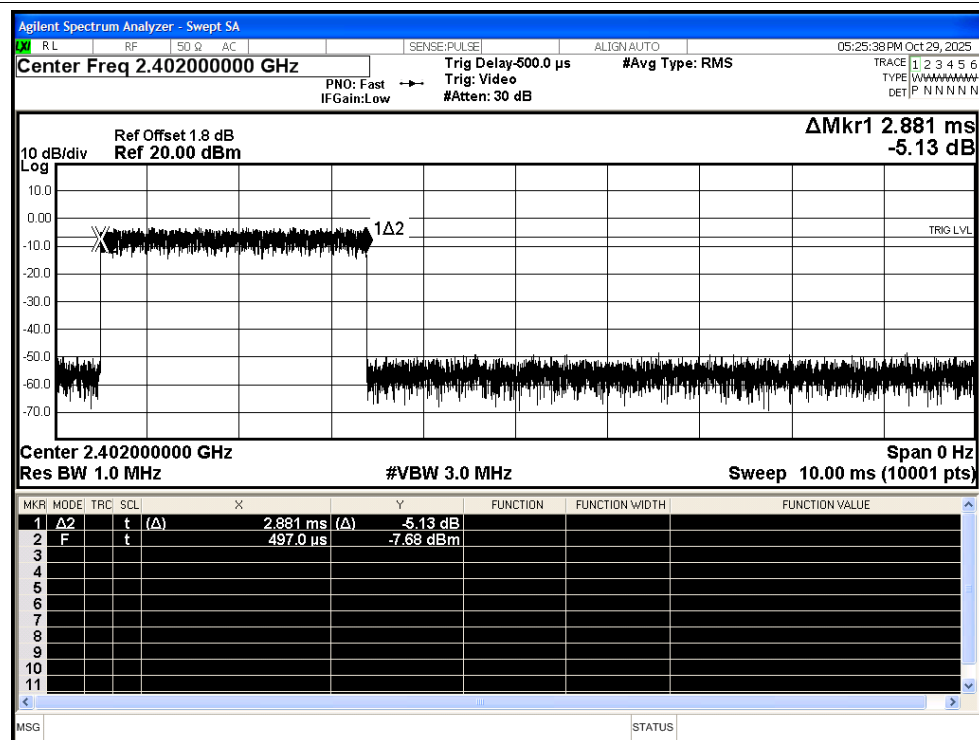
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



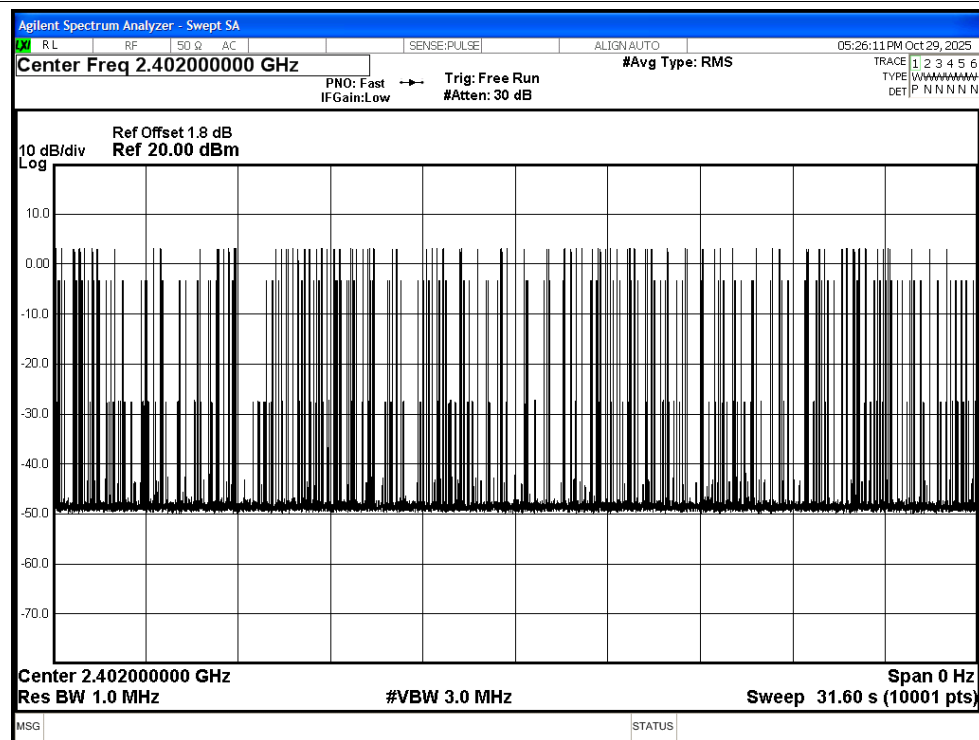
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



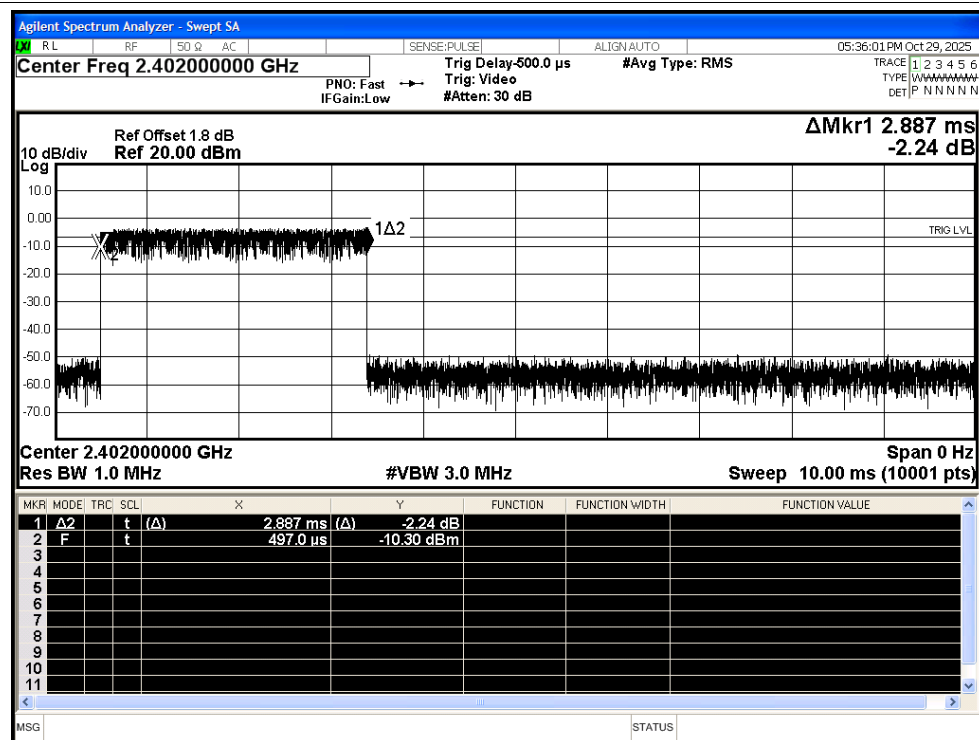
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



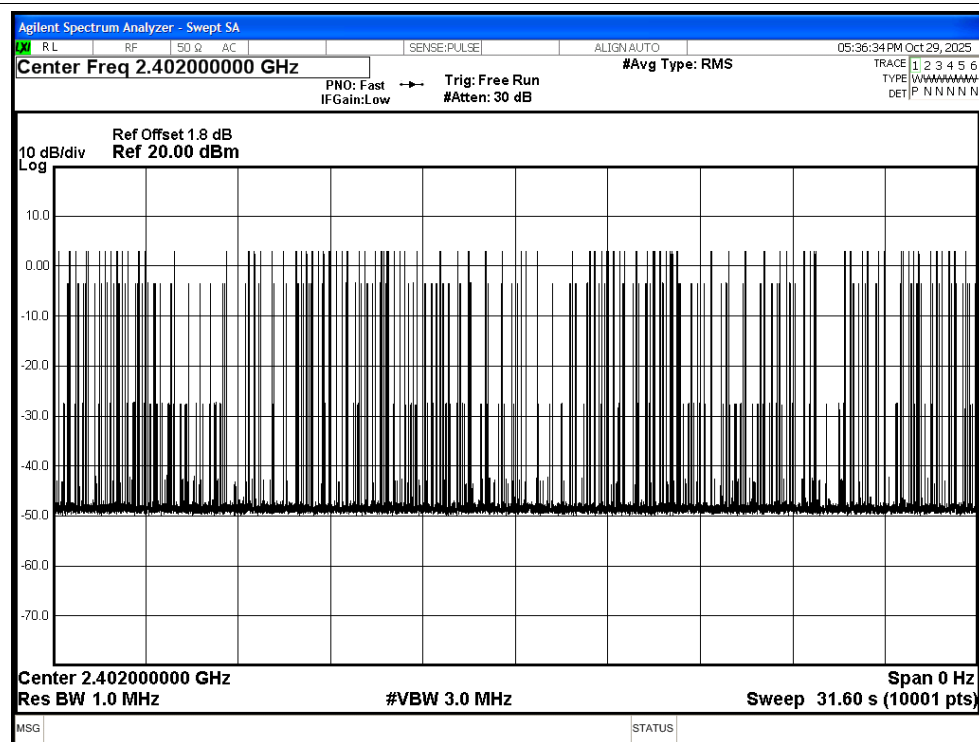
Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

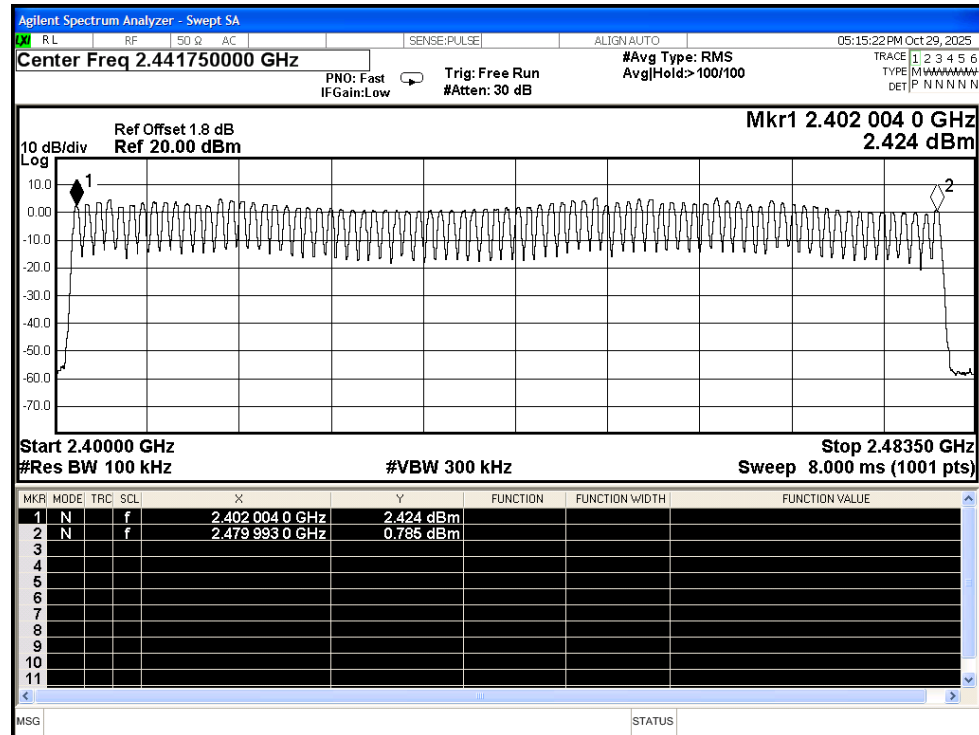


A.5 Number of Hopping Channel

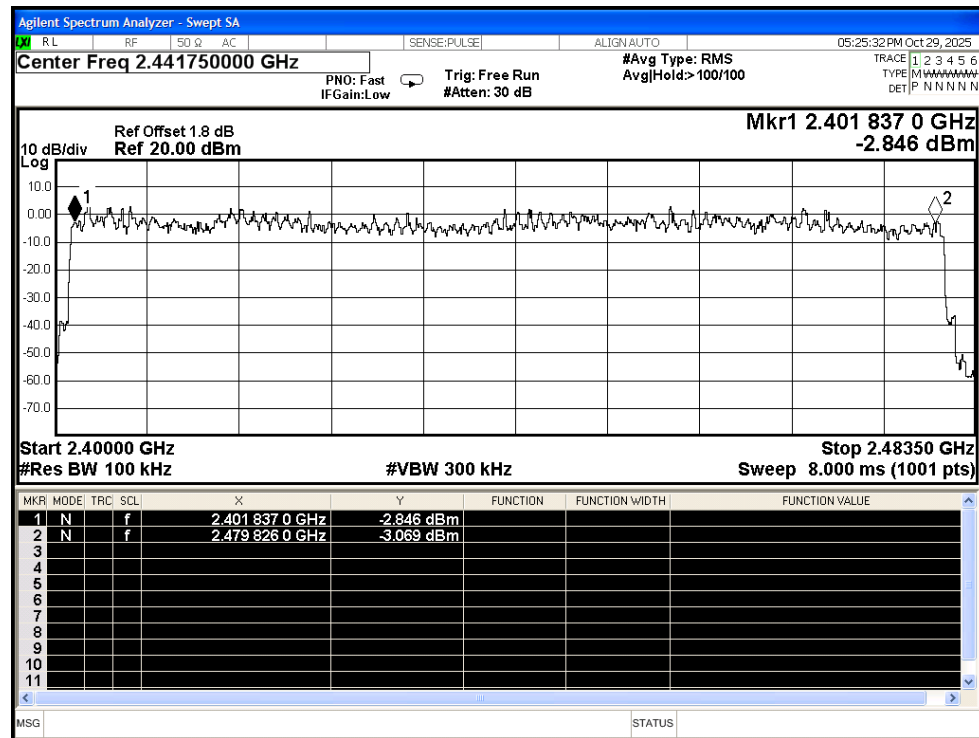
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

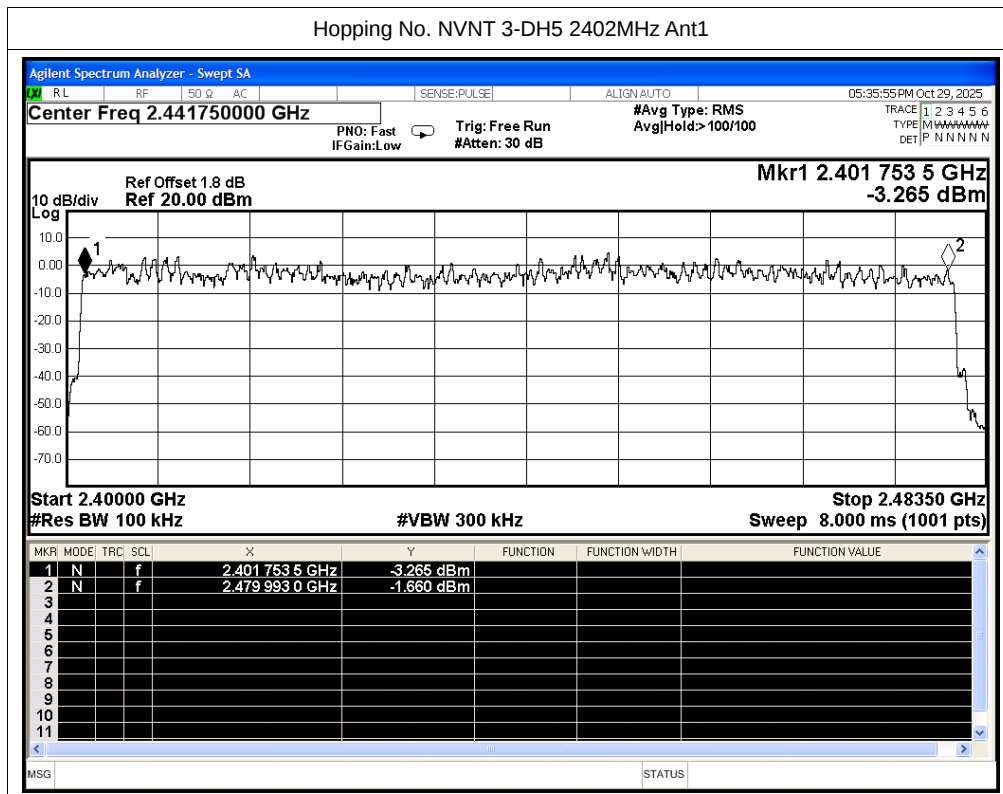
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



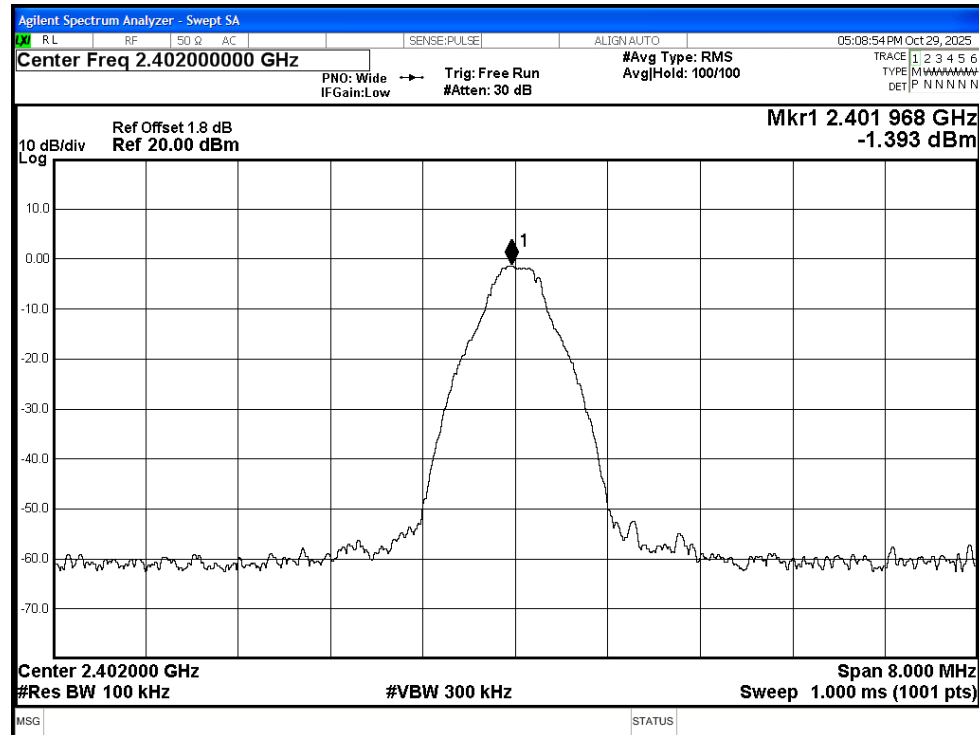


A.6 Band Edge

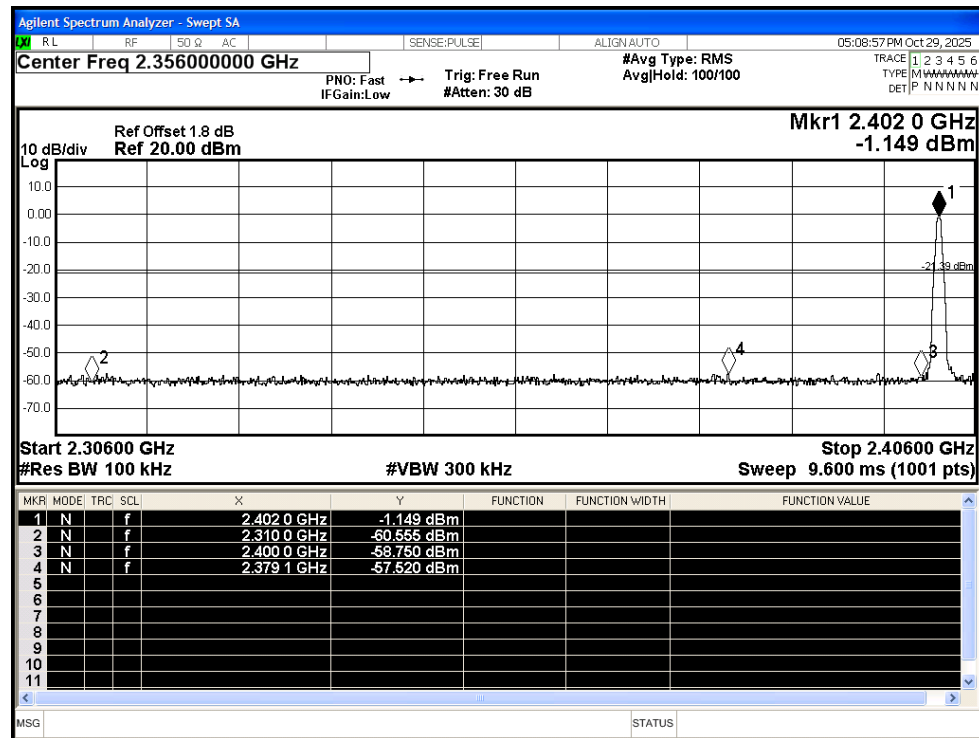
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.13	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-58.41	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.48	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-55.58	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-55.29	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-57.76	-20	Pass

Test Graphs

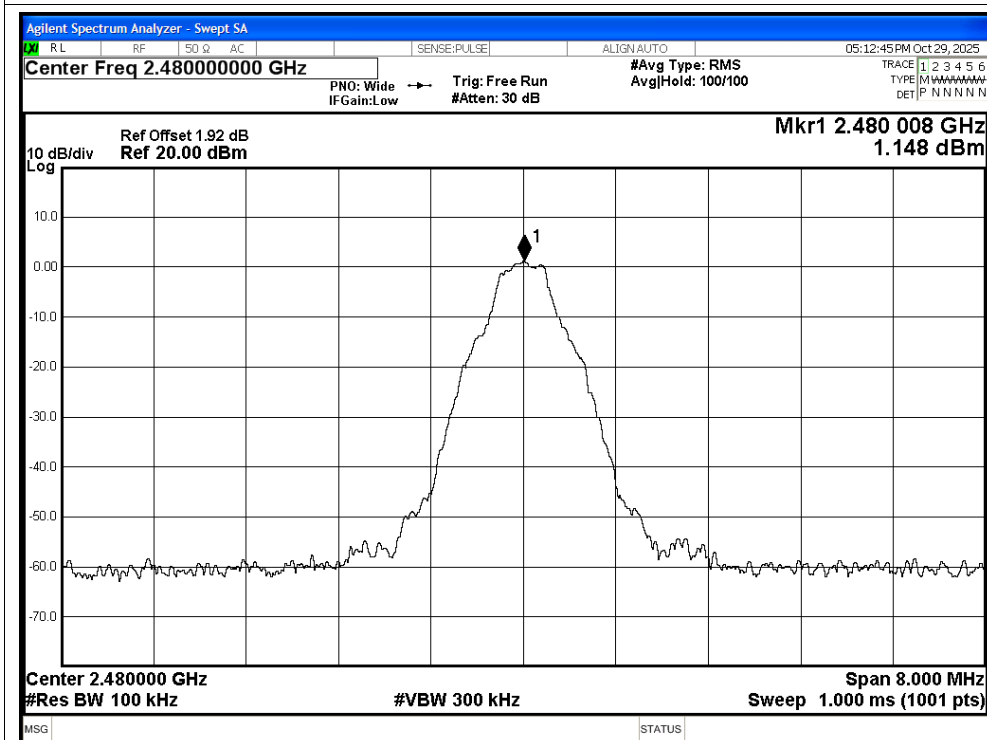
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



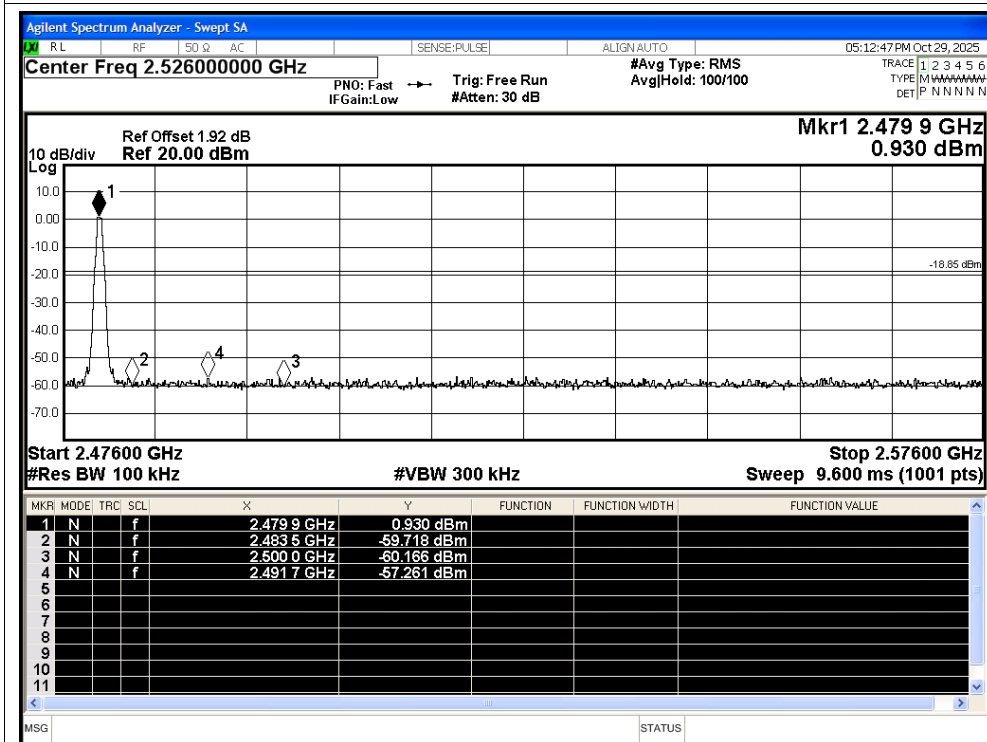
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



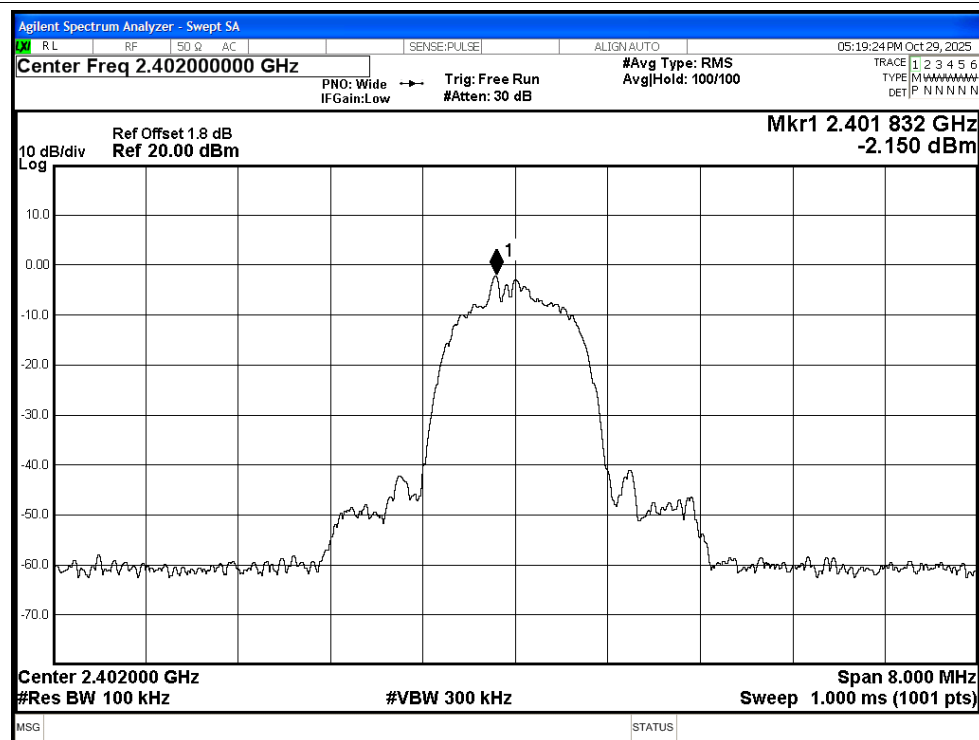
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



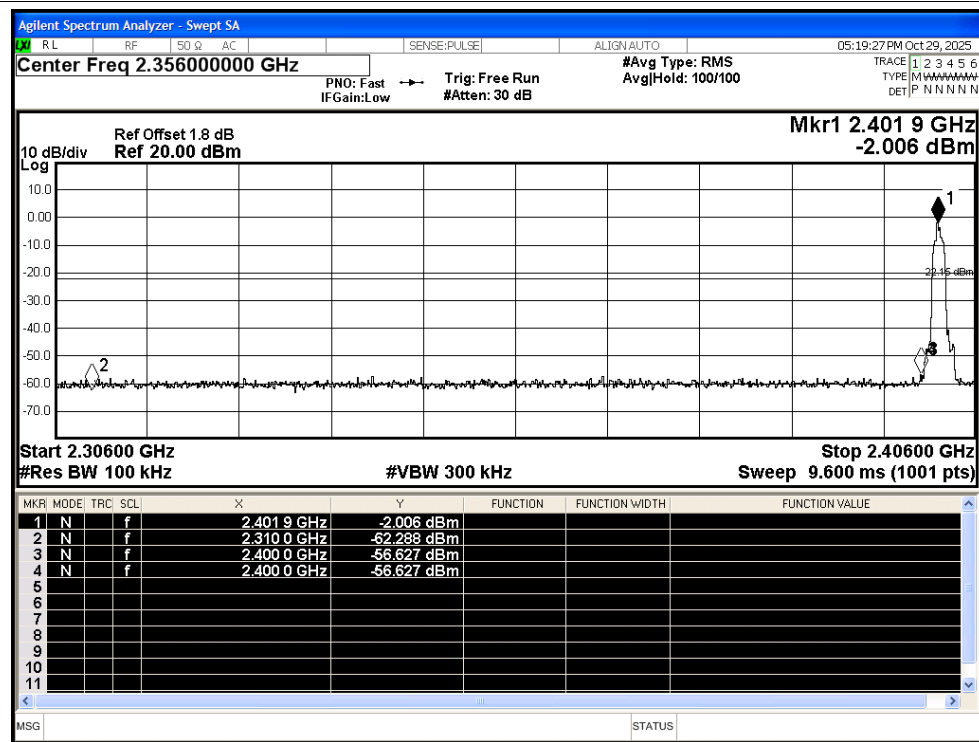
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



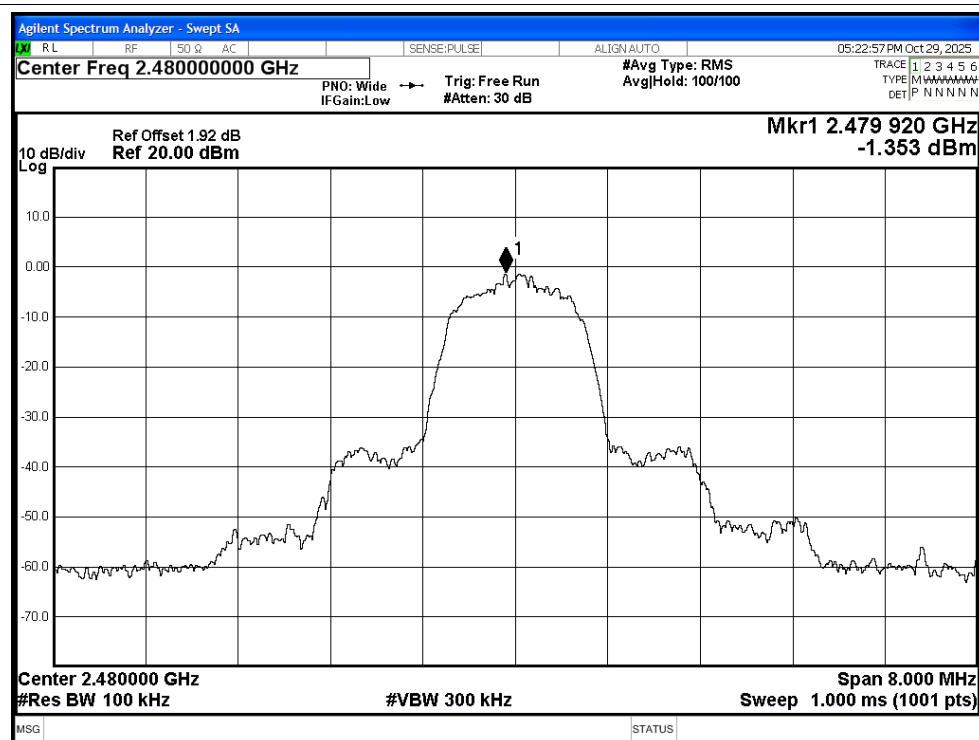
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



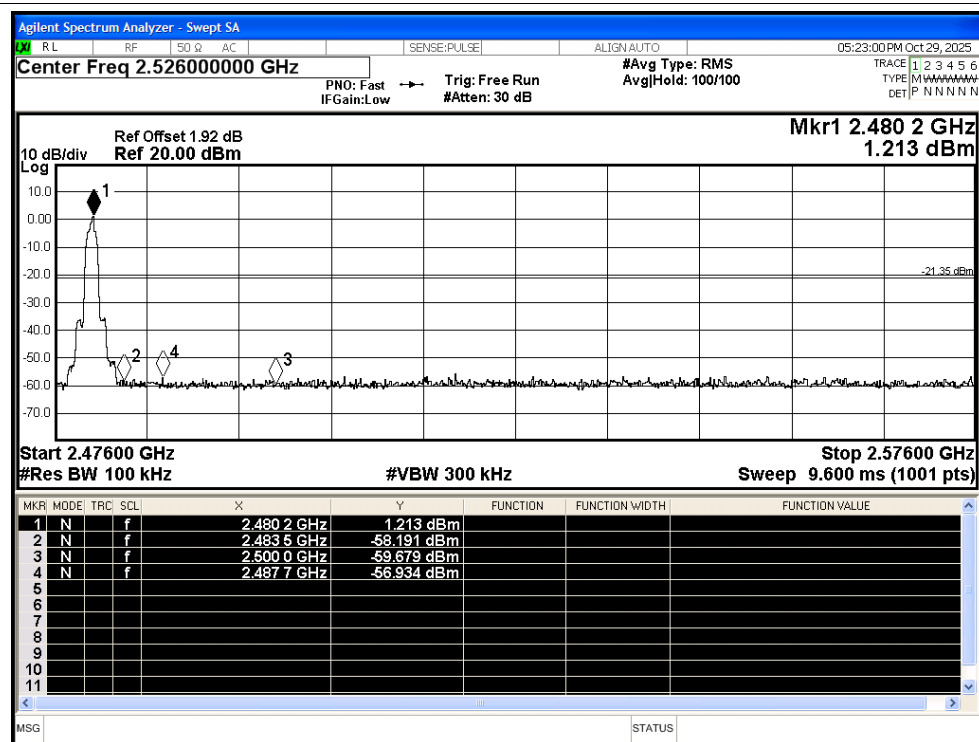
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



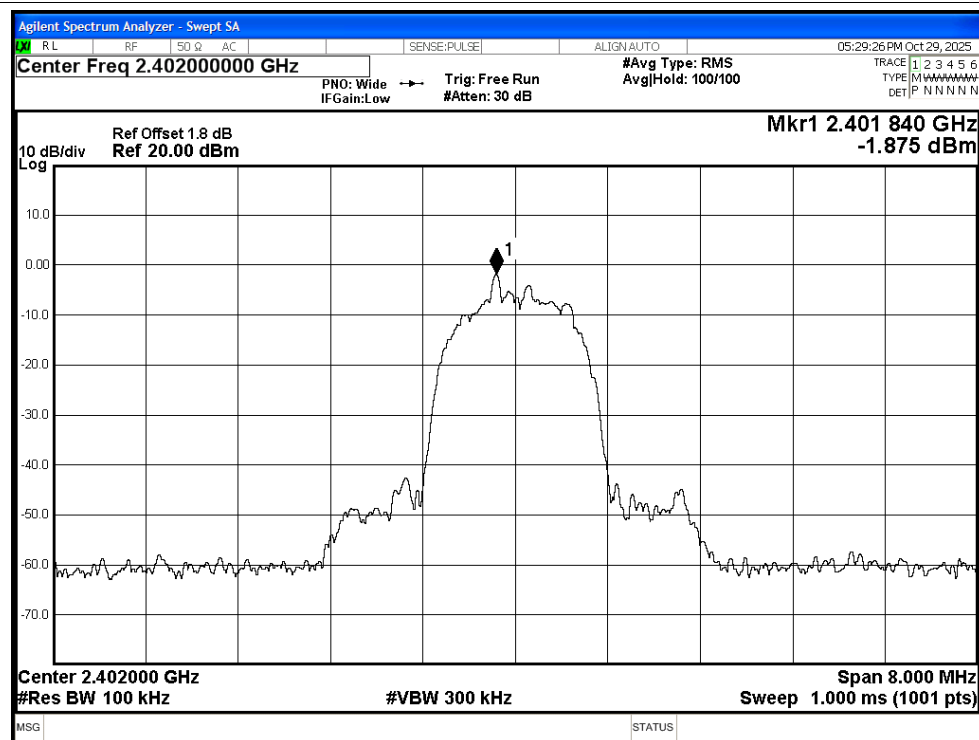
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



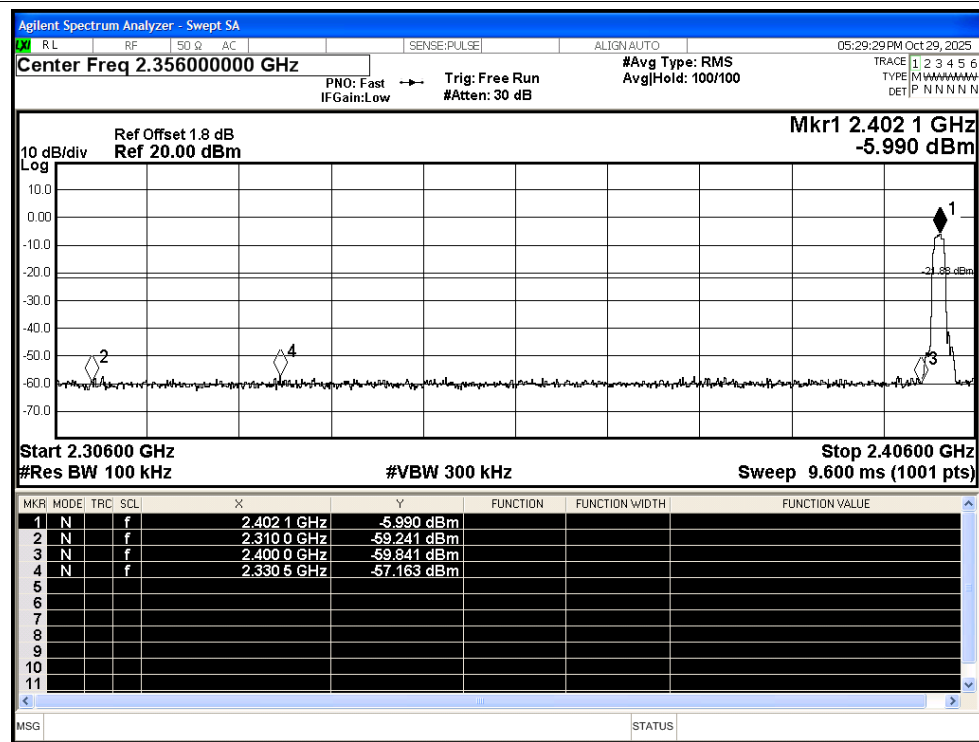
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



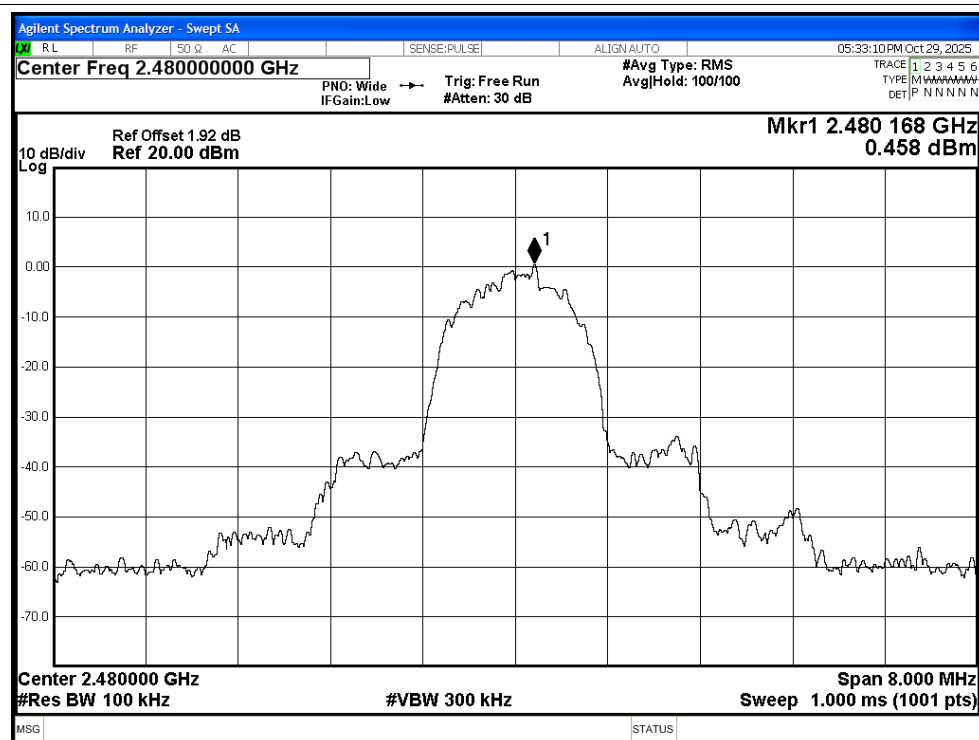
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



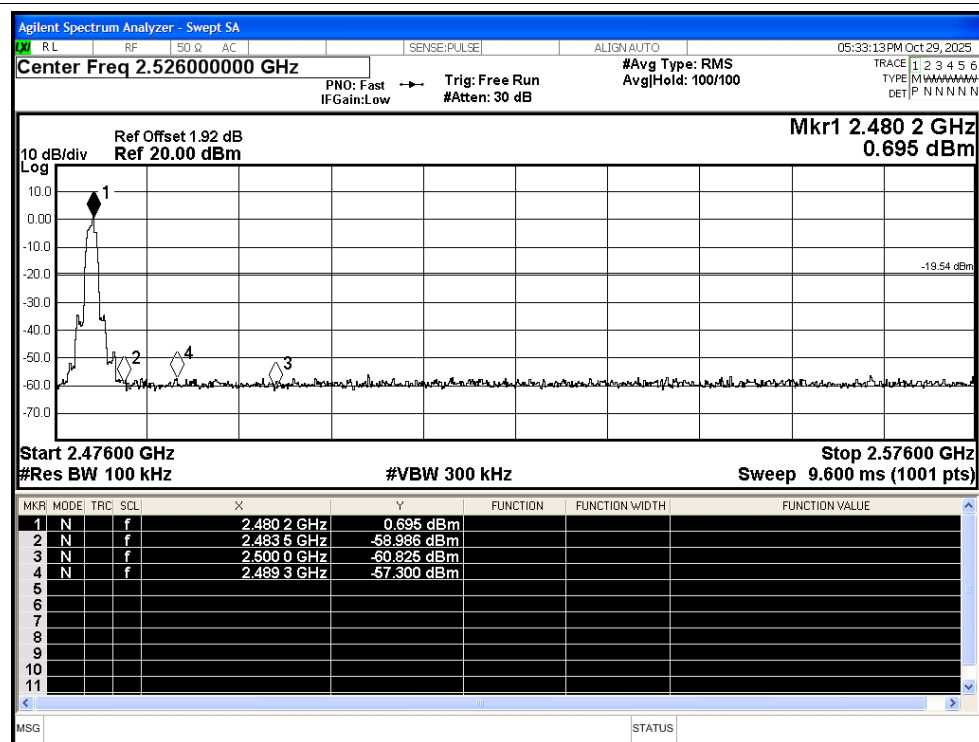
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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

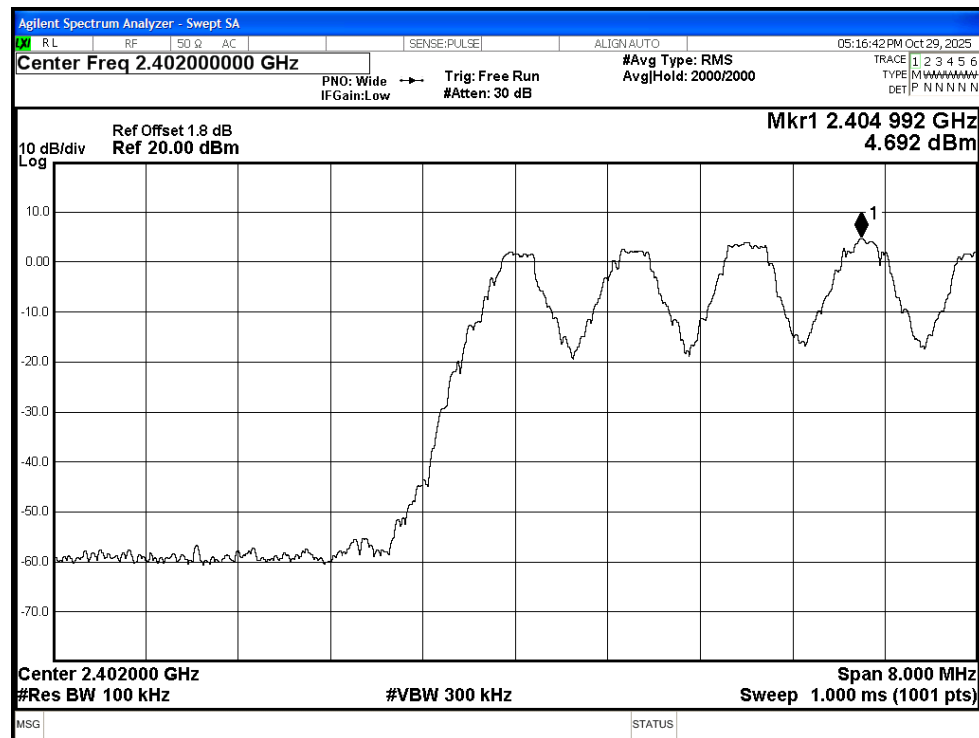


(Hopping)

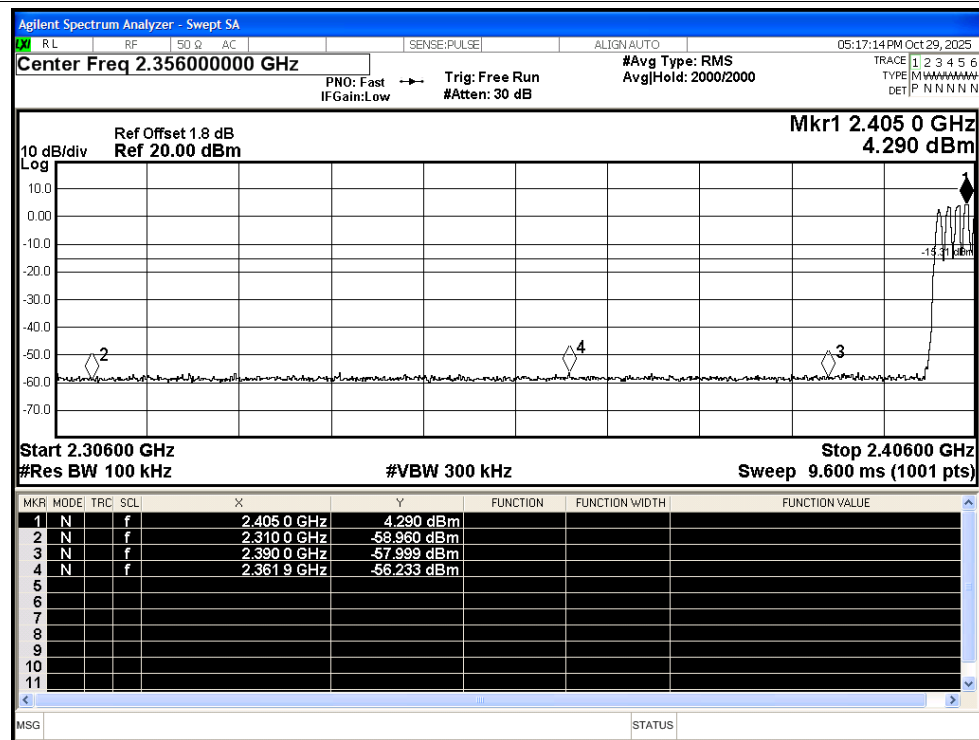
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-60.93	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.59	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-57.49	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-56.66	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-59.11	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-56.64	-20	Pass

Test Graphs

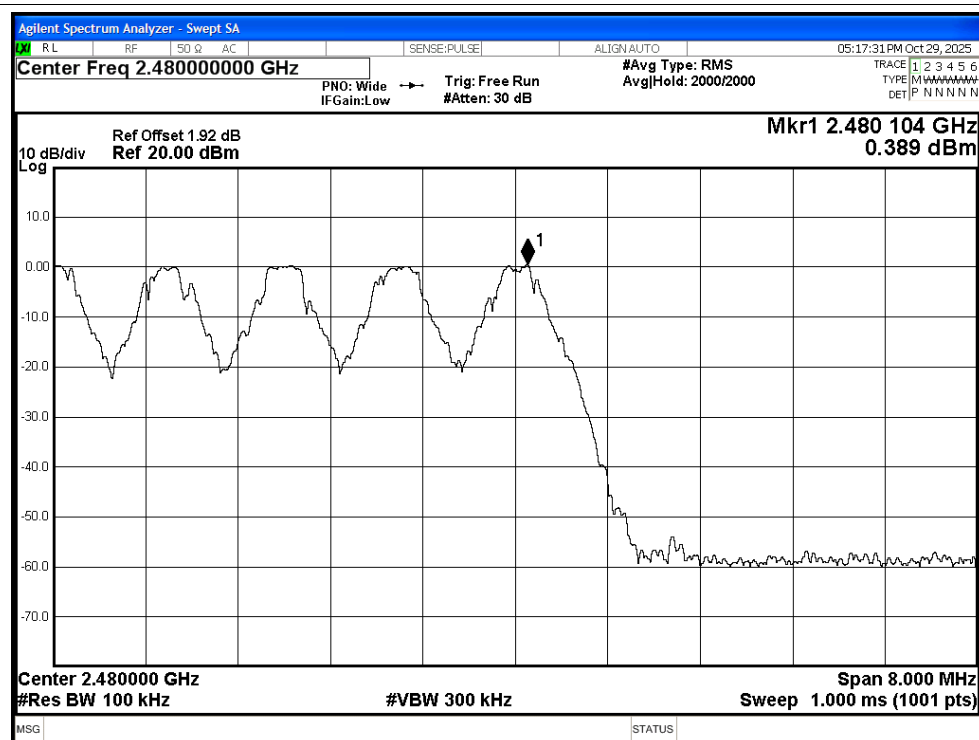
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



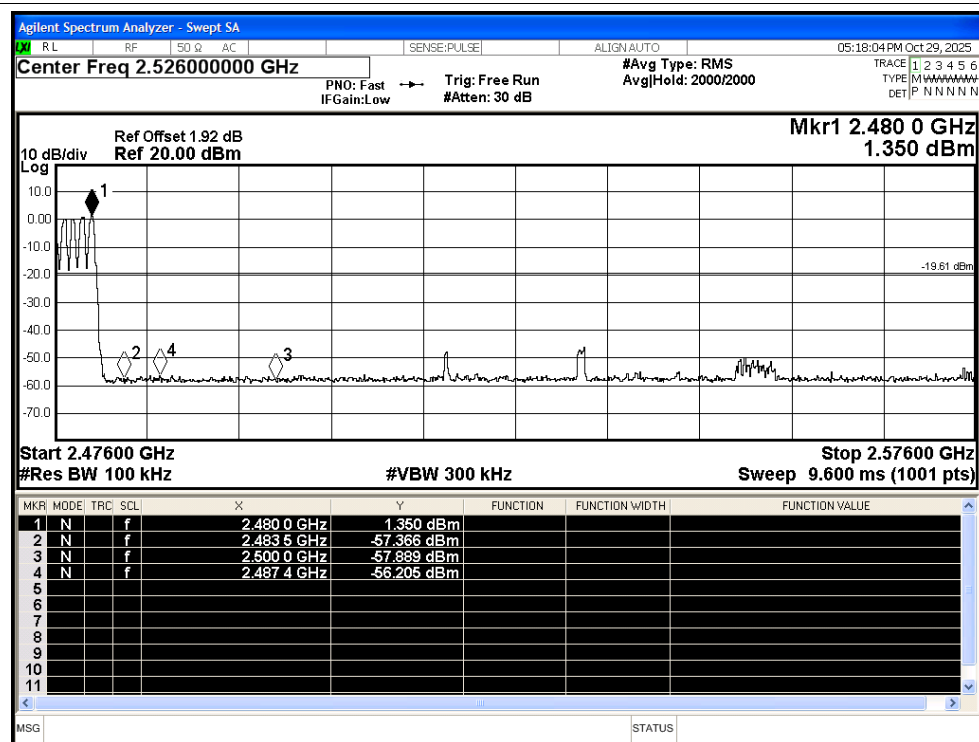
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



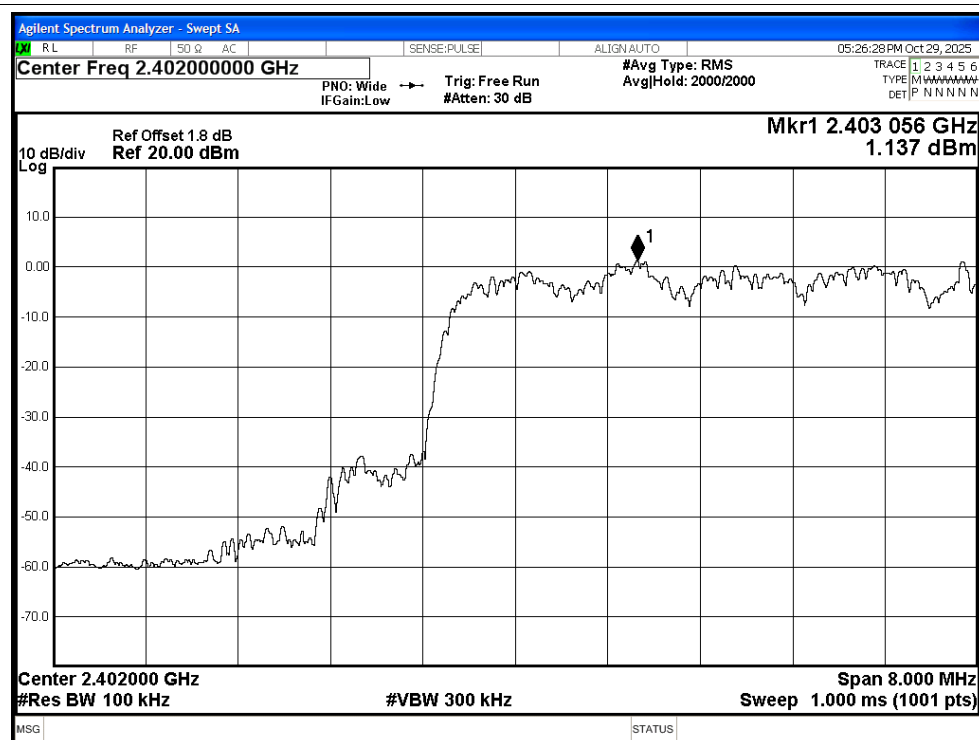
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



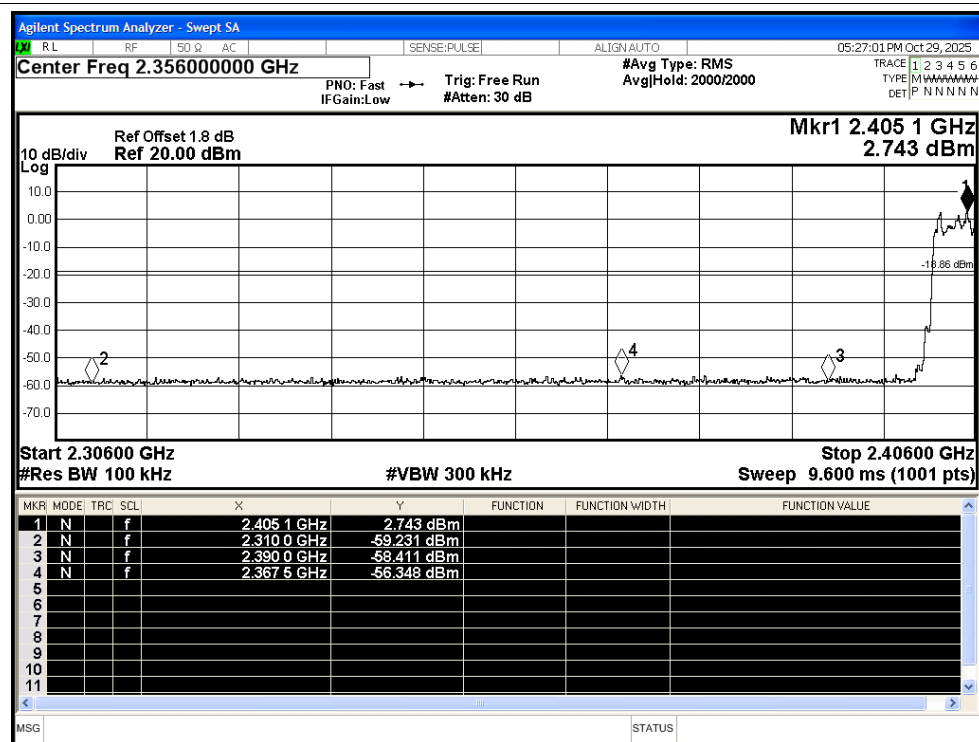
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



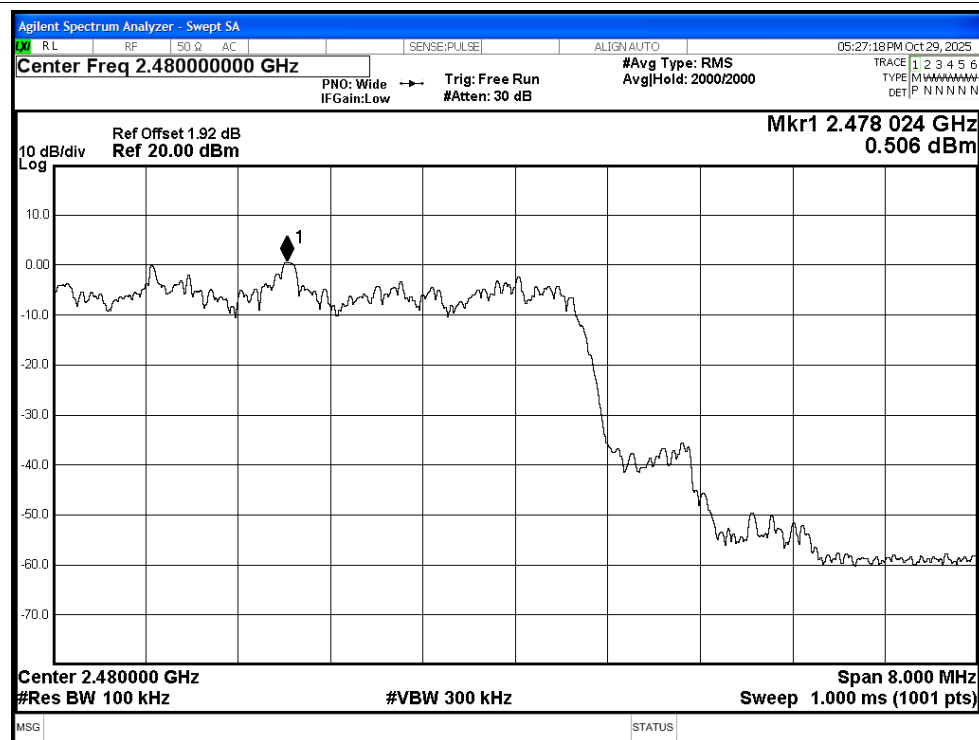
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



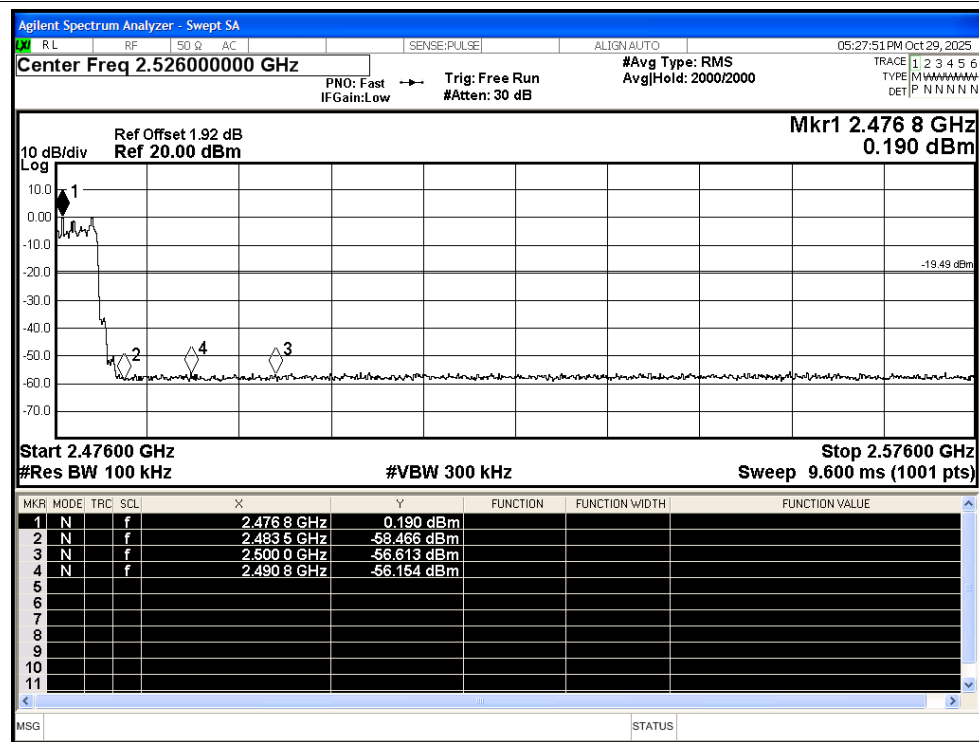
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



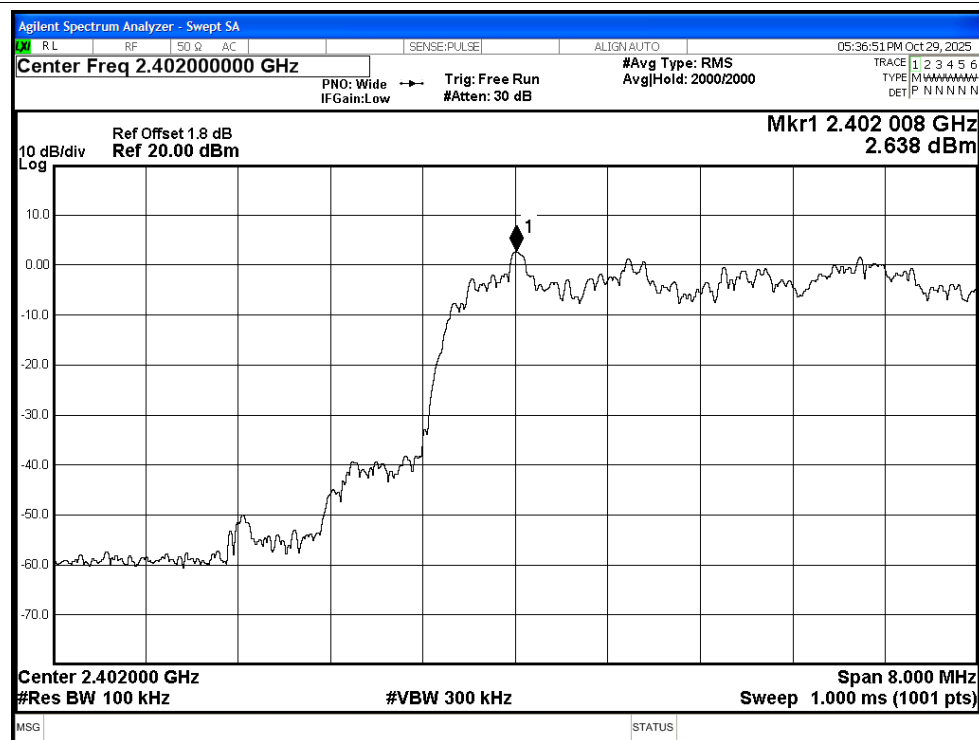
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



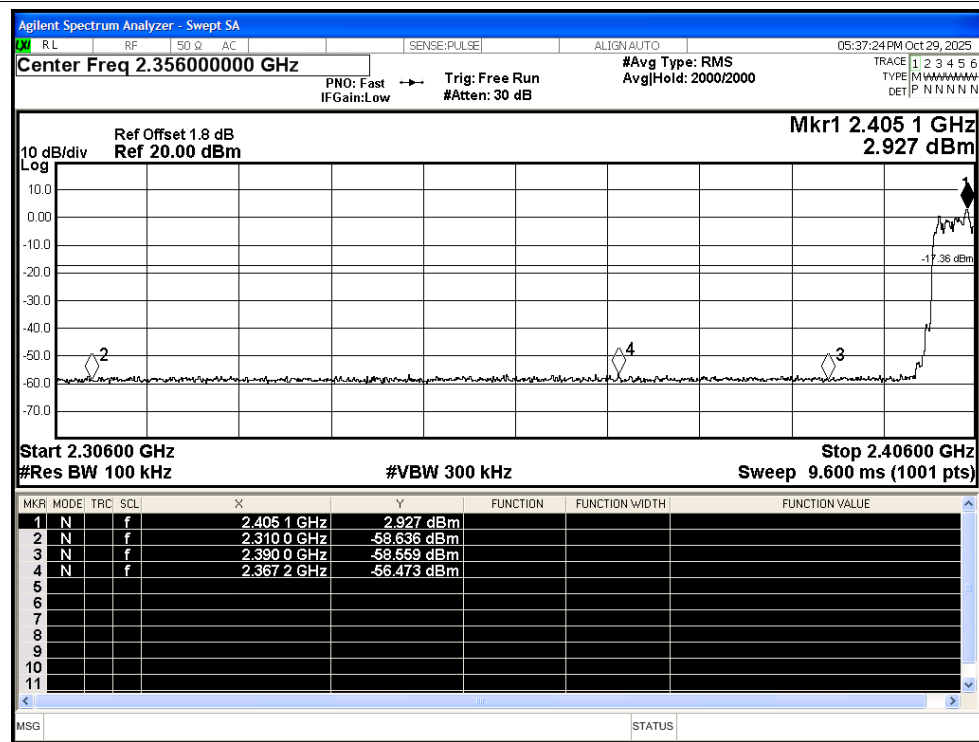
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



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



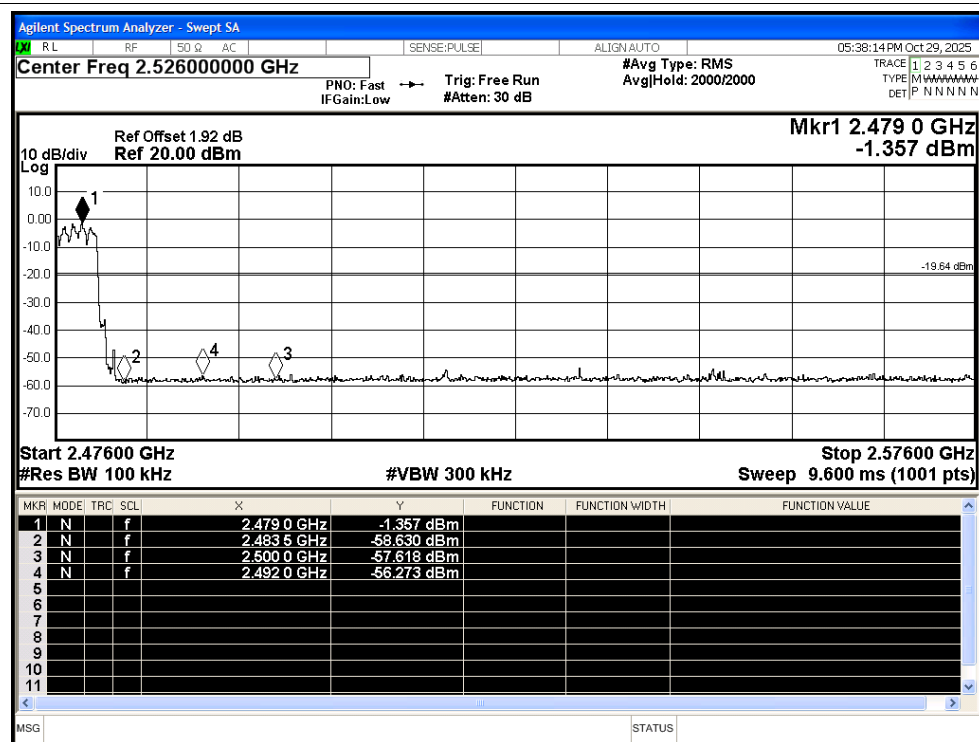
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



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



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

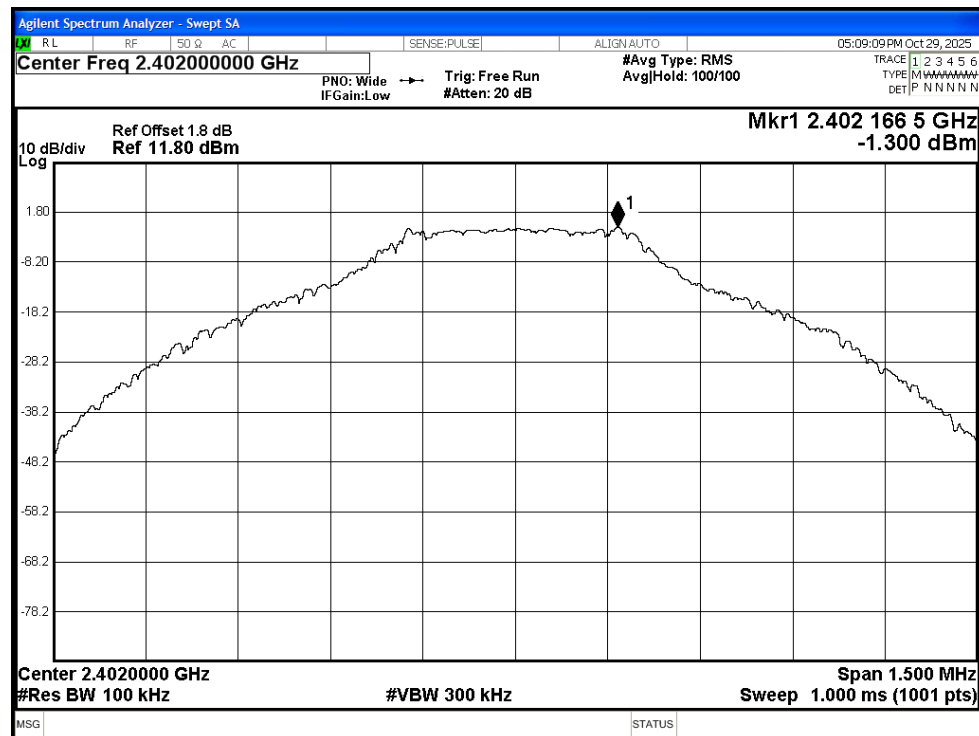


A.7 Conducted RF Spurious Emission

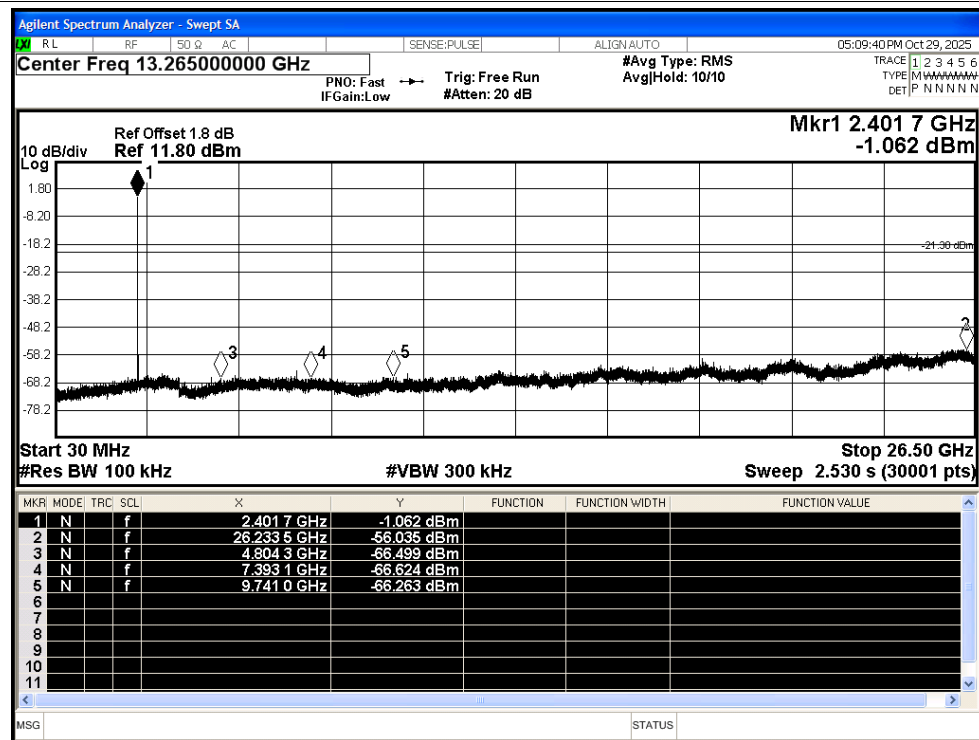
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-54.74	-20	Pass
NVNT	1-DH5	2441	Ant1	-53.61	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.79	-20	Pass
NVNT	2-DH5	2402	Ant1	-52.72	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.54	-20	Pass
NVNT	2-DH5	2480	Ant1	-41.18	-20	Pass
NVNT	3-DH5	2402	Ant1	-53.7	-20	Pass
NVNT	3-DH5	2441	Ant1	-52.62	-20	Pass
NVNT	3-DH5	2480	Ant1	-56.89	-20	Pass

Test Graphs

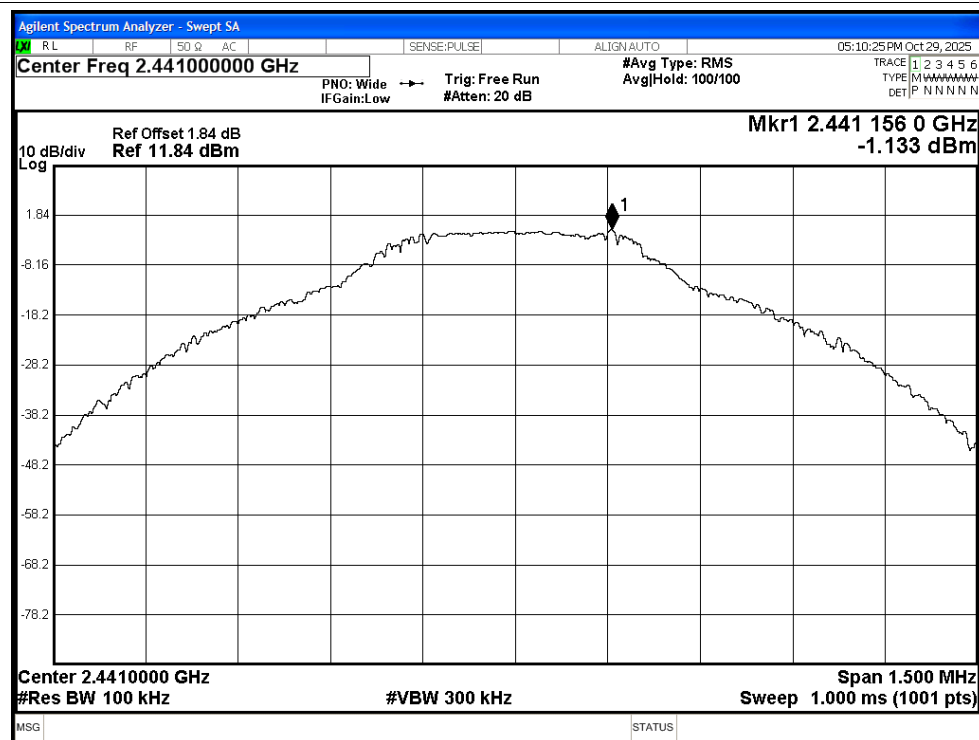
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



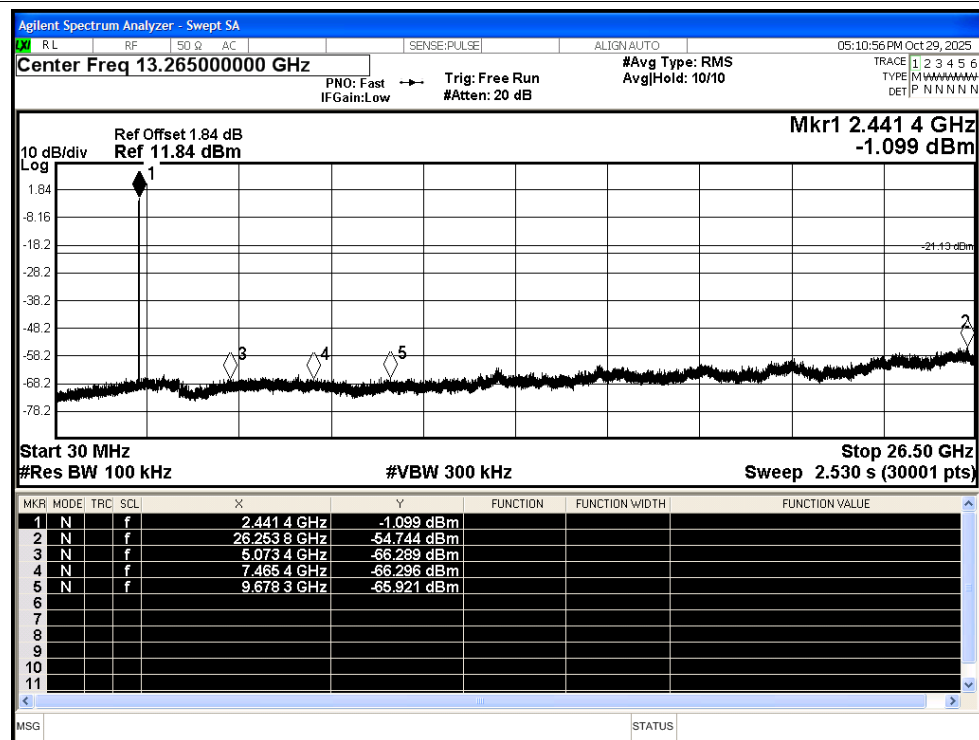
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



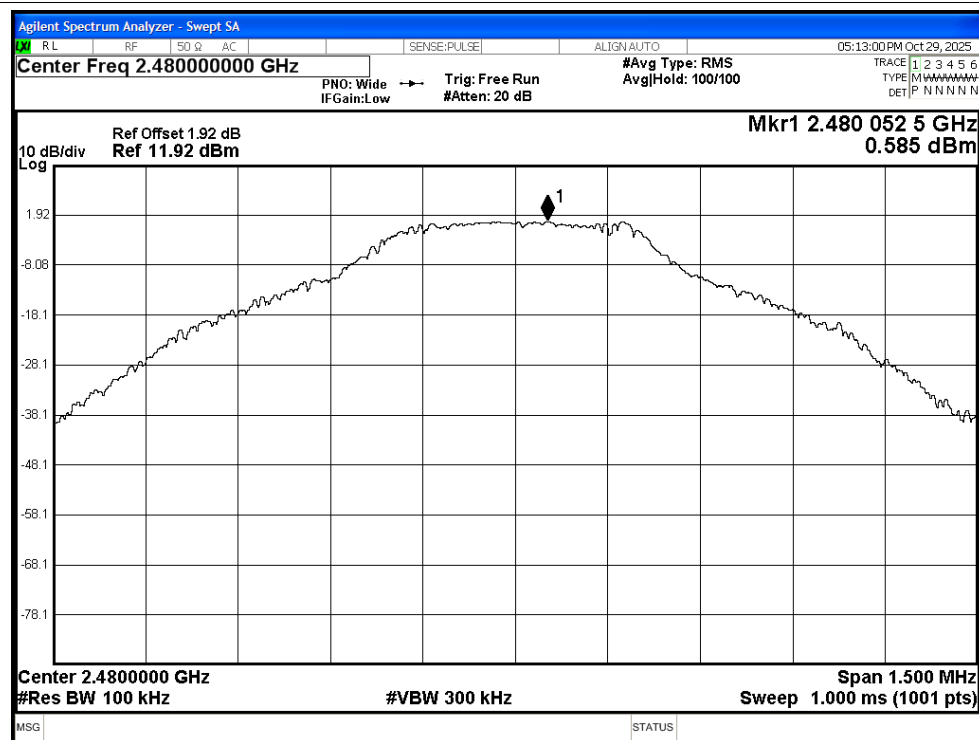
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



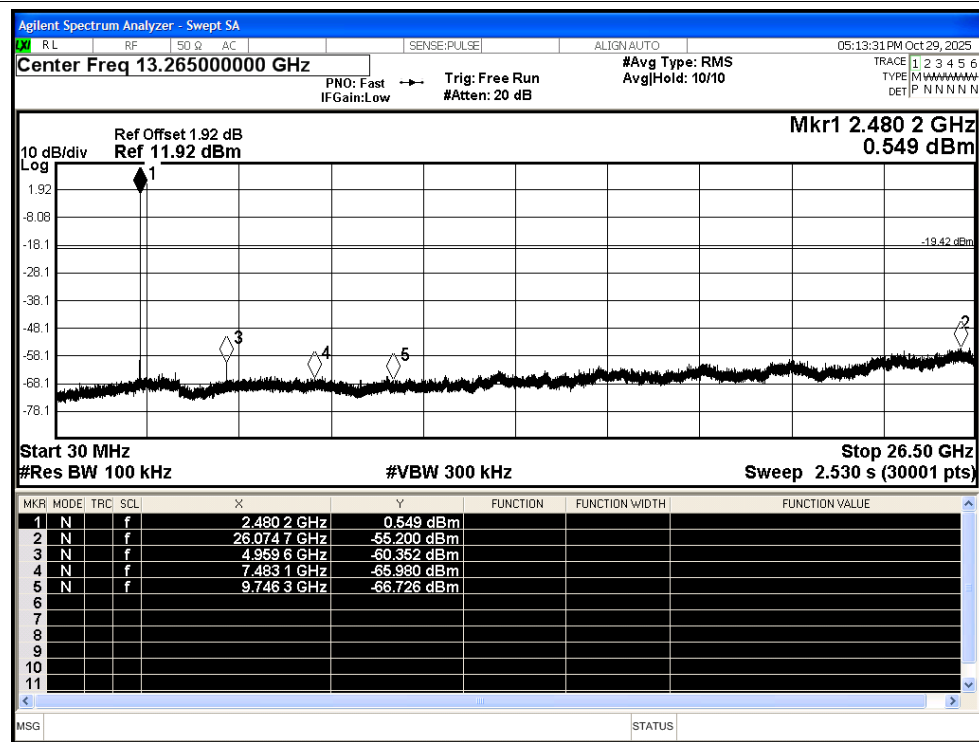
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



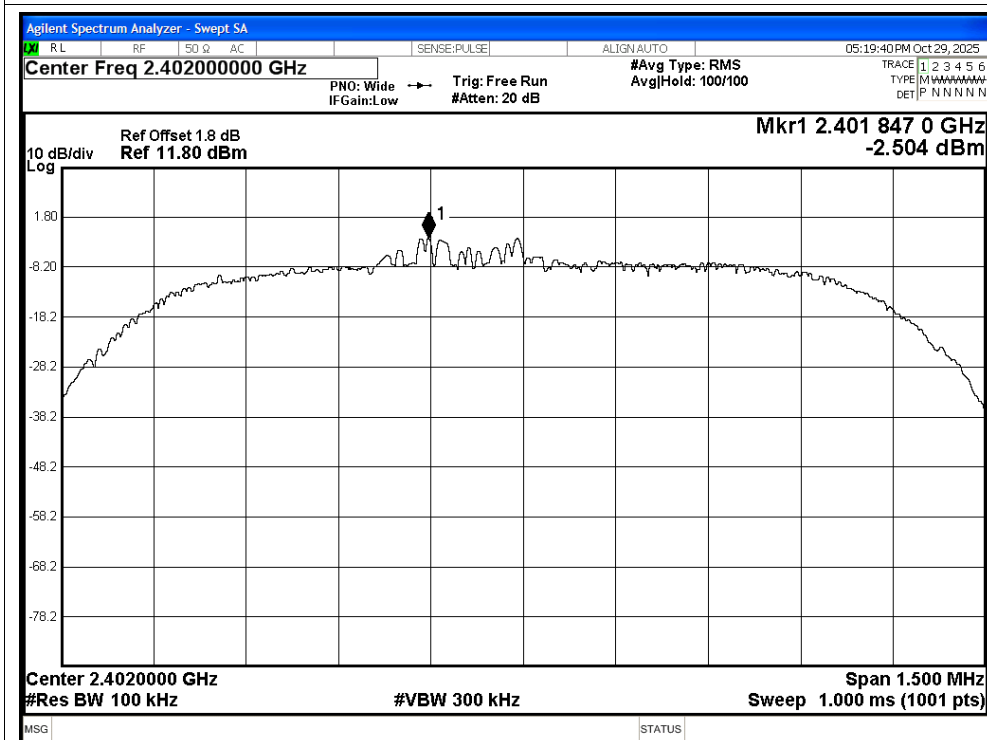
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



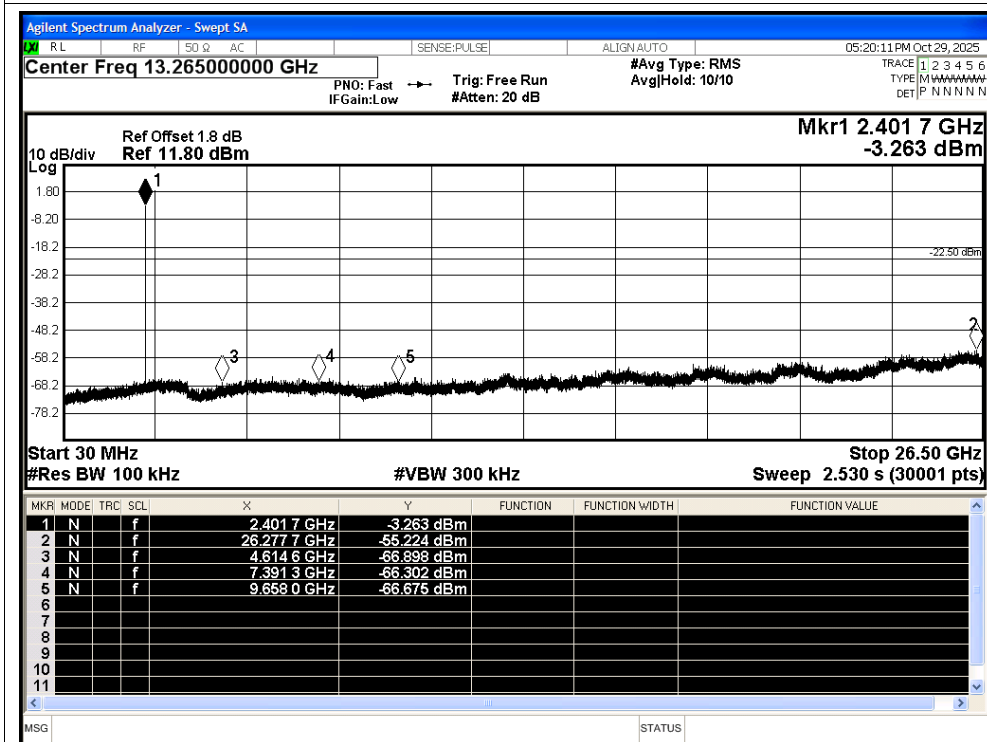
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



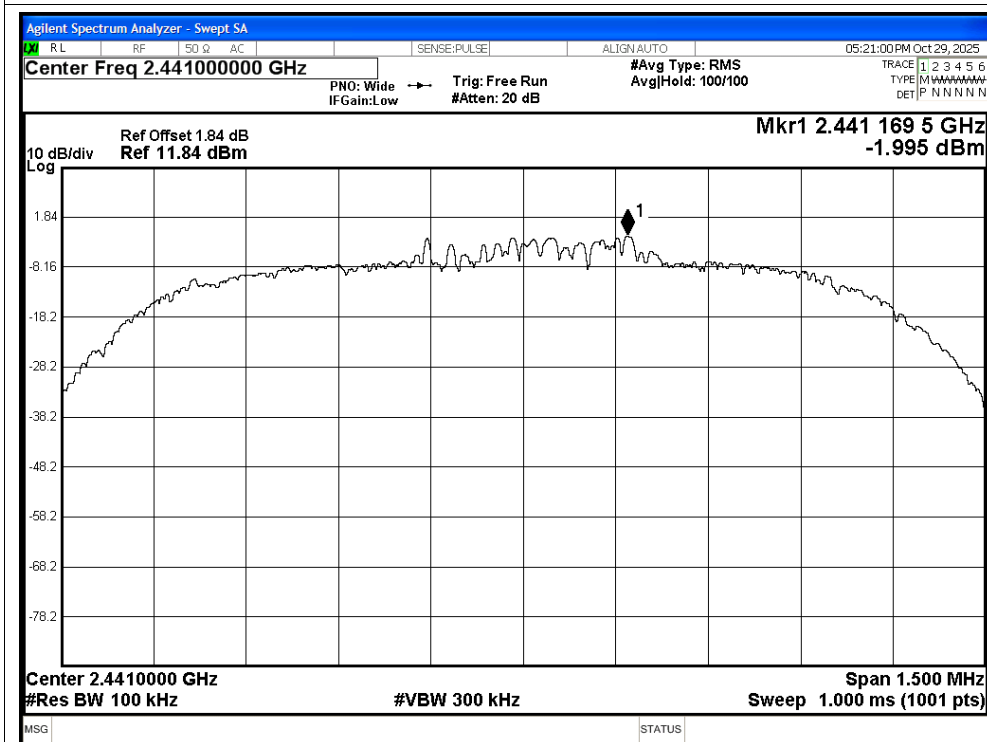
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



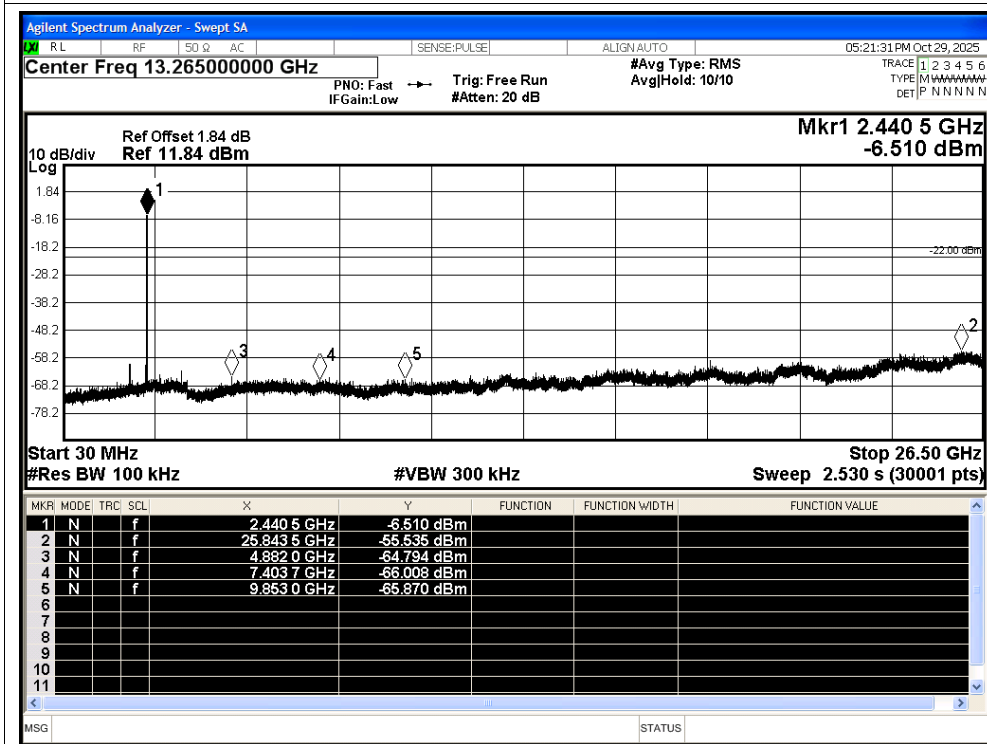
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



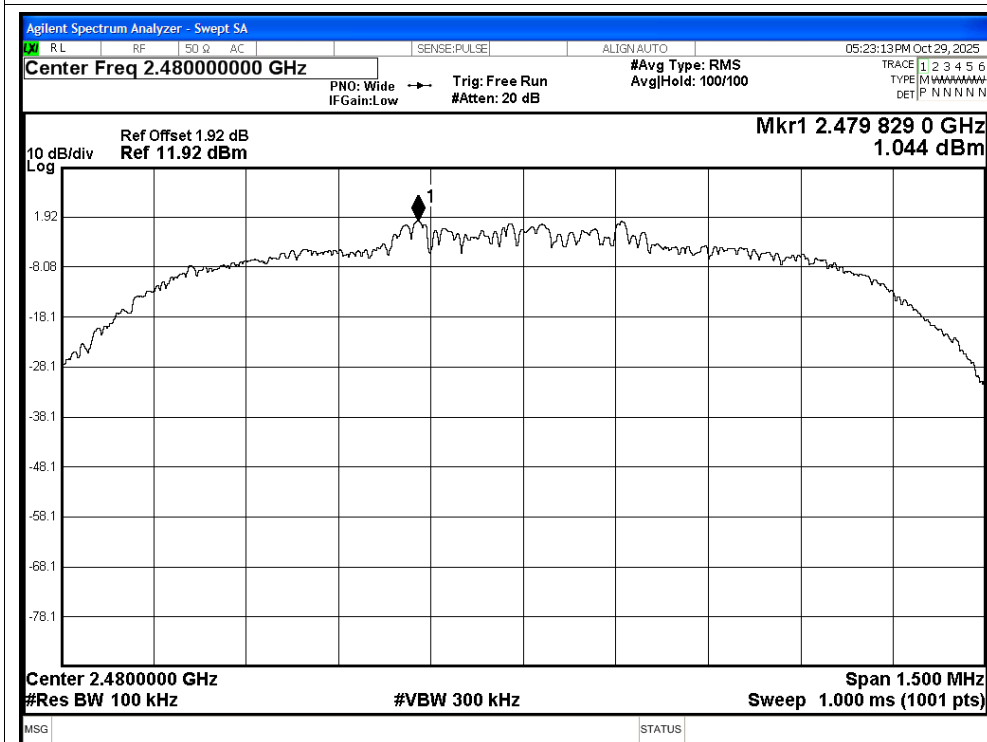
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



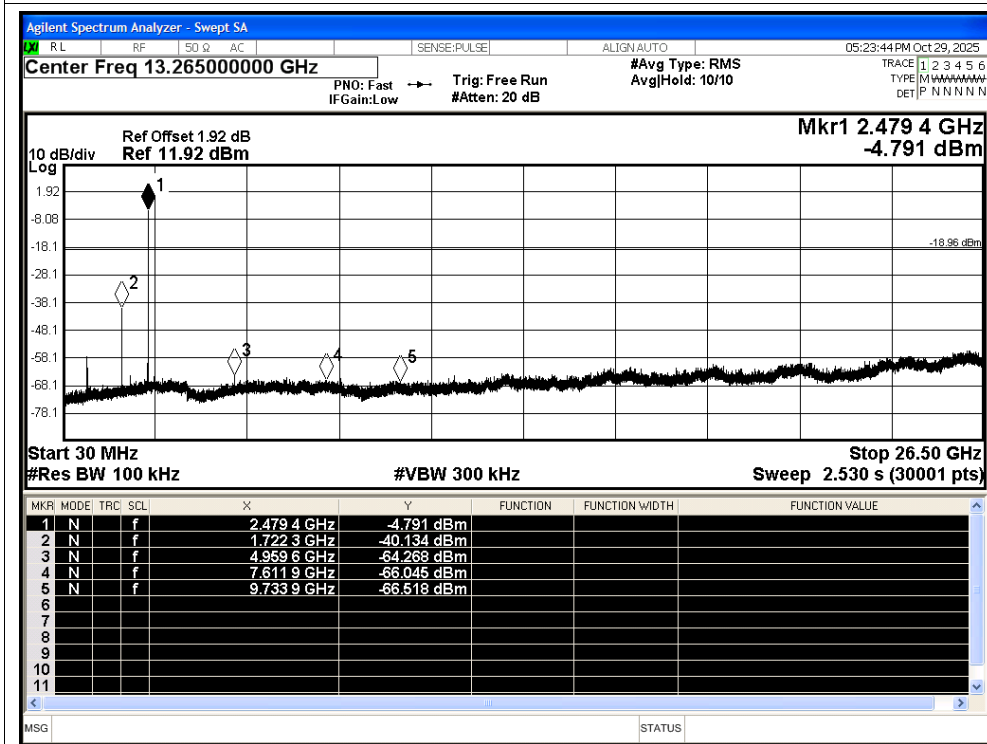
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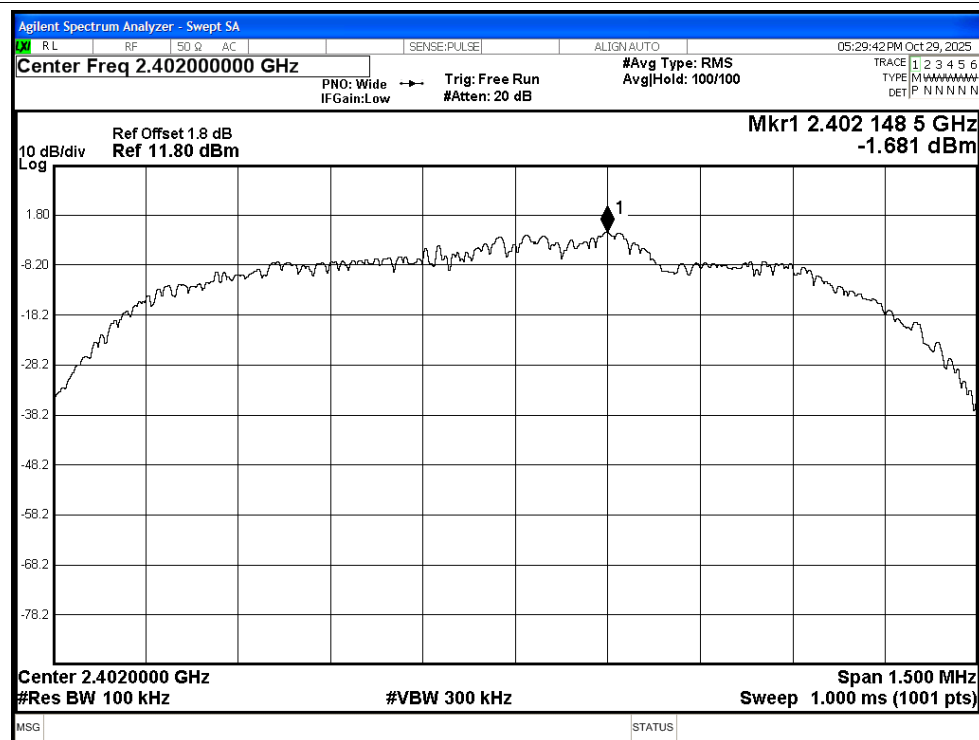
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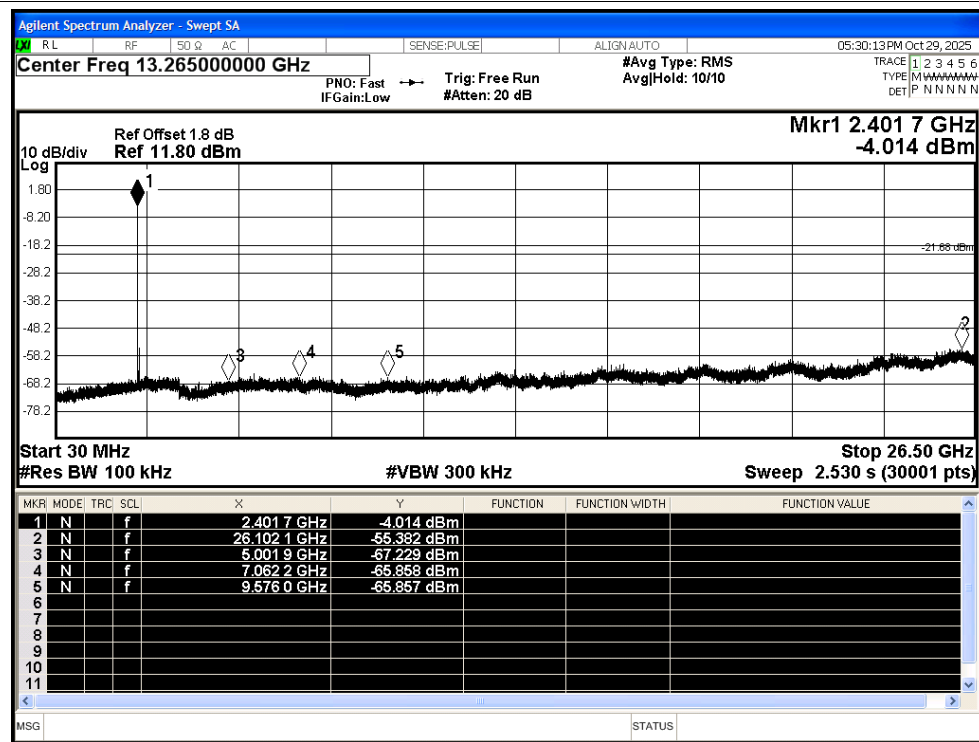
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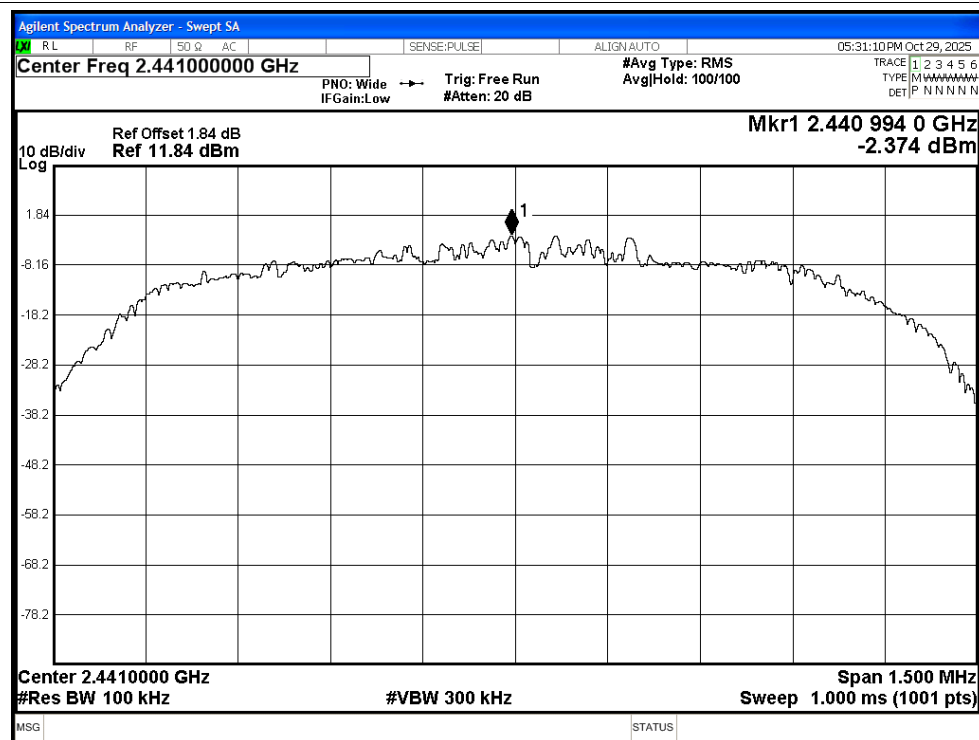
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



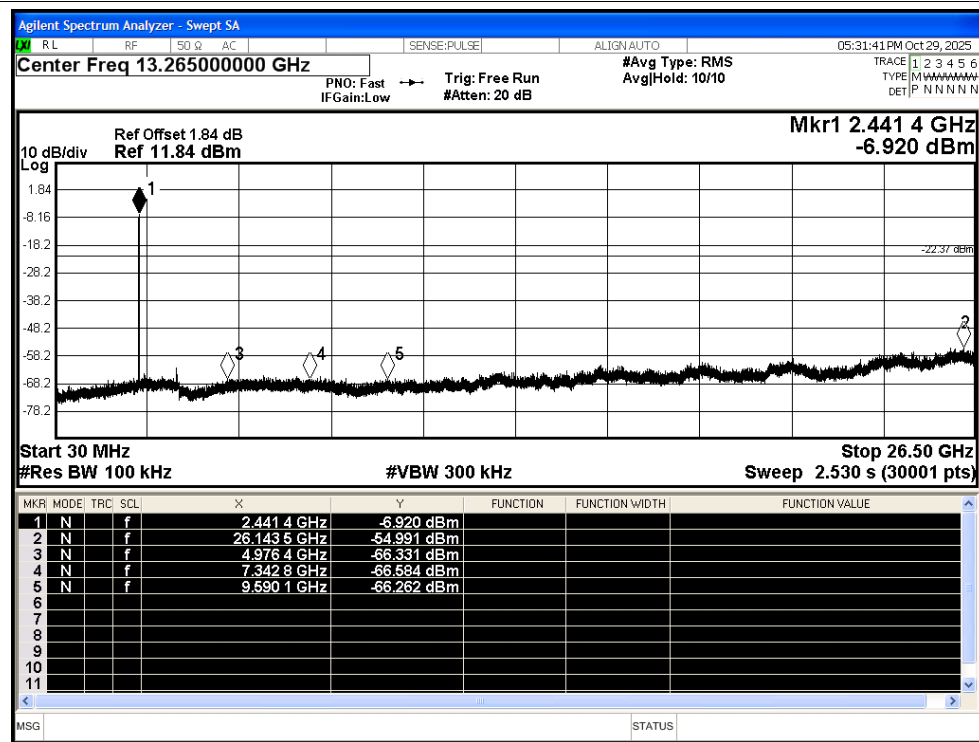
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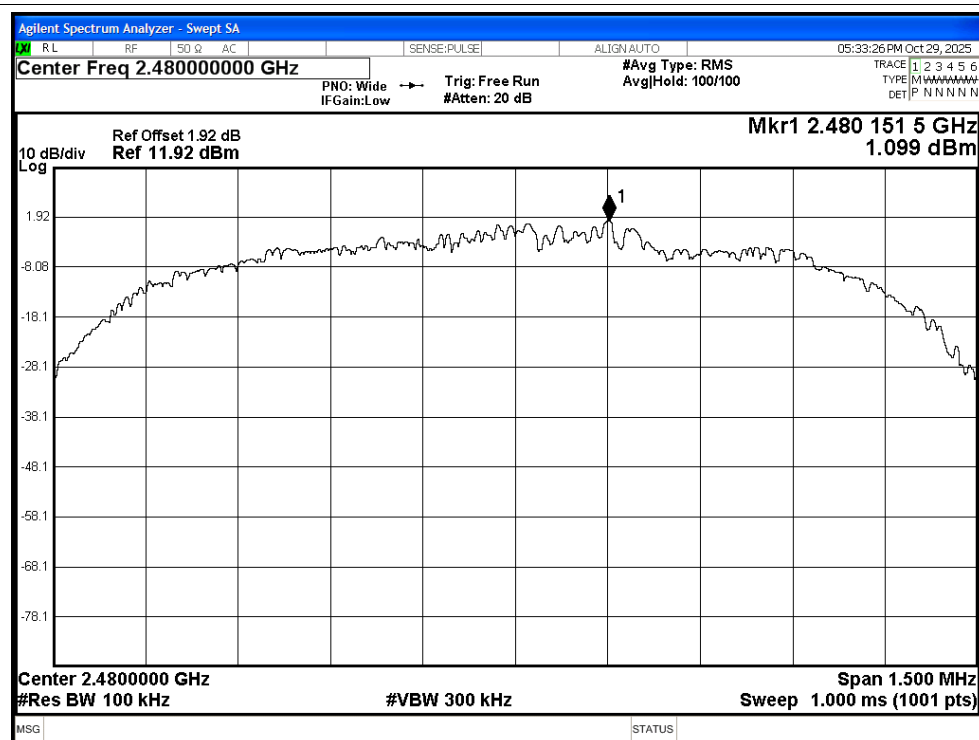
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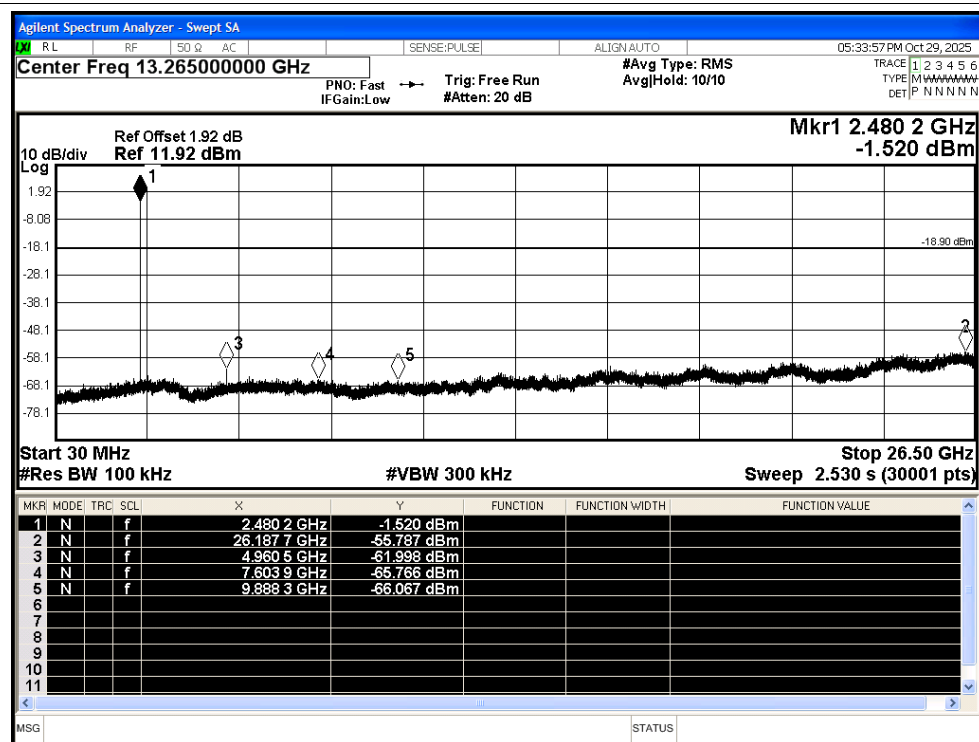
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

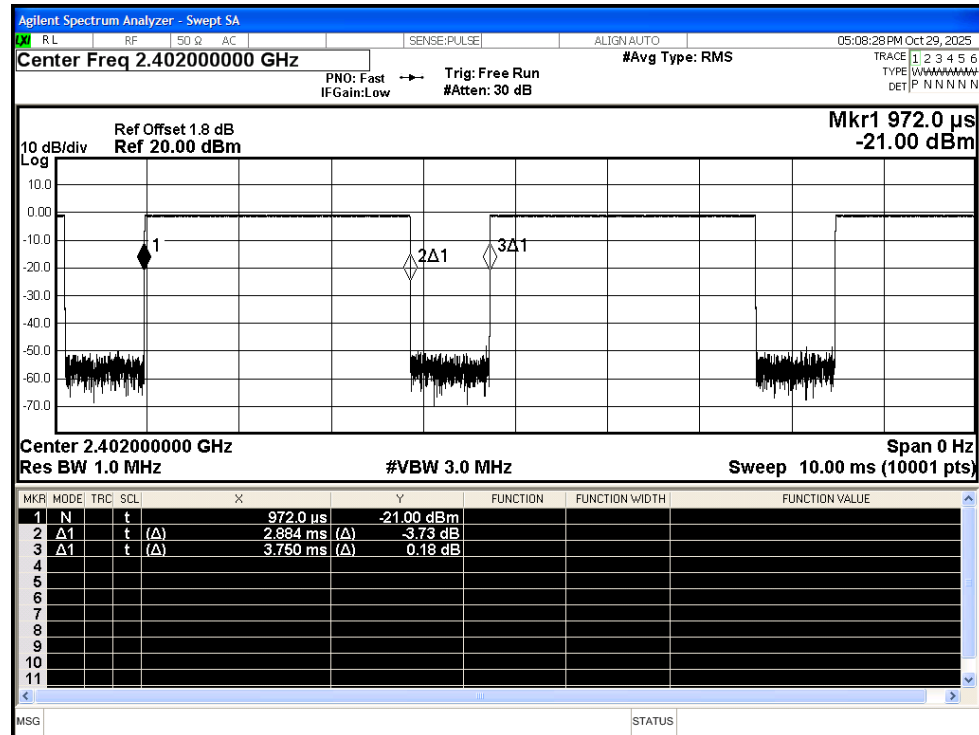


A.8 Duty Cycle

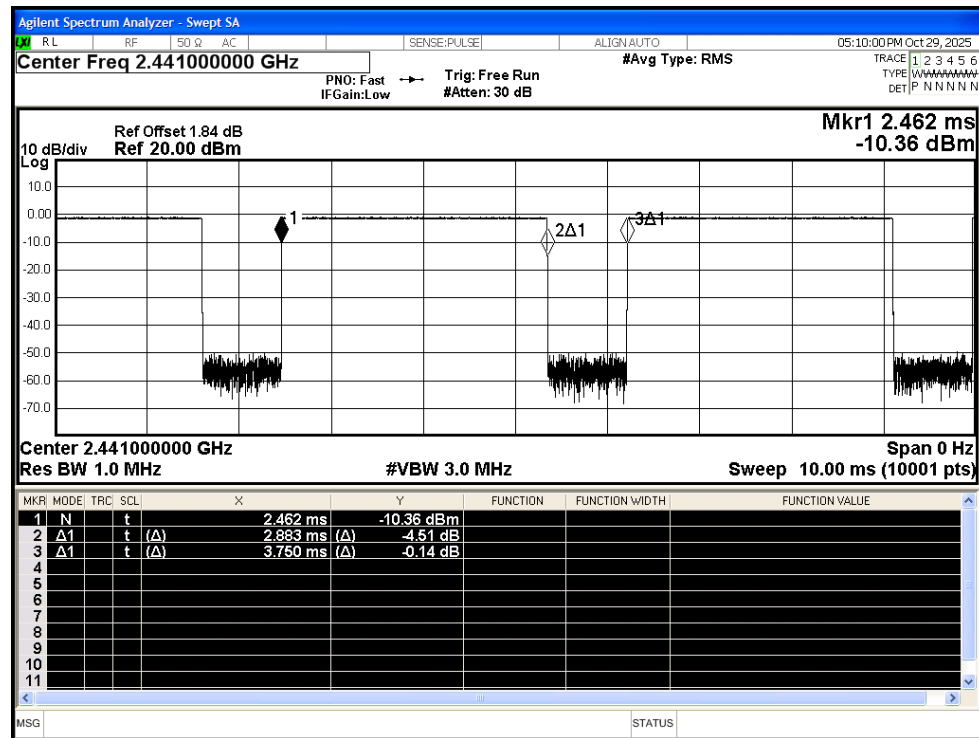
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	76.91	1.14	0.35
NVNT	1-DH5	2441	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2480	Ant1	76.91	1.14	0.35
NVNT	2-DH5	2402	Ant1	76.96	1.14	0.35
NVNT	2-DH5	2441	Ant1	76.96	1.14	0.35
NVNT	2-DH5	2480	Ant1	76.96	1.14	0.35
NVNT	3-DH5	2402	Ant1	77.01	1.13	0.35
NVNT	3-DH5	2441	Ant1	77.01	1.13	0.35
NVNT	3-DH5	2480	Ant1	77.01	1.13	0.35

Test Graphs

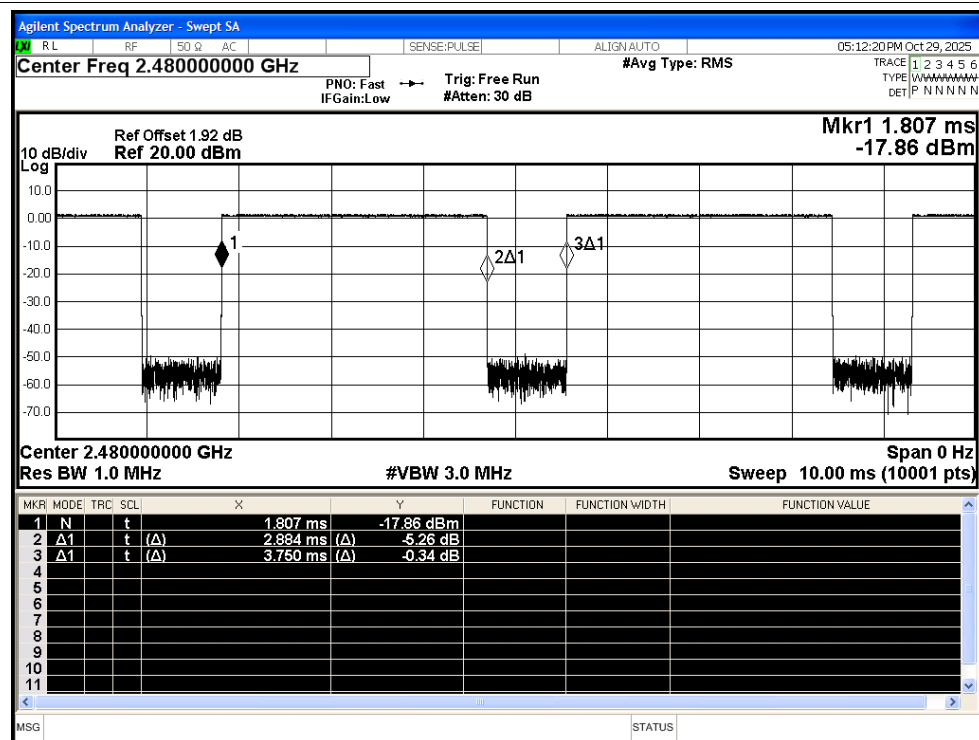
Duty Cycle NVNT 1-DH5 2402MHz Ant1



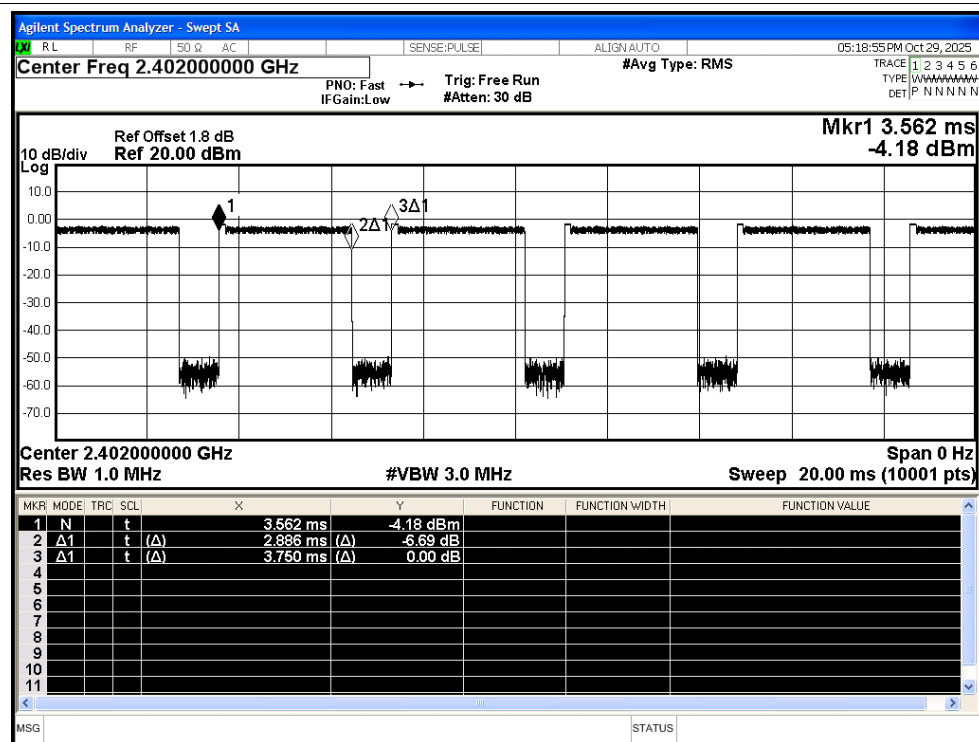
Duty Cycle NVNT 1-DH5 2441MHz Ant1



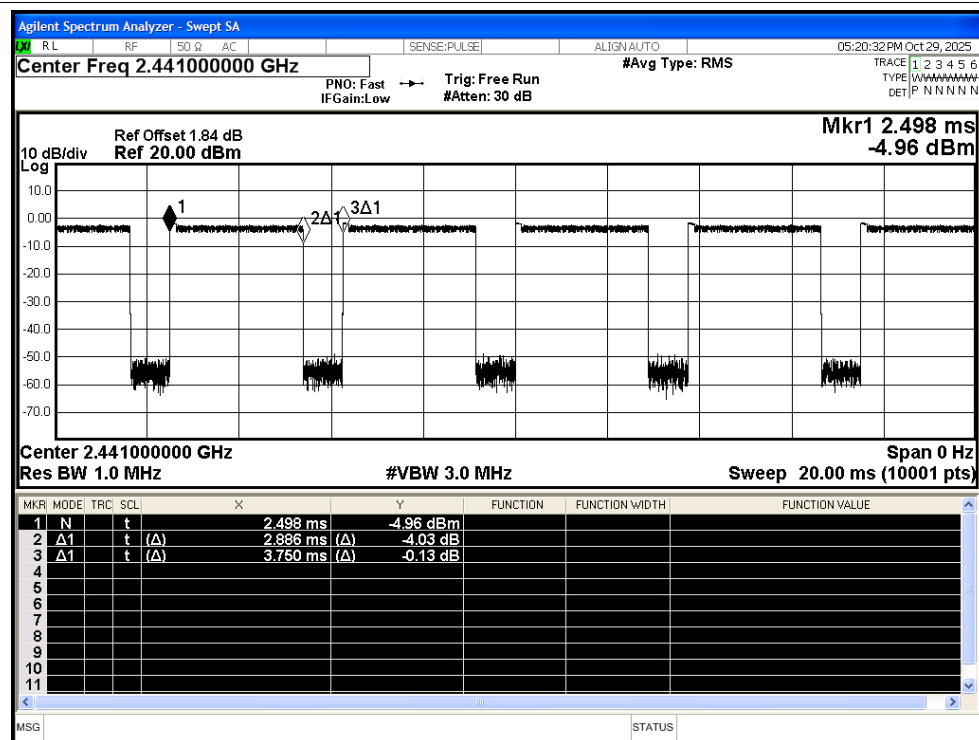
Duty Cycle NVNT 1-DH5 2480MHz Ant1



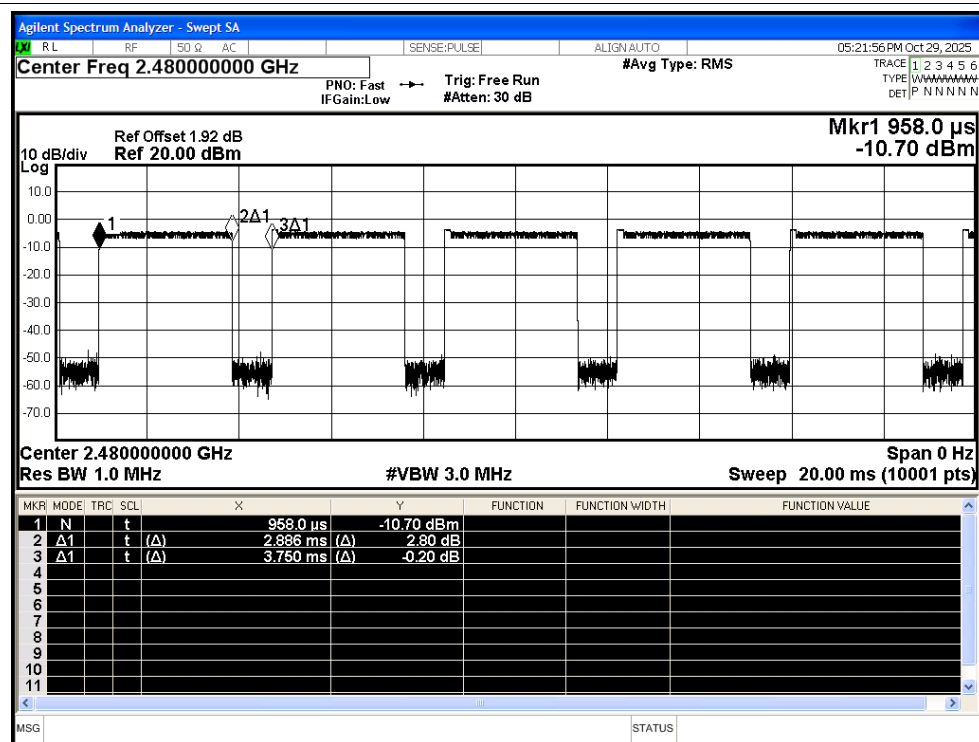
Duty Cycle NVNT 2-DH5 2402MHz Ant1



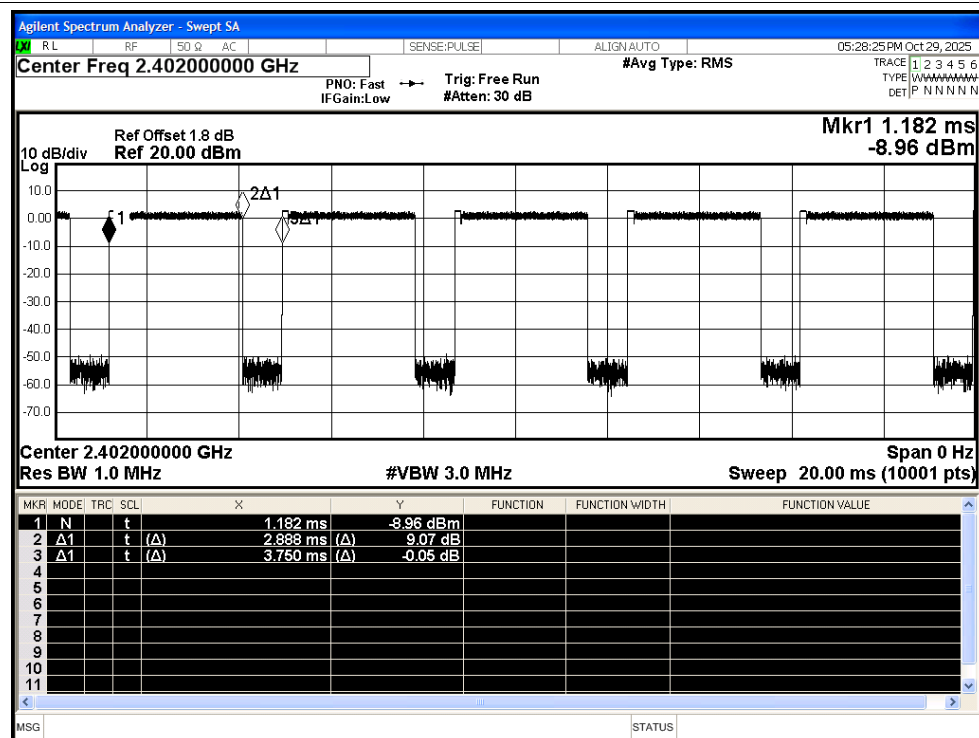
Duty Cycle NVNT 2-DH5 2441MHz Ant1



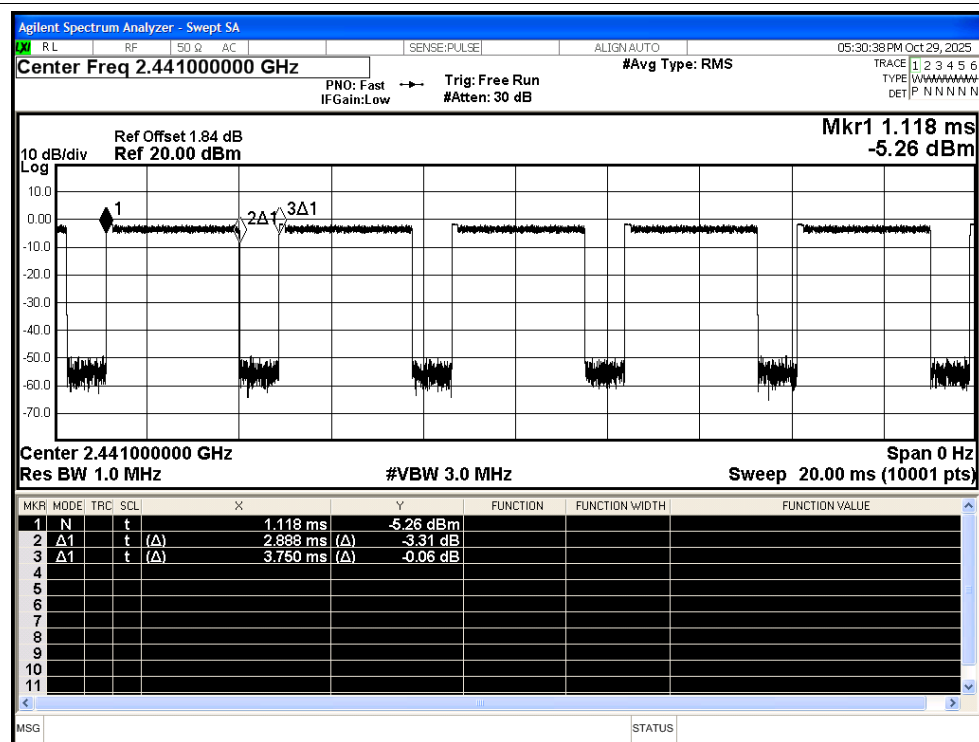
Duty Cycle NVNT 2-DH5 2480MHz Ant1

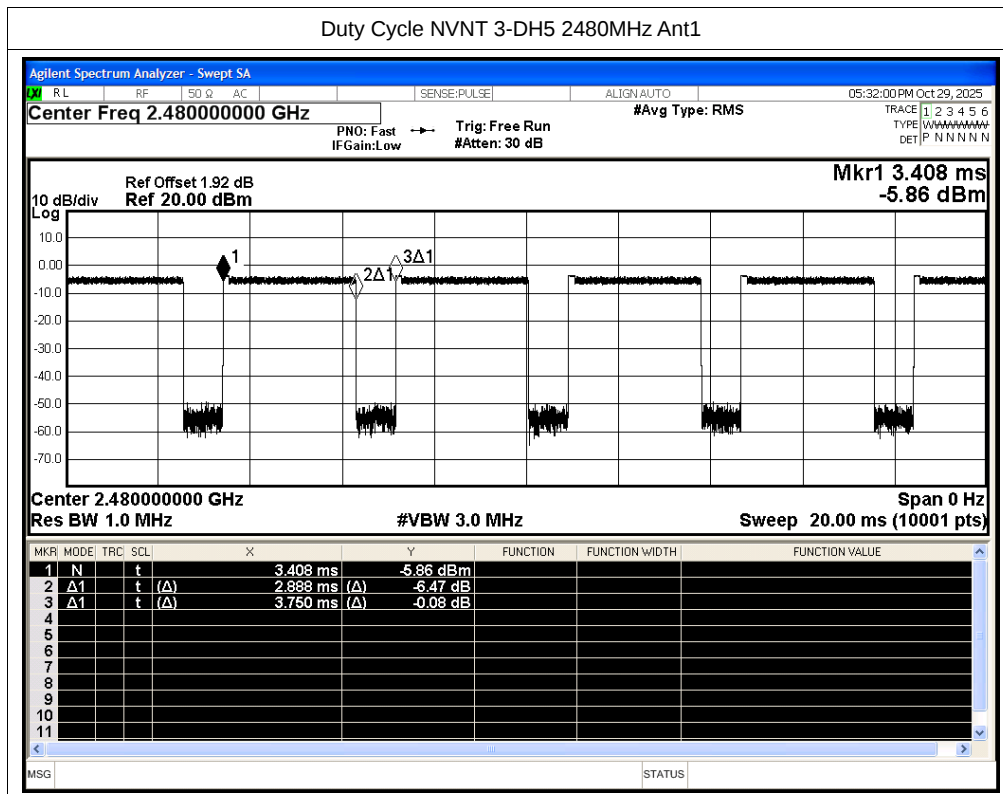


Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1



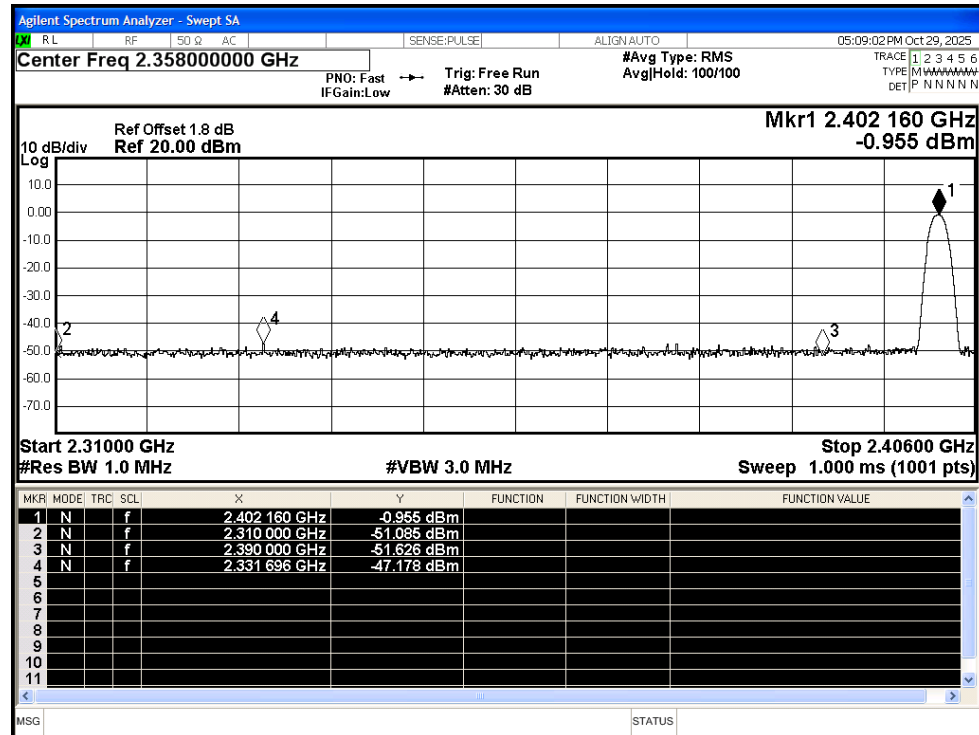


A.9 Restrict Band

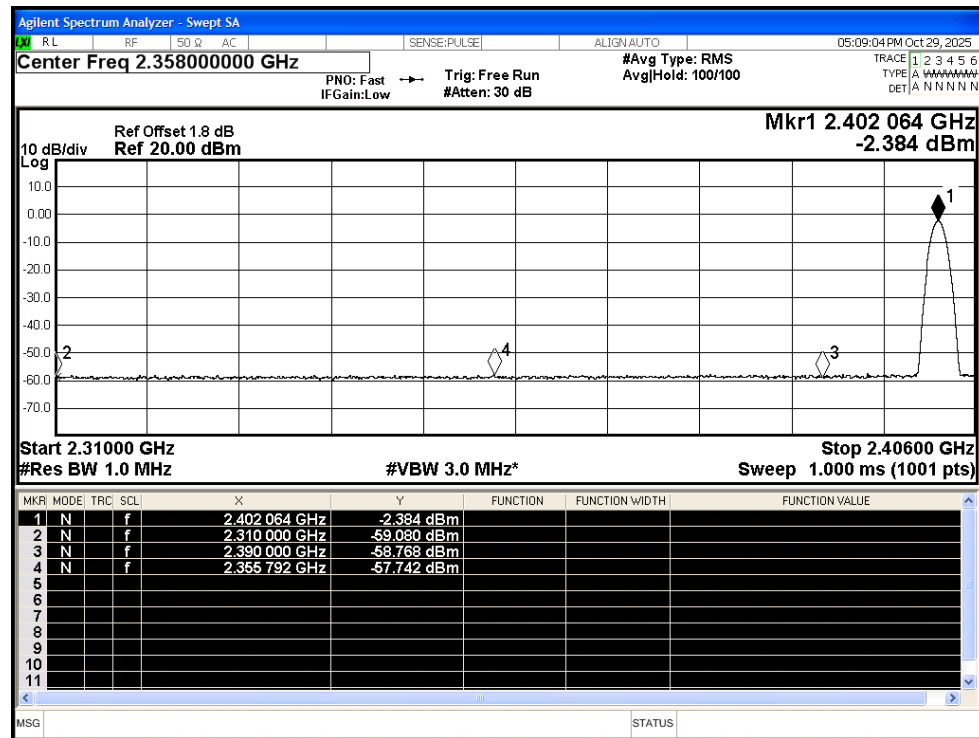
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-51.09	2.0	-	46.17	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-59.08	2.0	1.14	39.32	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2331.696	-47.18	2.0	-	50.08	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2355.792	-57.74	2.0	1.14	40.66	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-51.63	2.0	-	45.63	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-58.77	2.0	1.14	39.63	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.01	2.0	-	47.25	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-58.26	2.0	1.14	40.14	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2492.368	-47.21	2.0	-	50.05	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2484.664	-57.19	2.0	1.14	41.21	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-51.06	2.0	-	46.20	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-58.45	2.0	1.14	39.95	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-52.03	2.0	-	45.23	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-58.62	2.0	1.14	39.78	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2345.424	-47.72	2.0	-	49.54	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2389.296	-57.57	2.0	1.14	40.83	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-51.8	2.0	-	45.46	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-58.52	2.0	1.14	39.88	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-47.75	2.0	-	49.51	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-57.68	2.0	1.14	40.72	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2488.96	-47.46	2.0	-	49.80	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.4	-57.14	2.0	1.14	41.26	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-49.49	2.0	-	47.77	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-57.81	2.0	1.14	40.59	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-50.57	2.0	-	46.69	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-59.02	2.0	1.13	39.37	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2341.392	-47.92	2.0	-	49.34	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2347.632	-57.89	2.0	1.13	40.50	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-50.61	2.0	-	46.65	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-58.28	2.0	1.13	40.11	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-48.7	2.0	-	48.56	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-57.61	2.0	1.13	40.78	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.608	-46.18	2.0	-	51.08	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2484.136	-56.98	2.0	1.13	41.41	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-50.39	2.0	-	46.87	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-58.2	2.0	1.13	40.19	Average	54	Pass

Test Graphs

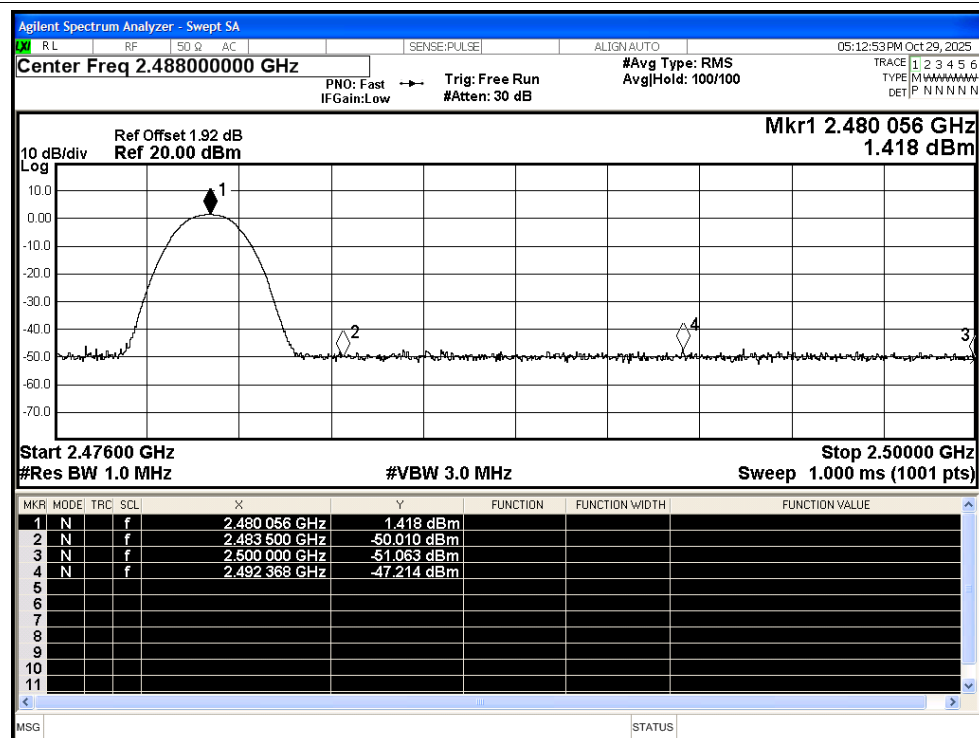
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



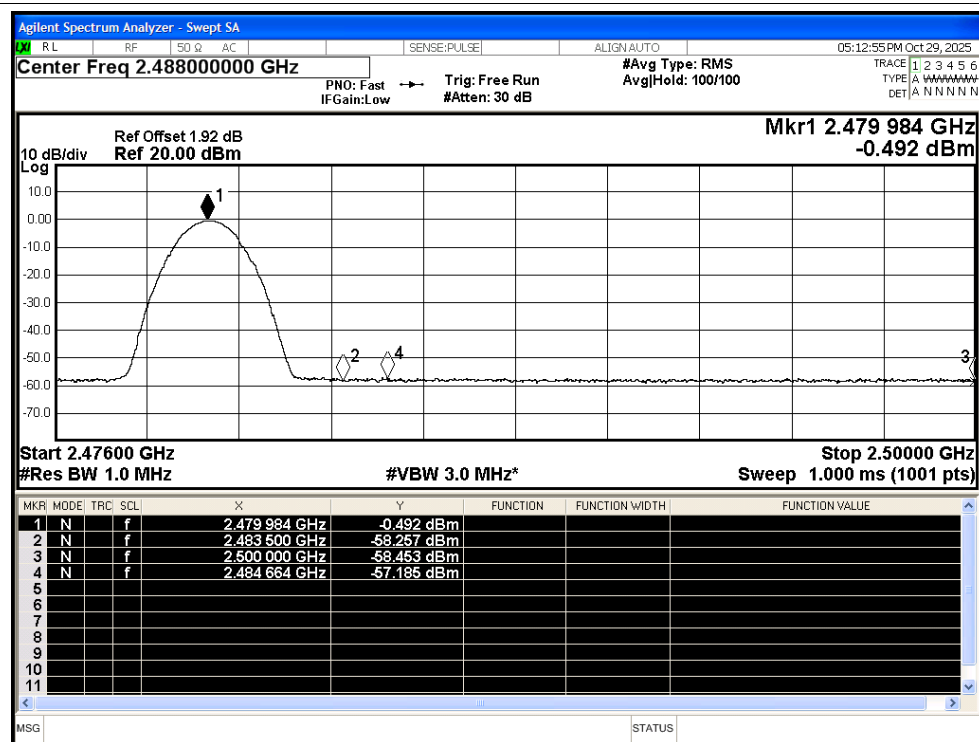
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



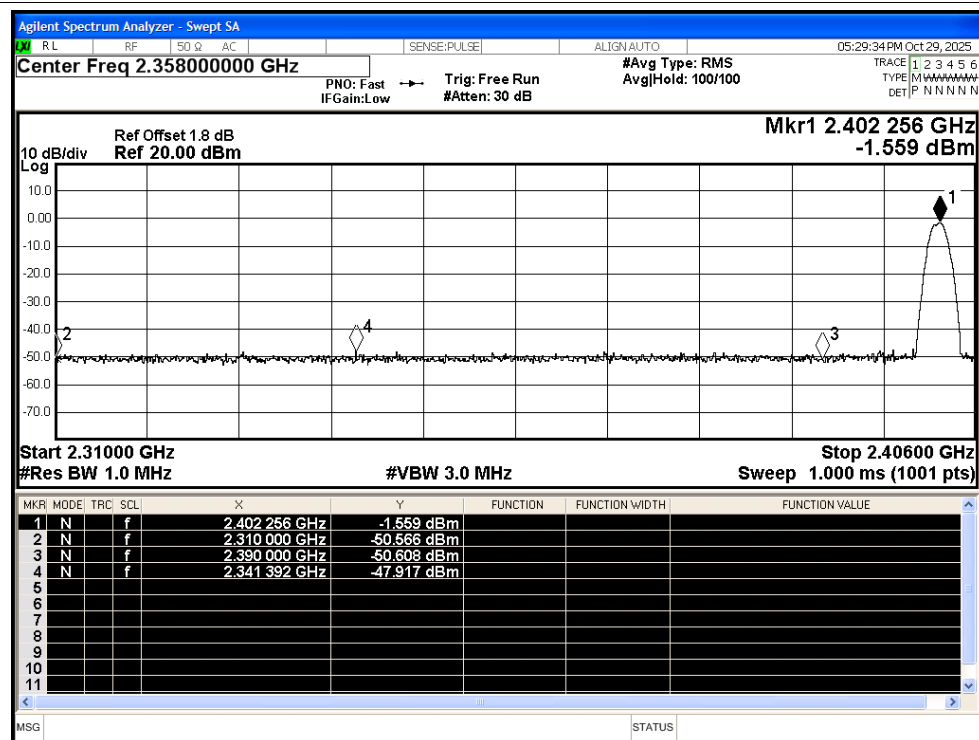
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



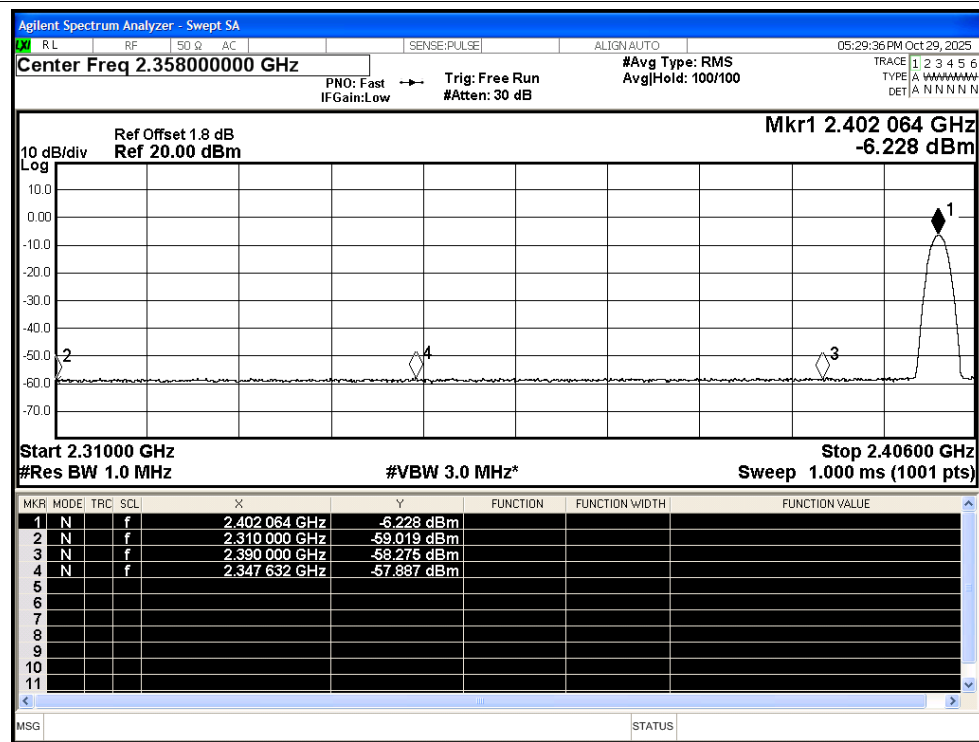
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



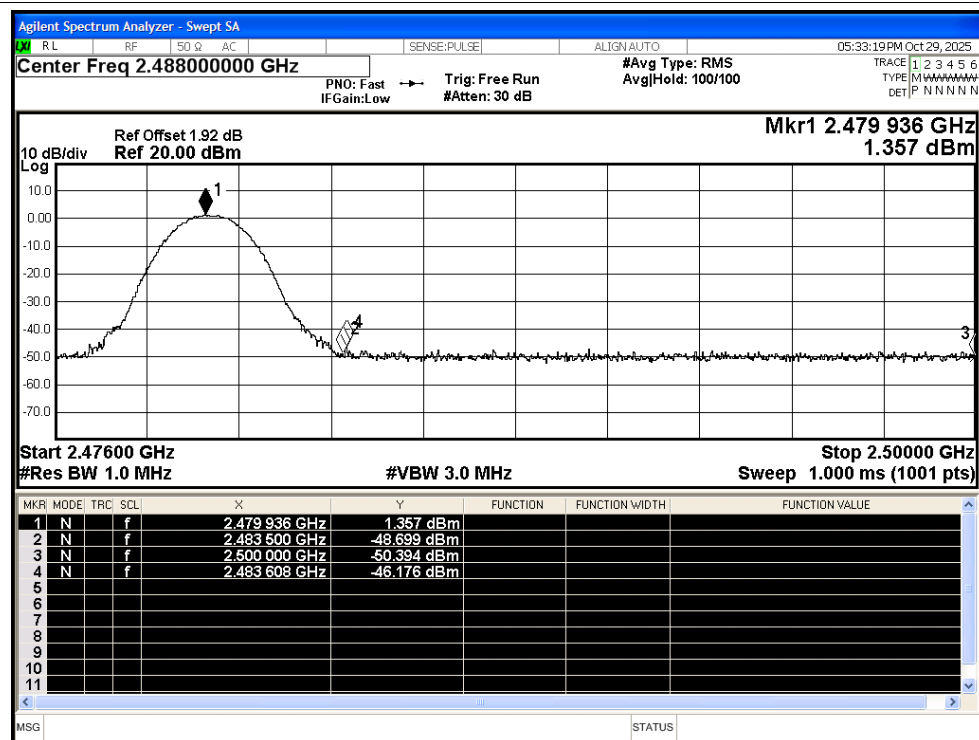
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



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

