



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Wireless headphone

Test Model: LS-2501

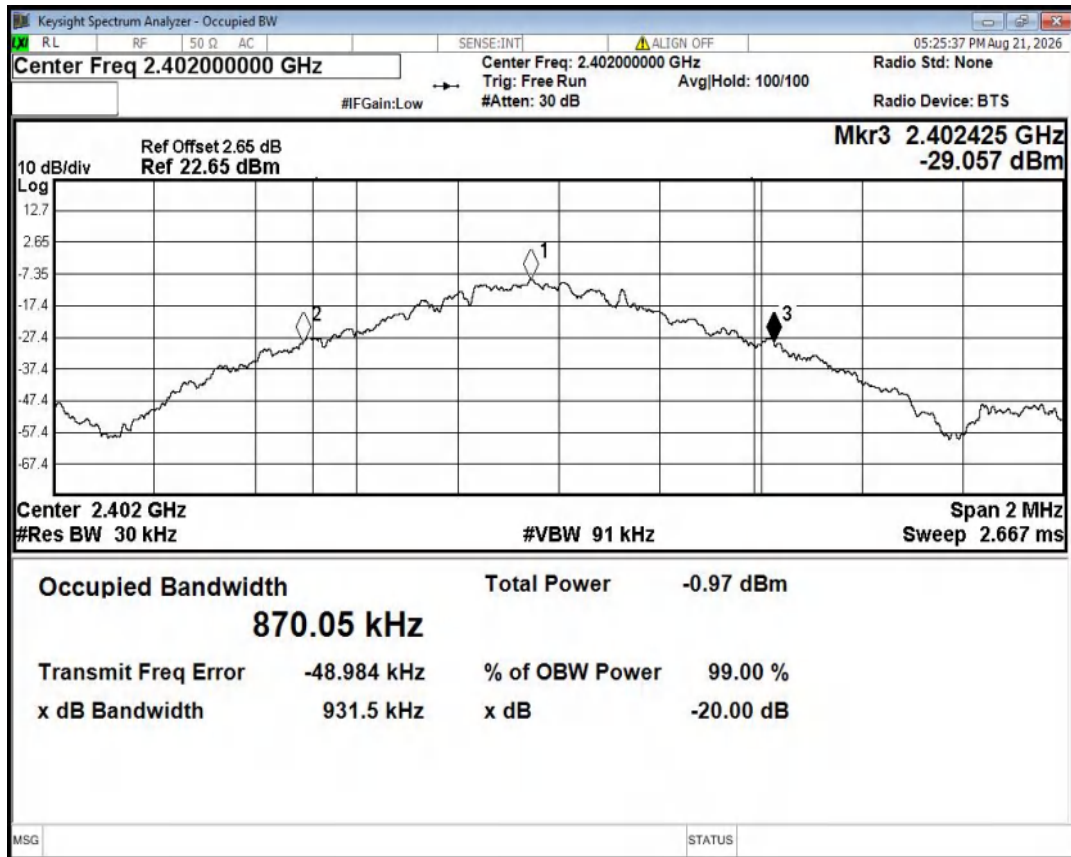
Environmental Conditions

Temperature:	24.5°C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Jerry Chu
Supervised by:	Can Kun

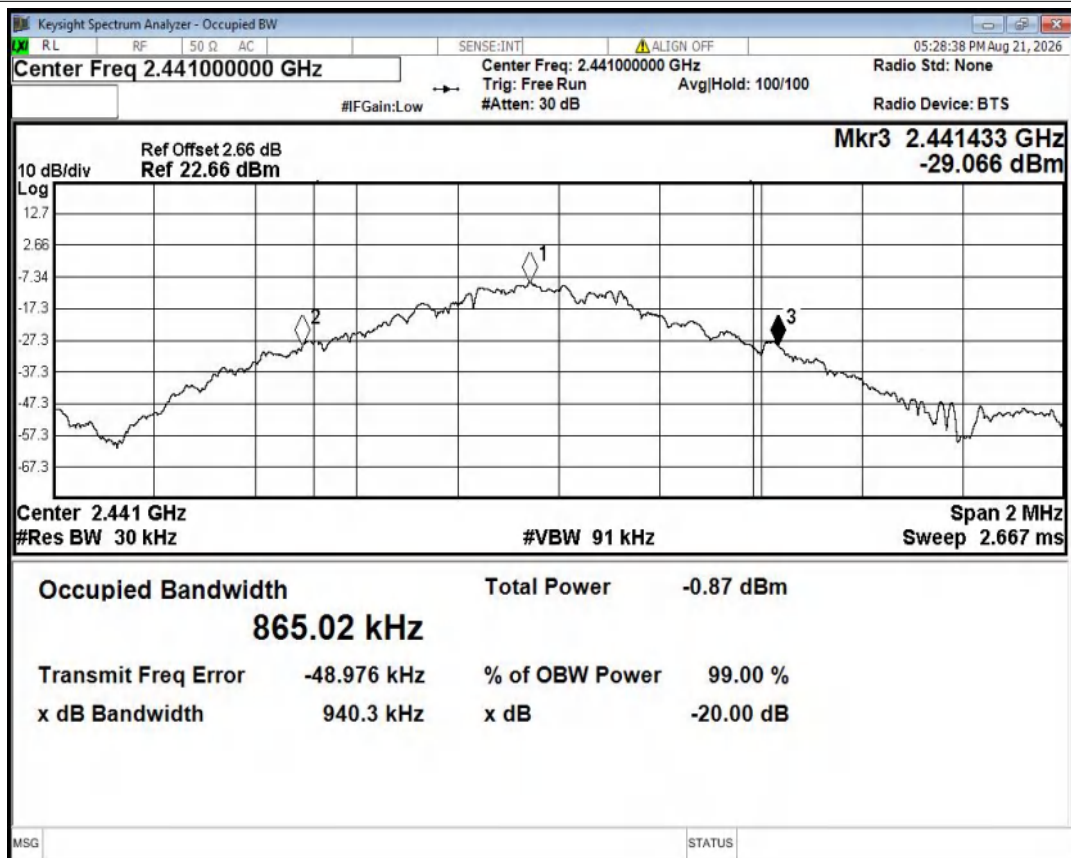


A.1 -20dB Bandwidth

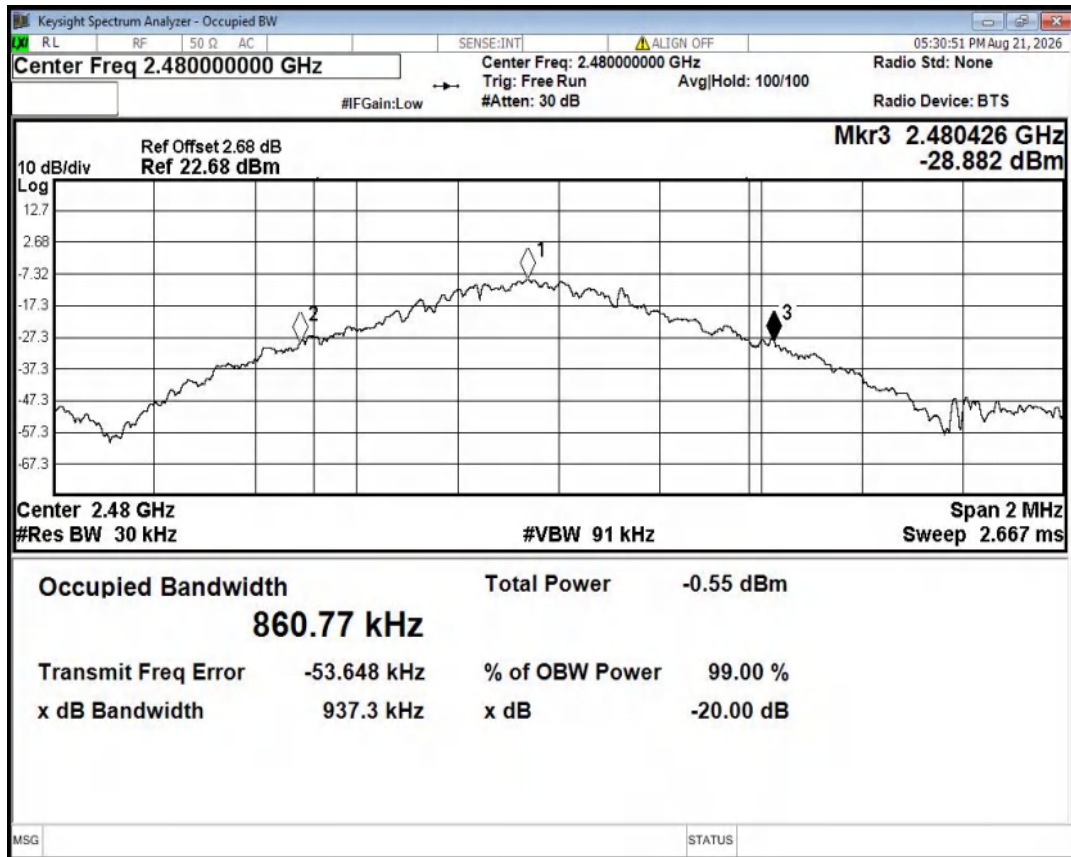
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.9315	No Limit	Pass
NVNT	1-DH5	2441	Ant1	0.9403	No Limit	Pass
NVNT	1-DH5	2480	Ant1	0.9373	No Limit	Pass
NVNT	2-DH5	2402	Ant1	1.274	No Limit	Pass
NVNT	2-DH5	2441	Ant1	1.32	No Limit	Pass
NVNT	2-DH5	2480	Ant1	1.281	No Limit	Pass
NVNT	3-DH5	2402	Ant1	1.309	No Limit	Pass
NVNT	3-DH5	2441	Ant1	1.278	No Limit	Pass
NVNT	3-DH5	2480	Ant1	1.326	No Limit	Pass



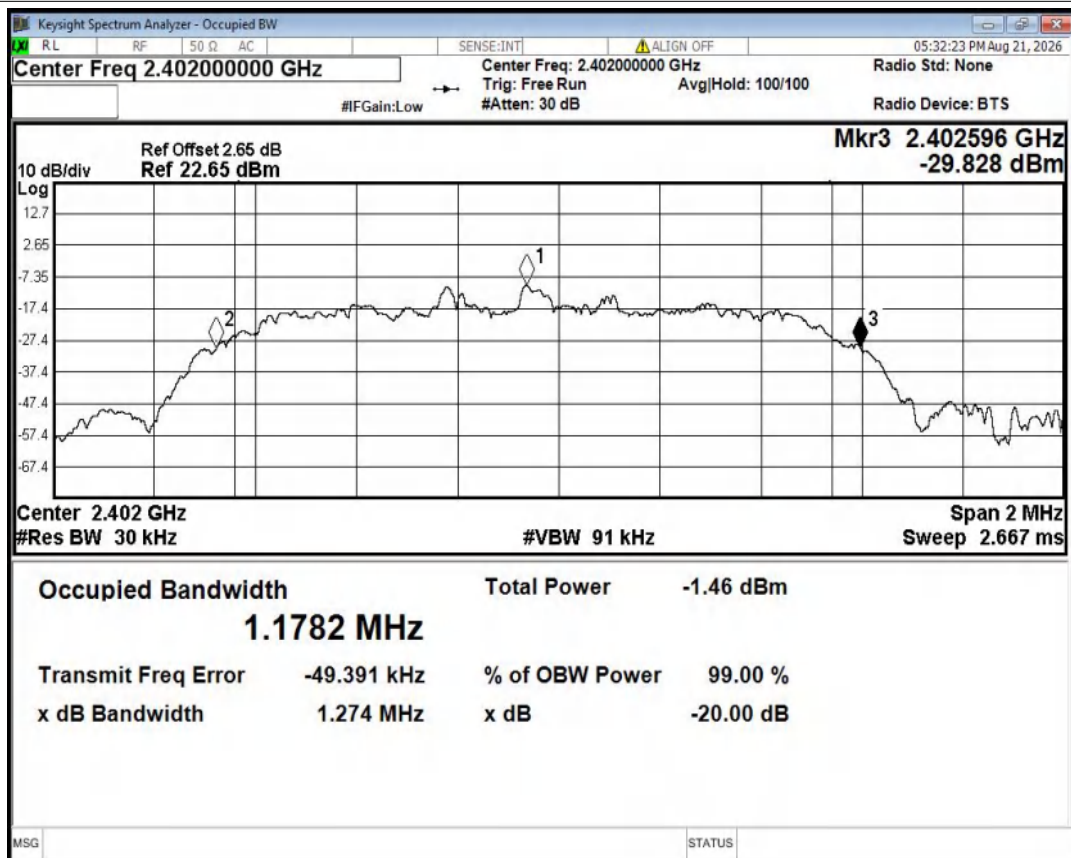
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



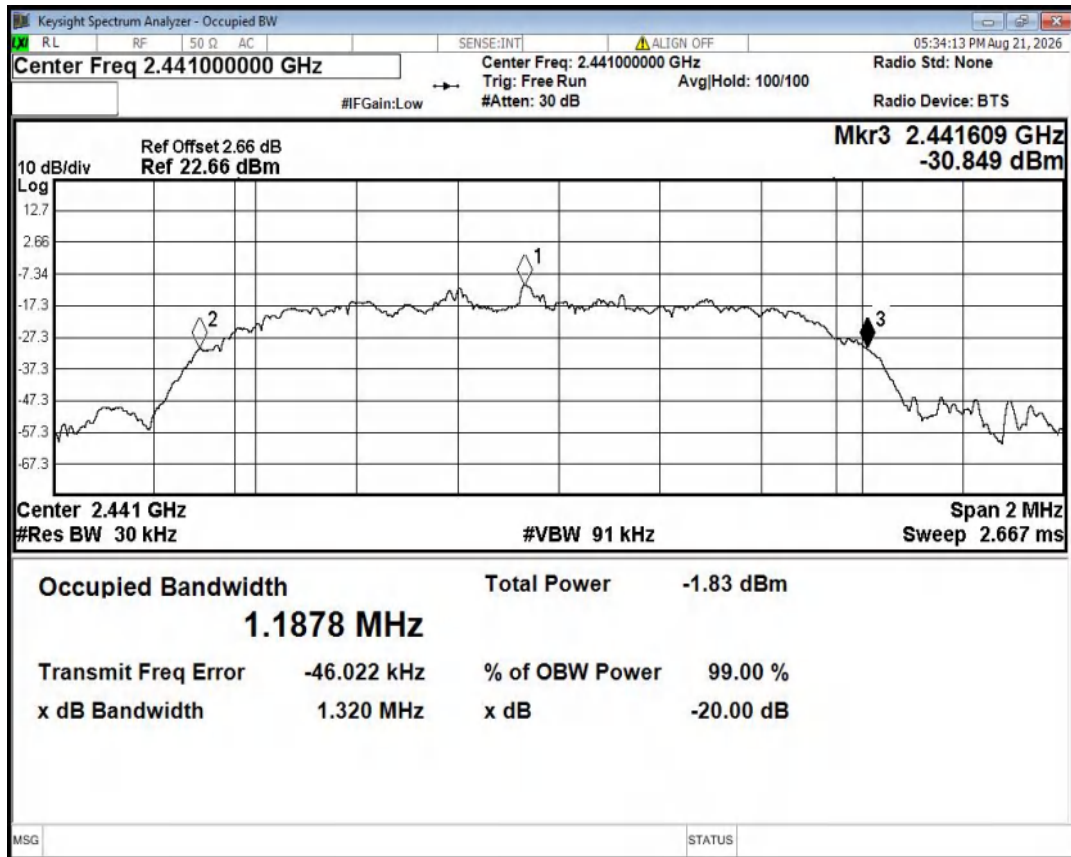
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



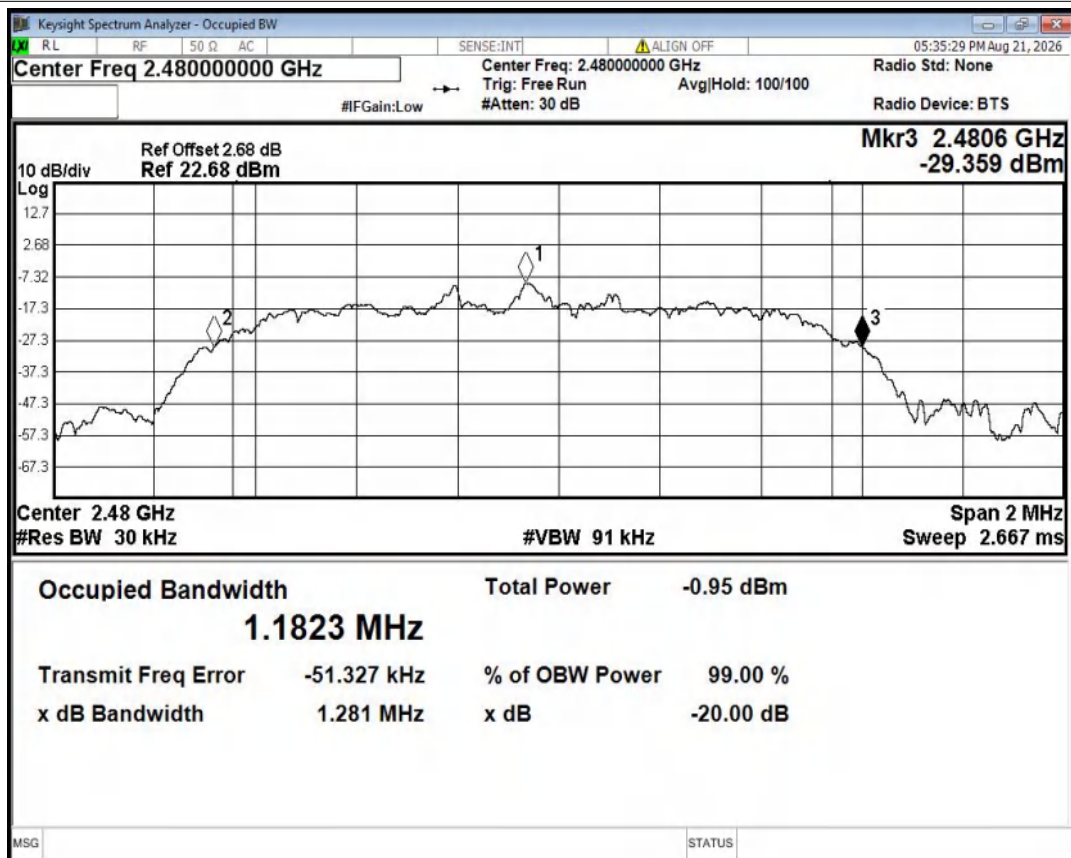
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



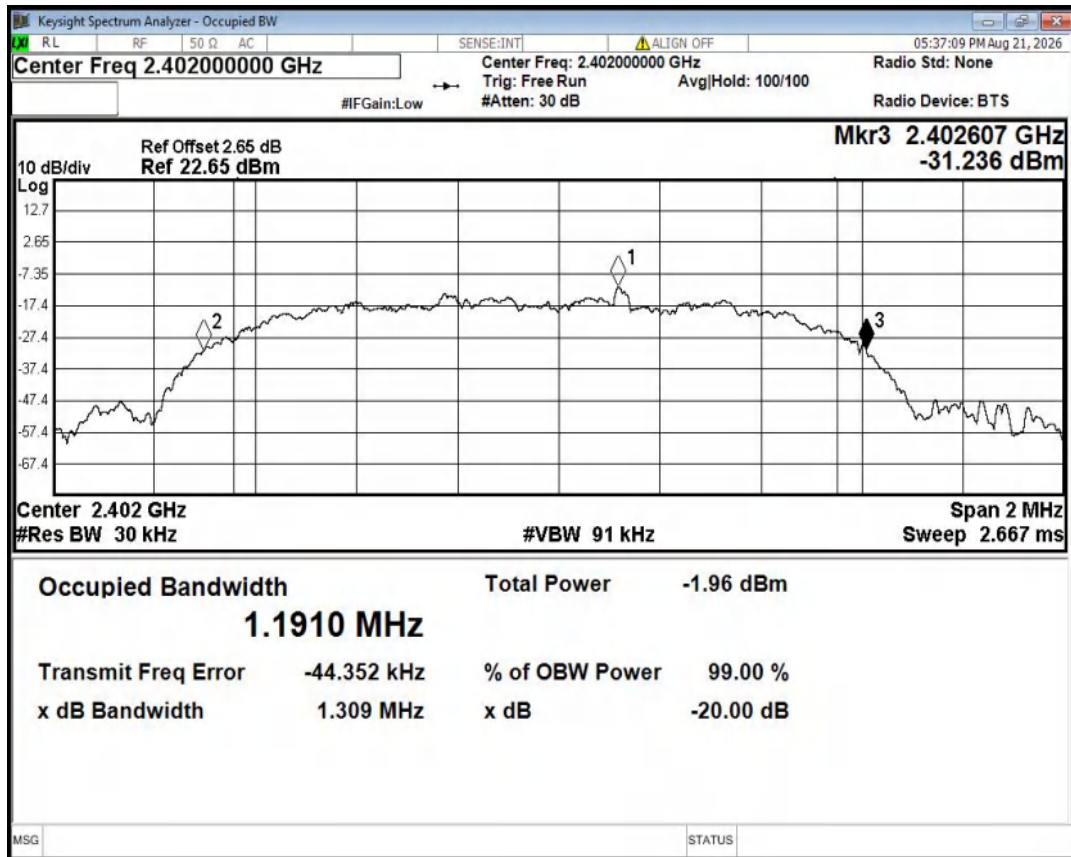
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



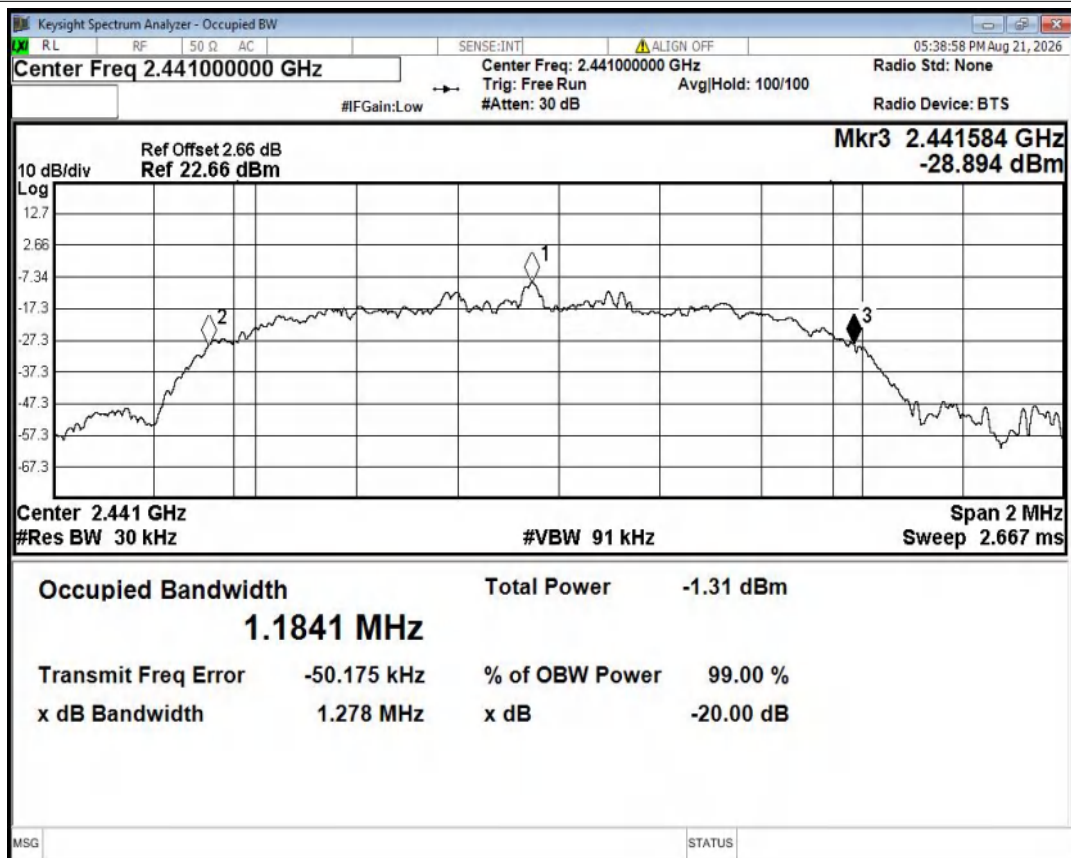
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



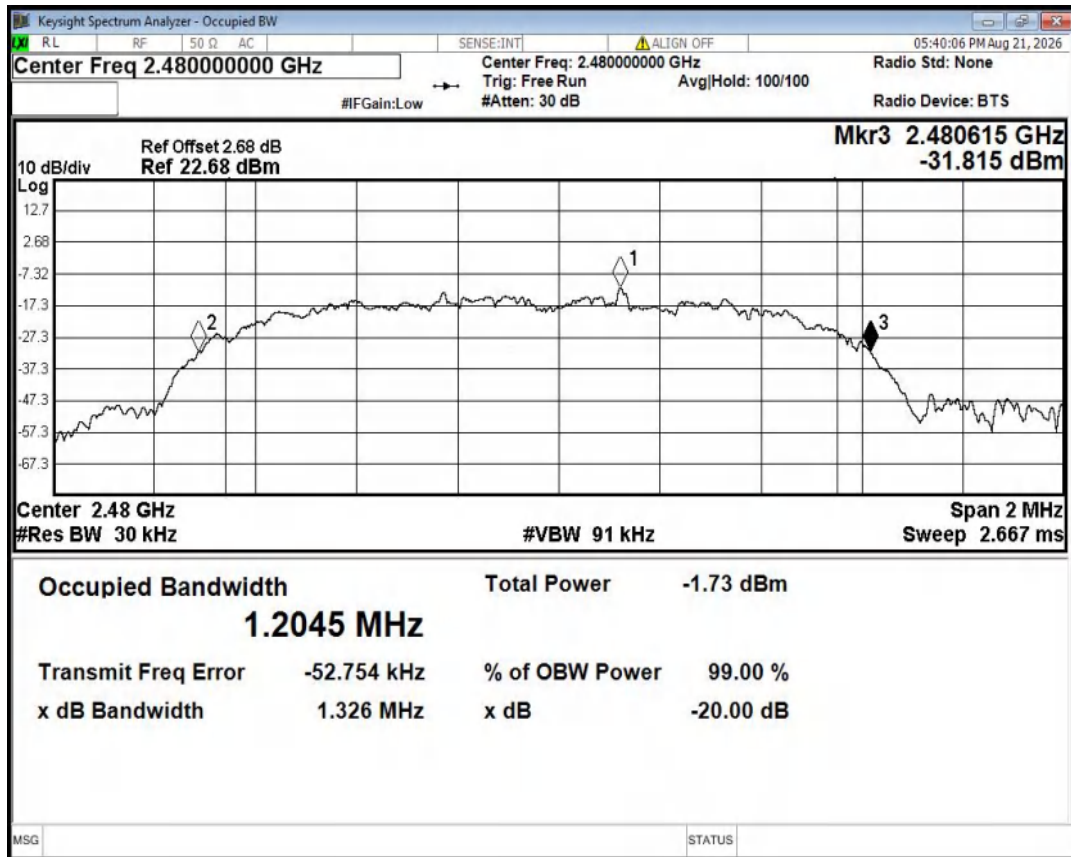
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1

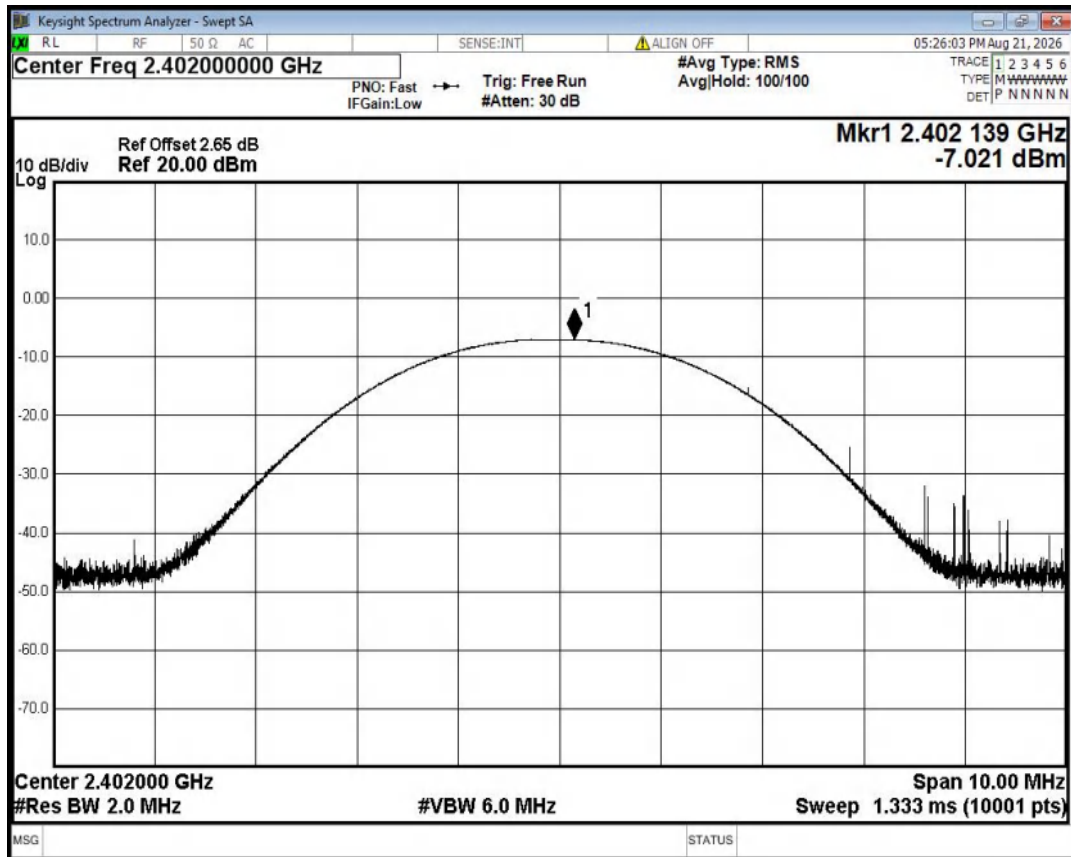


-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

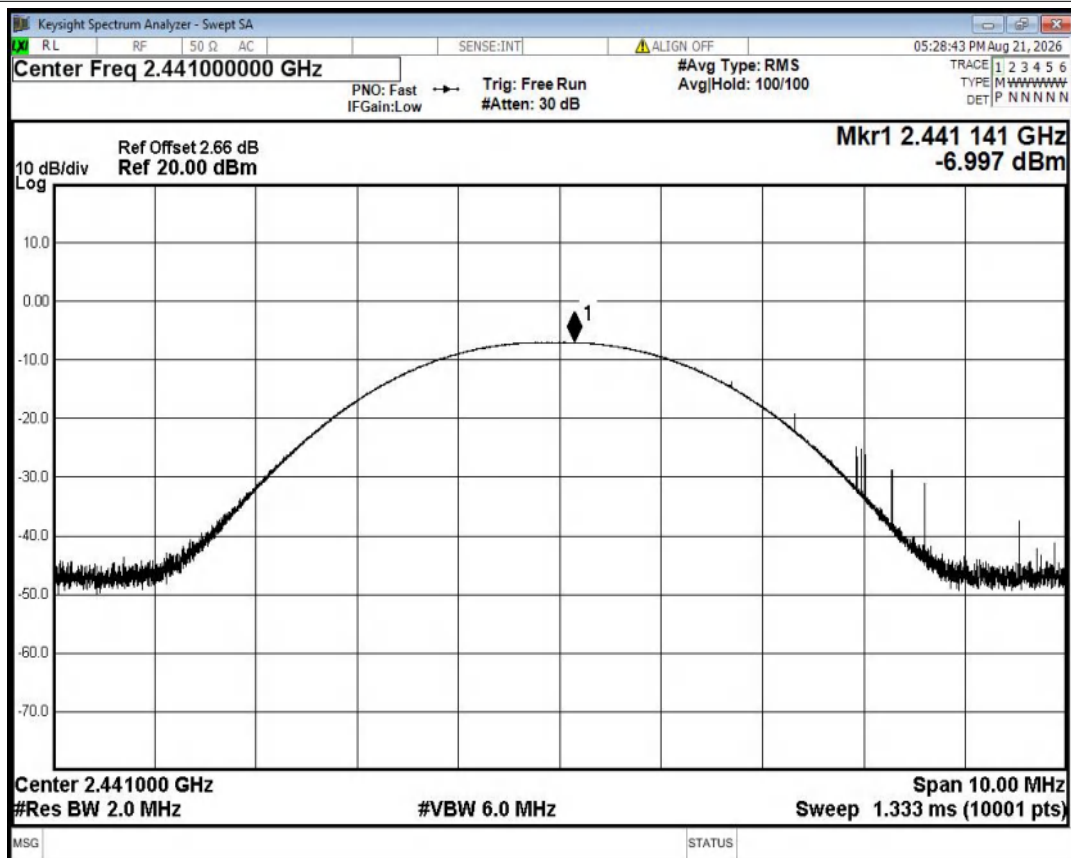


A.2 Maximum Peak Conducted Output Power

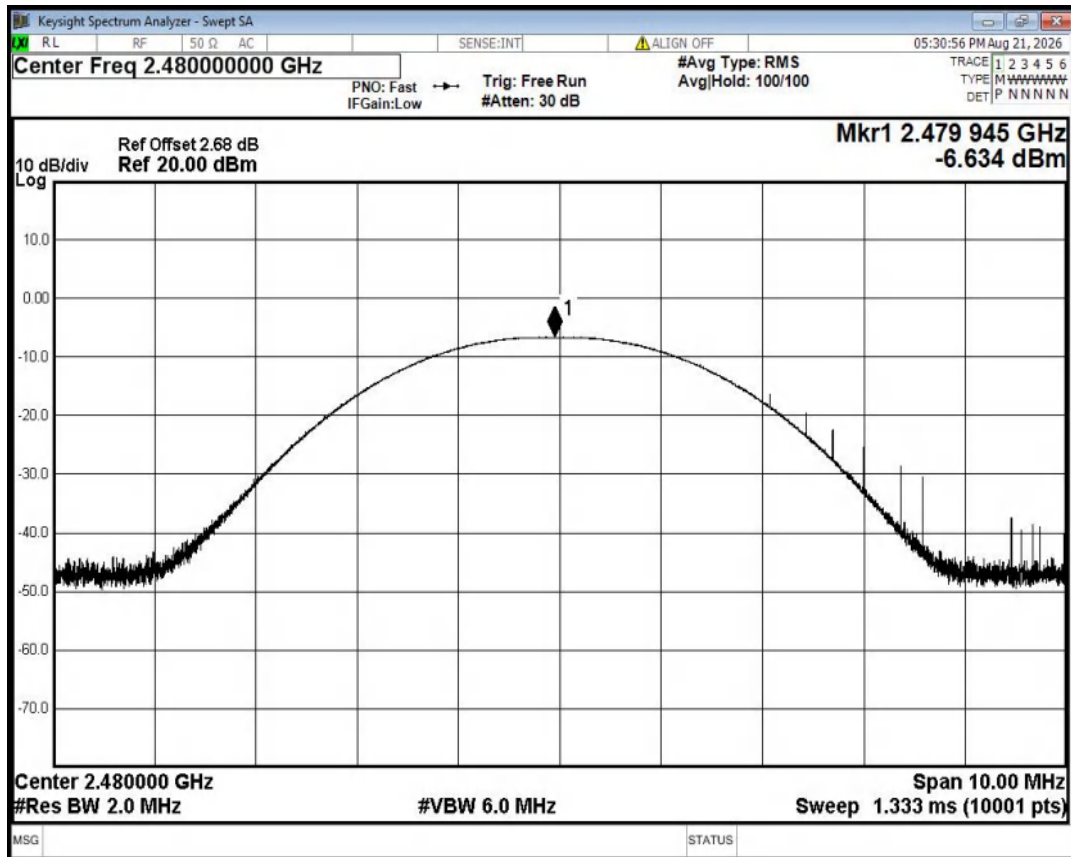
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit Conducted(dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-7.02	30	Pass
NVNT	1-DH5	2441	Ant1	-7	30	Pass
NVNT	1-DH5	2480	Ant1	-6.63	30	Pass
NVNT	2-DH5	2402	Ant1	-6.13	30	Pass
NVNT	2-DH5	2441	Ant1	-6.08	30	Pass
NVNT	2-DH5	2480	Ant1	-5.71	30	Pass
NVNT	3-DH5	2402	Ant1	-5.83	30	Pass
NVNT	3-DH5	2441	Ant1	-5.82	30	Pass
NVNT	3-DH5	2480	Ant1	-5.41	30	Pass



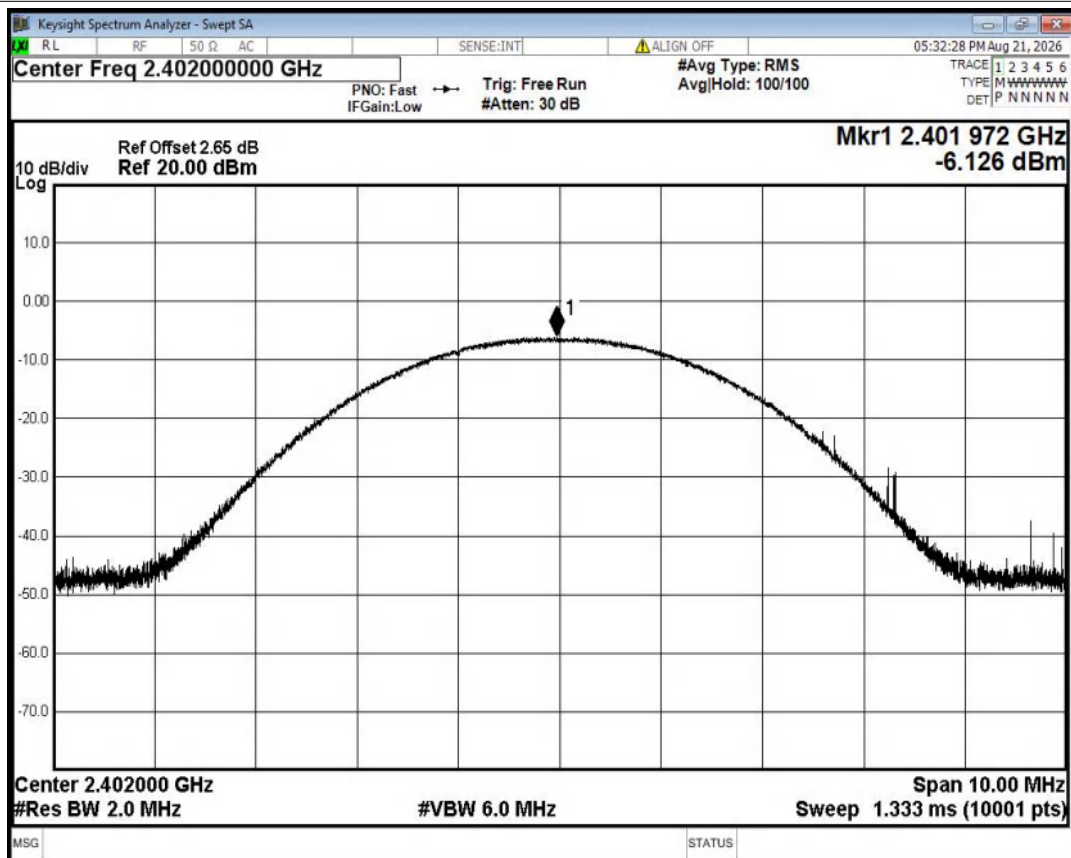
Peak Power NVNT 1-DH5 2402MHz Ant1



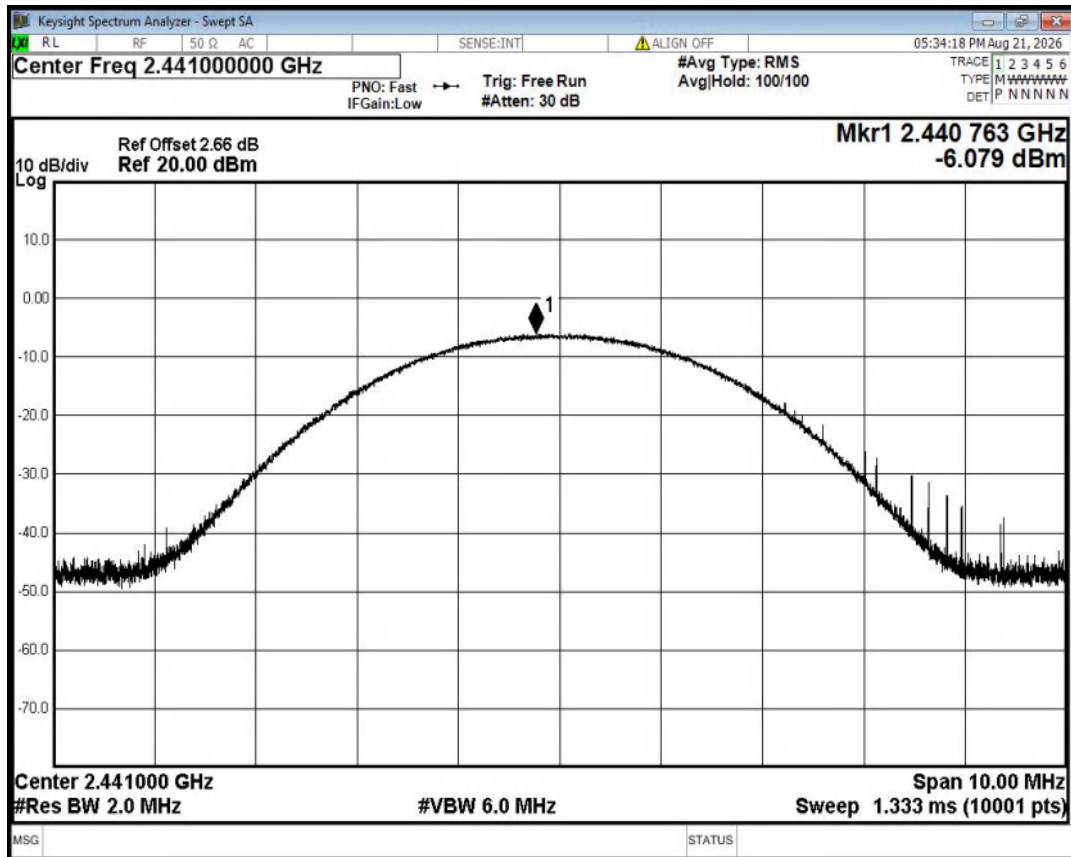
Peak Power NVNT 1-DH5 2441MHz Ant1



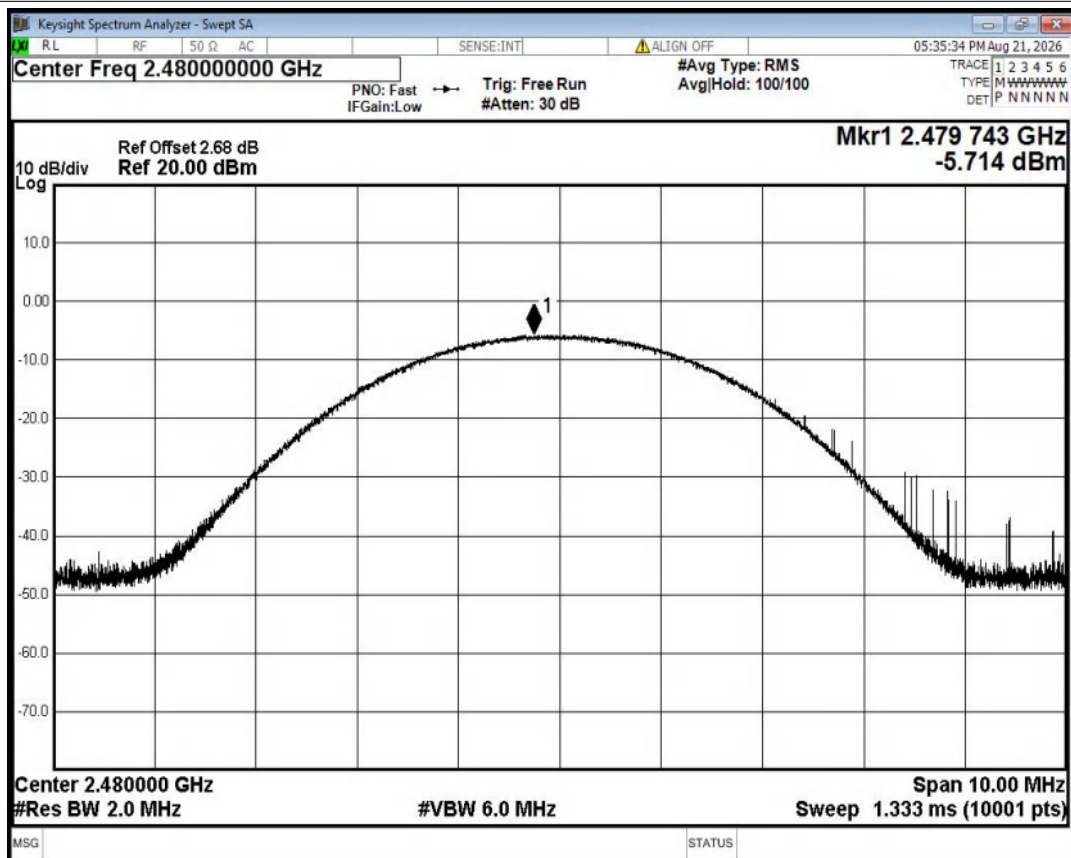
Peak Power NVNT 1-DH5 2480MHz Ant1



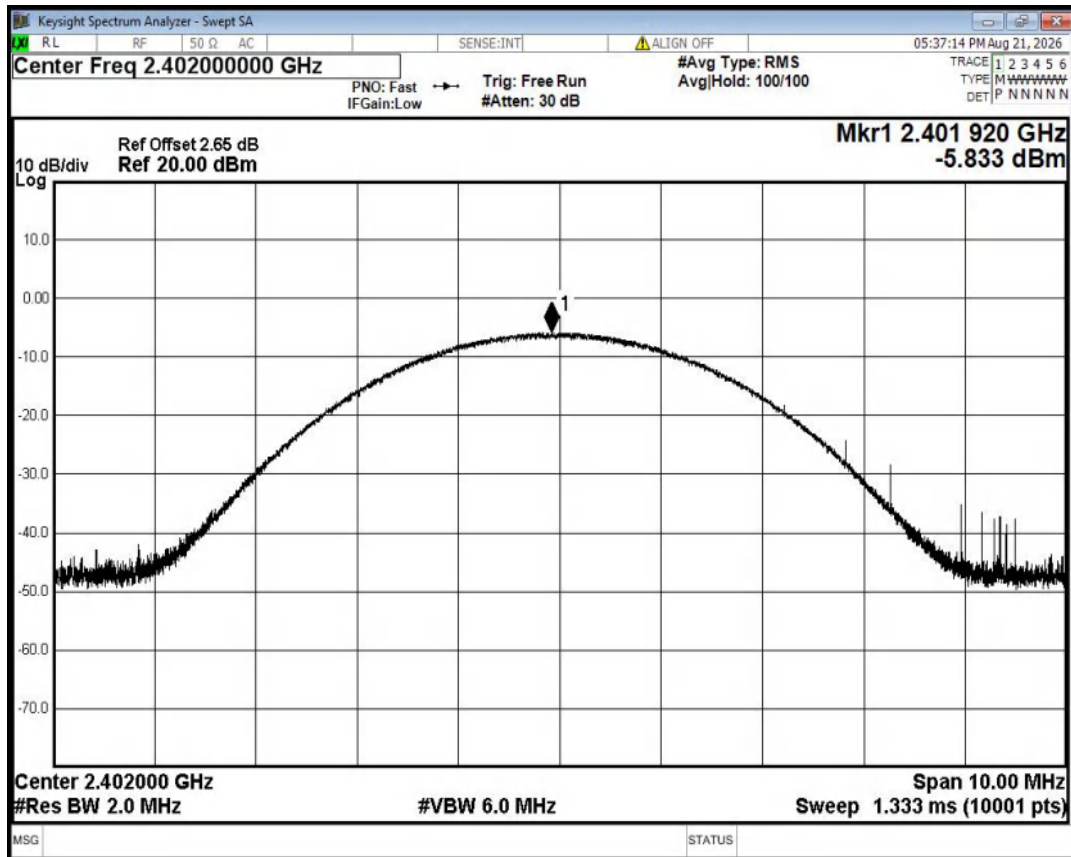
Peak Power NVNT 2-DH5 2402MHz Ant1



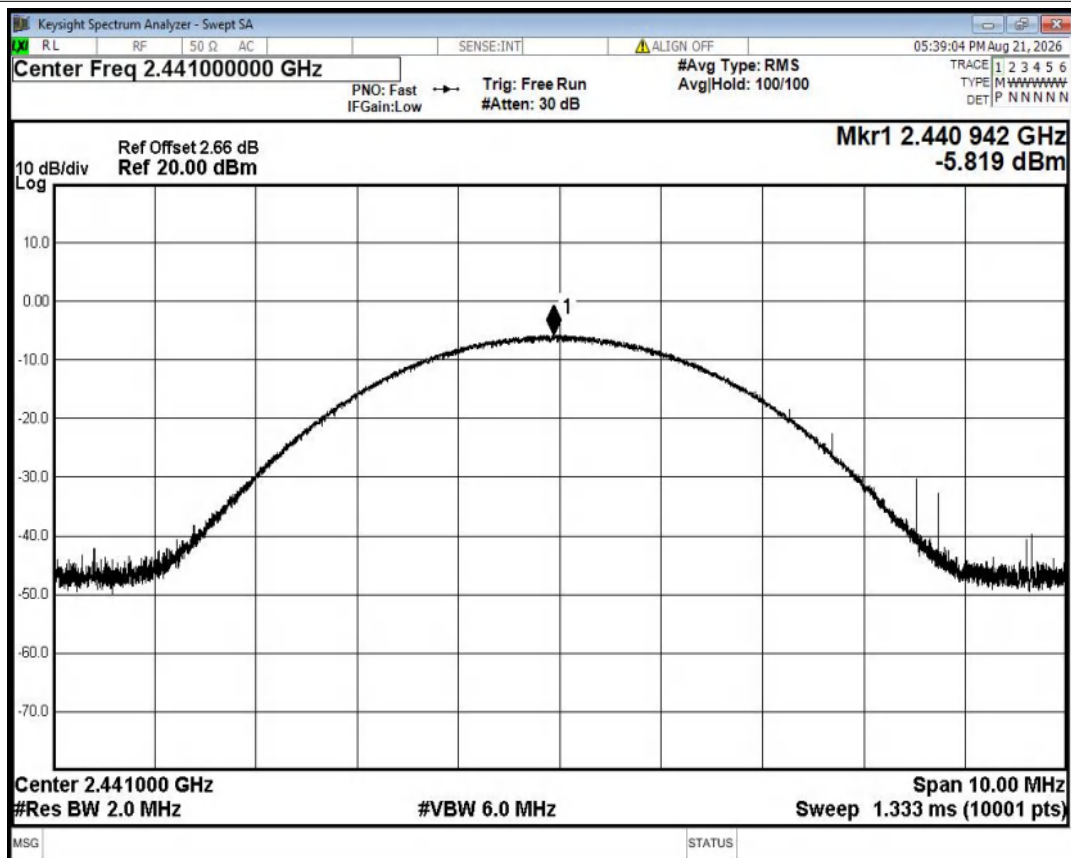
Peak Power NVNT 2-DH5 2441MHz Ant1



Peak Power NVNT 2-DH5 2480MHz Ant1



Peak Power NVNT 3-DH5 2402MHz Ant1

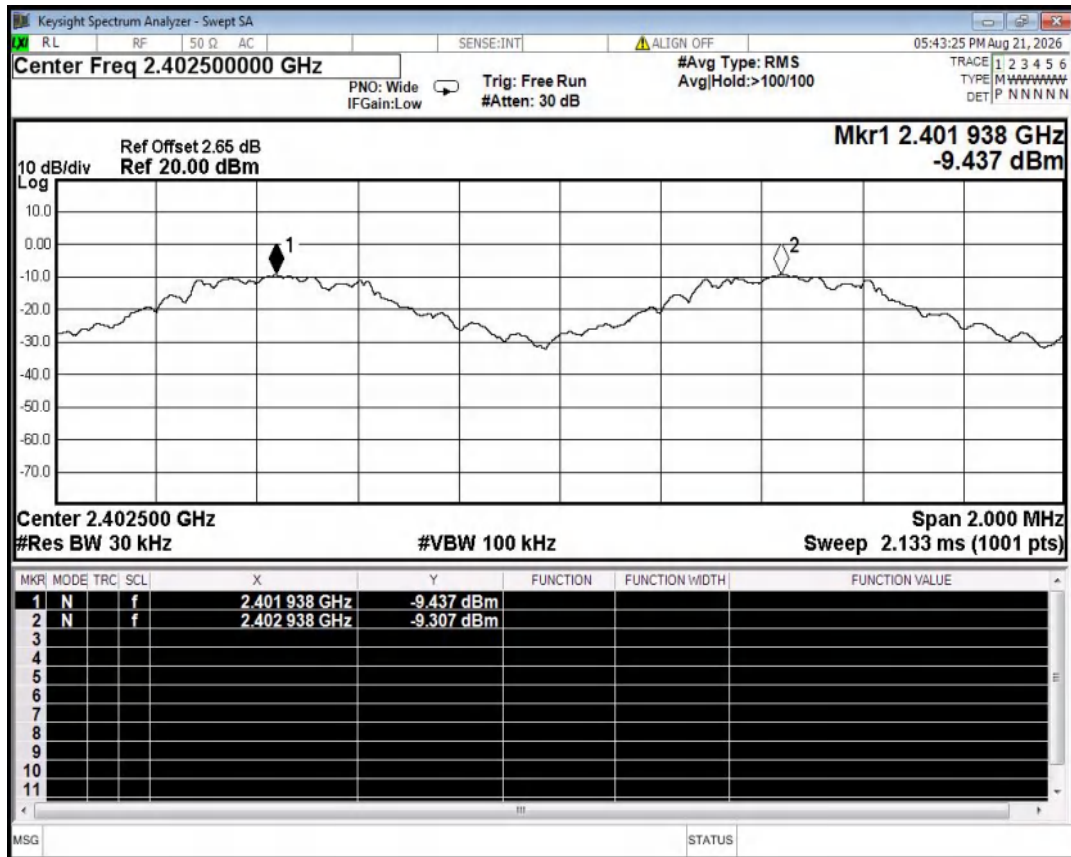


Peak Power NVNT 3-DH5 2441MHz Ant1

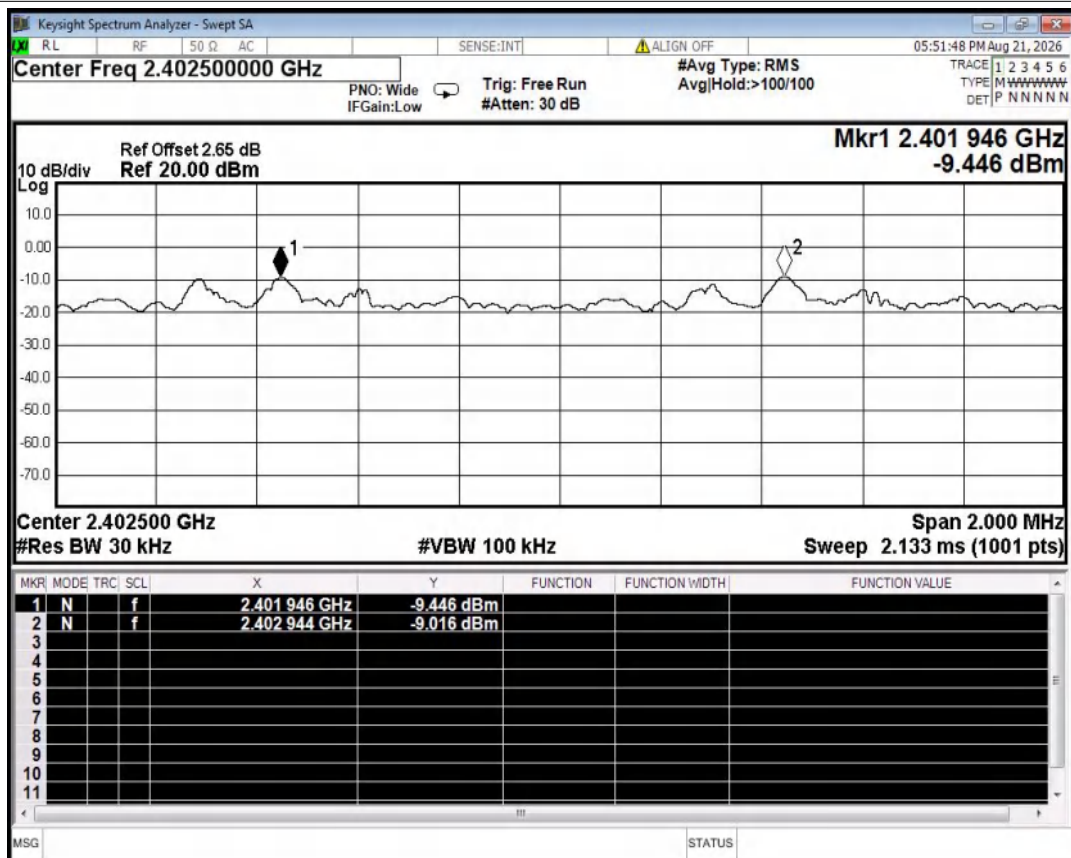


A.3 Carrier Frequencies Separation

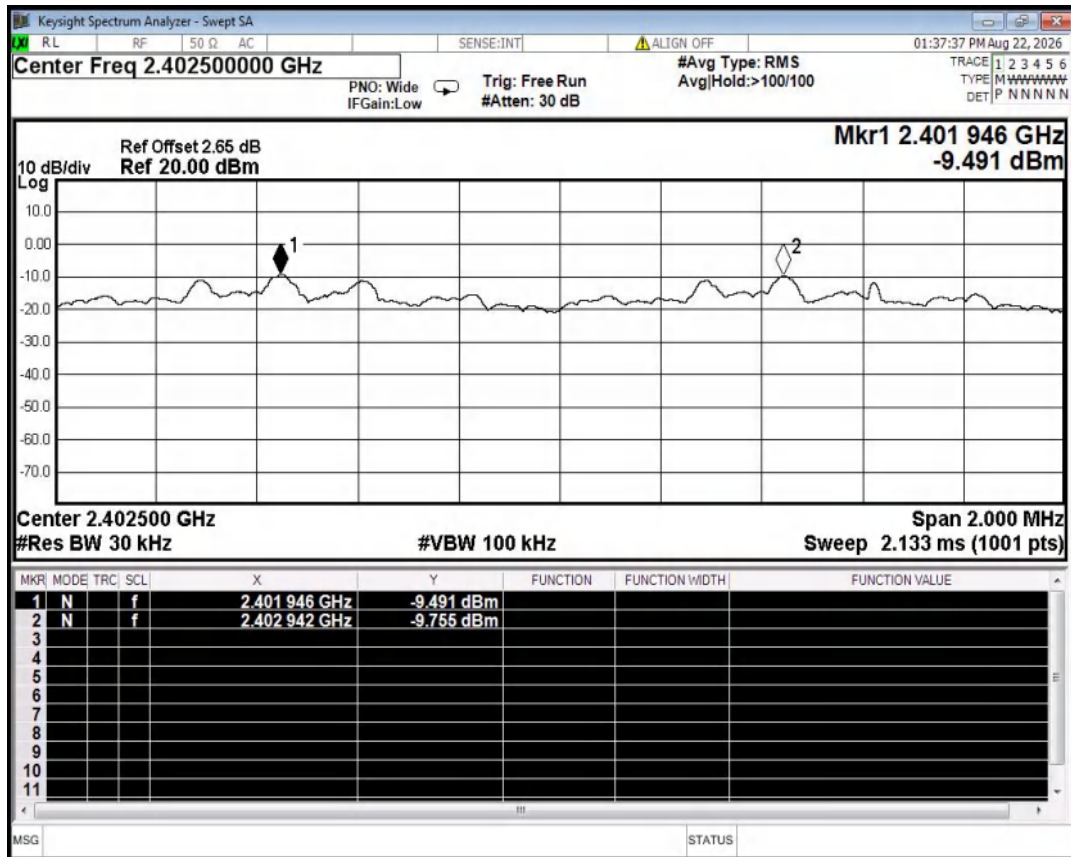
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.938	2402.938	1	0.621	Pass
NVNT	2-DH5	Ant1	2401.946	2402.944	0.998	0.849	Pass
NVNT	3-DH5	Ant1	2401.946	2402.942	0.996	0.873	Pass



CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1

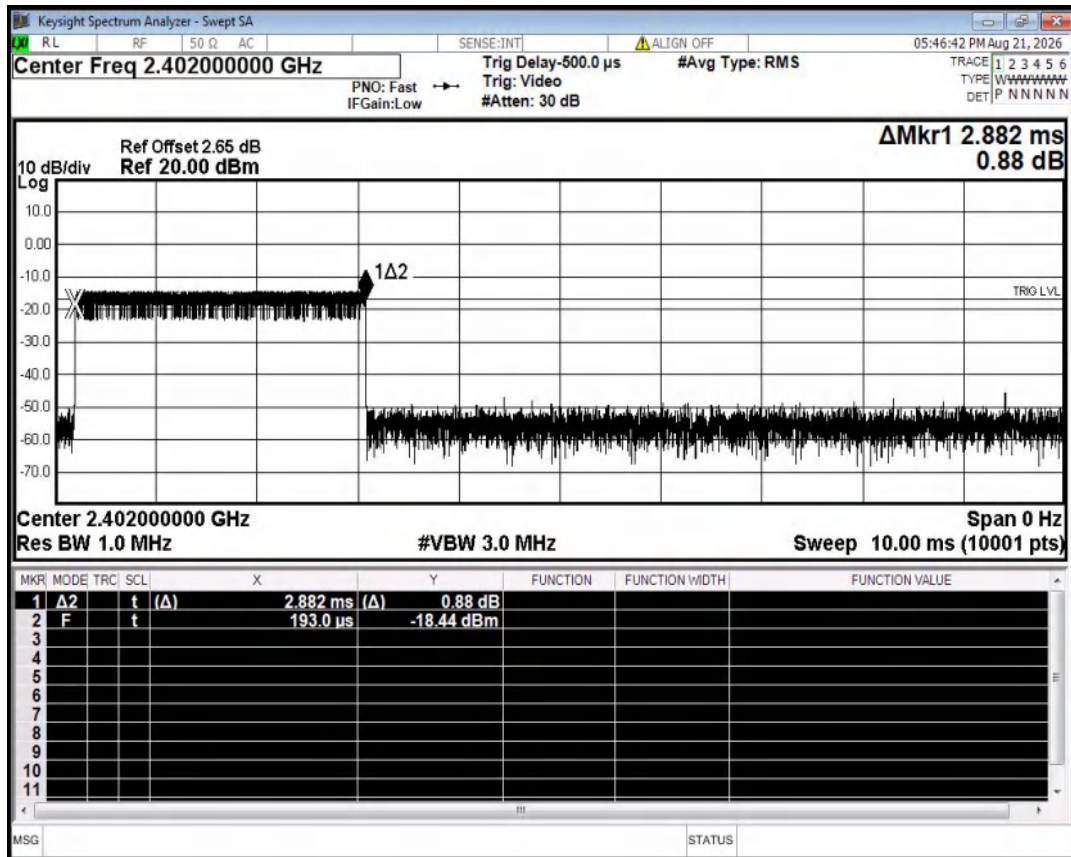


CFS NVNT 3-DH5 2402MHz Ant1

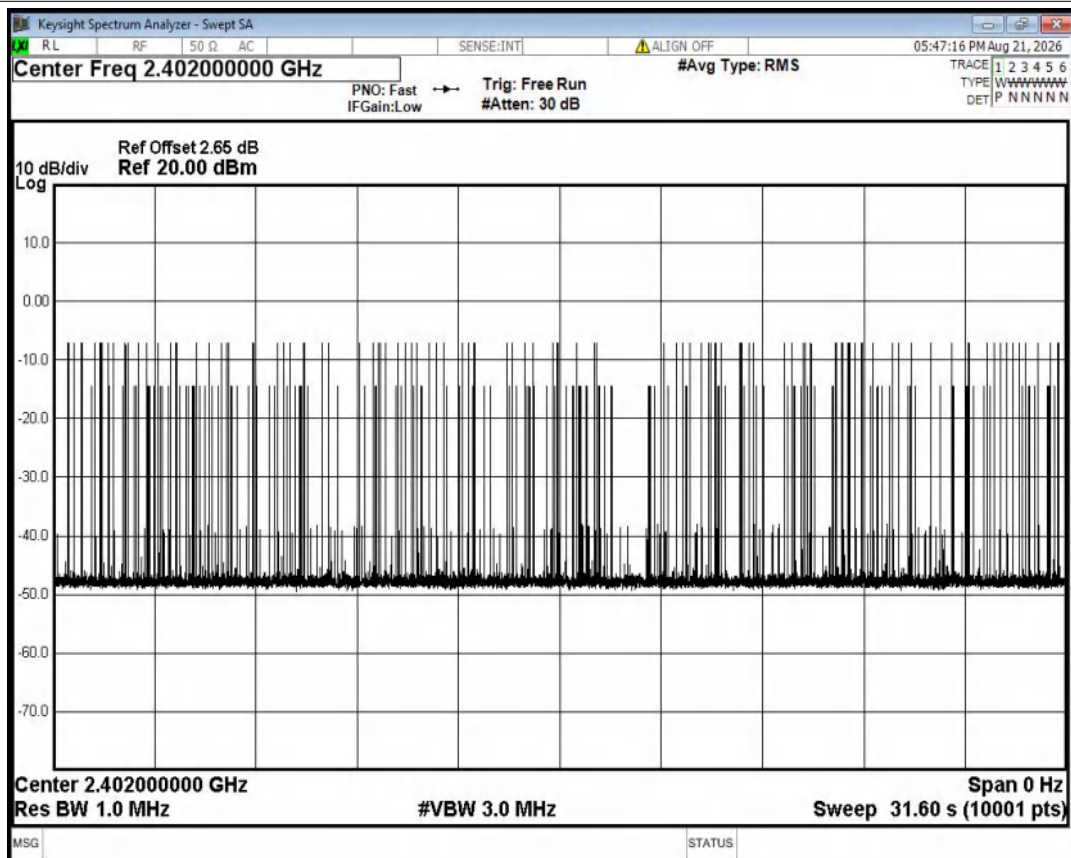


A.4 Dwell Time

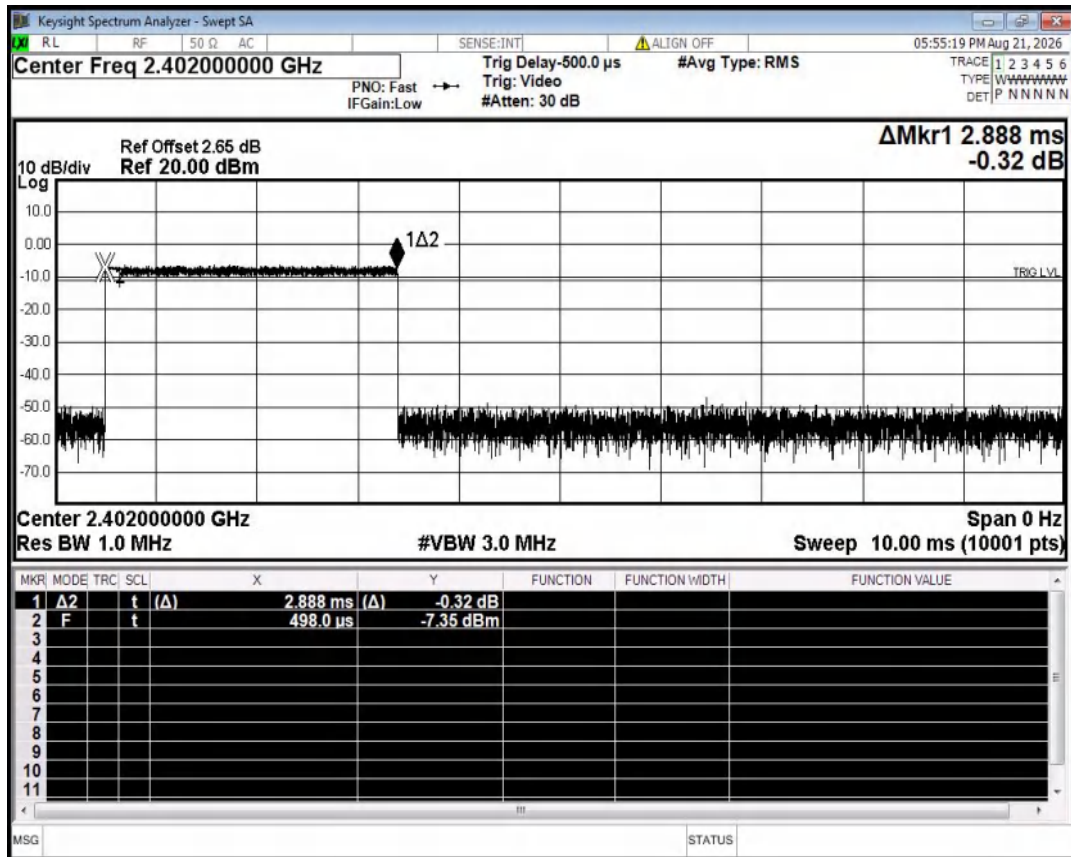
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.882	291.082	101	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.888	262.808	91	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.875	296.125	103	31600	400	Pass



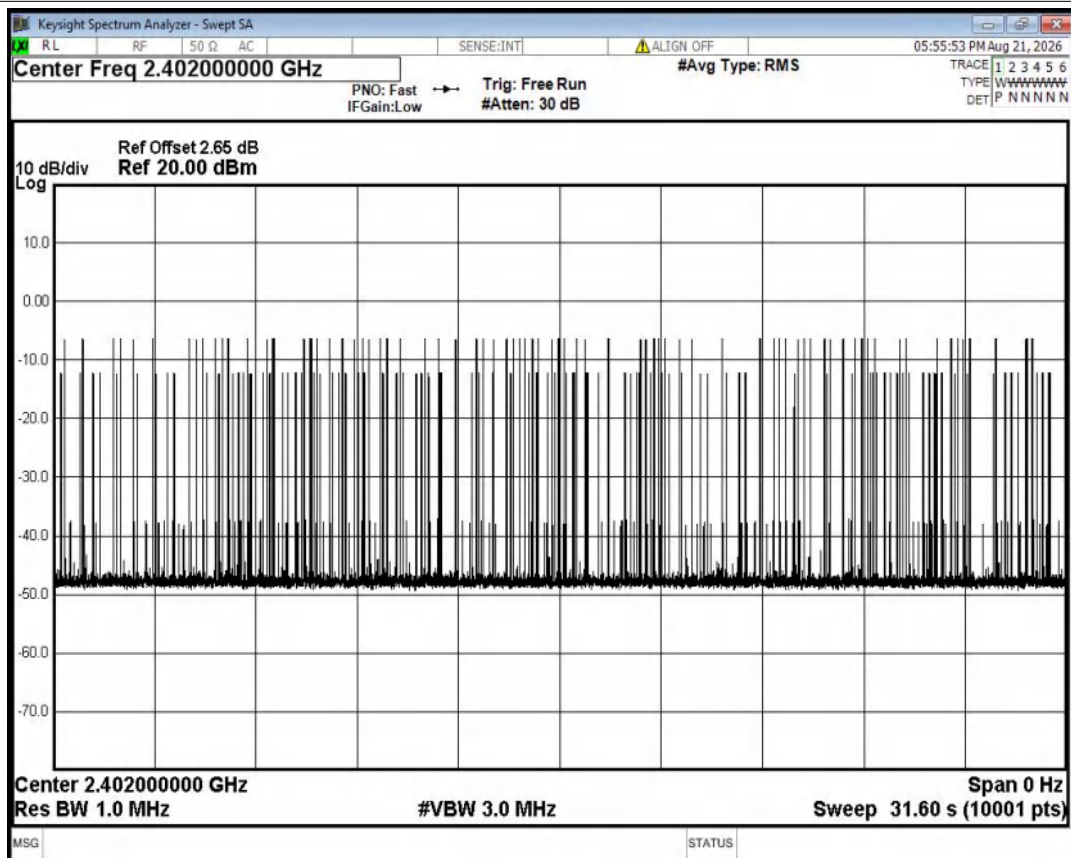
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



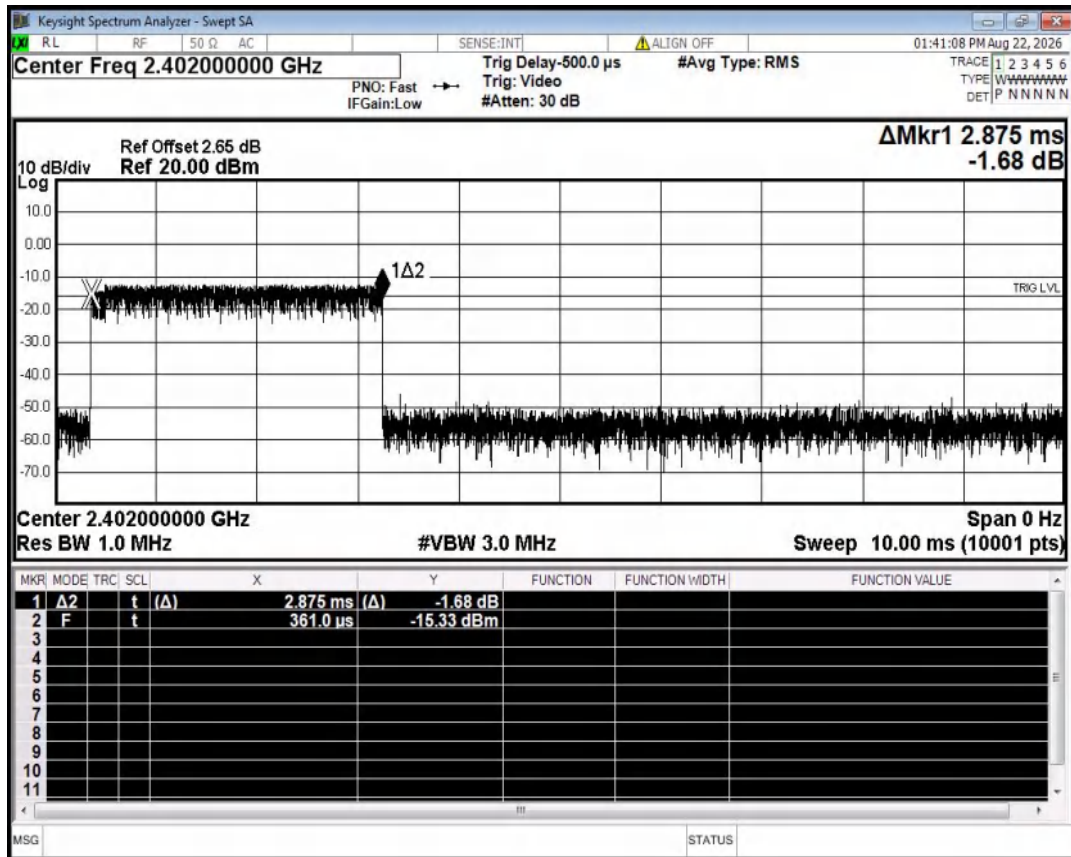
Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated



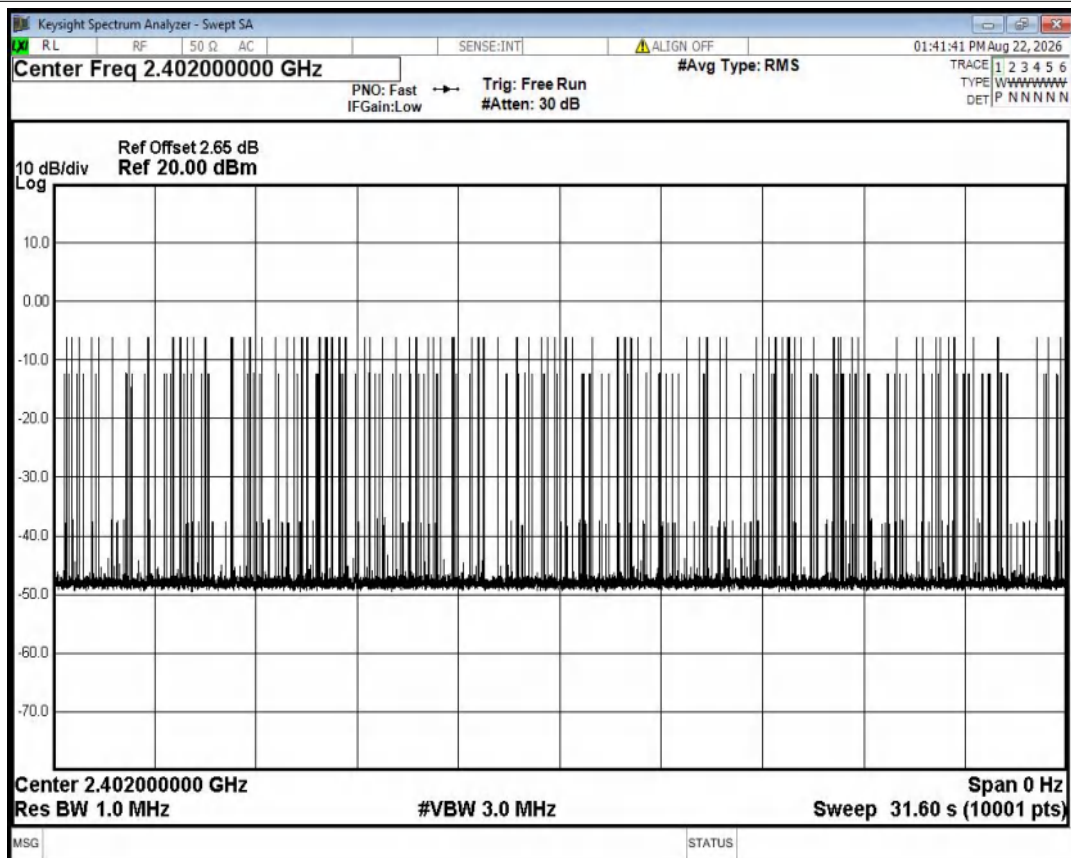
Dwell NVNT 2-DH5 2402MHz Ant1 One Burst



Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated



Dwell NVNT 3-DH5 2402MHz Ant1 One Burst

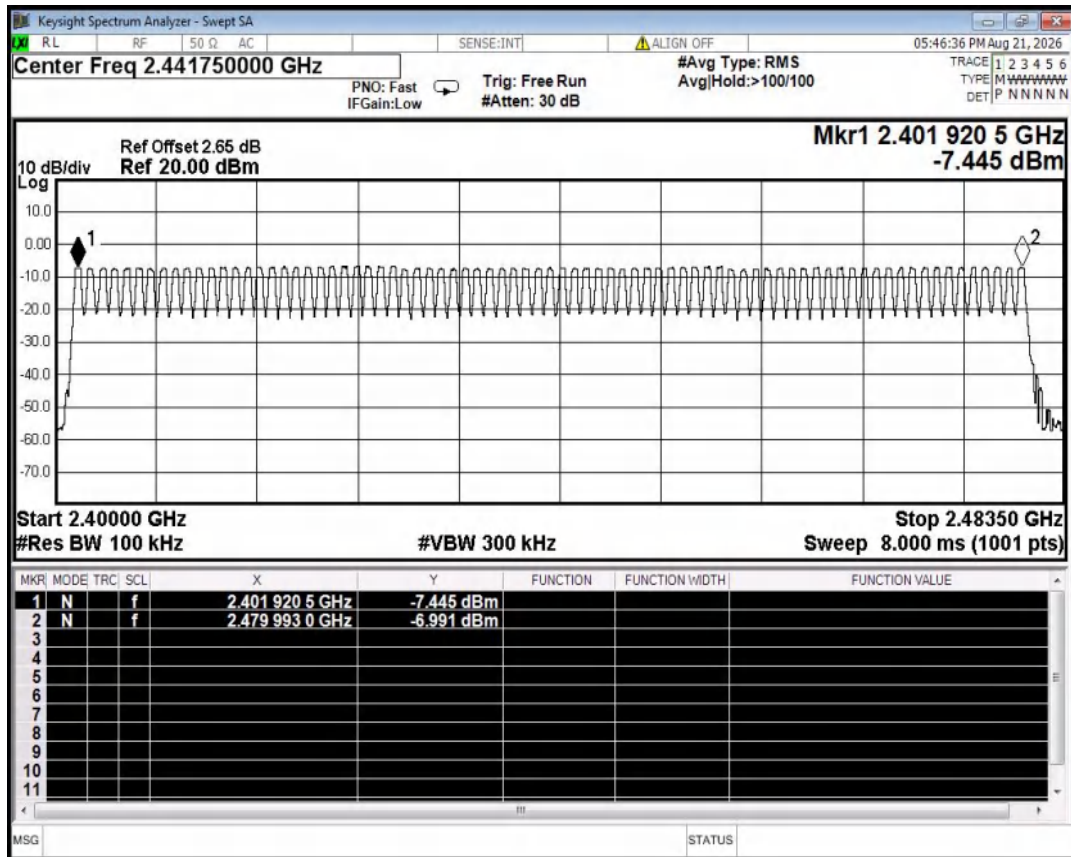


Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated

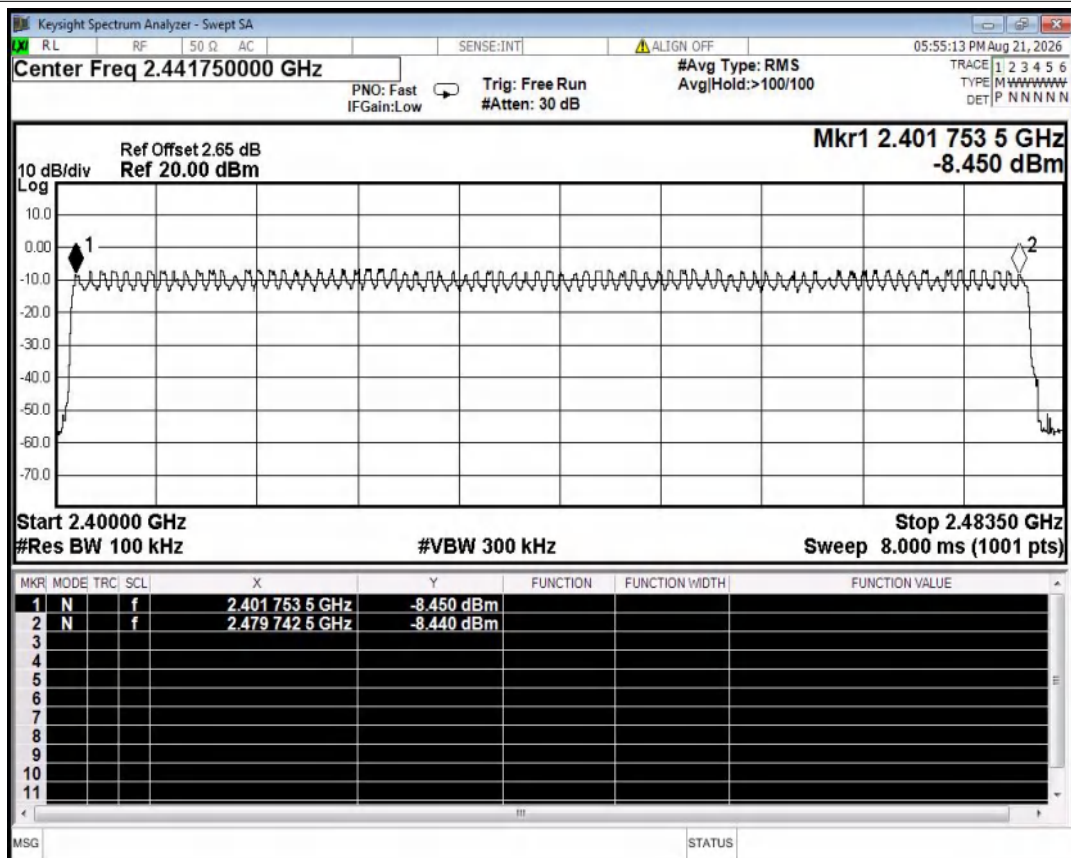


A.5 Number of Hopping Channel

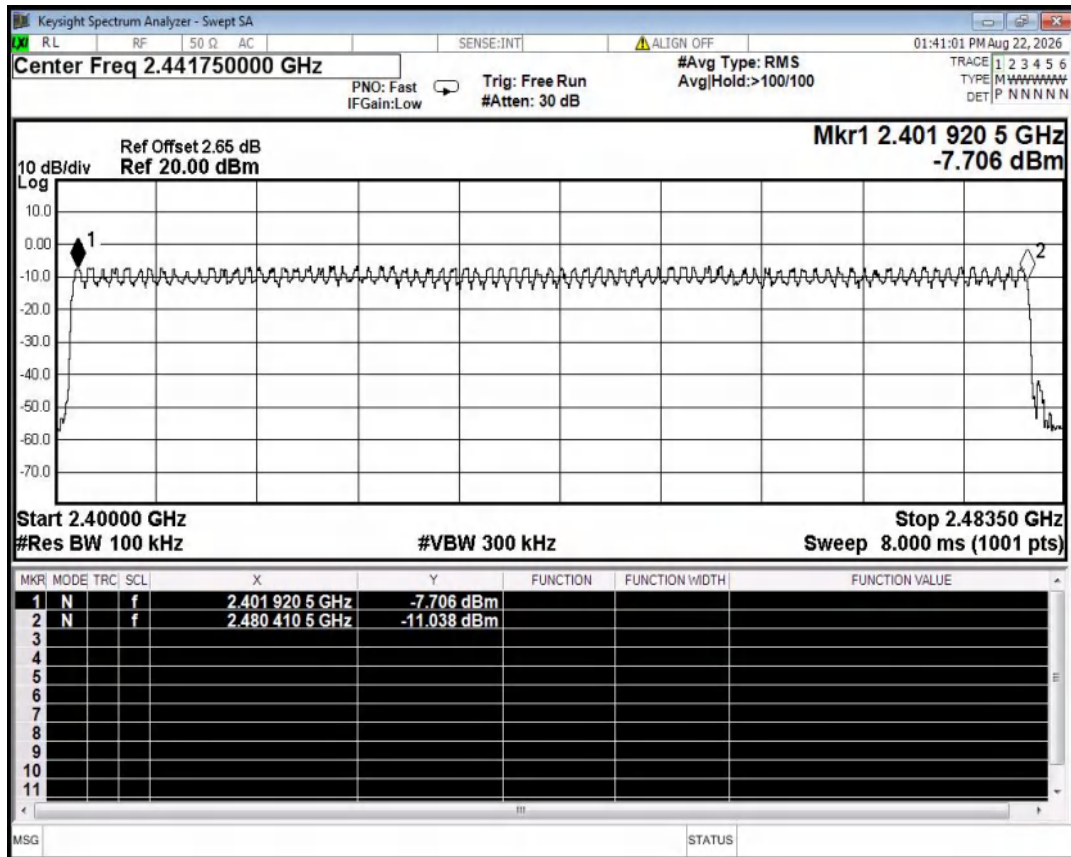
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1

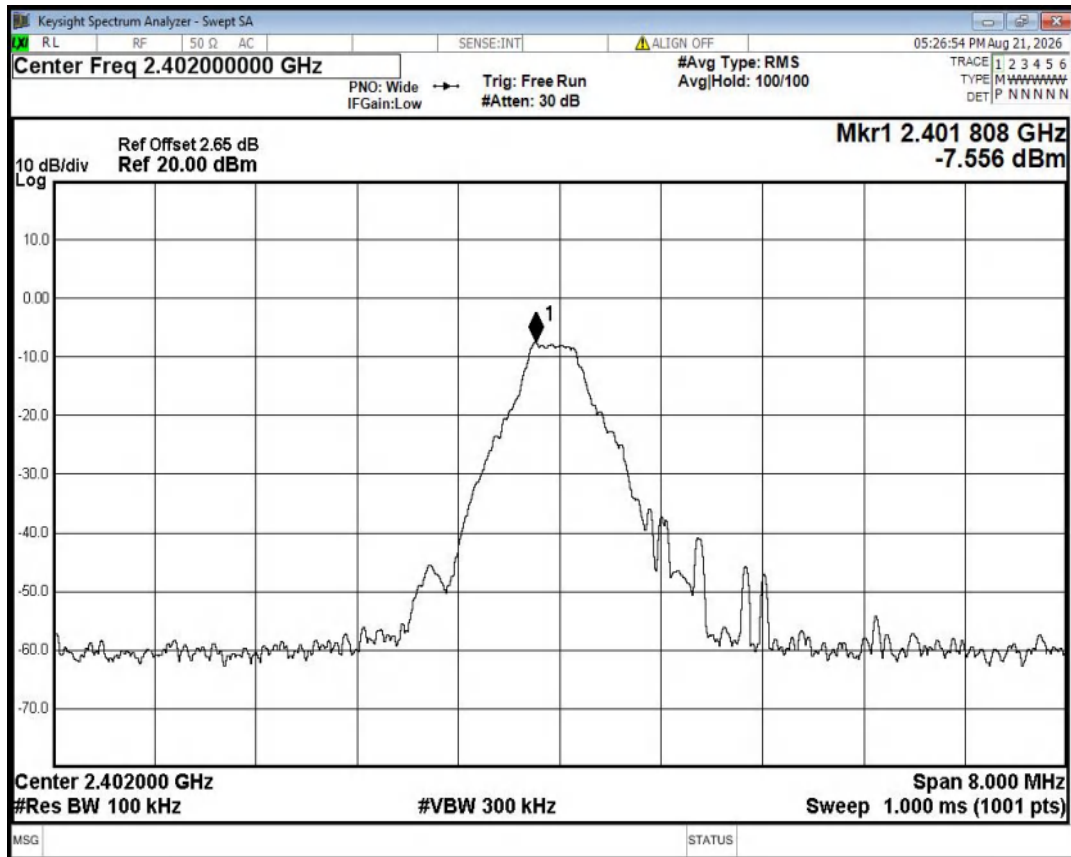


Hopping No. NVNT 3-DH5 2402MHz Ant1

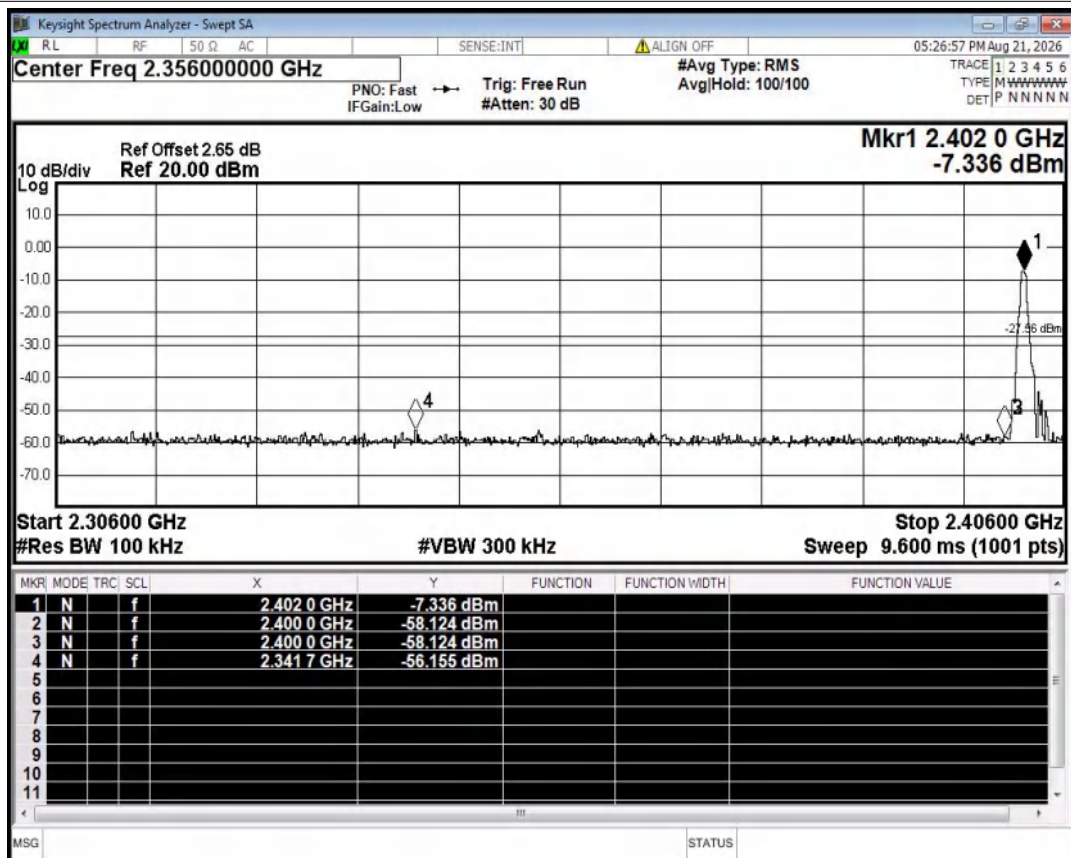


A.6 Band Edge

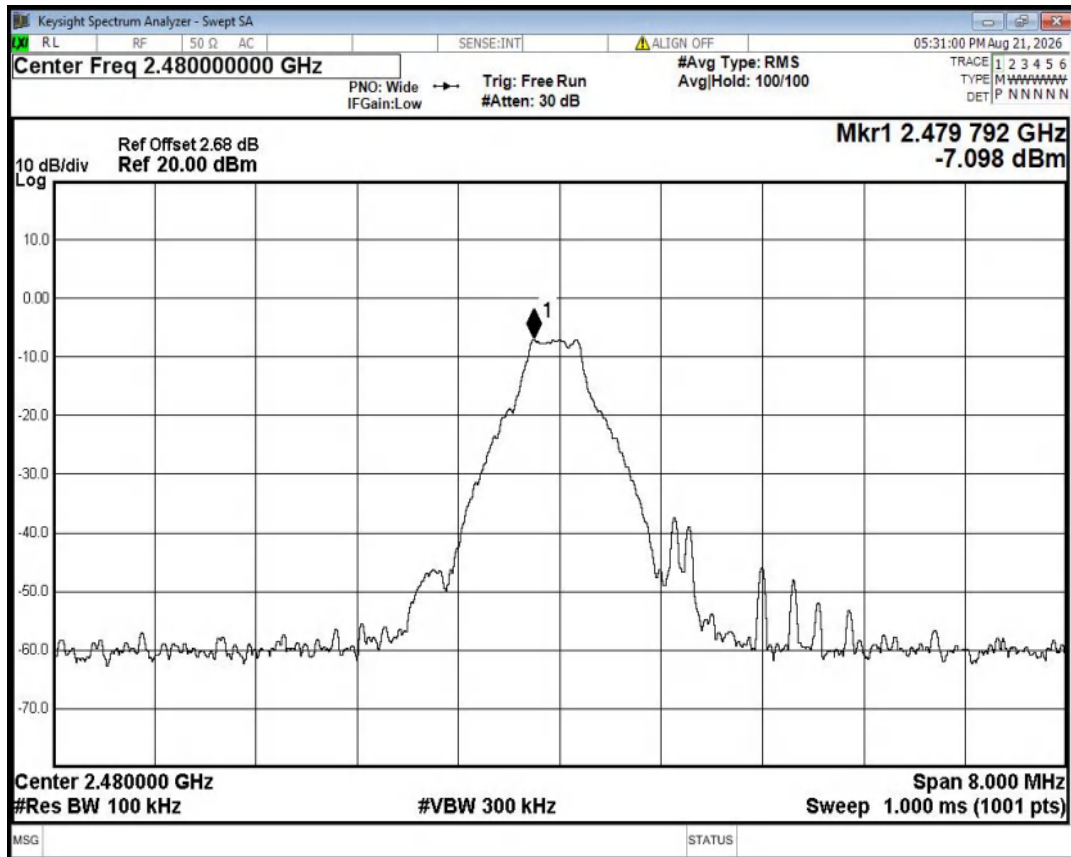
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-48.59	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-49.68	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-48.43	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-49.37	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-48.59	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-46.46	-20	Pass



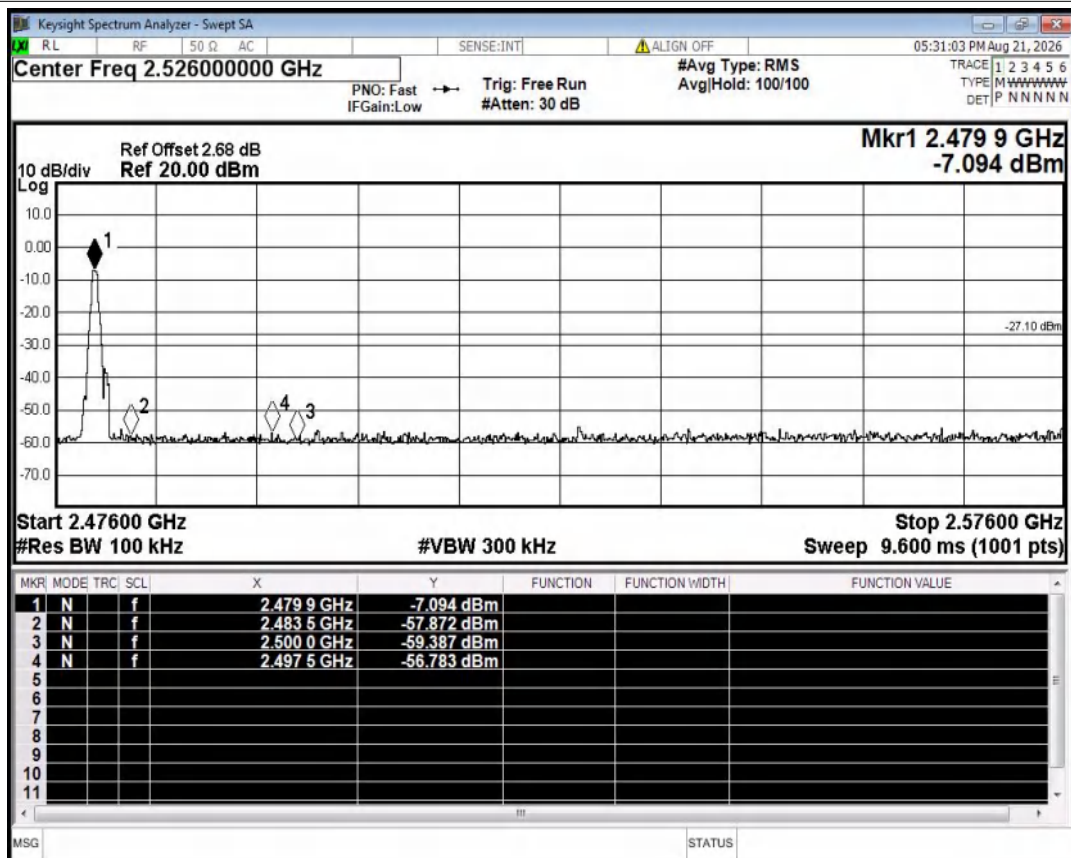
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



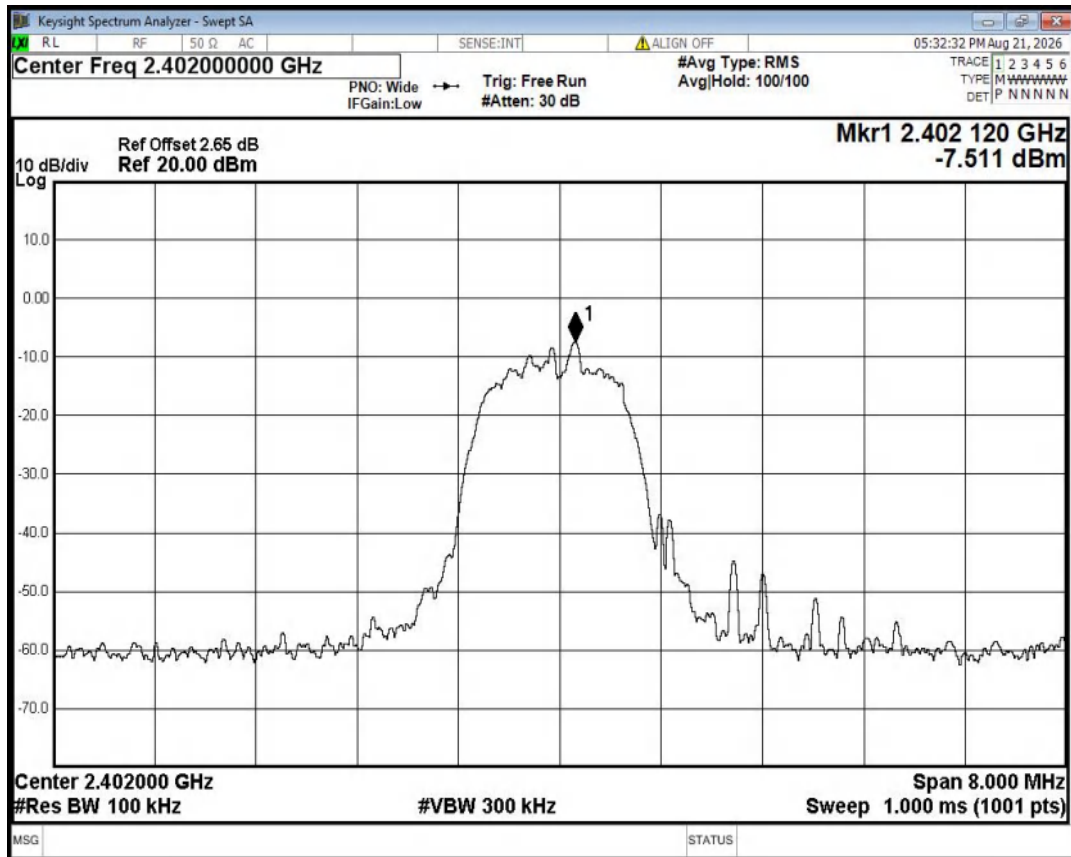
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



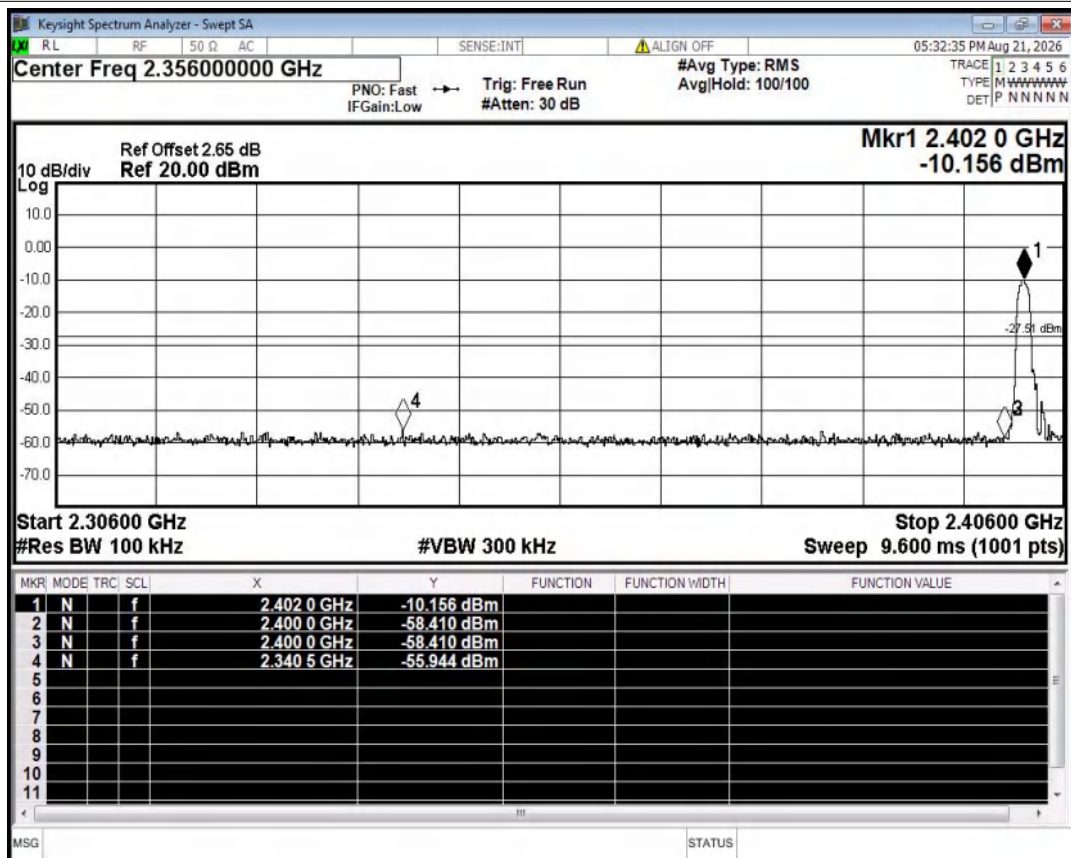
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



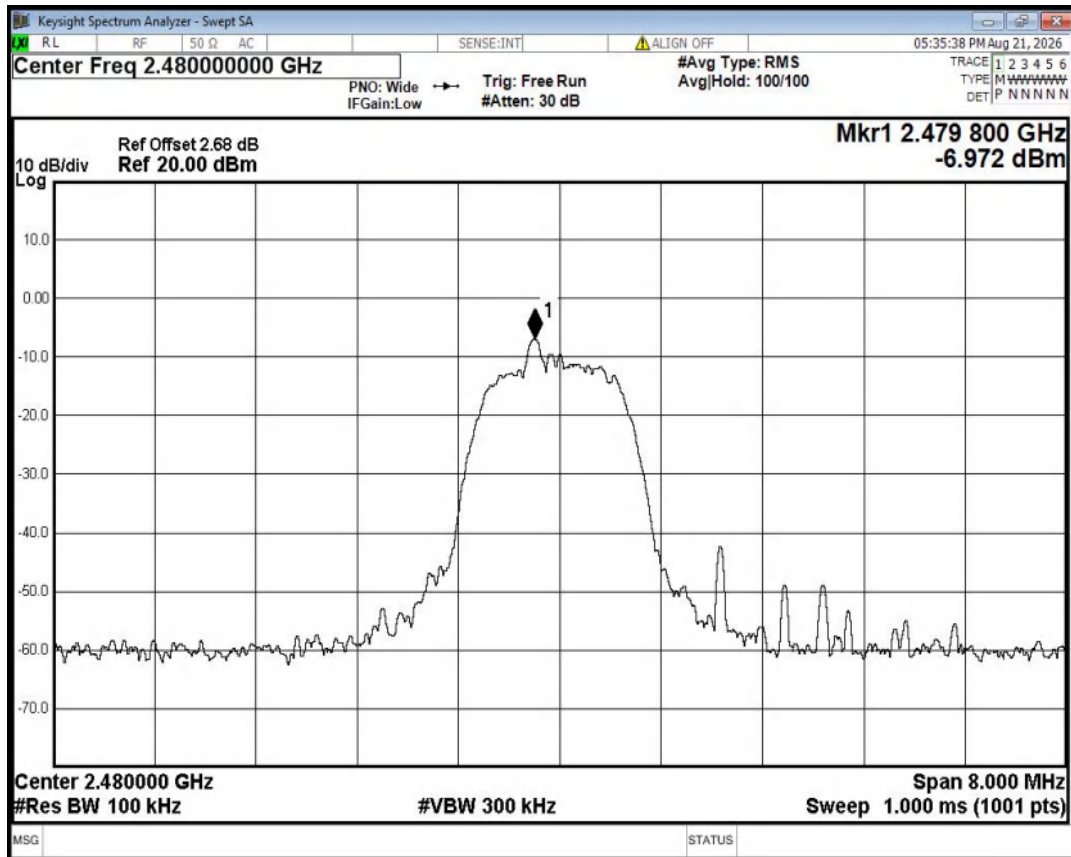
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



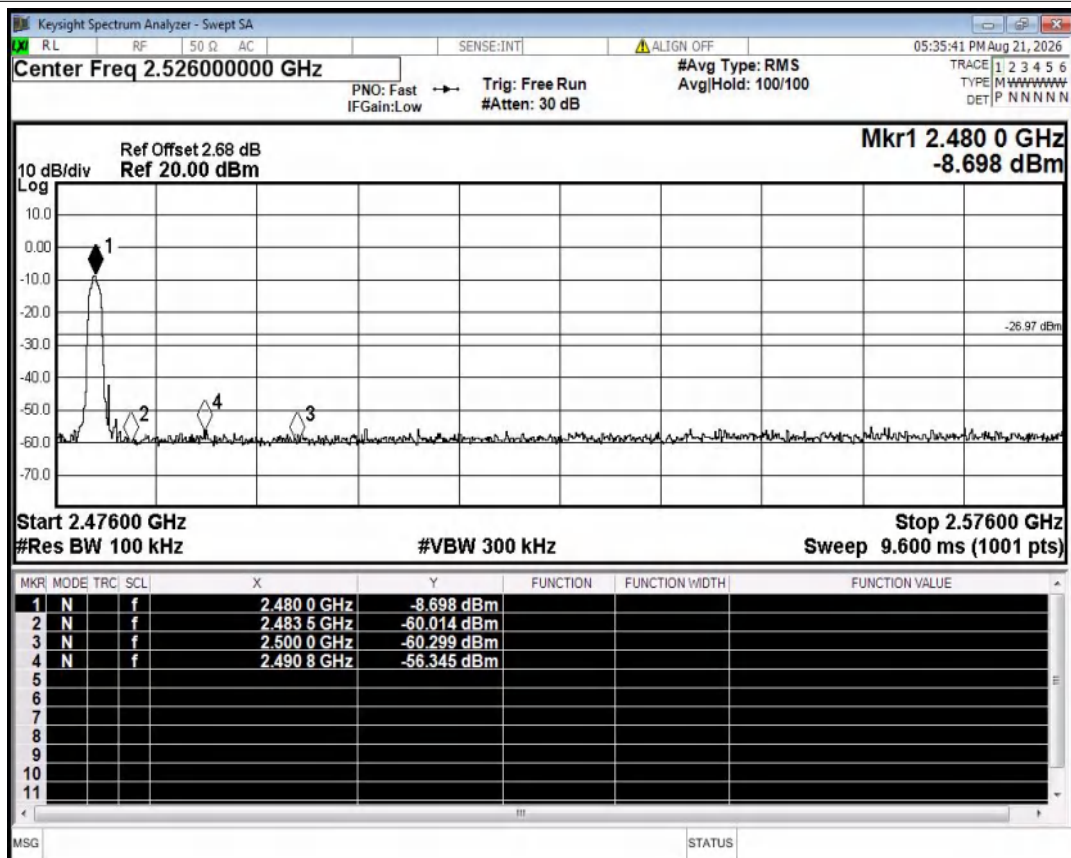
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



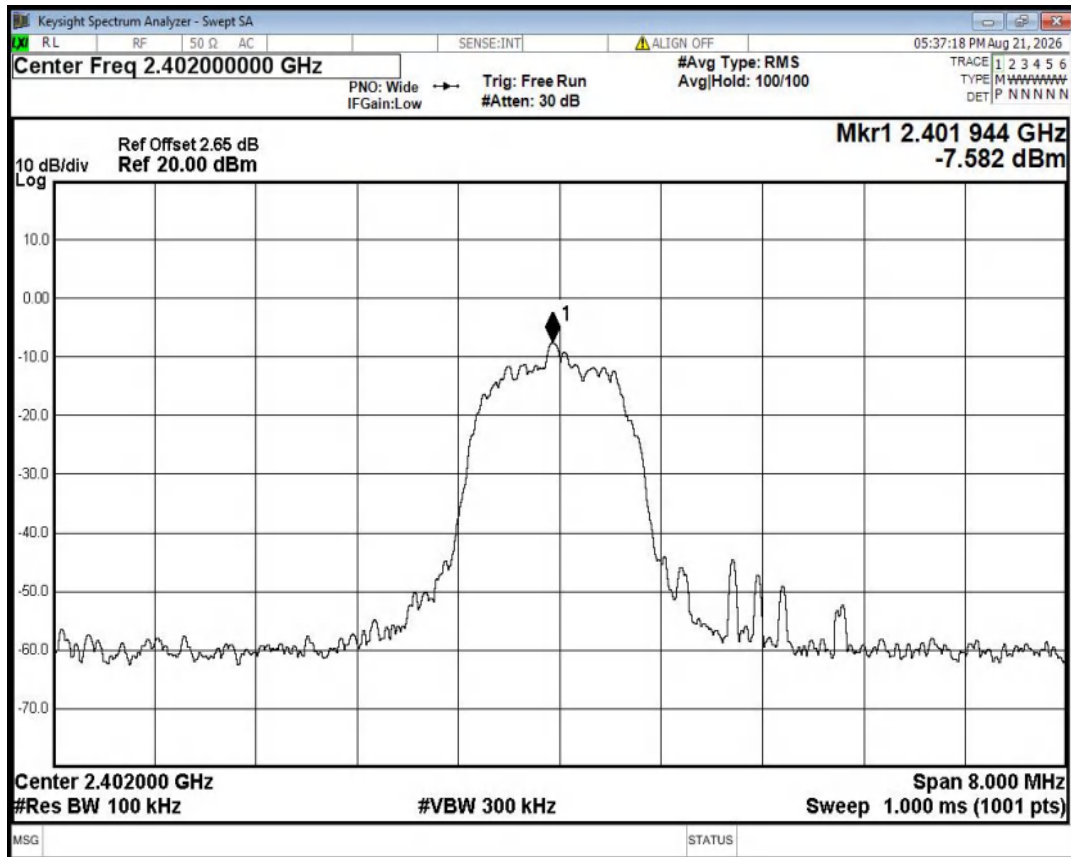
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



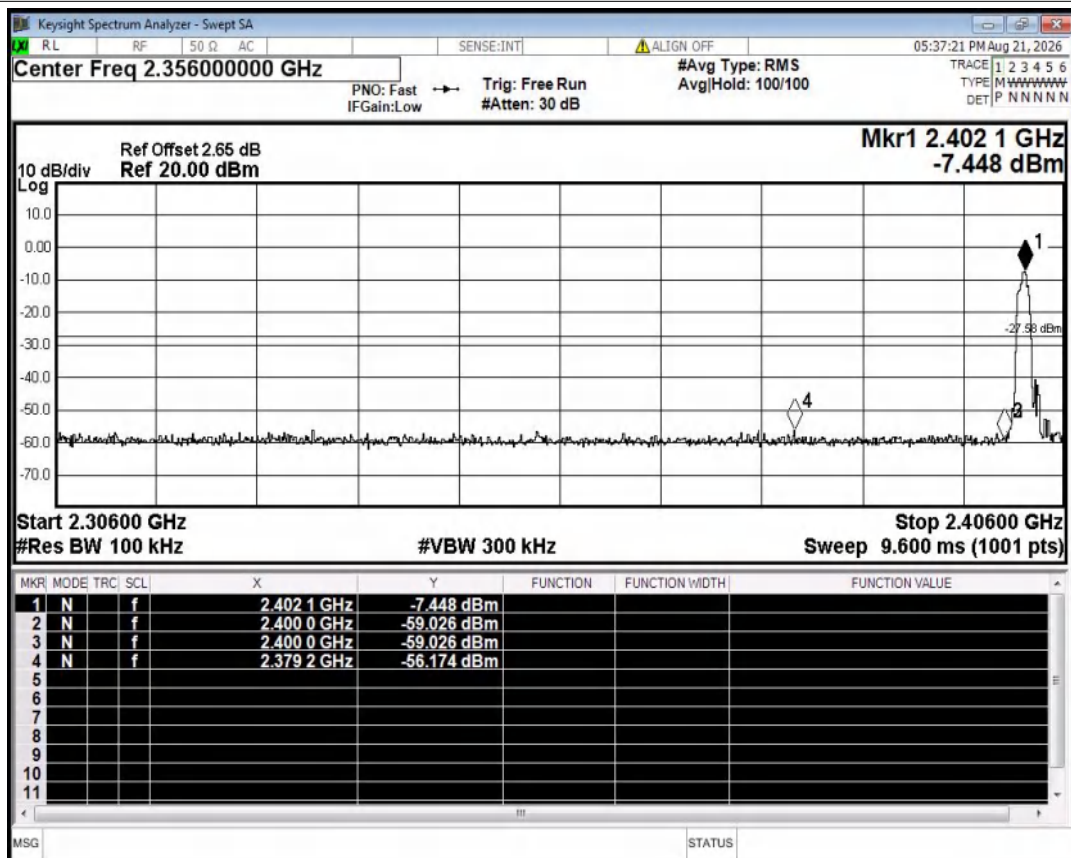
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



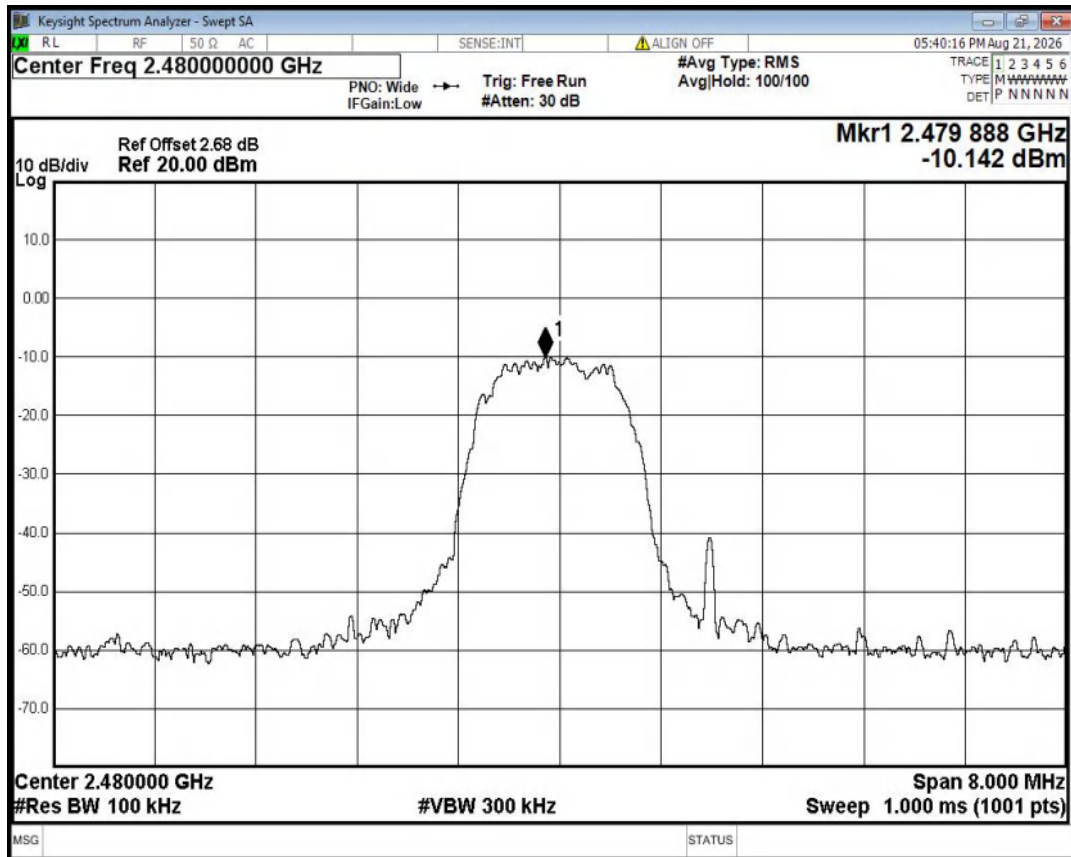
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



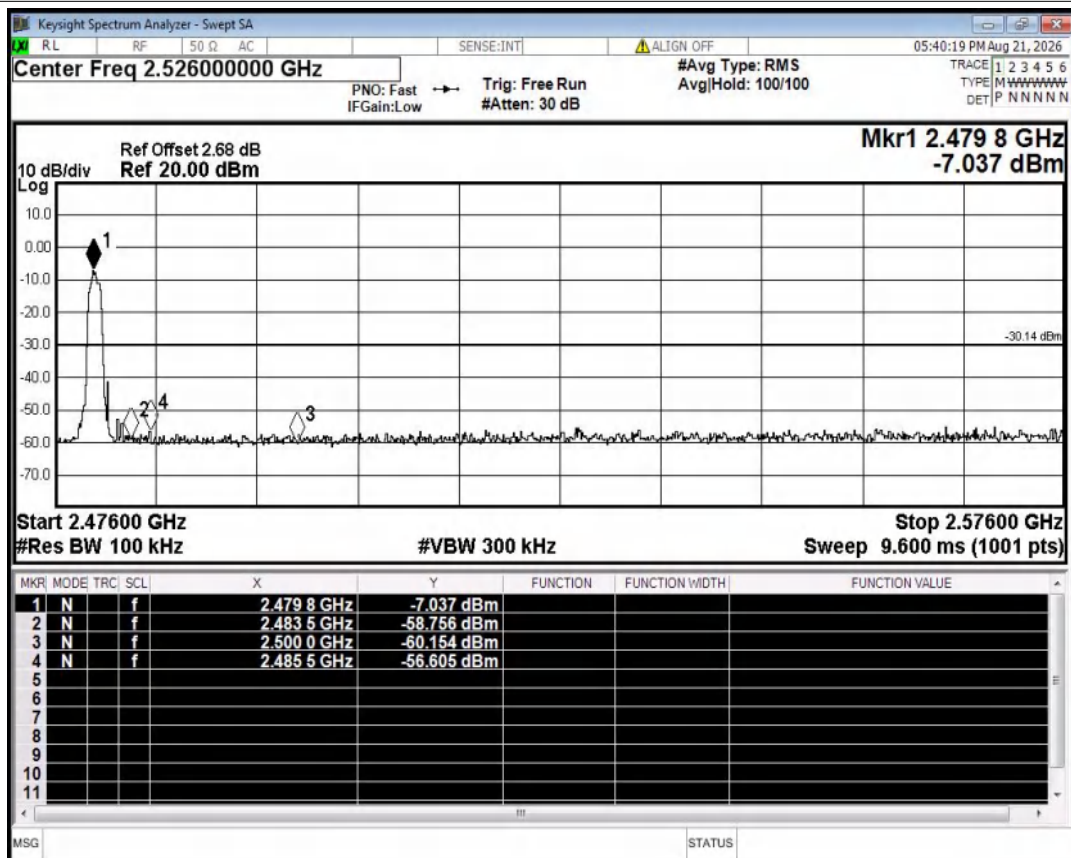
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



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



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

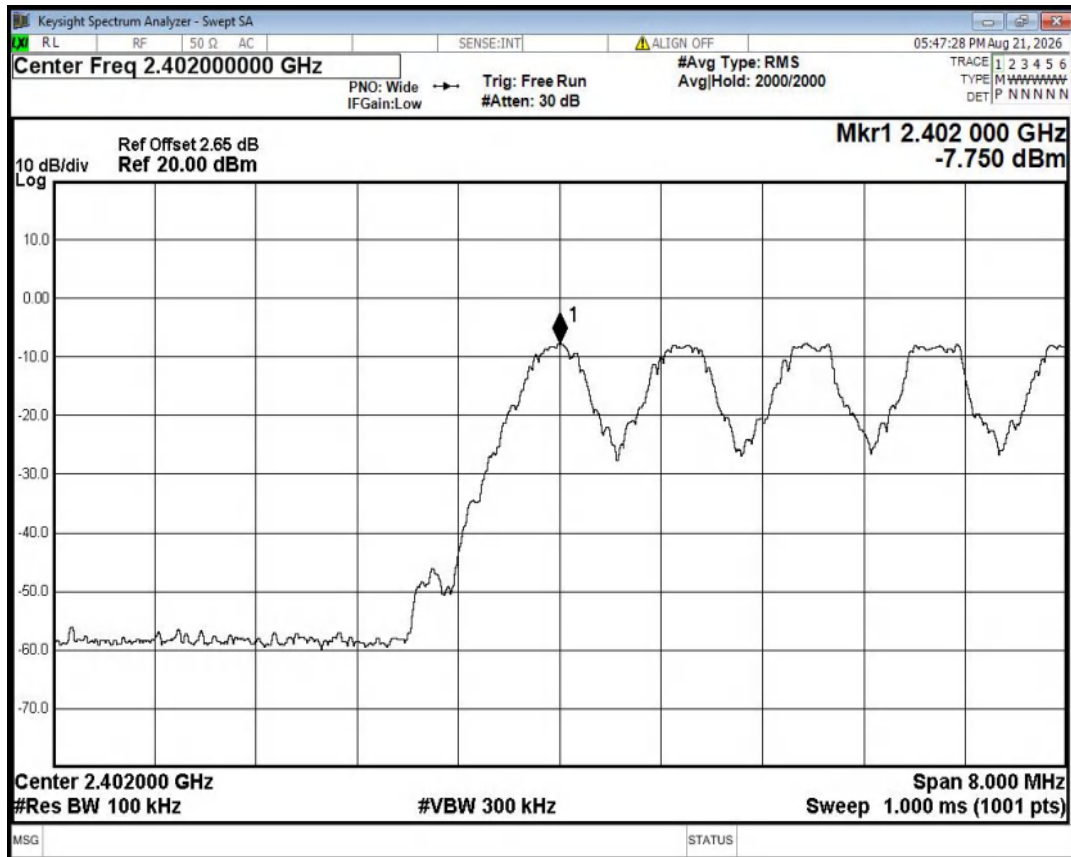


Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Emission

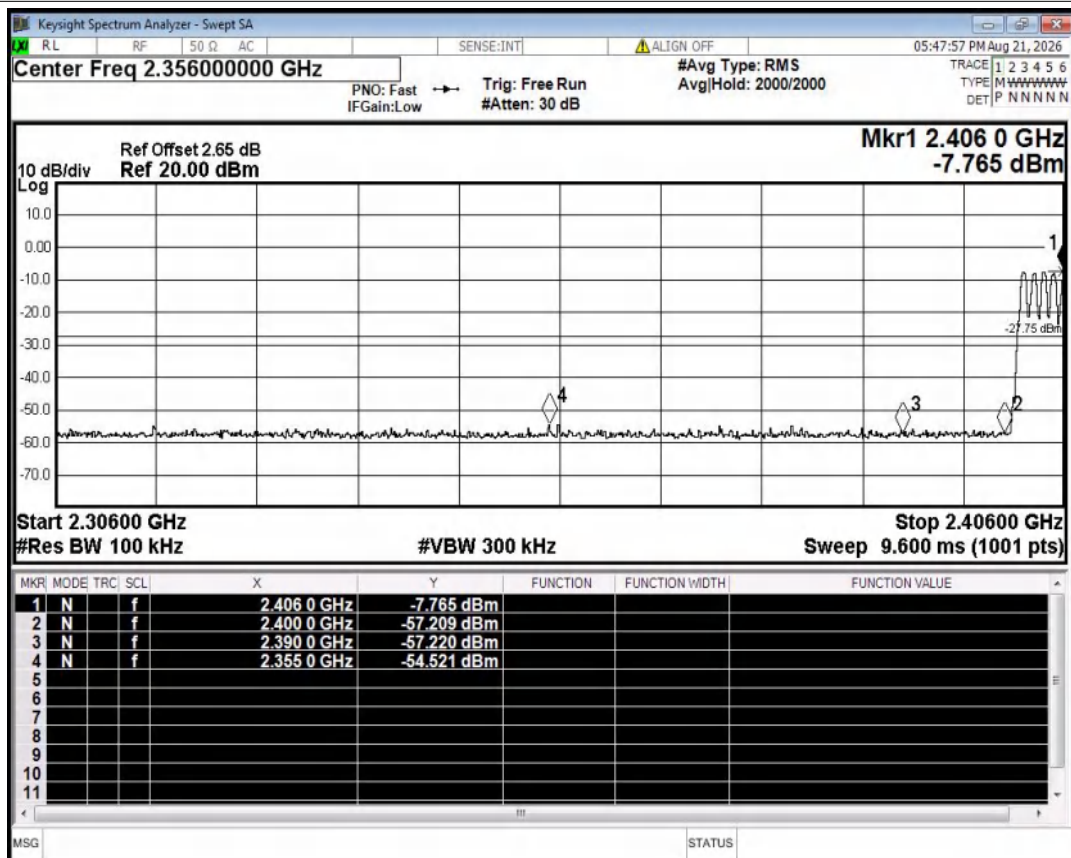


(Hopping)

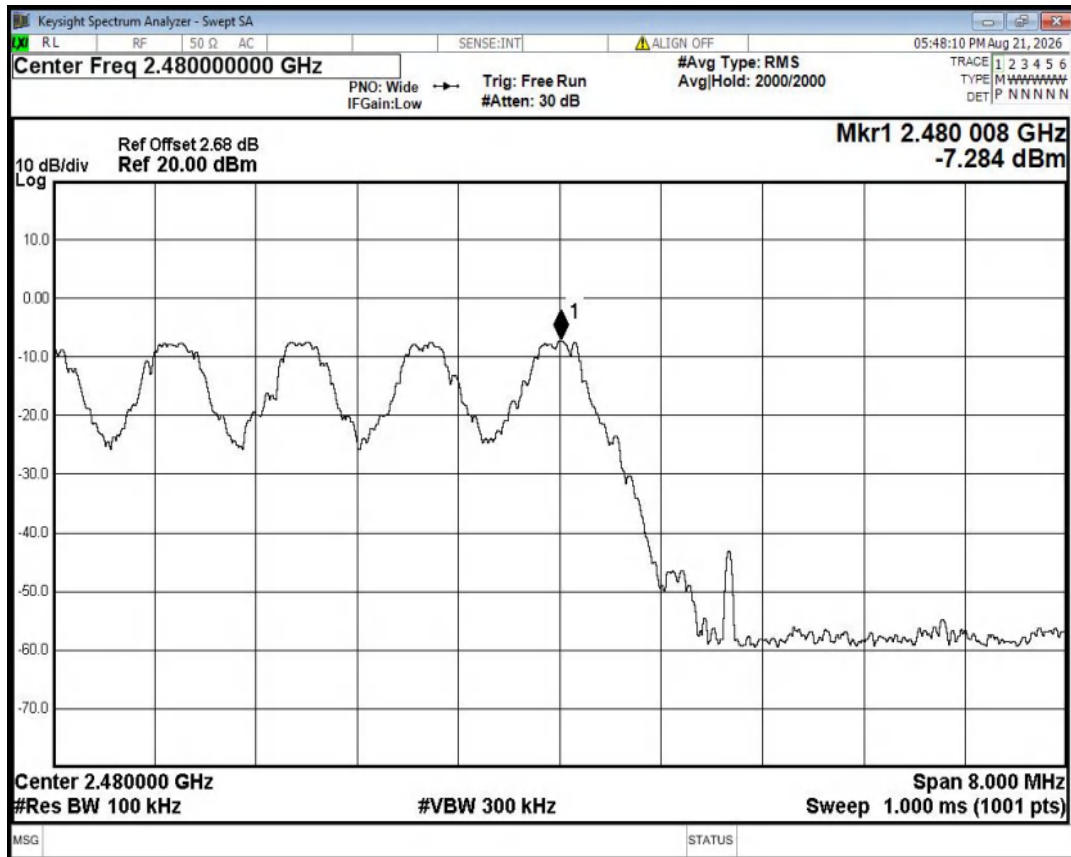
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-46.77	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-46.94	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-47.76	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-48.13	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-47.18	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-46.19	-20	Pass



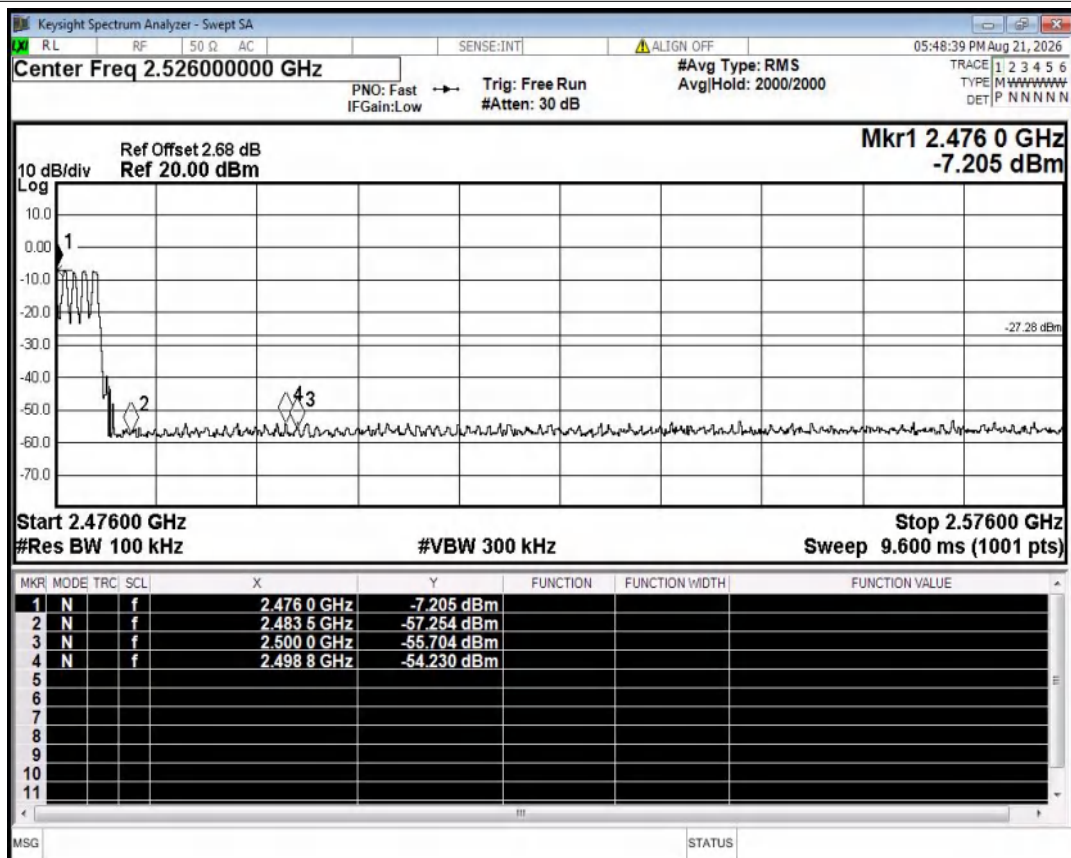
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



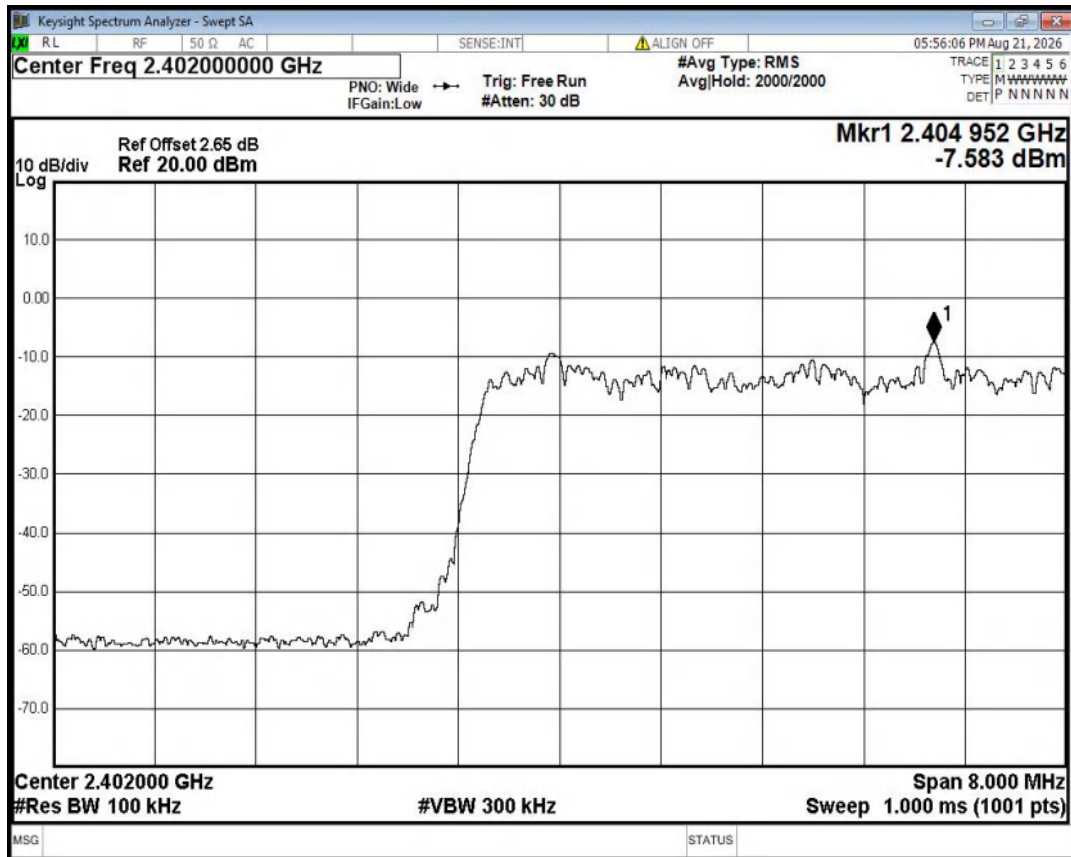
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



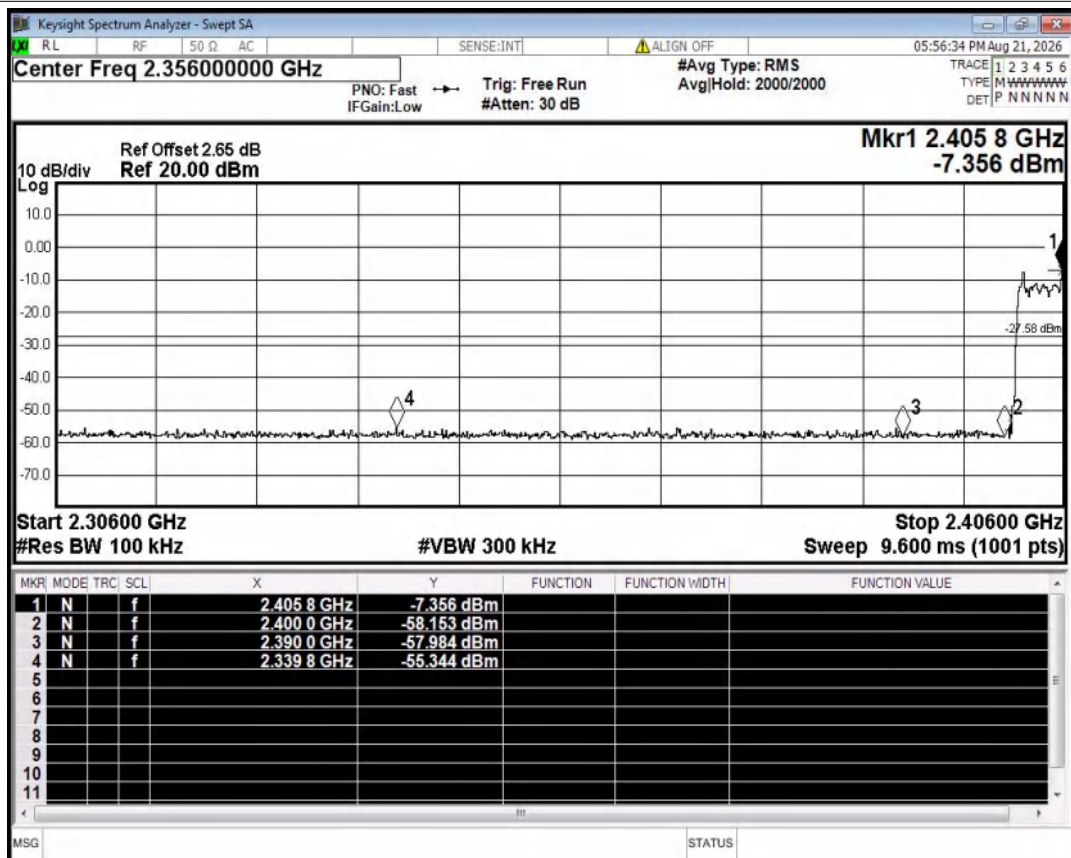
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



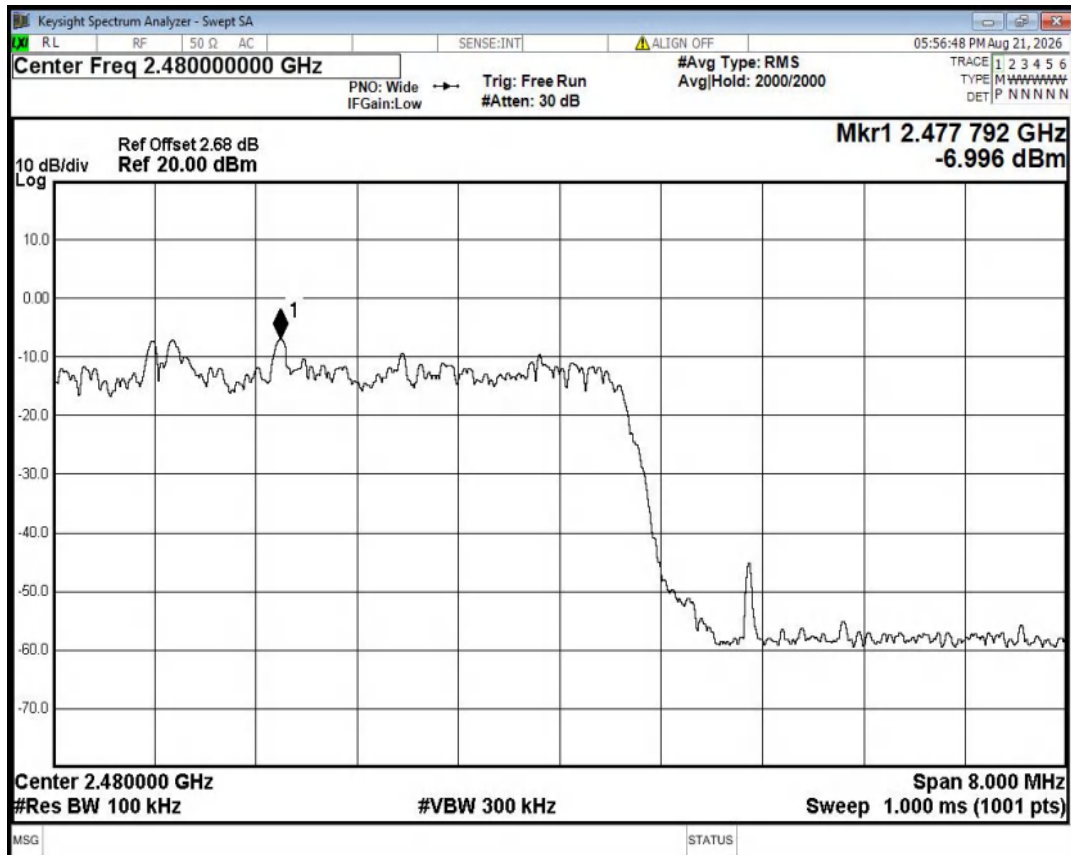
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



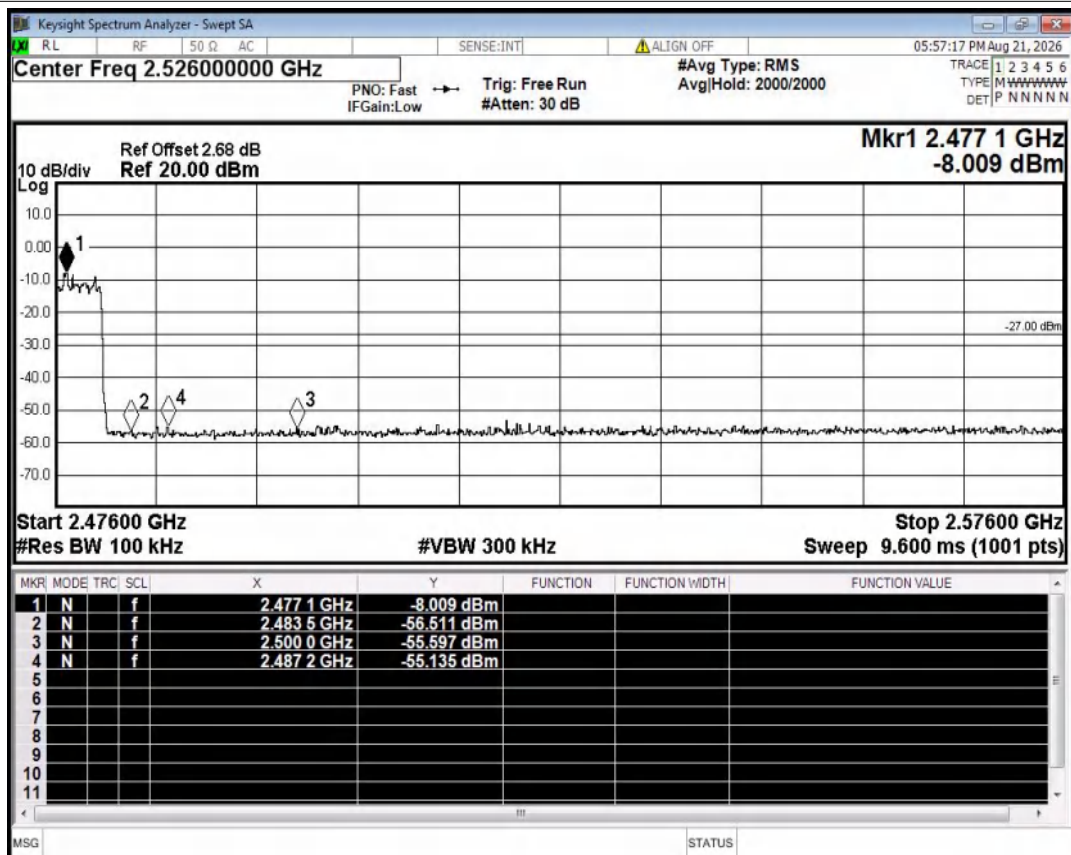
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



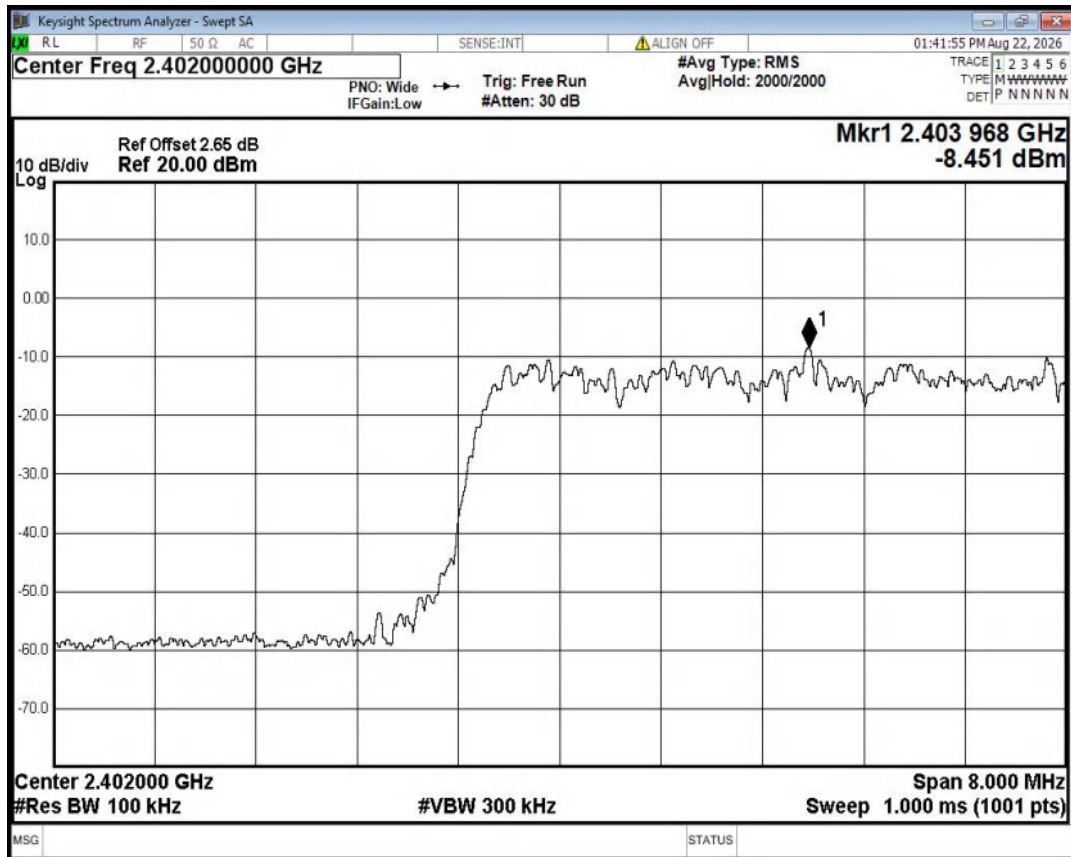
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



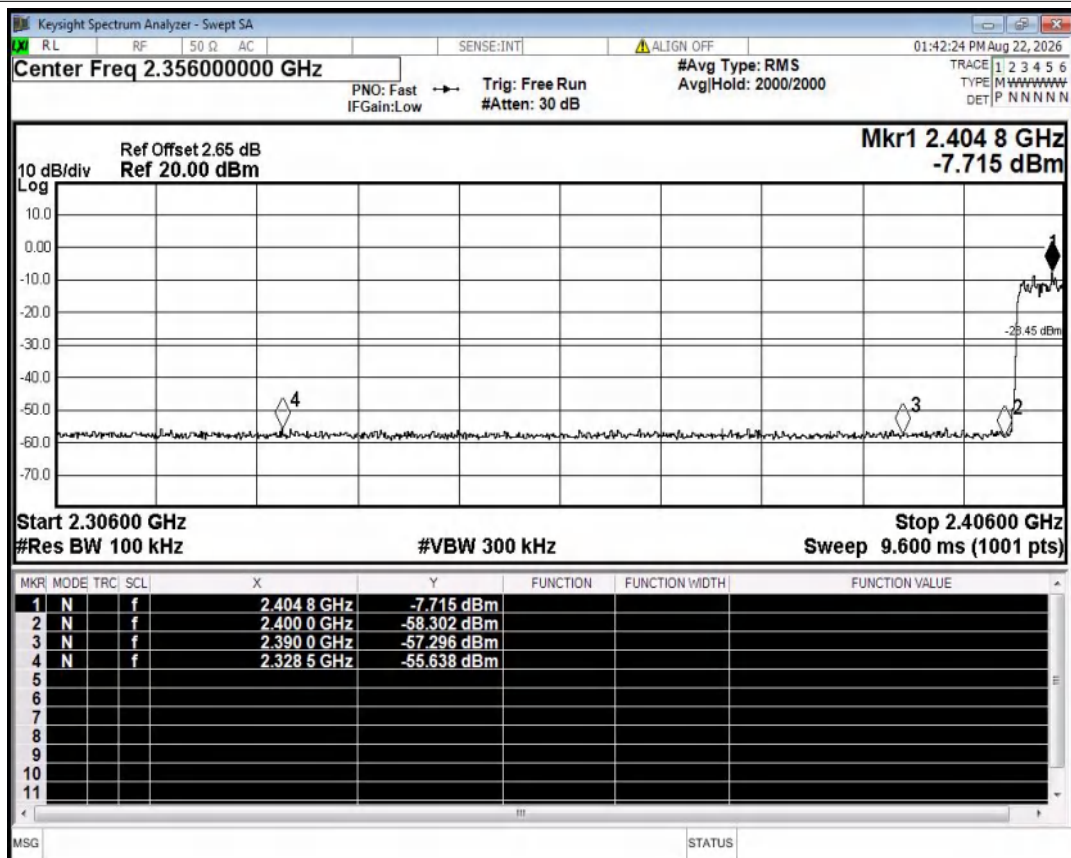
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



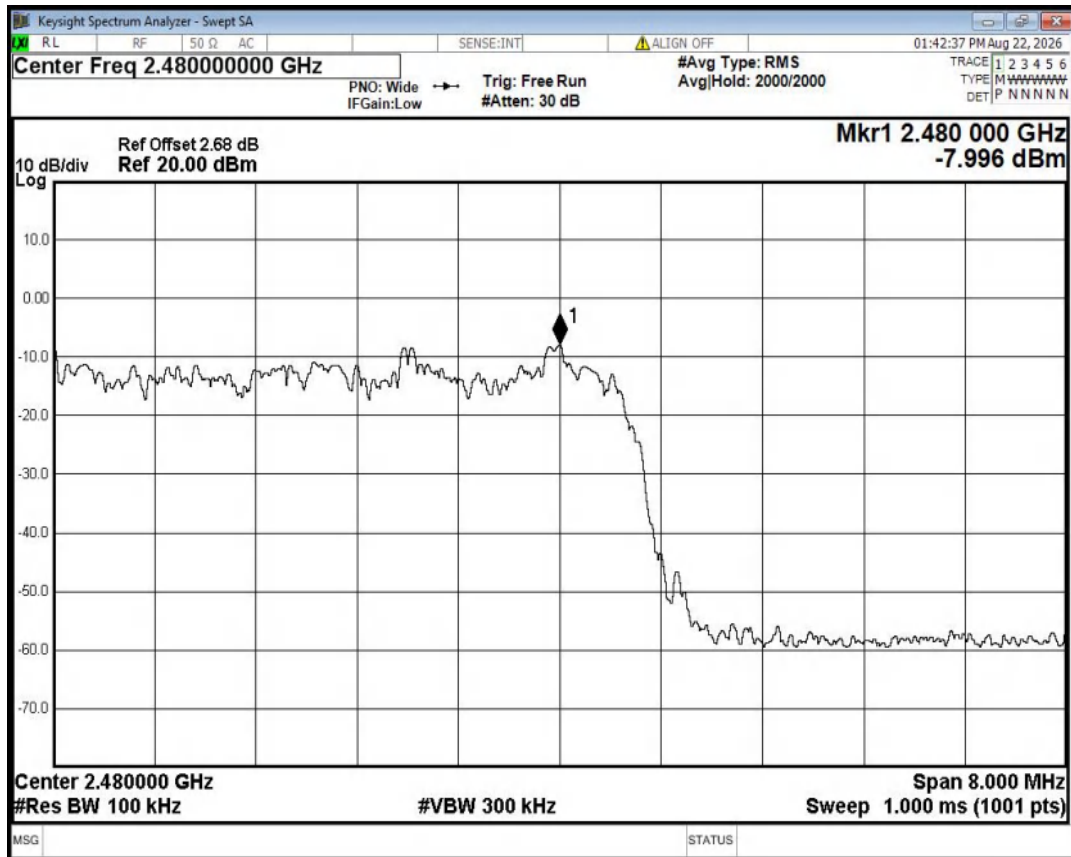
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



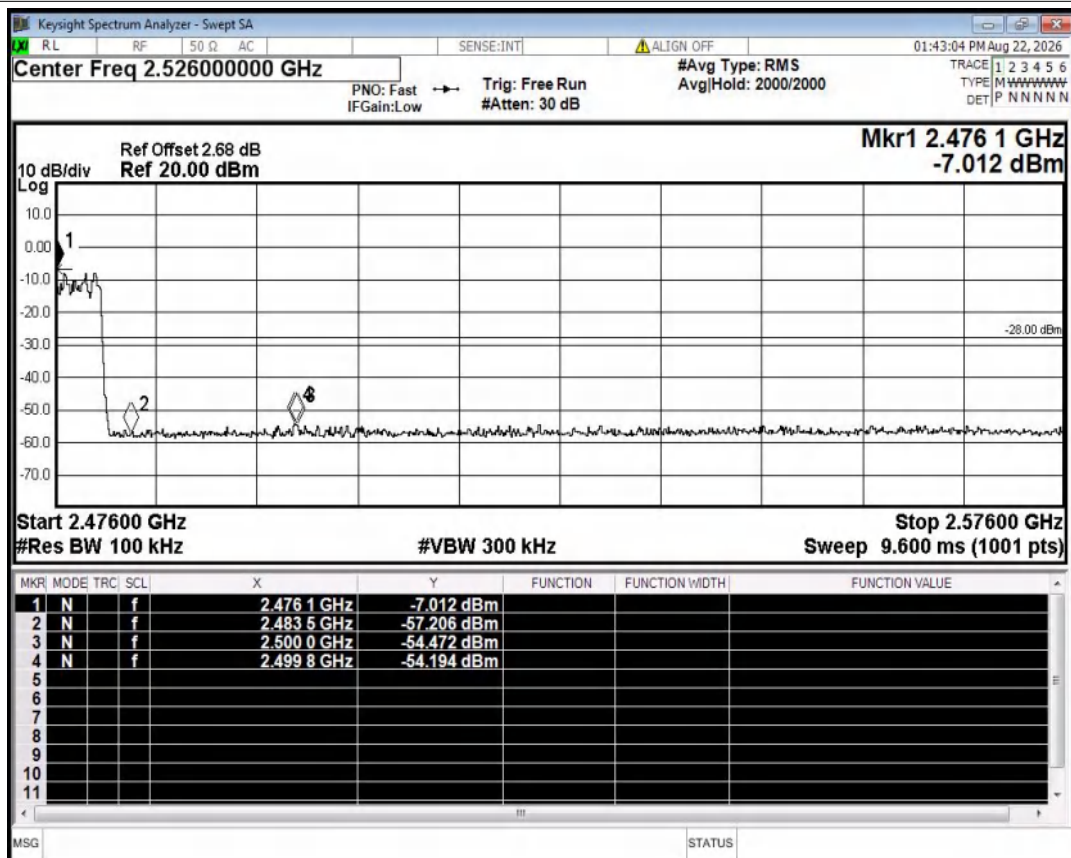
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



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



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

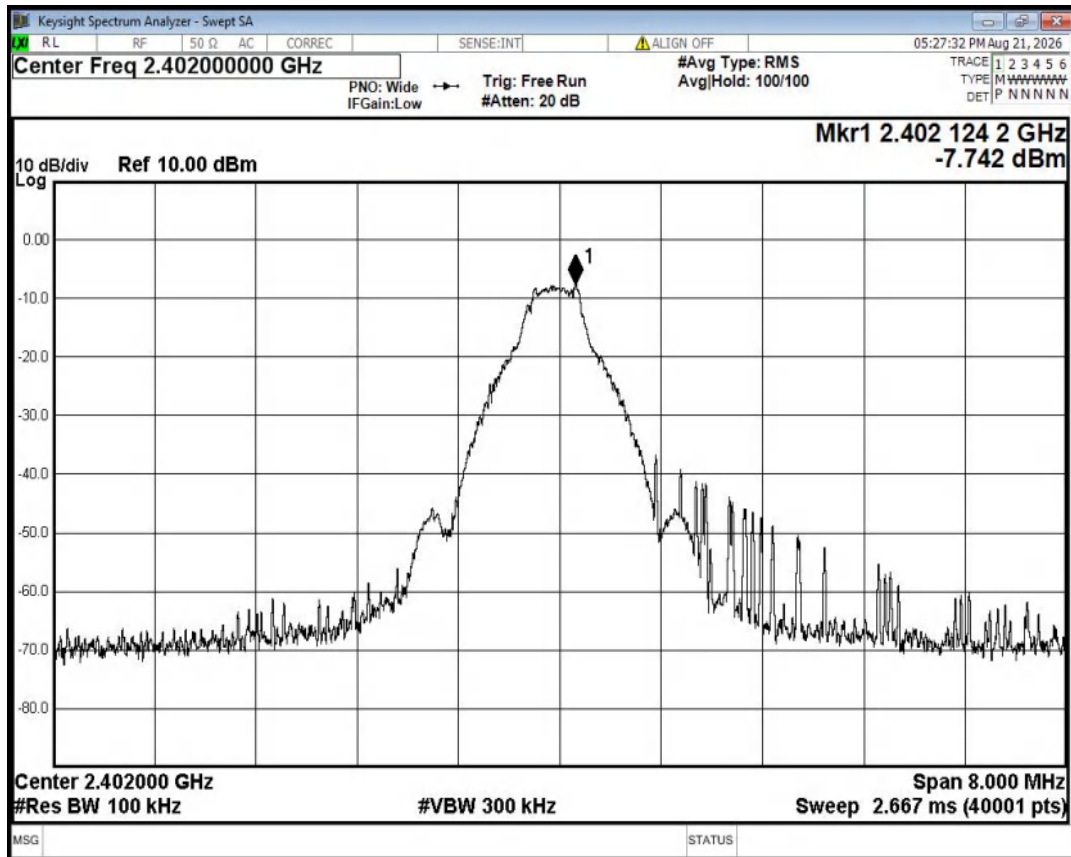


Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission

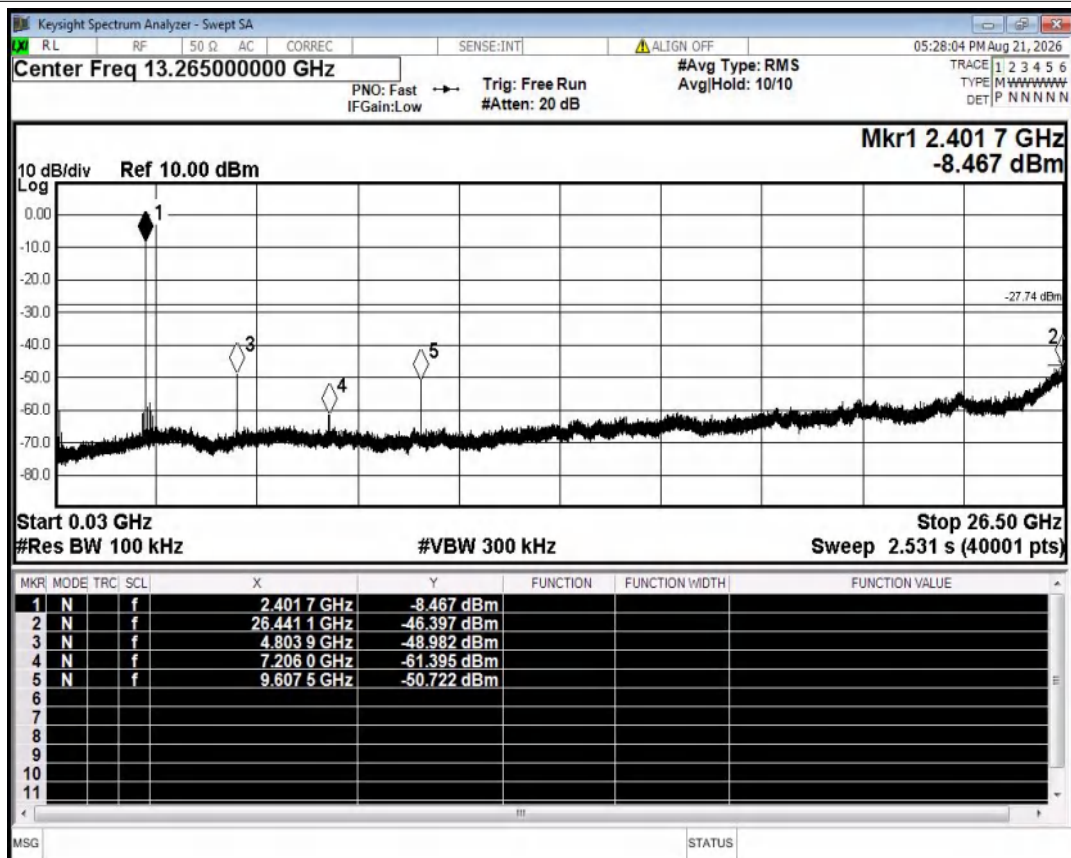


A.7 Conducted RF Spurious Emission

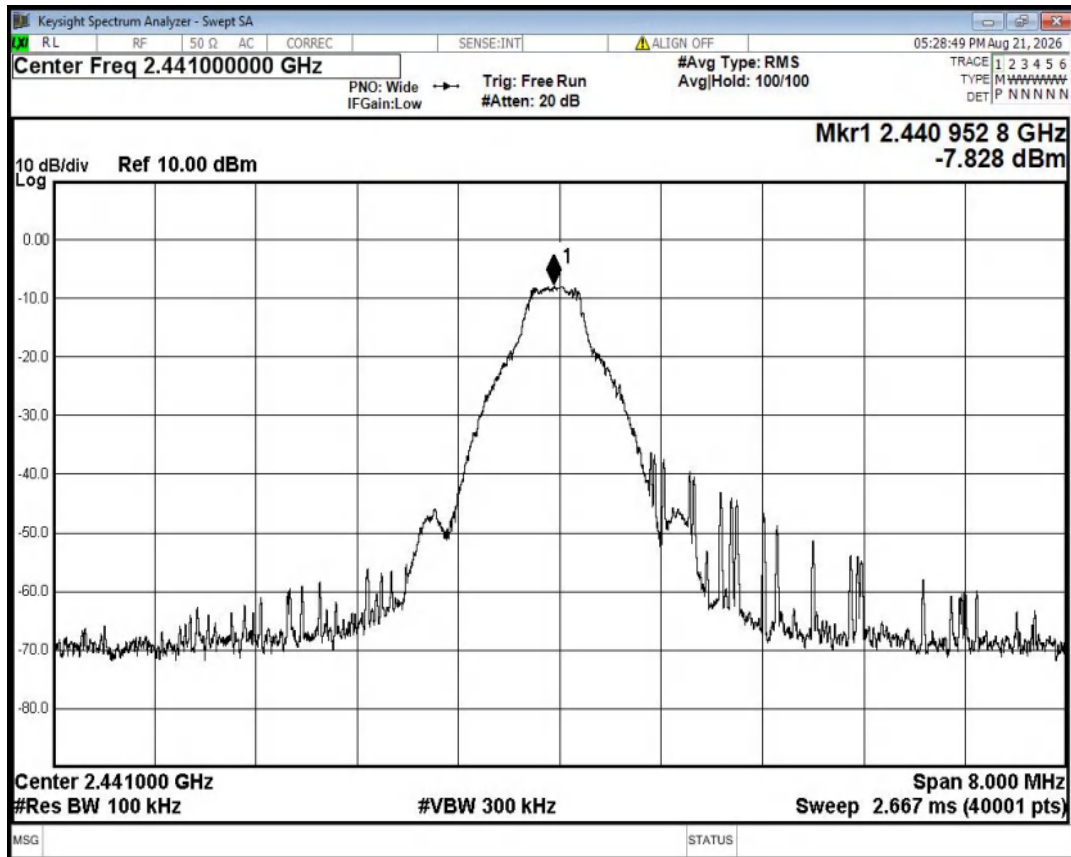
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-38.65	-20	Pass
NVNT	1-DH5	2441	Ant1	-38.85	-20	Pass
NVNT	1-DH5	2480	Ant1	-38.67	-20	Pass
NVNT	2-DH5	2402	Ant1	-38.85	-20	Pass
NVNT	2-DH5	2441	Ant1	-38.74	-20	Pass
NVNT	2-DH5	2480	Ant1	-39.65	-20	Pass
NVNT	3-DH5	2402	Ant1	-38.89	-20	Pass
NVNT	3-DH5	2441	Ant1	-39.5	-20	Pass
NVNT	3-DH5	2480	Ant1	-39.14	-20	Pass



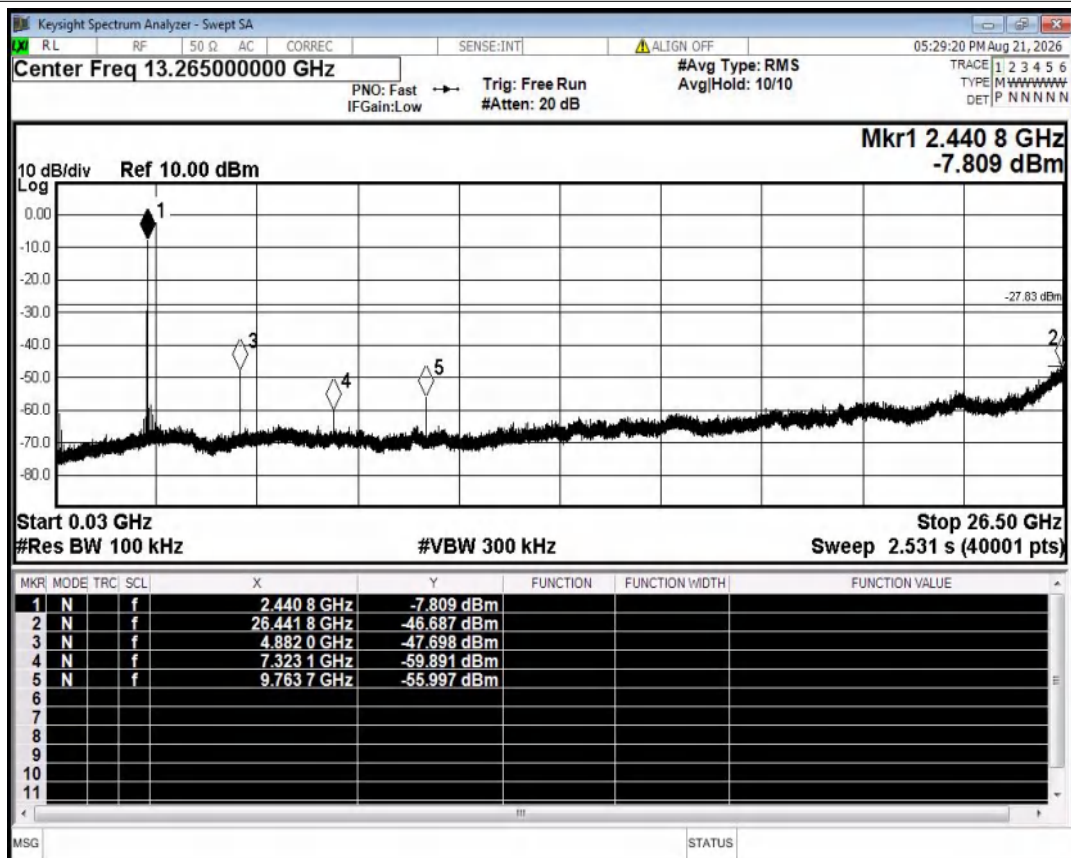
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



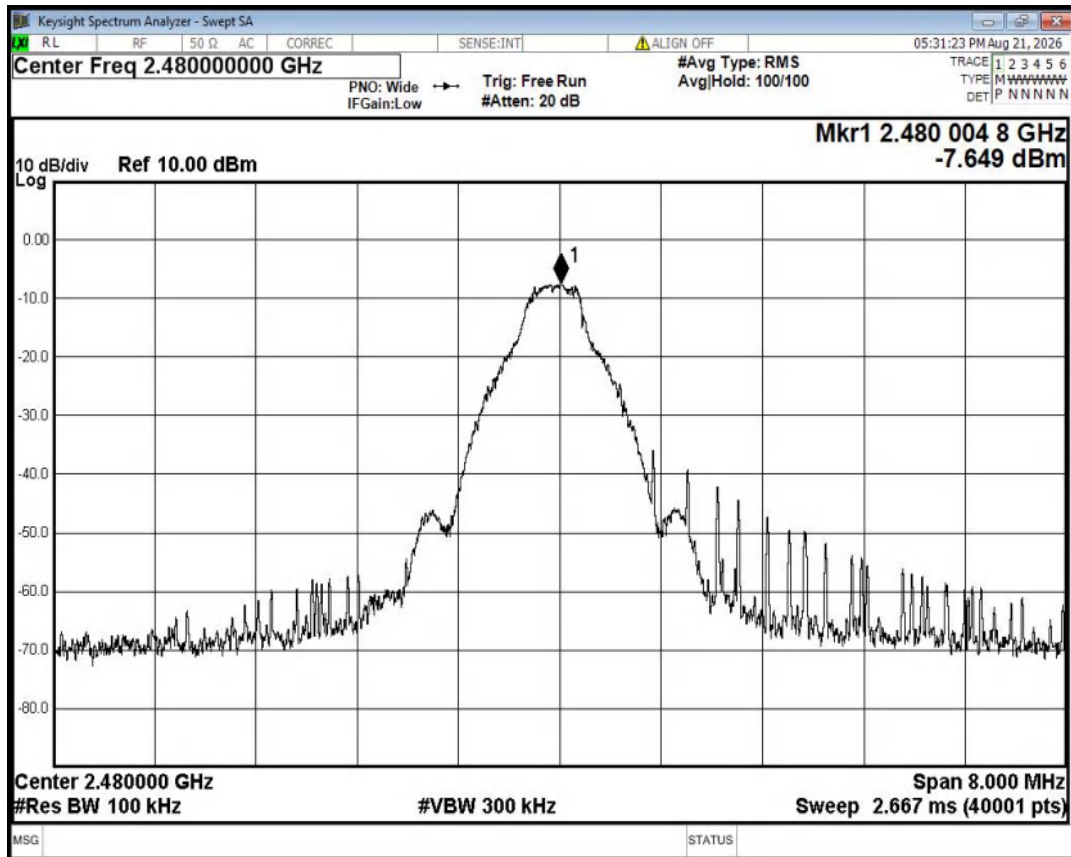
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



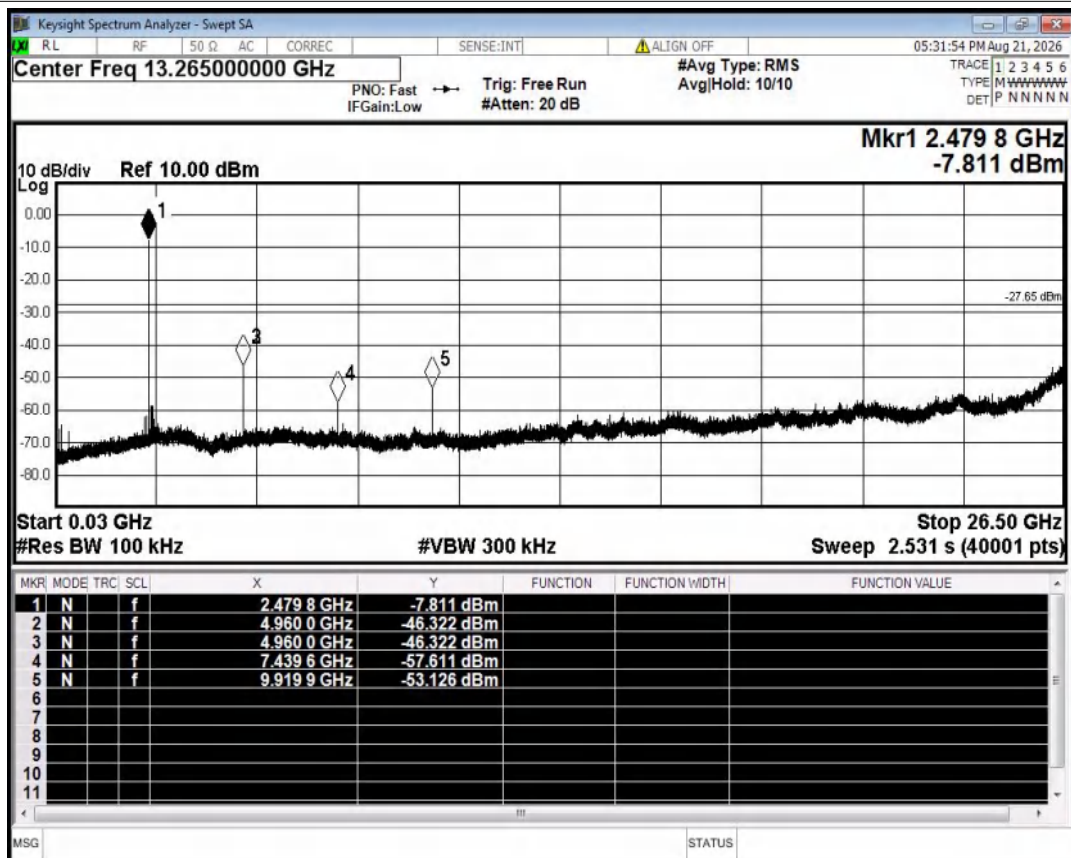
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



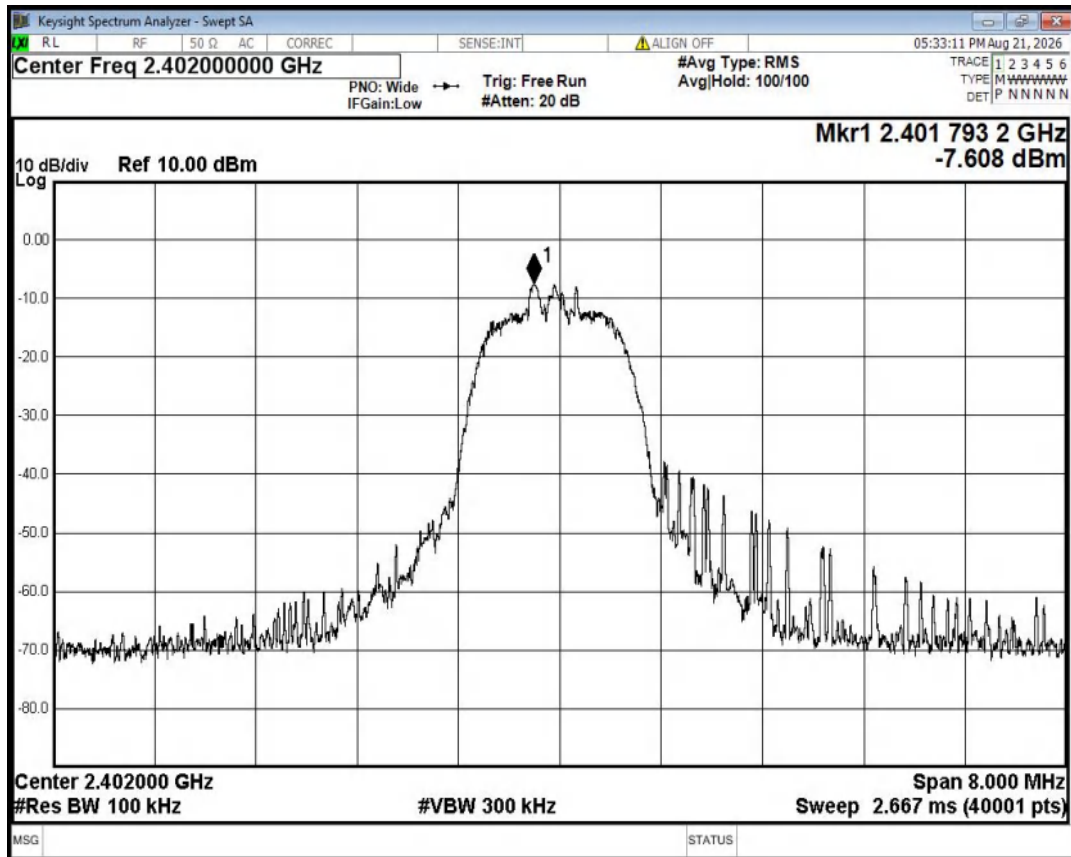
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



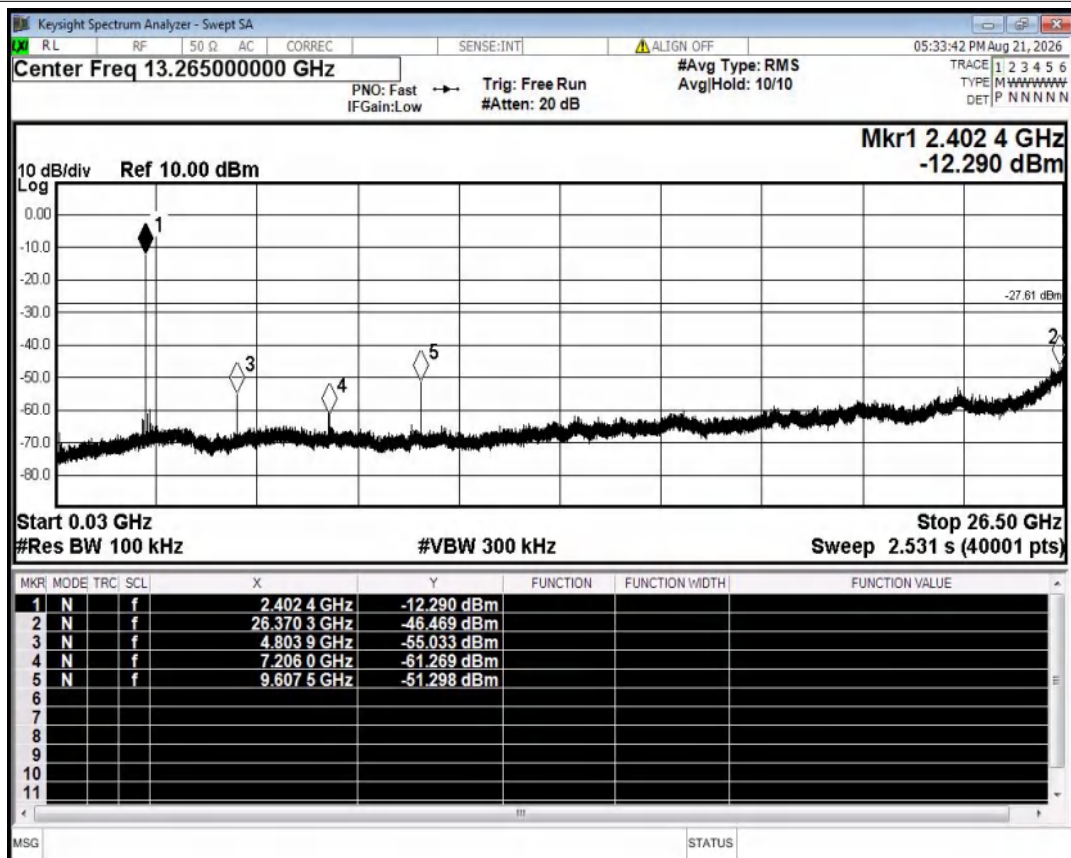
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



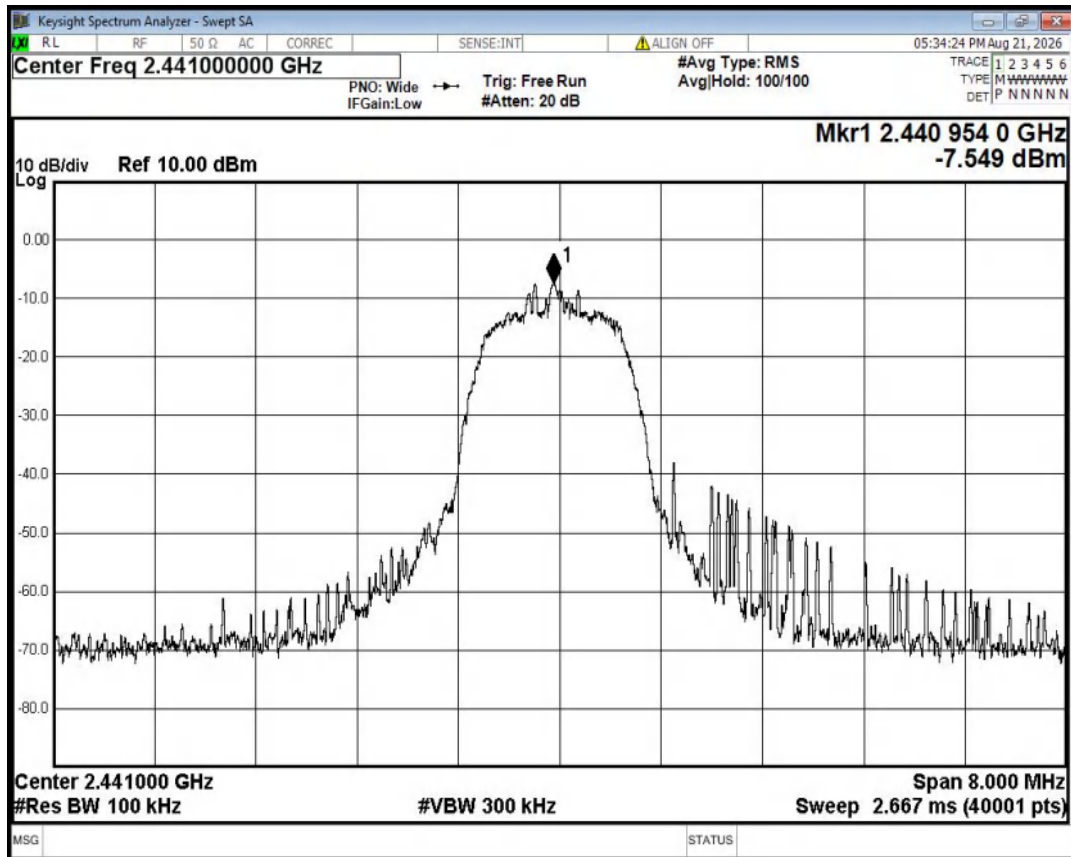
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



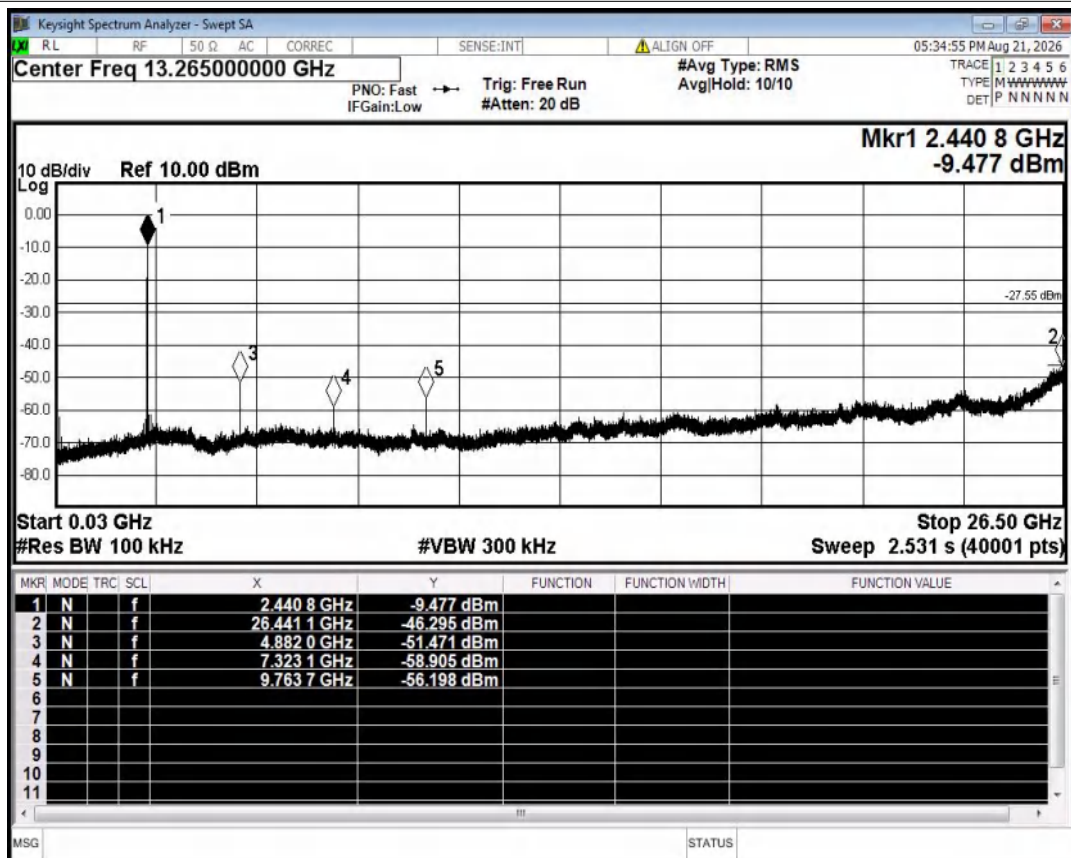
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



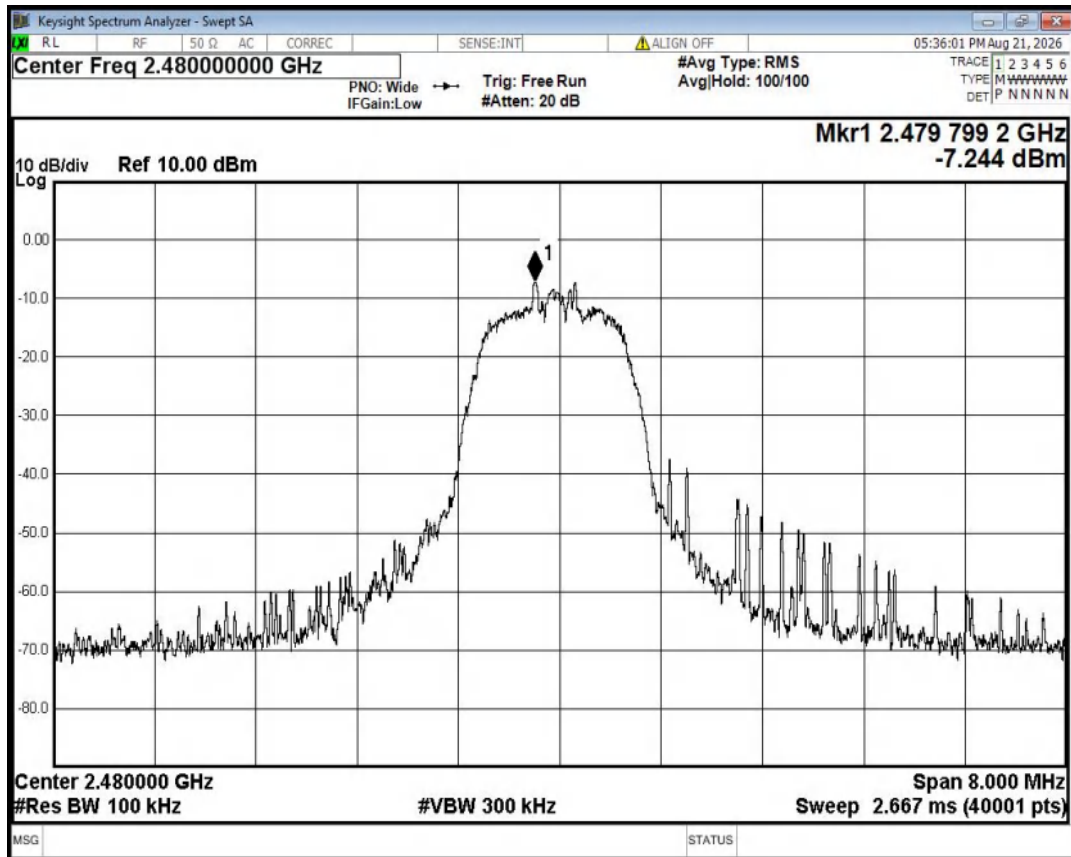
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



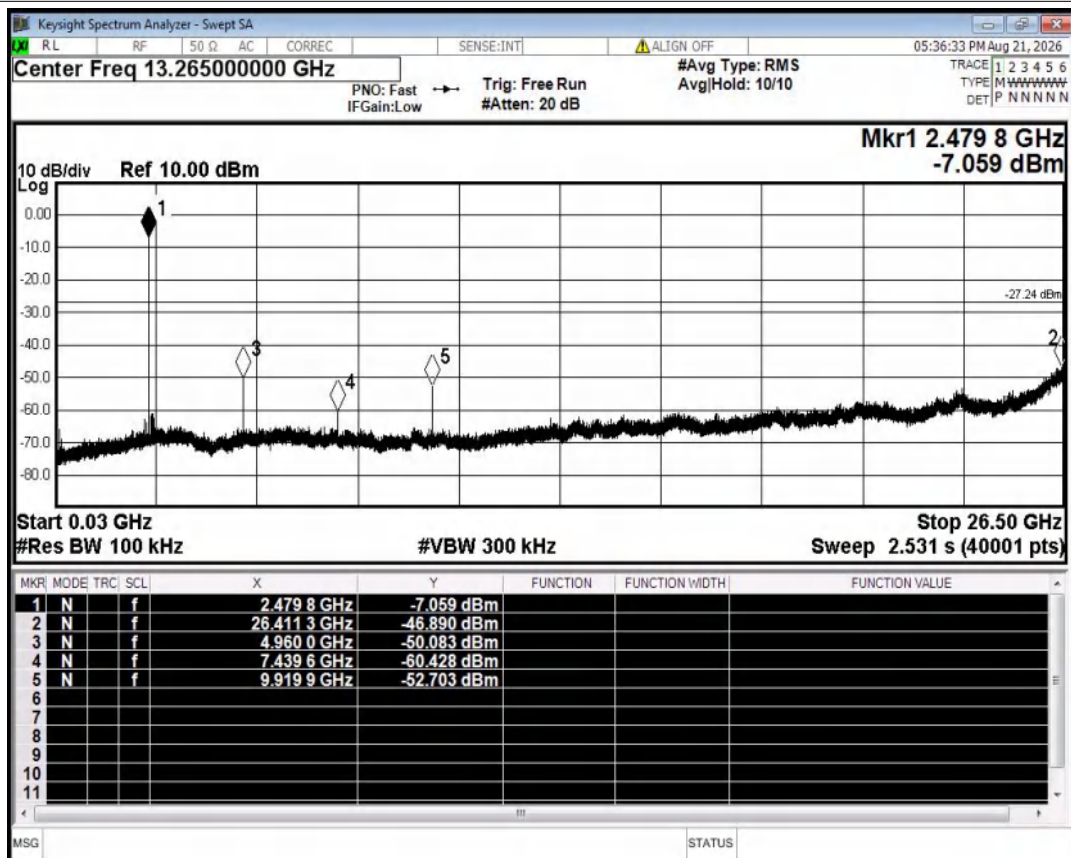
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



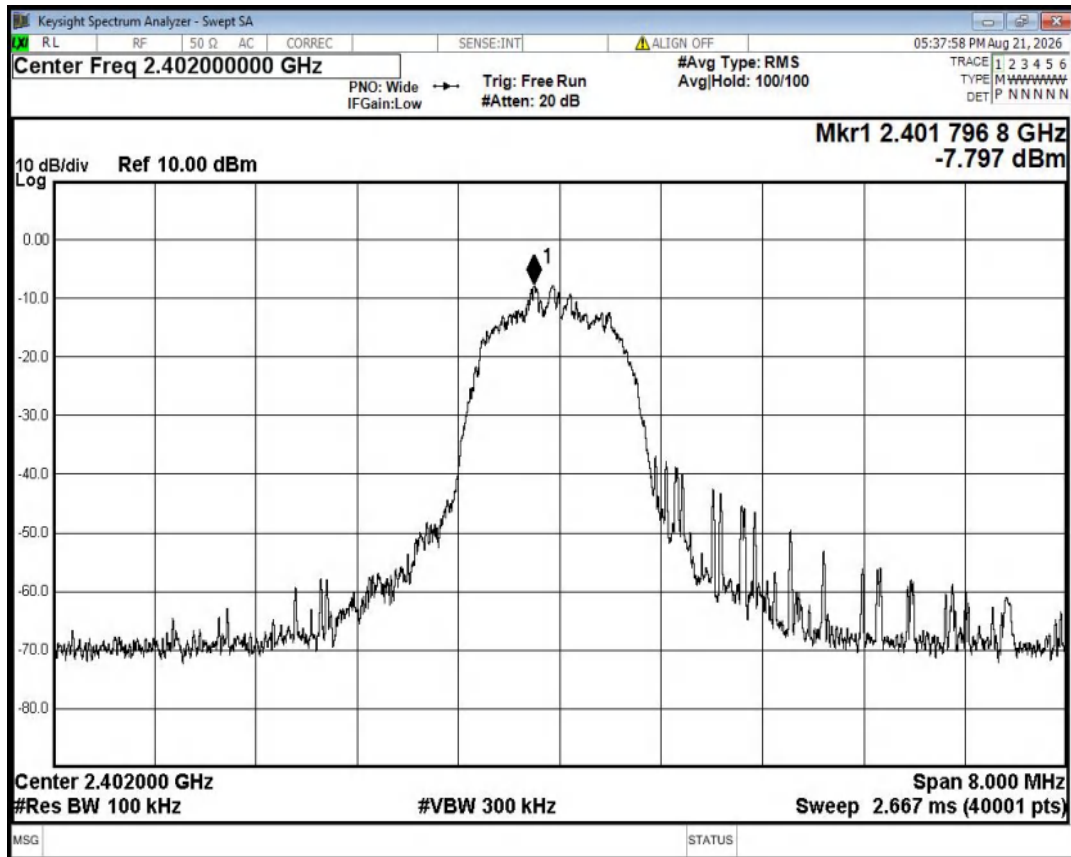
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



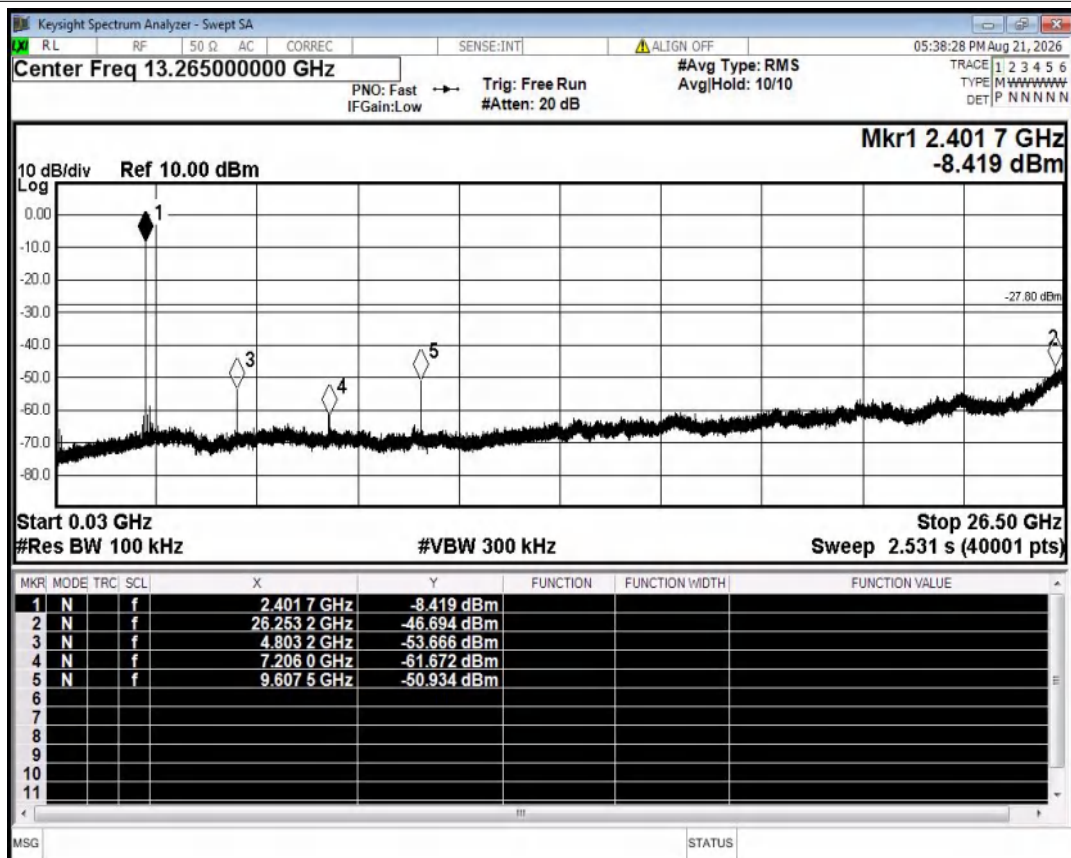
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



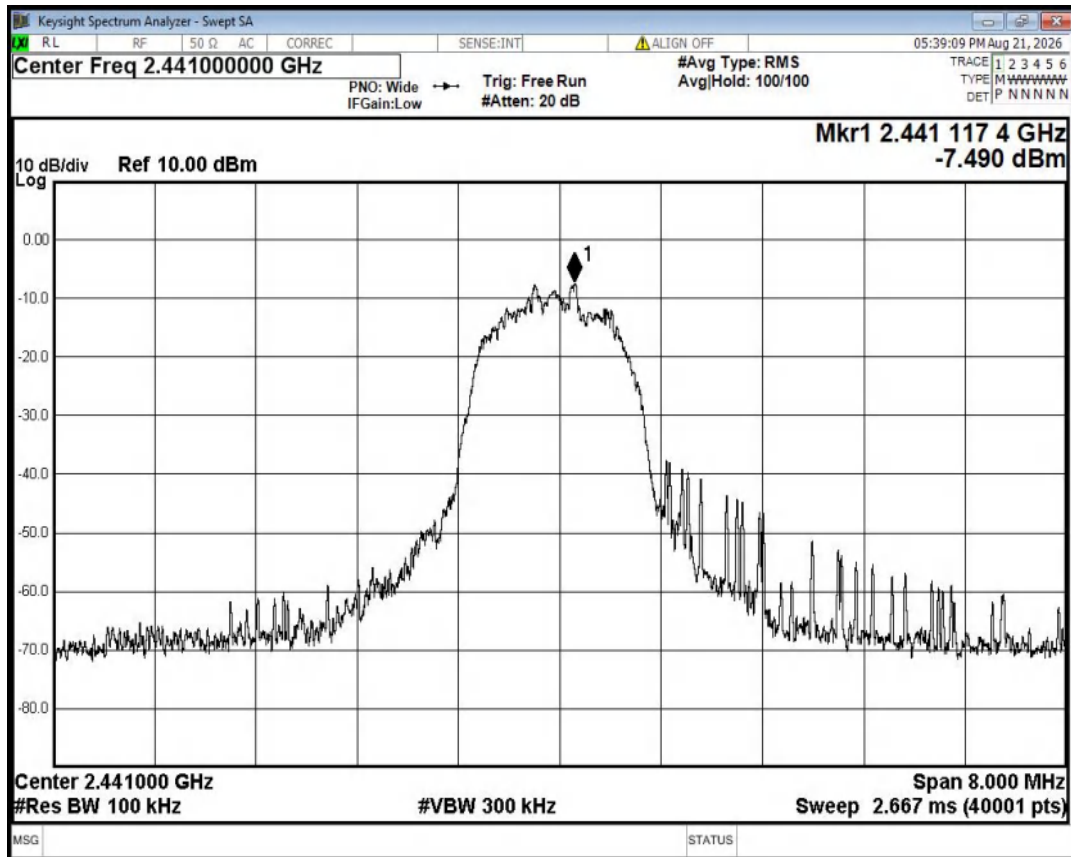
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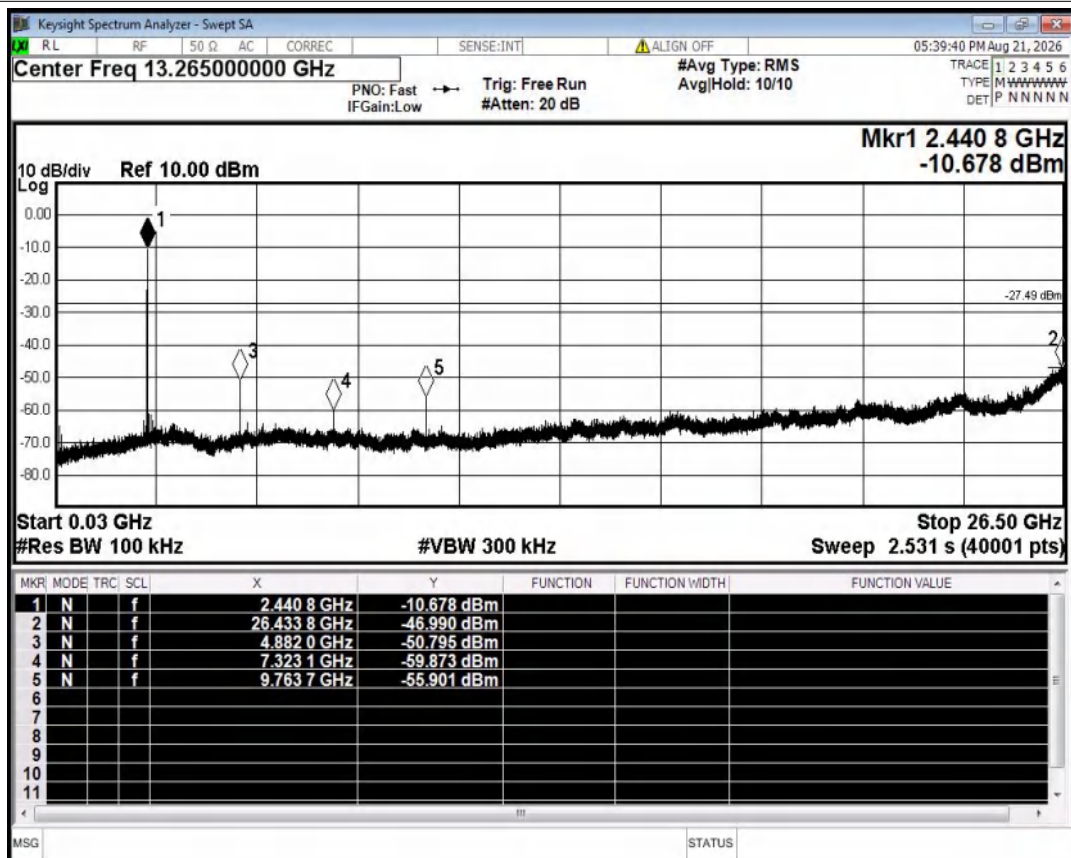
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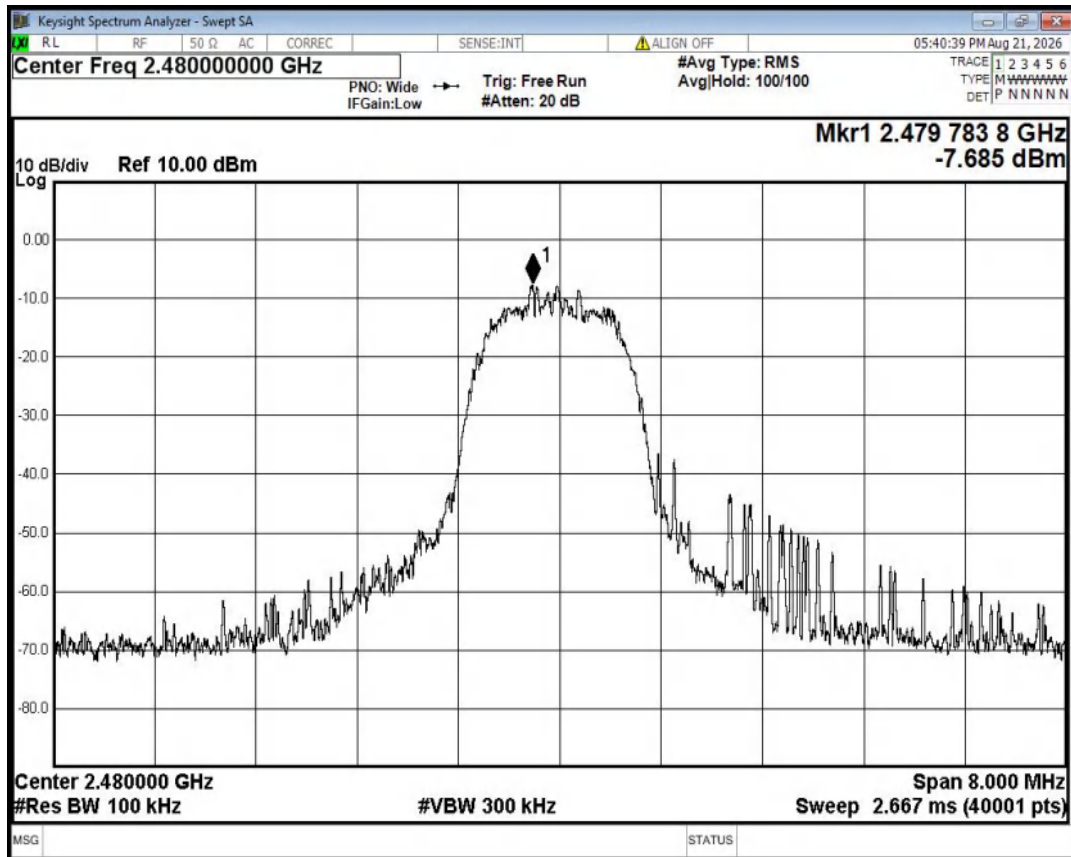
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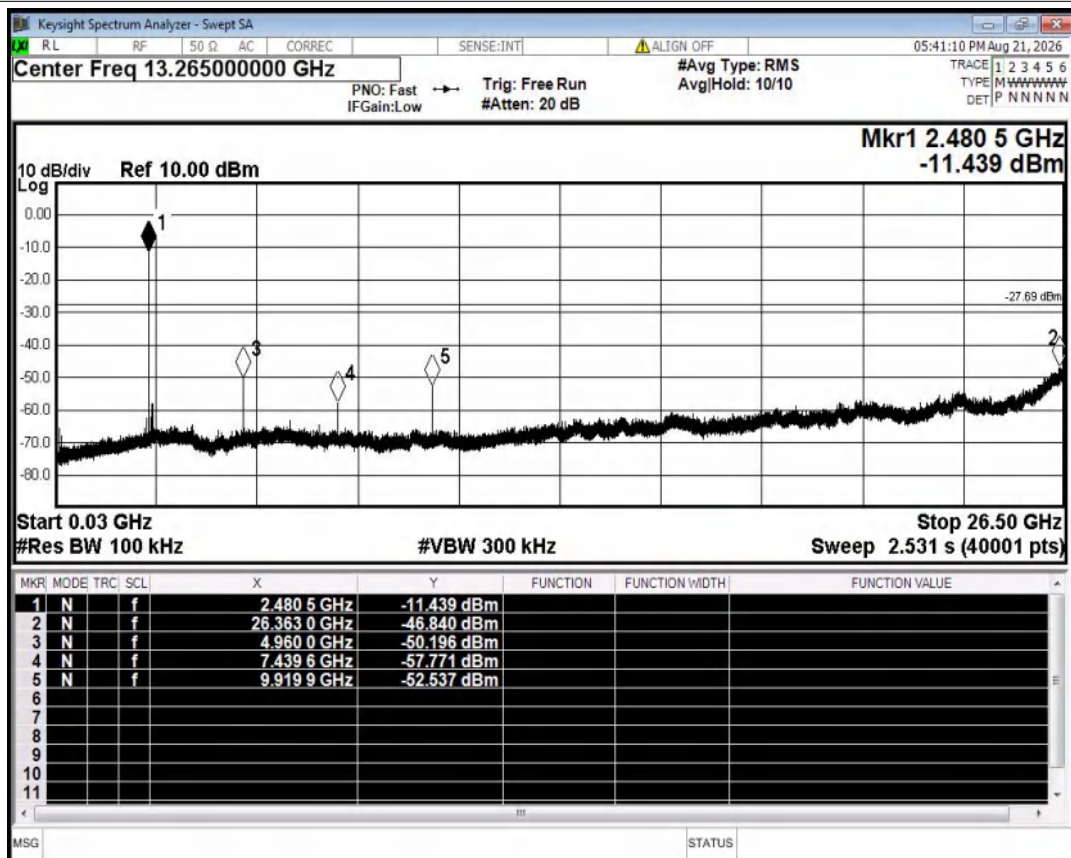
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref

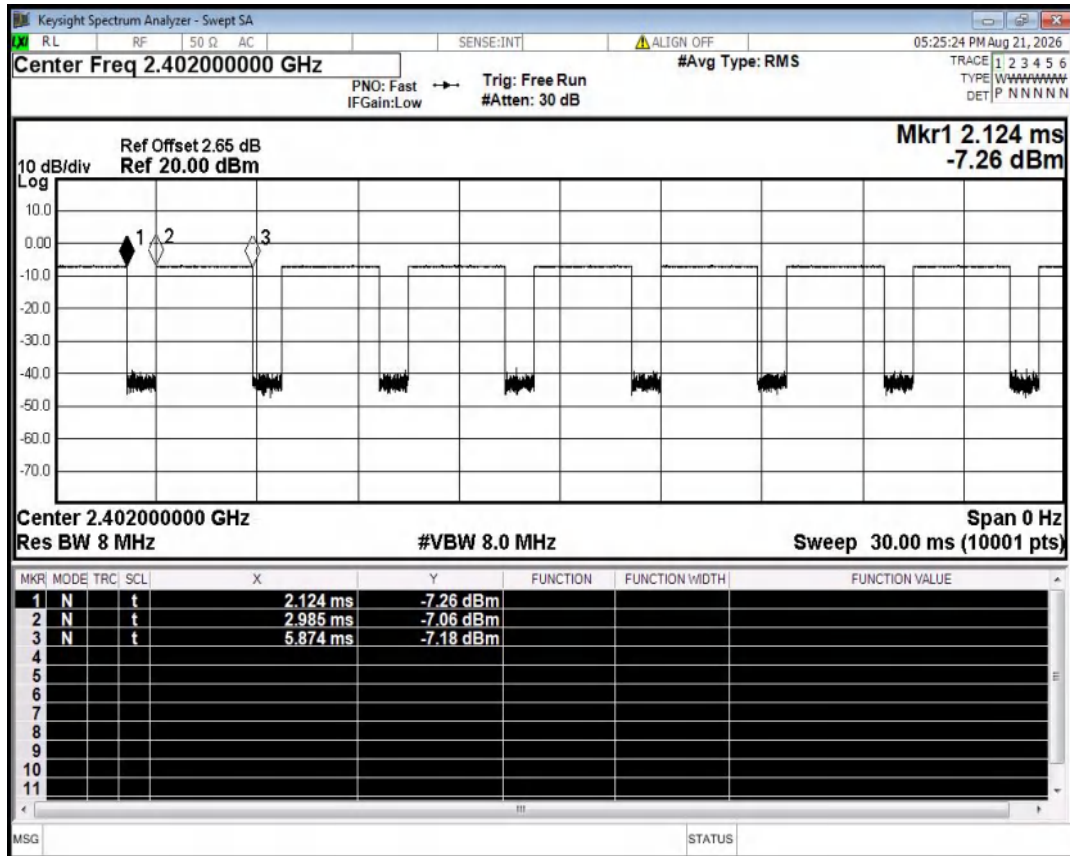


Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

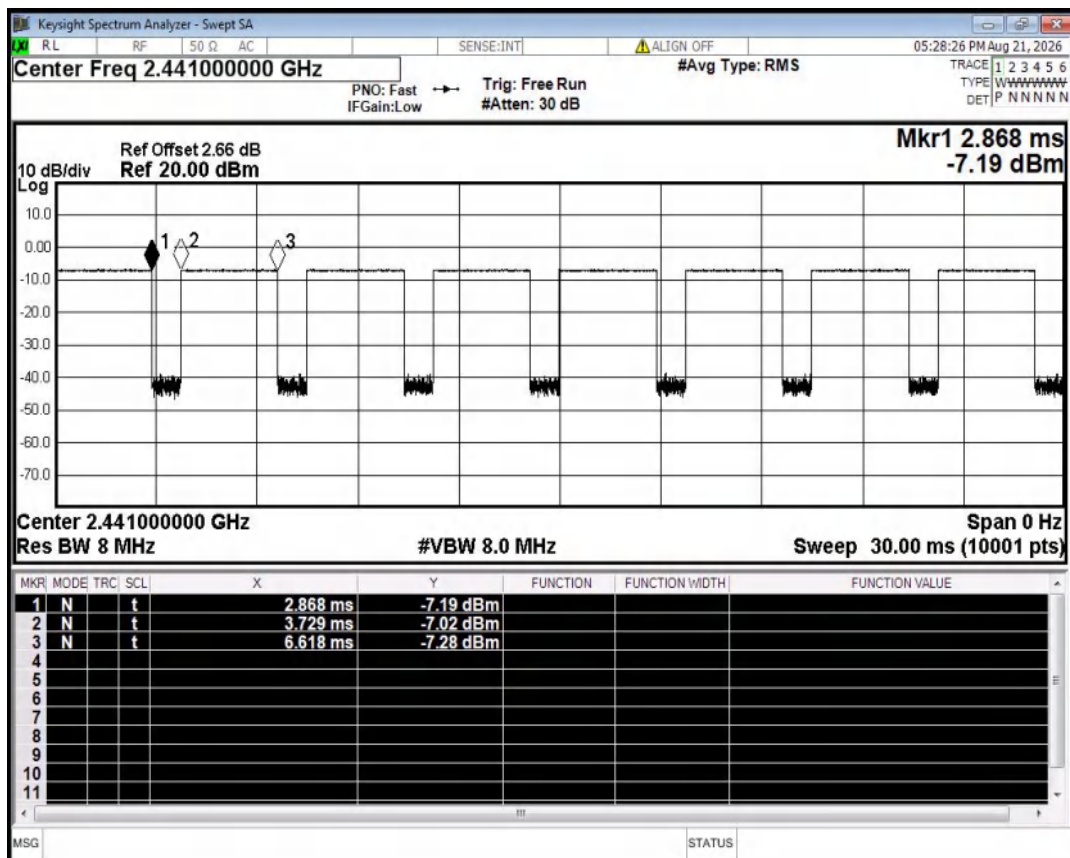


A.8 Duty Cycle

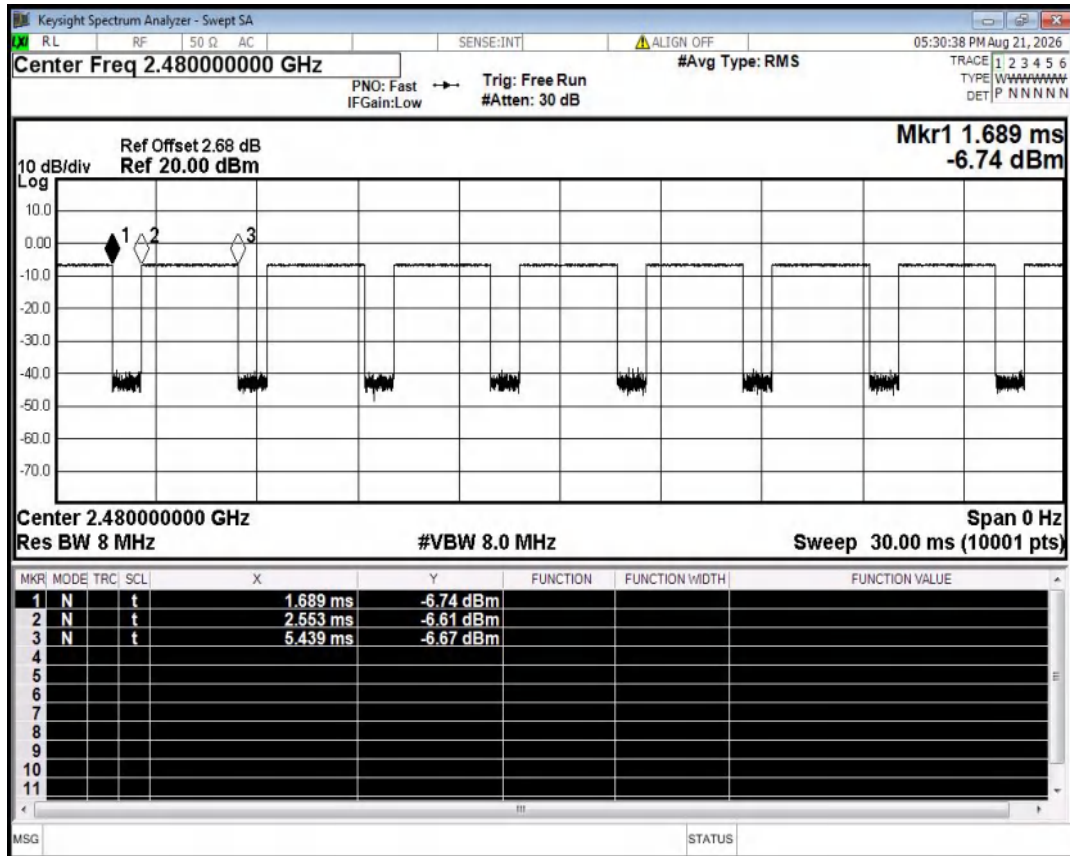
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.04	1.13	0.35
NVNT	1-DH5	2441	Ant1	77.04	1.13	0.35
NVNT	1-DH5	2480	Ant1	76.96	1.14	0.35
NVNT	2-DH5	2402	Ant1	77.12	1.13	0.35
NVNT	2-DH5	2441	Ant1	77.12	1.13	0.35
NVNT	2-DH5	2480	Ant1	77.12	1.13	0.35
NVNT	3-DH5	2402	Ant1	77.28	1.12	0.35
NVNT	3-DH5	2441	Ant1	77.2	1.12	0.35
NVNT	3-DH5	2480	Ant1	77.28	1.12	0.35



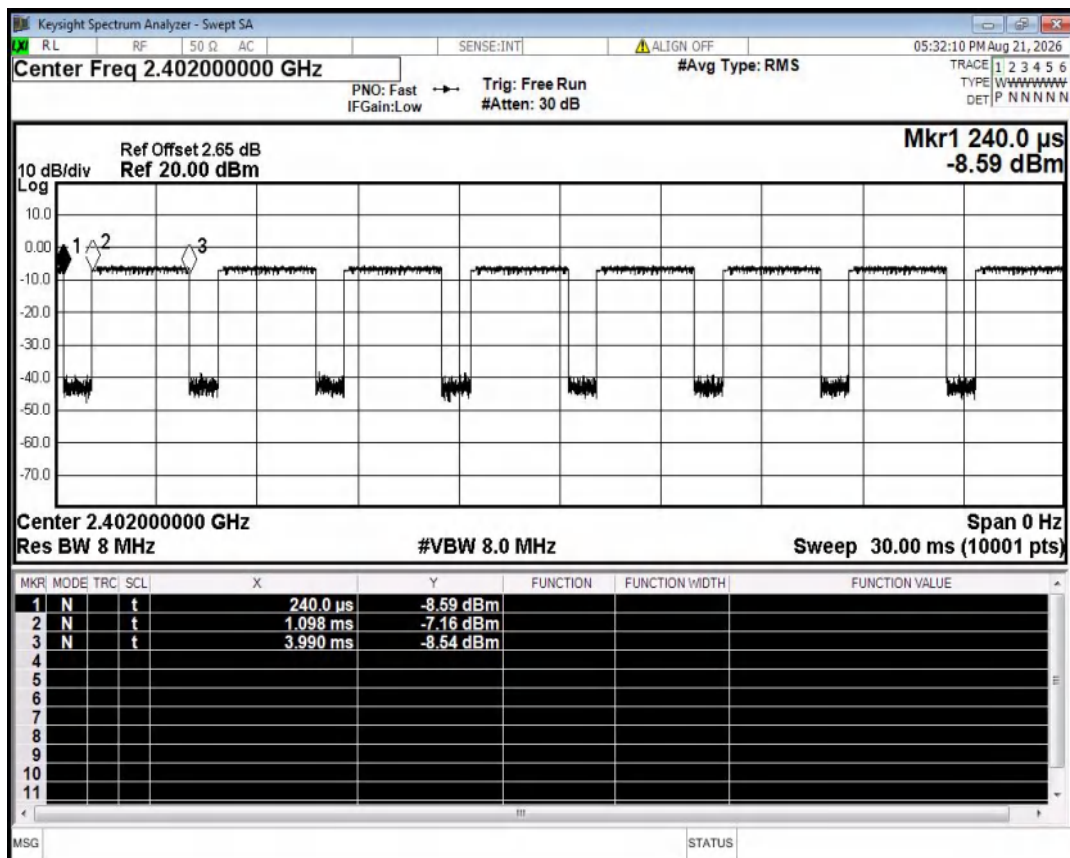
Duty Cycle NVNT 1-DH5 2402MHz Ant1



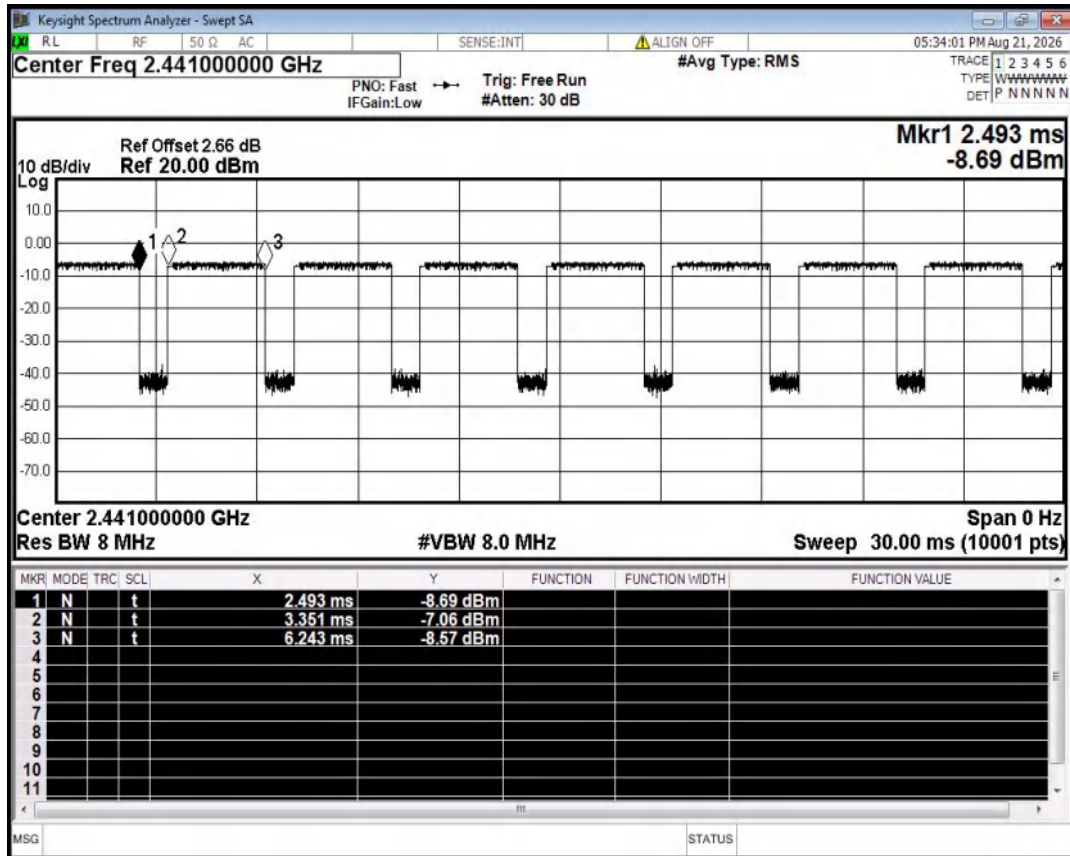
Duty Cycle NVNT 1-DH5 2441MHz Ant1



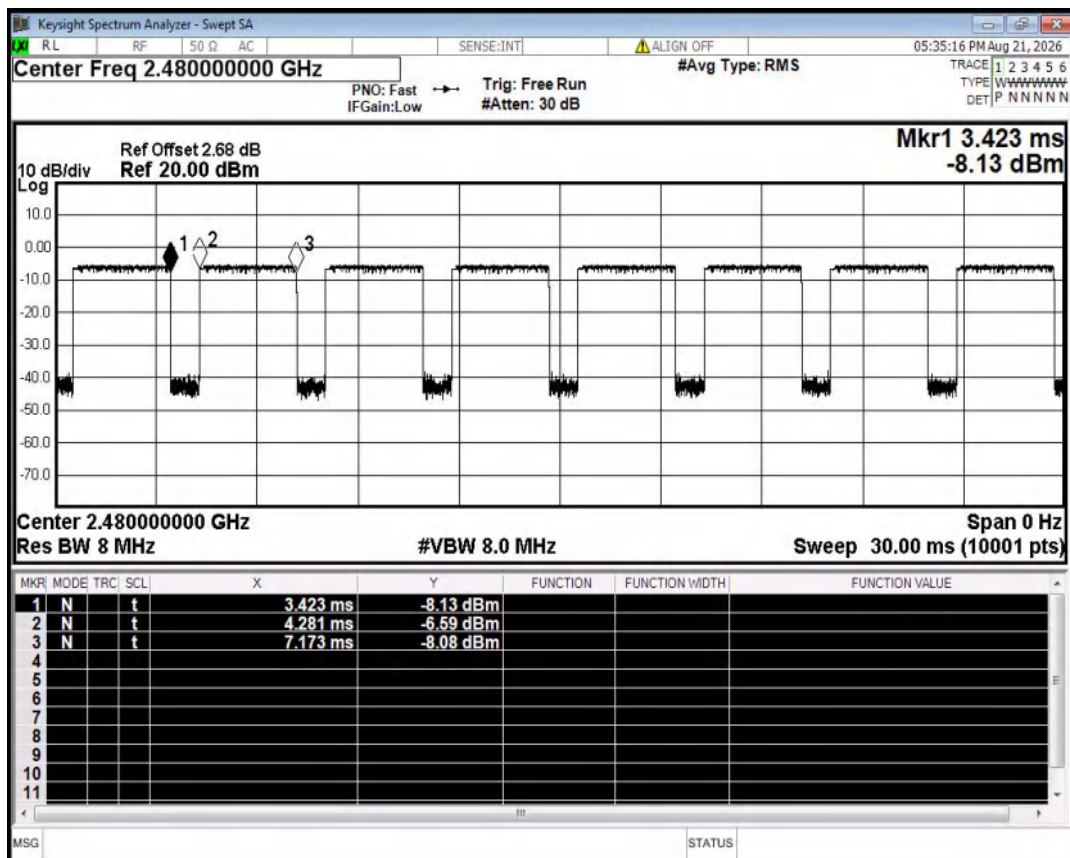
Duty Cycle NVNT 1-DH5 2480MHz Ant1



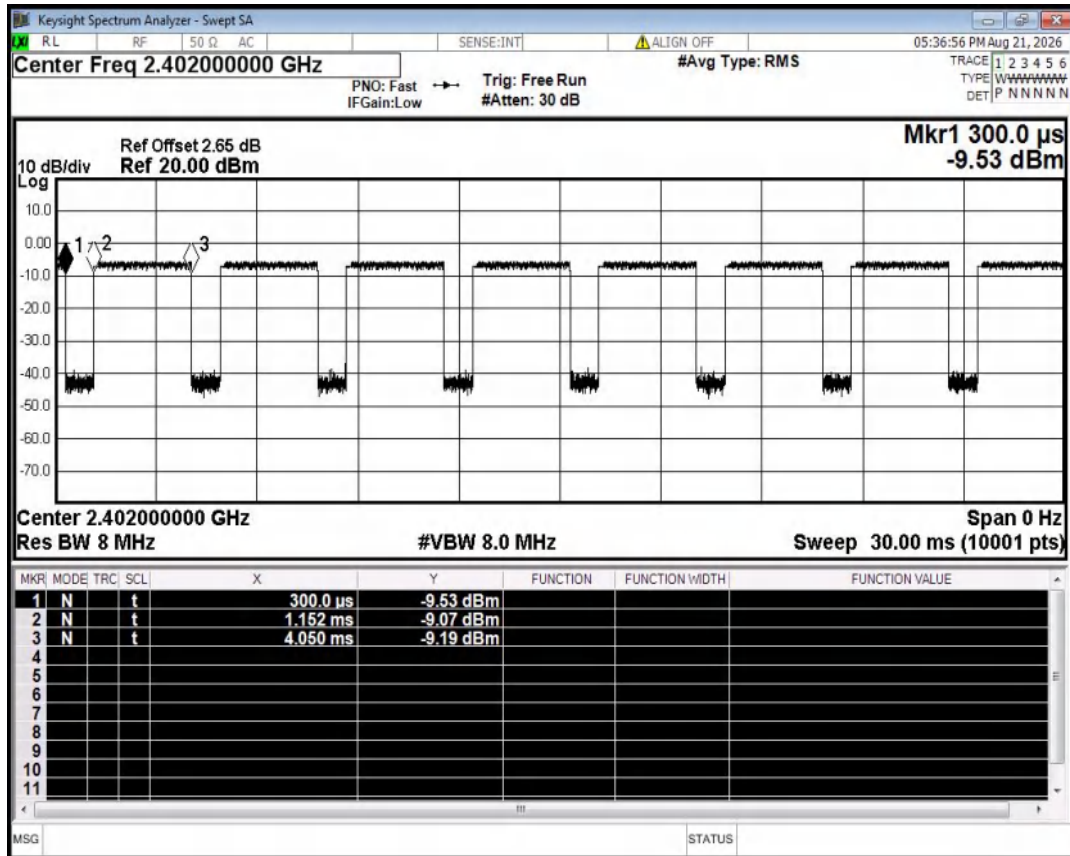
Duty Cycle NVNT 2-DH5 2402MHz Ant1



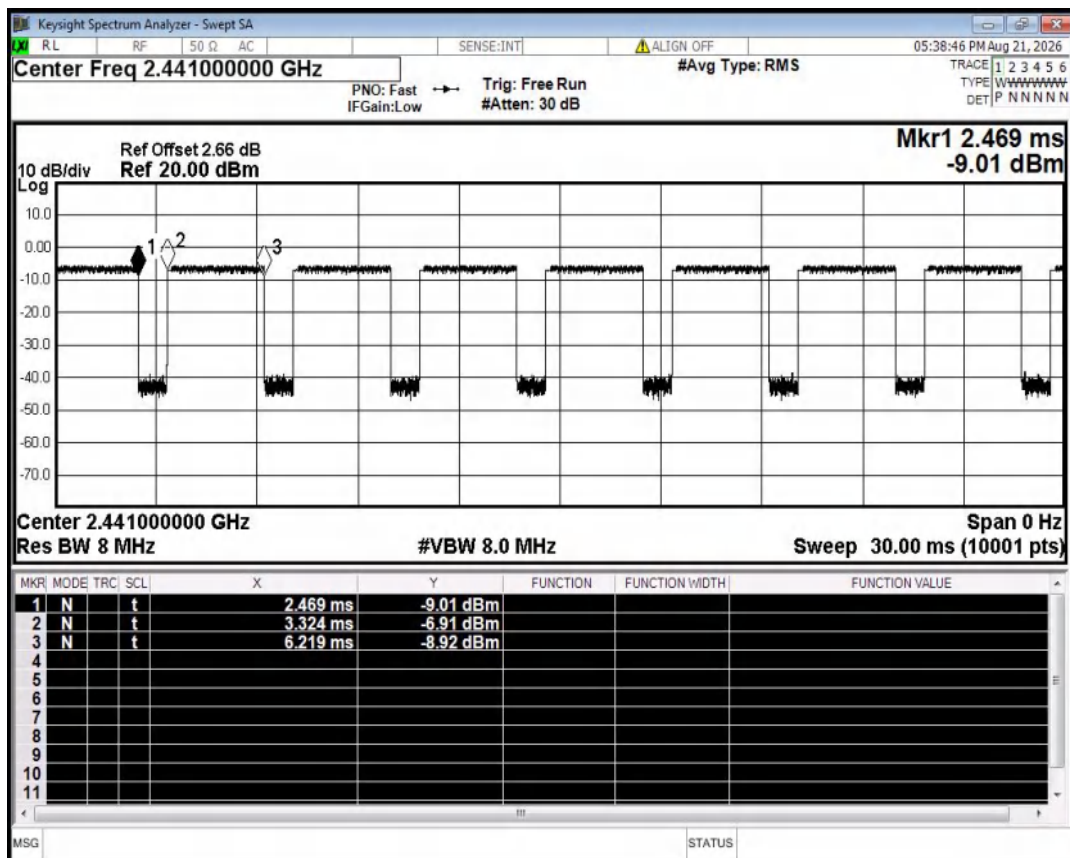
Duty Cycle NVNT 2-DH5 2441MHz Ant1



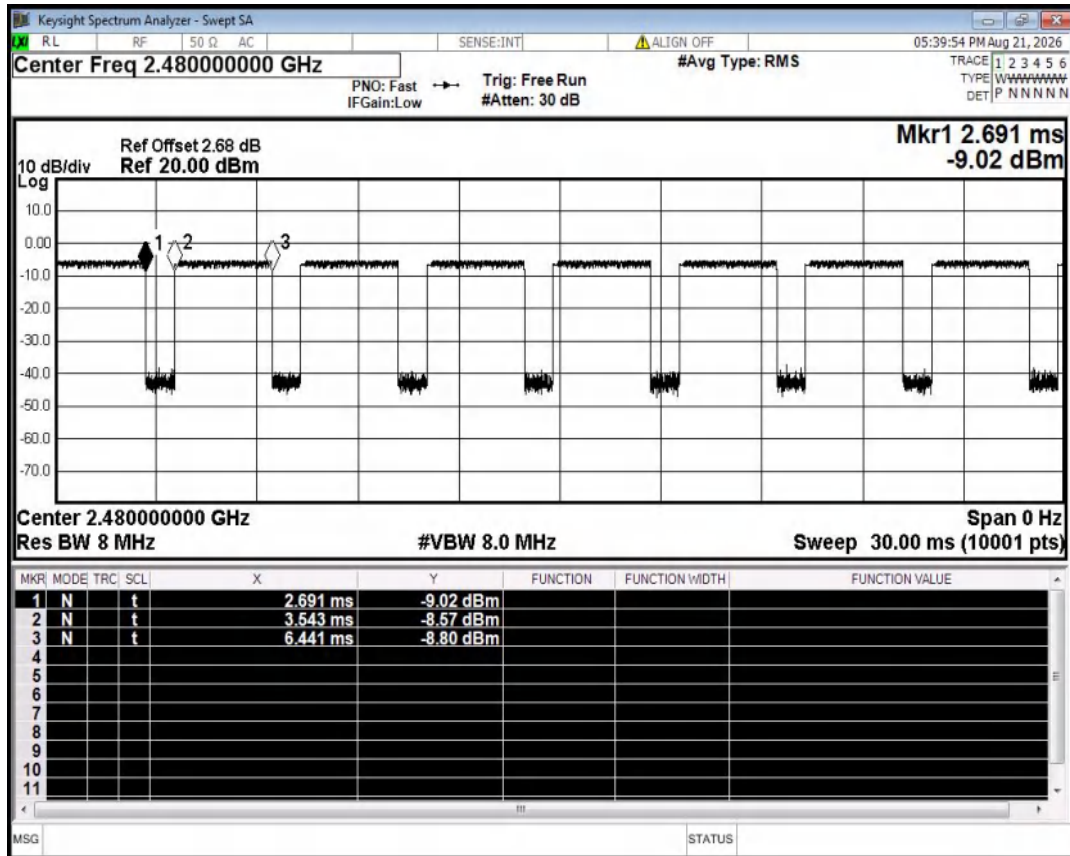
Duty Cycle NVNT 2-DH5 2480MHz Ant1



Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1

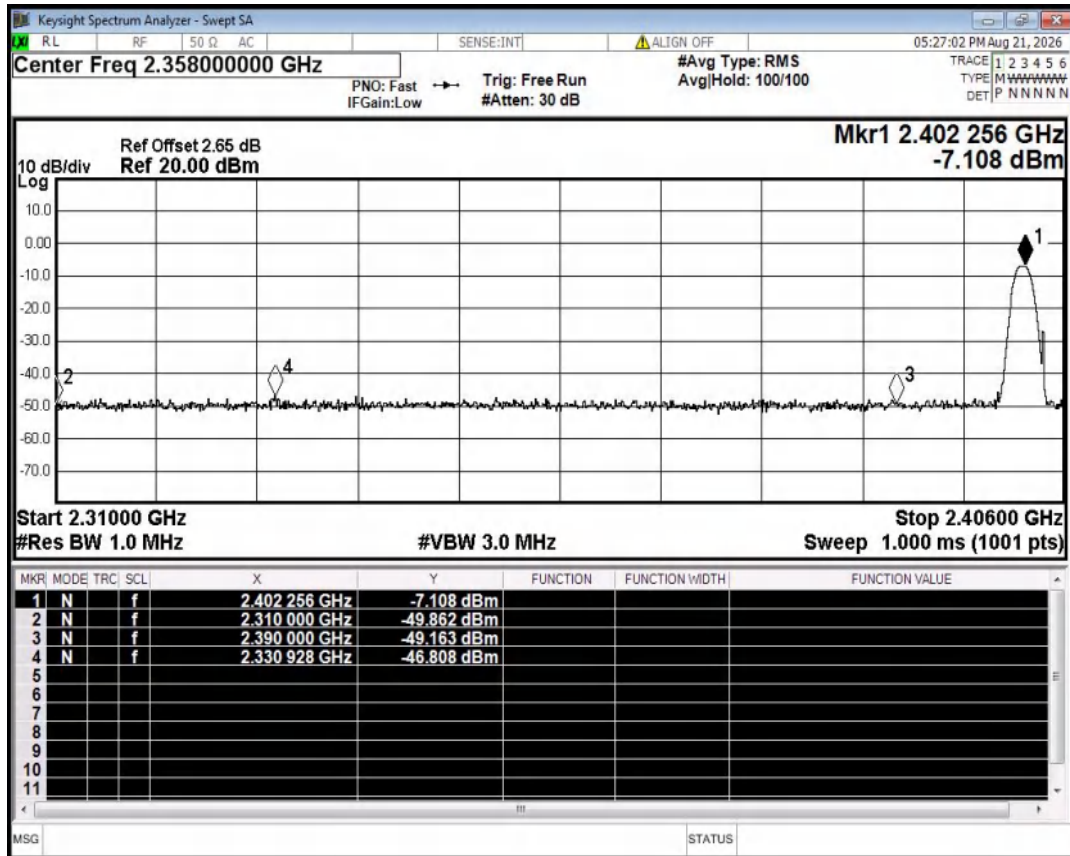


Duty Cycle NVNT 3-DH5 2480MHz Ant1

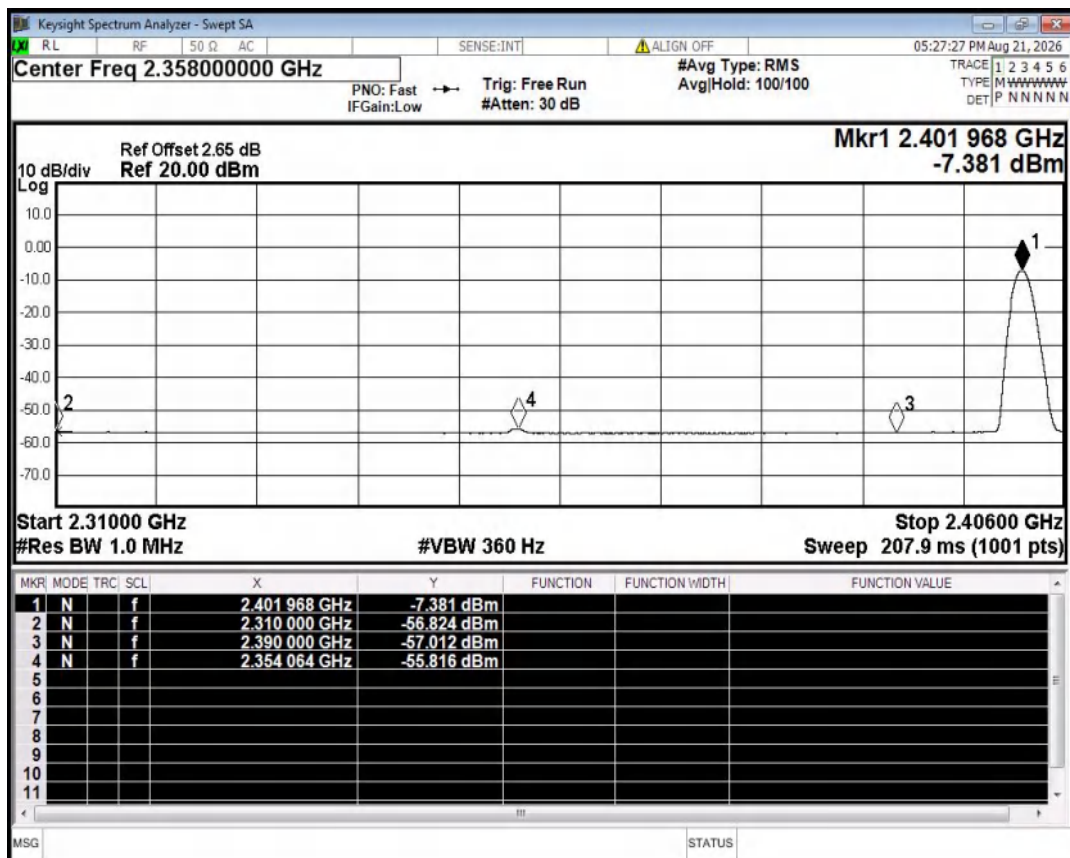


A.9 Restrict Band

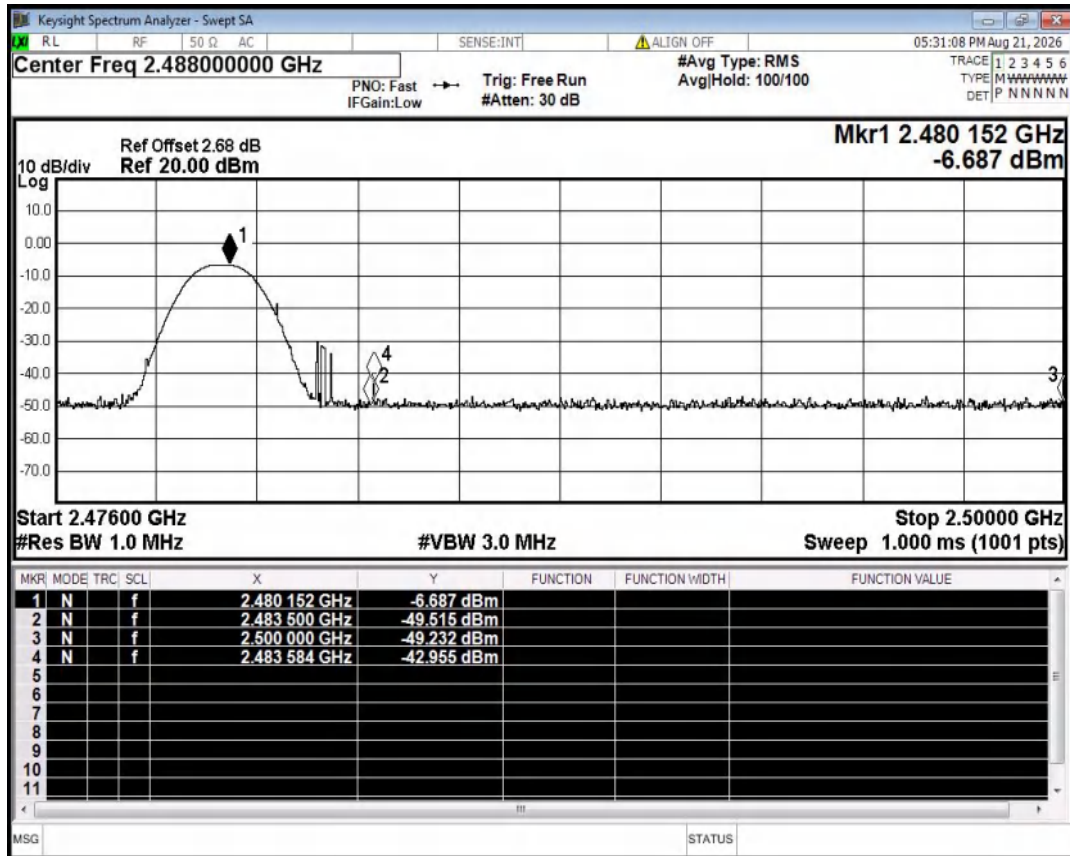
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-49.86	2	47.4	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-56.82	2	40.44	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2330.928	-46.8	2	50.46	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2354.064	-55.81	2	41.45	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.28	2	47.98	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-56.98	2	40.28	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.51	2	47.75	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-56.41	2	40.85	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.584	-42.95	2	54.31	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.512	-56.41	2	40.85	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.23	2	48.03	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-56.72	2	40.54	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-49.22	2	48.04	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-56.87	2	40.39	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2322.672	-45.49	2	51.77	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2353.968	-56.14	2	41.12	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-48.45	2	48.81	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-56.92	2	40.34	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-51	2	46.26	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-56.28	2	40.98	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.016	-41.7	2	55.56	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.512	-56.28	2	40.98	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-50.95	2	46.31	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-56.8	2	40.46	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-48.64	2	48.62	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-56.9	2	40.36	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2311.248	-47.36	2	49.9	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2353.968	-56.13	2	41.13	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-49.43	2	47.83	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-56.93	2	40.33	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-49.16	2	48.1	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-56.33	2	40.93	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.944	-42.37	2	54.89	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.512	-56.33	2	40.93	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-49.26	2	48	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-56.77	2	40.49	Average	54	Pass



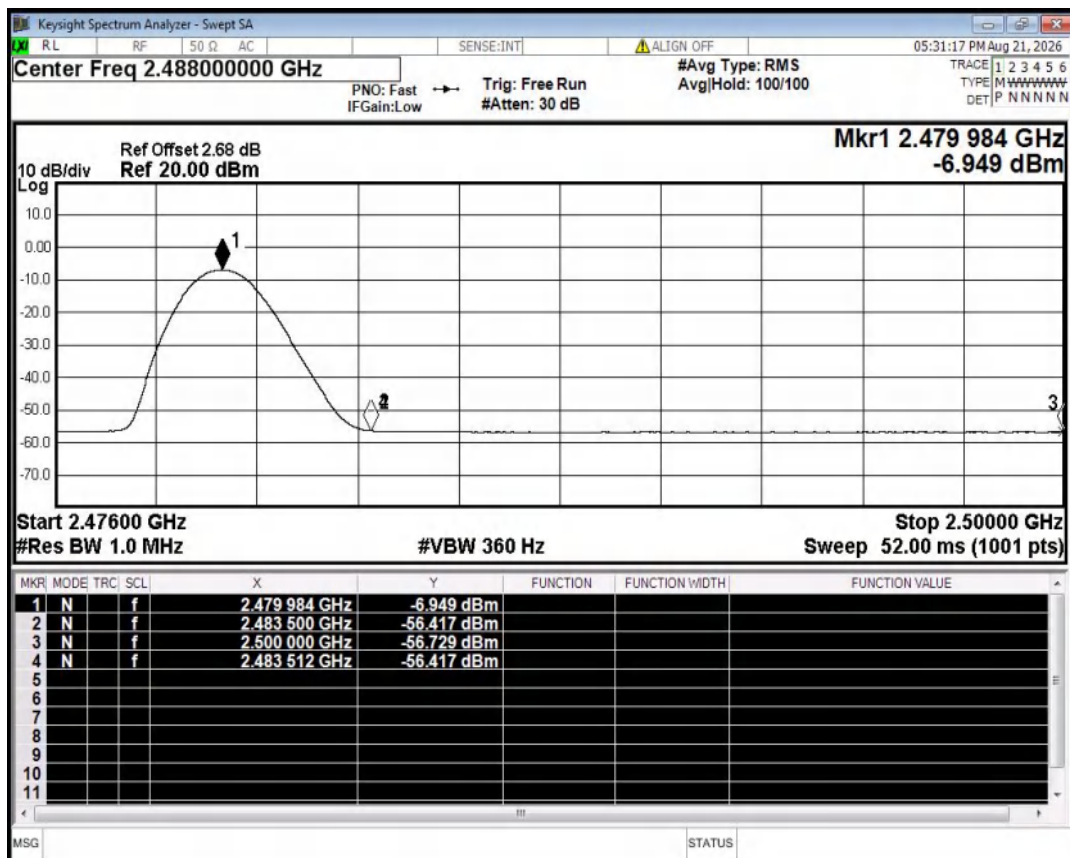
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



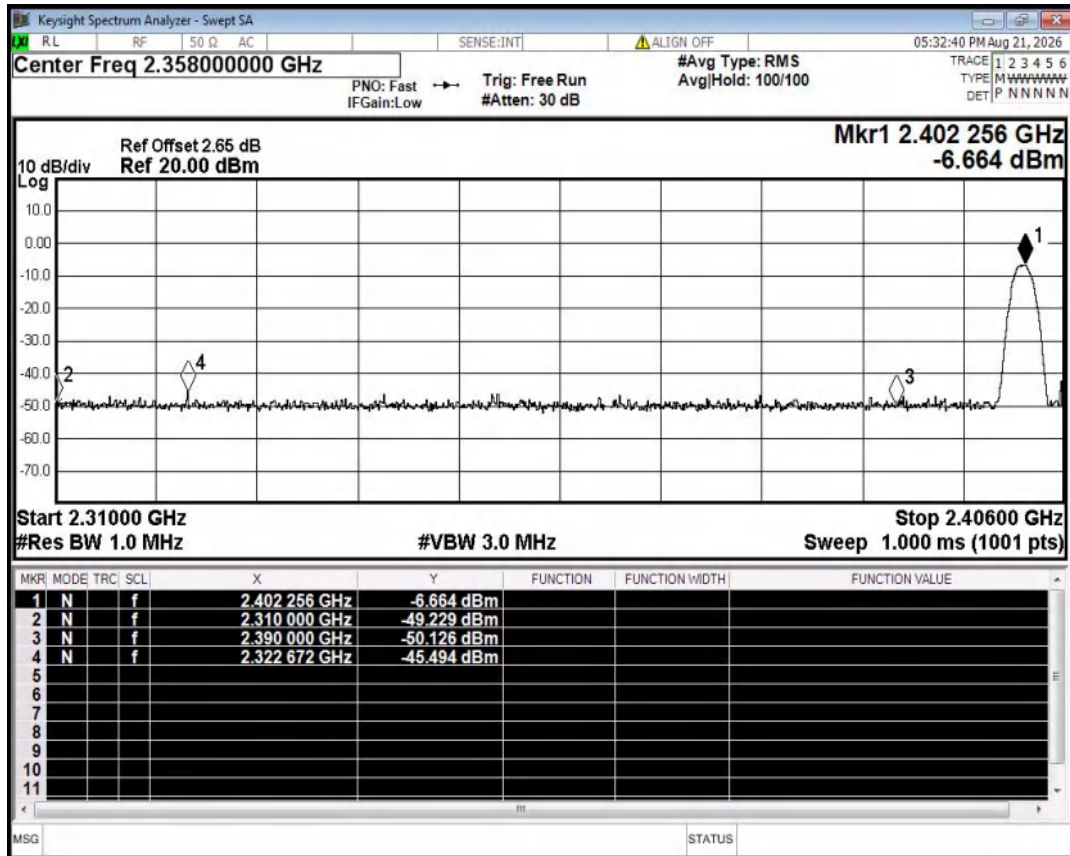
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



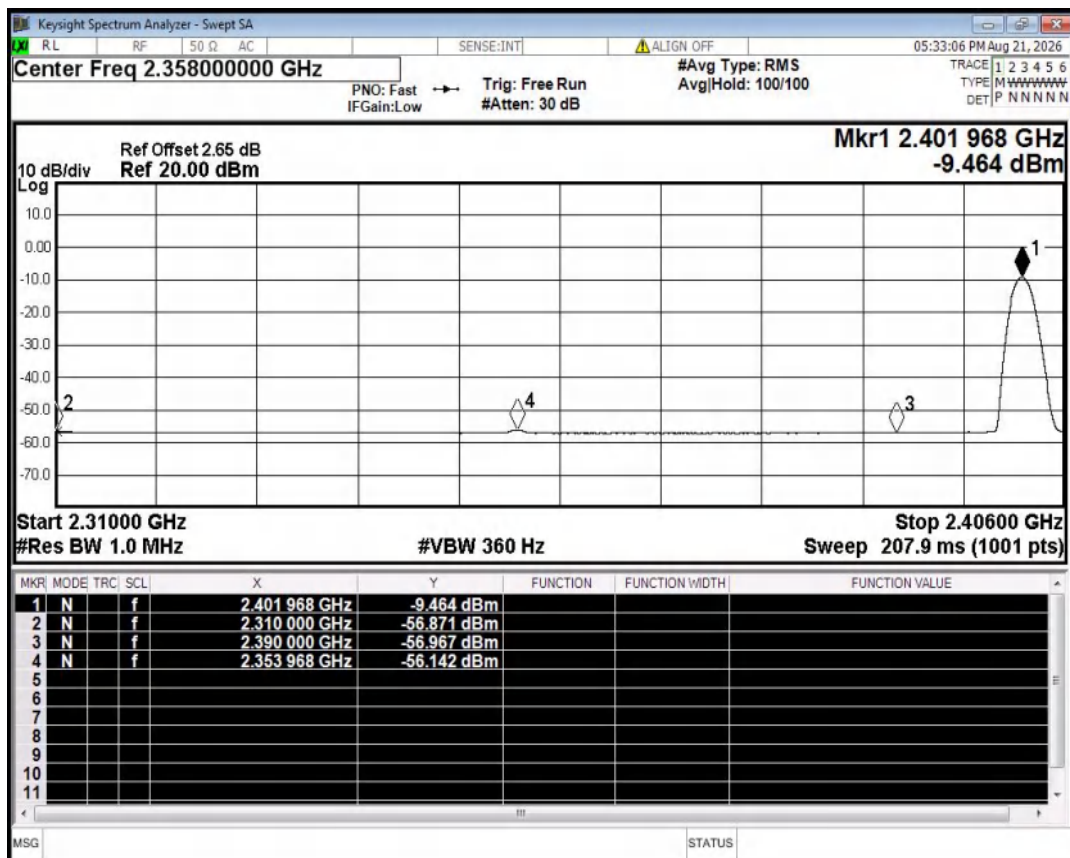
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



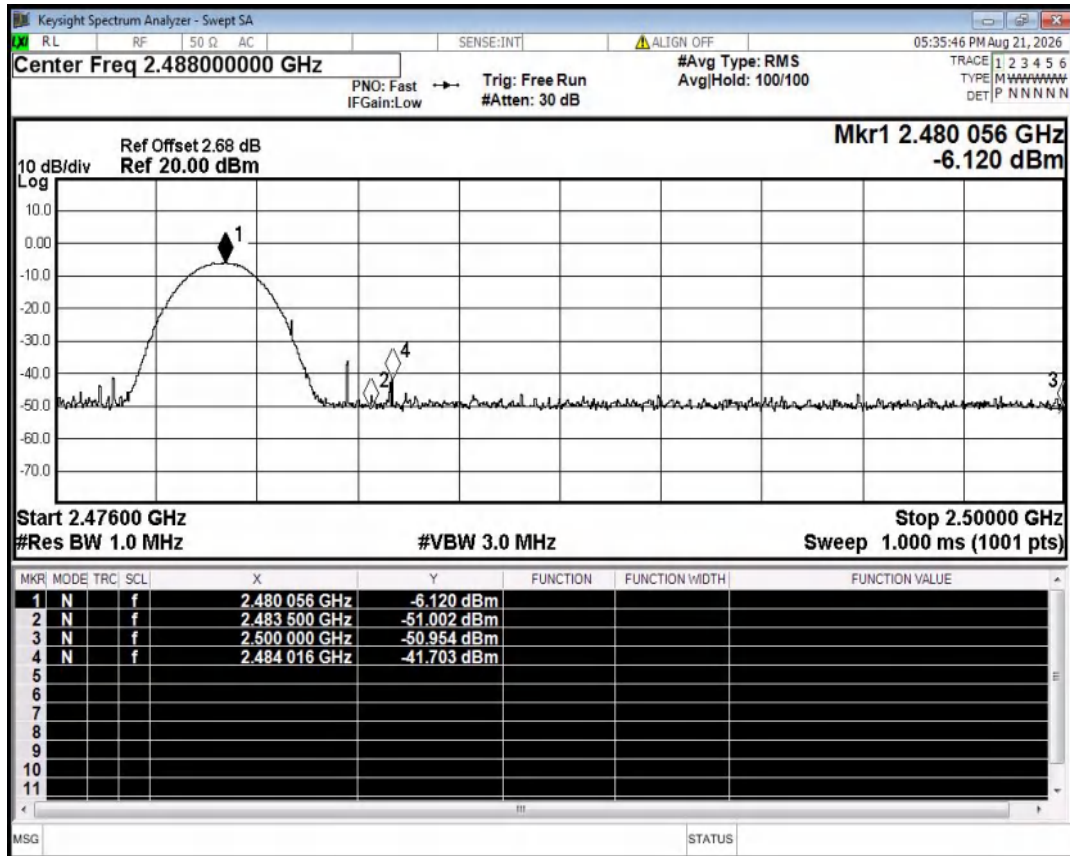
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



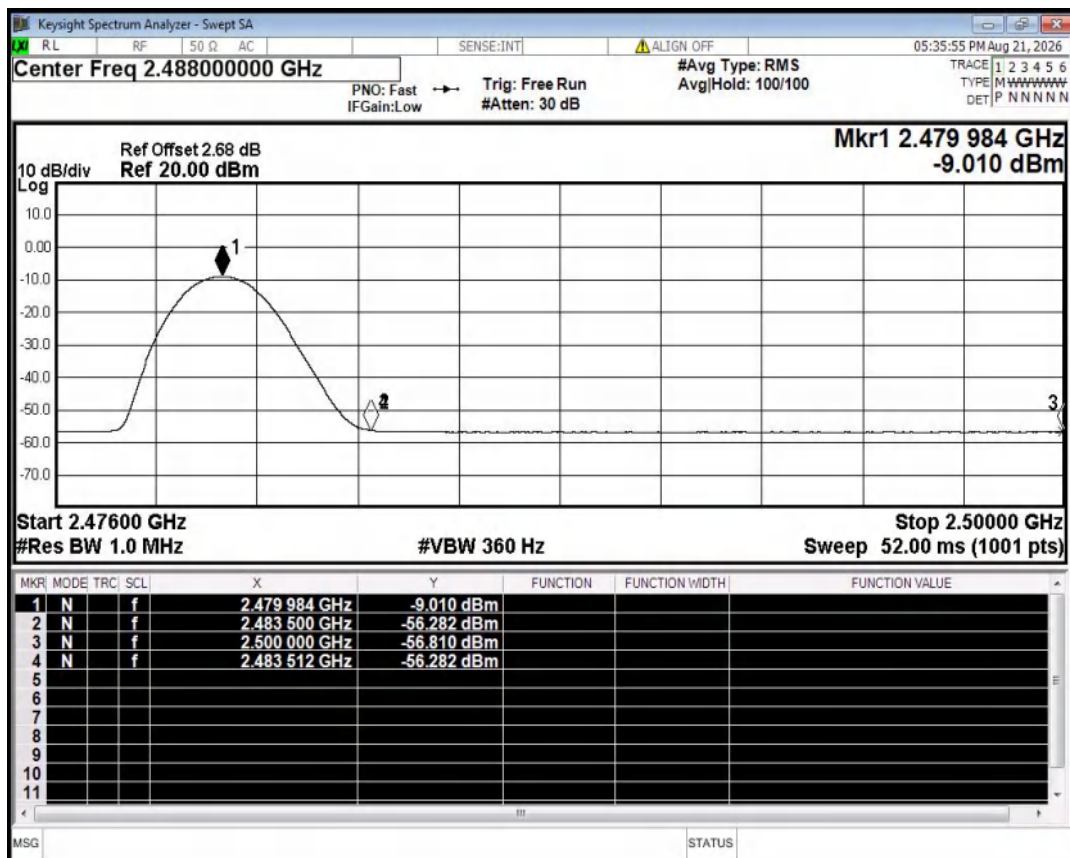
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



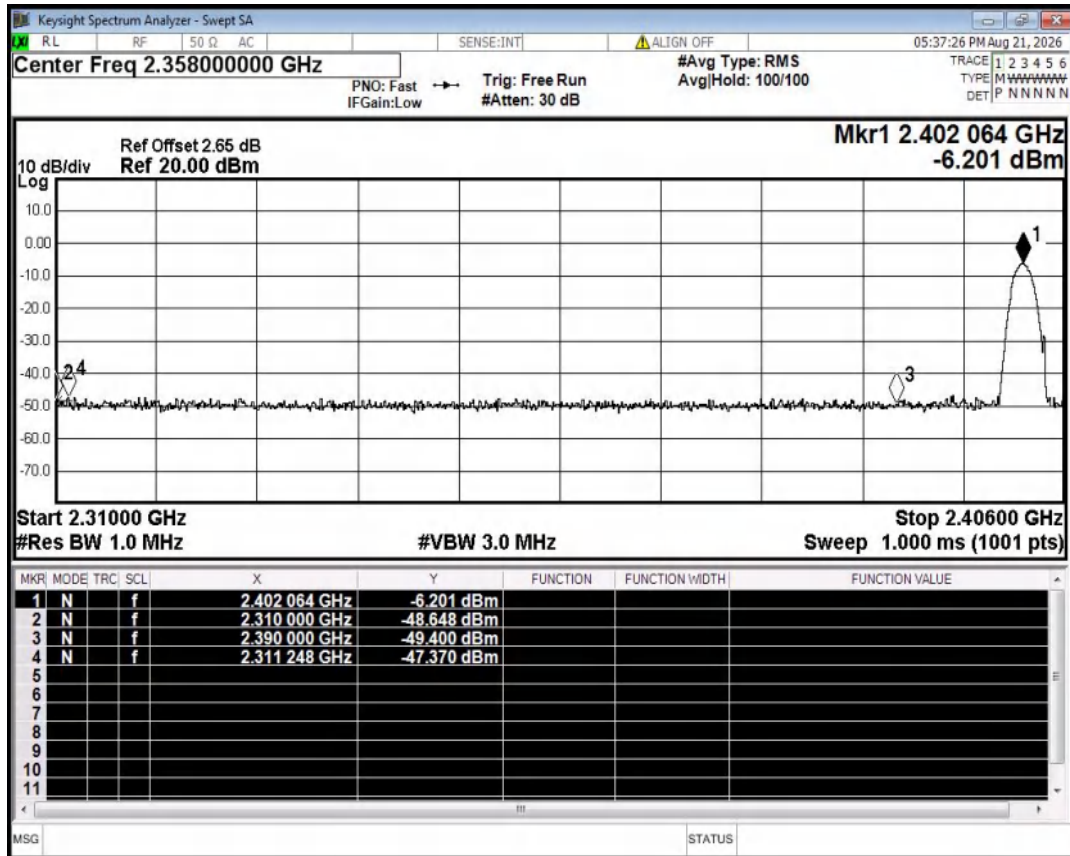
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



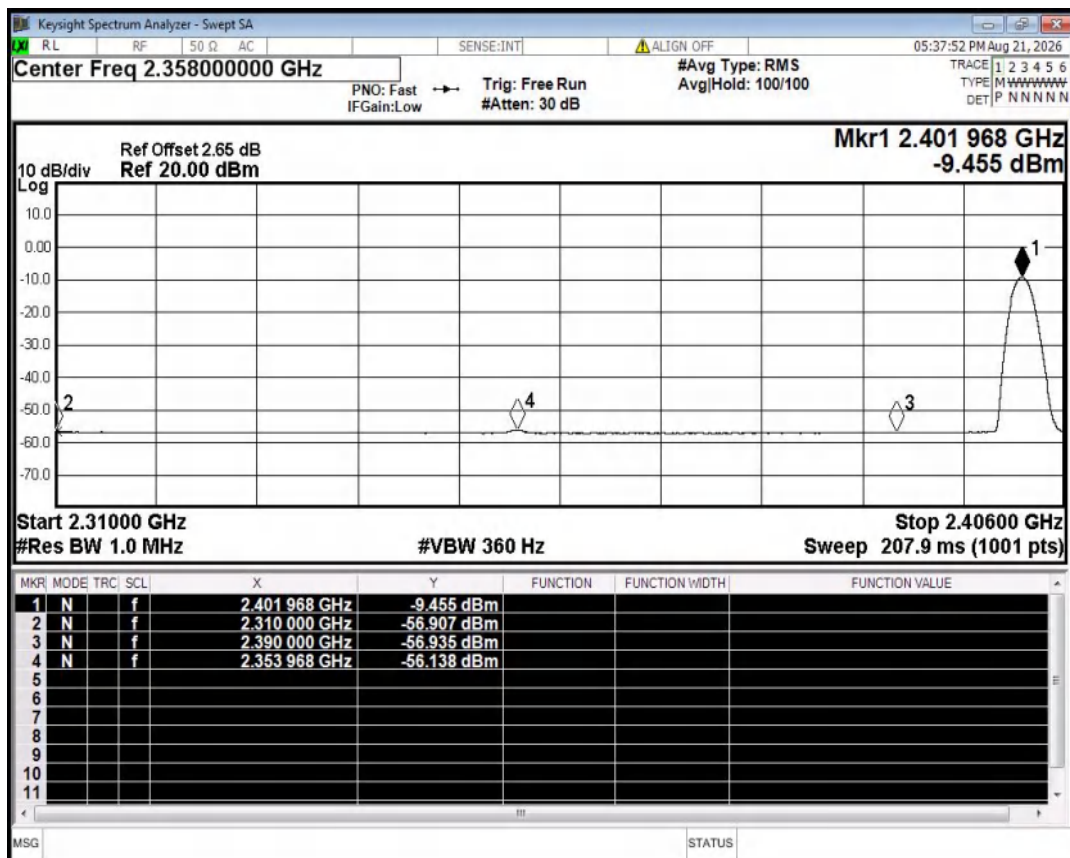
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



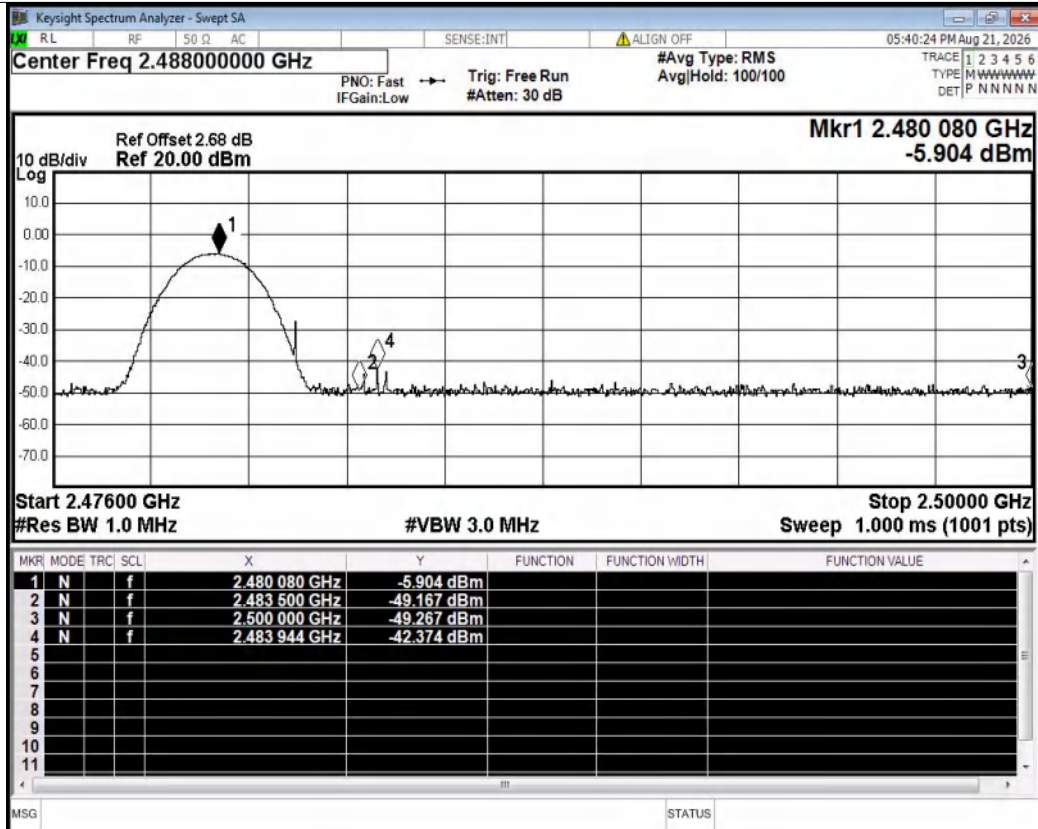
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



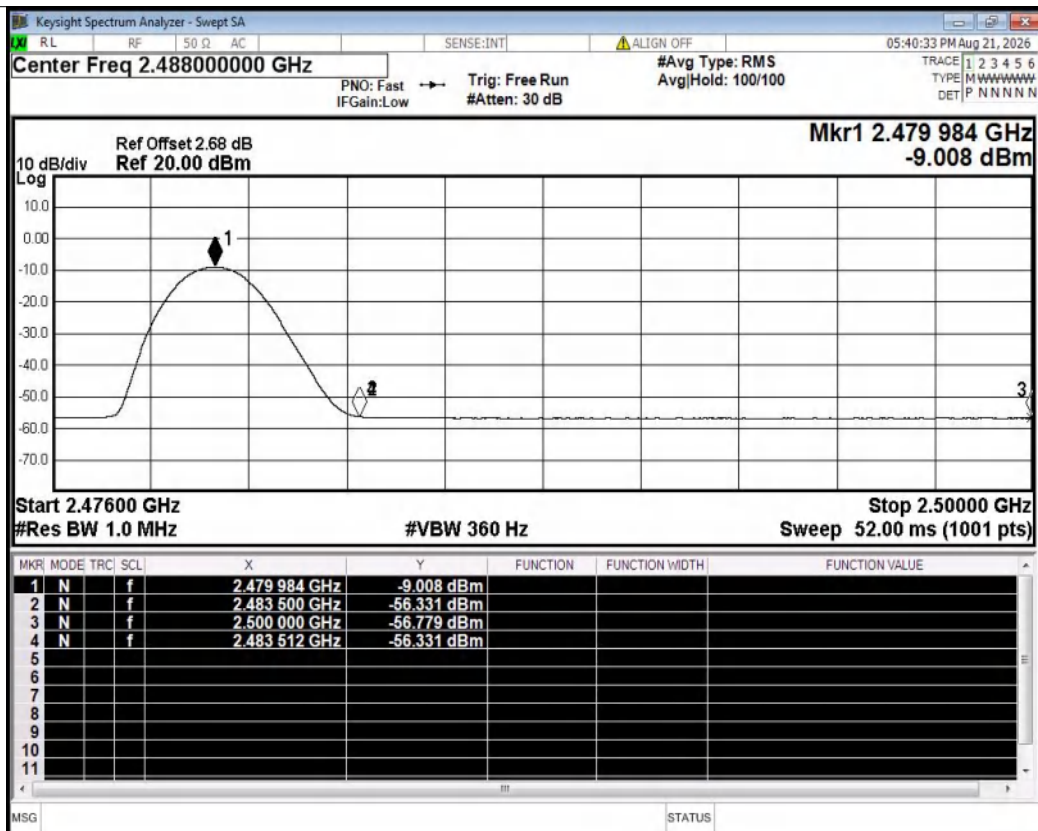
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



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