

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	KTV Earphone
Test Model:	HJWK1000
Sample ID:	HC-C-202403-0335-02-01
Environmental Conditions	
Temperature:	24.6℃
Relative Humidity:	52.6%
Test Voltage:	DC 3.7V
Test Engineer:	MikeYan
Note: For a more detailed features description, please refer to the report TBR-C-202403-0335-8 The report only show the worst case data.	

Contents

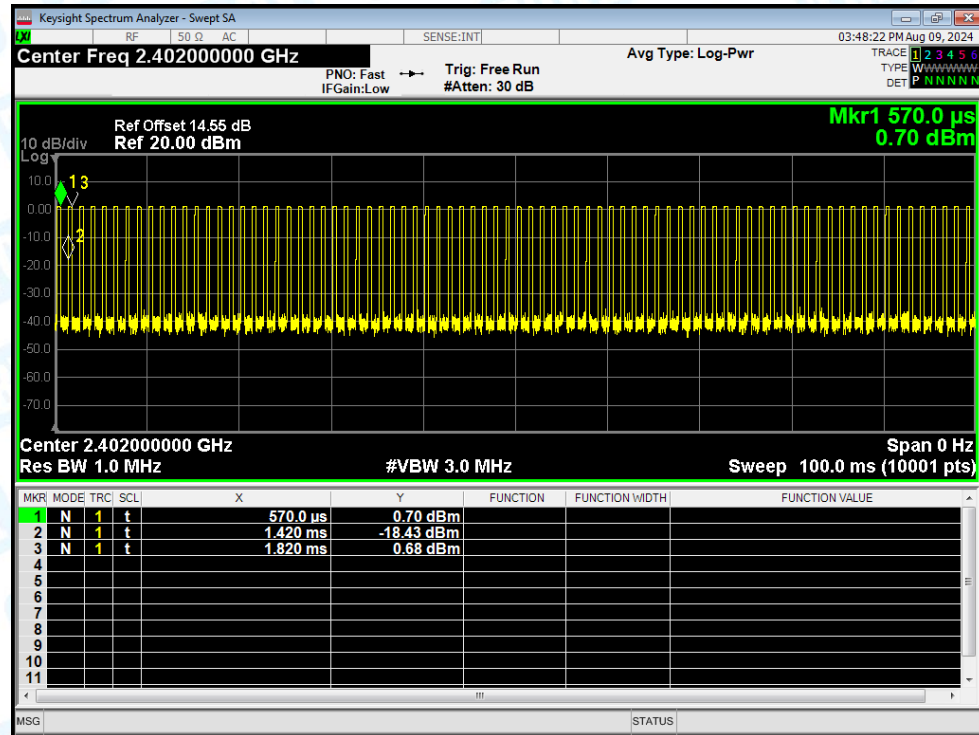
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1. Duty Cycle

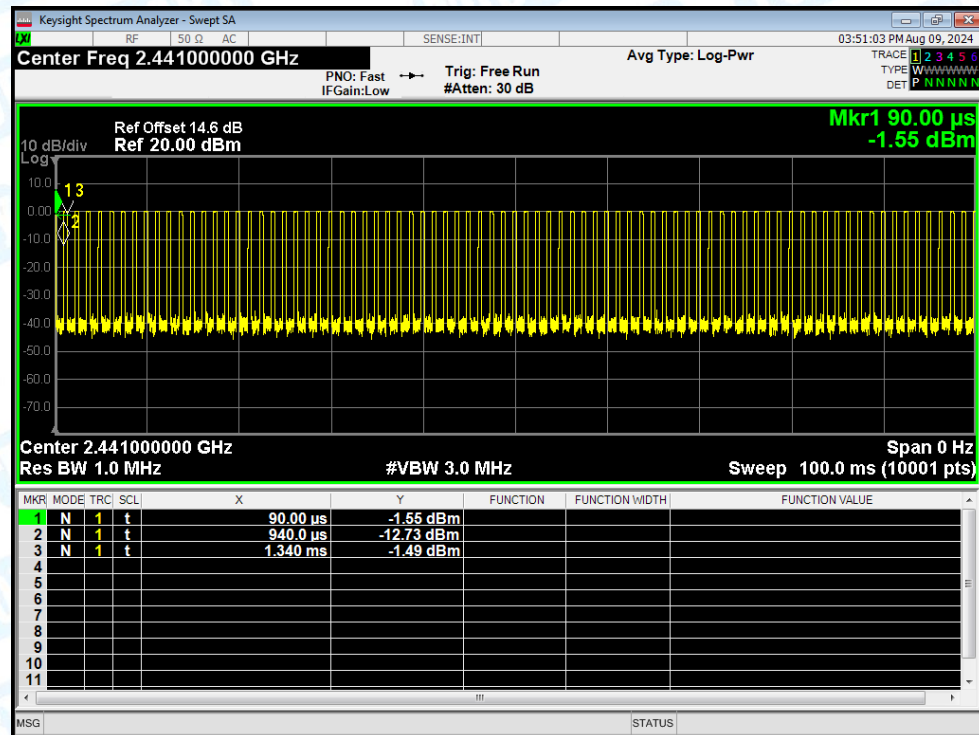
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	32	4.95	2.5
NVNT	1-DH1	2441	Ant1	32	4.95	2.5
NVNT	1-DH1	2480	Ant1	32	4.95	2.5
NVNT	2-DH1	2402	Ant1	32.8	4.84	2.44
NVNT	2-DH1	2441	Ant1	32.8	4.84	2.44
NVNT	2-DH1	2480	Ant1	32.8	4.84	2.44
NVNT	3-DH1	2402	Ant1	32.8	4.84	2.44
NVNT	3-DH1	2441	Ant1	32.8	4.84	2.44
NVNT	3-DH1	2480	Ant1	32.8	4.84	2.44

Test Graphs

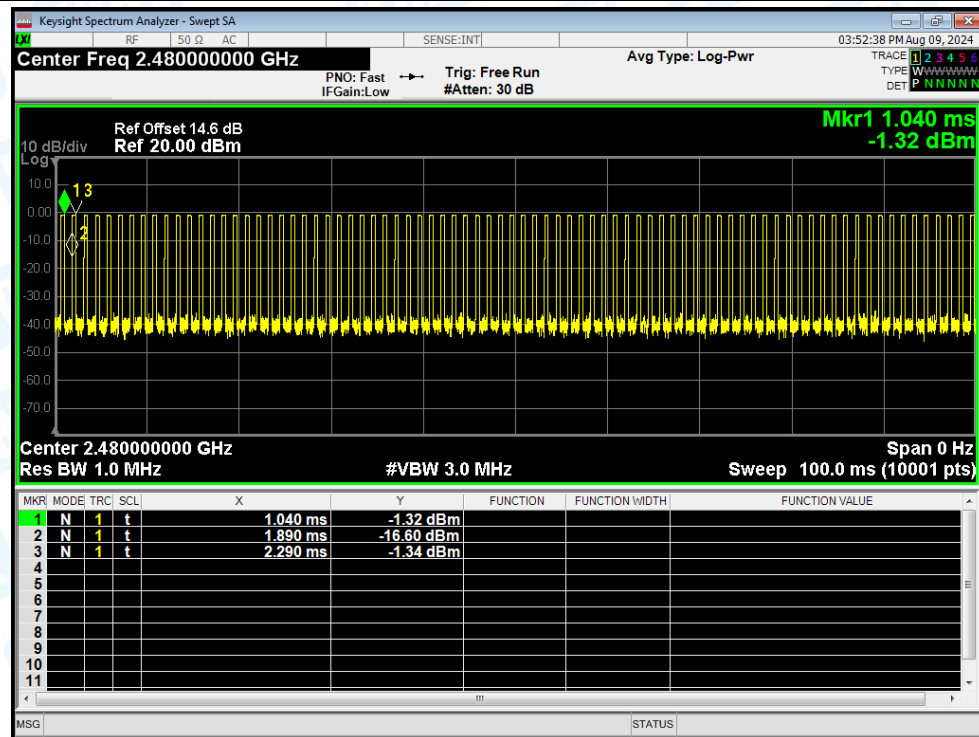
Duty Cycle NVNT 1-DH1 2402MHz Ant1



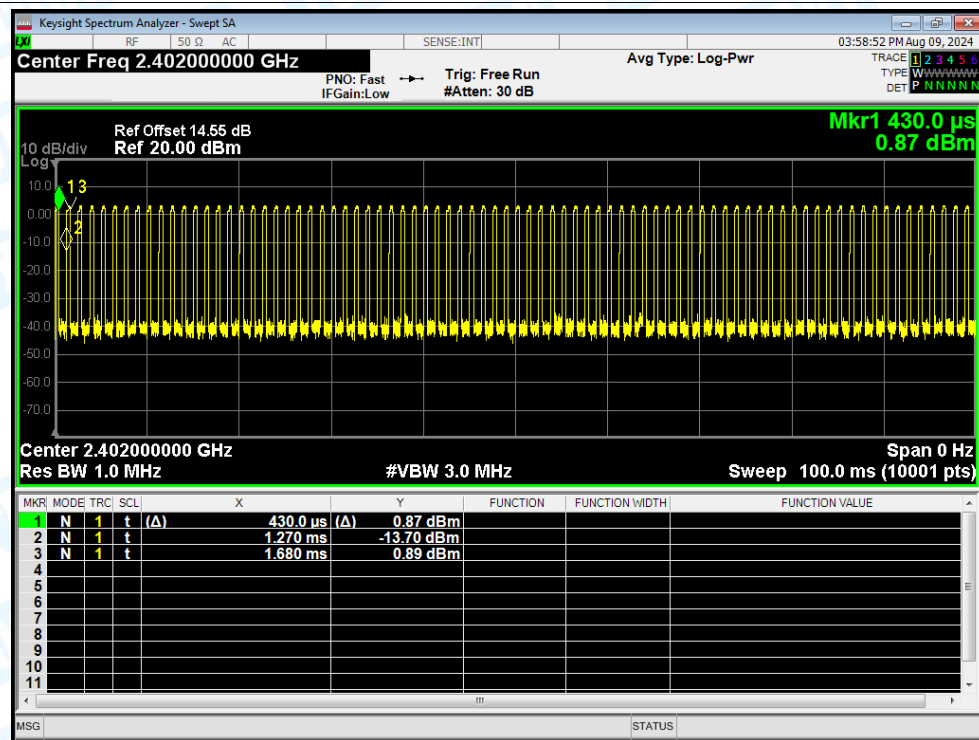
Duty Cycle NVNT 1-DH1 2441MHz Ant1



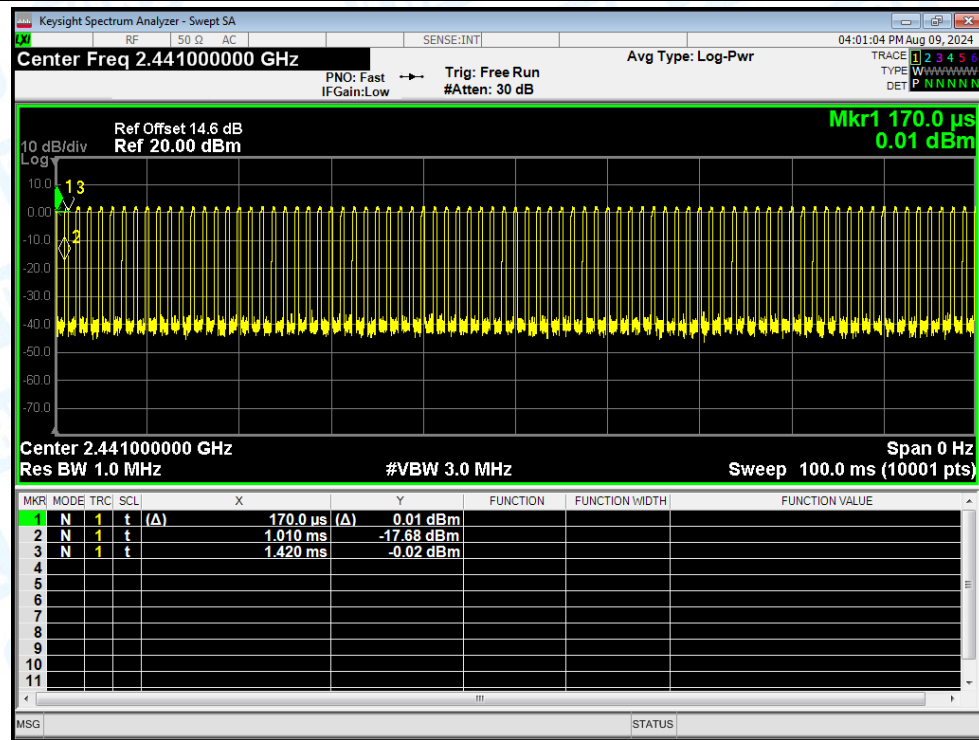
Duty Cycle NVNT 1-DH1 2480MHz Ant1



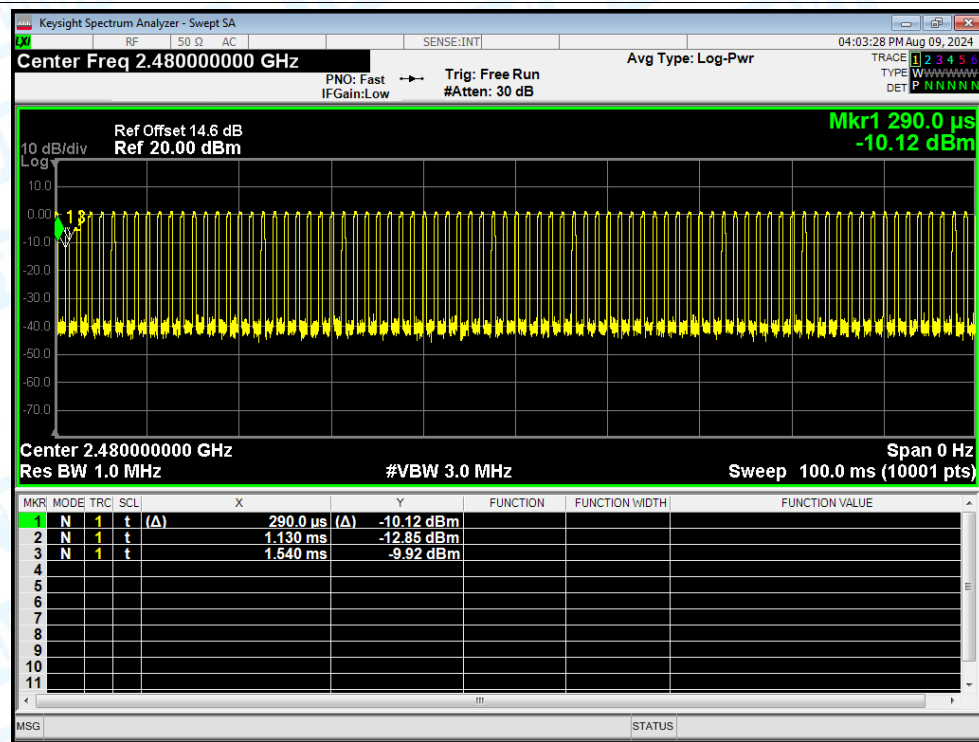
Duty Cycle NVNT 2-DH1 2402MHz Ant1



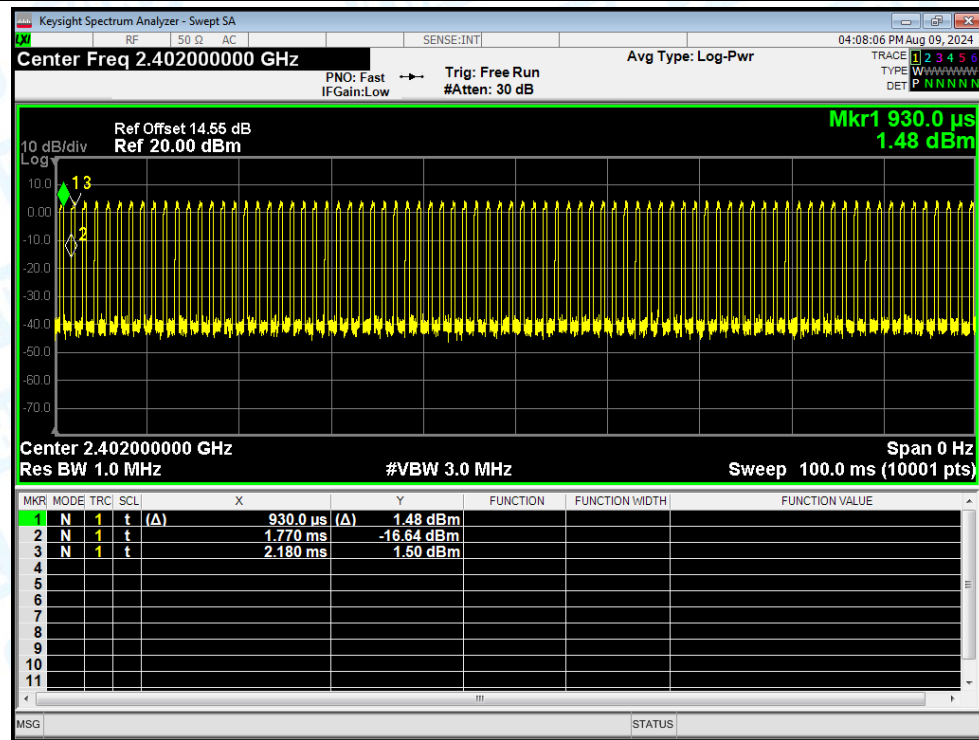
Duty Cycle NVNT 2-DH1 2441MHz Ant1



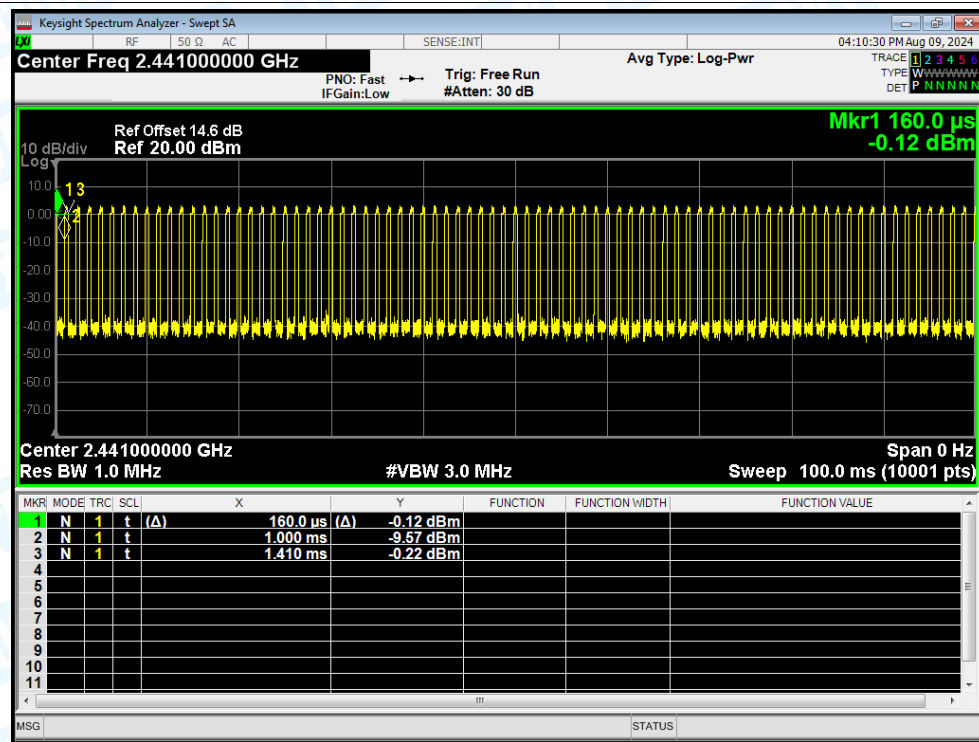
Duty Cycle NVNT 2-DH1 2480MHz Ant1

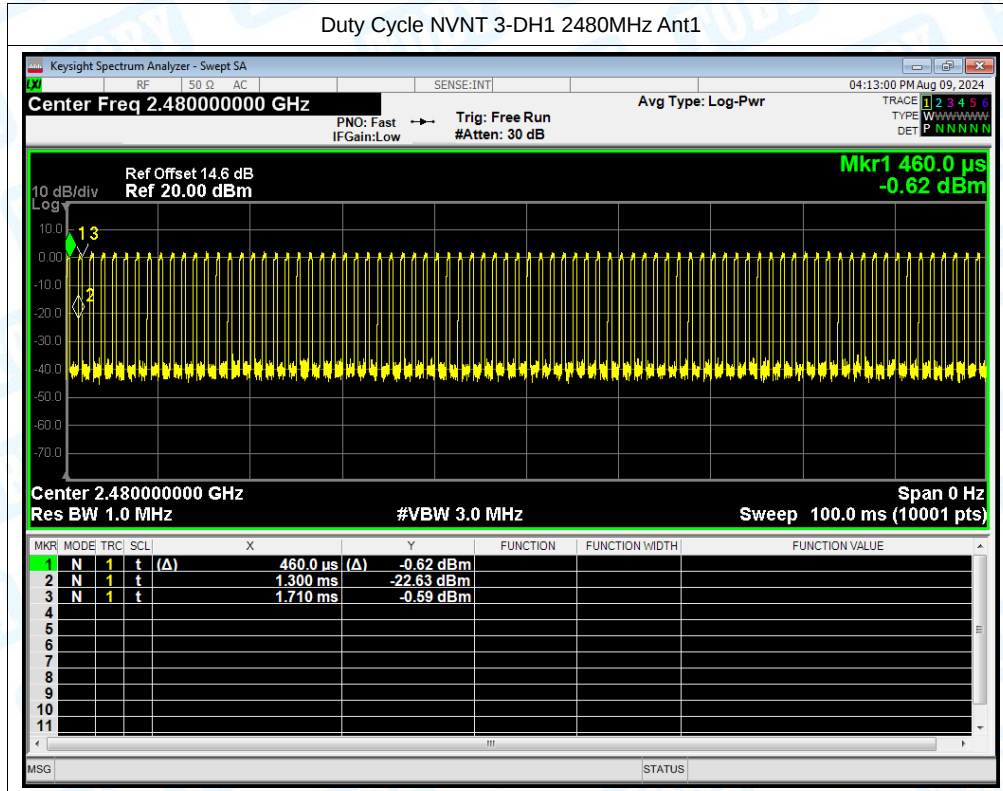


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



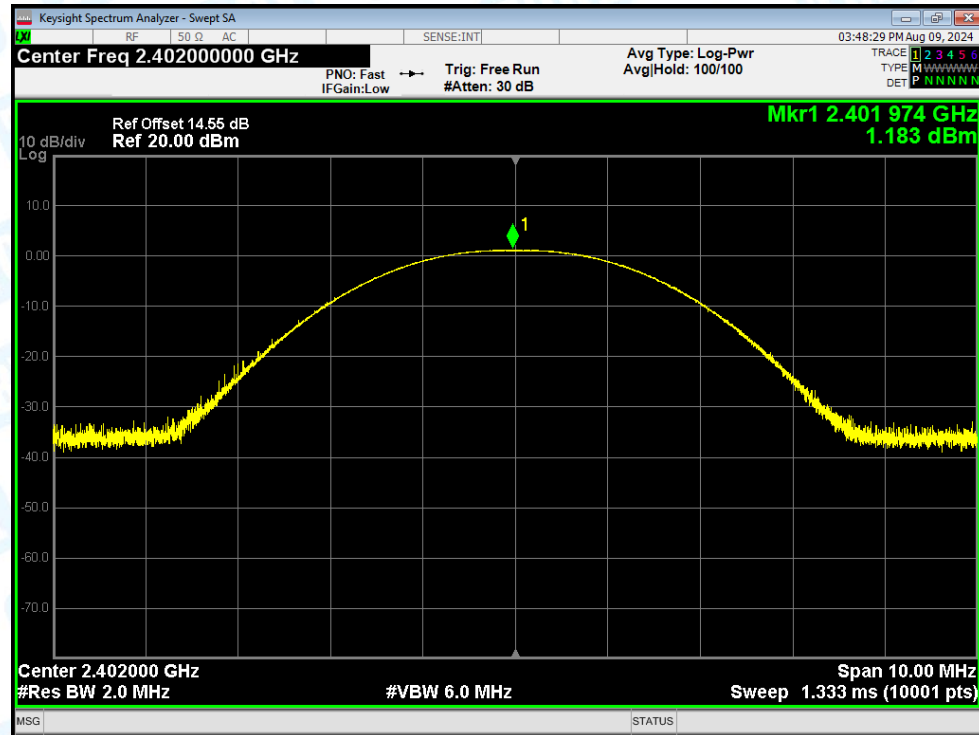


2. Maximum Conducted Output Power

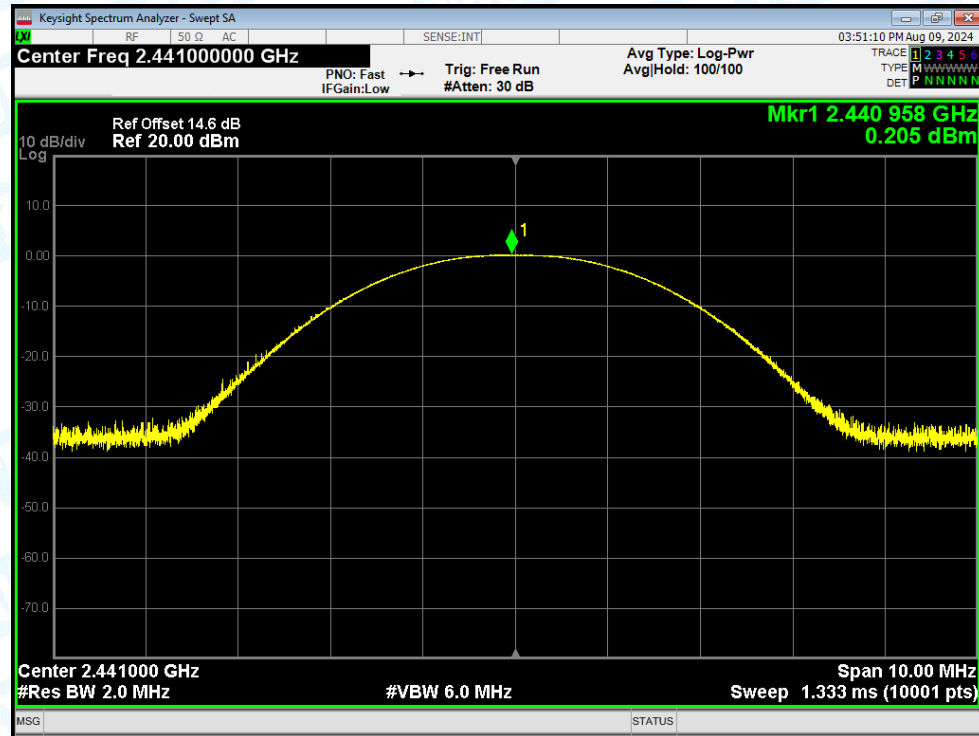
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	1.183	21	Pass
NVNT	1-DH1	2441	Ant1	0.205	21	Pass
NVNT	1-DH1	2480	Ant1	-0.779	21	Pass
NVNT	2-DH1	2402	Ant1	3.679	21	Pass
NVNT	2-DH1	2441	Ant1	2.622	21	Pass
NVNT	2-DH1	2480	Ant1	1.572	21	Pass
NVNT	3-DH1	2402	Ant1	3.206	21	Pass
NVNT	3-DH1	2441	Ant1	3.442	21	Pass
NVNT	3-DH1	2480	Ant1	2.415	21	Pass

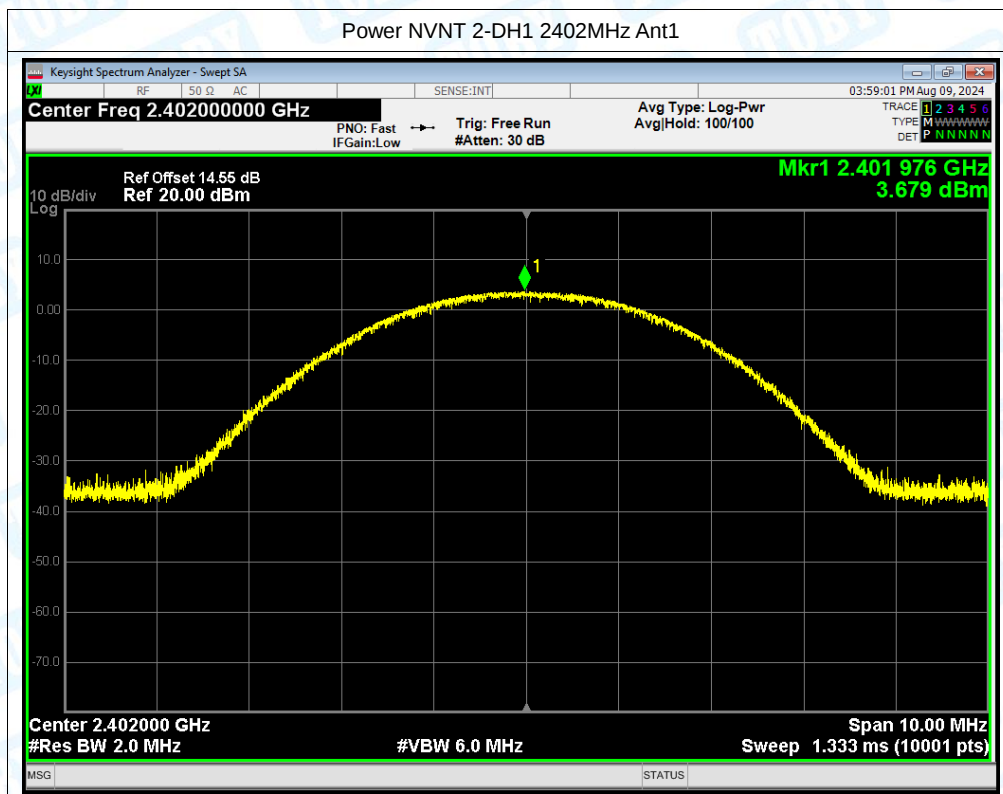
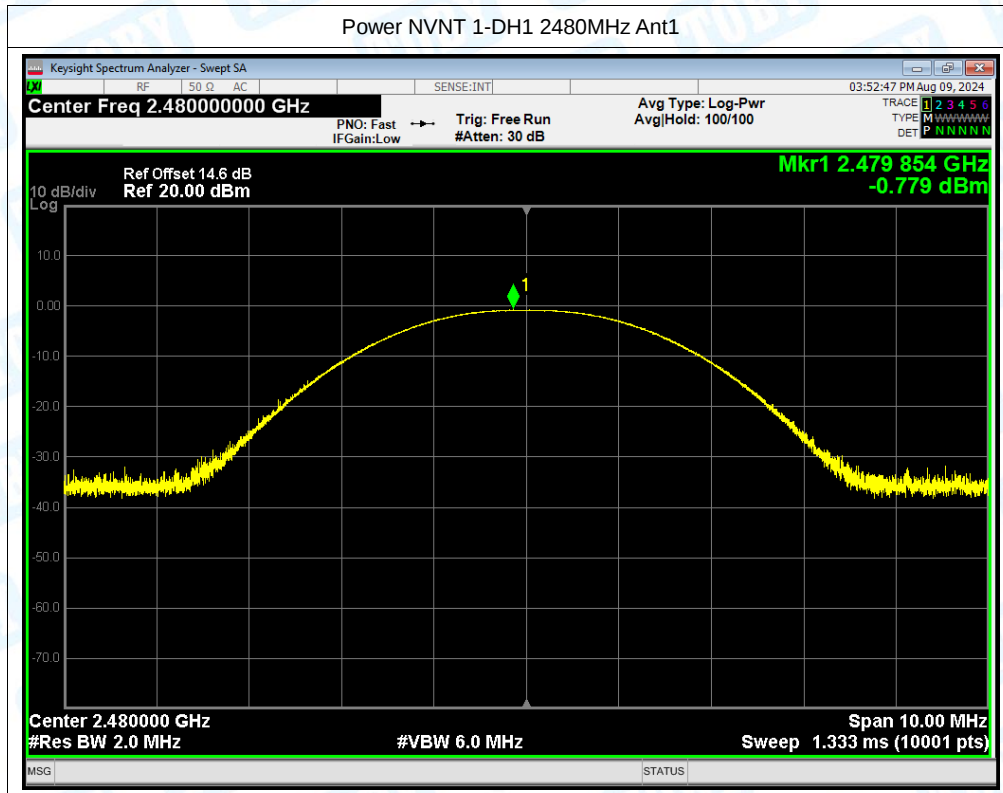
Test Graphs

Power NVNT 1-DH1 2402MHz Ant1

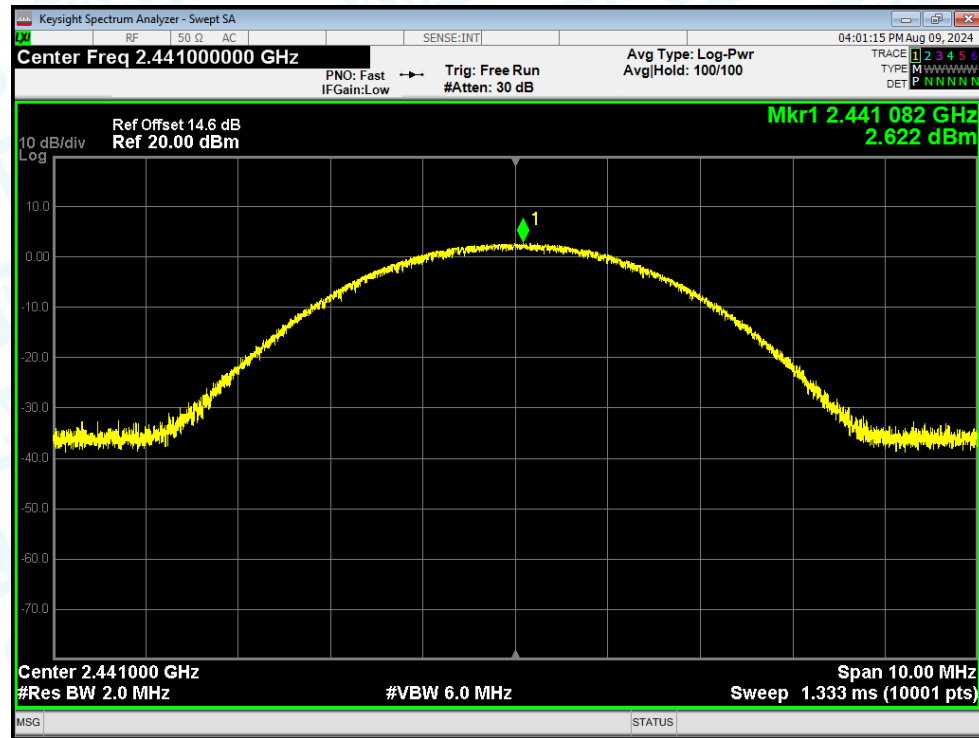


Power NVNT 1-DH1 2441MHz Ant1

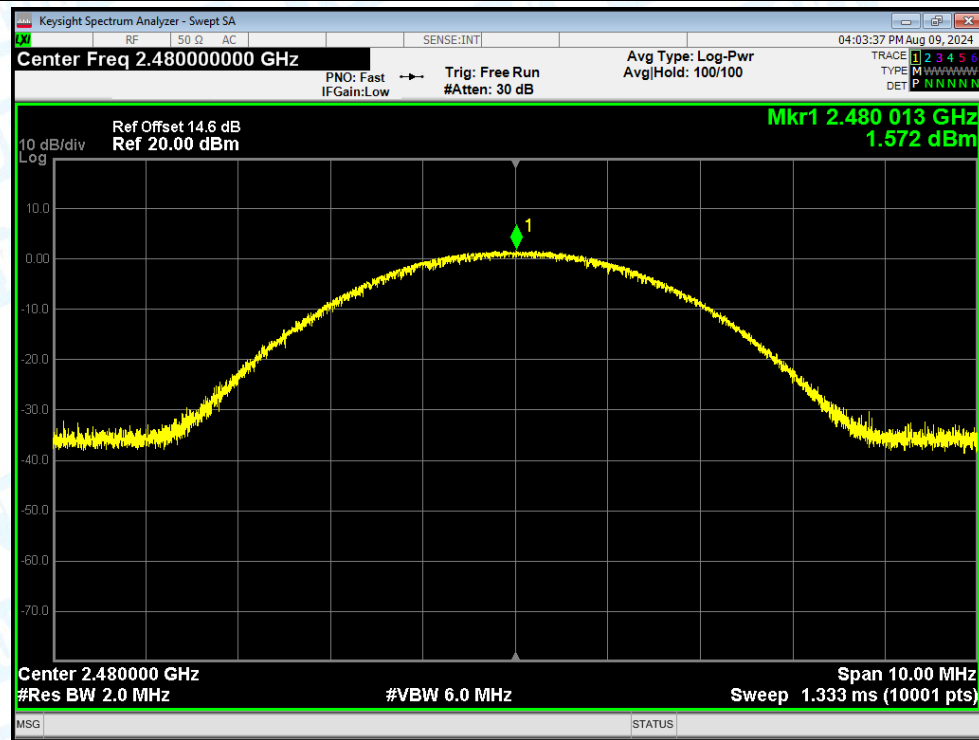




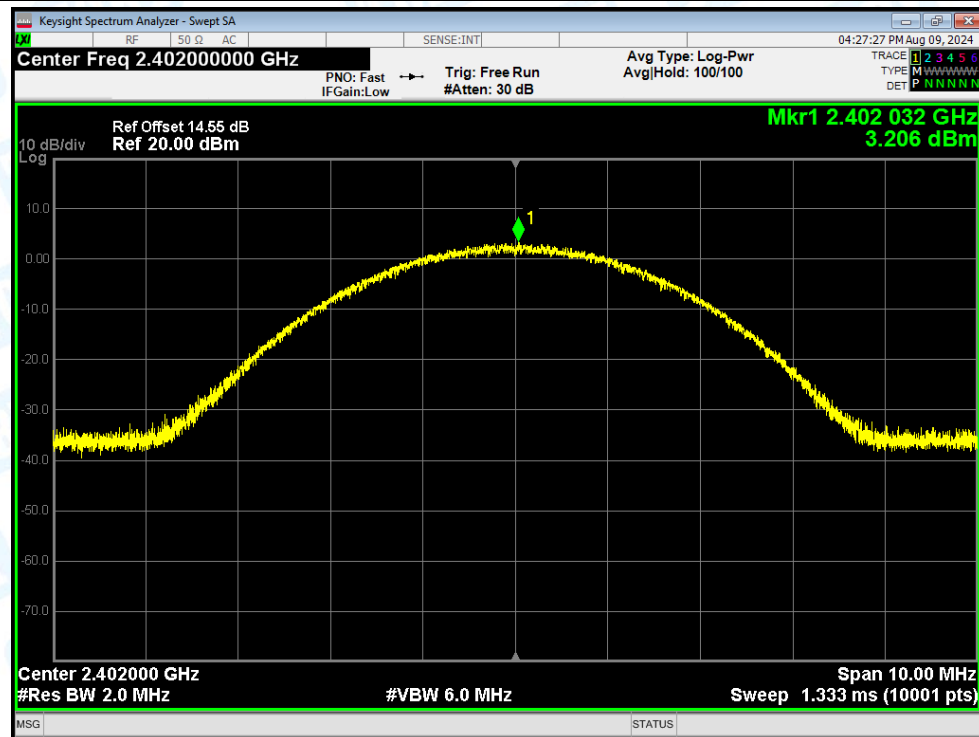
Power NVNT 2-DH1 2441MHz Ant1



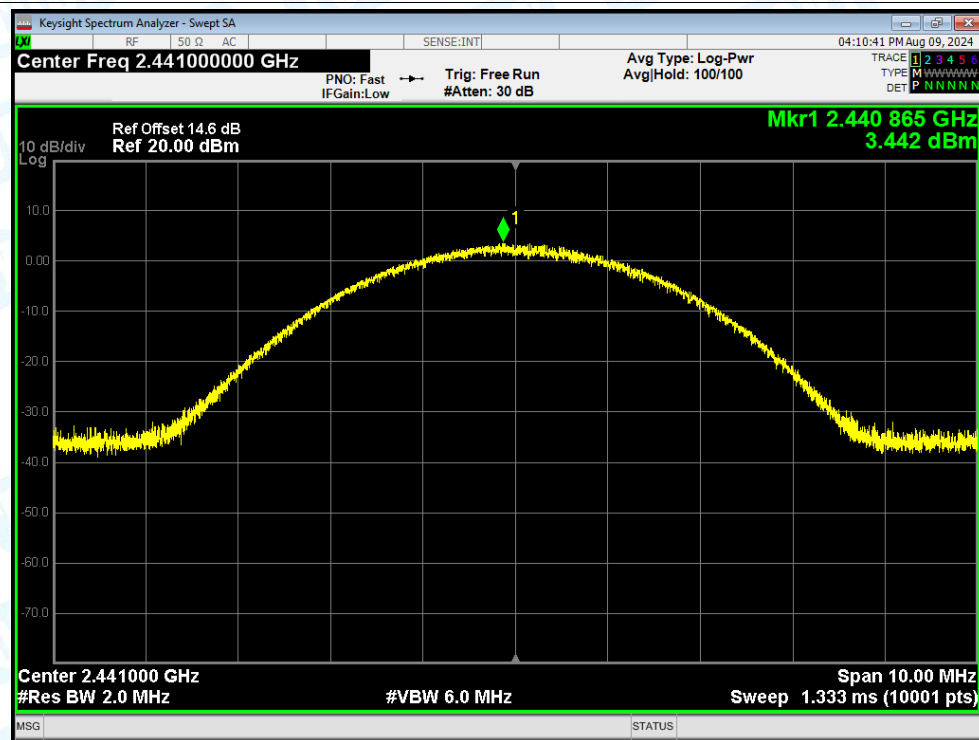
Power NVNT 2-DH1 2480MHz Ant1

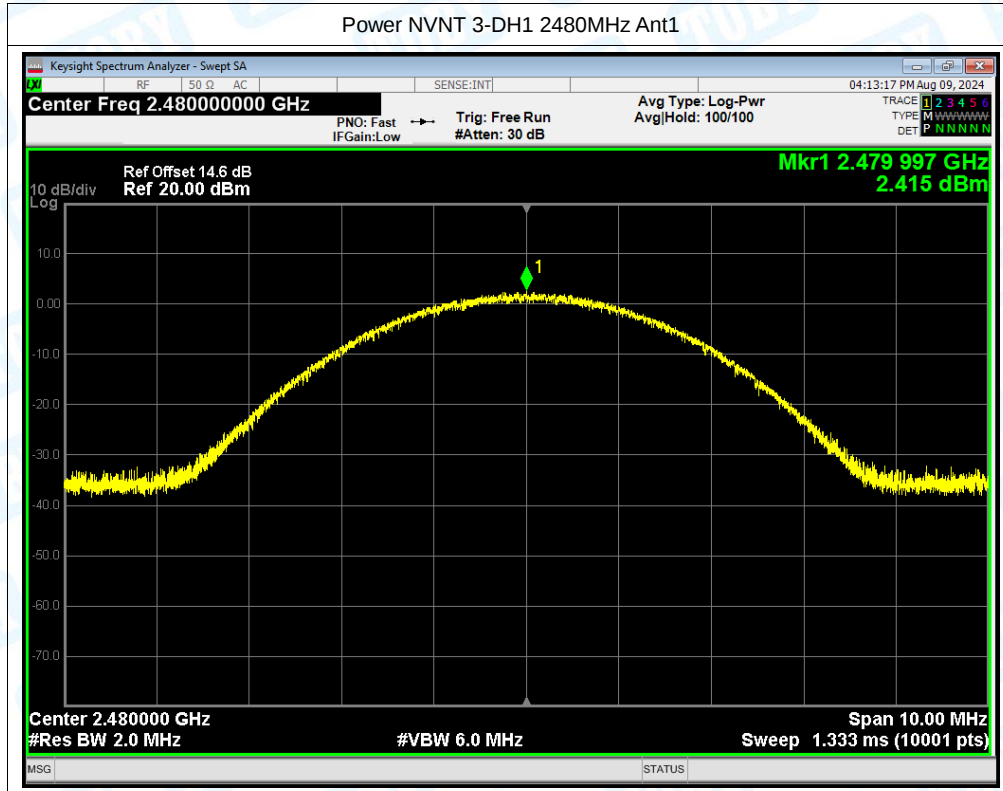


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



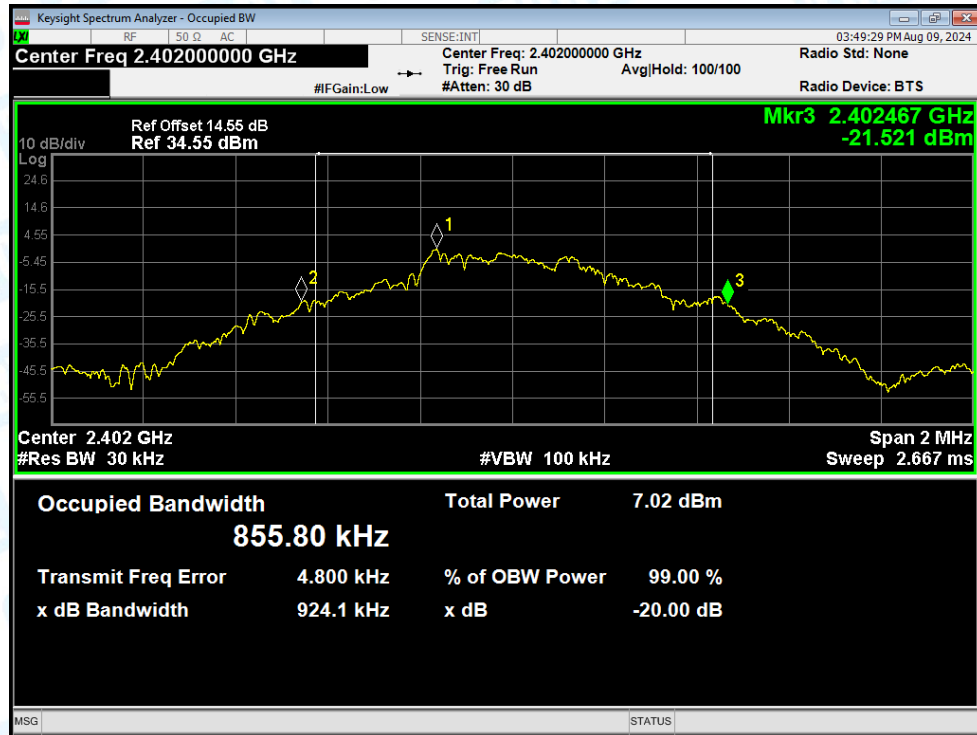


3. -20dB Bandwidth

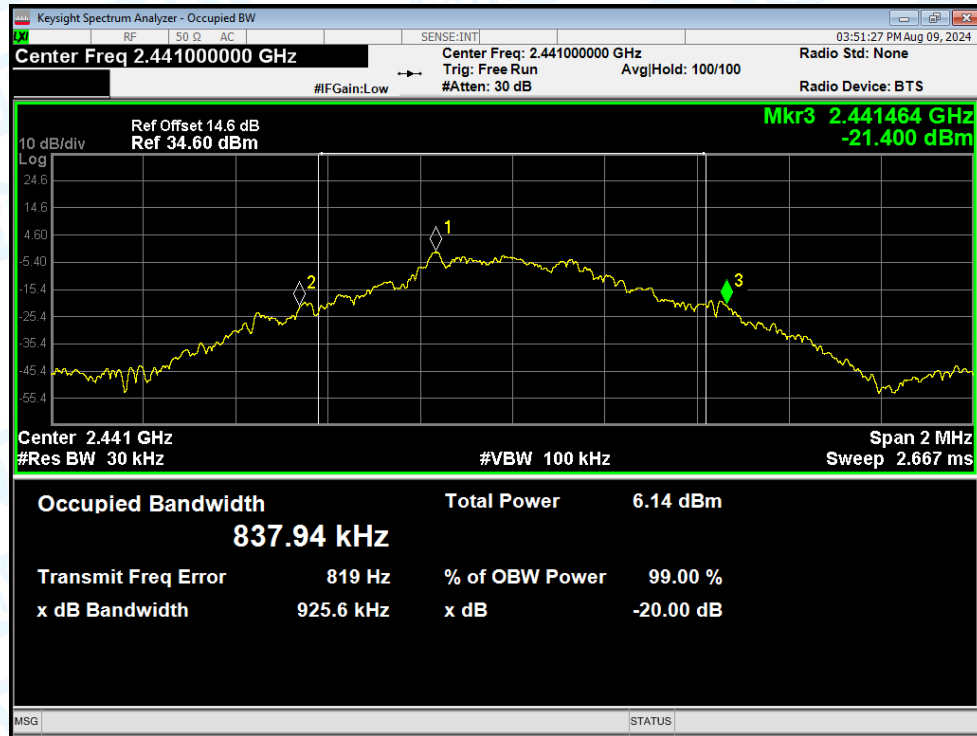
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.92	0	Pass
NVNT	1-DH1	2441	Ant1	0.93	0	Pass
NVNT	1-DH1	2480	Ant1	0.91	0	Pass
NVNT	2-DH1	2402	Ant1	1.29	0	Pass
NVNT	2-DH1	2441	Ant1	1.26	0	Pass
NVNT	2-DH1	2480	Ant1	1.29	0	Pass
NVNT	3-DH1	2402	Ant1	1.22	0	Pass
NVNT	3-DH1	2441	Ant1	1.21	0	Pass
NVNT	3-DH1	2480	Ant1	1.21	0	Pass

Test Graphs

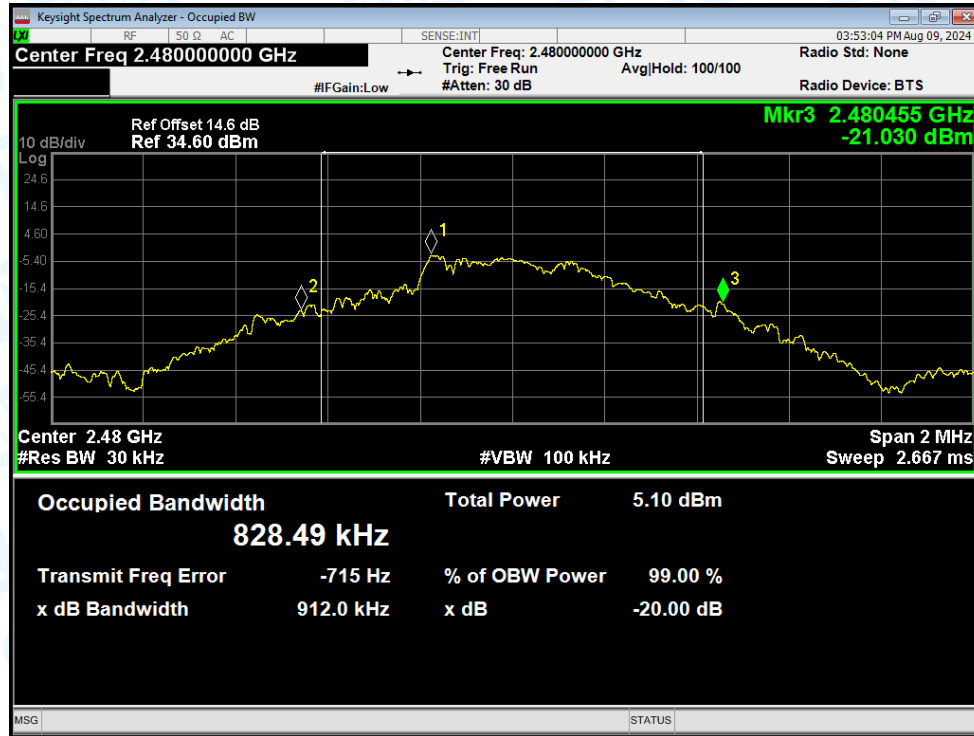
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



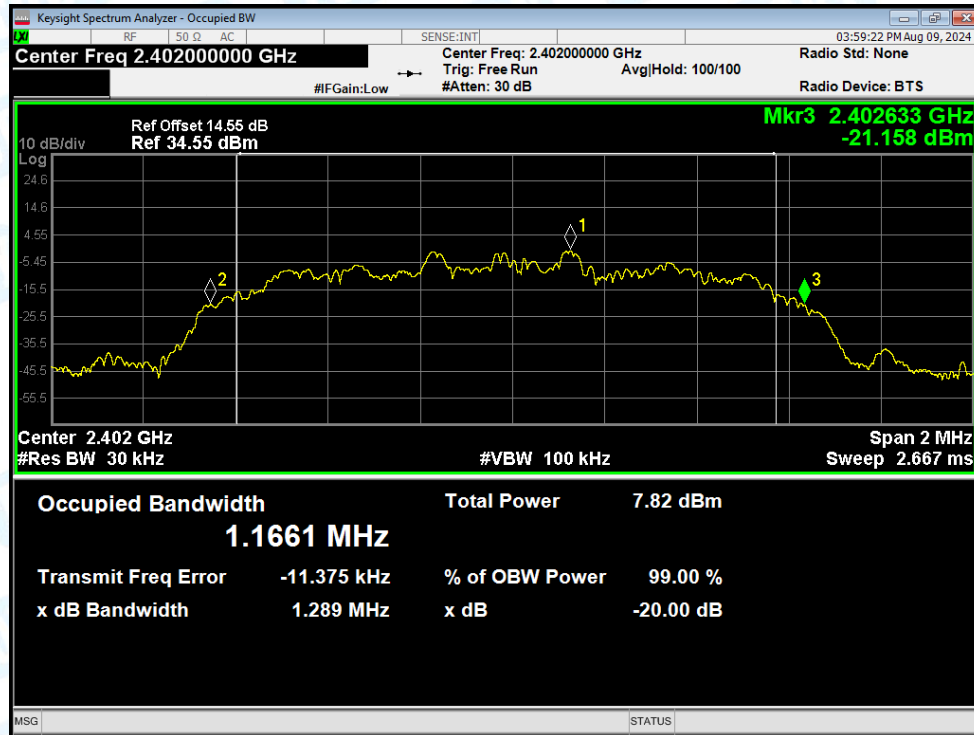
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



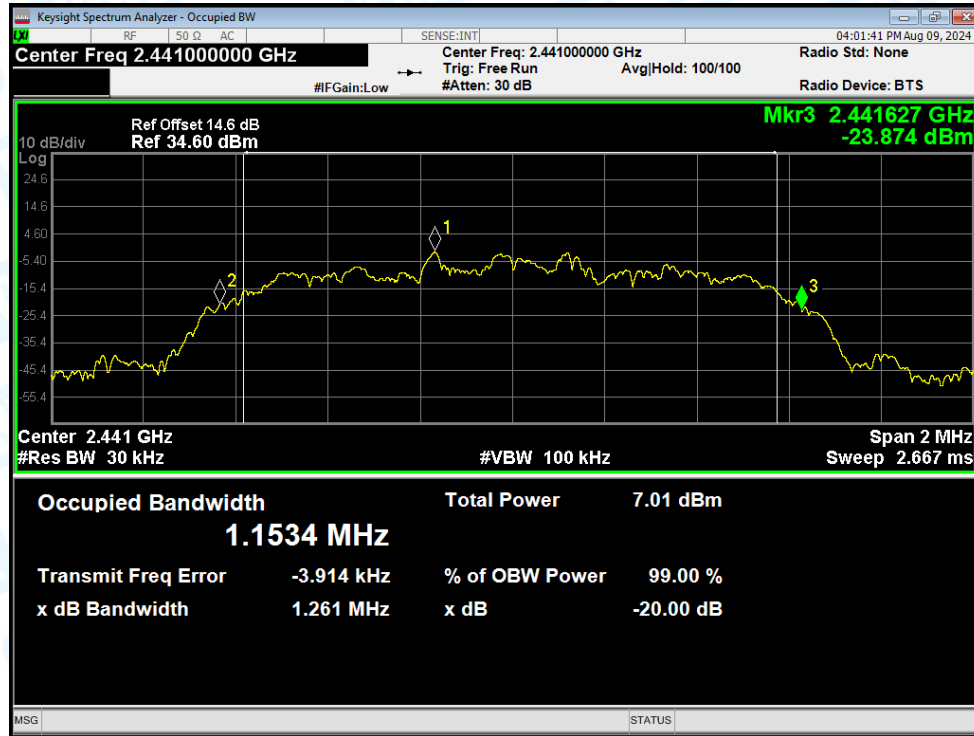
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



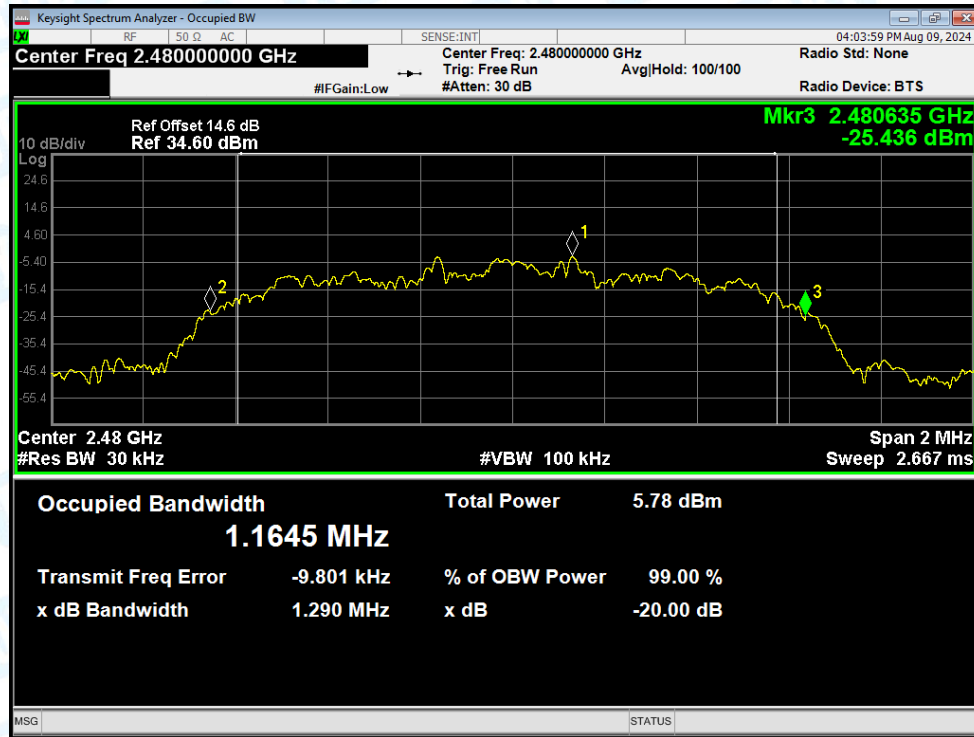
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



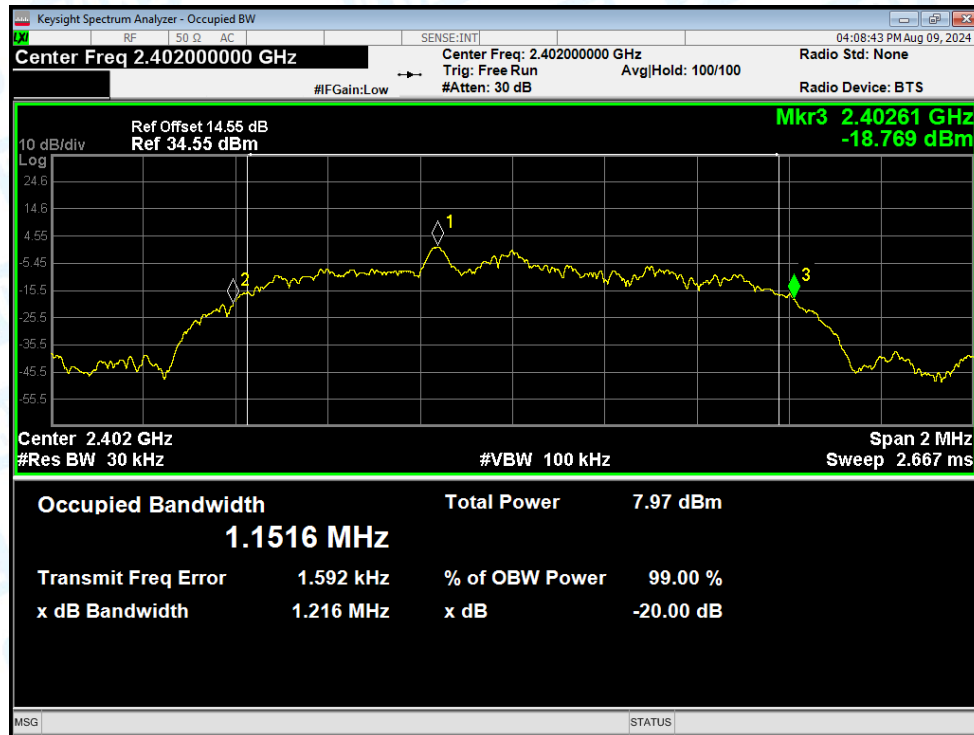
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



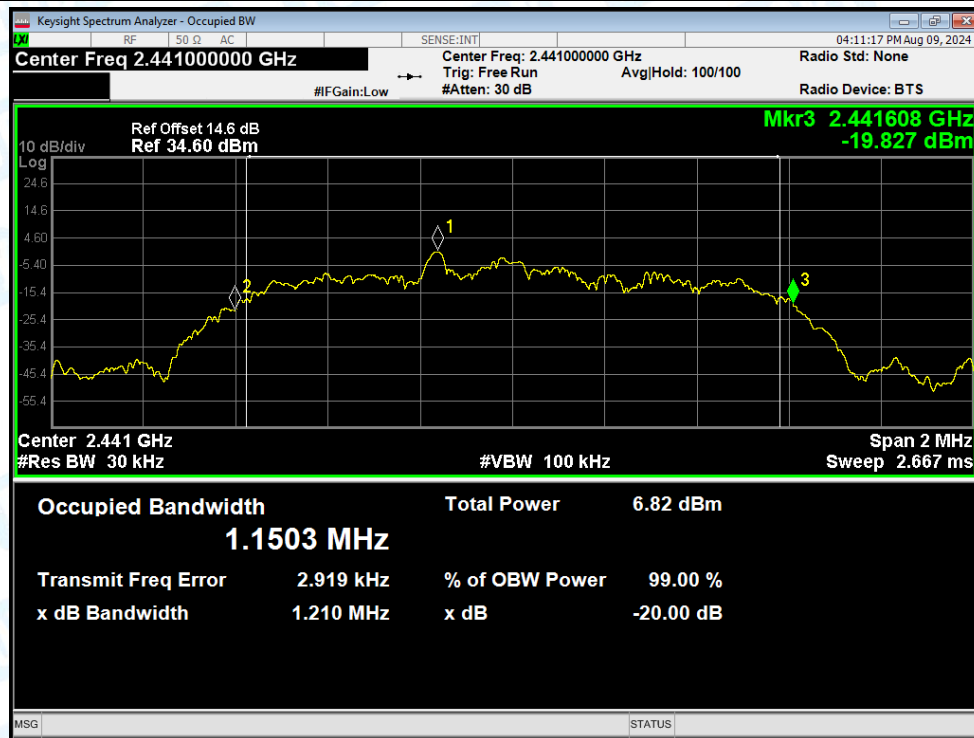
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

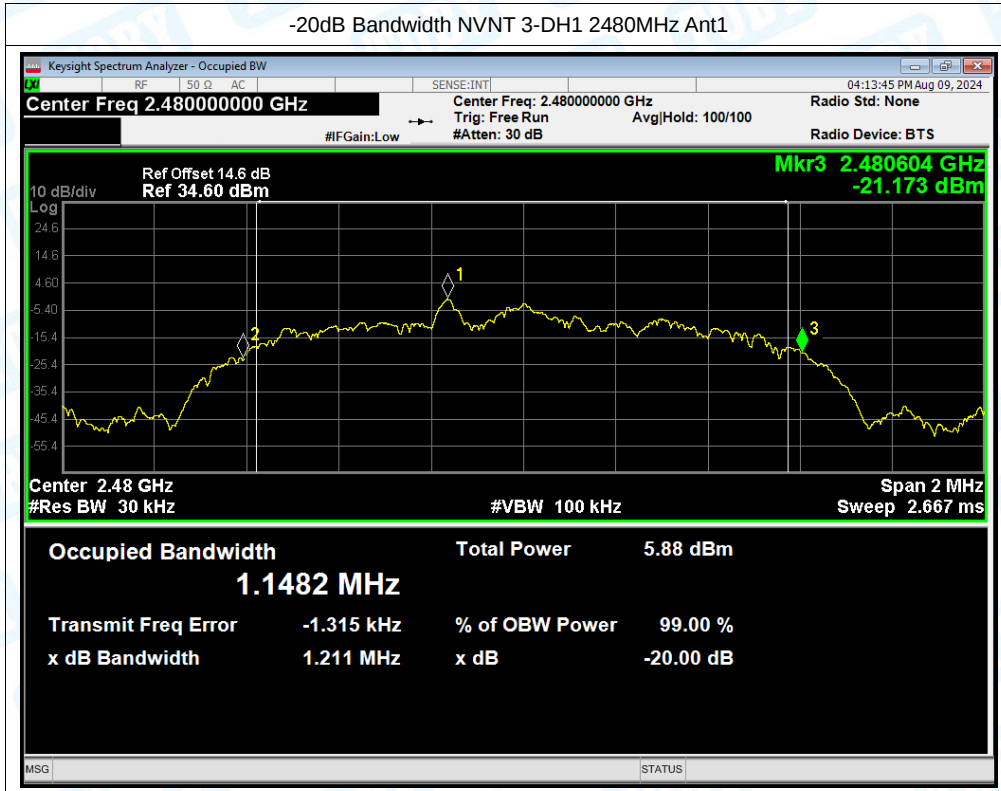


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



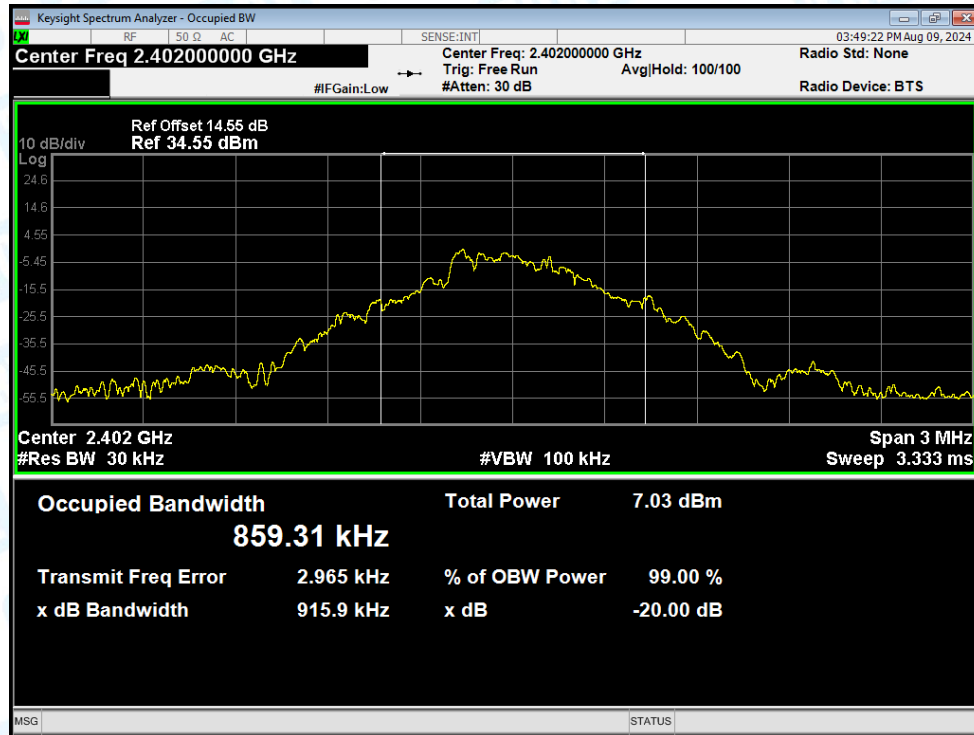


4. Occupied Channel Bandwidth

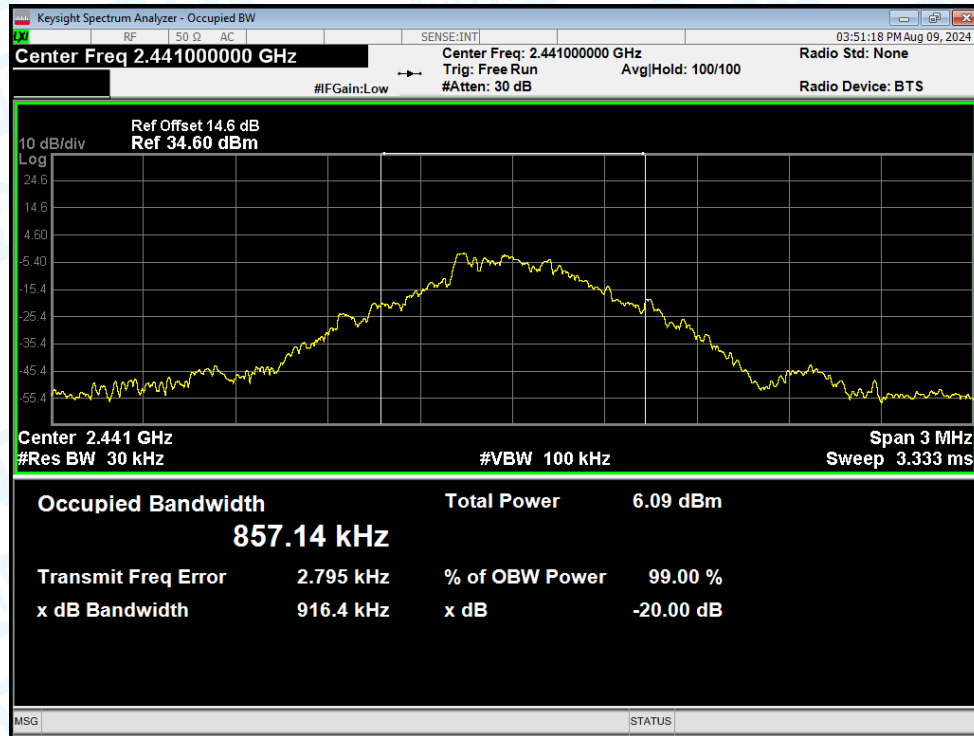
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.859
NVNT	1-DH1	2441	Ant1	0.857
NVNT	1-DH1	2480	Ant1	0.861
NVNT	2-DH1	2402	Ant1	1.162
NVNT	2-DH1	2441	Ant1	1.139
NVNT	2-DH1	2480	Ant1	1.166
NVNT	3-DH1	2402	Ant1	1.144
NVNT	3-DH1	2441	Ant1	1.145
NVNT	3-DH1	2480	Ant1	1.152

Test Graphs

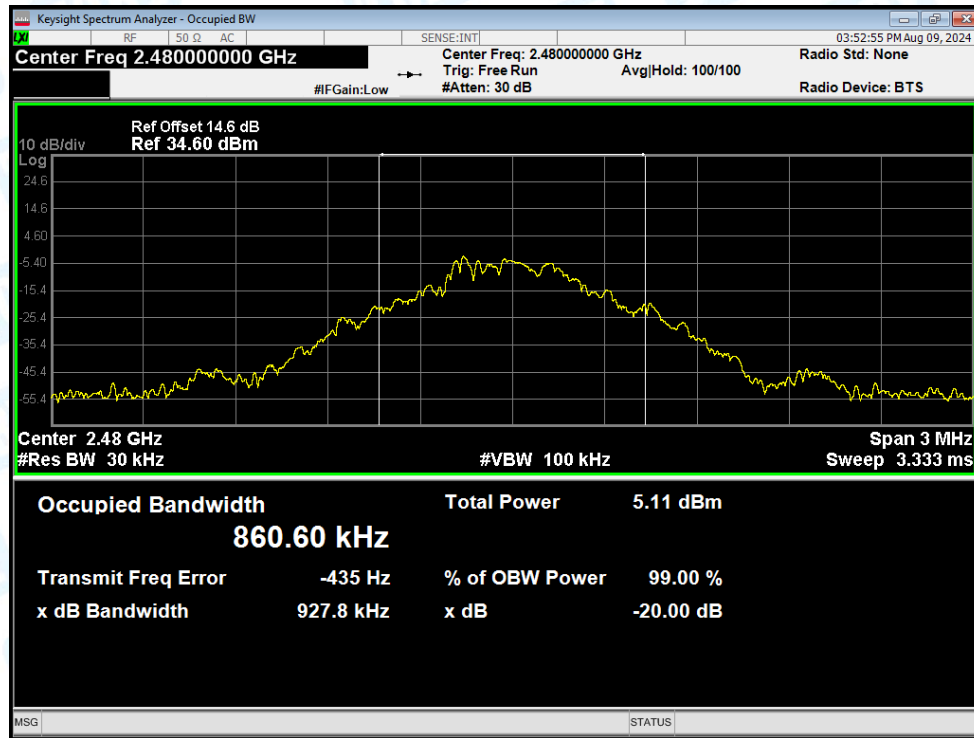
OBW NVNT 1-DH1 2402MHz Ant1



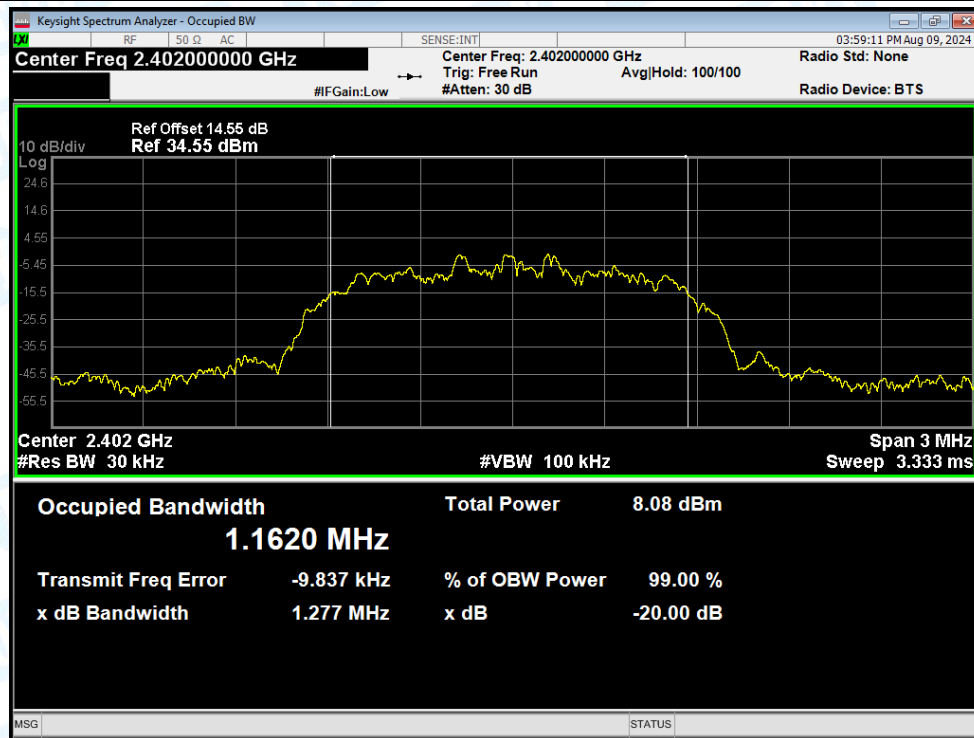
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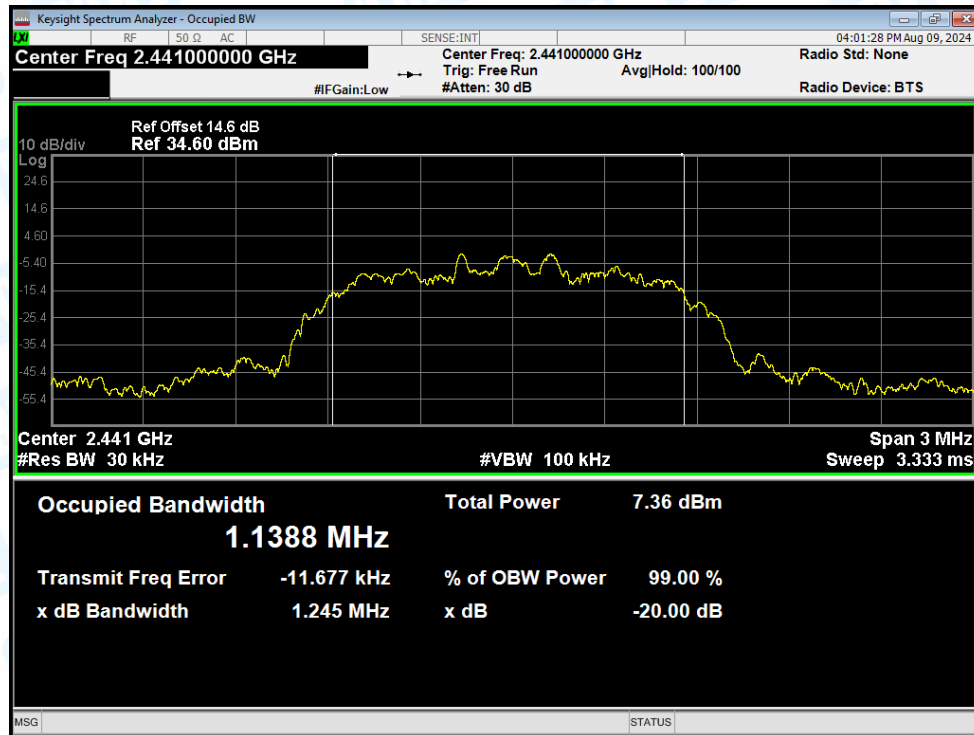
OBW NVNT 1-DH1 2480MHz Ant1



OBW NVNT 2-DH1 2402MHz Ant1



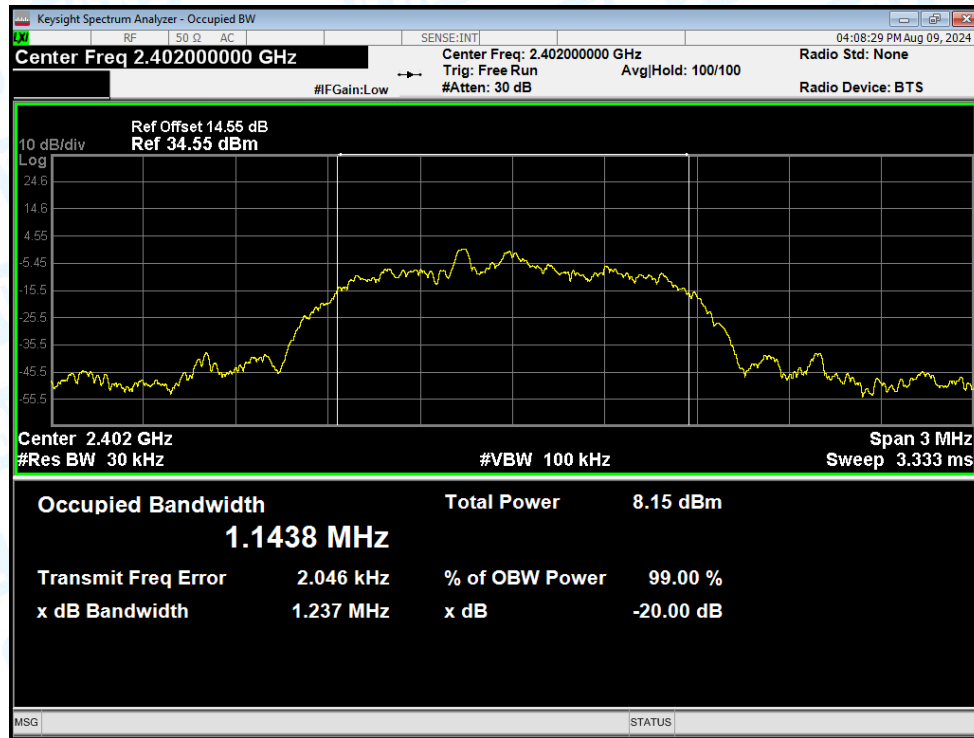
OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

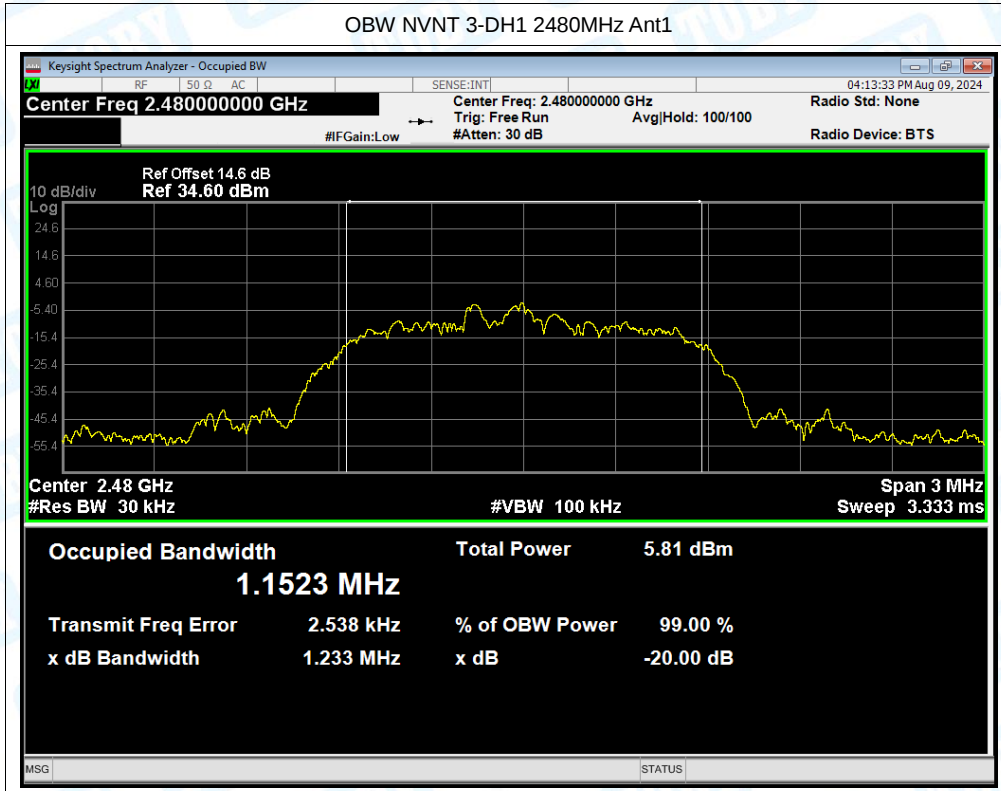


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



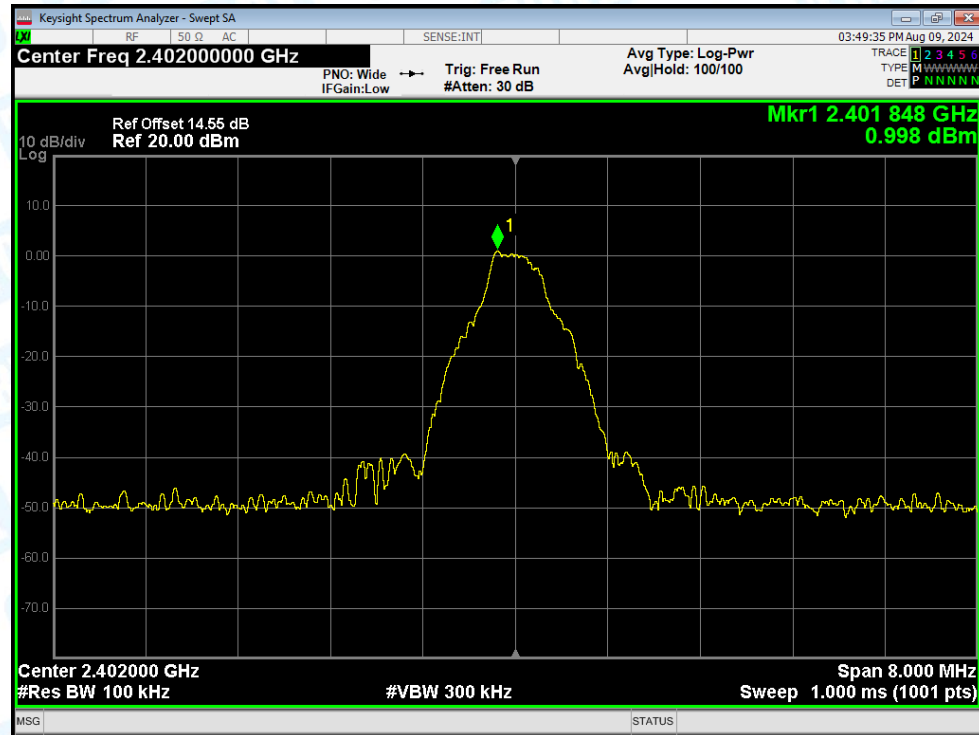


5. Band Edge

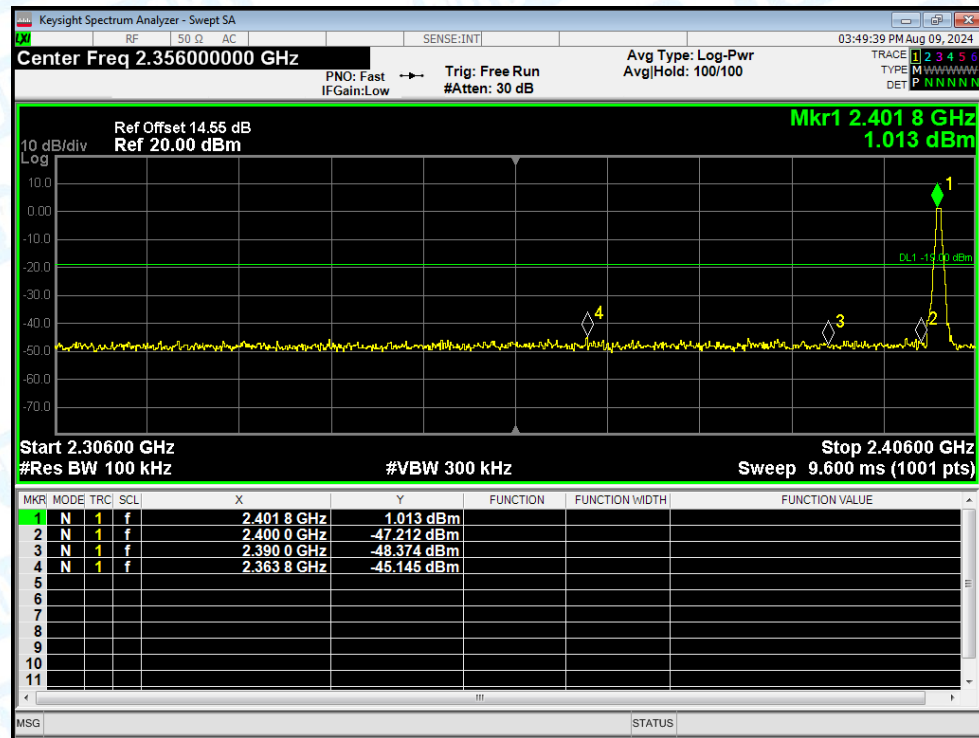
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-46.15	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-44.01	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-45.78	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-43.86	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-45.96	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-44.36	-20	Pass

Test Graphs

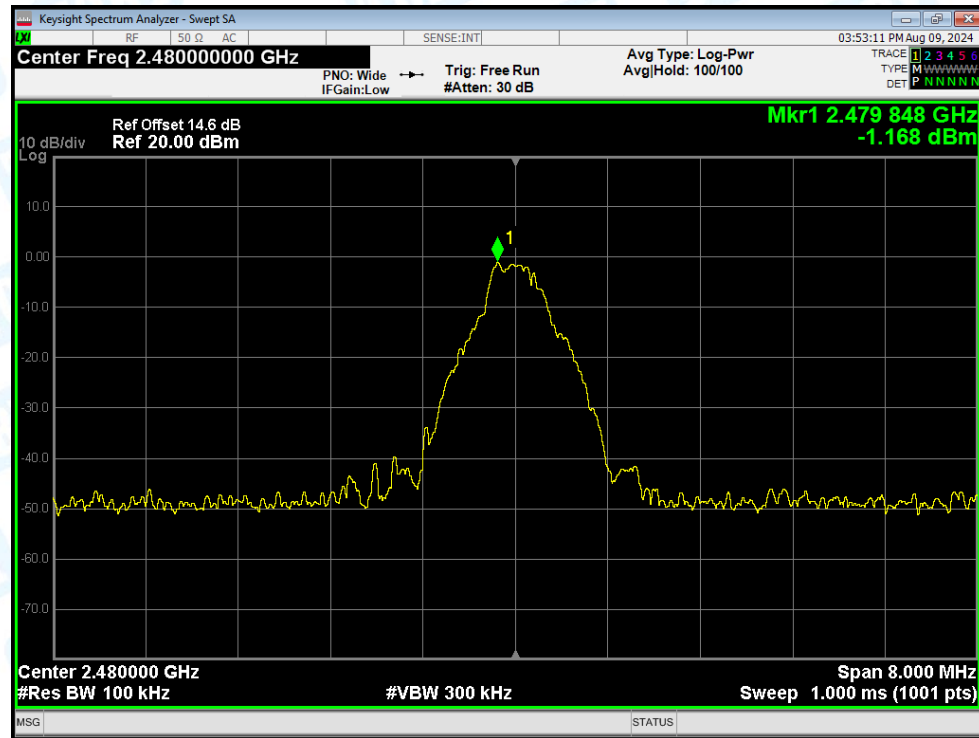
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



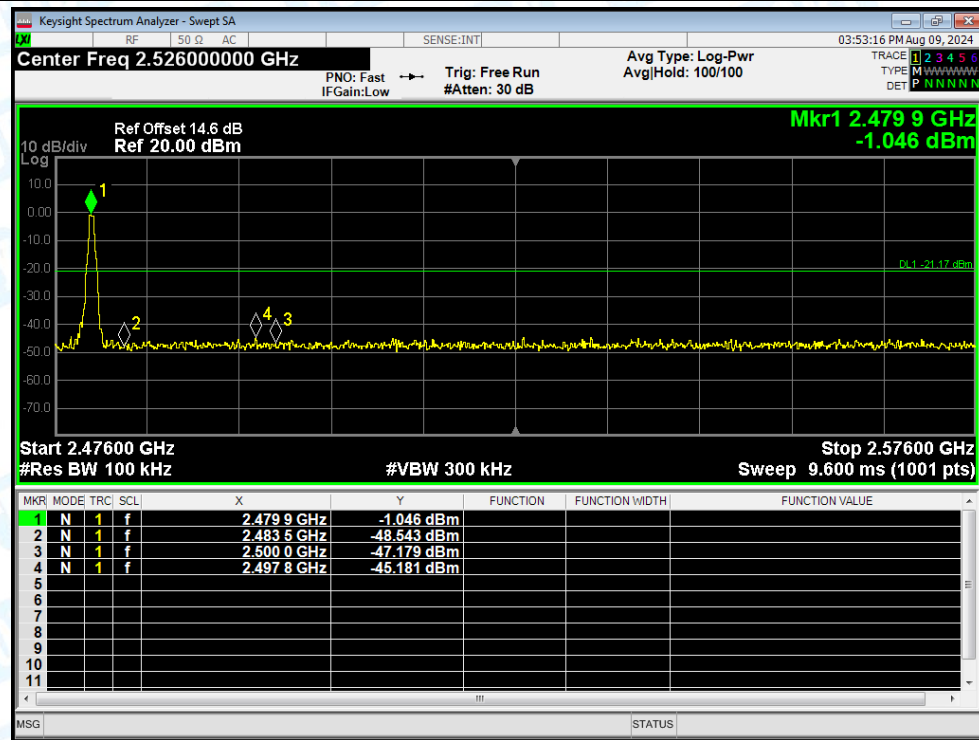
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



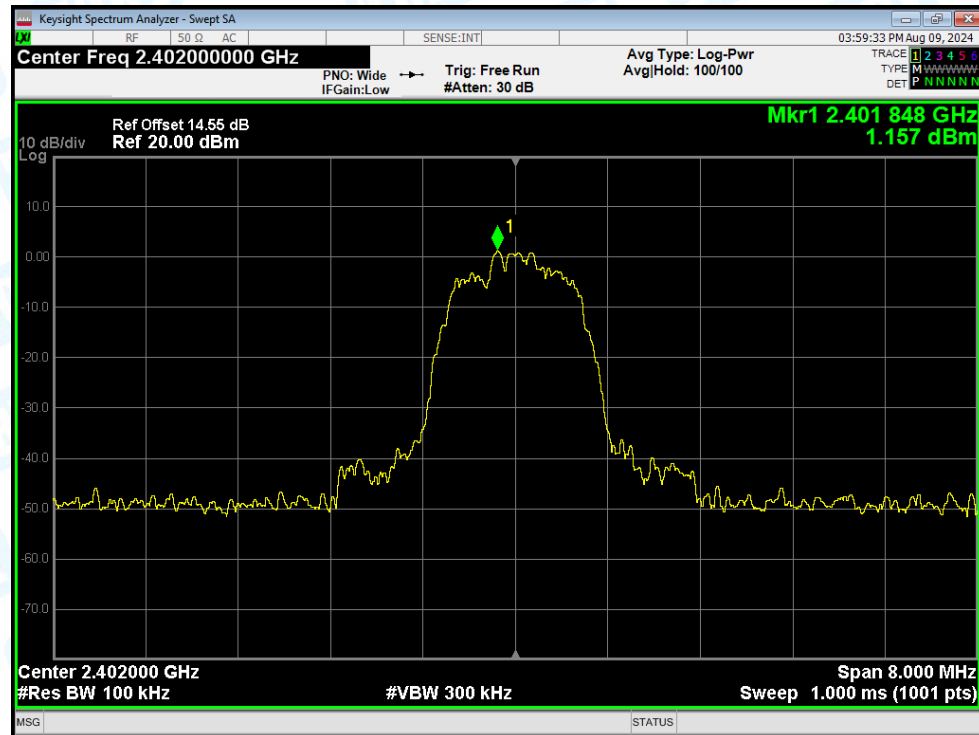
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



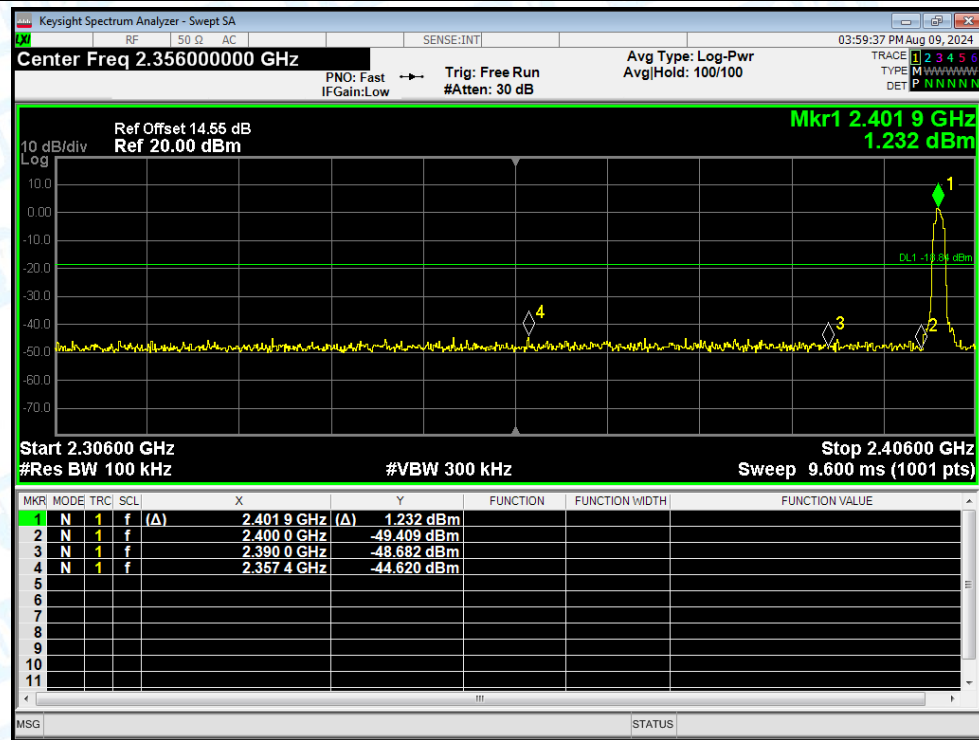
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



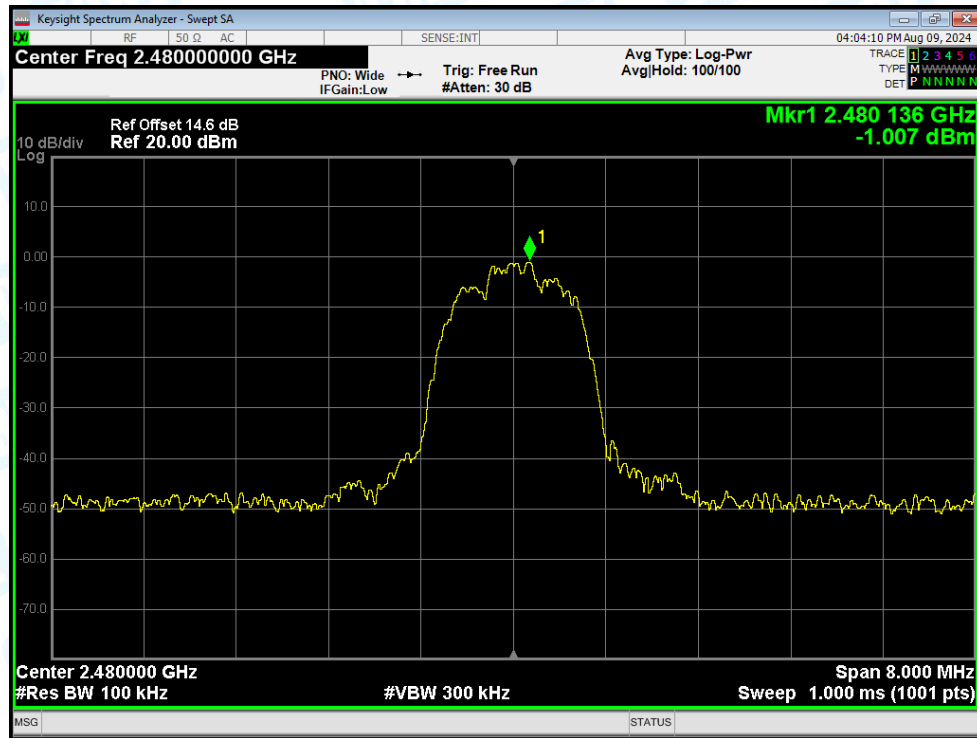
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



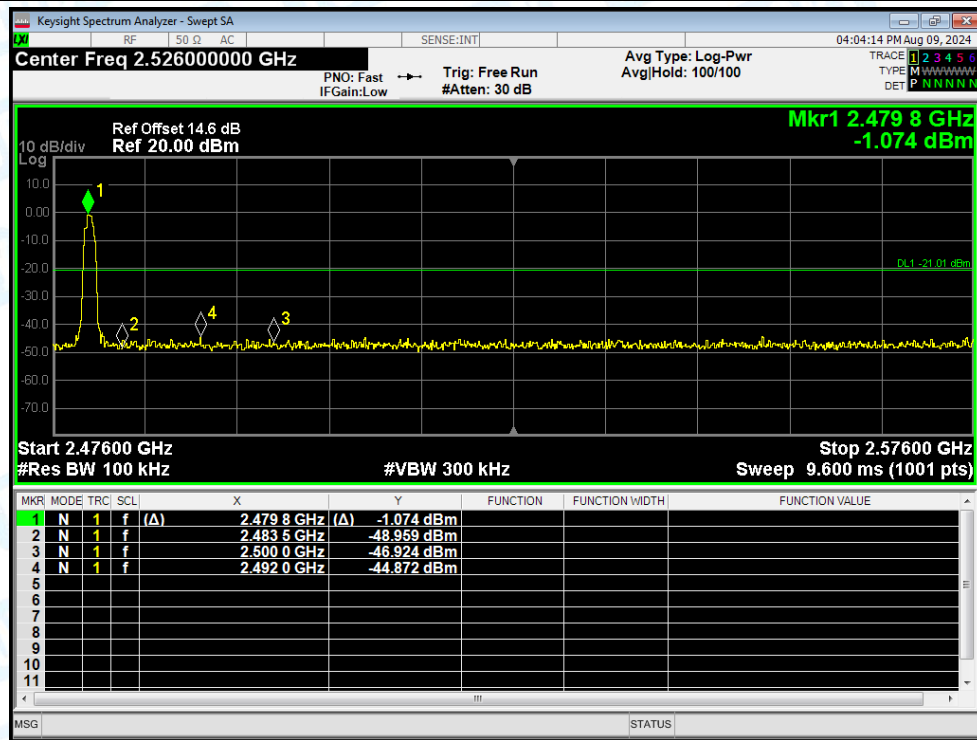
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



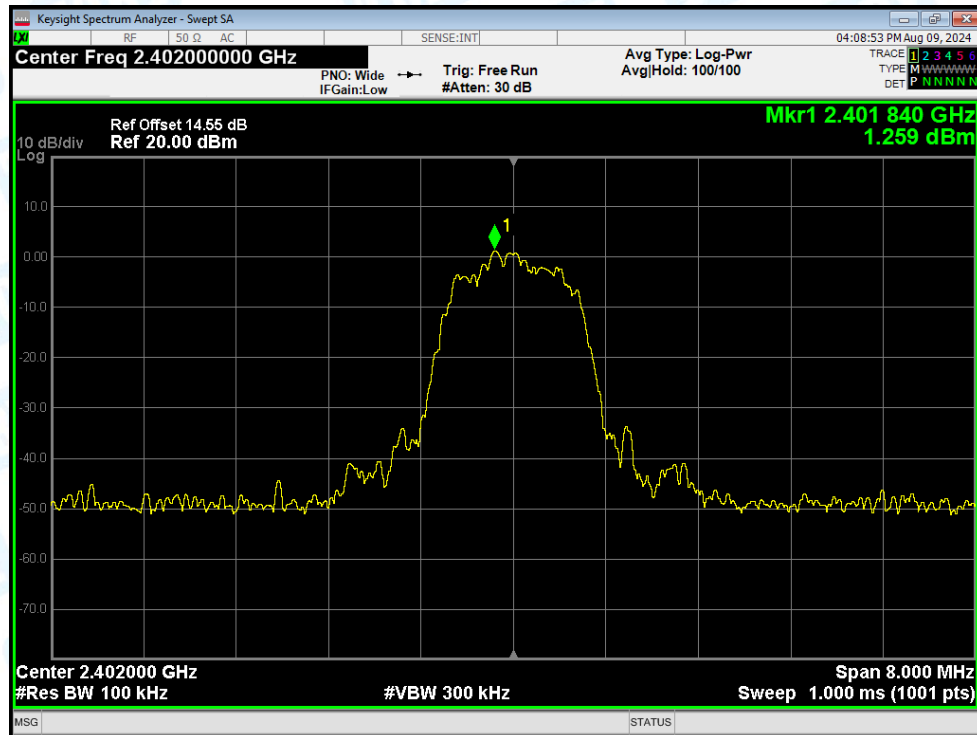
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



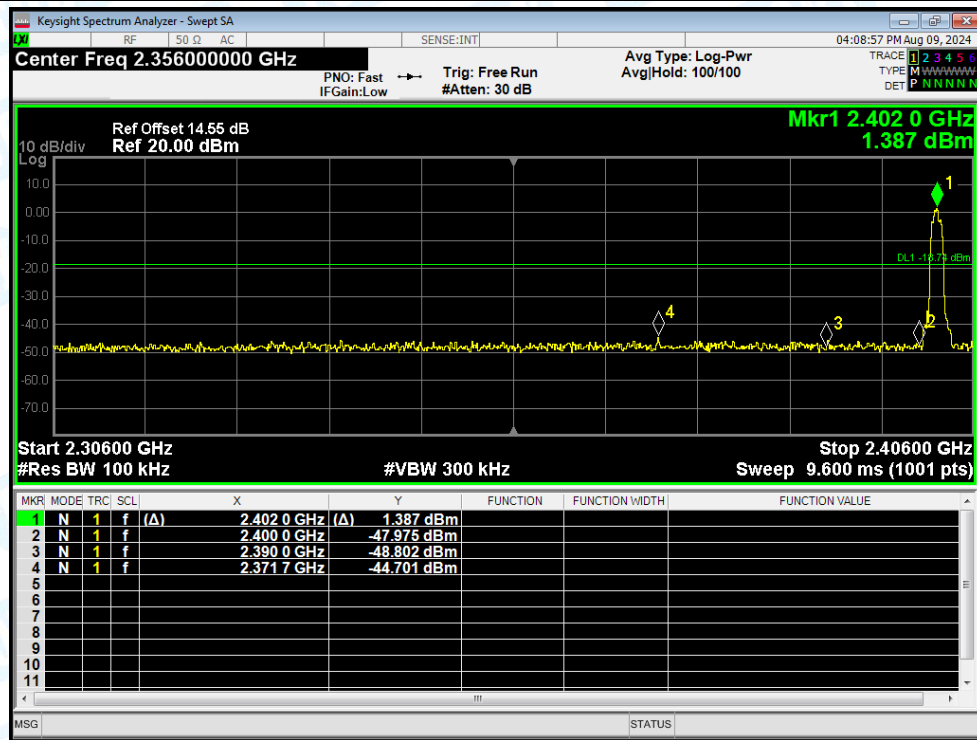
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



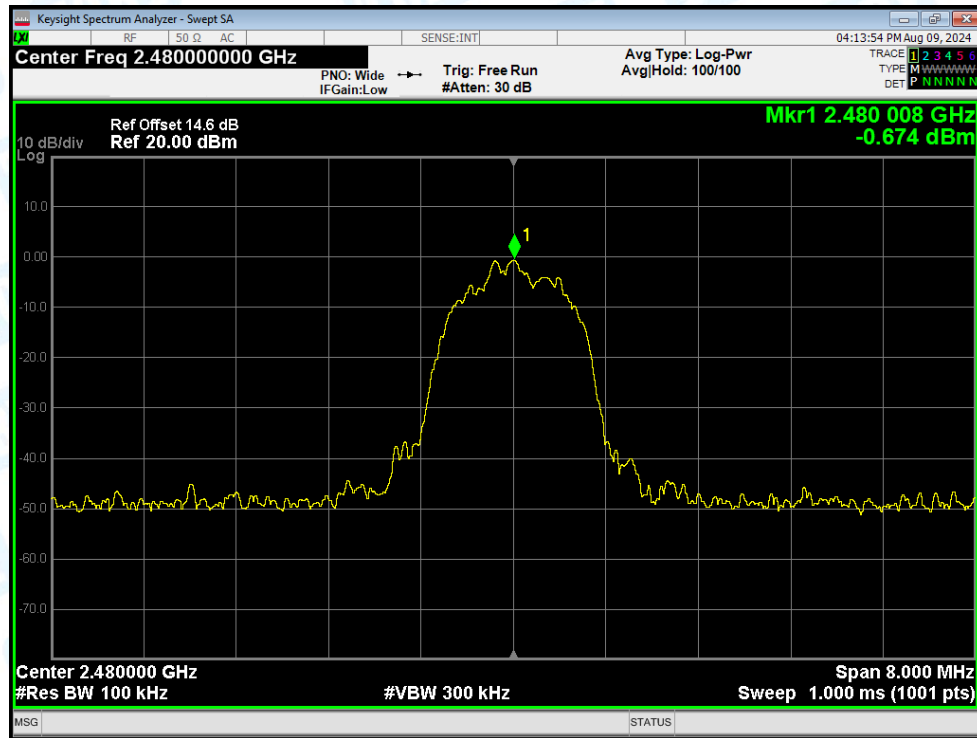
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



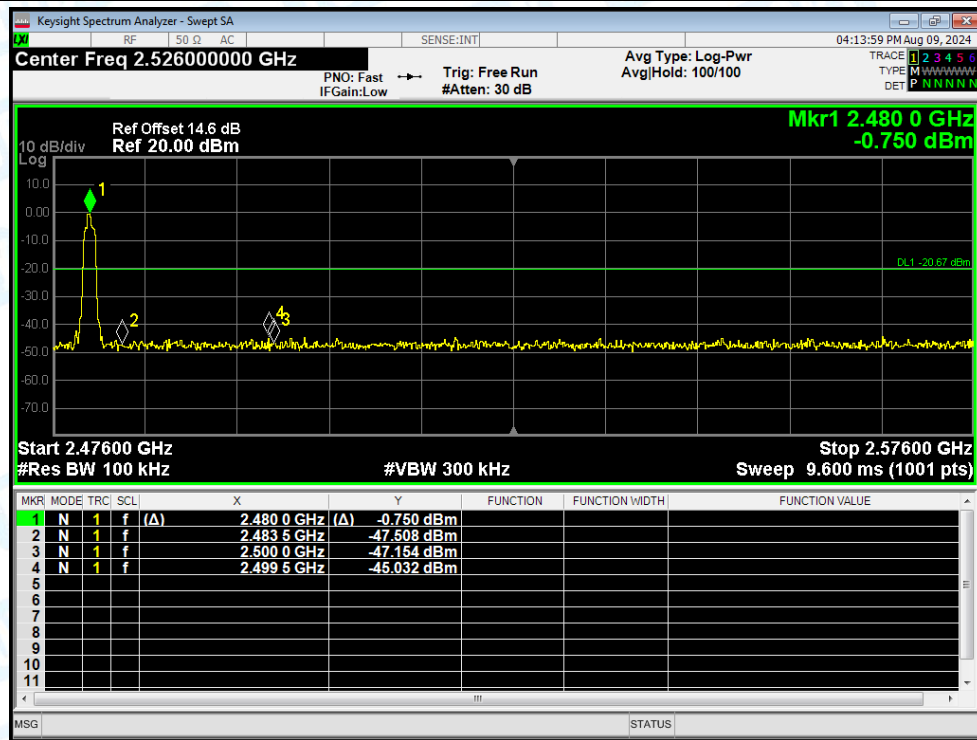
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Emission

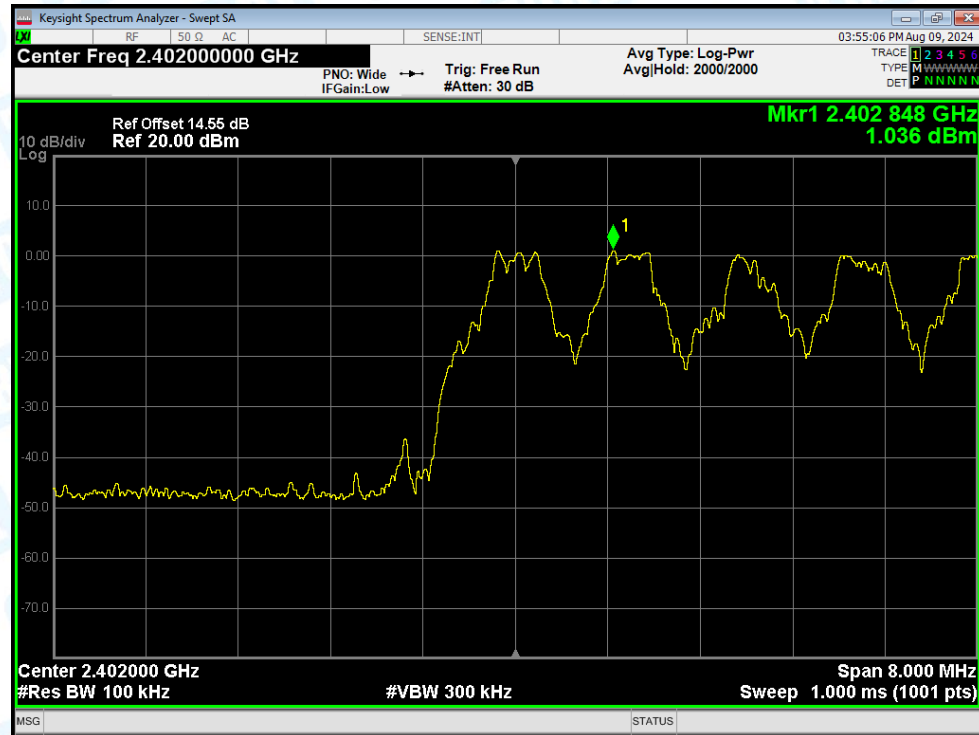


6. Band Edge(Hopping)

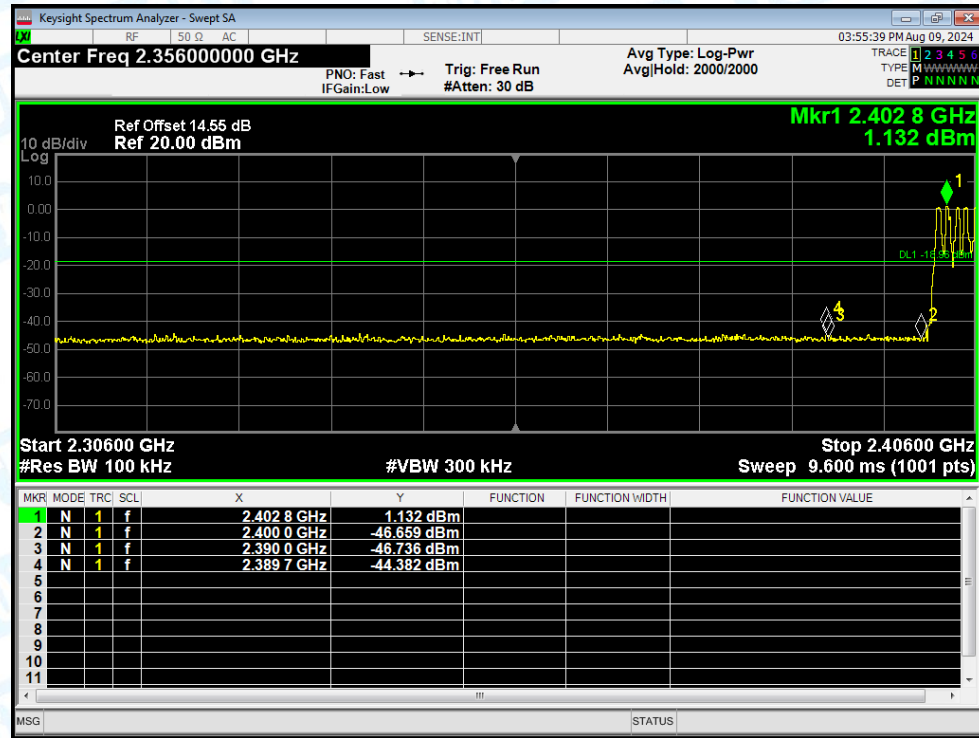
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-45.42	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-43.07	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-45.34	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-44.19	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-45.49	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-43.25	-20	Pass

Test Graphs

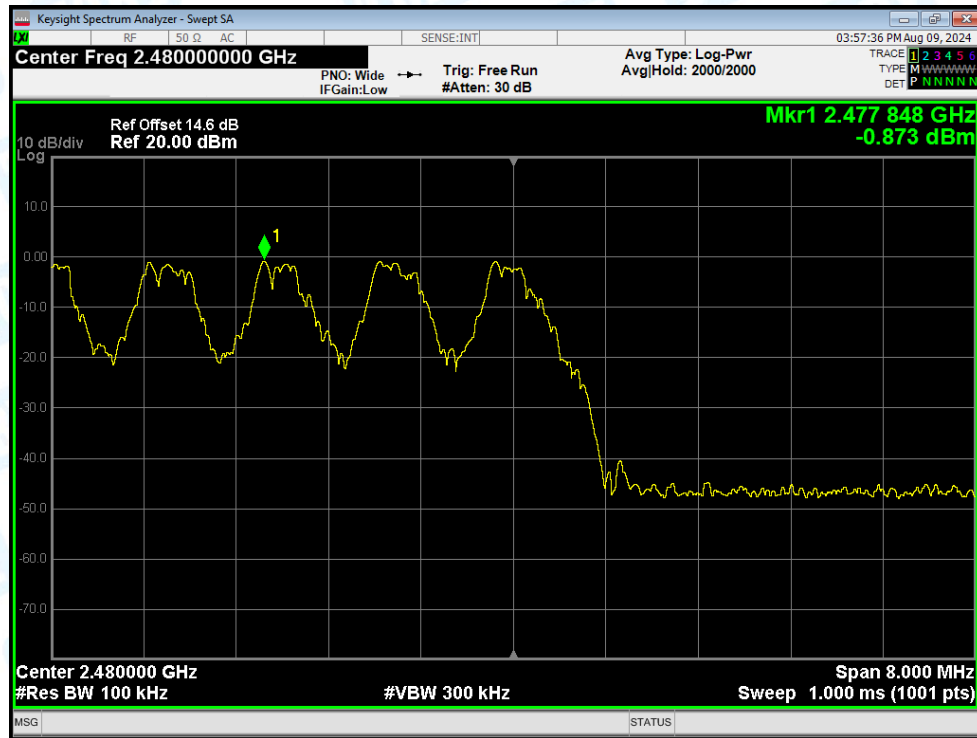
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



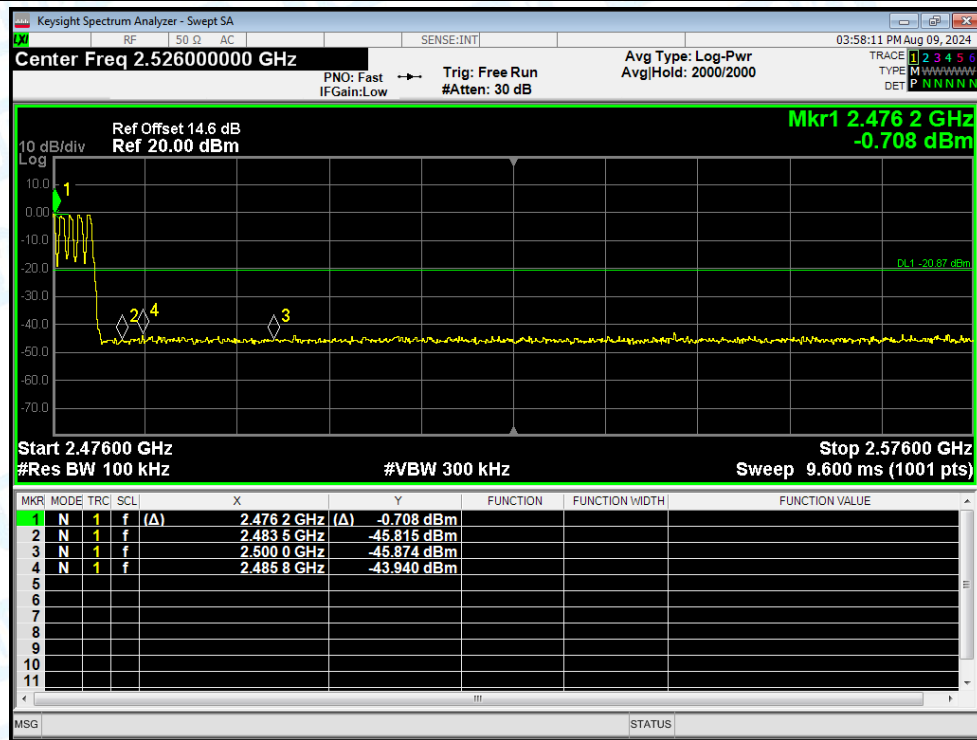
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



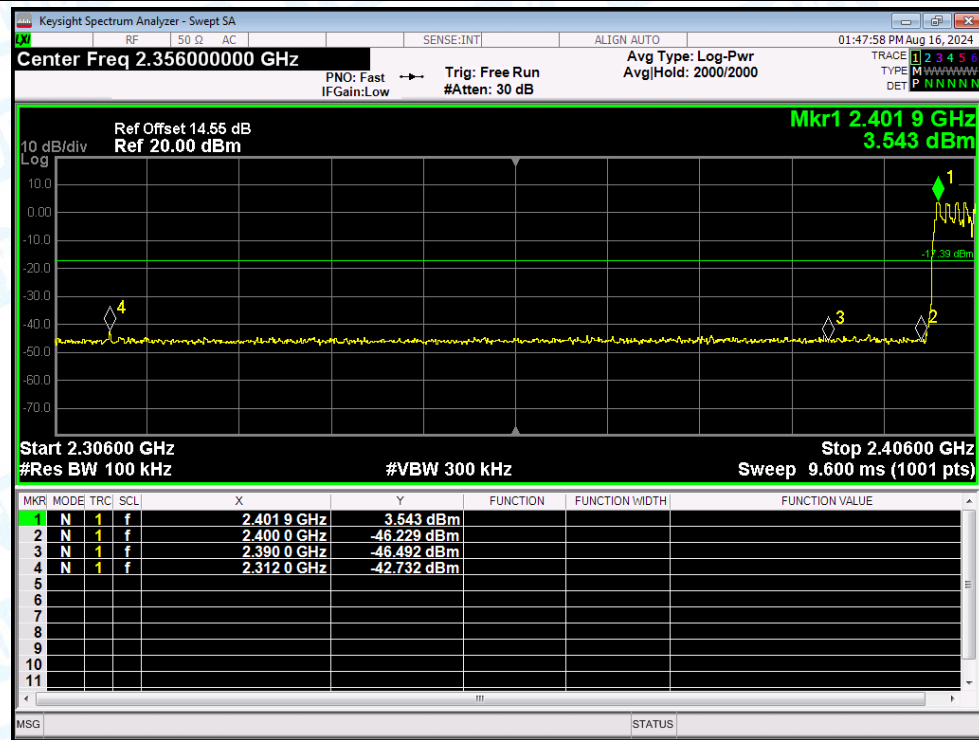
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission

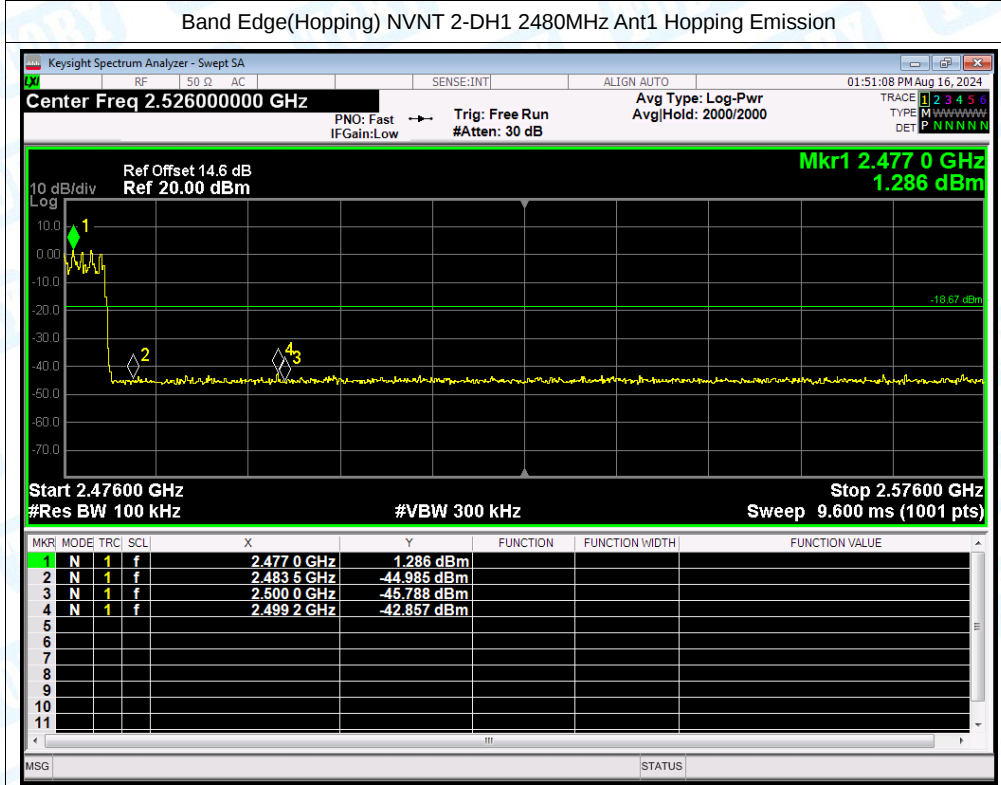
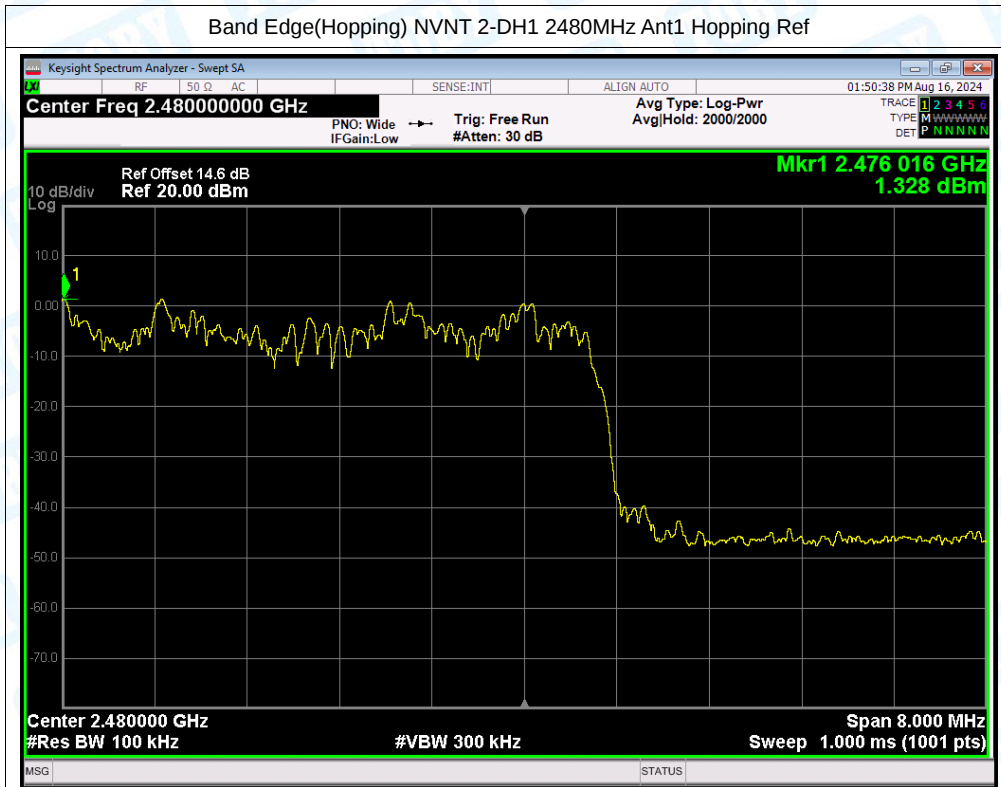


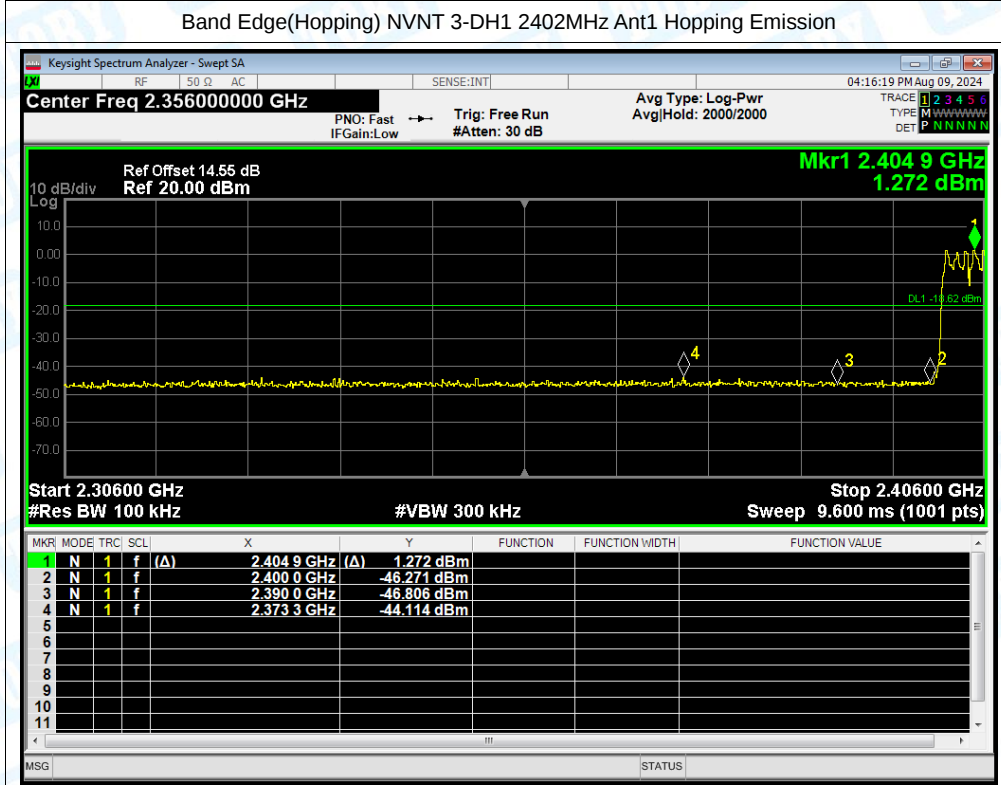
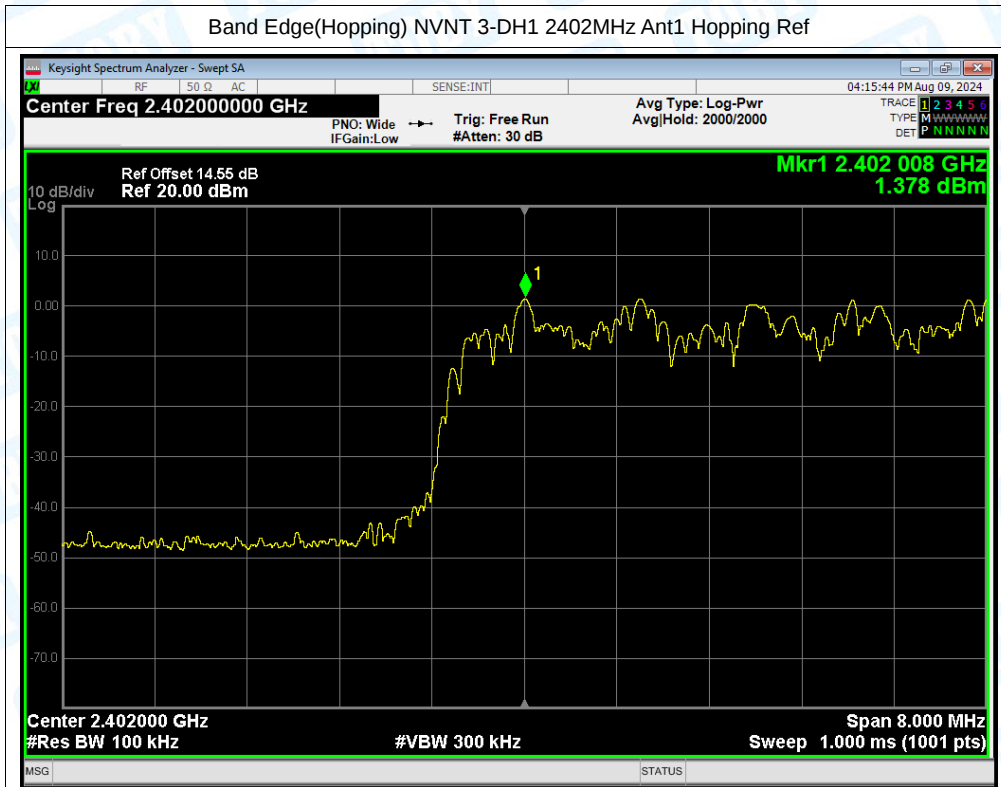
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref

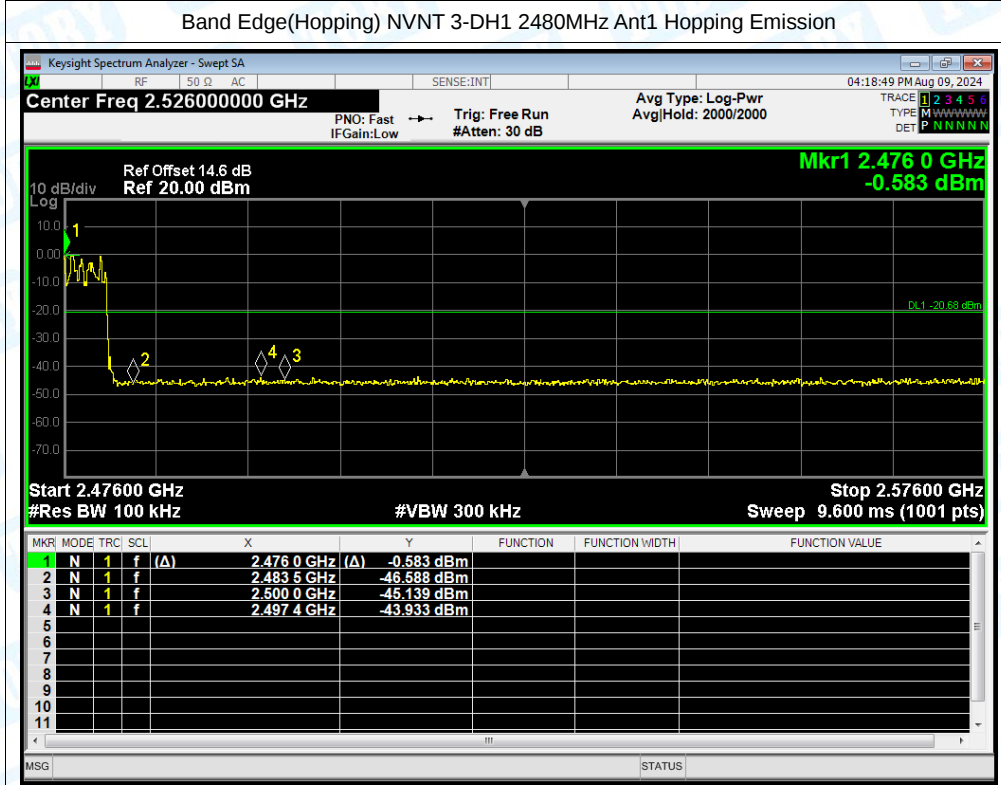
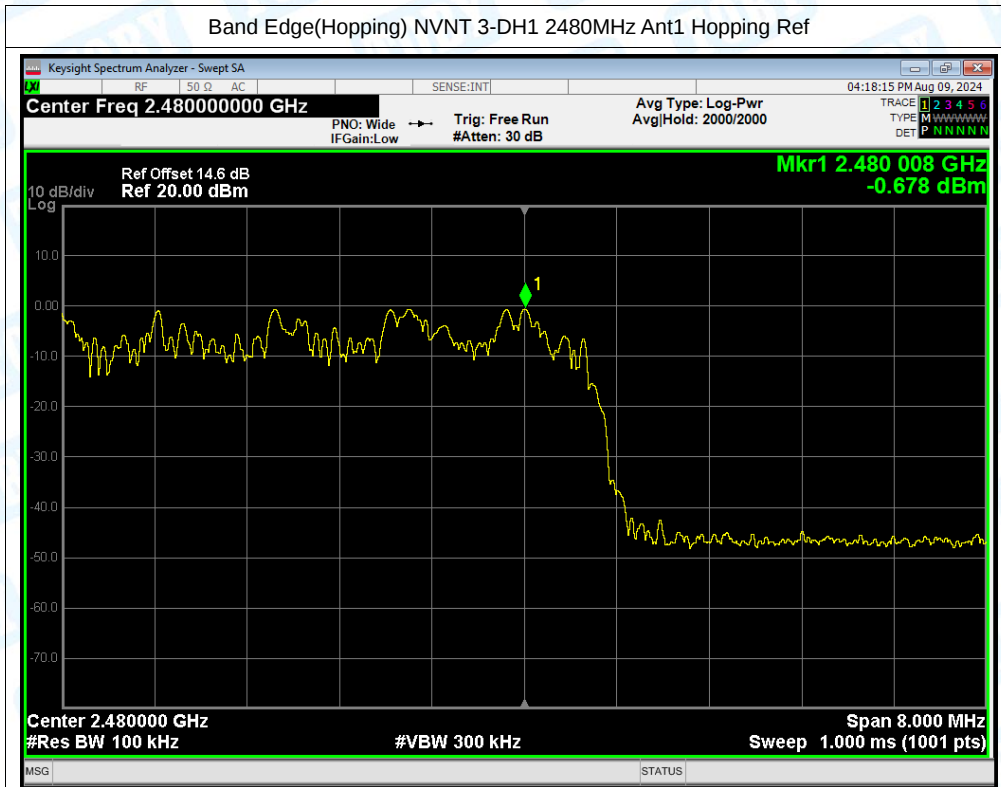


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission







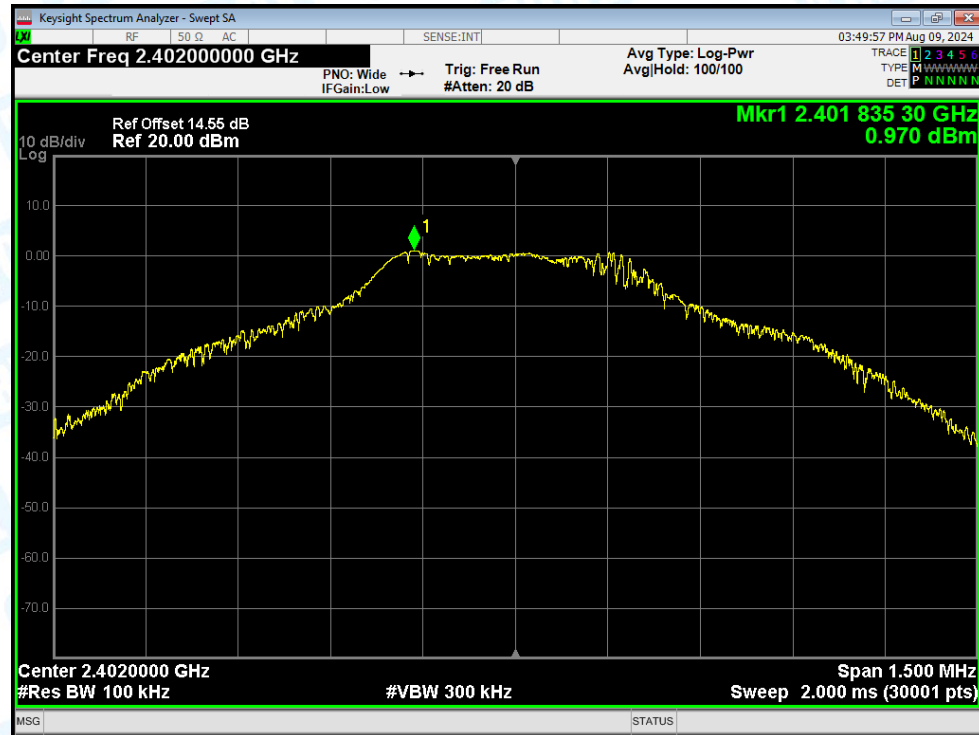


7. Conducted RF Spurious Emission

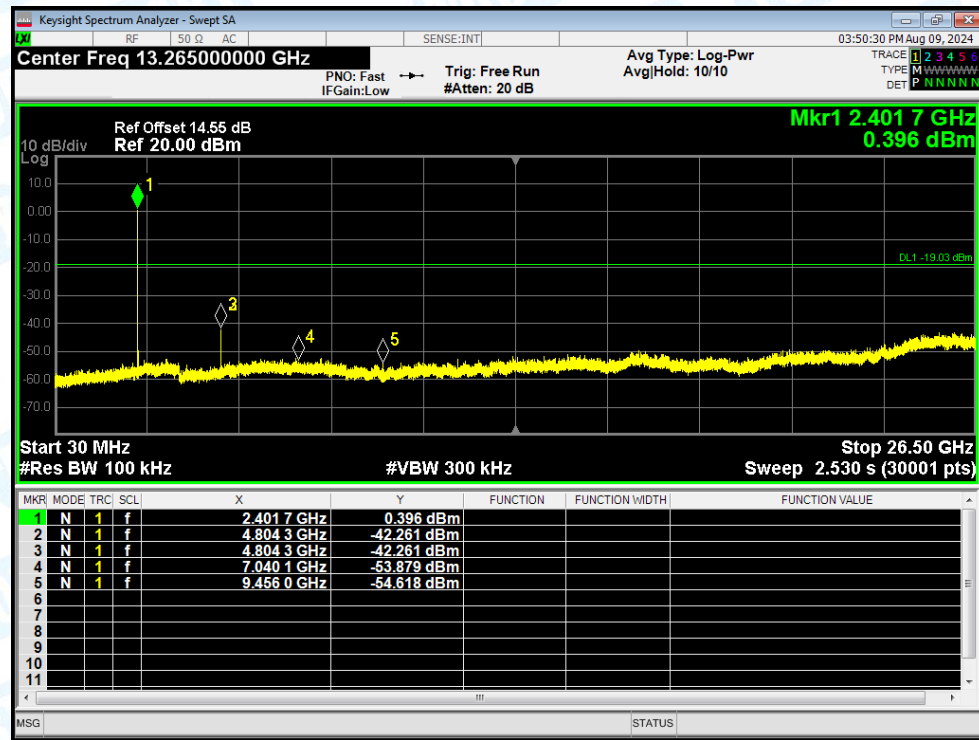
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-43.23	-20	Pass
NVNT	1-DH1	2441	Ant1	-42.9	-20	Pass
NVNT	1-DH1	2480	Ant1	-41.74	-20	Pass
NVNT	2-DH1	2402	Ant1	-43.56	-20	Pass
NVNT	2-DH1	2441	Ant1	-43.36	-20	Pass
NVNT	2-DH1	2480	Ant1	-42.18	-20	Pass
NVNT	3-DH1	2402	Ant1	-43.07	-20	Pass
NVNT	3-DH1	2441	Ant1	-42.42	-20	Pass
NVNT	3-DH1	2480	Ant1	-41.62	-20	Pass

Test Graphs

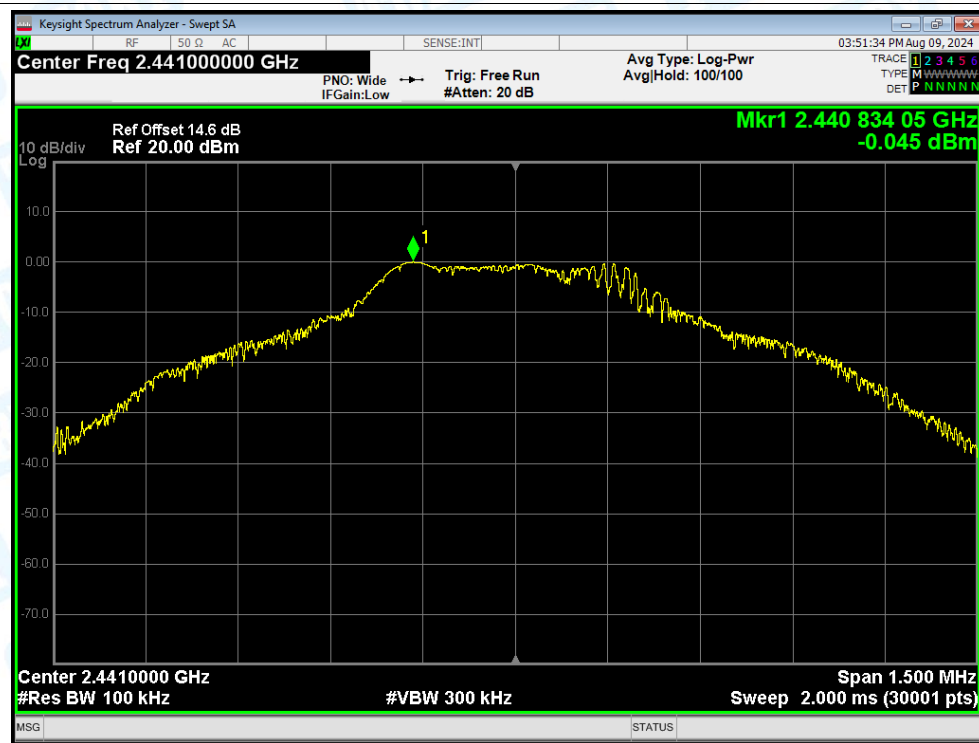
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



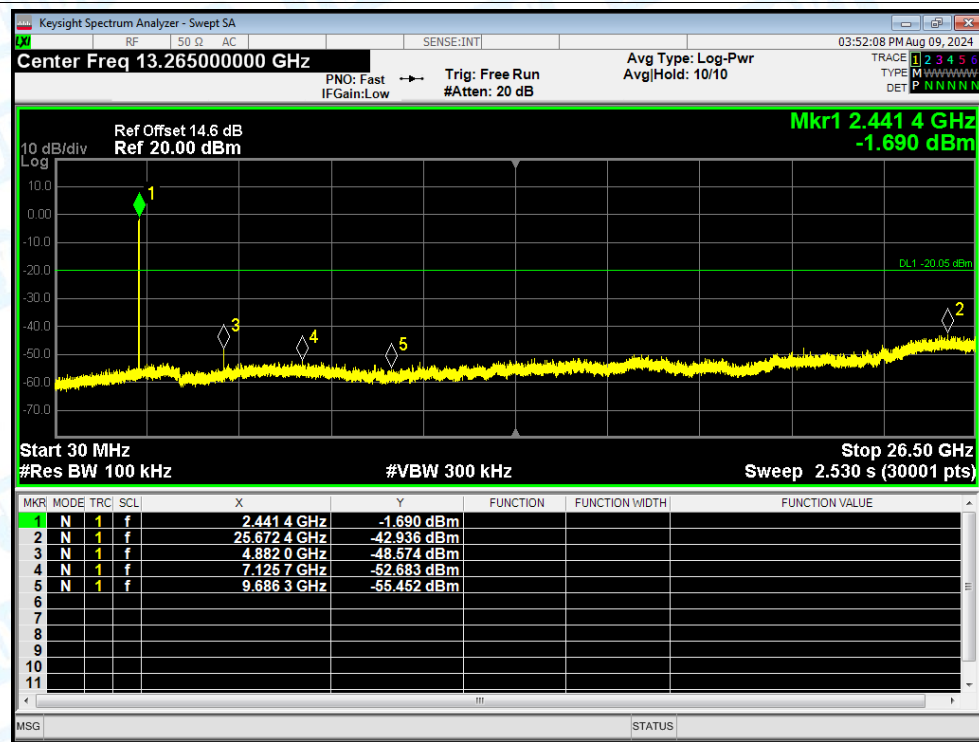
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



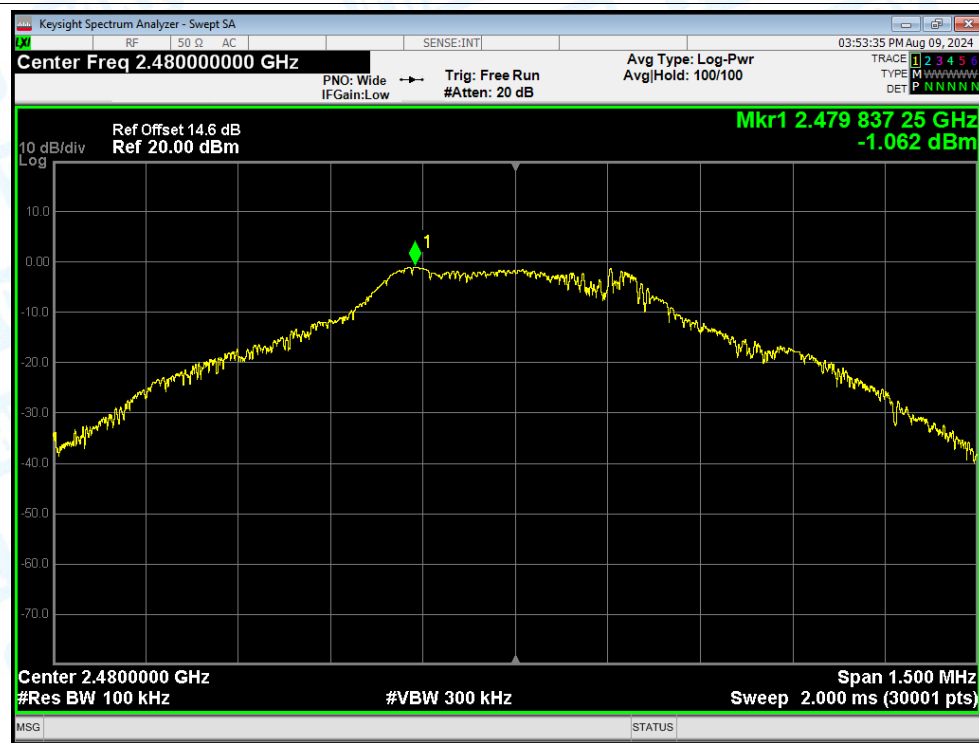
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



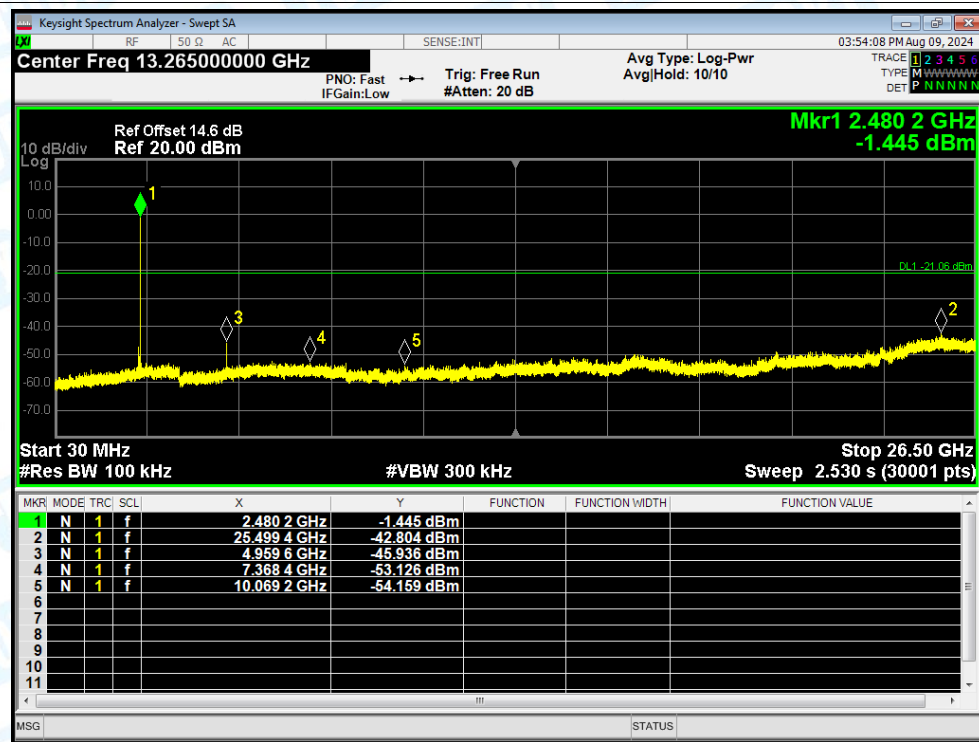
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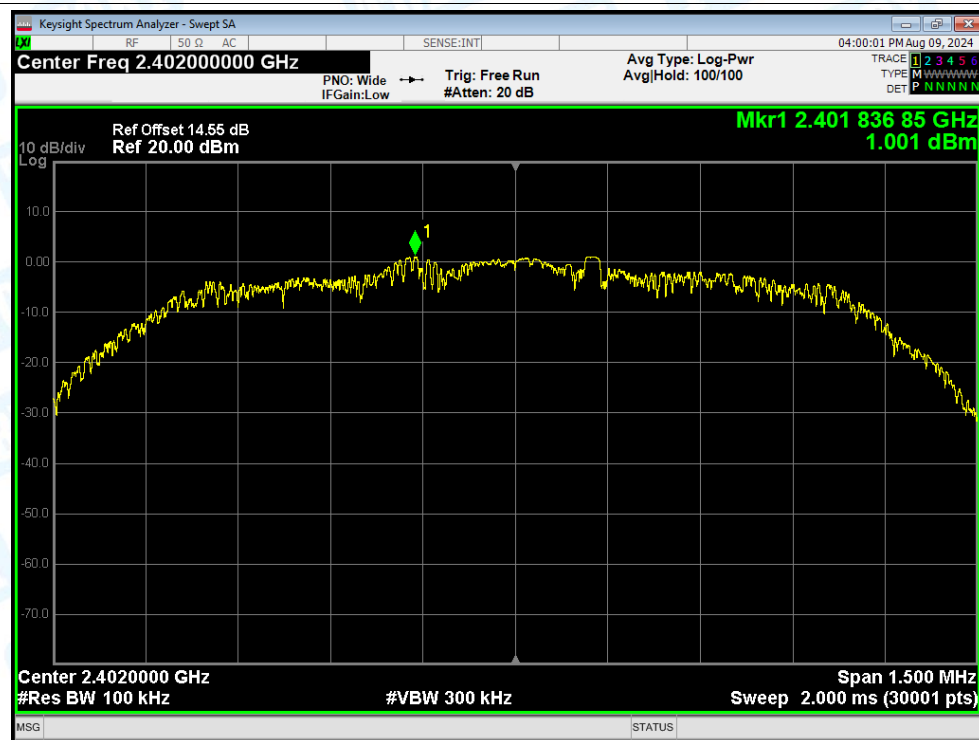
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



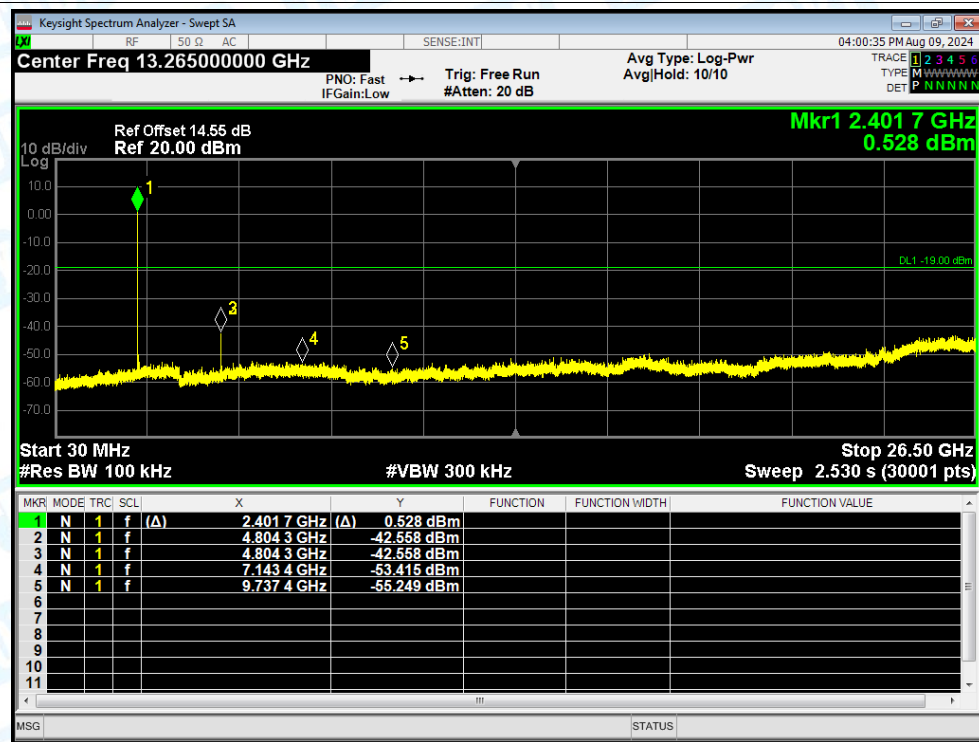
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



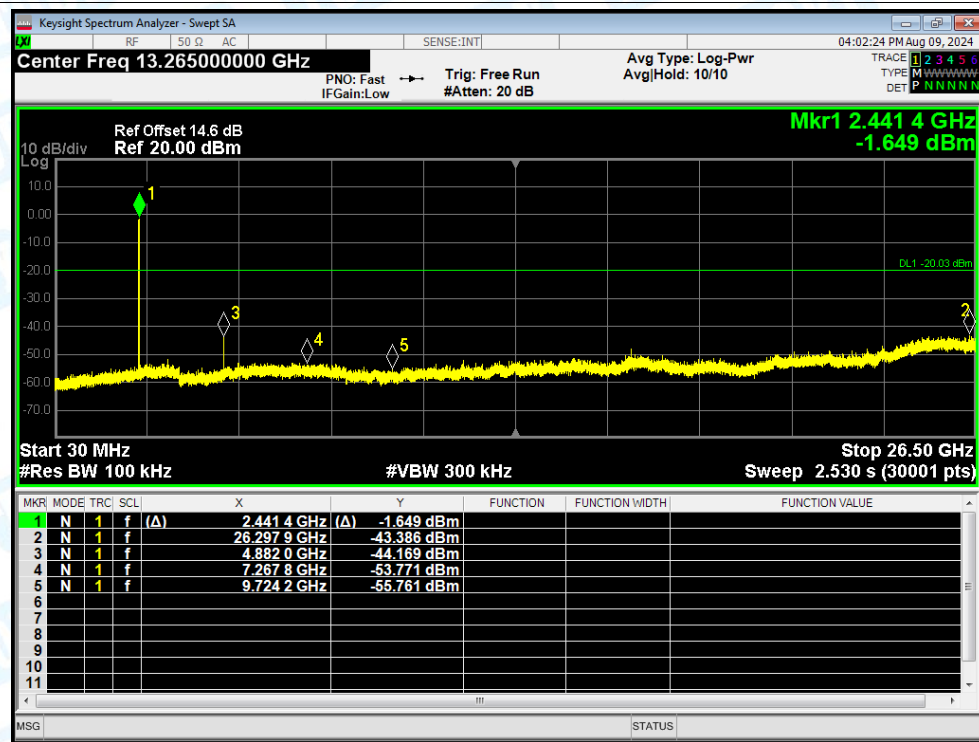
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



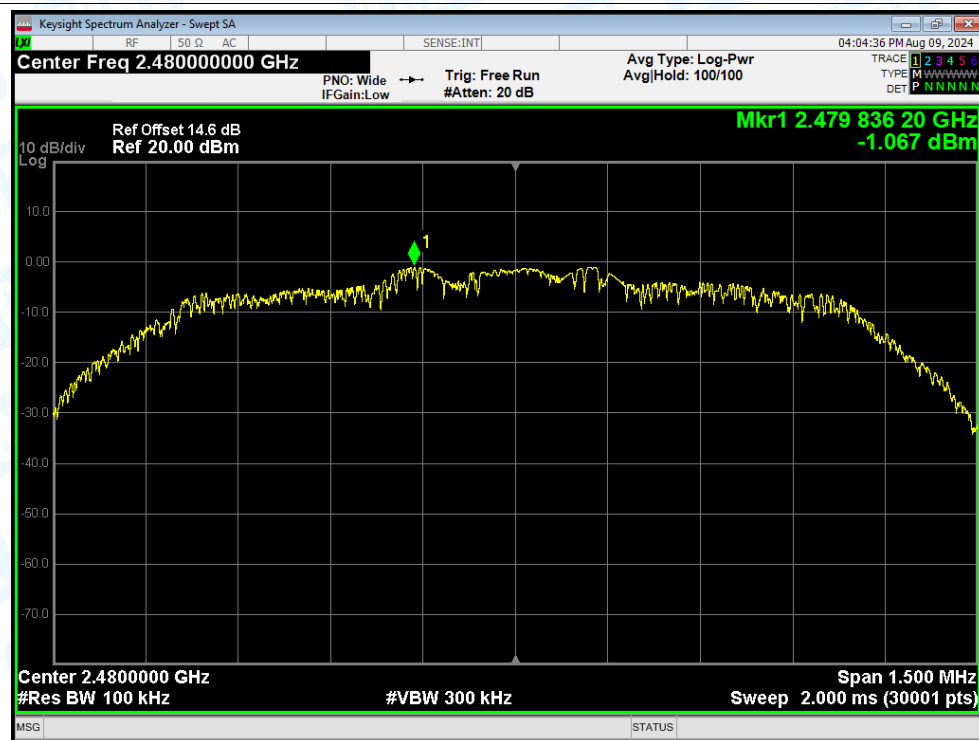
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



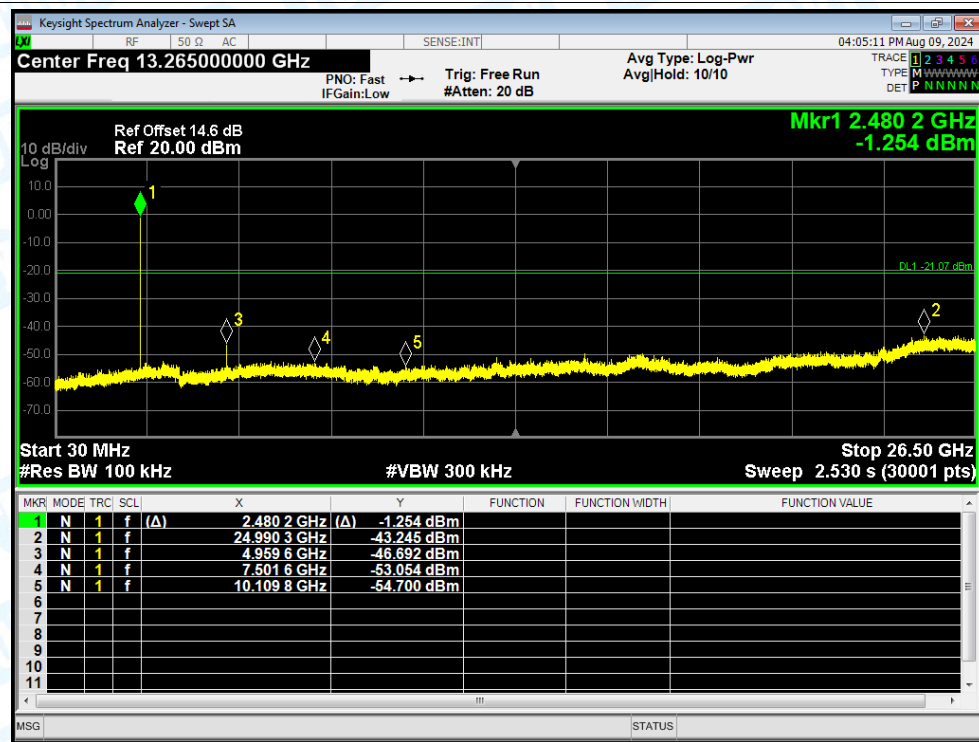
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



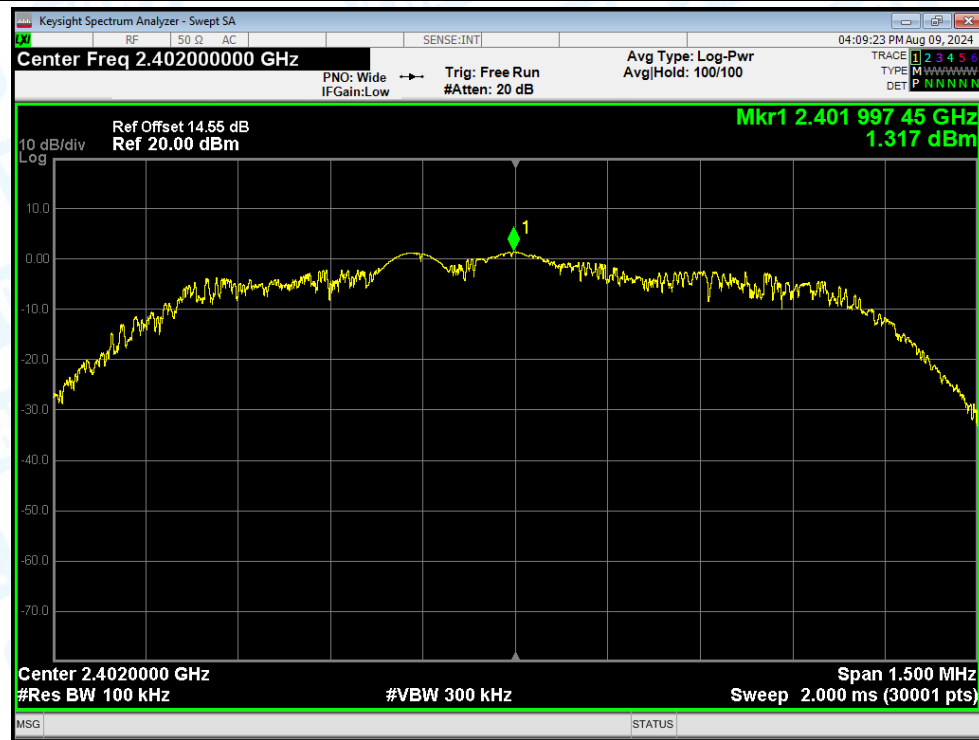
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



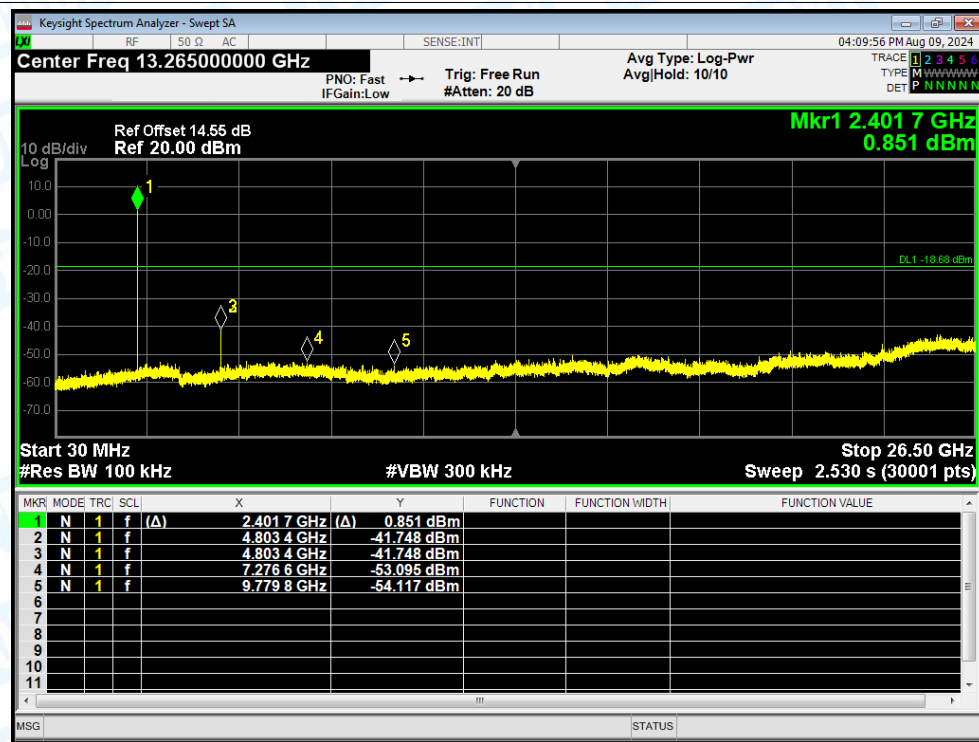
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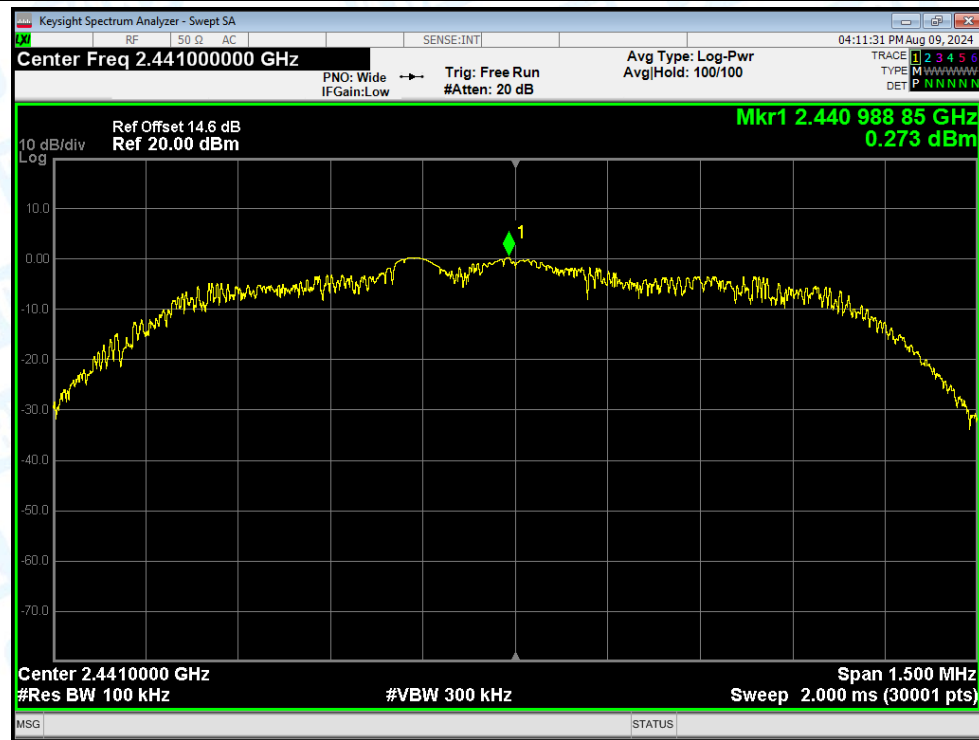
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



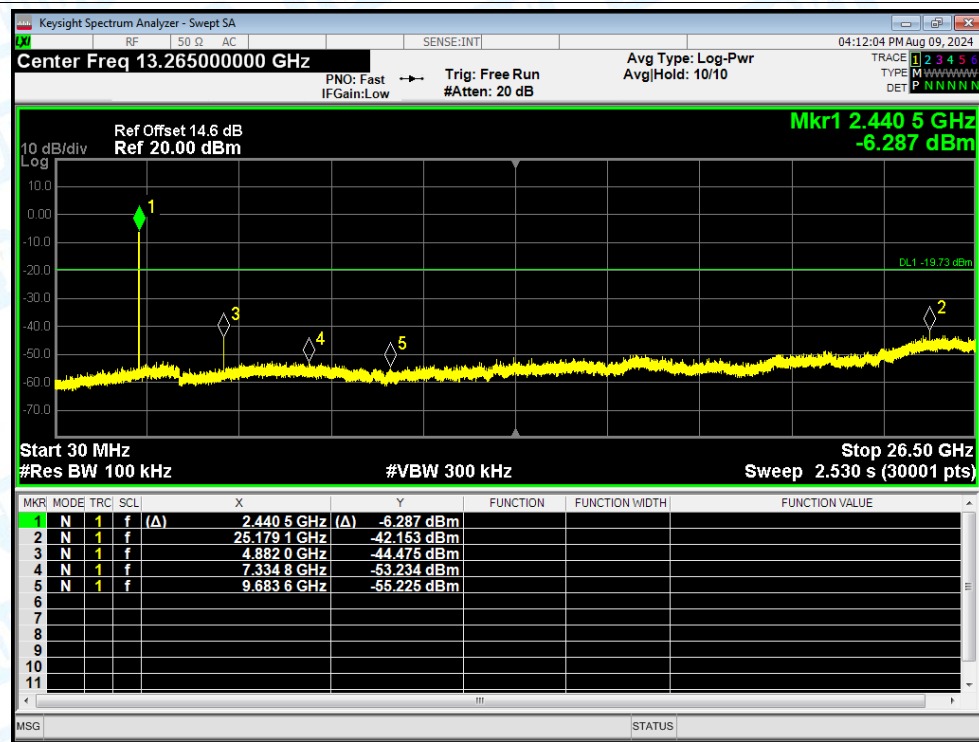
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



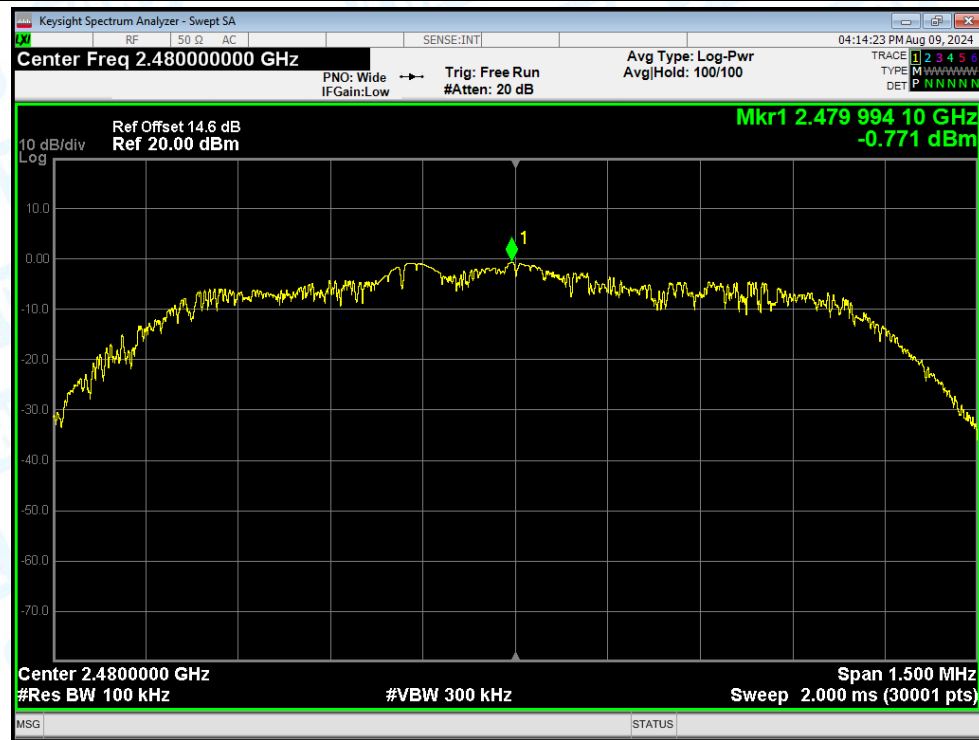
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



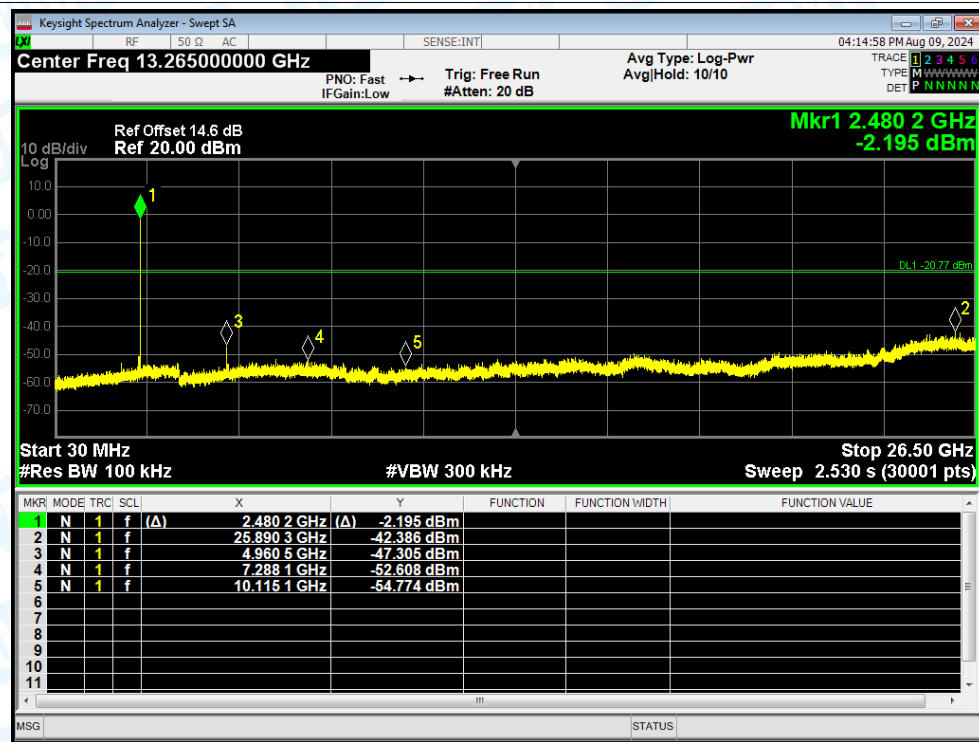
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

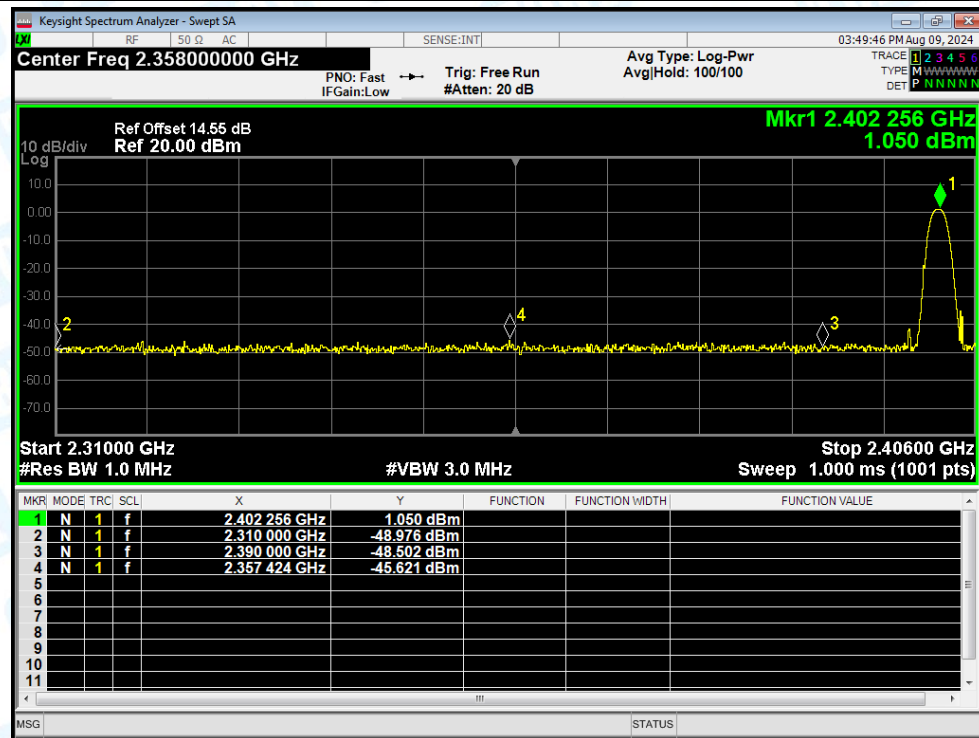


8. Restrict Band

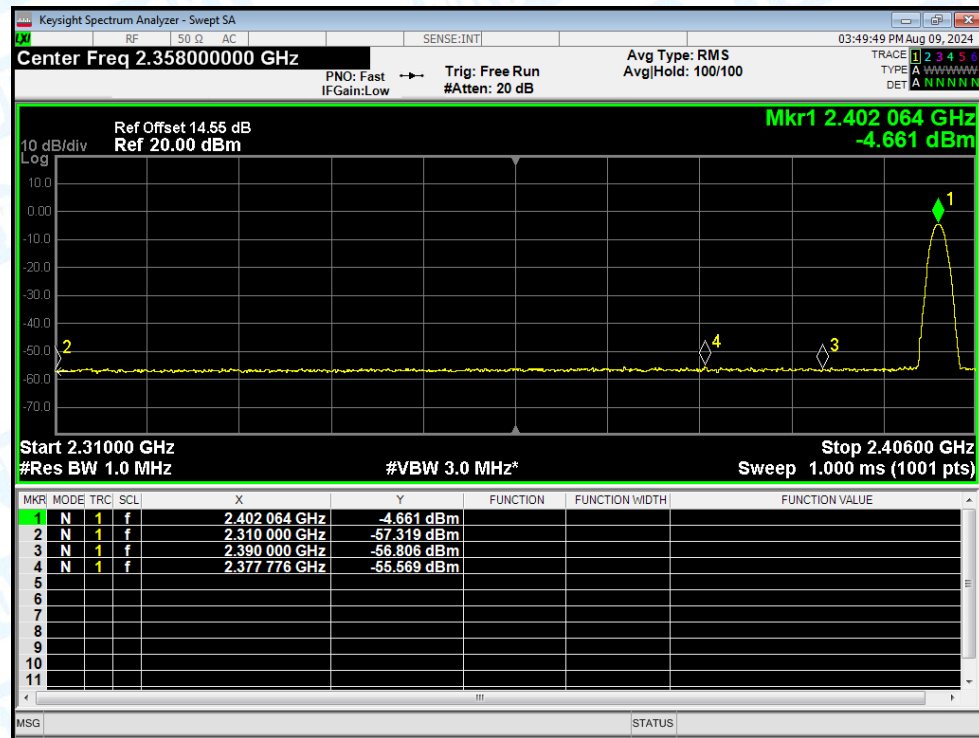
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-48.98	2	-	48.28	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-57.32	2	4.95	44.89	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2357.424	-45.62	2	-	51.64	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2377.776	-55.57	2	4.95	46.64	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-48.5	2	-	48.76	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-56.81	2	4.95	45.4	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-46.89	2	-	50.37	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-56.5	2	4.95	45.71	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2497.696	-44.62	2	-	52.64	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2499.424	-55.35	2	4.95	46.86	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-48.26	2	-	49	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-56.3	2	4.95	45.91	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.53	2	-	48.73	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-57.1	2	4.84	45	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2381.424	-45.49	2	-	51.77	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2385.168	-55.87	2	4.84	46.23	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-48.08	2	-	49.18	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-56.69	2	4.84	45.41	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-47.62	2	-	49.64	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-56.57	2	4.84	45.53	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2484.016	-44.88	2	-	52.38	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2484.112	-55.21	2	4.84	46.89	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-47.96	2	-	49.3	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-56.3	2	4.84	45.8	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-49.24	2	-	48.02	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-57.1	2	4.84	45	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2315.376	-46.22	2	-	51.04	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2350.032	-55.86	2	4.84	46.24	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-47.62	2	-	49.64	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-56.19	2	4.84	45.91	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-48.14	2	-	49.12	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-56.08	2	4.84	46.02	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2493.64	-45.05	2	-	52.21	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2495.056	-55.31	2	4.84	46.79	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-48.17	2	-	49.09	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-56.04	2	4.84	46.06	Average	54	Pass

Test Graphs

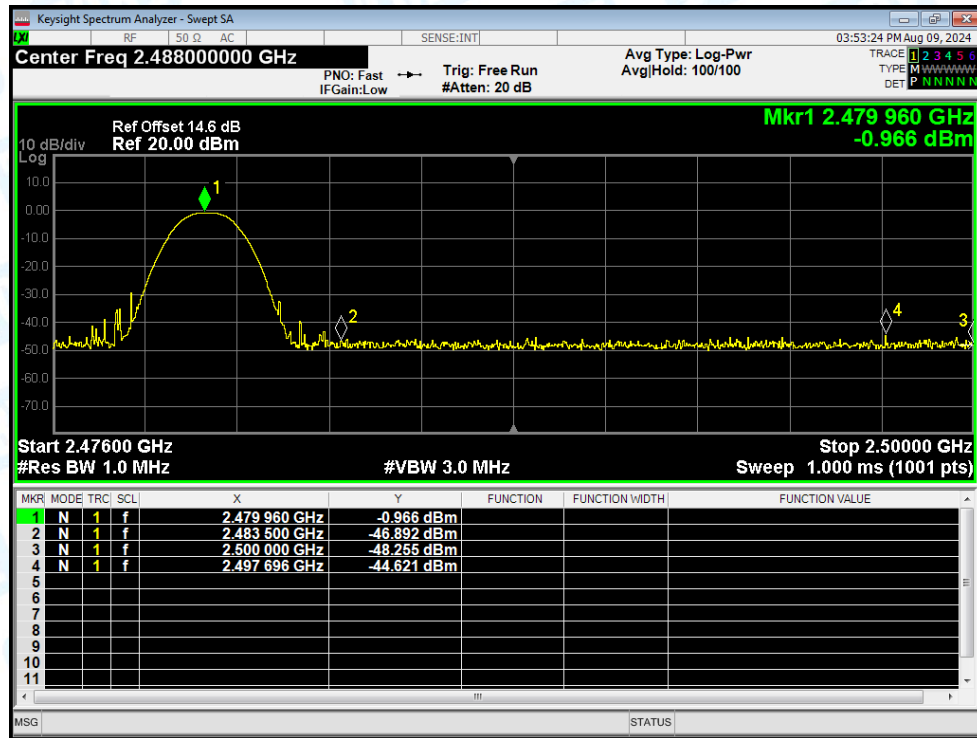
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



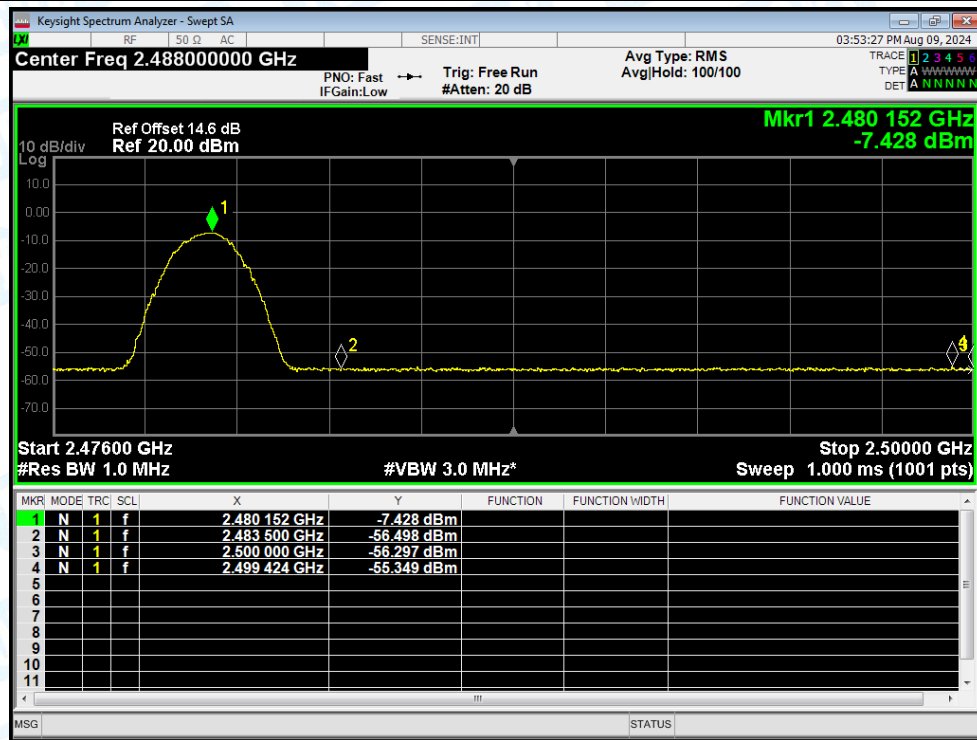
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



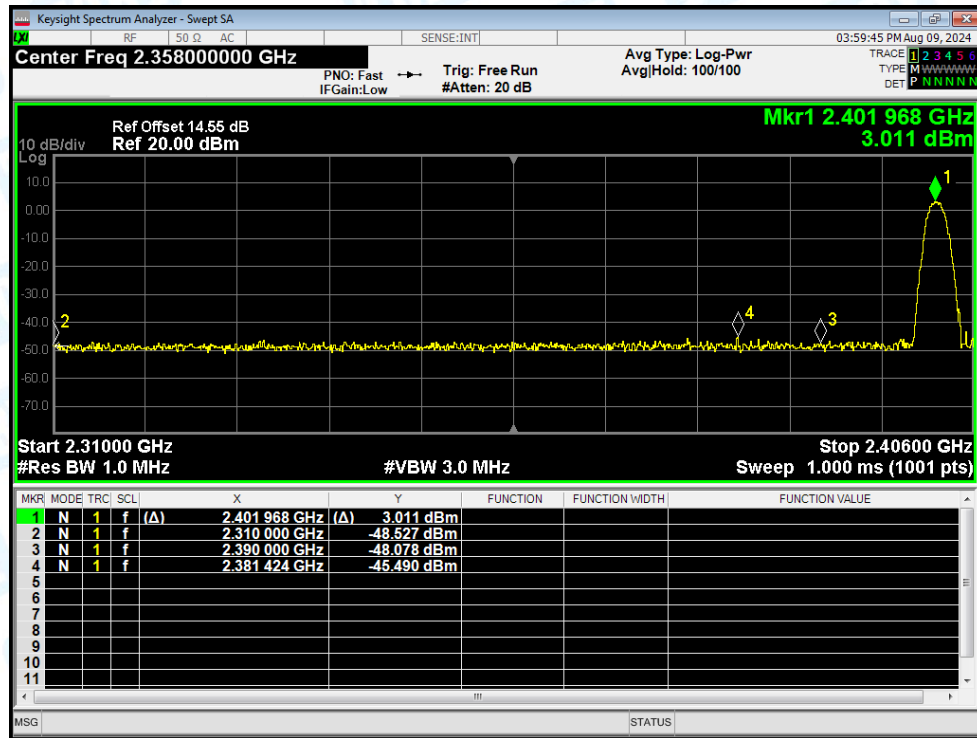
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



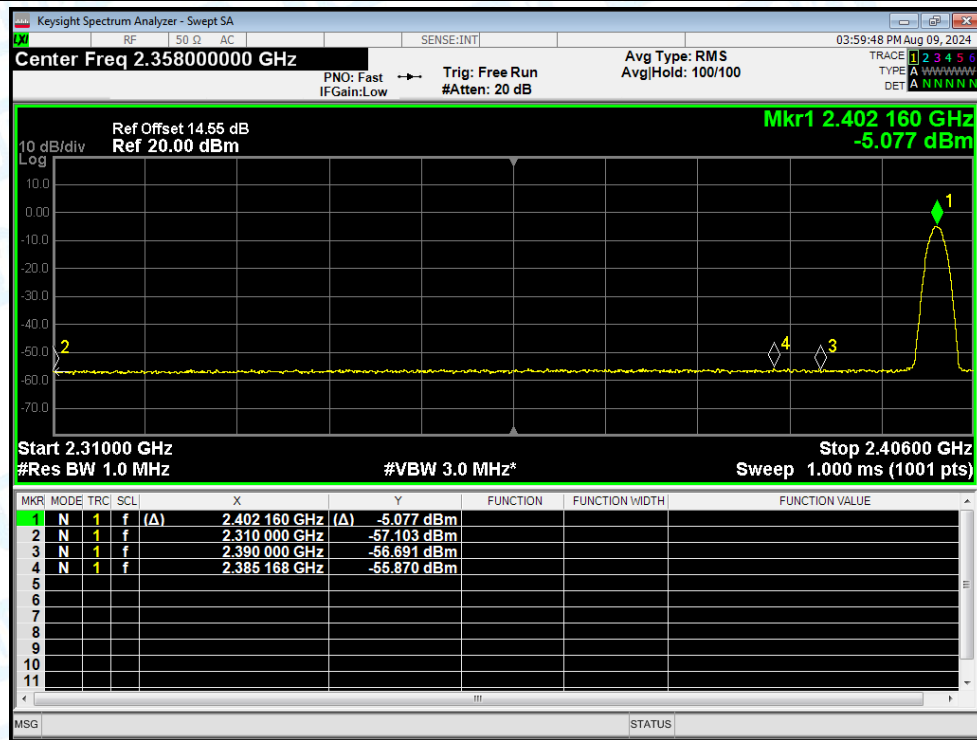
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



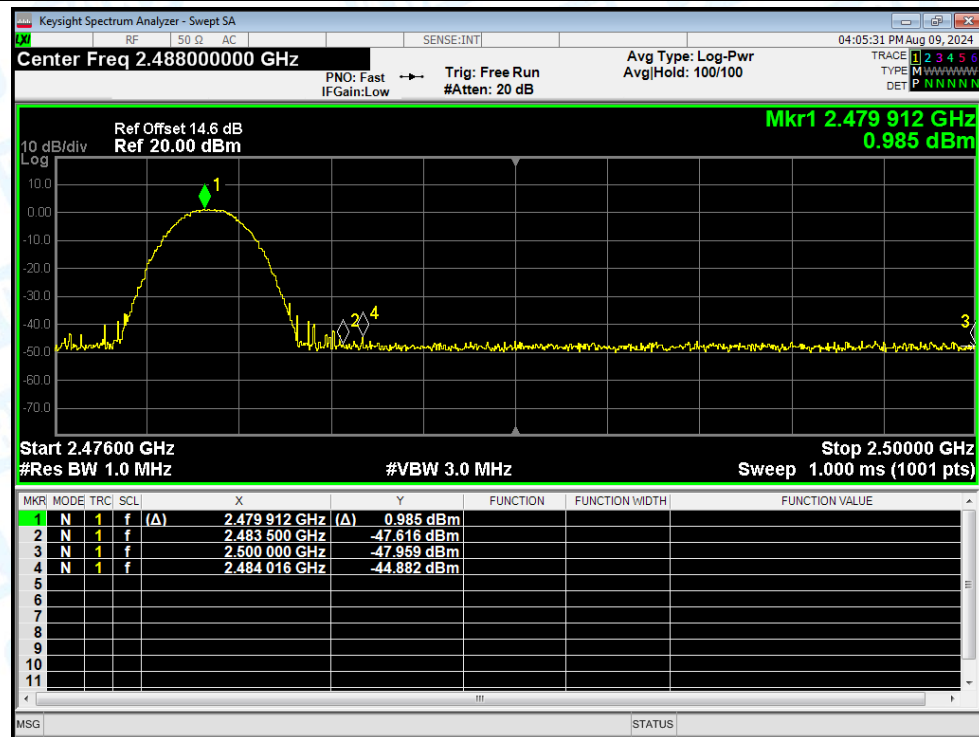
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



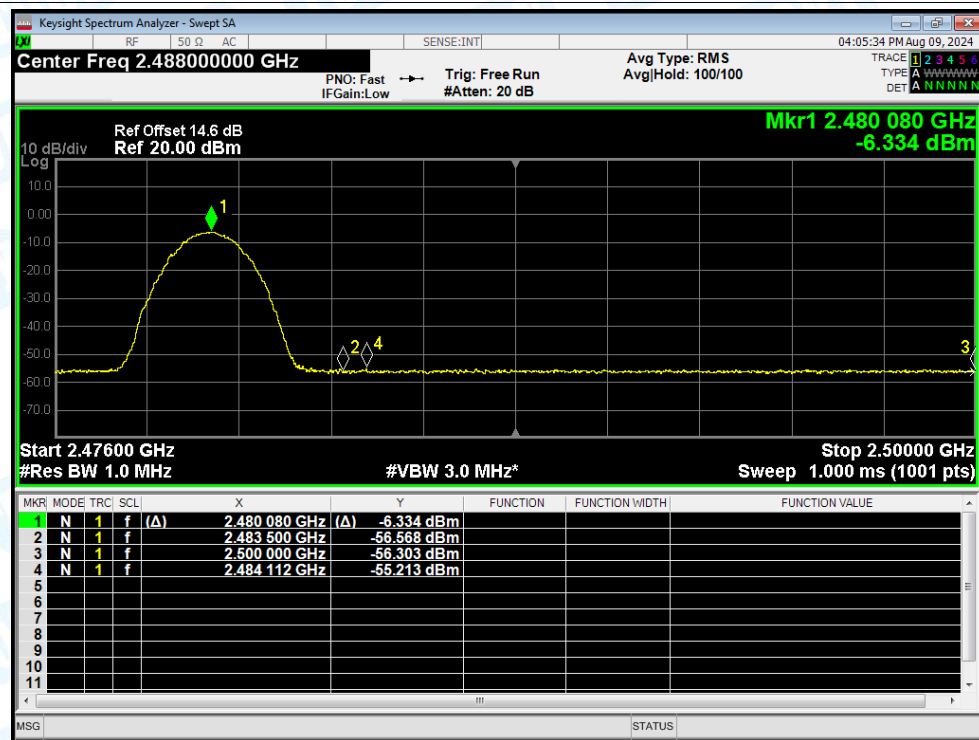
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



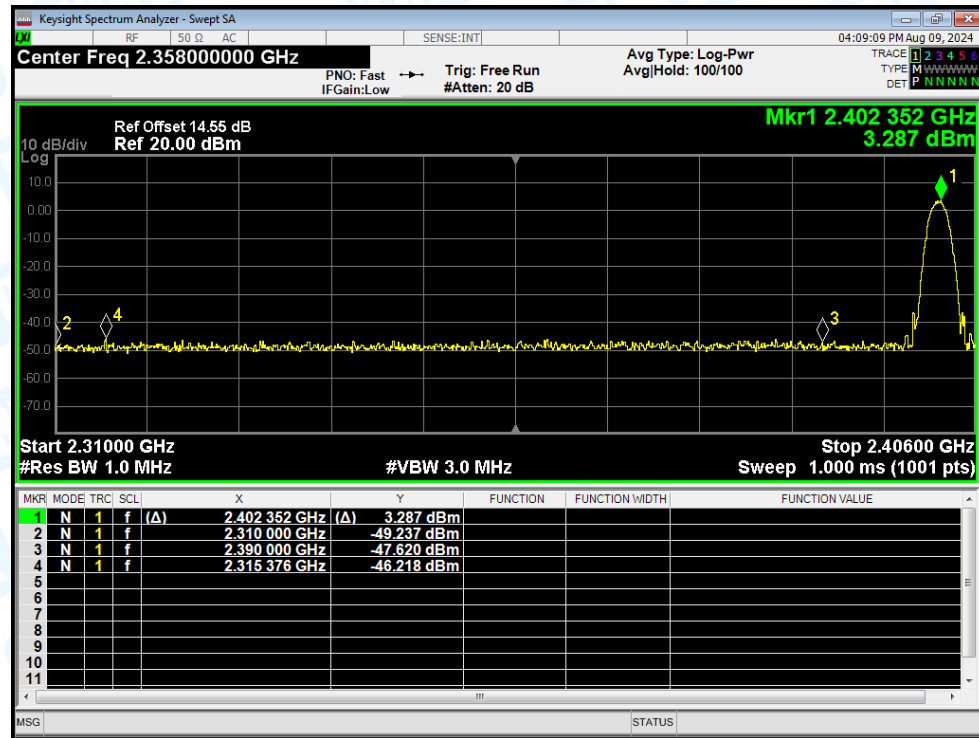
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



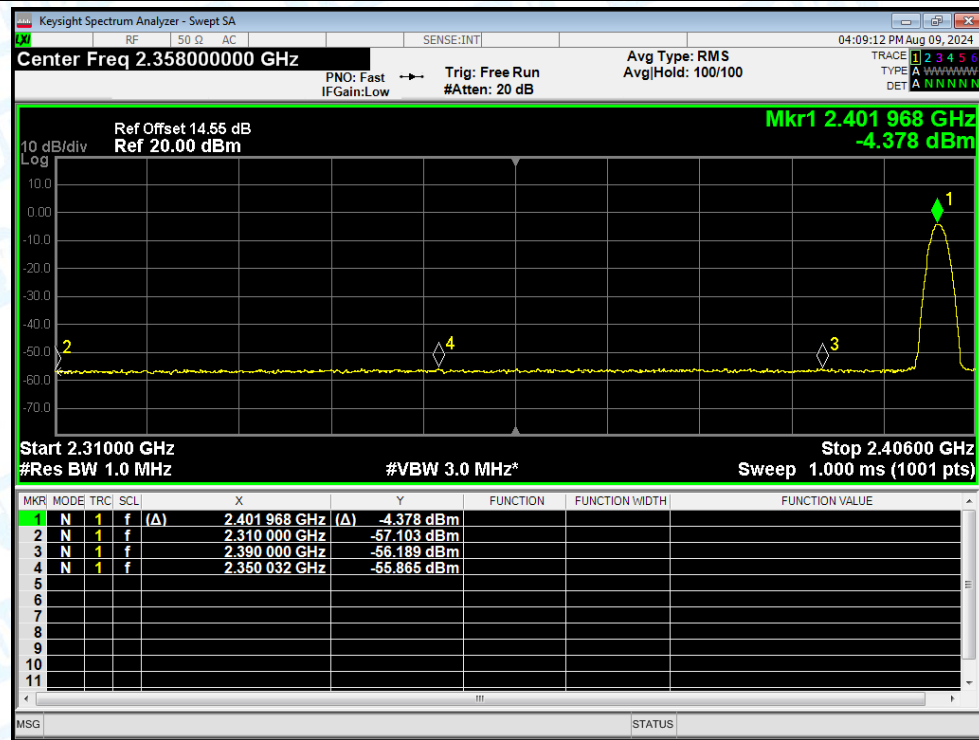
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



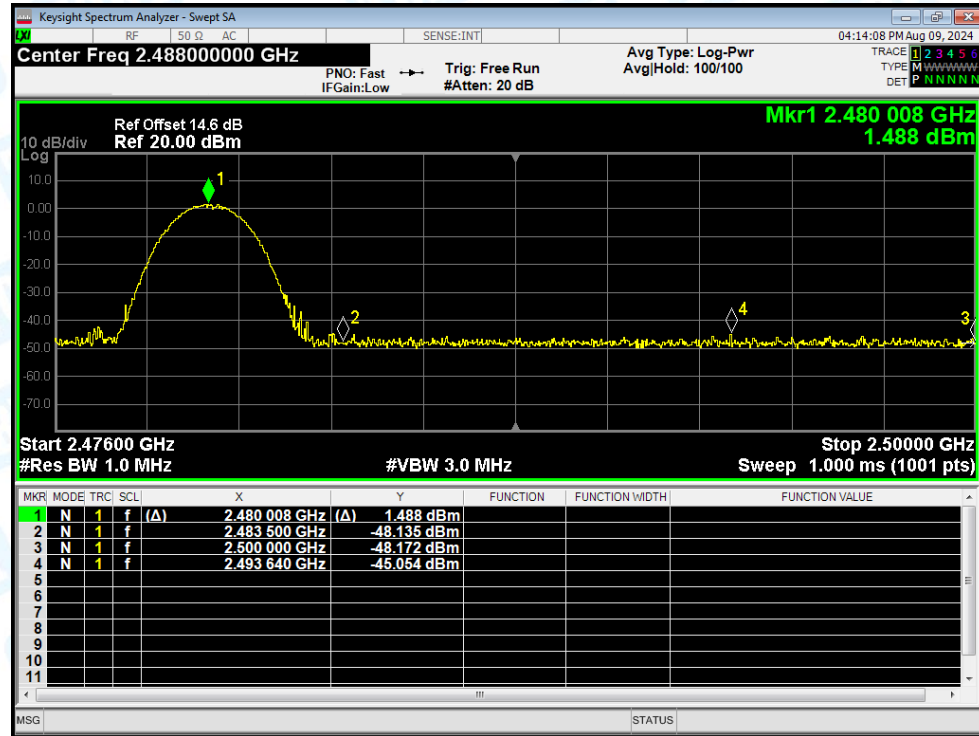
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



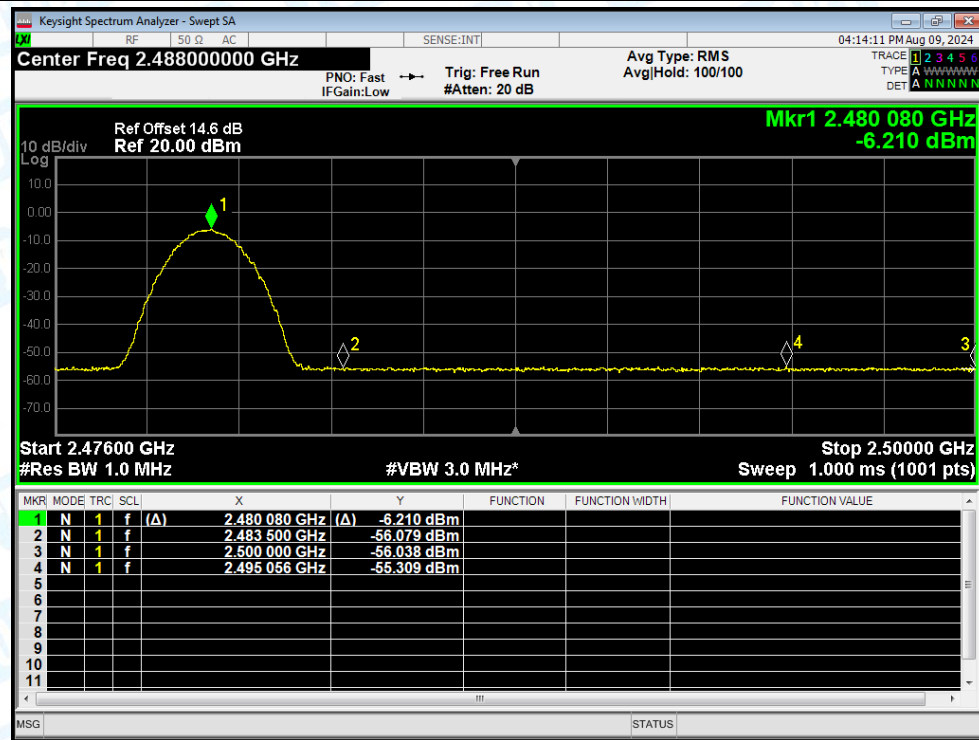
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Average

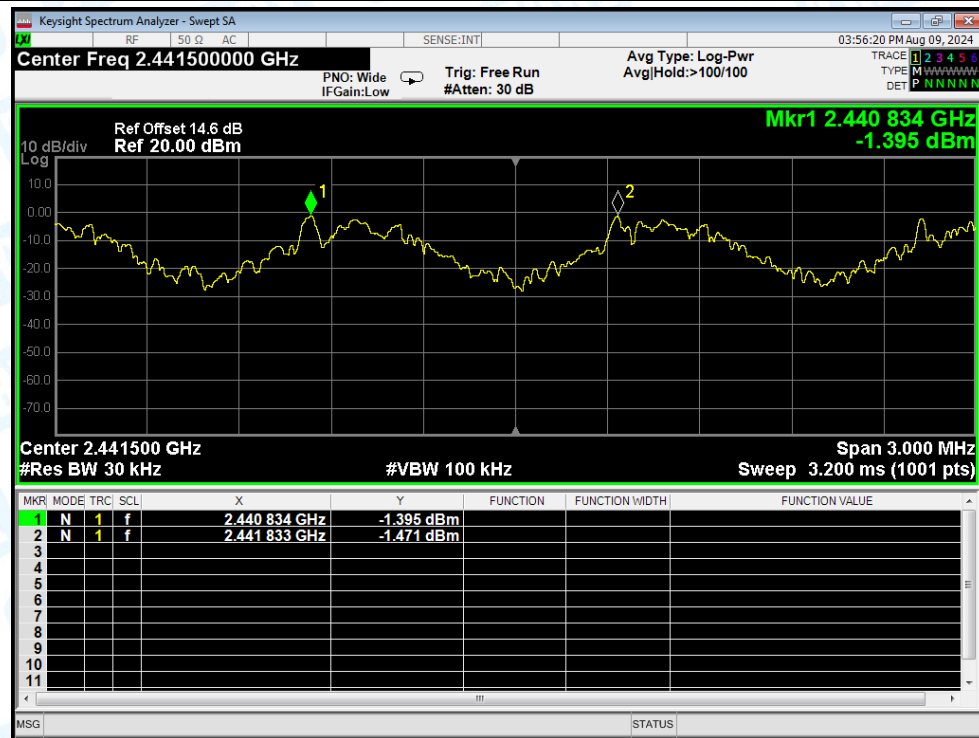


9. Carrier Frequencies Separation

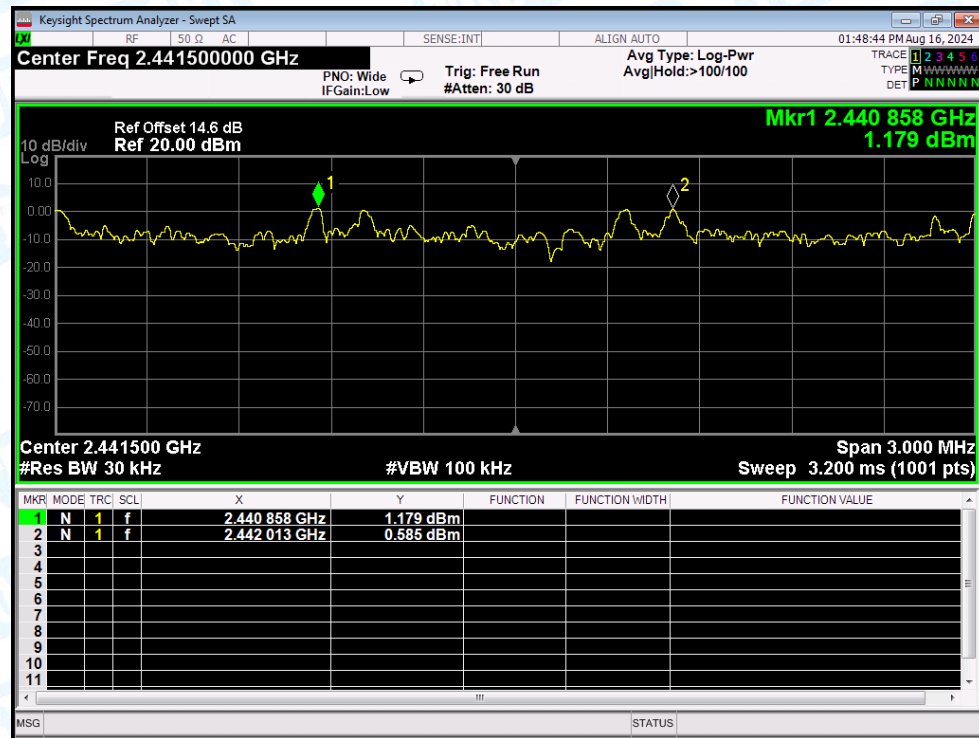
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.834	2441.833	0.999	0.62	Pass
NVNT	2-DH1	Ant1	2440.858	2442.013	1.155	0.025	Pass
NVNT	3-DH1	Ant1	2440.993	2441.989	0.996	0.807	Pass

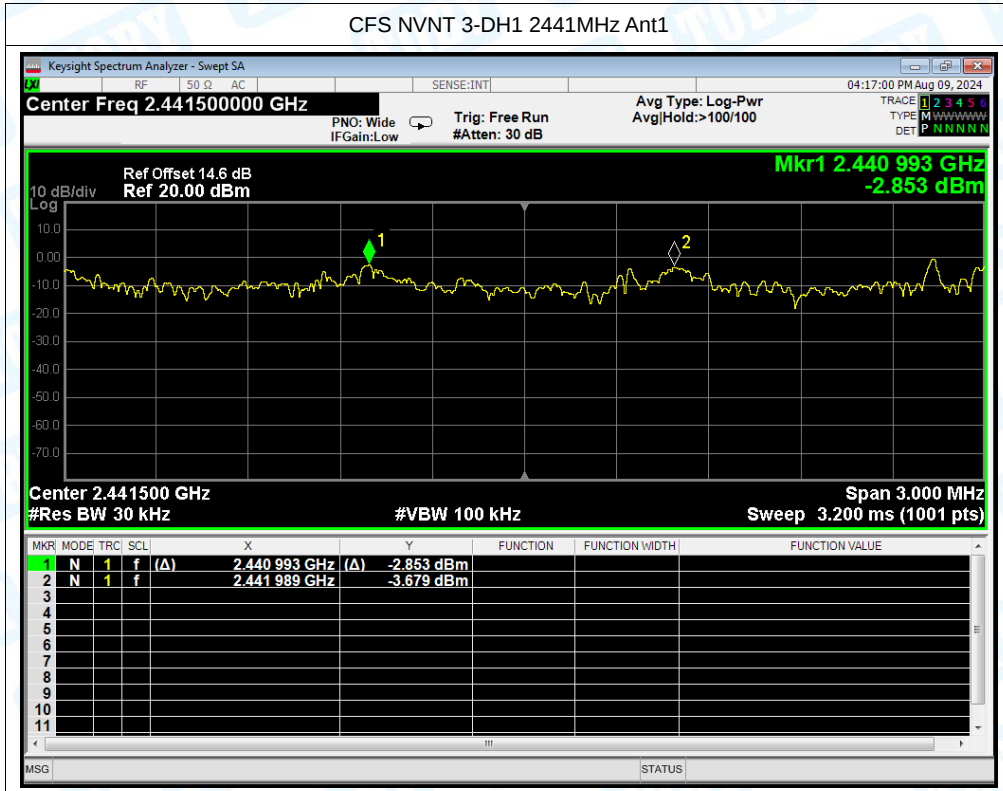
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



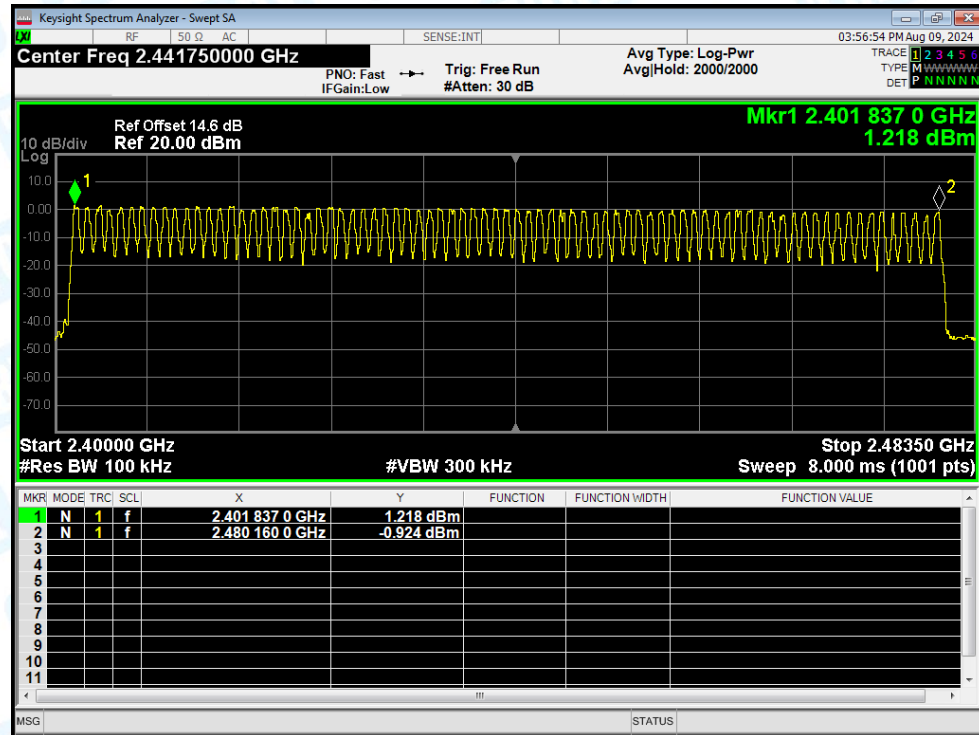


10. Number of Hopping Channel

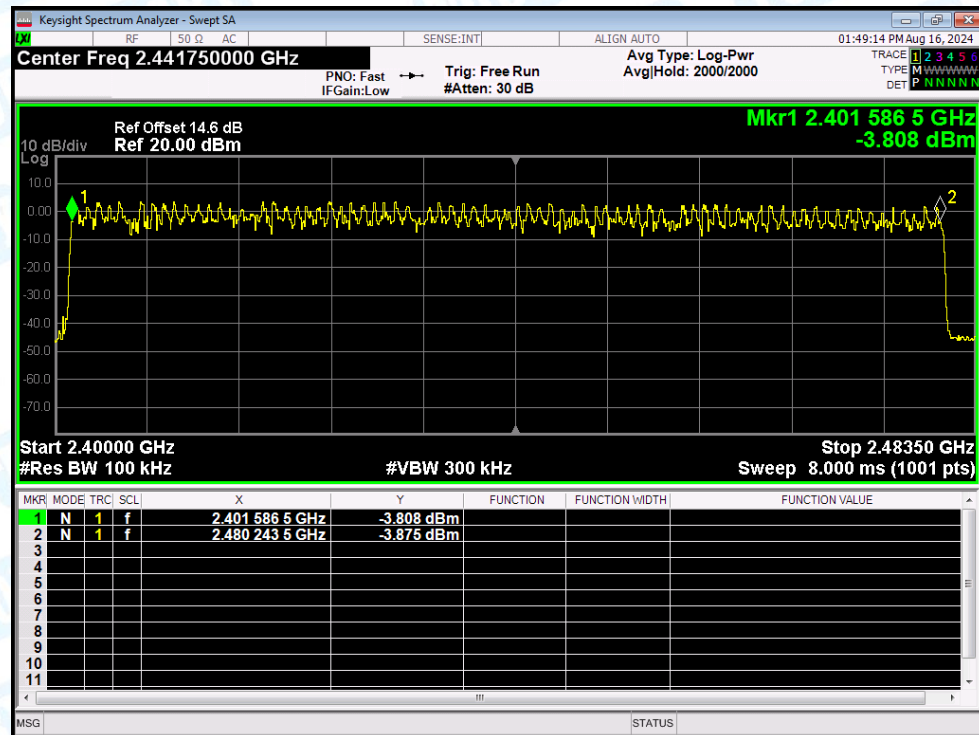
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

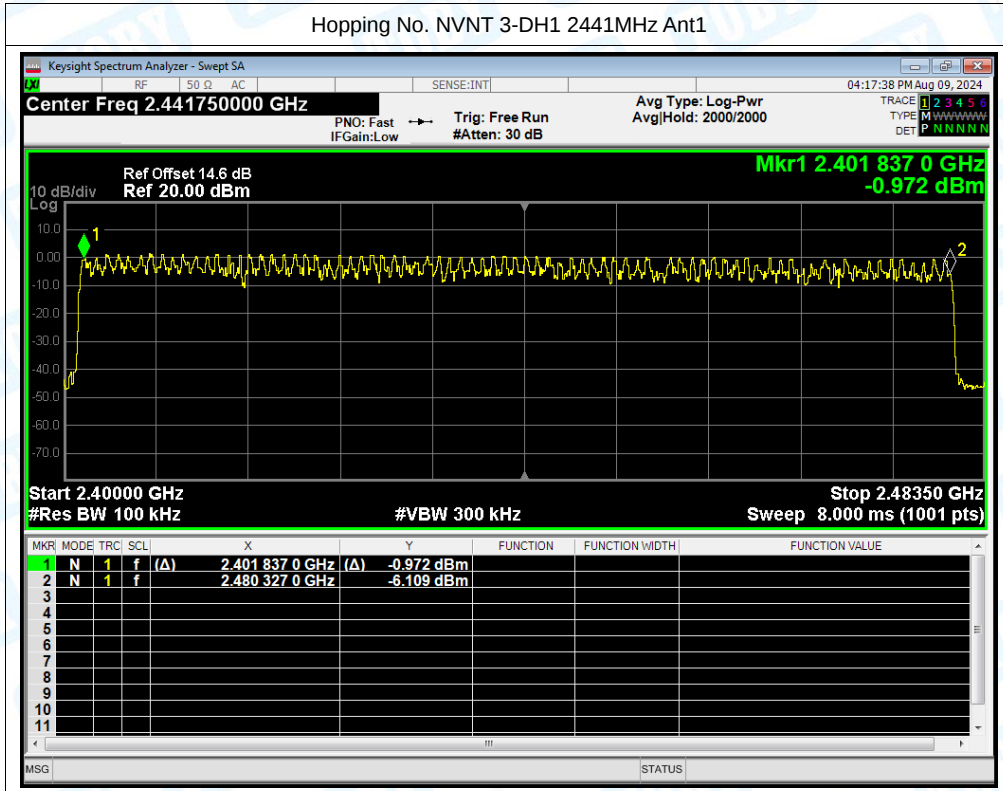
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



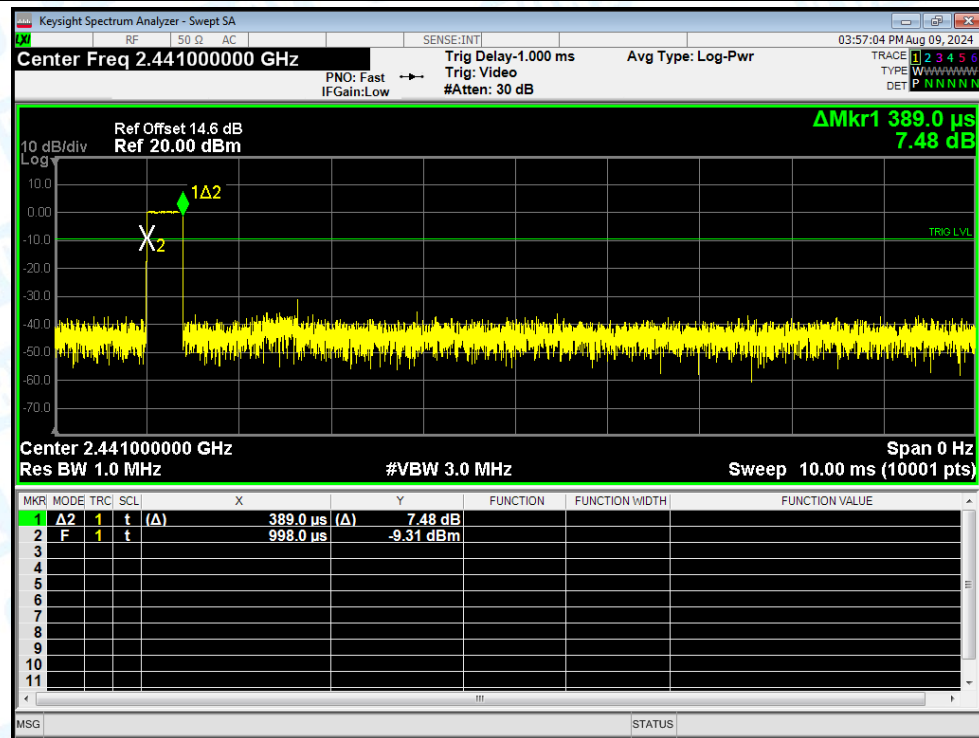


11. Dwell Time

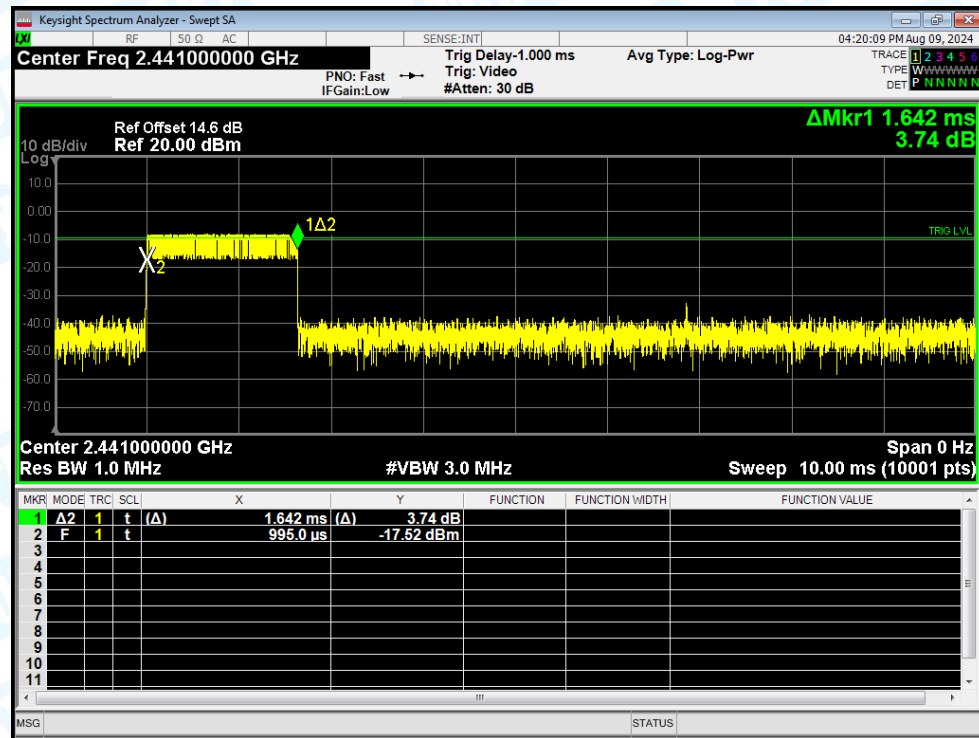
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.389	124.48	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.642	262.72	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.89	308.267	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.393	125.76	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.65	264	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.893	308.587	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.396	126.72	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.649	263.84	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.897	309.013	31600	400	Pass

Test Graphs

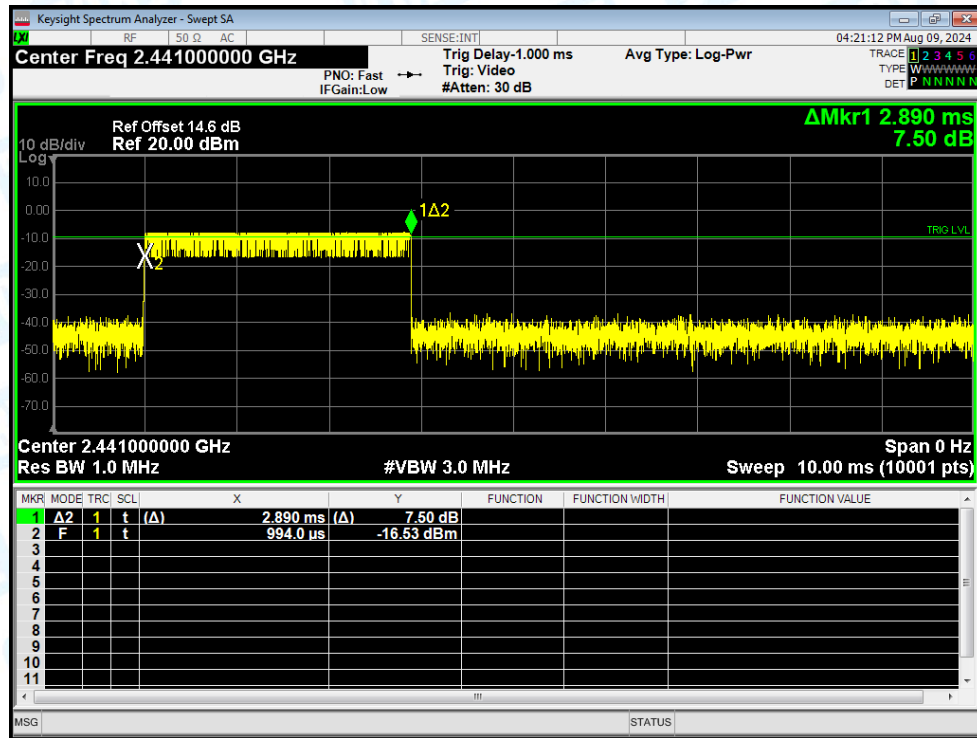
Dwell NVNT 1-DH1 2441MHz Ant1



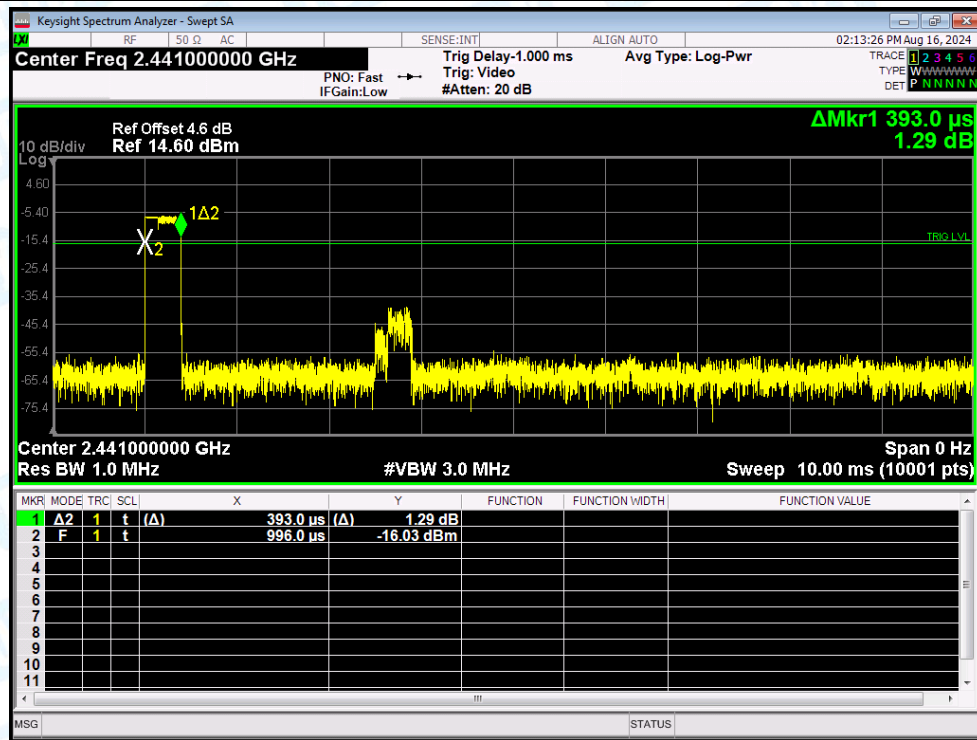
Dwell NVNT 1-DH3 2441MHz Ant1



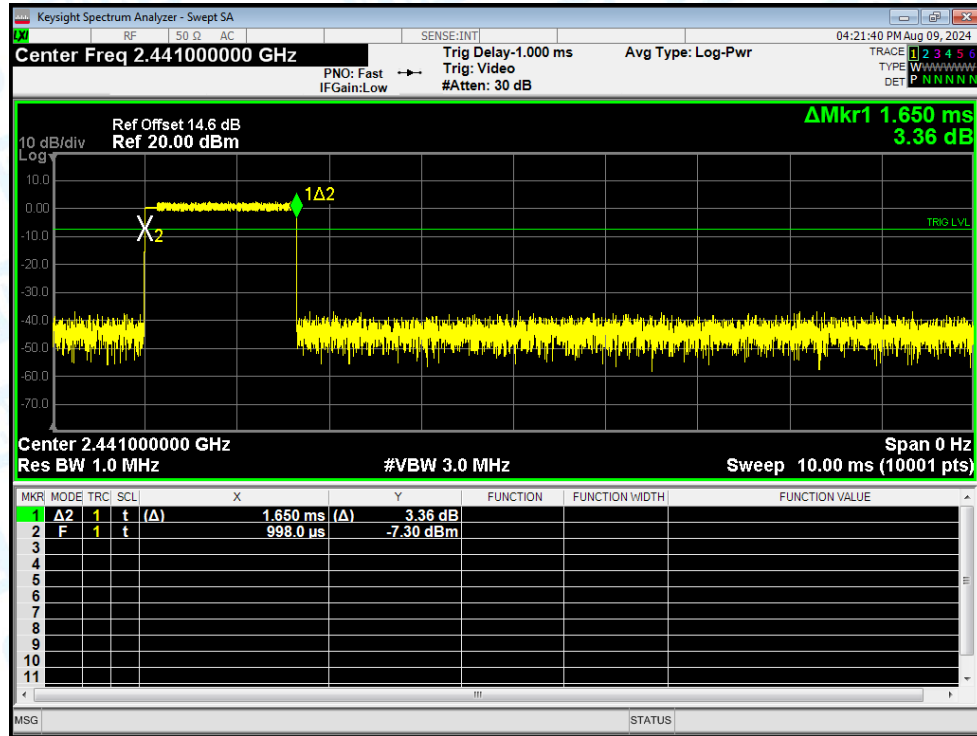
Dwell NVNT 1-DH5 2441MHz Ant1



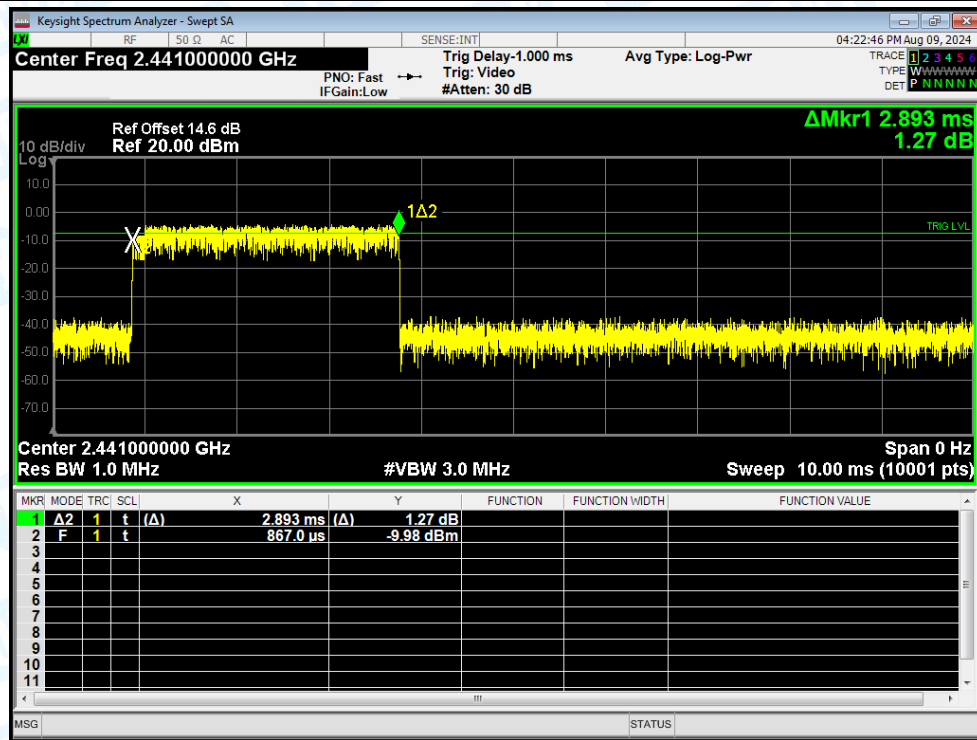
Dwell NVNT 2-DH1 2441MHz Ant1



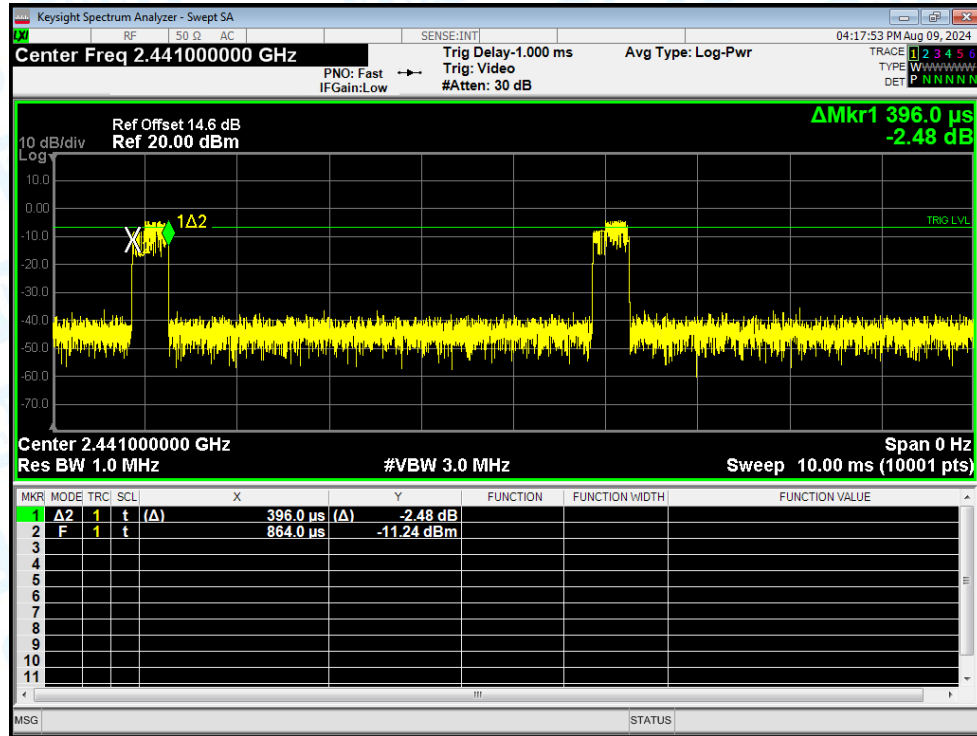
Dwell NVNT 2-DH3 2441MHz Ant1



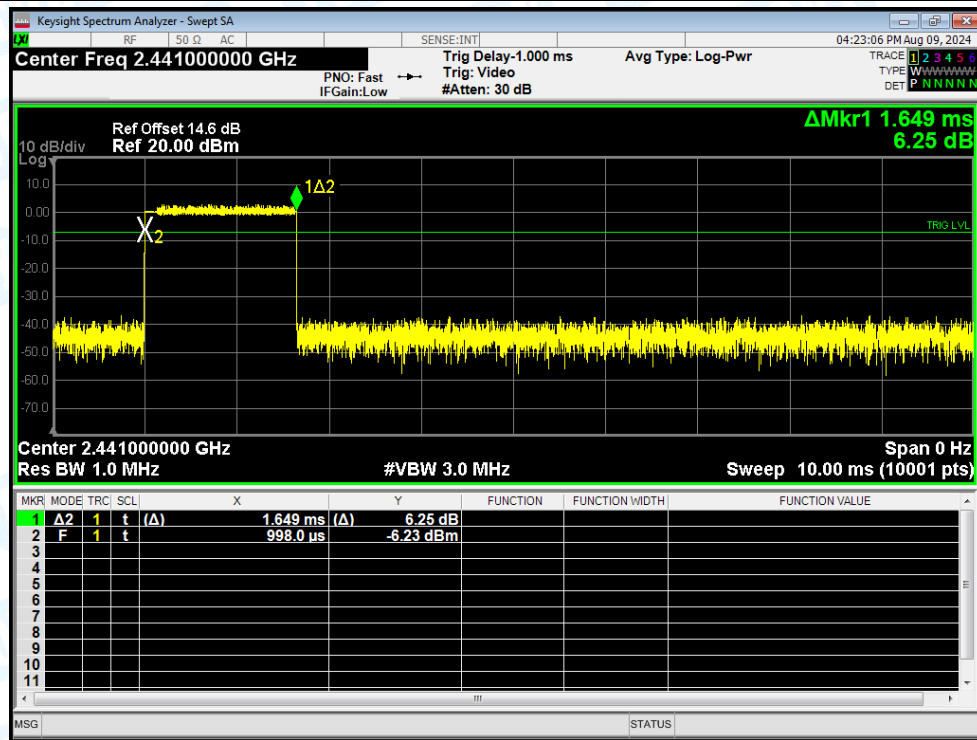
Dwell NVNT 2-DH5 2441MHz Ant1

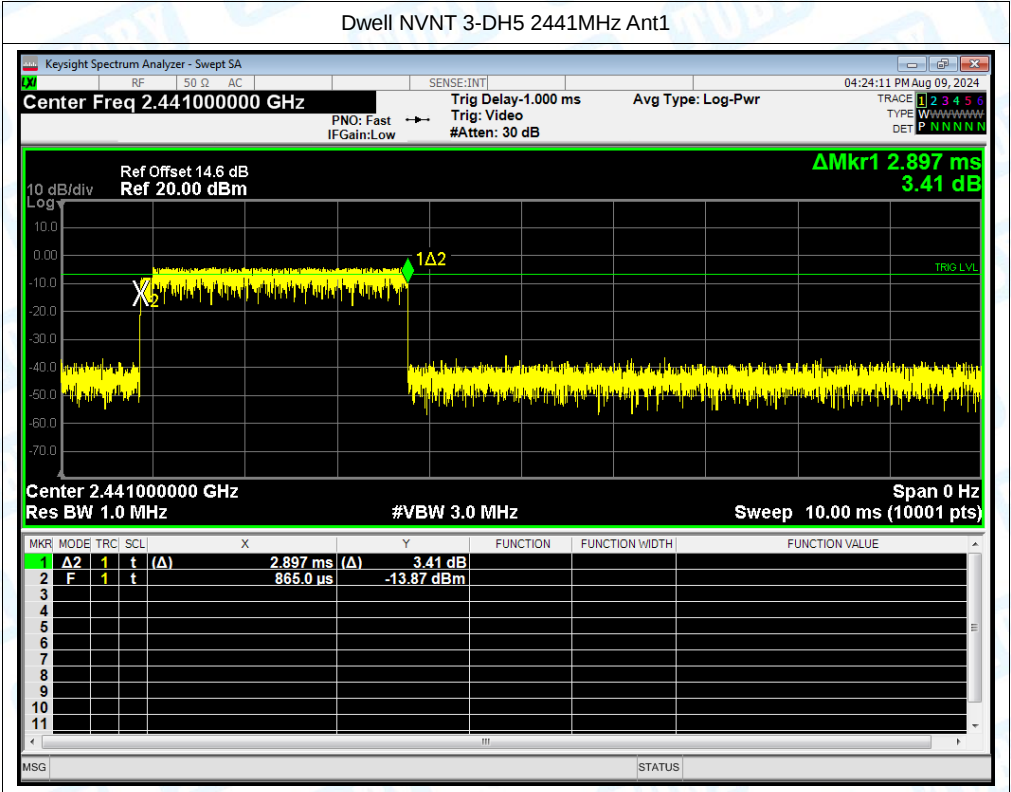


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





---- END OF REPORT ----