

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Y130
Test Model:	Y130
Sample ID:	HC-C-202405-0335-01-02
Environmental Conditions	
Temperature:	24.6℃
Relative Humidity:	52.6%
Test Voltage:	DC 3.7V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202405-0335-151 The report only show the worst case data.	

Contents

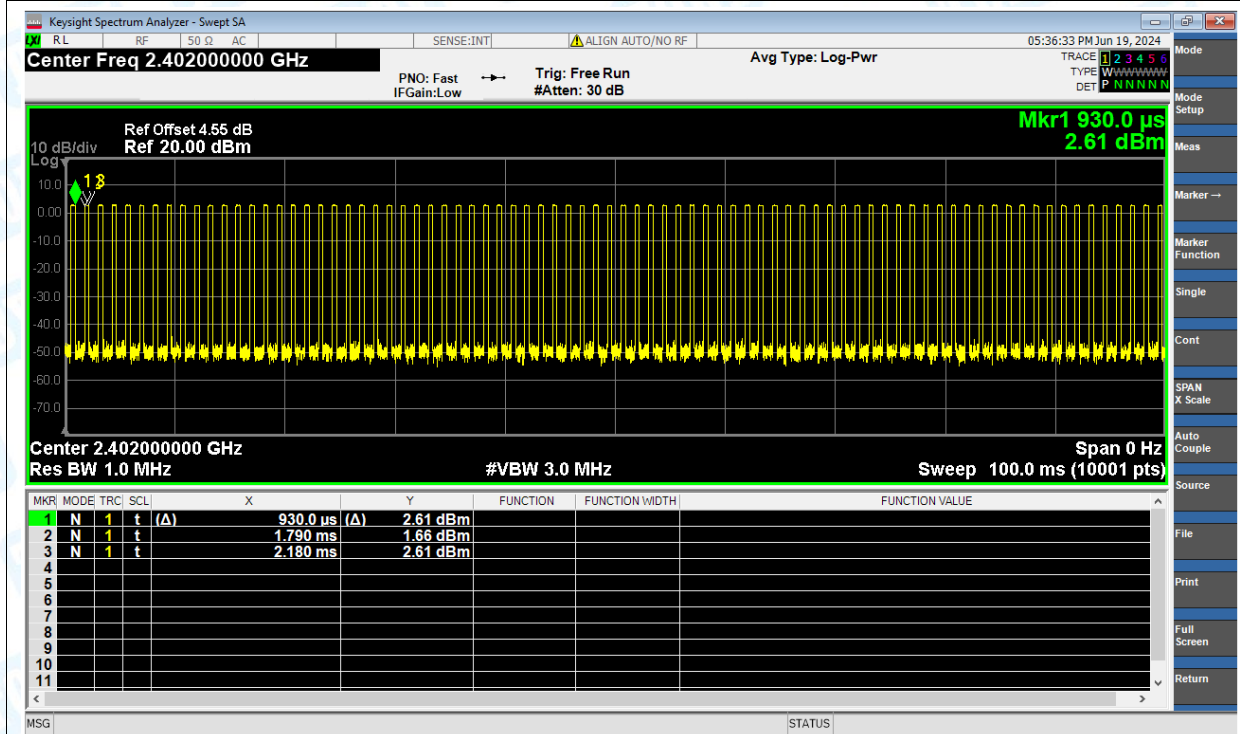
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1. Duty Cycle

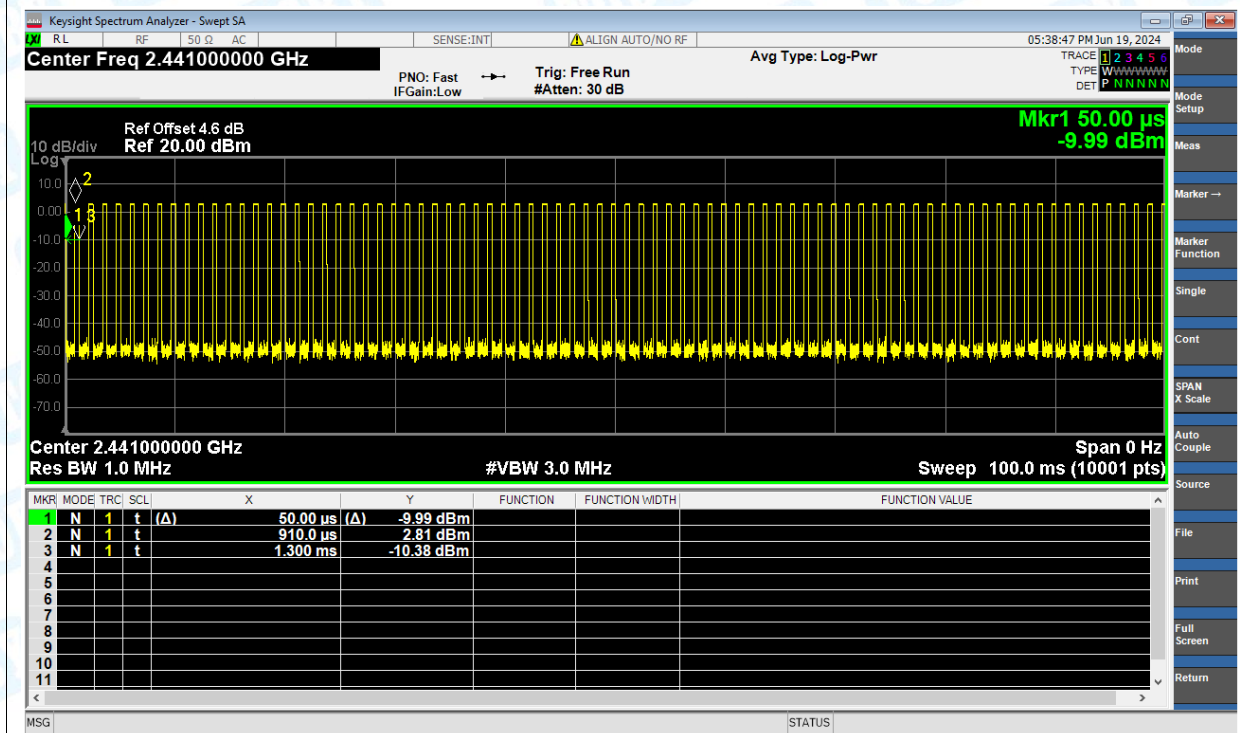
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	32	4.95	2.5
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	32	4.95	2.5

Test Graphs

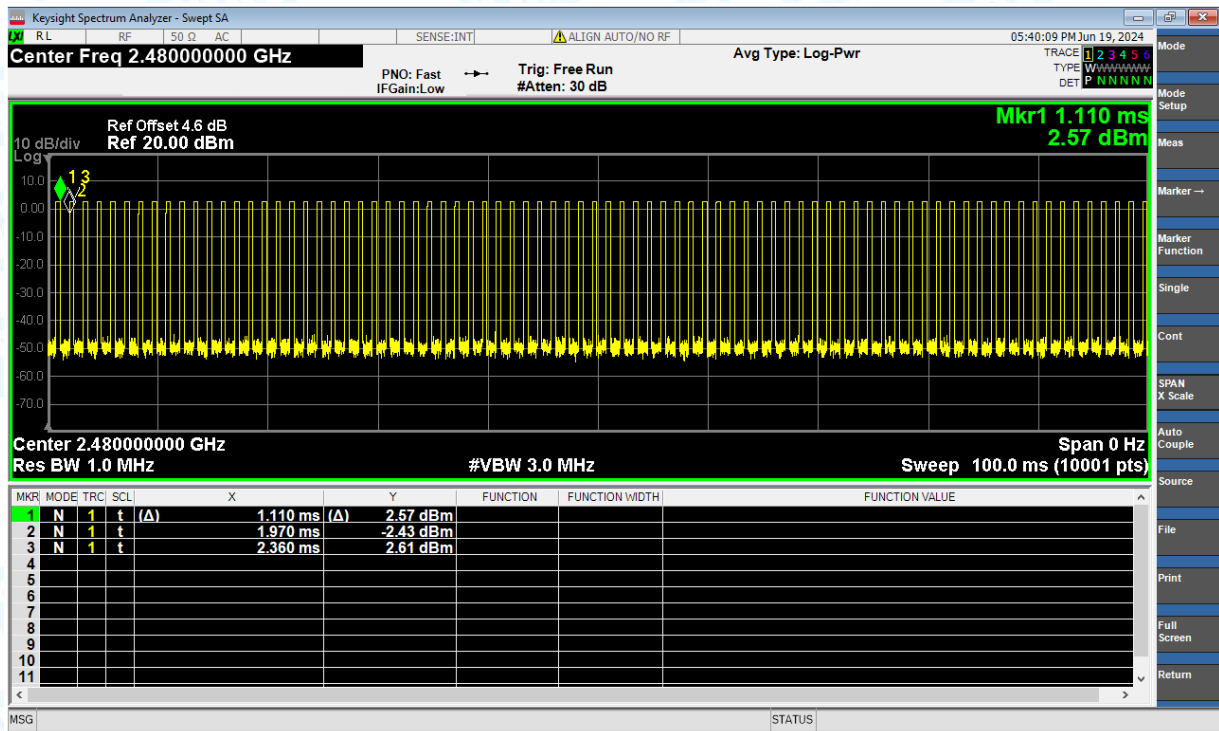
Duty Cycle NVNT 1-DH1 2402MHz Ant1



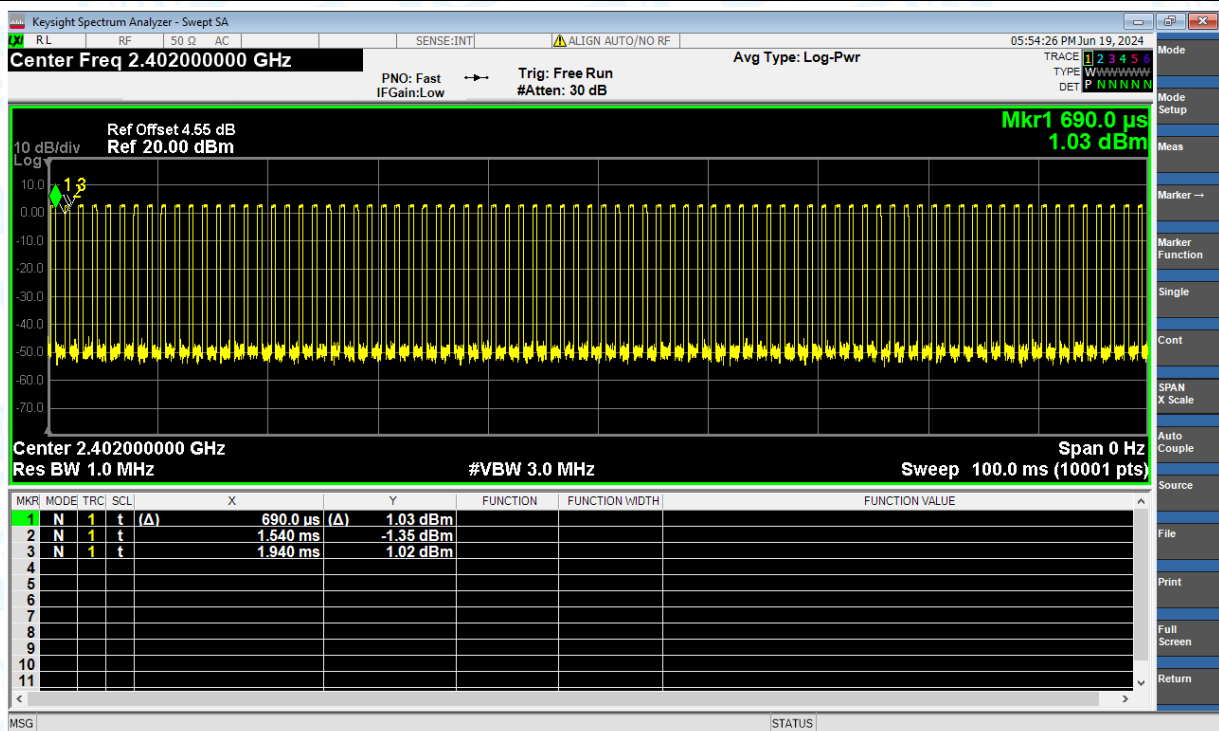
Duty Cycle NVNT 1-DH1 2441MHz Ant1



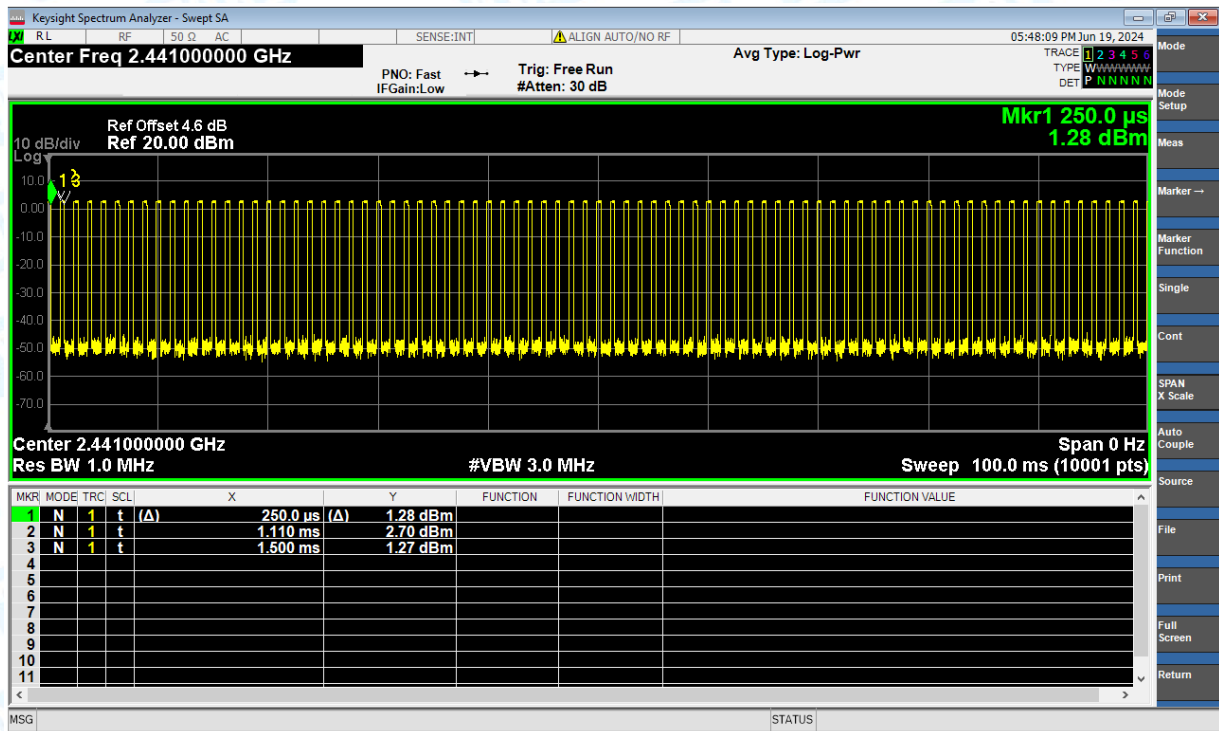
Duty Cycle NVNT 1-DH1 2480MHz Ant1



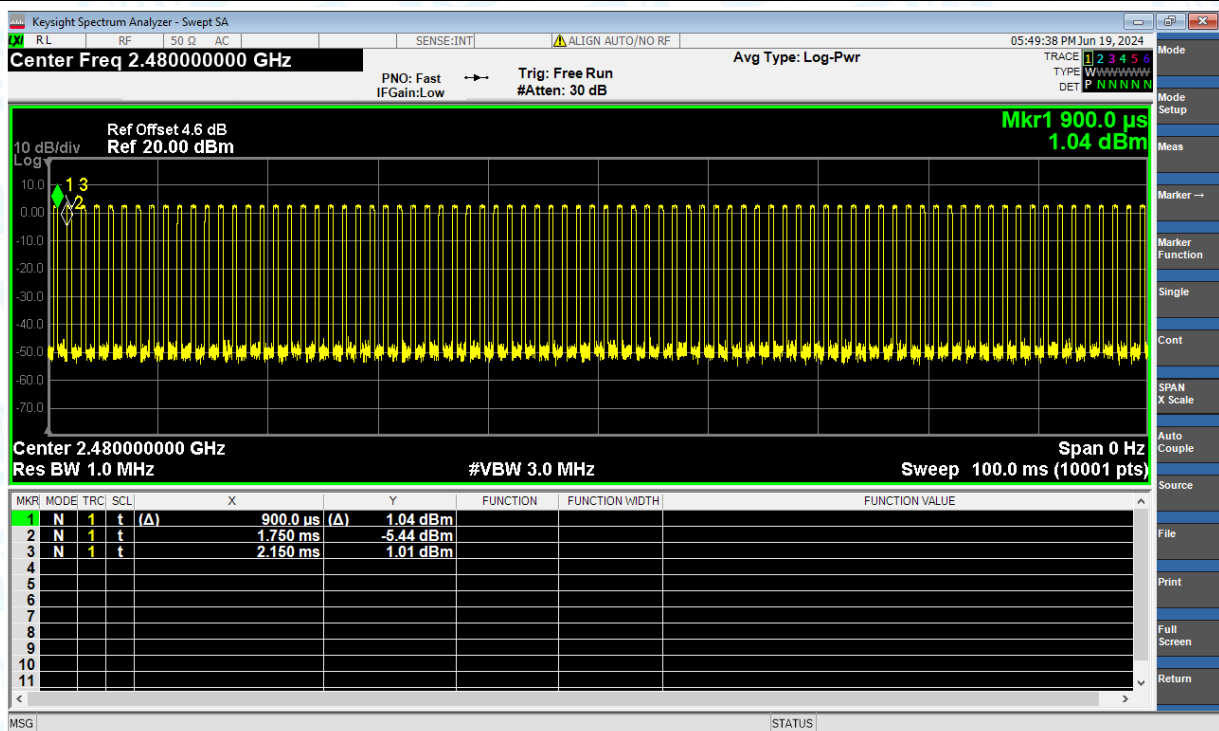
Duty Cycle NVNT 2-DH1 2402MHz Ant1



Duty Cycle NVNT 2-DH1 2441MHz Ant1



Duty Cycle NVNT 2-DH1 2480MHz Ant1

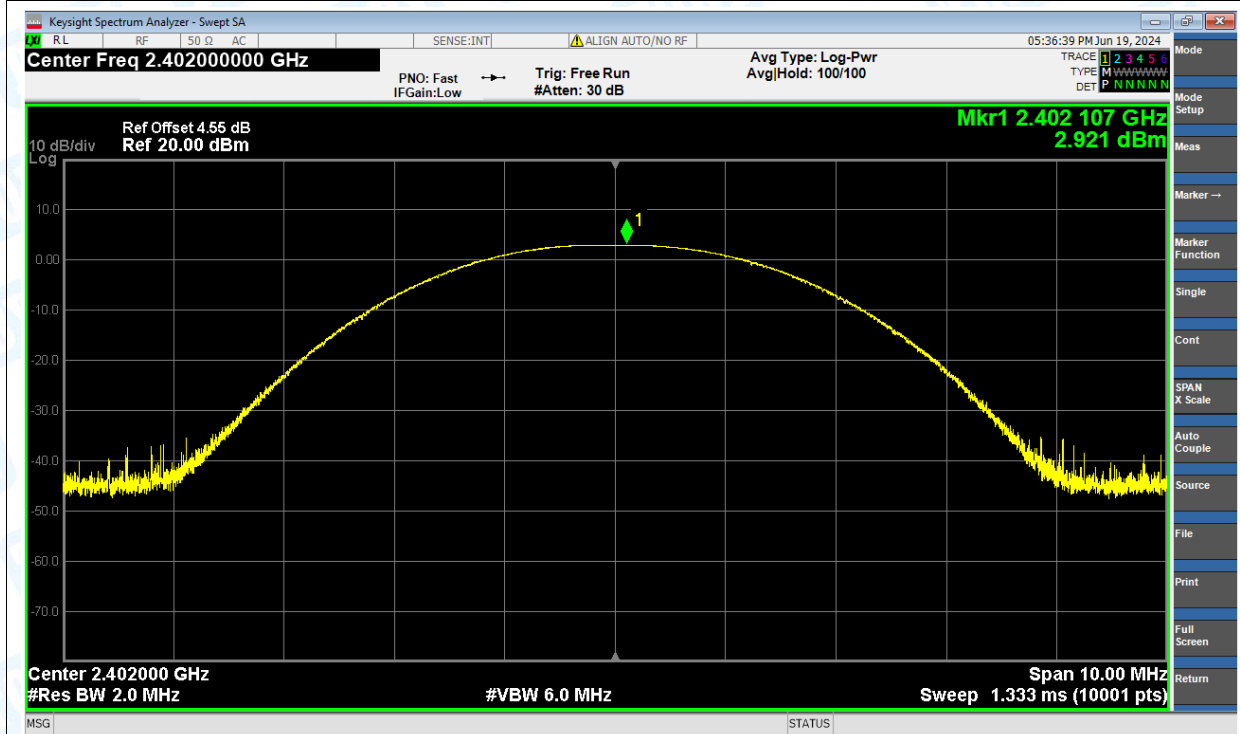


2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	2.921	21	Pass
NVNT	1-DH1	2441	Ant1	2.937	21	Pass
NVNT	1-DH1	2480	Ant1	2.823	21	Pass
NVNT	1-DH3	2441	Ant1	2.86	21	Pass
NVNT	1-DH5	2441	Ant1	2.783	21	Pass
NVNT	2-DH1	2402	Ant1	3.642	21	Pass
NVNT	2-DH1	2441	Ant1	3.583	21	Pass
NVNT	2-DH1	2480	Ant1	3.438	21	Pass
NVNT	2-DH3	2441	Ant1	3.633	21	Pass
NVNT	2-DH5	2441	Ant1	3.589	21	Pass

Test Graphs

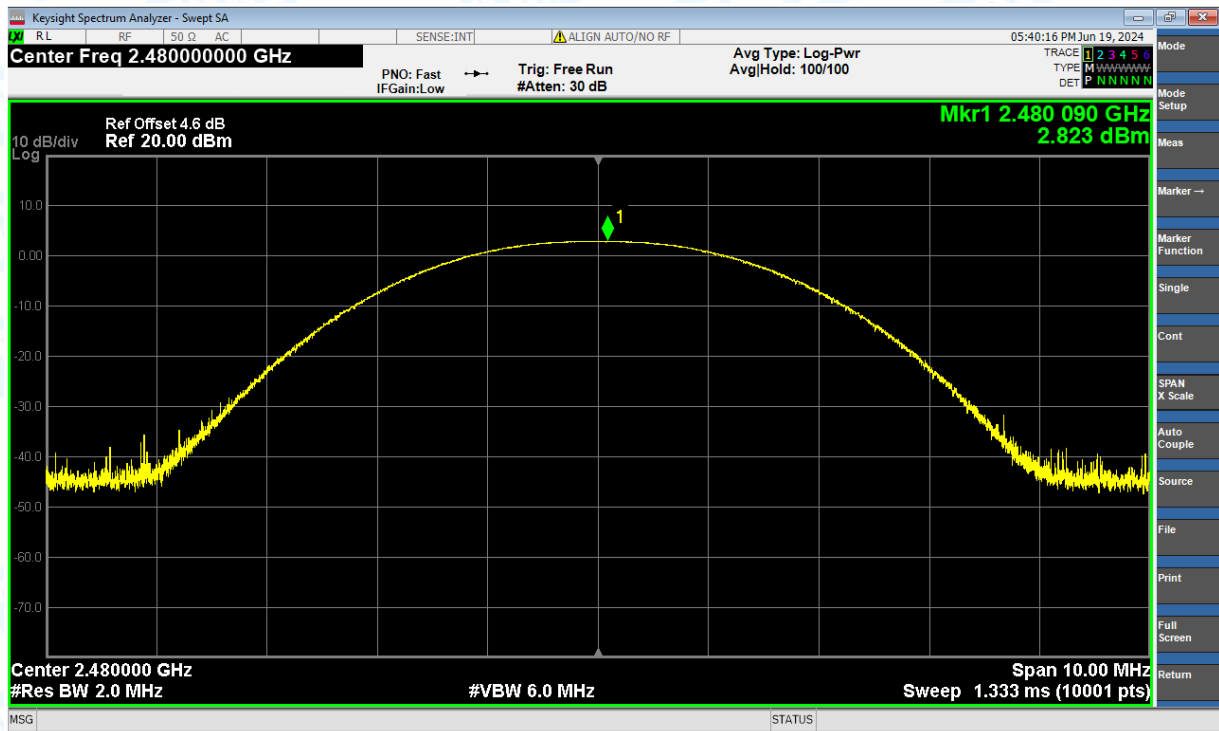
Power NVNT 1-DH1 2402MHz Ant1



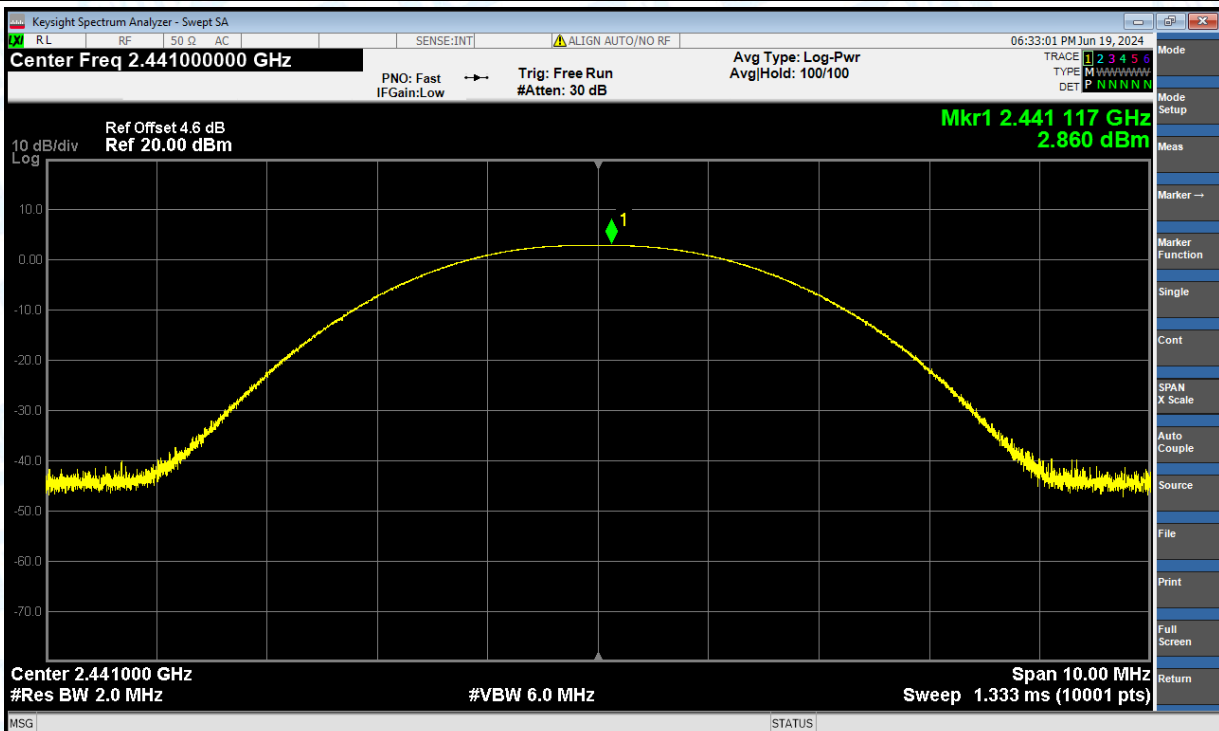
Power NVNT 1-DH1 2441MHz Ant1



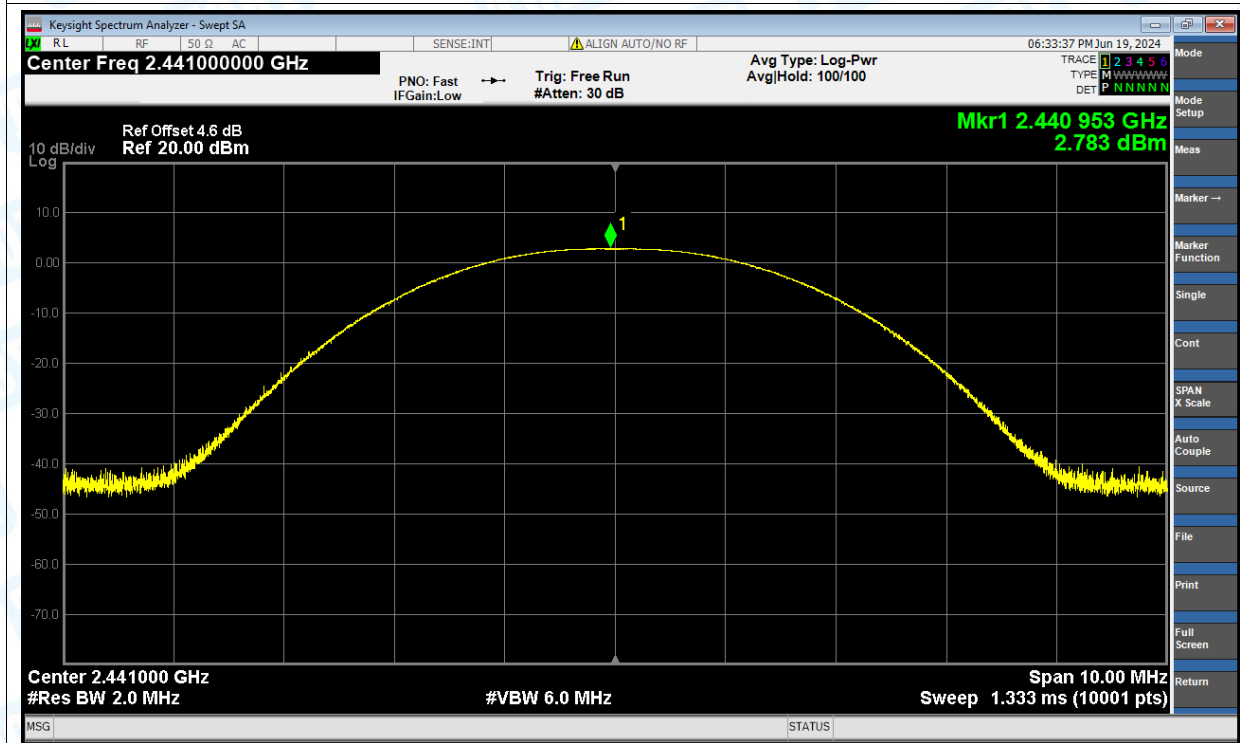
Power NVNT 1-DH1 2480MHz Ant1



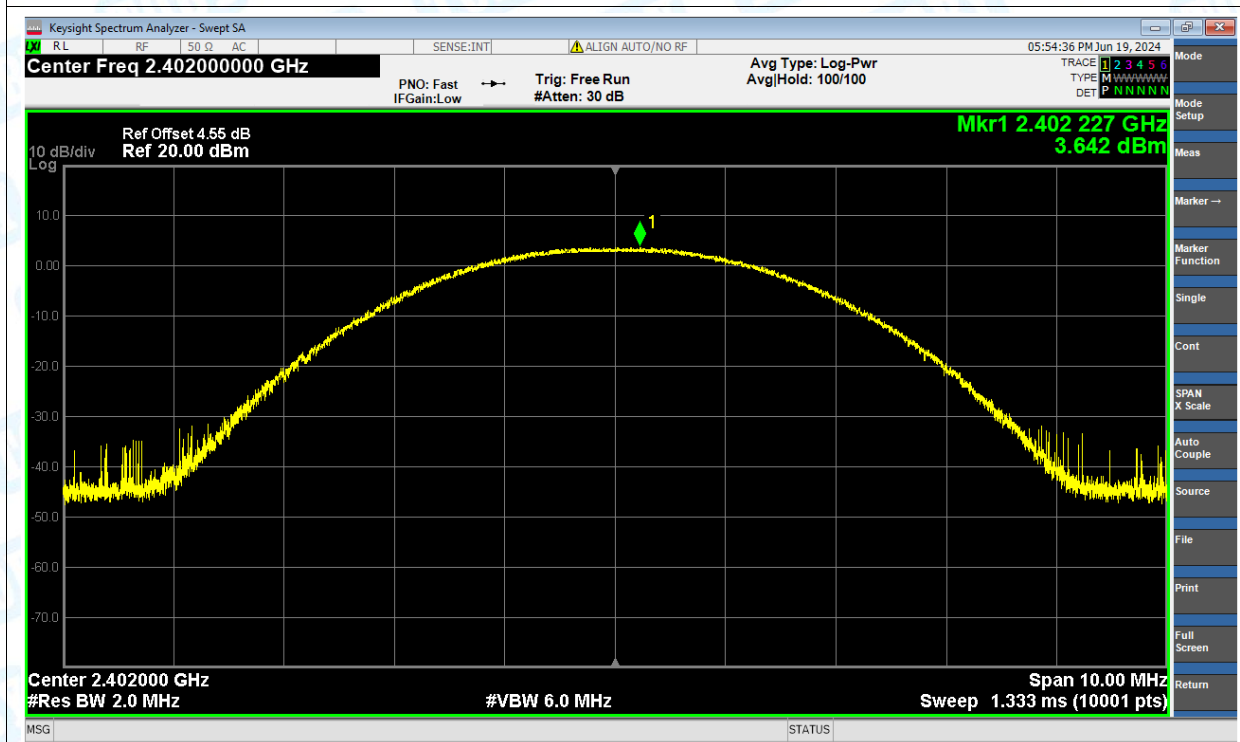
Power NVNT 1-DH3 2441MHz Ant1



Power NVNT 1-DH5 2441MHz Ant1



Power NVNT 2-DH1 2402MHz Ant1



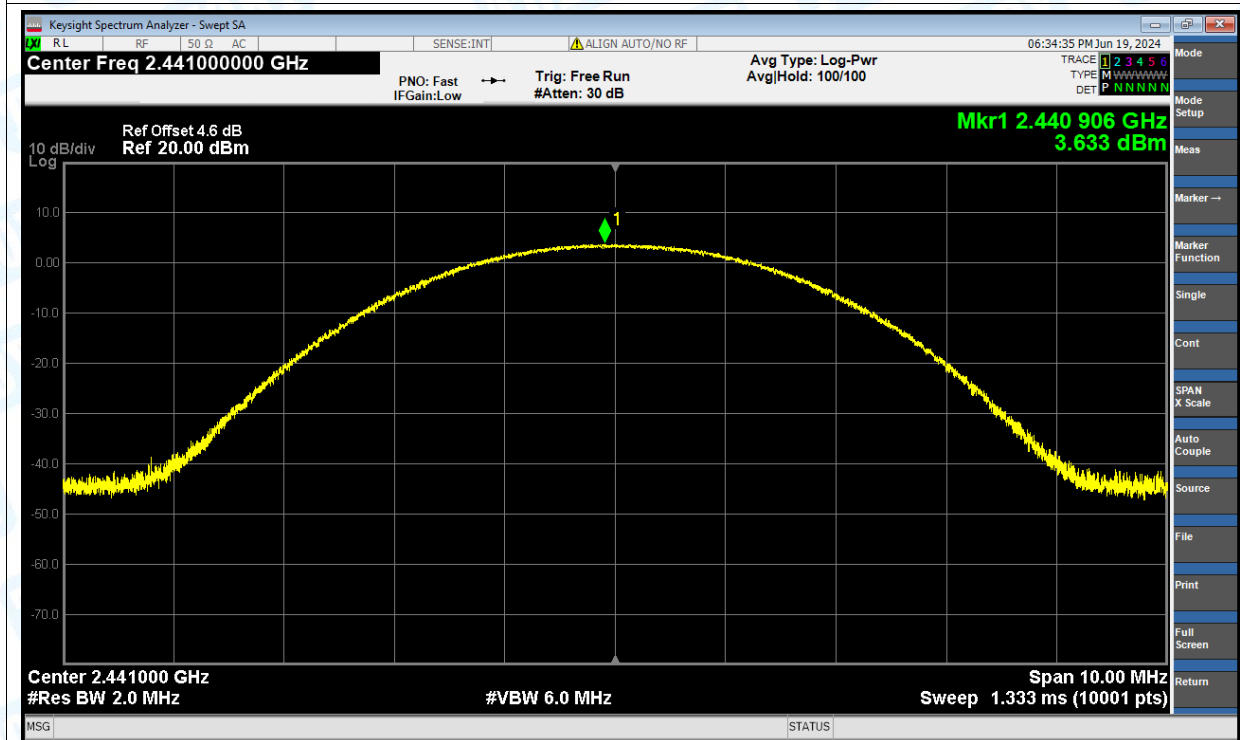
Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 2-DH3 2441MHz Ant1



Power NVNT 2-DH5 2441MHz Ant1

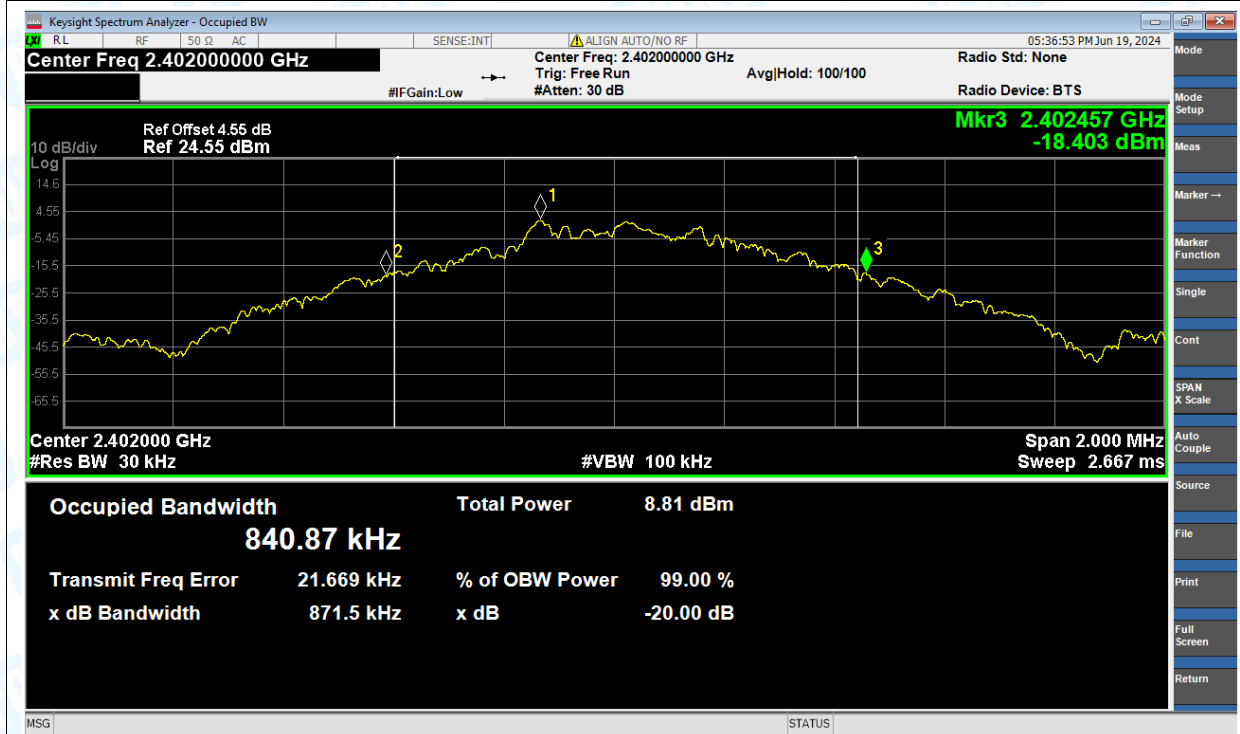


3. -20dB Bandwidth

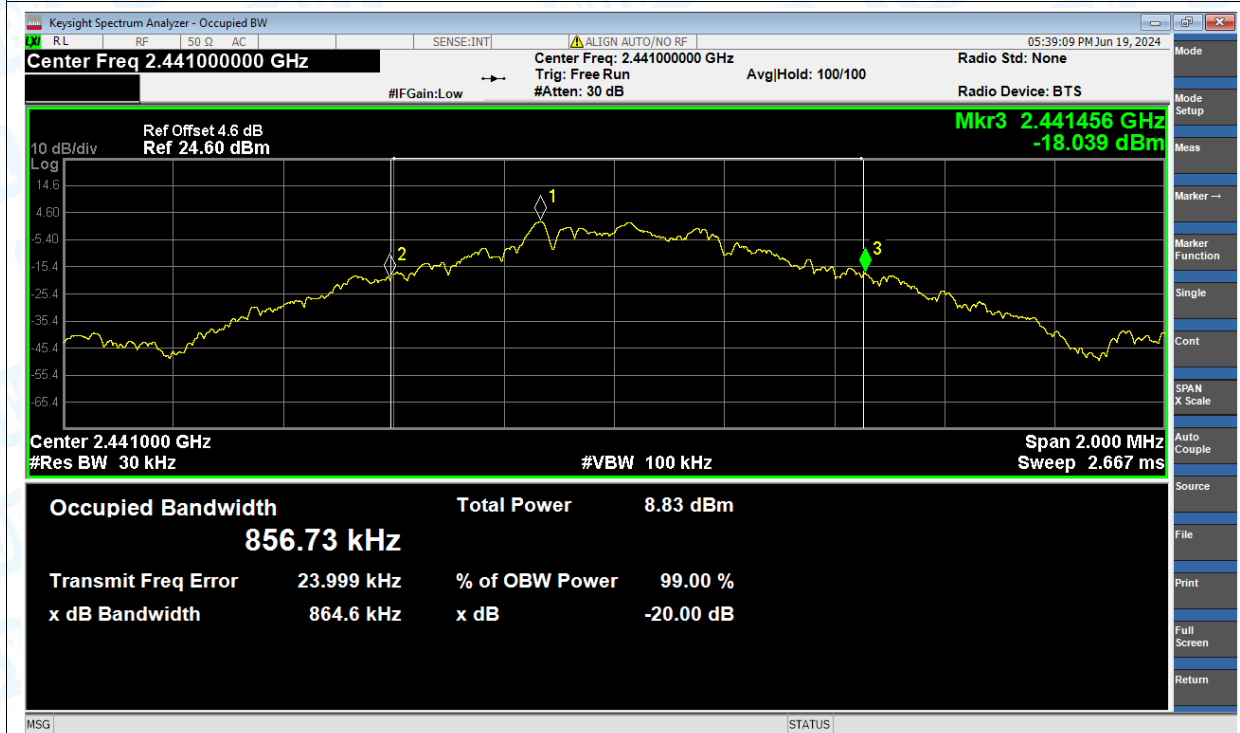
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	0	Pass
NVNT	1-DH1	2441	Ant1	0.86	0	Pass
NVNT	1-DH1	2480	Ant1	0.92	0	Pass
NVNT	2-DH1	2402	Ant1	1.24	0	Pass
NVNT	2-DH1	2441	Ant1	1.26	0	Pass
NVNT	2-DH1	2480	Ant1	1.24	0	Pass

Test Graphs

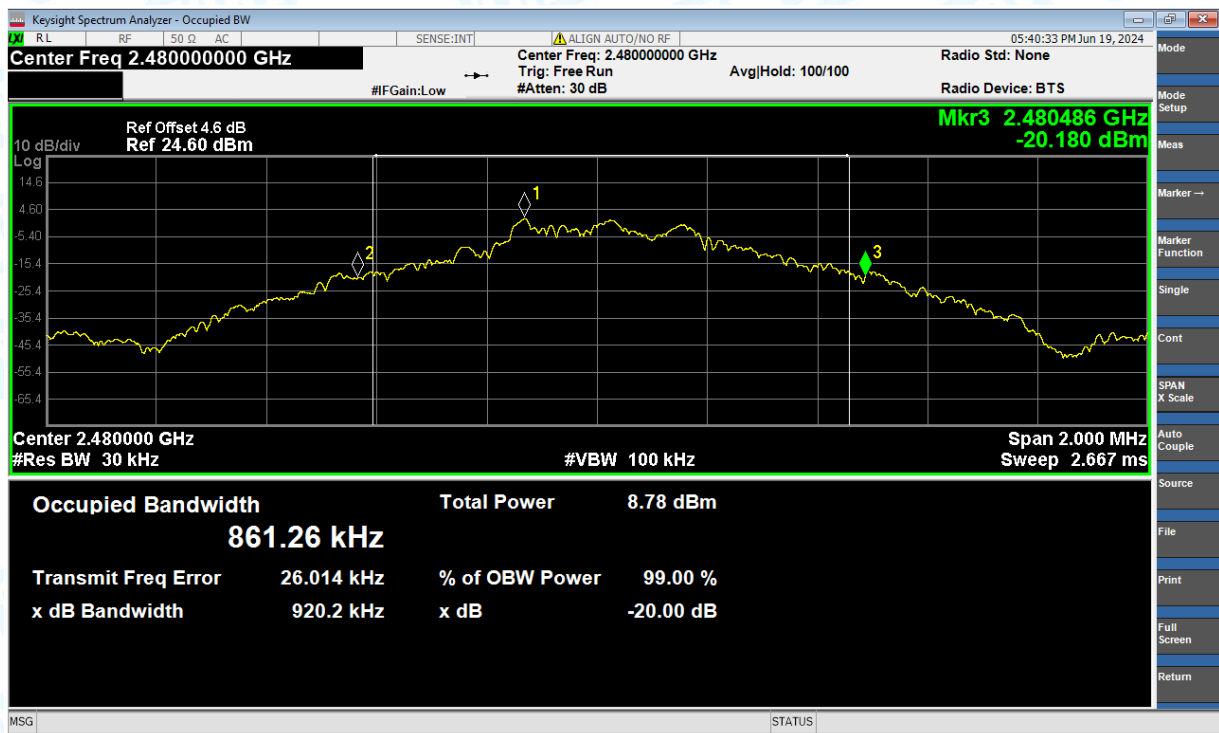
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



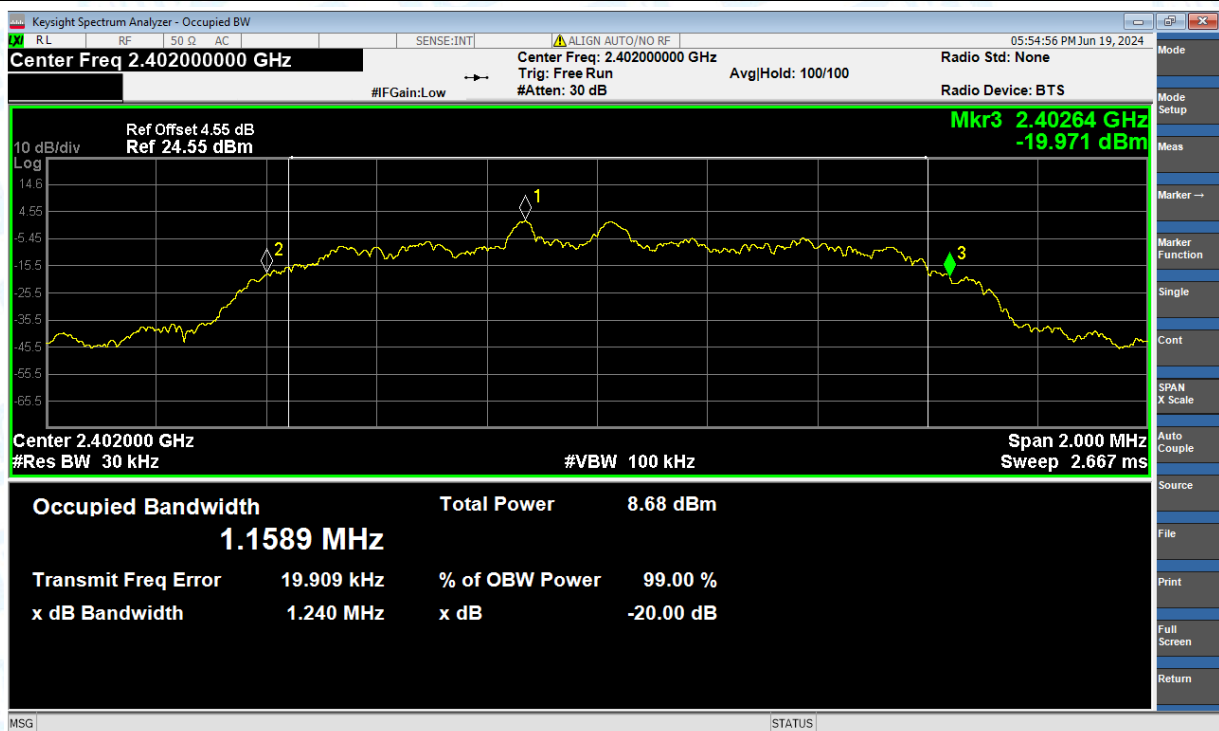
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



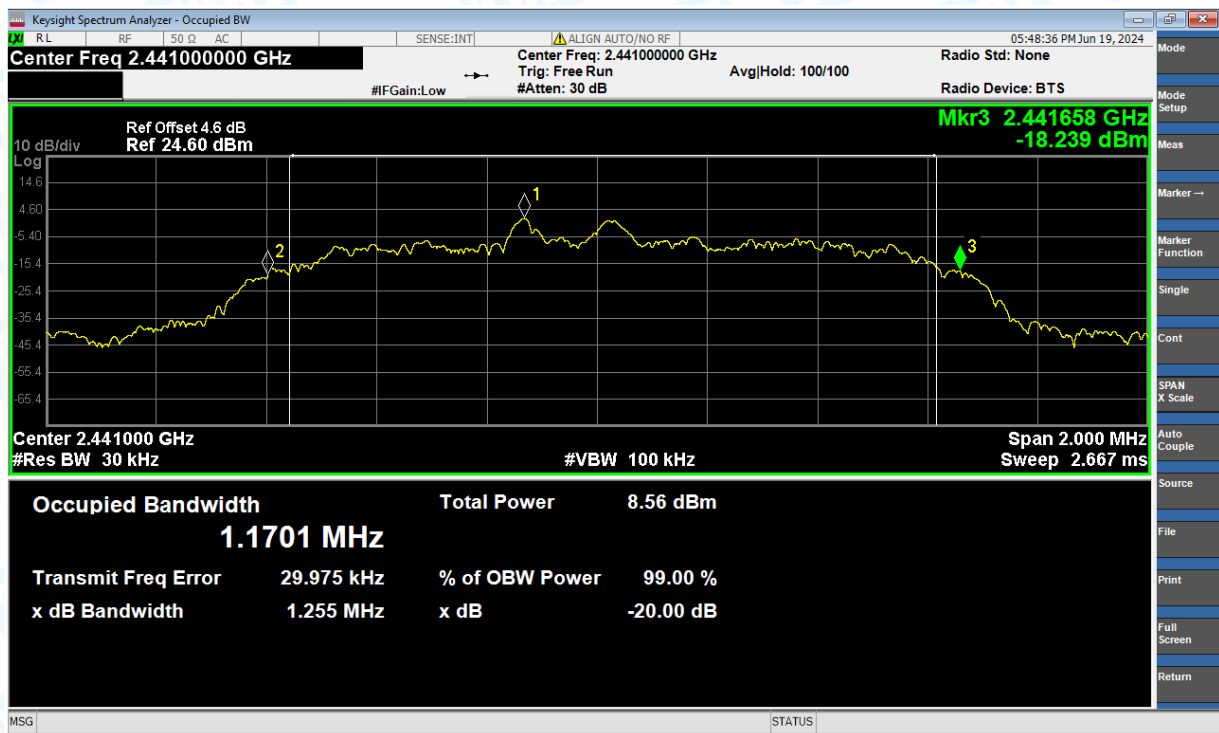
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



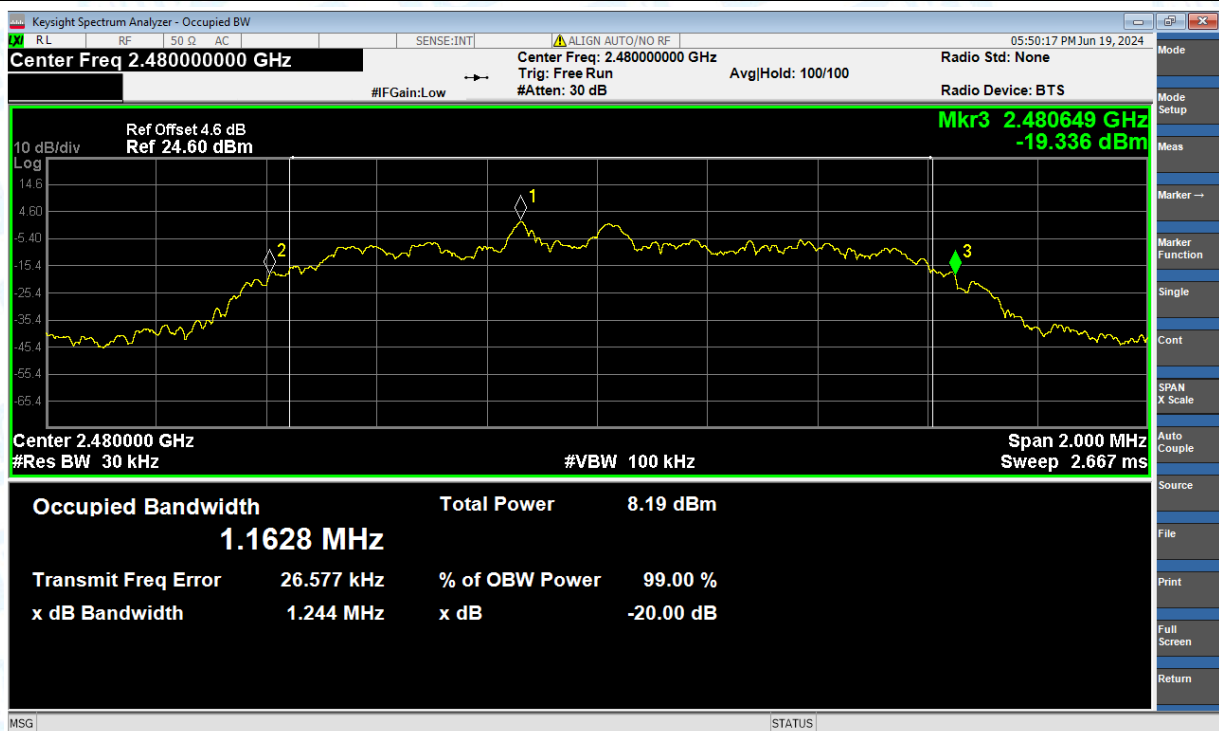
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

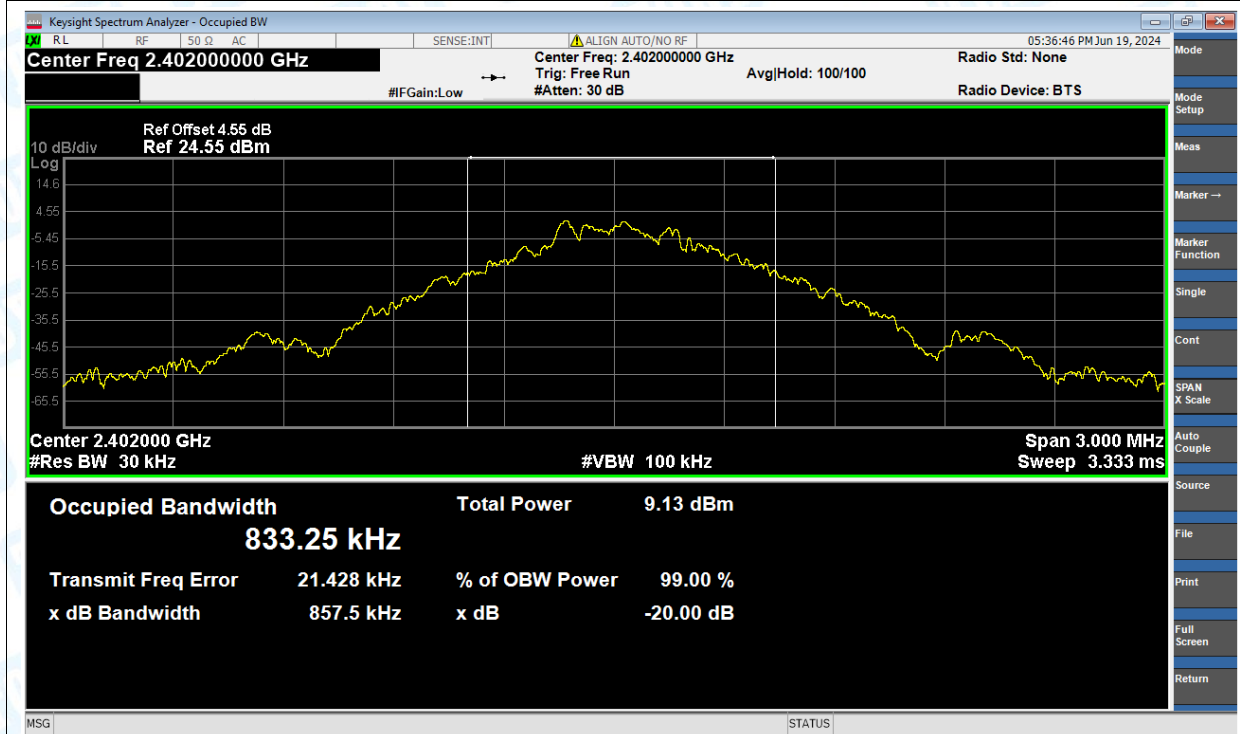


4. Occupied Channel Bandwidth

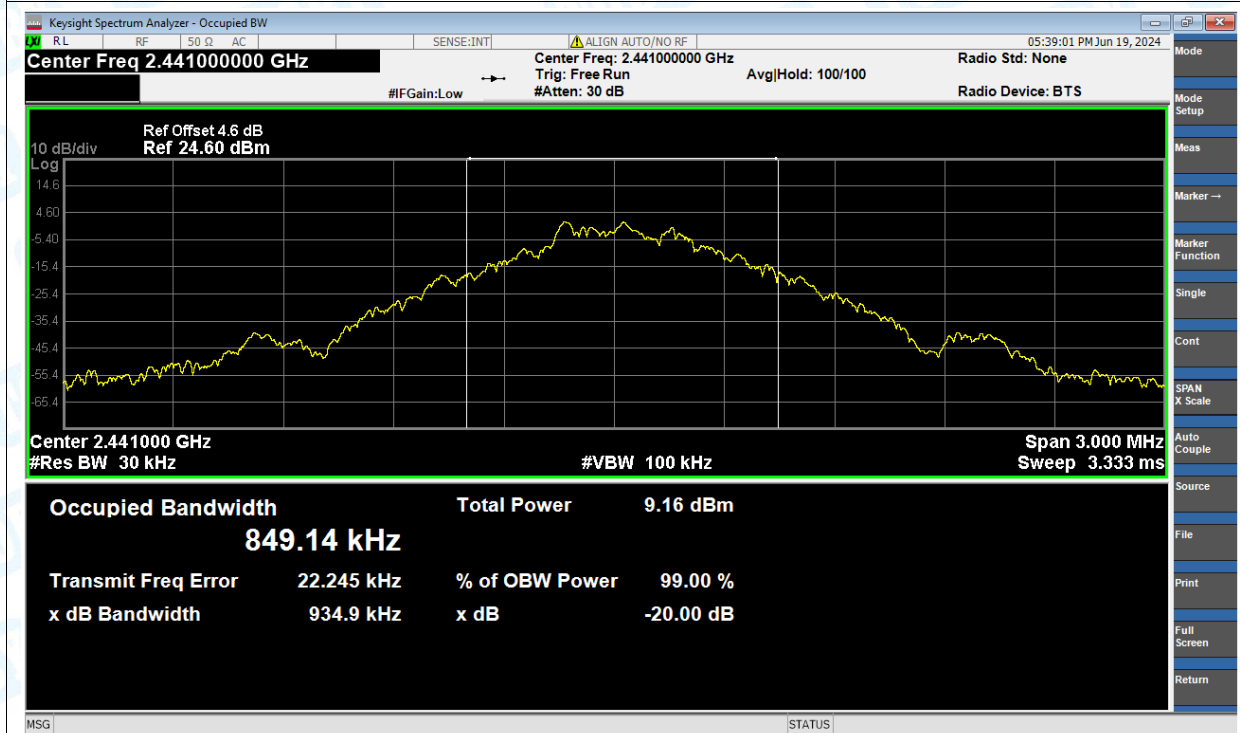
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.833
NVNT	1-DH1	2441	Ant1	0.849
NVNT	1-DH1	2480	Ant1	0.864
NVNT	2-DH1	2402	Ant1	1.167
NVNT	2-DH1	2441	Ant1	1.16
NVNT	2-DH1	2480	Ant1	1.183

Test Graphs

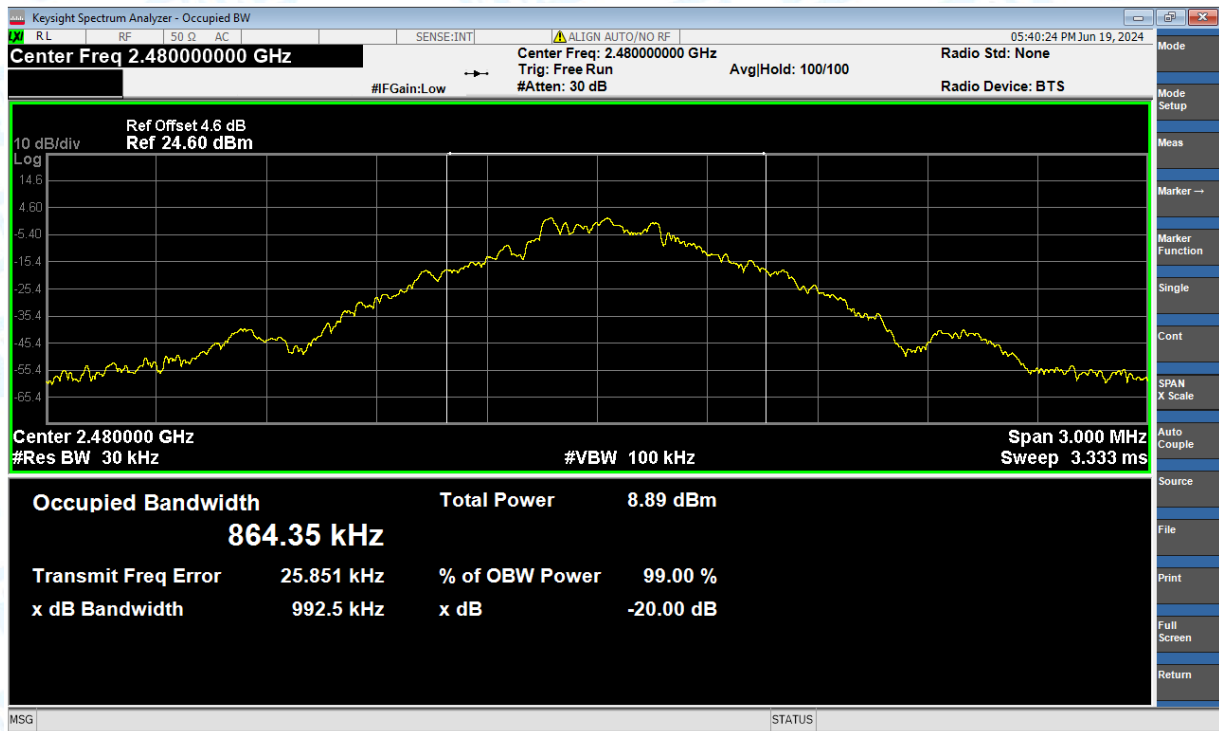
OBW NVNT 1-DH1 2402MHz Ant1



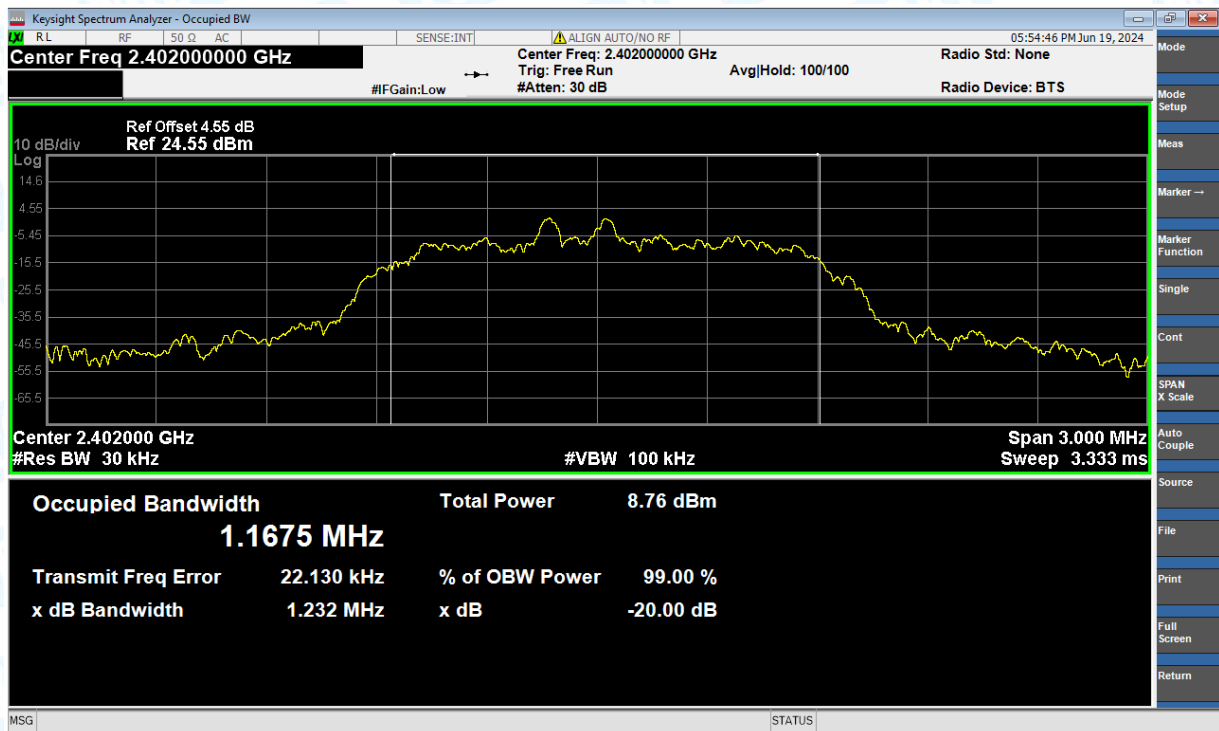
OBW NVNT 1-DH1 2441MHz Ant1



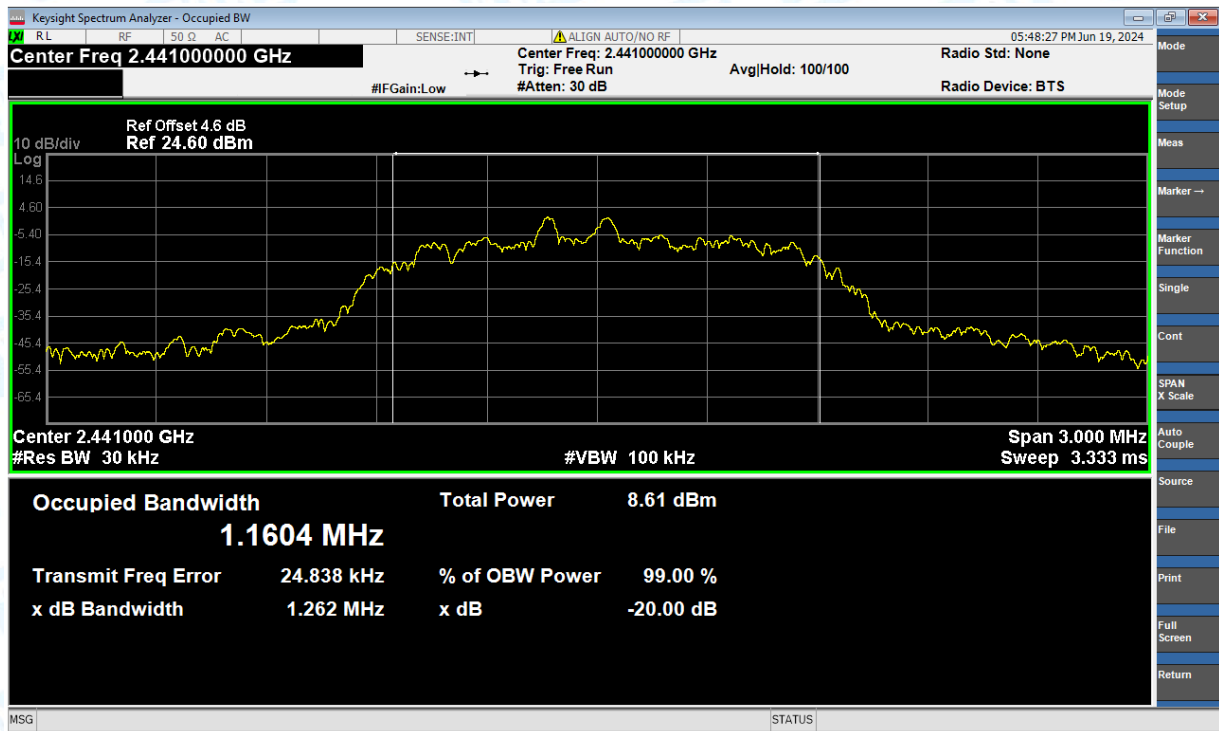
OBW NVNT 1-DH1 2480MHz Ant1



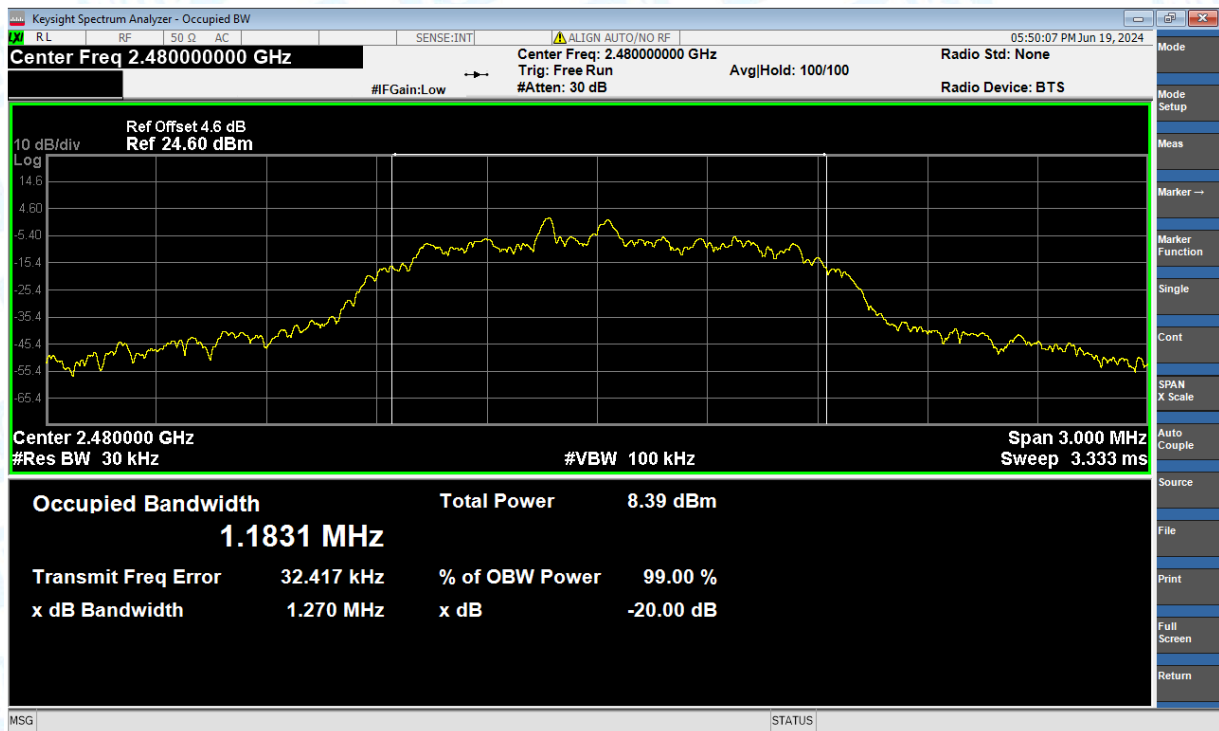
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

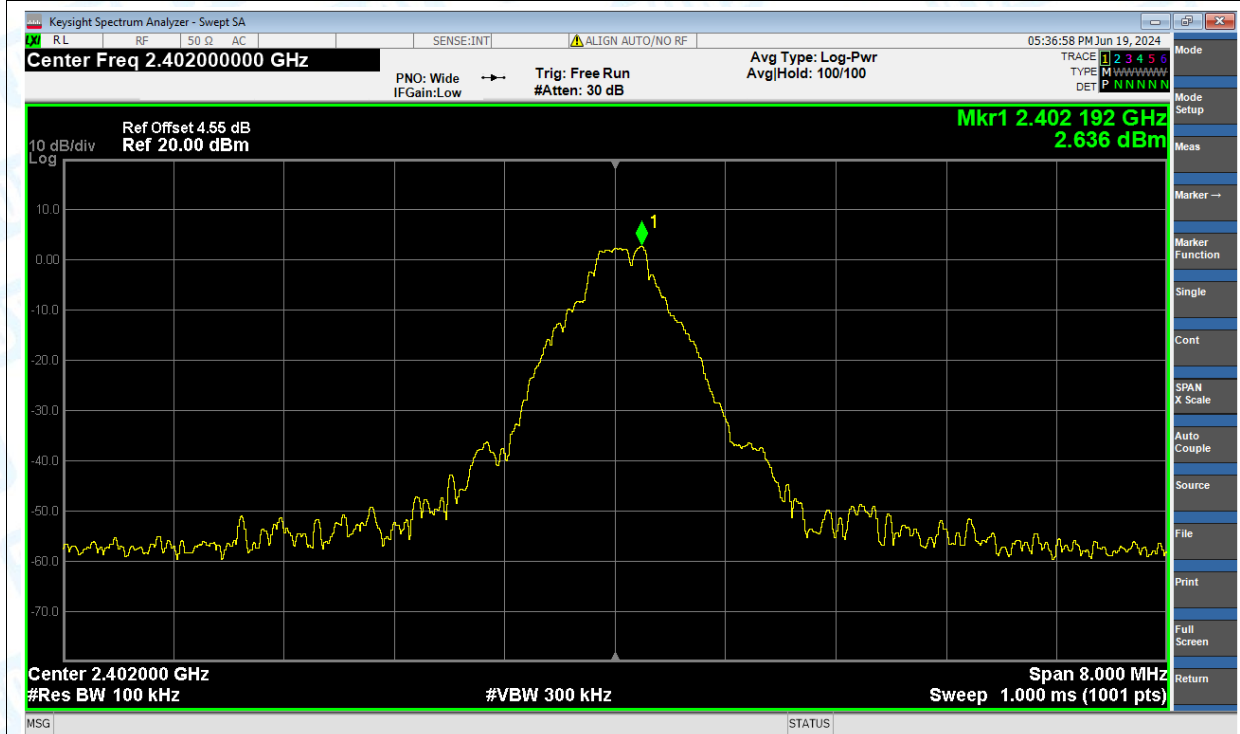


5. Band Edge

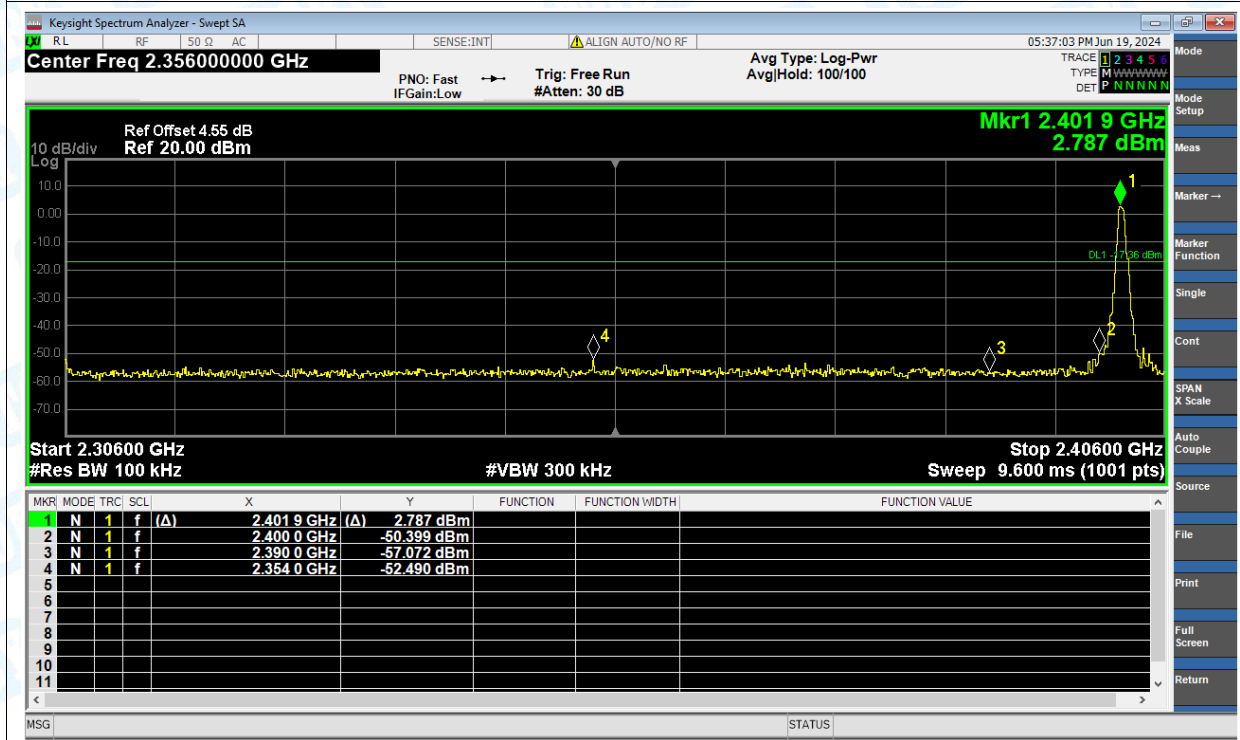
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-55.13	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-56.78	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-56.11	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-57.09	-20	Pass

Test Graphs

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



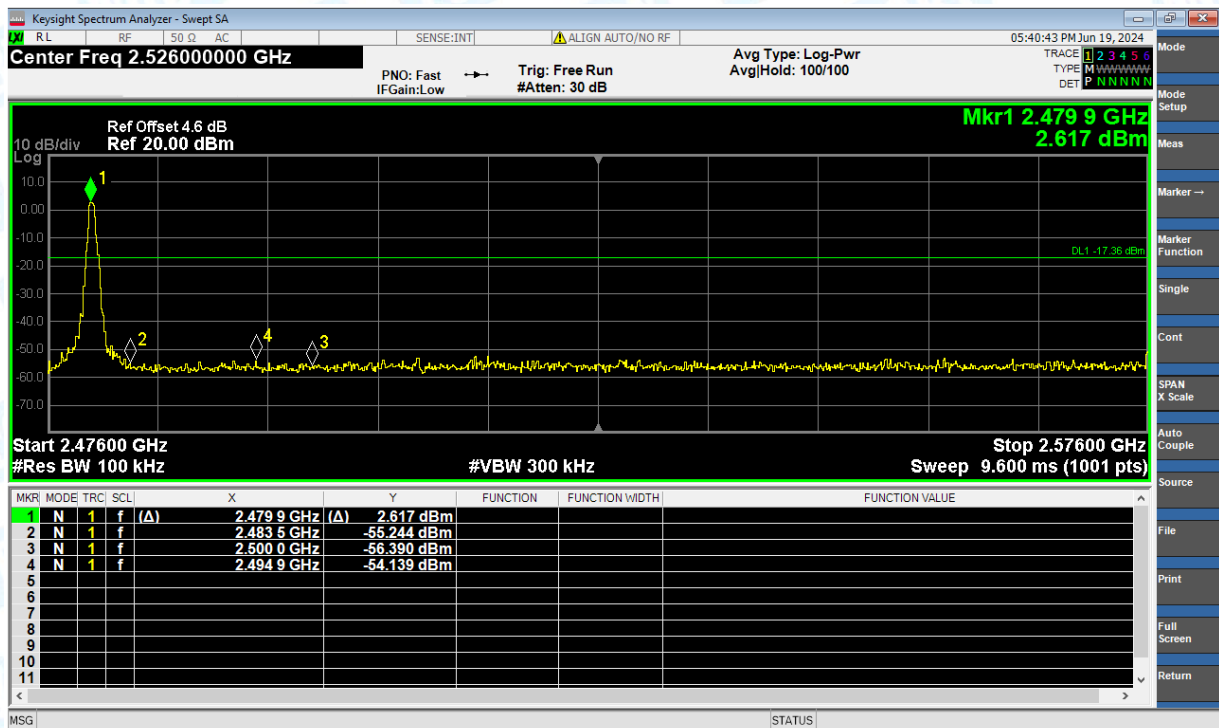
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



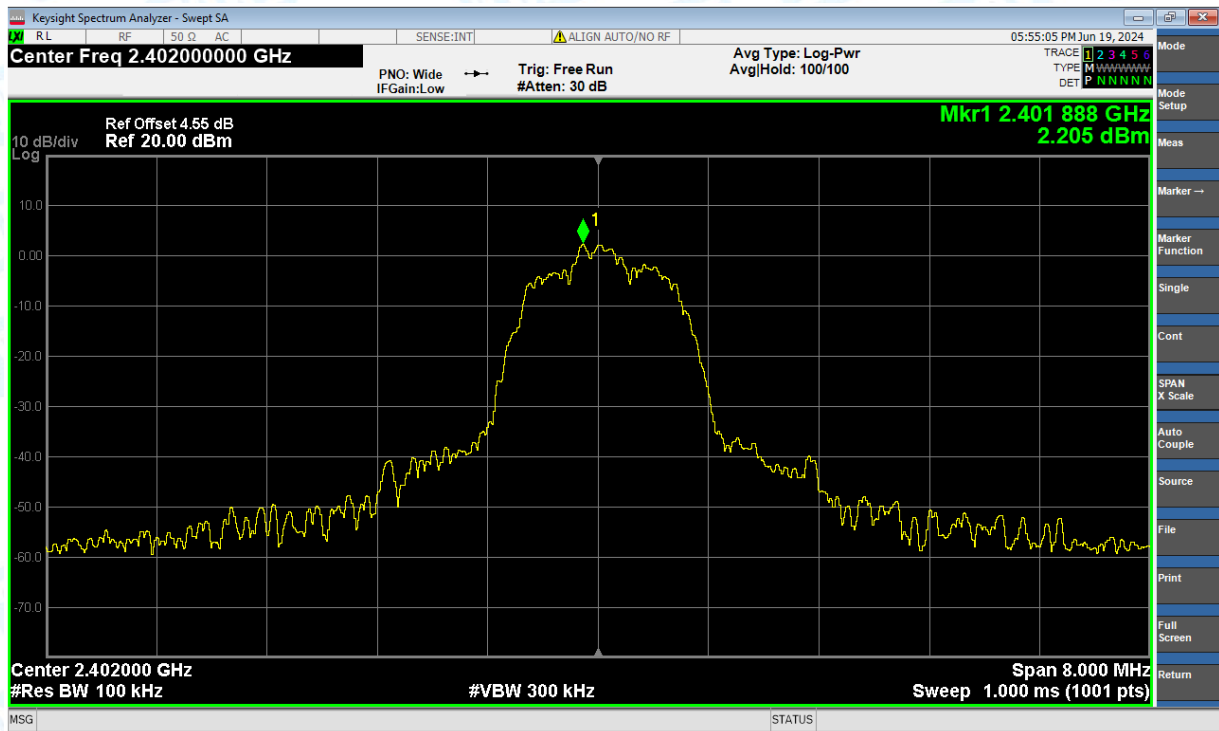
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



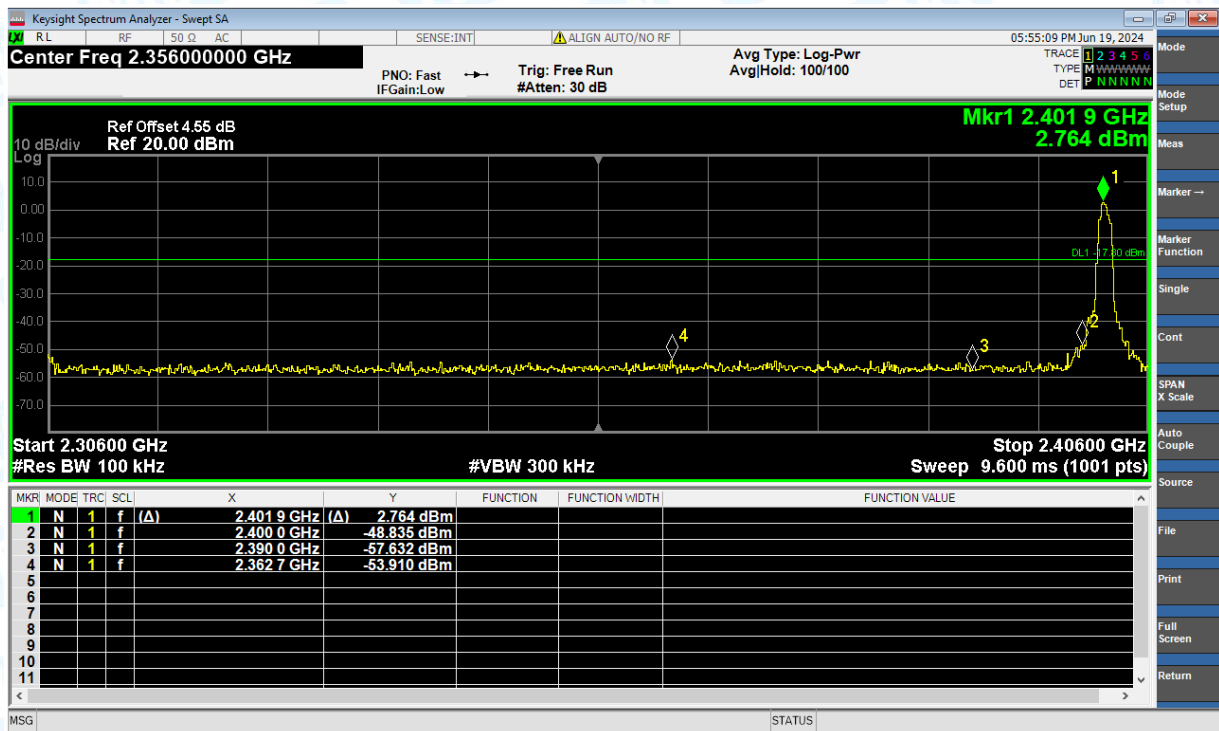
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



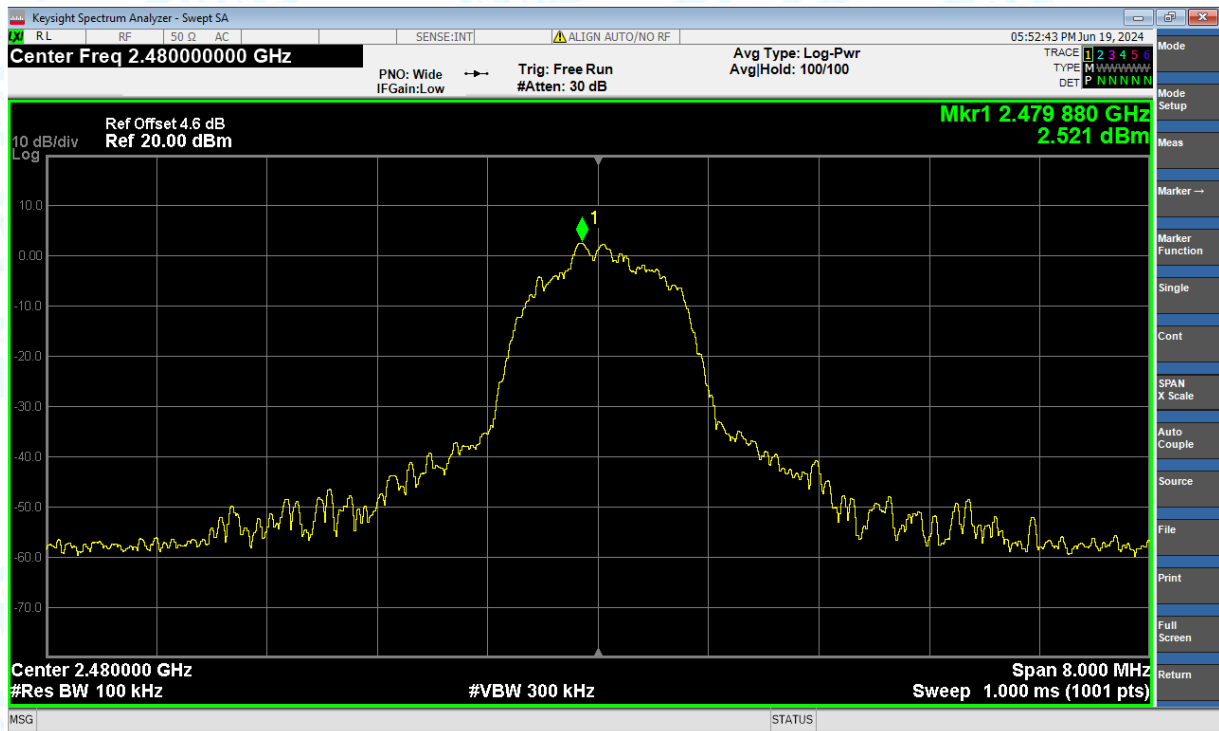
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



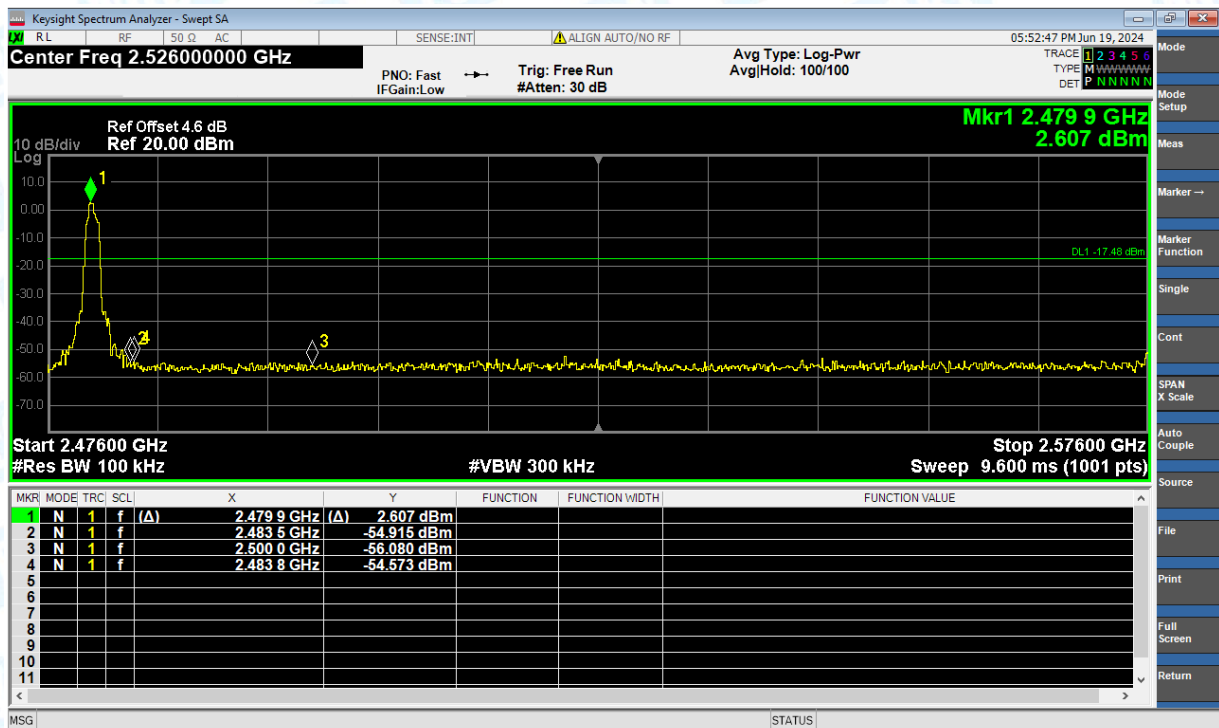
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



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



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



6. Band Edge(Hopping)

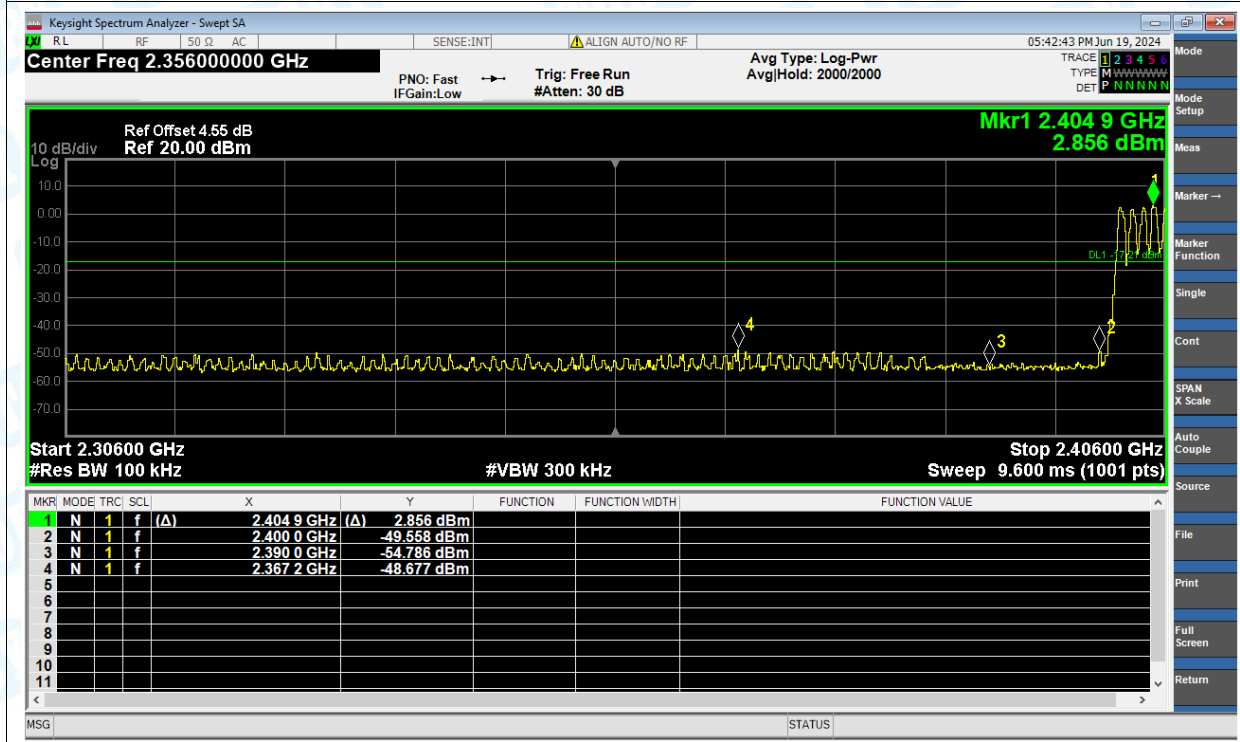
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-51.47	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-52.57	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-51.9	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-54.06	-20	Pass

Test Graphs

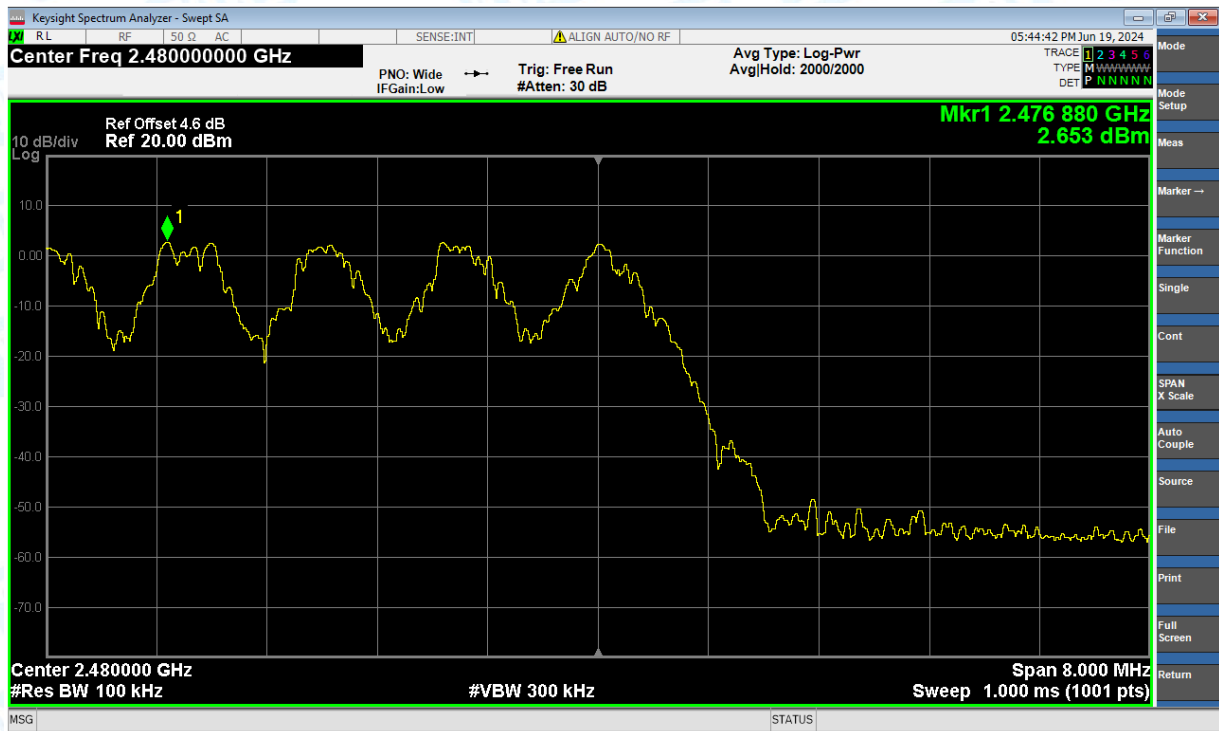
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



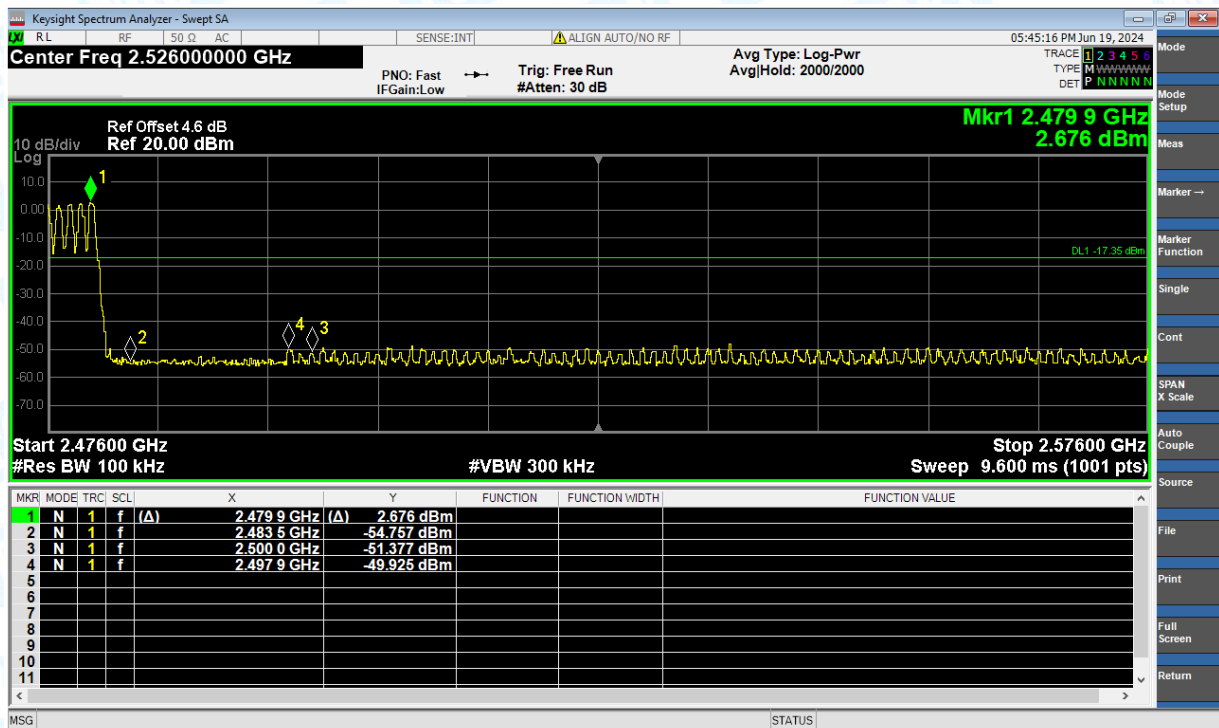
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



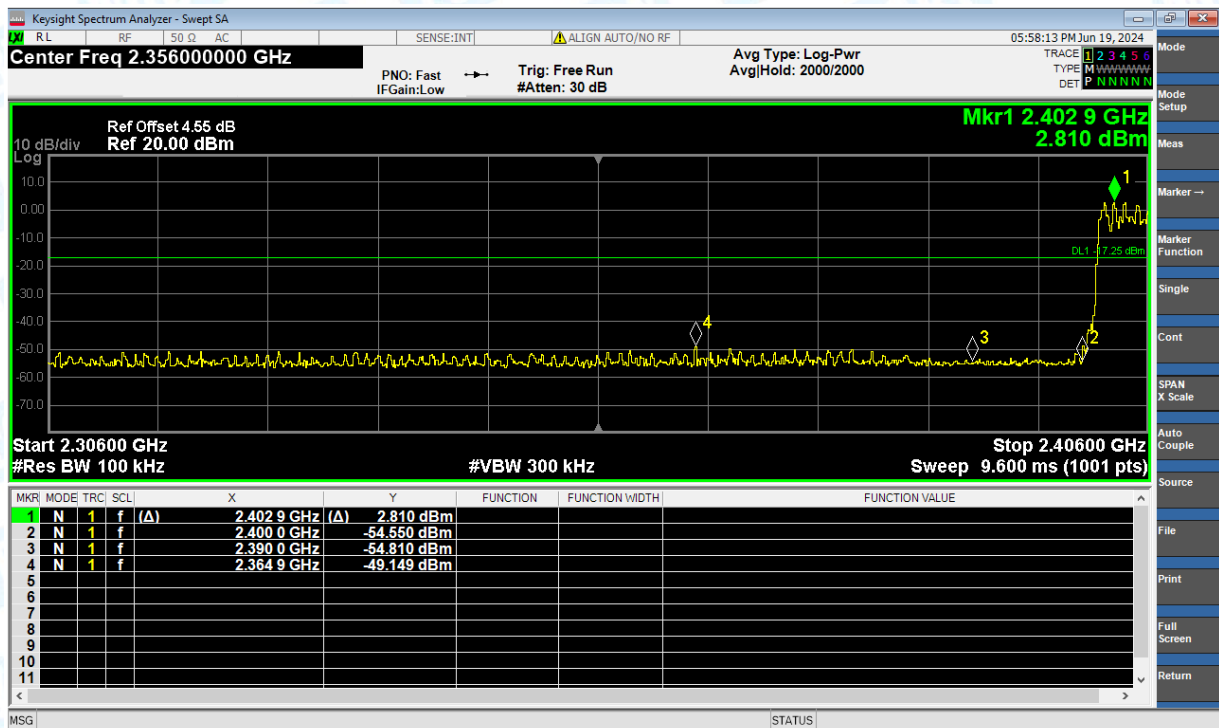
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



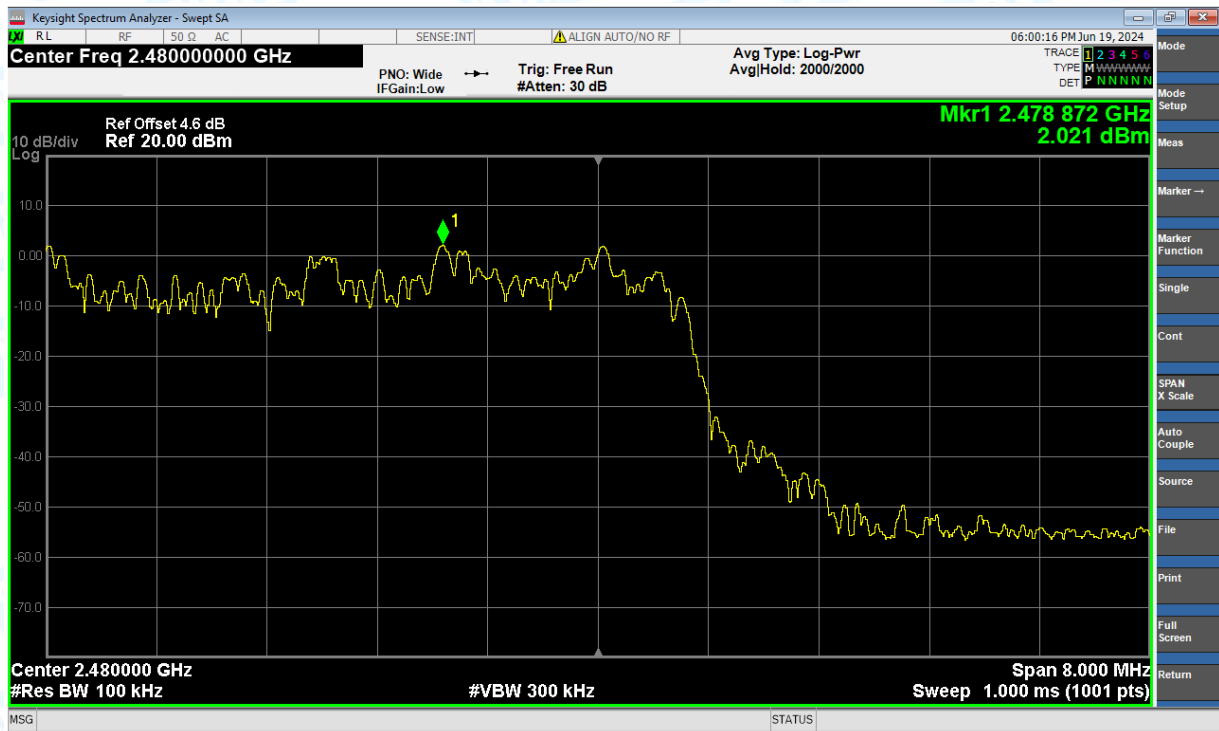
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



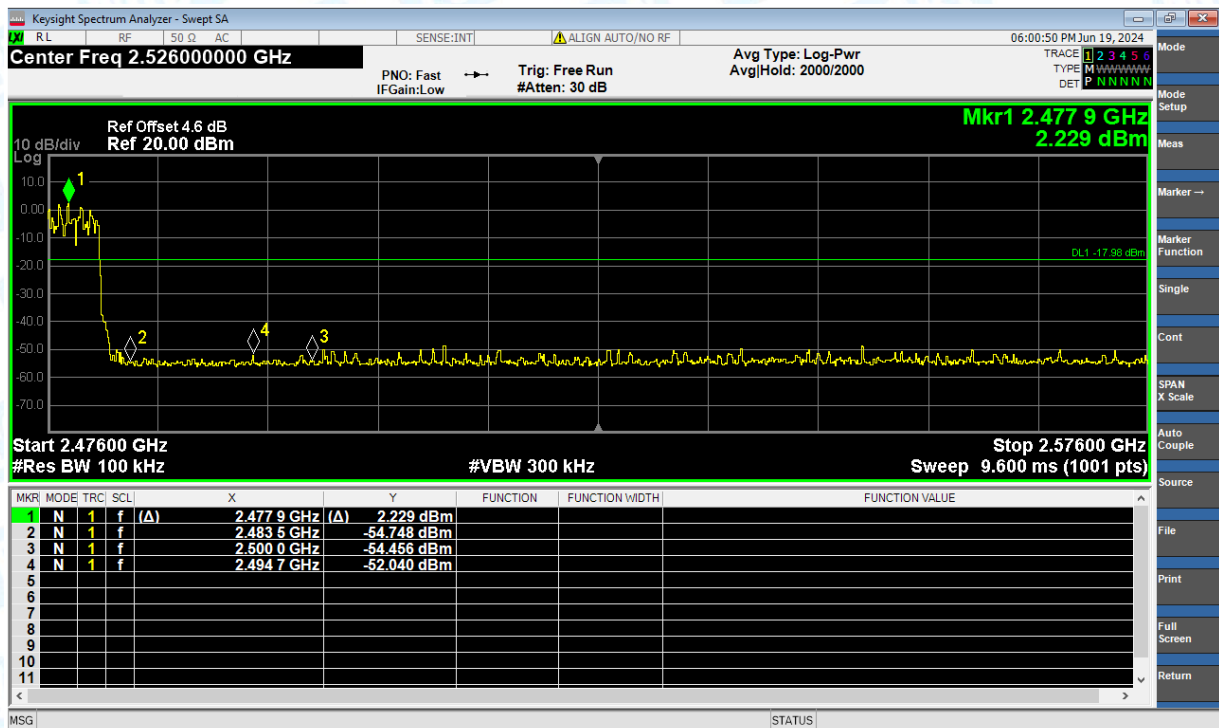
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission

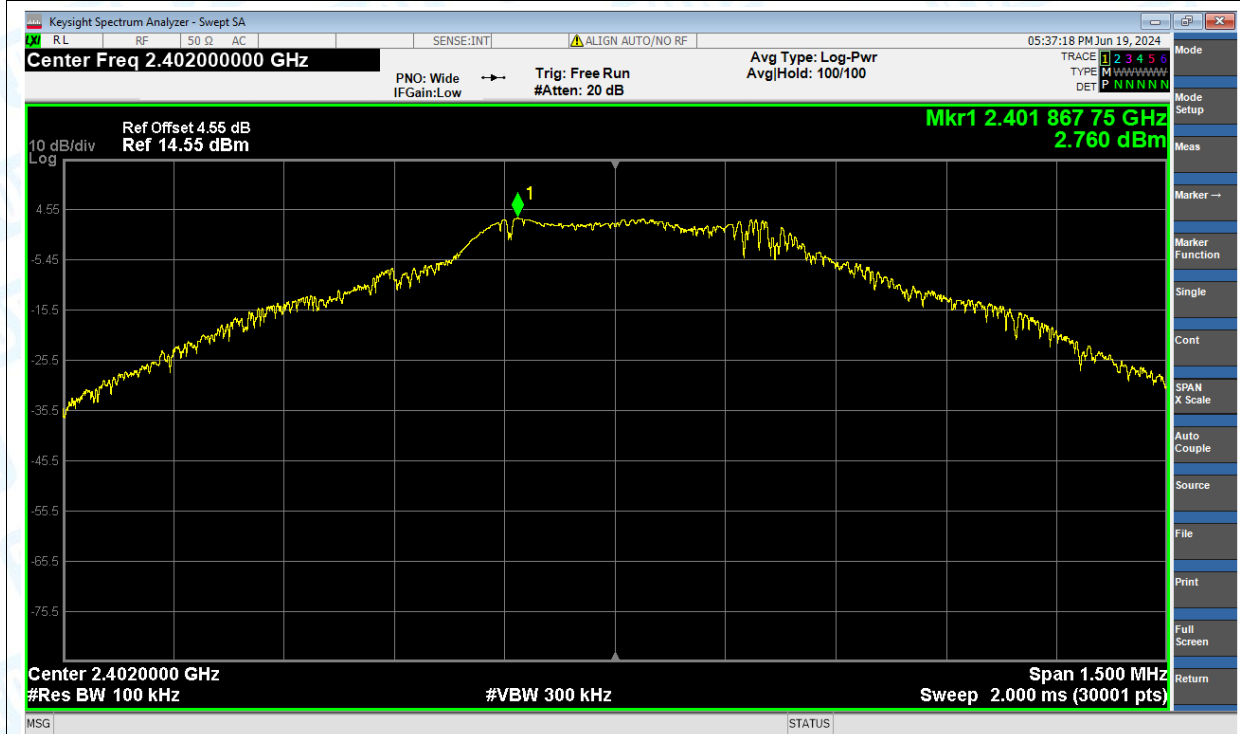


7. Conducted RF Spurious Emission

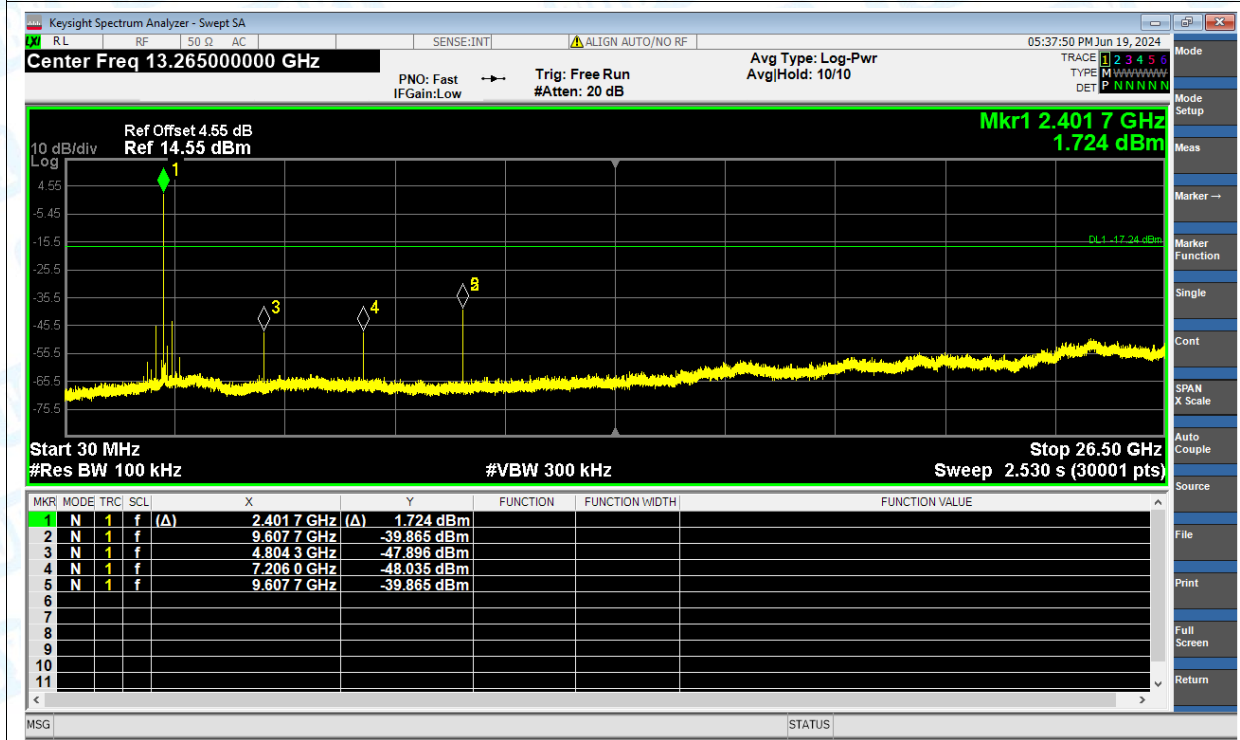
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-42.62	-20	Pass
NVNT	1-DH1	2441	Ant1	-45.21	-20	Pass
NVNT	1-DH1	2480	Ant1	-45.32	-20	Pass
NVNT	2-DH1	2402	Ant1	-42.39	-20	Pass
NVNT	2-DH1	2441	Ant1	-44.83	-20	Pass
NVNT	2-DH1	2480	Ant1	-46.09	-20	Pass

Test Graphs

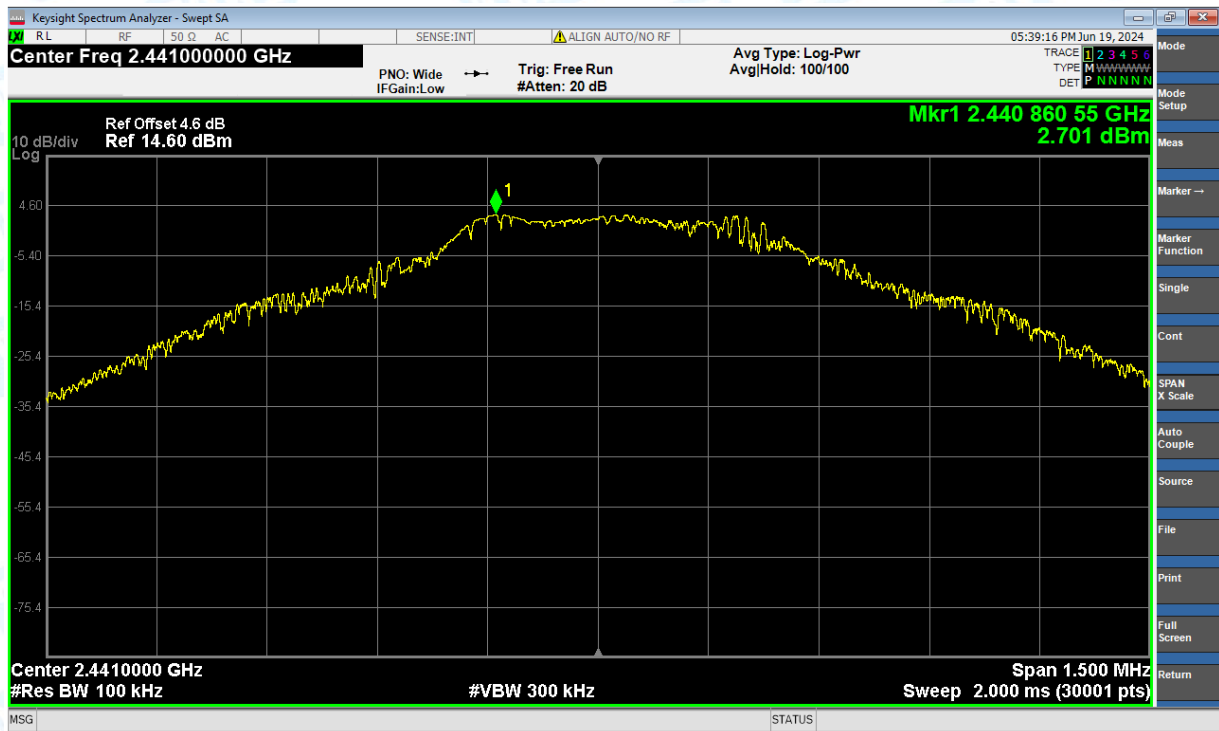
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



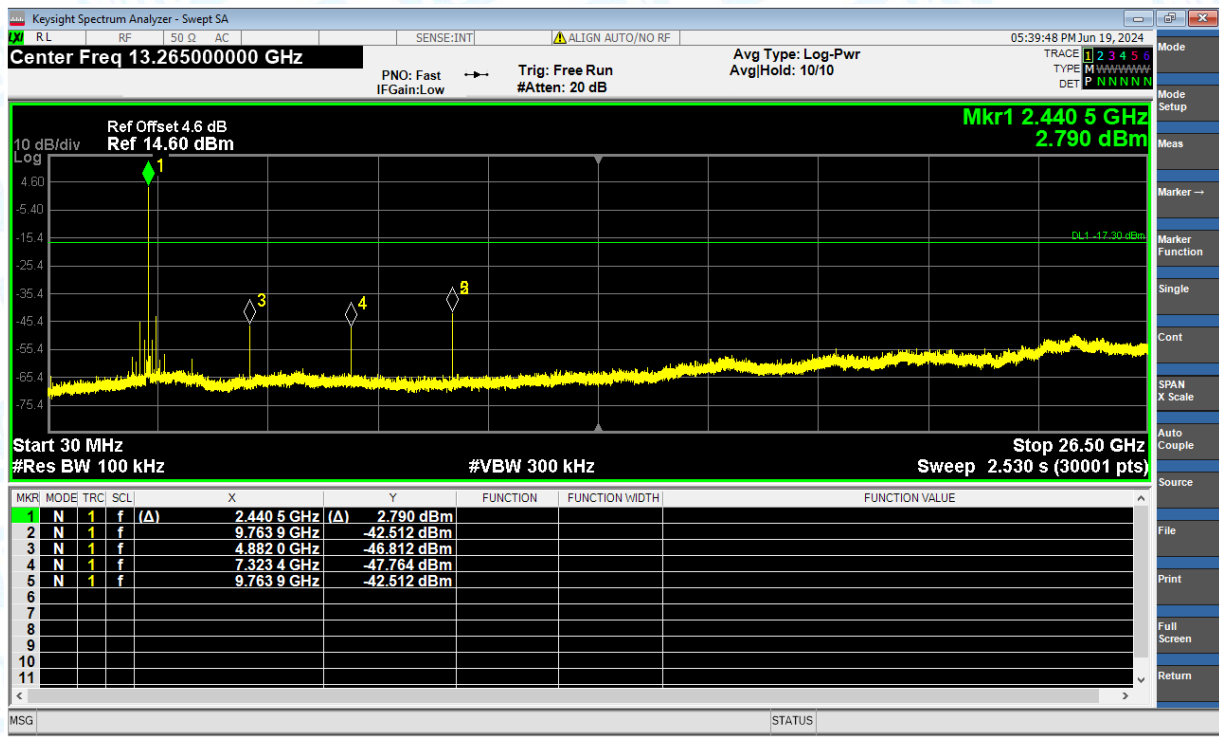
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



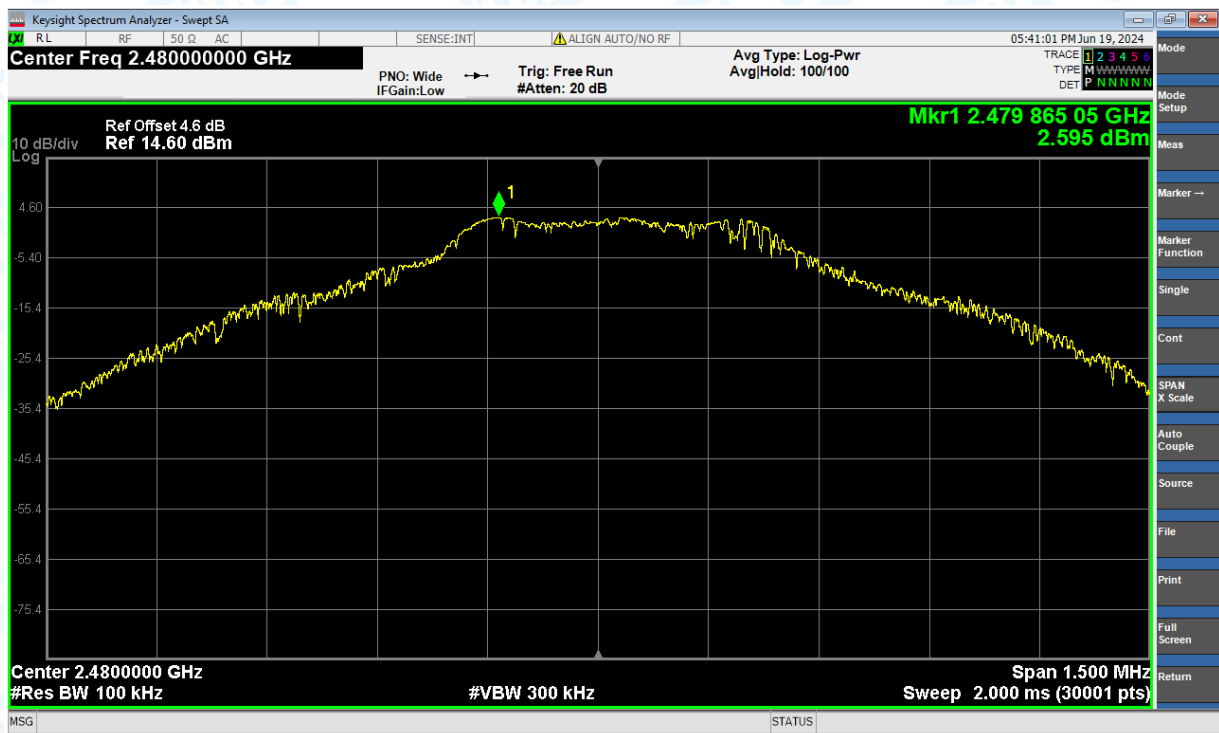
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



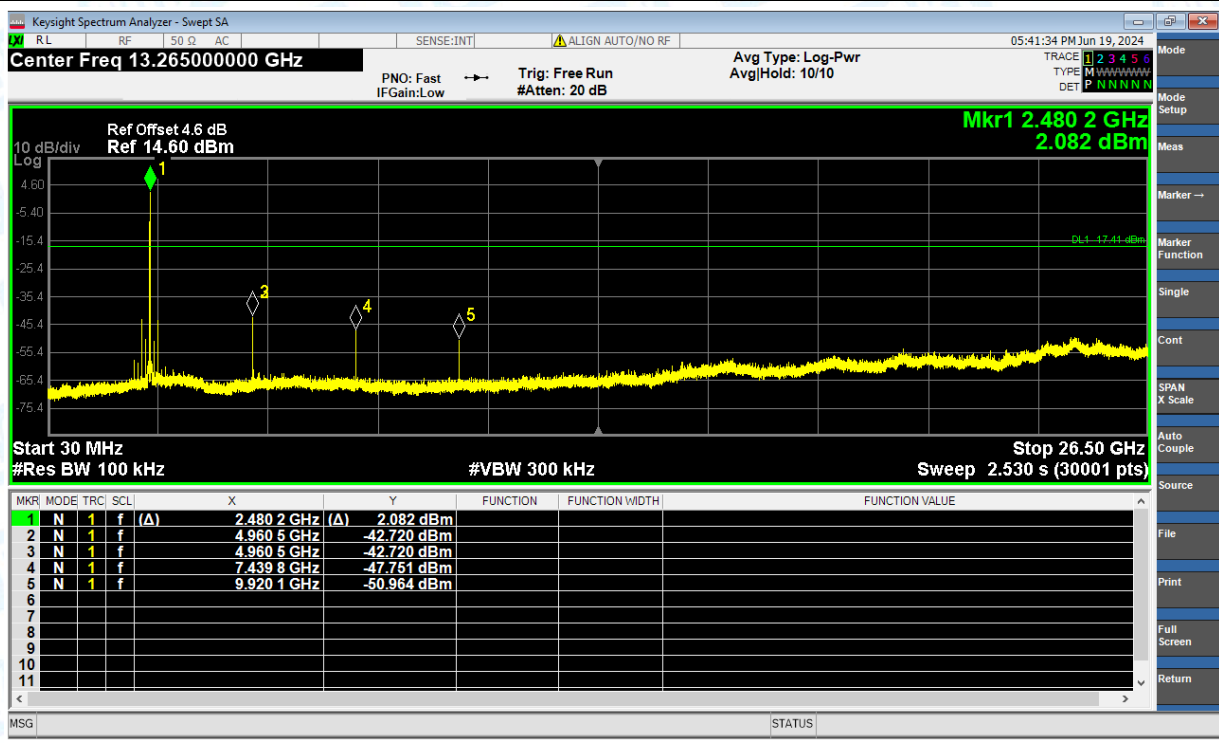
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



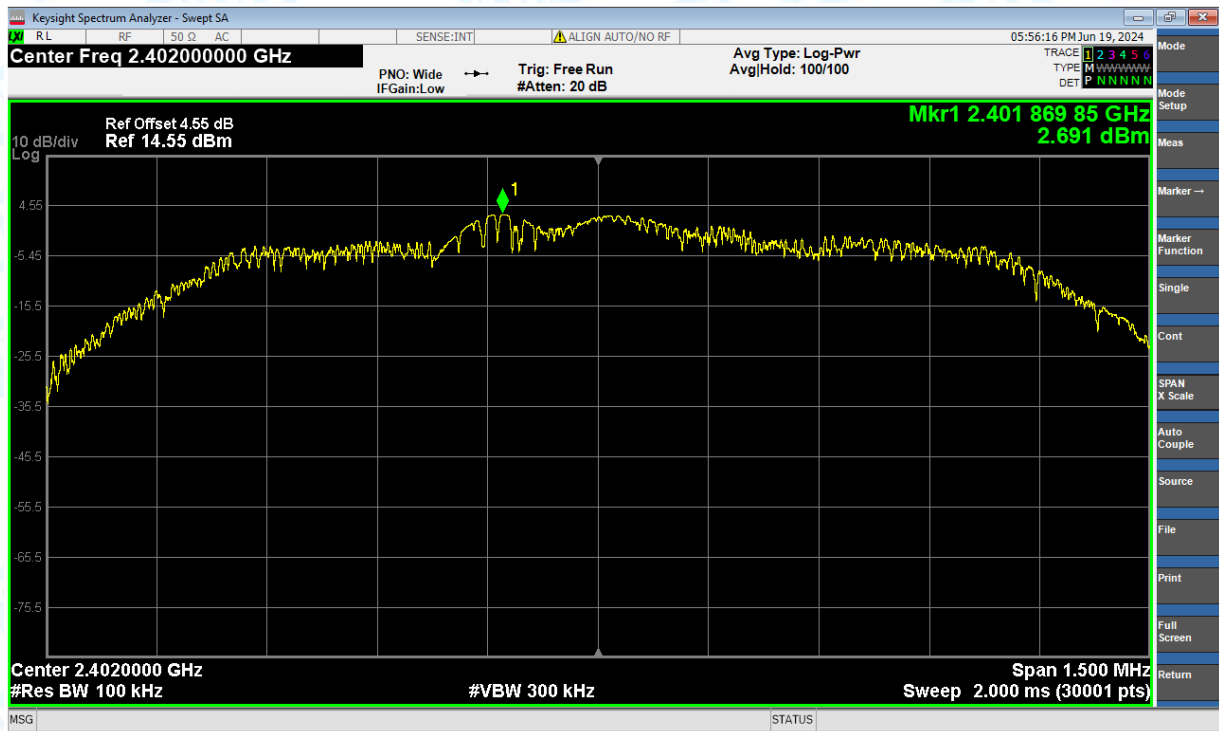
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



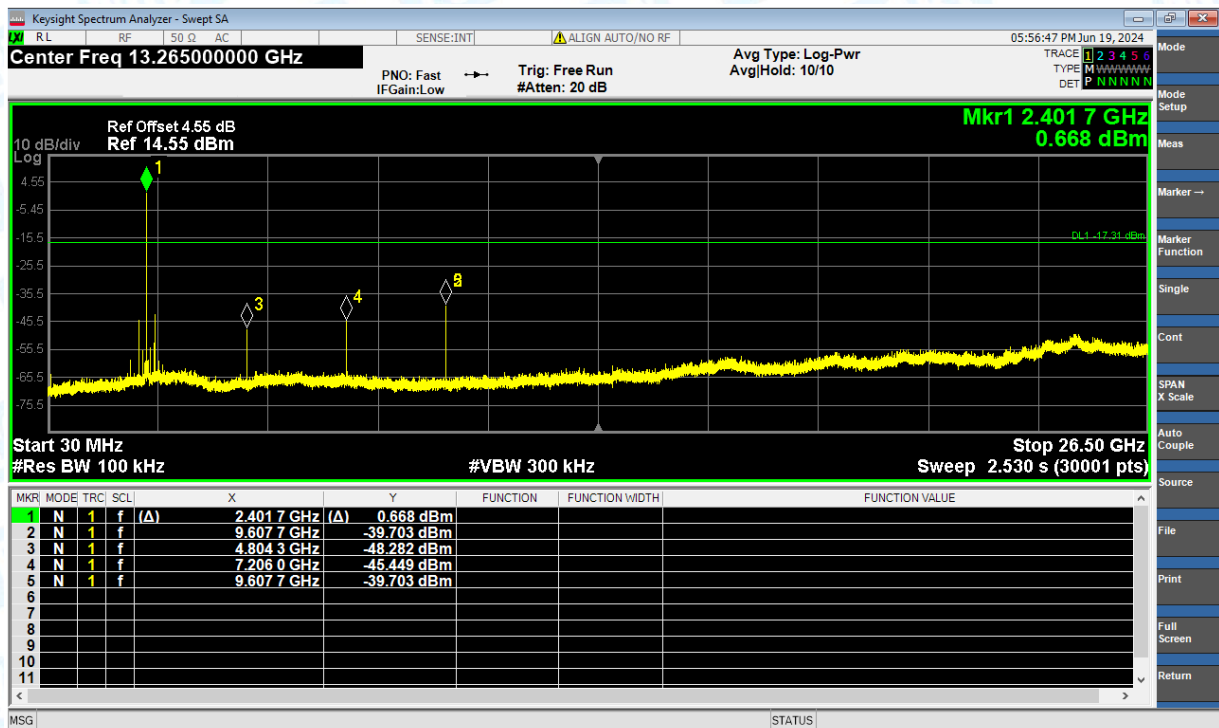
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



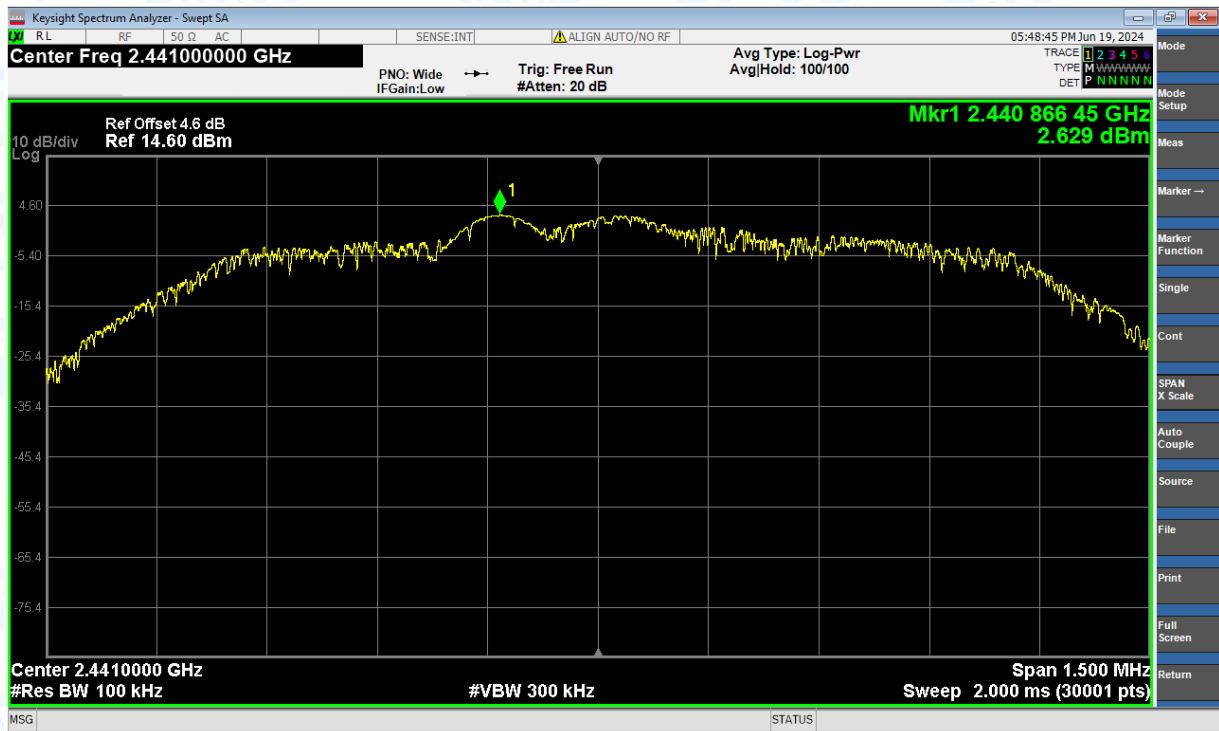
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



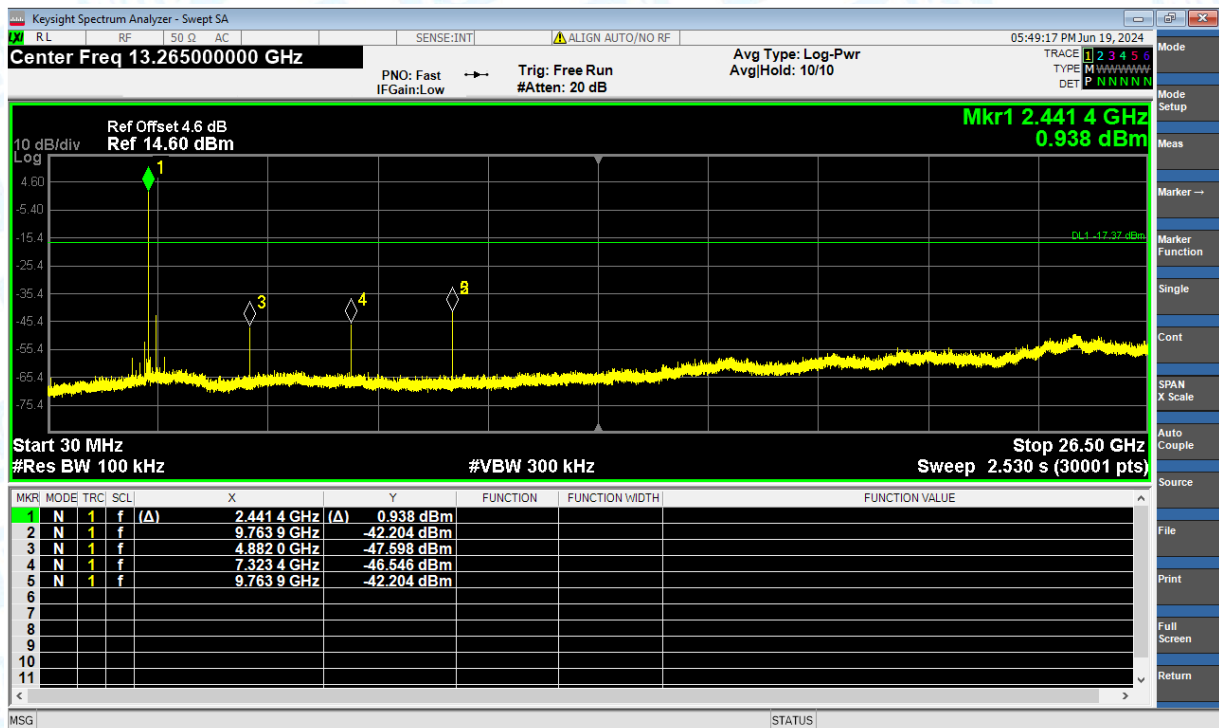
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



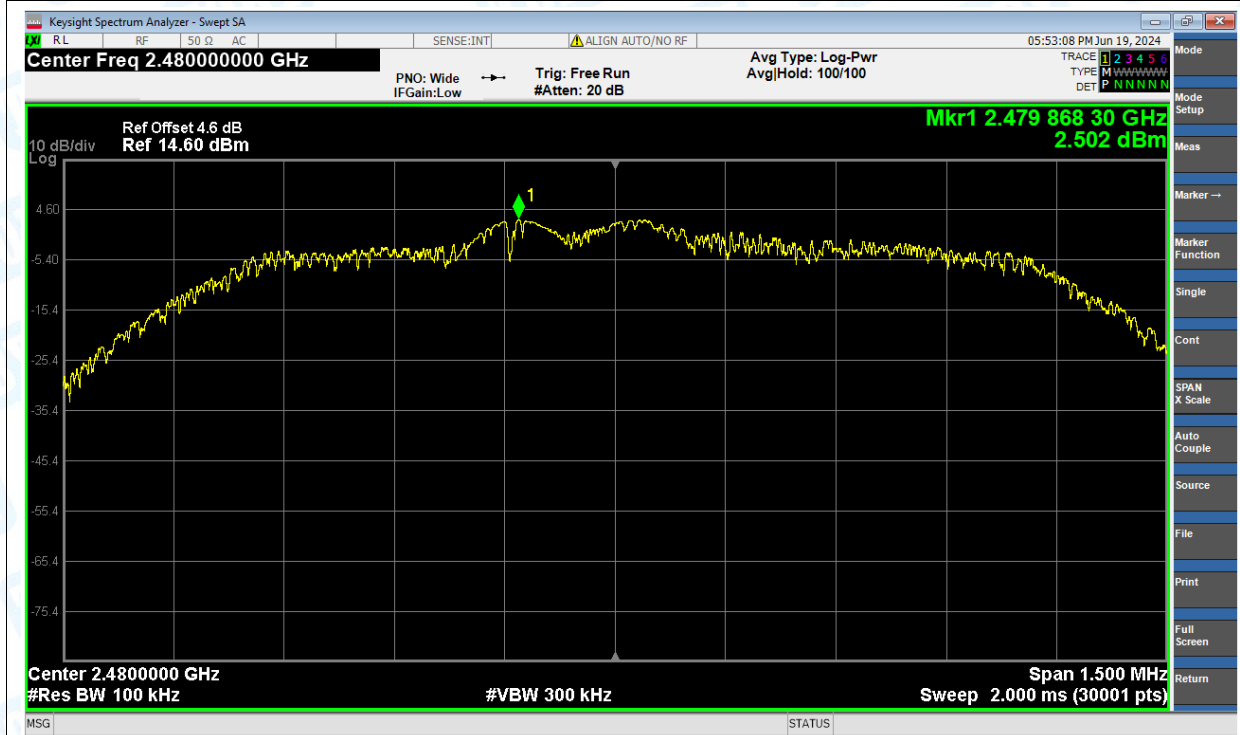
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



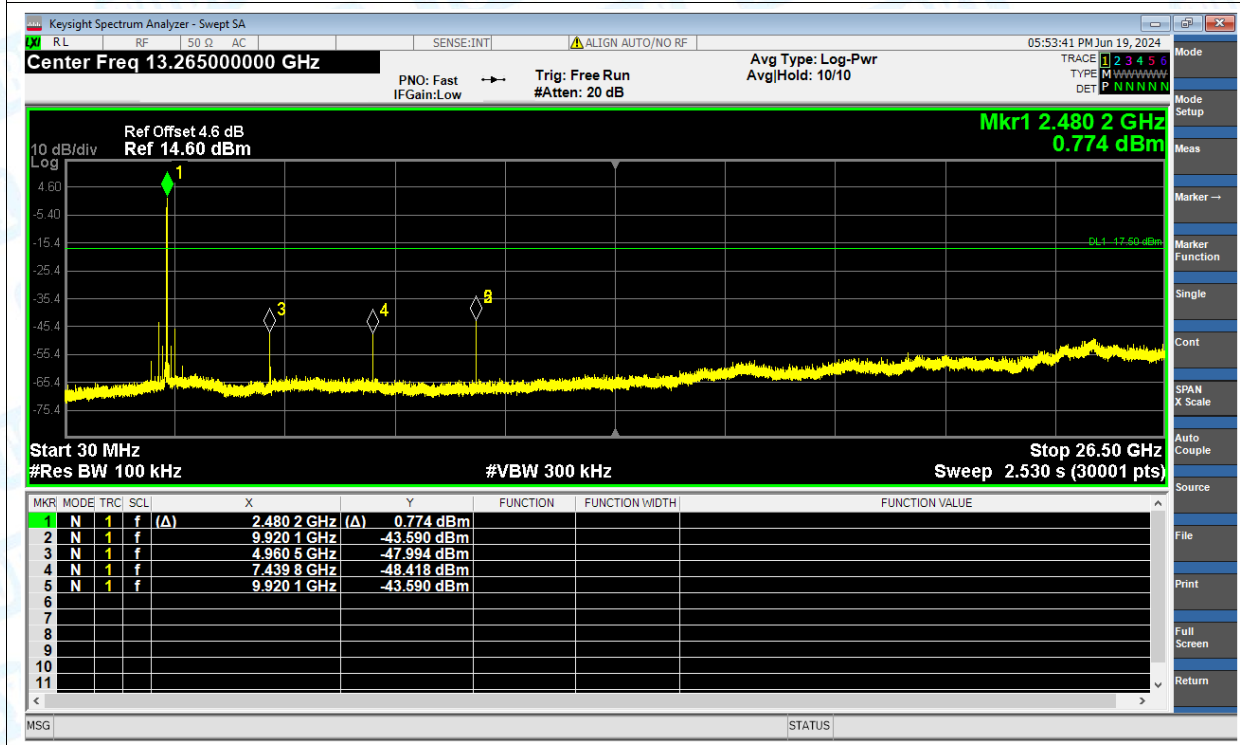
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

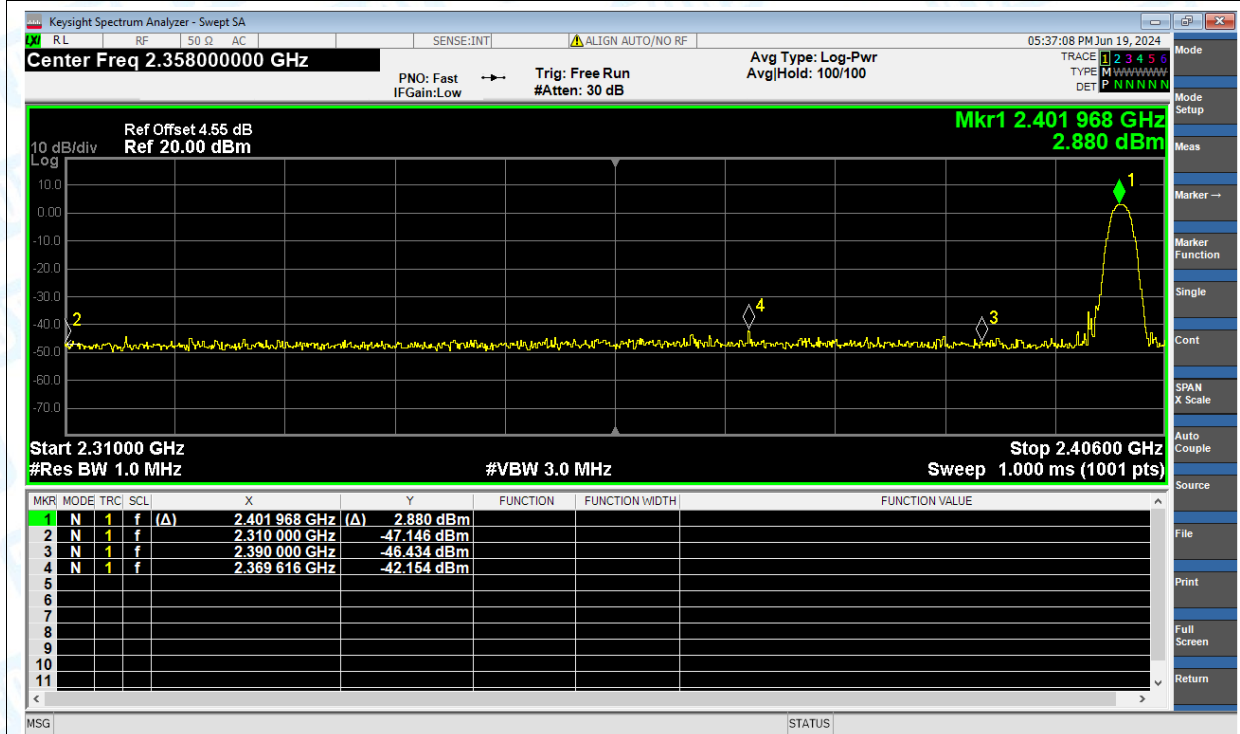


8. Restrict Band

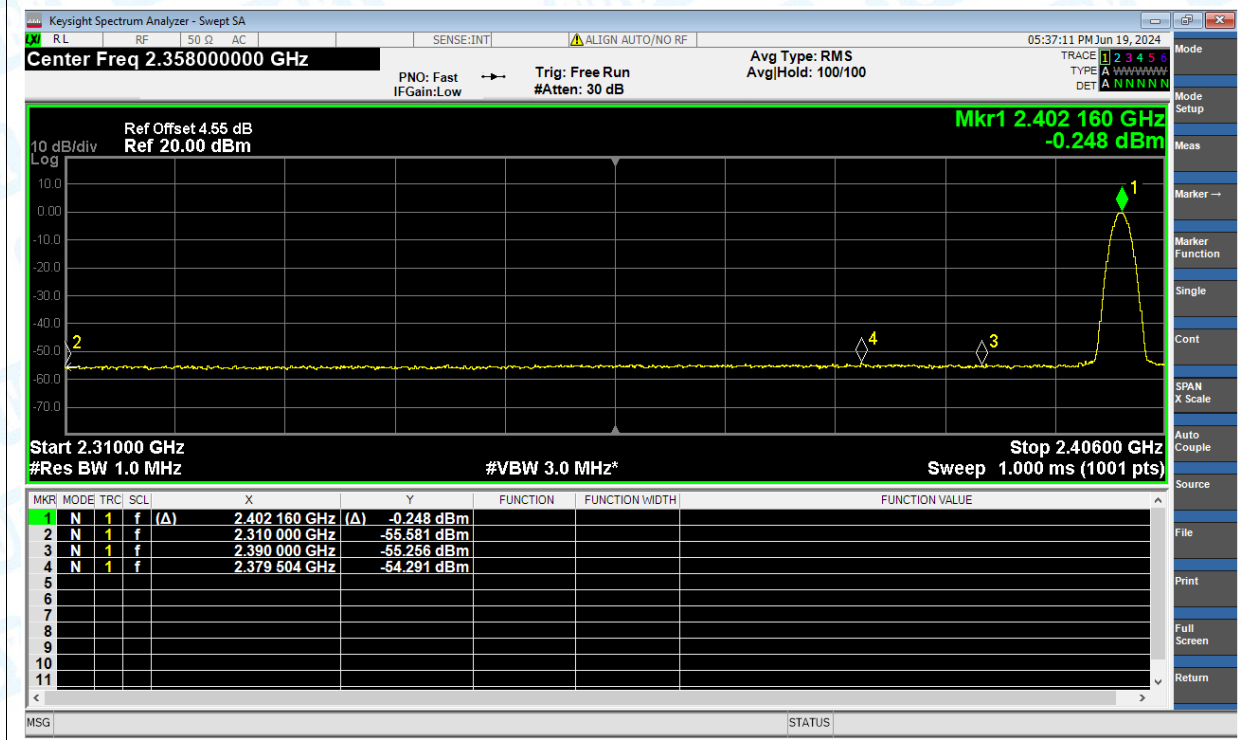
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-47.15	2	-	50.11	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.58	2	5.06	46.74	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2369.616	-42.15	2	-	55.11	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2379.504	-54.29	2	5.06	48.03	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-46.43	2	-	50.83	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.26	2	5.06	47.06	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-45.87	2	-	51.39	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.53	2	5.06	46.79	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.656	-41.21	2	-	56.05	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2489.968	-54.25	2	5.06	48.07	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-47.78	2	-	49.48	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.2	2	5.06	47.12	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-47.27	2	-	49.99	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-55.74	2	4.95	46.47	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2354.256	-44.09	2	-	53.17	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2374.416	-54.42	2	4.95	47.79	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.89	2	-	49.37	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.01	2	4.95	47.2	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-46.42	2	-	50.84	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-53.99	2	4.95	48.22	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.56	-36.7	2	-	60.56	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.512	-53.99	2	4.95	48.22	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-45.74	2	-	51.52	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.34	2	4.95	46.87	Average	54	Pass

Test Graphs

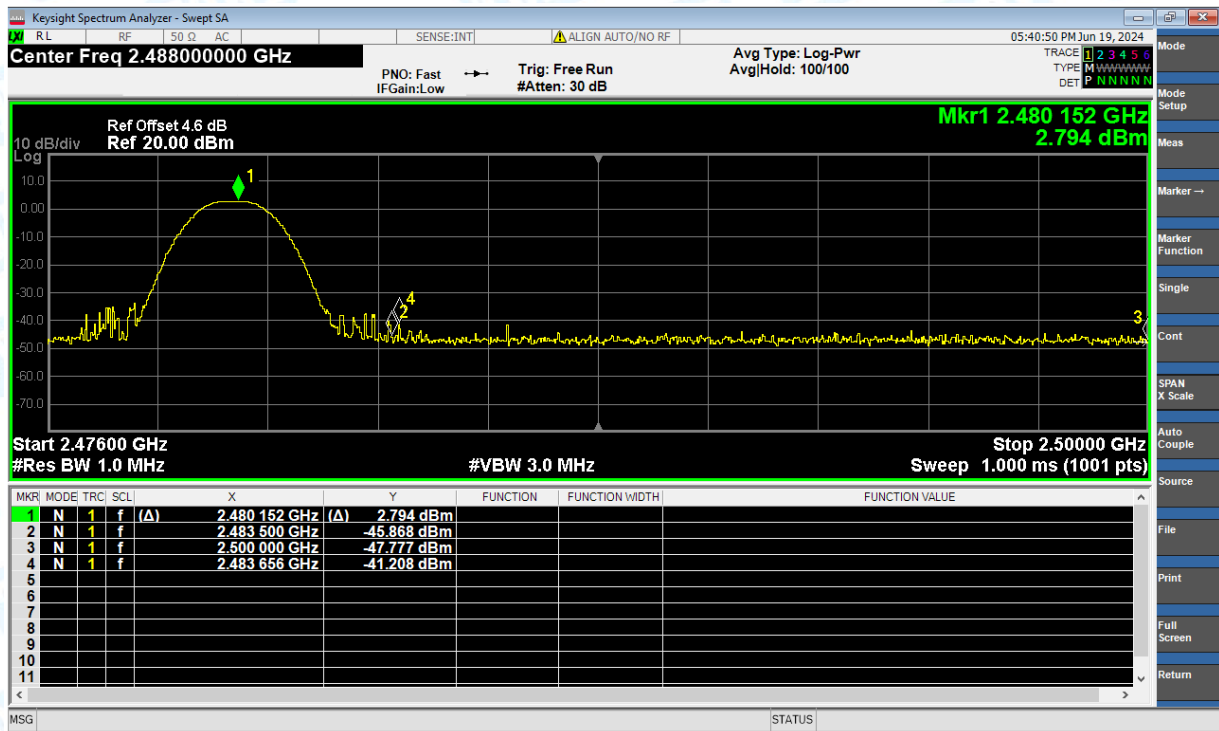
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



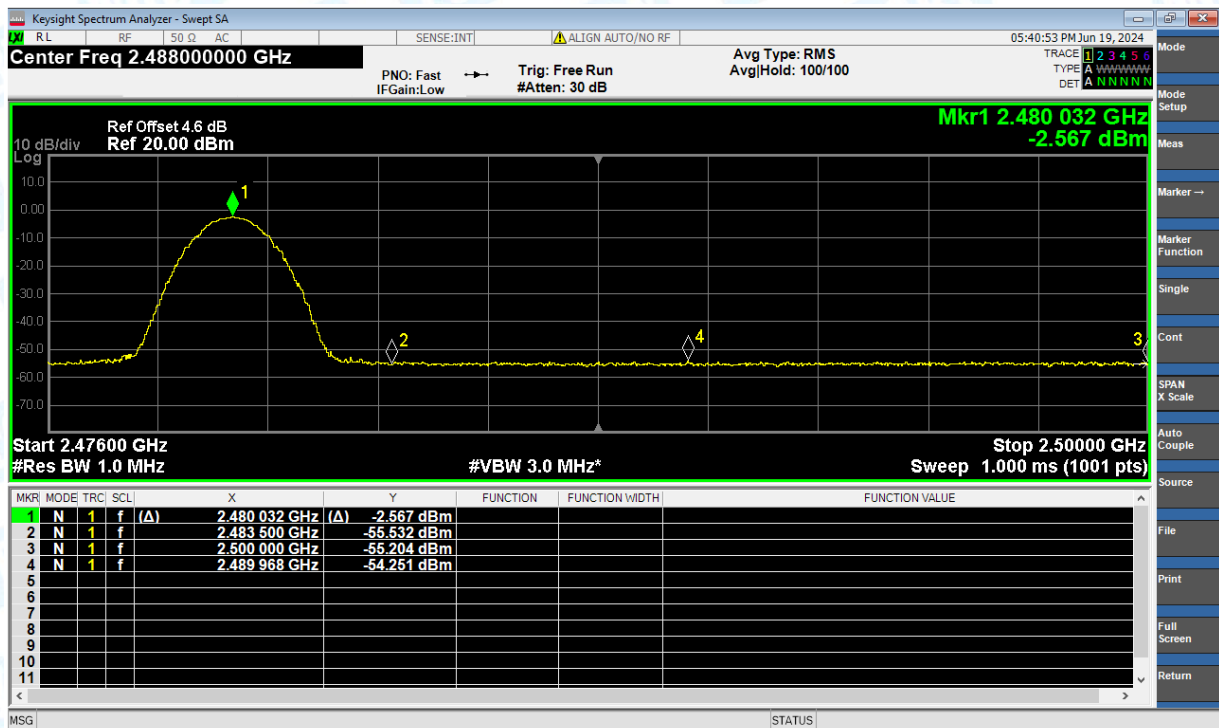
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



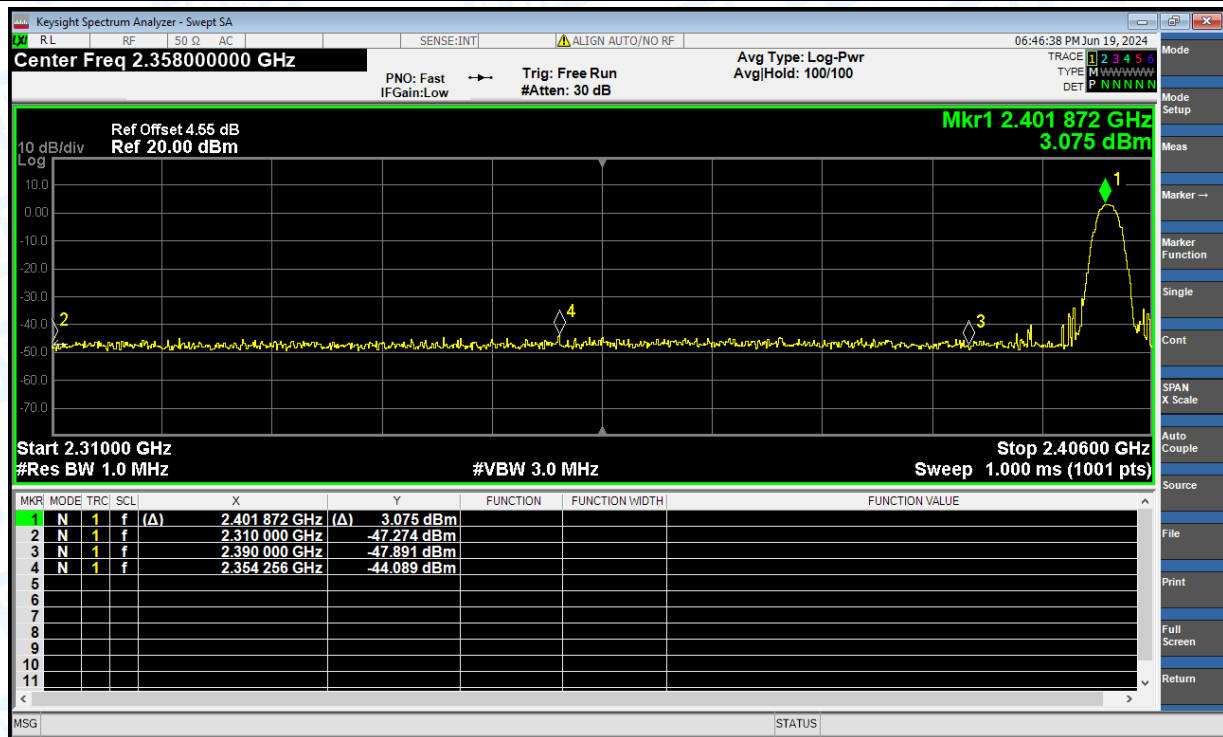
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



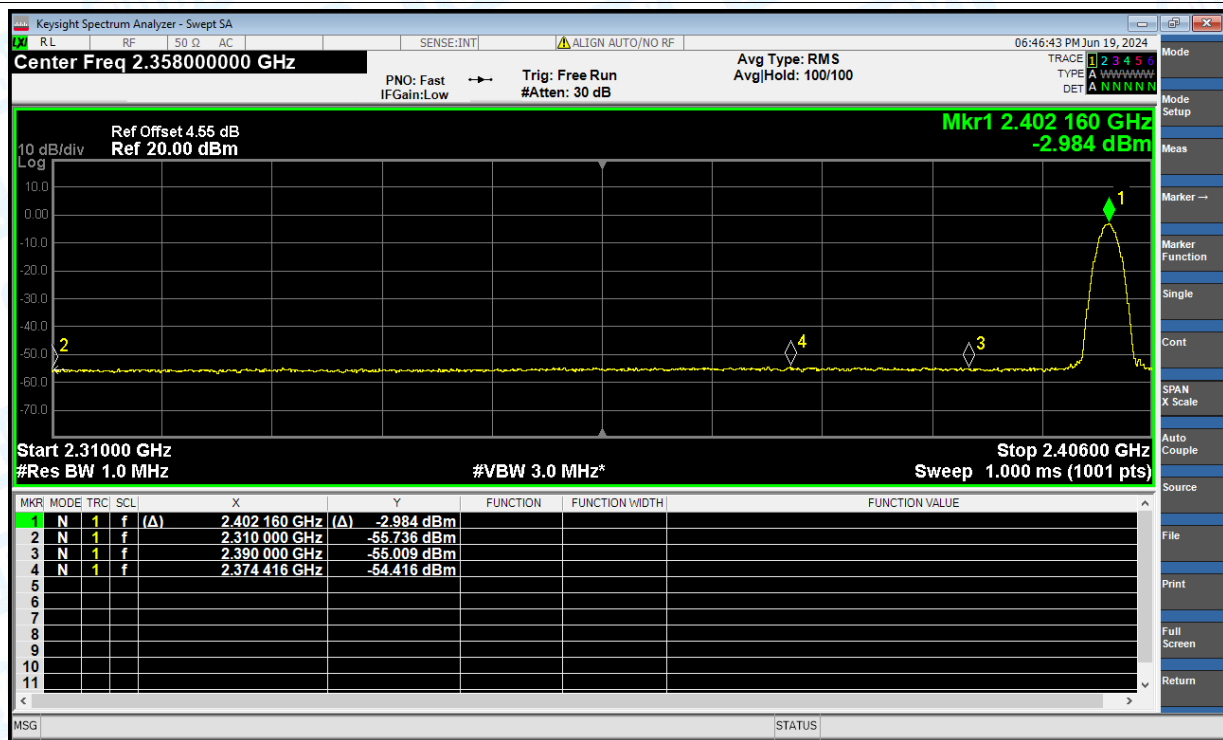
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



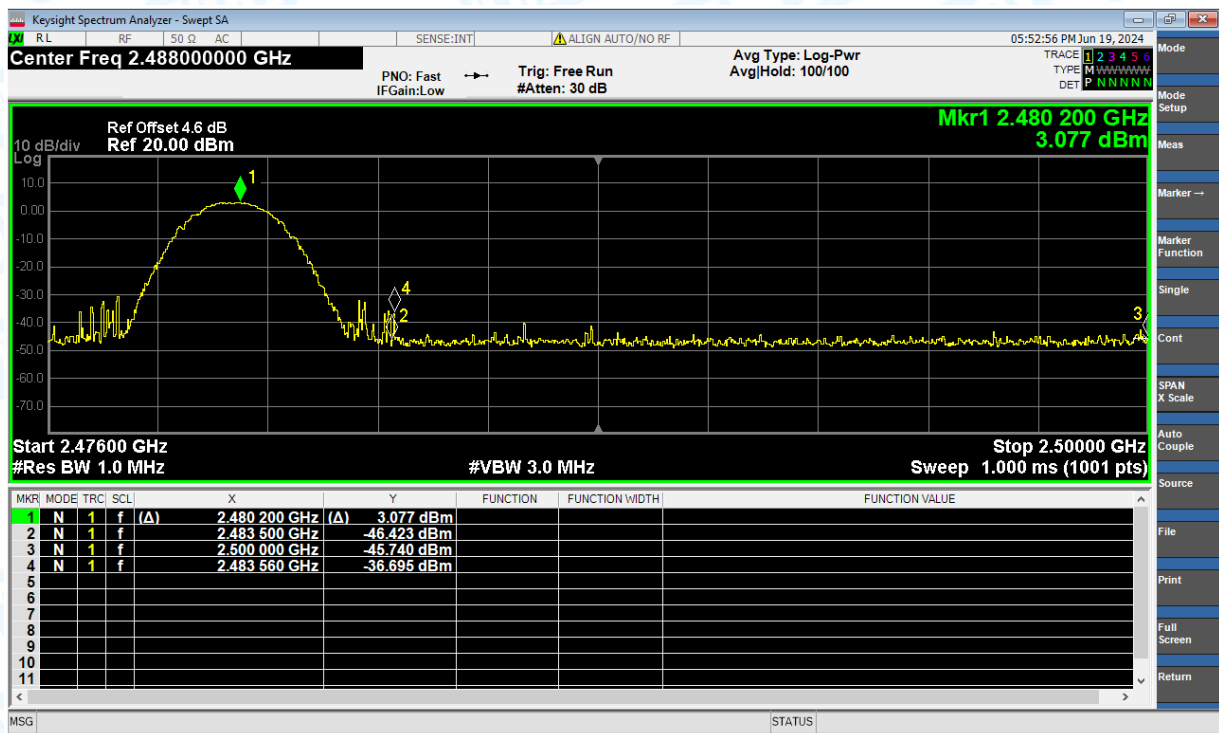
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



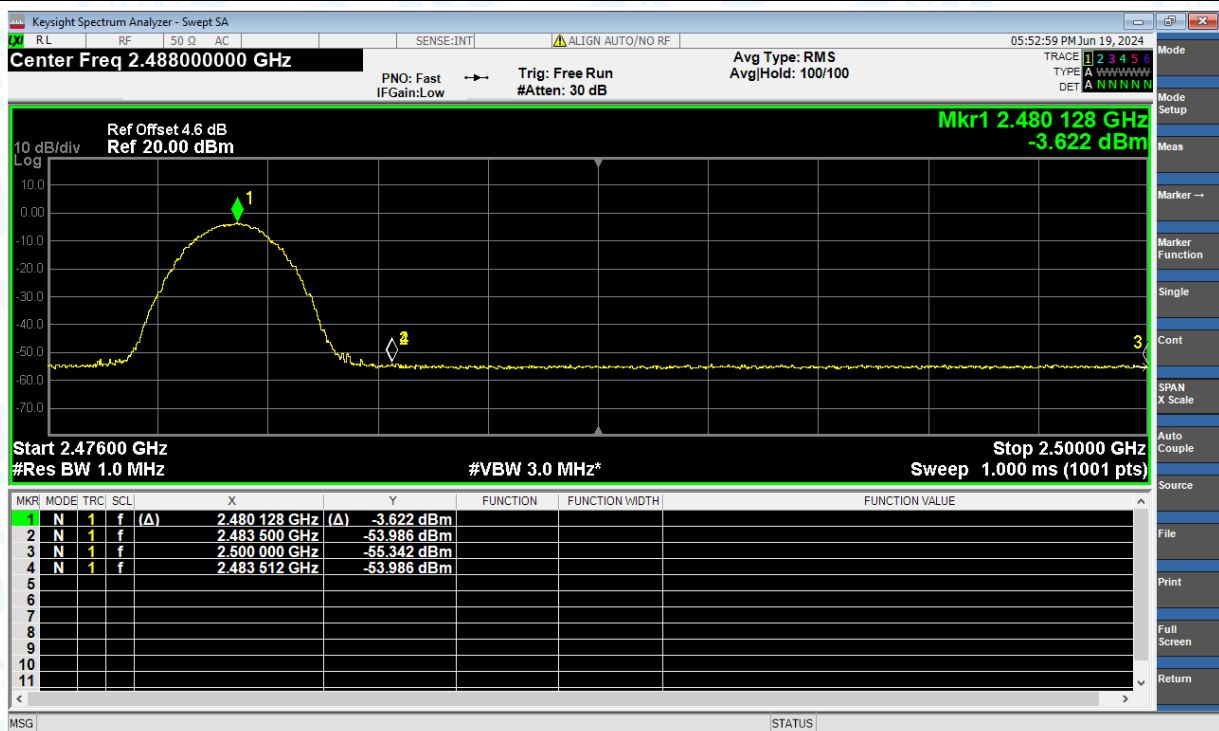
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



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



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

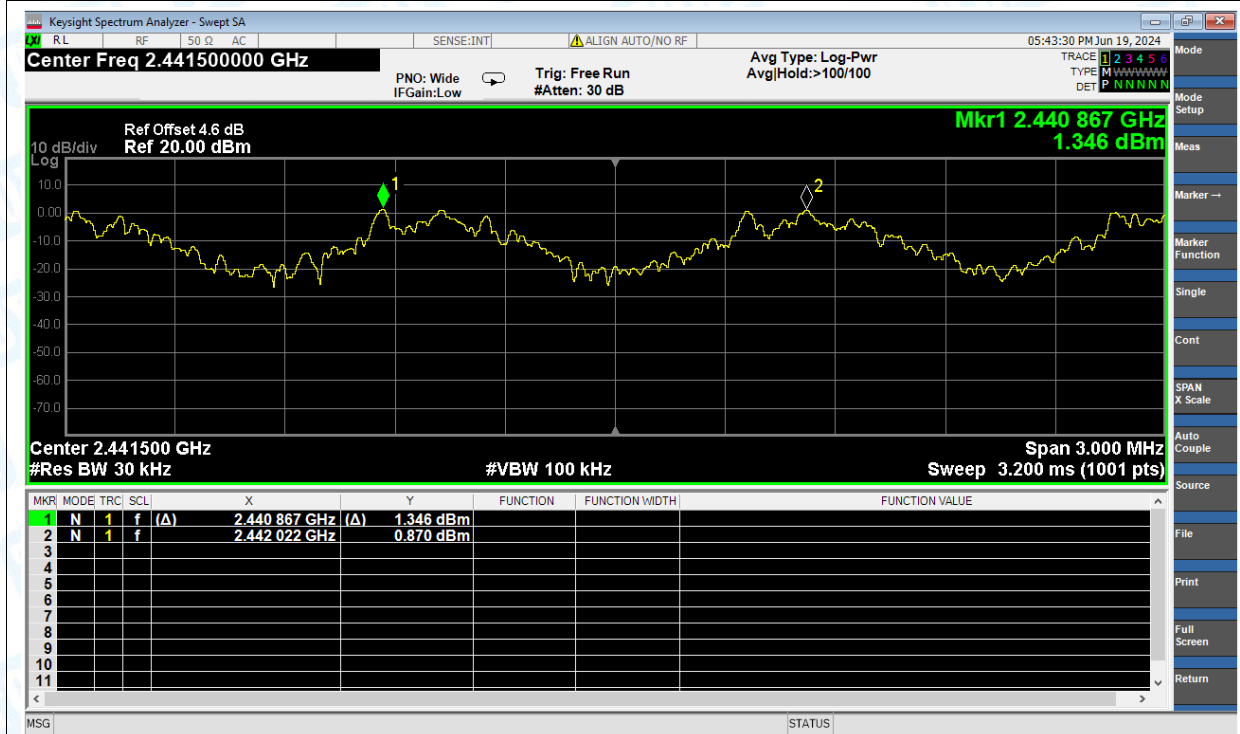


9. Carrier Frequencies Separation

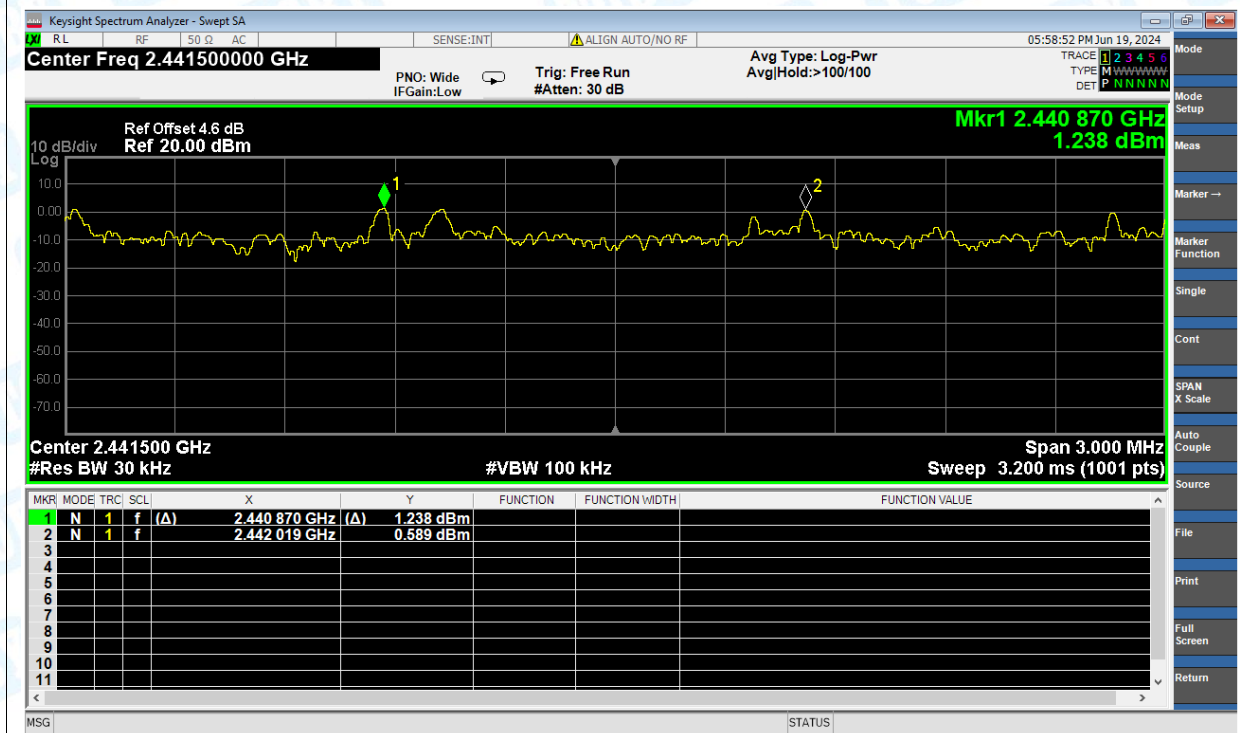
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.867	2442.022	1.155	0.573	Pass
NVNT	2-DH1	Ant1	2440.87	2442.019	1.149	0.84	Pass

Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1

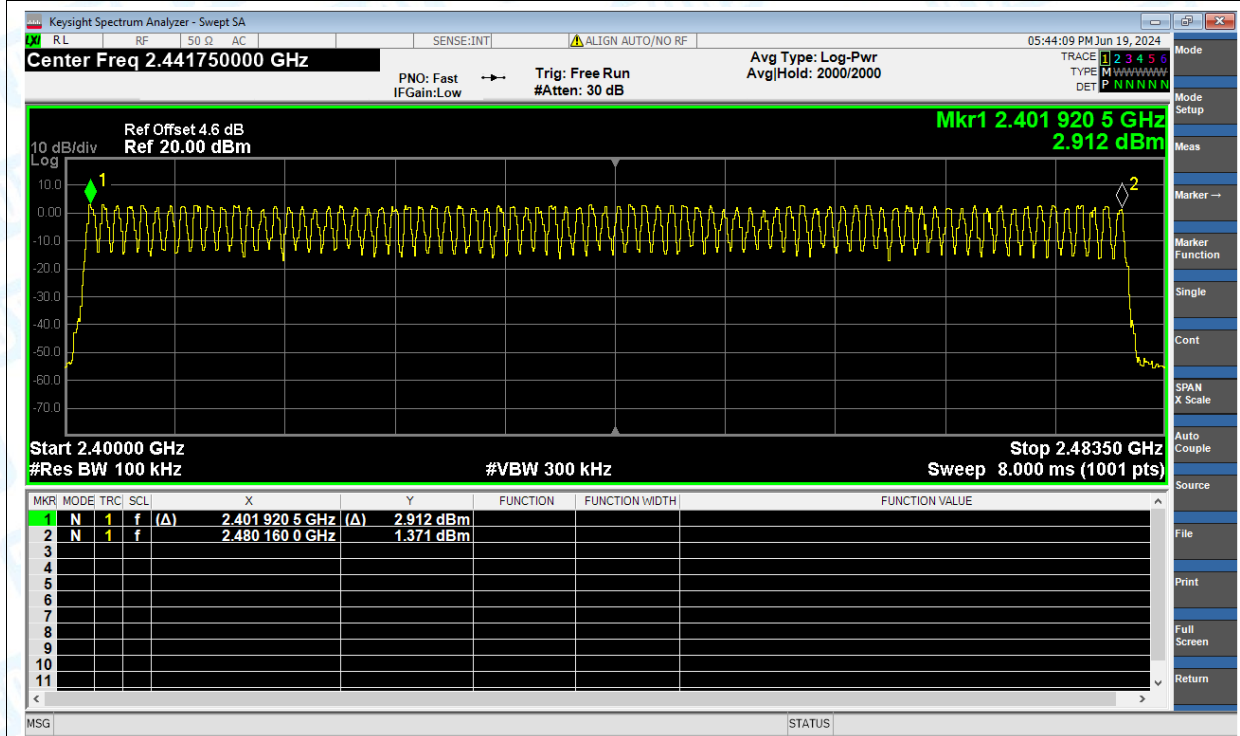


10.Number of Hopping Channel

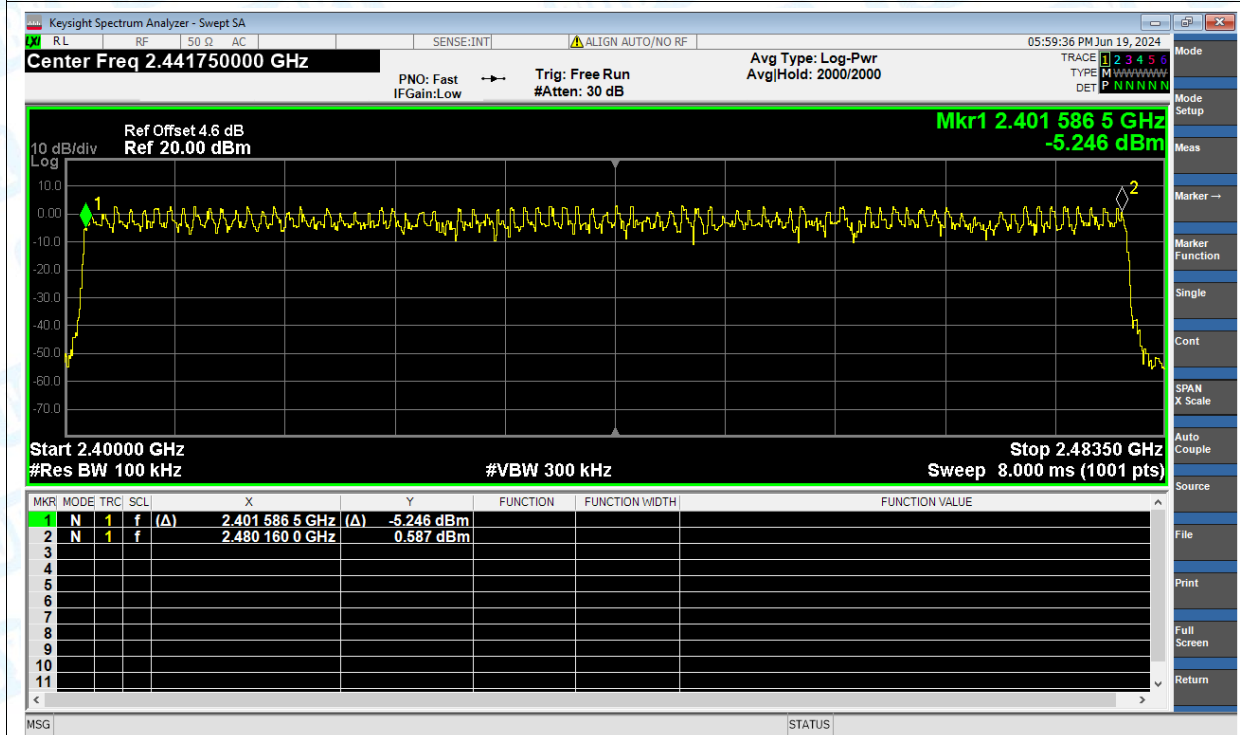
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1

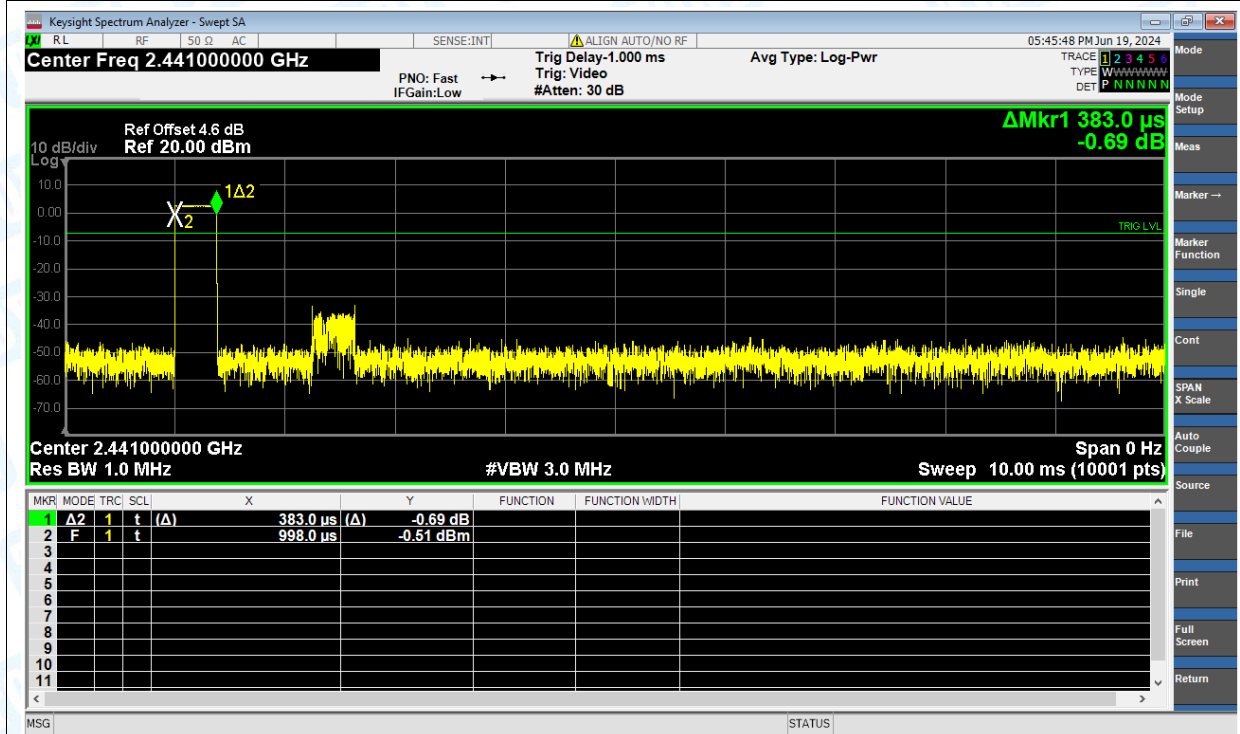


11.Dwell Time

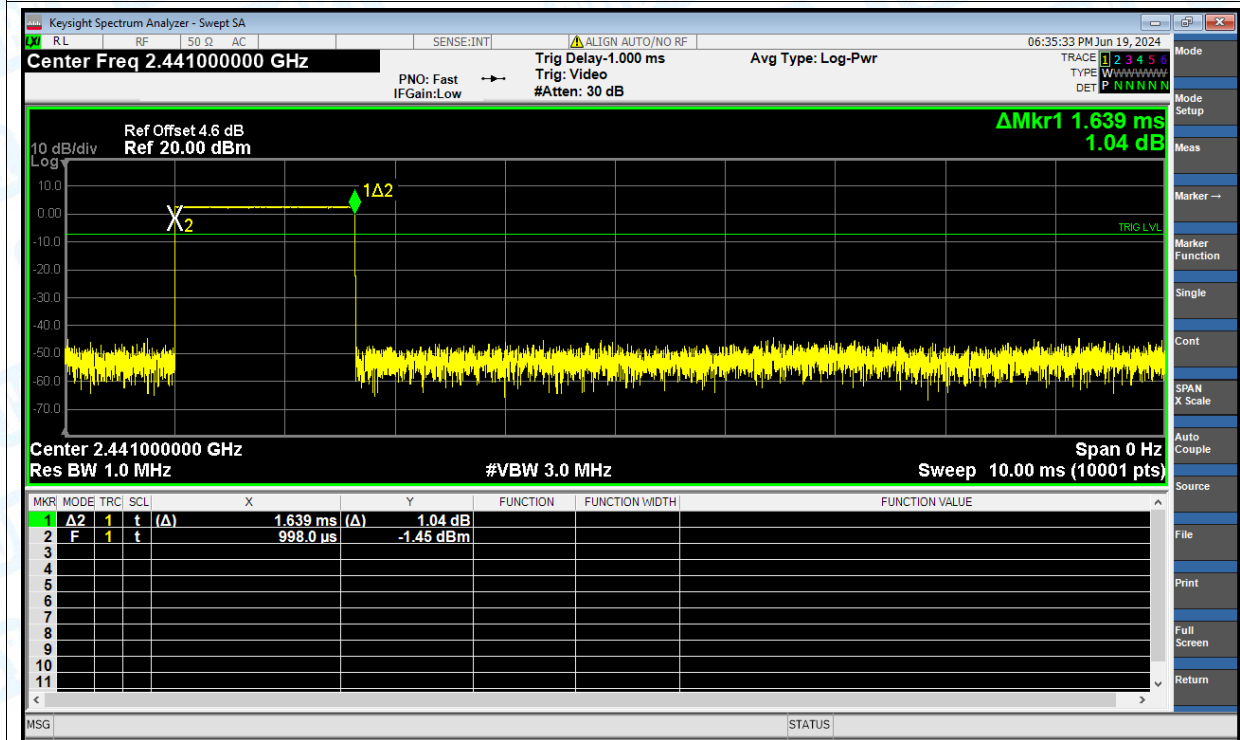
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.644	263.04	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.892	308.48	31600	400	Pass

Test Graphs

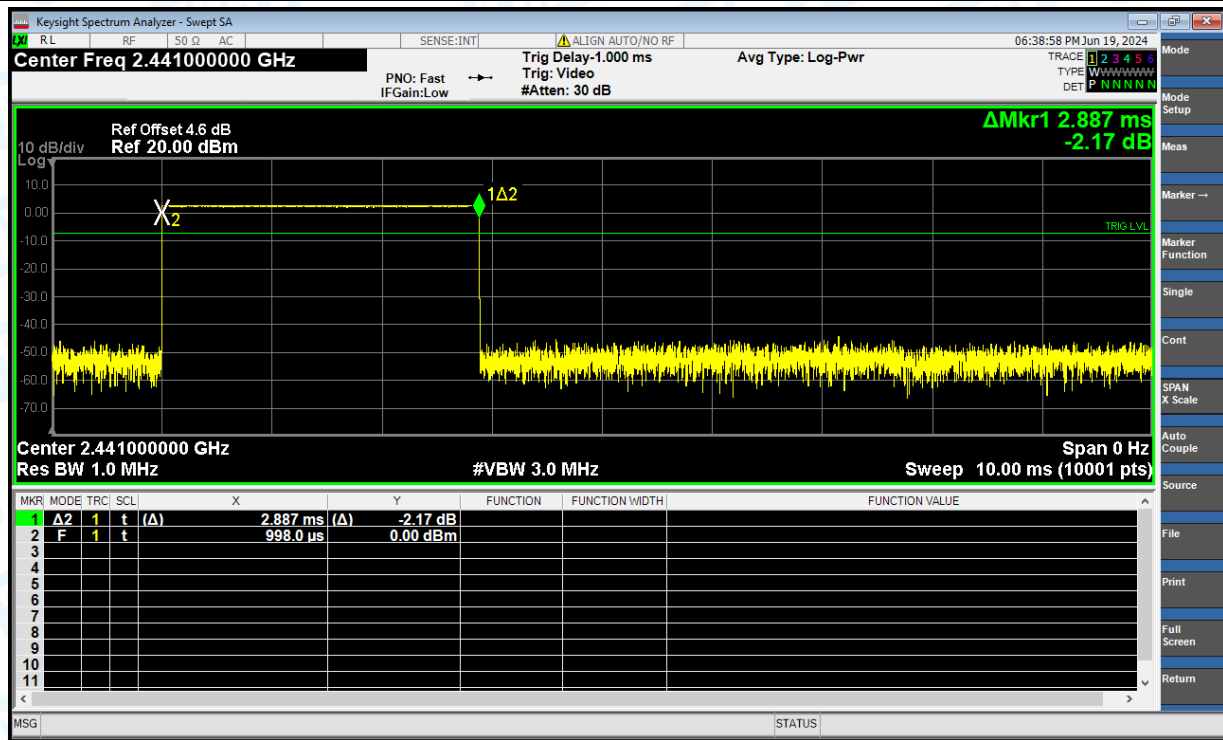
Dwell NVNT 1-DH1 2441MHz Ant1



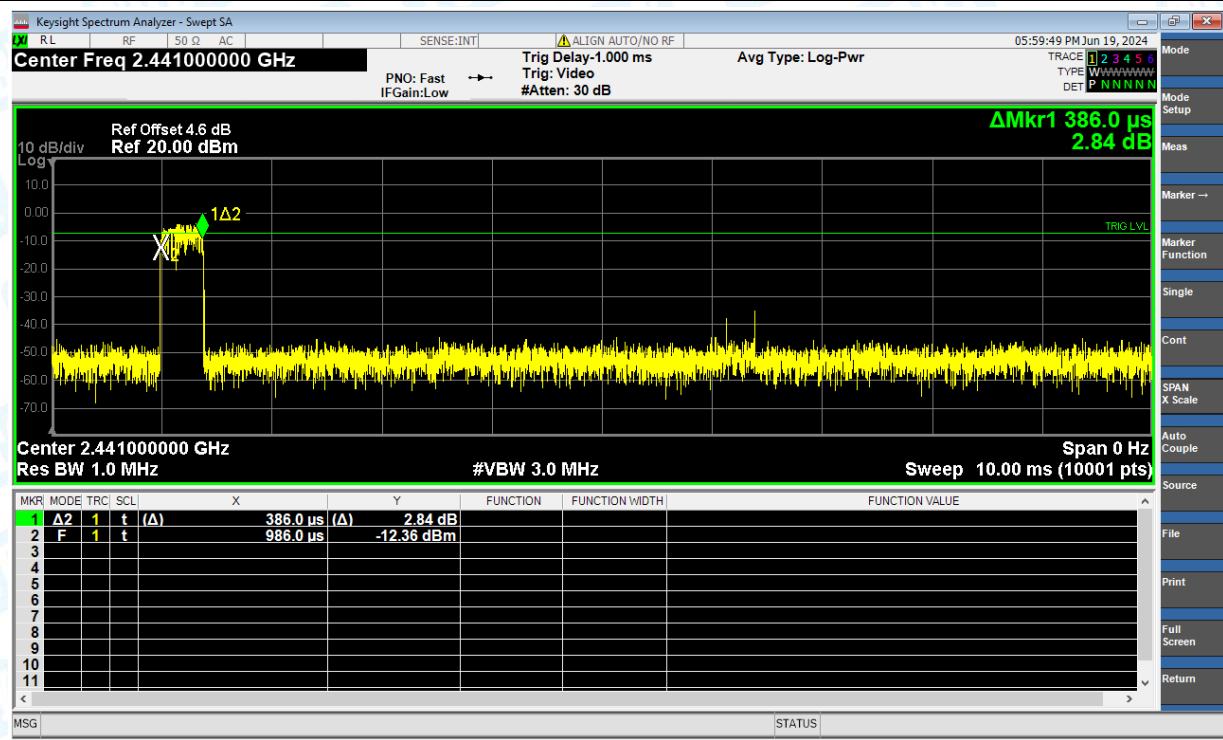
Dwell NVNT 1-DH3 2441MHz Ant1



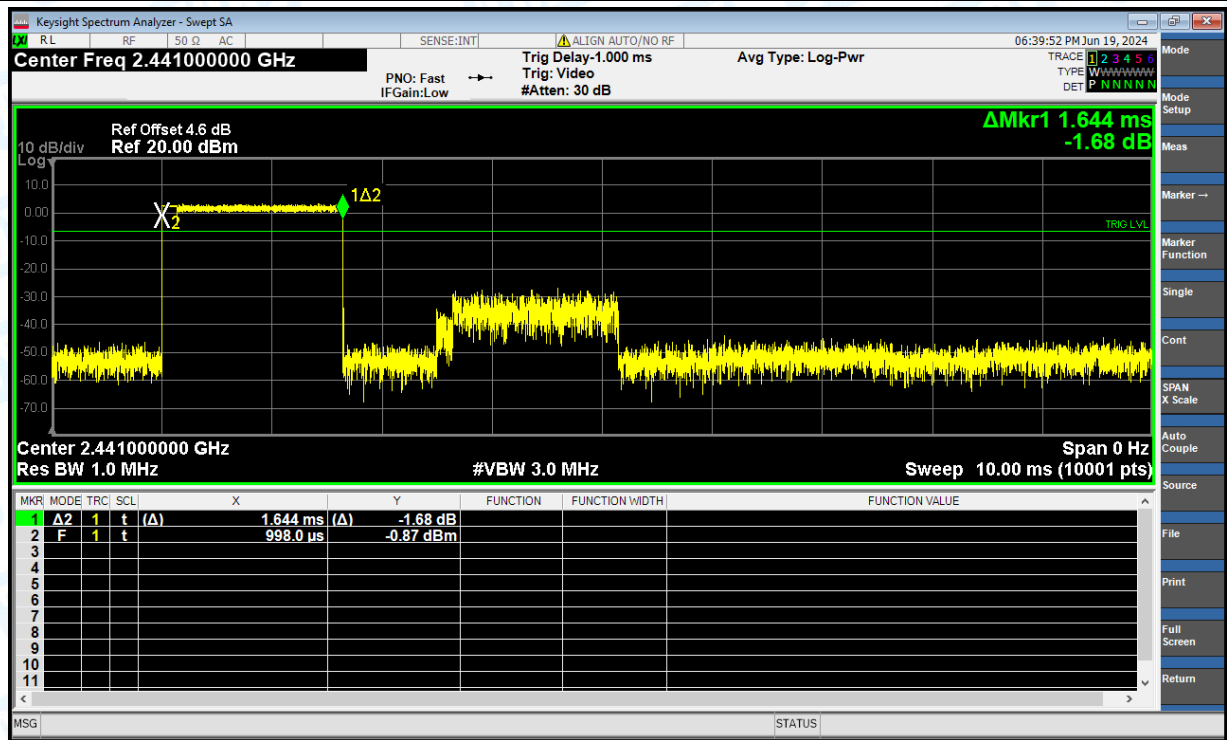
Dwell NVNT 1-DH5 2441MHz Ant1



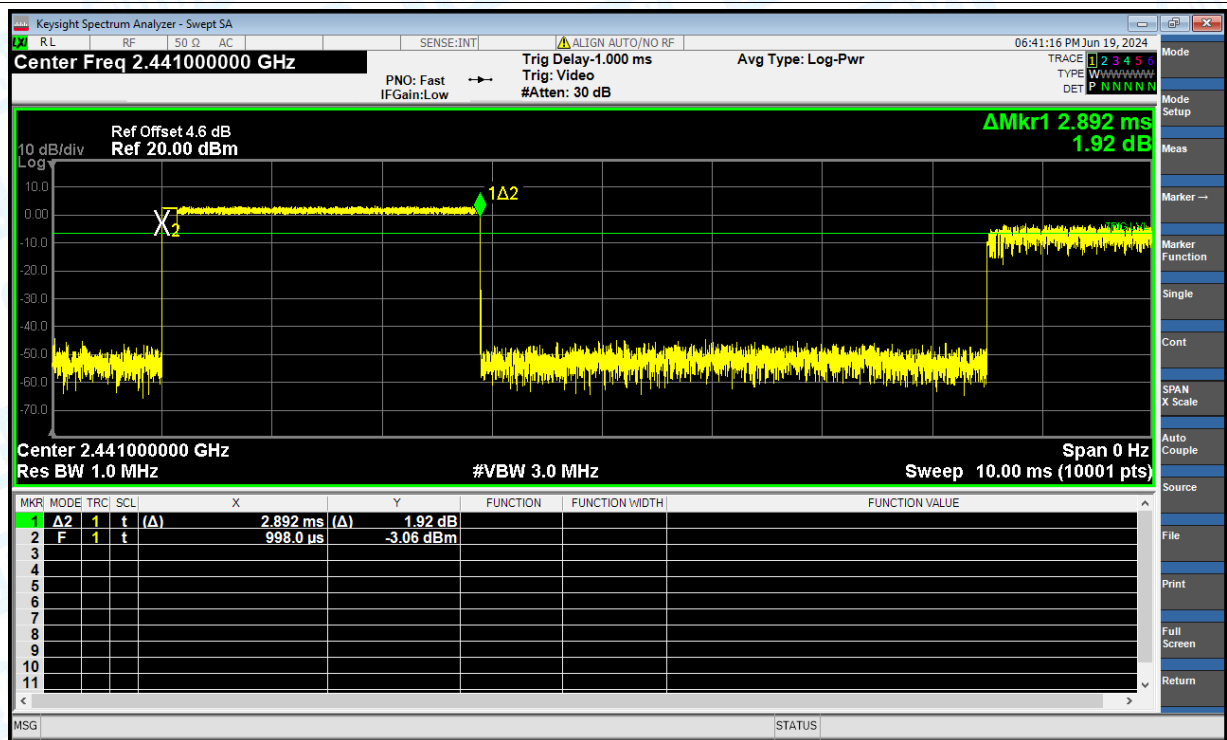
Dwell NVNT 2-DH1 2441MHz Ant1



Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1



-----END OF THE REPORT-----