RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	MINI PC
Test Model:	MN
Sample ID:	RW-C-202404-0249-5-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 19V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202404-0249-5 The report only show the worst case data.	

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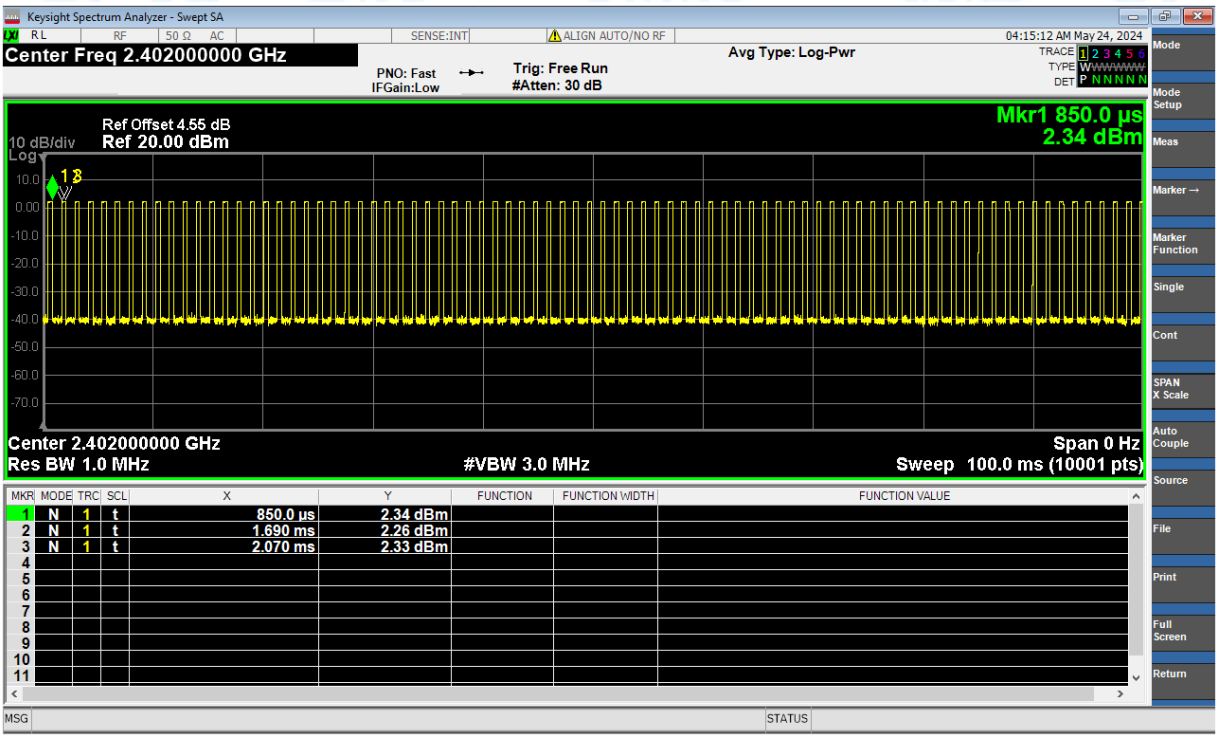
1. Duty Cycle

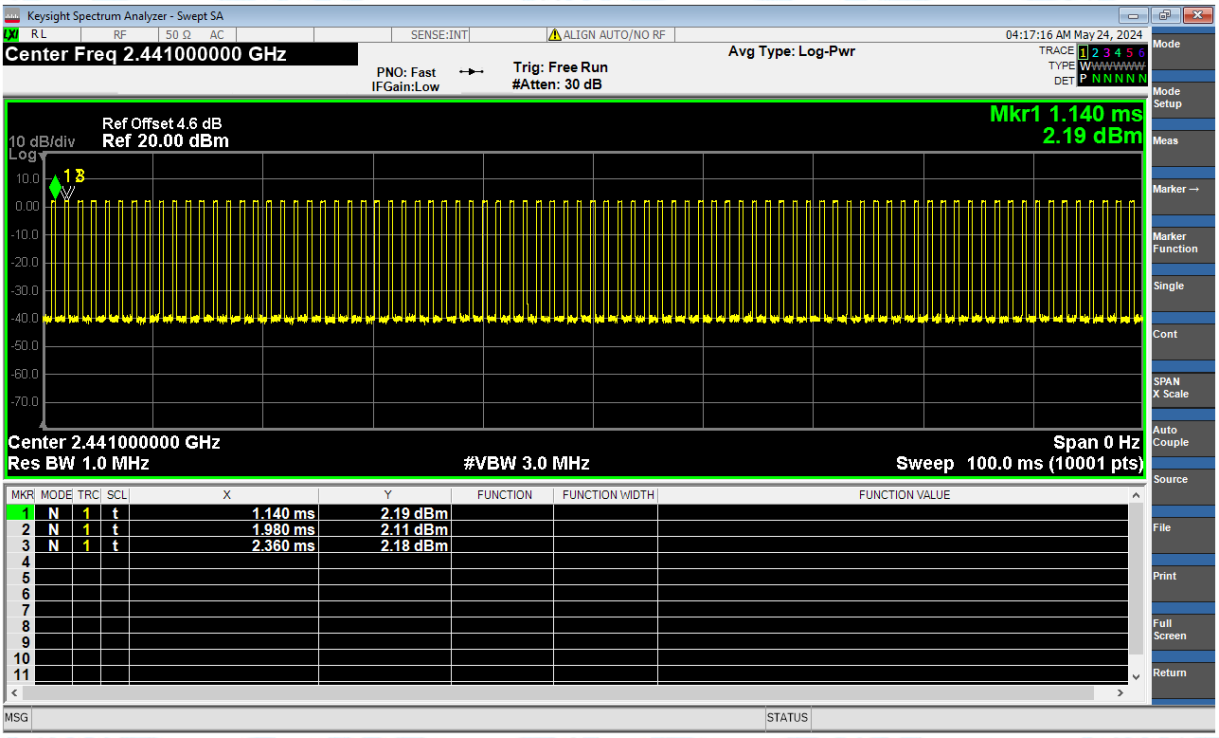
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.15	5.07	2.63
NVNT	1-DH1	2441	Ant1	31.15	5.07	2.63
NVNT	1-DH1	2480	Ant1	31.15	5.07	2.63
NVNT	2-DH1	2402	Ant1	31.71	4.99	2.56
NVNT	2-DH1	2441	Ant1	30.89	5.1	2.63
NVNT	2-DH1	2480	Ant1	30.89	5.1	2.63
NVNT	3-DH1	2402	Ant1	31.45	5.02	2.56
NVNT	3-DH1	2441	Ant1	31.71	4.99	2.56
NVNT	3-DH1	2480	Ant1	31.71	4.99	2.56

Test Graphs

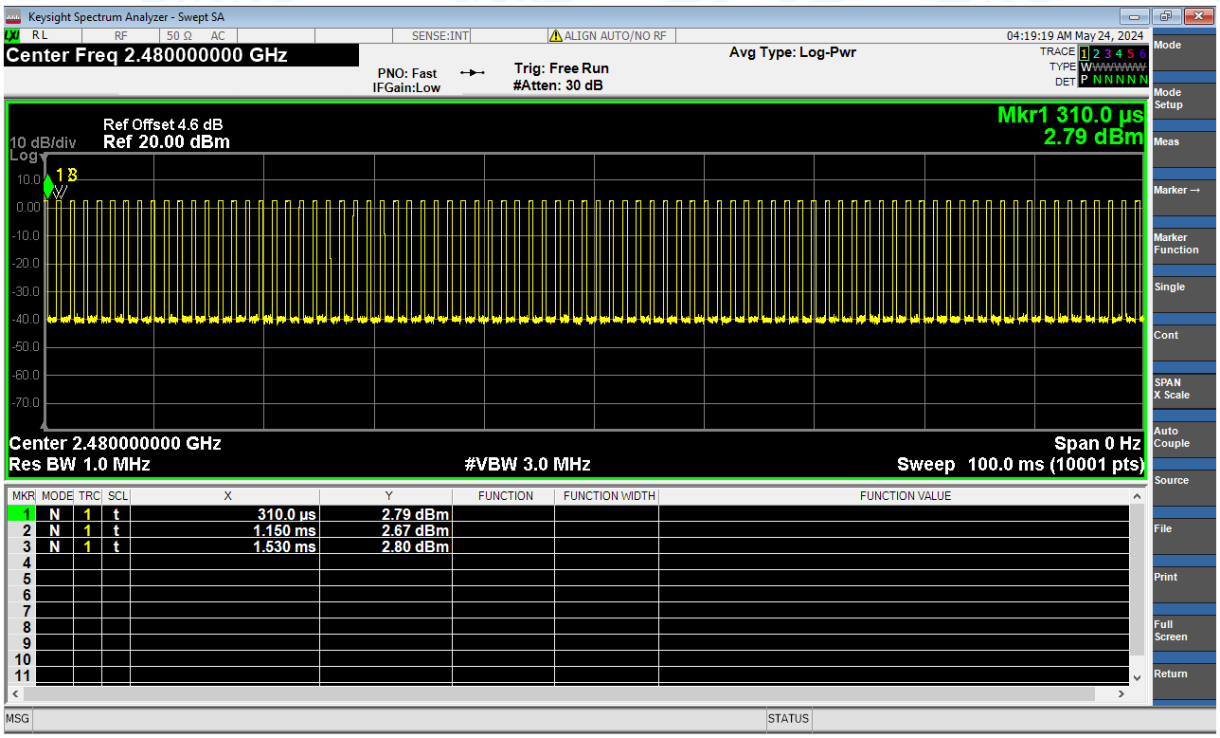
Duty Cycle NVNT 1-DH1 2402MHz Ant1



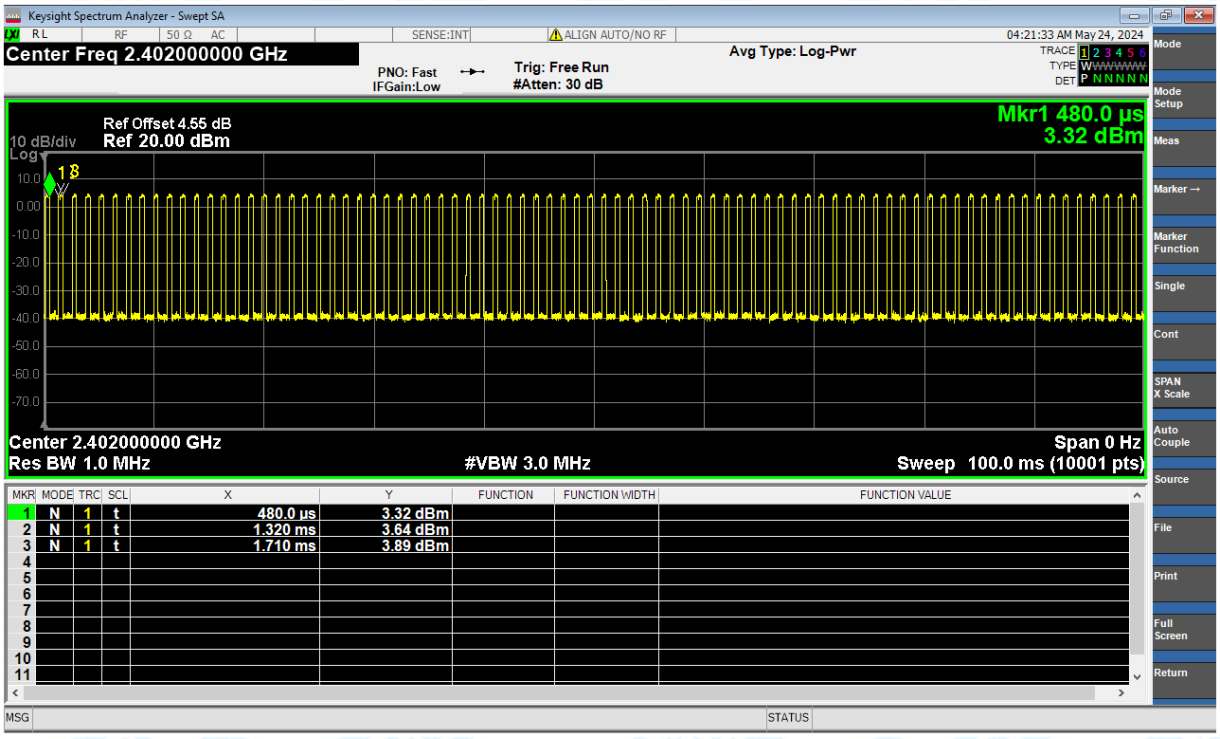
Duty Cycle NVNT 1-DH1 2441MHz Ant1



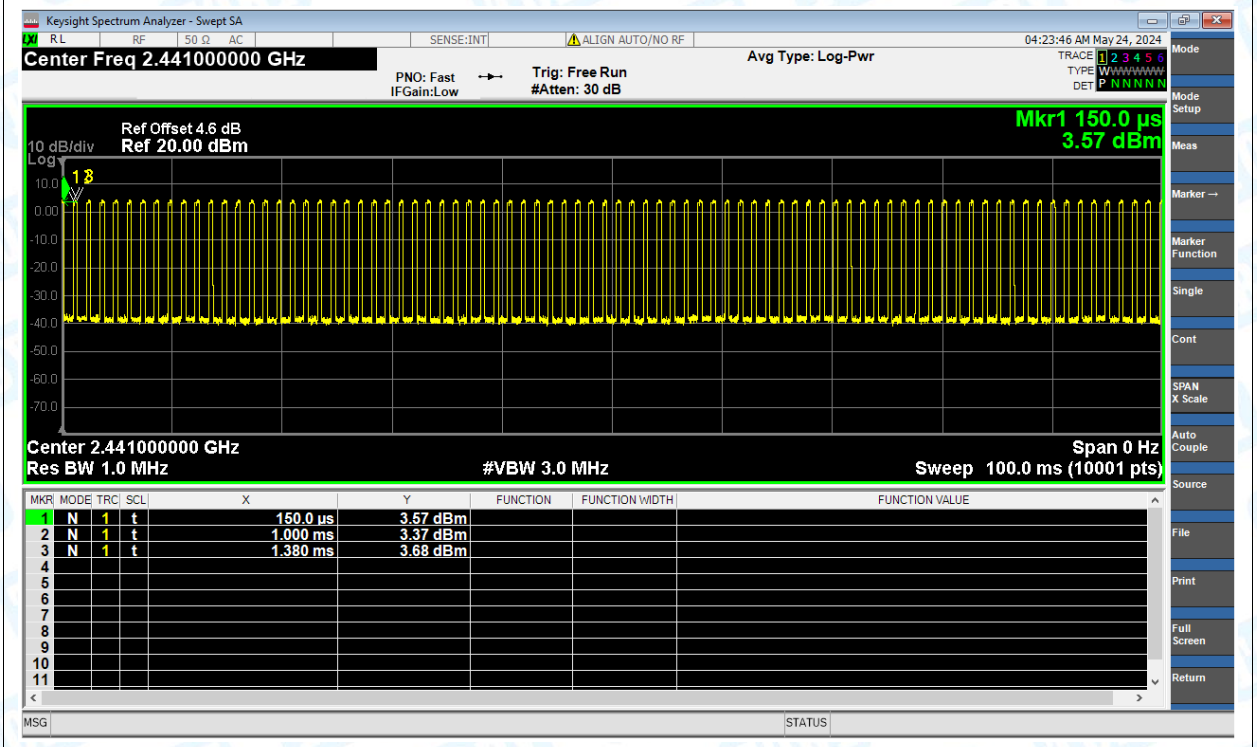
Duty Cycle NVNT 1-DH1 2480MHz Ant1



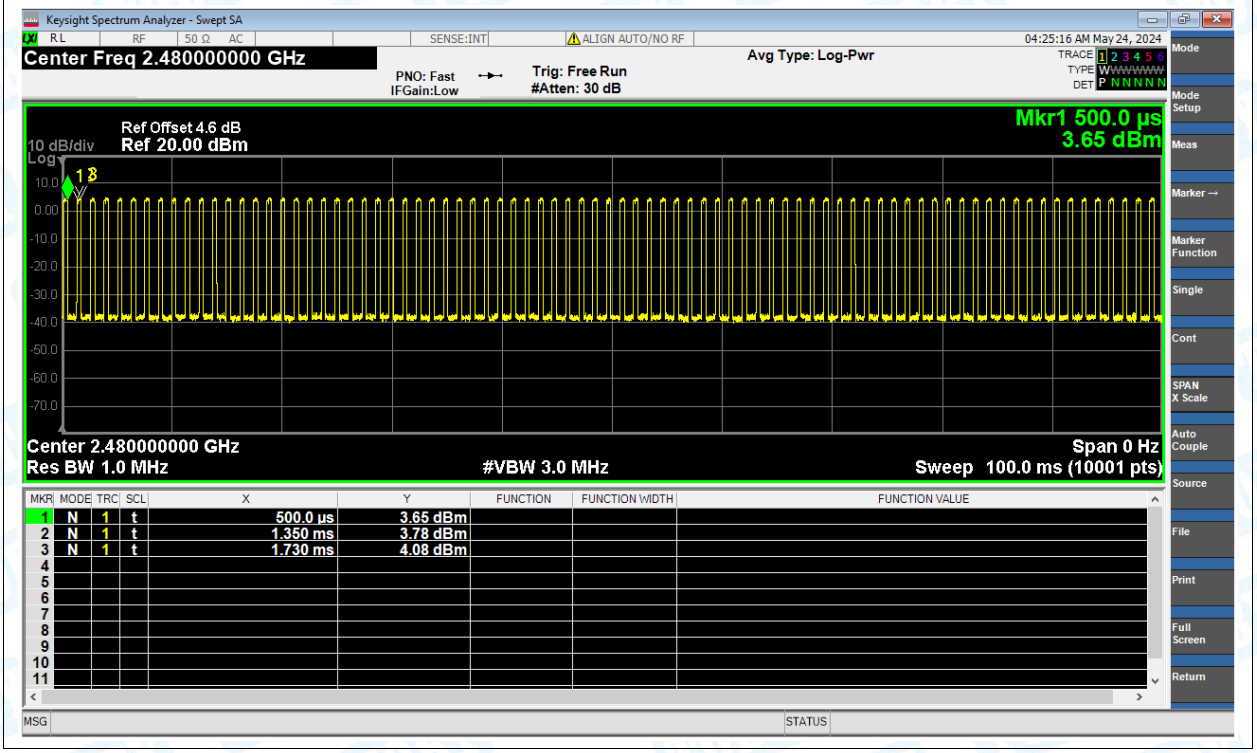
Duty Cycle NVNT 2-DH1 2402MHz Ant1



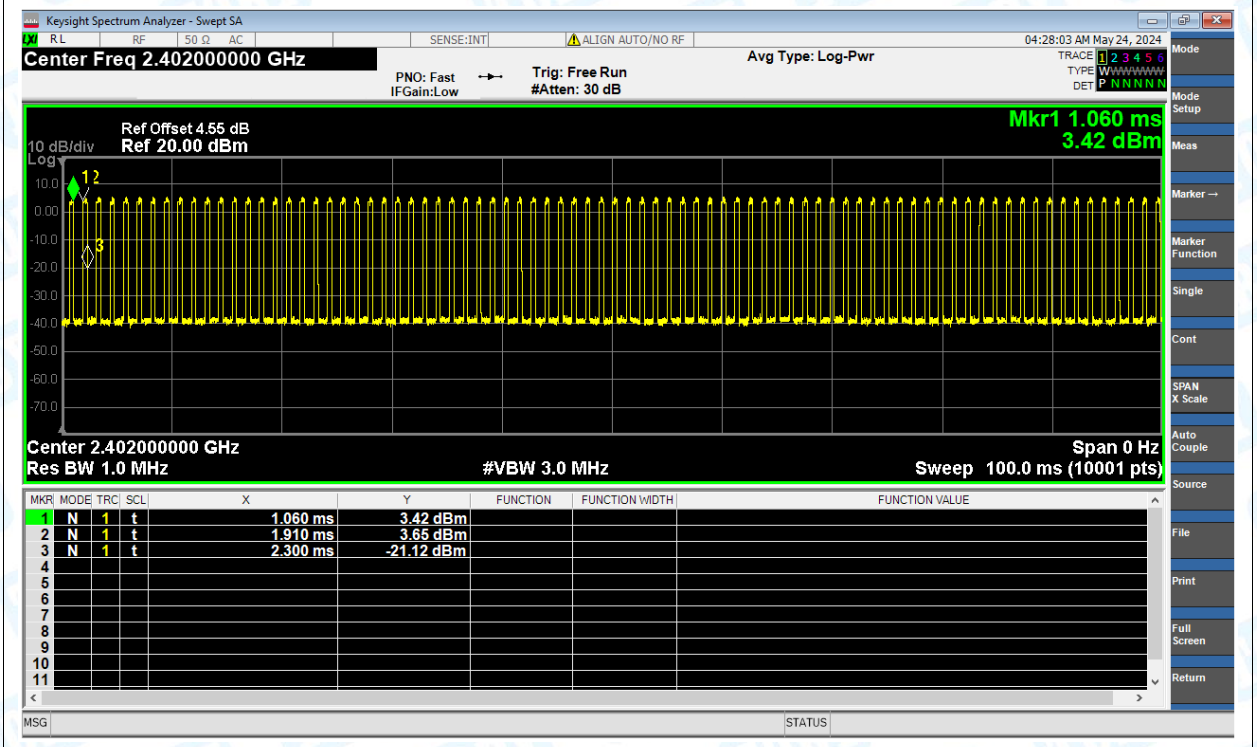
Duty Cycle NVNT 2-DH1 2441MHz Ant1



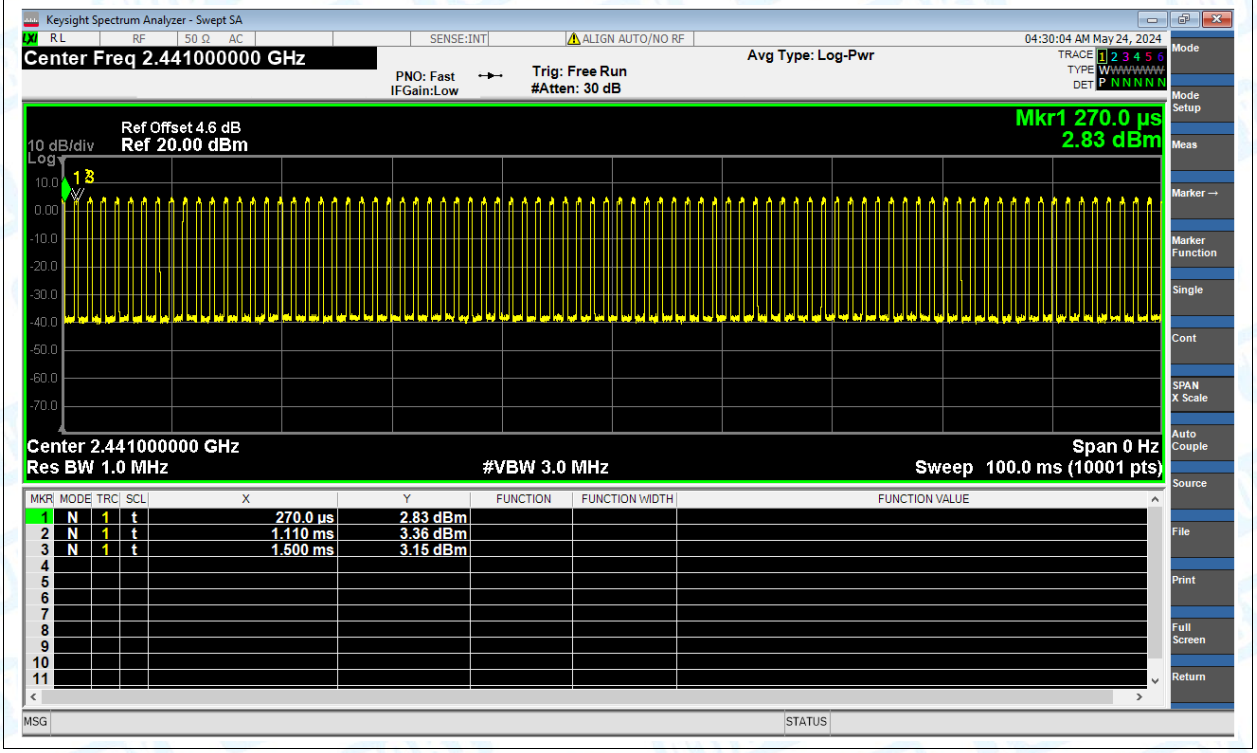
Duty Cycle NVNT 2-DH1 2480MHz Ant1



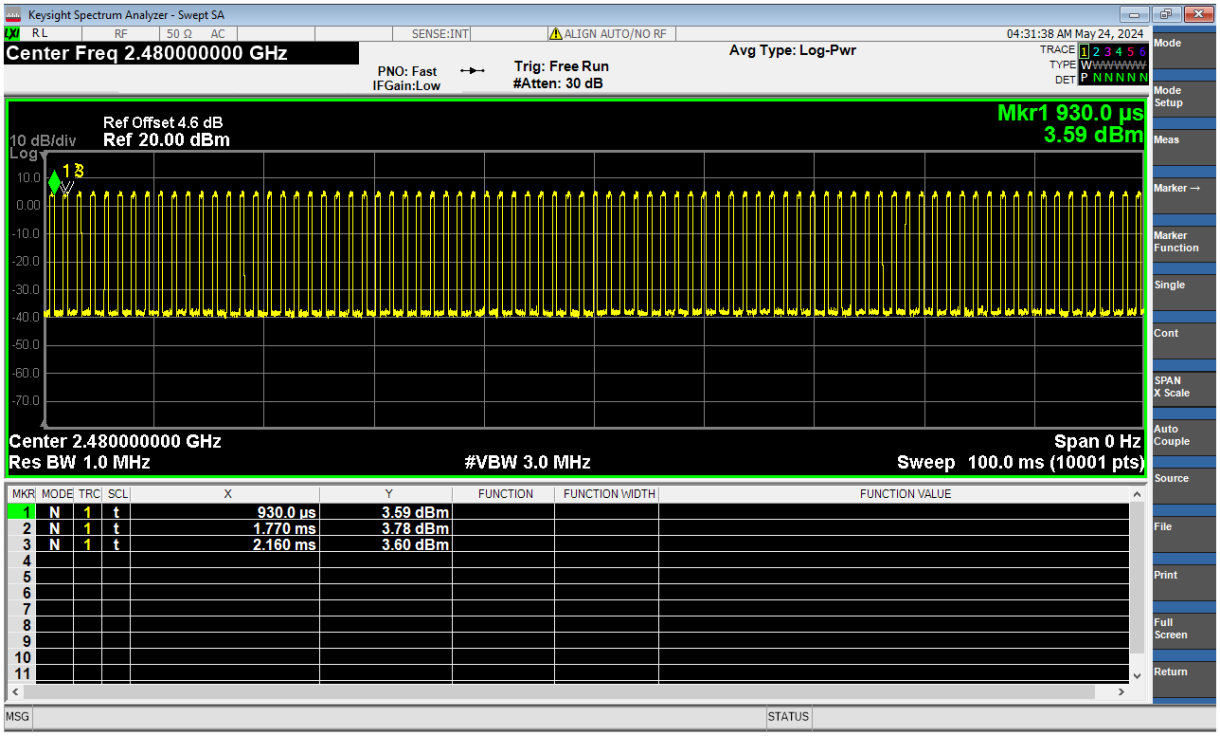
Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



Duty Cycle NVNT 3-DH1 2480MHz Ant1

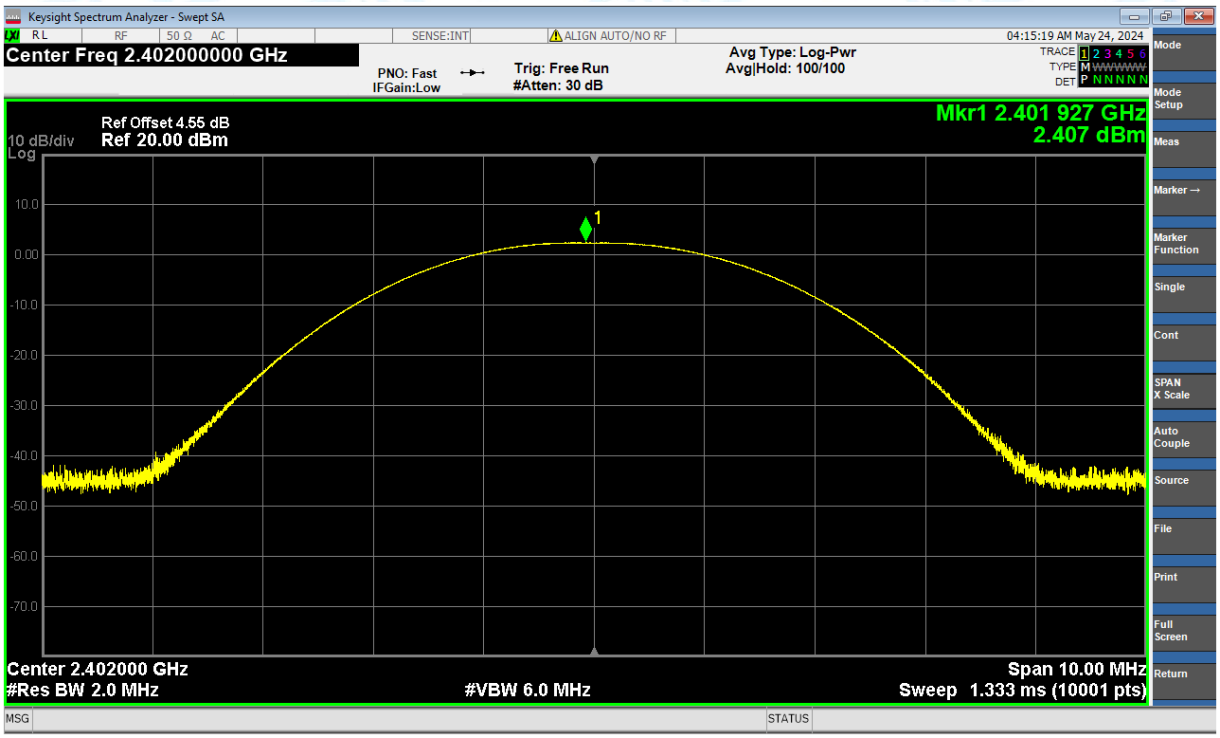


2. Maximum Conducted Output Power

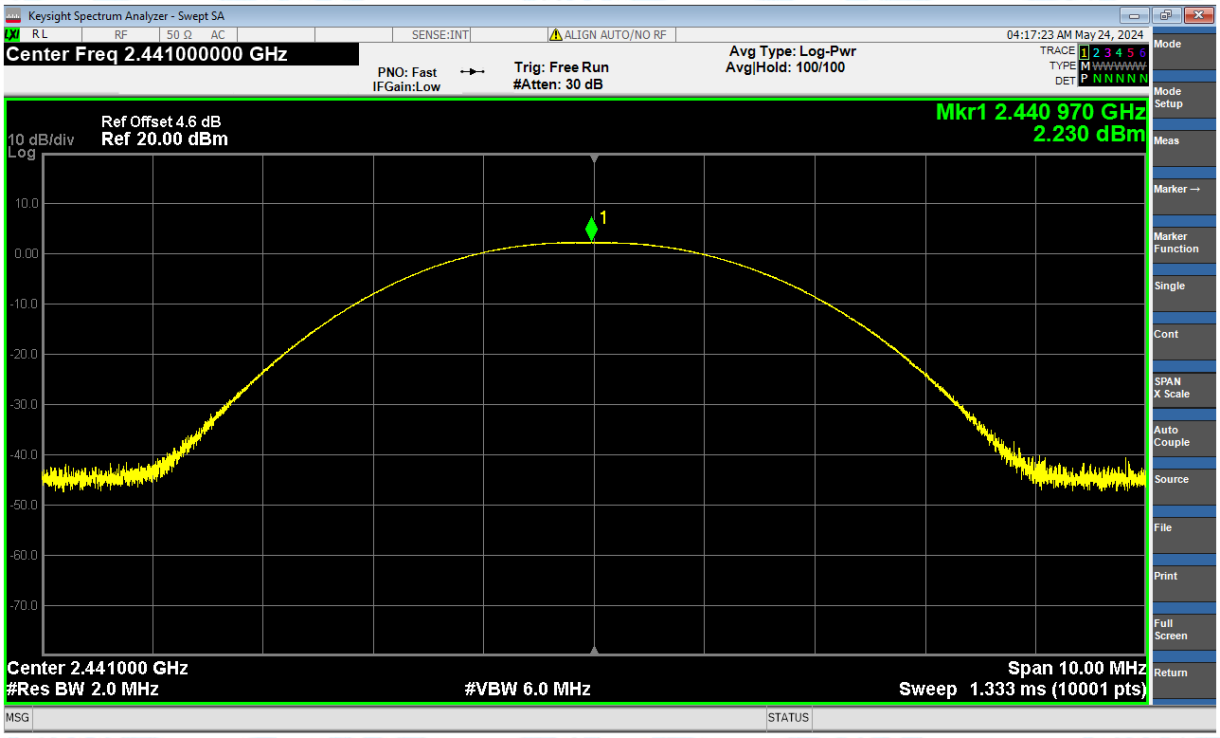
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	2.407	21	Pass
NVNT	1-DH1	2441	Ant1	2.23	21	Pass
NVNT	1-DH1	2480	Ant1	2.85	21	Pass
NVNT	2-DH1	2402	Ant1	5.163	21	Pass
NVNT	2-DH1	2441	Ant1	4.888	21	Pass
NVNT	2-DH1	2480	Ant1	5.309	21	Pass
NVNT	3-DH1	2402	Ant1	5.725	21	Pass
NVNT	3-DH1	2441	Ant1	5.411	21	Pass
NVNT	3-DH1	2480	Ant1	5.842	21	Pass

Test Graphs

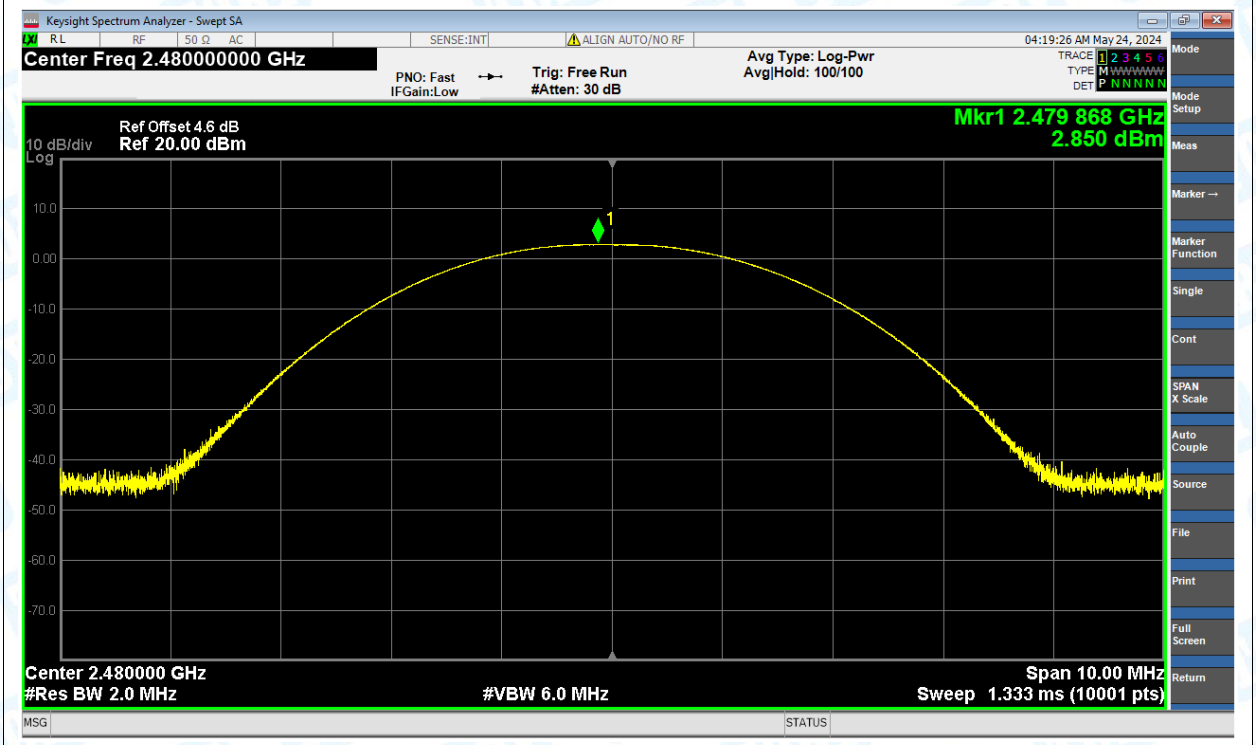
Power NVNT 1-DH1 2402MHz Ant1



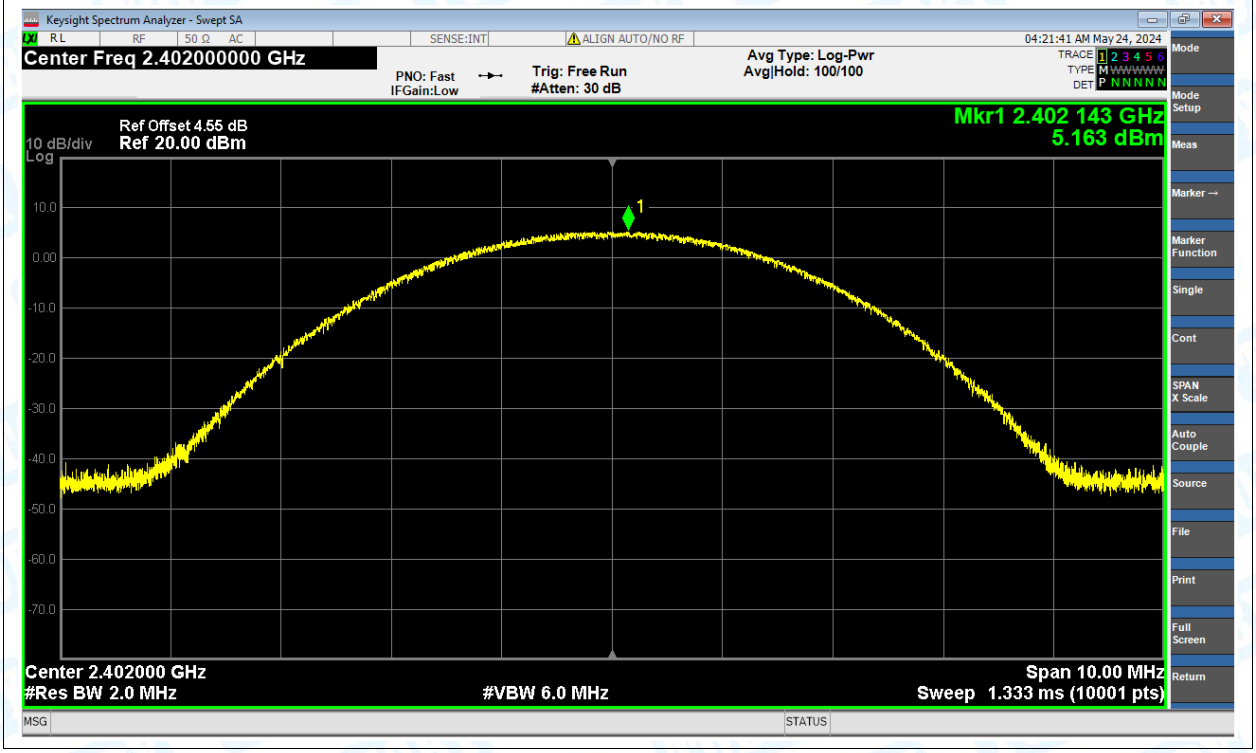
Power NVNT 1-DH1 2441MHz Ant1



Power NVNT 1-DH1 2480MHz Ant1



Power NVNT 2-DH1 2402MHz 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

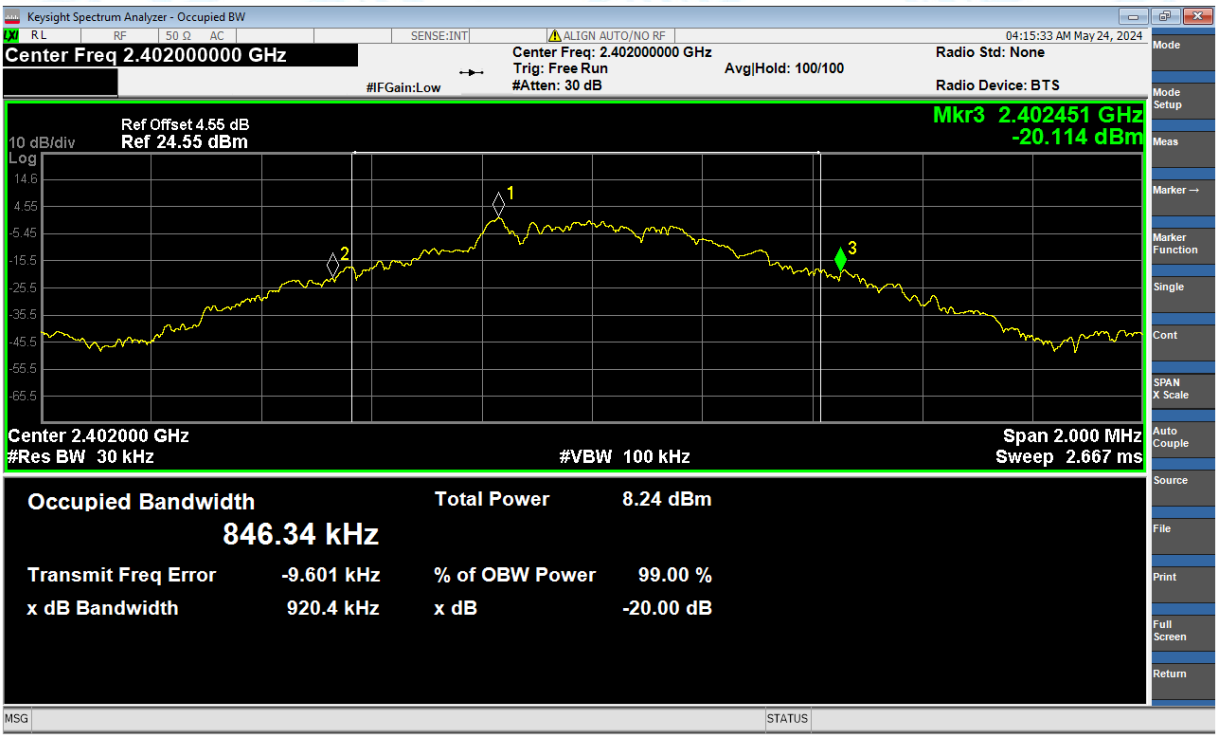
Power NVNT 3-DH1 2480MHz Ant1

3. -20dB Bandwidth

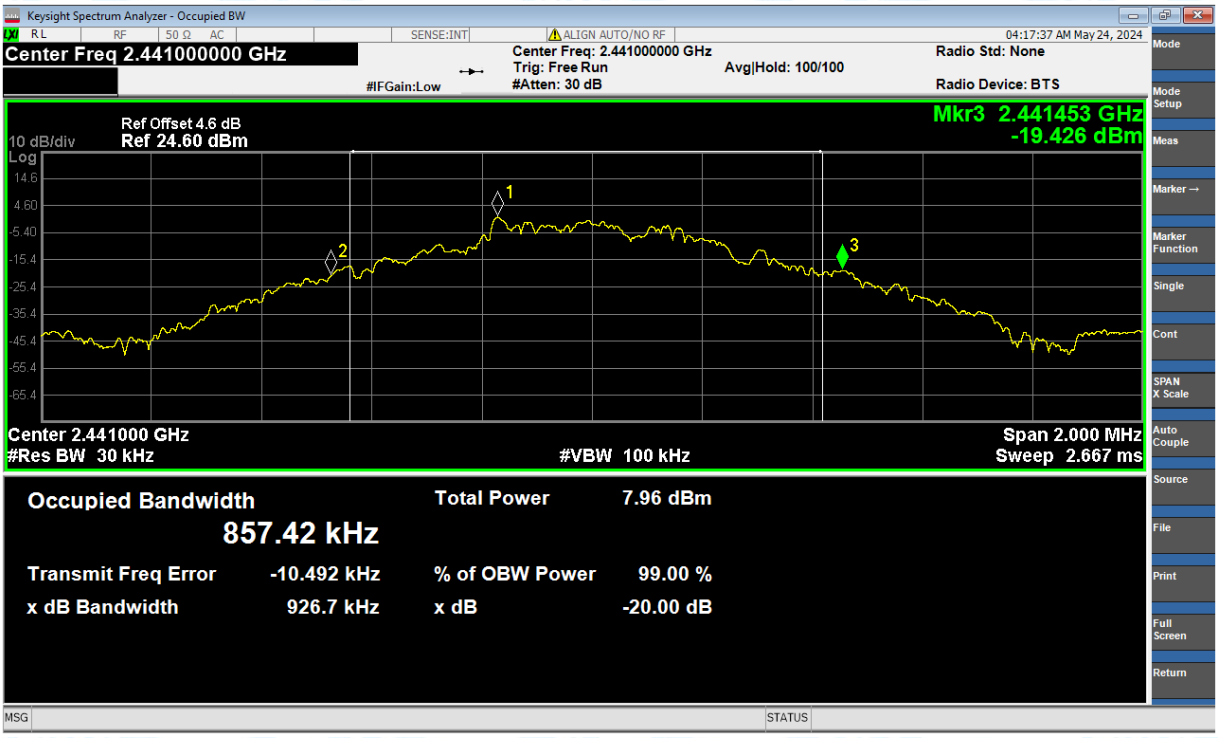
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.92	----	Pass
NVNT	1-DH1	2441	Ant1	0.93	----	Pass
NVNT	1-DH1	2480	Ant1	0.93	----	Pass
NVNT	2-DH1	2402	Ant1	1.21	----	Pass
NVNT	2-DH1	2441	Ant1	1.25	----	Pass
NVNT	2-DH1	2480	Ant1	1.20	----	Pass
NVNT	3-DH1	2402	Ant1	1.21	----	Pass
NVNT	3-DH1	2441	Ant1	1.21	----	Pass
NVNT	3-DH1	2480	Ant1	1.21	----	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1

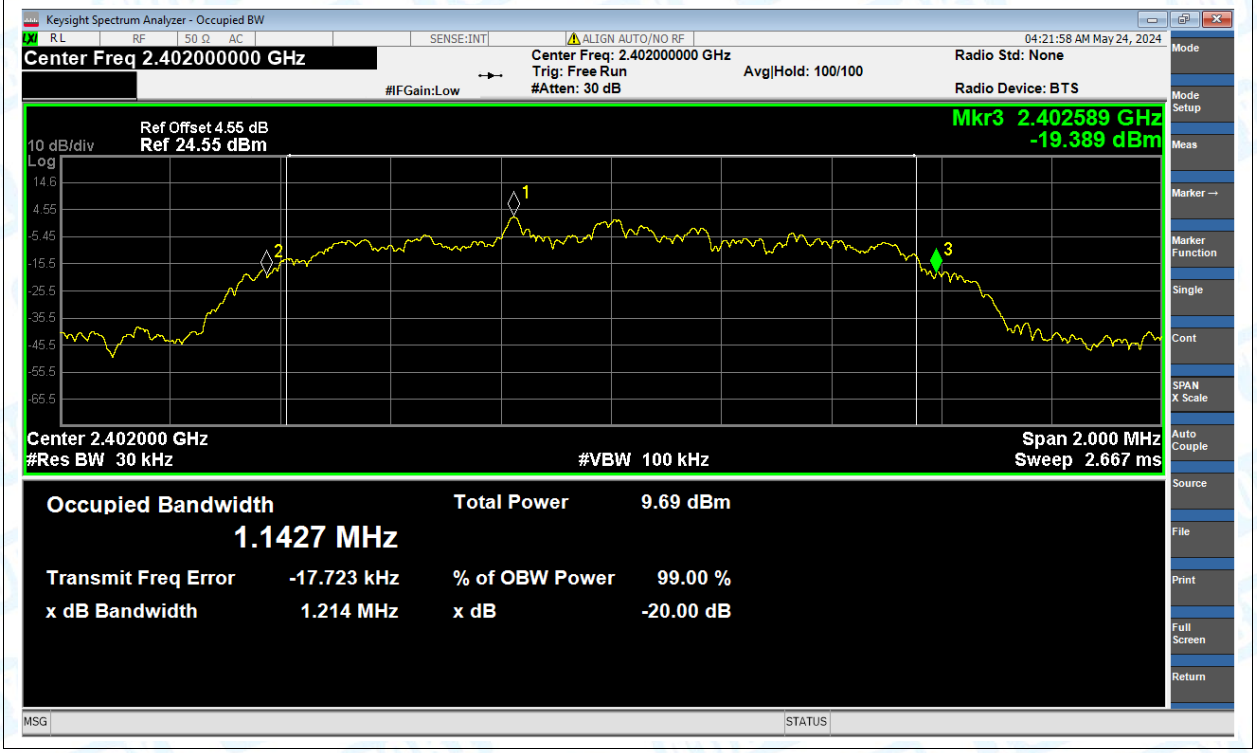


-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1

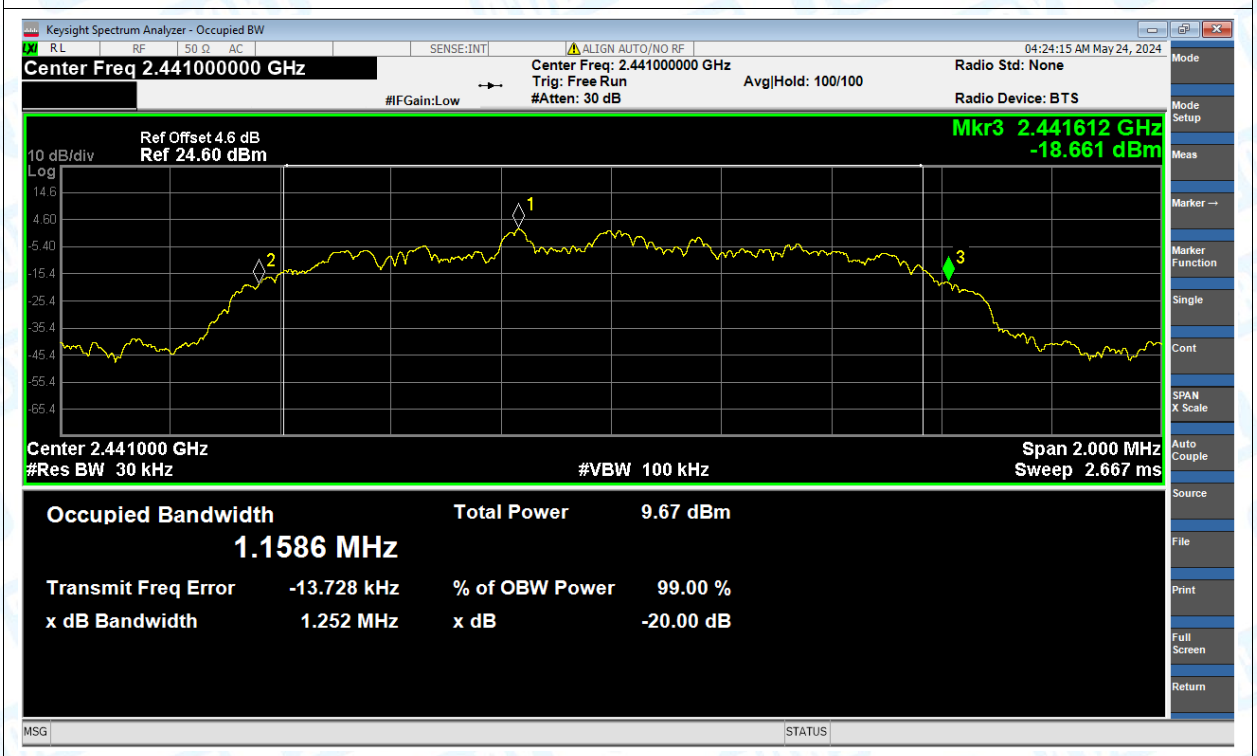


-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1

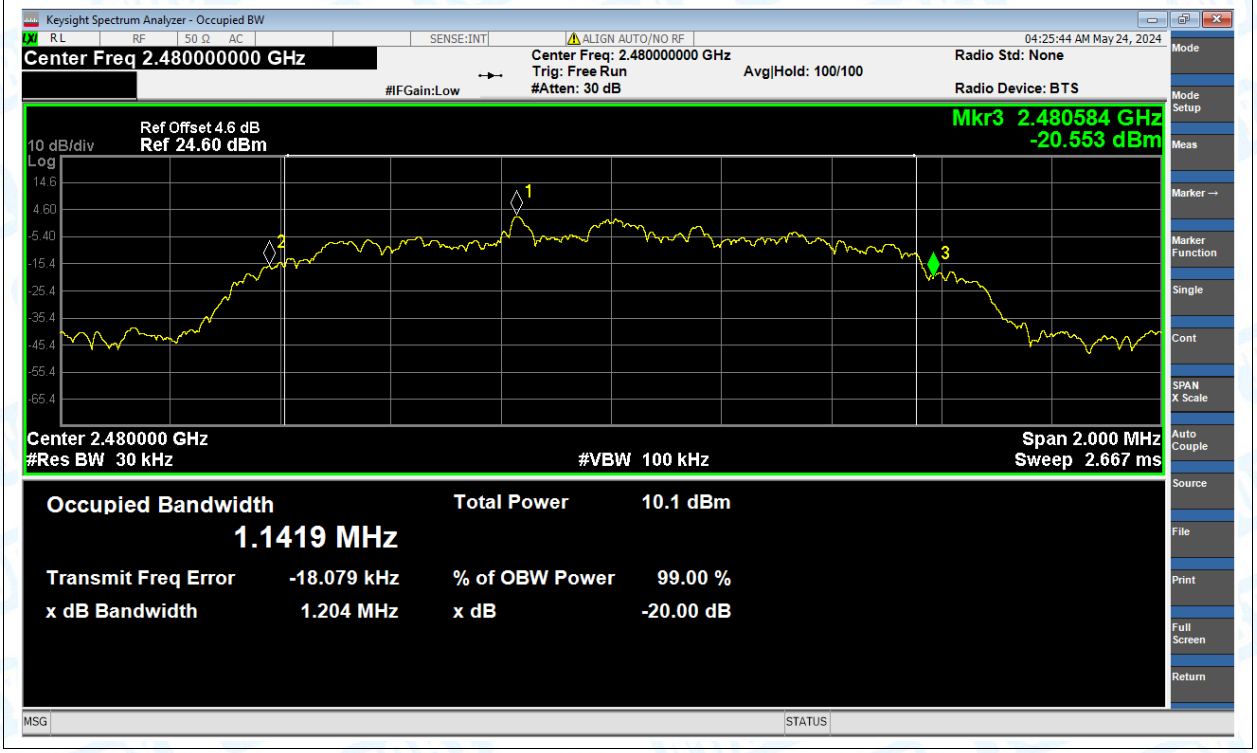
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



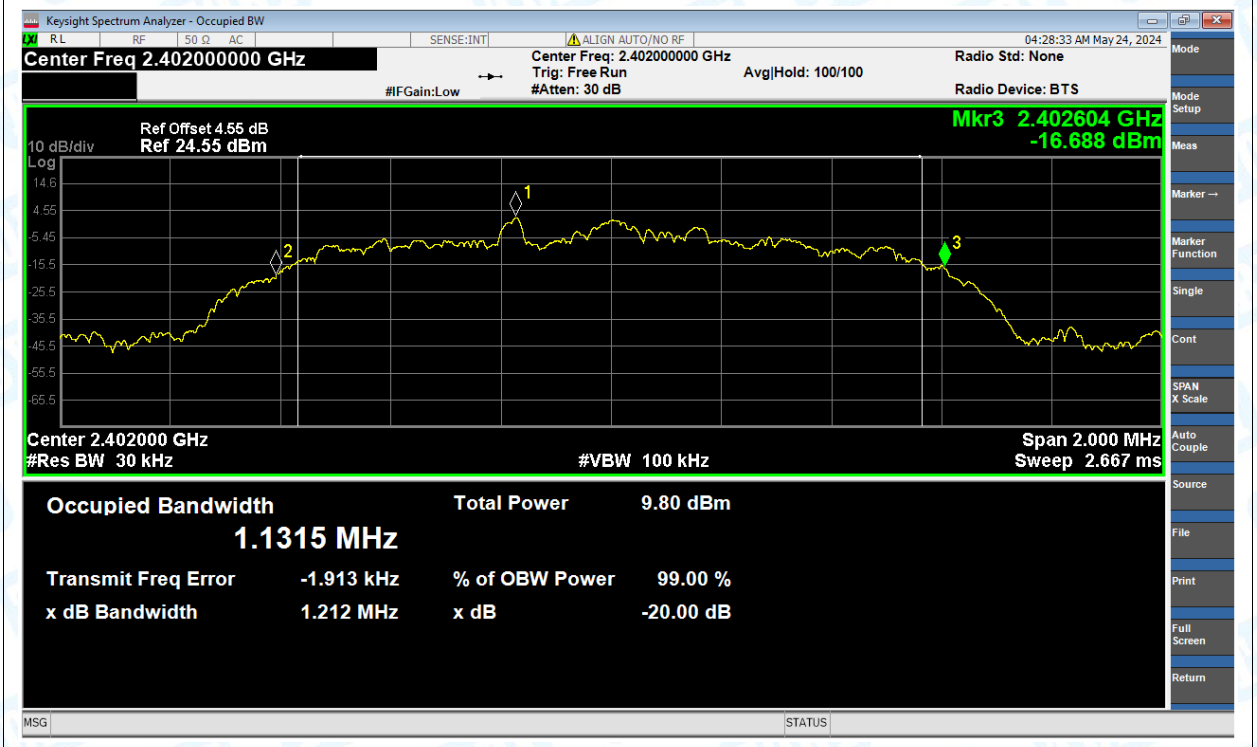
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

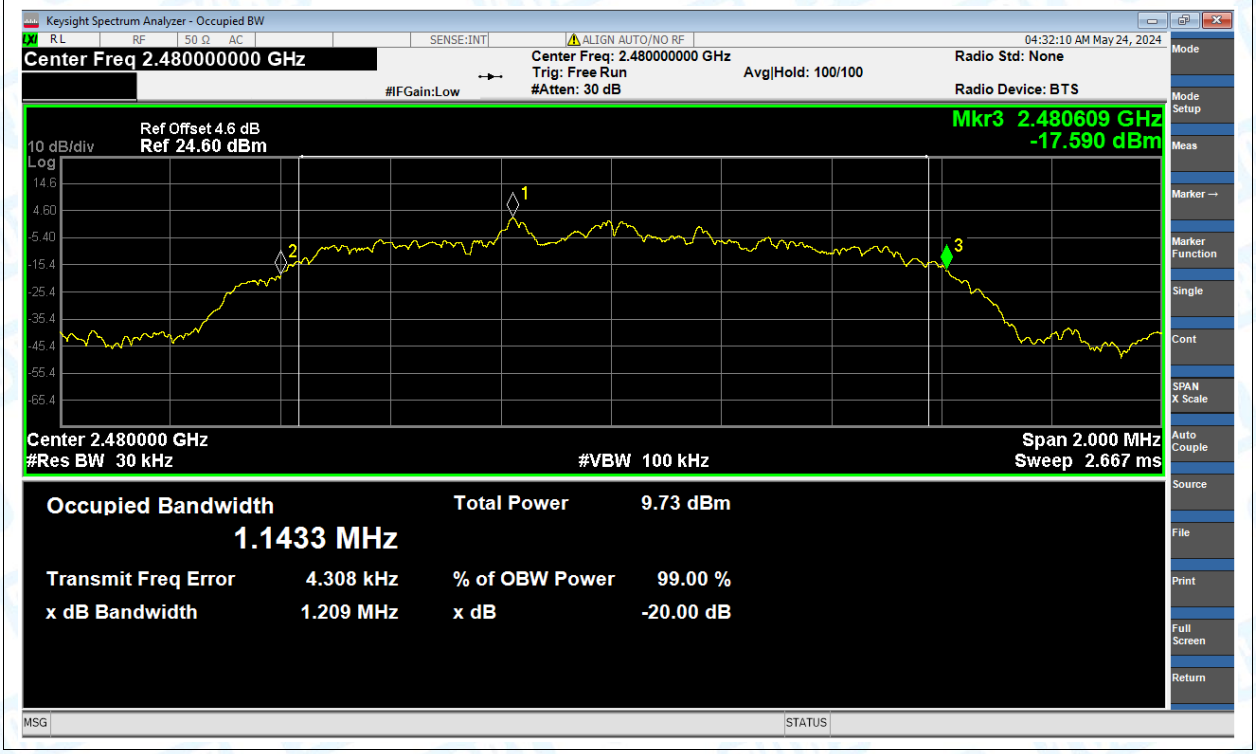


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1

-20dB Bandwidth NVNT 3-DH1 2480MHz Ant1

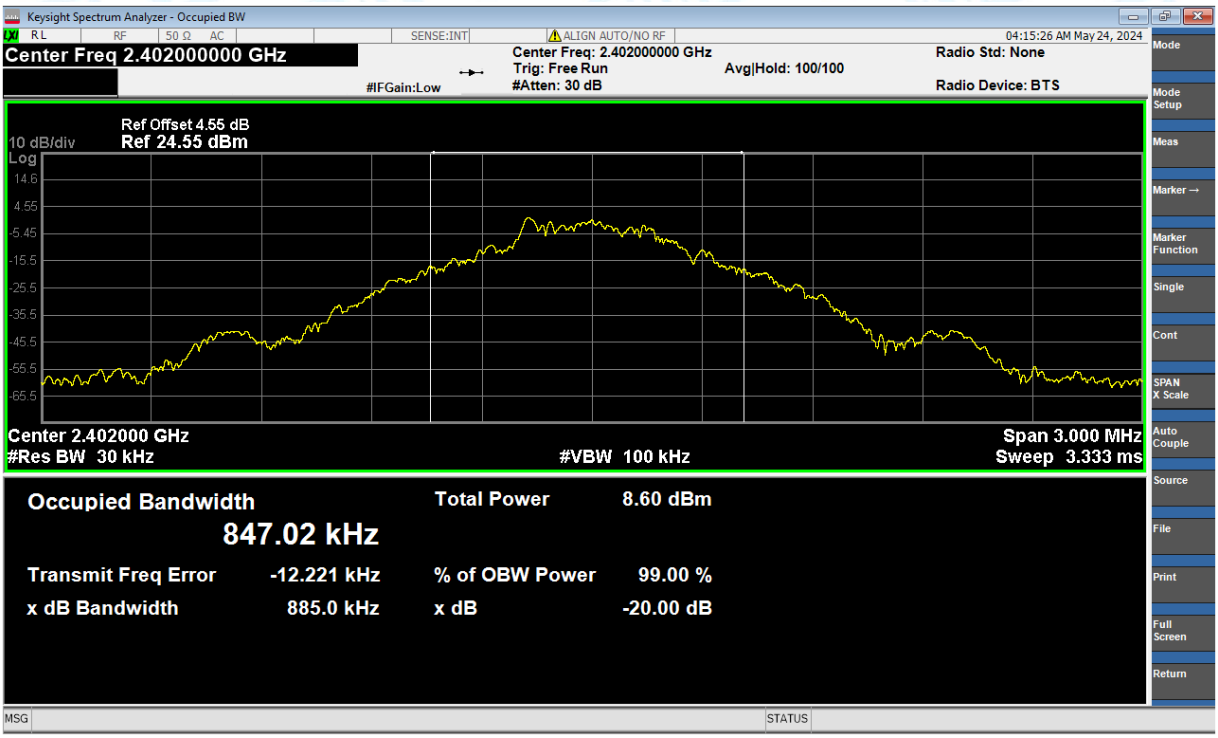


4. Occupied Channel Bandwidth

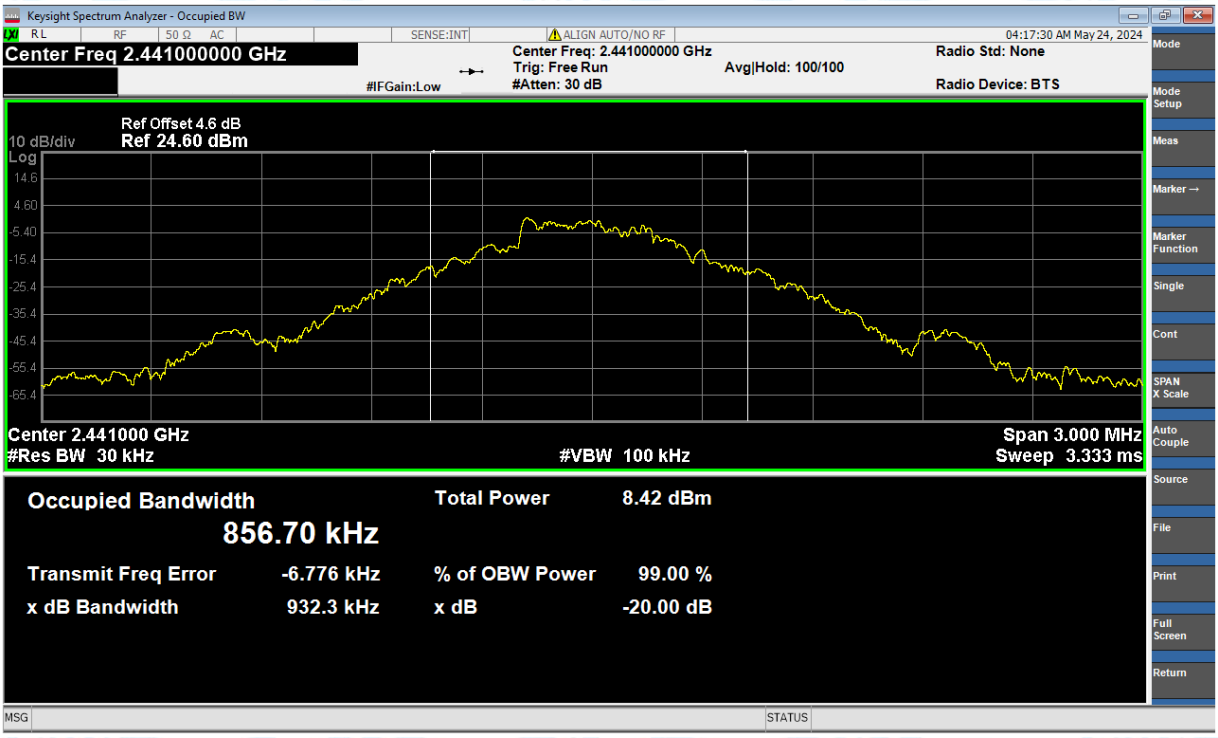
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.847
NVNT	1-DH1	2441	Ant1	0.857
NVNT	1-DH1	2480	Ant1	0.859
NVNT	2-DH1	2402	Ant1	1.130
NVNT	2-DH1	2441	Ant1	1.158
NVNT	2-DH1	2480	Ant1	1.170
NVNT	3-DH1	2402	Ant1	1.125
NVNT	3-DH1	2441	Ant1	1.132
NVNT	3-DH1	2480	Ant1	1.144

Test Graphs

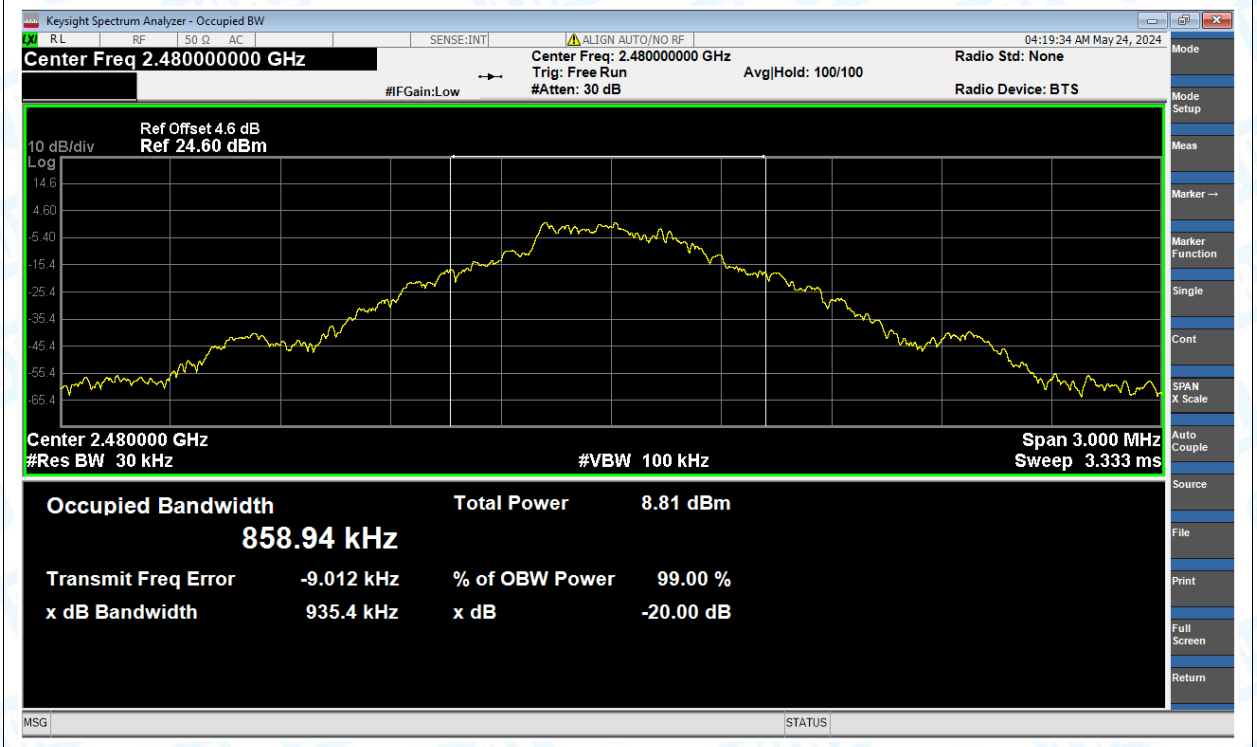
OBW NVNT 1-DH1 2402MHz Ant1



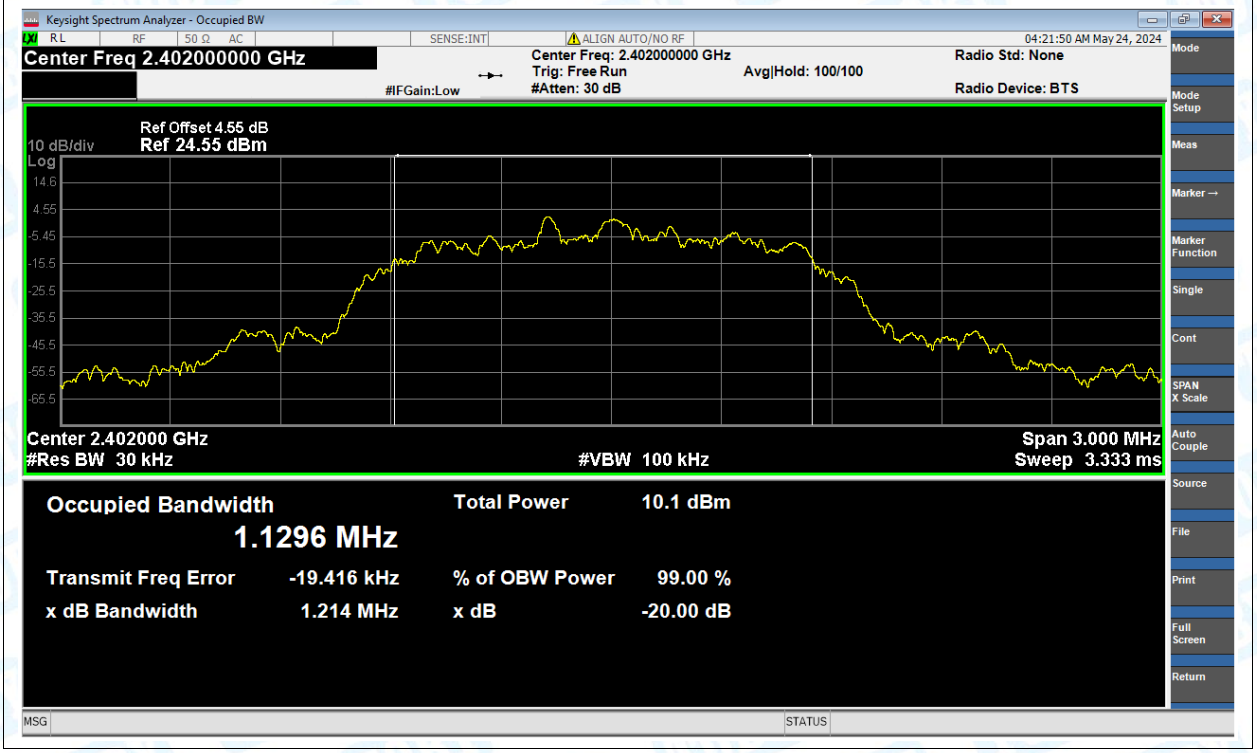
OBW NVNT 1-DH1 2441MHz Ant1



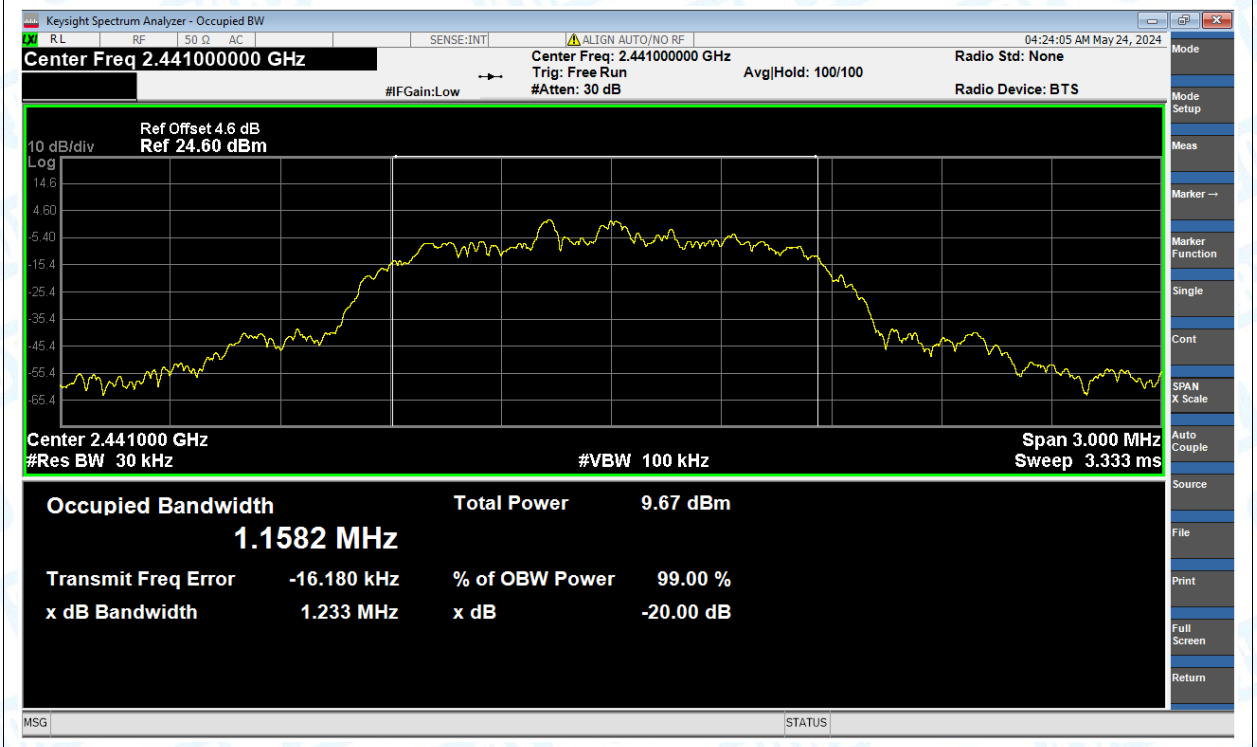
OBW NVNT 1-DH1 2480MHz Ant1



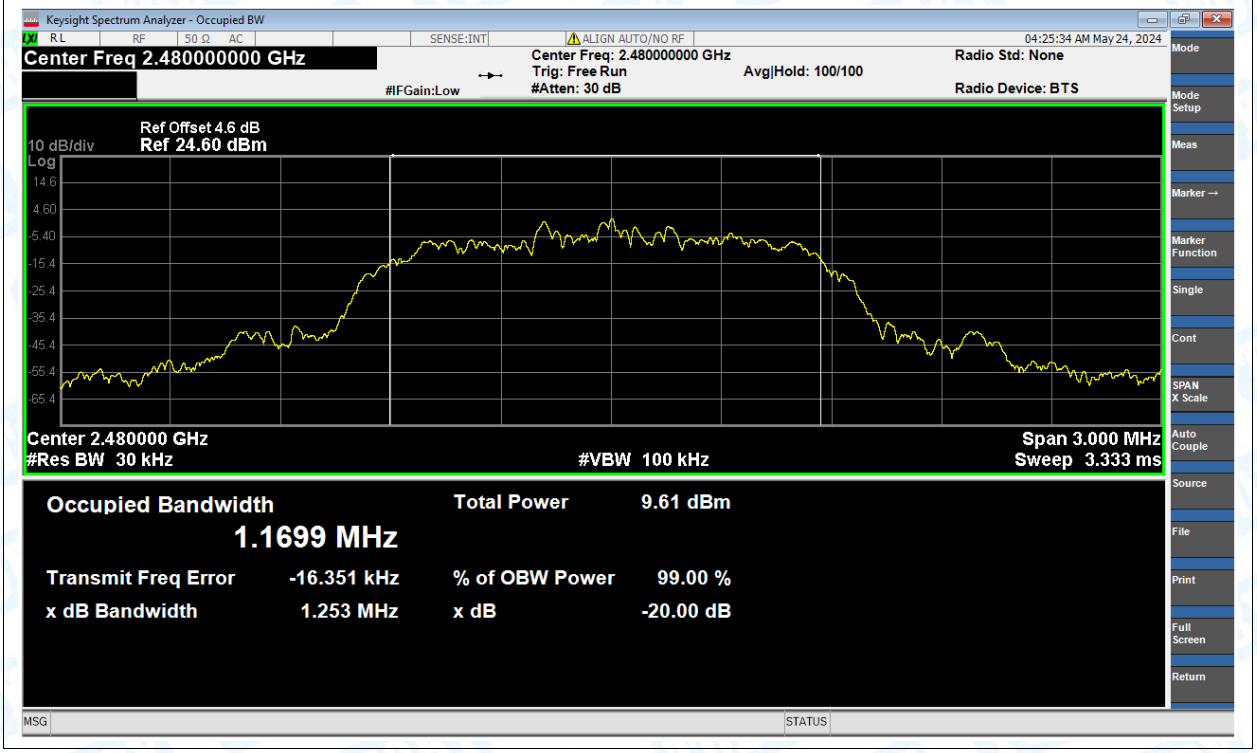
OBW NVNT 2-DH1 2402MHz Ant1



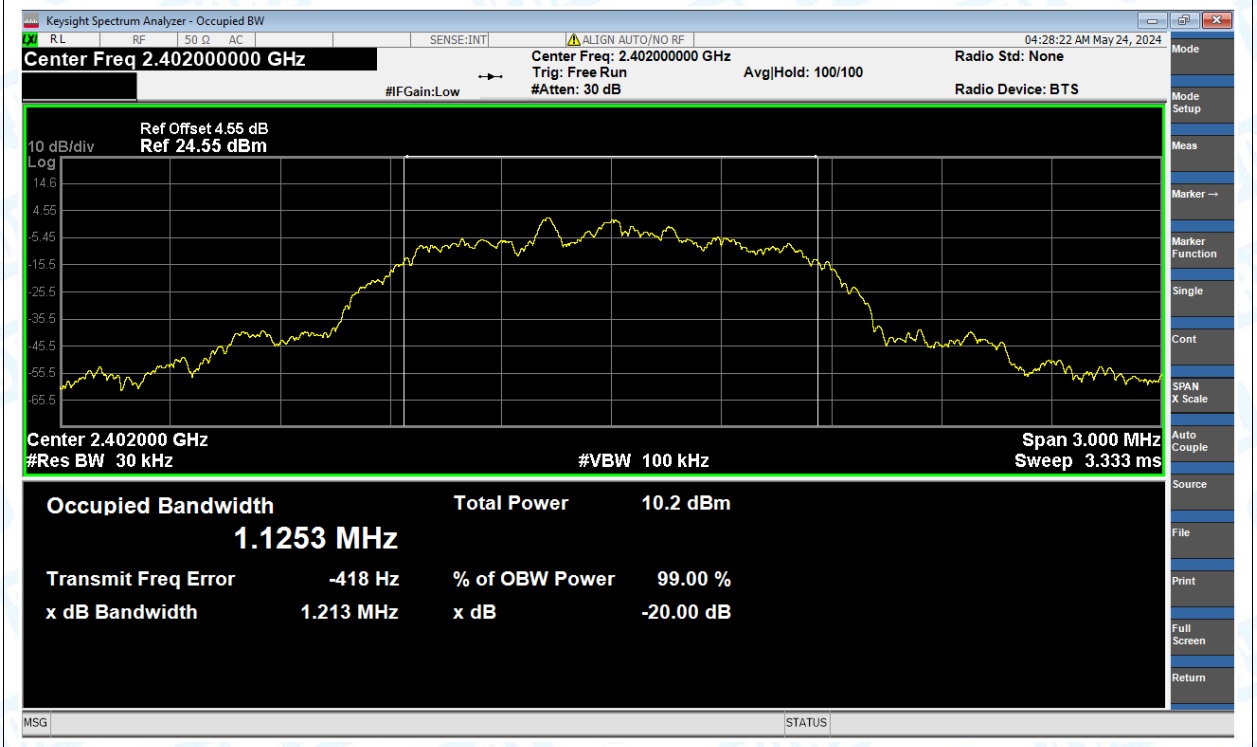
OBW NVNT 2-DH1 2441MHz Ant1



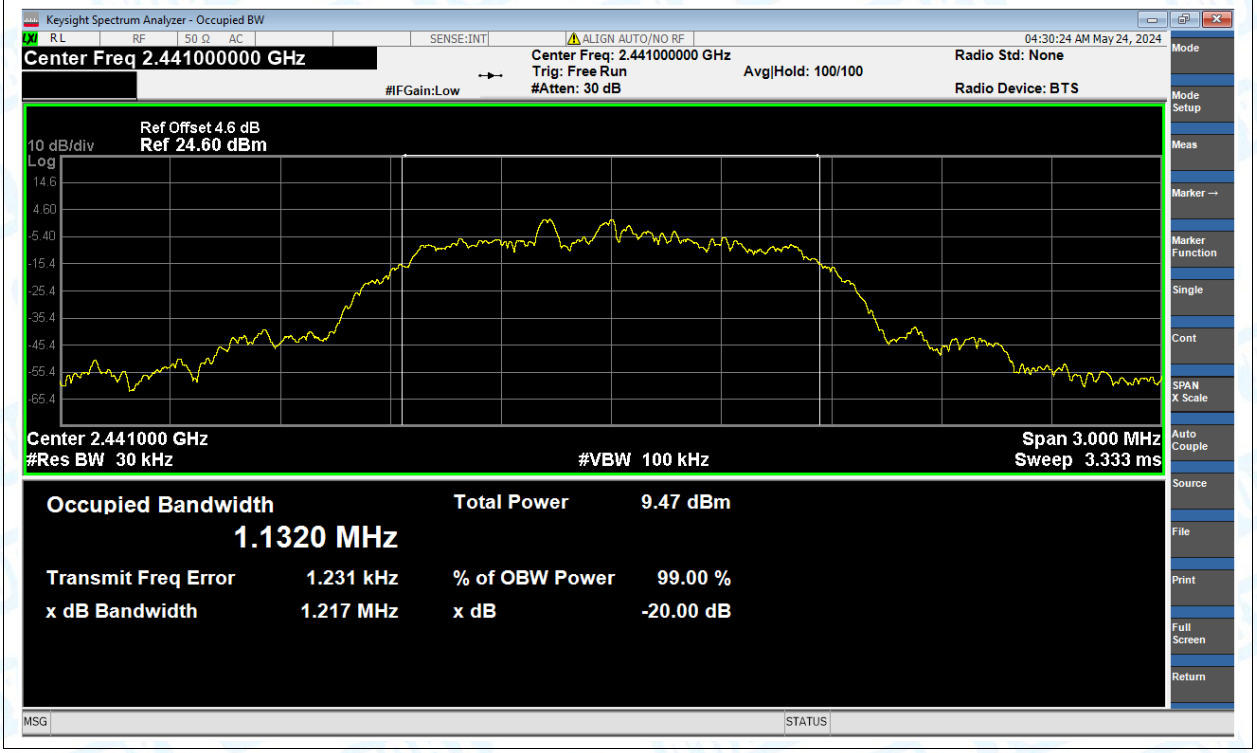
OBW NVNT 2-DH1 2480MHz Ant1



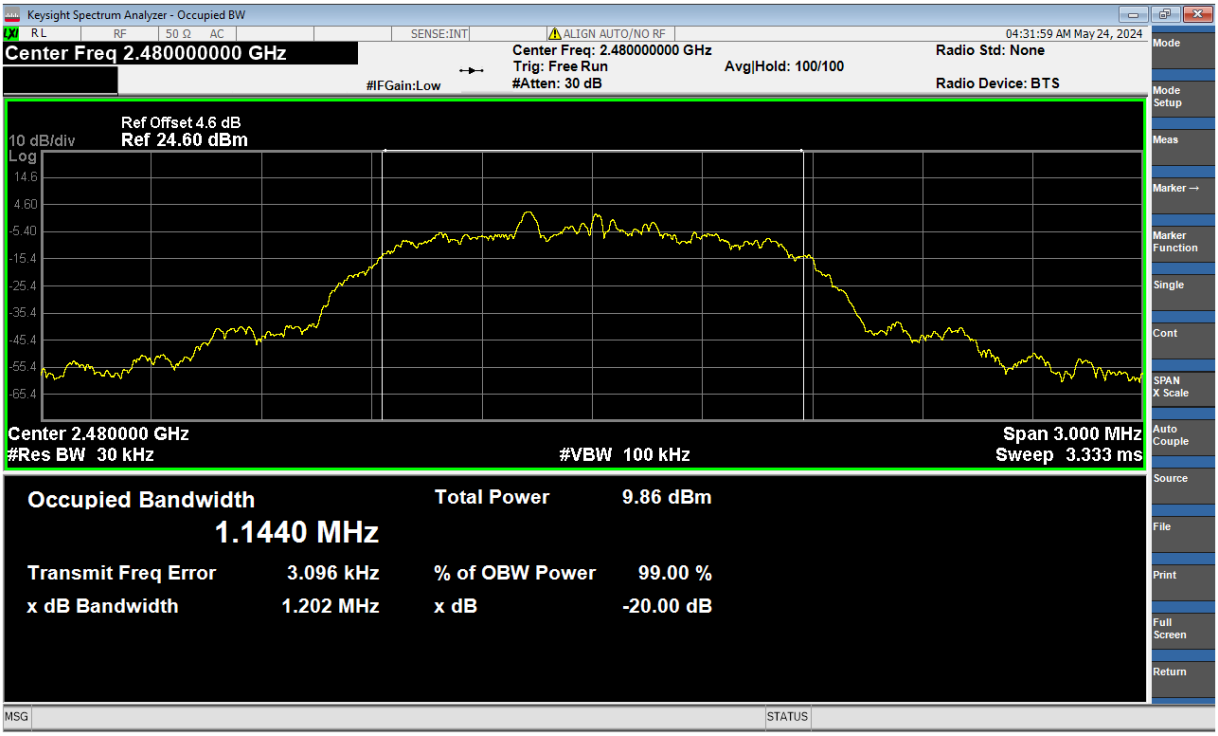
OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



OBW NVNT 3-DH1 2480MHz Ant1

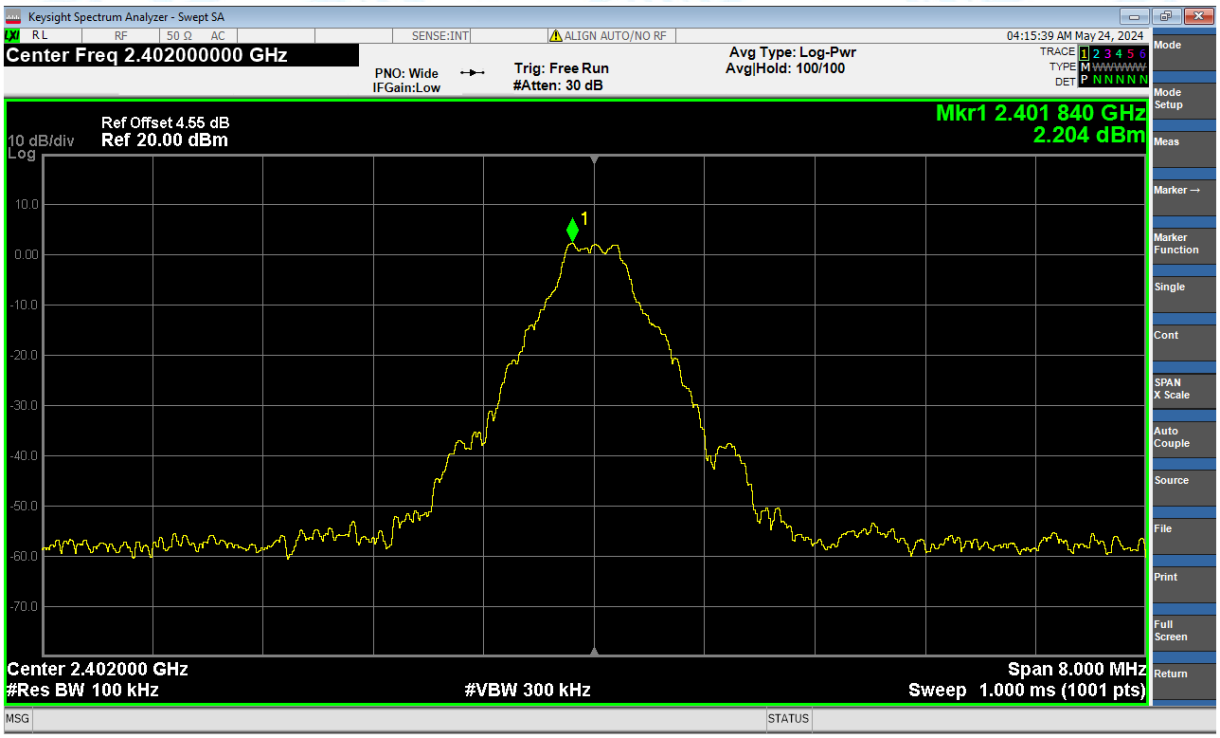


5. Band Edge

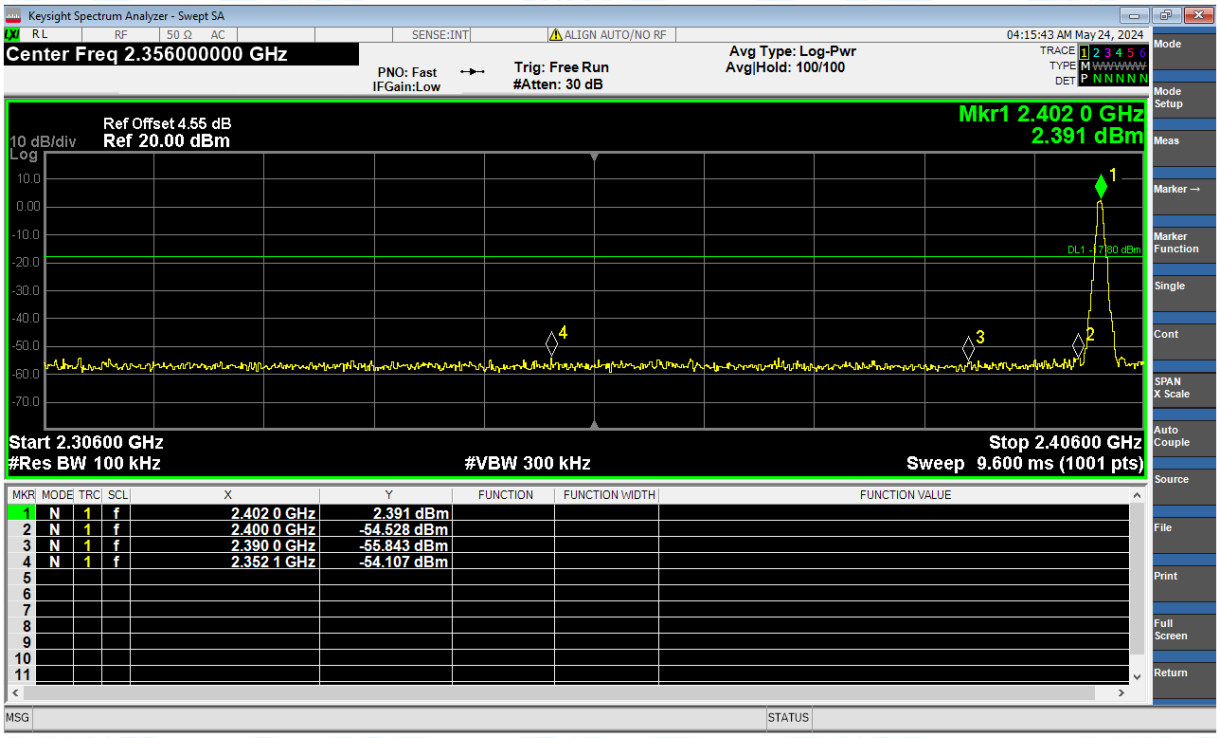
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-56.31	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-56.88	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-58.05	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-57.96	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-57.33	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-58.47	-20	Pass

Test Graphs

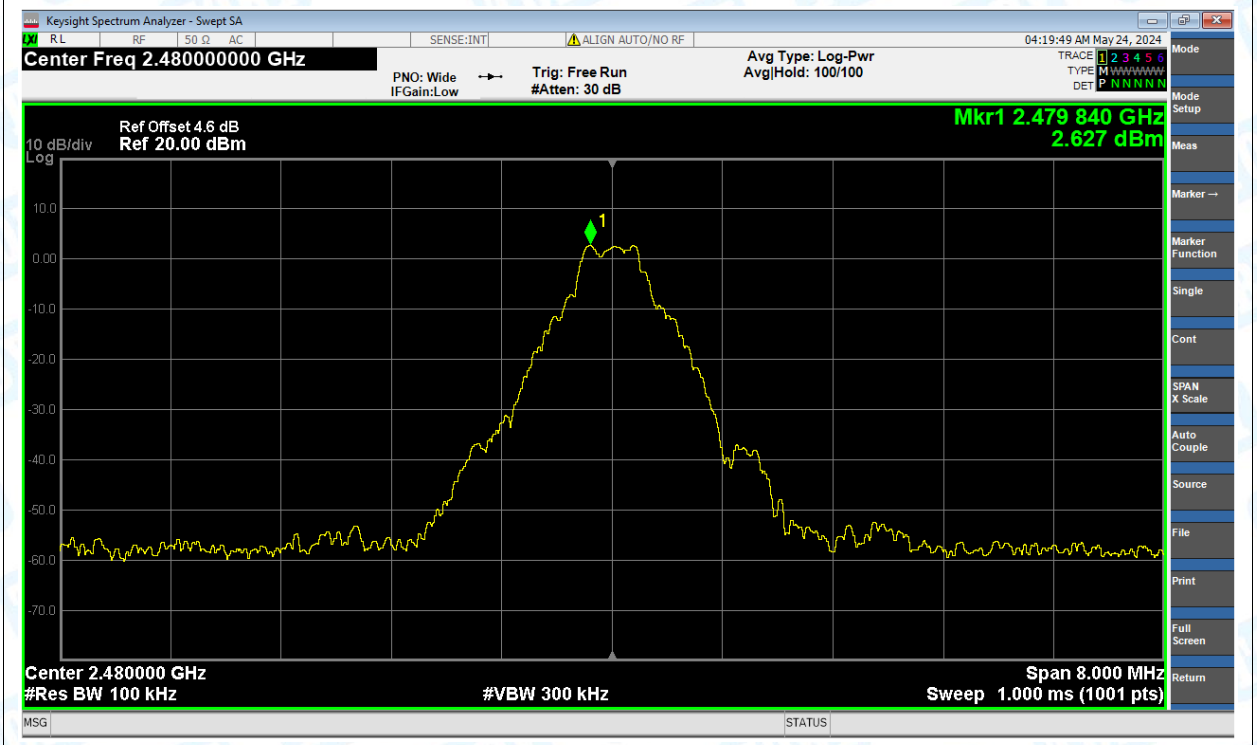
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



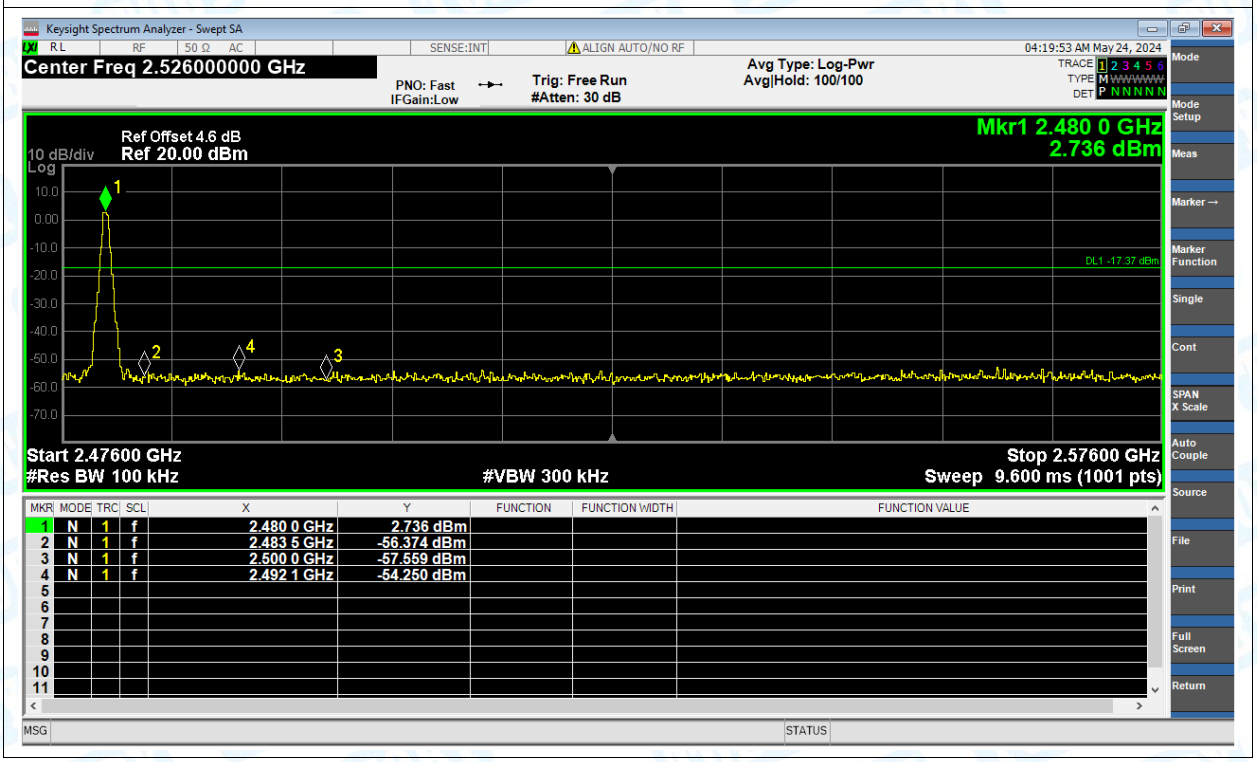
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



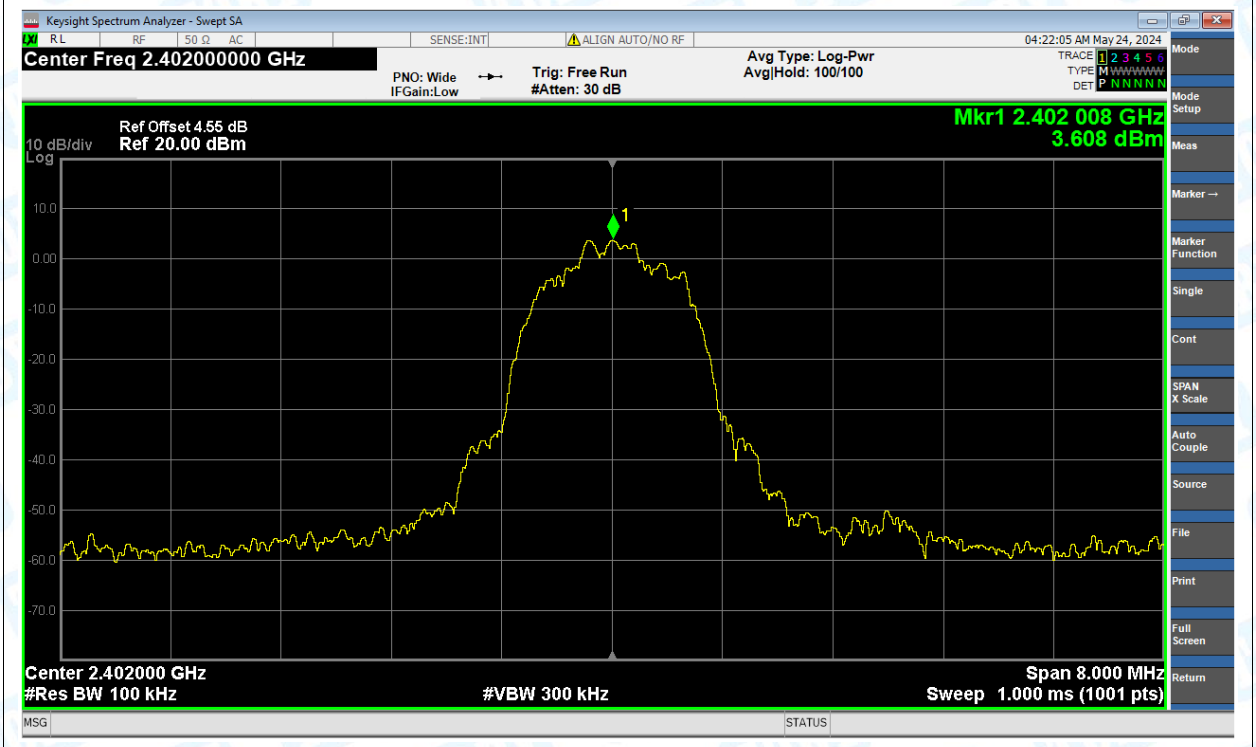
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



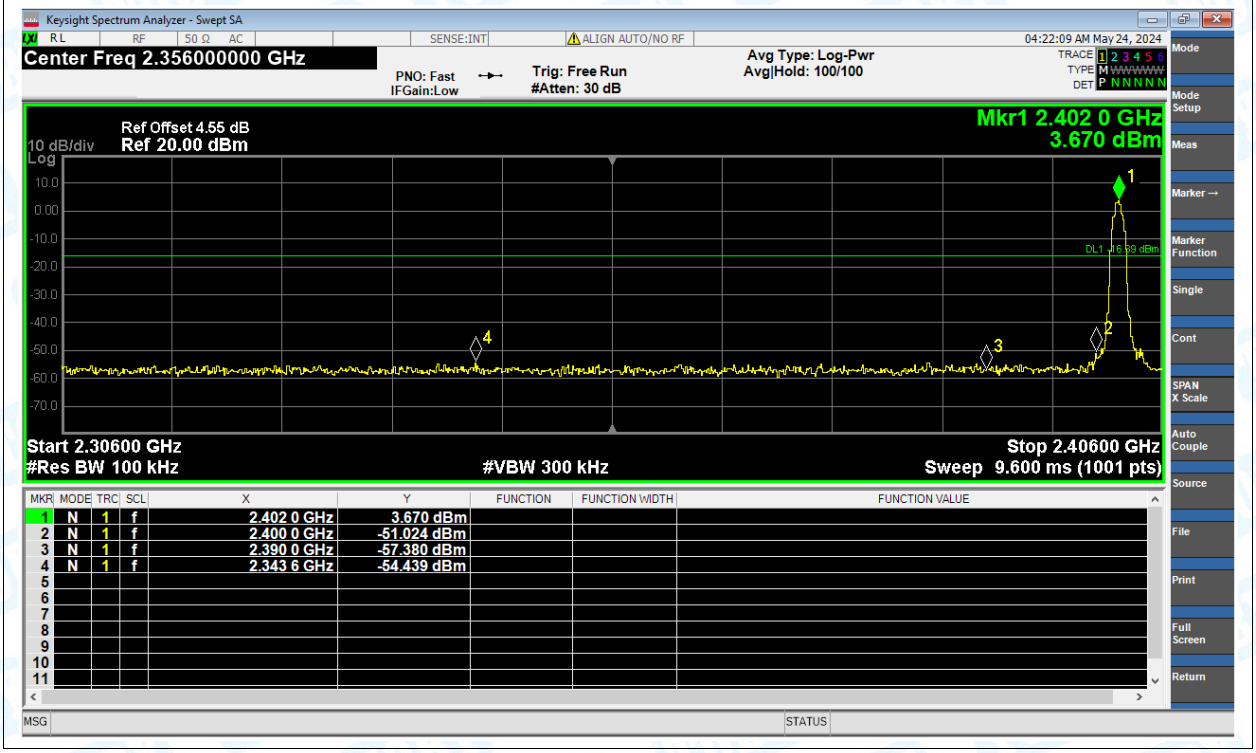
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



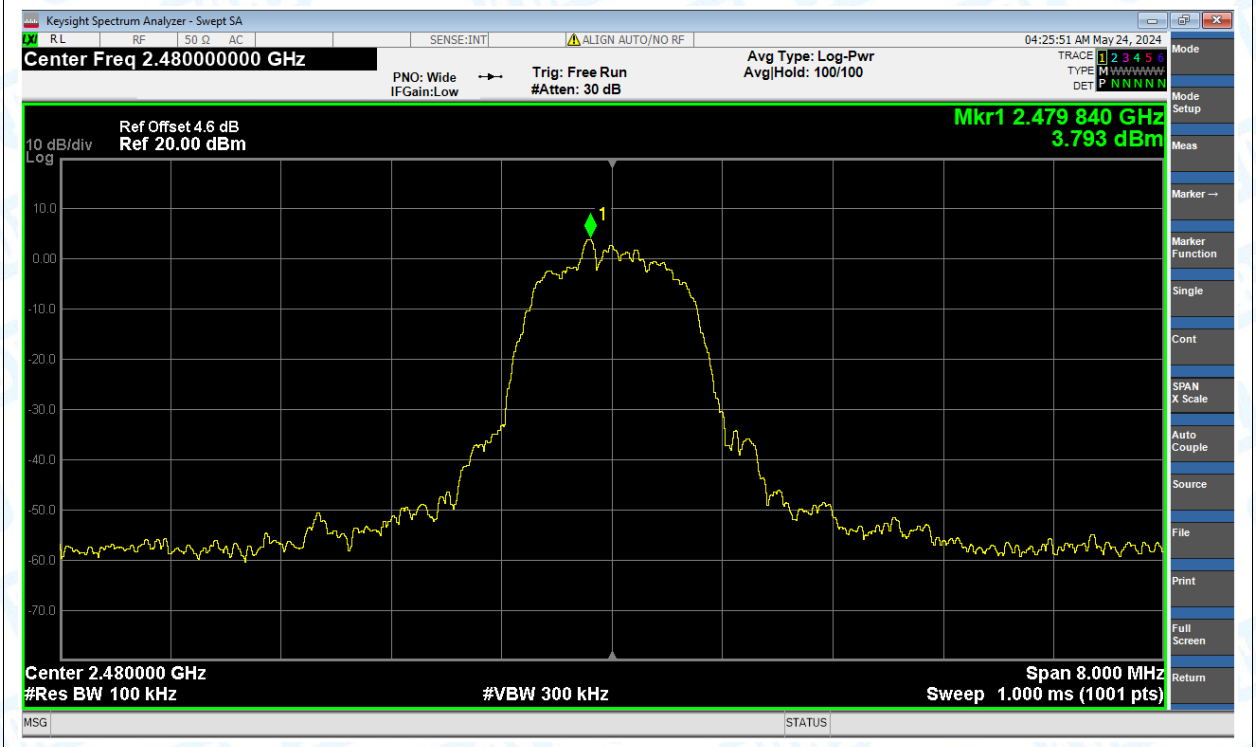
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



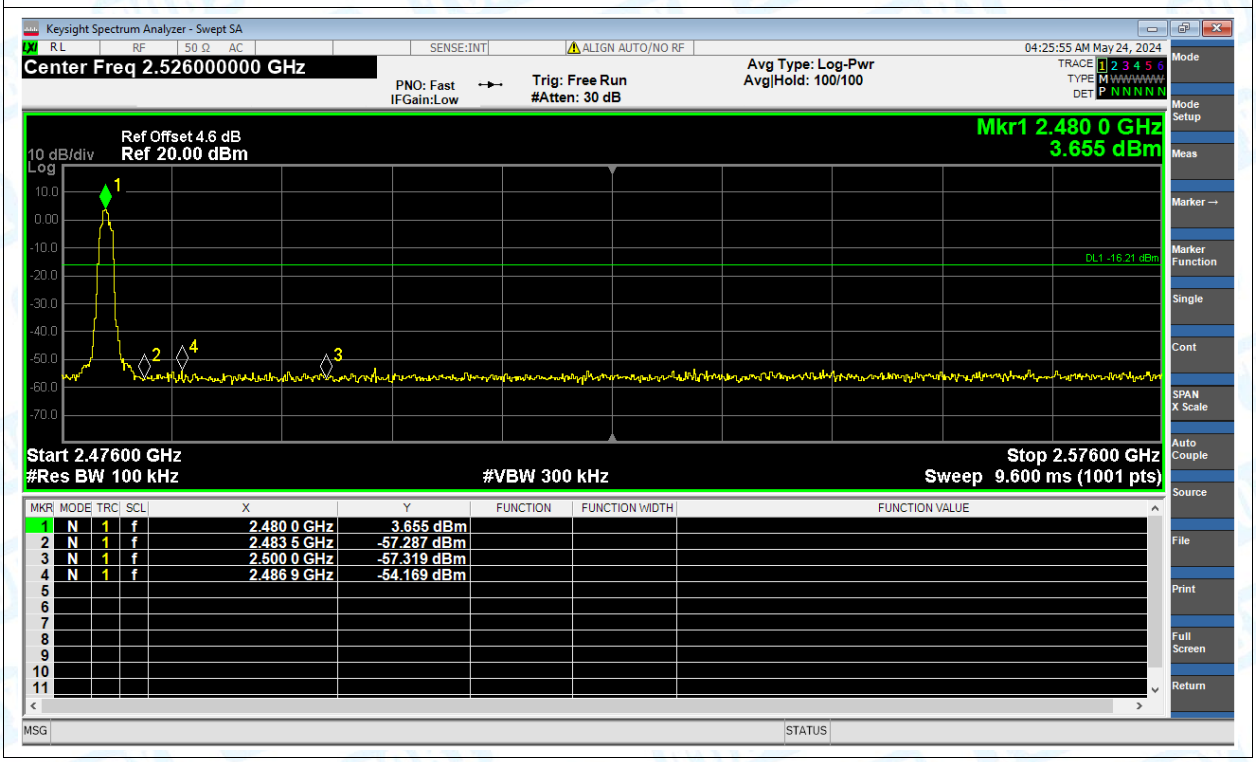
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



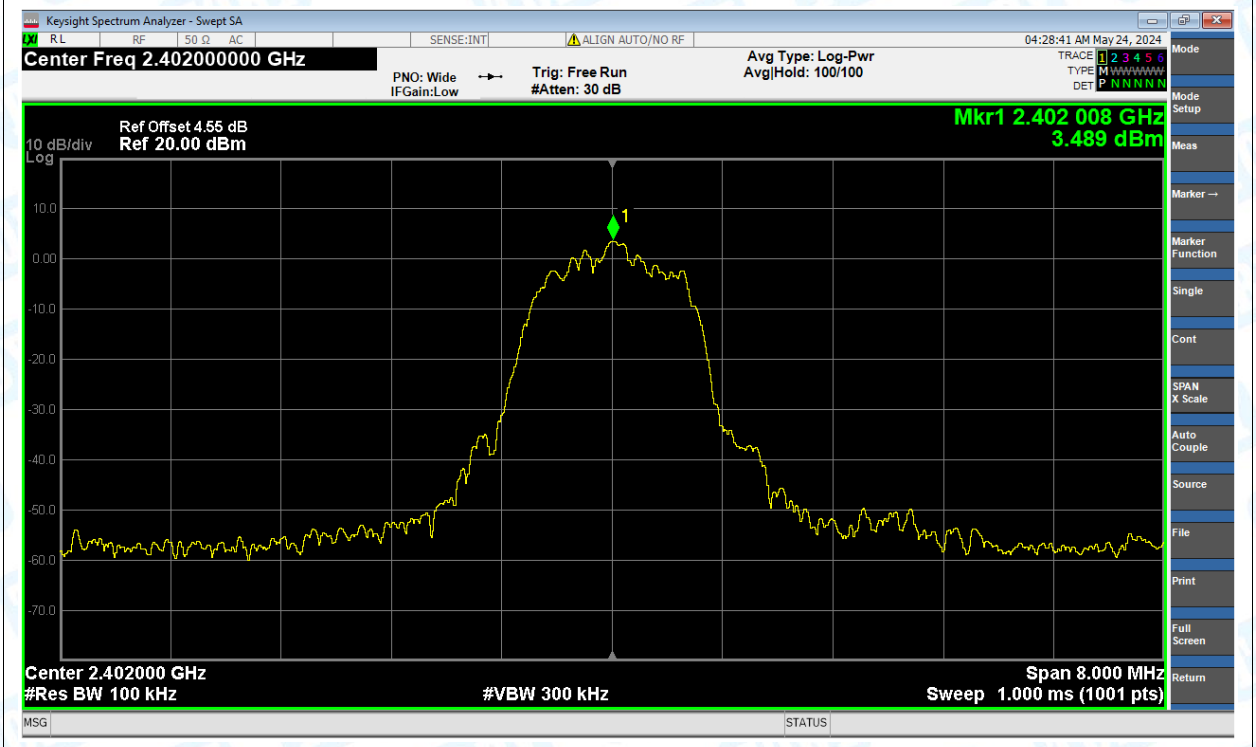
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



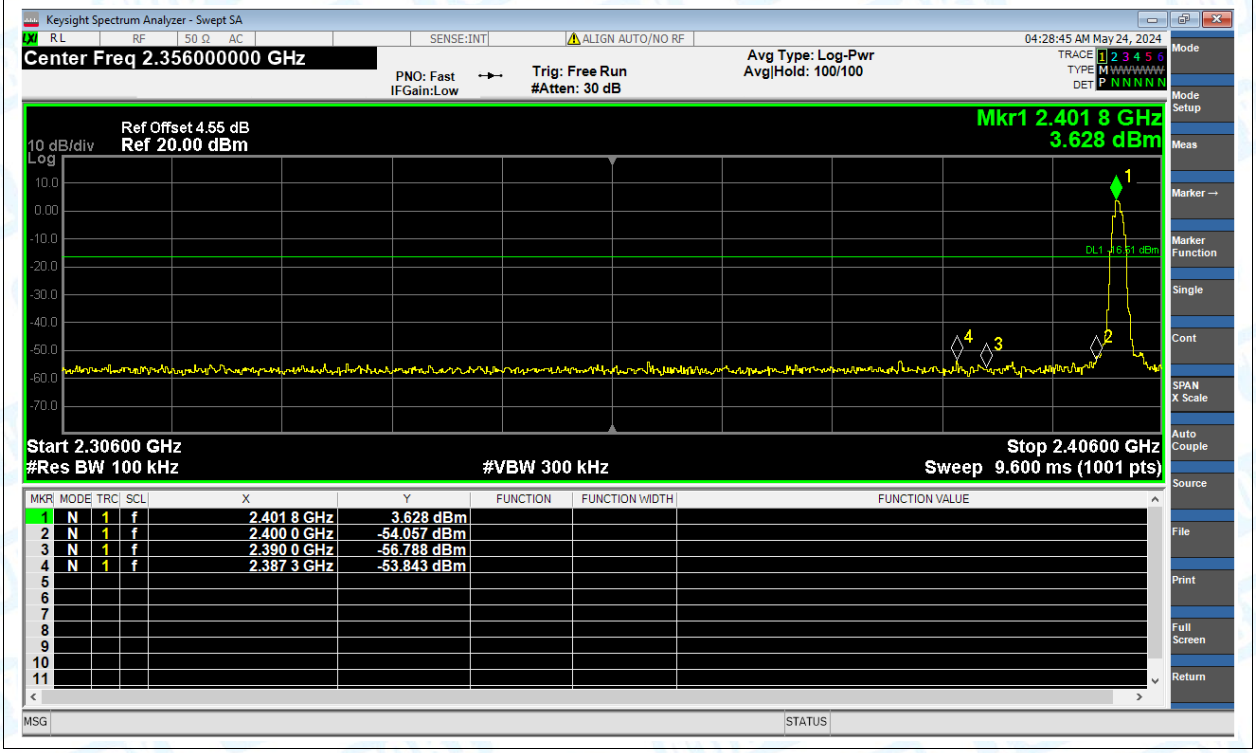
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



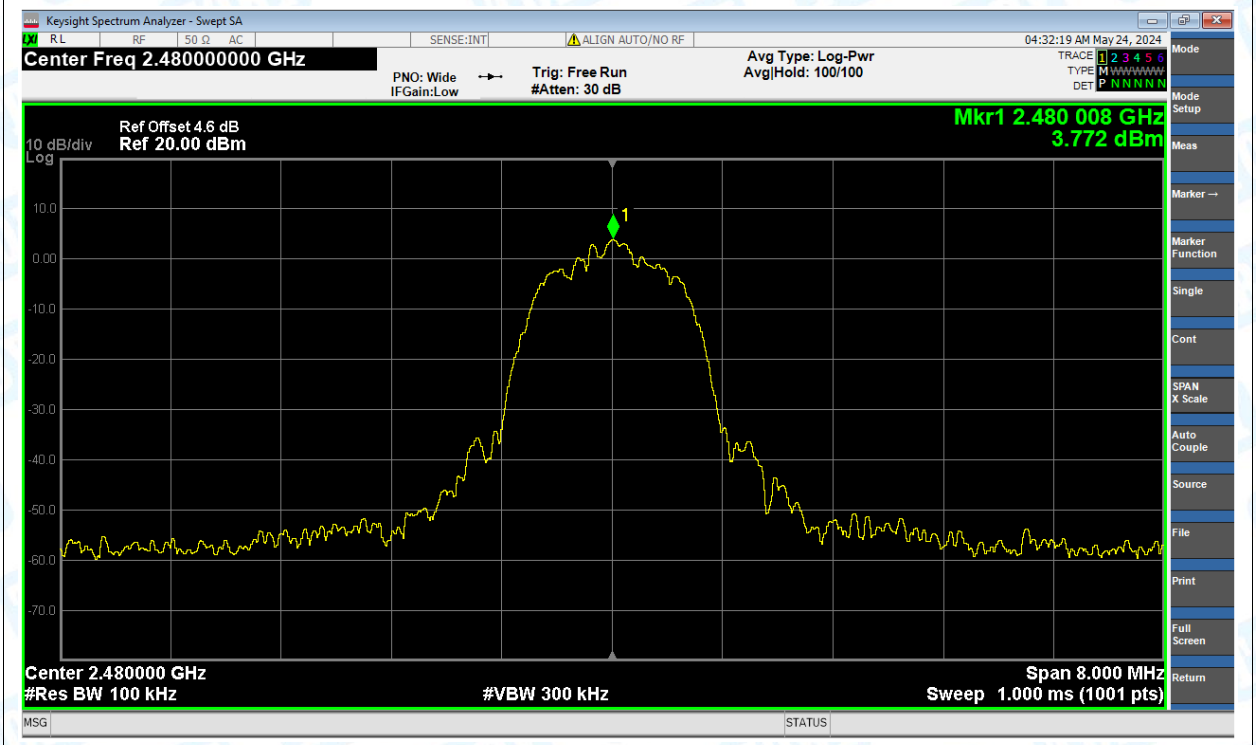
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



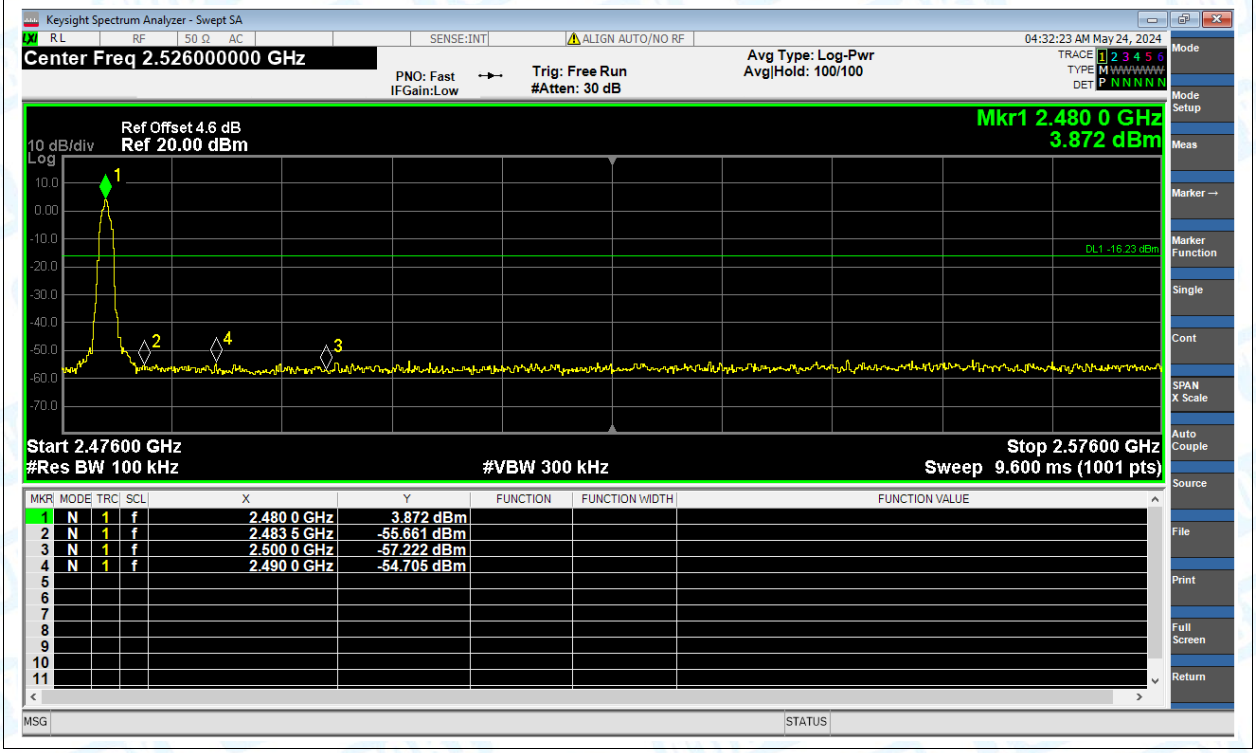
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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

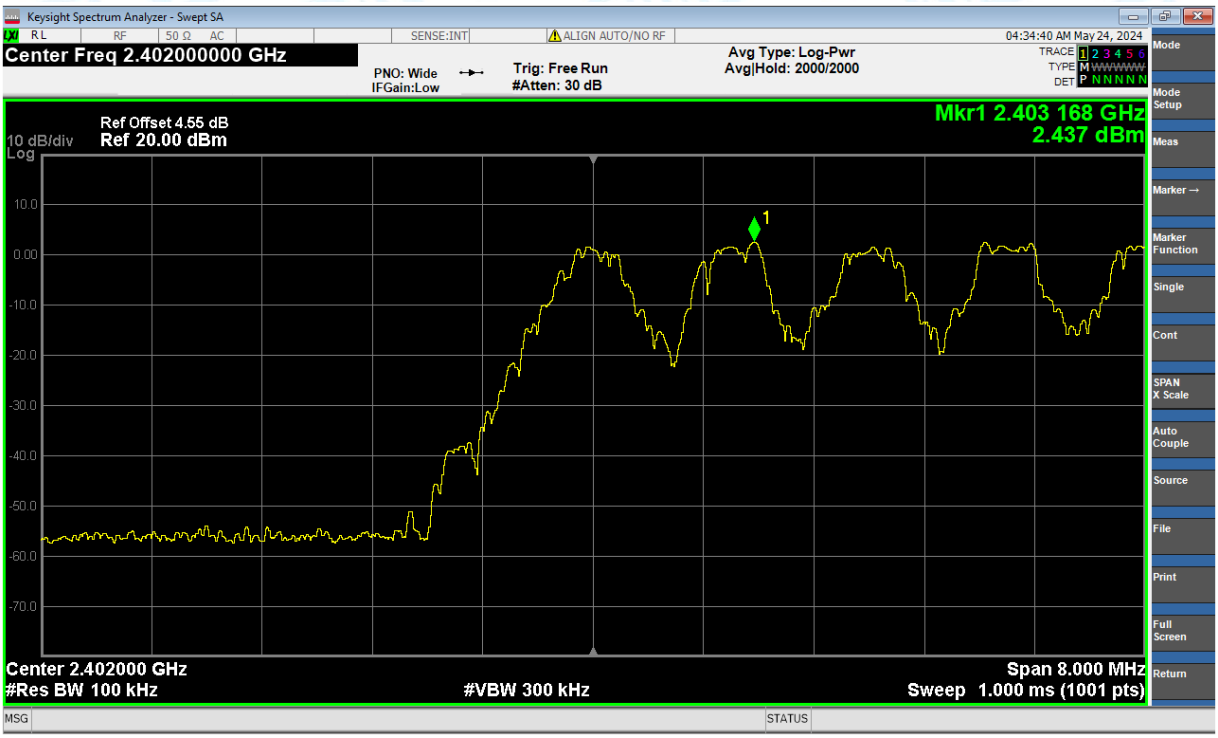


6. Band Edge(Hopping)

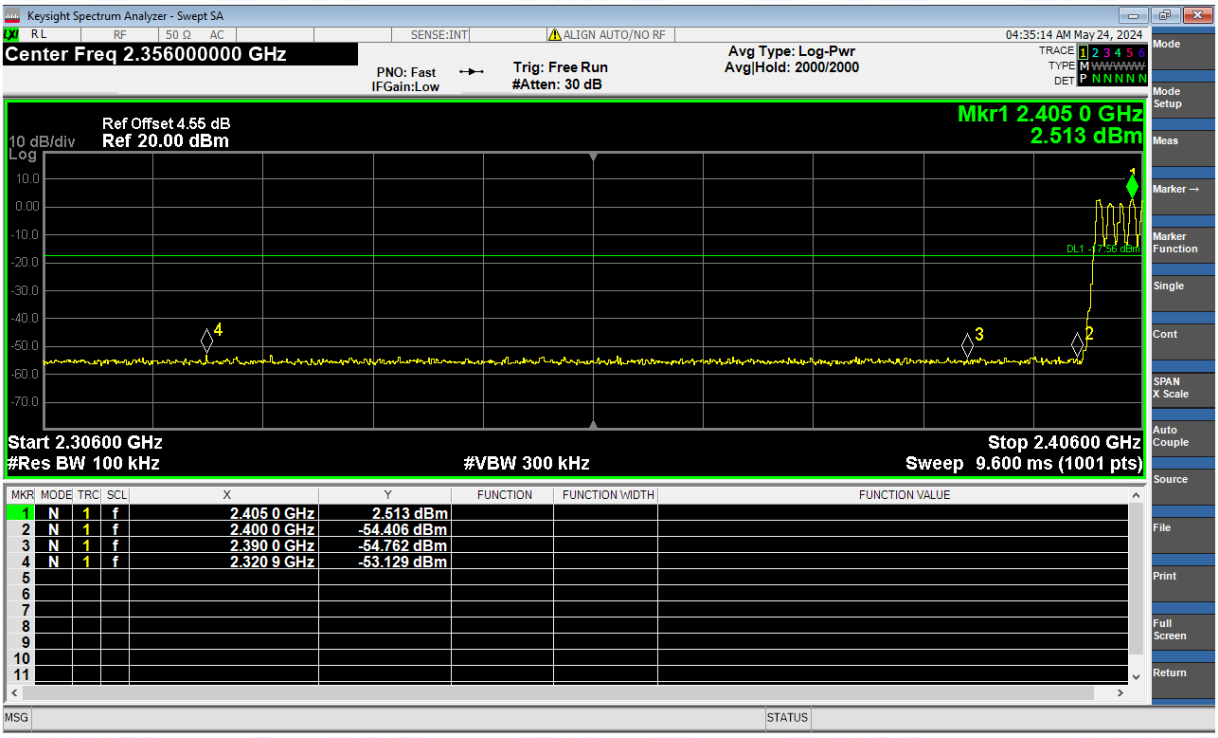
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-55.57	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-56.32	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-57.50	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-57.53	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-57.26	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-57.07	-20	Pass

Test Graphs

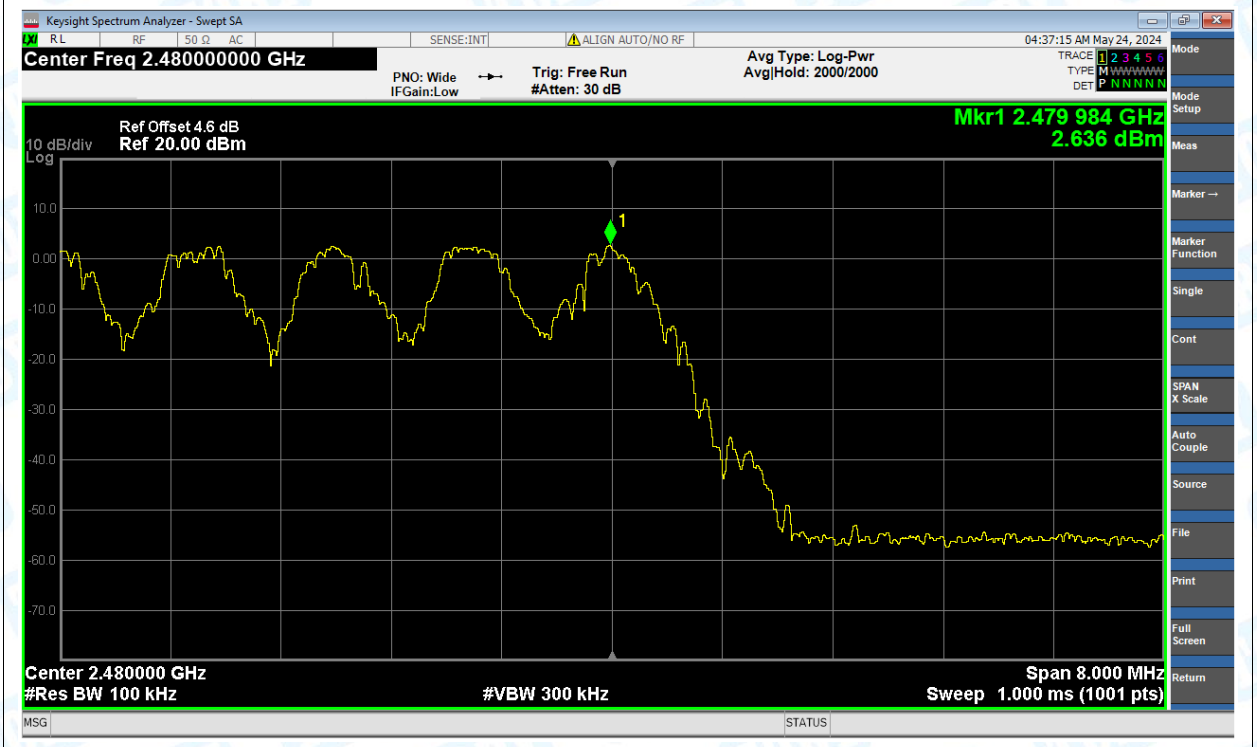
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



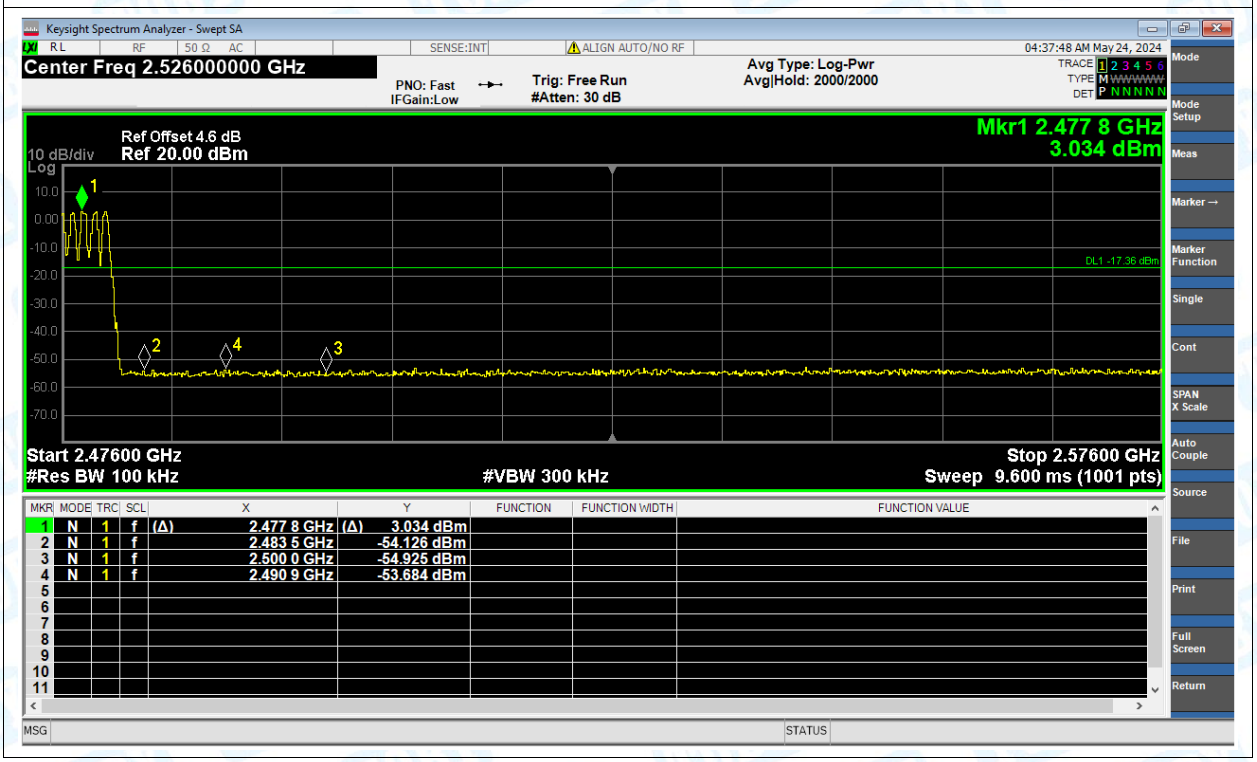
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



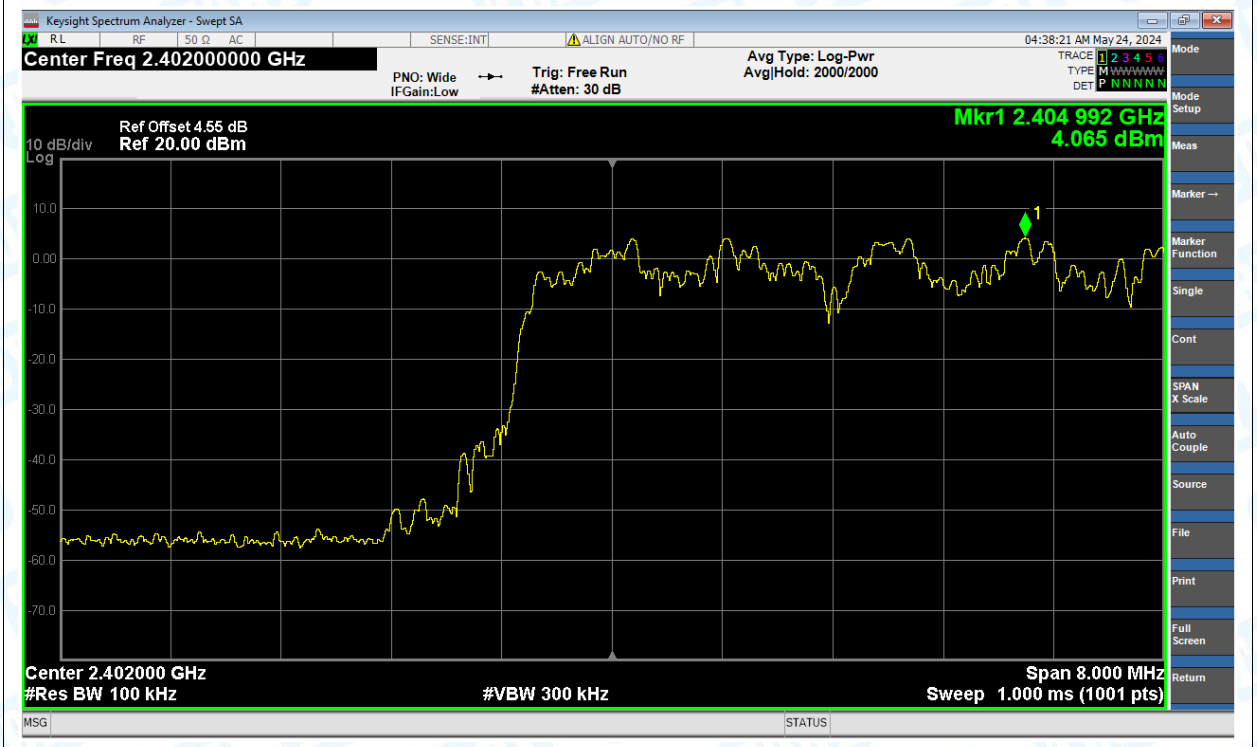
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



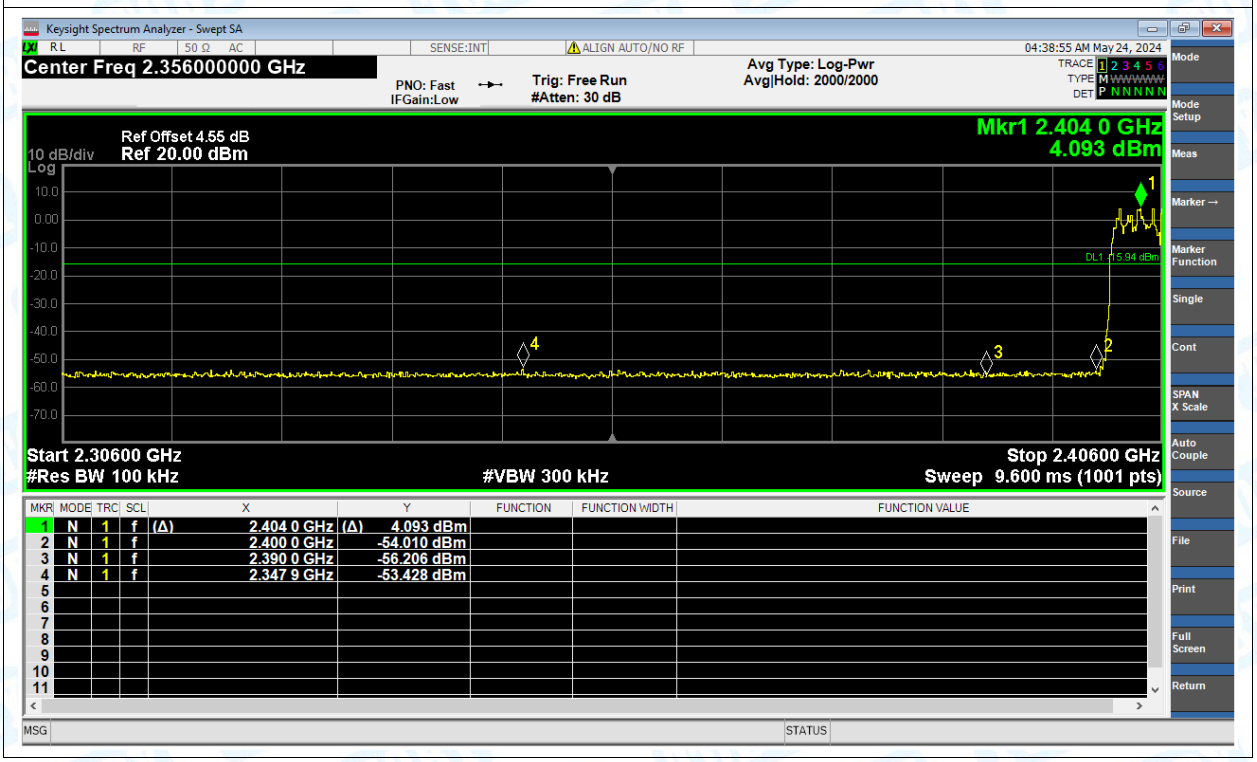
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



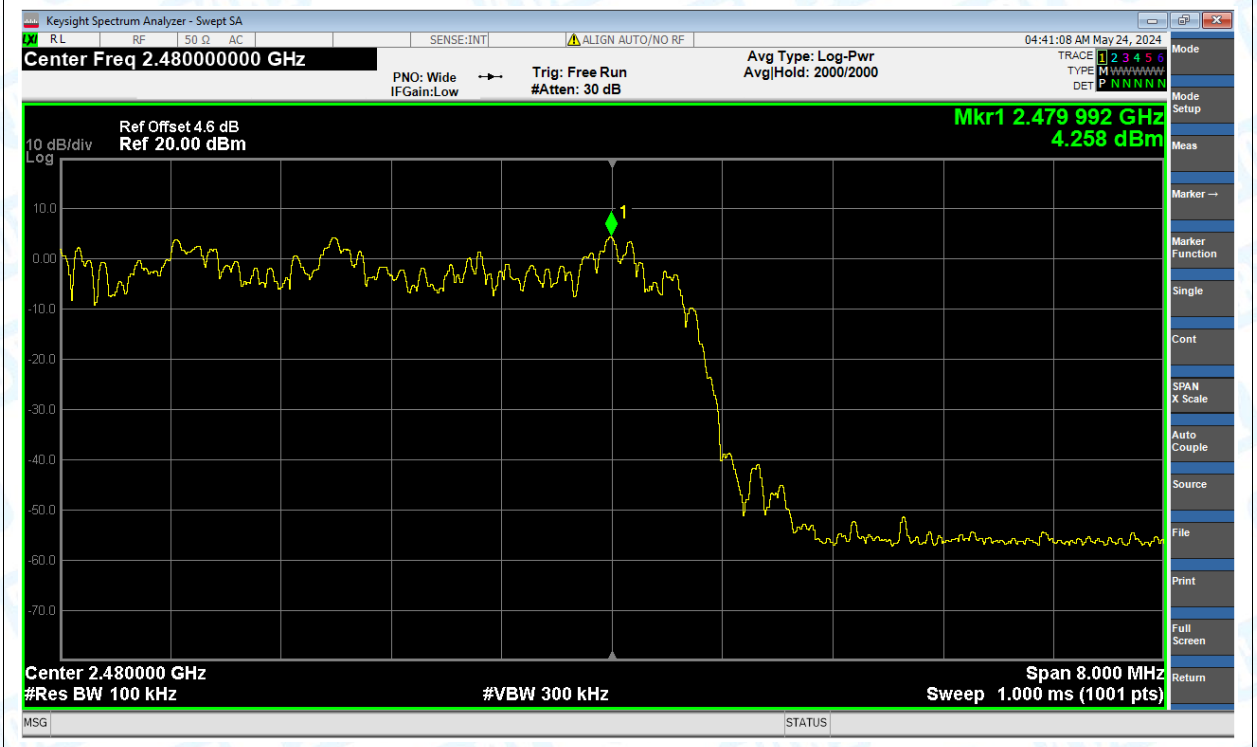
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



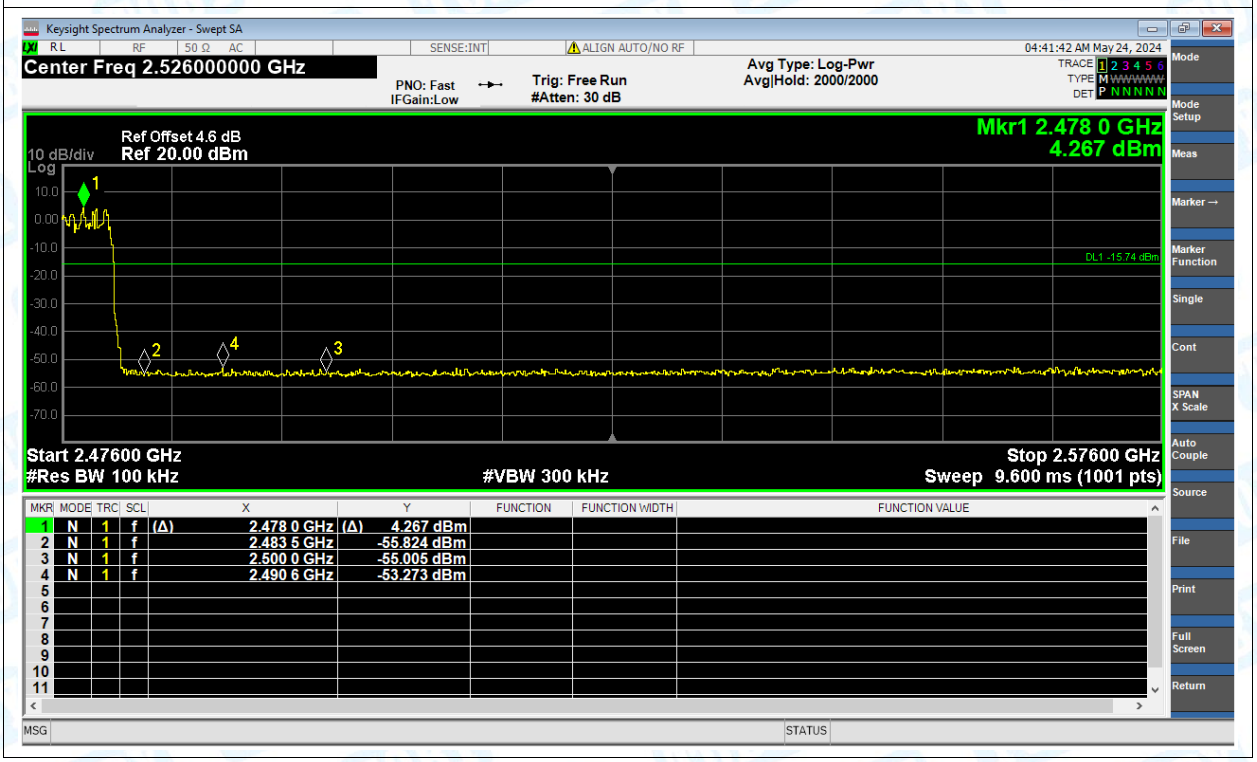
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



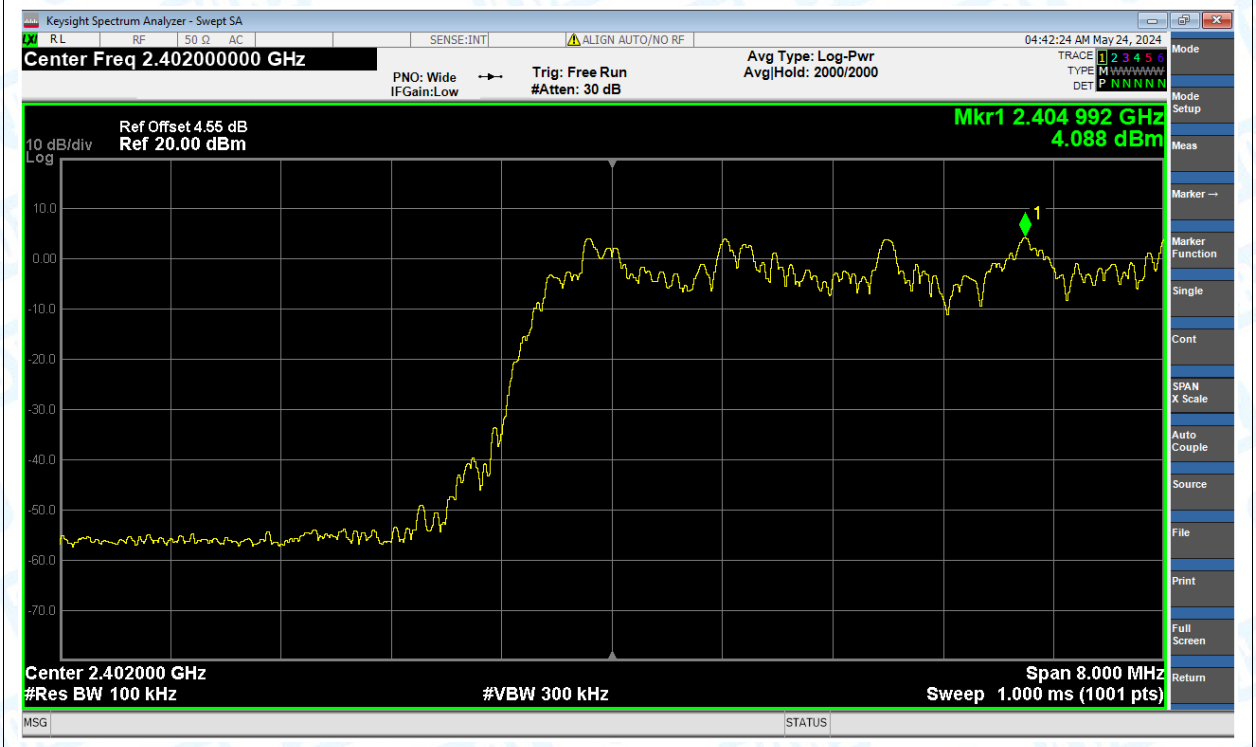
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



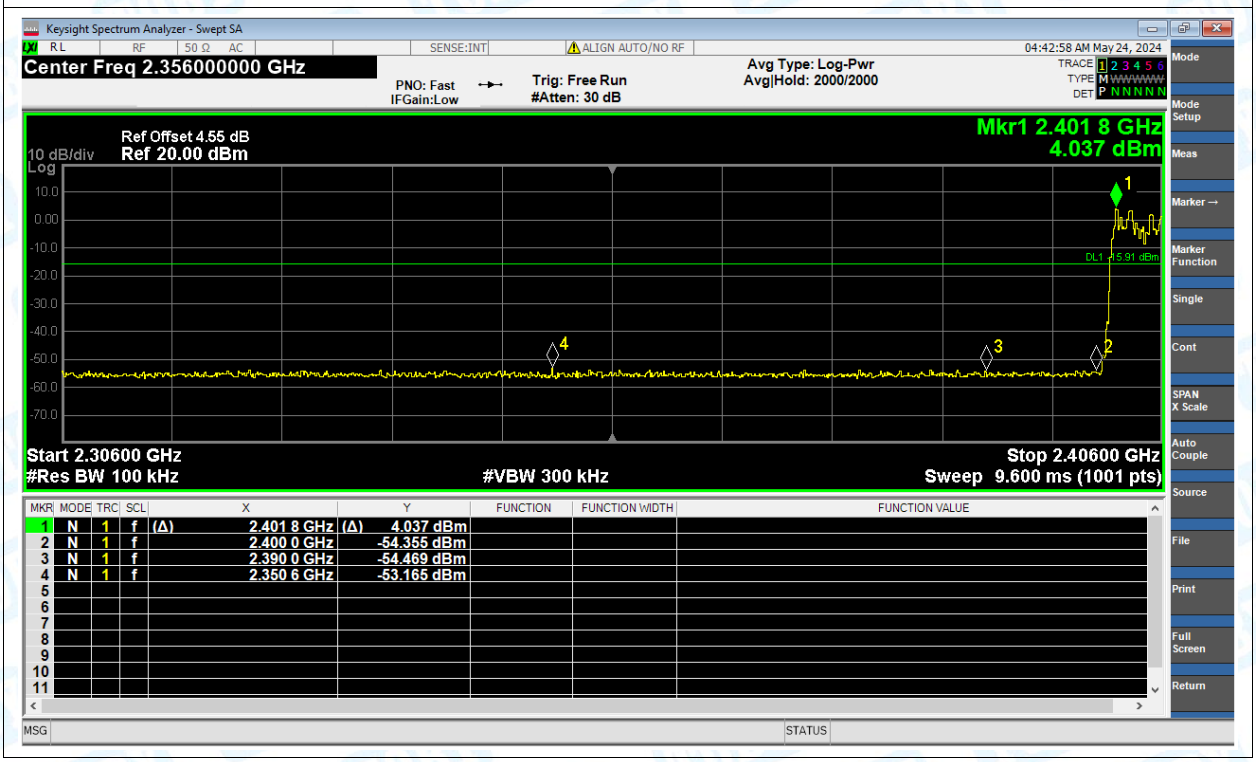
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



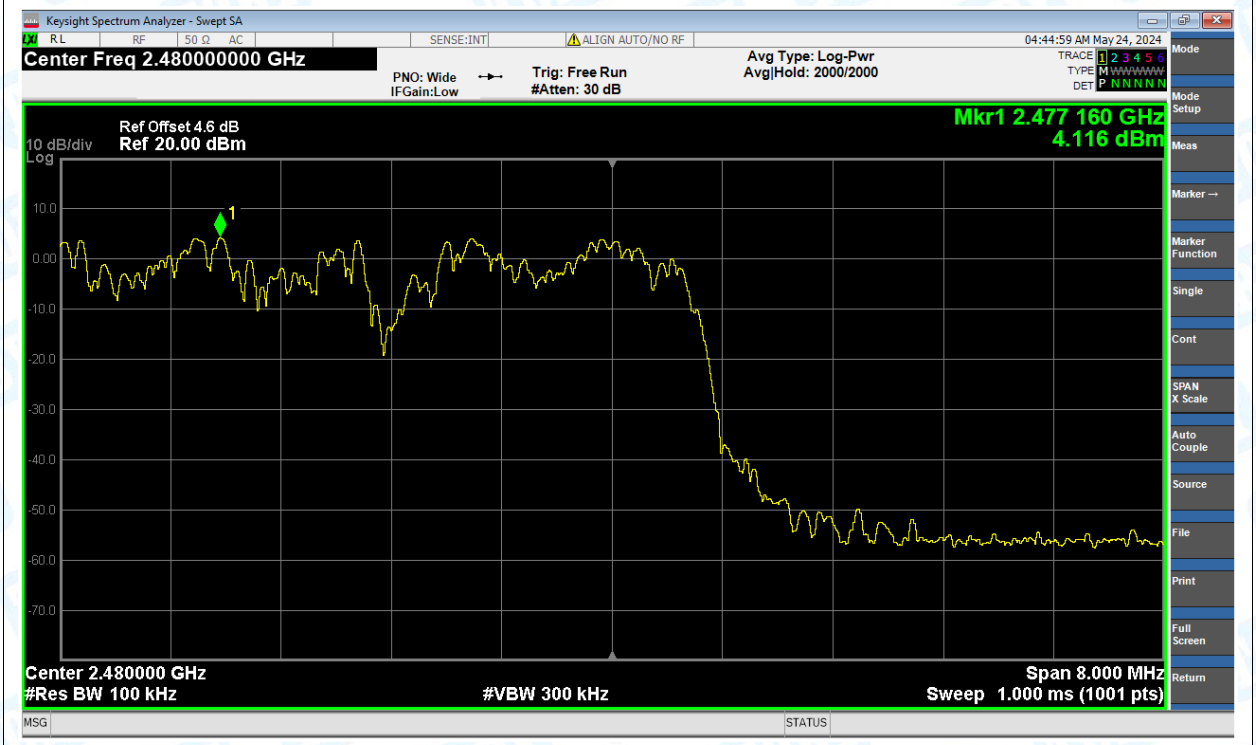
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



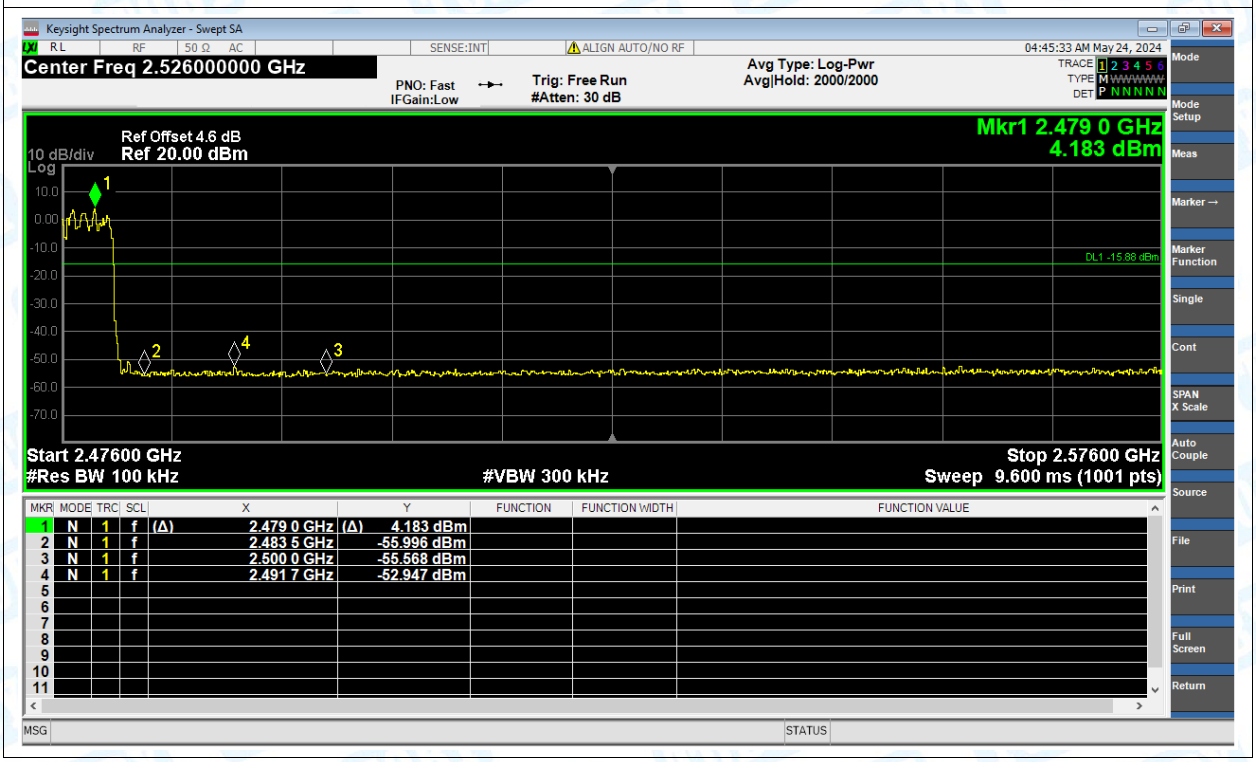
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Emission

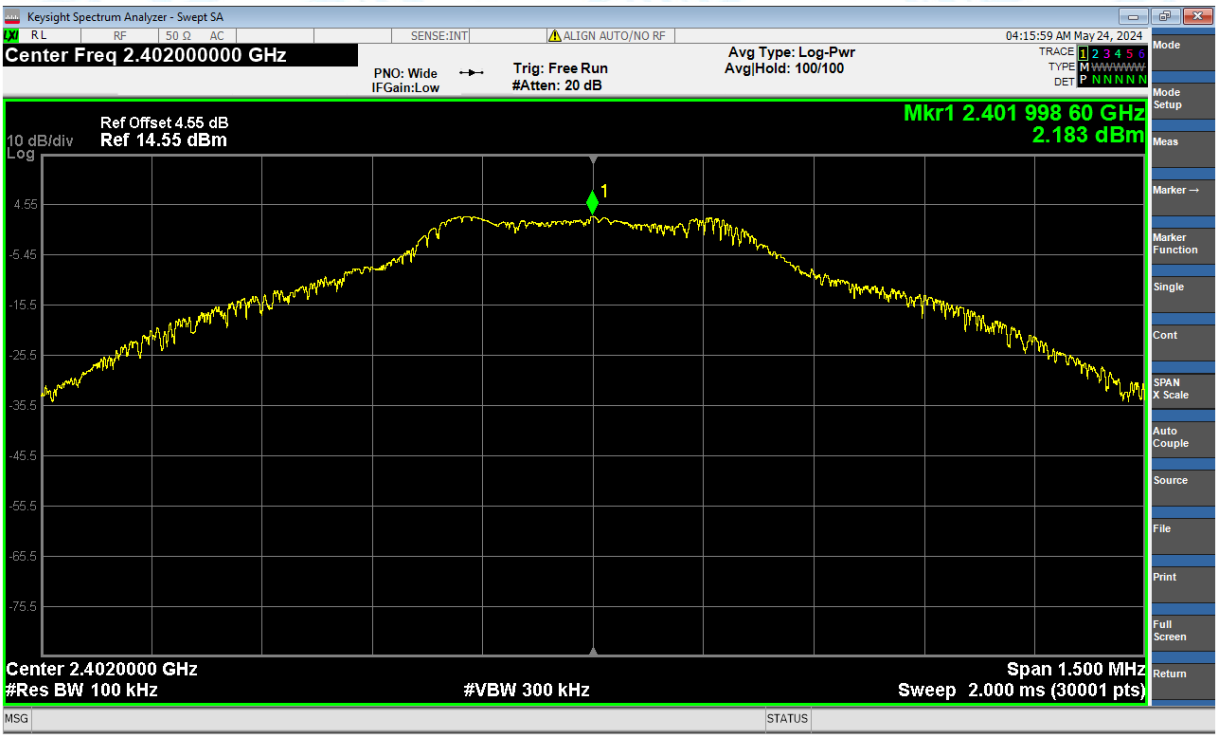


7. Conducted RF Spurious Emission

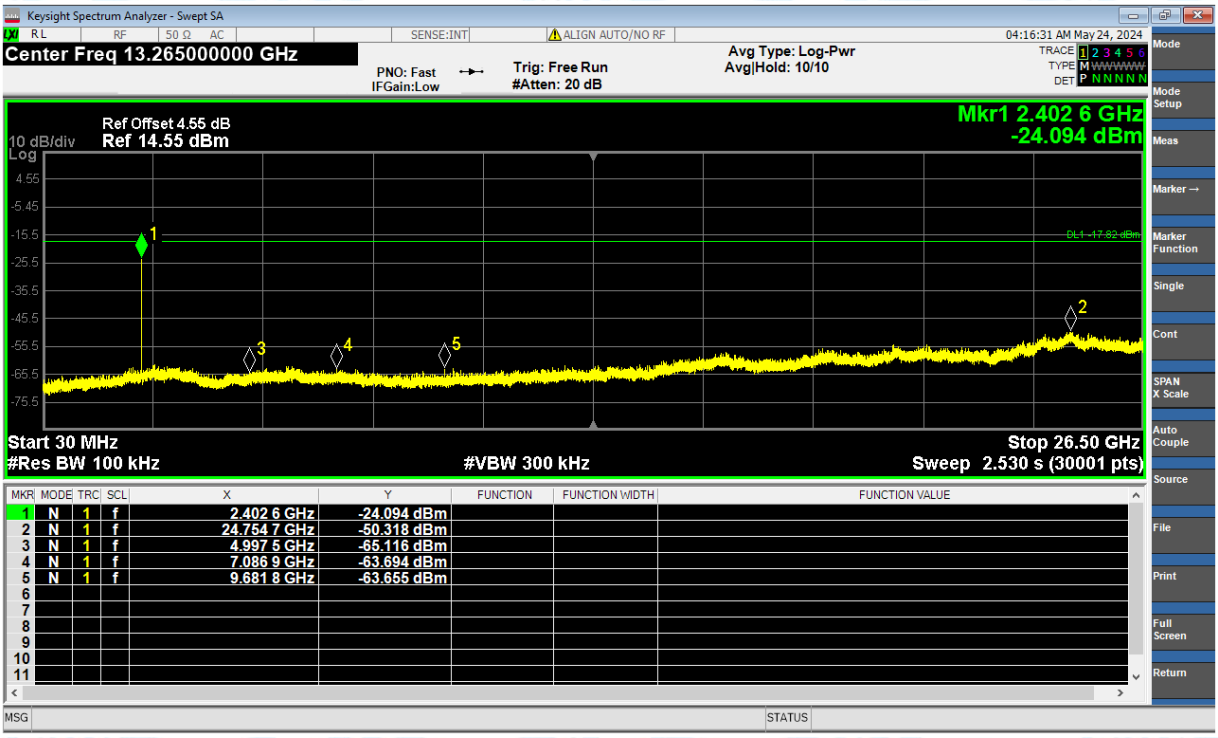
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-52.50	-20	Pass
NVNT	1-DH1	2441	Ant1	-51.69	-20	Pass
NVNT	1-DH1	2480	Ant1	-52.99	-20	Pass
NVNT	2-DH1	2402	Ant1	-52.83	-20	Pass
NVNT	2-DH1	2441	Ant1	-53.25	-20	Pass
NVNT	2-DH1	2480	Ant1	-53.65	-20	Pass
NVNT	3-DH1	2402	Ant1	-51.24	-20	Pass
NVNT	3-DH1	2441	Ant1	-53.08	-20	Pass
NVNT	3-DH1	2480	Ant1	-52.58	-20	Pass

Test Graphs

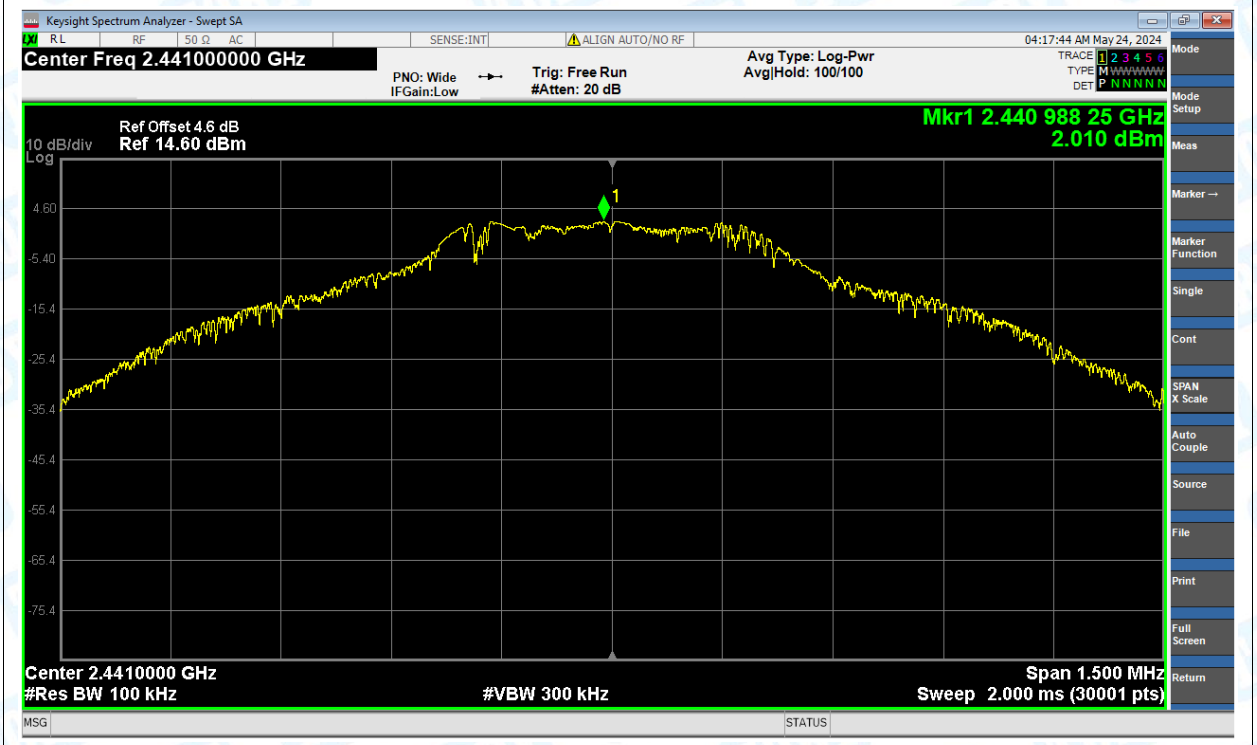
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



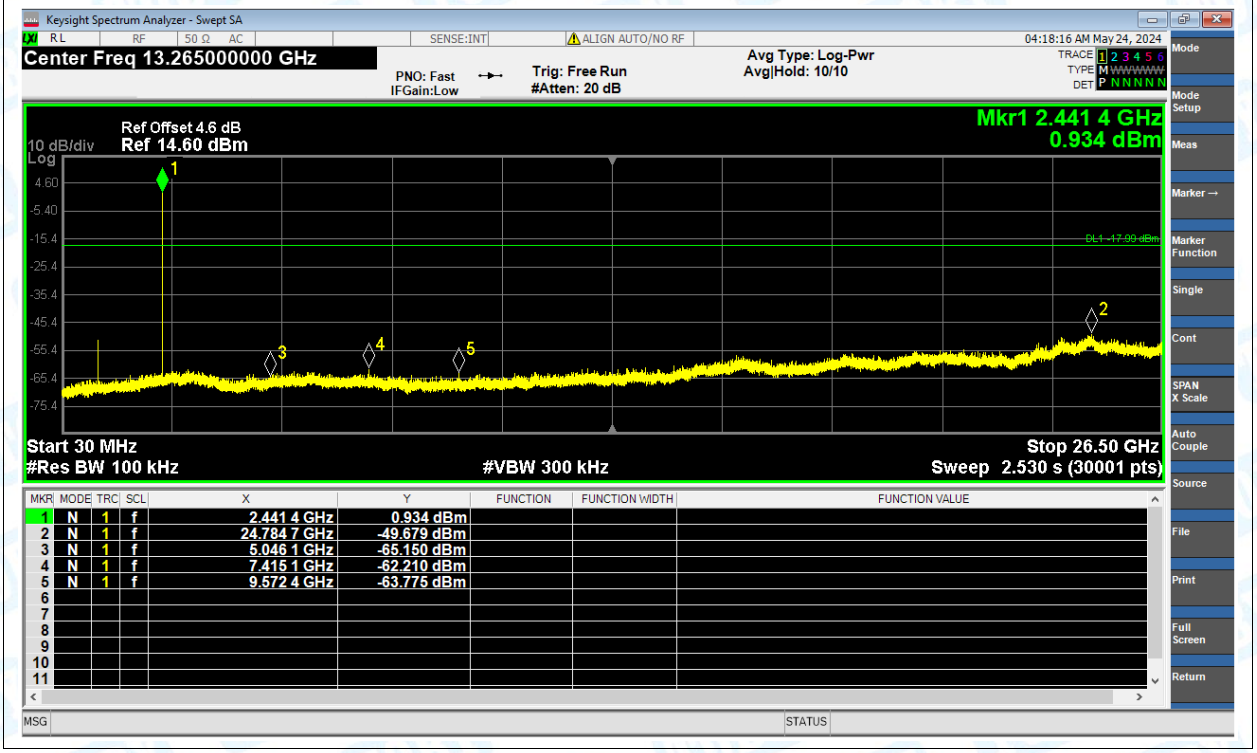
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



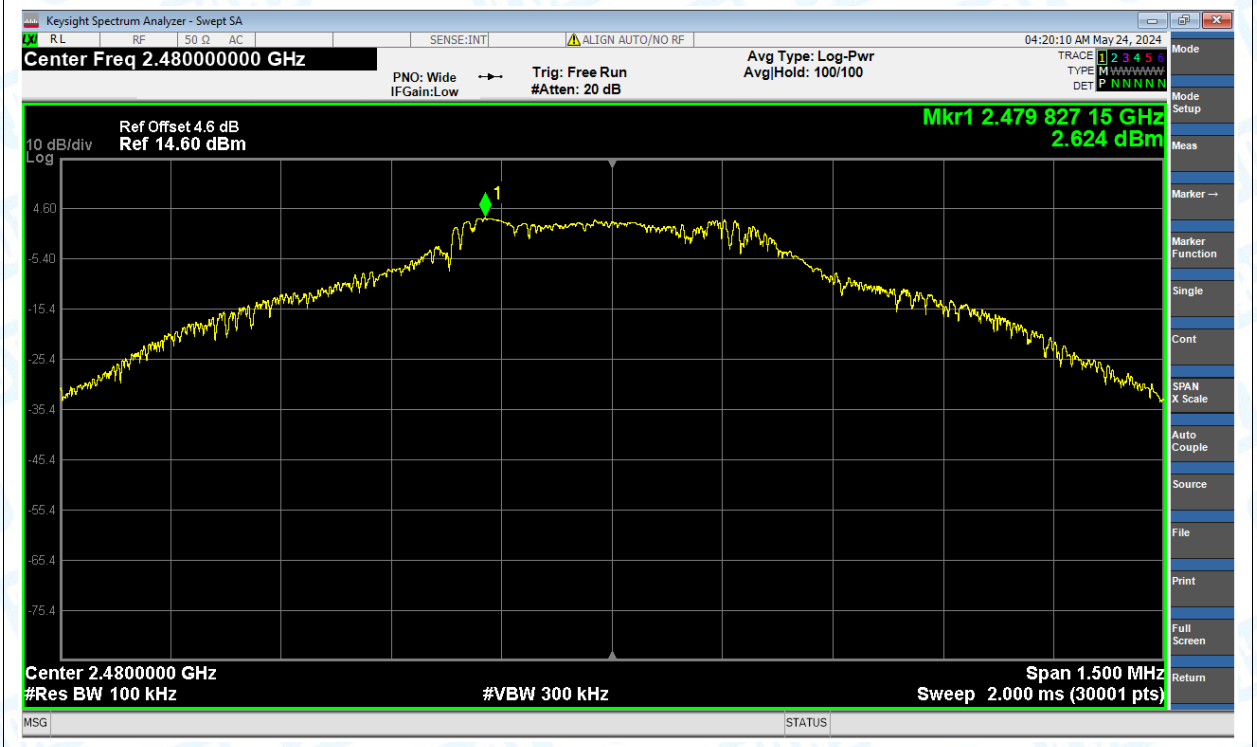
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



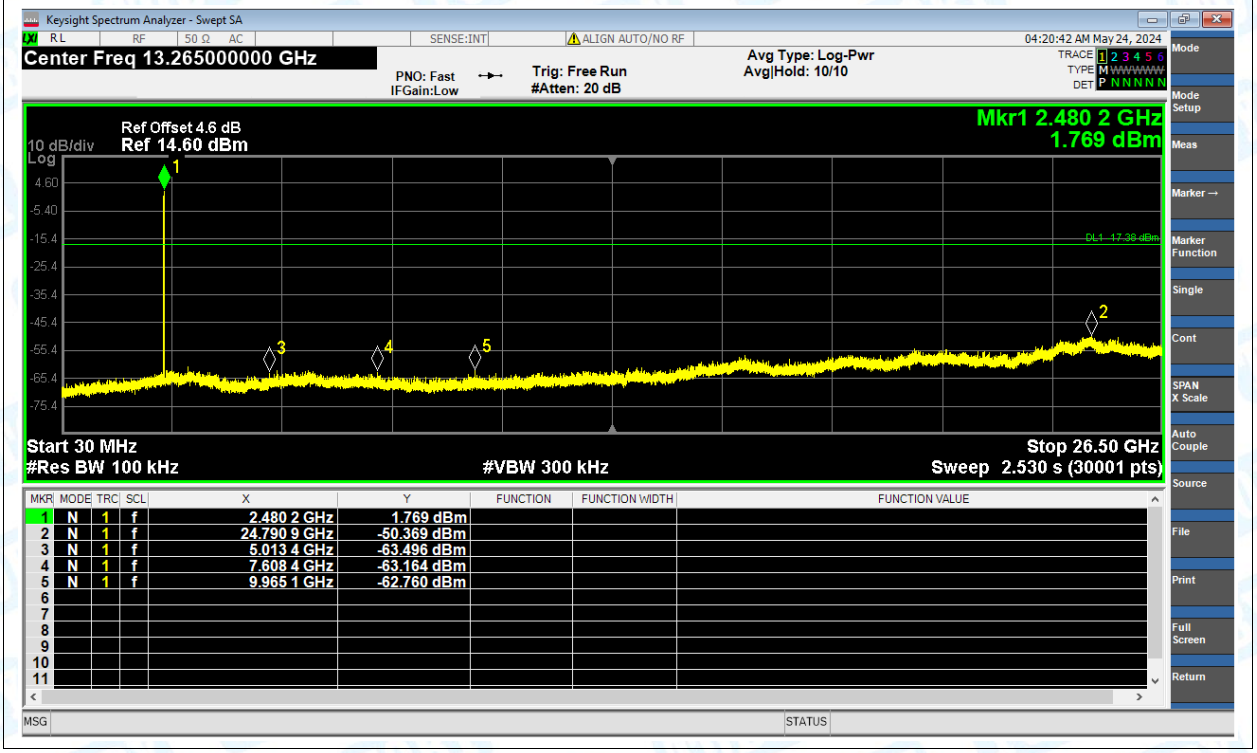
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



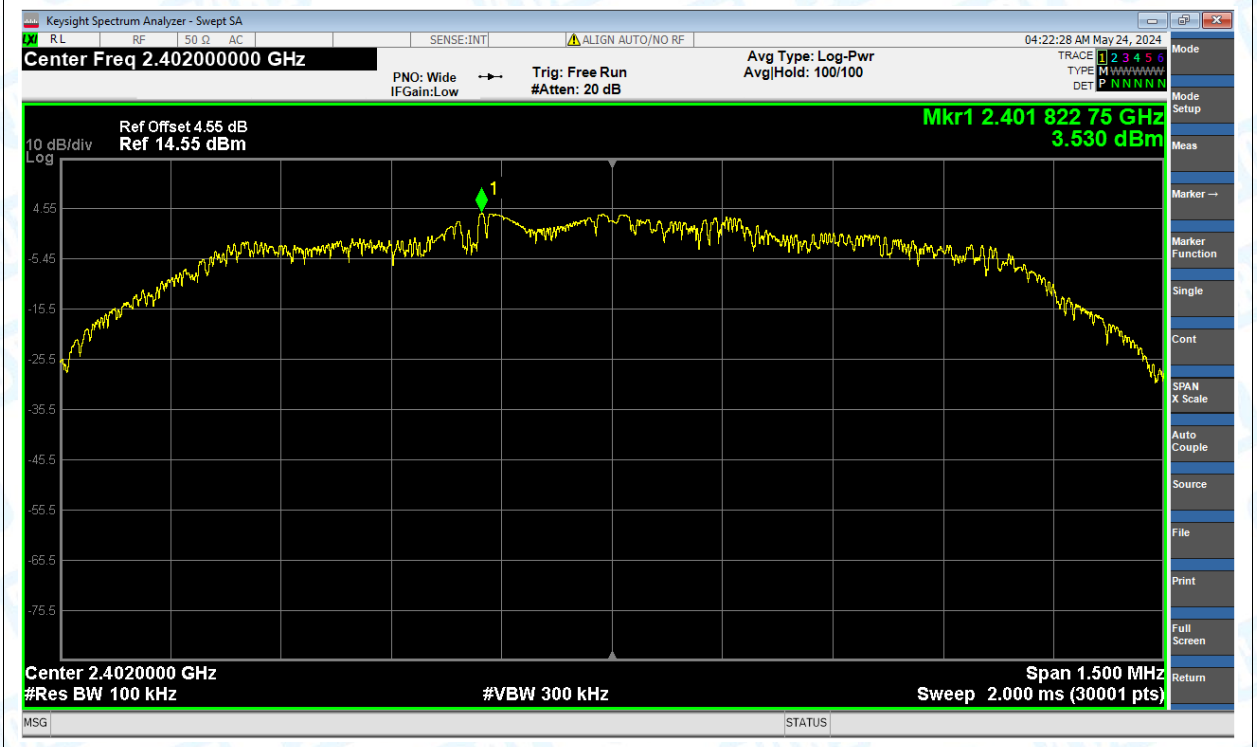
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



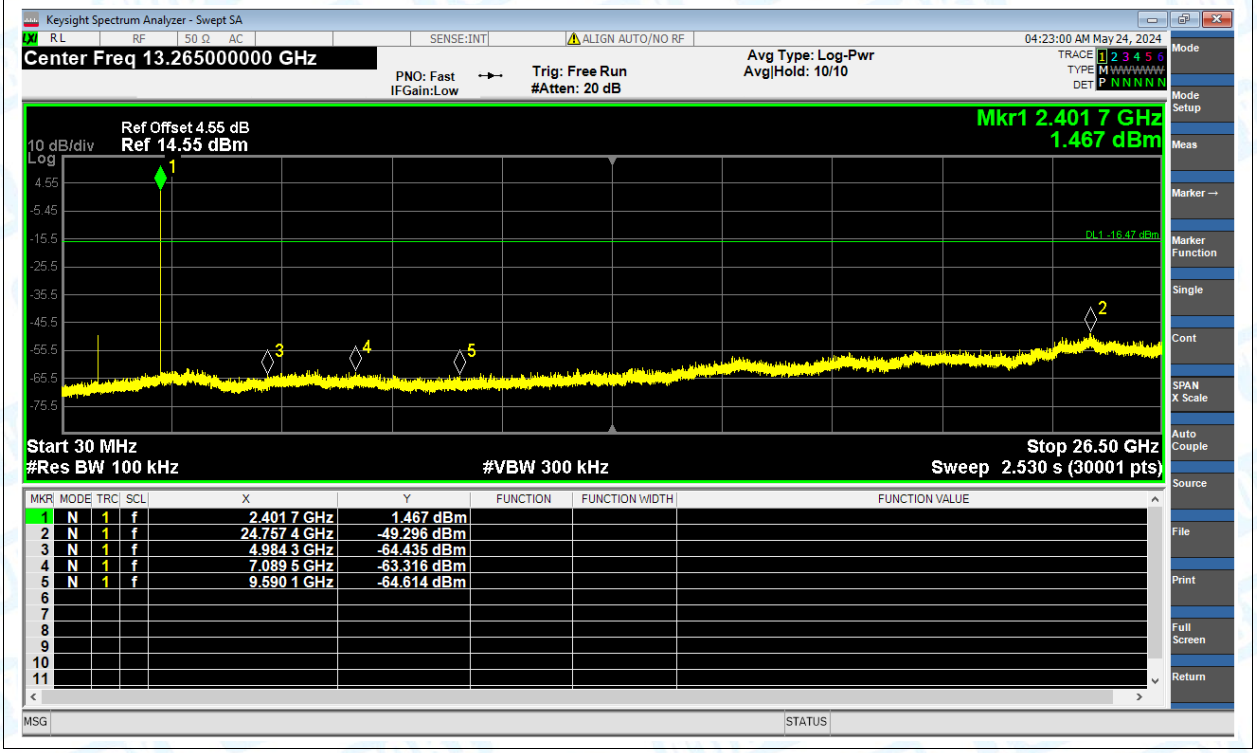
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



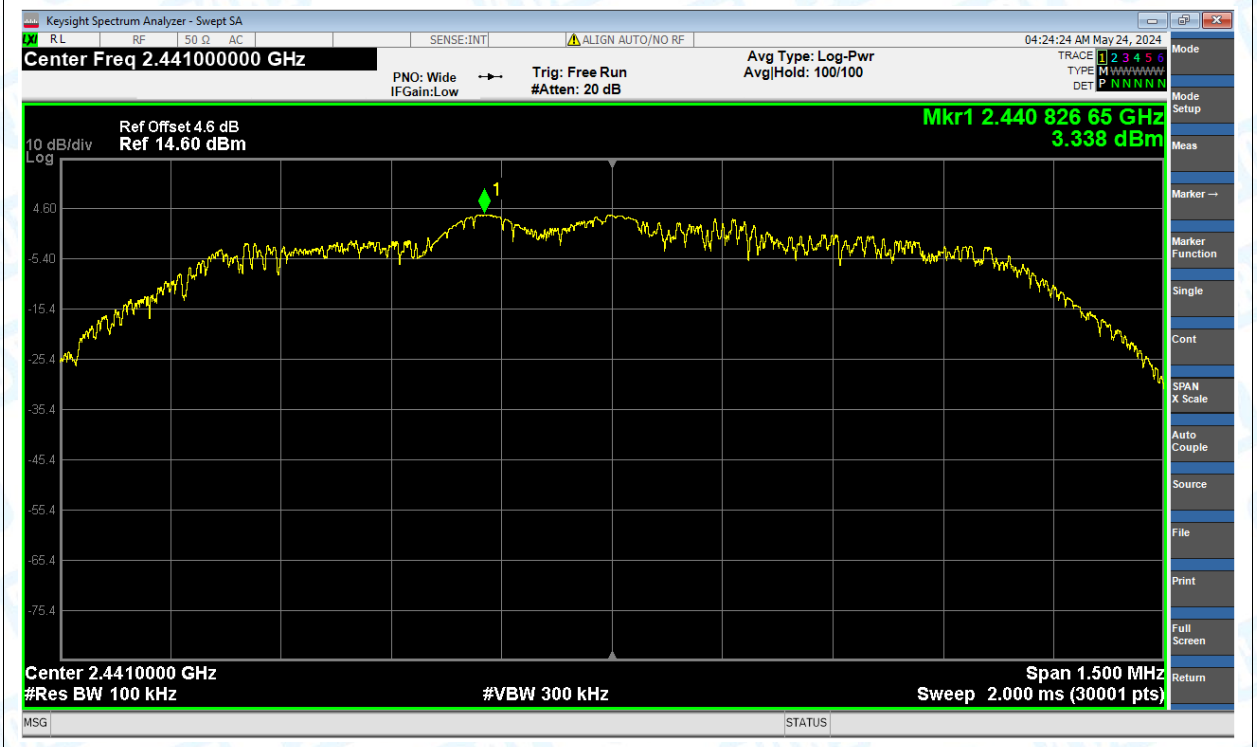
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



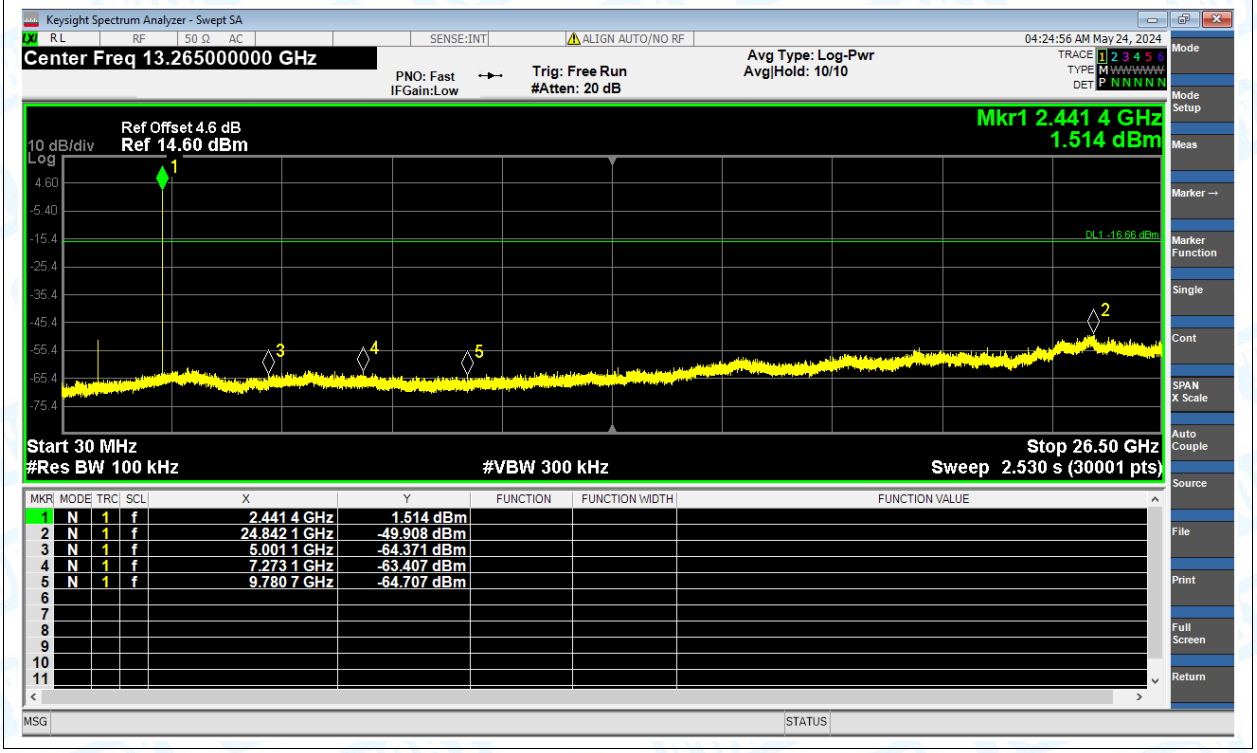
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref

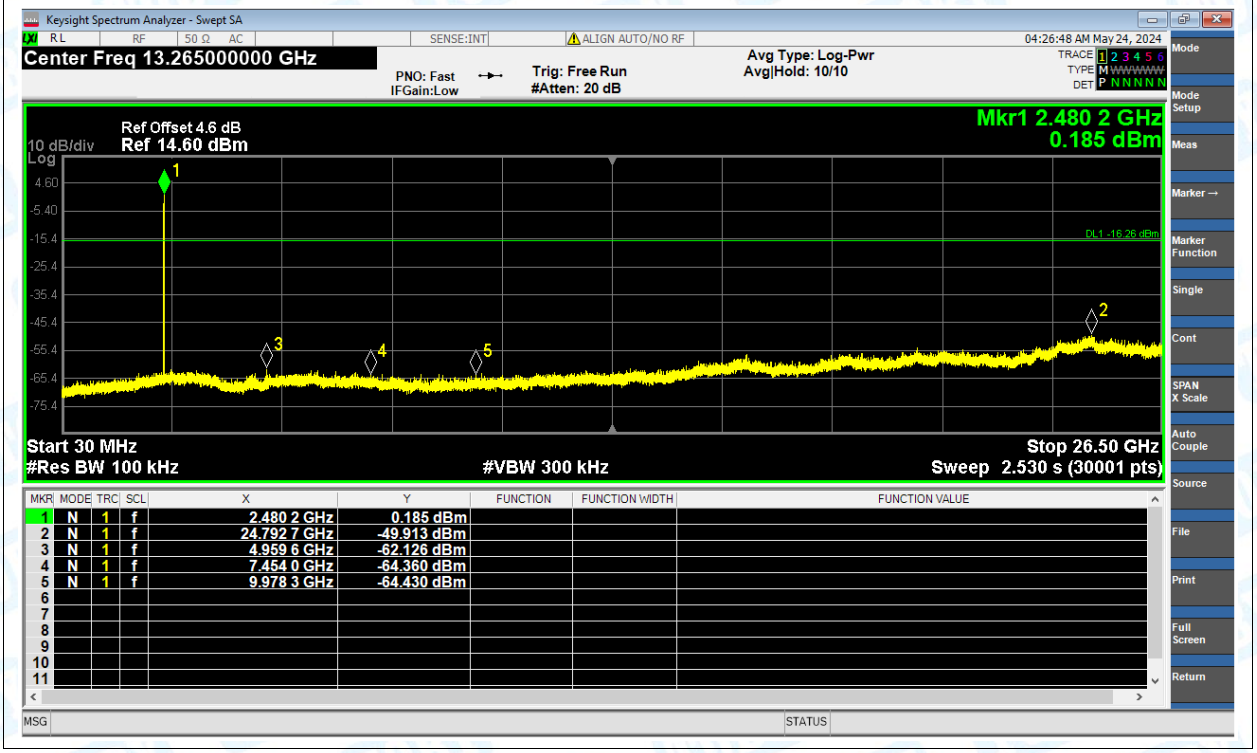


Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission

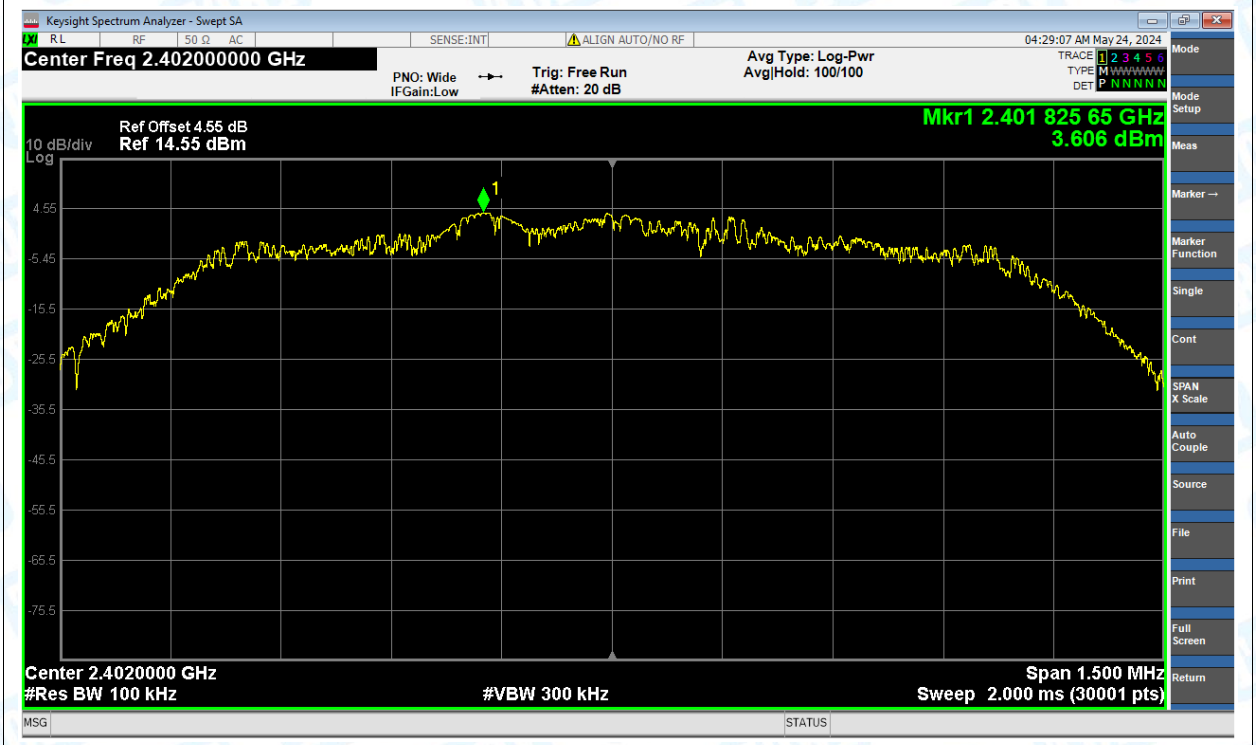


Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref

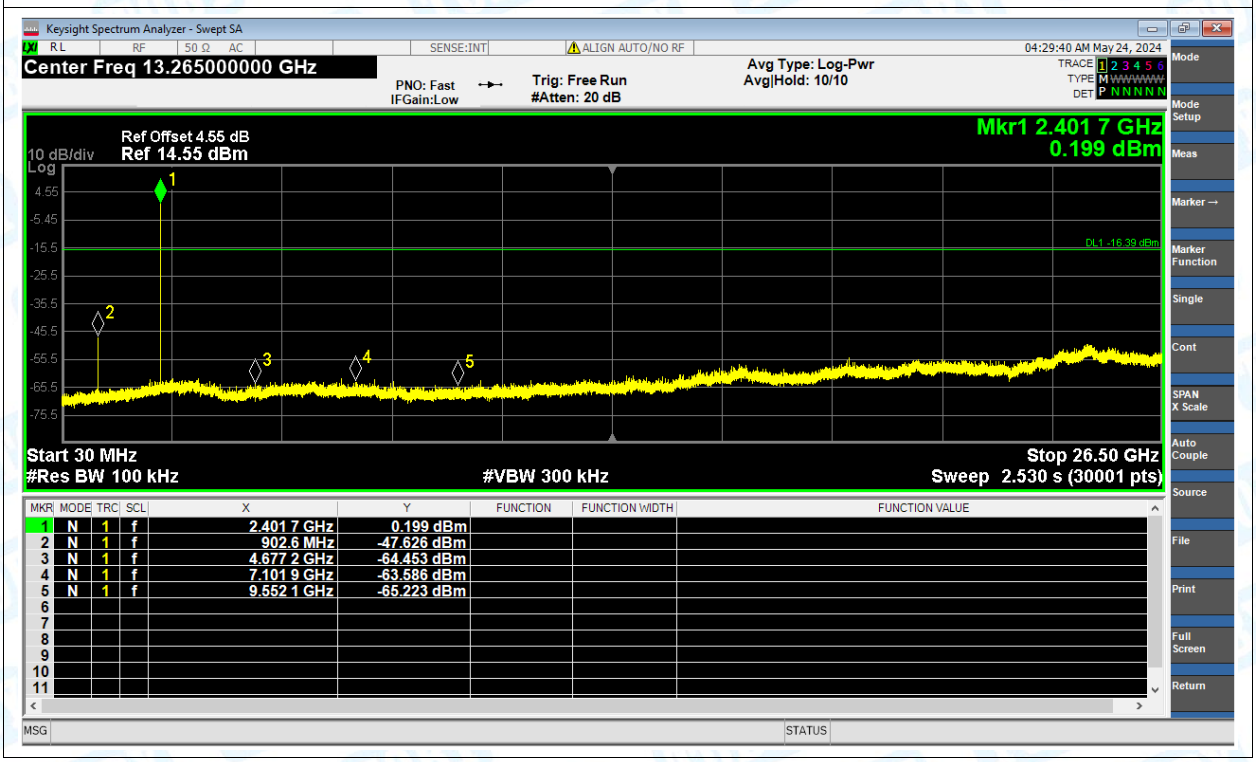
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



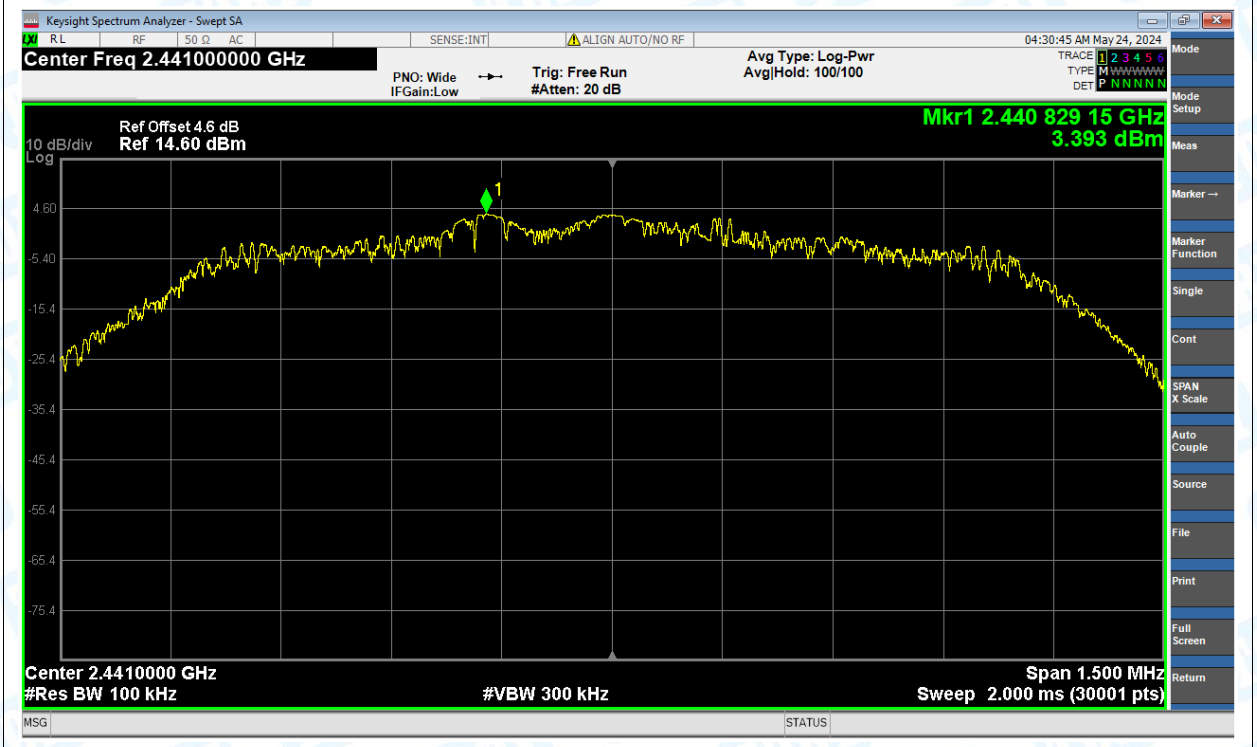
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



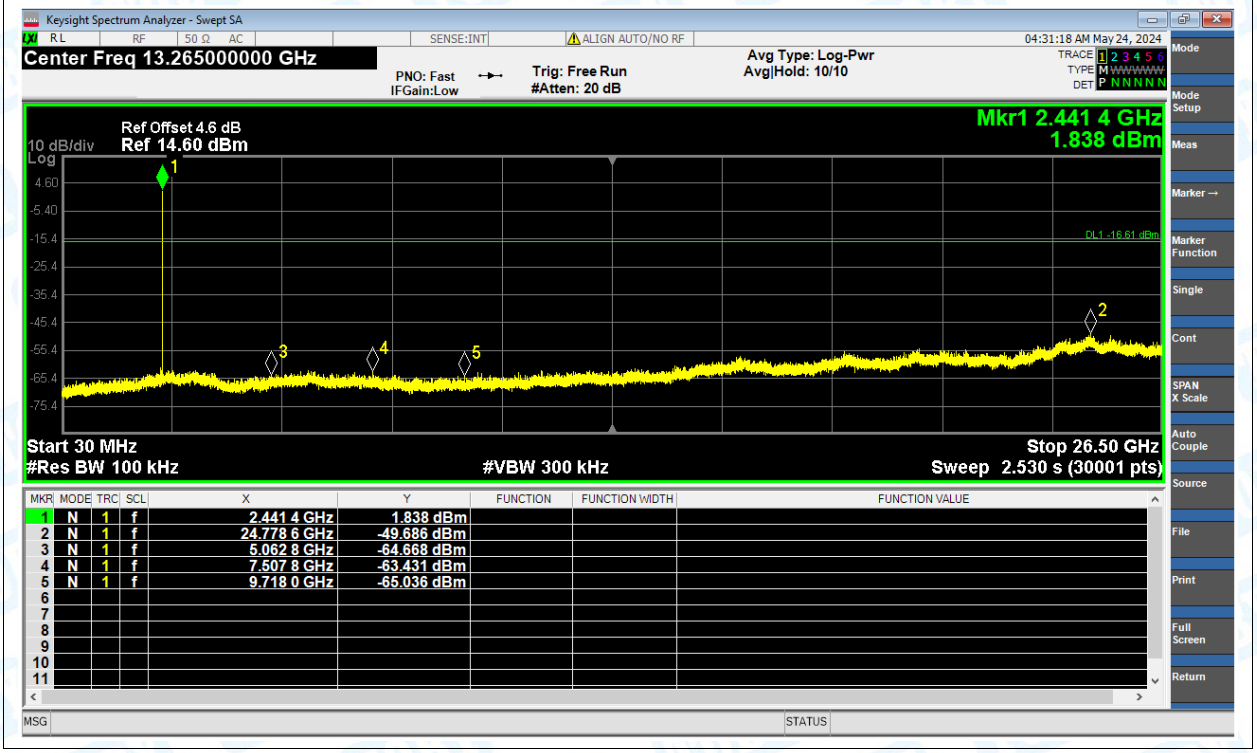
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



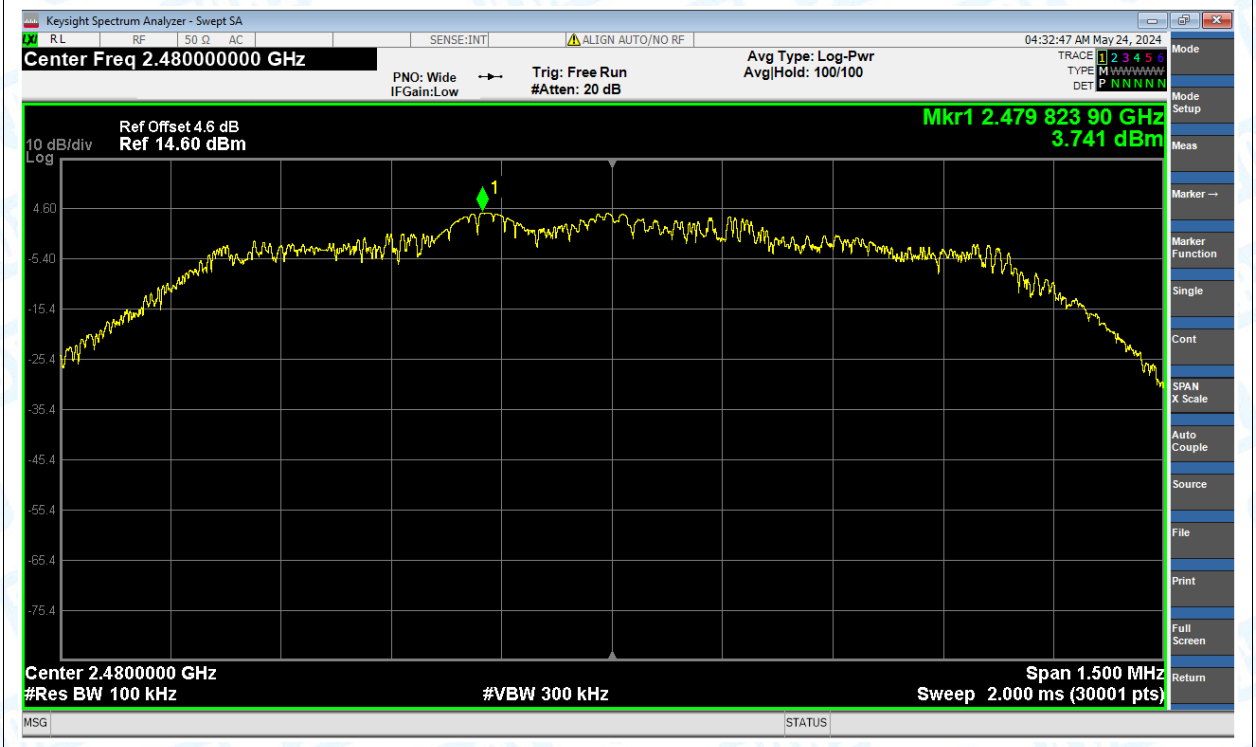
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



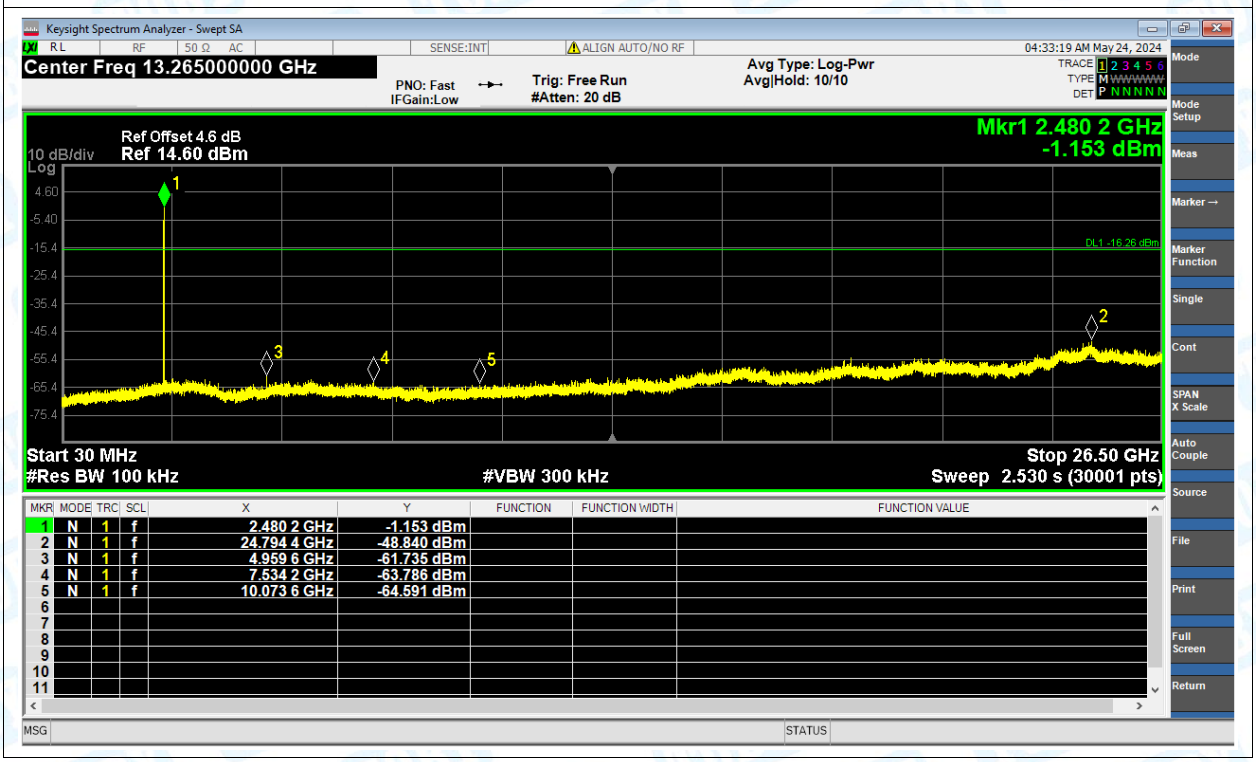
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

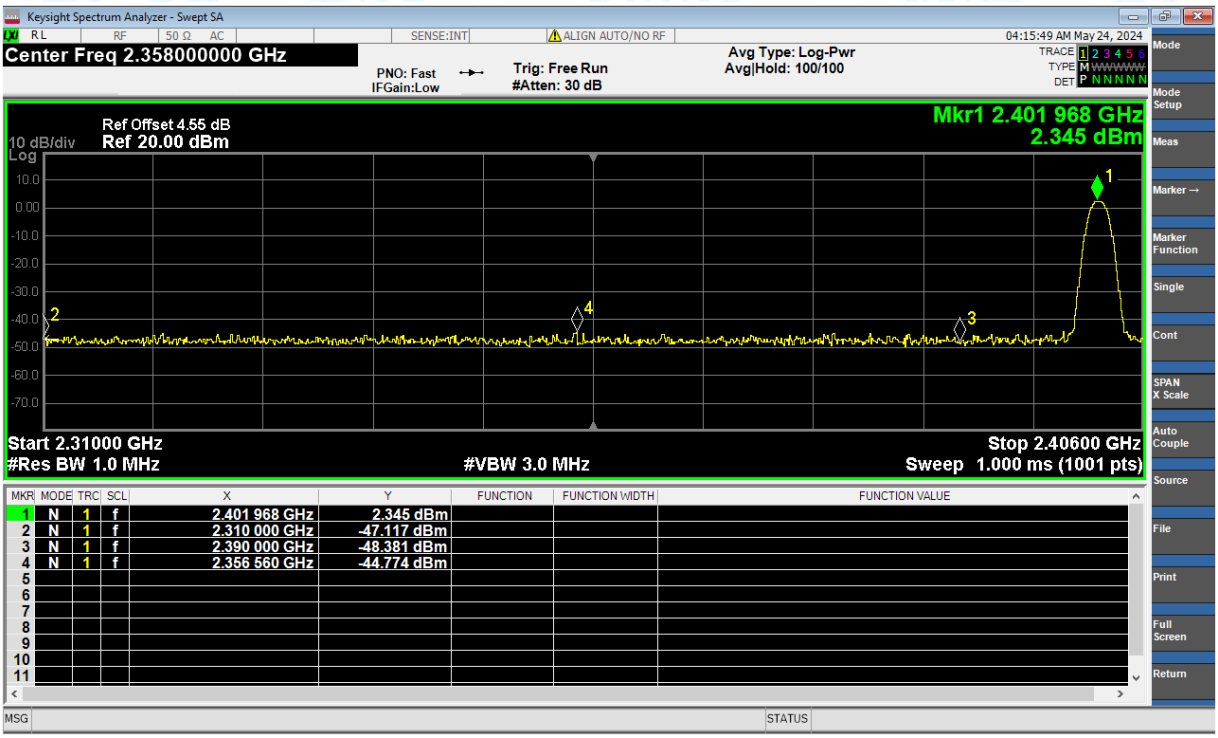


8. Restrict Band

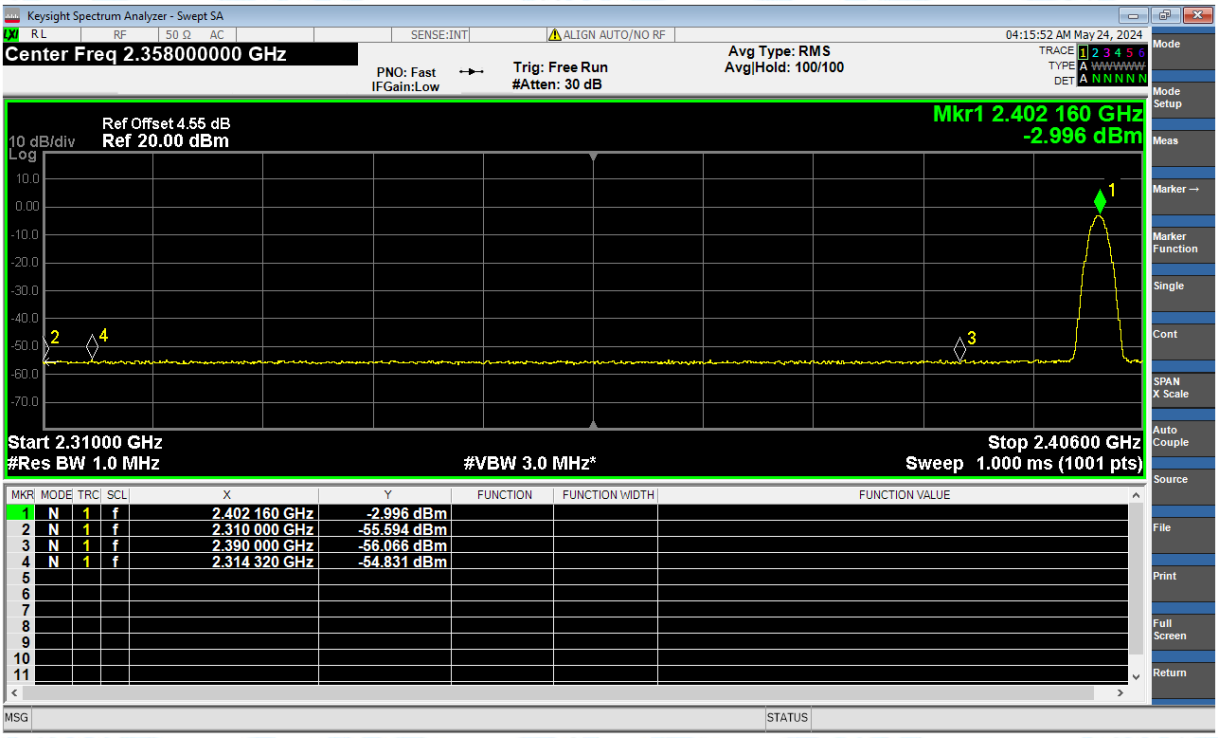
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-47.12	2	-	50.14	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.59	2	5.07	46.74	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2356.56	-44.77	2	-	52.49	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2314.32	-54.83	2	5.07	47.5	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-48.38	2	-	48.88	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-56.07	2	5.07	46.26	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-46.84	2	-	50.42	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.97	2	5.07	47.36	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2485.816	-44.07	2	-	53.19	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.728	-54.49	2	5.07	47.84	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.52	2	-	50.74	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.79	2	5.07	46.54	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.65	2	-	48.61	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-55.53	2	4.99	46.72	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2346.384	-44.02	2	-	53.24	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2376.816	-54.73	2	4.99	47.52	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46	2	-	51.26	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.15	2	4.99	47.1	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-47.27	2	-	49.99	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.38	2	5.1	46.98	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2487.928	-43.85	2	-	53.41	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.872	-54.54	2	5.1	47.82	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.8	2	-	50.46	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.35	2	5.1	47.01	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-47.74	2	-	49.52	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.77	2	5.02	46.51	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2385.648	-44.63	2	-	52.63	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2386.128	-54.71	2	5.02	47.57	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-48.1	2	-	49.16	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.72	2	5.02	46.56	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-47.05	2	-	50.21	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-55.2	2	4.99	47.05	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.56	-44.37	2	-	52.89	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2489.608	-54.41	2	4.99	47.84	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-47.07	2	-	50.19	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.31	2	4.99	46.94	Average	54	Pass

Test Graphs

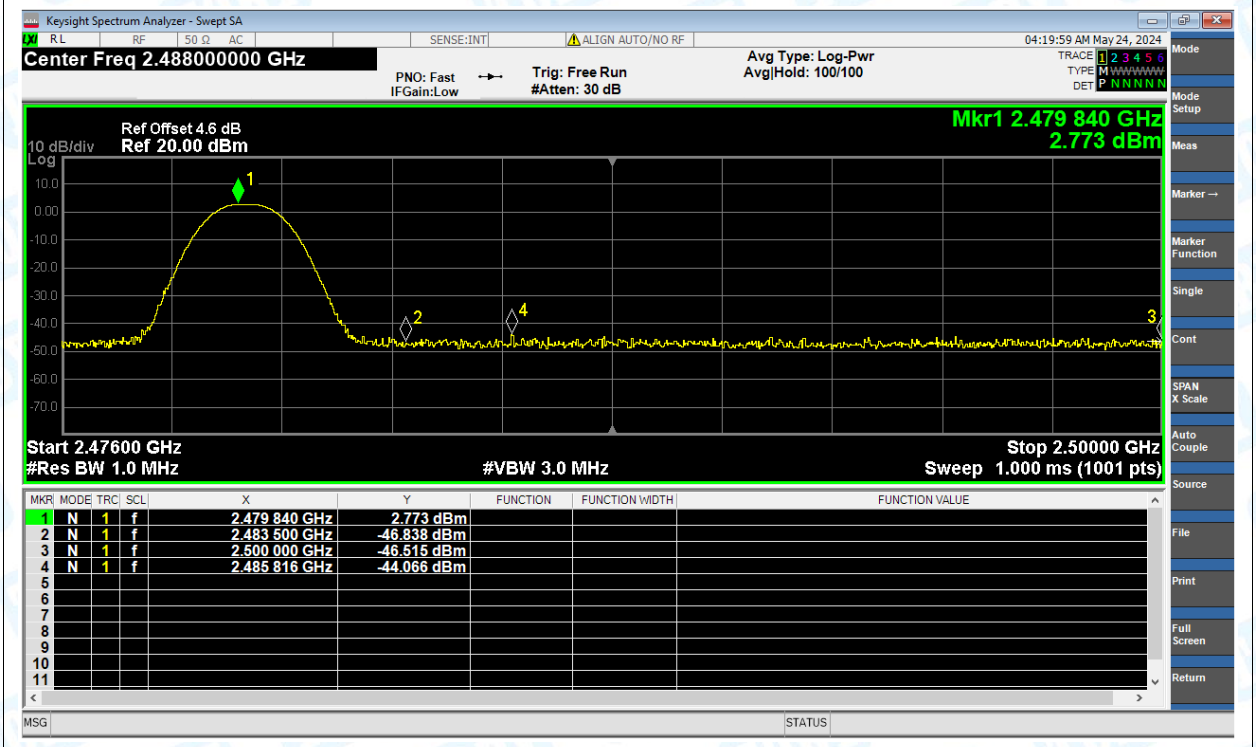
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



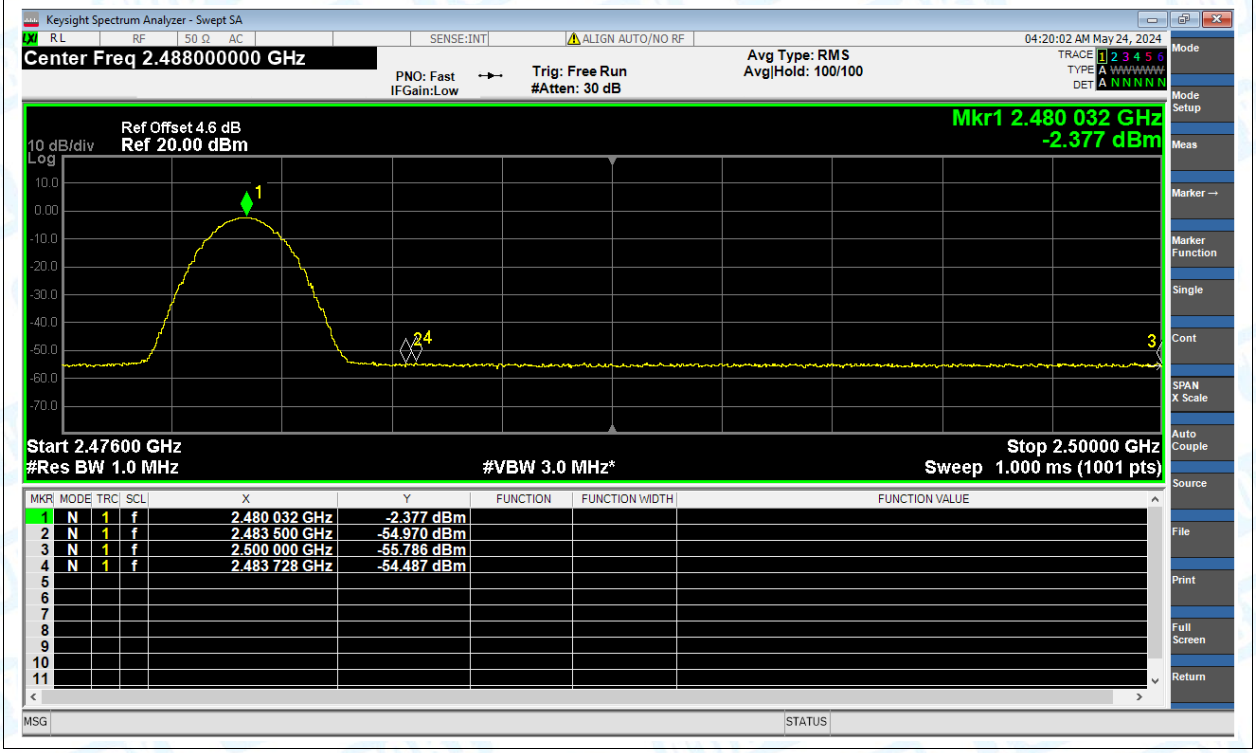
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



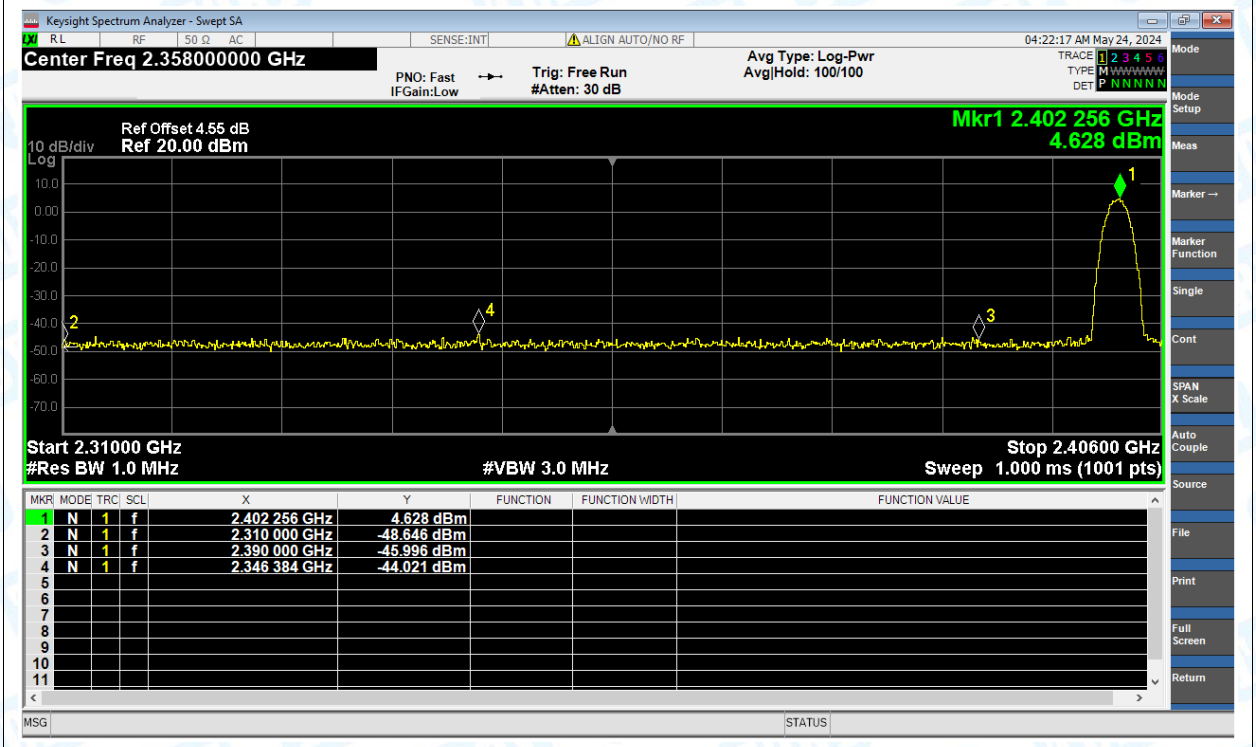
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



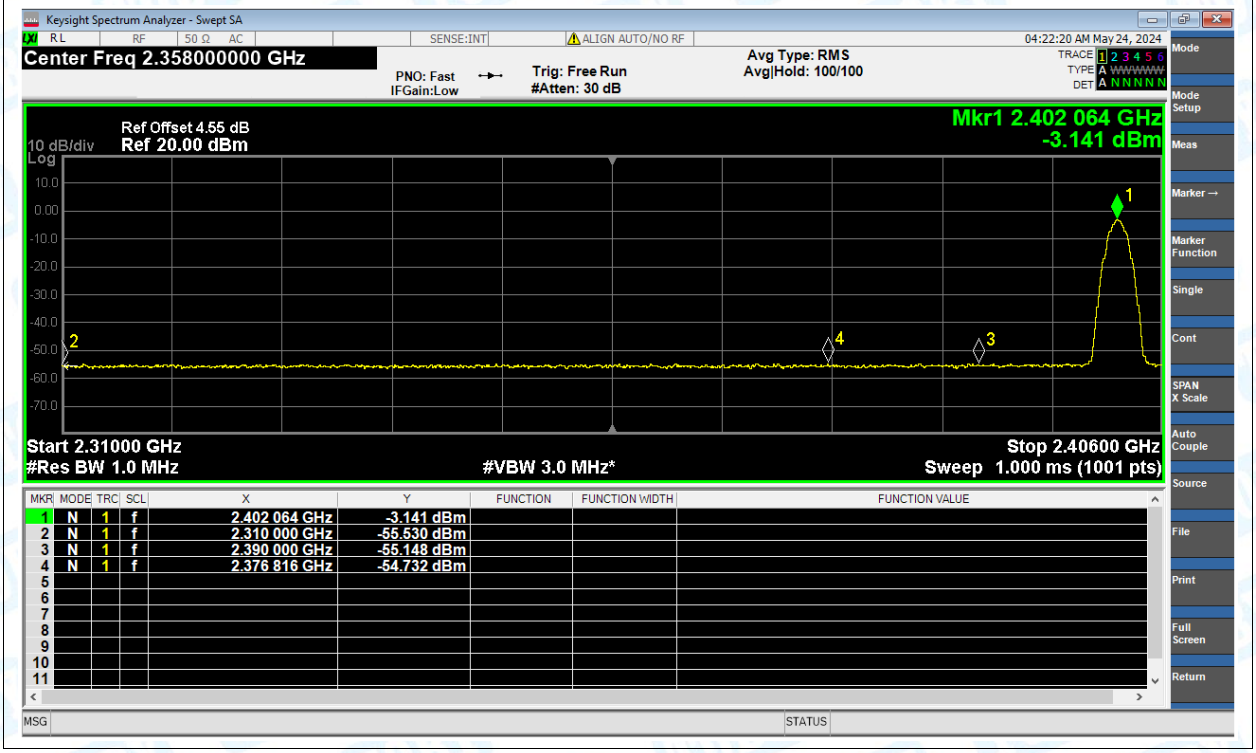
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



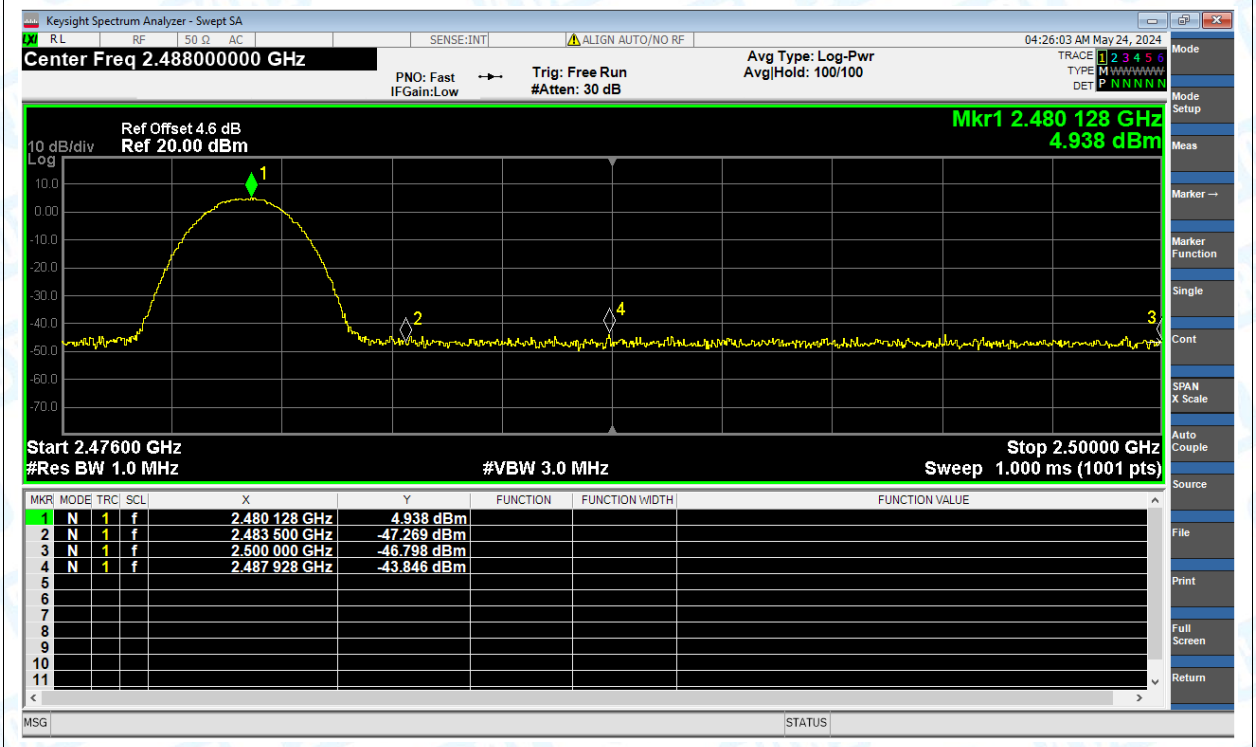
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



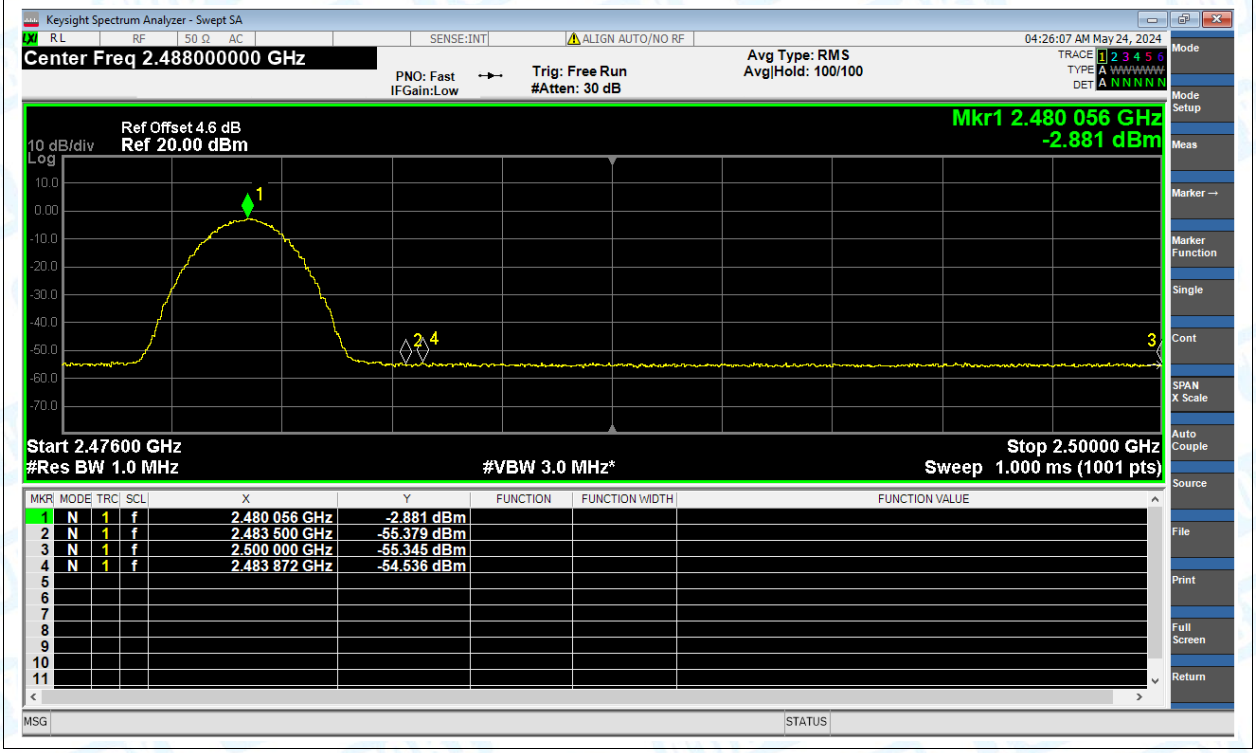
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



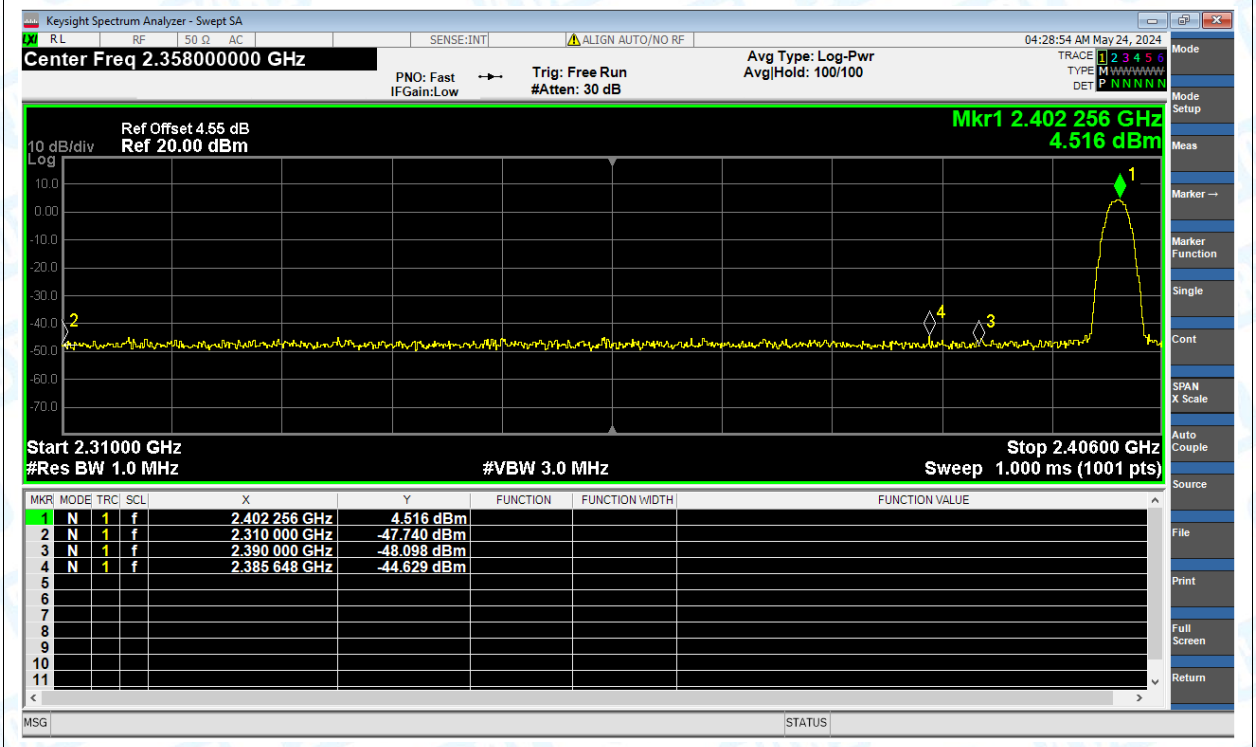
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



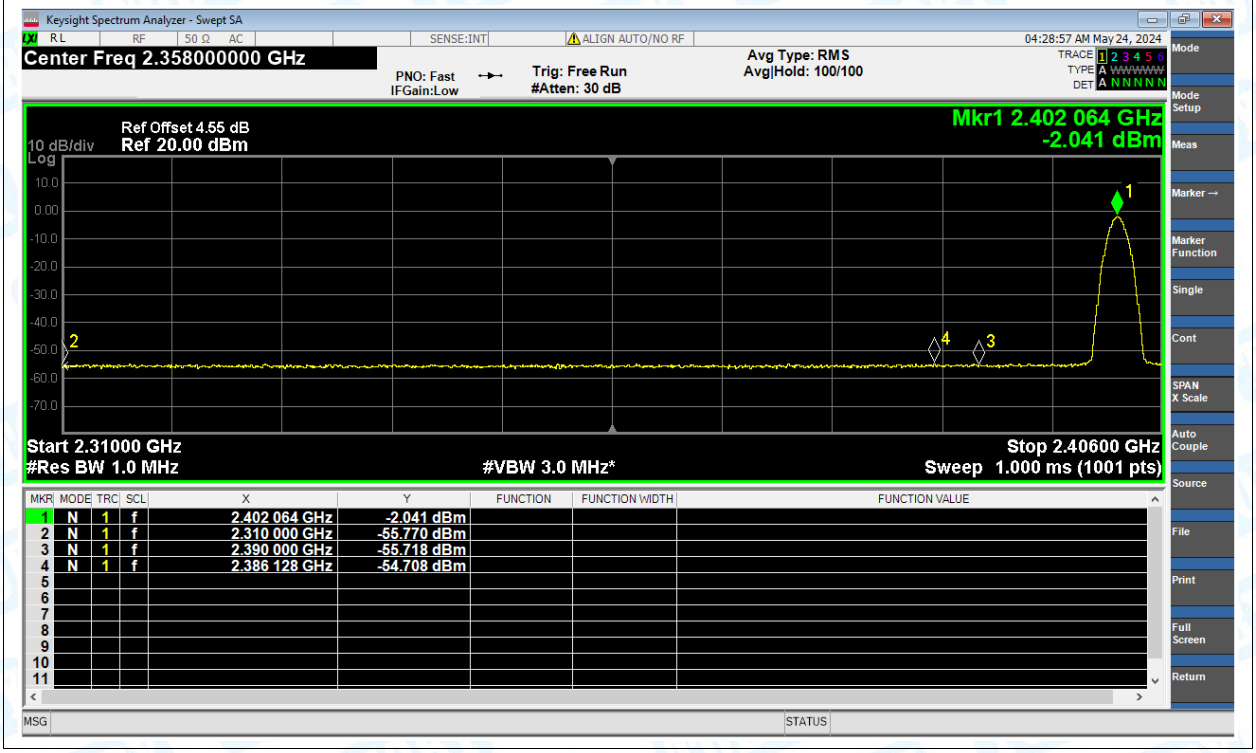
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



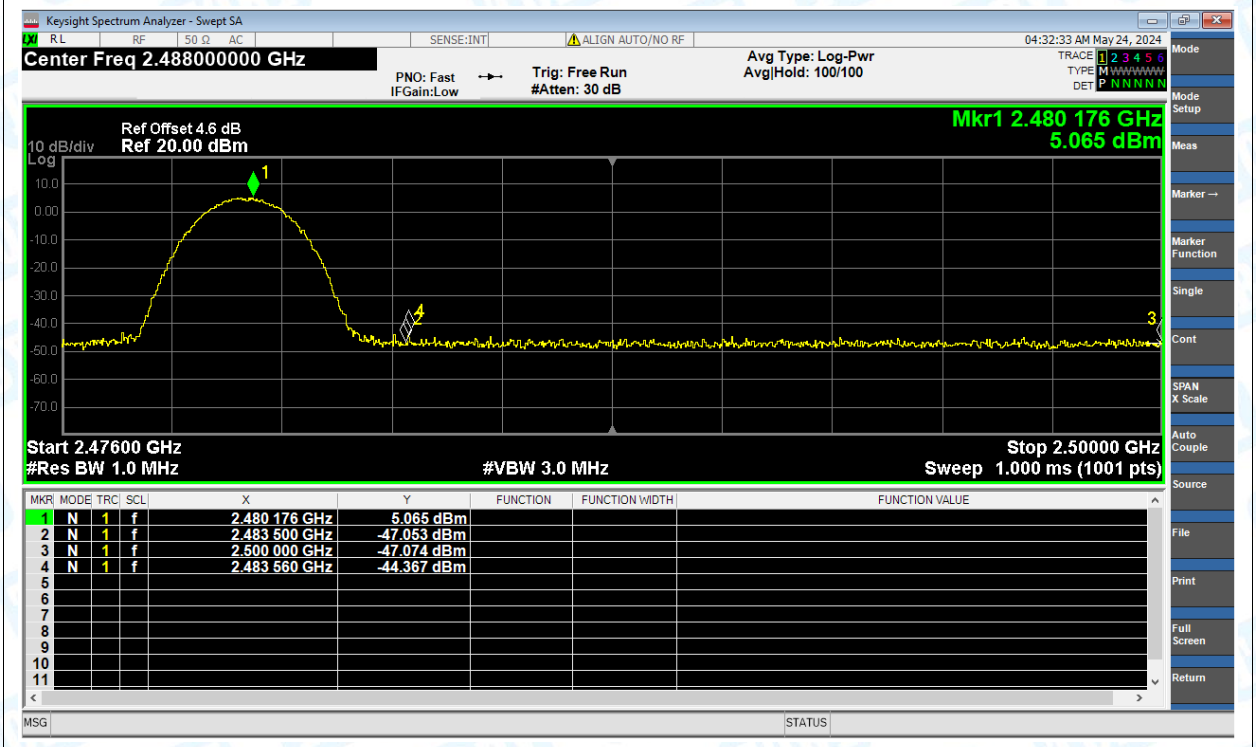
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



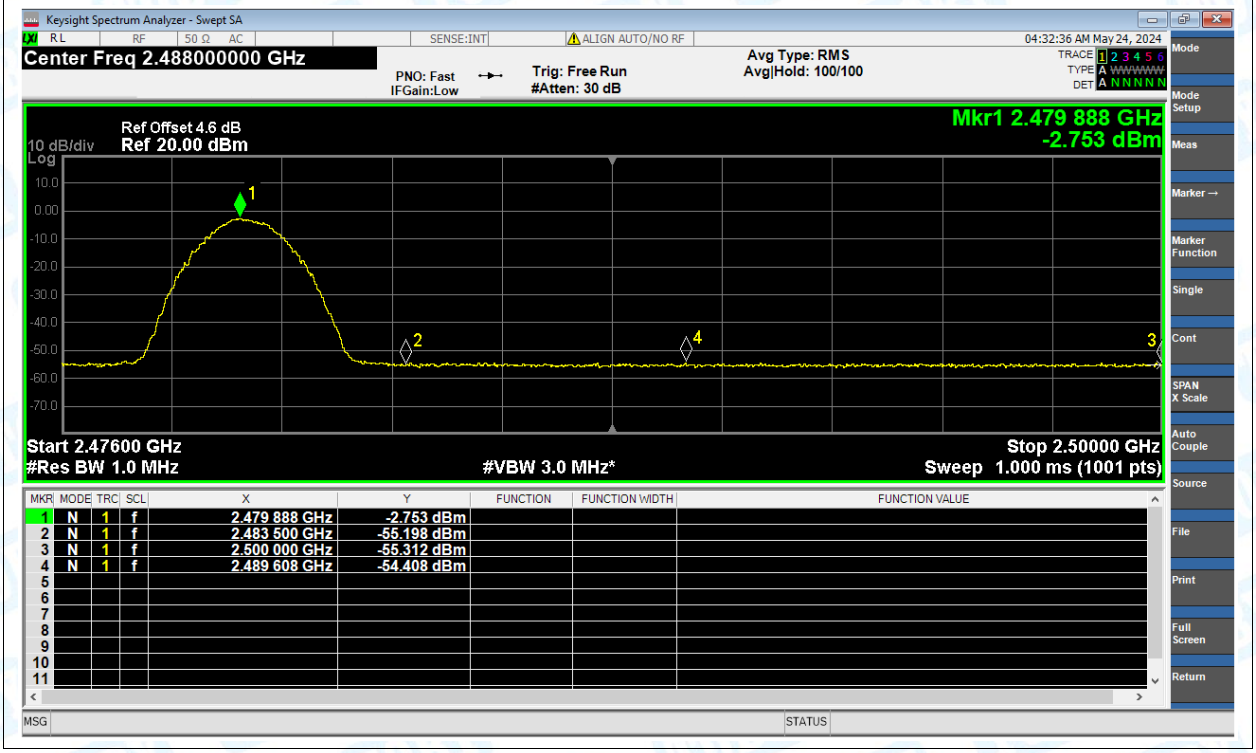
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

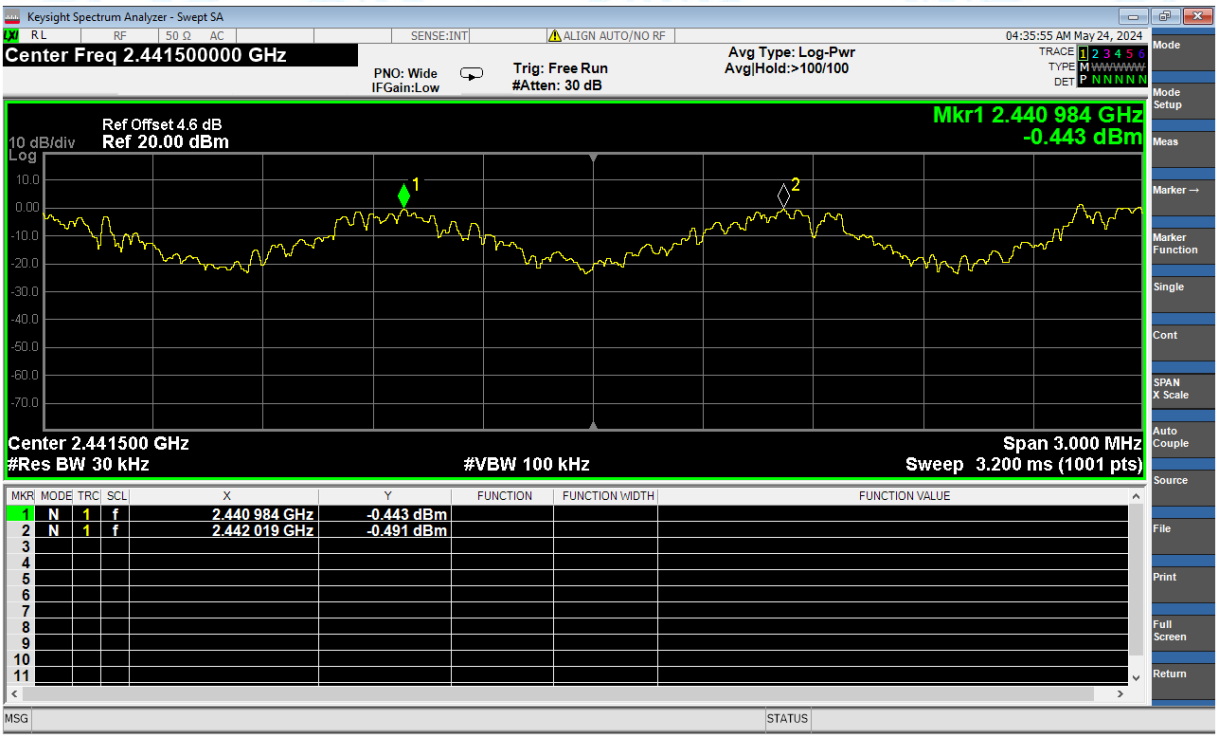


9. Carrier Frequencies Separation

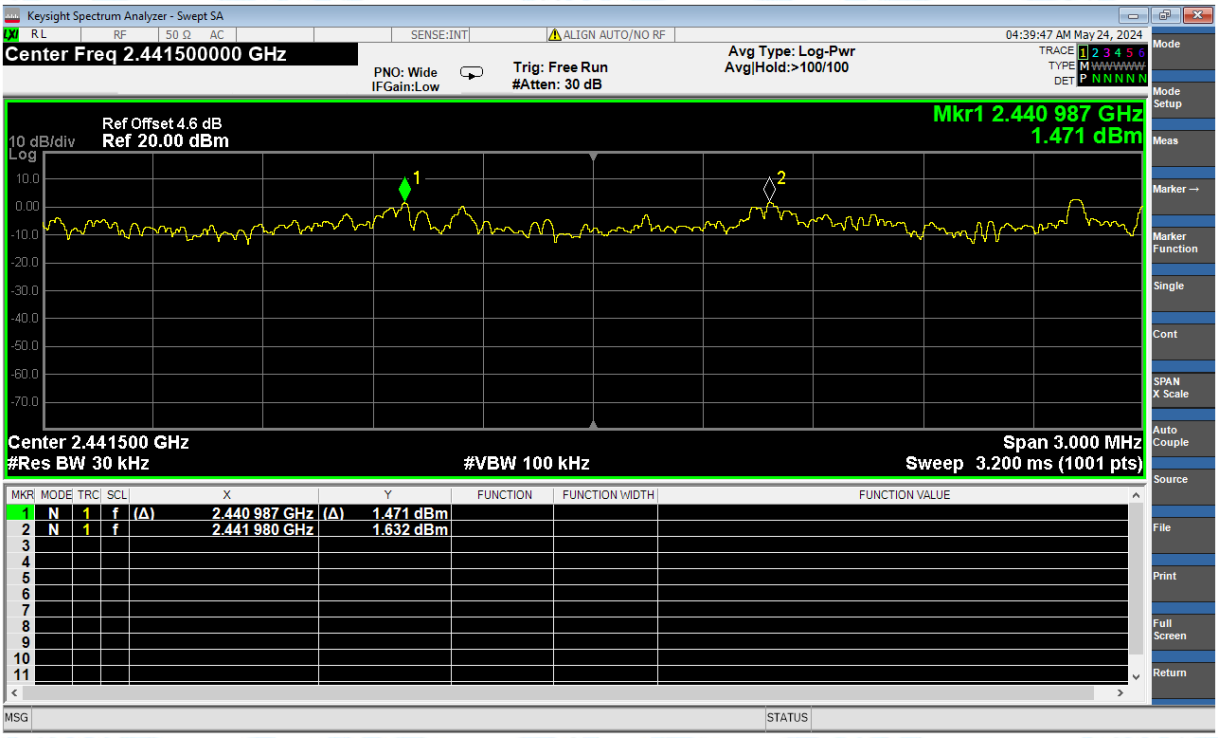
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.984	2442.019	1.035	0.62	Pass
NVNT	2-DH1	Ant1	2440.987	2441.98	0.993	0.833	Pass
NVNT	3-DH1	Ant1	2440.999	2441.974	0.975	0.807	Pass

Test Graphs

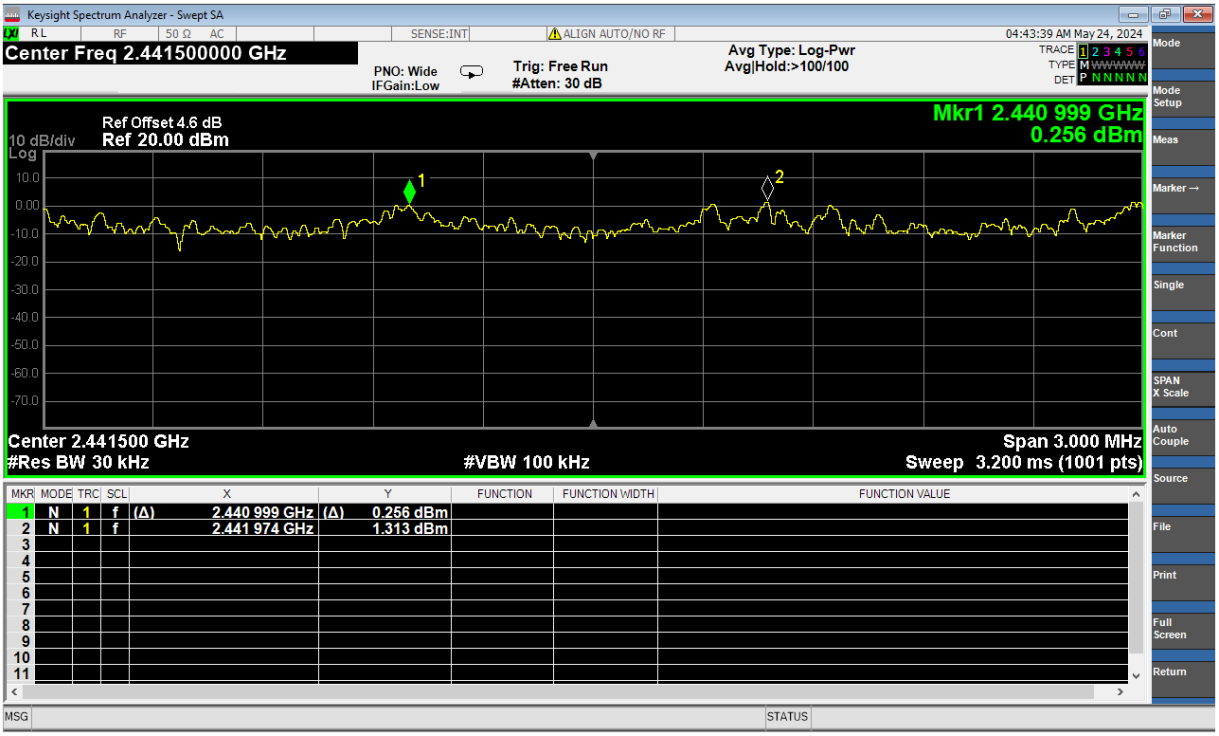
CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



CFS NVNT 3-DH1 2441MHz Ant1

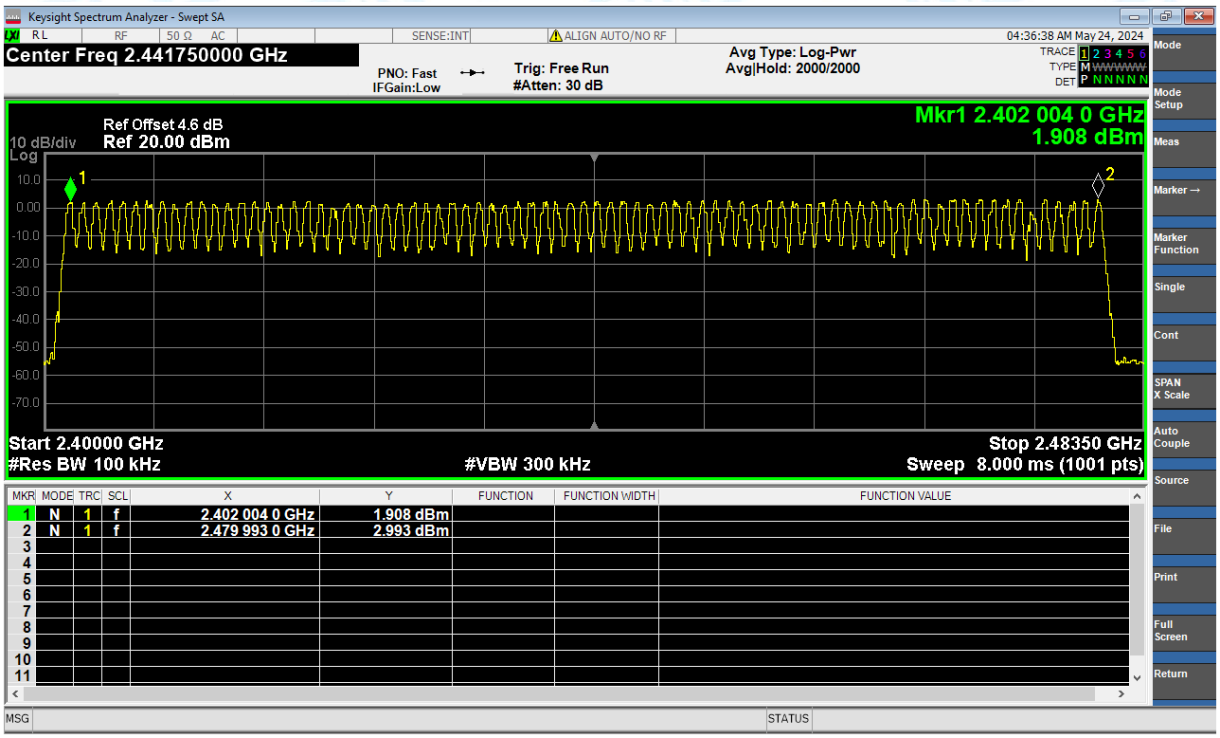


10. Number of Hopping Channel

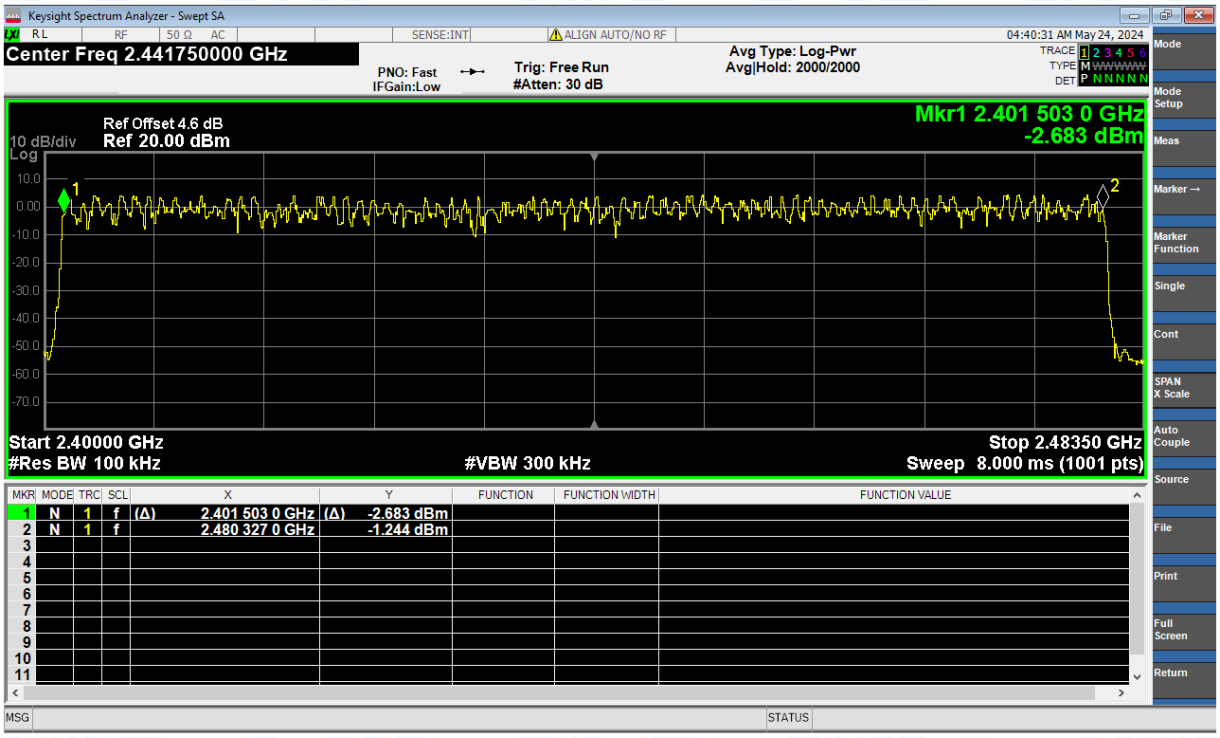
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

Test Graphs

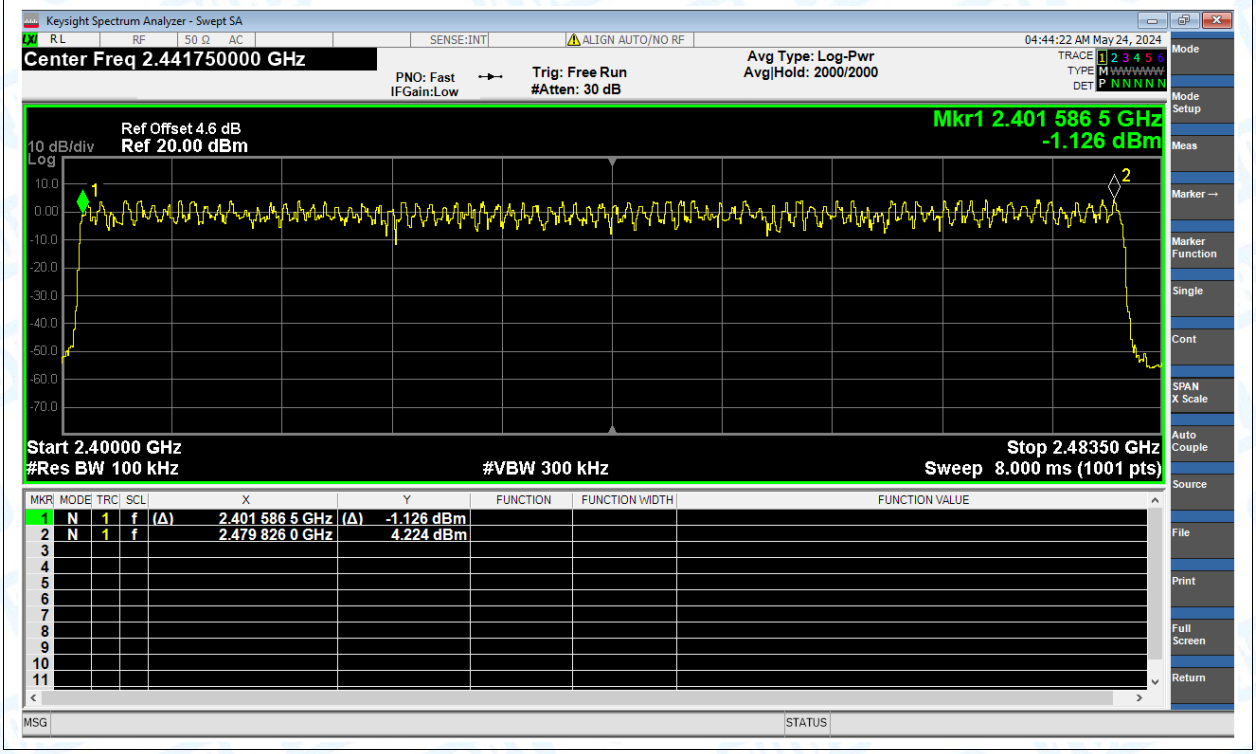
Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



Hopping No. NVNT 3-DH1 2441MHz Ant1

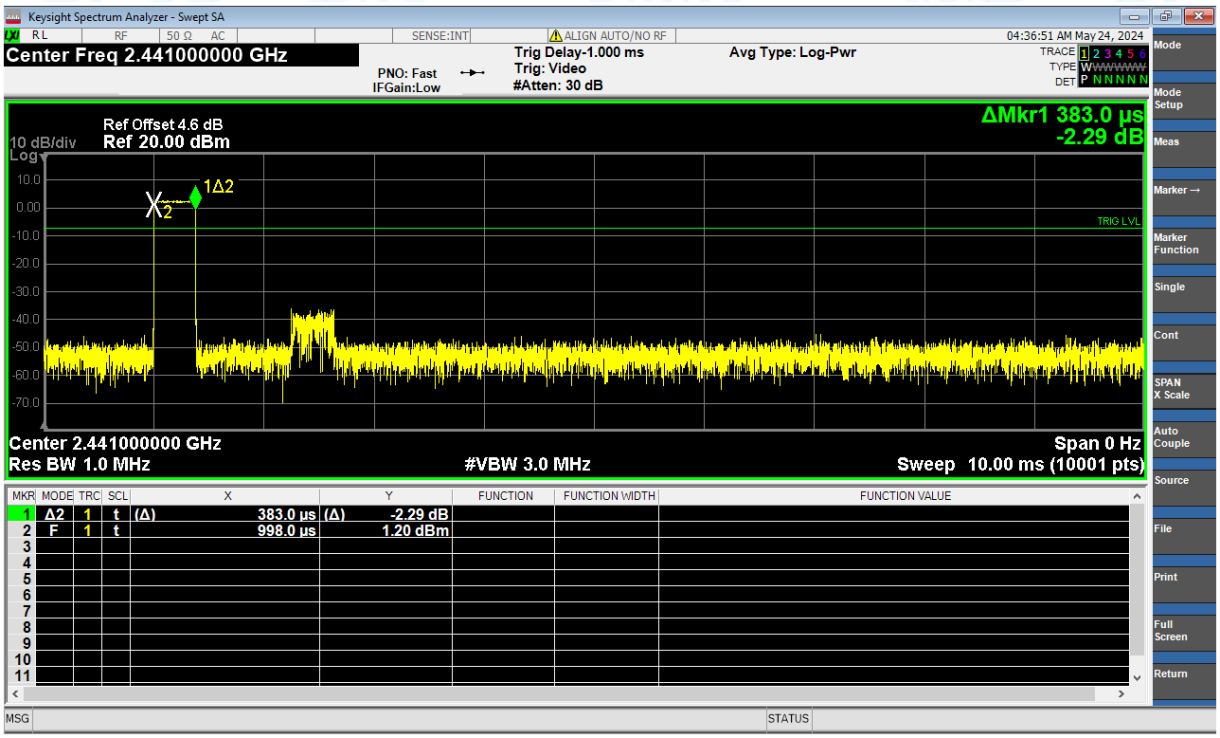


11. Dwell Time

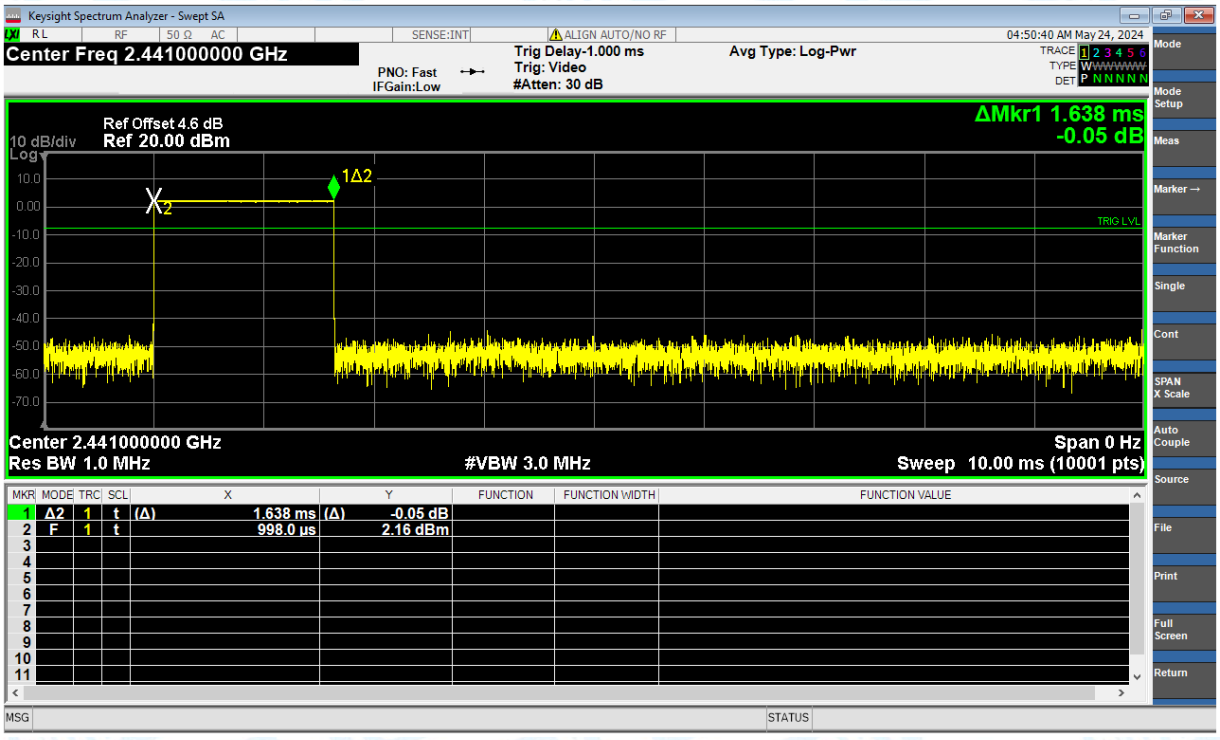
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.638	262.08	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.891	308.373	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.391	125.12	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.894	308.693	31600	400	Pass

Test Graphs

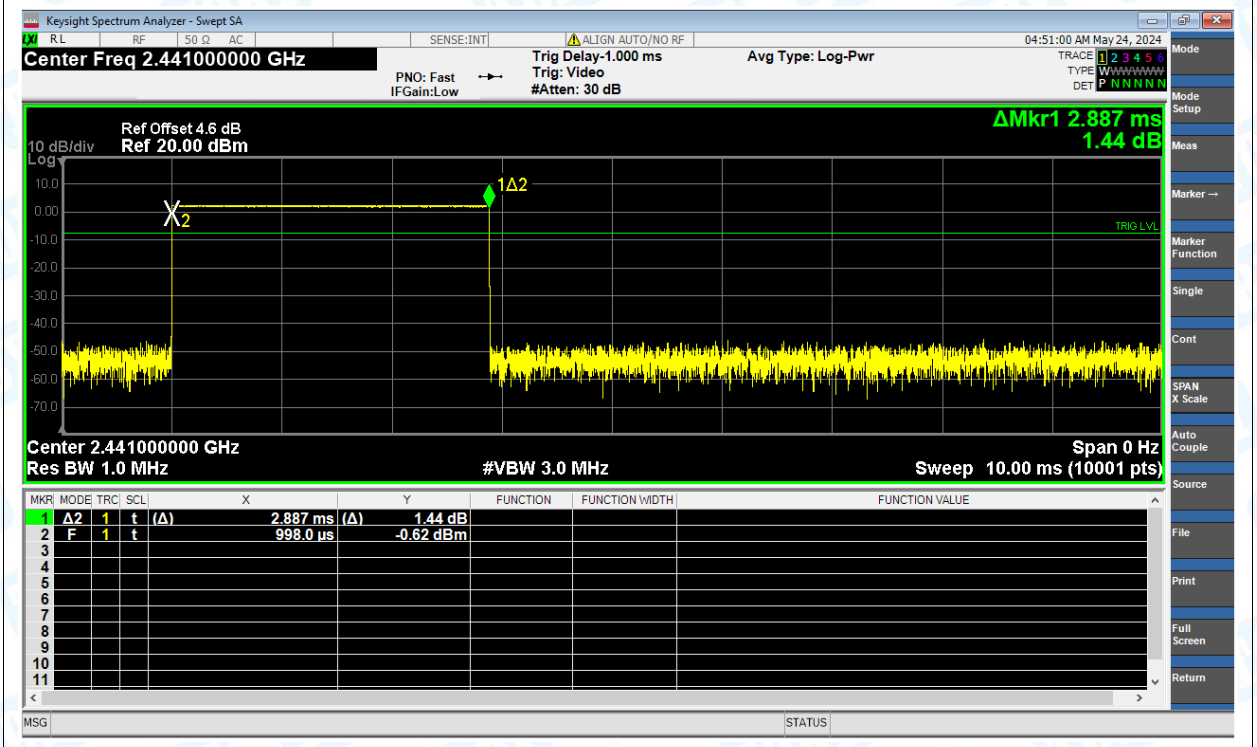
Dwell NVNT 1-DH1 2441MHz Ant1



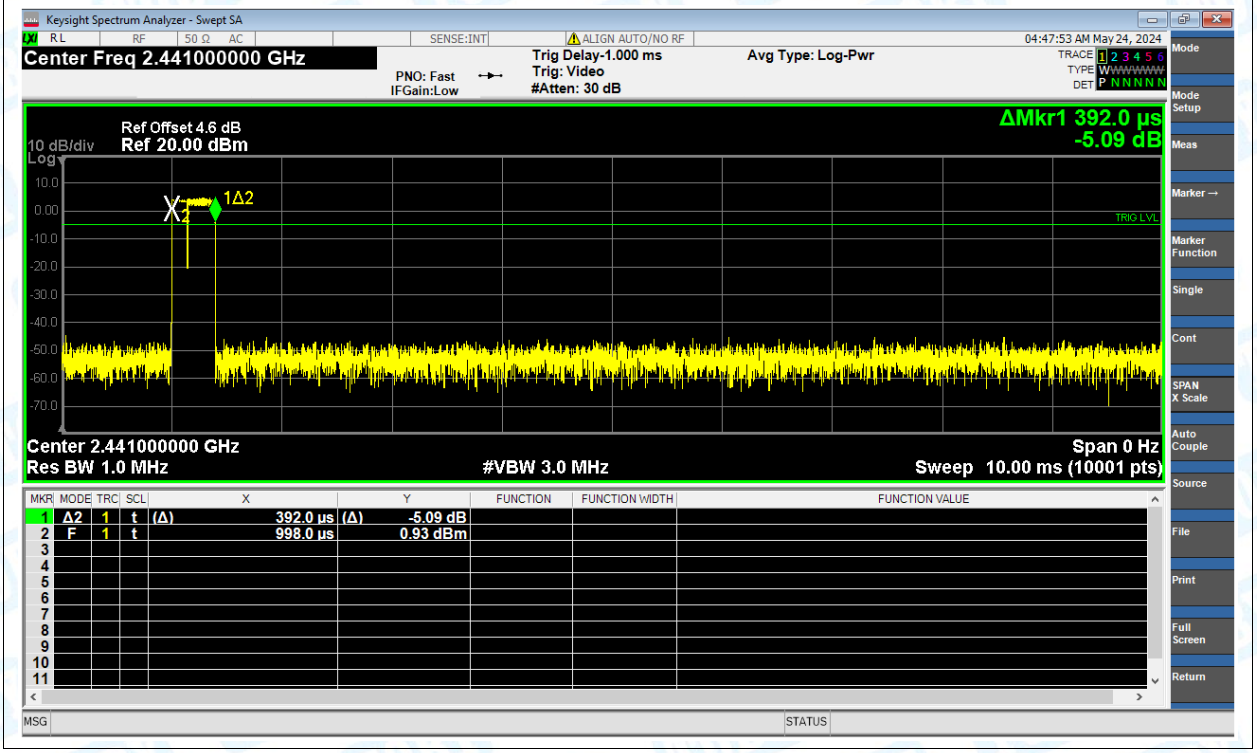
Dwell NVNT 1-DH3 2441MHz Ant1



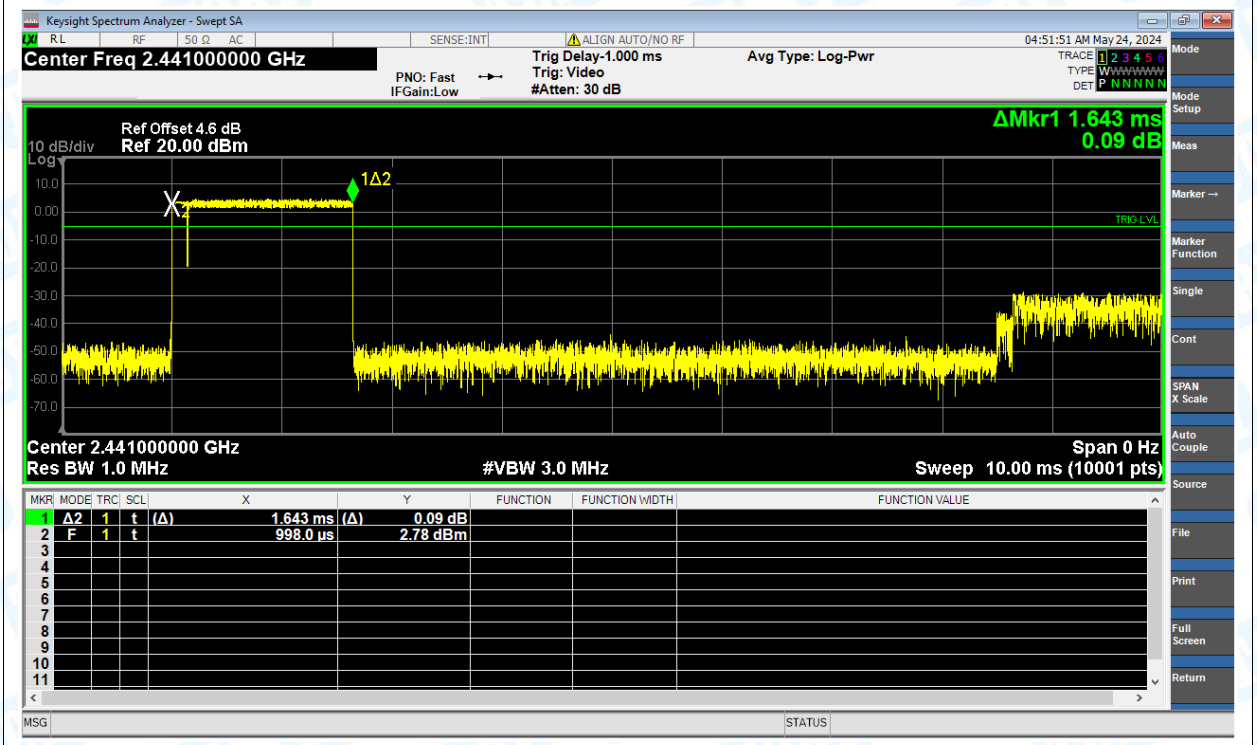
Dwell NVNT 1-DH5 2441MHz Ant1



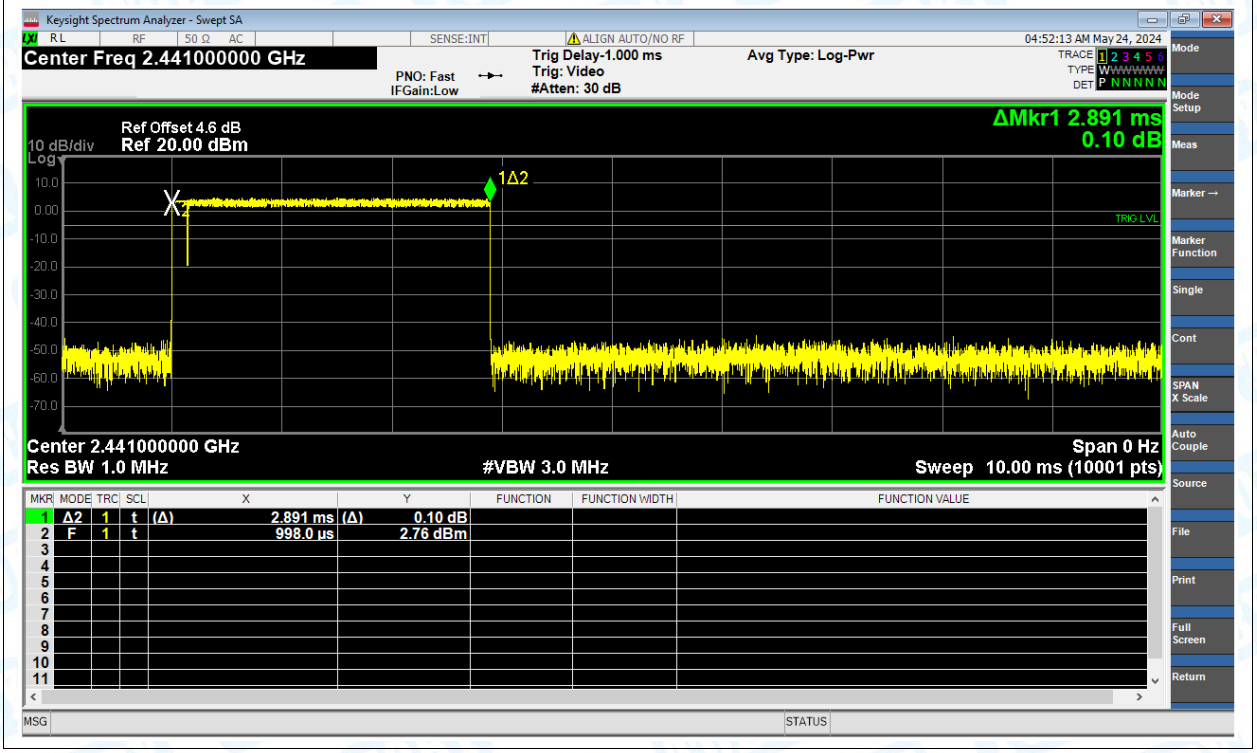
Dwell NVNT 2-DH1 2441MHz Ant1



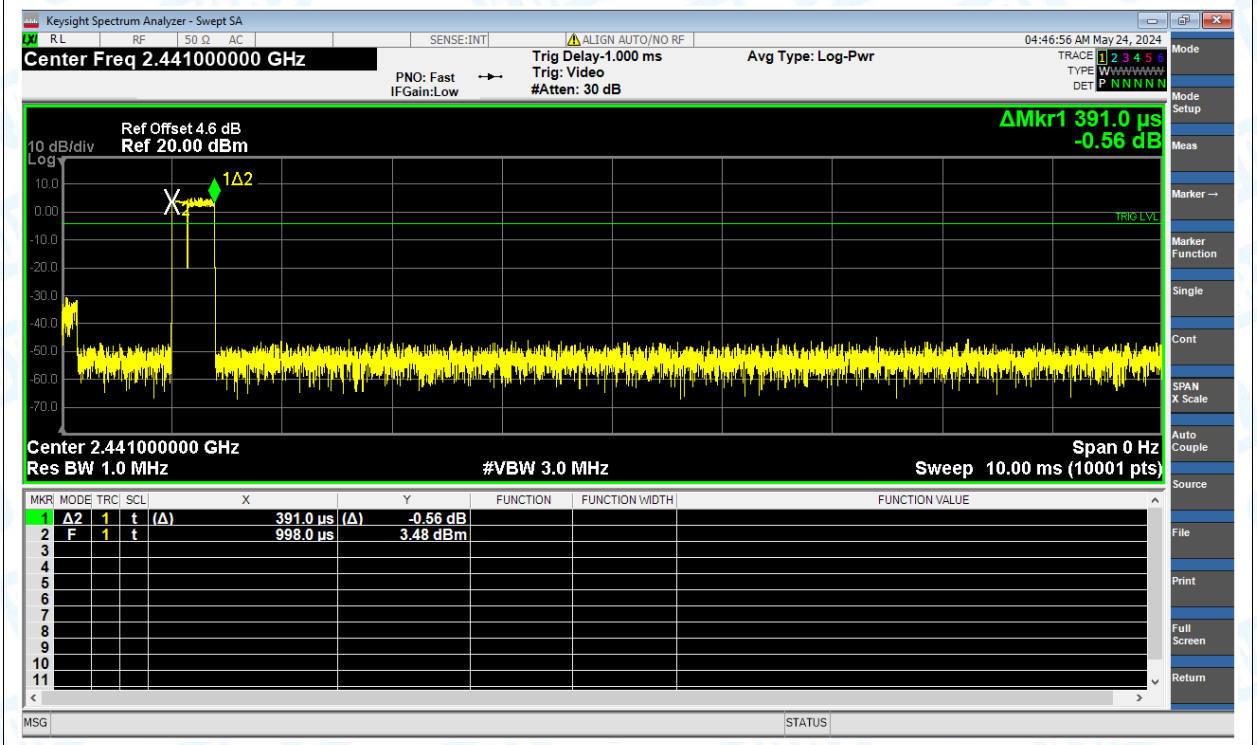
Dwell NVNT 2-DH3 2441MHz Ant1



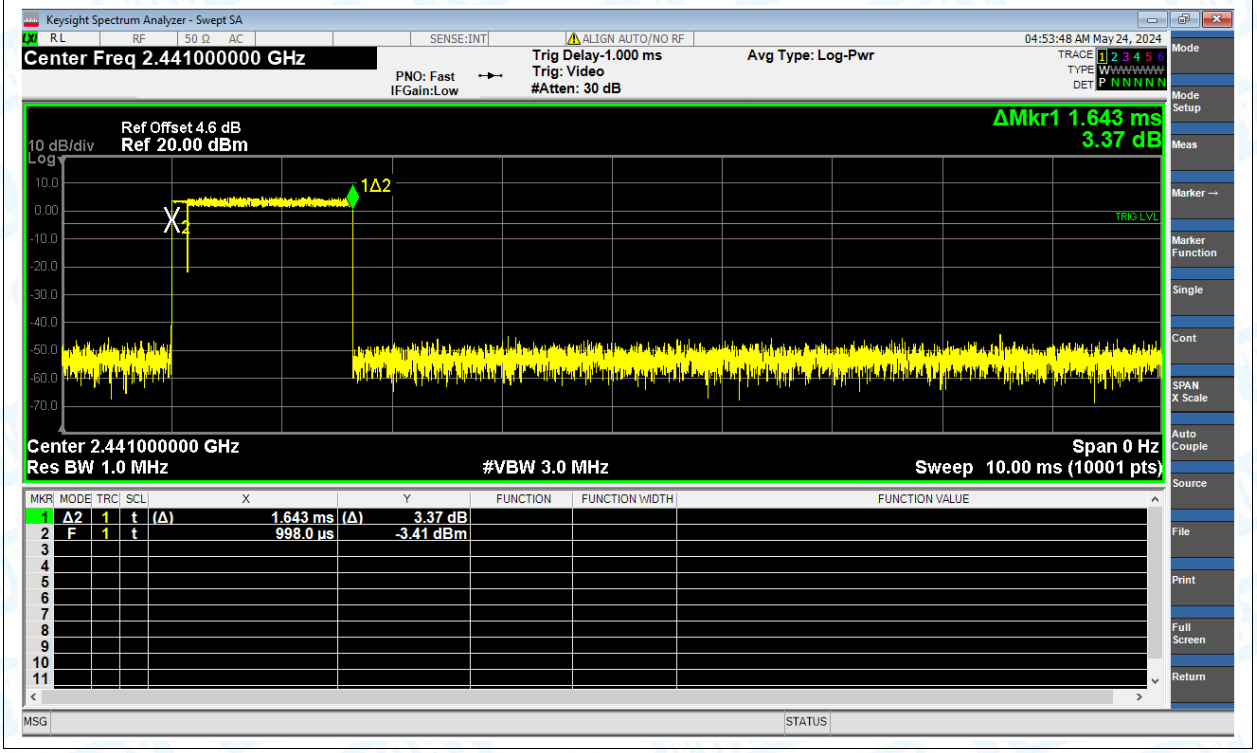
Dwell NVNT 2-DH5 2441MHz Ant1



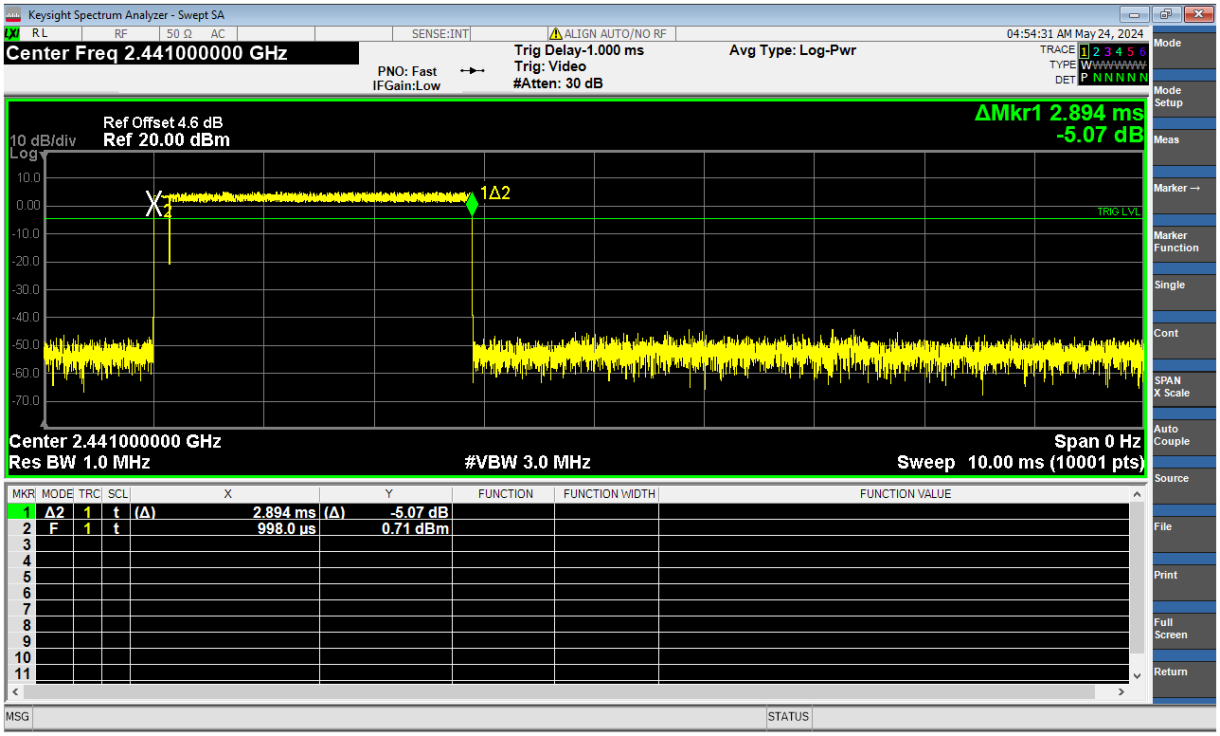
Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1



Dwell NVNT 3-DH5 2441MHz Ant1



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