

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Tablet PC
Test Model:	ZB32
Sample ID:	HC-C-202405-0231-03-02
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.8V
Test Engineer:	ZKN Zhou
Note: For a more detailed features description, please refer to the report TBR-C-202405-0231-141 The report only show the worst case data.	

Contents

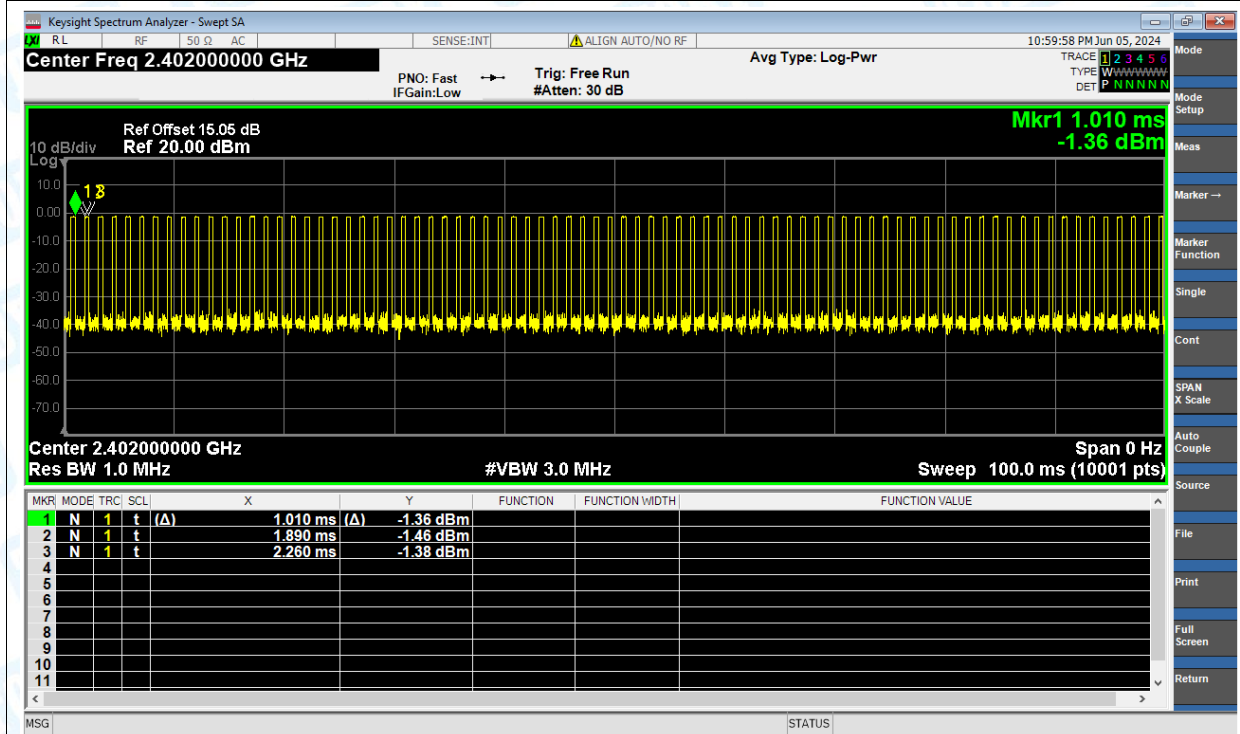
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1. Duty Cycle

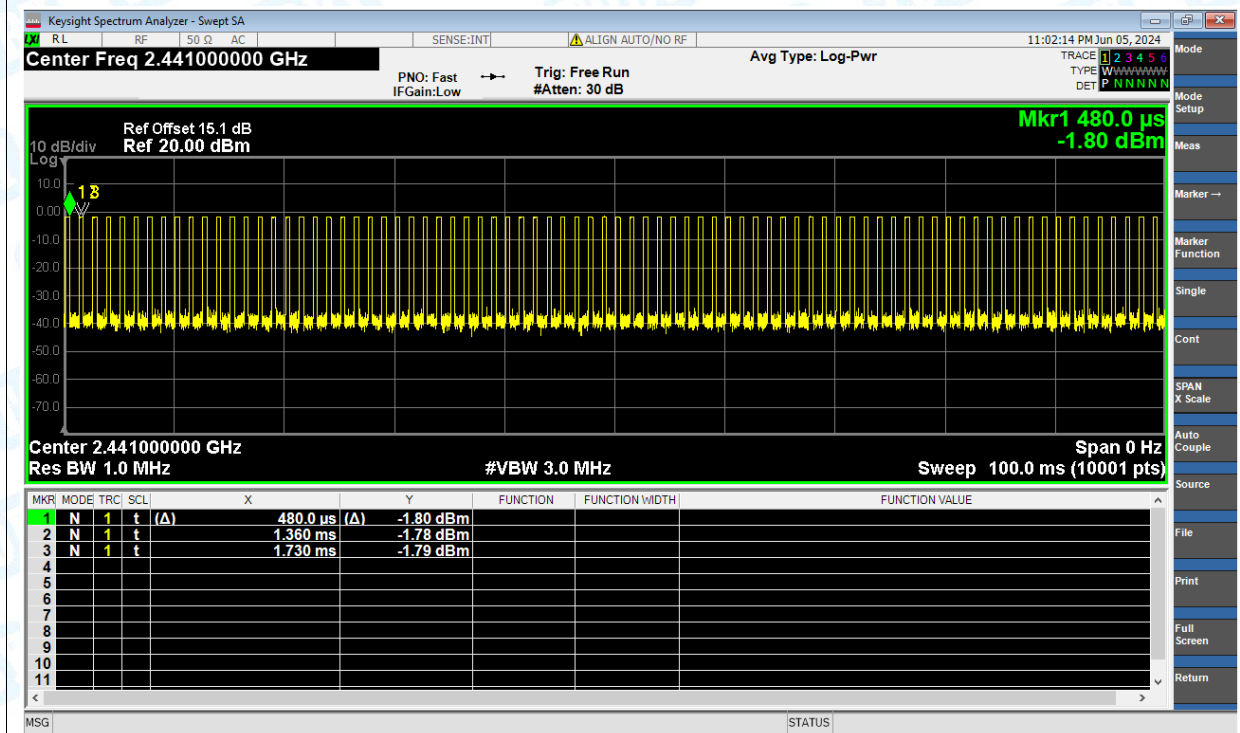
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	29.6	5.29	2.7
NVNT	1-DH1	2441	Ant1	29.6	5.29	2.7
NVNT	1-DH1	2480	Ant1	29.6	5.29	2.7
NVNT	2-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2480	Ant1	30.4	5.17	2.63

Test Graphs

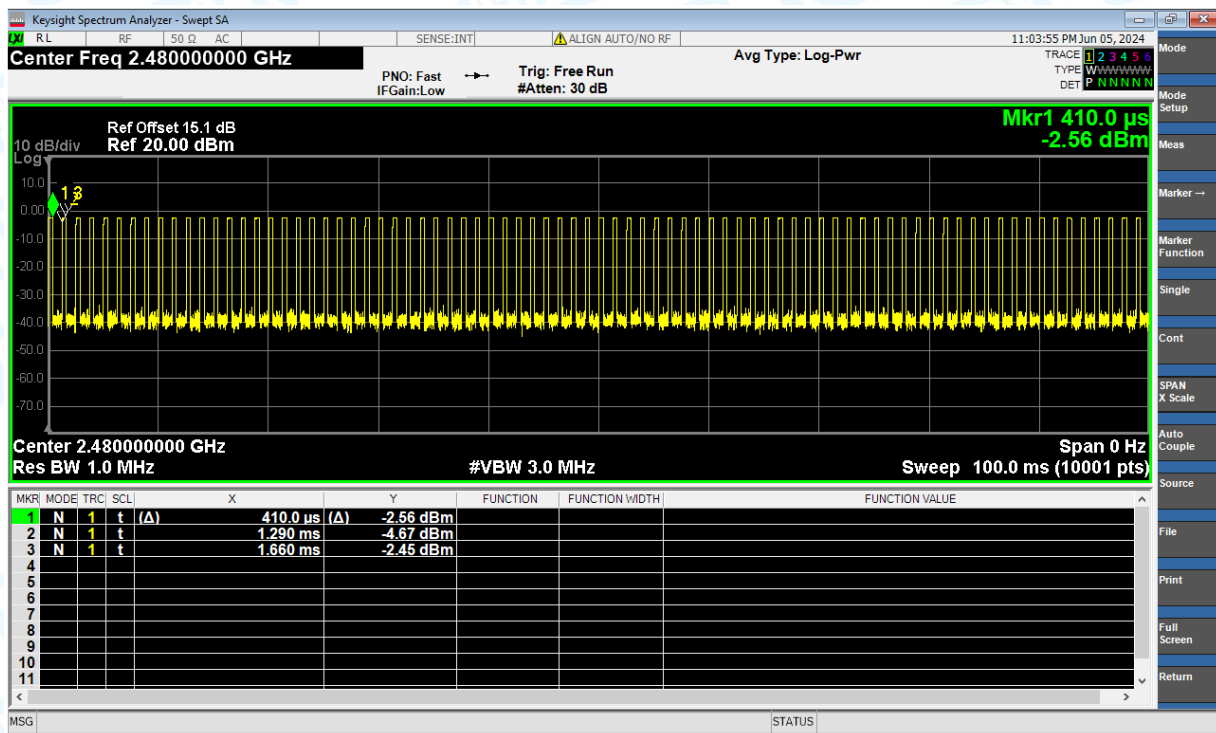
Duty Cycle NVNT 1-DH1 2402MHz Ant1



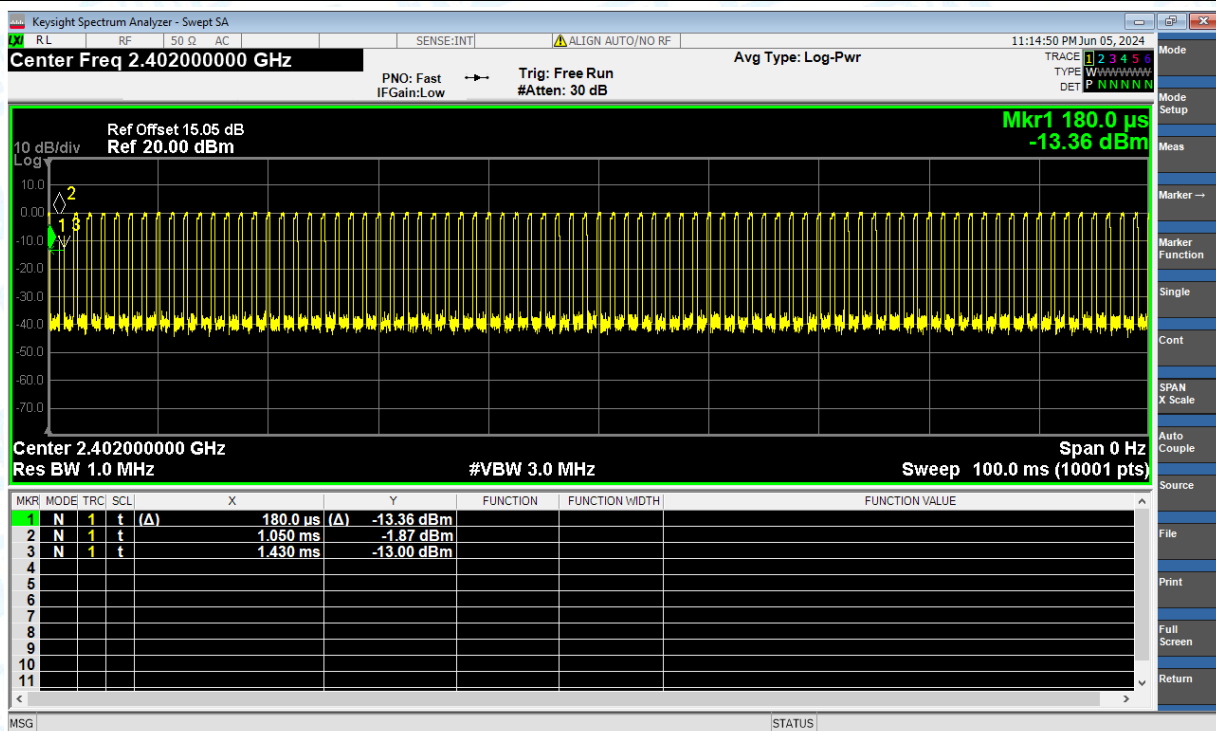
Duty Cycle NVNT 1-DH1 2441MHz Ant1



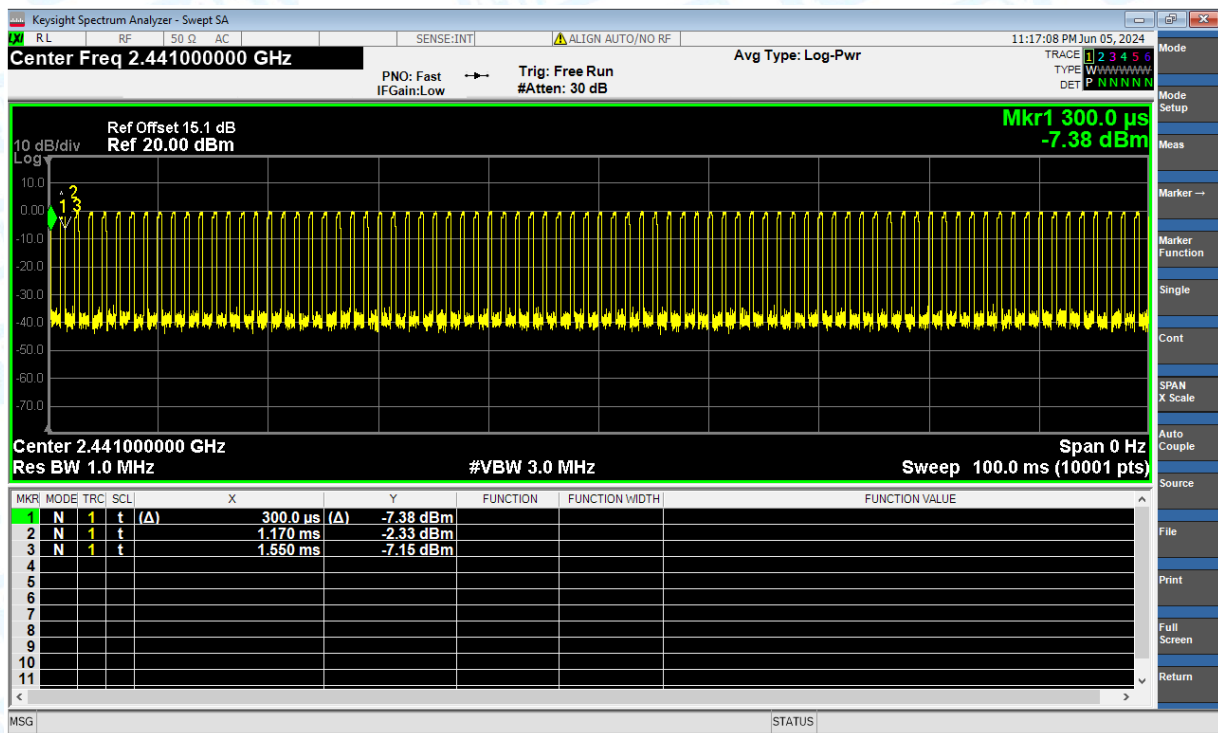
Duty Cycle NVNT 1-DH1 2480MHz Ant1



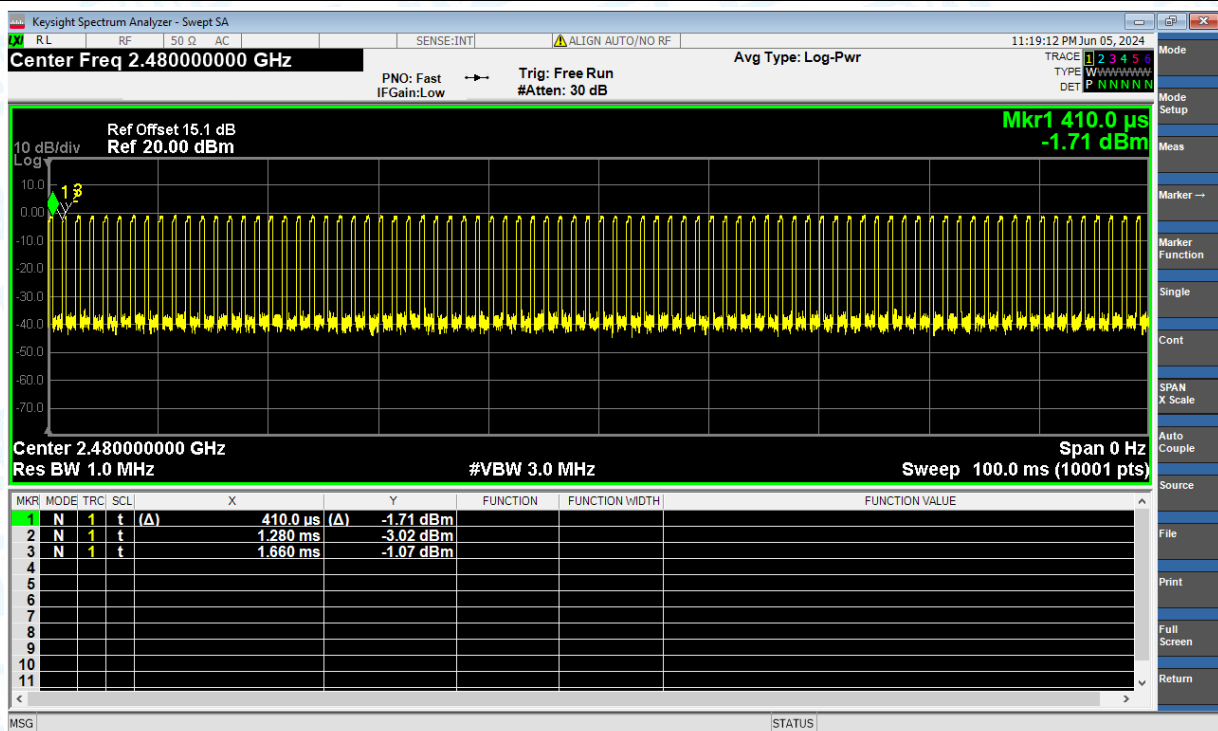
Duty Cycle NVNT 2-DH1 2402MHz Ant1



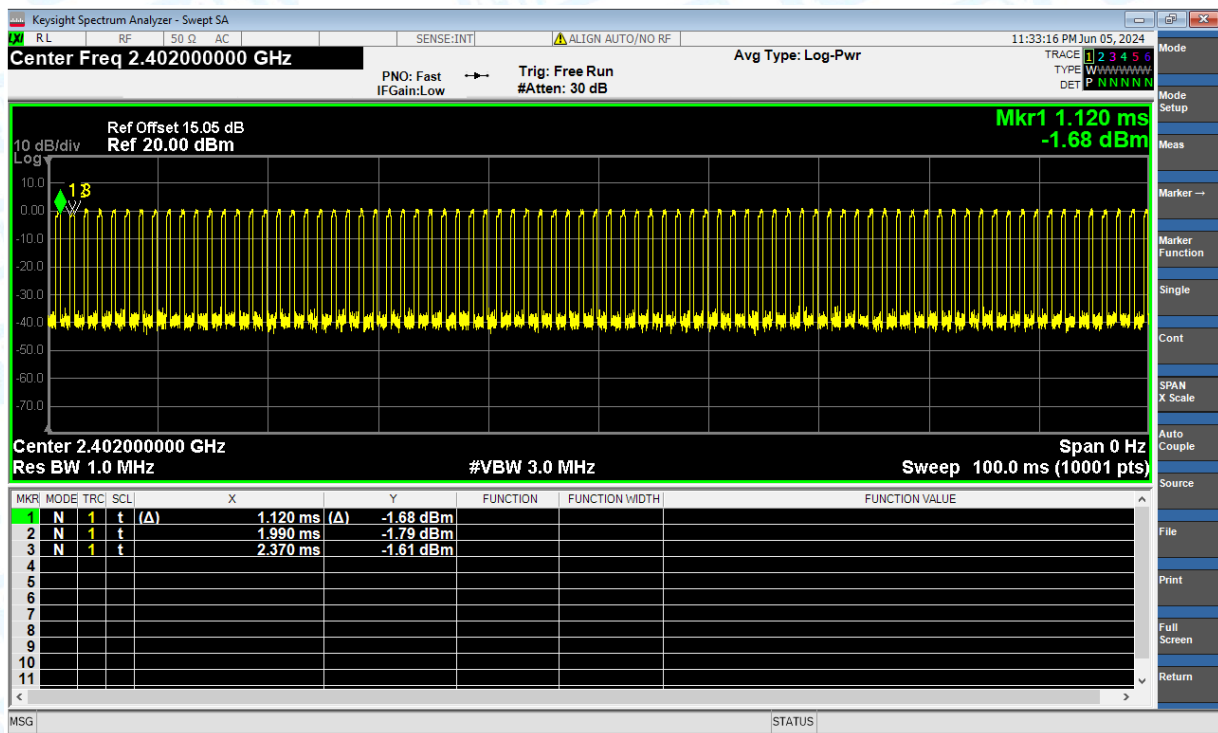
Duty Cycle NVNT 2-DH1 2441MHz Ant1



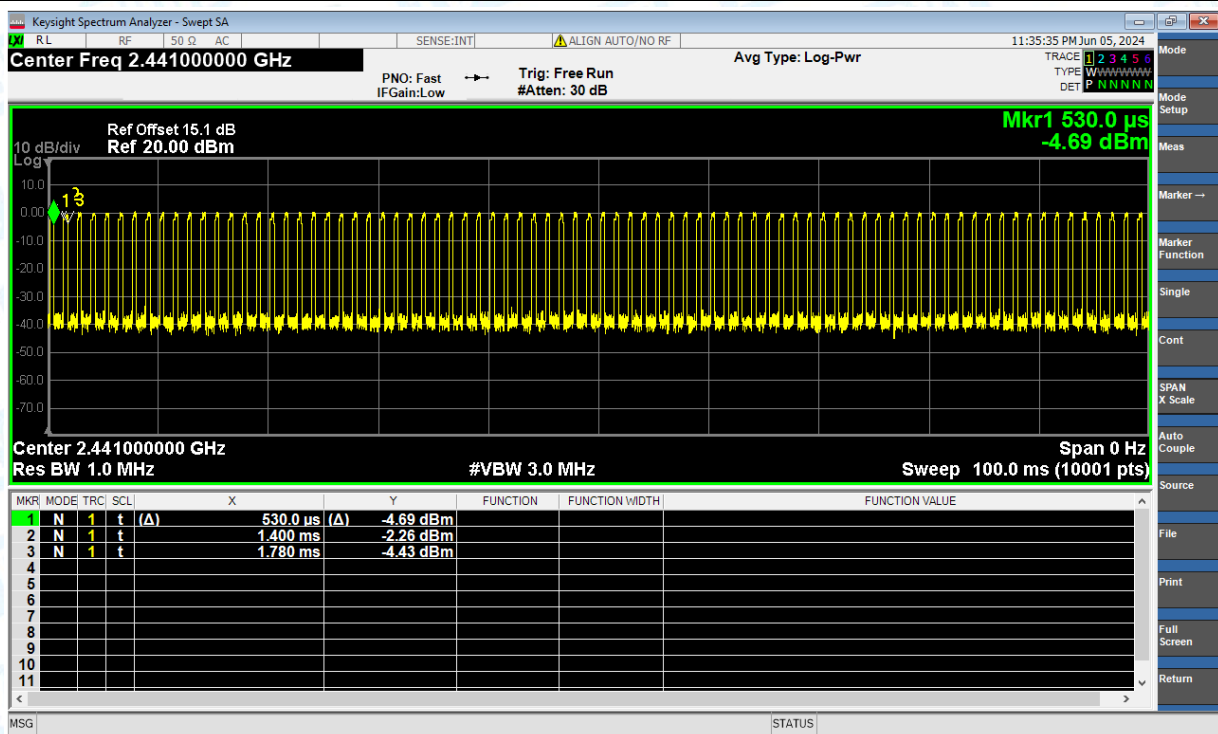
Duty Cycle NVNT 2-DH1 2480MHz Ant1

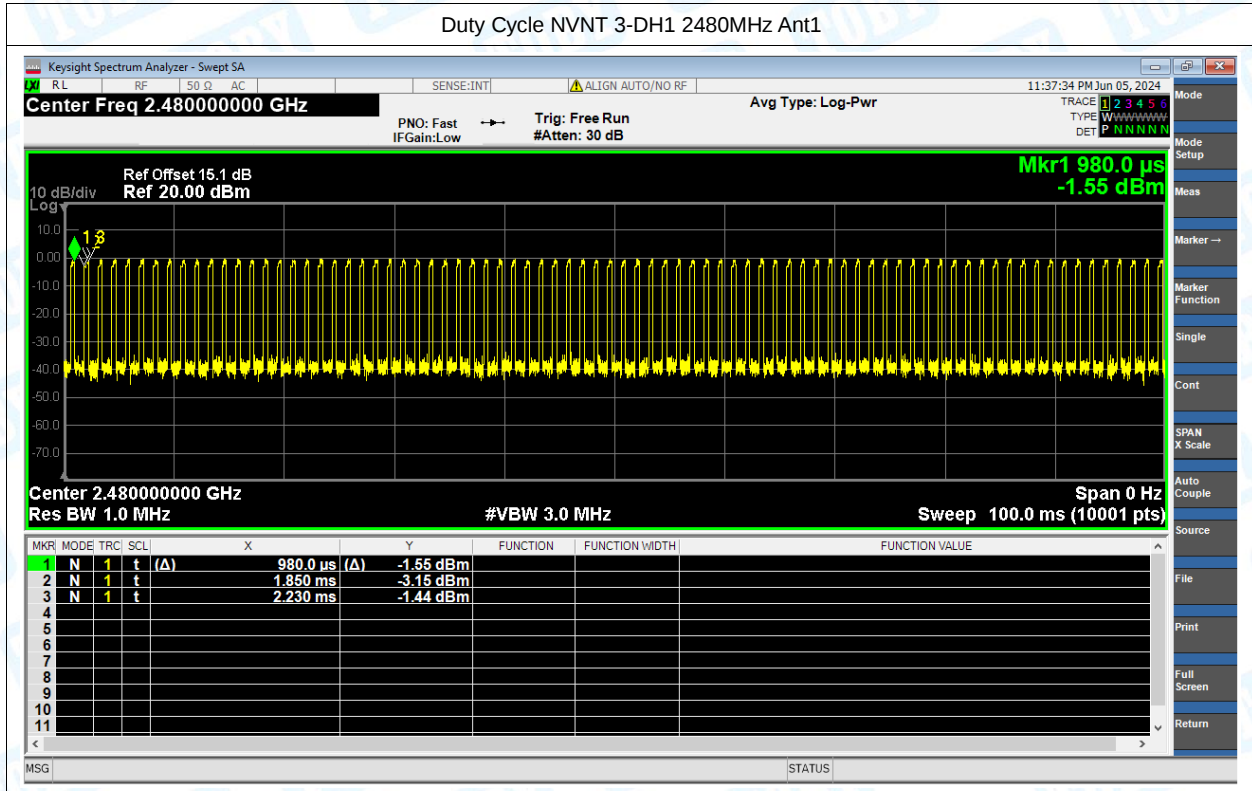


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



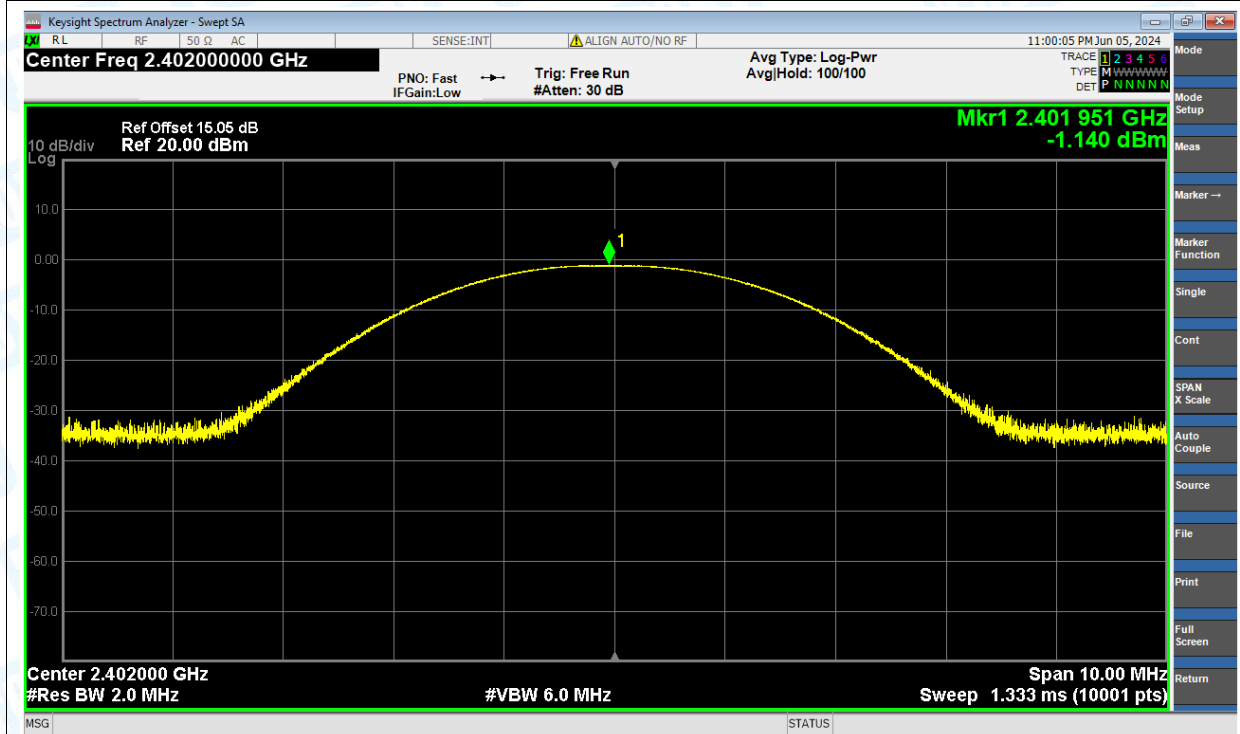


2.Maximum Conducted Output Power

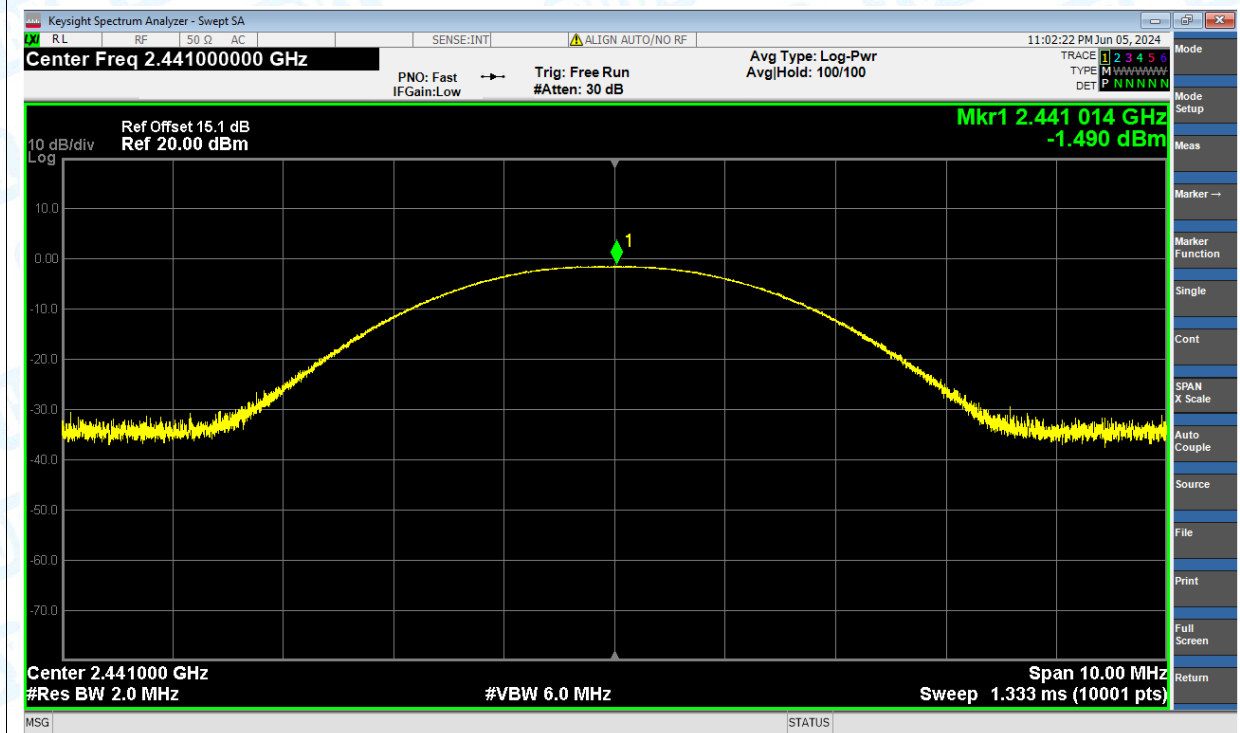
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	-1.14	21	Pass
NVNT	1-DH1	2441	Ant1	-1.49	21	Pass
NVNT	1-DH1	2480	Ant1	-2.178	21	Pass
NVNT	2-DH1	2402	Ant1	0.978	21	Pass
NVNT	2-DH1	2441	Ant1	0.485	21	Pass
NVNT	2-DH1	2480	Ant1	-0.178	21	Pass
NVNT	3-DH1	2402	Ant1	1.263	21	Pass
NVNT	3-DH1	2441	Ant1	1.056	21	Pass
NVNT	3-DH1	2480	Ant1	0.198	21	Pass

Test Graphs

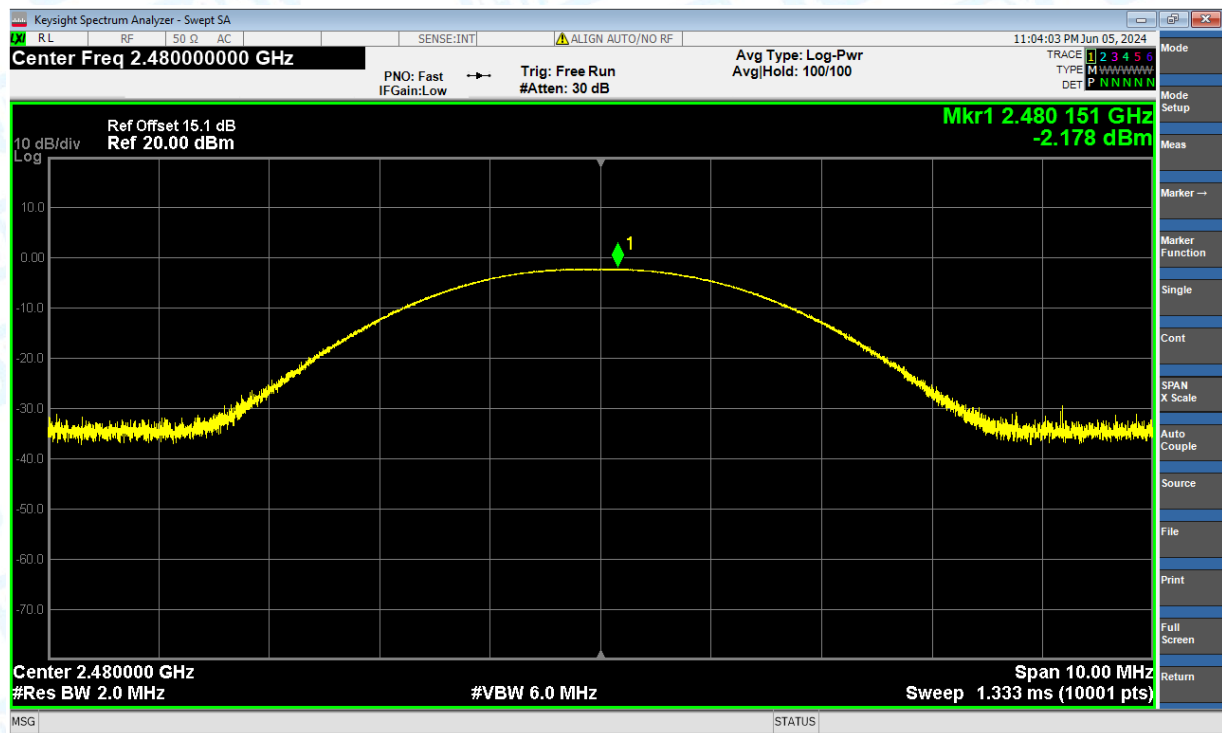
Power NVNT 1-DH1 2402MHz Ant1



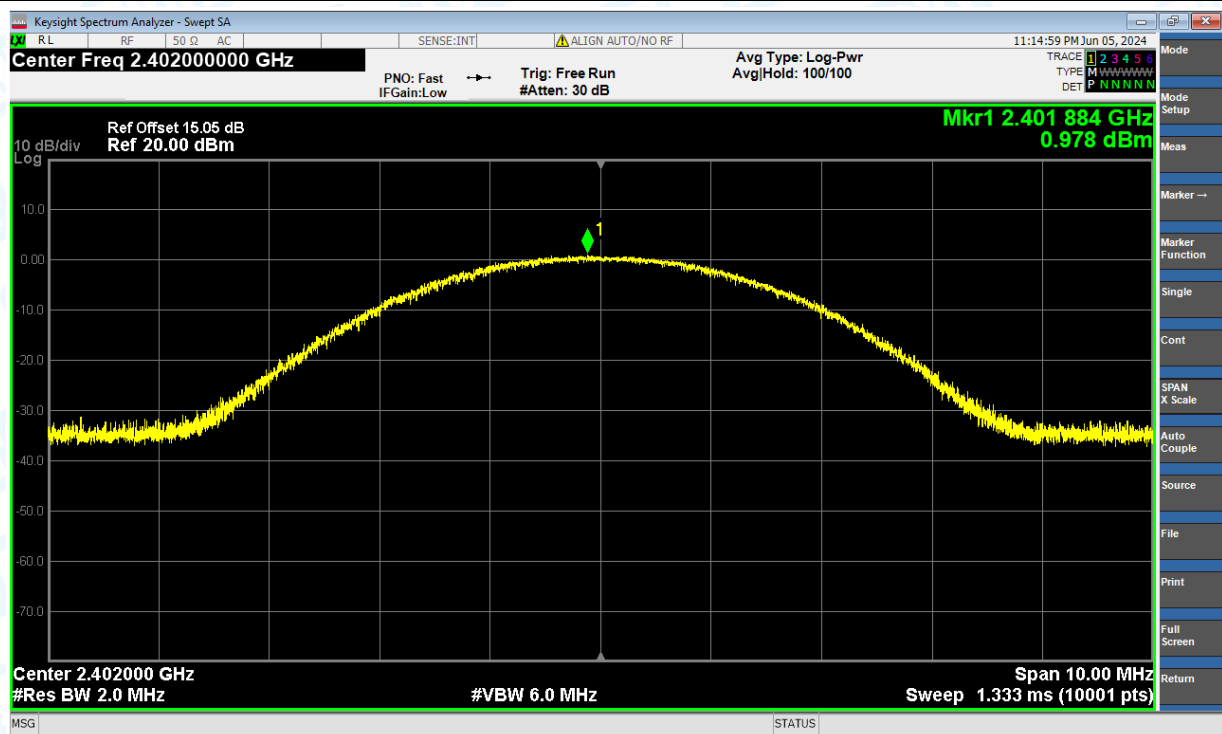
Power NVNT 1-DH1 2441MHz Ant1



Power NVNT 1-DH1 2480MHz Ant1



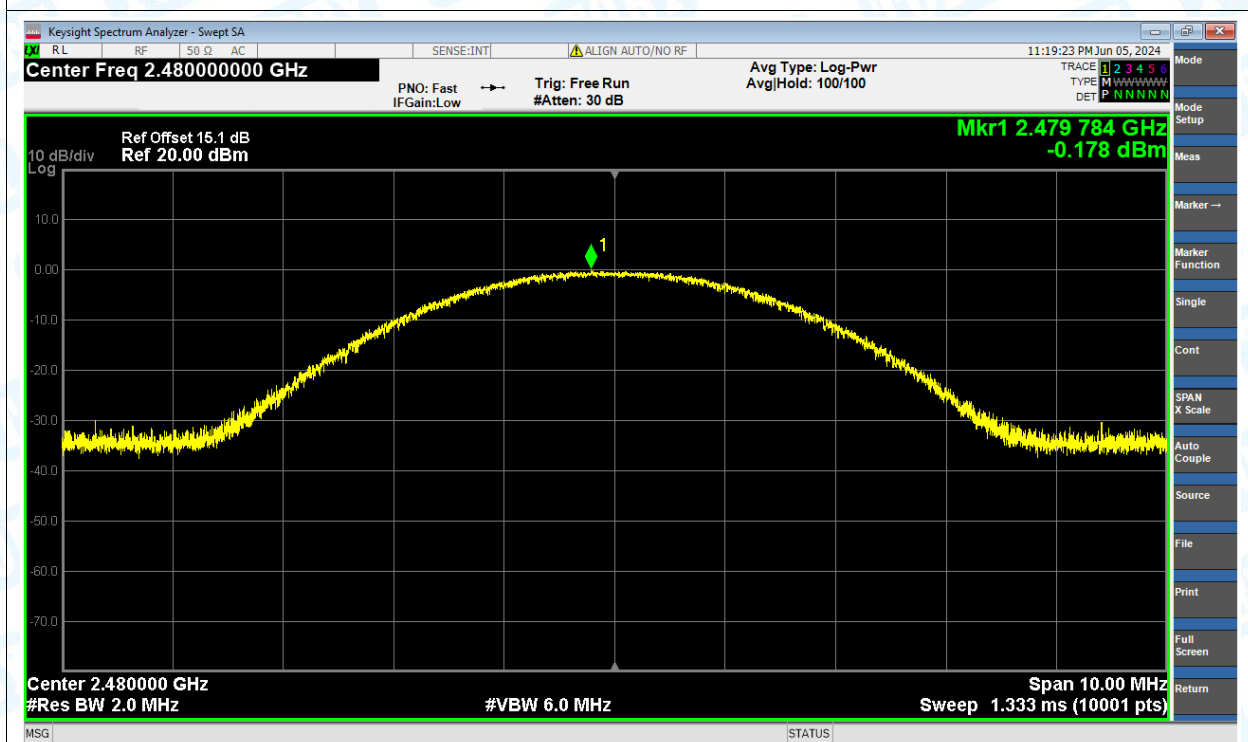
Power NVNT 2-DH1 2402MHz Ant1



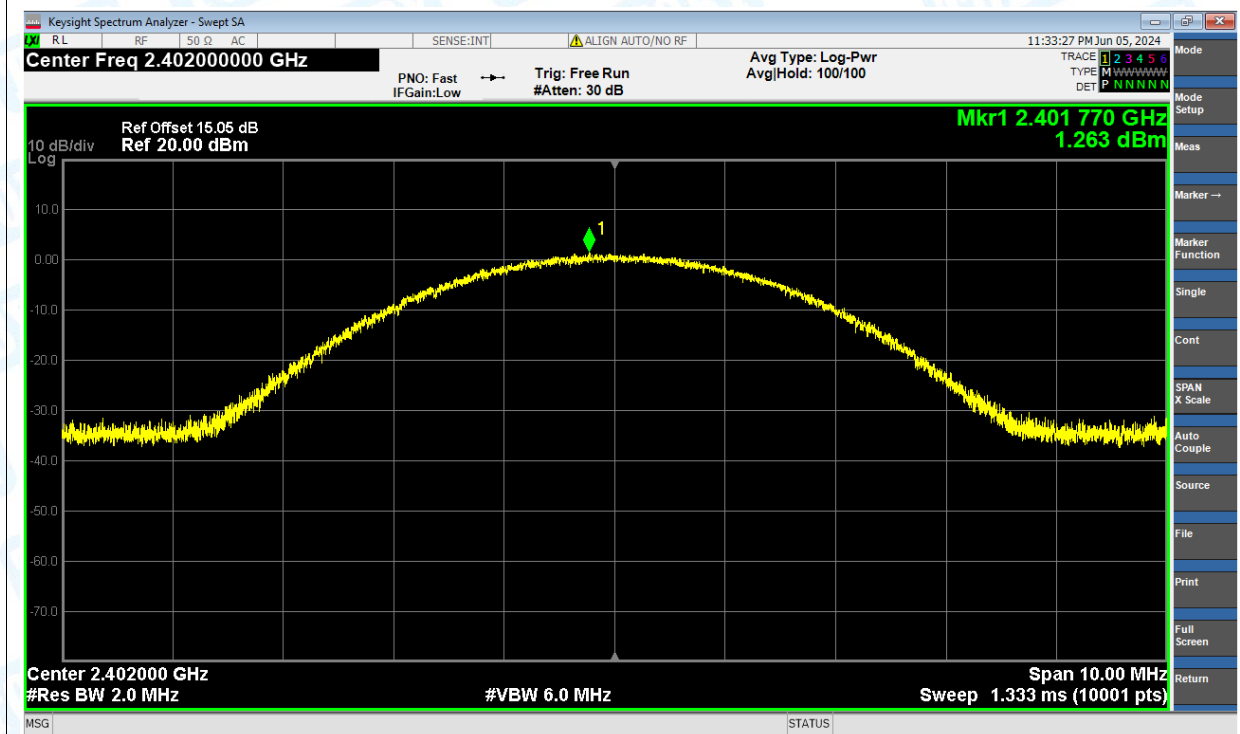
Power NVNT 2-DH1 2441MHz Ant1



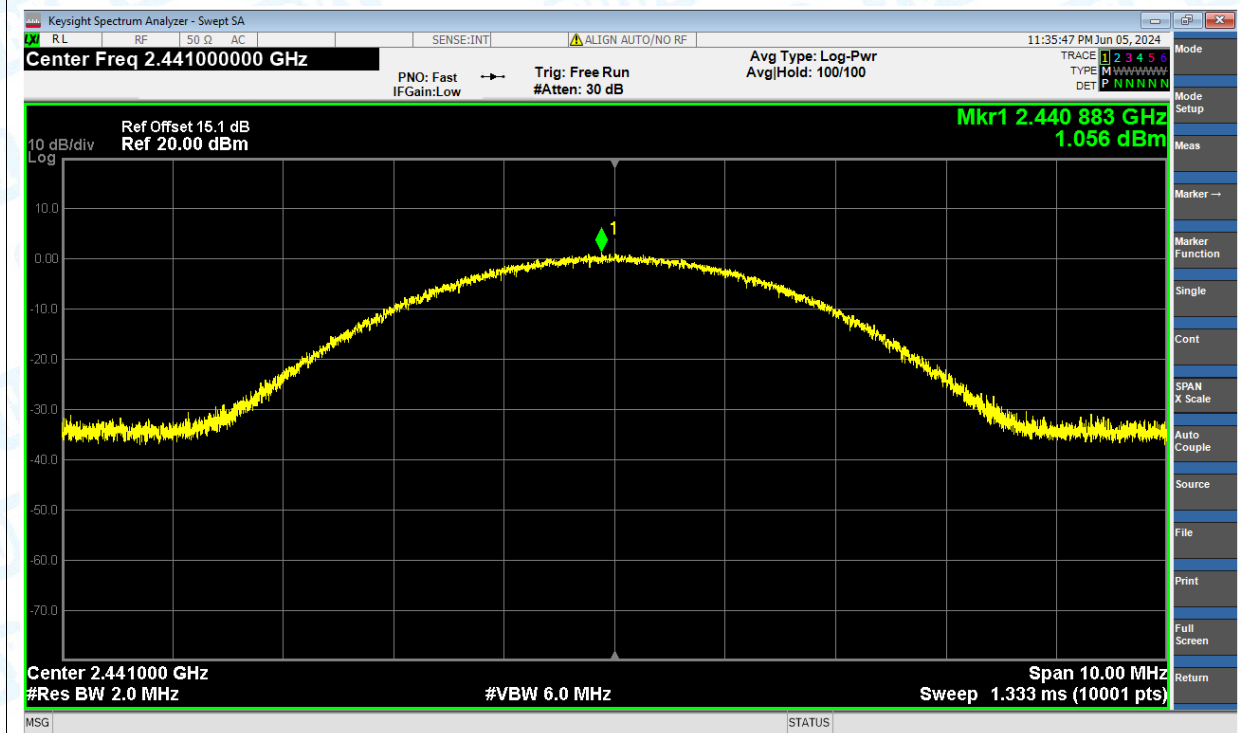
Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



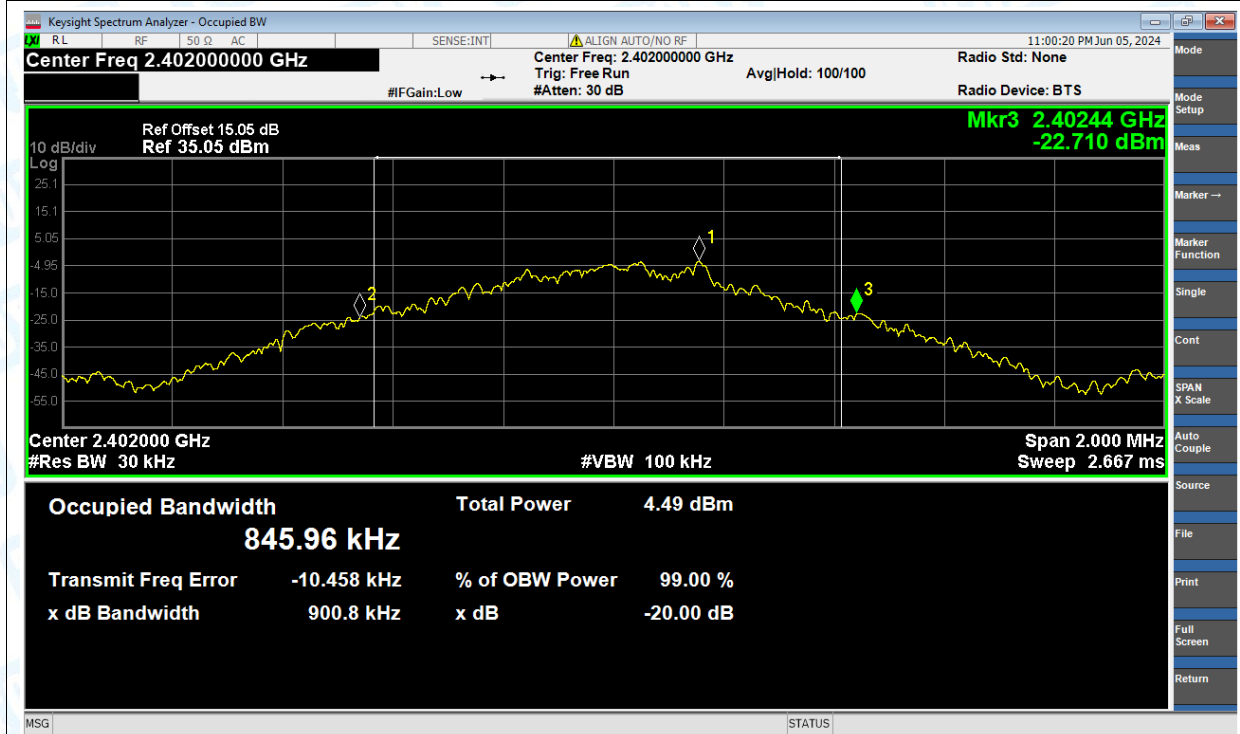


3.-20dB Bandwidth

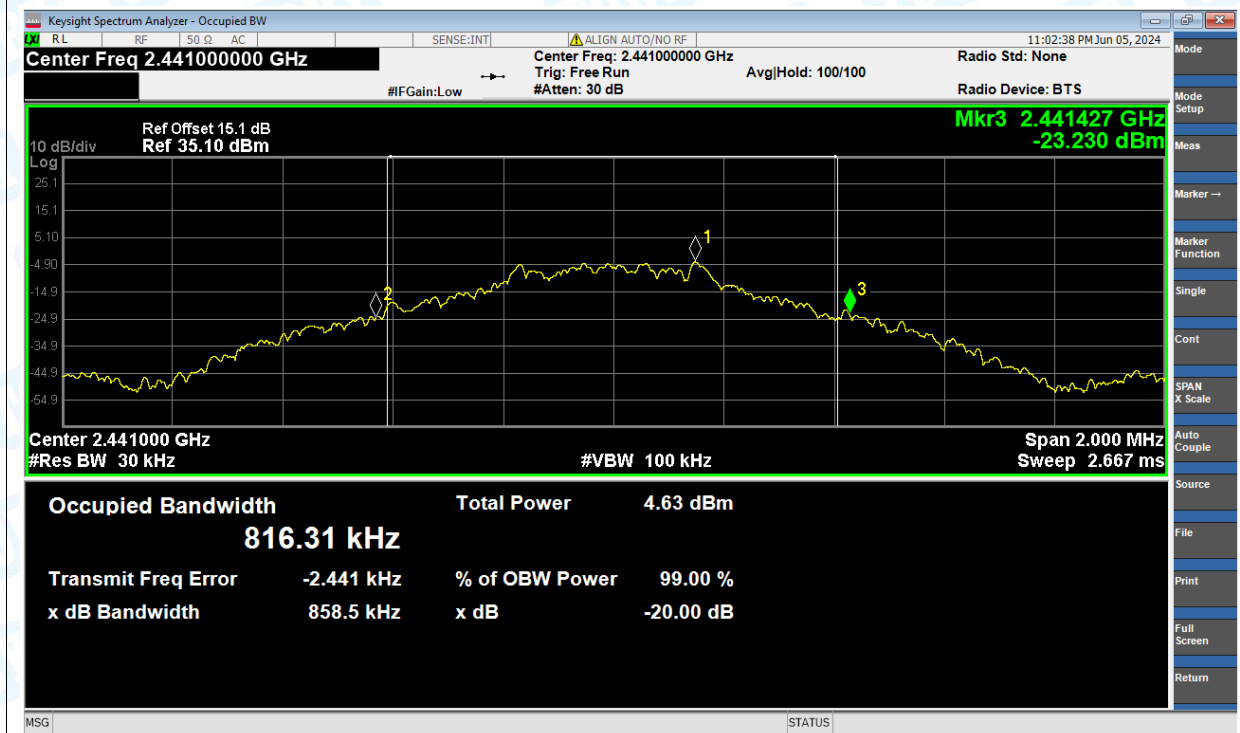
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.9	0	Pass
NVNT	1-DH1	2441	Ant1	0.86	0	Pass
NVNT	1-DH1	2480	Ant1	0.9	0	Pass
NVNT	2-DH1	2402	Ant1	1.28	0	Pass
NVNT	2-DH1	2441	Ant1	1.27	0	Pass
NVNT	2-DH1	2480	Ant1	1.28	0	Pass
NVNT	3-DH1	2402	Ant1	1.3	0	Pass
NVNT	3-DH1	2441	Ant1	1.3	0	Pass
NVNT	3-DH1	2480	Ant1	1.29	0	Pass

Test Graphs

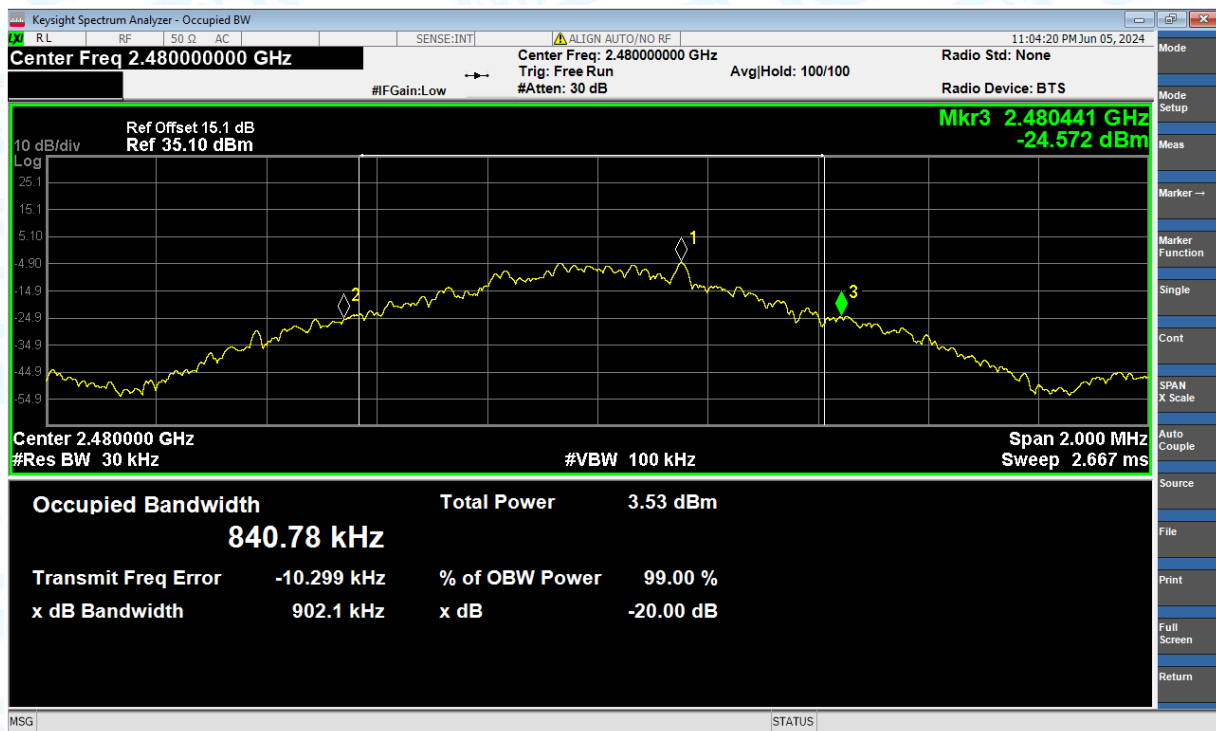
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



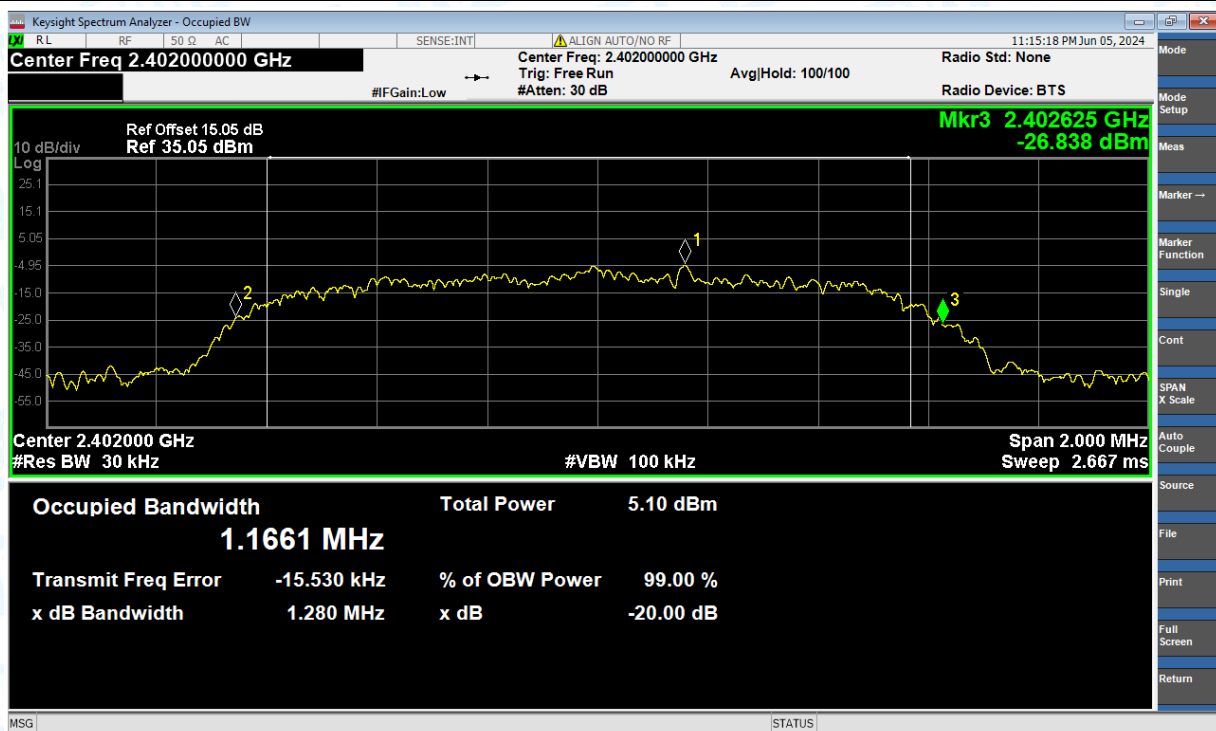
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



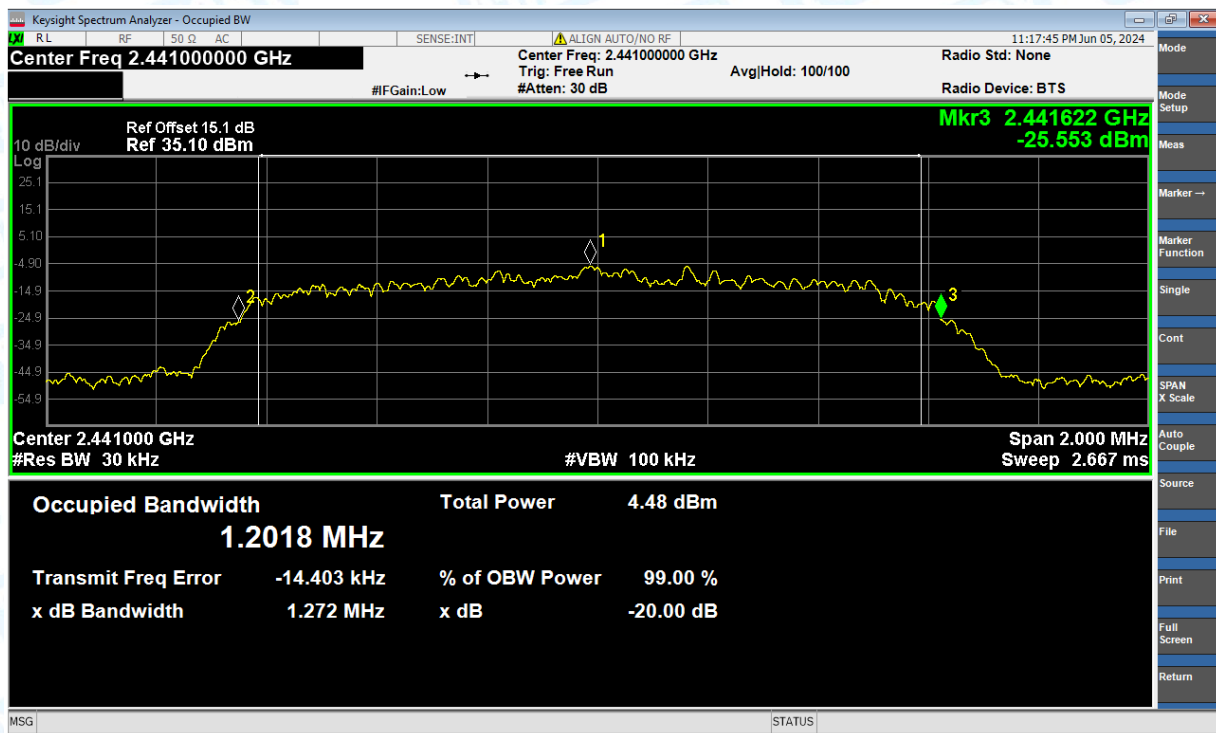
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



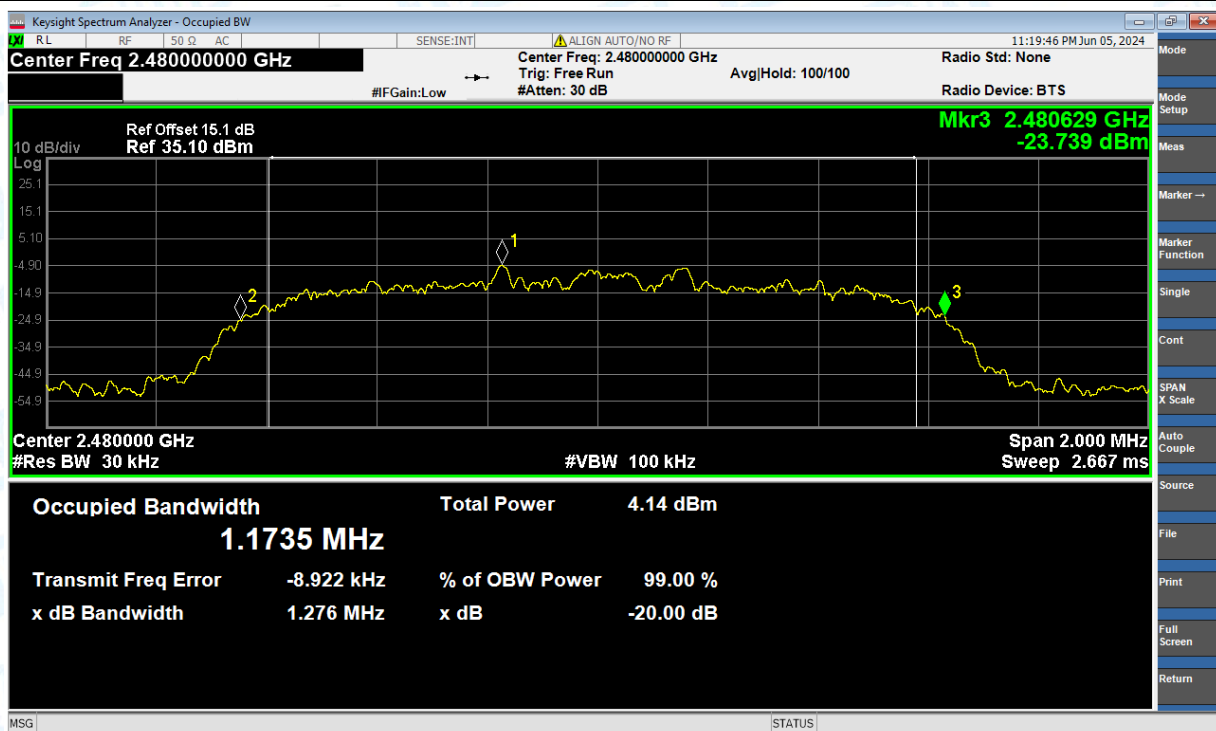
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



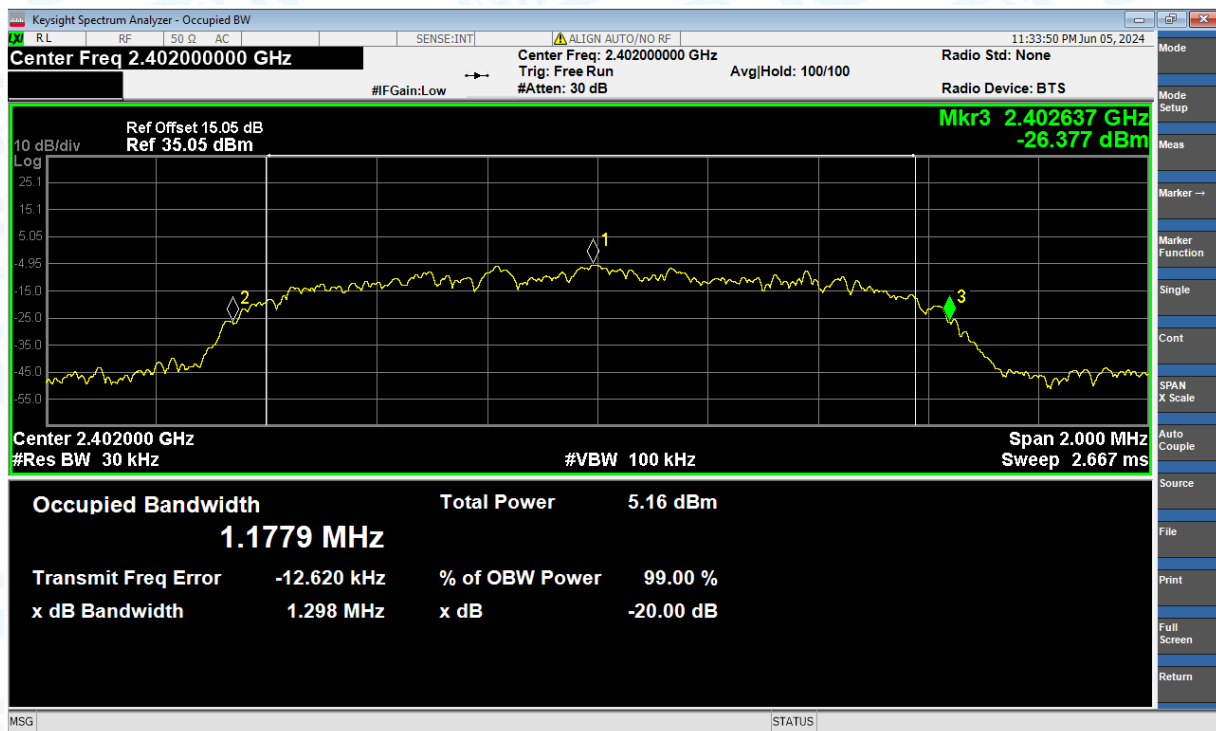
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



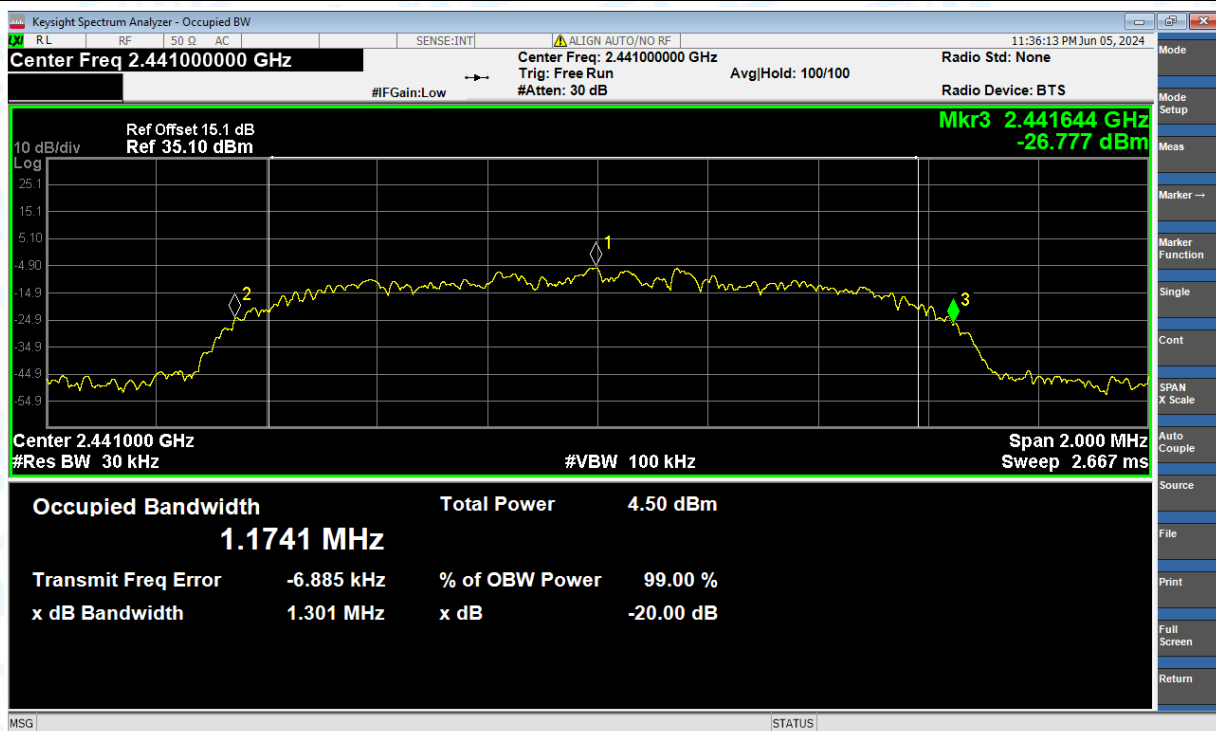
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

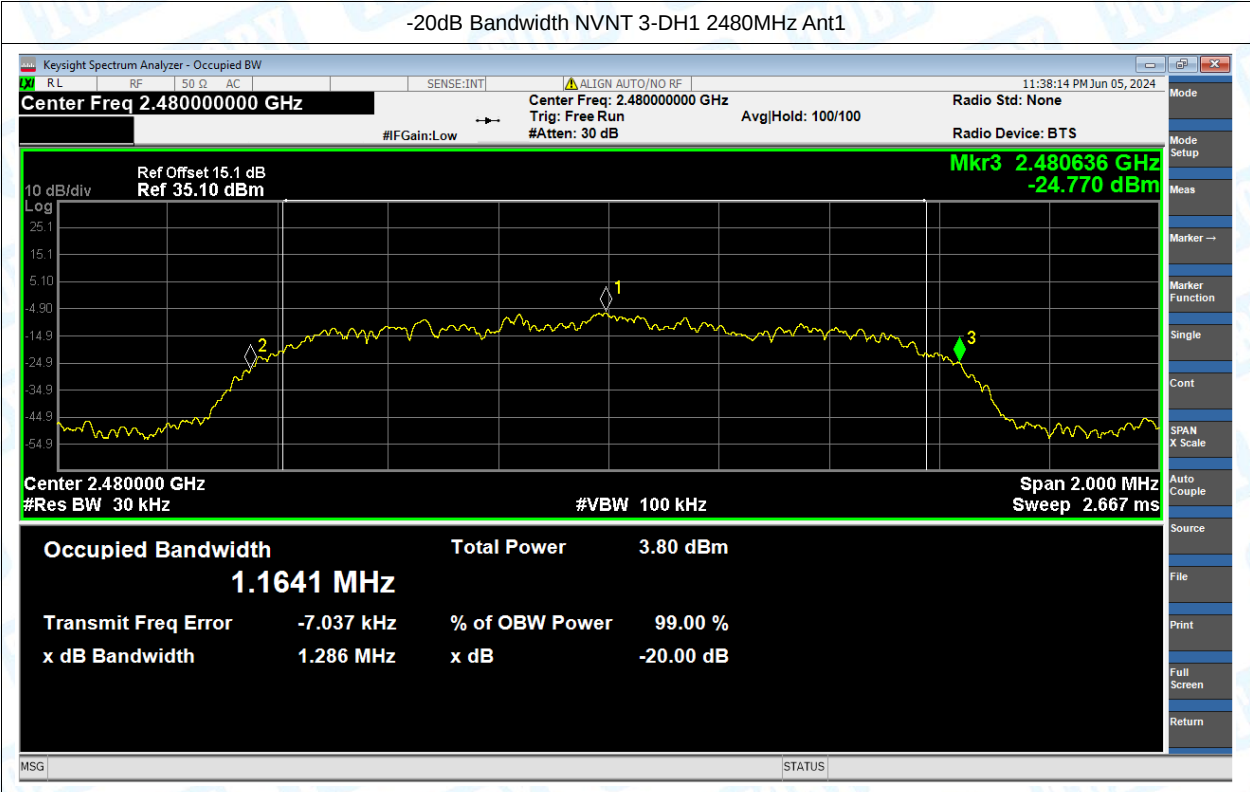


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



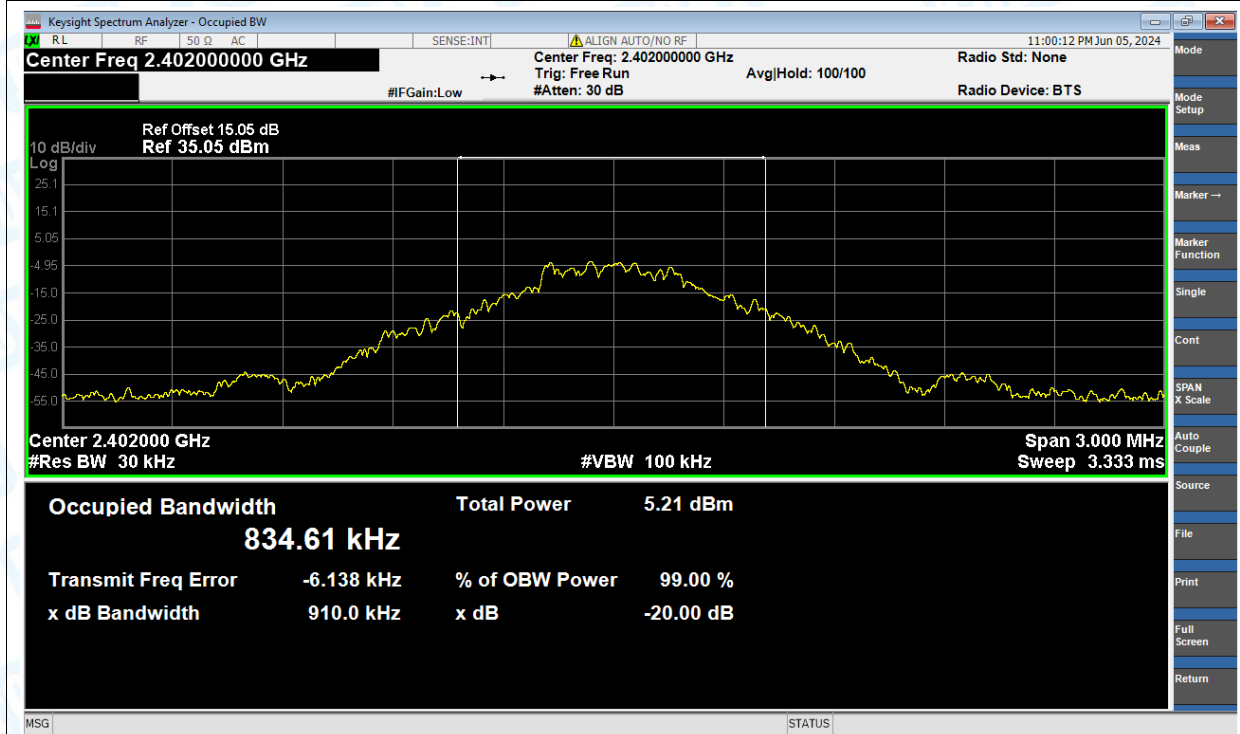


4.Occupied Channel Bandwidth

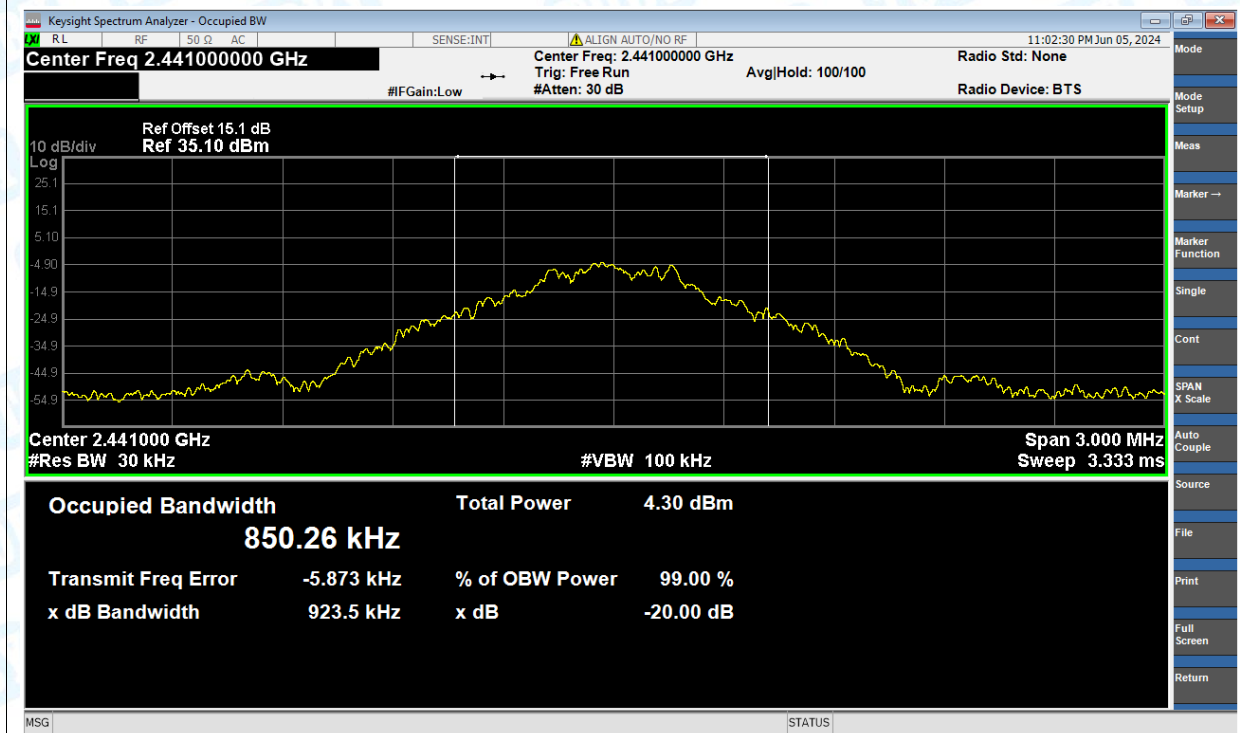
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.835
NVNT	1-DH1	2441	Ant1	0.85
NVNT	1-DH1	2480	Ant1	0.831
NVNT	2-DH1	2402	Ant1	1.18
NVNT	2-DH1	2441	Ant1	1.162
NVNT	2-DH1	2480	Ant1	1.157
NVNT	3-DH1	2402	Ant1	1.171
NVNT	3-DH1	2441	Ant1	1.17
NVNT	3-DH1	2480	Ant1	1.169

Test Graphs

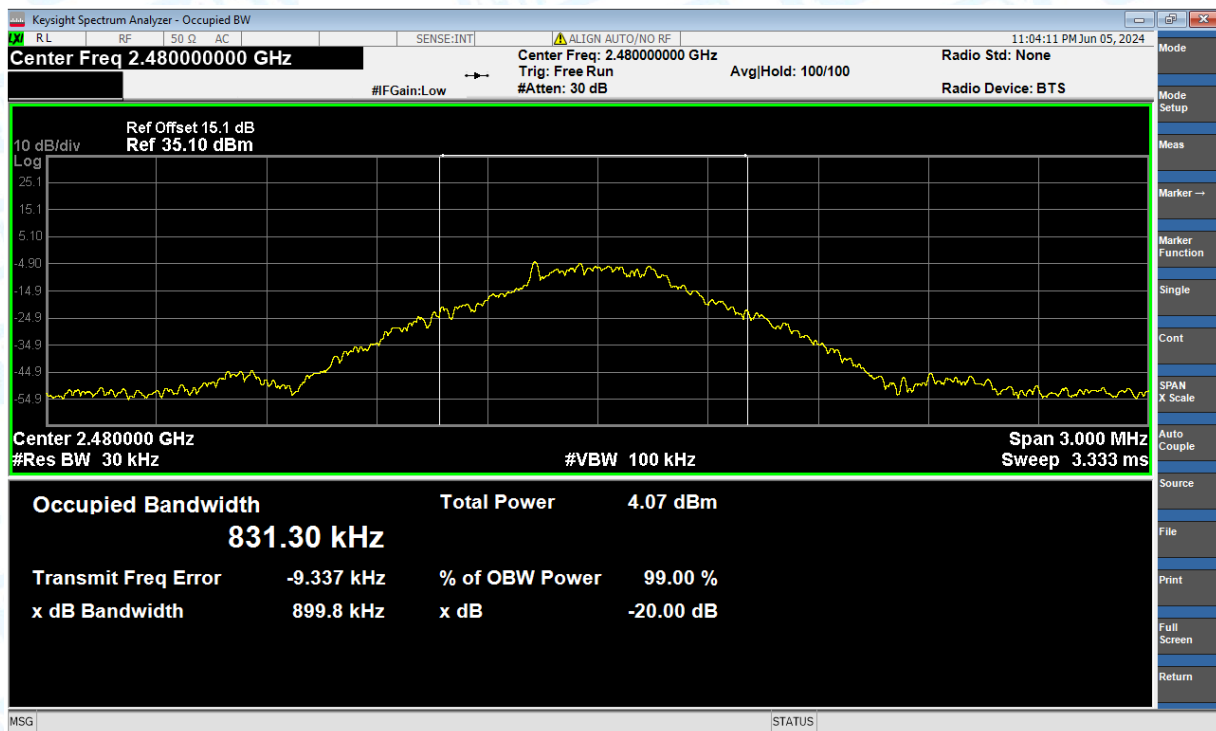
OBW NVNT 1-DH1 2402MHz Ant1



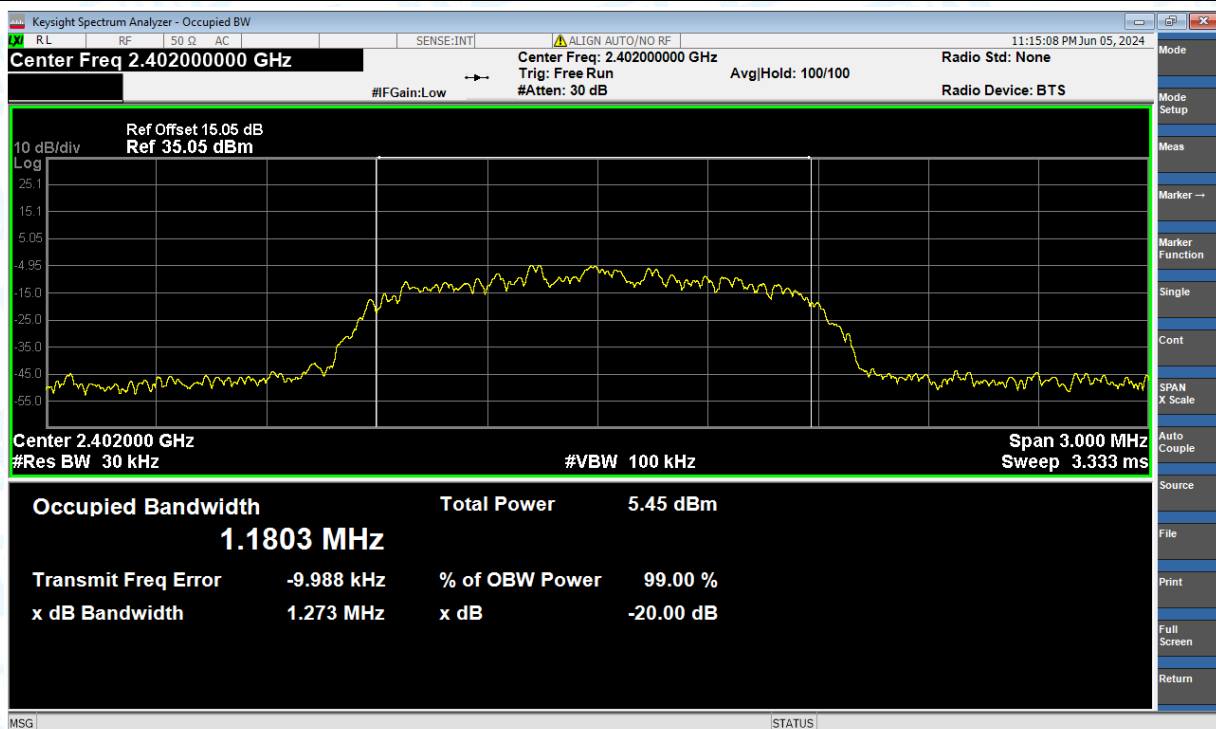
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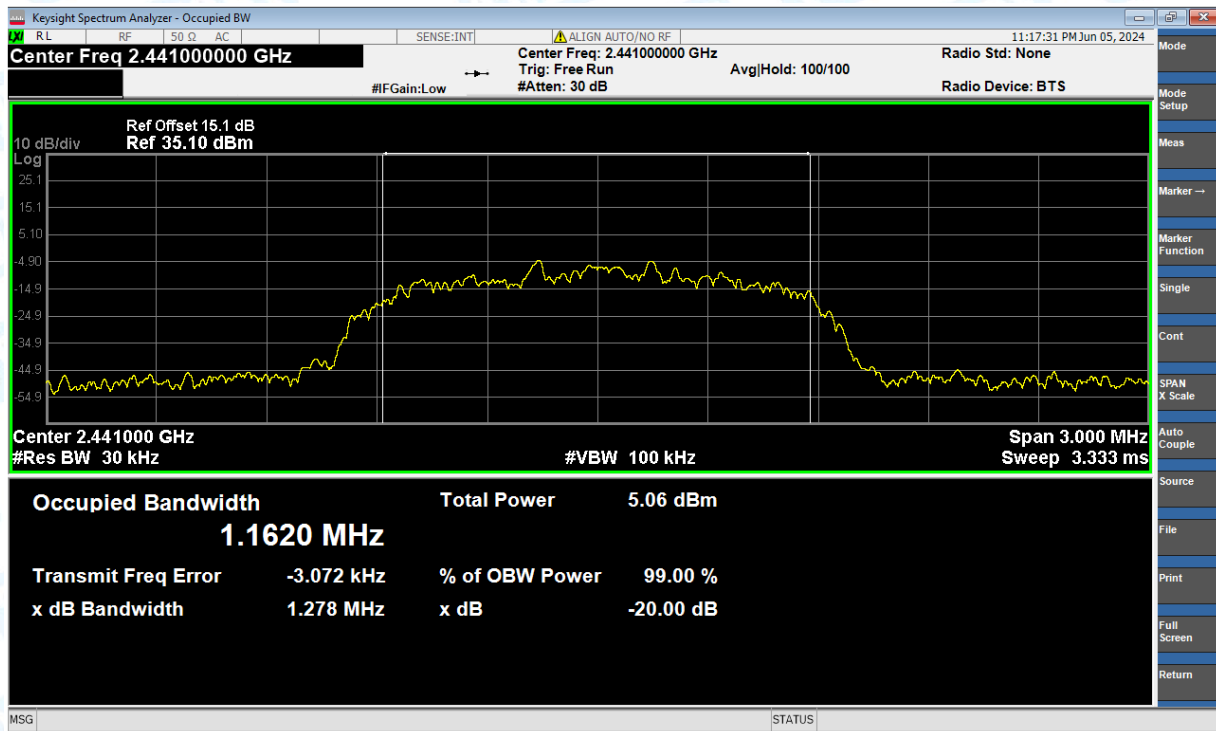
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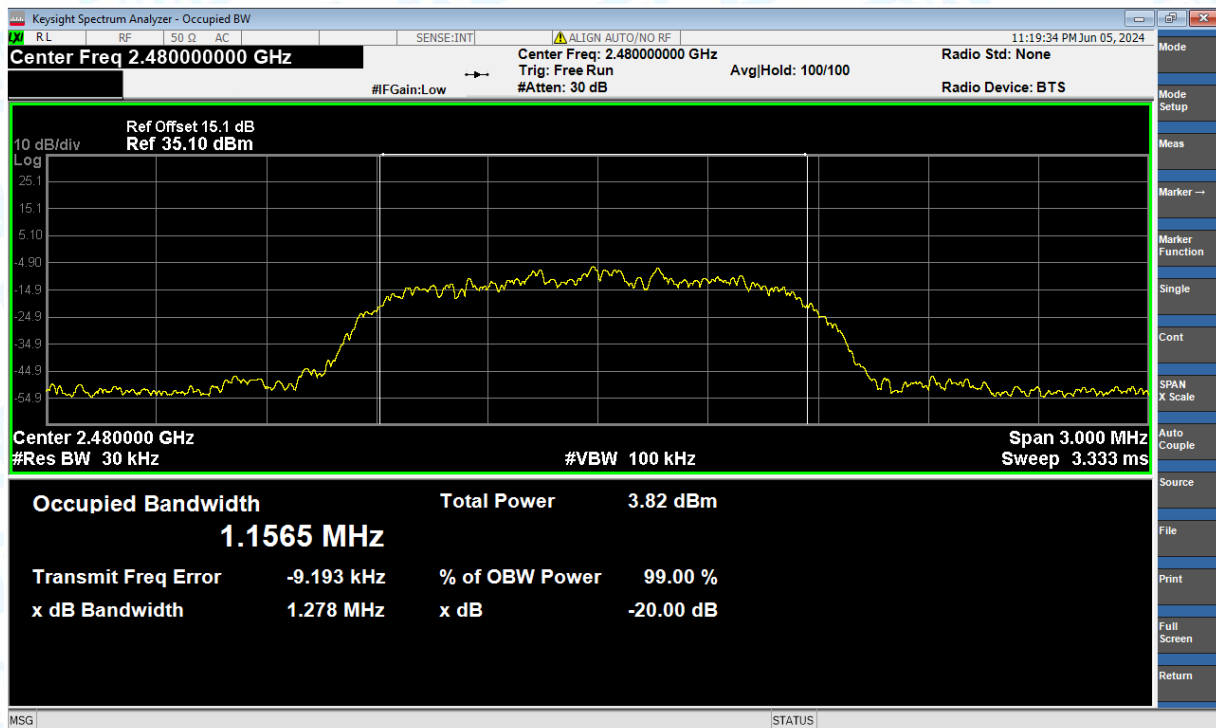
OBW NVNT 2-DH1 2402MHz Ant1



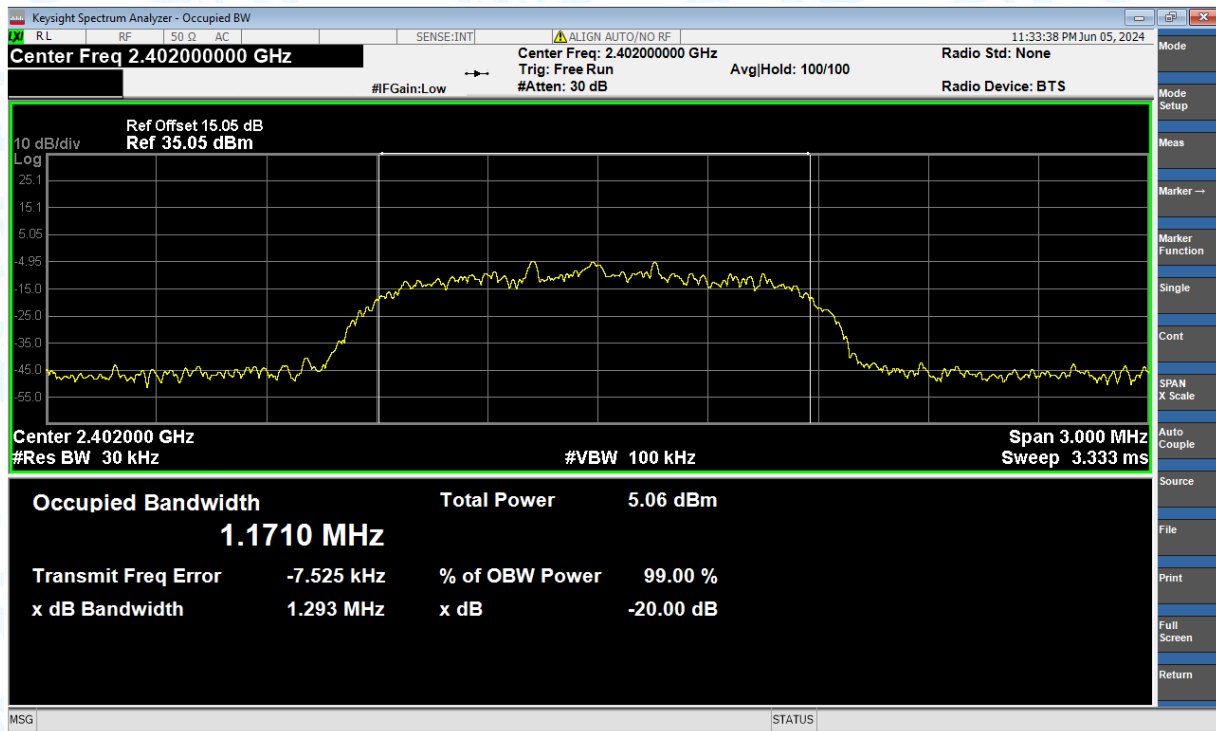
OBW NVNT 2-DH1 2441MHz Ant1



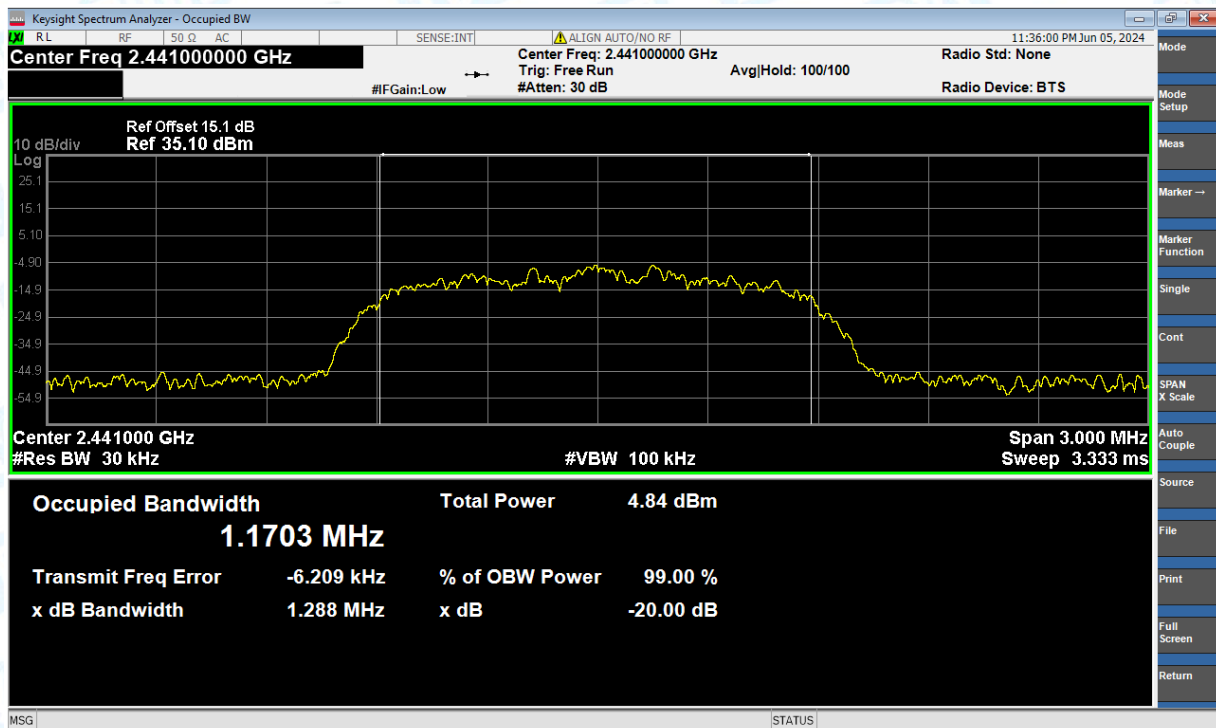
OBW NVNT 2-DH1 2480MHz Ant1

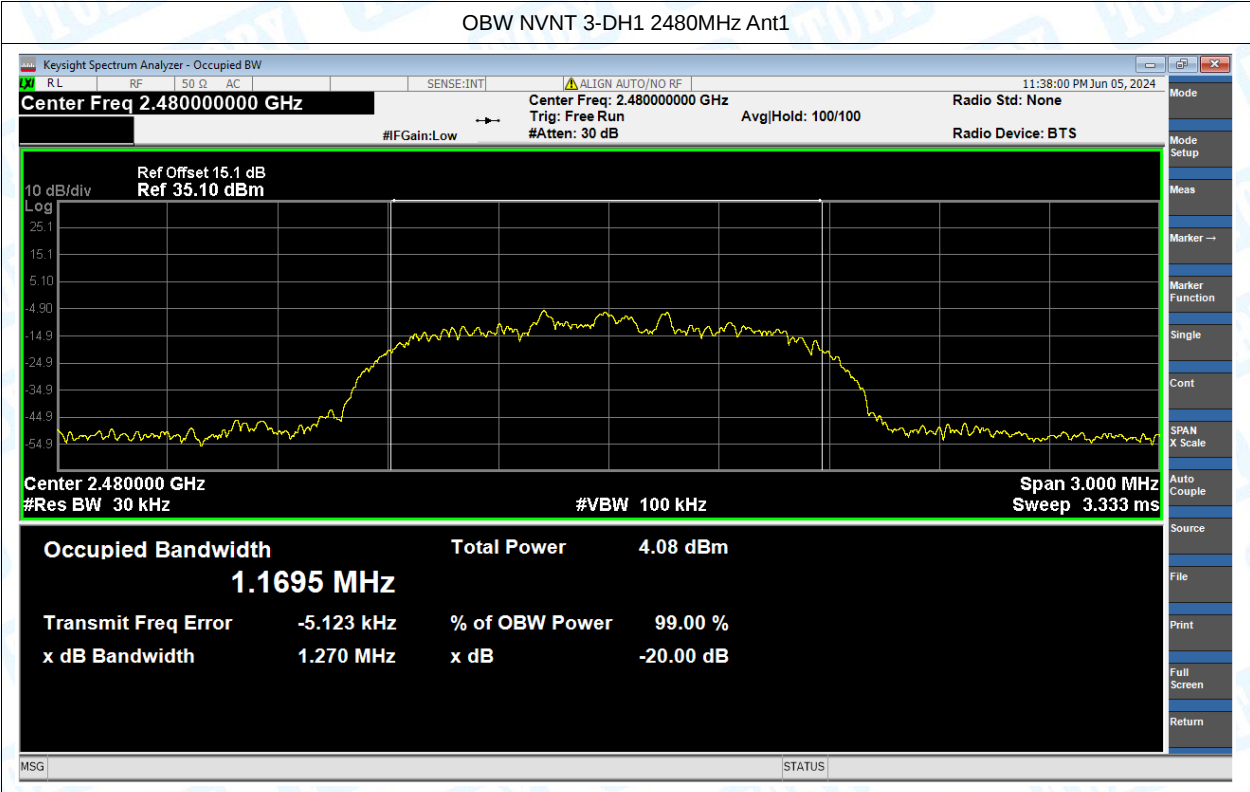


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



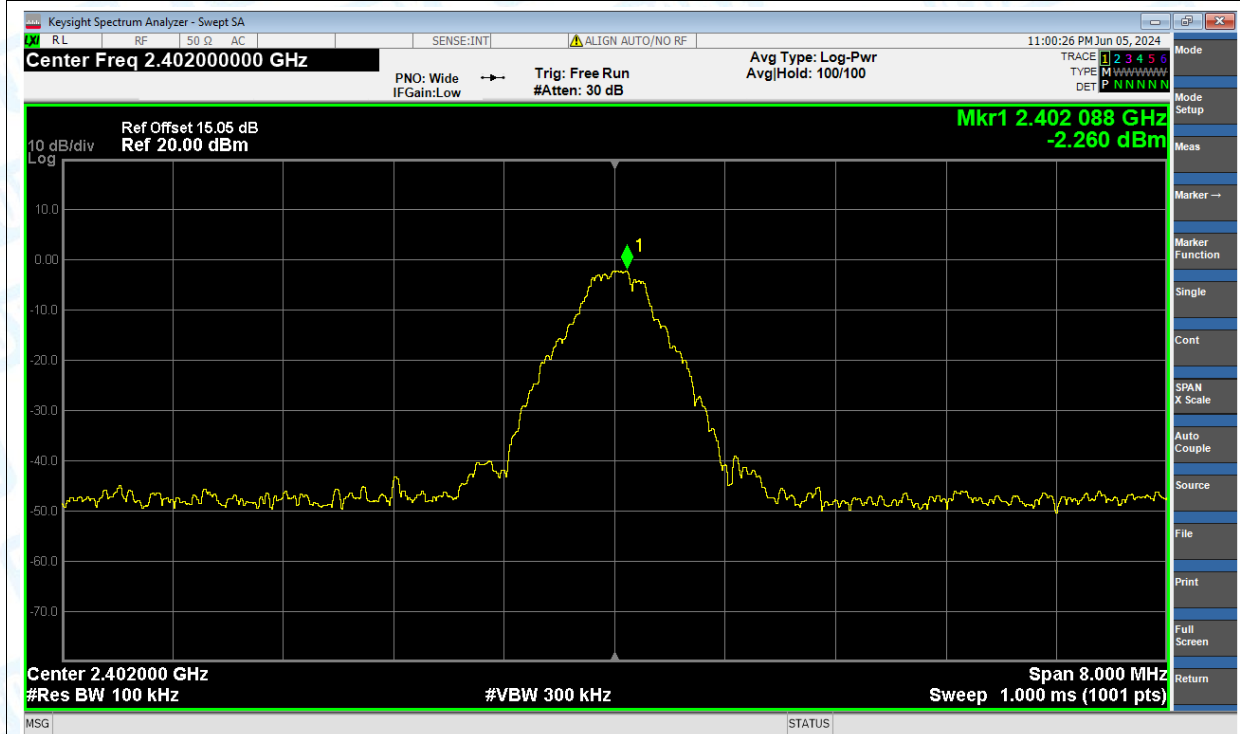


5.Band Edge

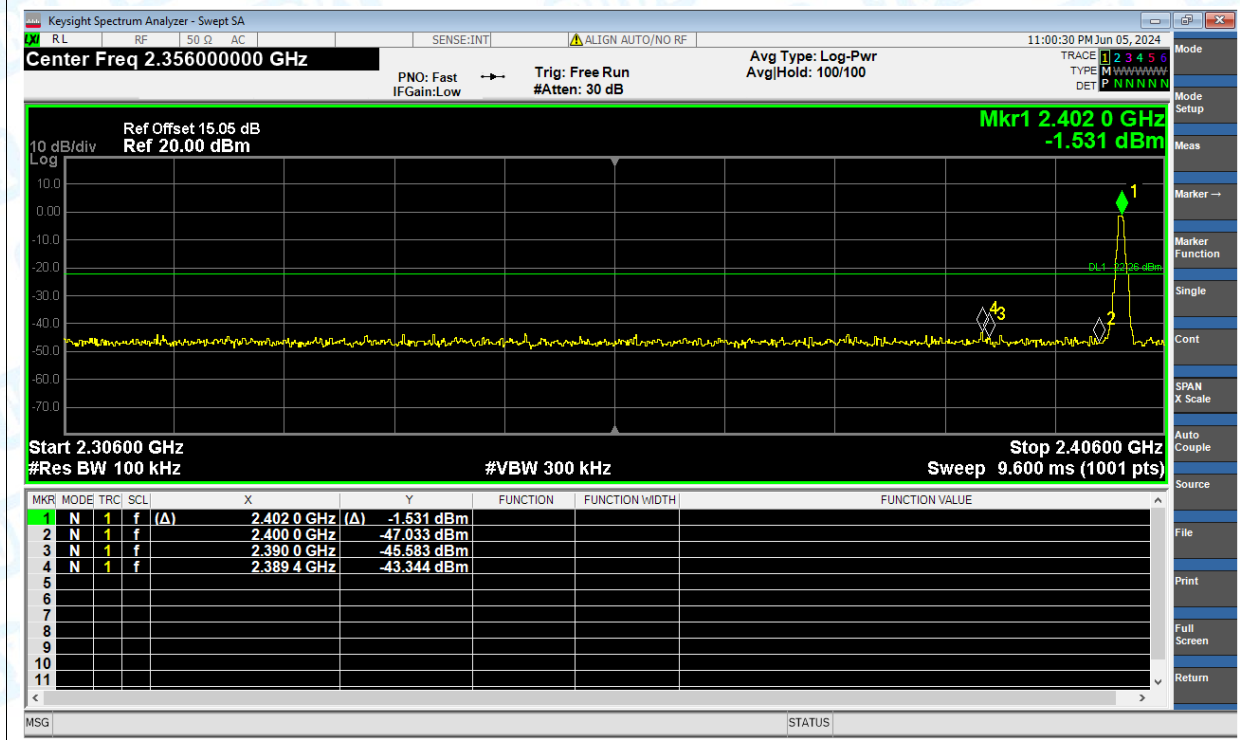
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-41.08	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-41.7	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-41.32	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-41.06	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-41.1	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-41.09	-20	Pass

Test Graphs

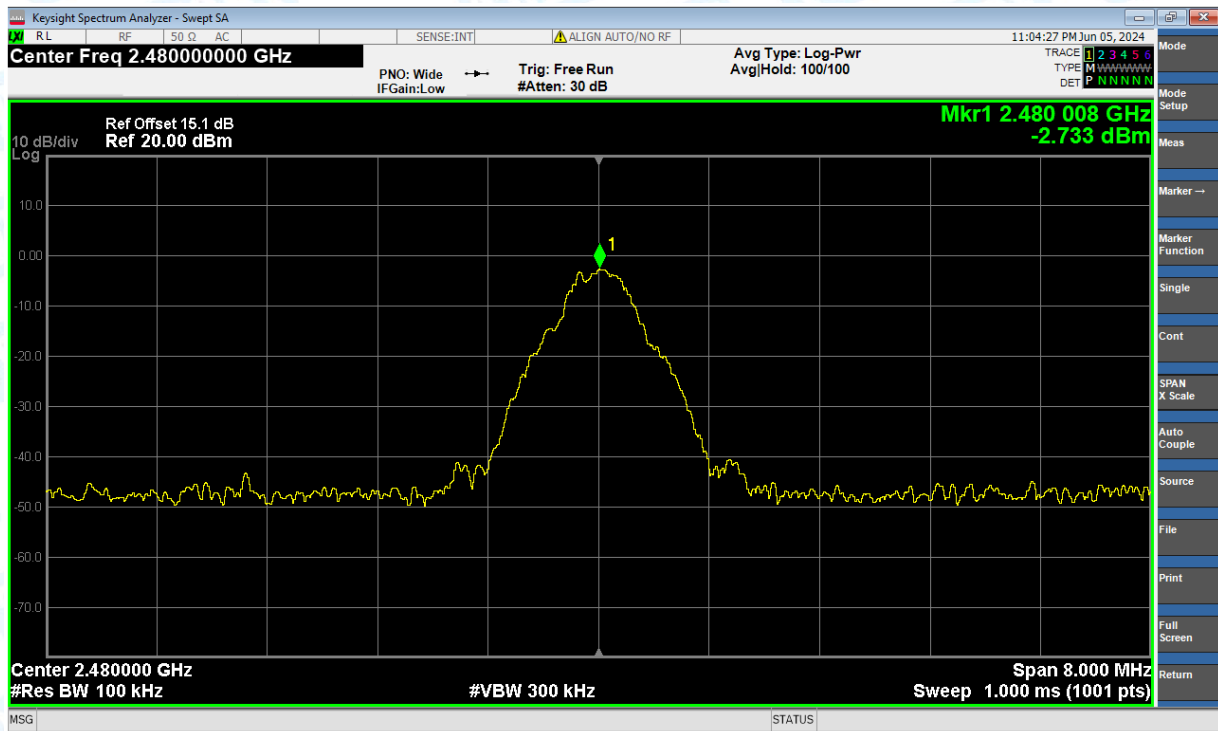
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



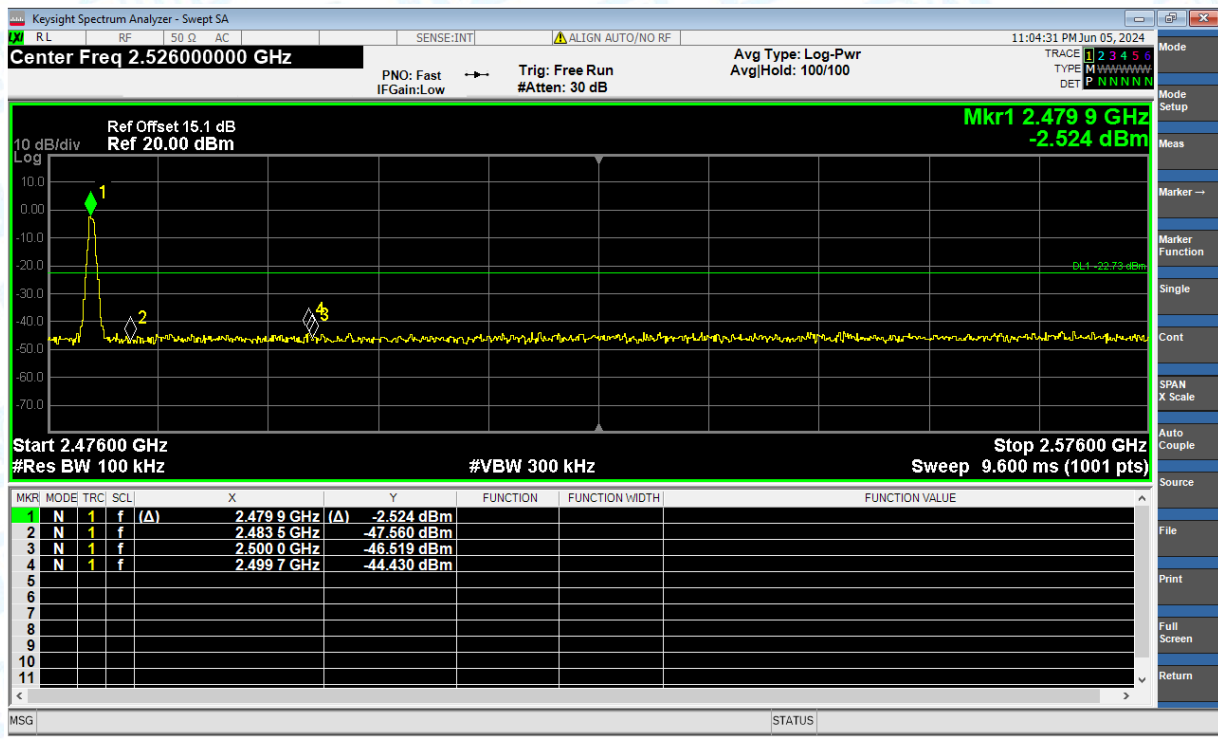
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



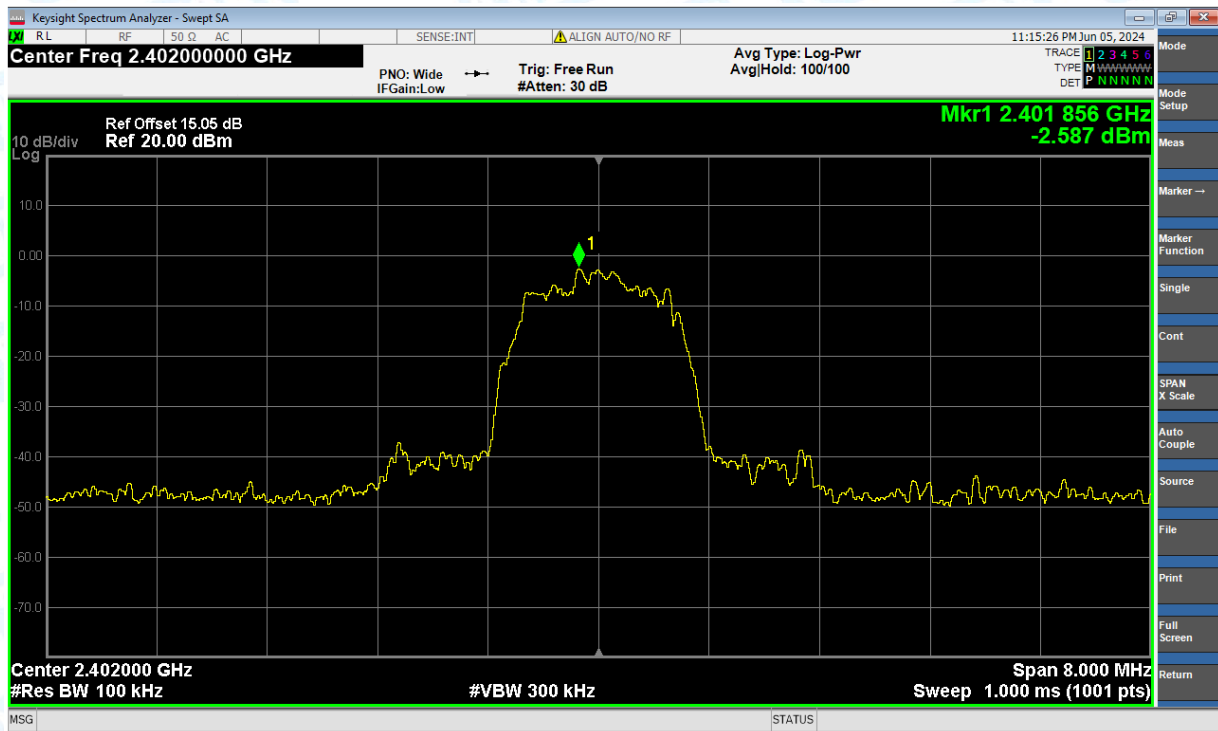
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



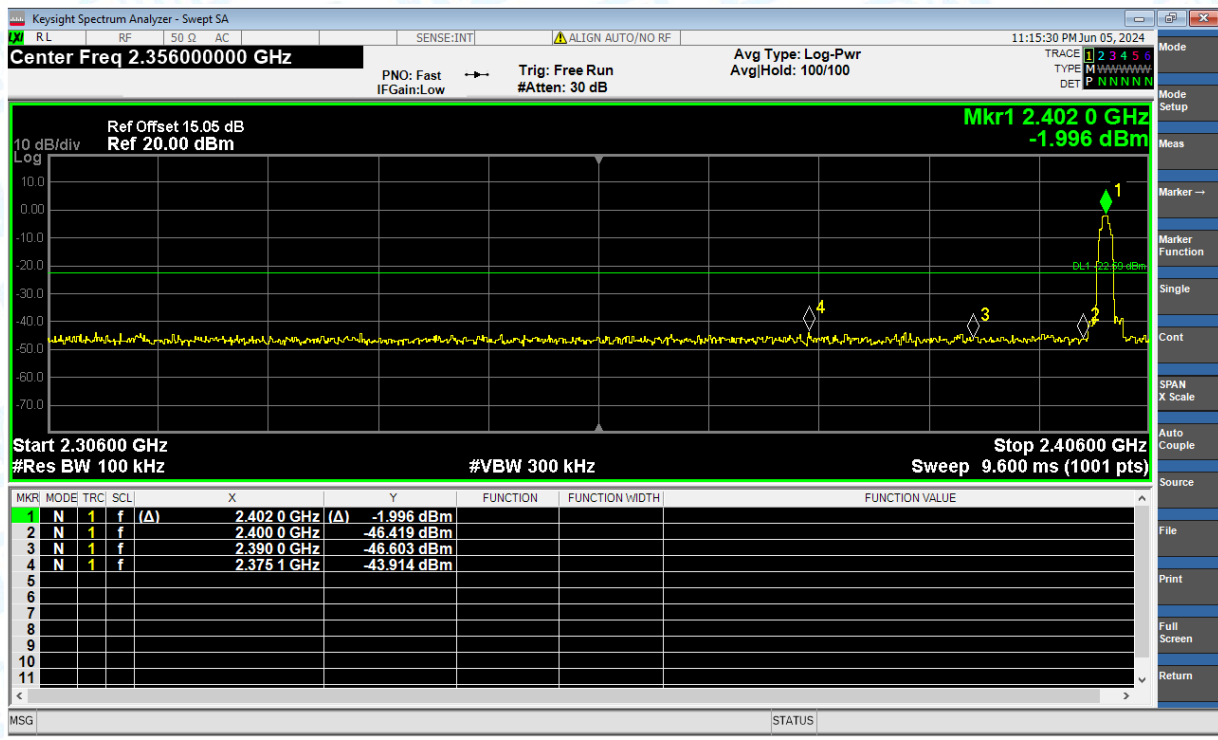
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



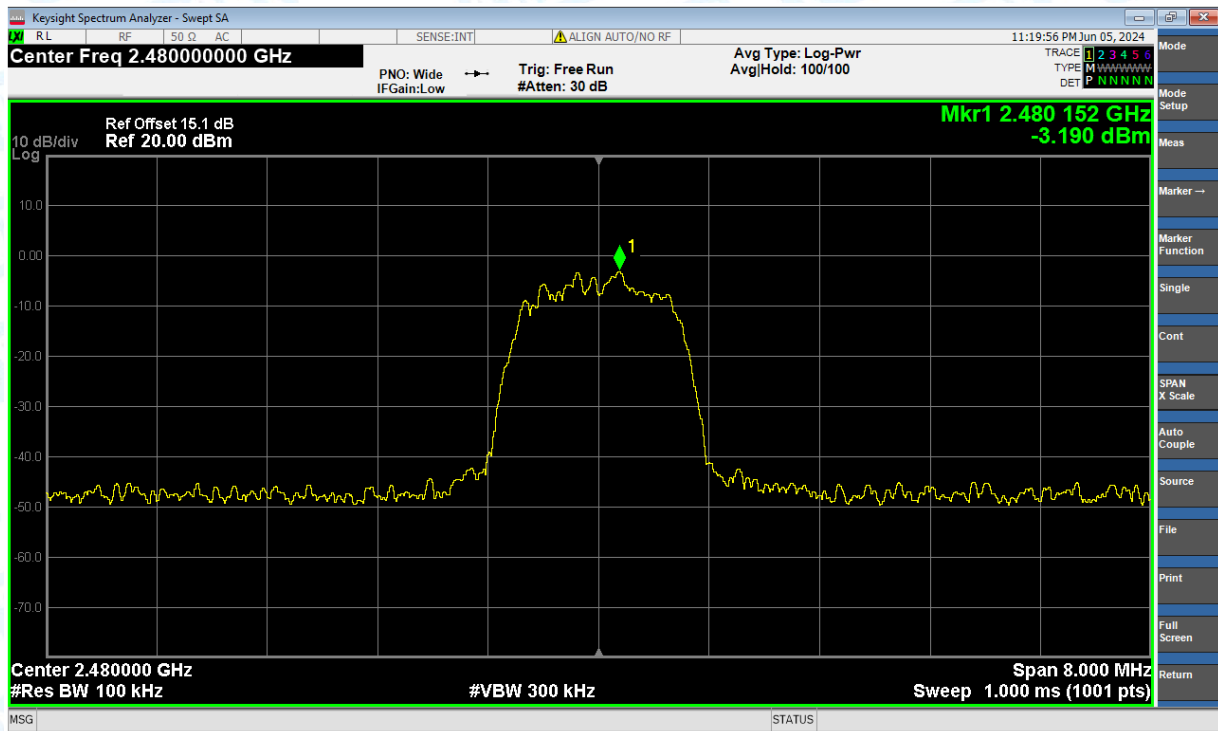
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



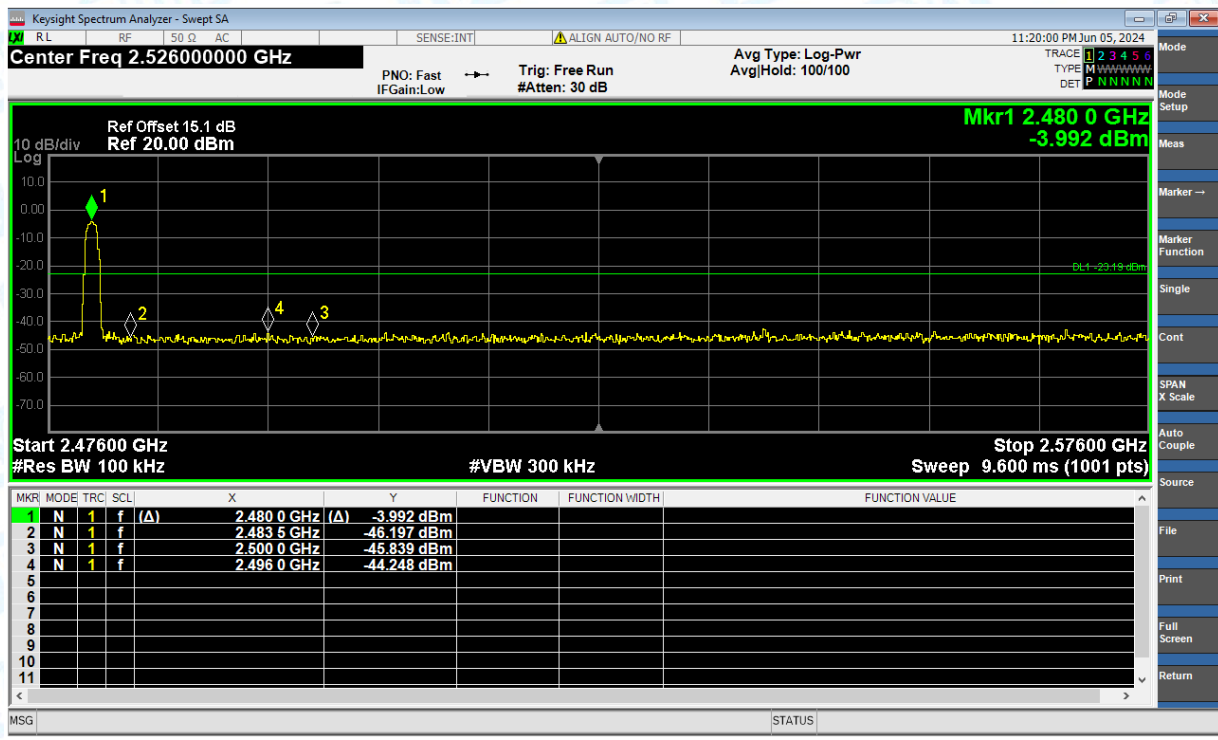
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



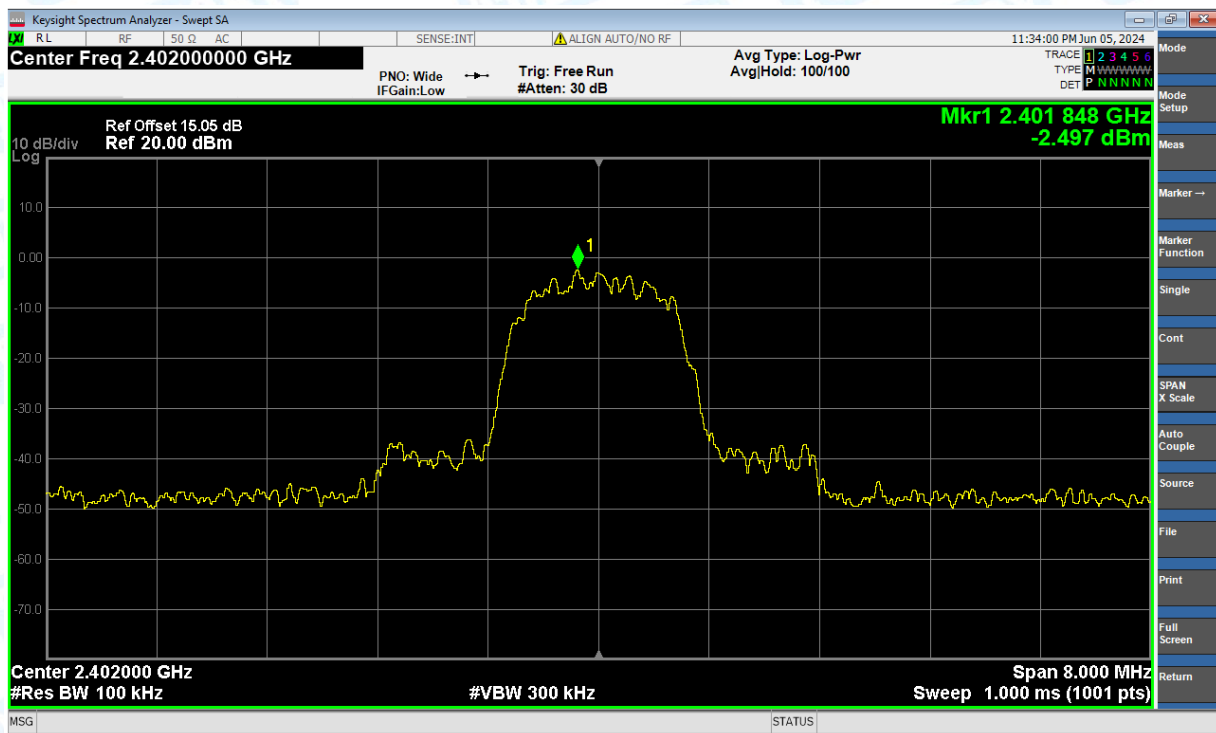
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



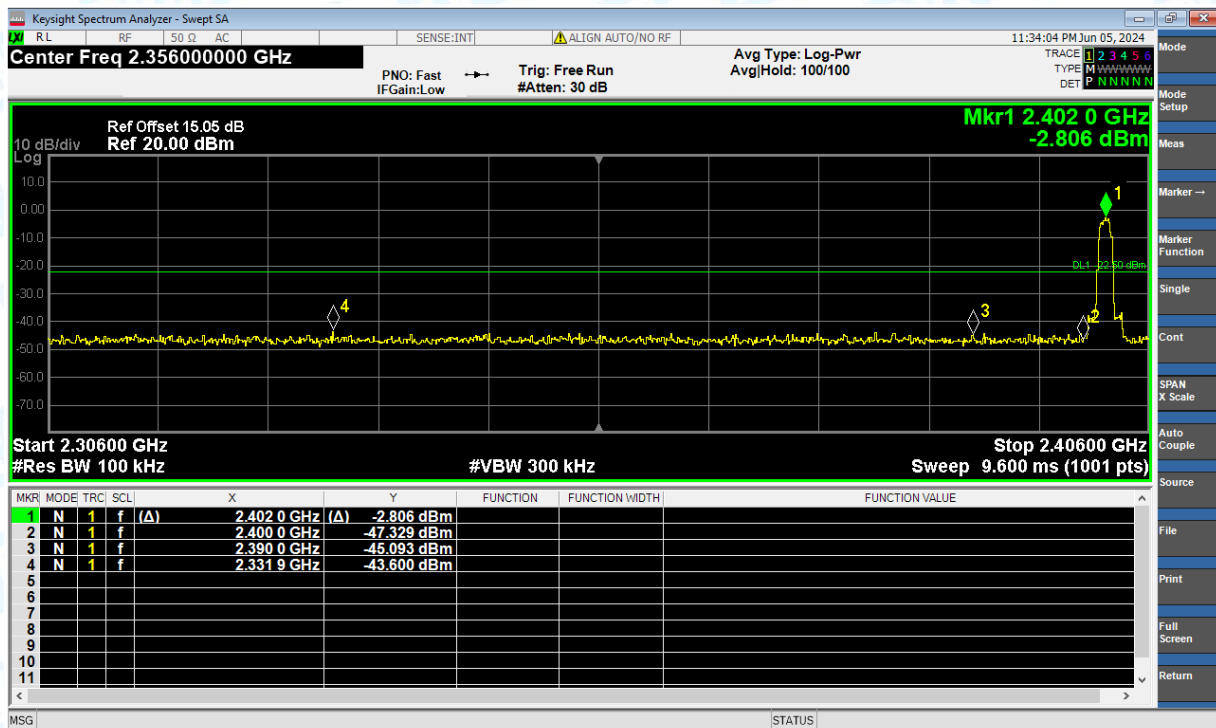
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



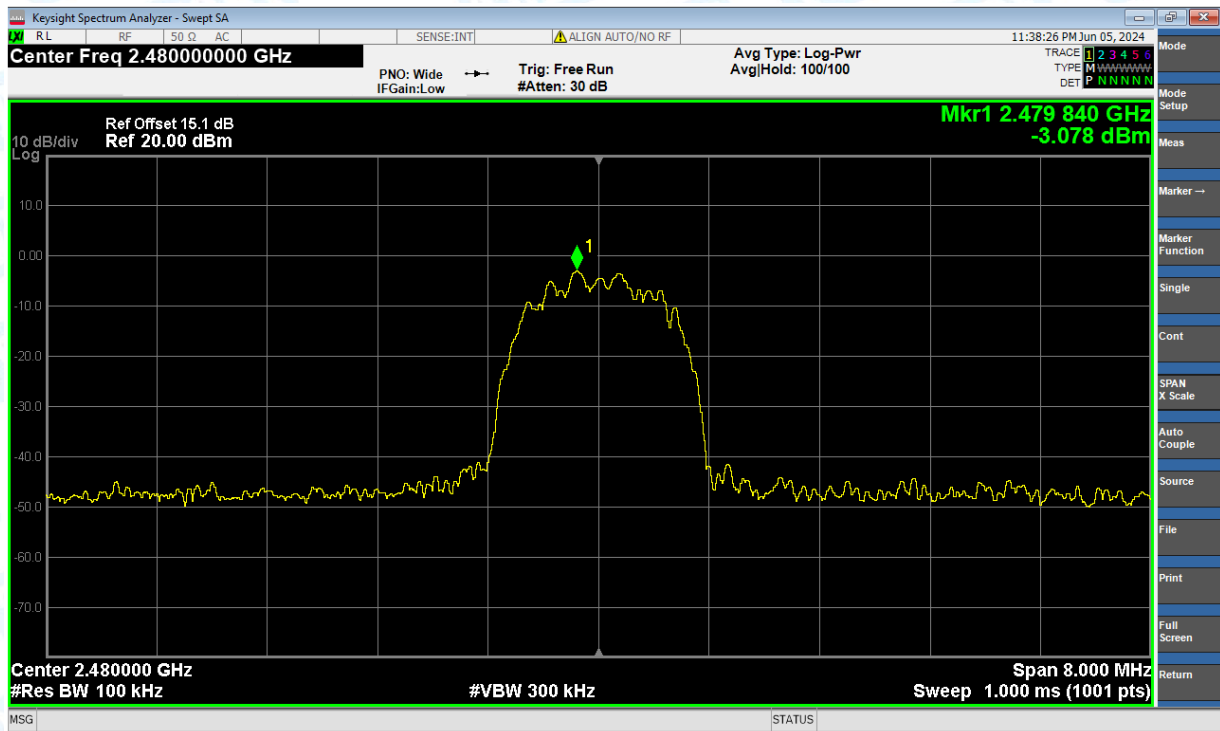
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



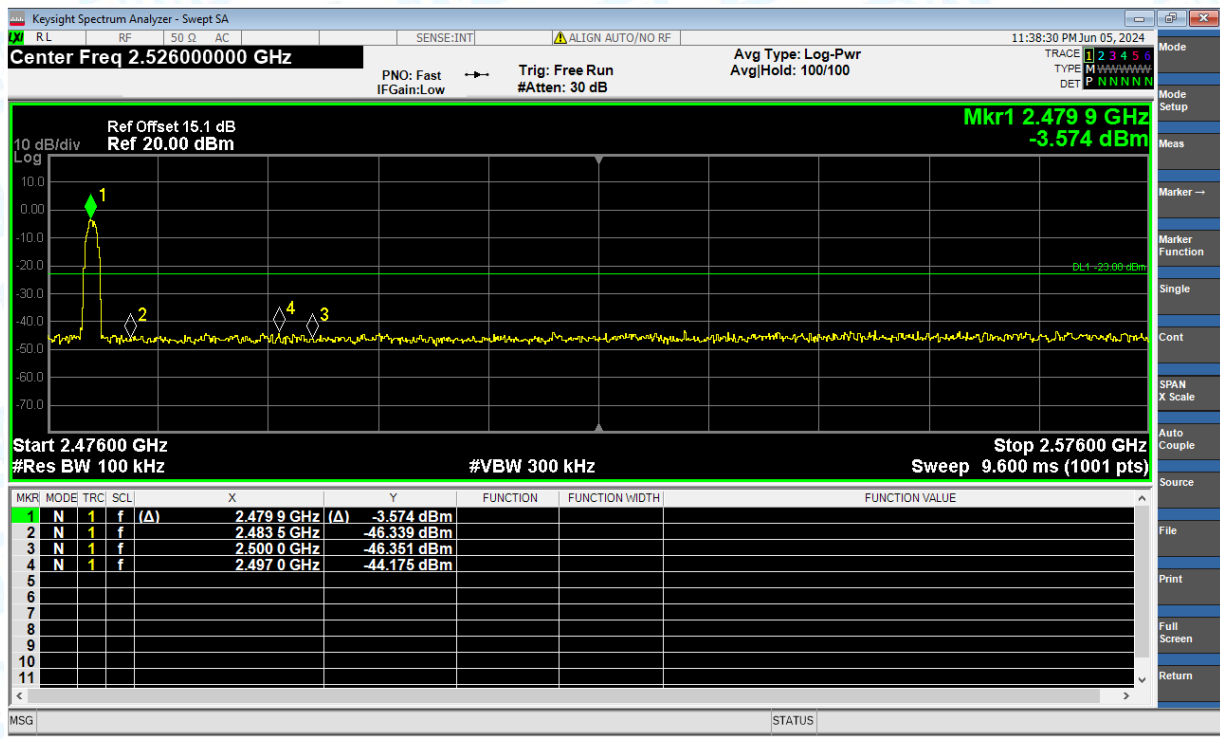
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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

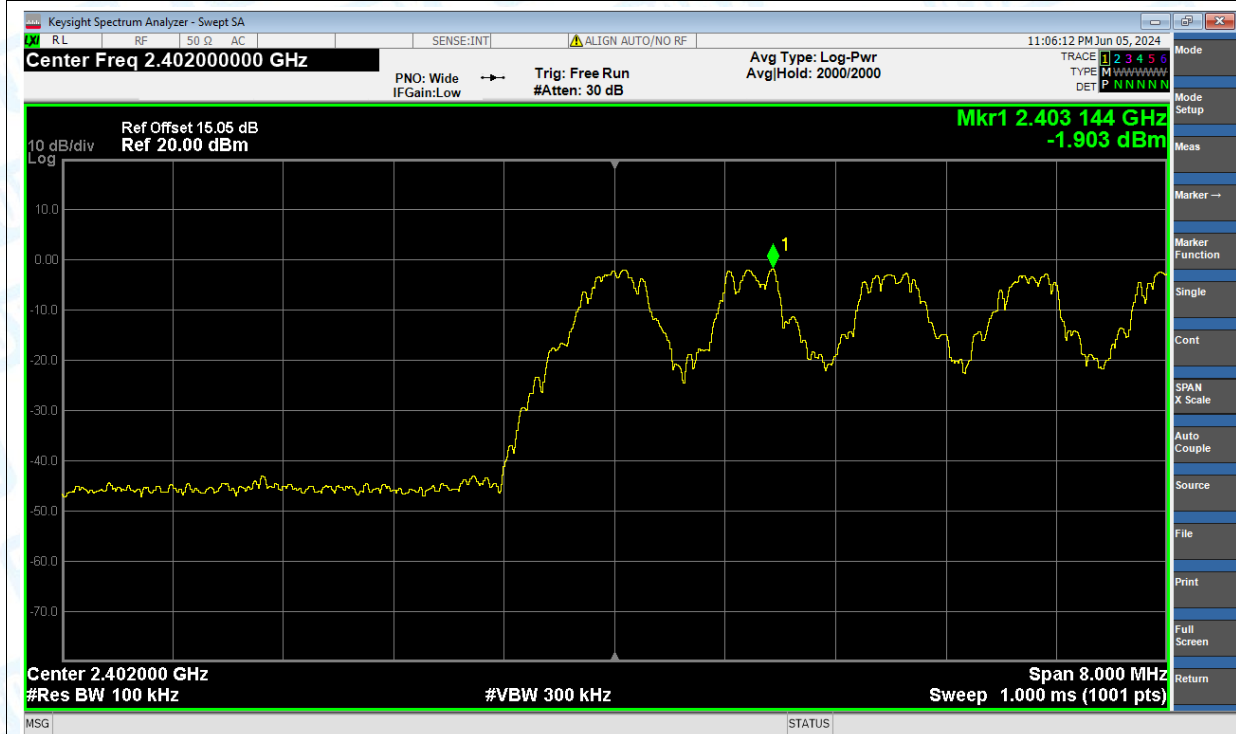


6. Band Edge(Hopping)

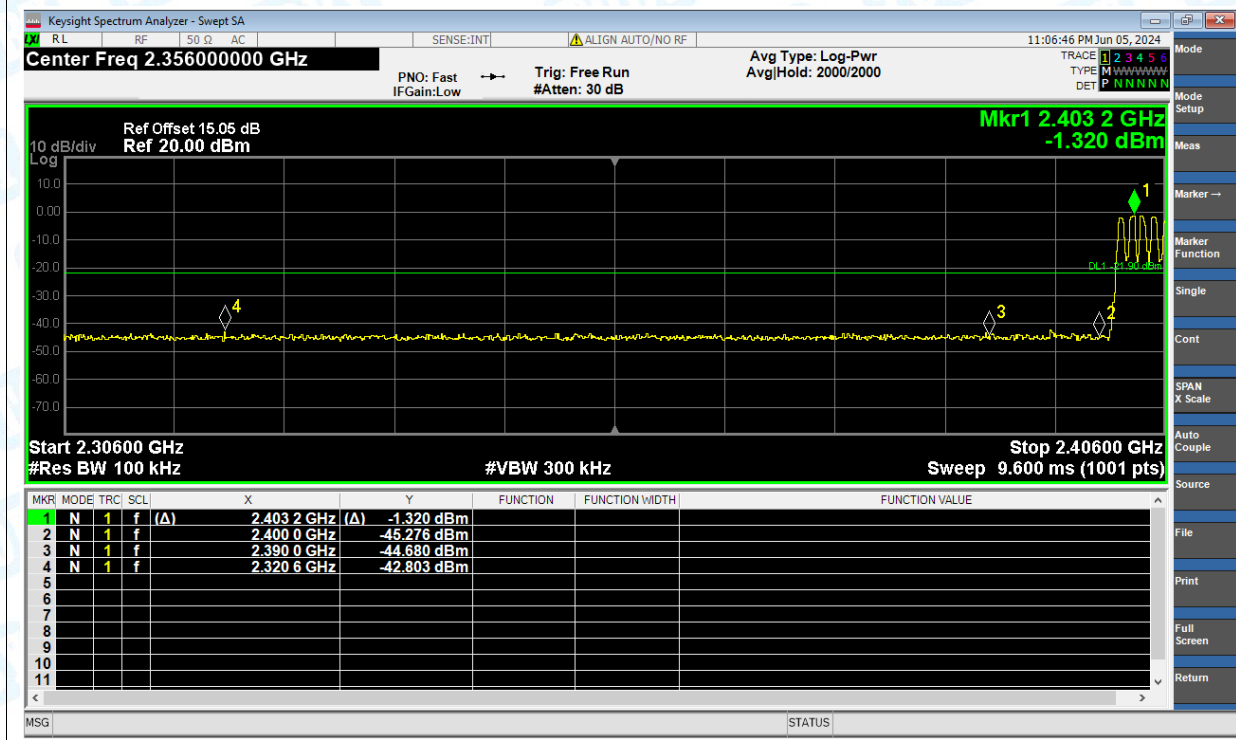
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-40.9	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-40.02	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-40.15	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-39.63	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-41.33	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-40.21	-20	Pass

Test Graphs

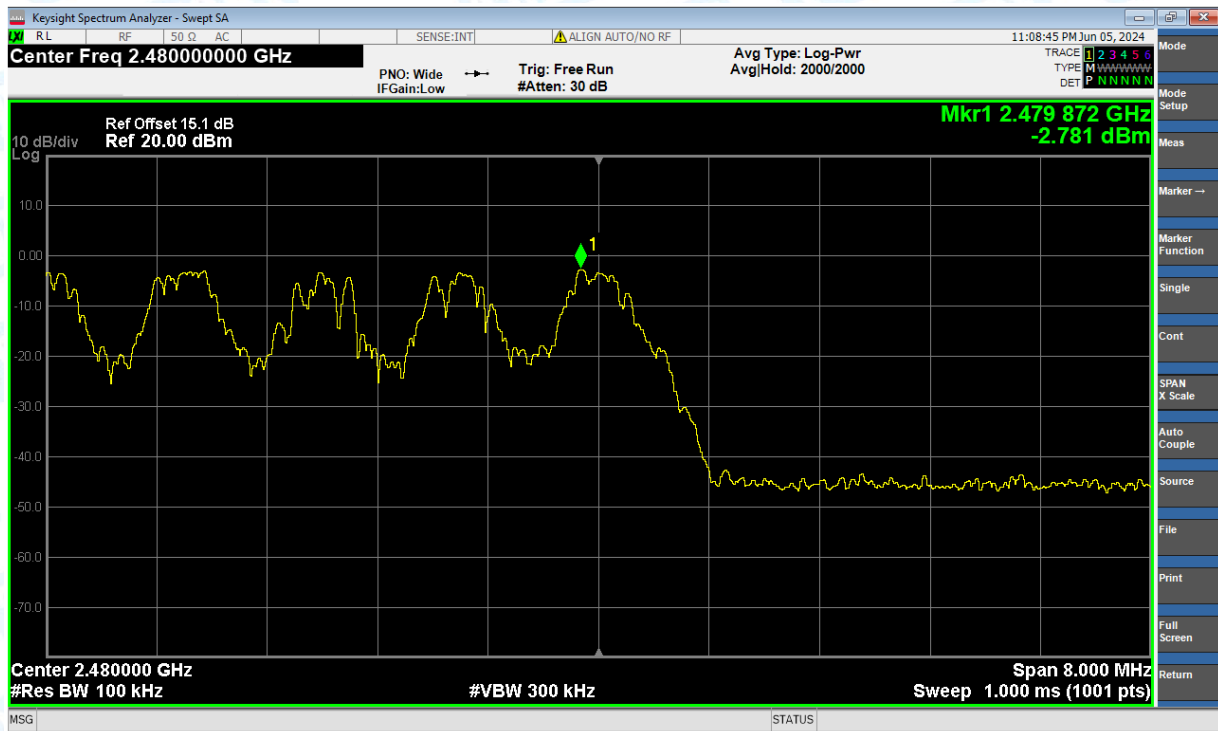
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



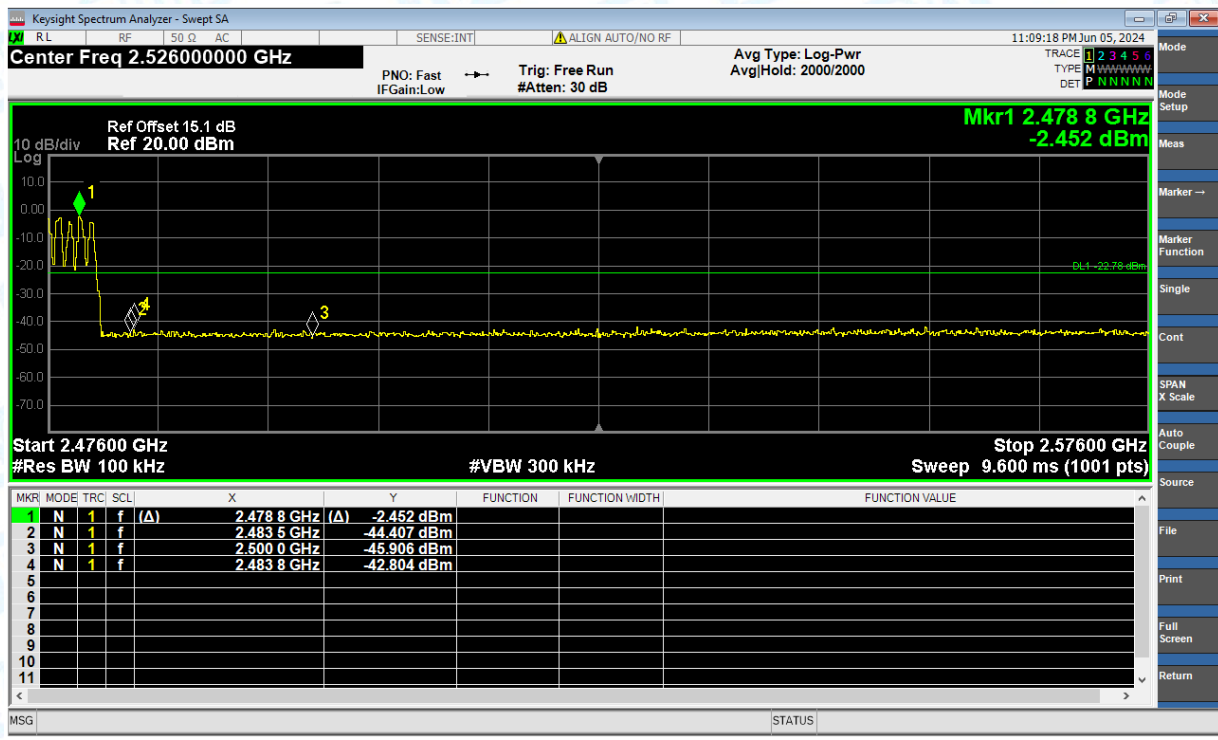
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



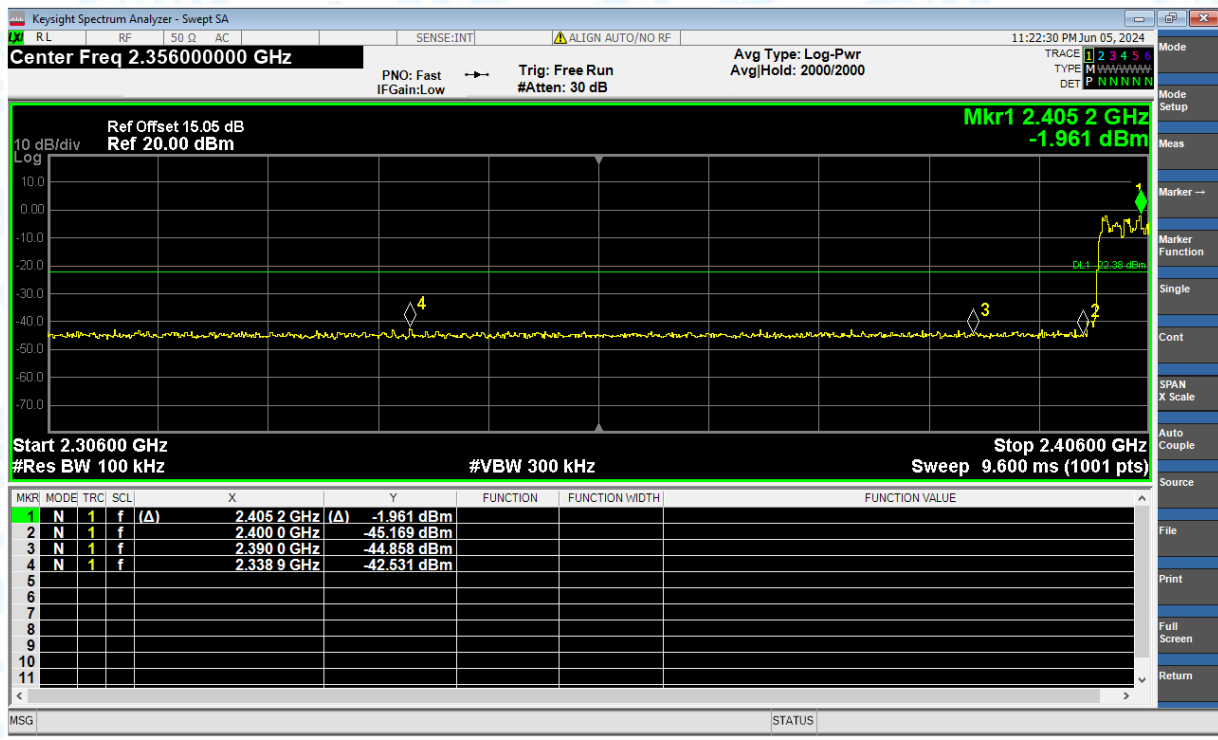
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



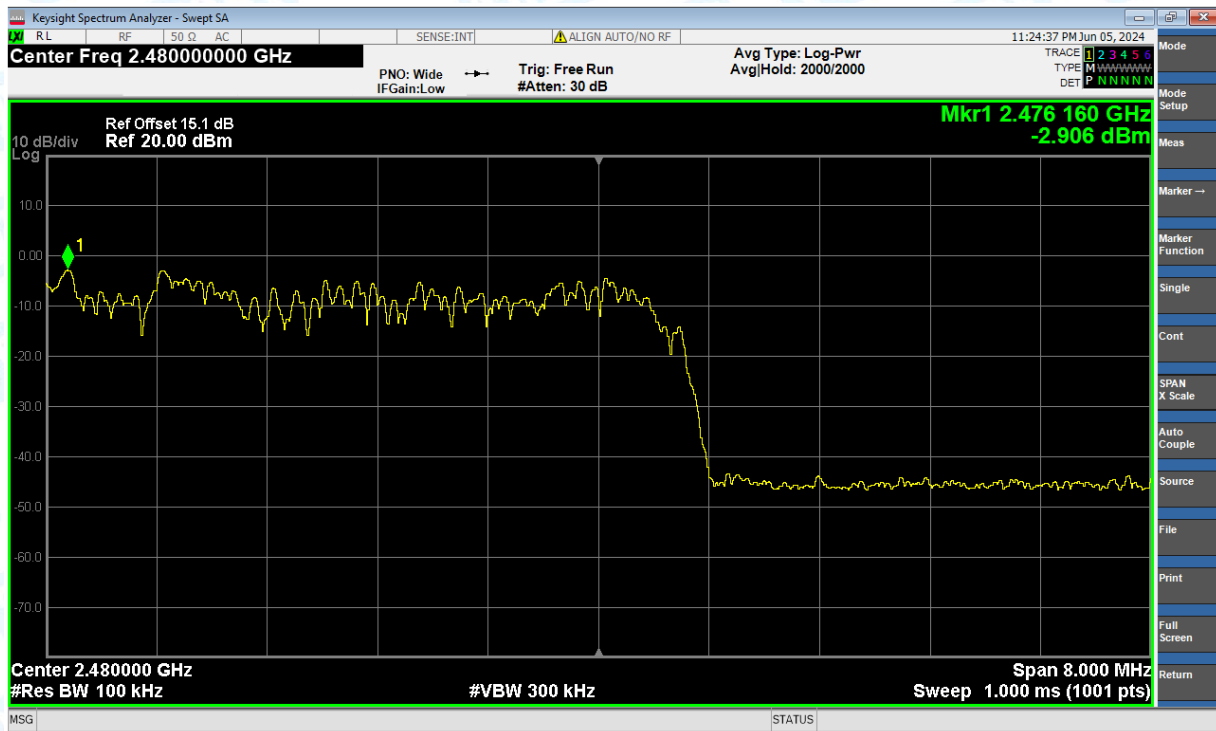
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



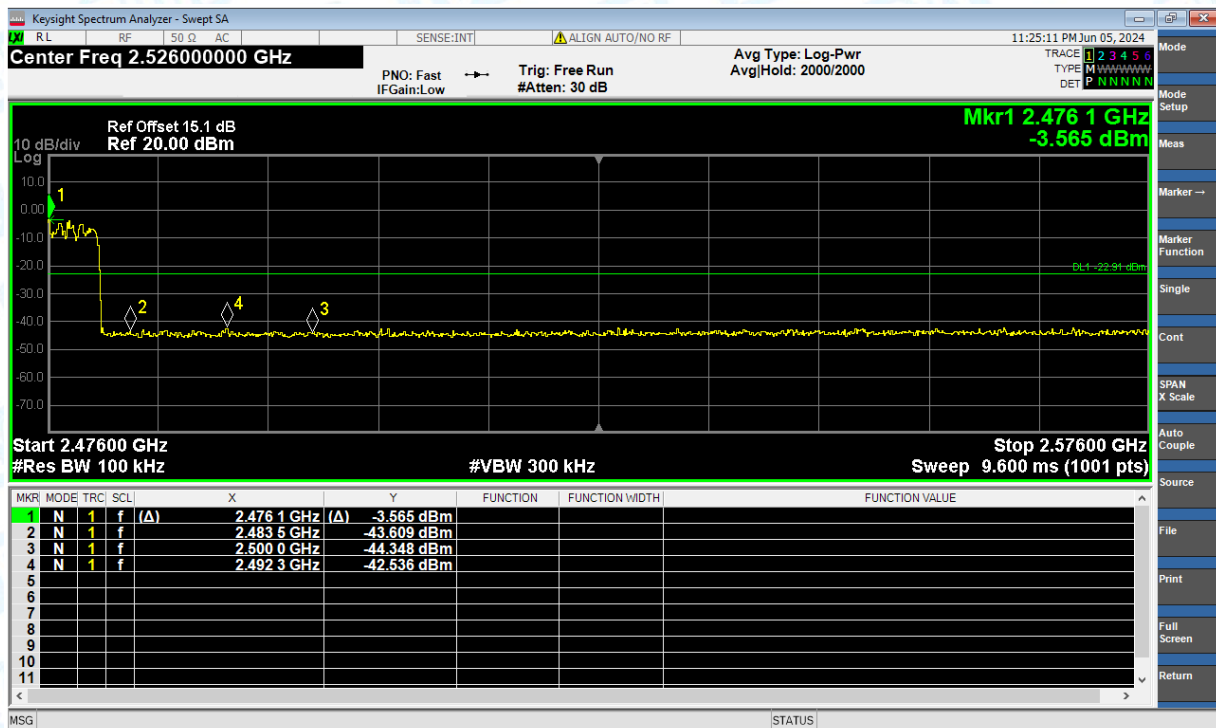
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



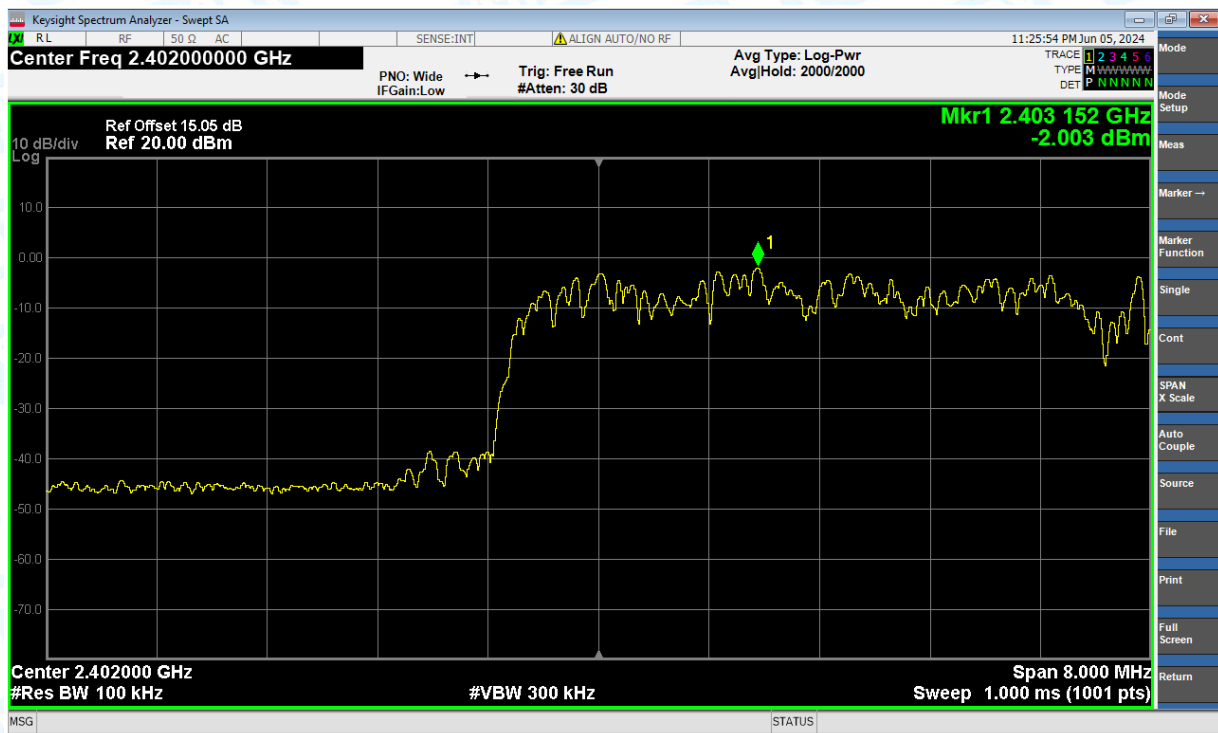
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



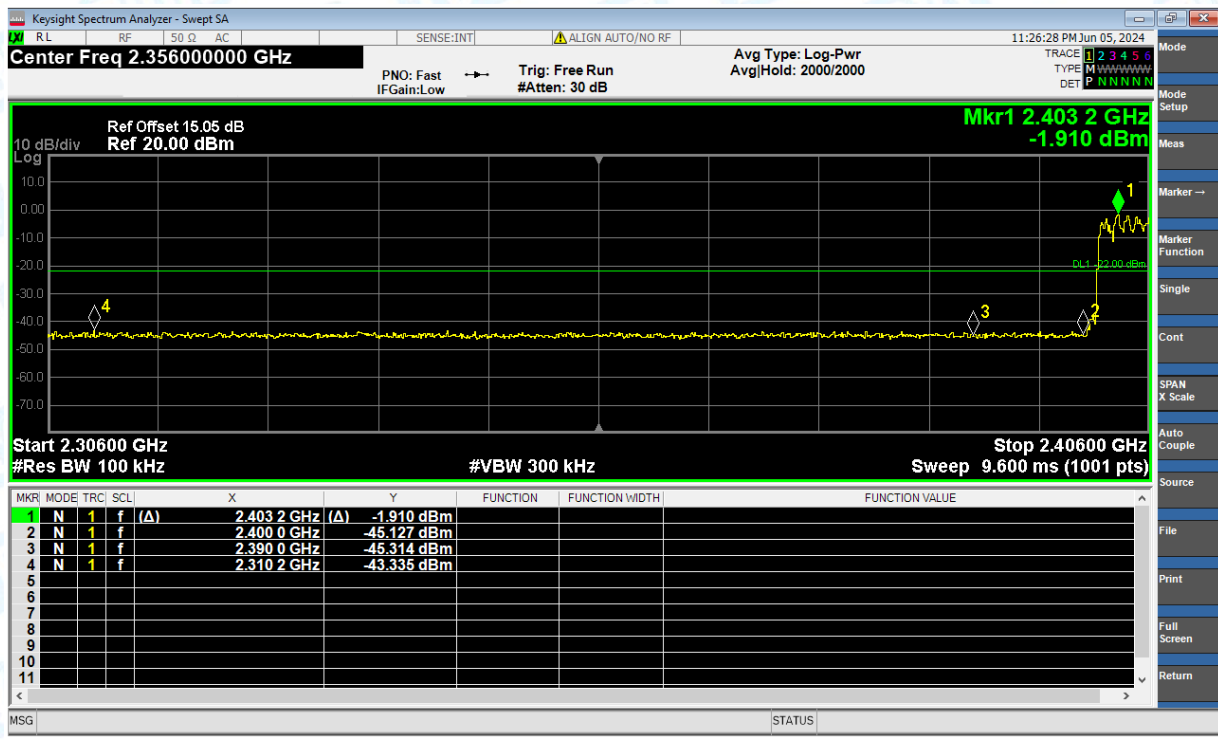
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



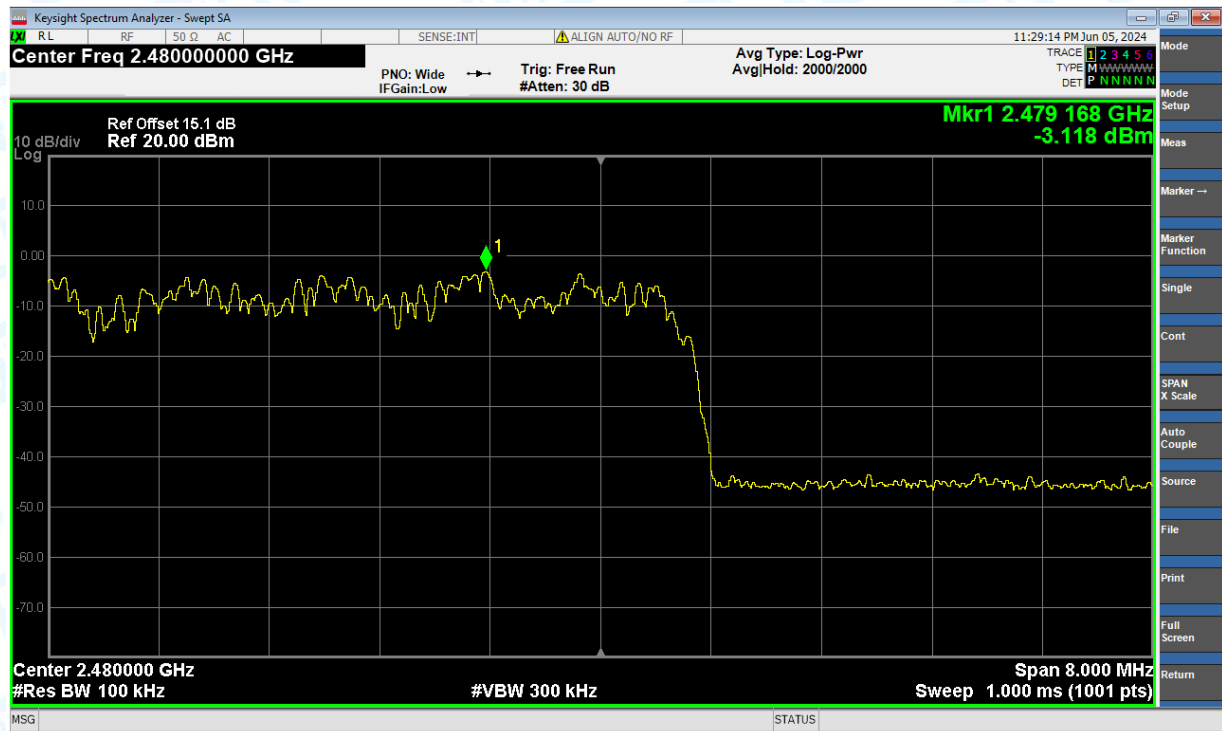
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



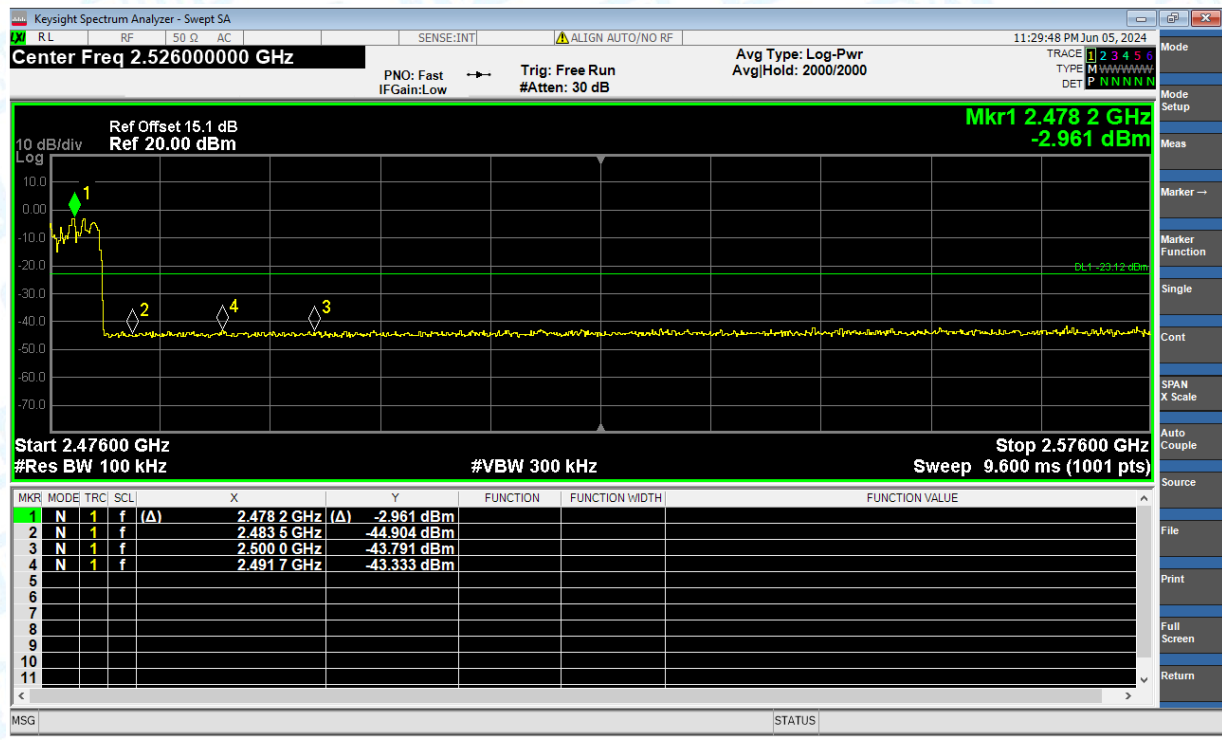
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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

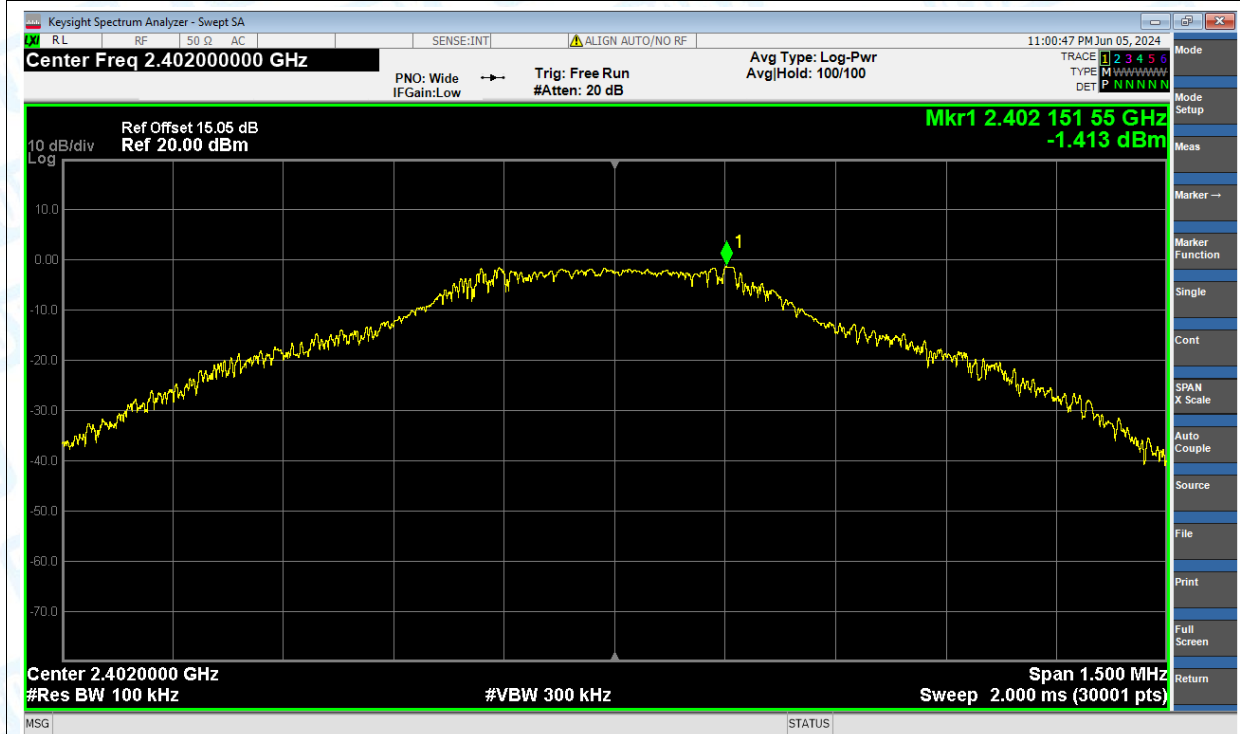


7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-38.03	-20	Pass
NVNT	1-DH1	2441	Ant1	-36.91	-20	Pass
NVNT	1-DH1	2480	Ant1	-35.35	-20	Pass
NVNT	2-DH1	2402	Ant1	-37.29	-20	Pass
NVNT	2-DH1	2441	Ant1	-36.66	-20	Pass
NVNT	2-DH1	2480	Ant1	-35.91	-20	Pass
NVNT	3-DH1	2402	Ant1	-37.61	-20	Pass
NVNT	3-DH1	2441	Ant1	-36.53	-20	Pass
NVNT	3-DH1	2480	Ant1	-36.51	-20	Pass

Test Graphs

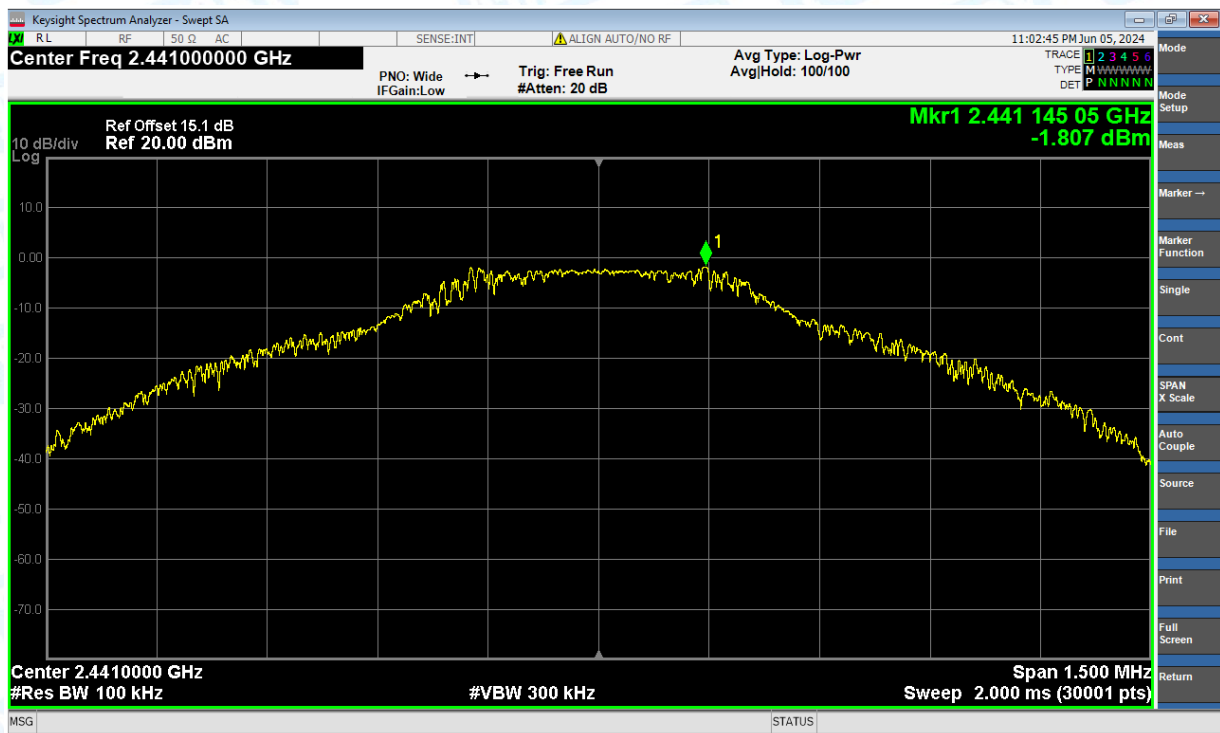
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



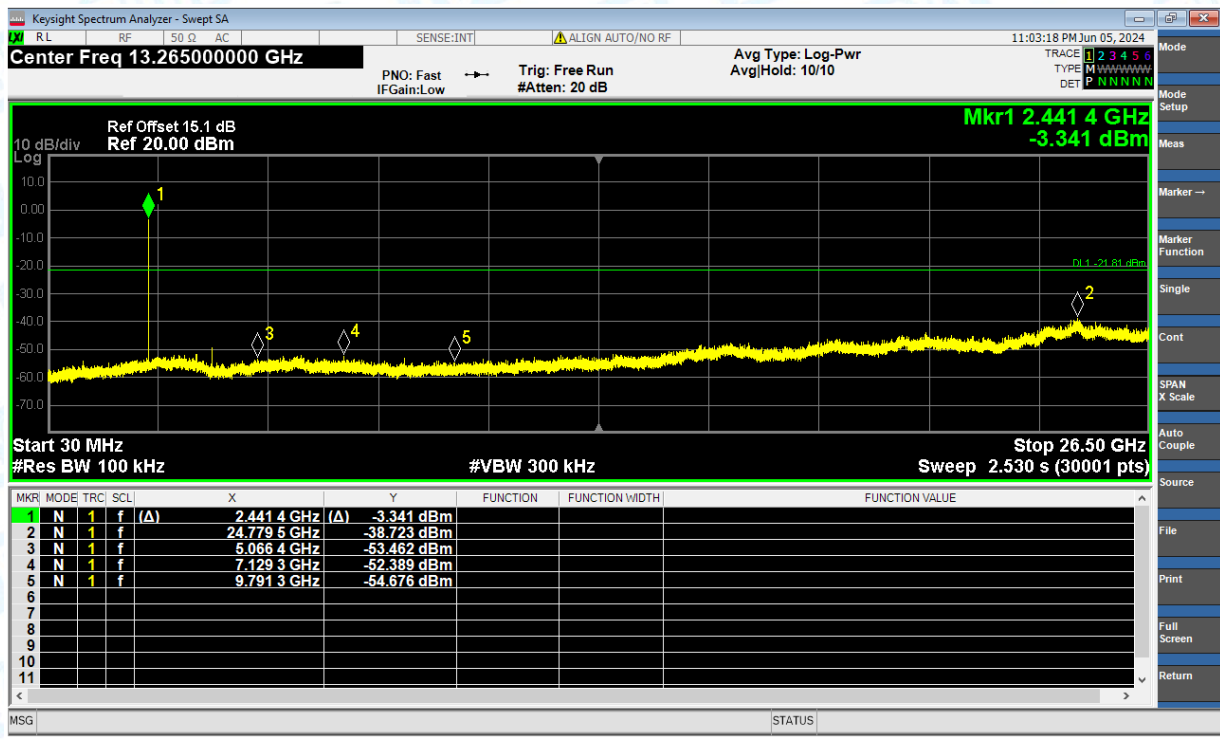
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



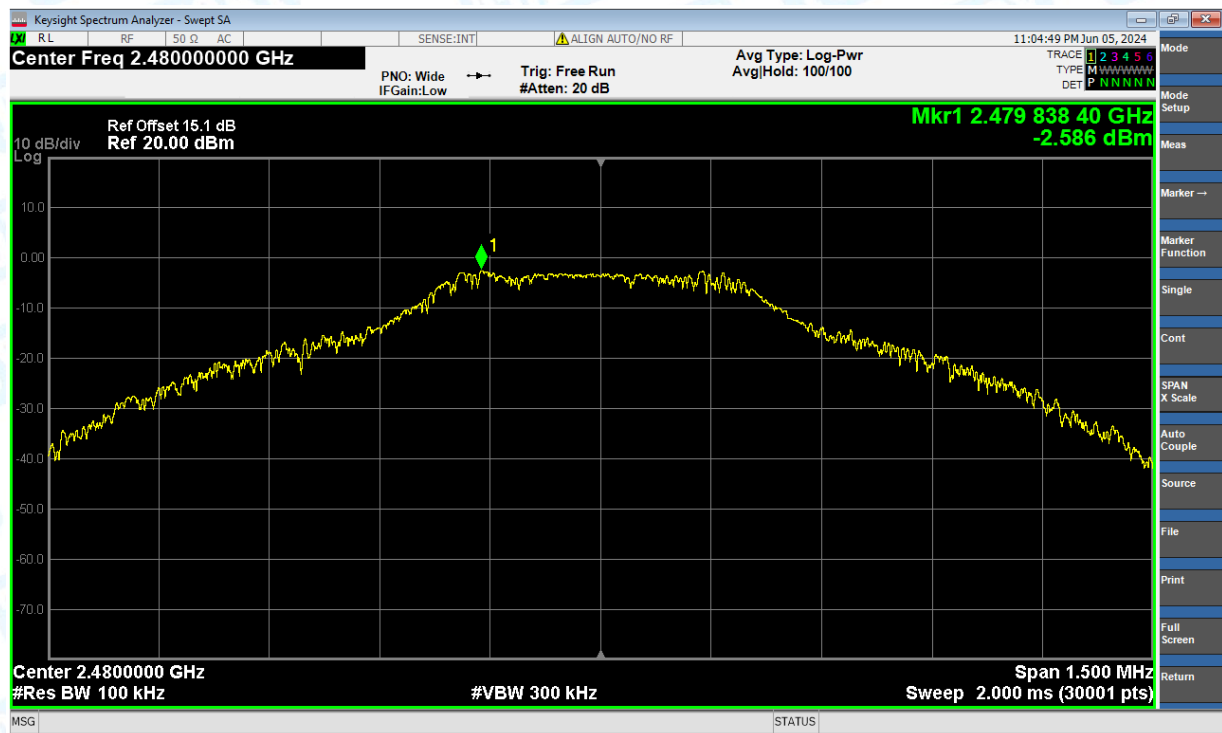
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



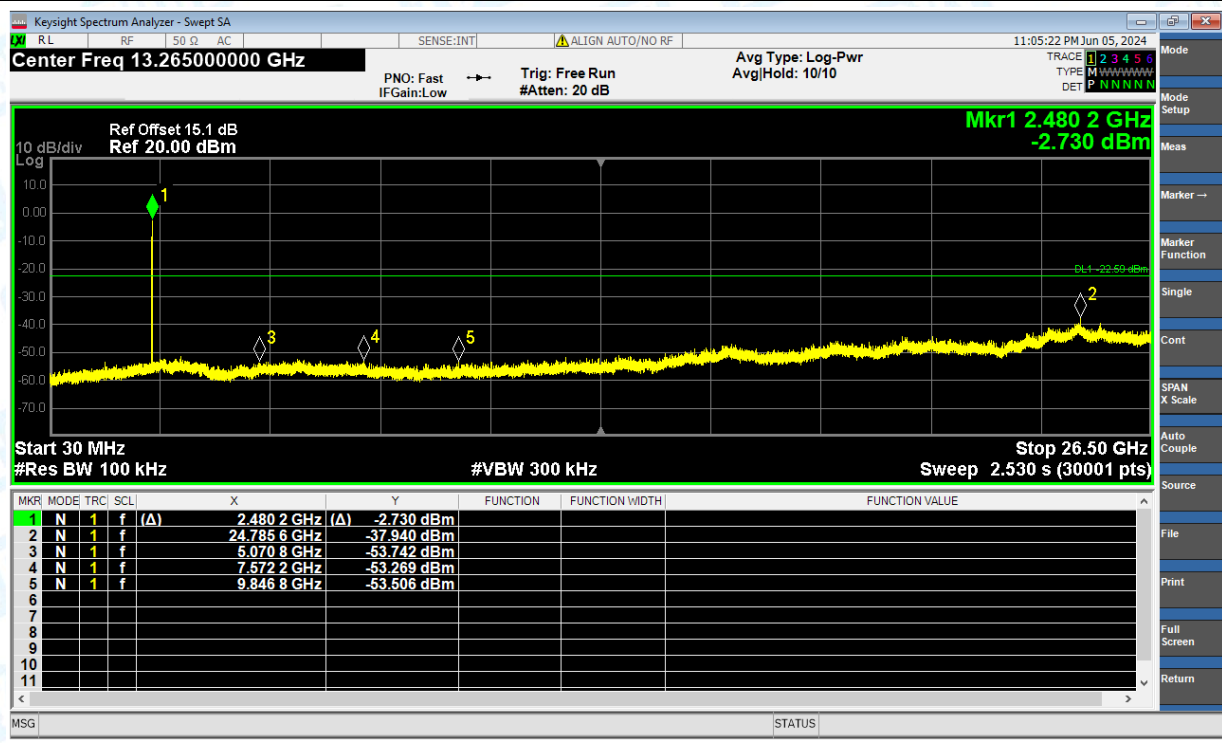
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



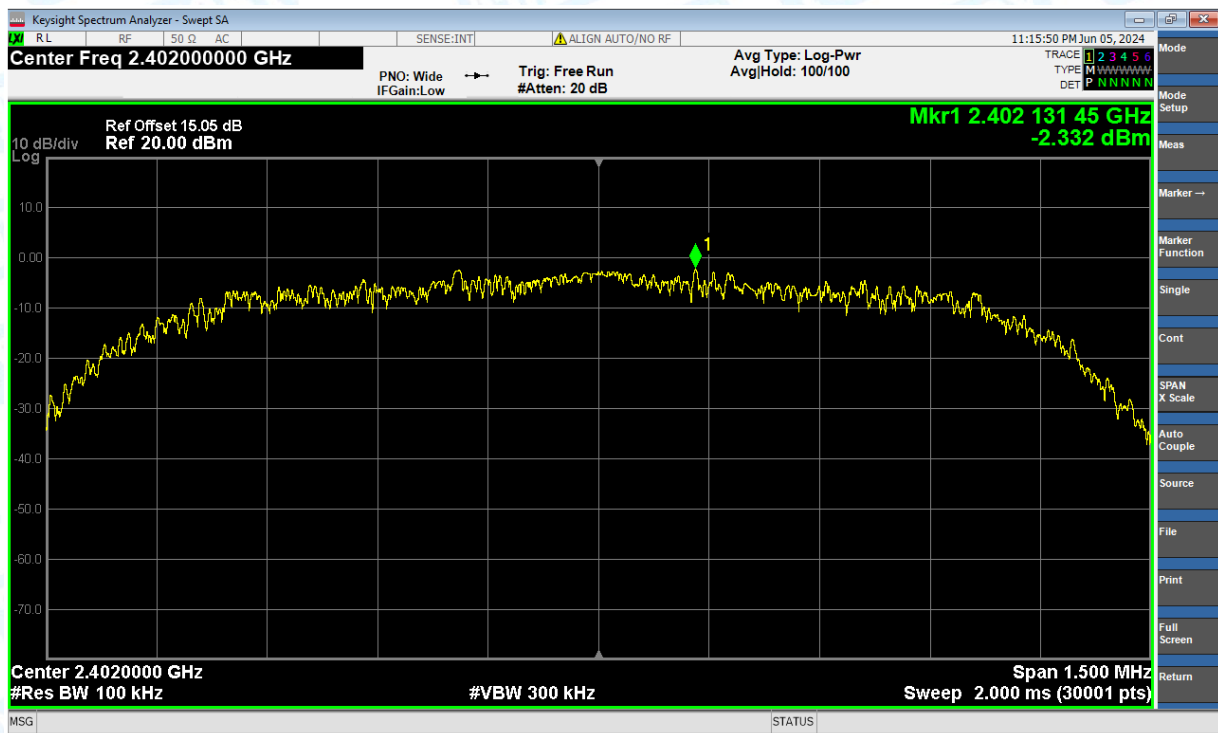
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



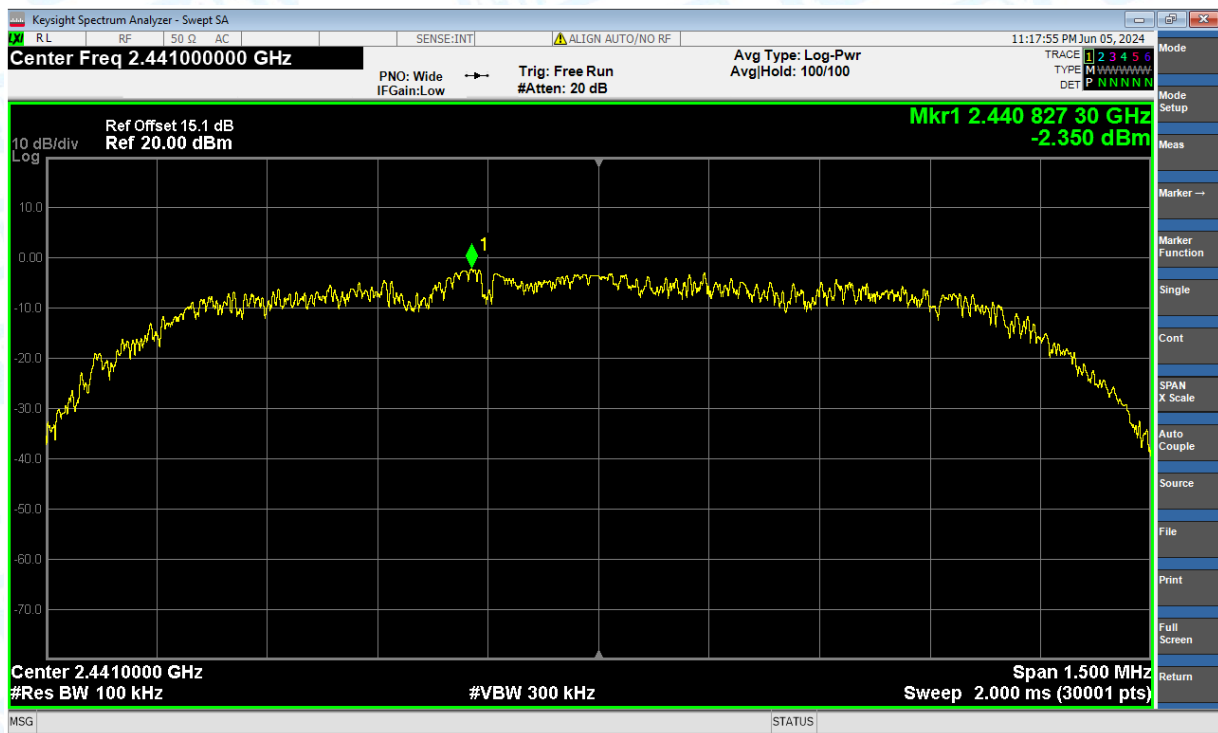
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



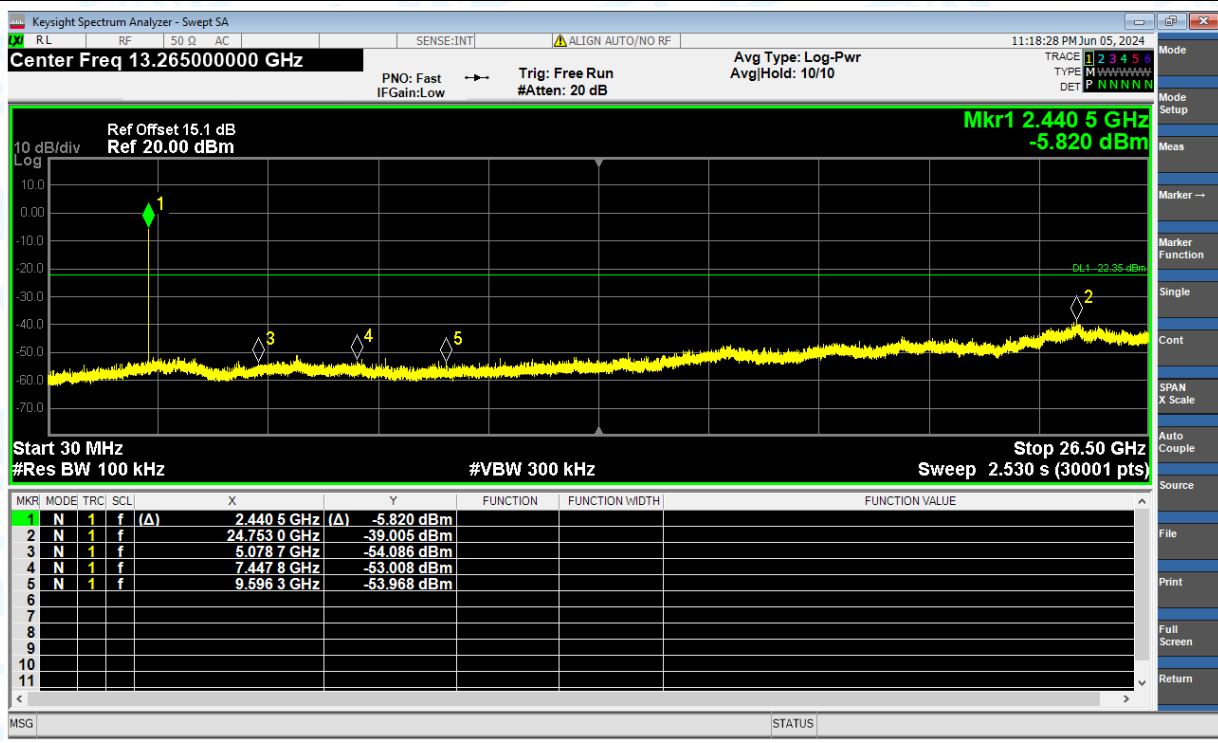
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



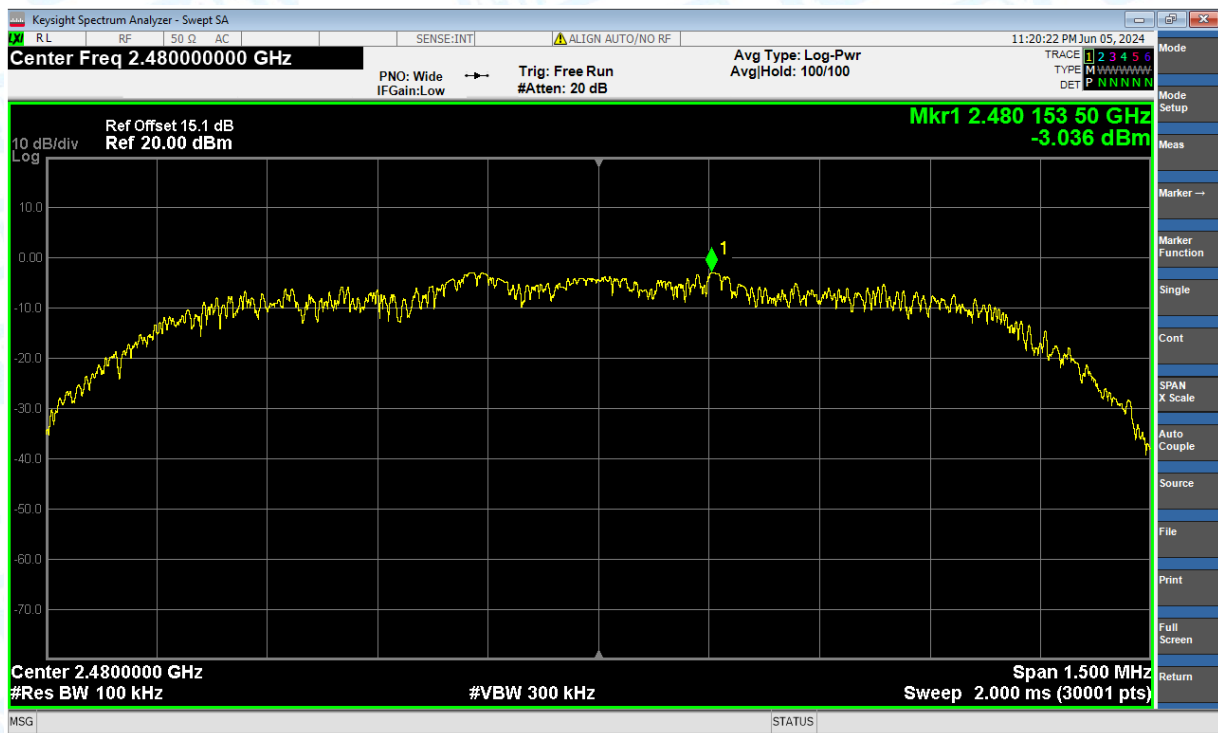
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



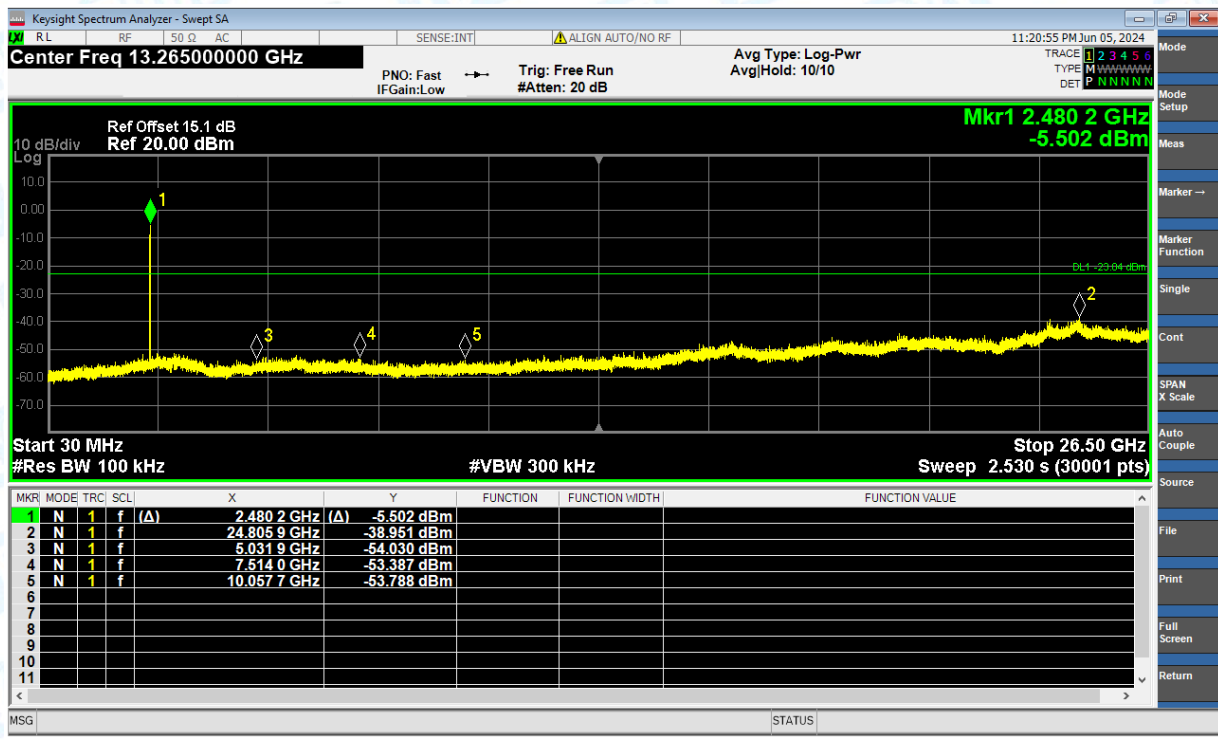
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



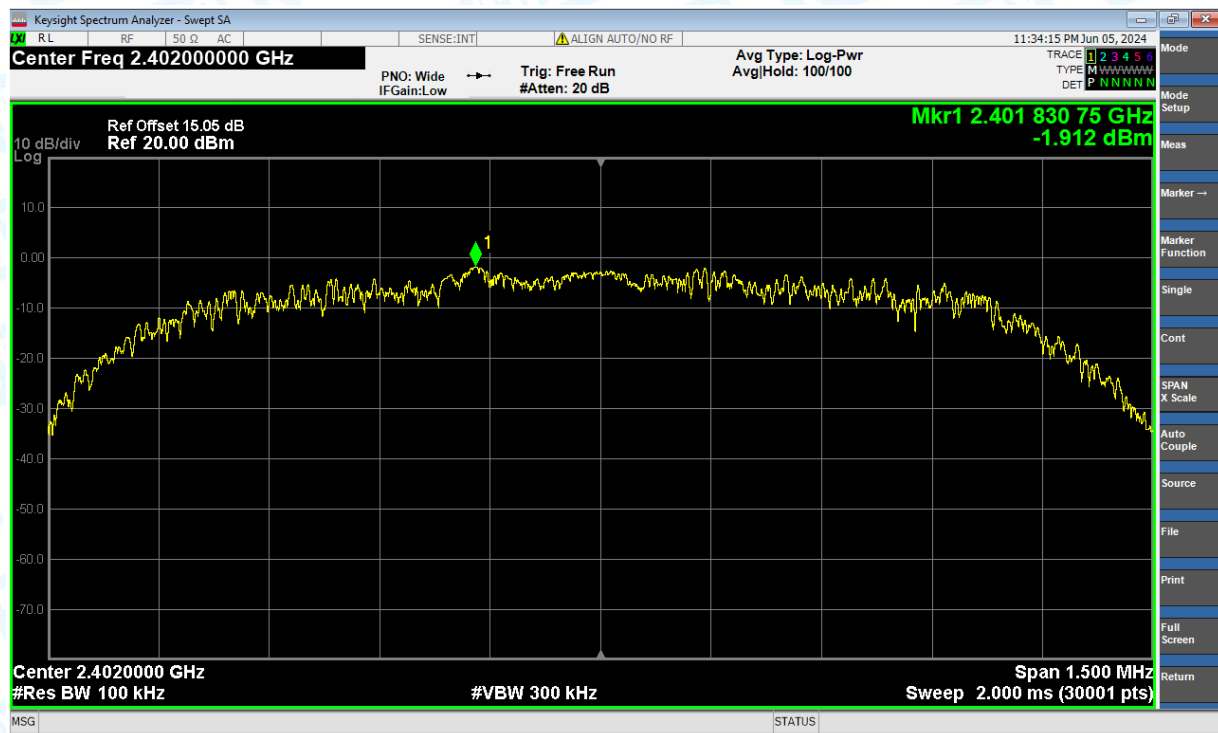
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



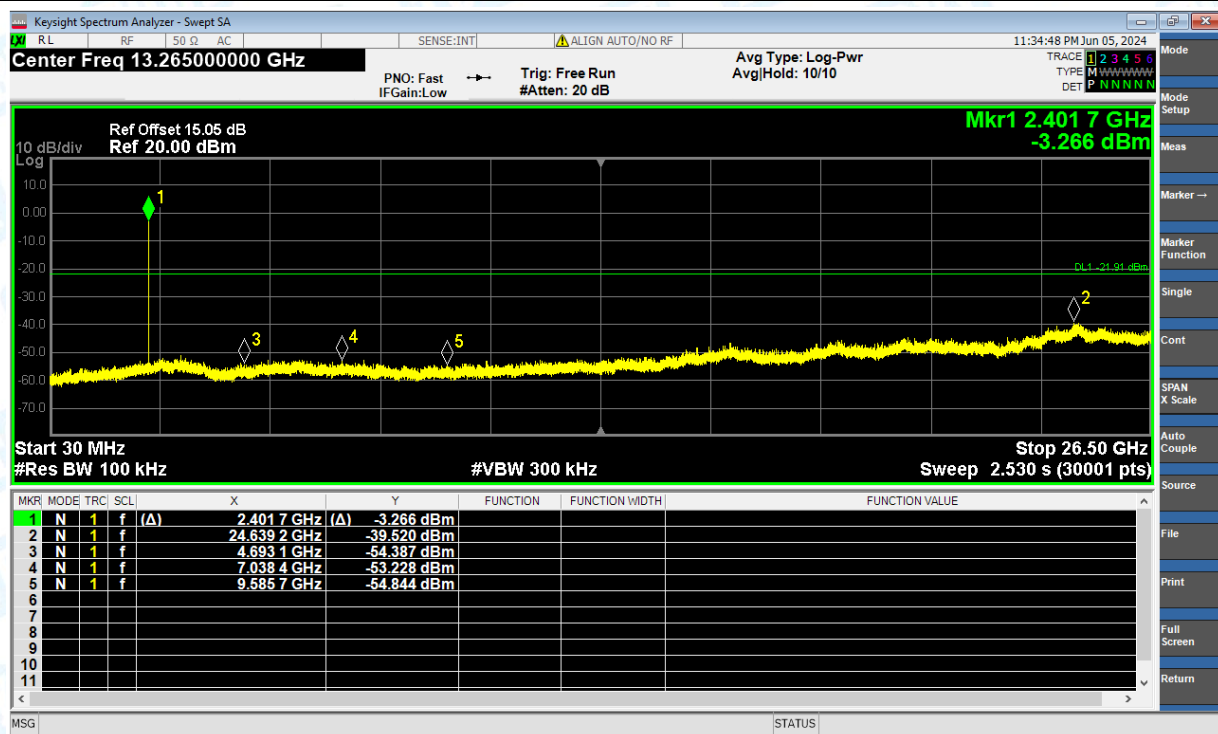
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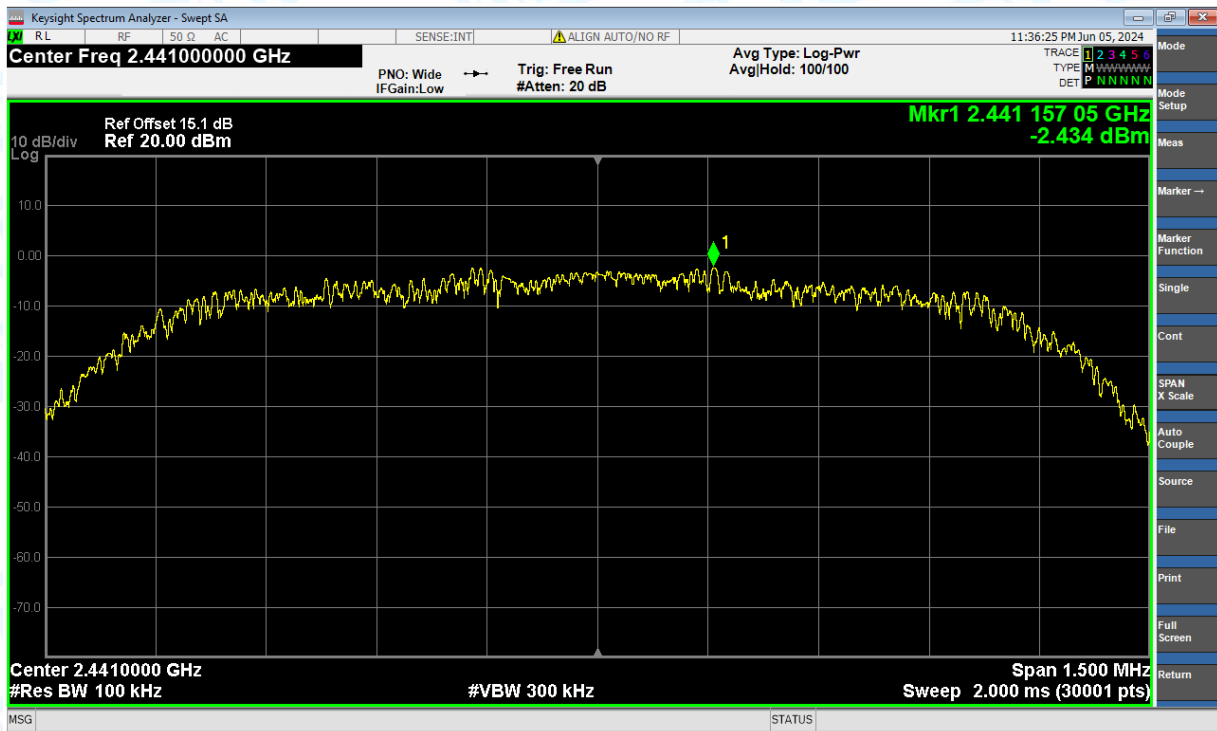
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



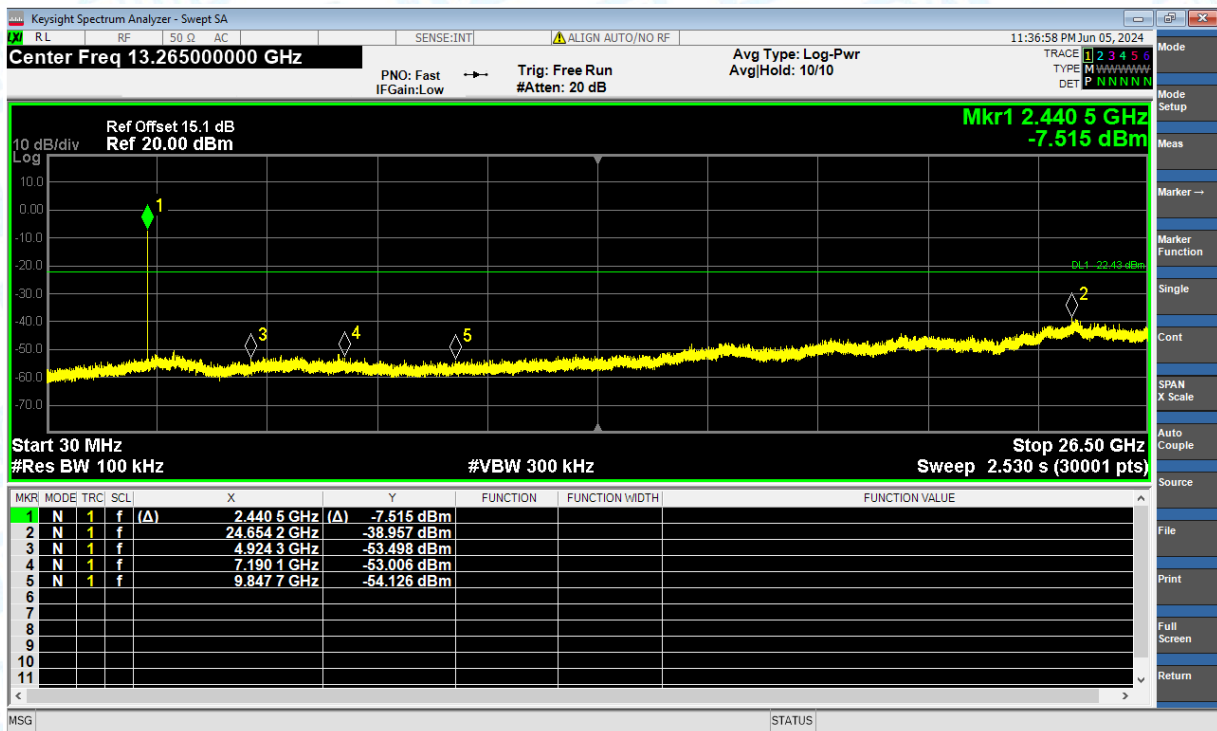
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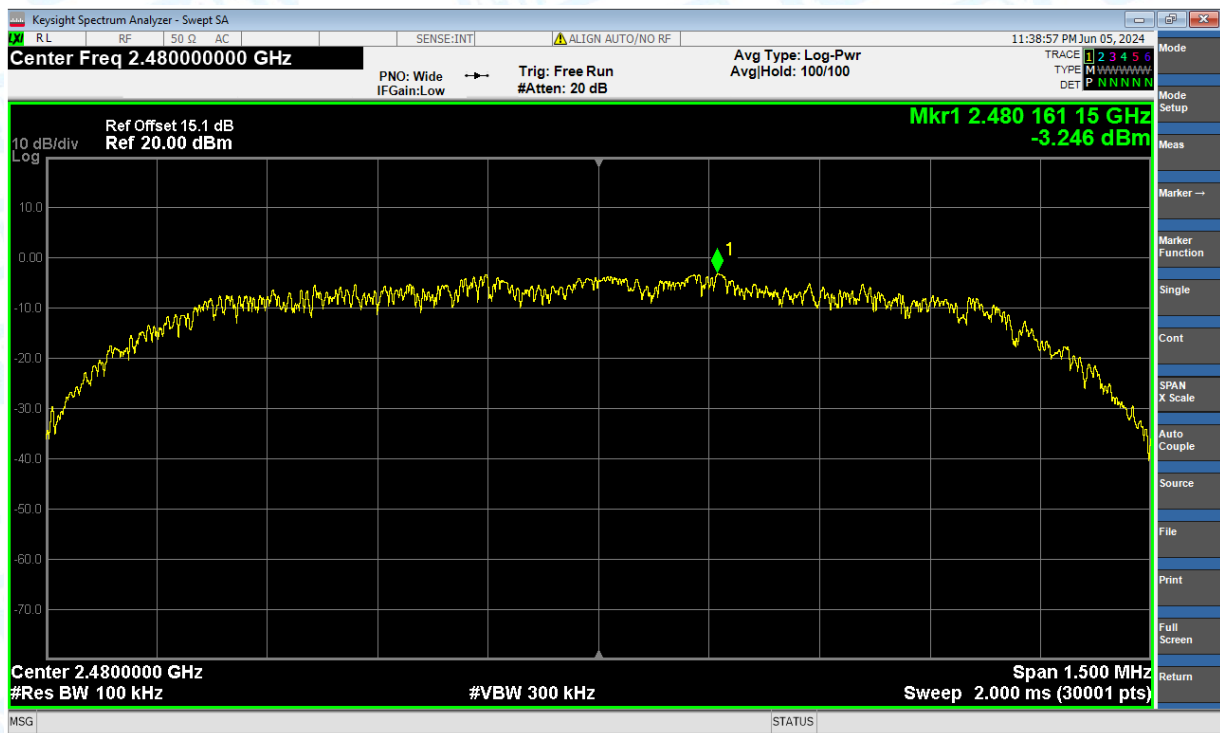
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



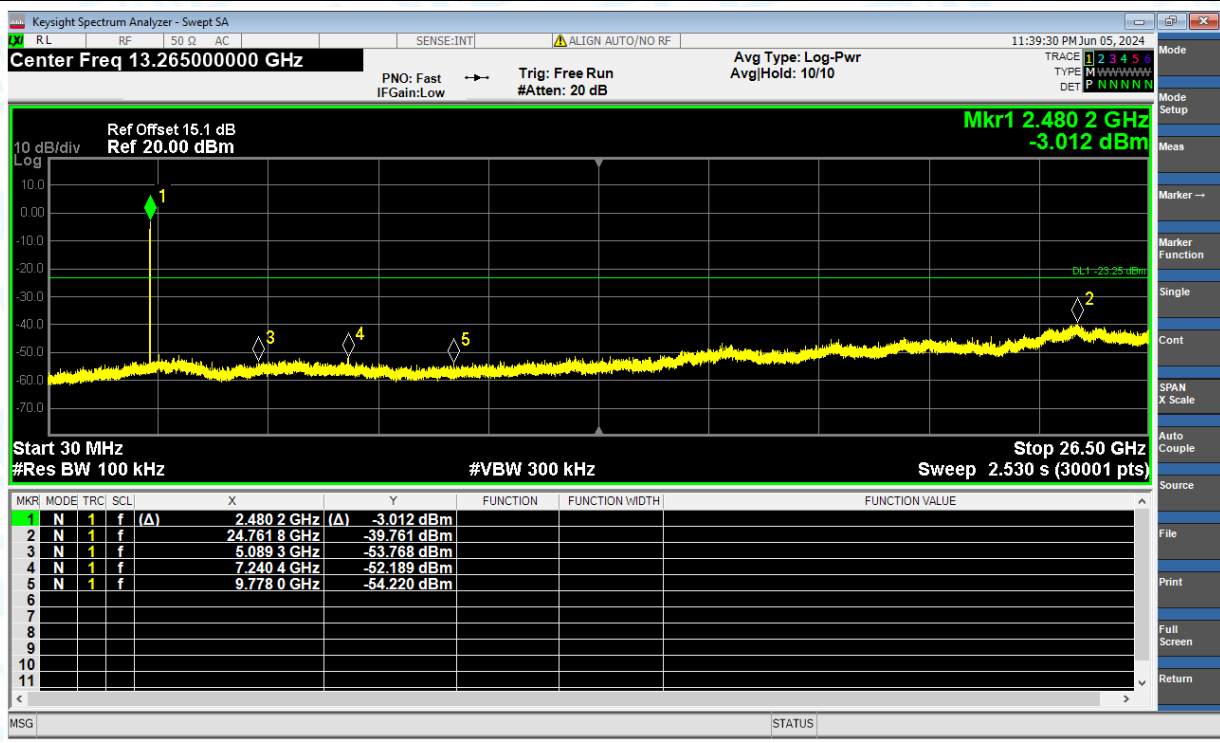
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

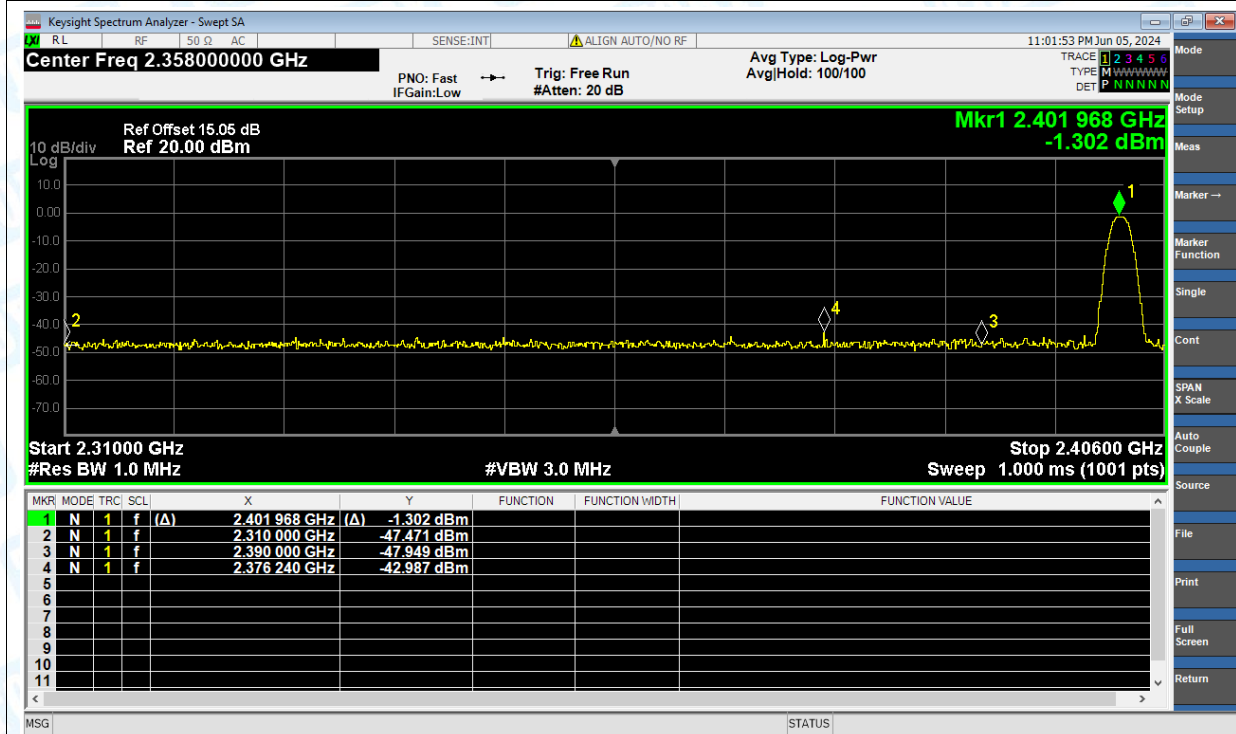


8.Restrict Band

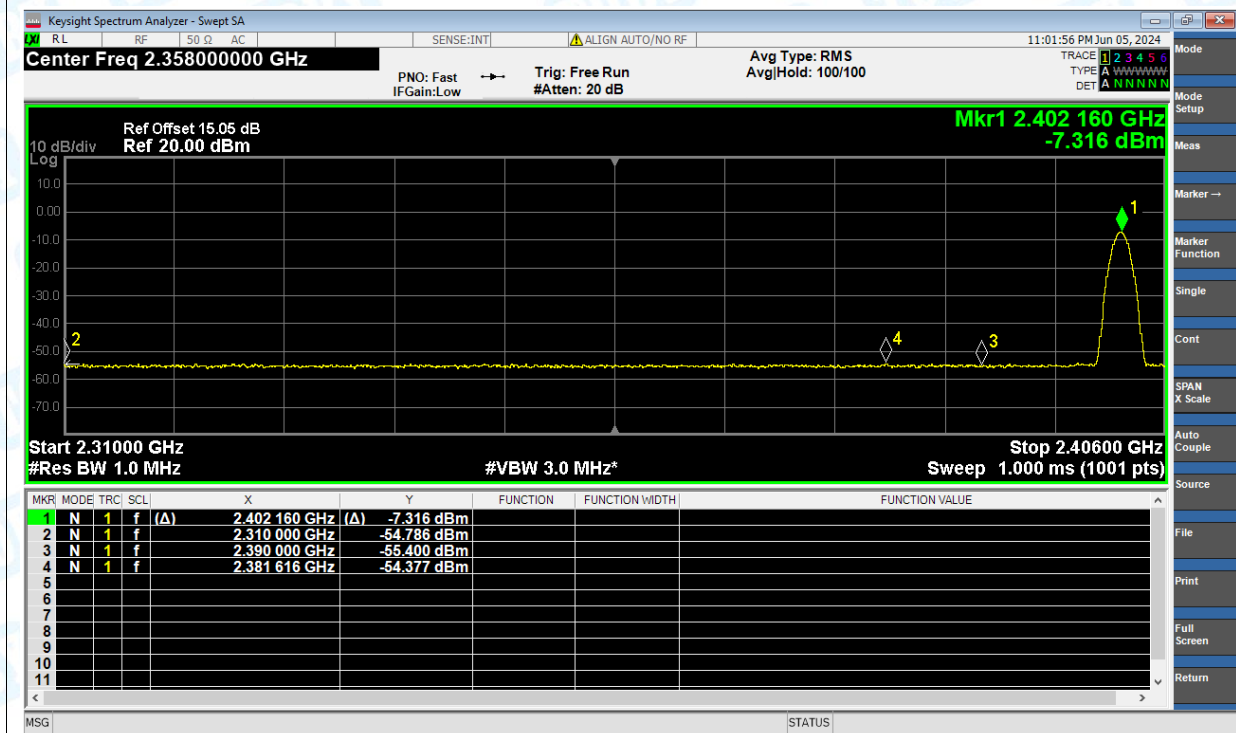
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-47.47	2	-	49.79	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-54.79	2	5.29	47.76	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2376.24	-42.99	2	-	54.27	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2381.616	-54.38	2	5.29	48.17	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.95	2	-	49.31	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.4	2	5.29	47.15	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-45.41	2	-	51.85	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.24	2	5.29	47.31	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2494.384	-42.81	2	-	54.45	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2495.032	-53.98	2	5.29	48.57	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-45.07	2	-	52.19	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.82	2	5.29	47.73	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.97	2	-	48.29	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-54.93	2	5.17	47.5	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2372.592	-44.24	2	-	53.02	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2346.192	-54.35	2	5.17	48.08	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46.21	2	-	51.05	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.26	2	5.17	47.17	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-46.32	2	-	50.94	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.41	2	5.17	48.02	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2496.976	-43.6	2	-	53.66	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2497.432	-53.98	2	5.17	48.45	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.61	2	-	50.65	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.8	2	5.17	46.63	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-47.61	2	-	49.65	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.47	2	5.17	46.96	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2342.64	-43.93	2	-	53.33	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2381.616	-54.27	2	5.17	48.16	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-48.4	2	-	48.86	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.06	2	5.17	47.37	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-46.78	2	-	50.48	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-54.65	2	5.17	47.78	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2495.752	-43.78	2	-	53.48	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2497.792	-54.15	2	5.17	48.28	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.5	2	-	50.76	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.28	2	5.17	47.15	Average	54	Pass

Test Graphs

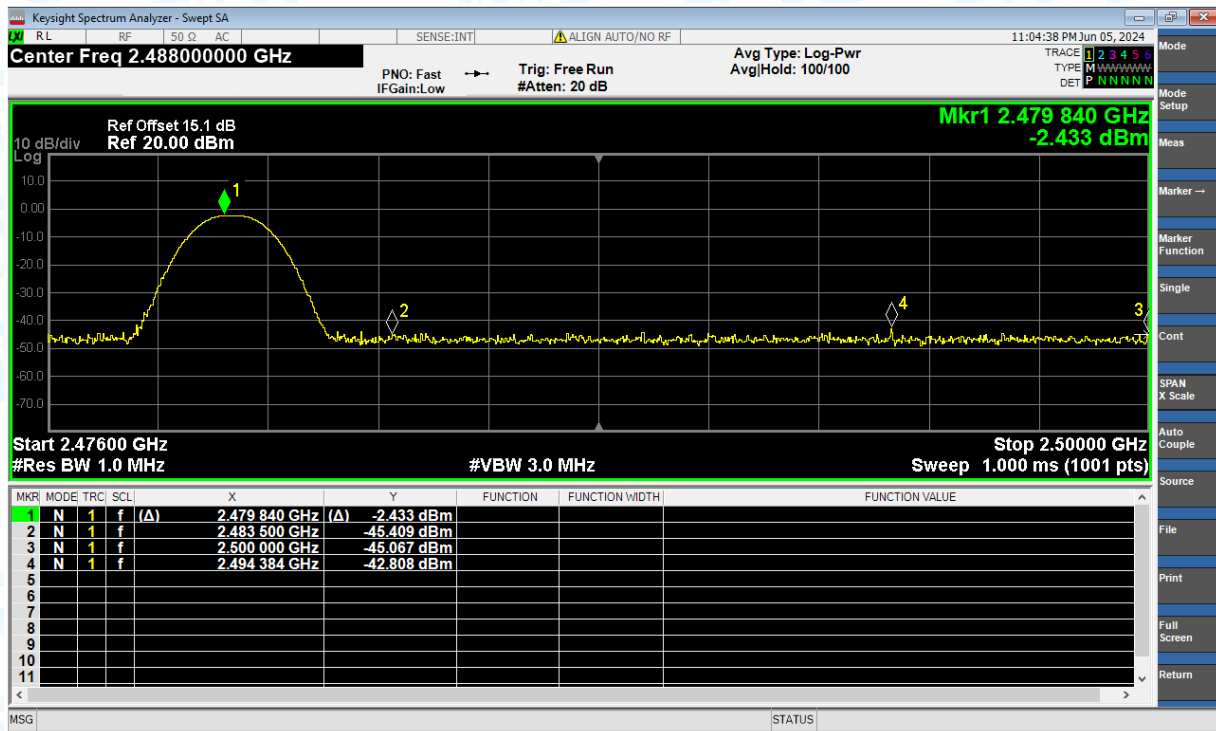
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



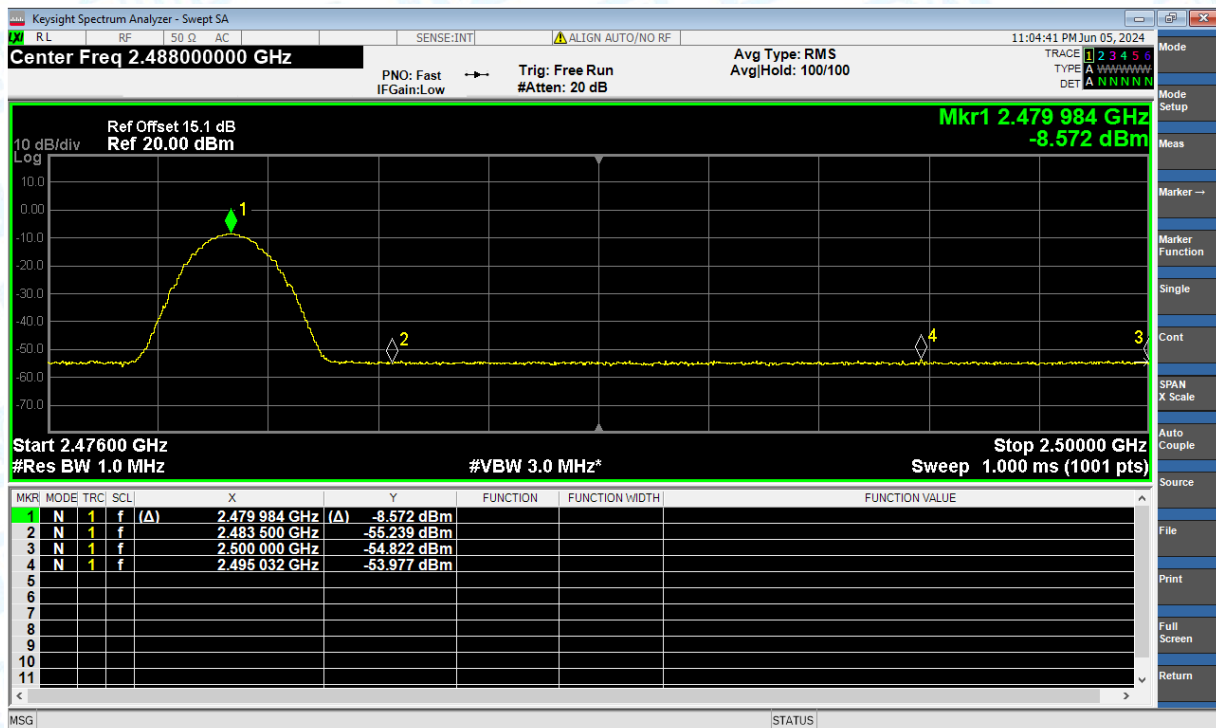
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



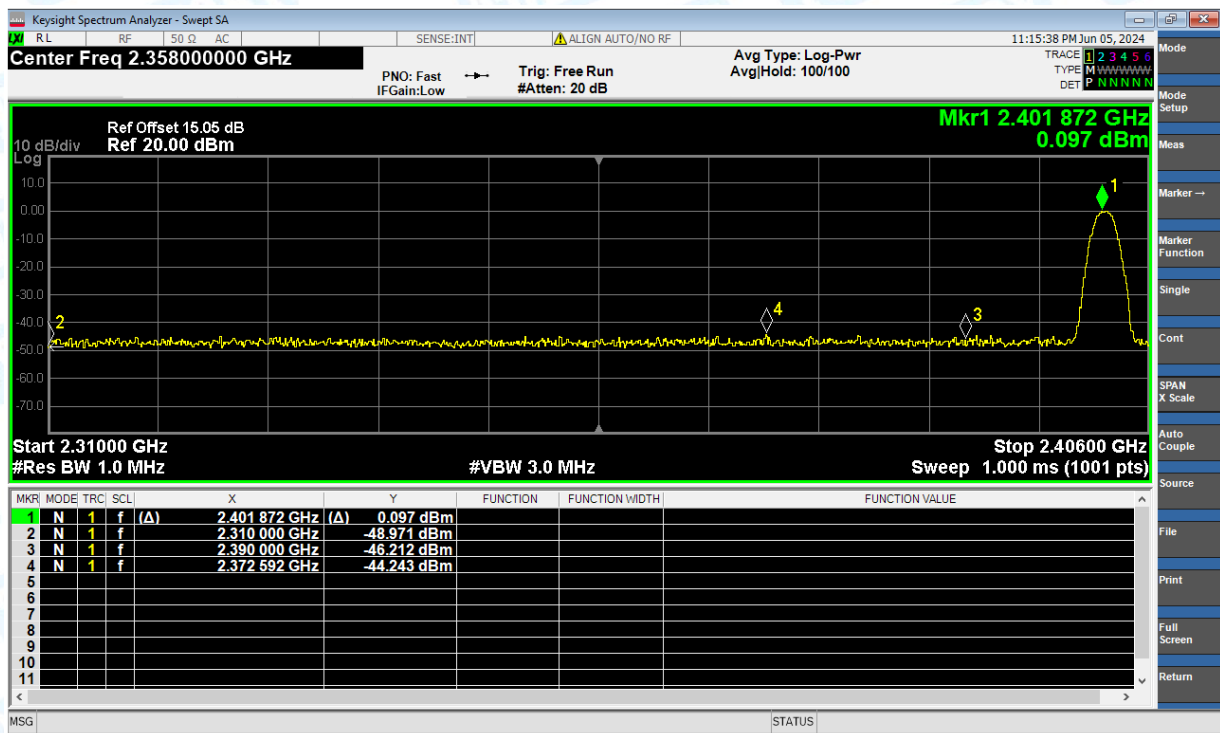
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



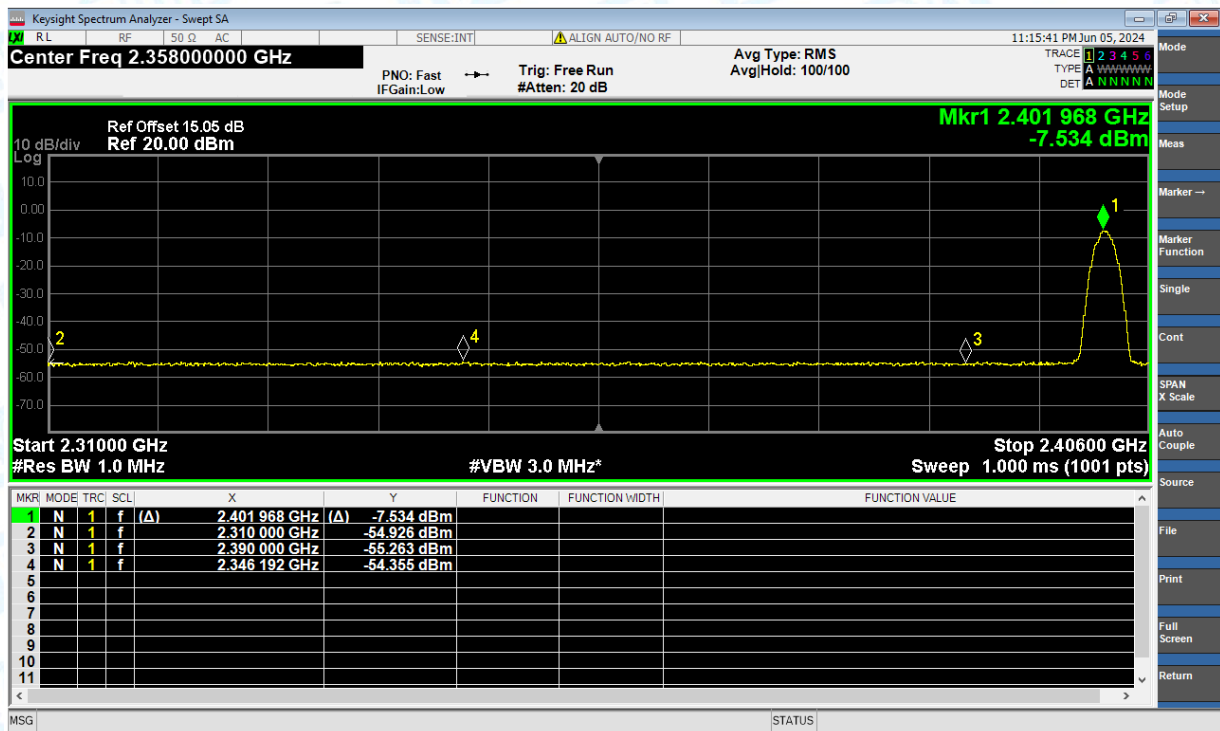
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



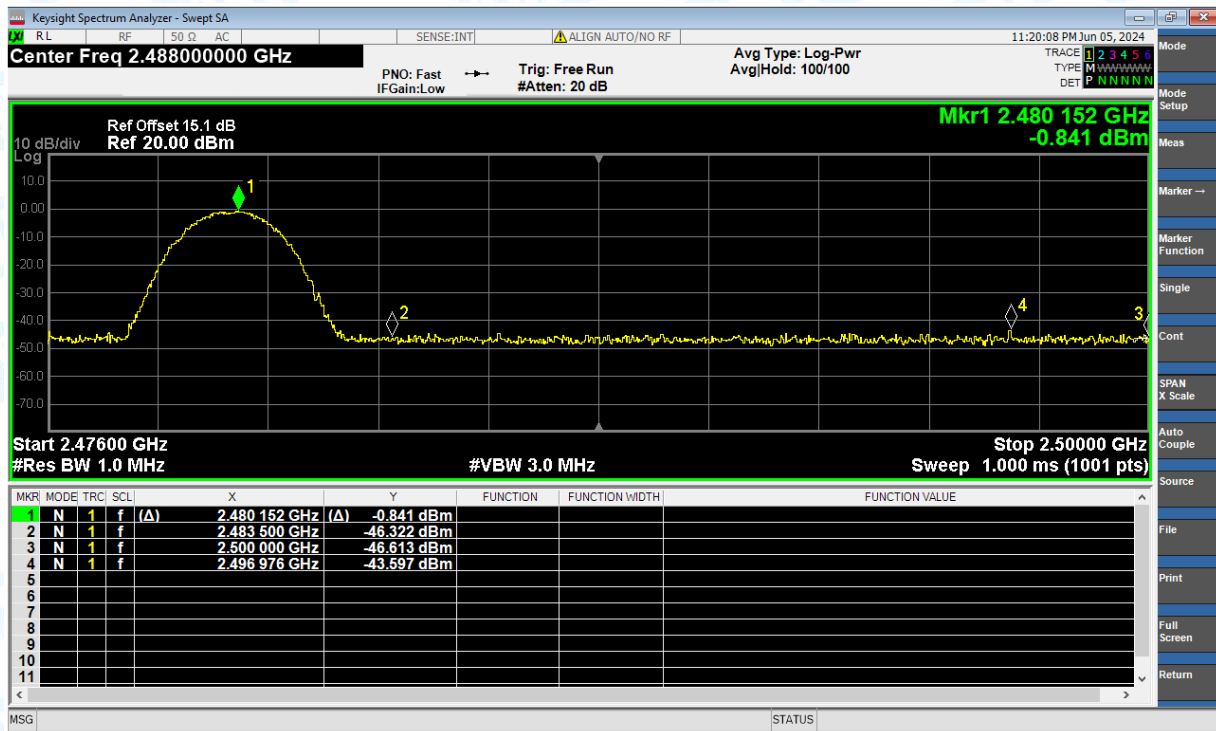
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



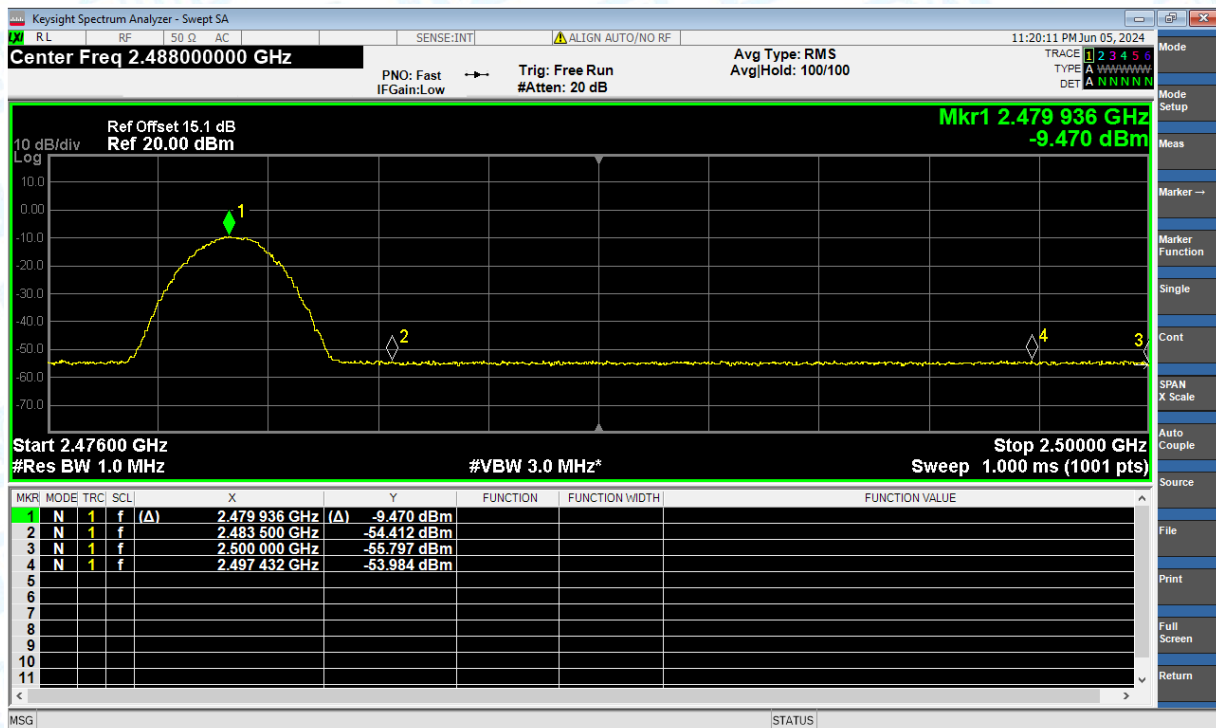
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



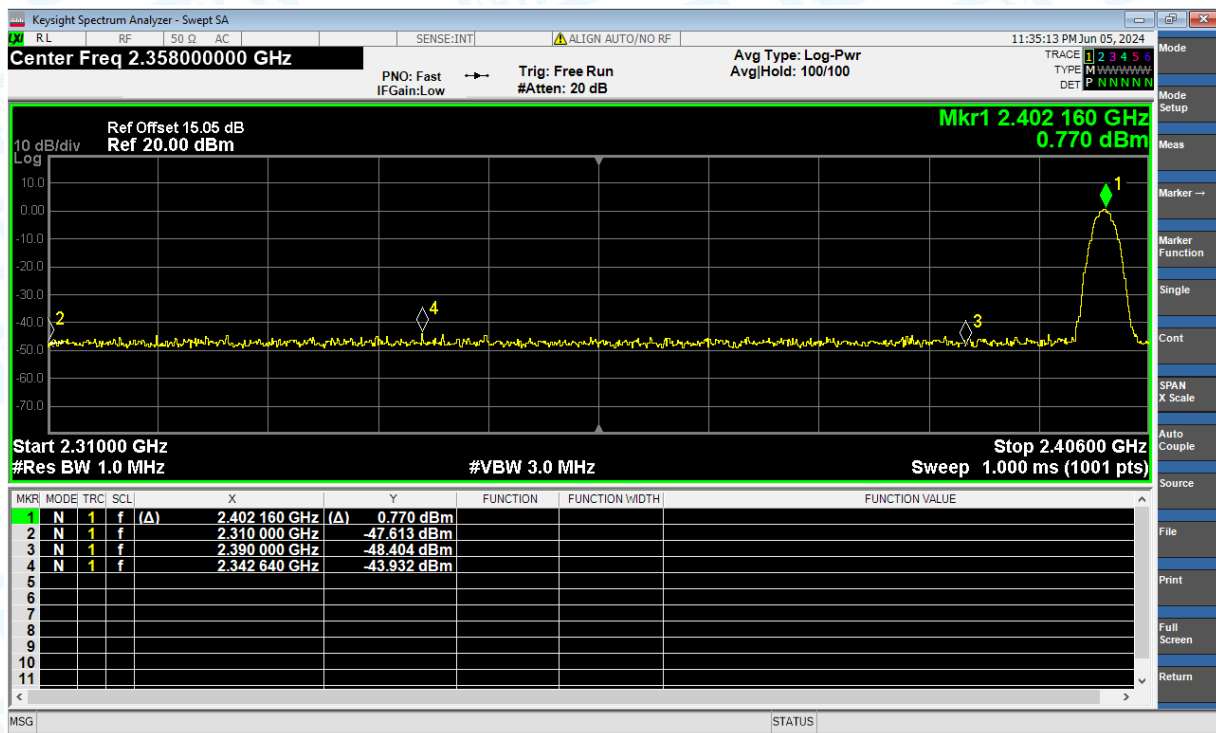
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



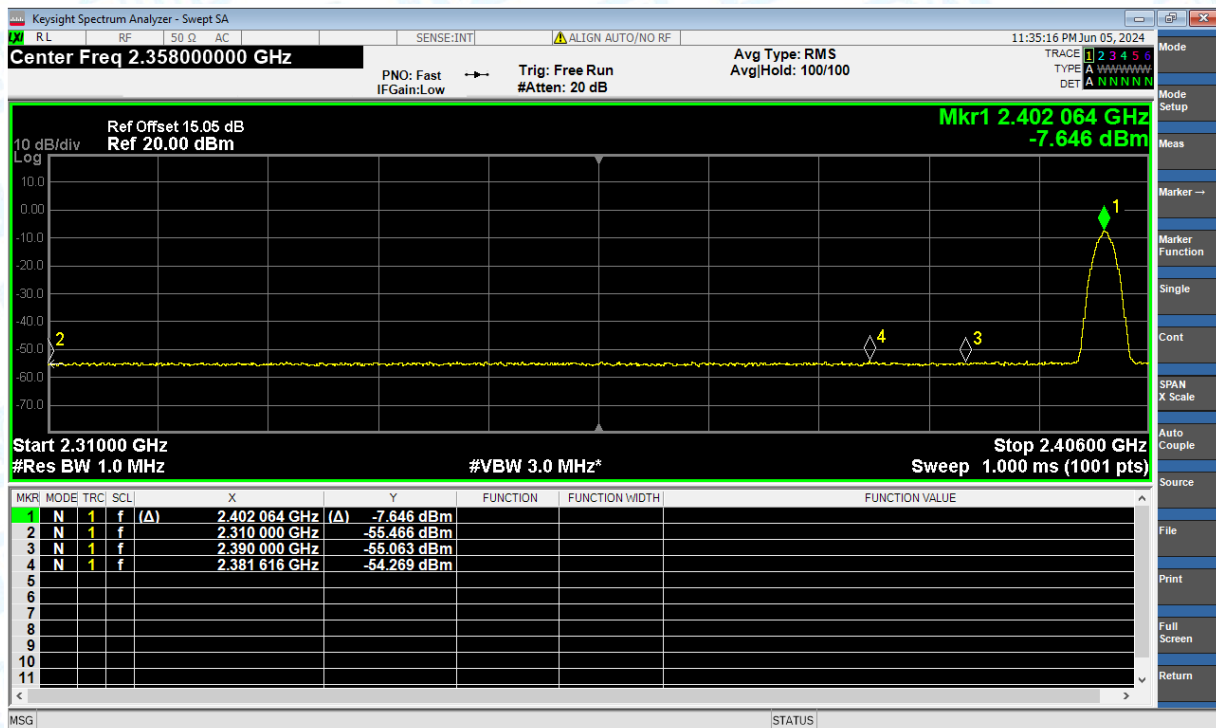
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



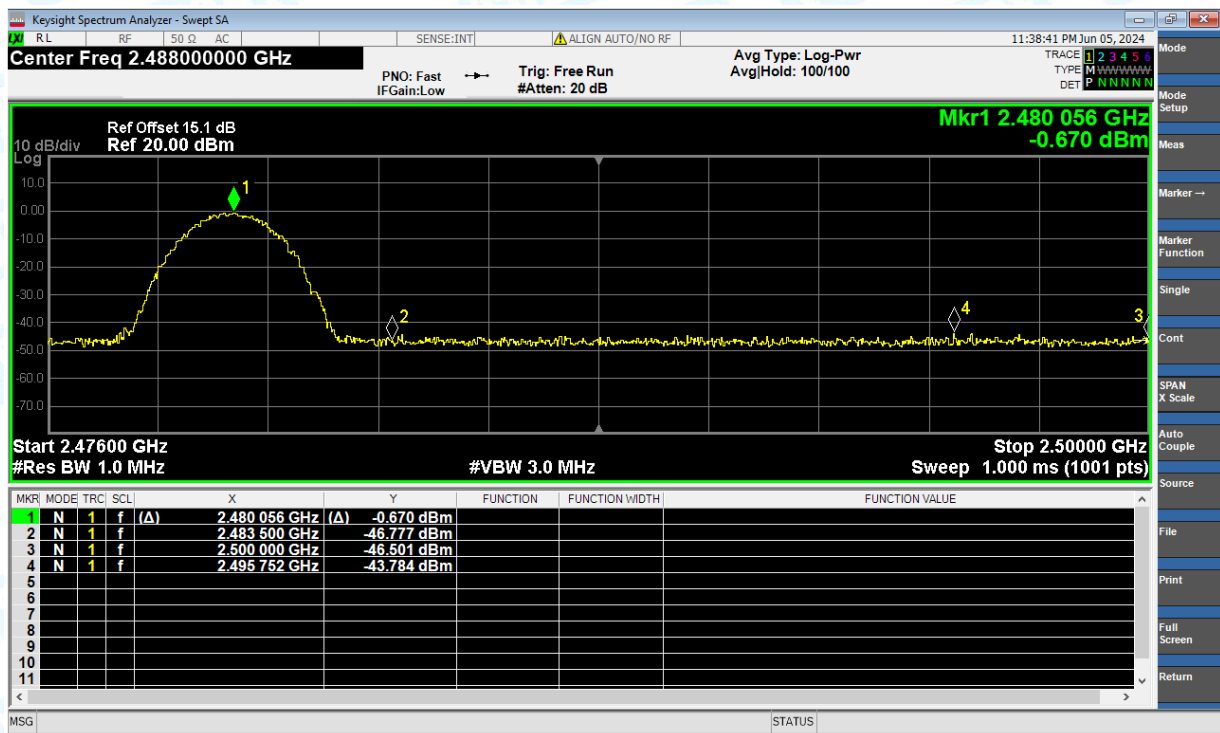
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



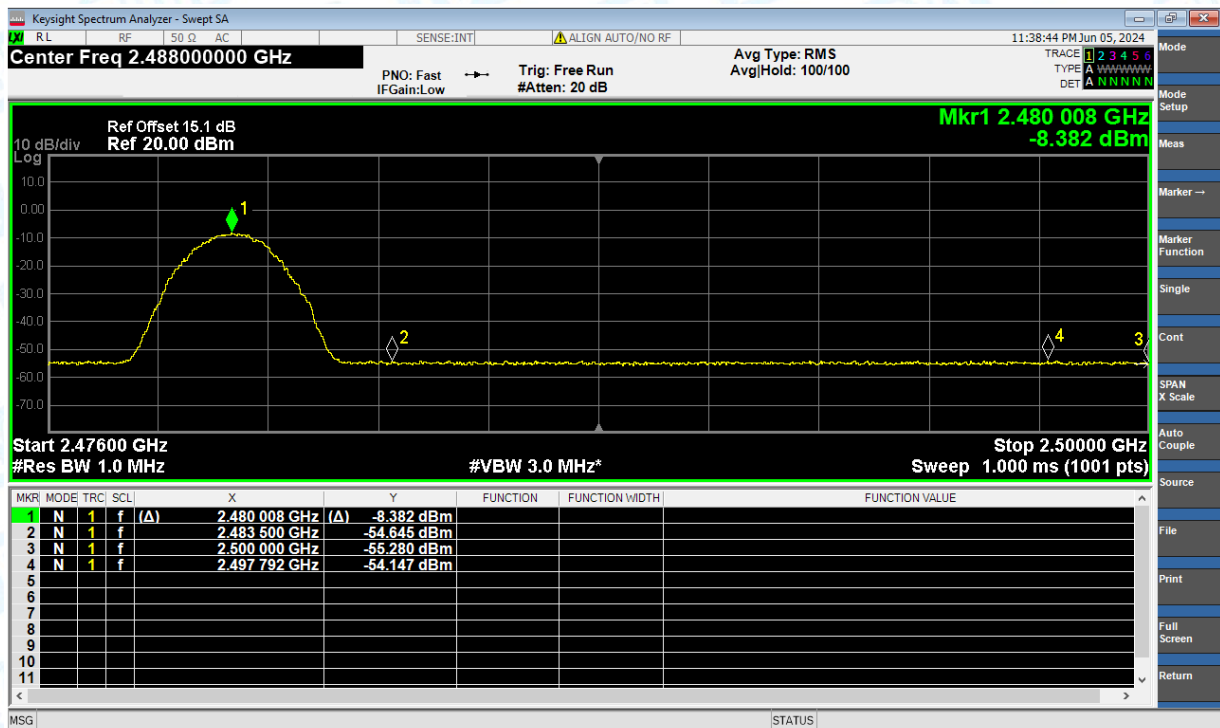
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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



9.Carrier Frequencies Separation

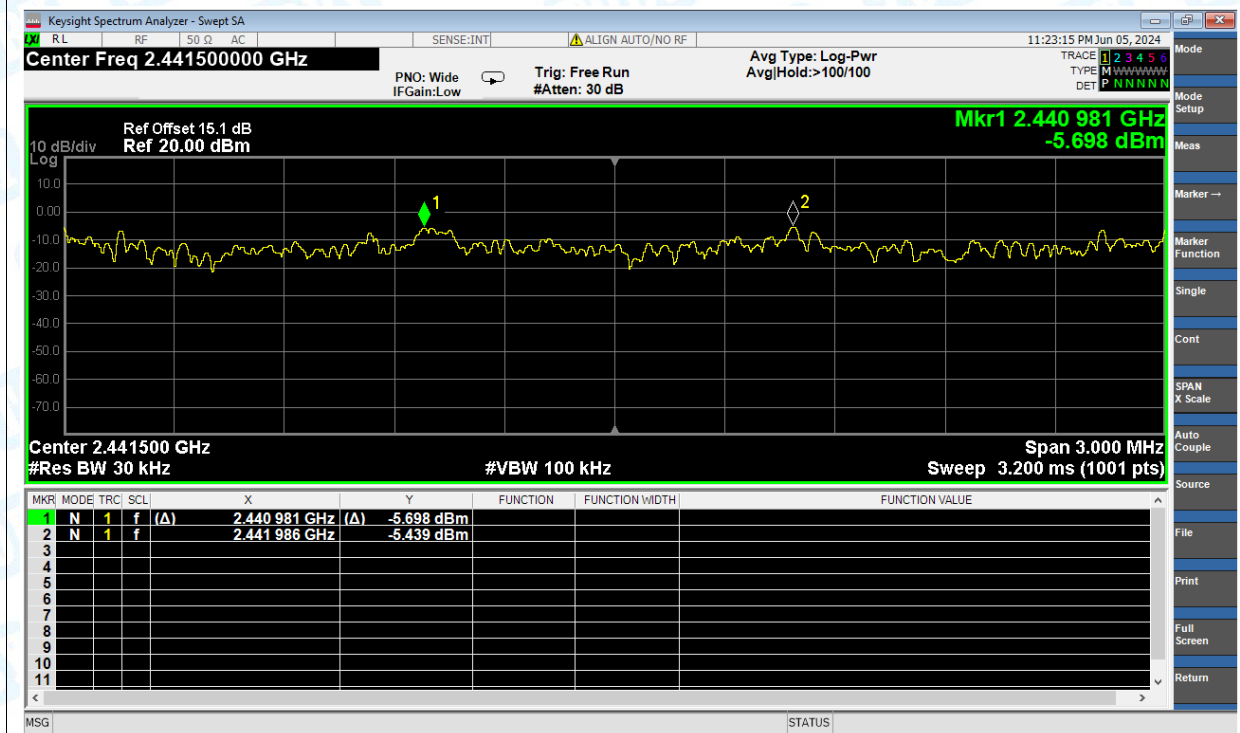
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.99	2441.824	0.834	0.573	Pass
NVNT	2-DH1	Ant1	2440.981	2441.986	1.005	0.847	Pass
NVNT	3-DH1	Ant1	2440.978	2442.016	1.038	0.025	Pass

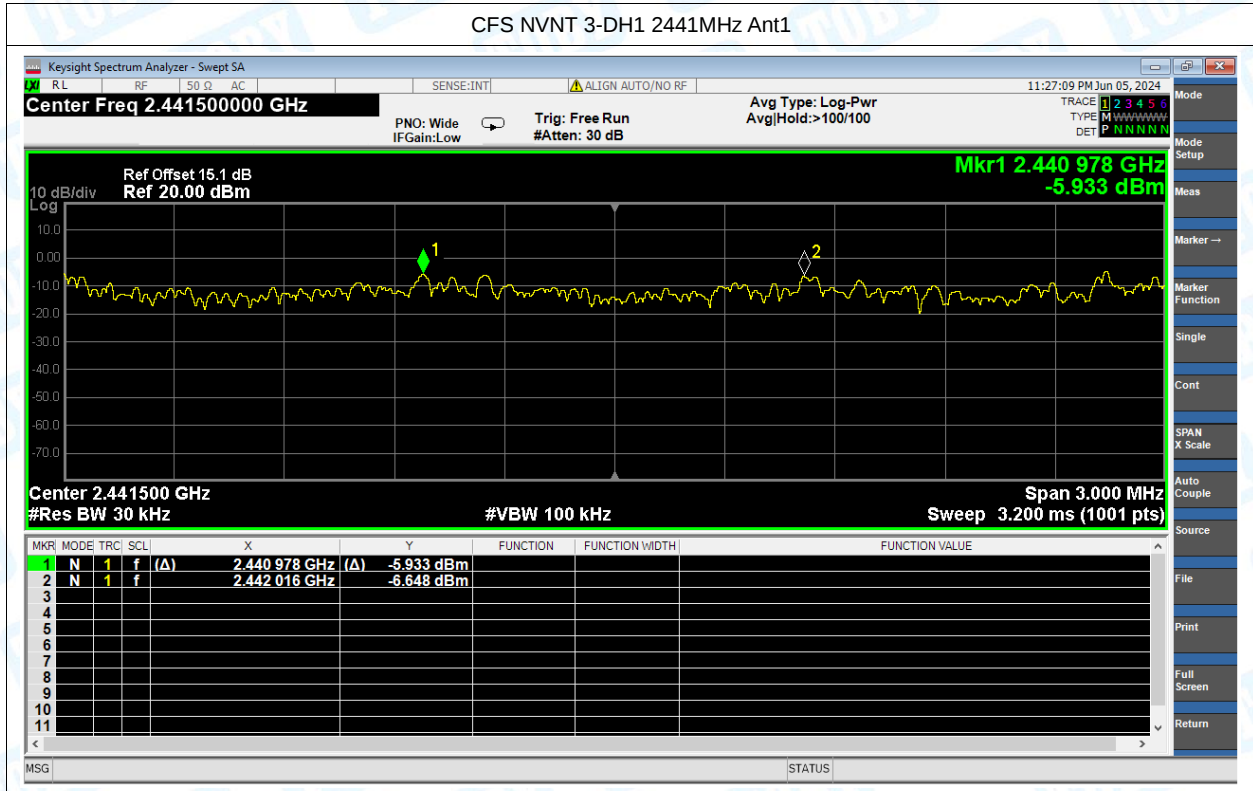
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



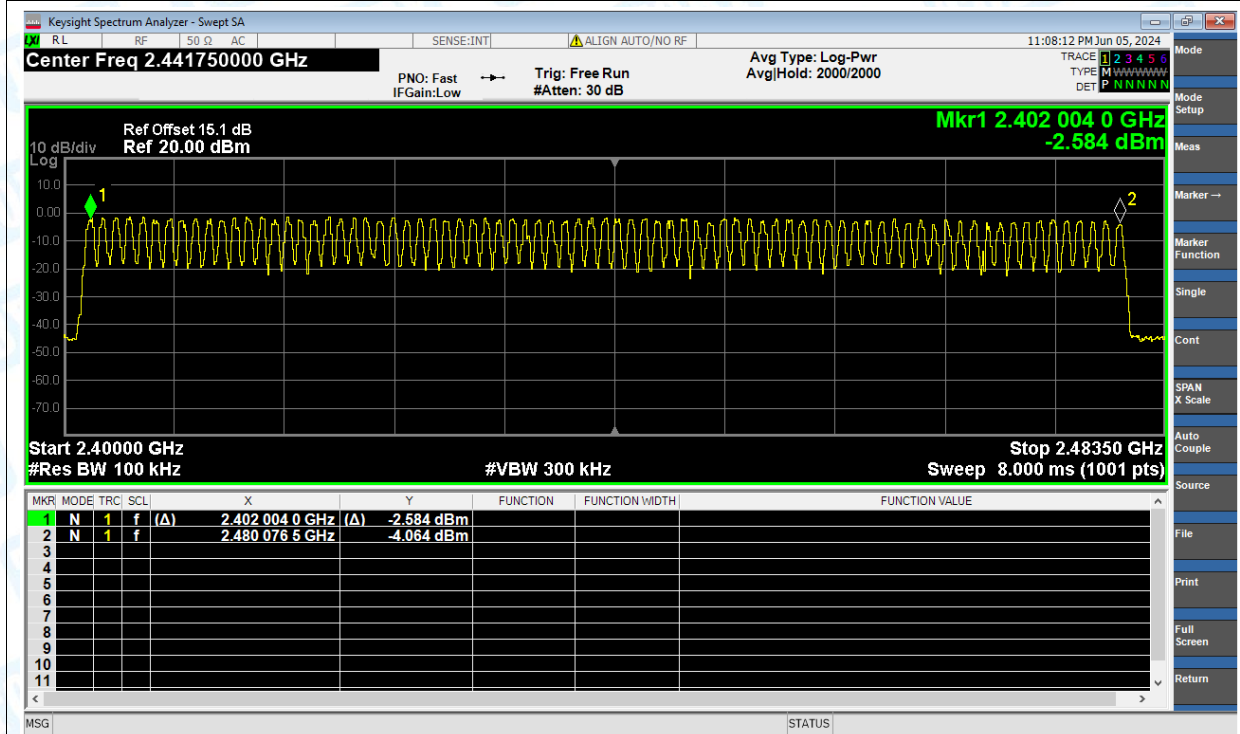


10.Number of Hopping Channel

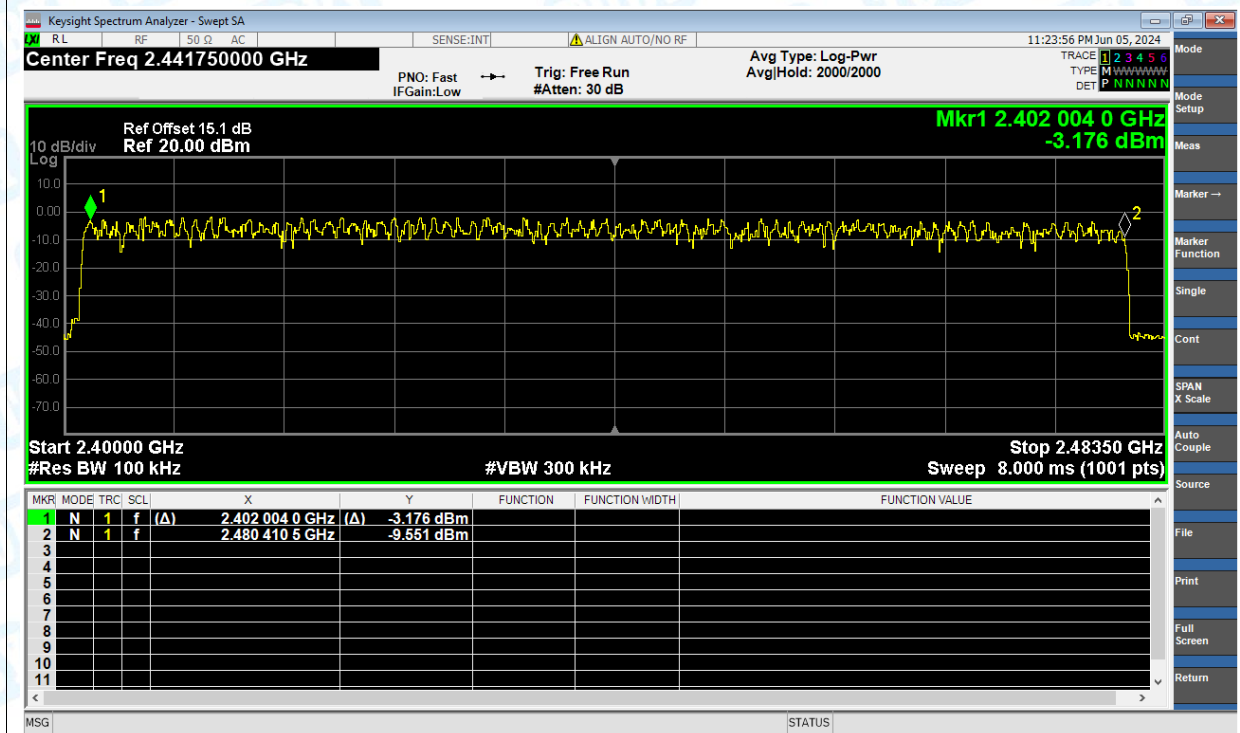
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

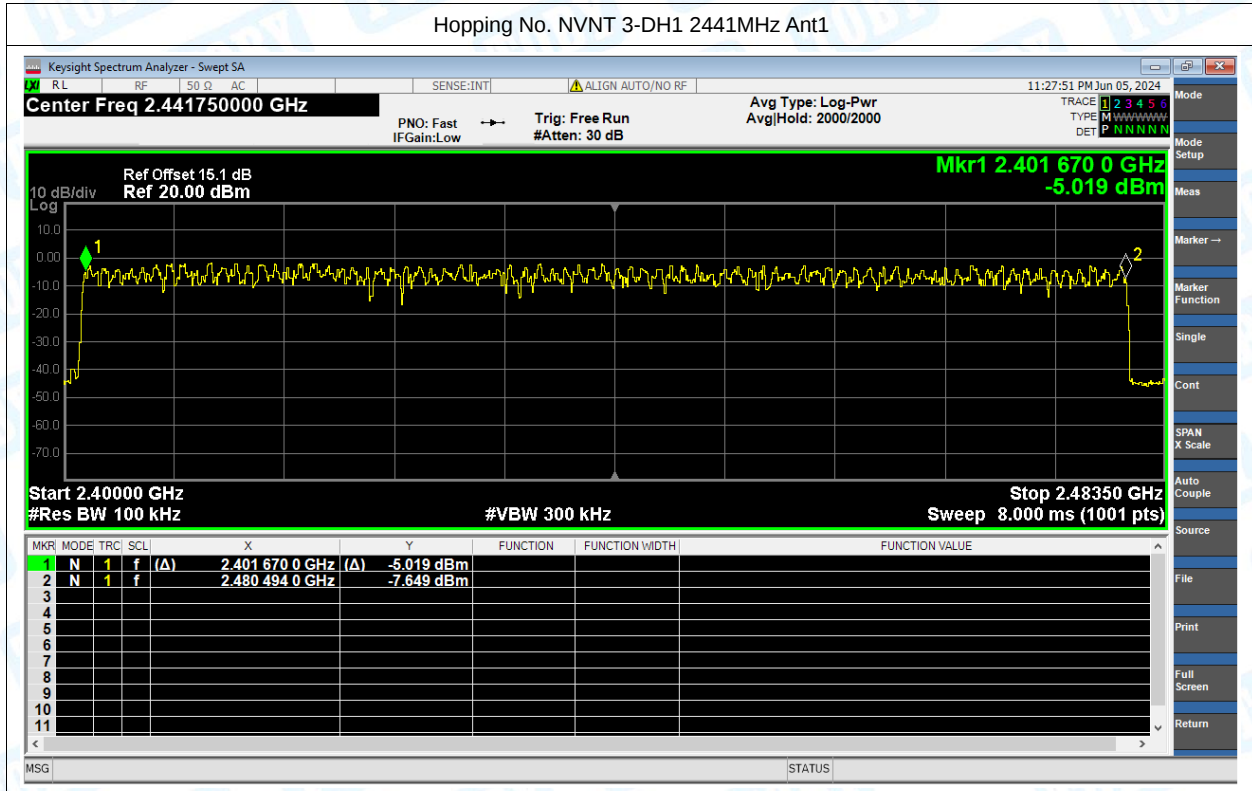
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



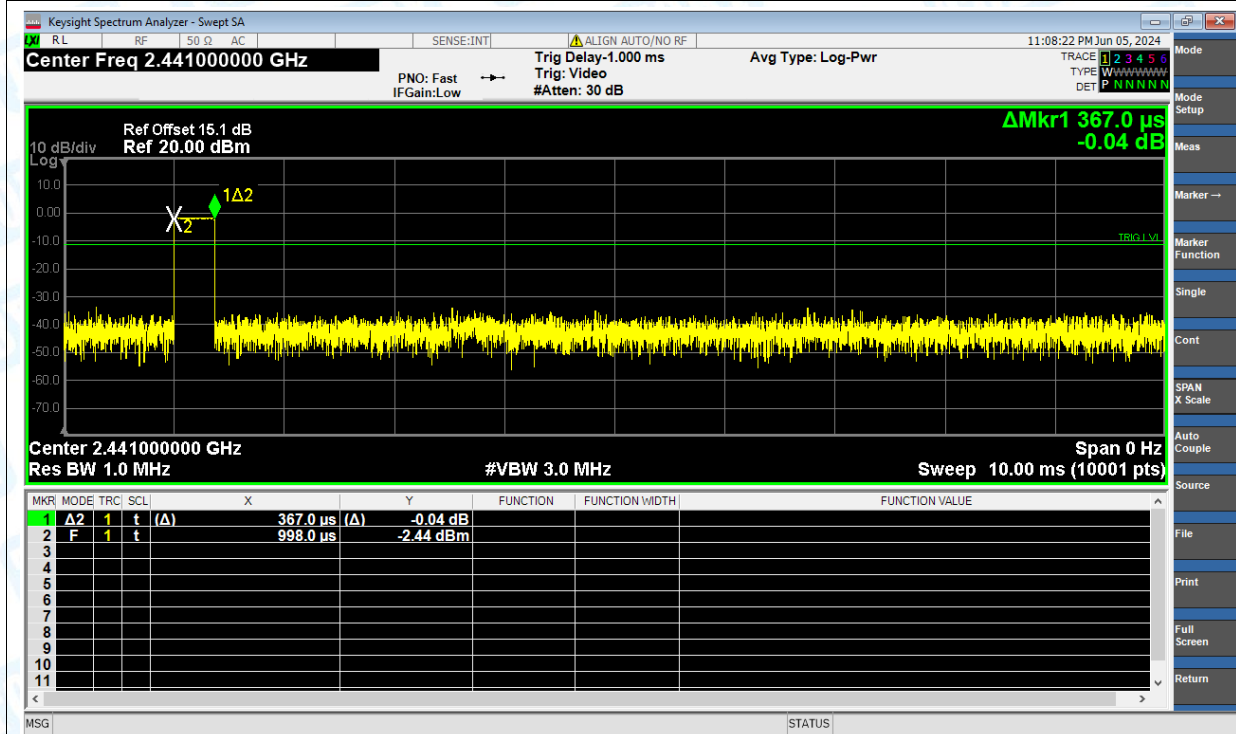


11.Dwell Time

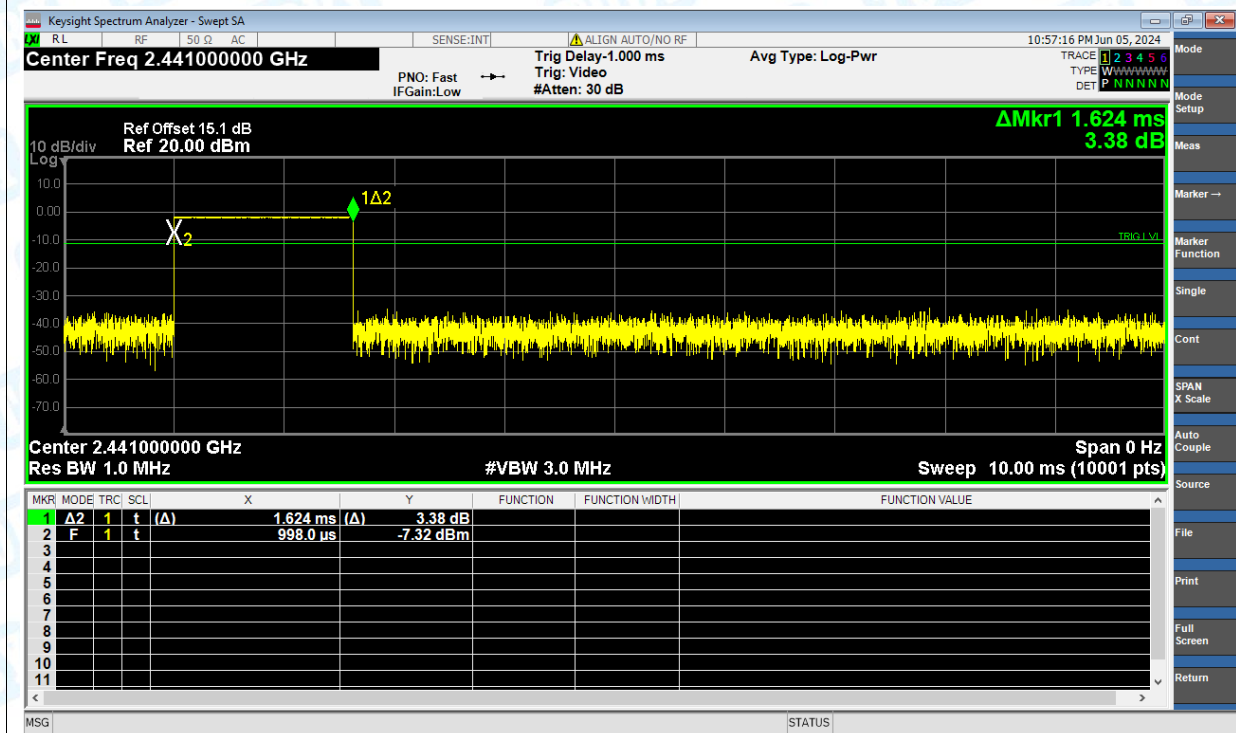
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.367	117.44	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.624	259.84	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.872	306.347	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.377	120.64	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.629	260.64	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.878	306.987	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.378	120.96	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.629	260.64	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.879	307.093	31600	400	Pass

Test Graphs

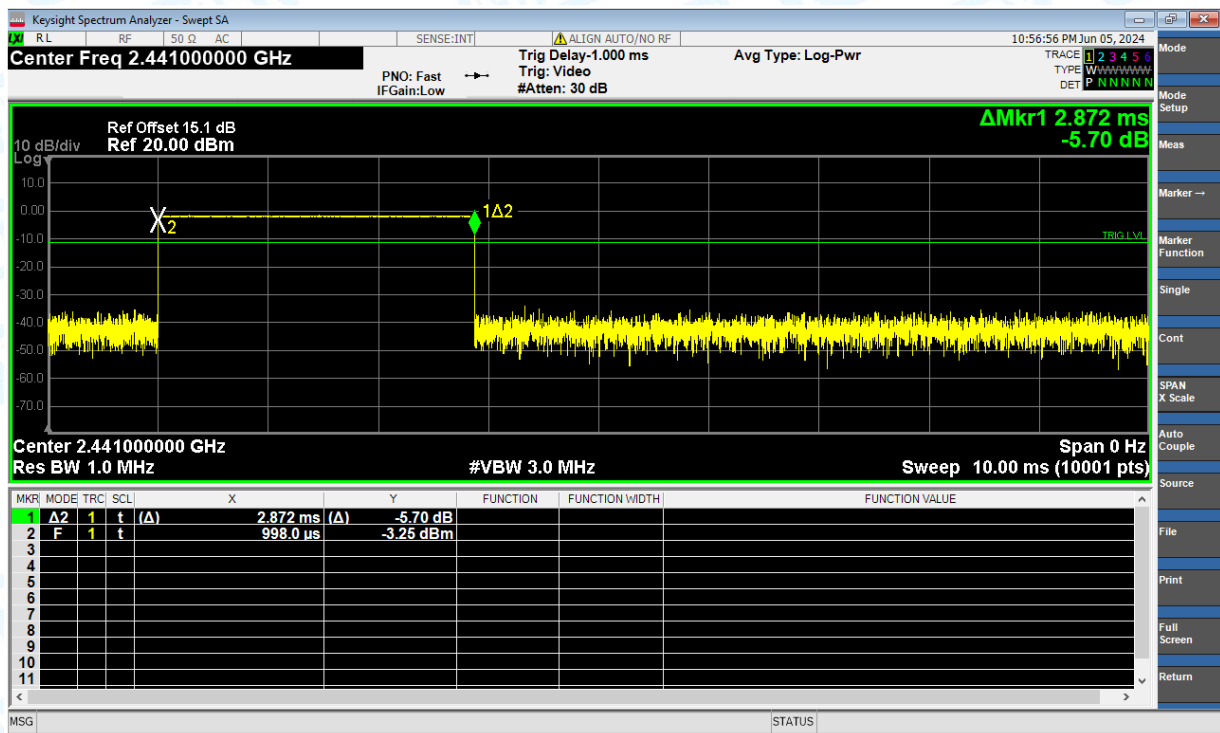
Dwell NVNT 1-DH1 2441MHz Ant1



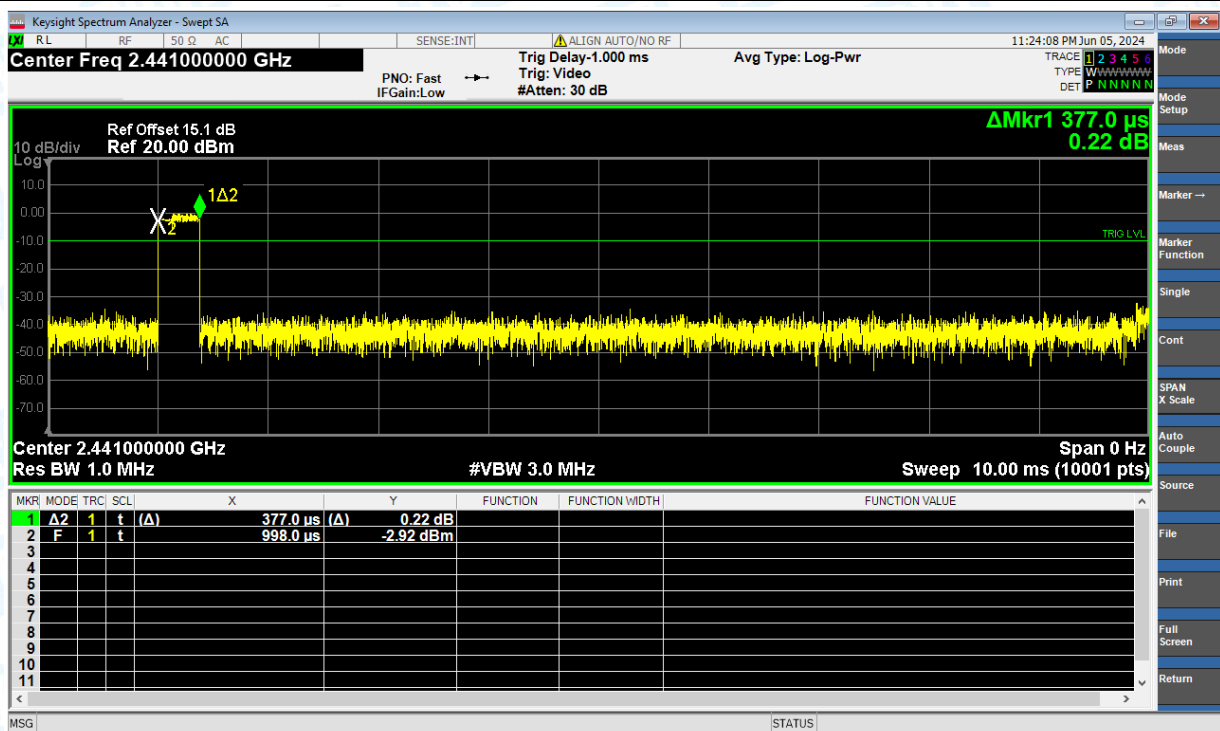
Dwell NVNT 1-DH3 2441MHz Ant1



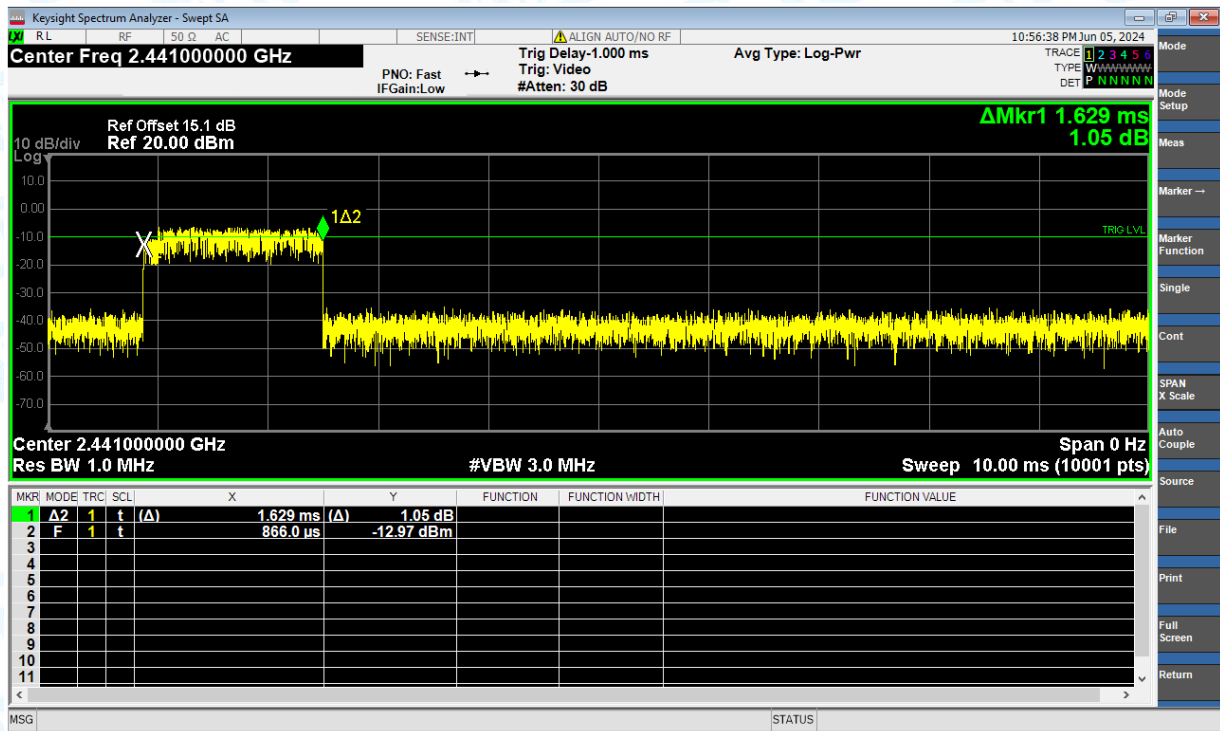
Dwell NVNT 1-DH5 2441MHz Ant1



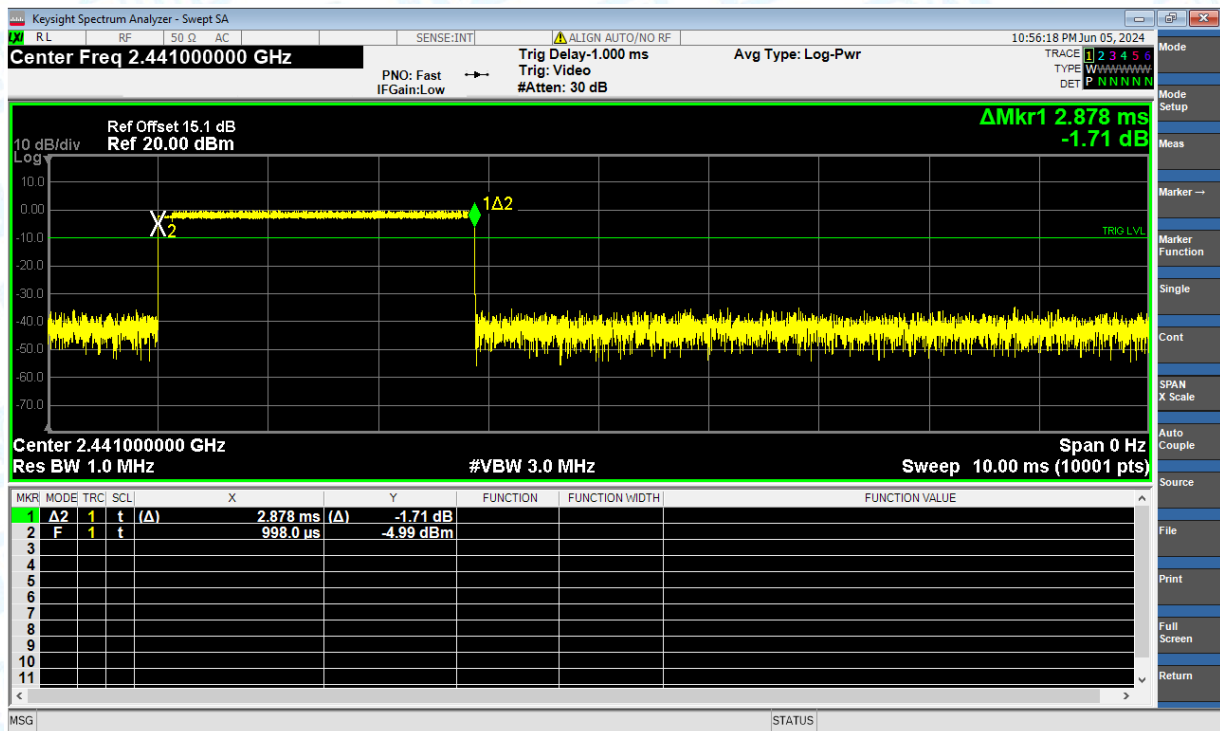
Dwell NVNT 2-DH1 2441MHz Ant1



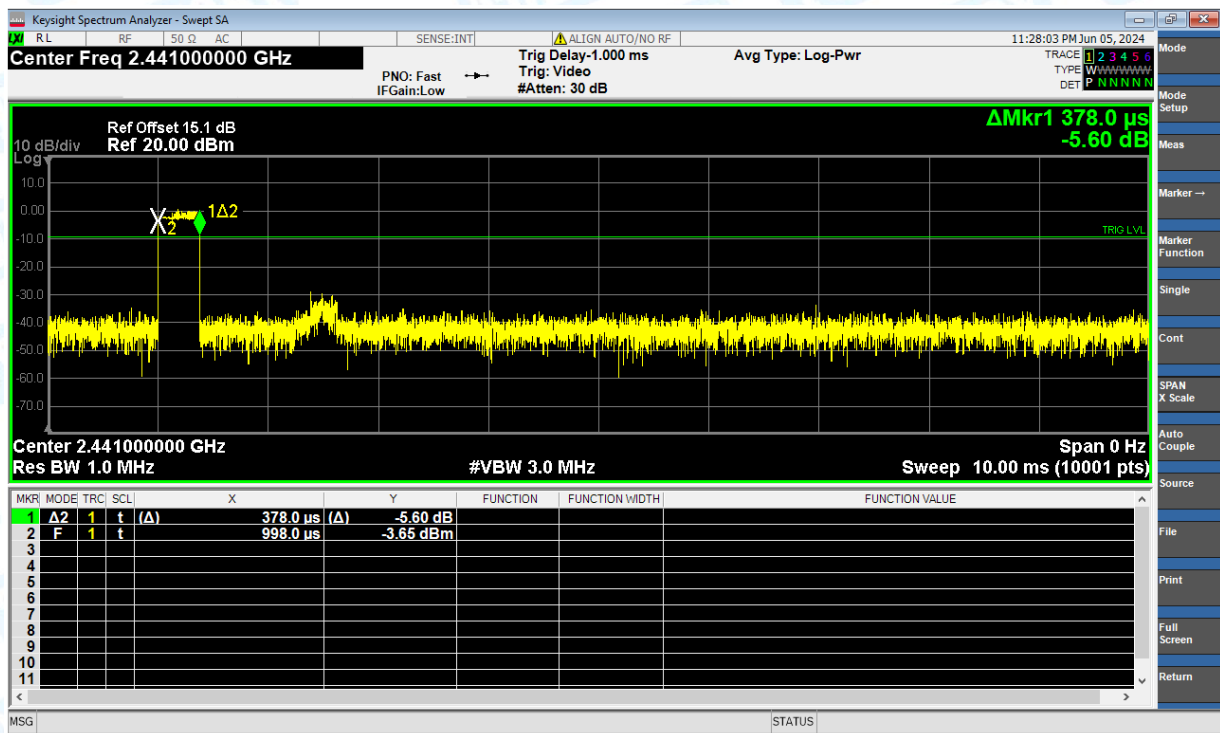
Dwell NVNT 2-DH3 2441MHz Ant1



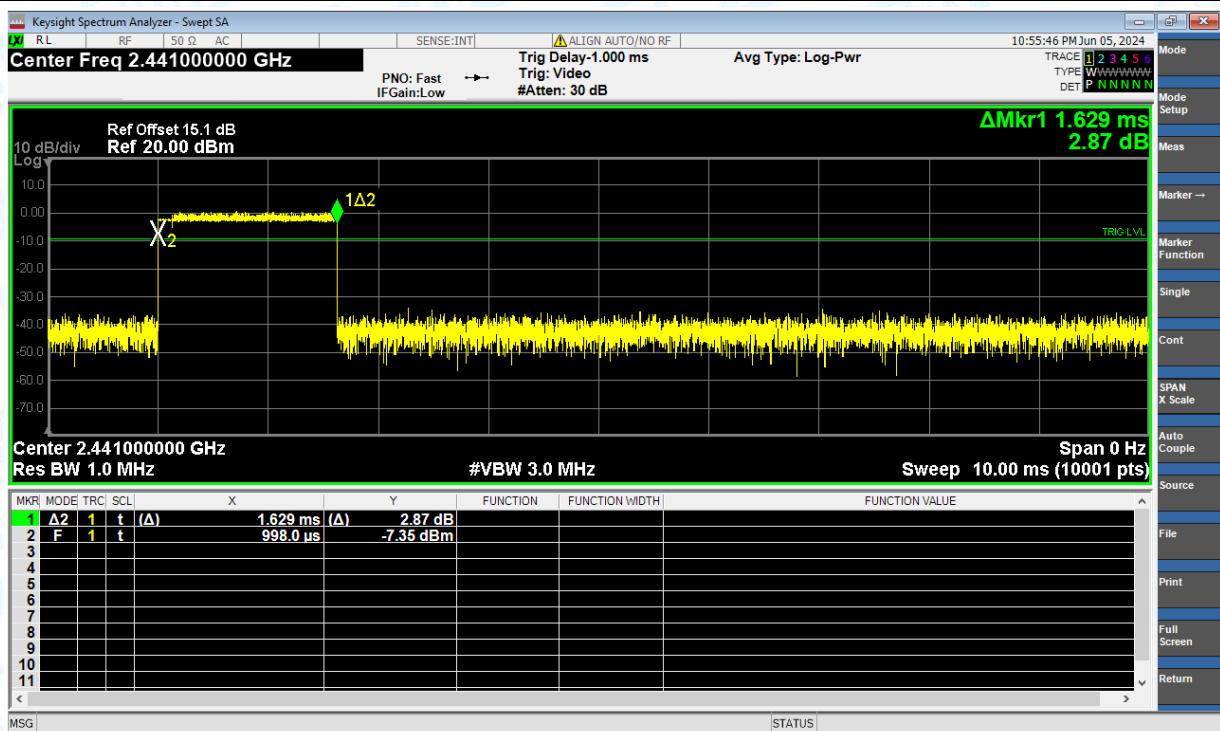
Dwell NVNT 2-DH5 2441MHz Ant1

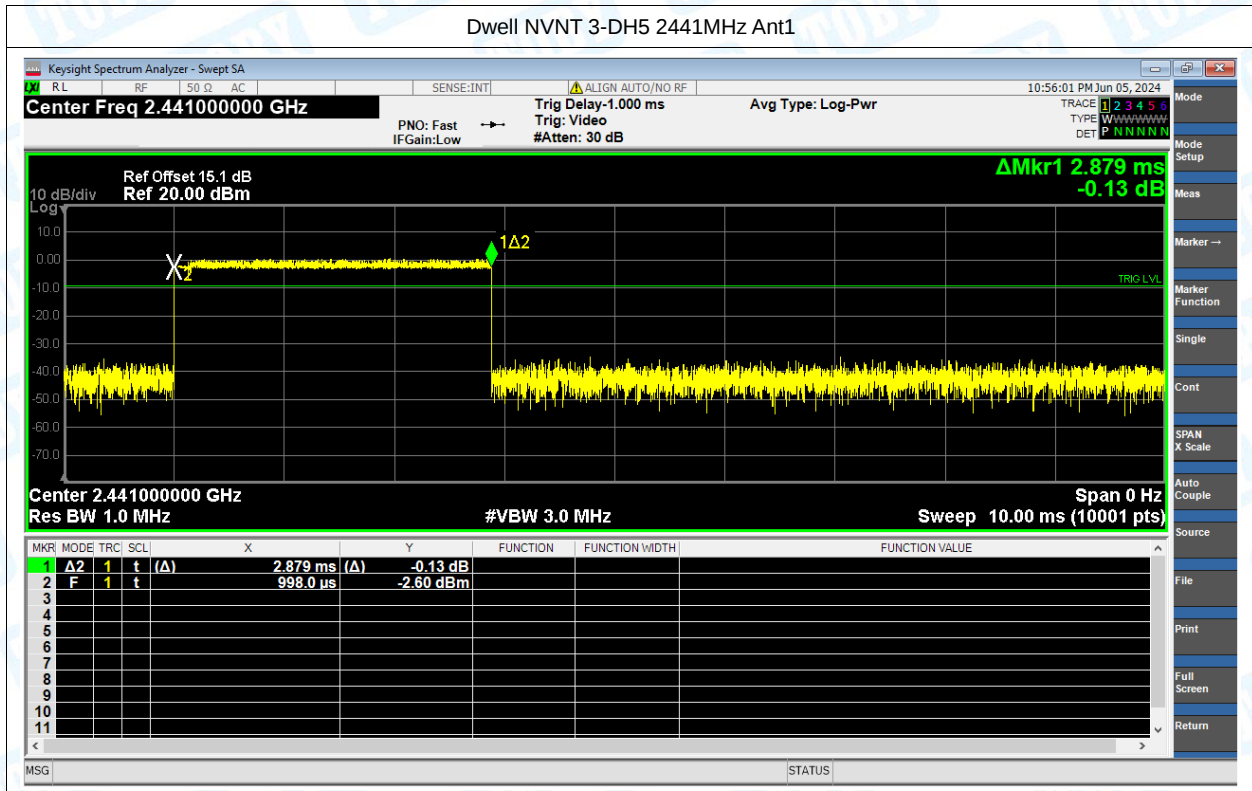


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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