

RF Test Data for Bluetooth(BDR+EDR) (Conducted Measurements)

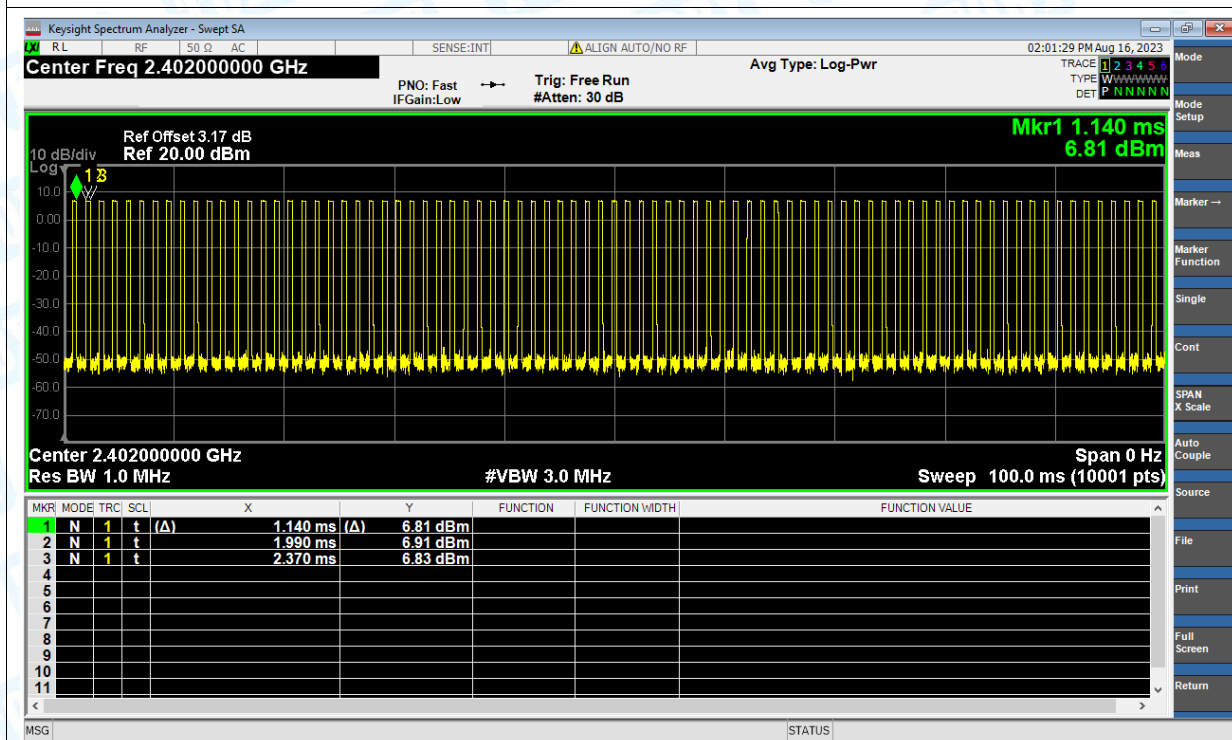
General Description of EUT	
Product Name:	Smart Watch
Test Model:	LC601
Sample ID:	HC-C-202308-0037-01-01-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC 3.8V
Test Engineer:	Liyingjing
Note: For a more detailed features description, please refer to the report TBR-C-202308-0037-21 The report only show the worst case data.	

Duty Cycle

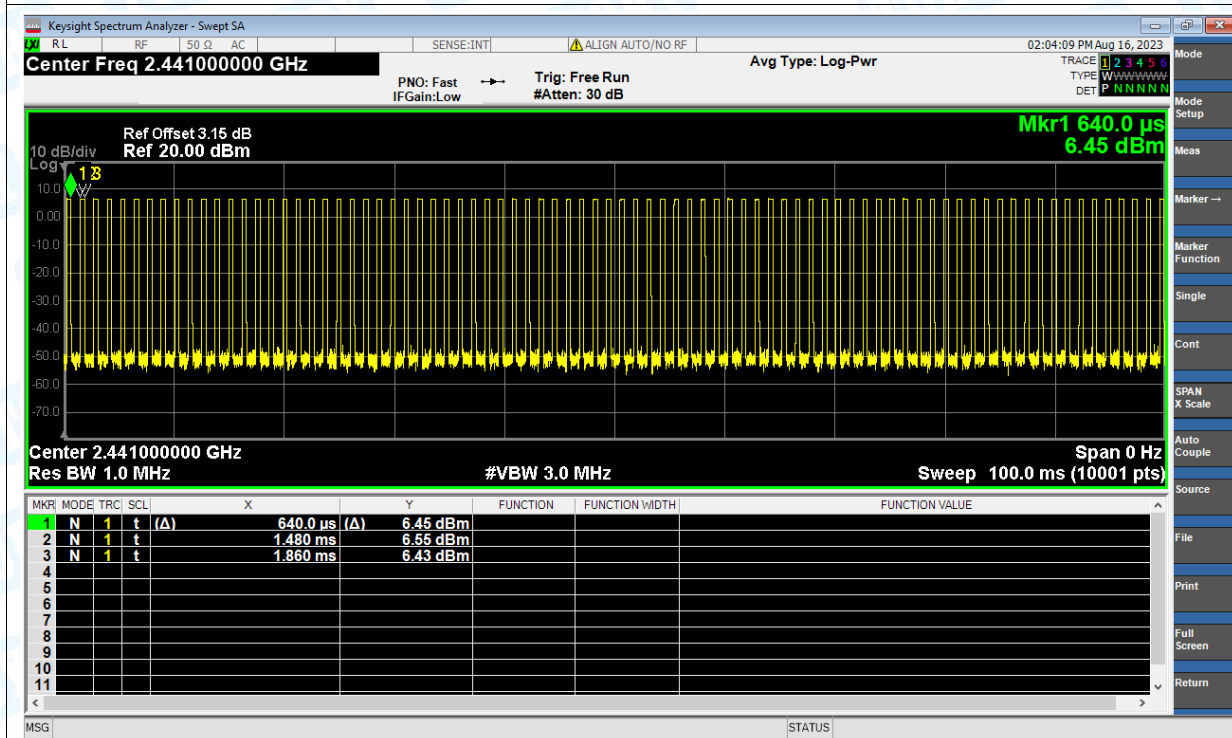
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.89	5.1	2.63
NVNT	1-DH1	2441	Ant1	31.15	5.07	2.63
NVNT	1-DH1	2480	Ant1	30.89	5.1	2.63
NVNT	2-DH1	2402	Ant1	31.71	4.99	2.56
NVNT	2-DH1	2441	Ant1	31.71	4.99	2.56
NVNT	2-DH1	2480	Ant1	30.89	5.1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

Test Graphs

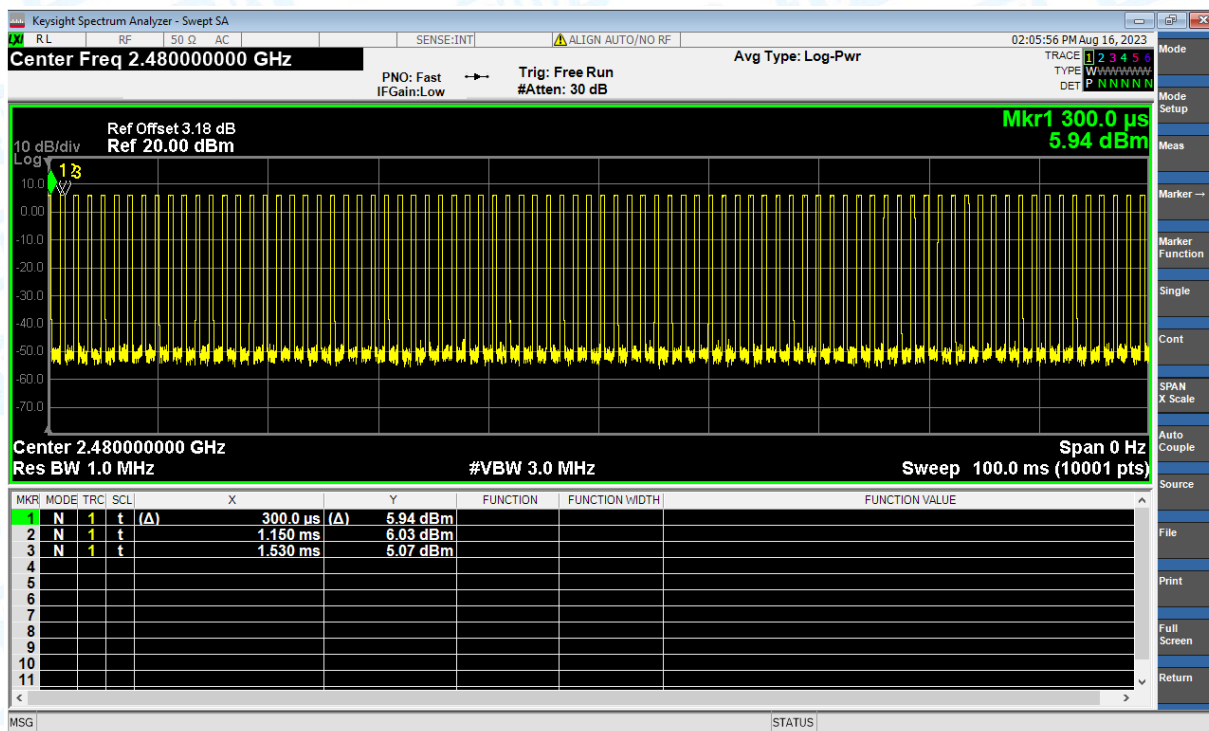
Duty Cycle NVNT 1-DH1 2402MHz Ant1



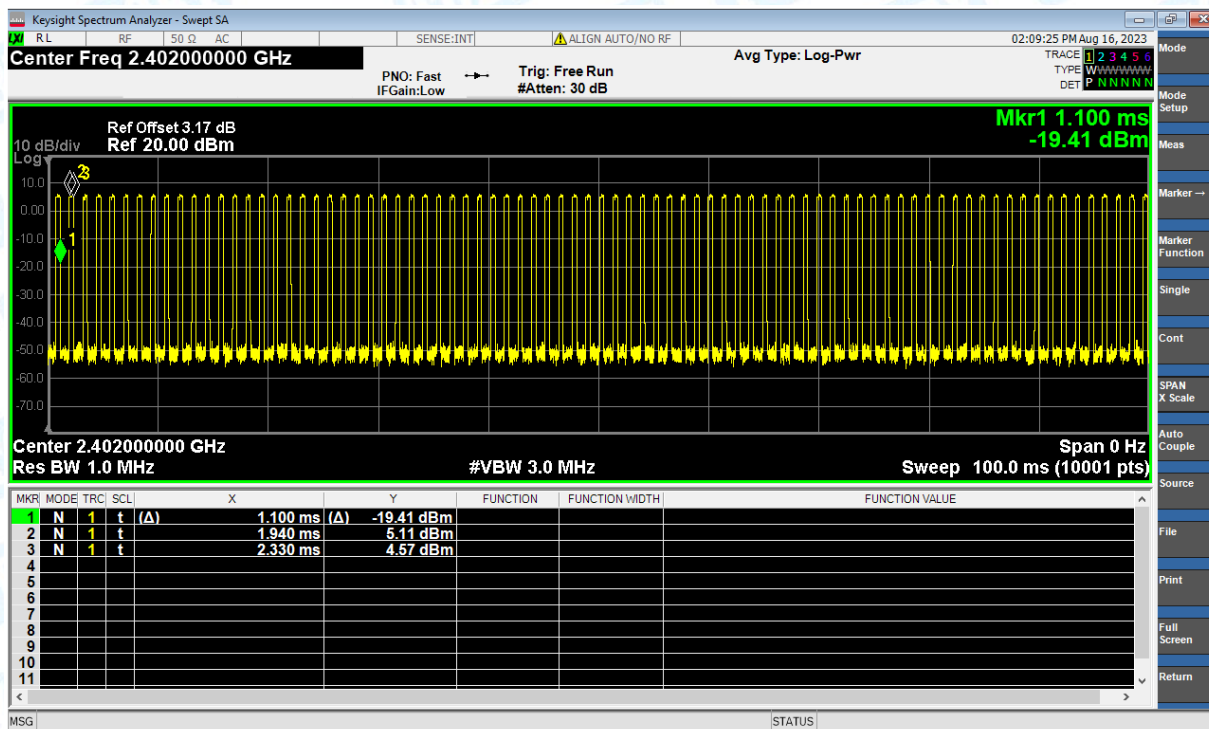
Duty Cycle NVNT 1-DH1 2441MHz Ant1



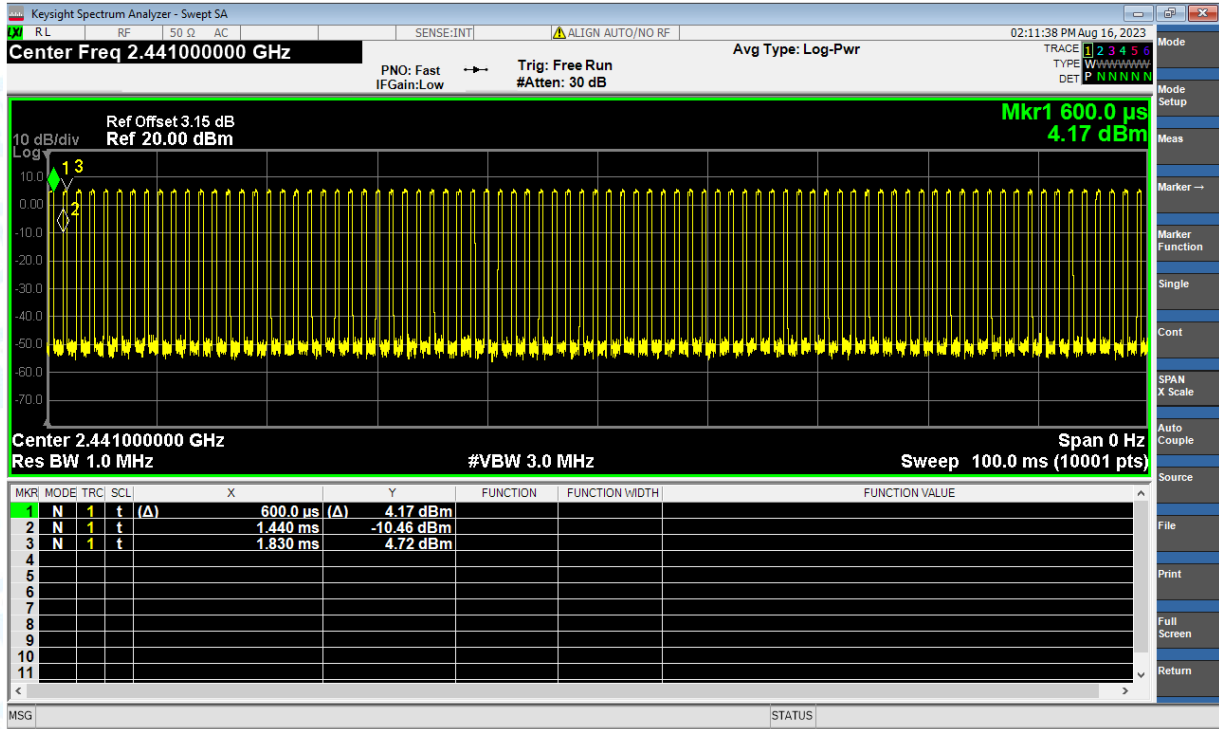
Duty Cycle NVNT 1-DH1 2480MHz Ant1



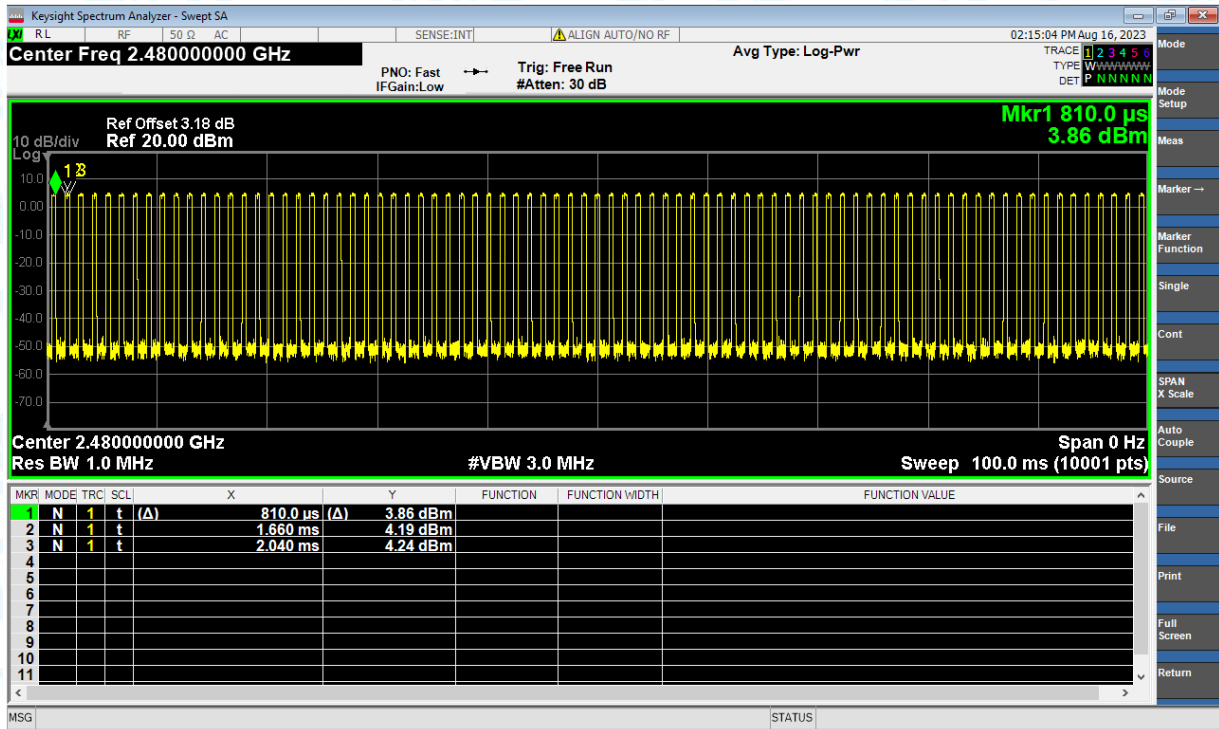
Duty Cycle NVNT 2-DH1 2402MHz Ant1



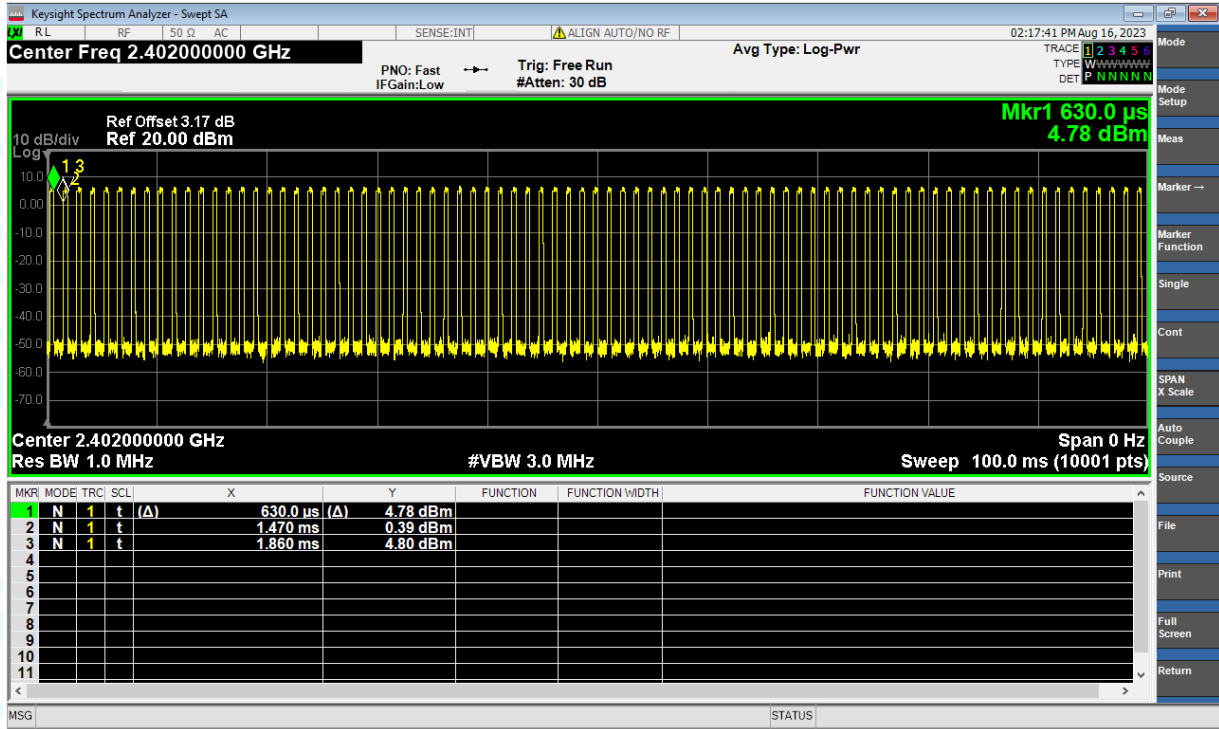
Duty Cycle NVNT 2-DH1 2441MHz Ant1



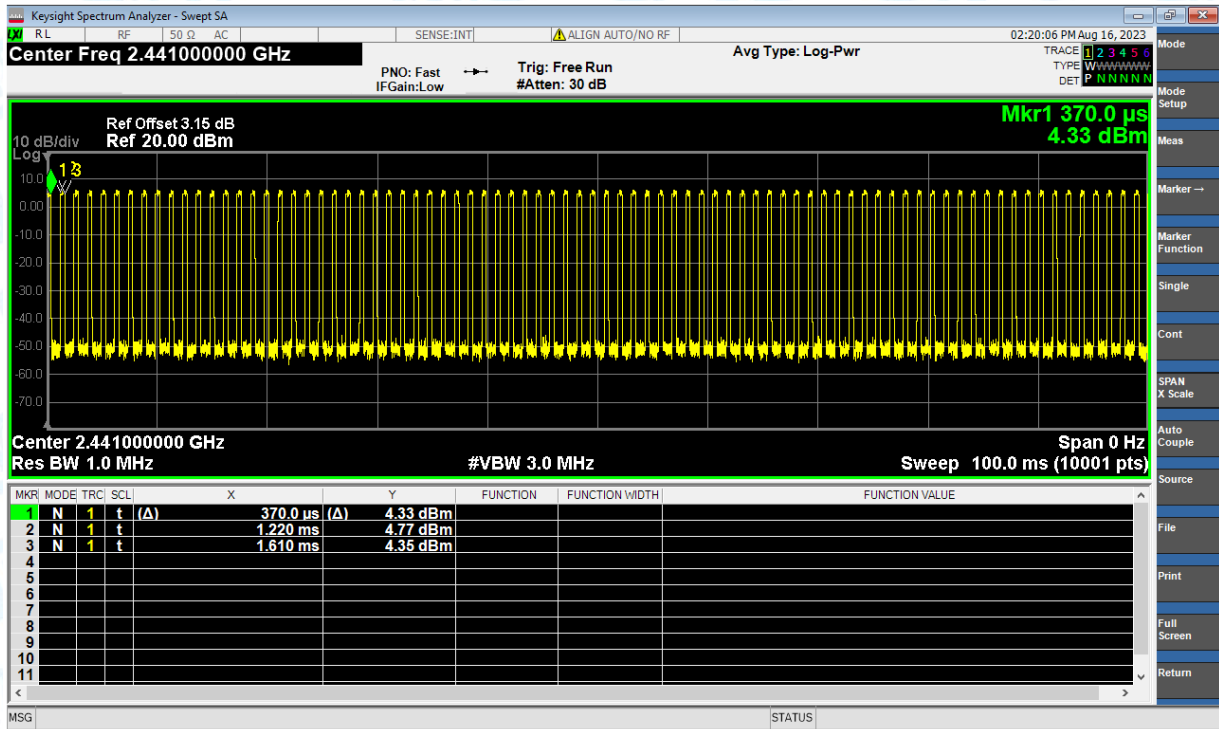
Duty Cycle NVNT 2-DH1 2480MHz Ant1

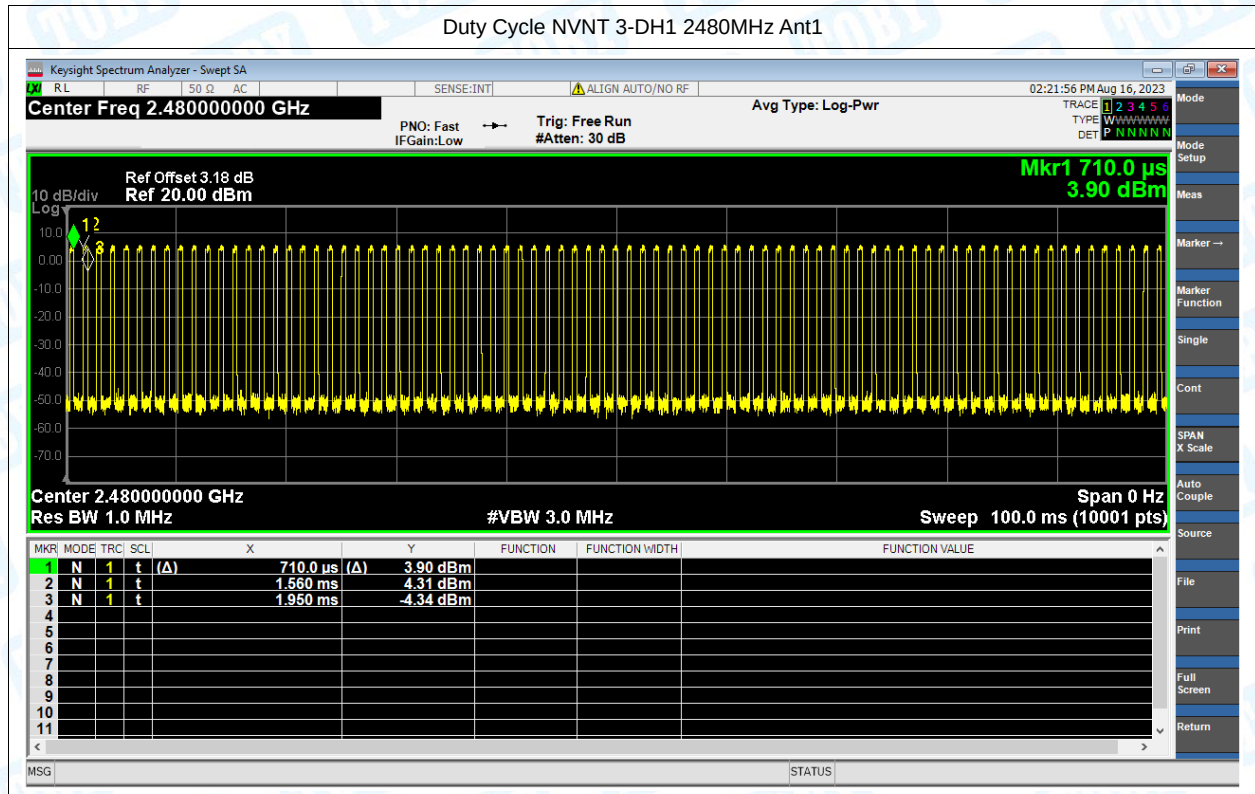


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





Maximum Conducted Output Power

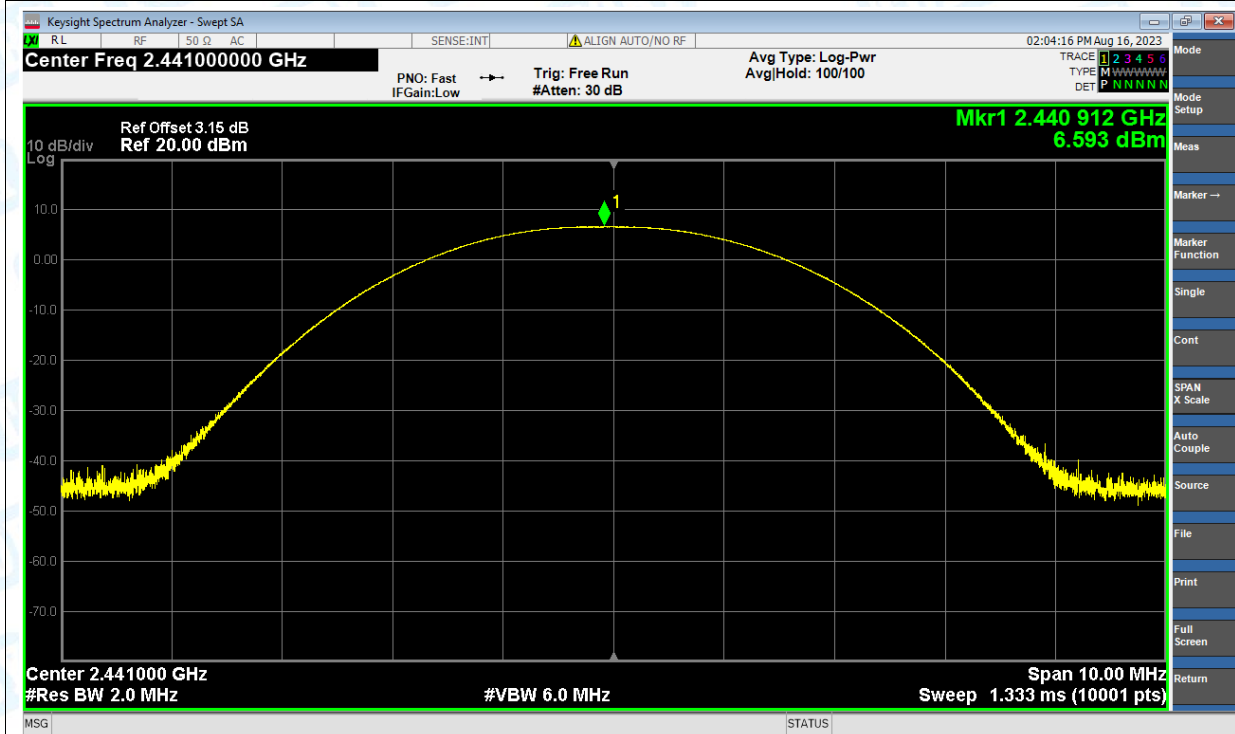
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	6.984	21	Pass
NVNT	1-DH1	2441	Ant1	6.593	21	Pass
NVNT	1-DH1	2480	Ant1	6.137	21	Pass
NVNT	2-DH1	2402	Ant1	6.429	21	Pass
NVNT	2-DH1	2441	Ant1	6.03	21	Pass
NVNT	2-DH1	2480	Ant1	5.551	21	Pass
NVNT	3-DH1	2402	Ant1	7.037	21	Pass
NVNT	3-DH1	2441	Ant1	6.659	21	Pass
NVNT	3-DH1	2480	Ant1	6.149	21	Pass

Test Graphs

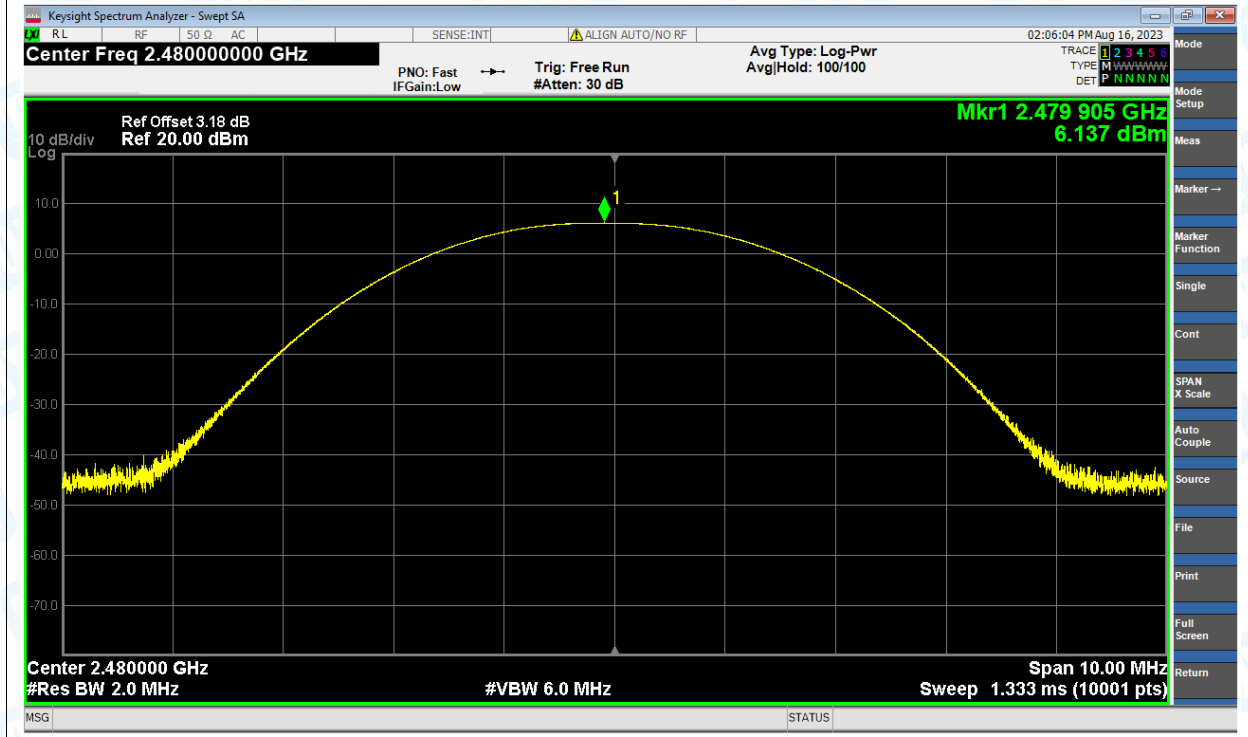
Power NVNT 1-DH1 2402MHz Ant1



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



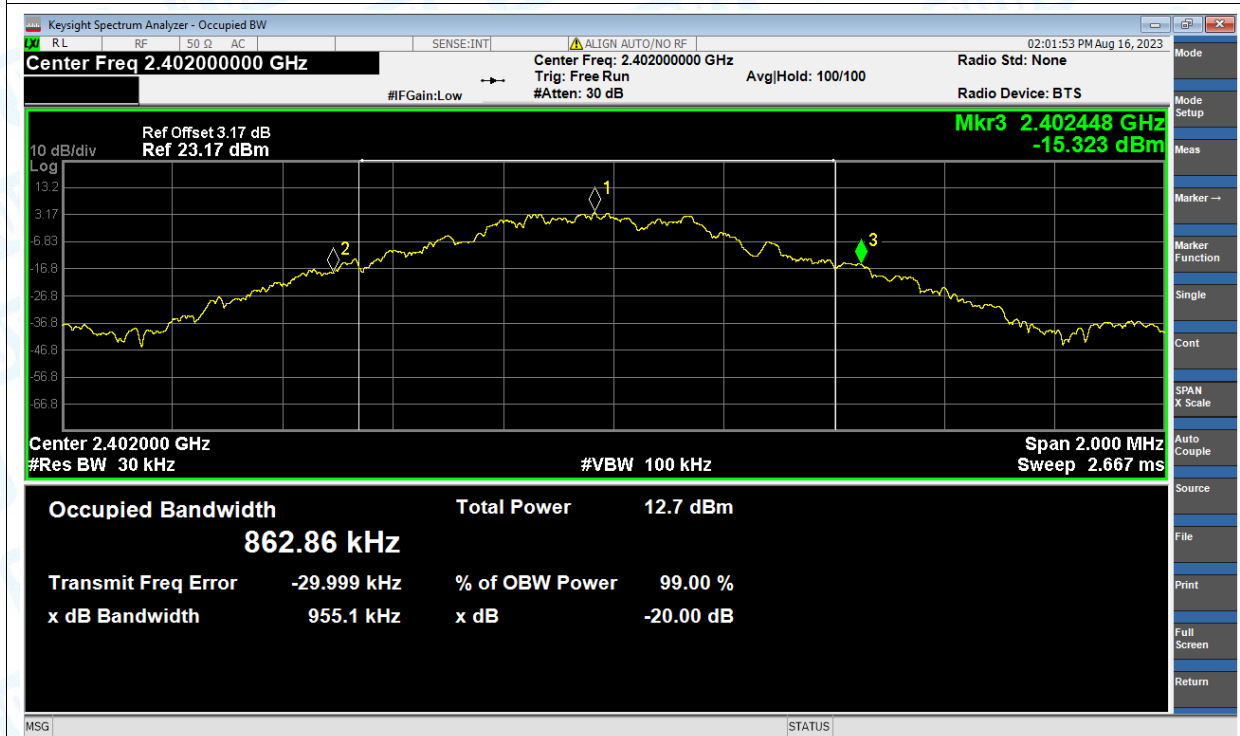


-20dB Bandwidth

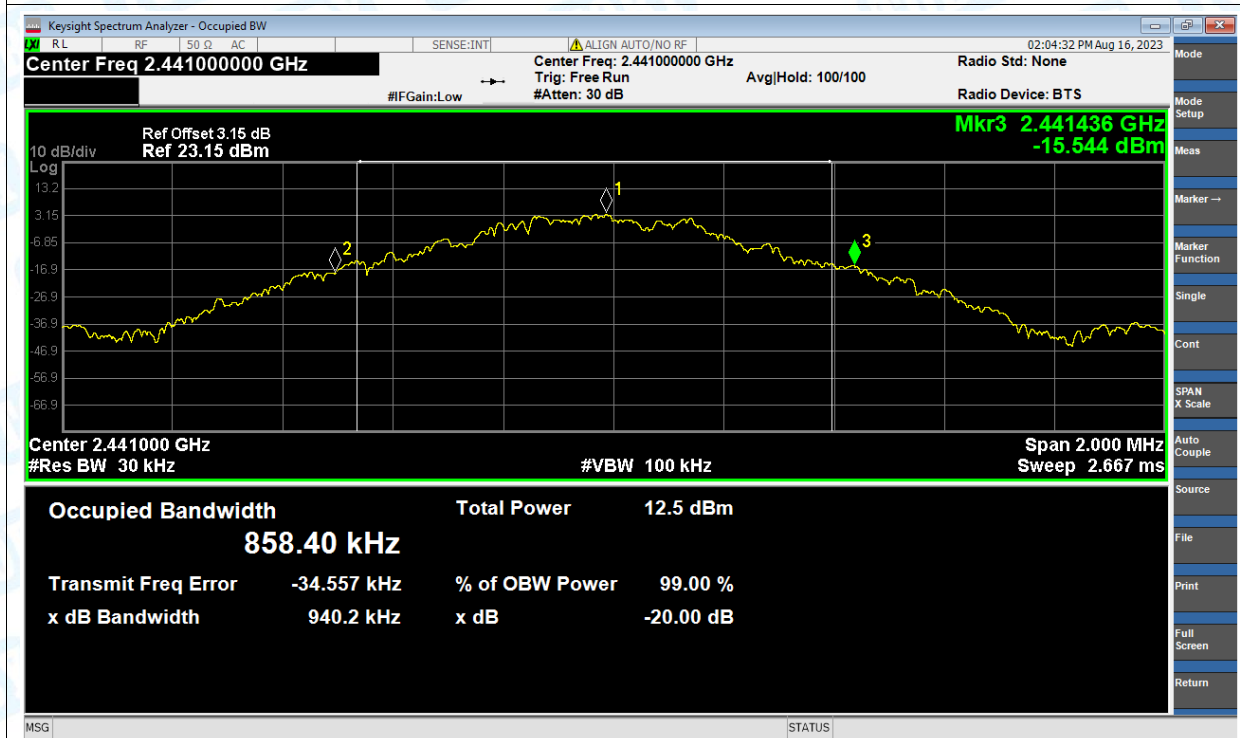
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.96	0	Pass
NVNT	1-DH1	2441	Ant1	0.94	0	Pass
NVNT	1-DH1	2480	Ant1	0.93	0	Pass
NVNT	2-DH1	2402	Ant1	1.26	0	Pass
NVNT	2-DH1	2441	Ant1	1.25	0	Pass
NVNT	2-DH1	2480	Ant1	1.25	0	Pass
NVNT	3-DH1	2402	Ant1	1.21	0	Pass
NVNT	3-DH1	2441	Ant1	1.22	0	Pass
NVNT	3-DH1	2480	Ant1	1.21	0	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



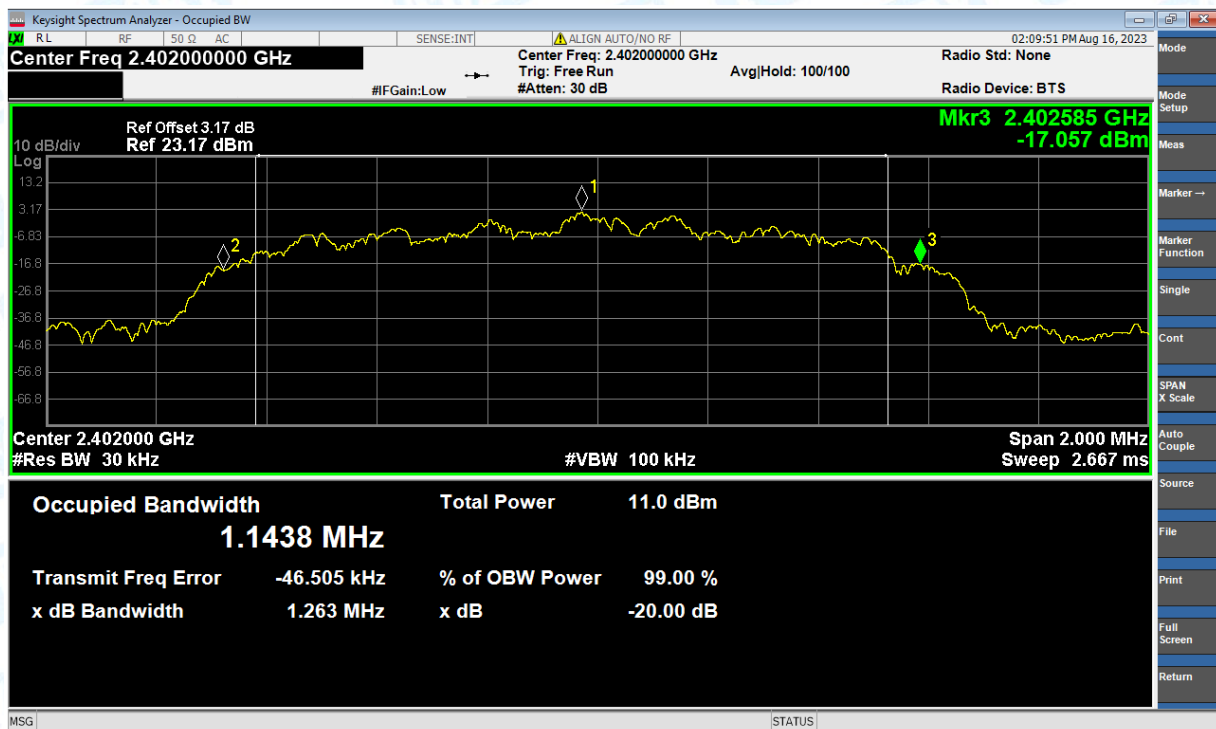
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



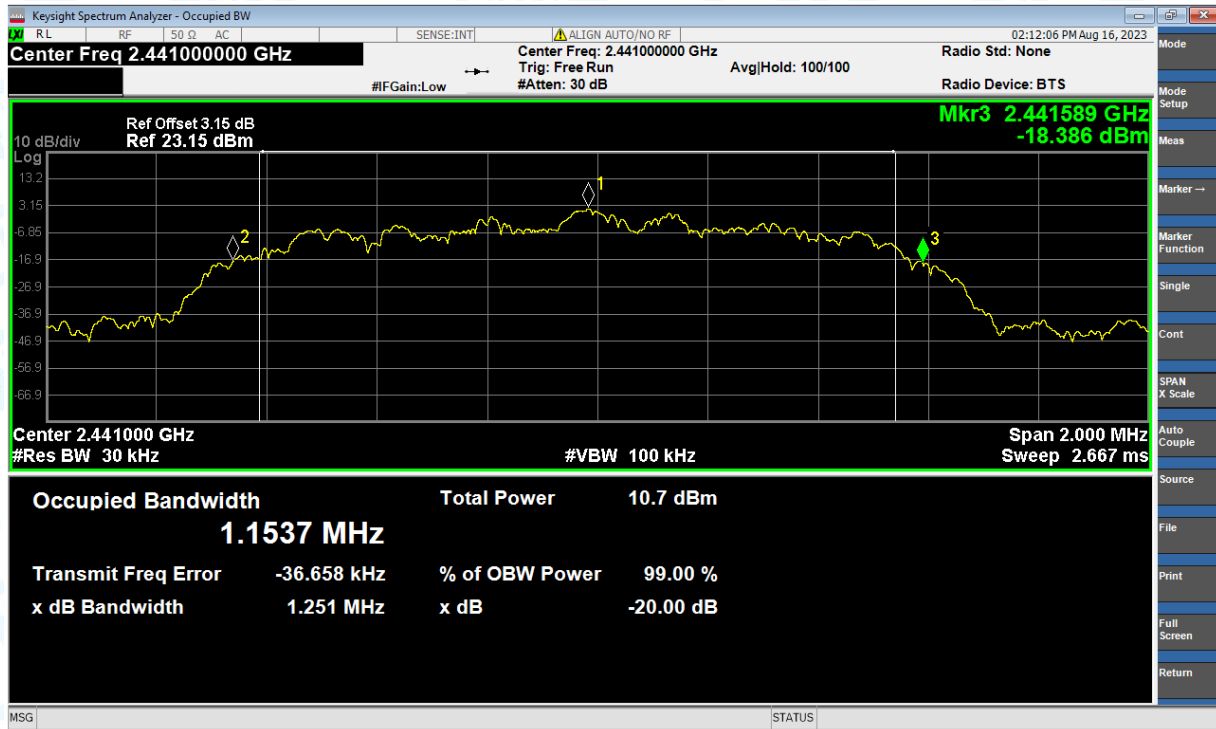
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



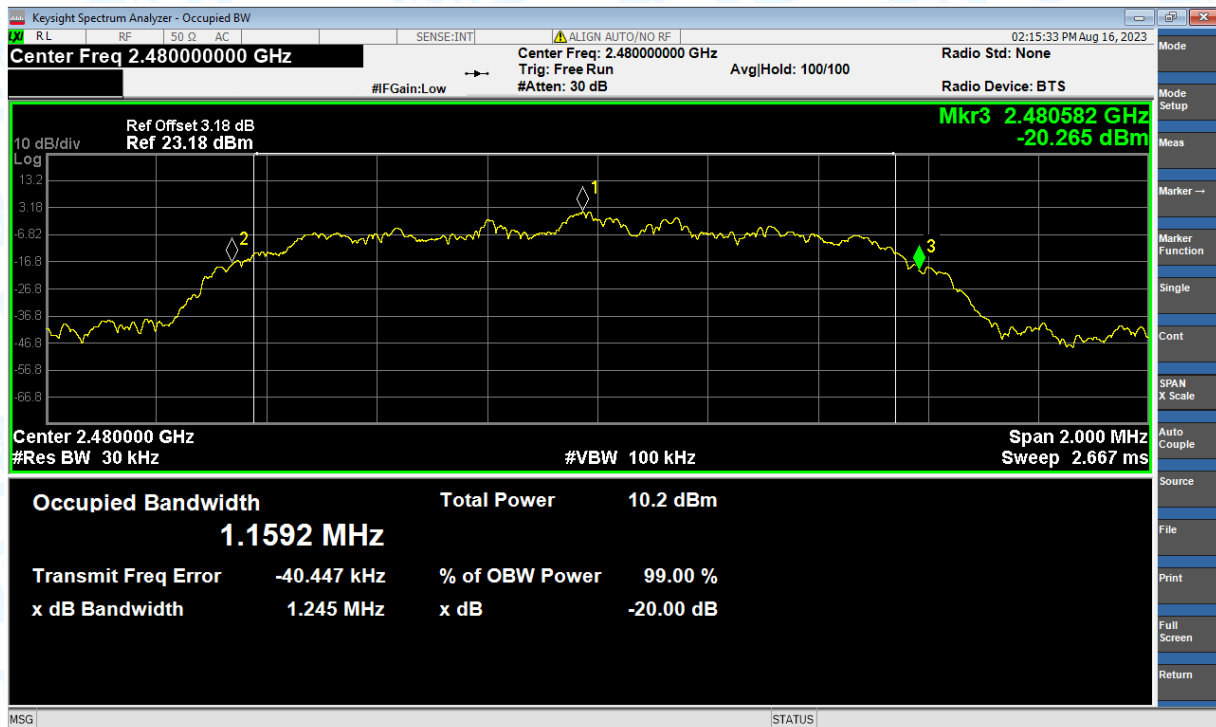
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



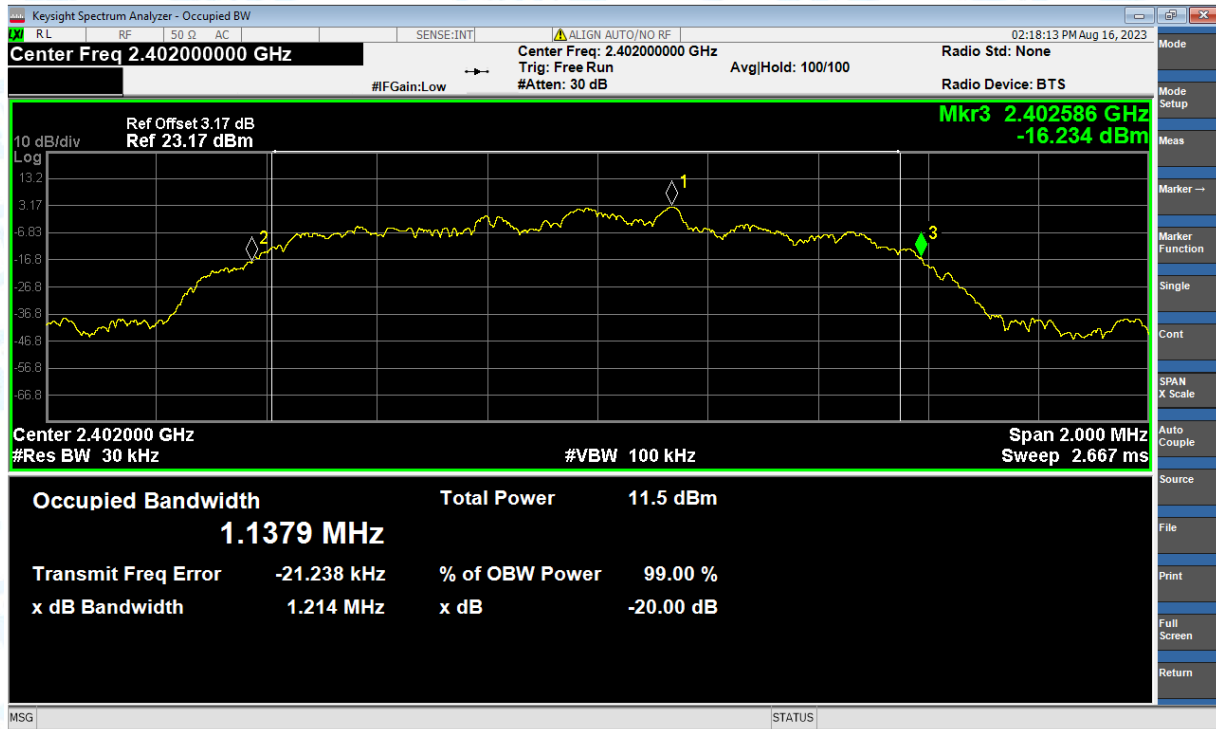
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



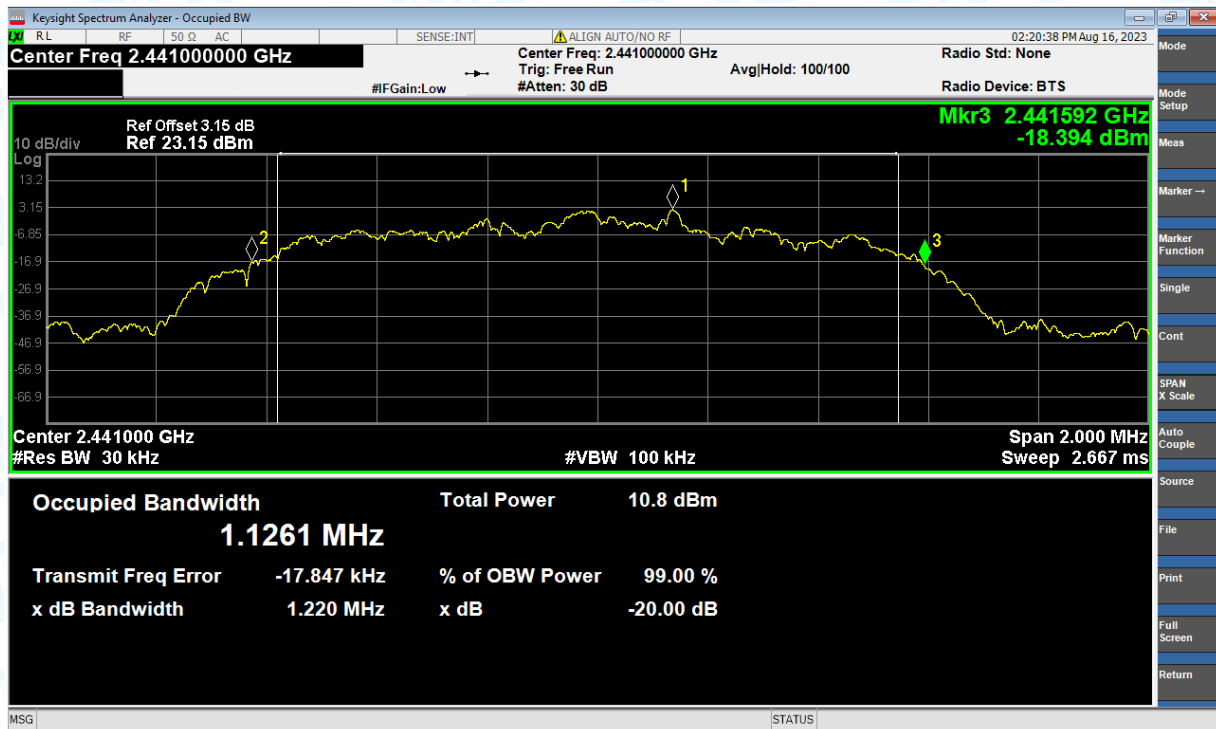
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

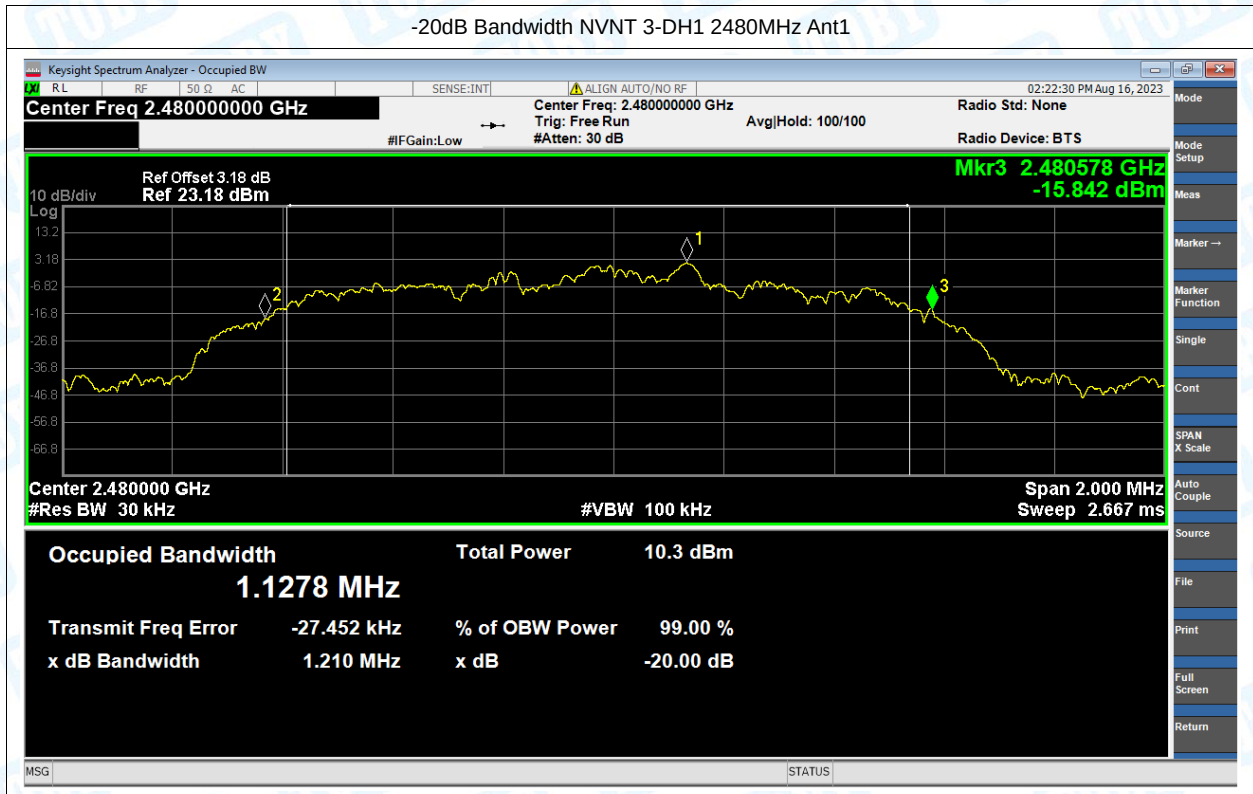


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



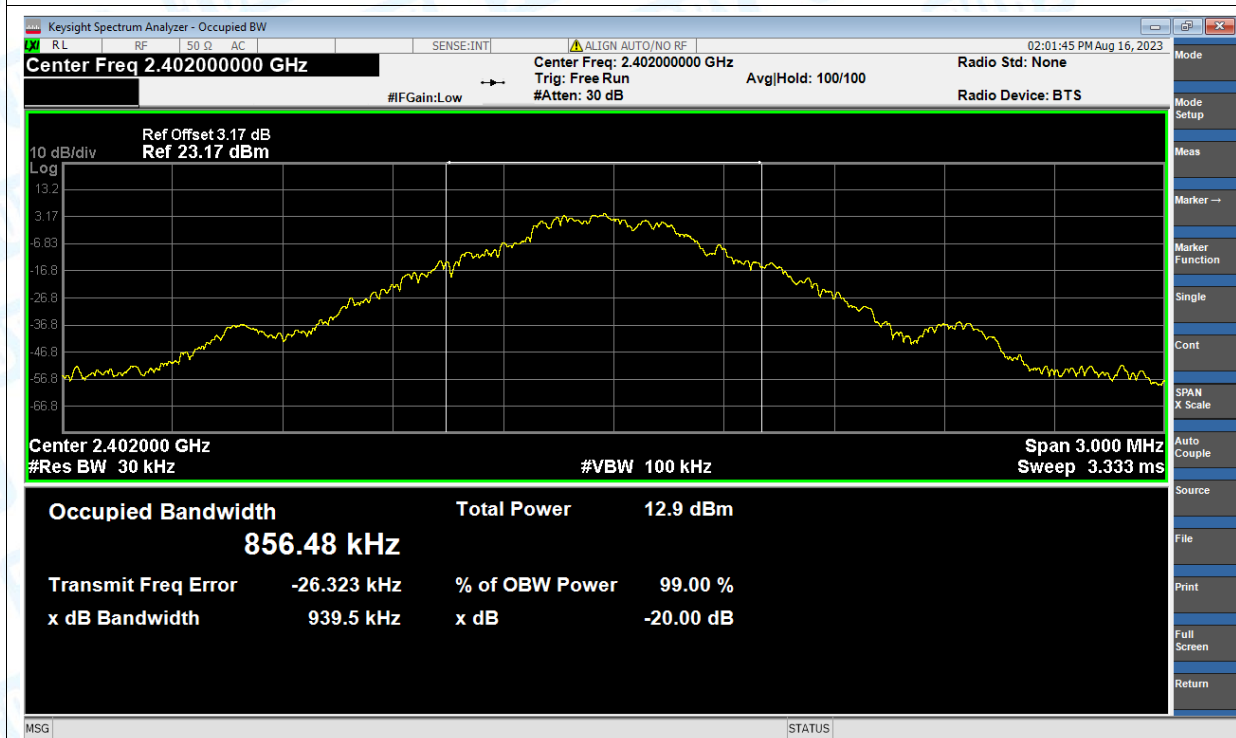


Occupied Channel Bandwidth

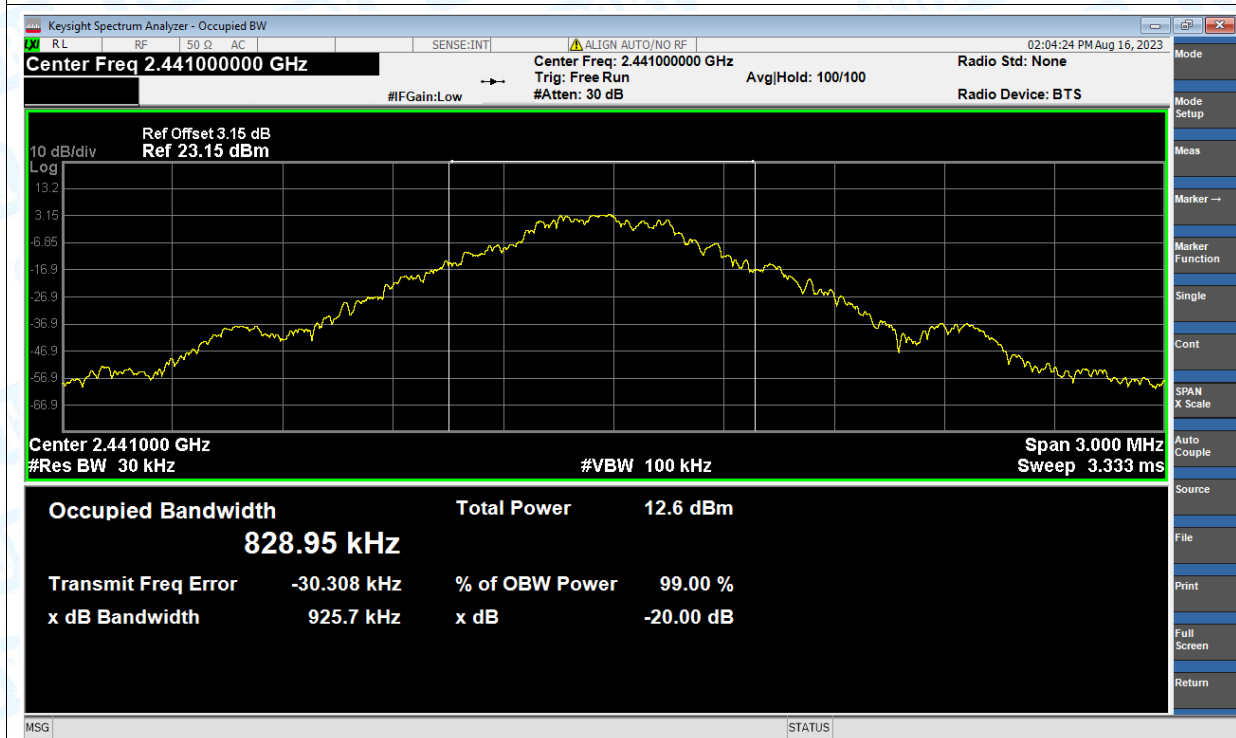
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.856
NVNT	1-DH1	2441	Ant1	0.829
NVNT	1-DH1	2480	Ant1	0.849
NVNT	2-DH1	2402	Ant1	1.163
NVNT	2-DH1	2441	Ant1	1.163
NVNT	2-DH1	2480	Ant1	1.165
NVNT	3-DH1	2402	Ant1	1.137
NVNT	3-DH1	2441	Ant1	1.132
NVNT	3-DH1	2480	Ant1	1.139

Test Graphs

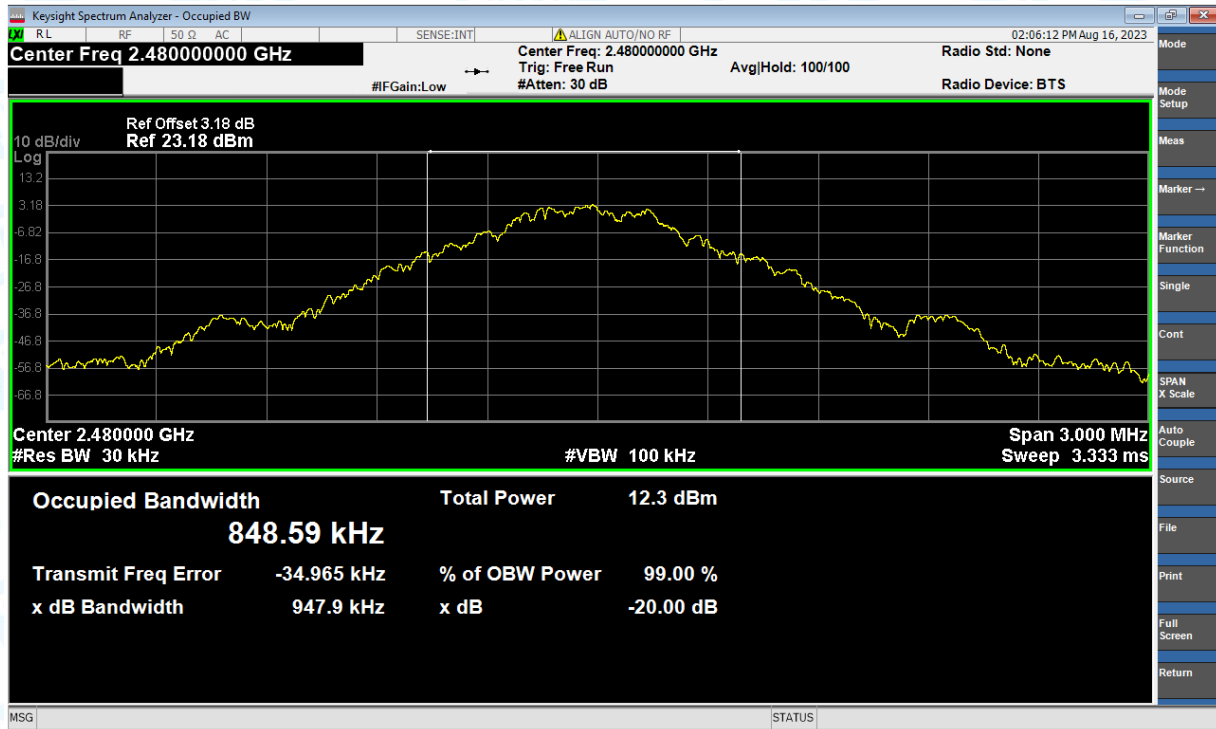
OBW NVNT 1-DH1 2402MHz Ant1



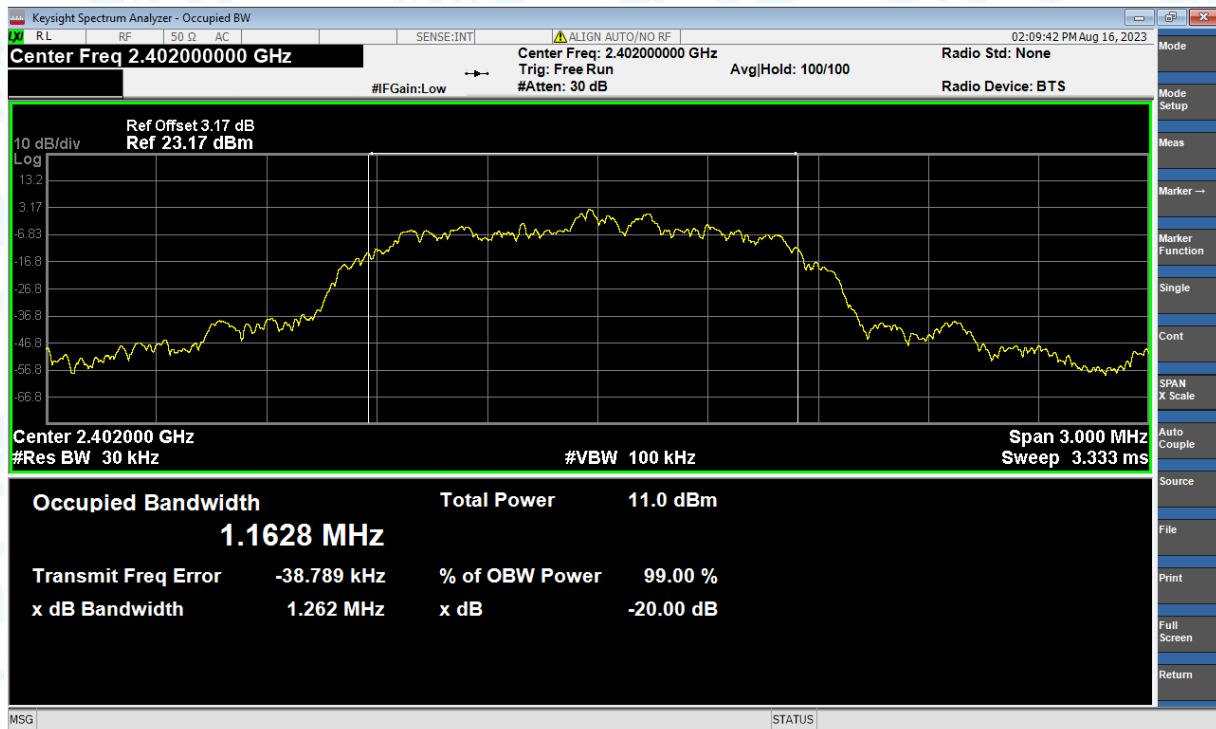
OBW NVNT 1-DH1 2441MHz Ant1



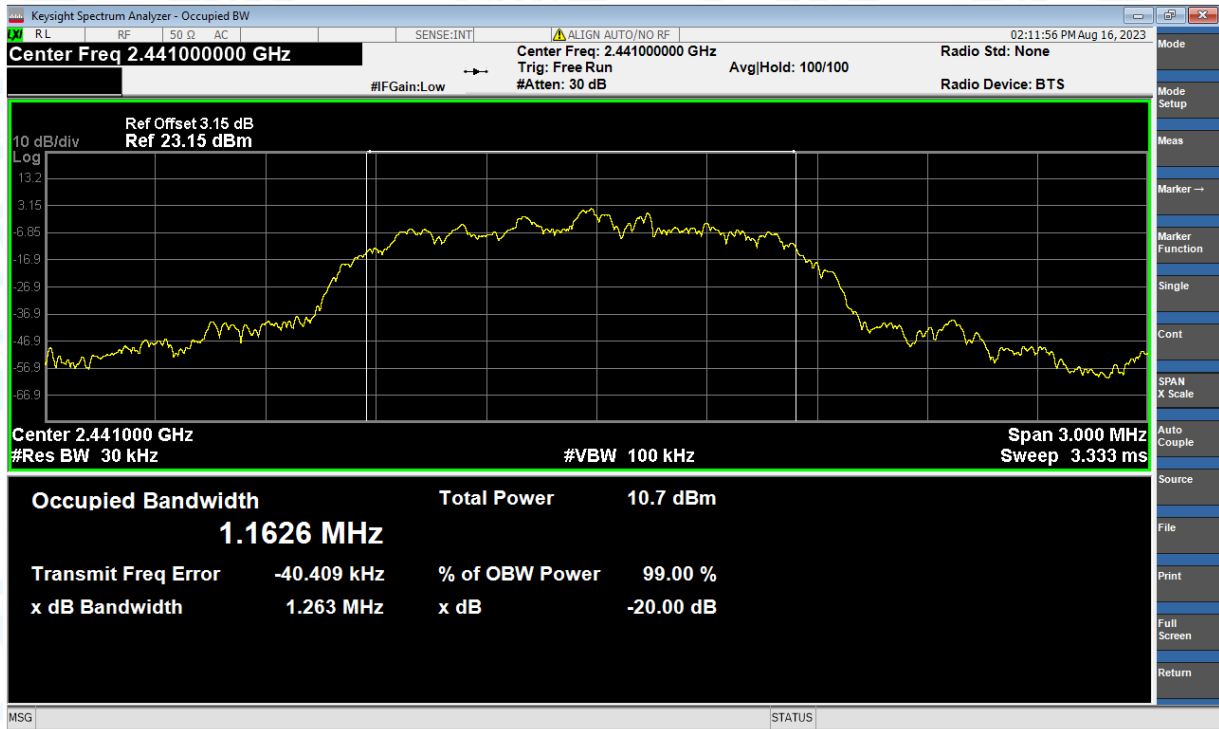
OBW NVNT 1-DH1 2480MHz Ant1



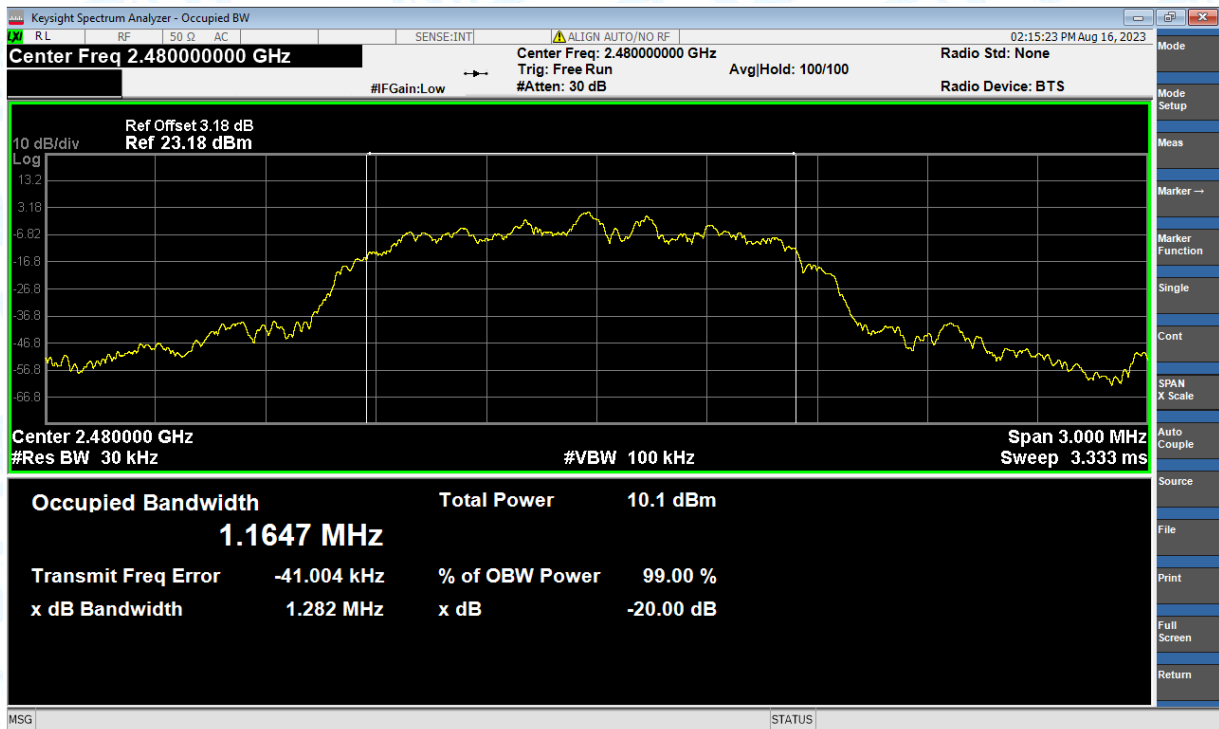
OBW NVNT 2-DH1 2402MHz Ant1



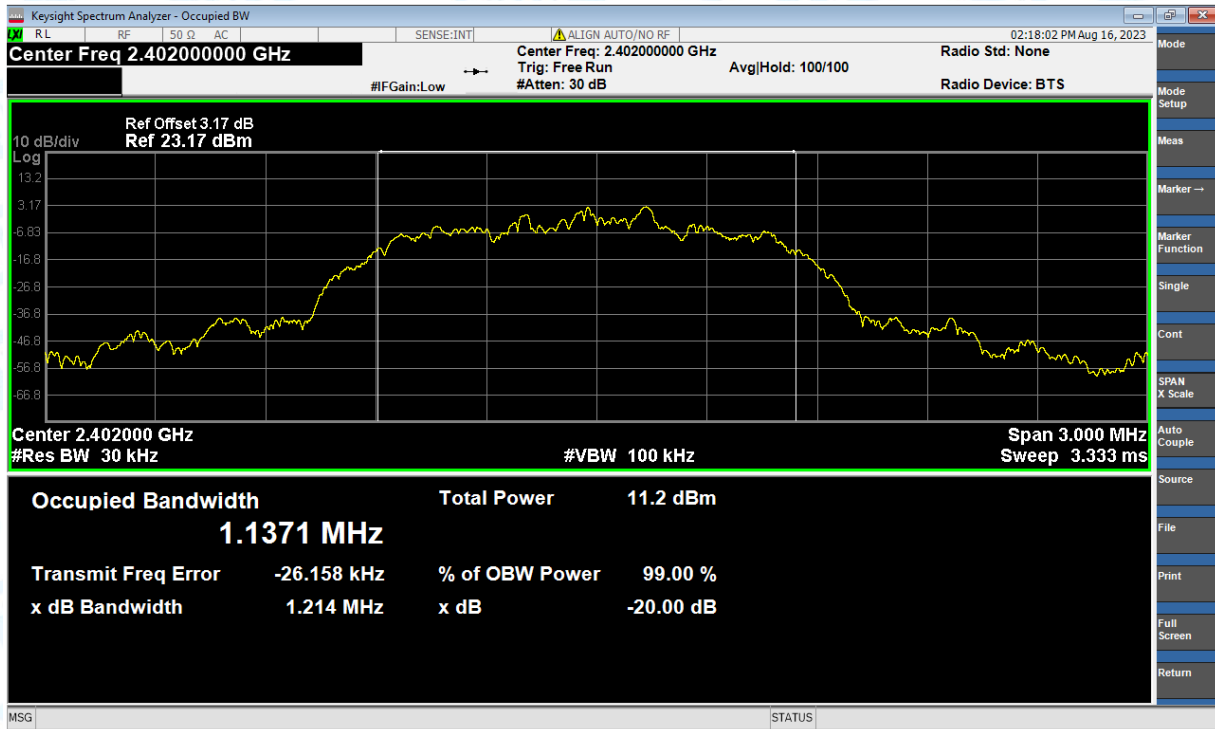
OBW NVNT 2-DH1 2441MHz Ant1



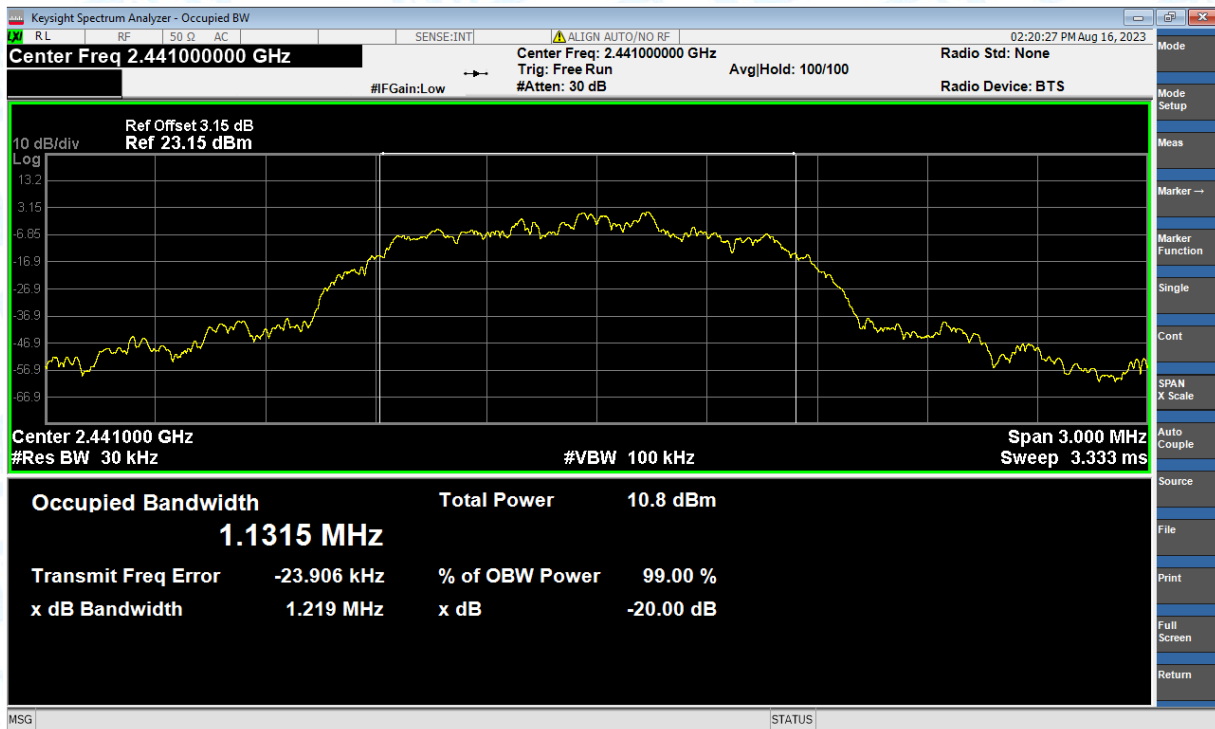
OBW NVNT 2-DH1 2480MHz Ant1

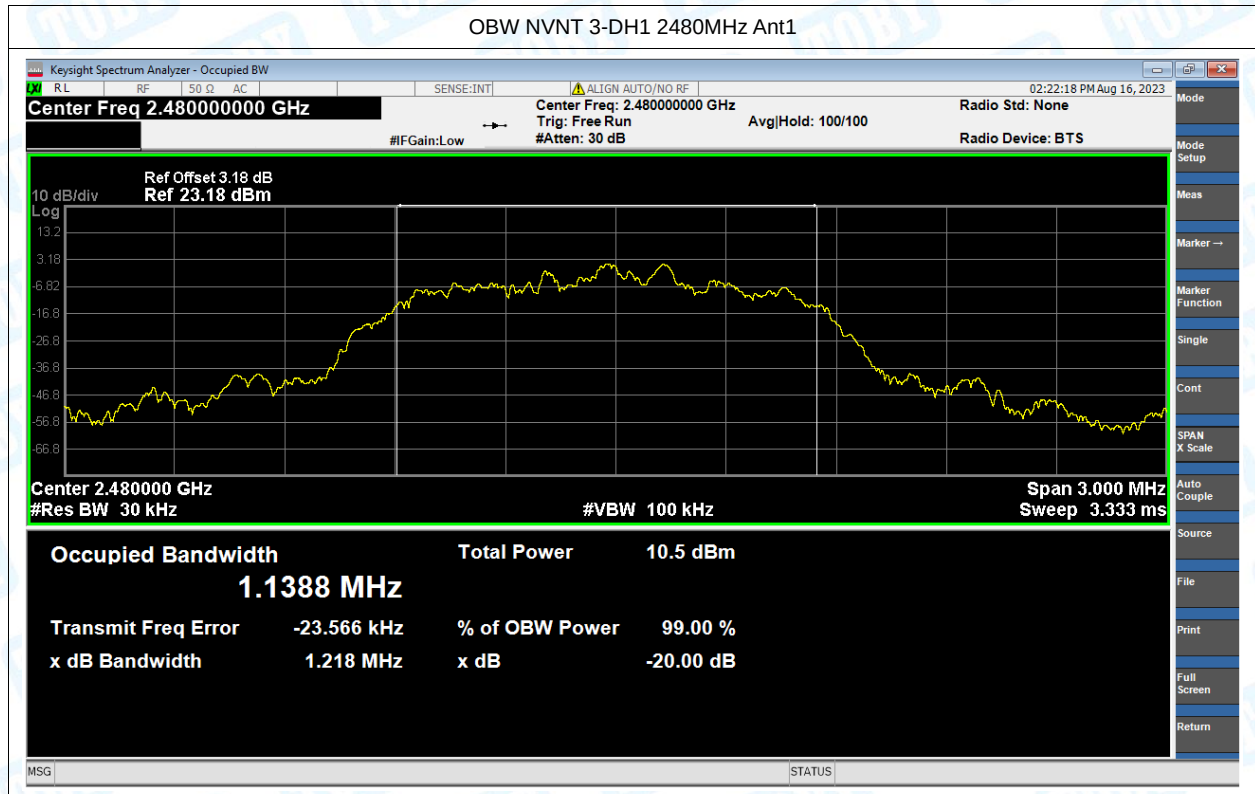


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



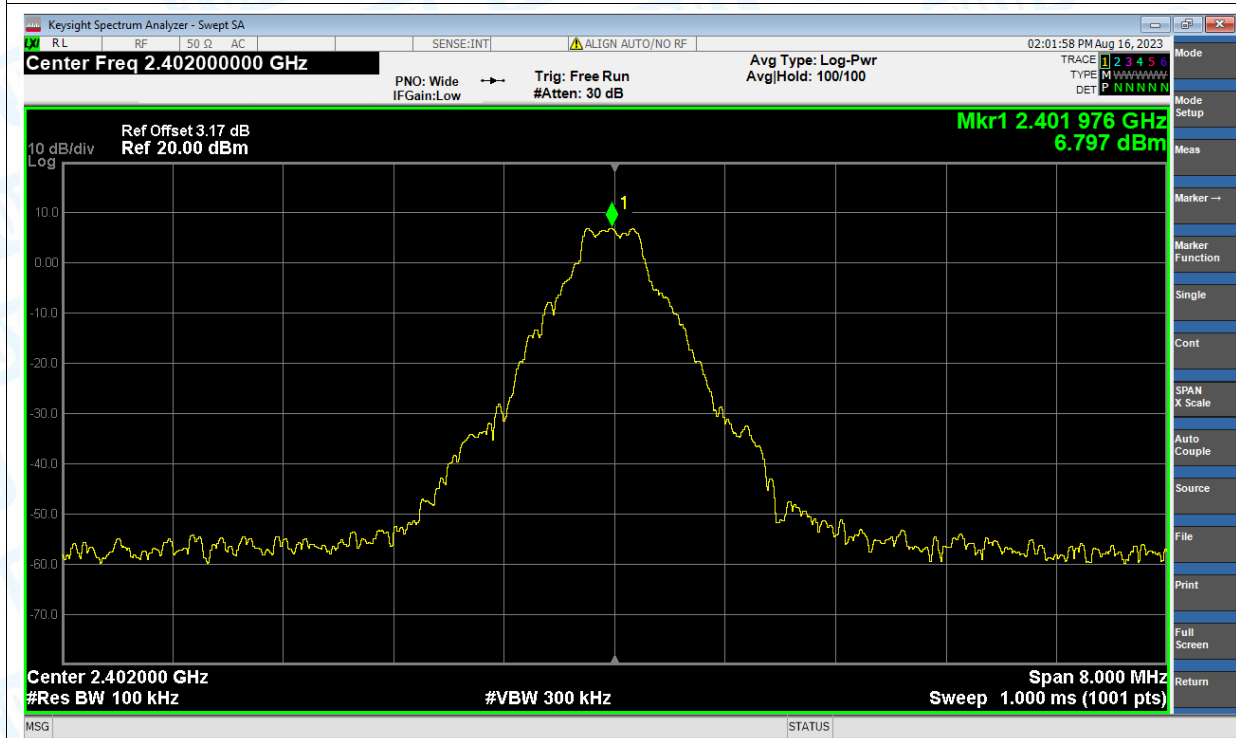


Band Edge

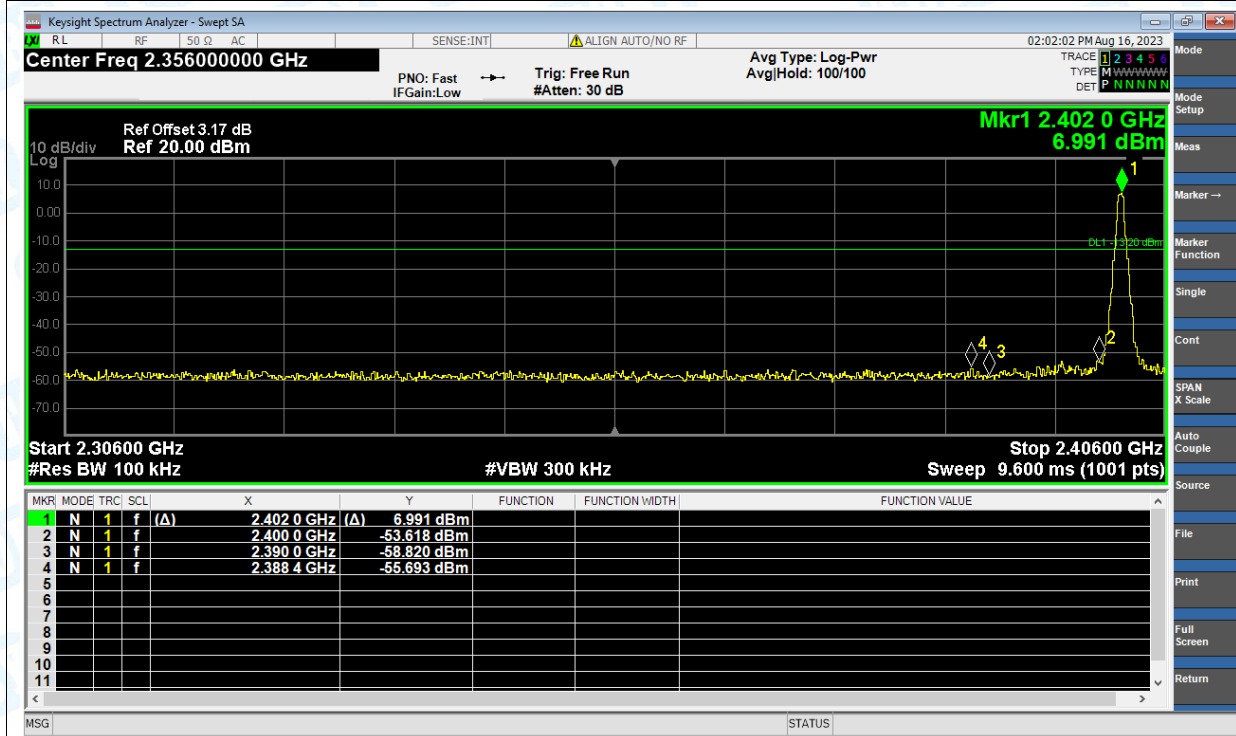
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-62.49	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-61.42	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-60.81	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-59.27	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-60.79	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-58.35	-20	Pass

Test Graphs

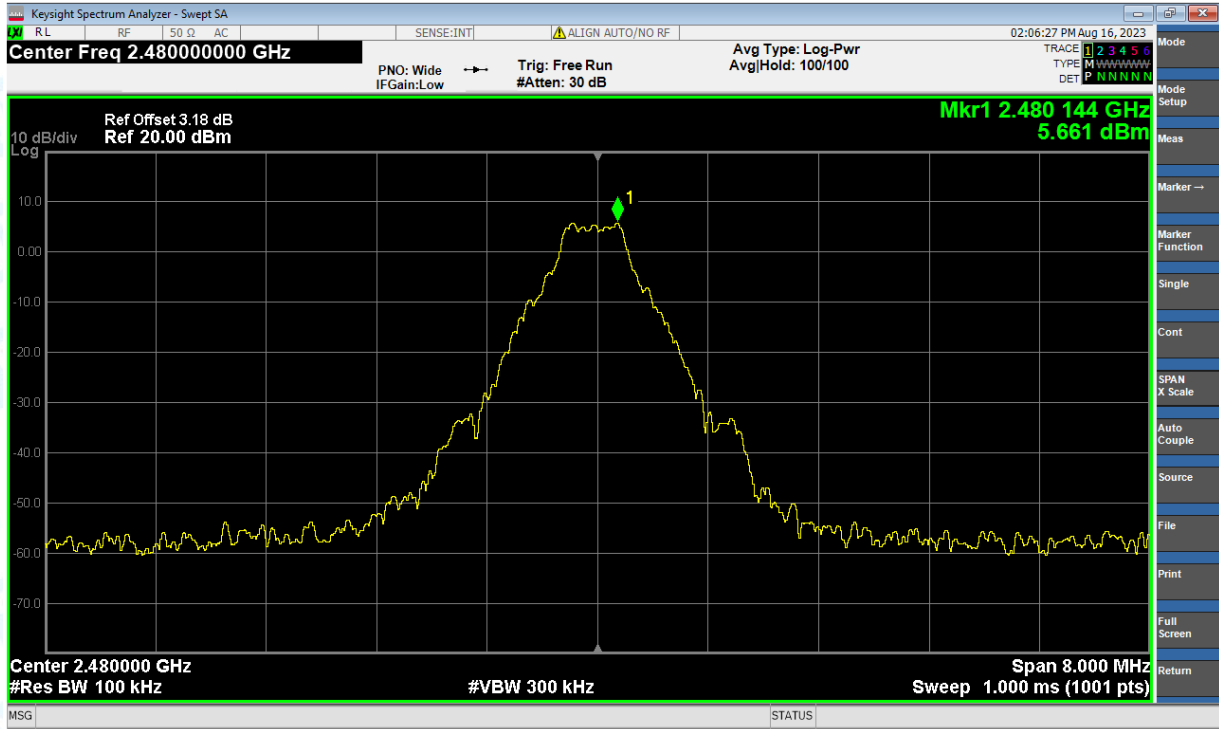
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



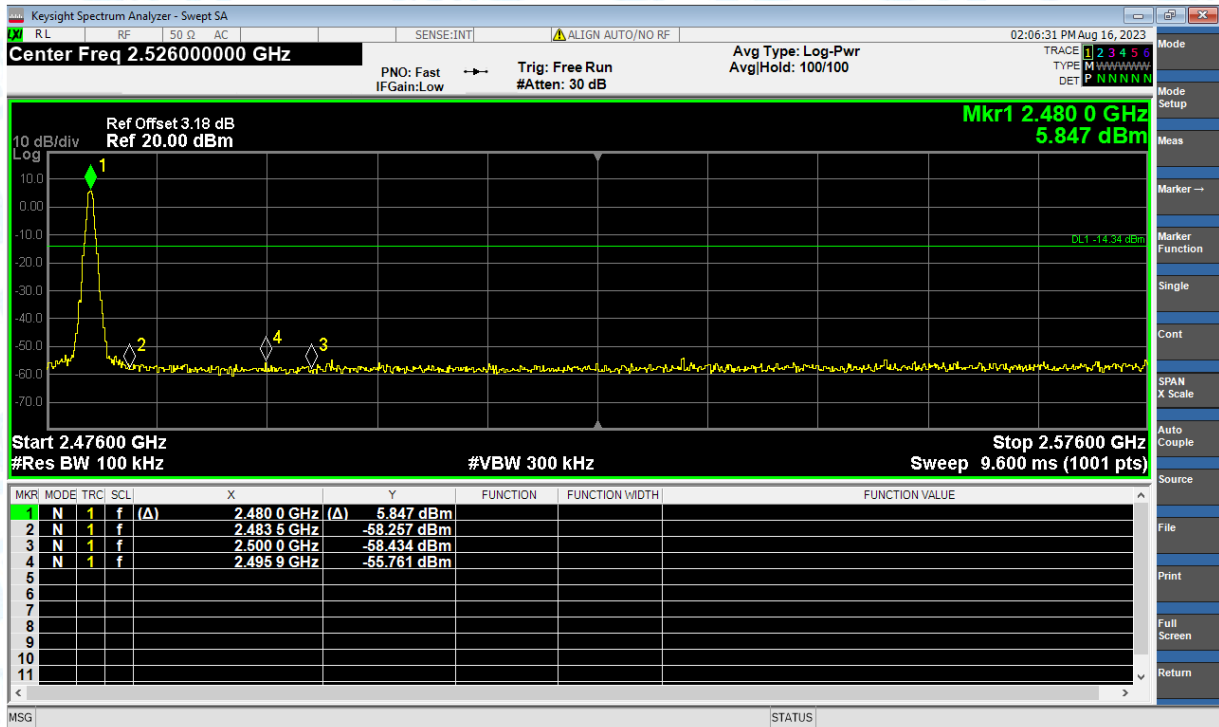
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



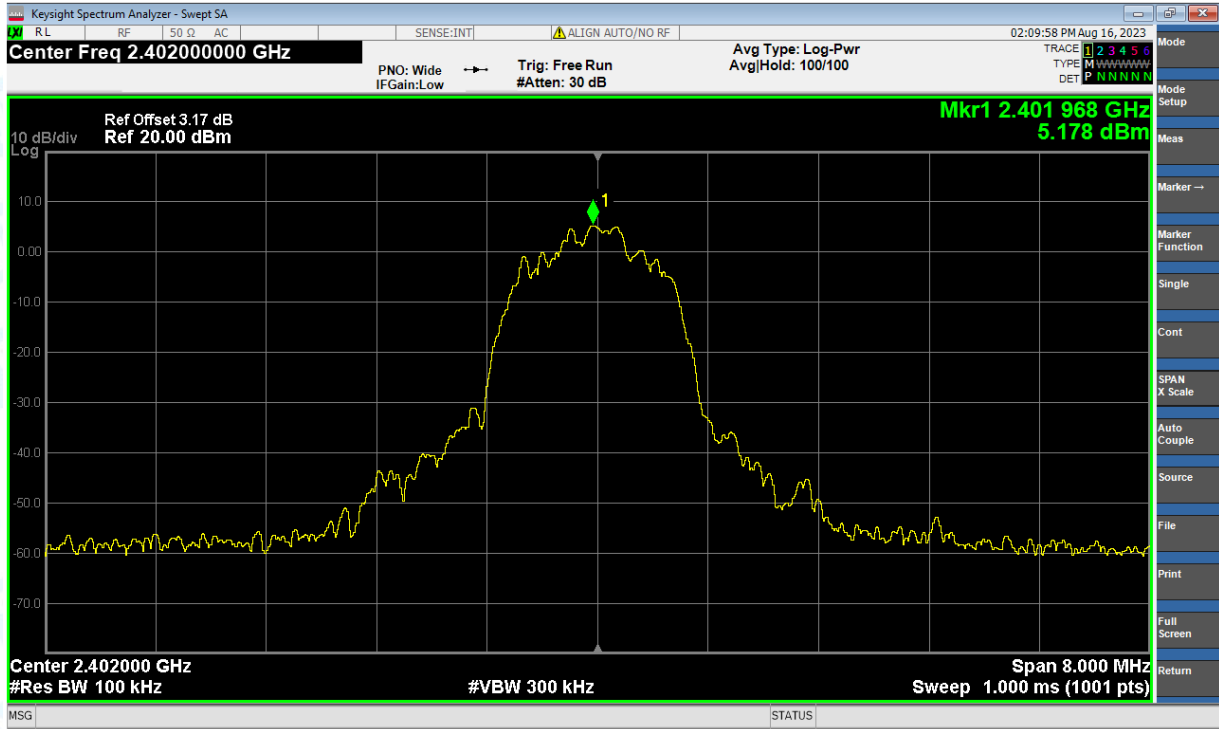
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



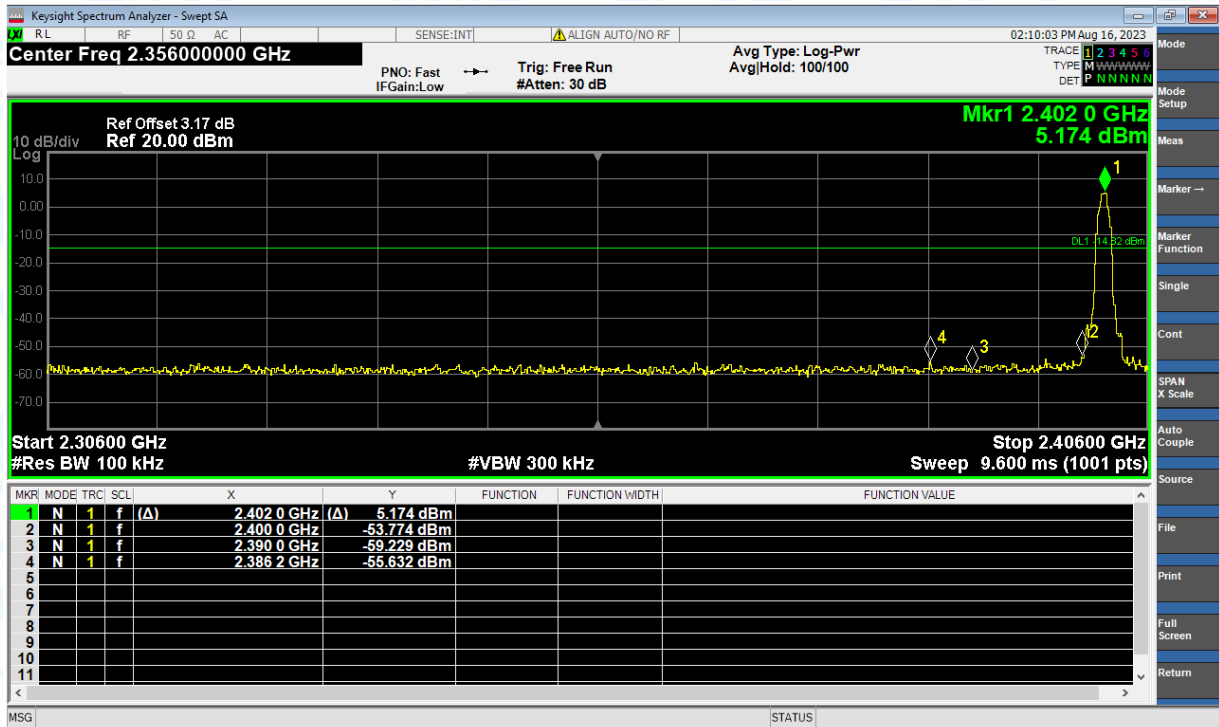
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



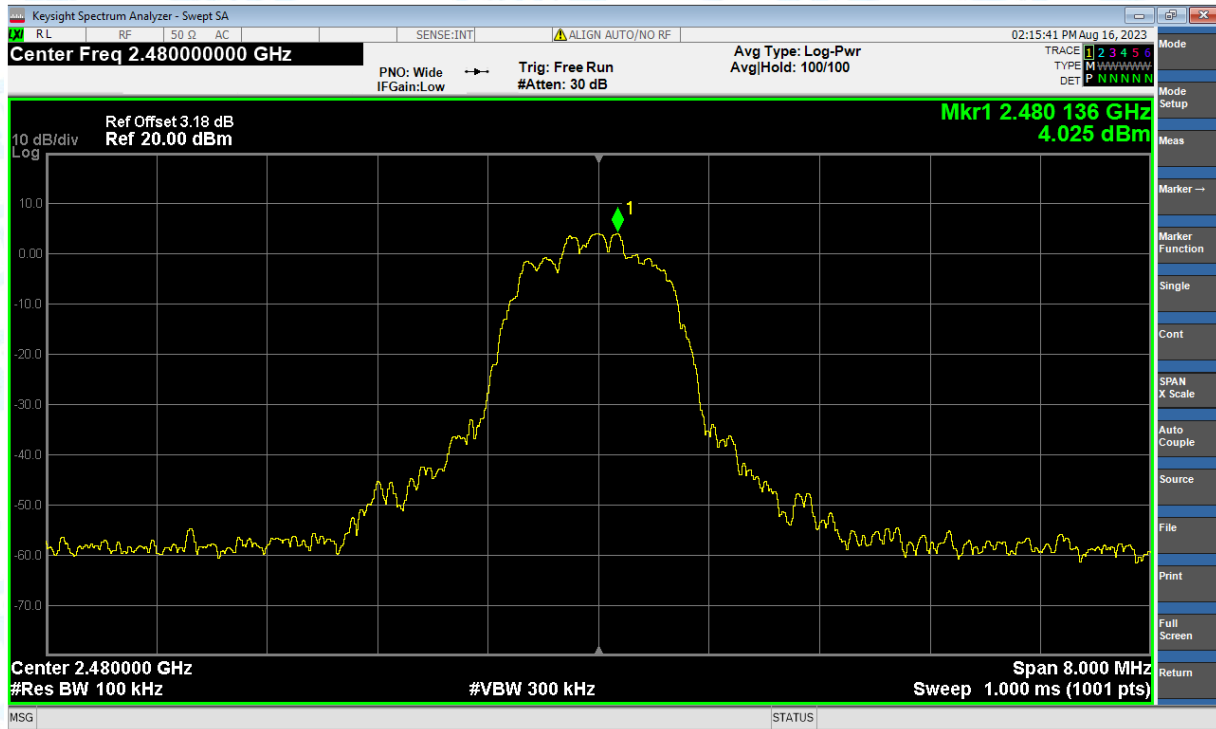
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



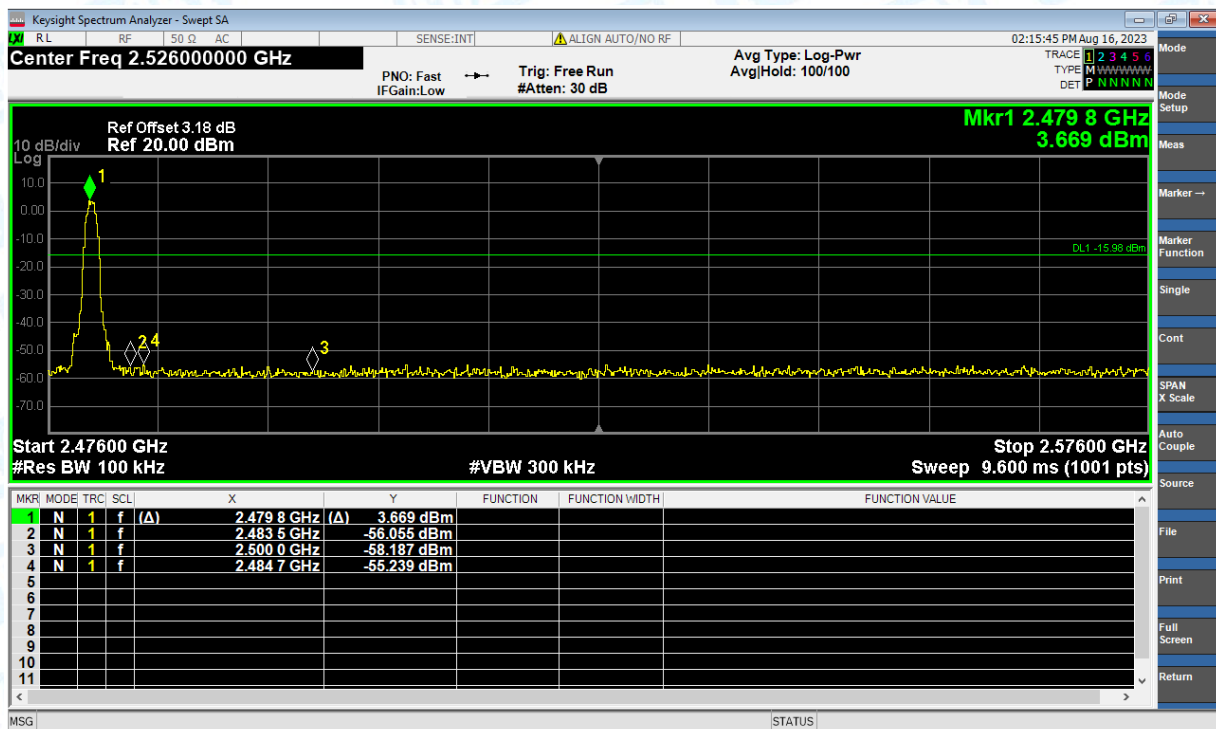
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



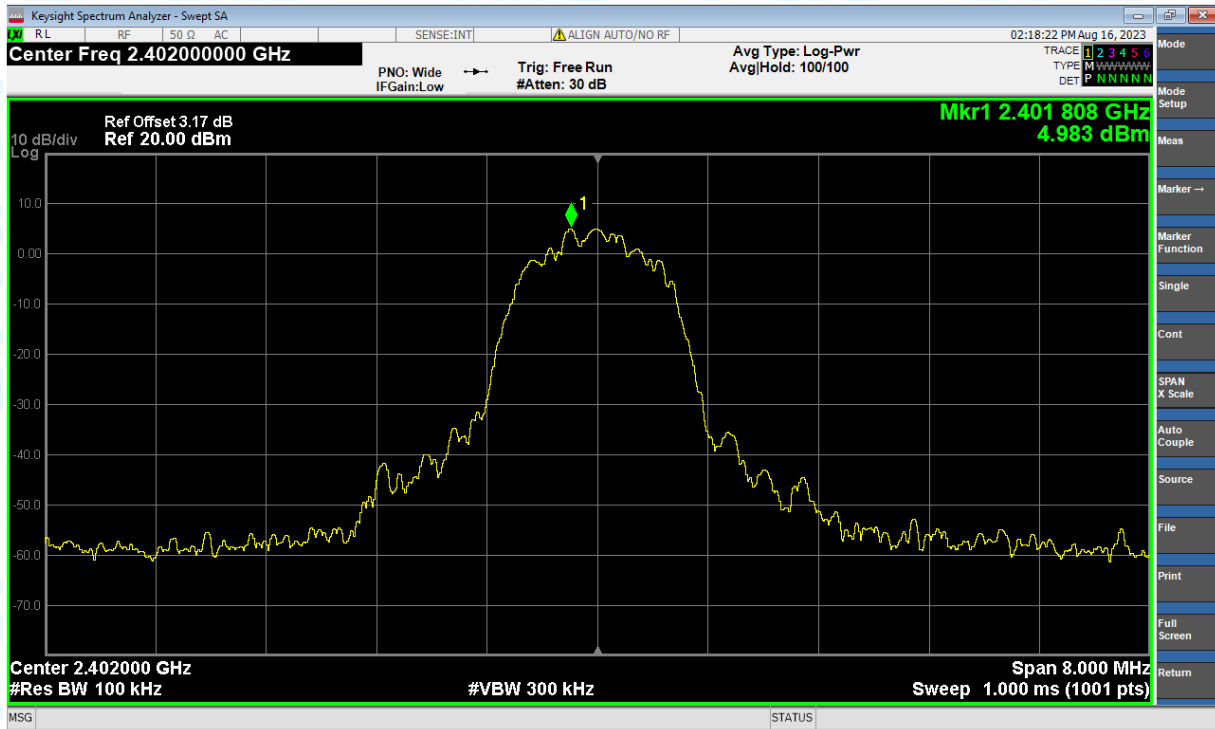
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



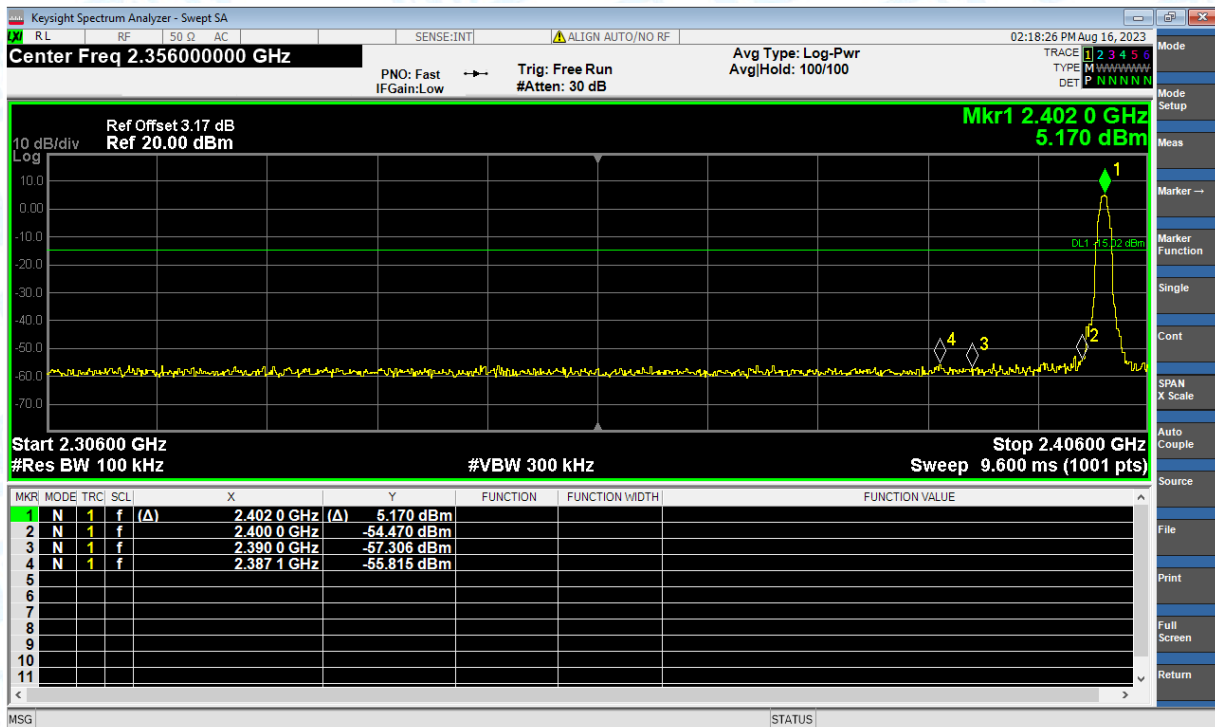
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



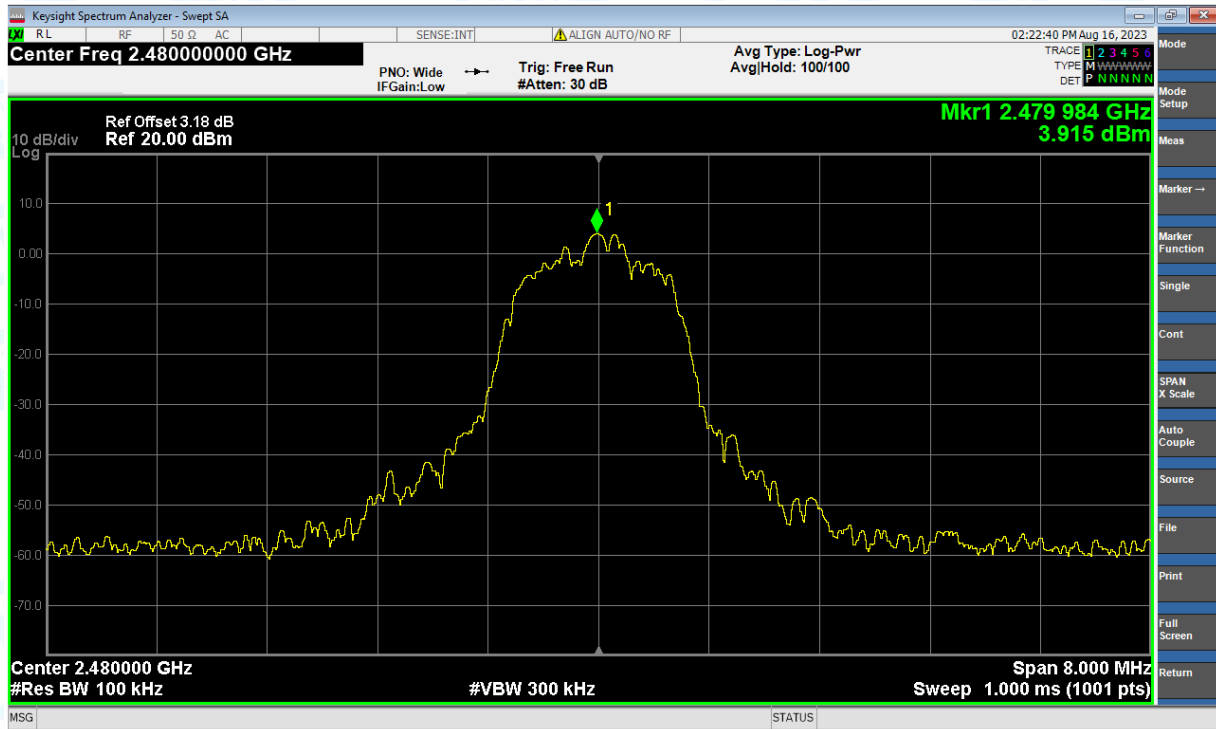
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



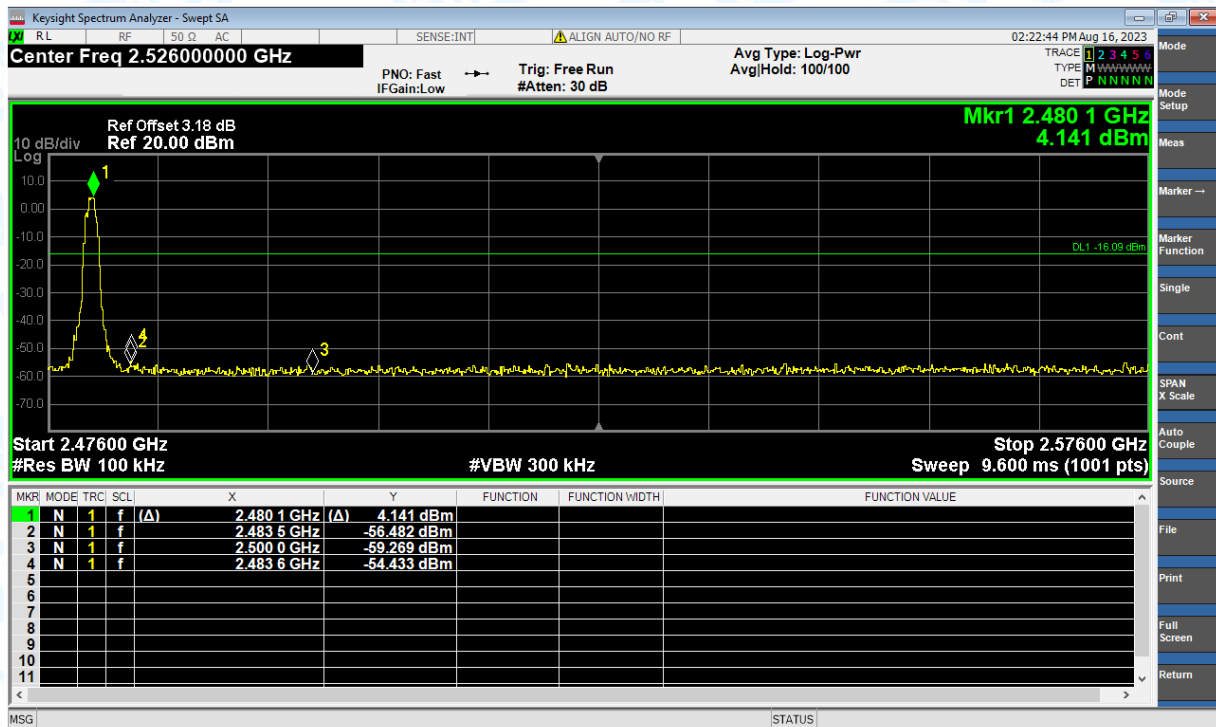
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



Band Edge(Hopping)

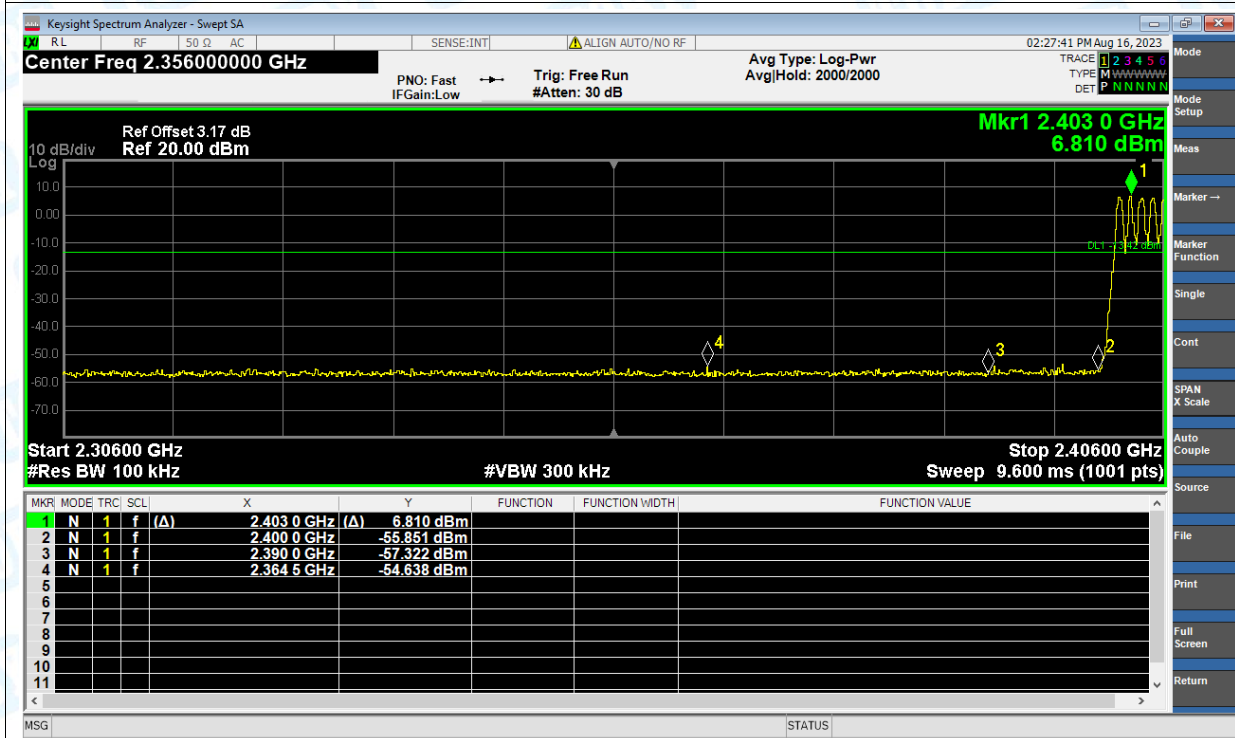
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-61.22	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-60.61	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-59.47	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-58.15	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-58.6	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-59.59	-20	Pass

Test Graphs

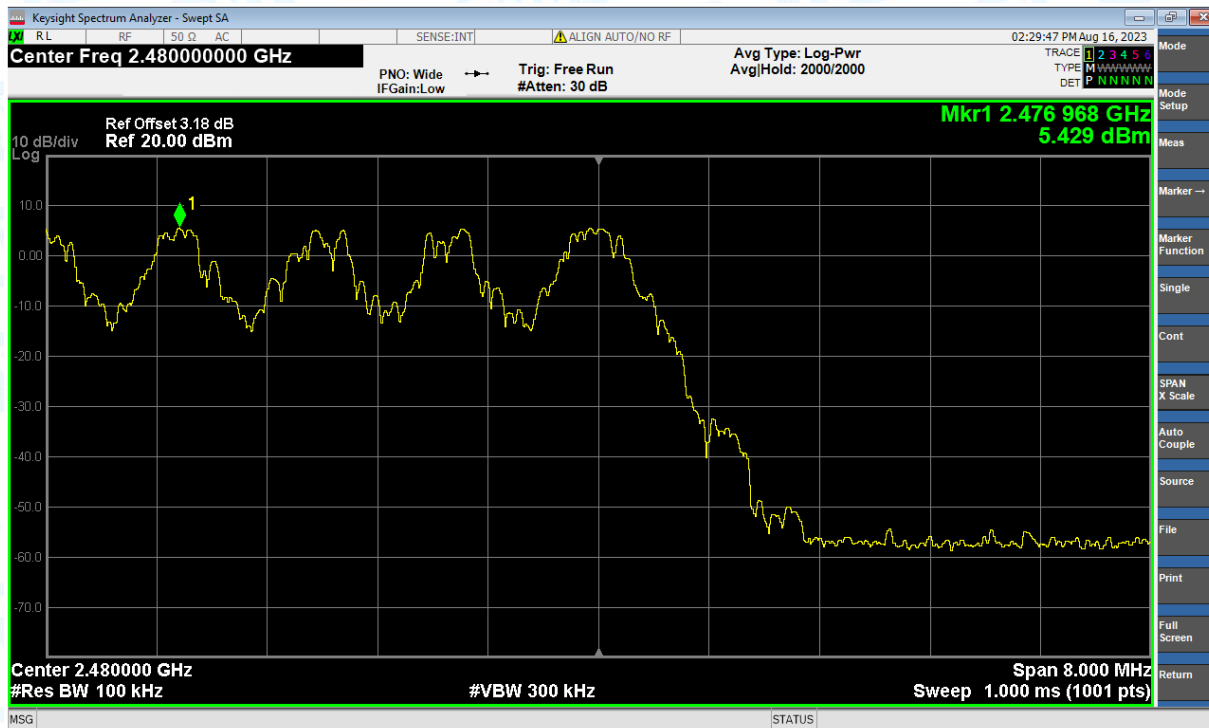
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



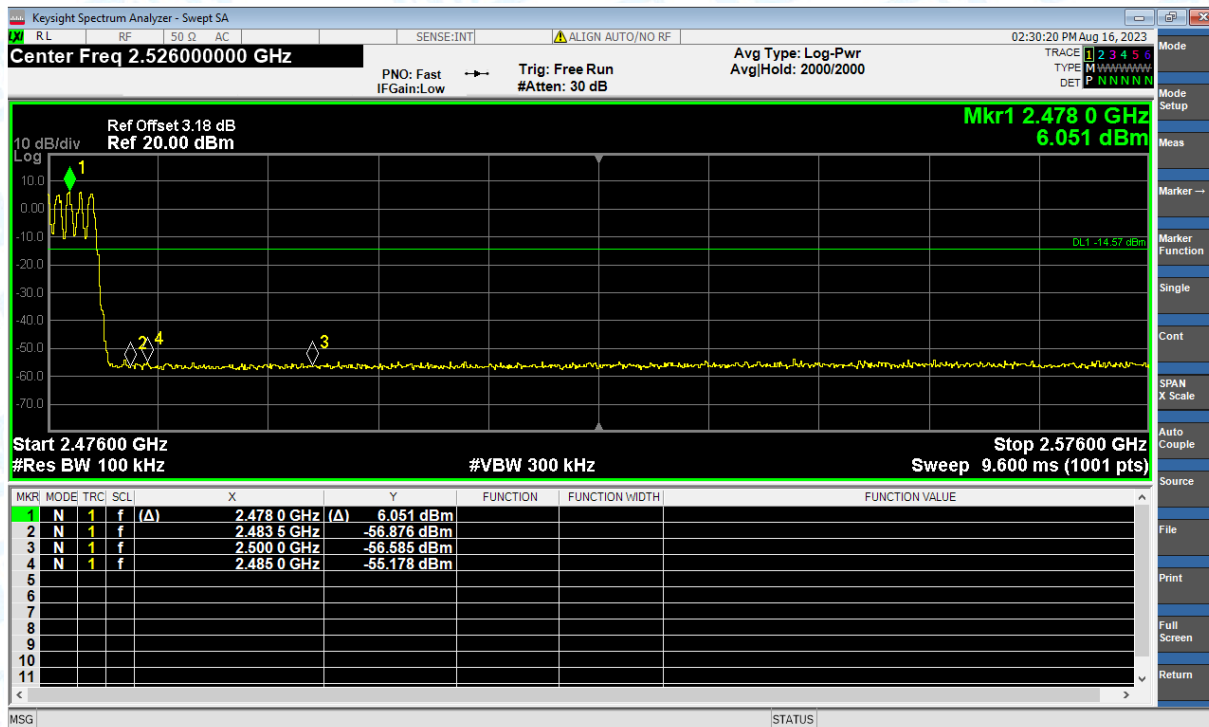
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



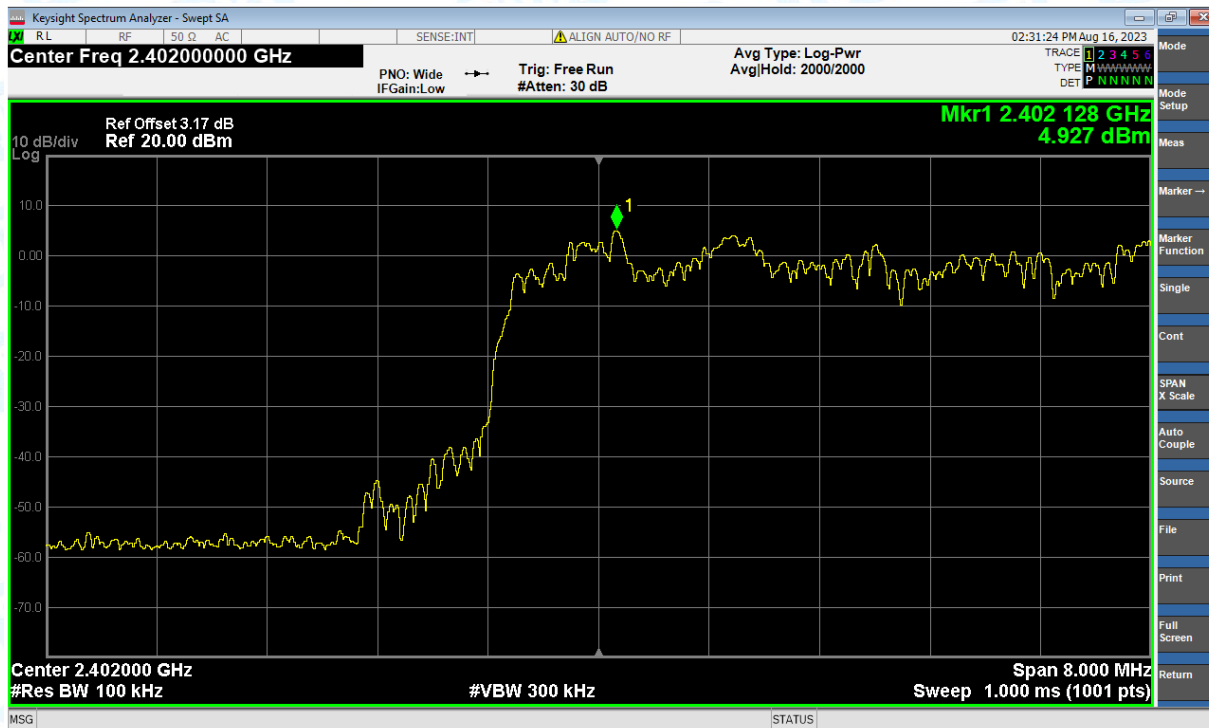
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



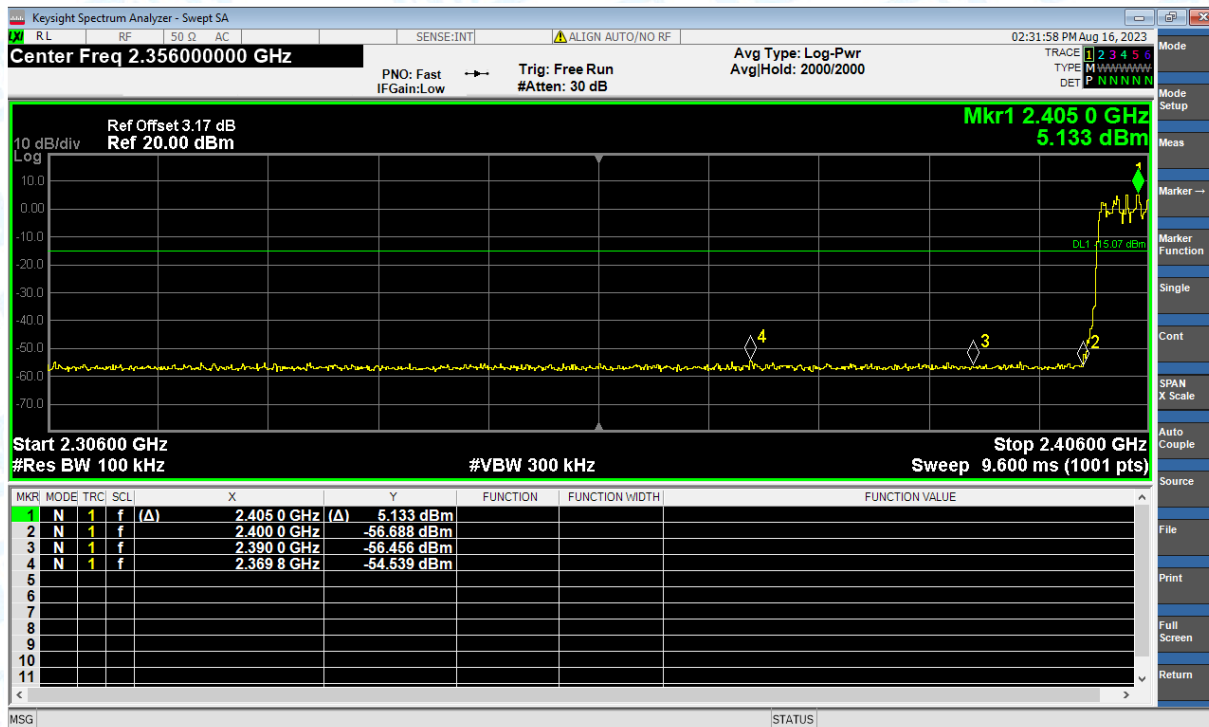
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



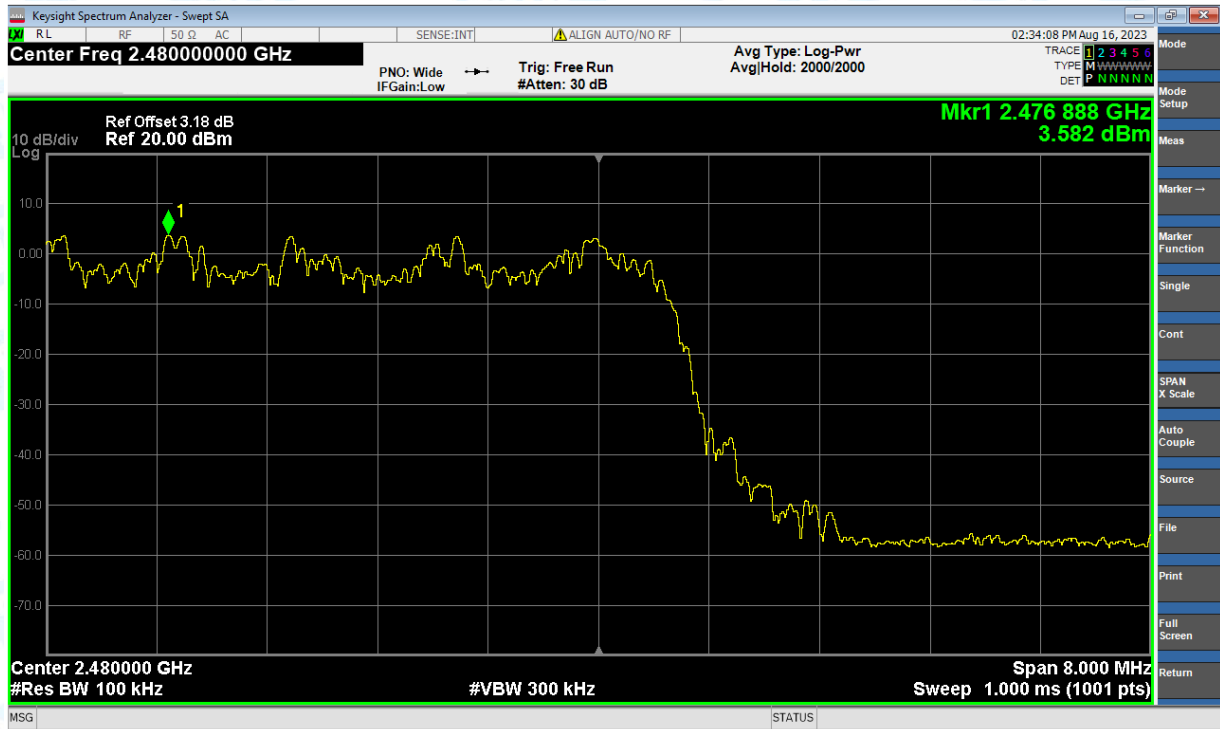
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



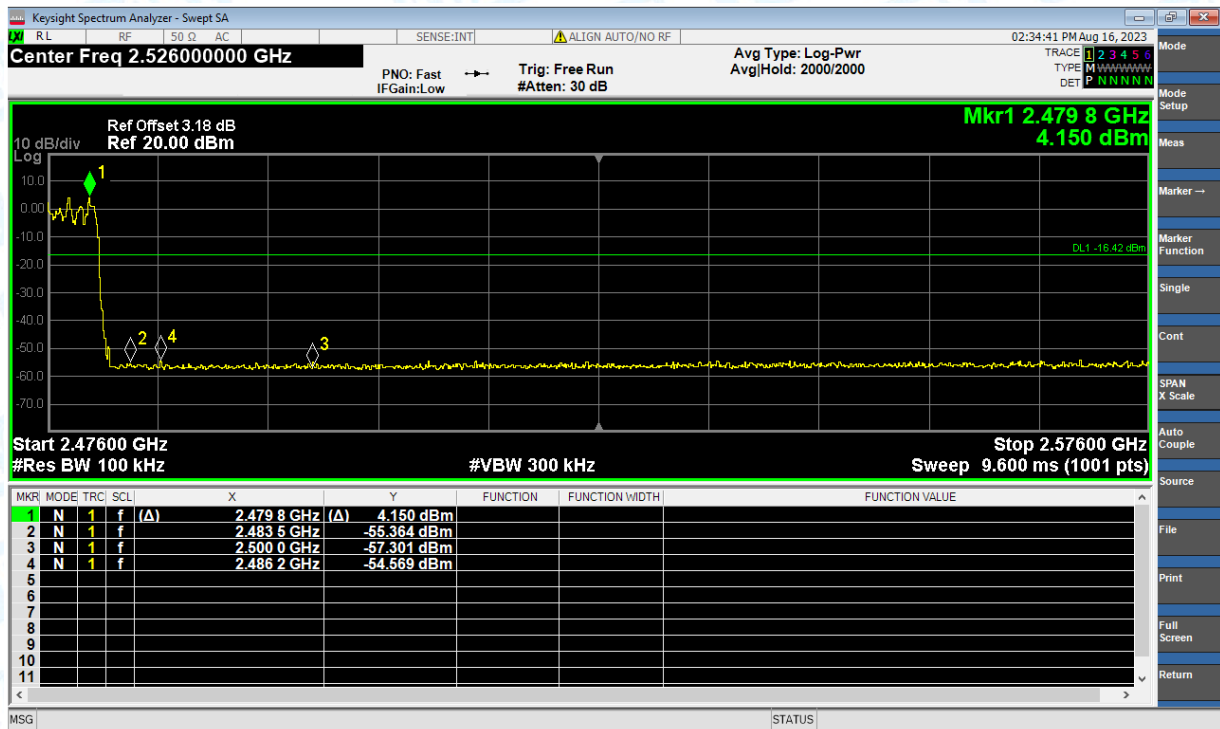
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



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



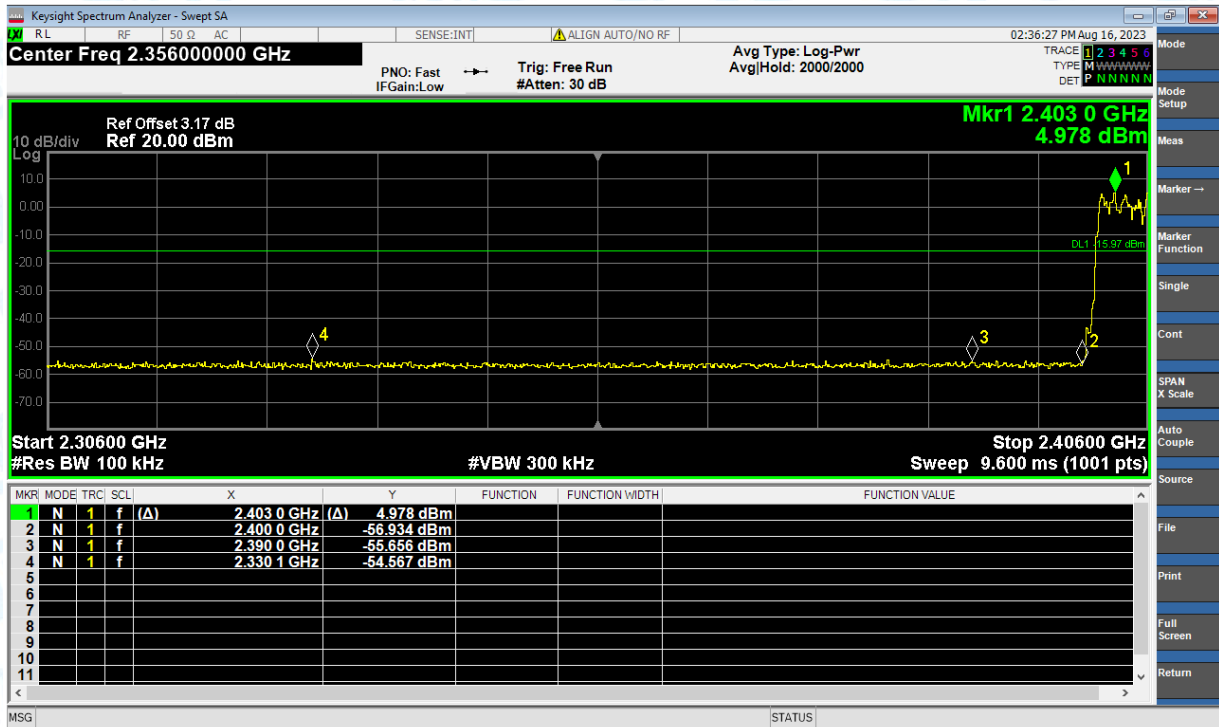
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



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



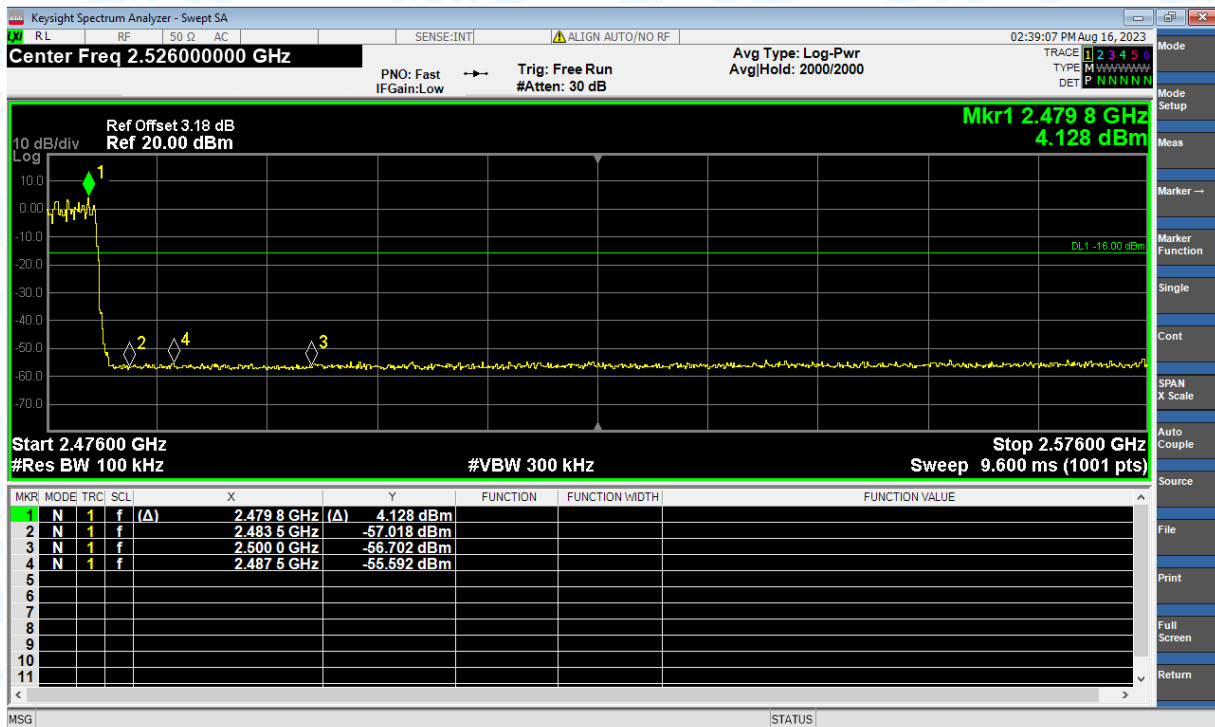
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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

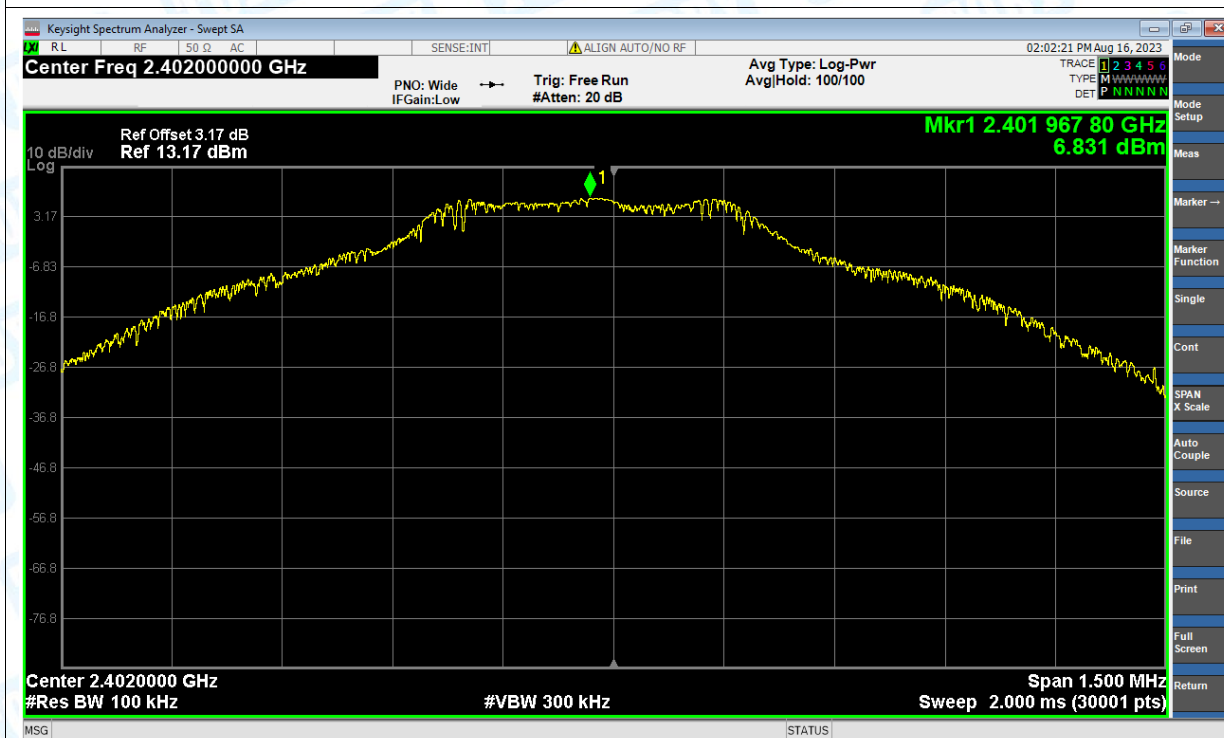


Conducted RF Spurious Emission

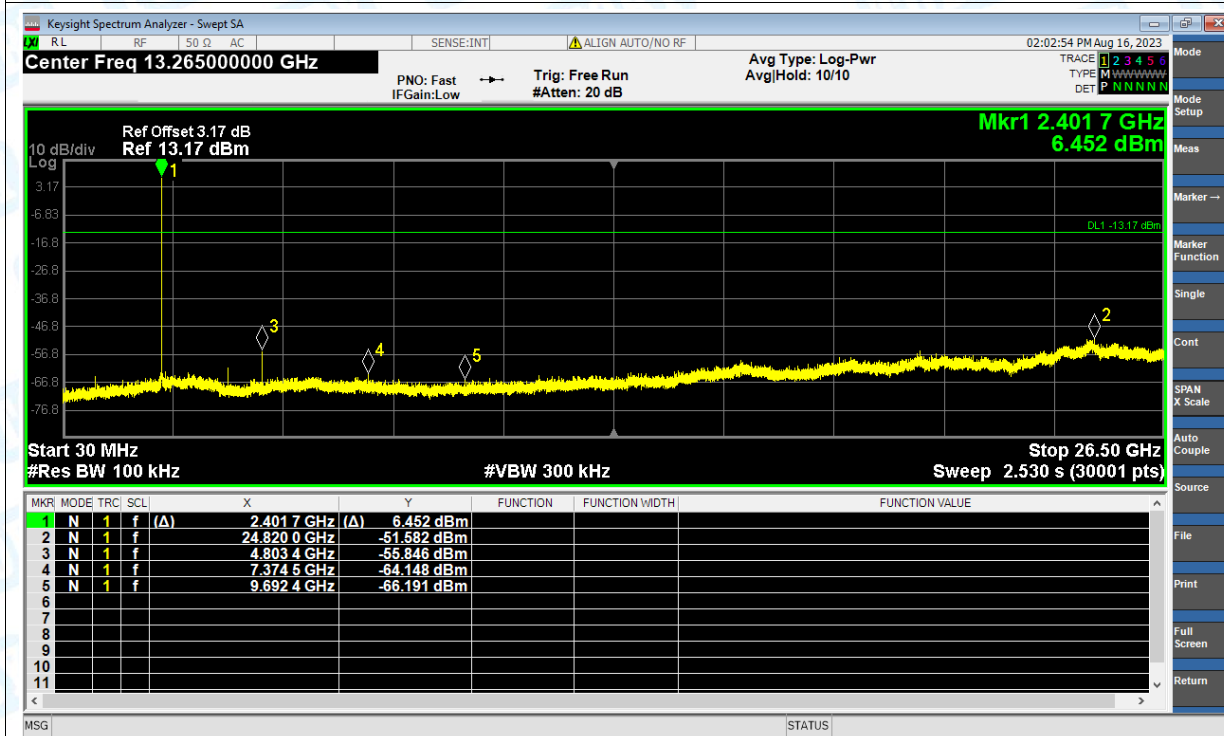
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-58.41	-20	Pass
NVNT	1-DH1	2441	Ant1	-57.71	-20	Pass
NVNT	1-DH1	2480	Ant1	-56.9	-20	Pass
NVNT	2-DH1	2402	Ant1	-56.16	-20	Pass
NVNT	2-DH1	2441	Ant1	-55.73	-20	Pass
NVNT	2-DH1	2480	Ant1	-55.49	-20	Pass
NVNT	3-DH1	2402	Ant1	-56.35	-20	Pass
NVNT	3-DH1	2441	Ant1	-55.37	-20	Pass
NVNT	3-DH1	2480	Ant1	-55.43	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



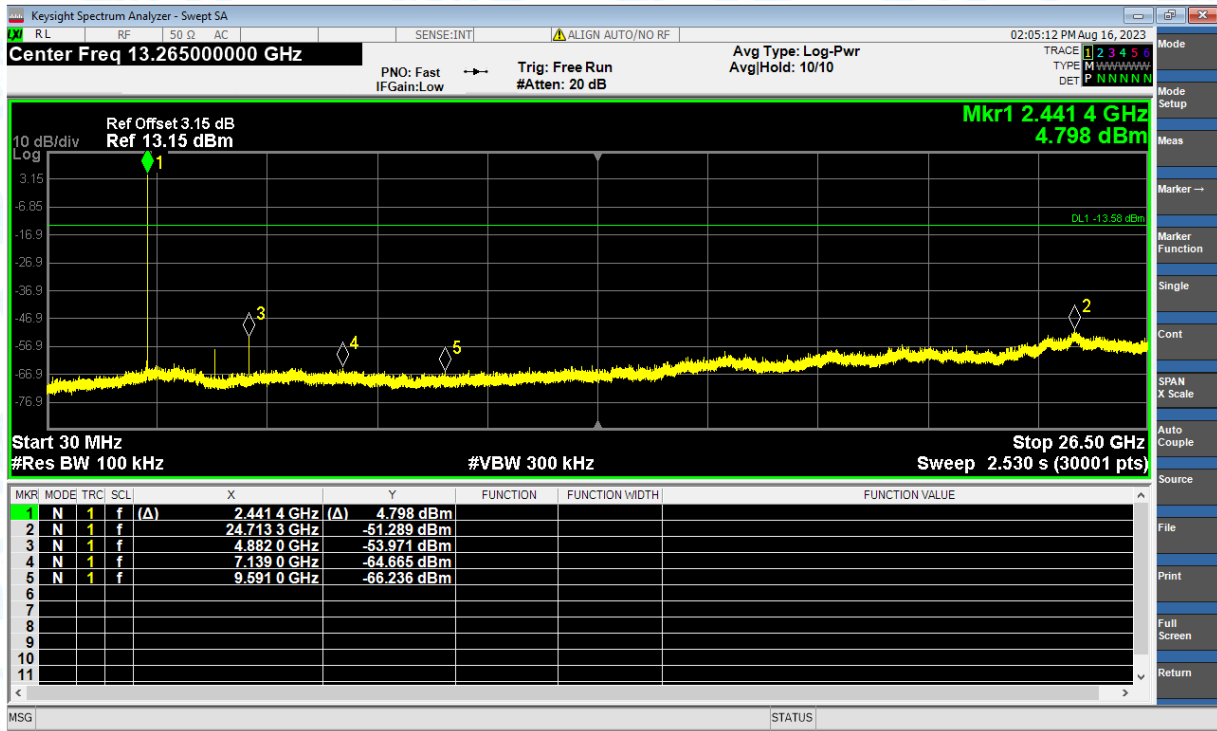
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



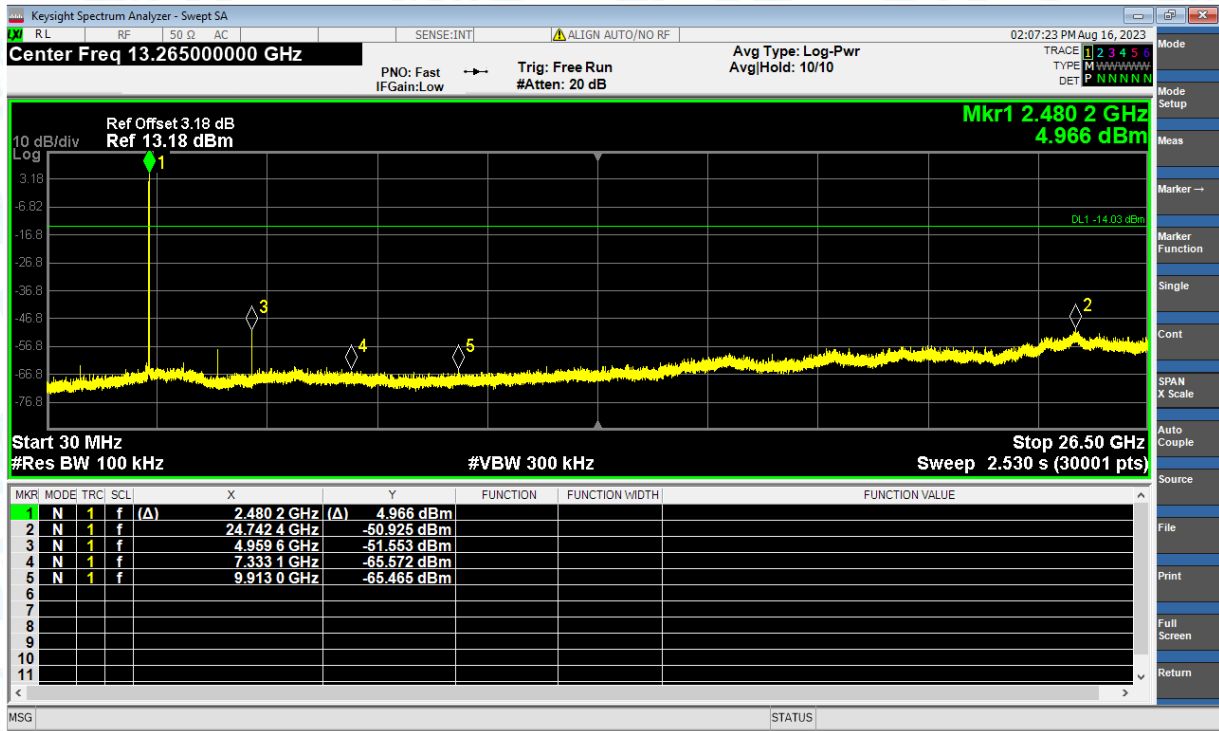
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



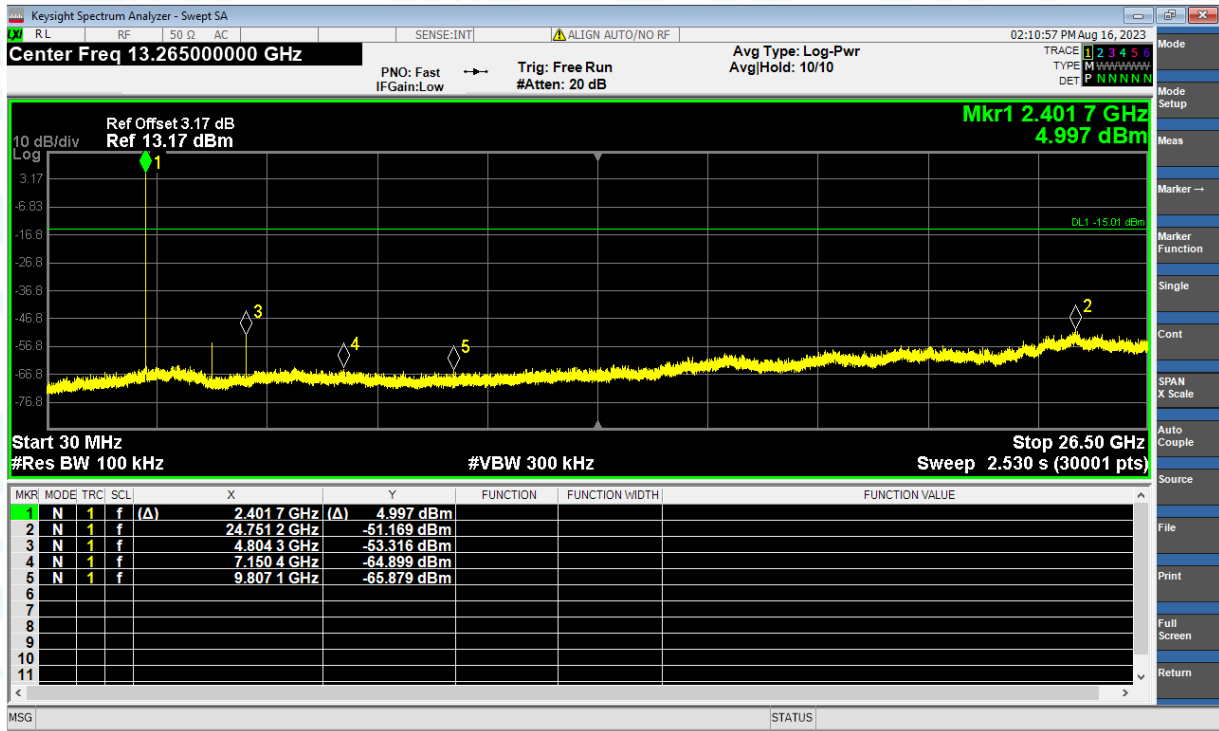
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



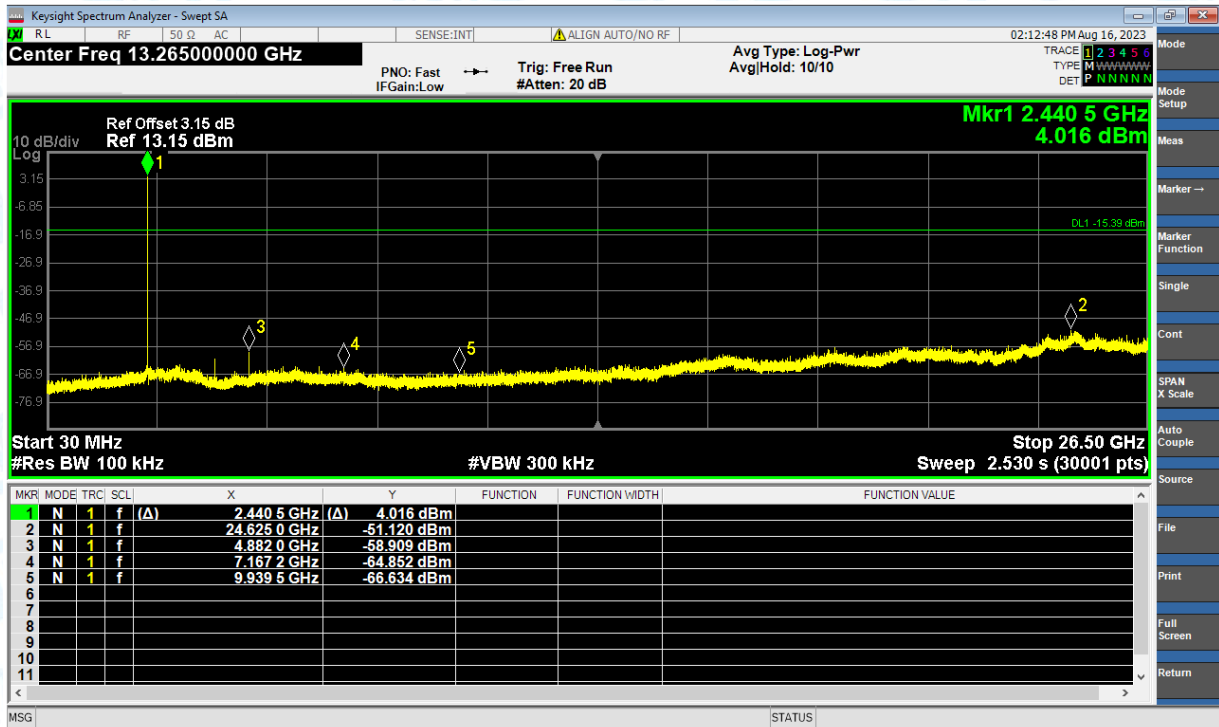
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



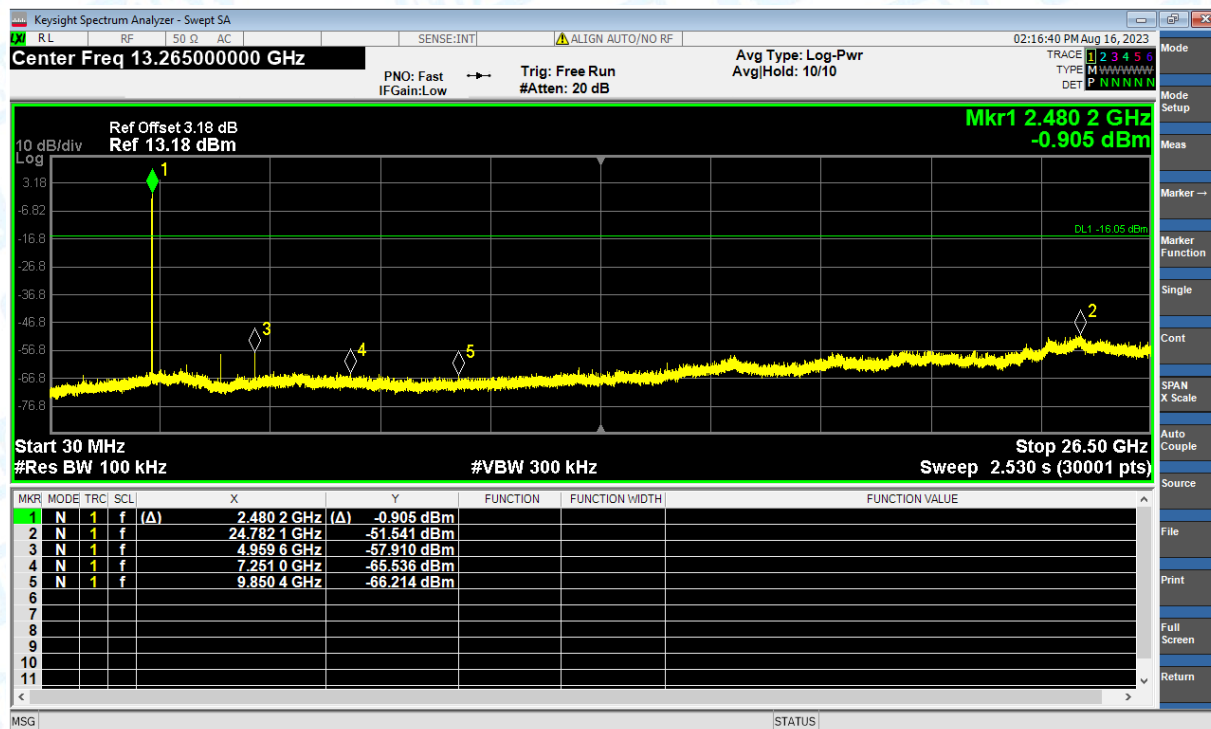
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



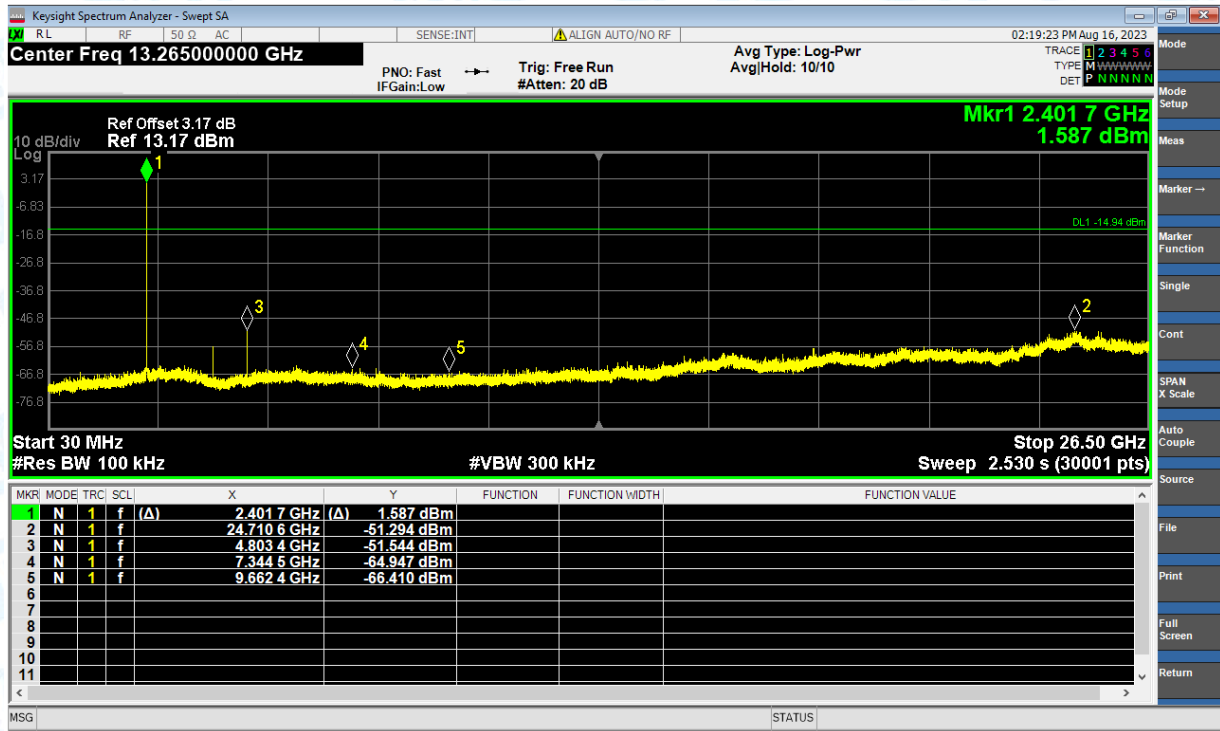
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



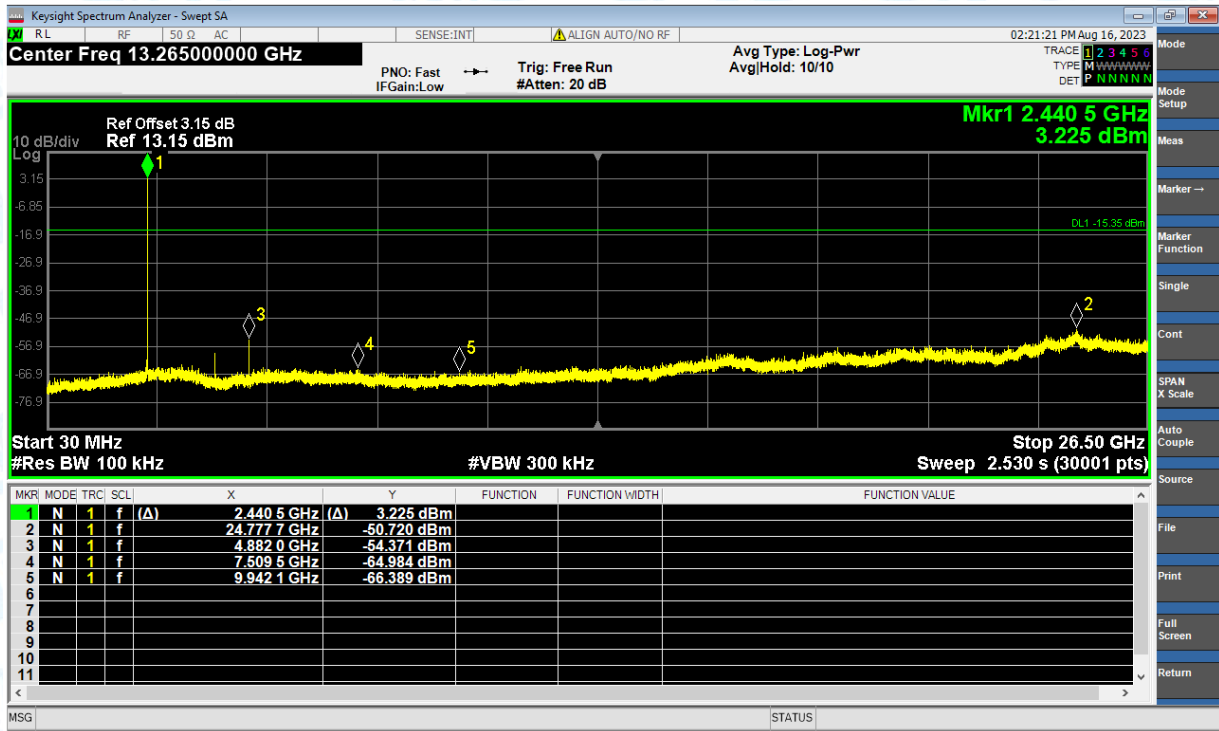
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



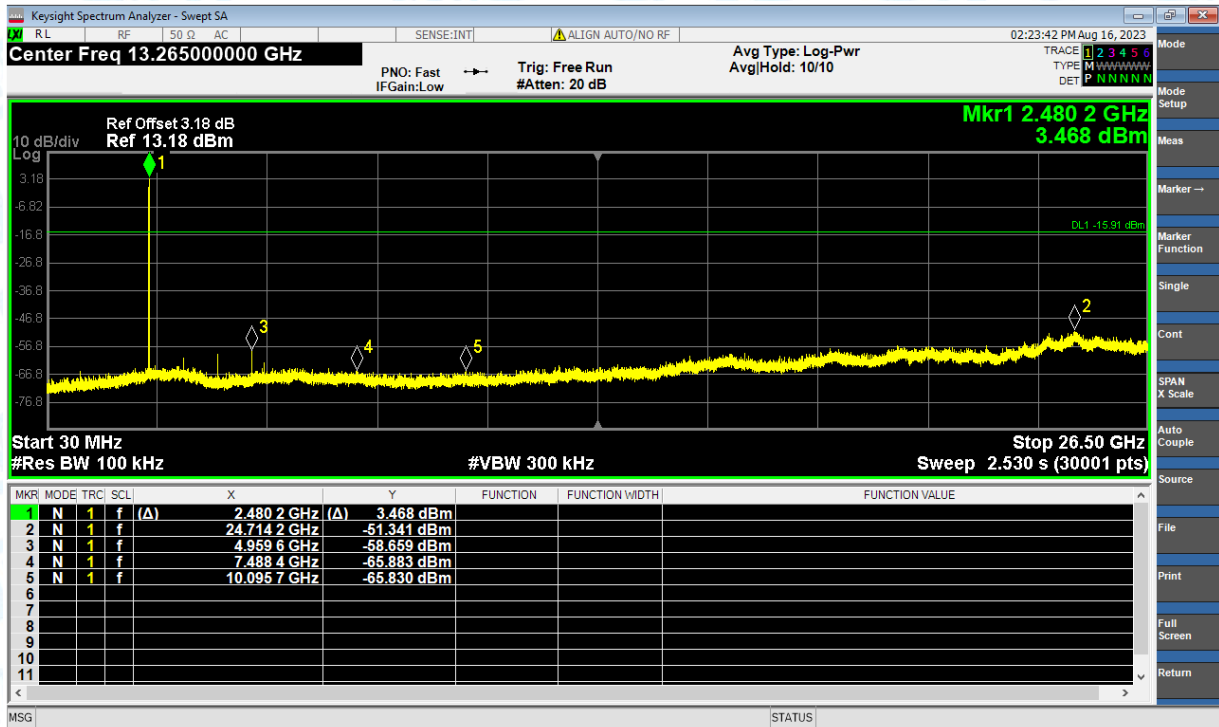
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

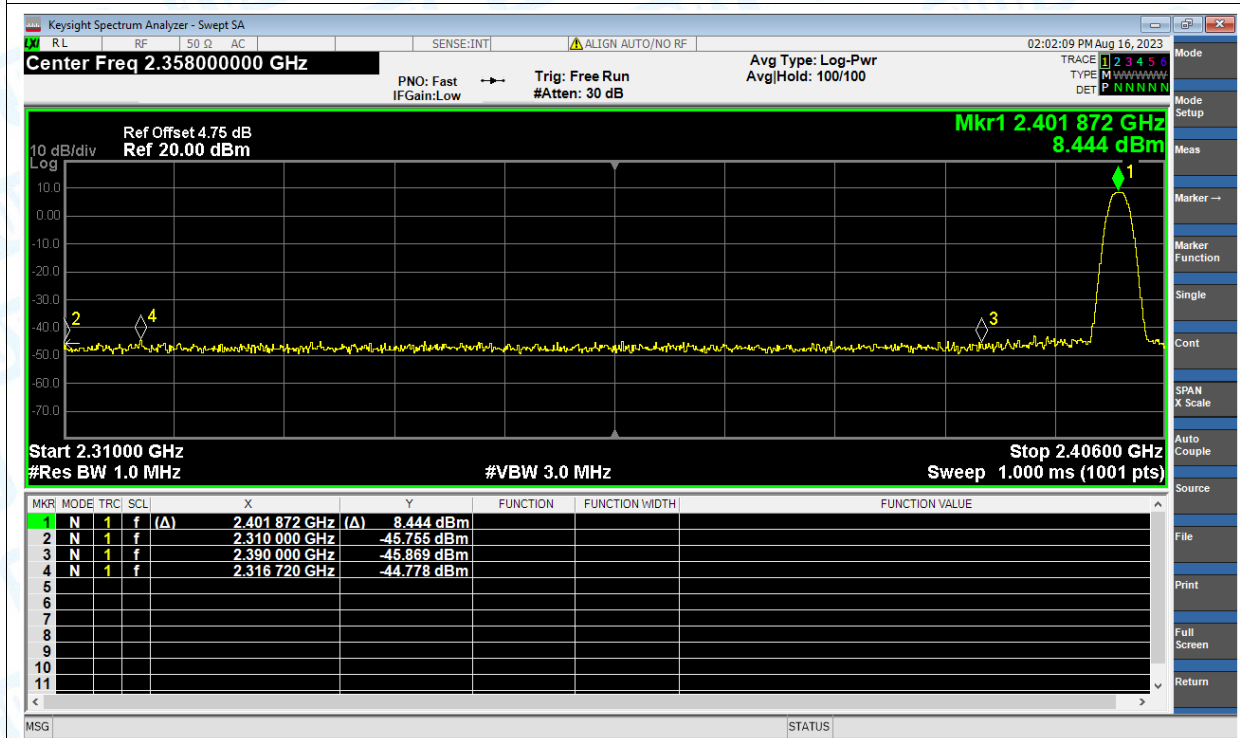


Restrict Band

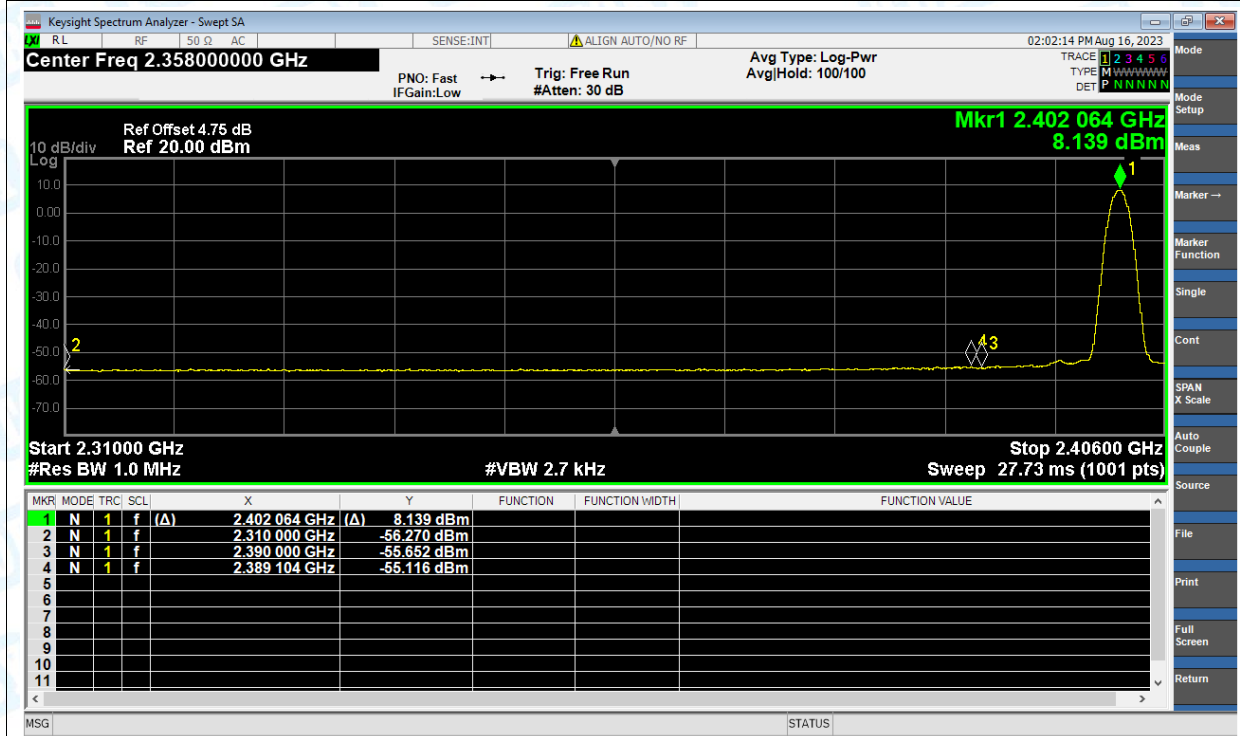
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-45.75	2	51.51	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.27	2	40.99	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2316.72	-44.78	2	52.48	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2389.104	-55.12	2	42.14	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-45.91	2	51.35	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.71	2	41.55	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-44.19	2	53.07	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.01	2	43.25	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.68	-42.93	2	54.33	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.776	-53.91	2	43.35	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.97	2	50.29	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-56.09	2	41.17	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-47.54	2	49.72	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.51	2	40.75	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2375.088	-44.92	2	52.34	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2387.088	-55.39	2	41.87	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-45.84	2	51.42	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.94	2	41.32	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-46.09	2	51.17	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.86	2	42.4	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2484.712	-43.17	2	54.09	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.56	-54.73	2	42.53	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-48.95	2	48.31	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-56.21	2	41.05	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-47.75	2	49.51	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.4	2	40.86	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2384.4	-44.79	2	52.47	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2386.32	-55.28	2	41.98	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-45.72	2	51.54	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.82	2	41.44	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-46.88	2	50.38	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-54.92	2	42.34	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2493.088	-44.42	2	52.84	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.944	-54.69	2	42.57	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-45.43	2	51.83	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-56.18	2	41.08	Average	54	Pass

Test Graphs

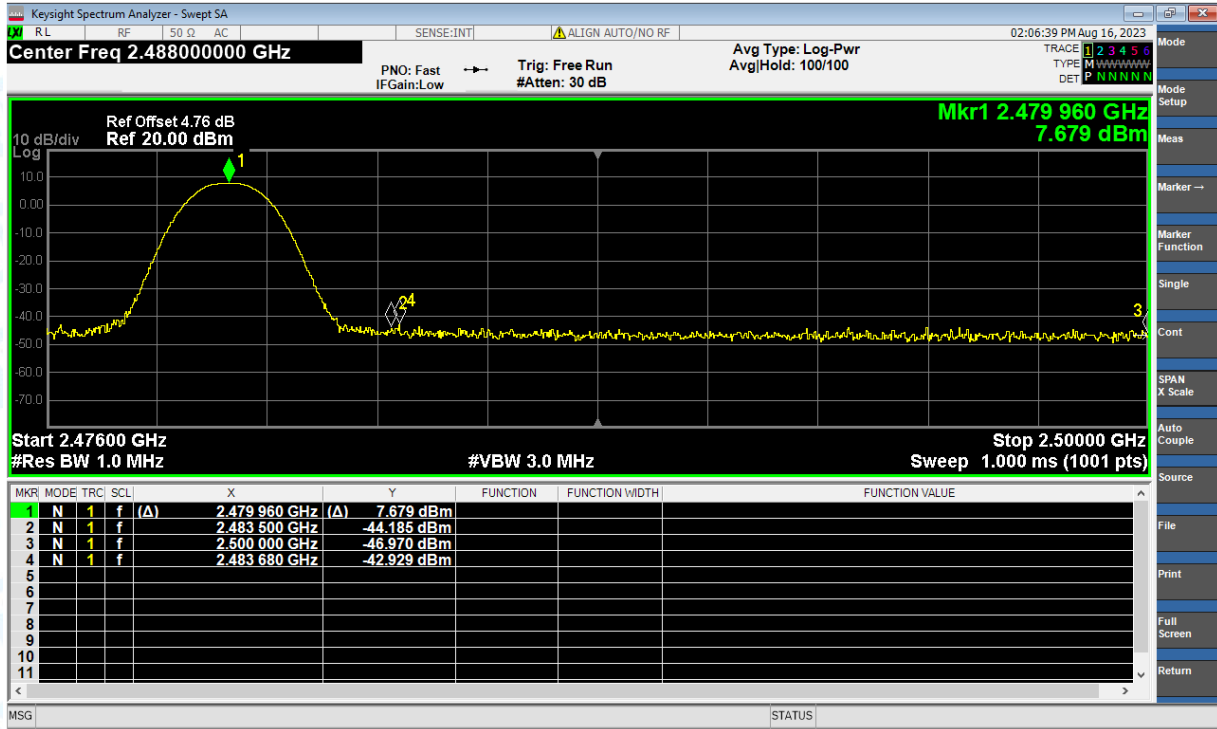
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



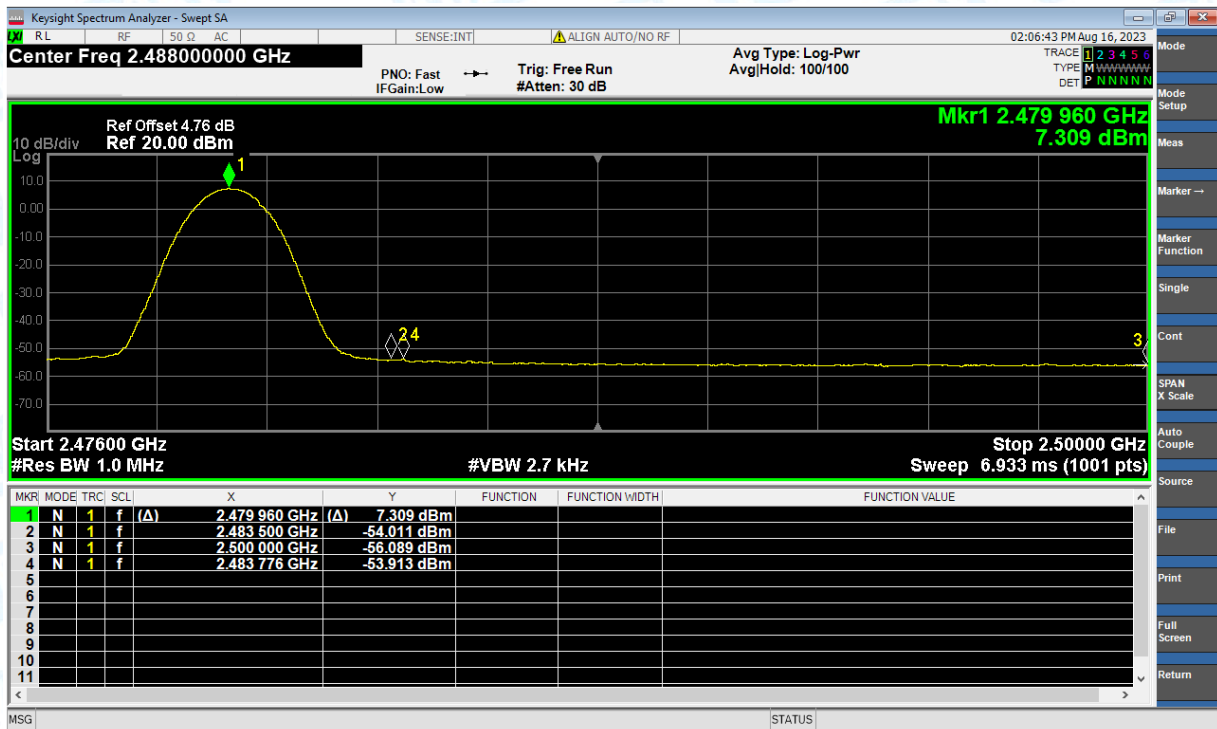
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



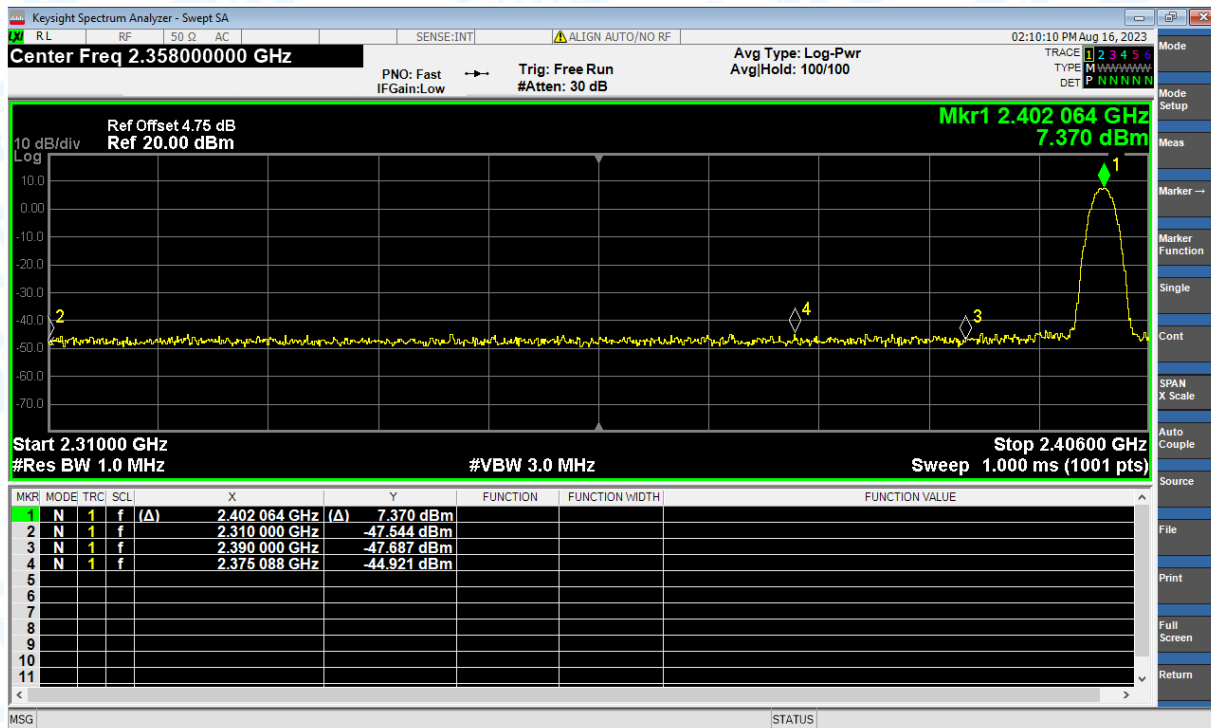
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



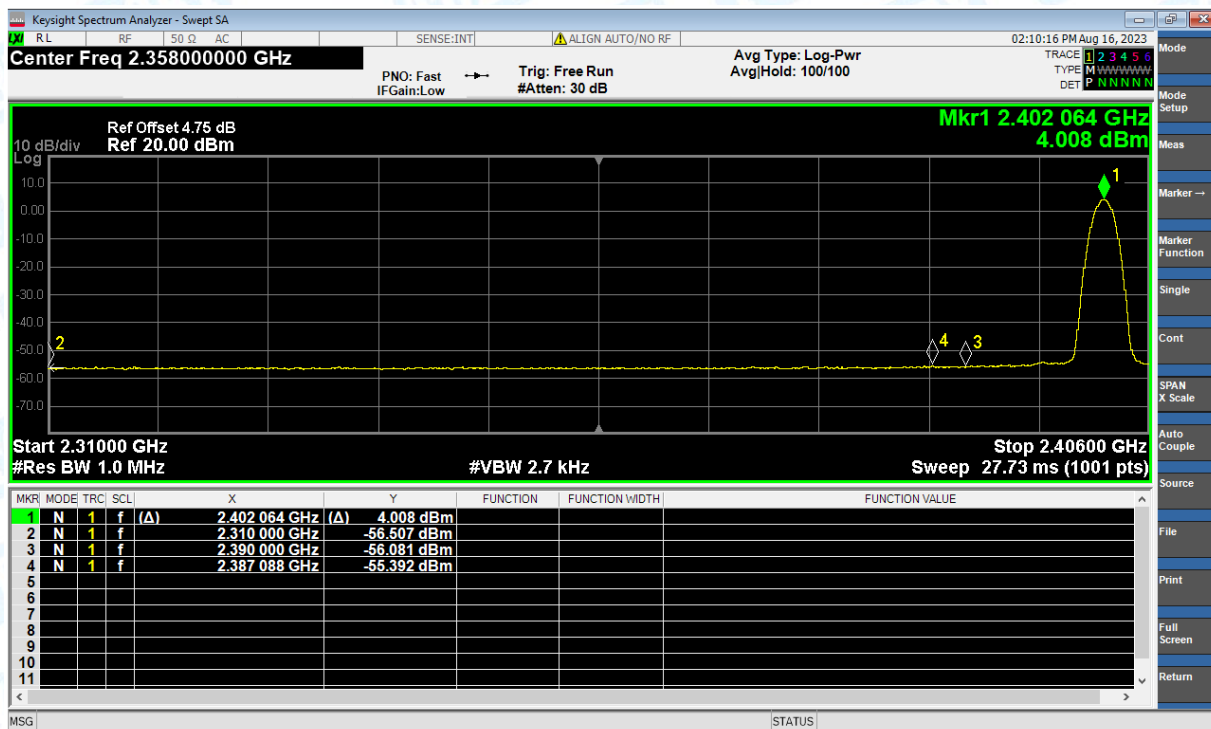
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



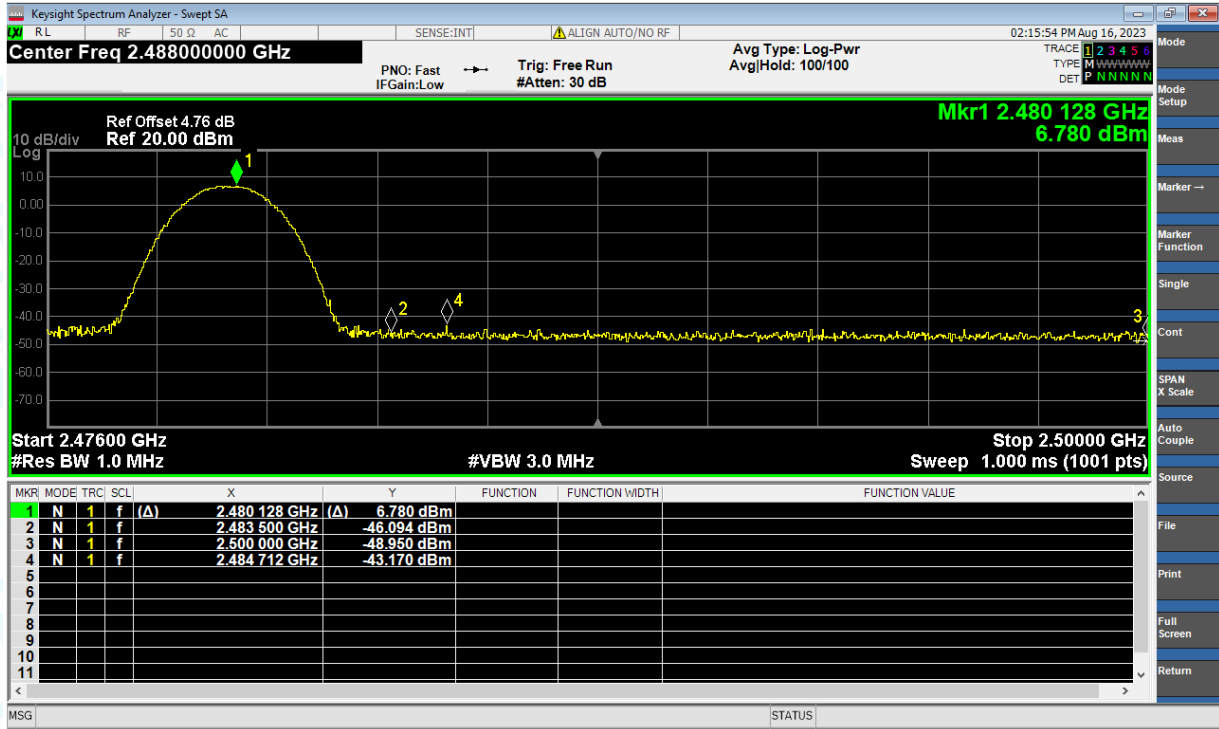
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



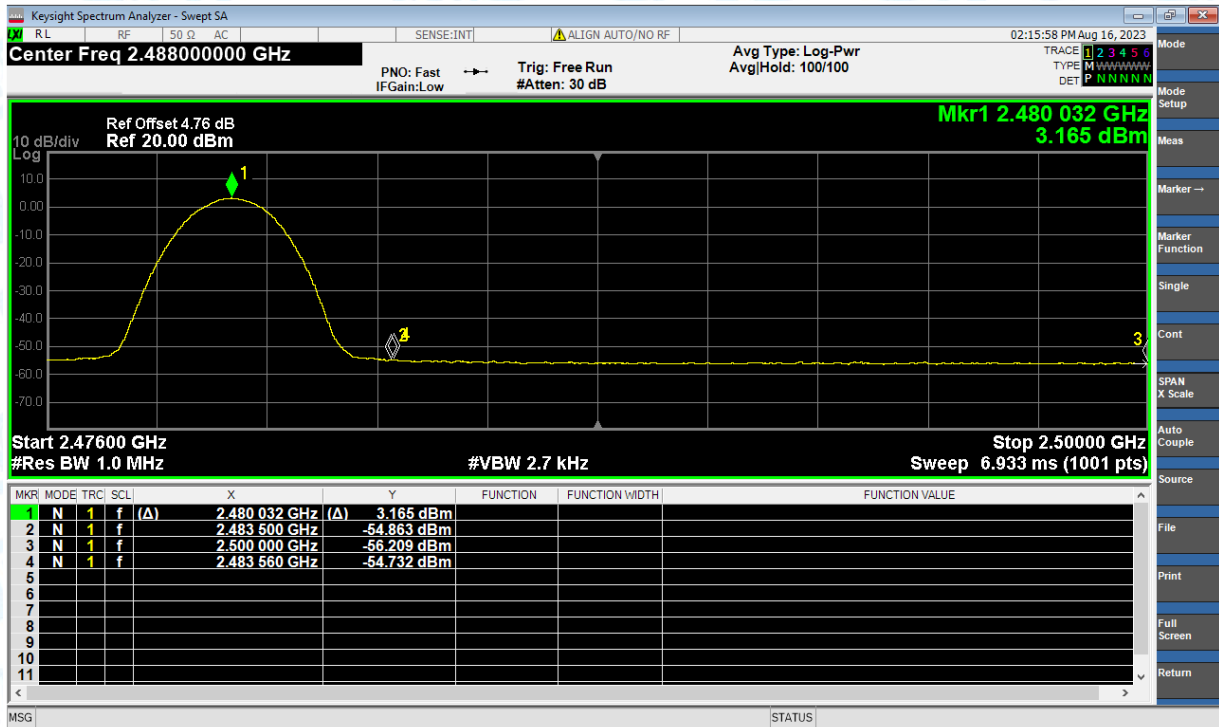
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



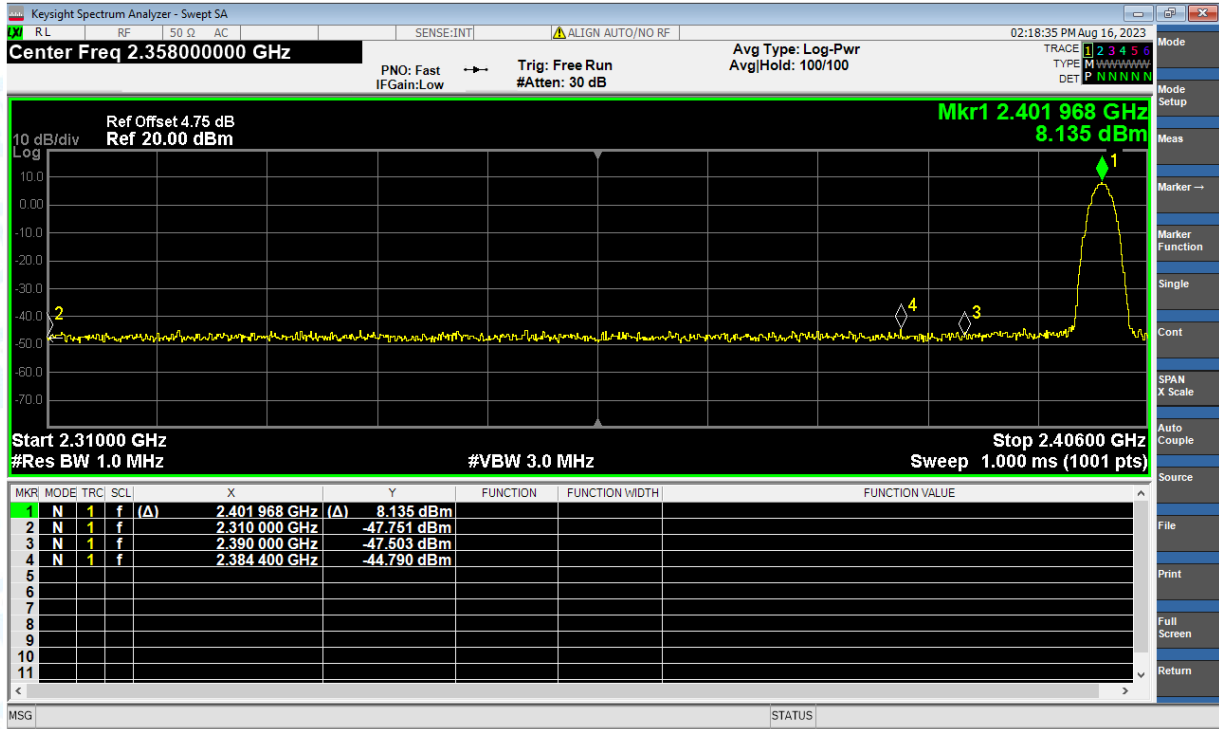
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



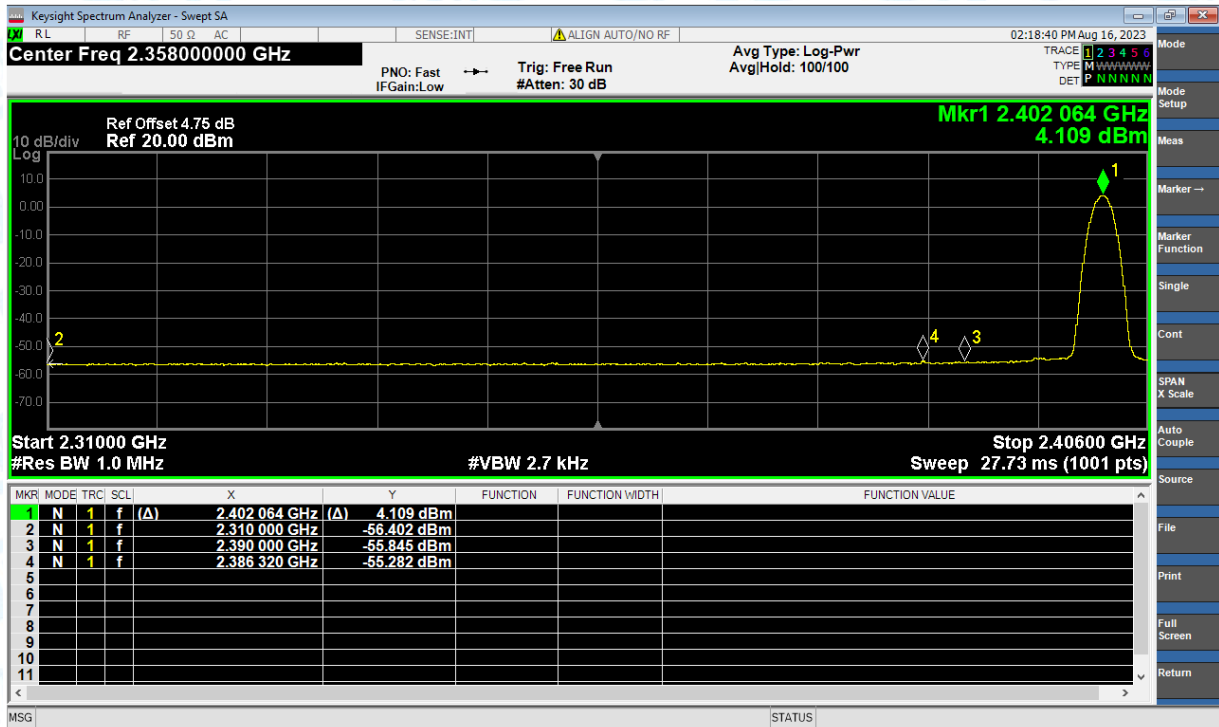
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



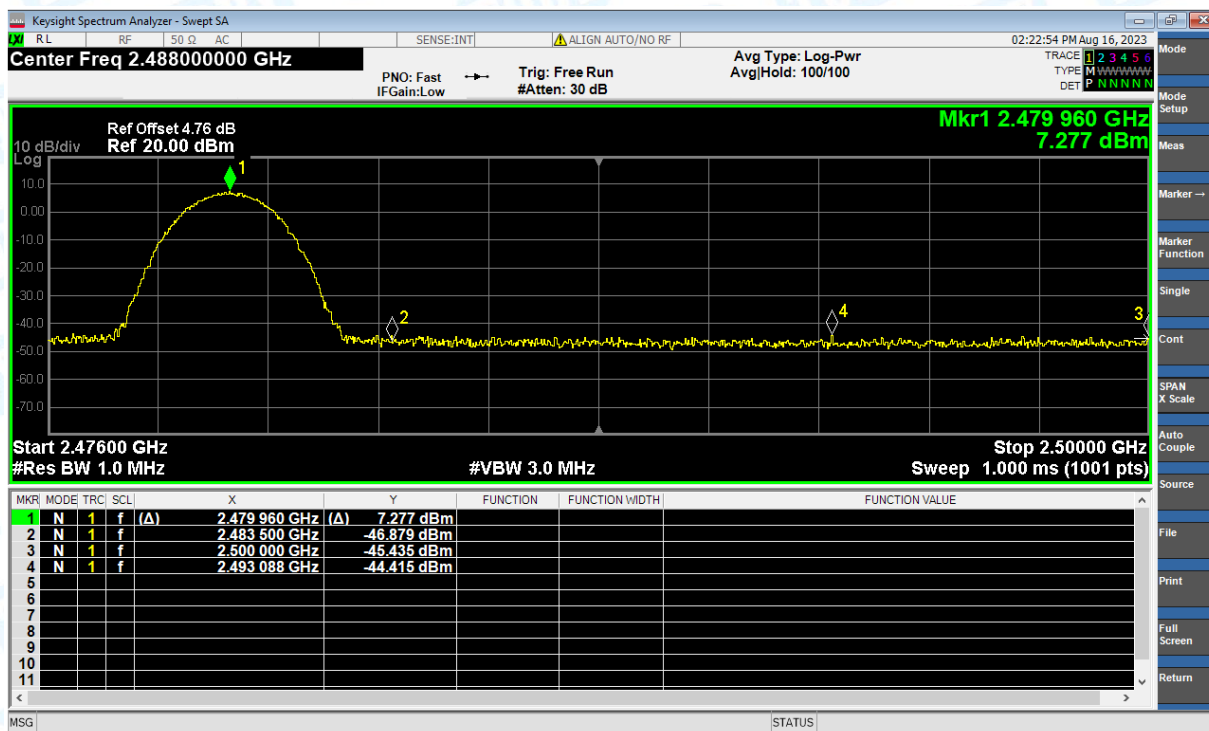
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



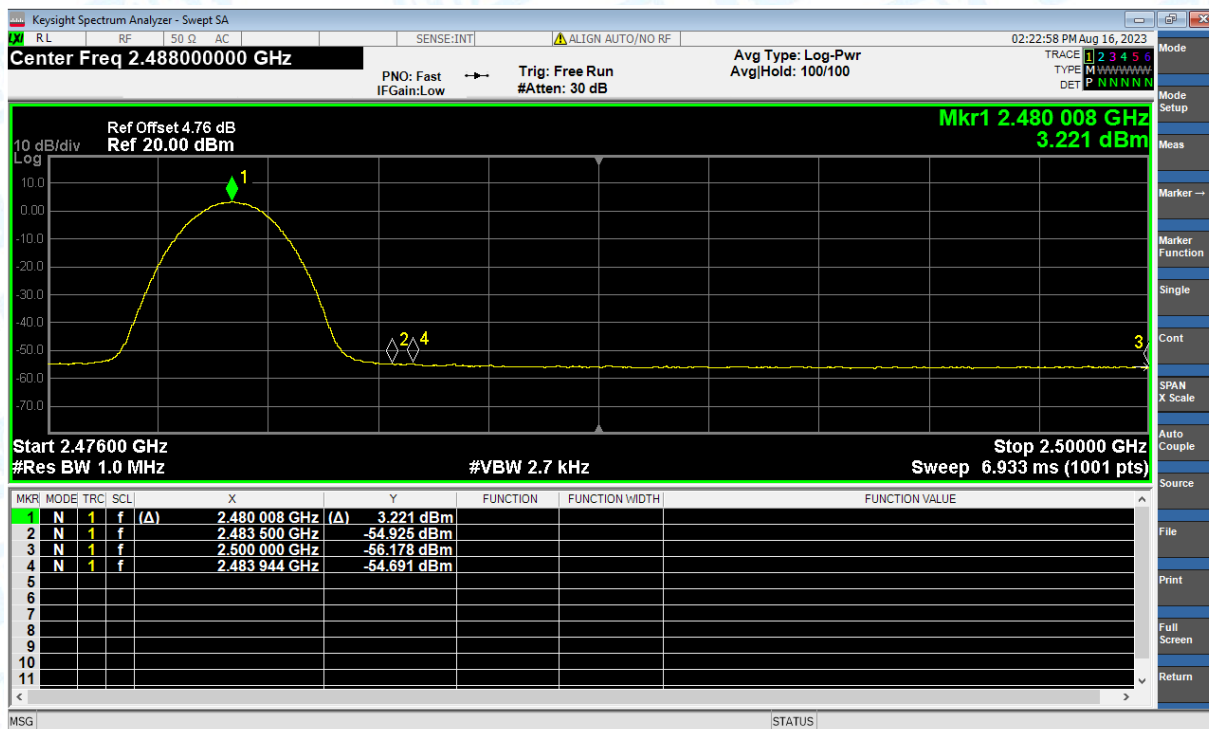
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

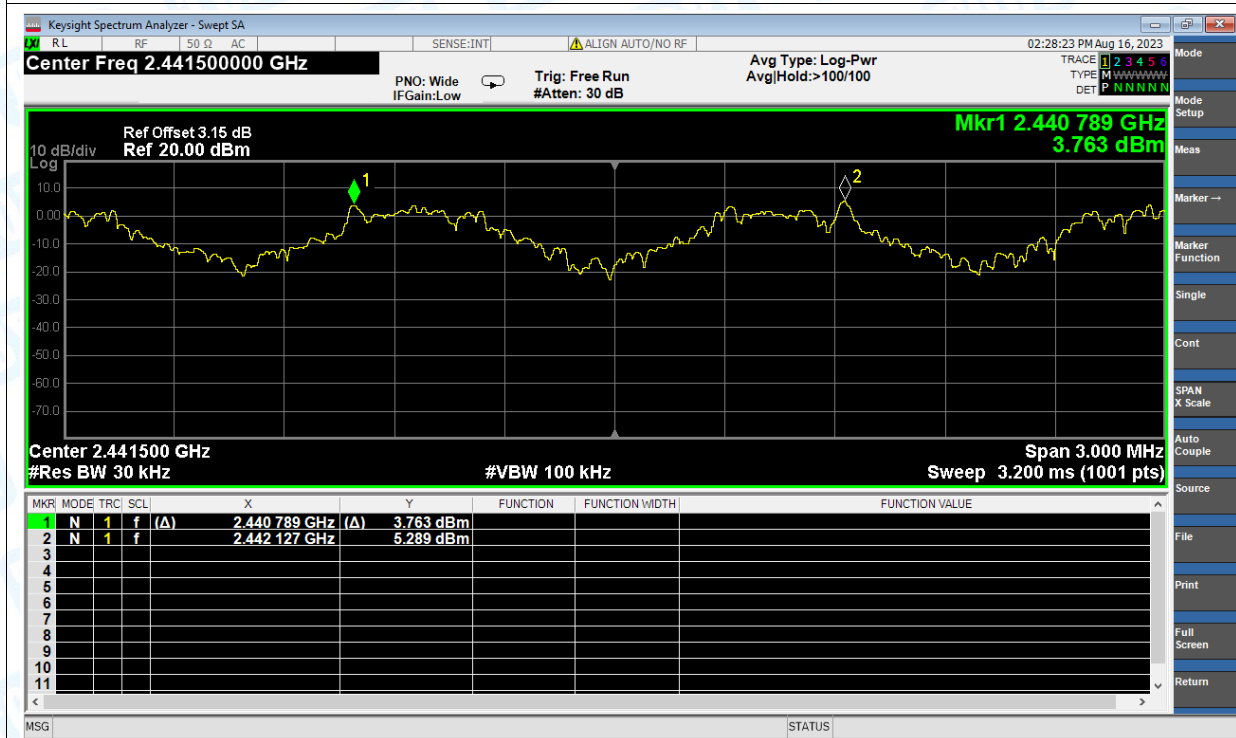


Carrier Frequencies Separation

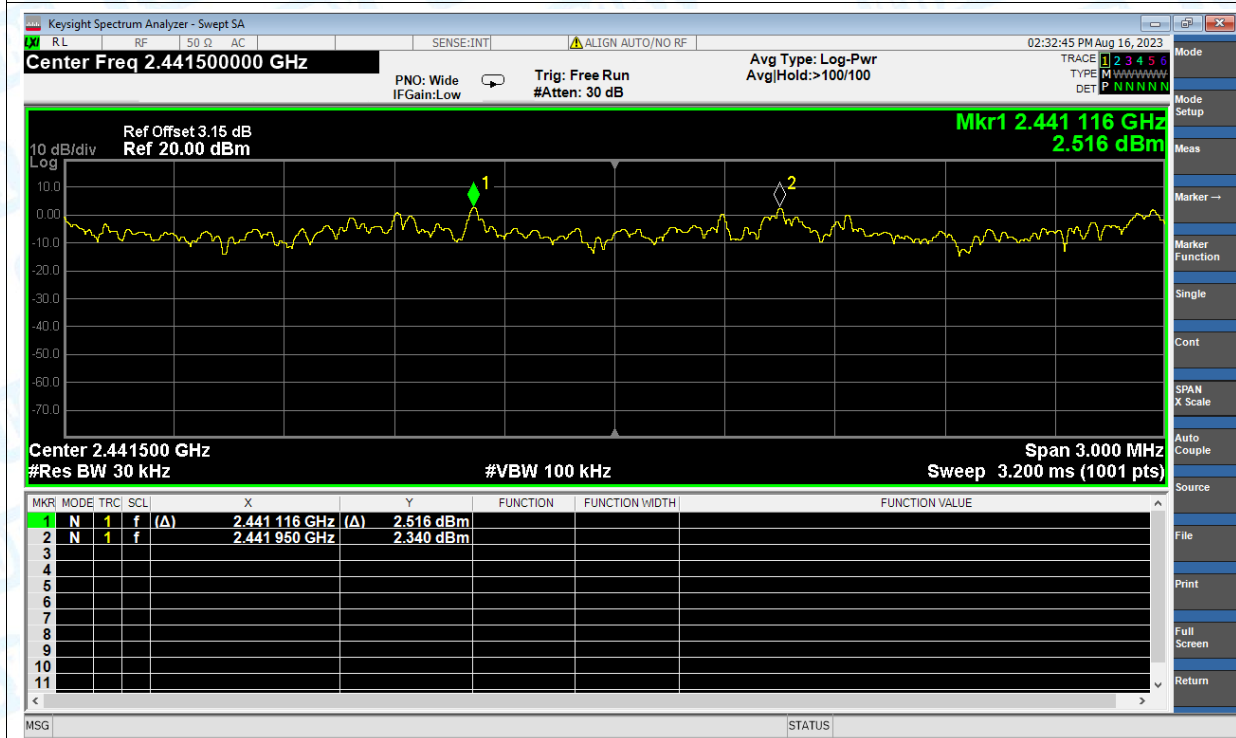
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.789	2442.127	1.338	0.627	Pass
NVNT	2-DH1	Ant1	2441.116	2441.95	0.834	0.833	Pass
NVNT	3-DH1	Ant1	2440.963	2441.974	1.011	0.813	Pass

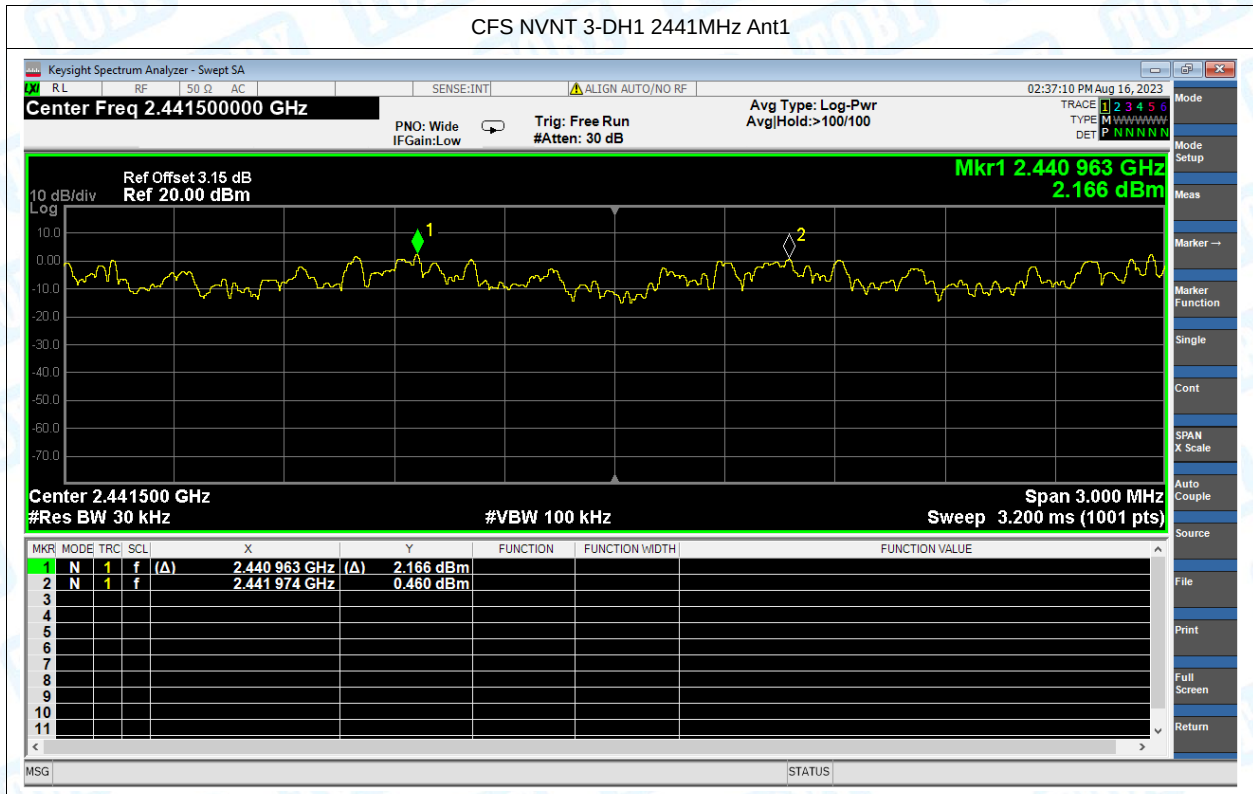
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



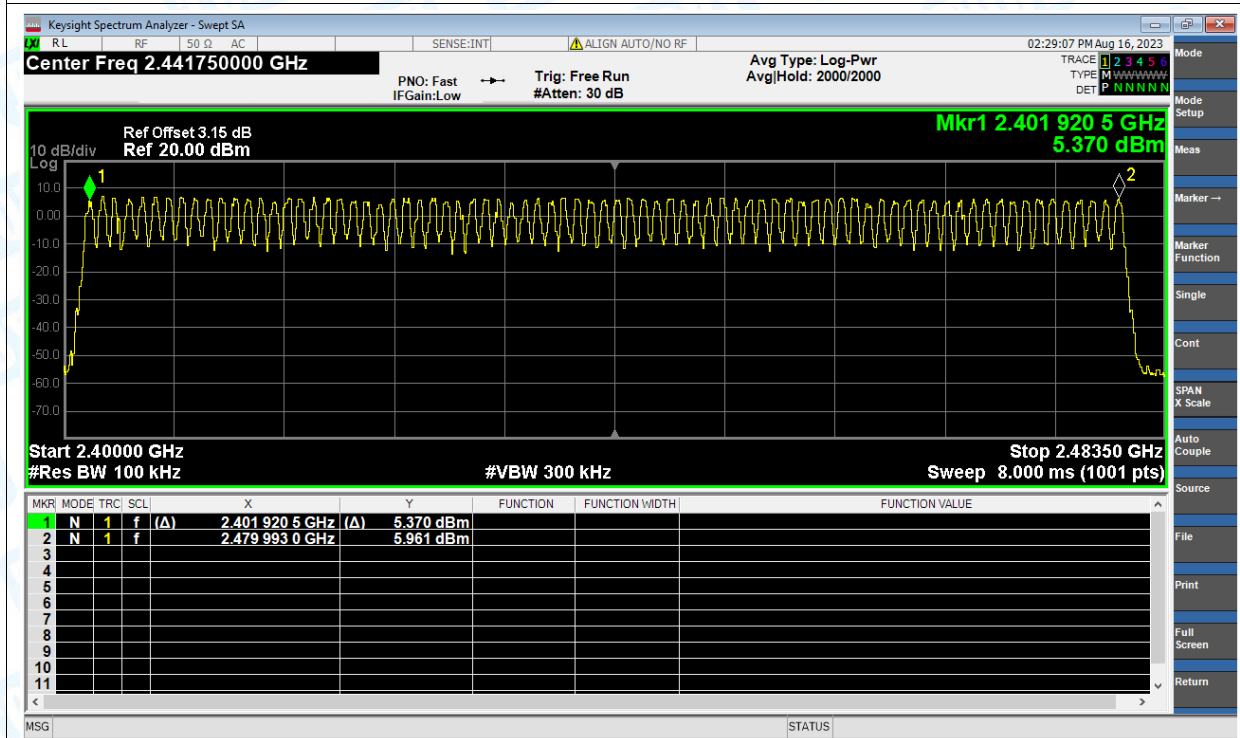


Number of Hopping Channel

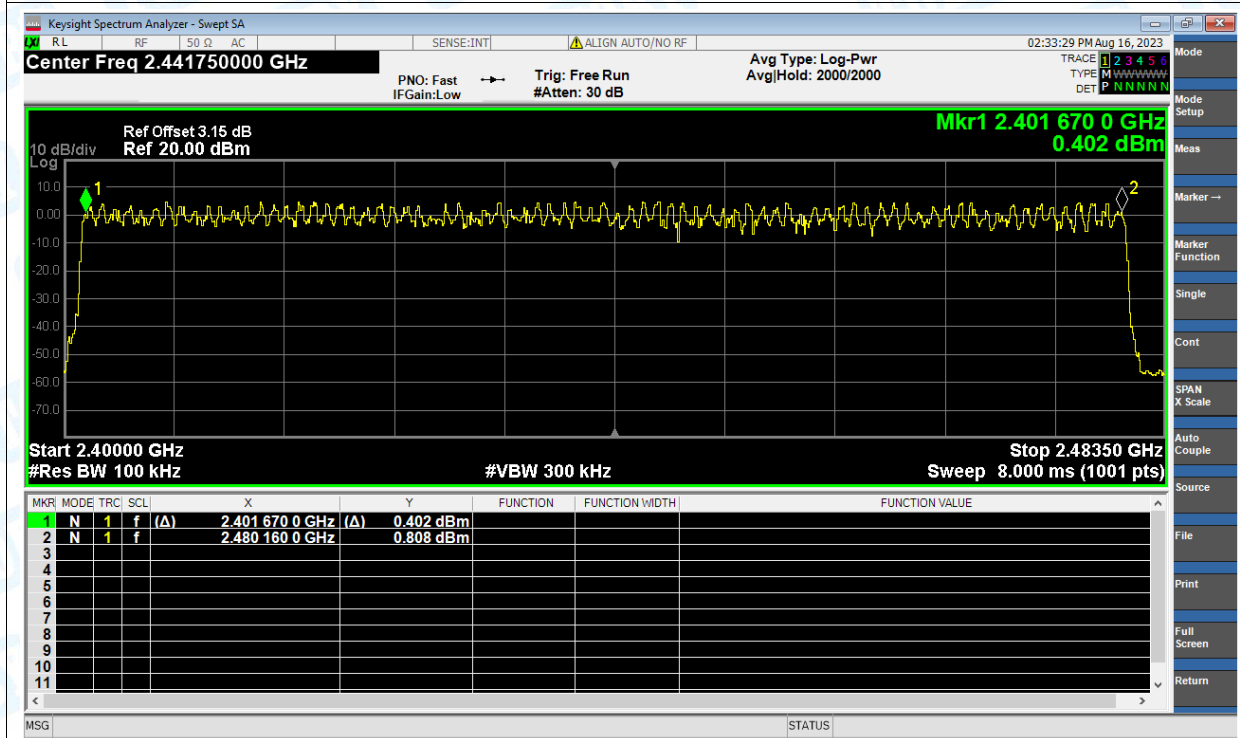
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

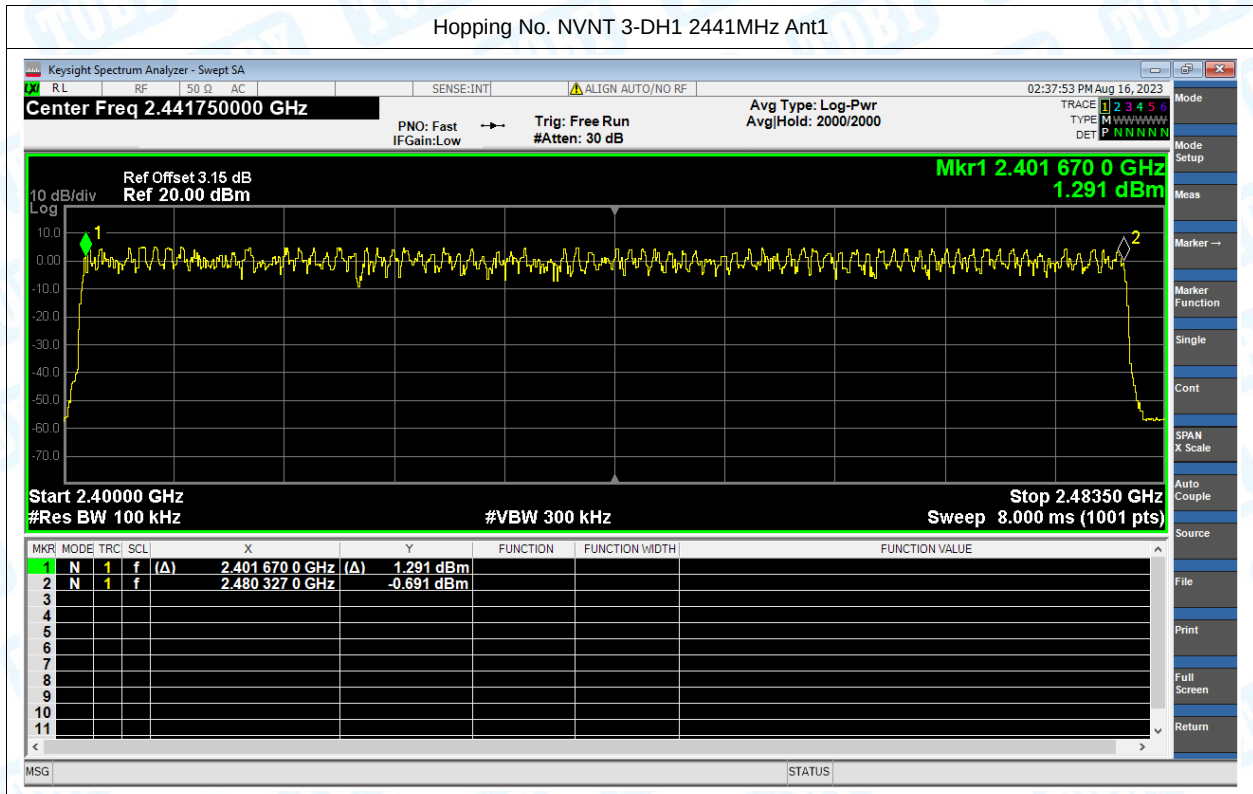
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



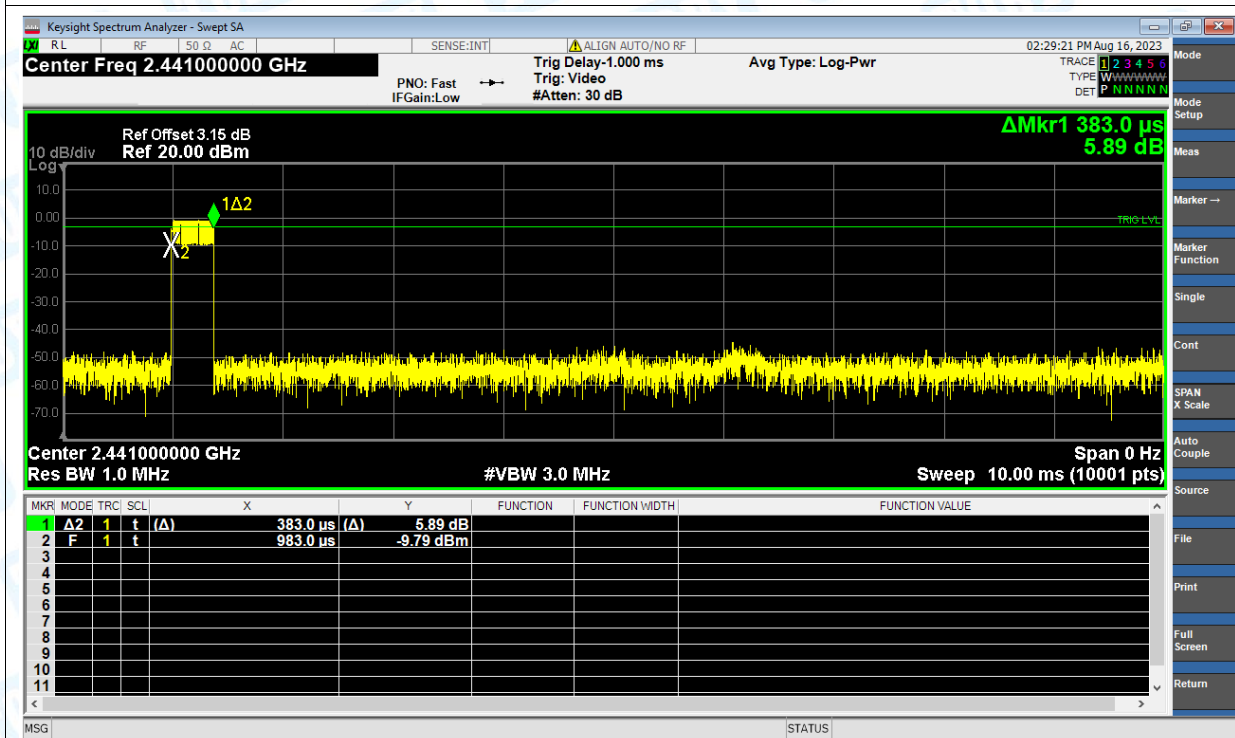


Dwell Time

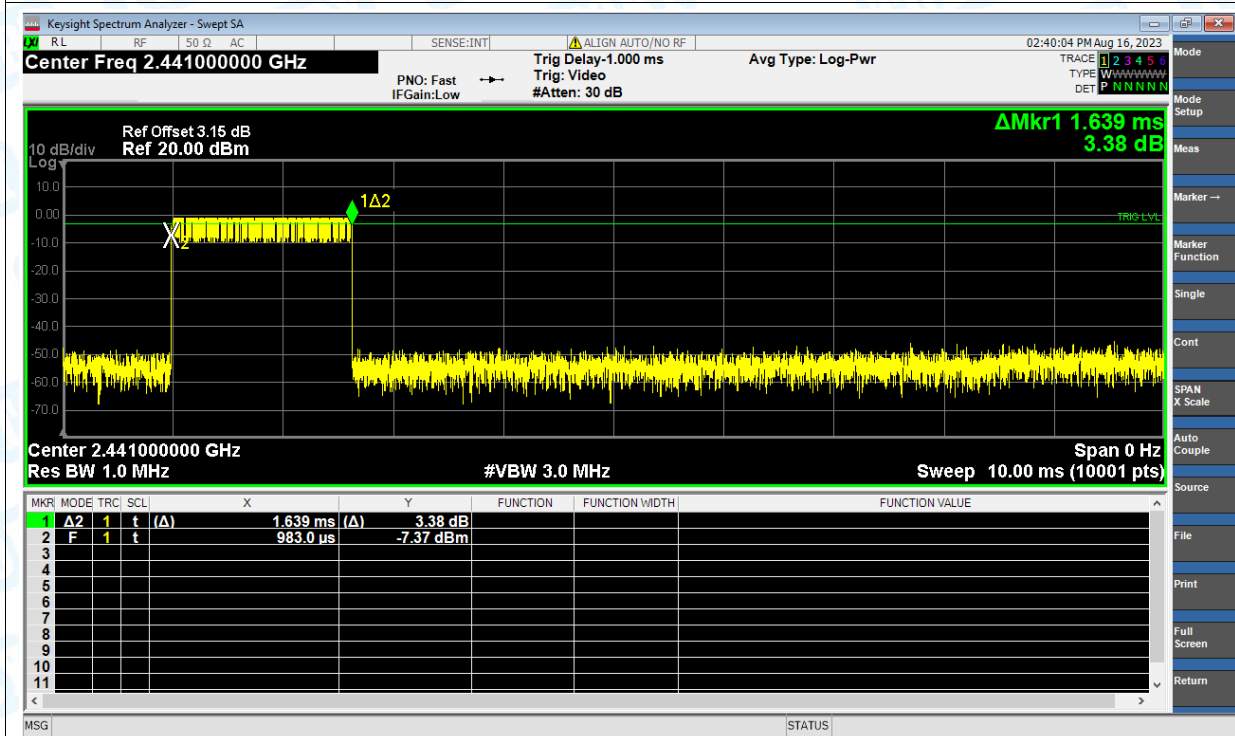
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.886	307.84	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.391	125.12	31600	400	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	2.893	308.587	31600	400	Pass

Test Graphs

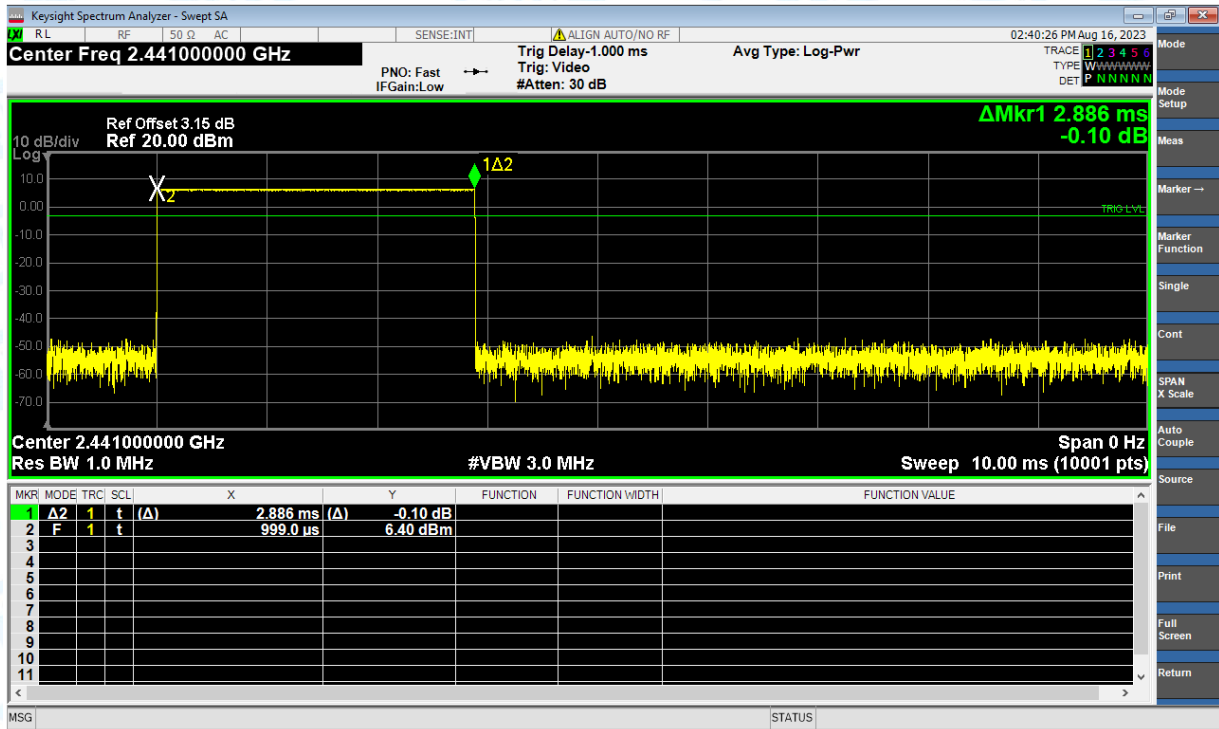
Dwell NVNT 1-DH1 2441MHz Ant1



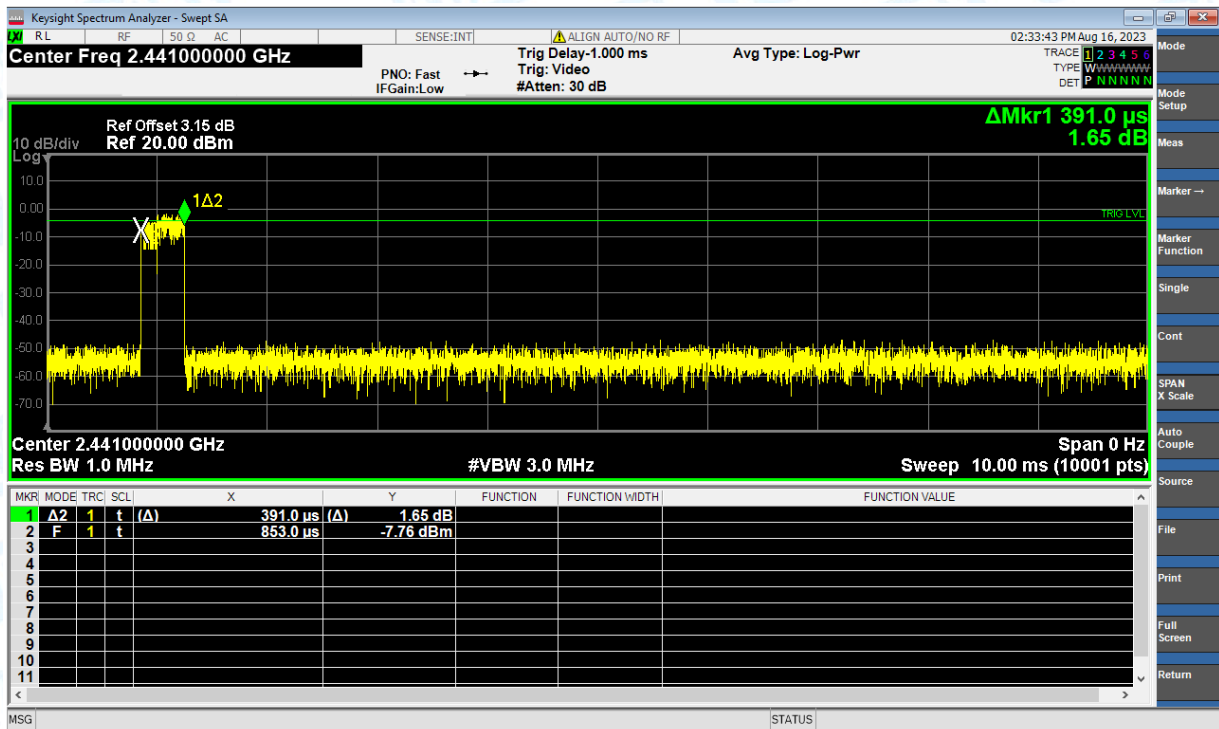
Dwell NVNT 1-DH3 2441MHz Ant1



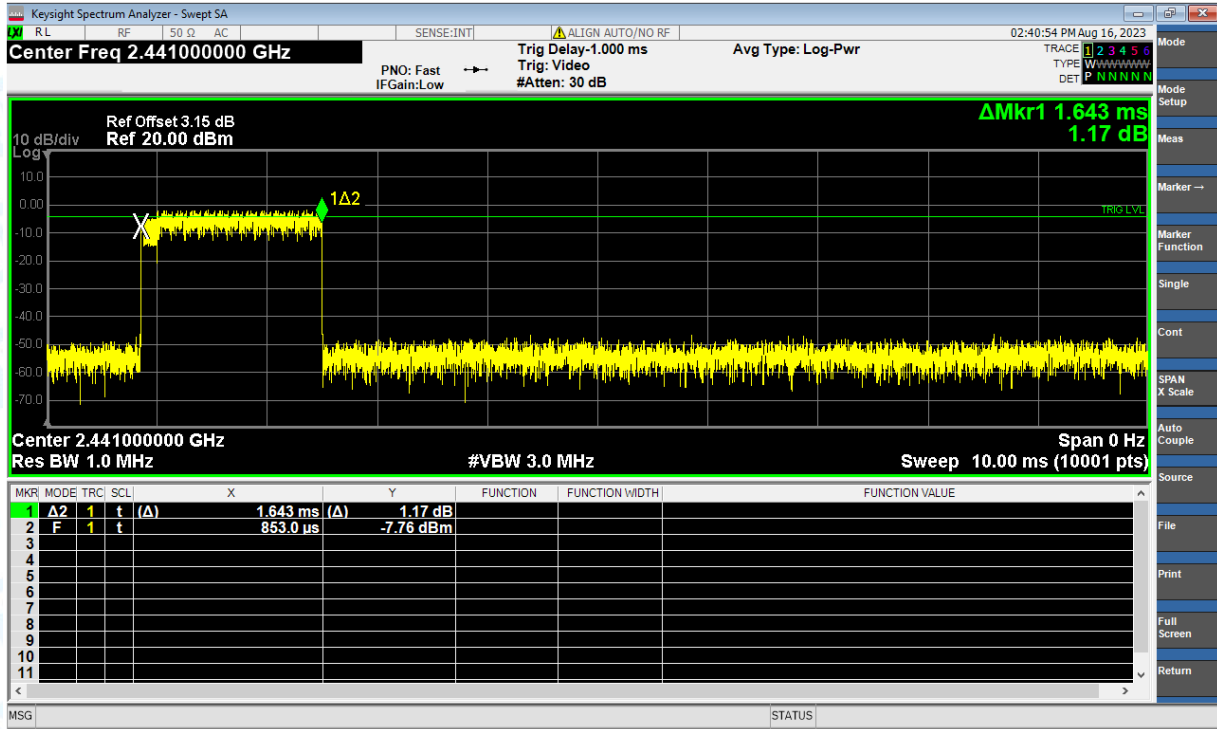
Dwell NVNT 1-DH5 2441MHz Ant1



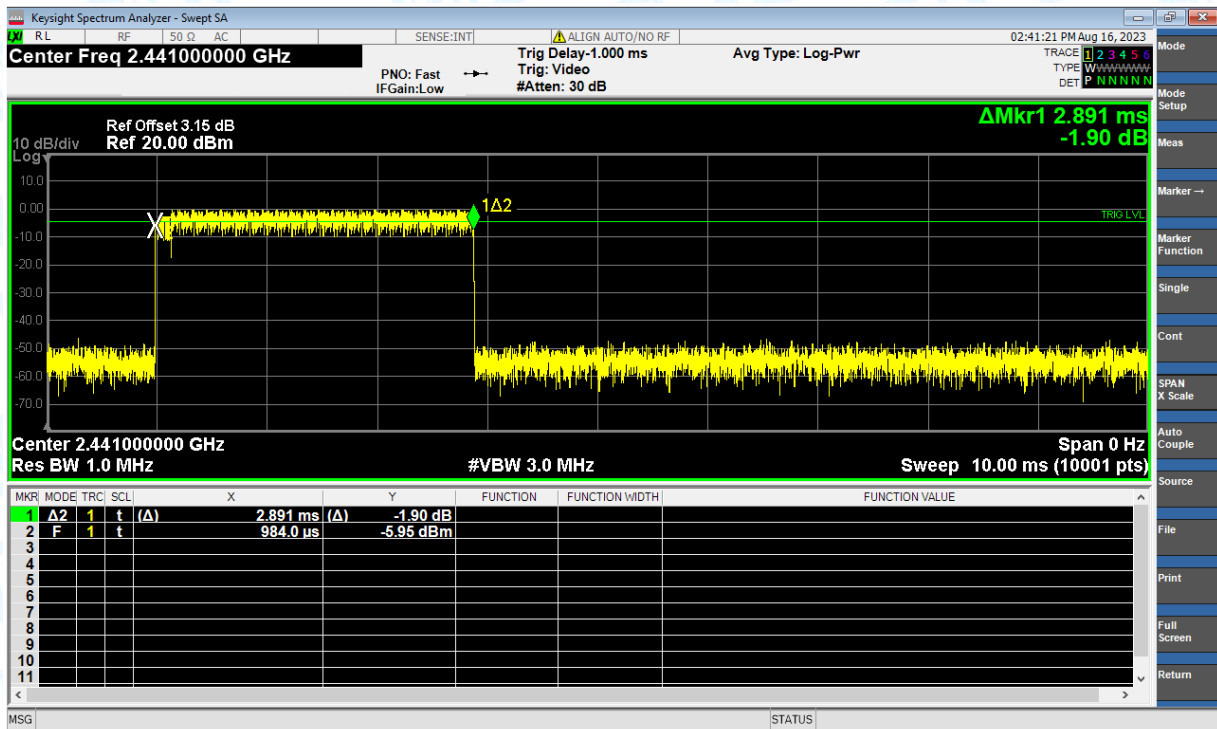
Dwell NVNT 2-DH1 2441MHz Ant1



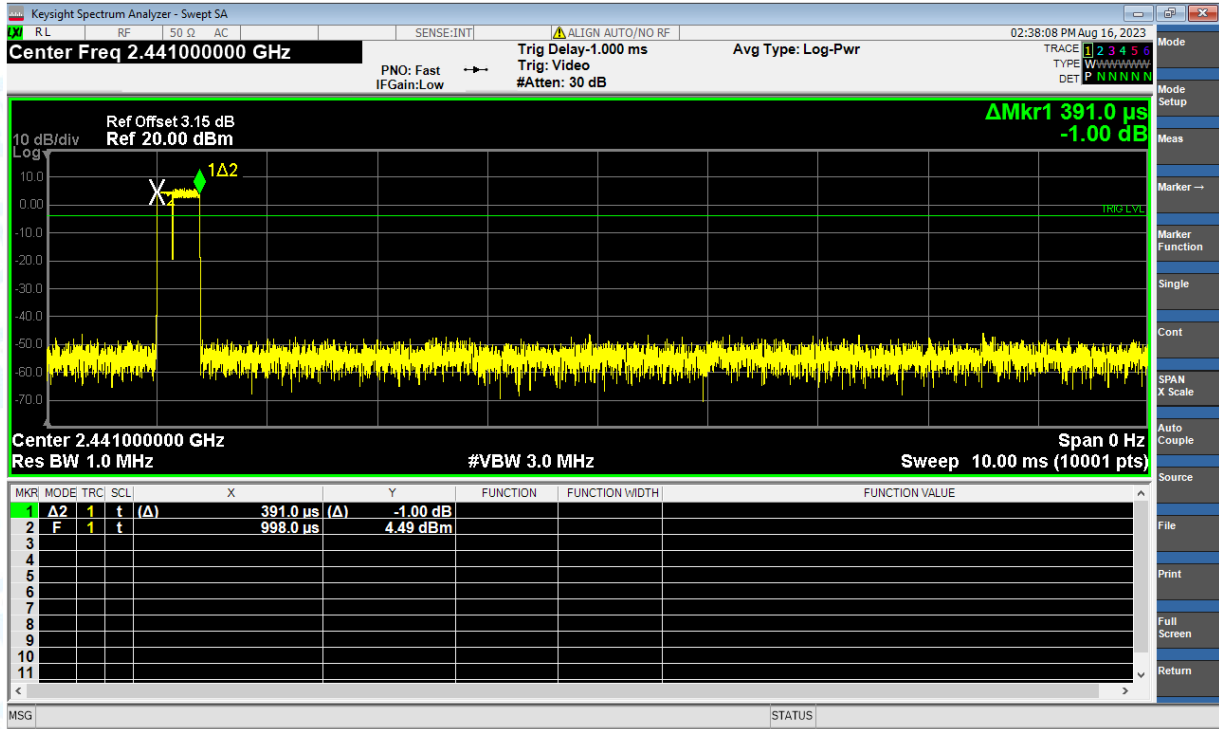
Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1



Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1

