

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

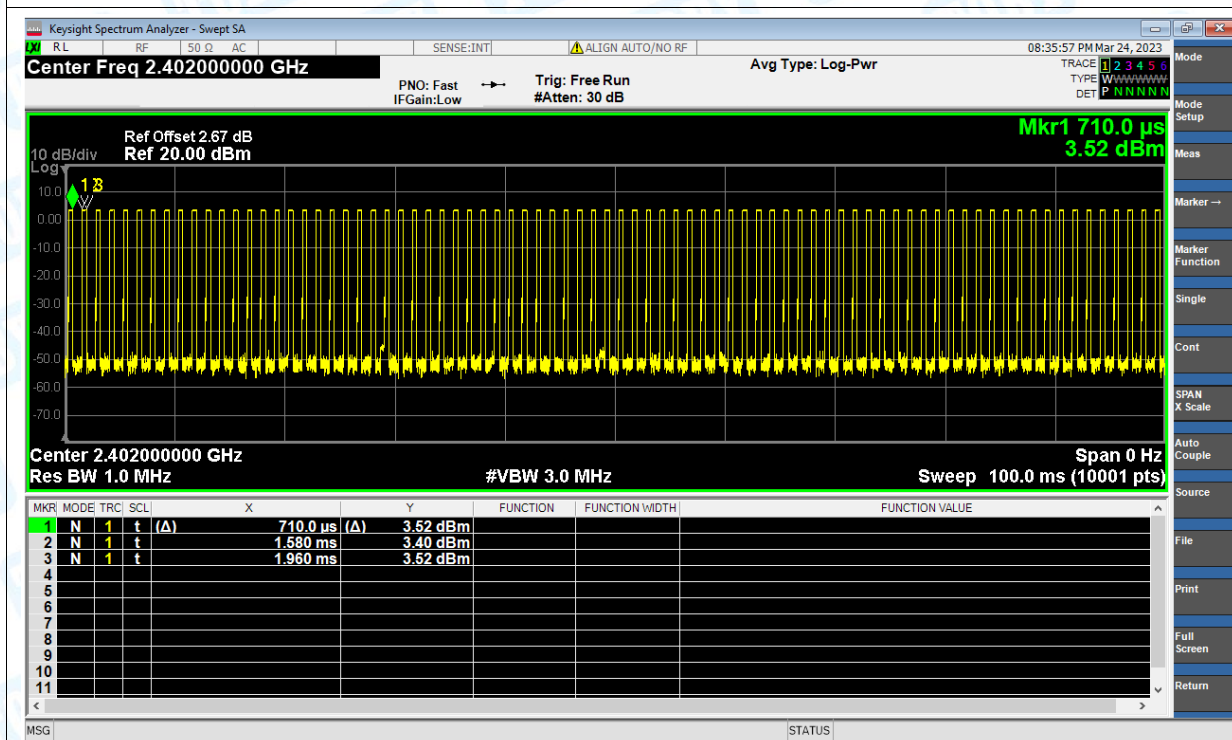
General Description of EUT	
Product Name:	BLUETOOTH RECORD PLAYER
Test Model:	CS-01 RECORD PLAYER
Sample ID:	RW-C-202201-0053-2-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 24V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202201-0053-3 The report only show the worst case data.	

1. Duty Cycle

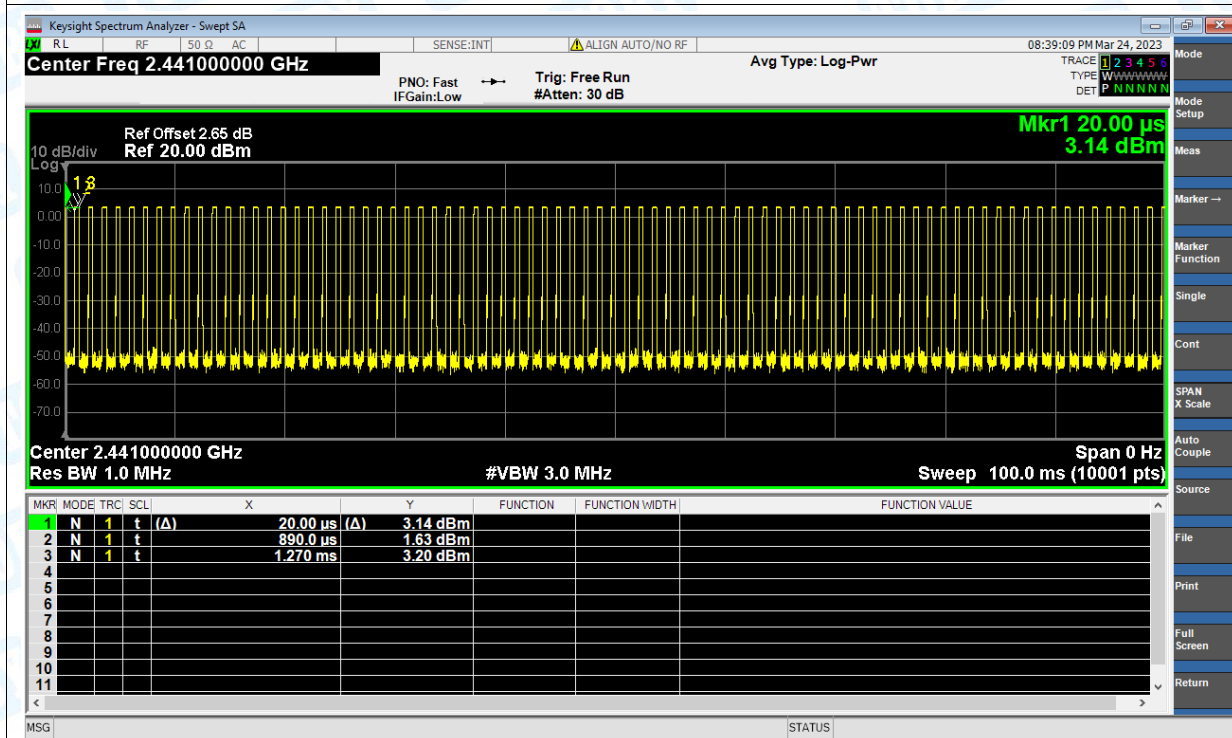
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2480	Ant1	31.2	5.06	2.56

Test Graphs

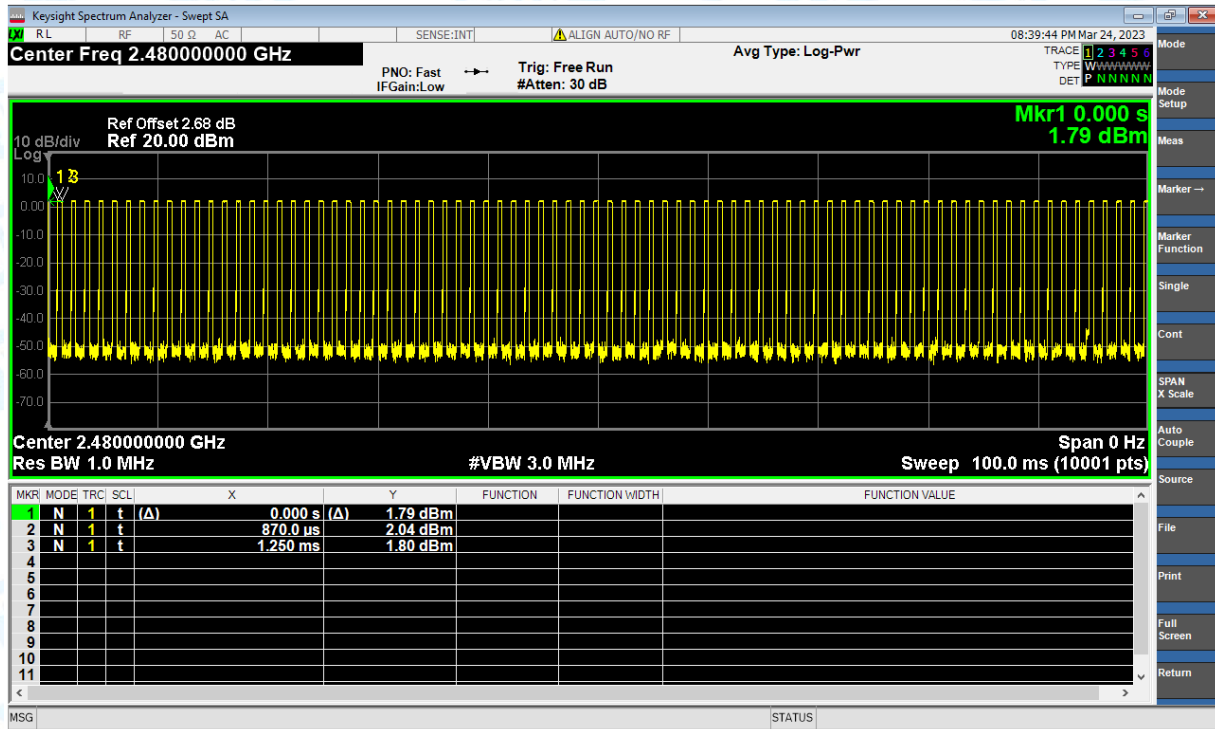
Duty Cycle NVNT 1-DH1 2402MHz Ant1



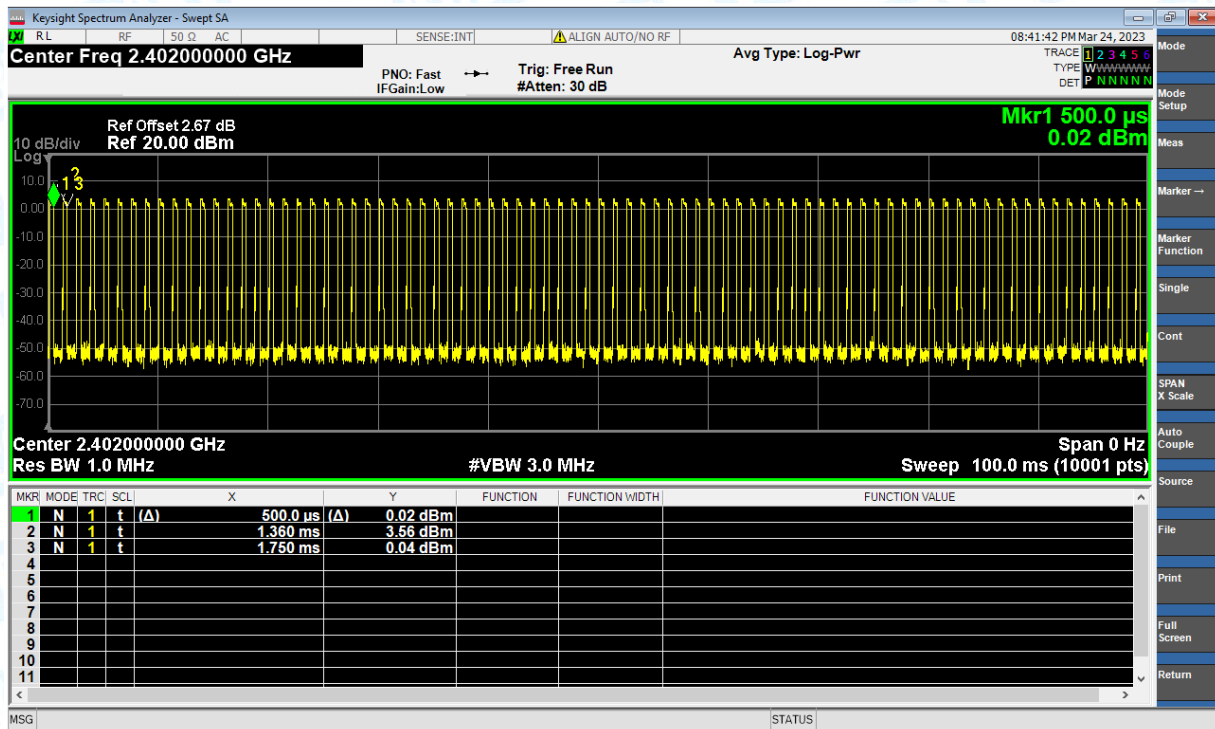
Duty Cycle NVNT 1-DH1 2441MHz Ant1



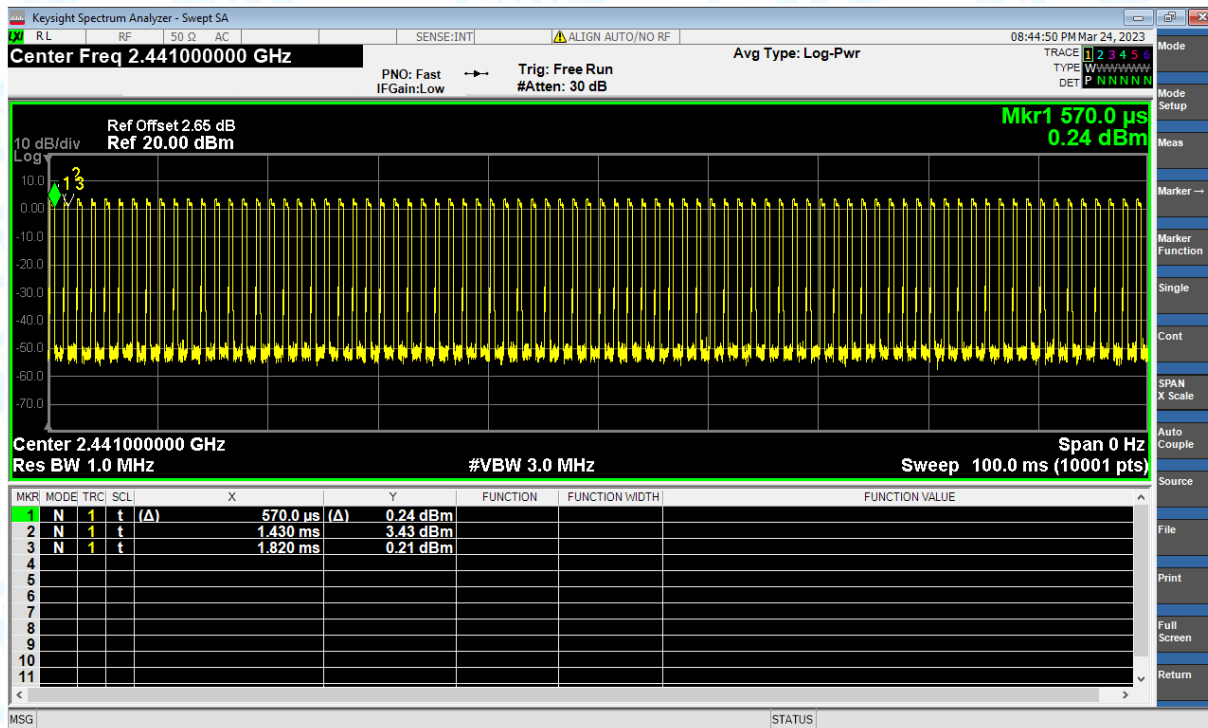
Duty Cycle NVNT 1-DH1 2480MHz Ant1



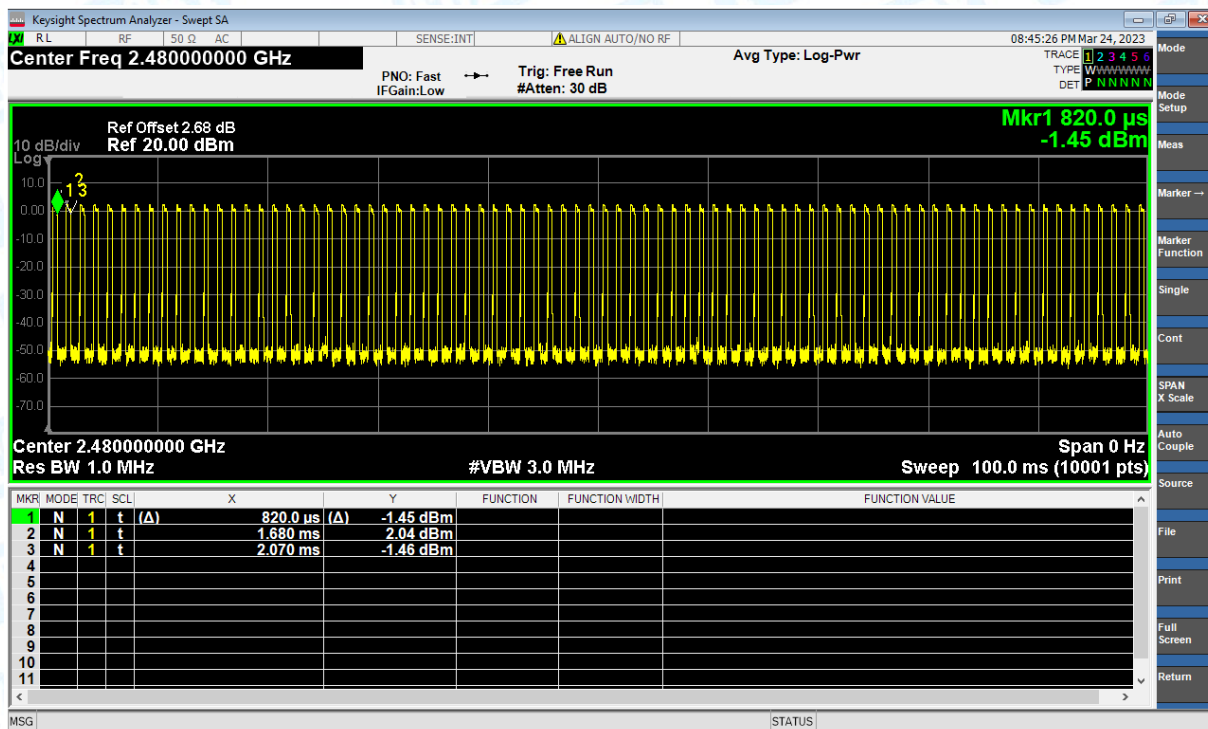
Duty Cycle NVNT 2-DH1 2402MHz Ant1



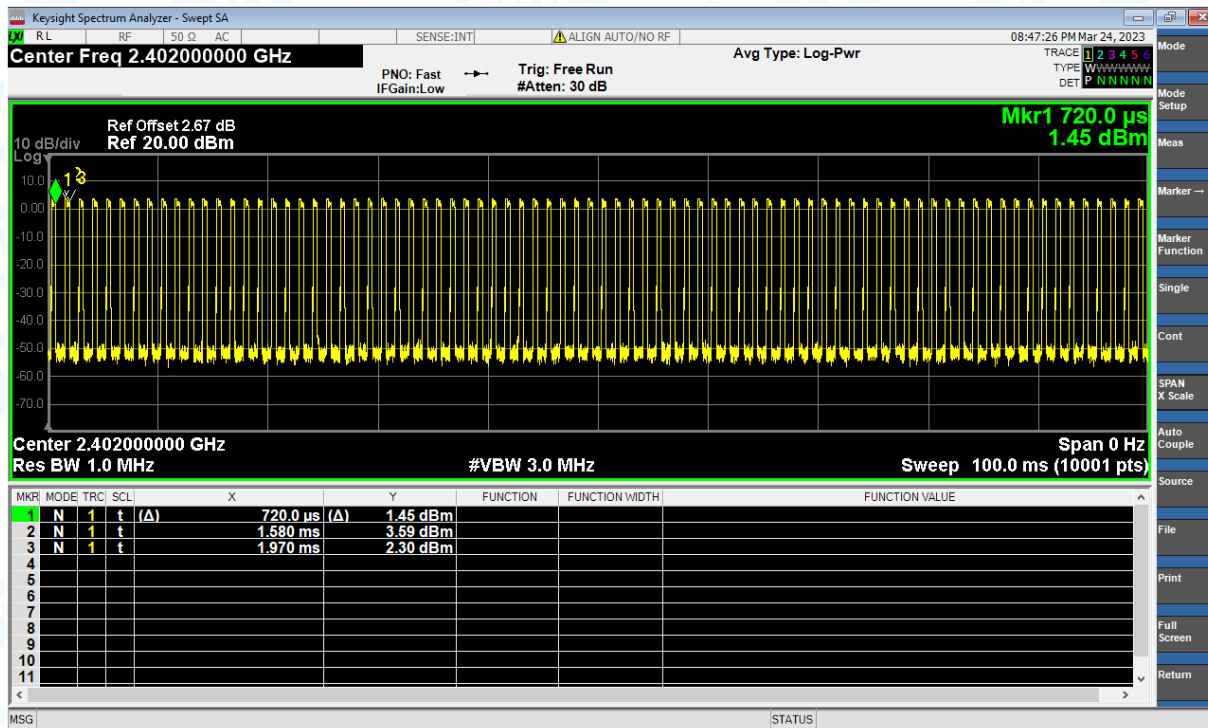
Duty Cycle NVNT 2-DH1 2441MHz Ant1



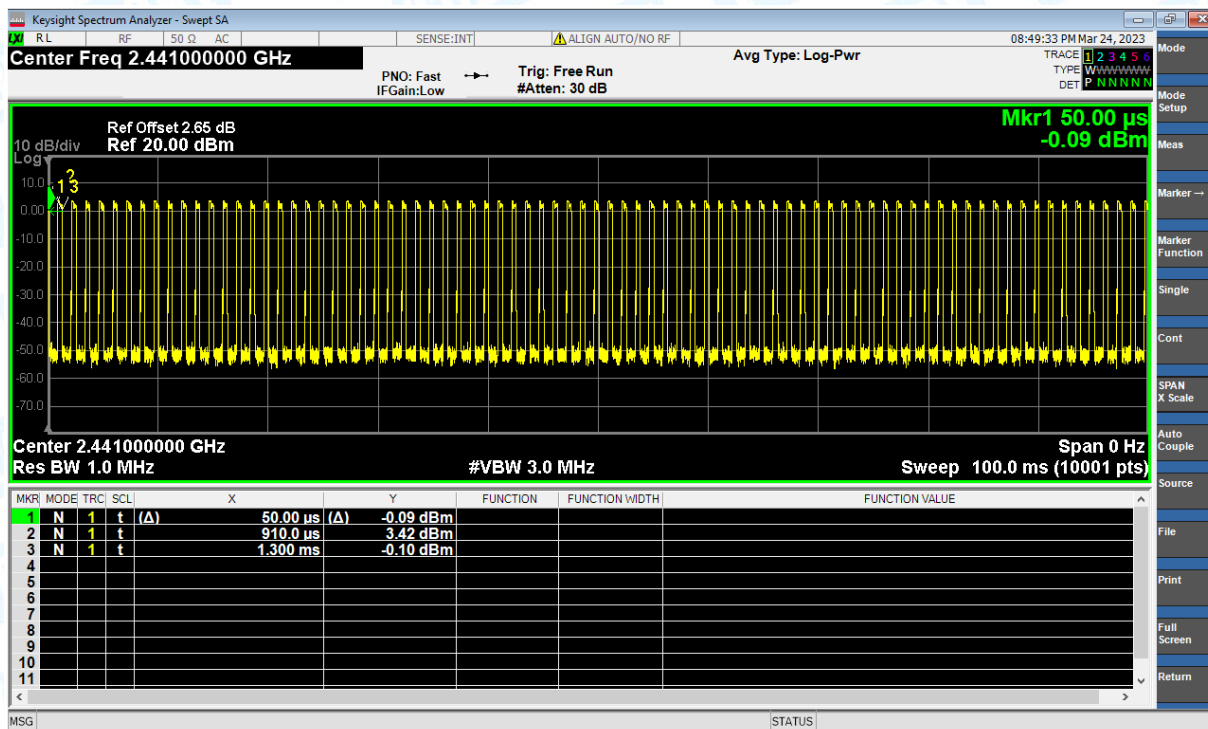
Duty Cycle NVNT 2-DH1 2480MHz Ant1

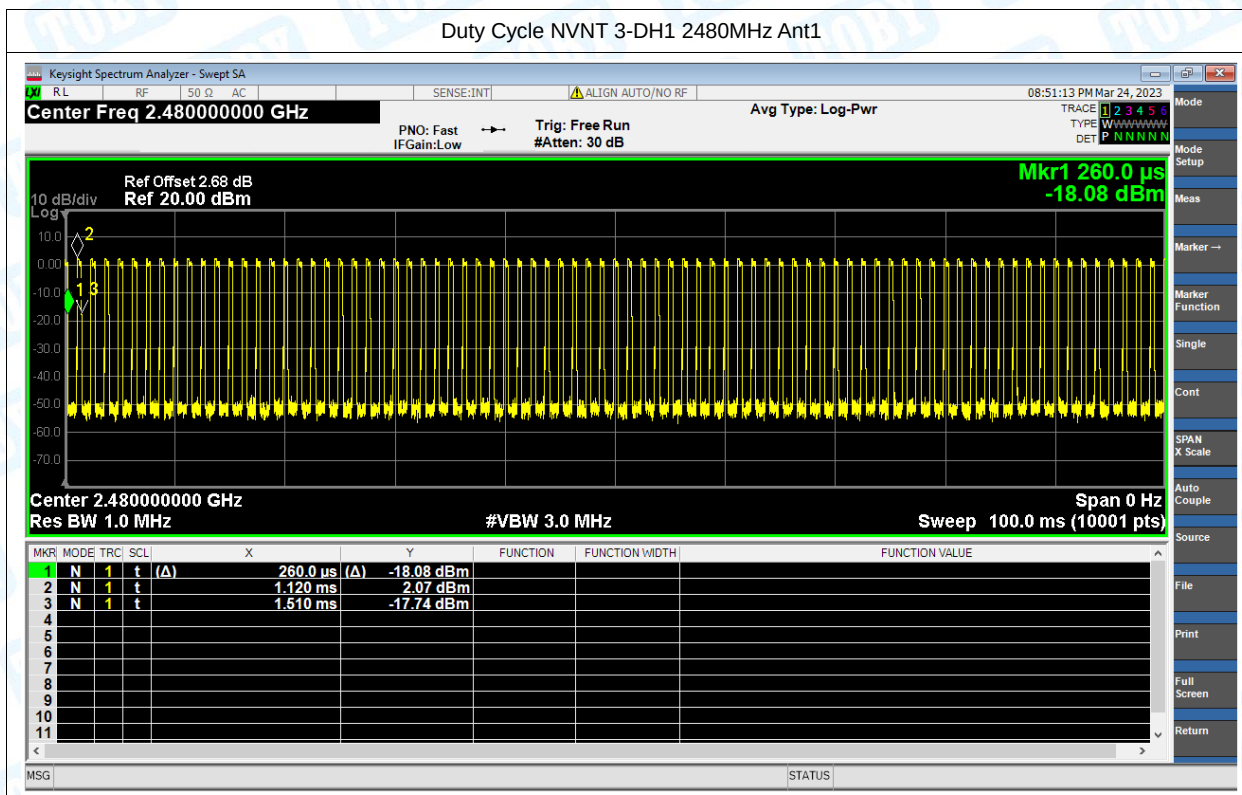


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



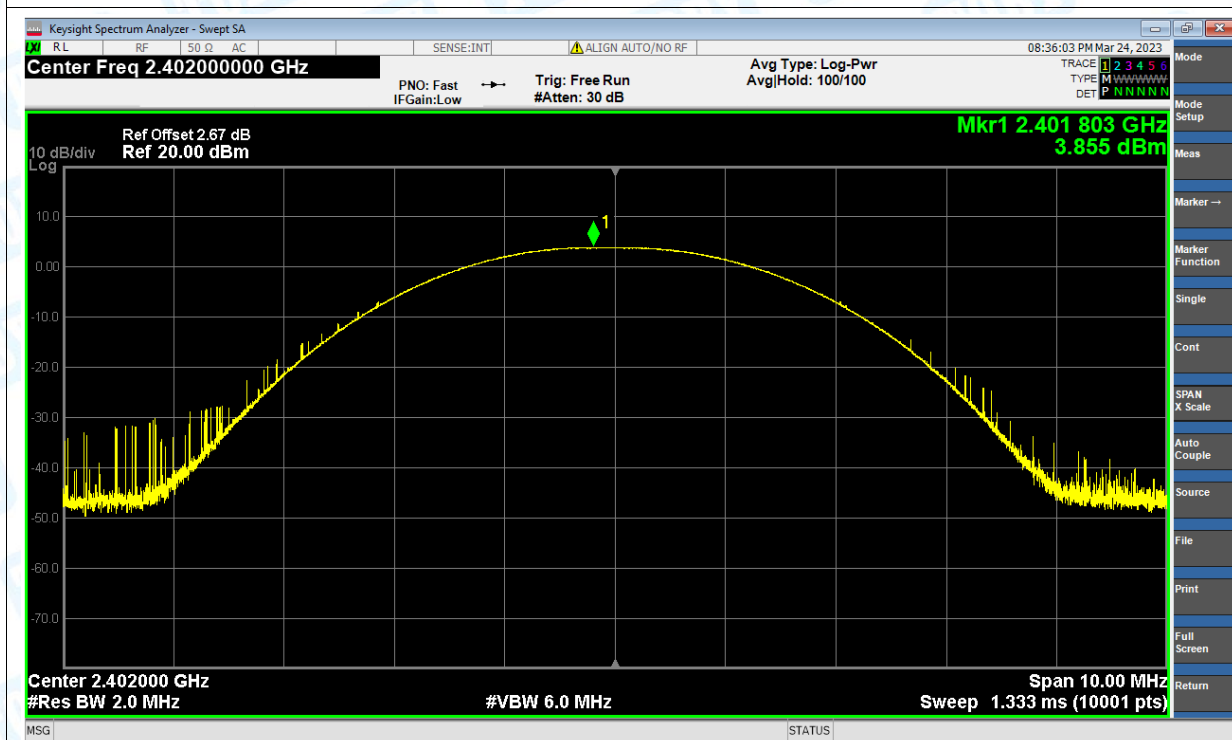


2. Maximum Conducted Output Power

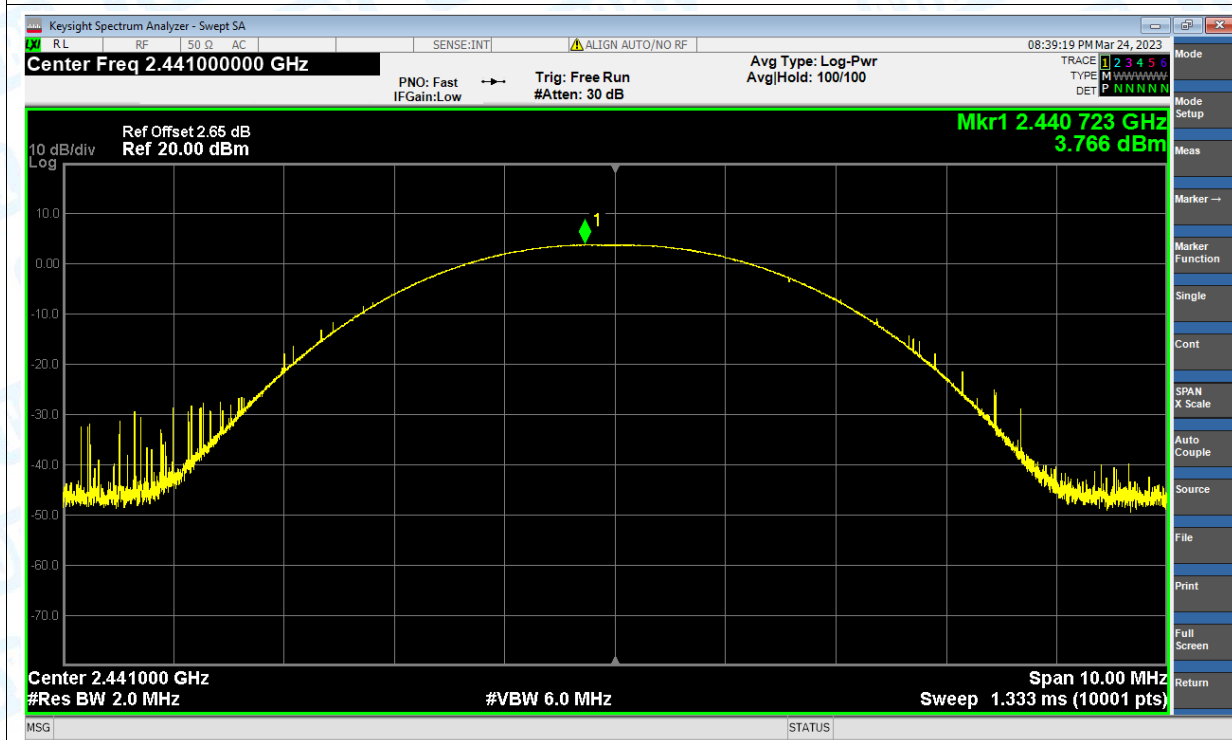
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.855	21	Pass
NVNT	1-DH1	2441	Ant1	3.766	21	Pass
NVNT	1-DH1	2480	Ant1	2.399	21	Pass
NVNT	2-DH1	2402	Ant1	3.97	21	Pass
NVNT	2-DH1	2441	Ant1	3.862	21	Pass
NVNT	2-DH1	2480	Ant1	2.407	21	Pass
NVNT	3-DH1	2402	Ant1	4.029	21	Pass
NVNT	3-DH1	2441	Ant1	3.814	21	Pass
NVNT	3-DH1	2480	Ant1	2.412	21	Pass

Test Graphs

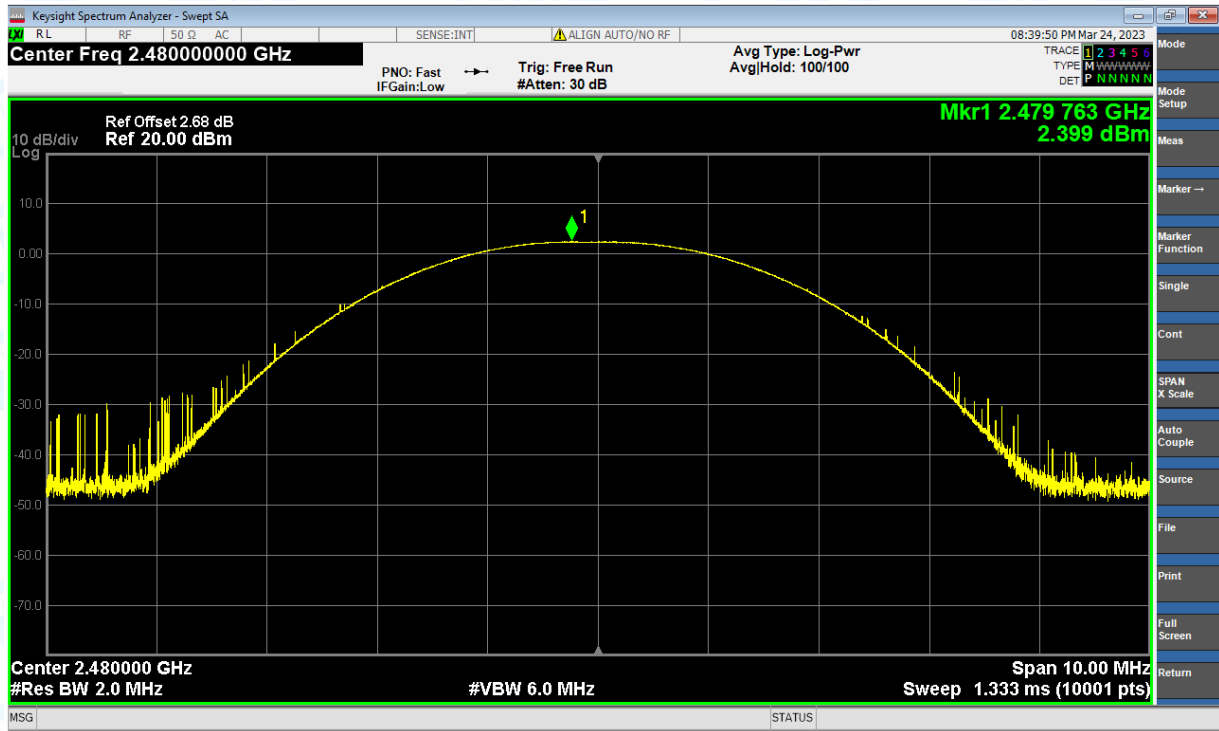
Power NVNT 1-DH1 2402MHz Ant1



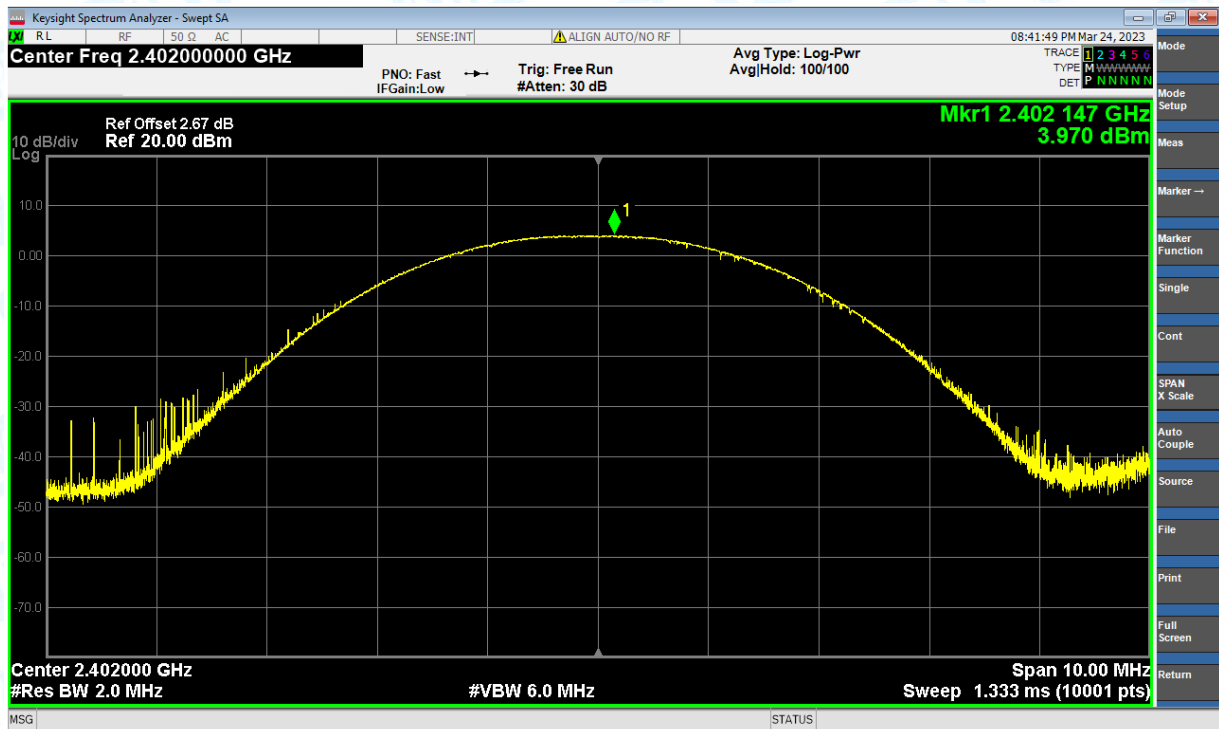
Power NVNT 1-DH1 2441MHz Ant1



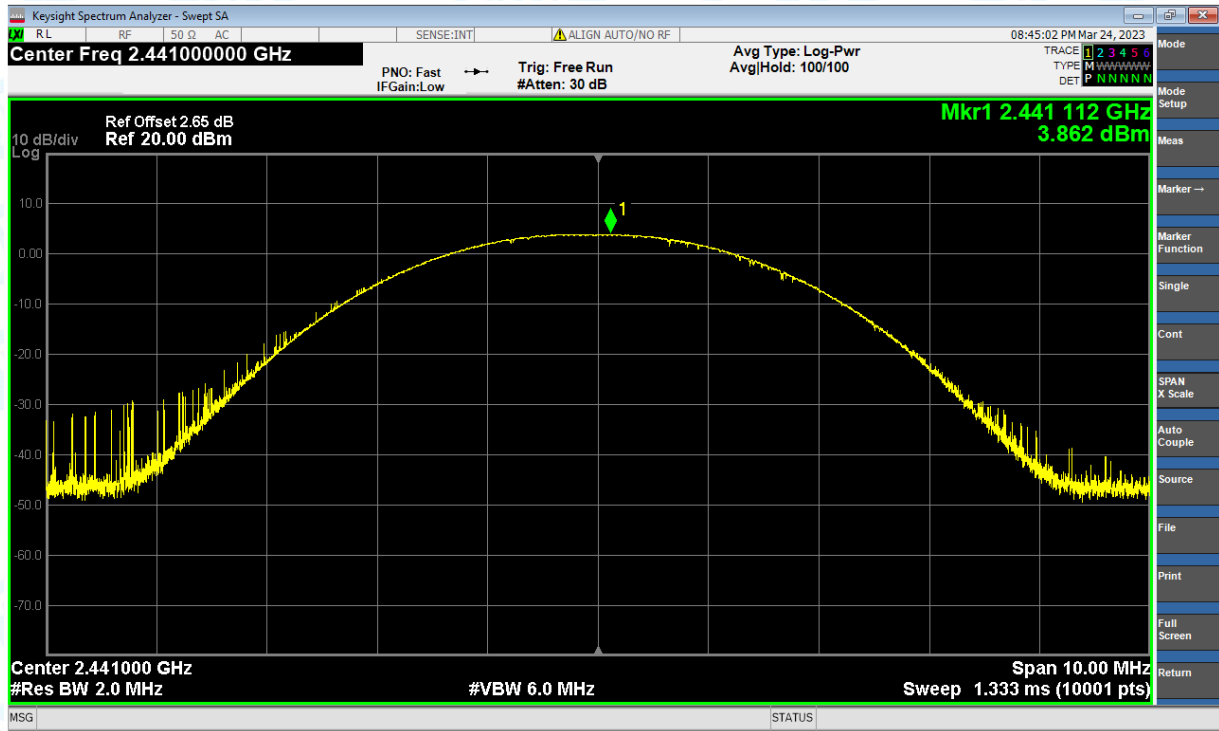
Power NVNT 1-DH1 2480MHz Ant1



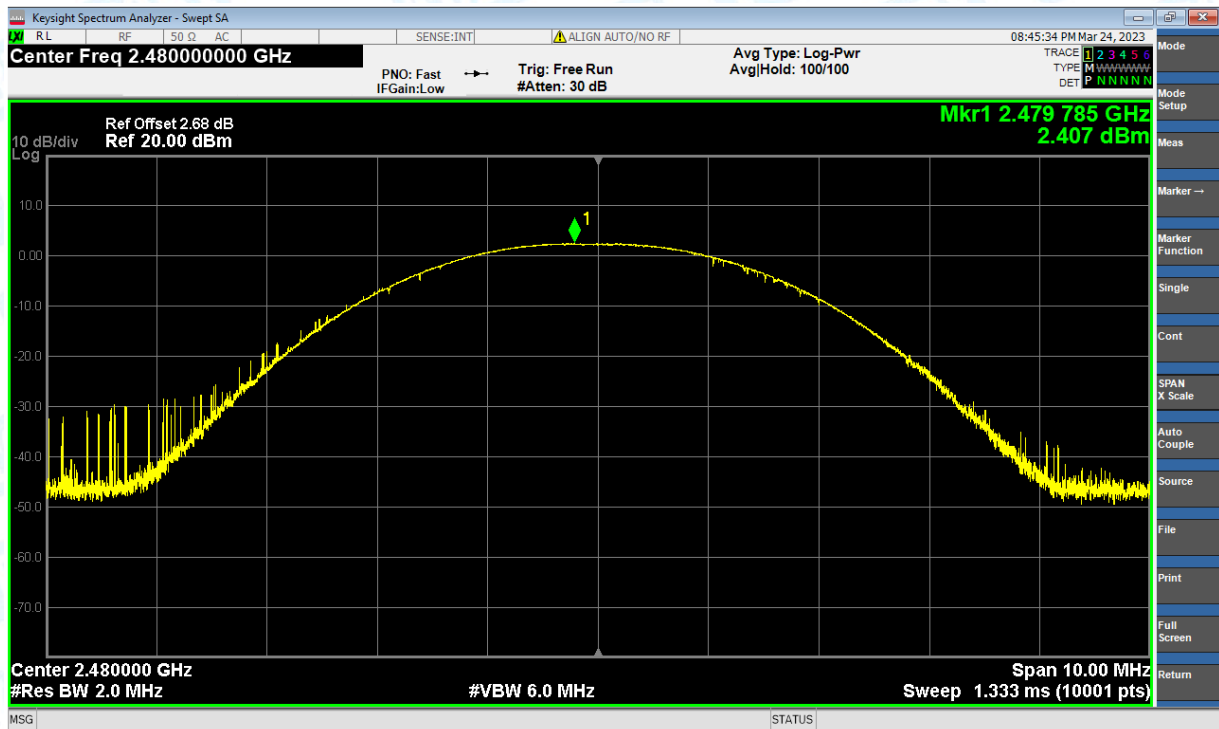
Power NVNT 2-DH1 2402MHz Ant1



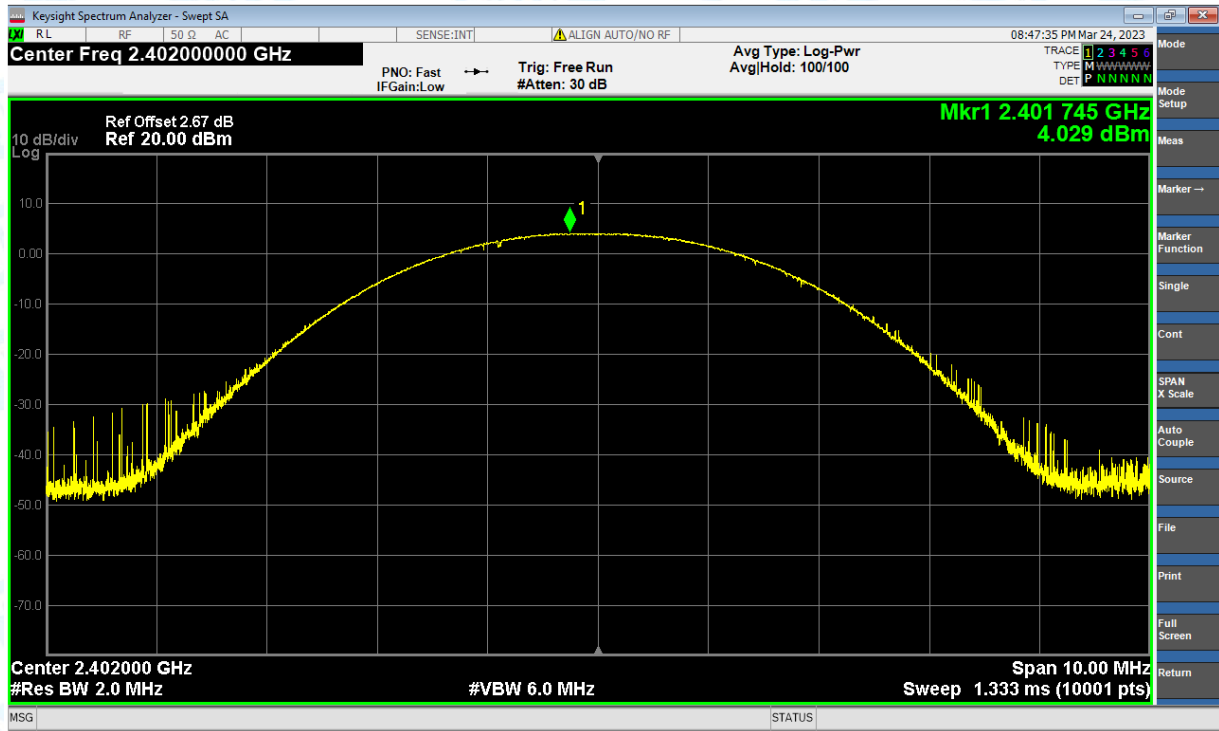
Power NVNT 2-DH1 2441MHz Ant1



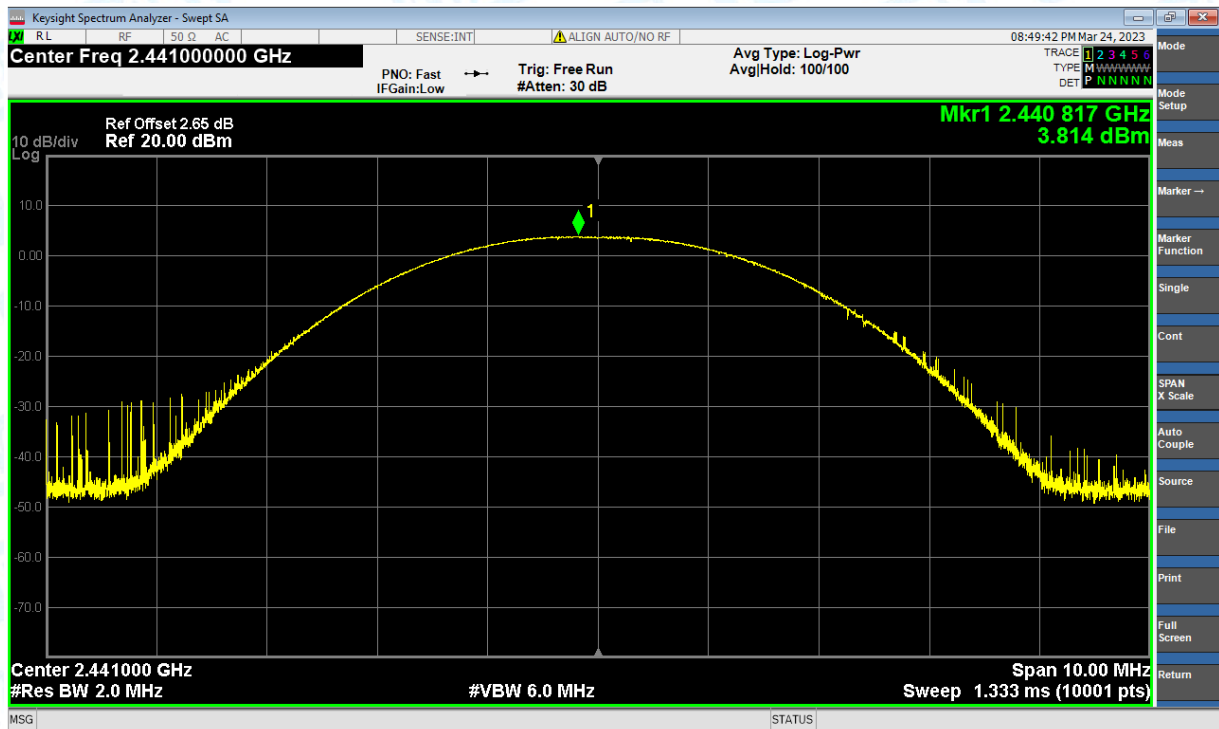
Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



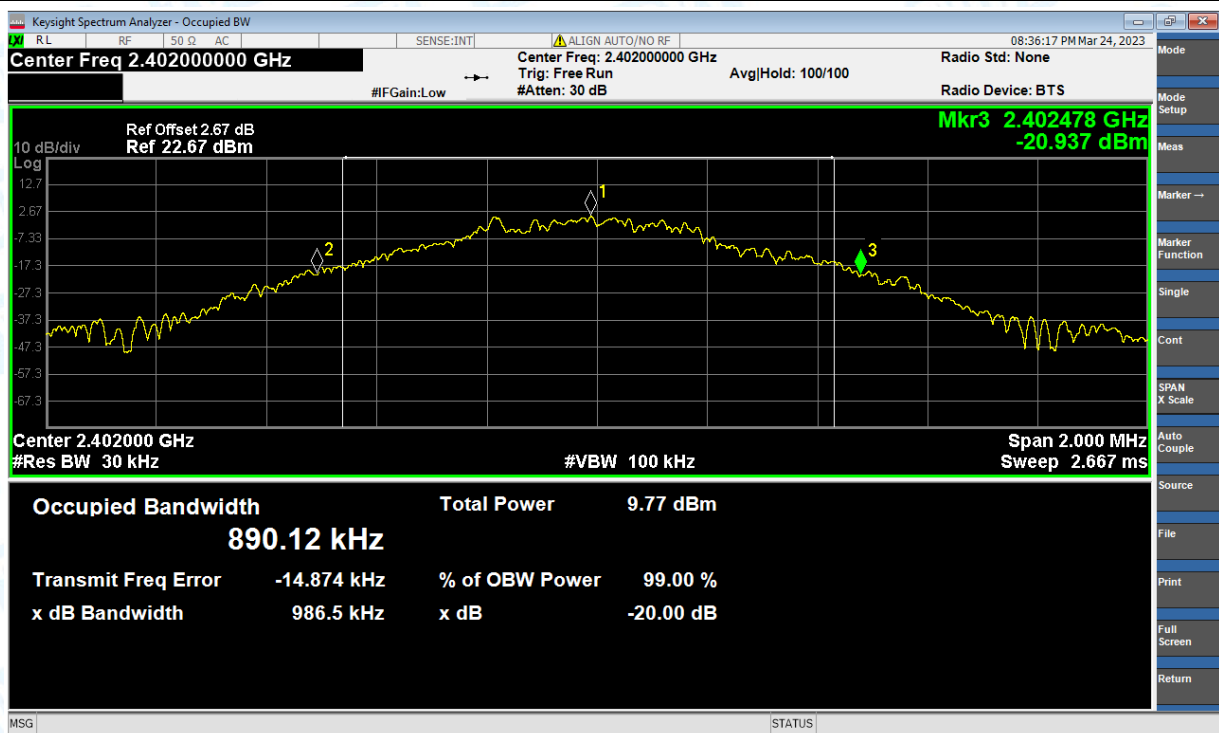


3. -20dB Bandwidth

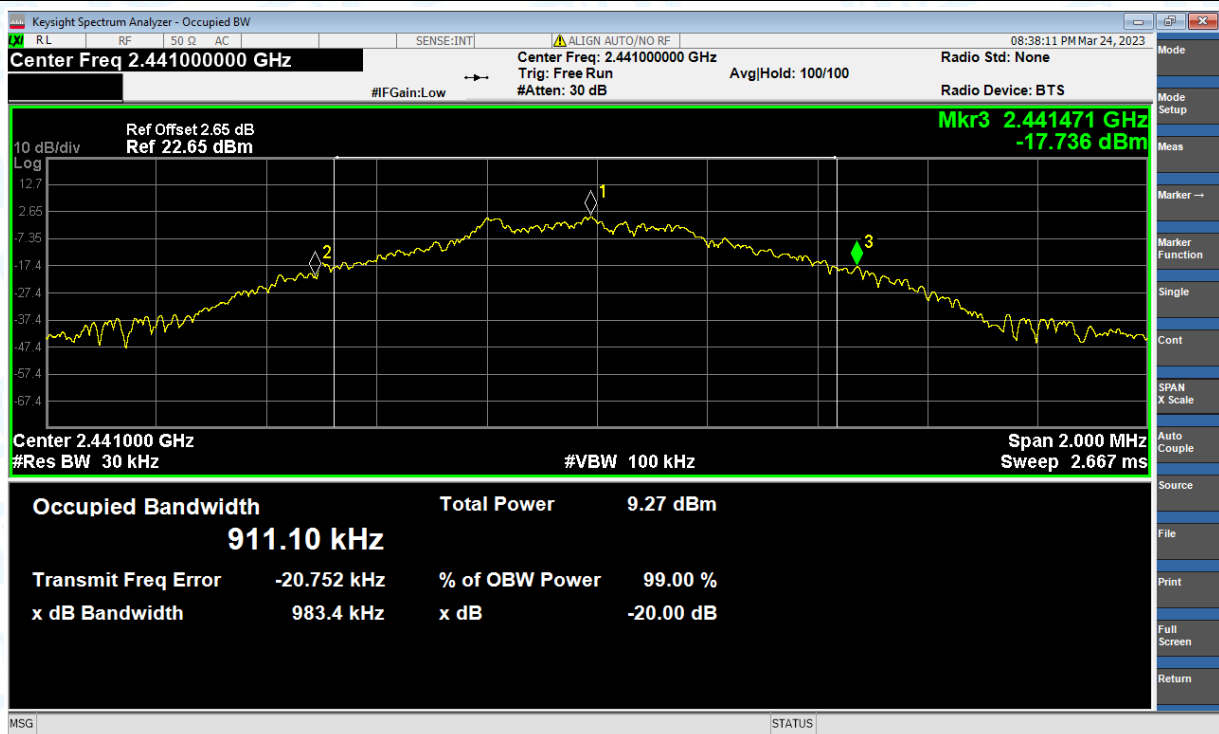
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.99	----	Pass
NVNT	1-DH1	2441	Ant1	0.98	----	Pass
NVNT	1-DH1	2480	Ant1	1.01	----	Pass
NVNT	2-DH1	2402	Ant1	1.29	----	Pass
NVNT	2-DH1	2441	Ant1	1.24	----	Pass
NVNT	2-DH1	2480	Ant1	1.26	----	Pass
NVNT	3-DH1	2402	Ant1	1.24	----	Pass
NVNT	3-DH1	2441	Ant1	1.26	----	Pass
NVNT	3-DH1	2480	Ant1	1.25	----	Pass

Test Graphs

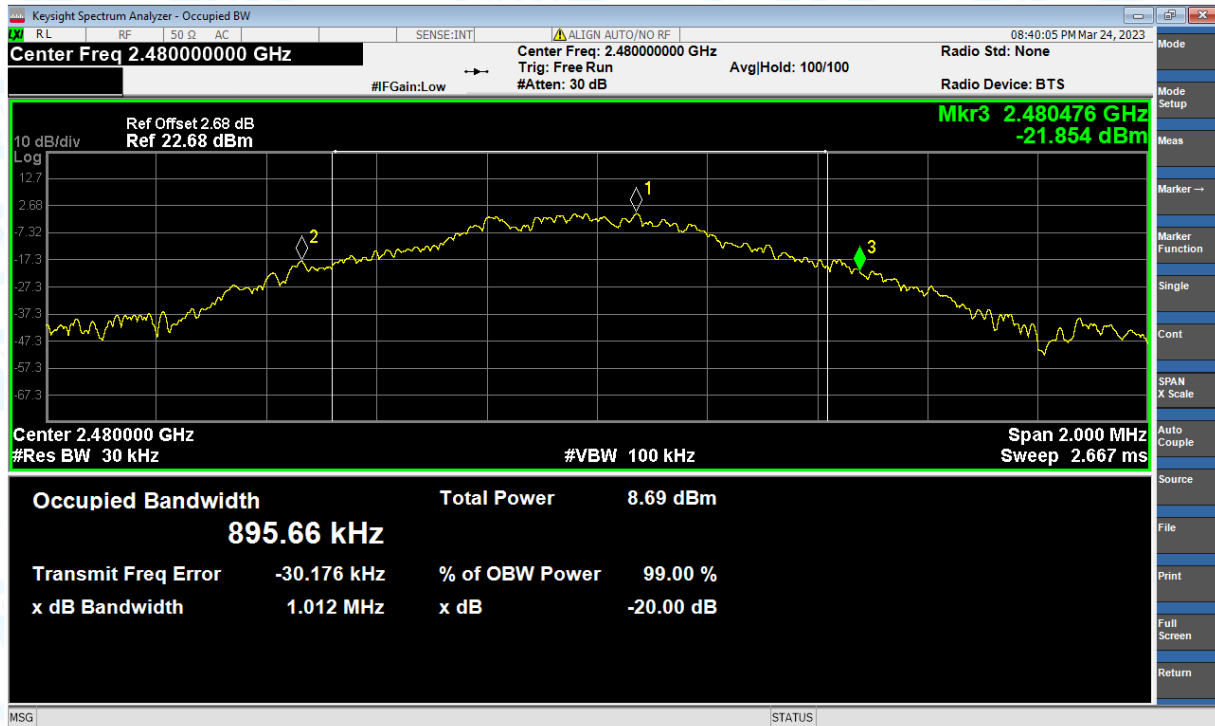
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



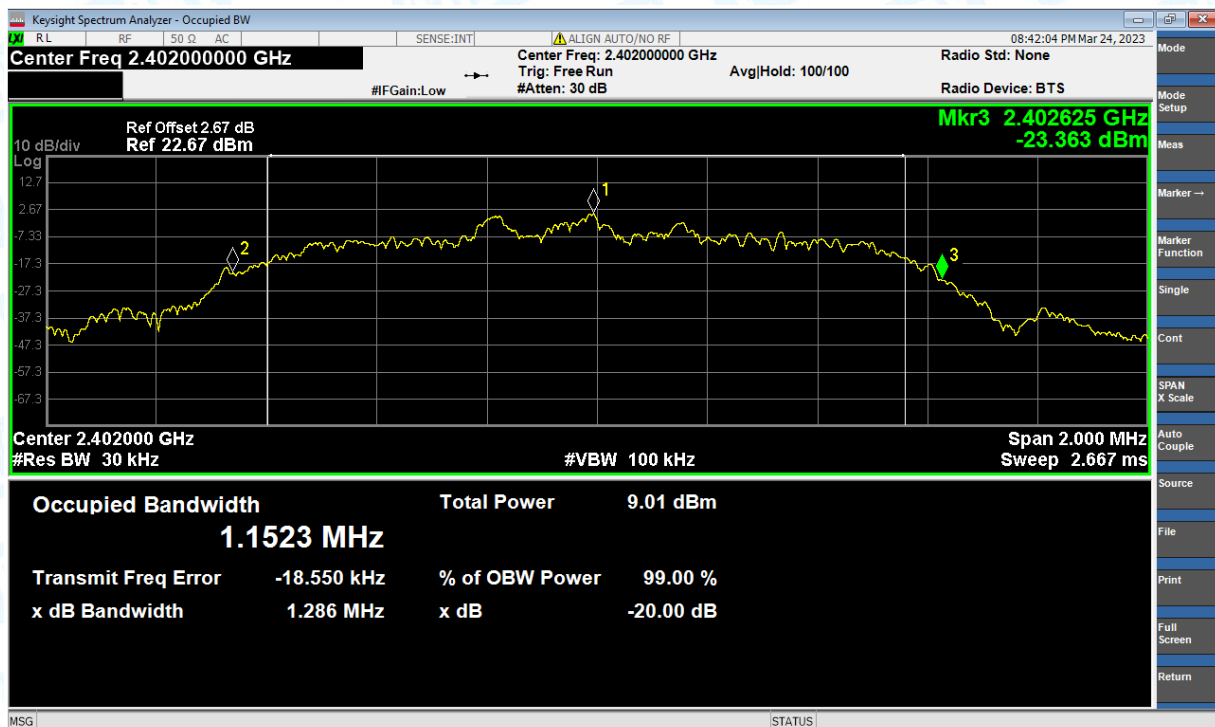
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



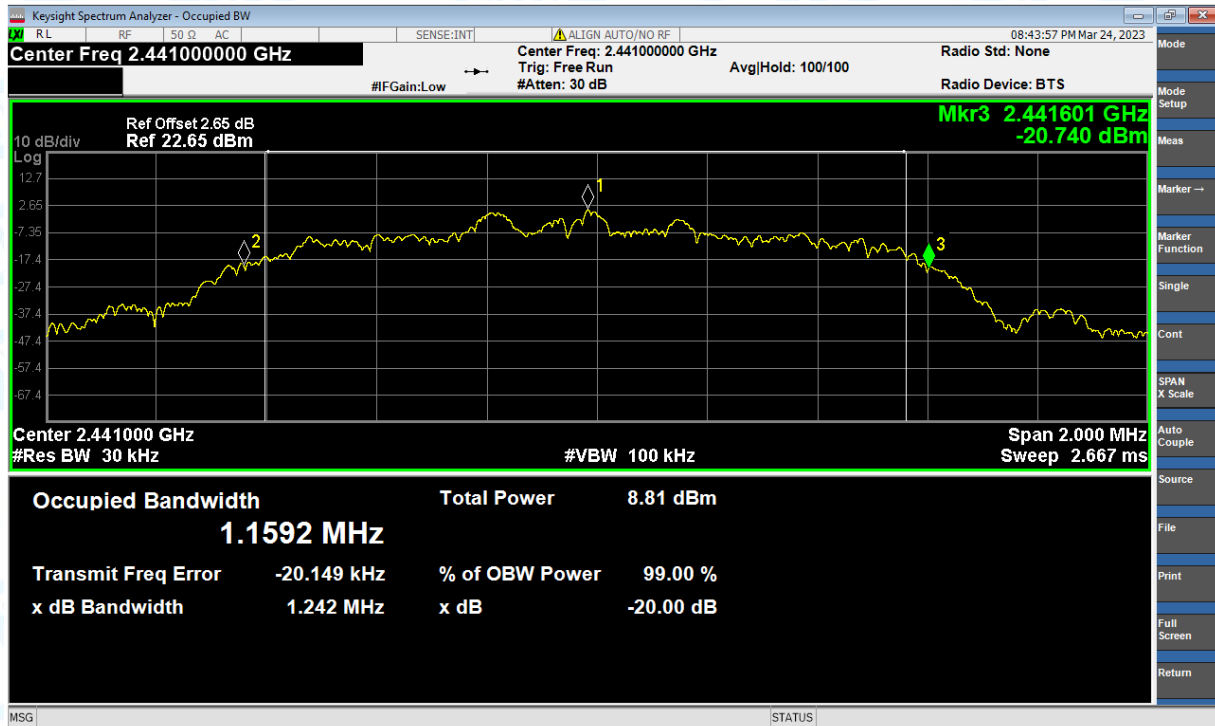
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



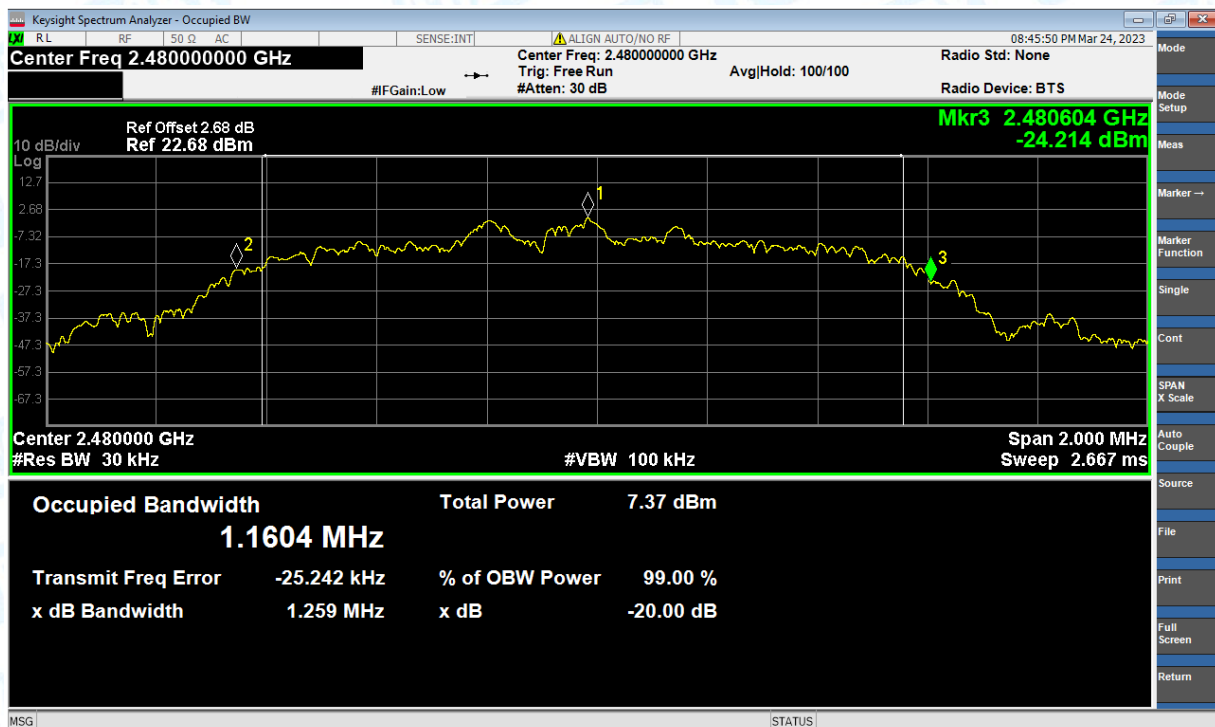
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



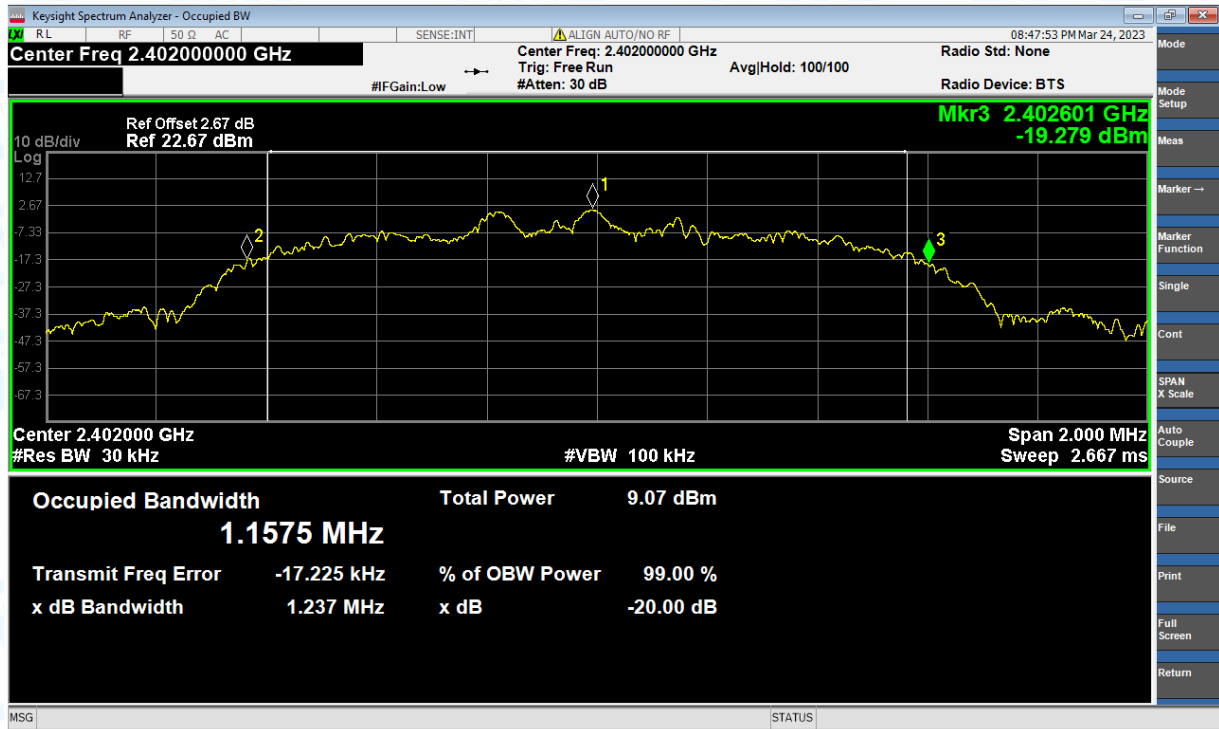
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



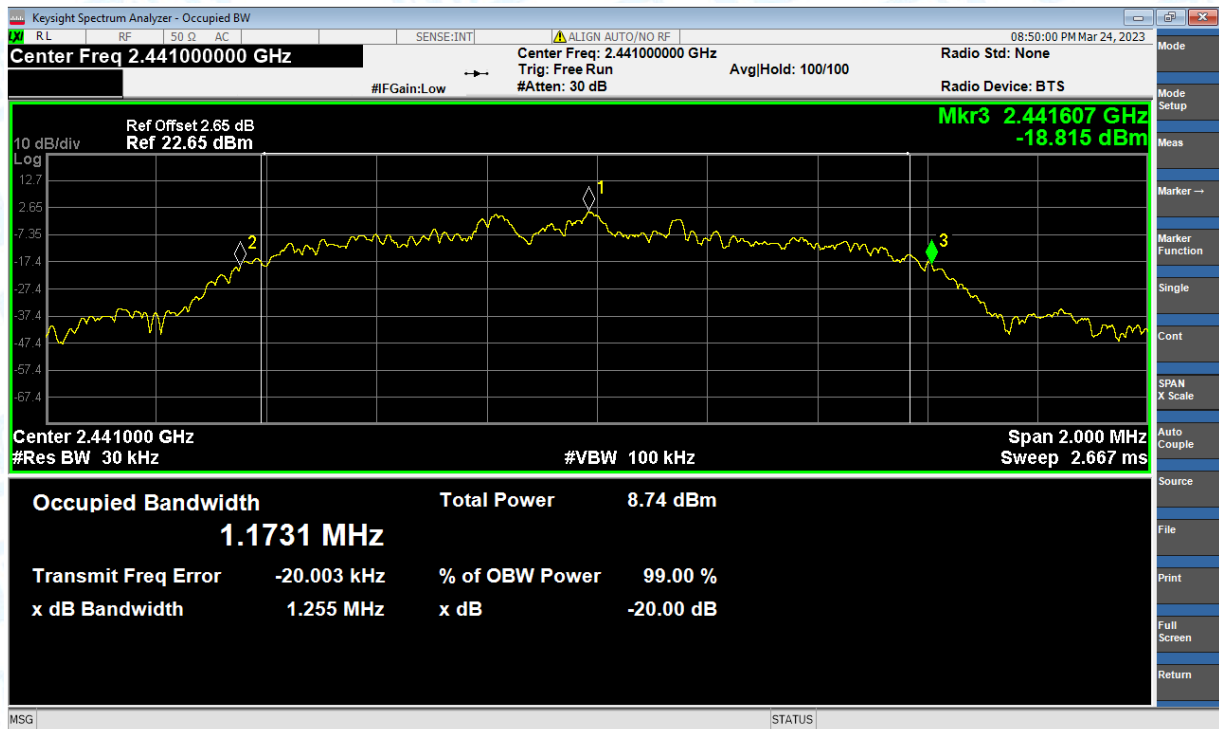
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

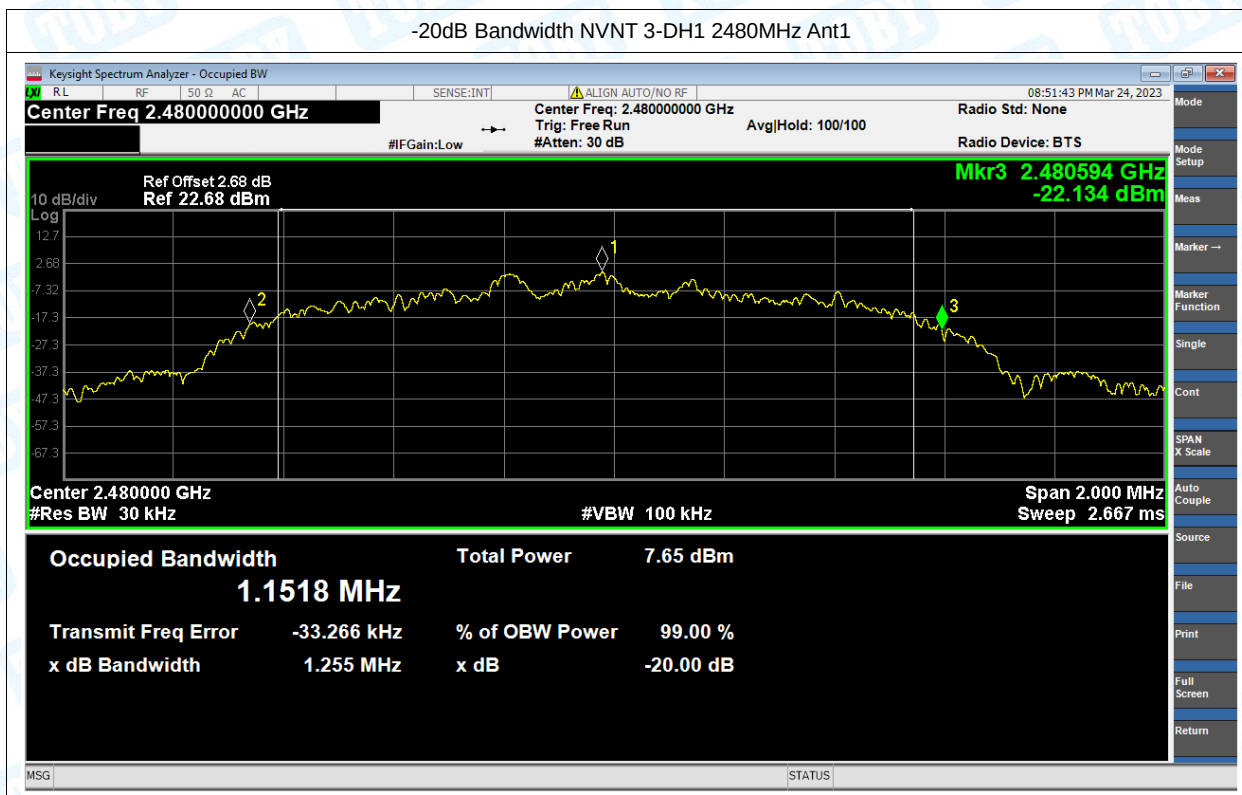


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



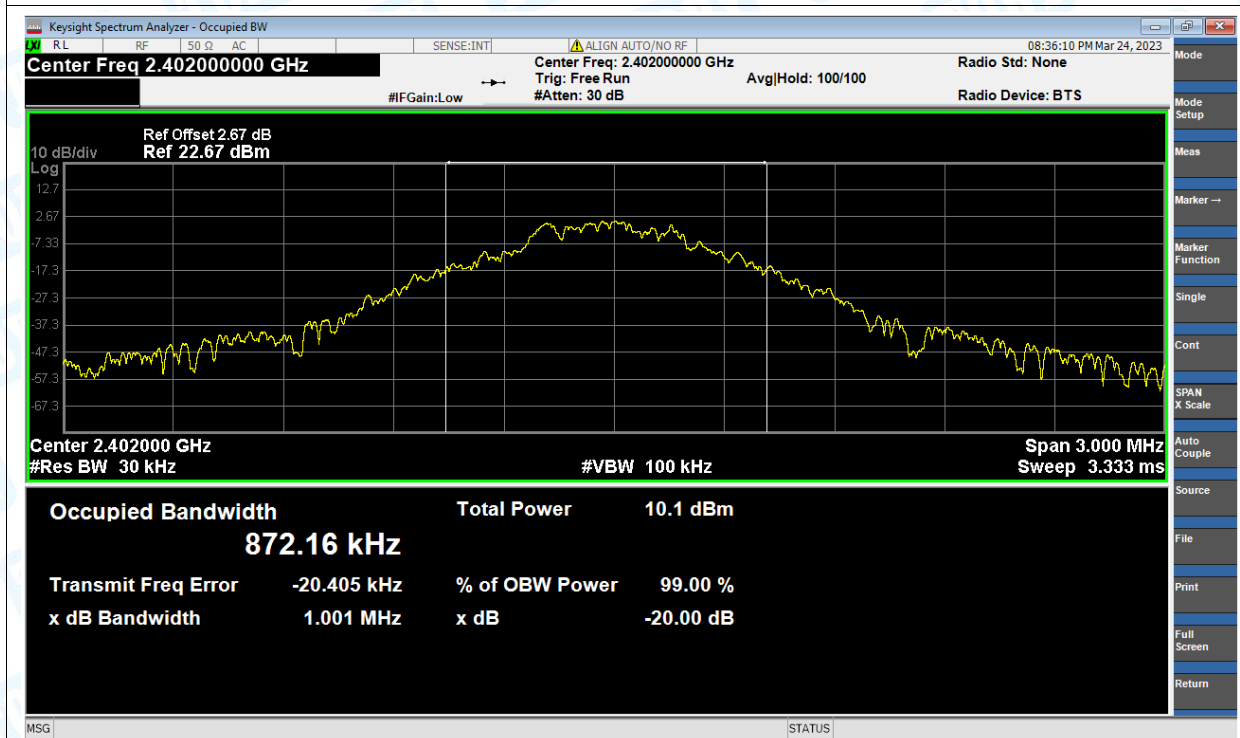


4. Occupied Channel Bandwidth

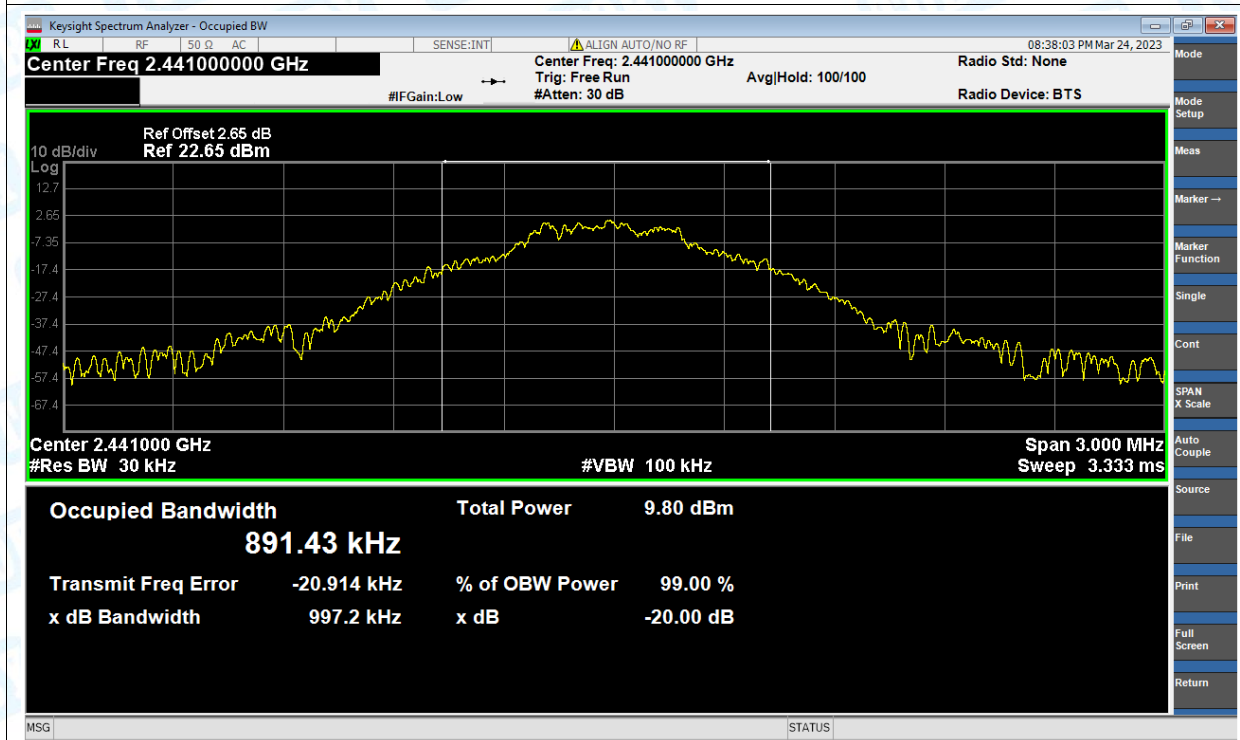
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.872
NVNT	1-DH1	2441	Ant1	0.891
NVNT	1-DH1	2480	Ant1	0.899
NVNT	2-DH1	2402	Ant1	1.189
NVNT	2-DH1	2441	Ant1	1.179
NVNT	2-DH1	2480	Ant1	1.151
NVNT	3-DH1	2402	Ant1	1.144
NVNT	3-DH1	2441	Ant1	1.169
NVNT	3-DH1	2480	Ant1	1.161

Test Graphs

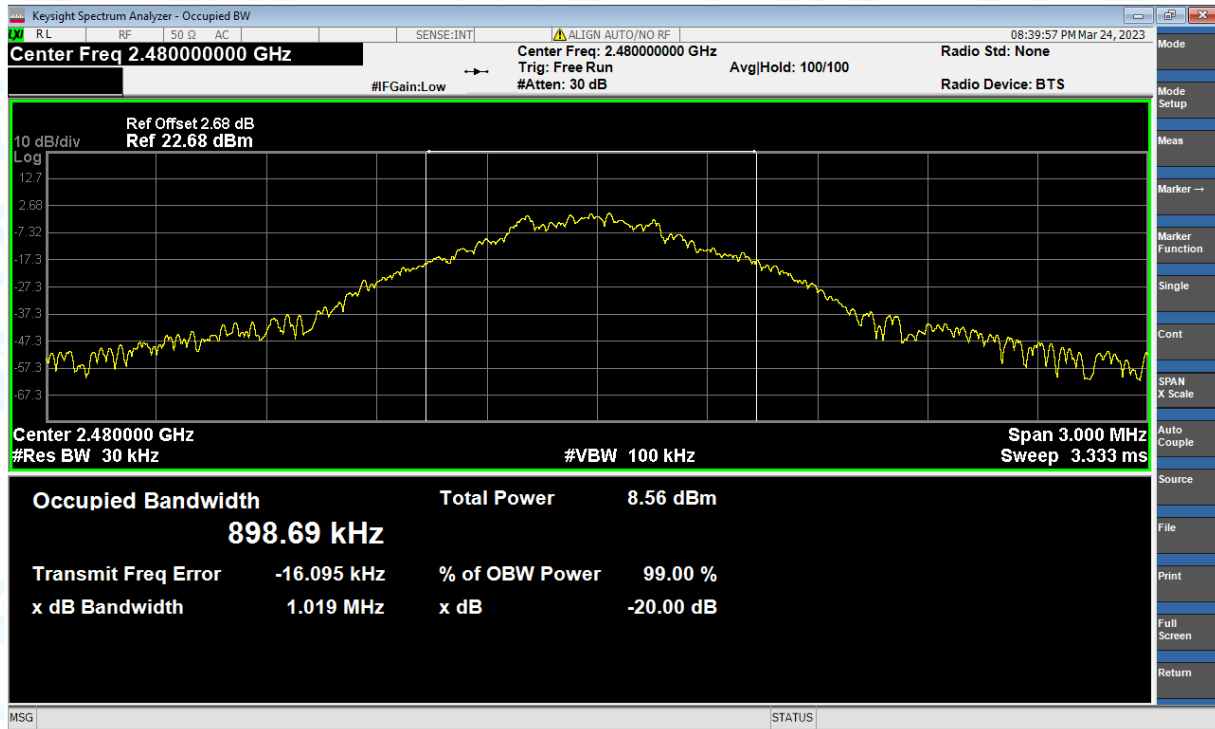
OBW NVNT 1-DH1 2402MHz Ant1



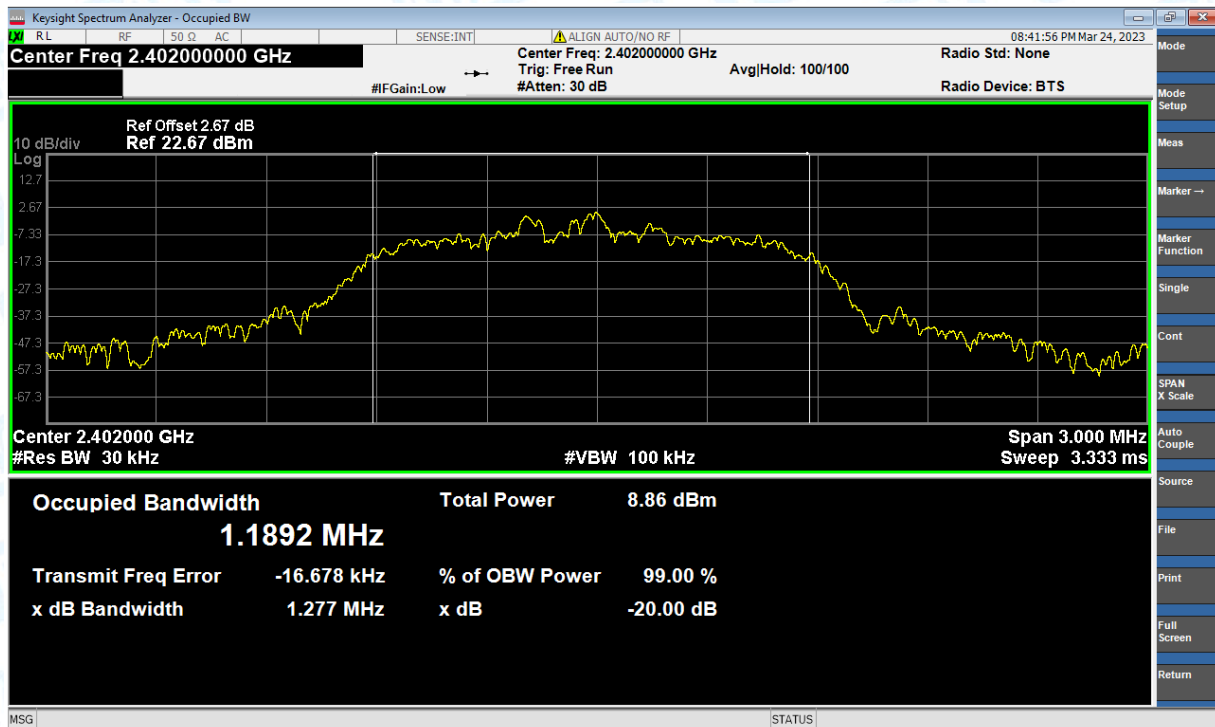
OBW NVNT 1-DH1 2441MHz Ant1



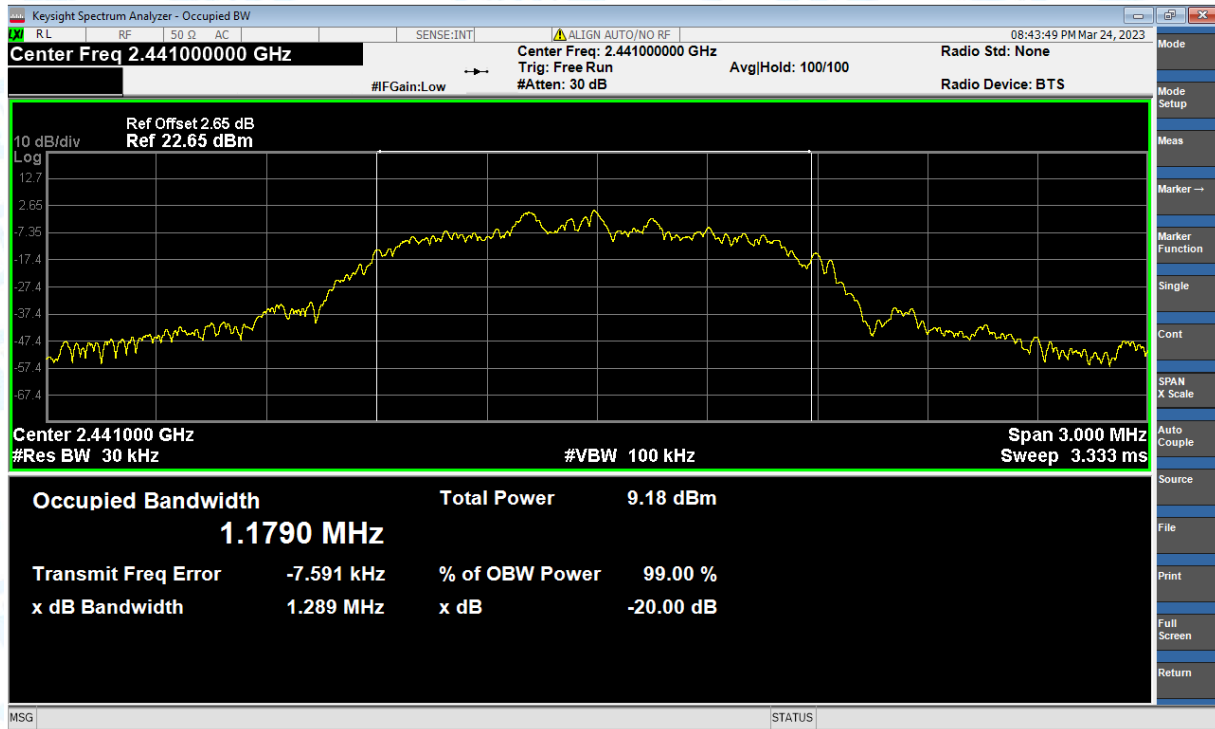
OBW NVNT 1-DH1 2480MHz Ant1



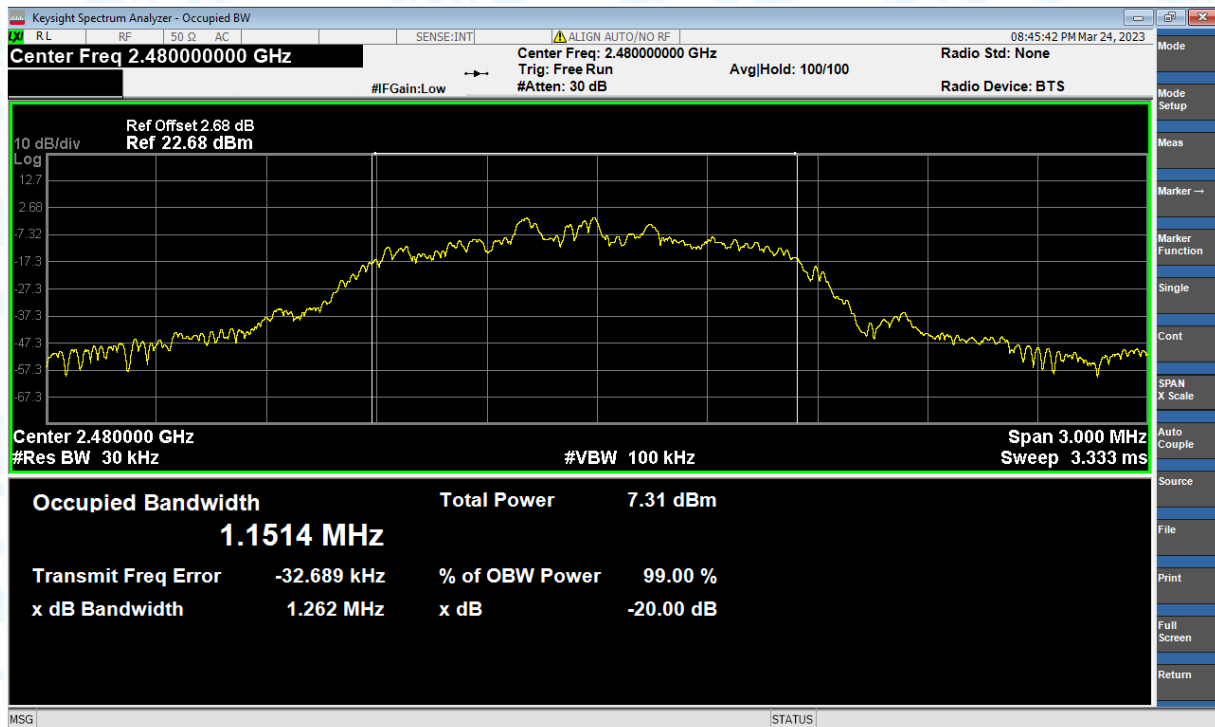
OBW NVNT 2-DH1 2402MHz Ant1



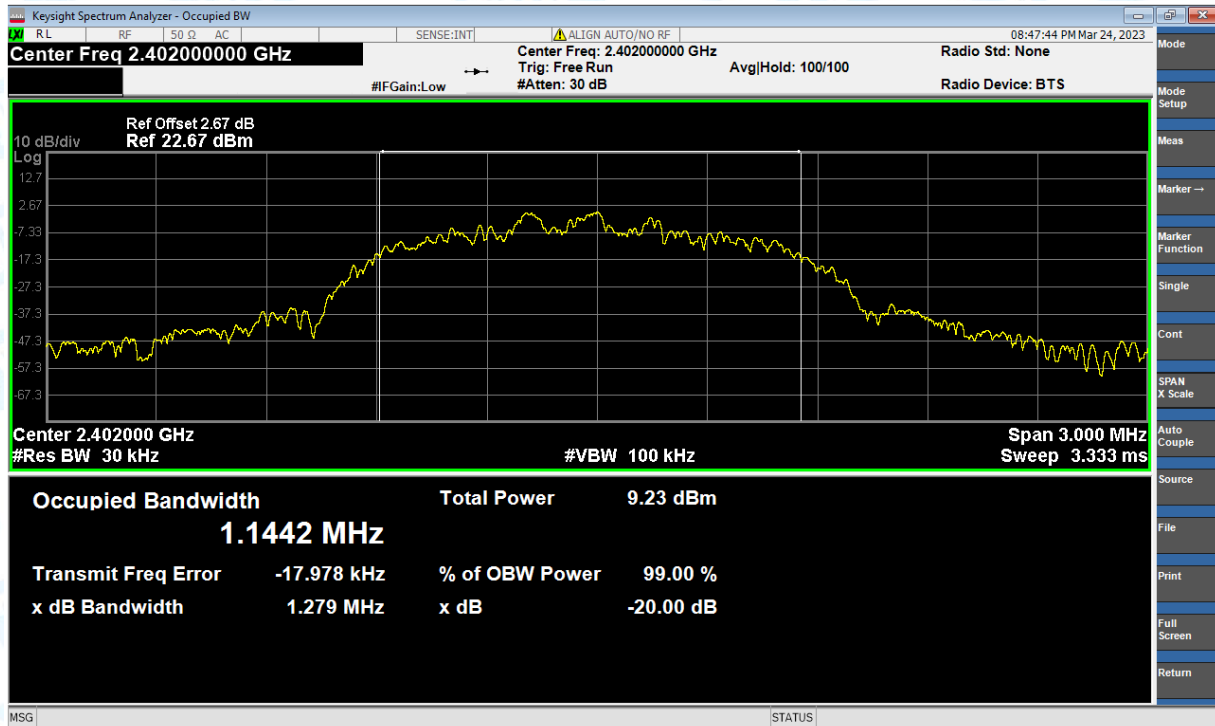
OBW NVNT 2-DH1 2441MHz Ant1



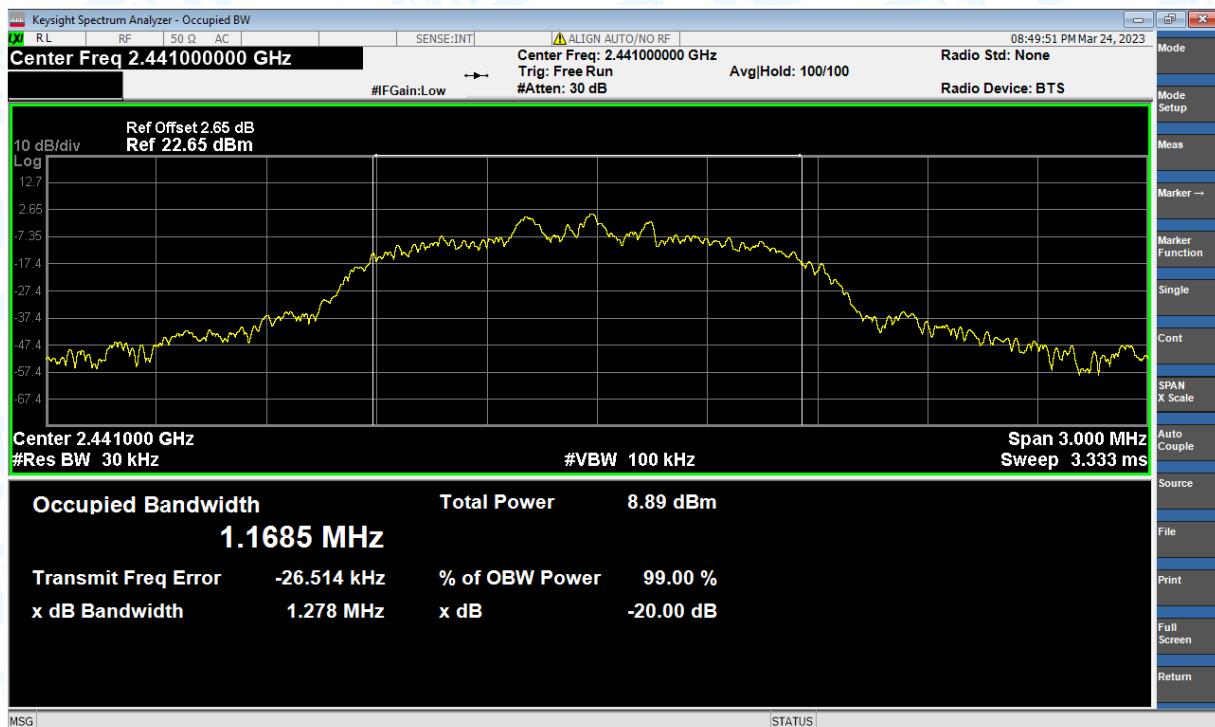
OBW NVNT 2-DH1 2480MHz Ant1

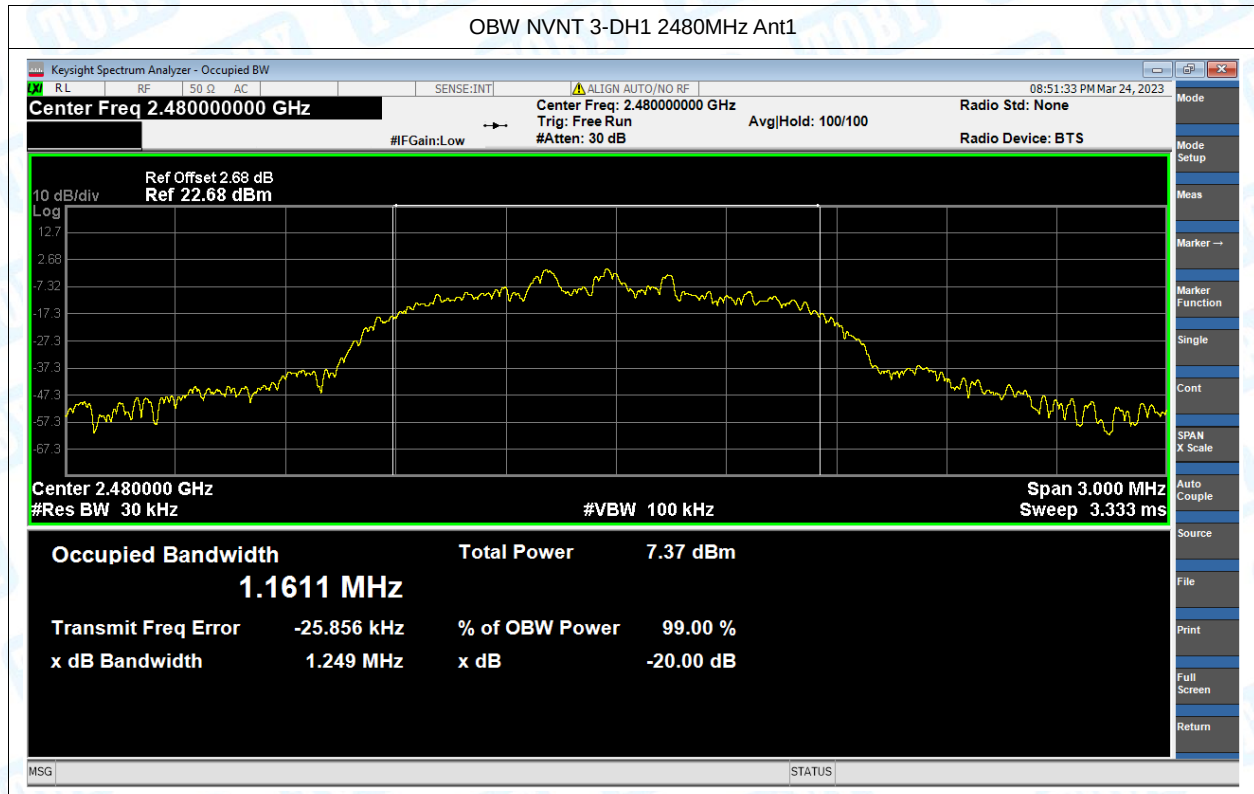


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



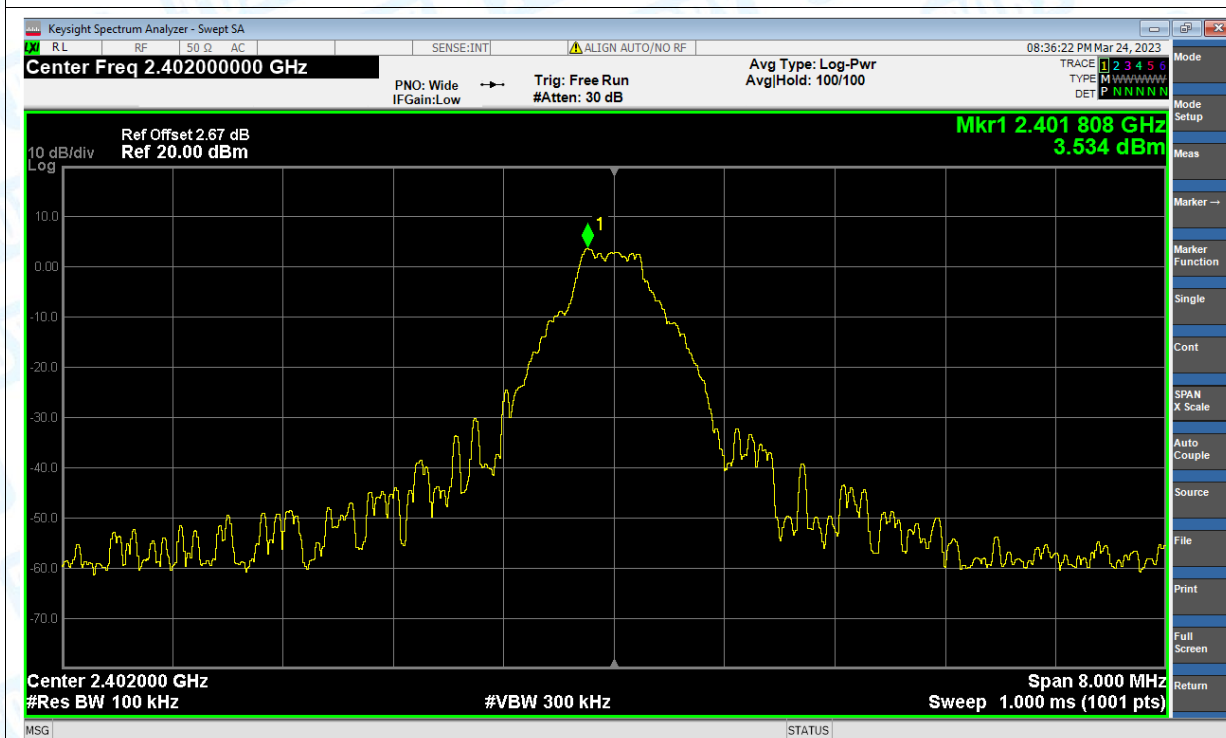


5. Band Edge

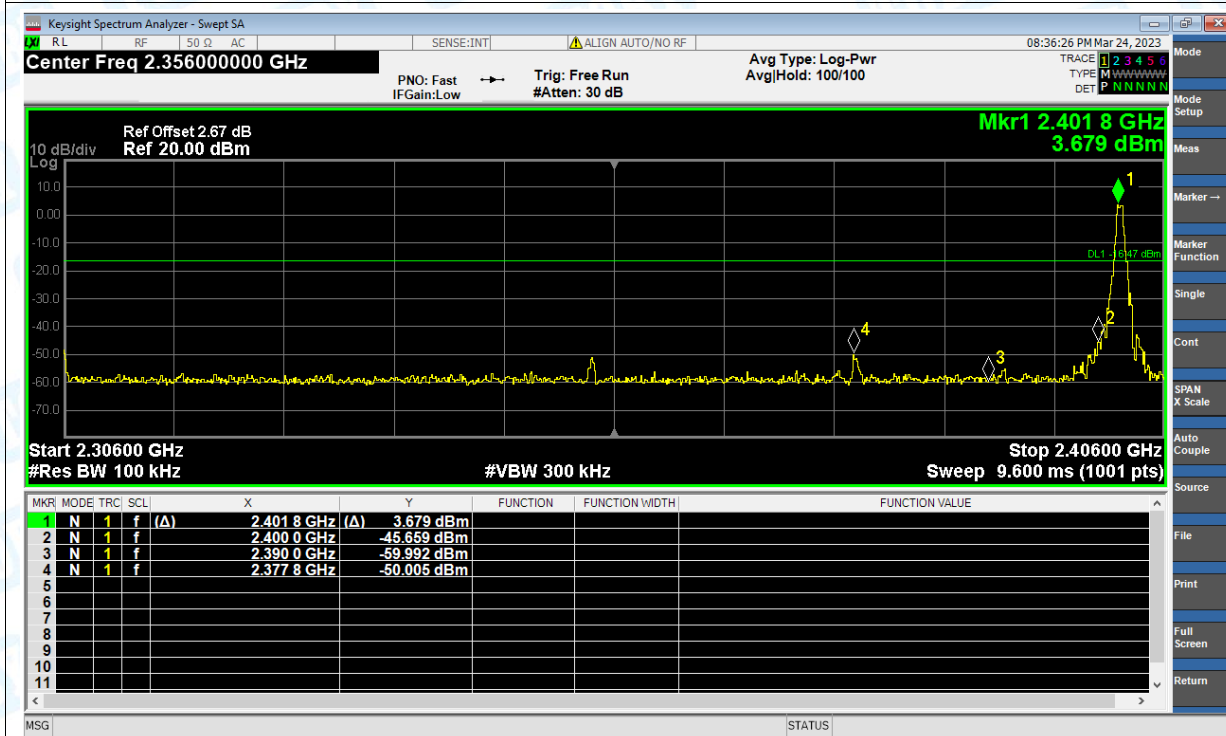
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-53.53	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-58.61	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-54.73	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-57.31	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-54.83	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-57.15	-20	Pass

Test Graphs

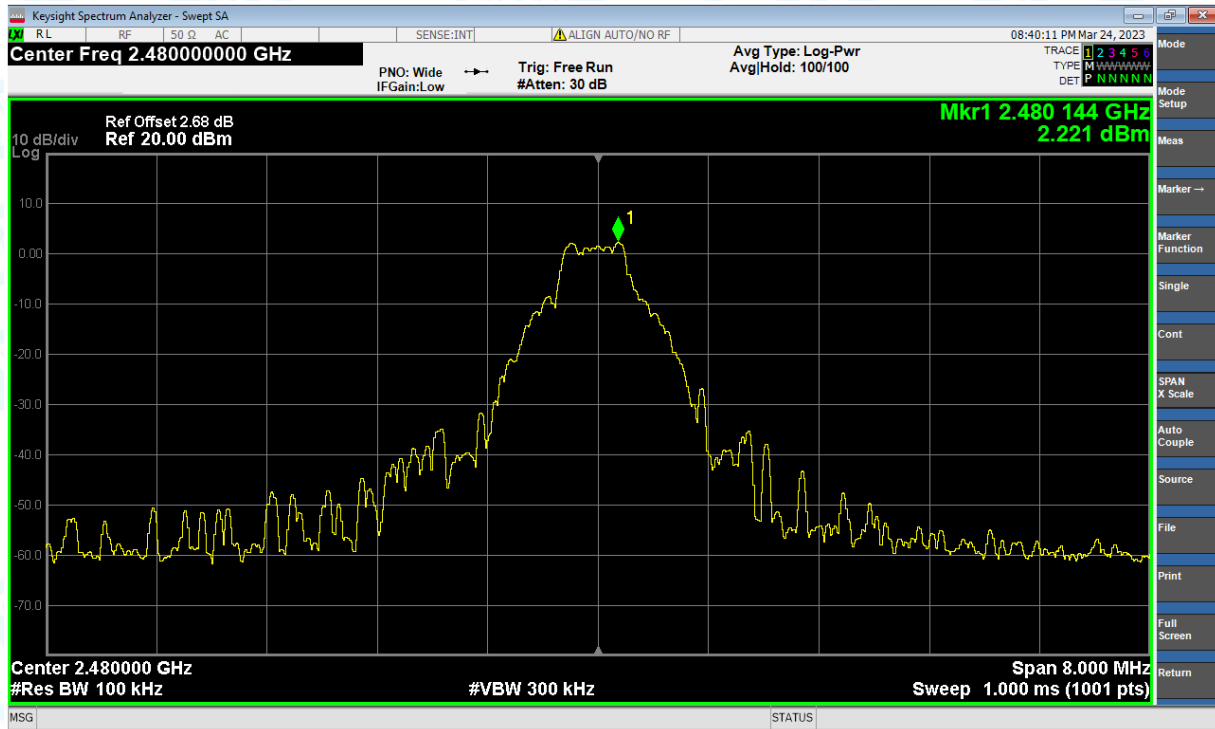
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



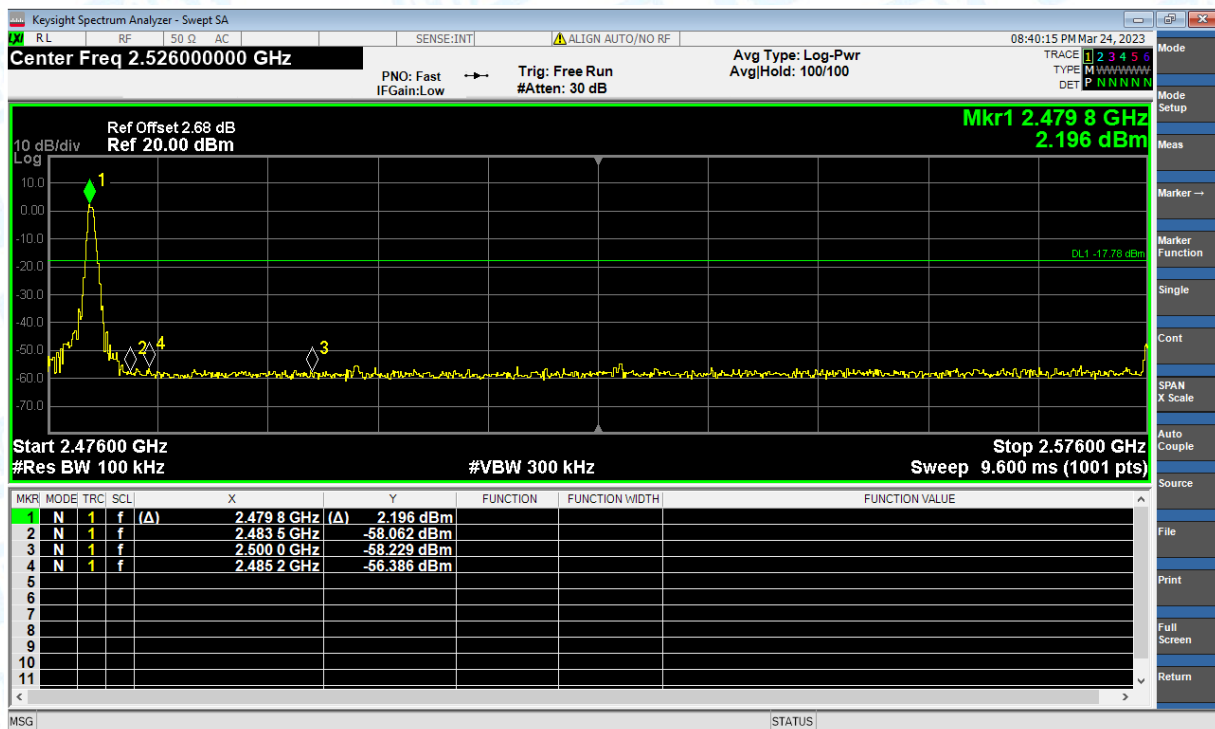
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



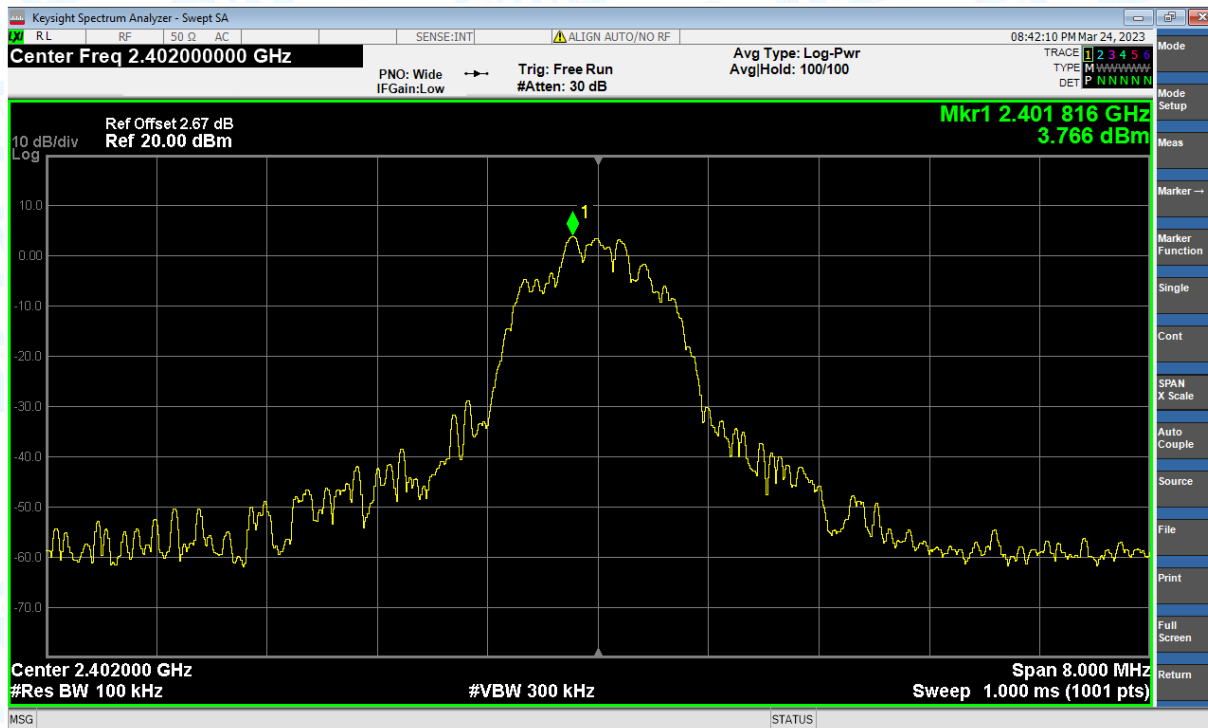
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



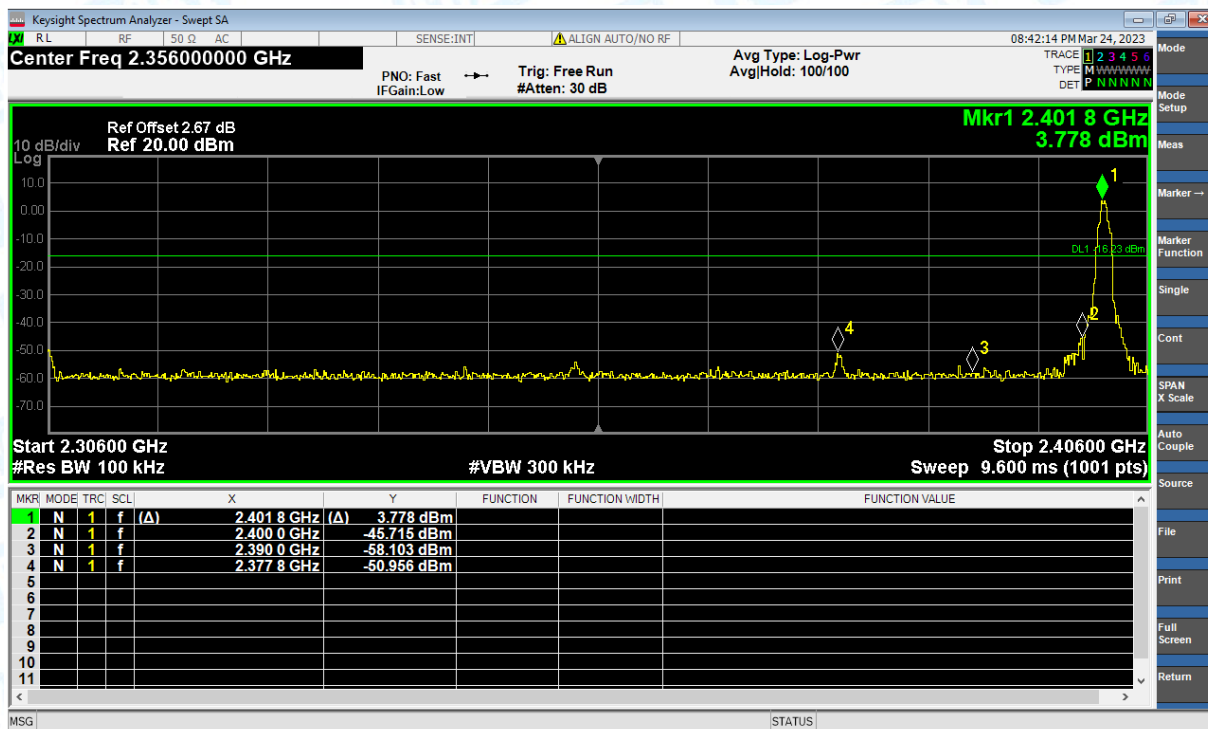
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



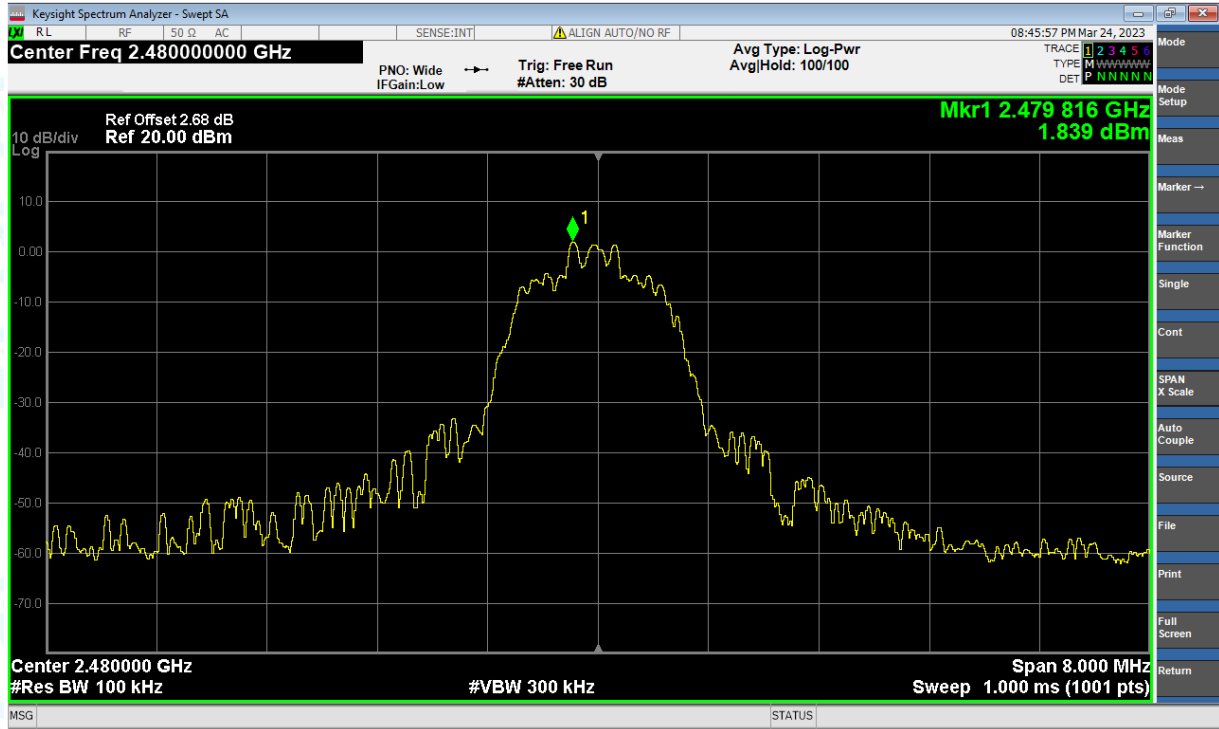
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



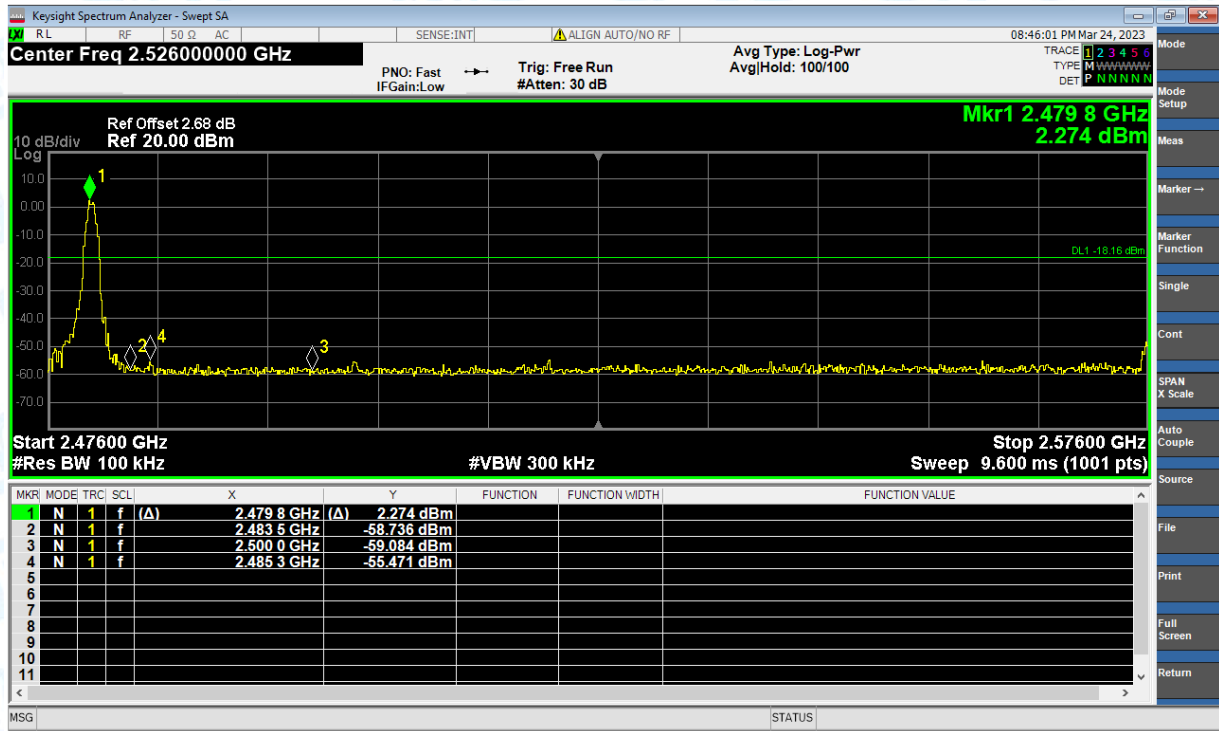
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



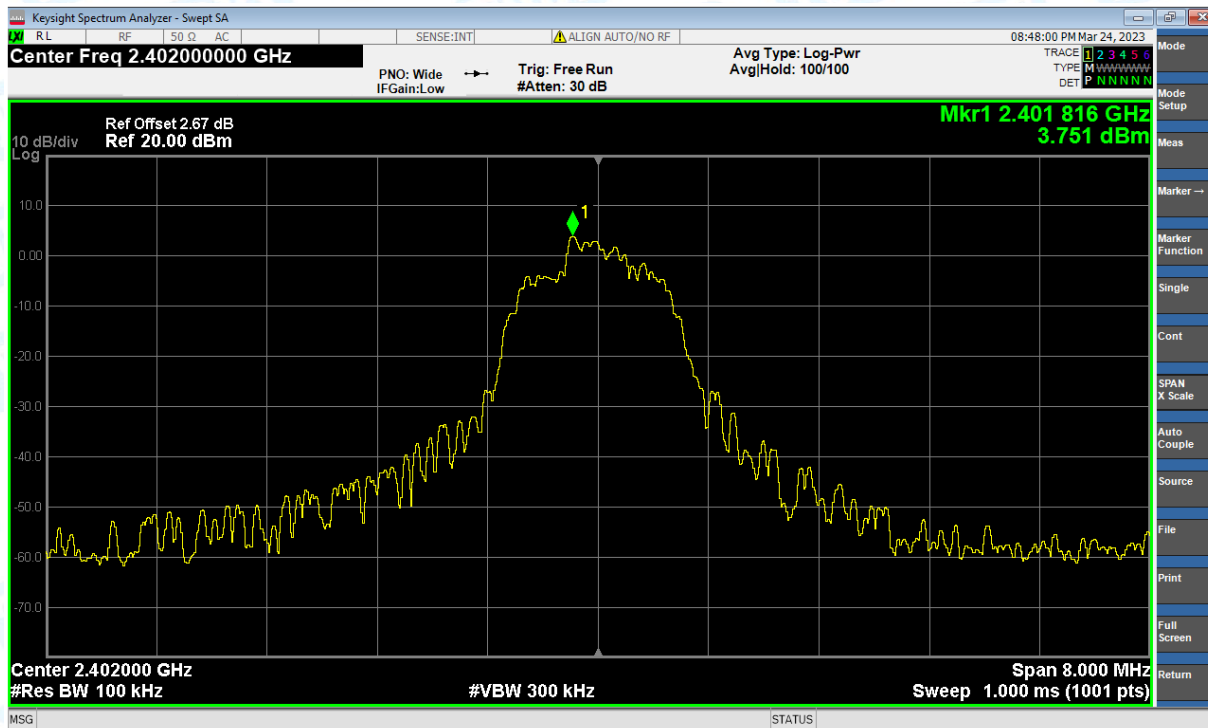
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



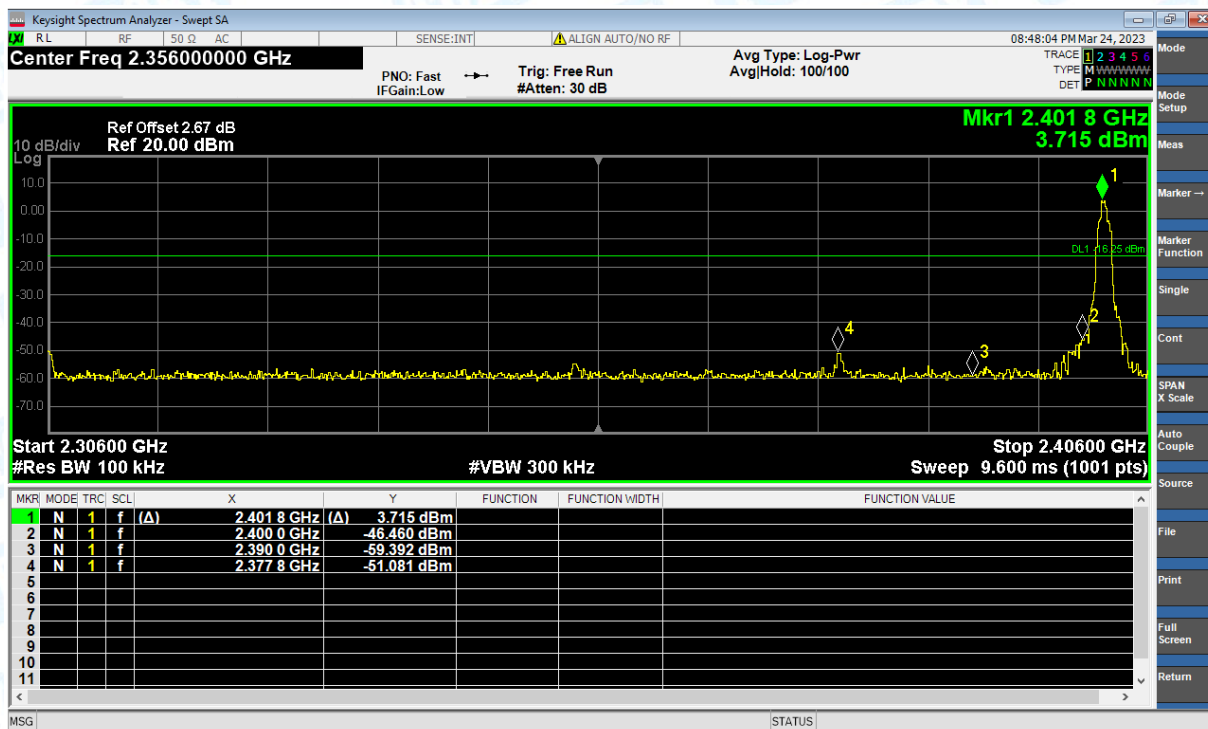
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



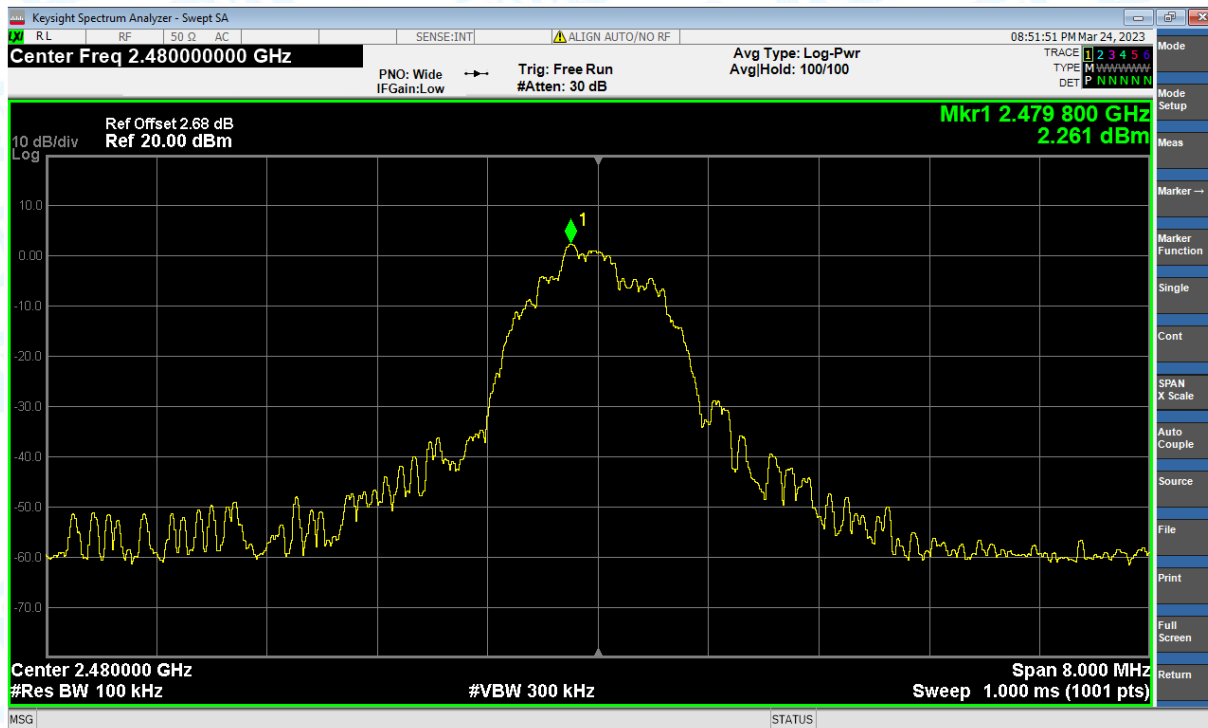
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



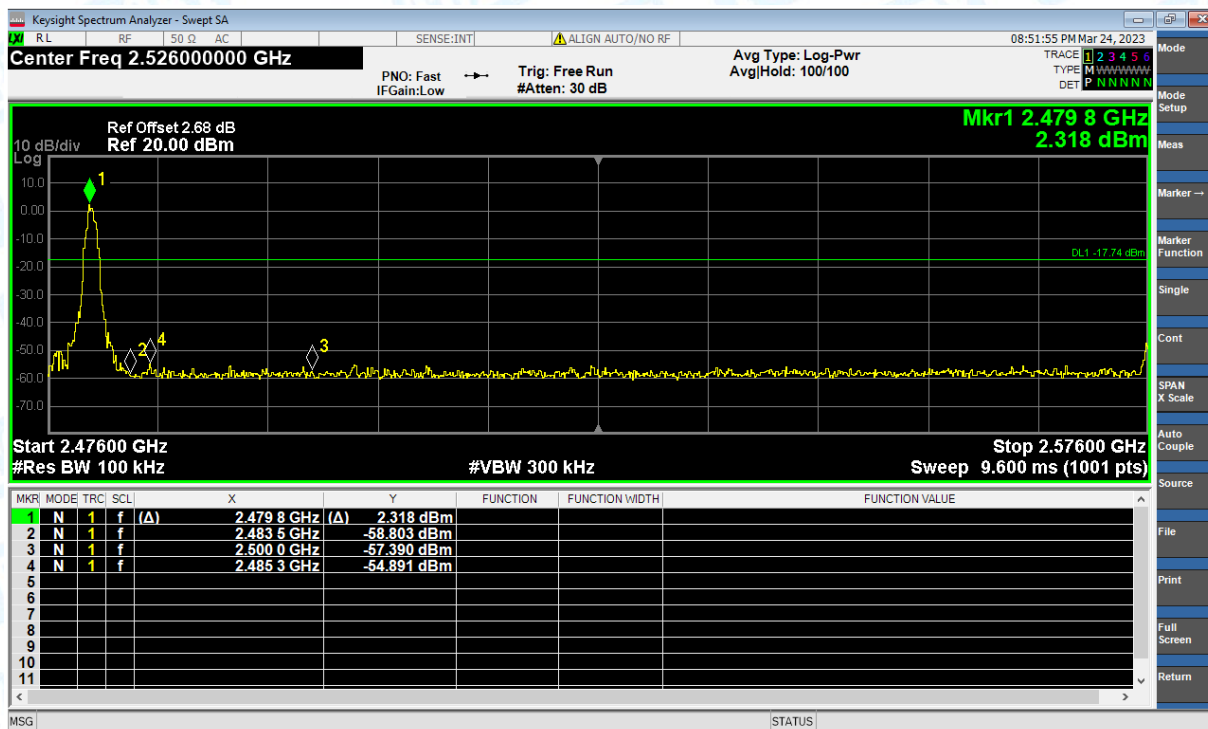
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



6. Band Edge(Hopping)

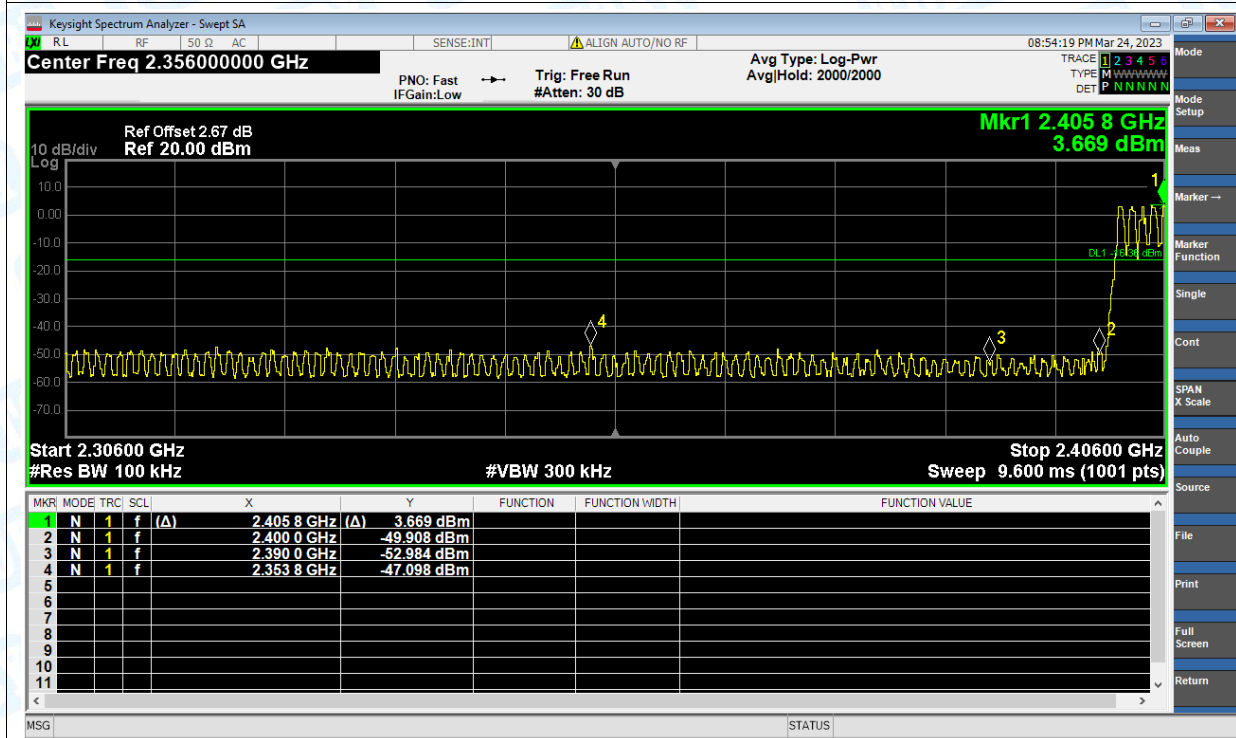
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-50.74	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-46.04	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-51.43	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-47.47	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-50.75	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-47.9	-20	Pass

Test Graphs

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



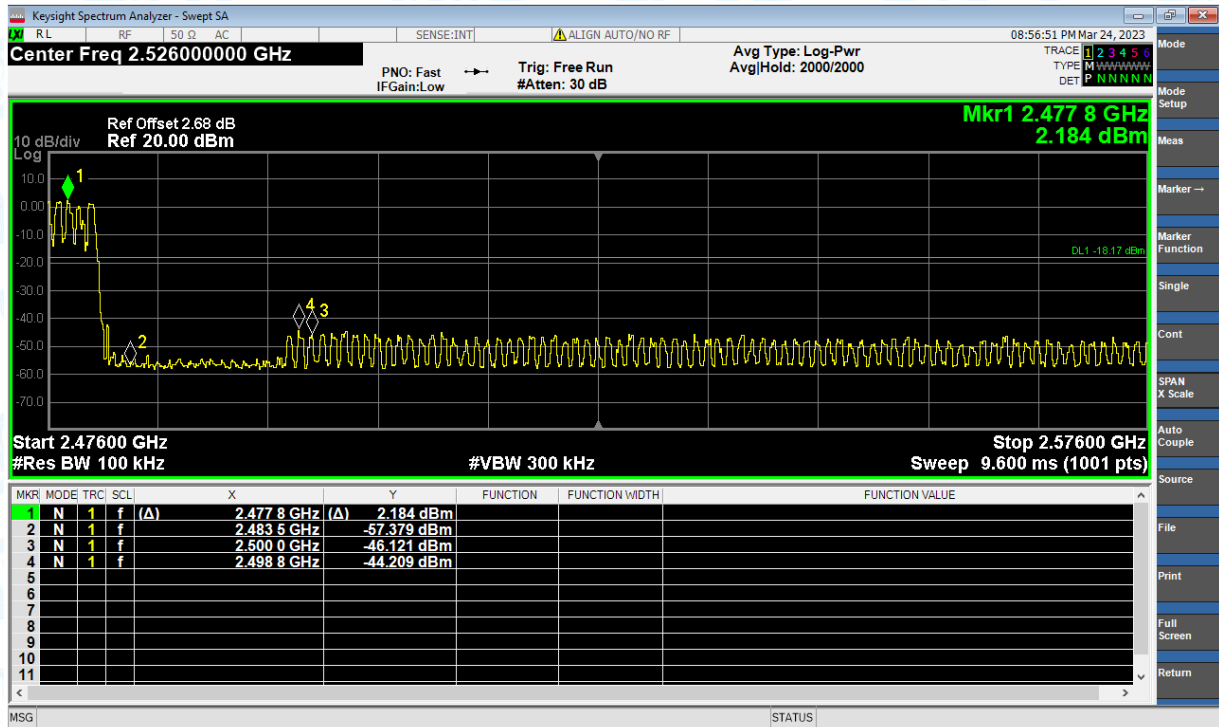
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



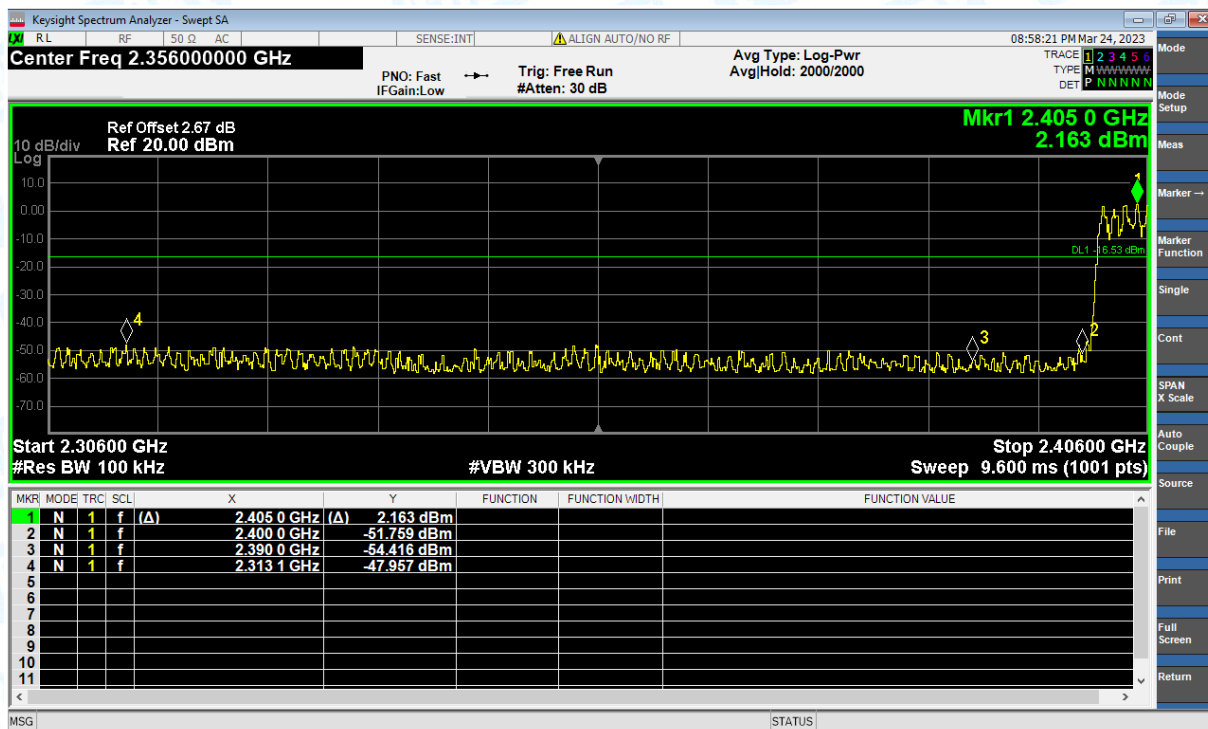
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



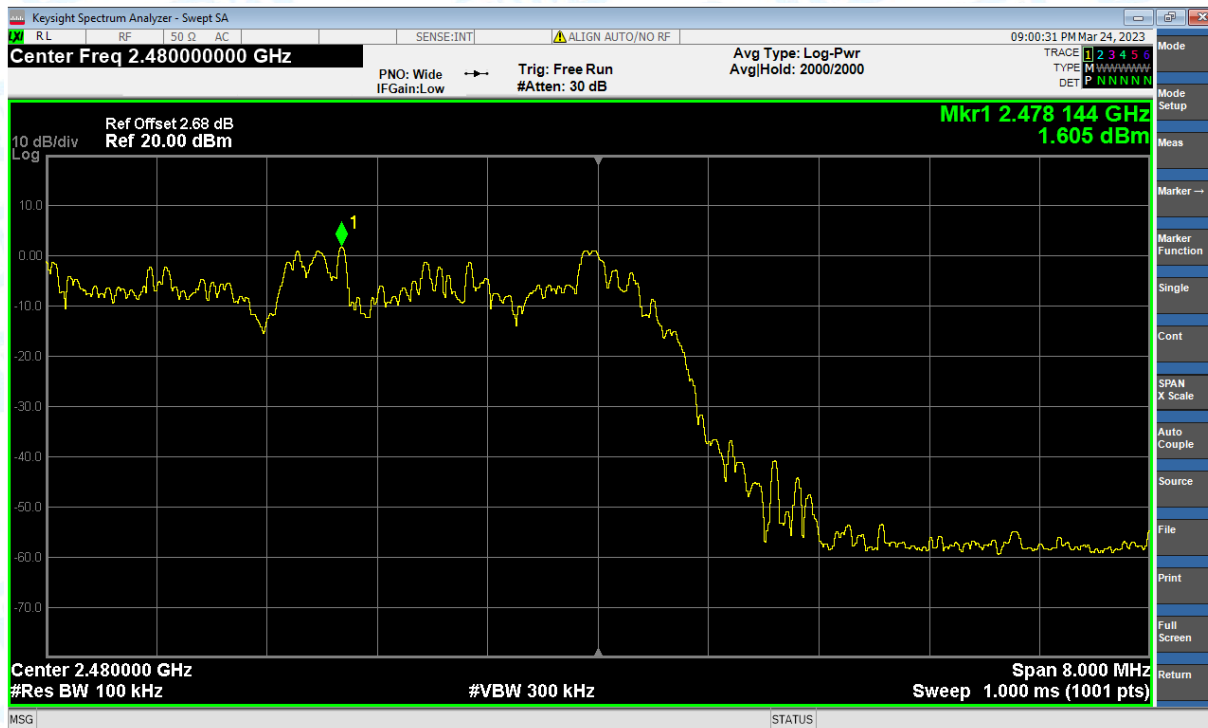
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



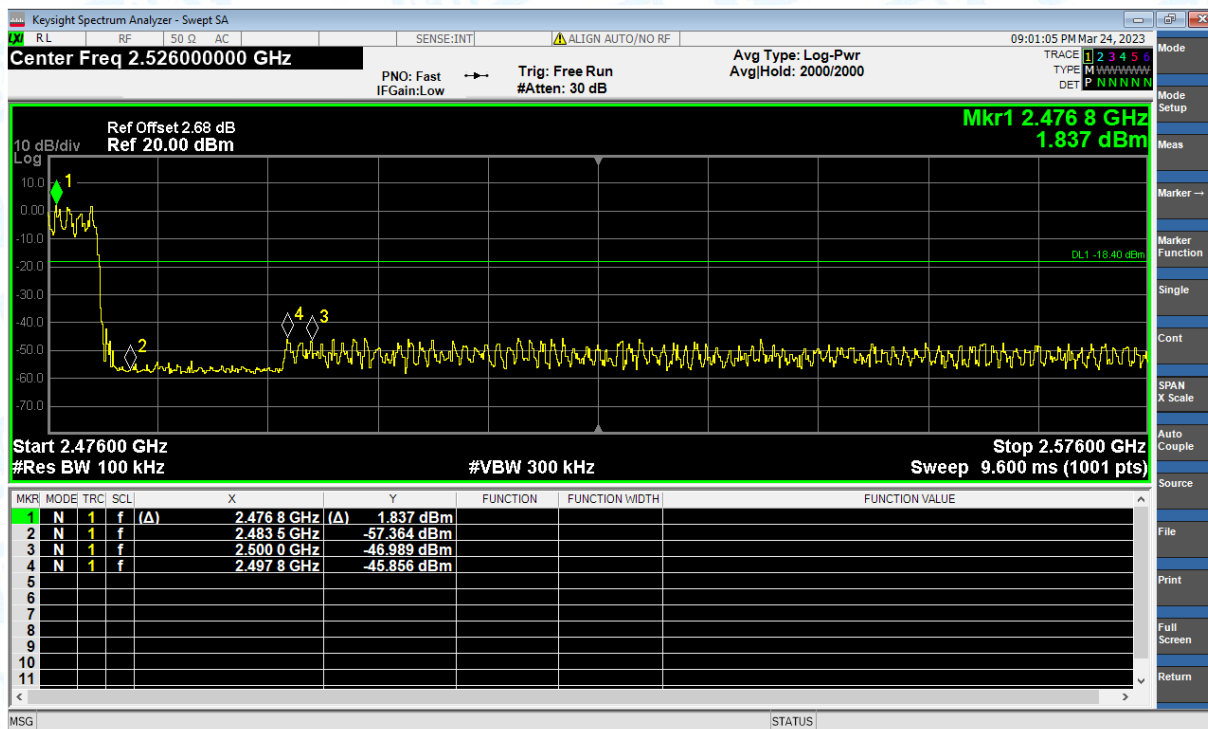
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



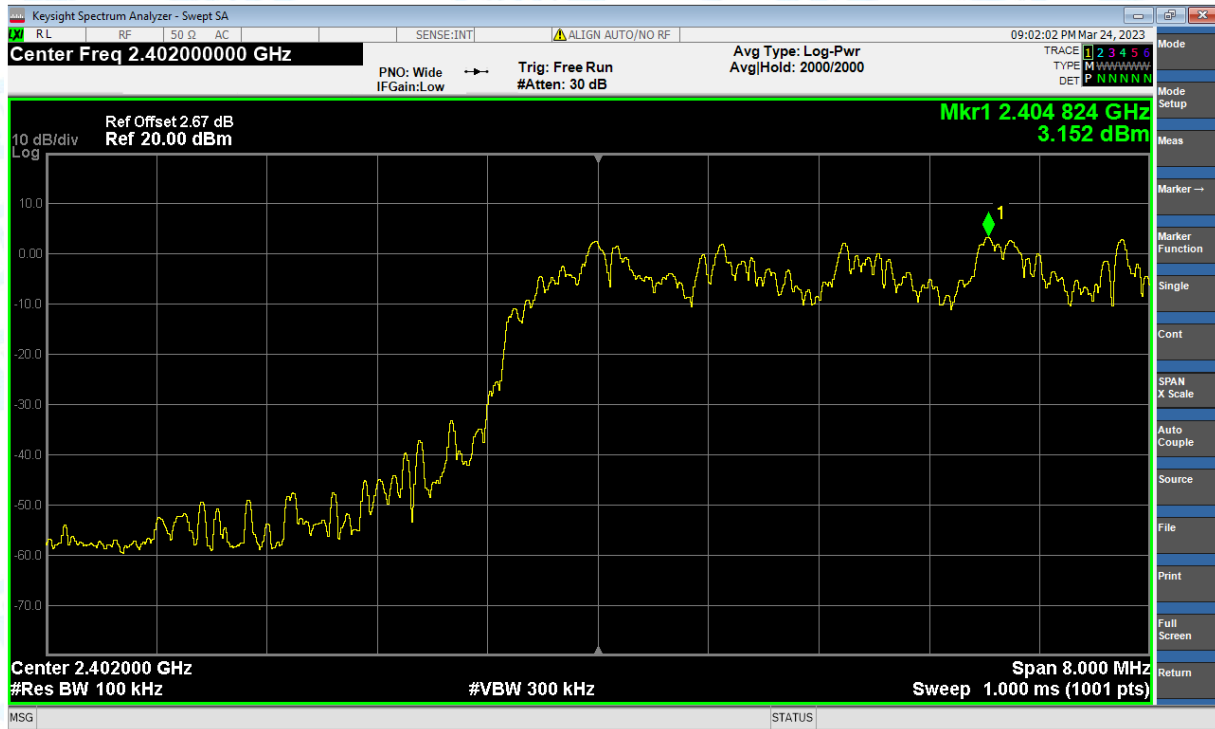
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



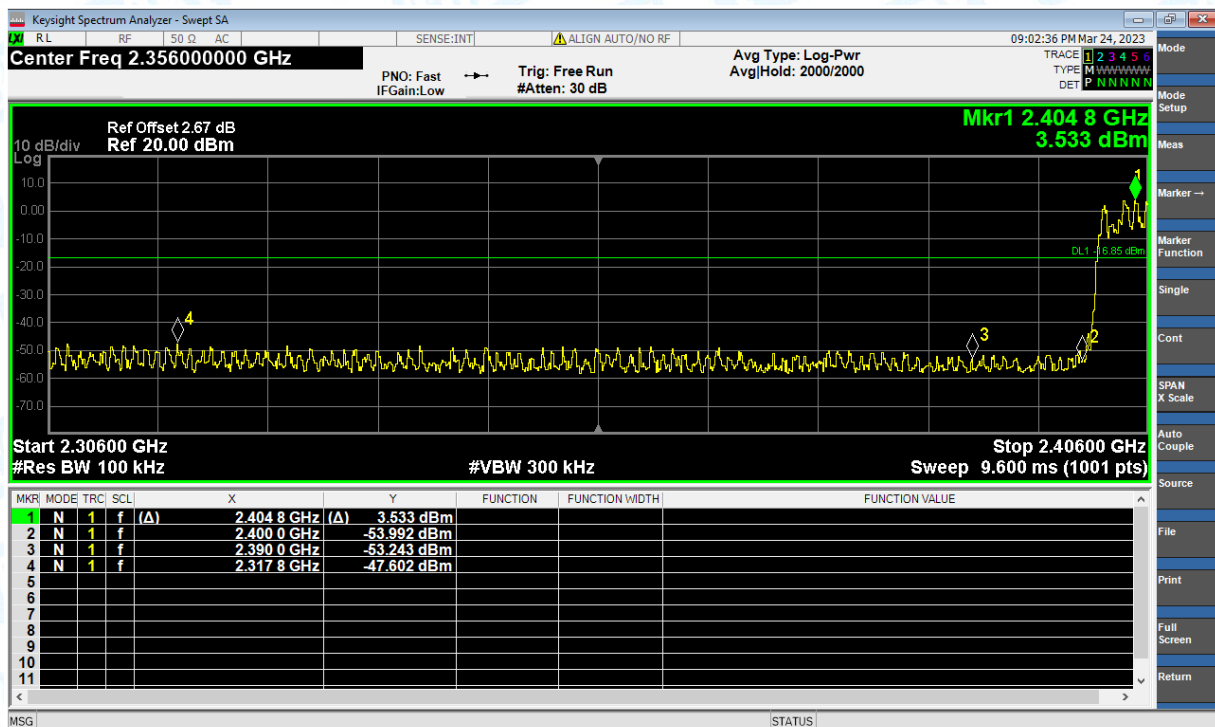
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



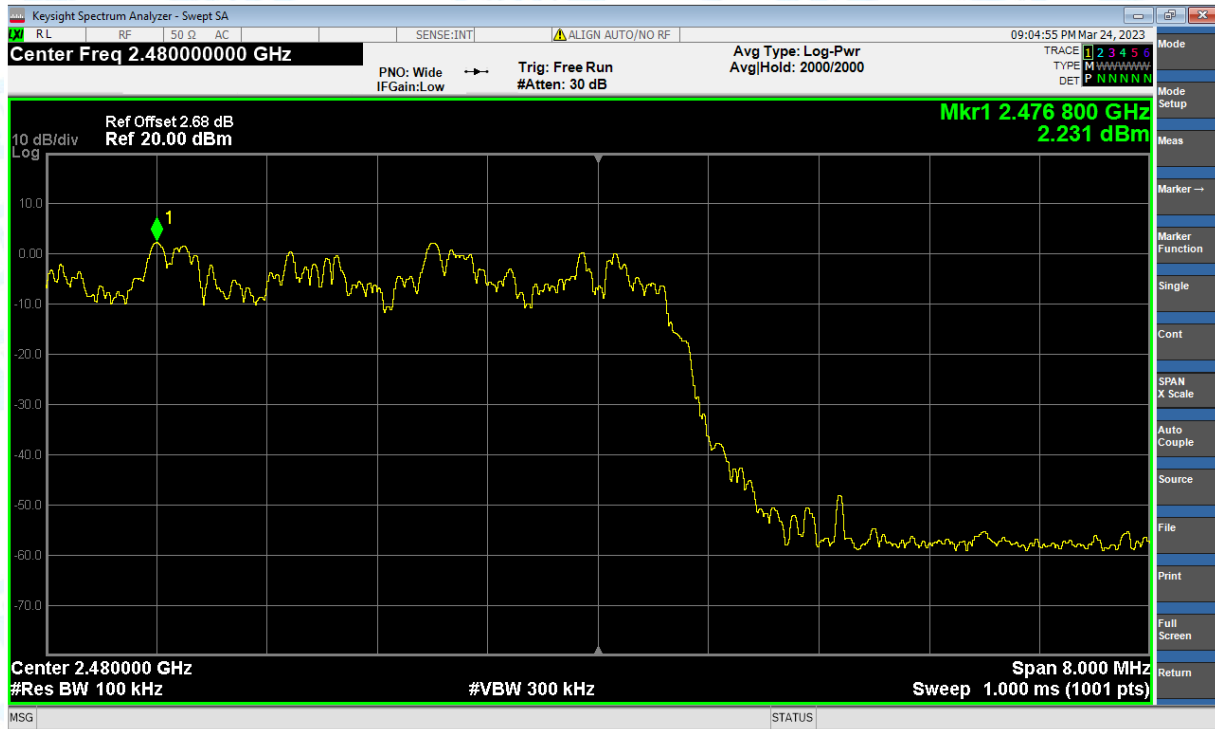
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



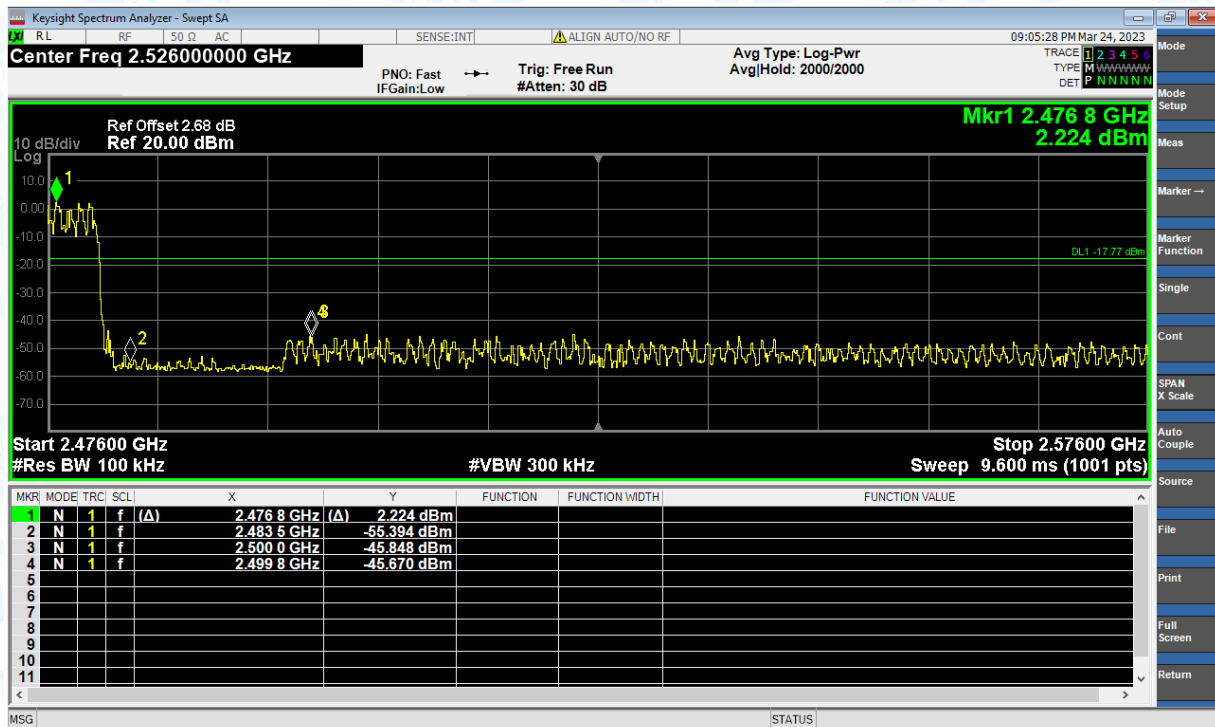
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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

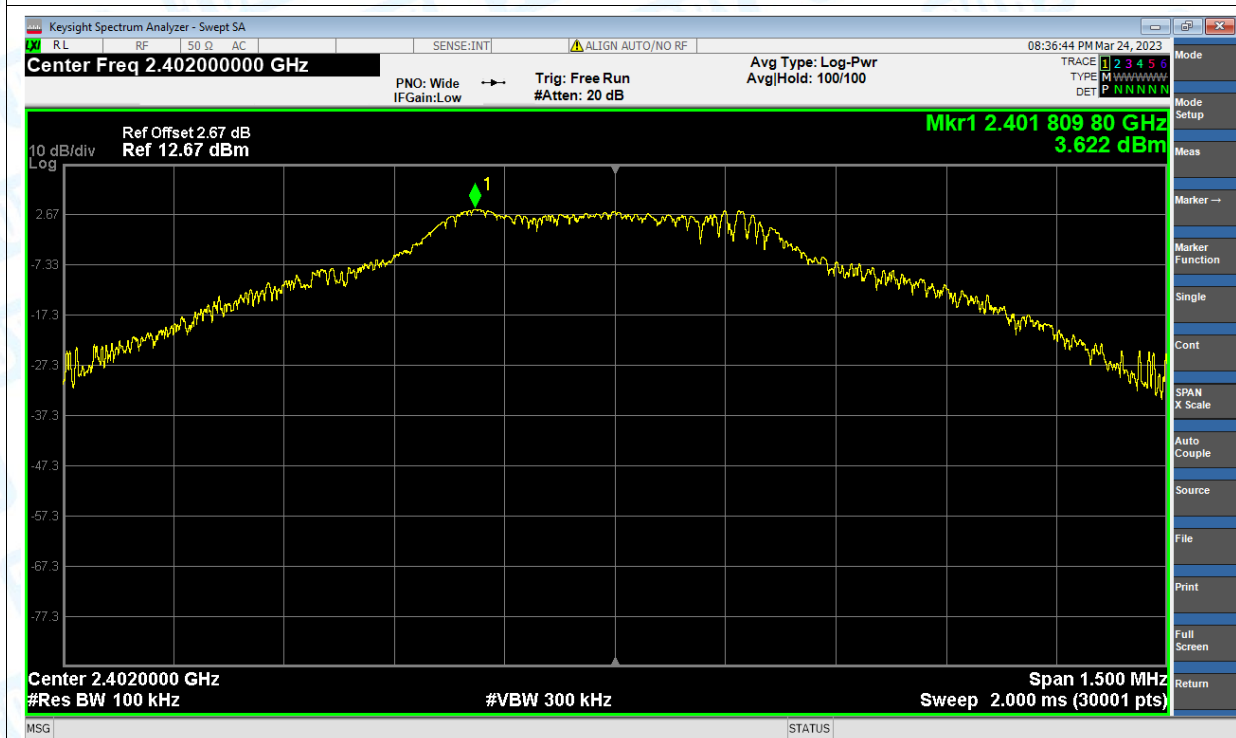


7. Conducted RF Spurious Emission

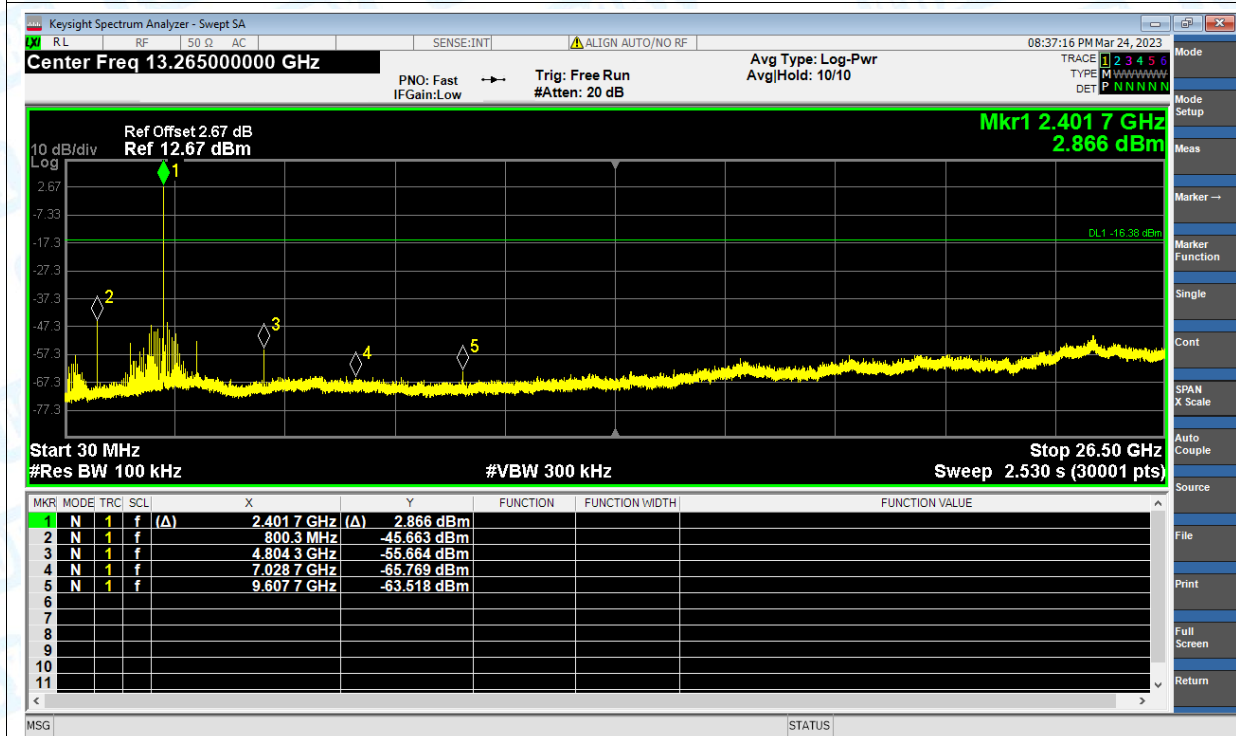
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-49.28	-20	Pass
NVNT	1-DH1	2441	Ant1	-50.1	-20	Pass
NVNT	1-DH1	2480	Ant1	-49.1	-20	Pass
NVNT	2-DH1	2402	Ant1	-51.04	-20	Pass
NVNT	2-DH1	2441	Ant1	-49.89	-20	Pass
NVNT	2-DH1	2480	Ant1	-48.24	-20	Pass
NVNT	3-DH1	2402	Ant1	-51.77	-20	Pass
NVNT	3-DH1	2441	Ant1	-50.93	-20	Pass
NVNT	3-DH1	2480	Ant1	-51.53	-20	Pass

Test Graphs

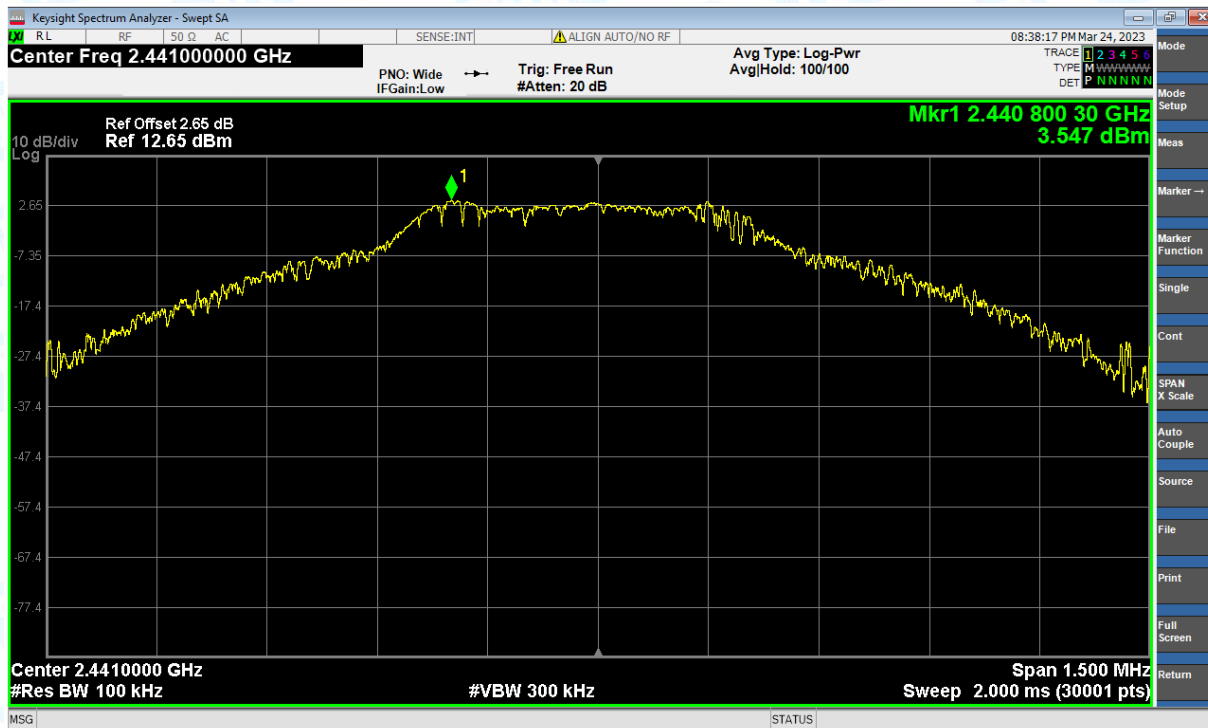
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



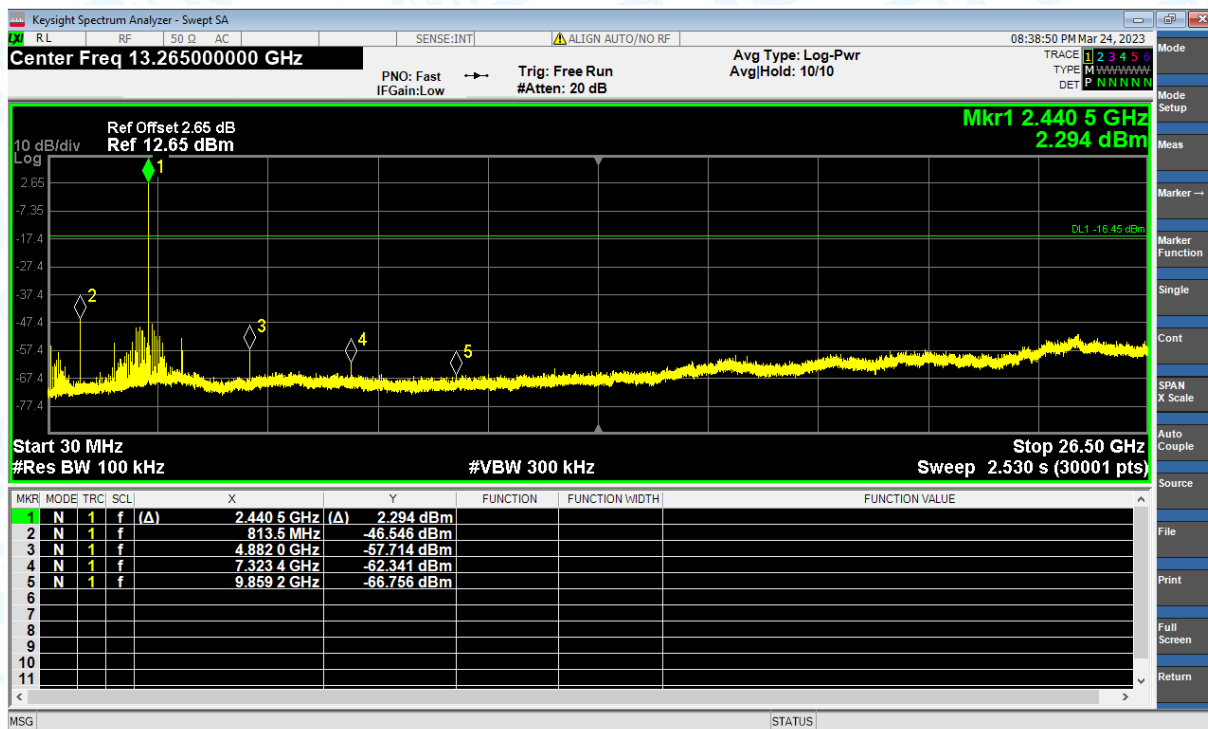
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



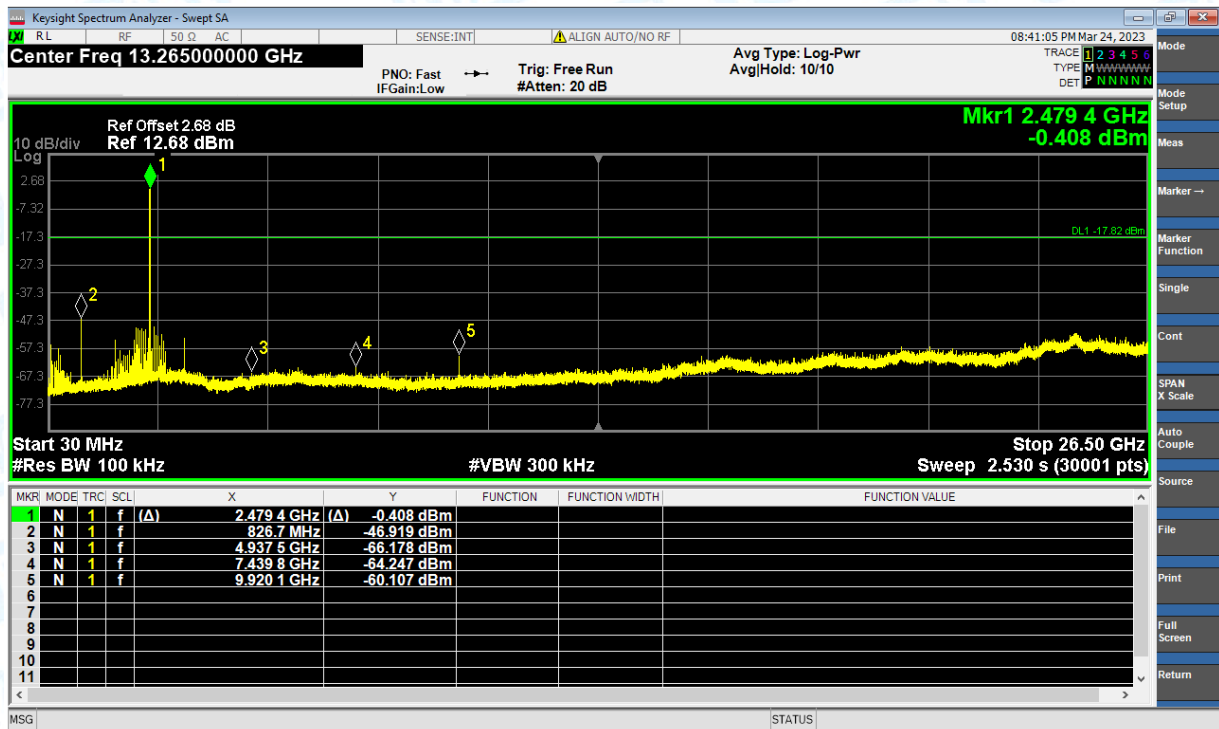
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



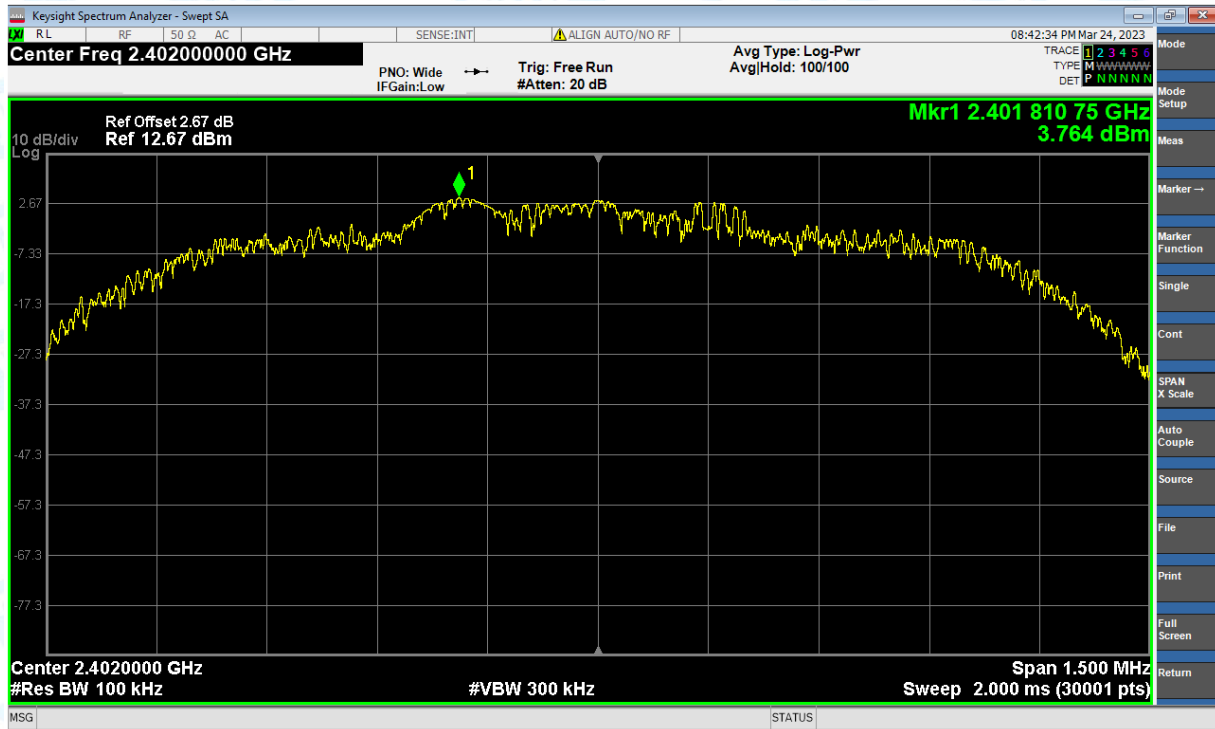
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



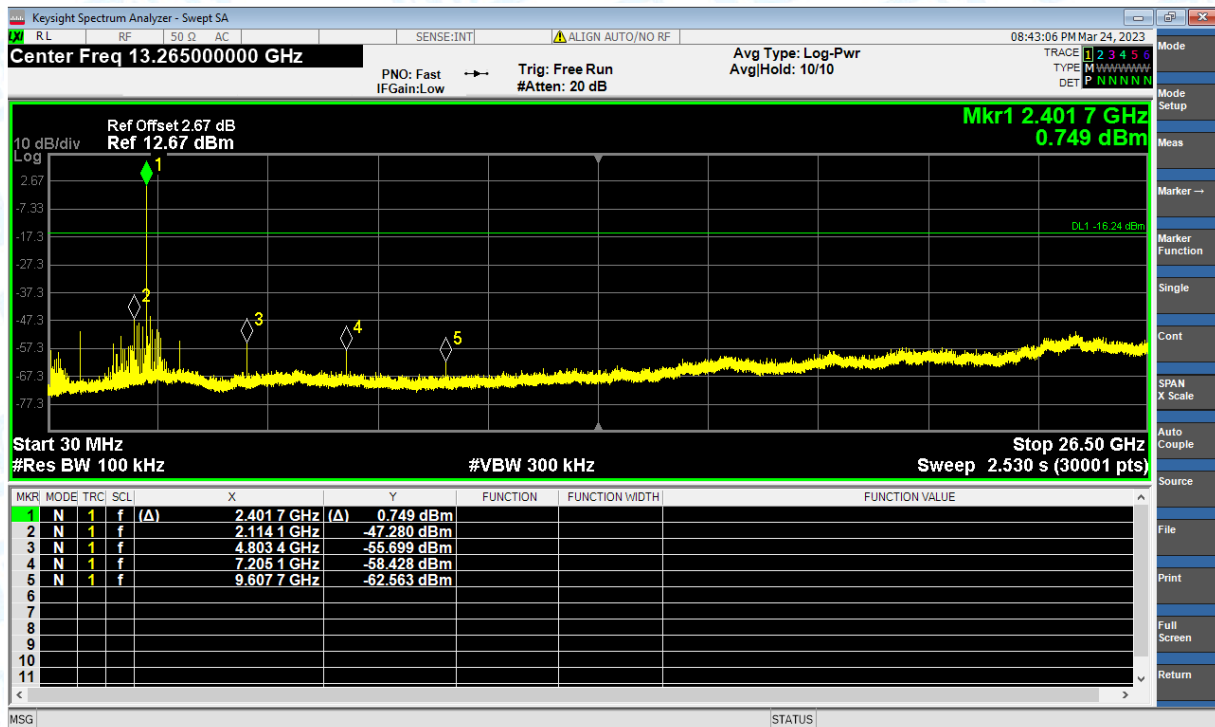
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



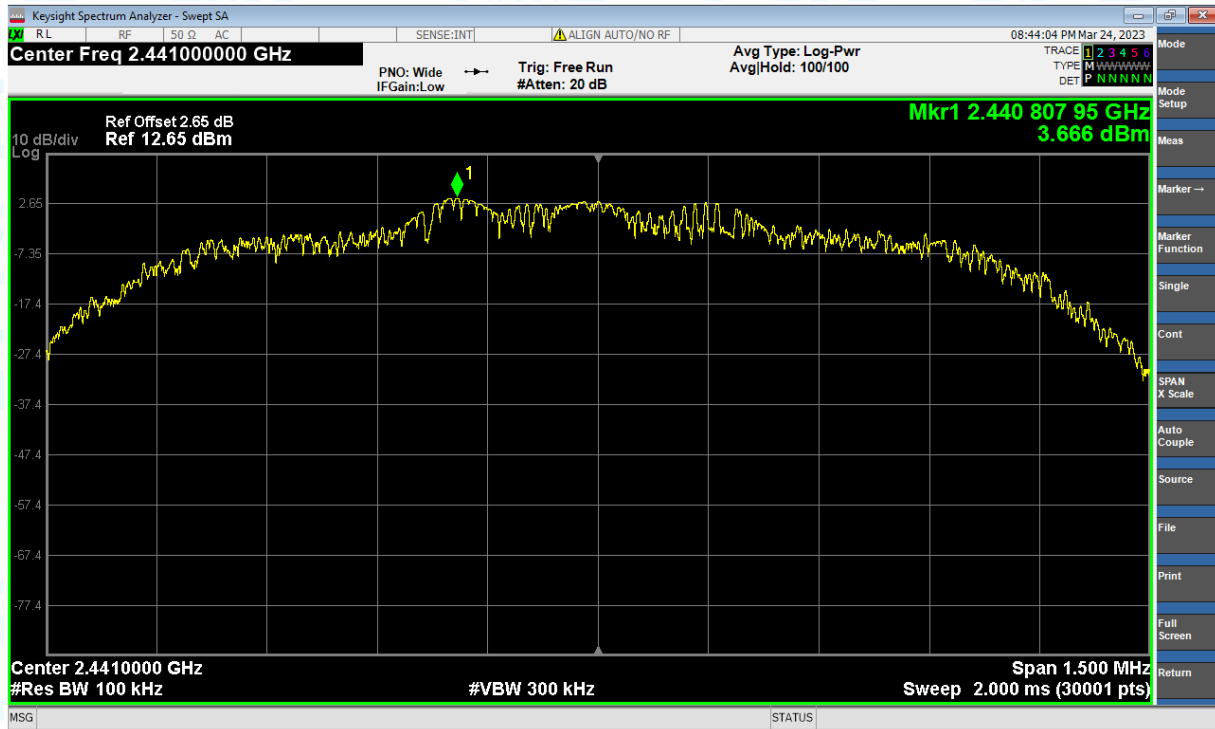
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



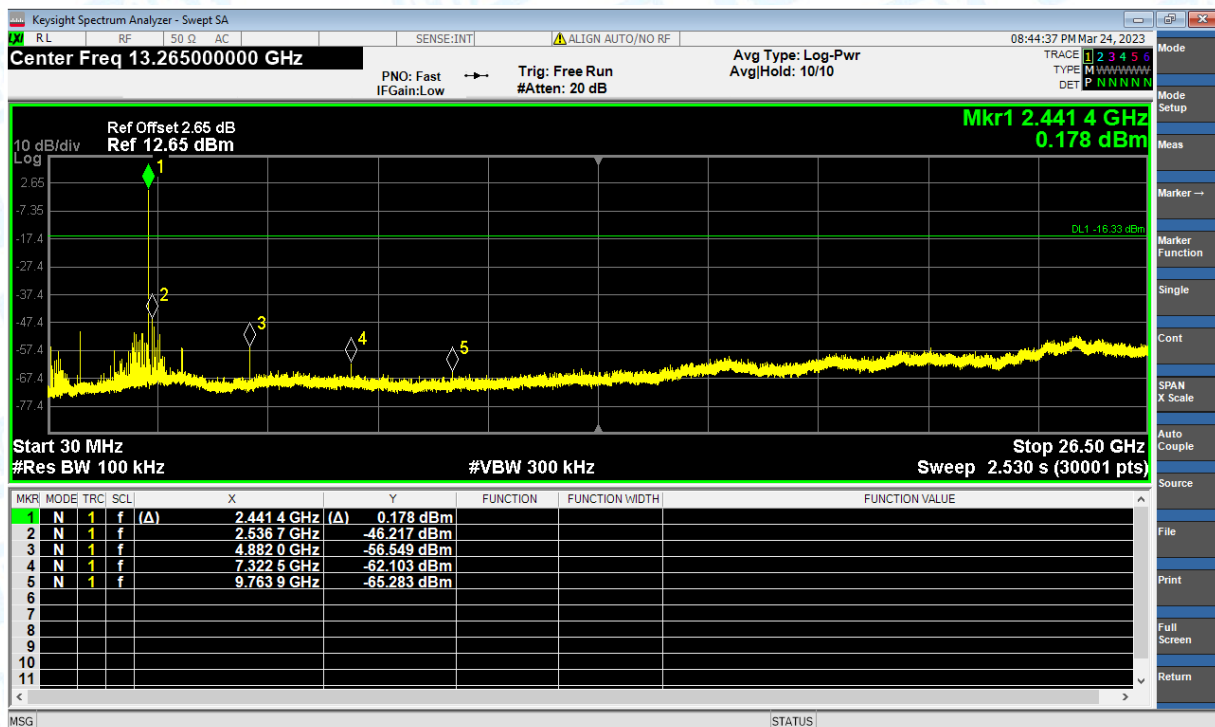
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



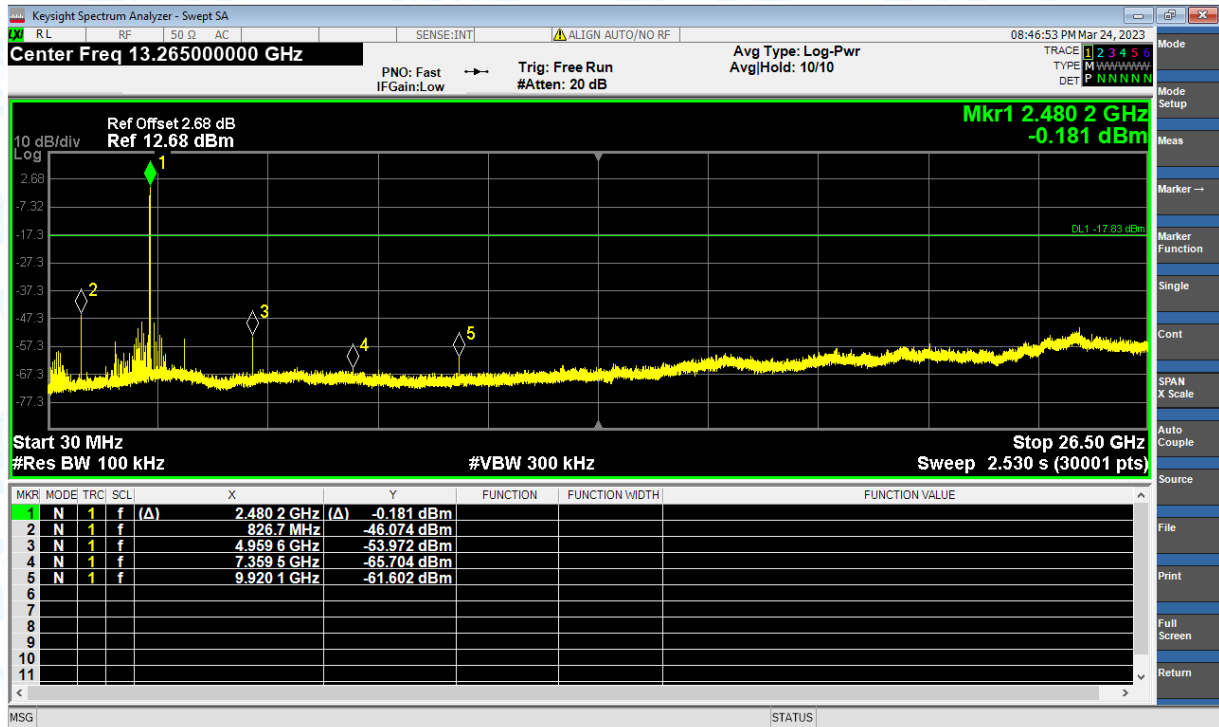
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



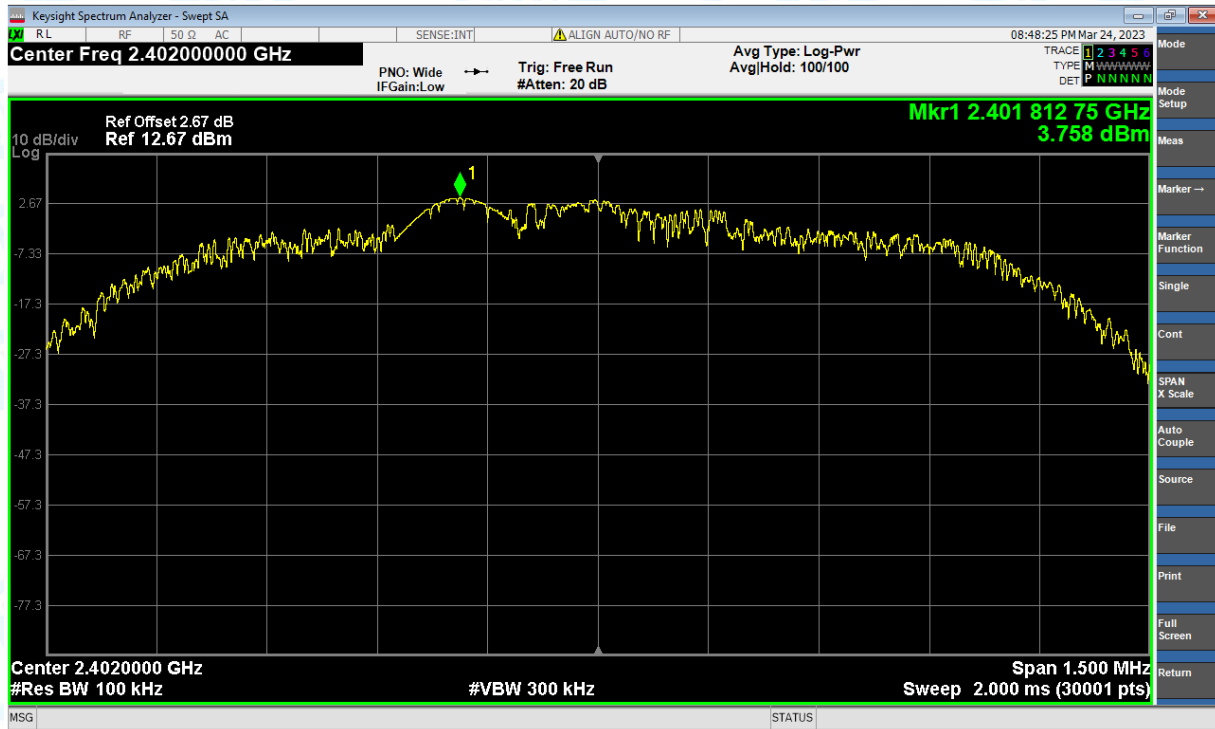
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



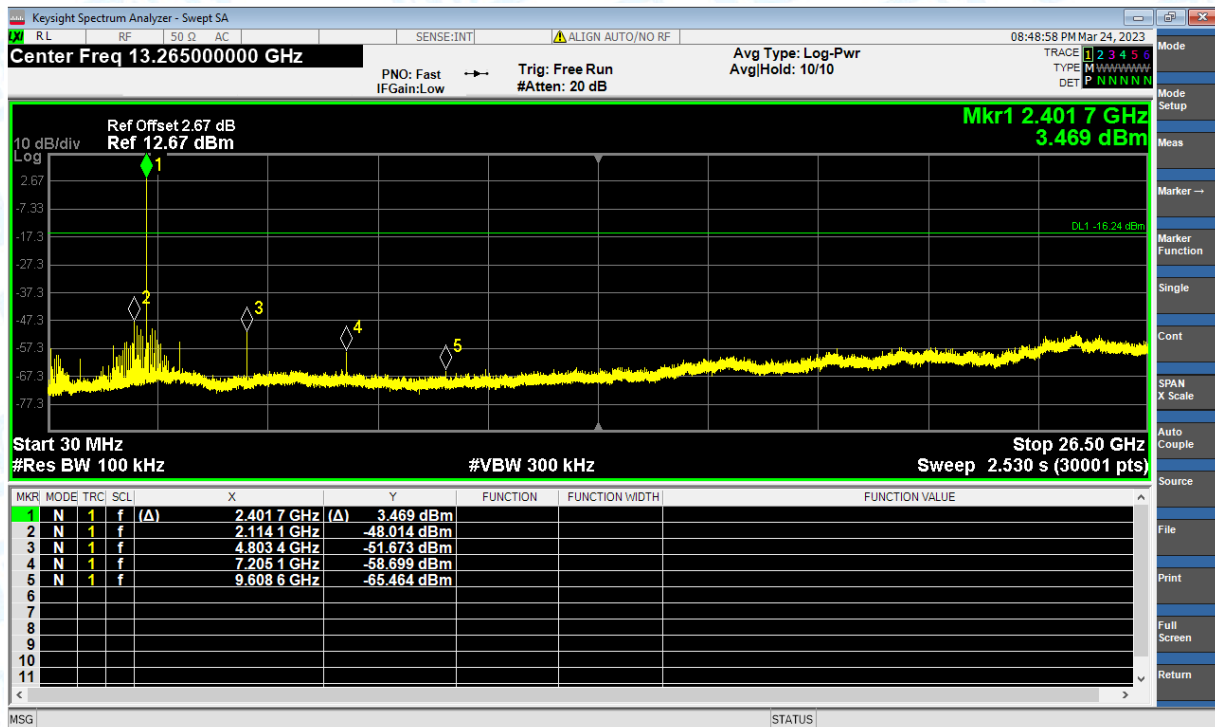
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



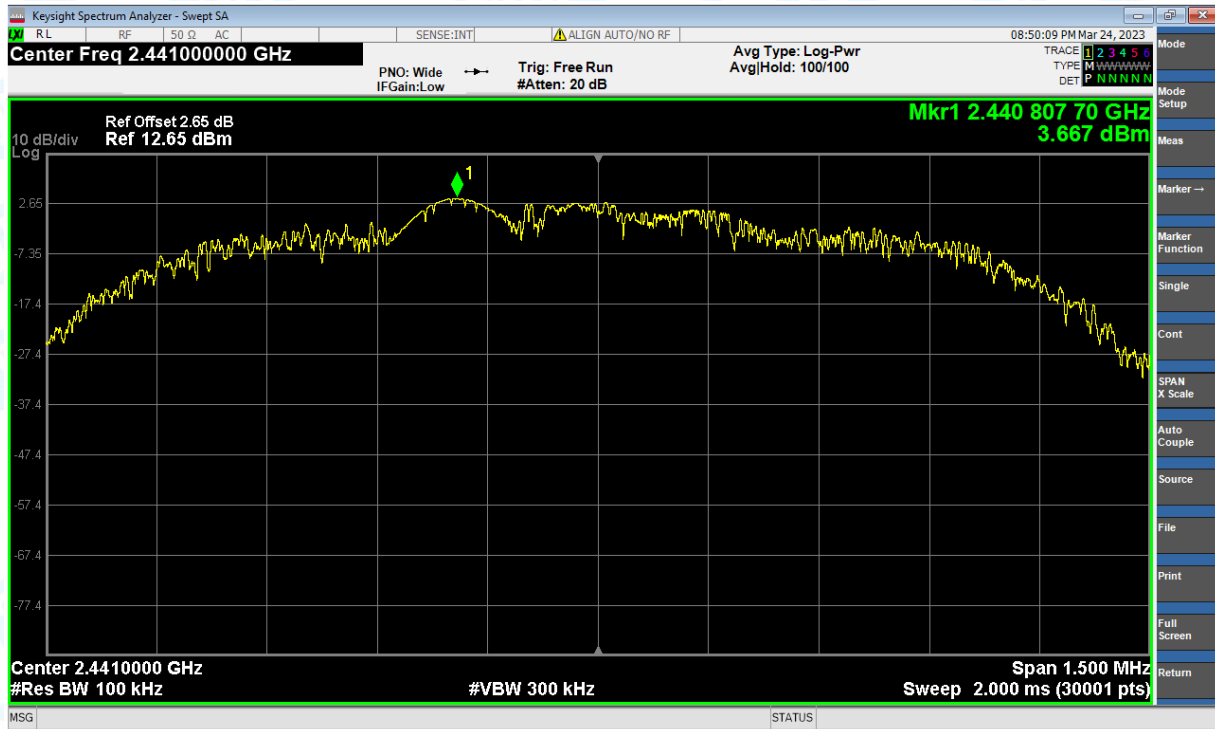
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



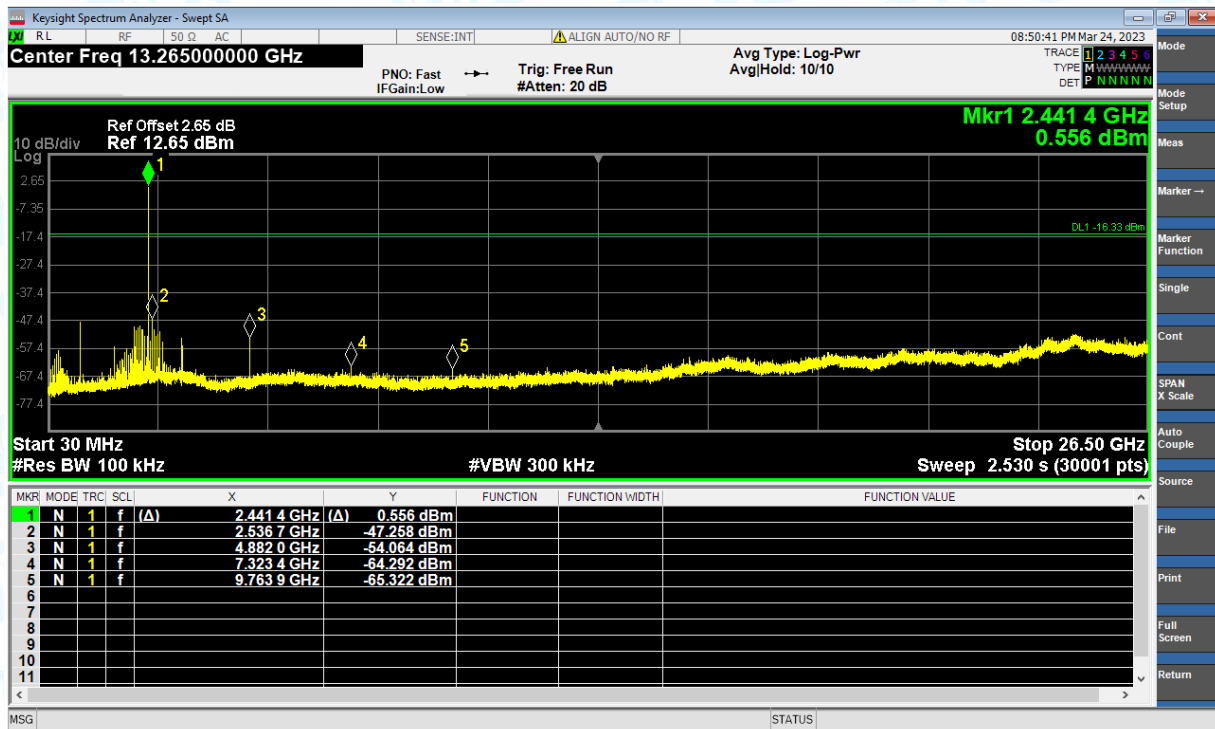
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



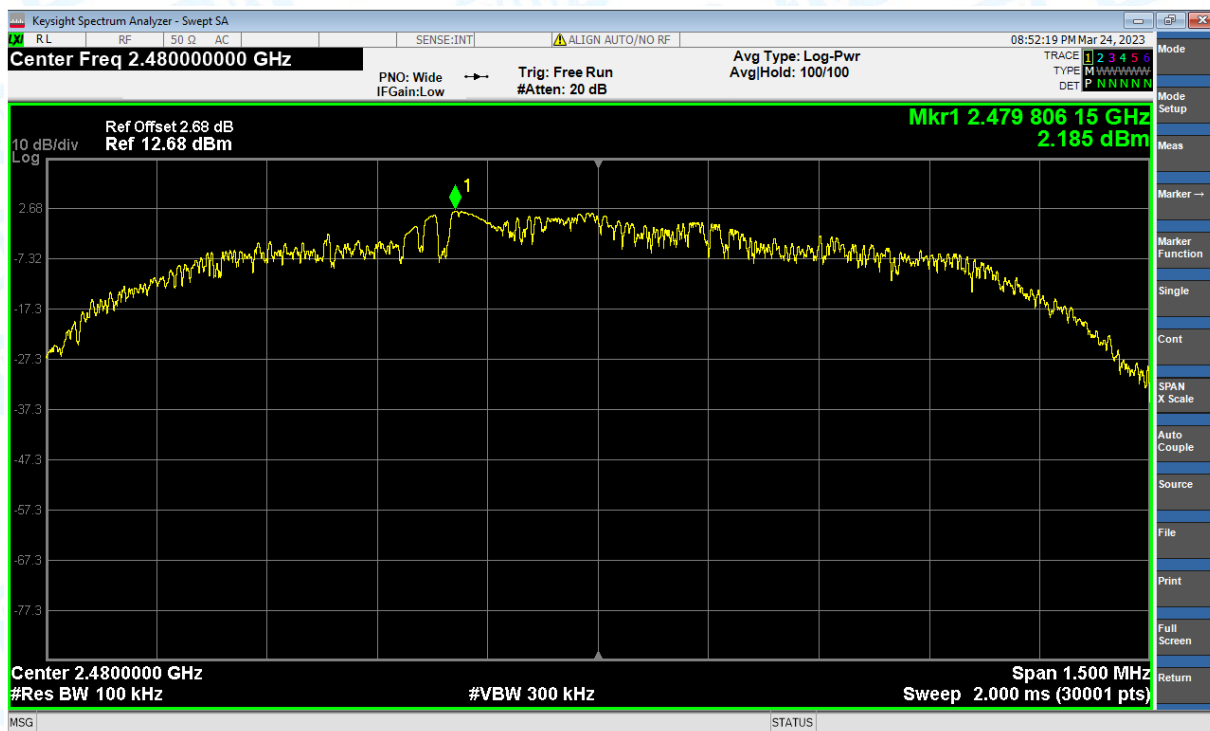
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



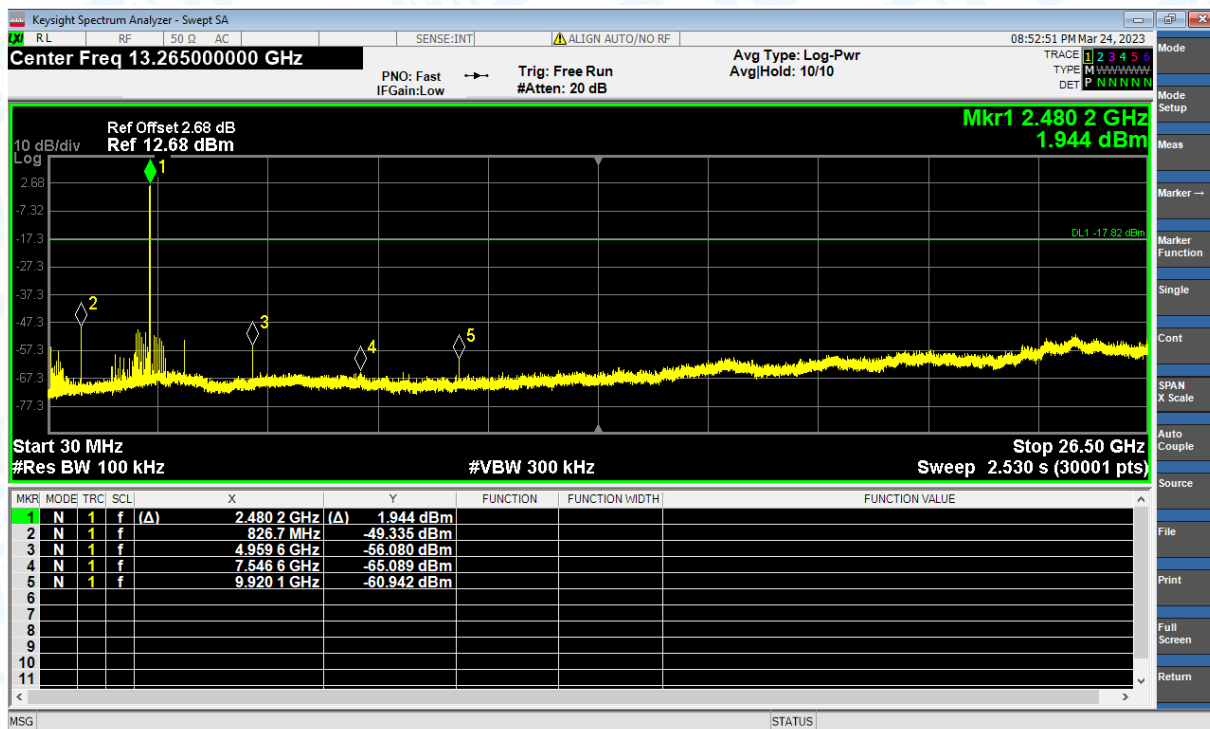
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

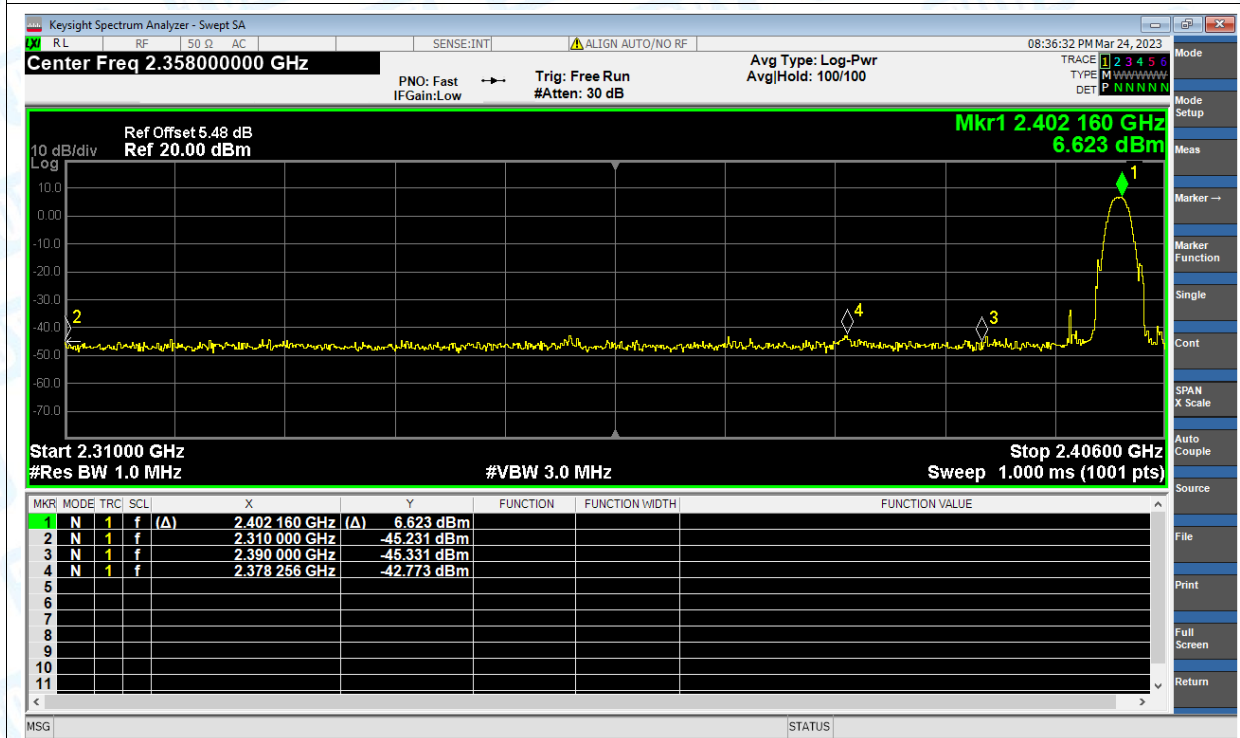


8. Restrict Band

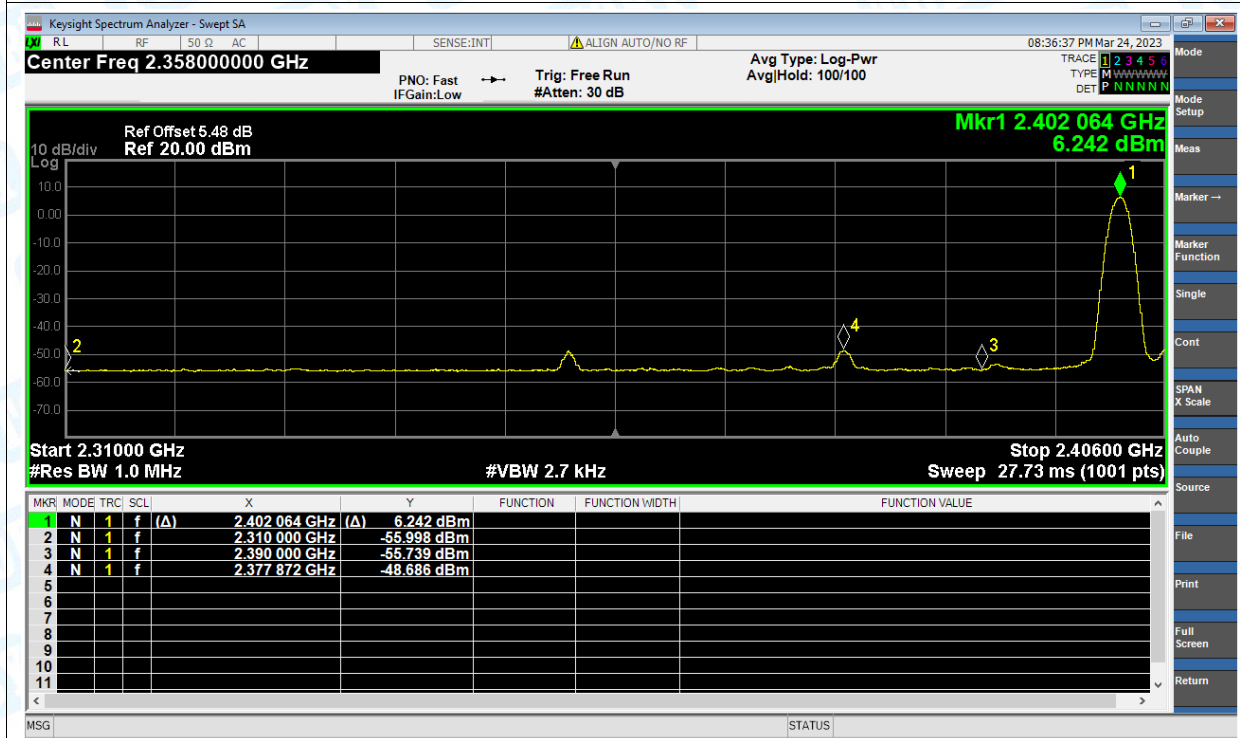
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-45.23	2.0	52.03	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56	2.0	41.26	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2378.256	-42.77	2.0	54.49	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2377.872	-48.69	2.0	48.57	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.63	2.0	49.63	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.61	2.0	41.65	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-44.42	2.0	52.84	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.49	2.0	42.77	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.704	-39.59	2.0	57.67	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2485.288	-53.8	2.0	43.46	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.66	2.0	50.6	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.51	2.0	41.75	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-46.99	2.0	50.27	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-55.91	2.0	41.35	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2377.968	-43.22	2.0	54.04	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2377.968	-49.08	2.0	48.18	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.04	2.0	50.22	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.18	2.0	42.08	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-45.15	2.0	52.11	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.77	2.0	42.49	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.656	-42.6	2.0	54.66	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2485.24	-54.12	2.0	43.14	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.35	2.0	50.91	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.42	2.0	41.84	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-46.53	2.0	50.73	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.9	2.0	41.36	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2357.232	-42.86	2.0	54.4	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2377.68	-49.67	2.0	47.59	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.71	2.0	50.55	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.42	2.0	41.84	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-46.75	2.0	50.51	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-54.46	2.0	42.8	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2490.088	-43.77	2.0	53.49	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2485.288	-54.22	2.0	43.04	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-45.79	2.0	51.47	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.22	2.0	42.04	Average	54	Pass

Test Graphs

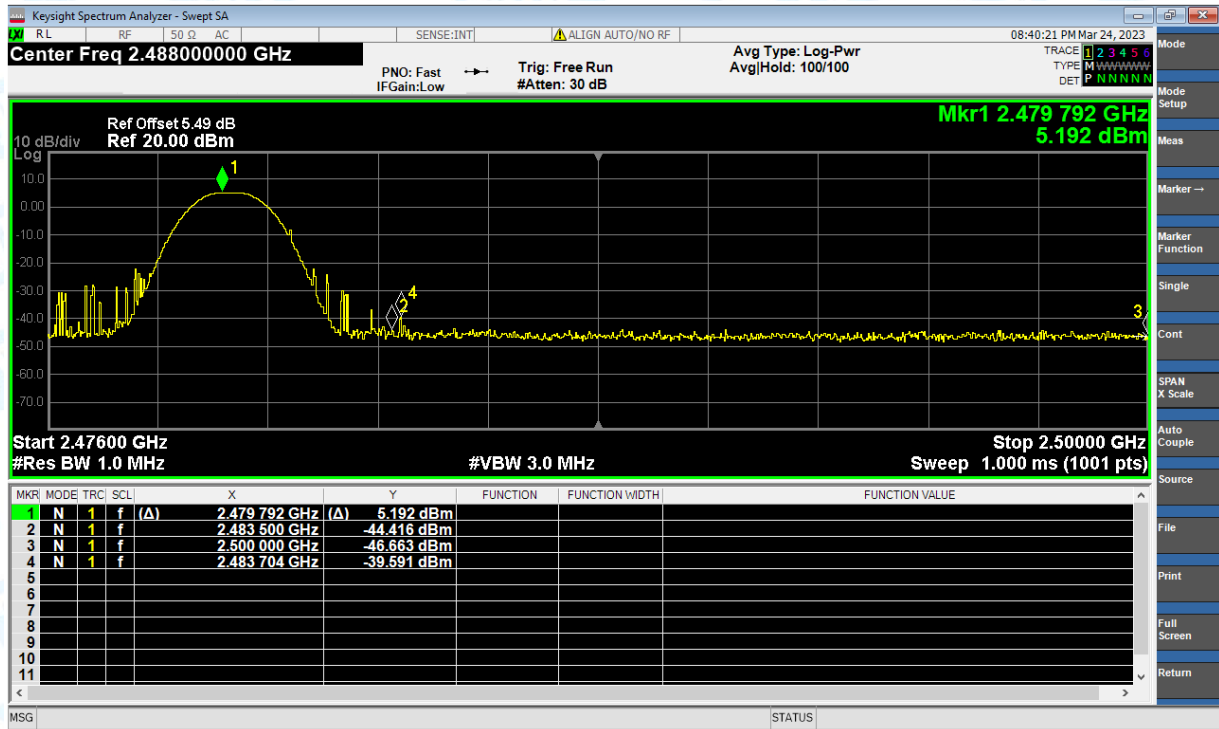
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



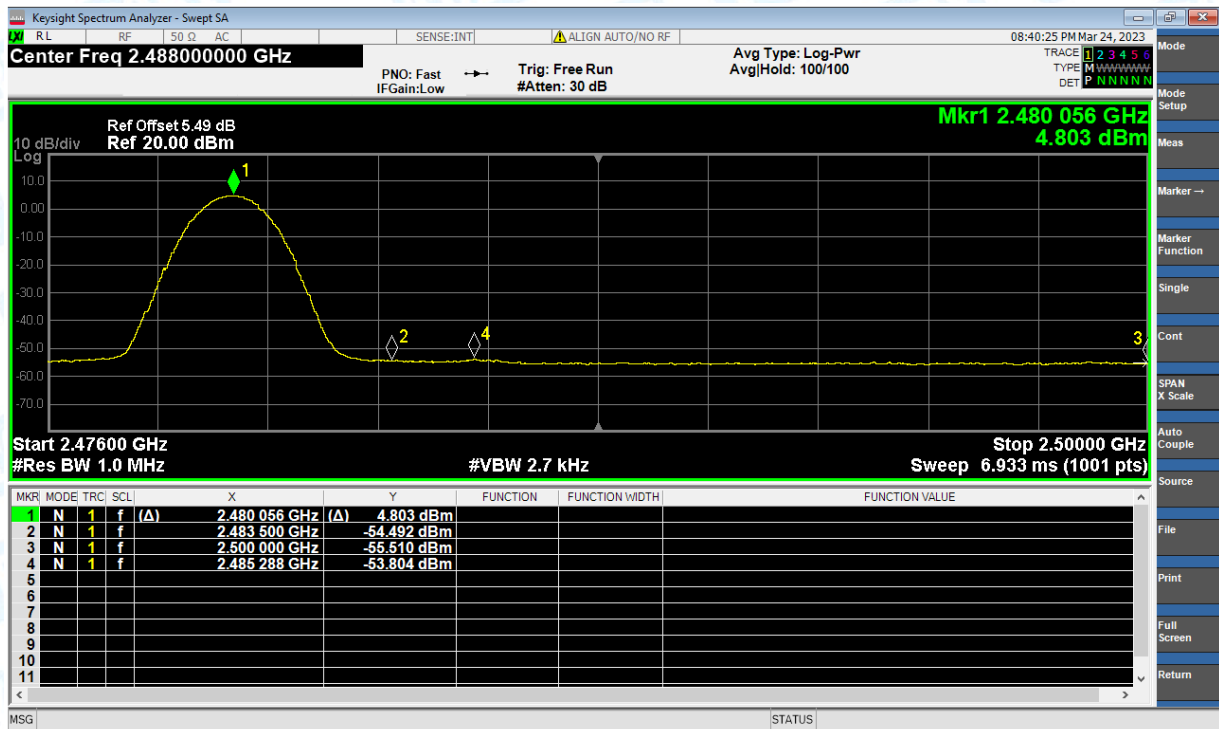
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



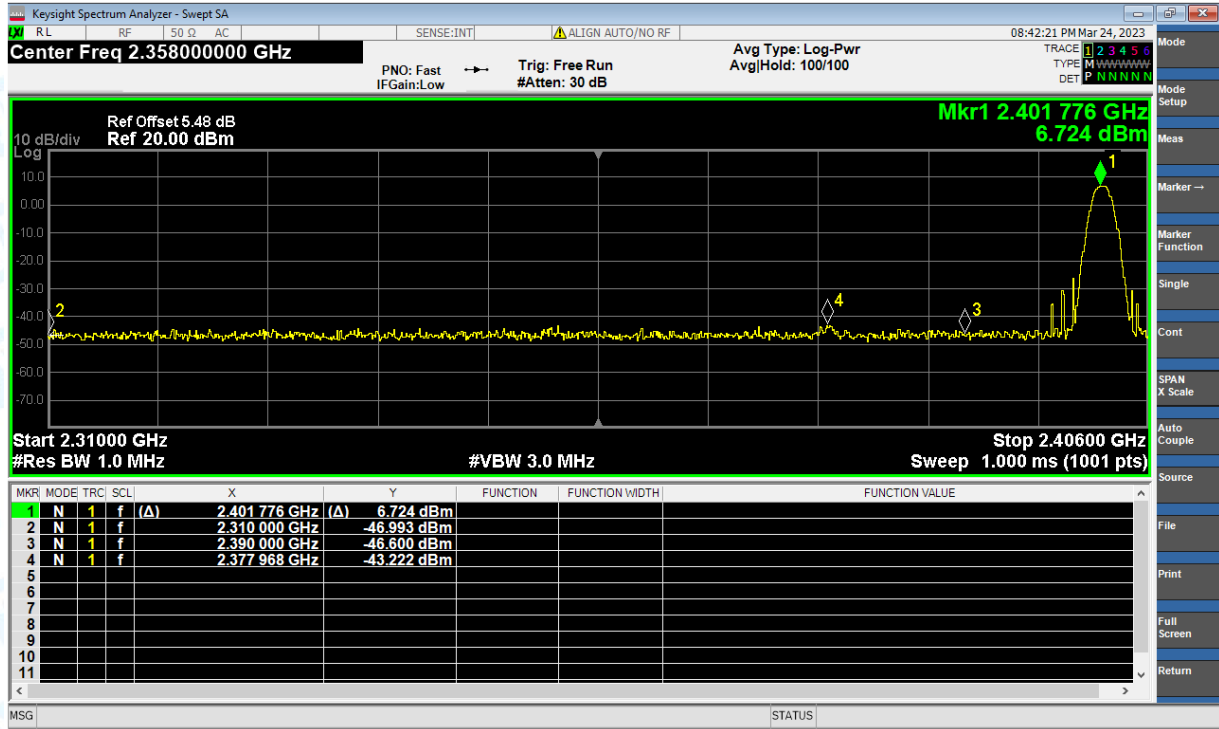
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



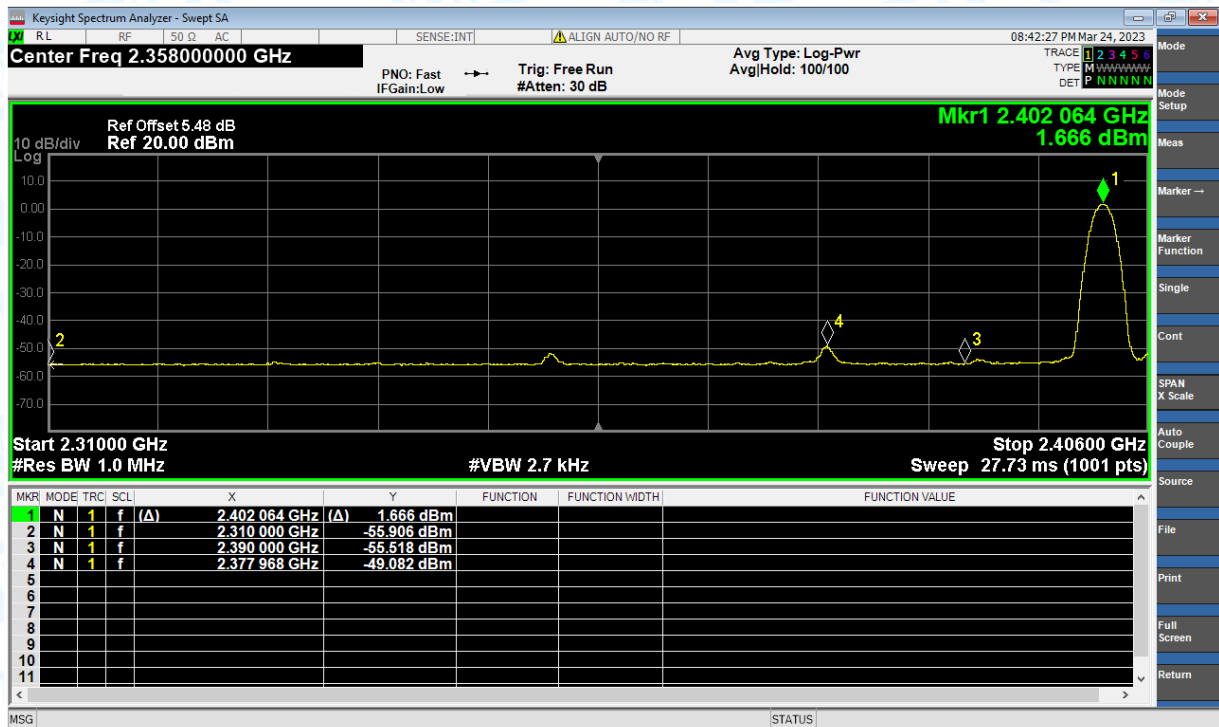
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



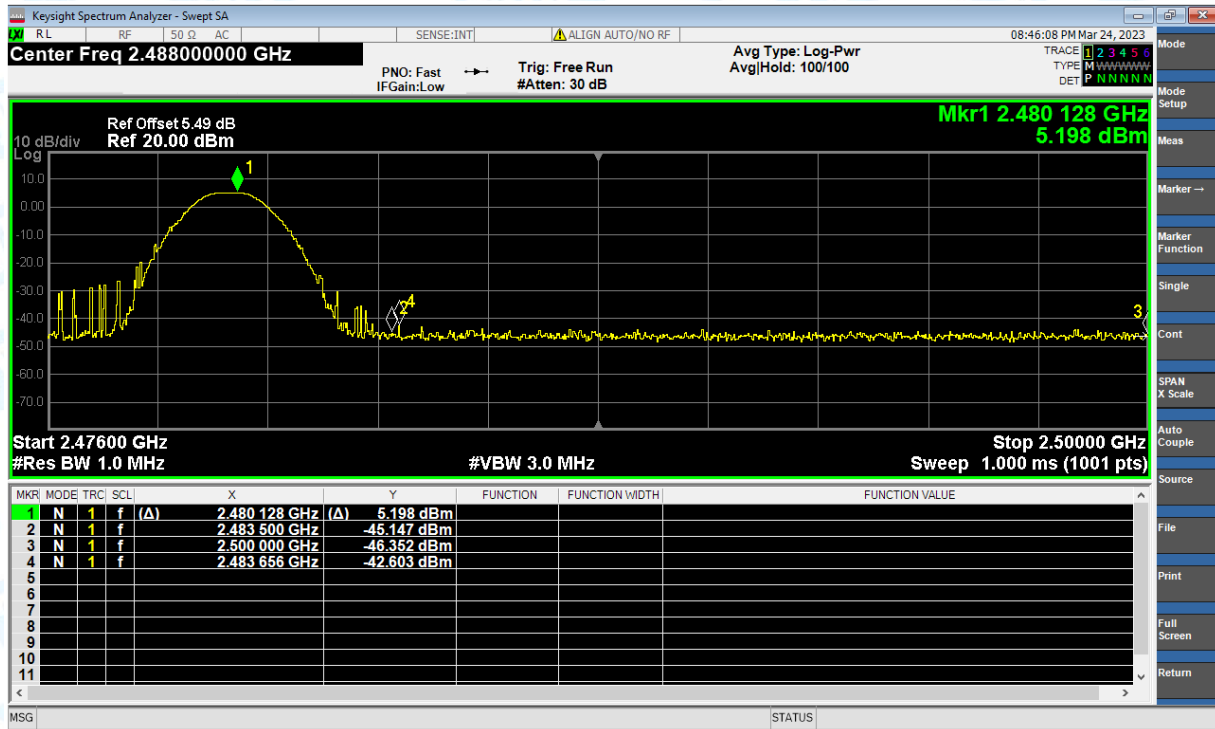
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



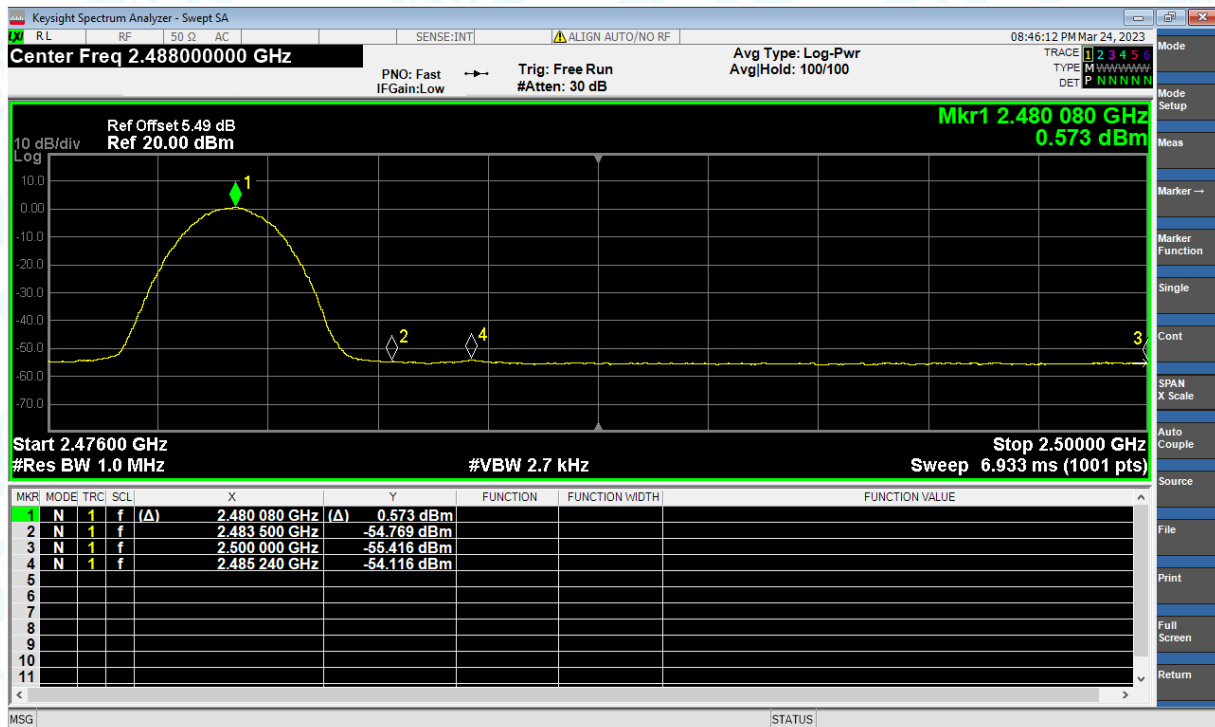
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



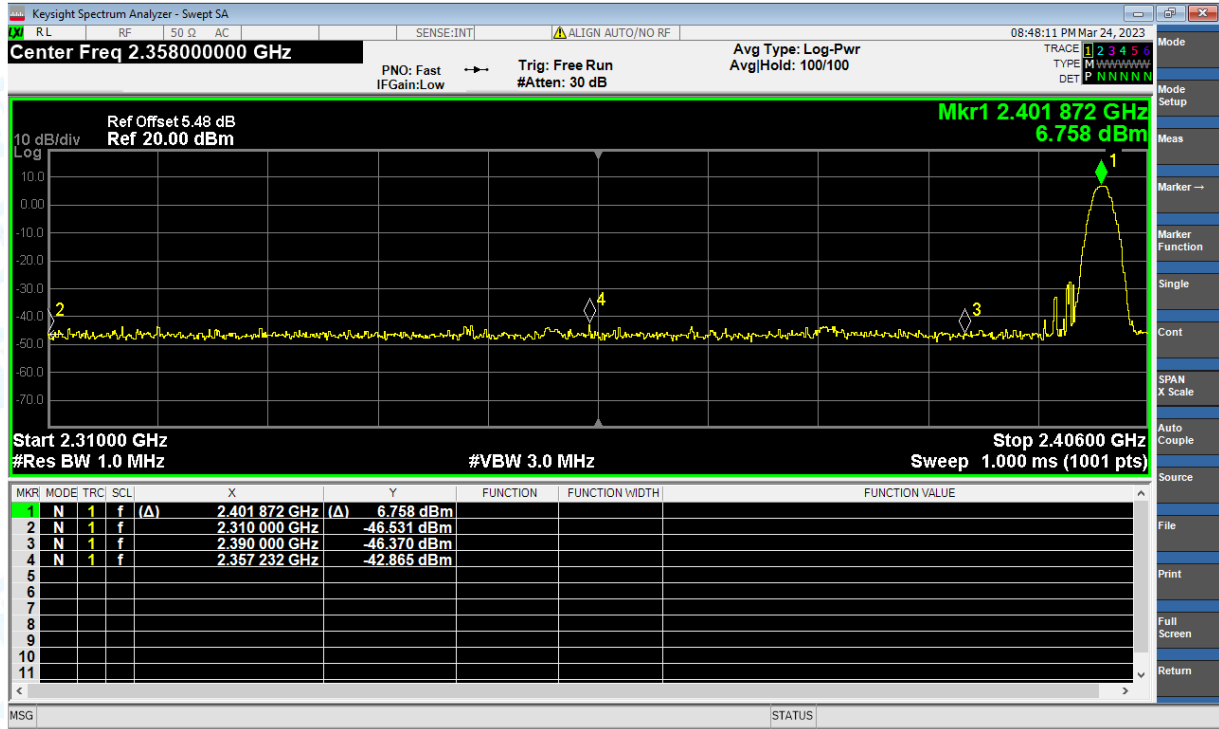
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



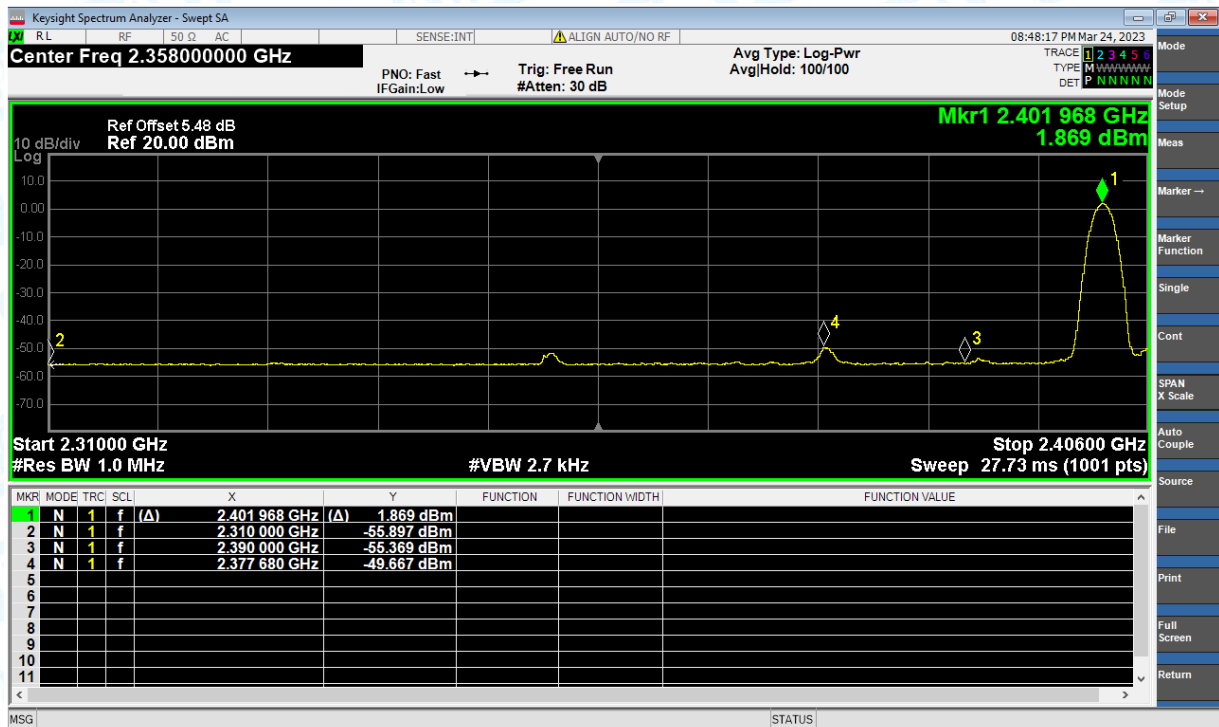
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



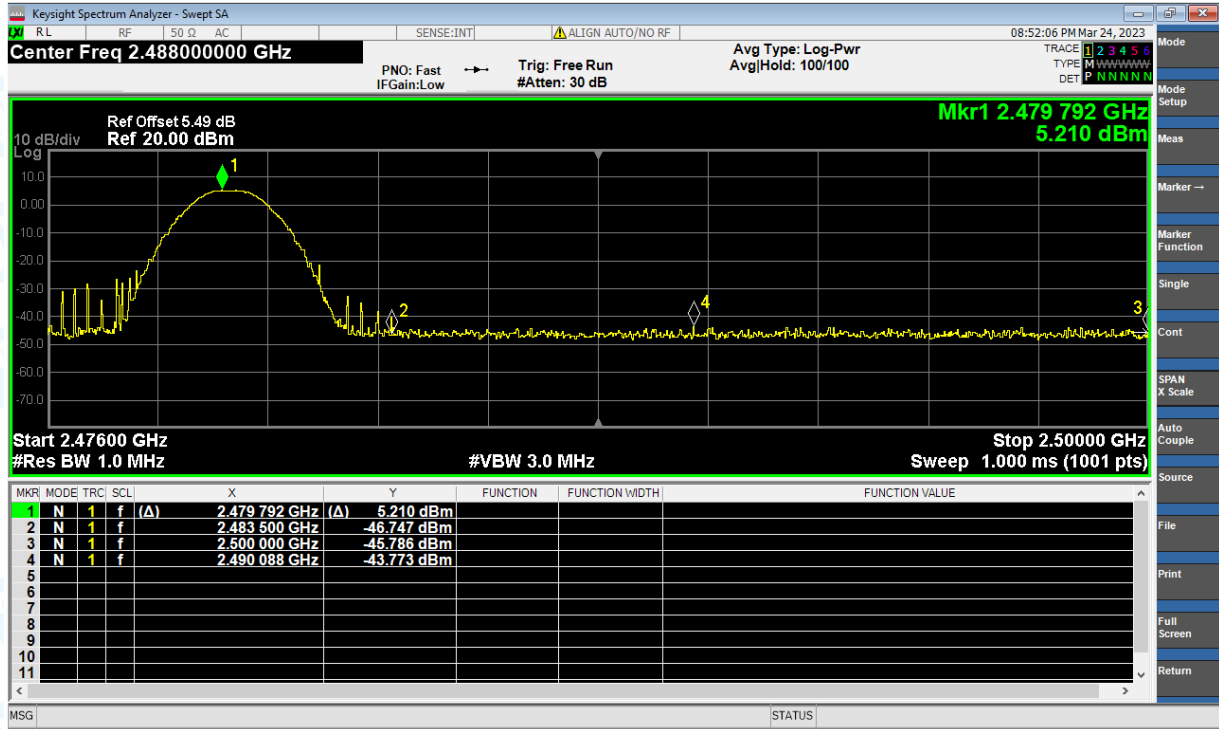
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



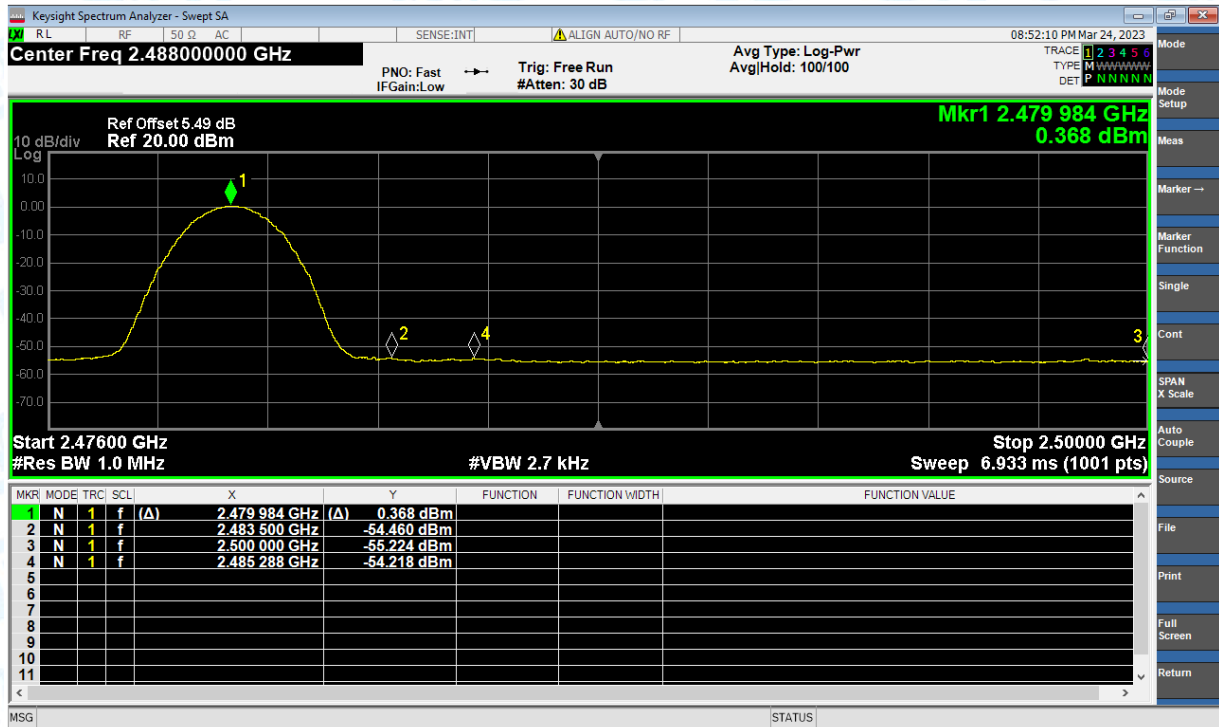
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

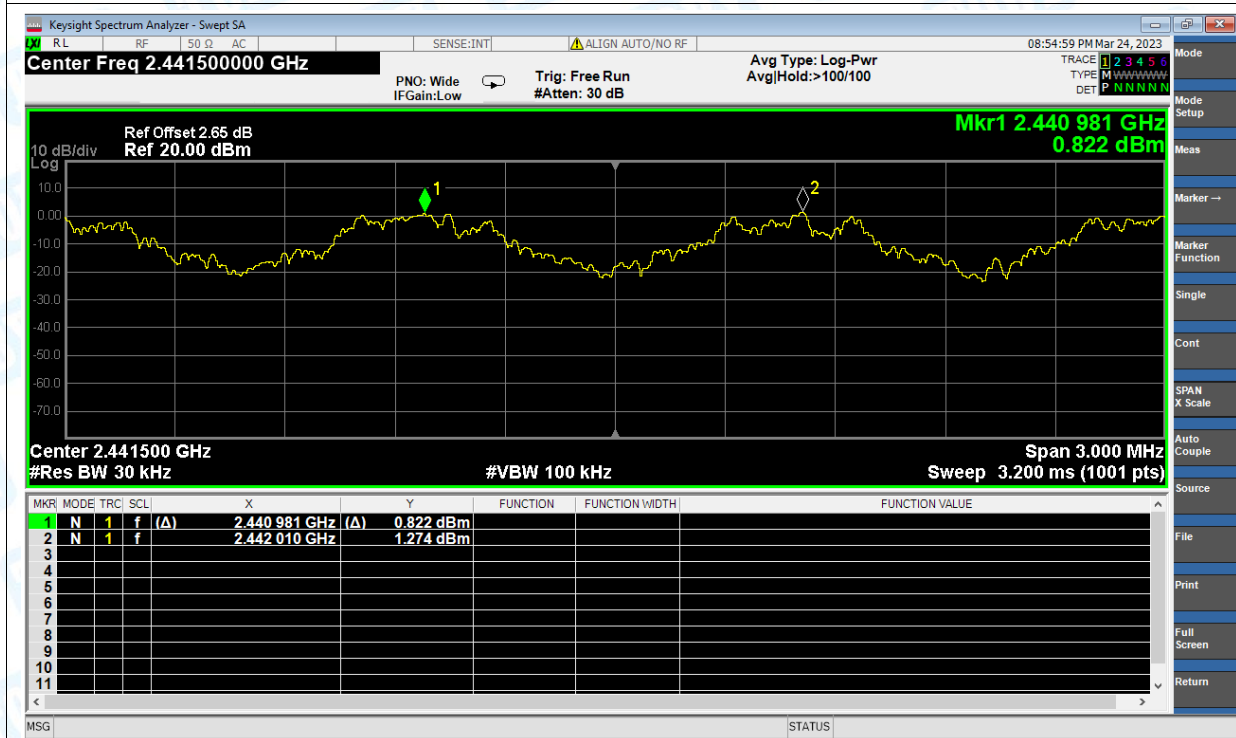


9. Carrier Frequencies Separation

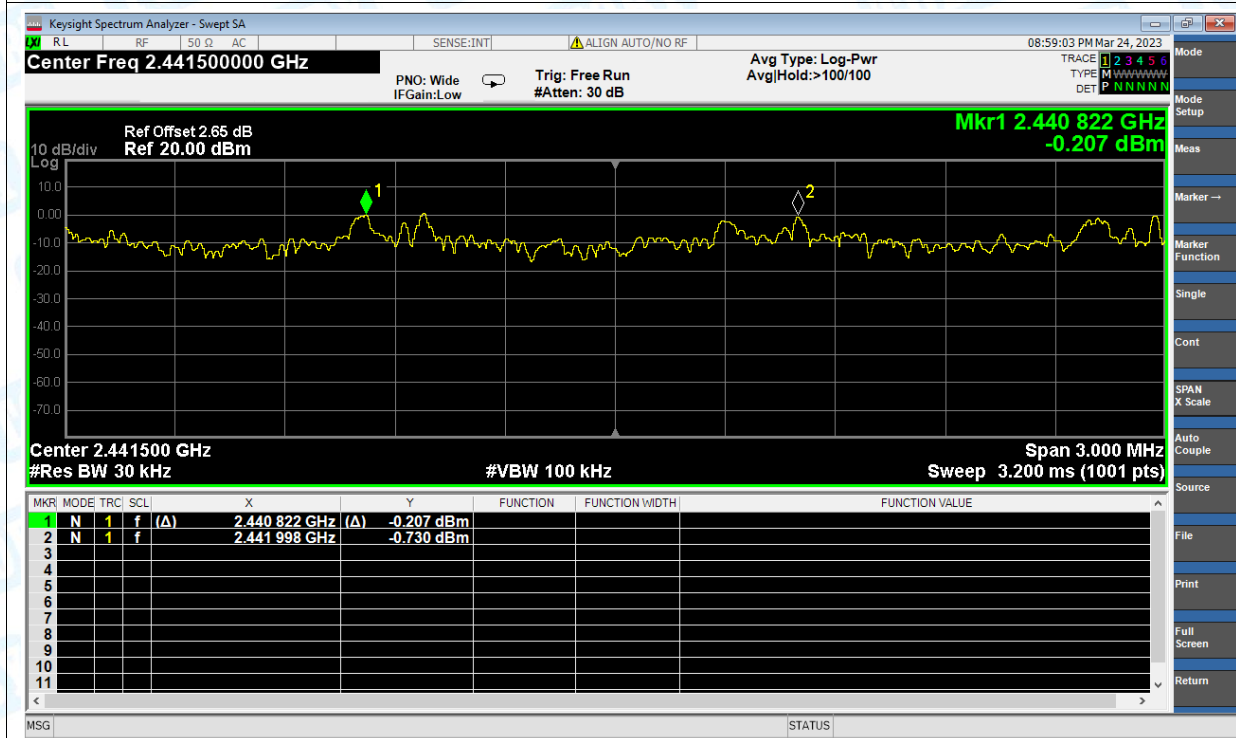
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.981	2442.01	1.029	0.673	Pass
NVNT	2-DH1	Ant1	2440.822	2441.998	1.176	0.86	Pass
NVNT	3-DH1	Ant1	2440.819	2441.977	1.158	0.84	Pass

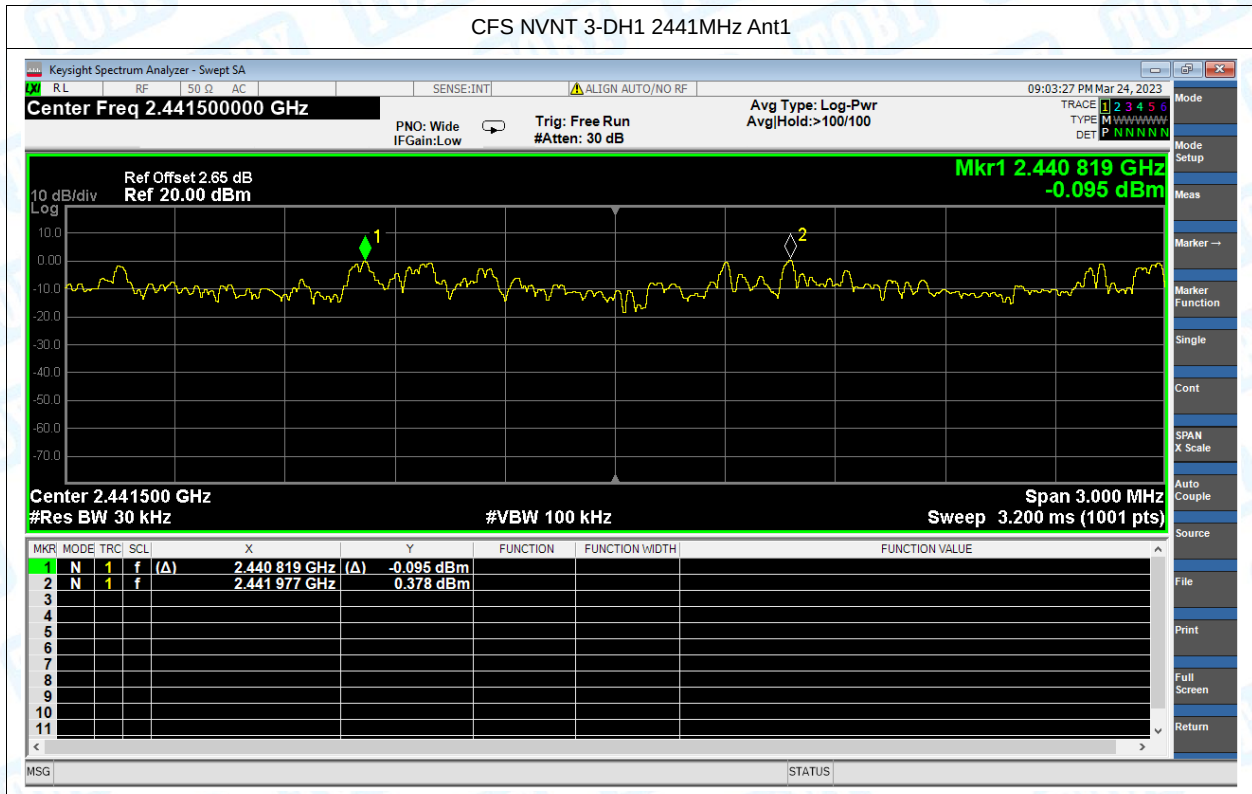
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



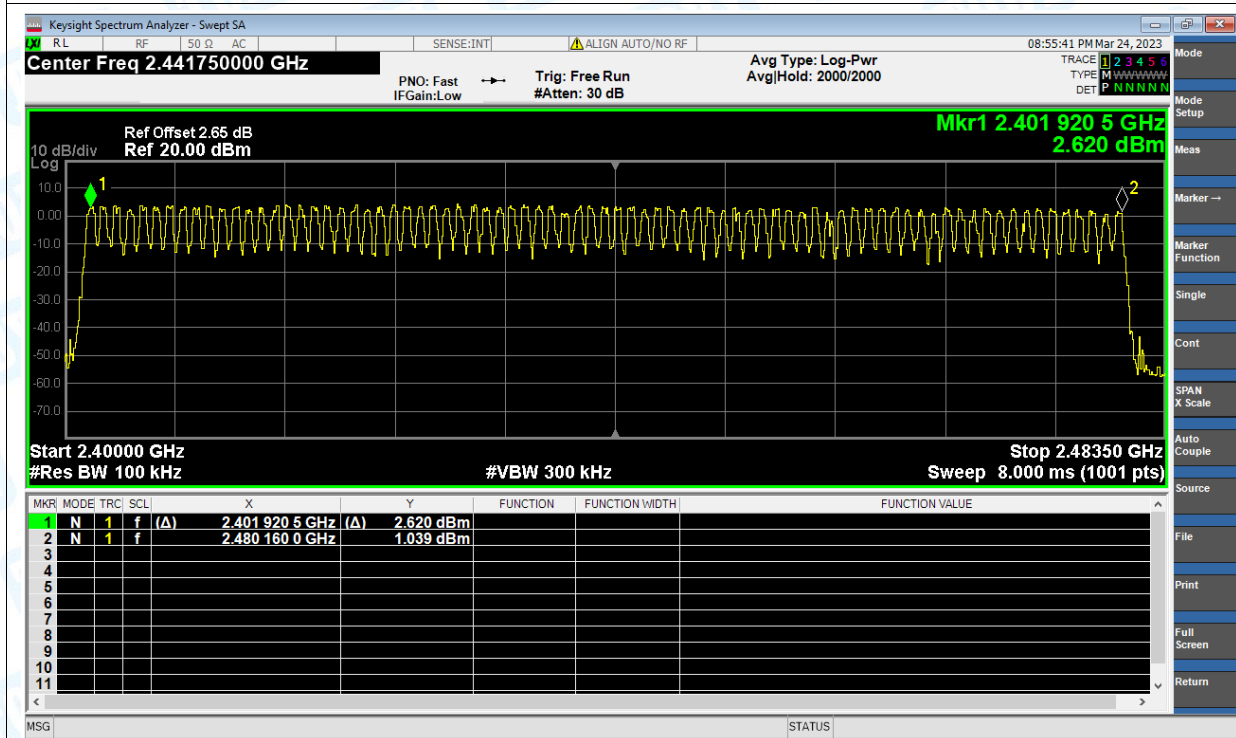


10. Number of Hopping Channel

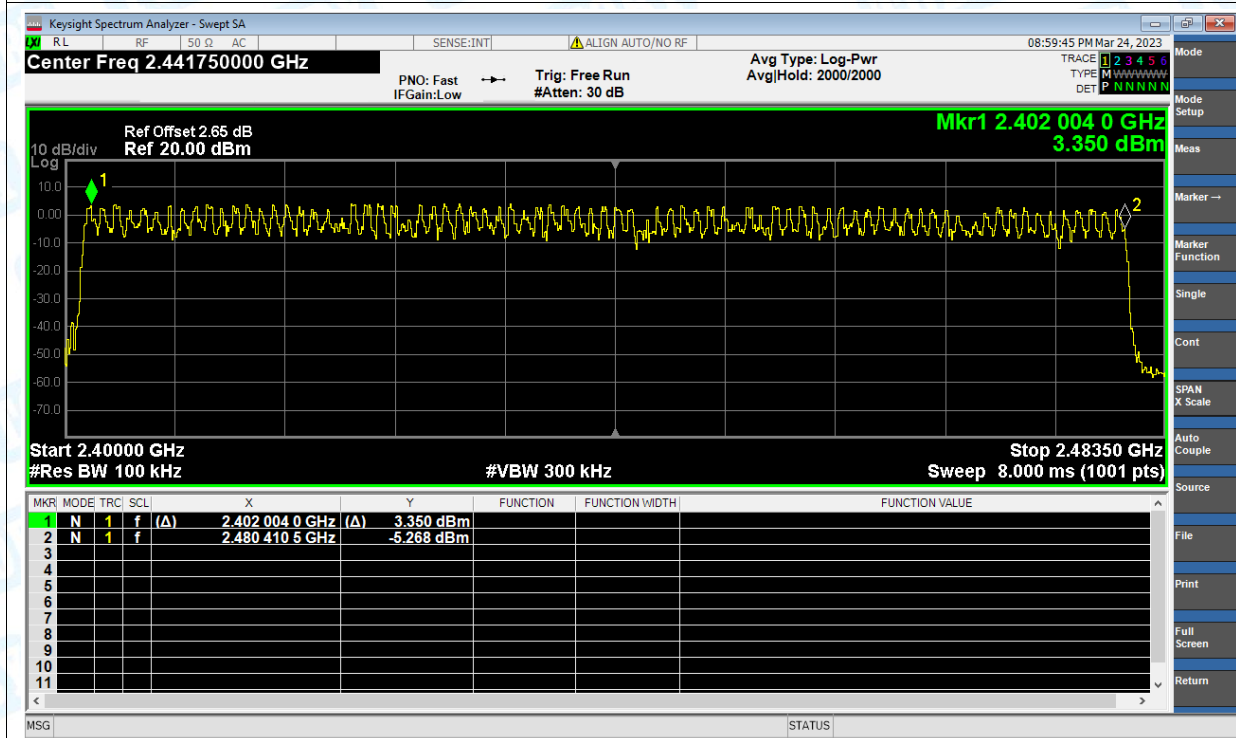
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

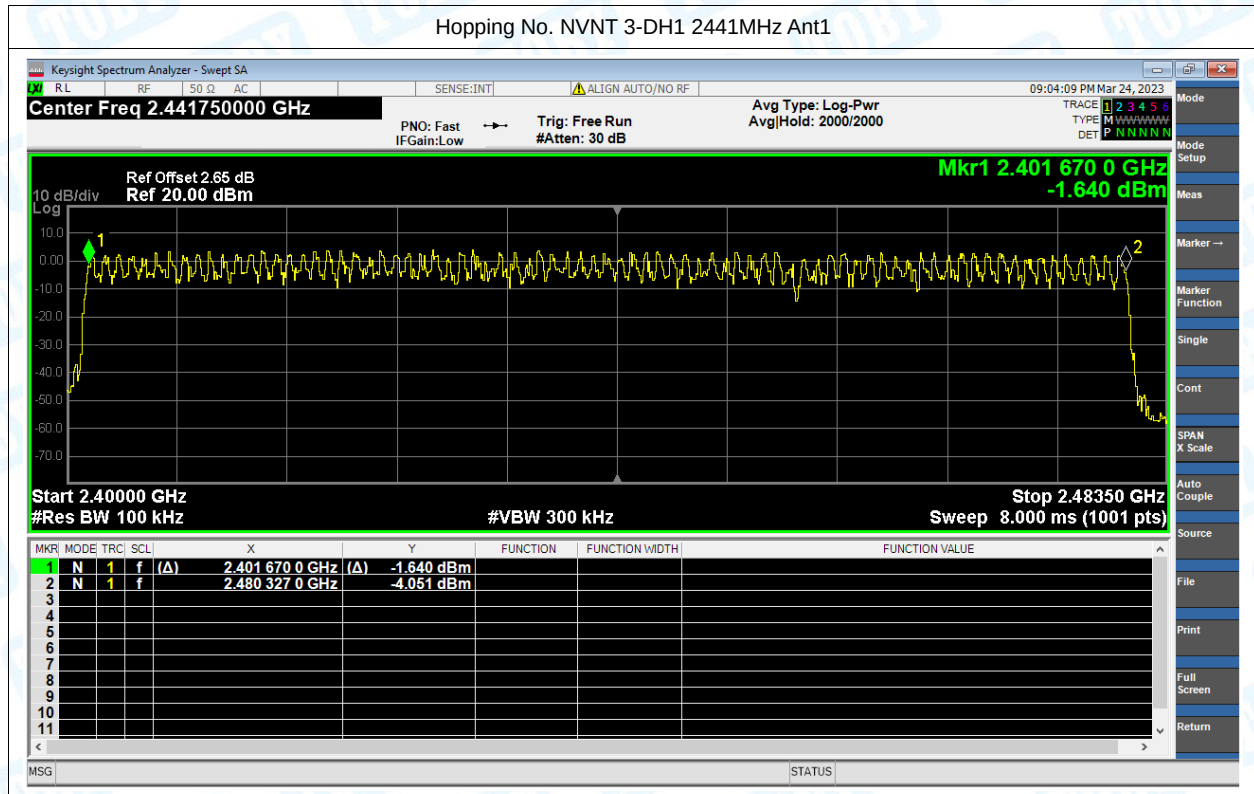
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



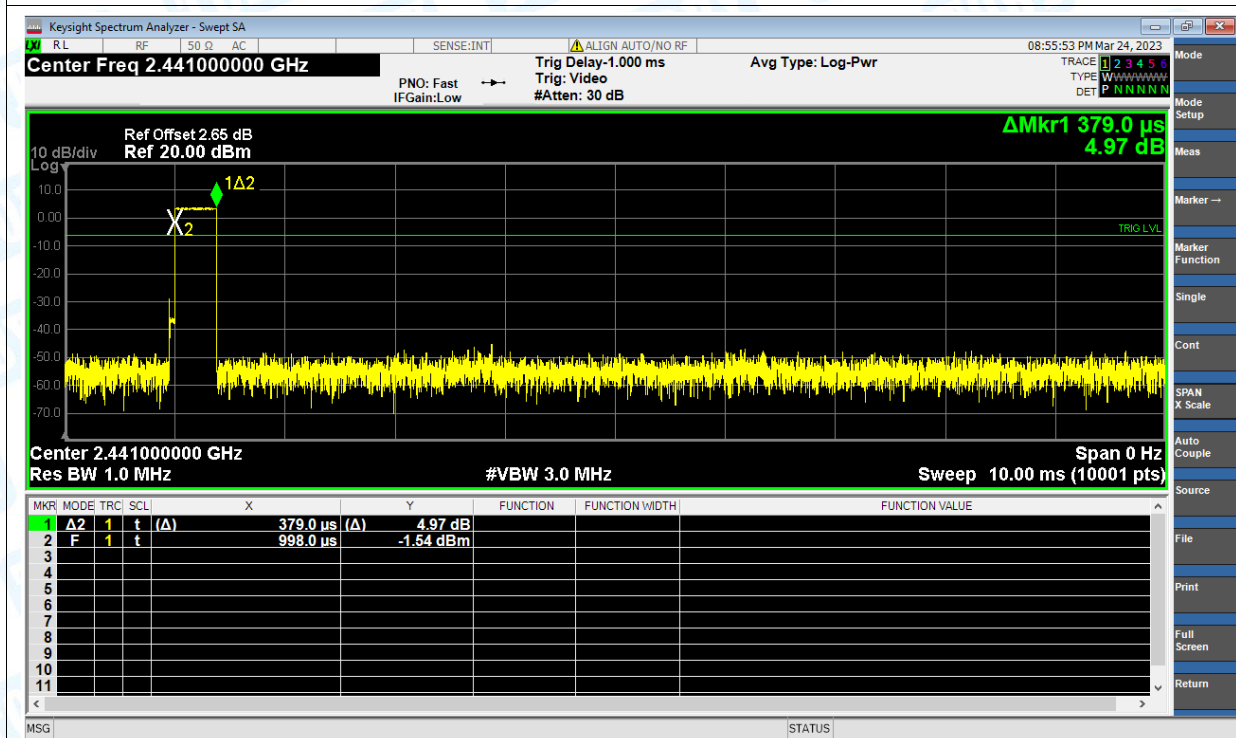


11. Dwell Time

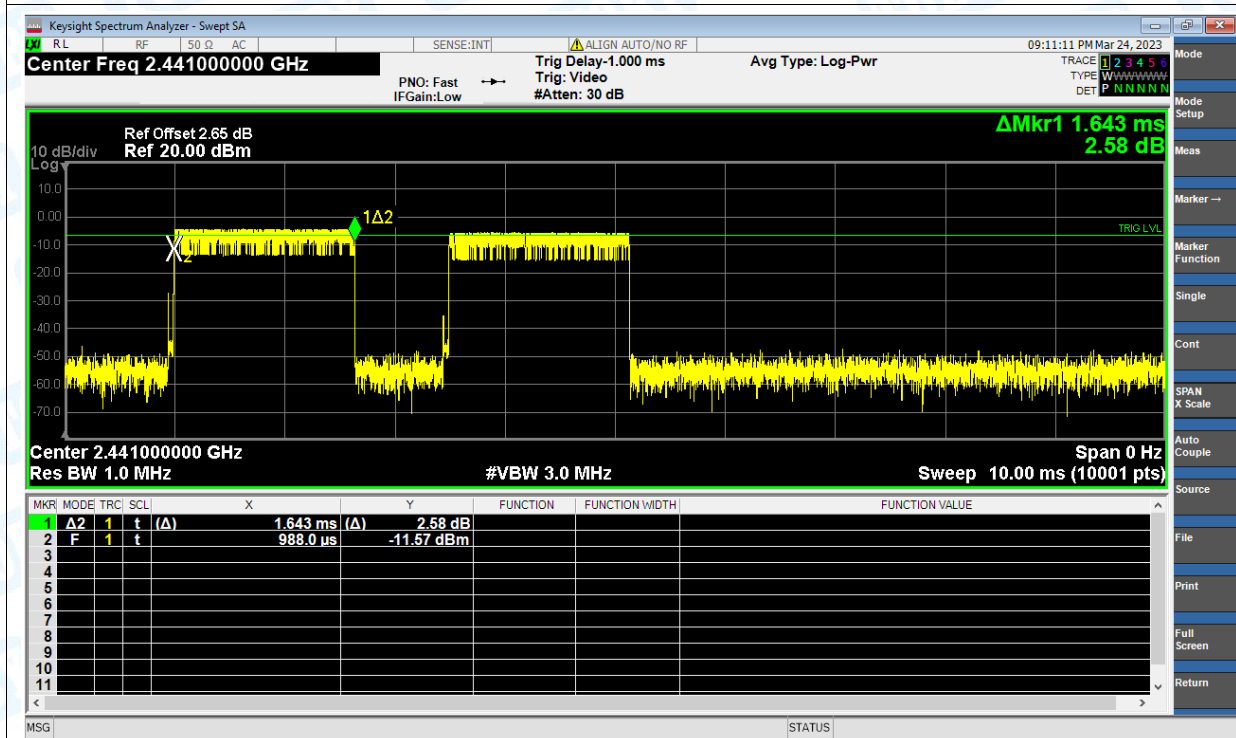
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.379	121.28	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.891	308.373	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.638	262.08	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.886	307.84	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.635	261.6	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.886	307.84	31600	400	Pass

Test Graphs

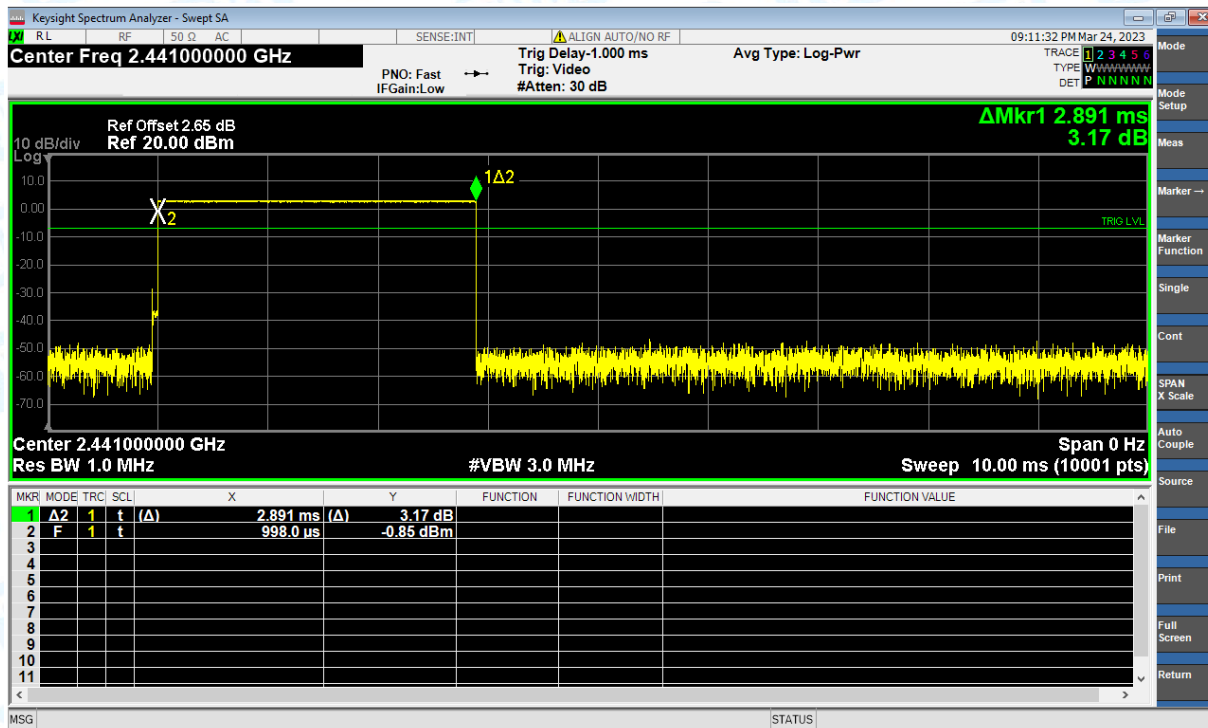
Dwell NVNT 1-DH1 2441MHz Ant1



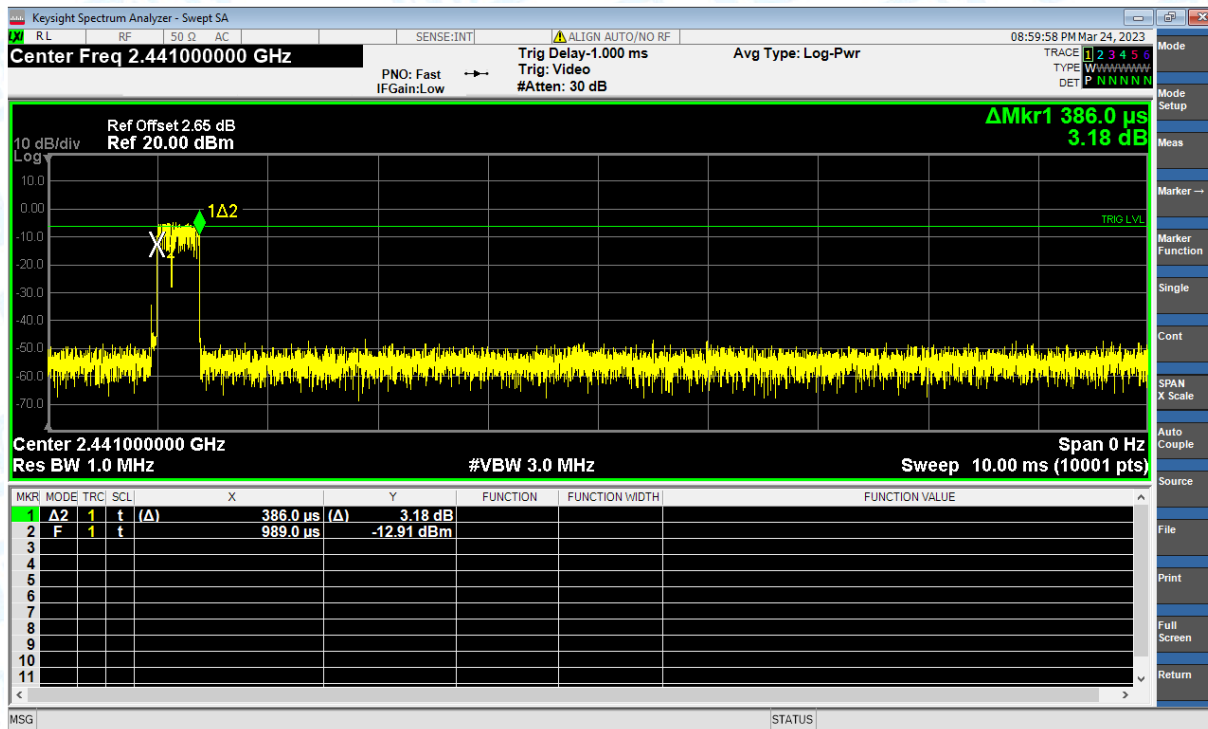
Dwell NVNT 1-DH3 2441MHz Ant1



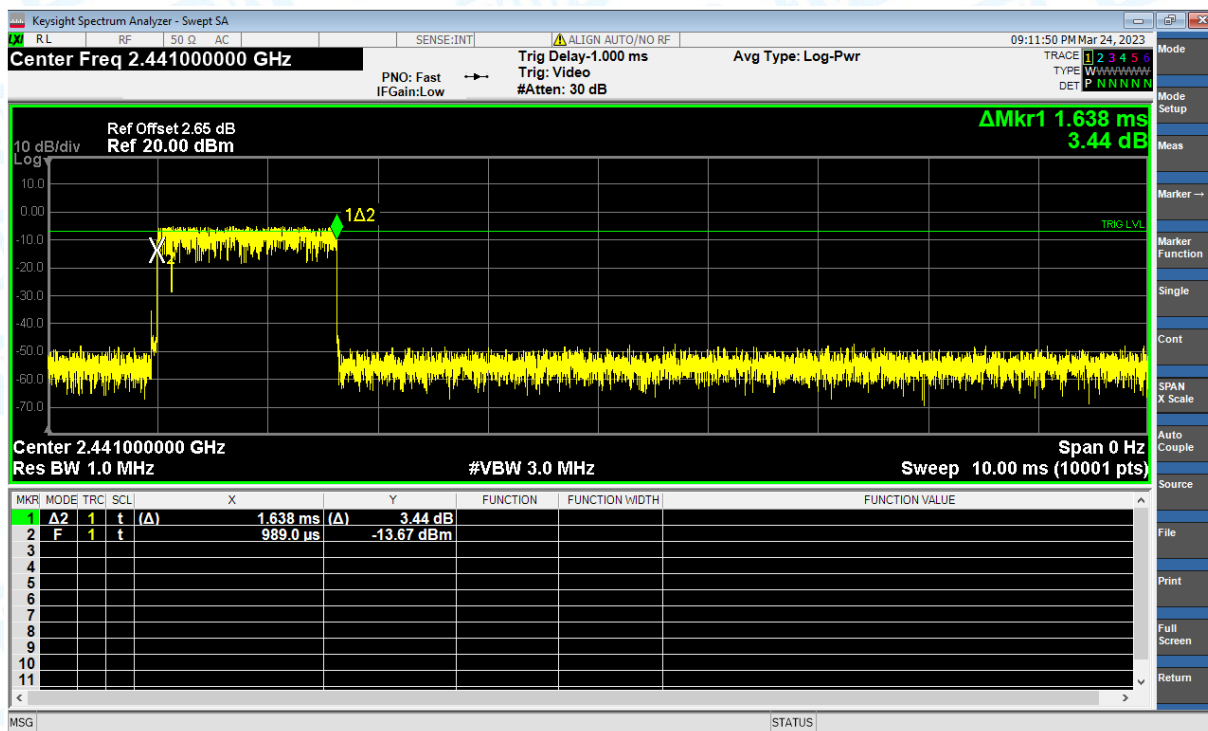
Dwell NVNT 1-DH5 2441MHz Ant1



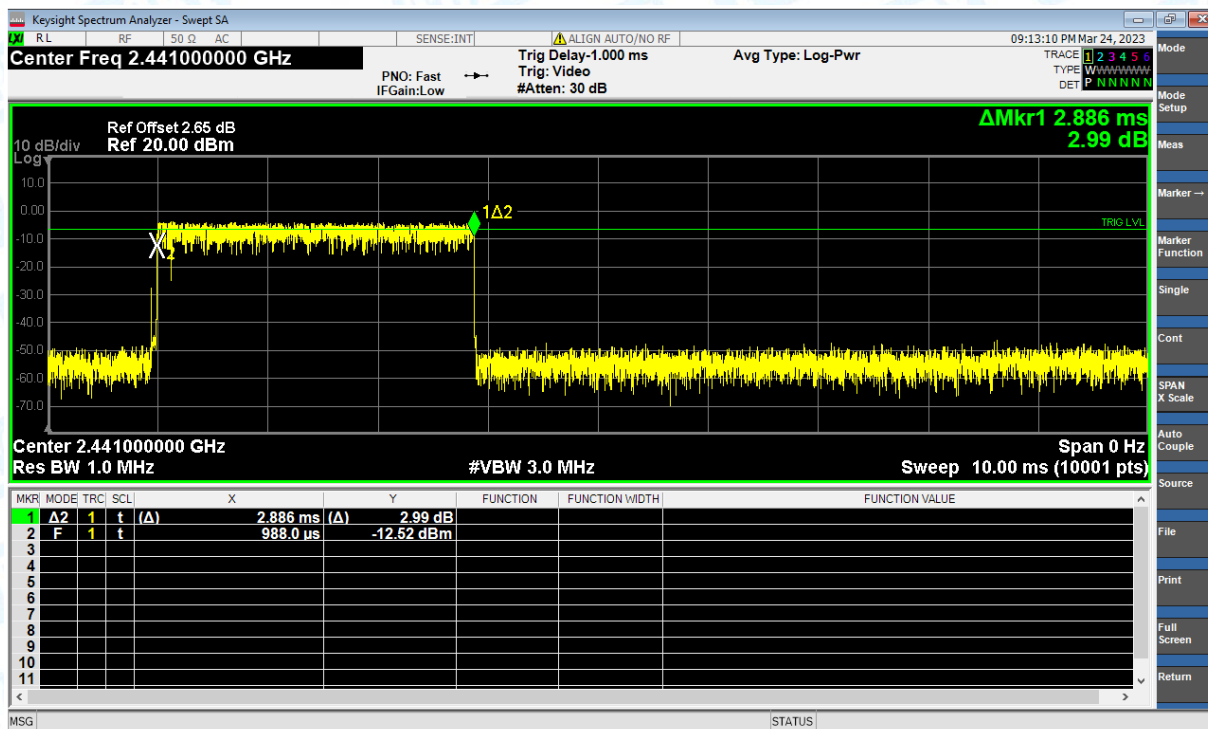
Dwell NVNT 2-DH1 2441MHz Ant1



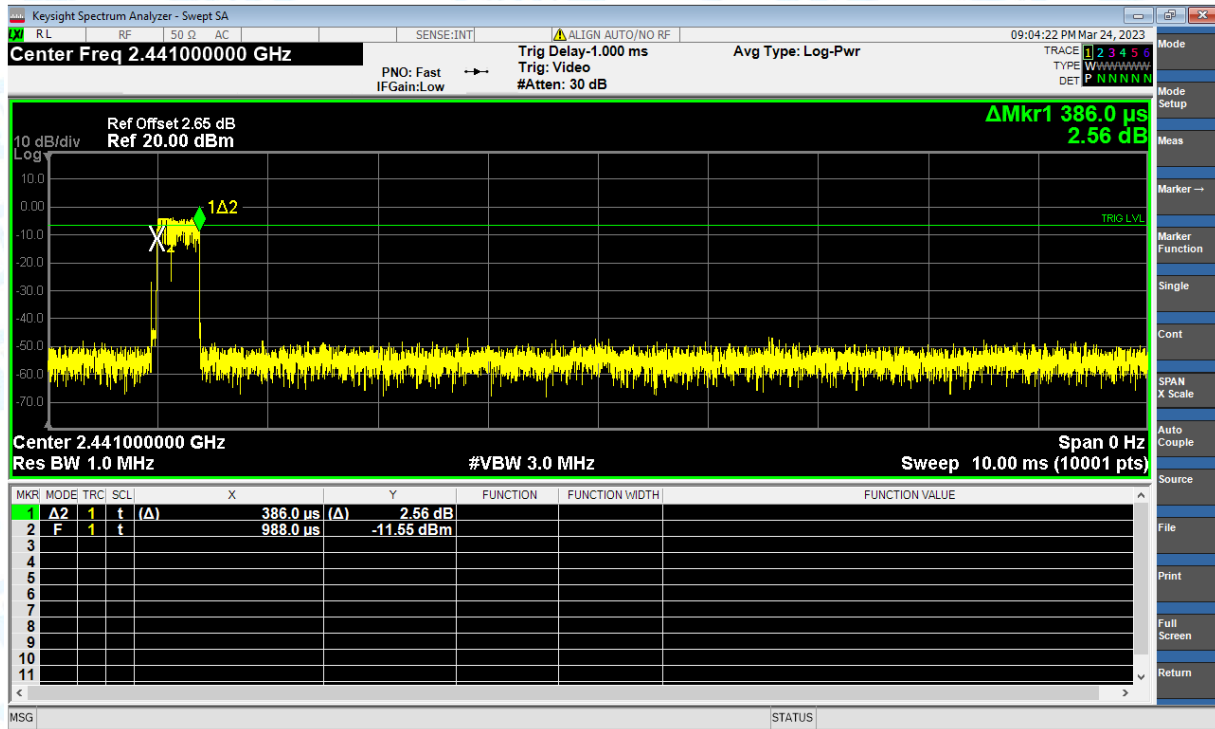
Dwell NVNT 2-DH3 2441MHz Ant1



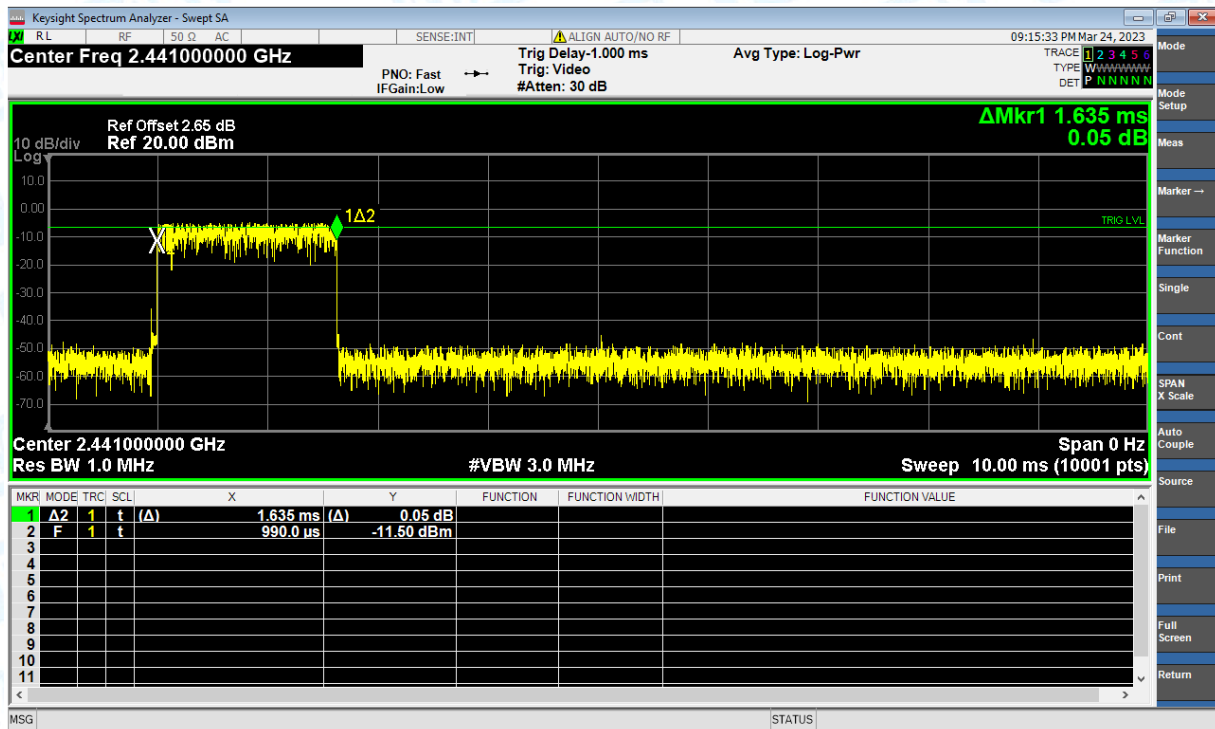
Dwell NVNT 2-DH5 2441MHz Ant1

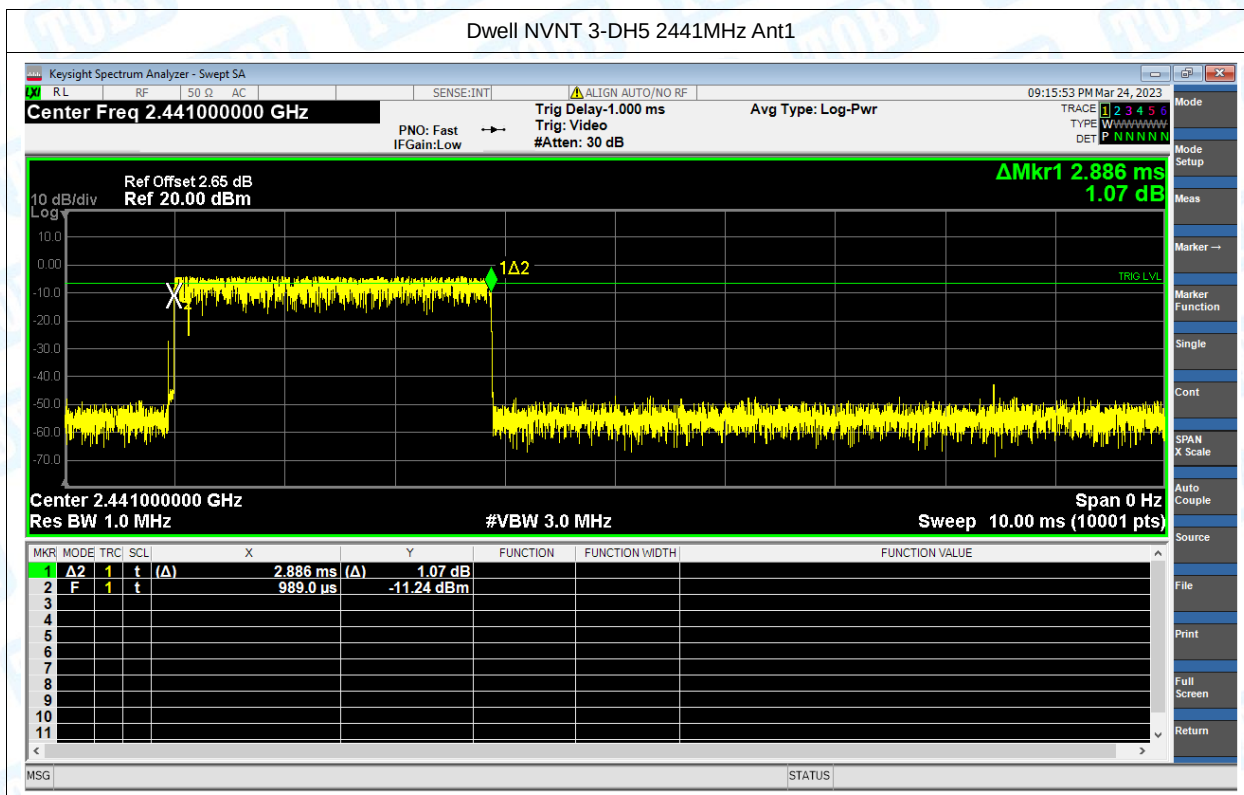


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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