

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

General Description of EUT	
Product Name:	Wireless Audio Receiver
Test Model:	BR1
Sample ID:	202301-0001-1-2
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202301-0001-1 The report only show the worst case data.	

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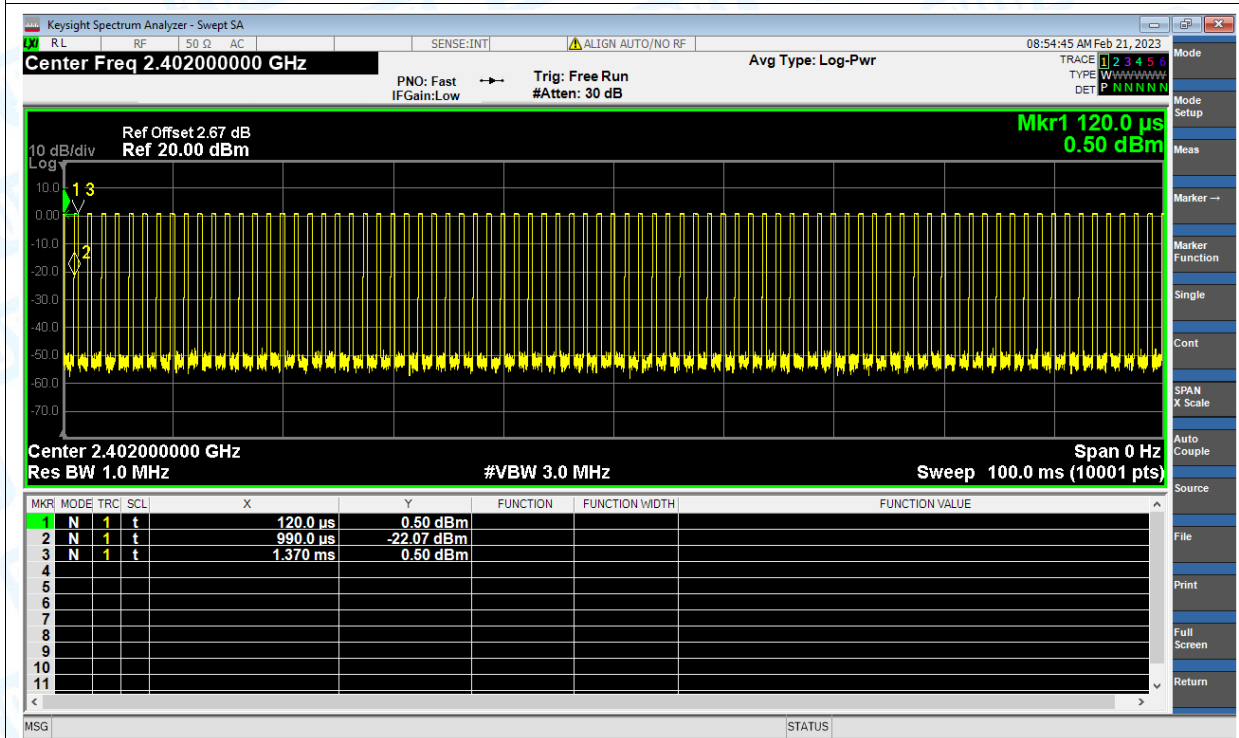
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1. Duty Cycle

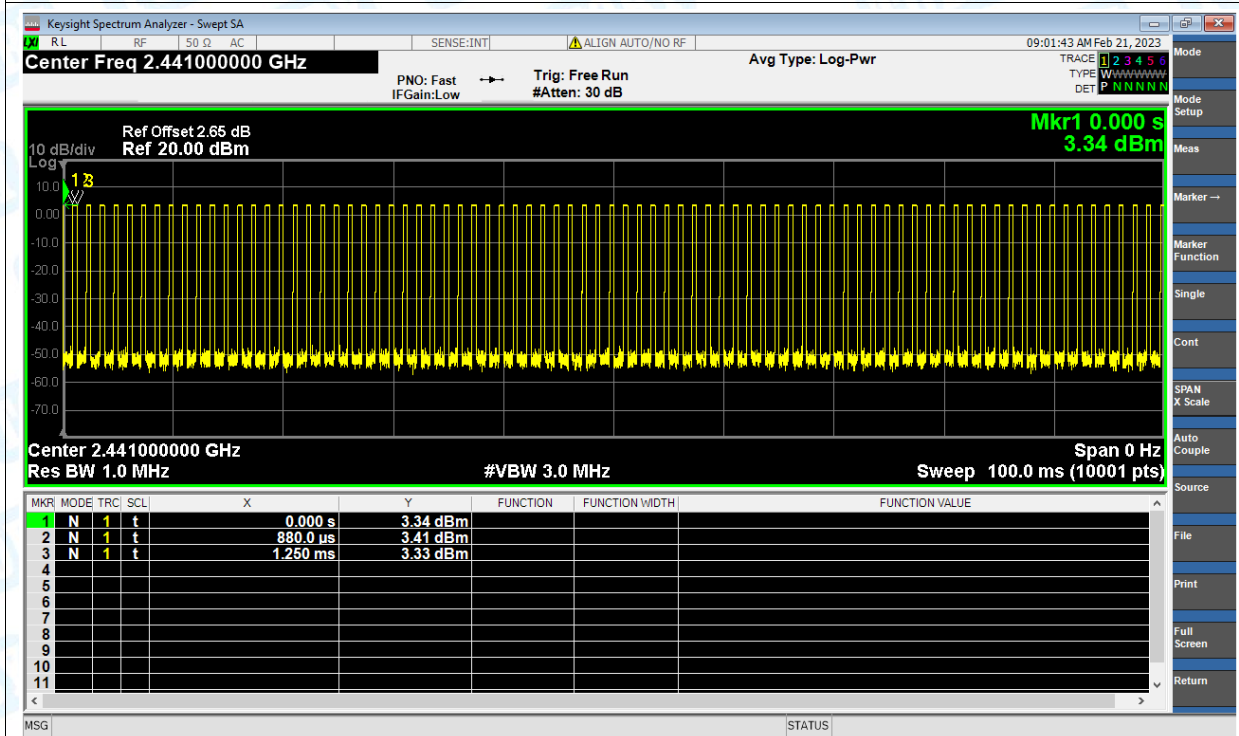
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	29.6	5.29	2.7
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	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

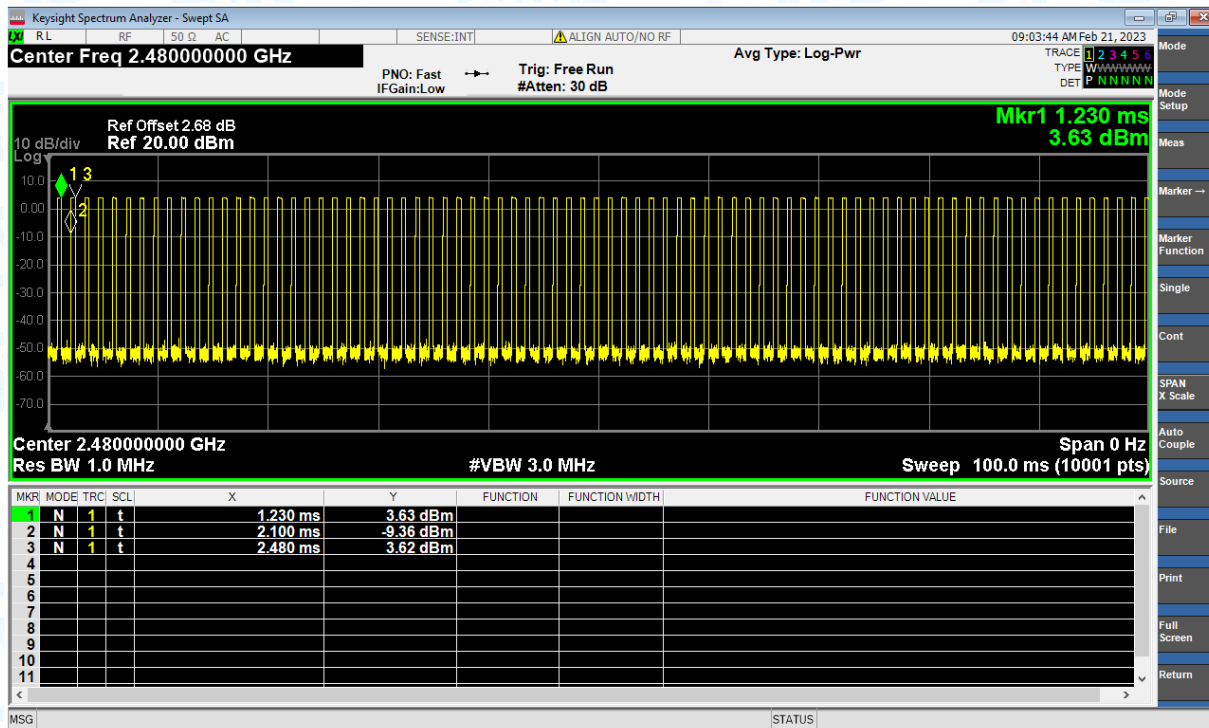
Duty Cycle NVNT 1-DH1 2402MHz Ant1



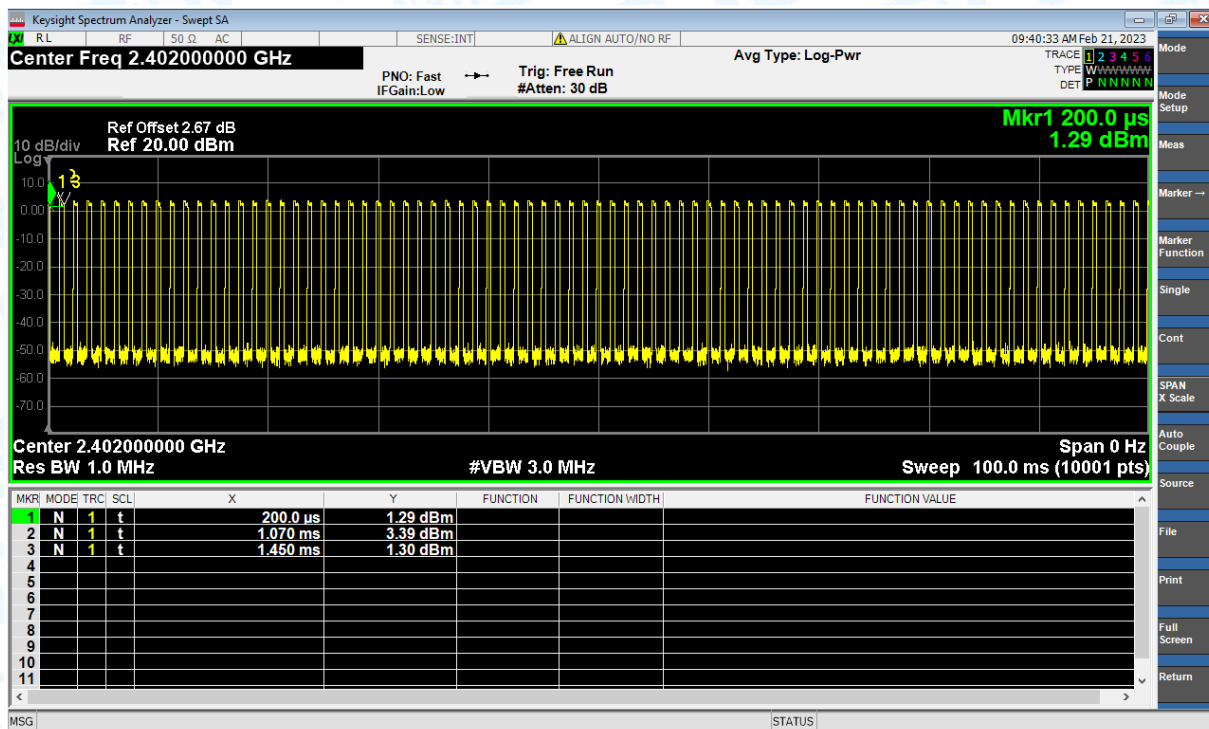
Duty Cycle NVNT 1-DH1 2441MHz Ant1



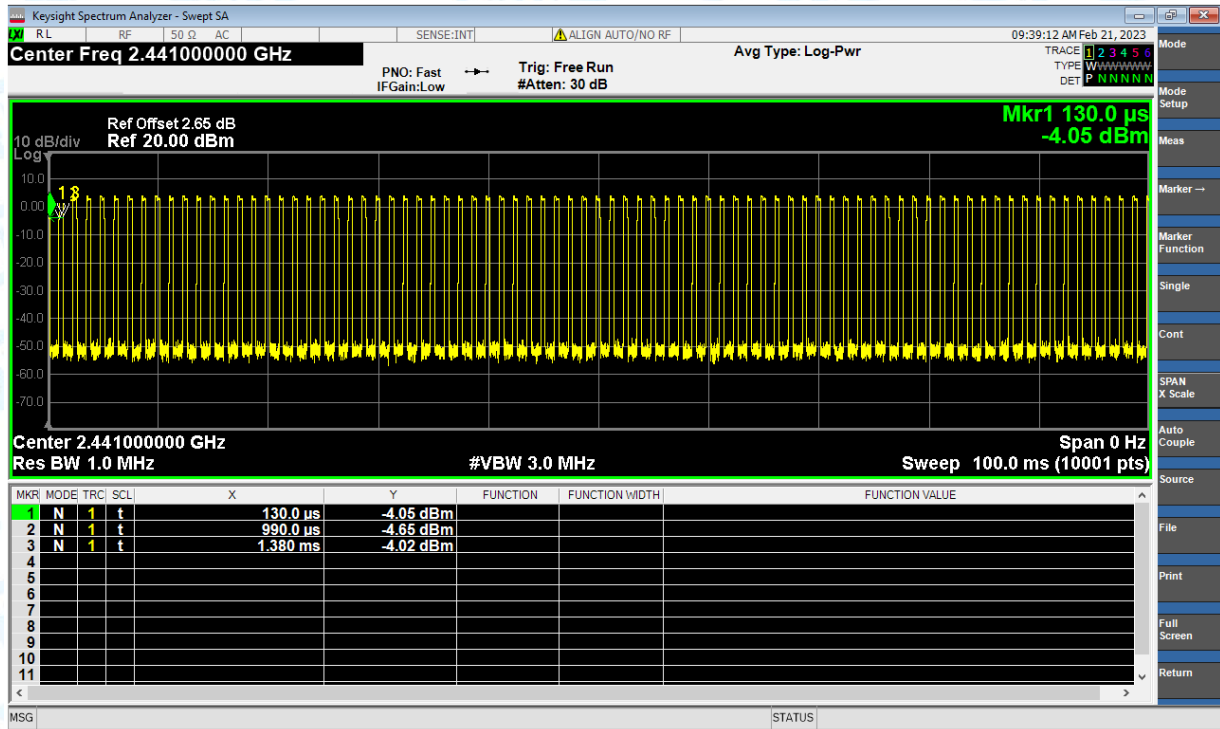
Duty Cycle NVNT 1-DH1 2480MHz Ant1



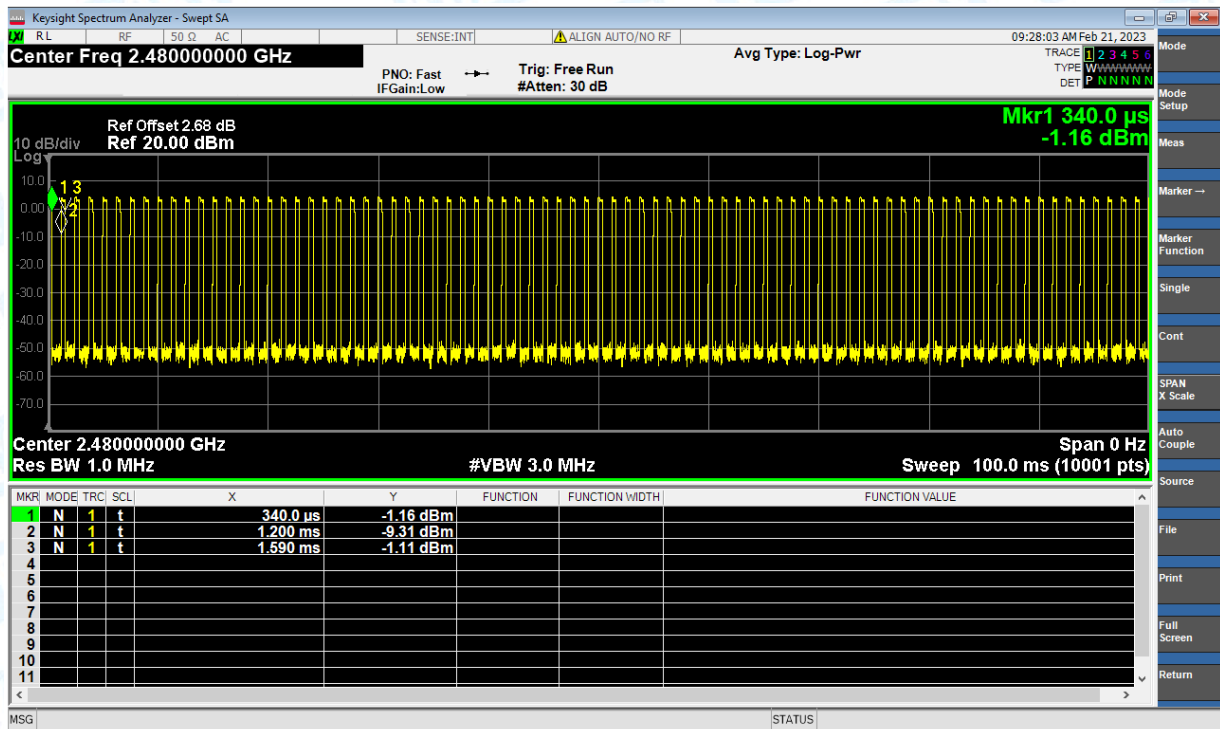
Duty Cycle NVNT 2-DH1 2402MHz Ant1



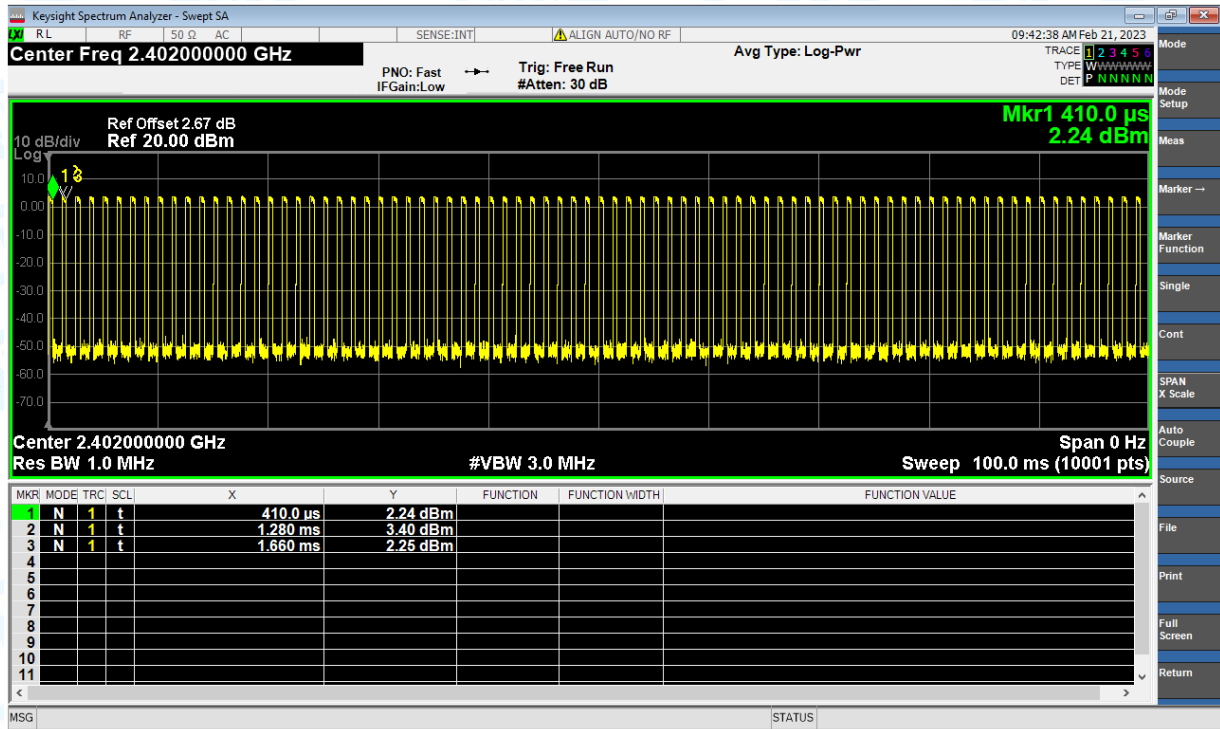
Duty Cycle NVNT 2-DH1 2441MHz Ant1



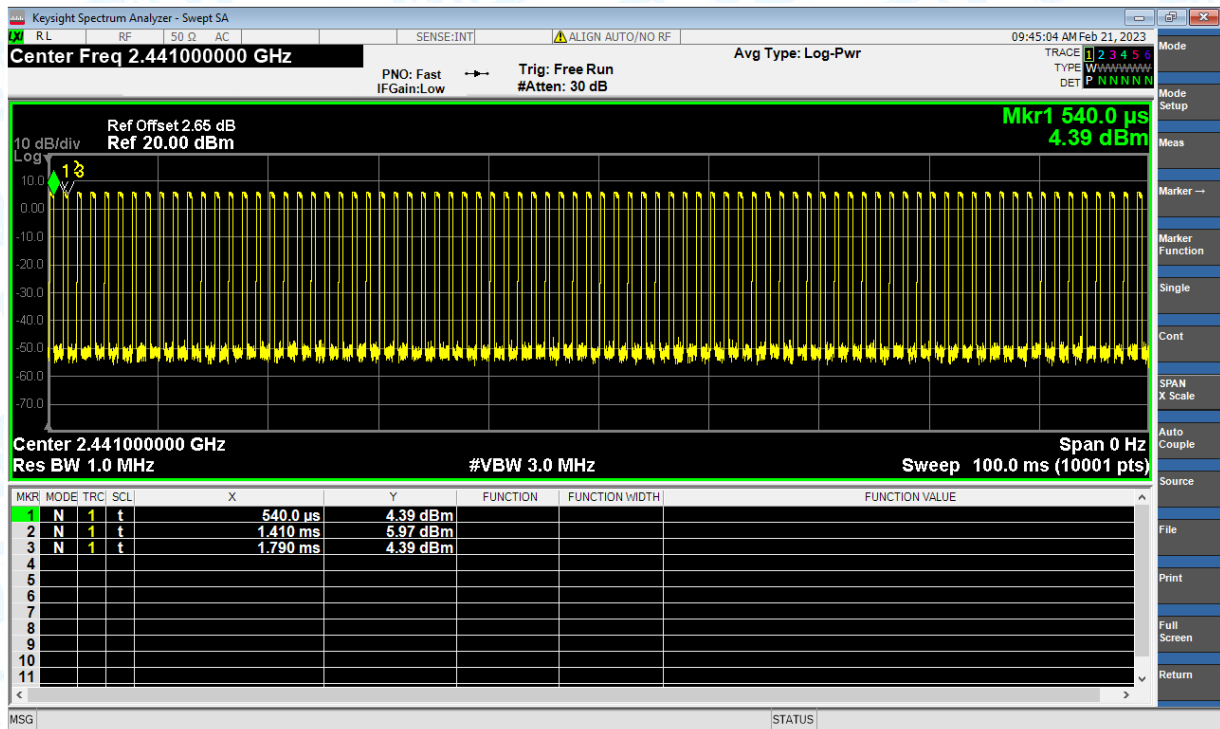
Duty Cycle NVNT 2-DH1 2480MHz Ant1

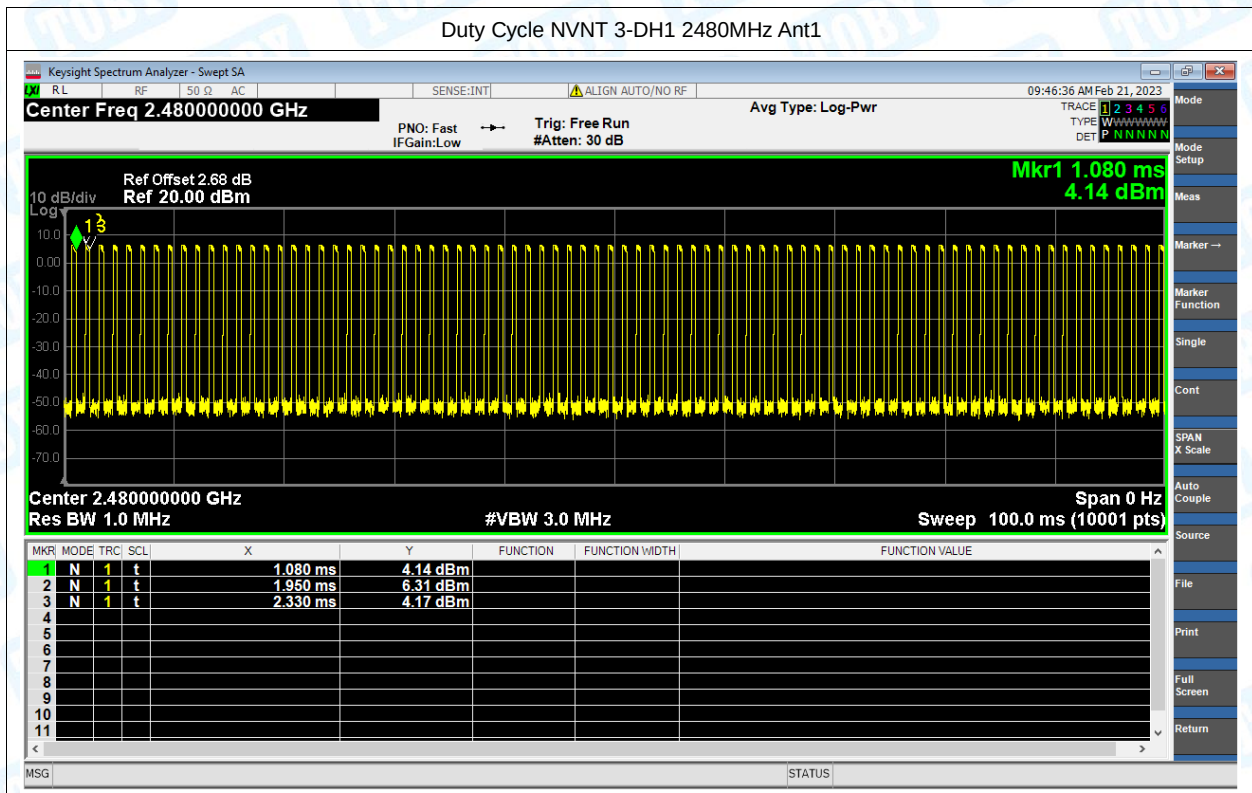


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



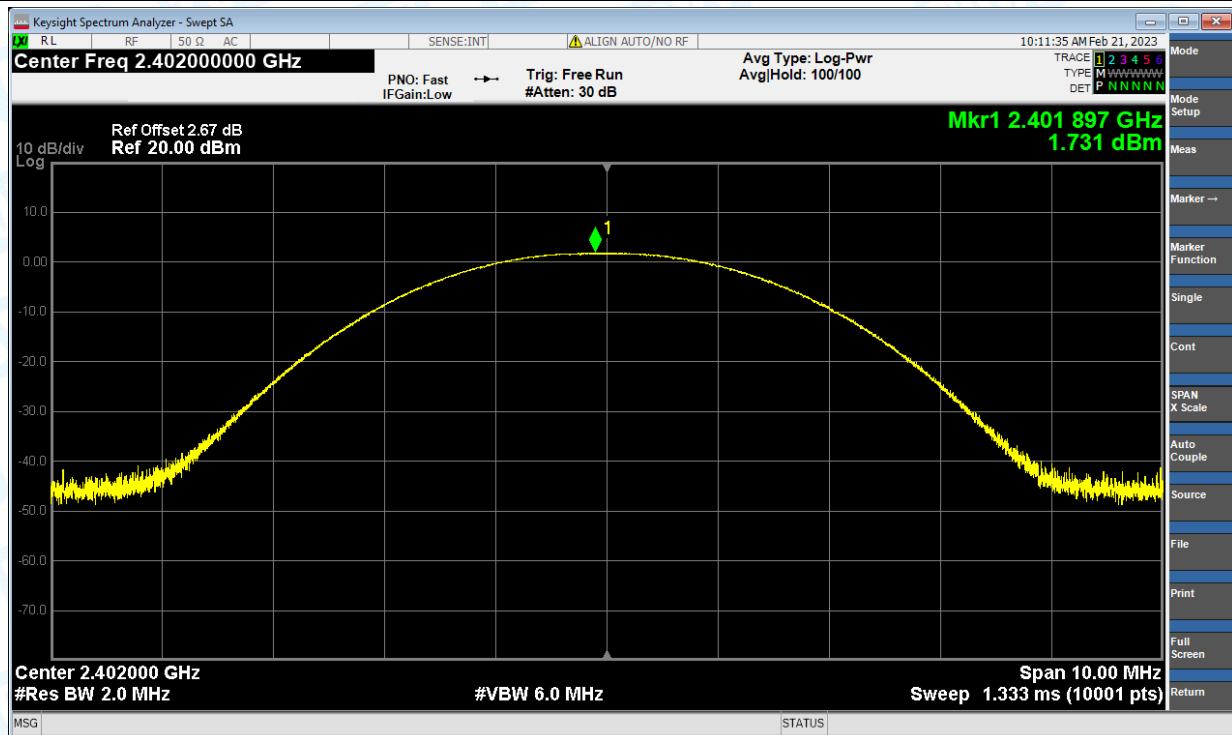


2. Maximum Conducted Output Power

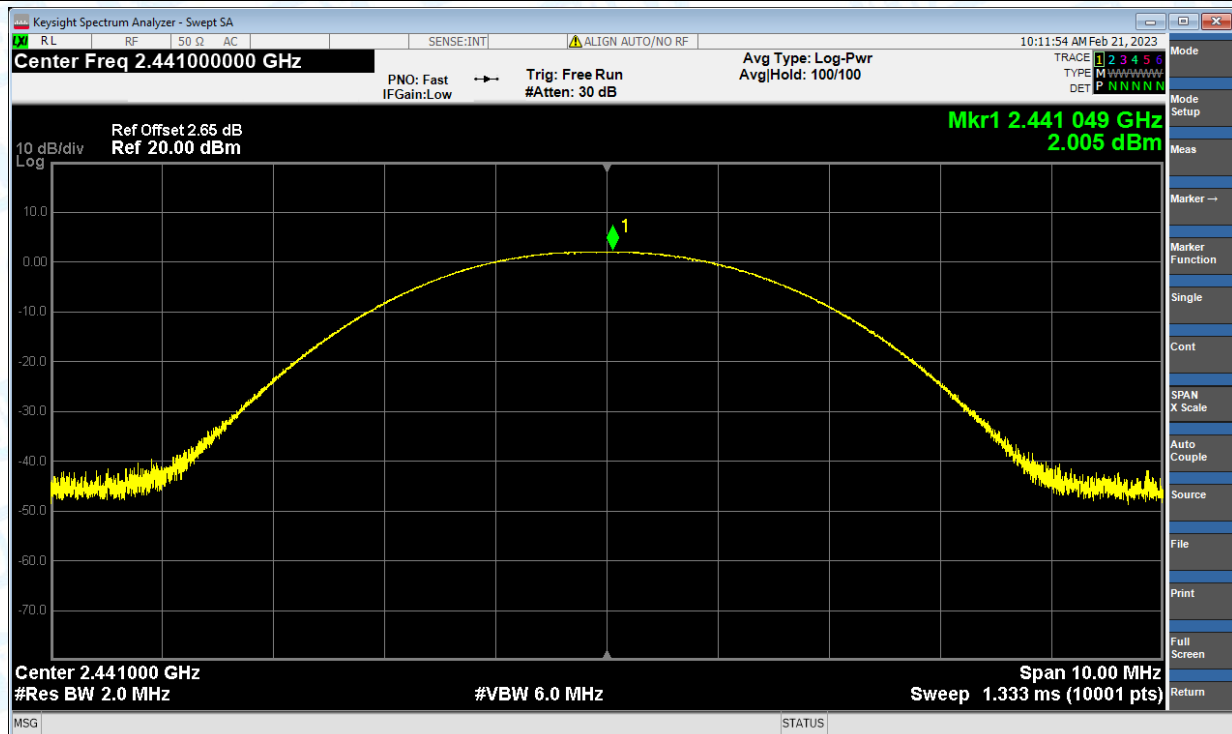
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	1.731	21	Pass
NVNT	1-DH1	2441	Ant1	2.005	21	Pass
NVNT	1-DH1	2480	Ant1	2.384	21	Pass
NVNT	2-DH1	2402	Ant1	1.683	21	Pass
NVNT	2-DH1	2441	Ant1	2.029	21	Pass
NVNT	2-DH1	2480	Ant1	2.391	21	Pass
NVNT	3-DH1	2402	Ant1	2.025	21	Pass
NVNT	3-DH1	2441	Ant1	2.331	21	Pass
NVNT	3-DH1	2480	Ant1	2.618	21	Pass

Test Graphs

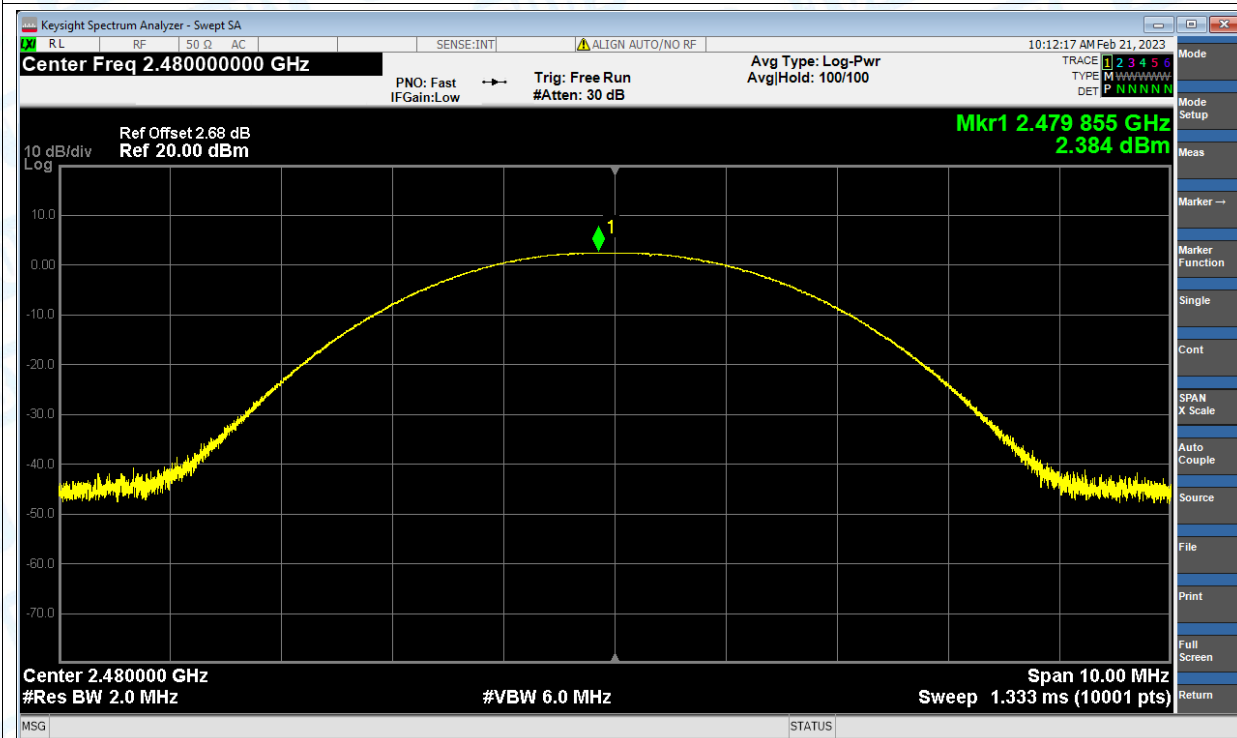
Power NVNT 1-DH1 2402MHz Ant1



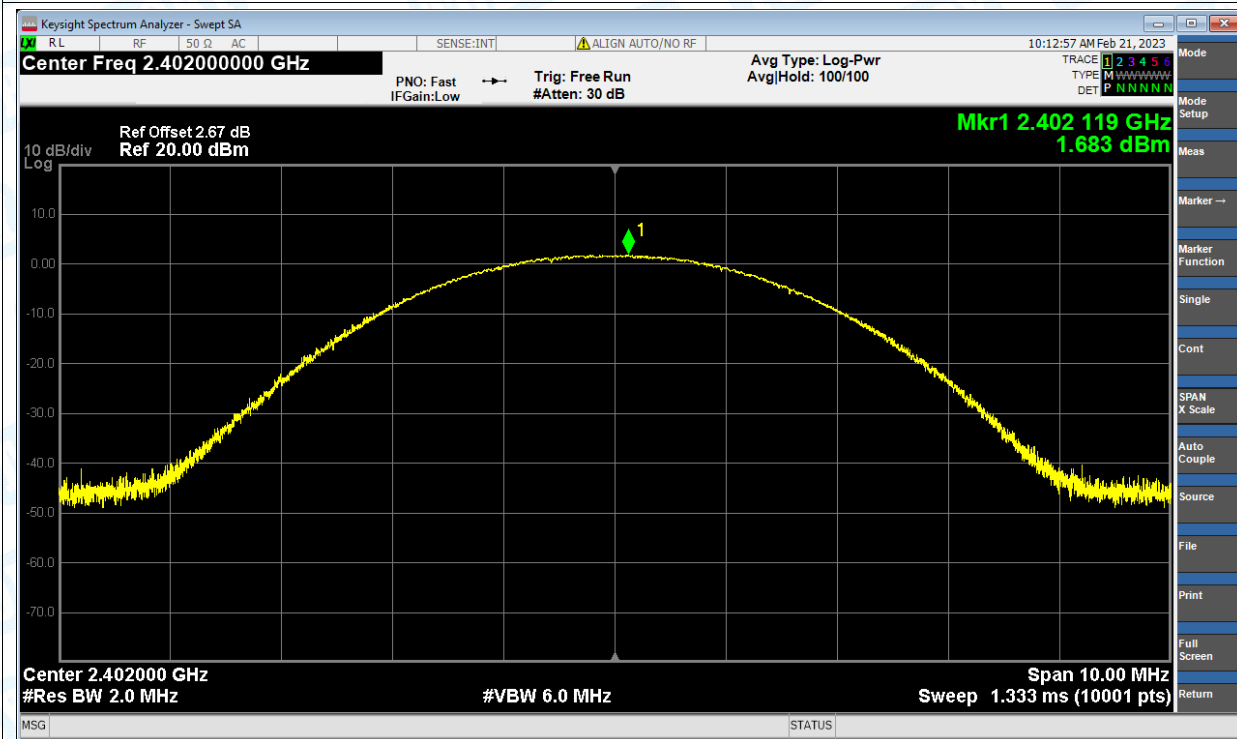
Power NVNT 1-DH1 2441MHz Ant1



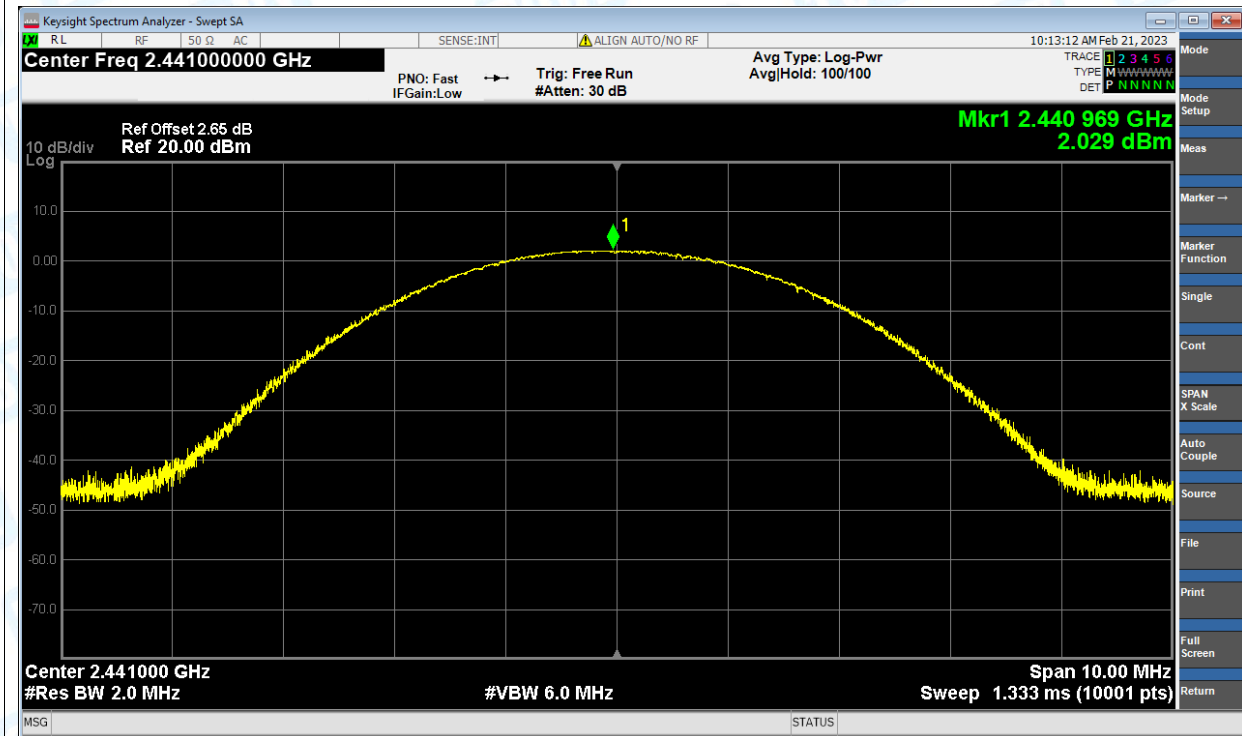
Power NVNT 1-DH1 2480MHz Ant1



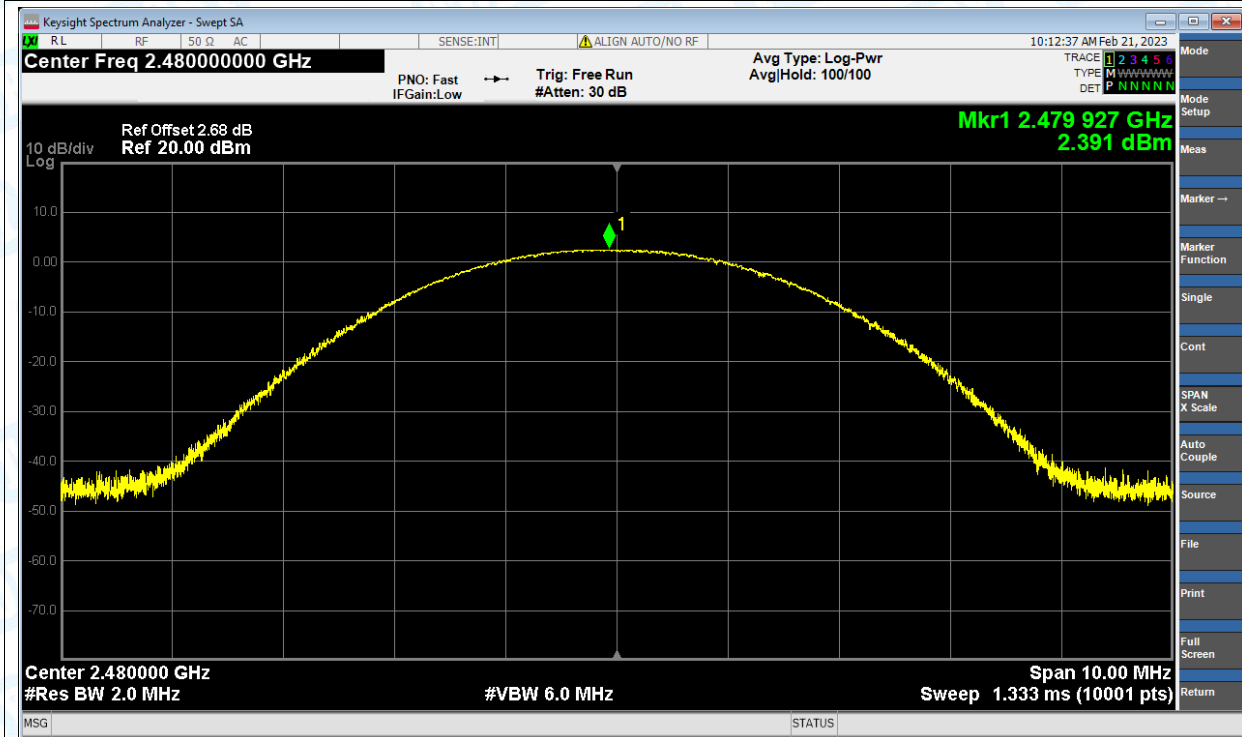
Power NVNT 2-DH1 2402MHz Ant1



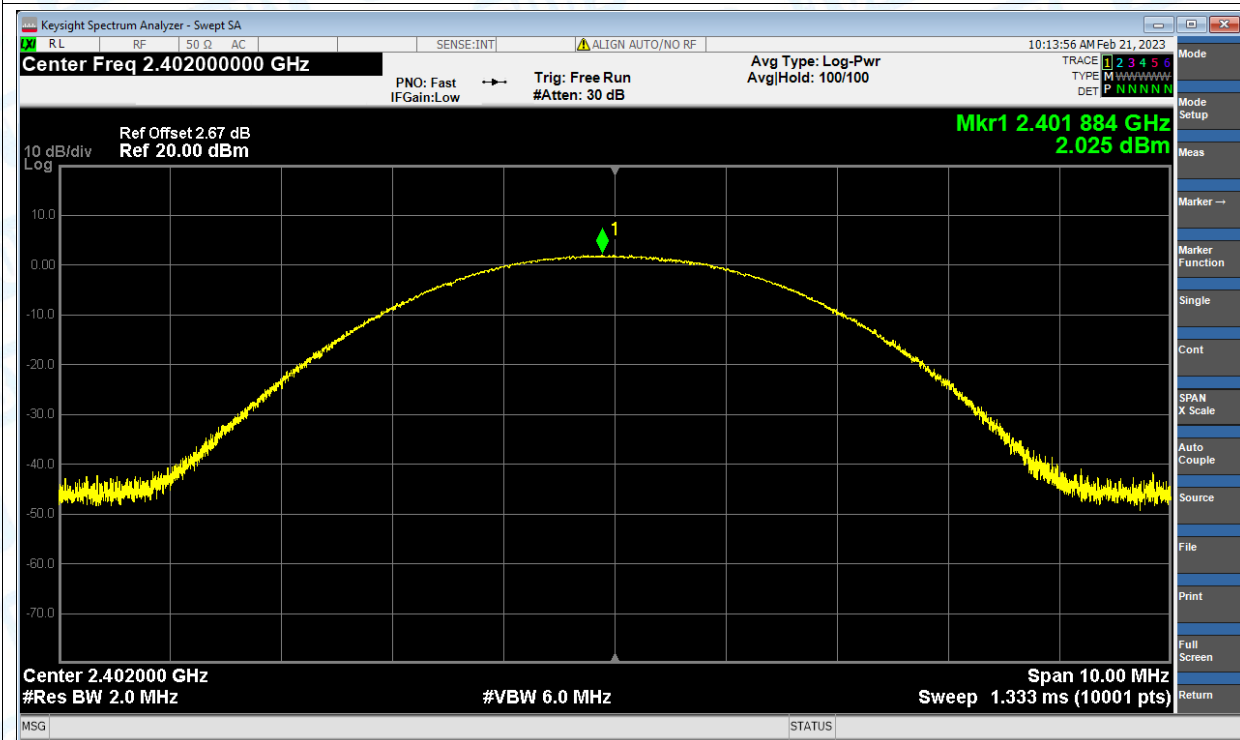
Power NVNT 2-DH1 2441MHz Ant1



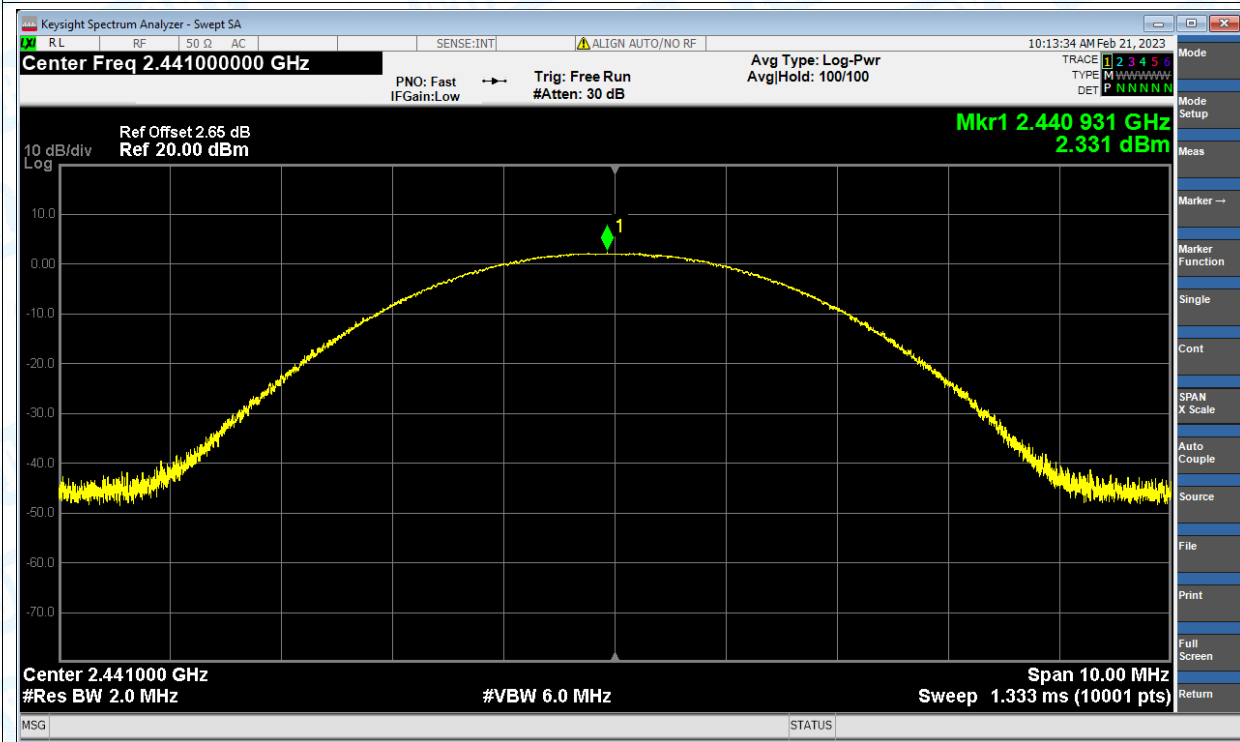
Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



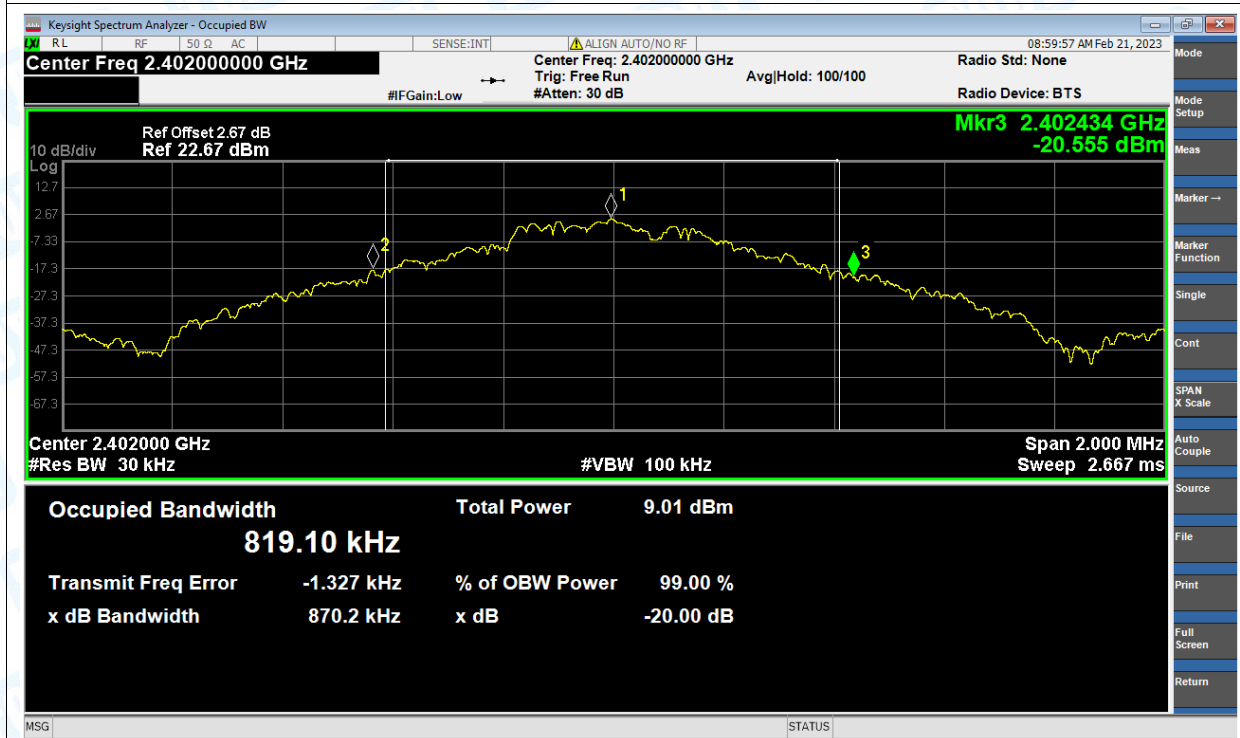


3. -20dB Bandwidth

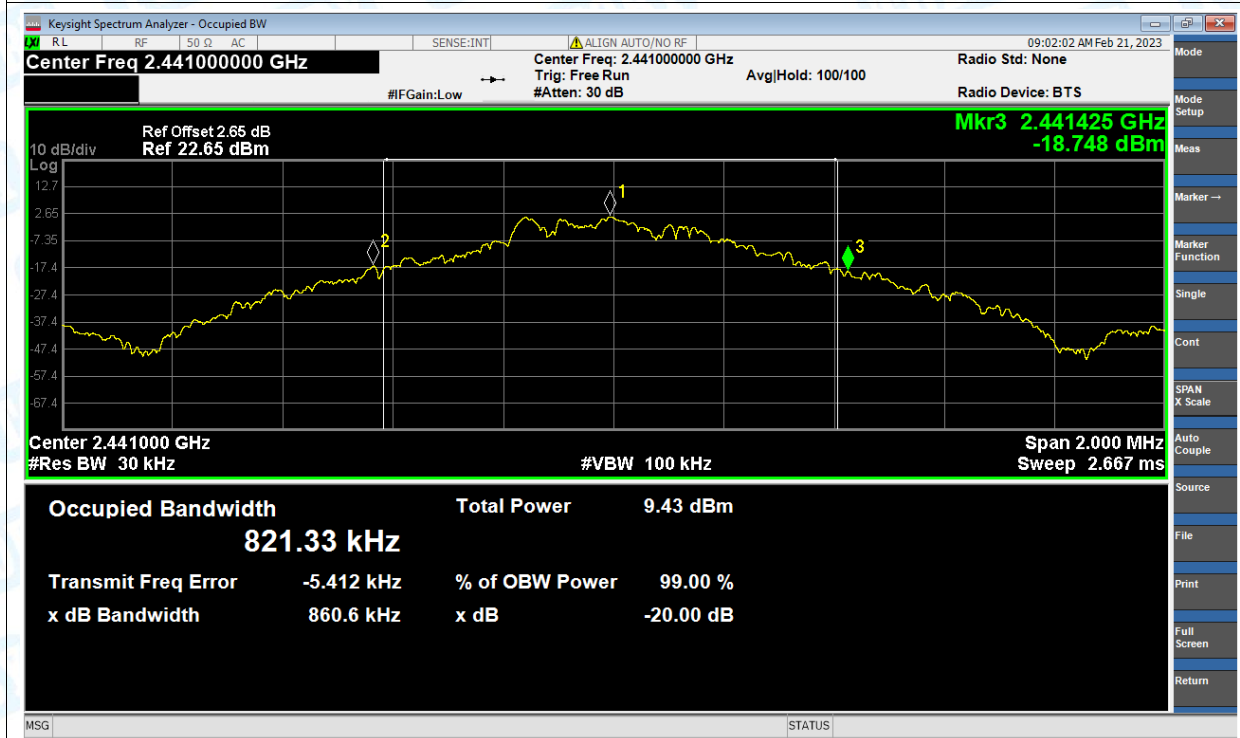
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	0	Pass
NVNT	1-DH1	2441	Ant1	0.86	0	Pass
NVNT	1-DH1	2480	Ant1	0.87	0	Pass
NVNT	2-DH1	2402	Ant1	1.2	0	Pass
NVNT	2-DH1	2441	Ant1	1.22	0	Pass
NVNT	2-DH1	2480	Ant1	1.21	0	Pass
NVNT	3-DH1	2402	Ant1	1.2	0	Pass
NVNT	3-DH1	2441	Ant1	1.2	0	Pass
NVNT	3-DH1	2480	Ant1	1.2	0	Pass

Test Graphs

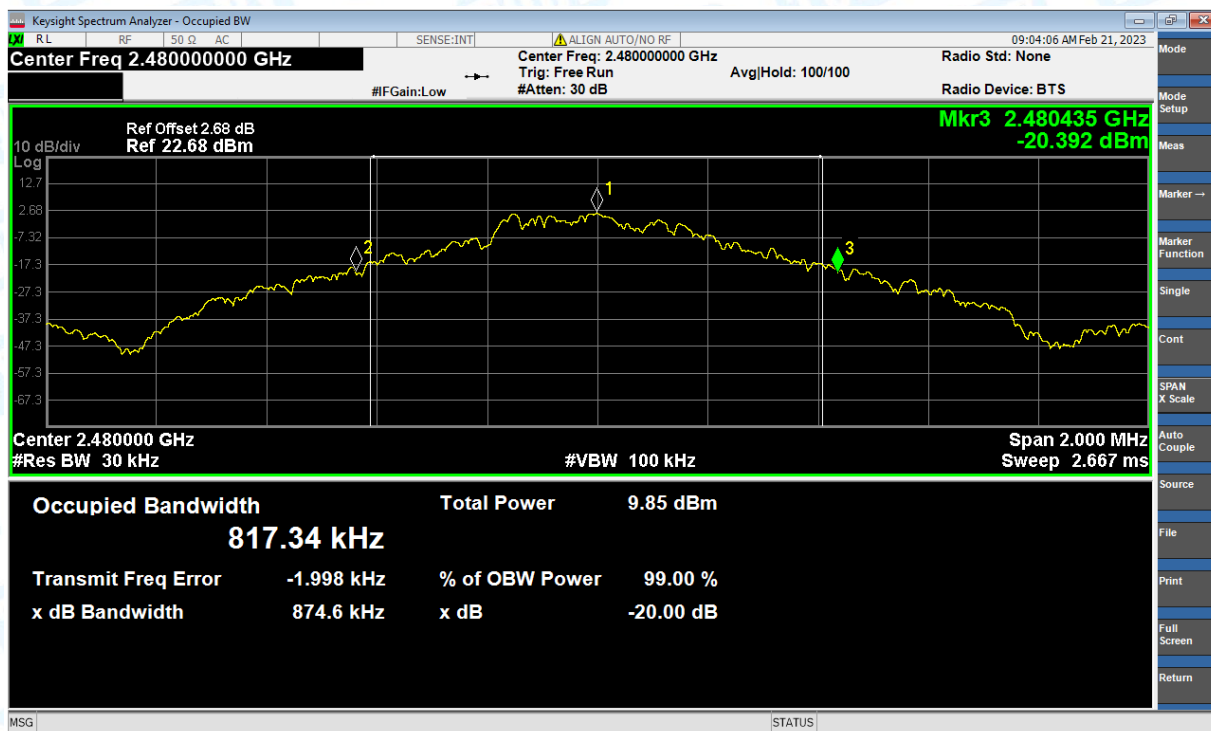
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



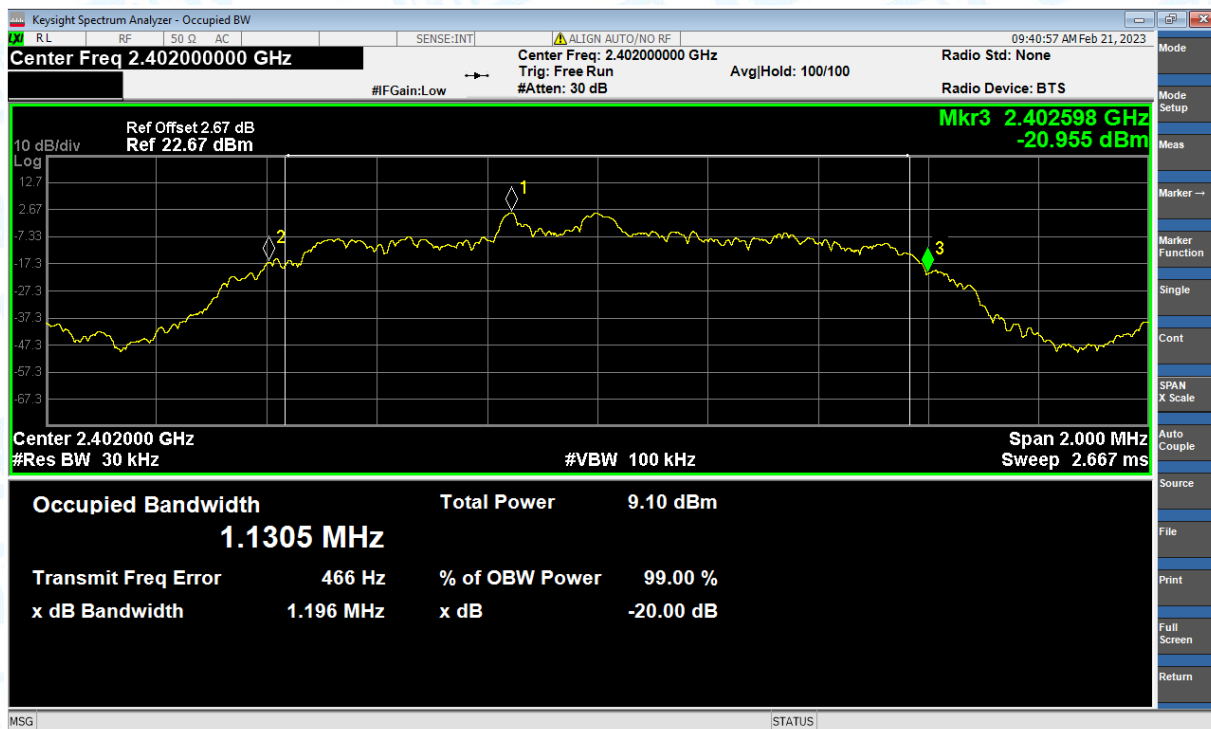
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



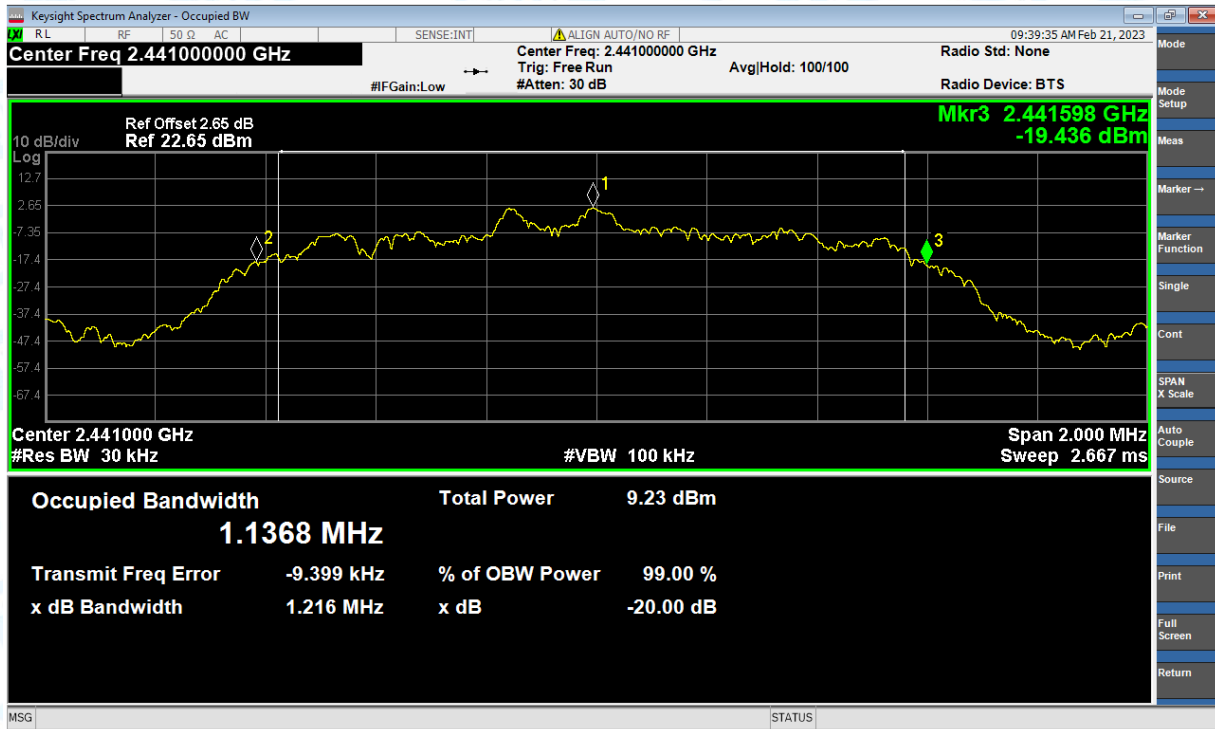
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



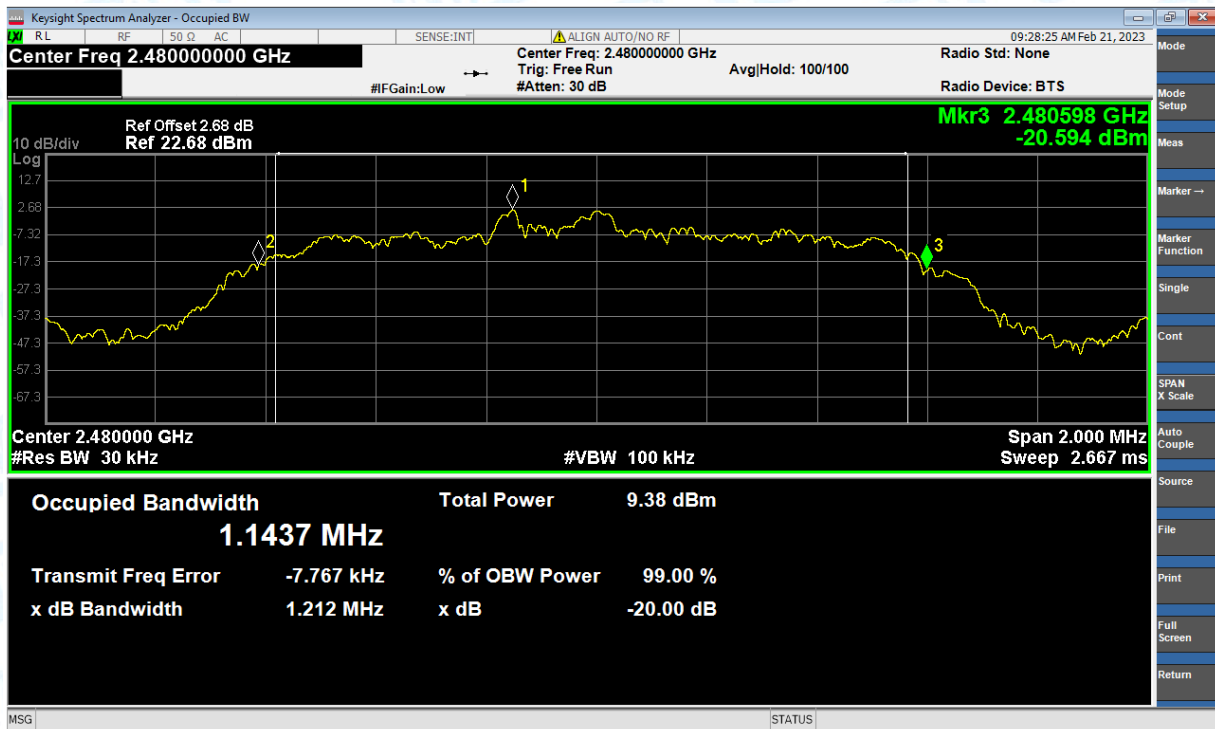
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



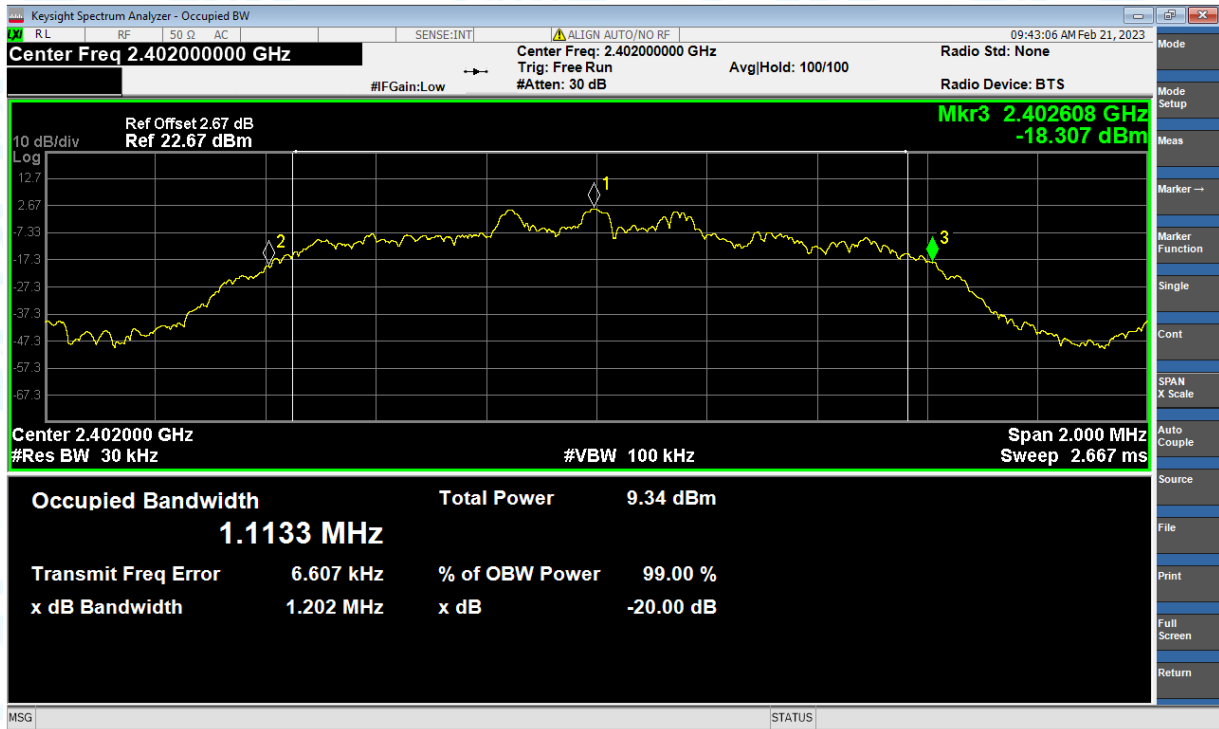
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



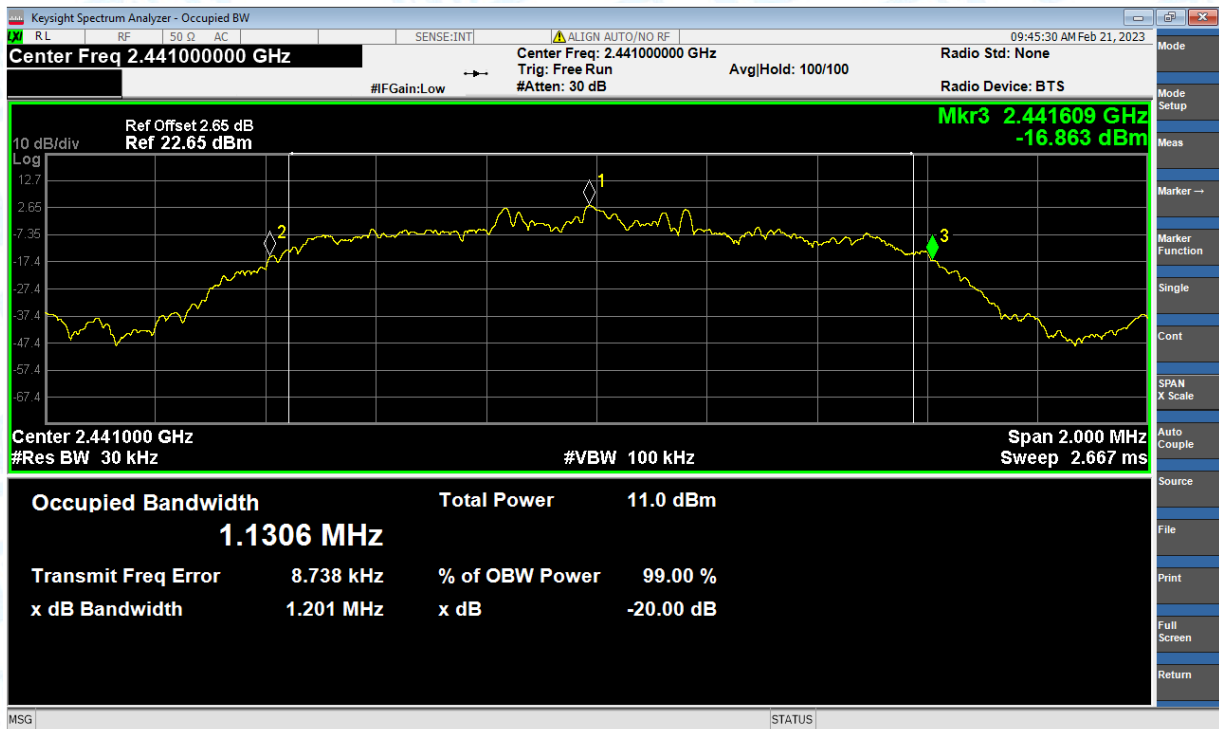
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

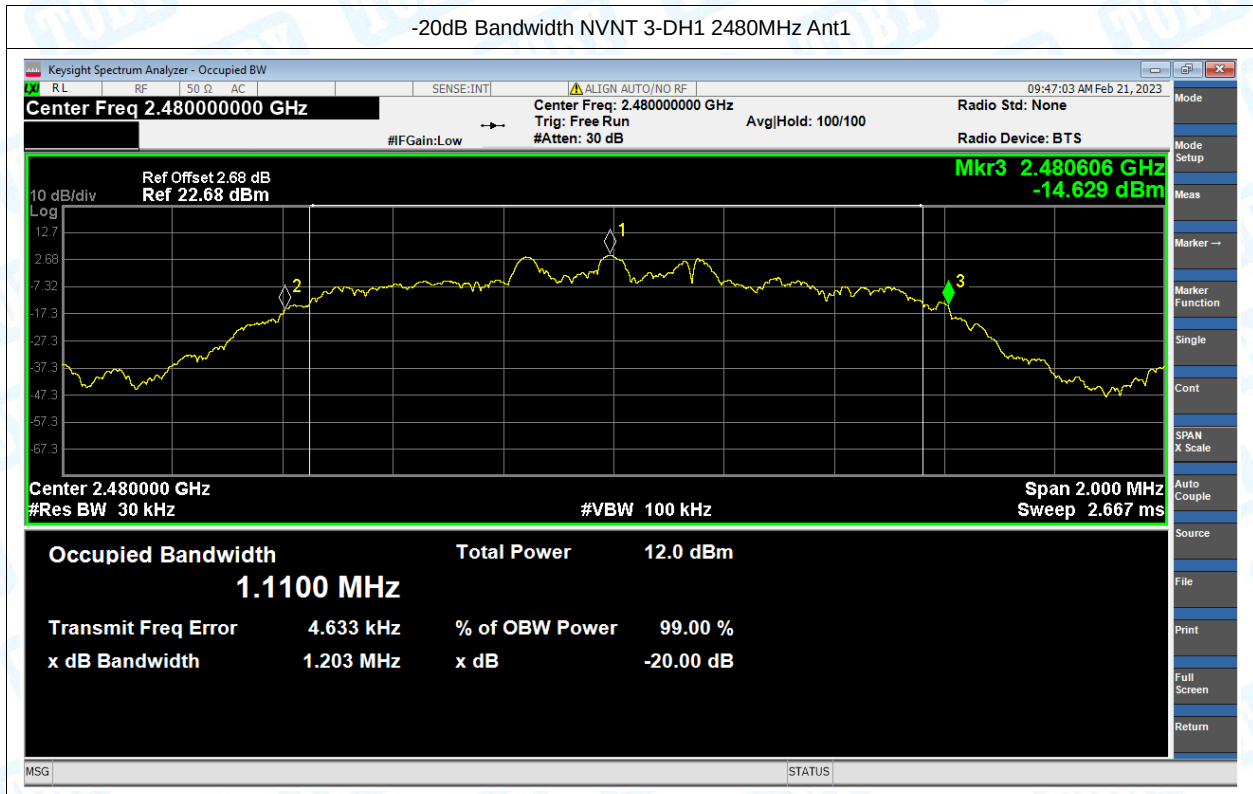


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



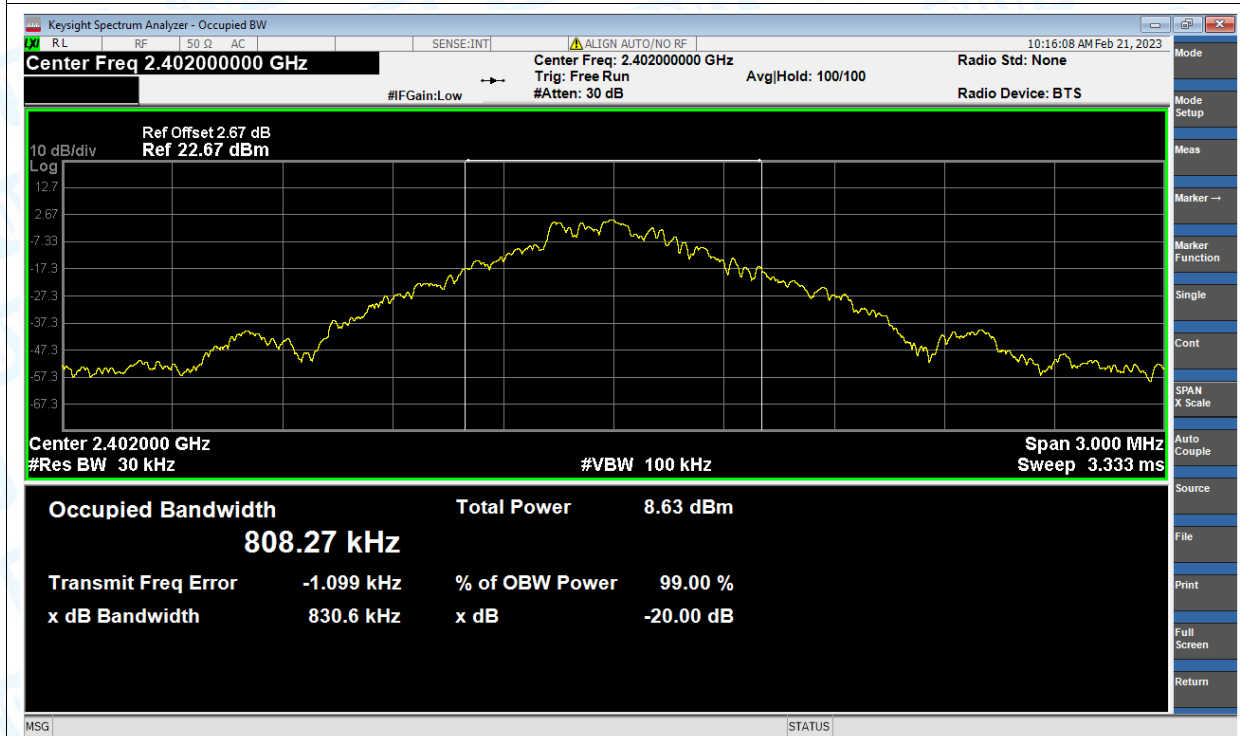


4. Occupied Channel Bandwidth

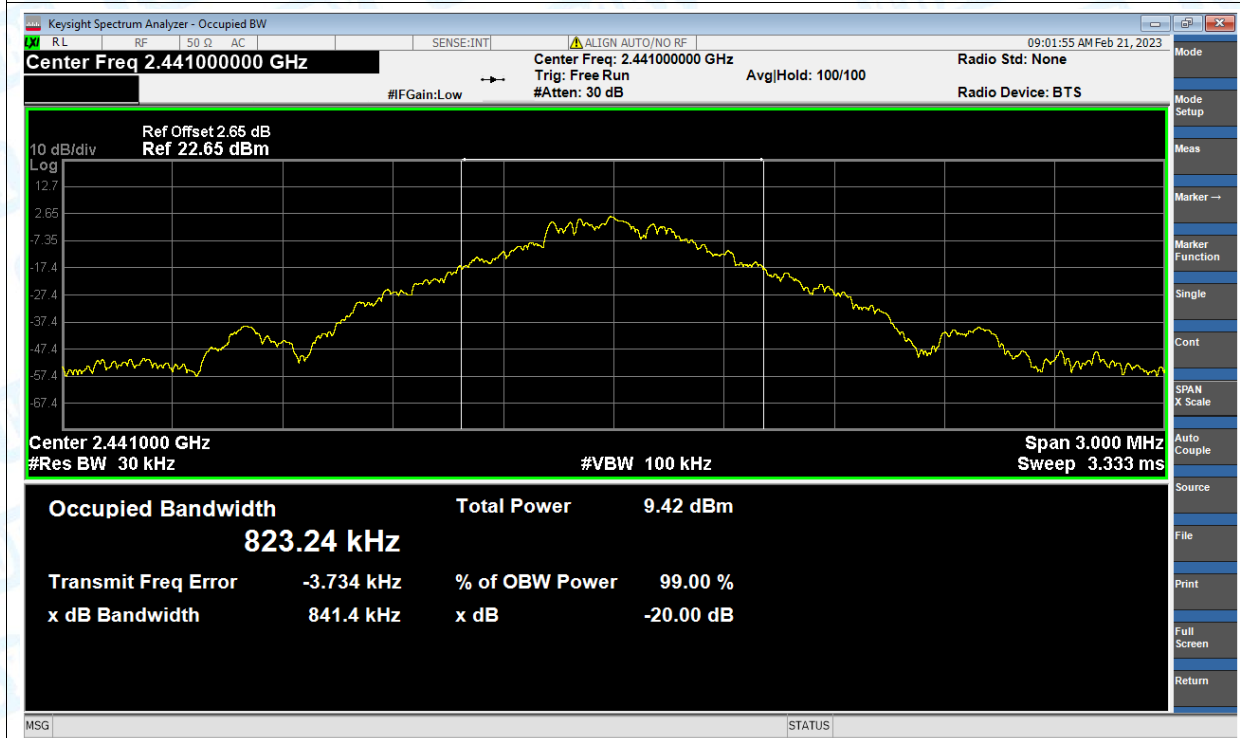
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.808
NVNT	1-DH1	2441	Ant1	0.823
NVNT	1-DH1	2480	Ant1	0.827
NVNT	2-DH1	2402	Ant1	1.105
NVNT	2-DH1	2441	Ant1	1.131
NVNT	2-DH1	2480	Ant1	1.123
NVNT	3-DH1	2402	Ant1	1.12
NVNT	3-DH1	2441	Ant1	1.122
NVNT	3-DH1	2480	Ant1	1.11

Test Graphs

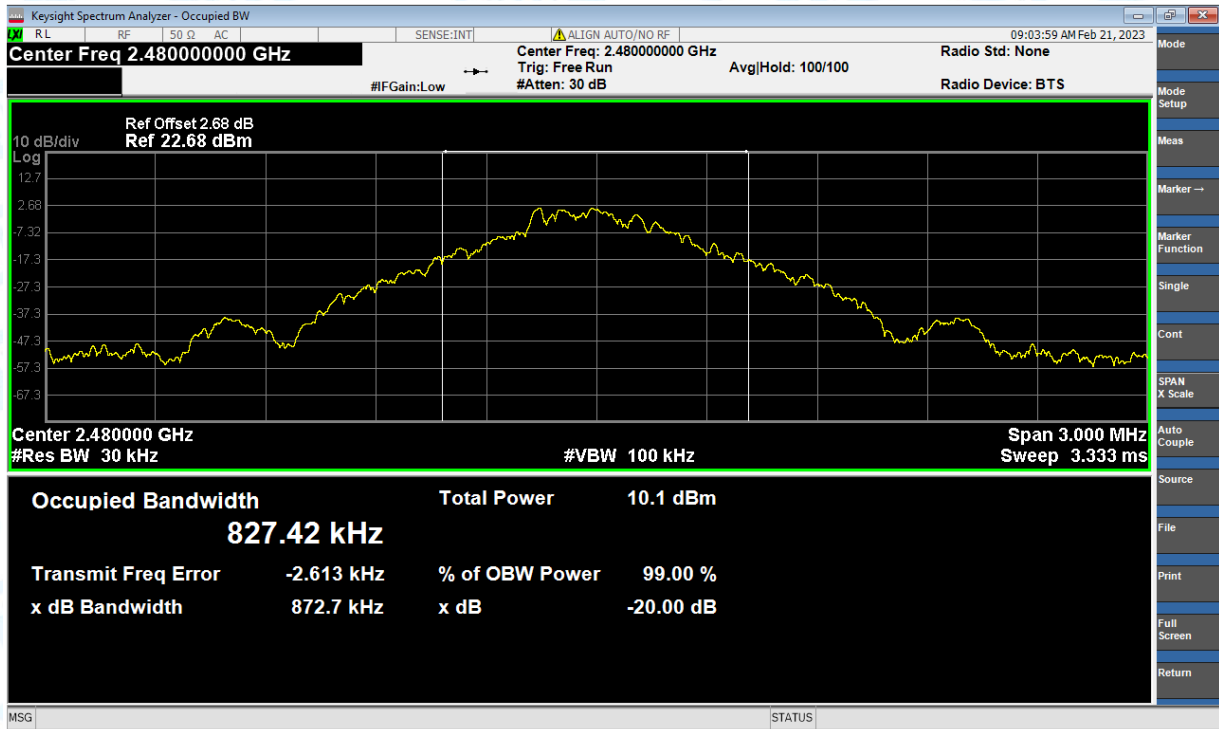
OBW NVNT 1-DH1 2402MHz Ant1



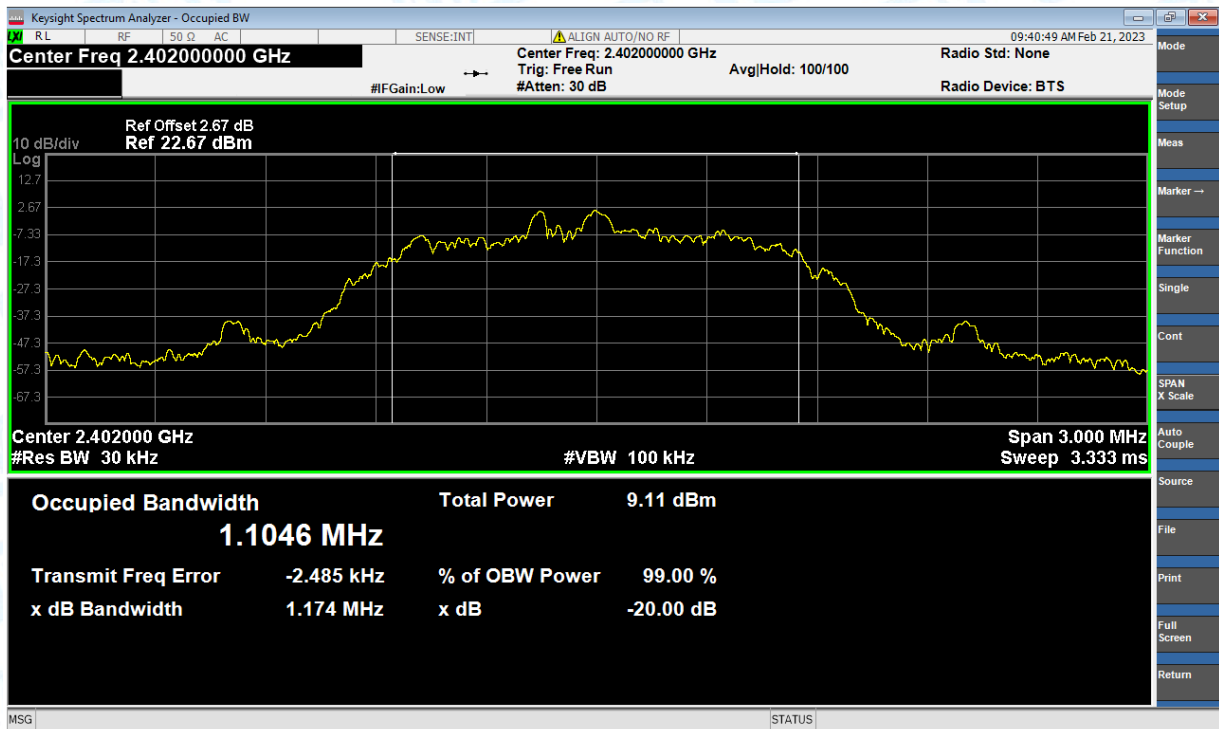
OBW NVNT 1-DH1 2441MHz Ant1



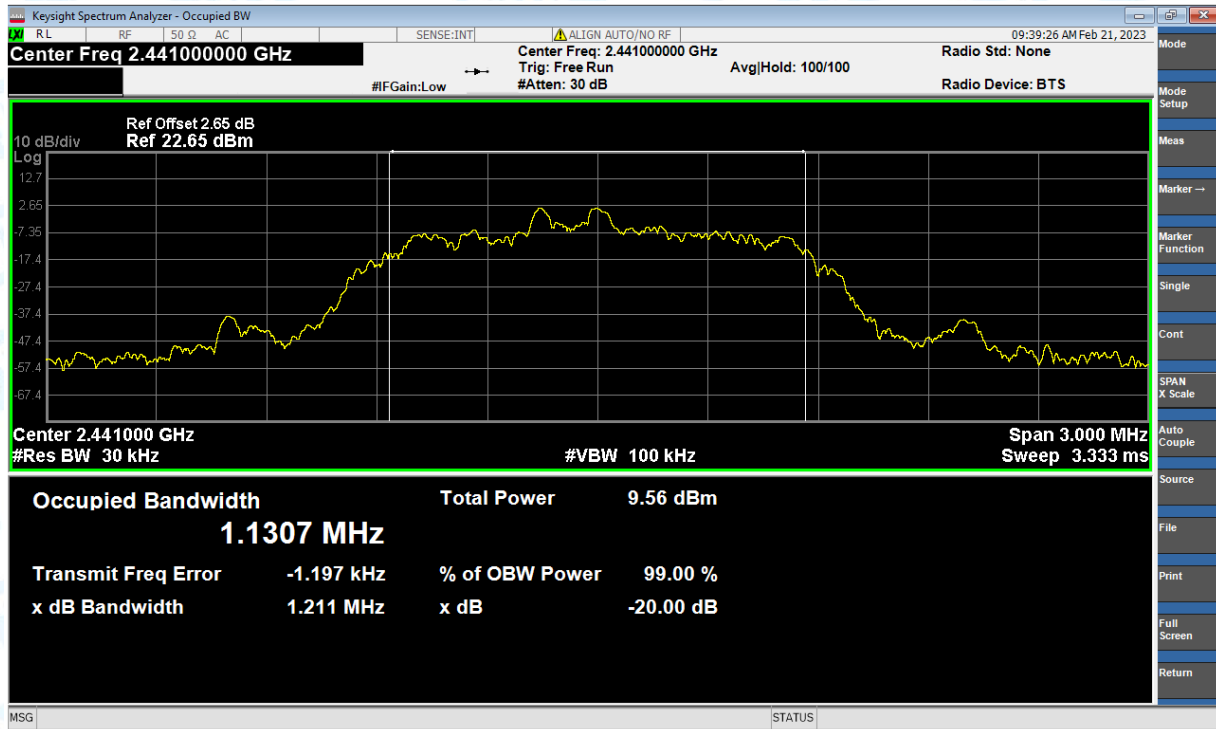
OBW NVNT 1-DH1 2480MHz Ant1



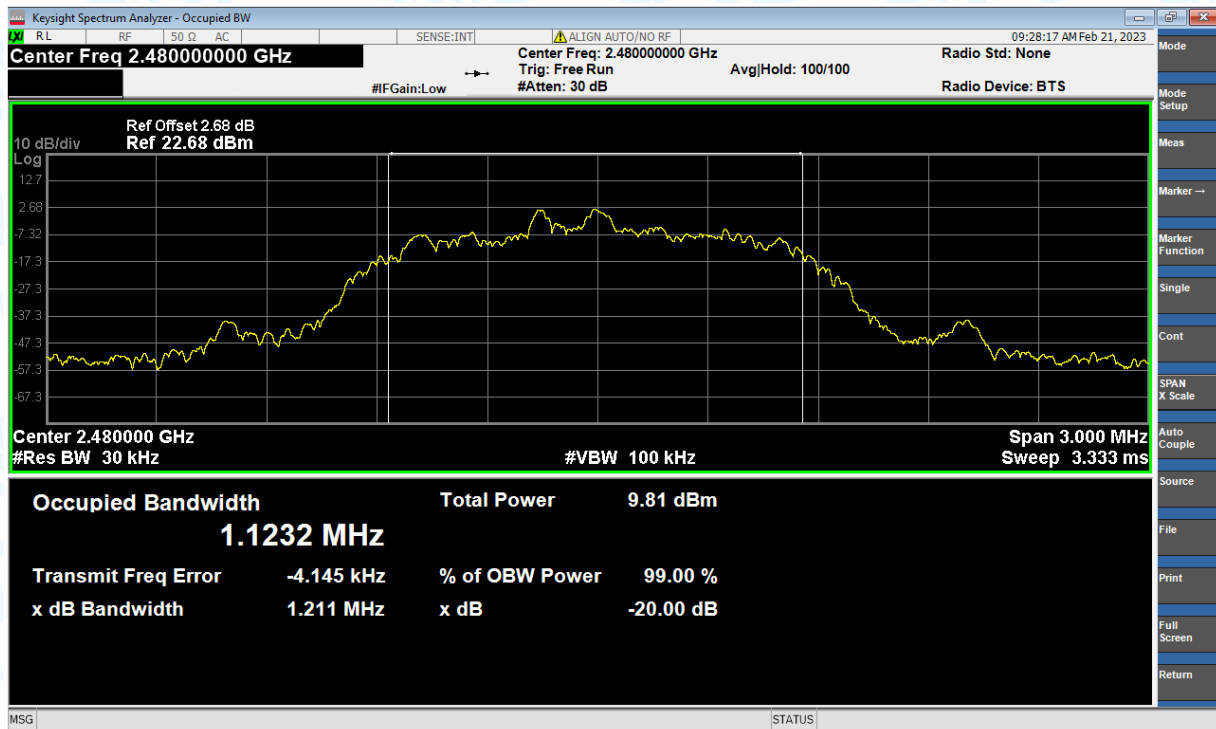
OBW NVNT 2-DH1 2402MHz Ant1



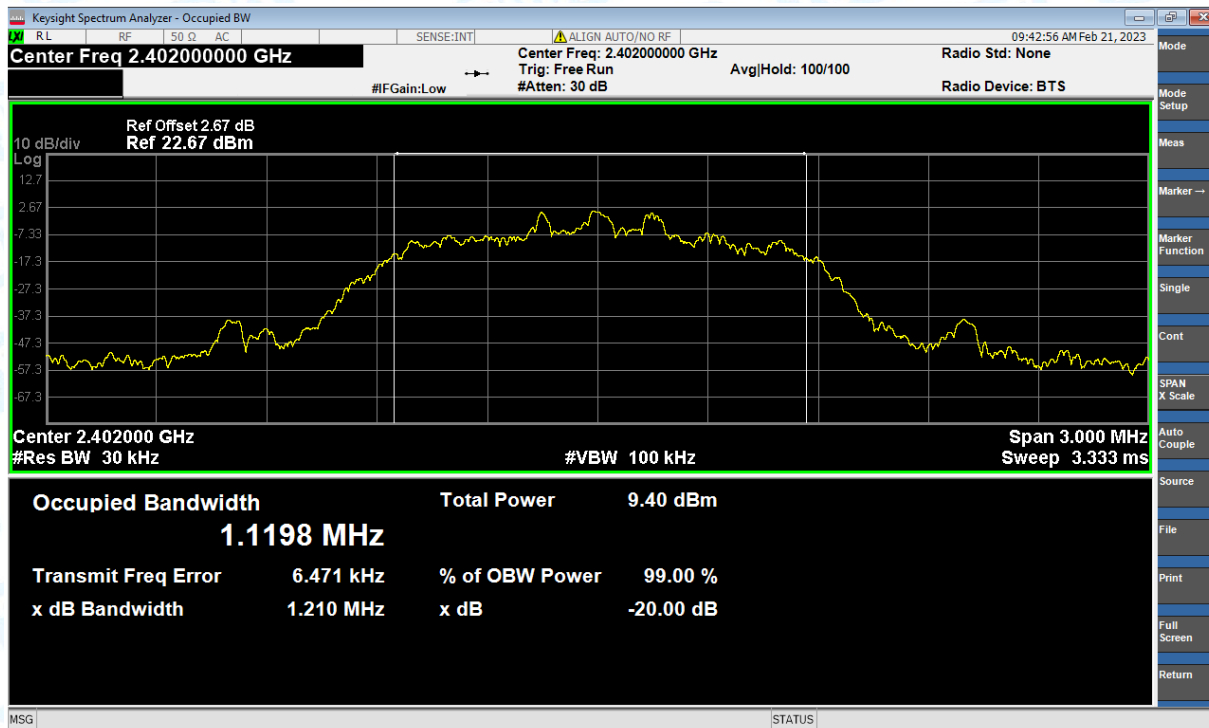
OBW NVNT 2-DH1 2441MHz Ant1



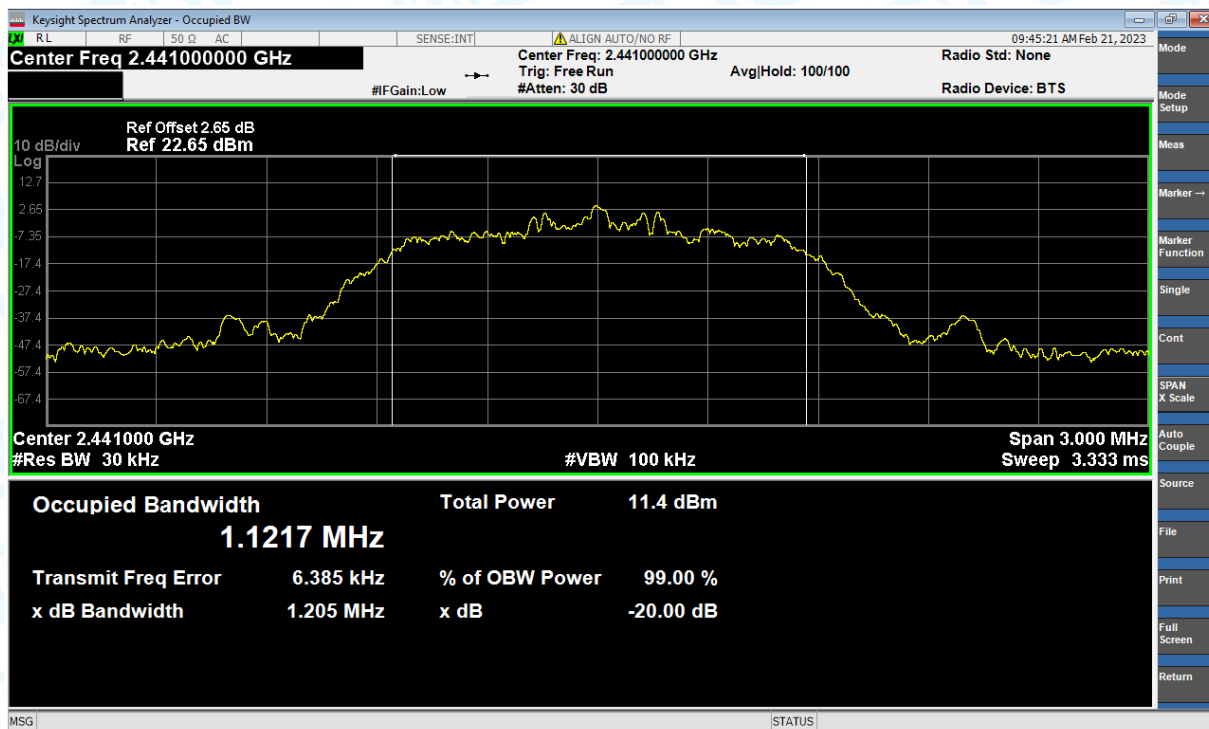
OBW NVNT 2-DH1 2480MHz Ant1

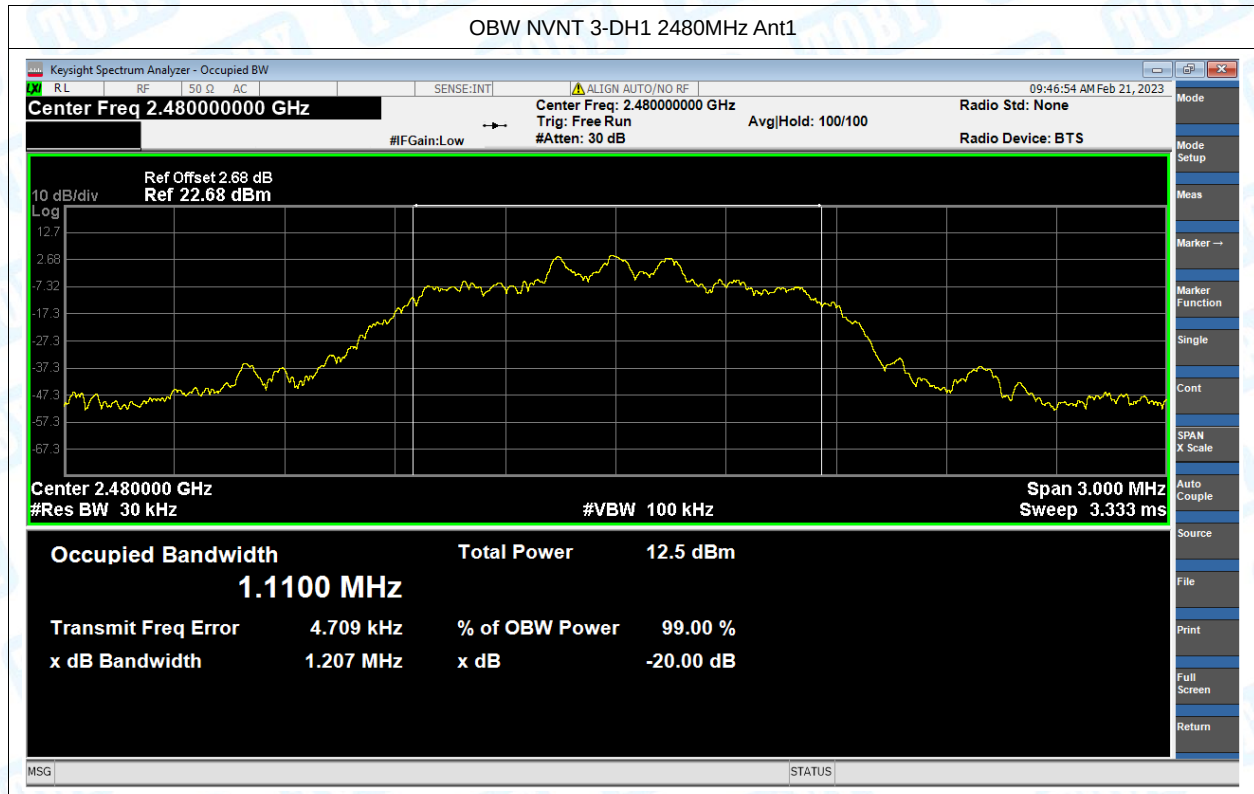


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



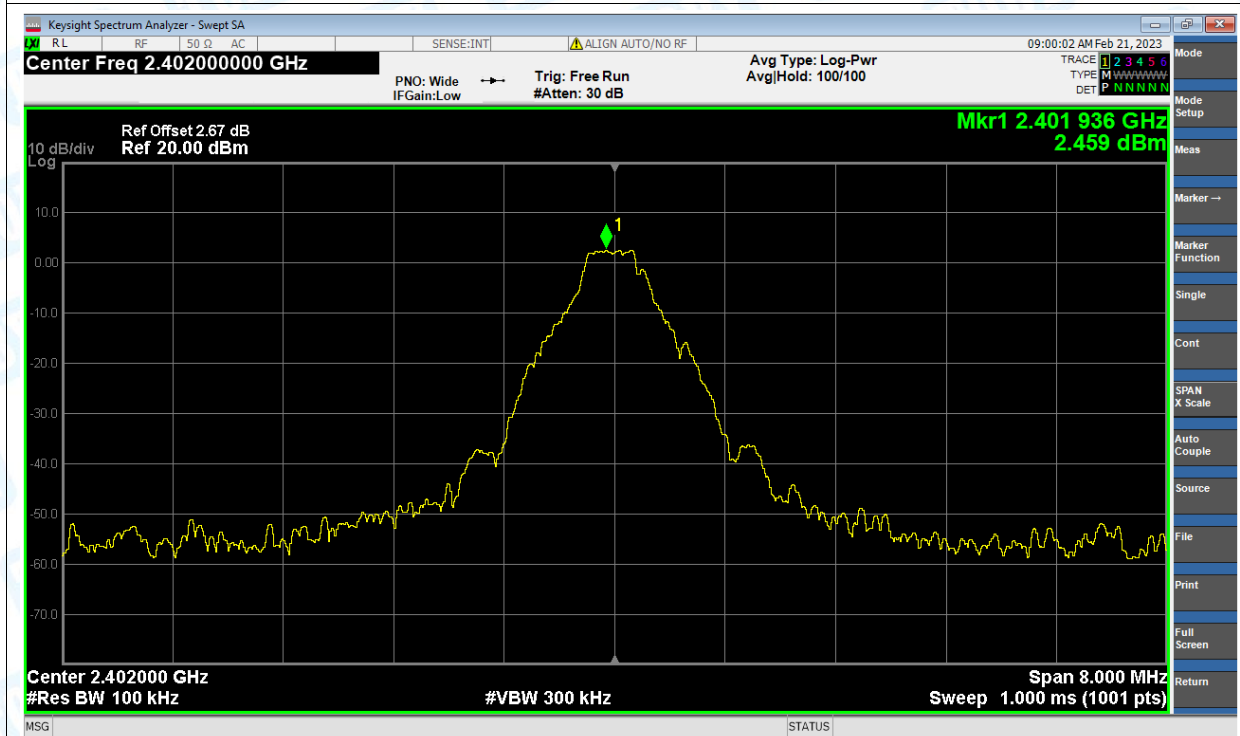


5. Band Edge

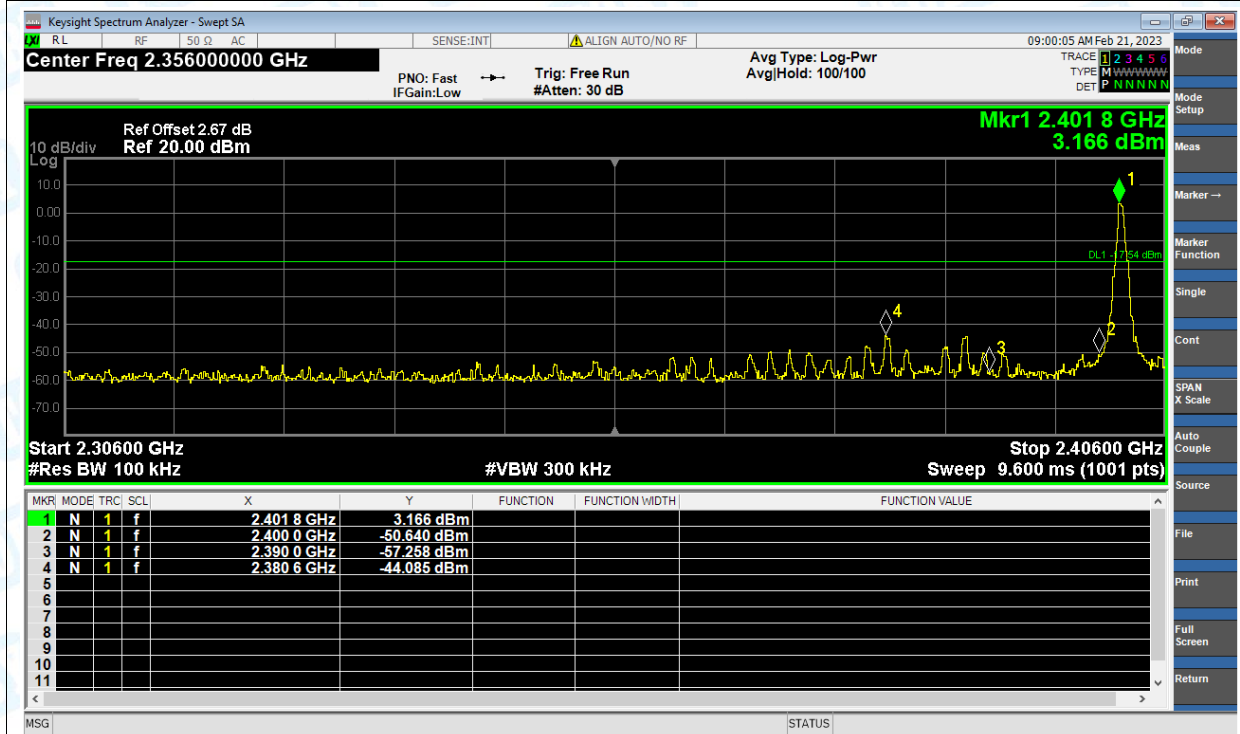
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-46.55	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-48.41	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-47.66	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-48.93	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-47.62	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-47.69	-20	Pass

Test Graphs

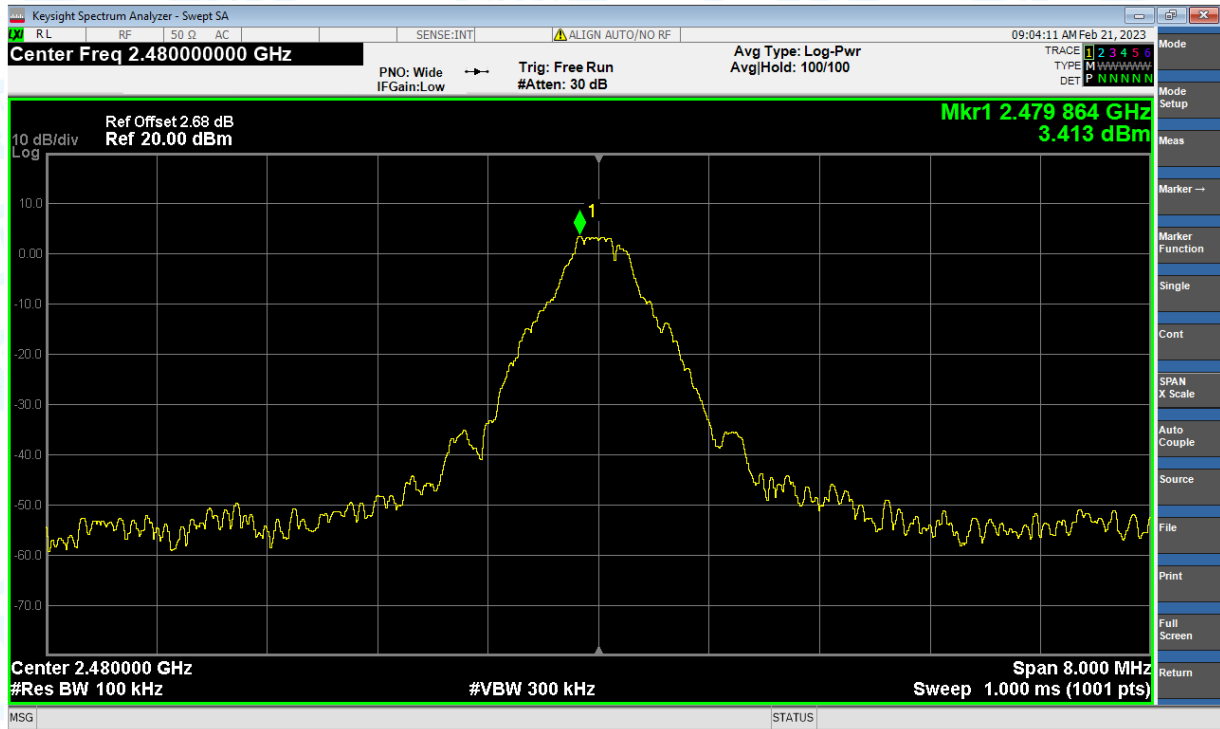
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



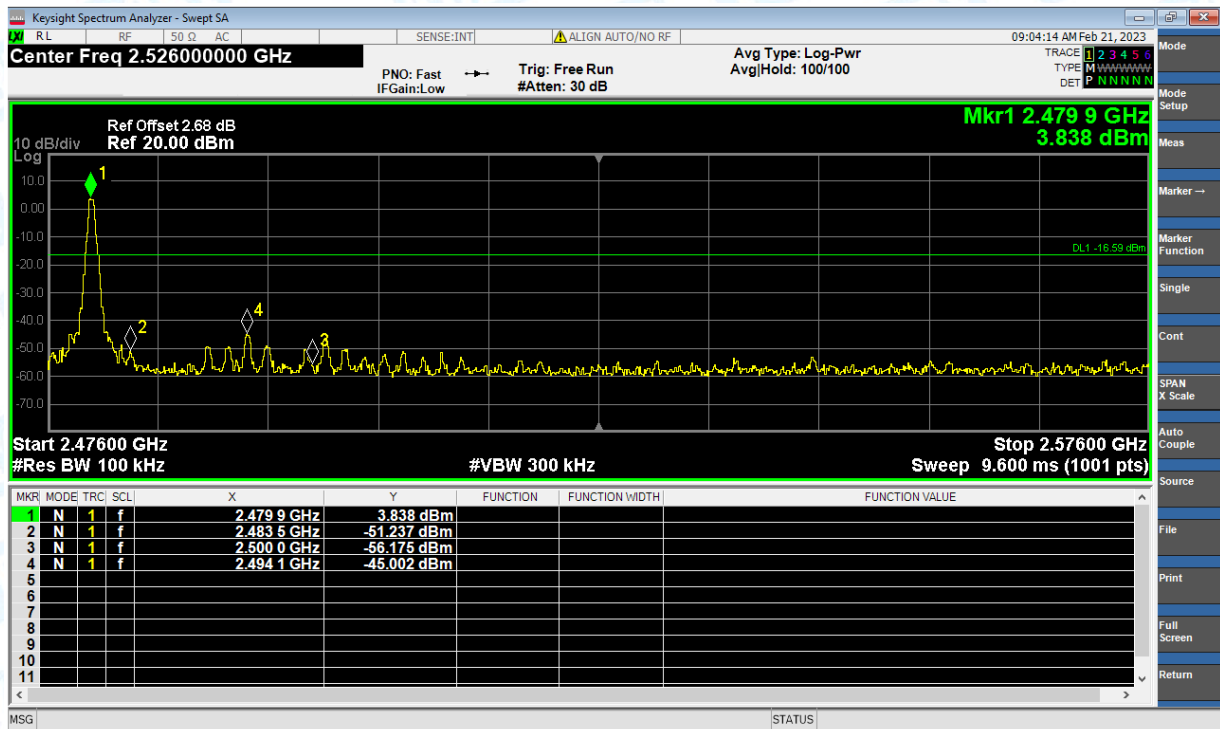
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



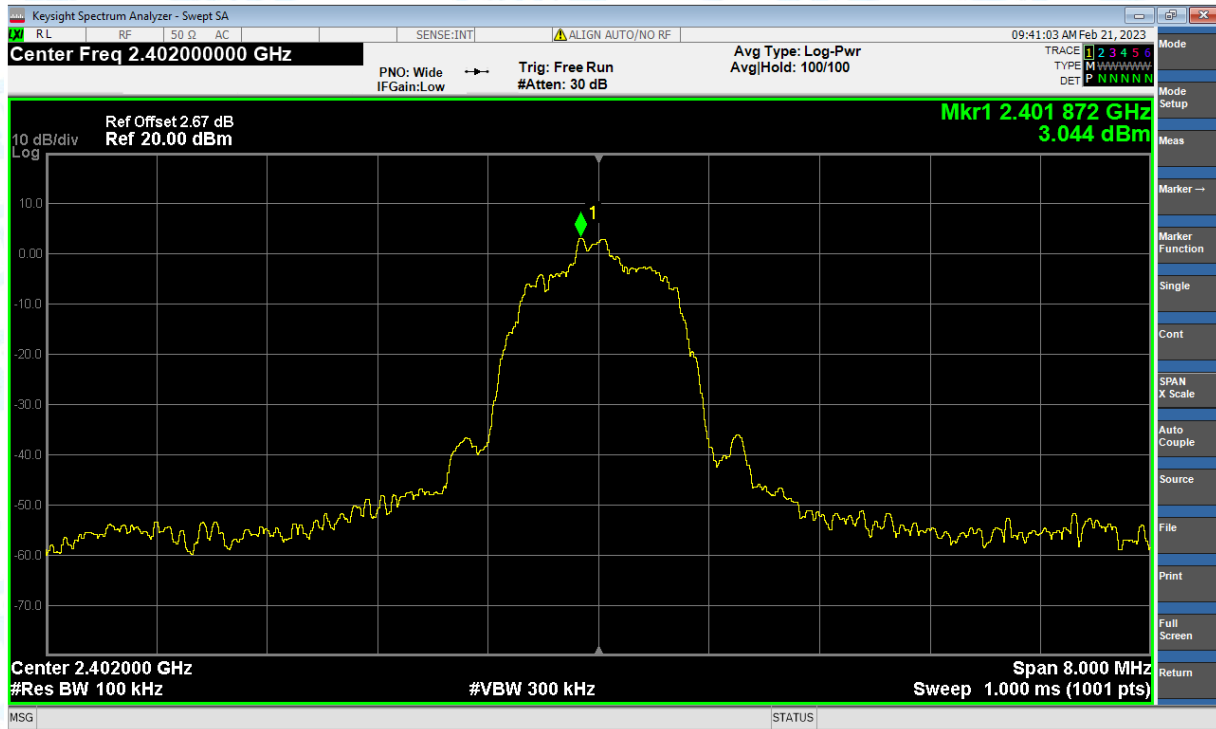
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



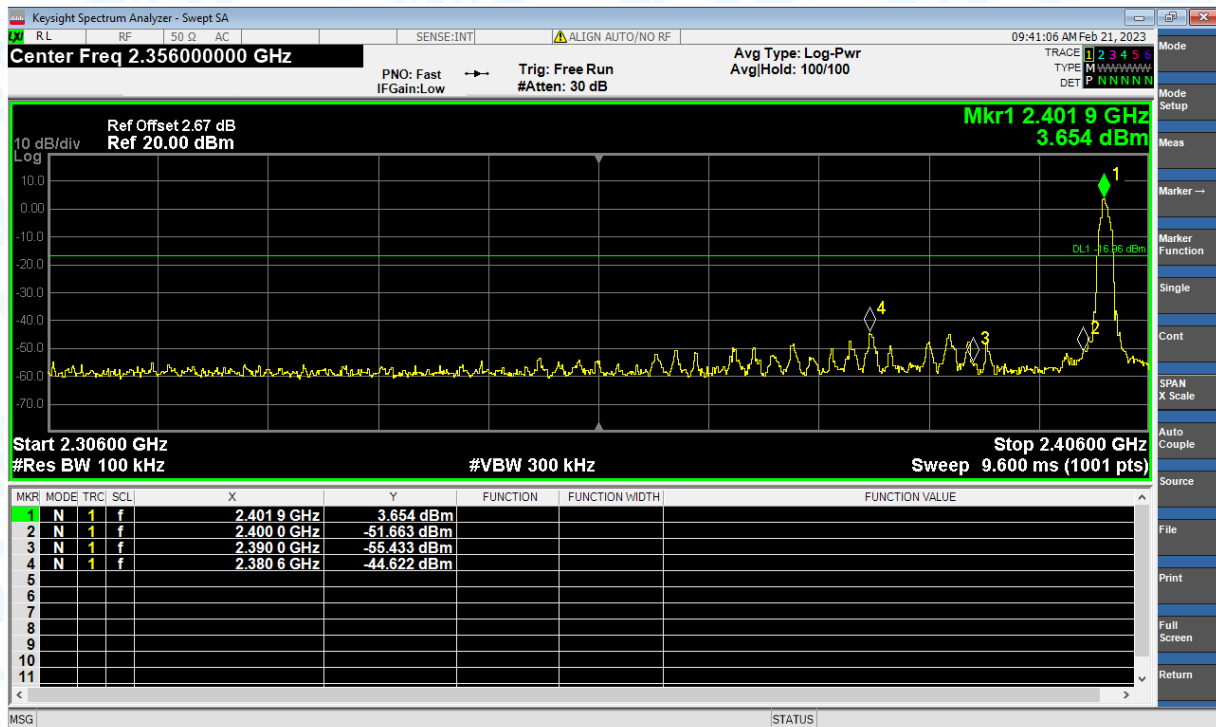
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



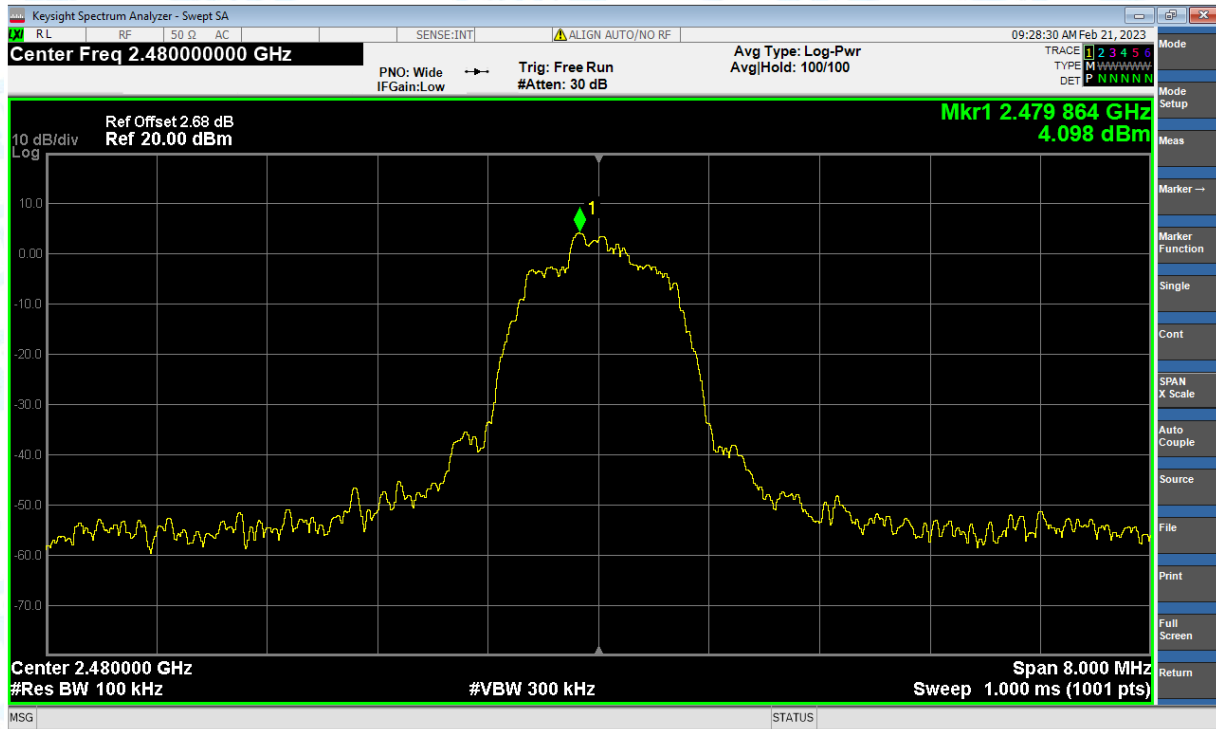
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



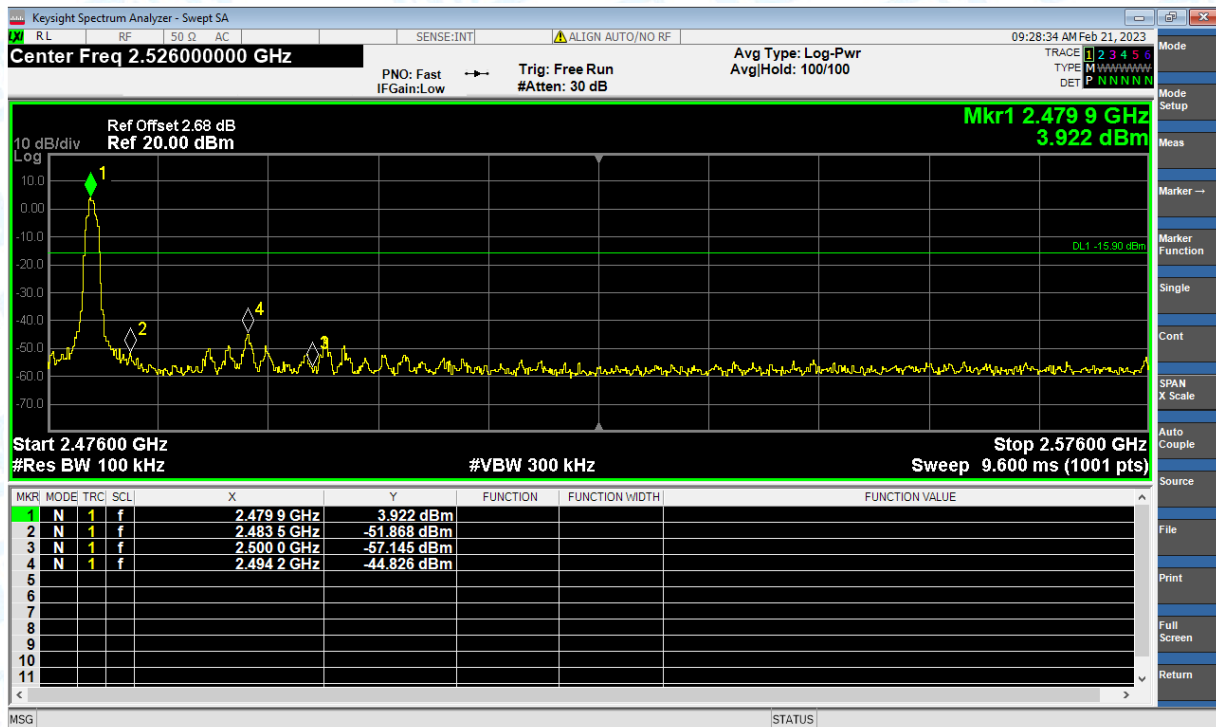
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



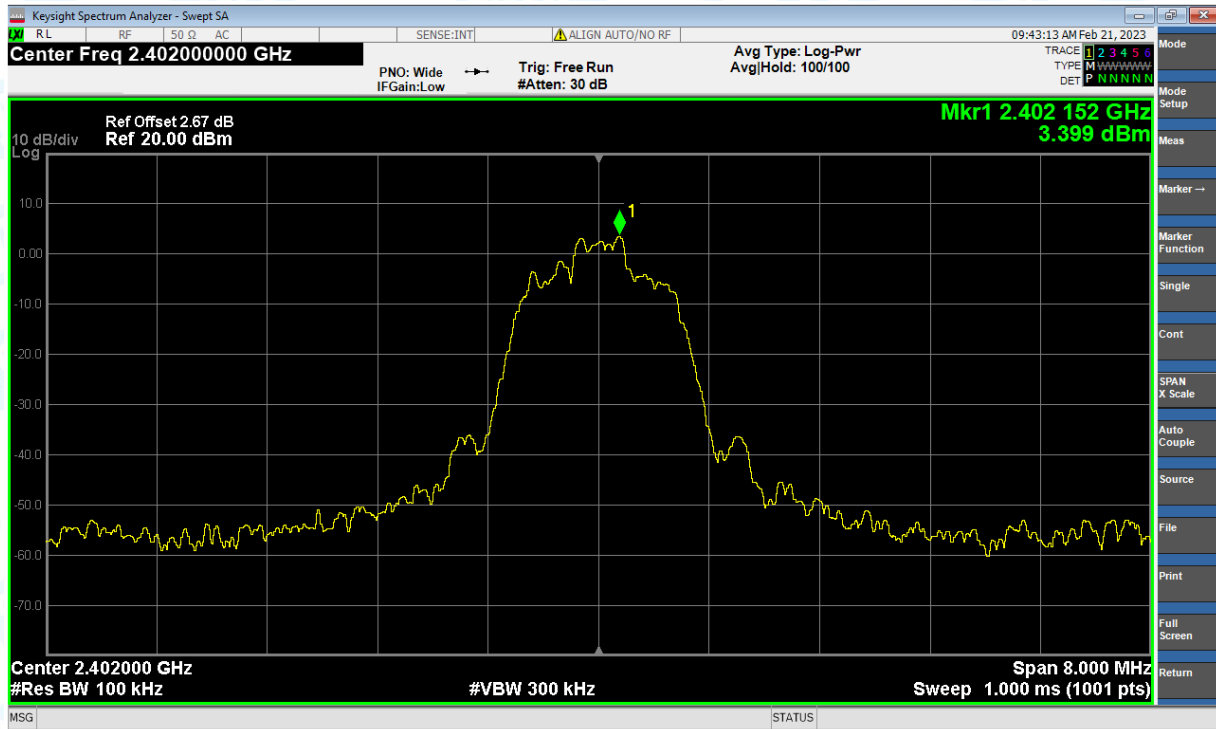
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



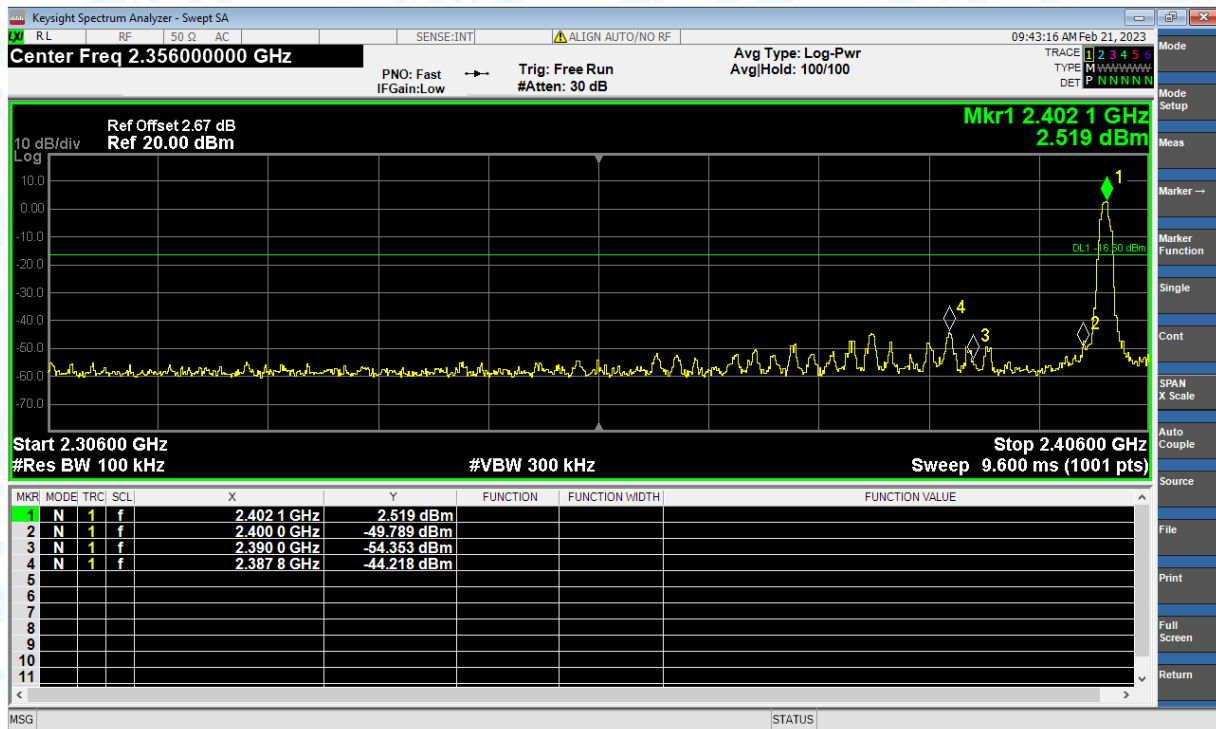
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



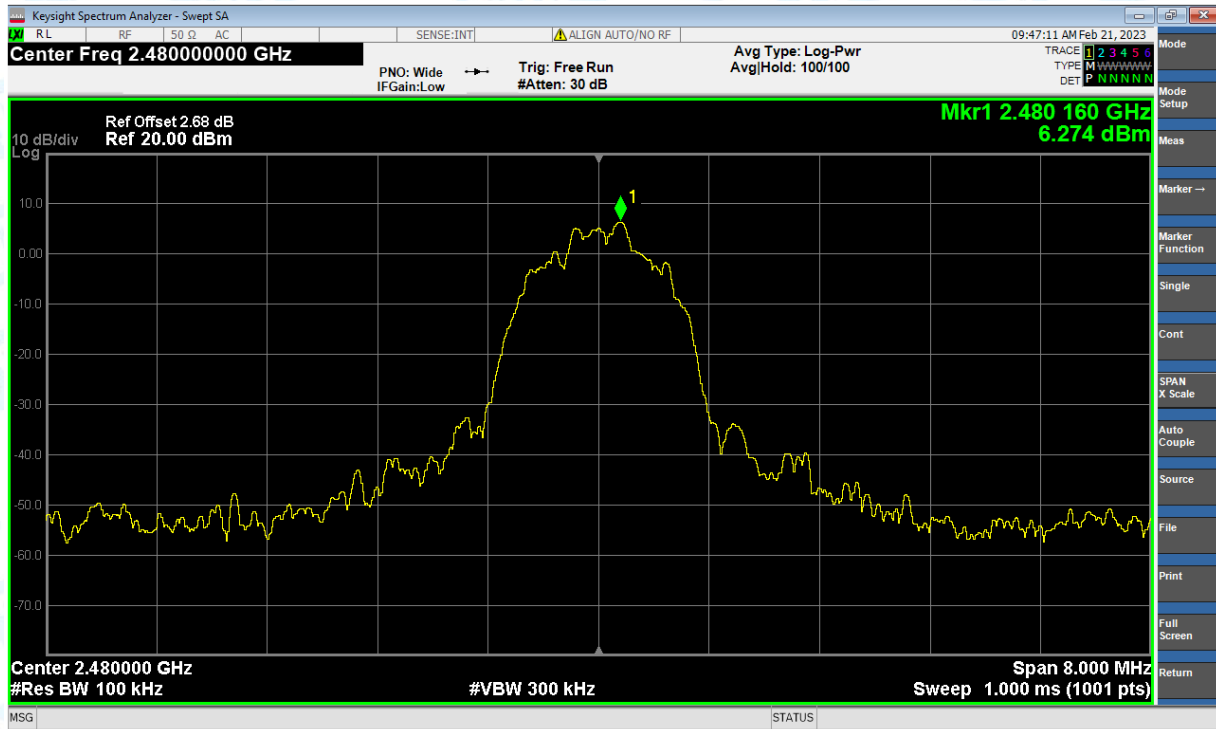
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



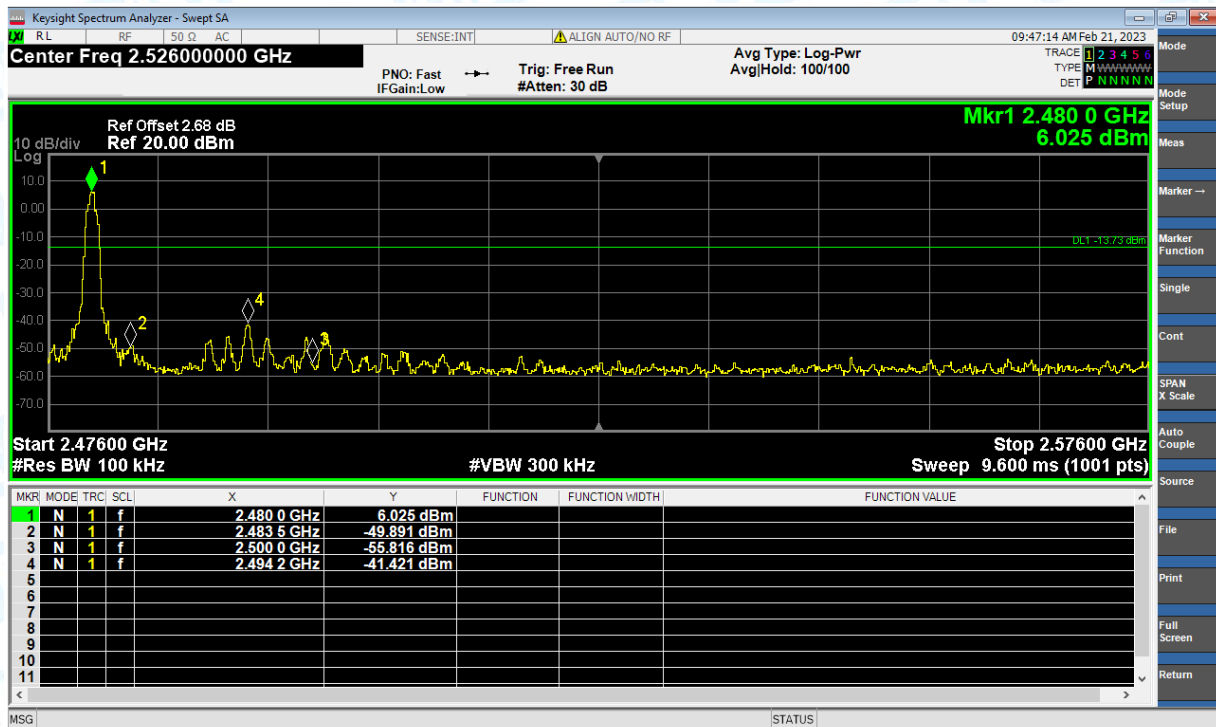
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



6. Band Edge(Hopping)

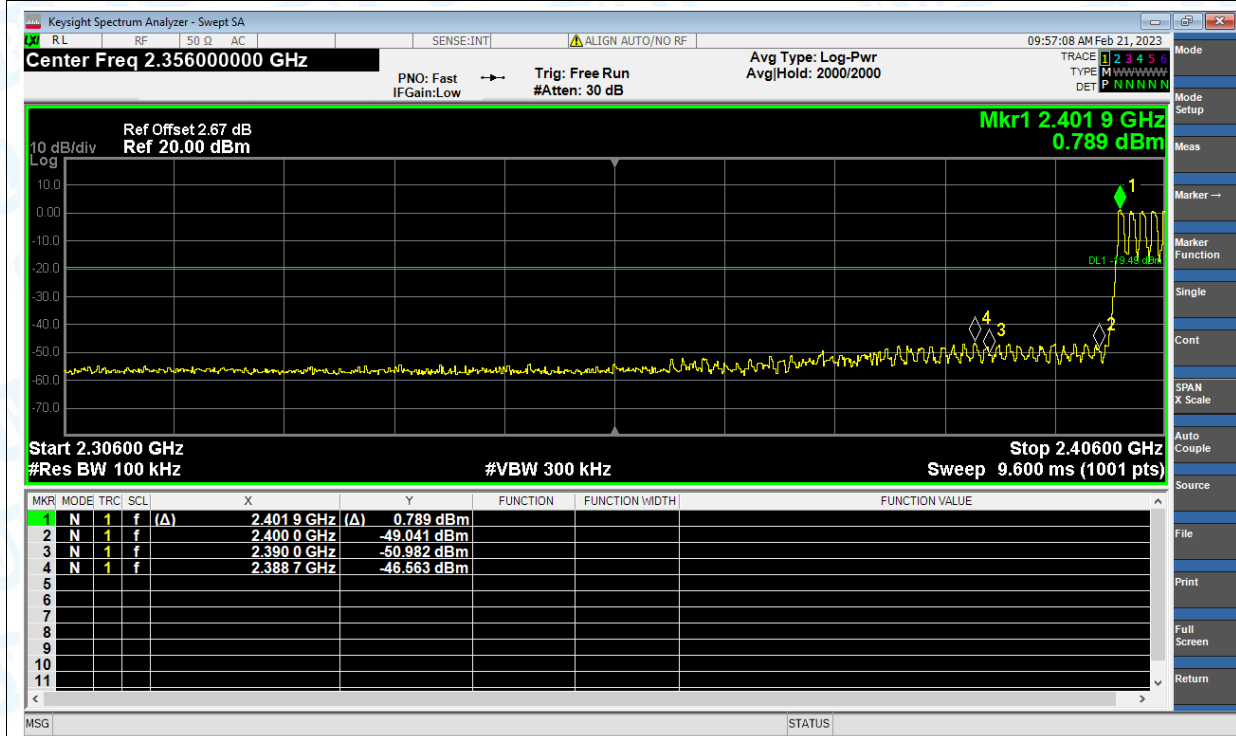
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-47.07	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-48.62	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-48.06	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-47.84	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-47.72	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-48.96	-20	Pass

Test Graphs

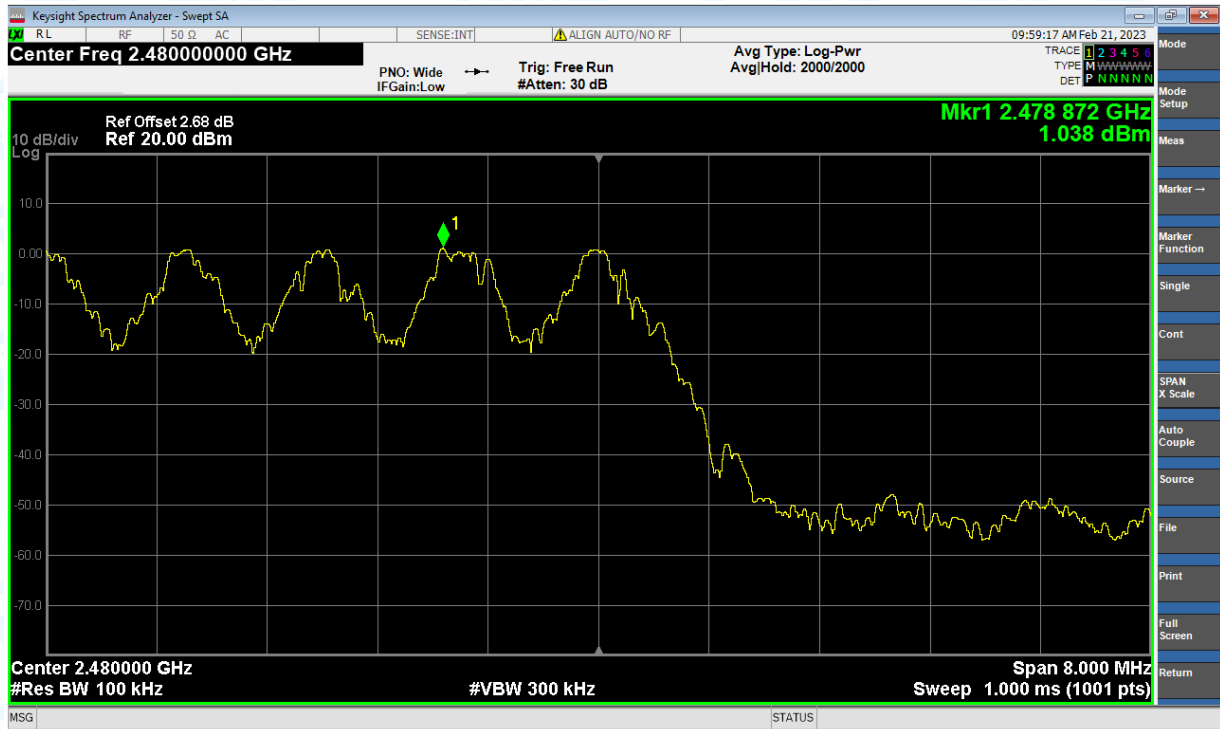
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



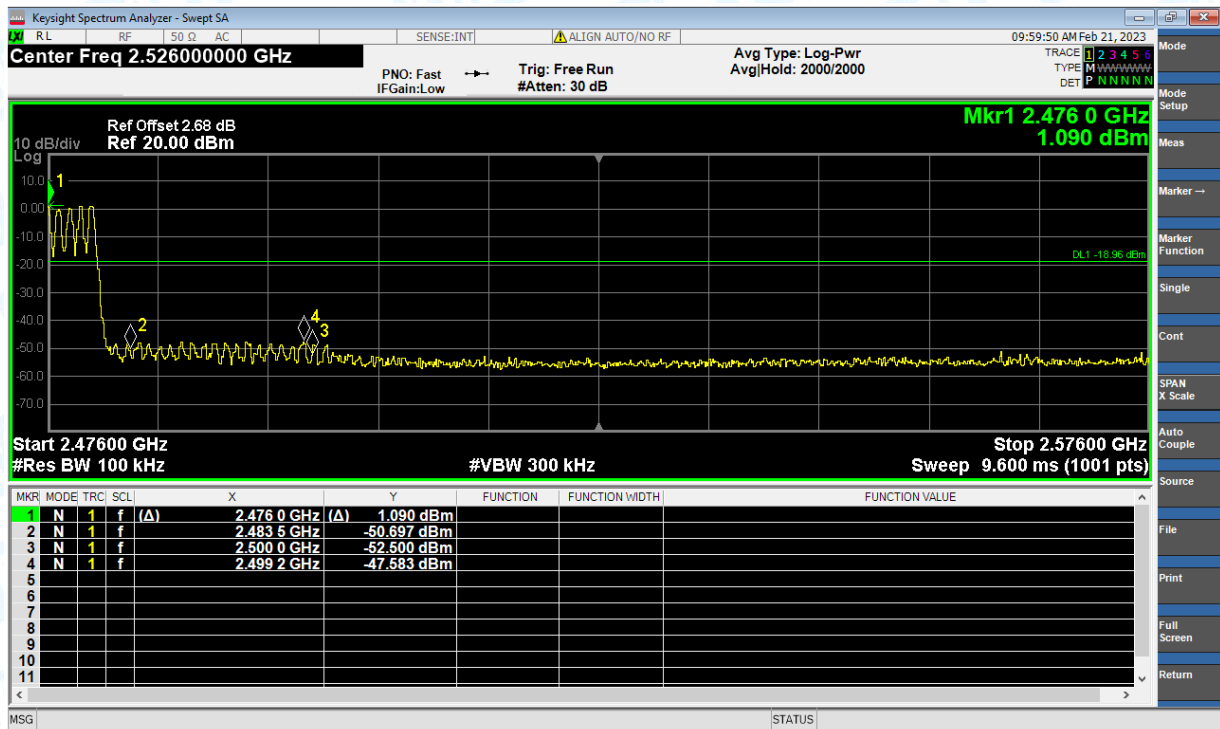
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



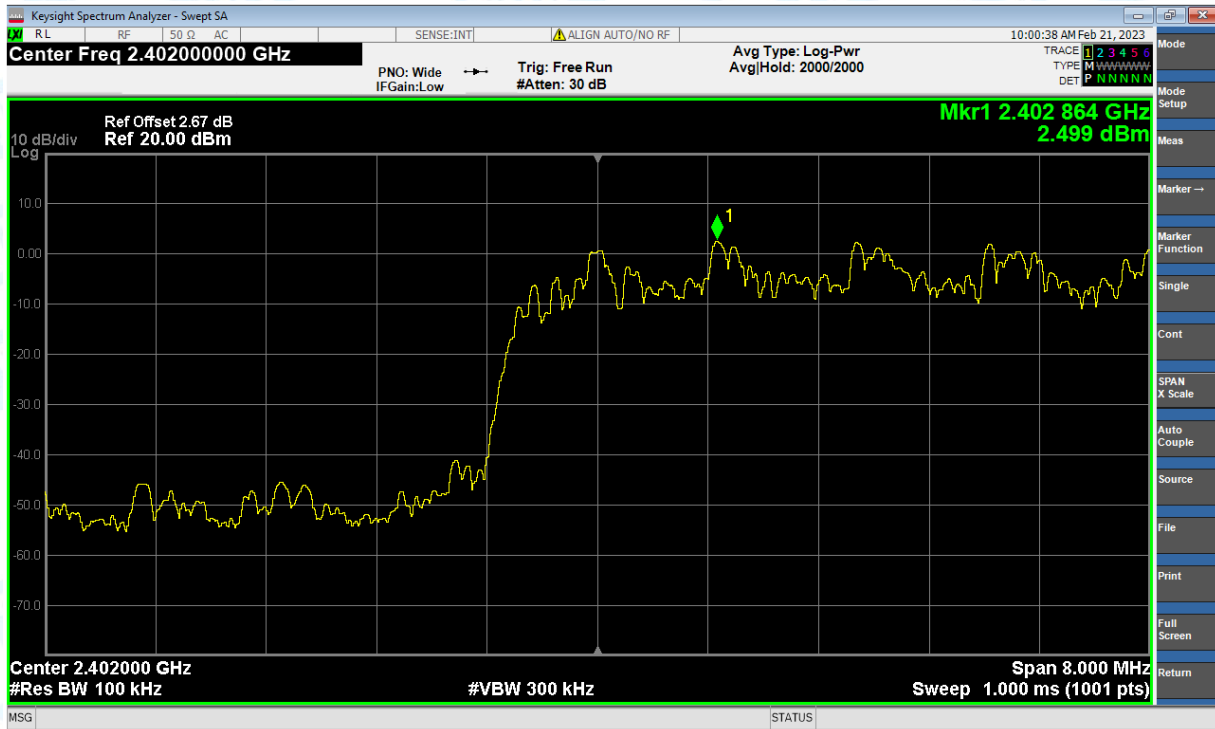
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



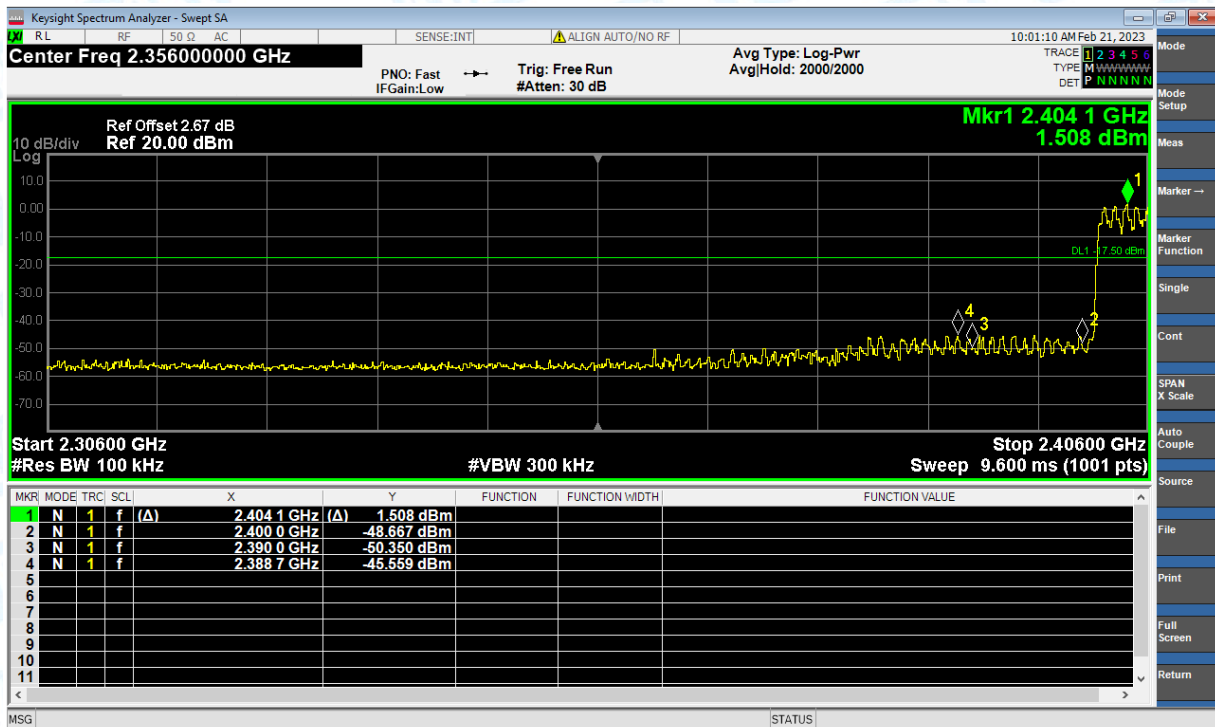
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



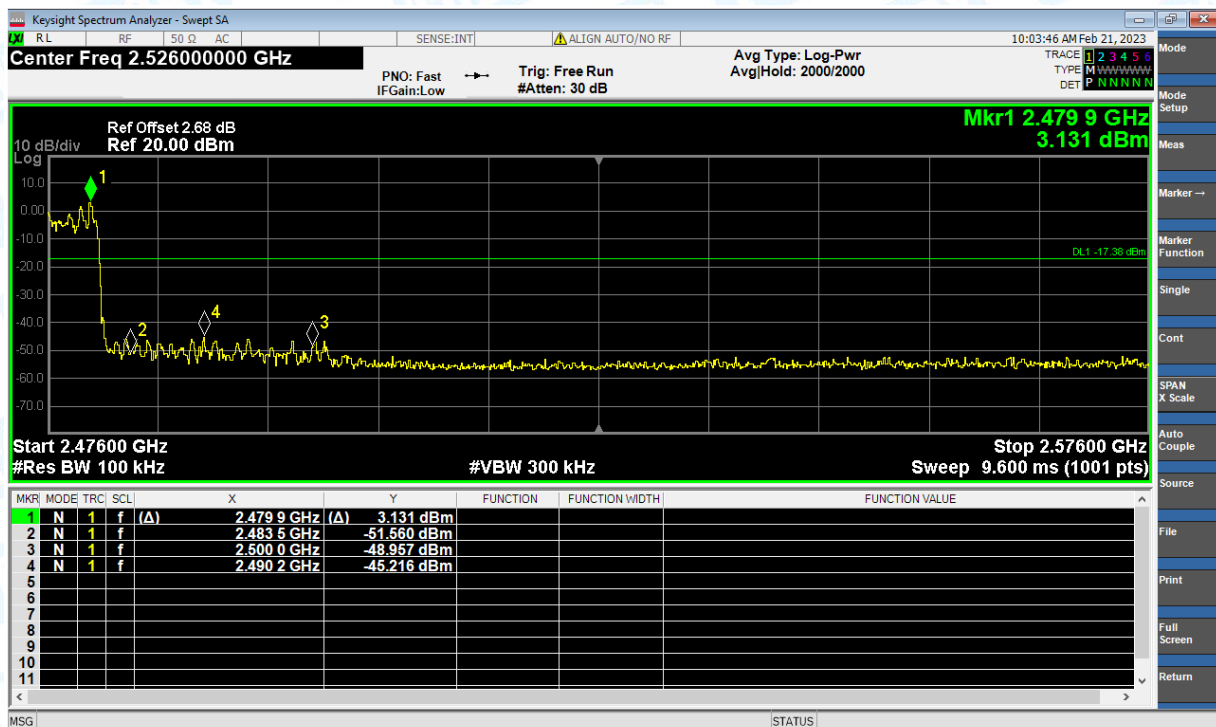
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



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



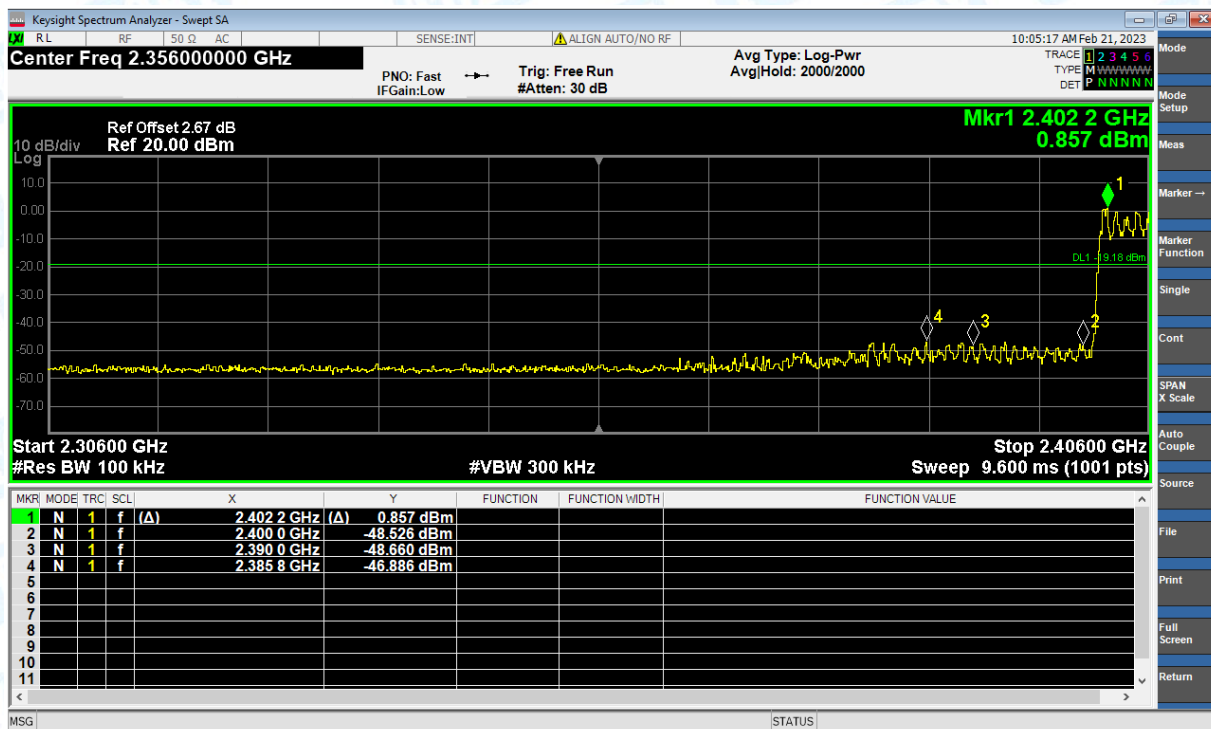
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



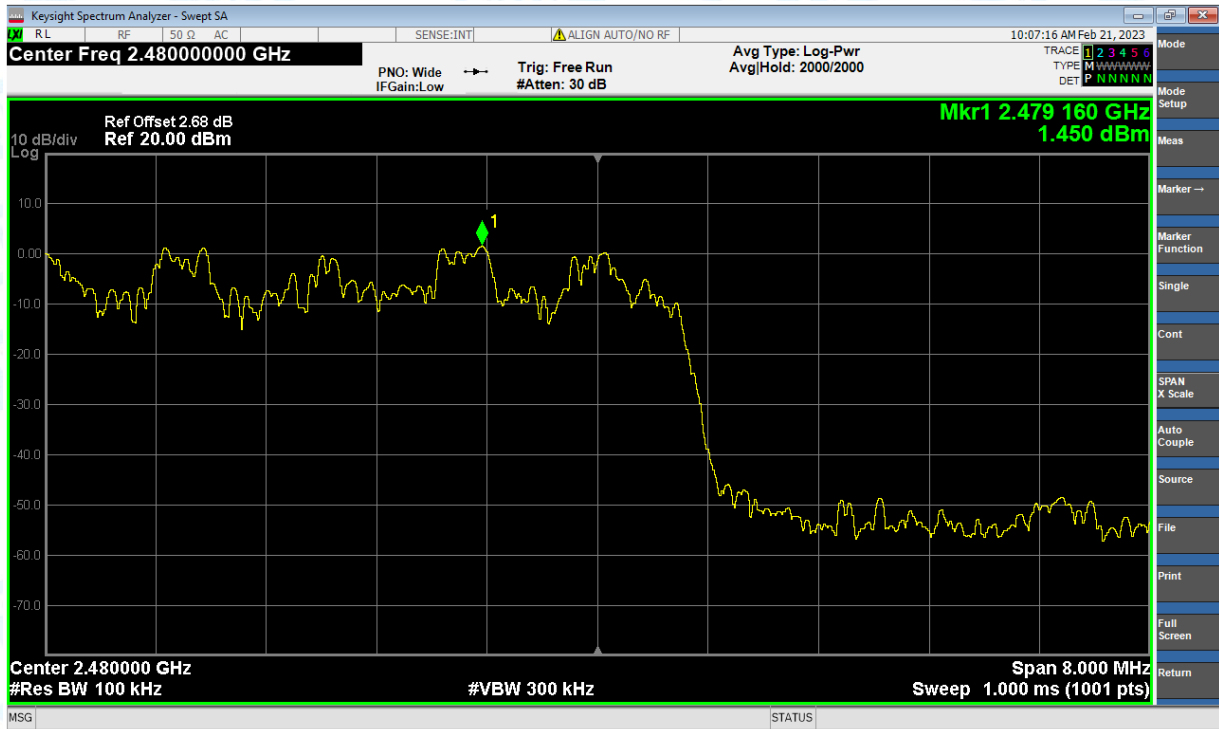
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



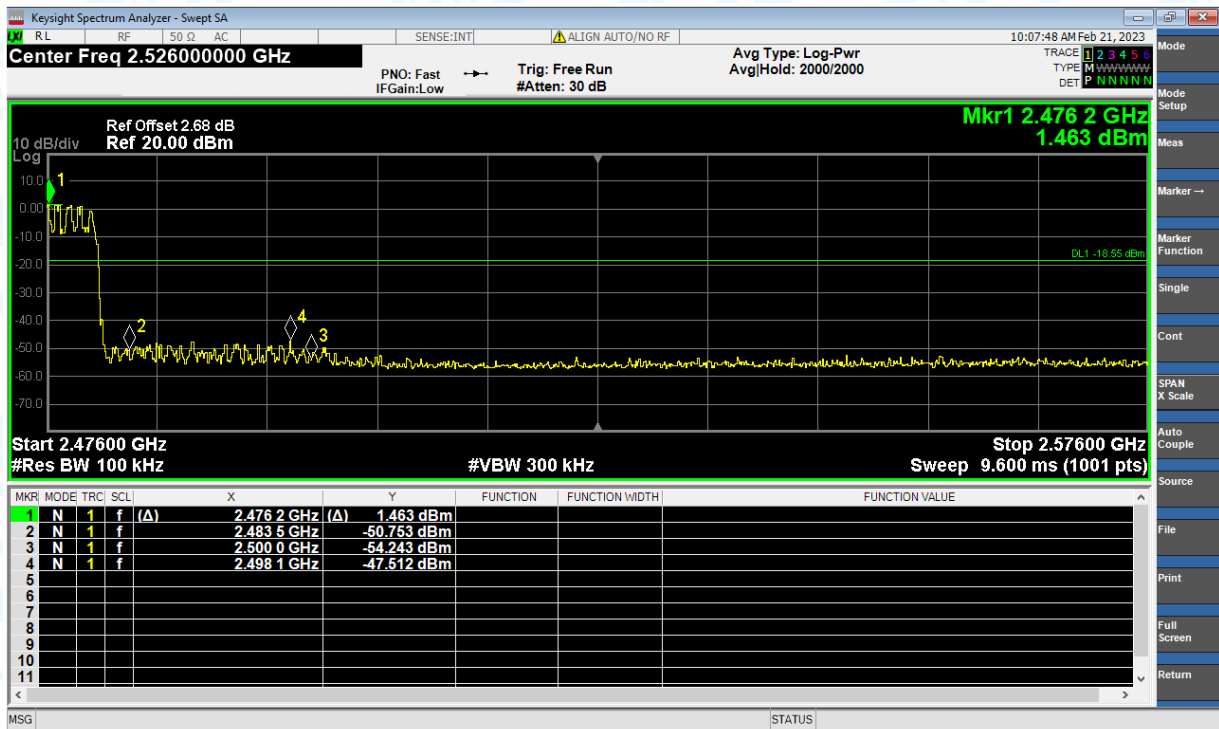
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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

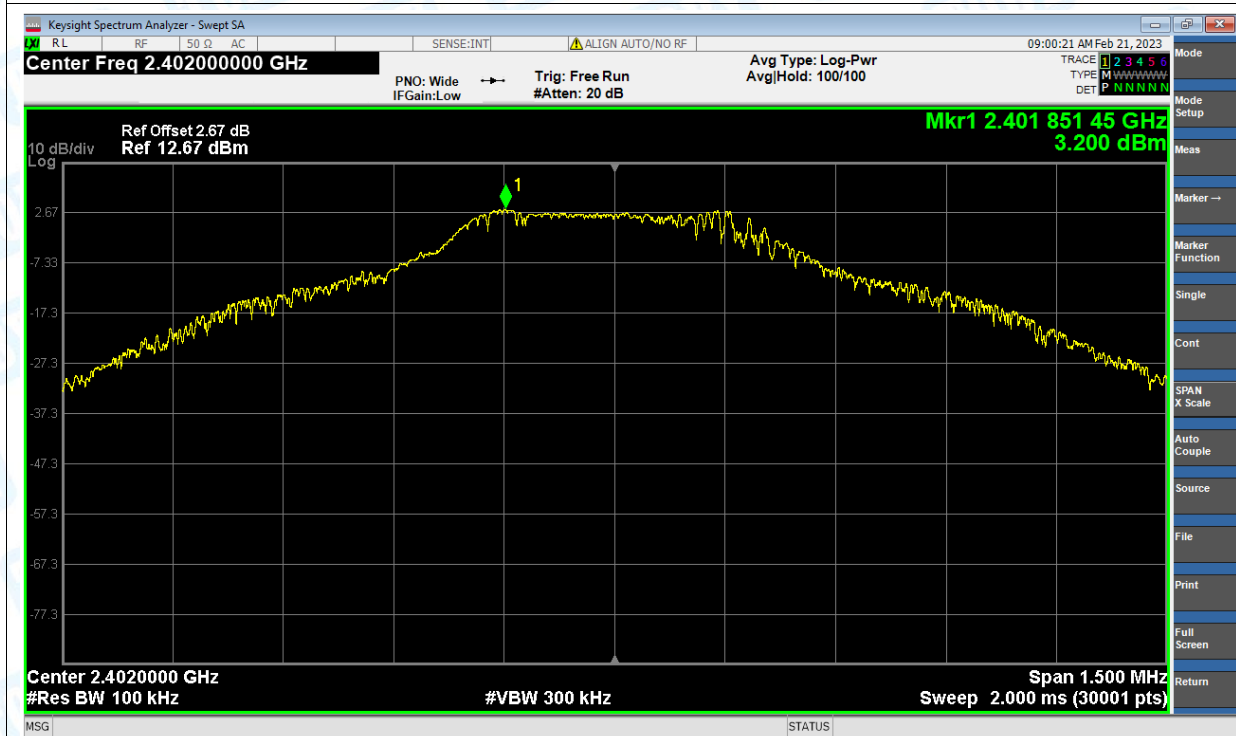


7. Conducted RF Spurious Emission

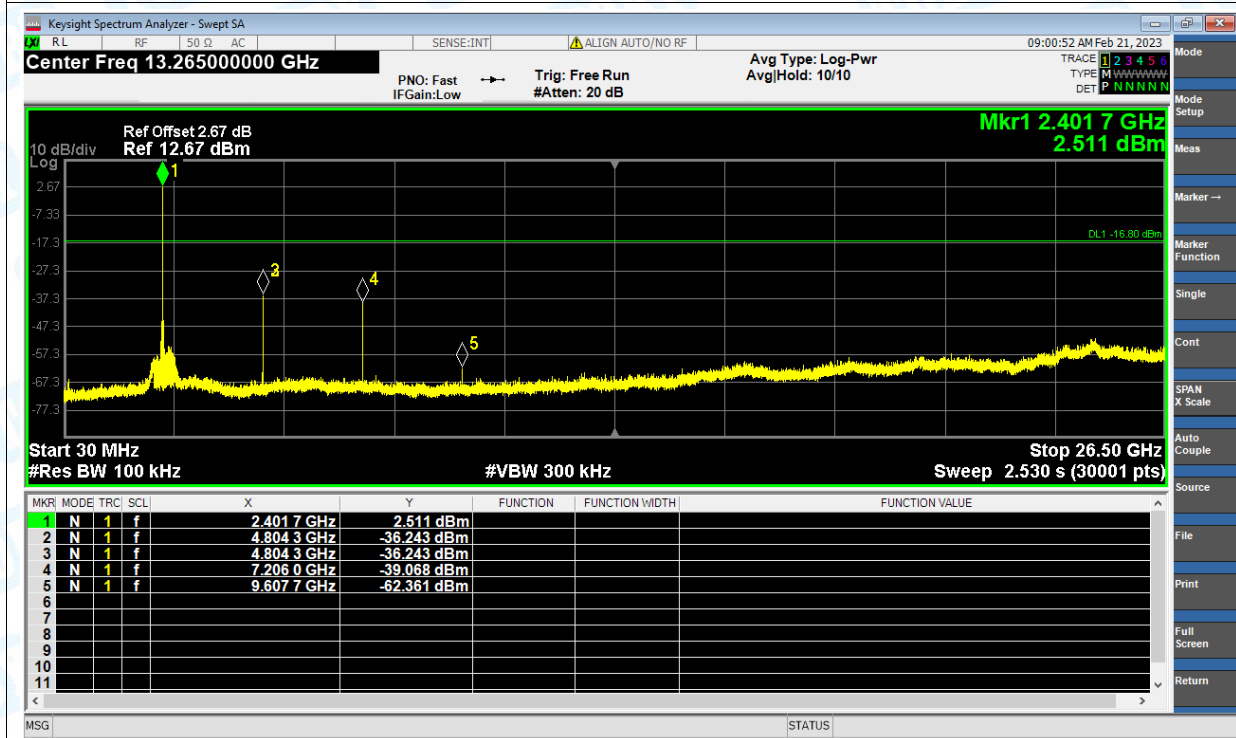
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-39.44	-20	Pass
NVNT	1-DH1	2441	Ant1	-40.68	-20	Pass
NVNT	1-DH1	2480	Ant1	-42.35	-20	Pass
NVNT	2-DH1	2402	Ant1	-41.36	-20	Pass
NVNT	2-DH1	2441	Ant1	-42.89	-20	Pass
NVNT	2-DH1	2480	Ant1	-43.93	-20	Pass
NVNT	3-DH1	2402	Ant1	-41.99	-20	Pass
NVNT	3-DH1	2441	Ant1	-45.47	-20	Pass
NVNT	3-DH1	2480	Ant1	-46.83	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



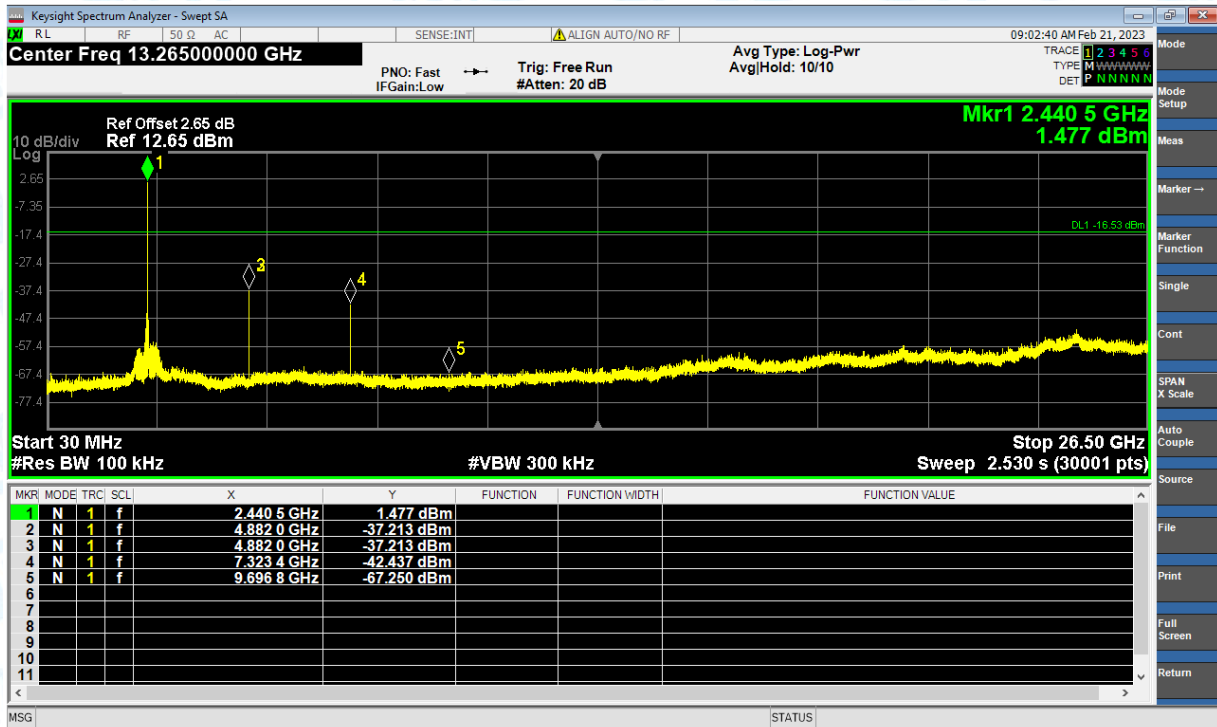
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



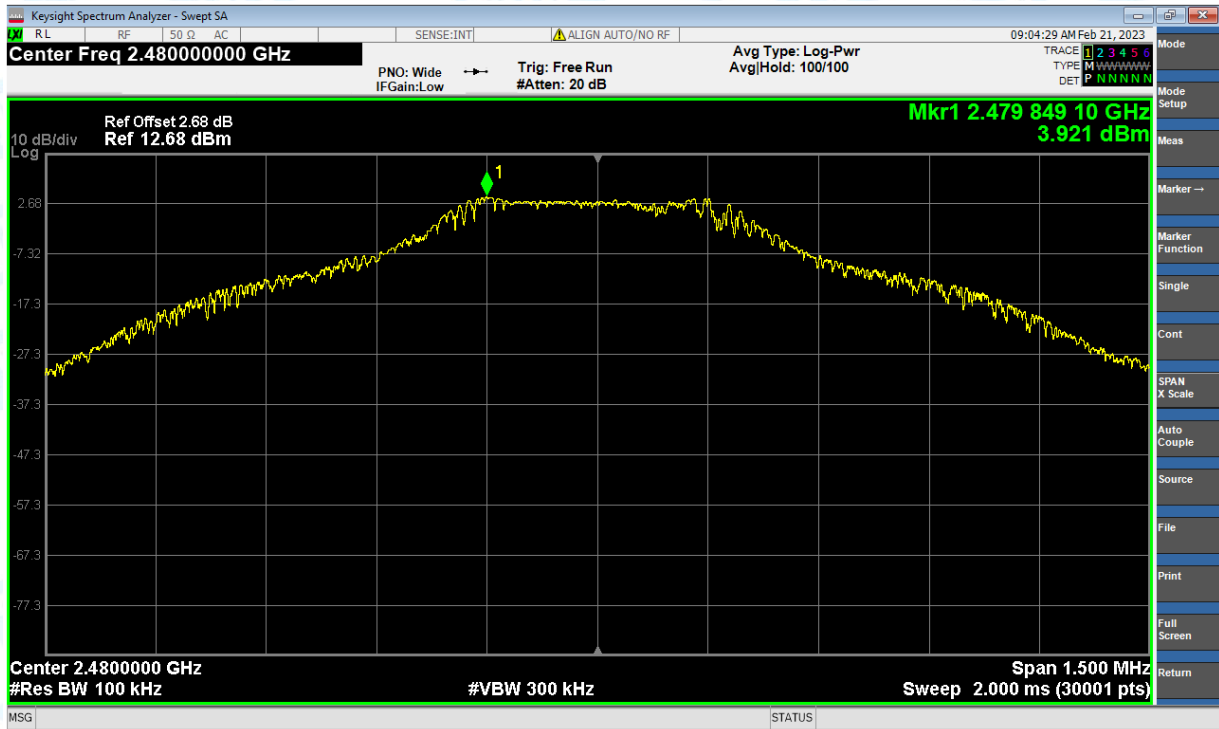
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



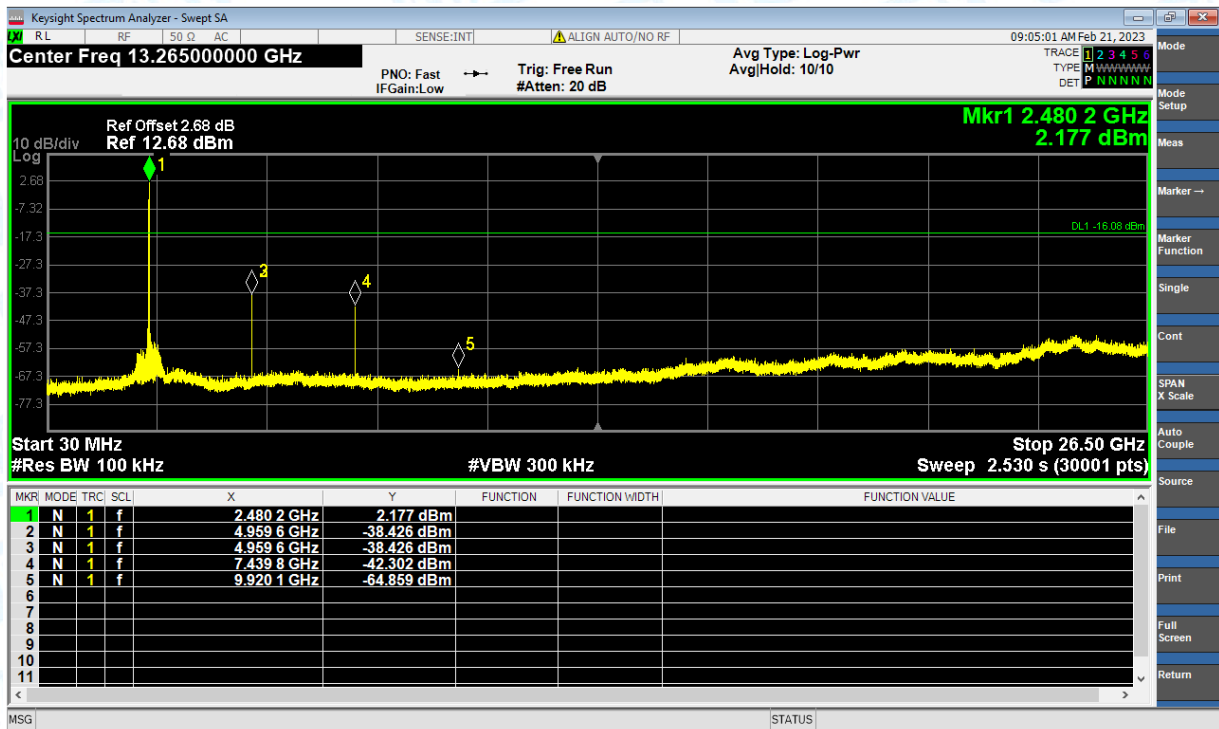
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



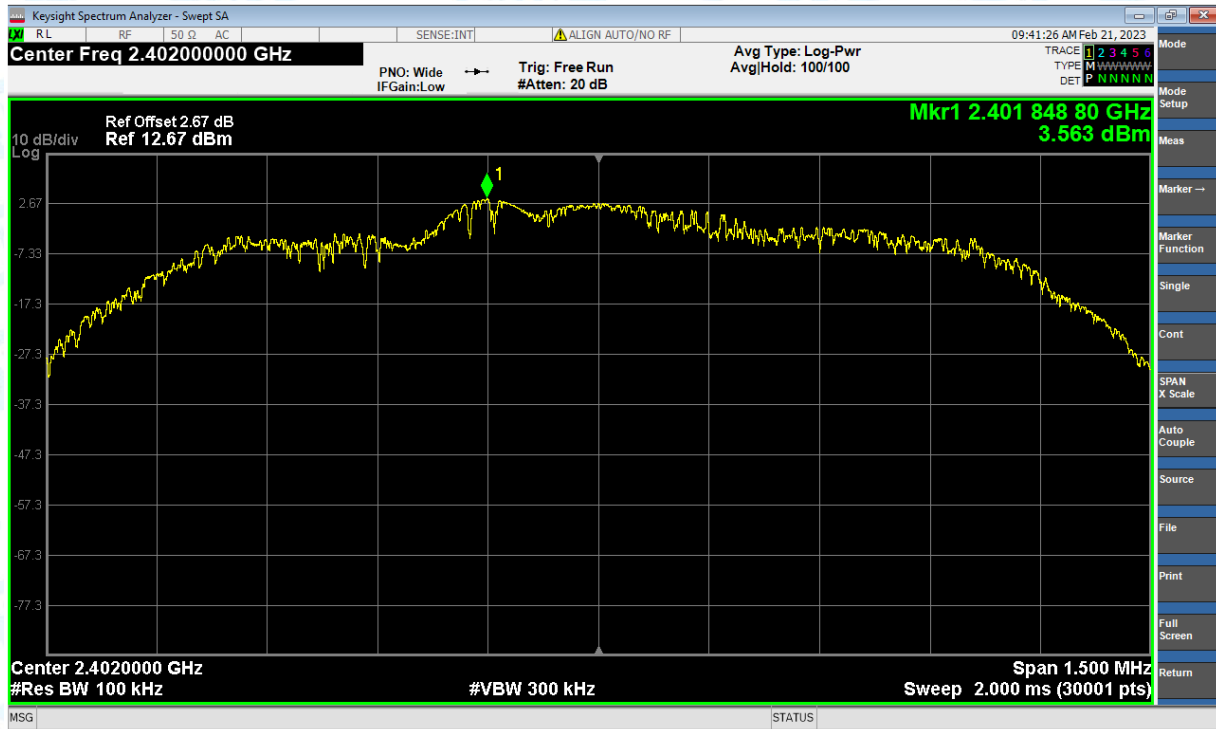
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



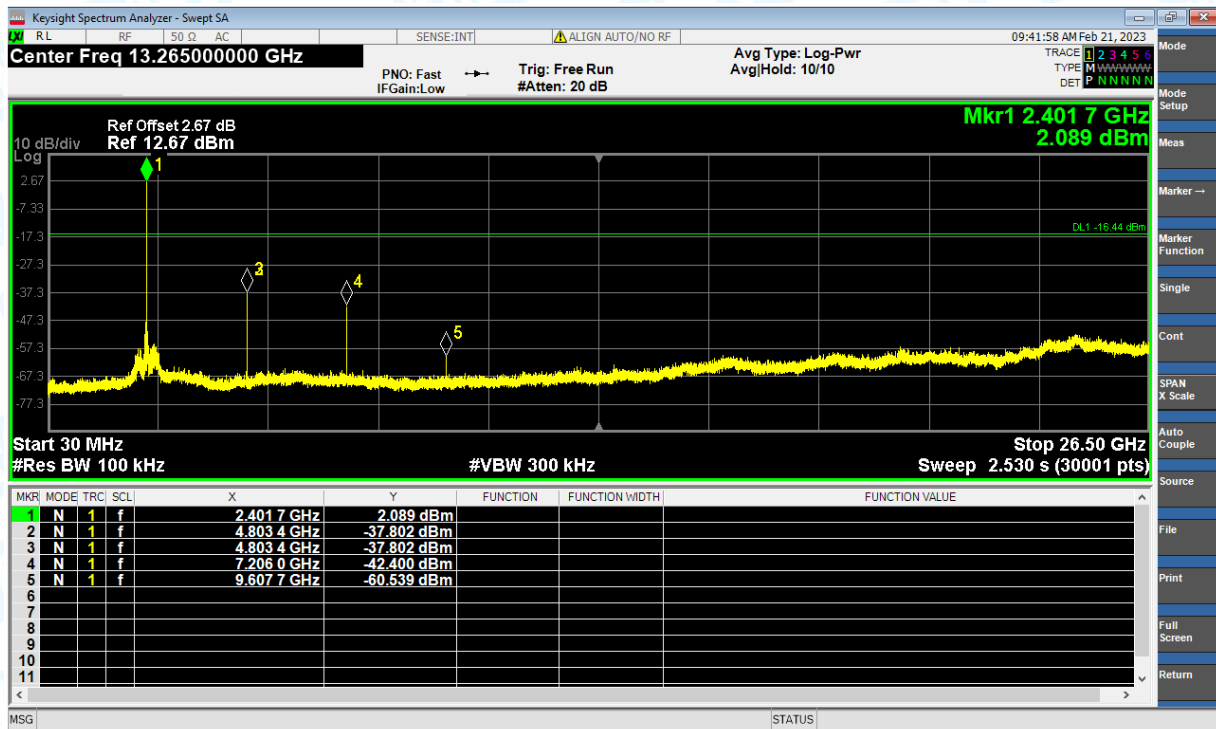
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



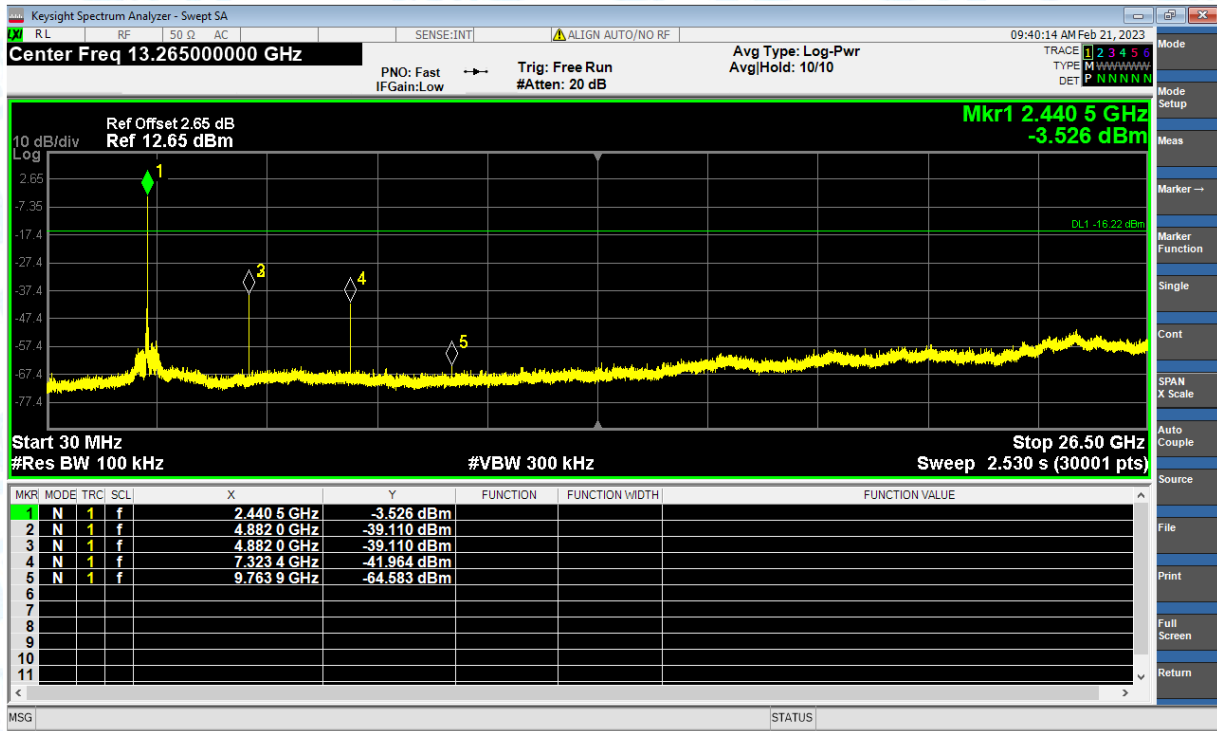
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



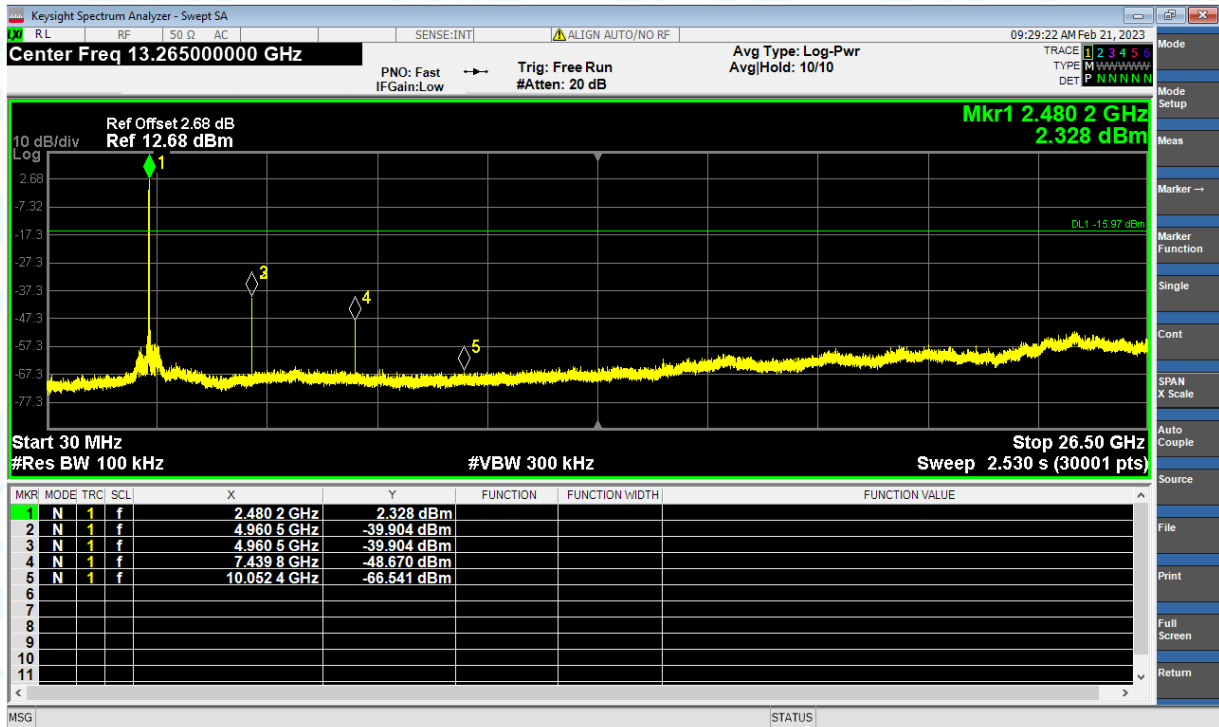
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



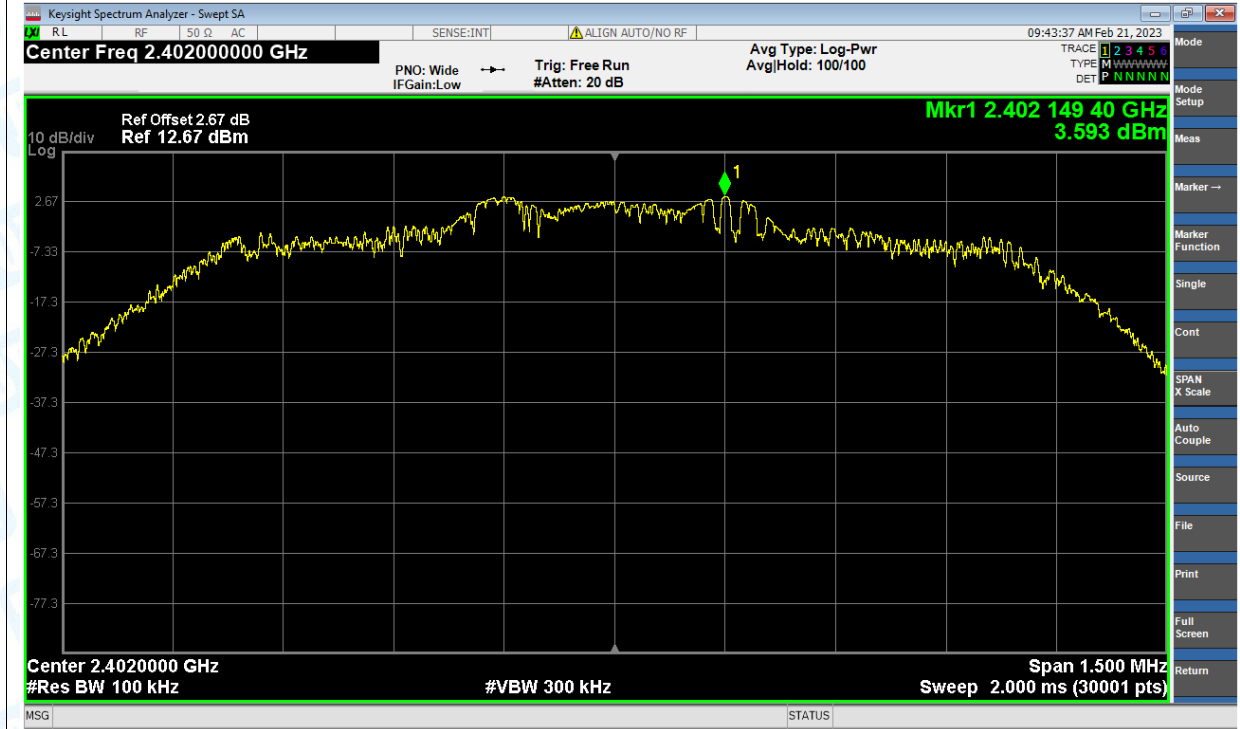
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



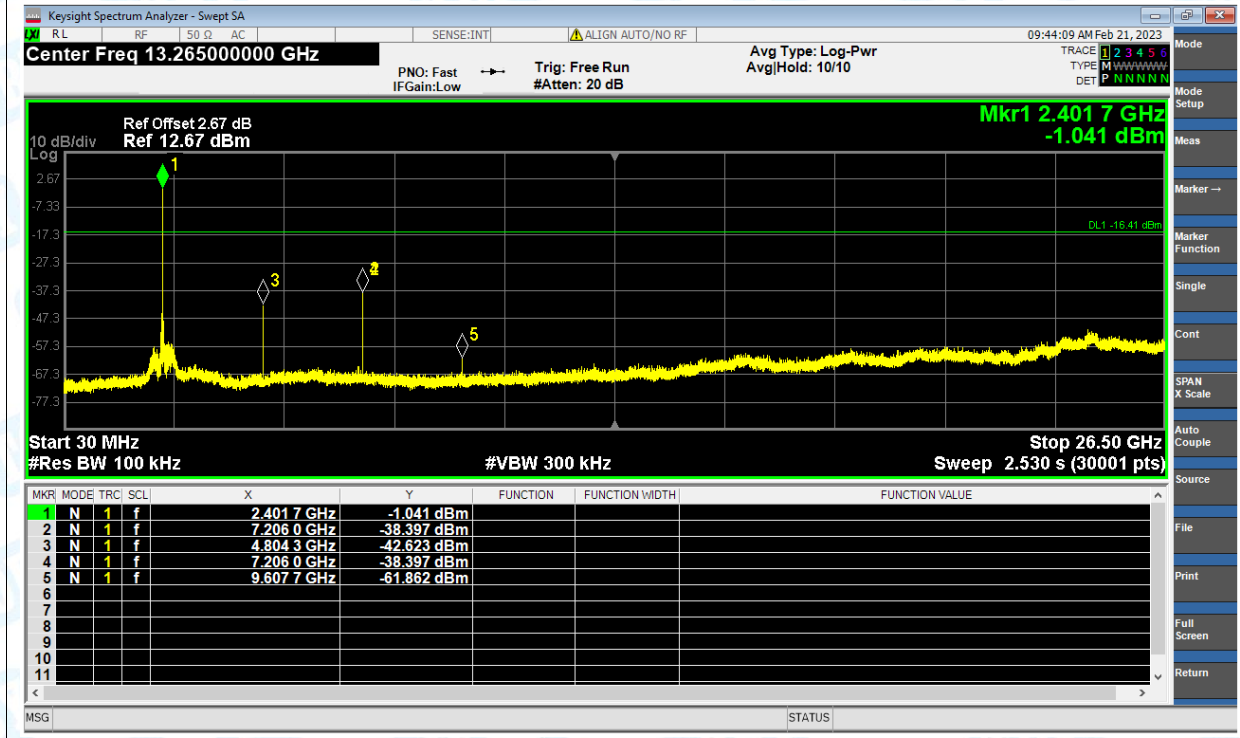
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



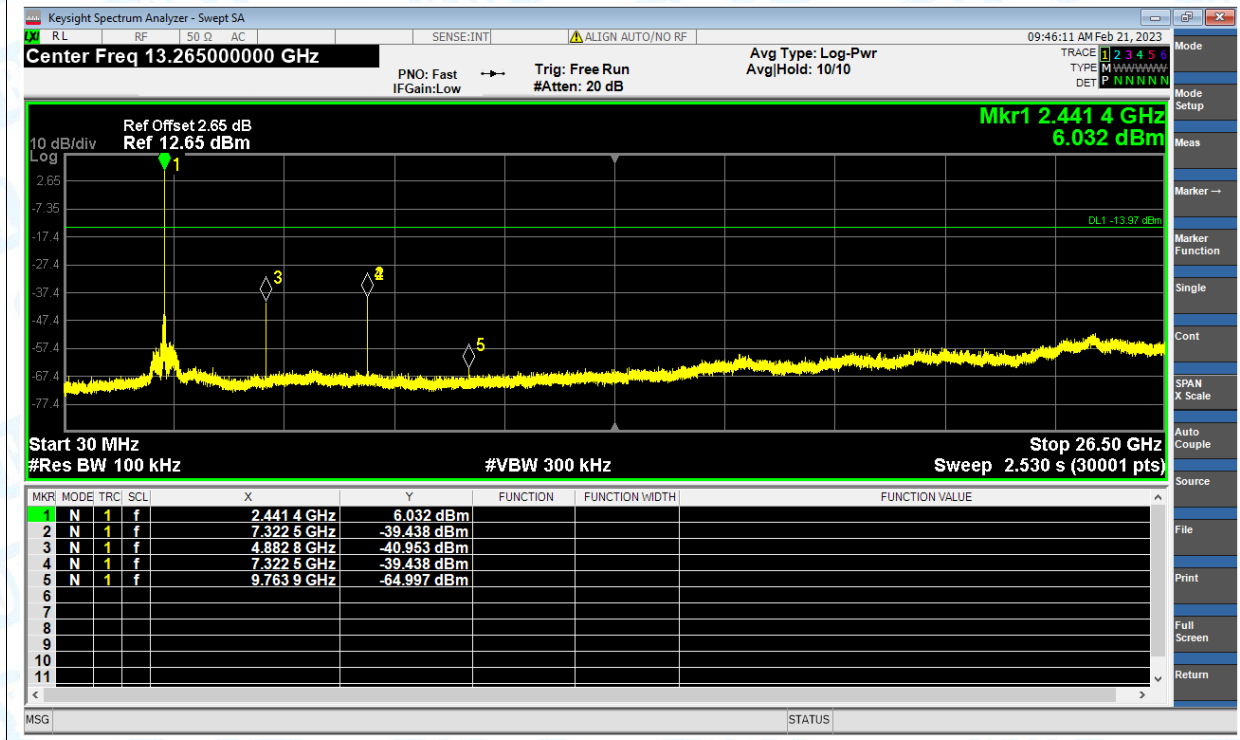
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



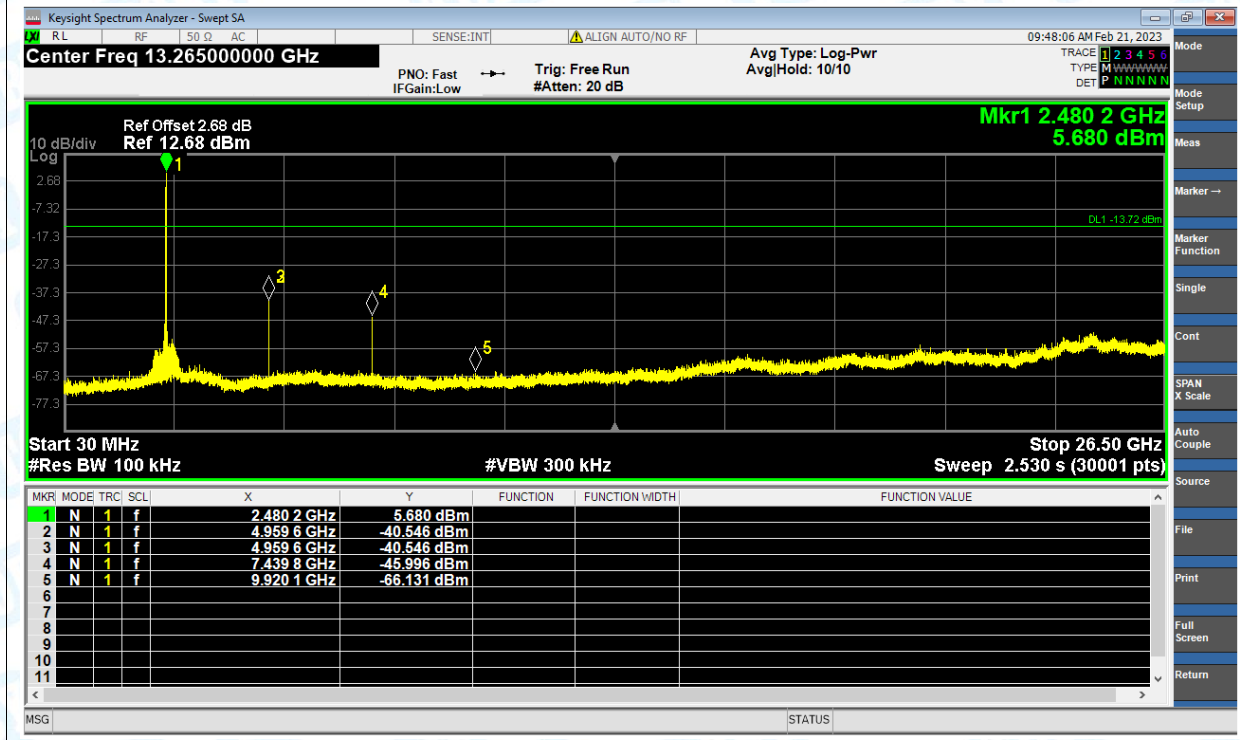
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

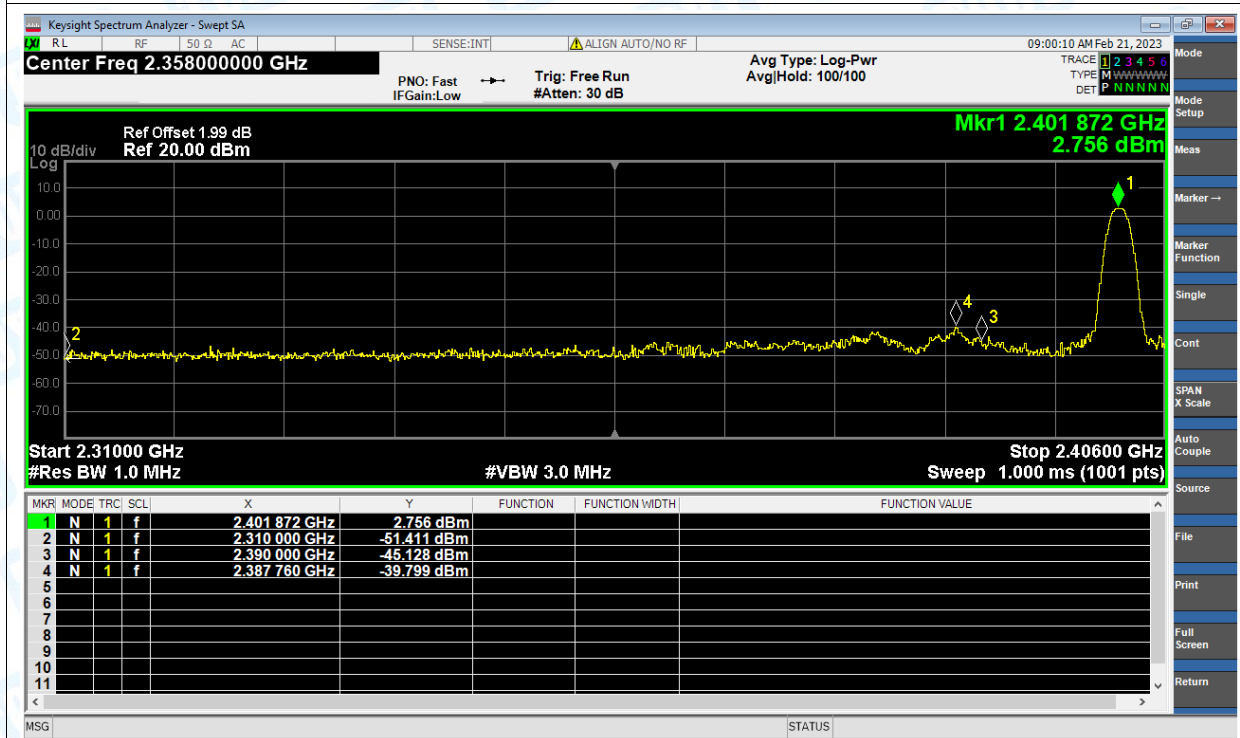


8. Restrict Band

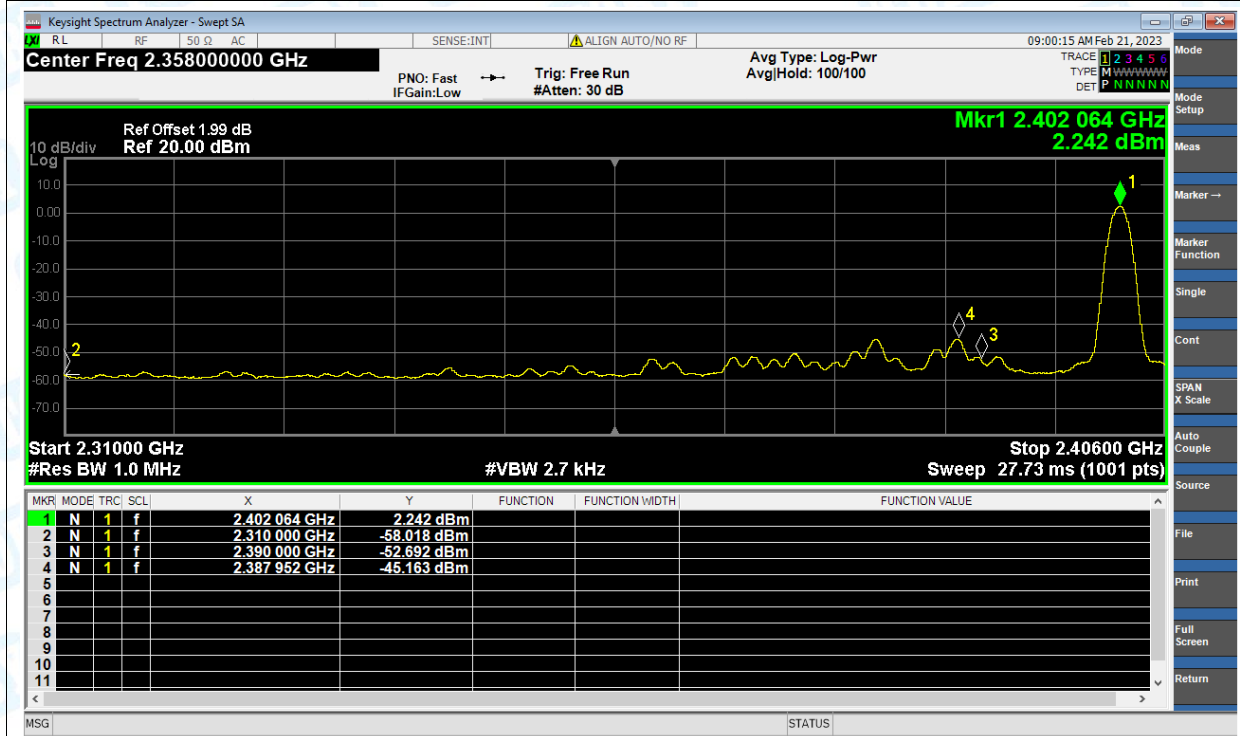
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-51.41	2	45.85	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-58.02	2	39.24	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2387.76	-39.8	2	57.46	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2387.952	-45.16	2	52.1	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-46.3	2	50.96	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-53.31	2	43.95	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-44.54	2	52.72	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-52.55	2	44.71	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2493.856	-40.48	2	56.78	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2494.24	-45.68	2	51.58	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-47.74	2	49.52	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-53.71	2	43.55	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-49.56	2	47.7	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-58.32	2	38.94	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2380.752	-40.57	2	56.69	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2387.856	-46.46	2	50.8	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.73	2	49.53	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-53.91	2	43.35	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-44.14	2	53.12	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.42	2	42.84	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2494.216	-41.58	2	55.68	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2494.24	-47.07	2	50.19	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.91	2	50.35	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-54.71	2	42.55	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-50.33	2	46.93	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-57.84	2	39.42	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2387.76	-40.67	2	56.59	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2380.752	-46.53	2	50.73	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-45.9	2	51.36	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-53.54	2	43.72	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-45.63	2	51.63	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-51.33	2	45.93	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2493.952	-38.31	2	58.95	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2494.024	-44.57	2	52.69	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-44.37	2	52.89	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-52.9	2	44.36	Average	54	Pass

Test Graphs

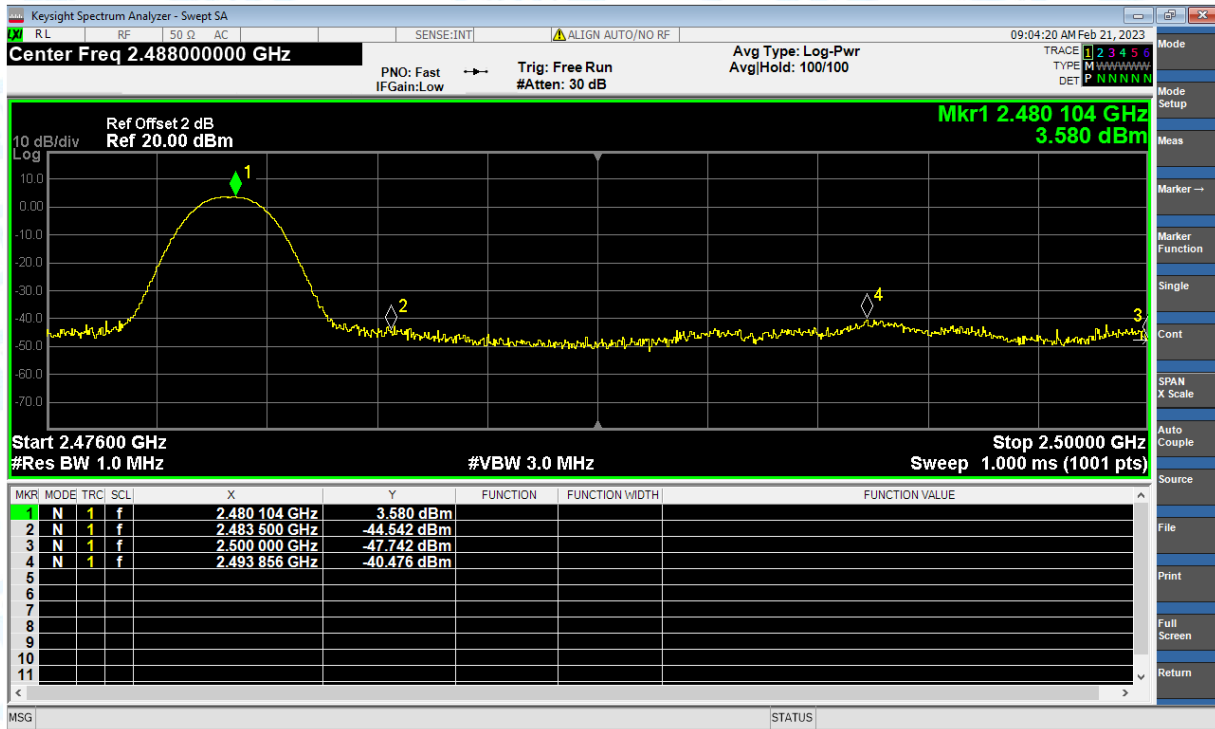
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



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



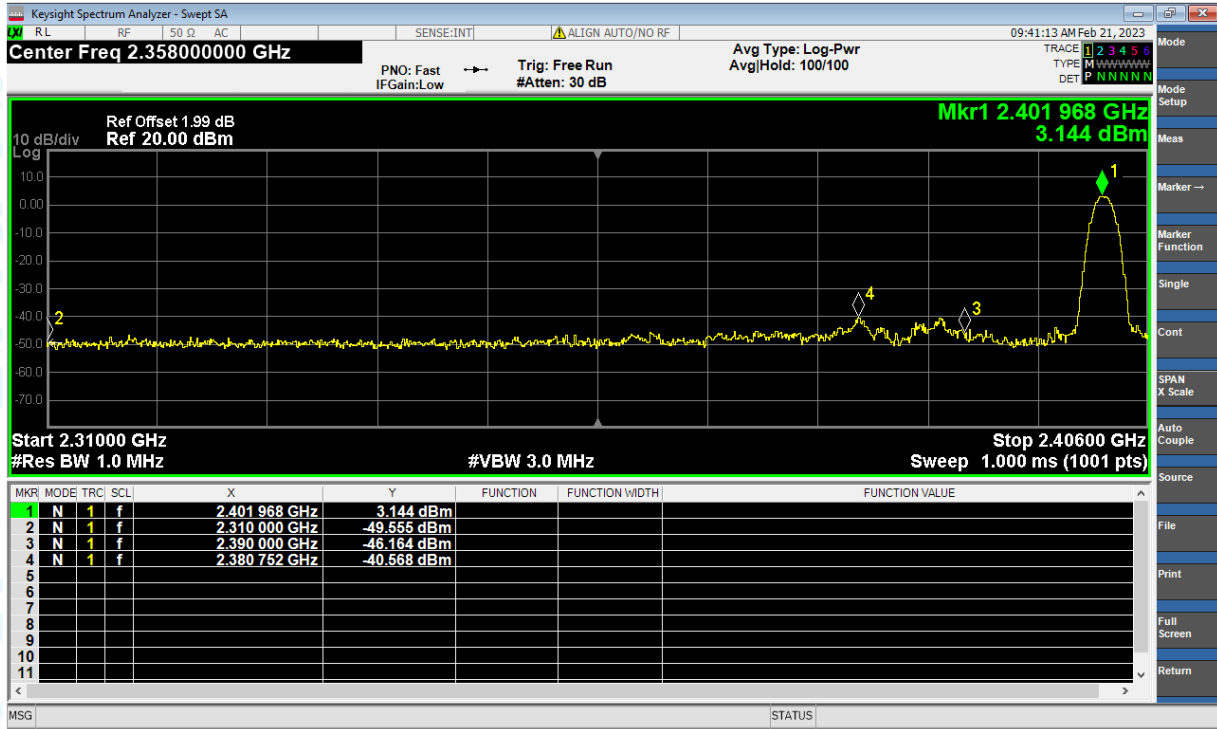
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



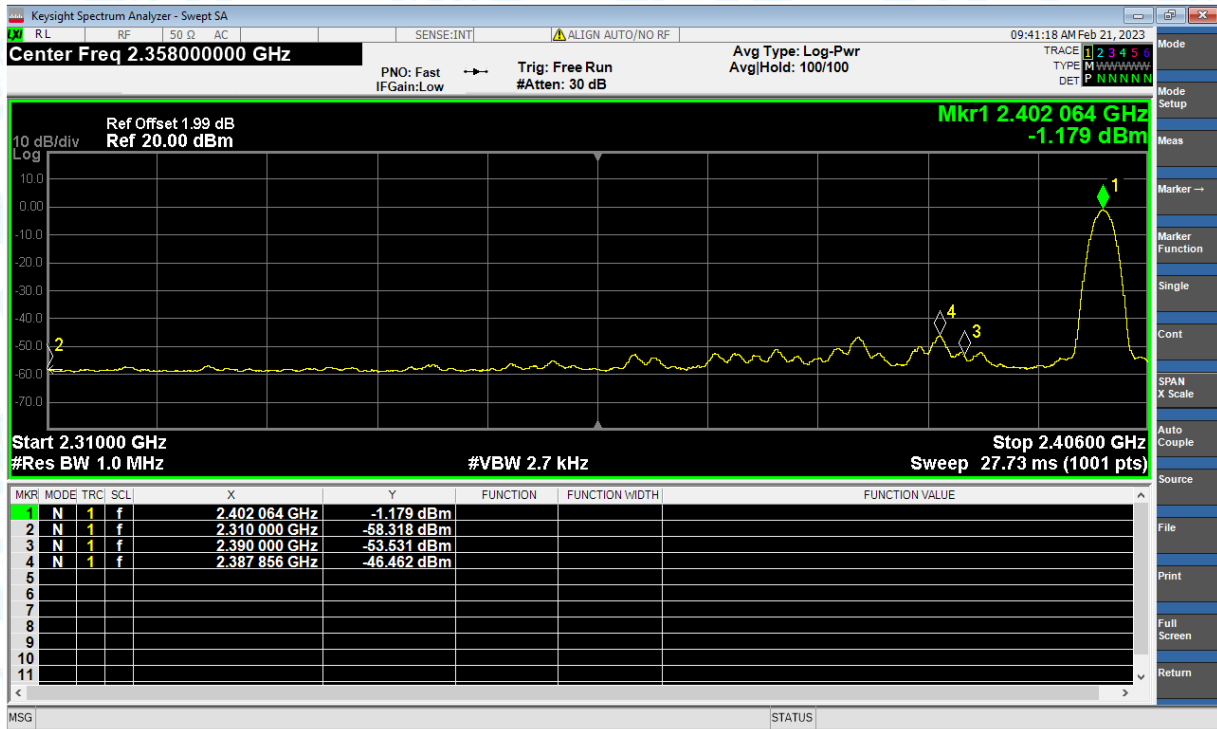
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



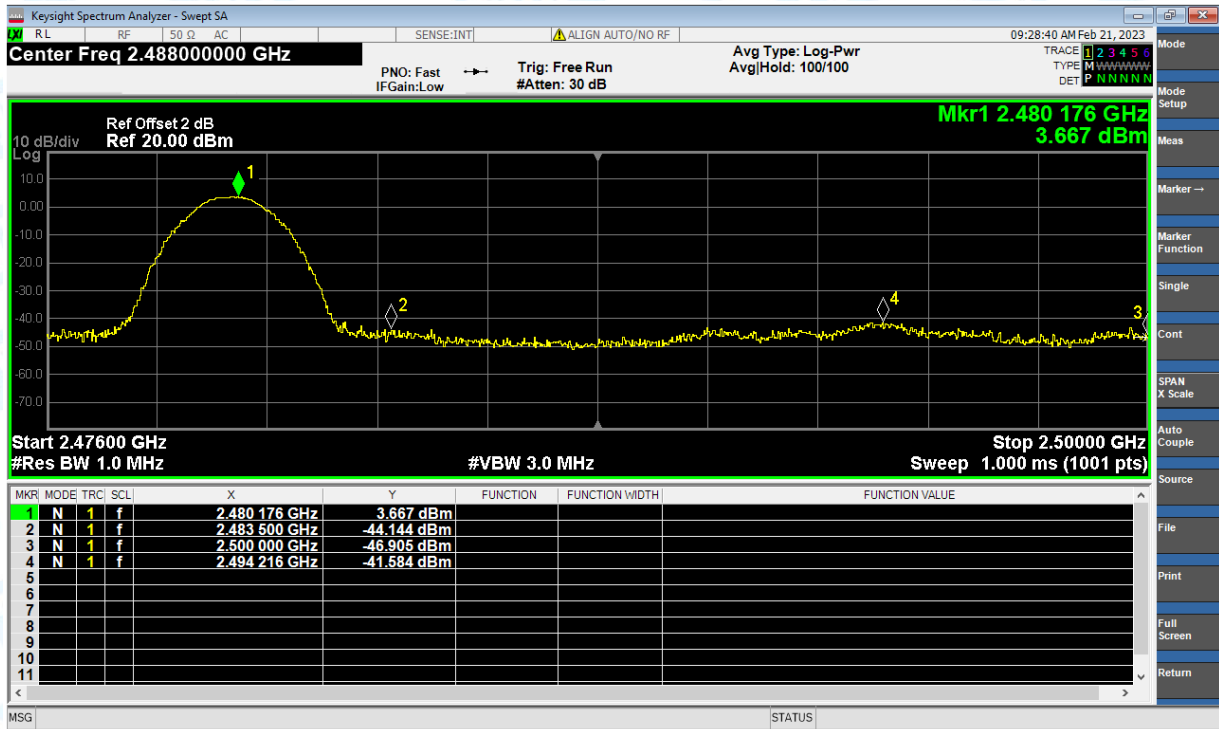
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



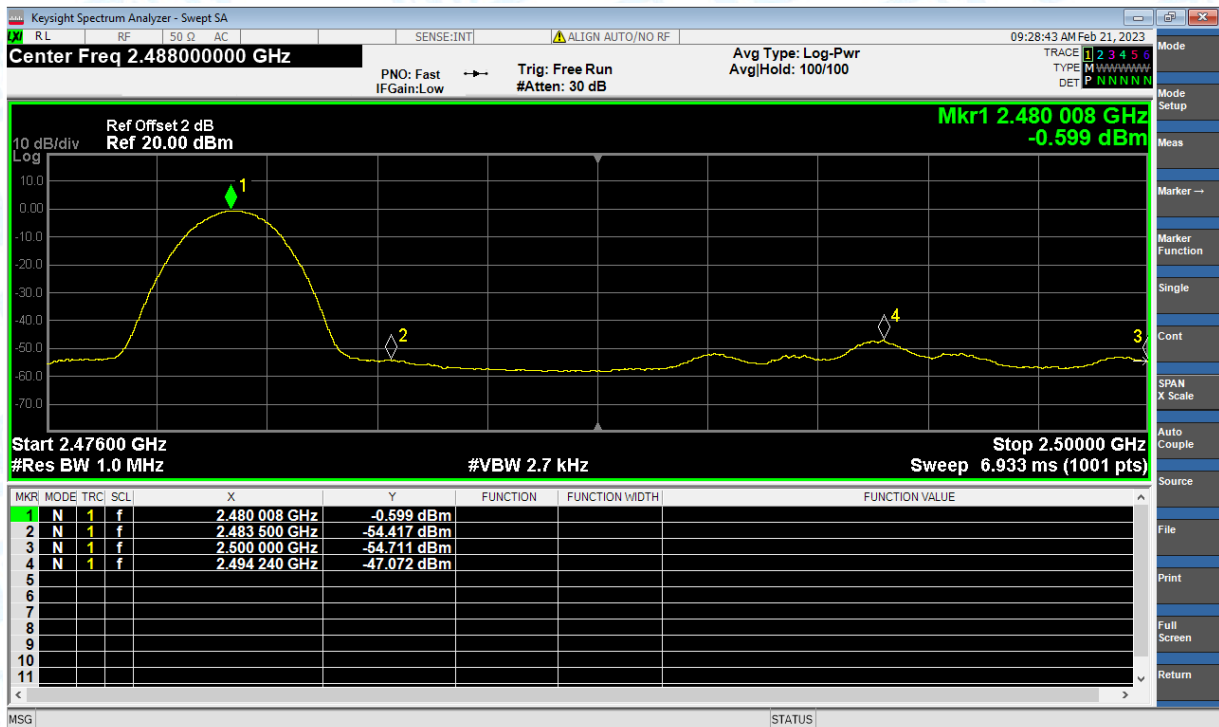
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



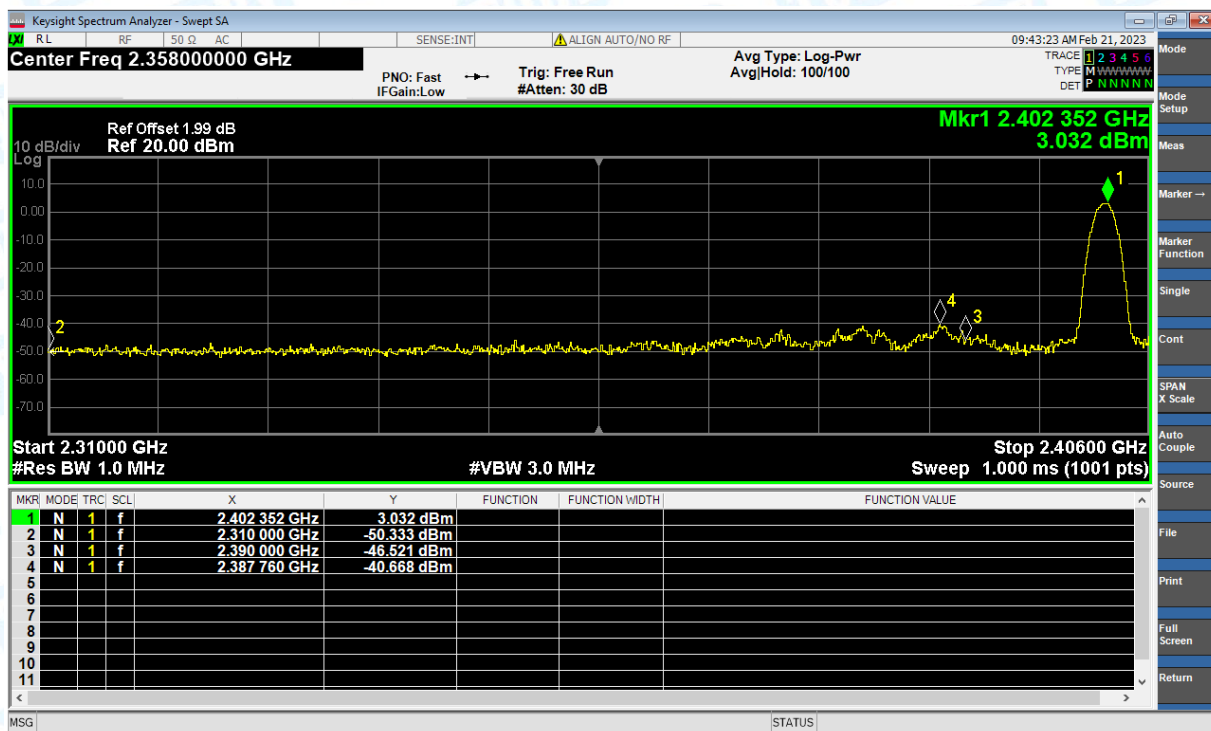
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



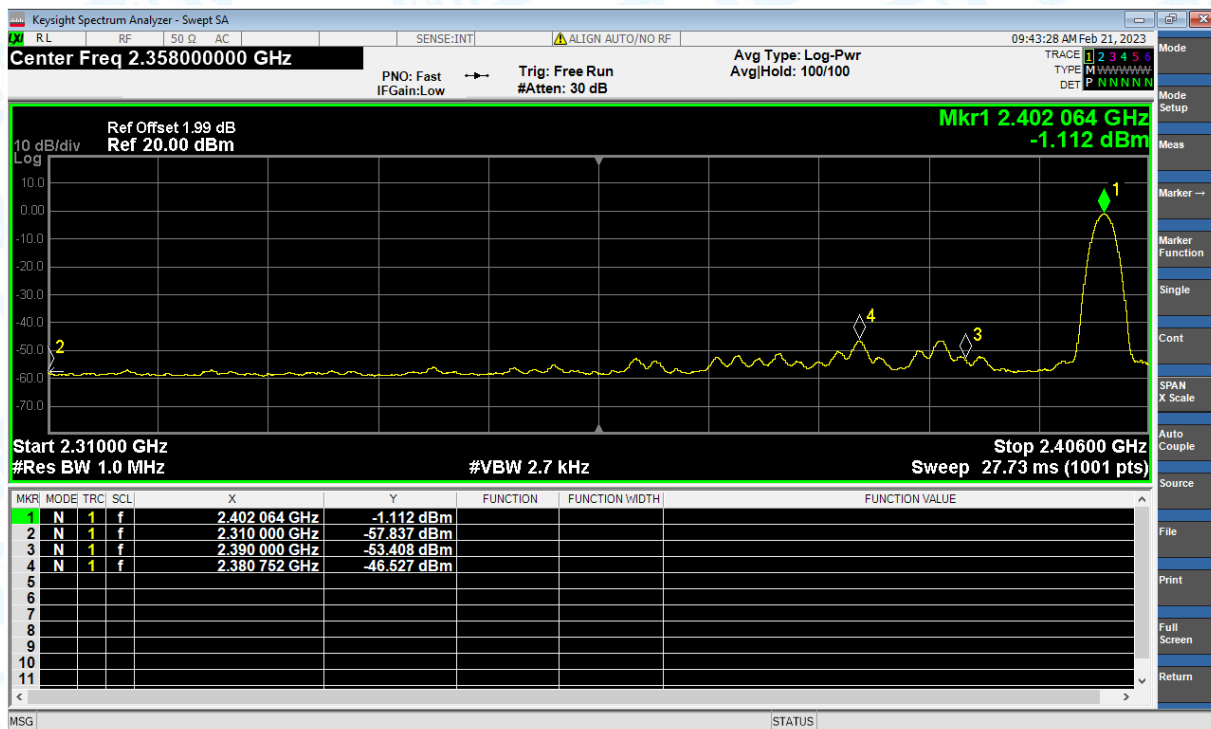
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



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



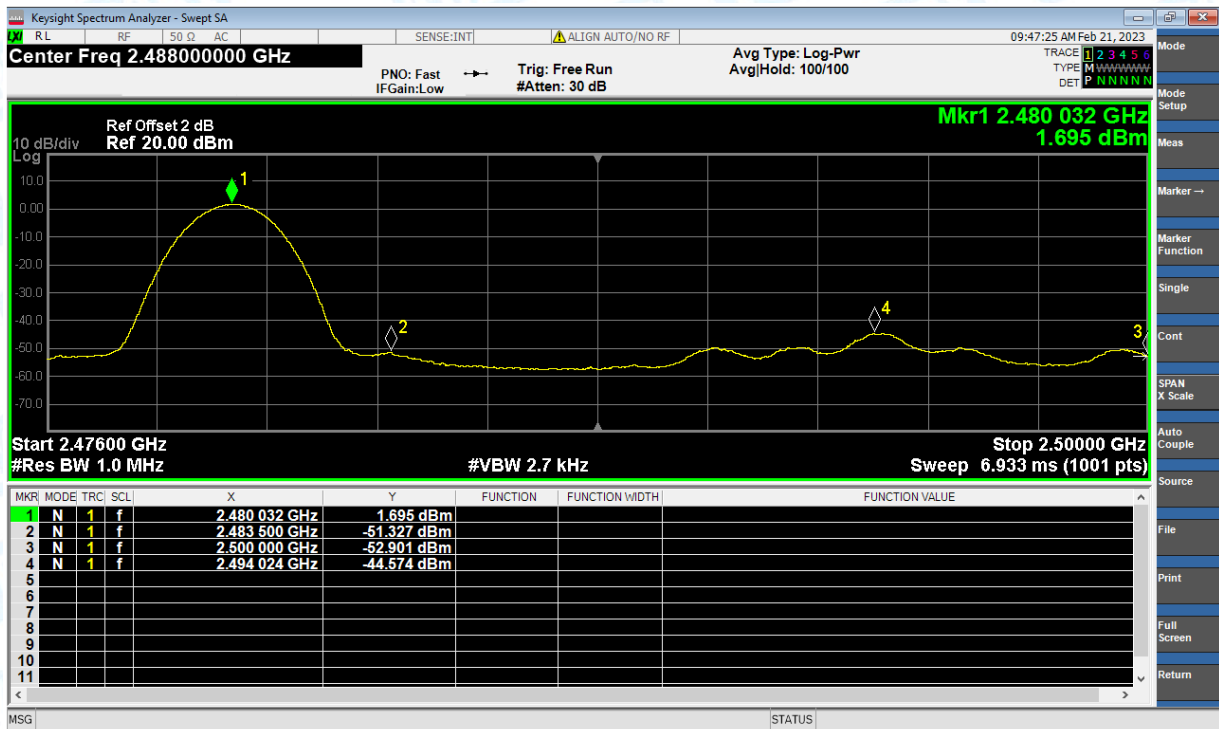
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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



9. Carrier Frequencies Separation

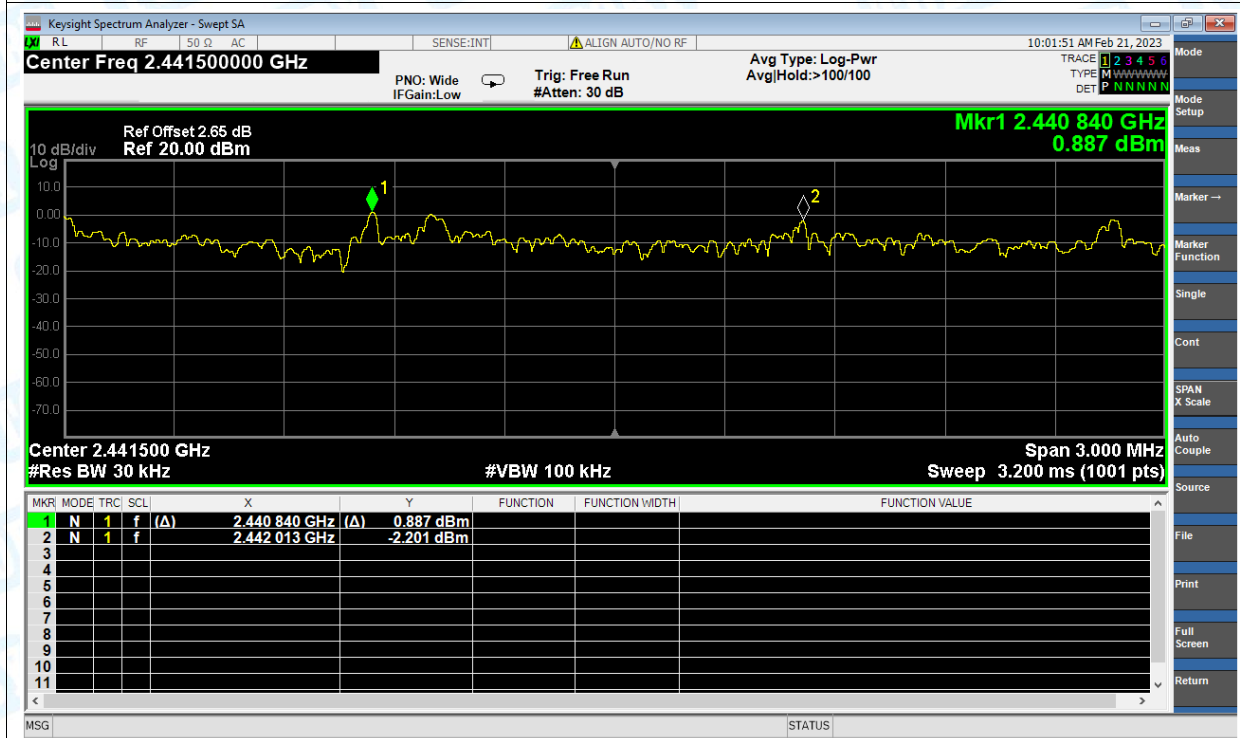
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.999	2441.845	0.846	0.573	Pass
NVNT	2-DH1	Ant1	2440.84	2442.013	1.173	0.813	Pass
NVNT	3-DH1	Ant1	2440.99	2441.845	0.855	0.8	Pass

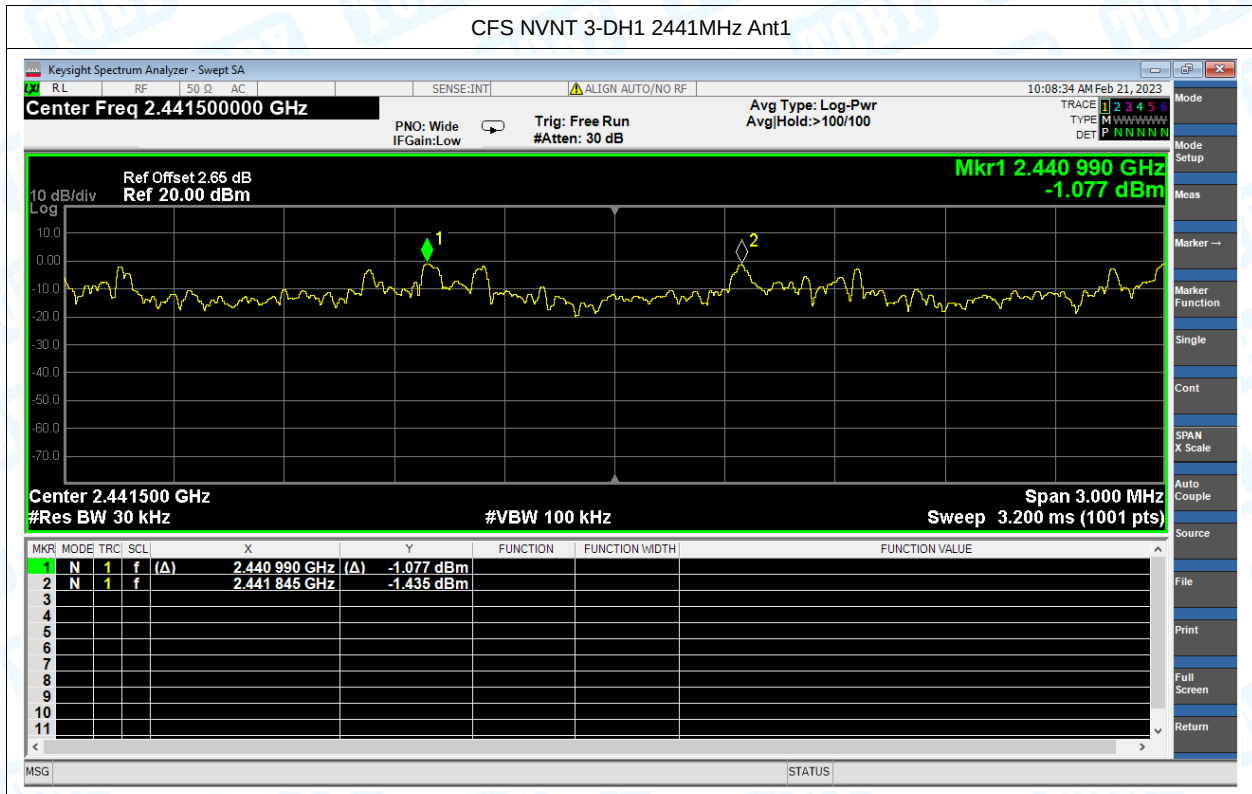
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



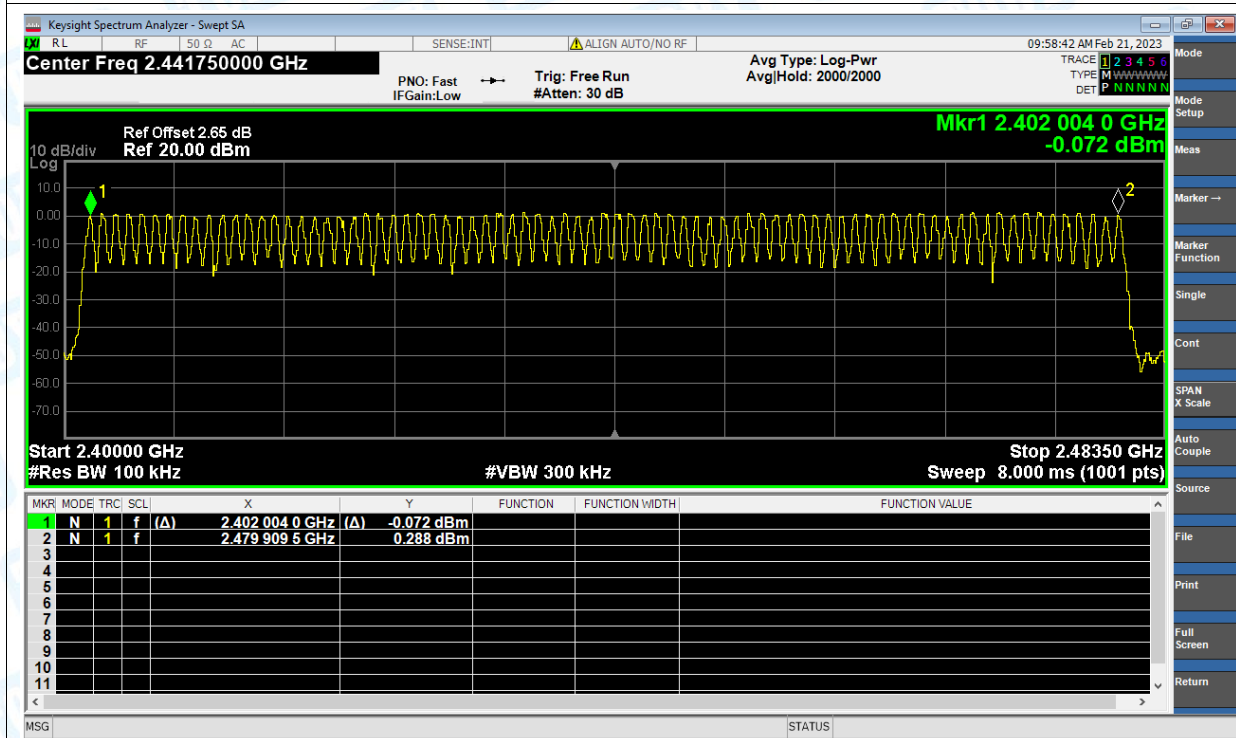


10. Number of Hopping Channel

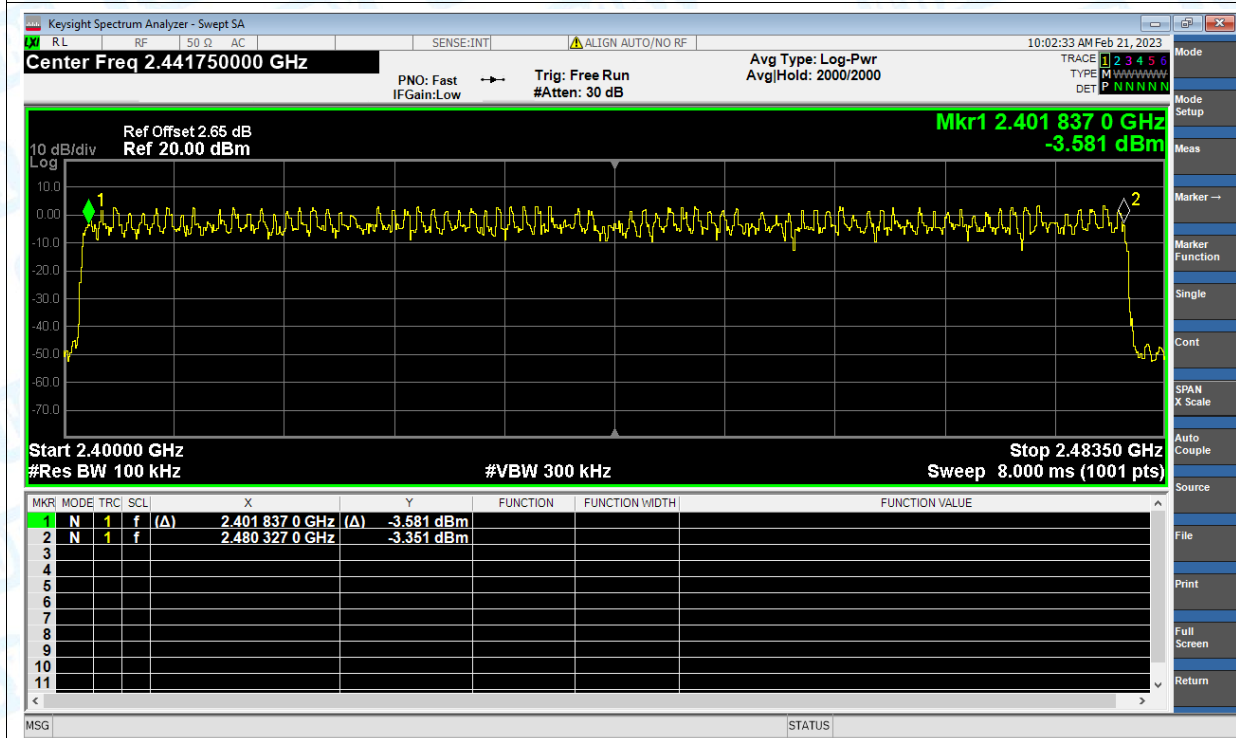
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

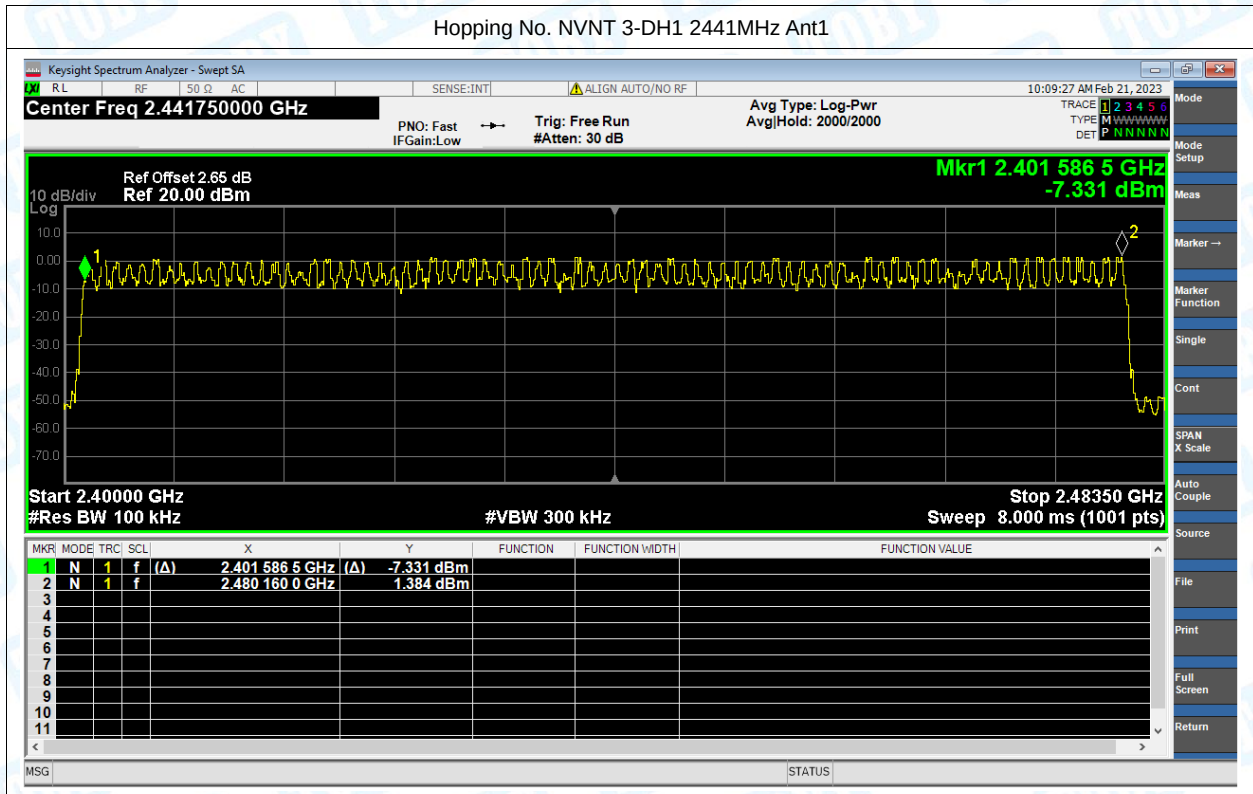
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



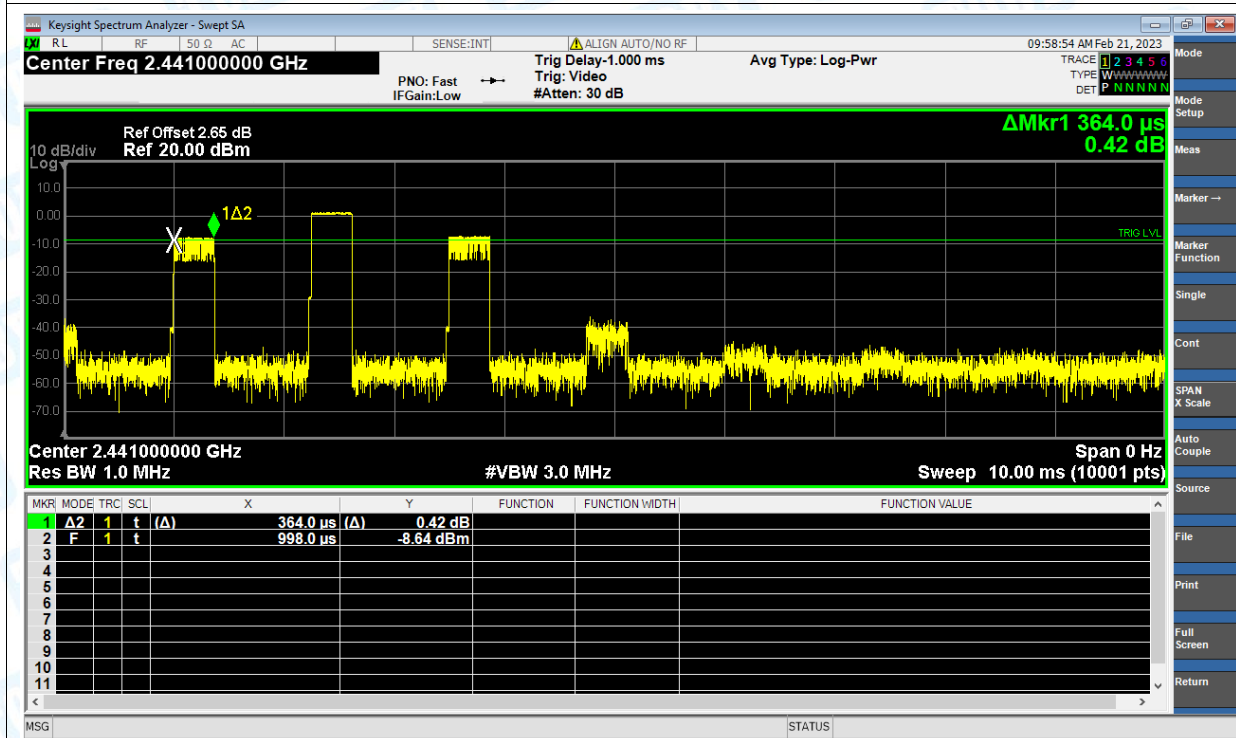


11. Dwell Time

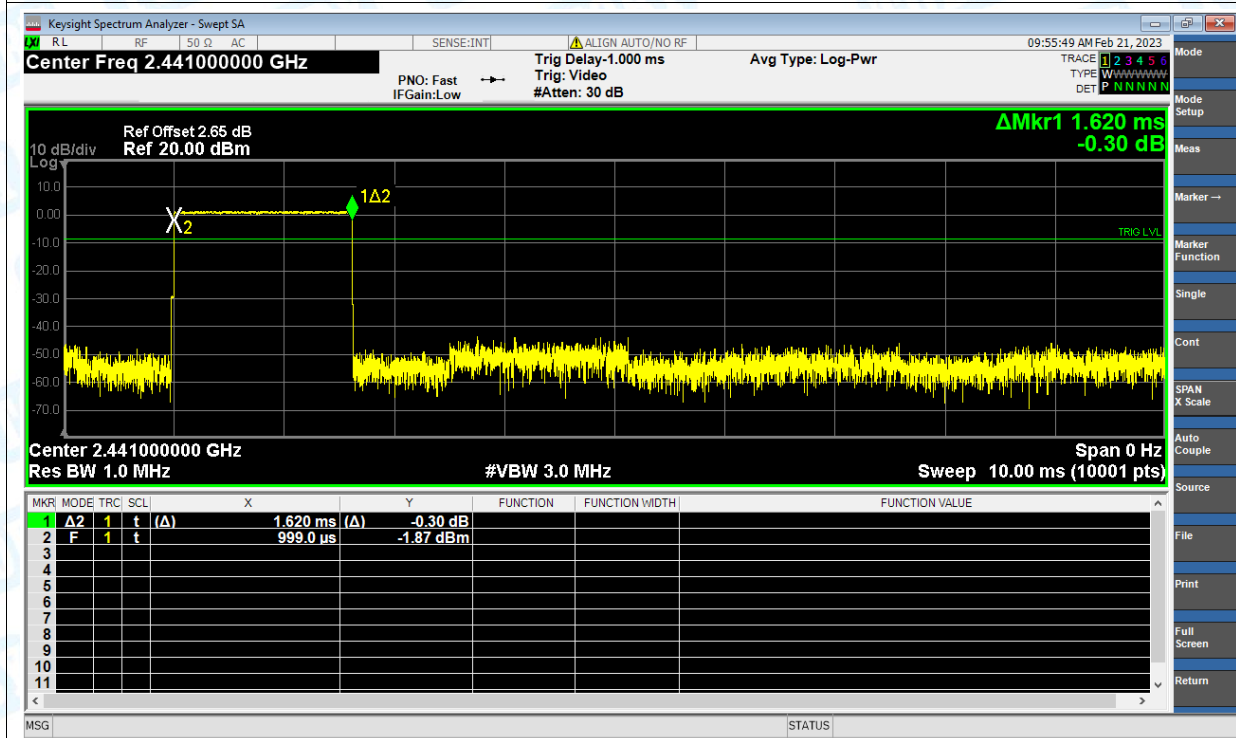
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.364	116.48	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.62	259.2	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.867	305.813	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.371	118.72	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.631	260.96	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.877	306.88	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.37	118.4	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.63	260.8	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.879	307.093	31600	400	Pass

Test Graphs

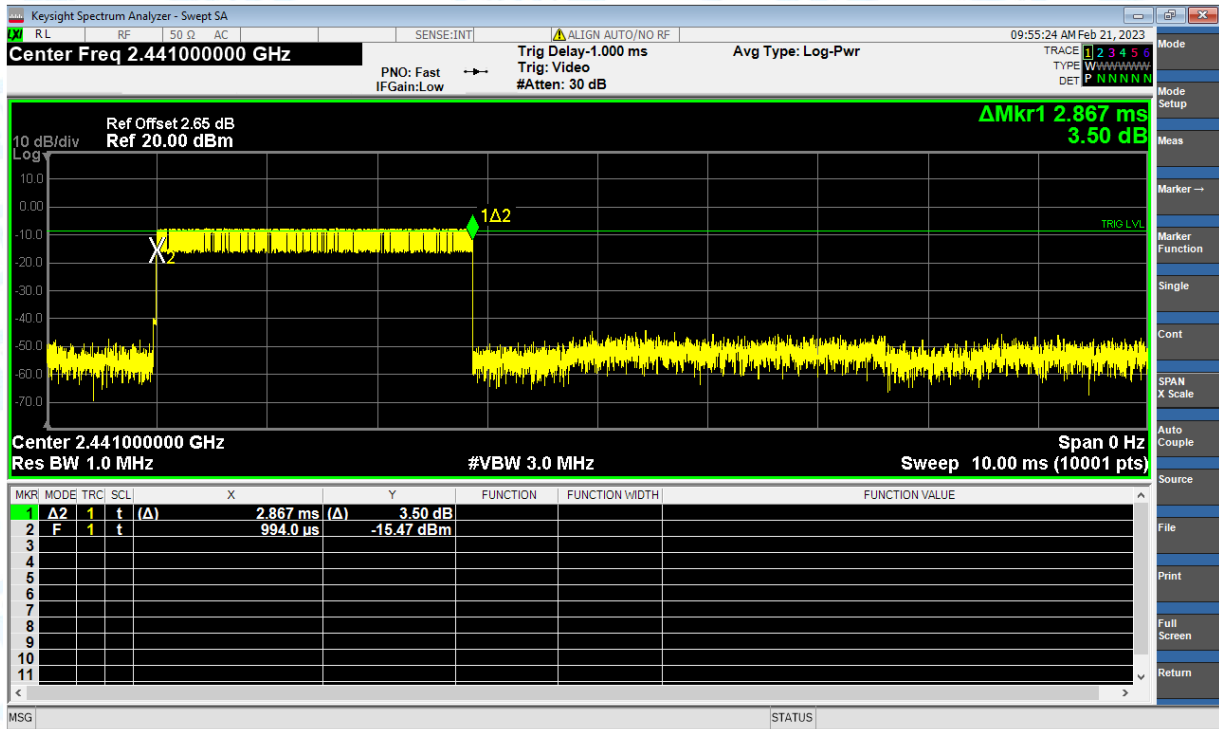
Dwell NVNT 1-DH1 2441MHz Ant1



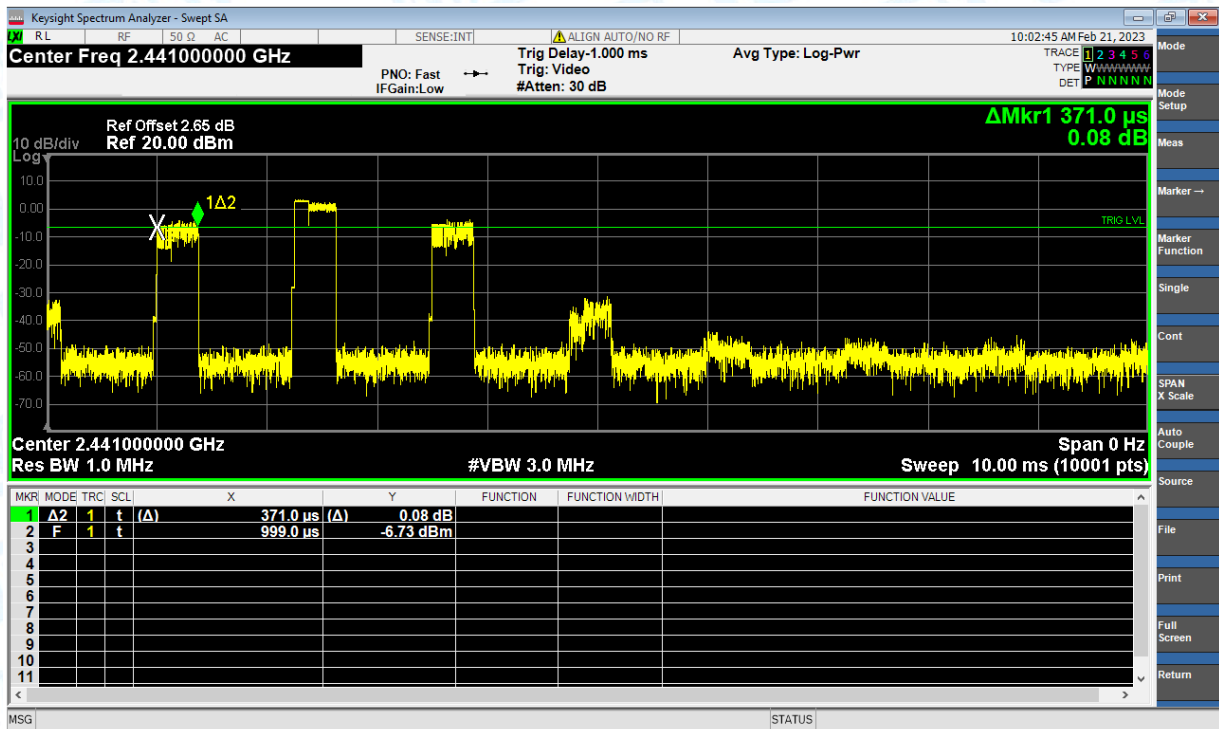
Dwell NVNT 1-DH3 2441MHz Ant1



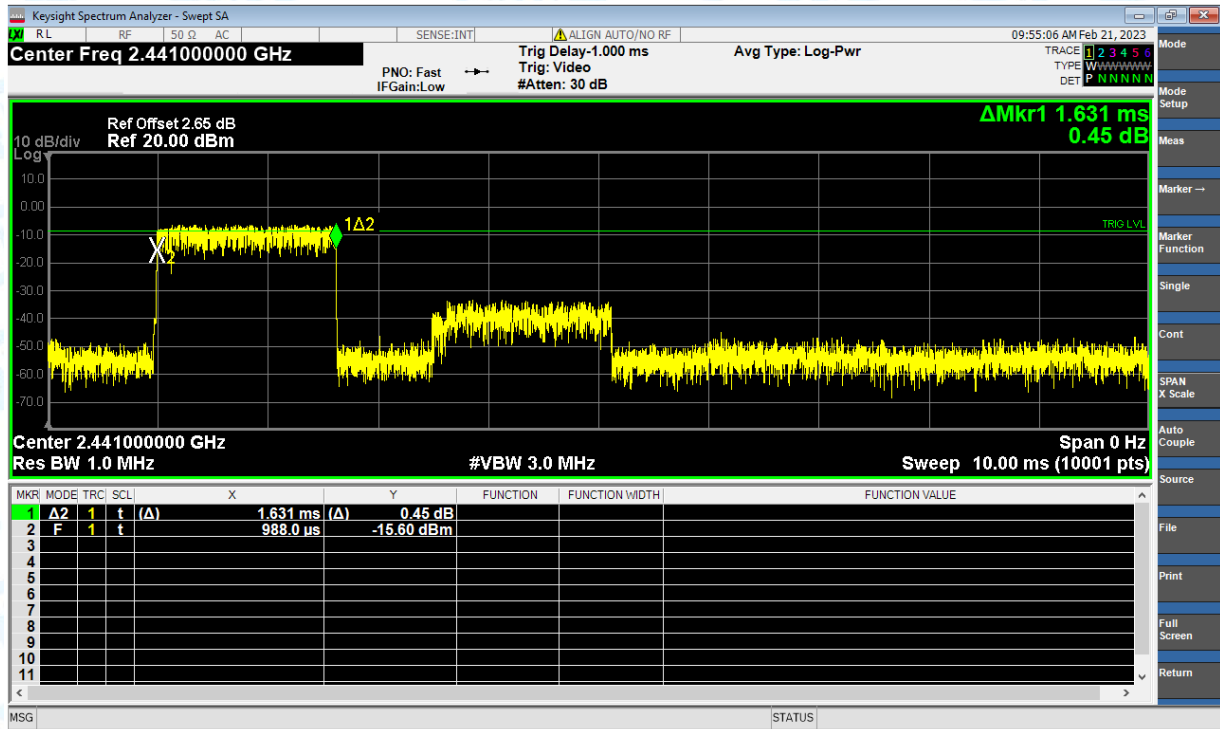
Dwell NVNT 1-DH5 2441MHz Ant1



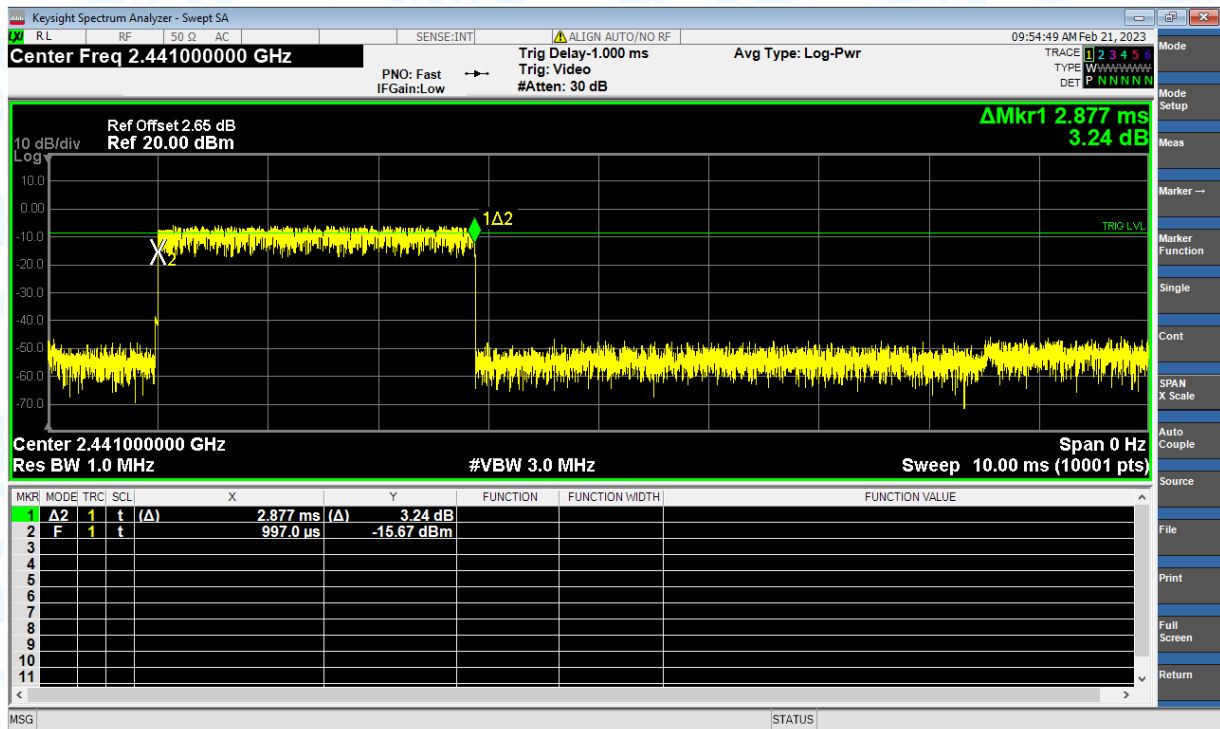
Dwell NVNT 2-DH1 2441MHz Ant1



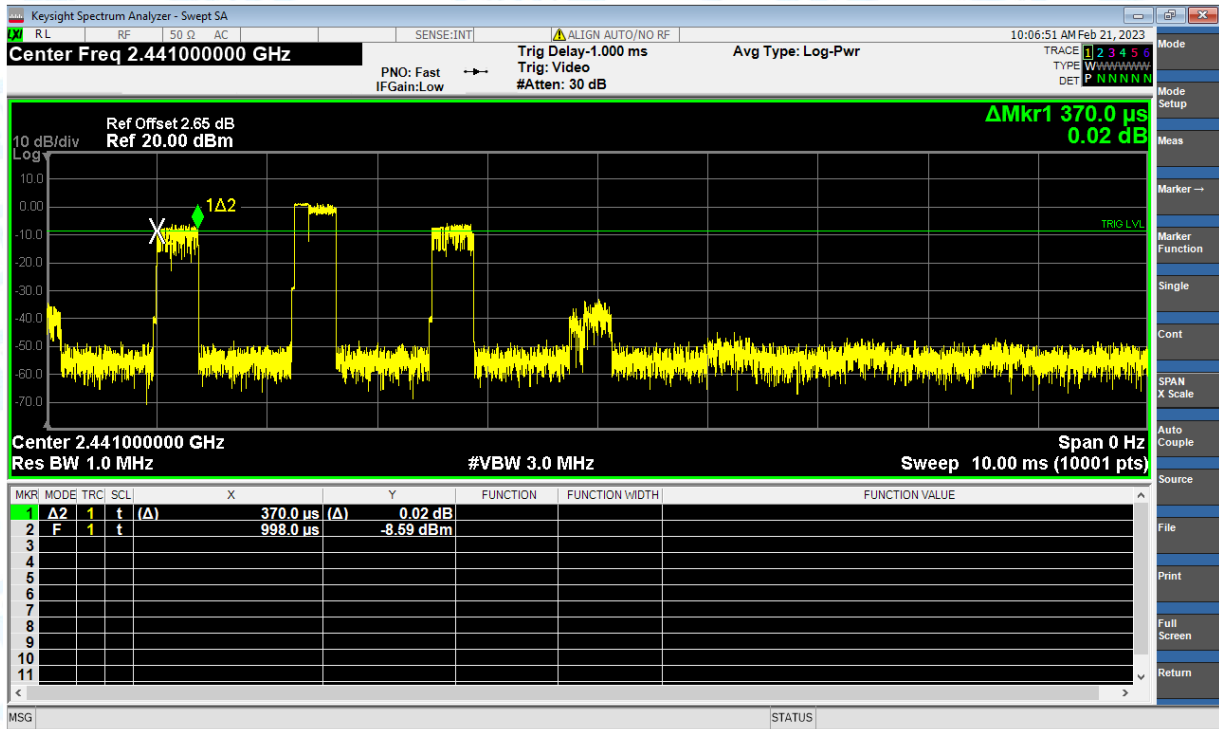
Dwell NVNT 2-DH3 2441MHz Ant1



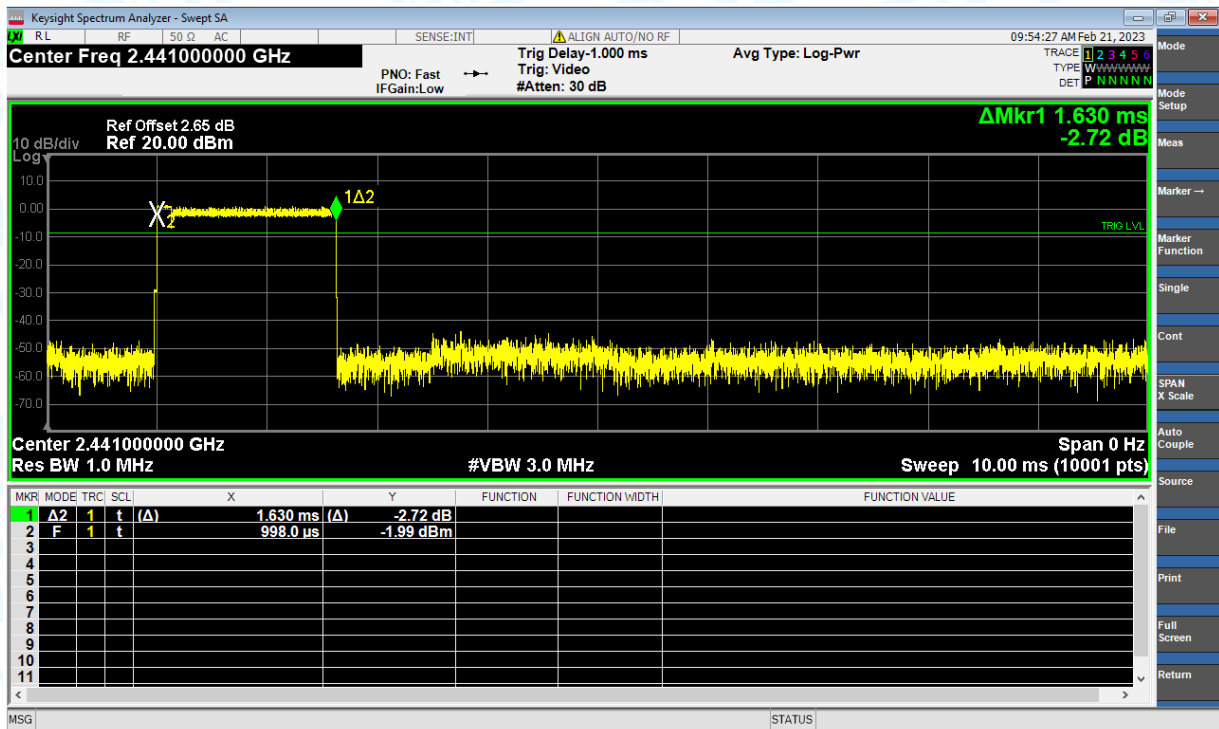
Dwell NVNT 2-DH5 2441MHz Ant1

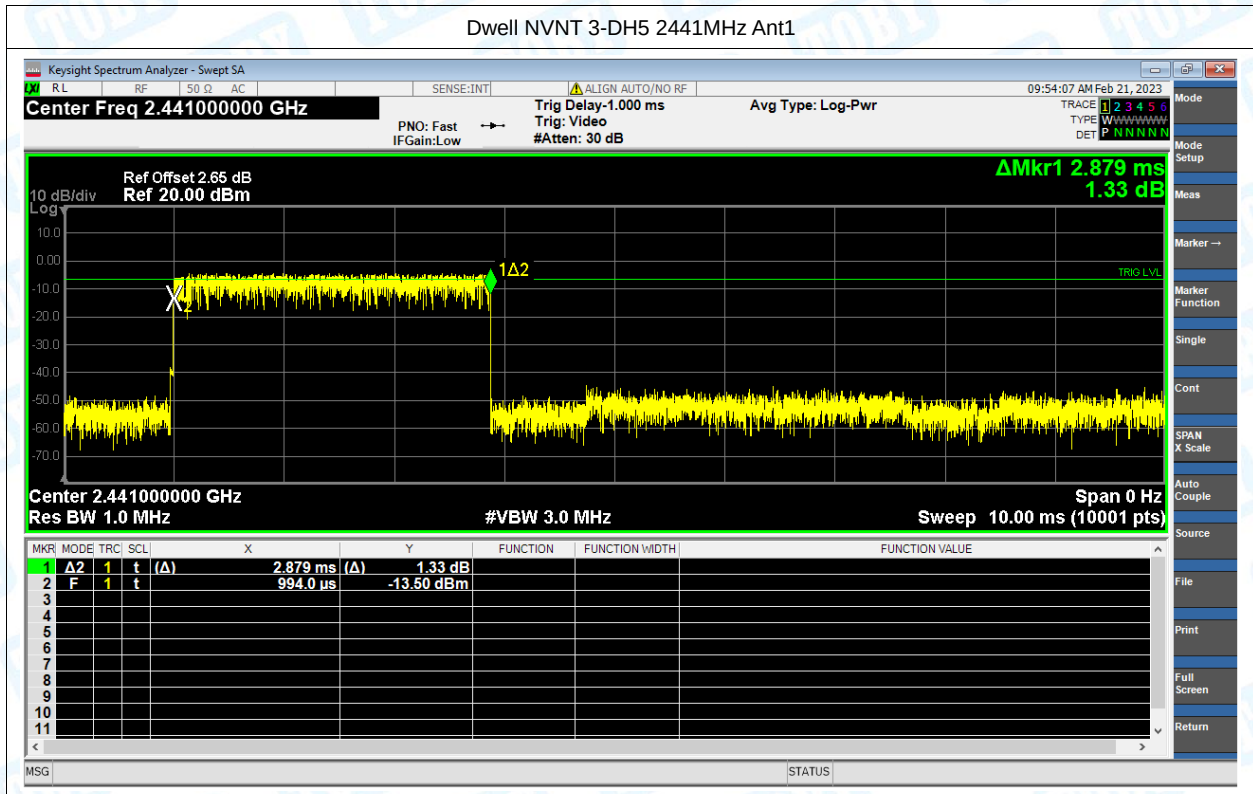


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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