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

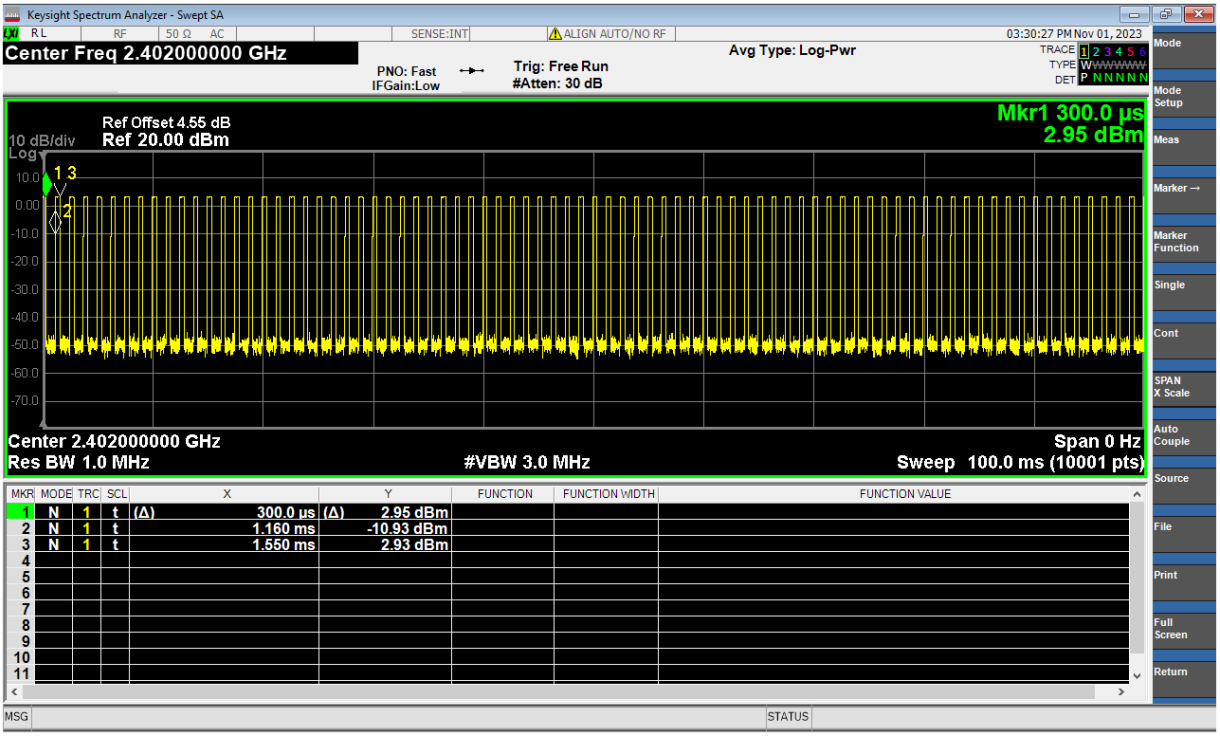
General Description of EUT	
Product Name:	Wireless Headphone
Test Model:	iKF Solo
Sample ID:	HC-C-202308-0210-01-01-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC 5V
Test Engineer:	Liyingjing
Note: For a more detailed features description, please refer to the report TBR-C-202308-0210-2 The report only sho the worst case data.	

Duty Cycle

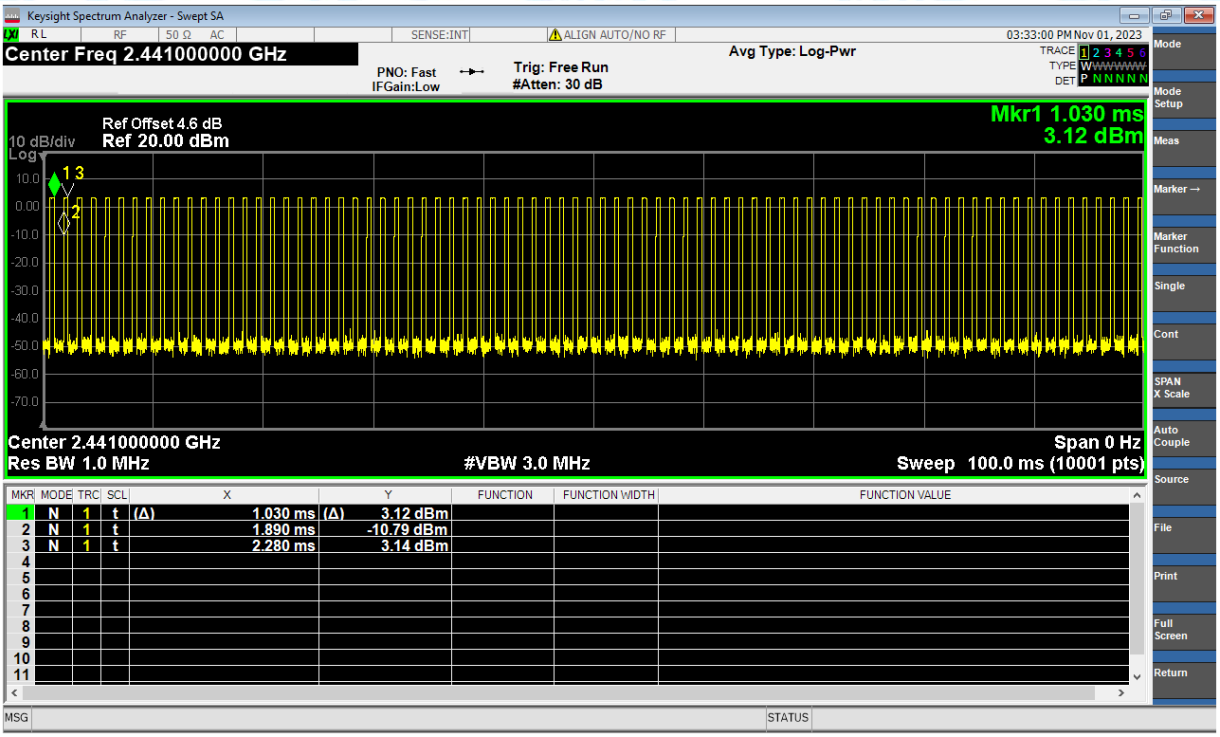
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	32	4.95	2.5
NVNT	3-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2480	Ant1	32	4.95	2.5

Test Graphs

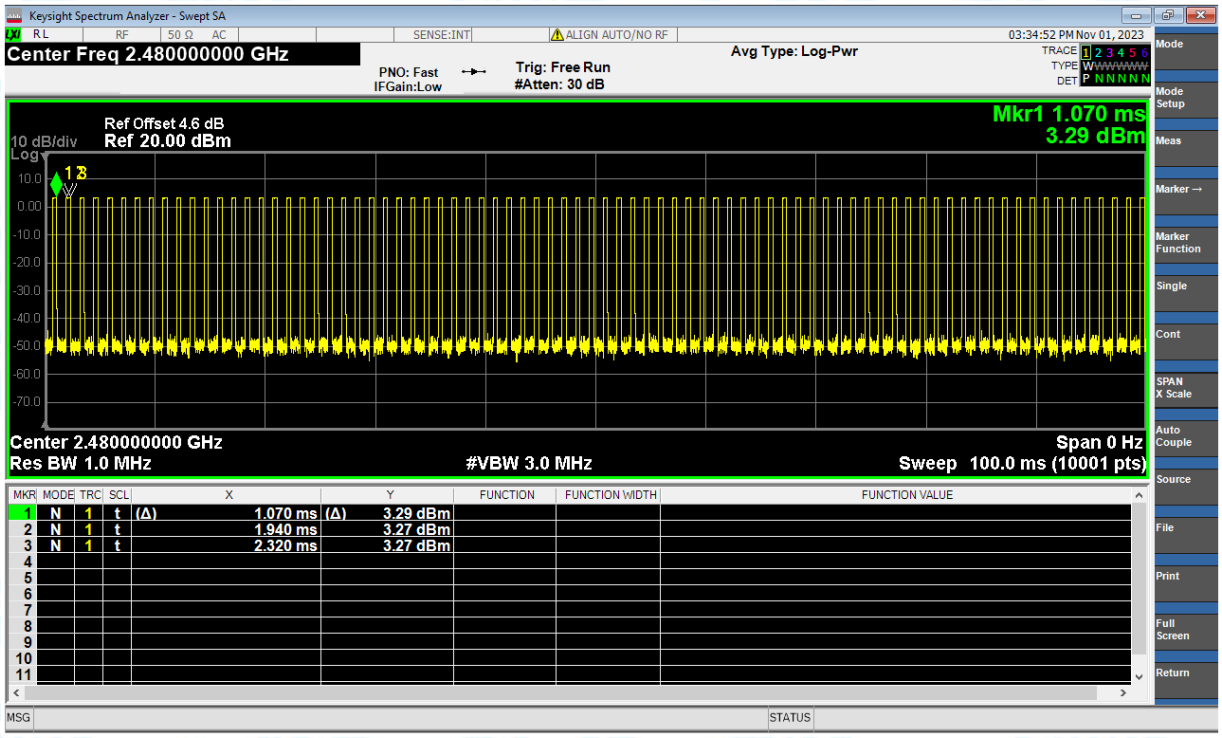
Duty Cycle NVNT 1-DH1 2402MHz Ant1



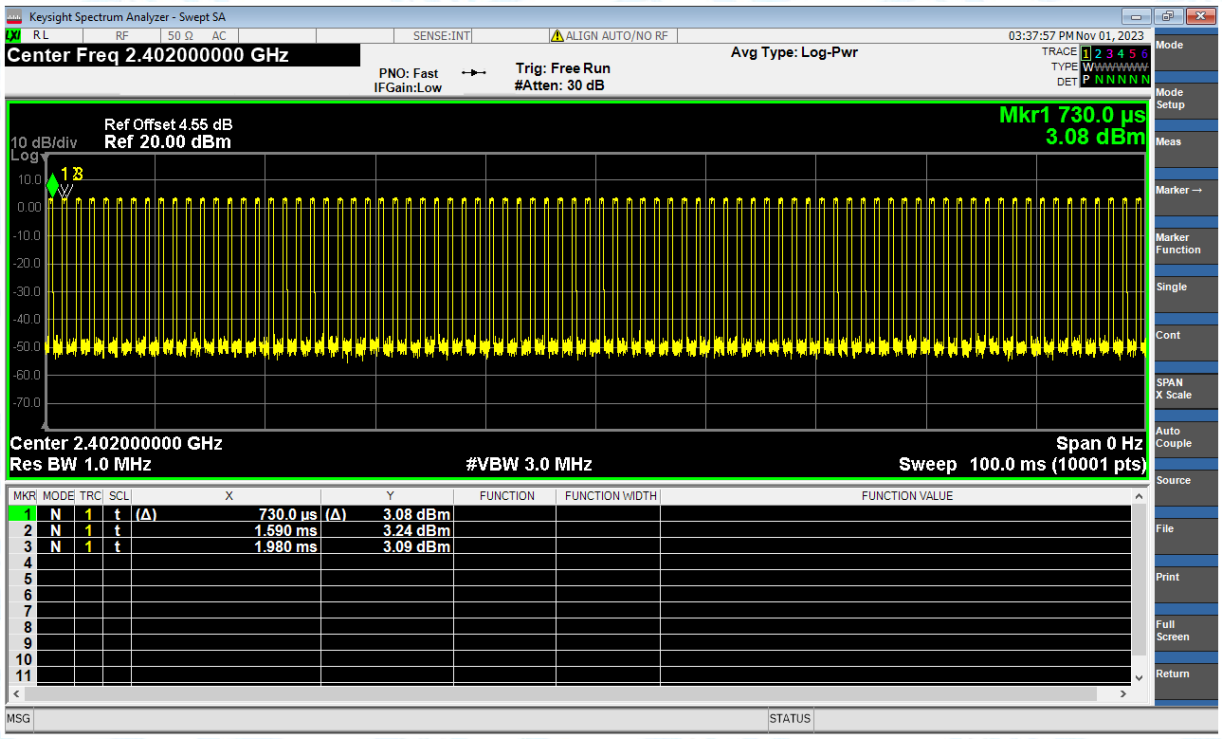
Duty Cycle NVNT 1-DH1 2441MHz Ant1



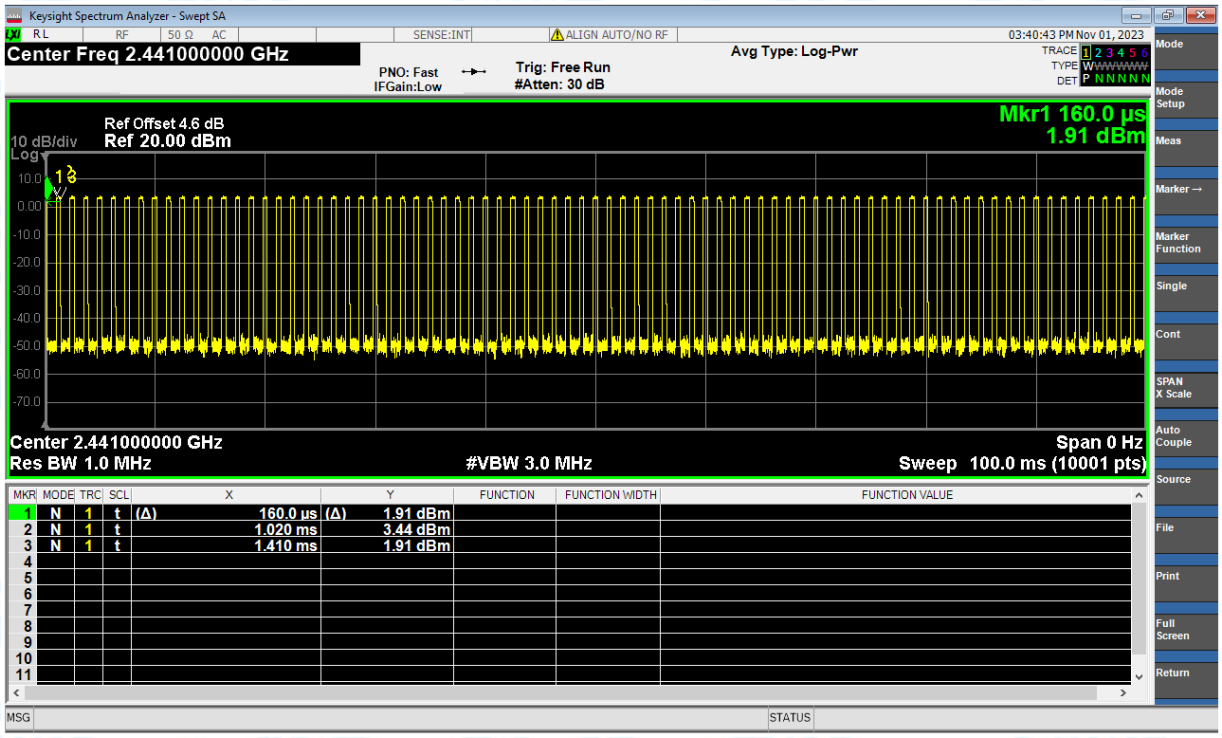
Duty Cycle NVNT 1-DH1 2480MHz Ant1



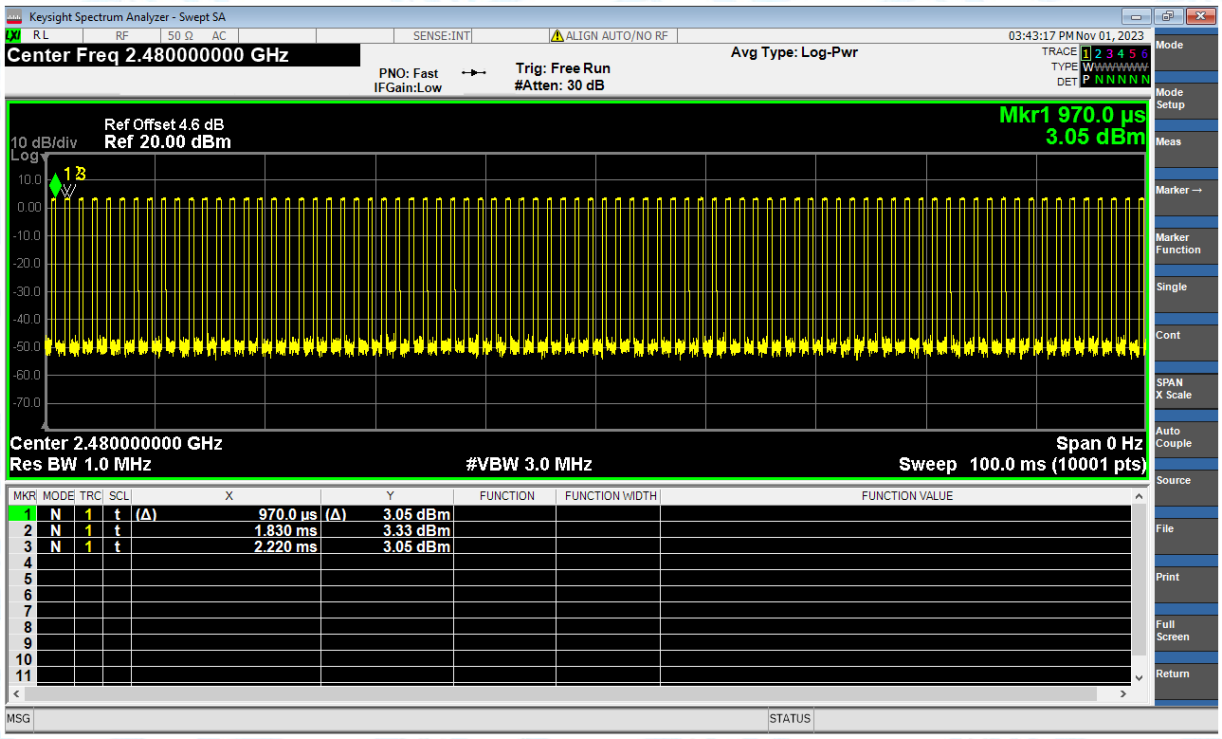
Duty Cycle NVNT 2-DH1 2402MHz Ant1



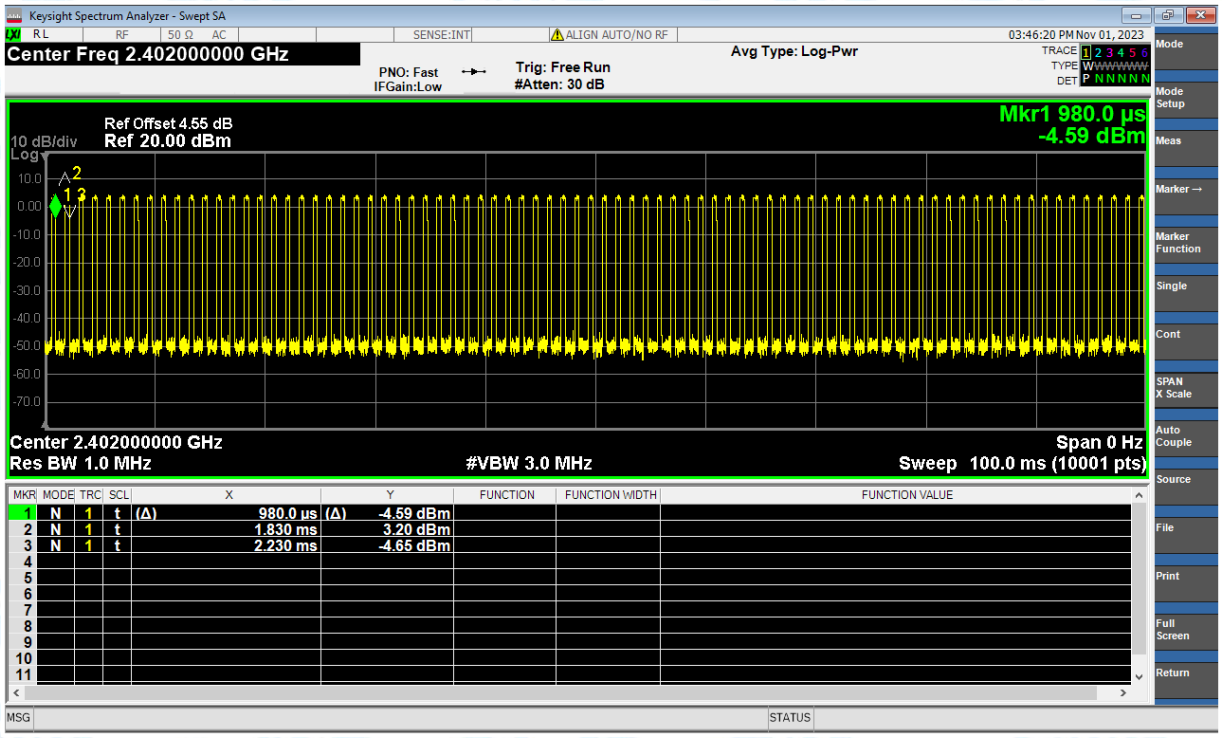
Duty Cycle NVNT 2-DH1 2441MHz Ant1



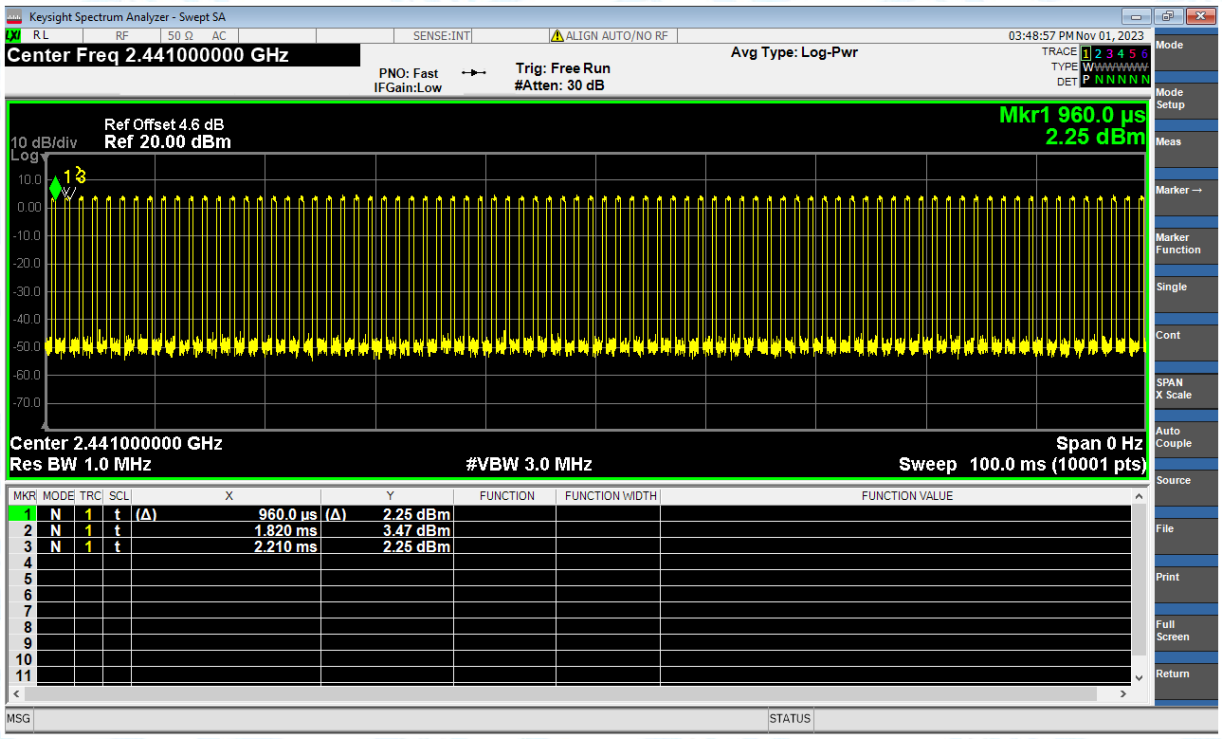
Duty Cycle NVNT 2-DH1 2480MHz Ant1



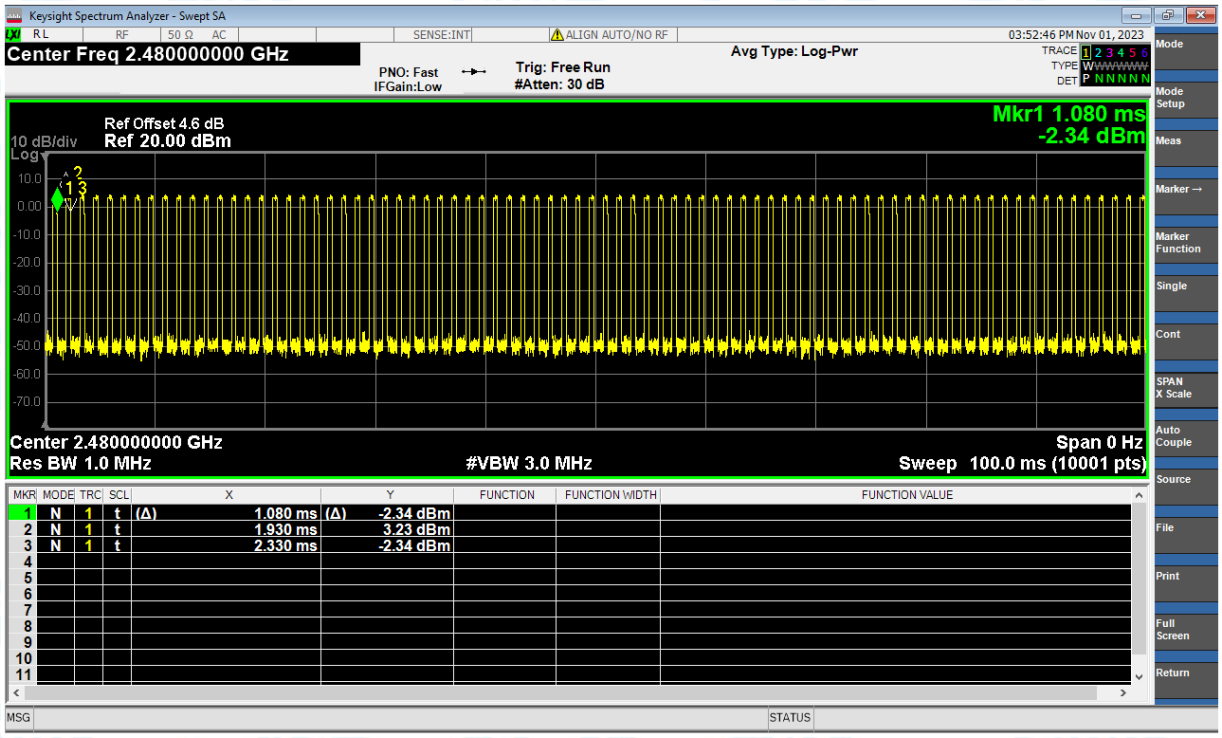
Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



Duty Cycle NVNT 3-DH1 2480MHz Ant1

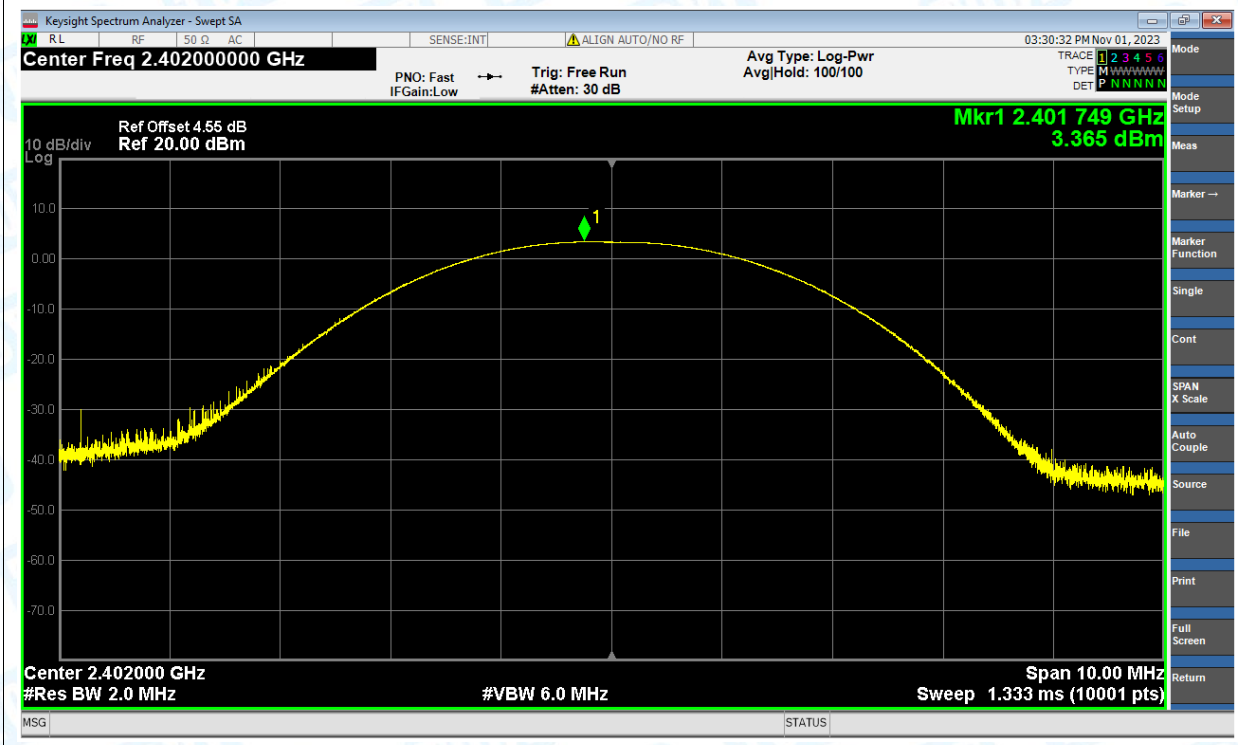


Maximum Conducted Output Power

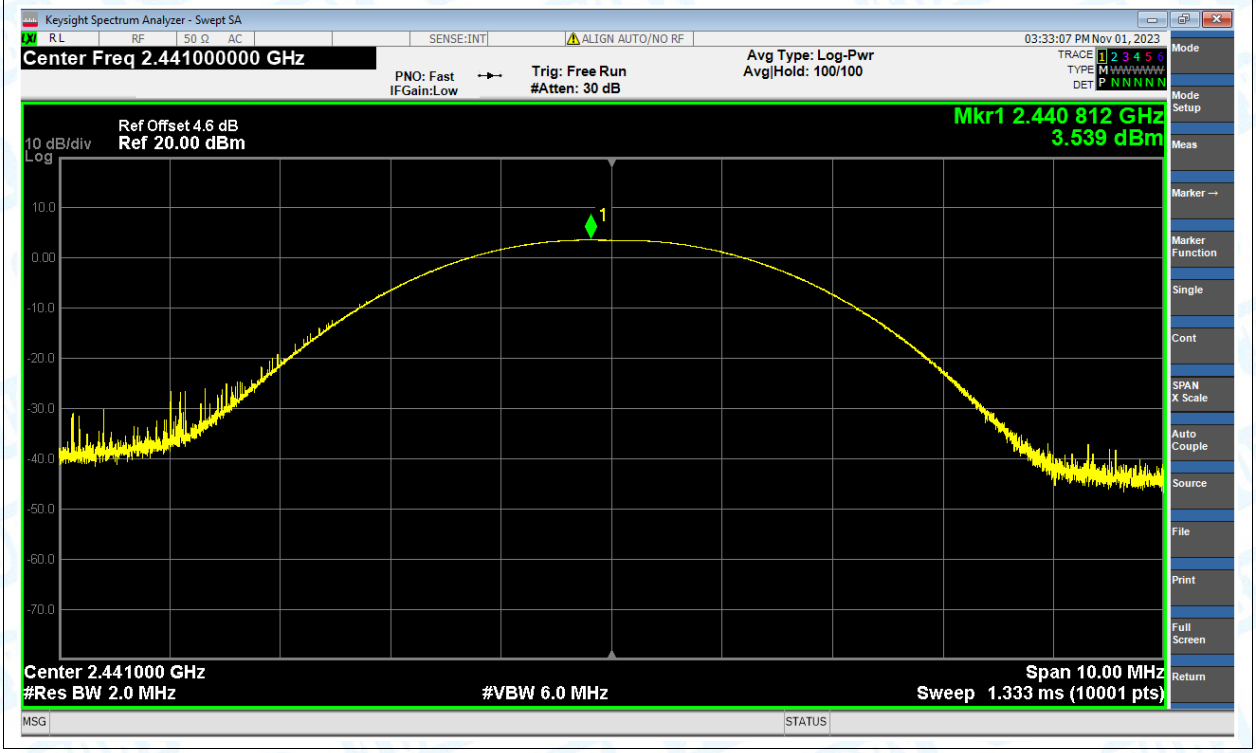
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.365	21	Pass
NVNT	1-DH1	2441	Ant1	3.539	21	Pass
NVNT	1-DH1	2480	Ant1	3.433	21	Pass
NVNT	2-DH1	2402	Ant1	4.236	21	Pass
NVNT	2-DH1	2441	Ant1	4.387	21	Pass
NVNT	2-DH1	2480	Ant1	4.271	21	Pass
NVNT	3-DH1	2402	Ant1	4.847	21	Pass
NVNT	3-DH1	2441	Ant1	4.958	21	Pass
NVNT	3-DH1	2480	Ant1	4.788	21	Pass

Test Graphs

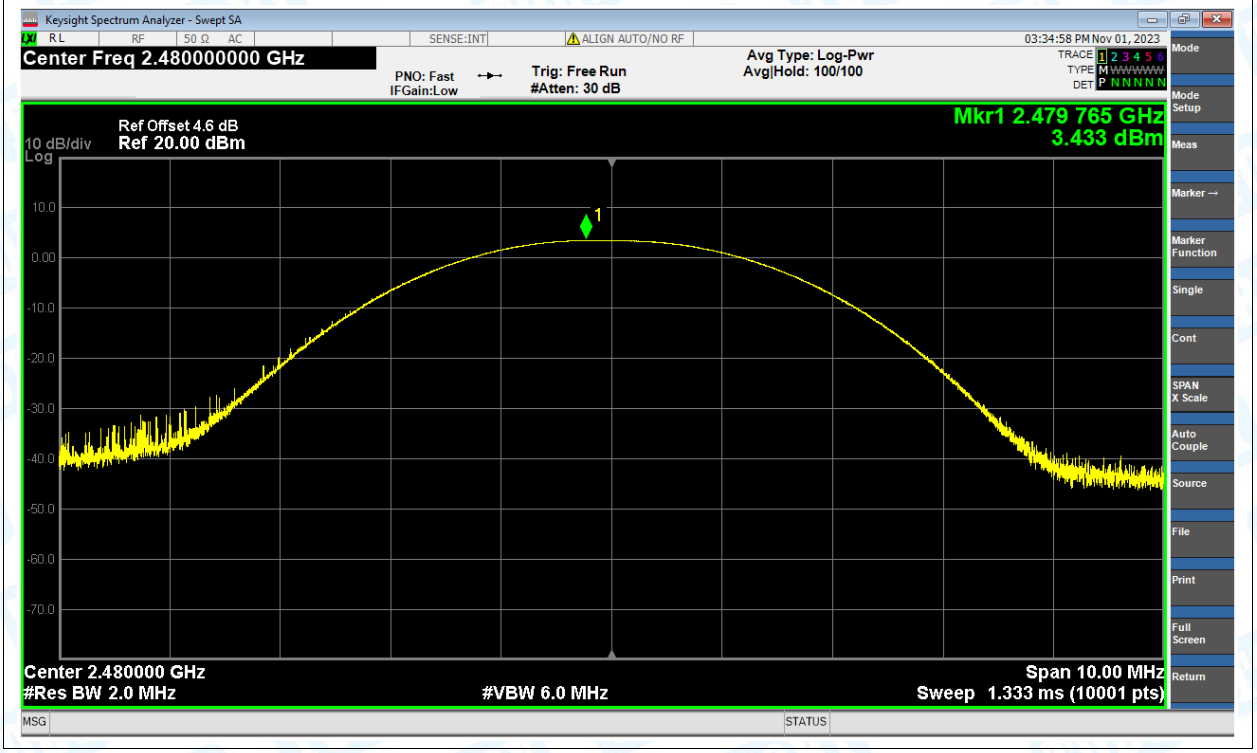
Power NVNT 1-DH1 2402MHz Ant1



Power NVNT 1-DH1 2441MHz Ant1

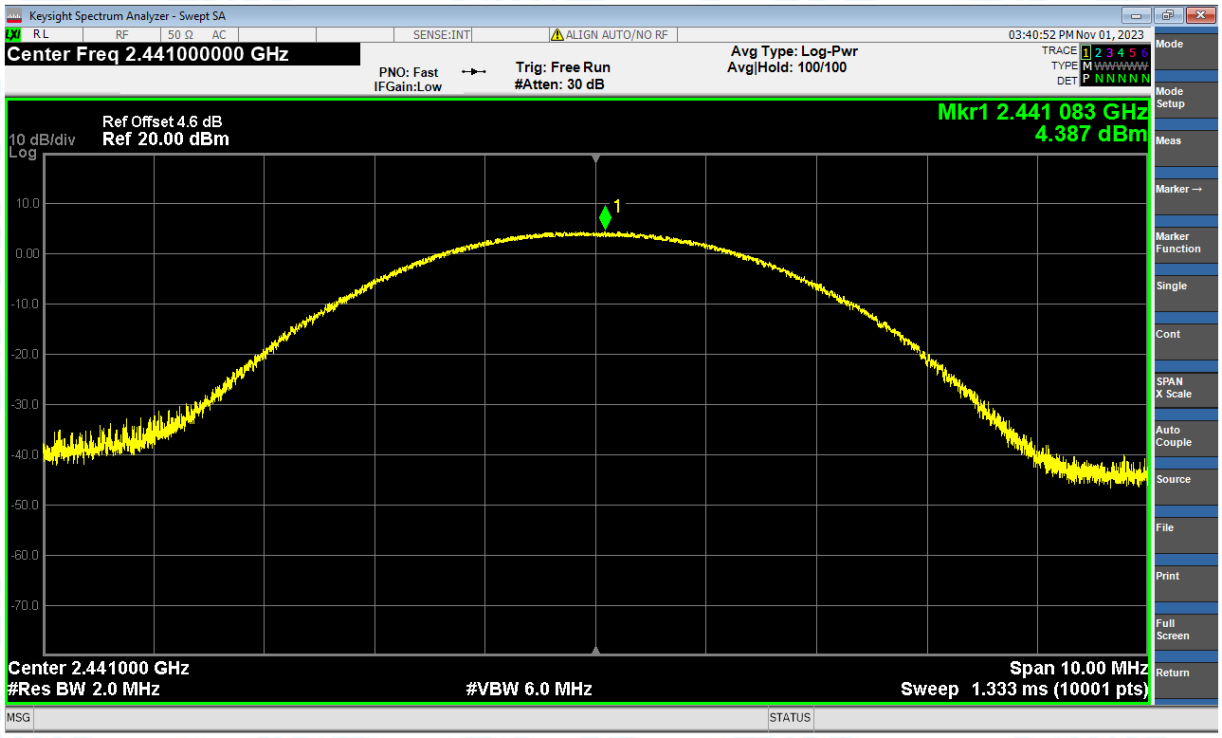


Power NVNT 1-DH1 2480MHz Ant1

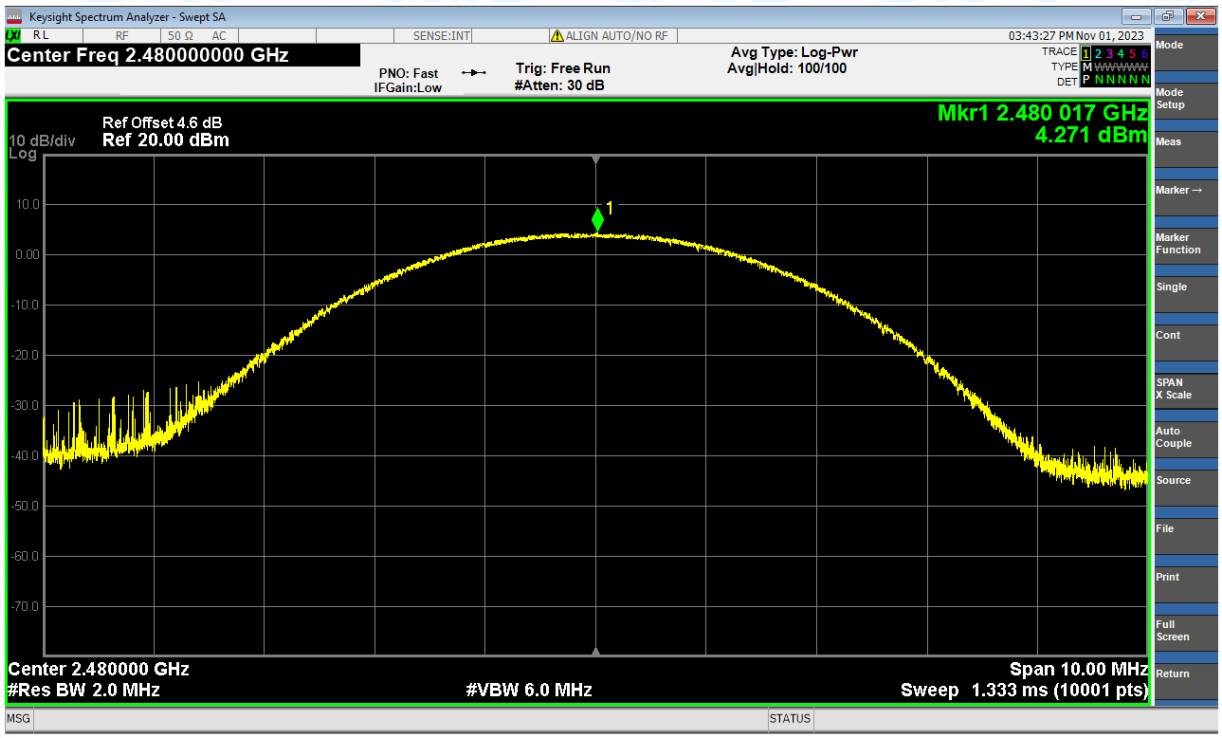


Power NVNT 2-DH1 2402MHz Ant1

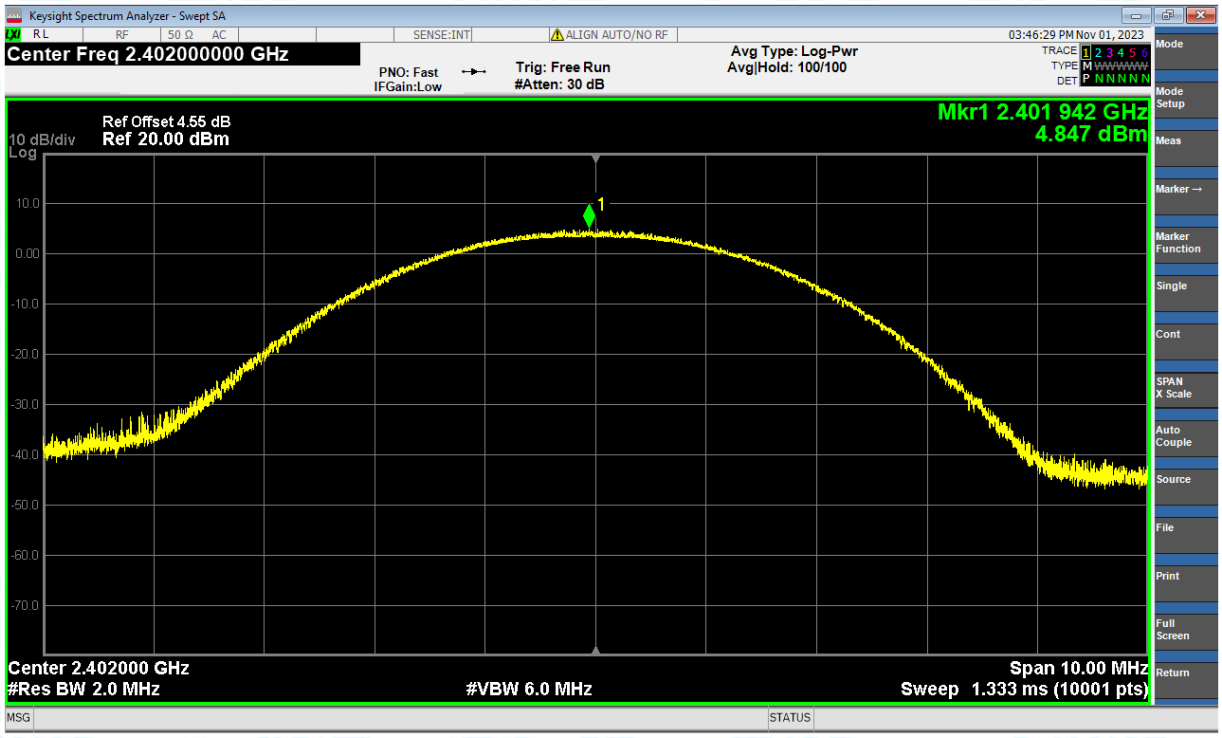
Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1

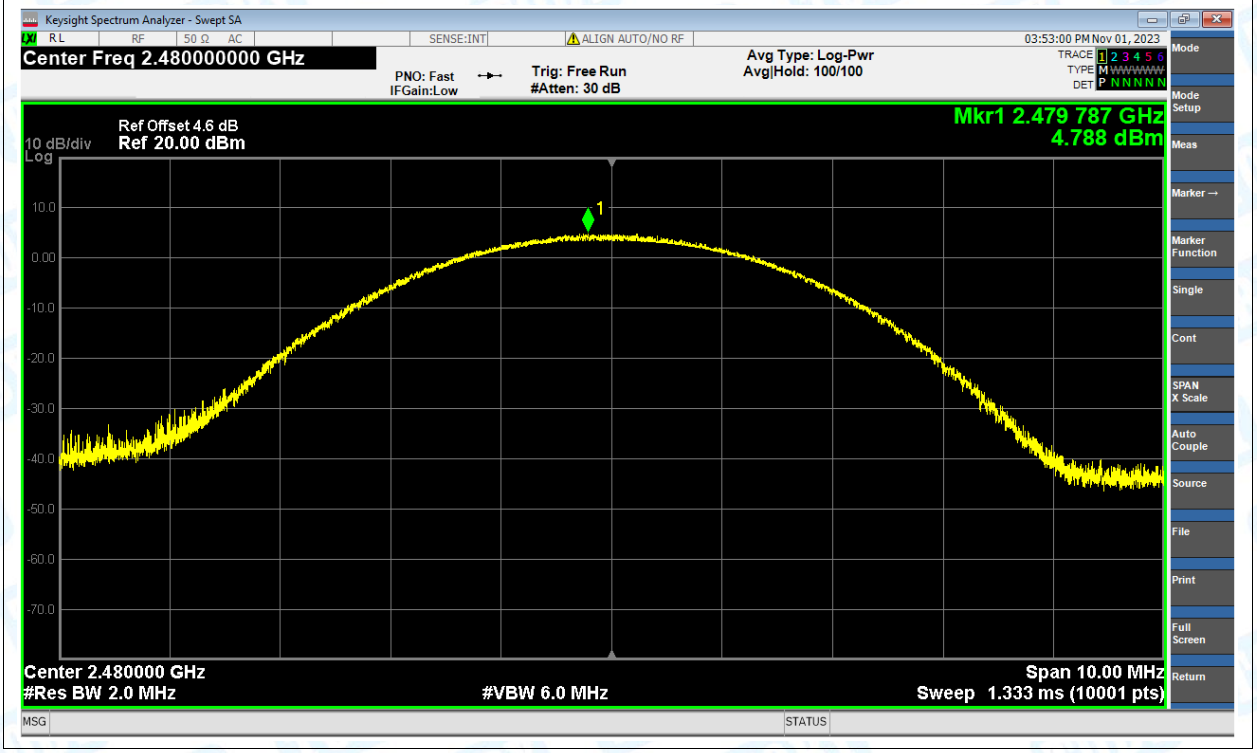


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1

Power NVNT 3-DH1 2480MHz Ant1

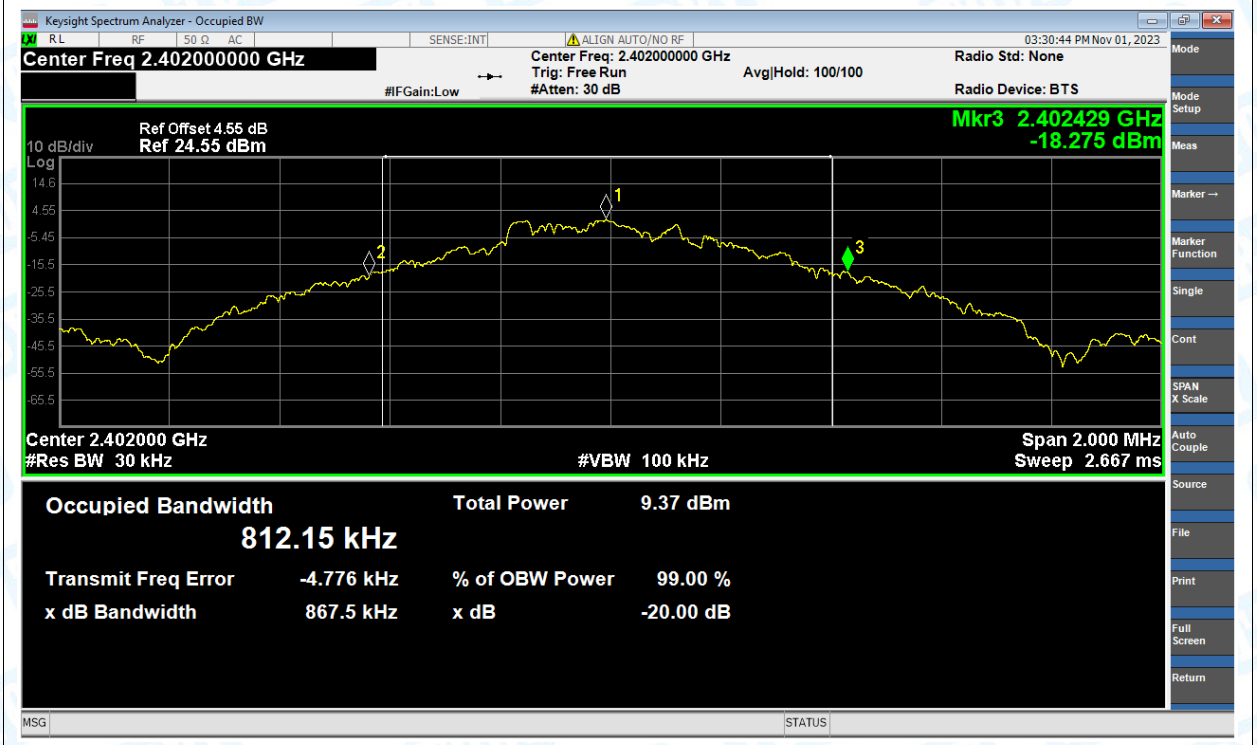


-20dB Bandwidth

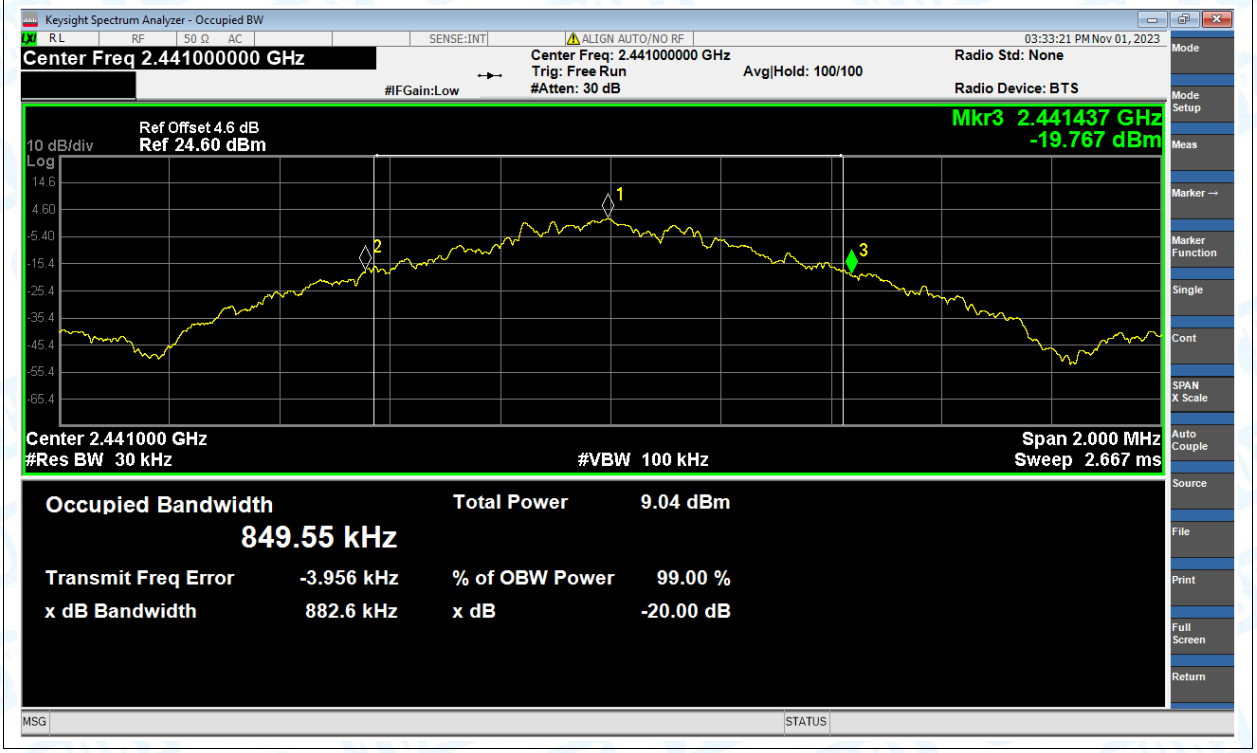
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	/	Pass
NVNT	1-DH1	2441	Ant1	0.88	/	Pass
NVNT	1-DH1	2480	Ant1	0.87	/	Pass
NVNT	2-DH1	2402	Ant1	1.26	/	Pass
NVNT	2-DH1	2441	Ant1	1.25	/	Pass
NVNT	2-DH1	2480	Ant1	1.25	/	Pass
NVNT	3-DH1	2402	Ant1	1.24	/	Pass
NVNT	3-DH1	2441	Ant1	1.22	/	Pass
NVNT	3-DH1	2480	Ant1	1.21	/	Pass

Test Graphs

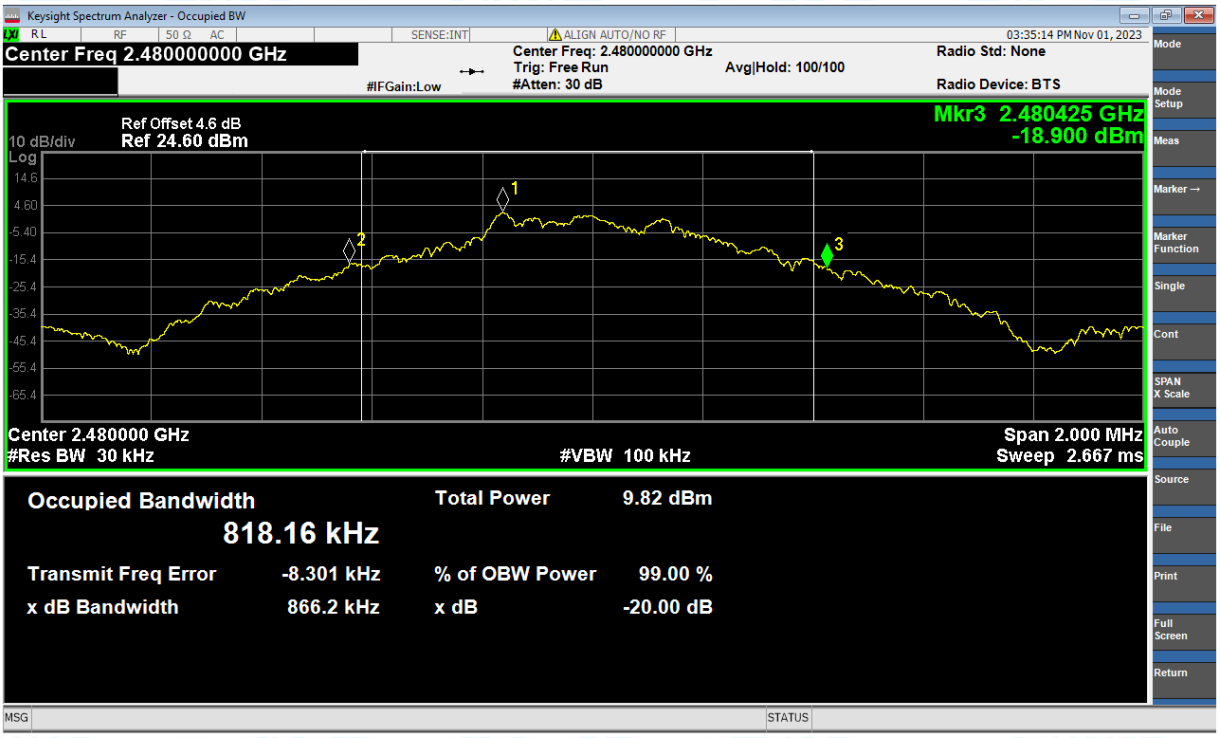
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



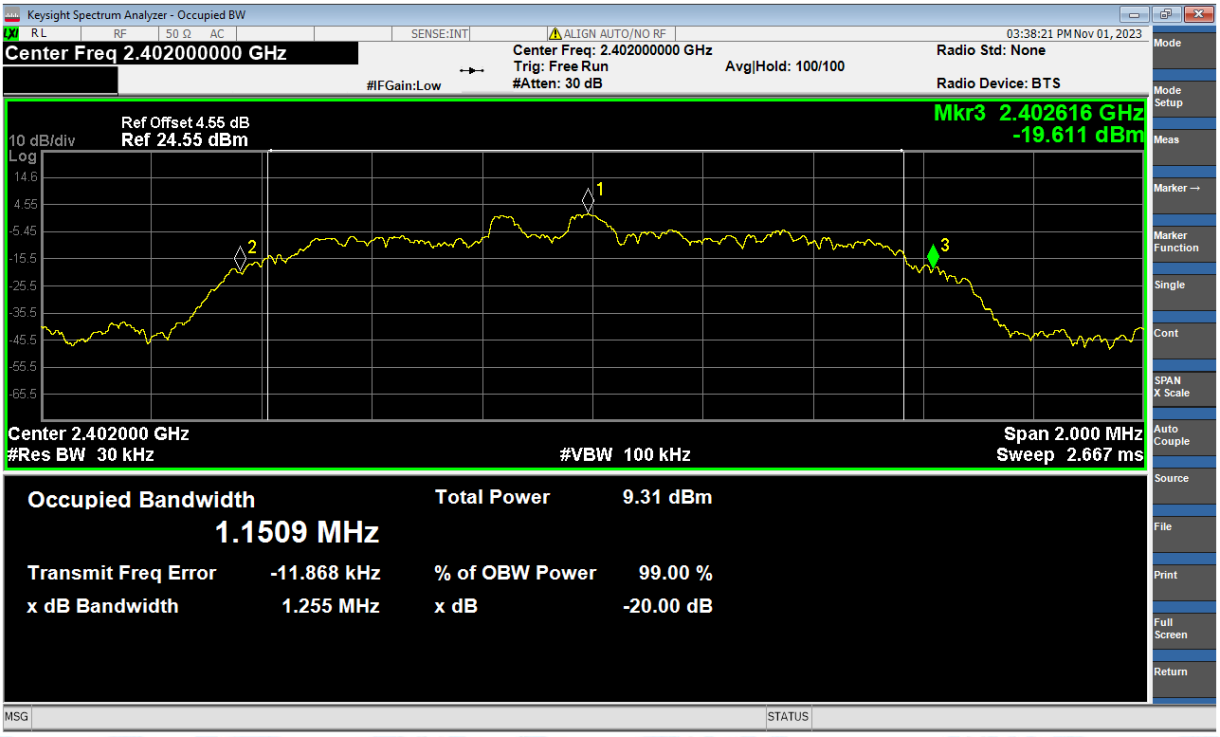
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



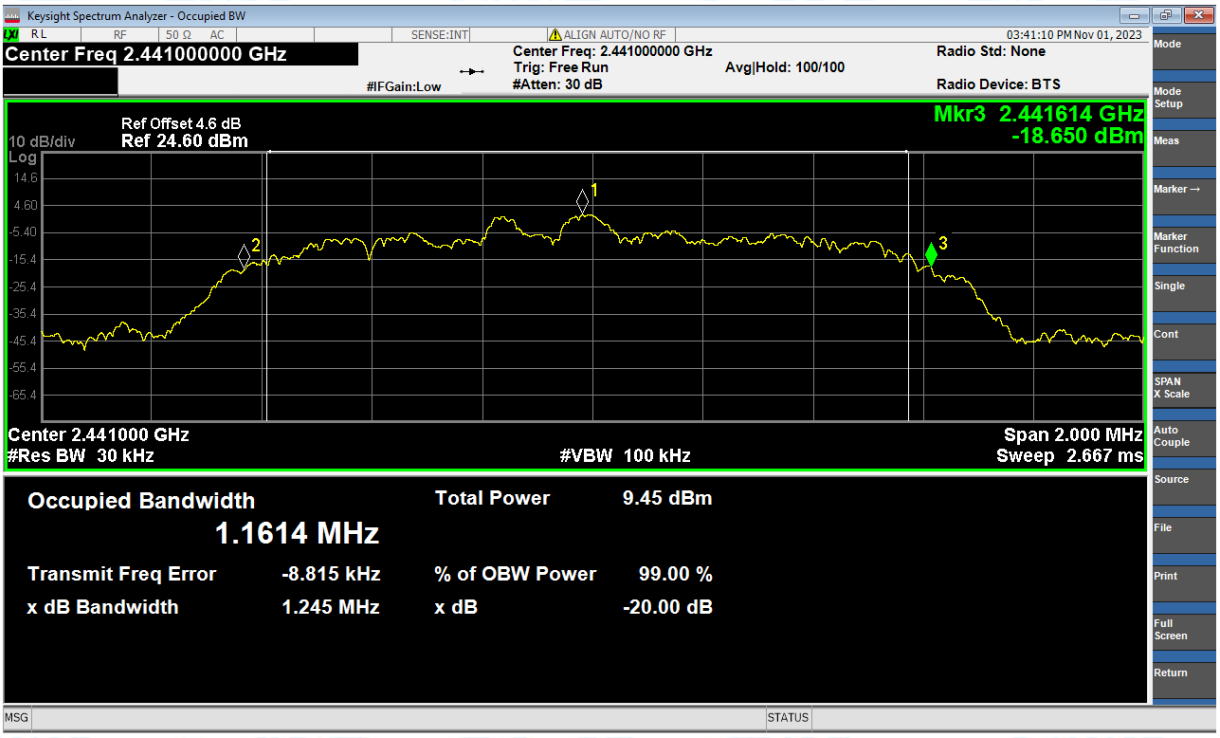
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



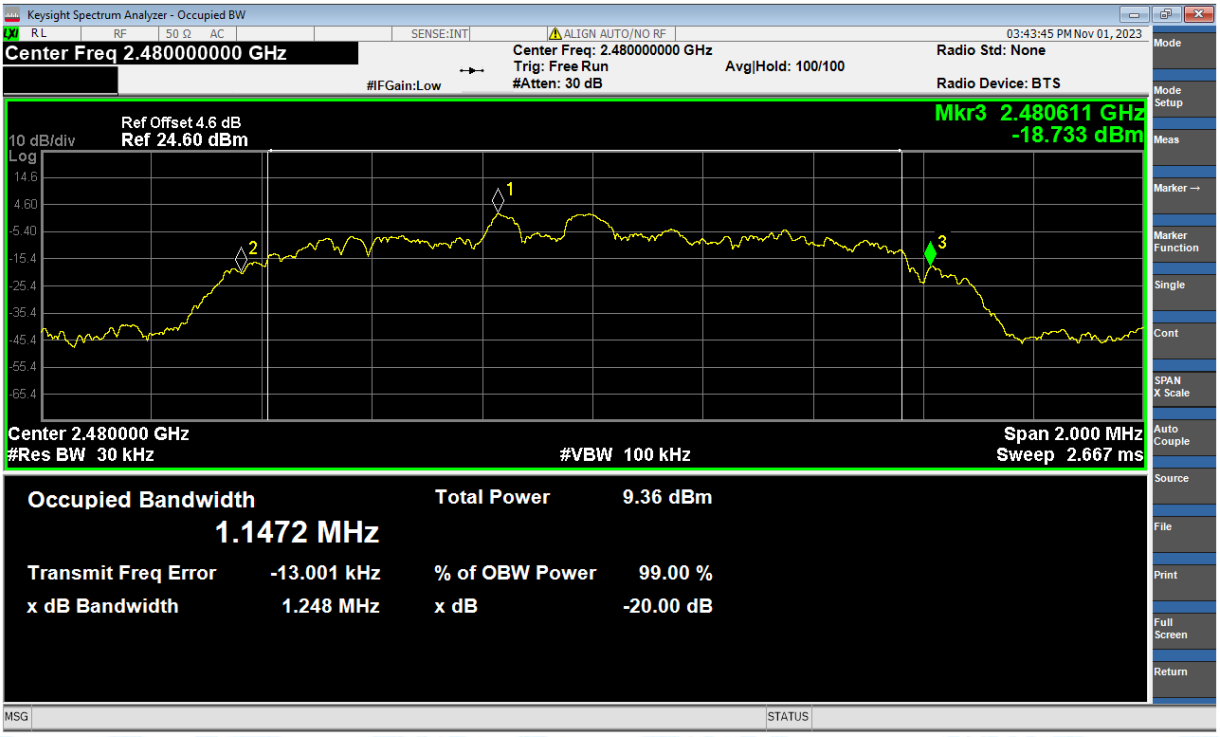
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



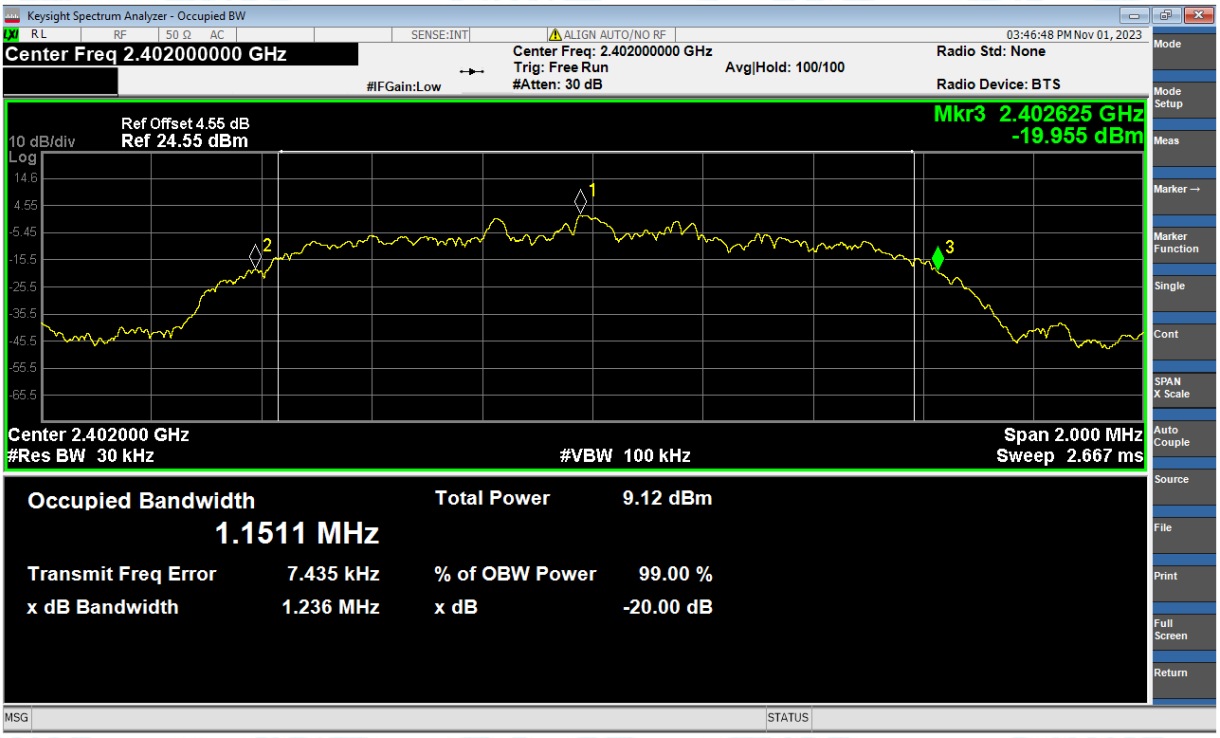
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



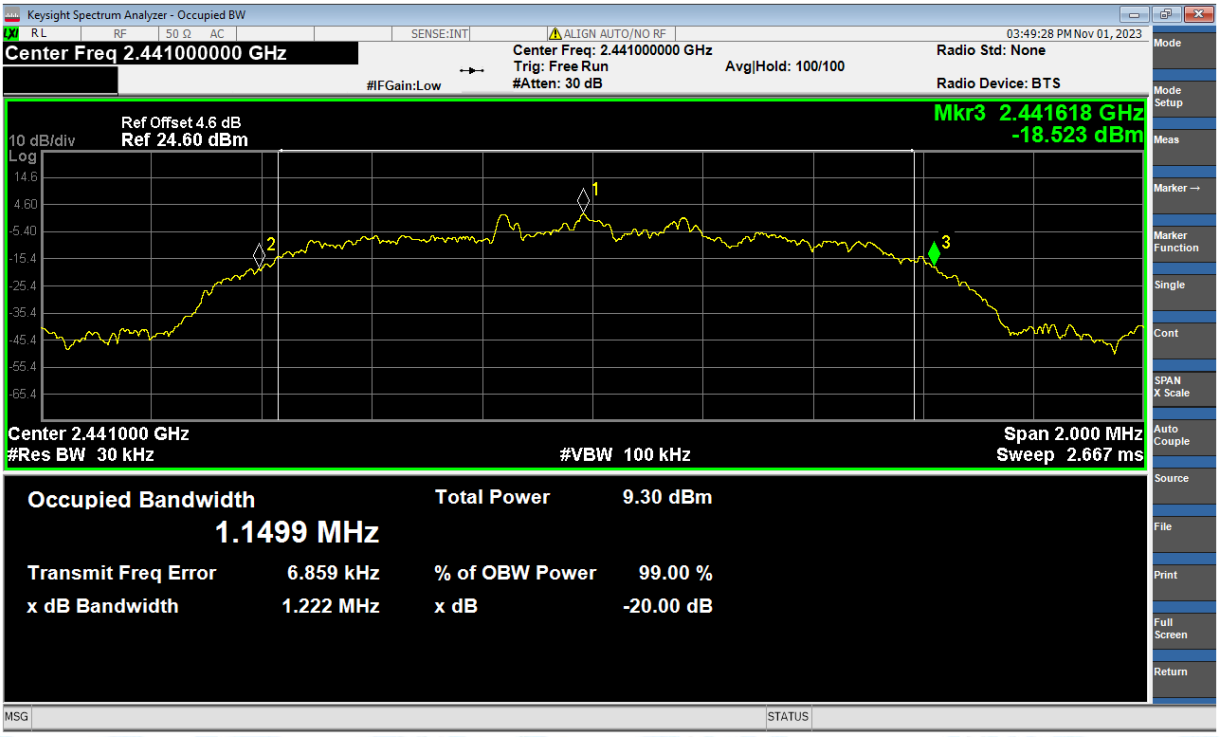
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1



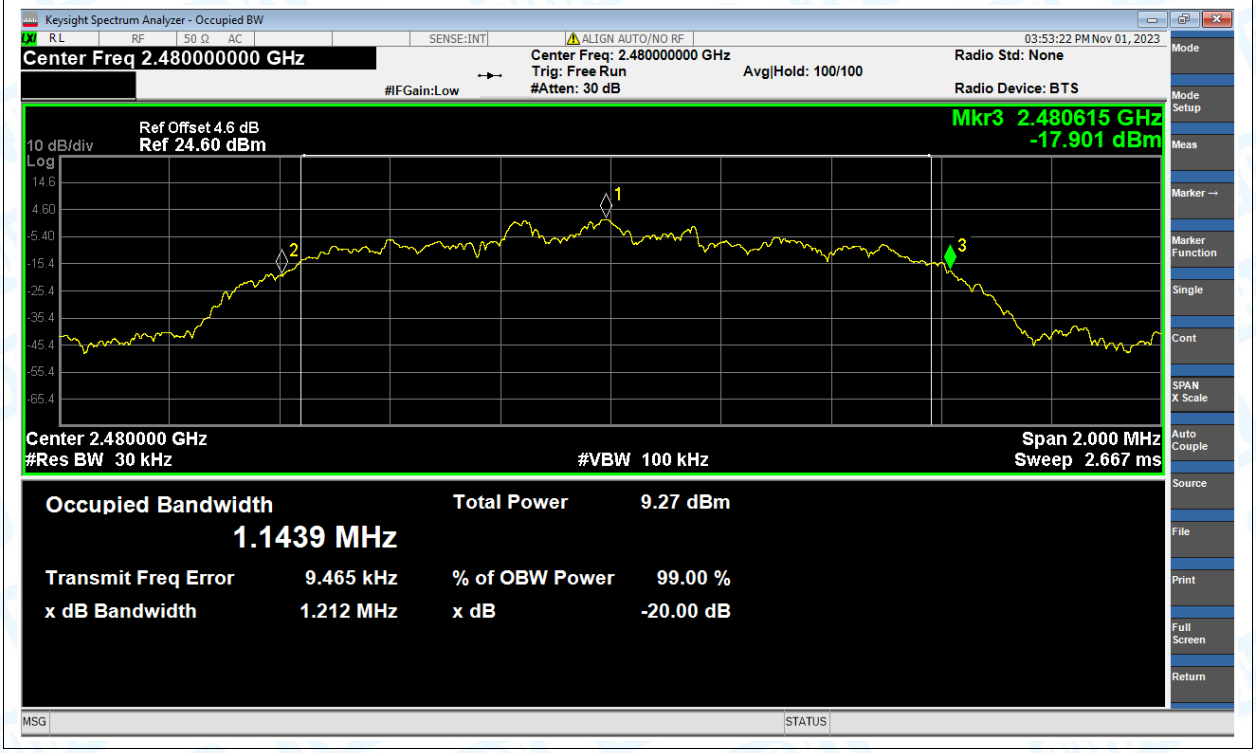
-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2480MHz Ant1

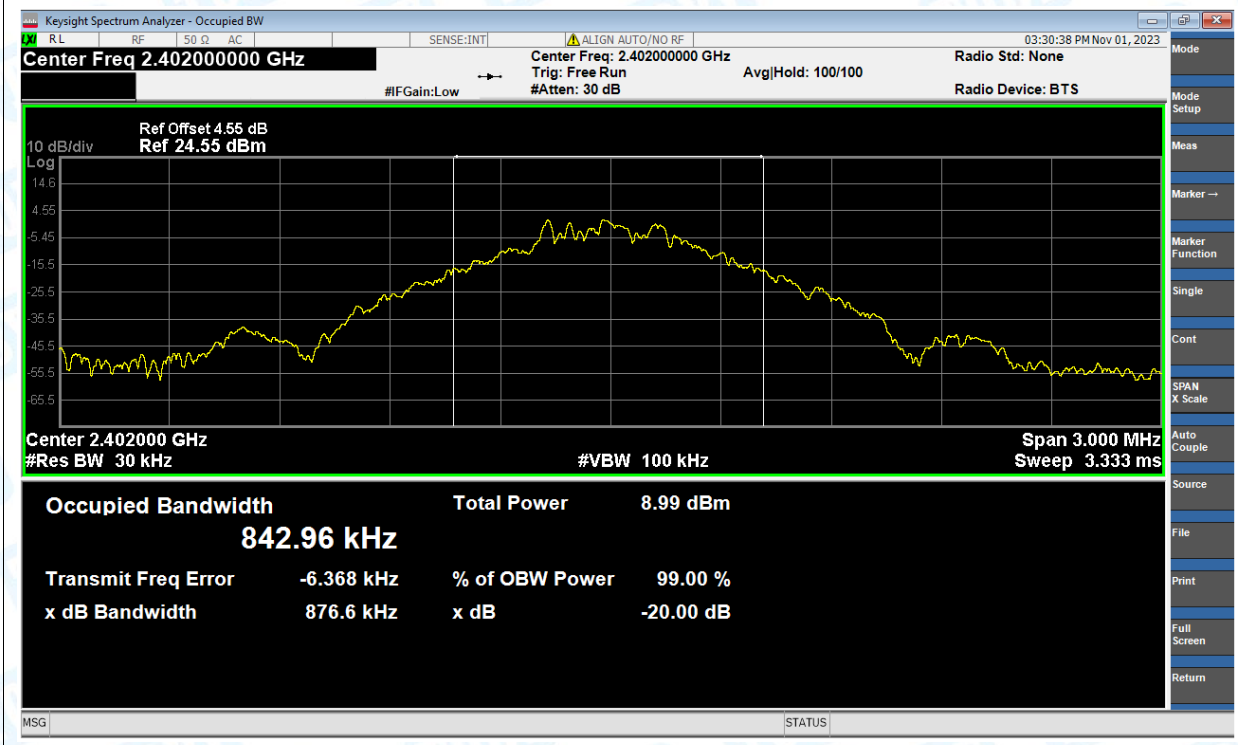


Occupied Channel Bandwidth

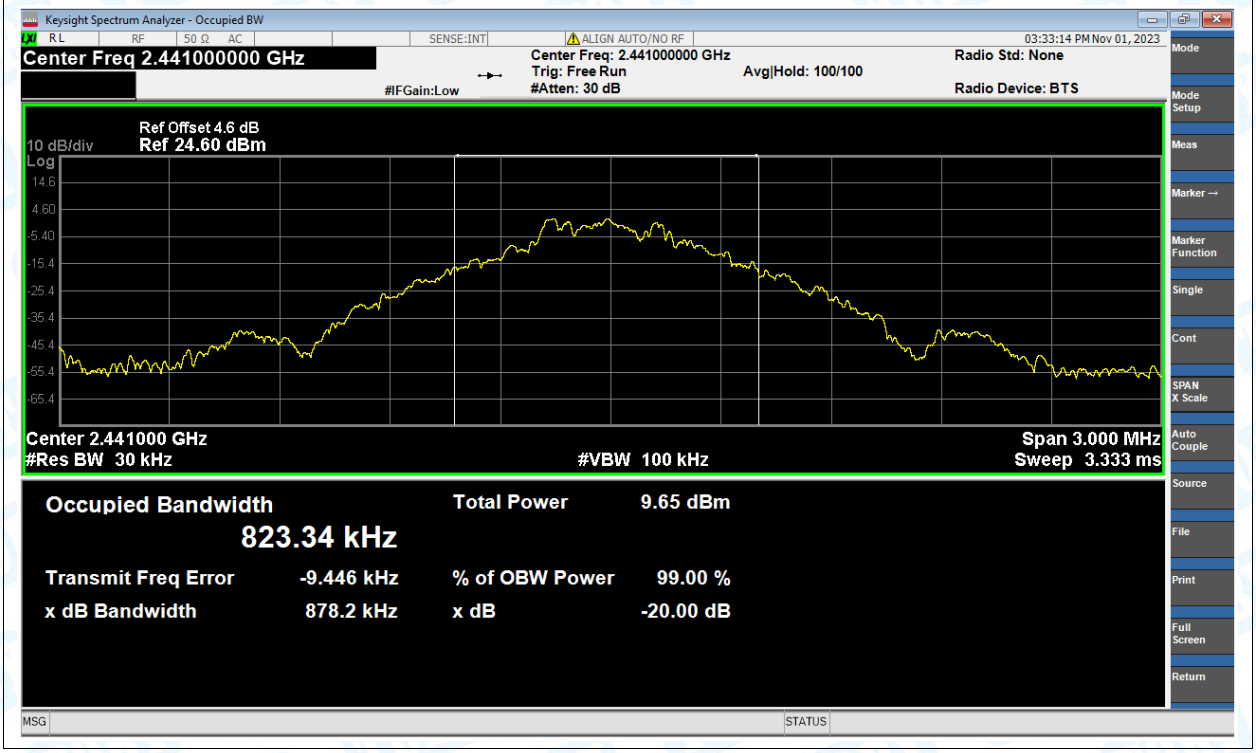
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.843
NVNT	1-DH1	2441	Ant1	0.823
NVNT	1-DH1	2480	Ant1	0.829
NVNT	2-DH1	2402	Ant1	1.167
NVNT	2-DH1	2441	Ant1	1.162
NVNT	2-DH1	2480	Ant1	1.156
NVNT	3-DH1	2402	Ant1	1.144
NVNT	3-DH1	2441	Ant1	1.144
NVNT	3-DH1	2480	Ant1	1.136

Test Graphs

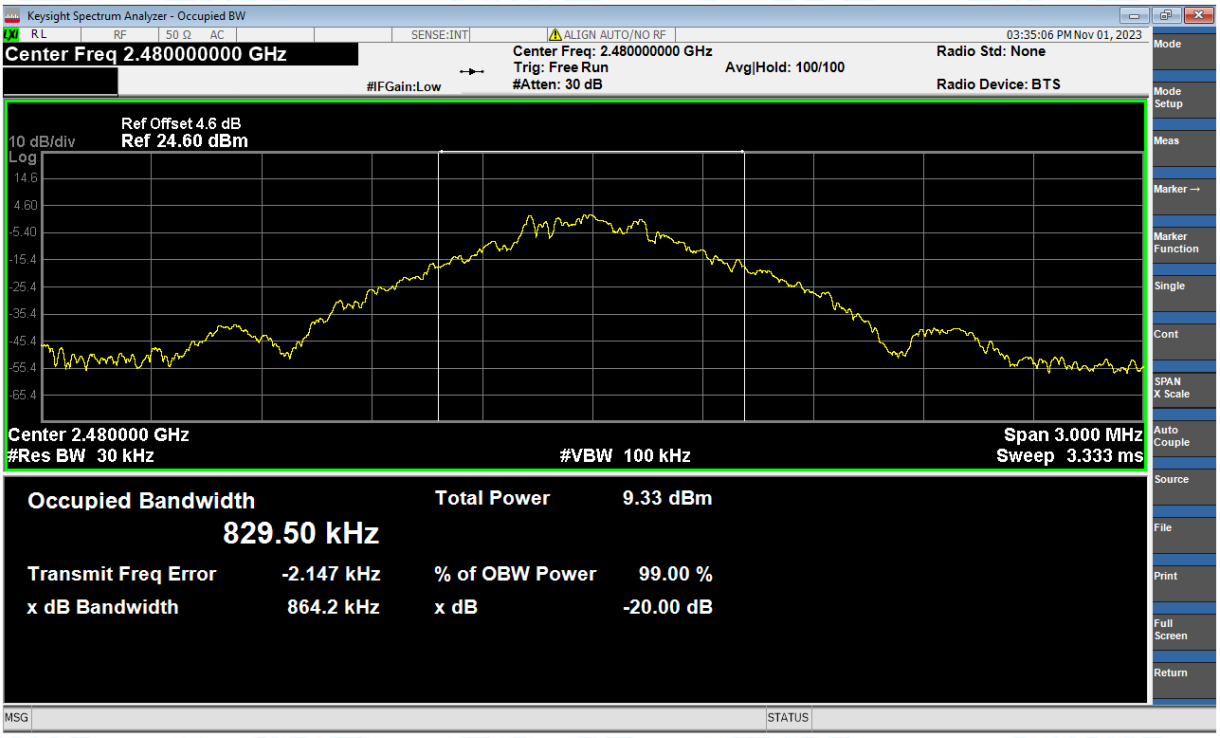
OBW NVNT 1-DH1 2402MHz Ant1



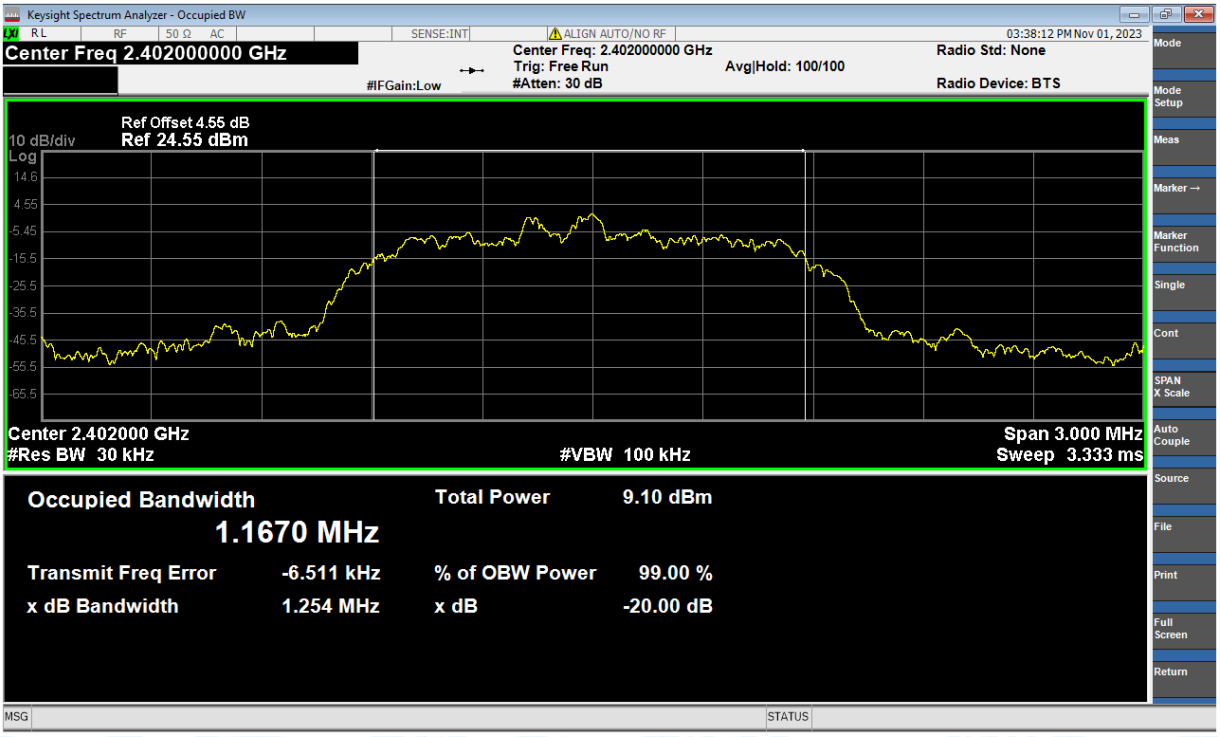
OBW NVNT 1-DH1 2441MHz Ant1



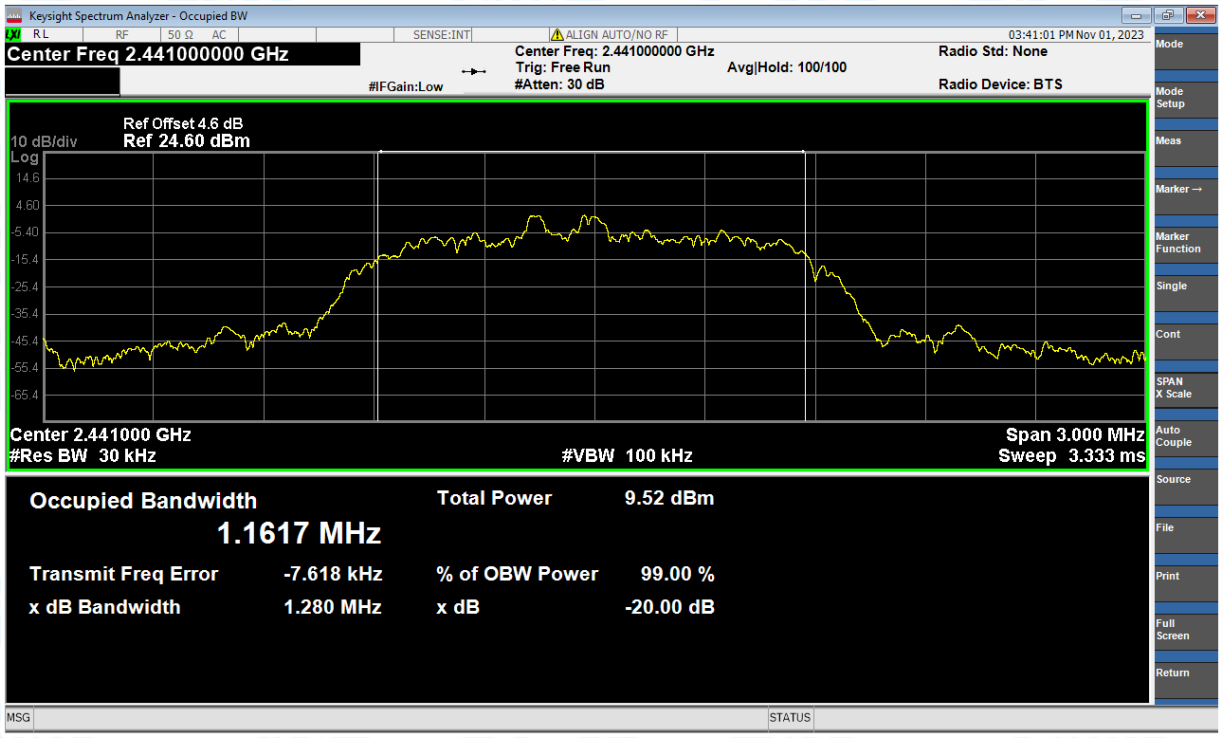
OBW NVNT 1-DH1 2480MHz Ant1



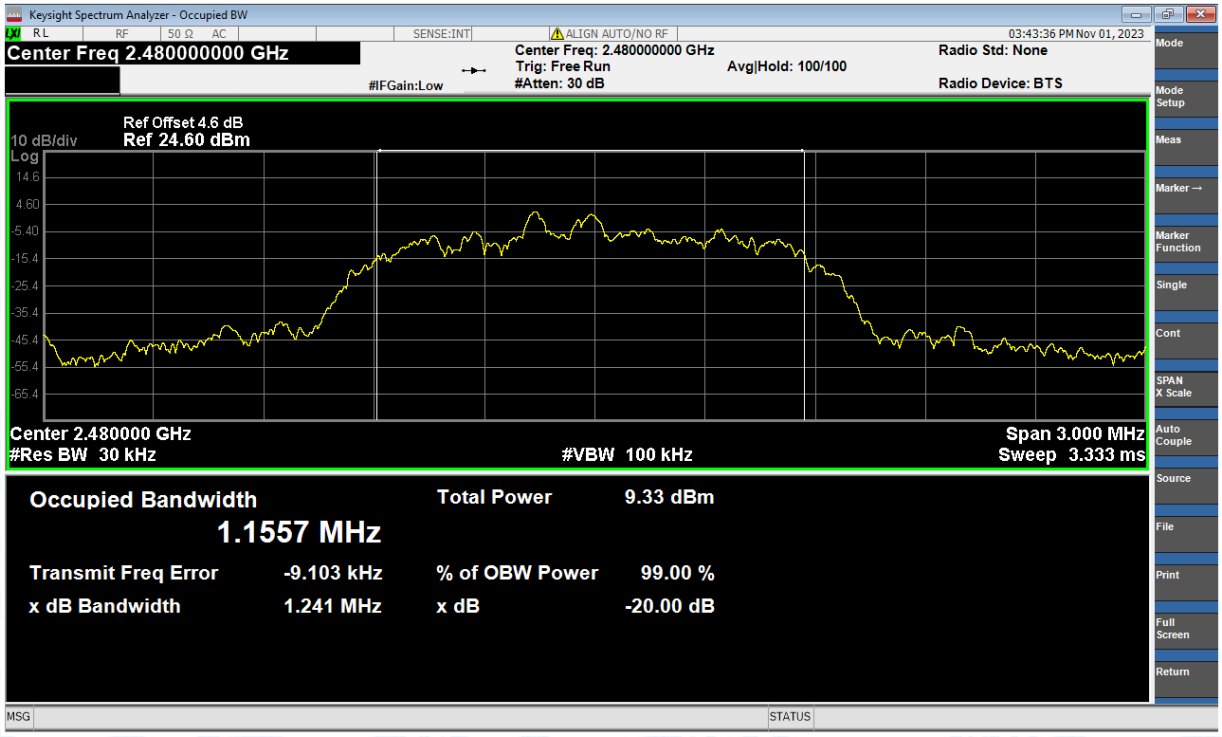
OBW NVNT 2-DH1 2402MHz Ant1



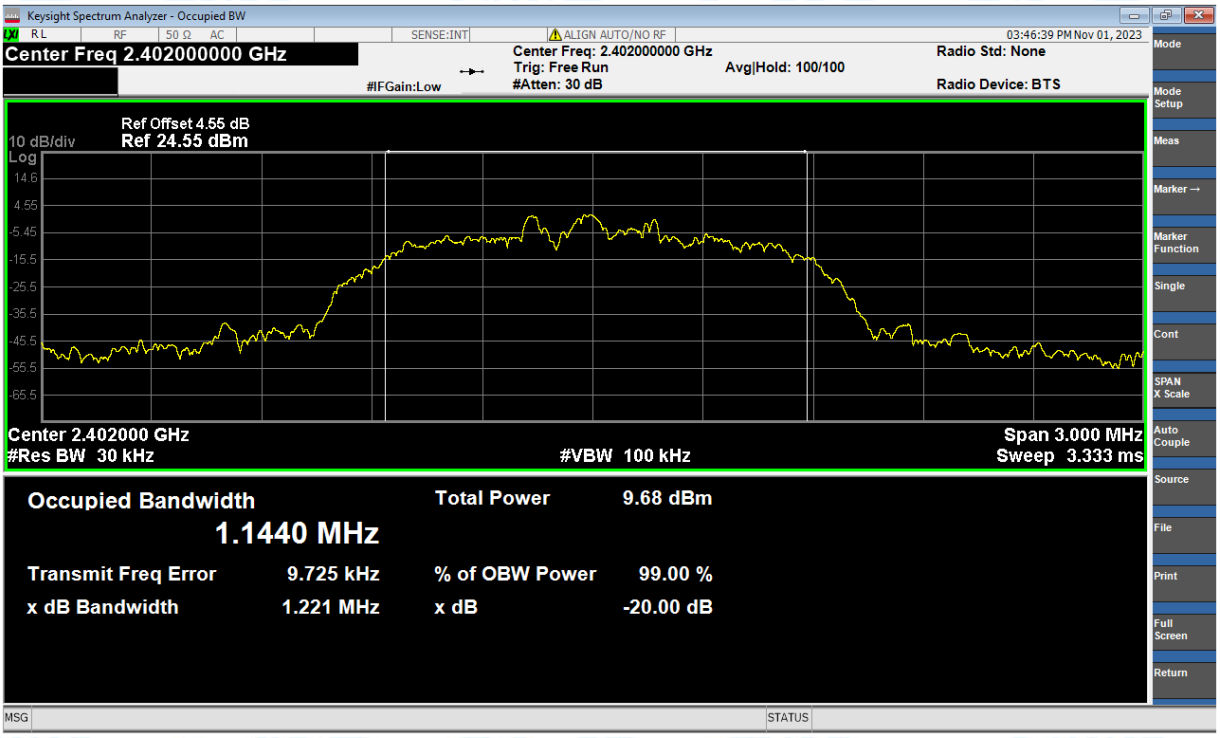
OBW NVNT 2-DH1 2441MHz Ant1



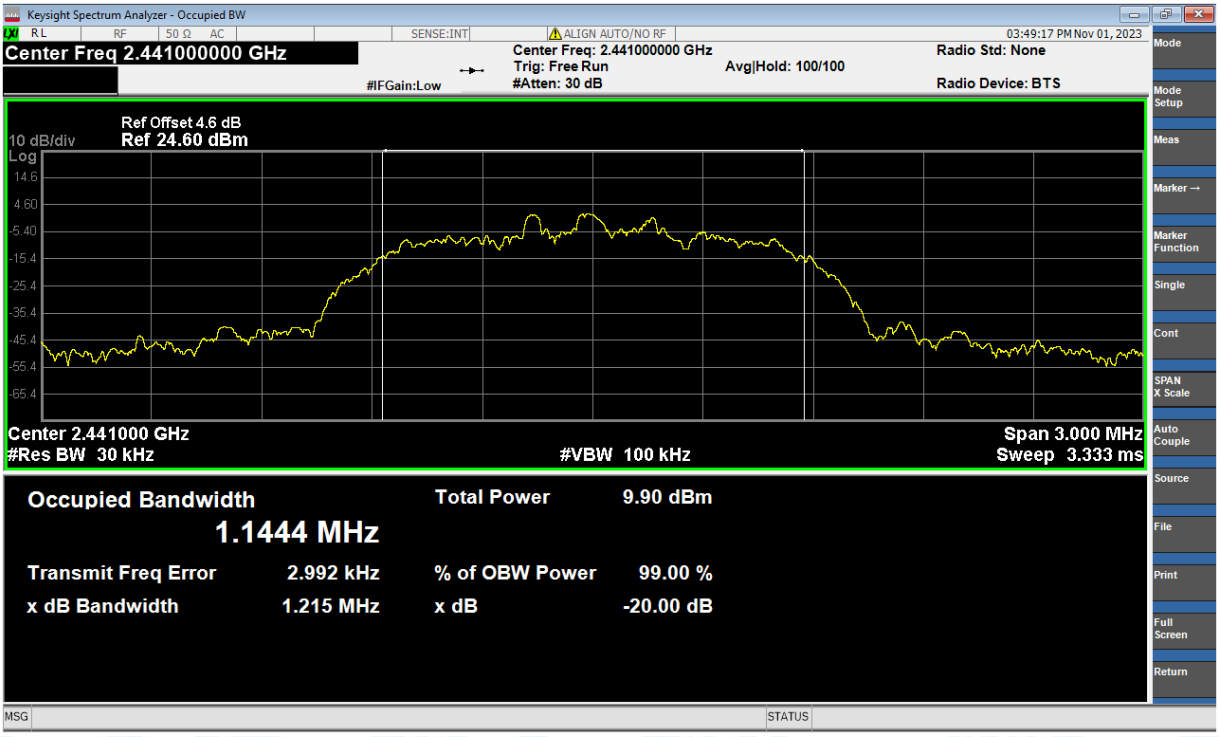
OBW NVNT 2-DH1 2480MHz Ant1



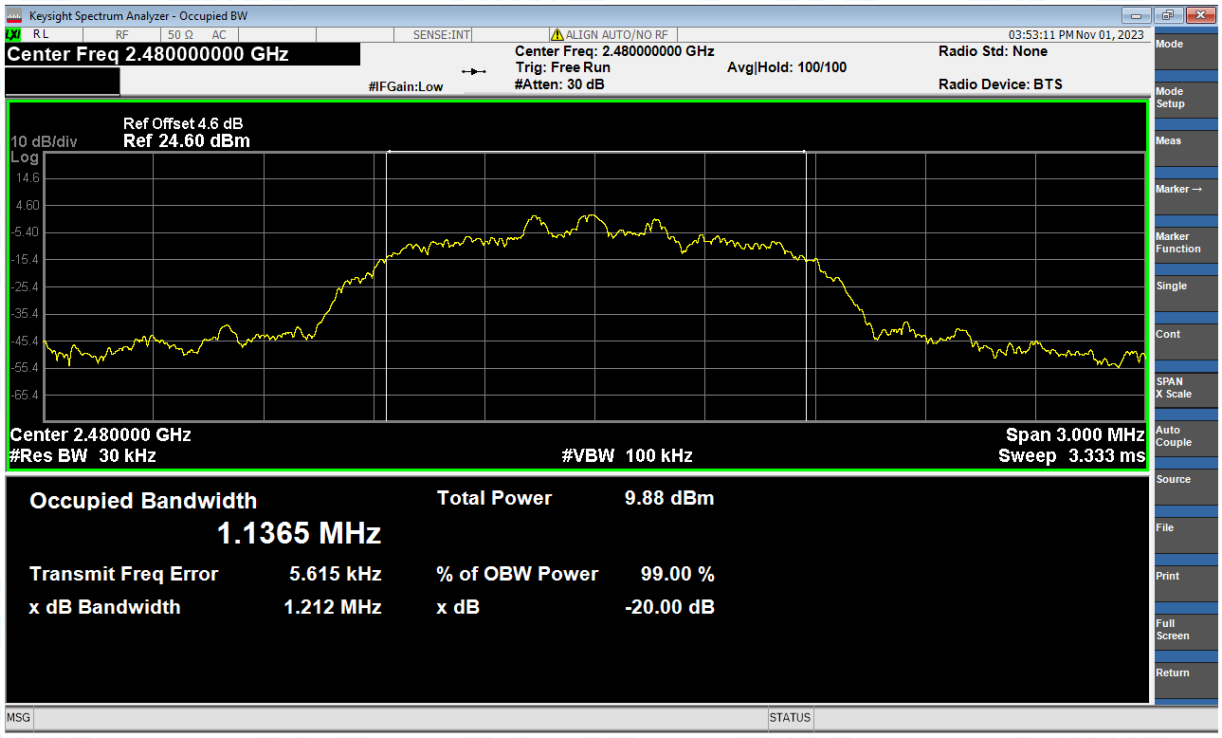
OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



OBW NVNT 3-DH1 2480MHz Ant1

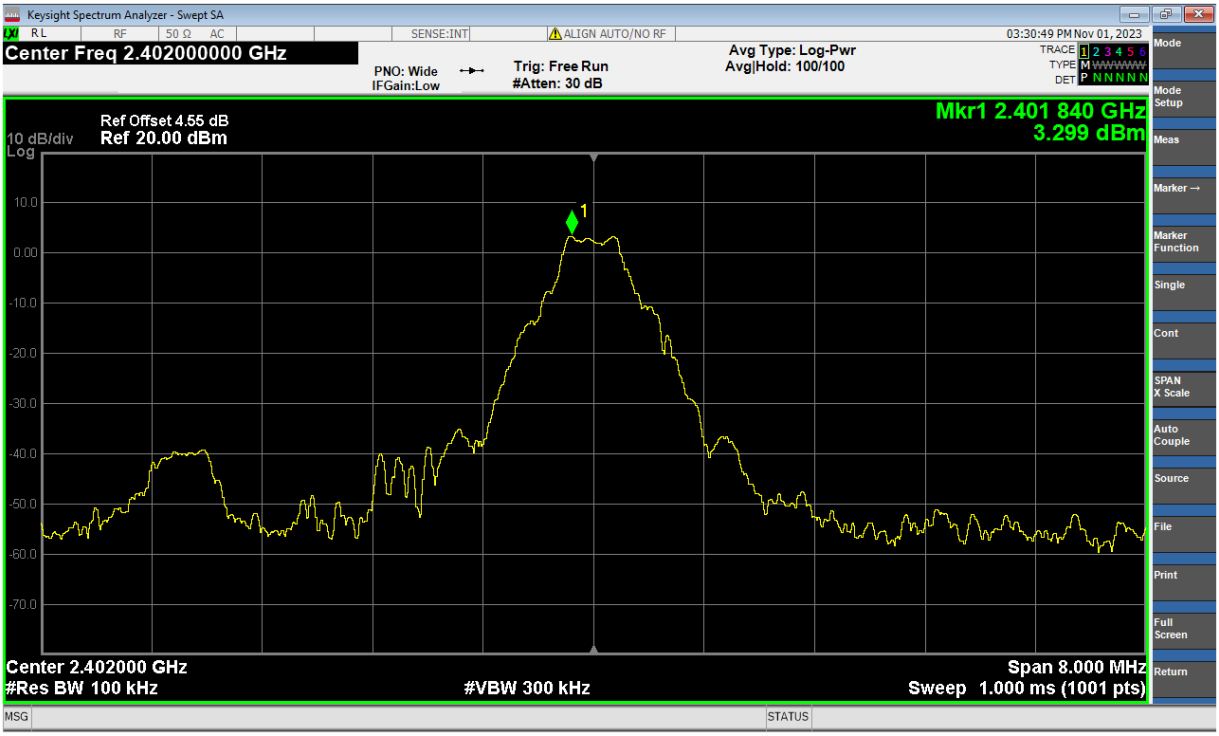


Band Edge

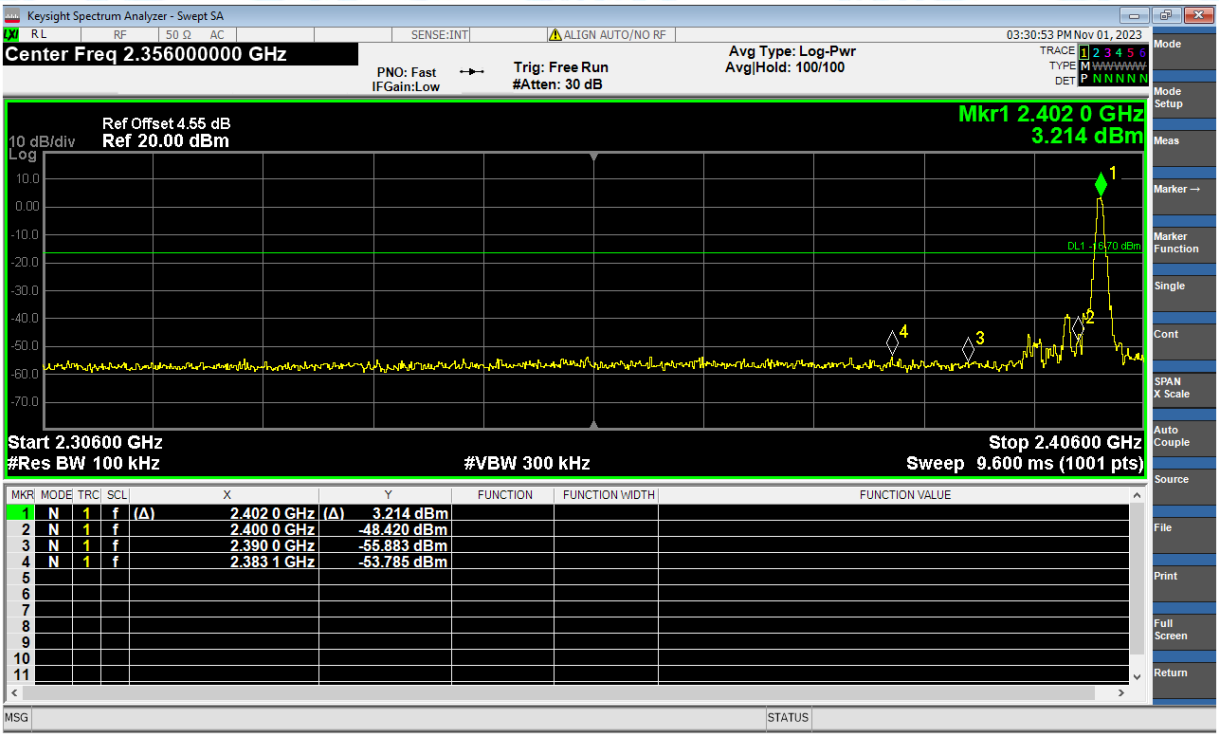
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-57.09	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-55.34	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-56.9	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-56.89	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-54.44	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-56.85	-20	Pass

Test Graphs

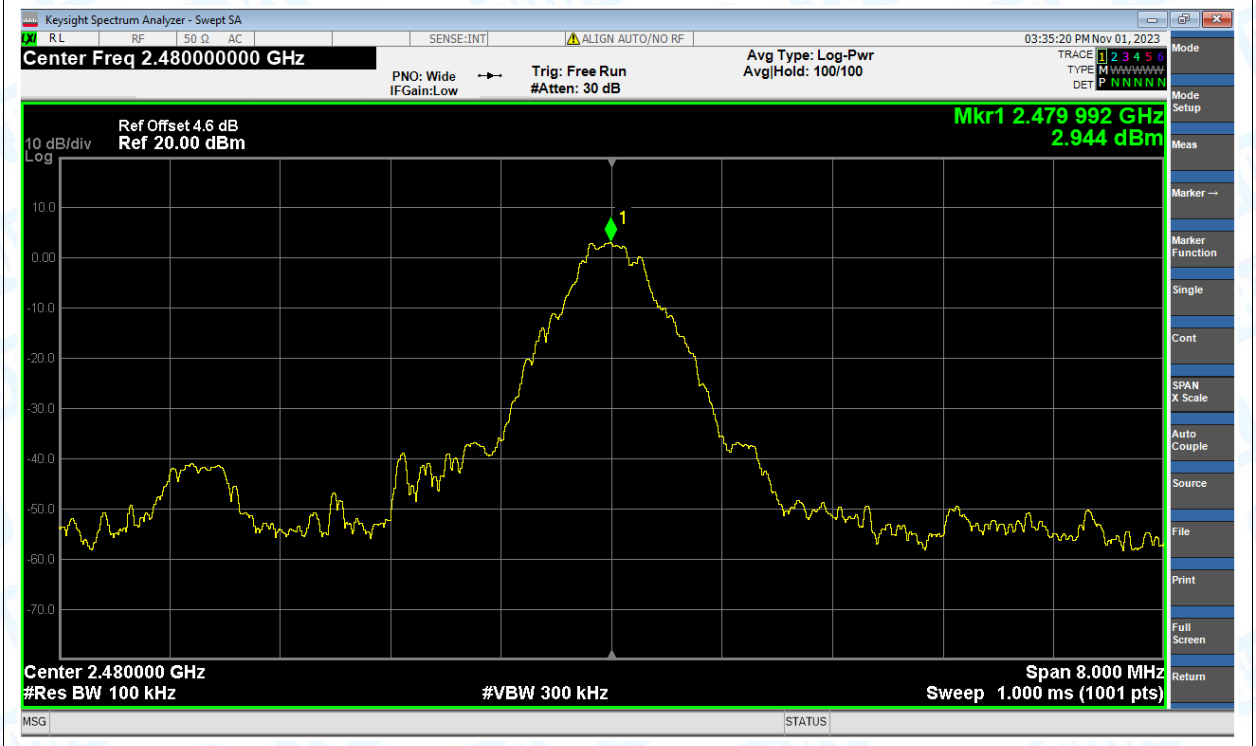
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



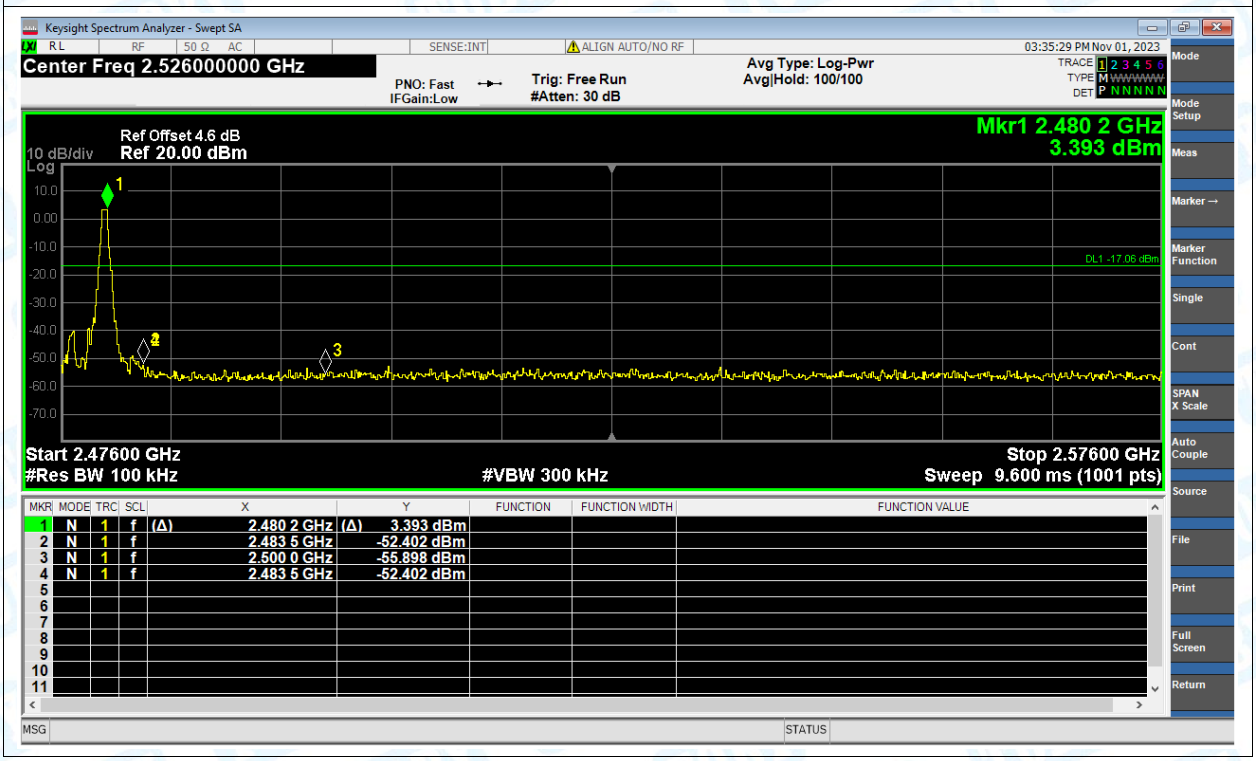
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



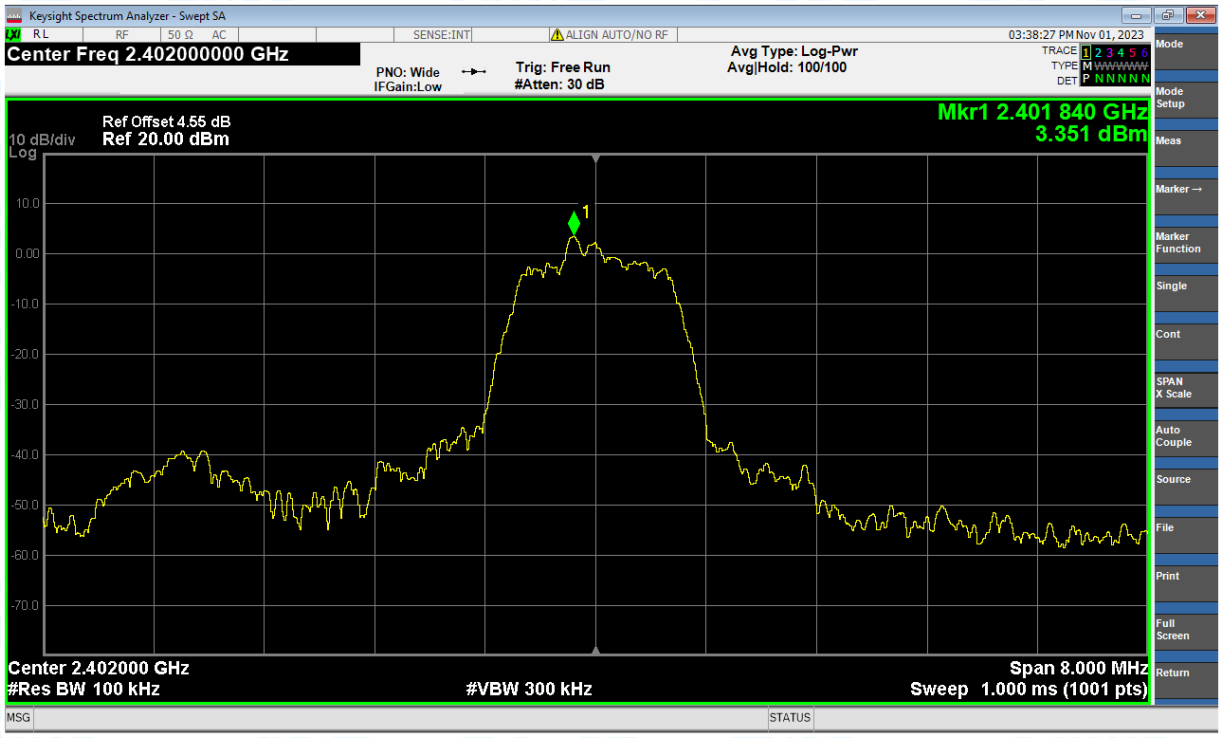
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



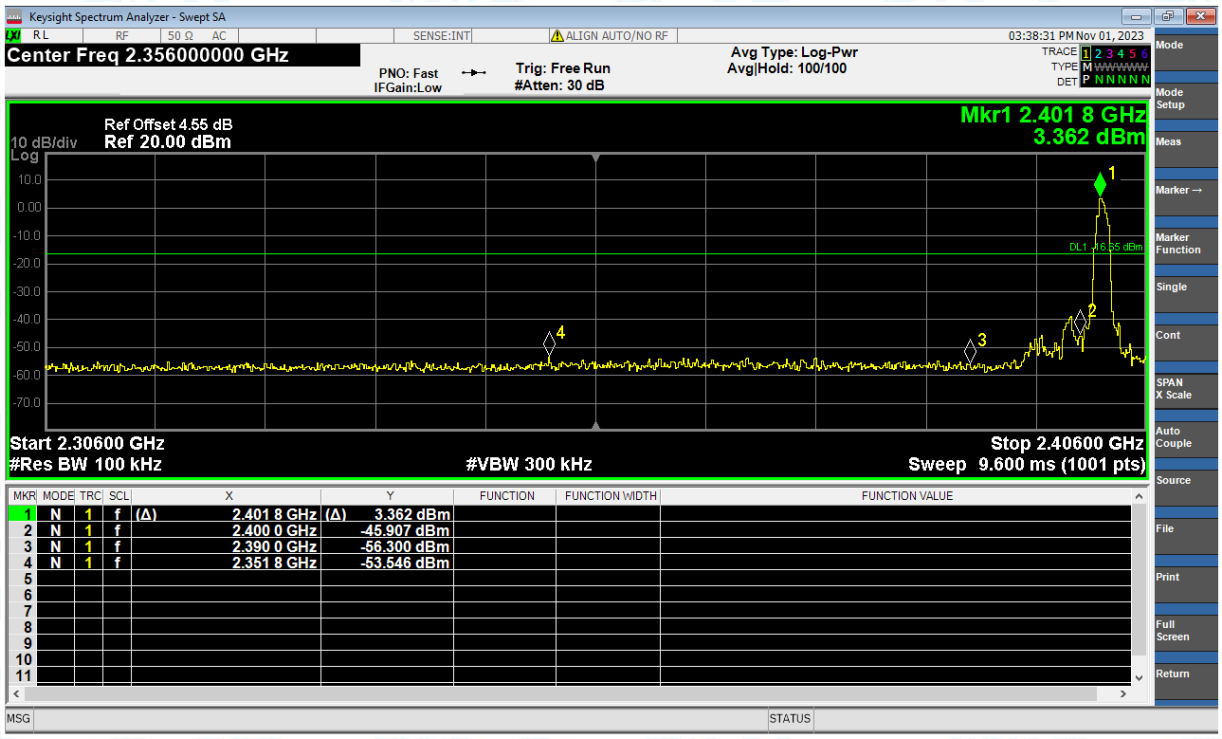
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



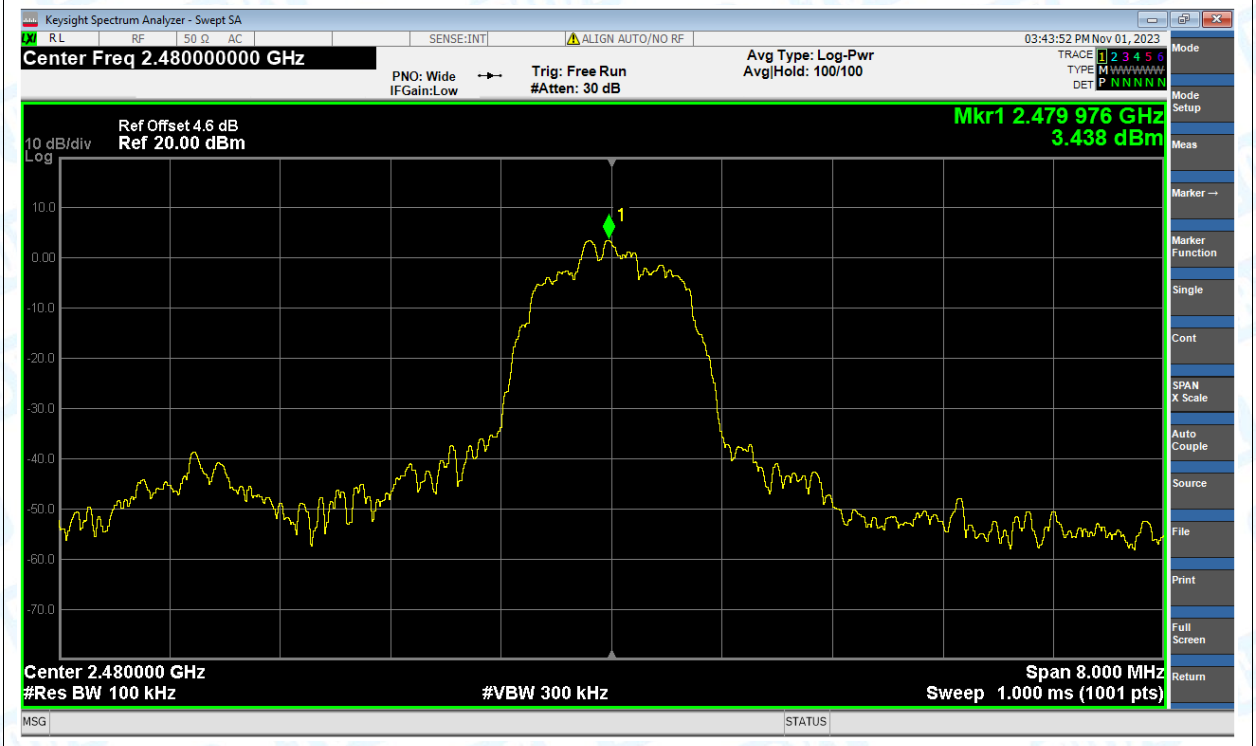
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



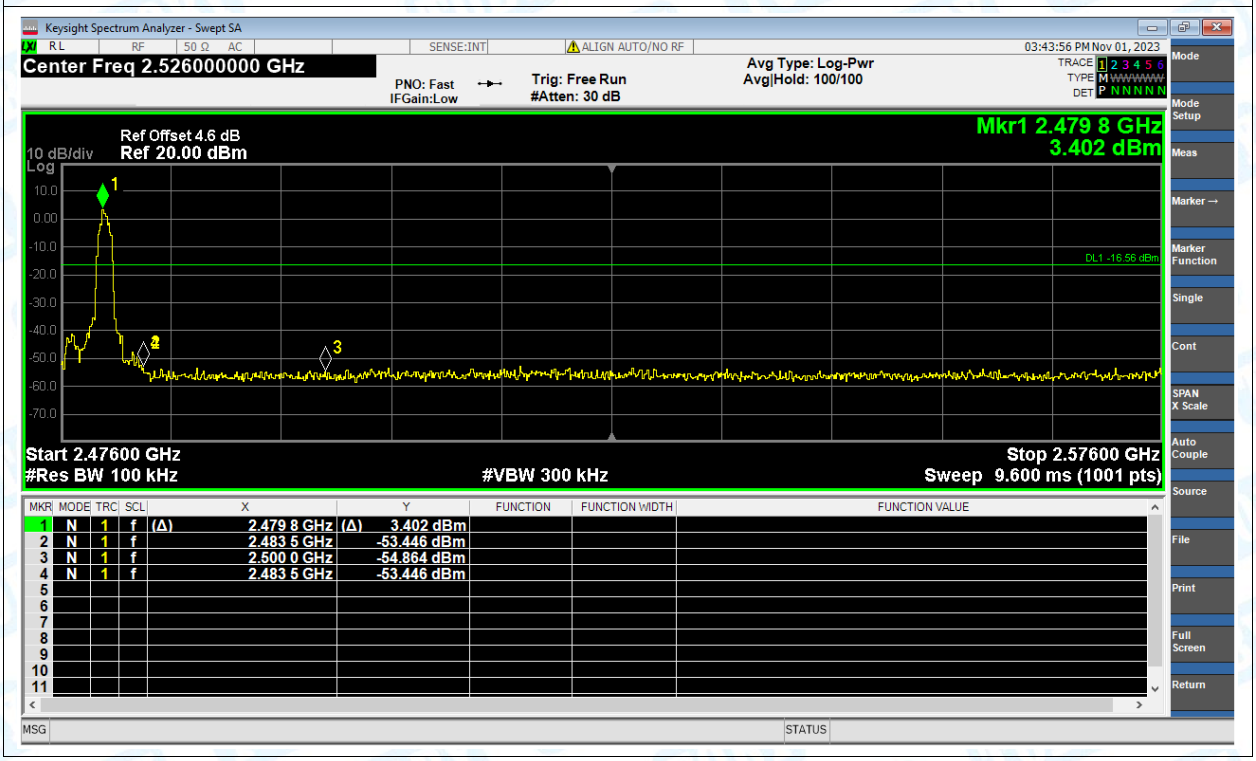
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



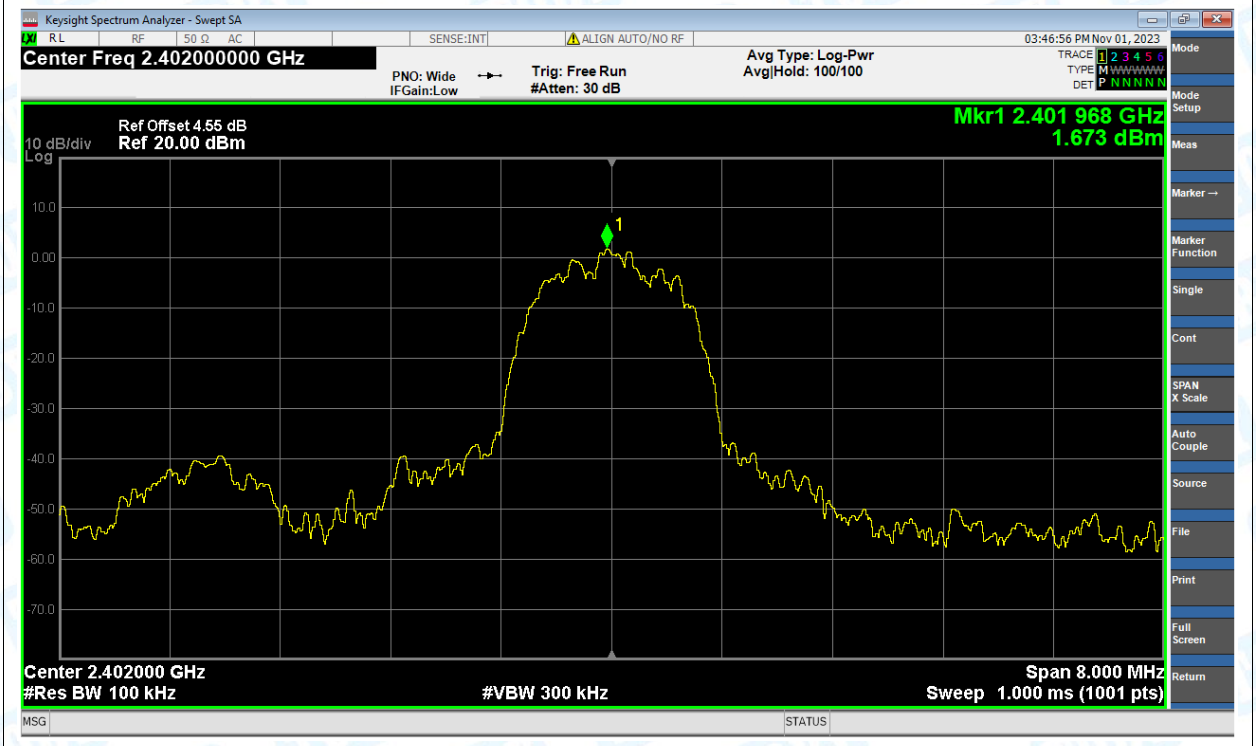
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



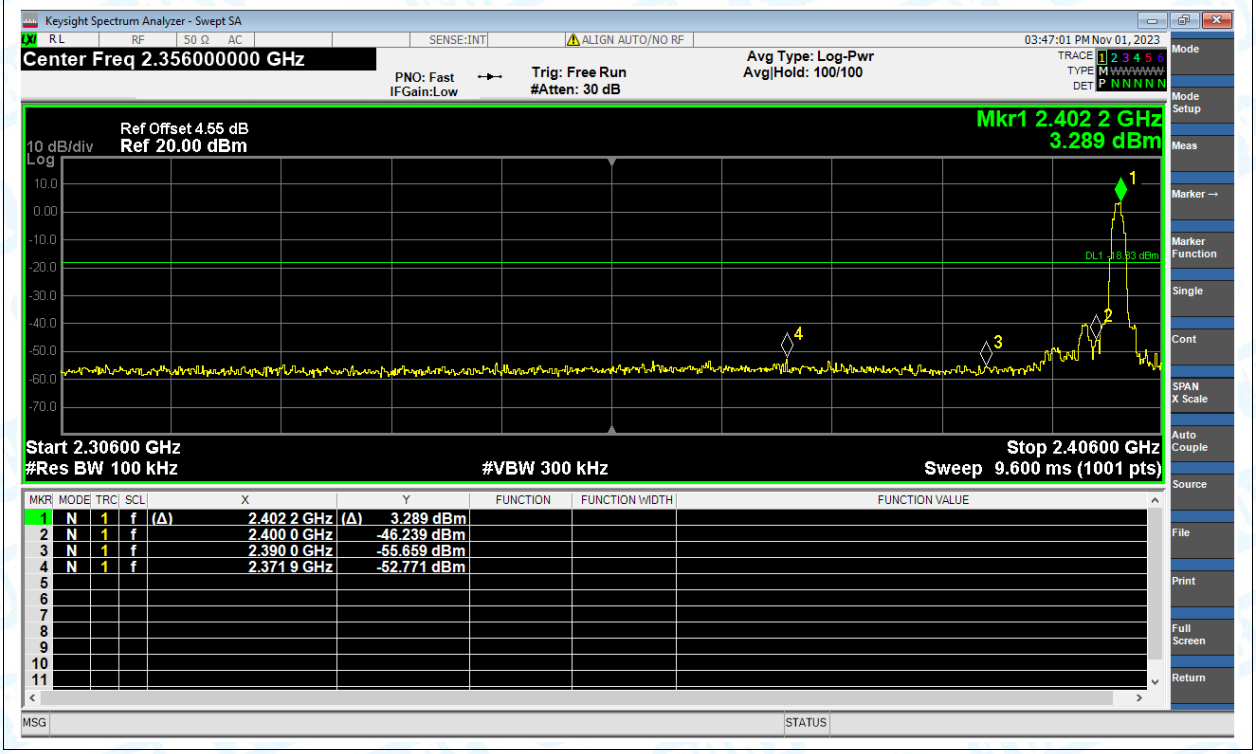
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



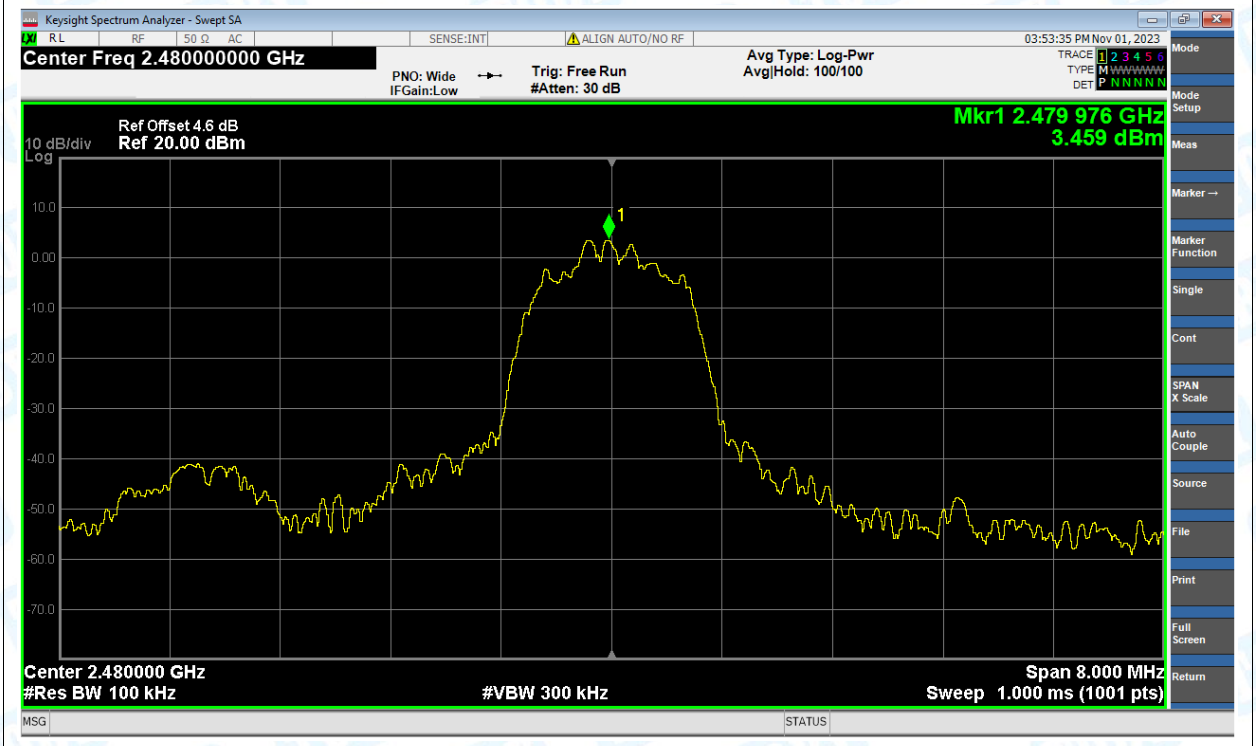
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



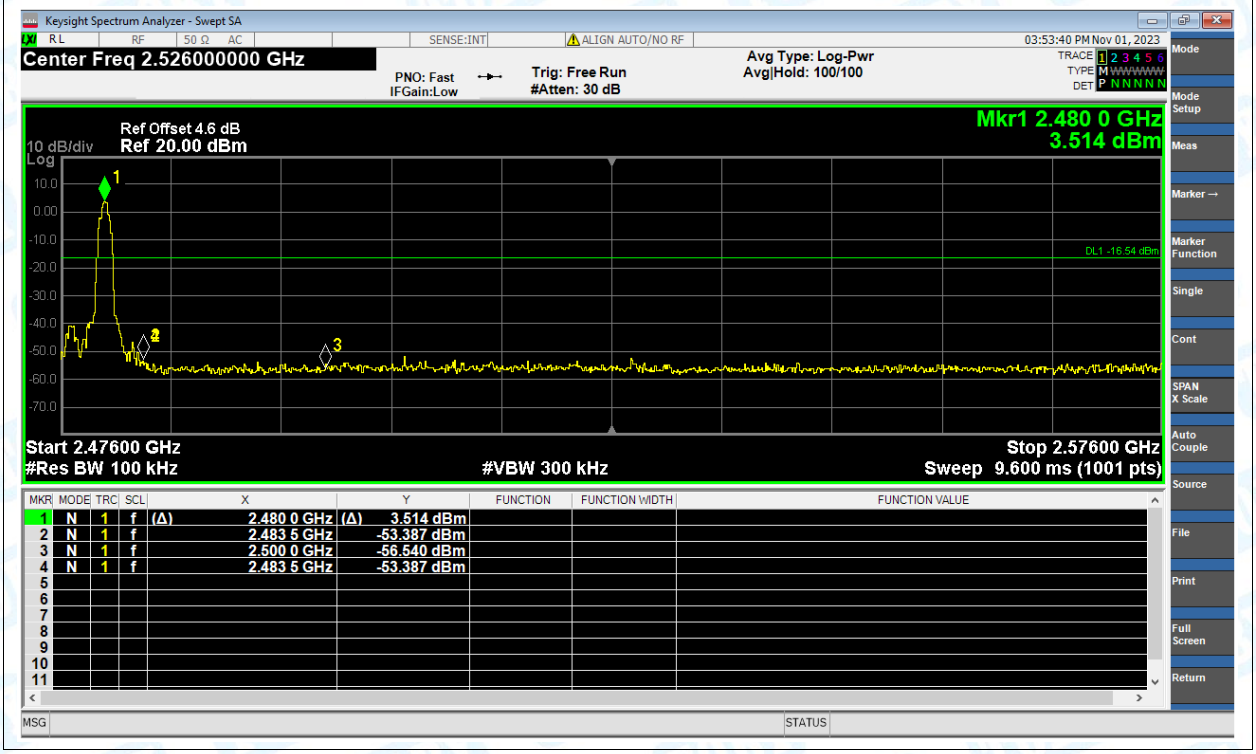
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



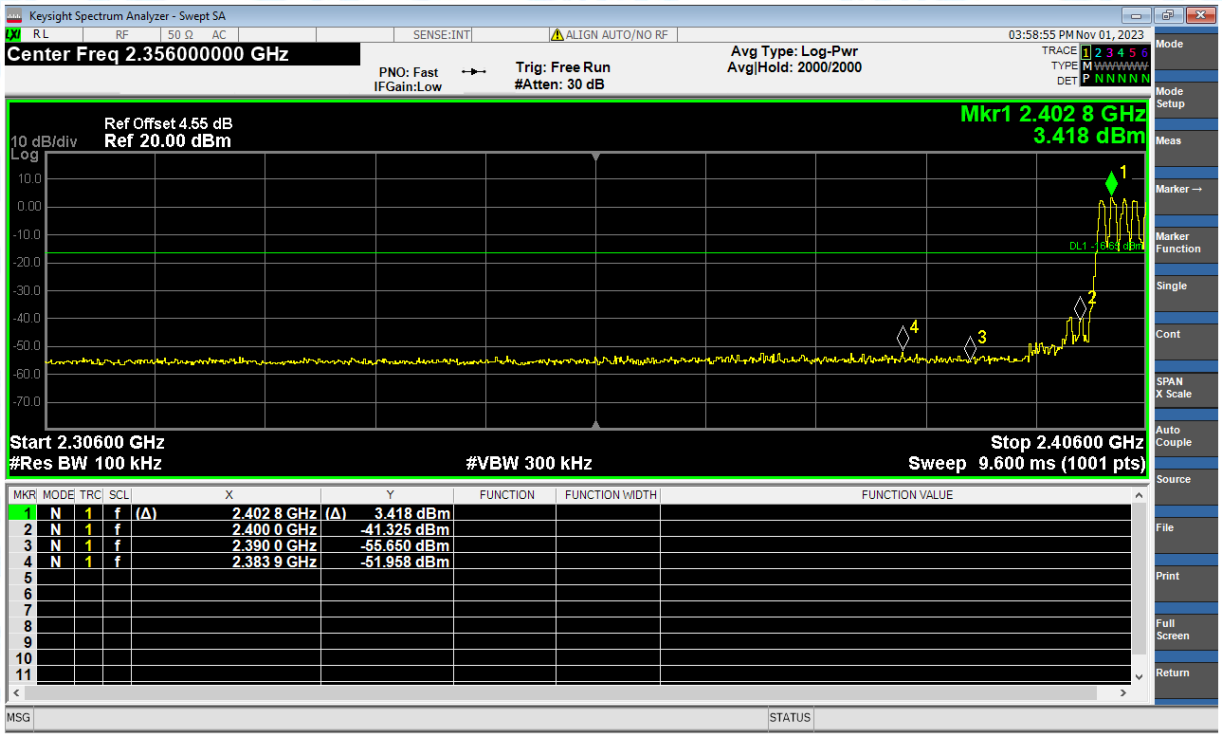
Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-55.31	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-54.17	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-56.61	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-55.68	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-55.75	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-55.48	-20	Pass

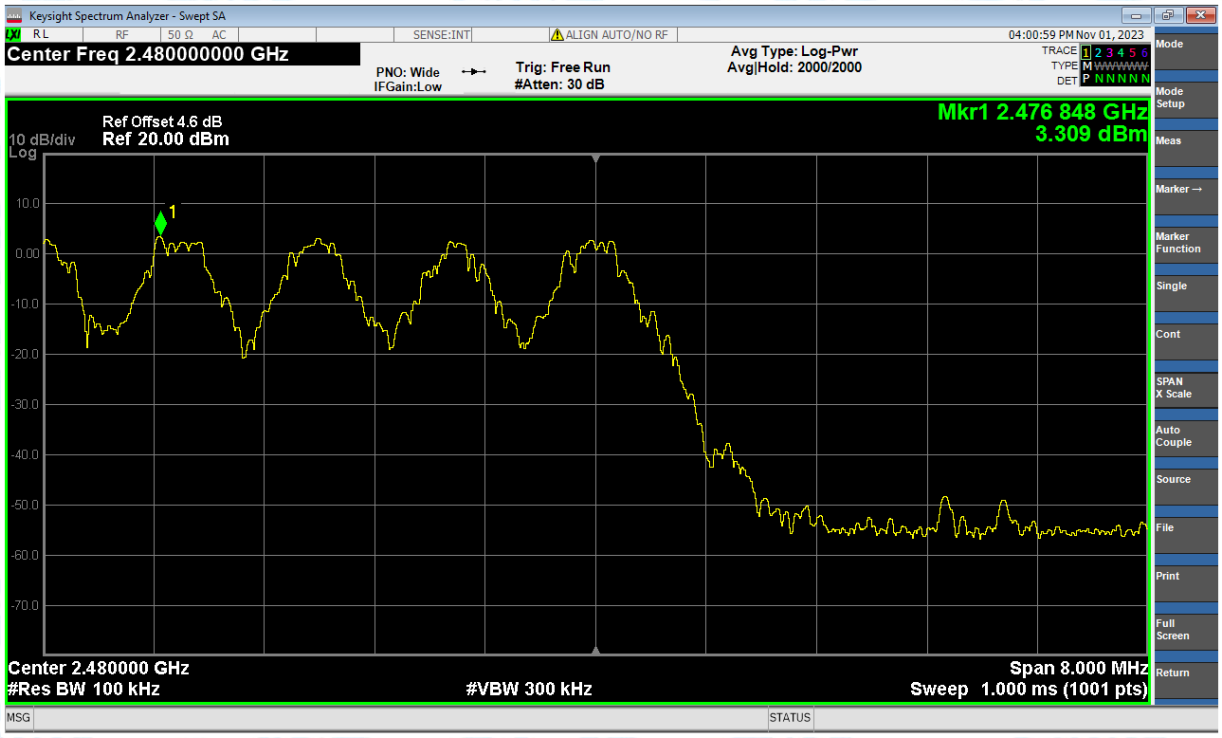
Test Graphs

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

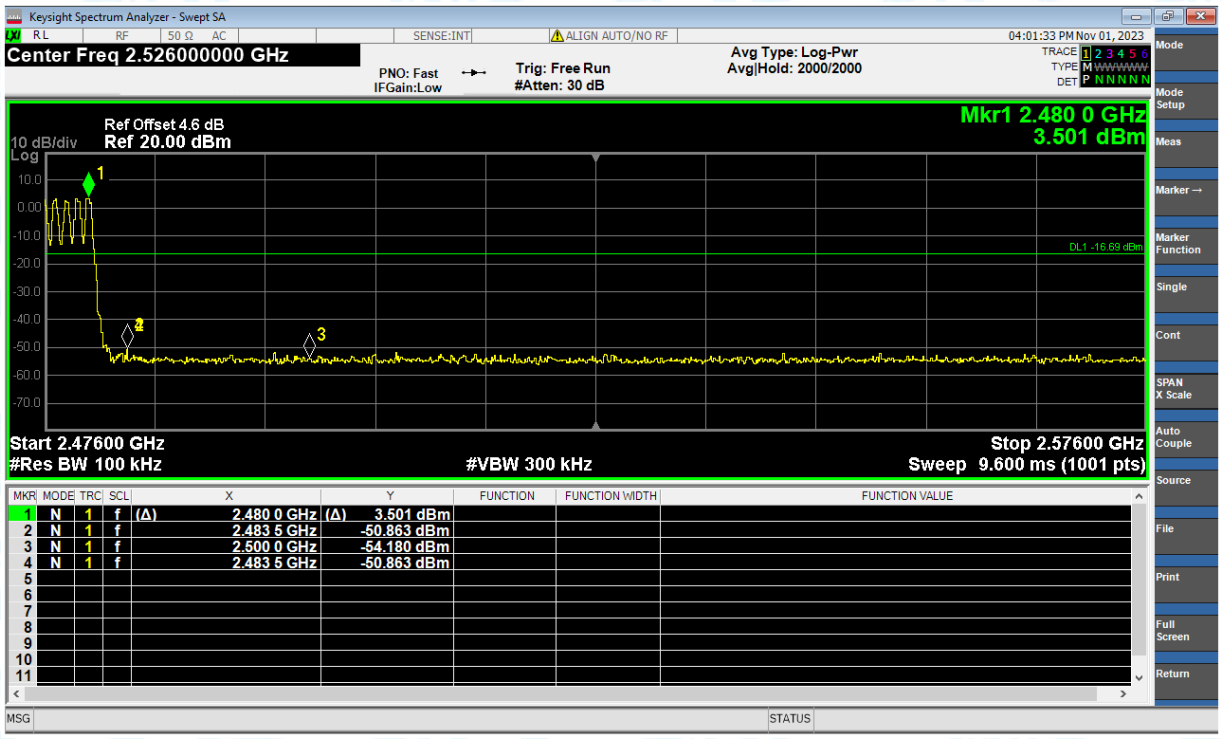
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



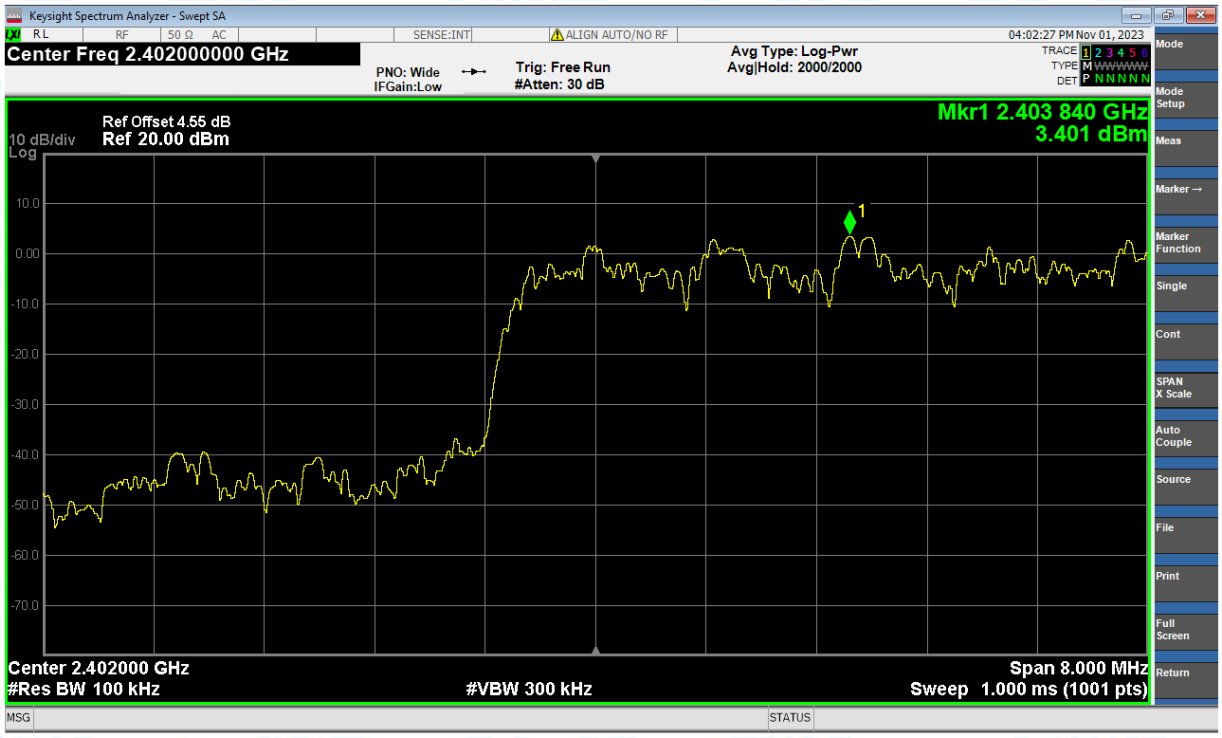
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



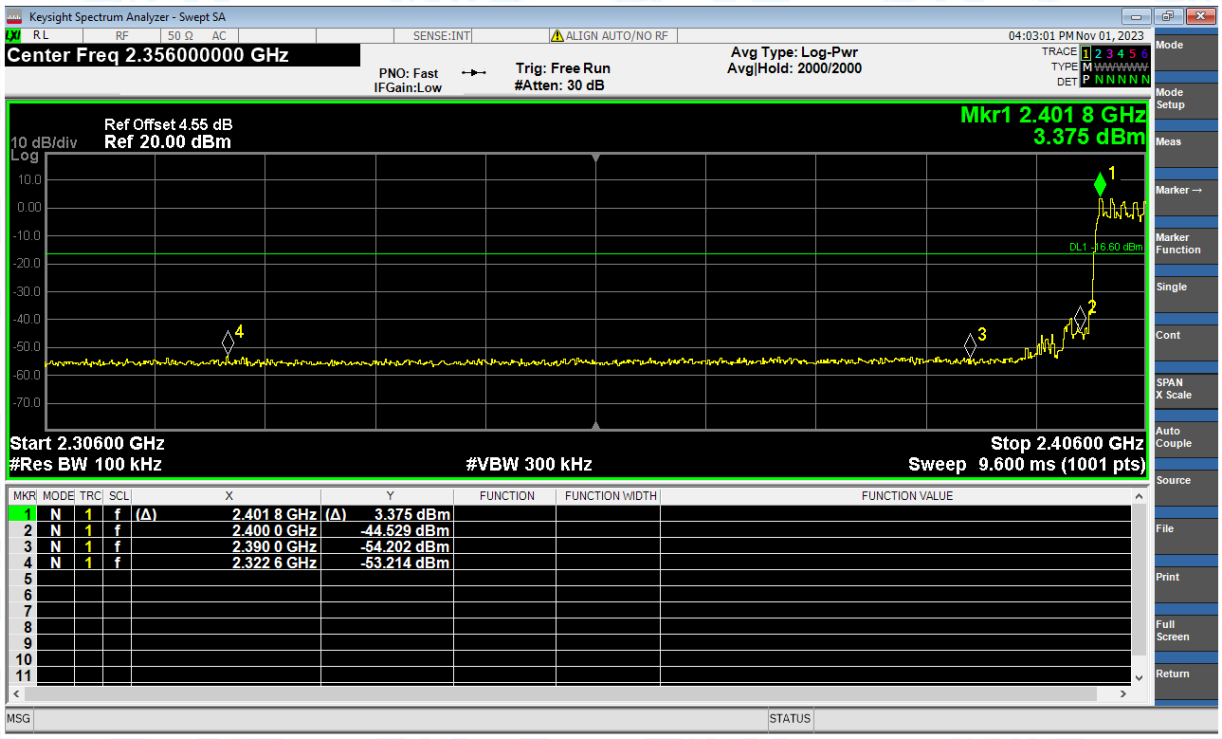
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



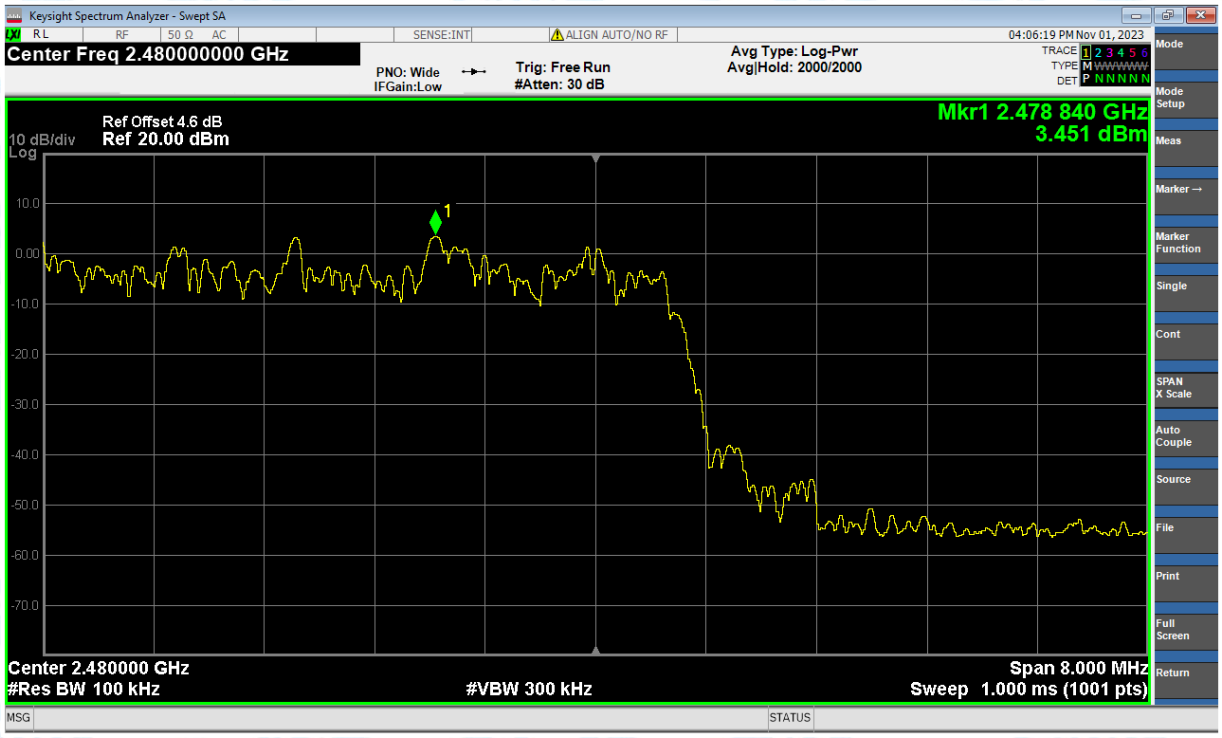
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



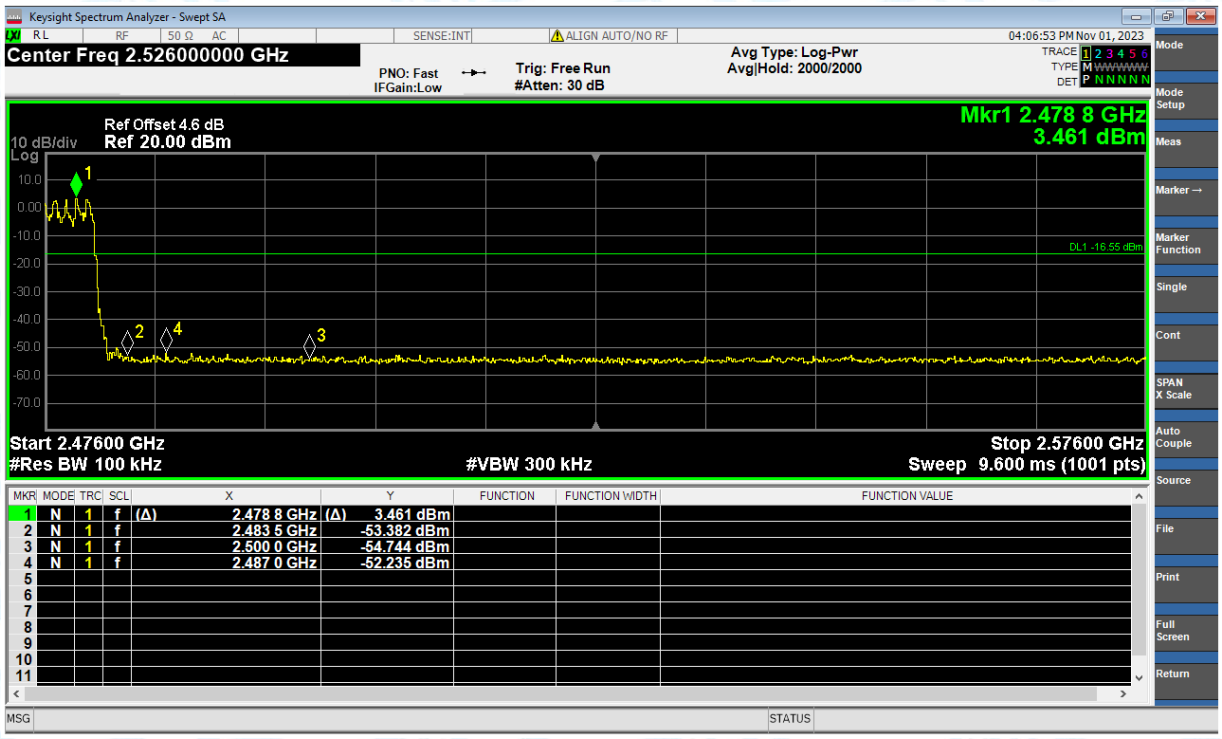
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



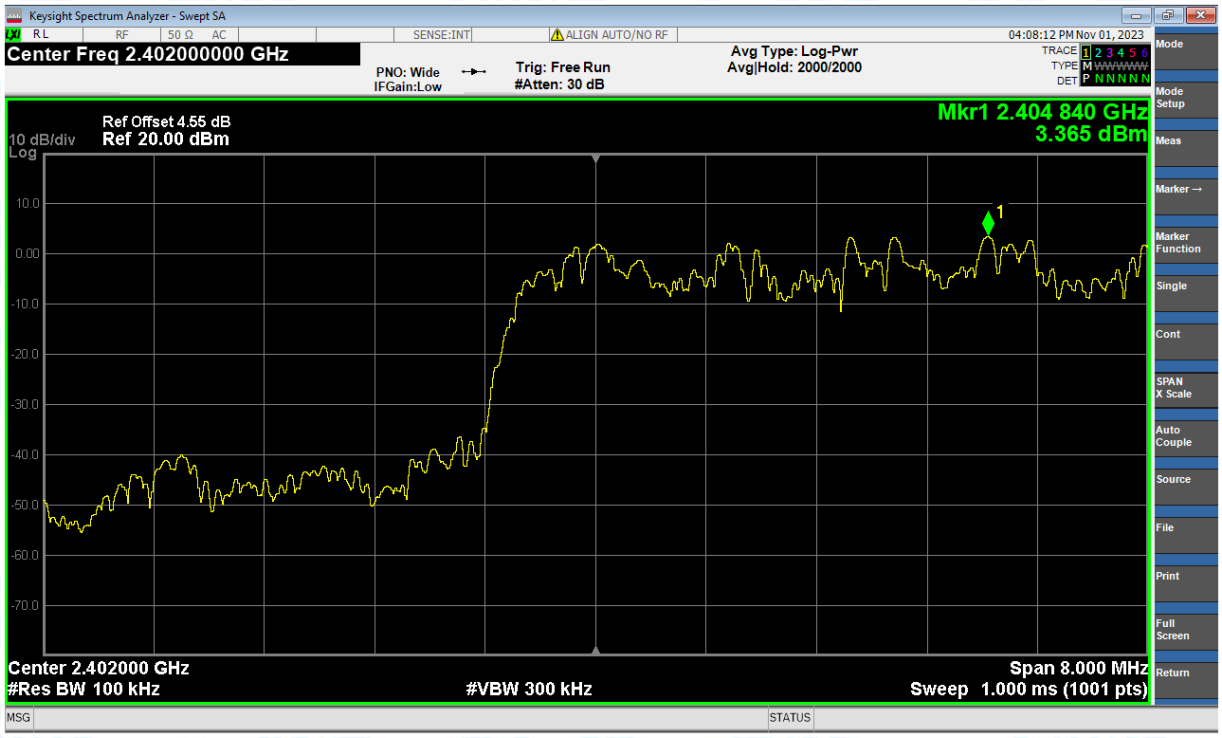
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



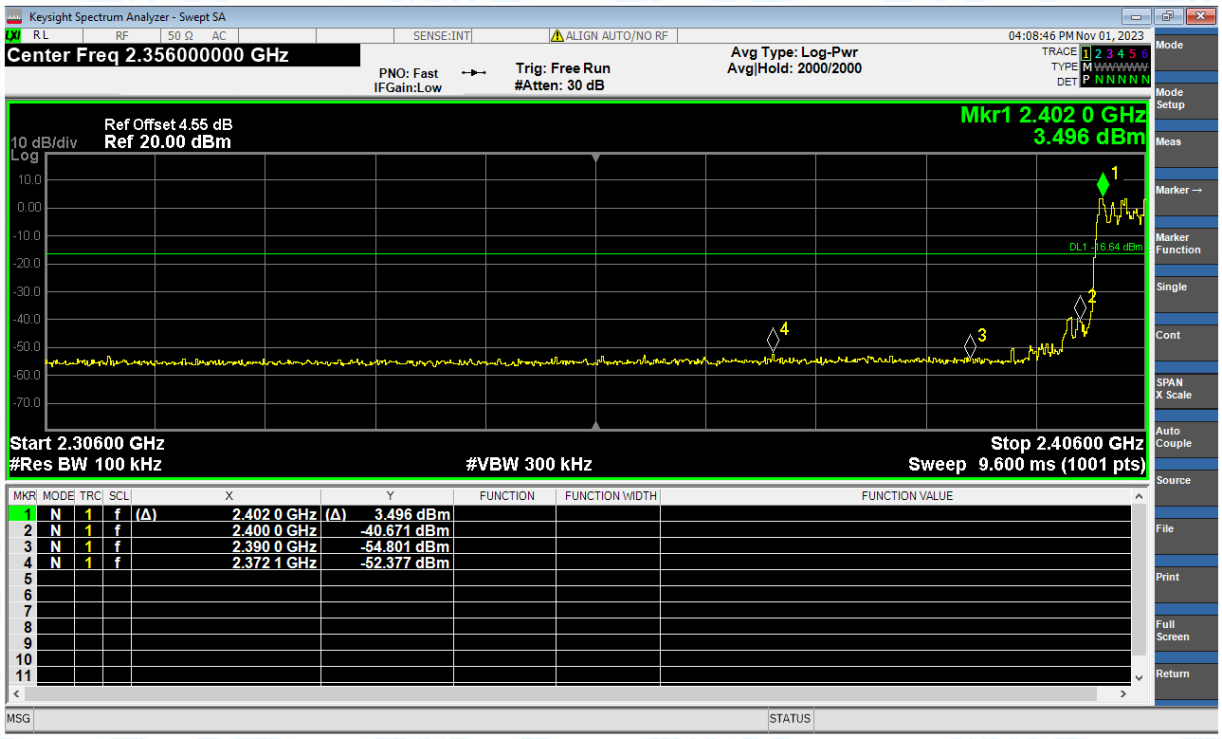
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



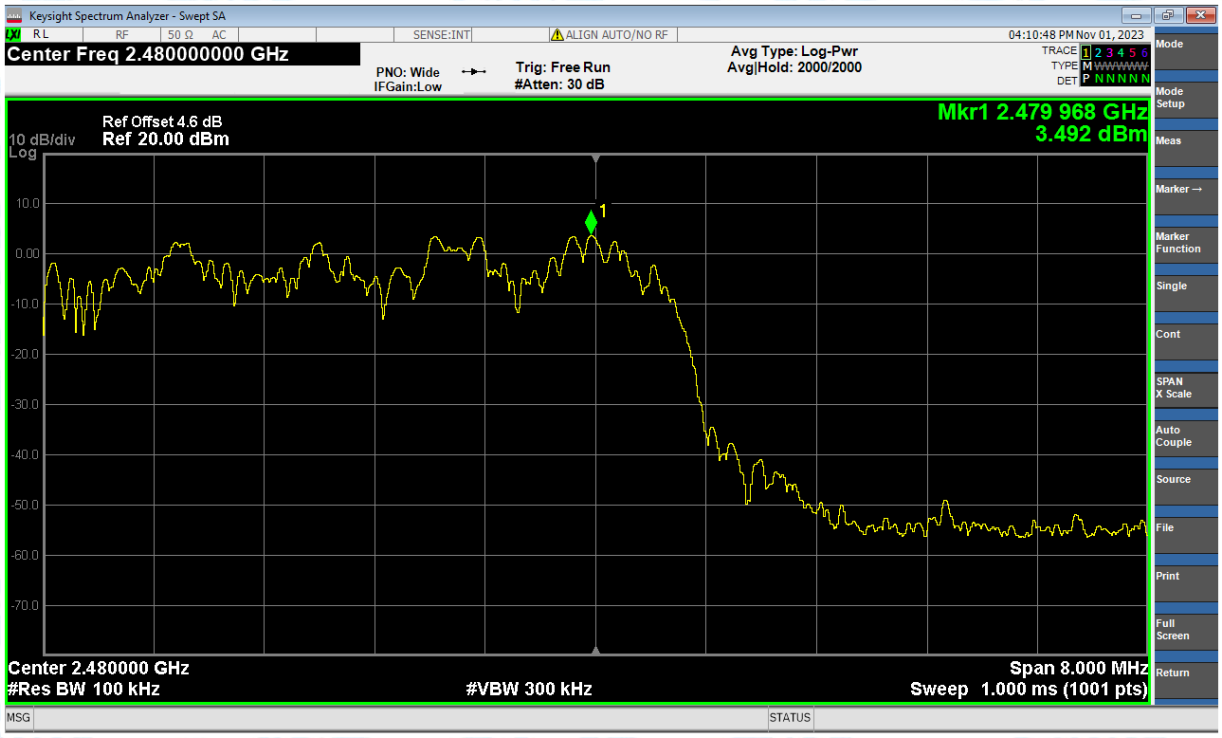
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



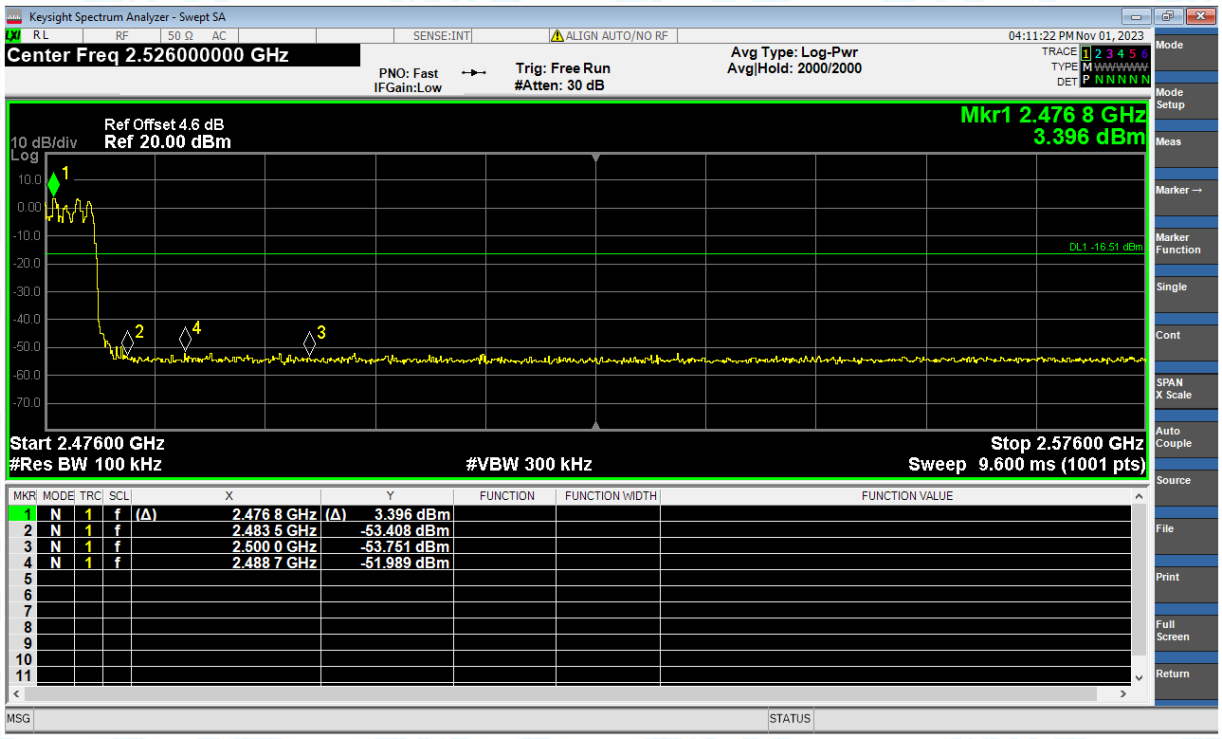
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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

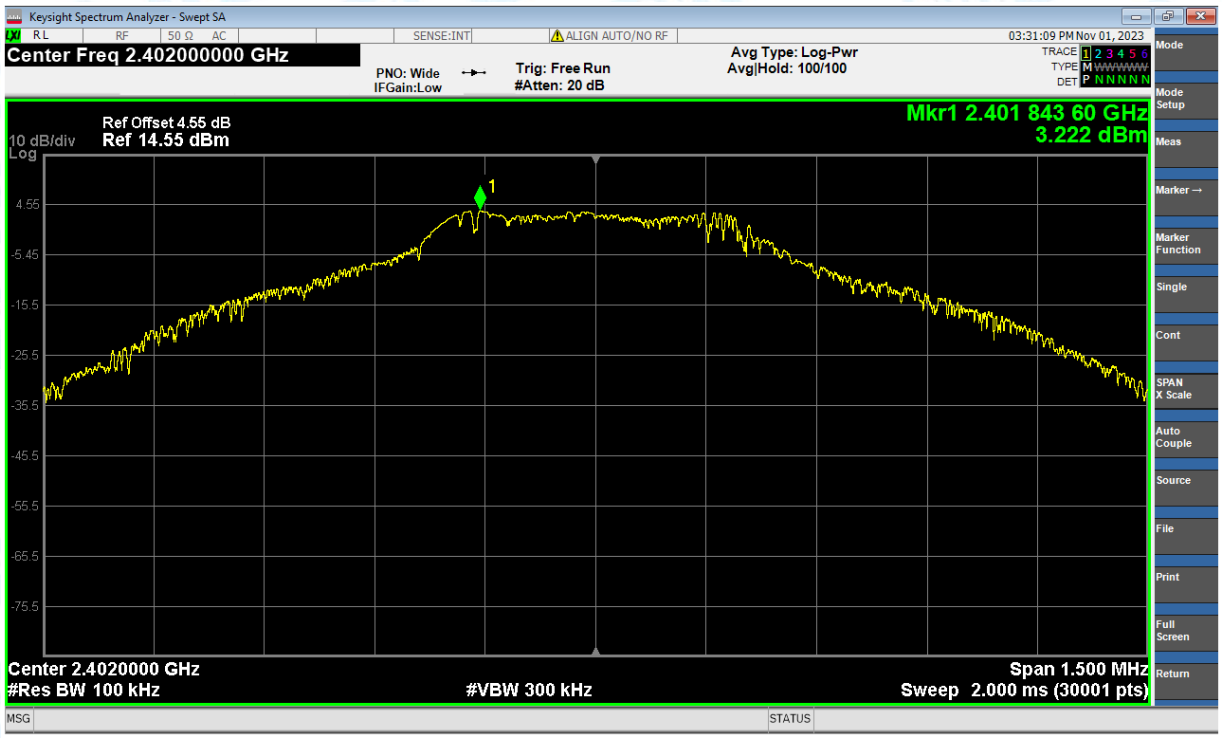


Conducted RF Spurious Emission

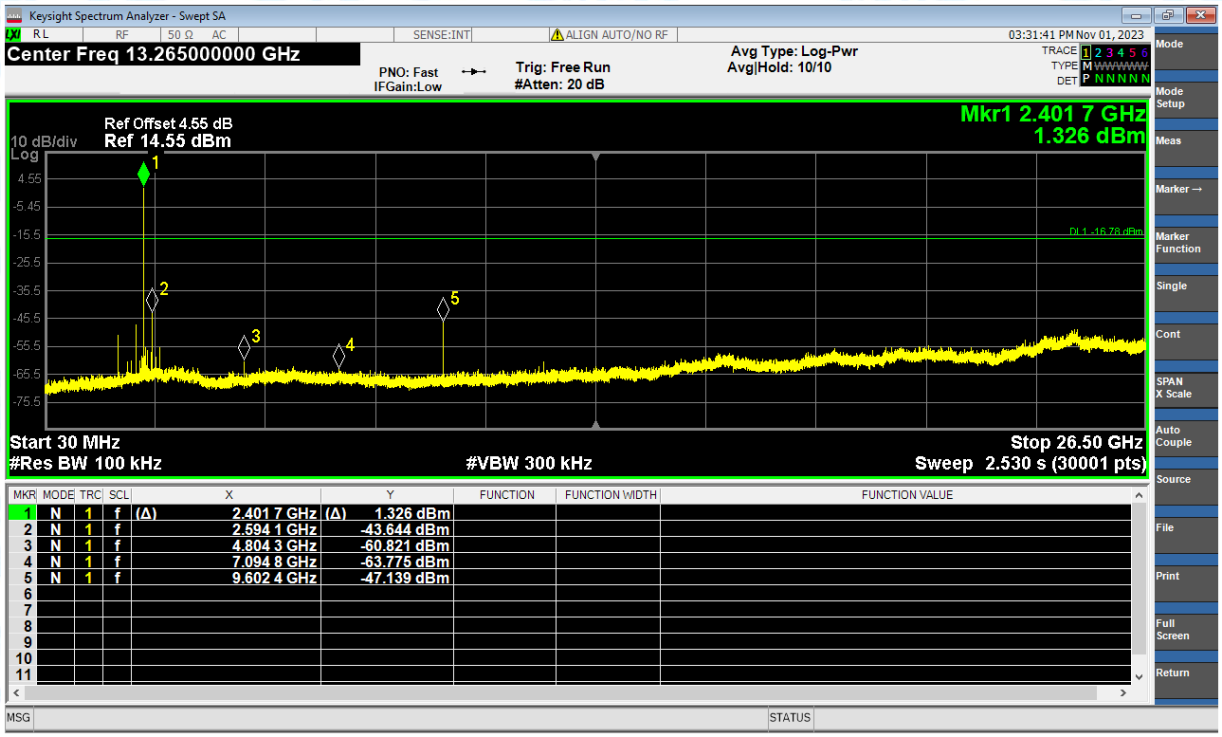
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-46.86	-20	Pass
NVNT	1-DH1	2441	Ant1	-49.2	-20	Pass
NVNT	1-DH1	2480	Ant1	-47.79	-20	Pass
NVNT	2-DH1	2402	Ant1	-48.89	-20	Pass
NVNT	2-DH1	2441	Ant1	-48.29	-20	Pass
NVNT	2-DH1	2480	Ant1	-48.39	-20	Pass
NVNT	3-DH1	2402	Ant1	-51.15	-20	Pass
NVNT	3-DH1	2441	Ant1	-49.26	-20	Pass
NVNT	3-DH1	2480	Ant1	-51.07	-20	Pass

Test Graphs

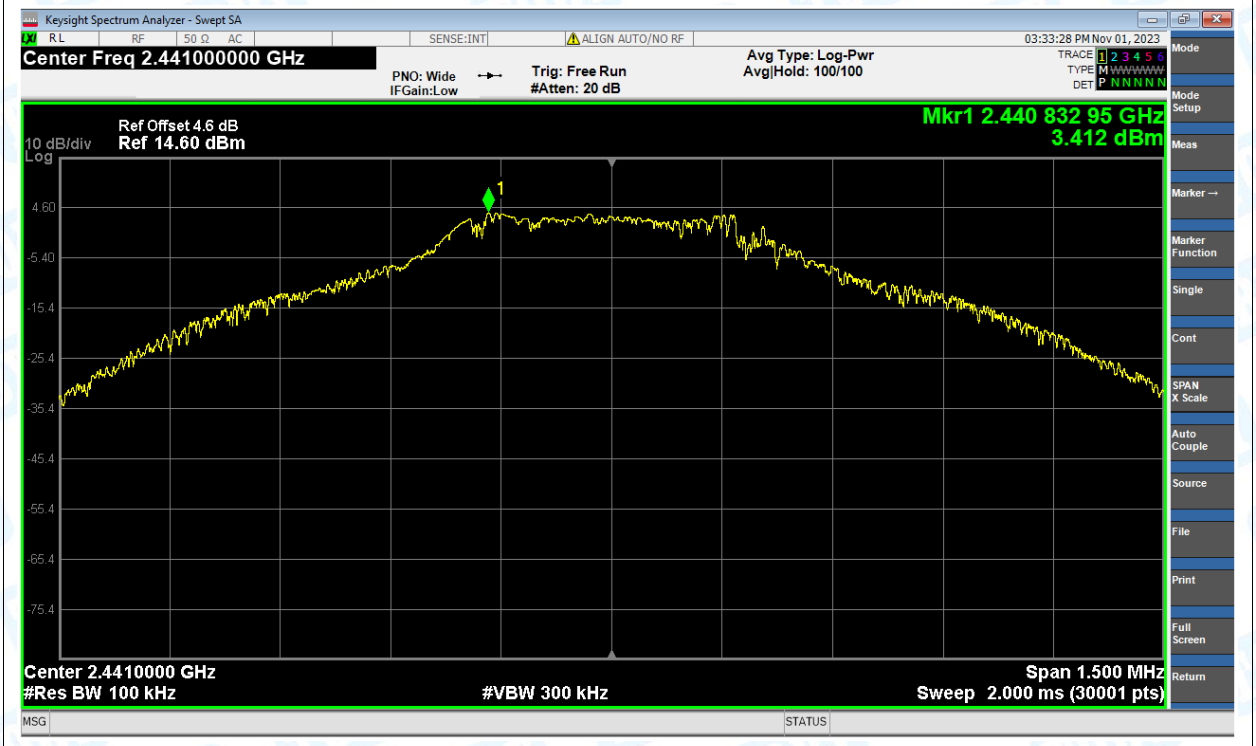
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



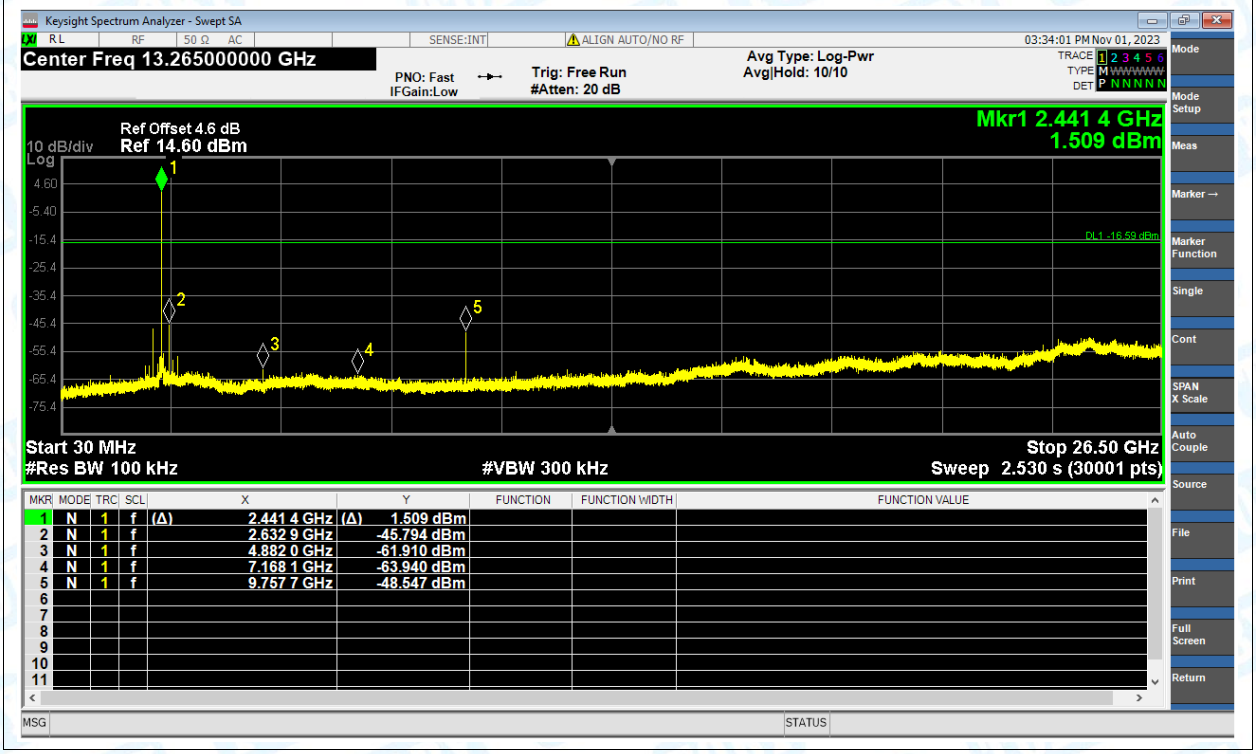
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



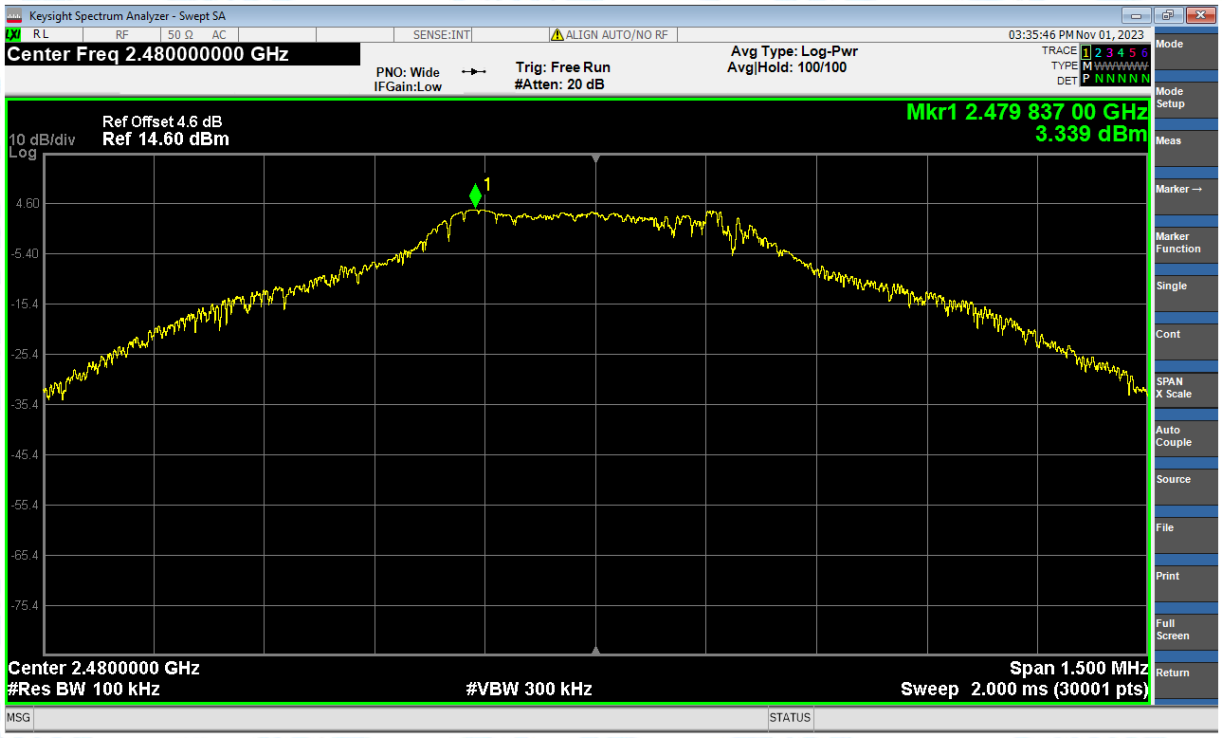
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



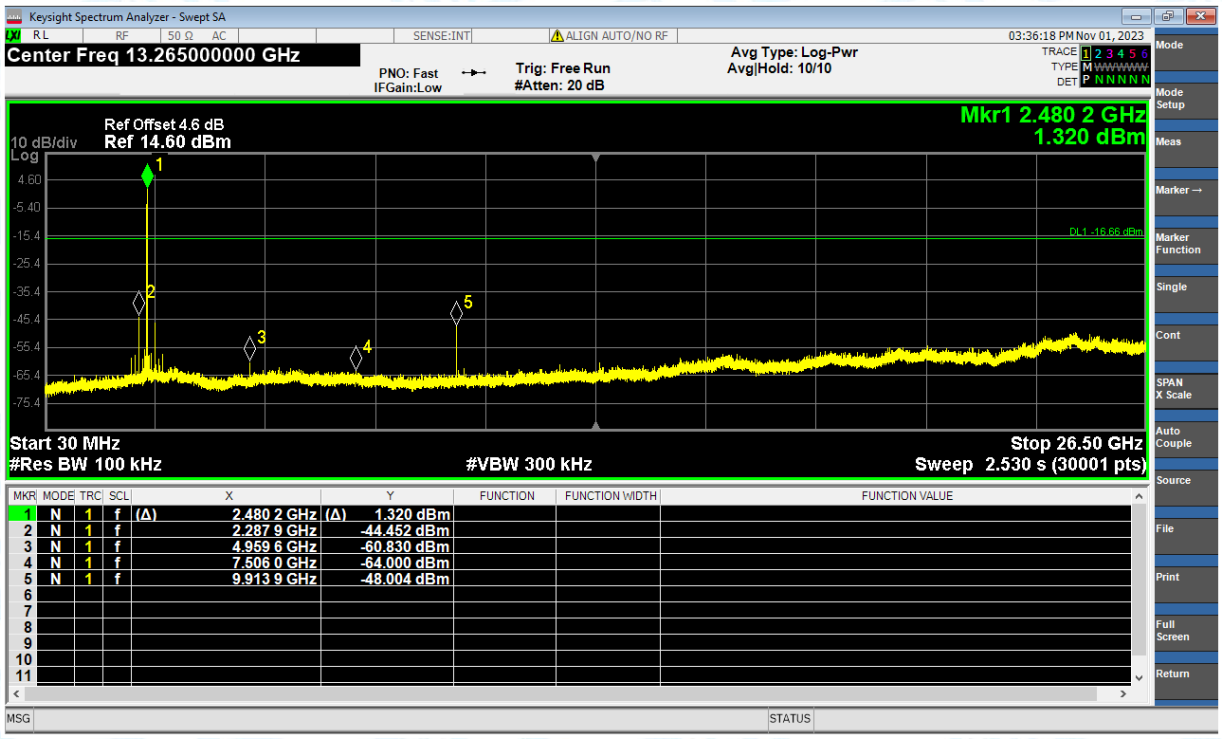
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref

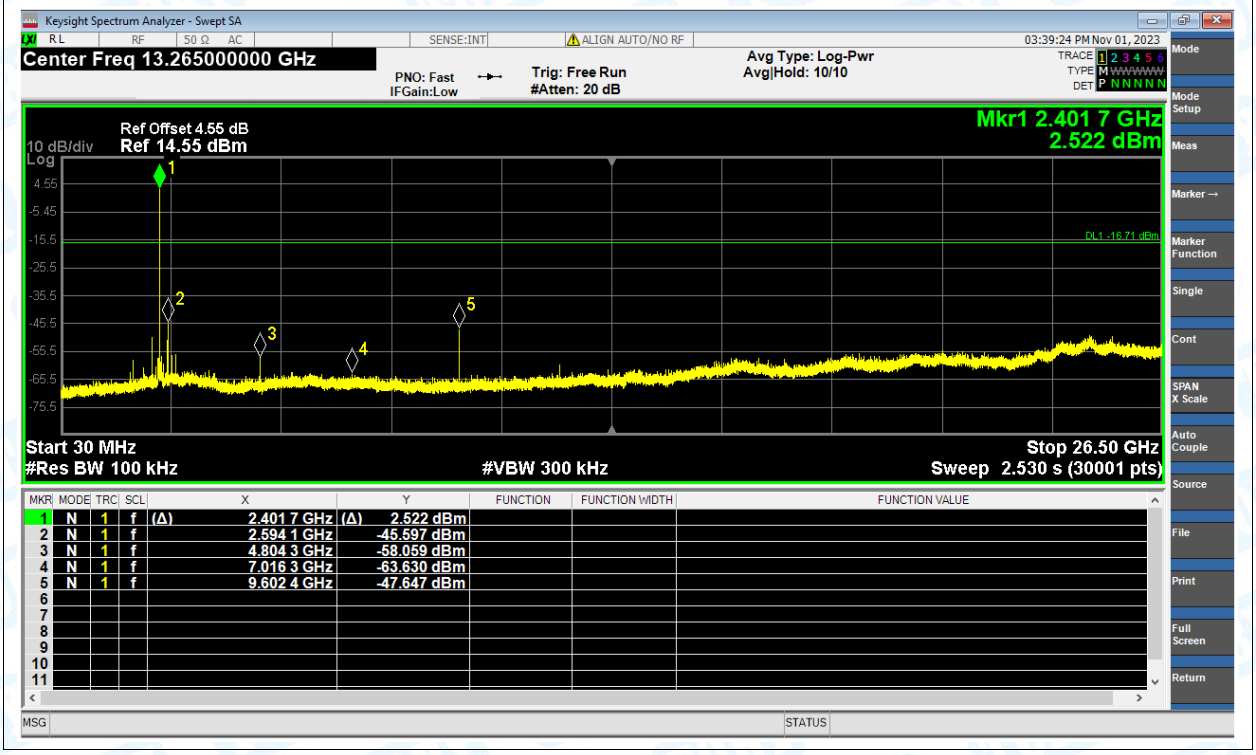


Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



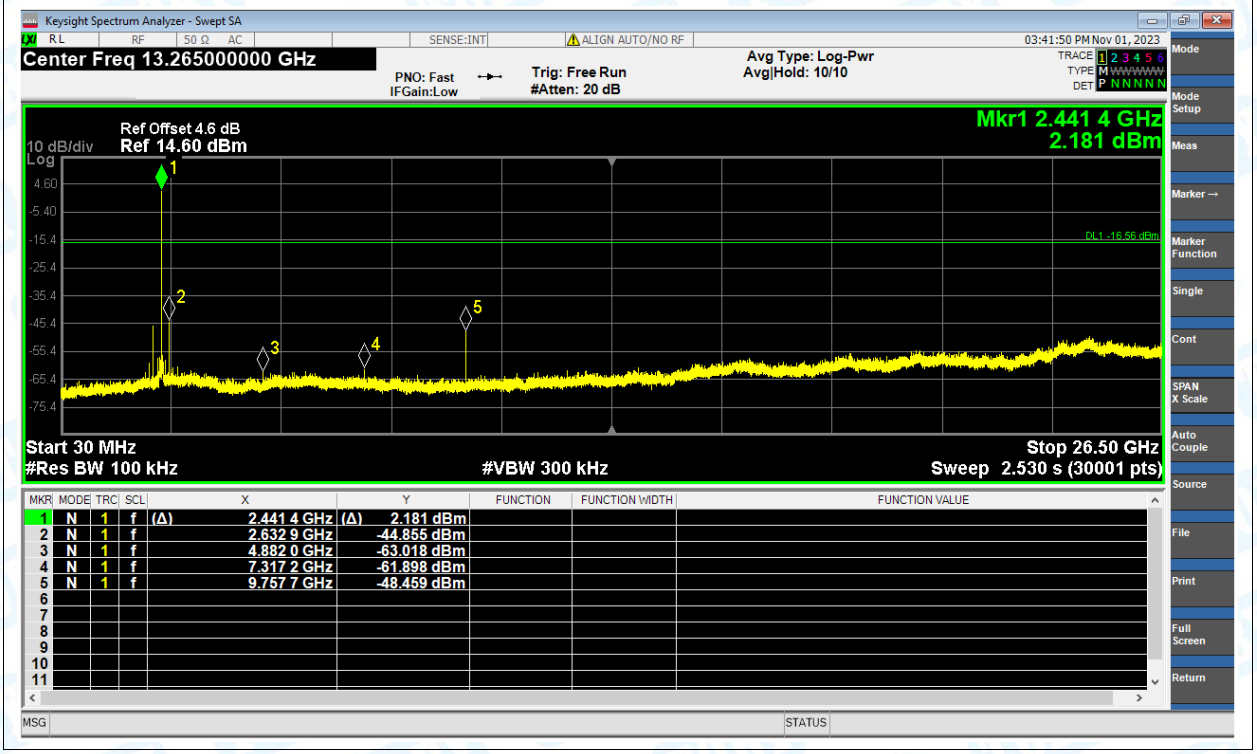
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref

Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission

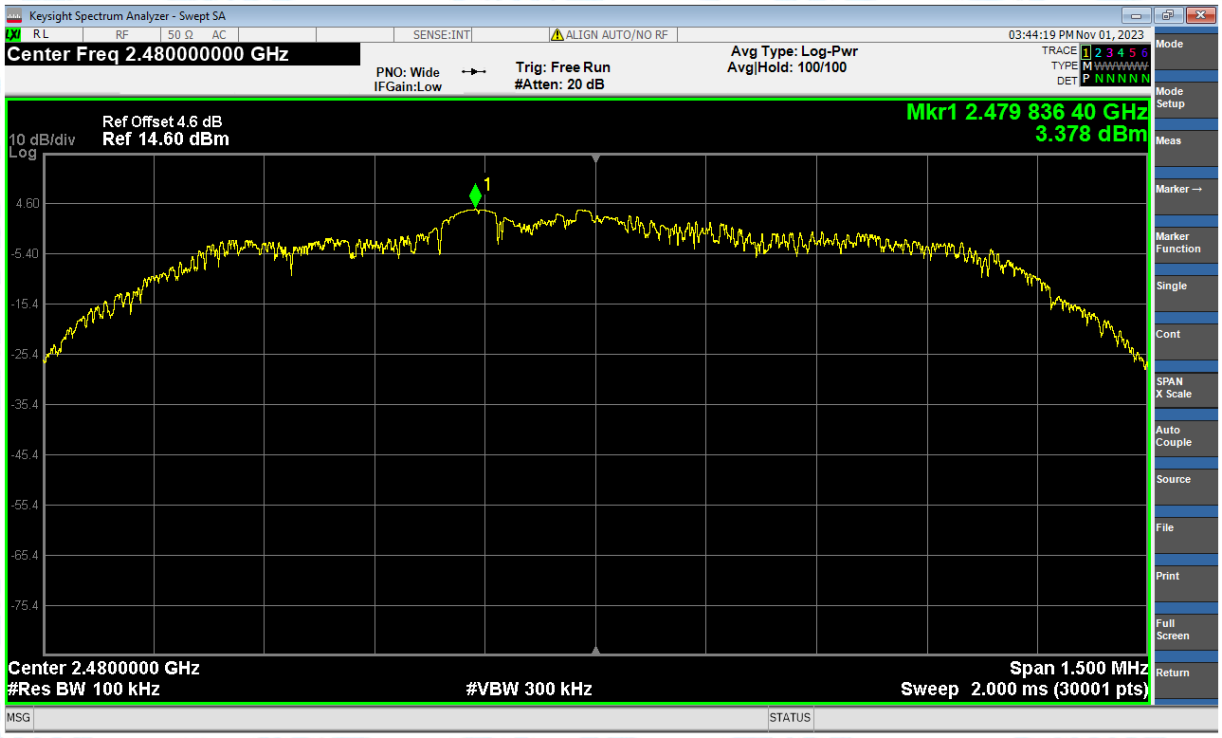


Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref

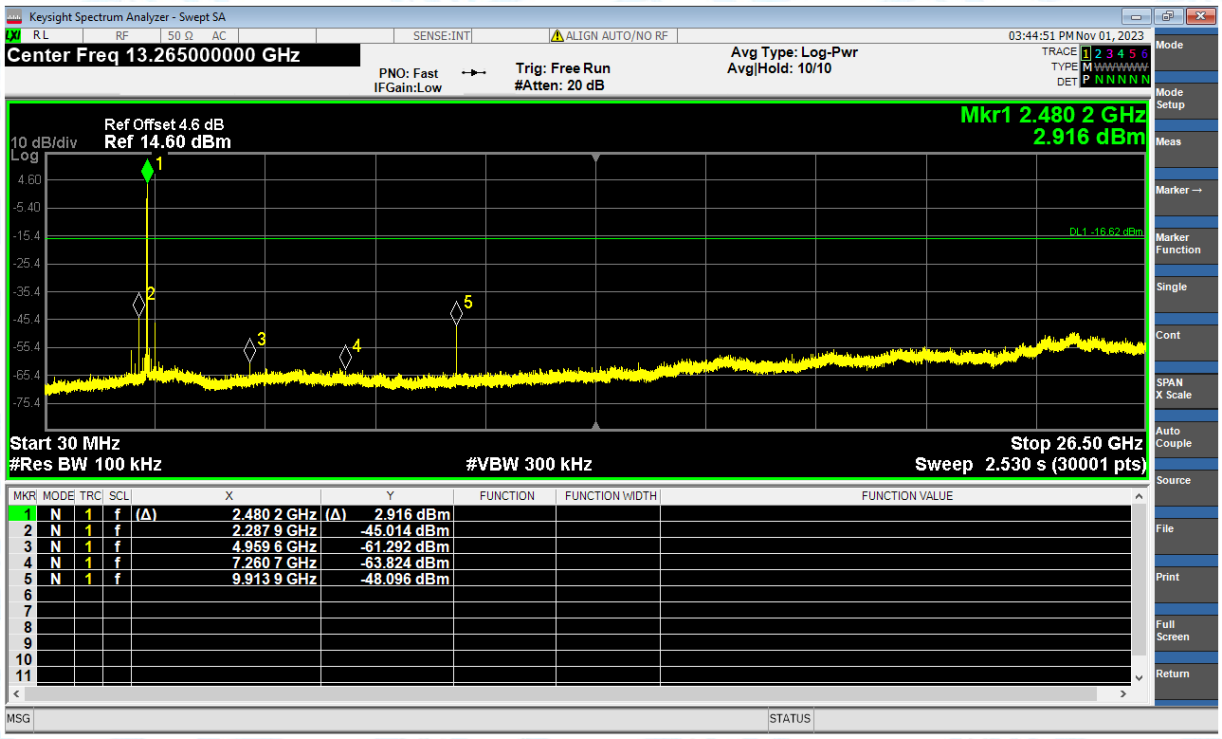
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



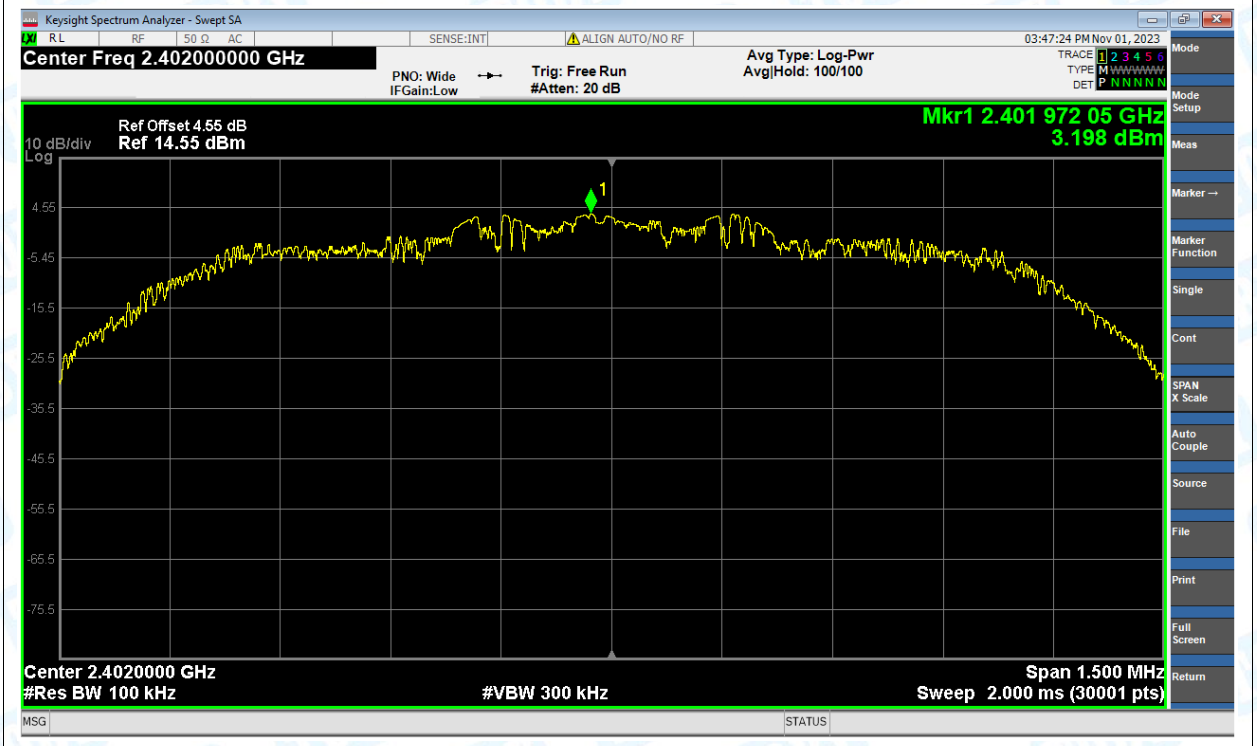
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



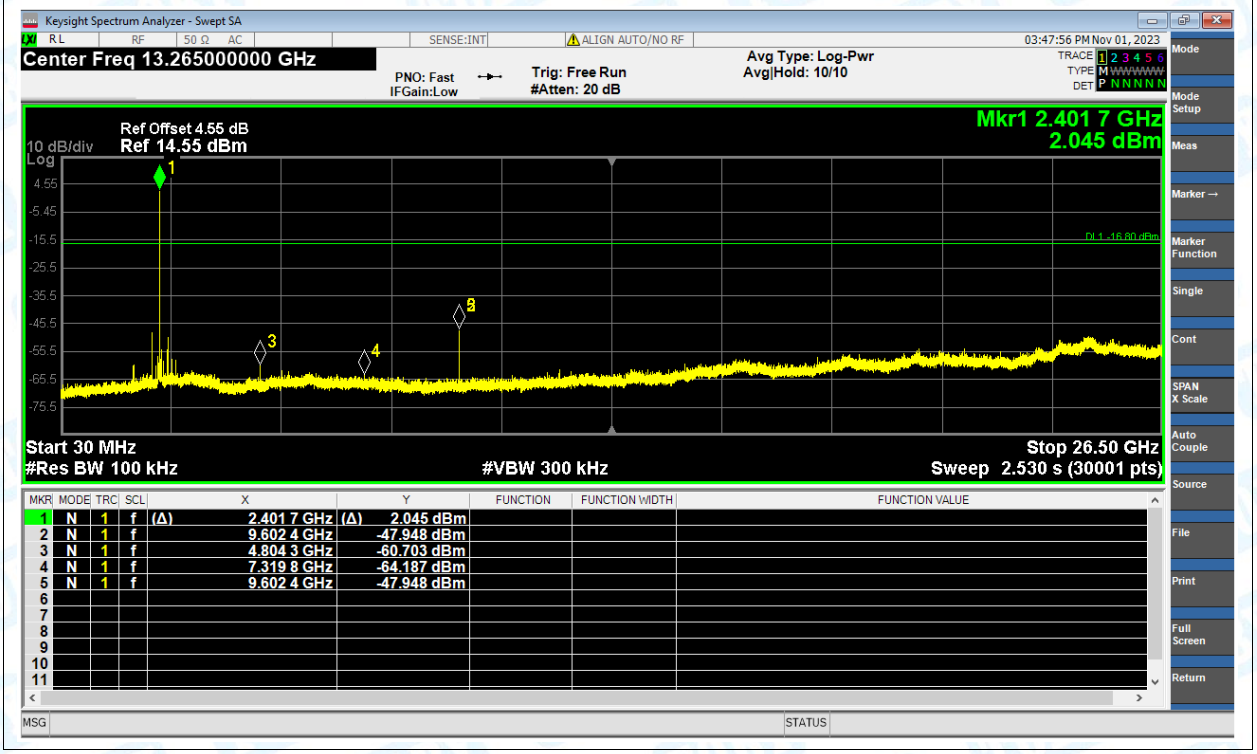
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



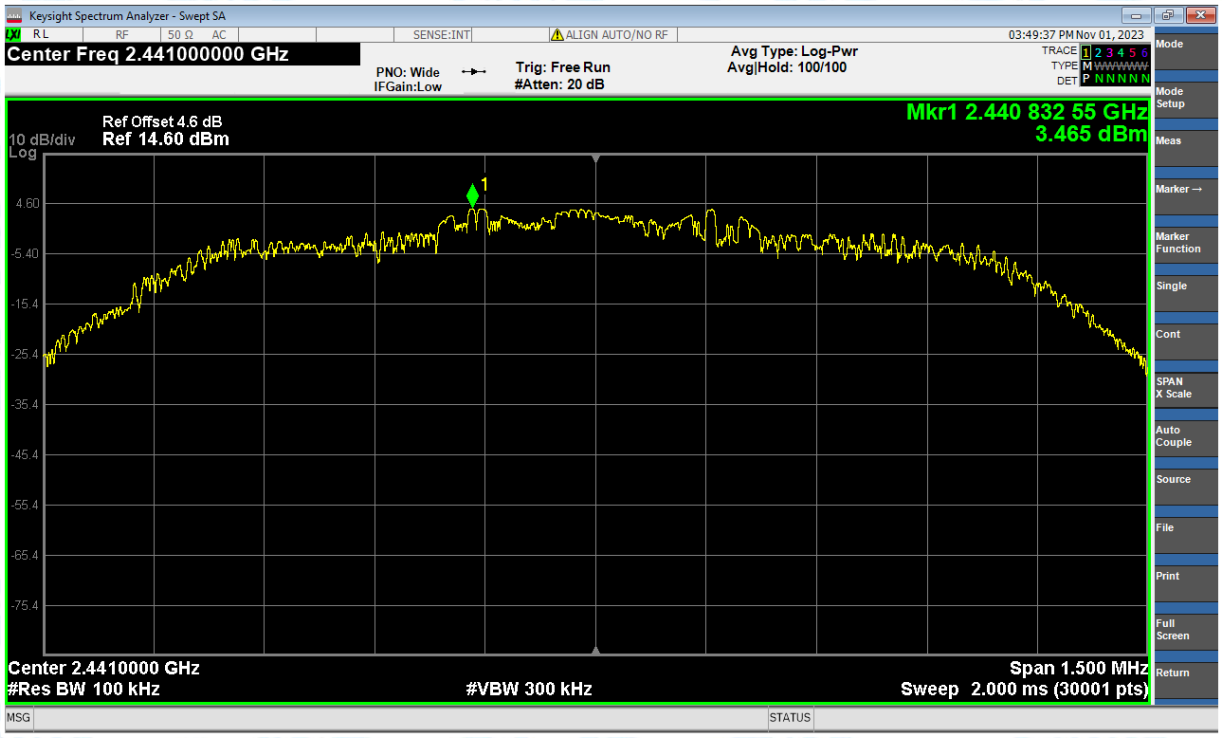
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



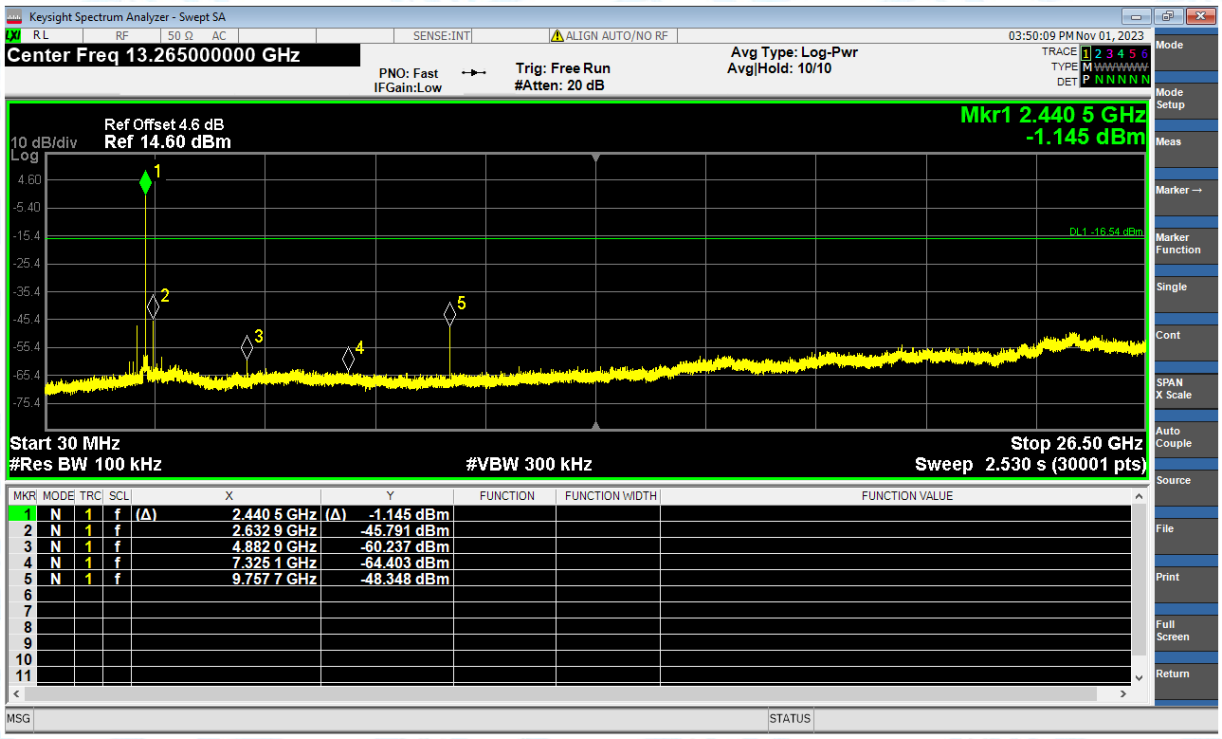
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



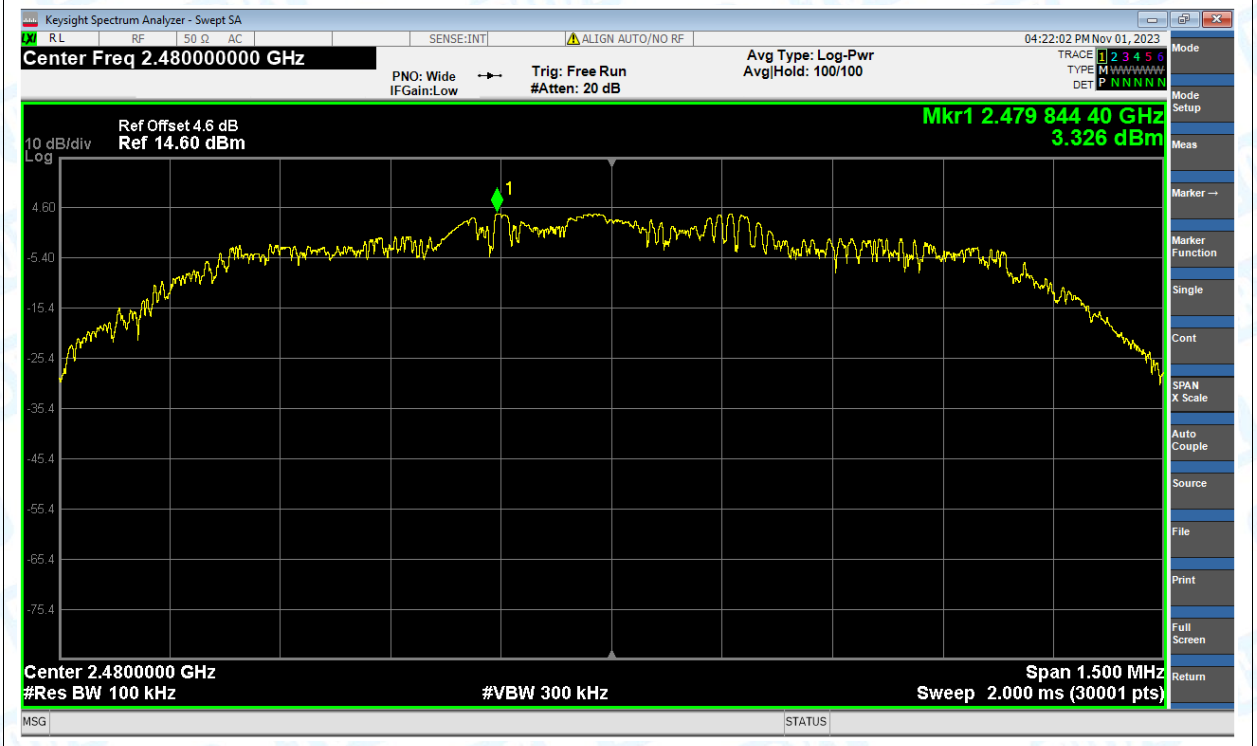
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



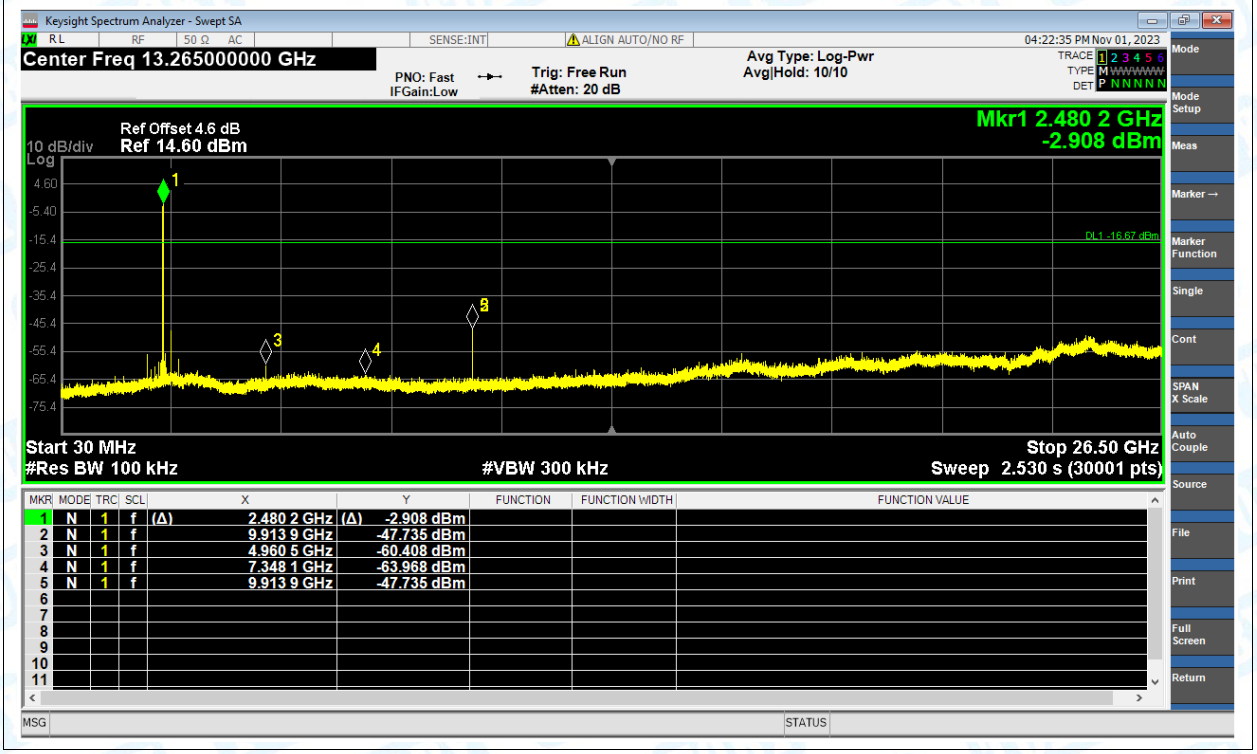
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

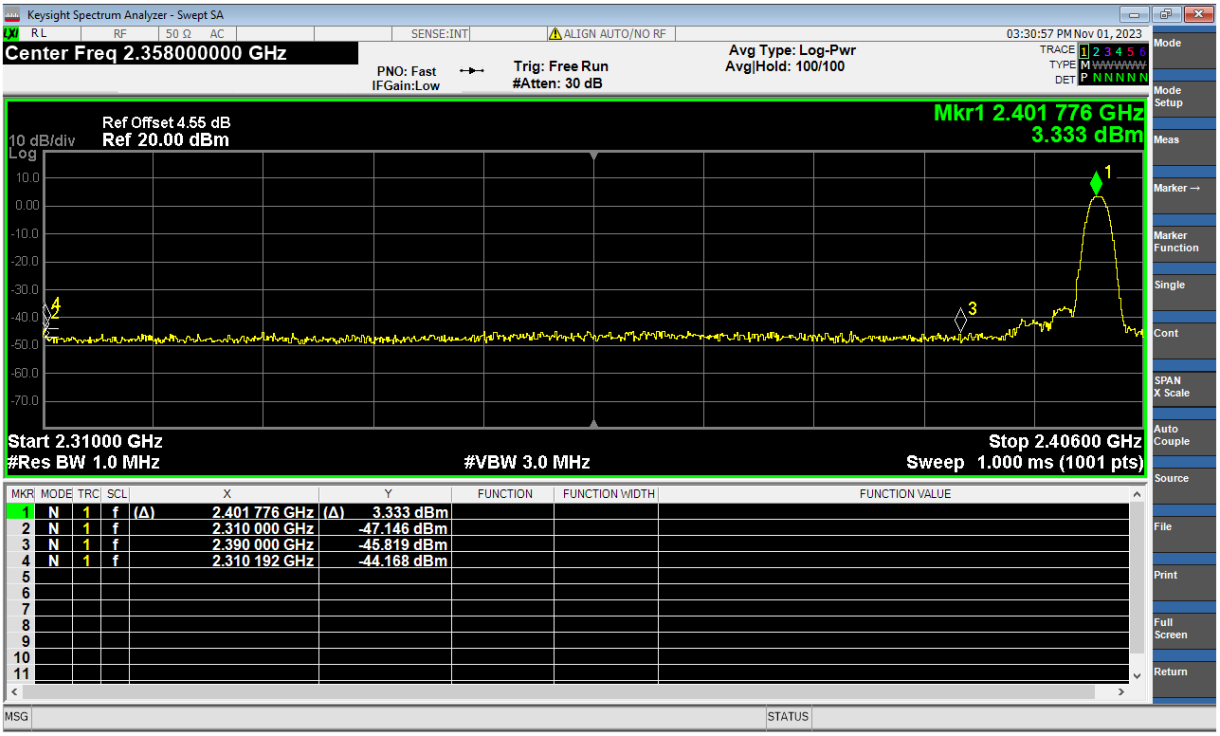


Restrict Band

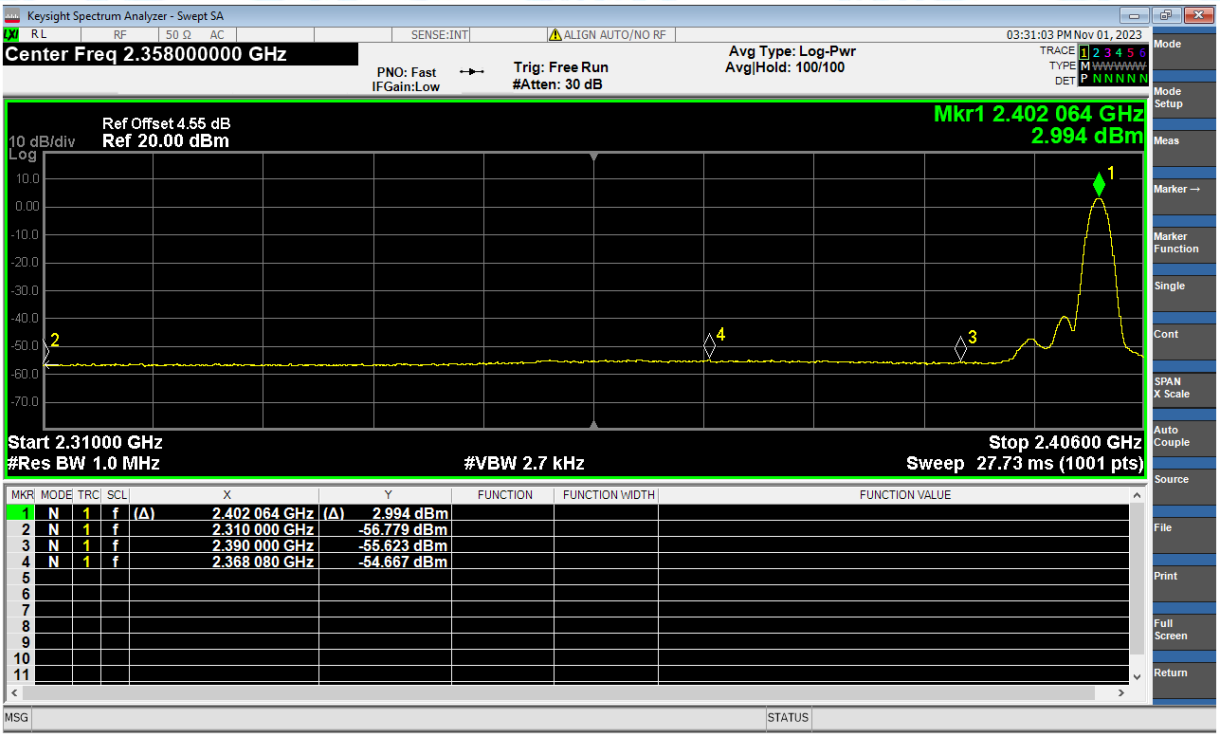
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-47.15	2	50.11	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.78	2	40.48	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310.192	-44.17	2	53.09	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2368.08	-54.67	2	42.59	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-48.92	2	48.34	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.81	2	41.45	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-46.43	2	50.83	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-51.72	2	45.54	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.608	-42.91	2	54.35	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.632	-51.68	2	45.58	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-47.21	2	50.05	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.37	2	41.89	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-49.16	2	48.1	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.52	2	40.74	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2386.224	-43.37	2	53.89	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2358.384	-54.69	2	42.57	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-48.32	2	48.94	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-56	2	41.26	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-44.54	2	52.72	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-52.57	2	44.69	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2484.616	-41.94	2	55.32	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.56	-52.54	2	44.72	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.43	2	50.83	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.6	2	41.66	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-47.46	2	49.8	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.57	2	40.69	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2362.896	-42.98	2	54.28	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2363.184	-54.31	2	42.95	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.98	2	50.28	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.71	2	41.55	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-43.52	2	53.74	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-52.75	2	44.51	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.56	-42.57	2	54.69	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.56	-52.59	2	44.67	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.2	2	51.06	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.21	2	42.05	Average	54	Pass

Test Graphs

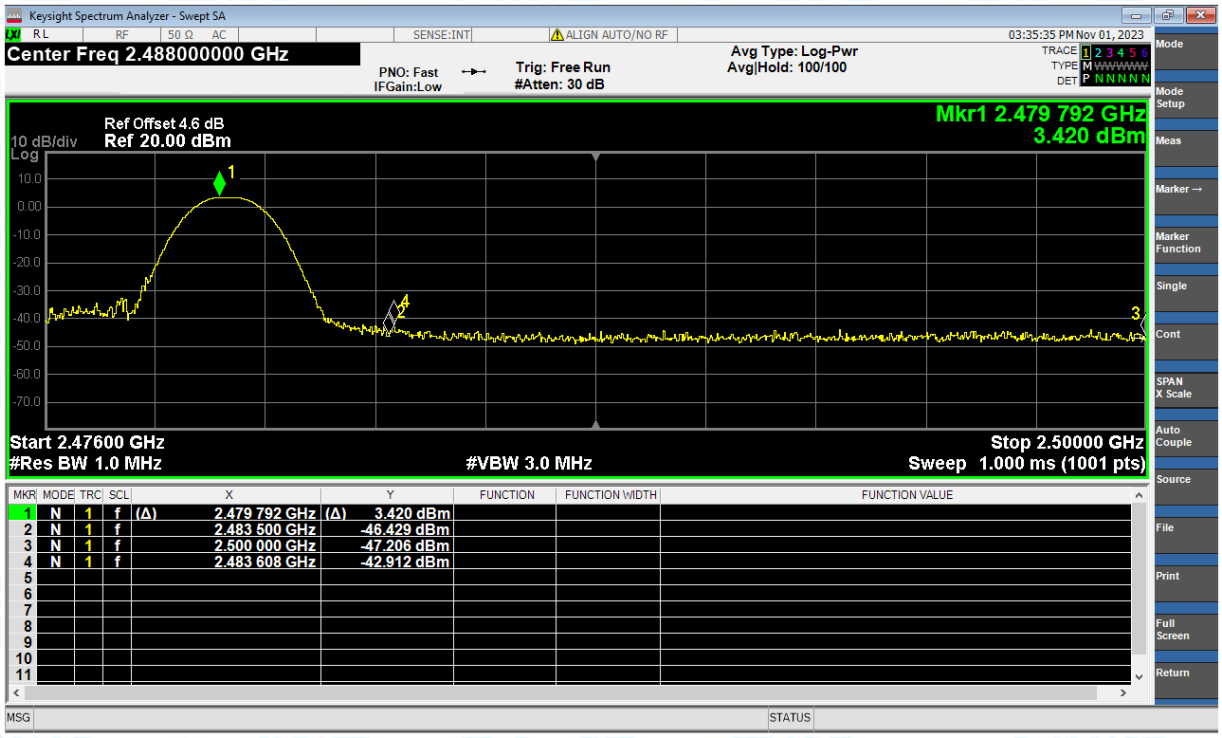
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



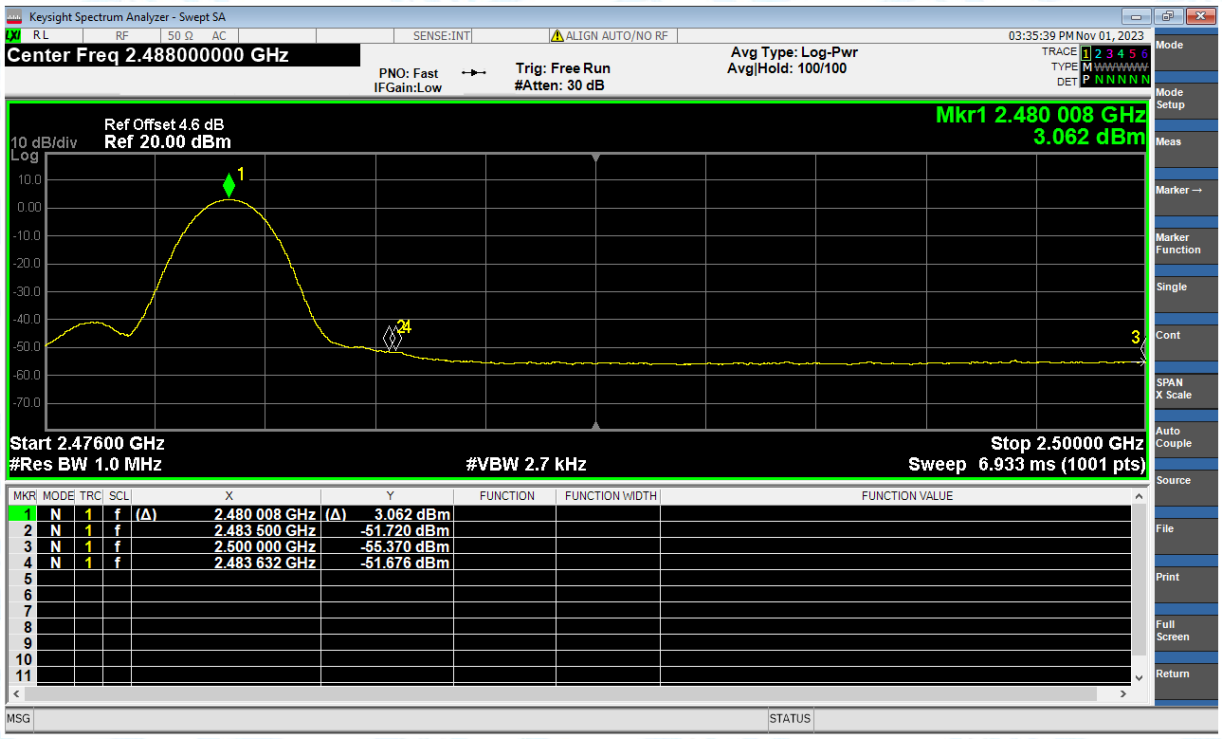
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



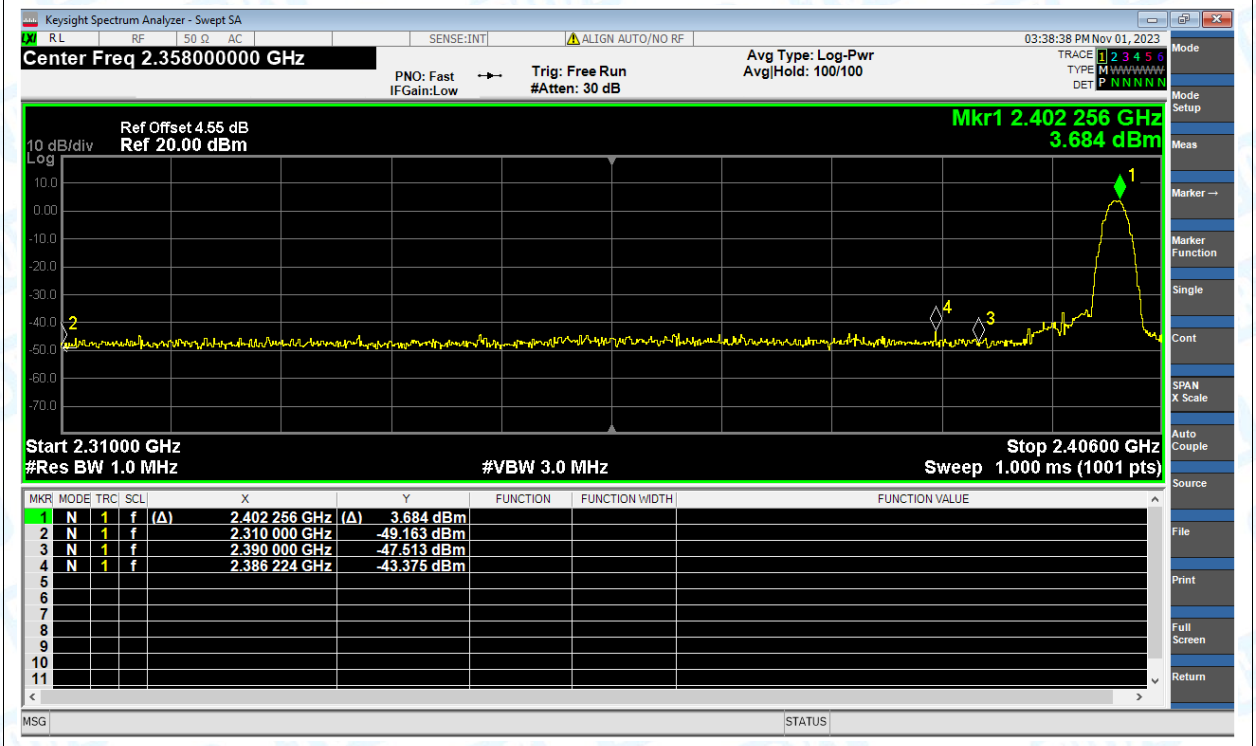
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



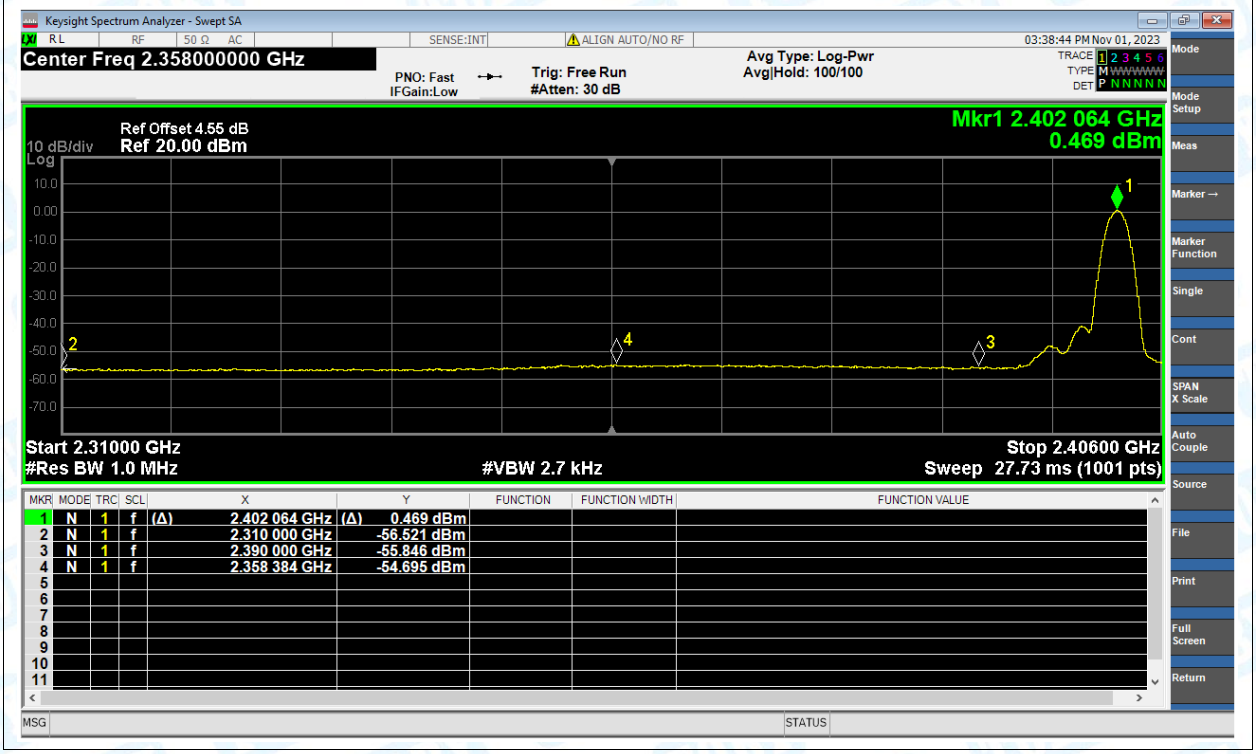
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



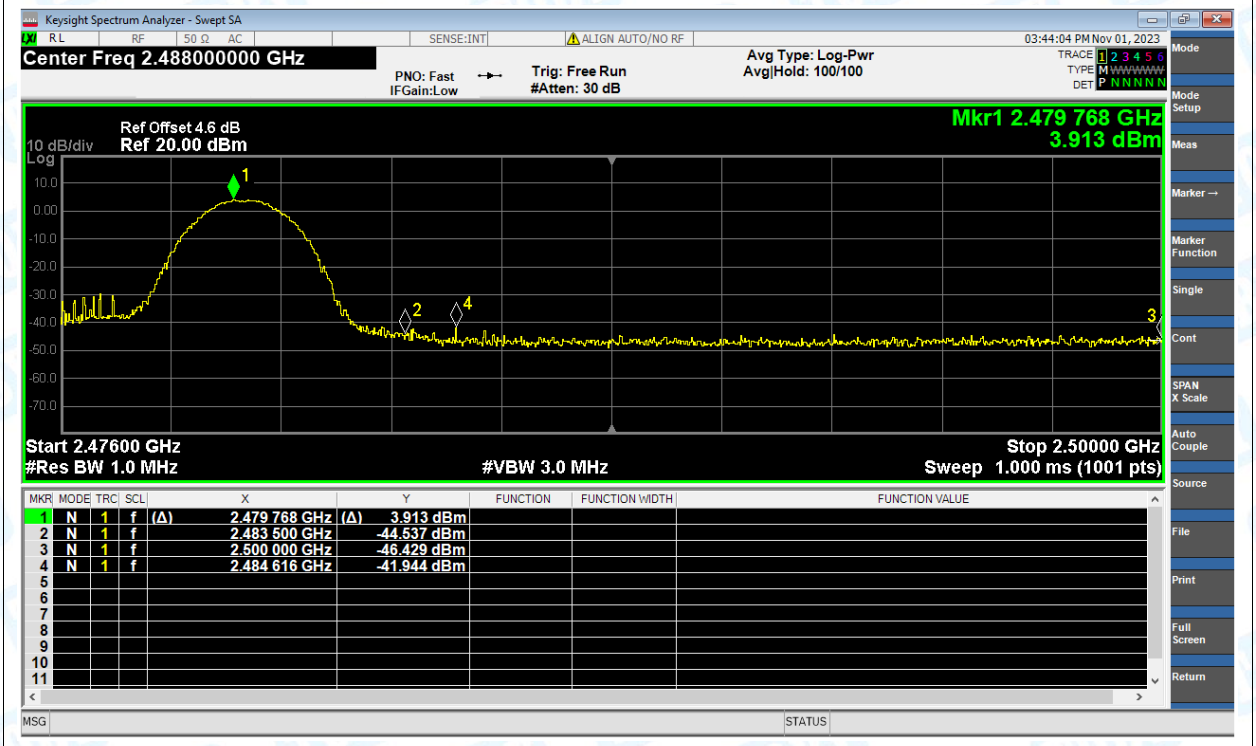
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



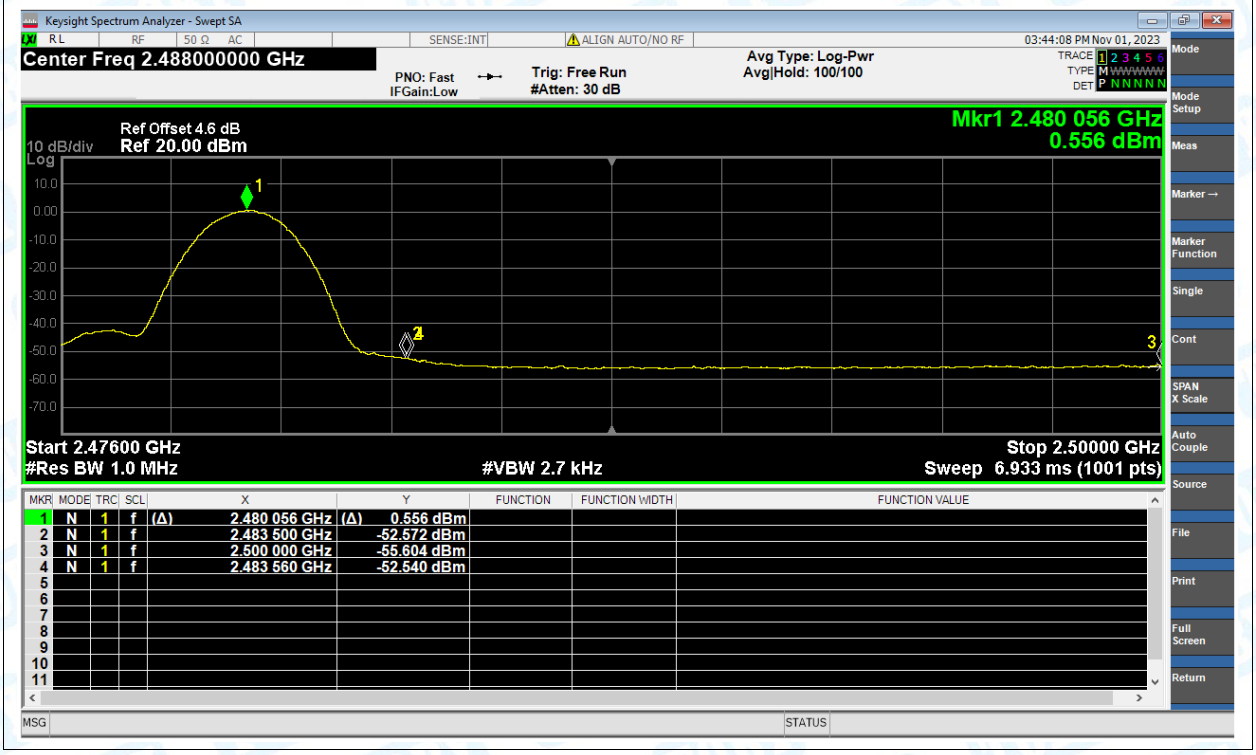
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



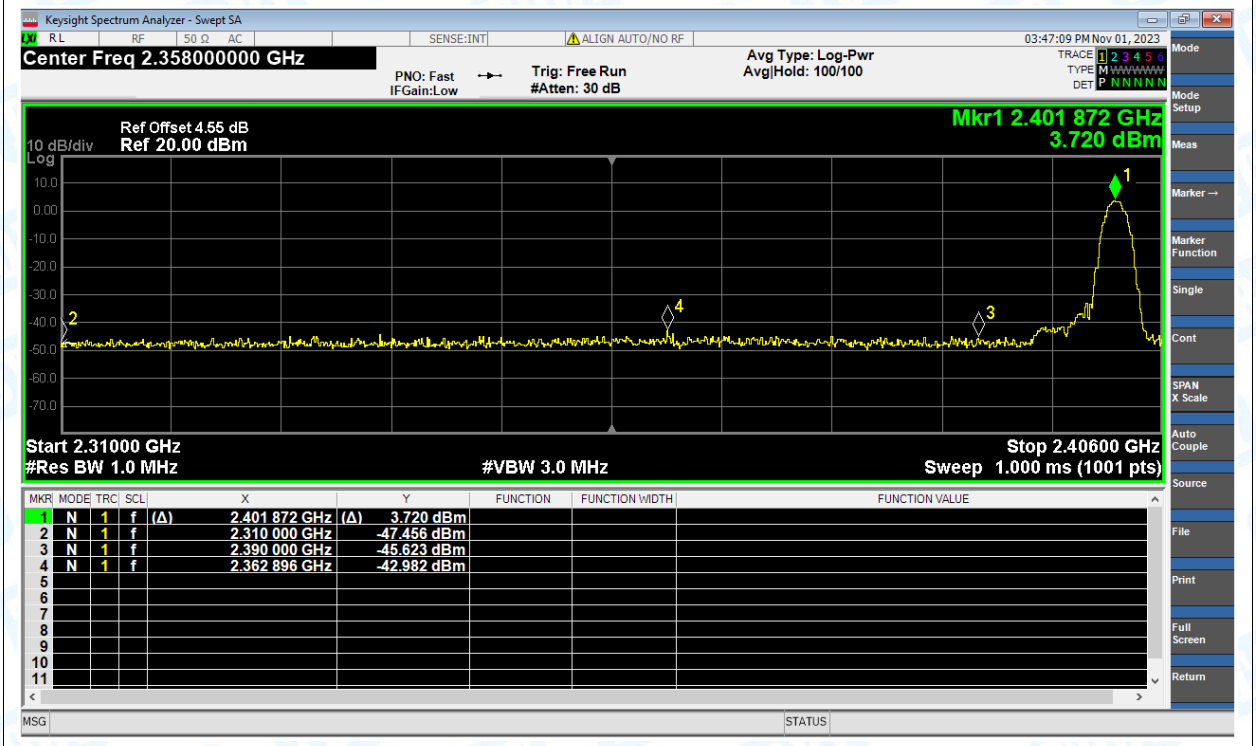
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



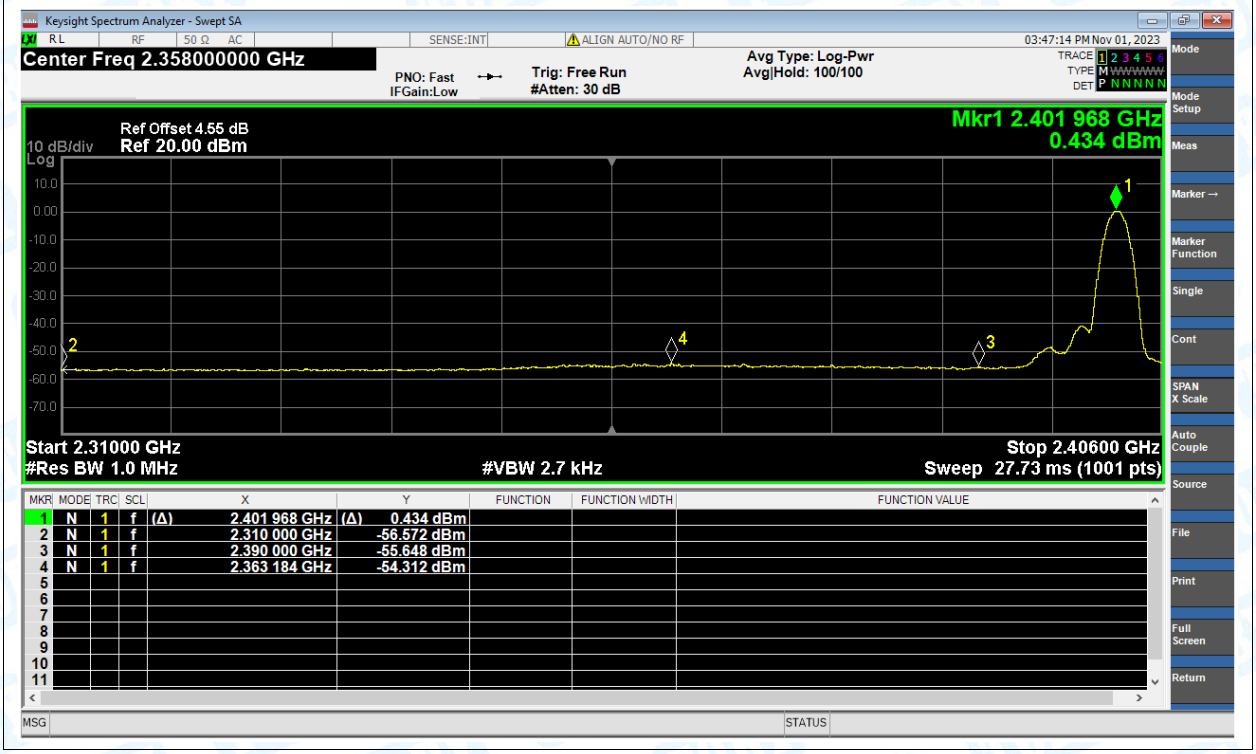
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



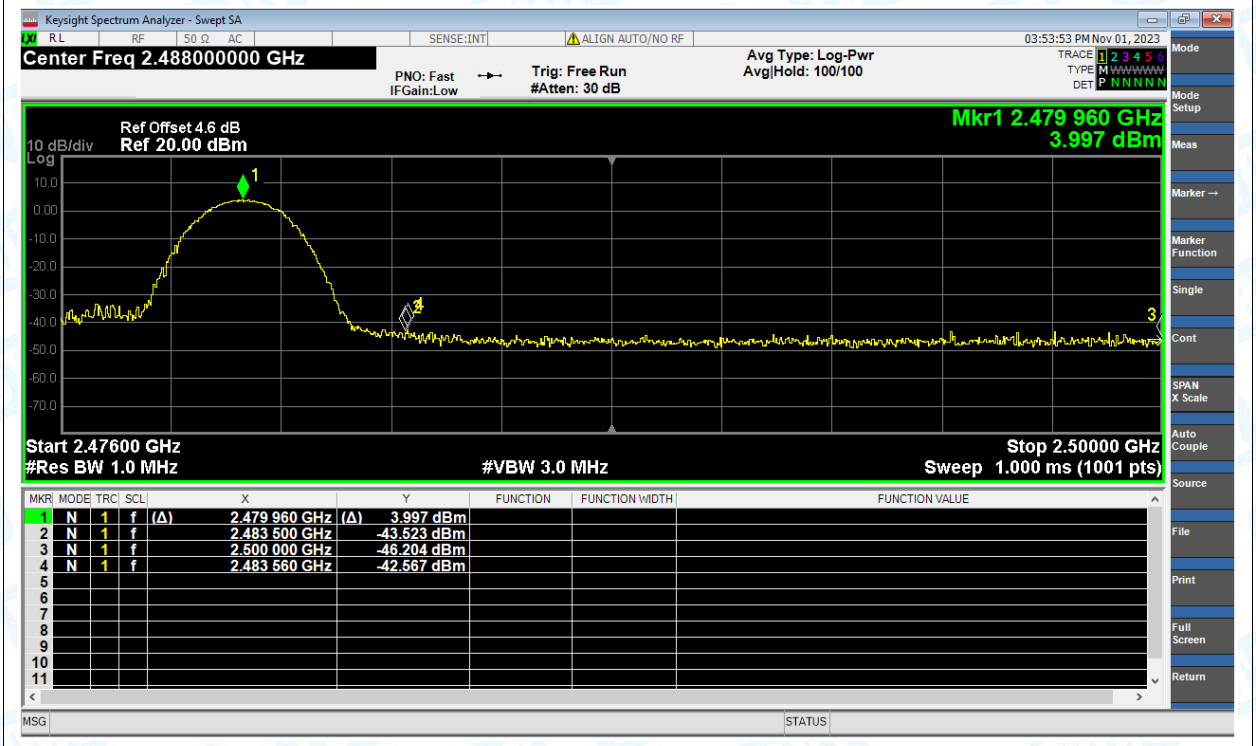
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



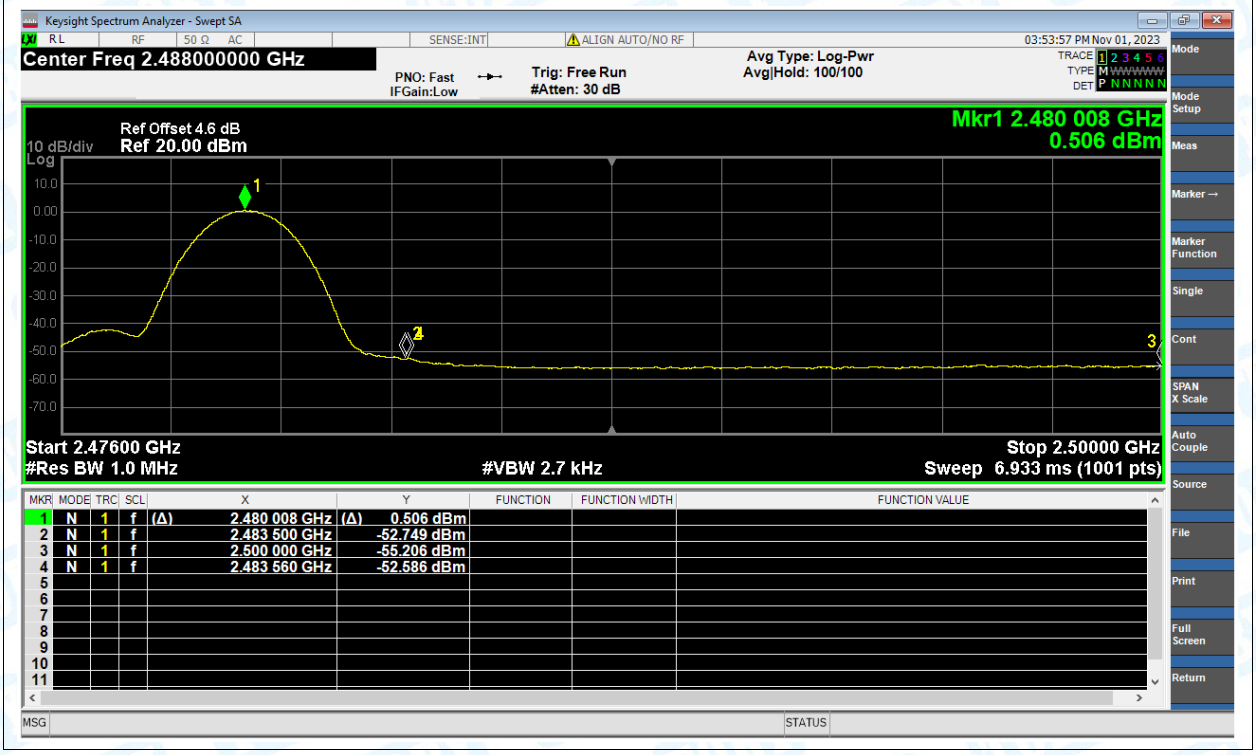
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

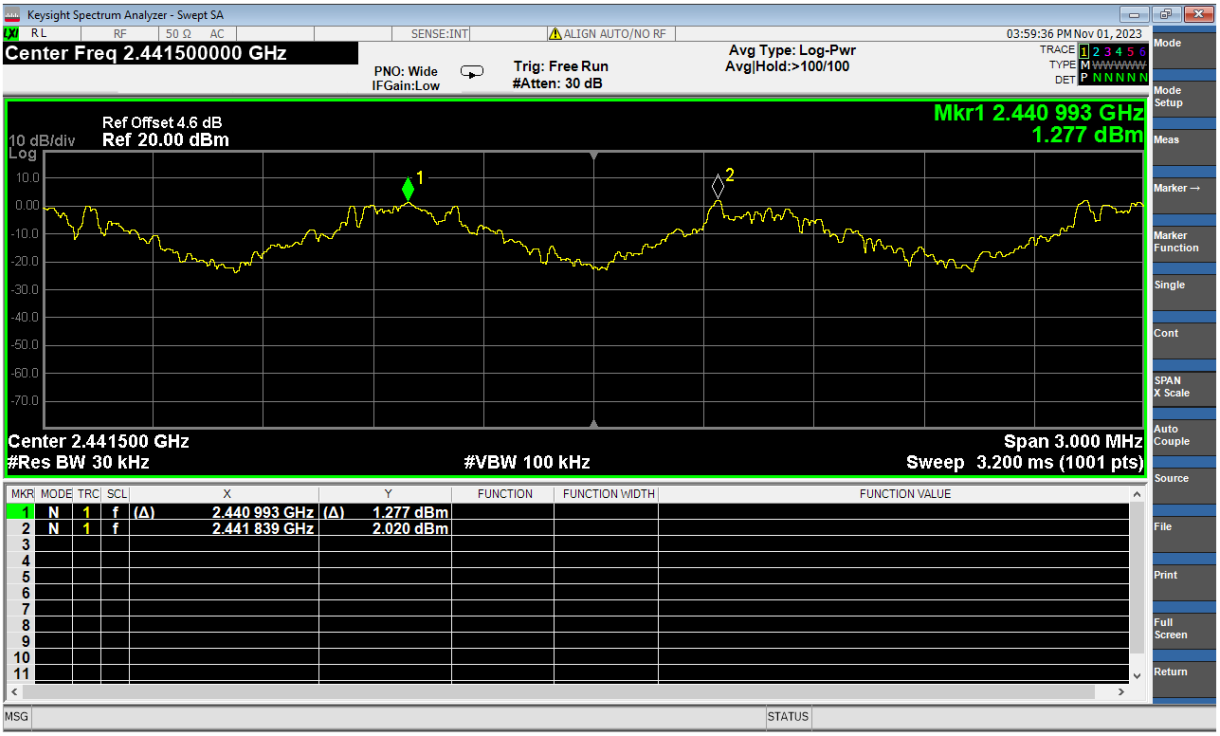


Carrier Frequencies Separation

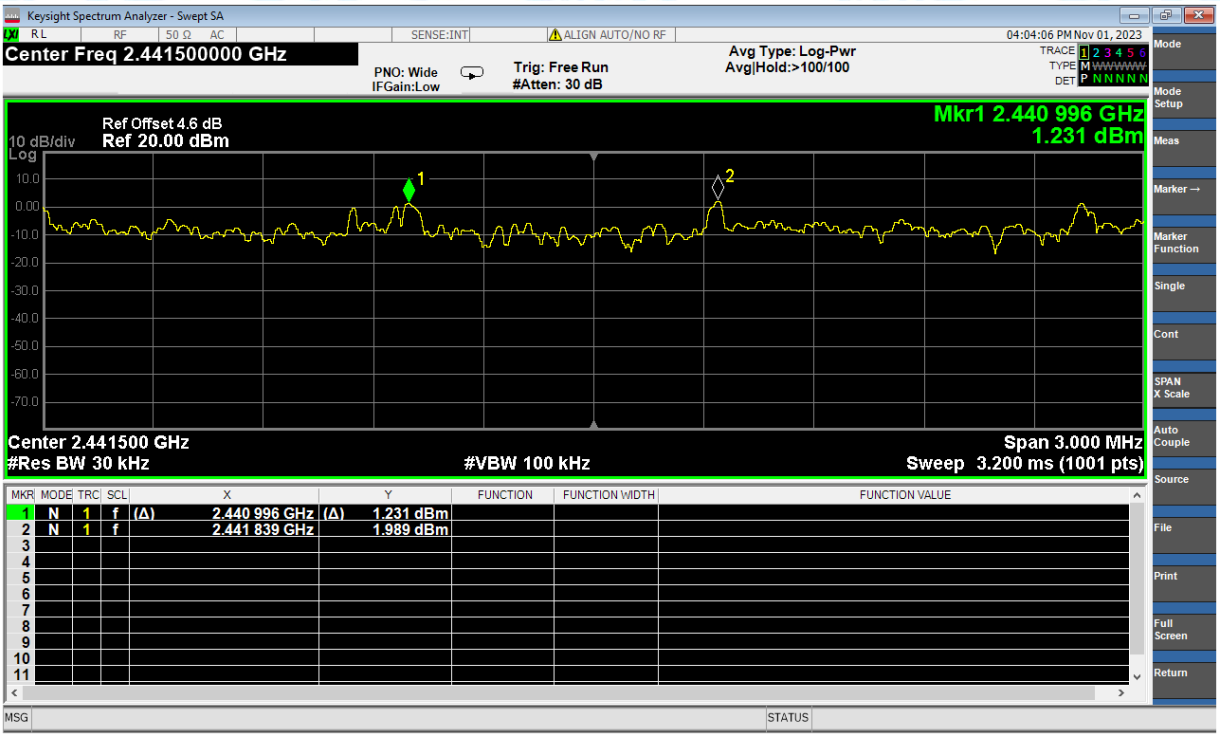
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.993	2441.839	0.846	0.587	Pass
NVNT	2-DH1	Ant1	2440.996	2441.839	0.843	0.833	Pass
NVNT	3-DH1	Ant1	2440.831	2441.836	1.005	0.813	Pass

Test Graphs

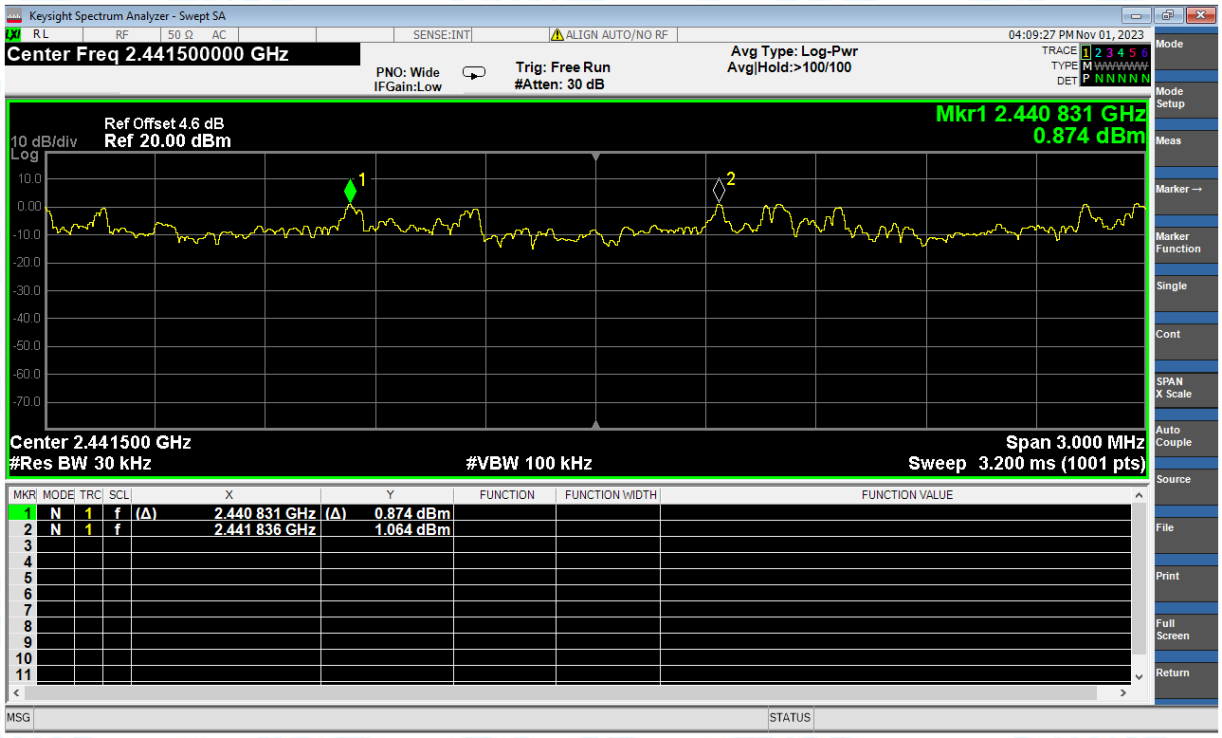
CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



CFS NVNT 3-DH1 2441MHz Ant1

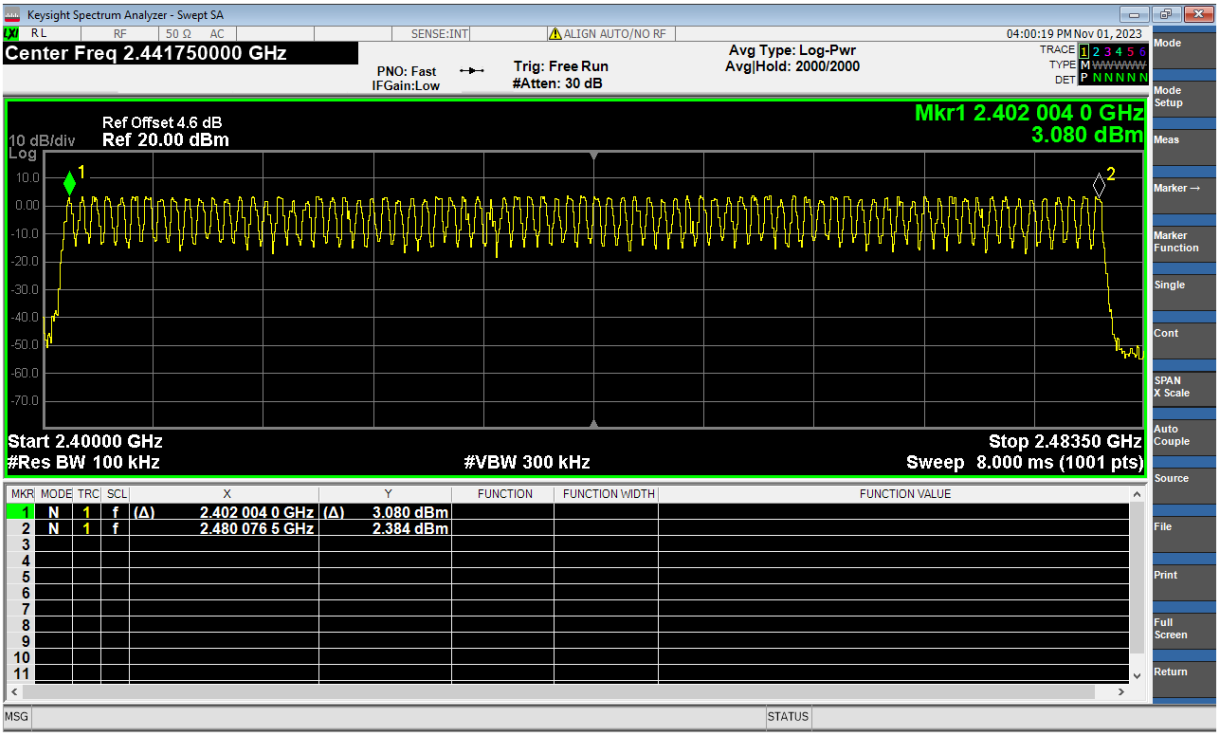


Number of Hopping Channel

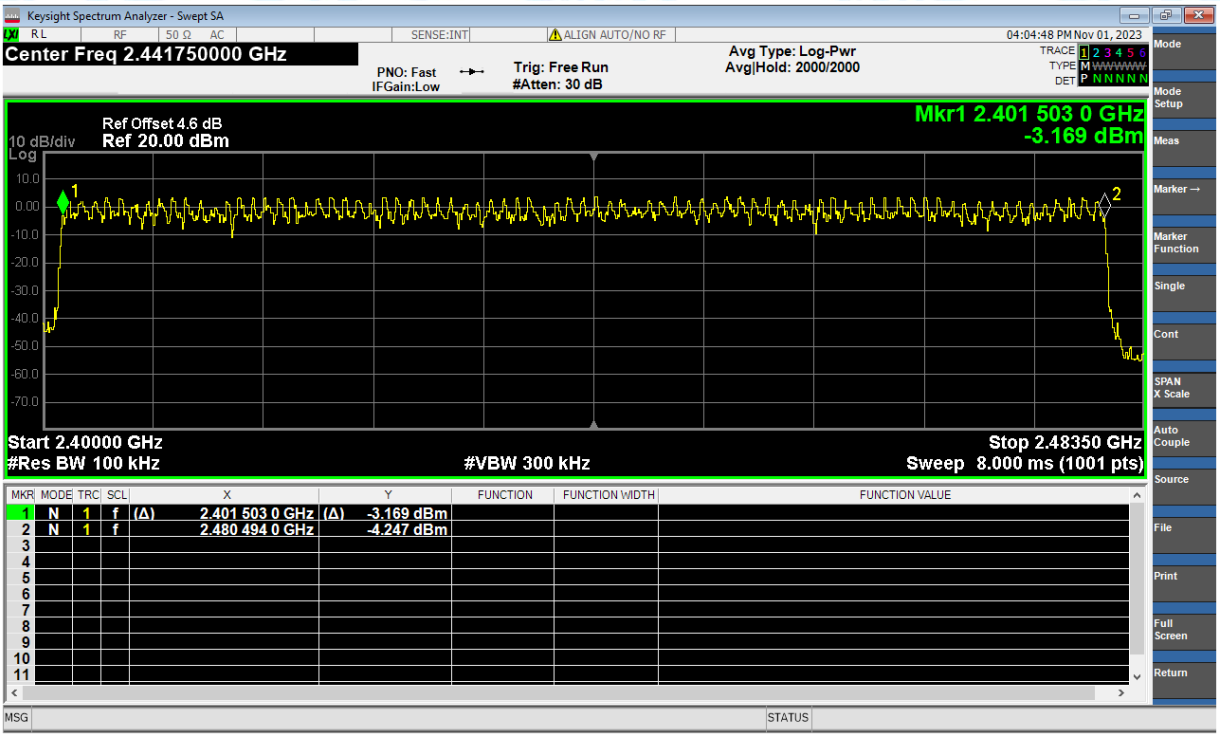
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

Test Graphs

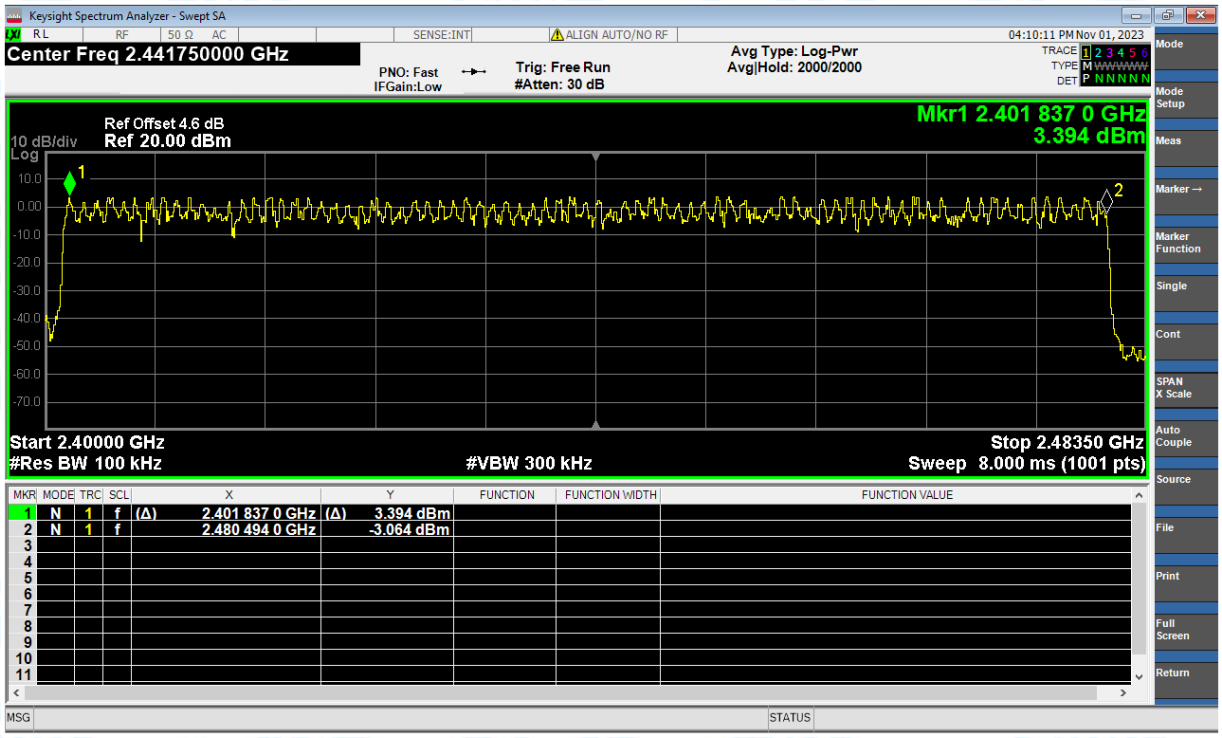
Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



Hopping No. NVNT 3-DH1 2441MHz Ant1

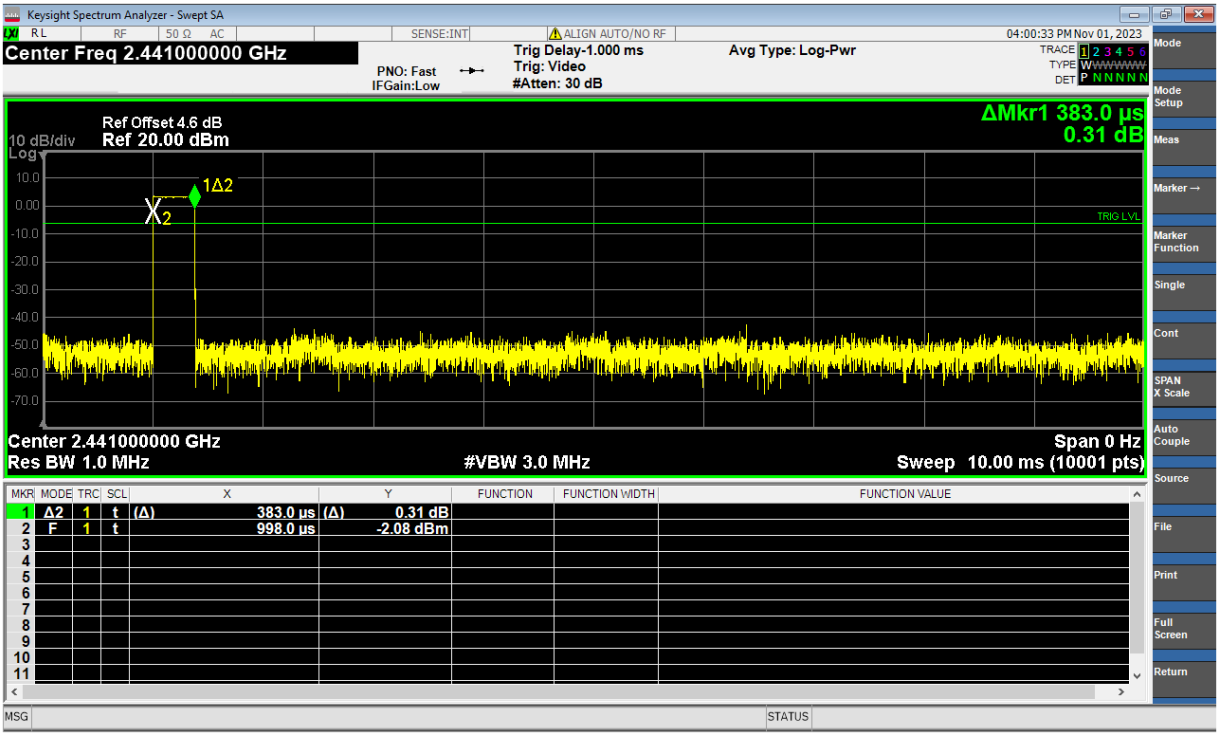


Dwell Time

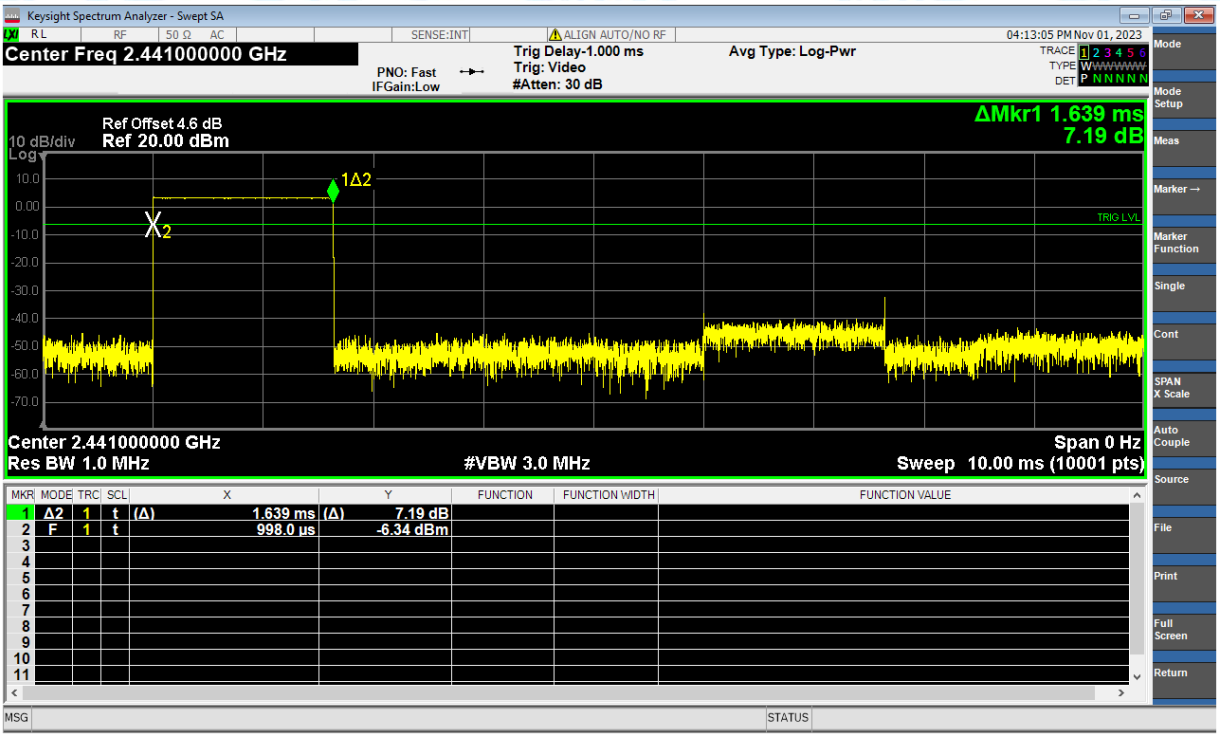
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.886	307.84	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.892	308.48	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.39	124.8	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.641	262.56	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.892	308.48	31600	400	Pass

Test Graphs

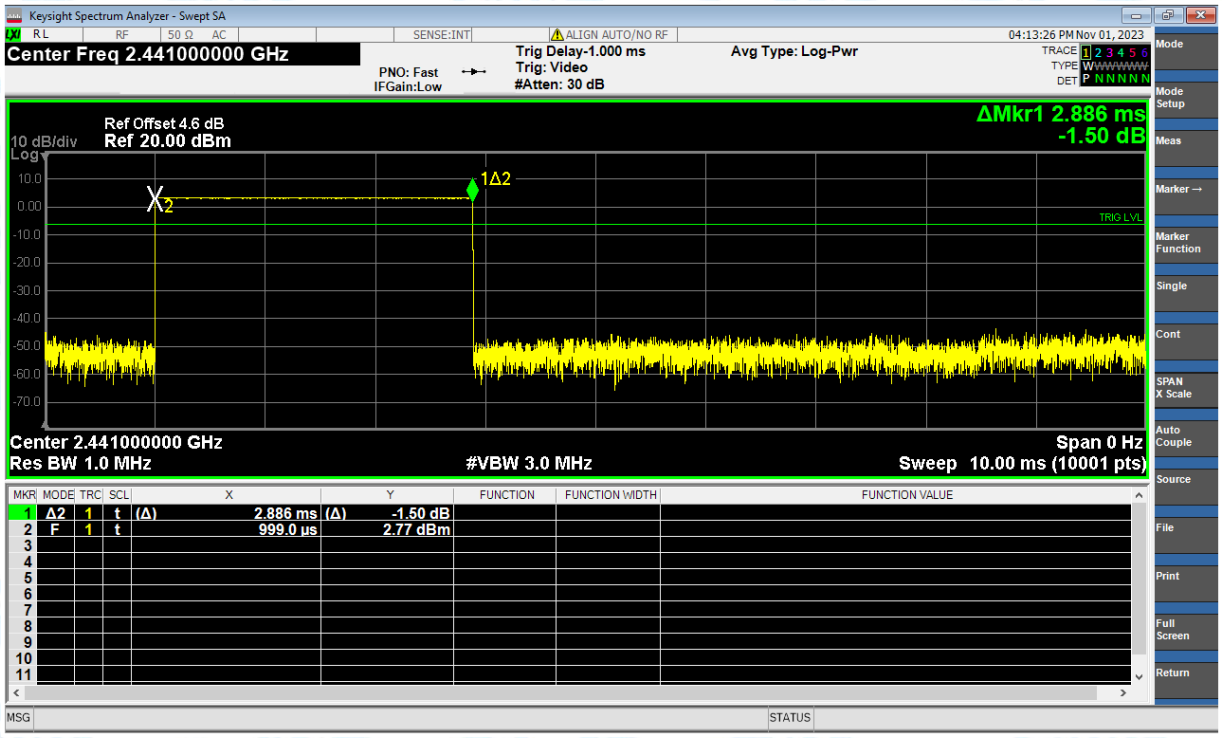
Dwell NVNT 1-DH1 2441MHz Ant1



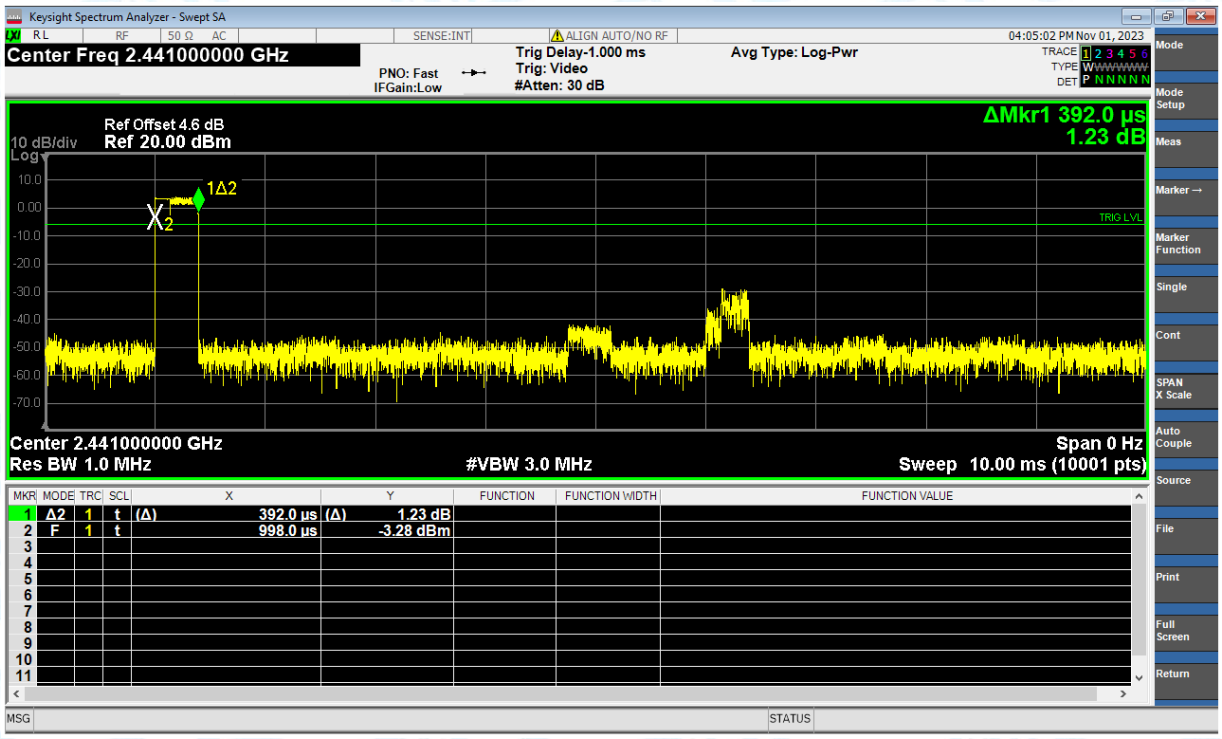
Dwell NVNT 1-DH3 2441MHz Ant1



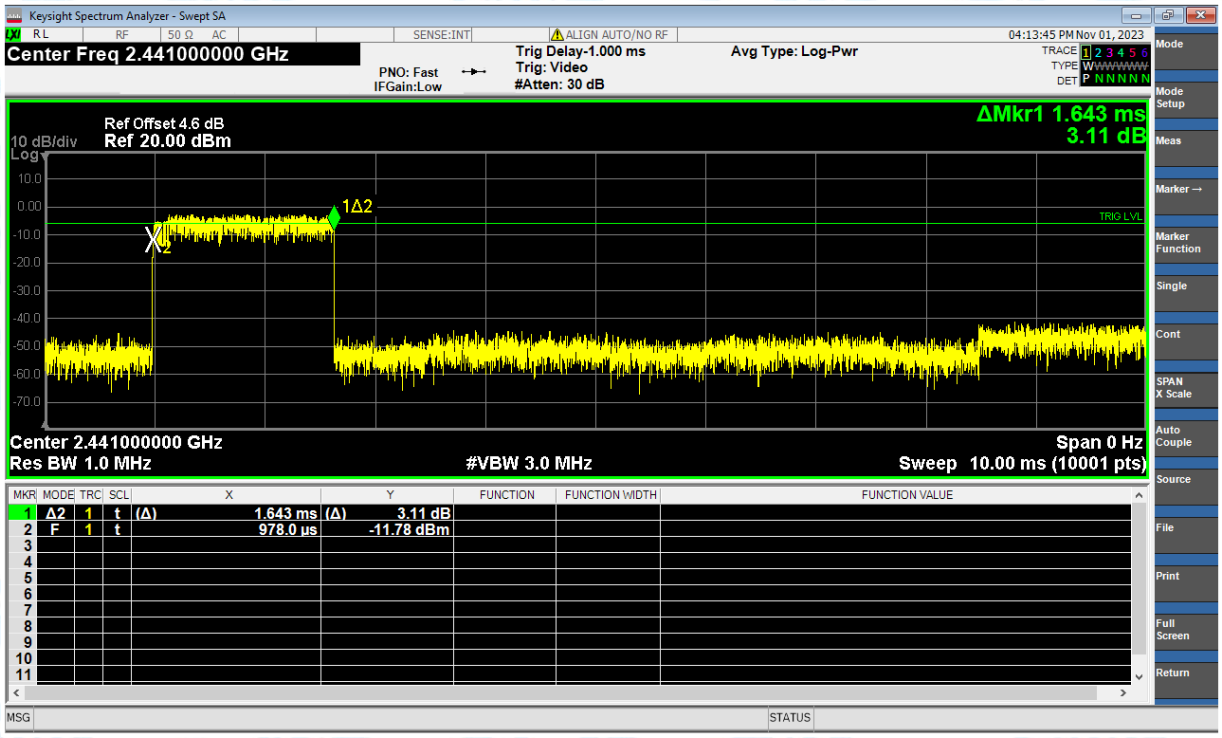
Dwell NVNT 1-DH5 2441MHz Ant1



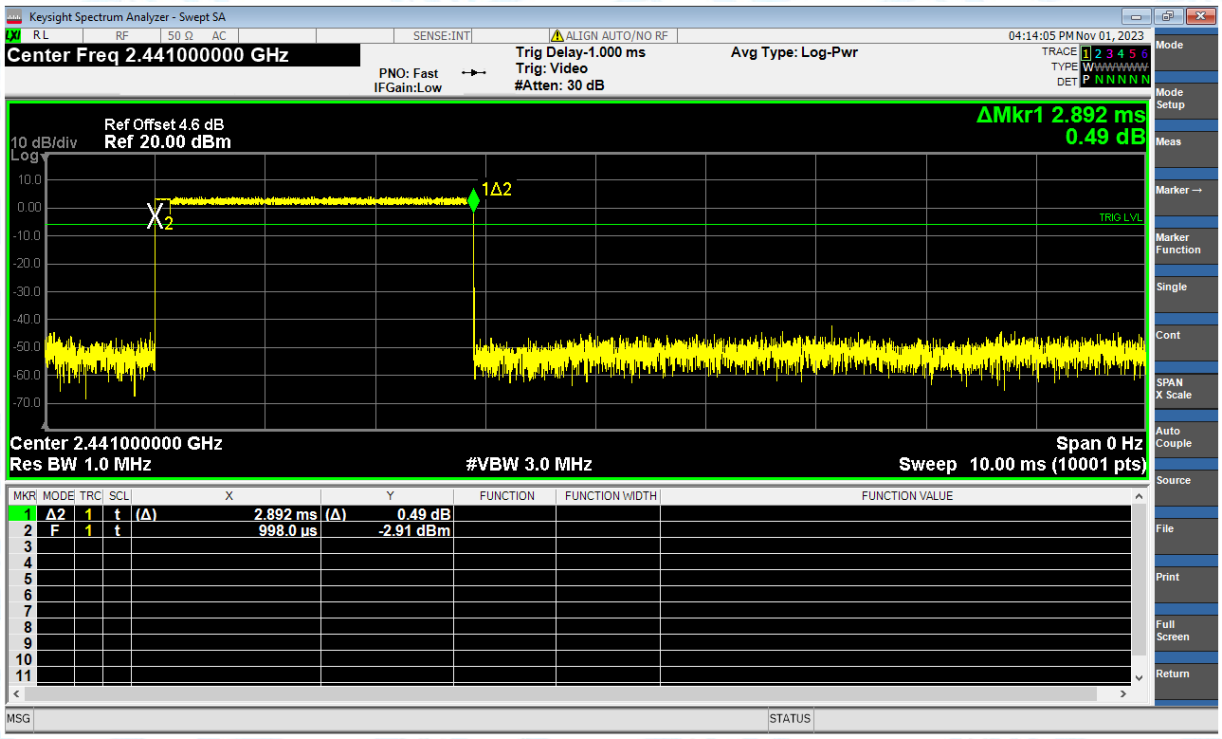
Dwell NVNT 2-DH1 2441MHz Ant1



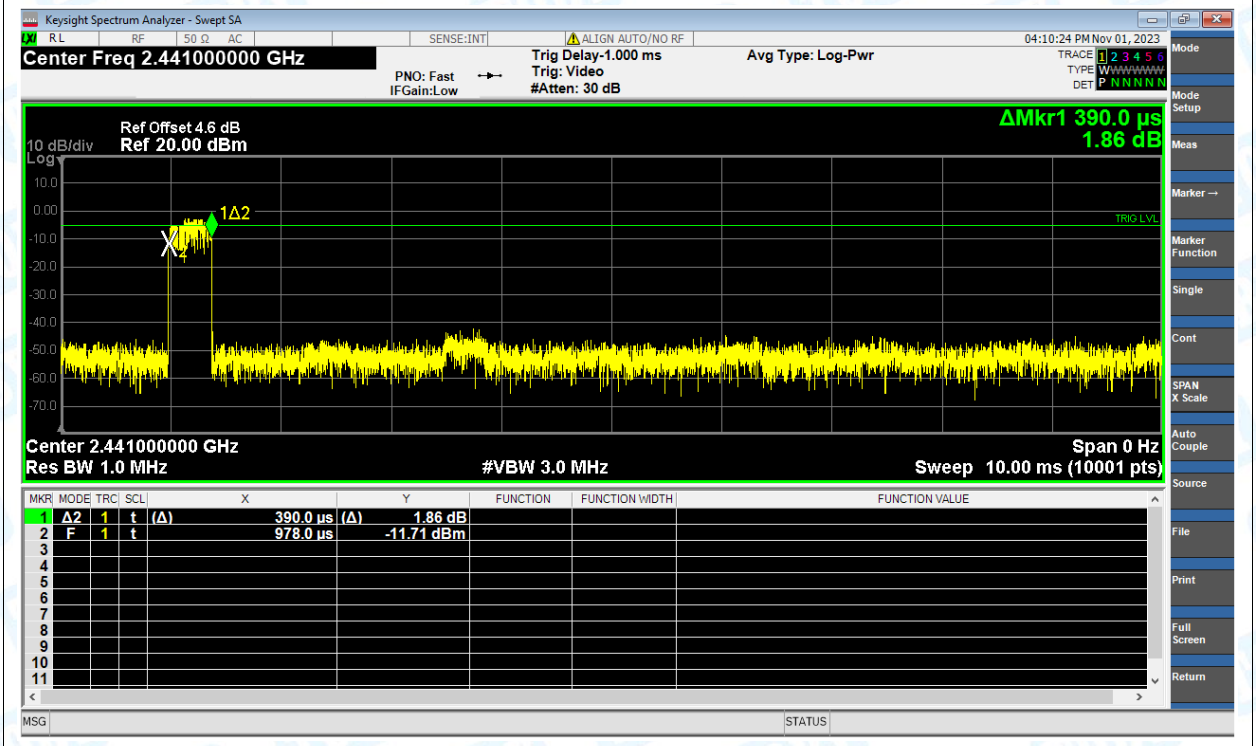
Dwell NVNT 2-DH3 2441MHz Ant1



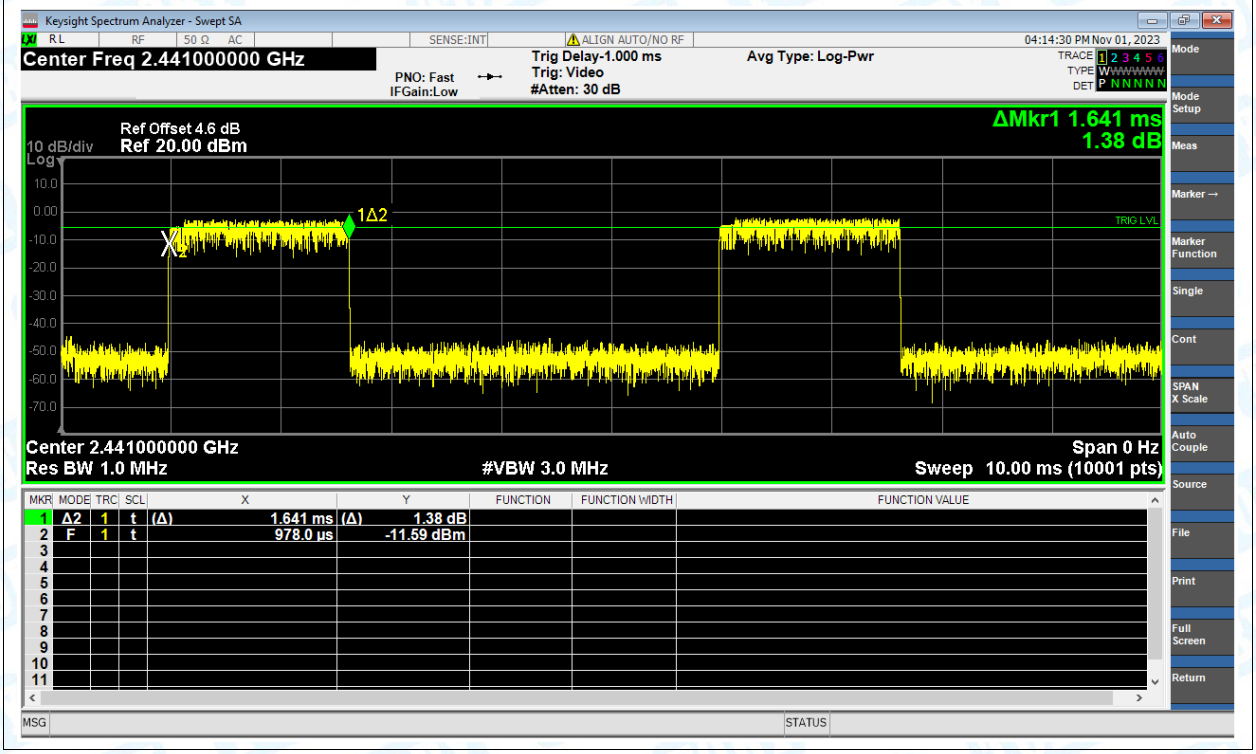
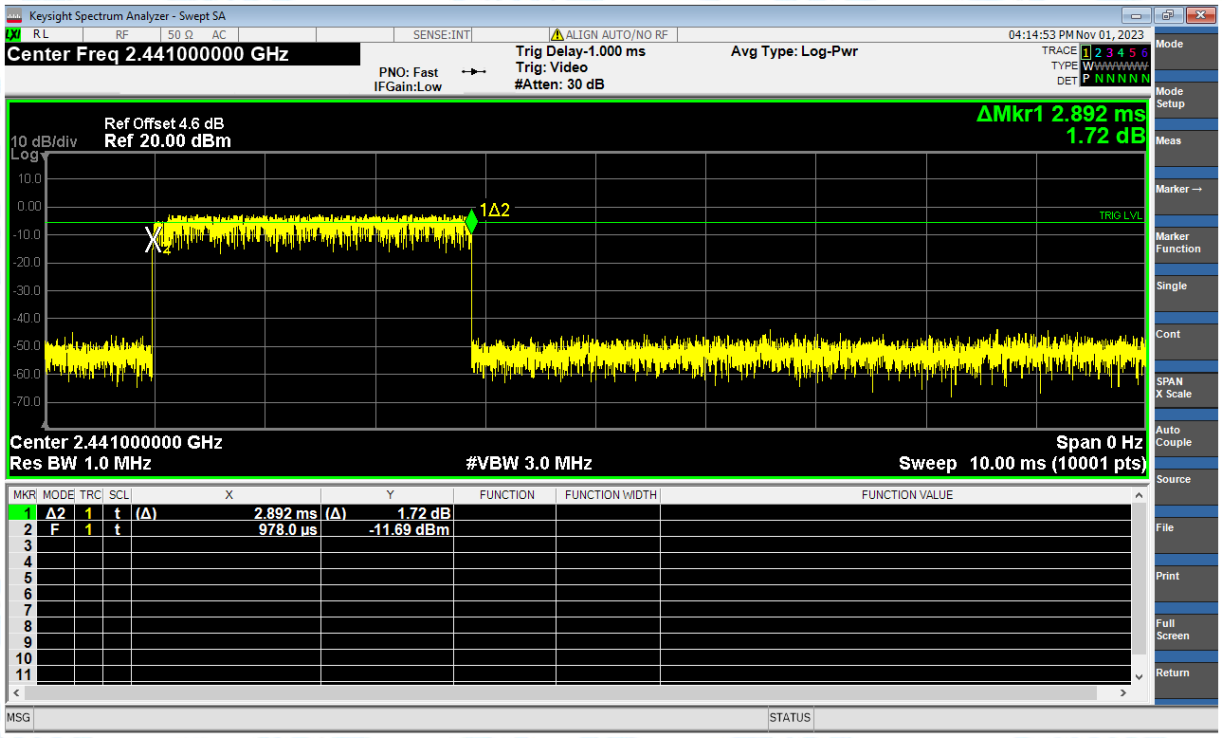
Dwell NVNT 2-DH5 2441MHz Ant1



Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1



Dwell NVNT 3-DH5 2441MHz Ant1