

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

General Description of EUT	
Product Name:	YOSUDA Treadmill YSD-T200
Test Model:	YSD-T200
Sample ID:	202307-0025-1-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	AC 120V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202307-0025-31 The report only show the worst case data.	

Contents

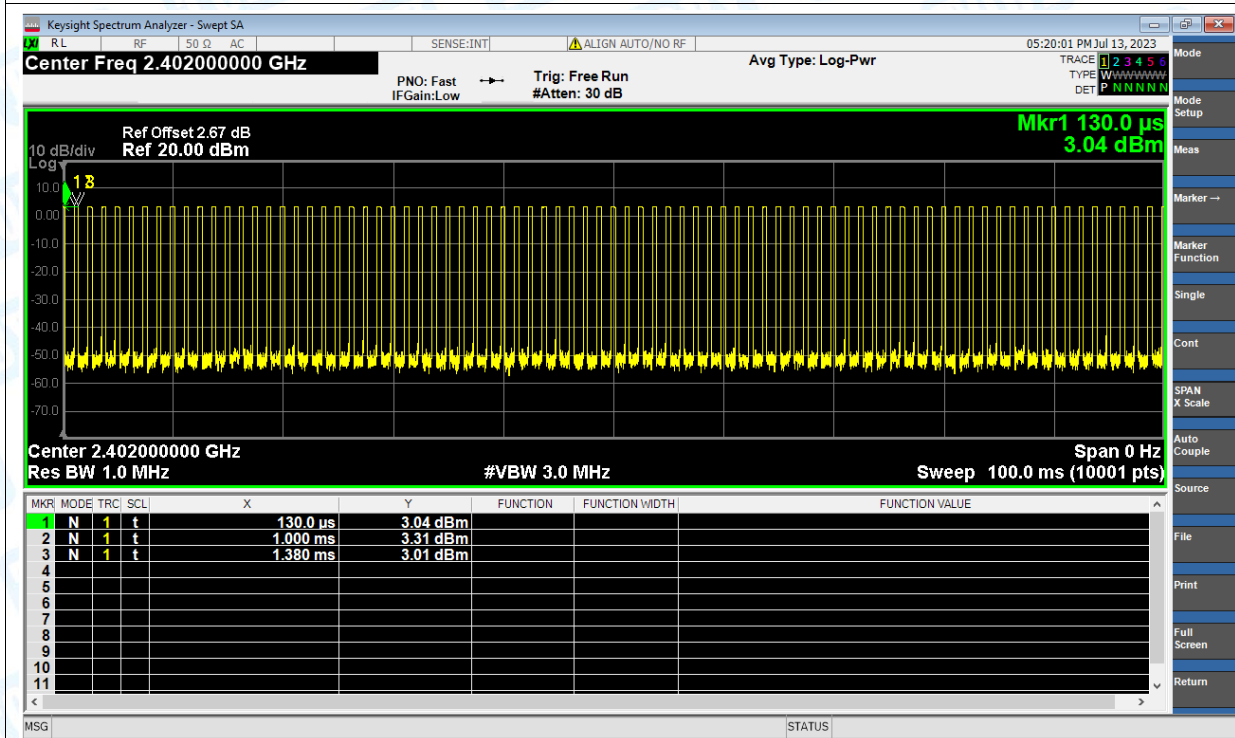
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1. Duty Cycle

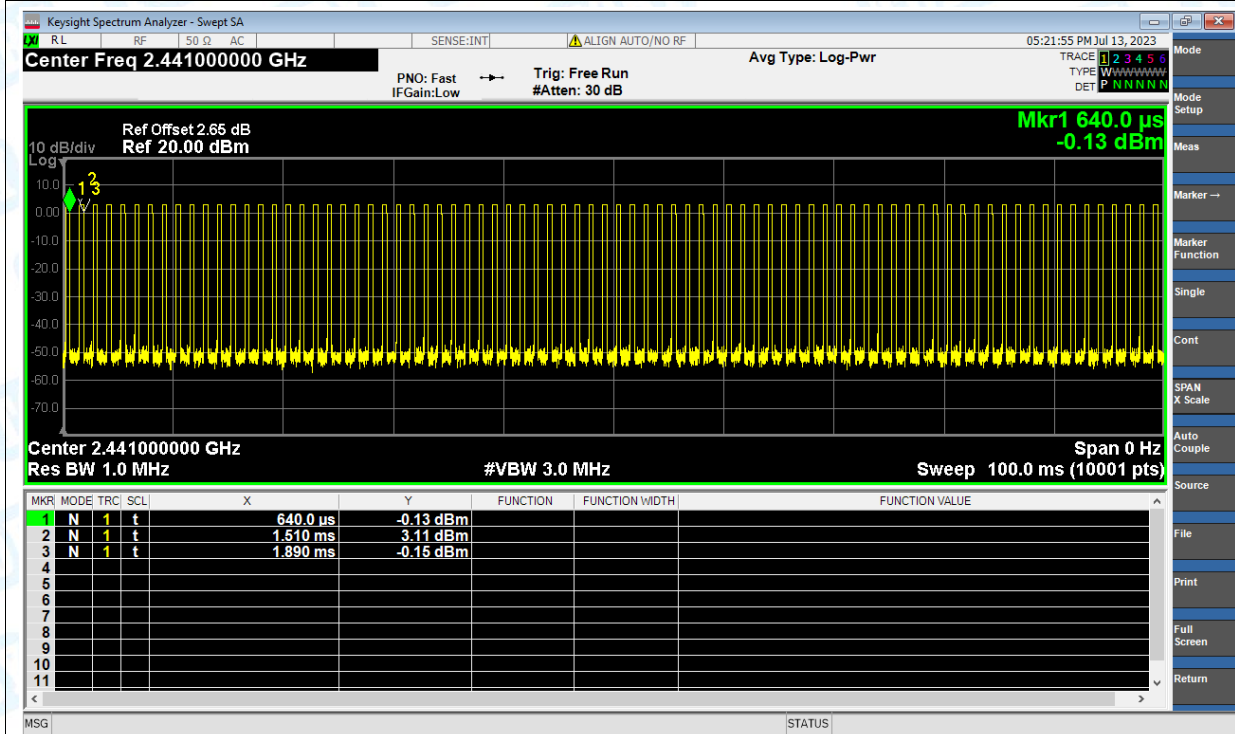
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	30.4	5.17	2.63

Test Graphs

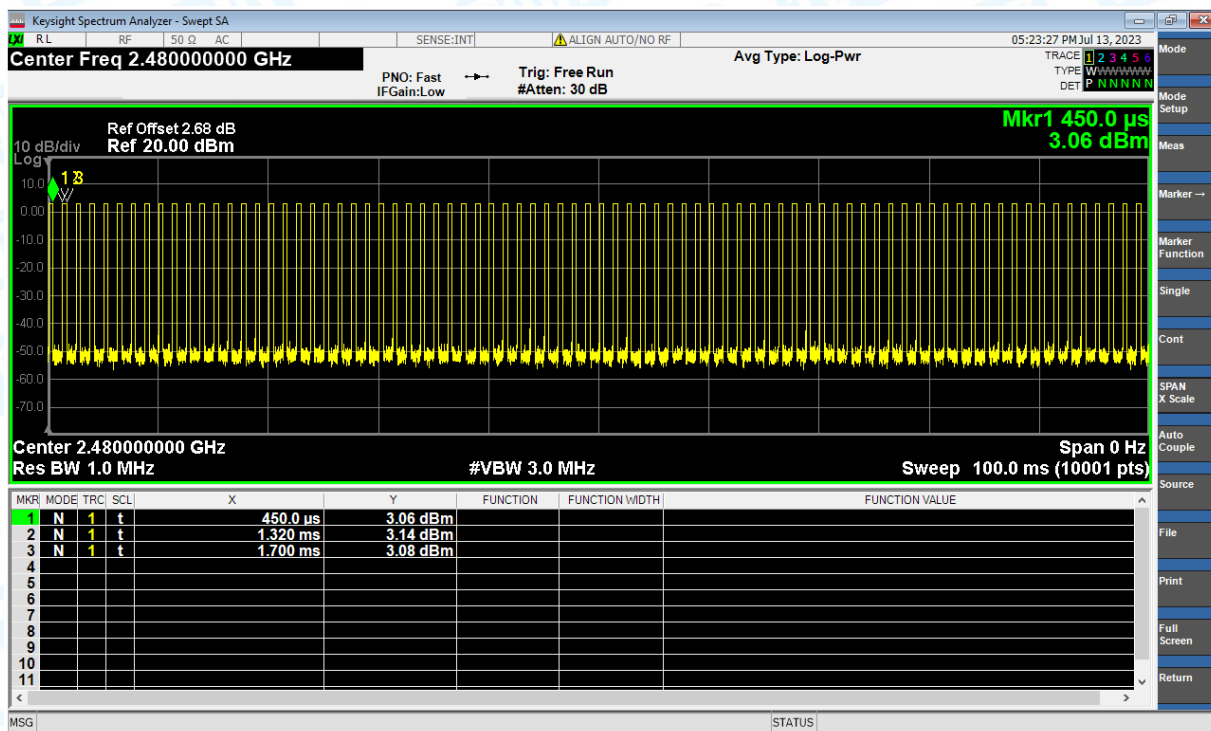
Duty Cycle NVNT 1-DH1 2402MHz Ant1



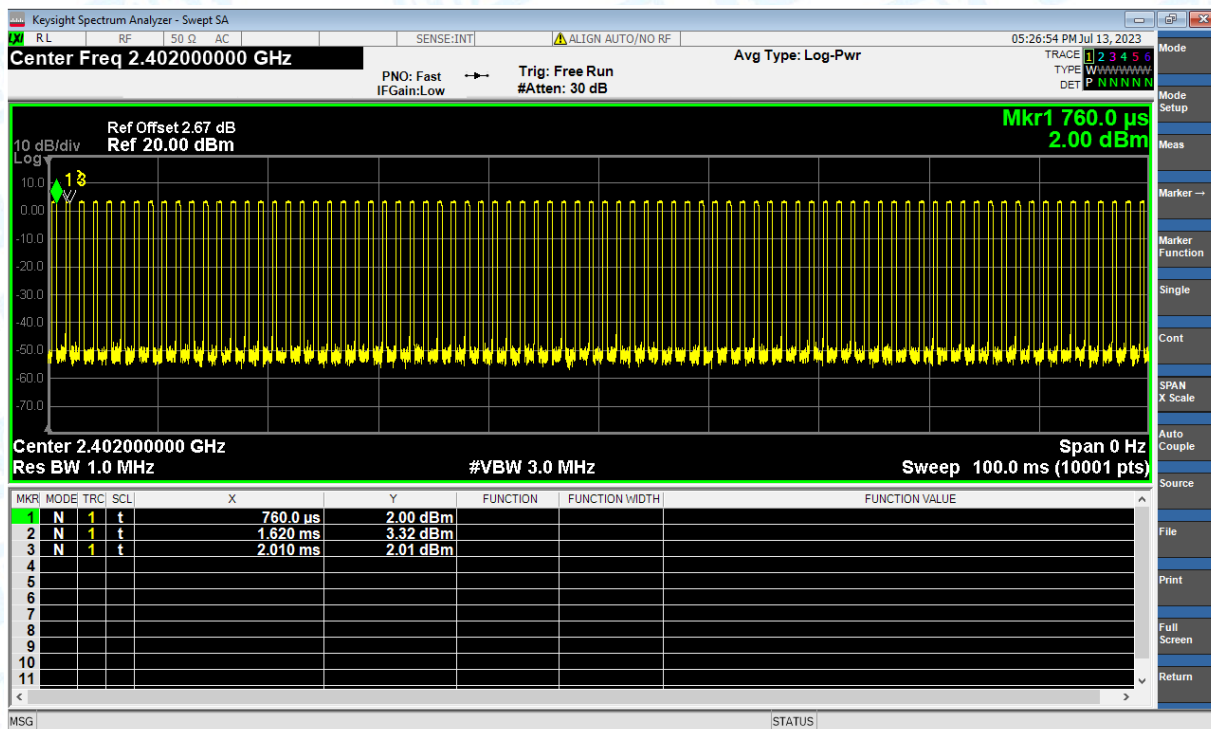
Duty Cycle NVNT 1-DH1 2441MHz Ant1



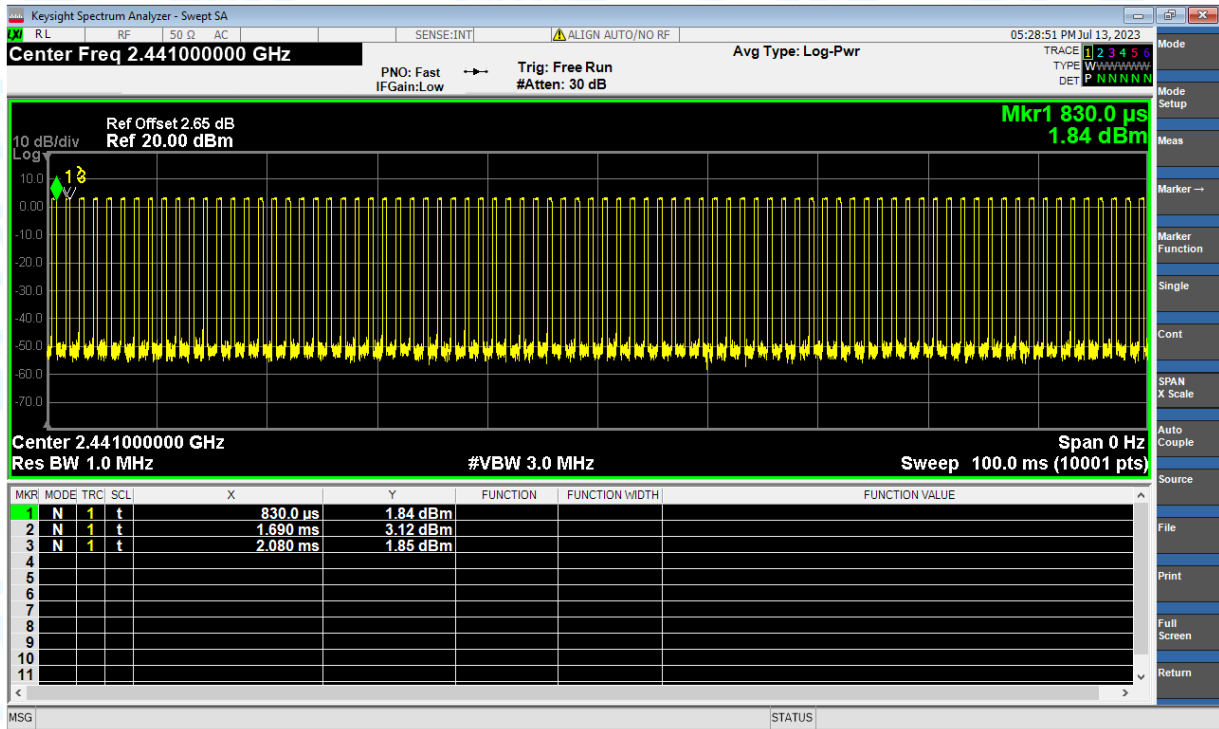
Duty Cycle NVNT 1-DH1 2480MHz Ant1



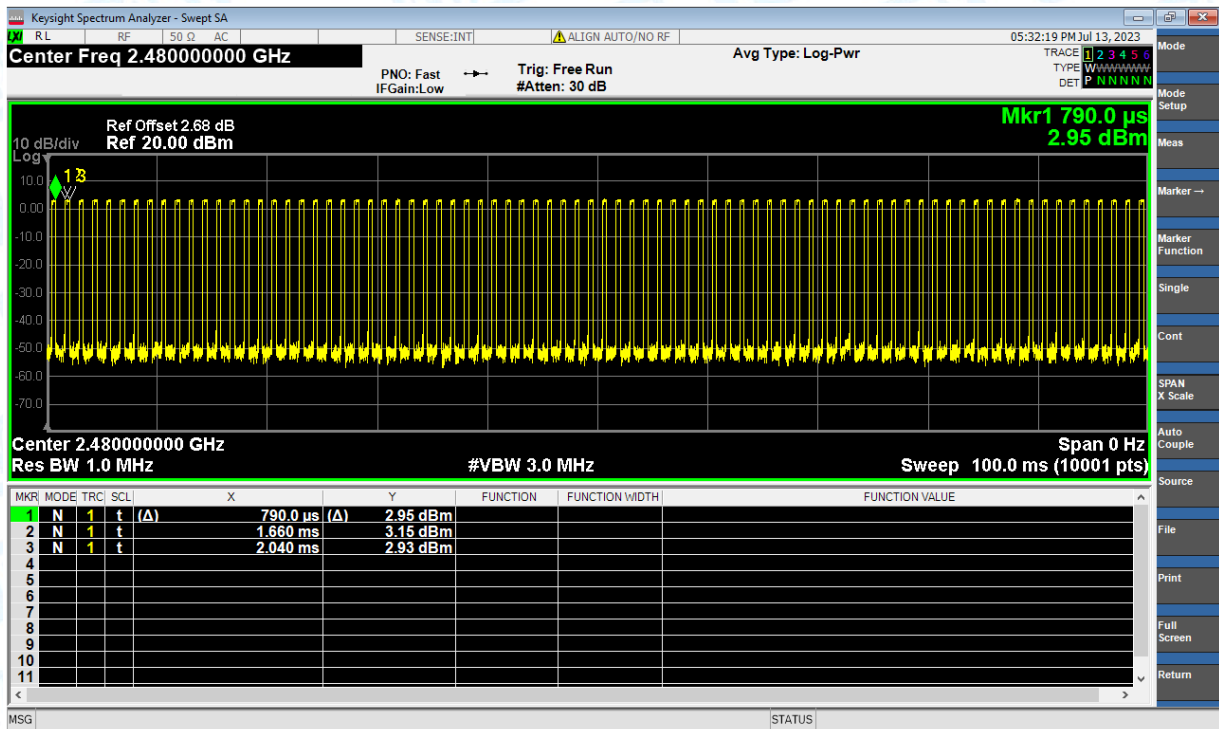
Duty Cycle NVNT 2-DH1 2402MHz Ant1



Duty Cycle NVNT 2-DH1 2441MHz Ant1



Duty Cycle NVNT 2-DH1 2480MHz Ant1

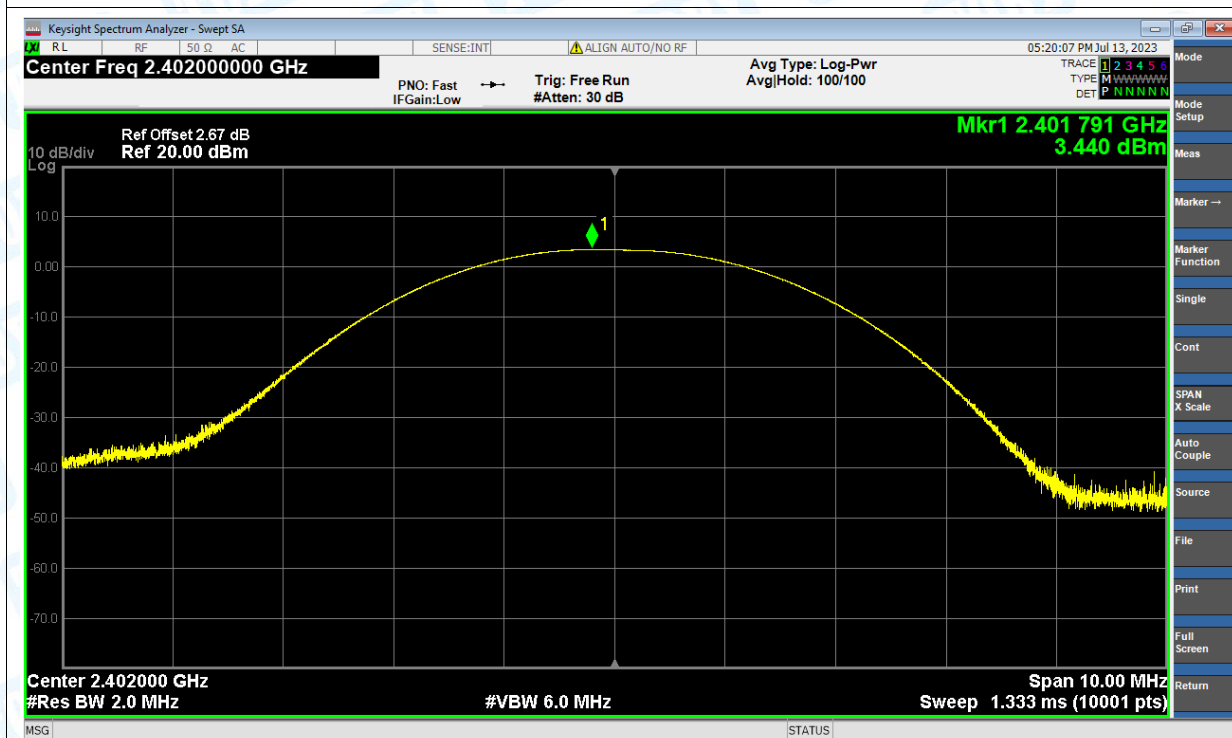


2. Maximum Conducted Output Power

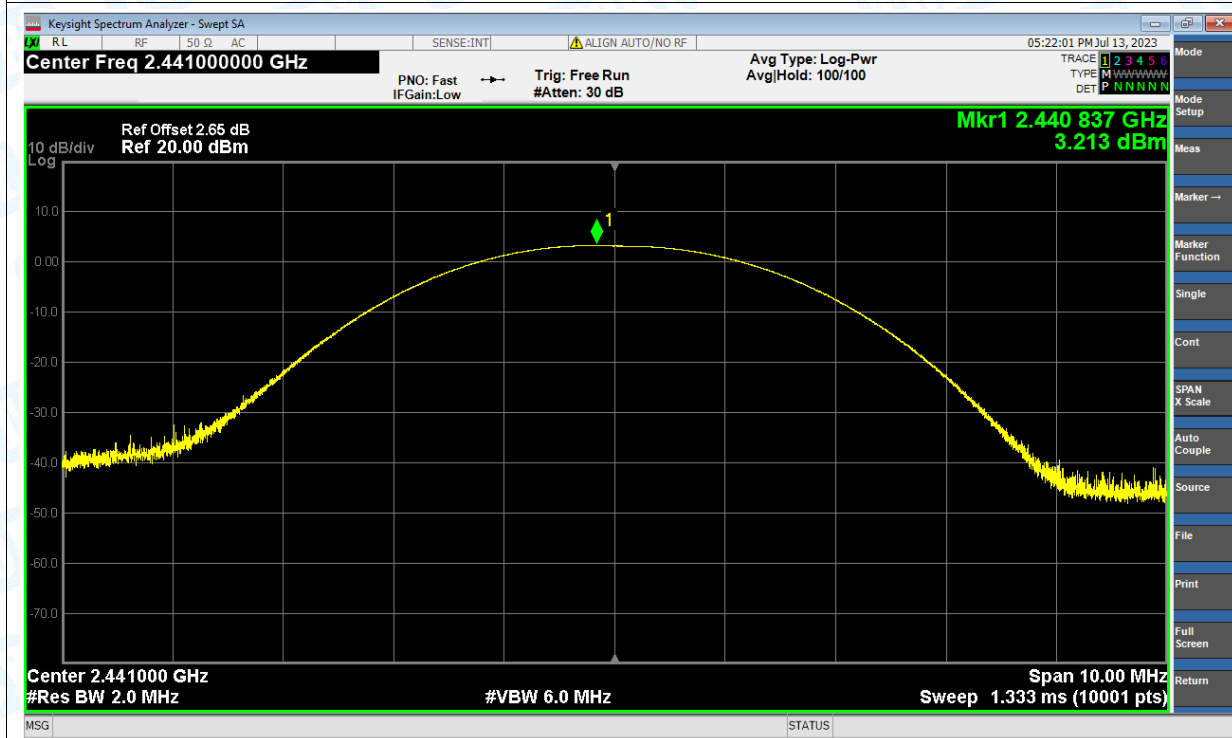
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.44	21	Pass
NVNT	1-DH1	2441	Ant1	3.213	21	Pass
NVNT	1-DH1	2480	Ant1	3.244	21	Pass
NVNT	2-DH1	2402	Ant1	4.126	21	Pass
NVNT	2-DH1	2441	Ant1	3.909	21	Pass
NVNT	2-DH1	2480	Ant1	3.937	21	Pass

Test Graphs

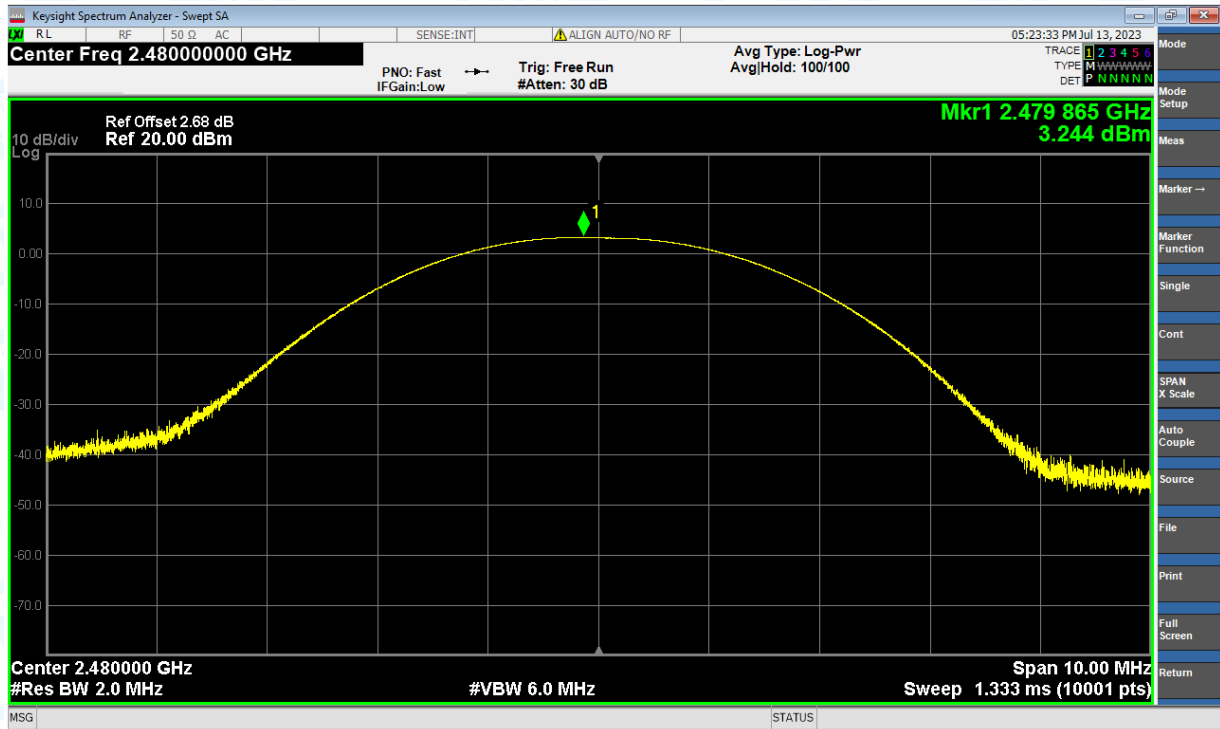
Power NVNT 1-DH1 2402MHz Ant1



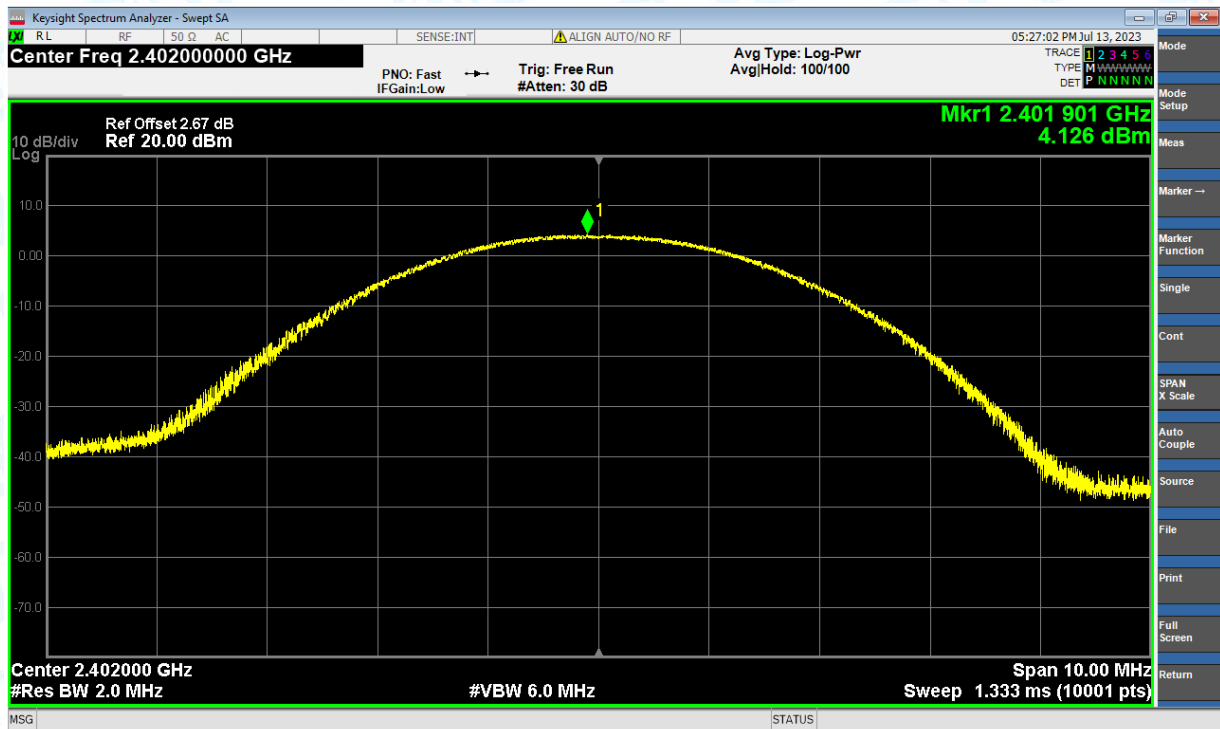
Power NVNT 1-DH1 2441MHz Ant1



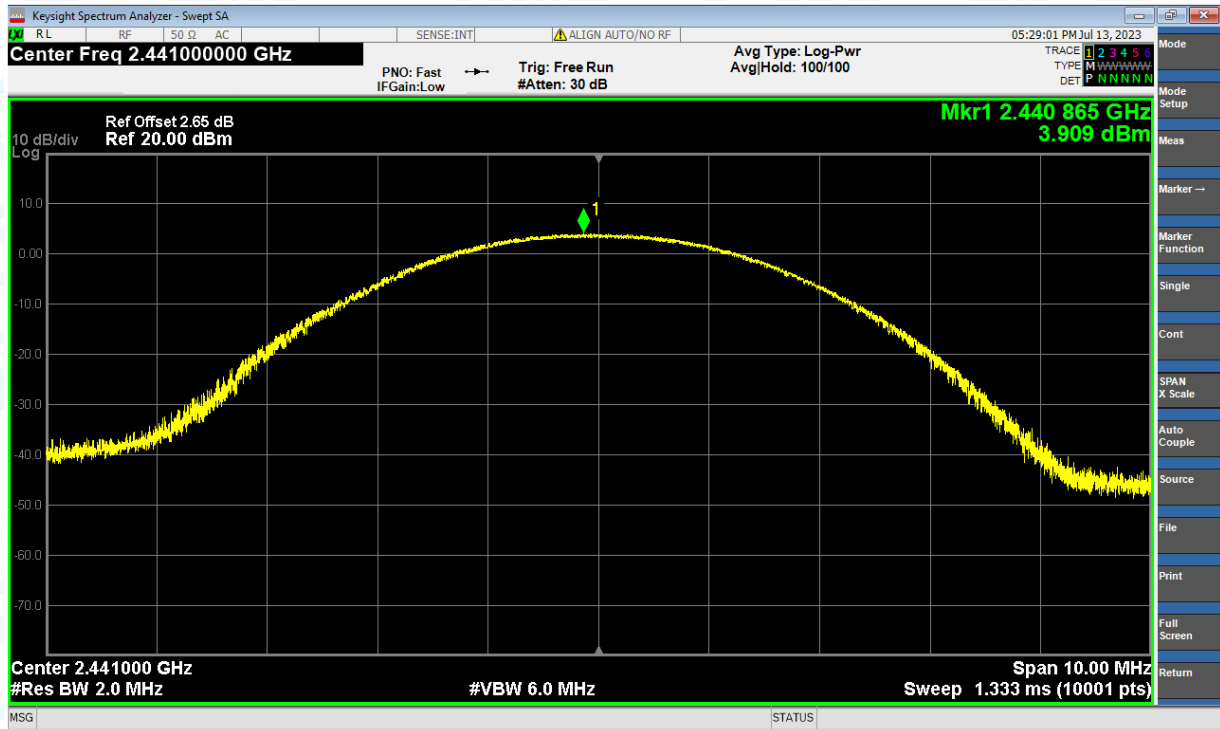
Power NVNT 1-DH1 2480MHz Ant1



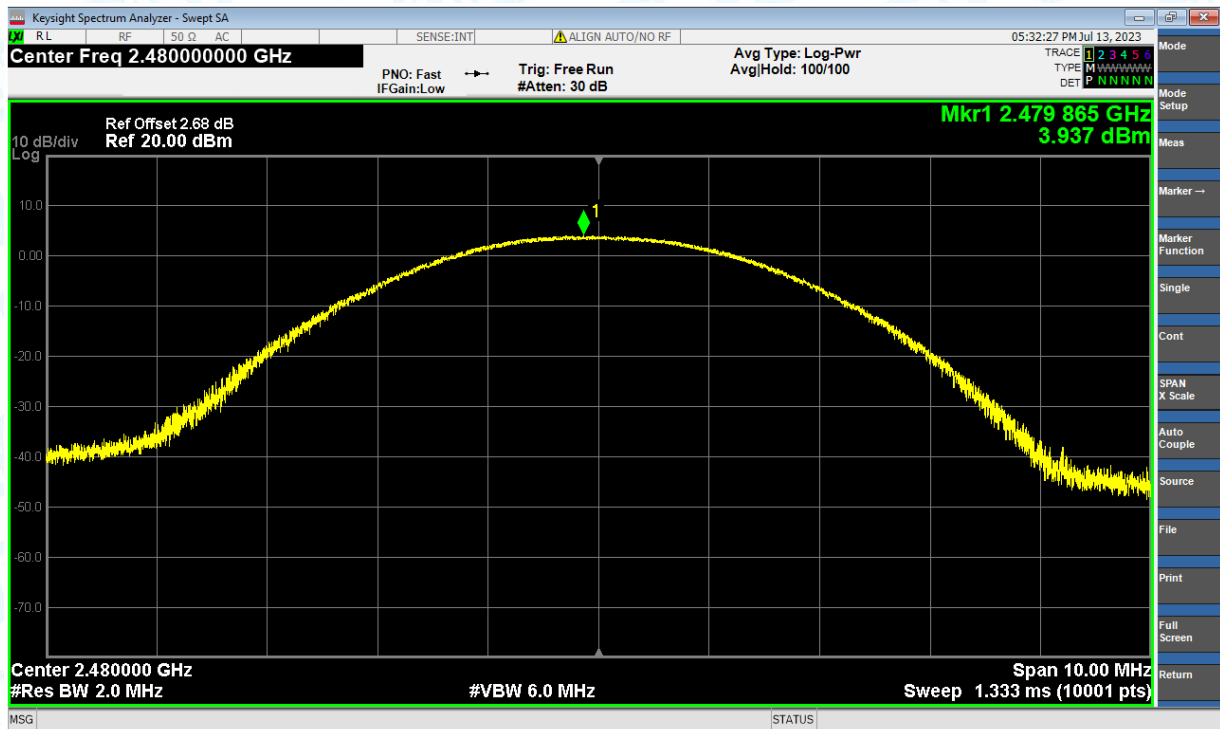
Power NVNT 2-DH1 2402MHz Ant1



Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1

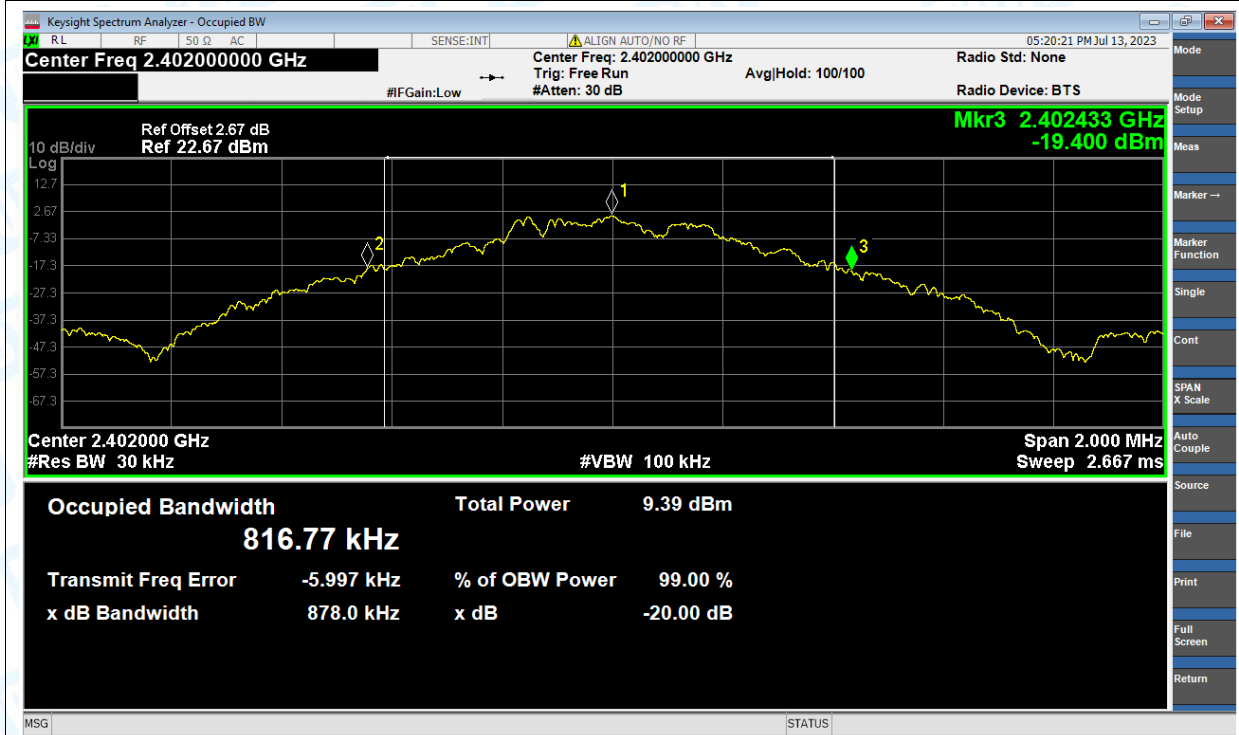


3. -20dB Bandwidth

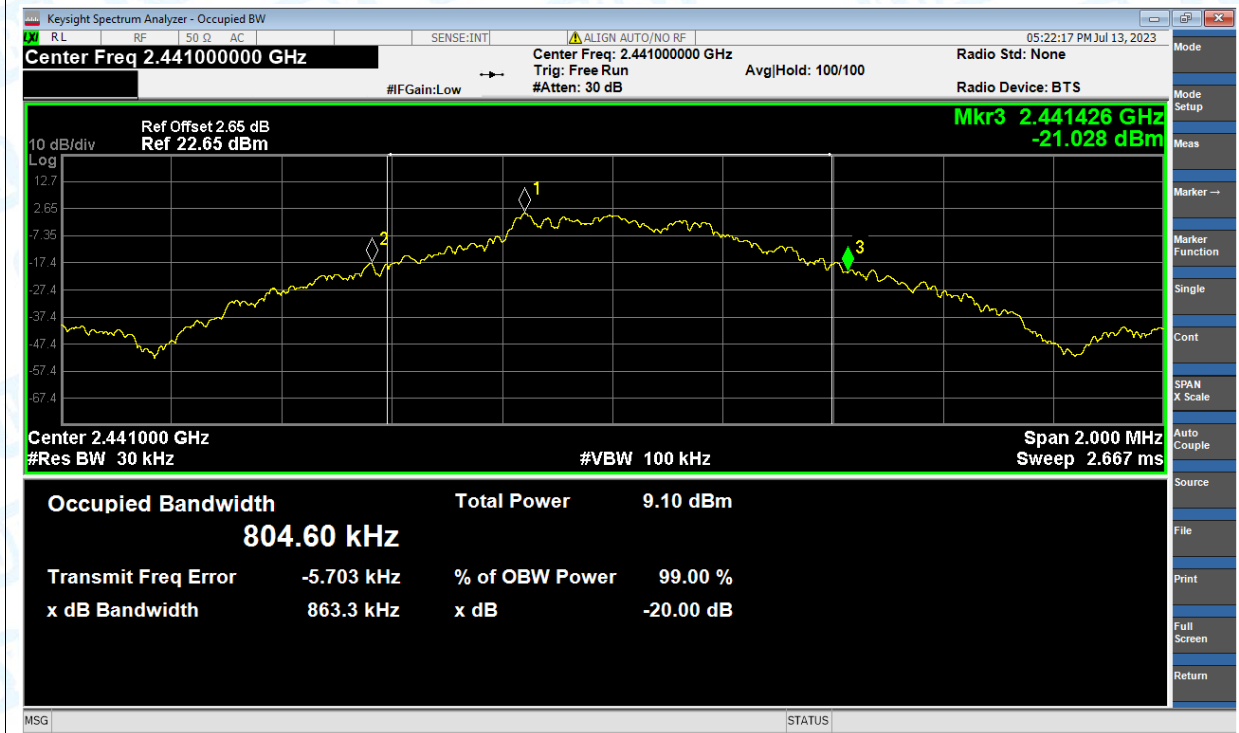
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.88	0	Pass
NVNT	1-DH1	2441	Ant1	0.86	0	Pass
NVNT	1-DH1	2480	Ant1	0.88	0	Pass
NVNT	2-DH1	2402	Ant1	1.27	0	Pass
NVNT	2-DH1	2441	Ant1	1.27	0	Pass
NVNT	2-DH1	2480	Ant1	1.24	0	Pass

Test Graphs

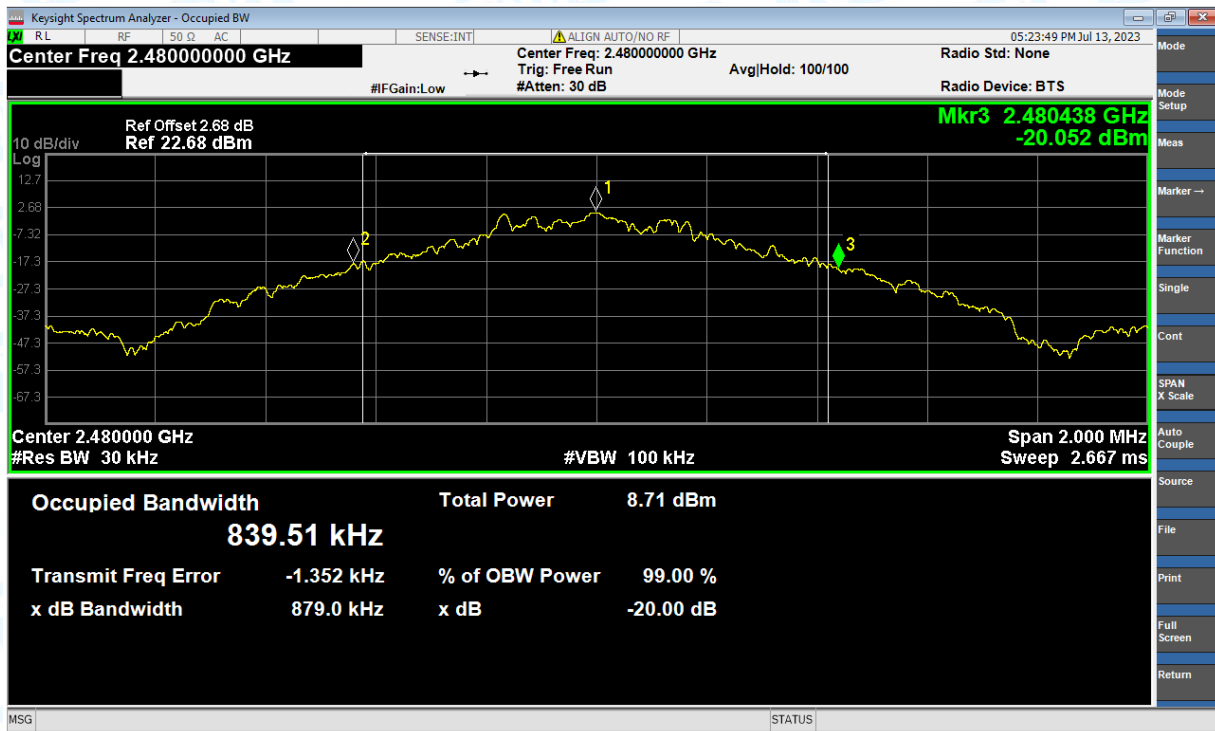
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



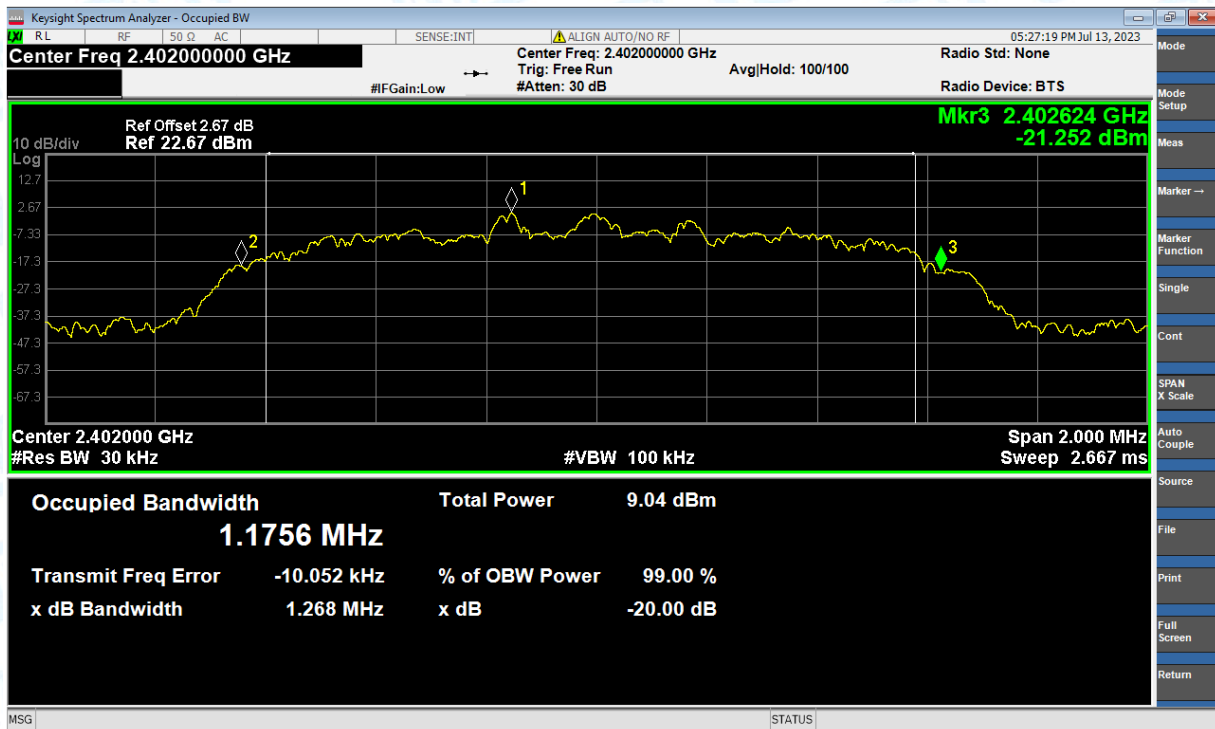
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



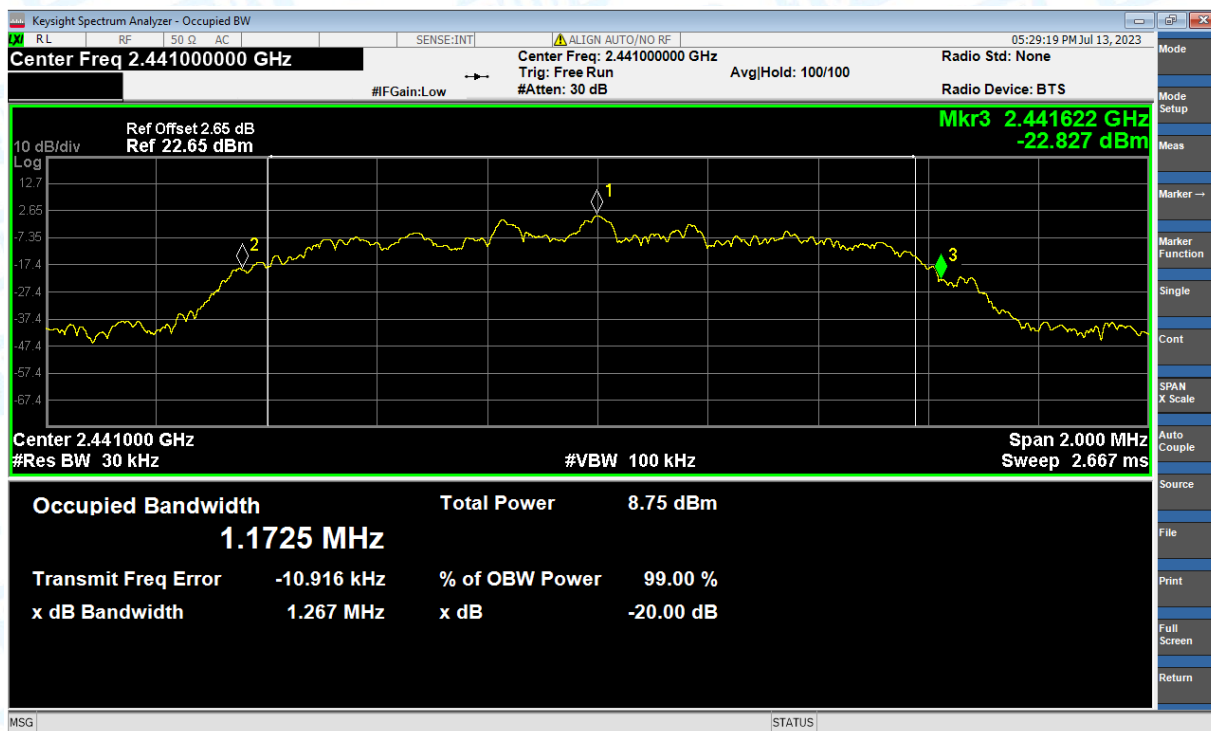
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



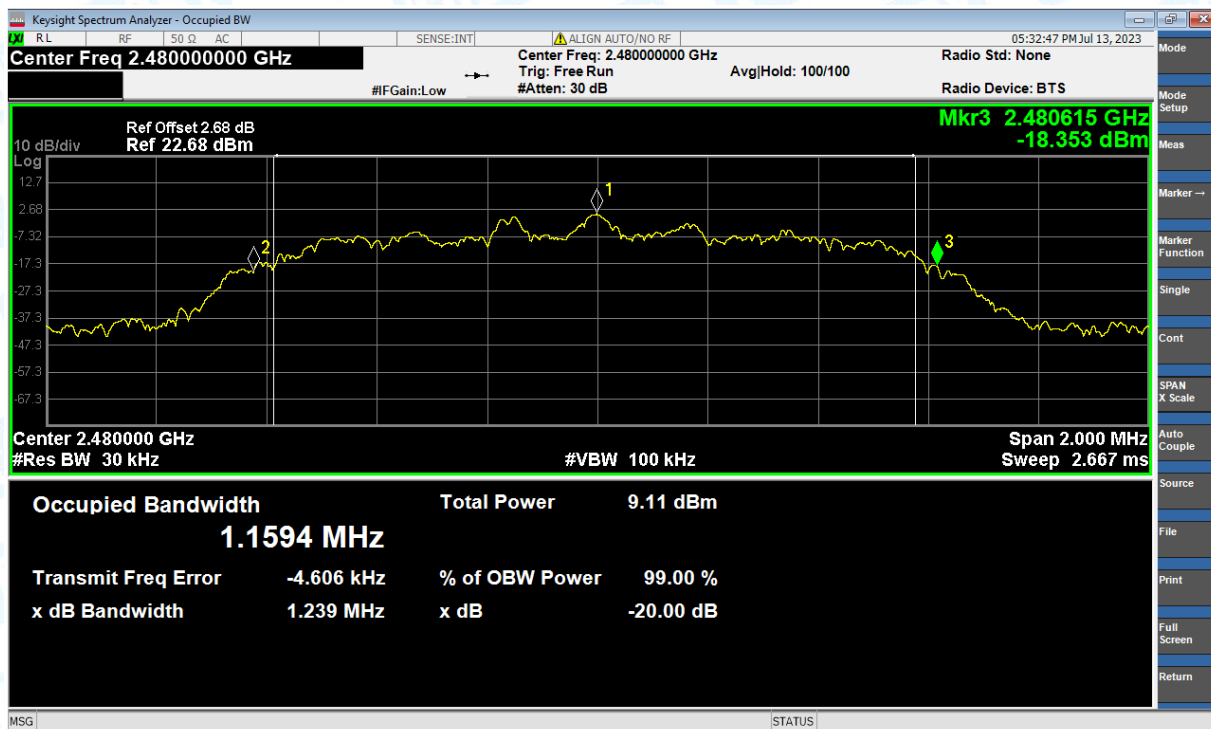
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

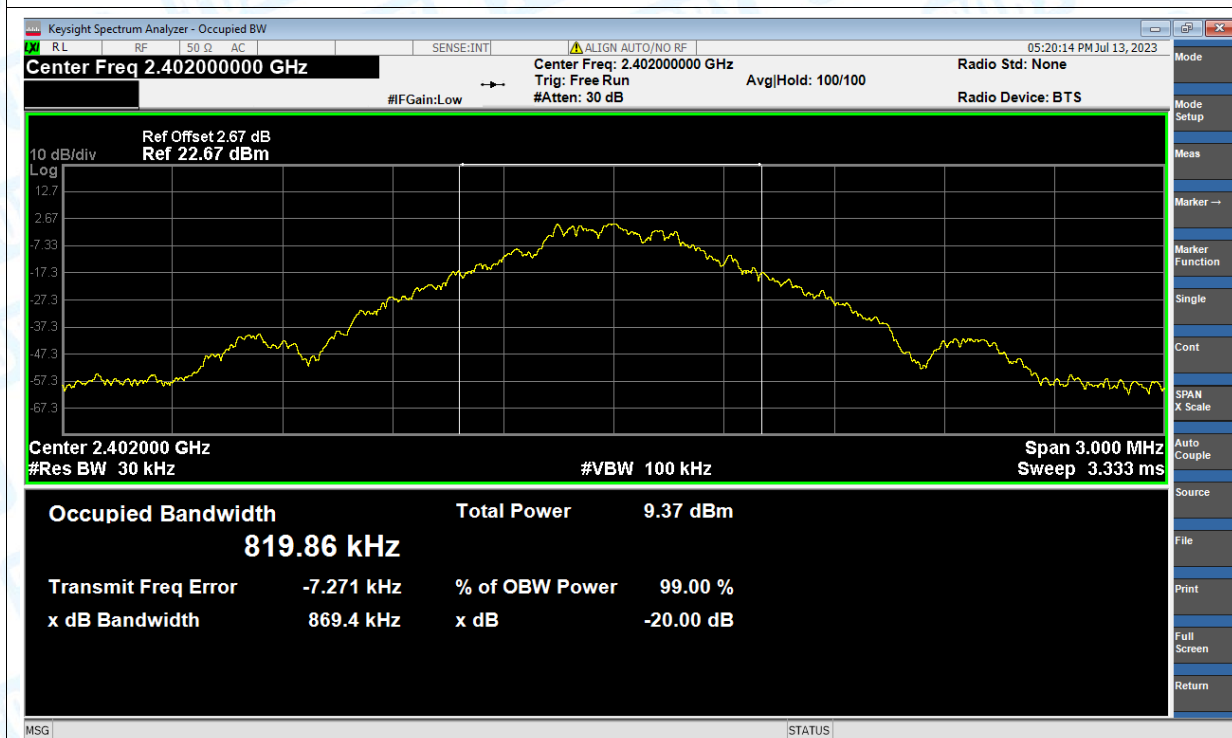


4. Occupied Channel Bandwidth

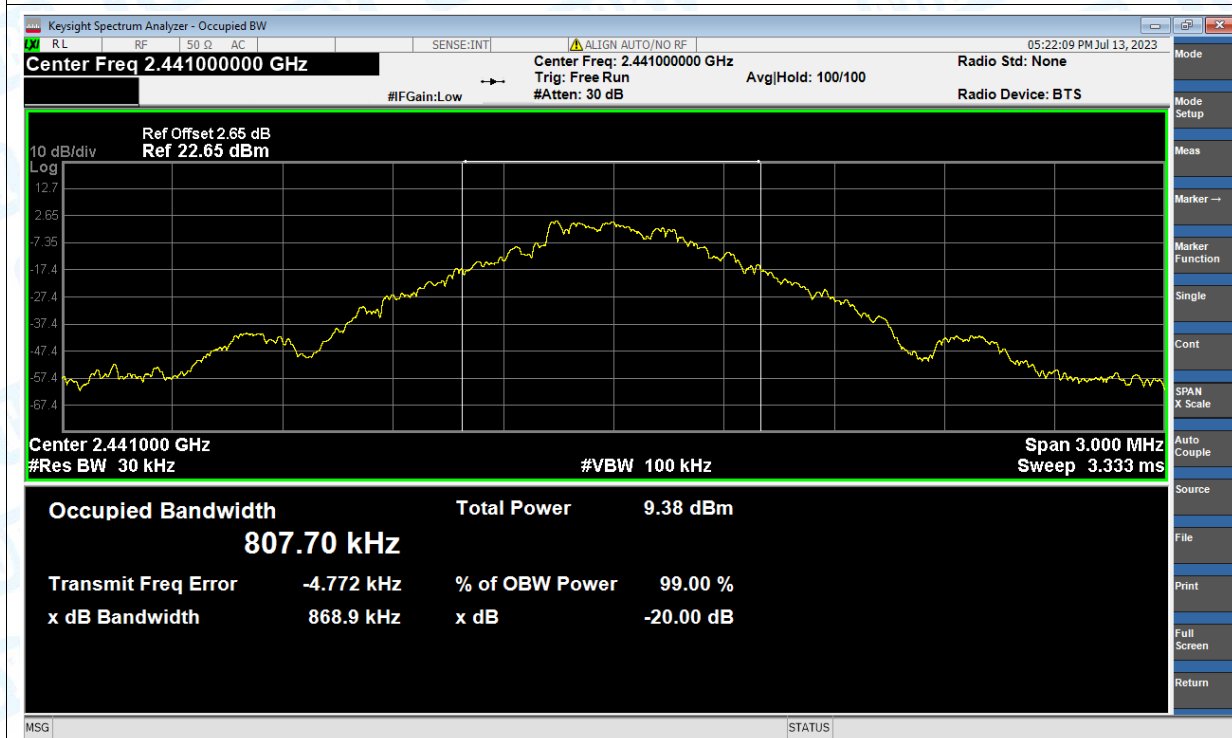
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.82
NVNT	1-DH1	2441	Ant1	0.808
NVNT	1-DH1	2480	Ant1	0.821
NVNT	2-DH1	2402	Ant1	1.167
NVNT	2-DH1	2441	Ant1	1.164
NVNT	2-DH1	2480	Ant1	1.171

Test Graphs

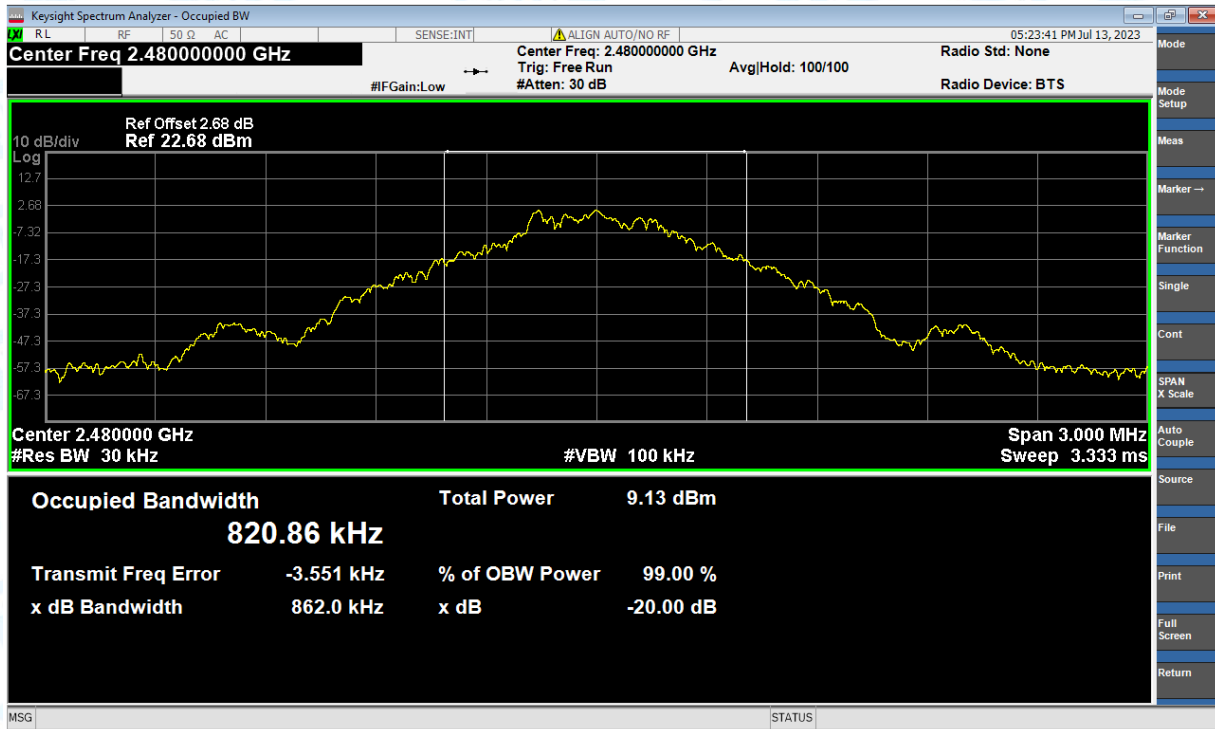
OBW NVNT 1-DH1 2402MHz Ant1



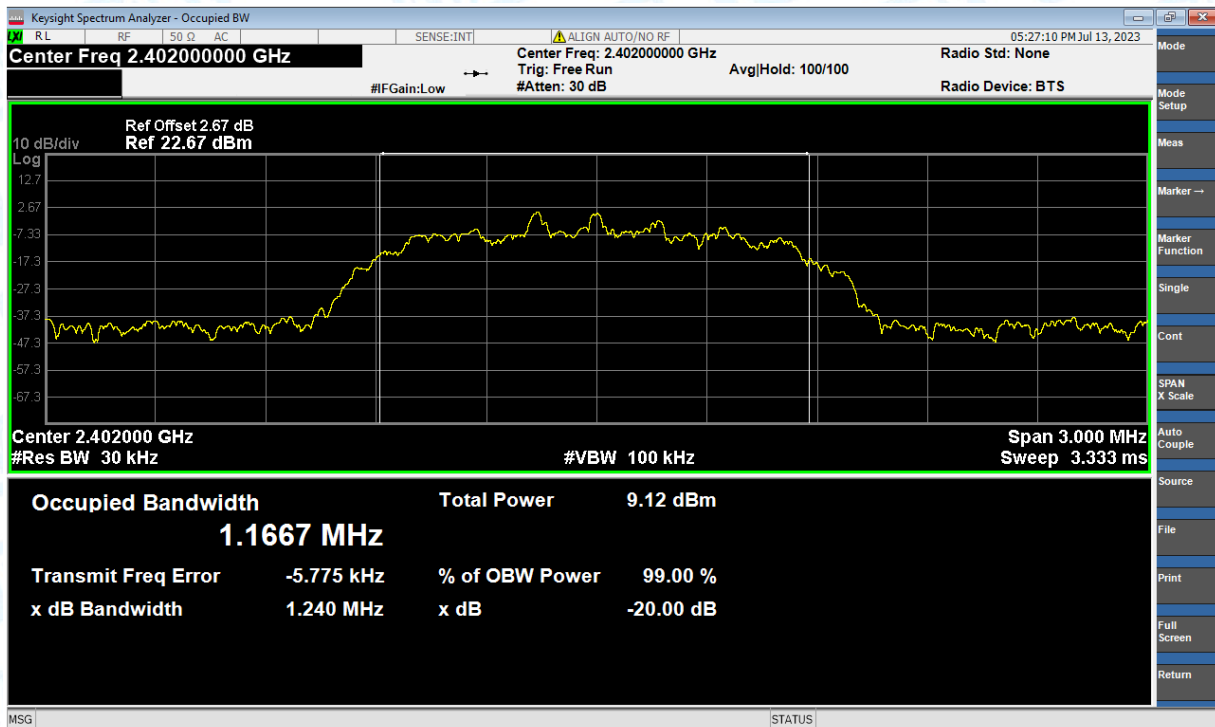
OBW NVNT 1-DH1 2441MHz Ant1



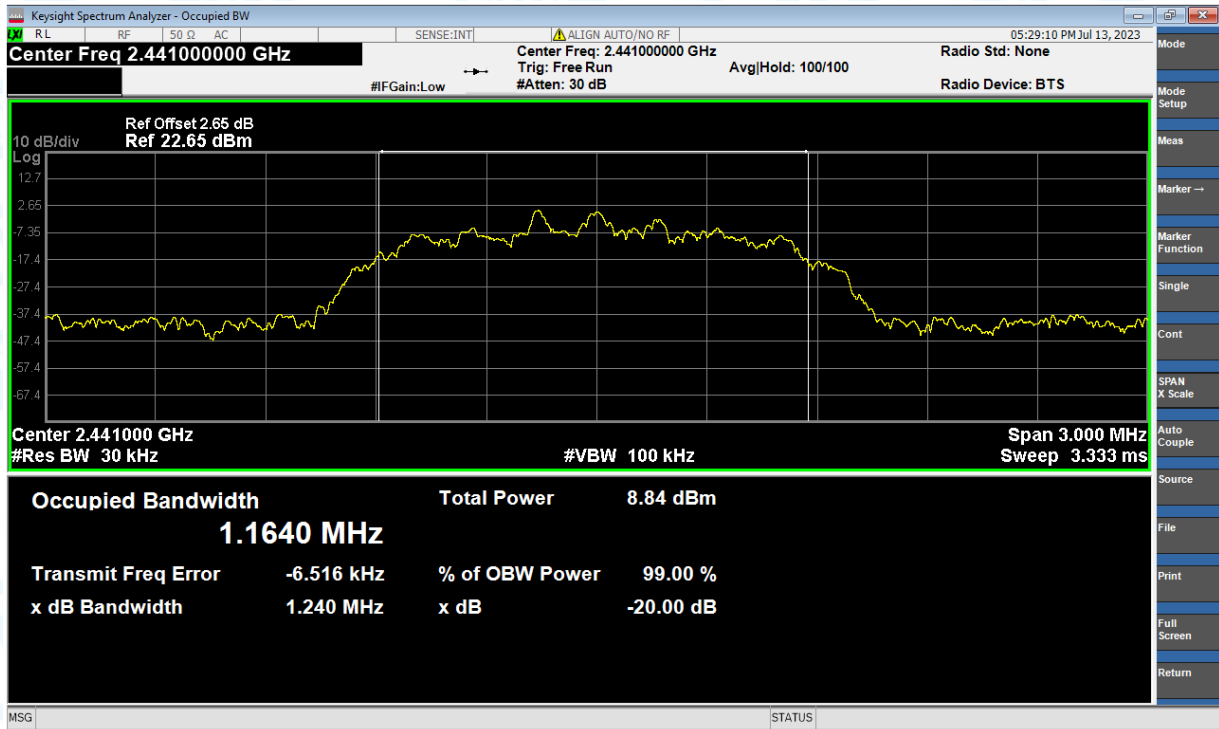
OBW NVNT 1-DH1 2480MHz Ant1



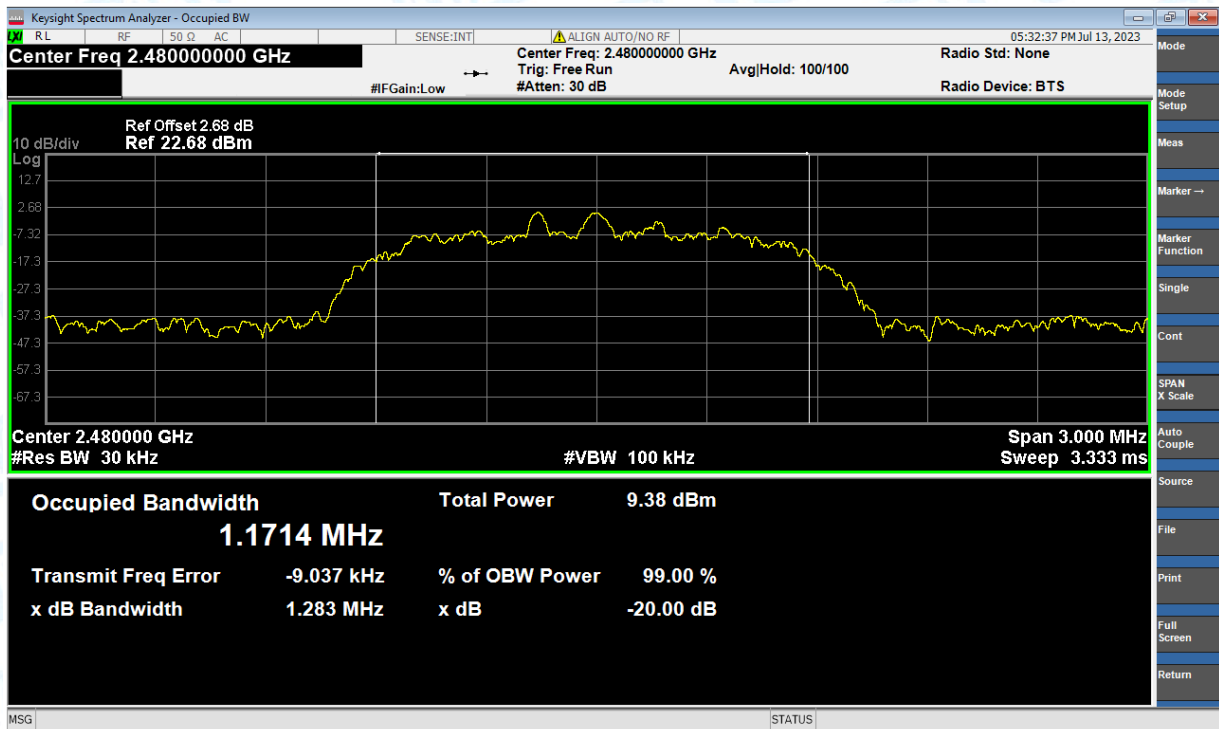
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

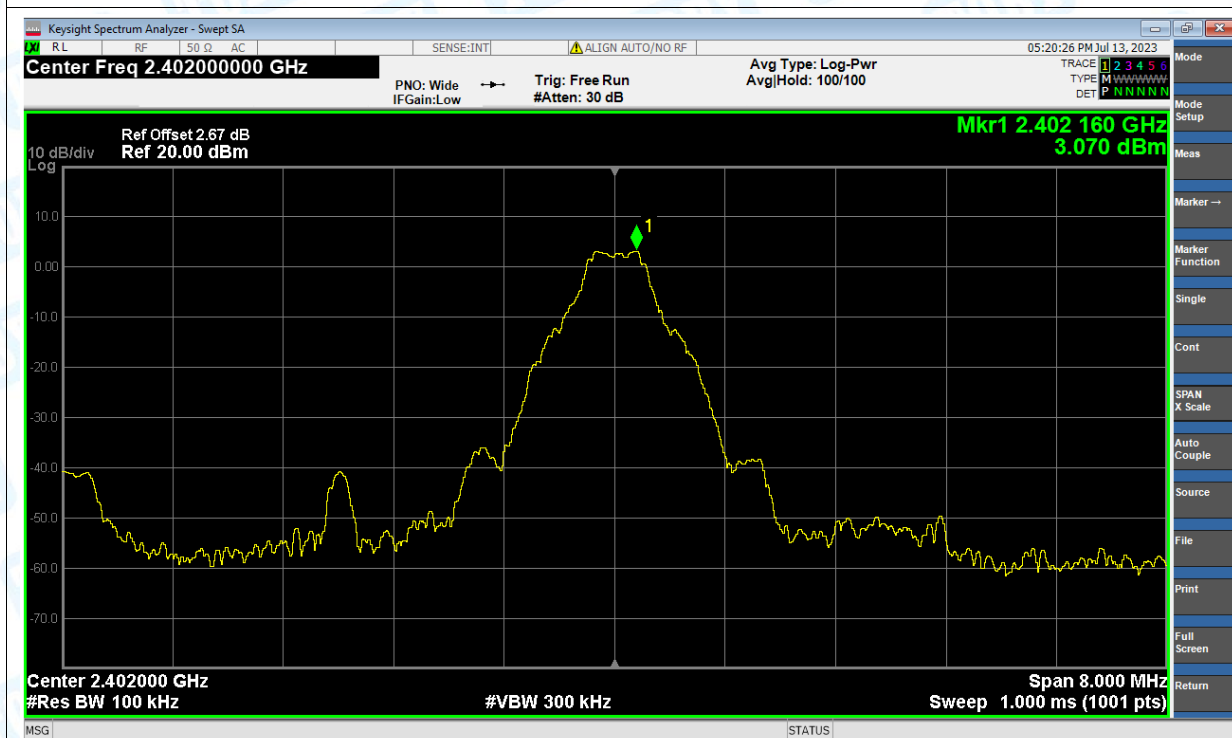


5. Band Edge

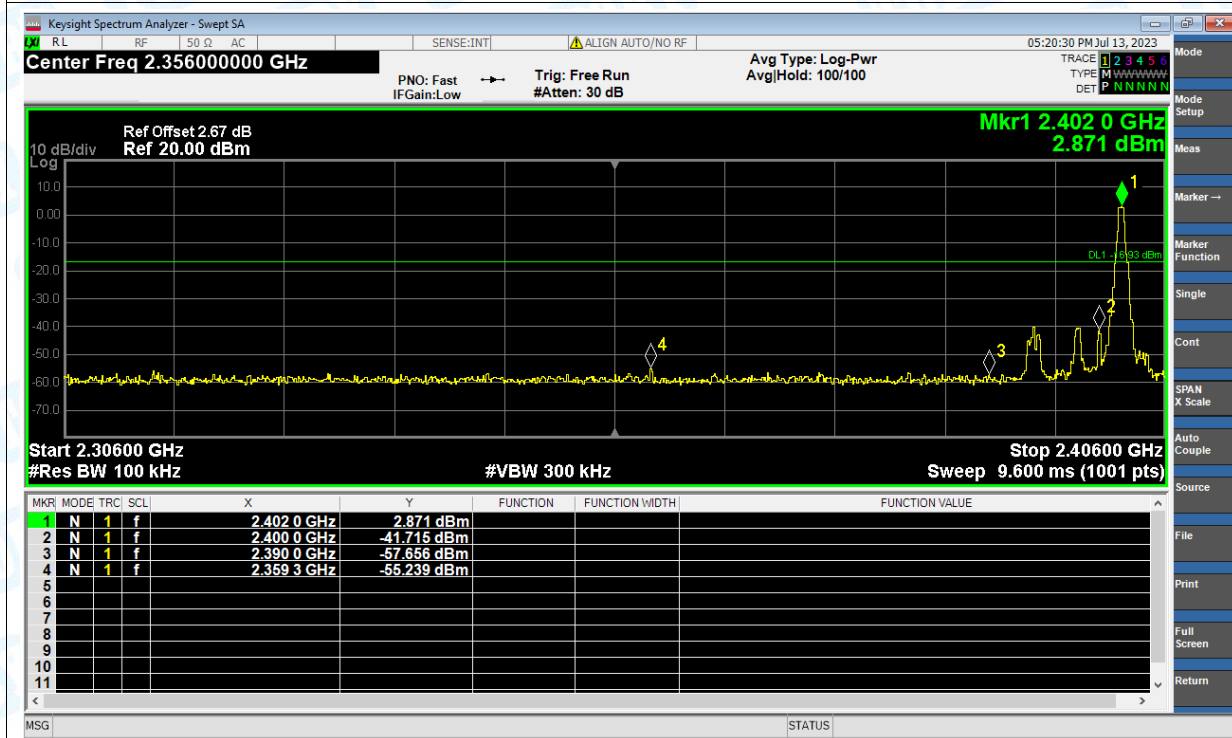
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-58.31	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-54.29	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-59.03	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-56.04	-20	Pass

Test Graphs

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



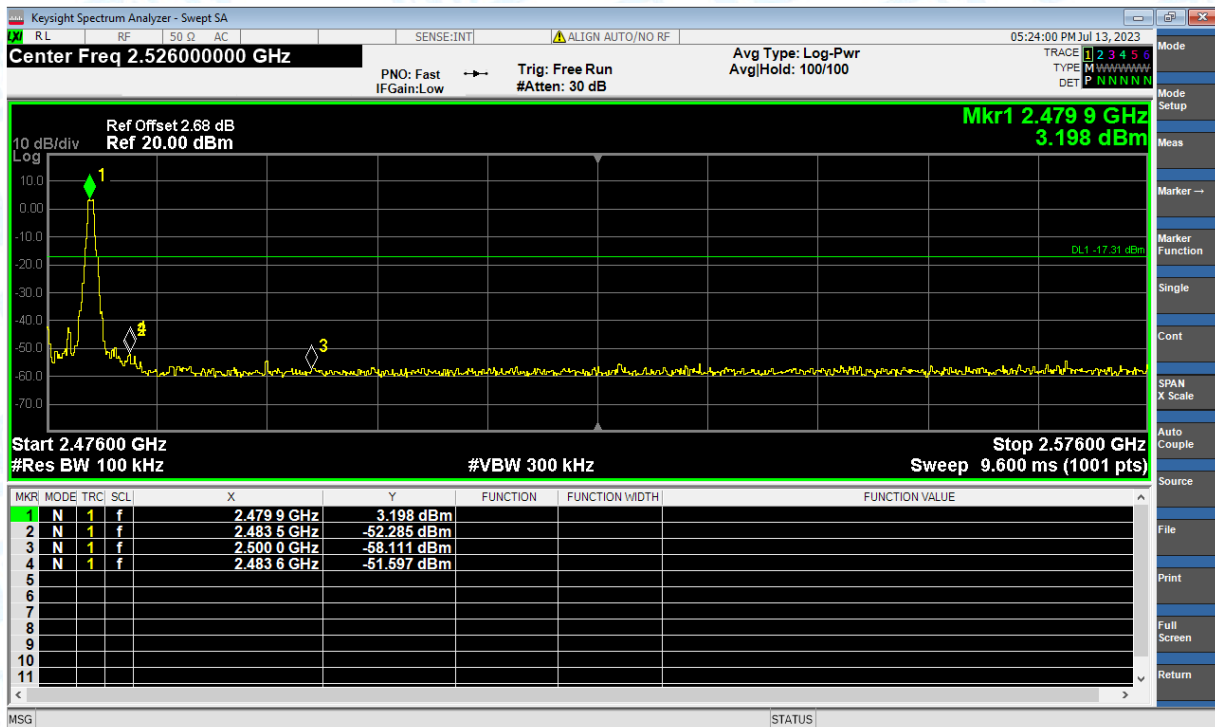
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



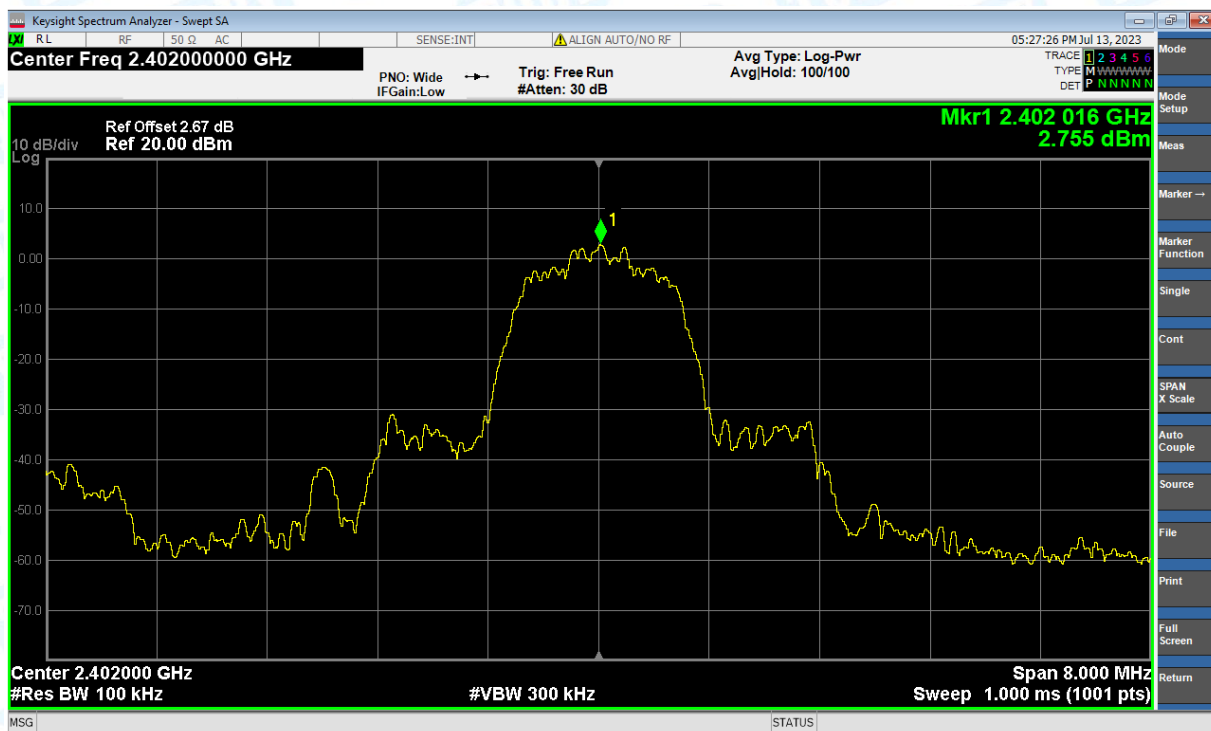
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



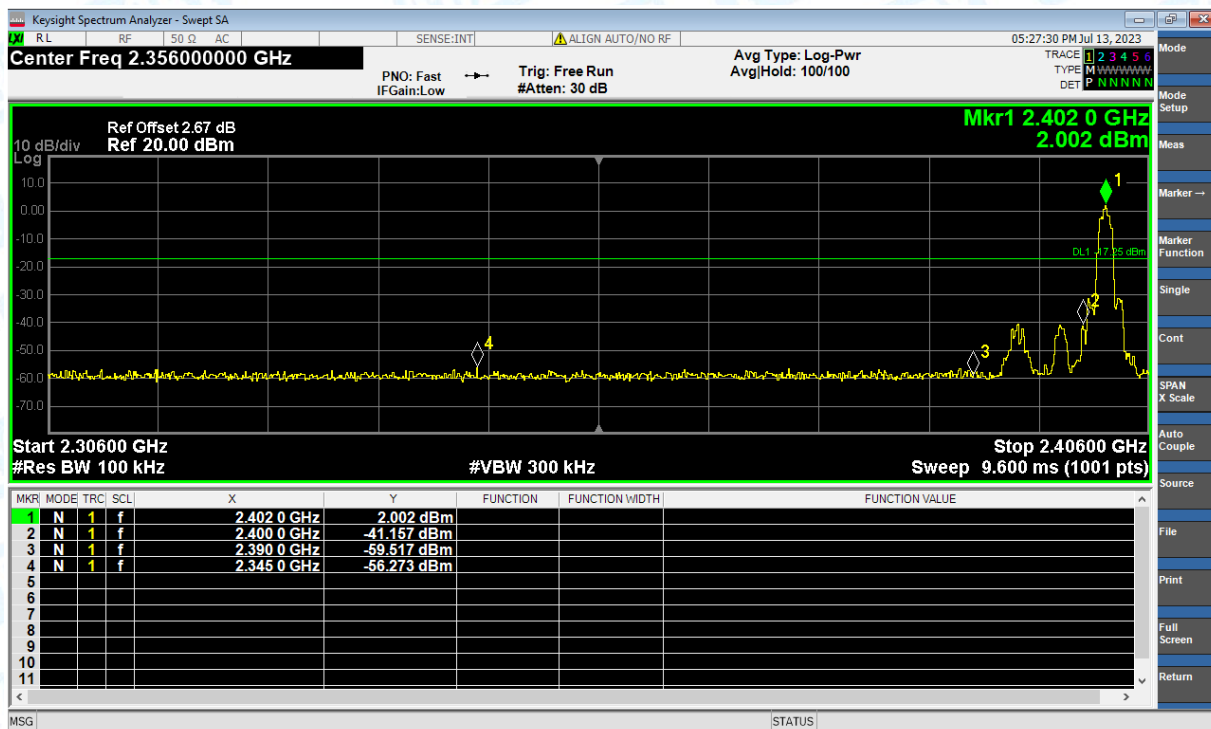
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



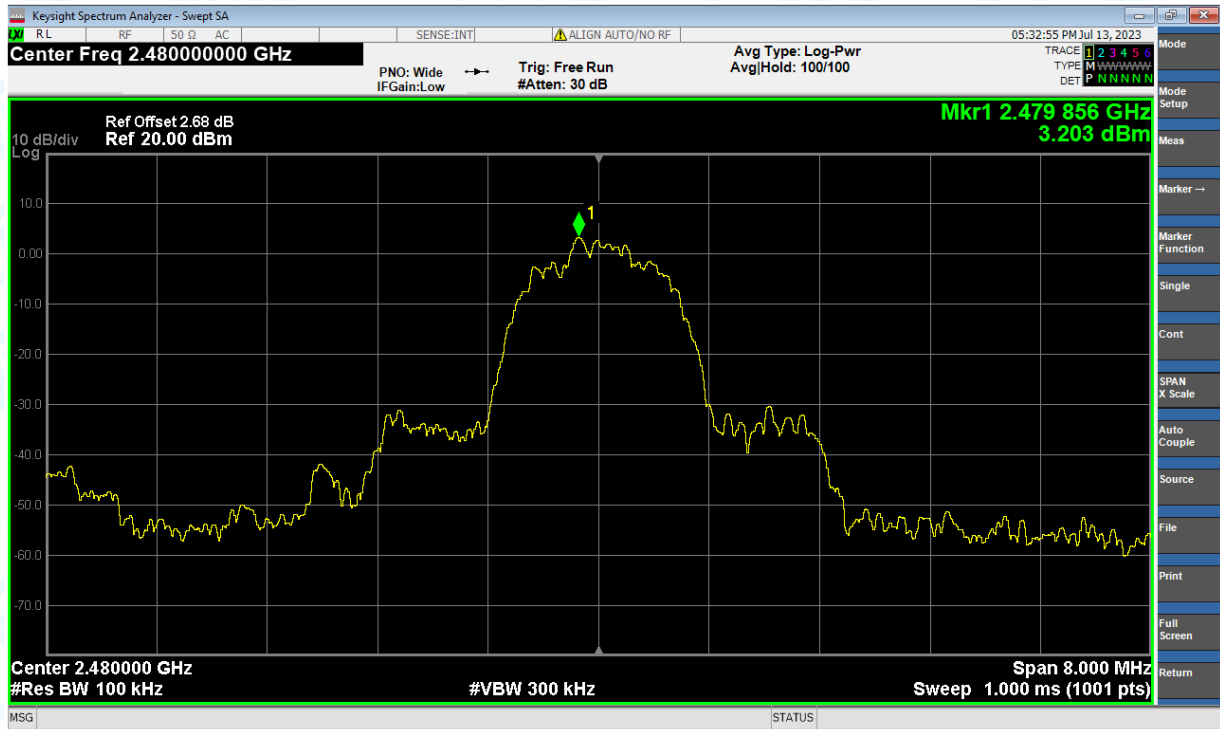
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



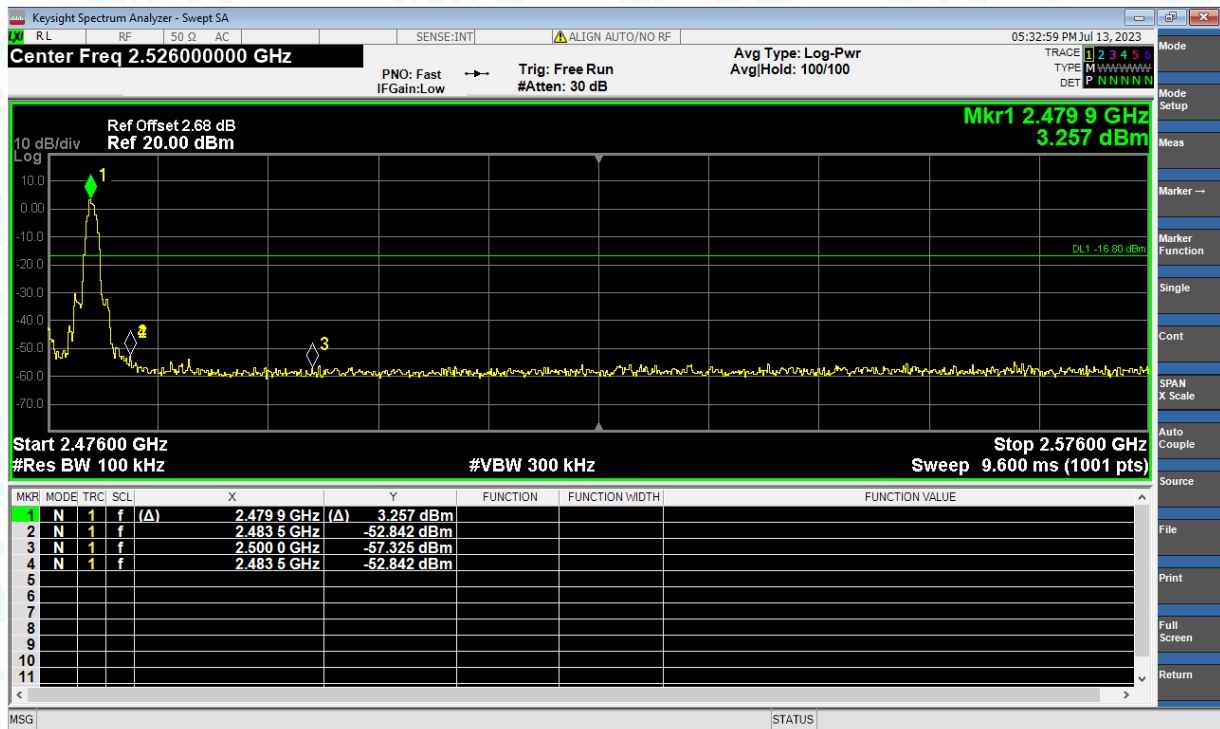
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



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



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



6. Band Edge(Hopping)

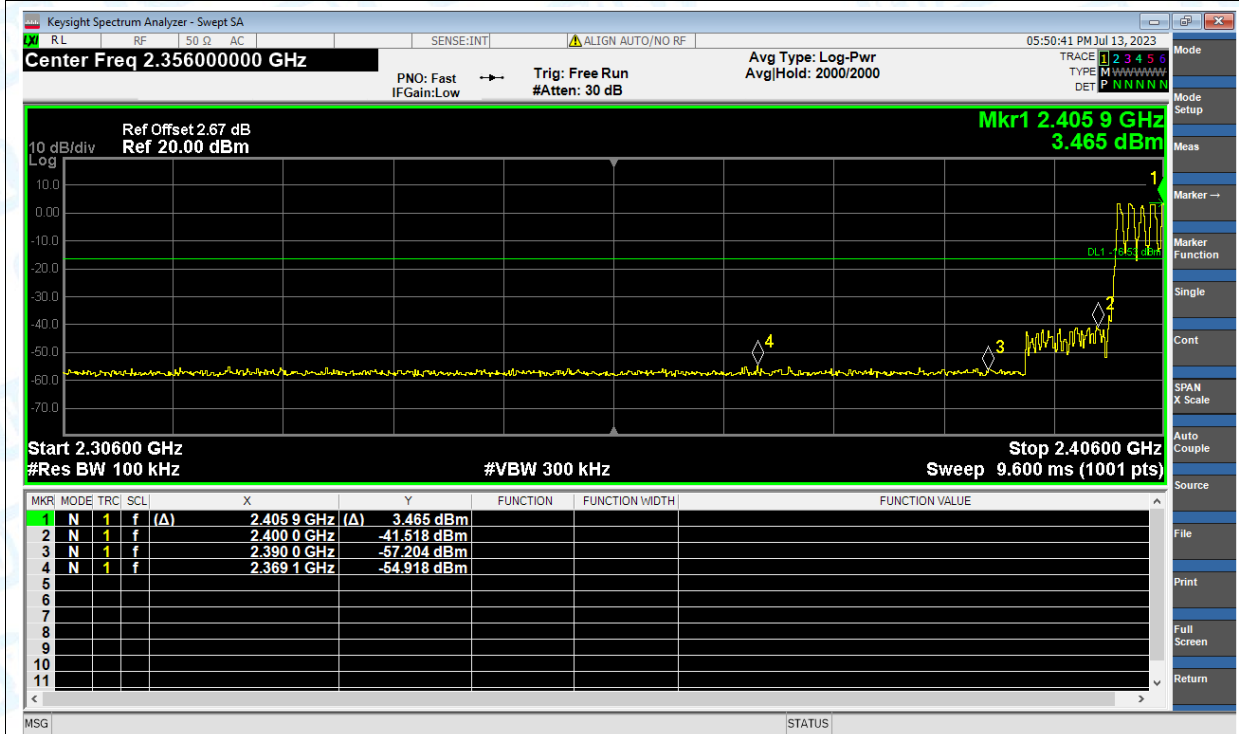
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-58.39	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-56.07	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-58.64	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-55.86	-20	Pass

Test Graphs

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



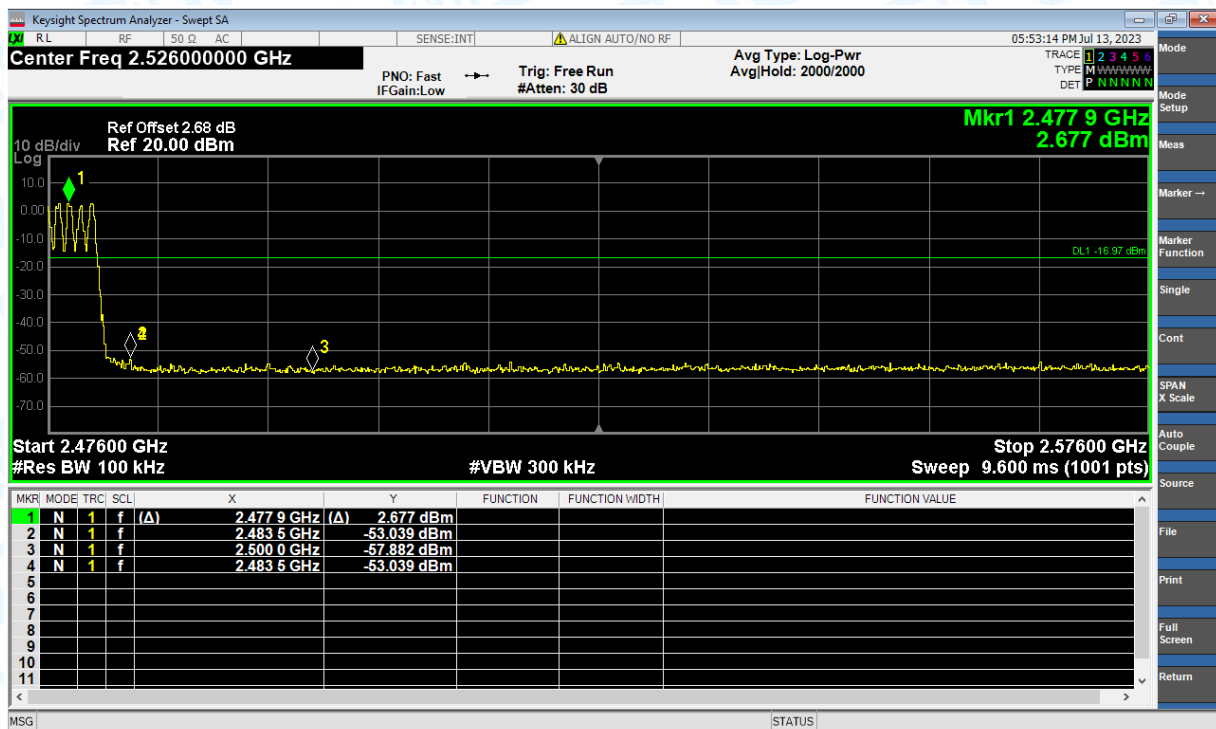
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



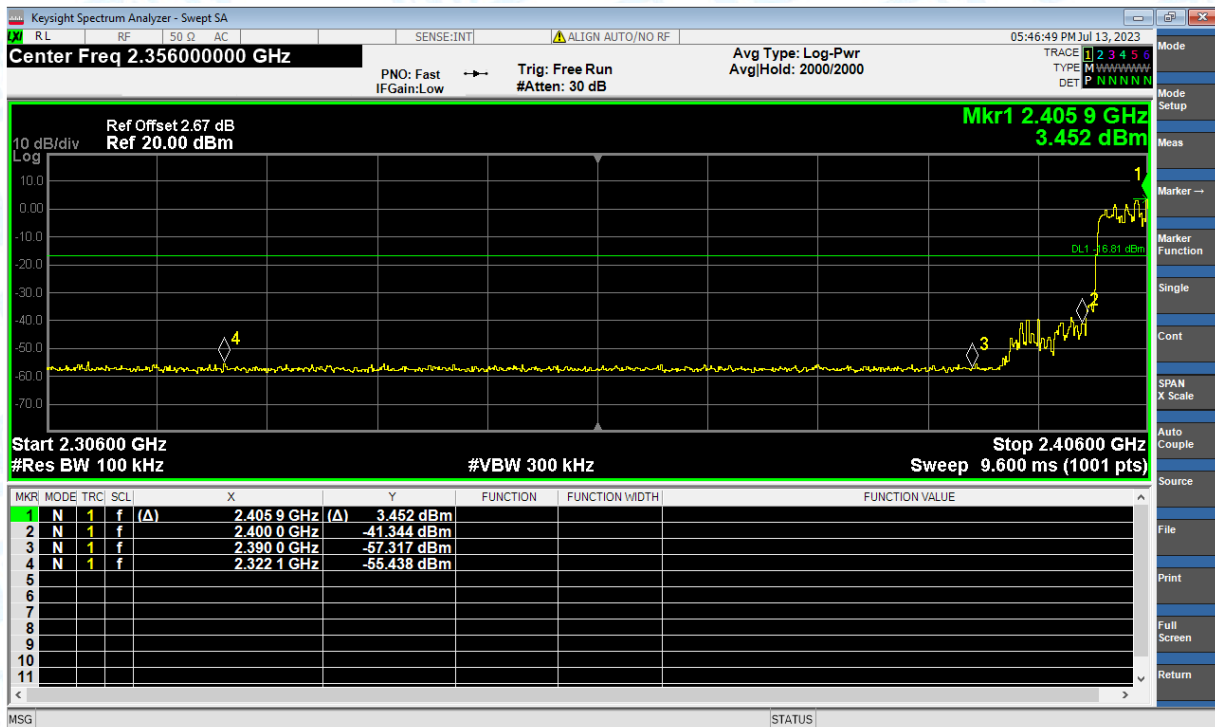
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



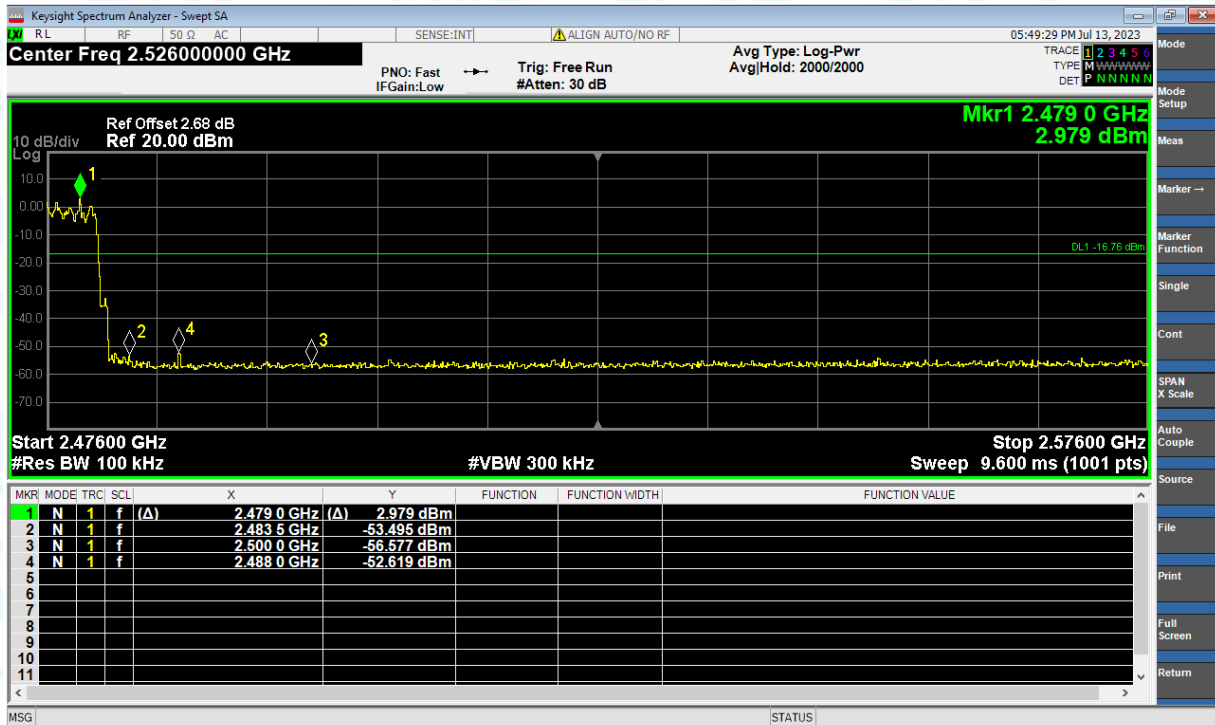
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



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



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

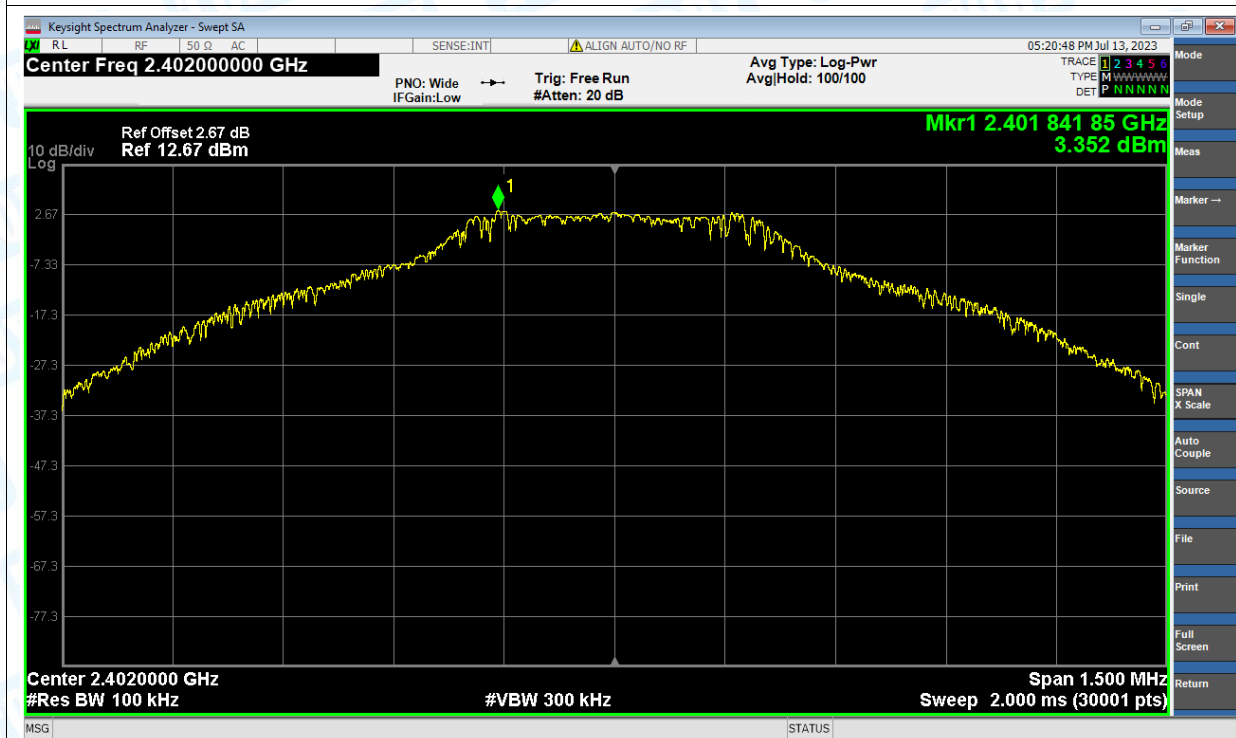


7. Conducted RF Spurious Emission

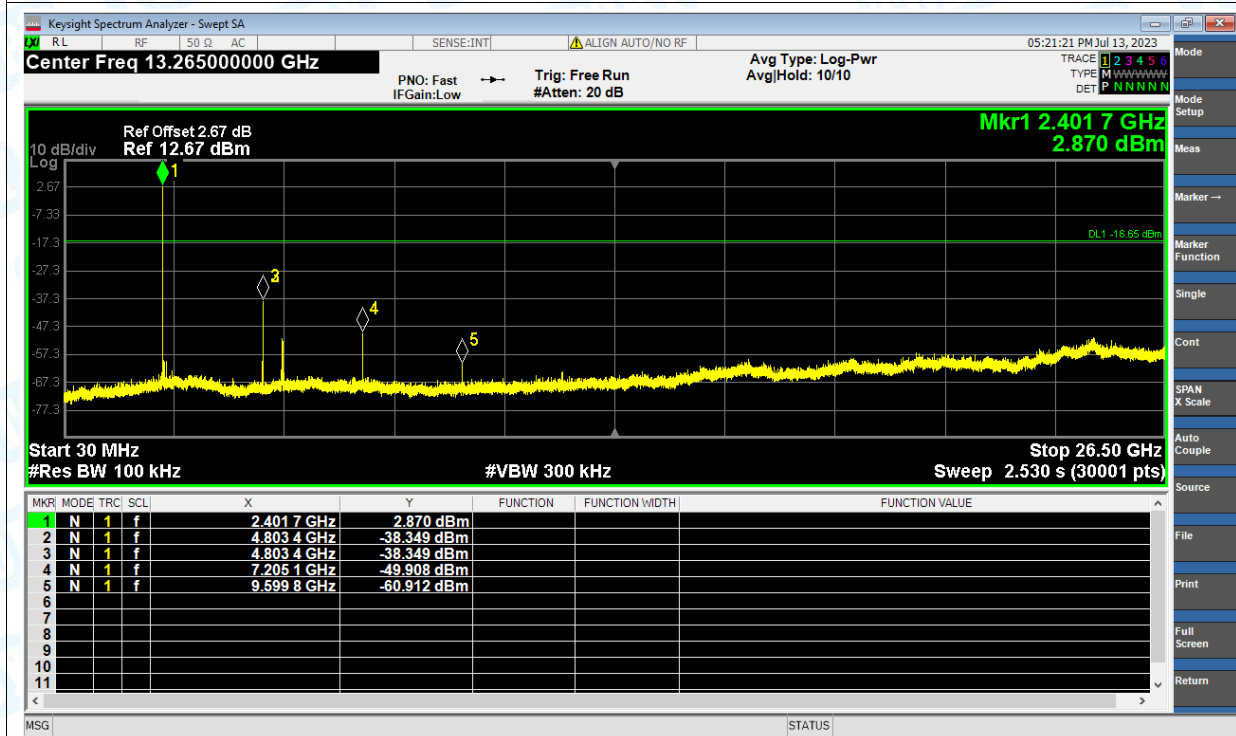
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-41.7	-20	Pass
NVNT	1-DH1	2441	Ant1	-43.74	-20	Pass
NVNT	1-DH1	2480	Ant1	-42.95	-20	Pass
NVNT	2-DH1	2402	Ant1	-46.82	-20	Pass
NVNT	2-DH1	2441	Ant1	-46.07	-20	Pass
NVNT	2-DH1	2480	Ant1	-40.84	-20	Pass

Test Graphs

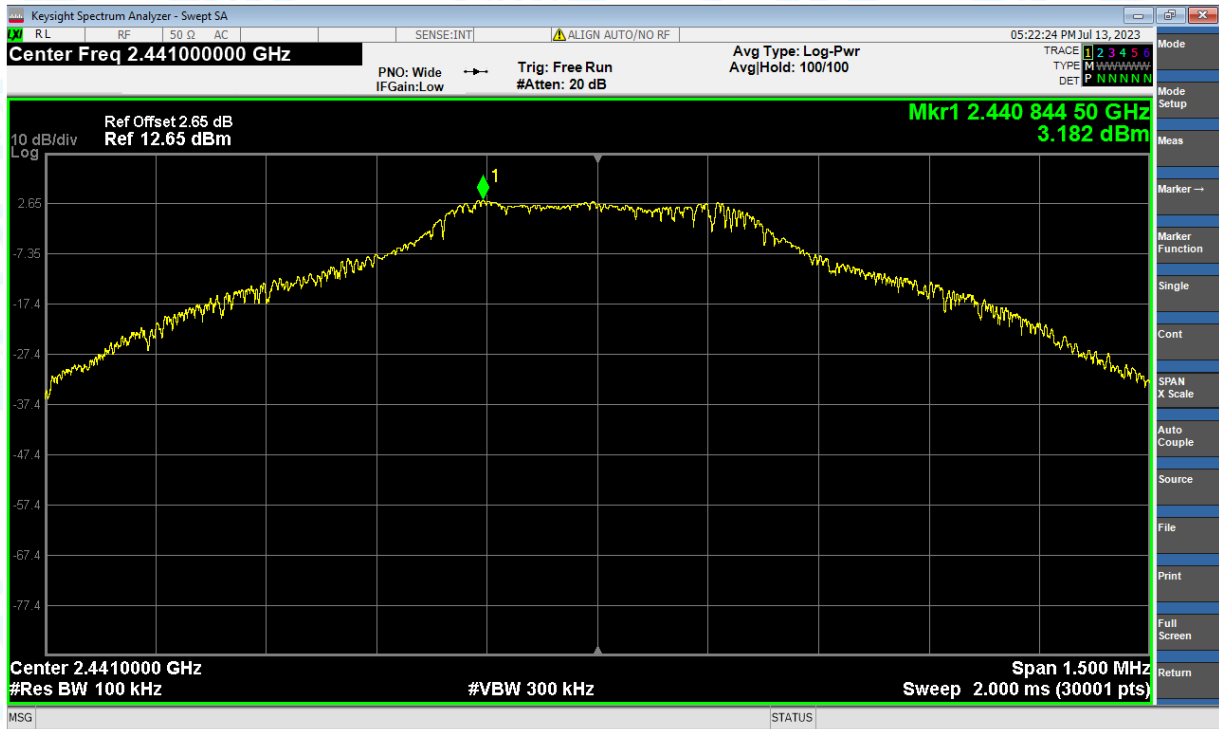
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



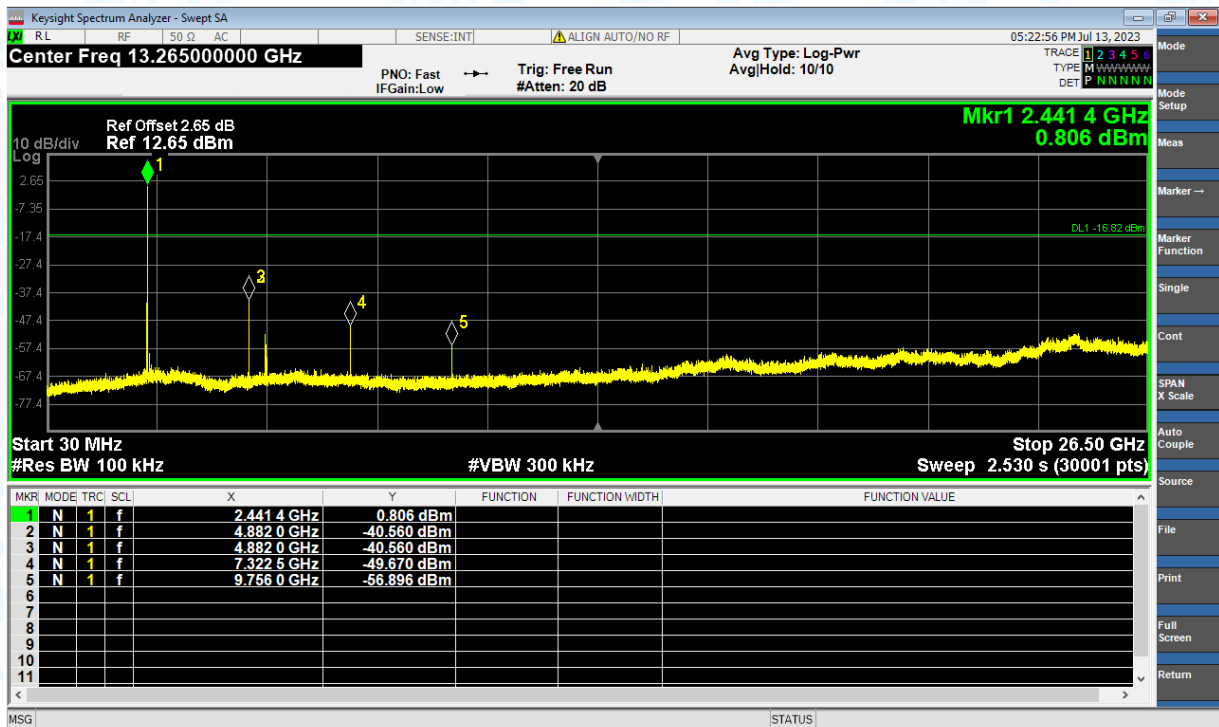
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



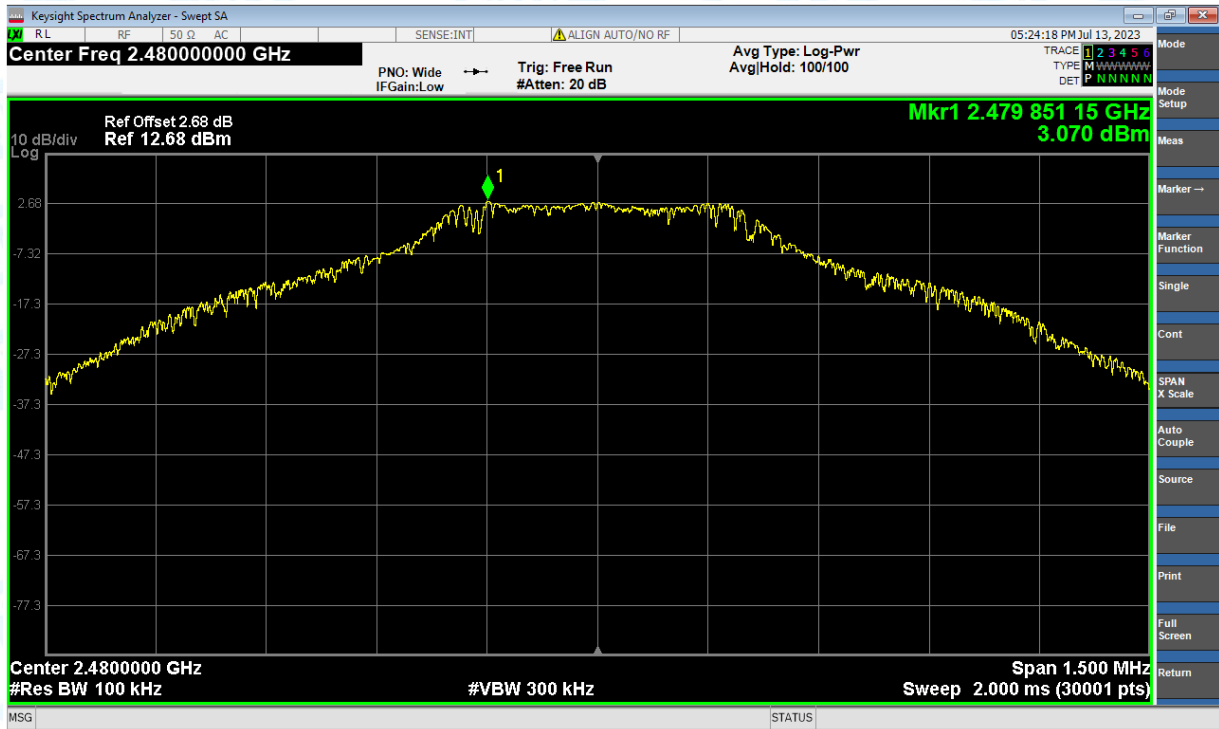
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



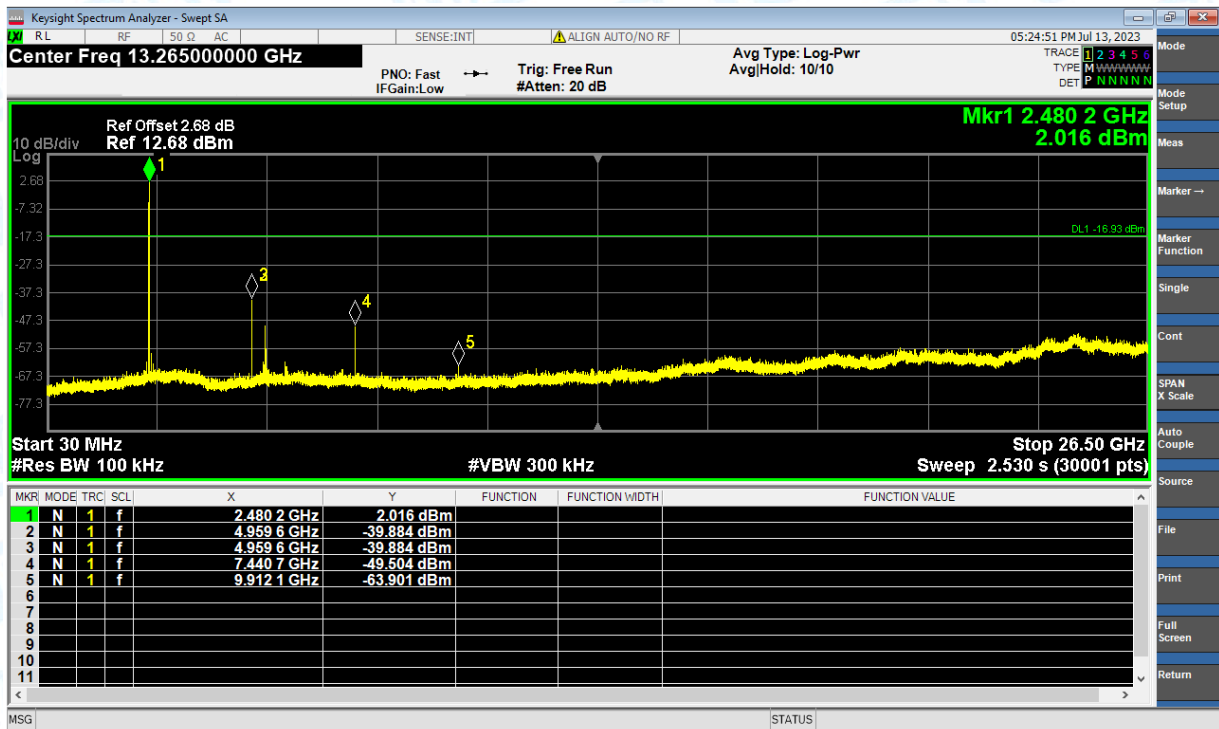
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



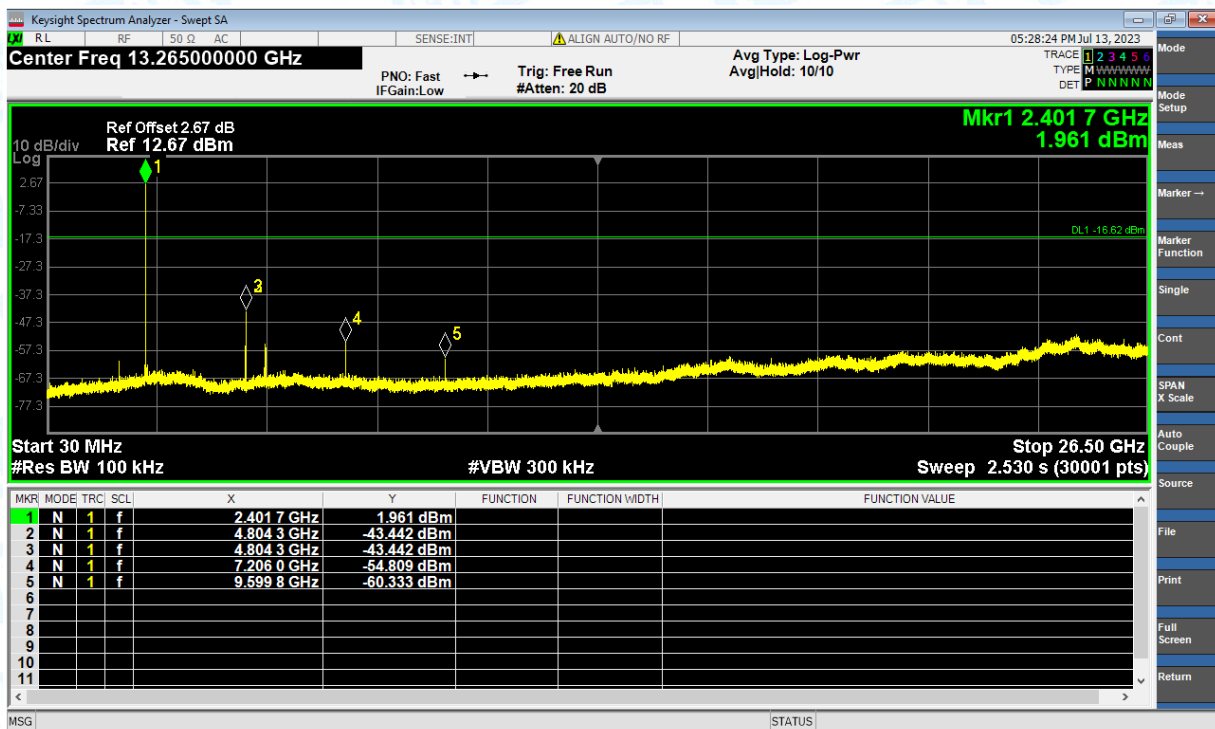
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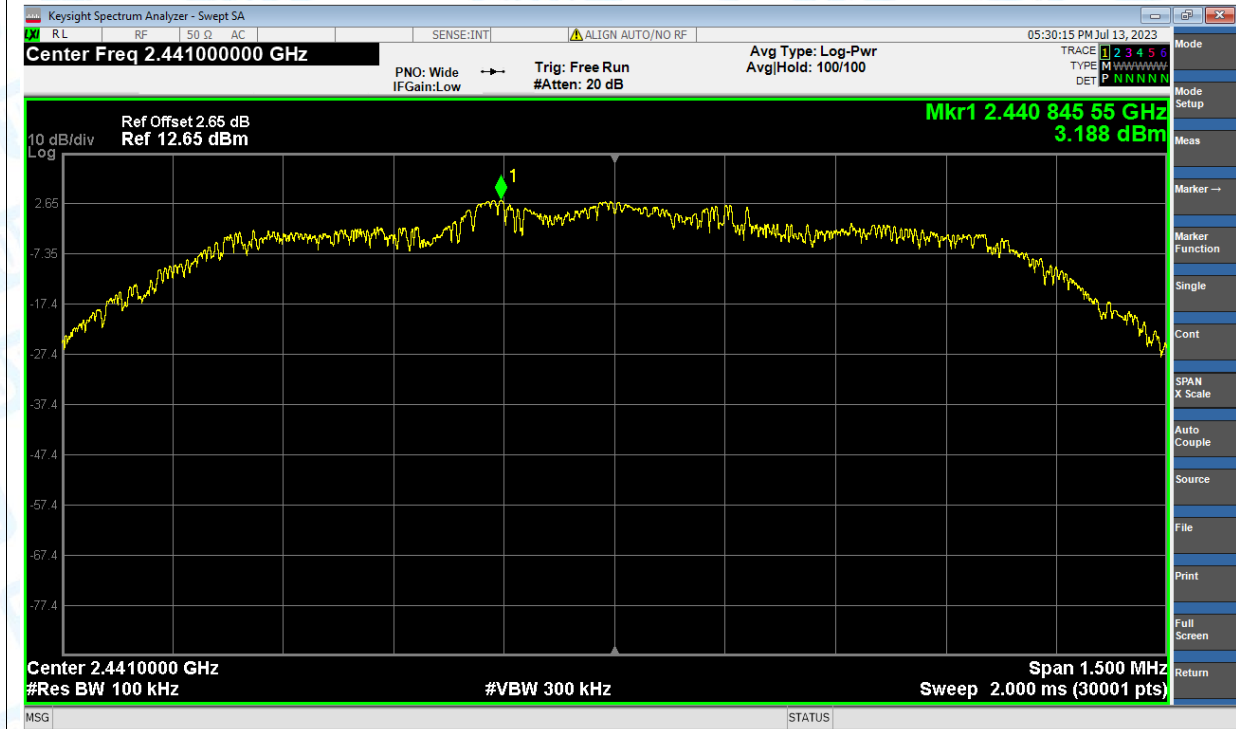
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



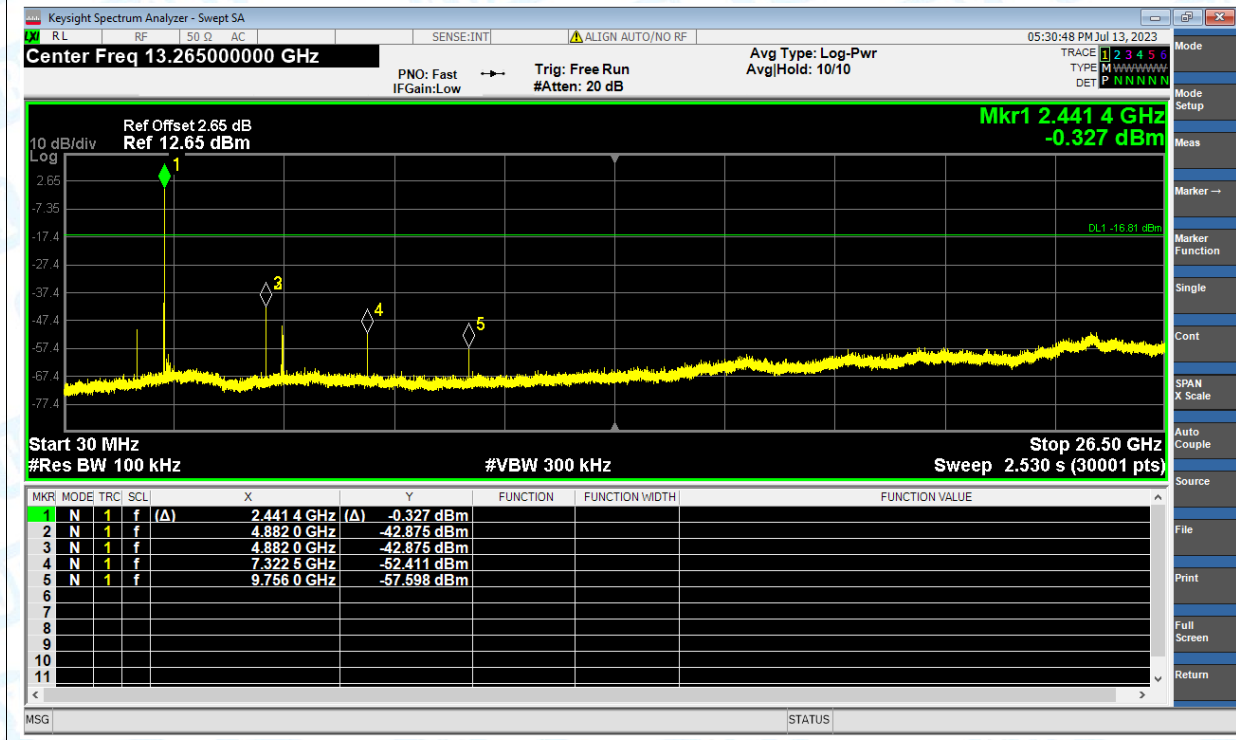
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



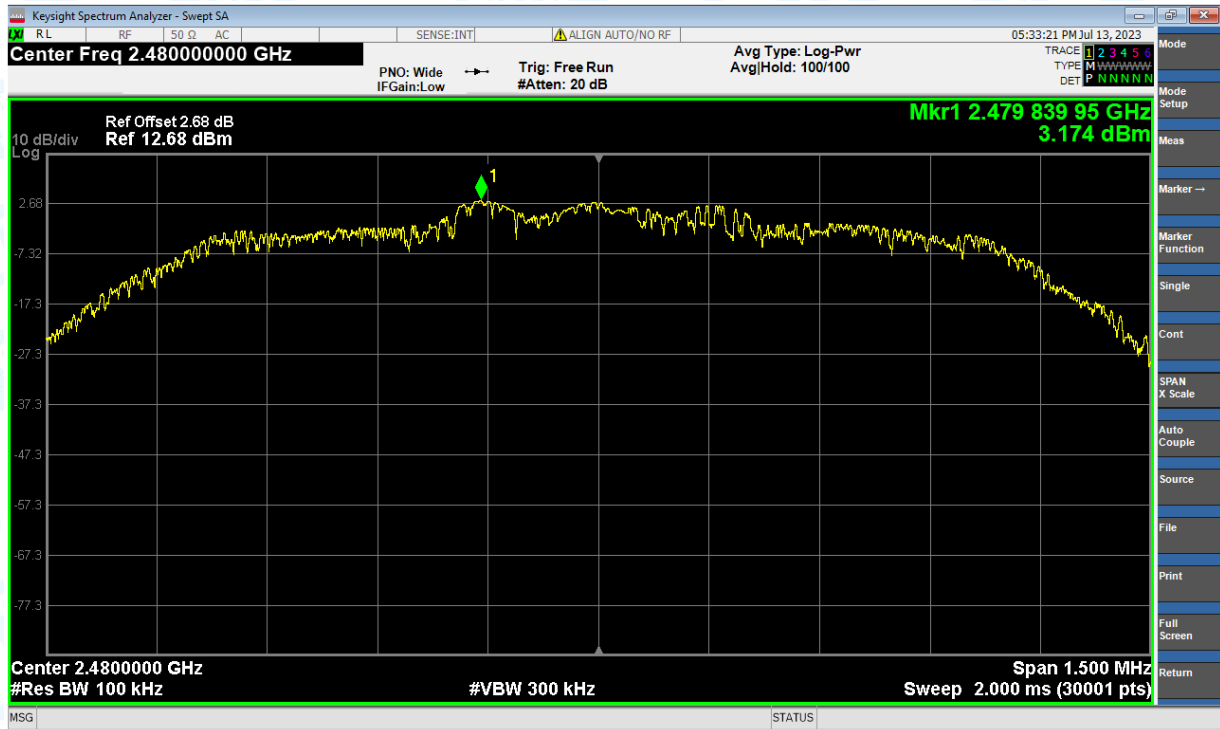
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



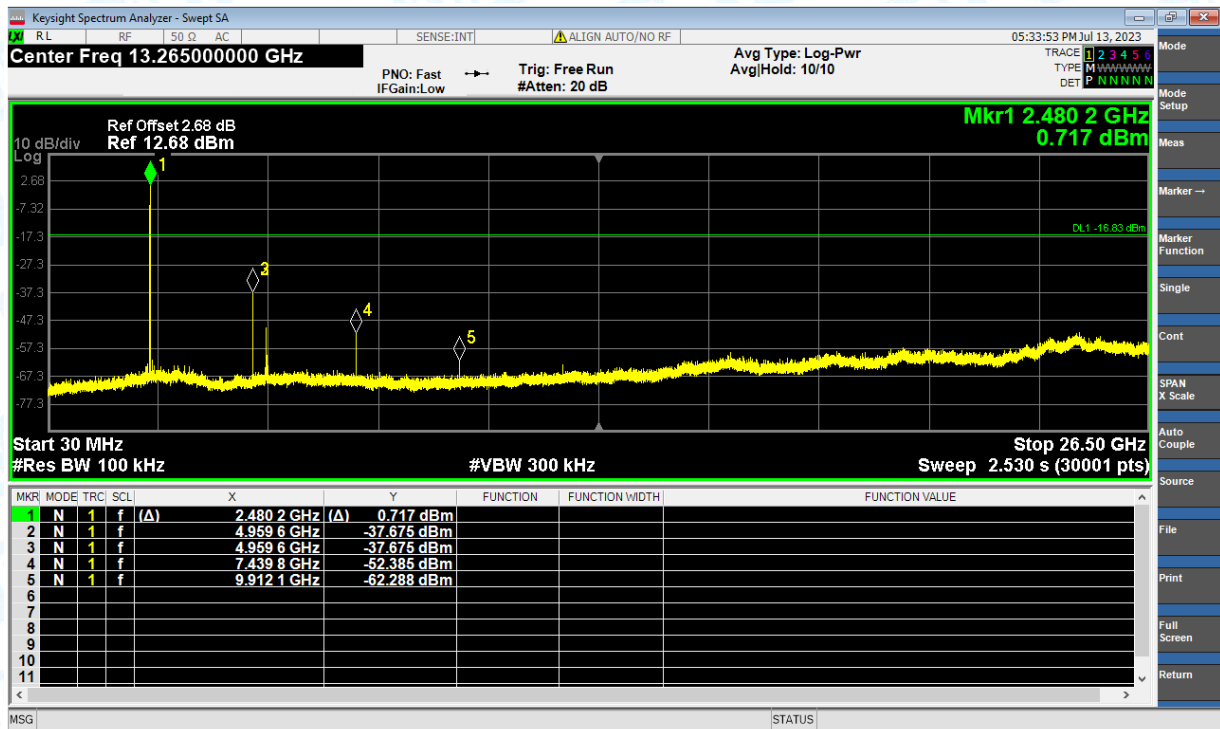
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

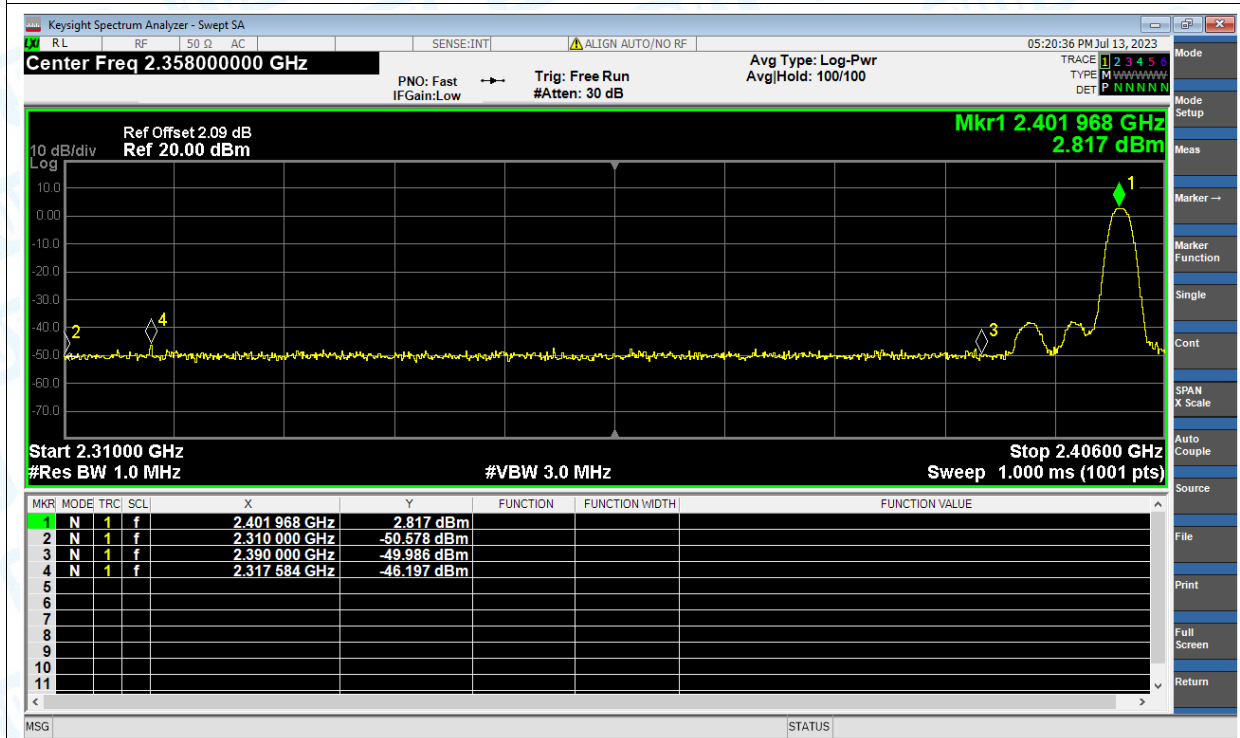


8. Restrict Band

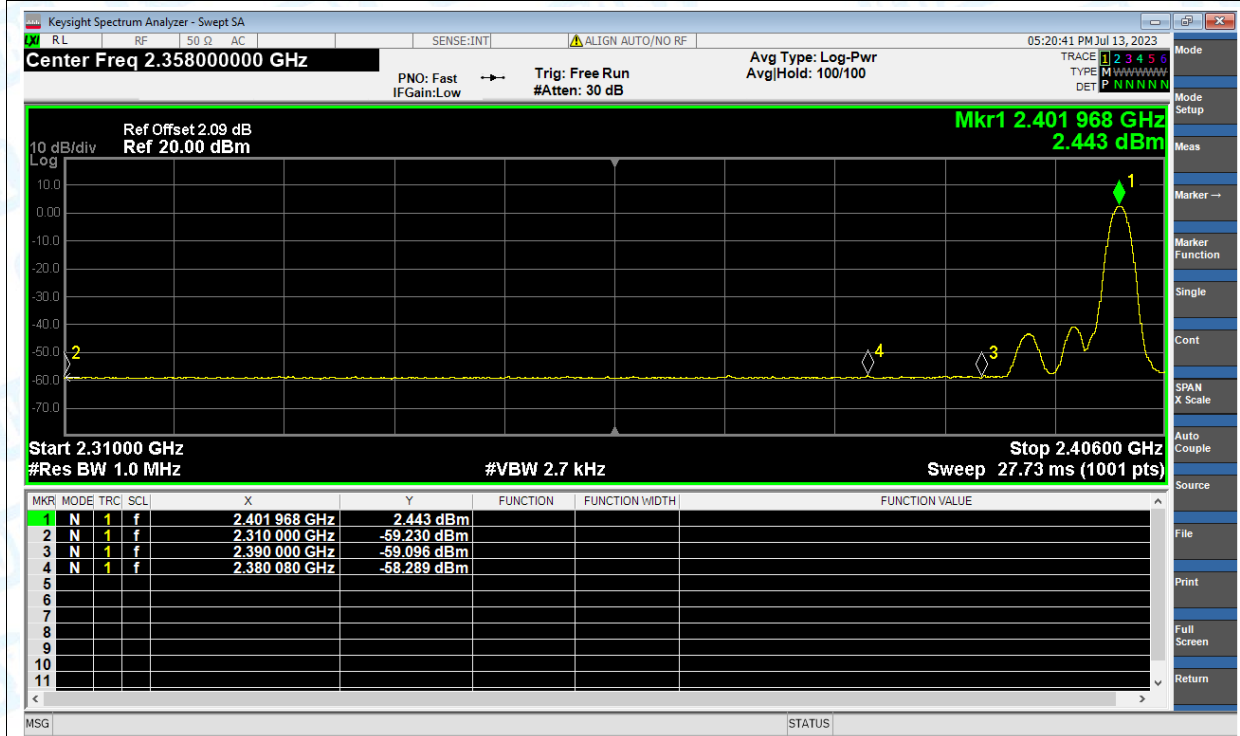
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-50.58	2	46.68	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-59.23	2	38.03	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2317.584	-46.2	2	51.06	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2380.08	-58.29	2	38.97	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-50.28	2	46.98	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-58.91	2	38.35	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-45.66	2	51.6	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-53.8	2	43.46	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.536	-43.98	2	53.28	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.584	-53.66	2	43.6	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-50.5	2	46.76	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-58.94	2	38.32	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-50.36	2	46.9	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-59.31	2	37.95	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2325.552	-47.31	2	49.95	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2384.976	-58.42	2	38.84	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.61	2	49.65	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-58.85	2	38.41	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-44.99	2	52.27	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.31	2	42.95	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.824	-44.59	2	52.67	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.536	-54.14	2	43.12	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-50.12	2	47.14	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-58.79	2	38.47	Average	54	Pass

Test Graphs

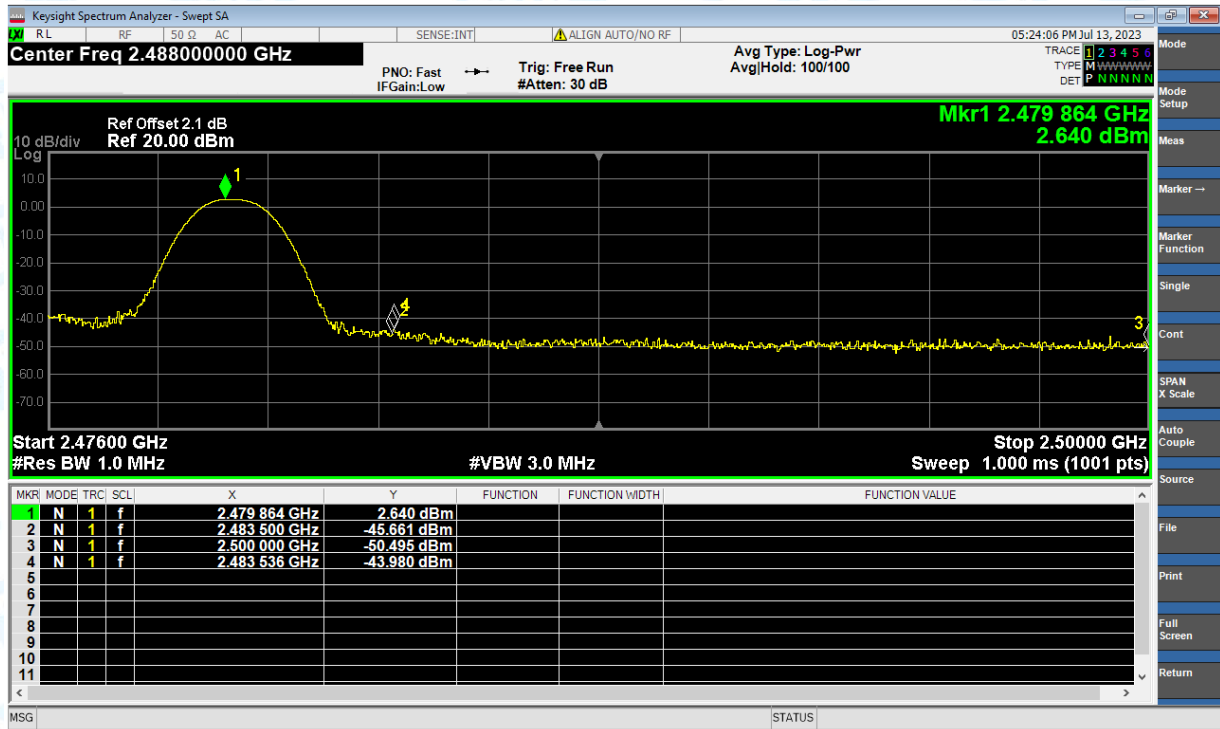
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



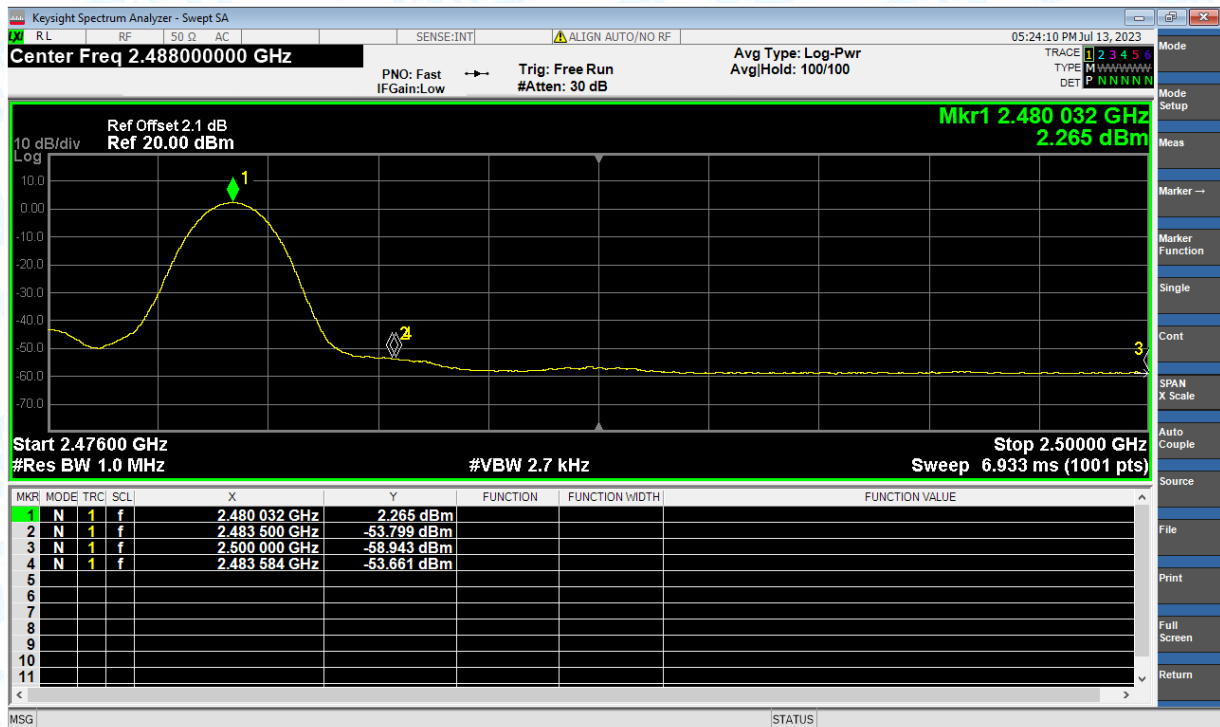
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



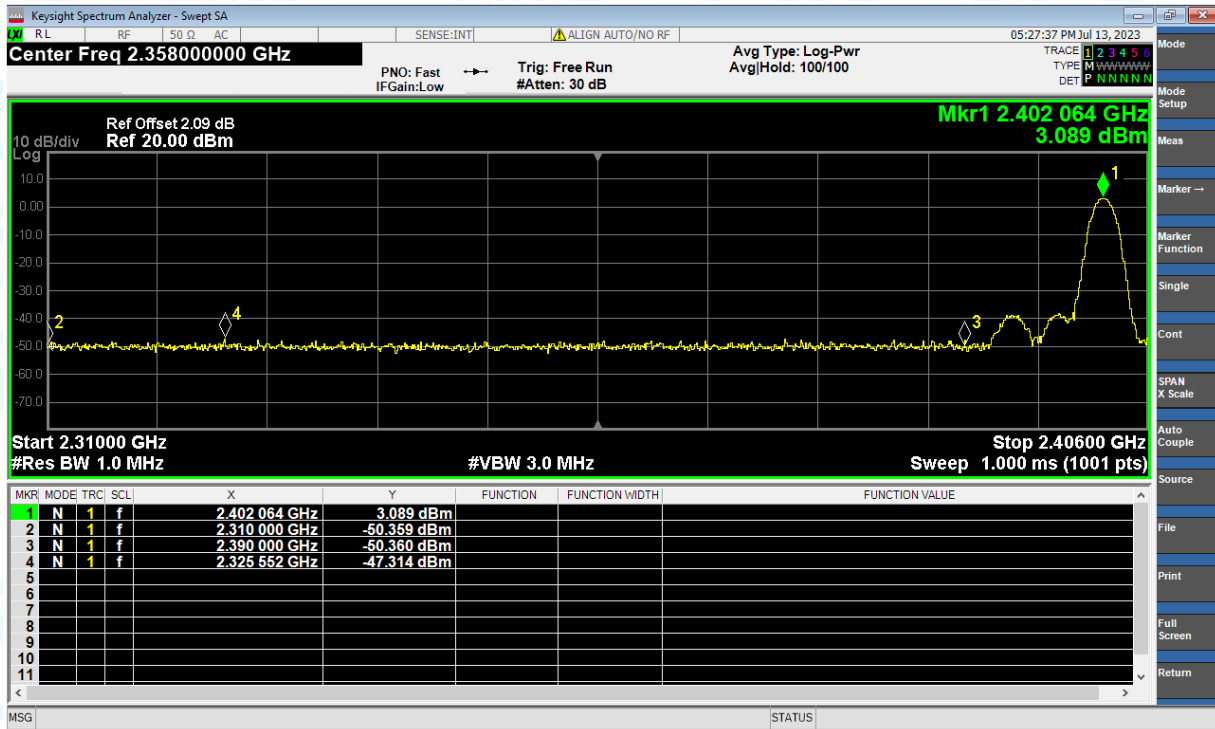
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



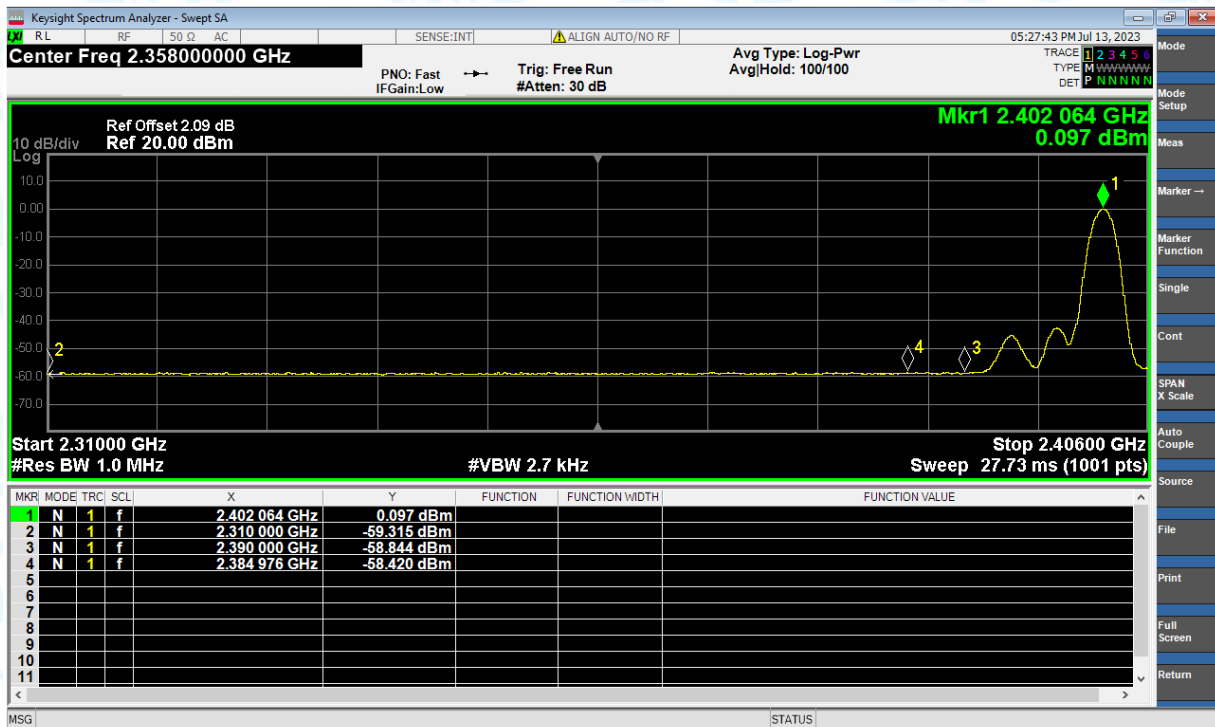
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



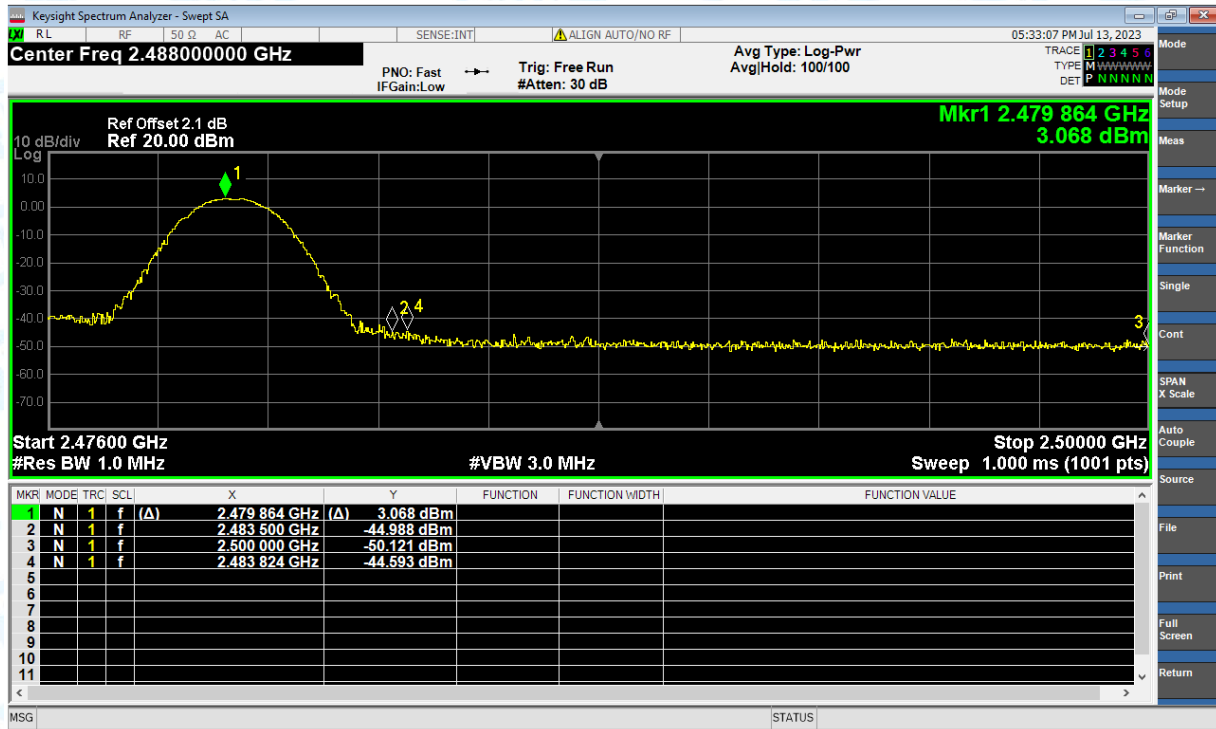
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



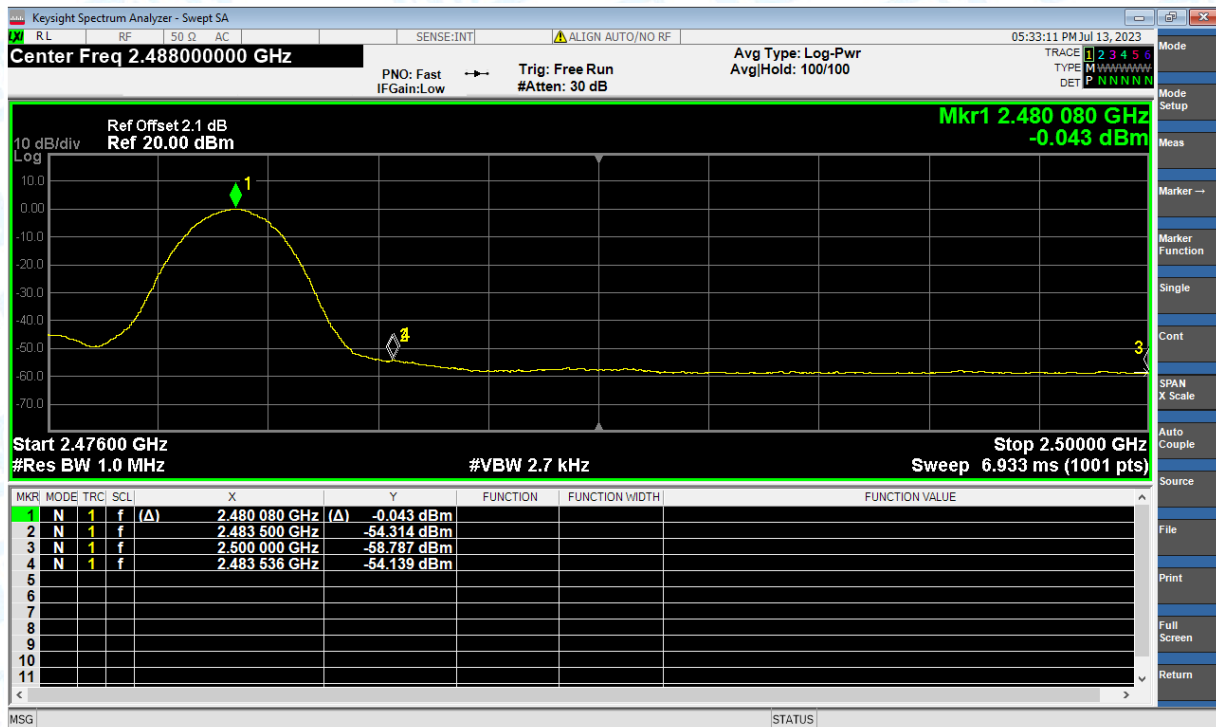
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



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



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



9. Carrier Frequencies Separation

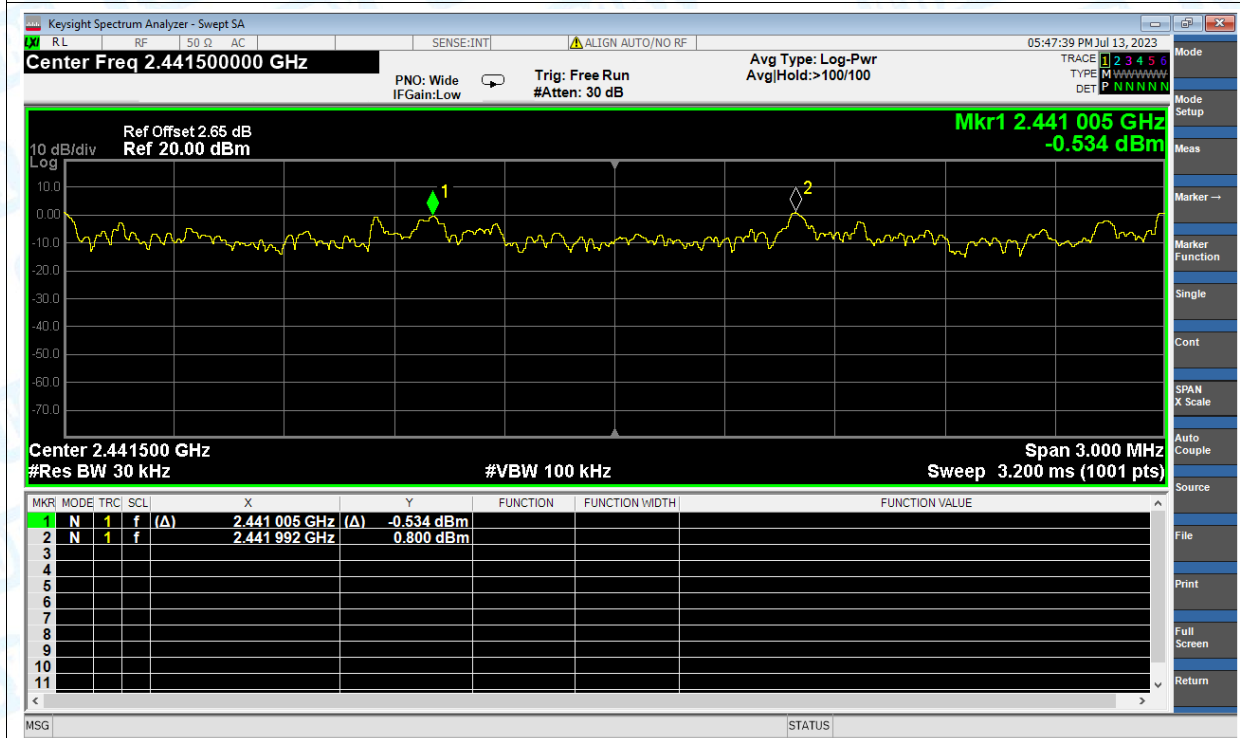
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.996	2442.001	1.005	0.573	Pass
NVNT	2-DH1	Ant1	2441.005	2441.992	0.987	0.847	Pass

Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1

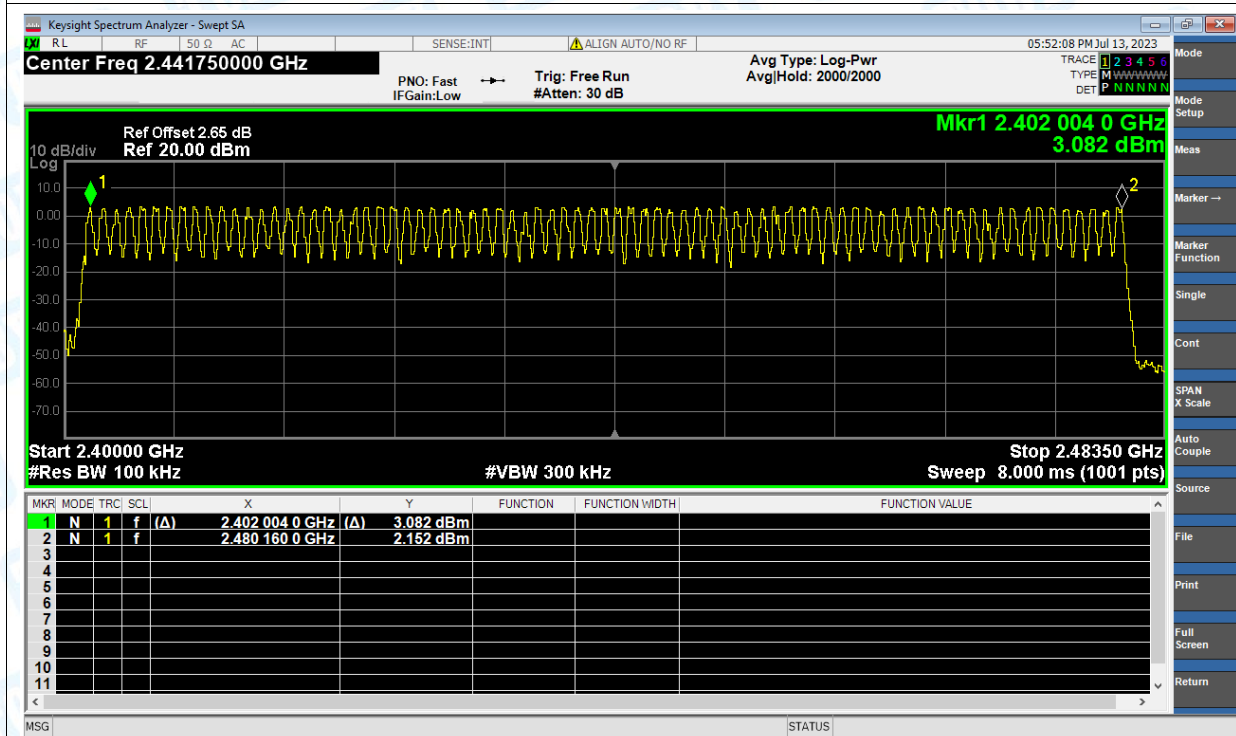


10. Number of Hopping Channel

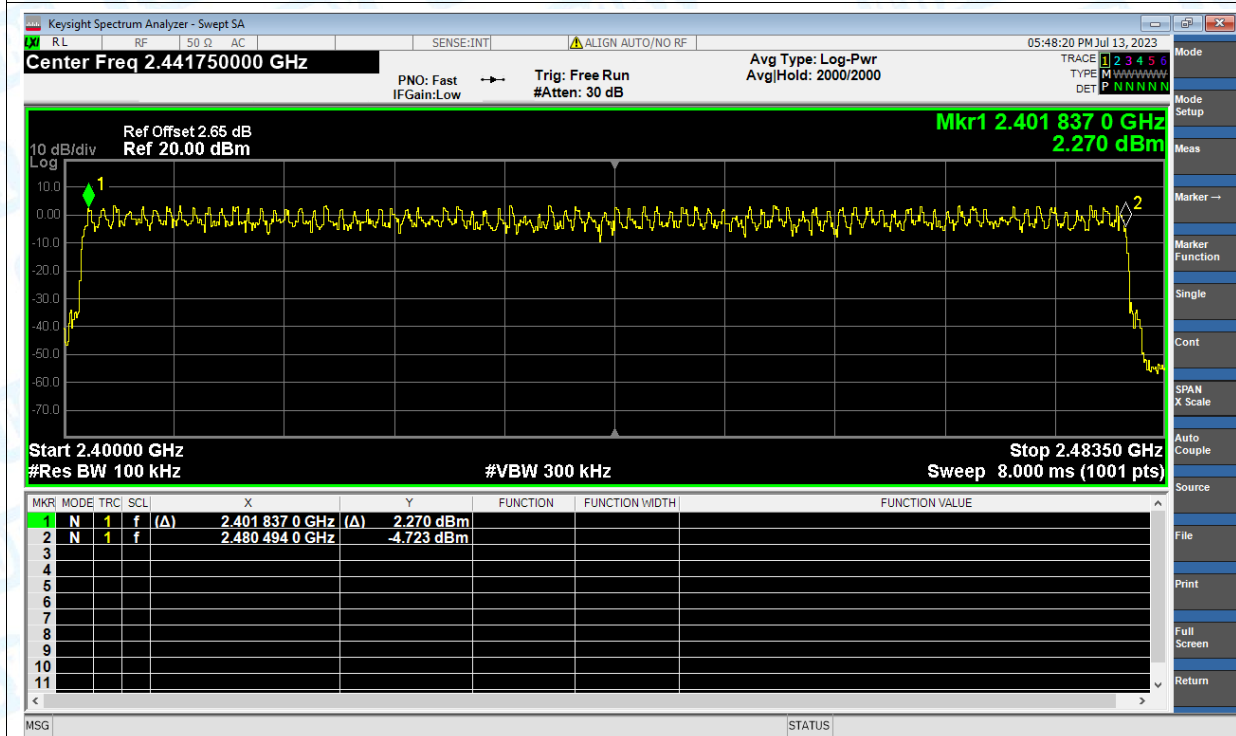
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1

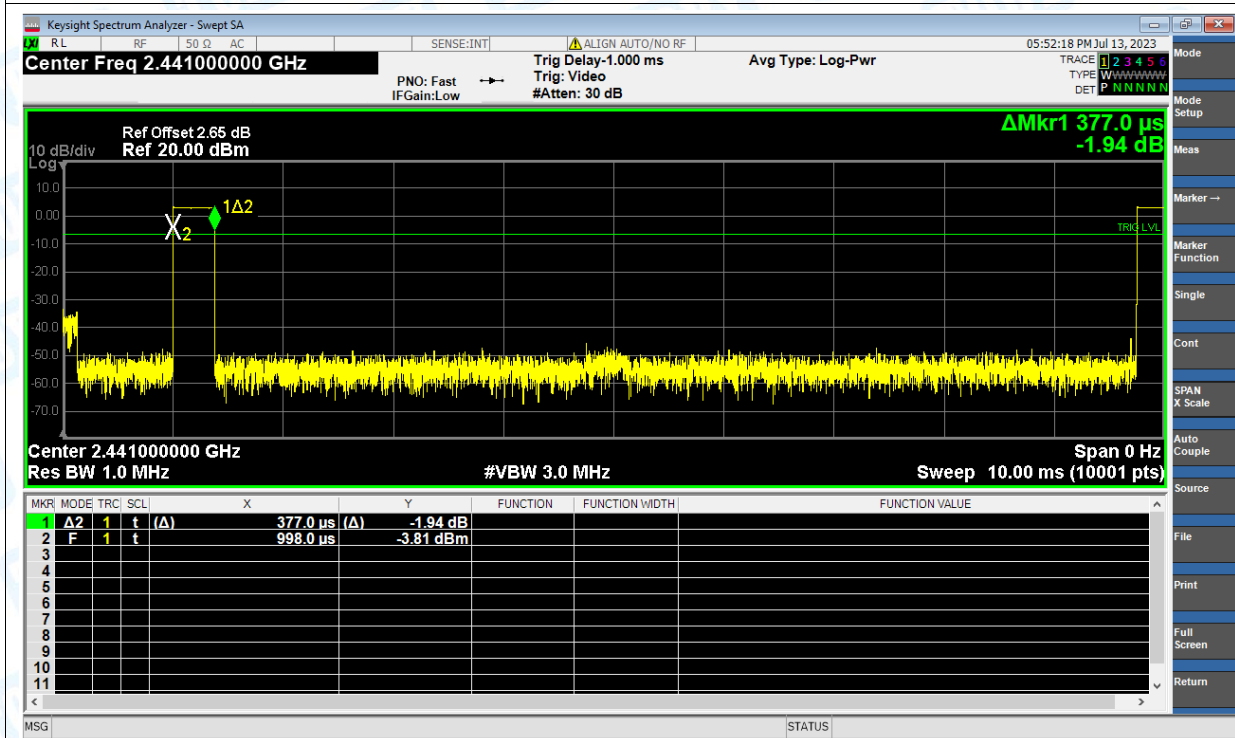


11. Dwell Time

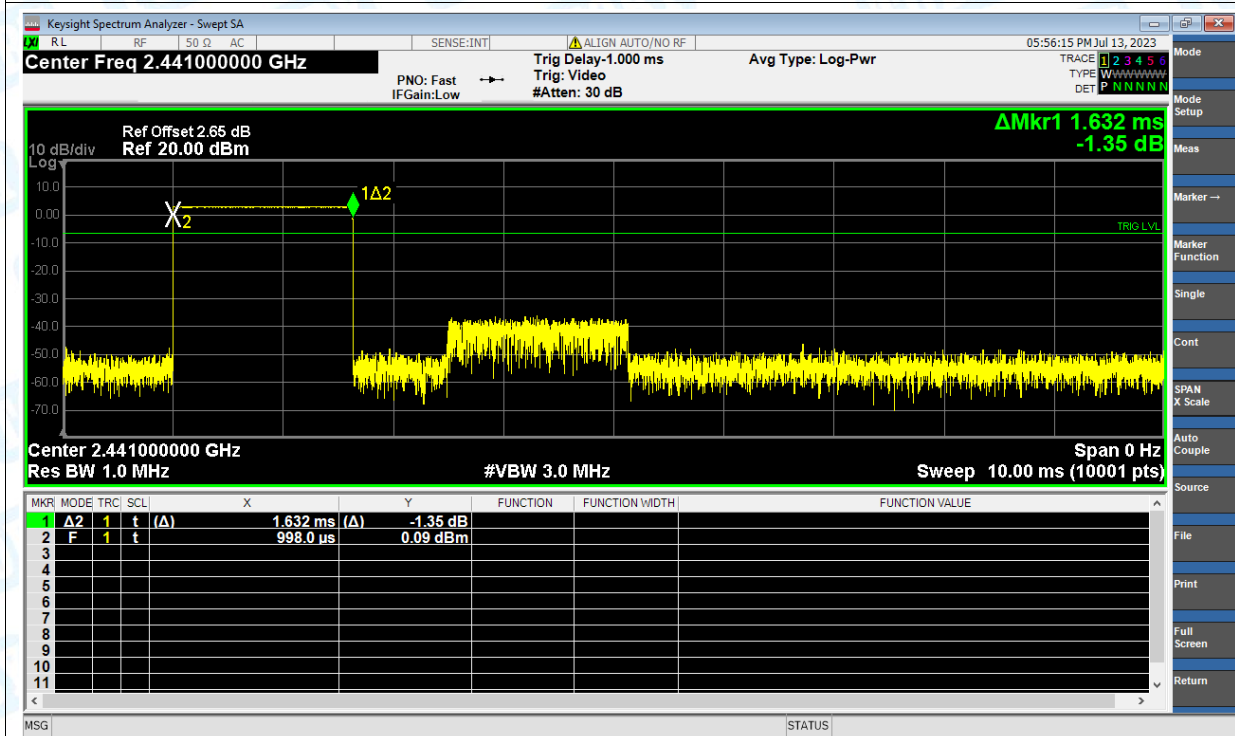
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.377	120.64	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.632	261.12	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.881	307.307	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.637	261.92	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.886	307.84	31600	400	Pass

Test Graphs

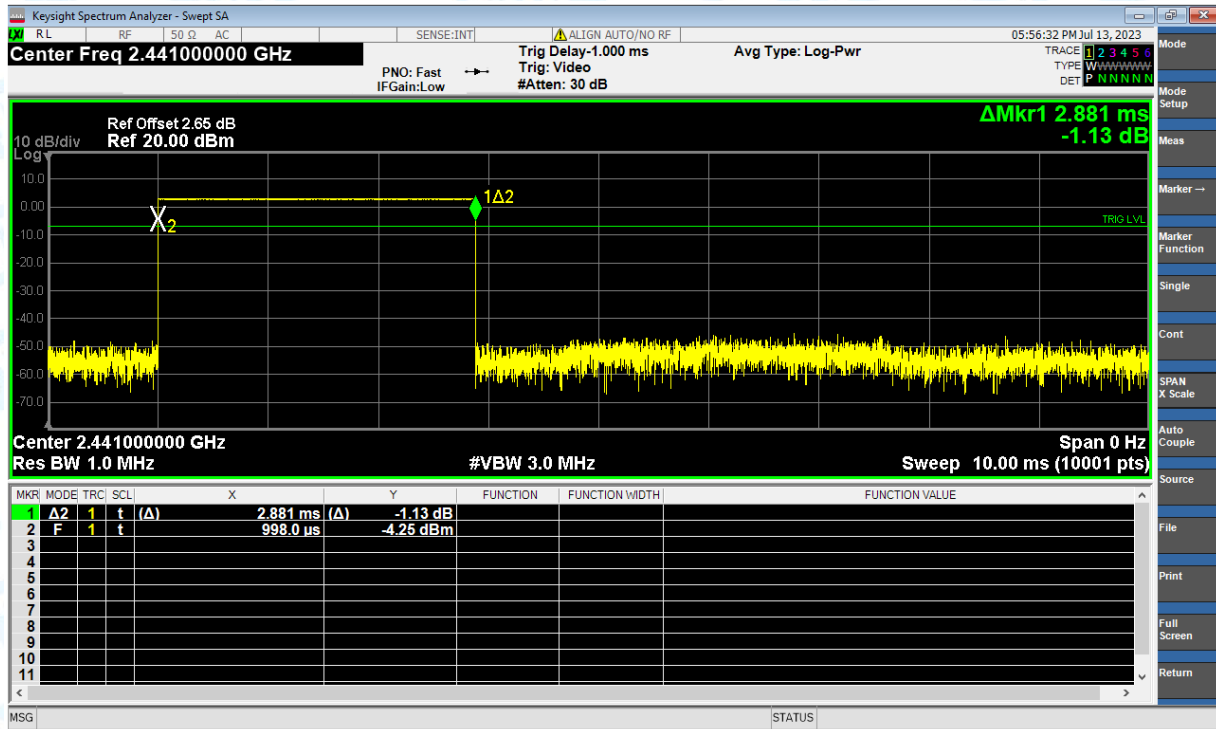
Dwell NVNT 1-DH1 2441MHz Ant1



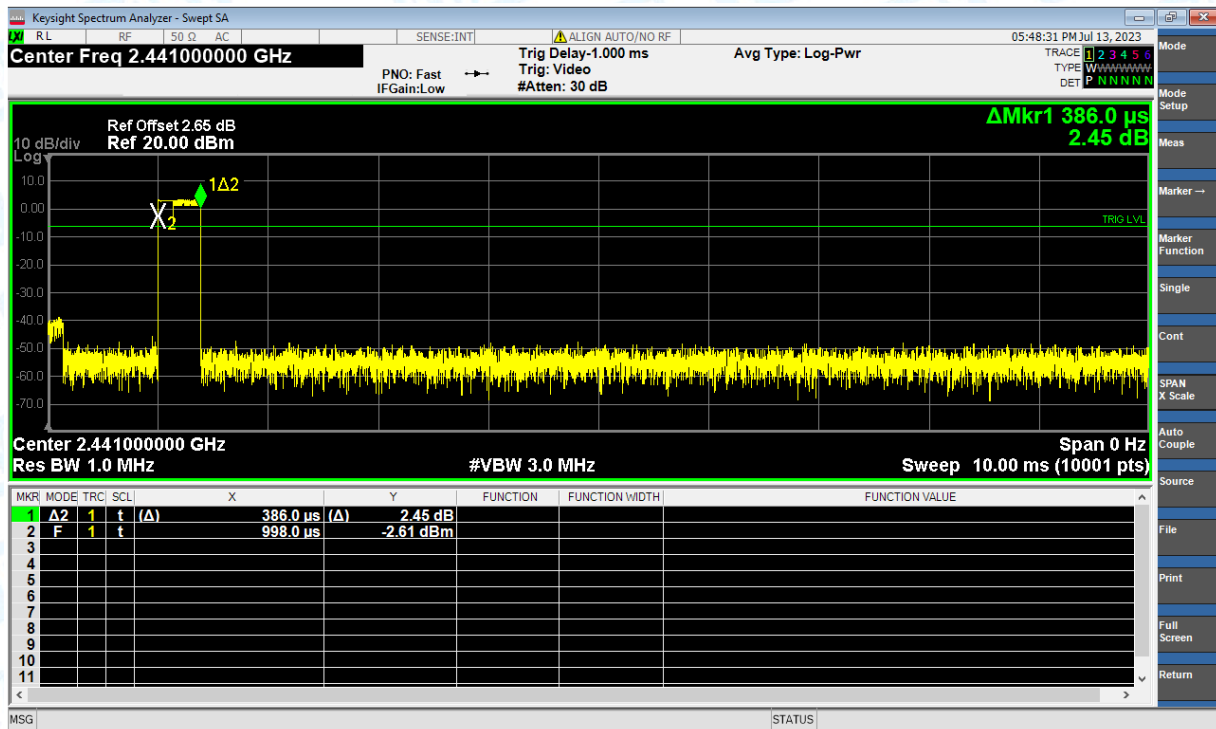
Dwell NVNT 1-DH3 2441MHz Ant1



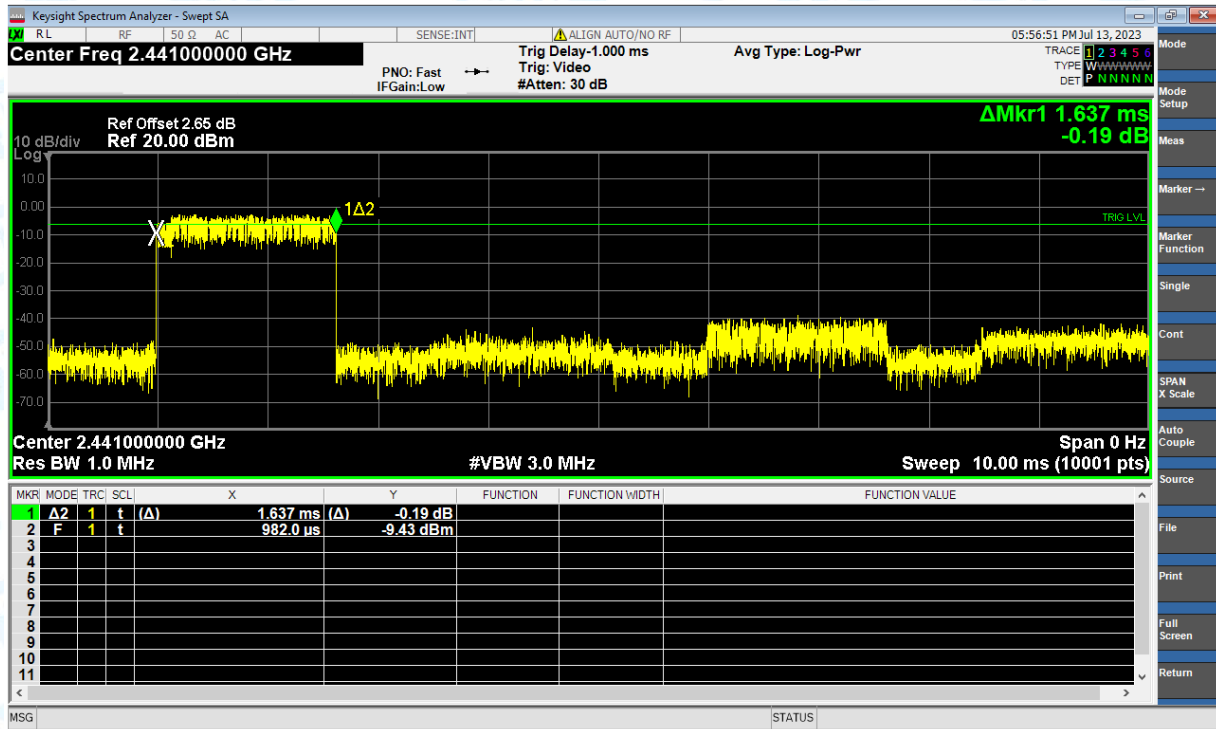
Dwell NVNT 1-DH5 2441MHz Ant1



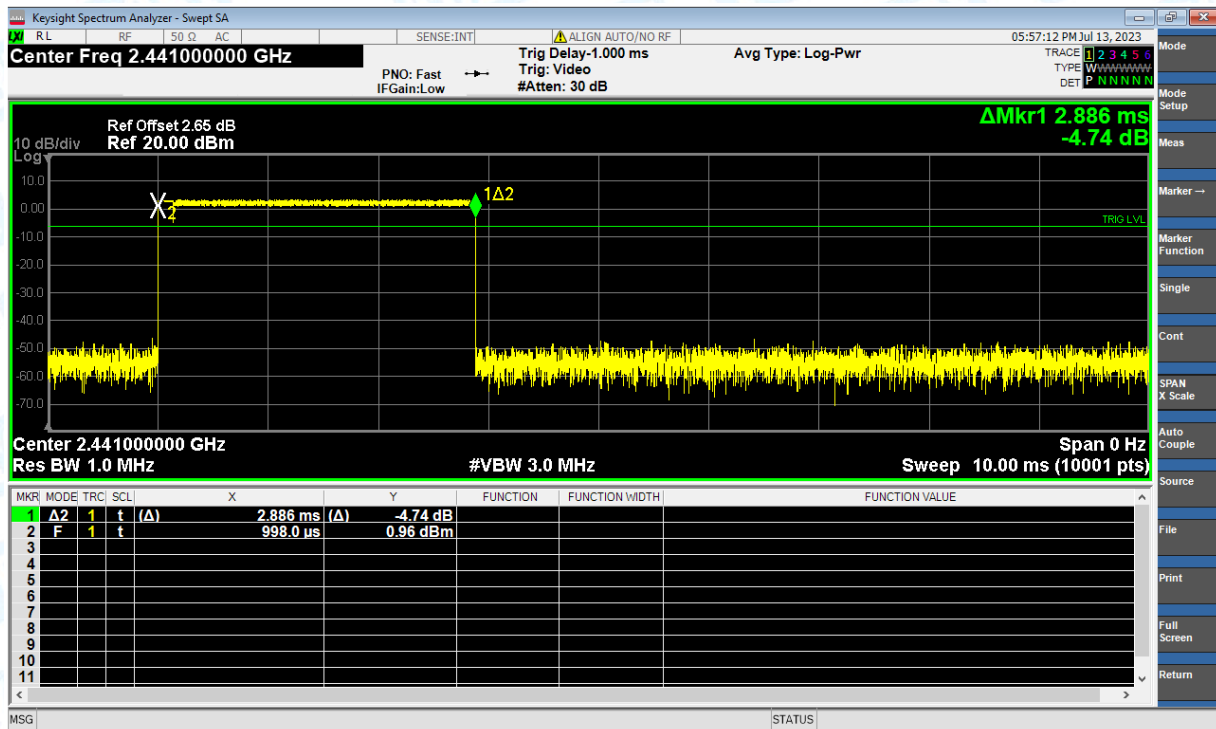
Dwell NVNT 2-DH1 2441MHz Ant1



Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1



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