

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

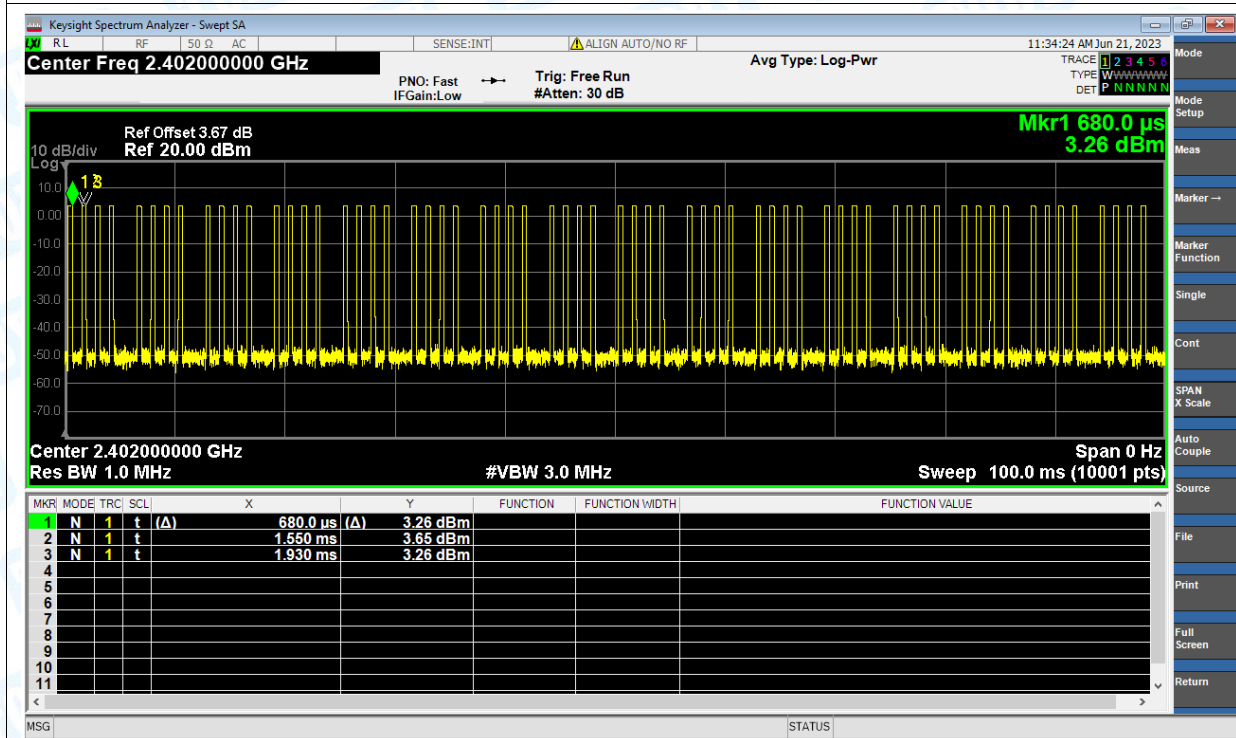
General Description of EUT	
Product Name:	Pinit Wireless Earbuds
Test Model:	PIWEB-01
Sample ID:	RW-C-202304-0081-1-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	52%
Test Voltage:	DC 3.7V
Test Engineer:	Liu ji ming
Note: For a more detailed features description, please refer to the report TBR-C-202304-0081-1 The report only show the worst case data.	

Duty Cycle

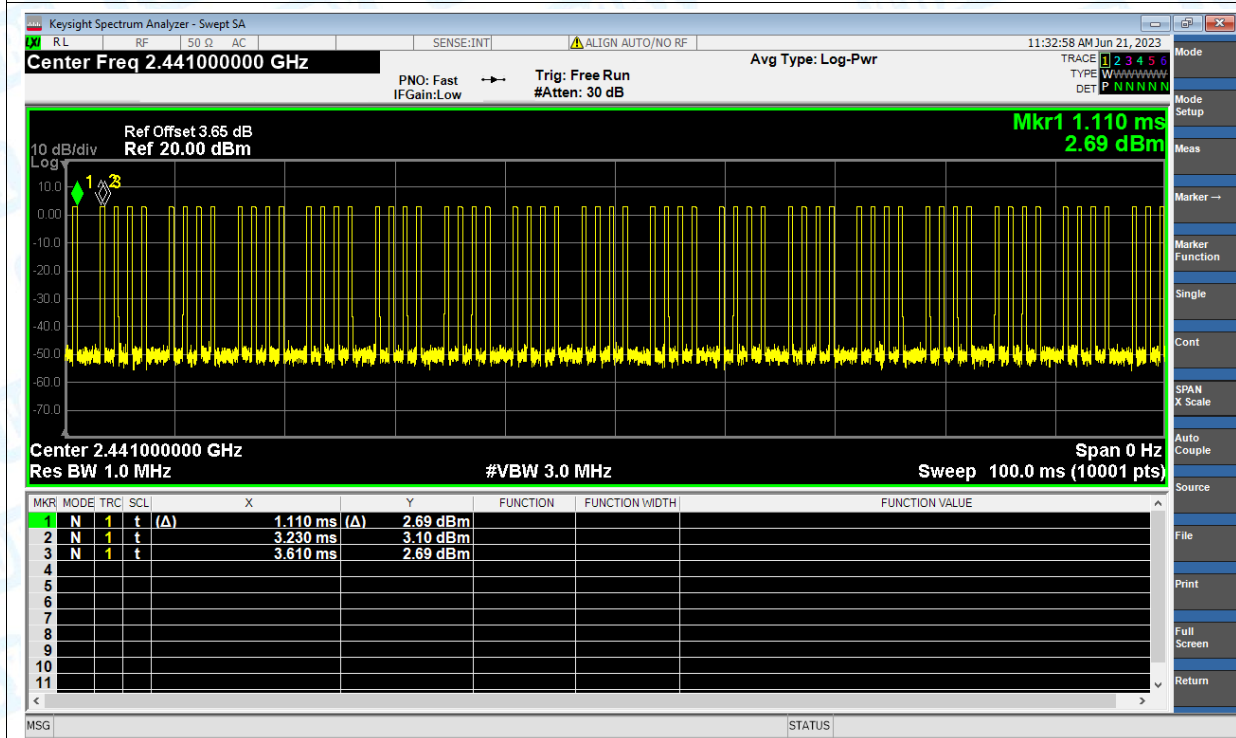
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	15.2	8.18	2.63
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	30.65	5.14	2.63
NVNT	2-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
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

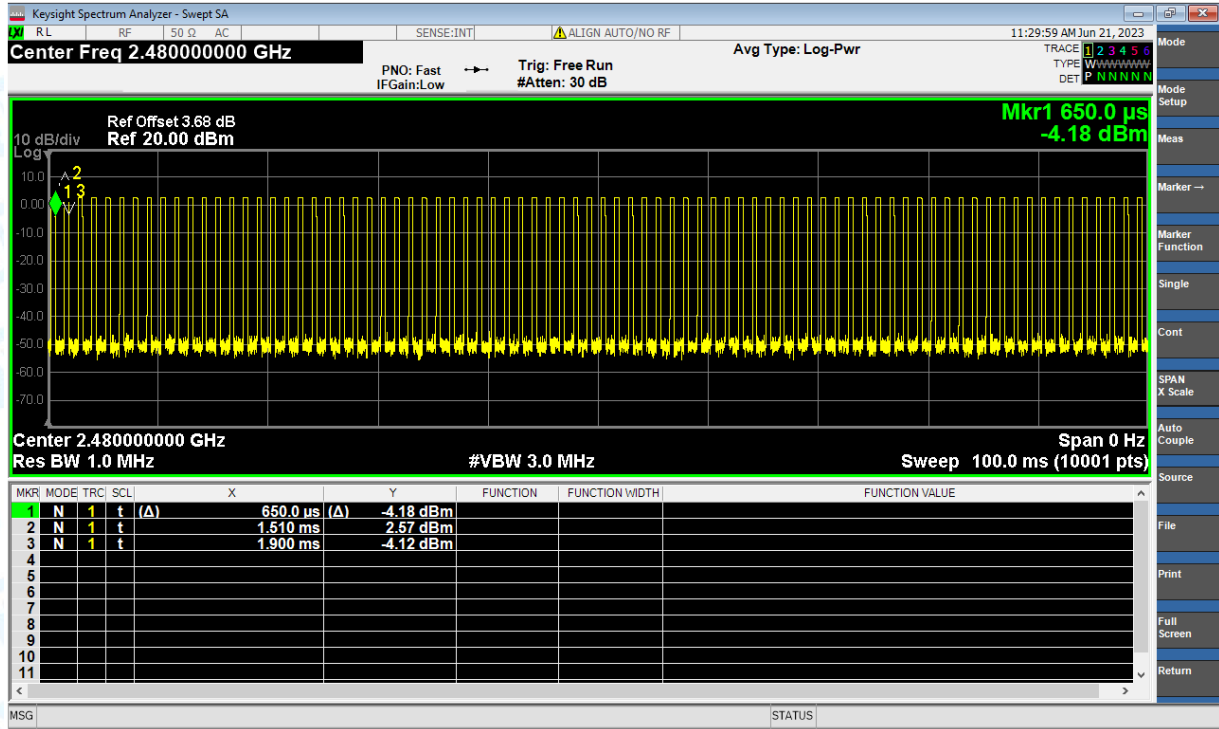
Duty Cycle NVNT 1-DH1 2402MHz Ant1



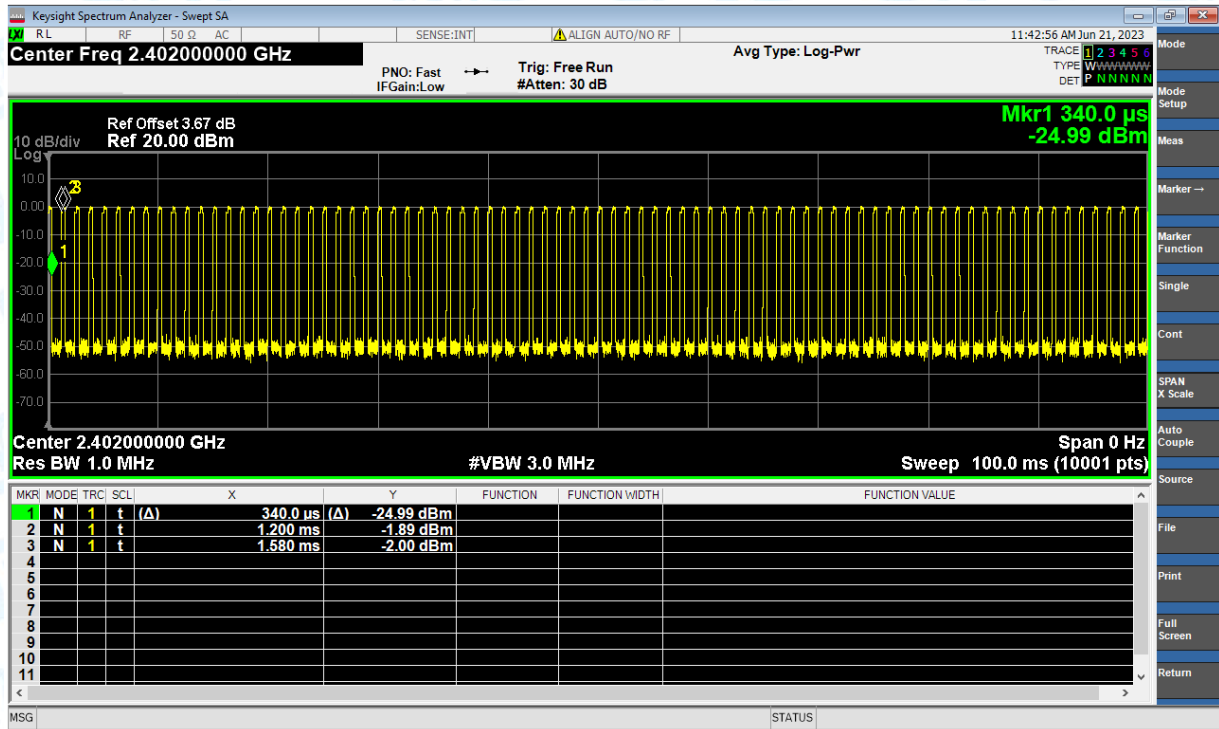
Duty Cycle NVNT 1-DH1 2441MHz Ant1



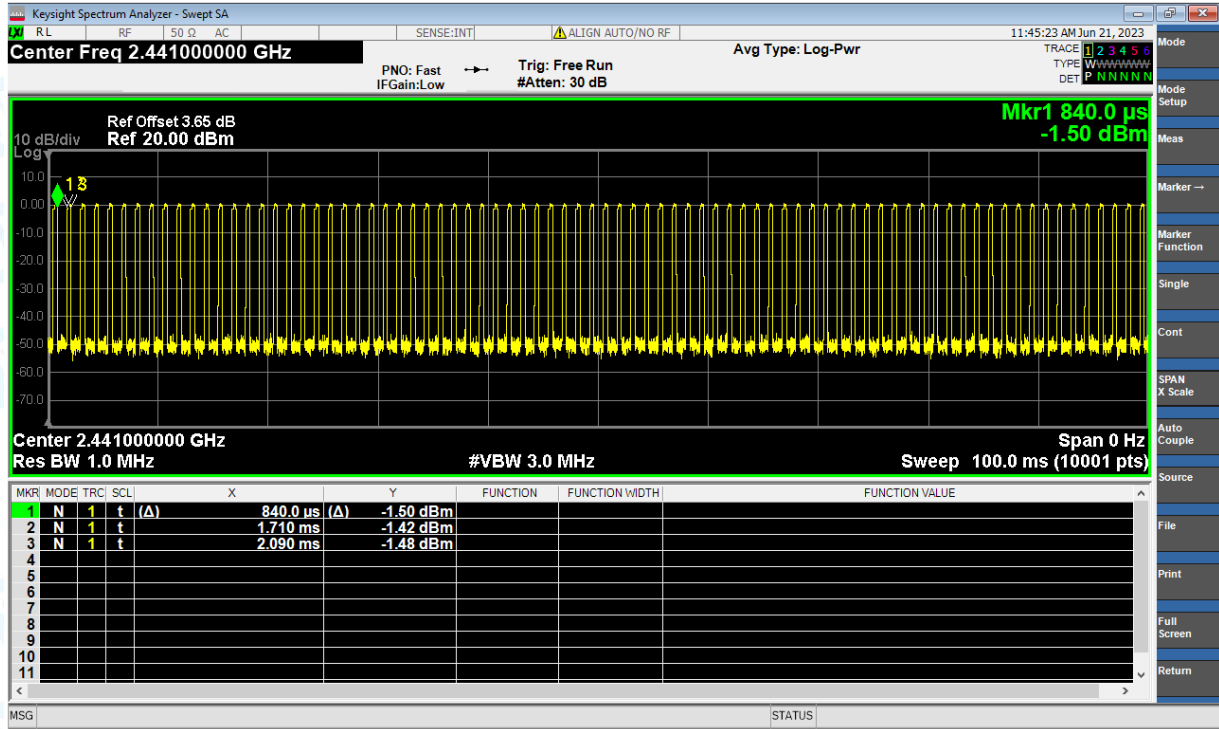
Duty Cycle NVNT 1-DH1 2480MHz Ant1



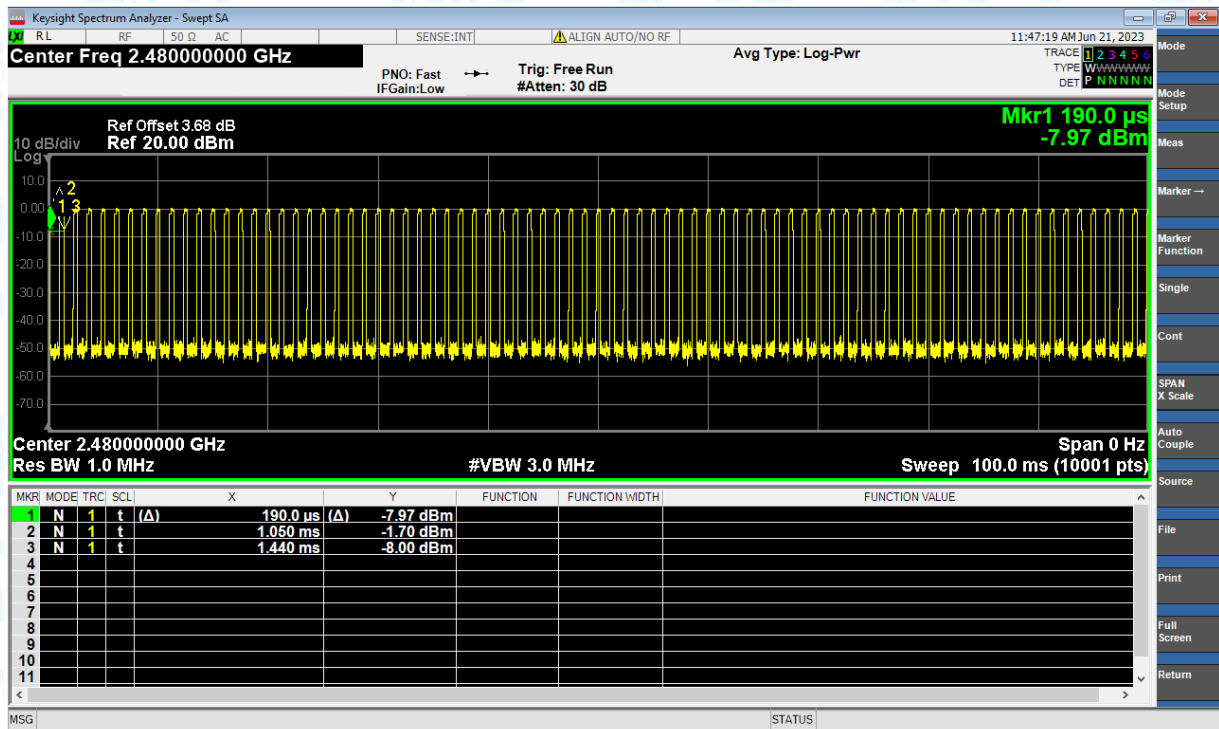
Duty Cycle NVNT 2-DH1 2402MHz Ant1



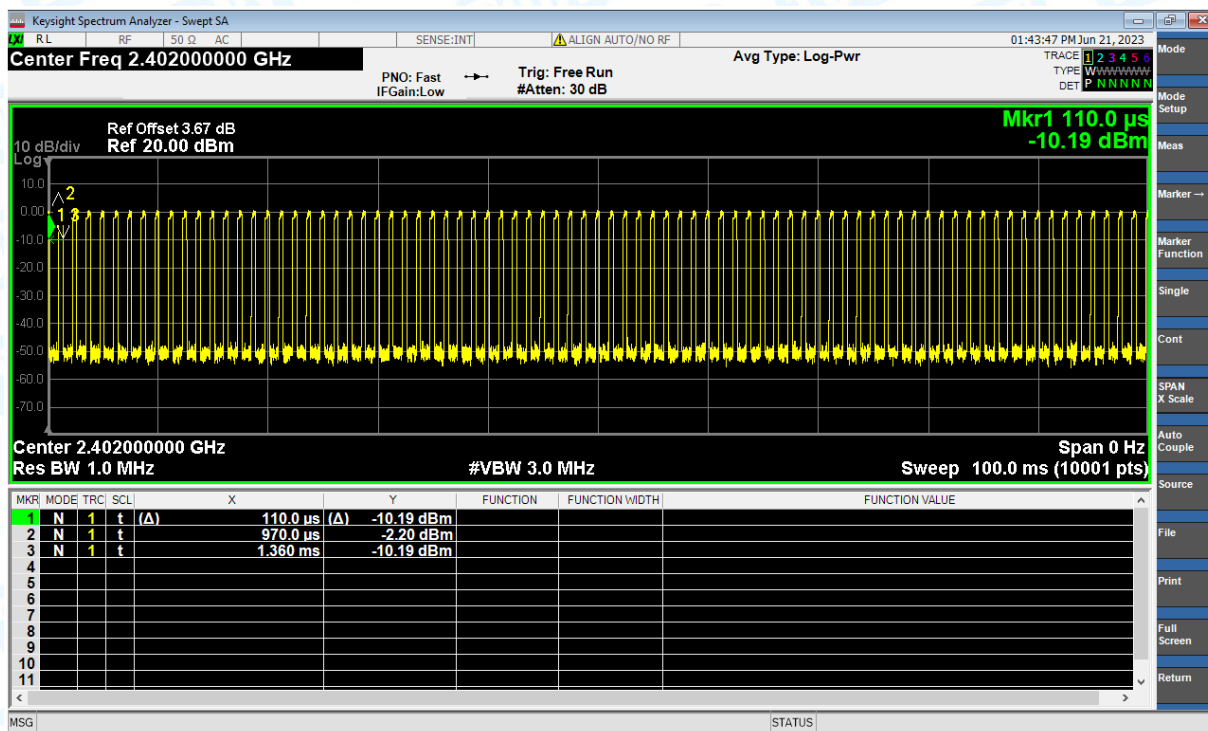
Duty Cycle NVNT 2-DH1 2441MHz Ant1



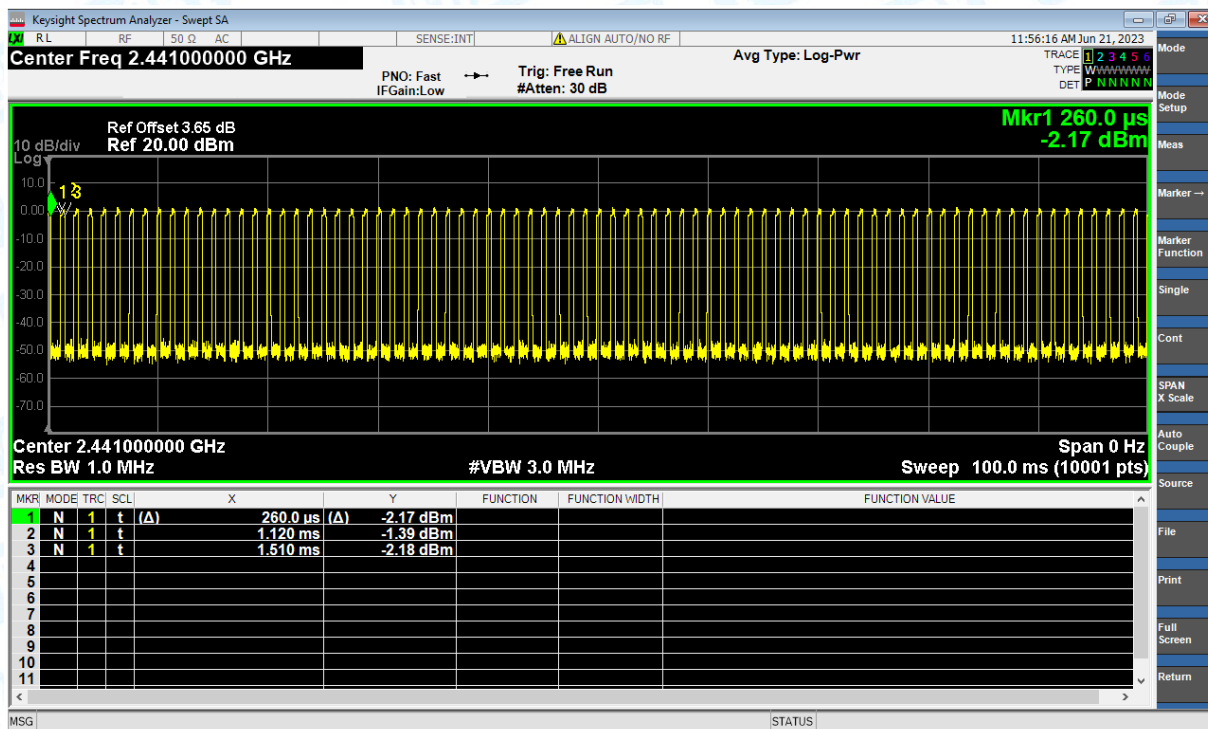
Duty Cycle NVNT 2-DH1 2480MHz Ant1

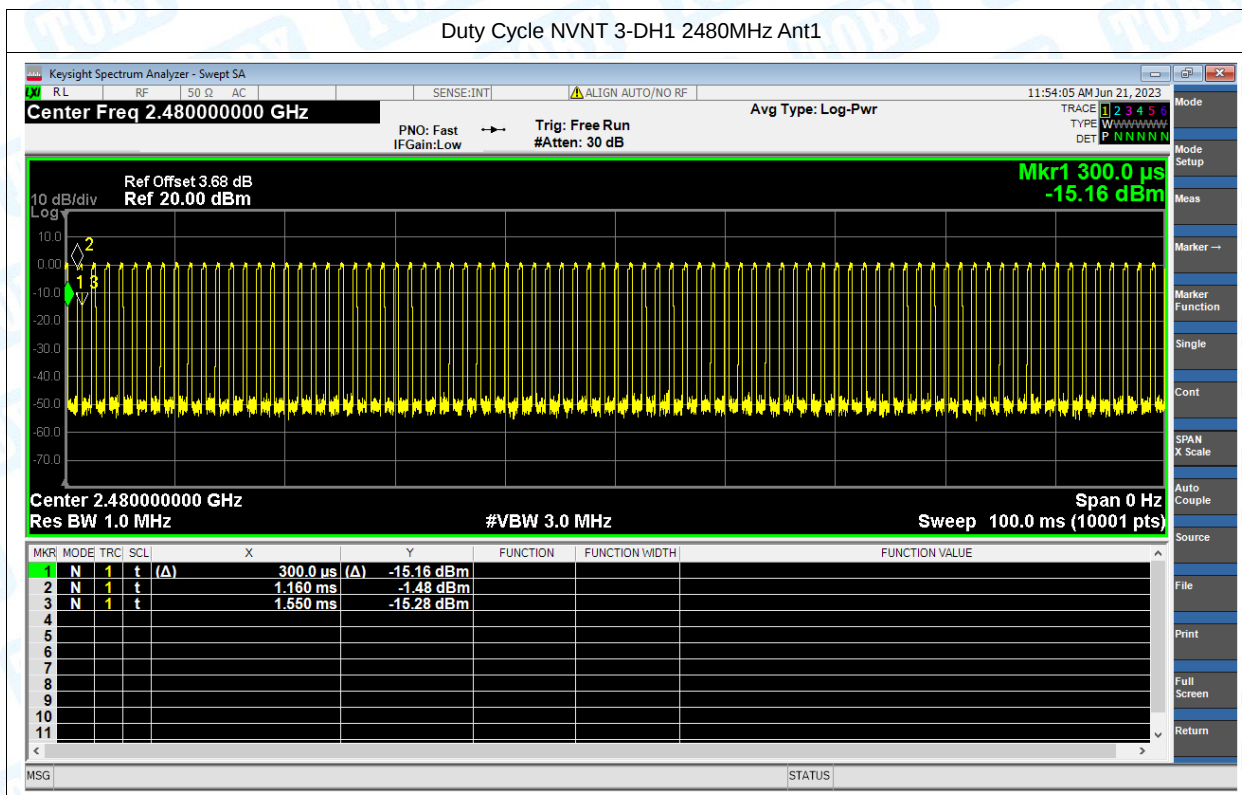


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



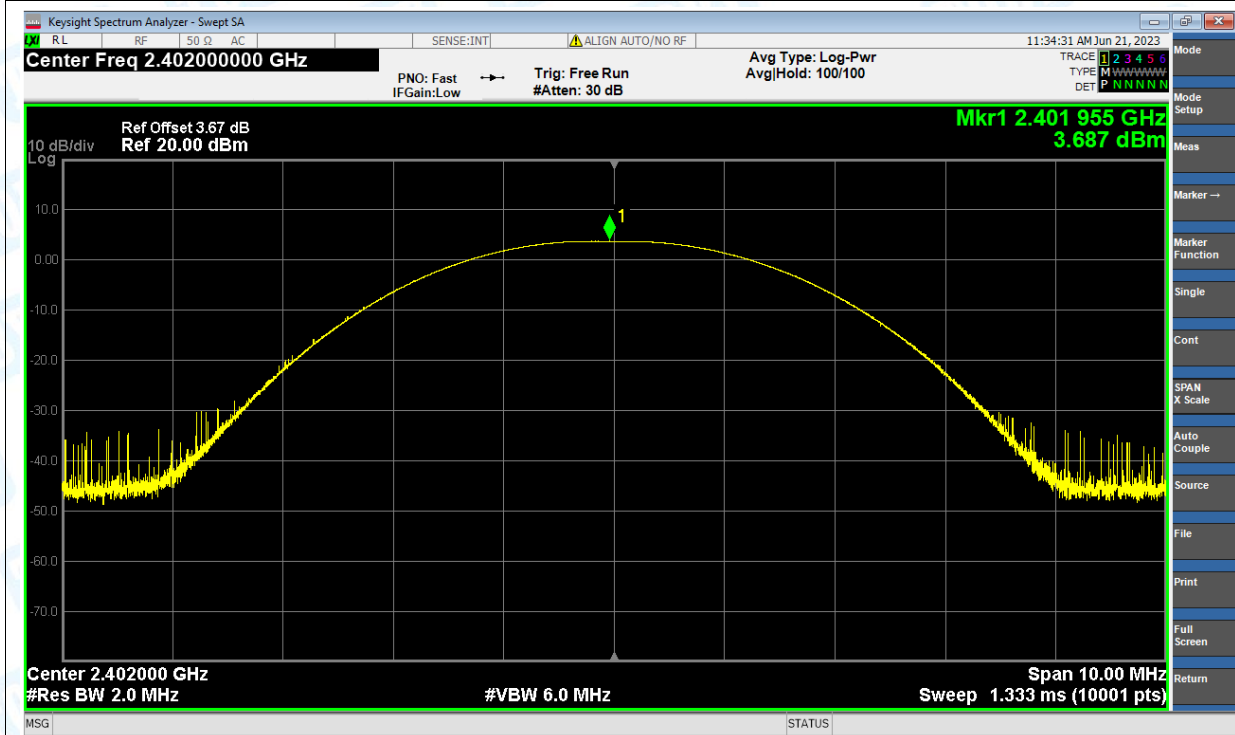


Maximum Conducted Output Power

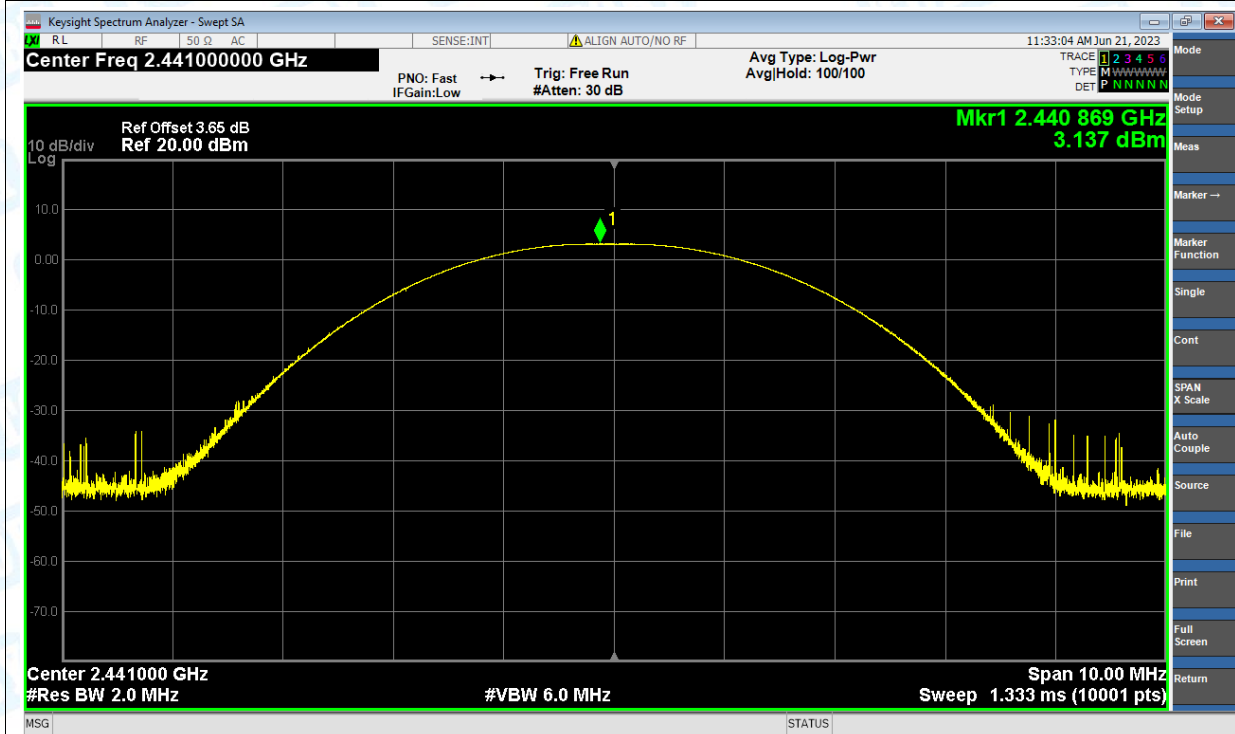
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.687	21	Pass
NVNT	1-DH1	2441	Ant1	3.137	21	Pass
NVNT	1-DH1	2480	Ant1	2.766	21	Pass
NVNT	2-DH1	2402	Ant1	0.745	21	Pass
NVNT	2-DH1	2441	Ant1	1.056	21	Pass
NVNT	2-DH1	2480	Ant1	0.799	21	Pass
NVNT	3-DH1	2402	Ant1	1.25	21	Pass
NVNT	3-DH1	2441	Ant1	1.597	21	Pass
NVNT	3-DH1	2480	Ant1	1.403	21	Pass

Test Graphs

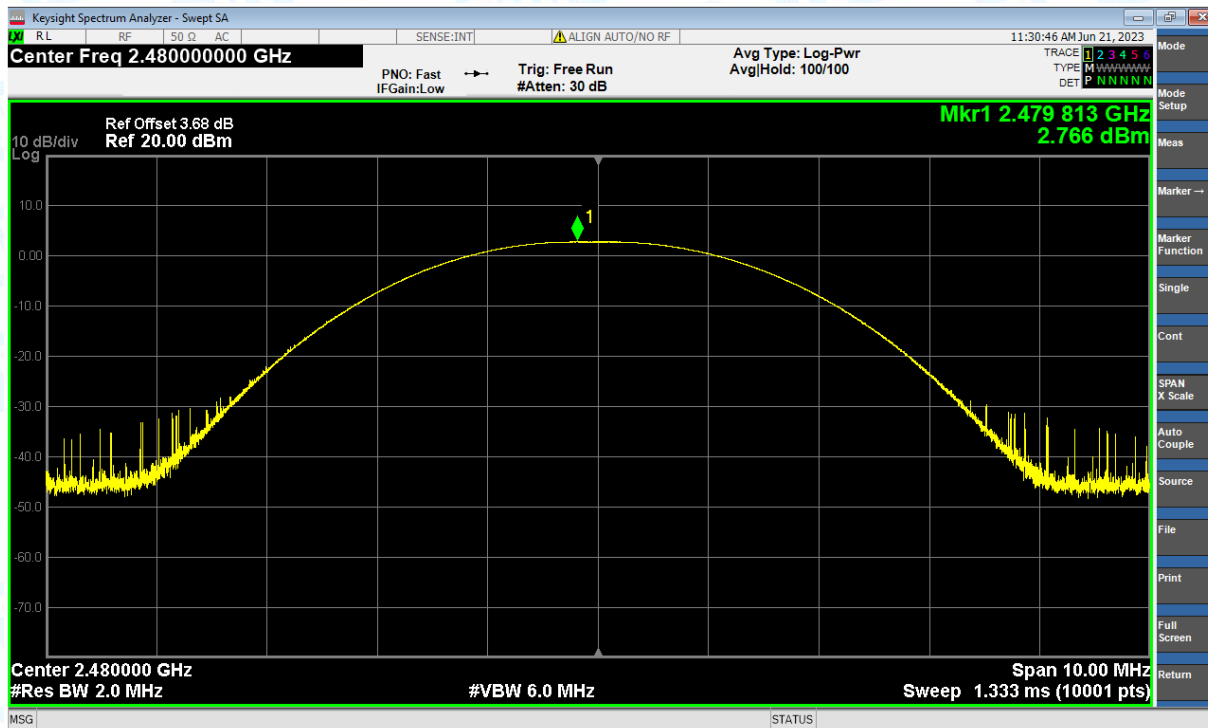
Power NVNT 1-DH1 2402MHz Ant1



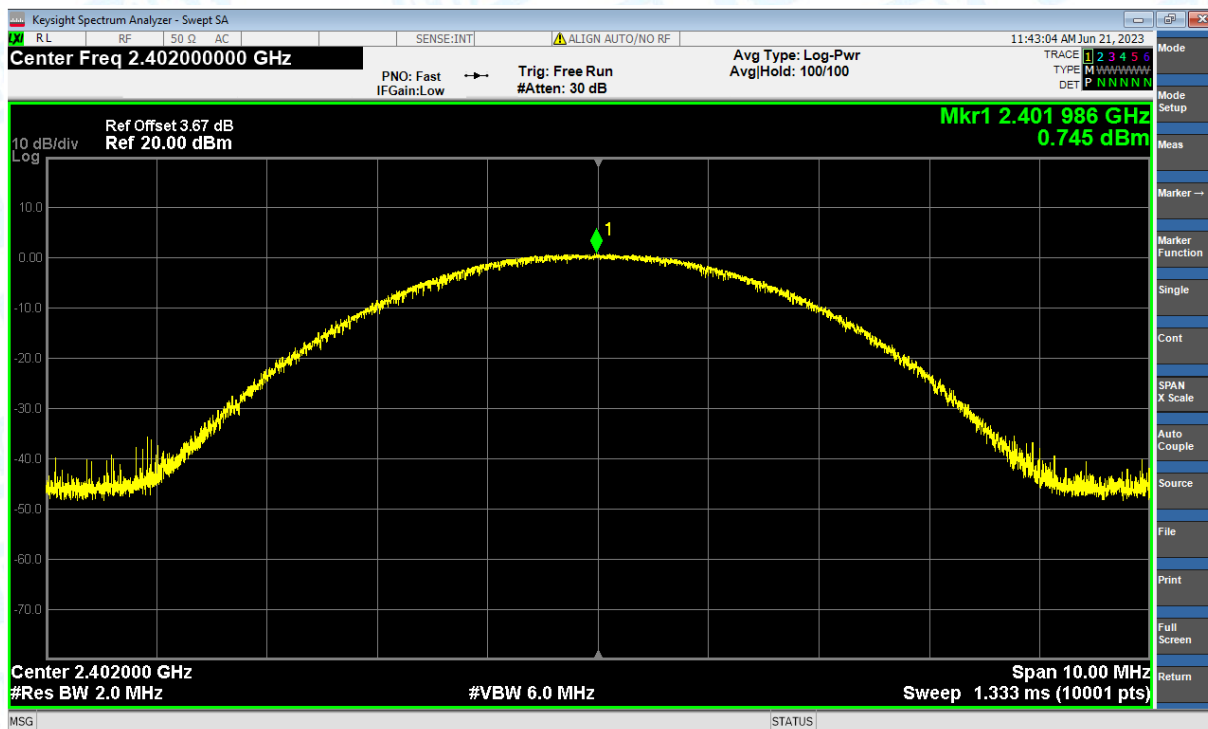
Power NVNT 1-DH1 2441MHz Ant1



Power NVNT 1-DH1 2480MHz Ant1



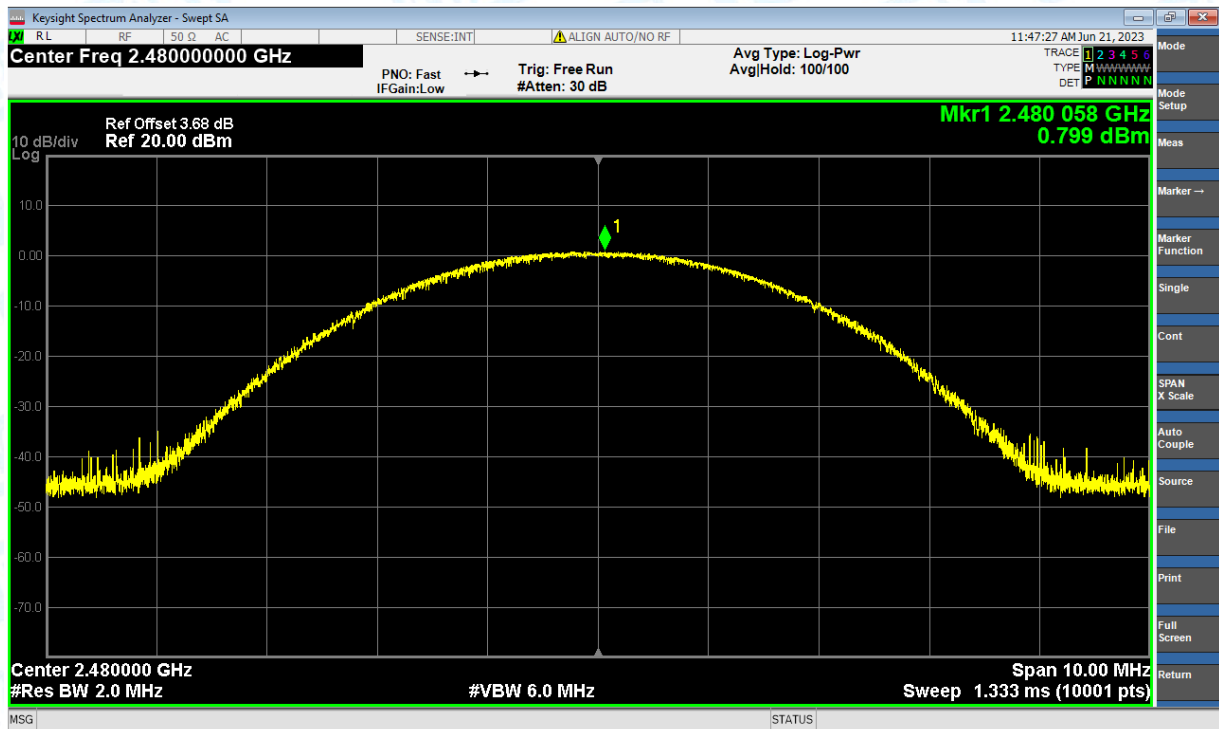
Power NVNT 2-DH1 2402MHz Ant1



Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



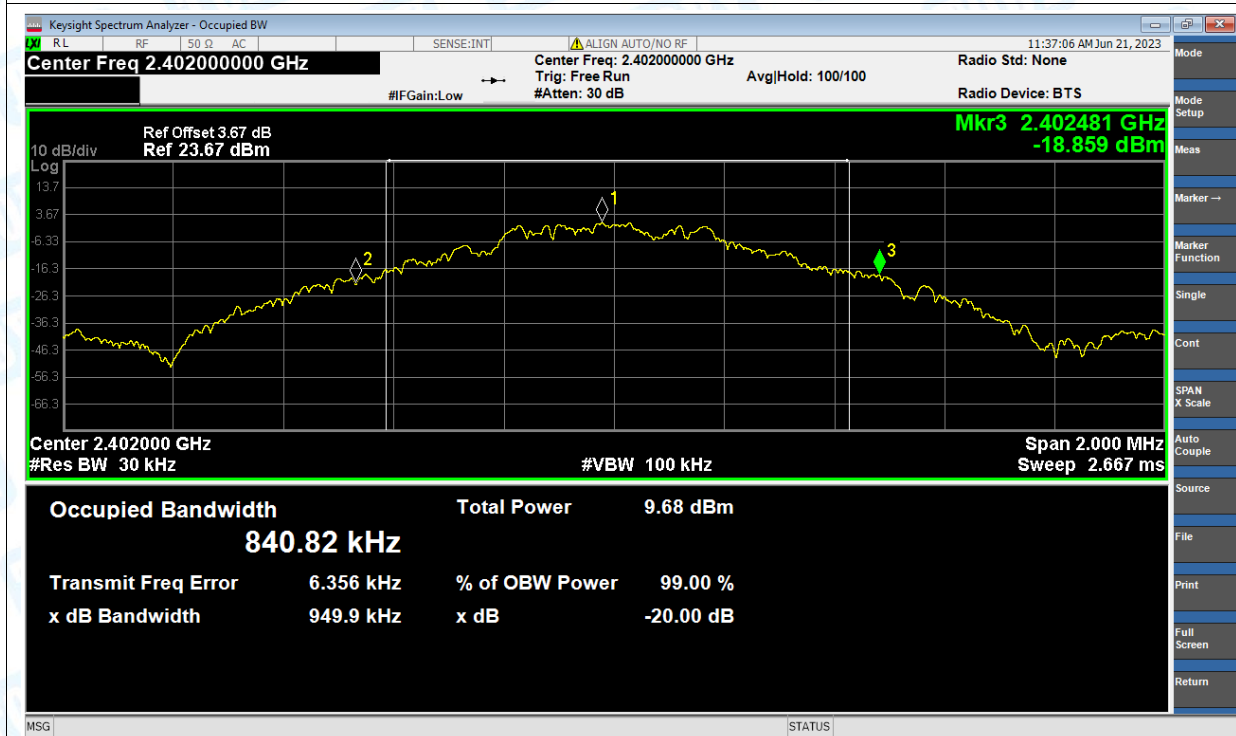


-20dB Bandwidth

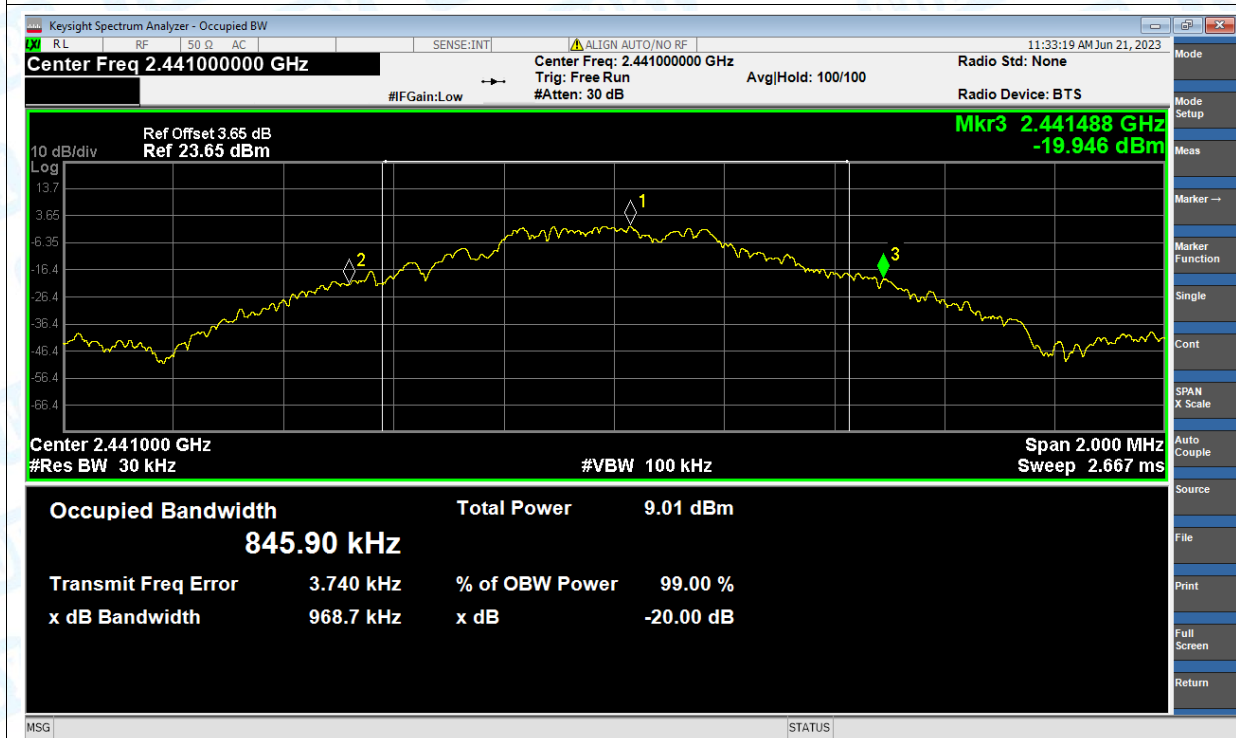
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.95	0	Pass
NVNT	1-DH1	2441	Ant1	0.97	0	Pass
NVNT	1-DH1	2480	Ant1	0.95	0	Pass
NVNT	2-DH1	2402	Ant1	1.32	0	Pass
NVNT	2-DH1	2441	Ant1	1.33	0	Pass
NVNT	2-DH1	2480	Ant1	1.34	0	Pass
NVNT	3-DH1	2402	Ant1	1.3	0	Pass
NVNT	3-DH1	2441	Ant1	1.3	0	Pass
NVNT	3-DH1	2480	Ant1	1.28	0	Pass

Test Graphs

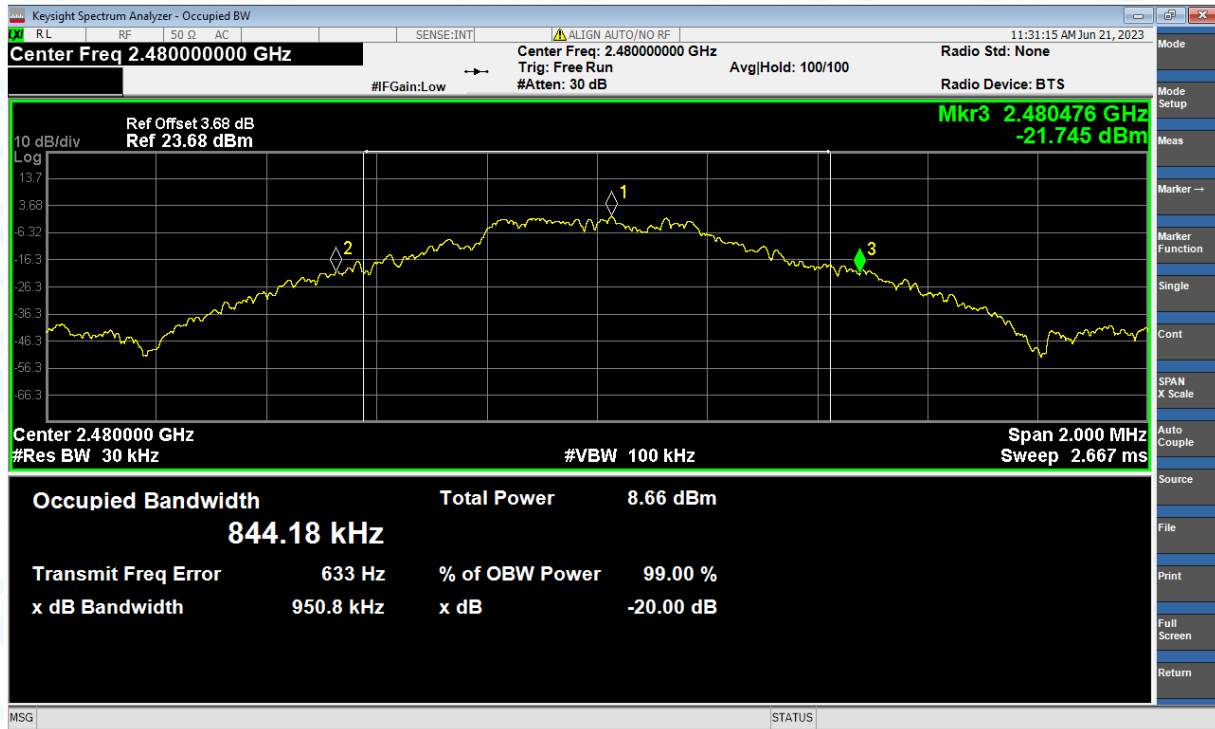
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



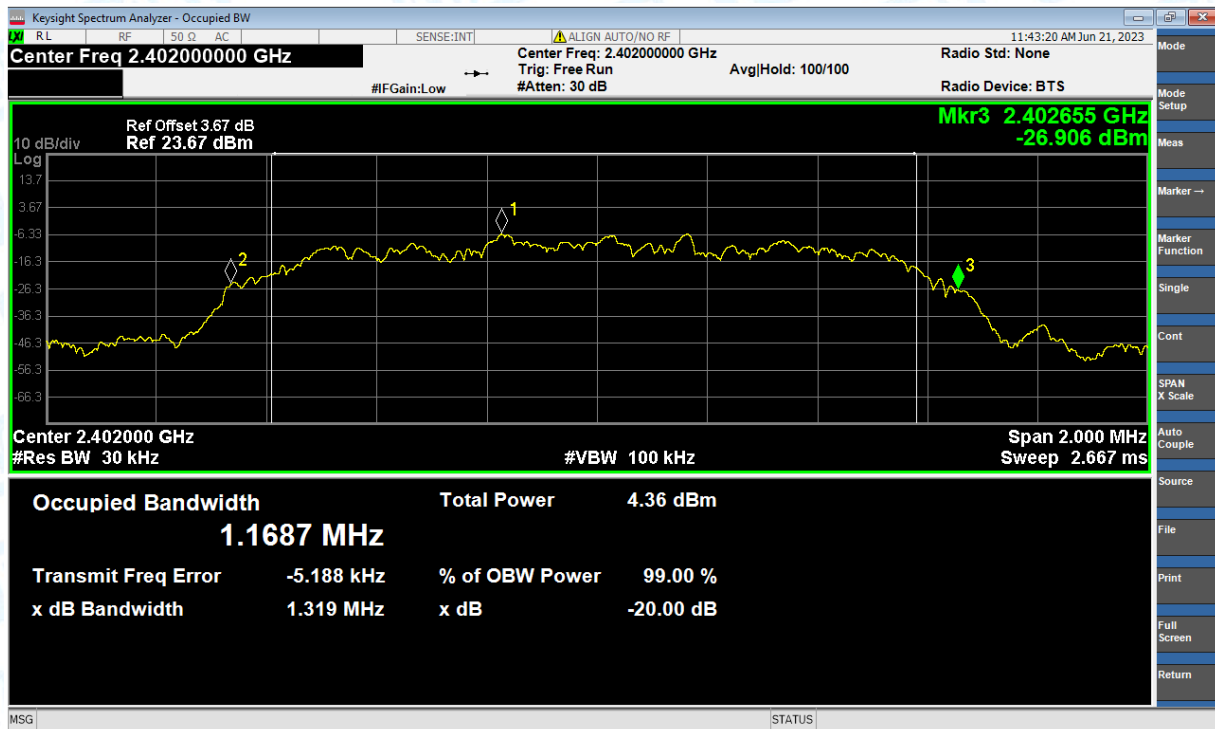
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



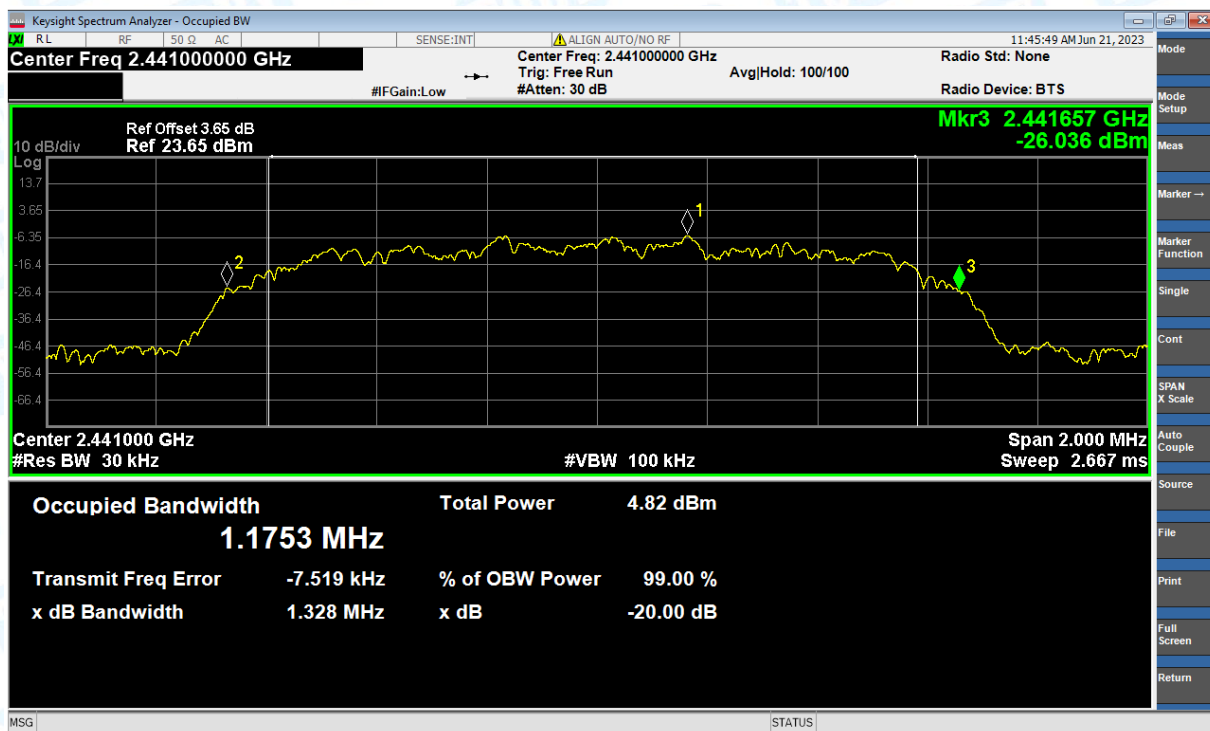
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



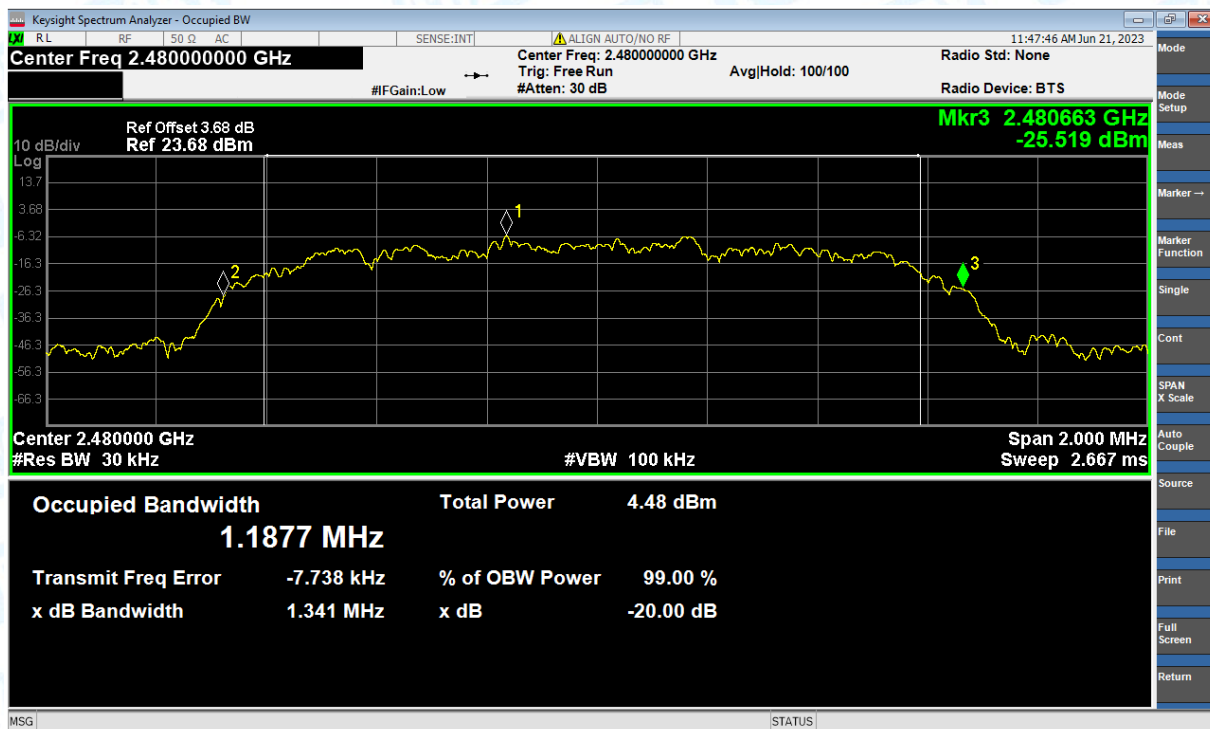
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



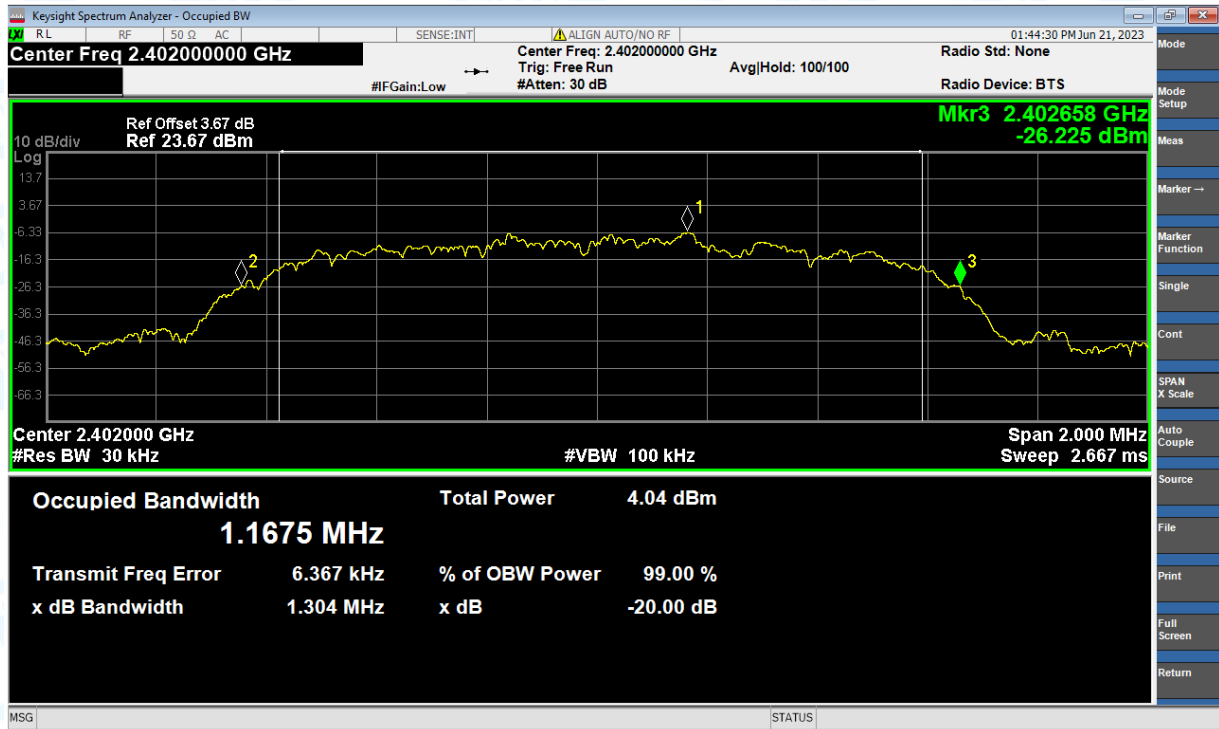
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



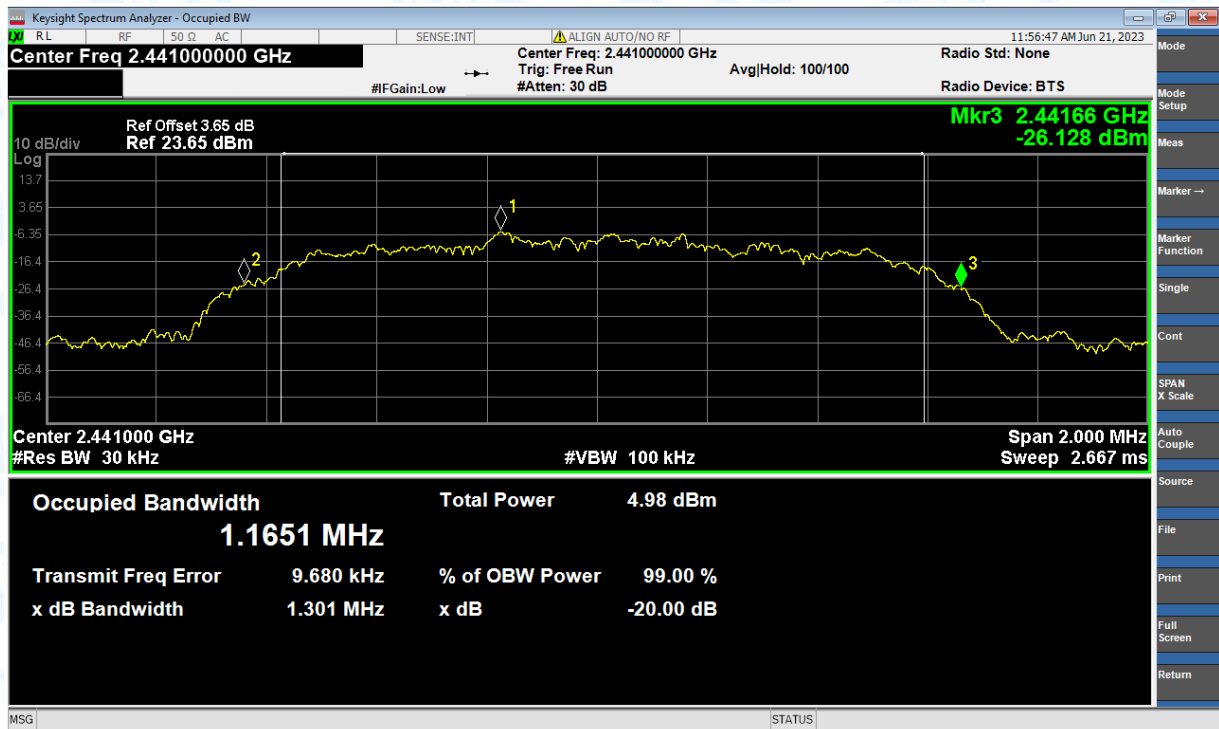
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

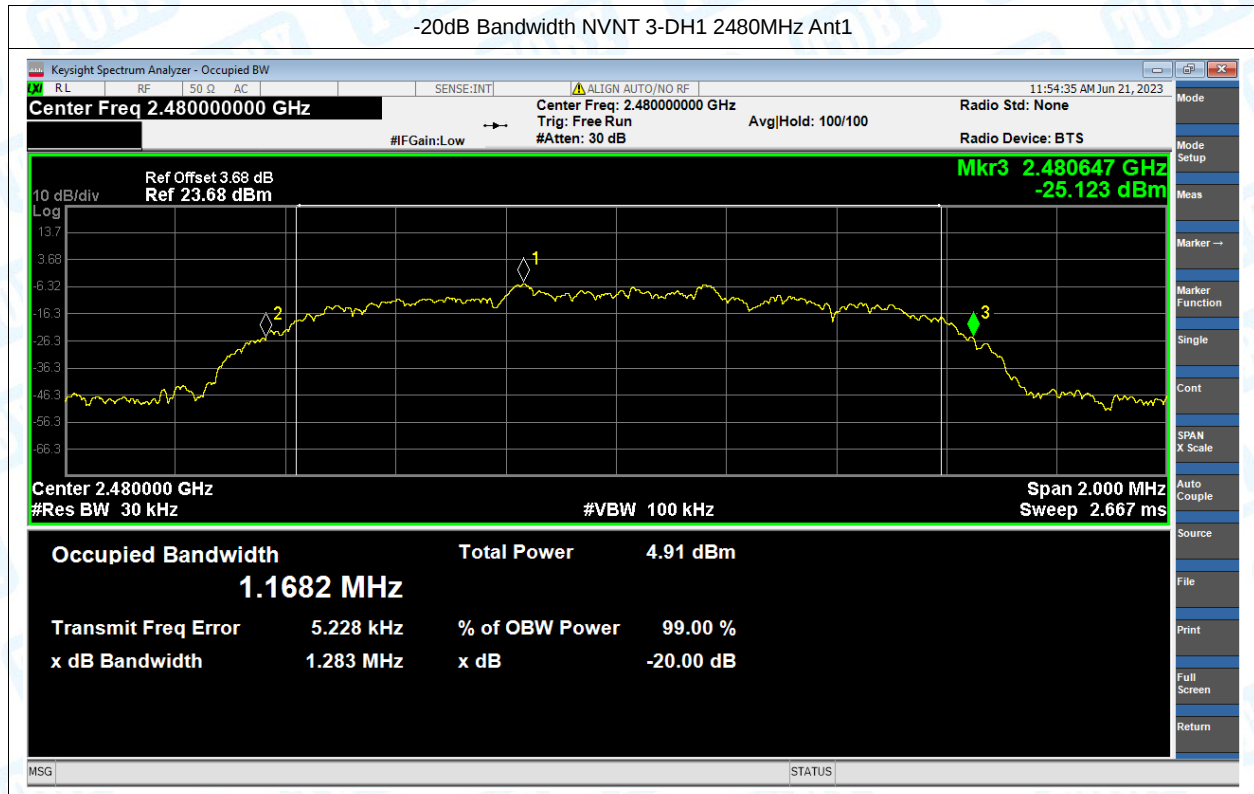


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



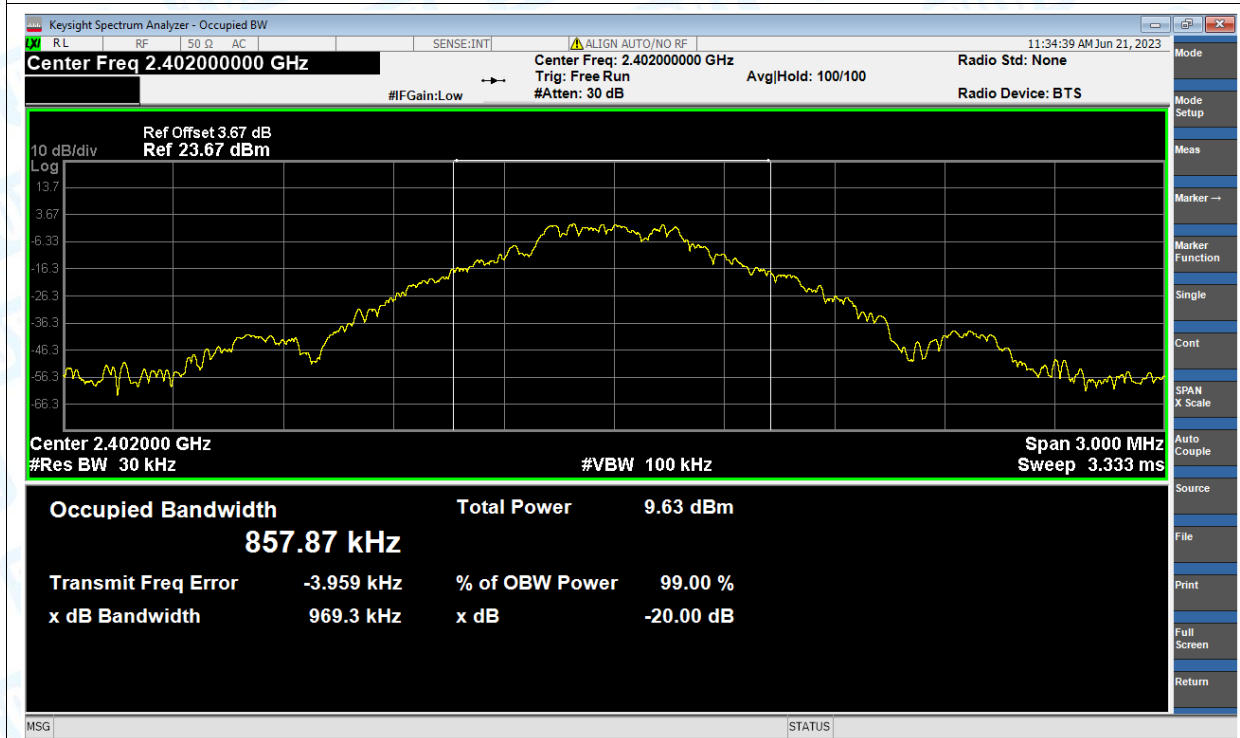


Occupied Channel Bandwidth

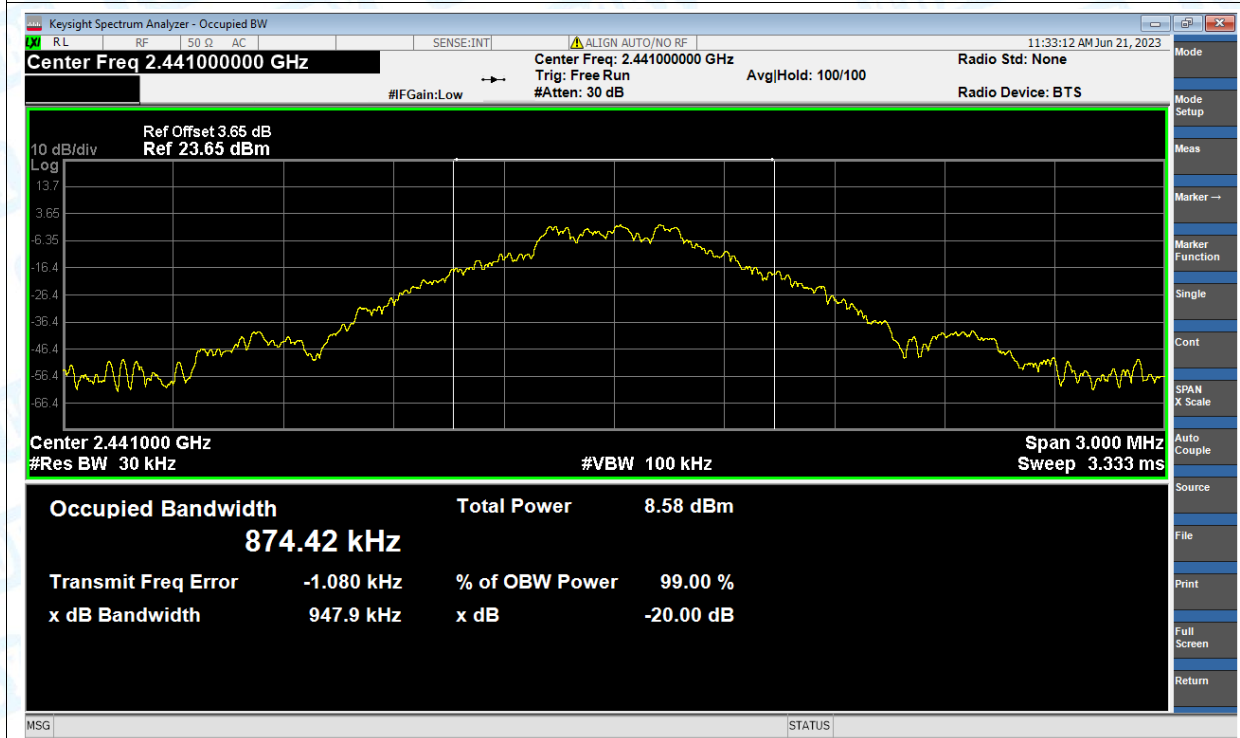
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.858
NVNT	1-DH1	2441	Ant1	0.874
NVNT	1-DH1	2480	Ant1	0.853
NVNT	2-DH1	2402	Ant1	1.185
NVNT	2-DH1	2441	Ant1	1.151
NVNT	2-DH1	2480	Ant1	1.178
NVNT	3-DH1	2402	Ant1	1.175
NVNT	3-DH1	2441	Ant1	1.162
NVNT	3-DH1	2480	Ant1	1.166

Test Graphs

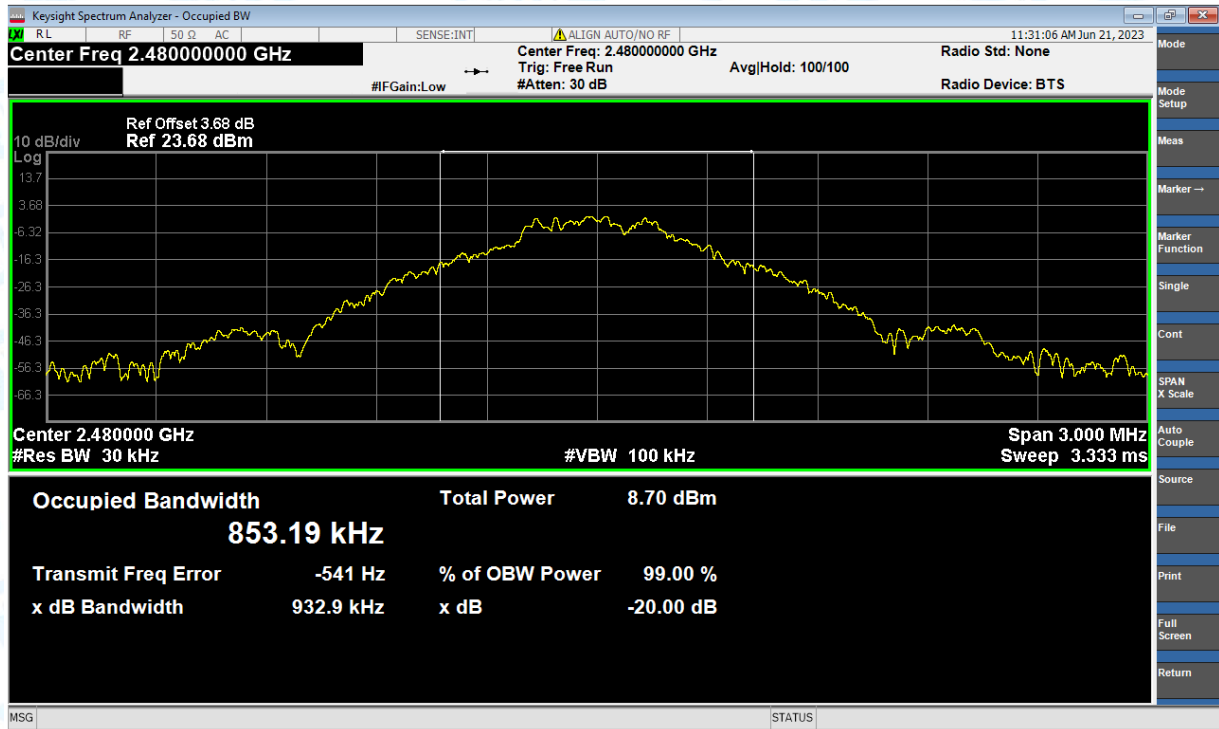
OBW NVNT 1-DH1 2402MHz Ant1



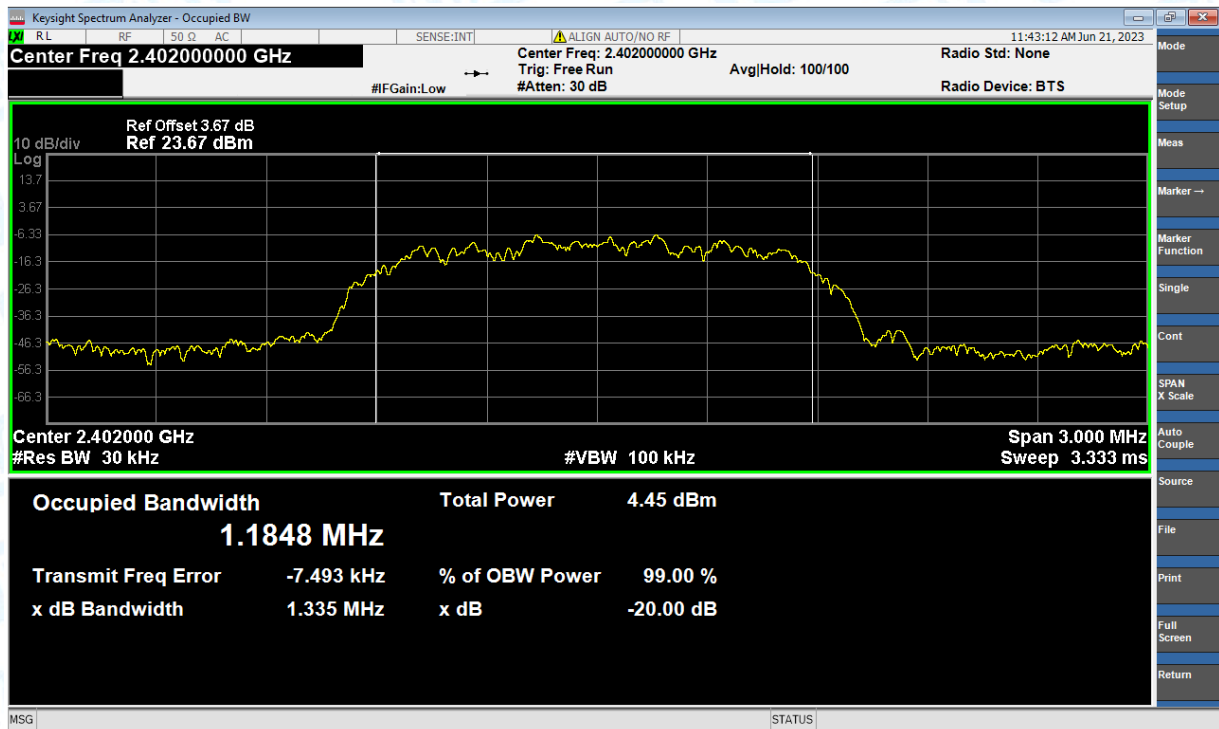
OBW NVNT 1-DH1 2441MHz Ant1



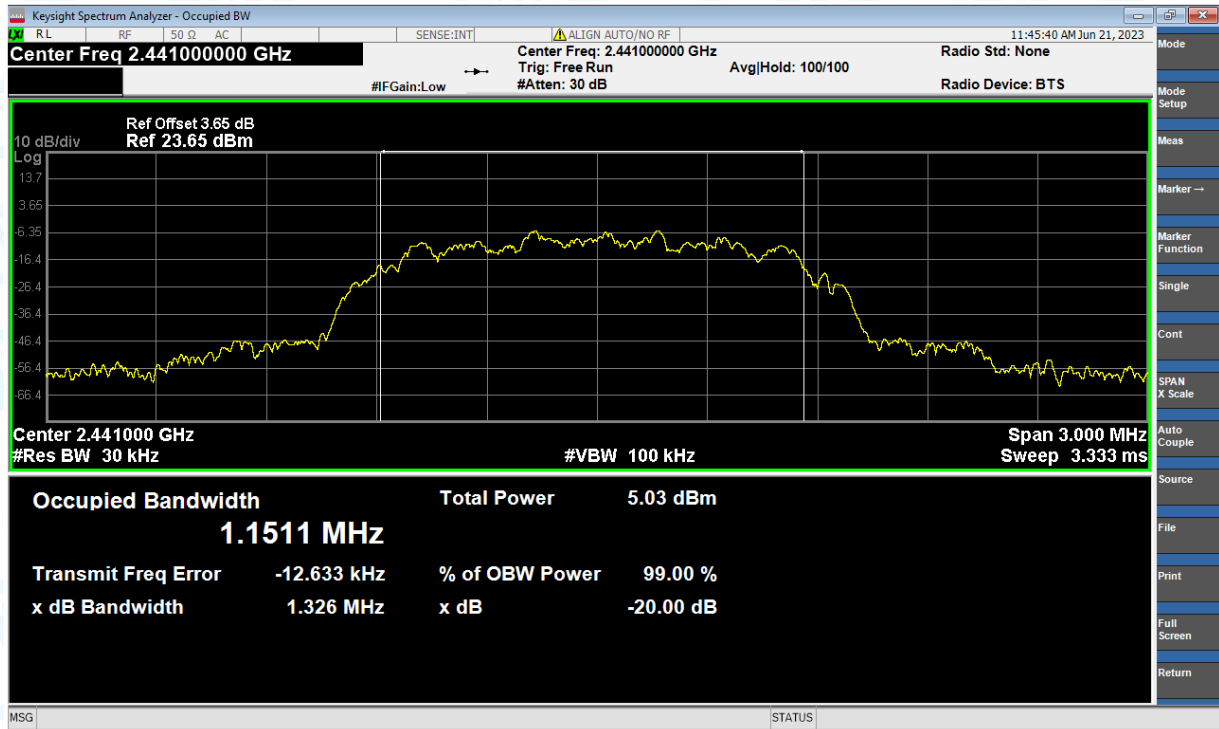
OBW NVNT 1-DH1 2480MHz Ant1



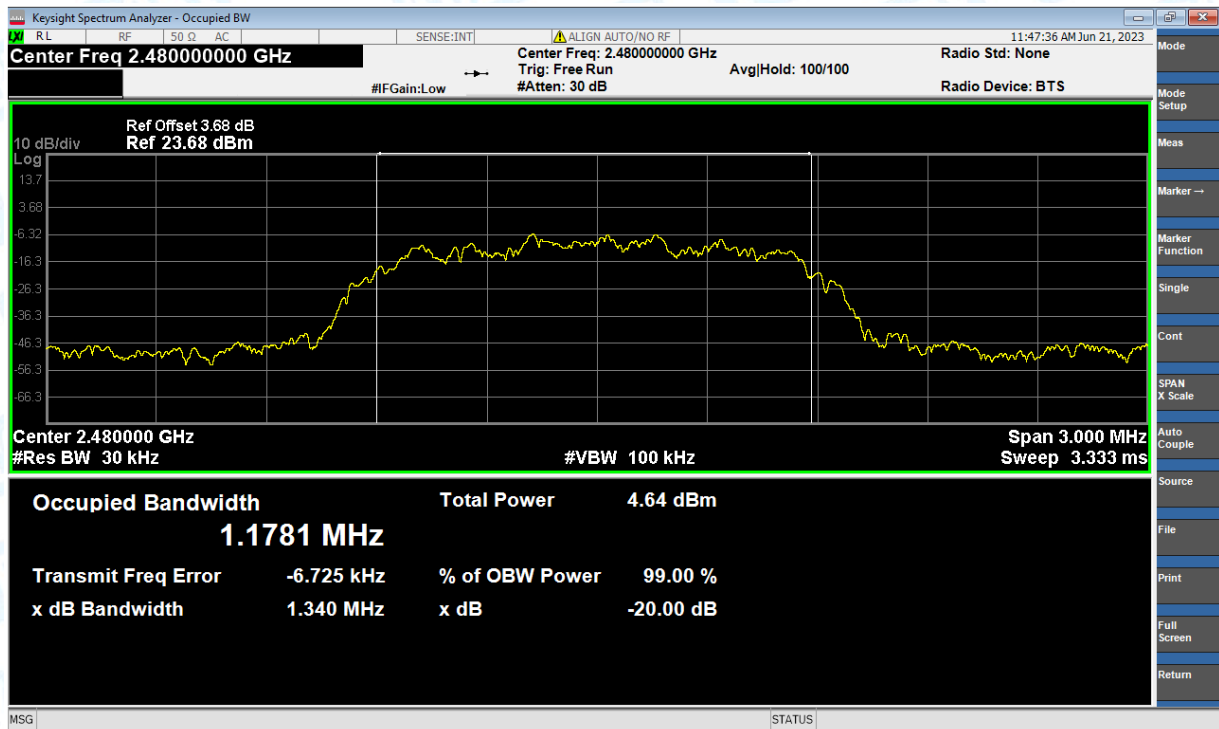
OBW NVNT 2-DH1 2402MHz Ant1



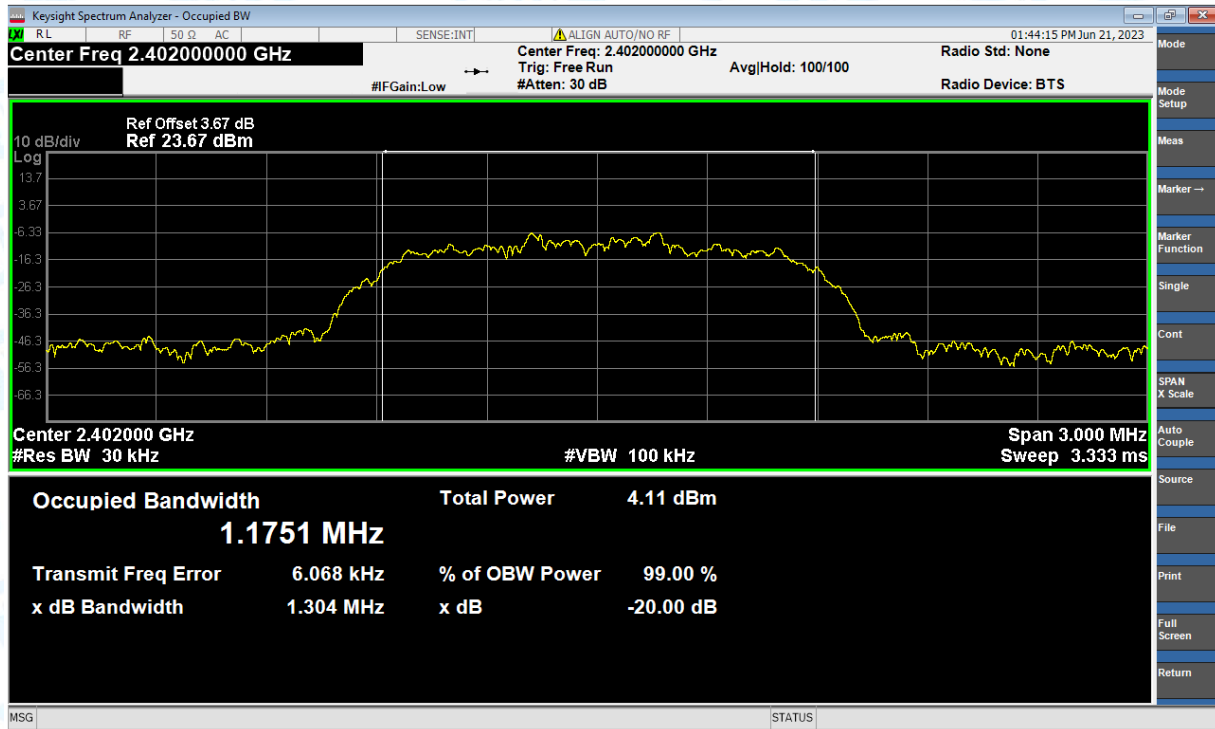
OBW NVNT 2-DH1 2441MHz Ant1



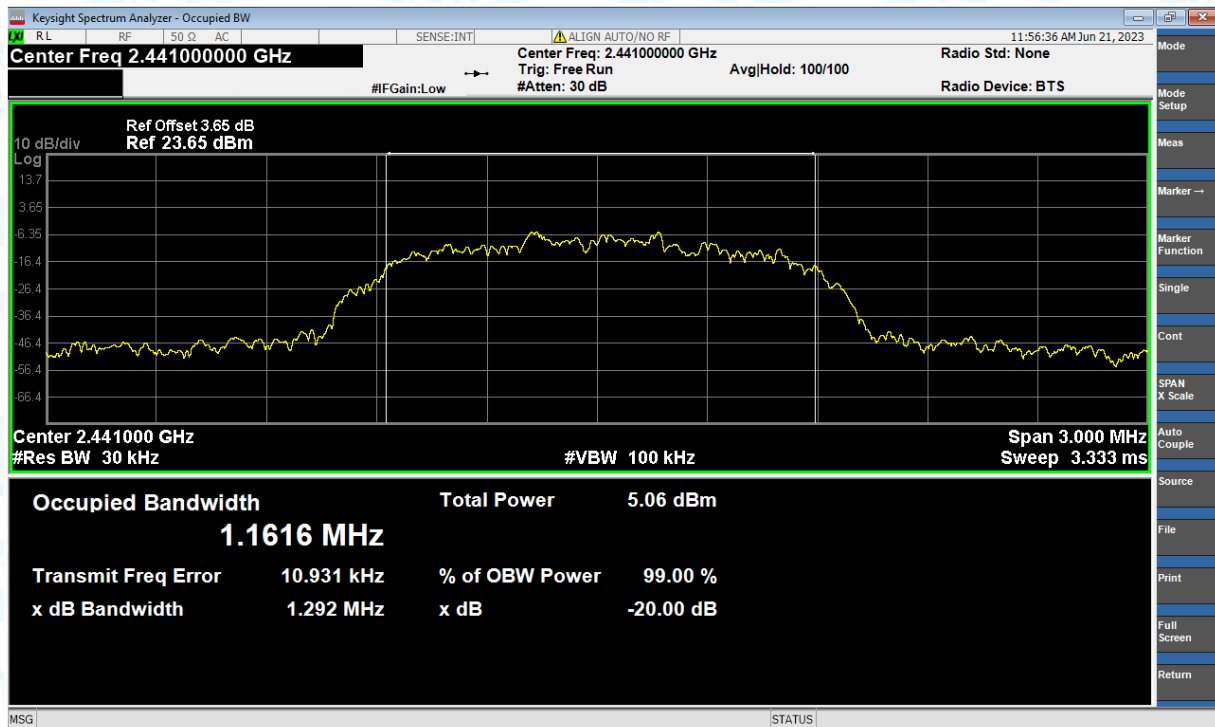
OBW NVNT 2-DH1 2480MHz Ant1

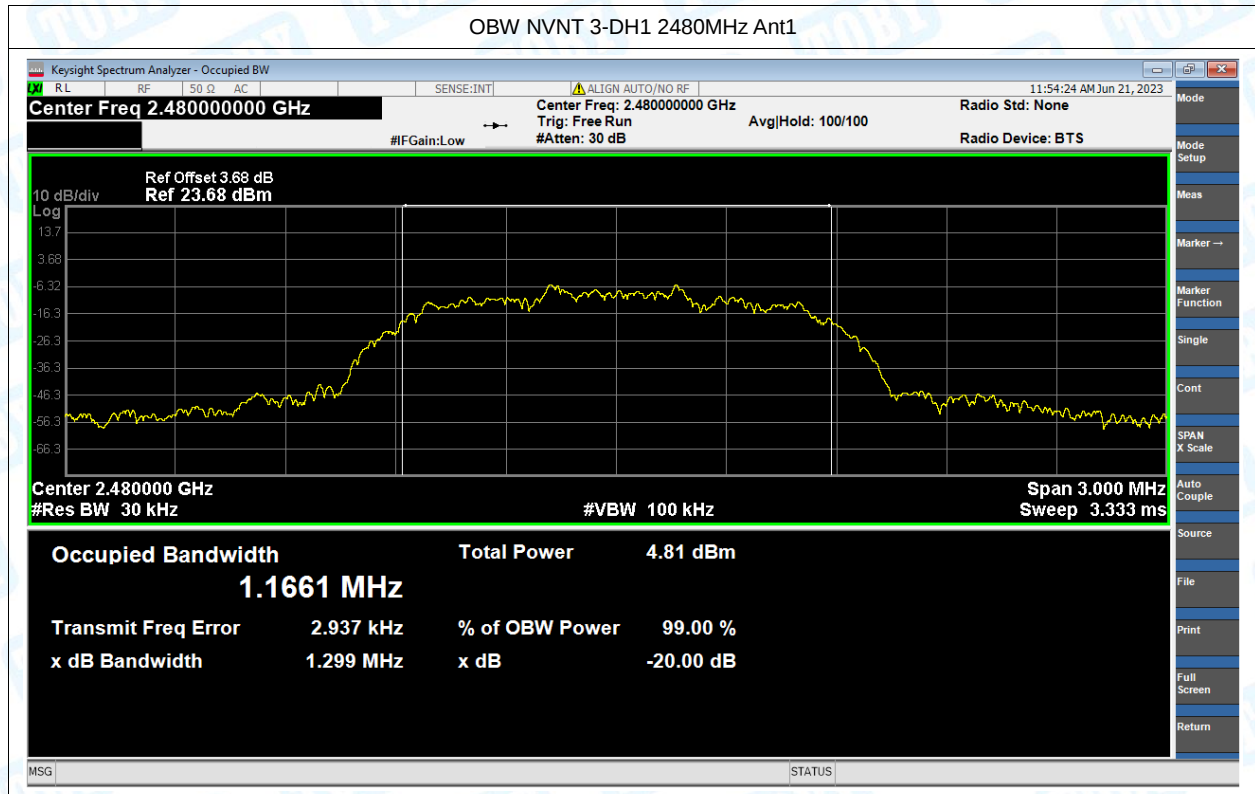


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



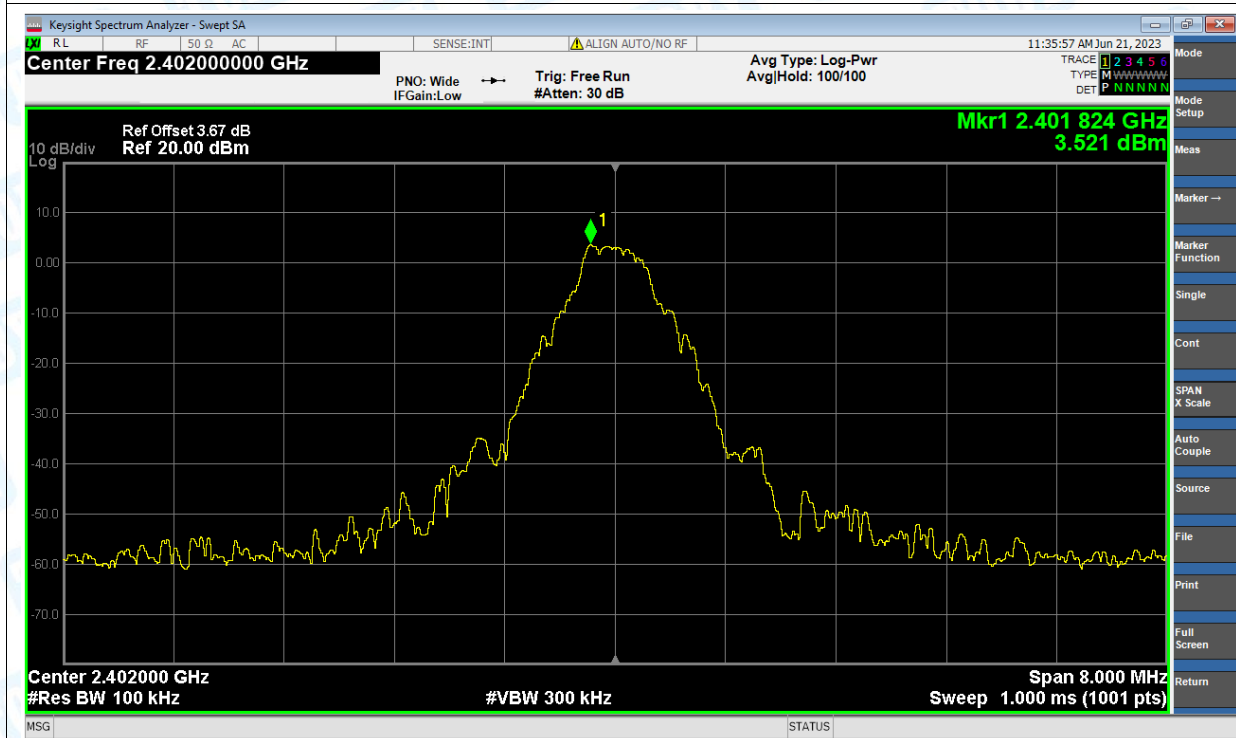


Band Edge

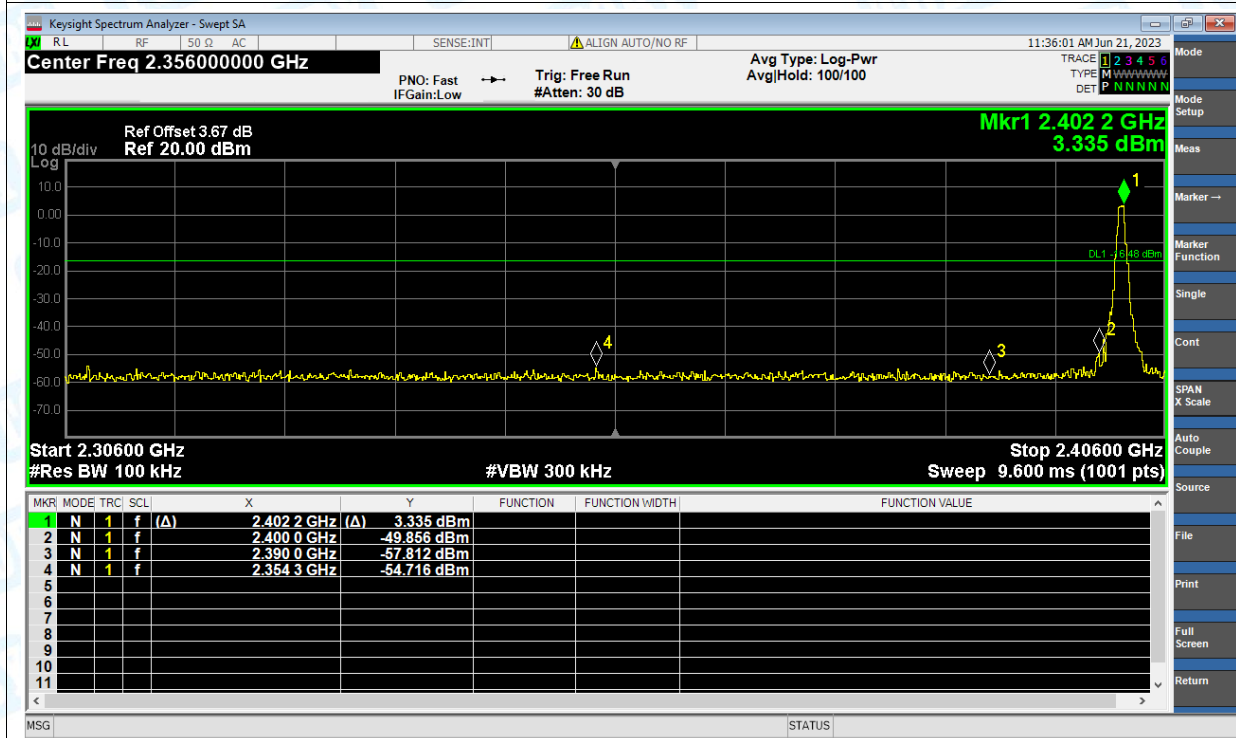
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-58.24	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-57.23	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-52.95	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-53.18	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-53.53	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-52.16	-20	Pass

Test Graphs

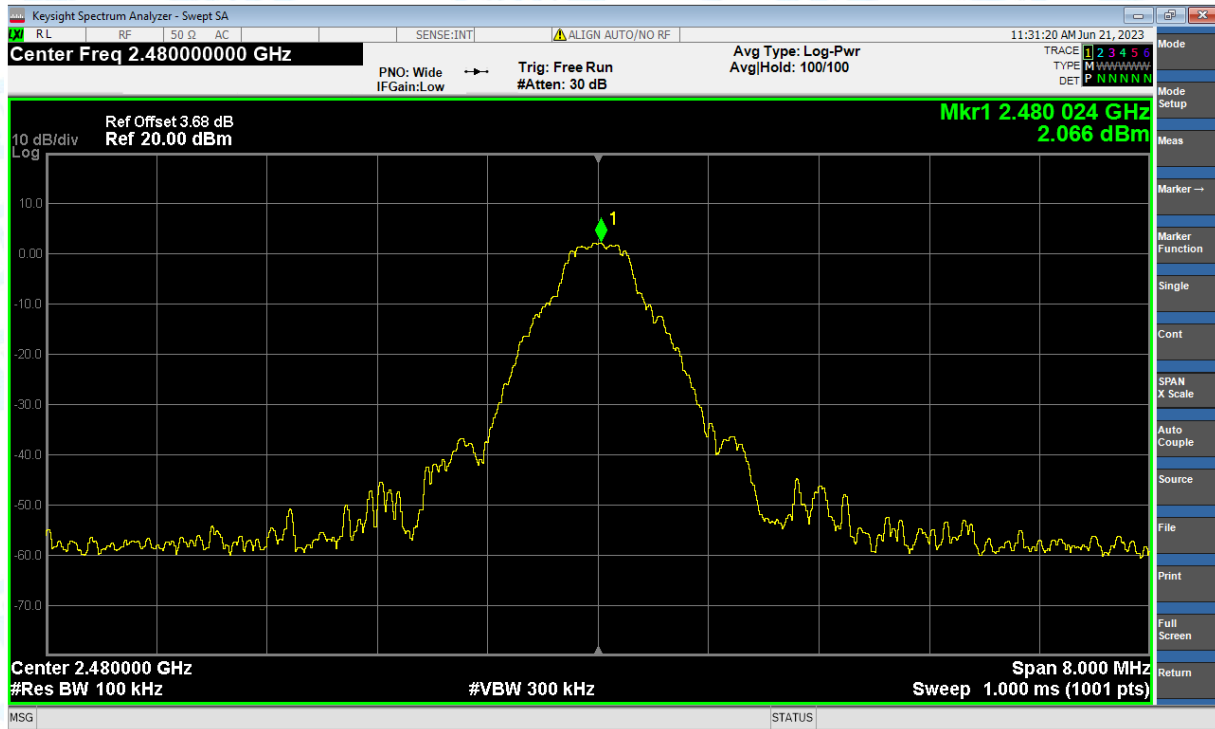
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



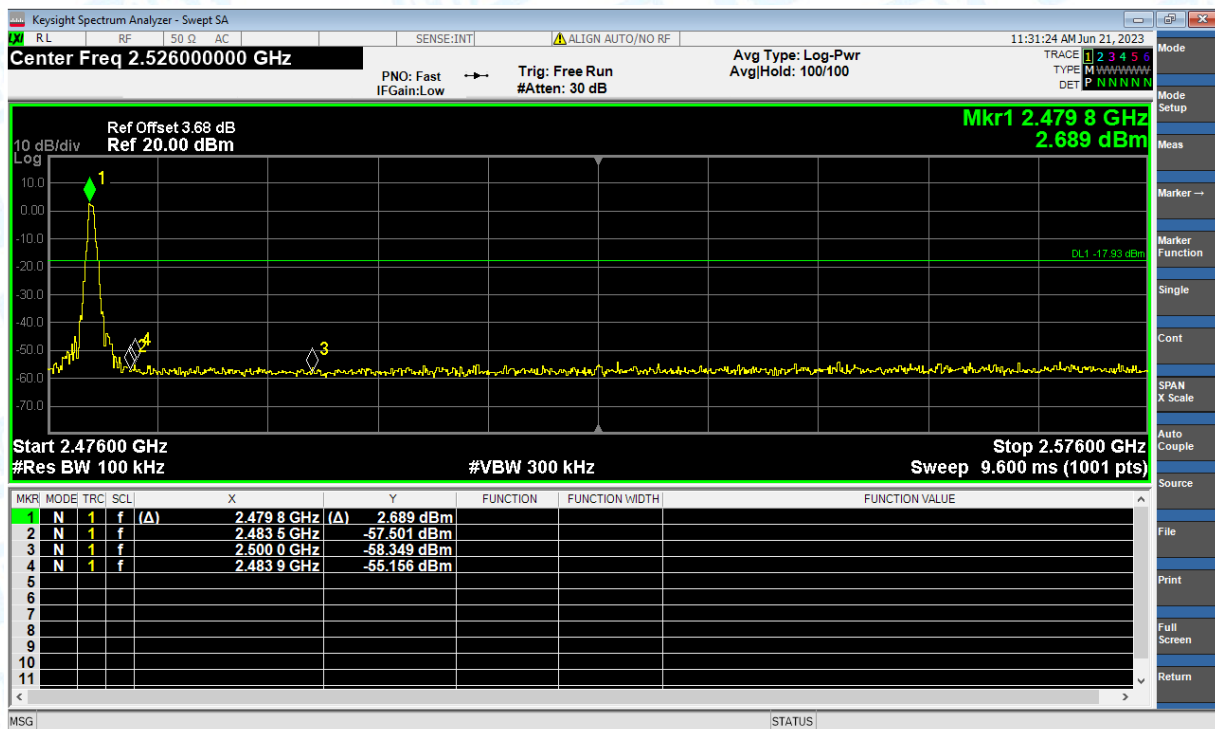
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



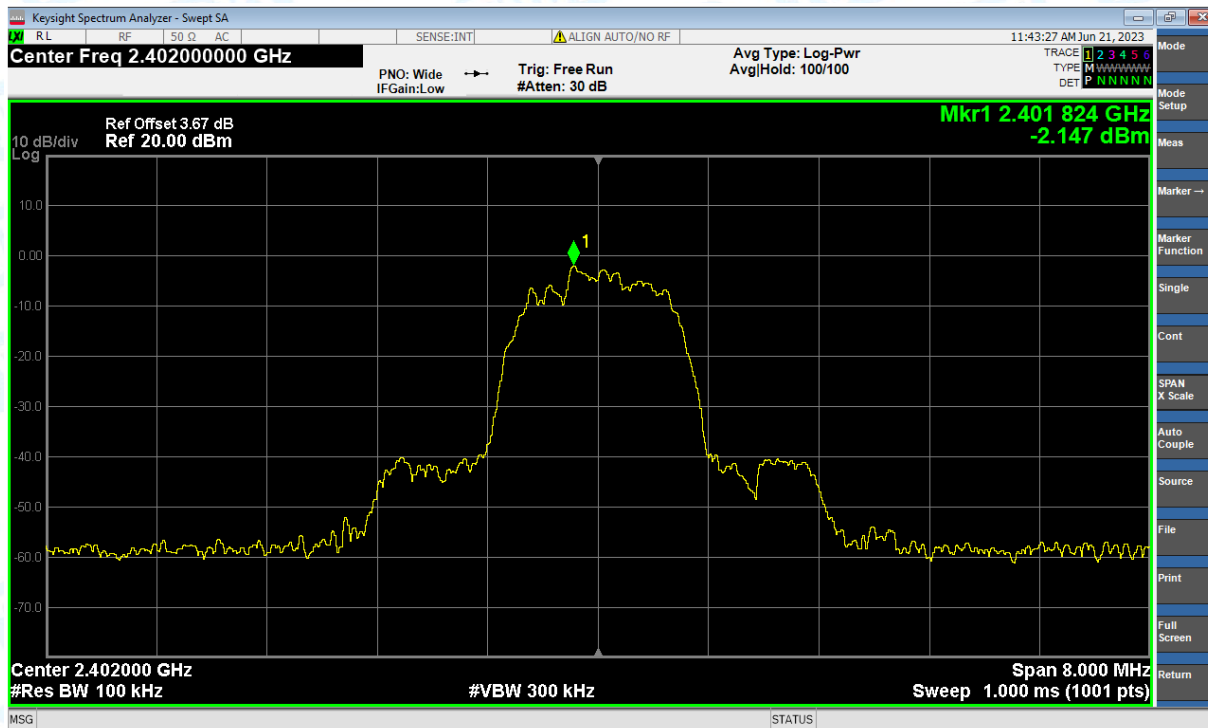
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



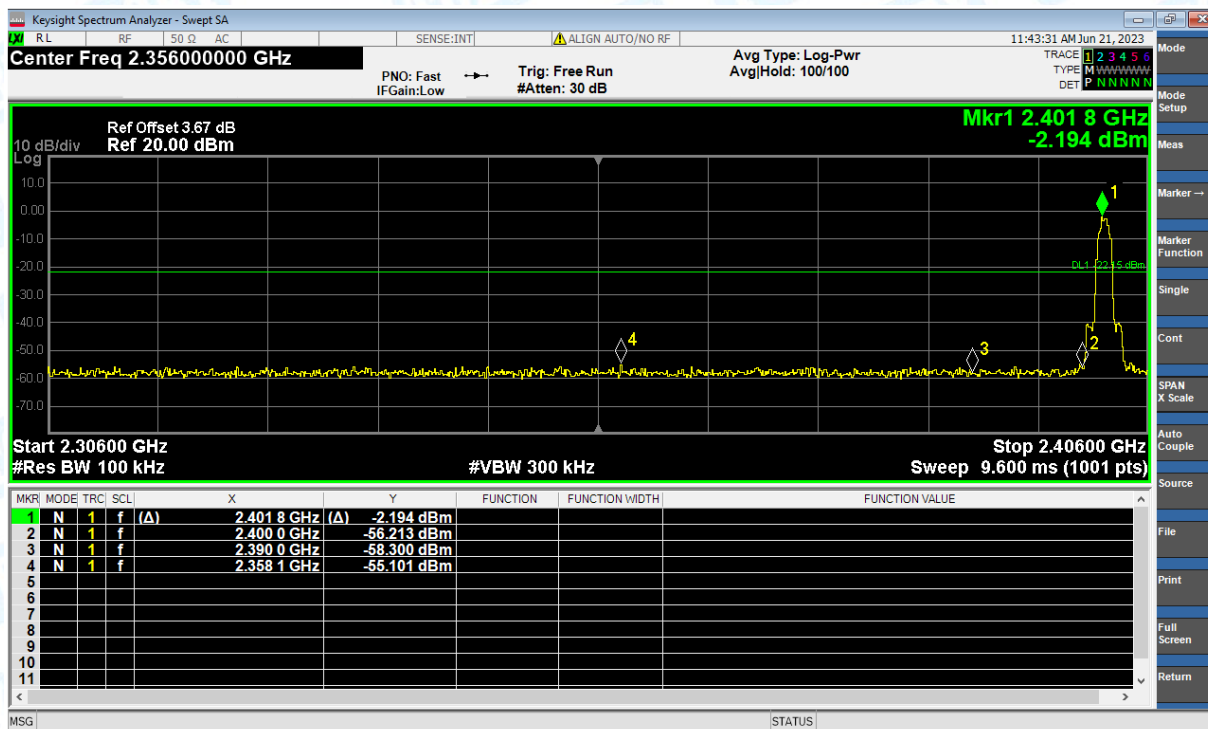
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



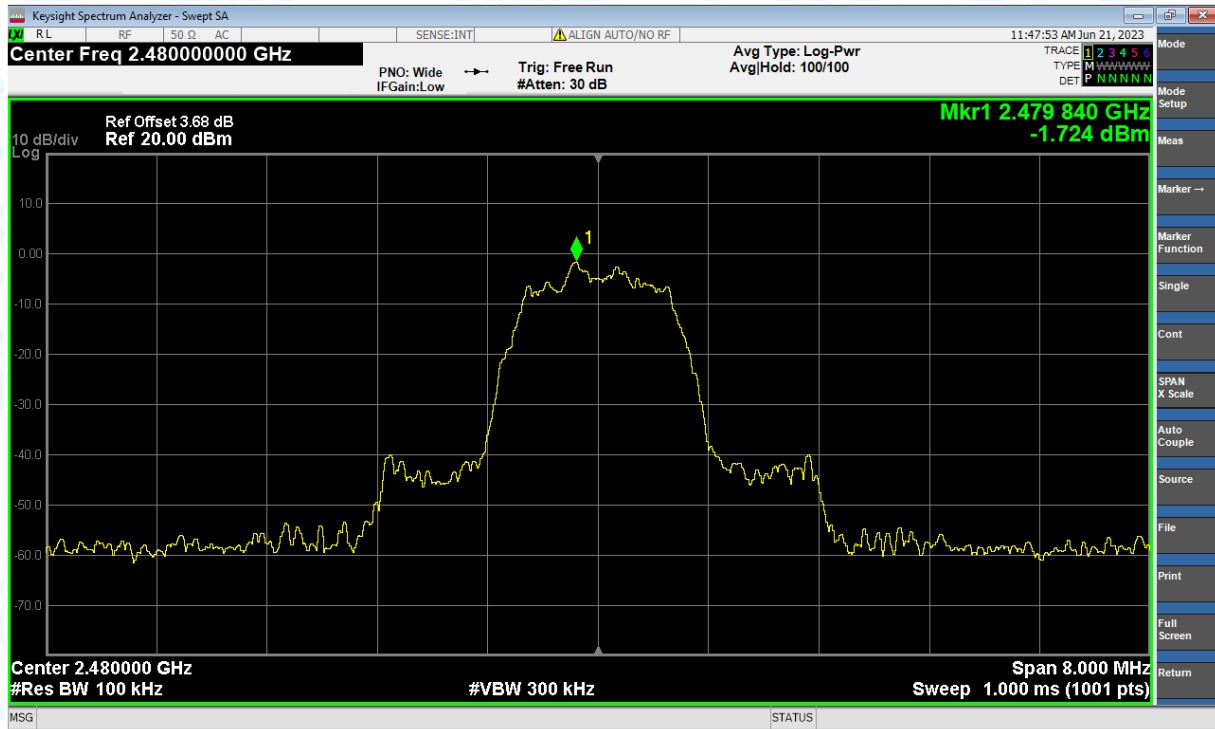
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



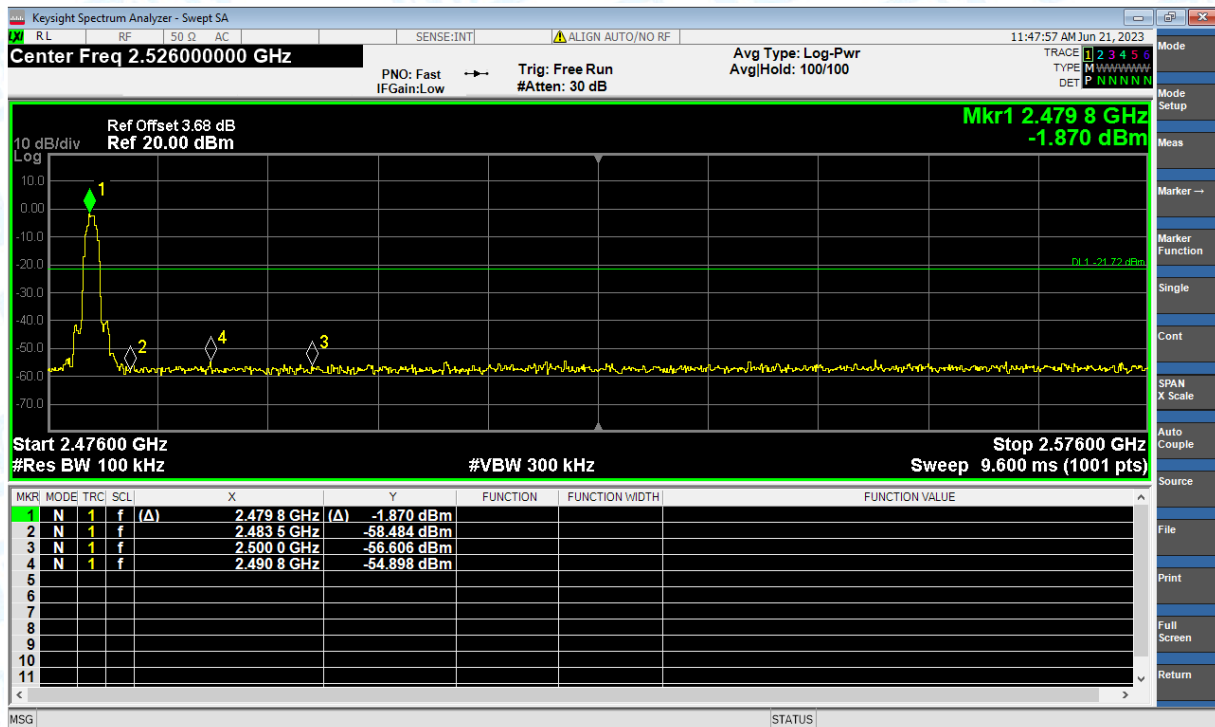
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



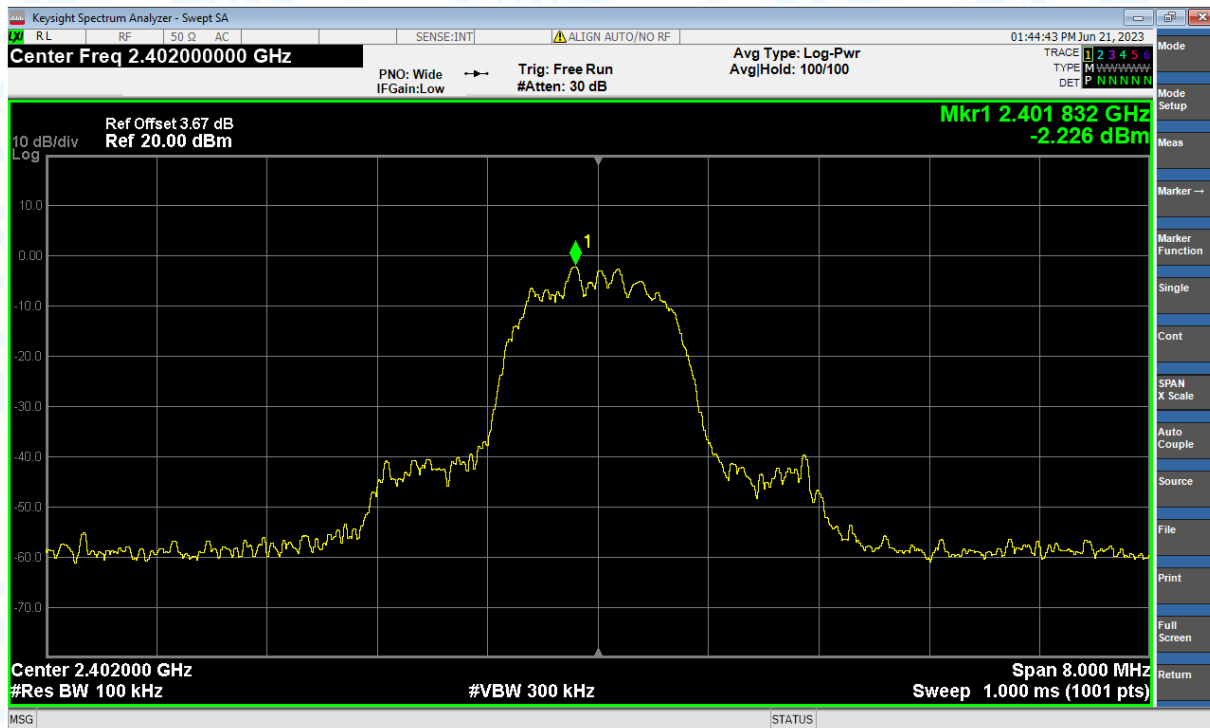
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



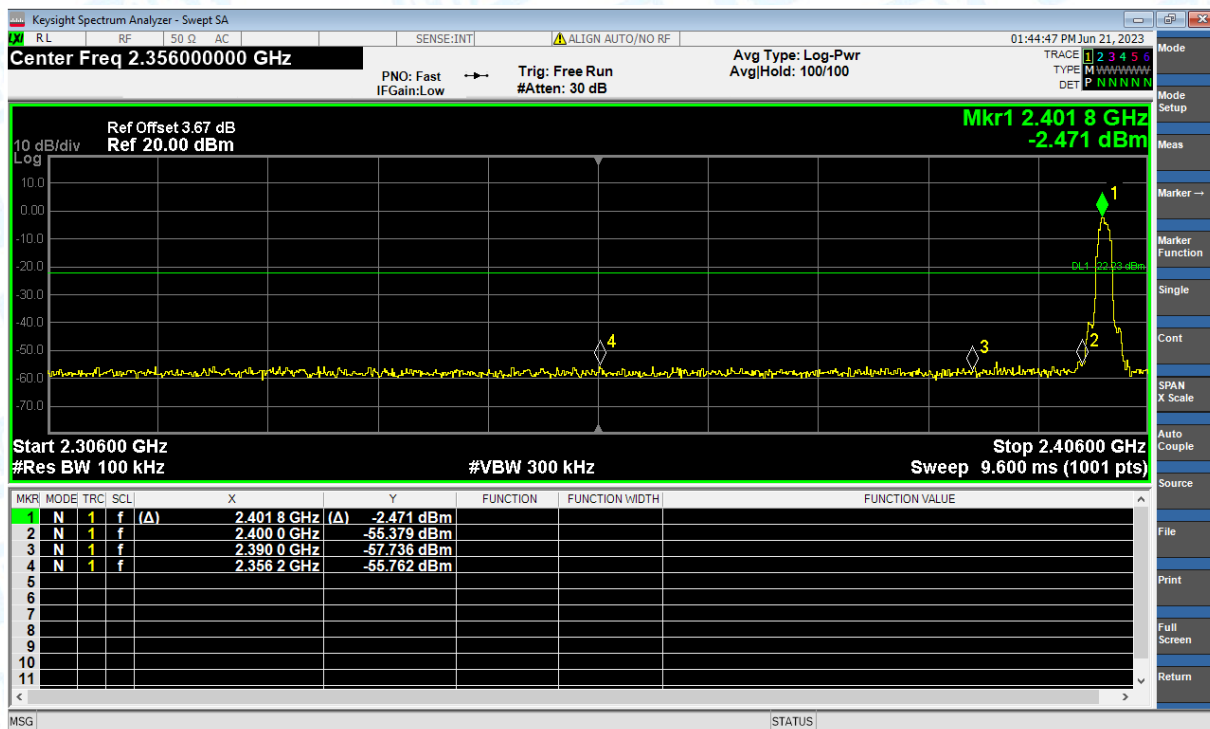
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



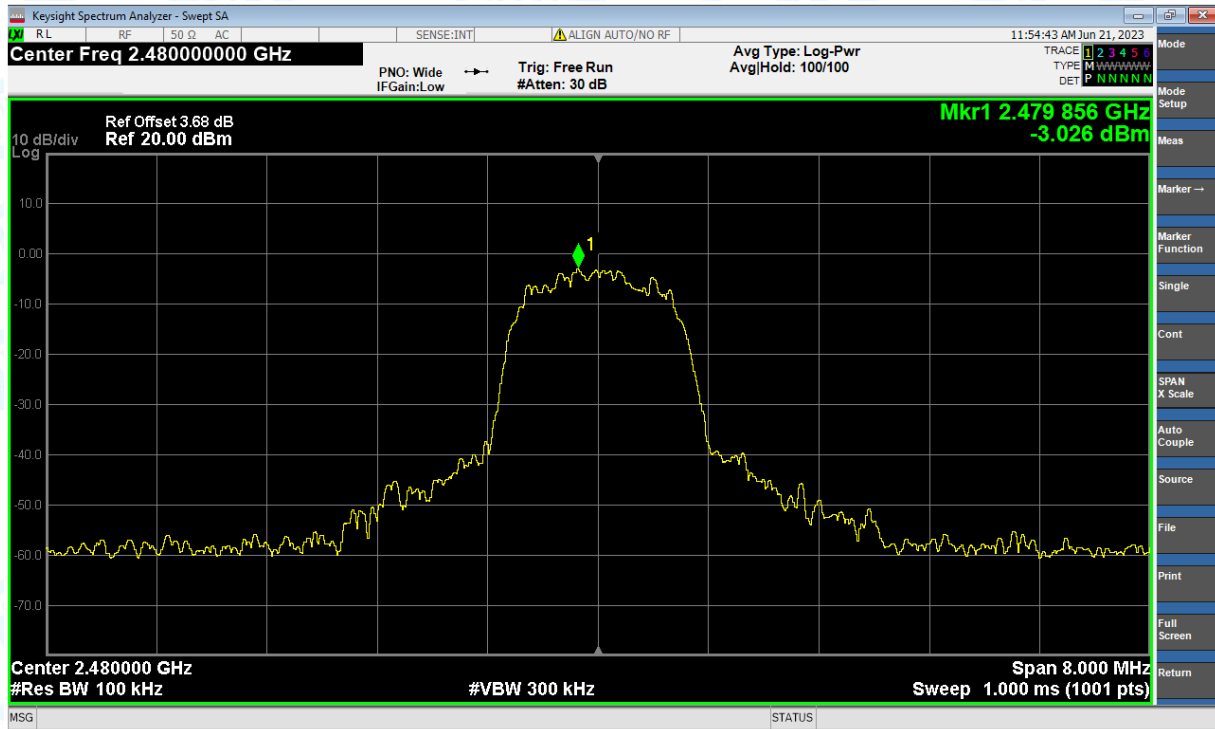
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



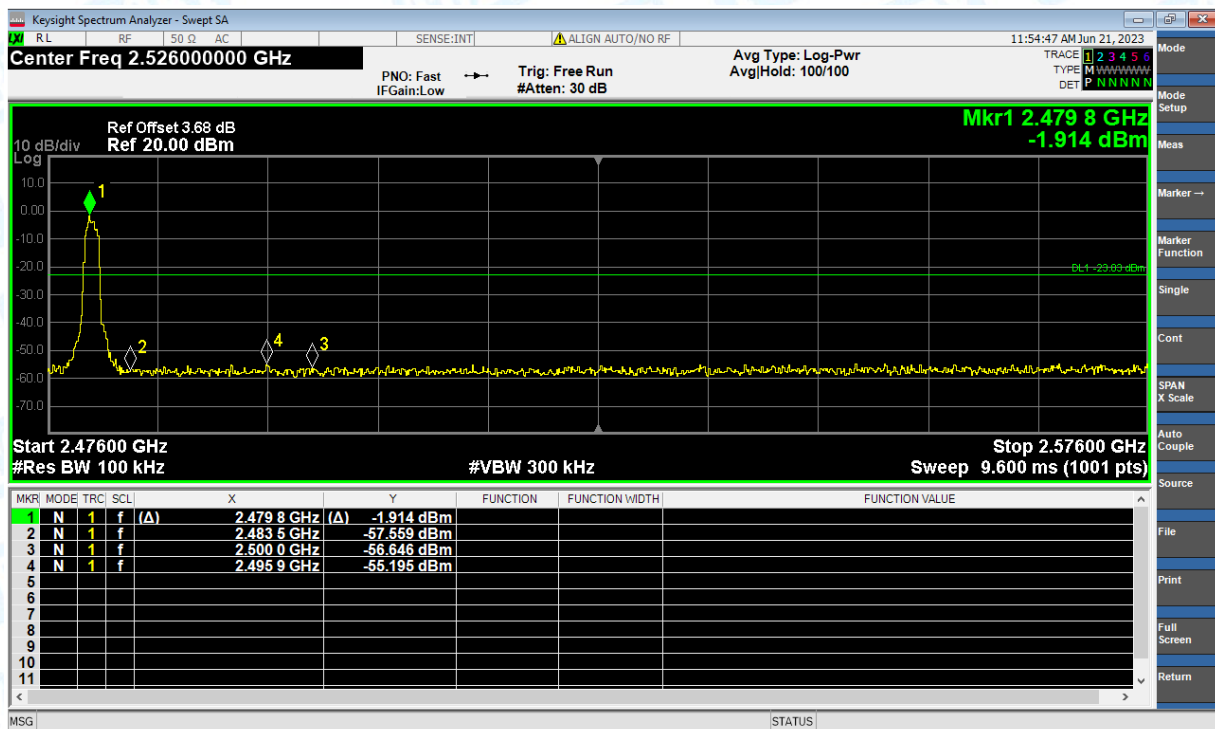
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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

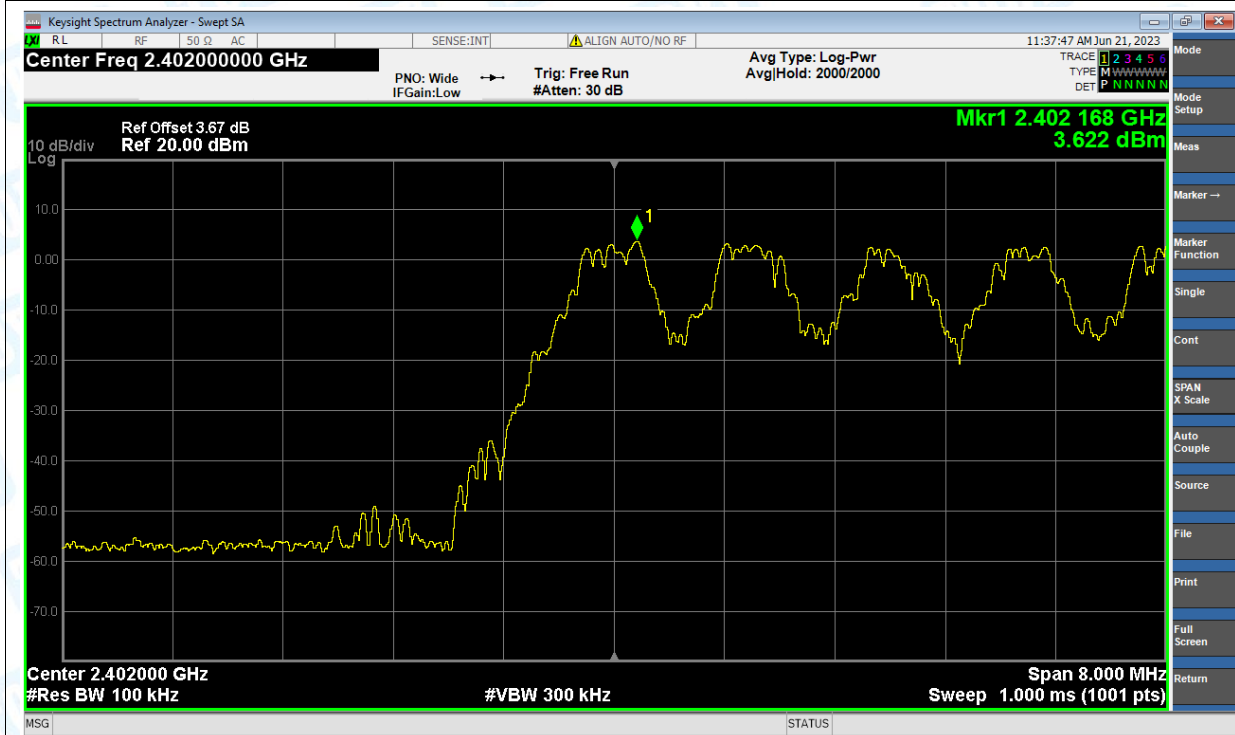


Band Edge(Hopping)

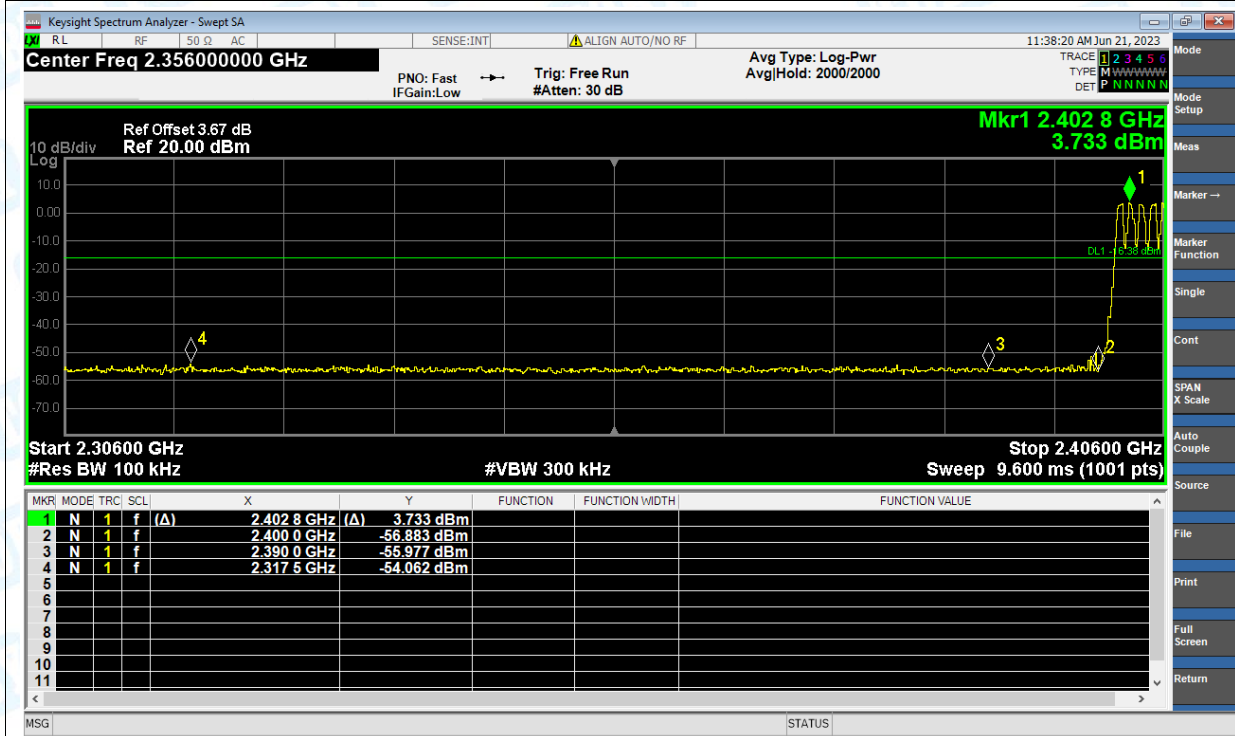
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-57.68	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-56.55	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-52.07	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-52.5	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-51.88	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-51.79	-20	Pass

Test Graphs

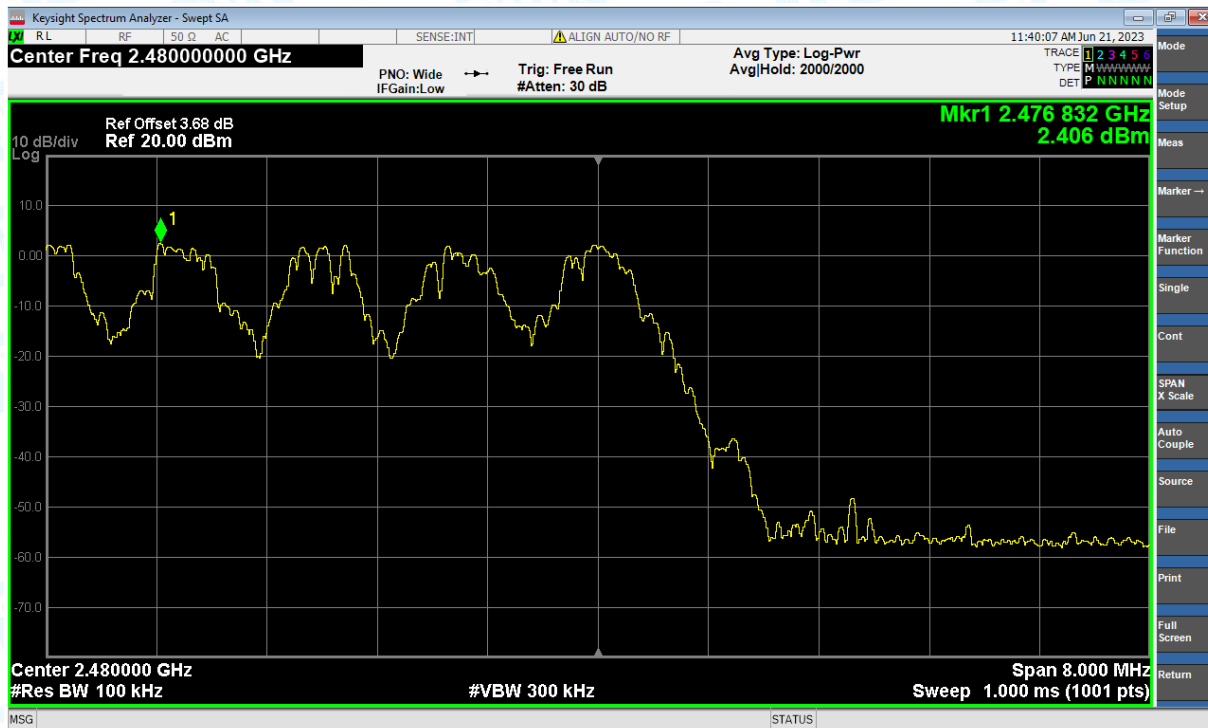
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



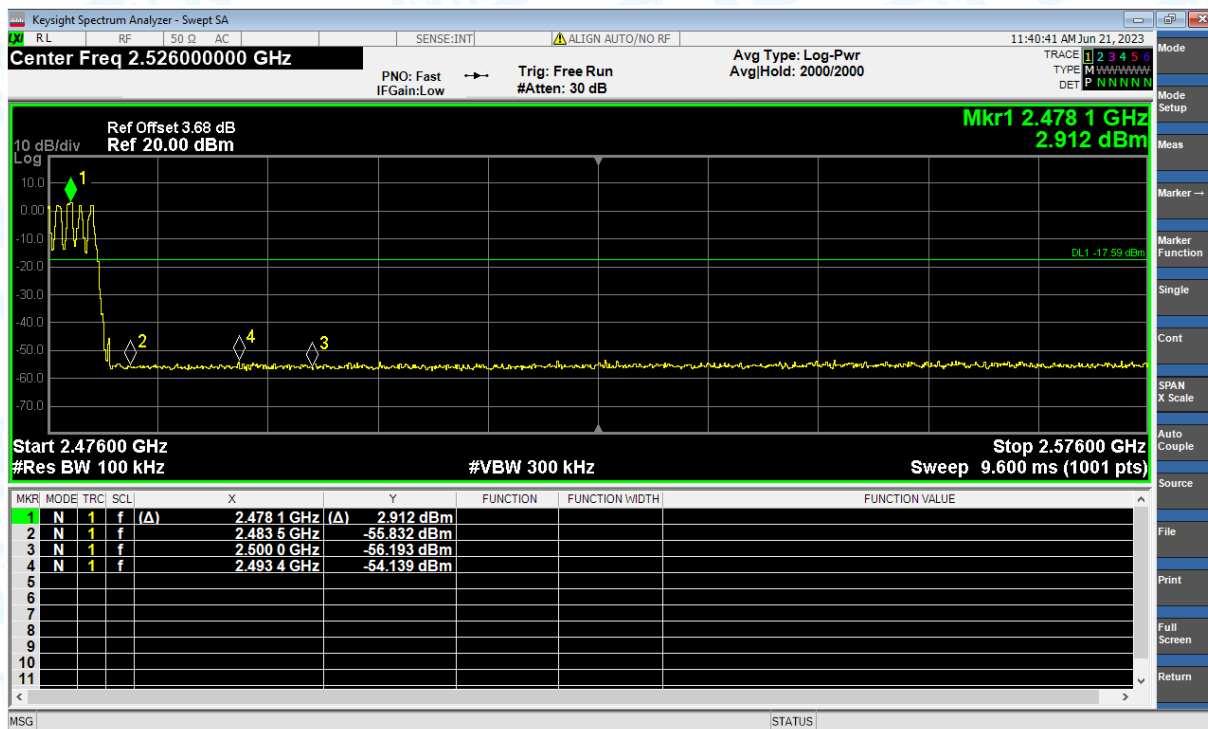
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



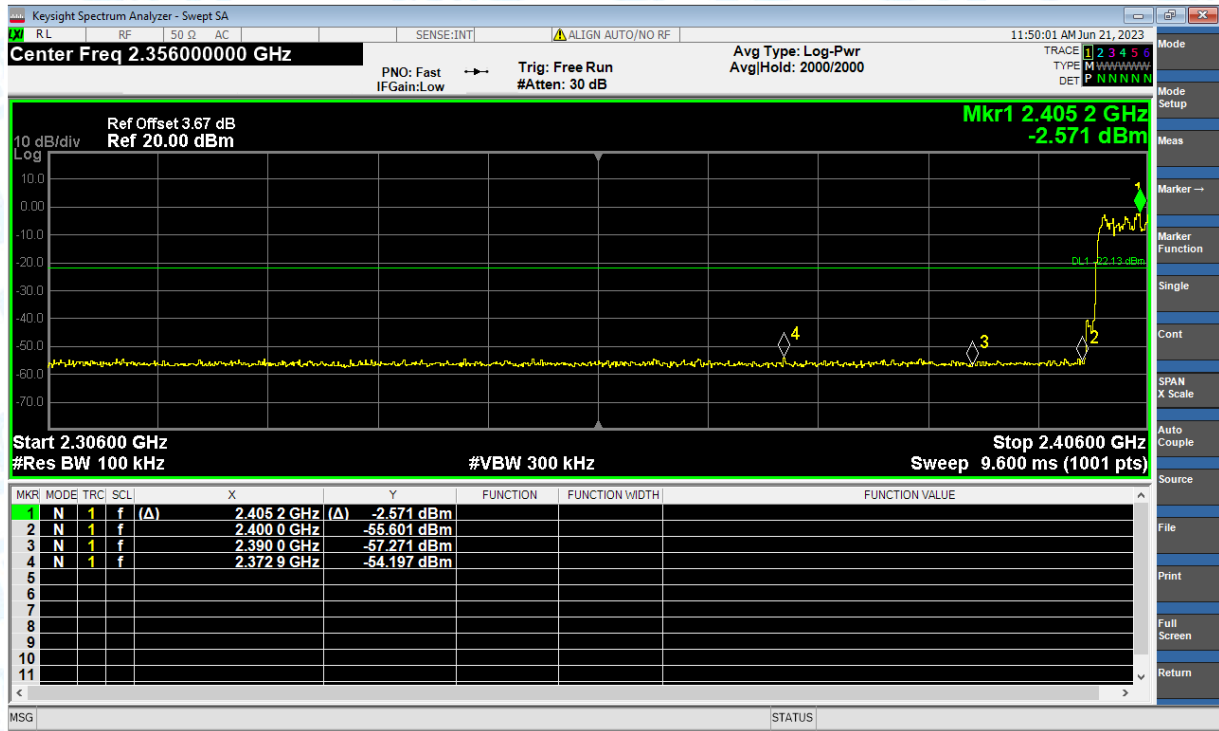
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



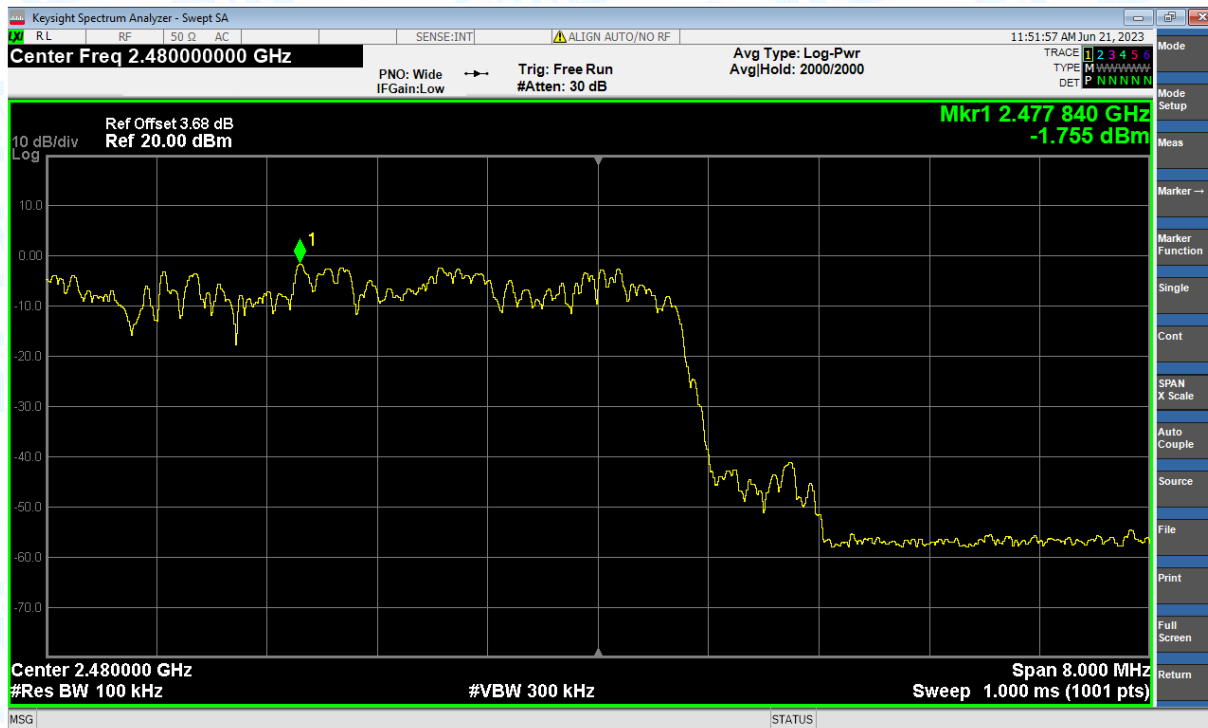
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



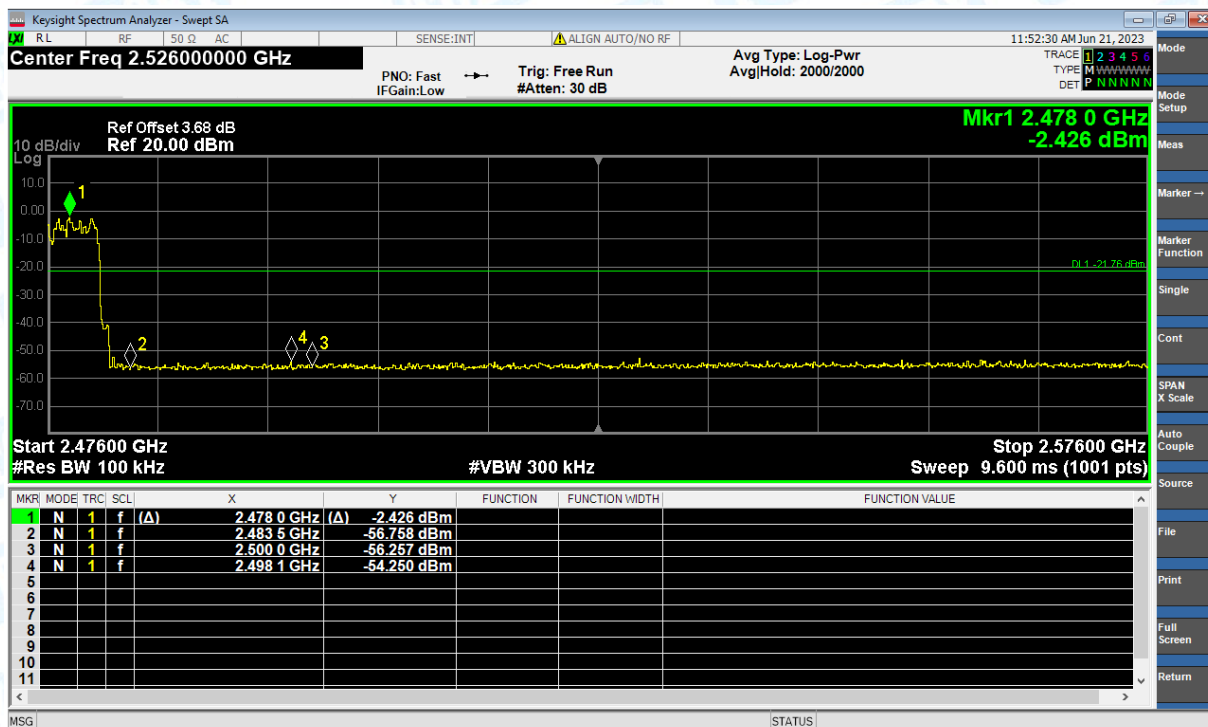
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



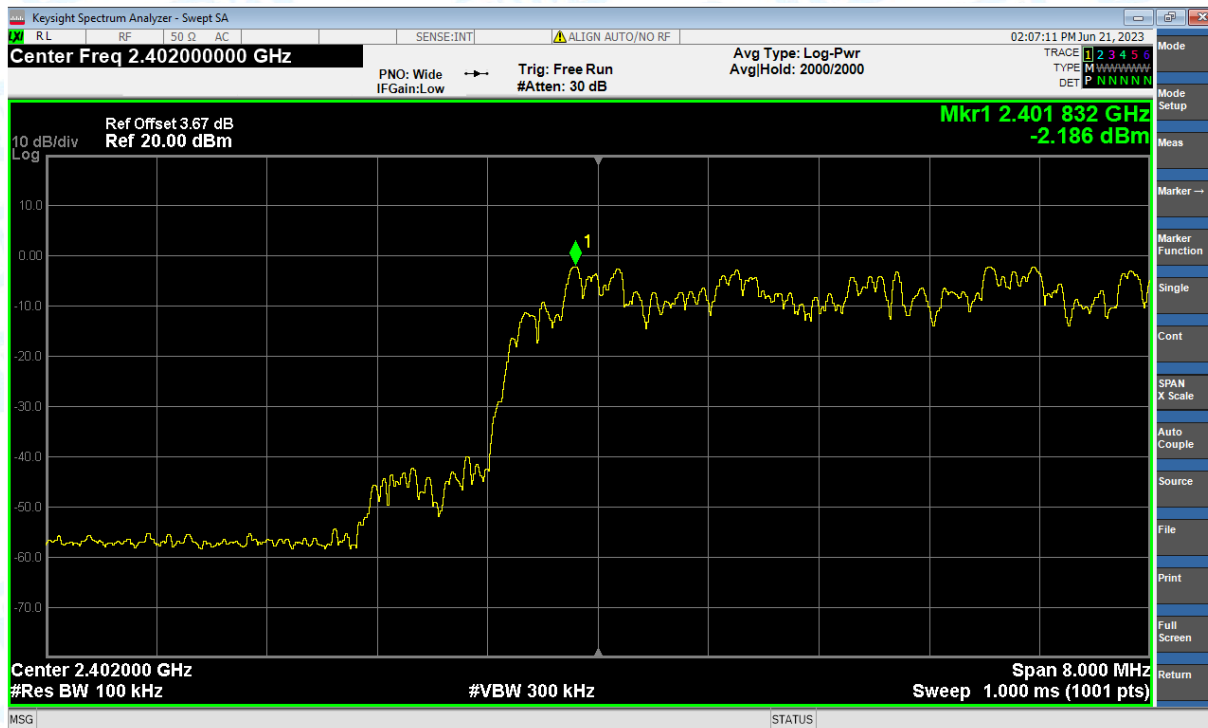
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



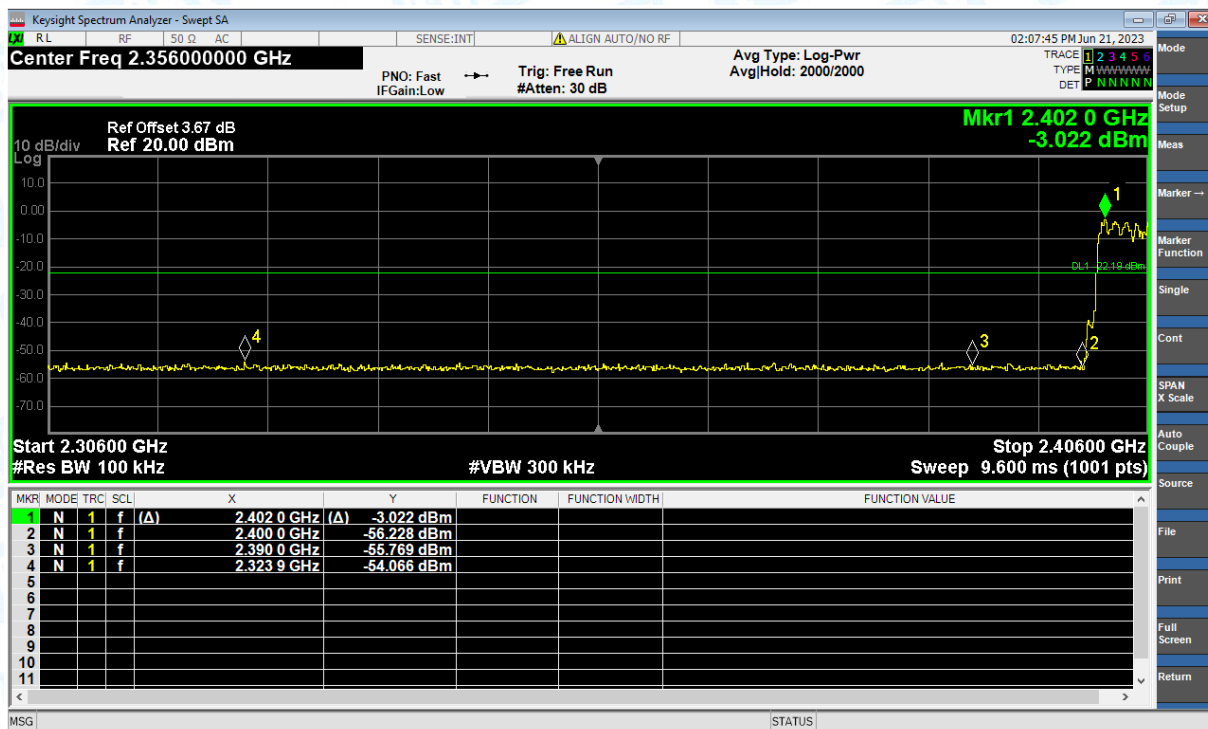
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



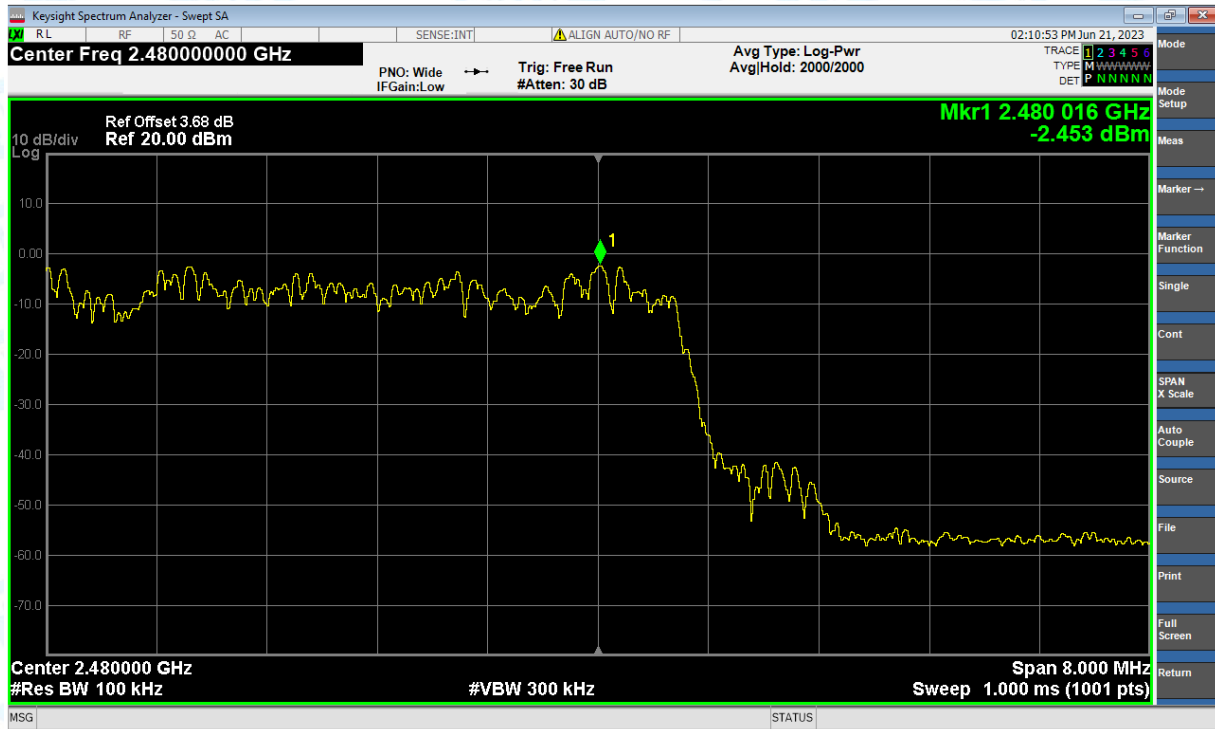
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



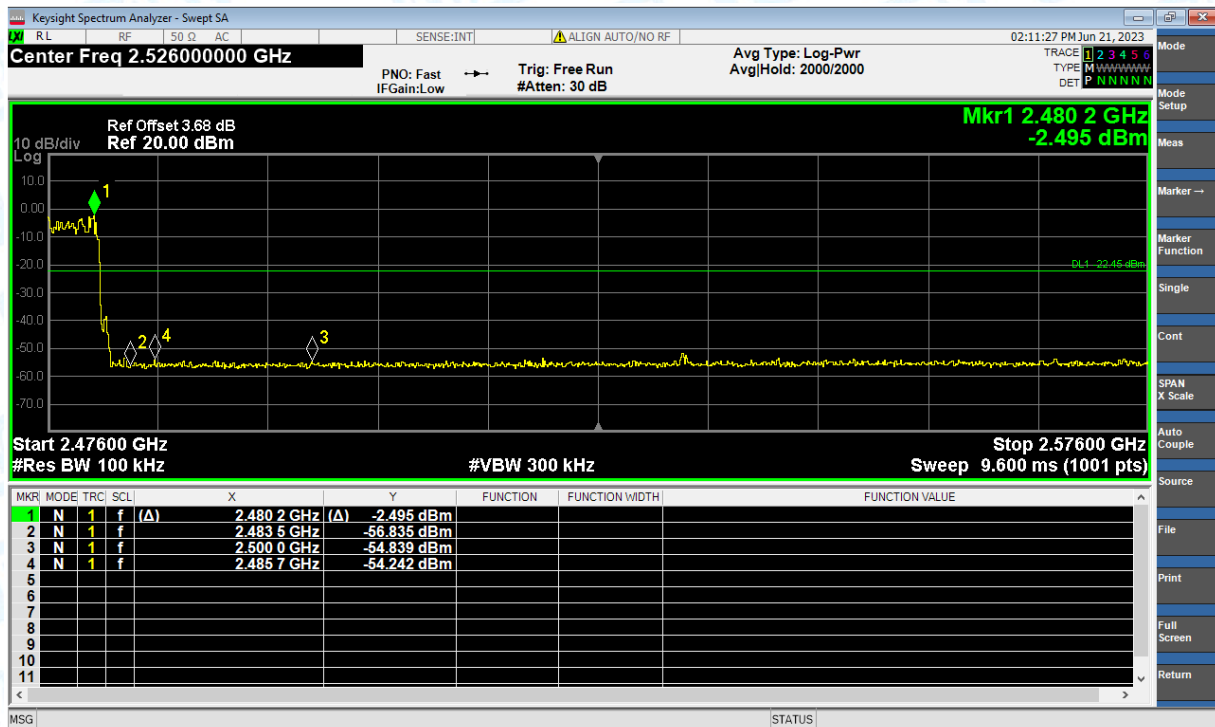
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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

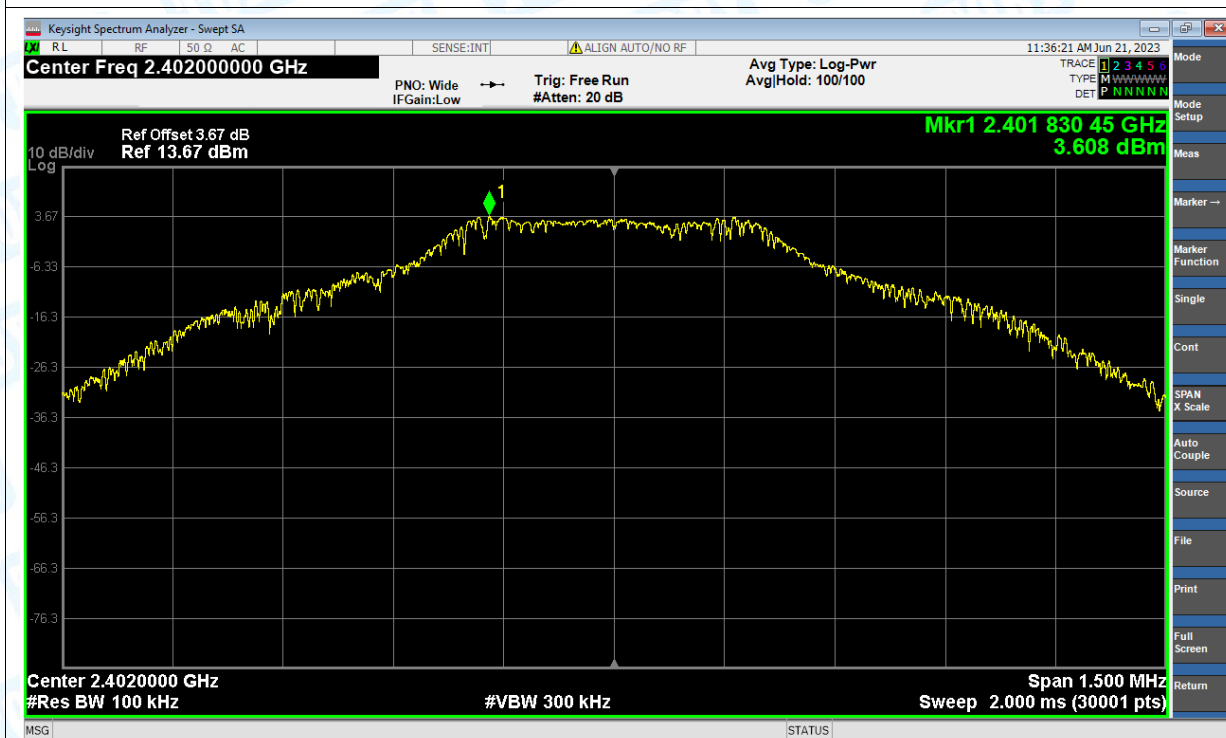


Conducted RF Spurious Emission

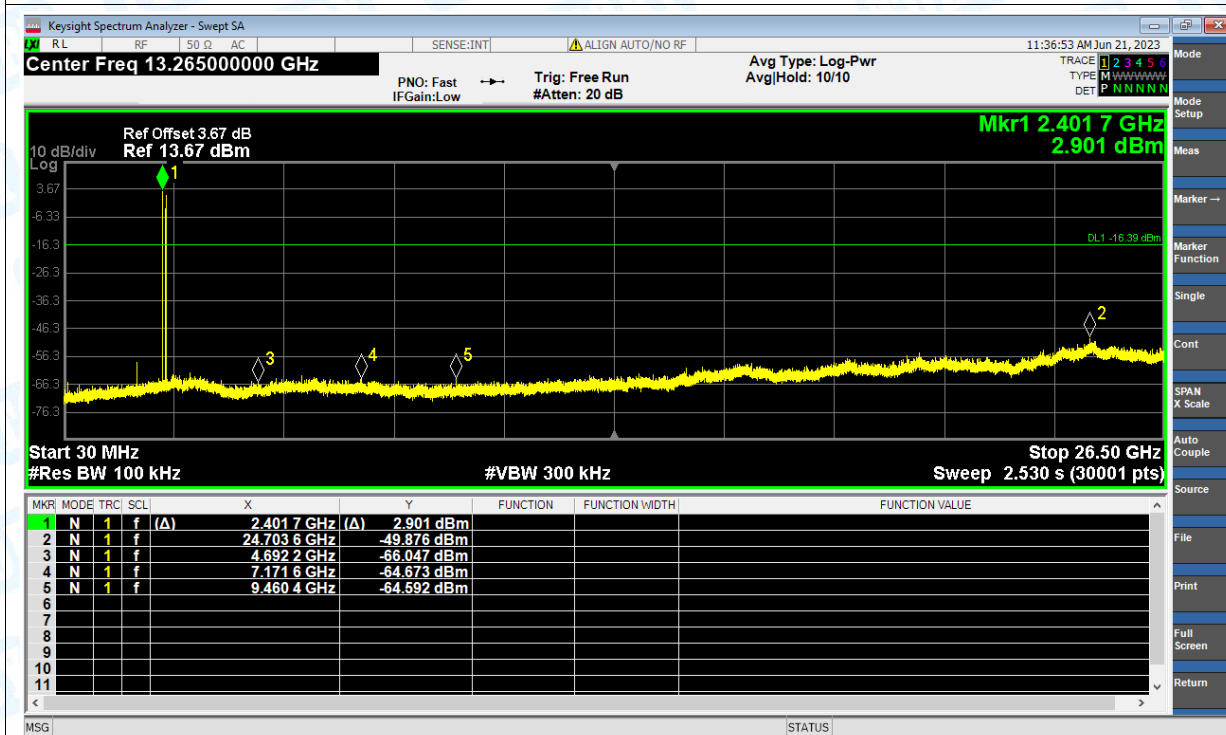
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-53.49	-20	Pass
NVNT	1-DH1	2441	Ant1	-53.62	-20	Pass
NVNT	1-DH1	2480	Ant1	-53.24	-20	Pass
NVNT	2-DH1	2402	Ant1	-48.82	-20	Pass
NVNT	2-DH1	2441	Ant1	-49.36	-20	Pass
NVNT	2-DH1	2480	Ant1	-49.06	-20	Pass
NVNT	3-DH1	2402	Ant1	-48.29	-20	Pass
NVNT	3-DH1	2441	Ant1	-48.98	-20	Pass
NVNT	3-DH1	2480	Ant1	-48.58	-20	Pass

Test Graphs

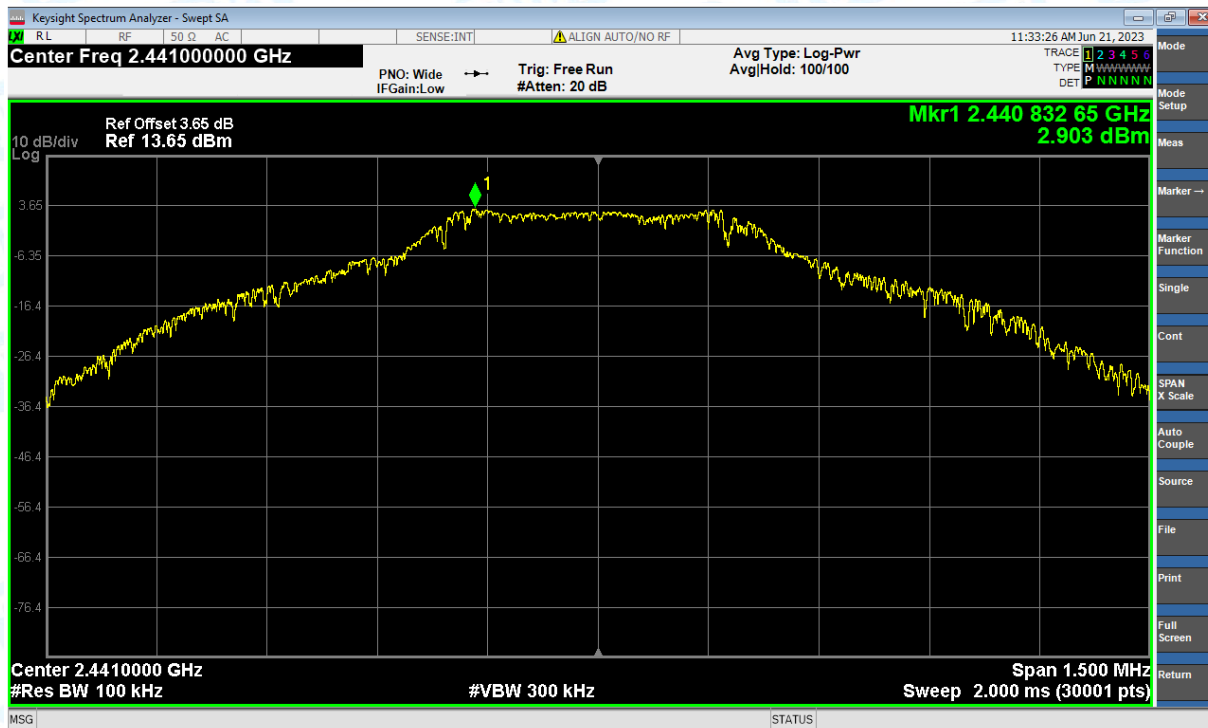
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



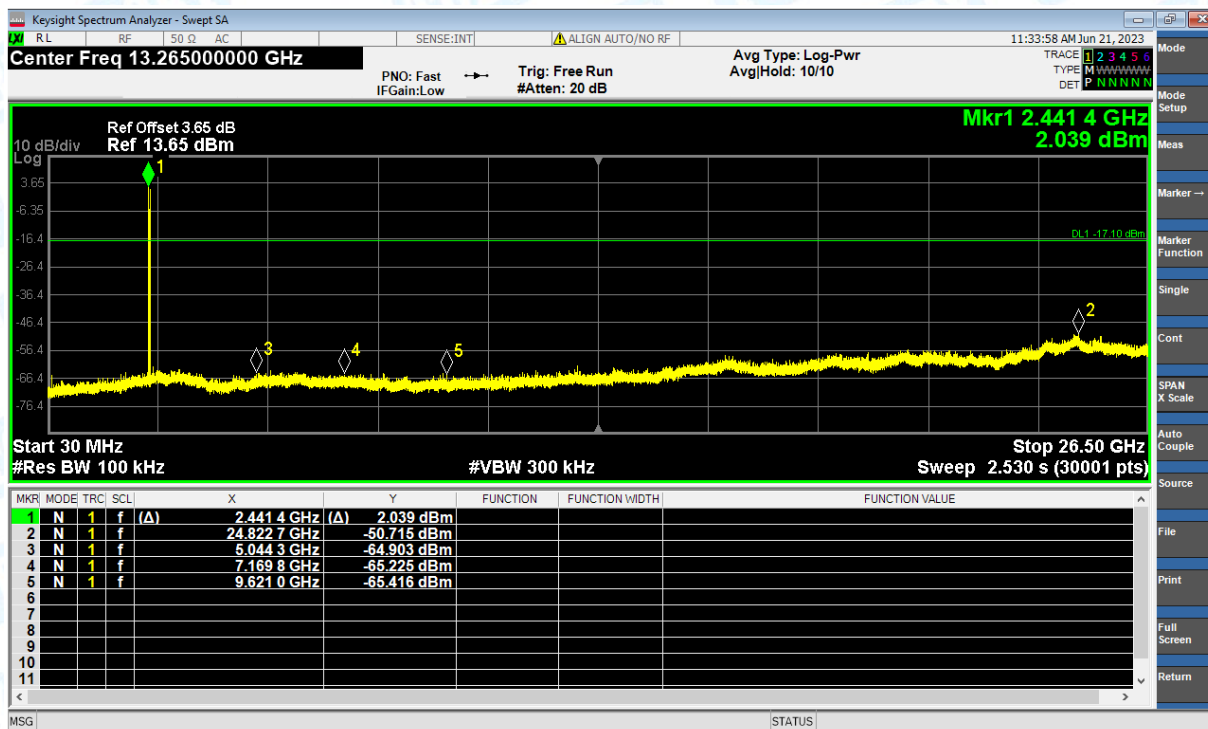
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



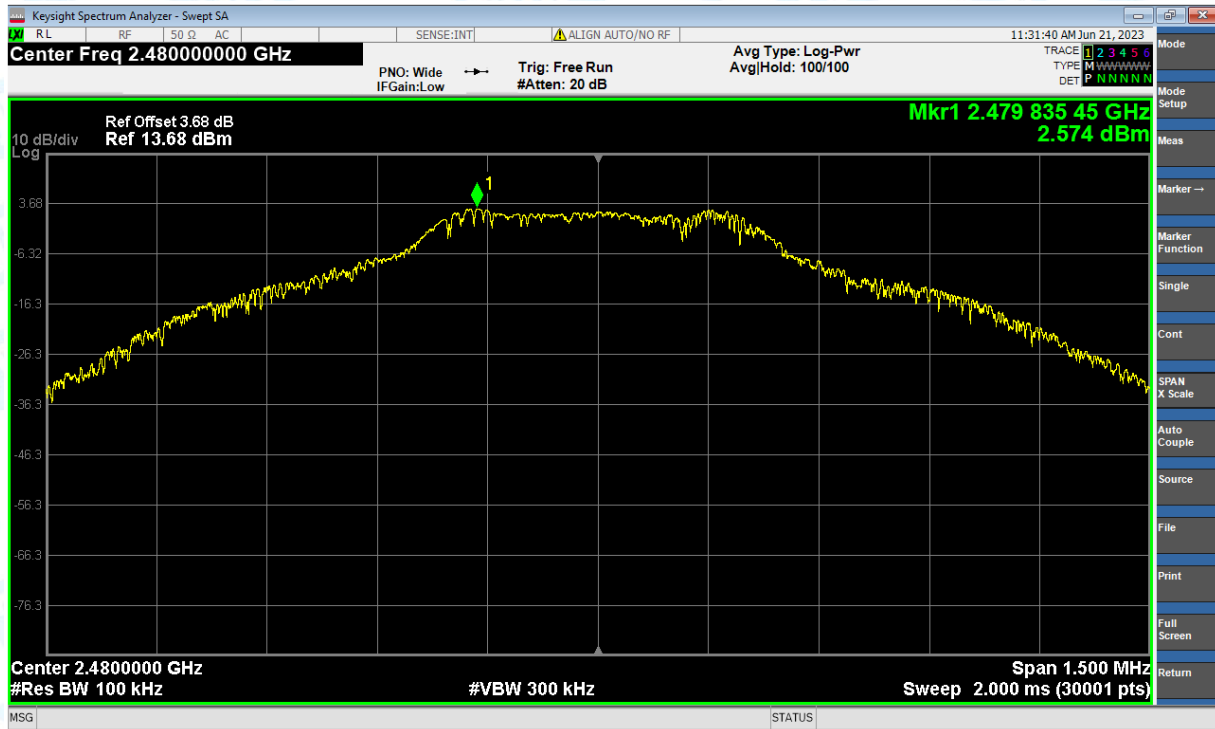
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



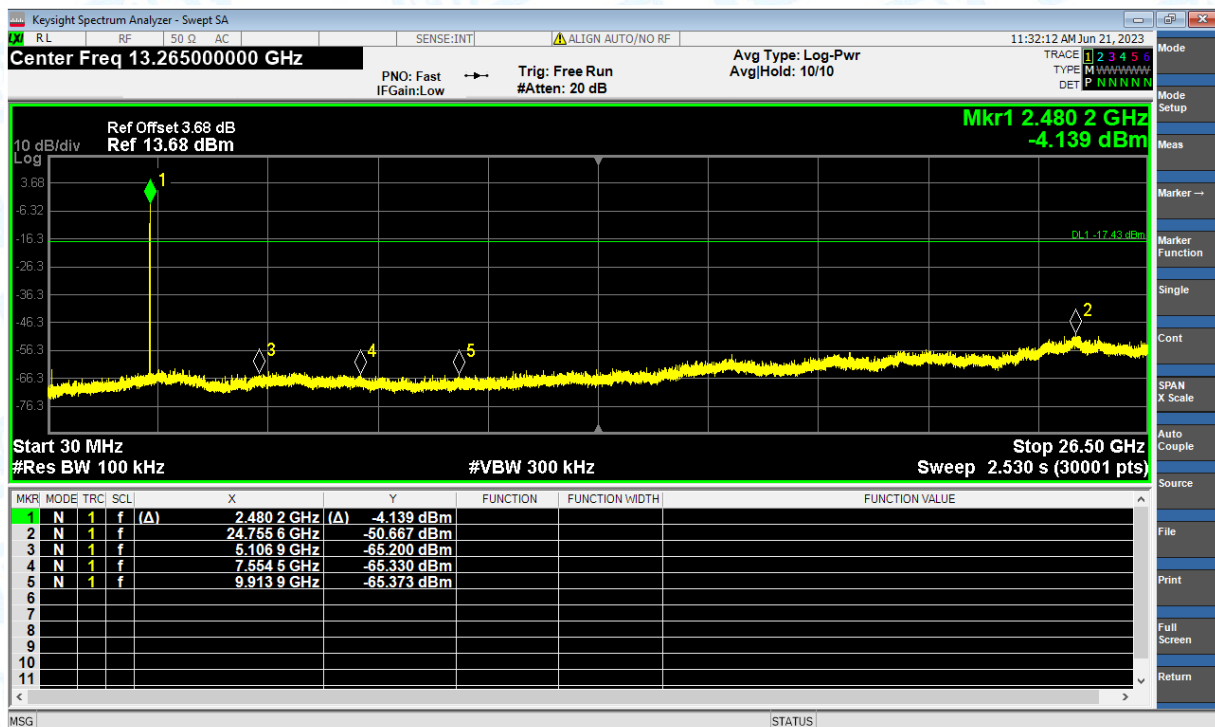
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



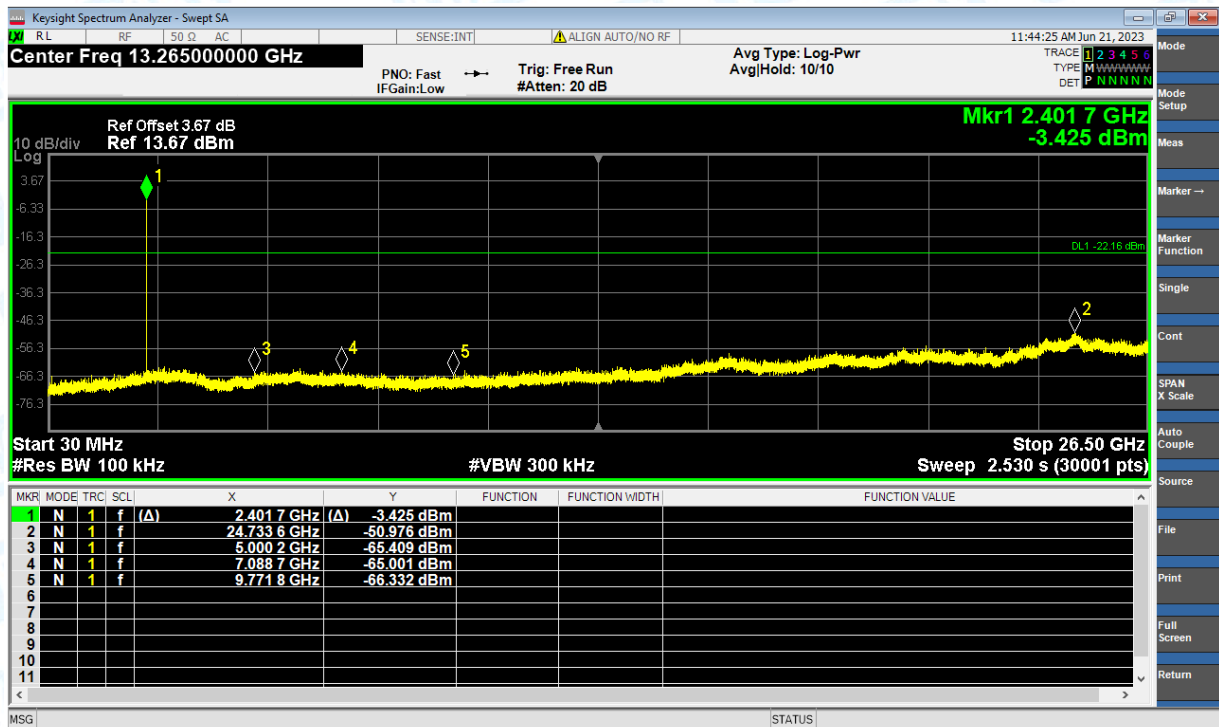
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



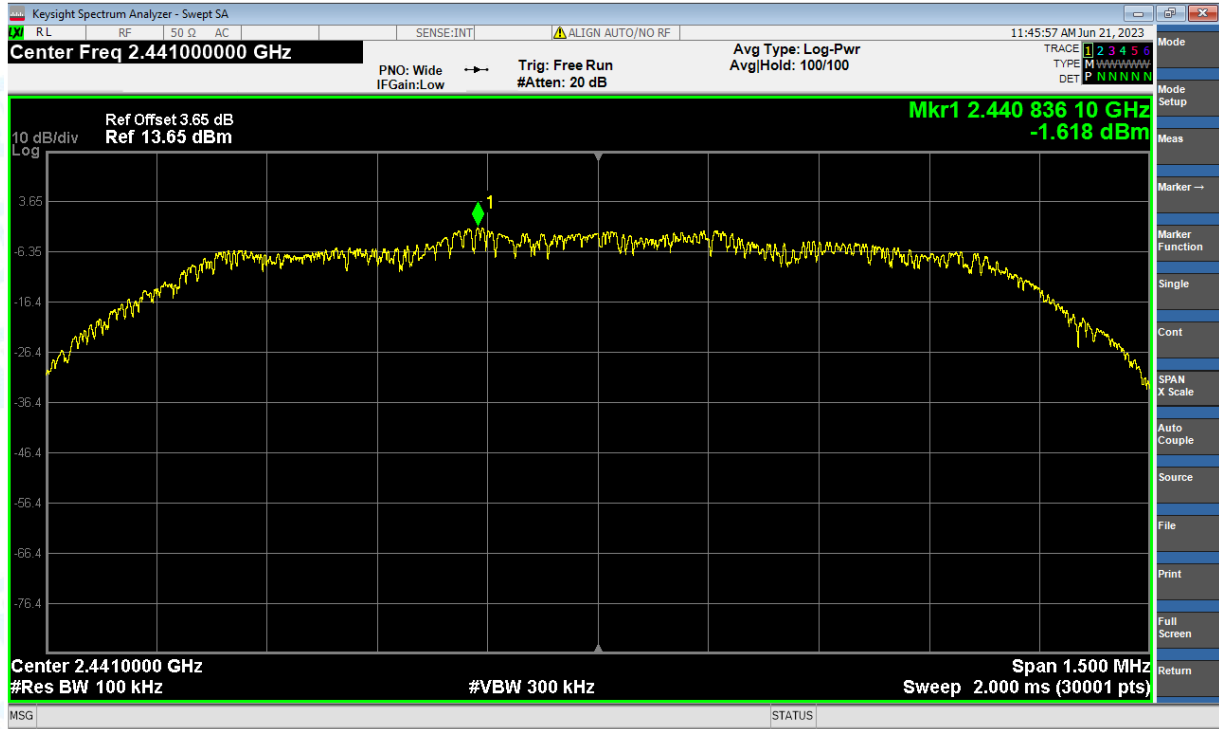
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



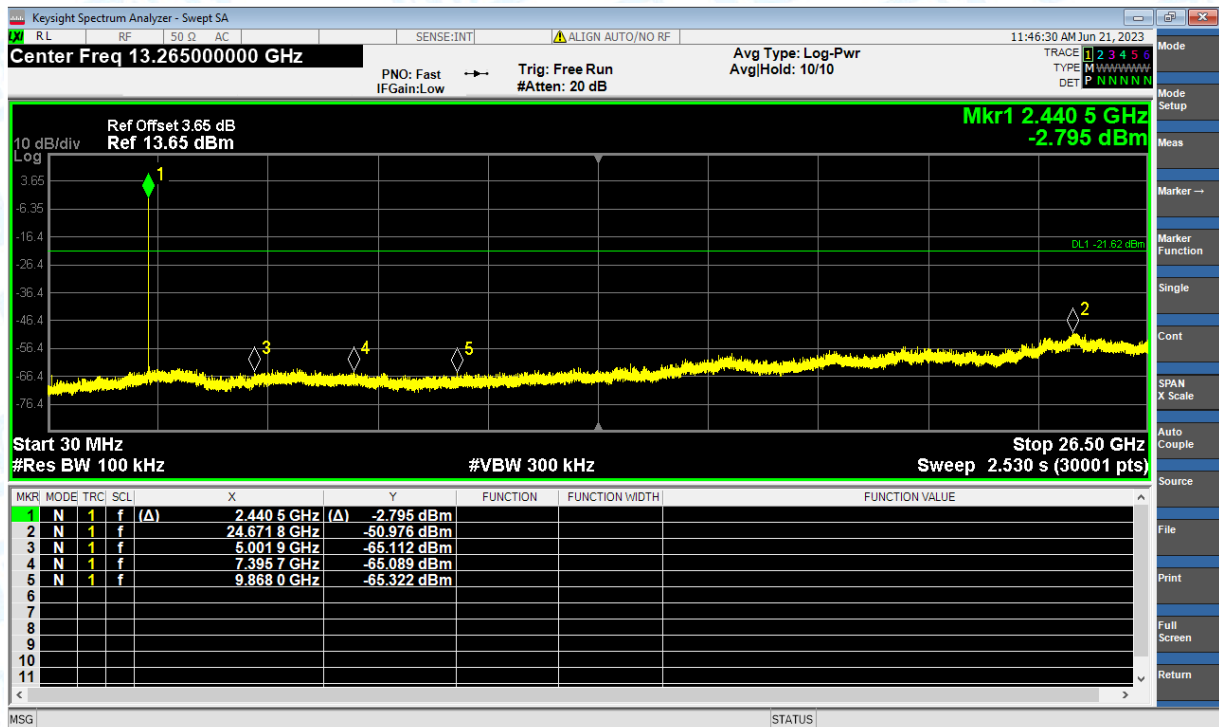
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



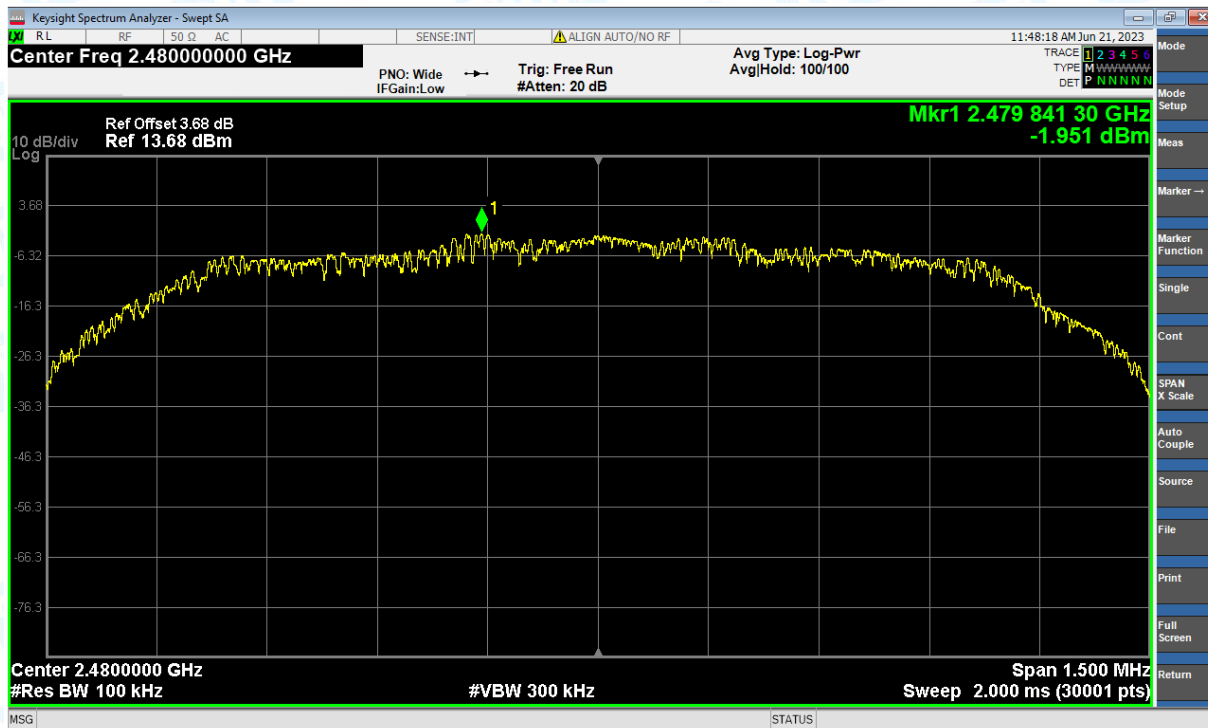
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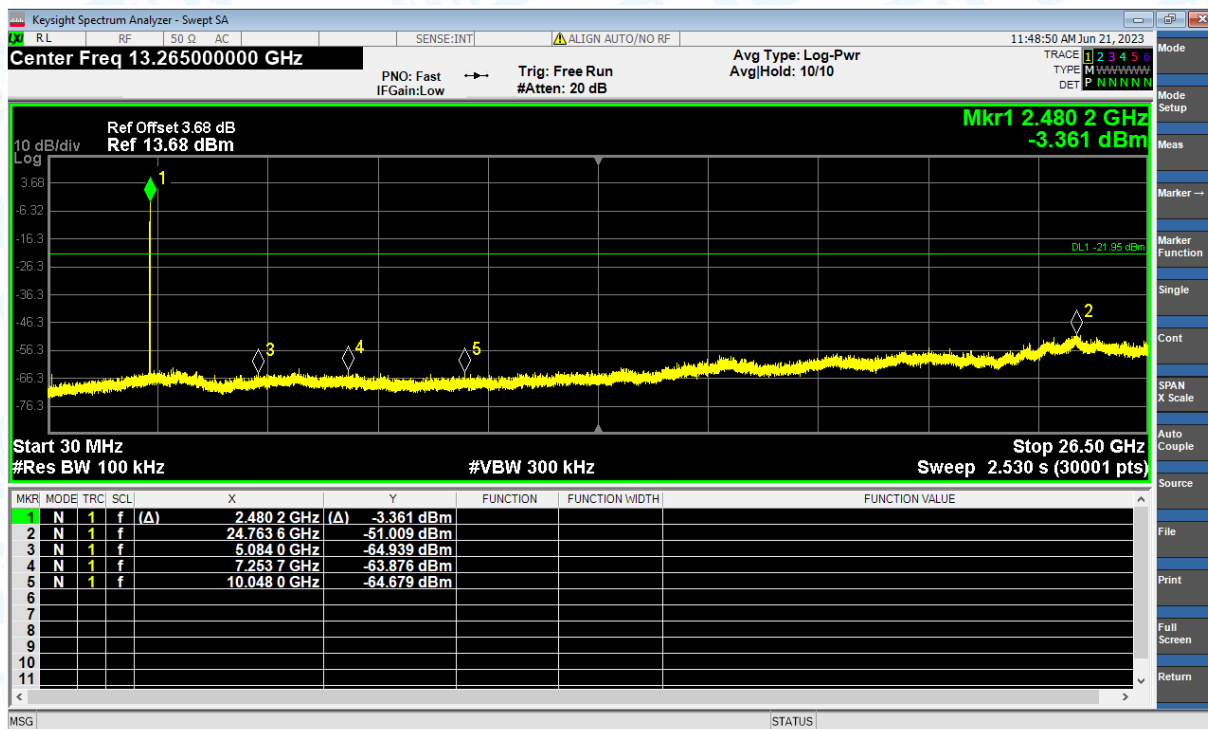
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



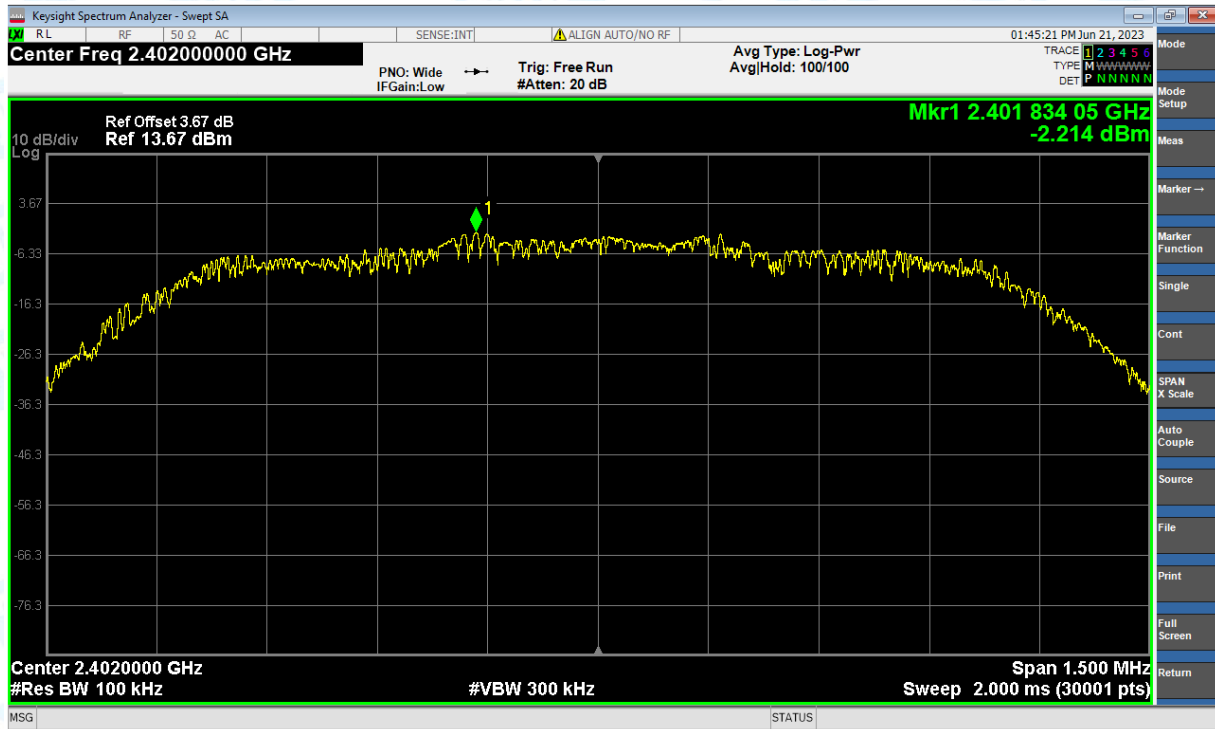
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



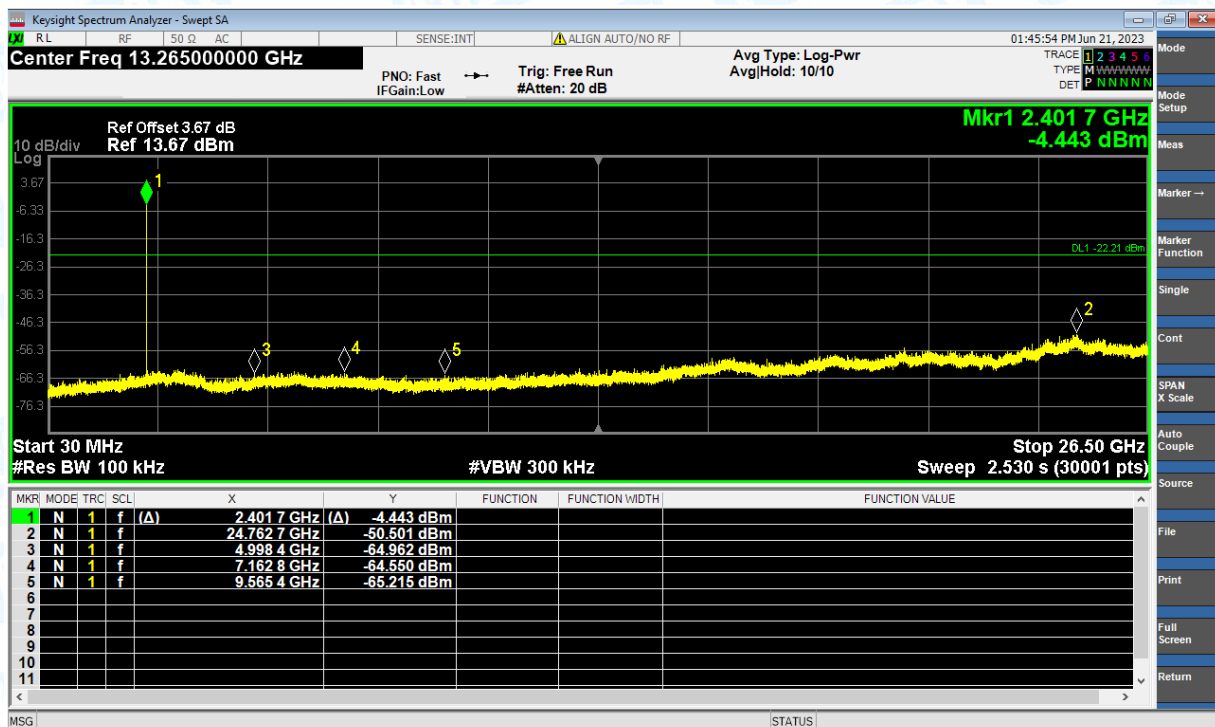
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



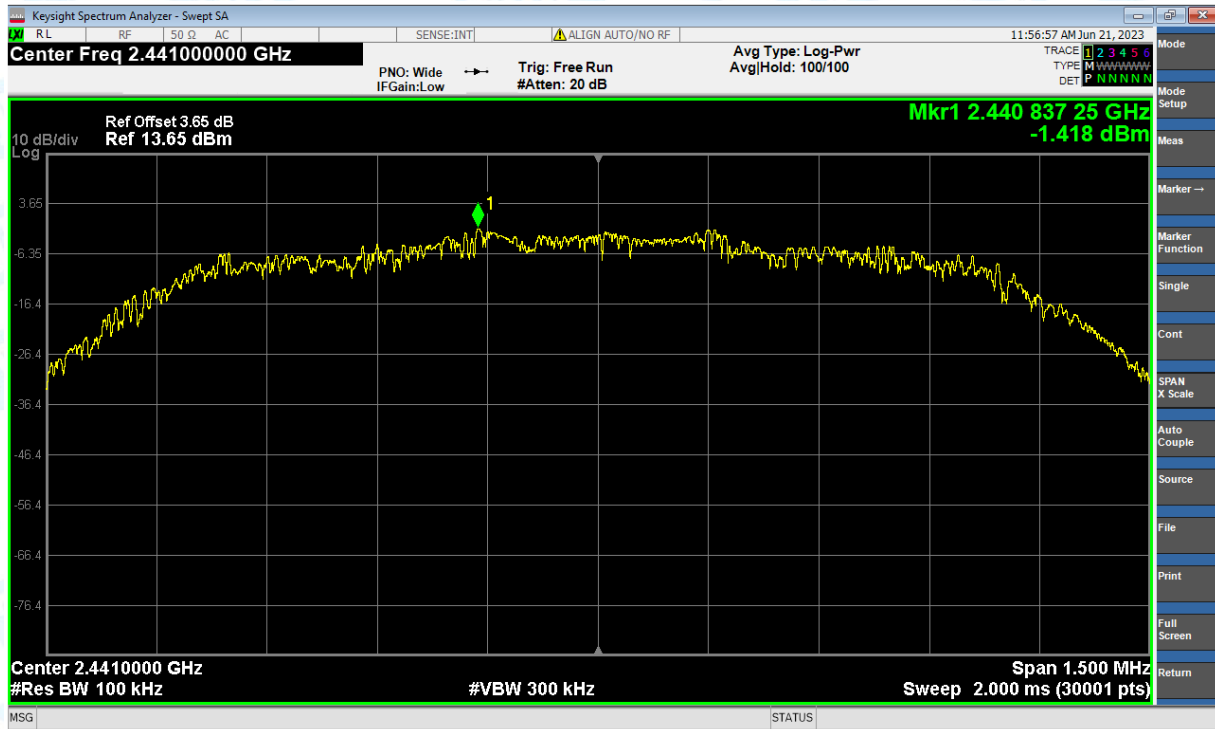
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



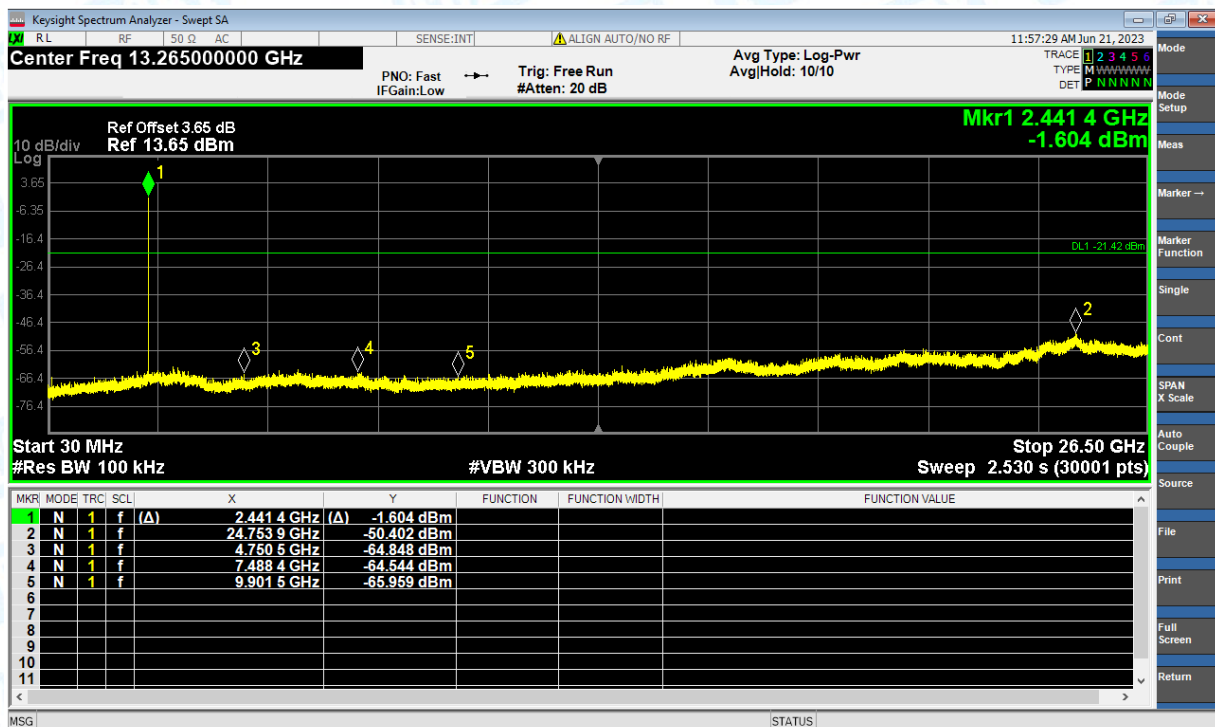
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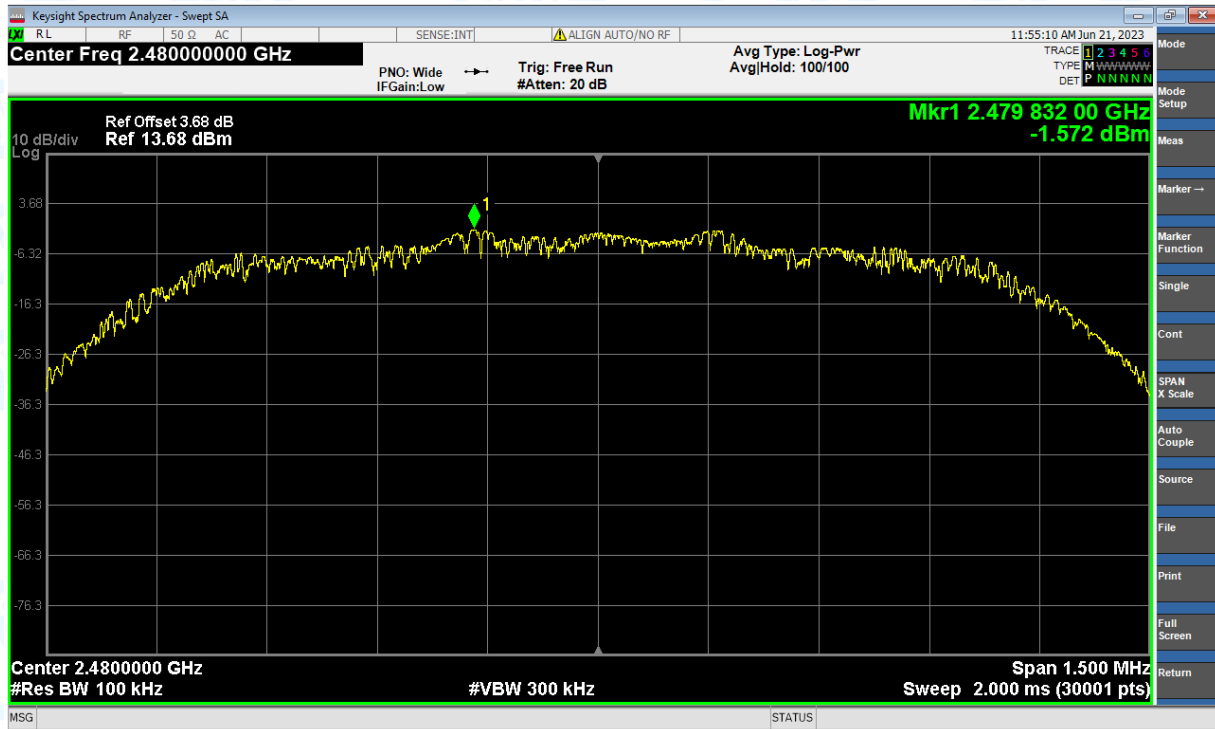
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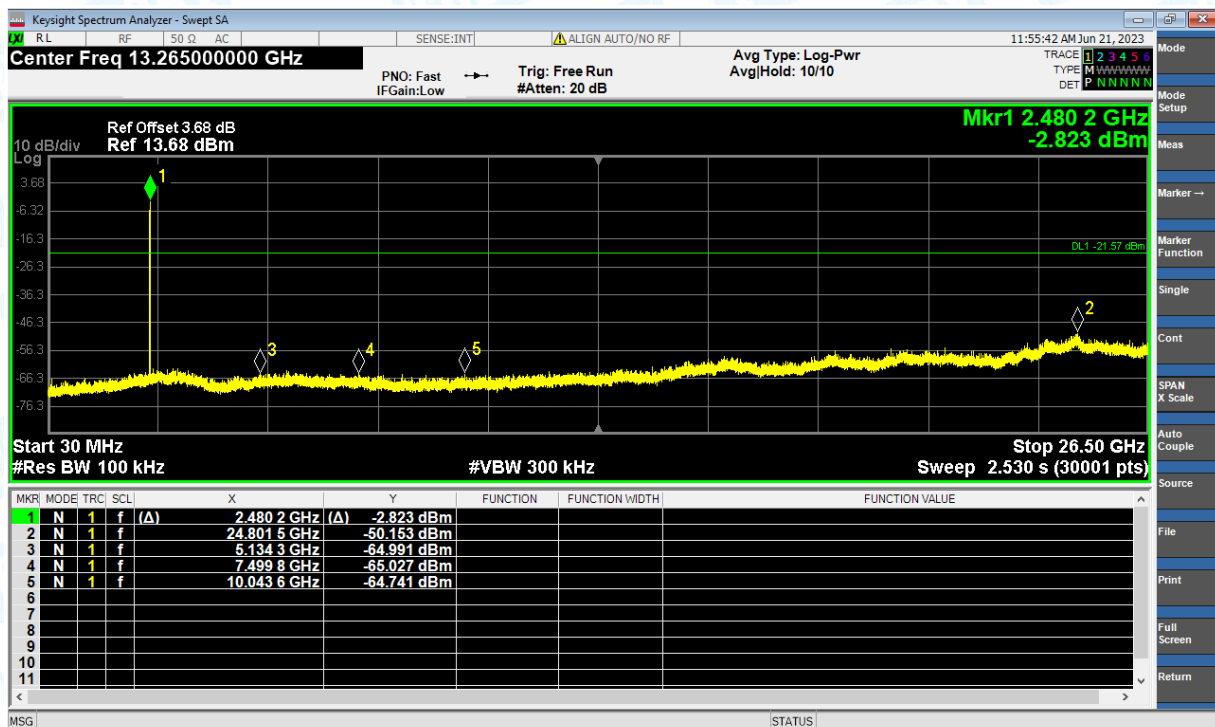
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

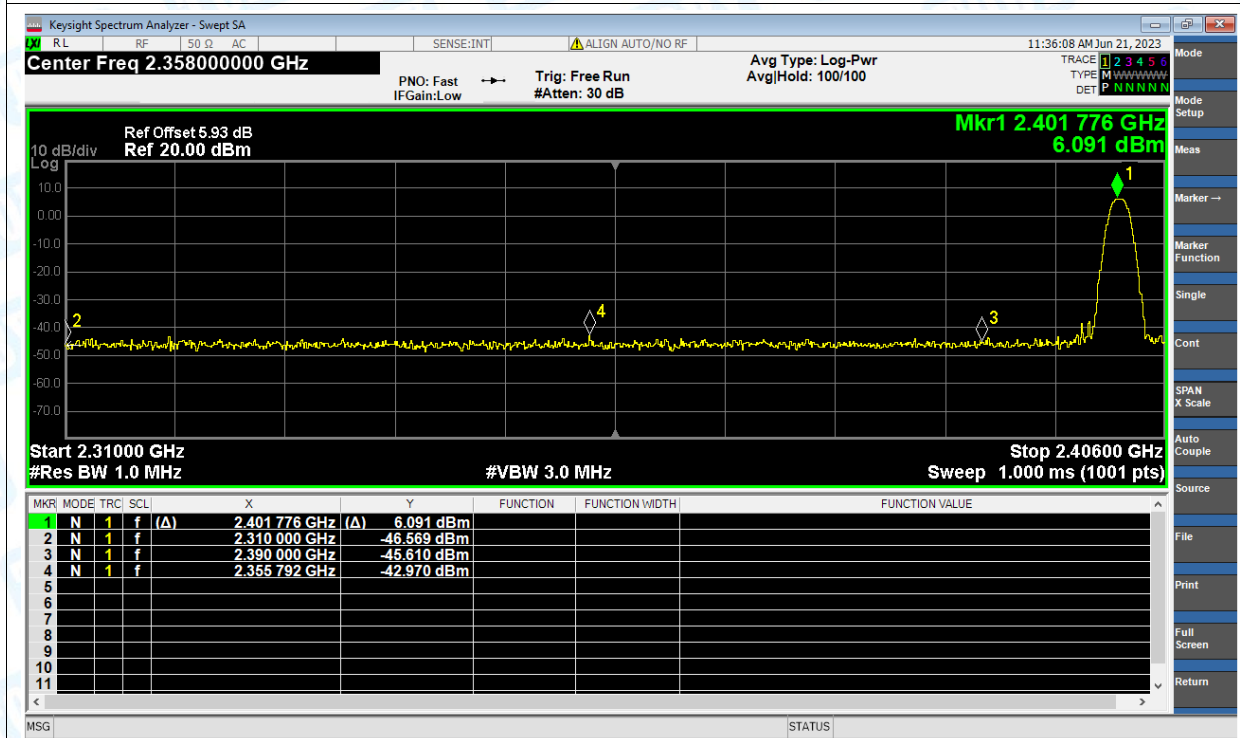


Restrict Band

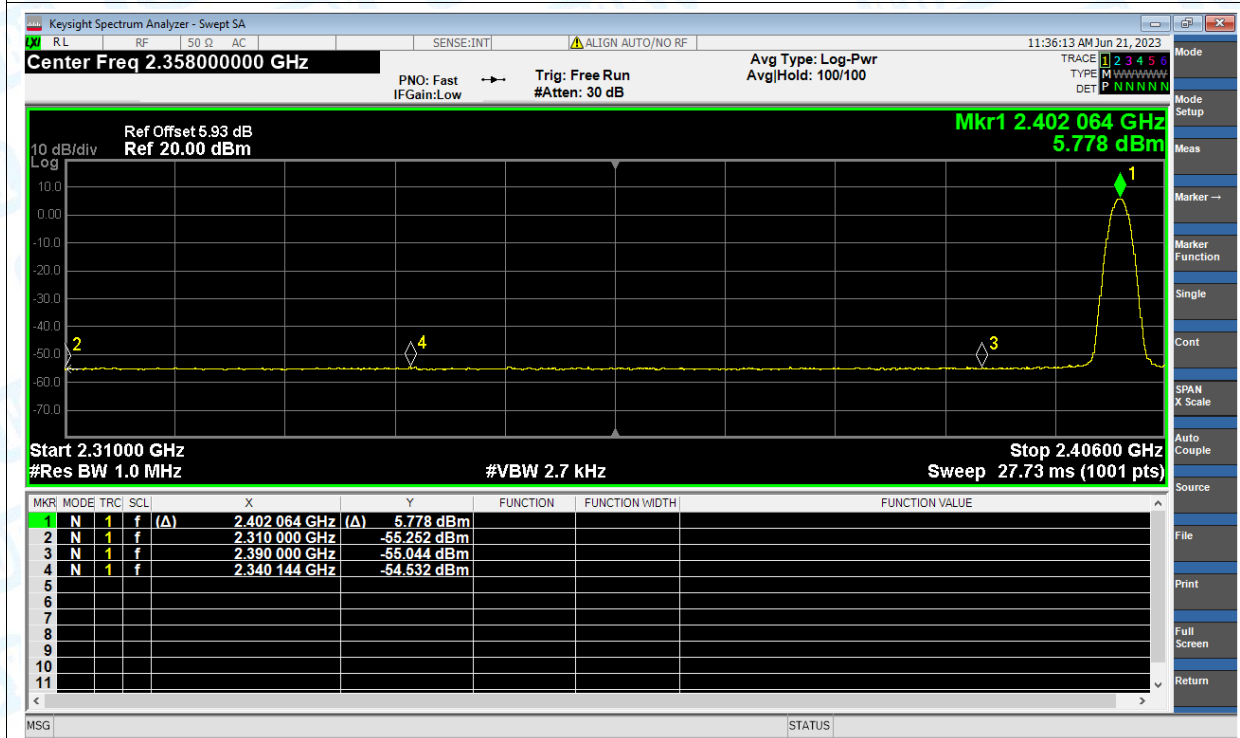
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-46.57	2.26	50.95	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.25	2.26	42.27	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2355.792	-42.97	2.26	54.55	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2340.144	-54.53	2.26	42.99	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-45.47	2.26	52.05	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-54.79	2.26	42.73	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-46.92	2.26	50.6	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.28	2.26	43.24	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2484.232	-37.57	2.26	59.95	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2484.352	-54.21	2.26	43.31	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-44.48	2.26	53.04	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55	2.26	42.52	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-46.49	2.26	51.03	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-54.85	2.26	42.67	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2389.104	-42.71	2.26	54.81	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2375.28	-54.56	2.26	42.96	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46.09	2.26	51.43	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.3	2.26	42.22	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-46.5	2.26	51.02	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.09	2.26	43.43	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2494.096	-43.11	2.26	54.41	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.512	-54.09	2.26	43.43	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-47.07	2.26	50.45	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.15	2.26	42.37	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-45.11	2.26	52.41	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.38	2.26	42.14	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2353.68	-43.42	2.26	54.1	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2385.168	-54.52	2.26	43	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.68	2.26	50.84	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.12	2.26	42.4	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-45.81	2.26	51.71	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-54.17	2.26	43.35	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.56	-41.27	2.26	56.25	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.896	-53.92	2.26	43.6	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-45.15	2.26	52.37	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.17	2.26	42.35	Average	54	Pass

Test Graphs

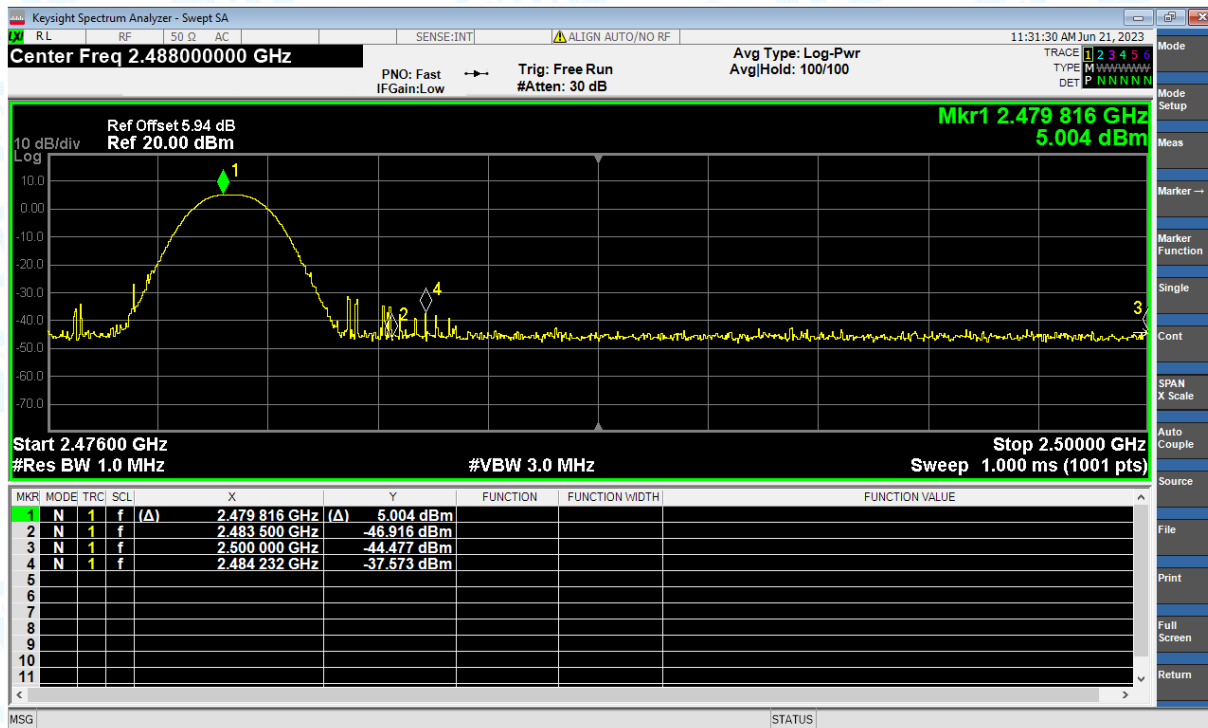
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



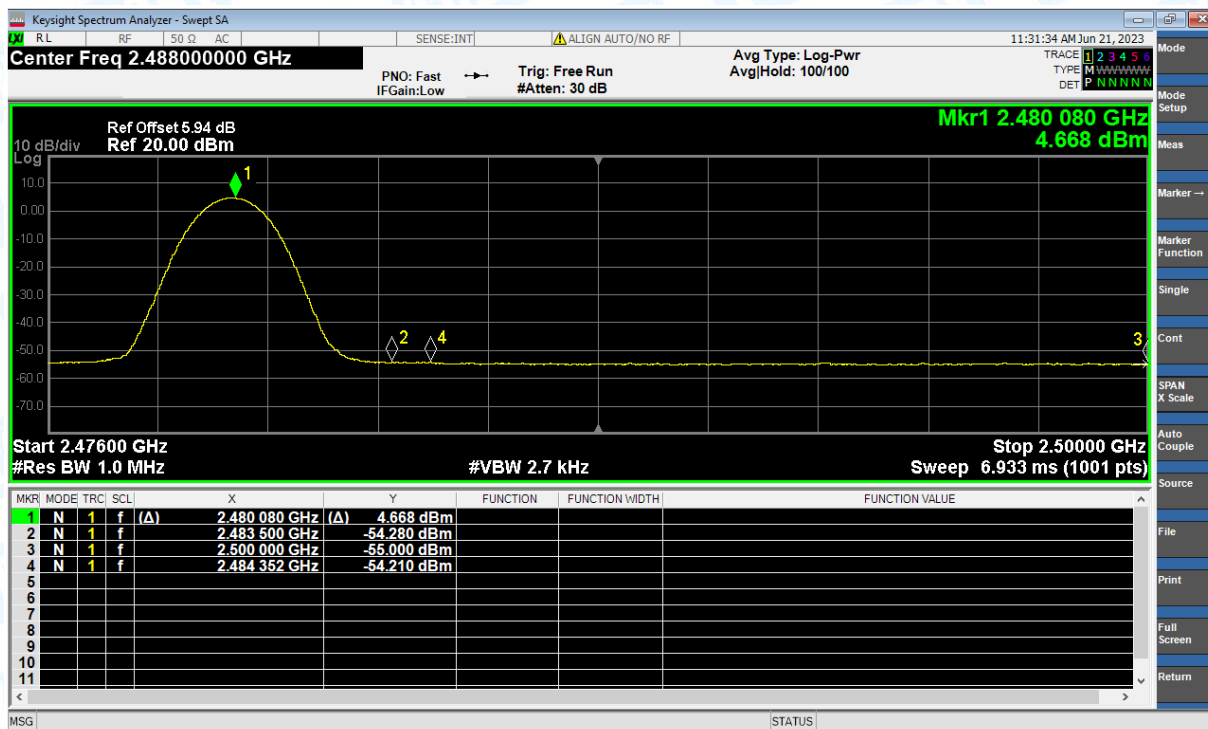
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



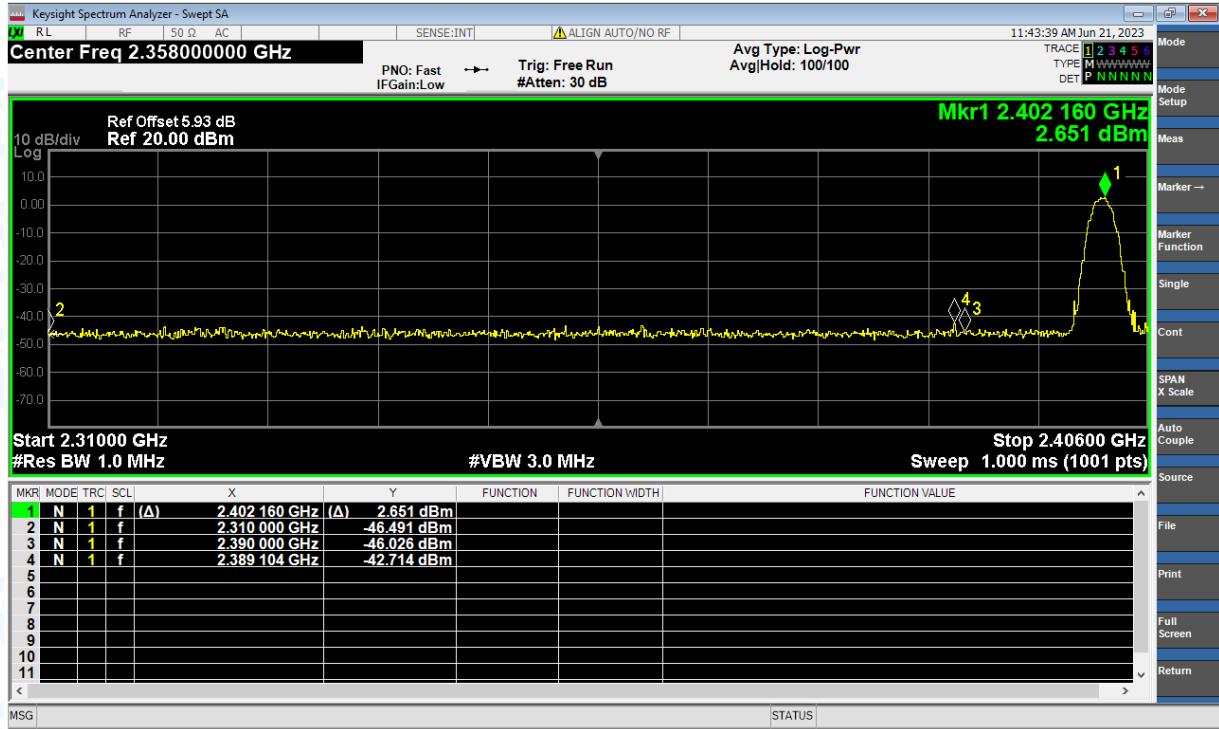
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



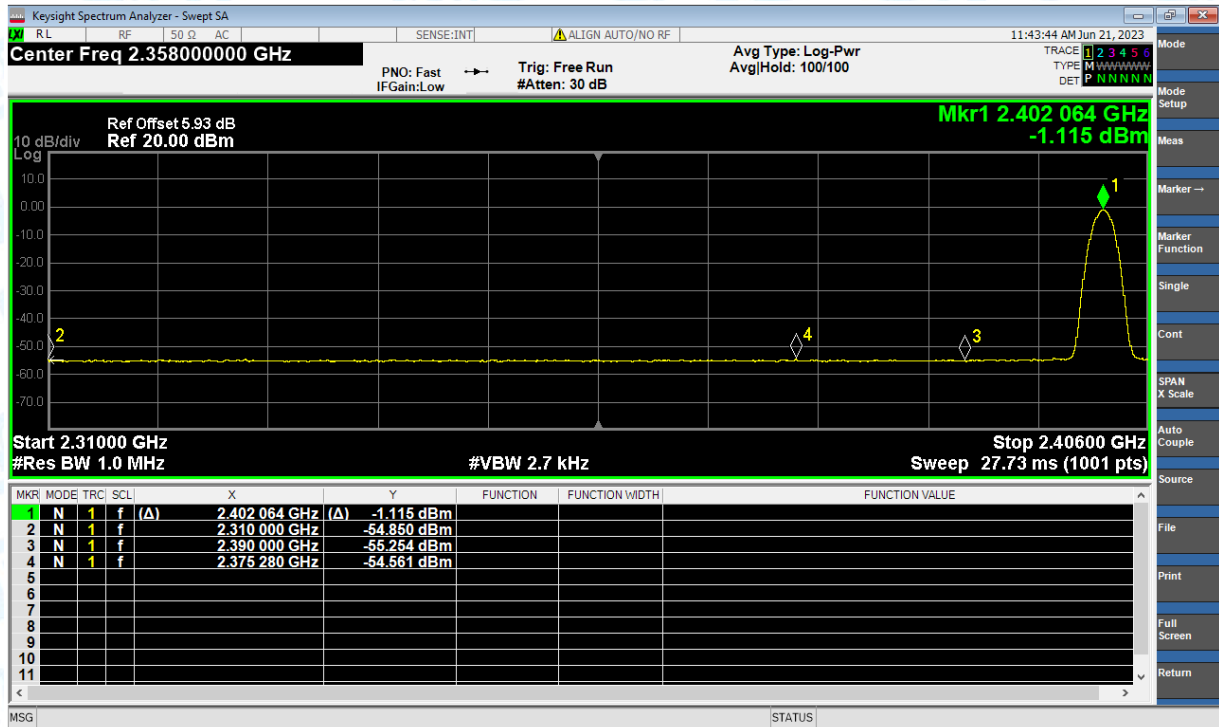
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



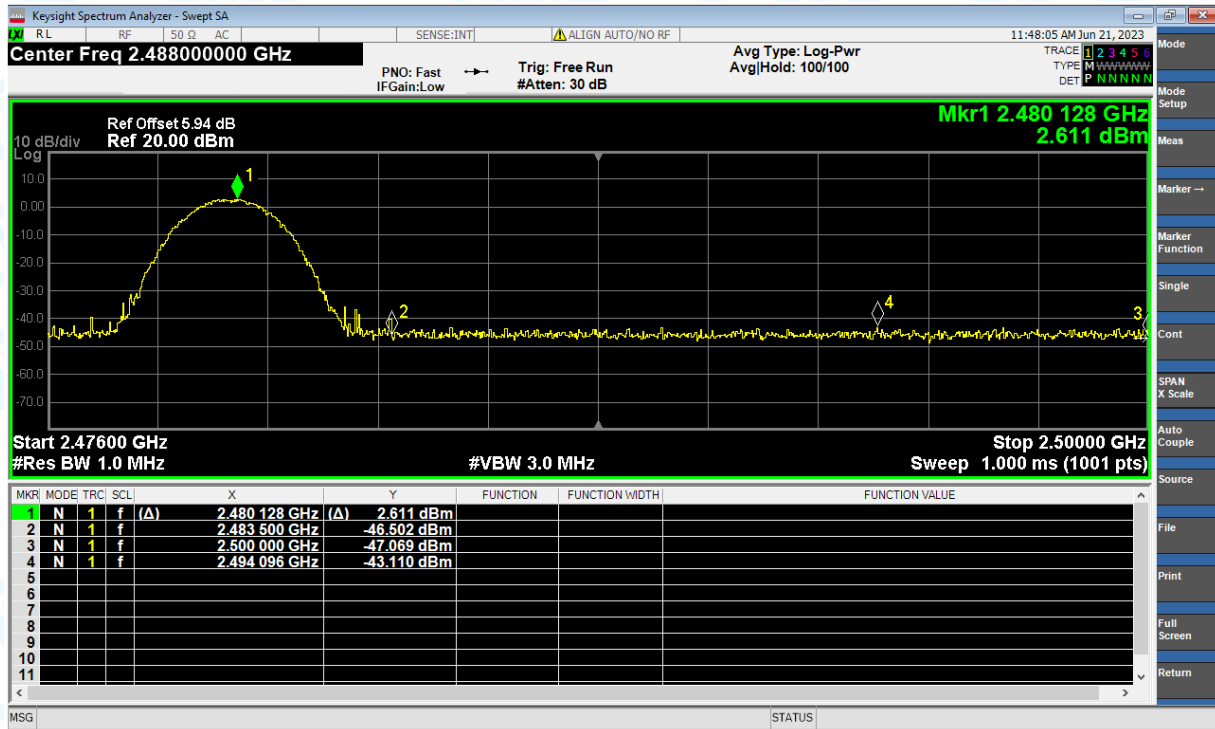
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



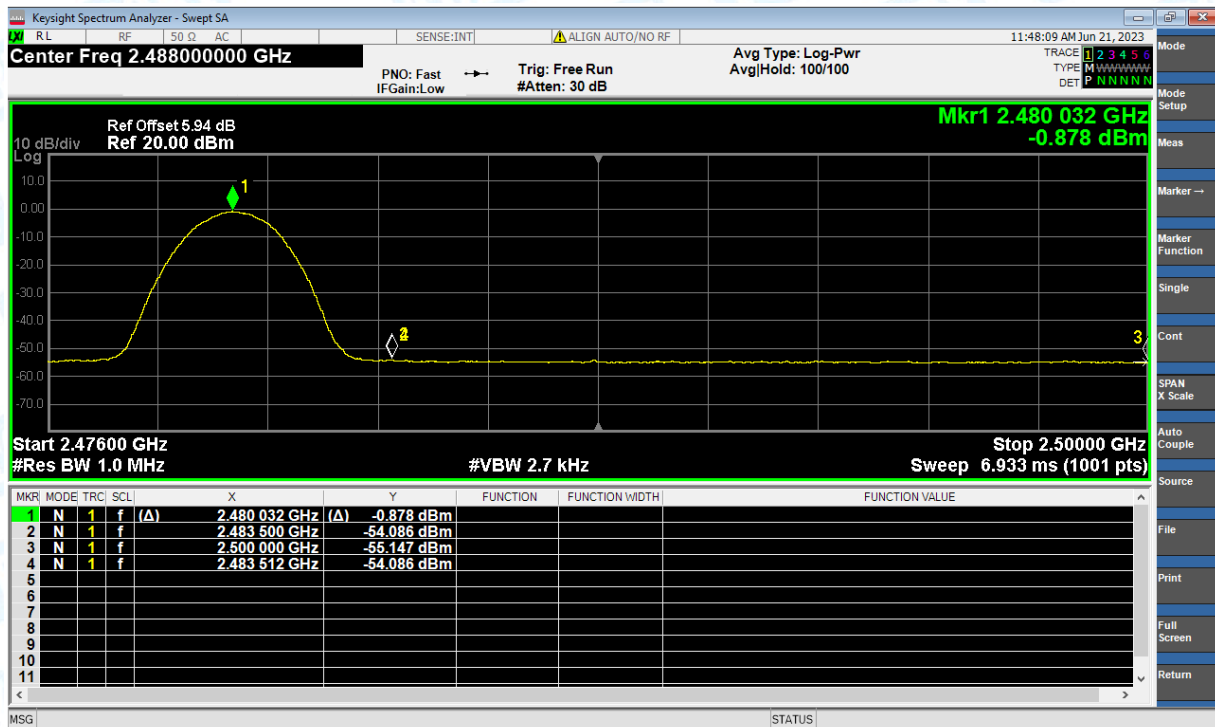
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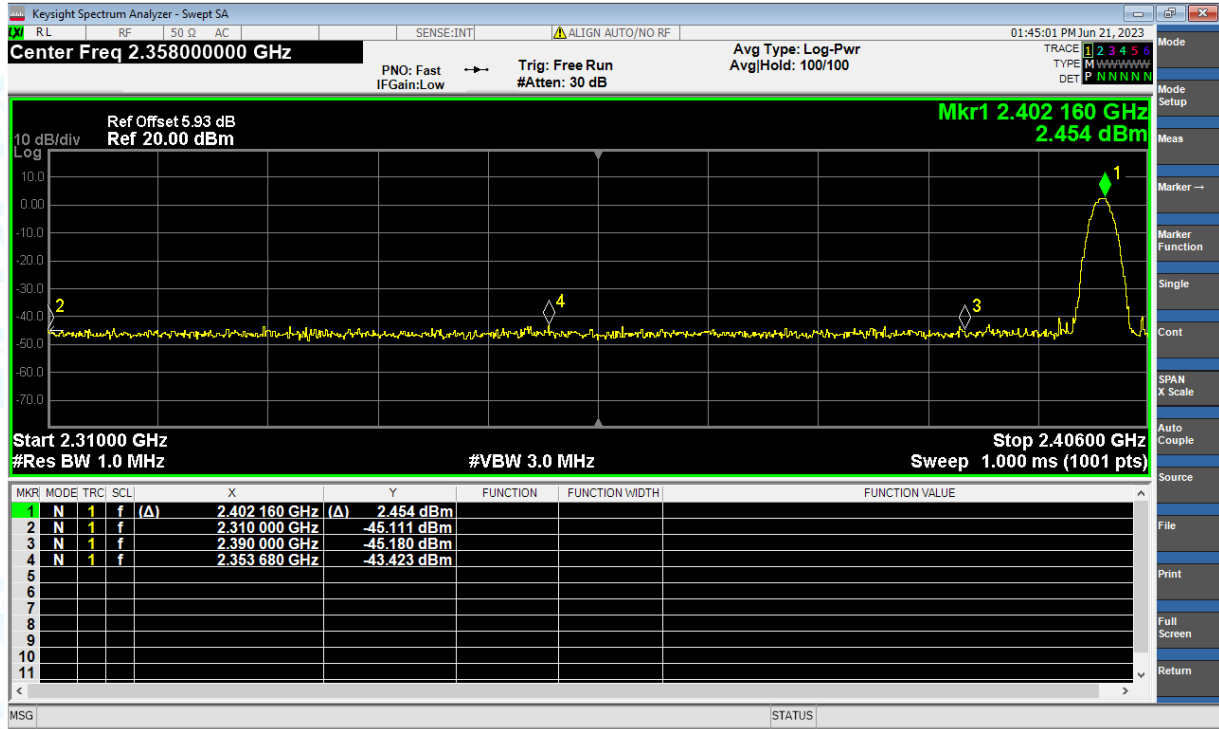
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



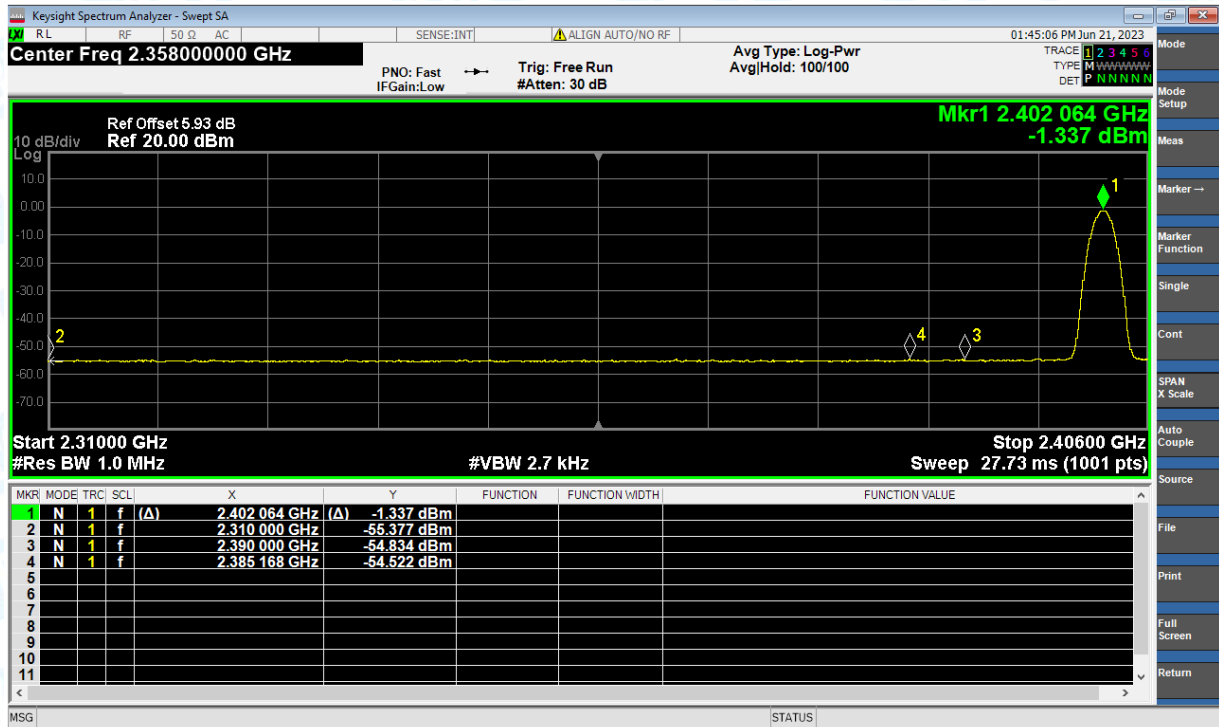
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



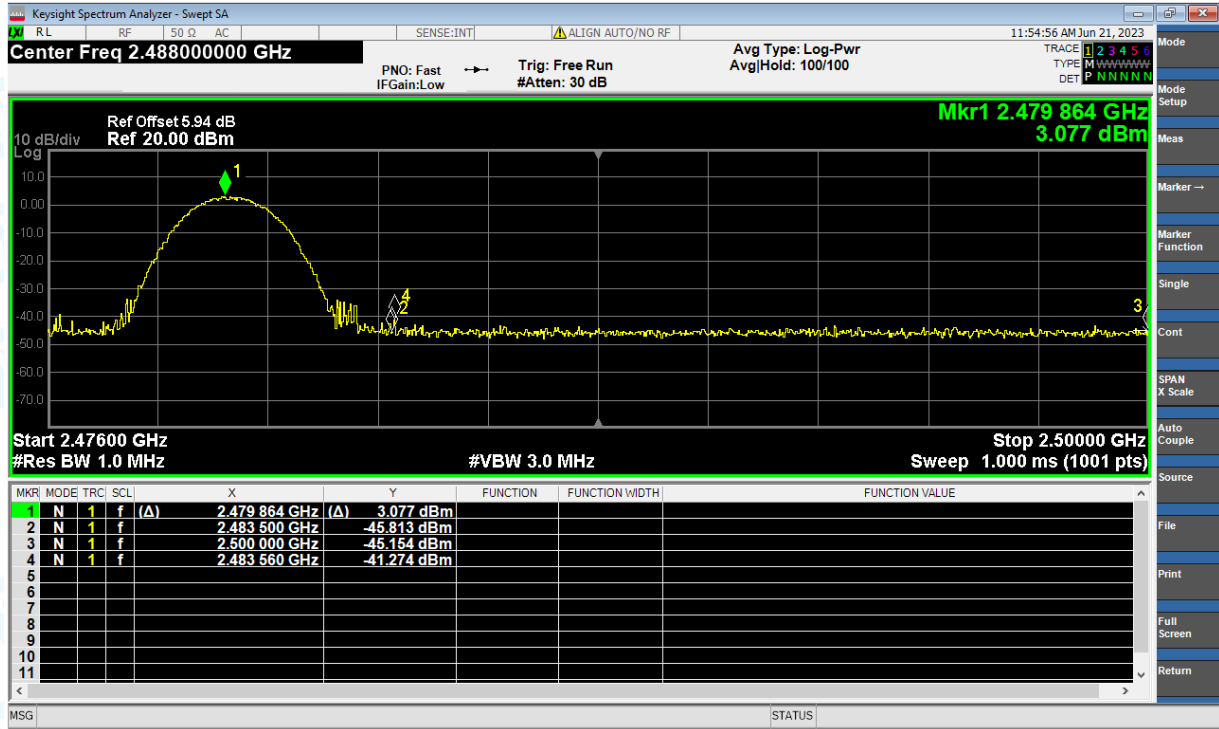
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



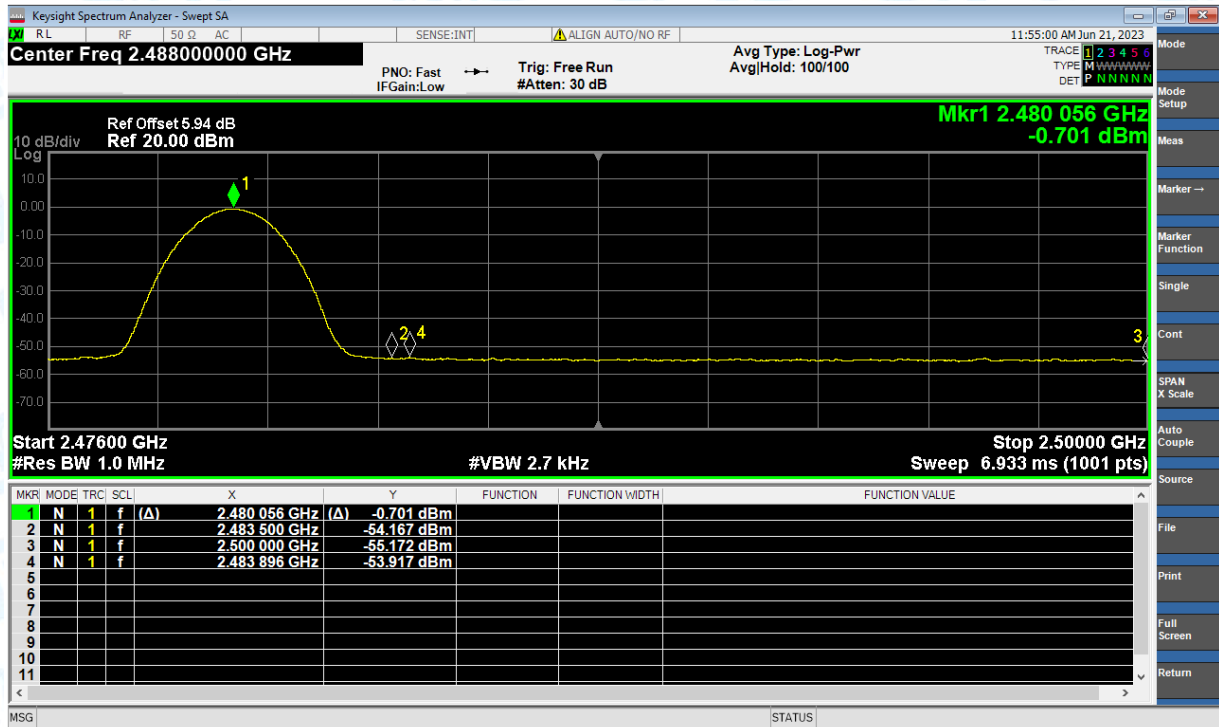
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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



Carrier Frequencies Separation

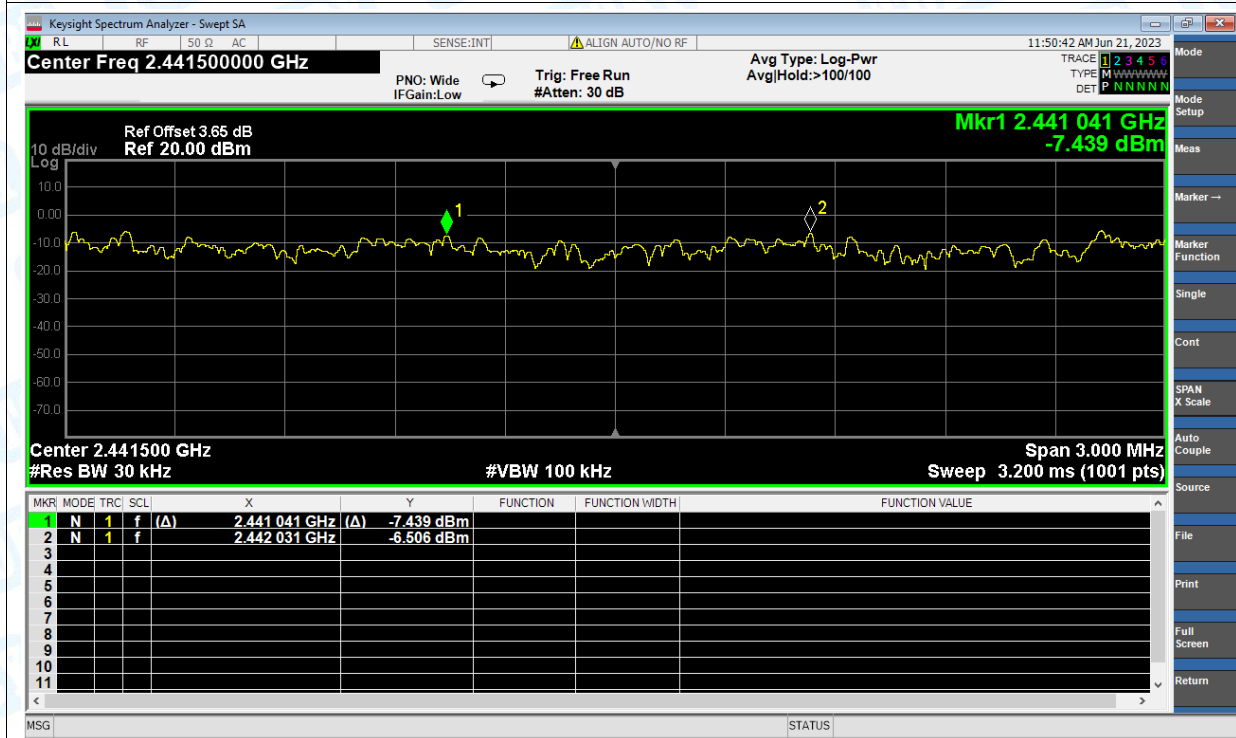
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2441.014	2441.977	0.963	0.647	Pass
NVNT	2-DH1	Ant1	2441.041	2442.031	0.99	0.887	Pass
NVNT	3-DH1	Ant1	2440.831	2442.166	1.335	0.867	Pass

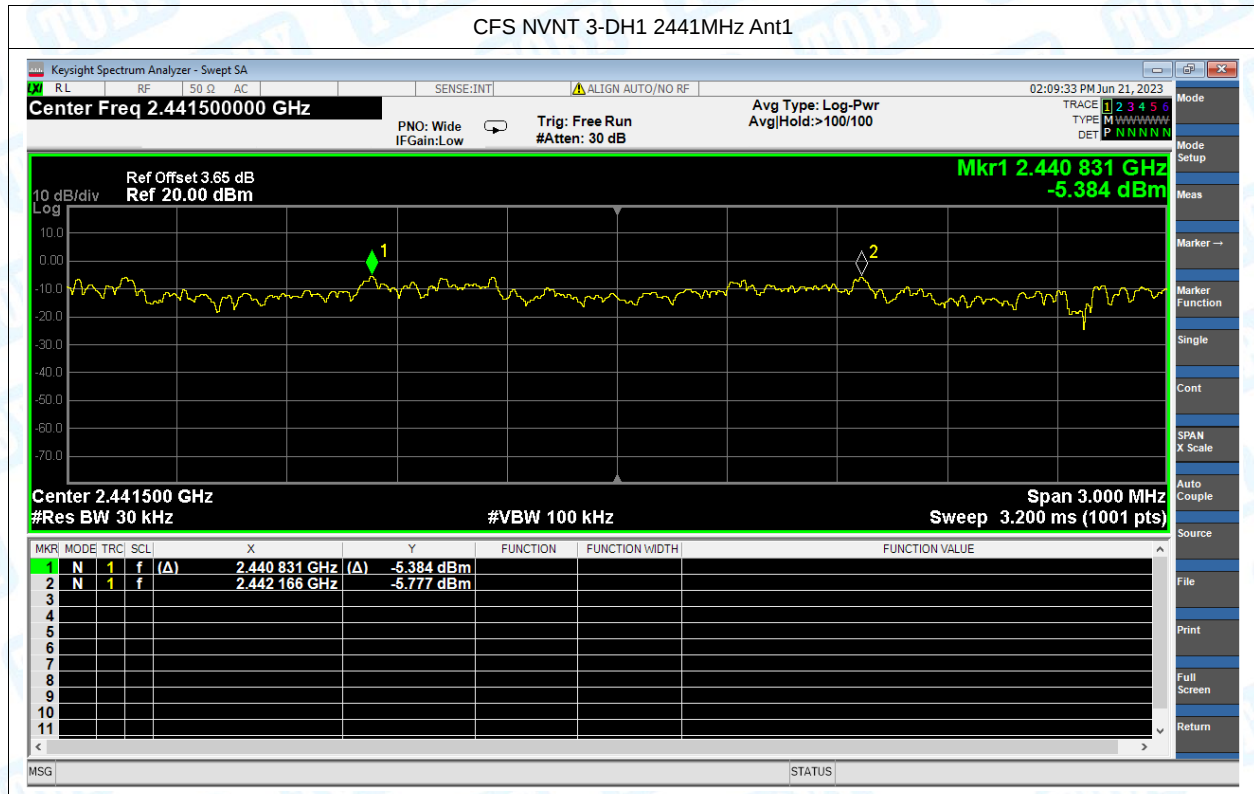
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



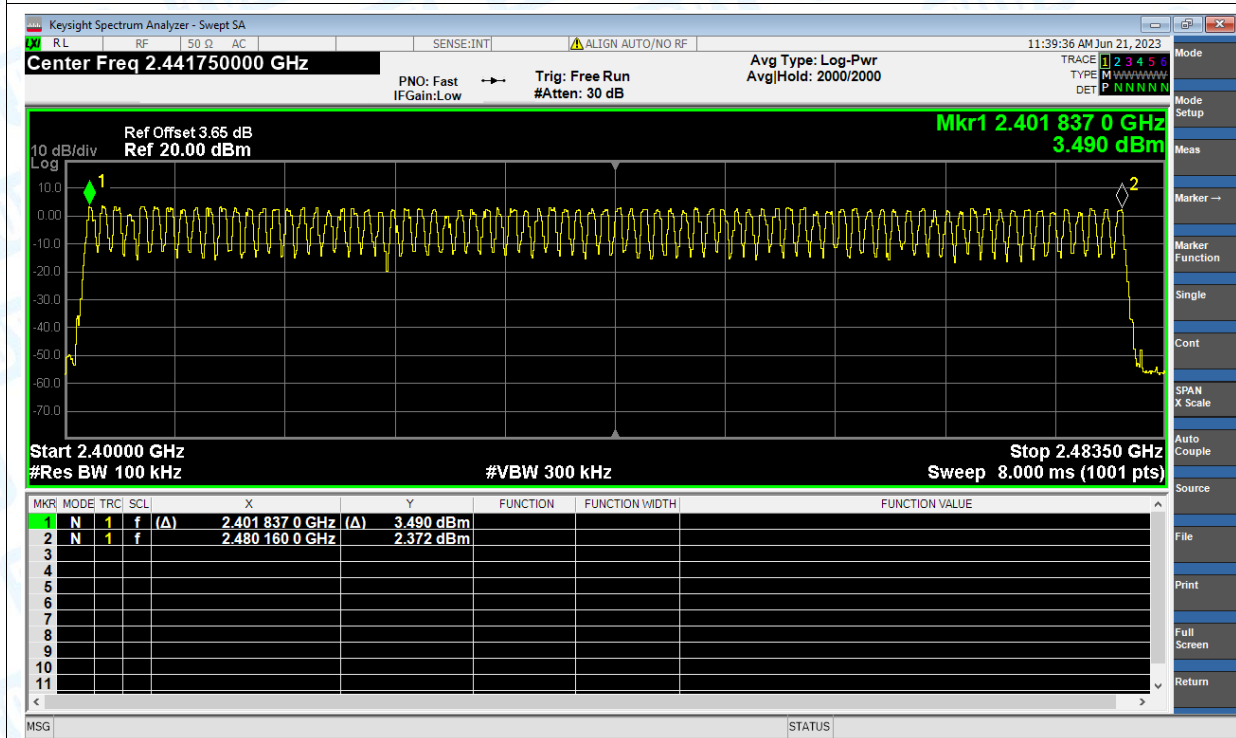


Number of Hopping Channel

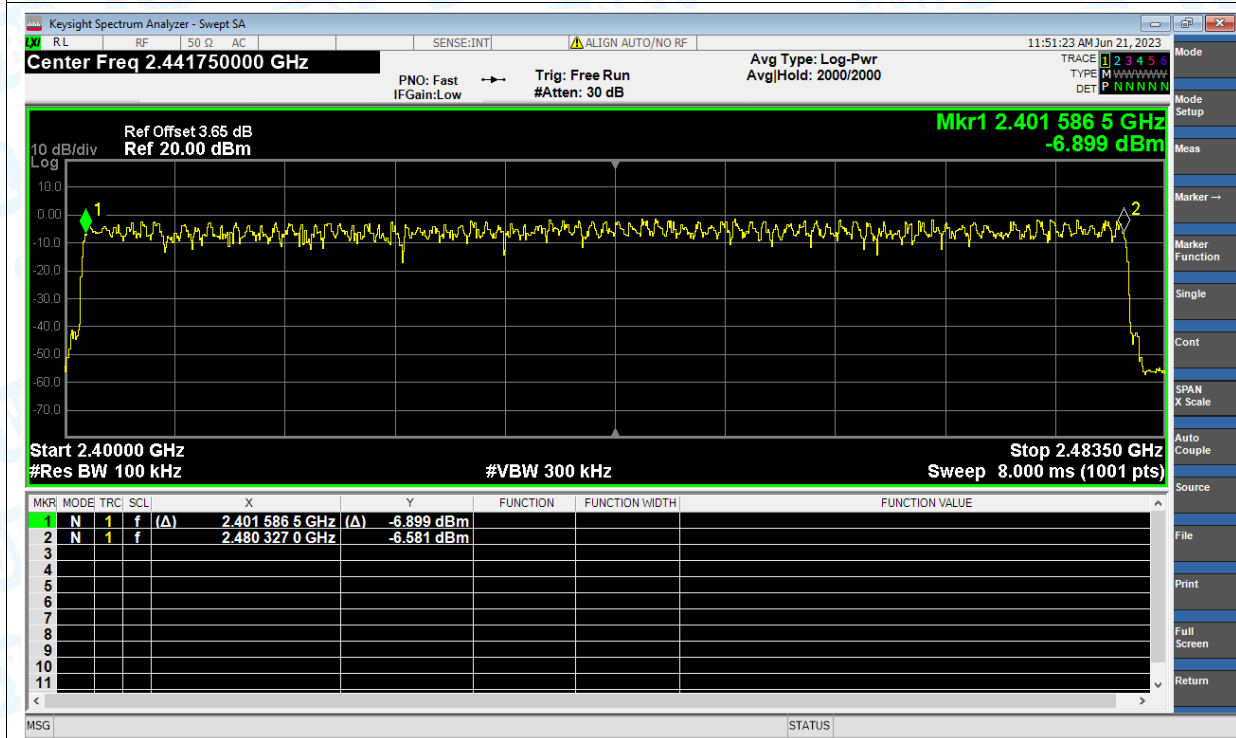
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

Test Graphs

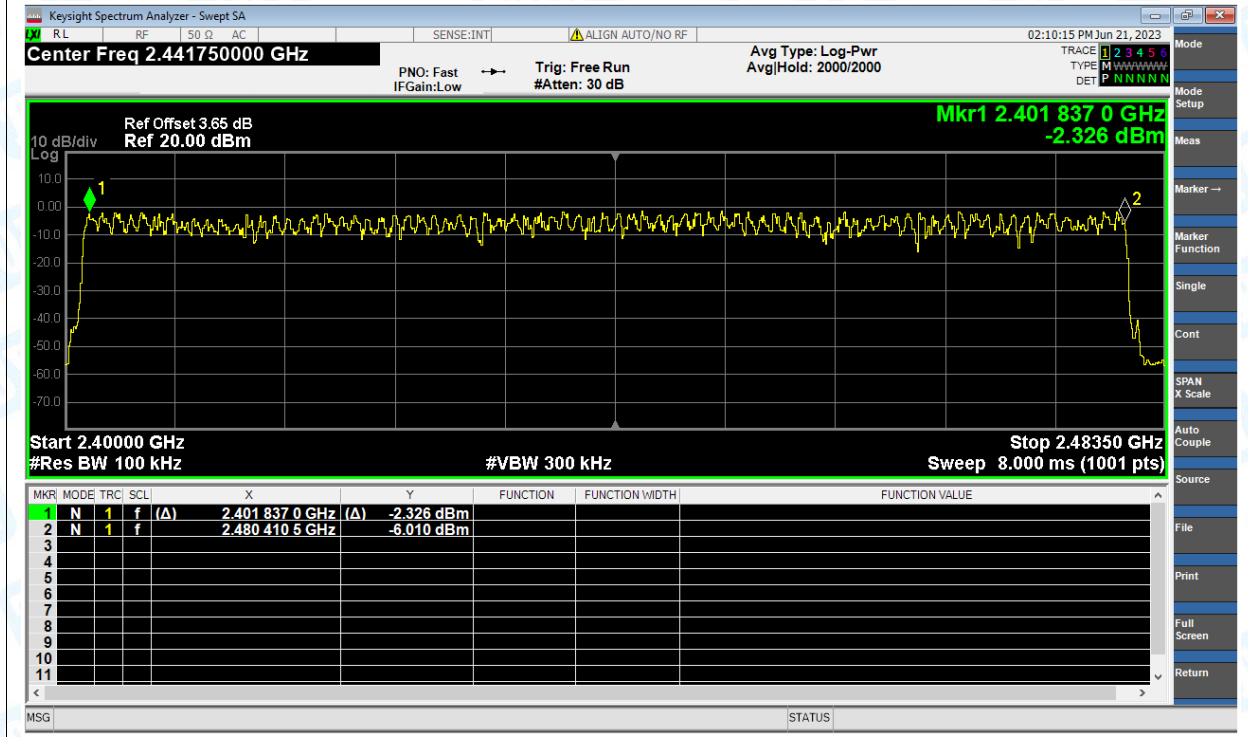
Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



Hopping No. NVNT 3-DH1 2441MHz Ant1

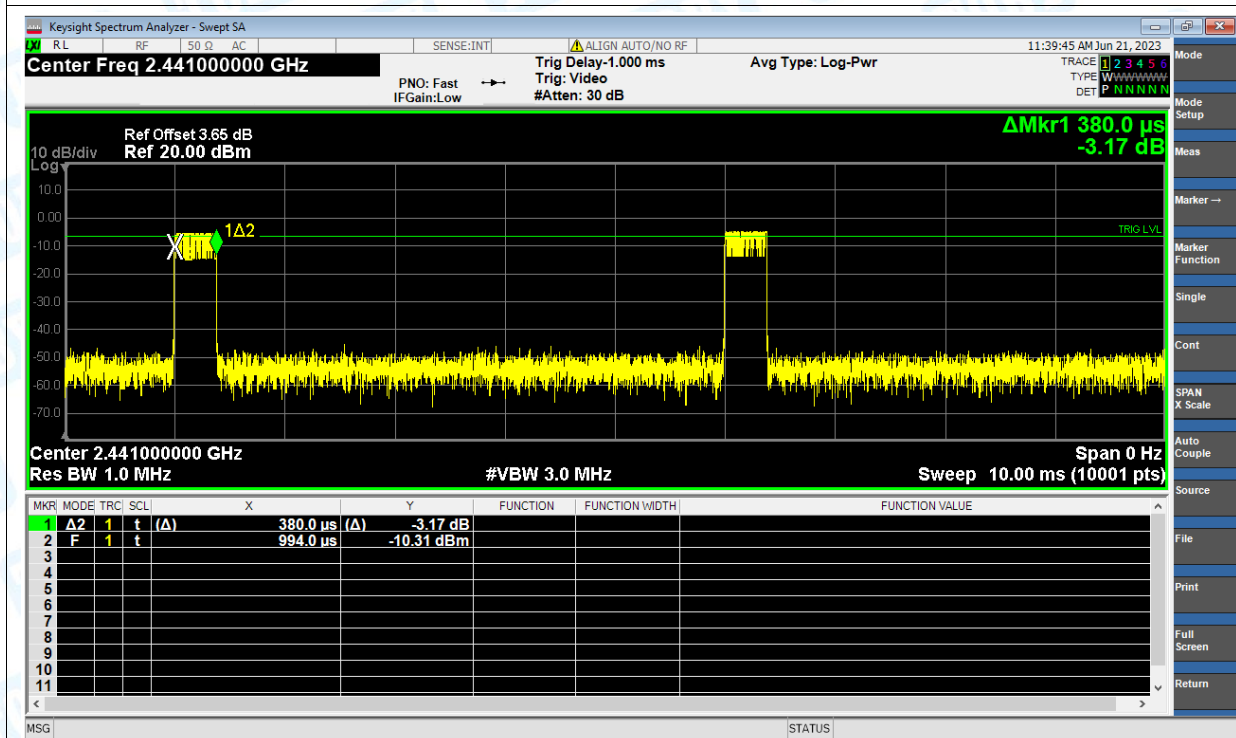


Dwell Time

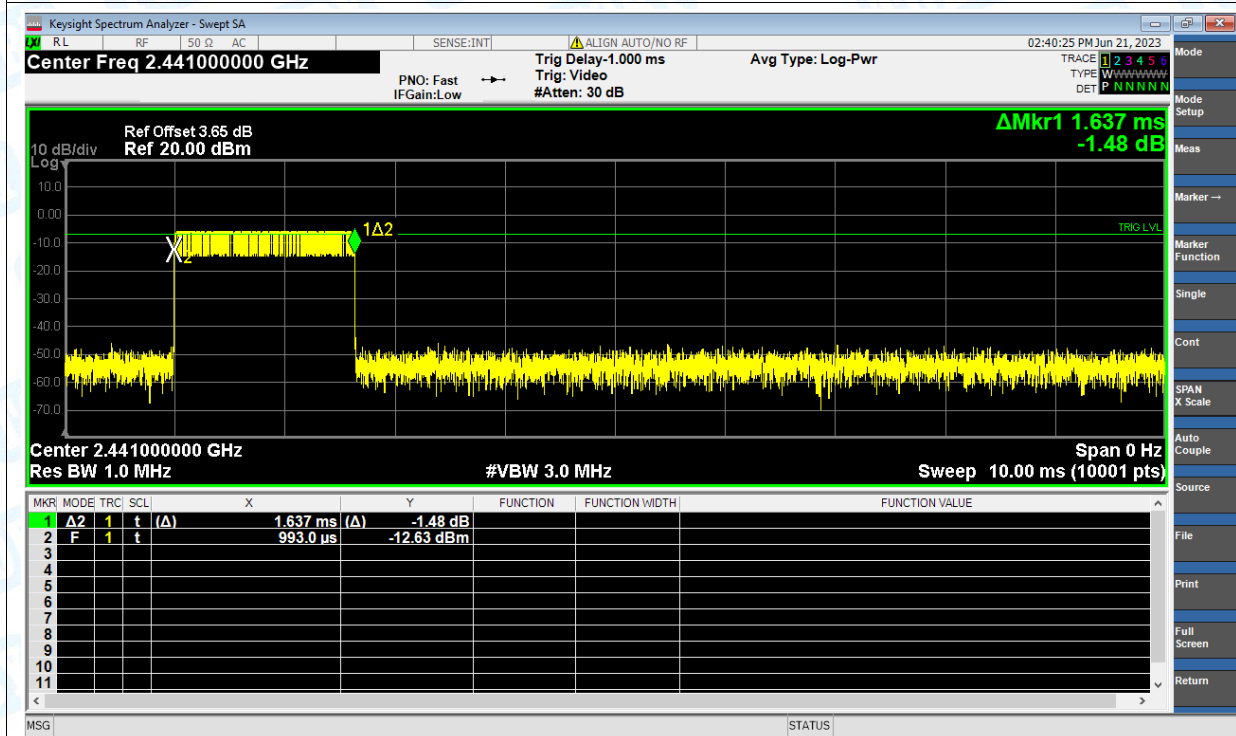
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.38	121.6	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.637	261.92	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.884	307.627	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.385	123.2	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.632	261.12	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.884	307.627	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.385	123.2	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.635	261.6	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.885	307.733	31600	400	Pass

Test Graphs

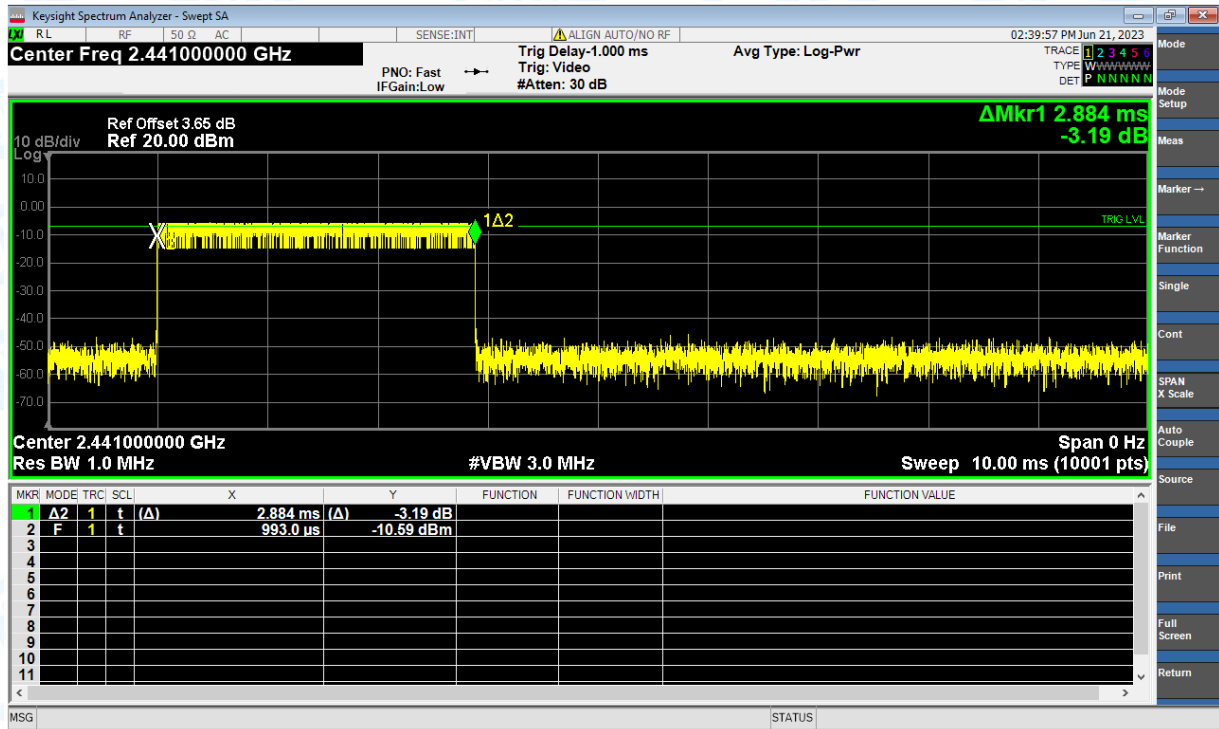
Dwell NVNT 1-DH1 2441MHz Ant1



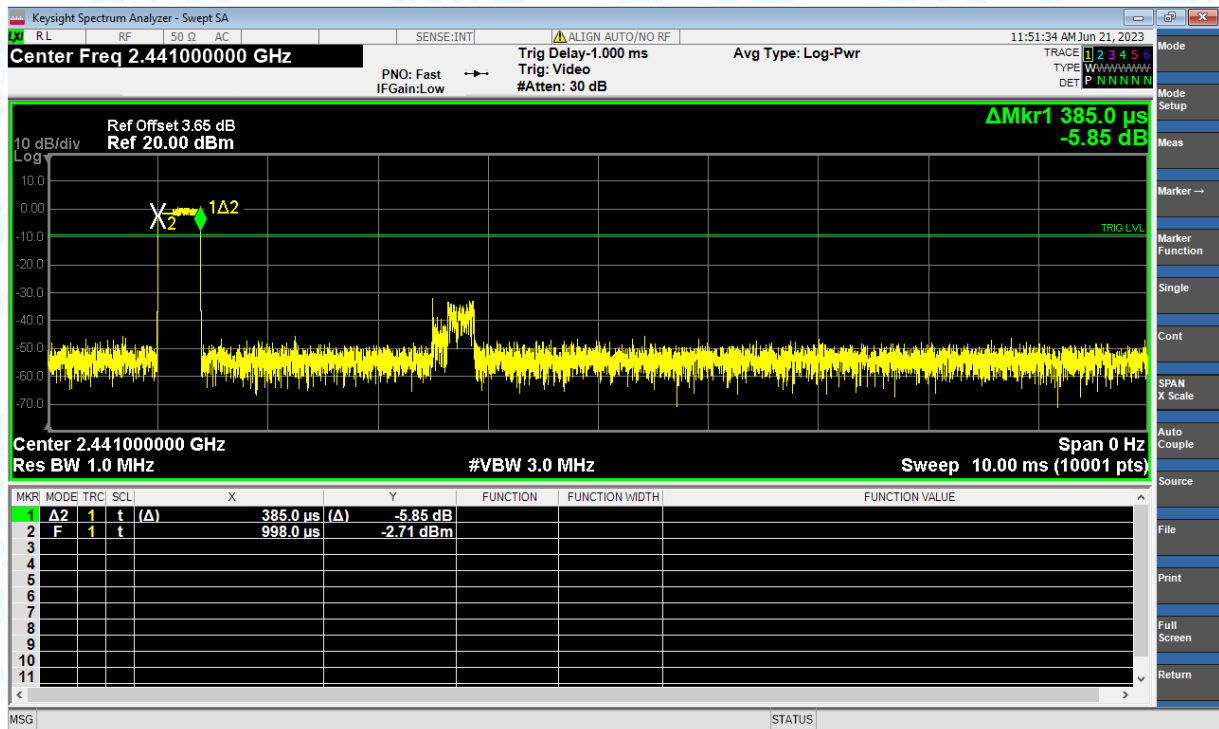
Dwell NVNT 1-DH3 2441MHz Ant1



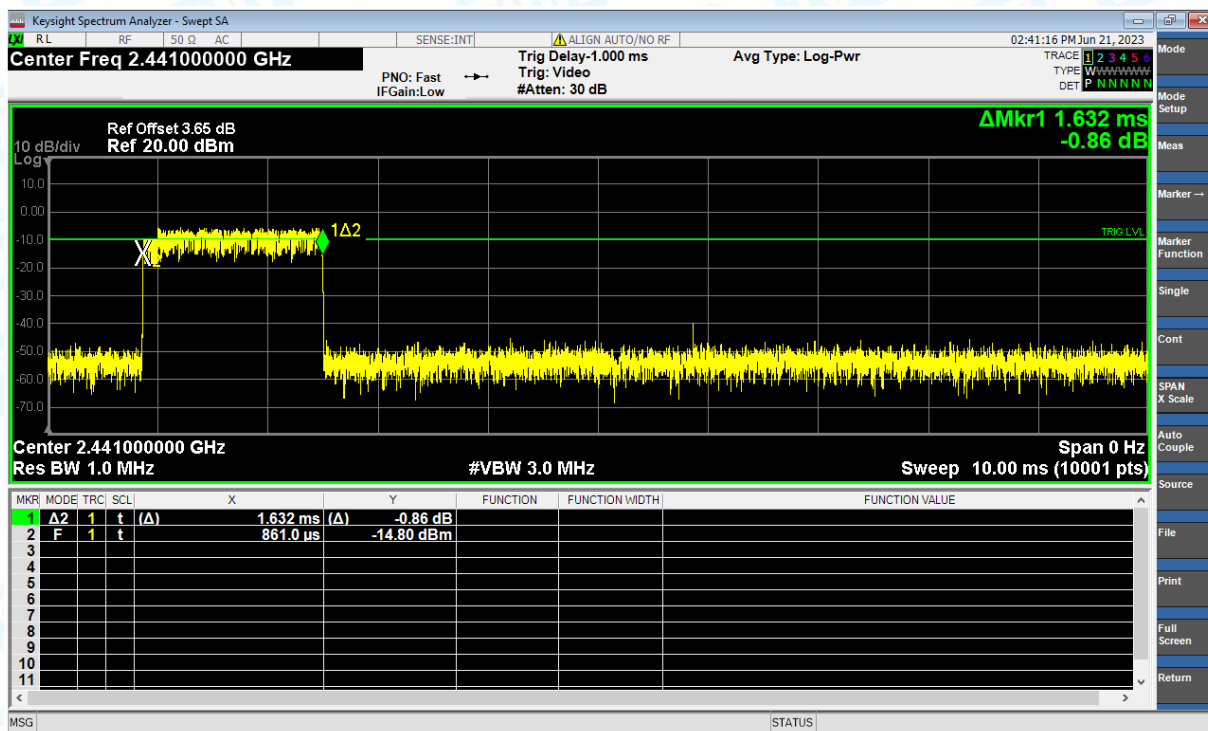
Dwell NVNT 1-DH5 2441MHz Ant1



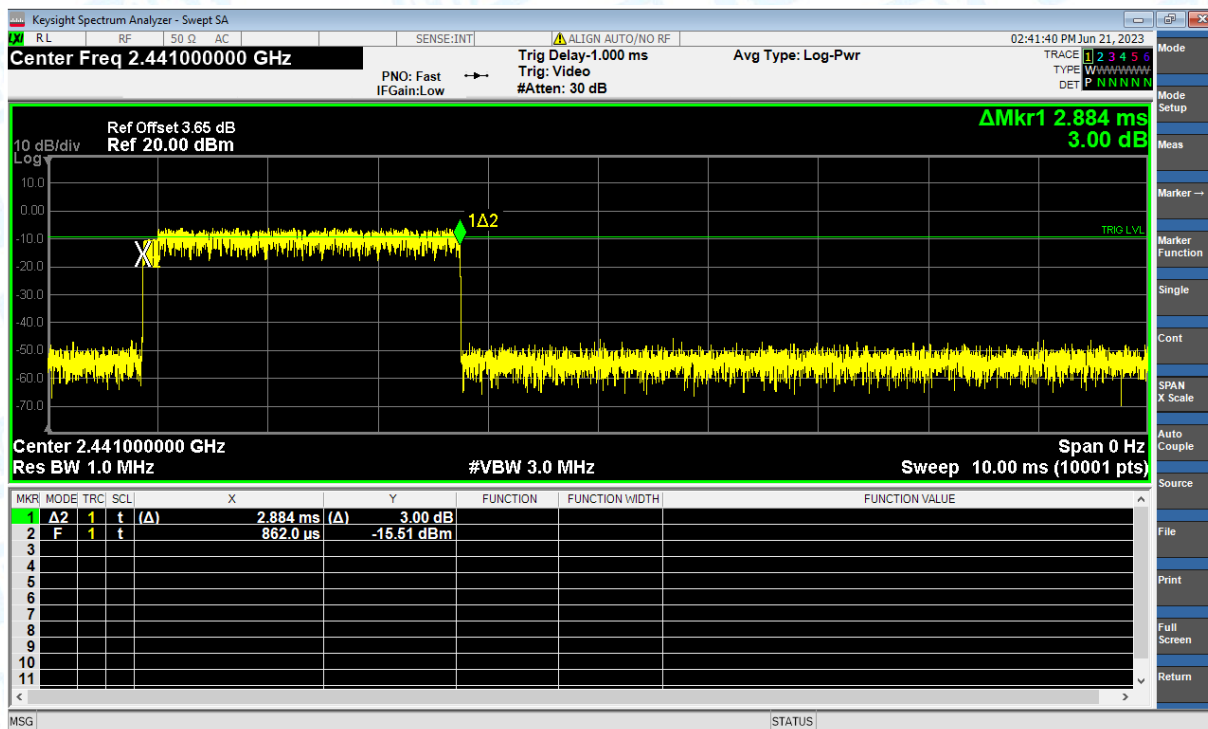
Dwell NVNT 2-DH1 2441MHz Ant1



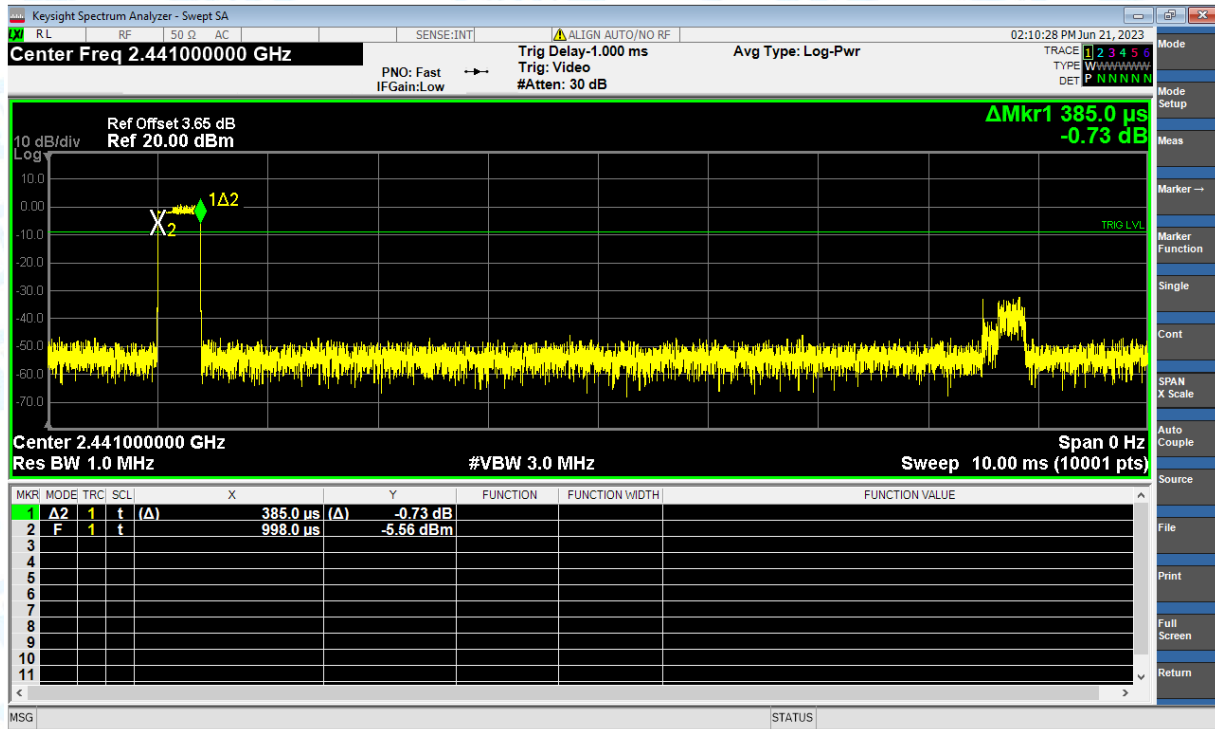
Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1



Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1

