

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

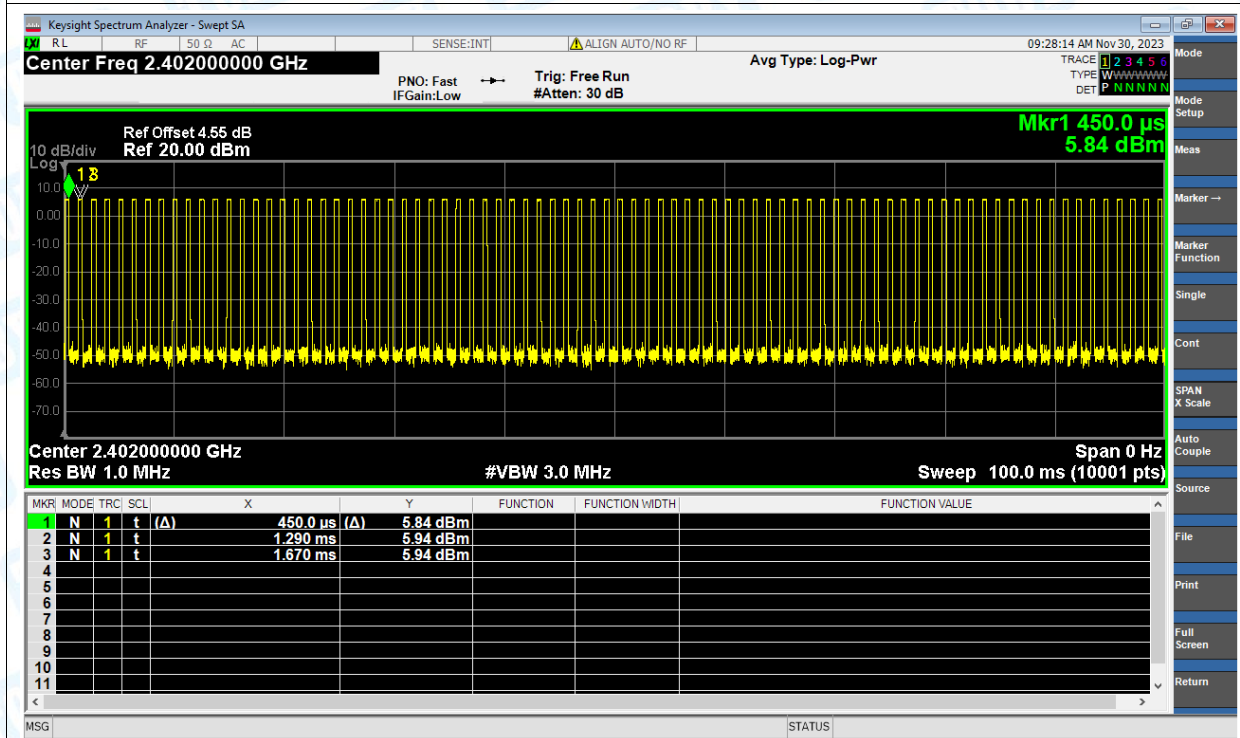
General Description of EUT	
Product Name:	Lixel L2 300 V1
Test Model:	Lixel
Sample ID:	HC-C-202309-0278-02-02-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC 14.4V
Test Engineer:	Liyingjing
Note: For a more detailed features description, please refer to the report TBR-C-202309-0278-22 The report only show the worst case data.	

Duty Cycle

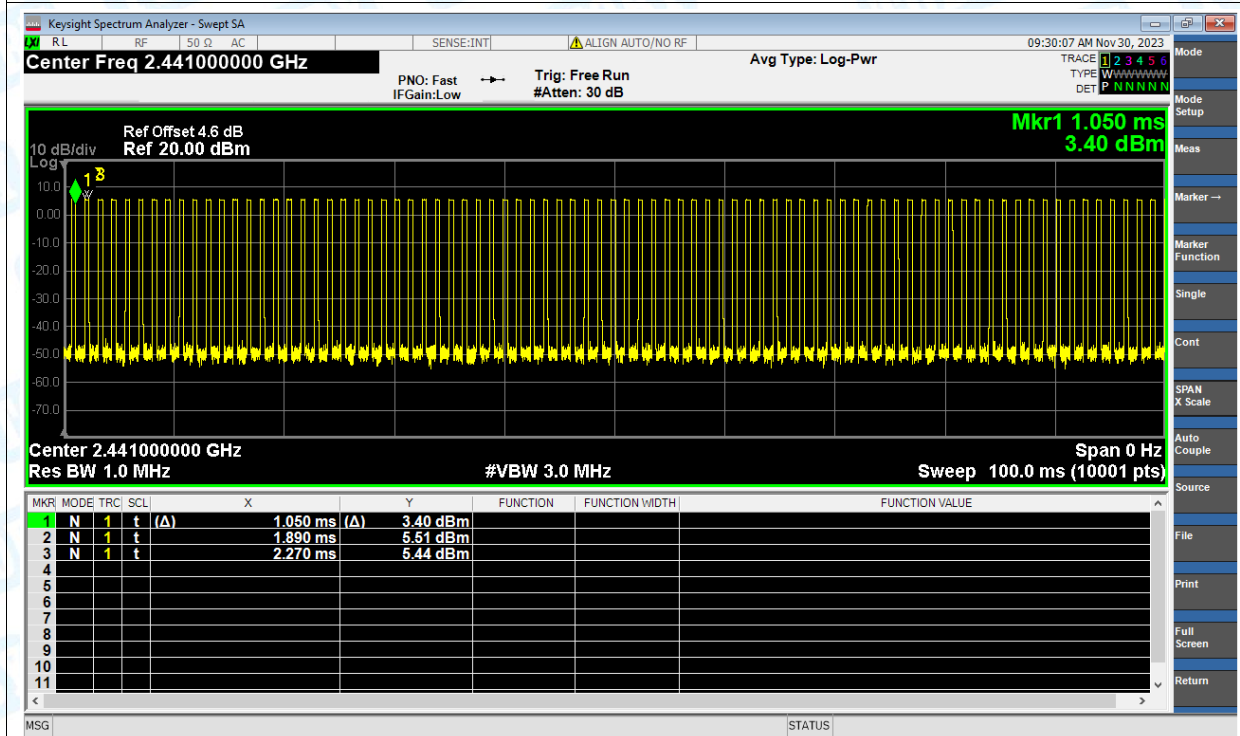
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.15	5.07	2.63
NVNT	1-DH1	2441	Ant1	31.15	5.07	2.63
NVNT	1-DH1	2480	Ant1	30.89	5.1	2.63
NVNT	2-DH1	2402	Ant1	31.71	4.99	2.56
NVNT	2-DH1	2441	Ant1	31.71	4.99	2.56
NVNT	2-DH1	2480	Ant1	31.71	4.99	2.56
NVNT	3-DH1	2402	Ant1	31.71	4.99	2.56
NVNT	3-DH1	2441	Ant1	31.71	4.99	2.56
NVNT	3-DH1	2480	Ant1	31.71	4.99	2.56

Test Graphs

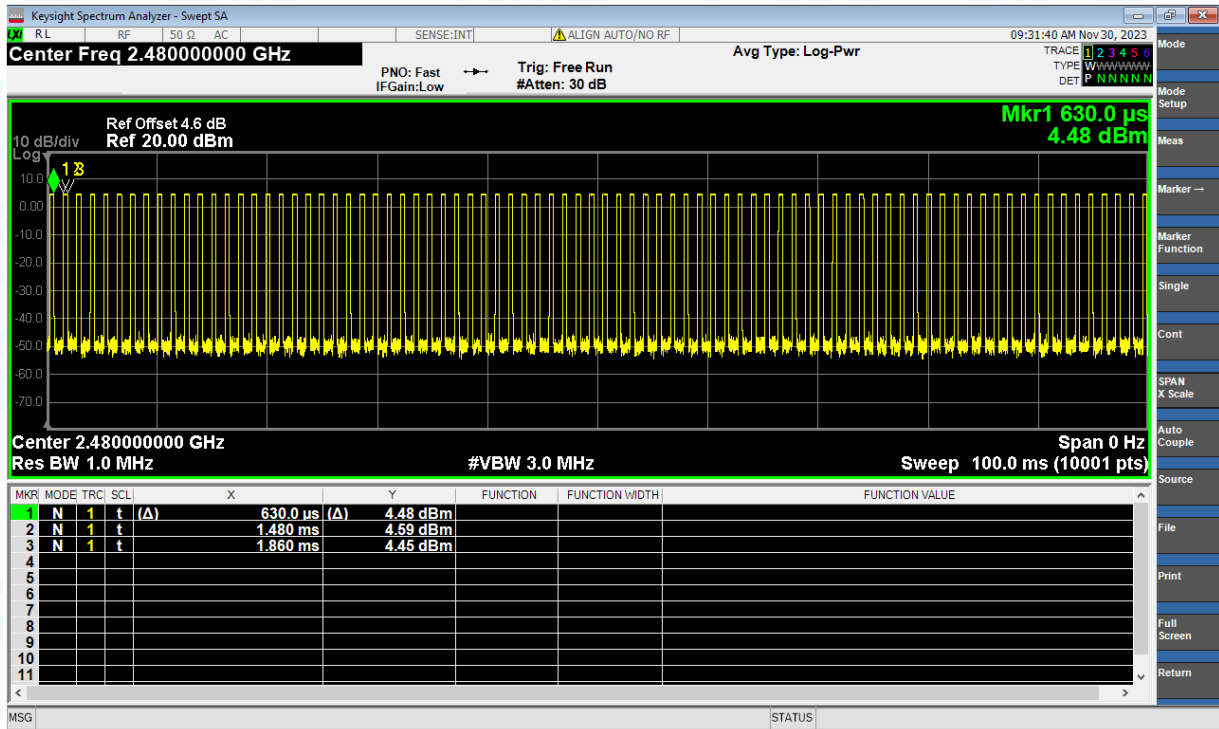
Duty Cycle NVNT 1-DH1 2402MHz Ant1



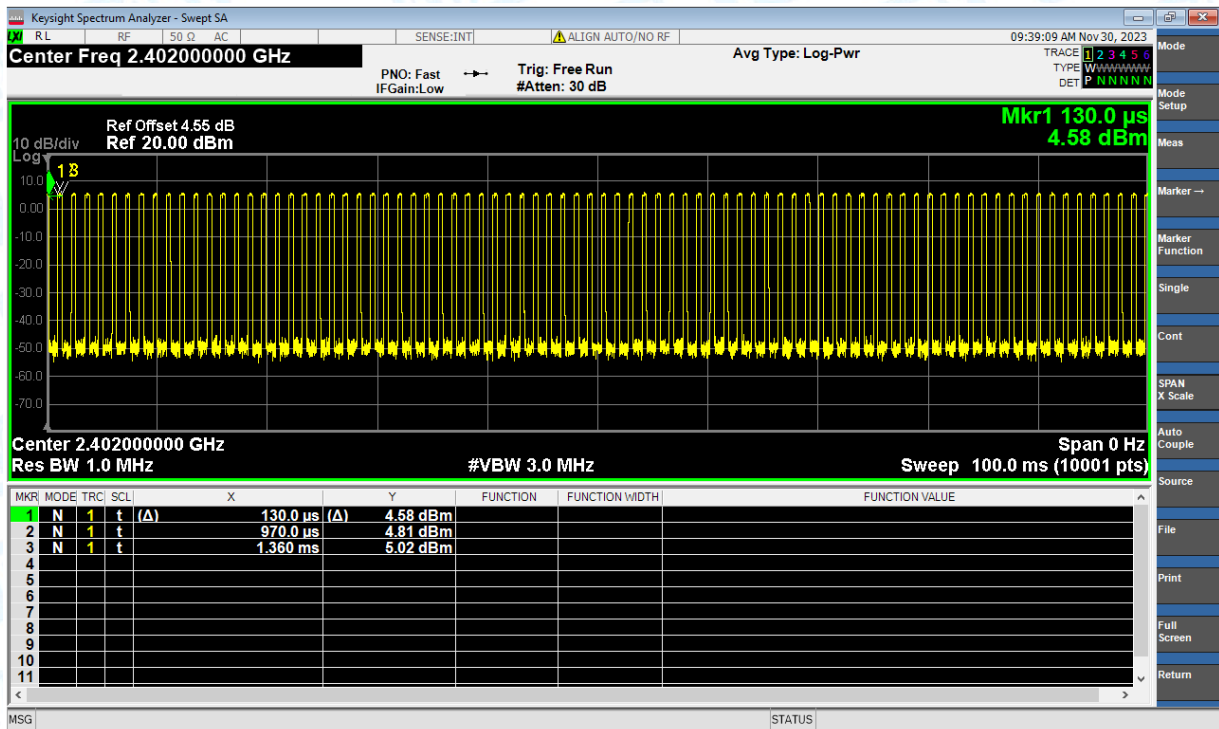
Duty Cycle NVNT 1-DH1 2441MHz Ant1



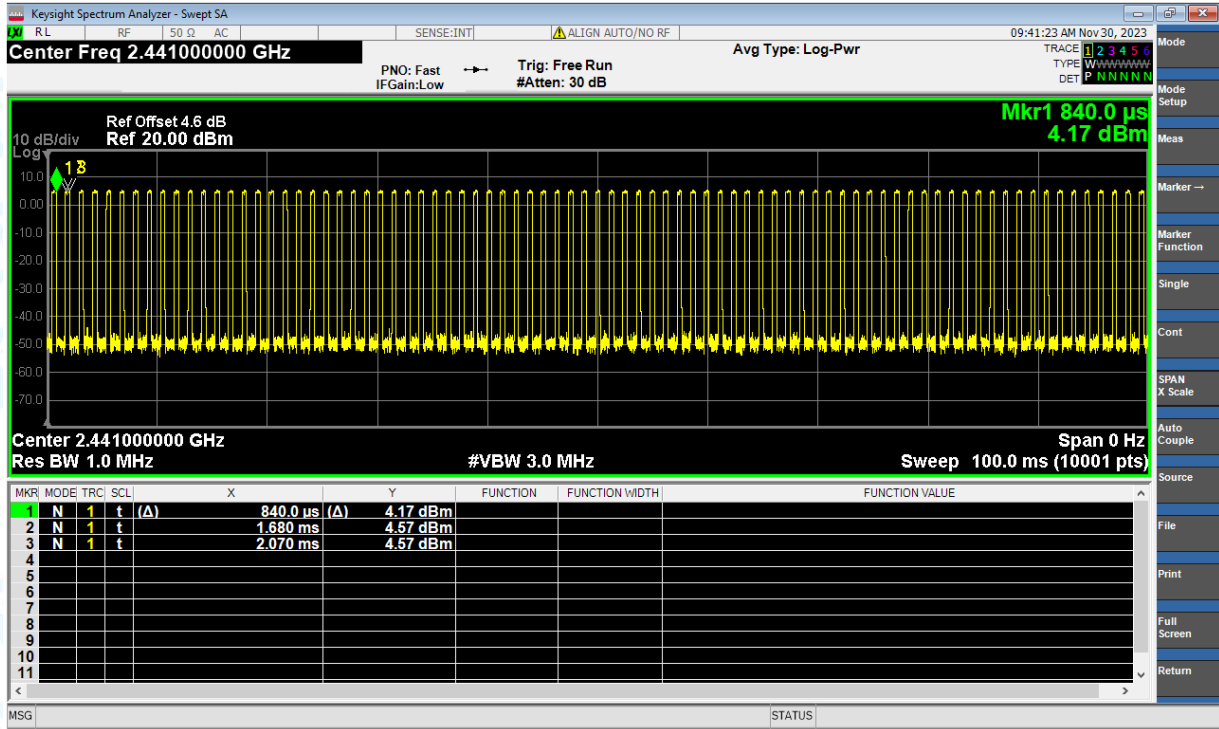
Duty Cycle NVNT 1-DH1 2480MHz Ant1



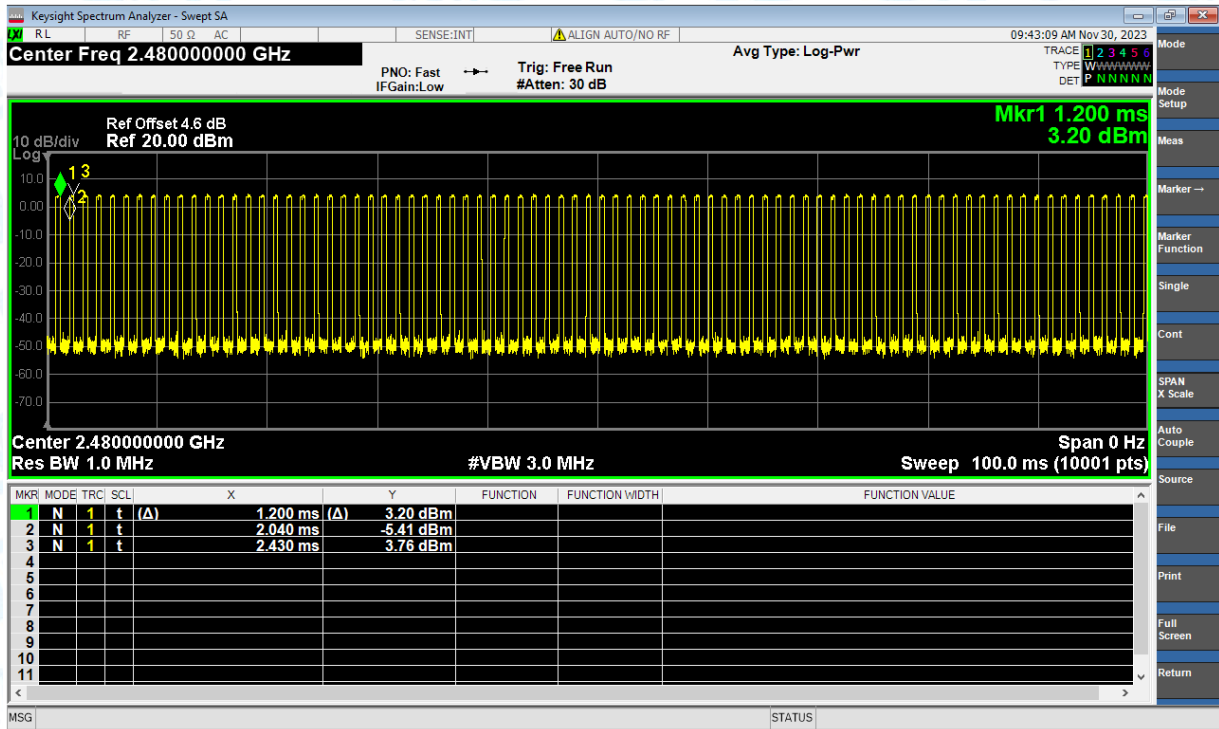
Duty Cycle NVNT 2-DH1 2402MHz Ant1



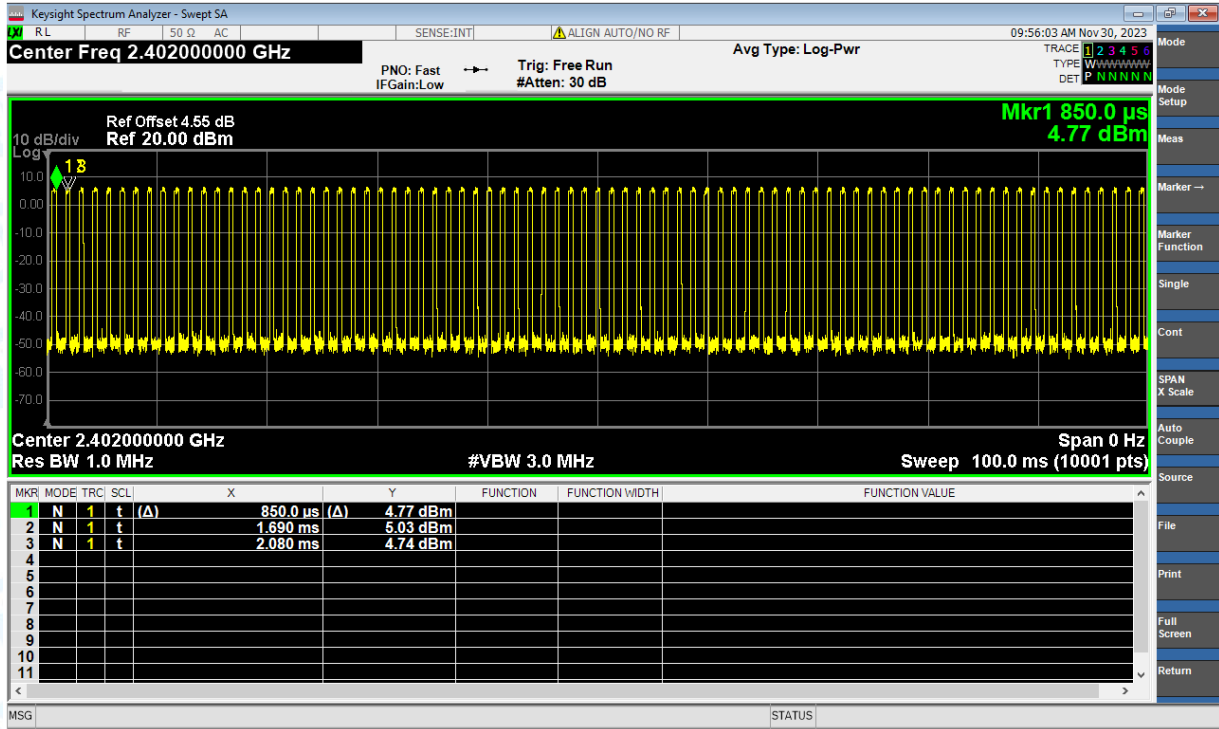
Duty Cycle NVNT 2-DH1 2441MHz Ant1



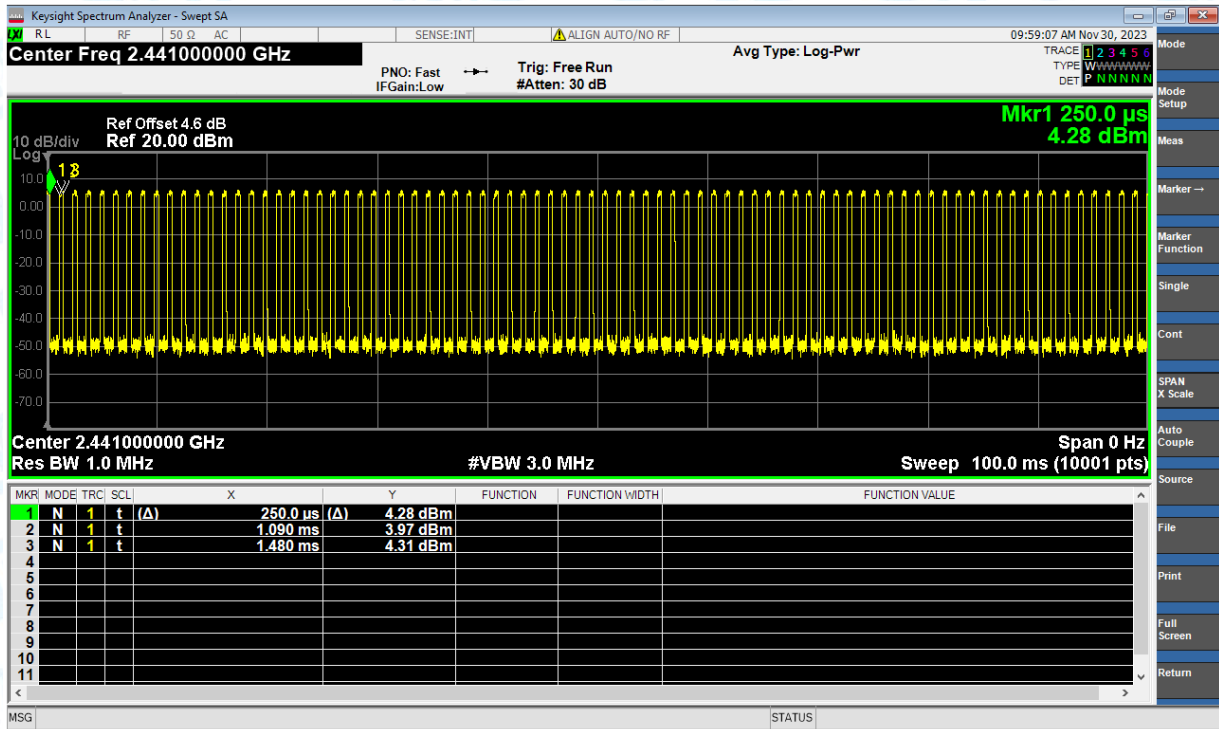
Duty Cycle NVNT 2-DH1 2480MHz Ant1

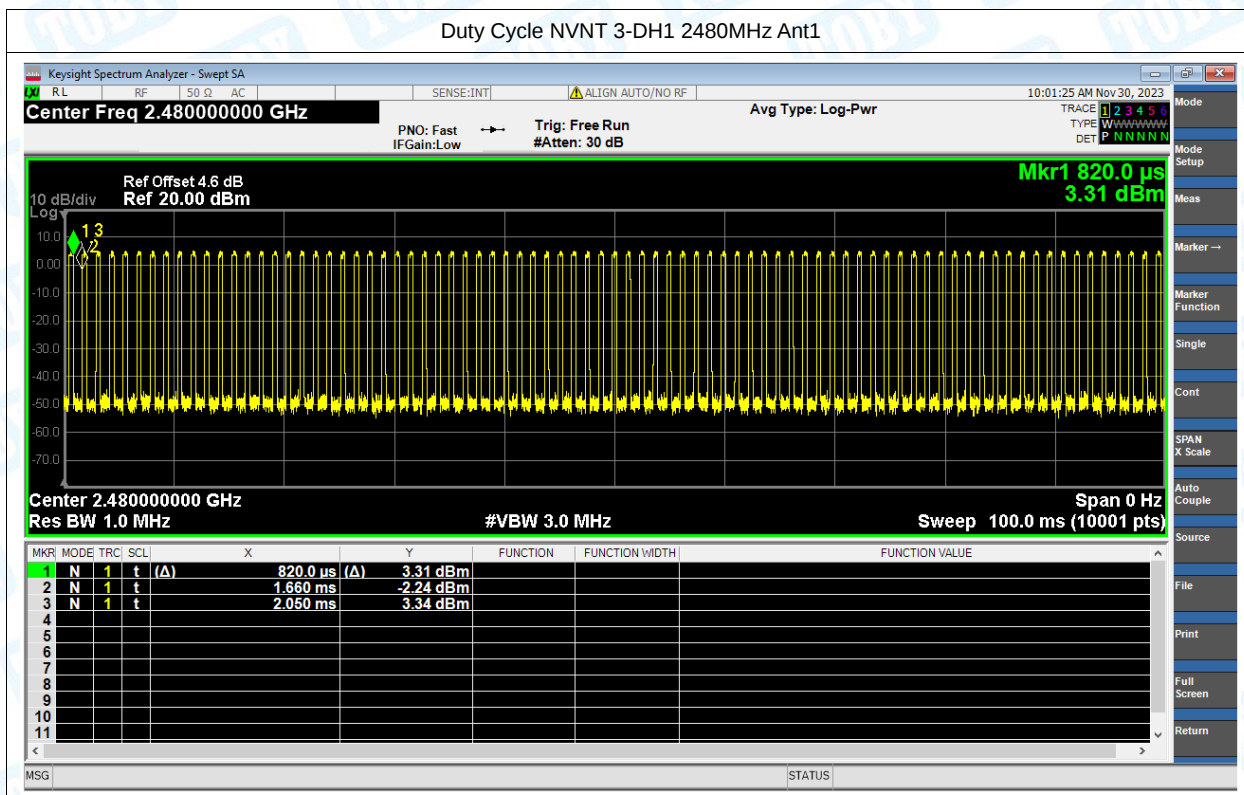


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



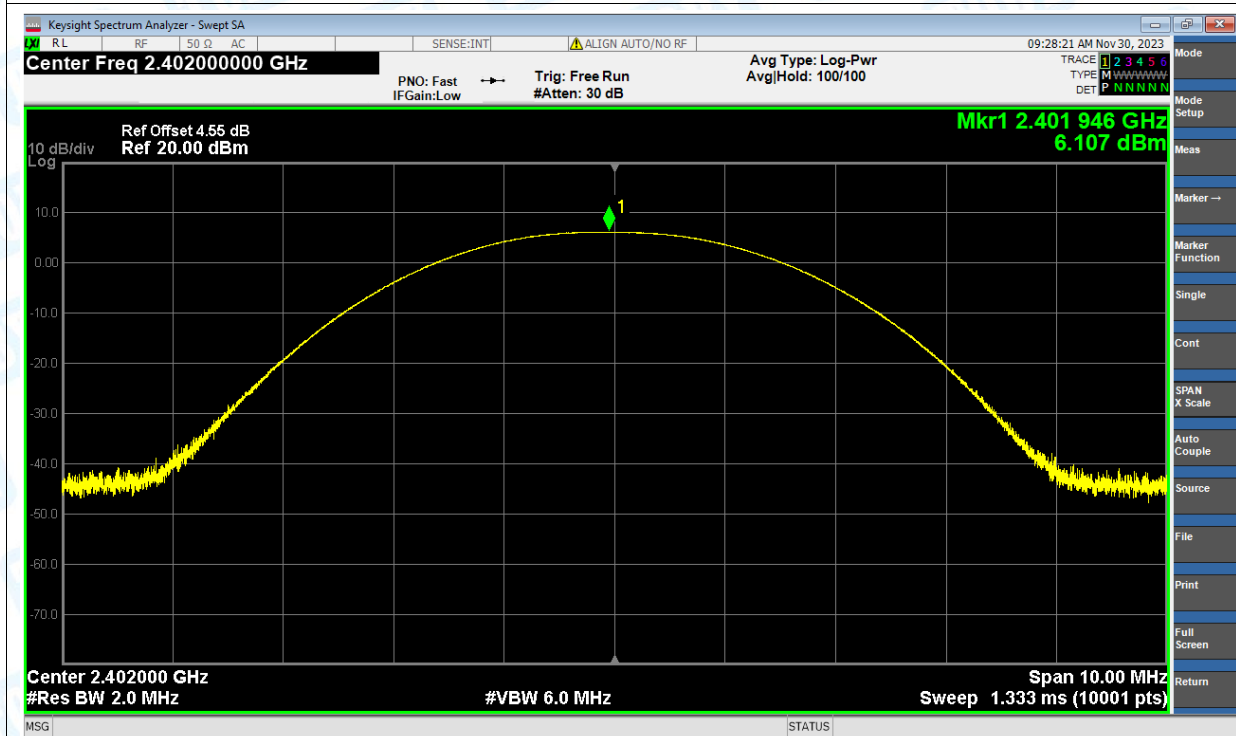


Maximum Conducted Output Power

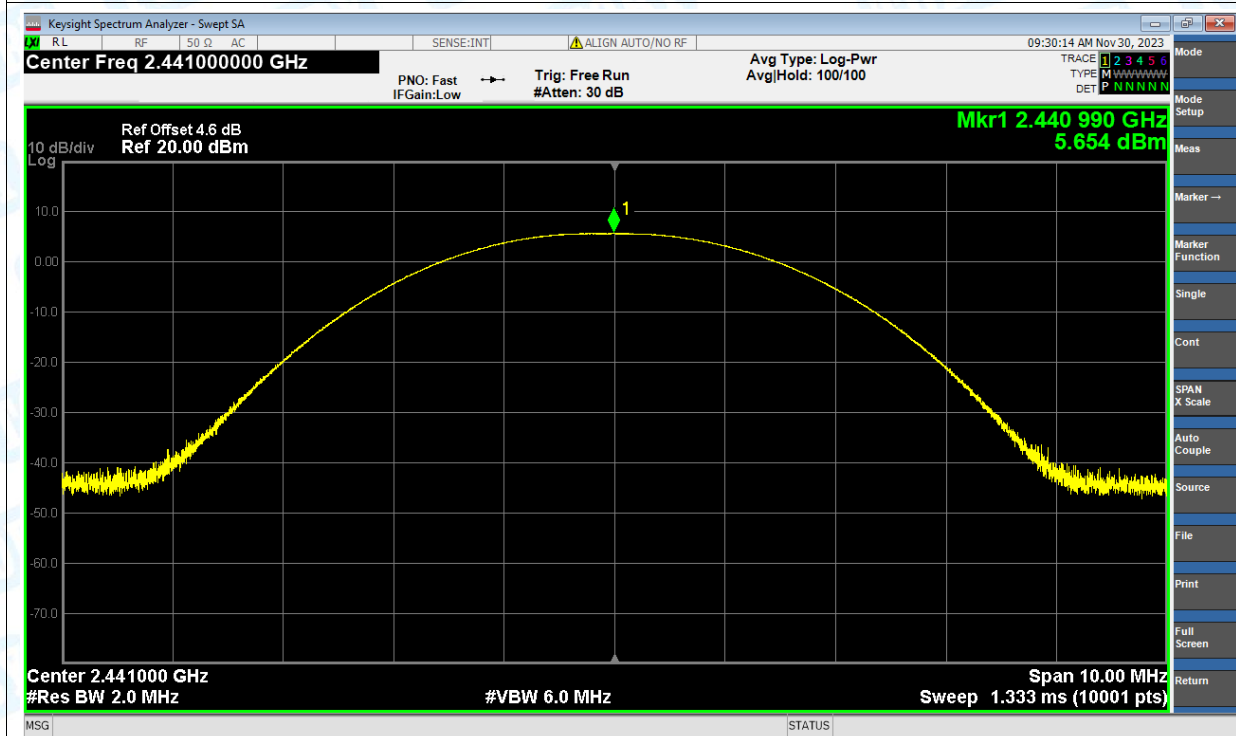
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	6.107	21	Pass
NVNT	1-DH1	2441	Ant1	5.654	21	Pass
NVNT	1-DH1	2480	Ant1	4.719	21	Pass
NVNT	2-DH1	2402	Ant1	6.337	21	Pass
NVNT	2-DH1	2441	Ant1	5.907	21	Pass
NVNT	2-DH1	2480	Ant1	4.969	21	Pass
NVNT	3-DH1	2402	Ant1	6.8	21	Pass
NVNT	3-DH1	2441	Ant1	6.392	21	Pass
NVNT	3-DH1	2480	Ant1	5.503	21	Pass

Test Graphs

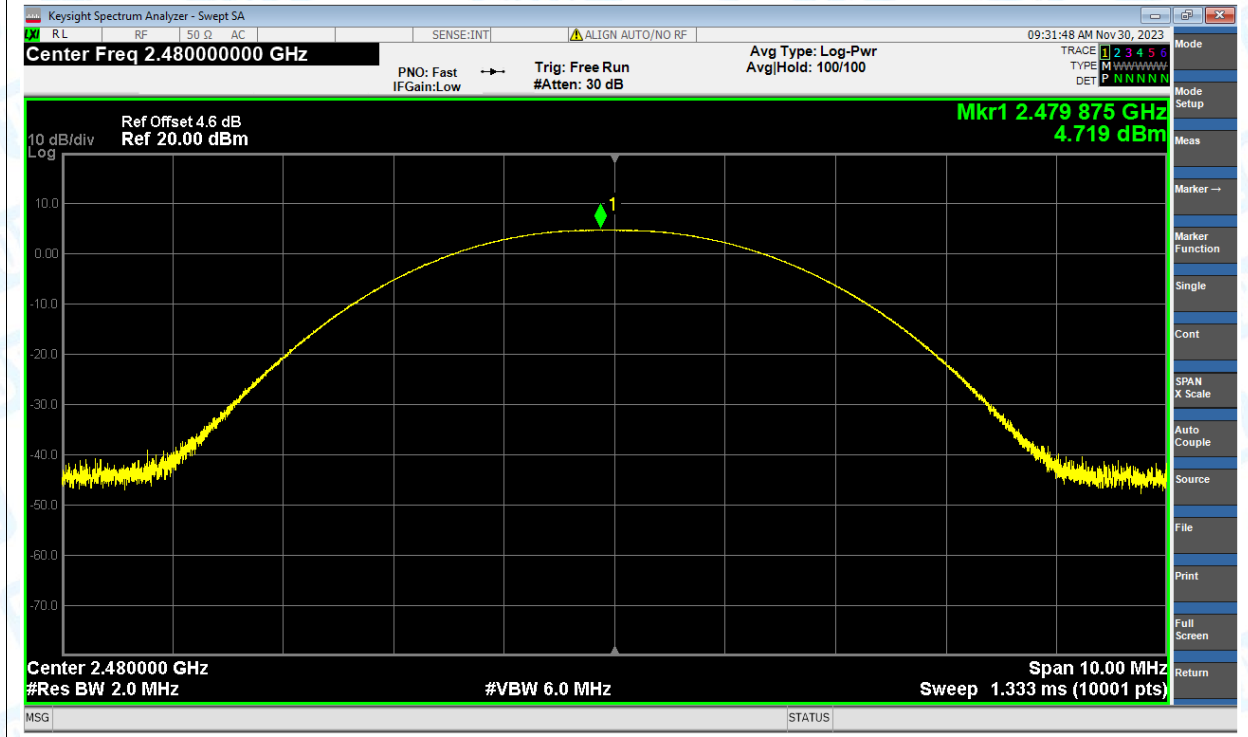
Power NVNT 1-DH1 2402MHz Ant1



Power NVNT 1-DH1 2441MHz Ant1



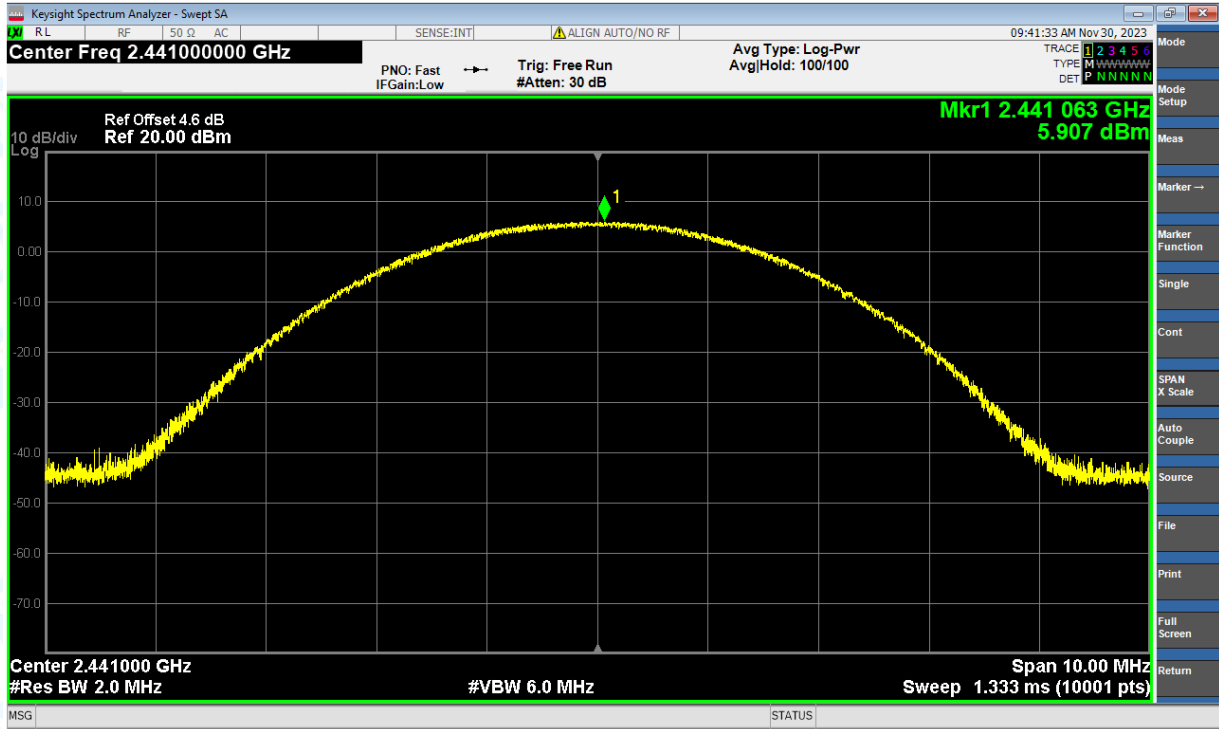
Power NVNT 1-DH1 2480MHz Ant1



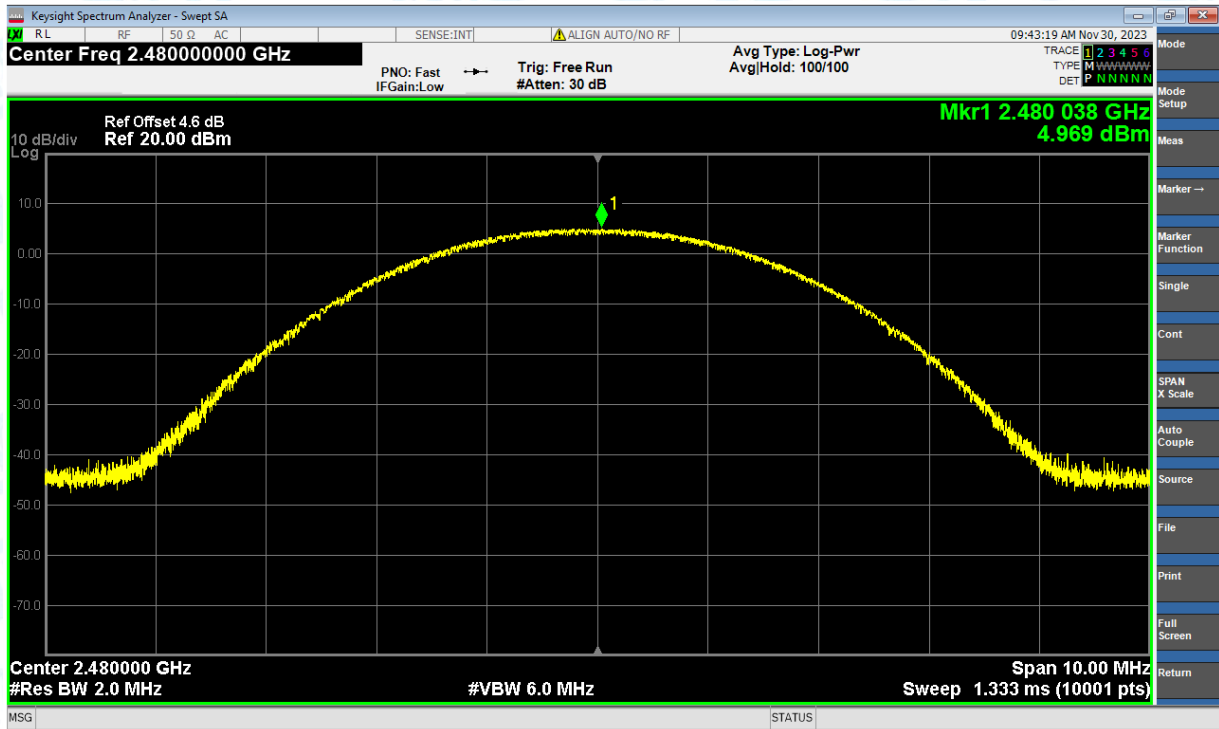
Power NVNT 2-DH1 2402MHz Ant1



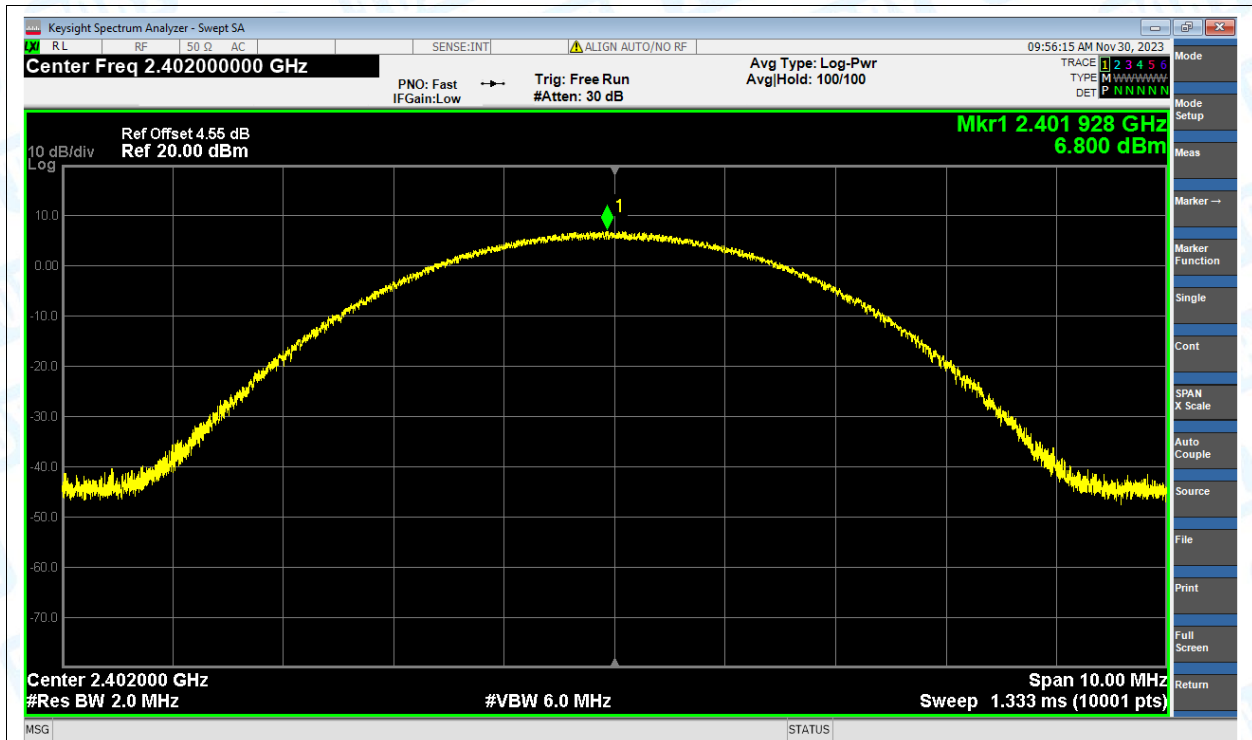
Power NVNT 2-DH1 2441MHz Ant1



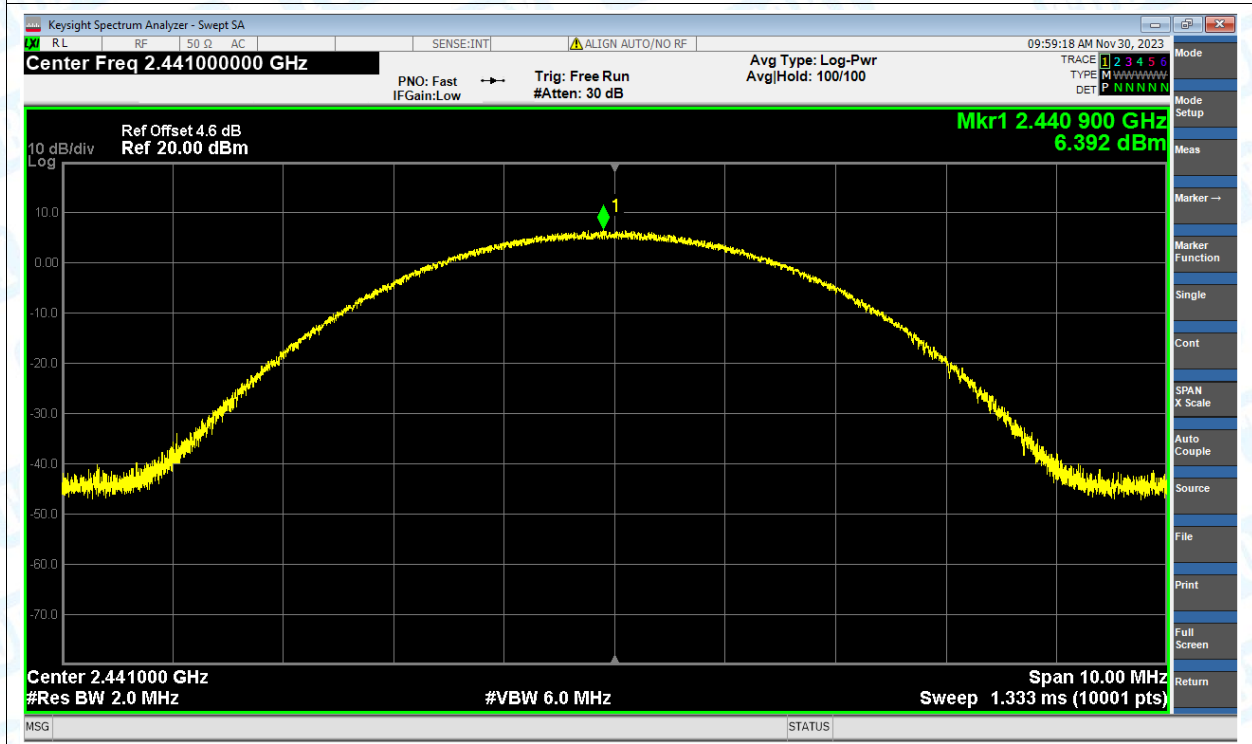
Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



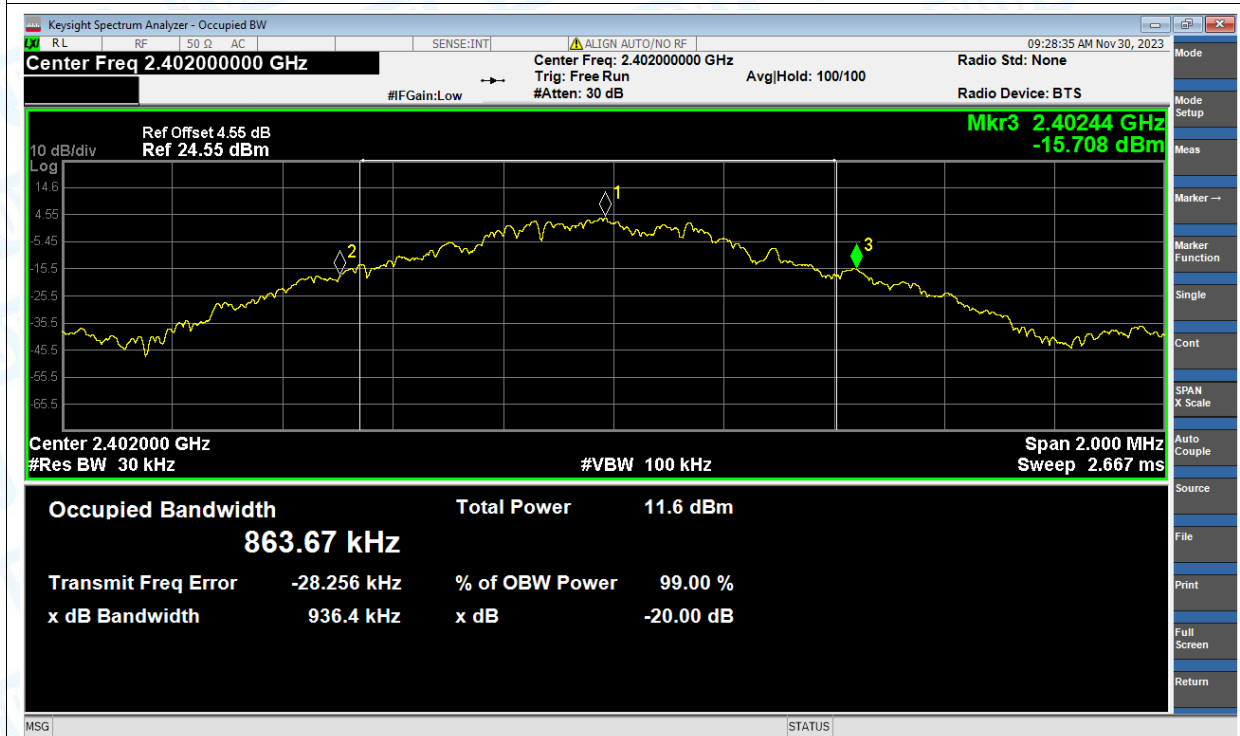


-20dB Bandwidth

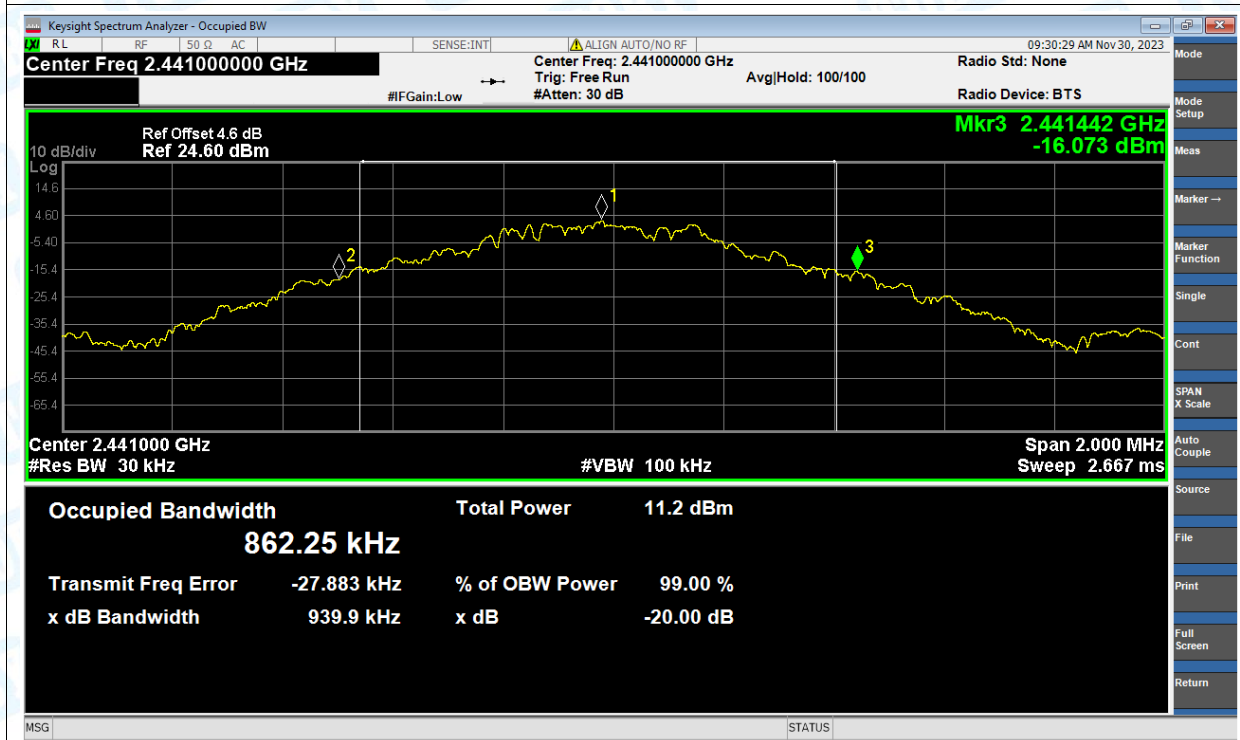
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.94	0	Pass
NVNT	1-DH1	2441	Ant1	0.94	0	Pass
NVNT	1-DH1	2480	Ant1	0.93	0	Pass
NVNT	2-DH1	2402	Ant1	1.22	0	Pass
NVNT	2-DH1	2441	Ant1	1.23	0	Pass
NVNT	2-DH1	2480	Ant1	1.23	0	Pass
NVNT	3-DH1	2402	Ant1	1.21	0	Pass
NVNT	3-DH1	2441	Ant1	1.22	0	Pass
NVNT	3-DH1	2480	Ant1	1.21	0	Pass

Test Graphs

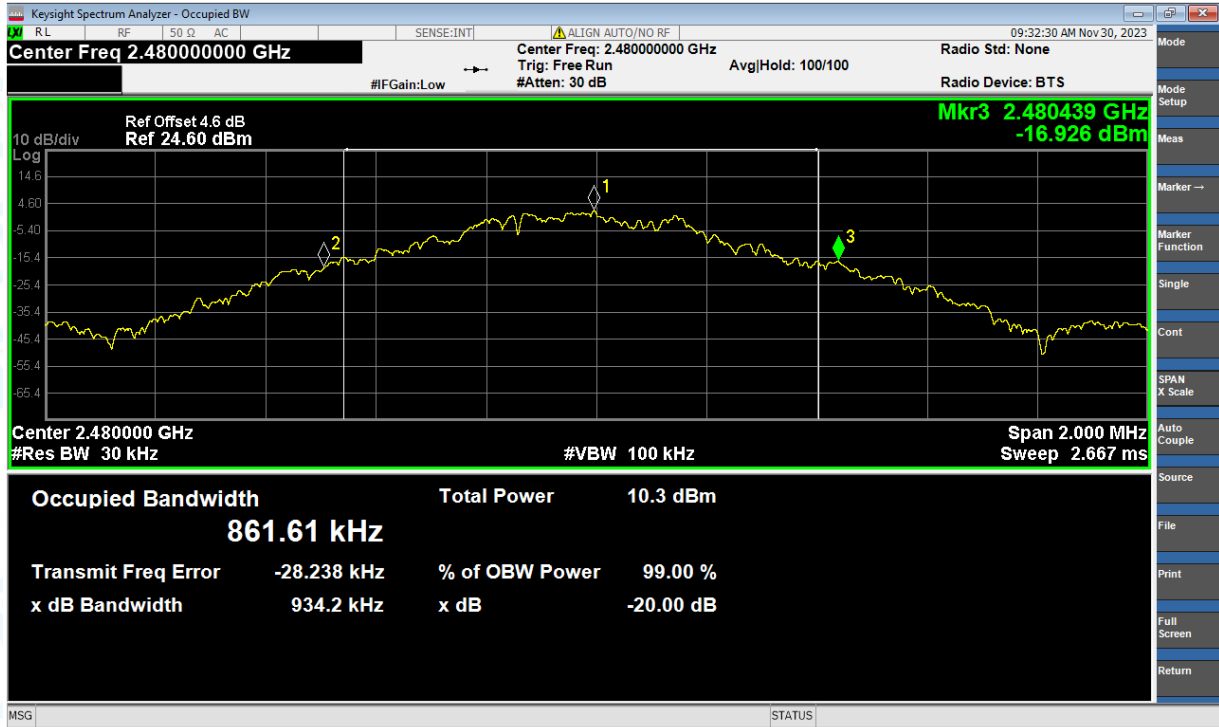
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



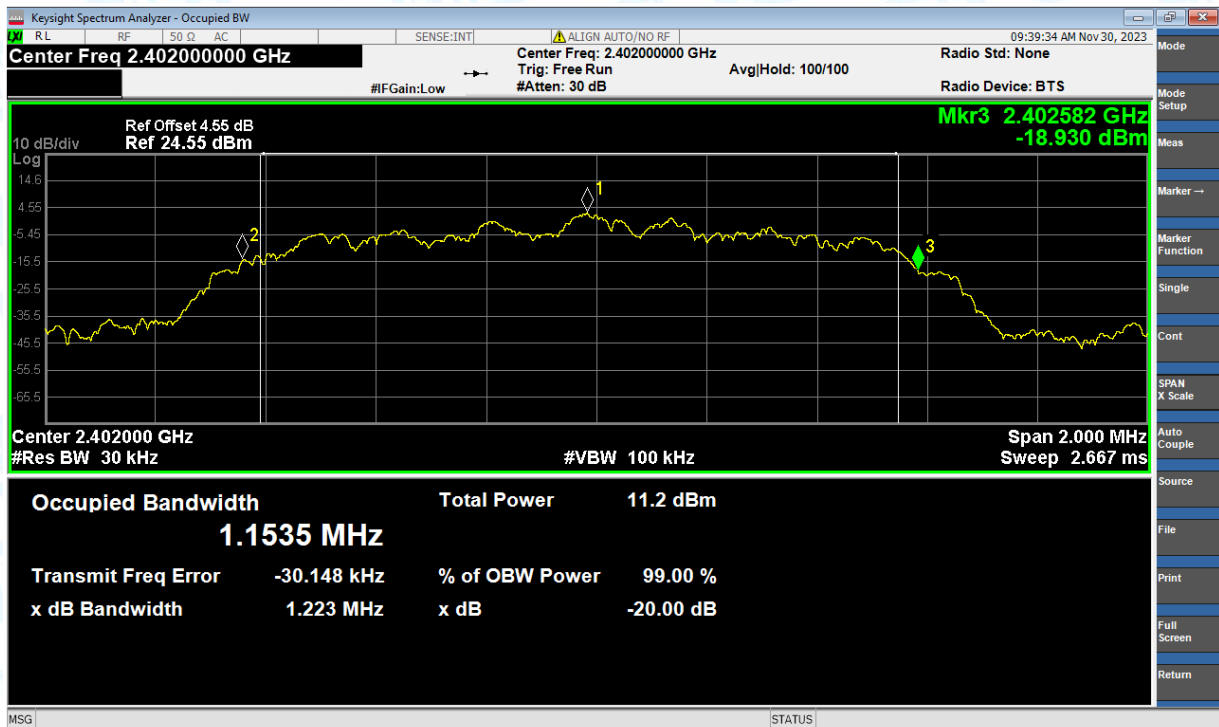
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



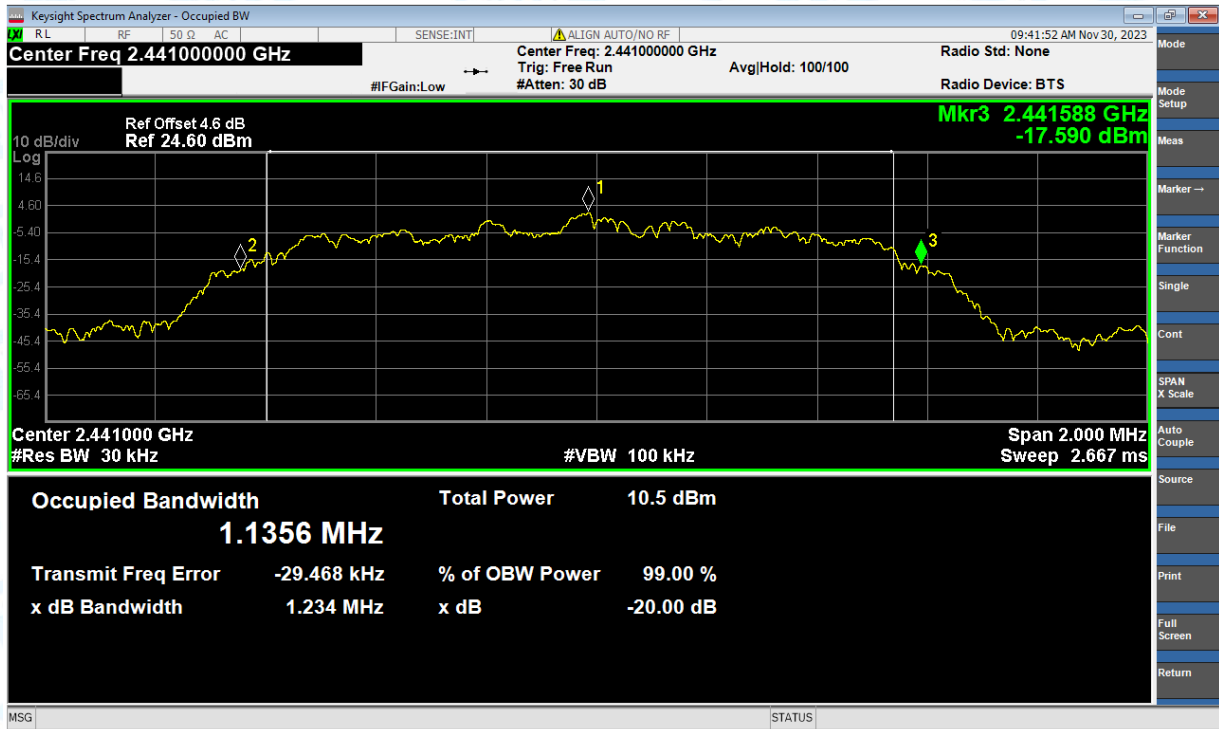
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



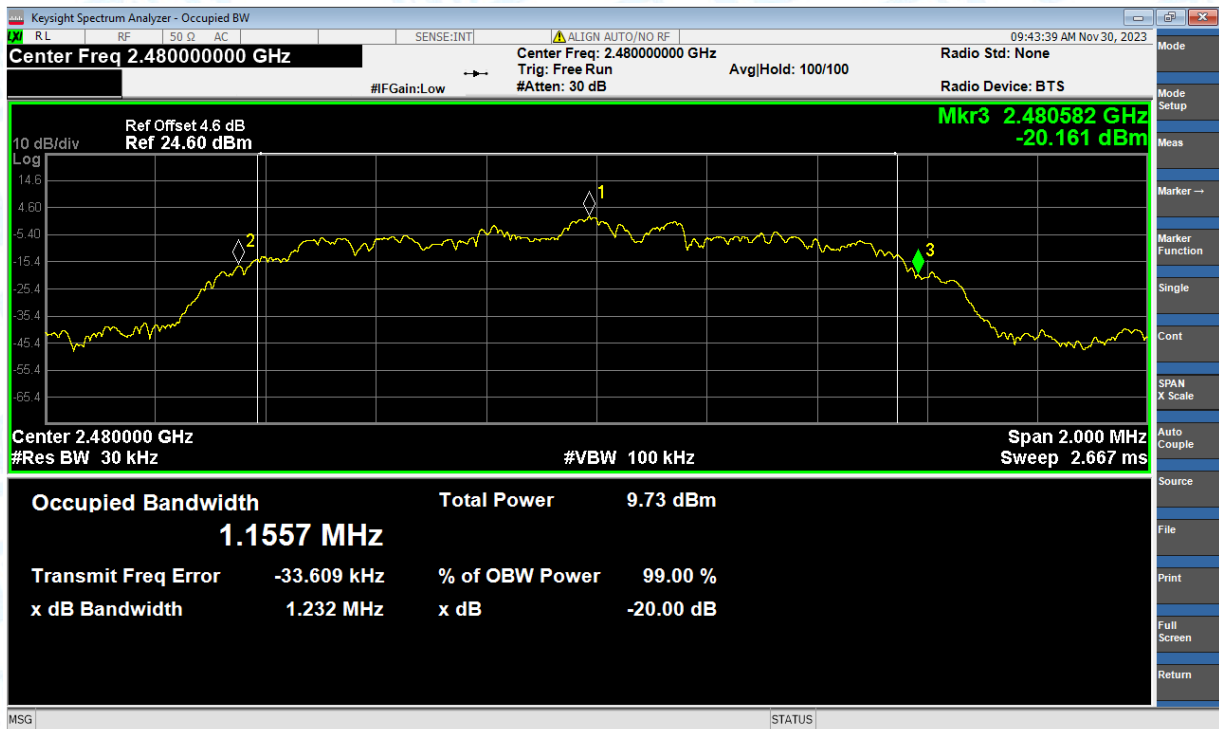
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



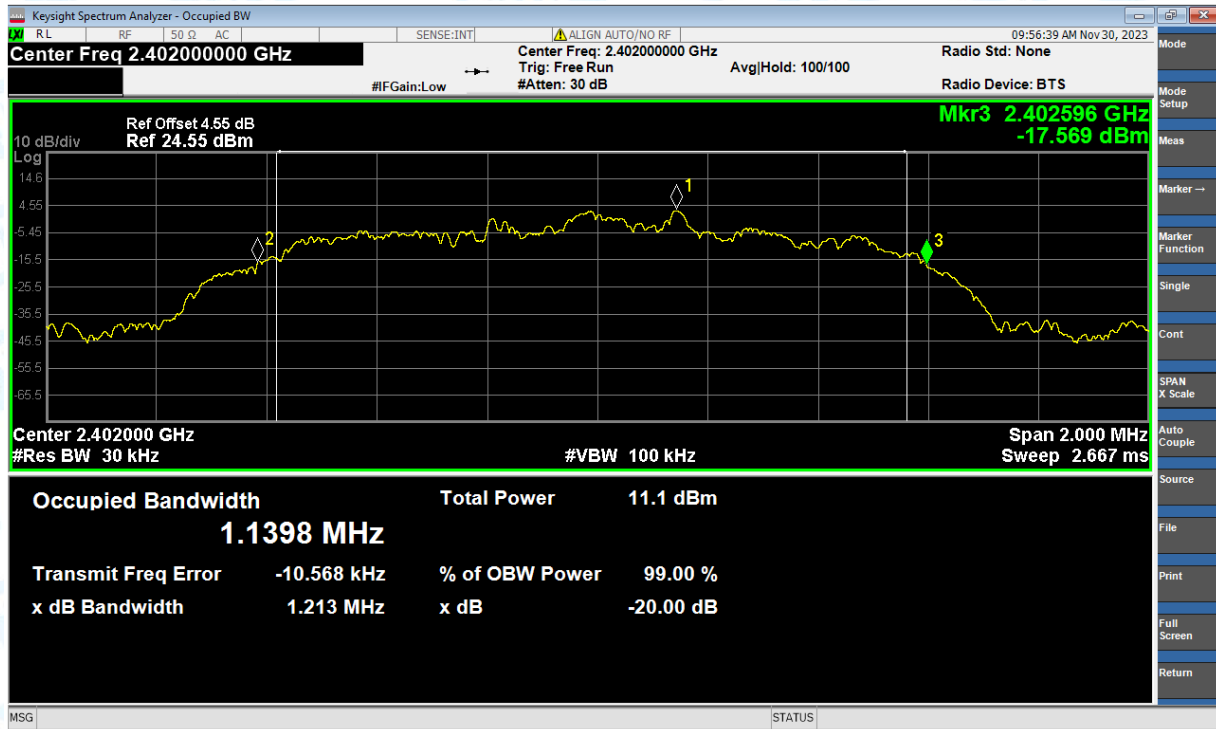
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



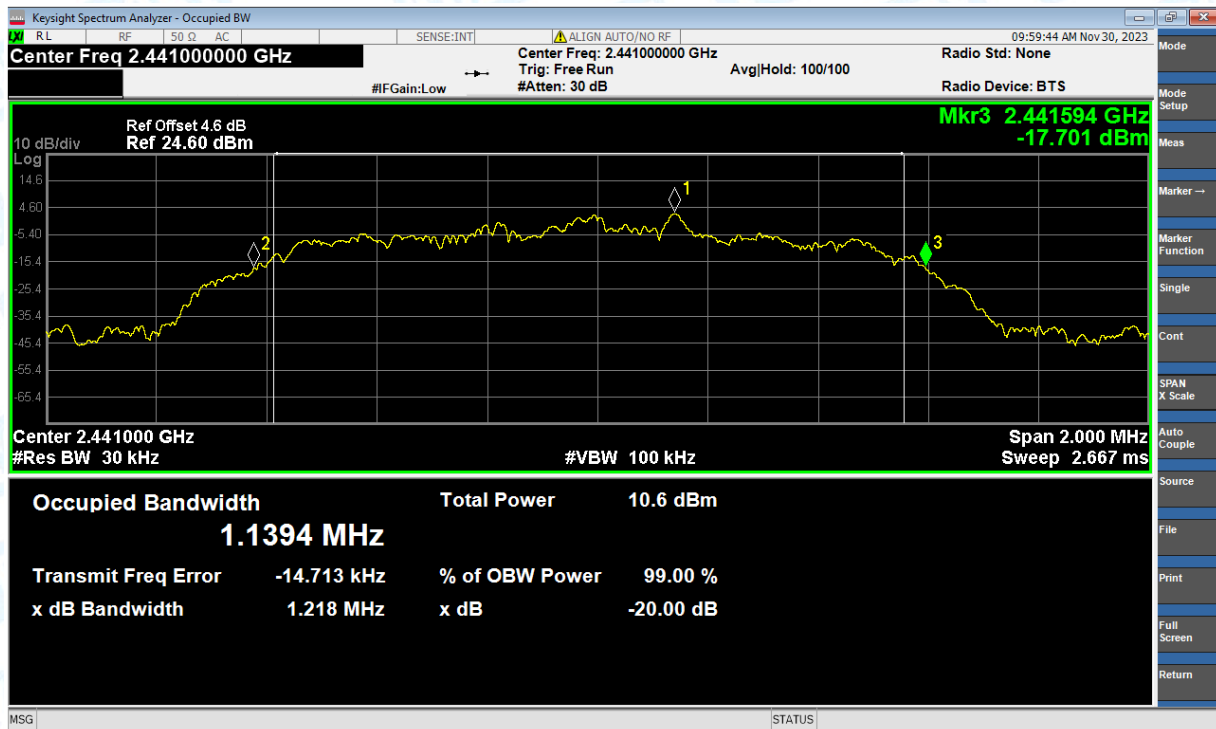
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

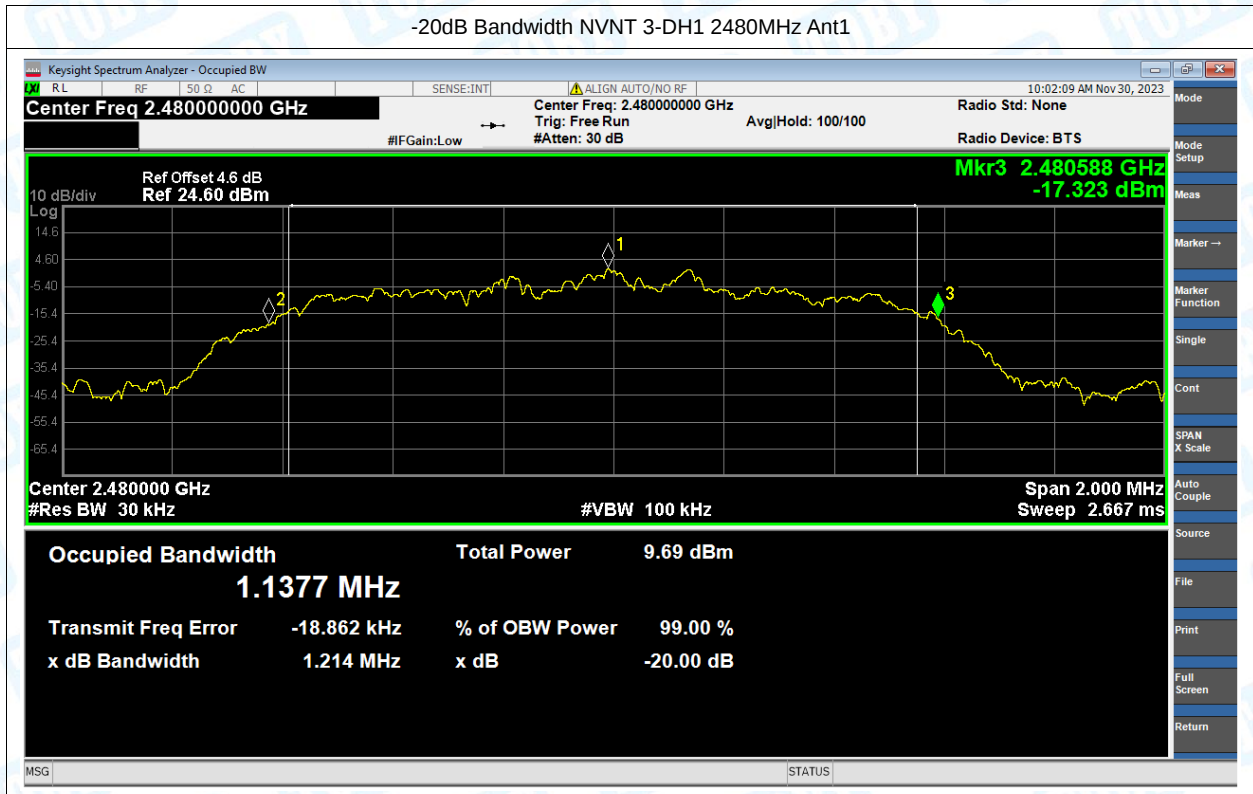


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



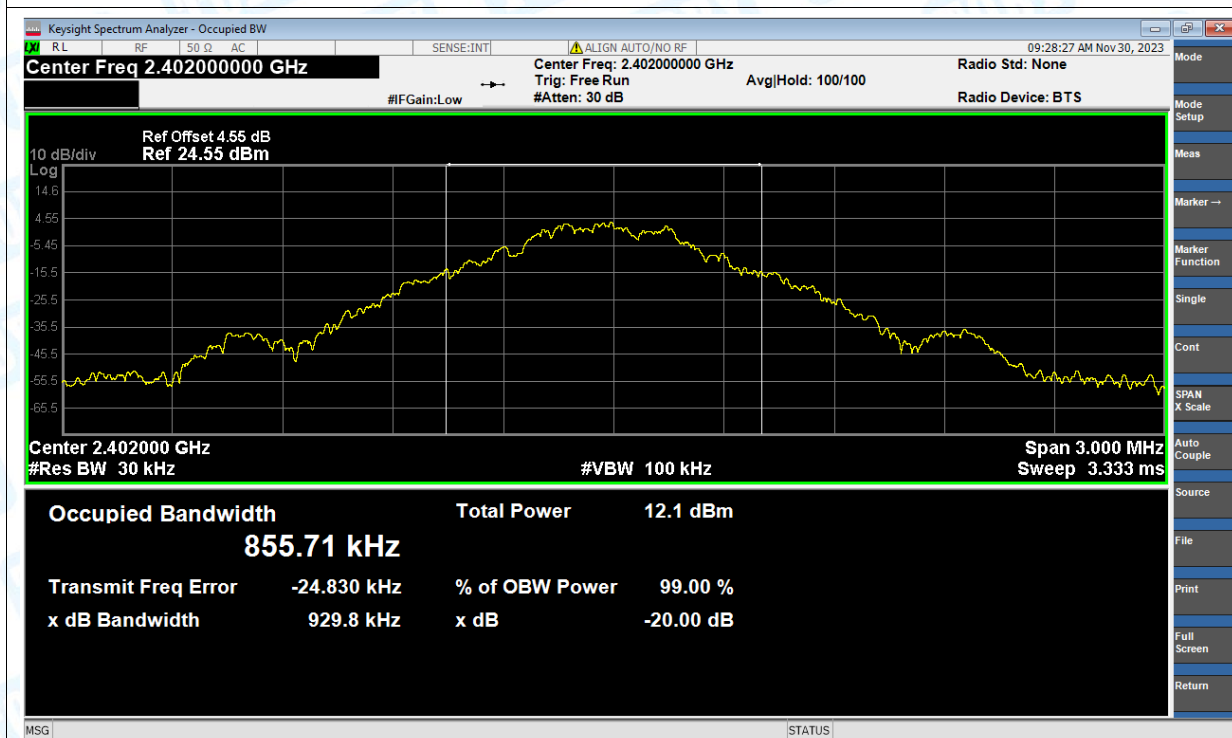


Occupied Channel Bandwidth

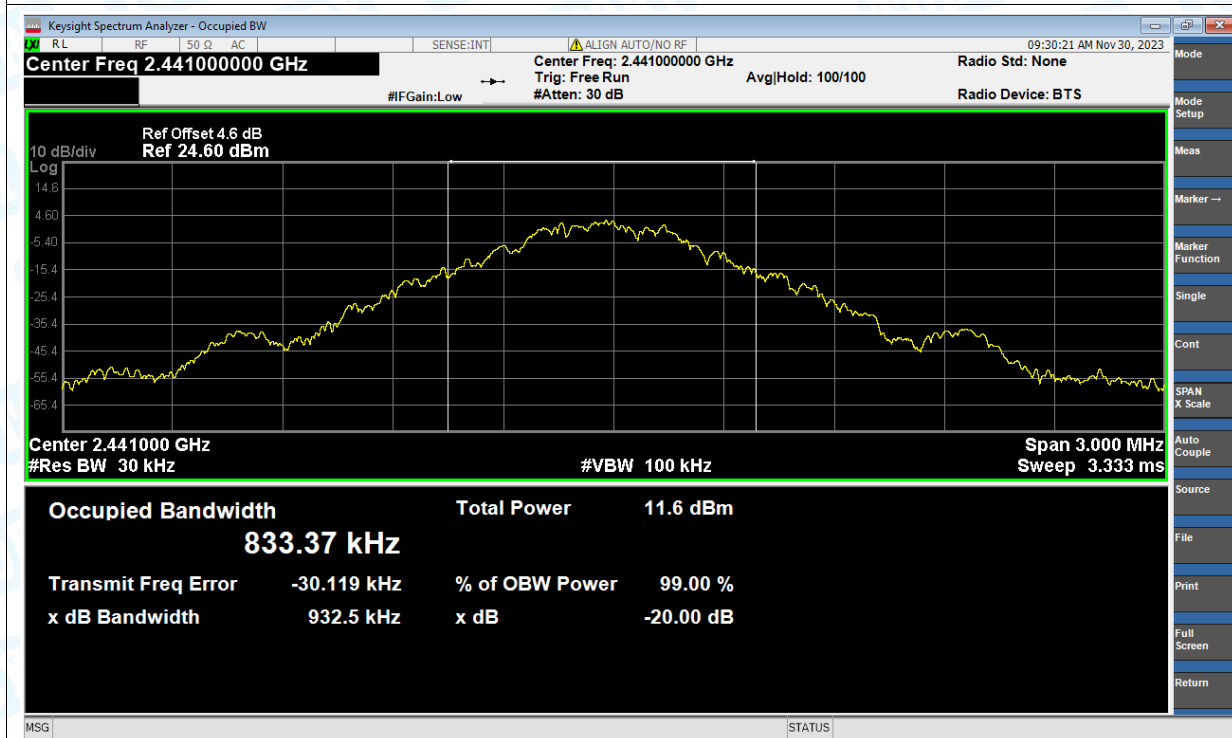
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.856
NVNT	1-DH1	2441	Ant1	0.833
NVNT	1-DH1	2480	Ant1	0.867
NVNT	2-DH1	2402	Ant1	1.138
NVNT	2-DH1	2441	Ant1	1.159
NVNT	2-DH1	2480	Ant1	1.158
NVNT	3-DH1	2402	Ant1	1.143
NVNT	3-DH1	2441	Ant1	1.133
NVNT	3-DH1	2480	Ant1	1.142

Test Graphs

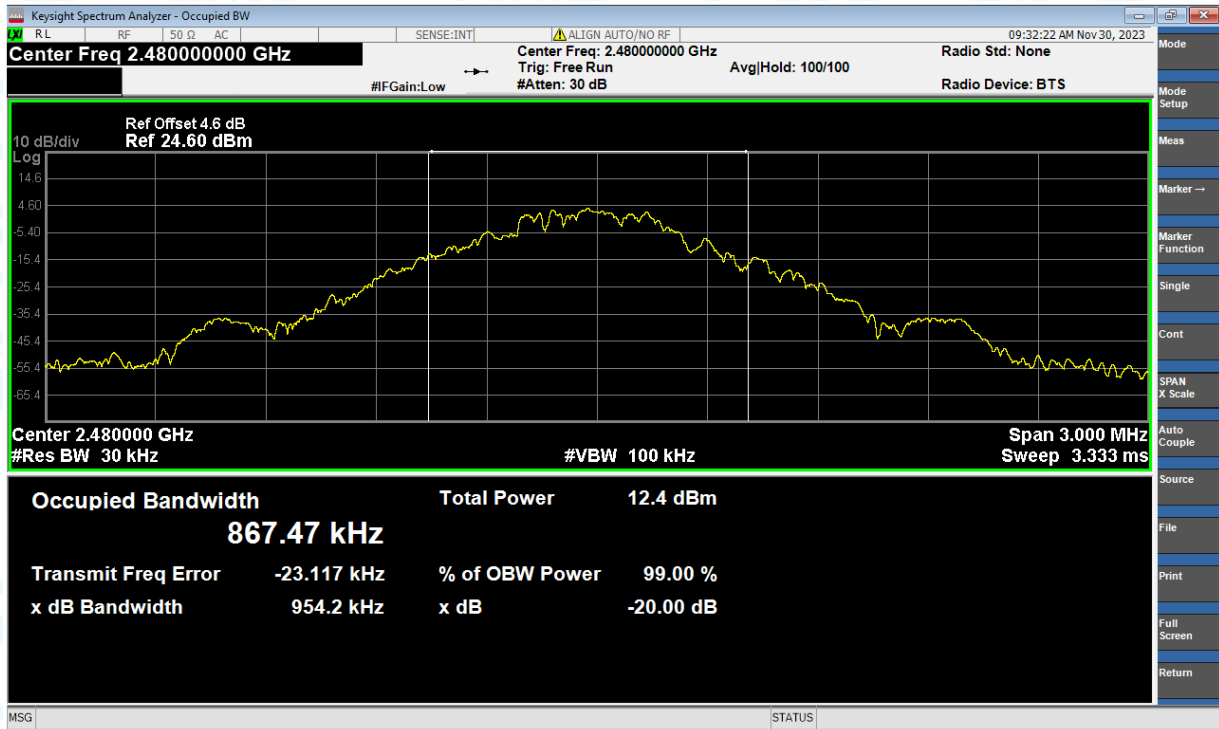
OBW NVNT 1-DH1 2402MHz Ant1



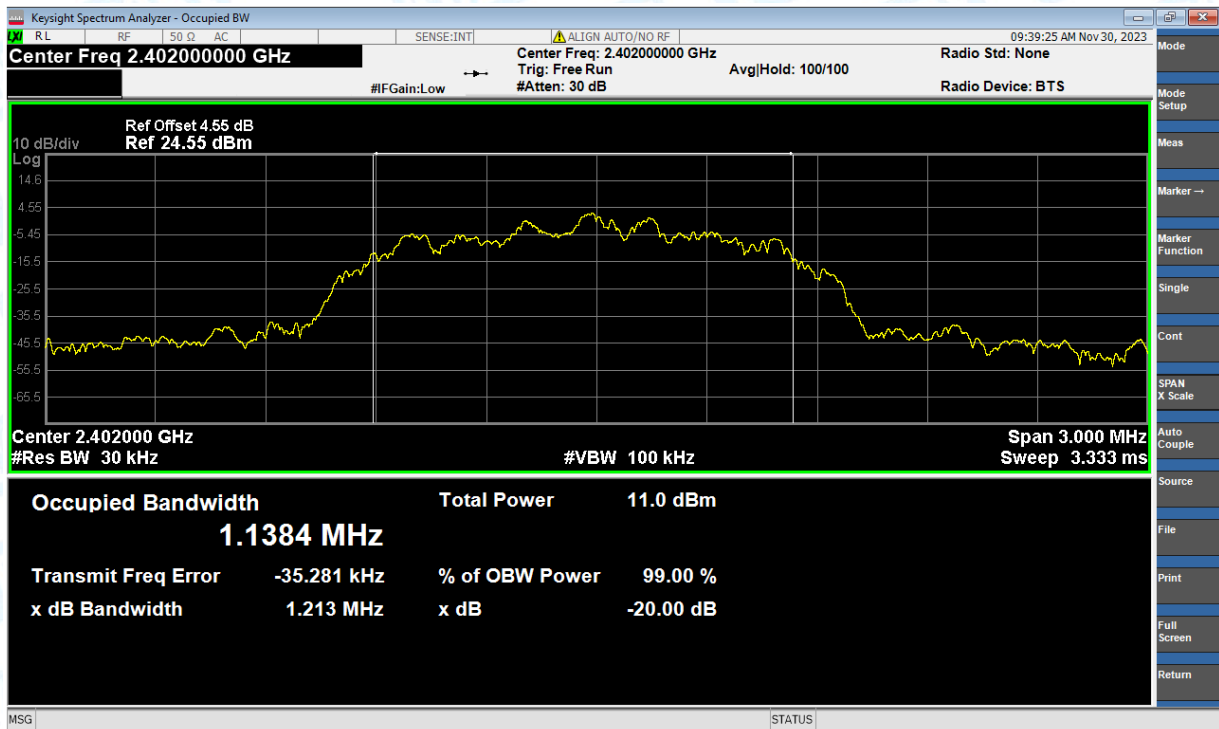
OBW NVNT 1-DH1 2441MHz Ant1



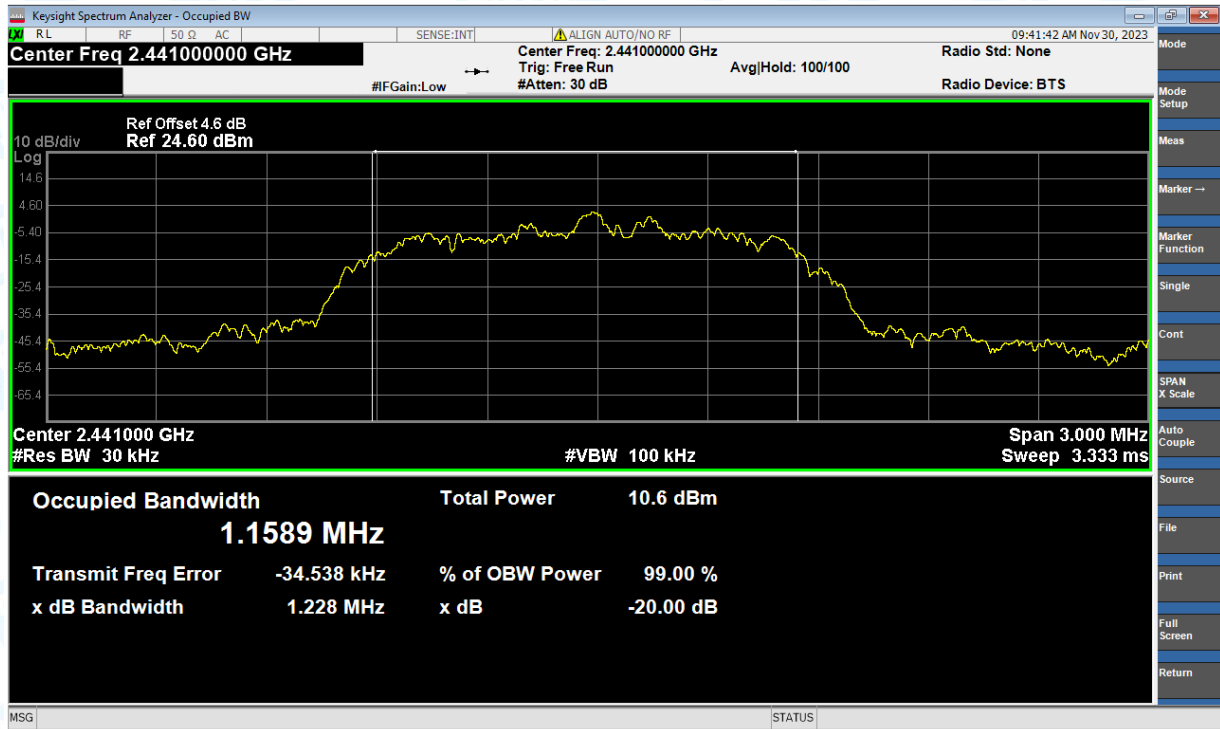
OBW NVNT 1-DH1 2480MHz Ant1



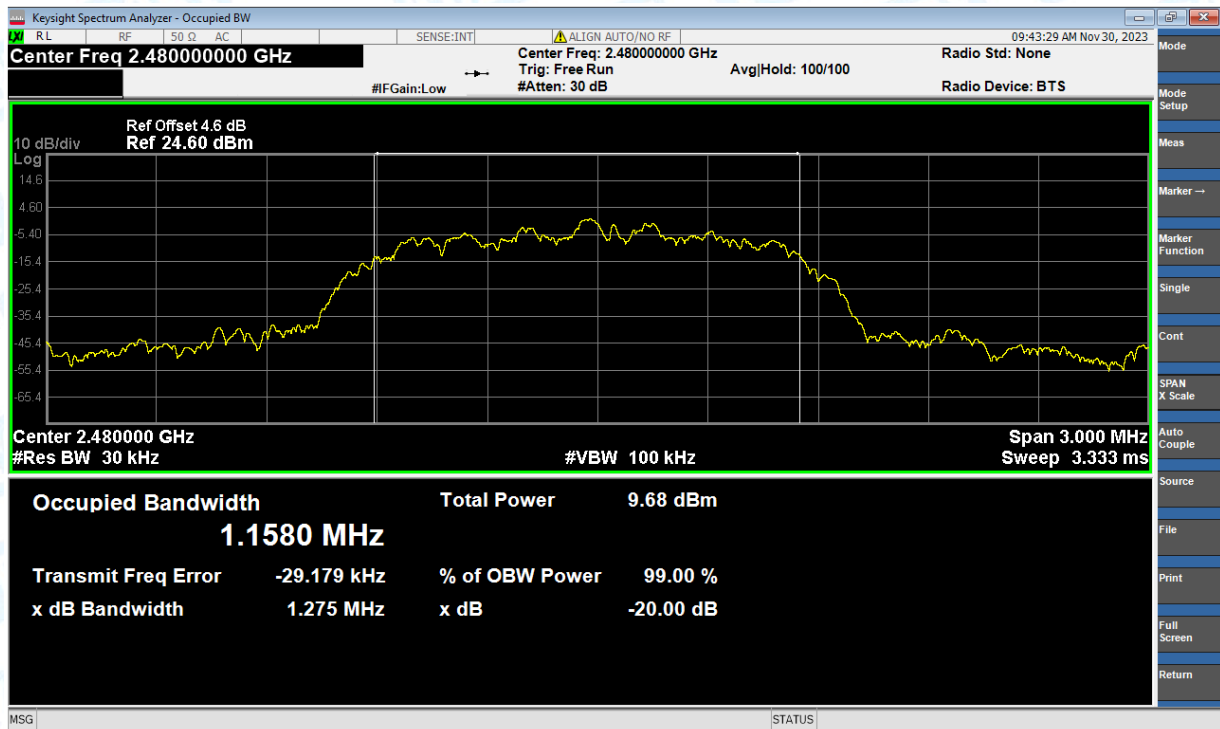
OBW NVNT 2-DH1 2402MHz Ant1



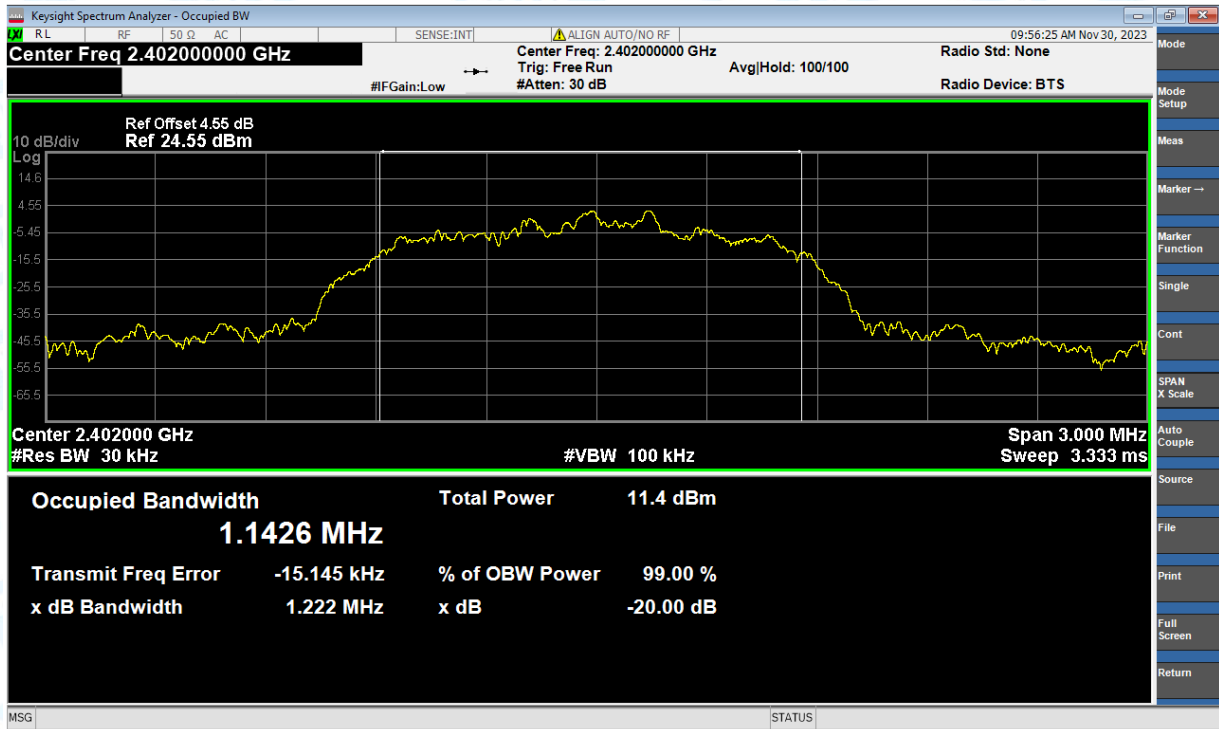
OBW NVNT 2-DH1 2441MHz Ant1



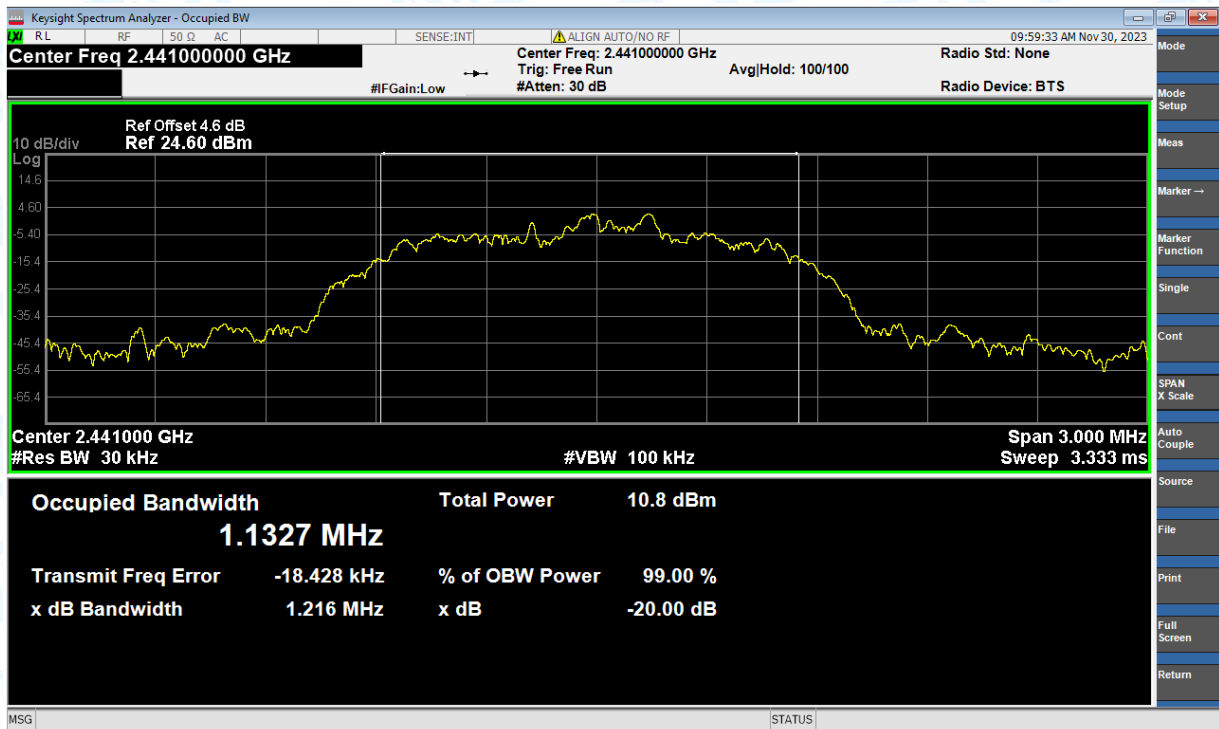
OBW NVNT 2-DH1 2480MHz Ant1

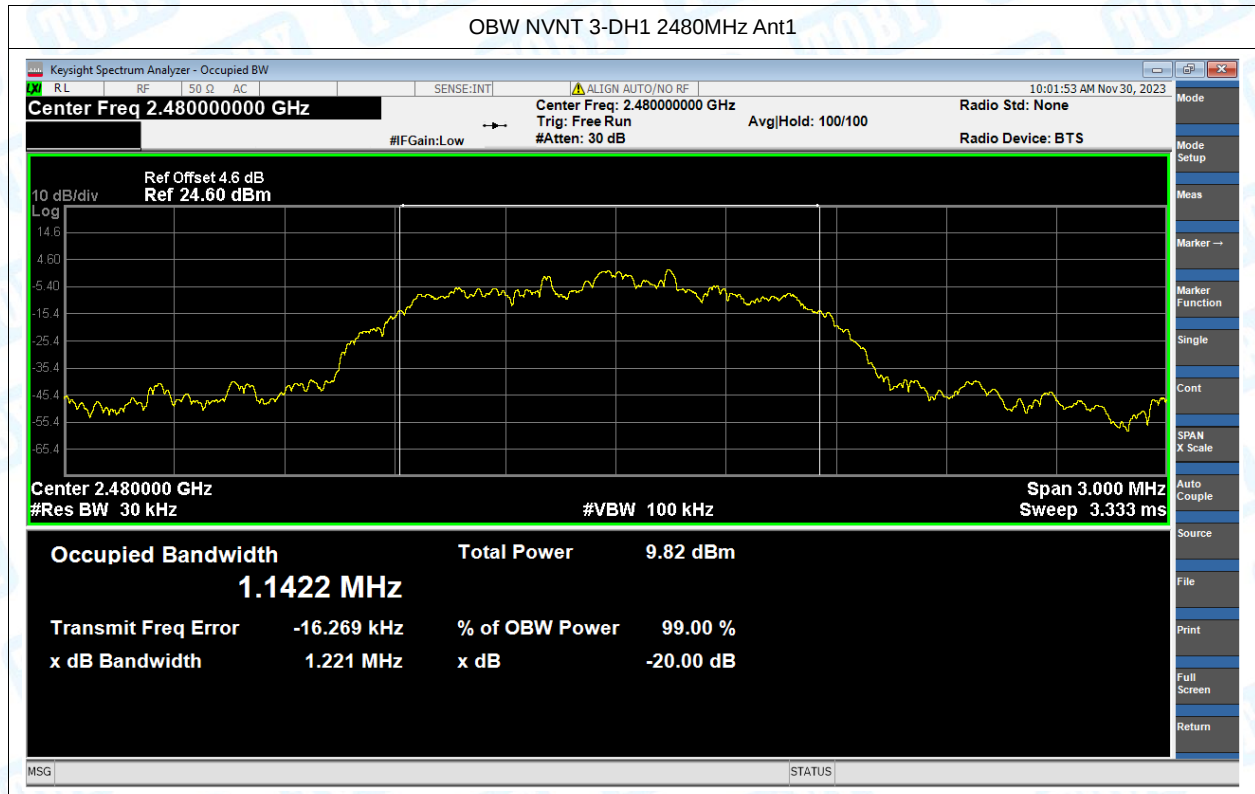


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



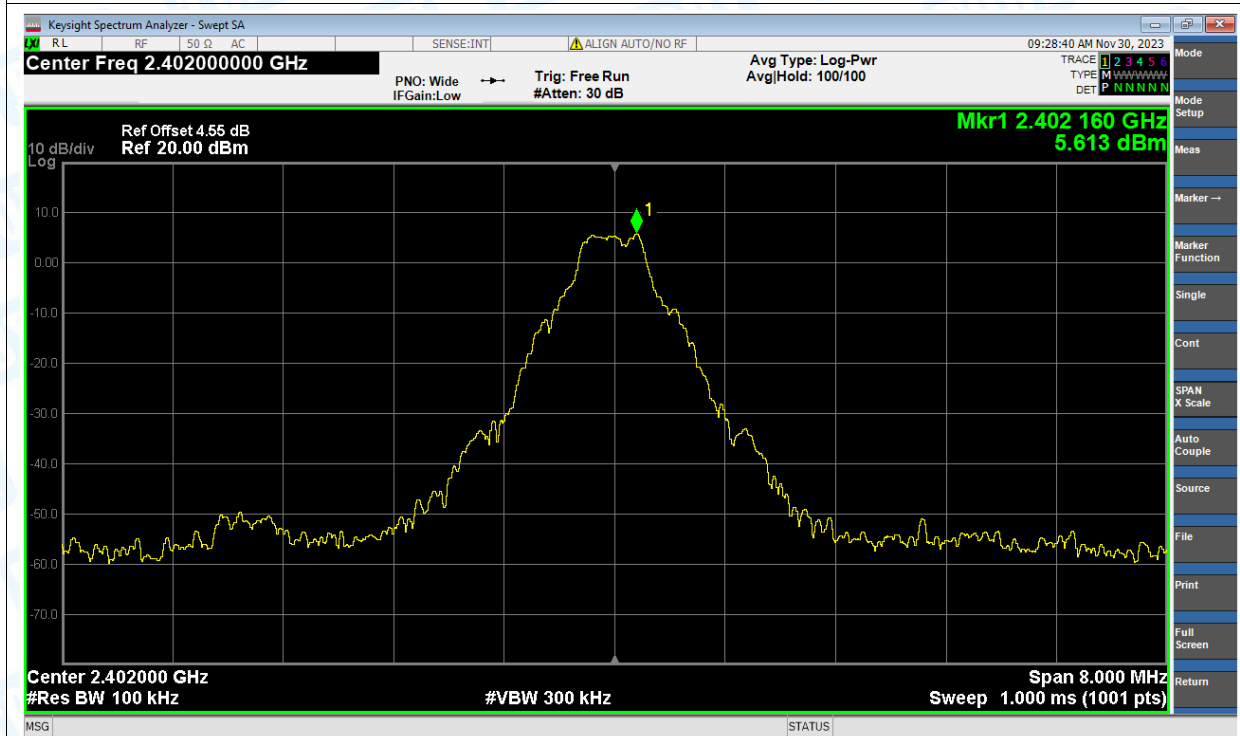


Band Edge

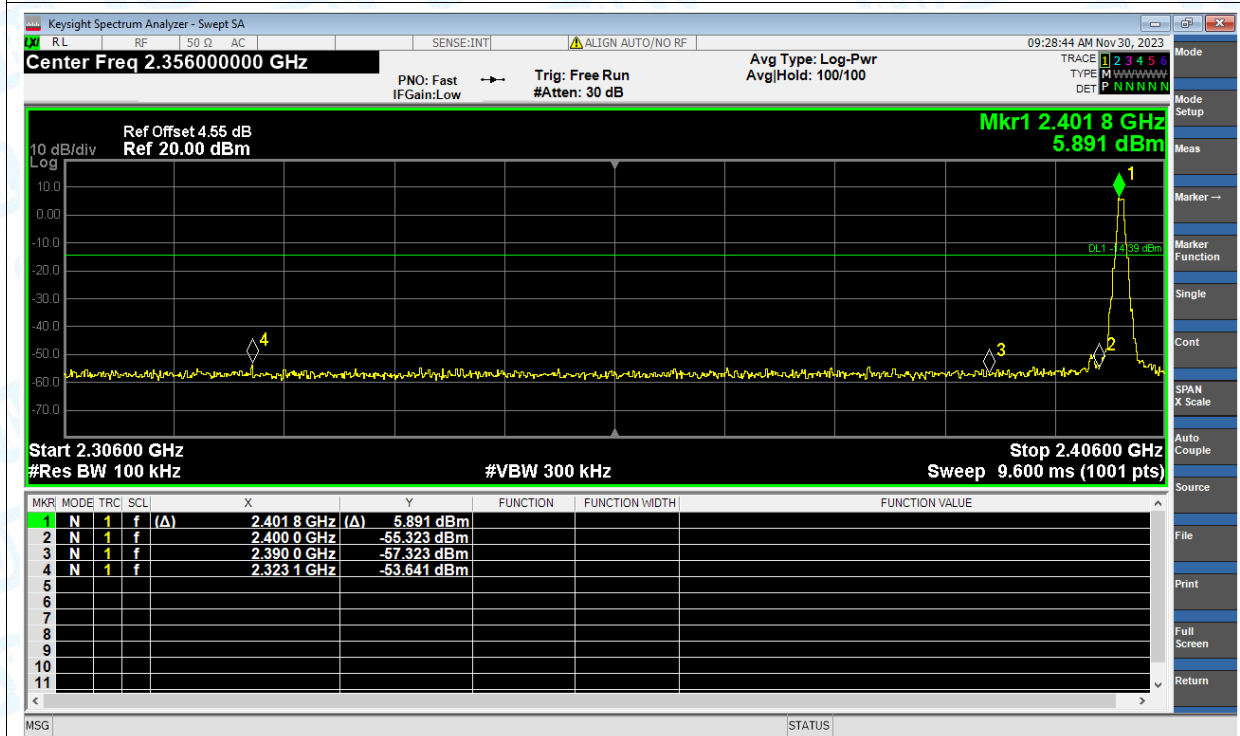
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-59.25	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-58.87	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-59.75	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-58.04	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-58.88	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-58	-20	Pass

Test Graphs

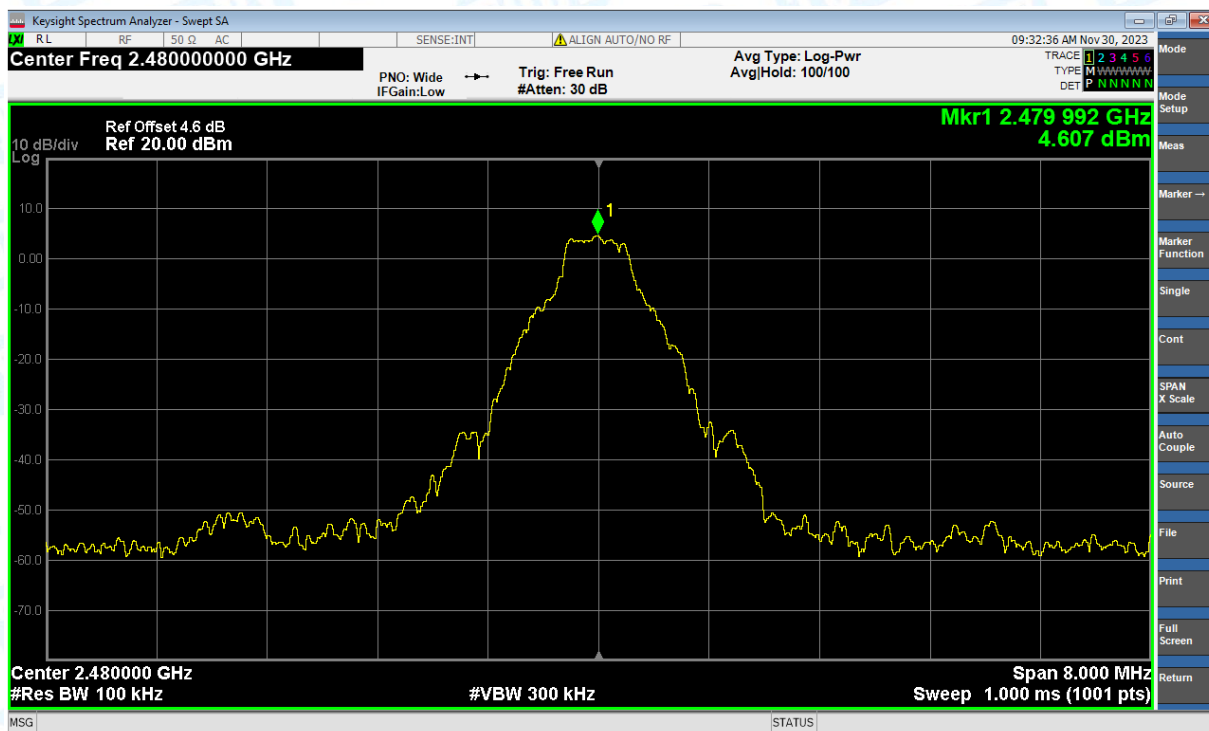
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



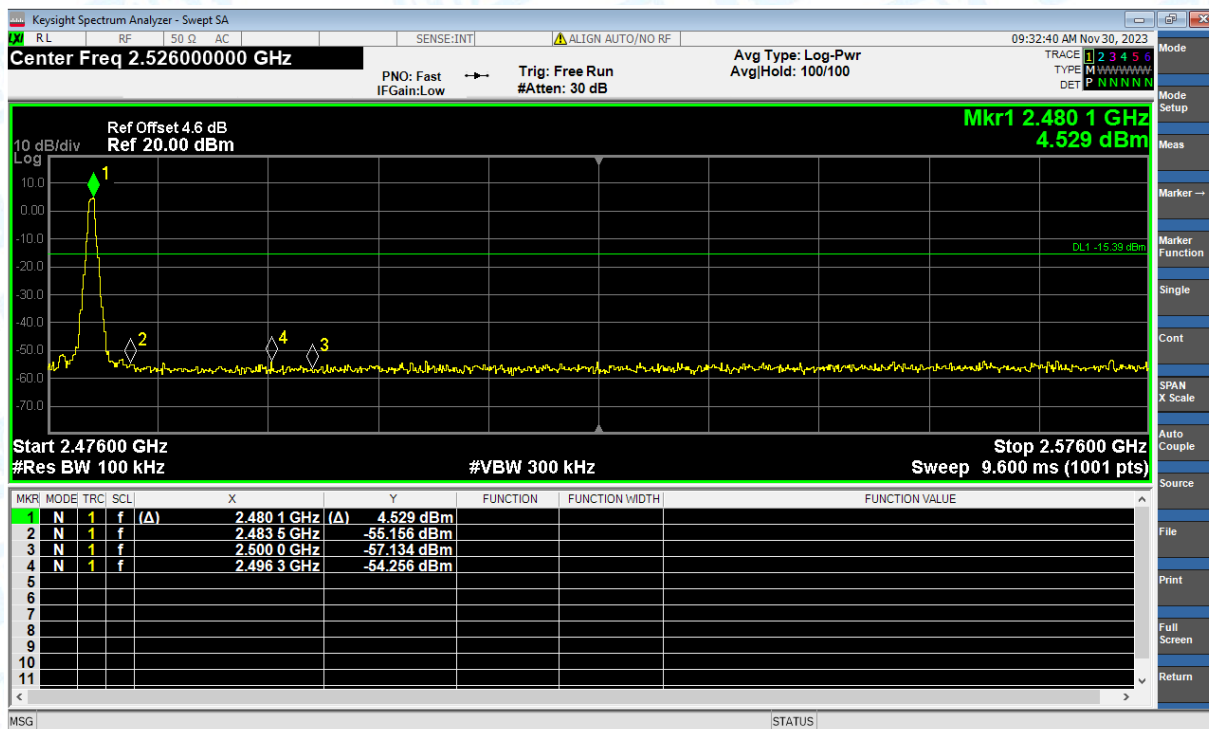
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



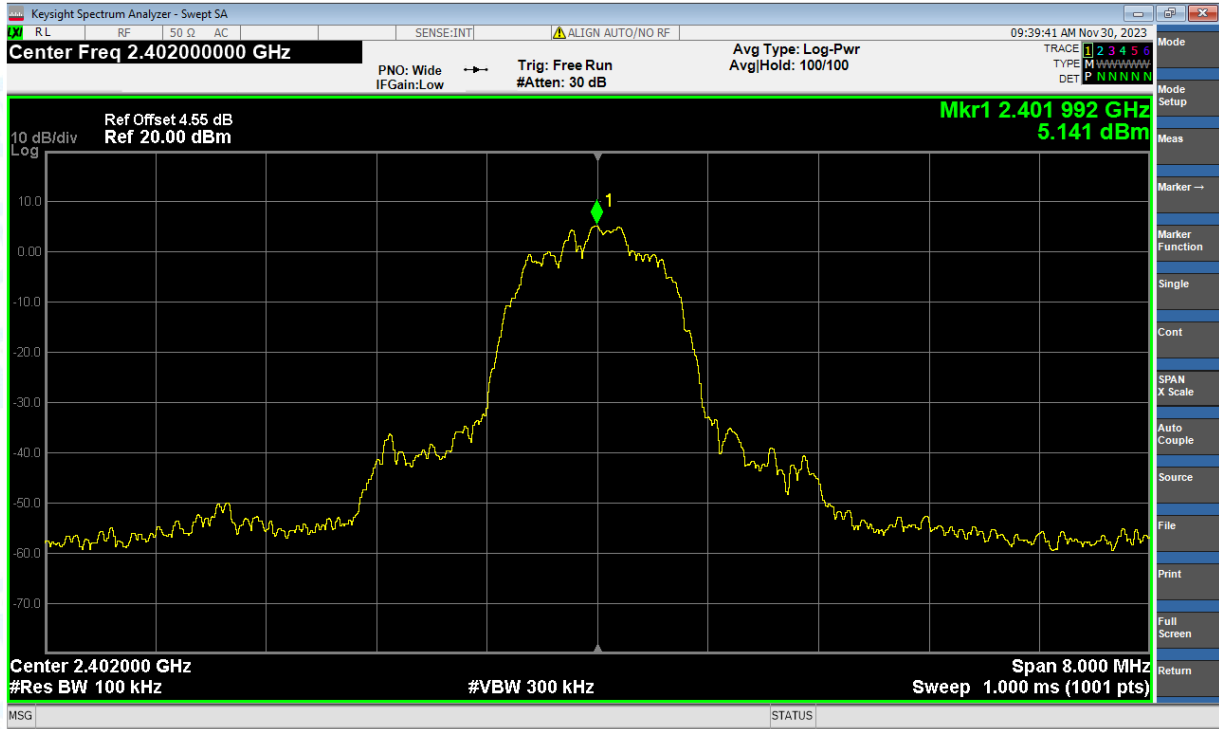
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



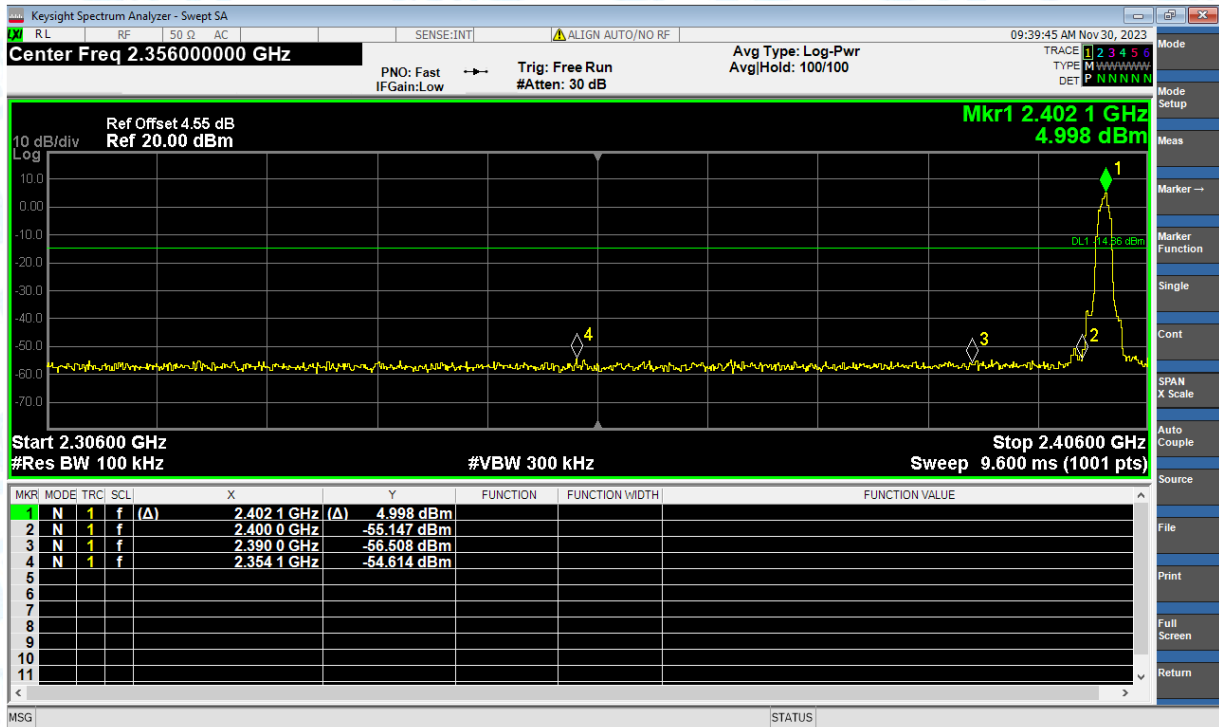
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



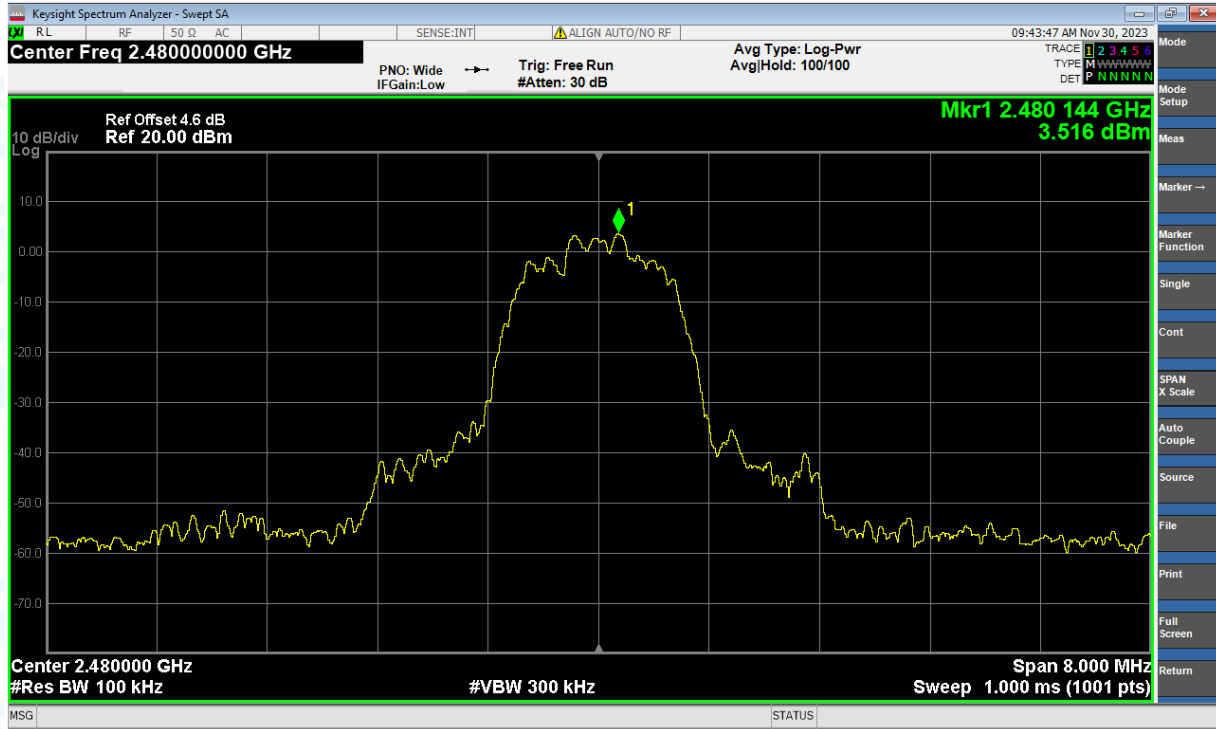
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



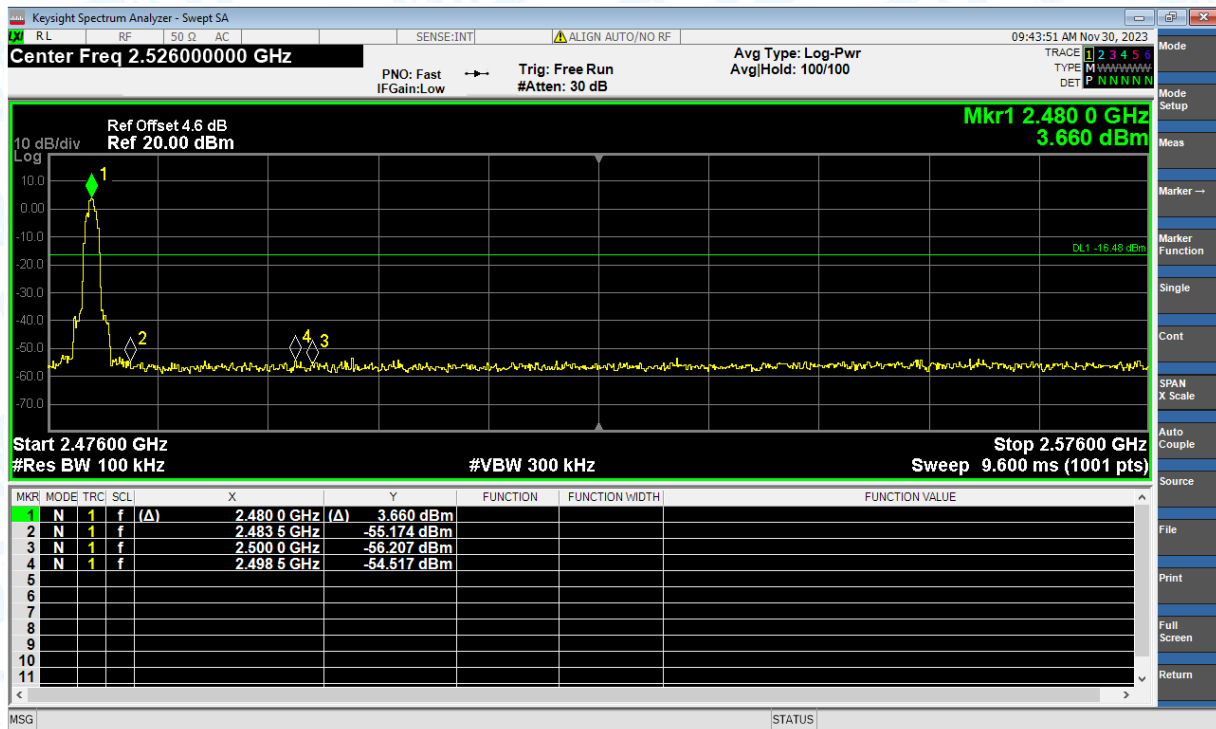
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



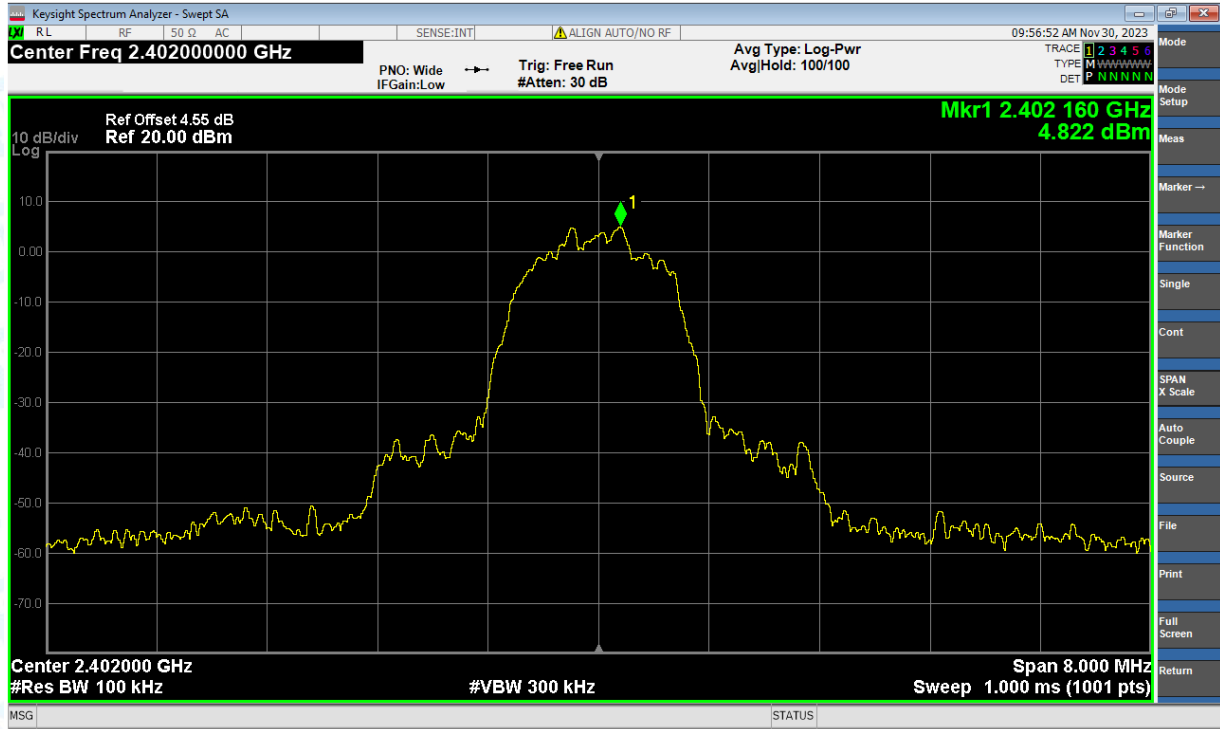
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



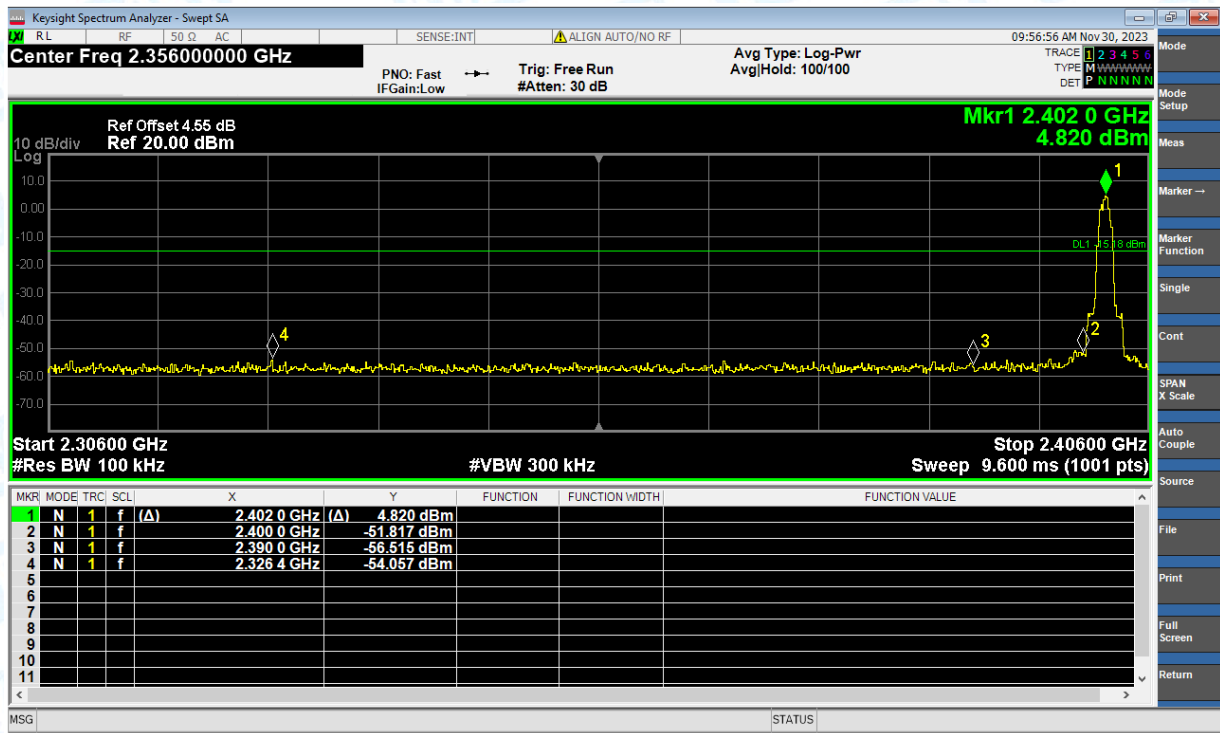
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



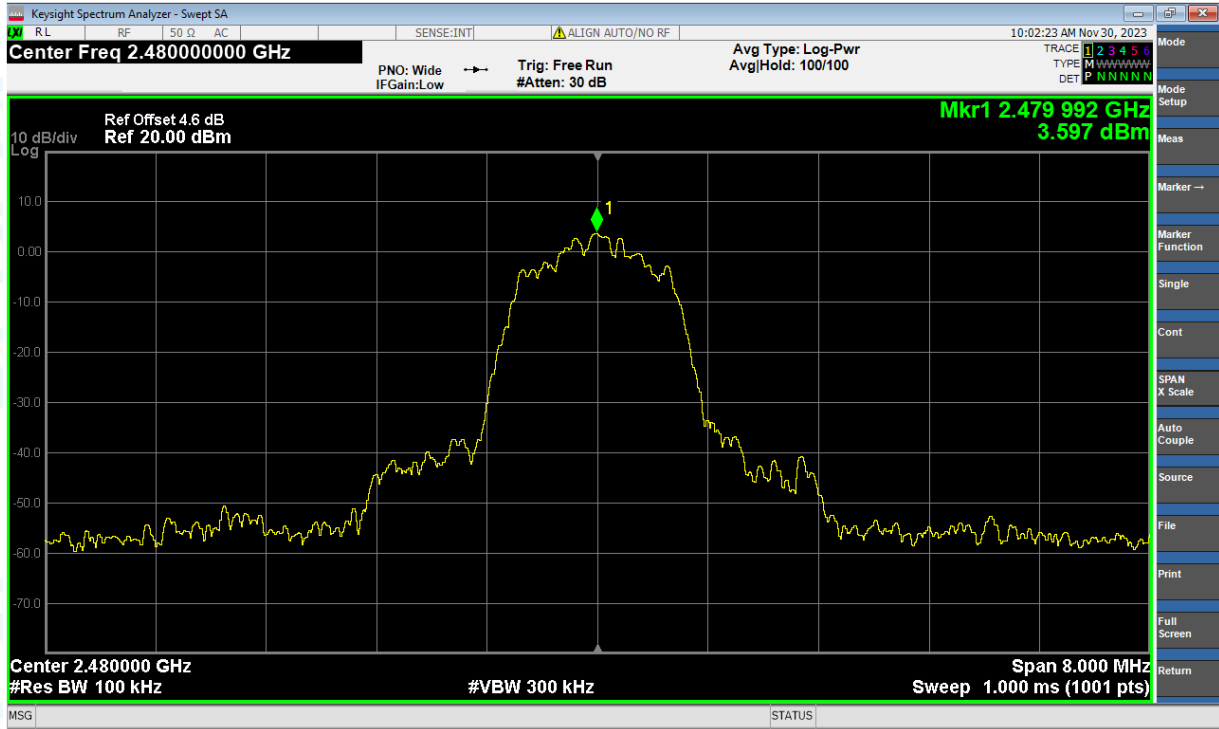
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



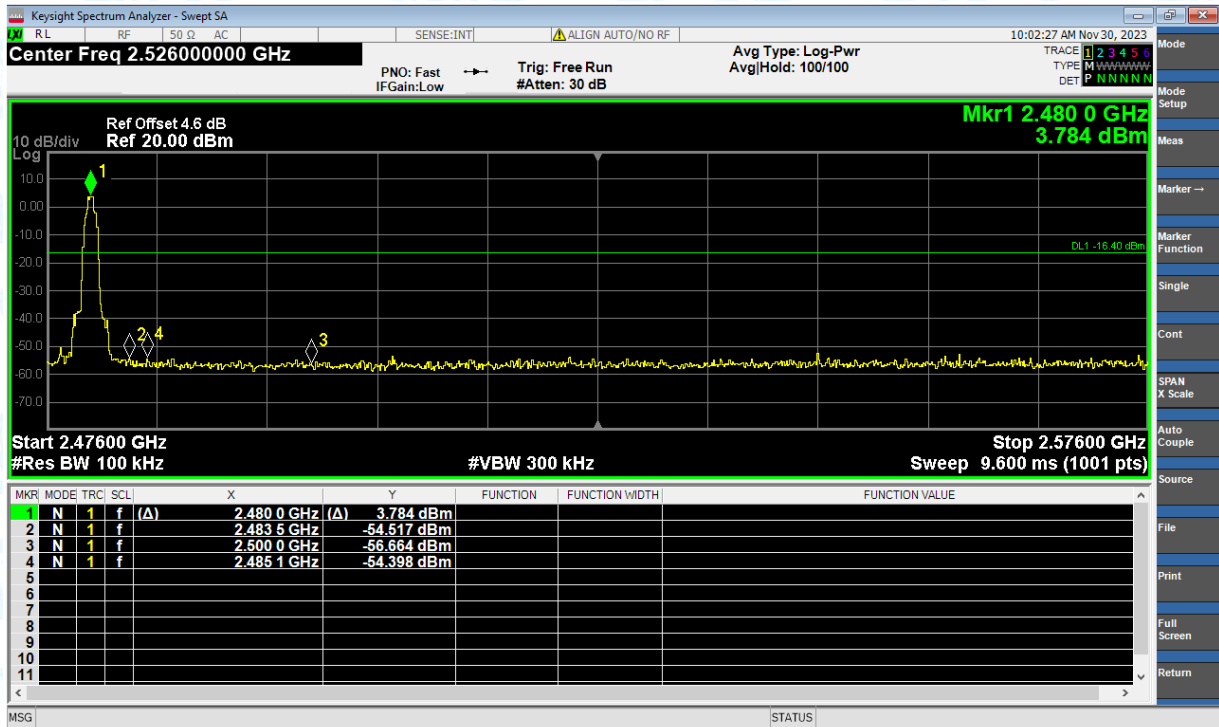
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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

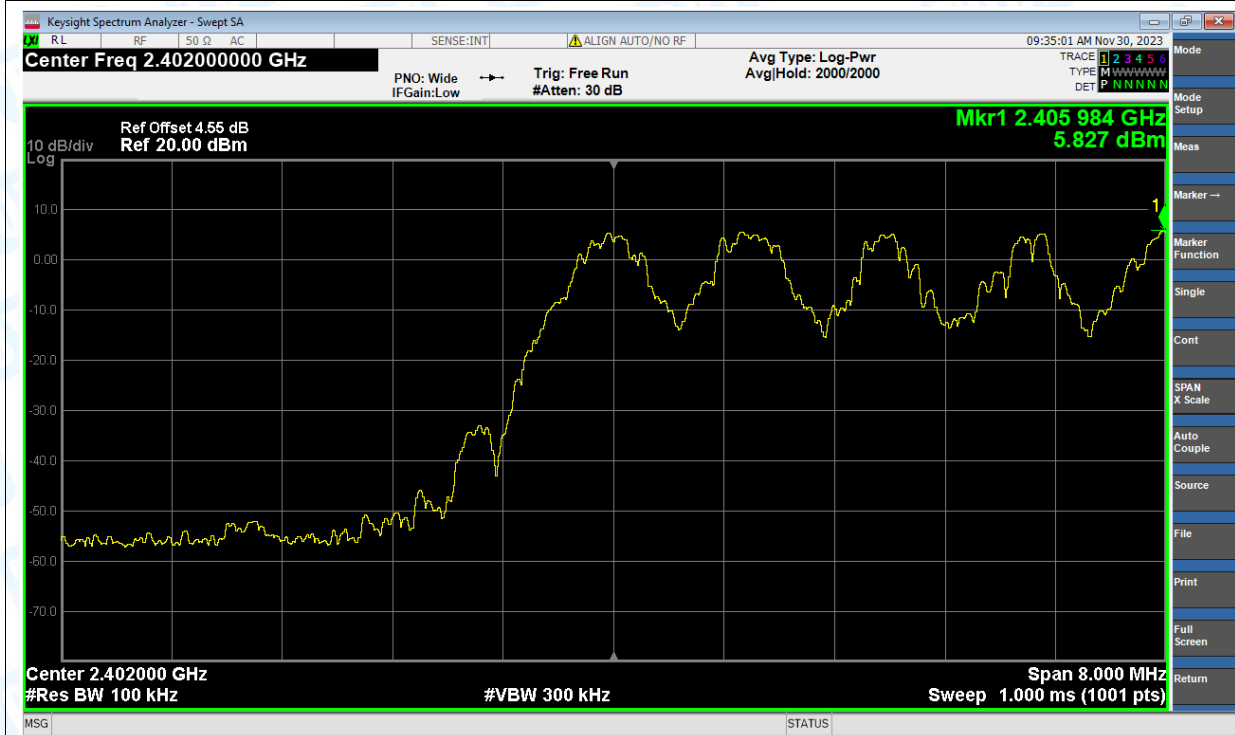


Band Edge(Hopping)

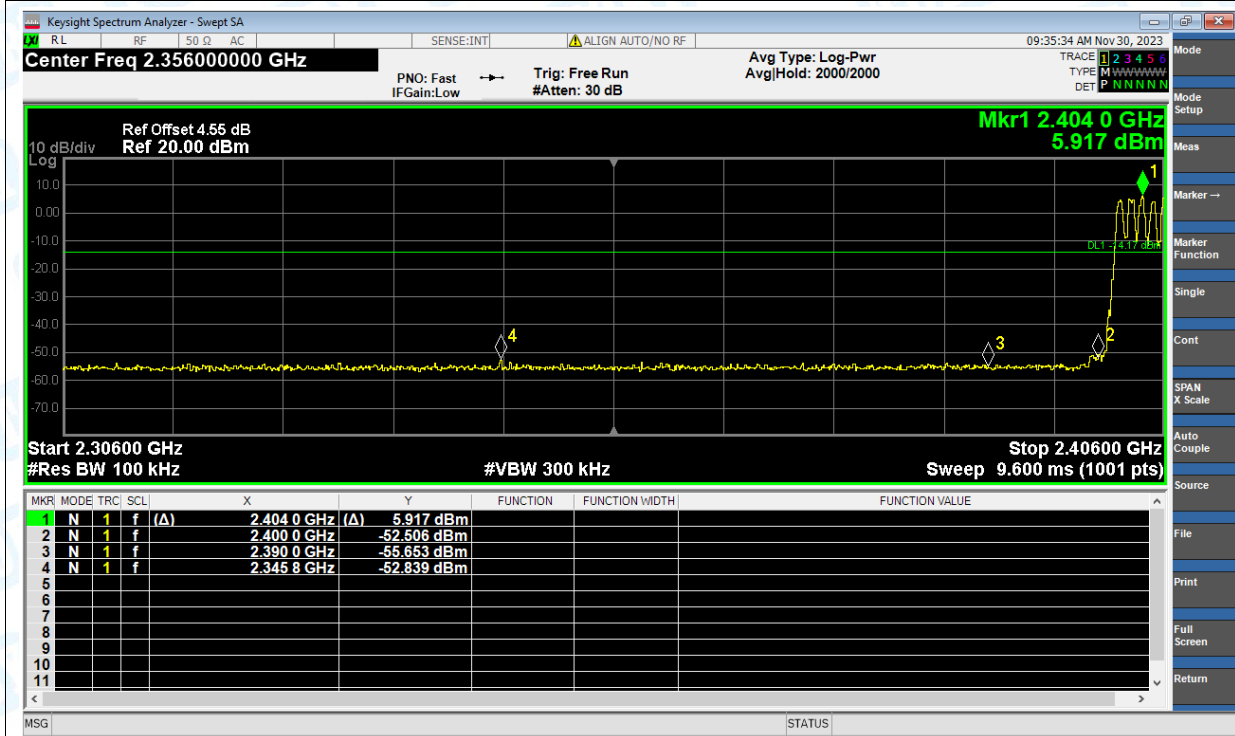
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-58.67	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-57.79	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-57.96	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-56.75	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-56.63	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-56.77	-20	Pass

Test Graphs

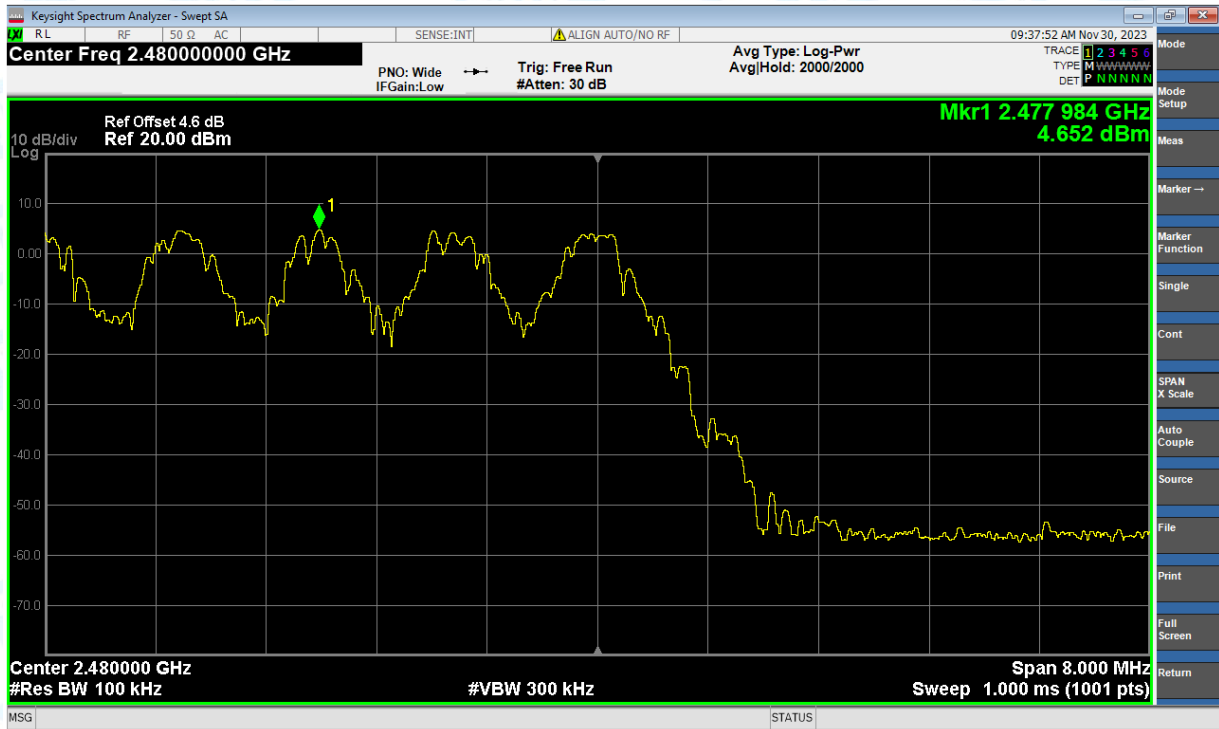
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



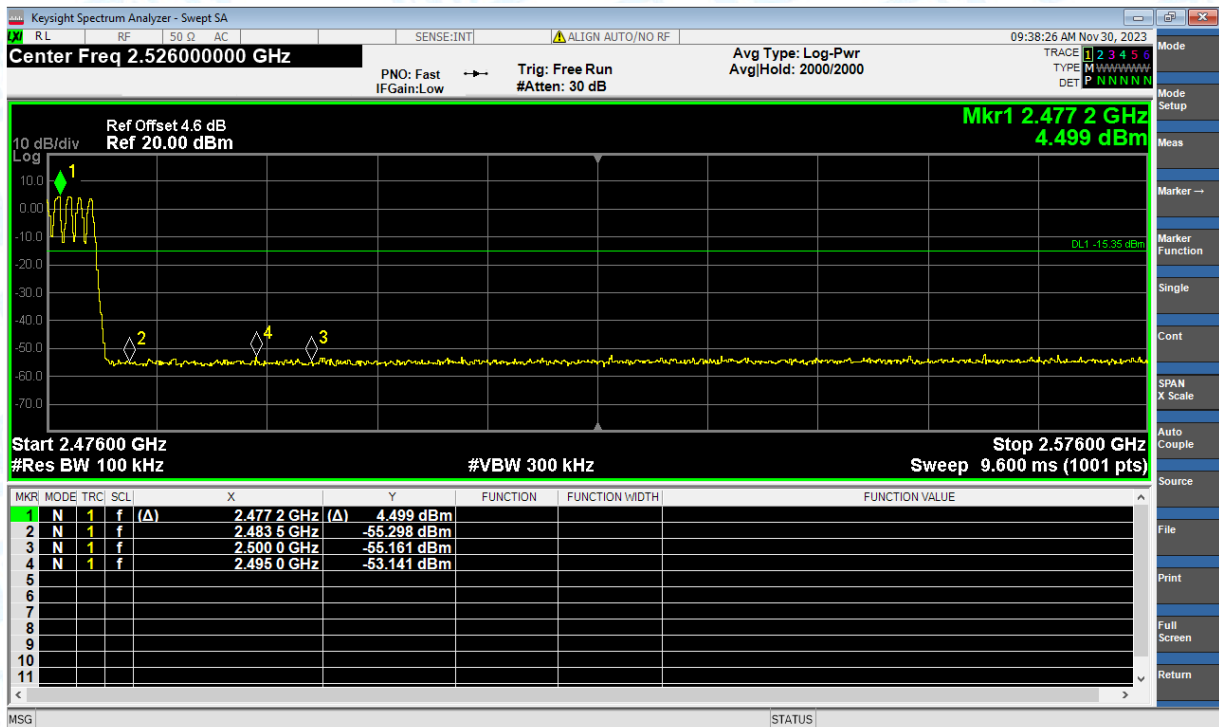
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



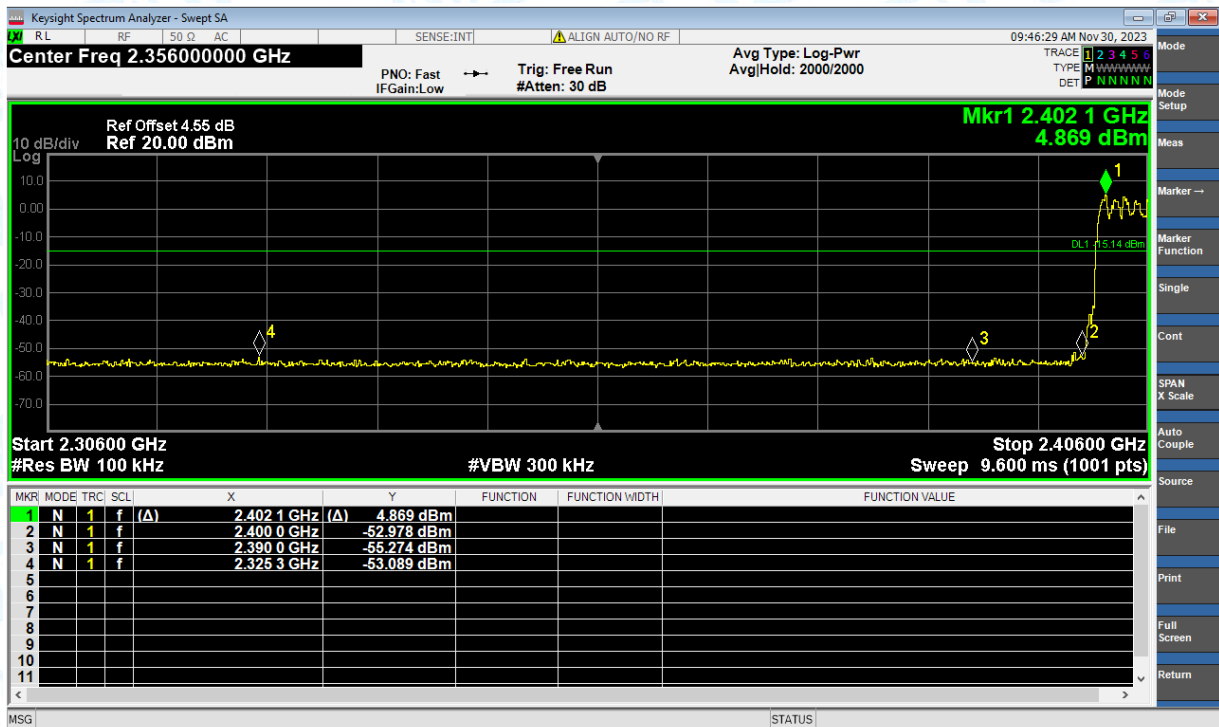
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



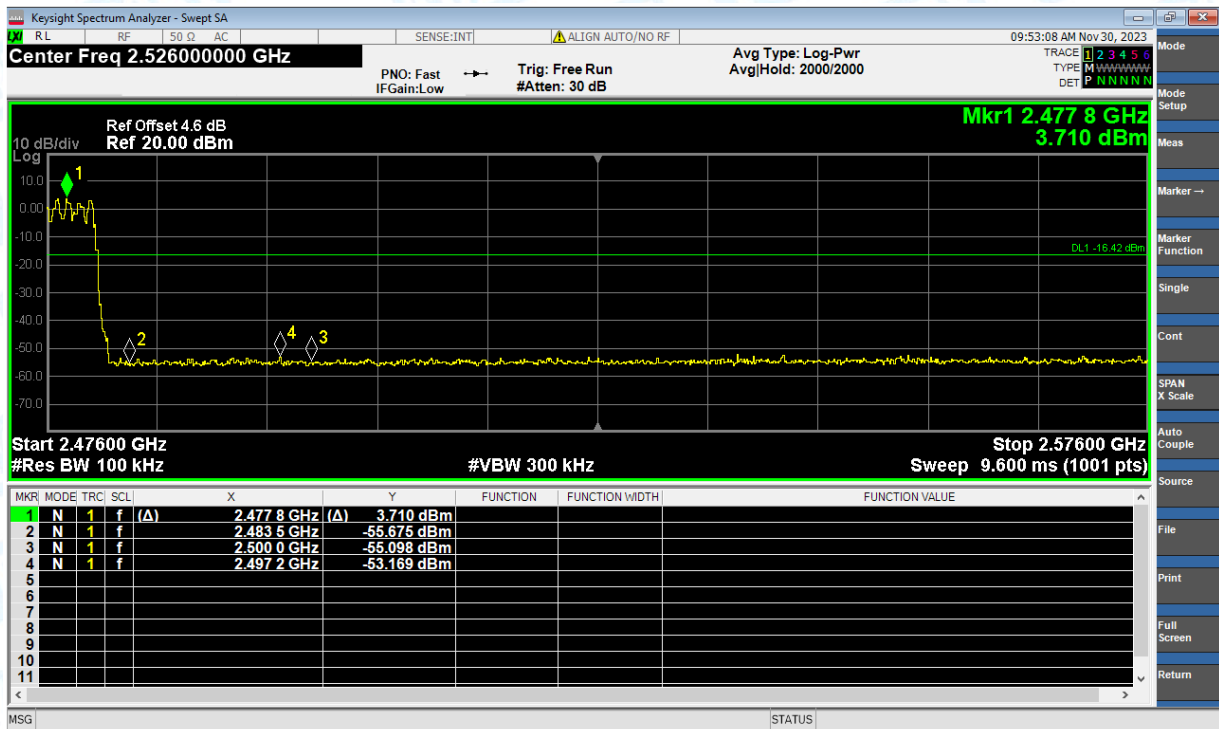
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



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



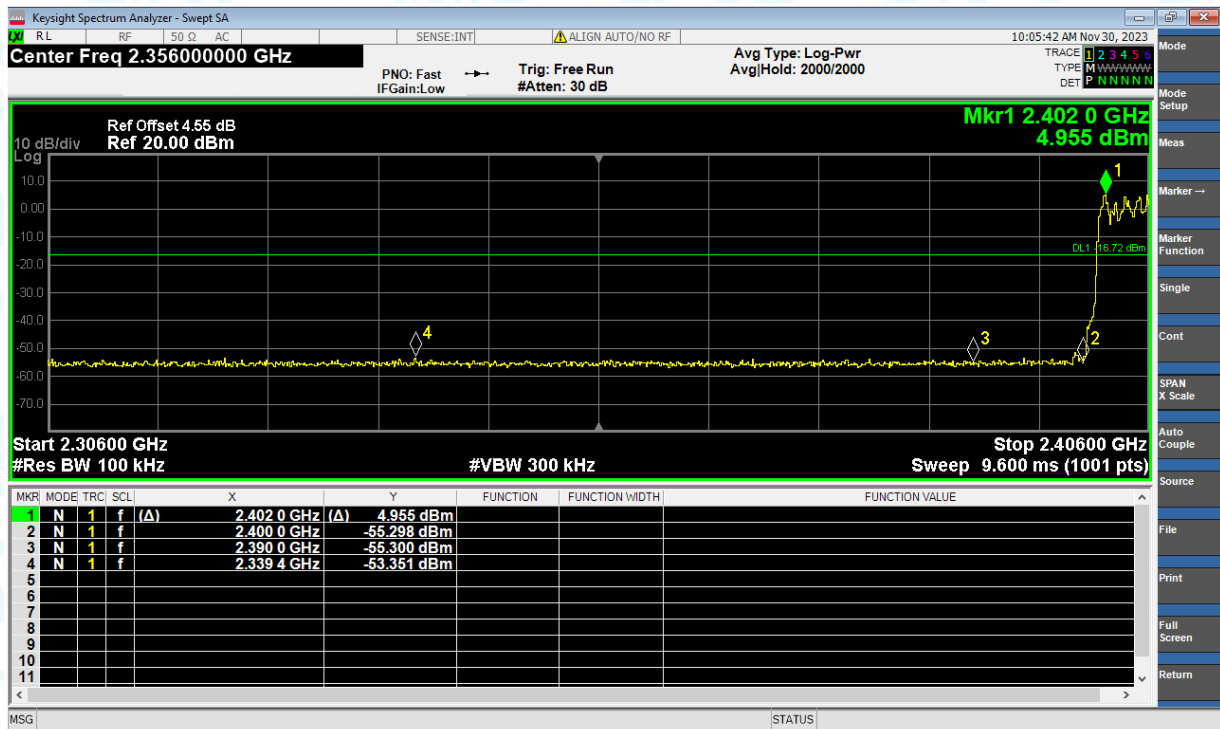
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



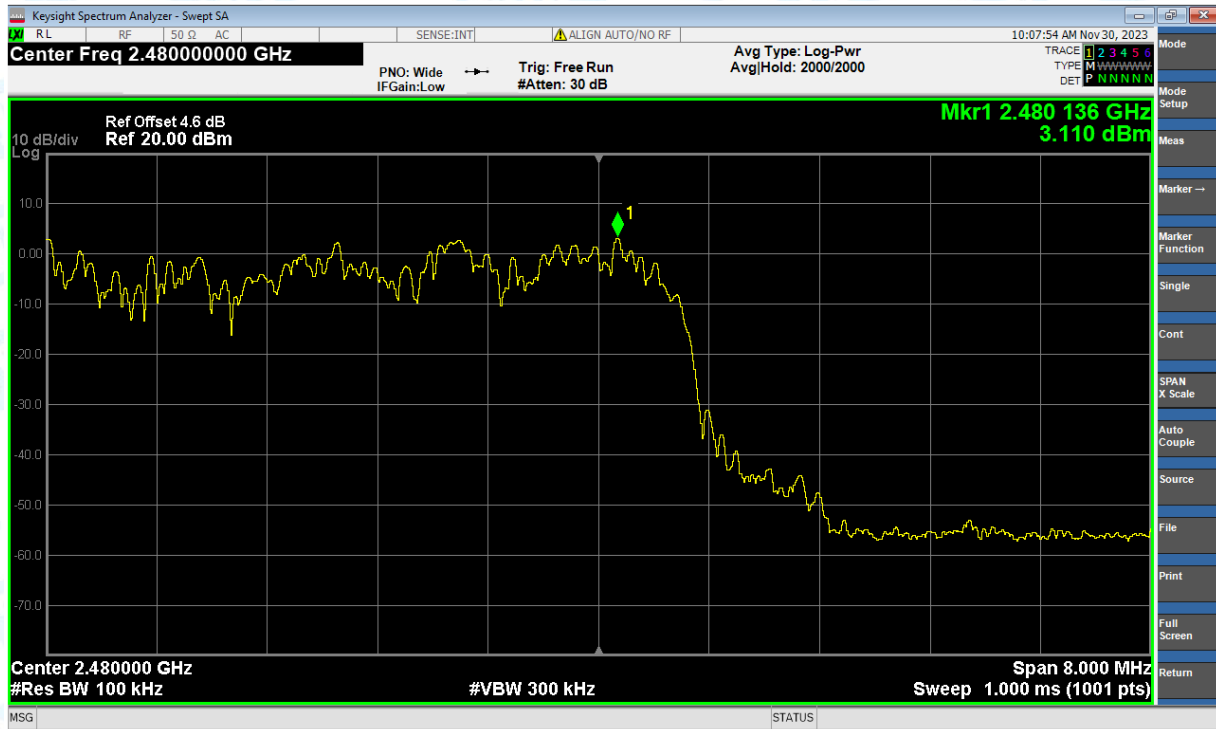
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



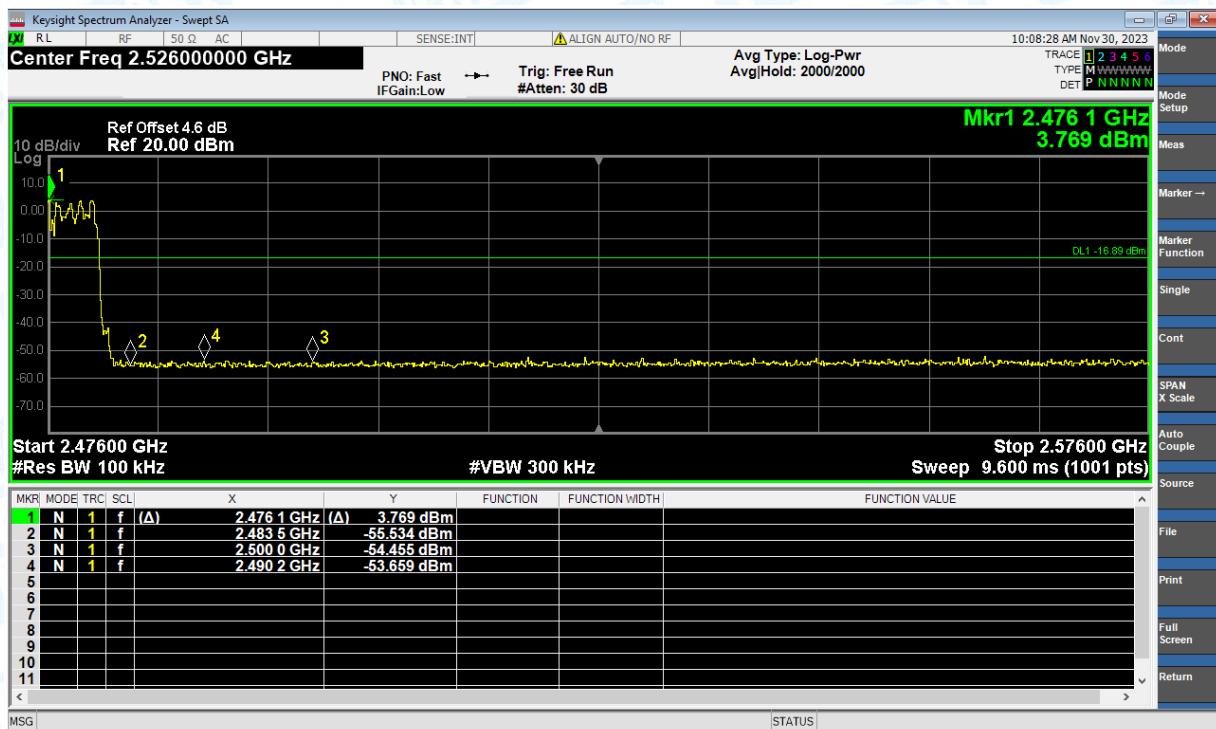
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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

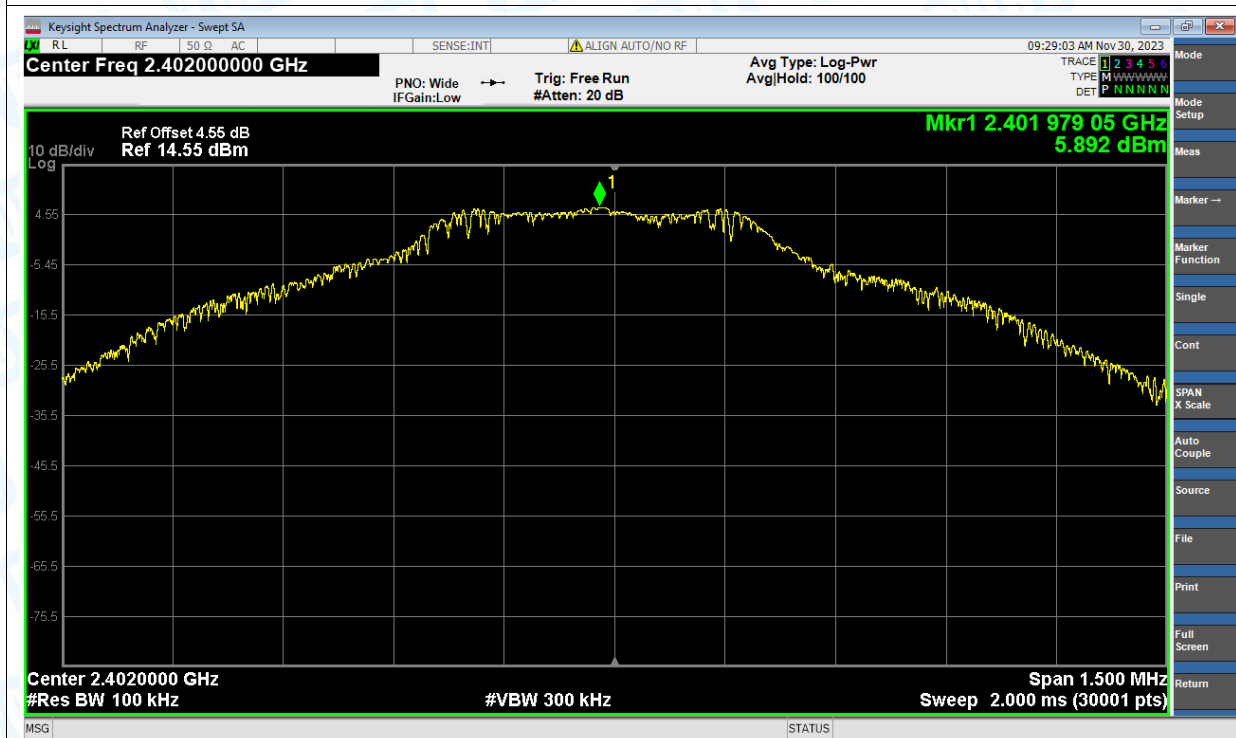


Conducted RF Spurious Emission

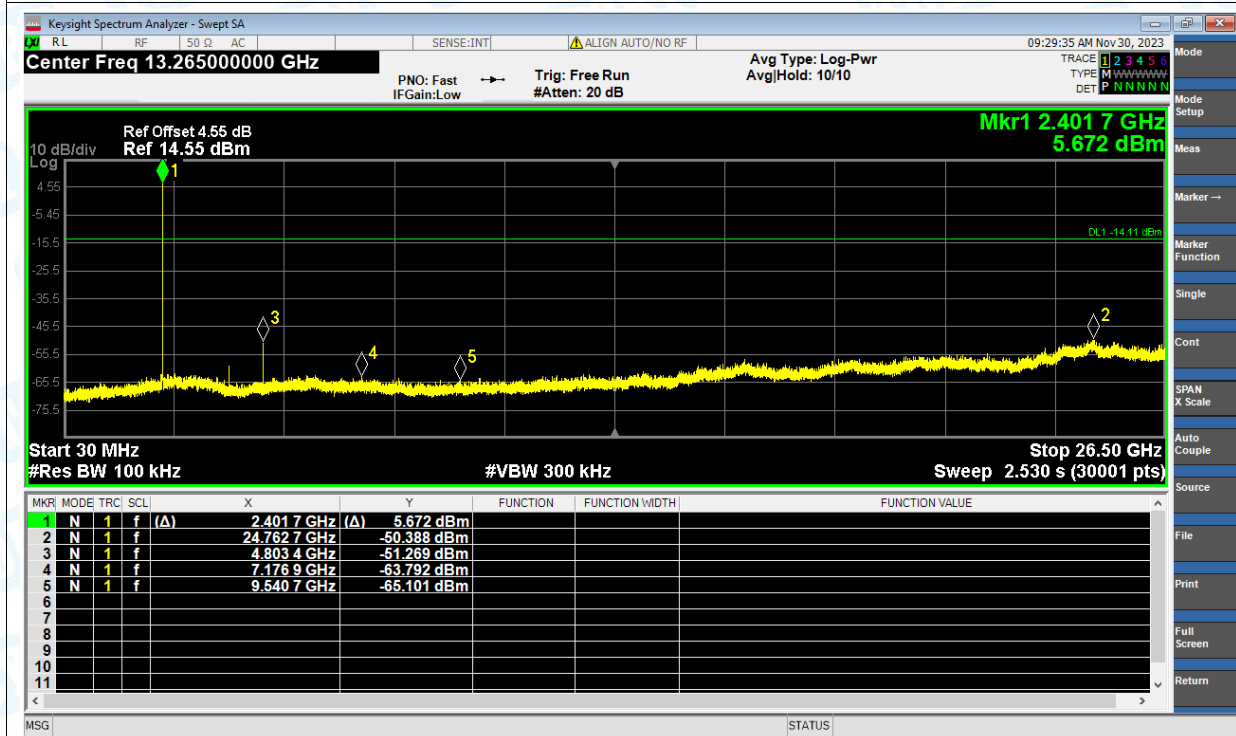
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-56.28	-20	Pass
NVNT	1-DH1	2441	Ant1	-50.81	-20	Pass
NVNT	1-DH1	2480	Ant1	-51.1	-20	Pass
NVNT	2-DH1	2402	Ant1	-47.62	-20	Pass
NVNT	2-DH1	2441	Ant1	-49.49	-20	Pass
NVNT	2-DH1	2480	Ant1	-52.38	-20	Pass
NVNT	3-DH1	2402	Ant1	-47.46	-20	Pass
NVNT	3-DH1	2441	Ant1	-49.19	-20	Pass
NVNT	3-DH1	2480	Ant1	-52.96	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



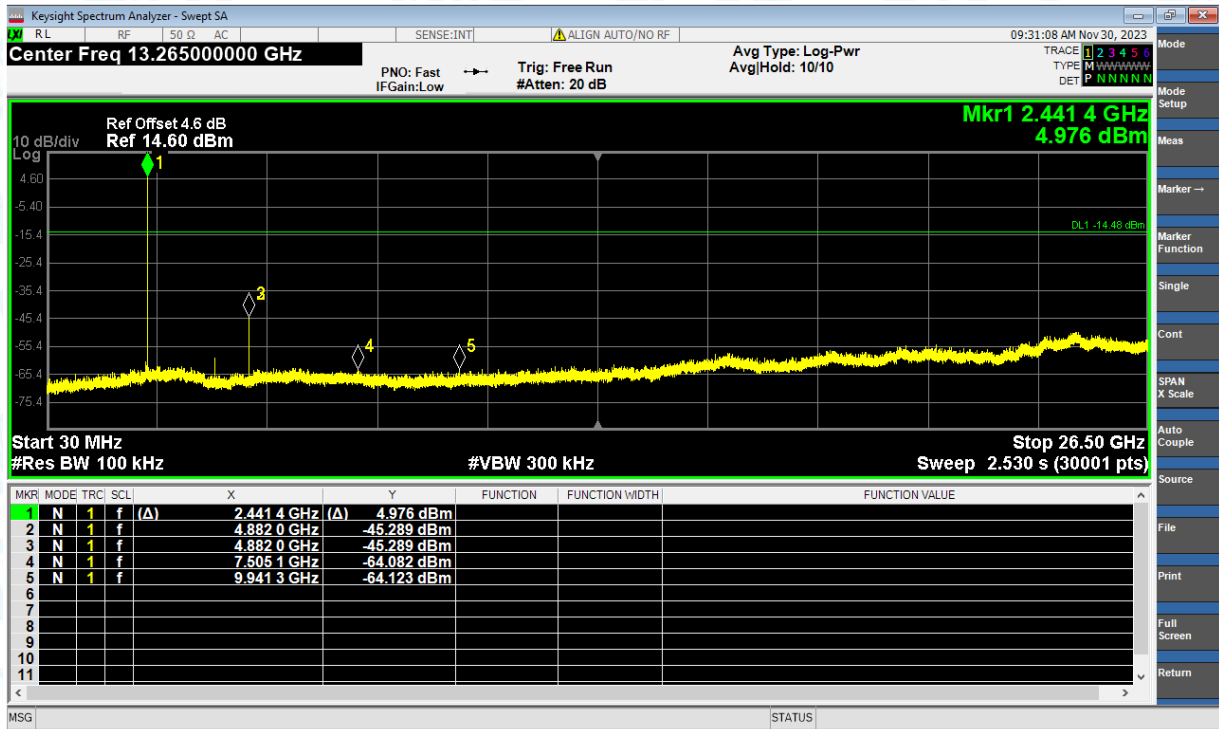
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



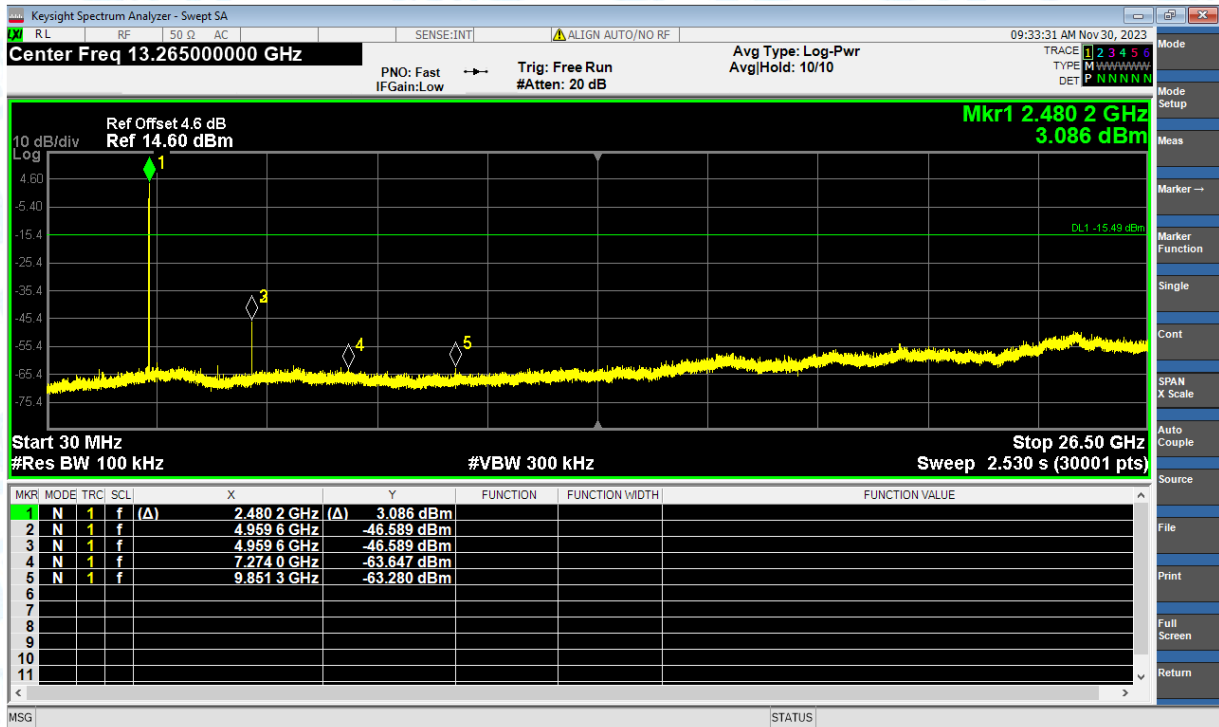
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



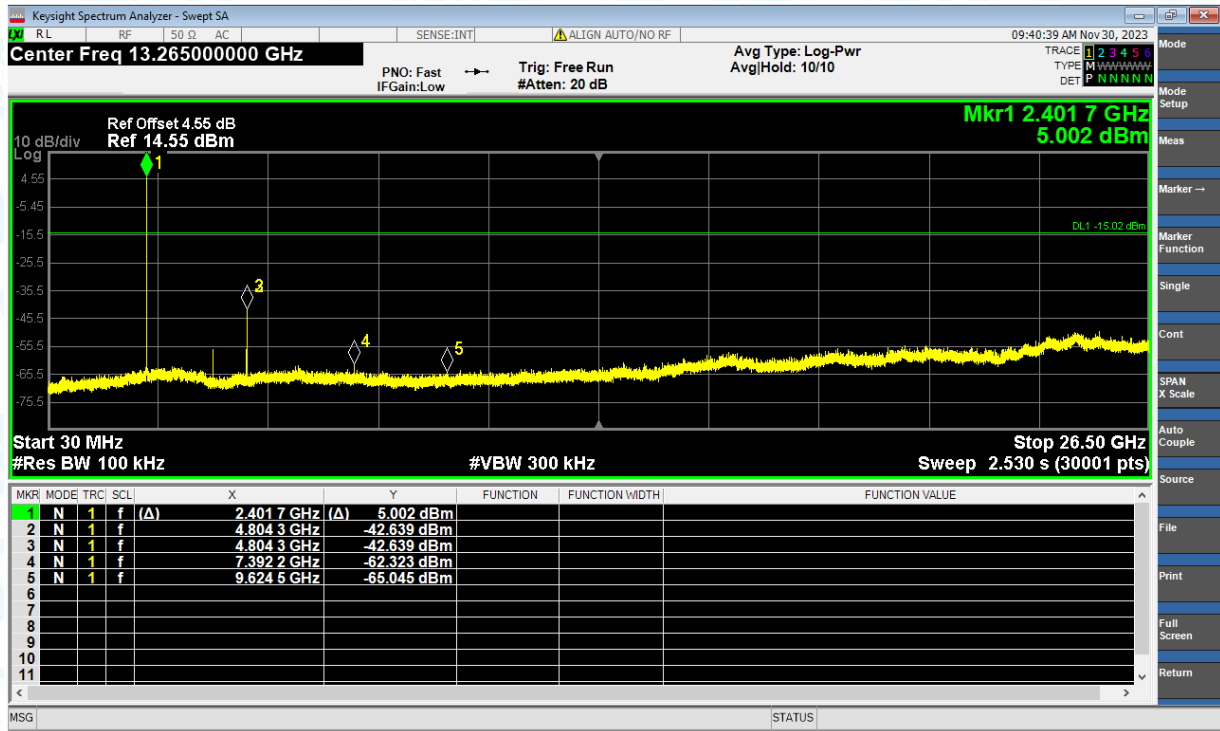
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



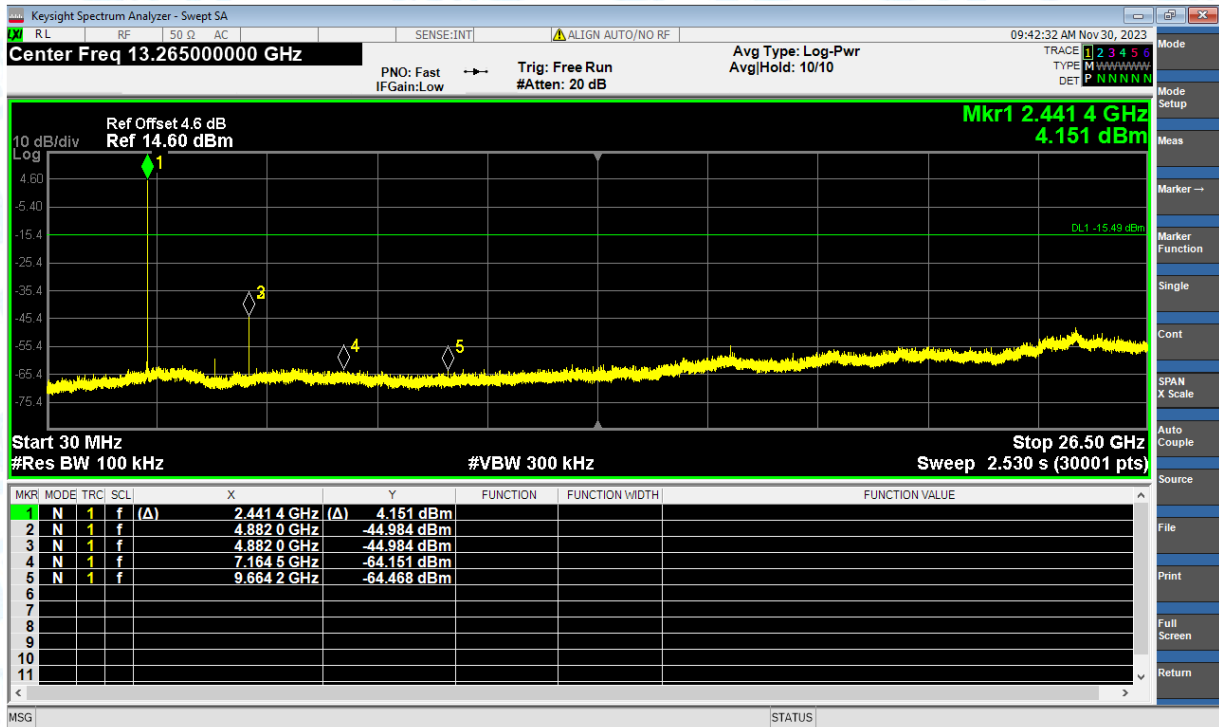
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



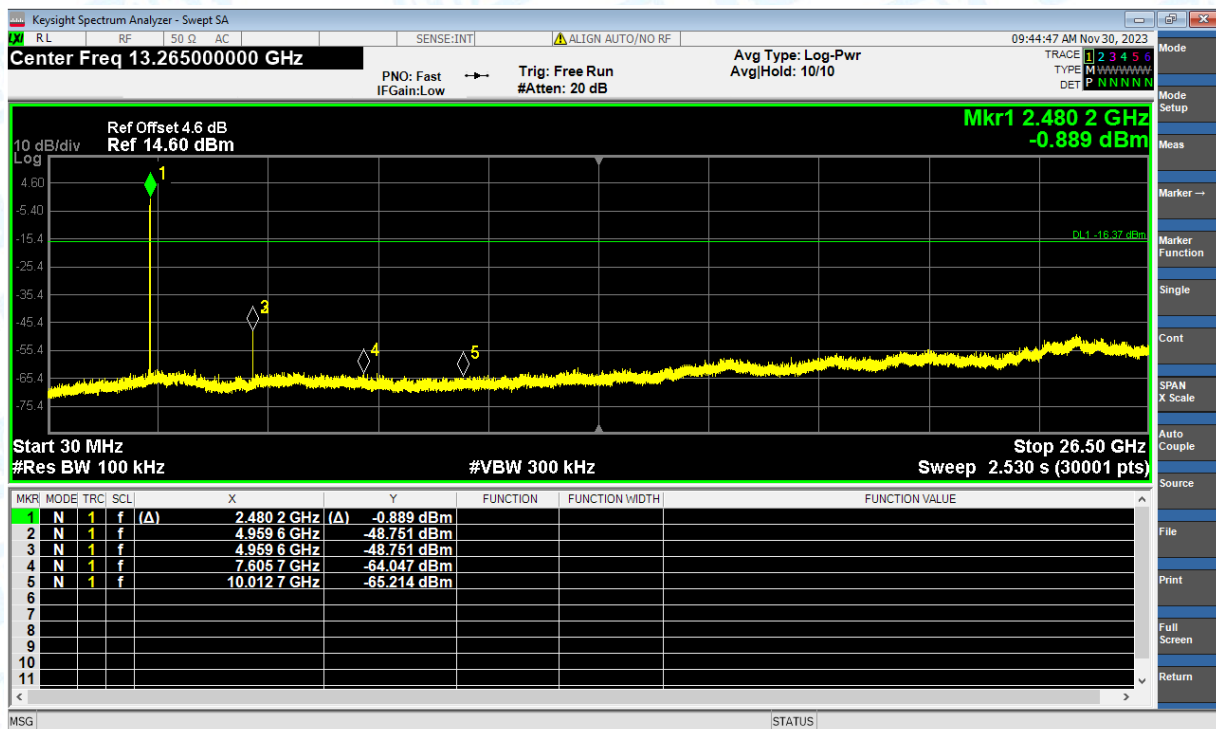
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



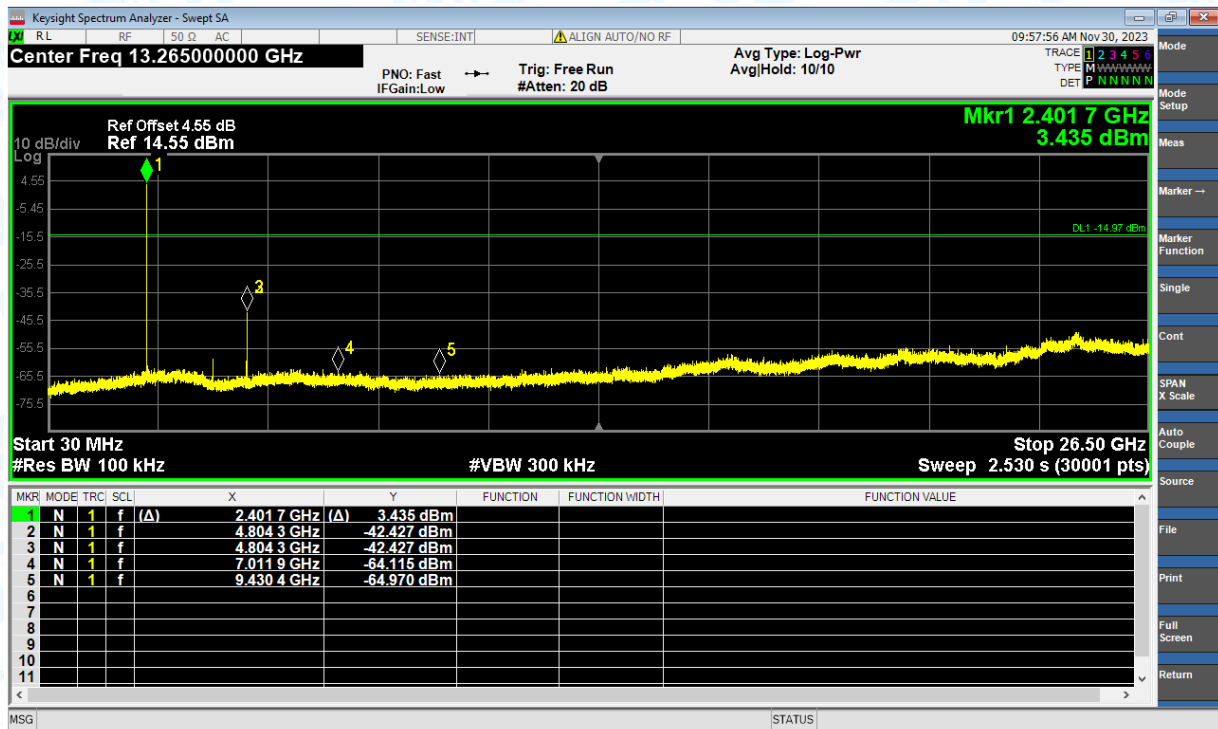
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



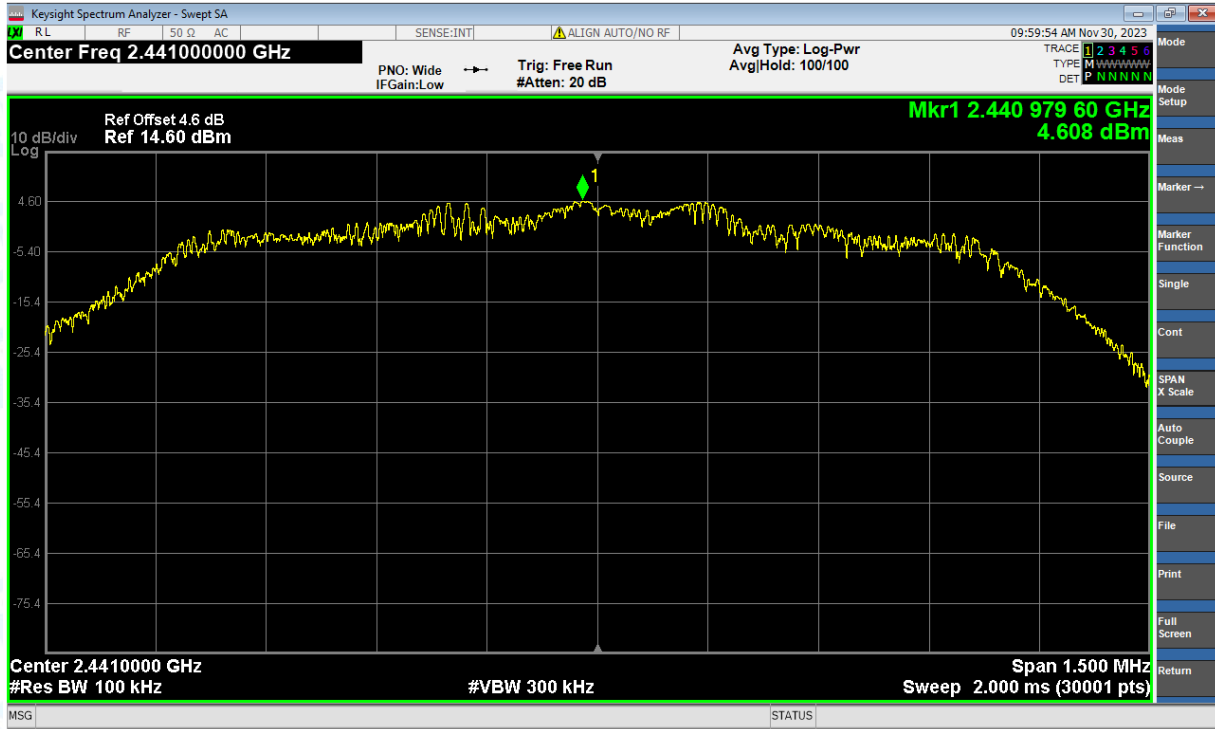
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



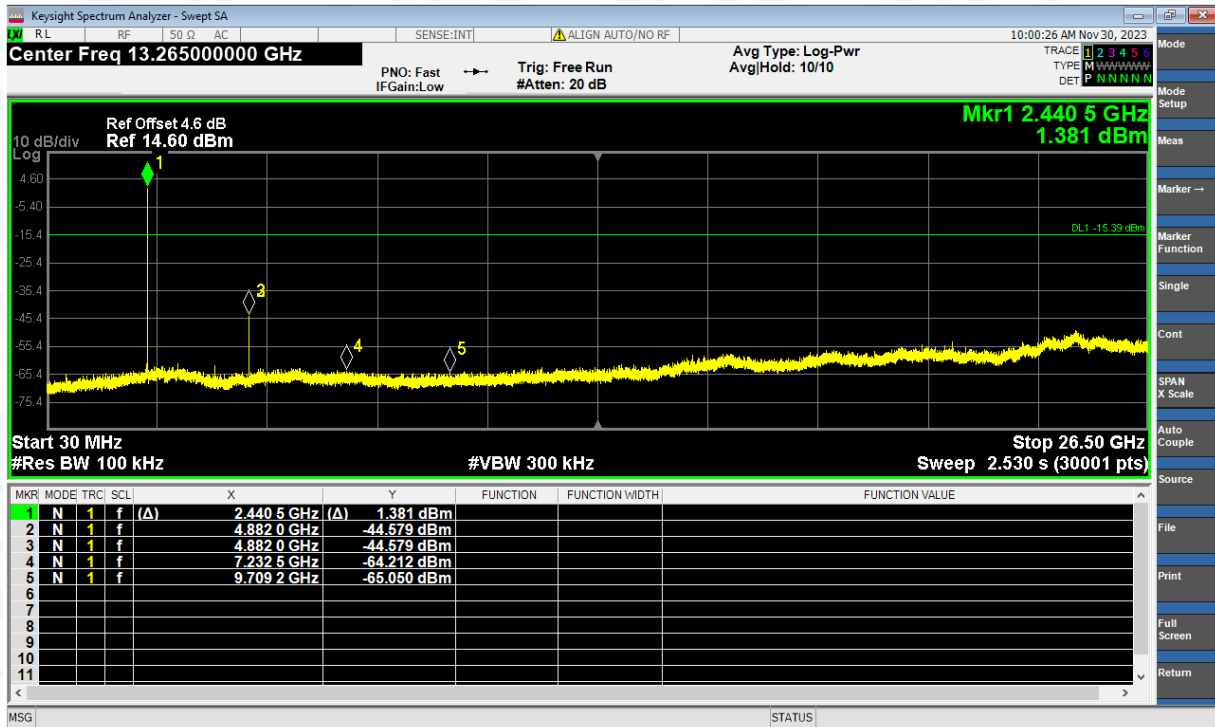
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



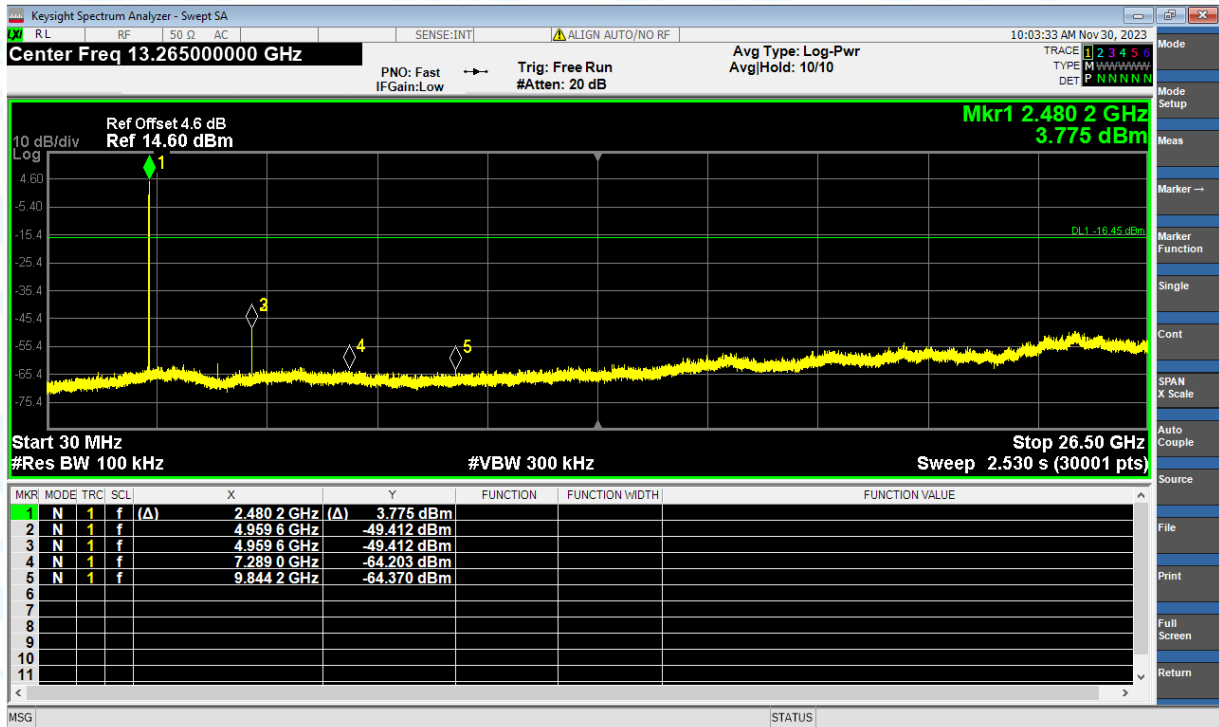
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

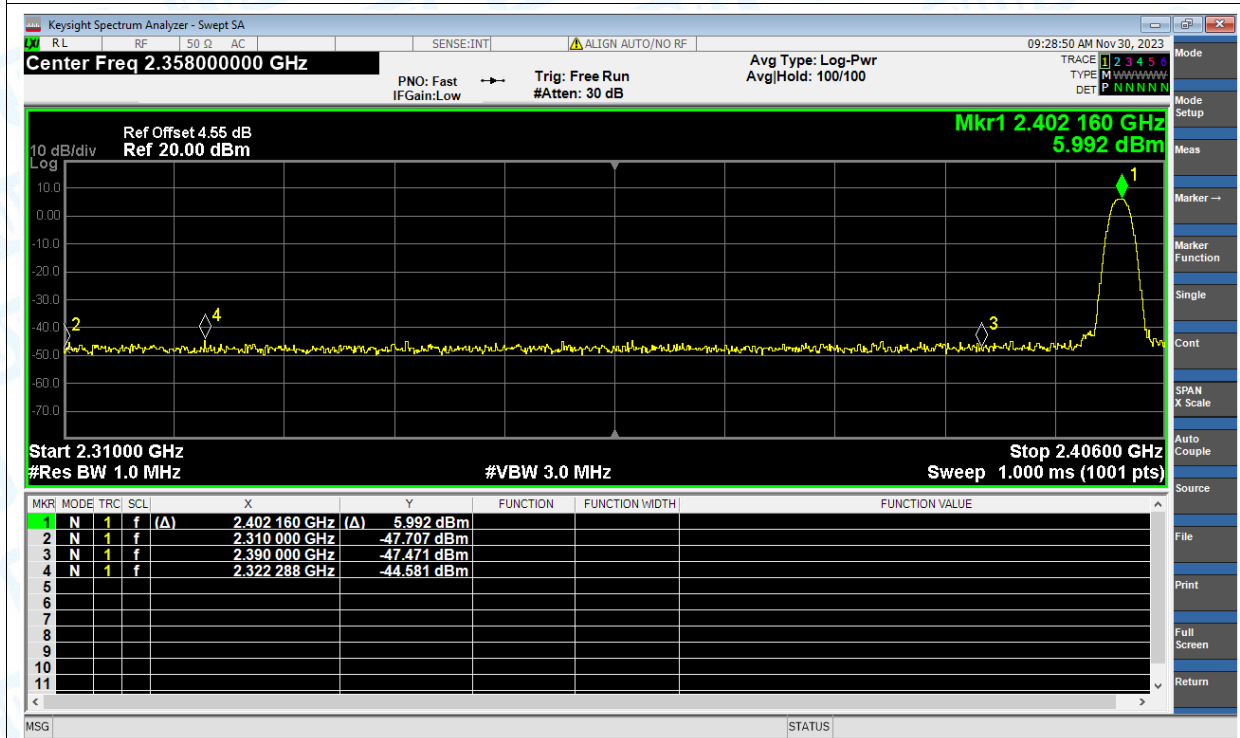


Restrict Band

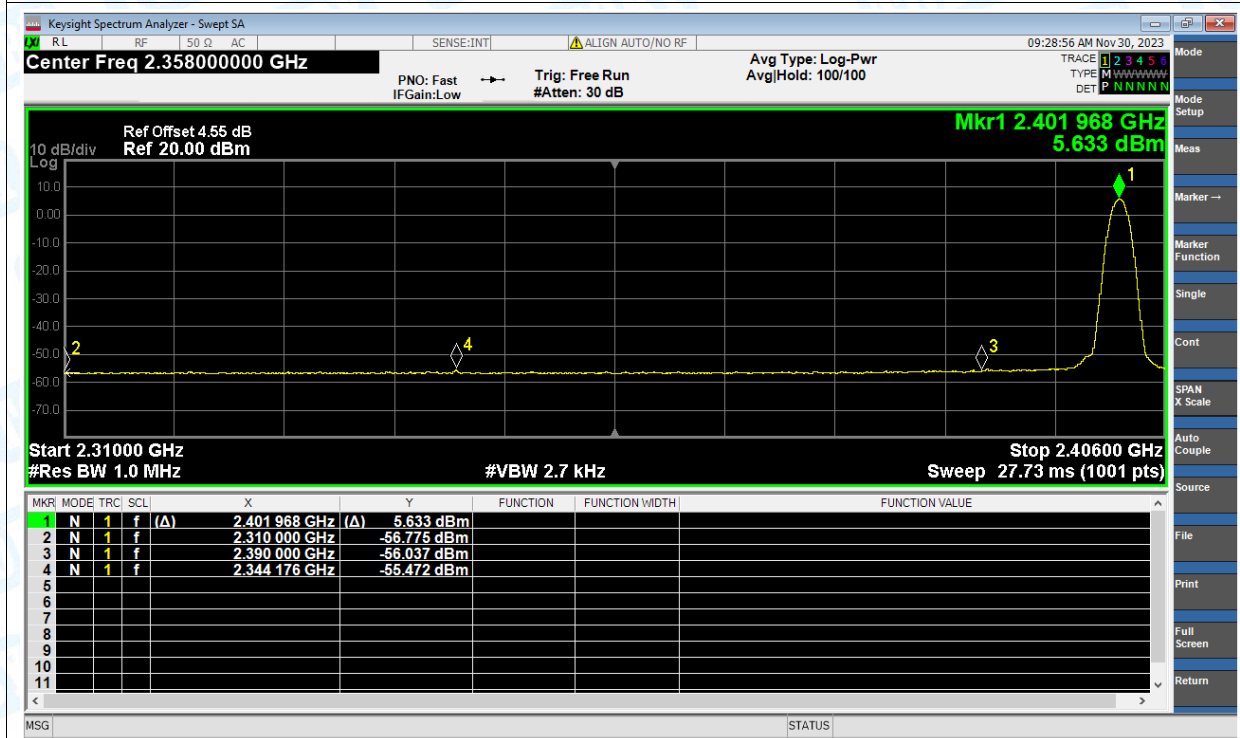
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-47.71	2	49.55	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.78	2	40.48	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2322.288	-44.58	2	52.68	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2344.176	-55.47	2	41.79	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.96	2	49.3	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.87	2	41.39	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-47.03	2	50.23	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.23	2	42.03	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2484.448	-44.01	2	53.25	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.848	-55.1	2	42.16	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.51	2	50.75	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-56.25	2	41.01	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-47.87	2	49.39	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.36	2	40.9	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2348.112	-44.48	2	52.78	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2387.568	-55.75	2	41.51	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-48.41	2	48.85	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-56.26	2	41	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-45.67	2	51.59	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.24	2	42.02	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2484.088	-43.24	2	54.02	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.704	-55.18	2	42.08	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.52	2	50.74	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-56.28	2	40.98	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-47.78	2	49.48	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.89	2	40.37	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2378.928	-44.45	2	52.81	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2384.496	-55.63	2	41.63	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	-55.86	2	41.4	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-48.33	2	48.93	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-55.33	2	41.93	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2491.024	-44.1	2	53.16	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.56	-55.2	2	42.06	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-47.57	2	49.69	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-56.22	2	41.04	Average	54	Pass

Test Graphs

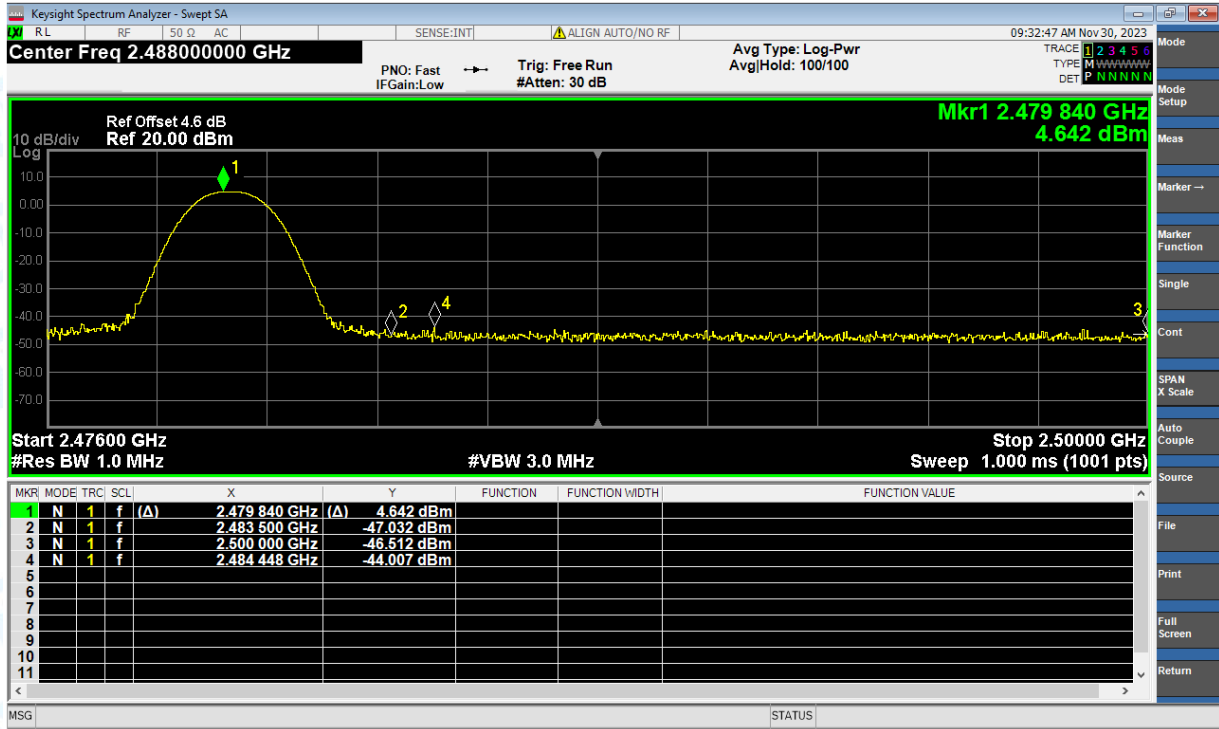
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



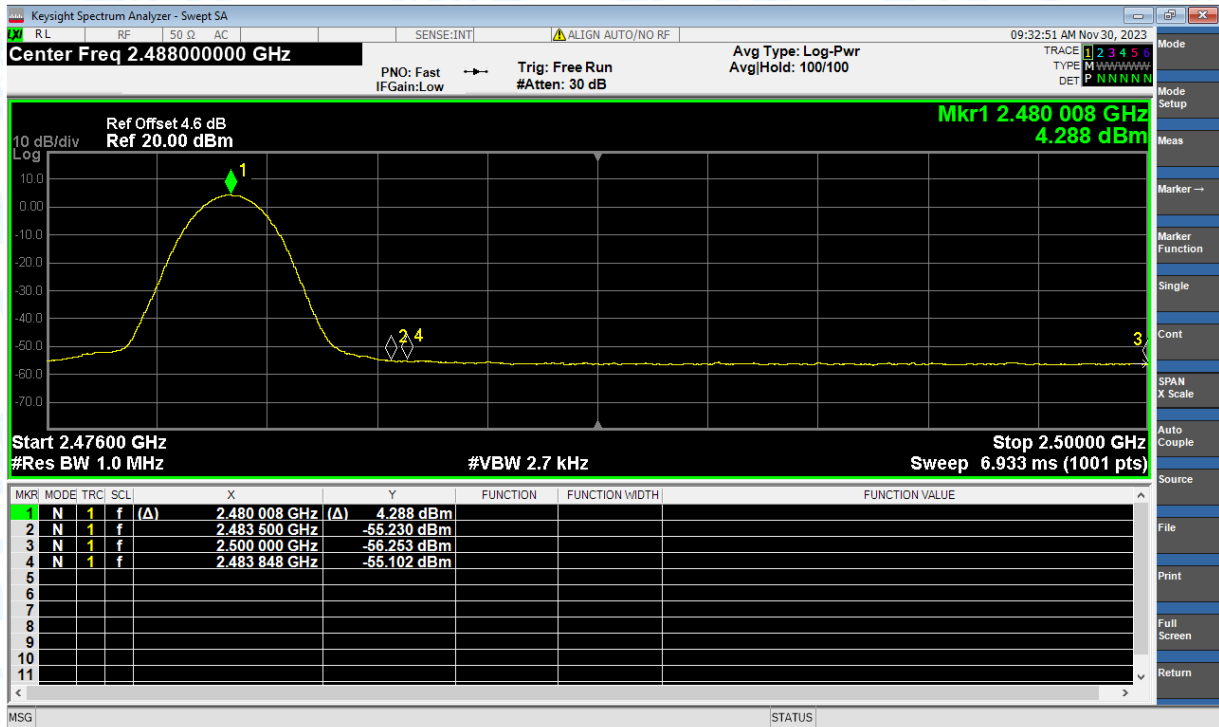
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



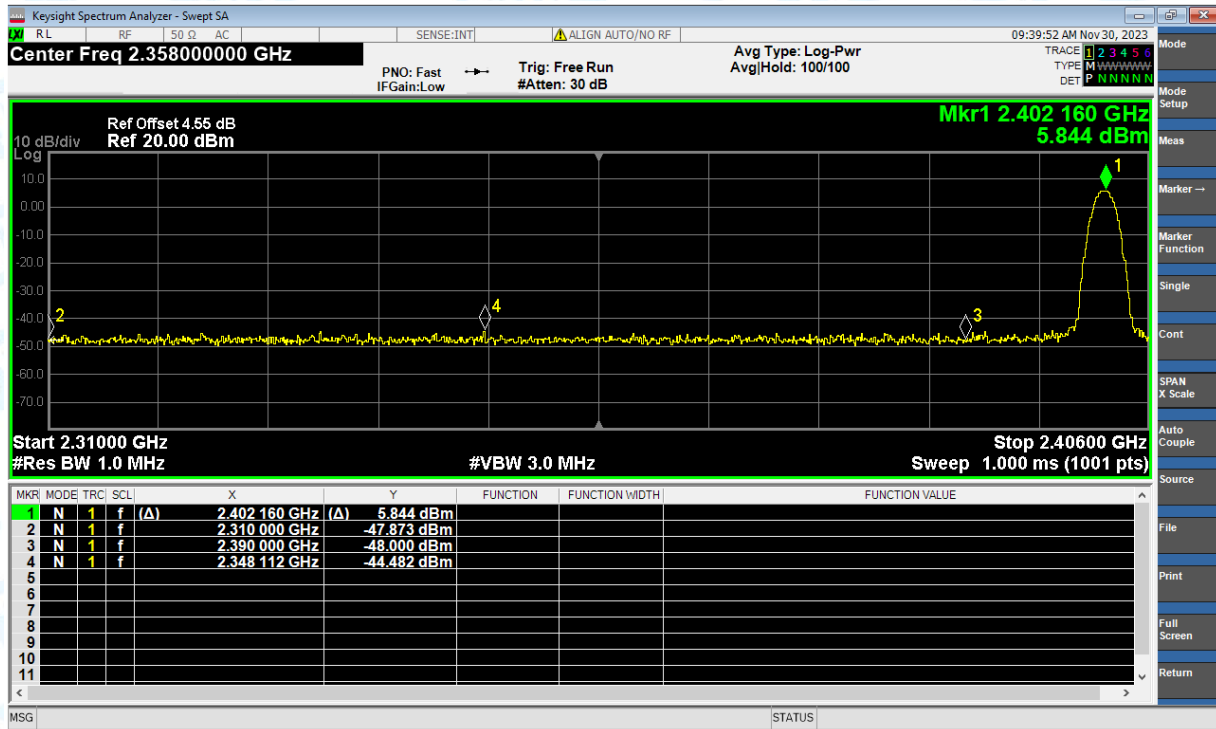
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



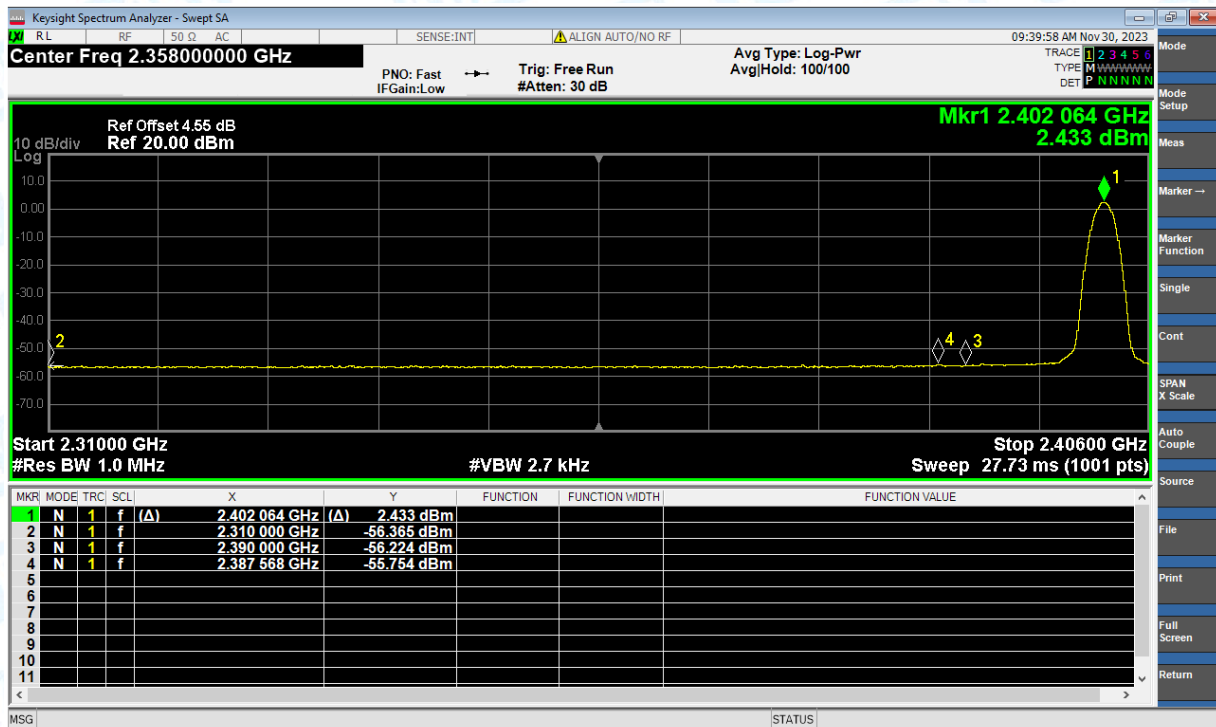
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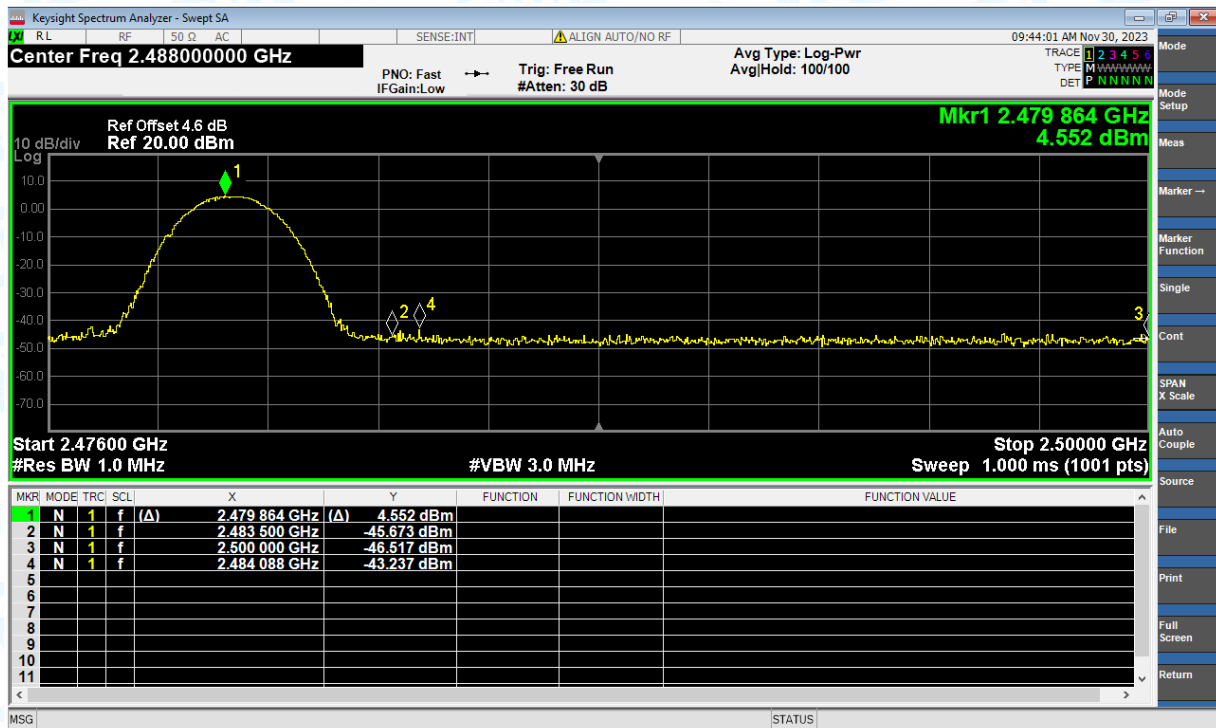
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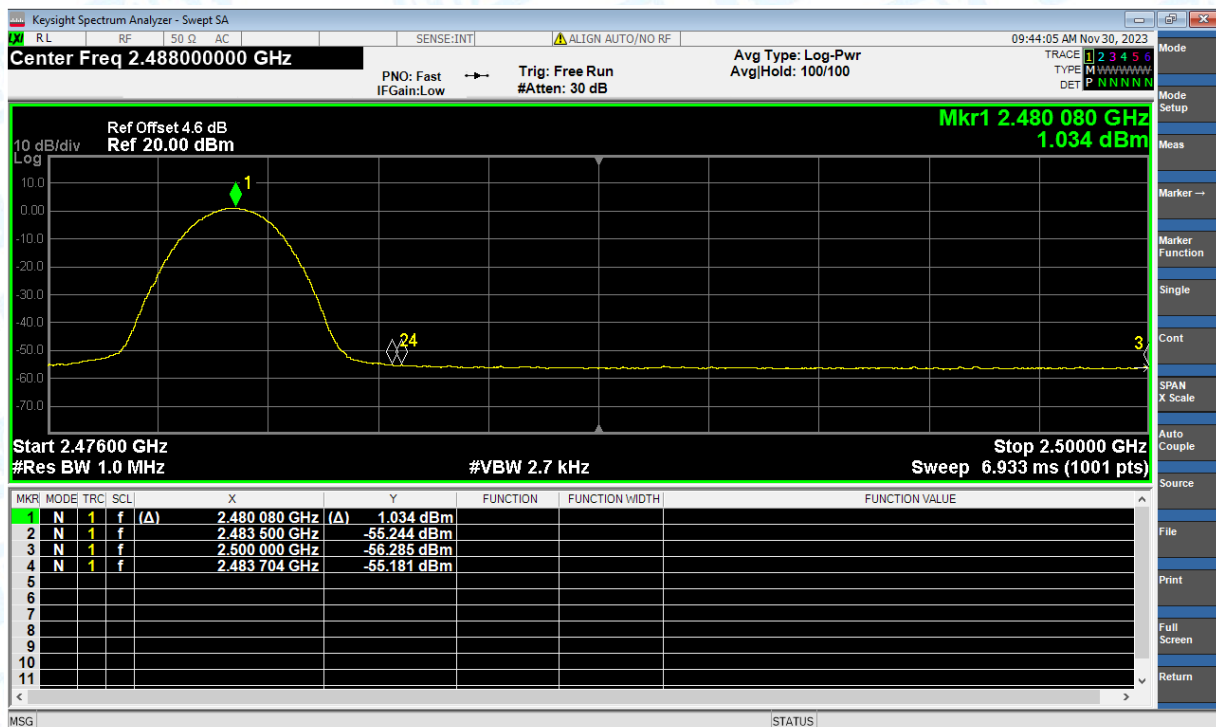
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



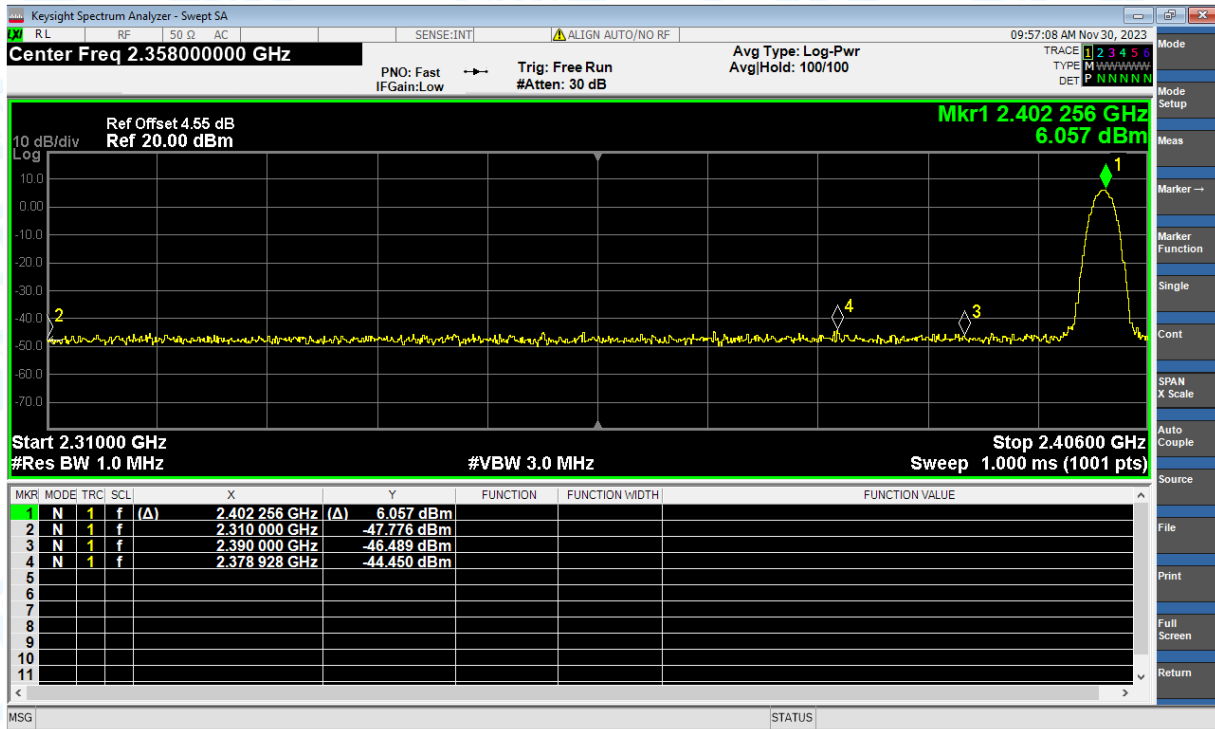
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



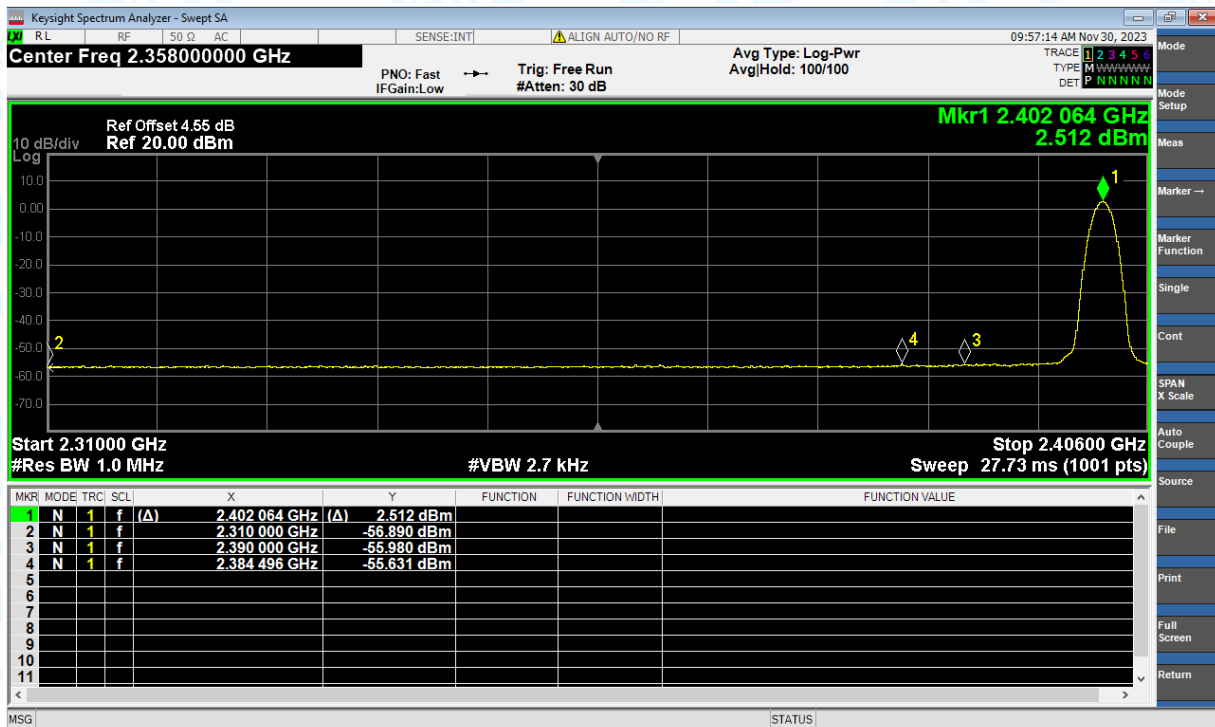
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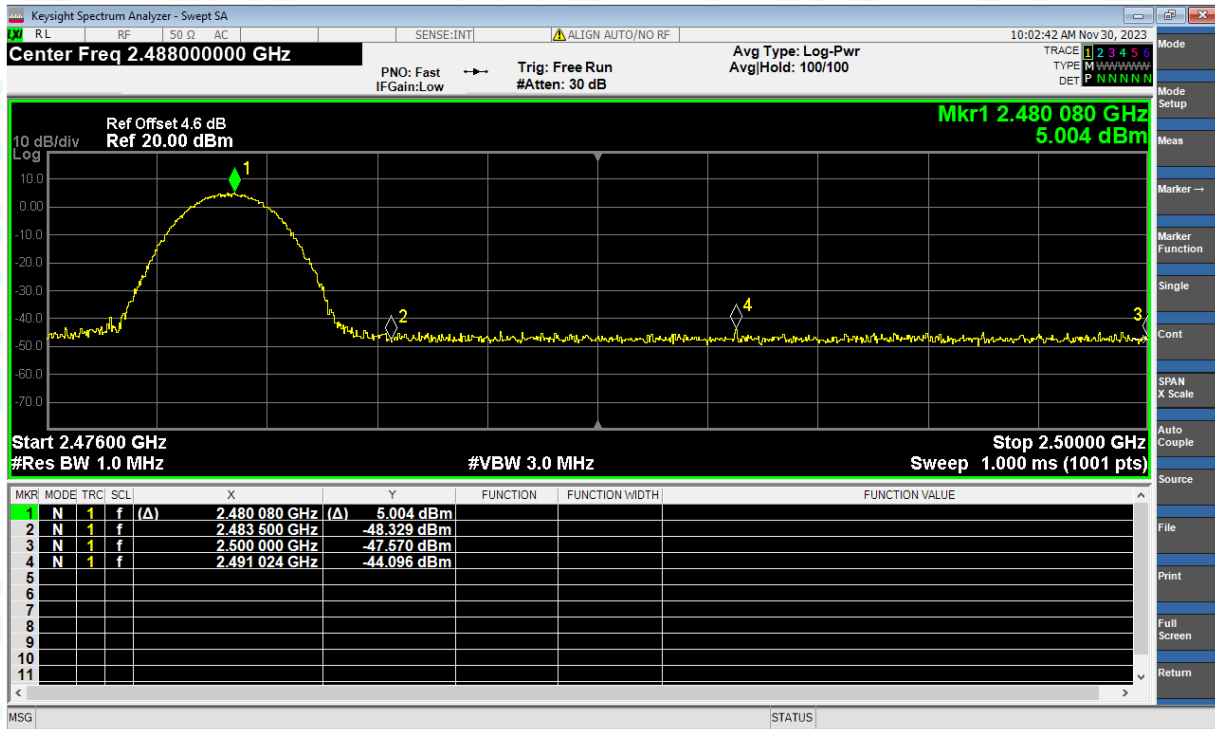
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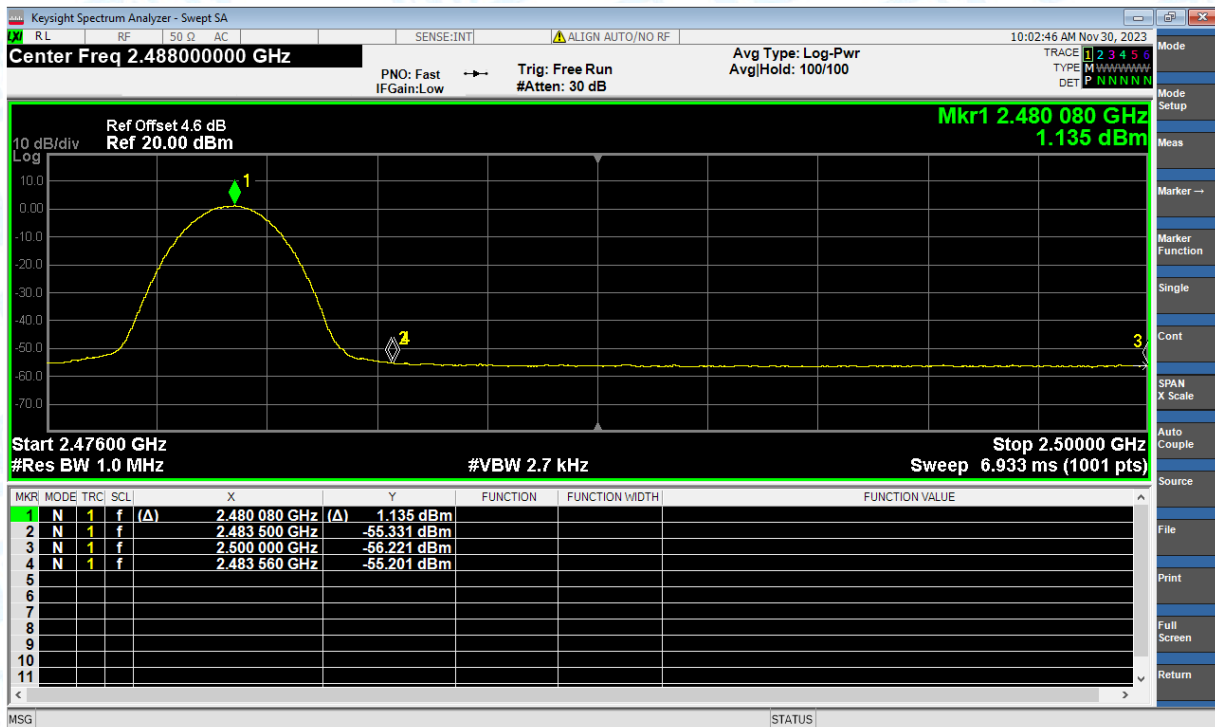
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

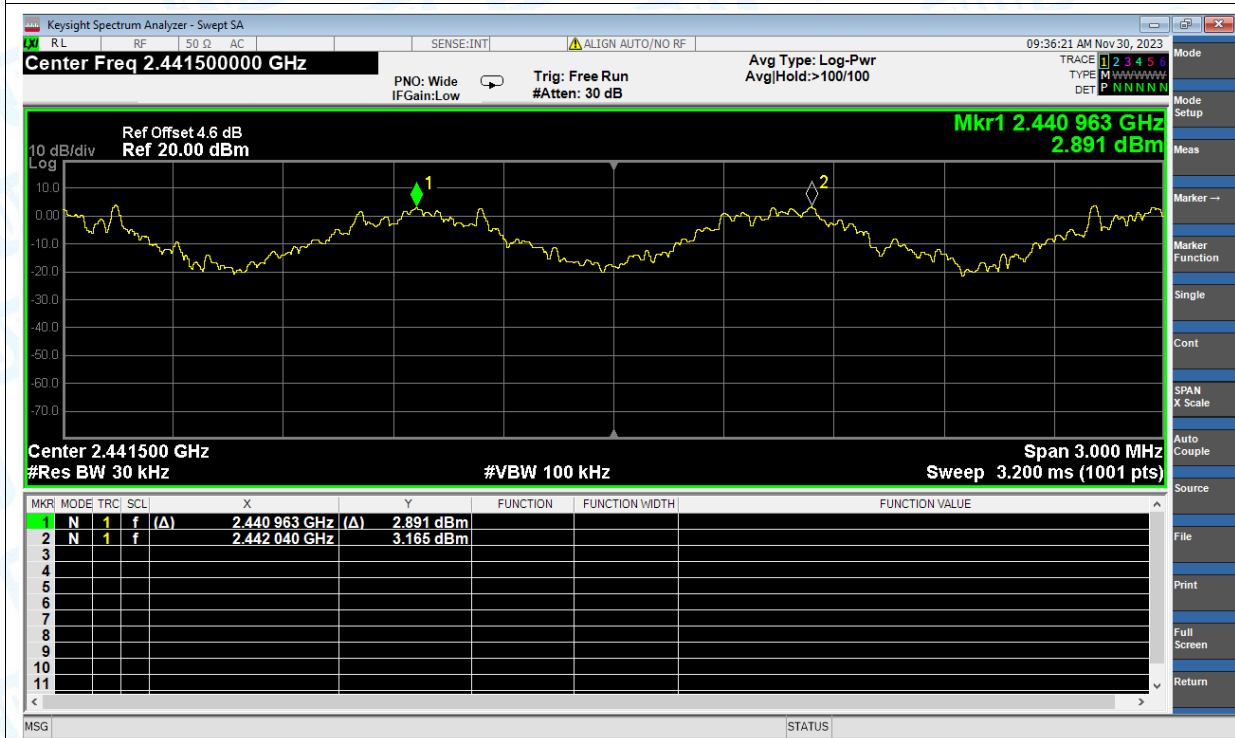


Carrier Frequencies Separation

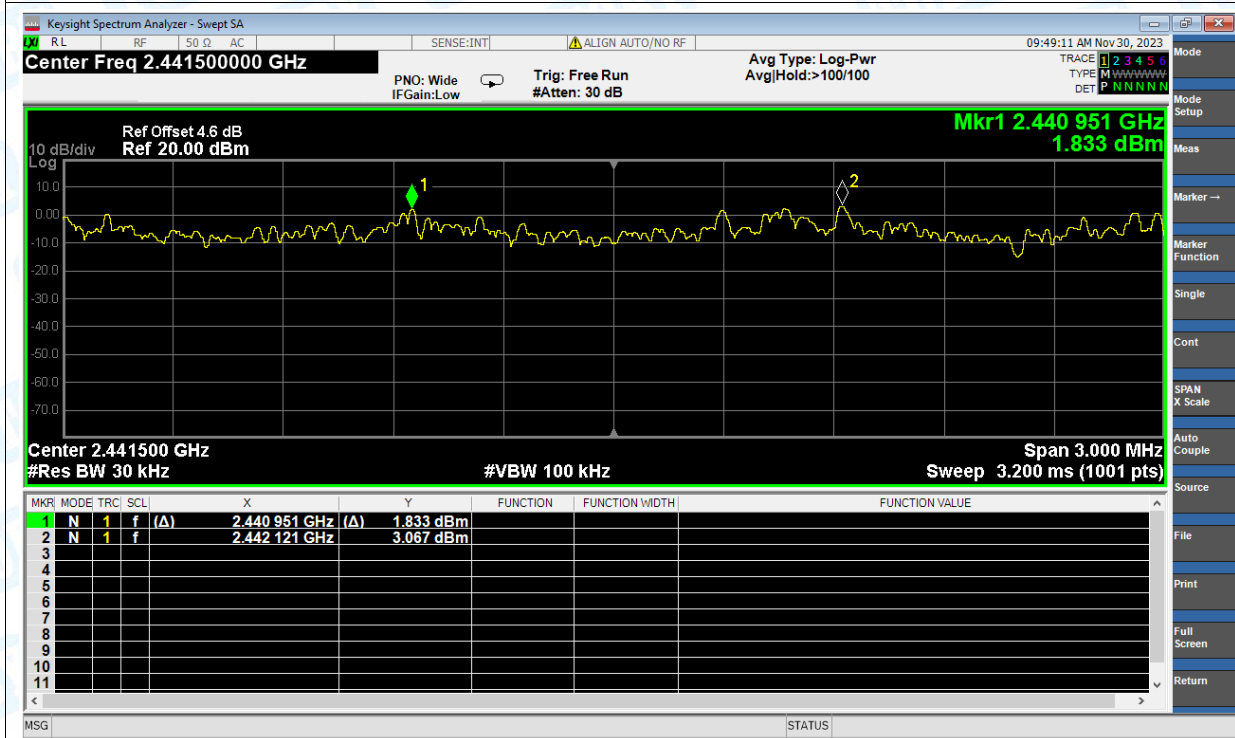
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.963	2442.04	1.077	0.627	Pass
NVNT	2-DH1	Ant1	2440.951	2442.121	1.17	0.82	Pass
NVNT	3-DH1	Ant1	2441.137	2442.139	1.002	0.813	Pass

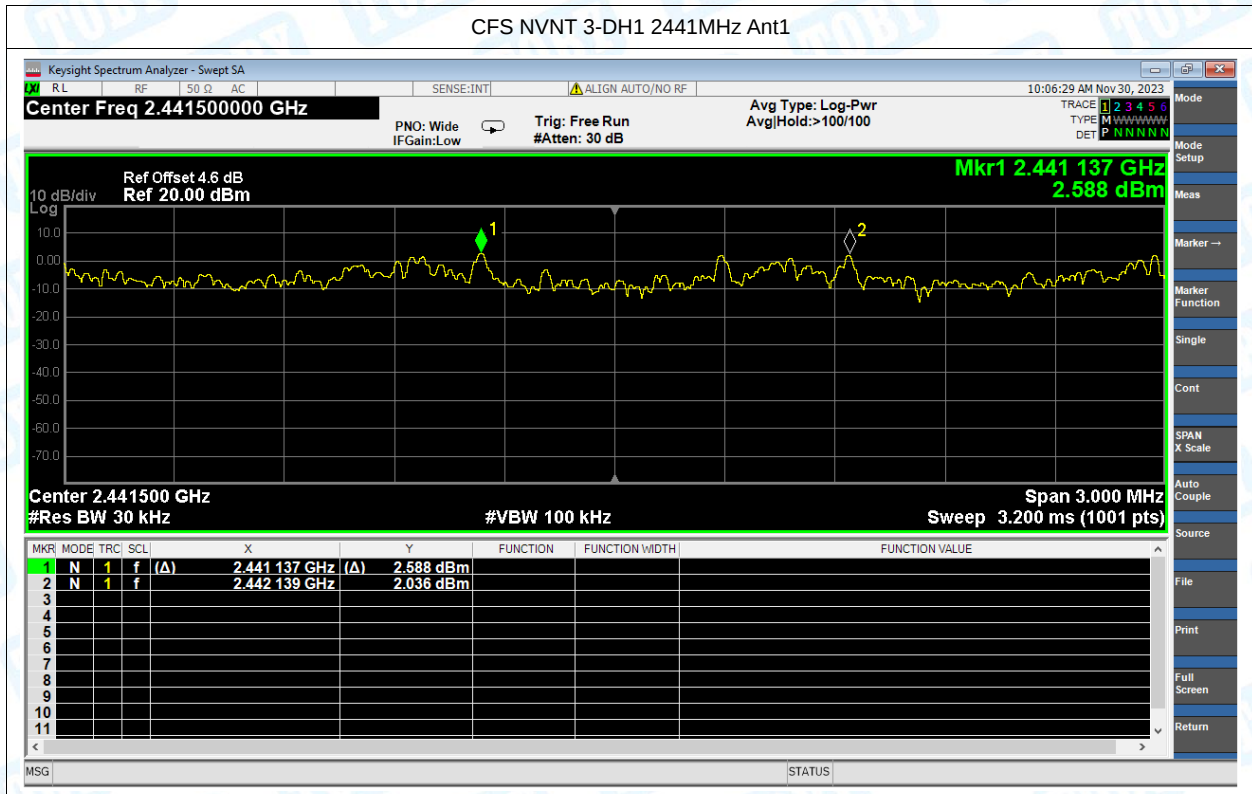
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



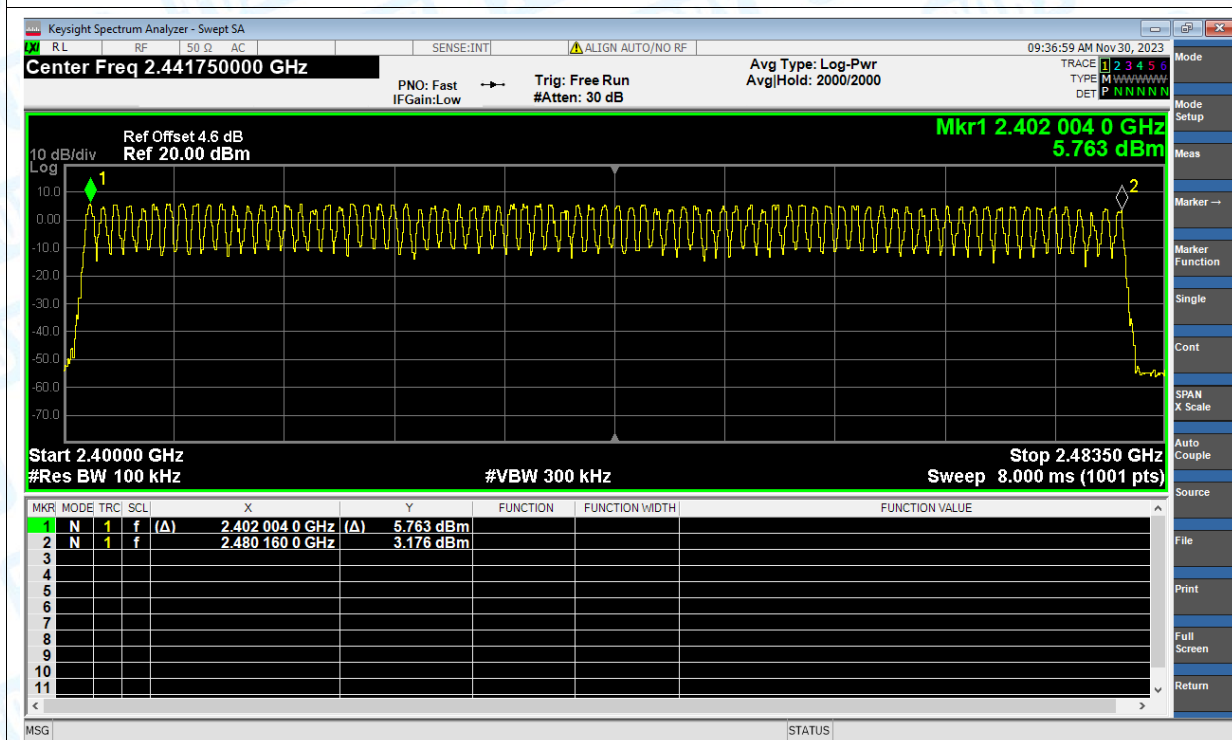


Number of Hopping Channel

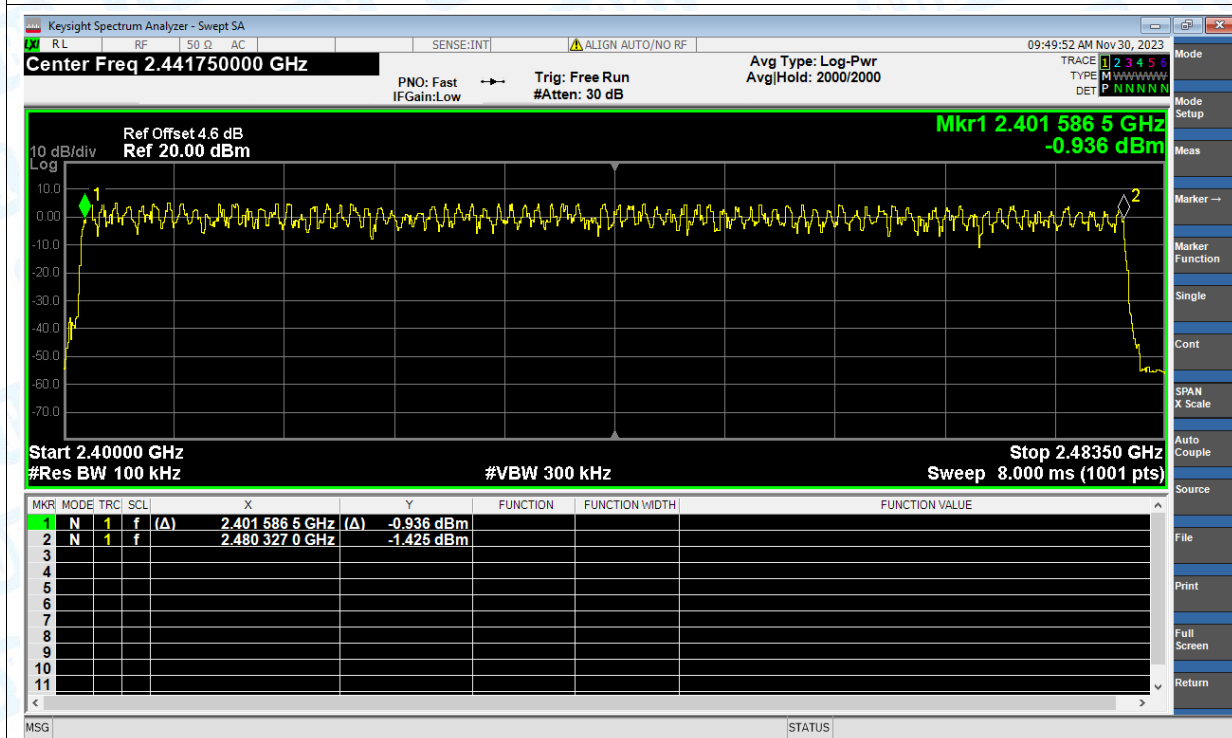
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

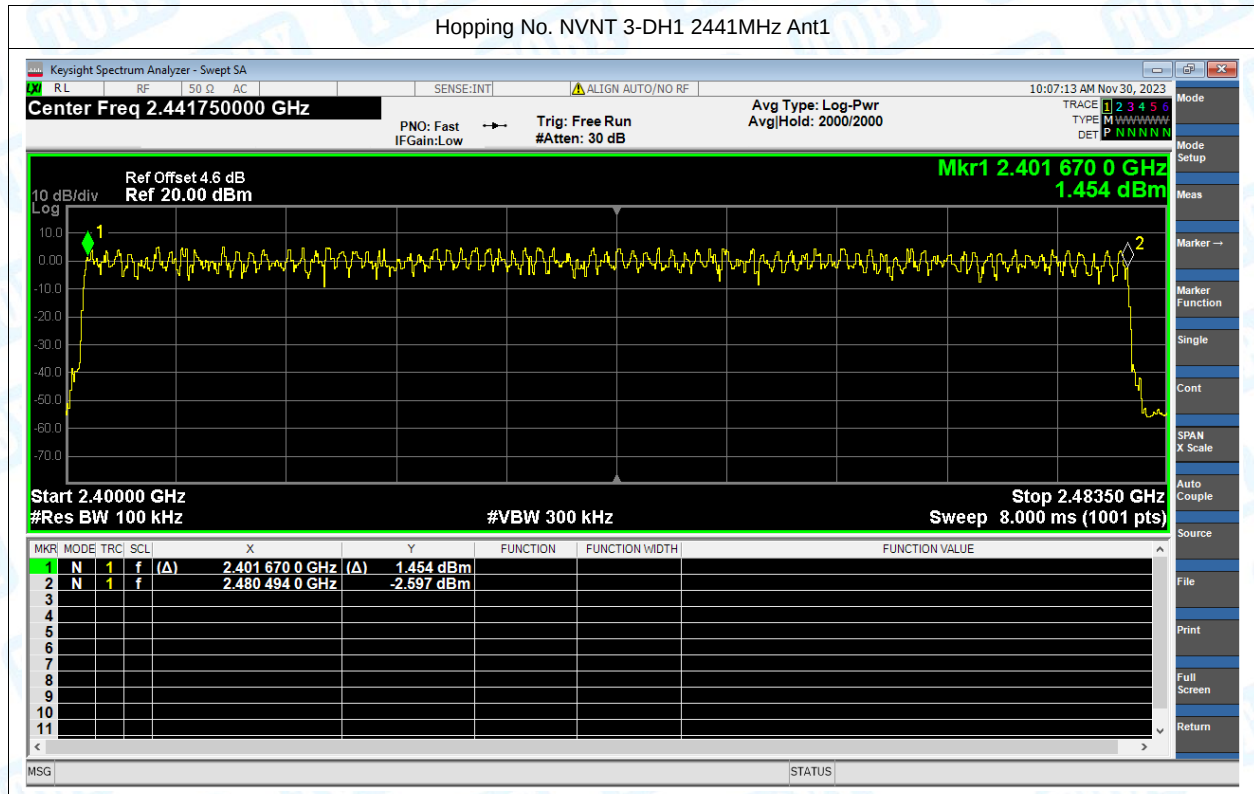
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



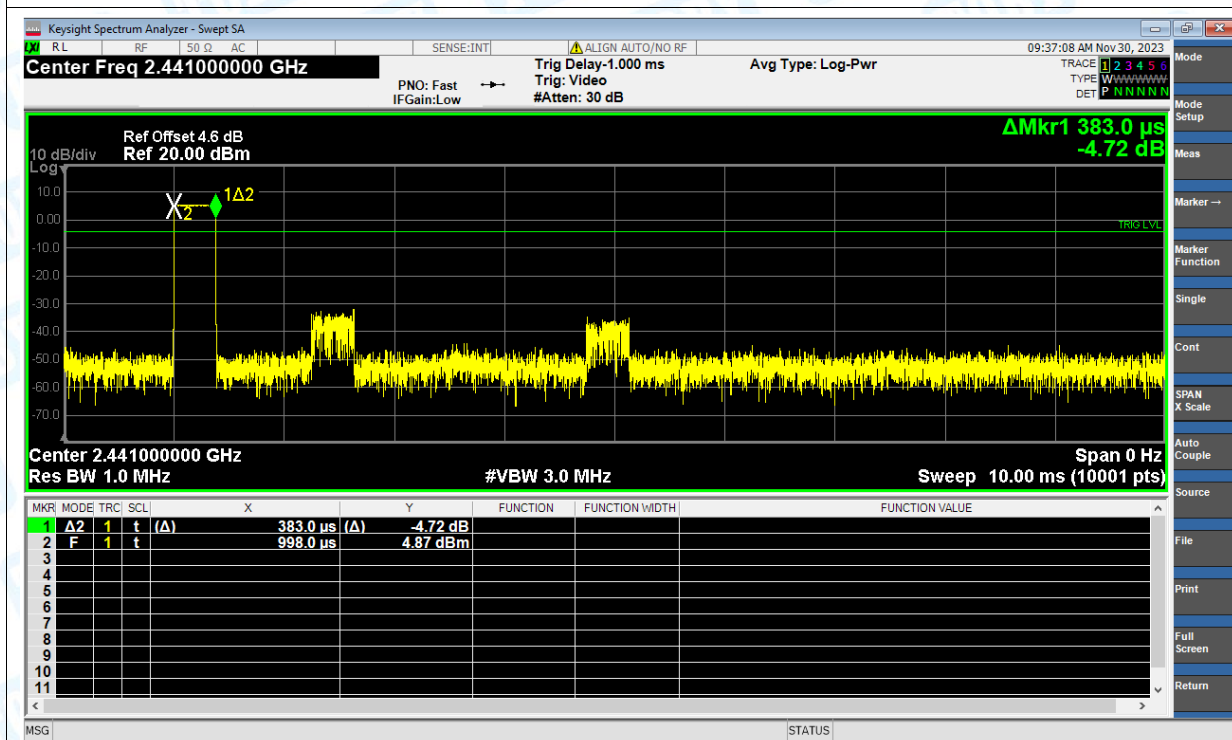


Dwell Time

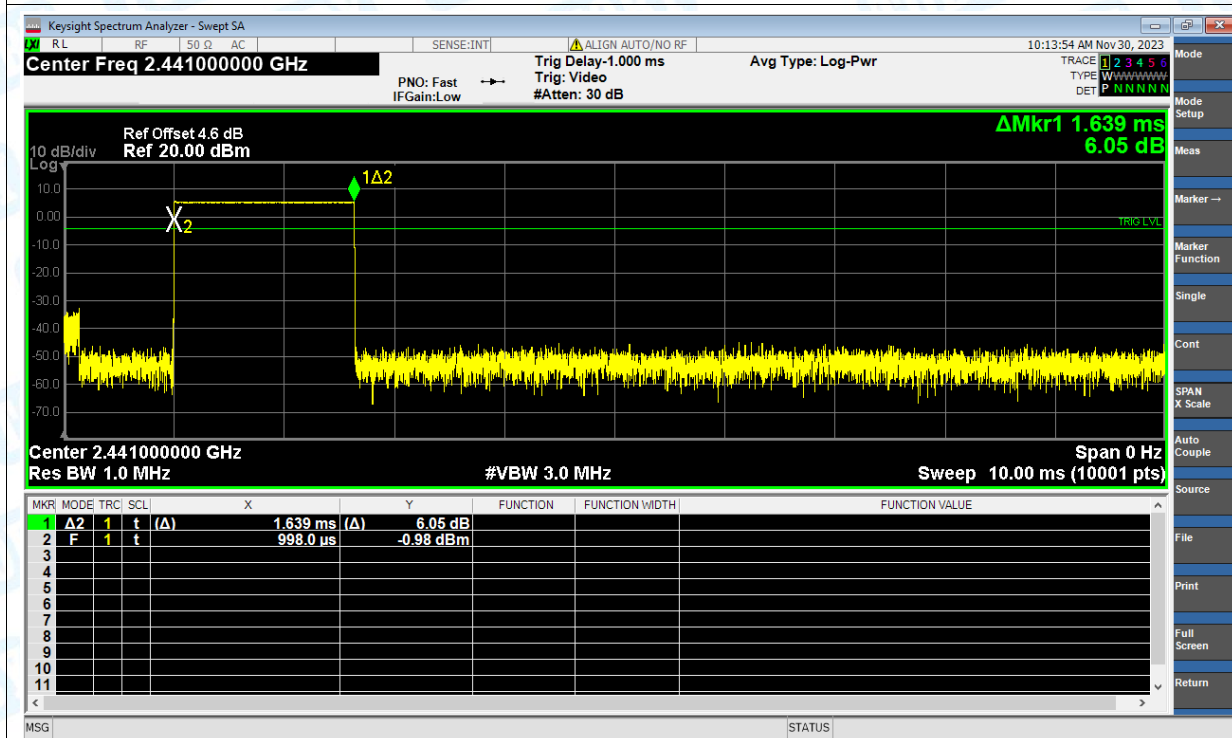
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.391	125.12	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.891	308.373	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.642	262.72	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.893	308.587	31600	400	Pass

Test Graphs

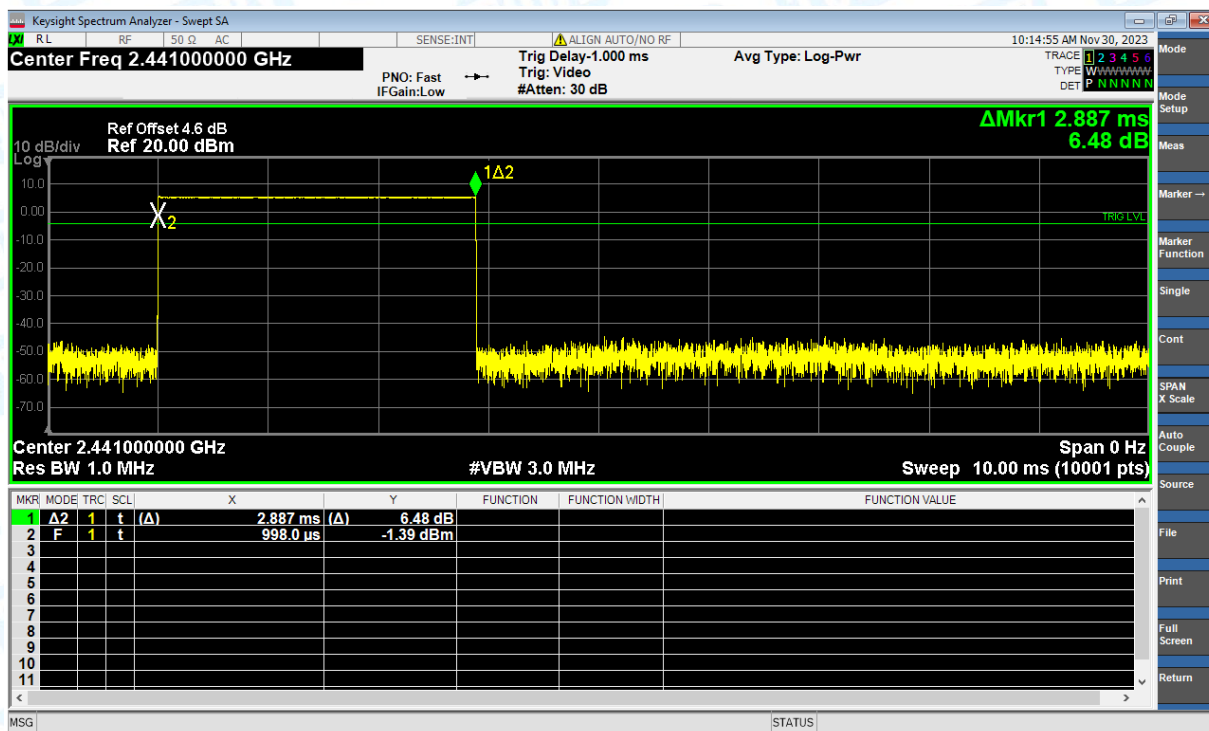
Dwell NVNT 1-DH1 2441MHz Ant1



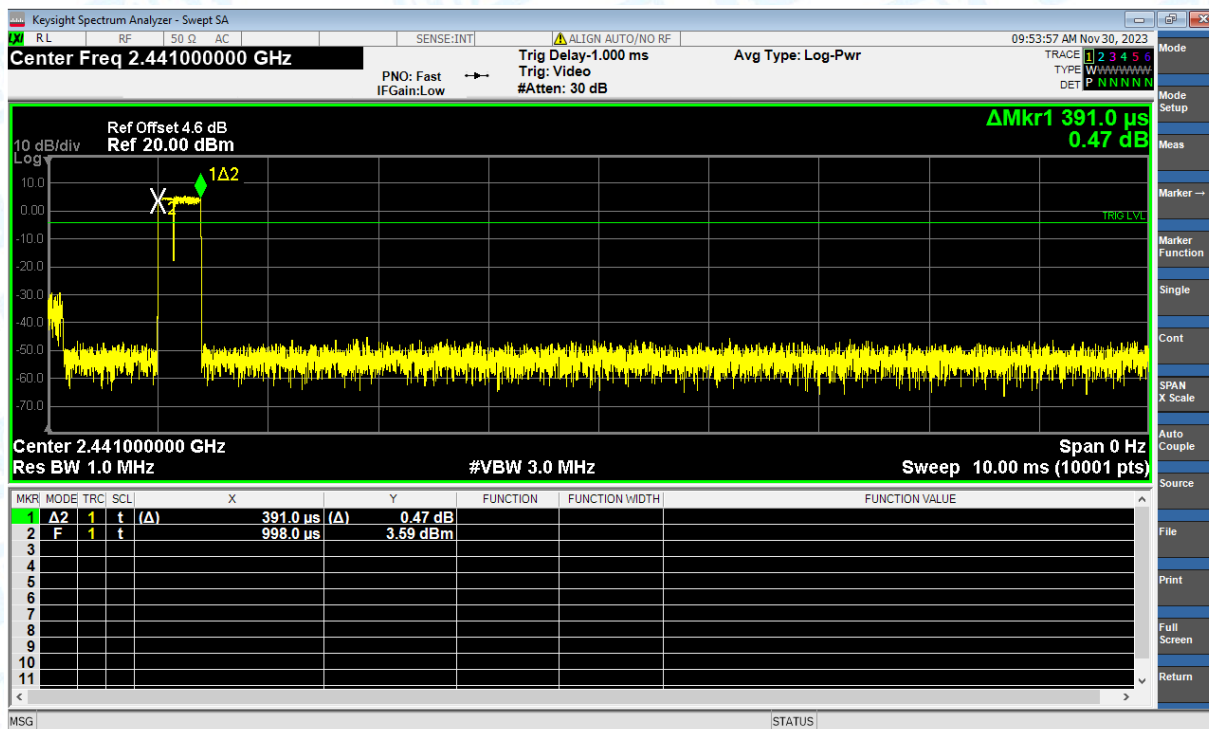
Dwell NVNT 1-DH3 2441MHz Ant1



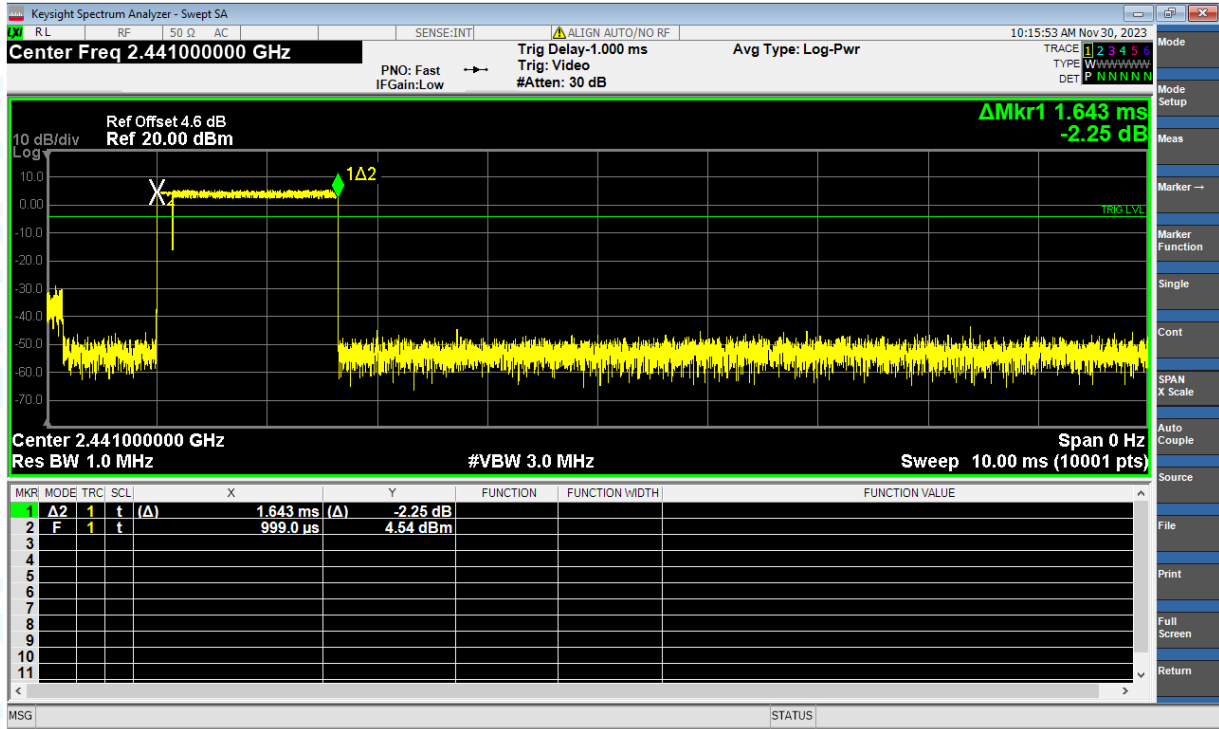
Dwell NVNT 1-DH5 2441MHz Ant1



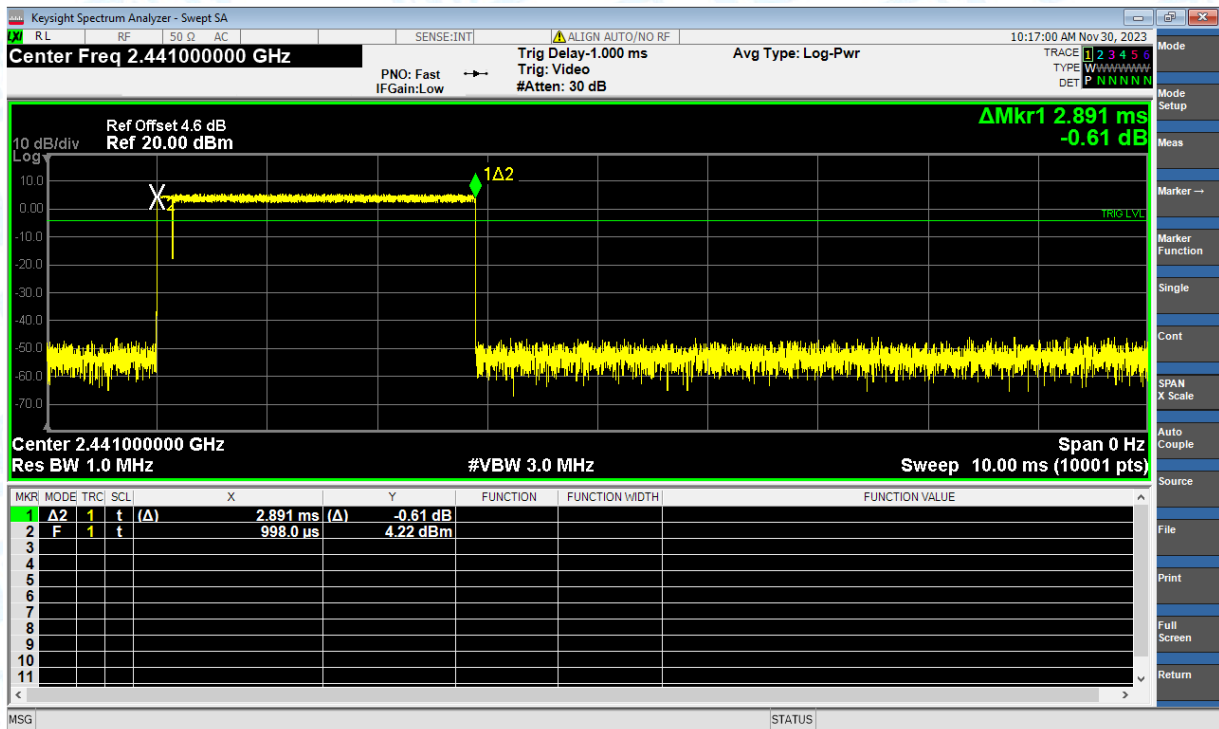
Dwell NVNT 2-DH1 2441MHz Ant1



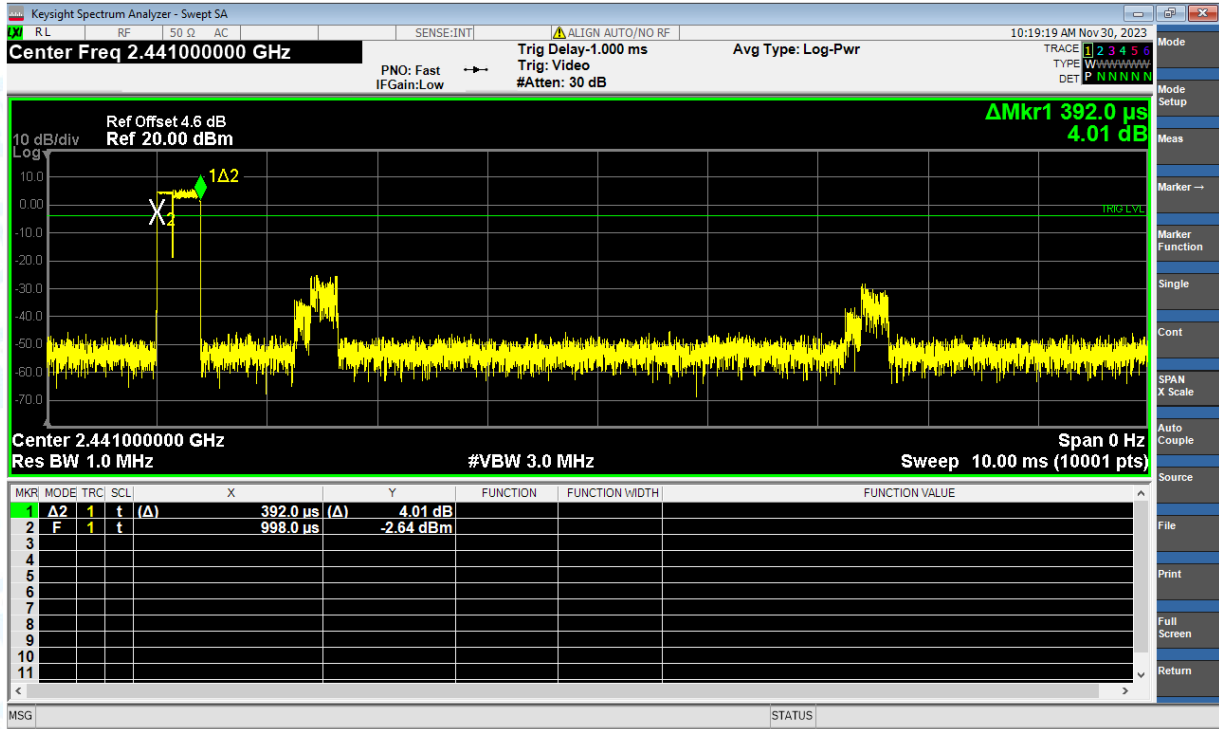
Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1



Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1

