

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

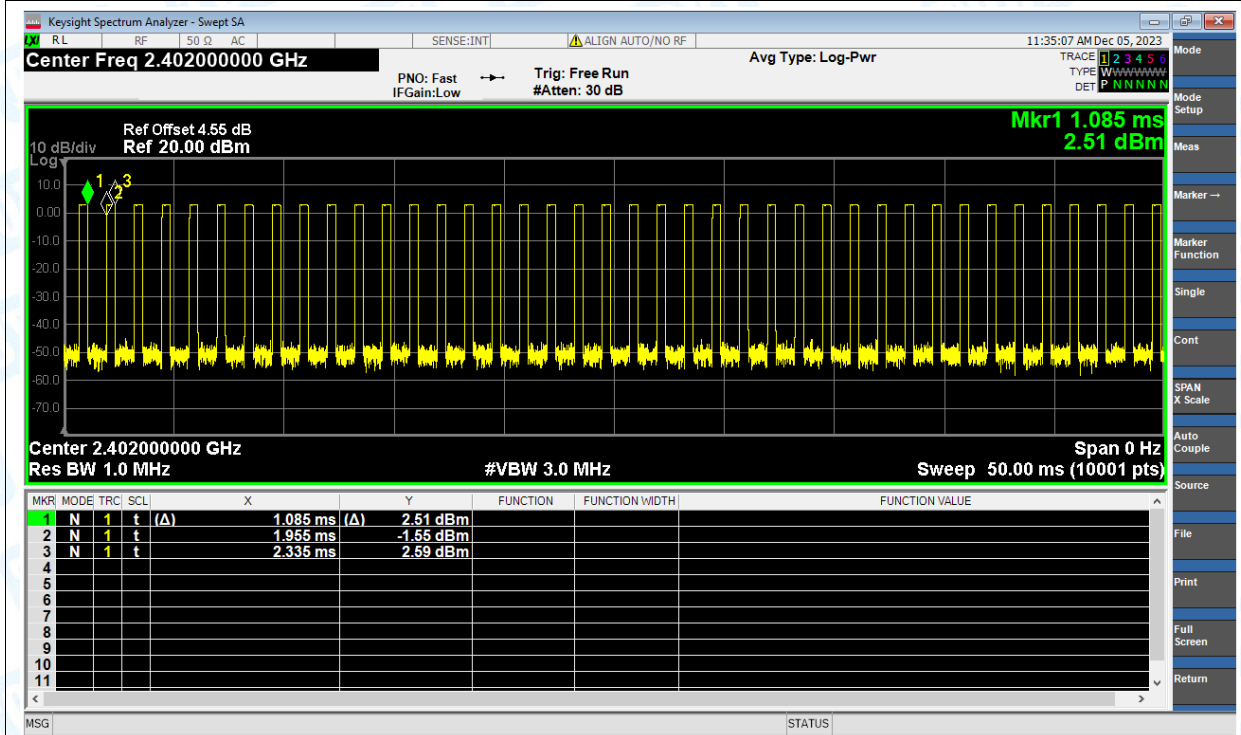
General Description of EUT	
<b>Product Name:</b>	AINote
<b>Test Model:</b>	S6
<b>Sample ID:</b>	HC-C-202311-0266-02-01-2#
Environmental Conditions	
<b>Temperature:</b>	23.8°C
<b>Relative Humidity:</b>	48%
<b>Test Voltage:</b>	DC 3.8V
<b>Test Engineer:</b>	Zhou Zhen
Note: For a more detailed features description, please refer to the report TBR-C-202311-0266-3 The report only show the worst case data.	

# 1. Duty Cycle

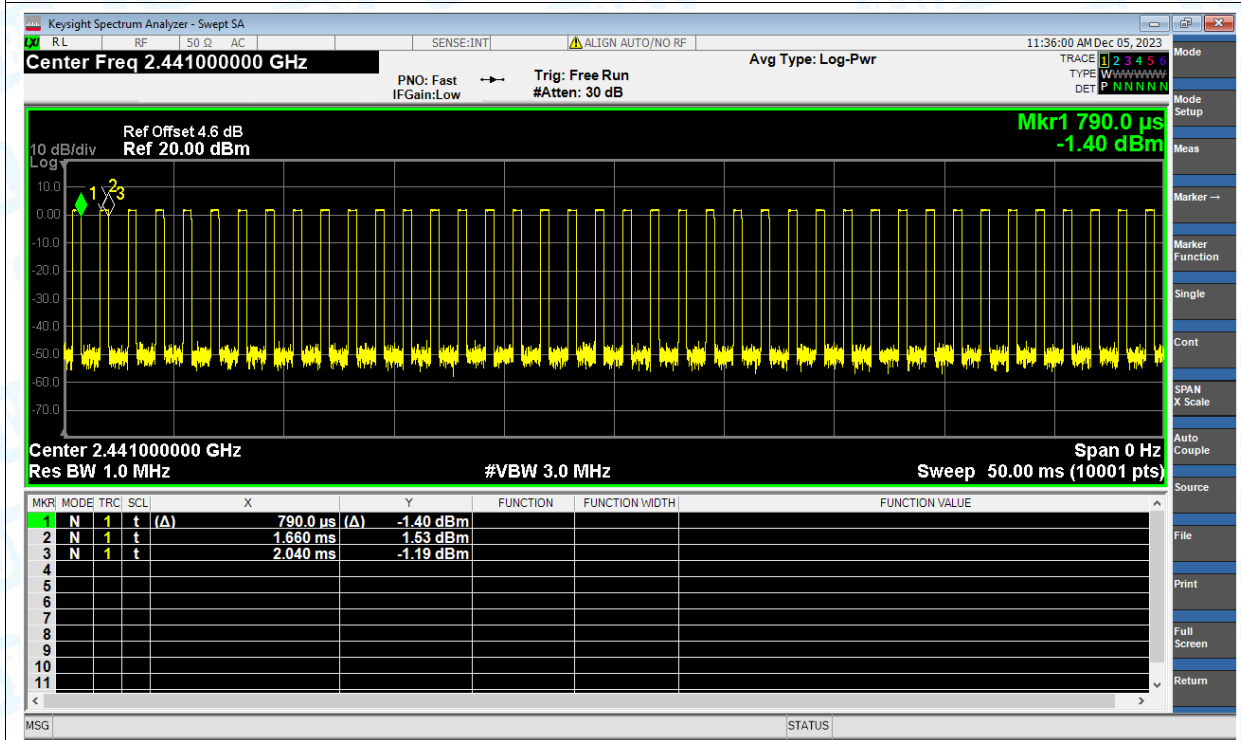
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	30.8	5.11	2.6
NVNT	2-DH1	2441	Ant1	30.8	5.11	2.6
NVNT	2-DH1	2480	Ant1	30.8	5.11	2.6
NVNT	3-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2441	Ant1	30.8	5.11	2.6
NVNT	3-DH1	2480	Ant1	31.2	5.06	2.56

Test Graphs

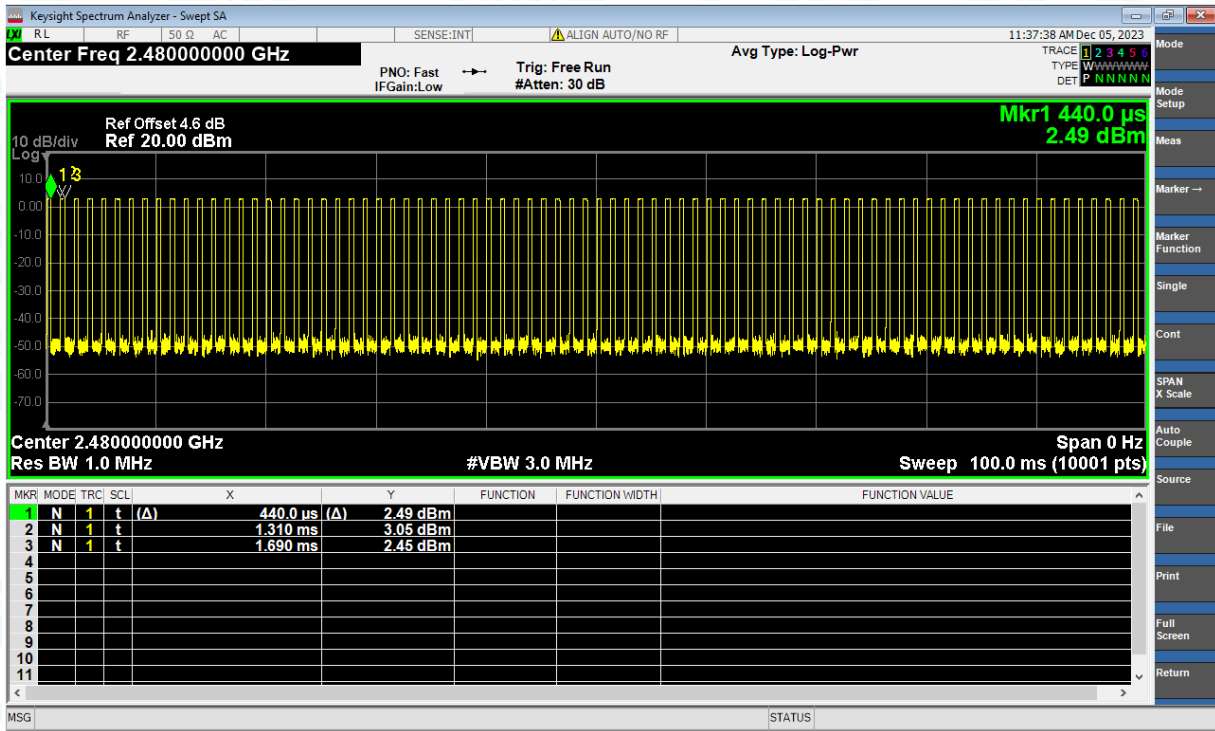
Duty Cycle NVNT 1-DH1 2402MHz Ant1



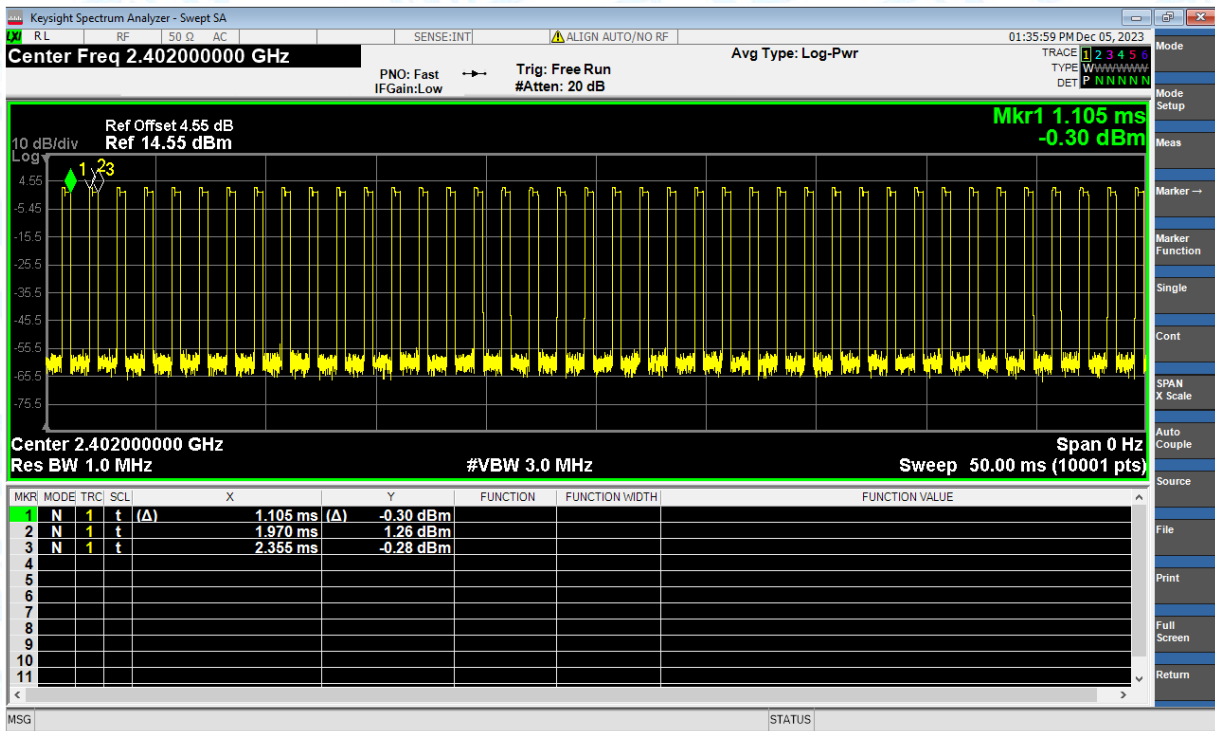
Duty Cycle NVNT 1-DH1 2441MHz Ant1



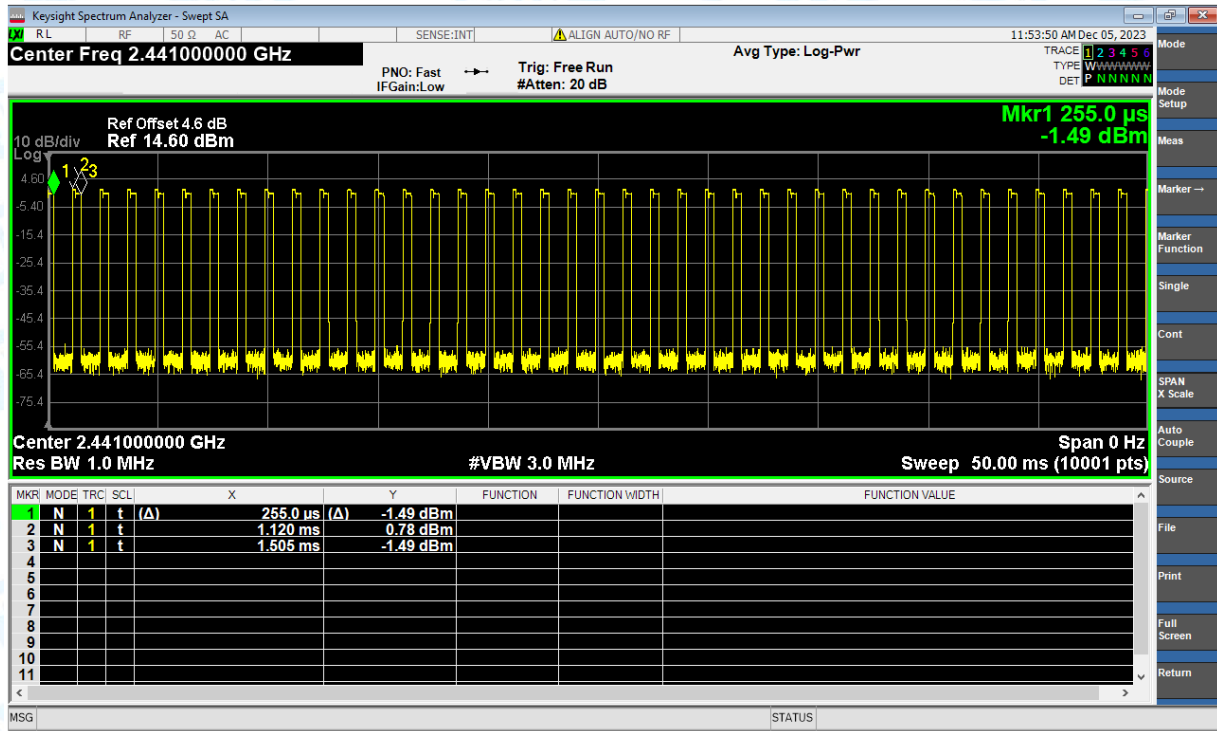
Duty Cycle NVNT 1-DH1 2480MHz Ant1



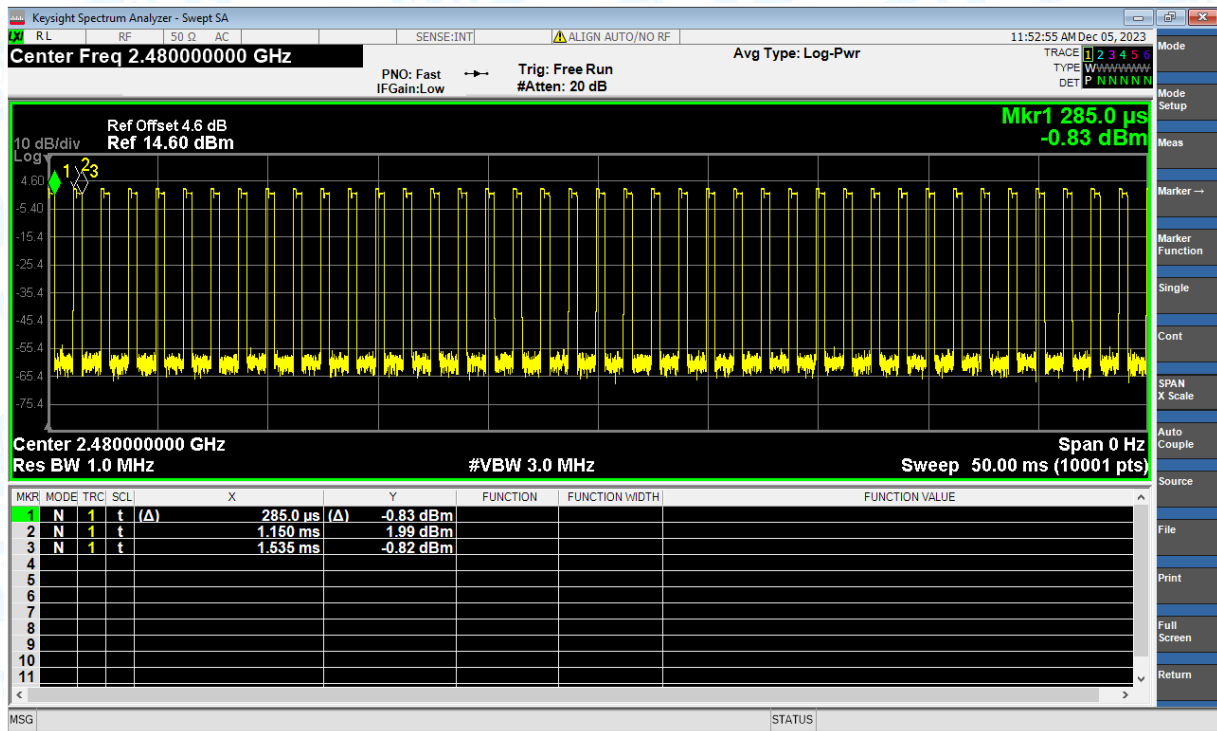
Duty Cycle NVNT 2-DH1 2402MHz Ant1



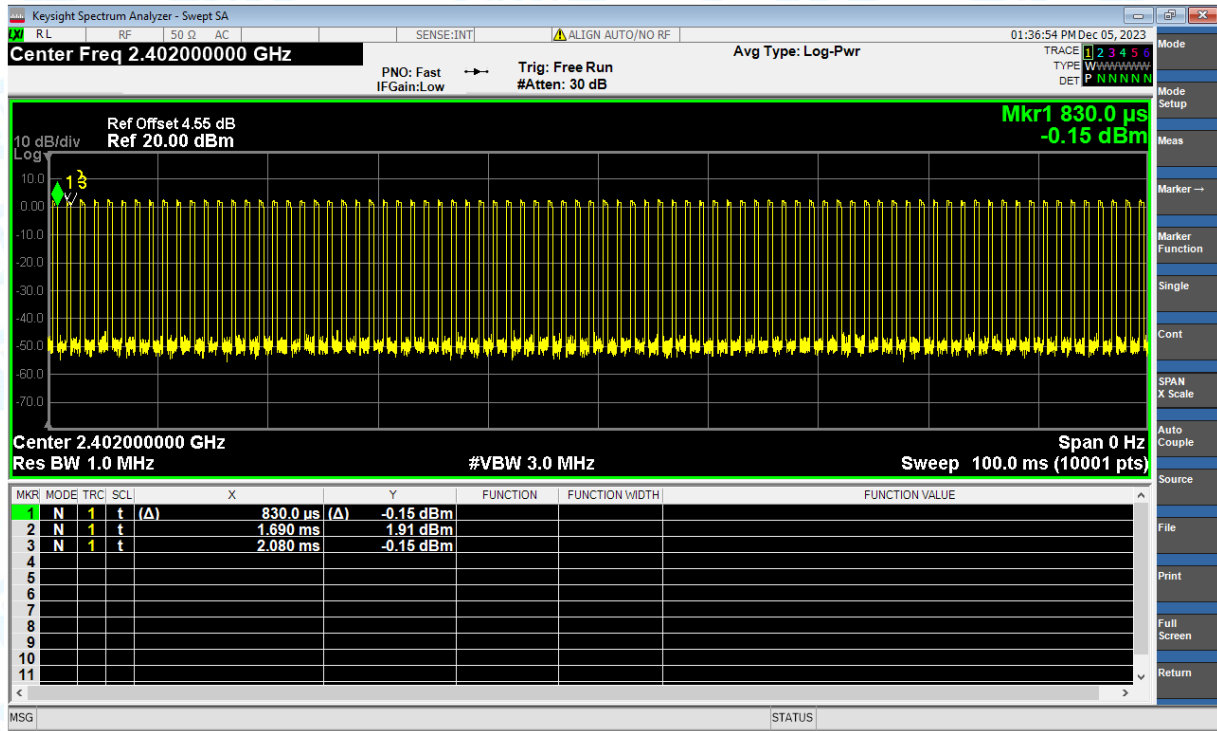
Duty Cycle NVNT 2-DH1 2441MHz Ant1



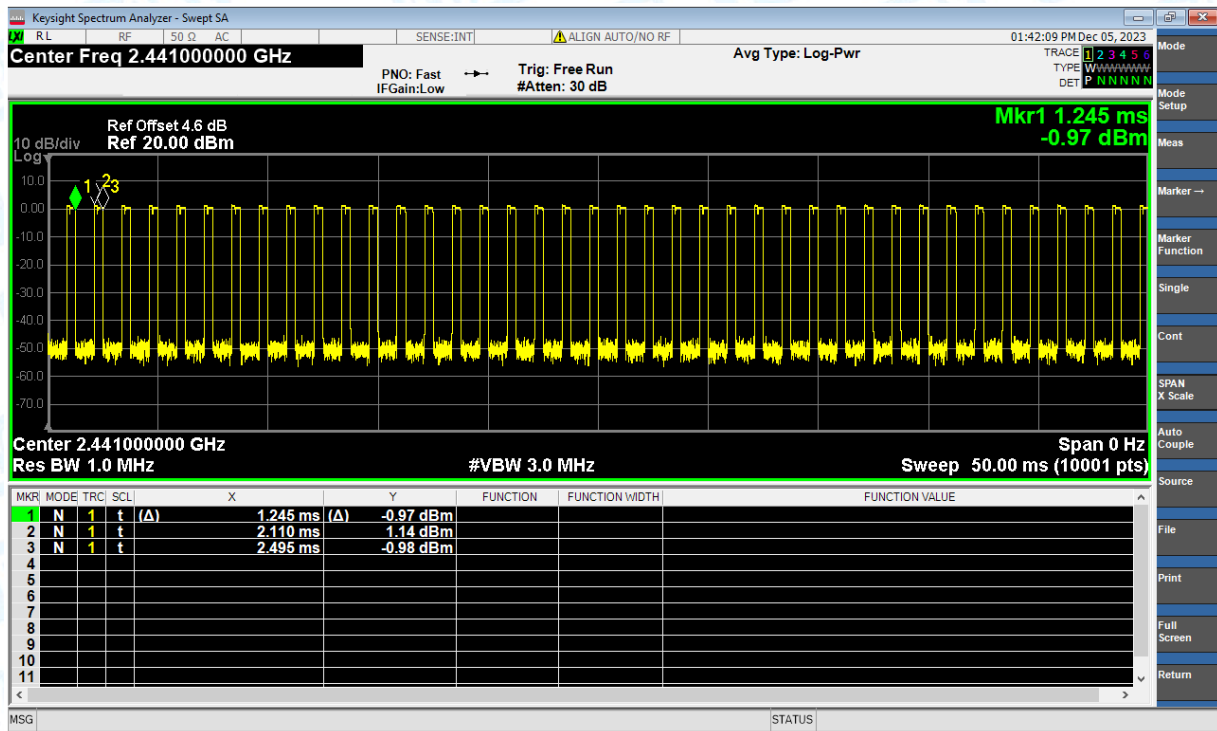
Duty Cycle NVNT 2-DH1 2480MHz Ant1

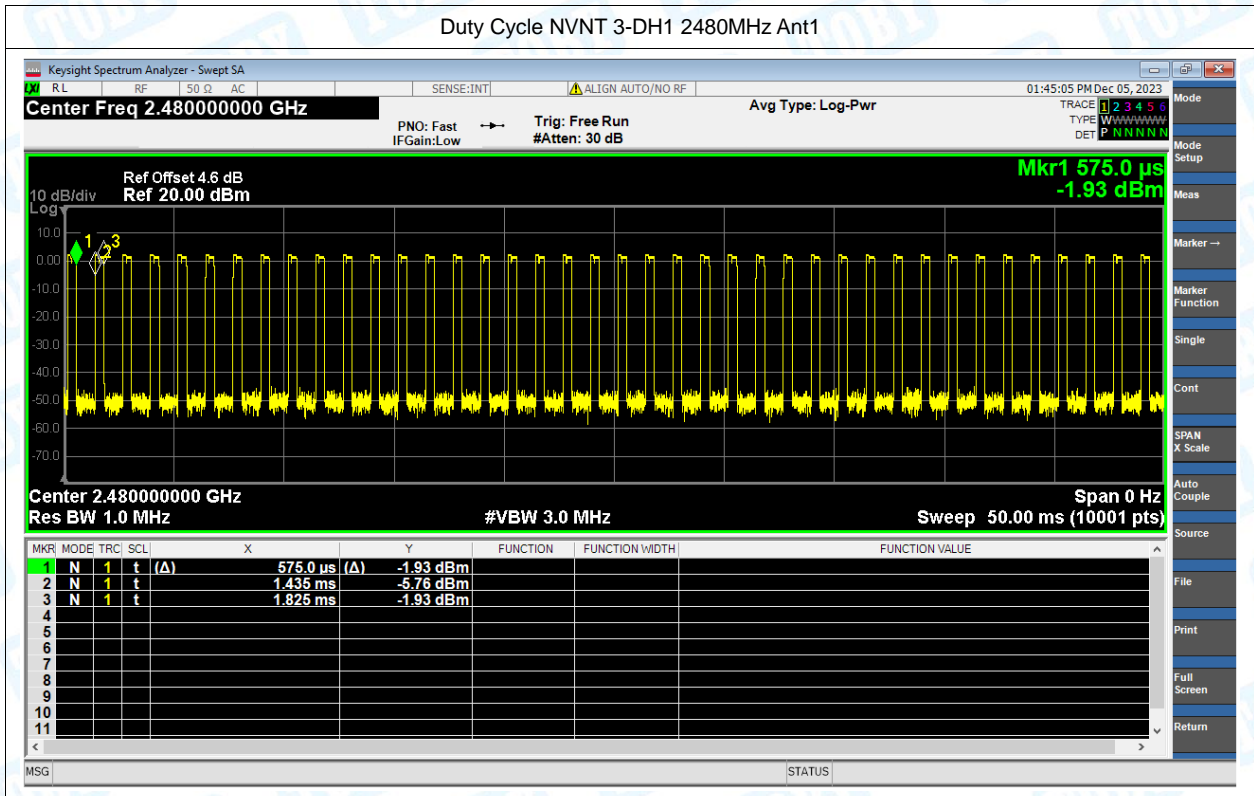


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





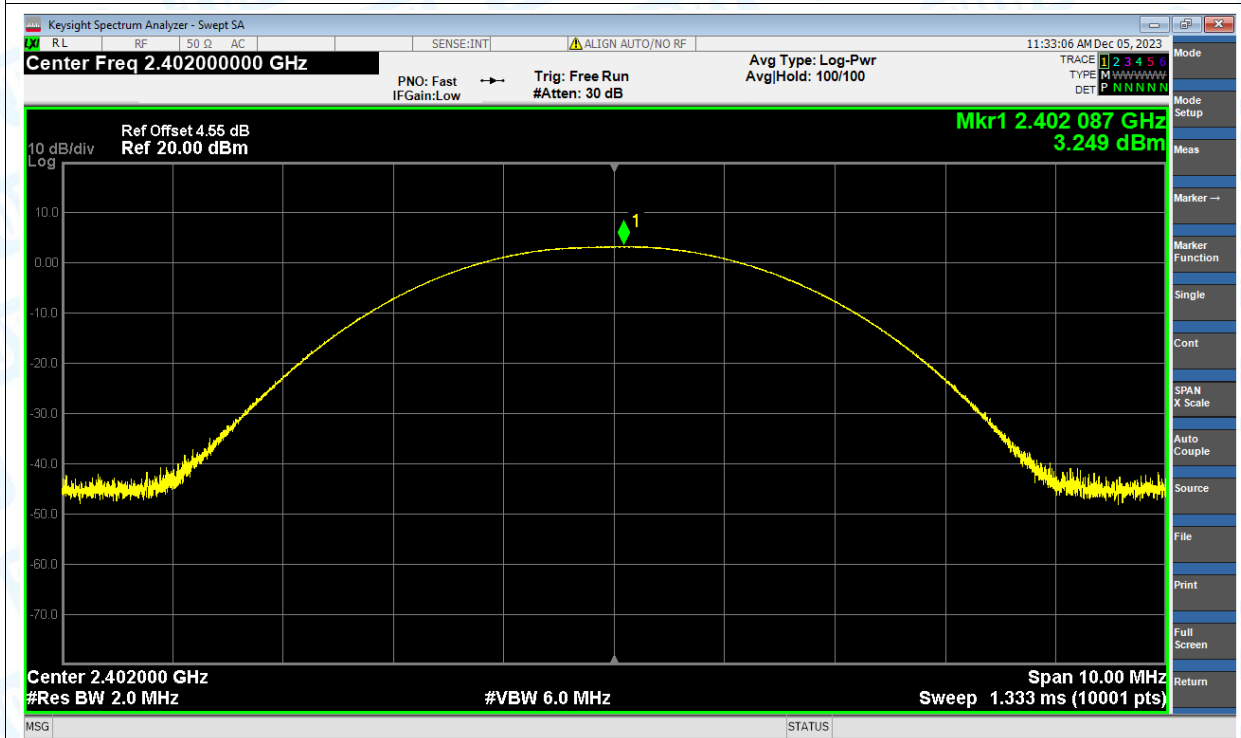
## 2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.249	21	Pass
NVNT	1-DH1	2441	Ant1	2.055	21	Pass
NVNT	1-DH1	2480	Ant1	3.157	21	Pass
NVNT	2-DH1	2402	Ant1	2.314	21	Pass
NVNT	2-DH1	2441	Ant1	2.962	21	Pass
NVNT	2-DH1	2480	Ant1	2.080	21	Pass
NVNT	3-DH1	2402	Ant1	2.605	21	Pass
NVNT	3-DH1	2441	Ant1	1.543	21	Pass
NVNT	3-DH1	2480	Ant1	2.404	21	Pass



Test Graphs

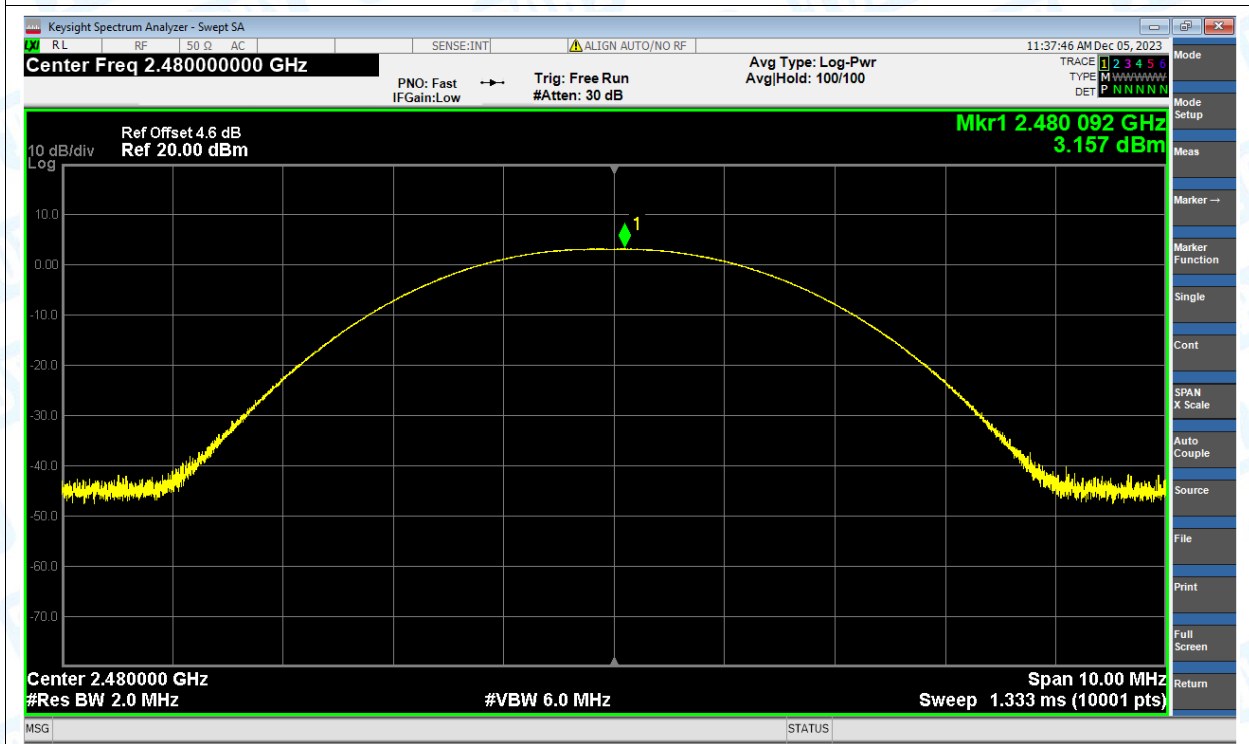
Power NVNT 1-DH1 2402MHz Ant1



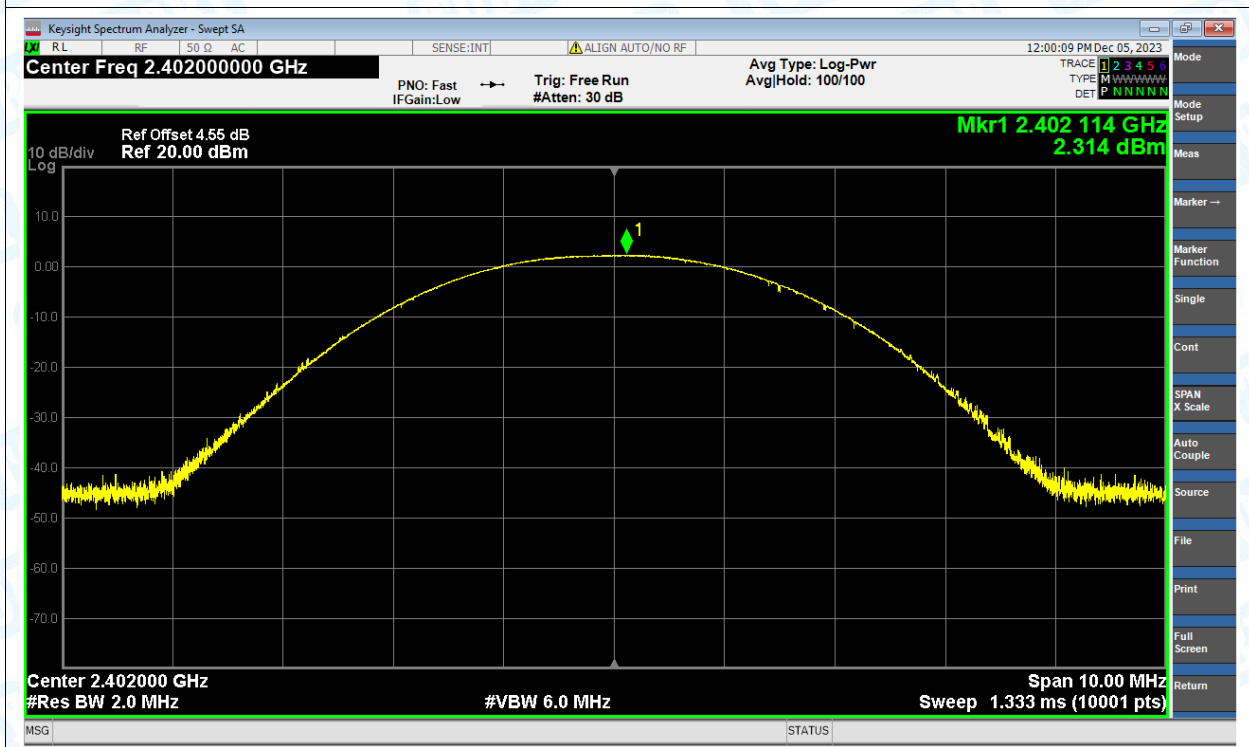
Power NVNT 1-DH1 2441MHz Ant1



Power NVNT 1-DH1 2480MHz Ant1



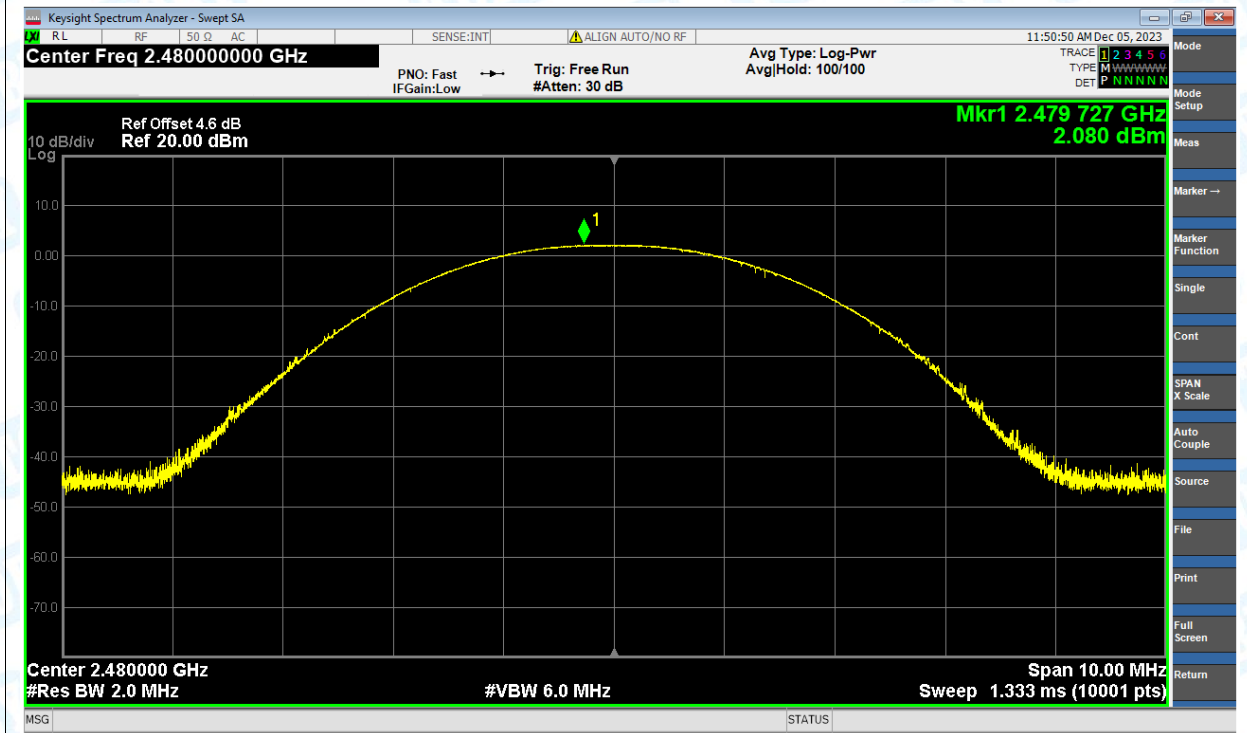
Power NVNT 2-DH1 2402MHz Ant1



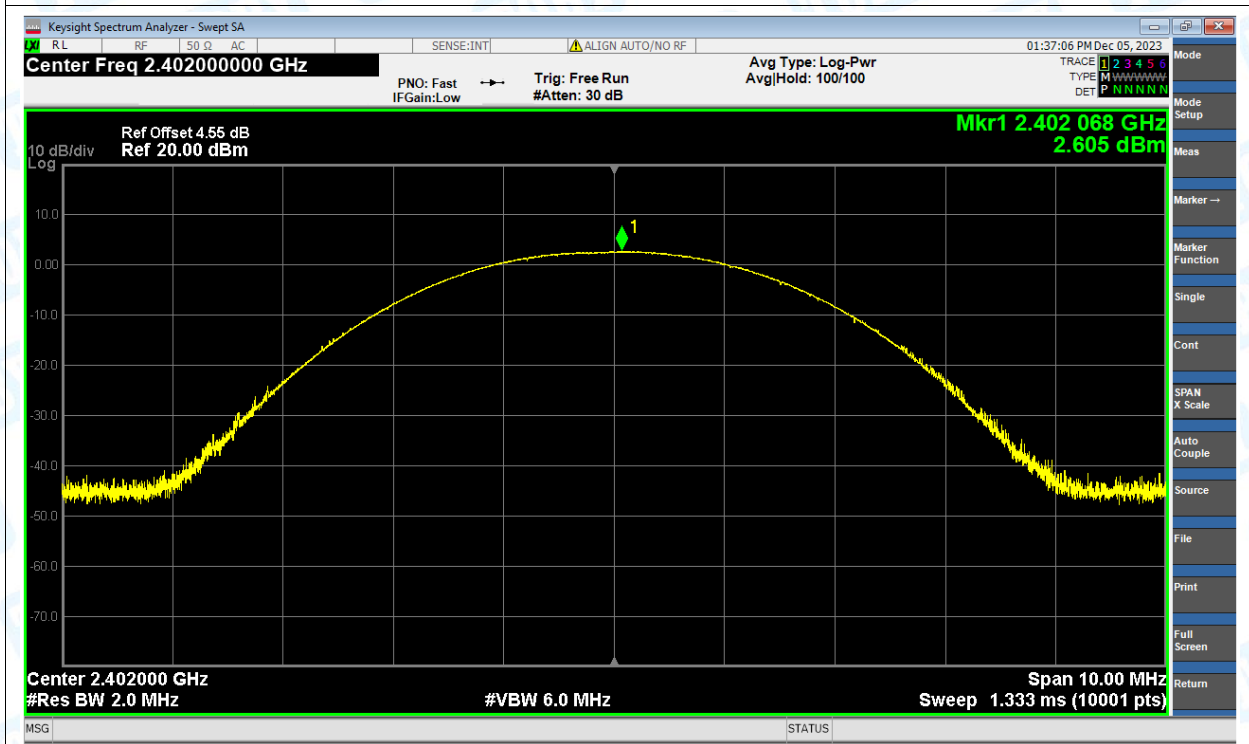
Power NVNT 2-DH1 2441MHz Ant1



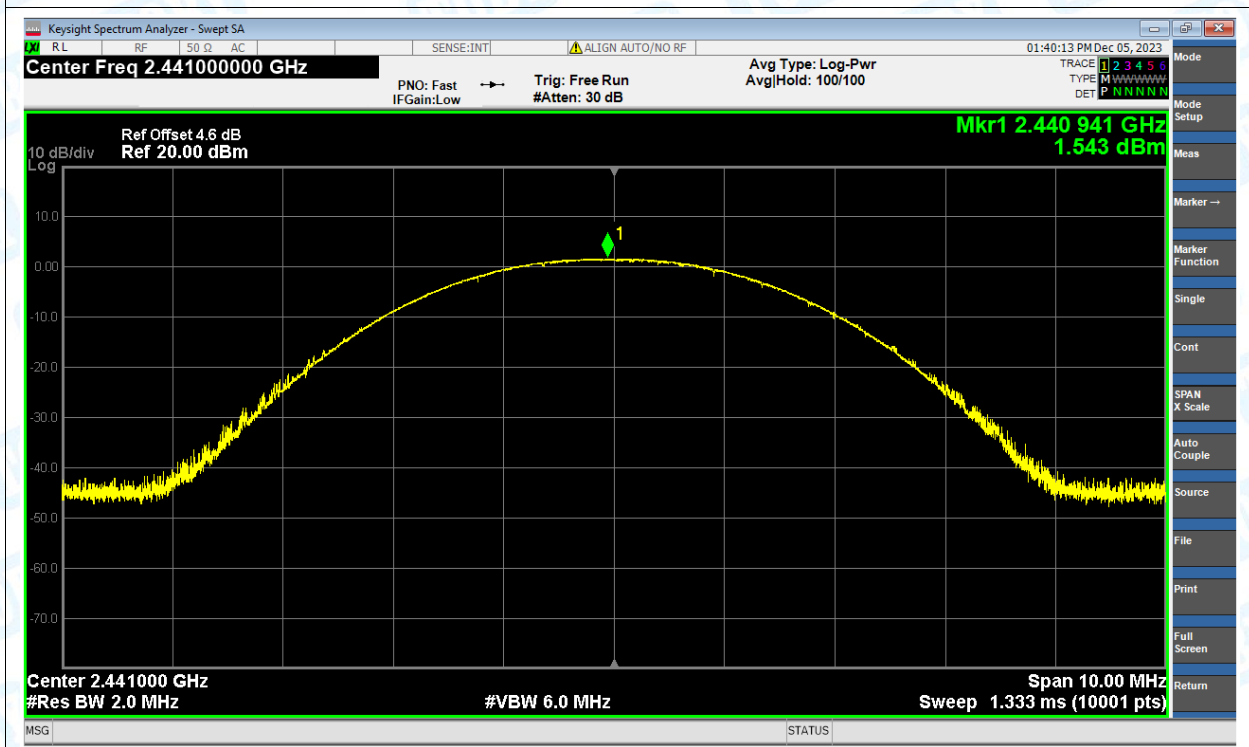
Power NVNT 2-DH1 2480MHz Ant1

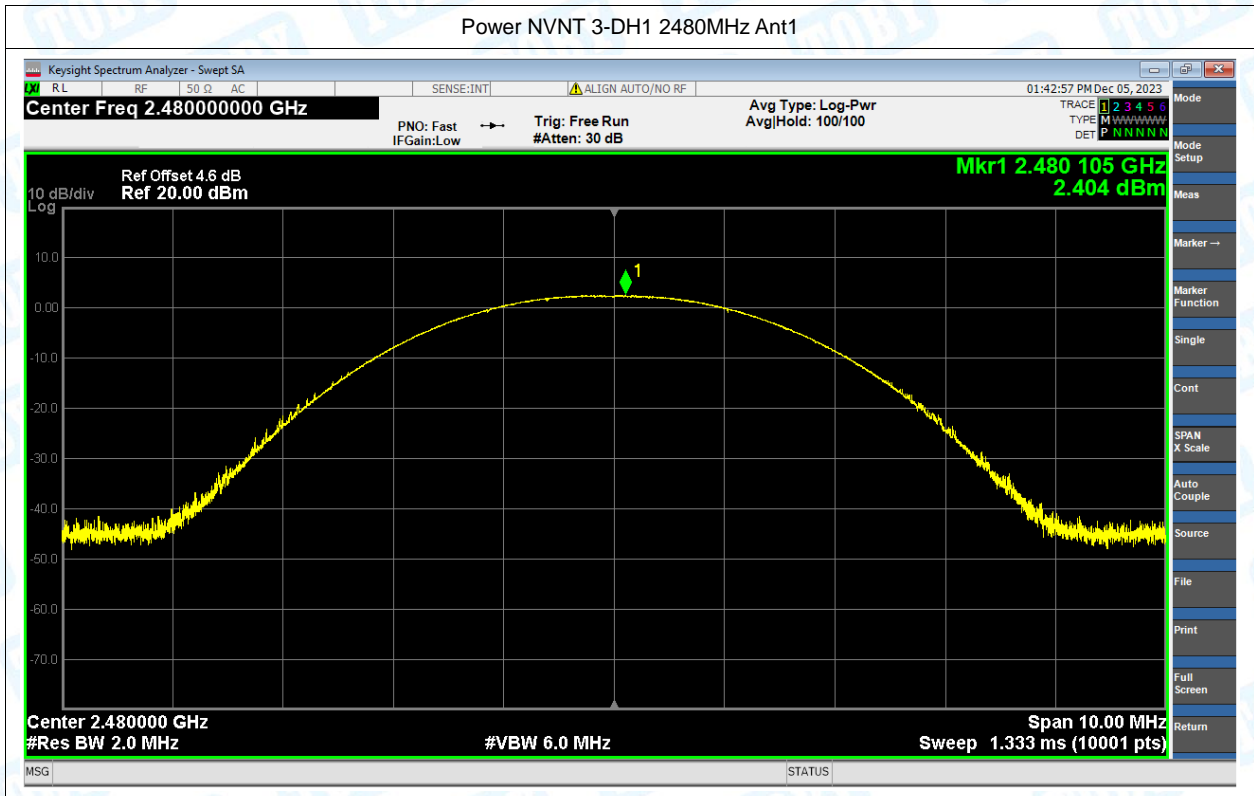


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



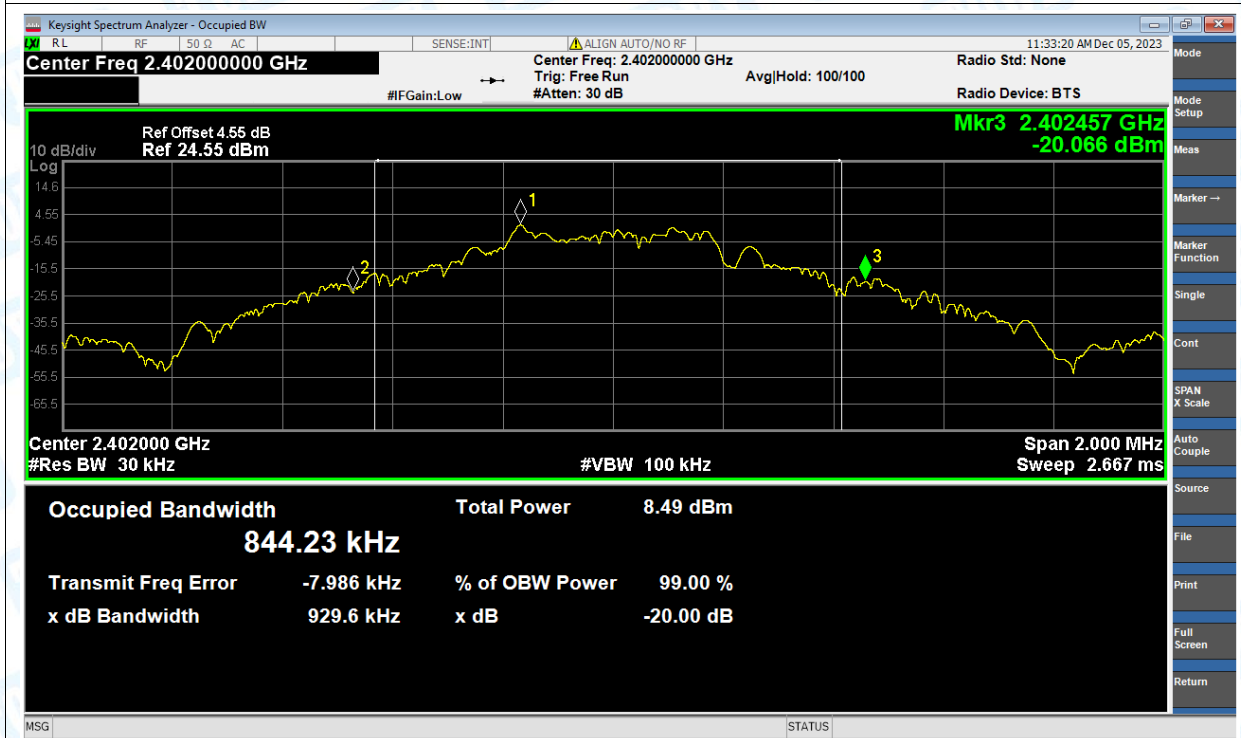


### 3. -20dB Bandwidth

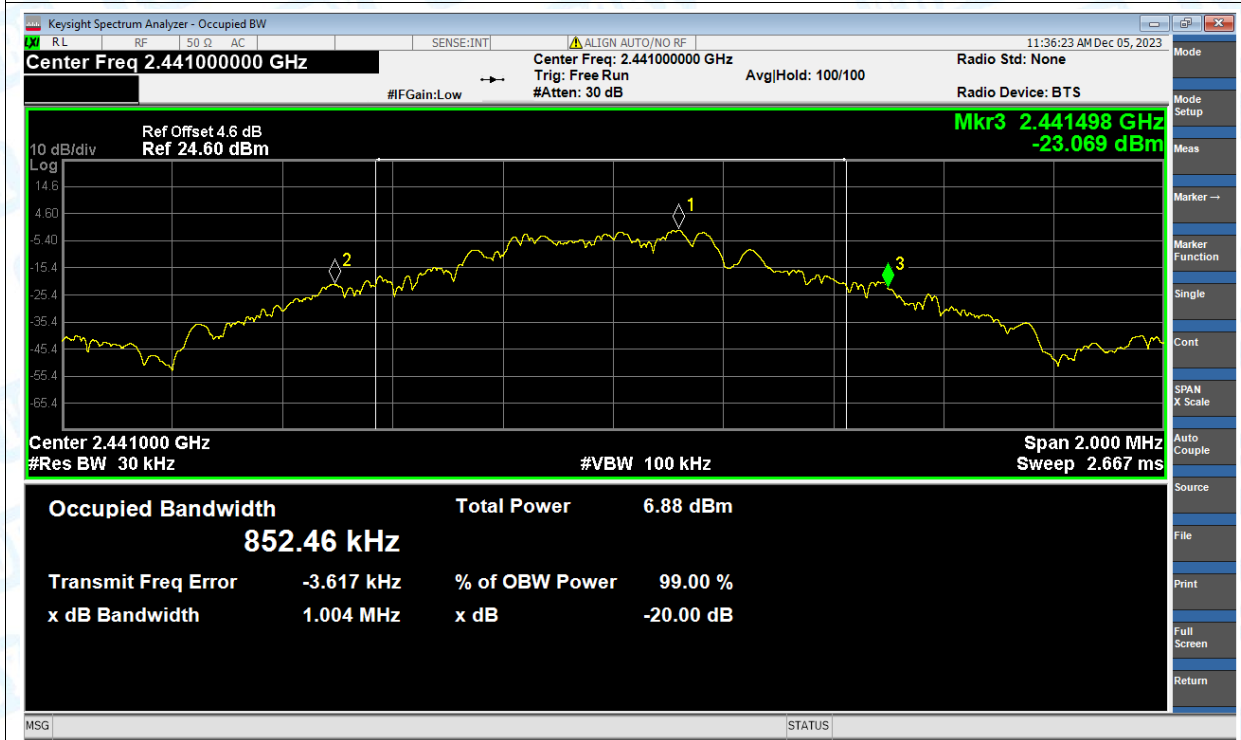
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.93	----	Pass
NVNT	1-DH1	2441	Ant1	1.00	----	Pass
NVNT	1-DH1	2480	Ant1	0.93	----	Pass
NVNT	2-DH1	2402	Ant1	1.28	----	Pass
NVNT	2-DH1	2441	Ant1	1.28	----	Pass
NVNT	2-DH1	2480	Ant1	1.28	----	Pass
NVNT	3-DH1	2402	Ant1	1.26	----	Pass
NVNT	3-DH1	2441	Ant1	1.23	----	Pass
NVNT	3-DH1	2480	Ant1	1.26	----	Pass

Test Graphs

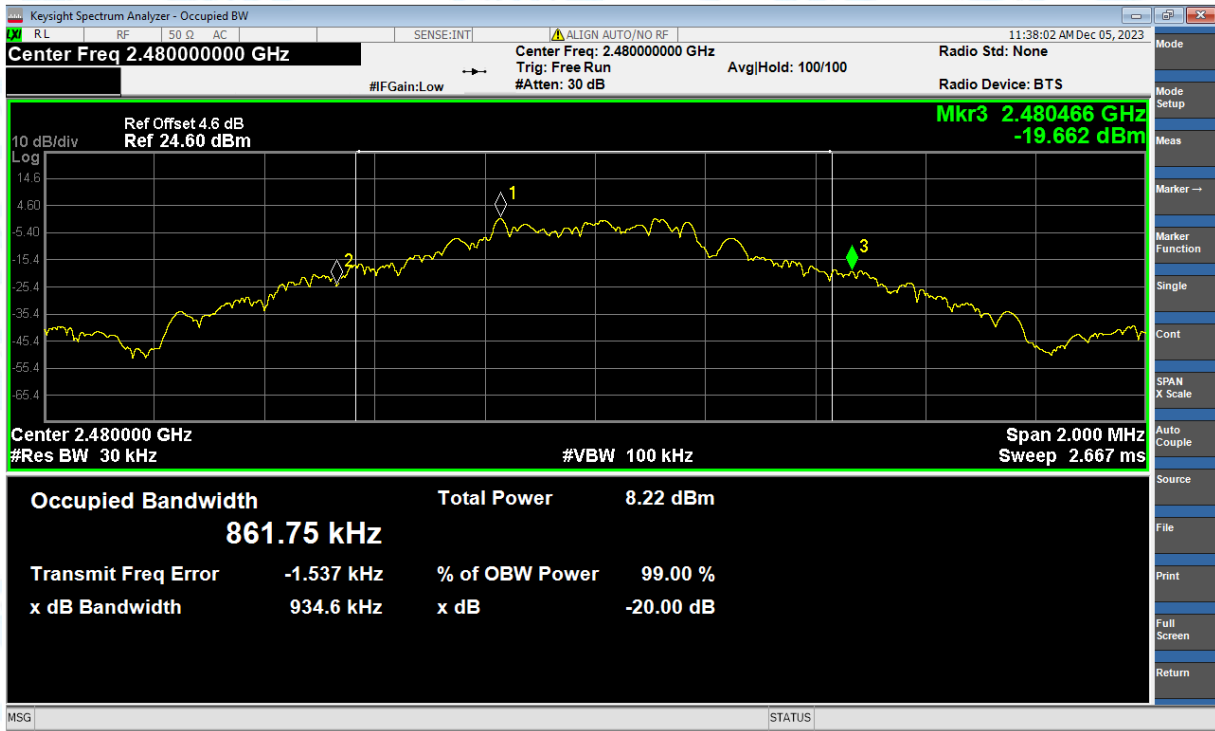
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



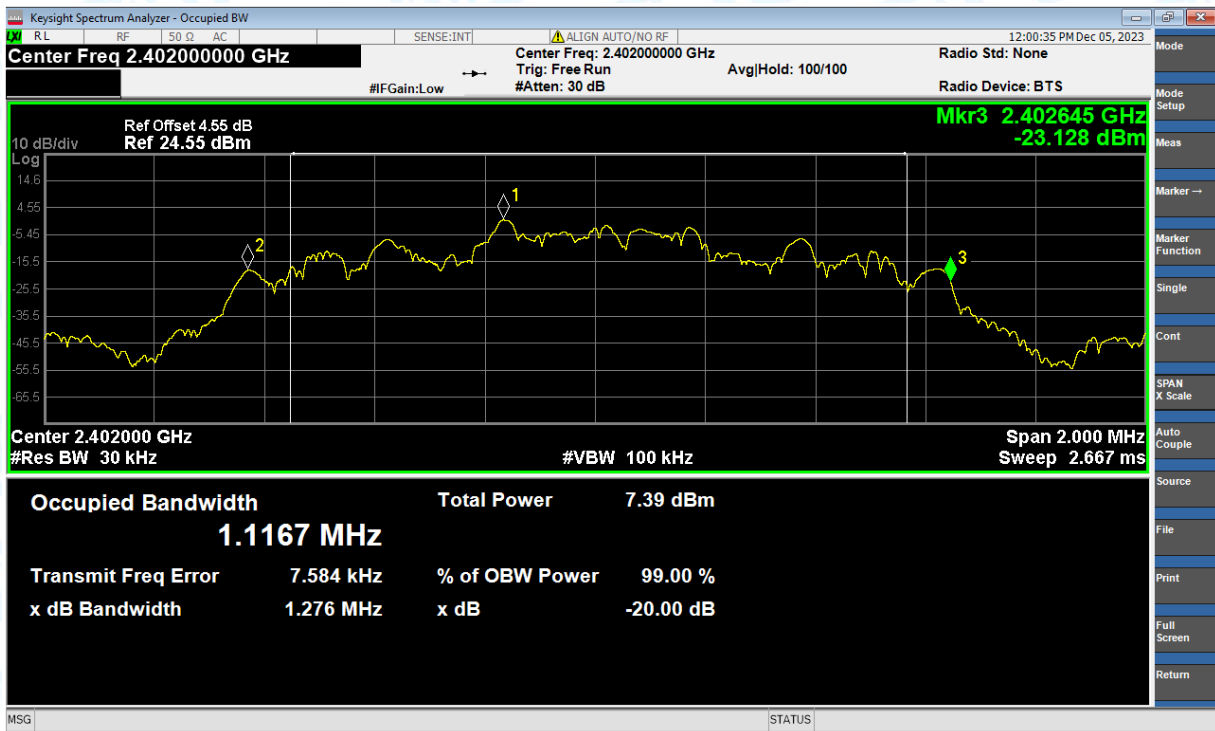
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1

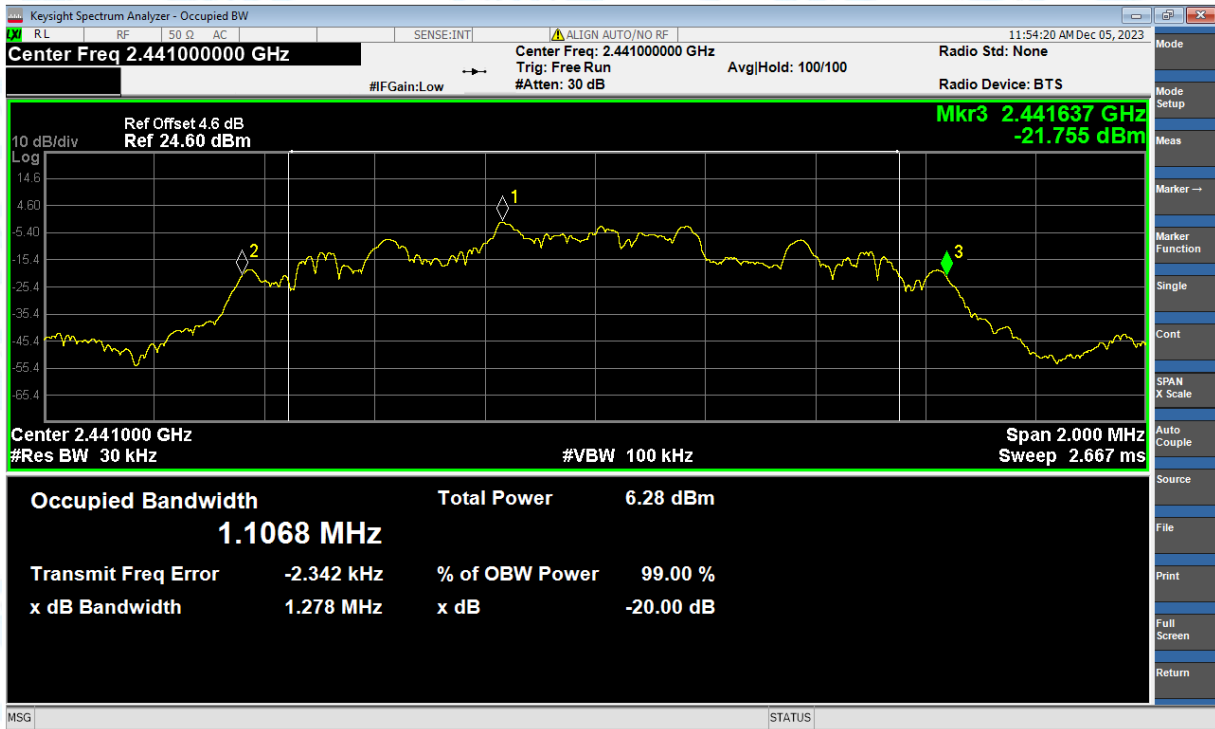


-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1

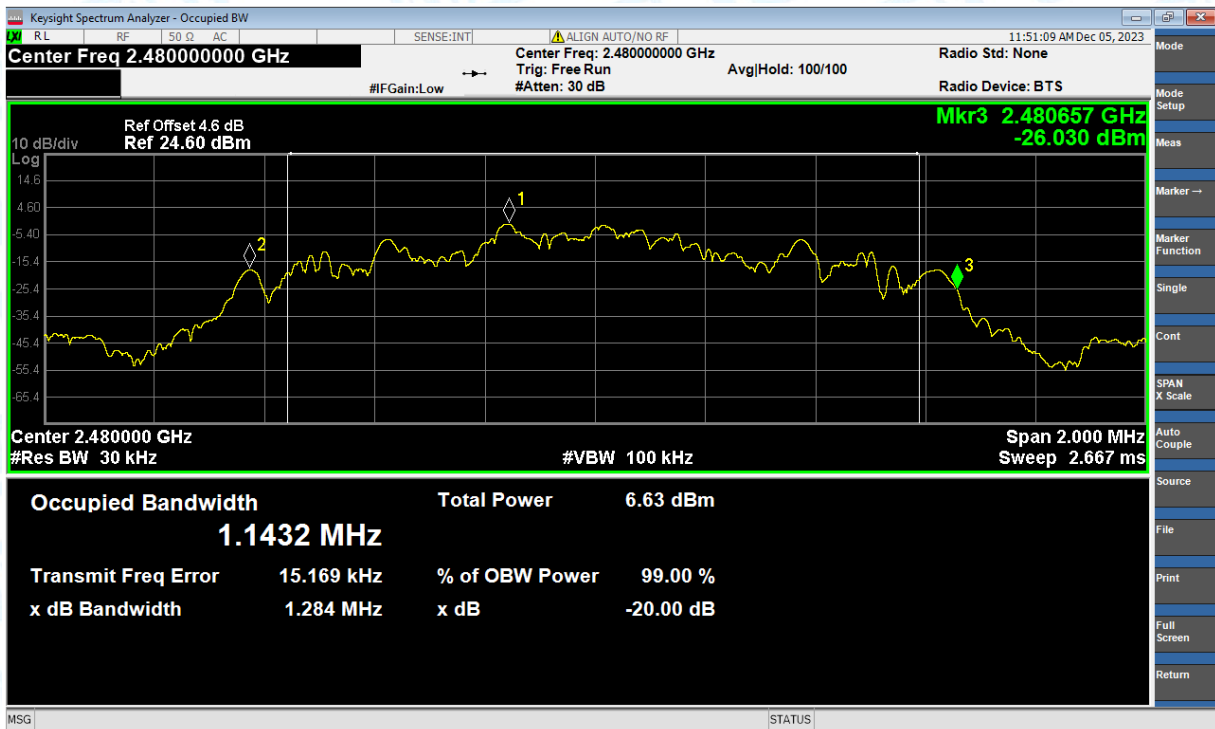




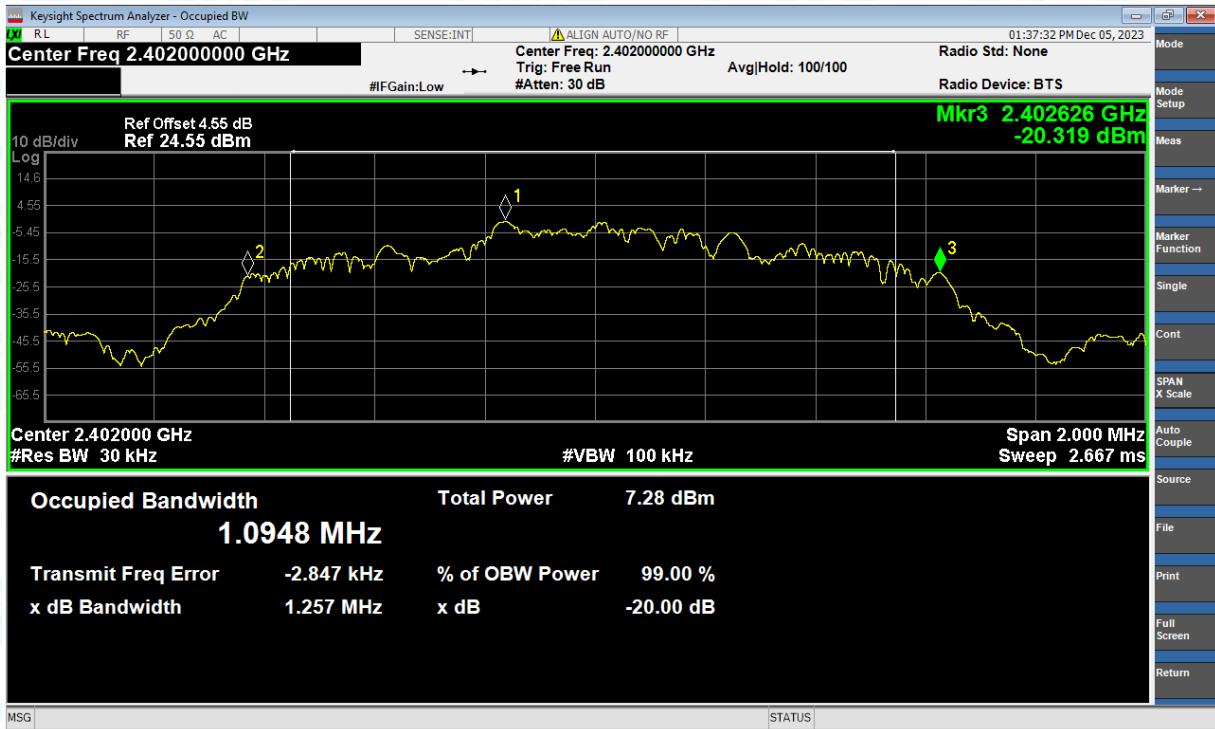
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



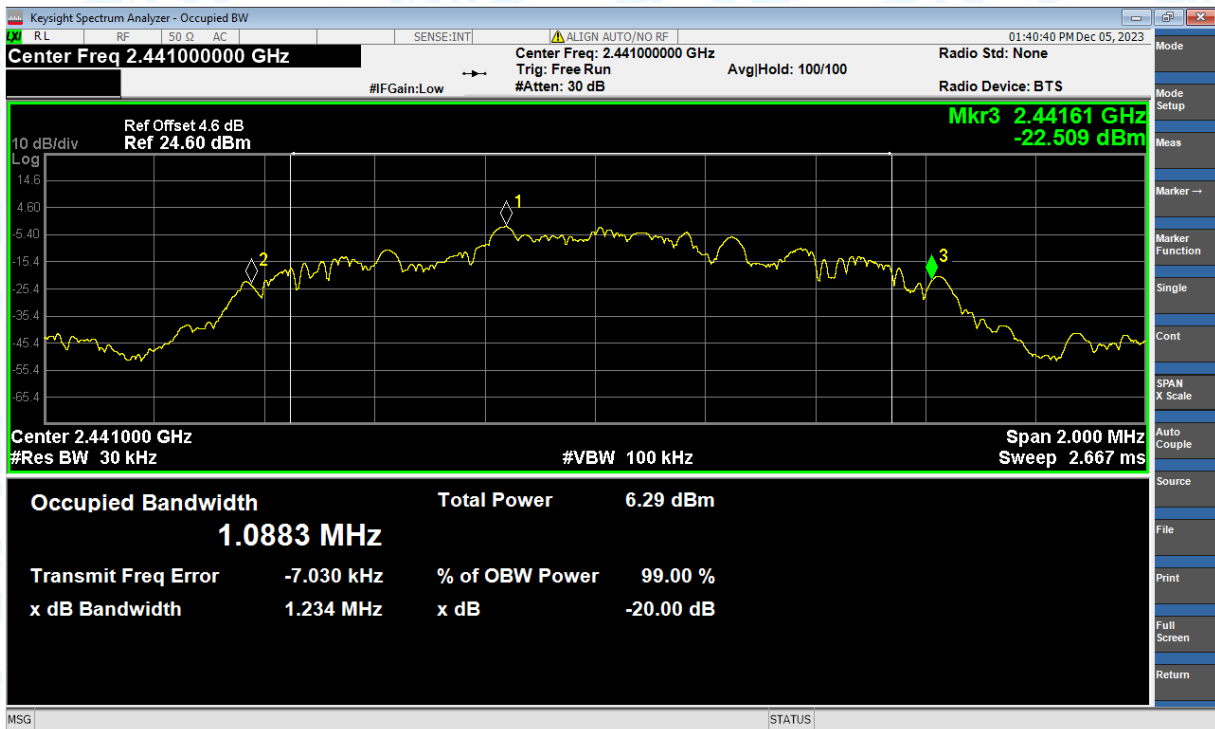
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

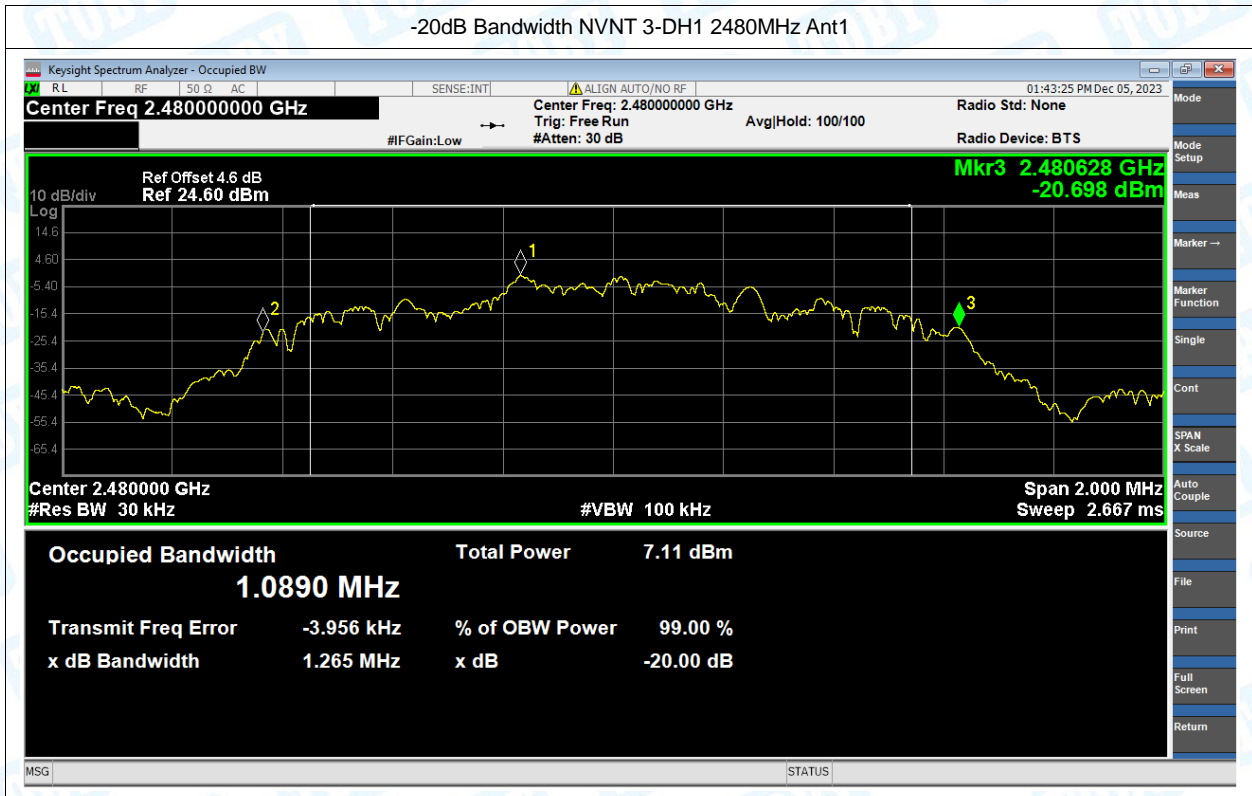


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



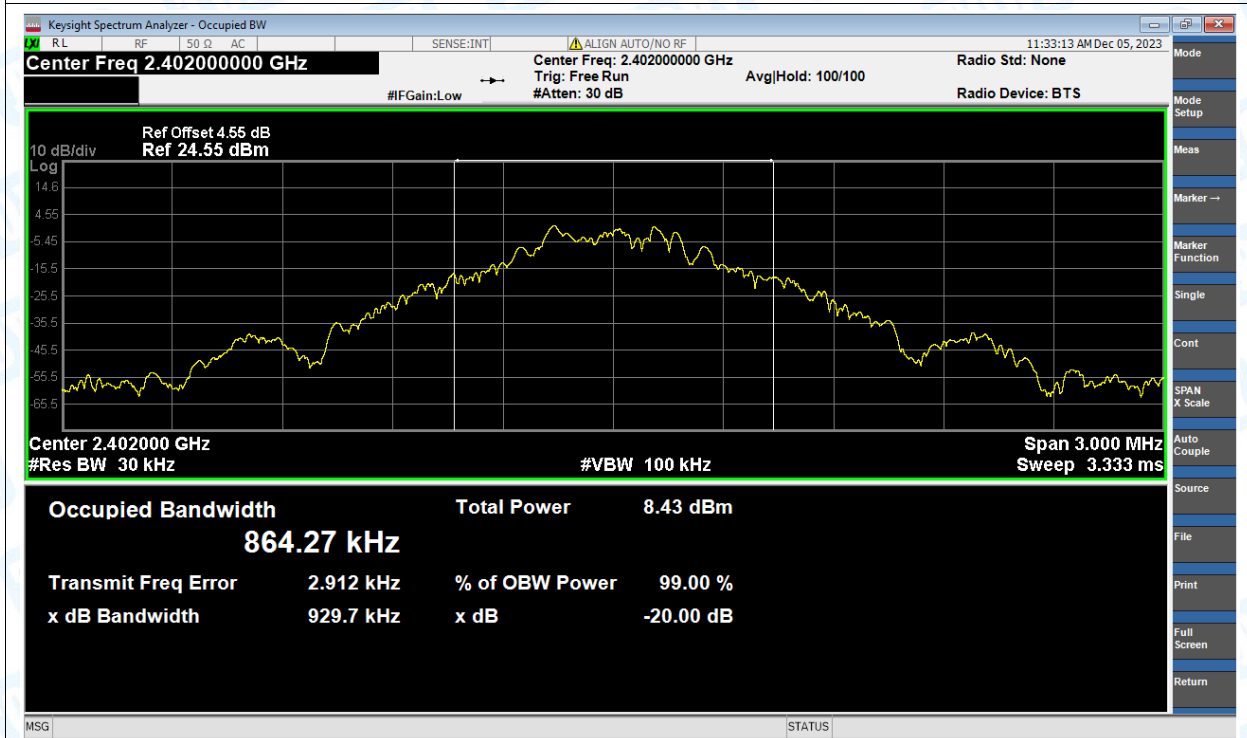


## 4. Occupied Channel Bandwidth

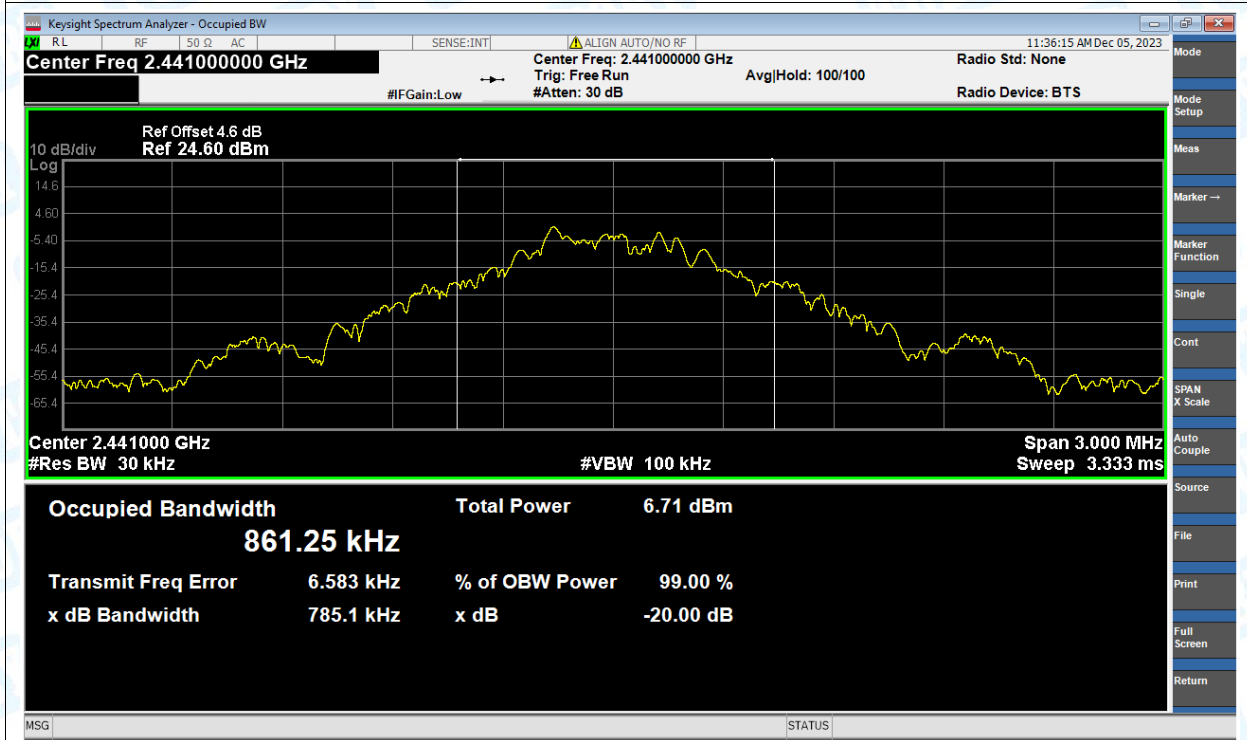
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.864
NVNT	1-DH1	2441	Ant1	0.861
NVNT	1-DH1	2480	Ant1	0.860
NVNT	2-DH1	2402	Ant1	1.099
NVNT	2-DH1	2441	Ant1	1.103
NVNT	2-DH1	2480	Ant1	1.099
NVNT	3-DH1	2402	Ant1	1.096
NVNT	3-DH1	2441	Ant1	1.093
NVNT	3-DH1	2480	Ant1	1.080

Test Graphs

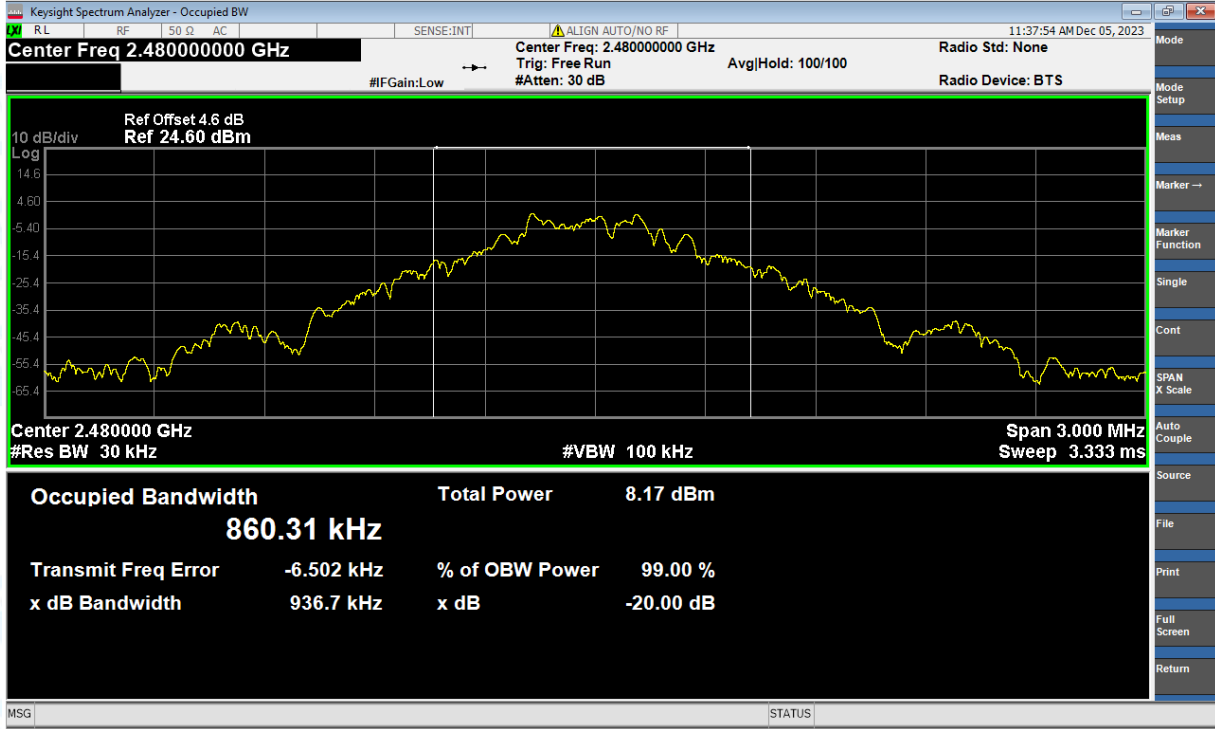
OBW NVNT 1-DH1 2402MHz Ant1



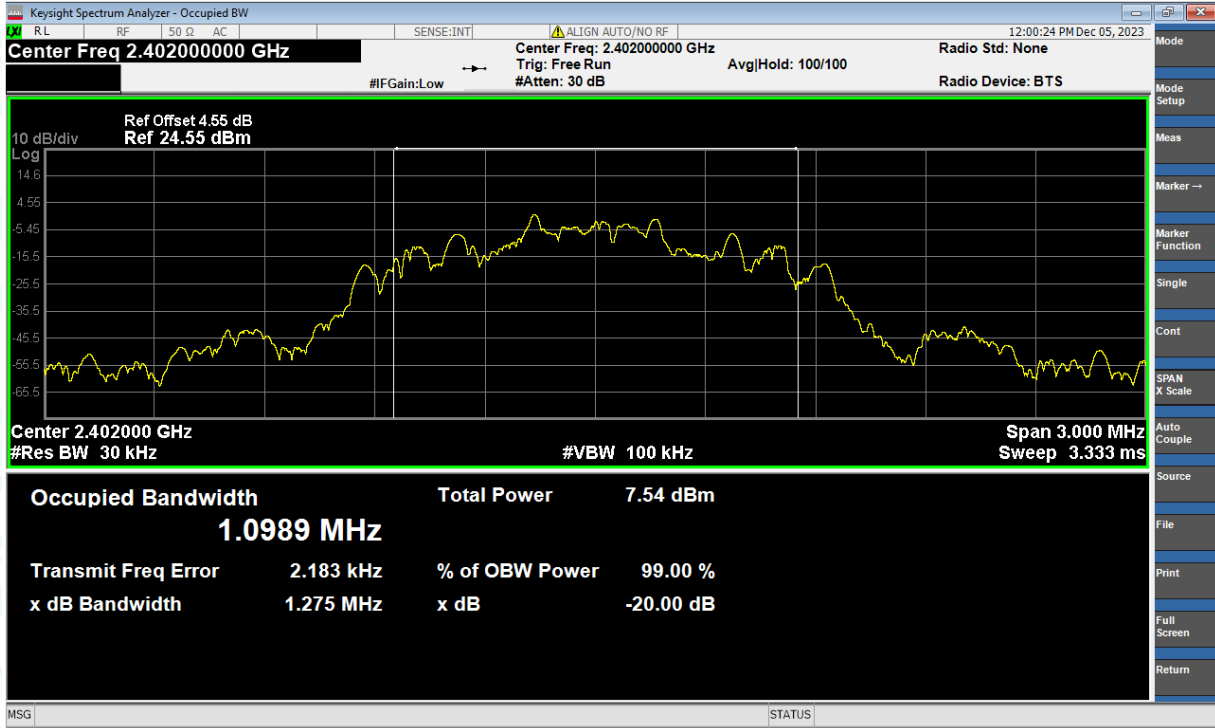
OBW NVNT 1-DH1 2441MHz Ant1



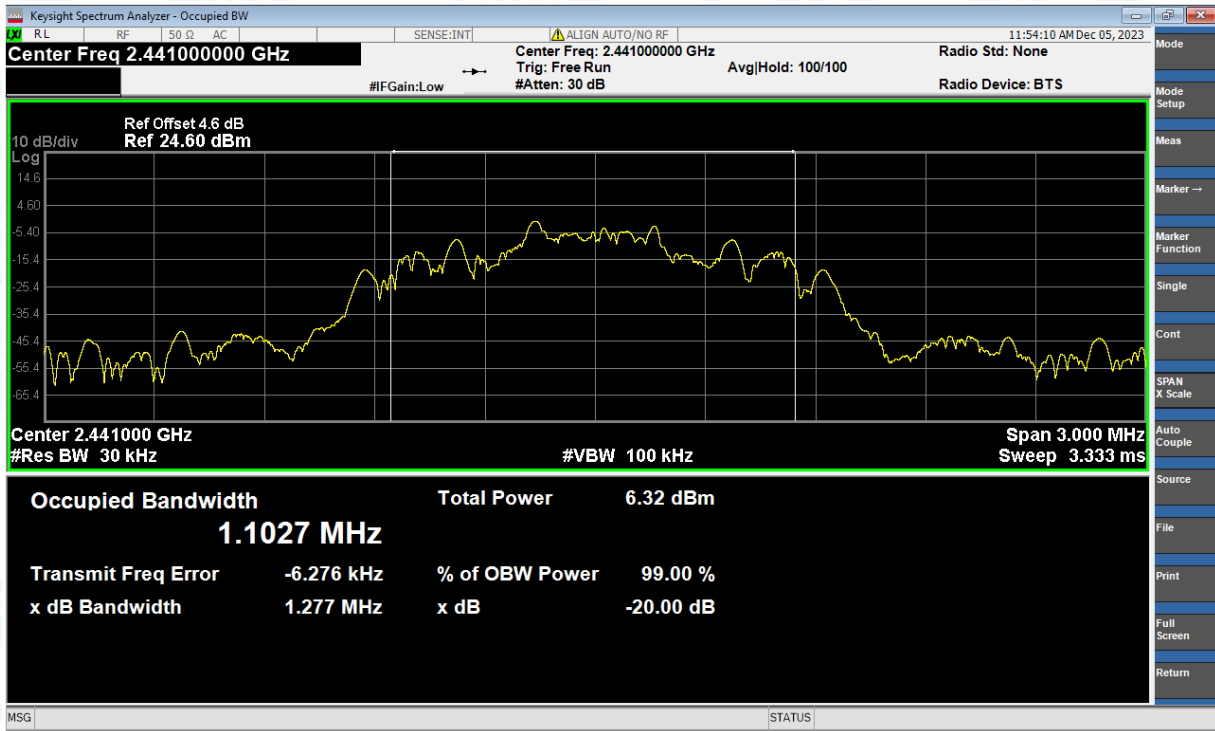
OBW NVNT 1-DH1 2480MHz Ant1



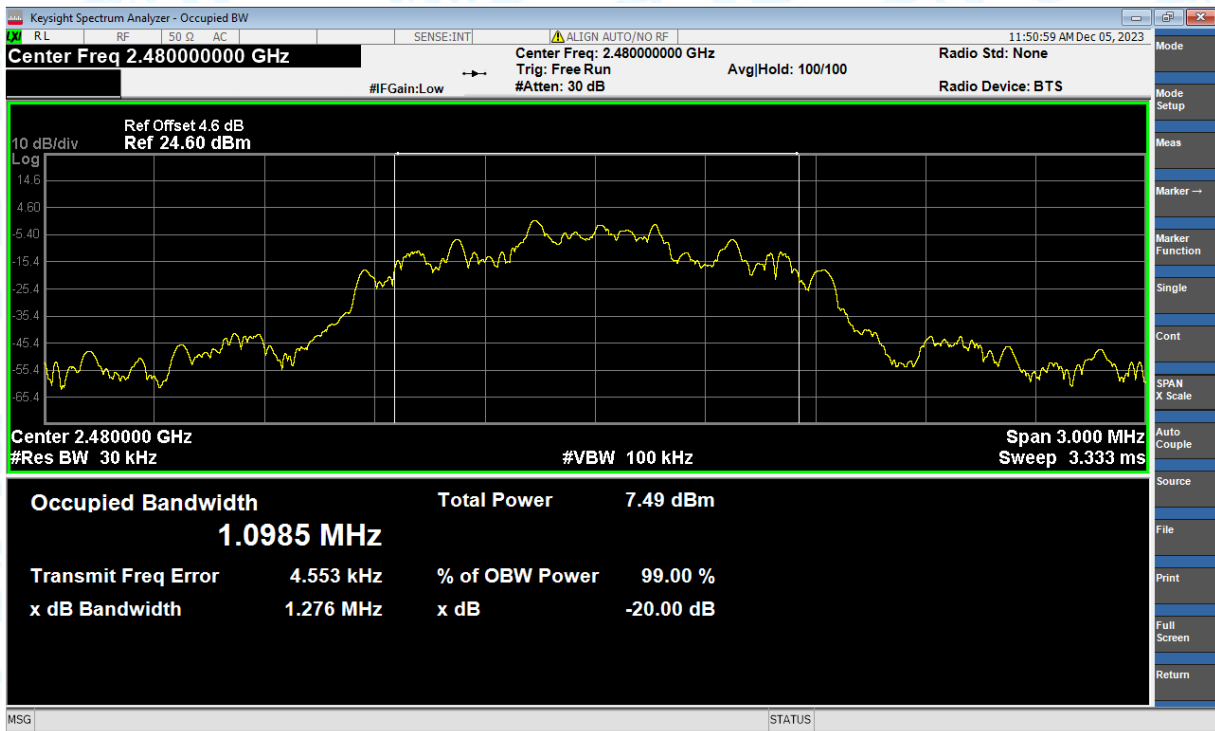
OBW NVNT 2-DH1 2402MHz Ant1



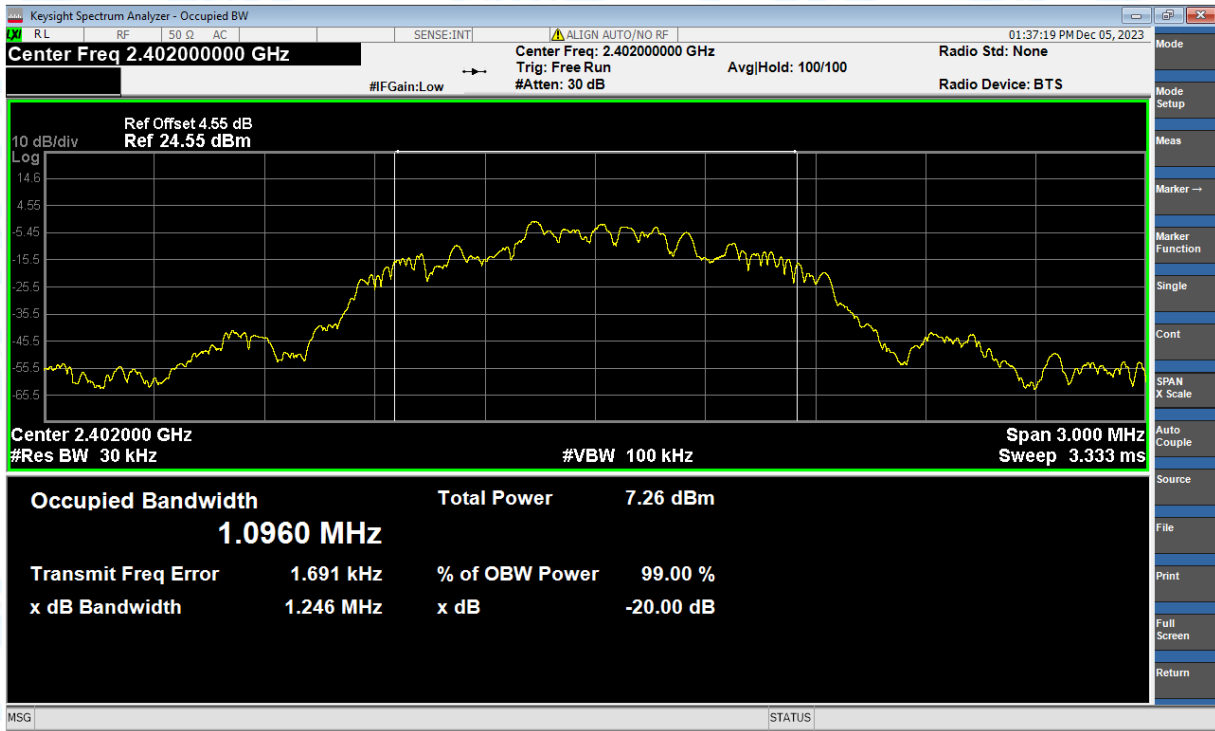
OBW NVNT 2-DH1 2441MHz Ant1



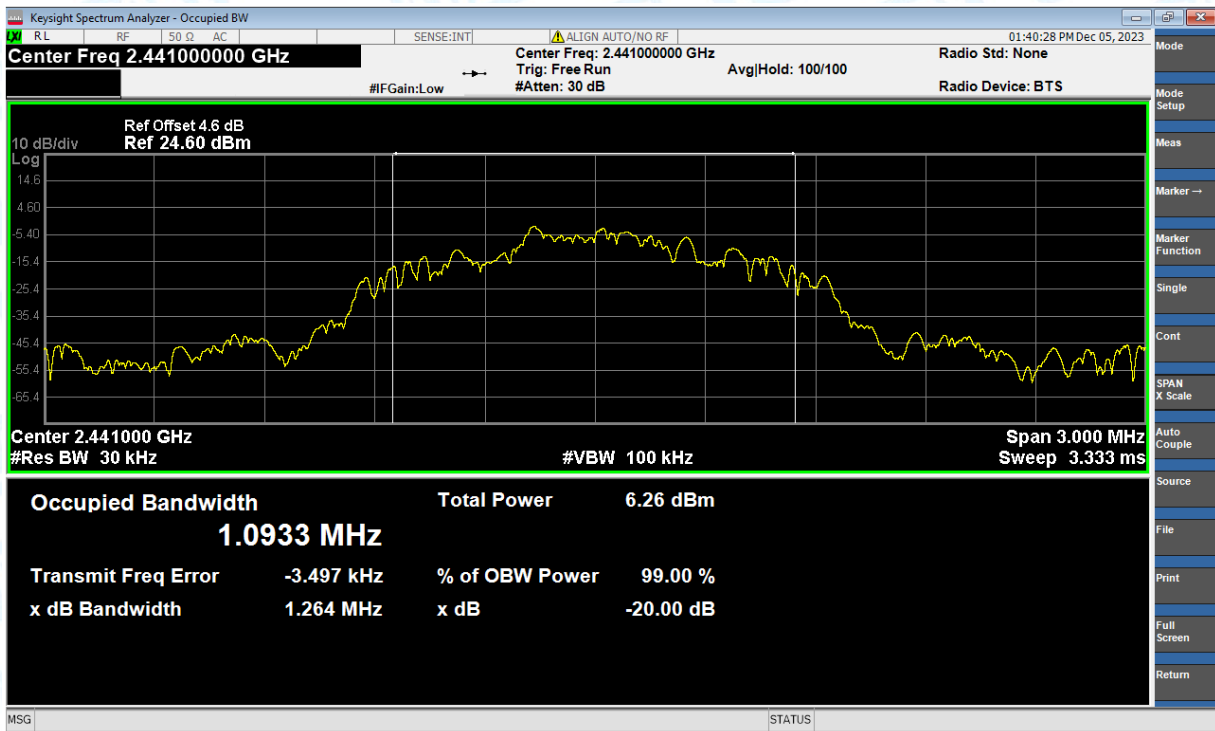
OBW NVNT 2-DH1 2480MHz Ant1



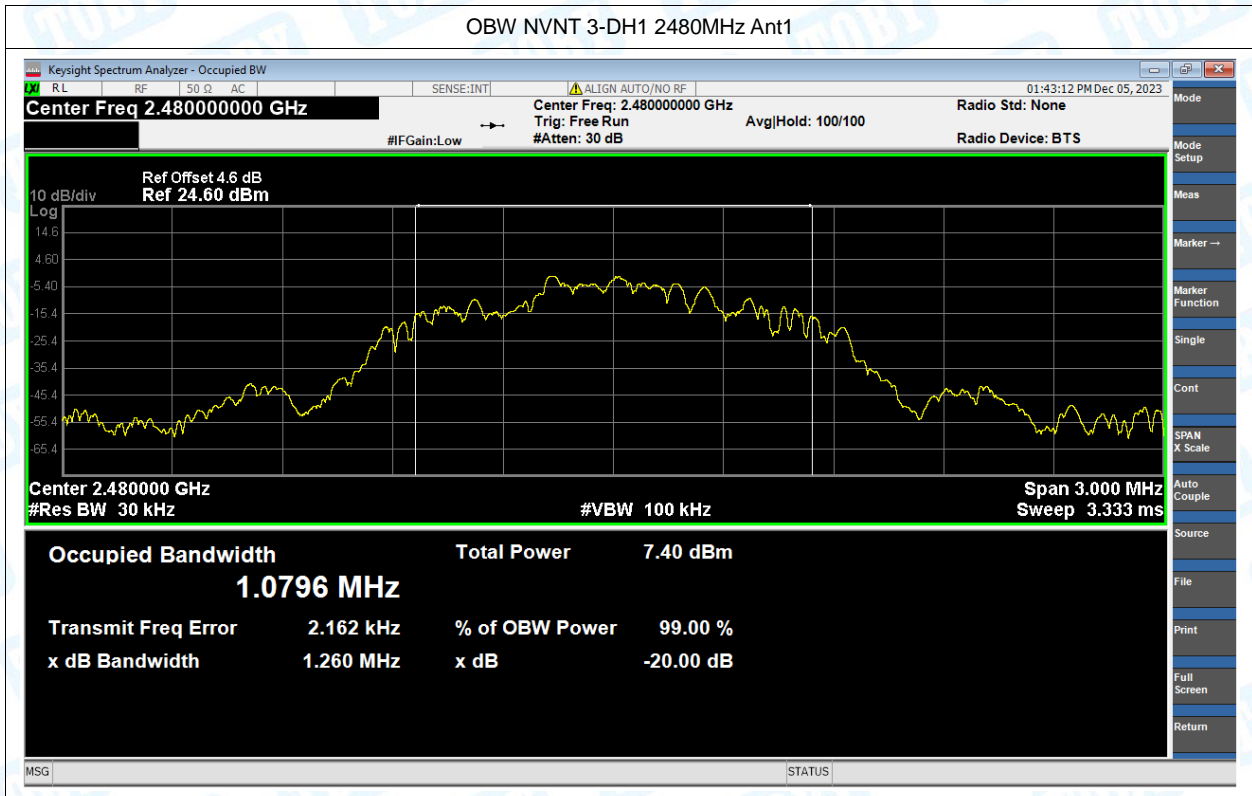
OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1





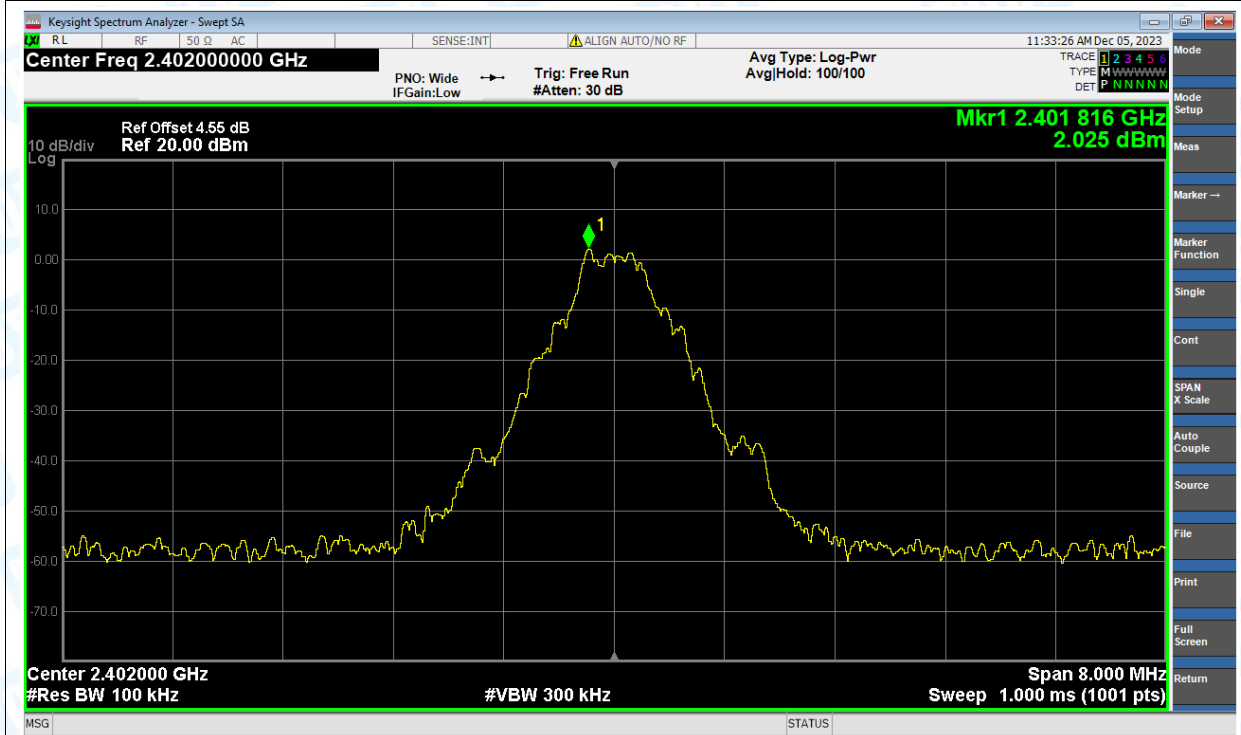


## 5. Band Edge

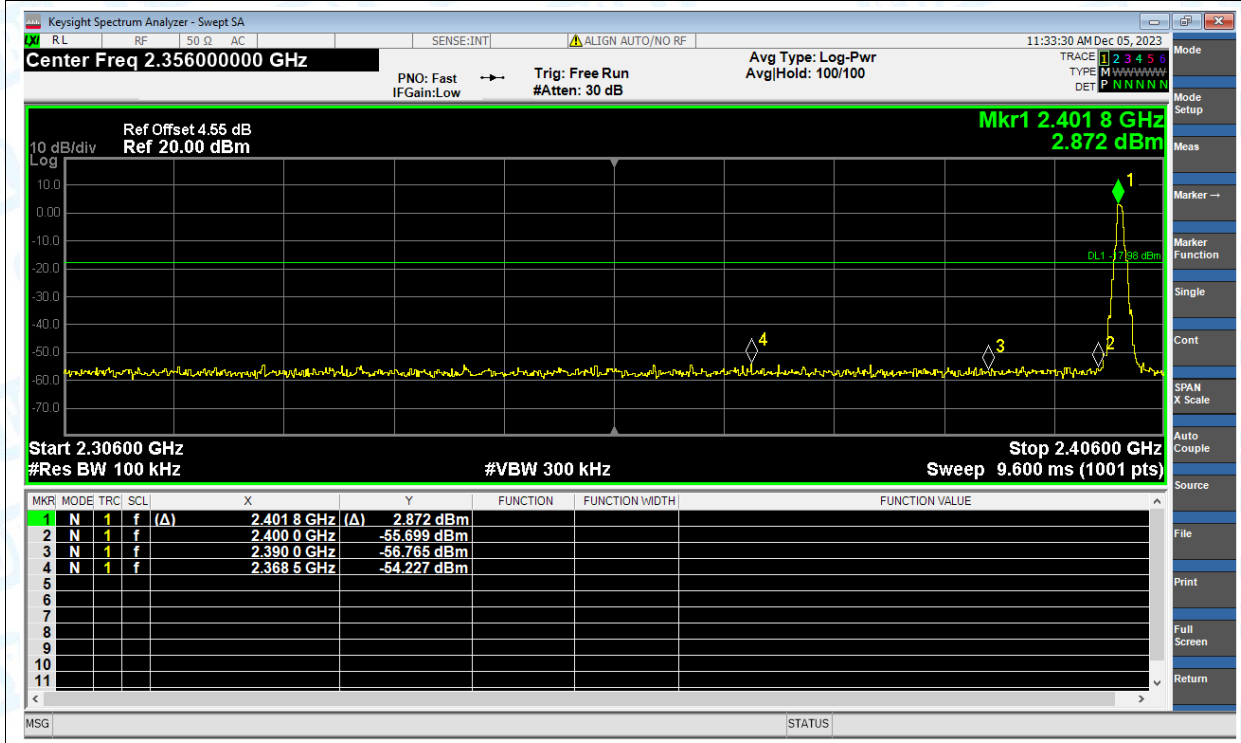
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-56.26	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-56.42	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-56.00	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-56.38	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-56.34	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.77	-20	Pass

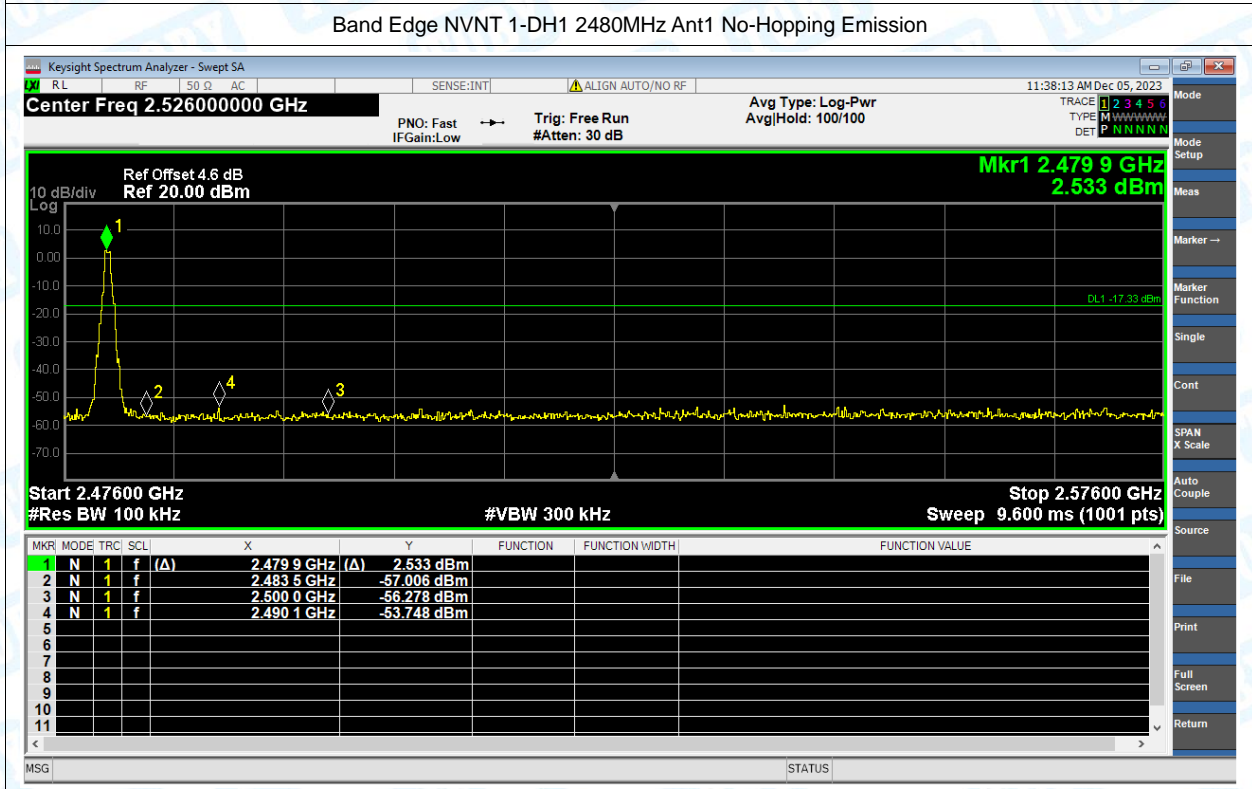
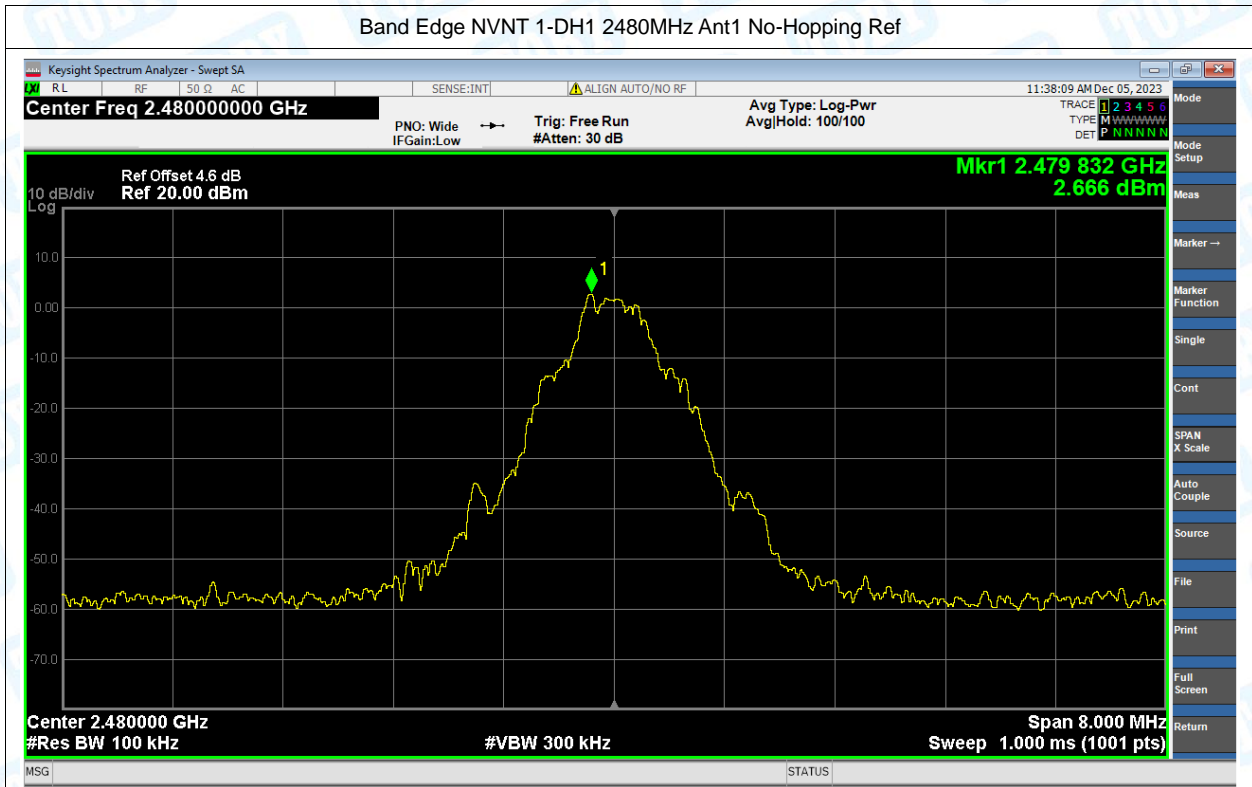
Test Graphs

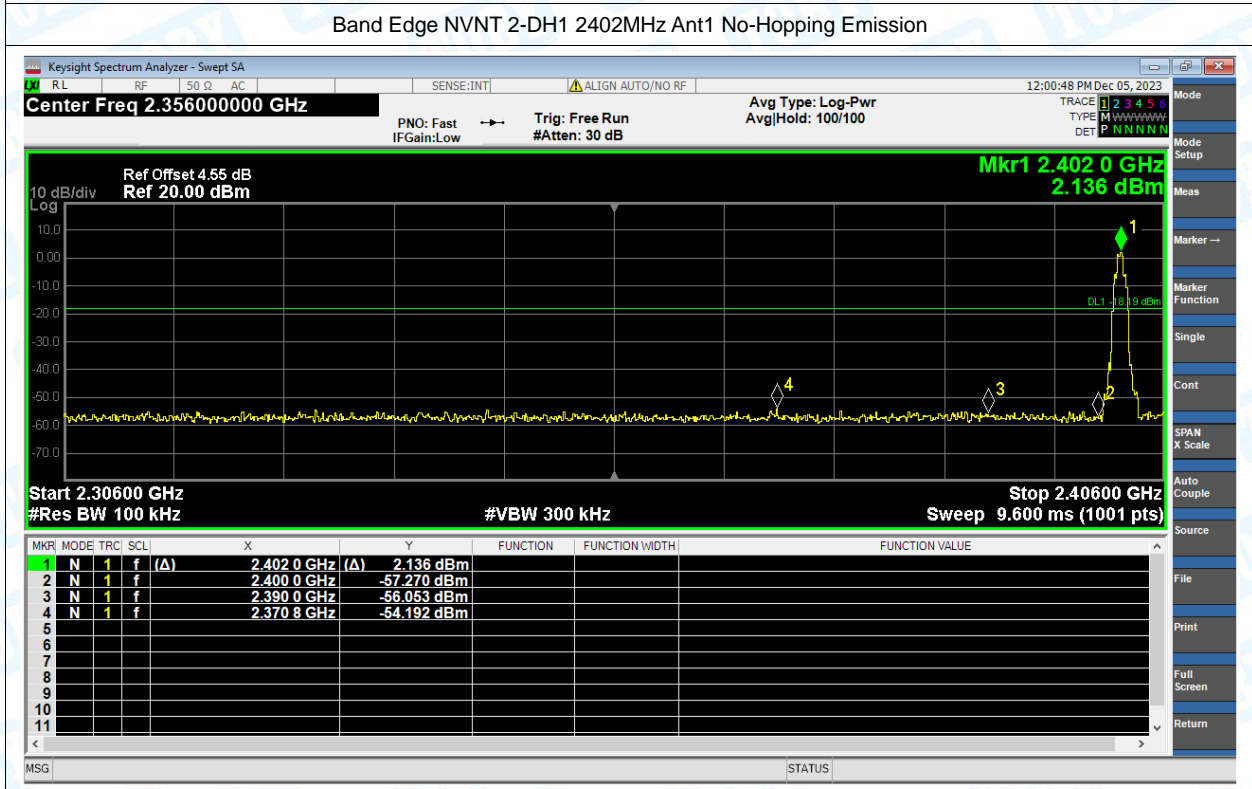
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref

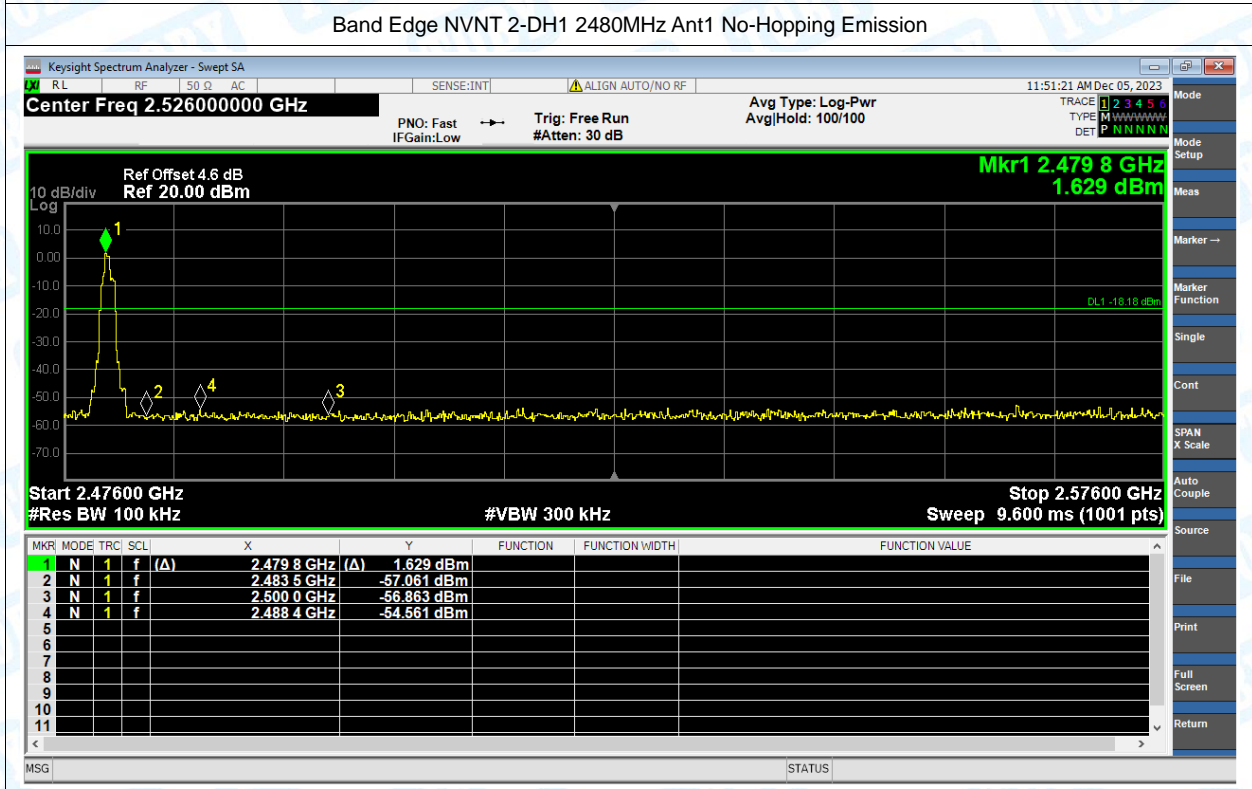
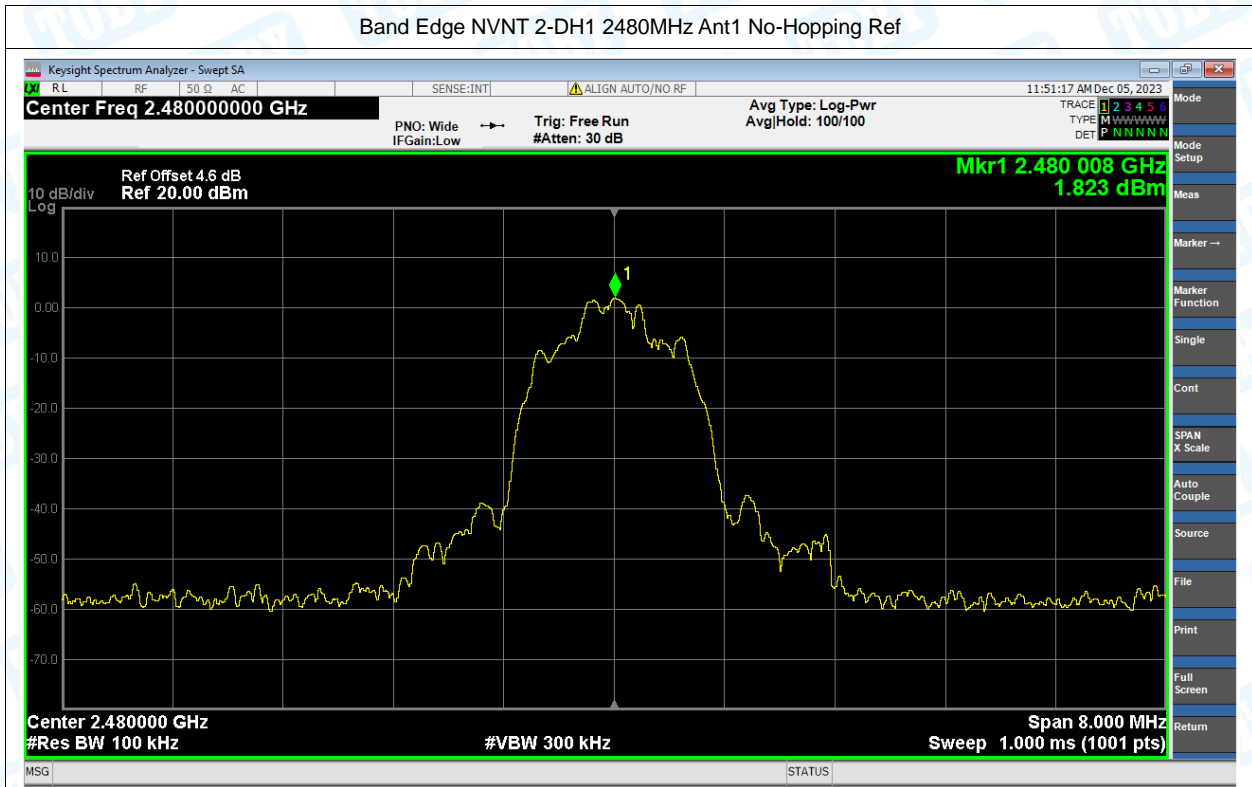


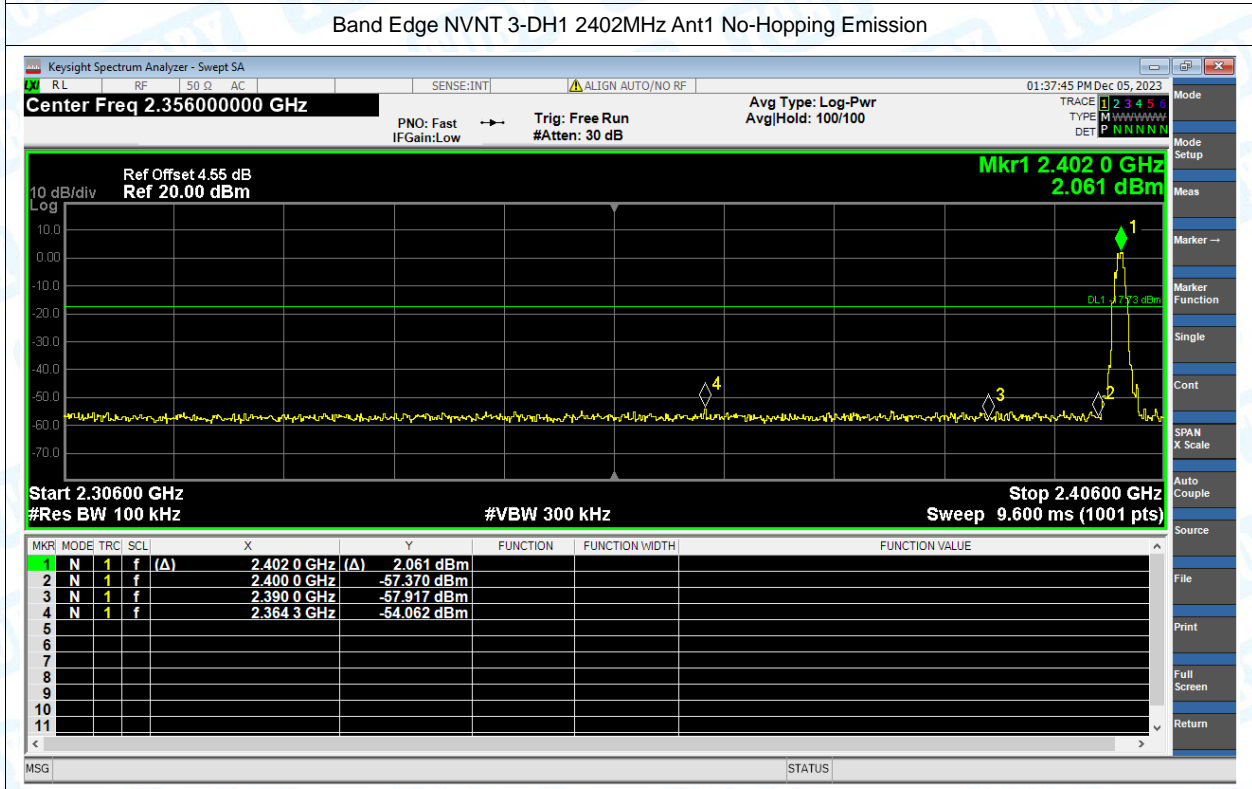
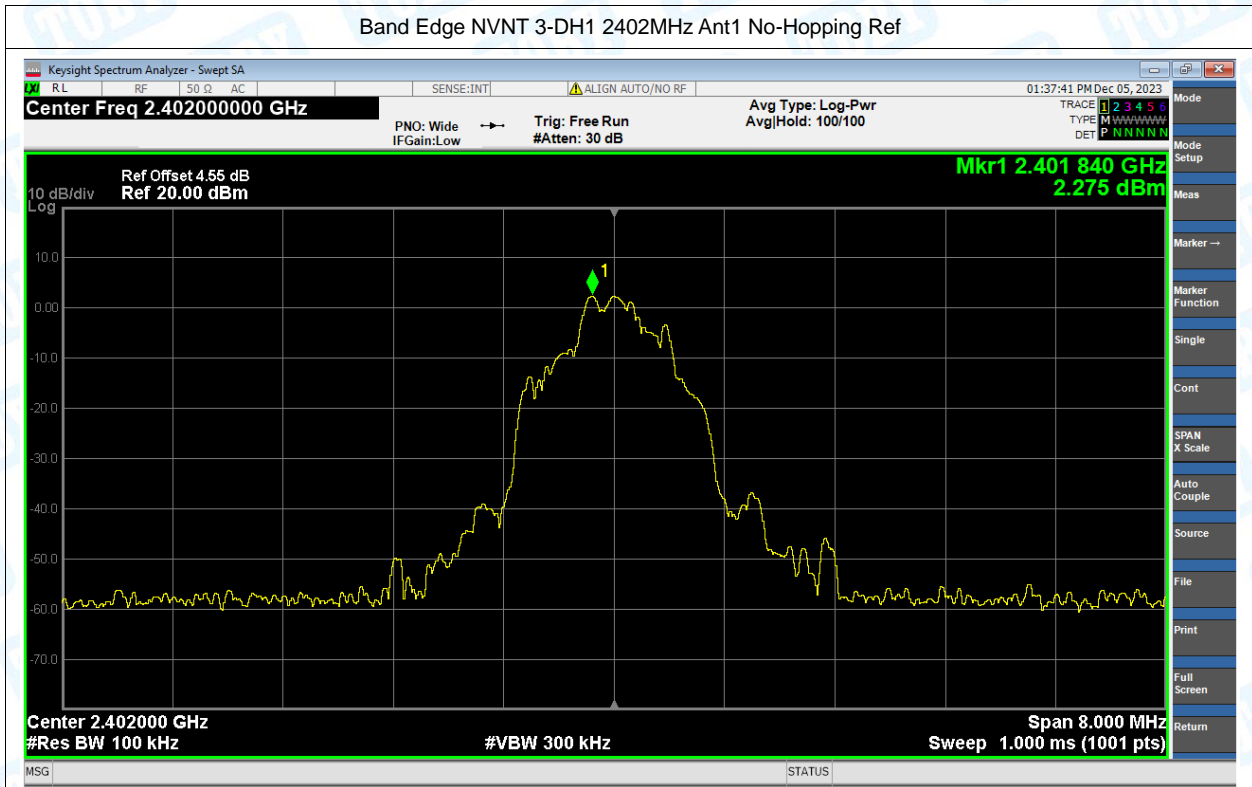
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



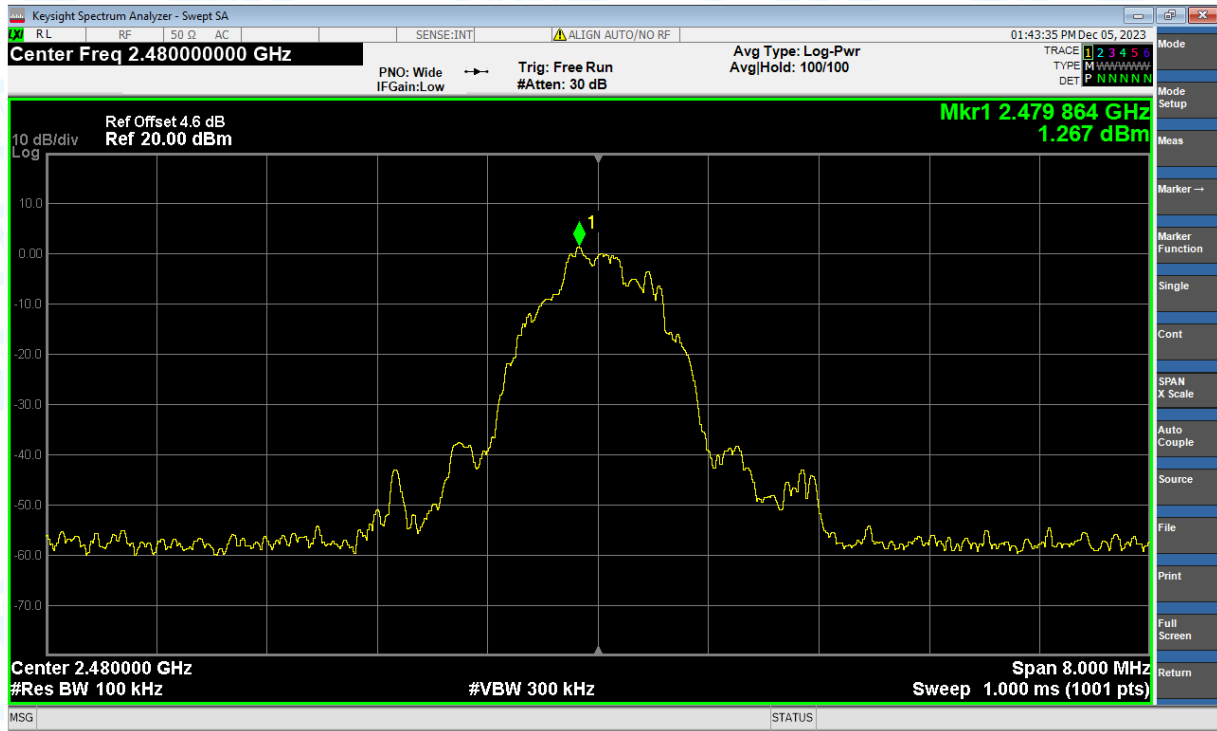




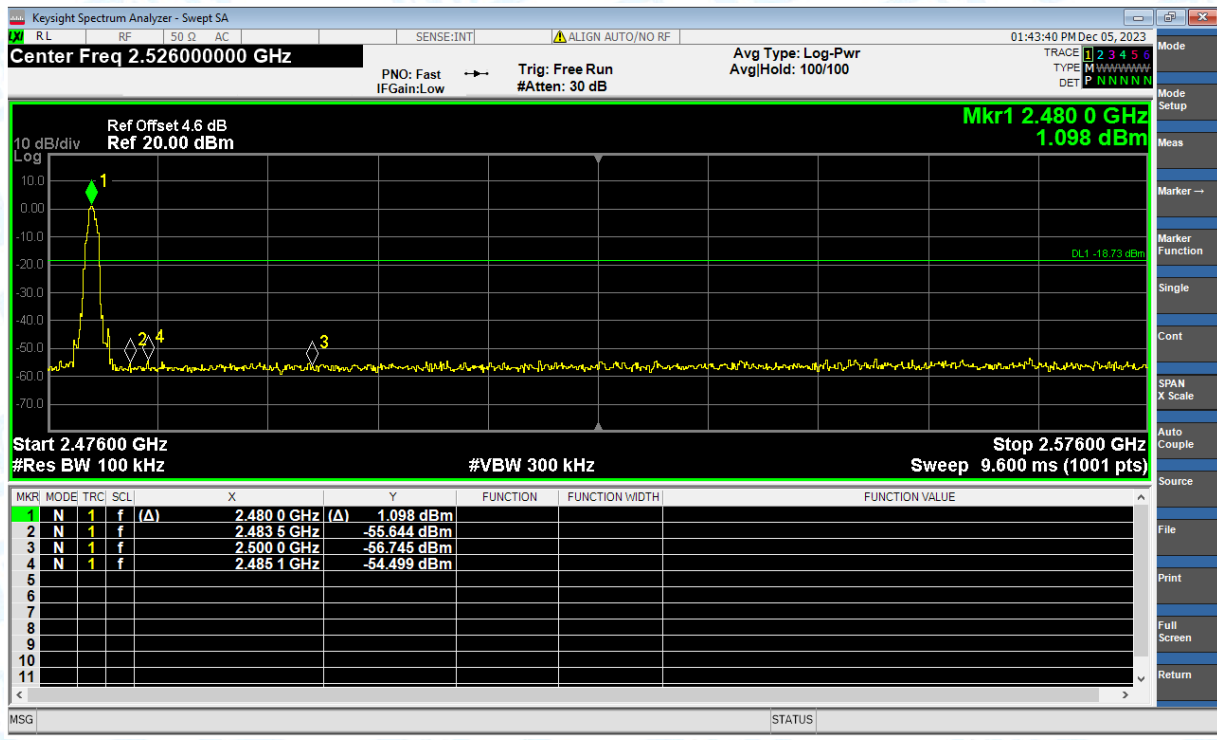




Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



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



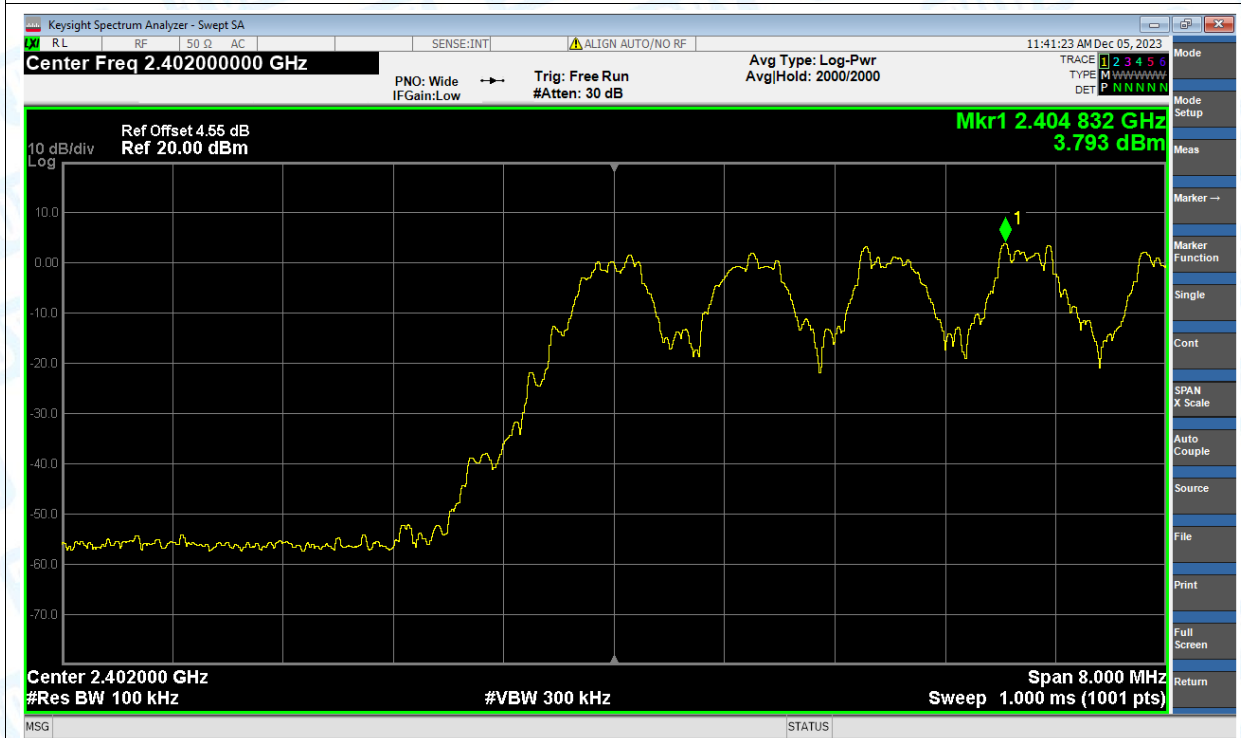


## 6. Band Edge(Hopping)

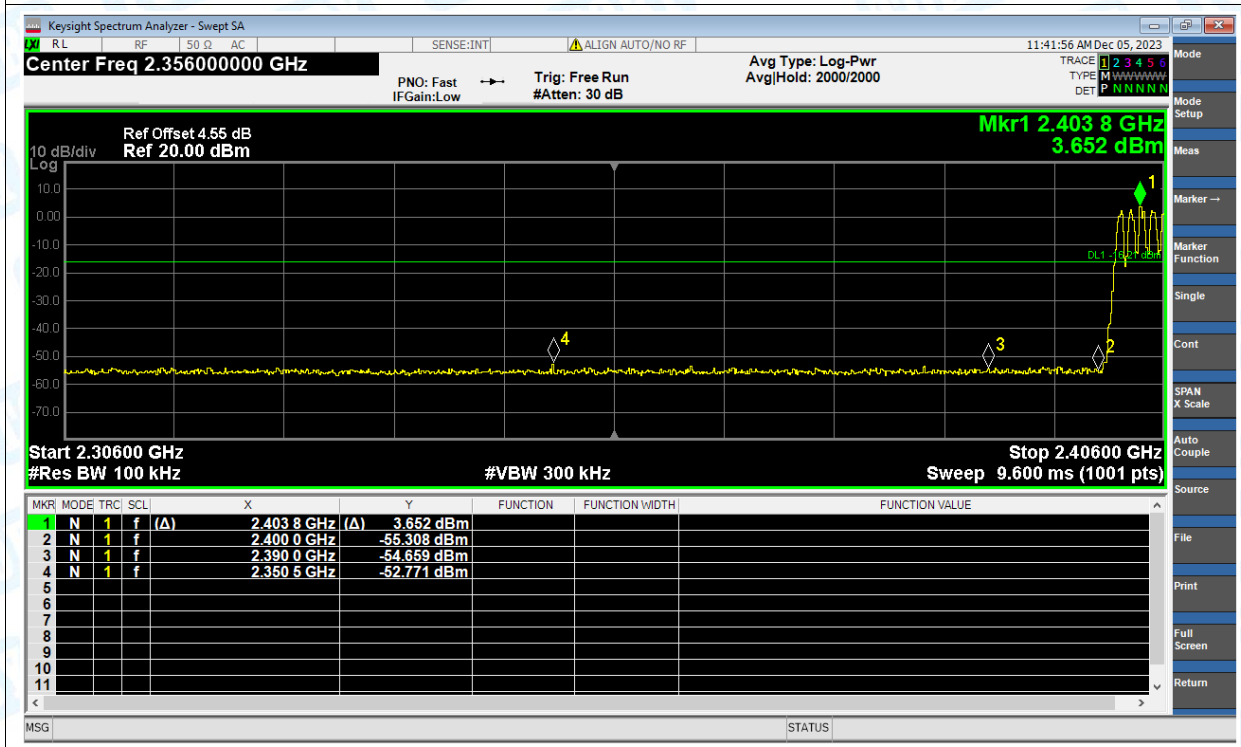
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-56.56	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-55.46	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-56.44	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-54.76	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-55.89	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-55.55	-20	Pass

Test Graphs

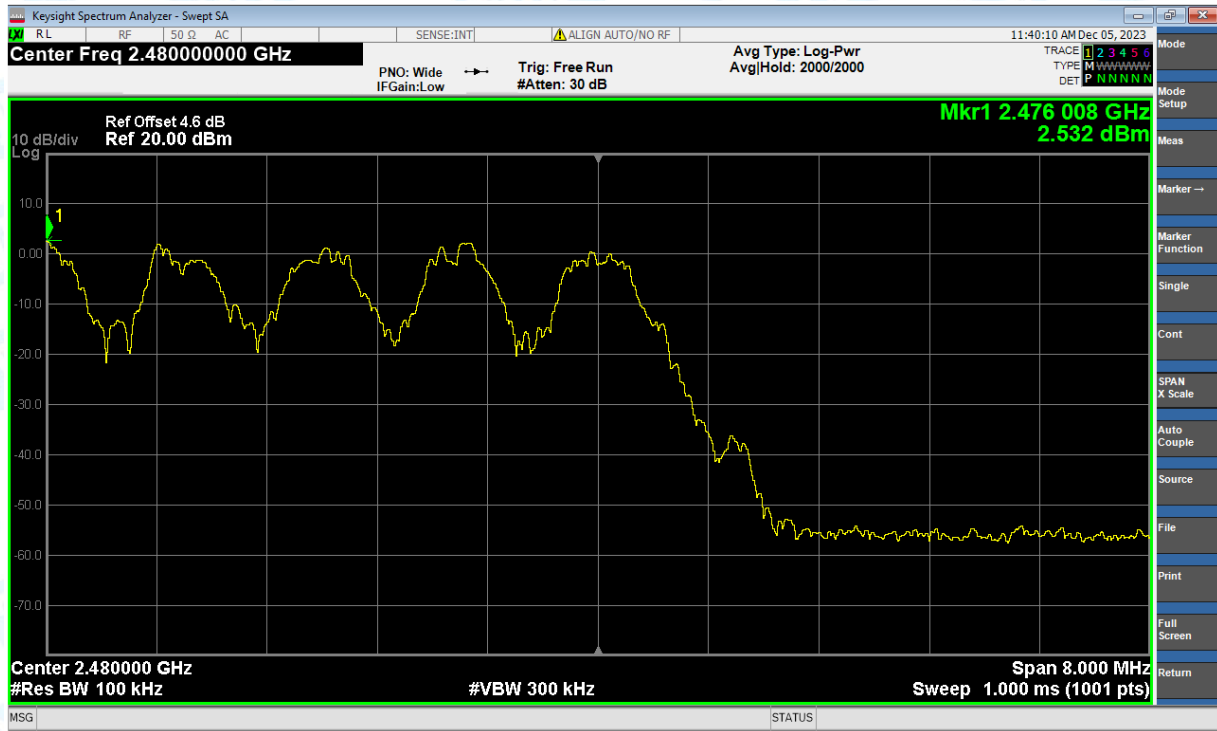
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



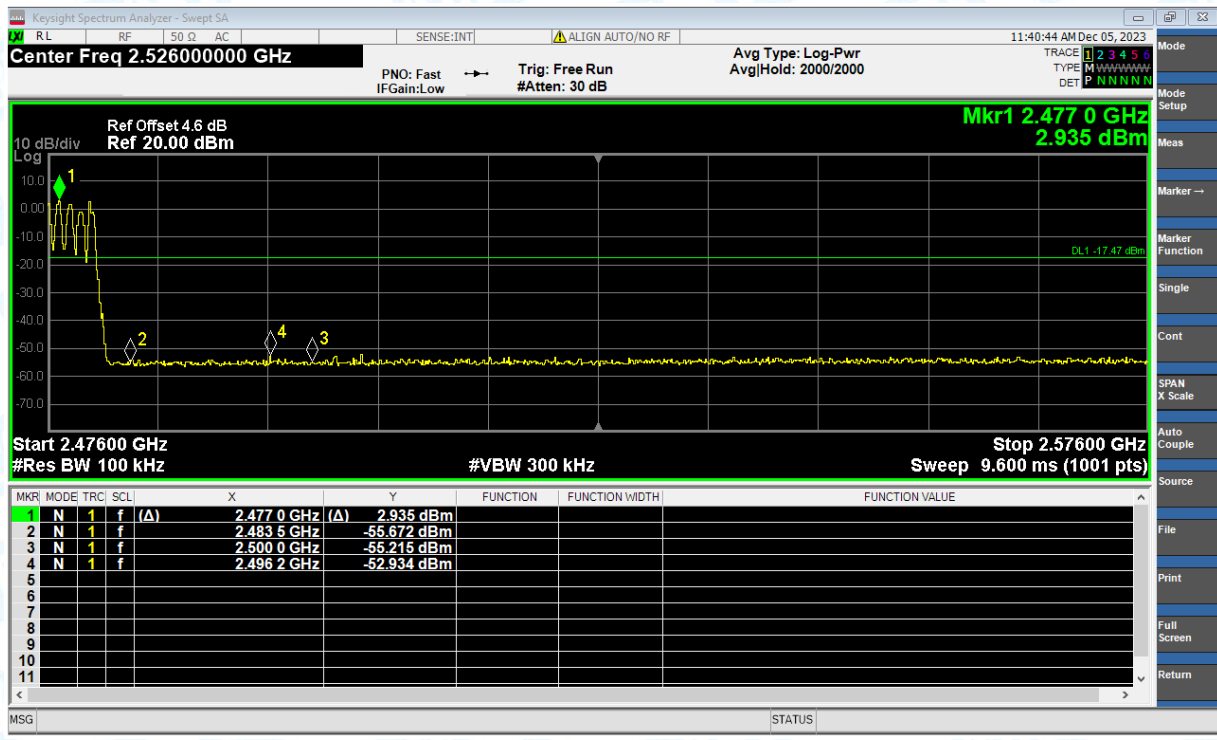
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



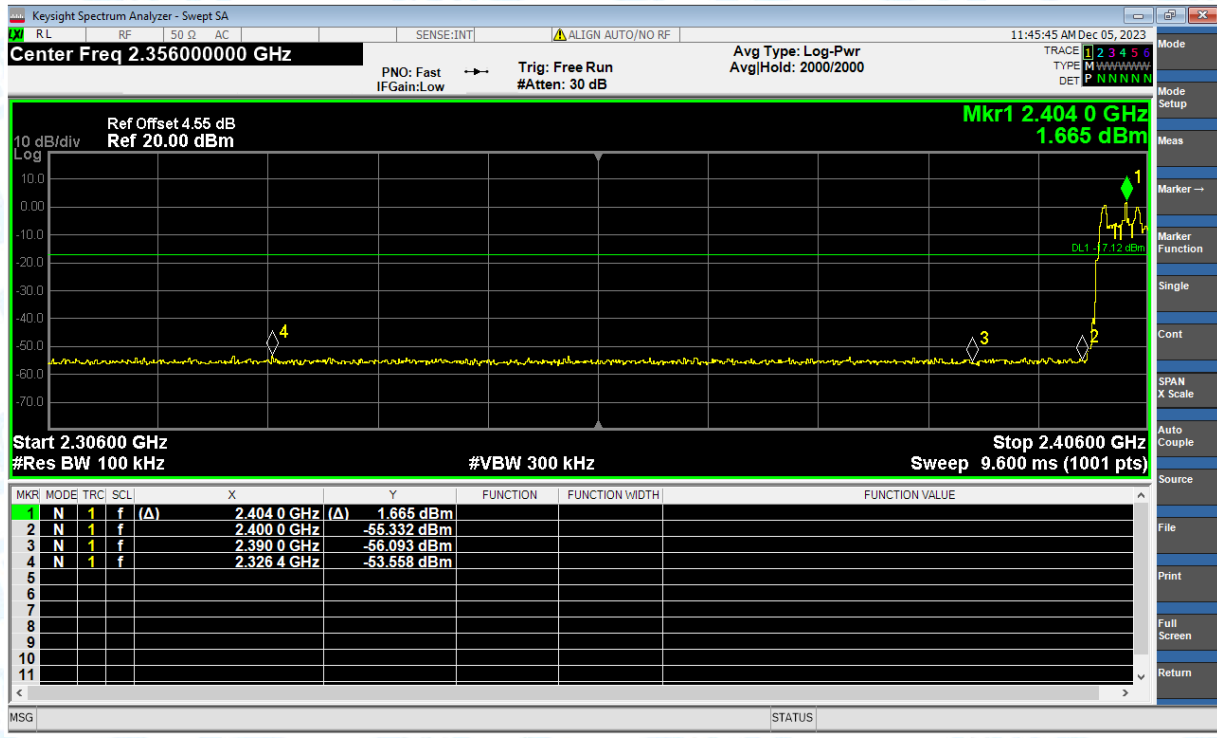
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



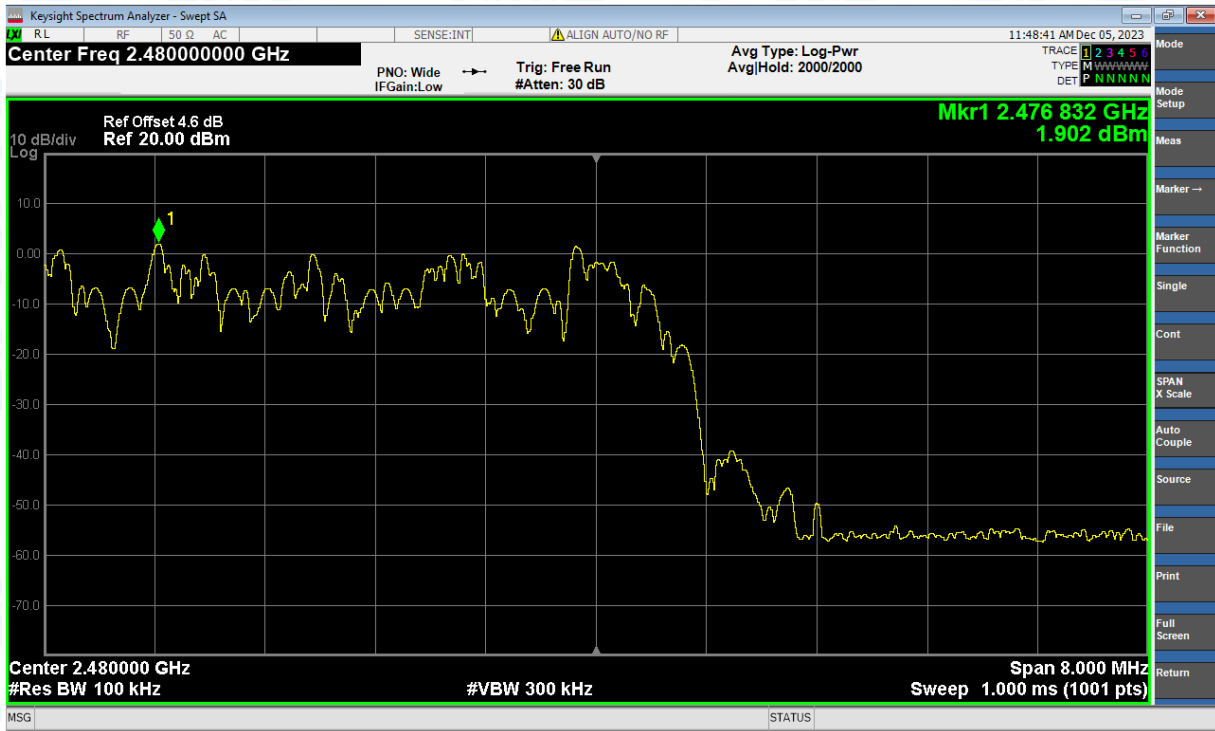
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



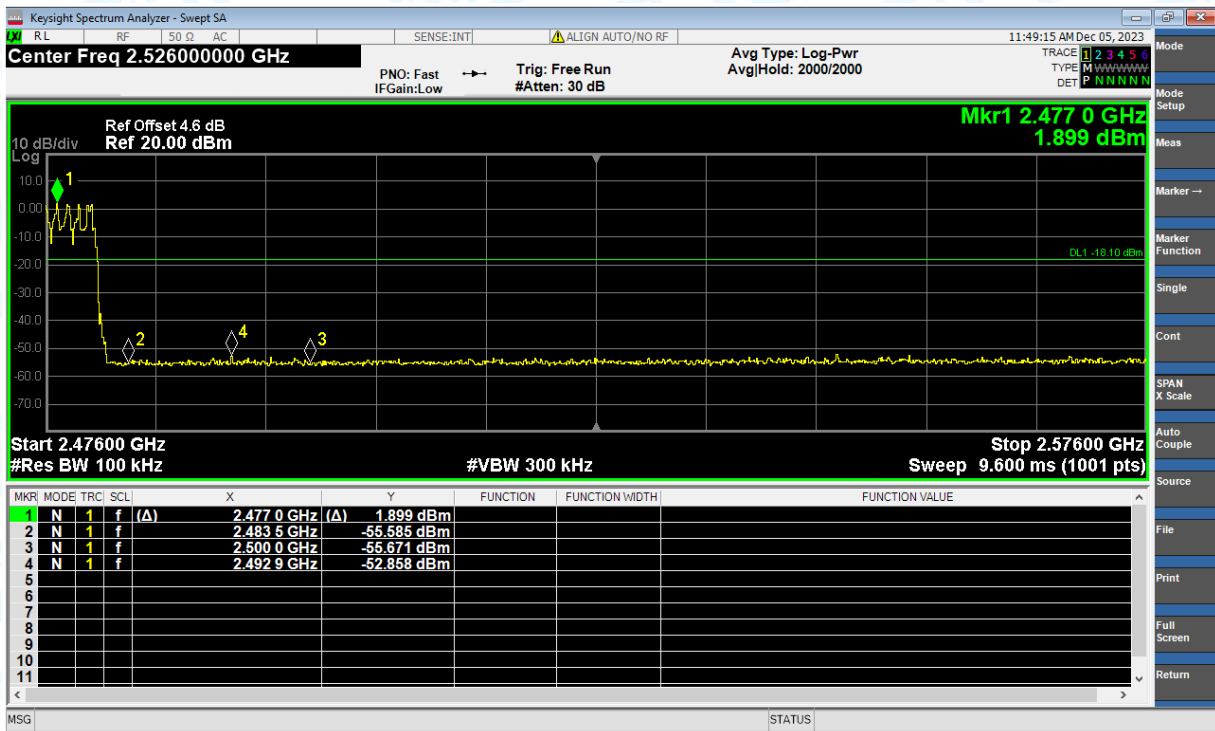
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



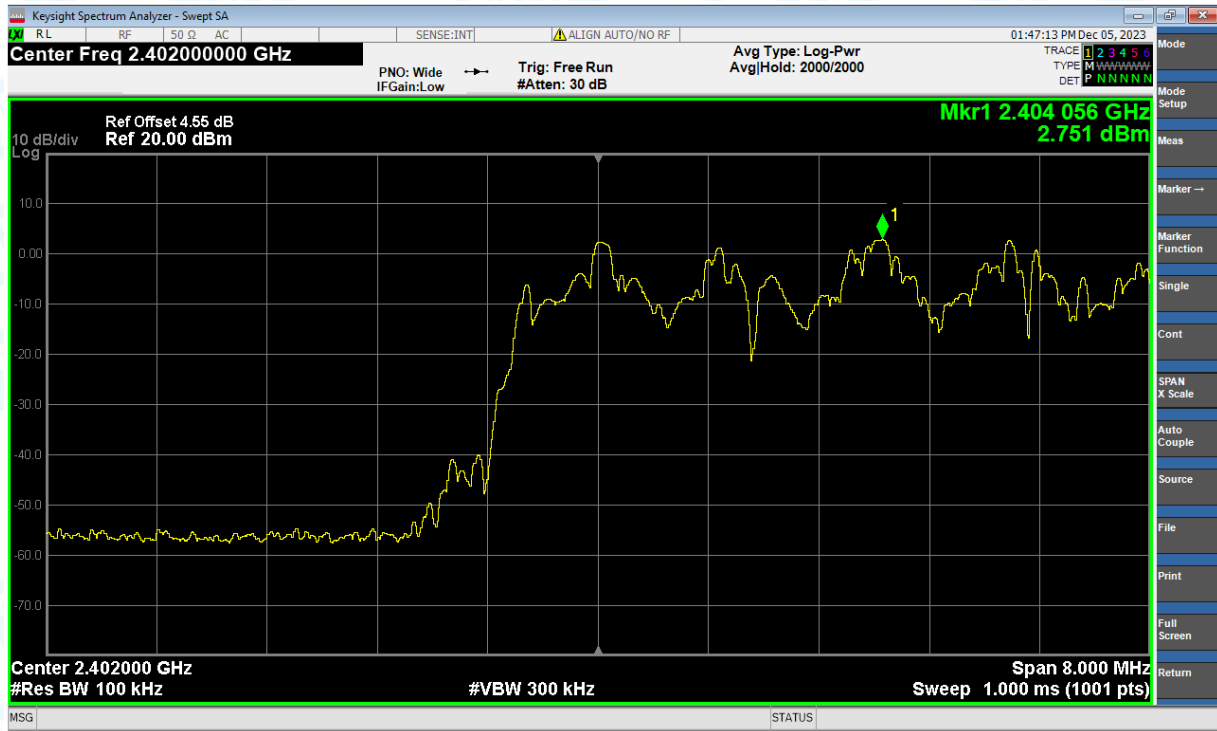
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



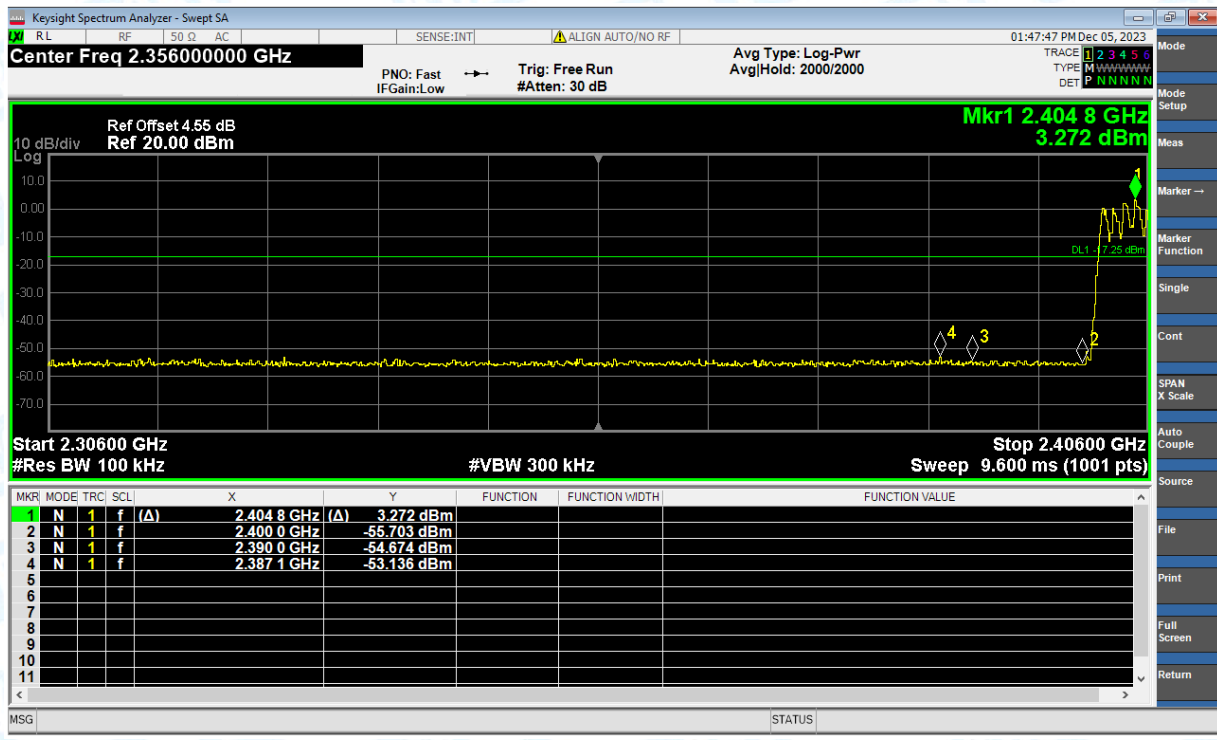
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



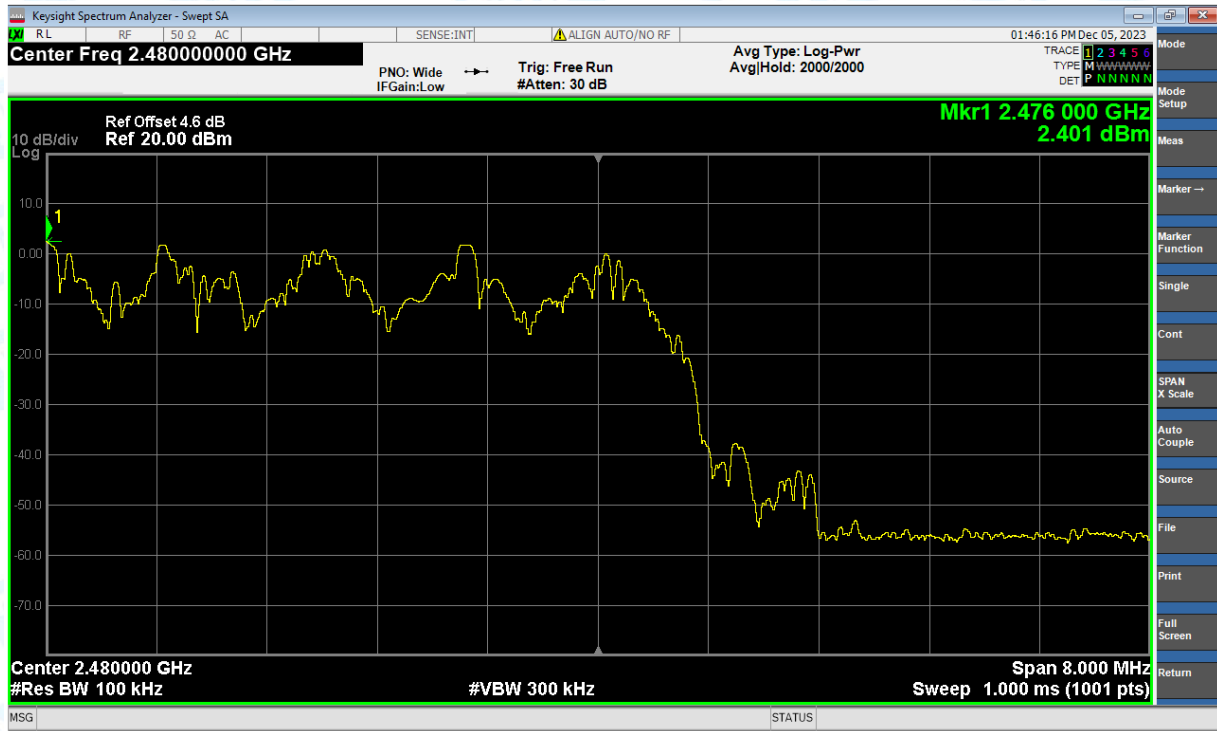
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



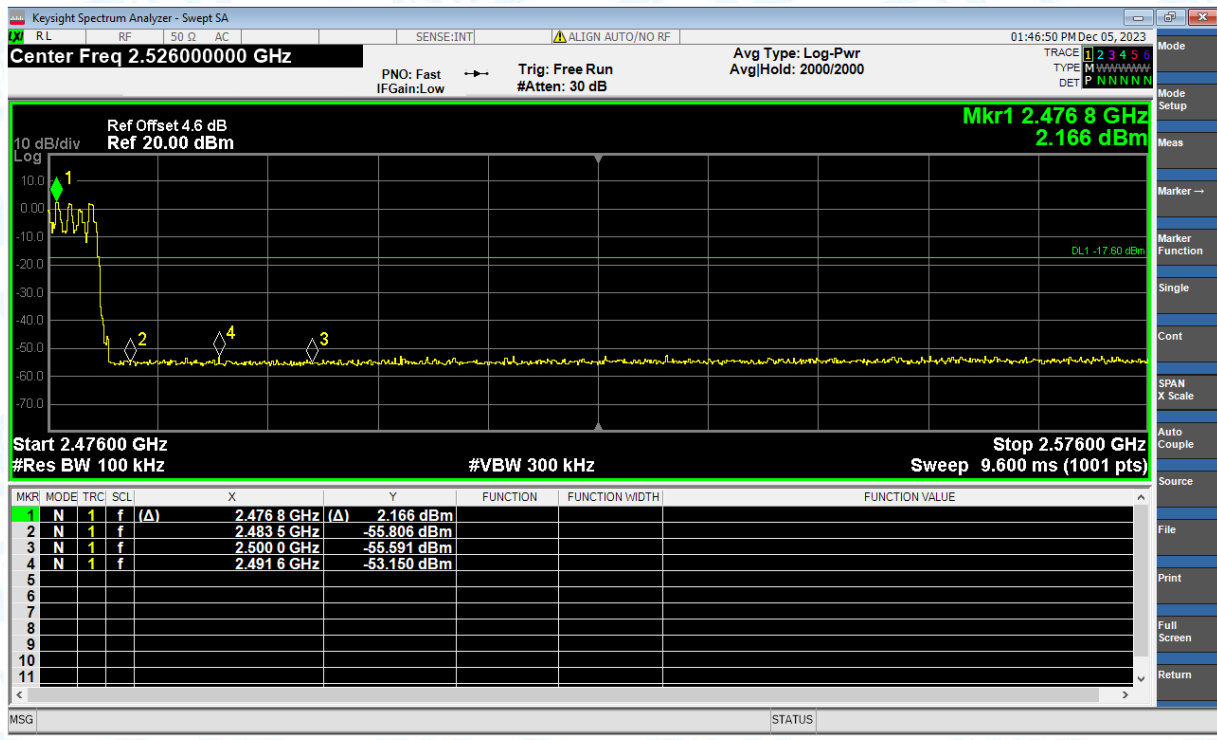
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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



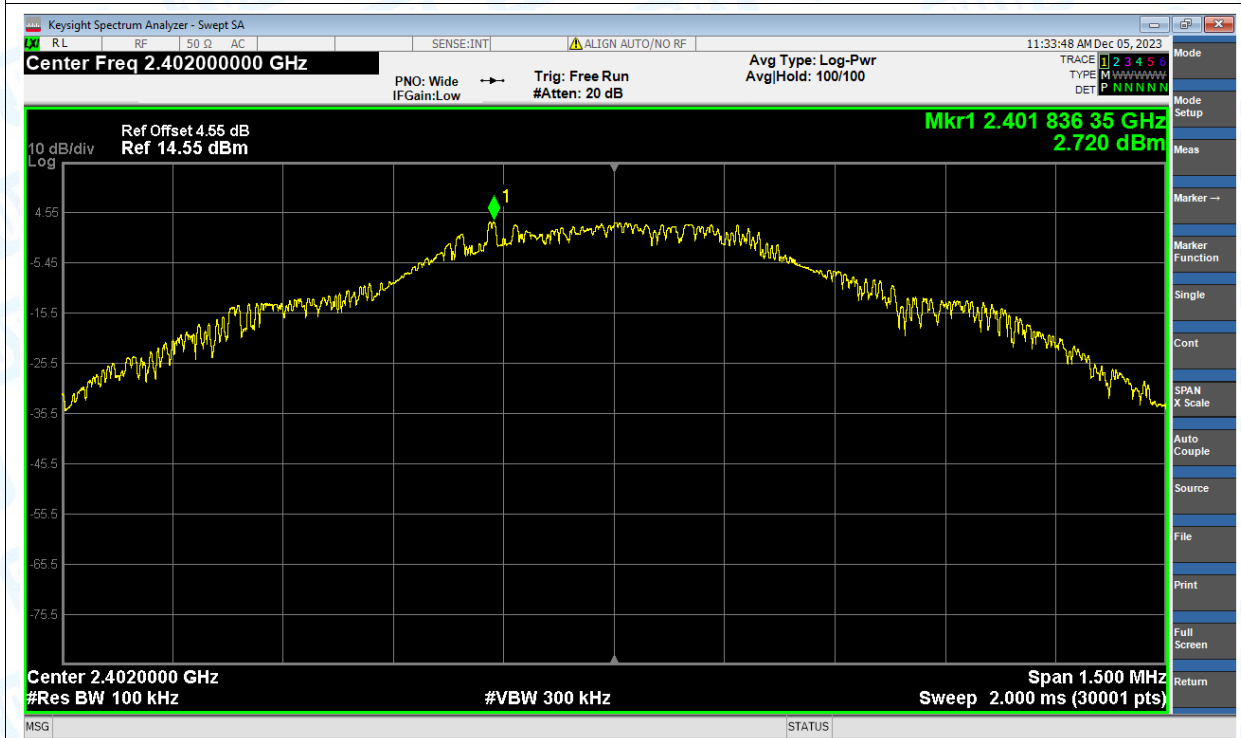
## 7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-51.59	-20	Pass
NVNT	1-DH1	2441	Ant1	-51.43	-20	Pass
NVNT	1-DH1	2480	Ant1	-53.04	-20	Pass
NVNT	2-DH1	2402	Ant1	-50.95	-20	Pass
NVNT	2-DH1	2441	Ant1	-50.59	-20	Pass
NVNT	2-DH1	2480	Ant1	-51.46	-20	Pass
NVNT	3-DH1	2402	Ant1	-51.80	-20	Pass
NVNT	3-DH1	2441	Ant1	-50.84	-20	Pass
NVNT	3-DH1	2480	Ant1	-51.98	-20	Pass

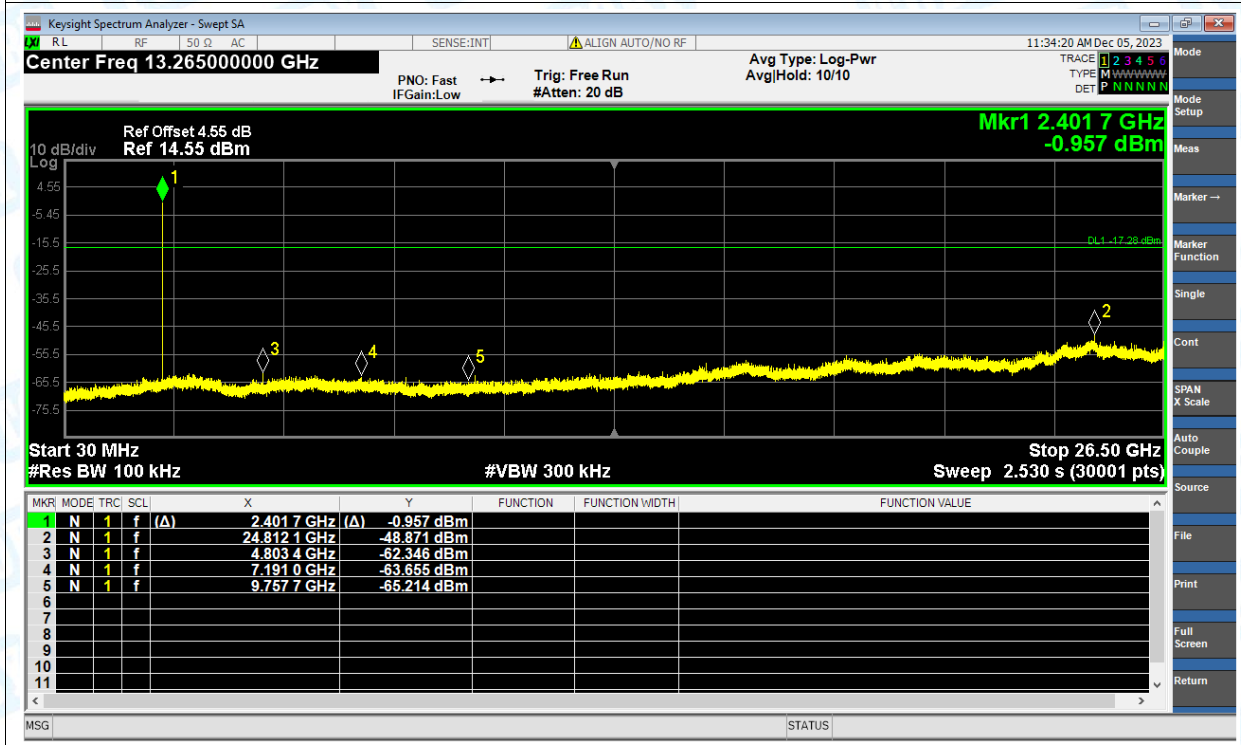


Test Graphs

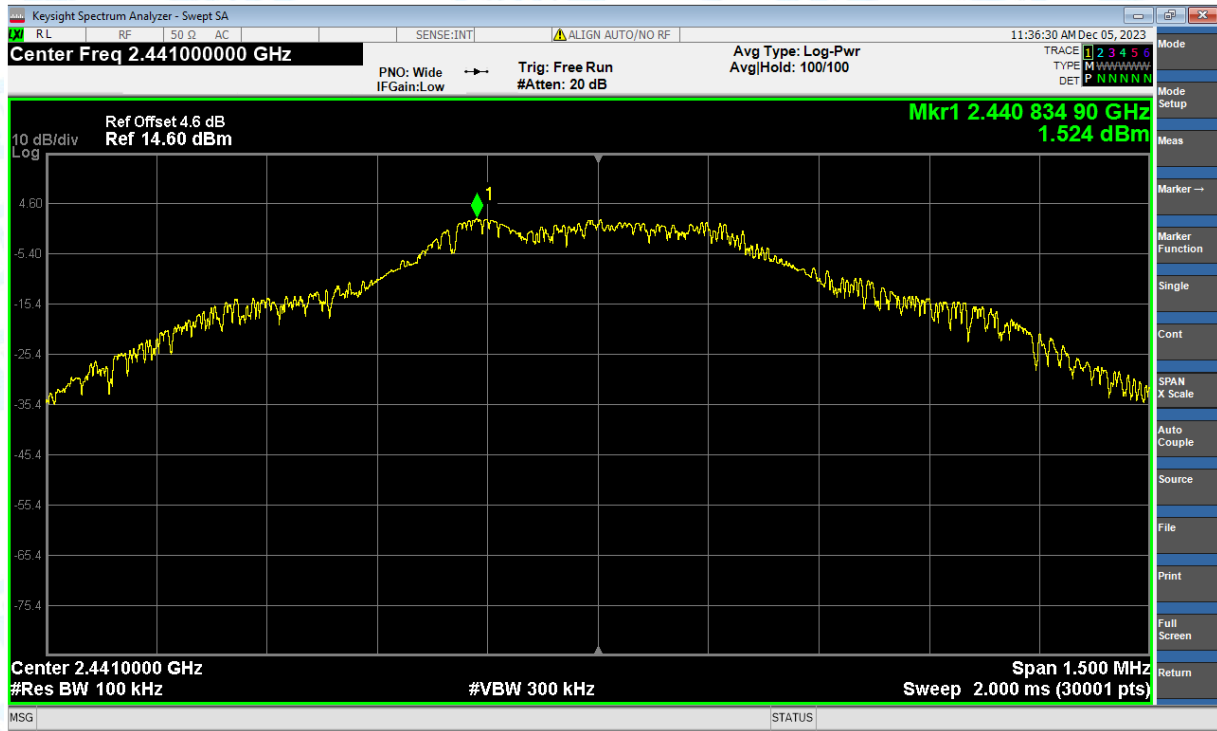
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



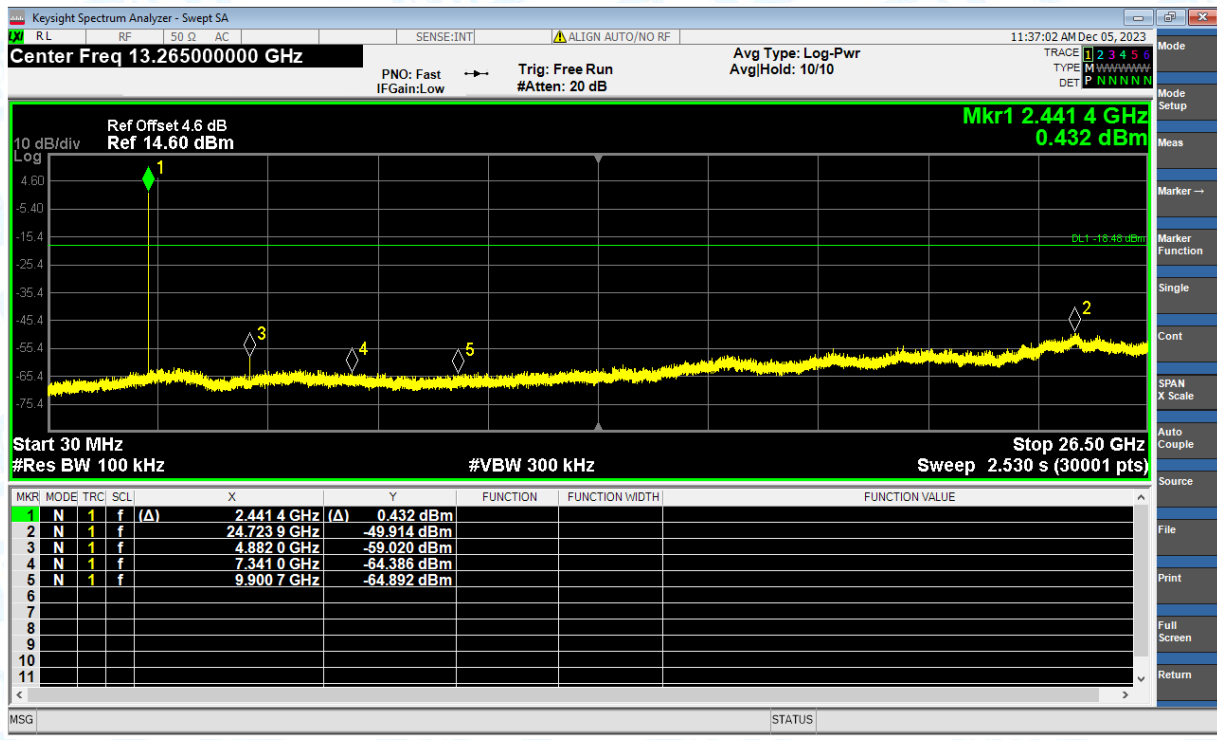
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



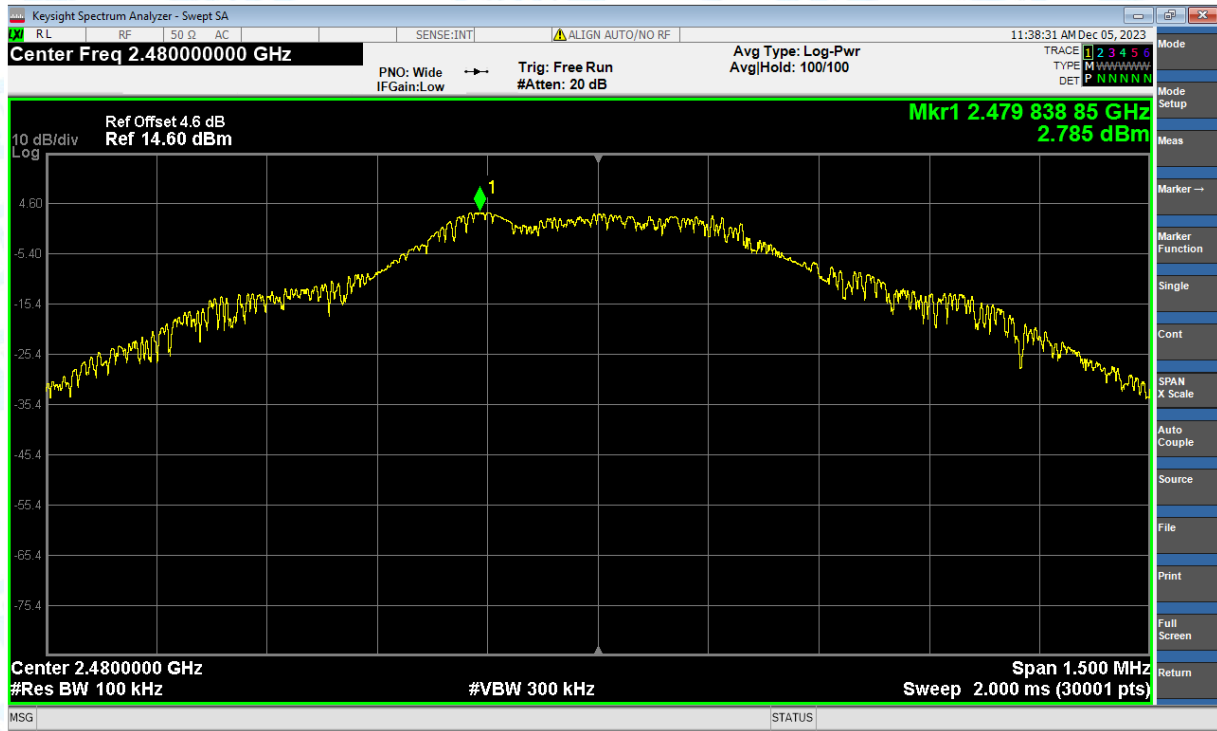
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



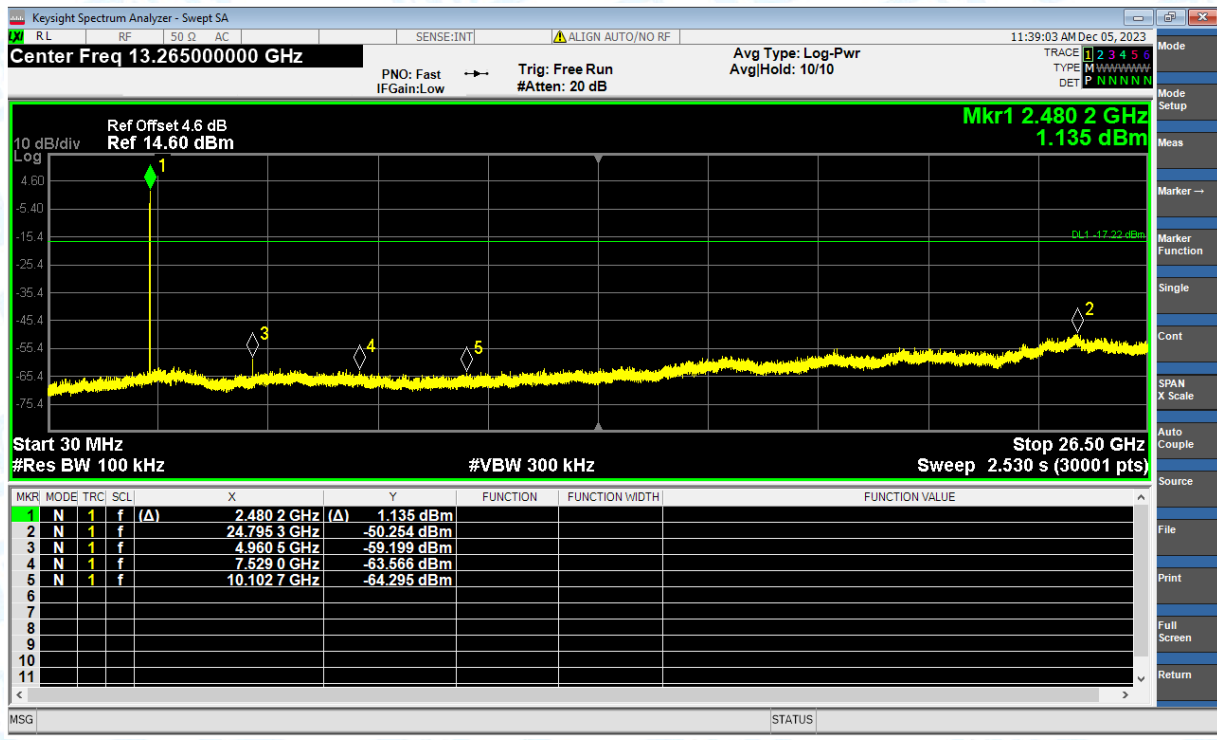
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



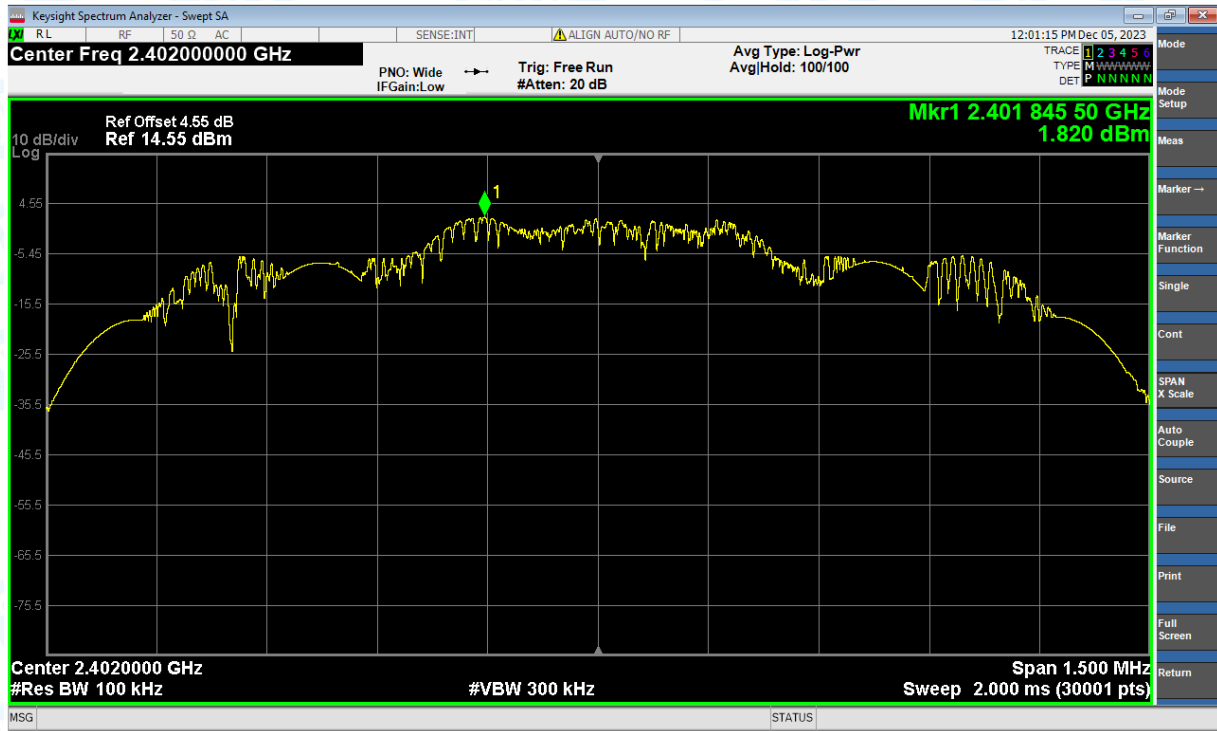
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



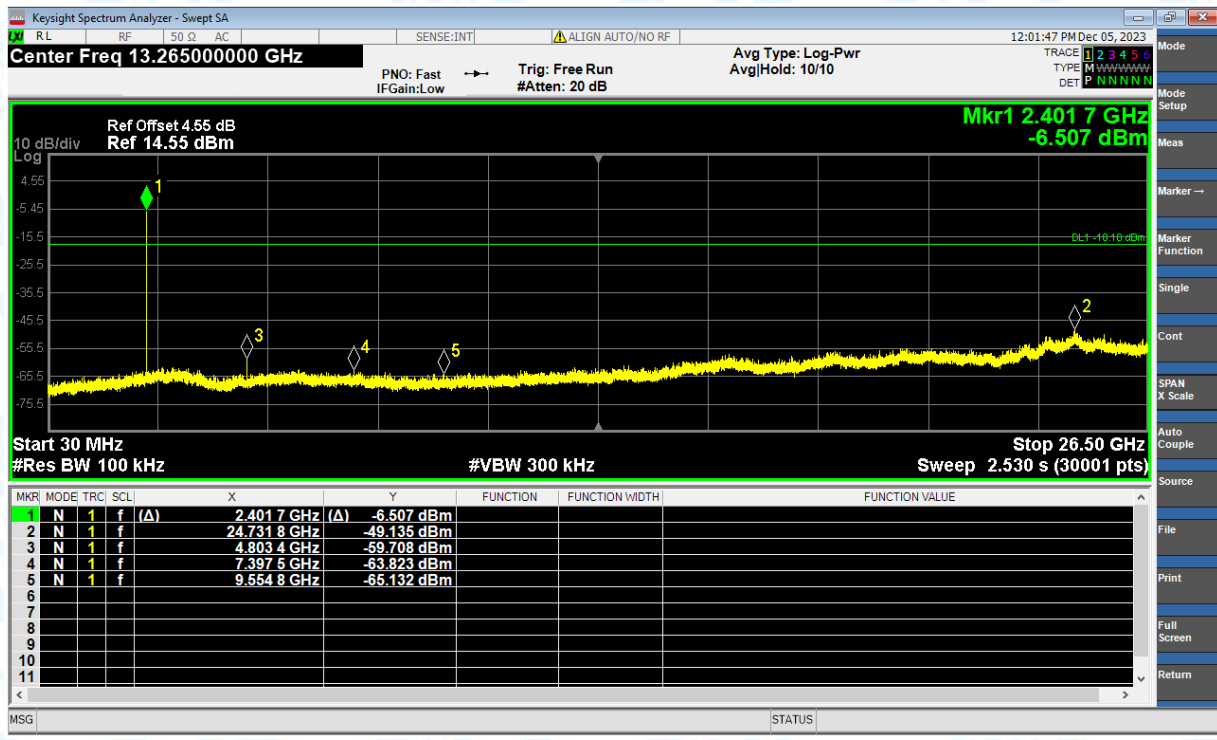
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



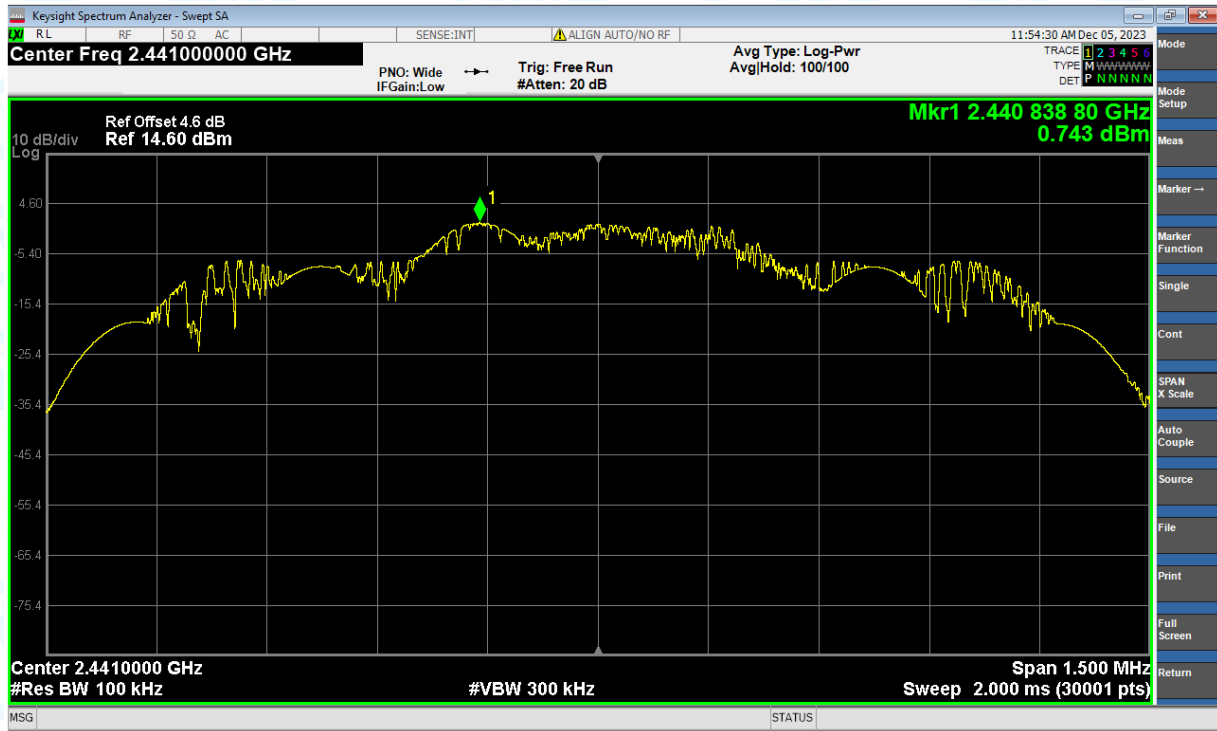
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



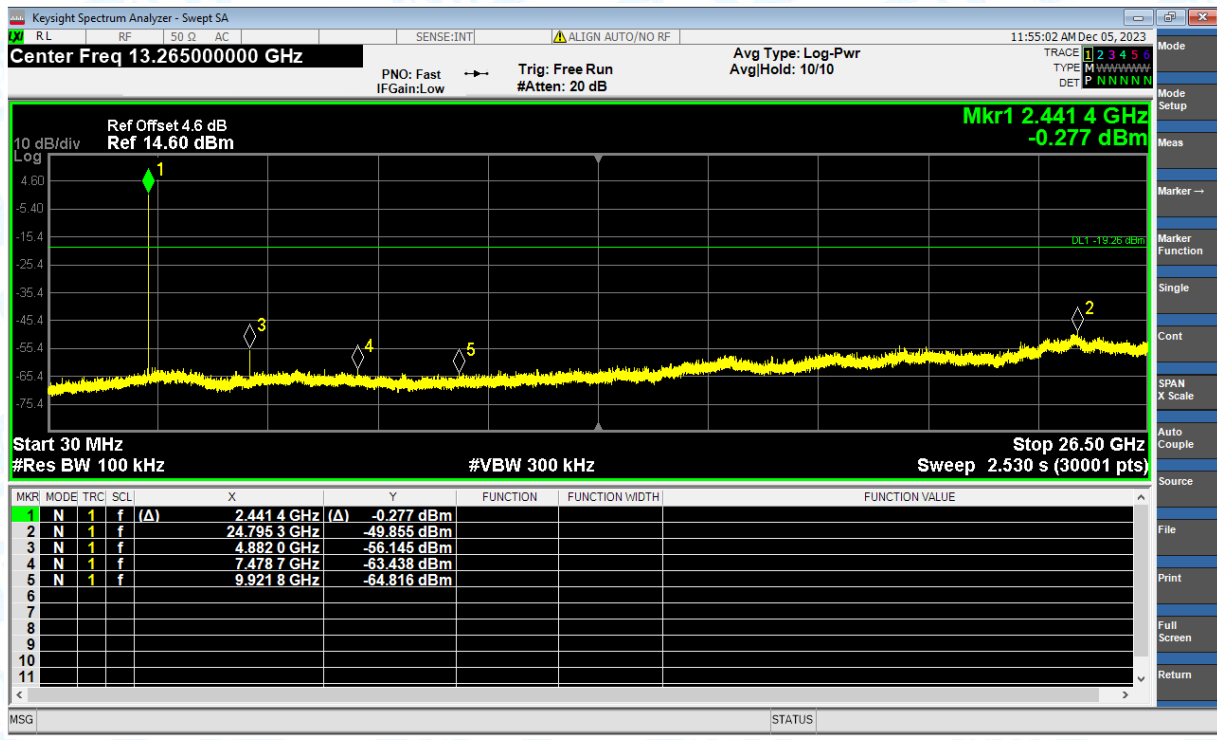
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



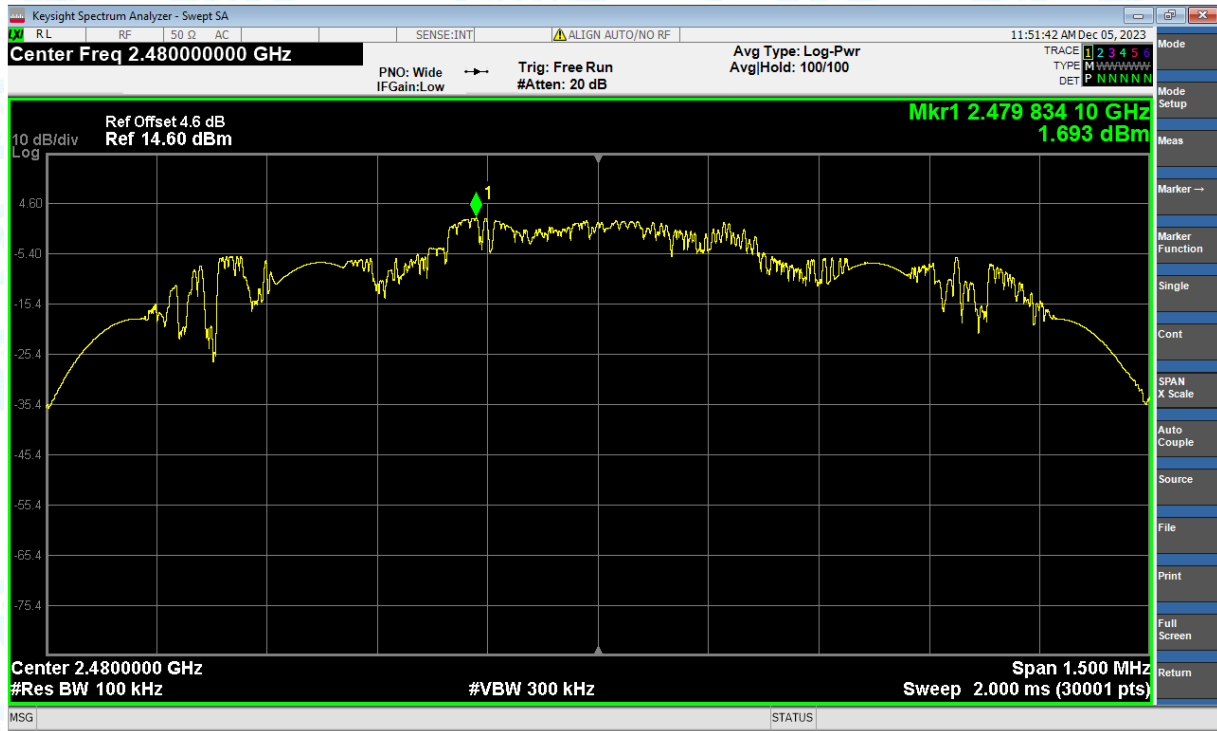
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



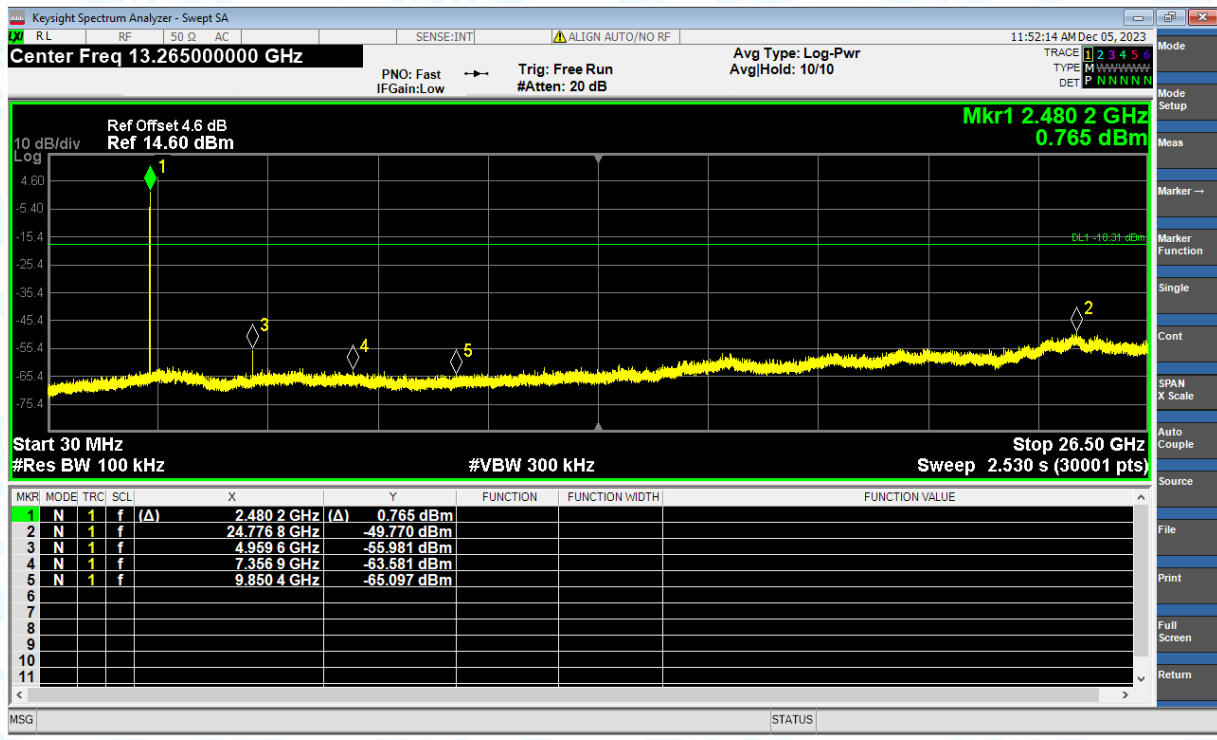
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



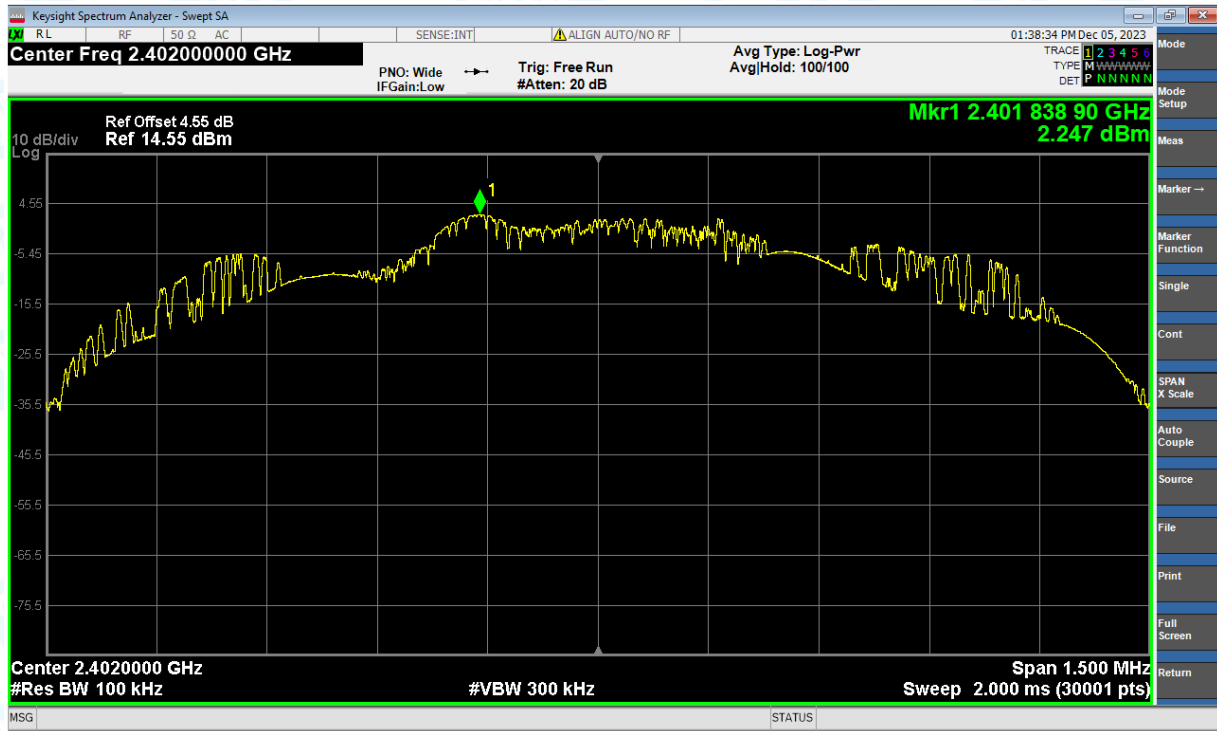
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



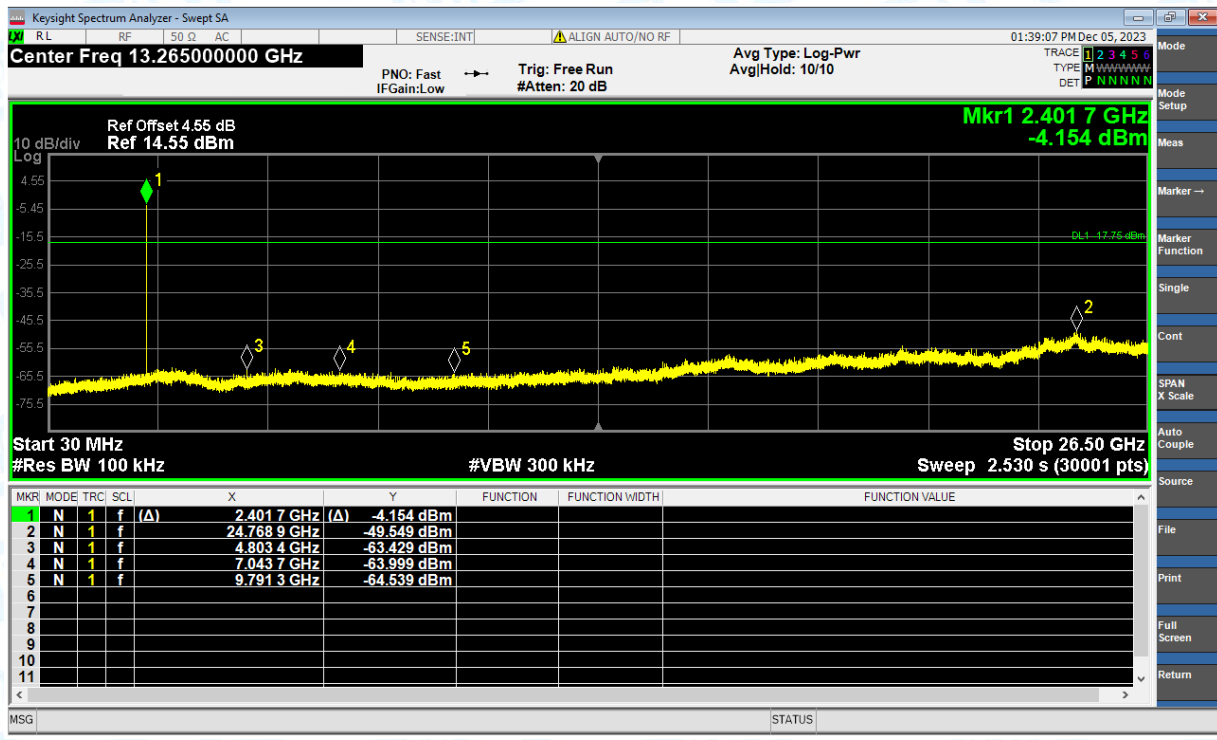
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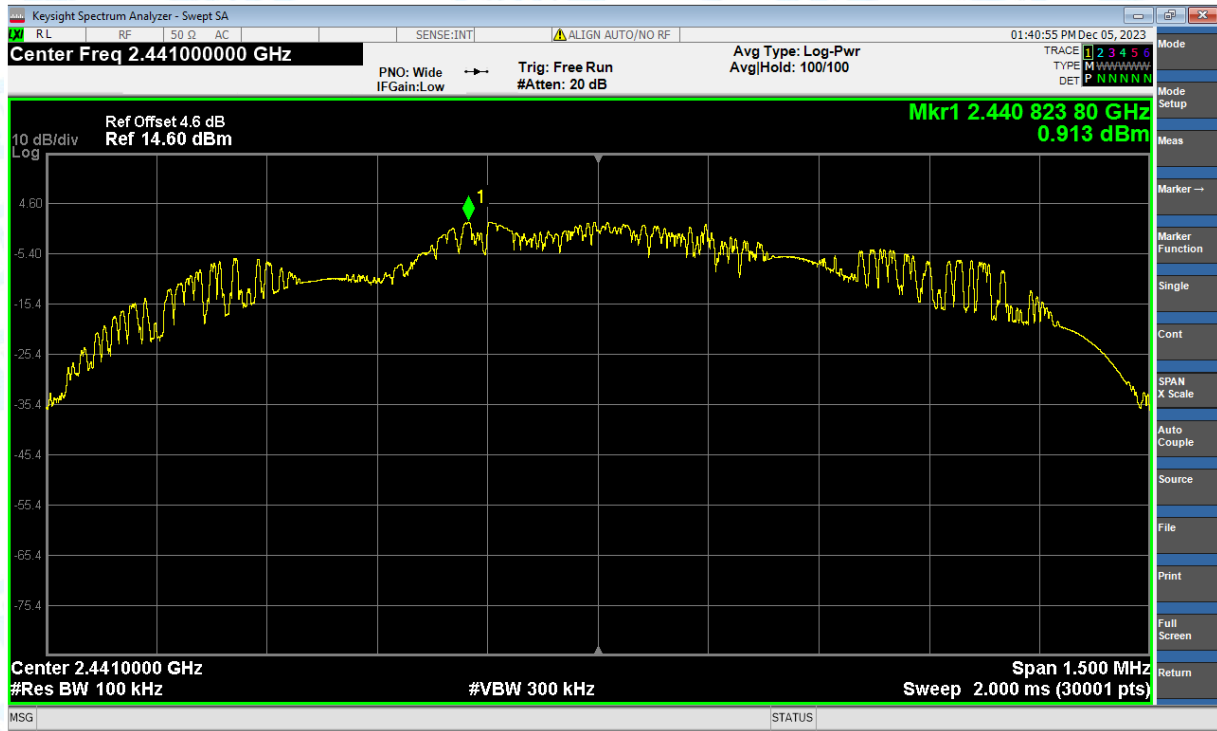
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



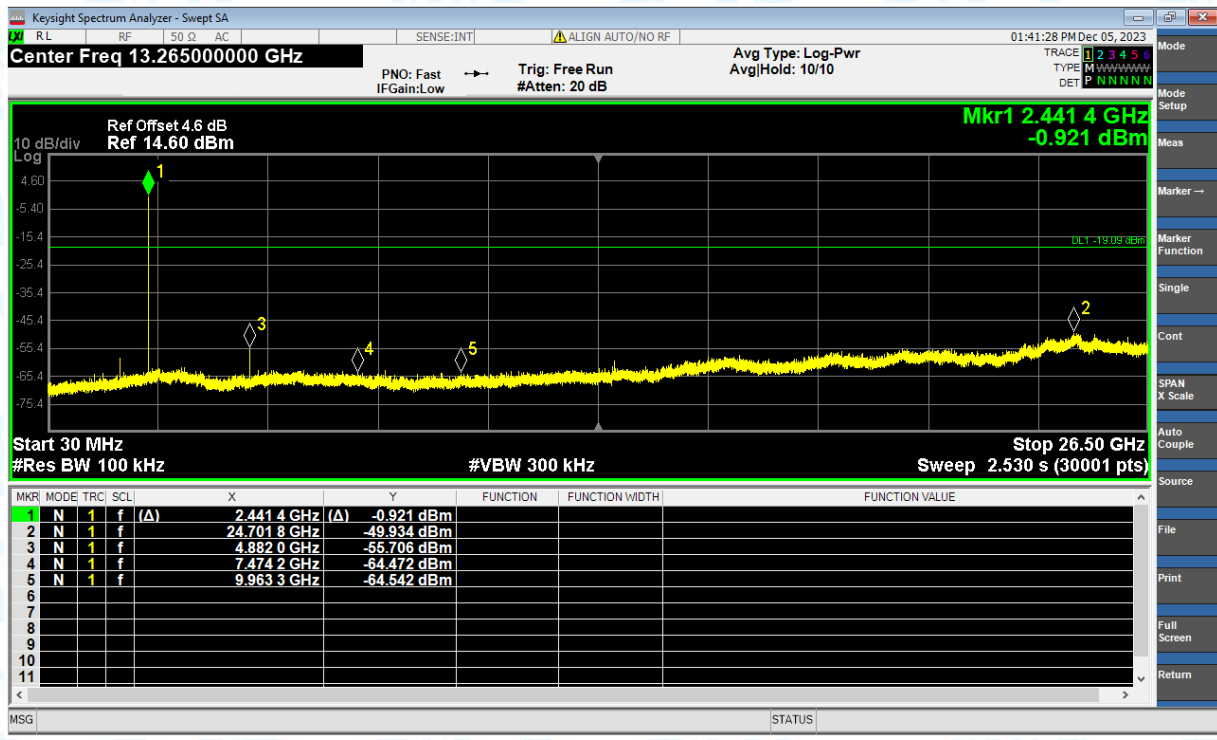
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref

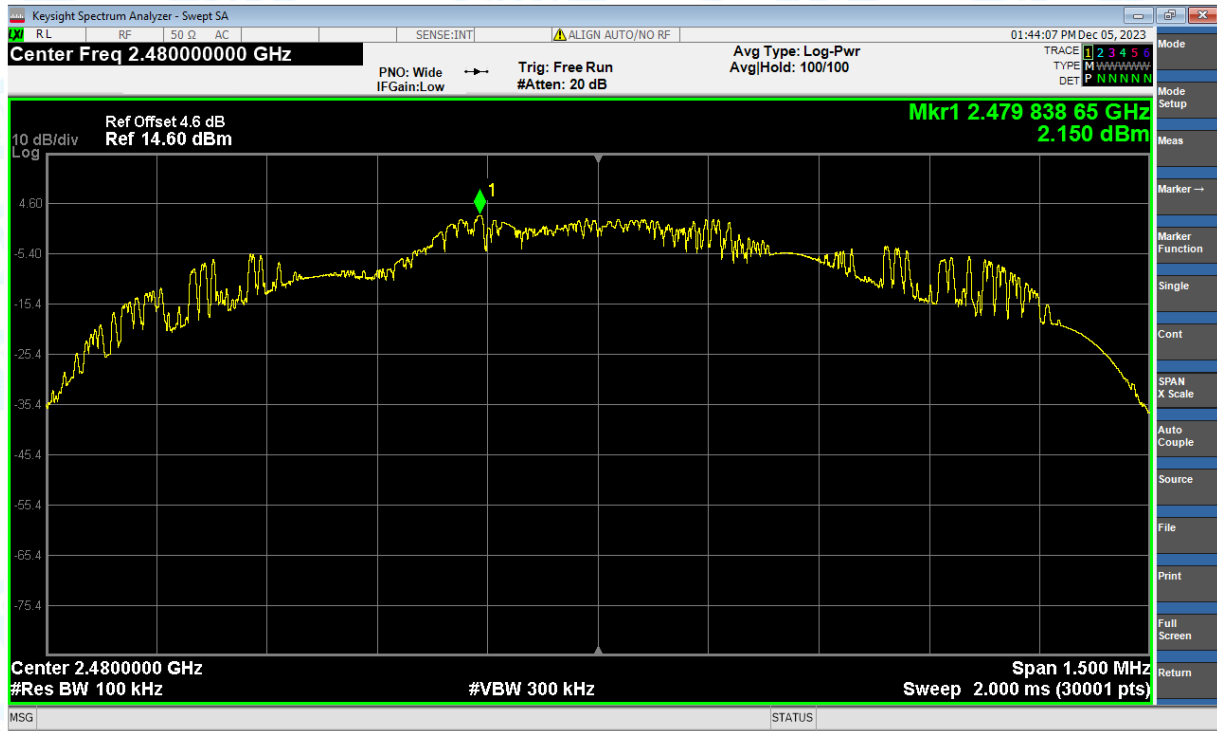


Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission

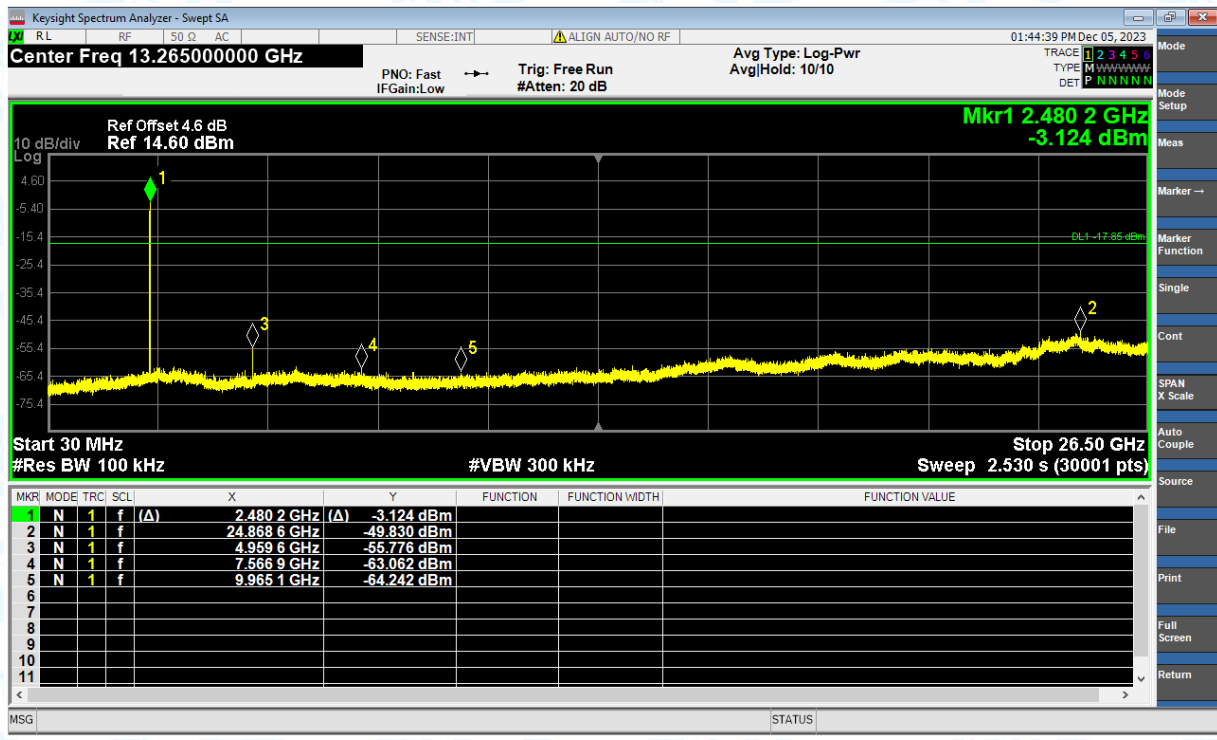




Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

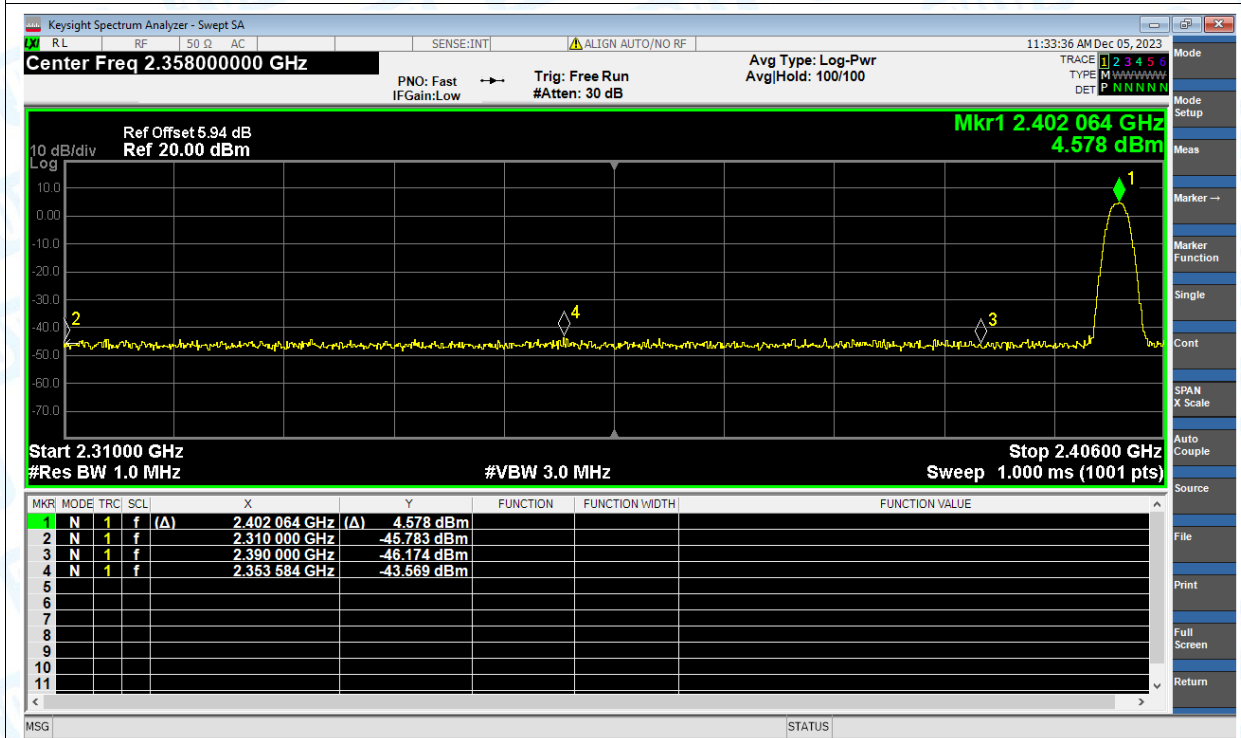


## 8. Restrict Band

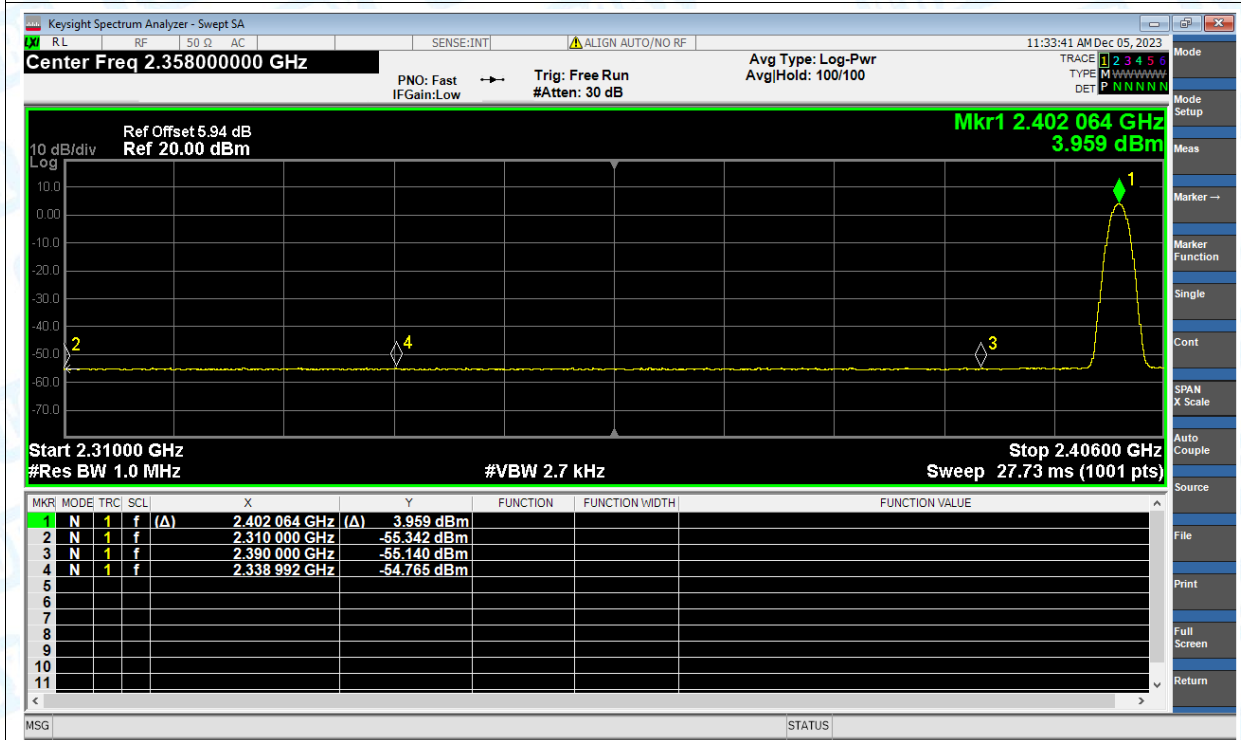
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-45.78	2	51.48	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.34	2	41.92	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2353.584	-43.57	2	53.69	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2338.992	-54.77	2	42.49	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.12	2	50.14	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.08	2	42.18	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-46.84	2	50.42	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.68	2	42.58	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2486.296	-43.3	2	53.96	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2499.856	-54.35	2	42.91	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.55	2	50.71	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.85	2	42.41	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-46.13	2	51.13	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.12	2	41.14	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2346	-43.26	2	54	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2386.128	-55.74	2	41.52	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-45.2	2	52.06	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-56.1	2	41.16	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-46.62	2	50.64	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.8	2	42.46	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2485.528	-43.07	2	54.19	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2485.36	-54.44	2	42.82	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-44.06	2	53.2	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.18	2	42.08	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-45.31	2	51.95	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.49	2	41.77	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2379.024	-43.11	2	54.15	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2313.648	-54.75	2	42.51	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-47.5	2	49.76	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.12	2	42.14	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-46.3	2	50.96	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-54.56	2	42.7	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2487.232	-41.67	2	55.59	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2485.864	-54.42	2	42.84	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-45.88	2	51.38	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.09	2	42.17	Average	54	Pass

Test Graphs

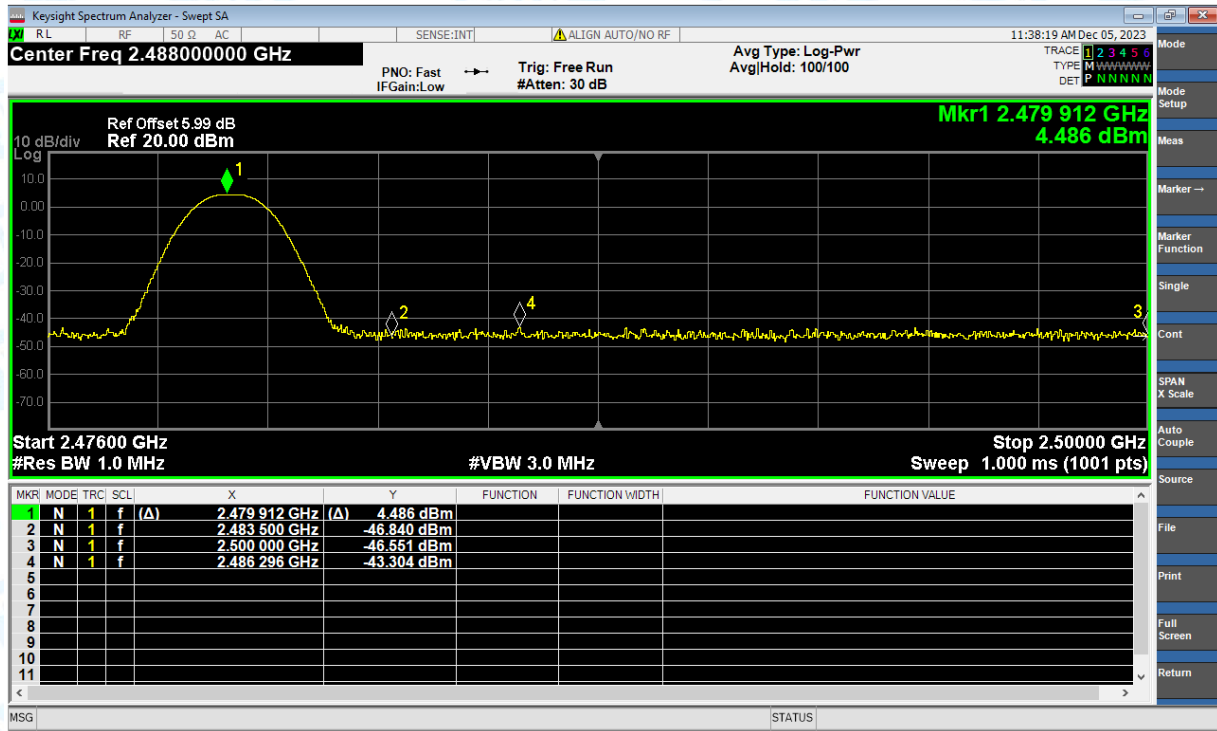
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



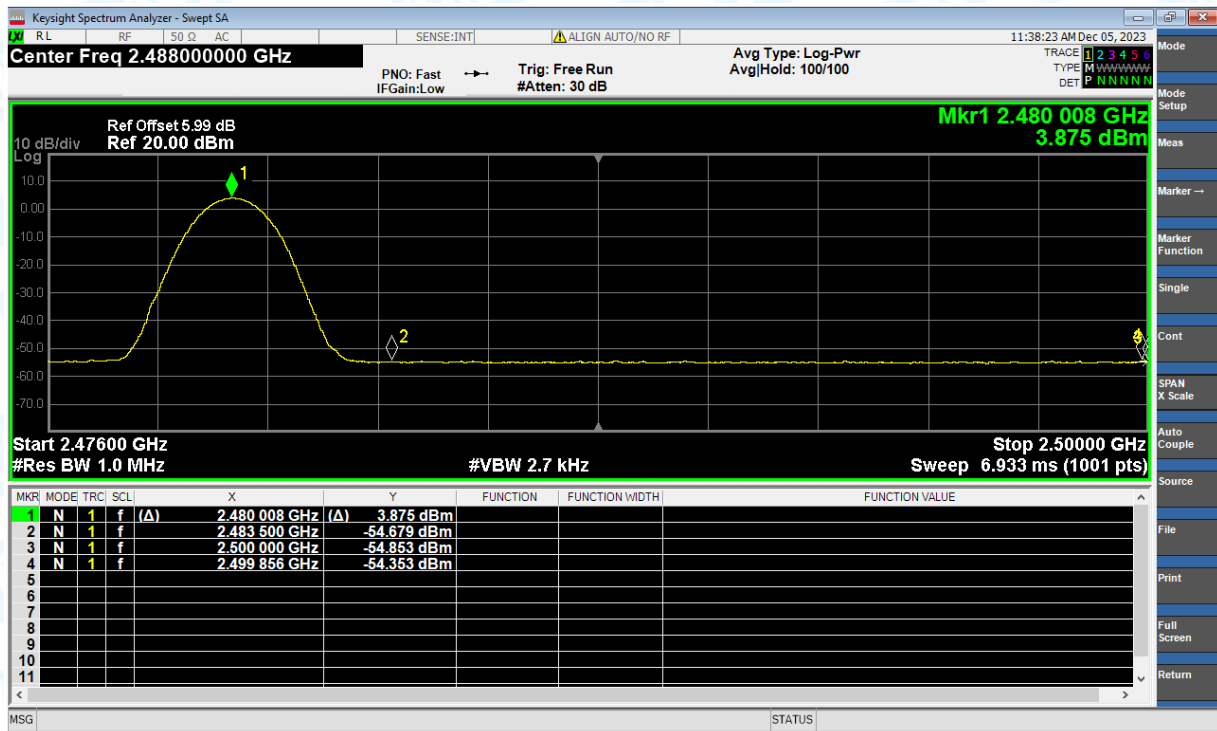
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



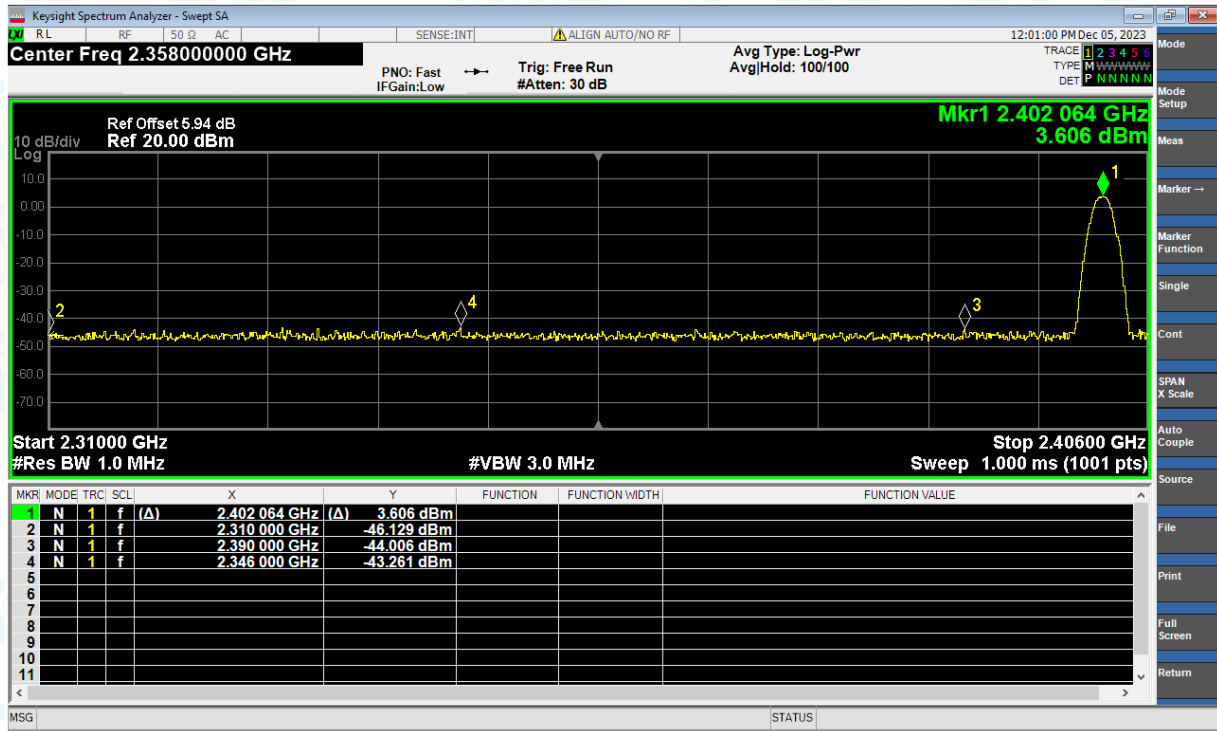
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



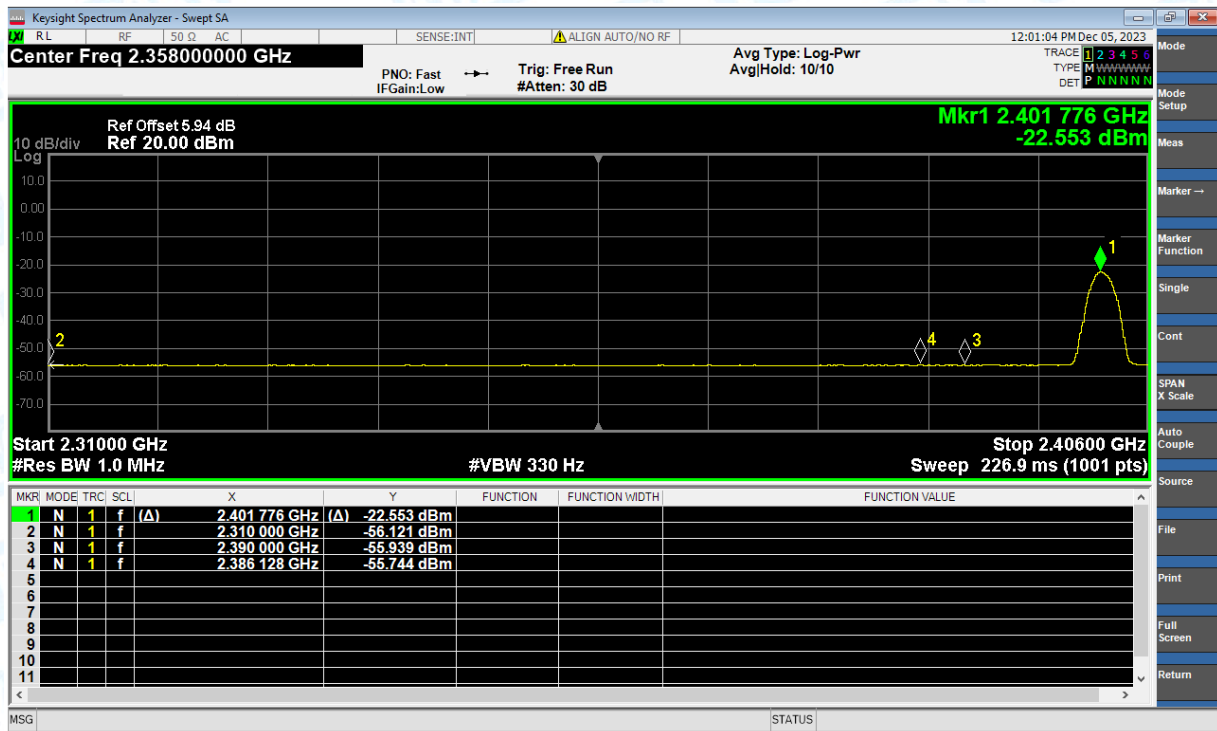
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



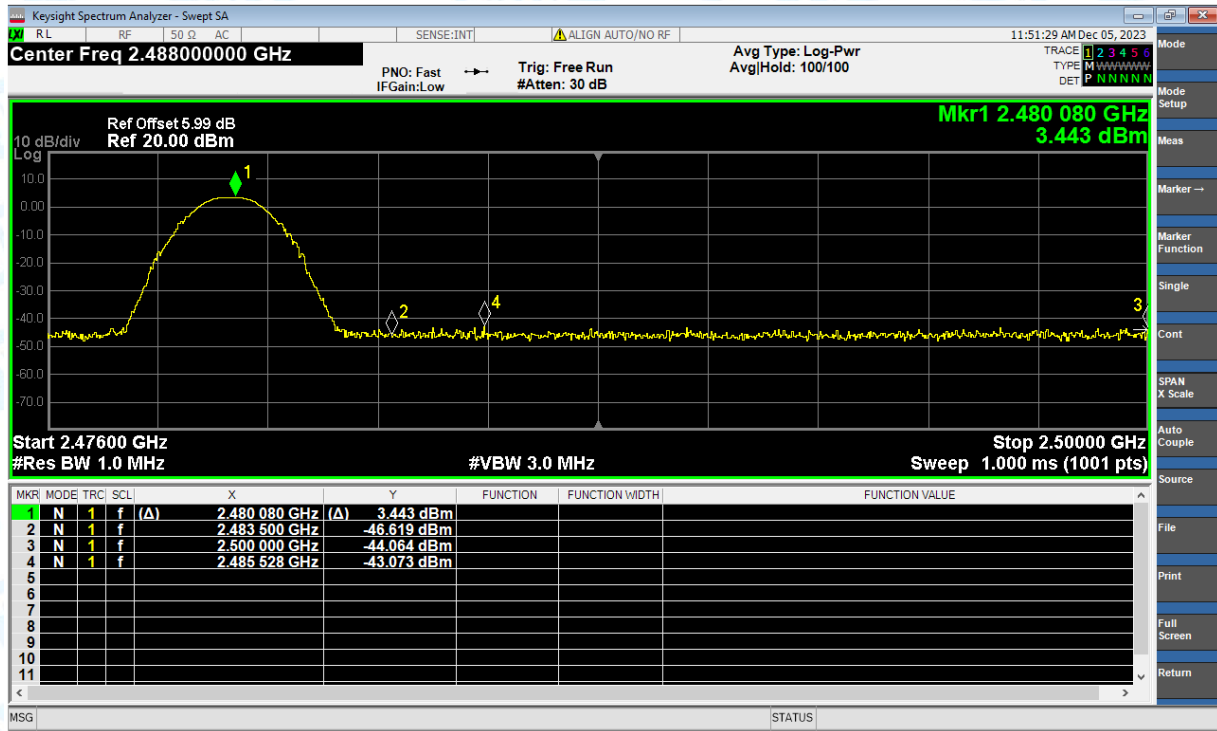
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



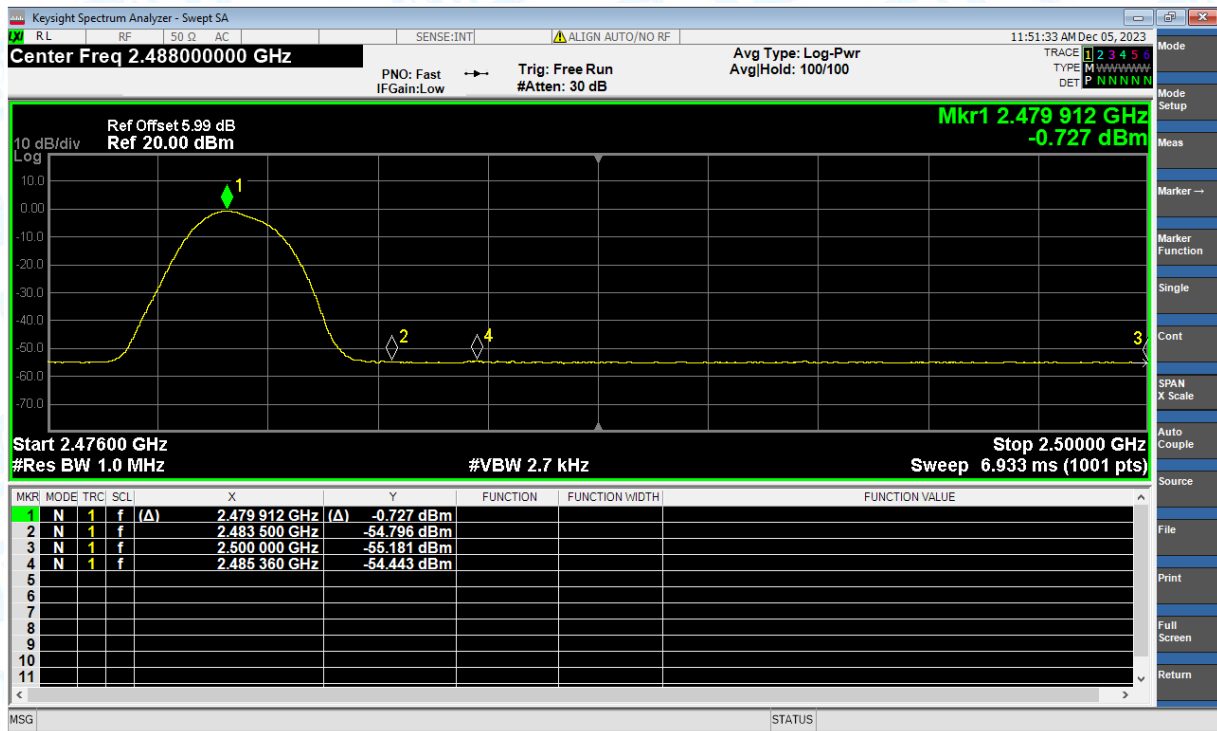
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



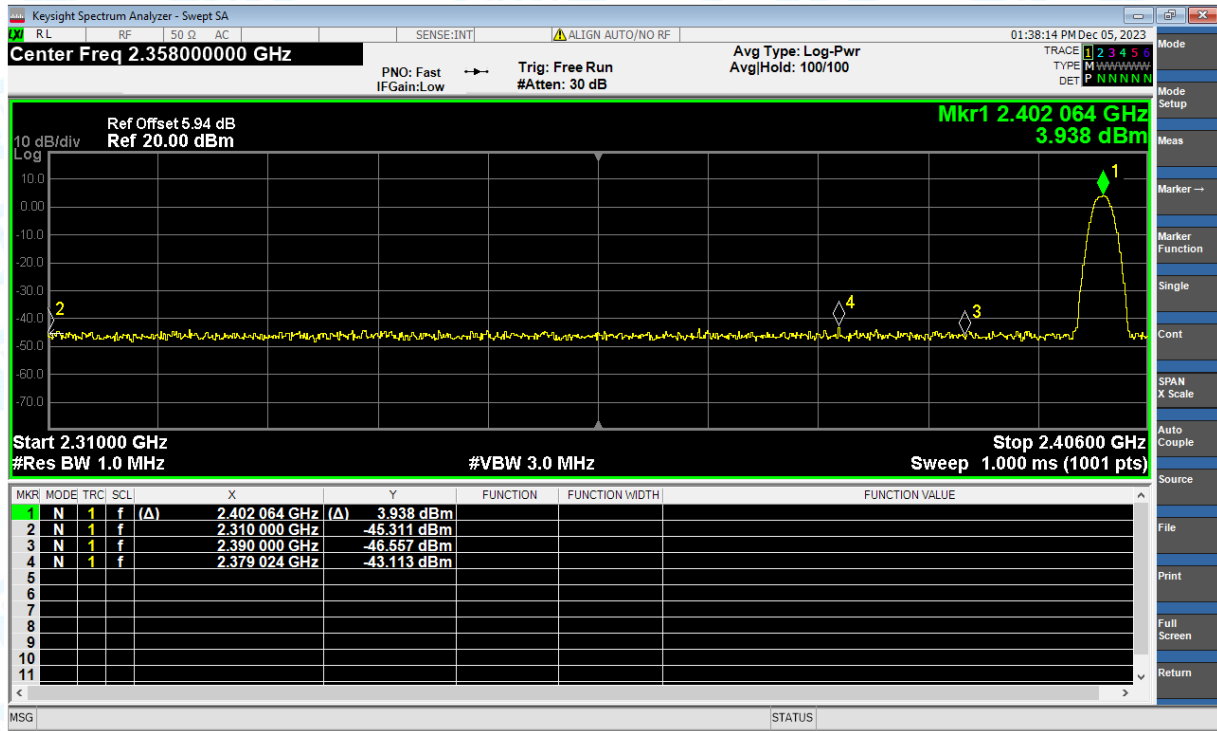
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



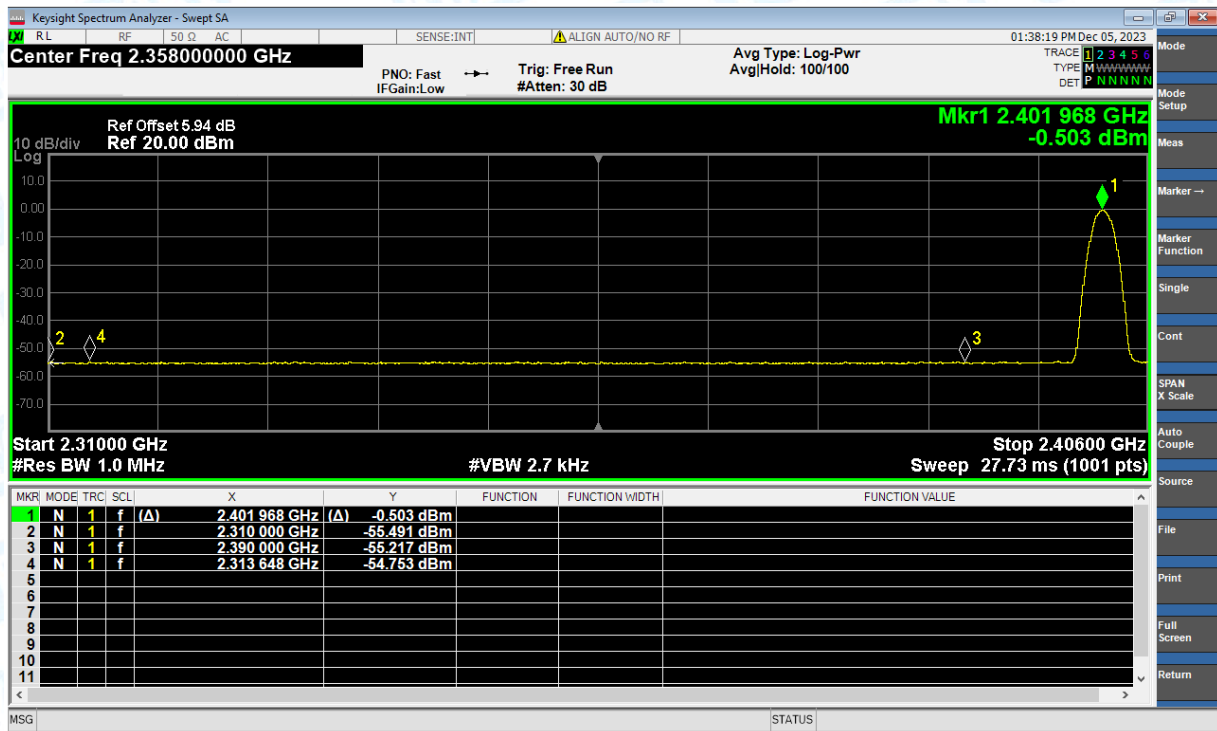
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



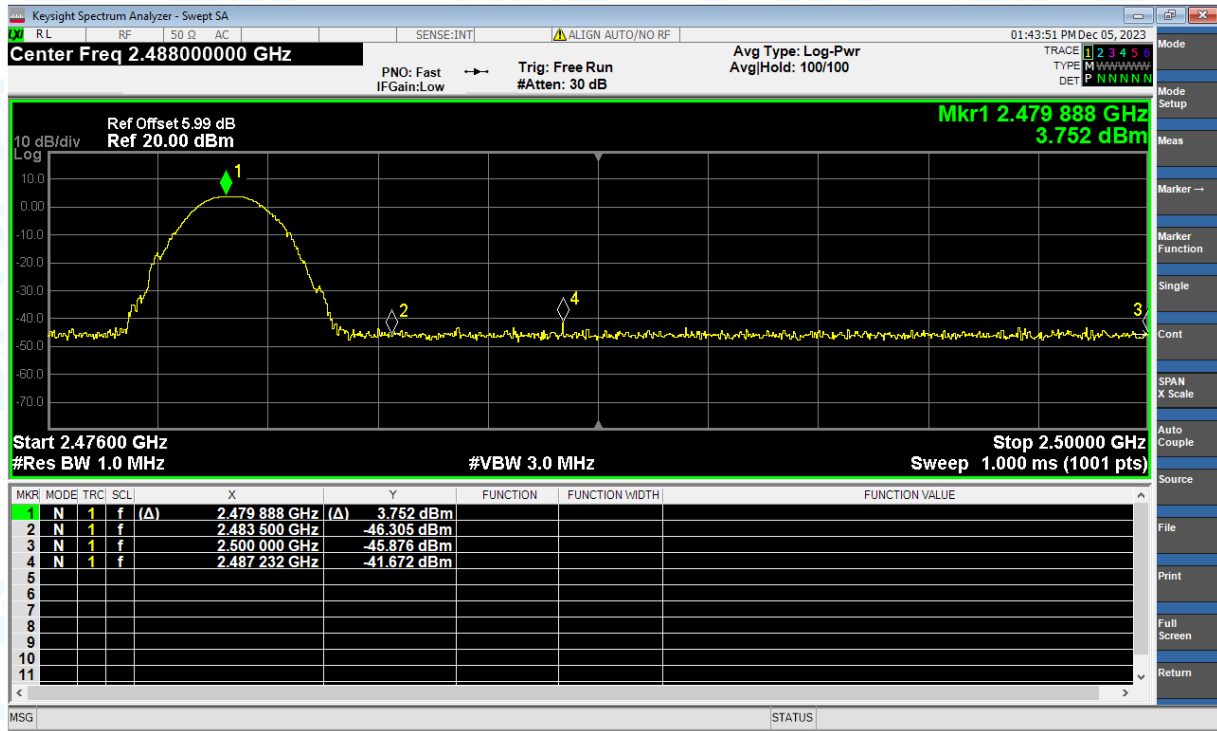
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



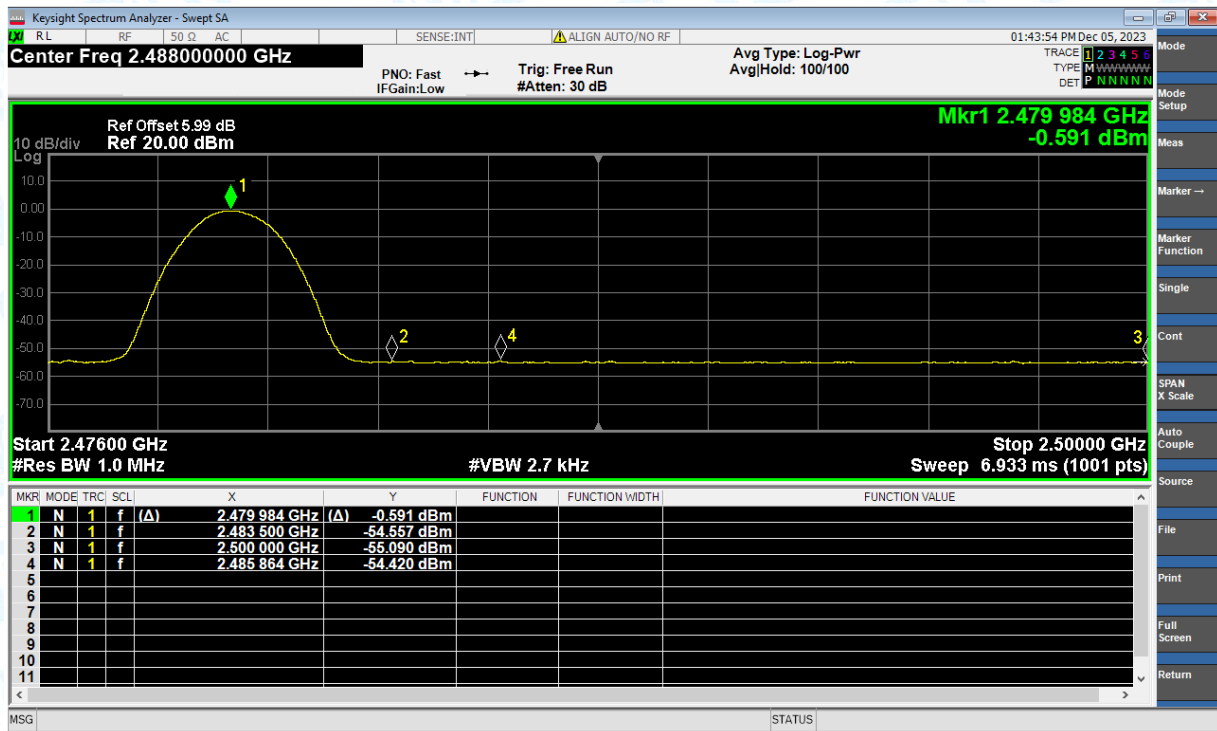
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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



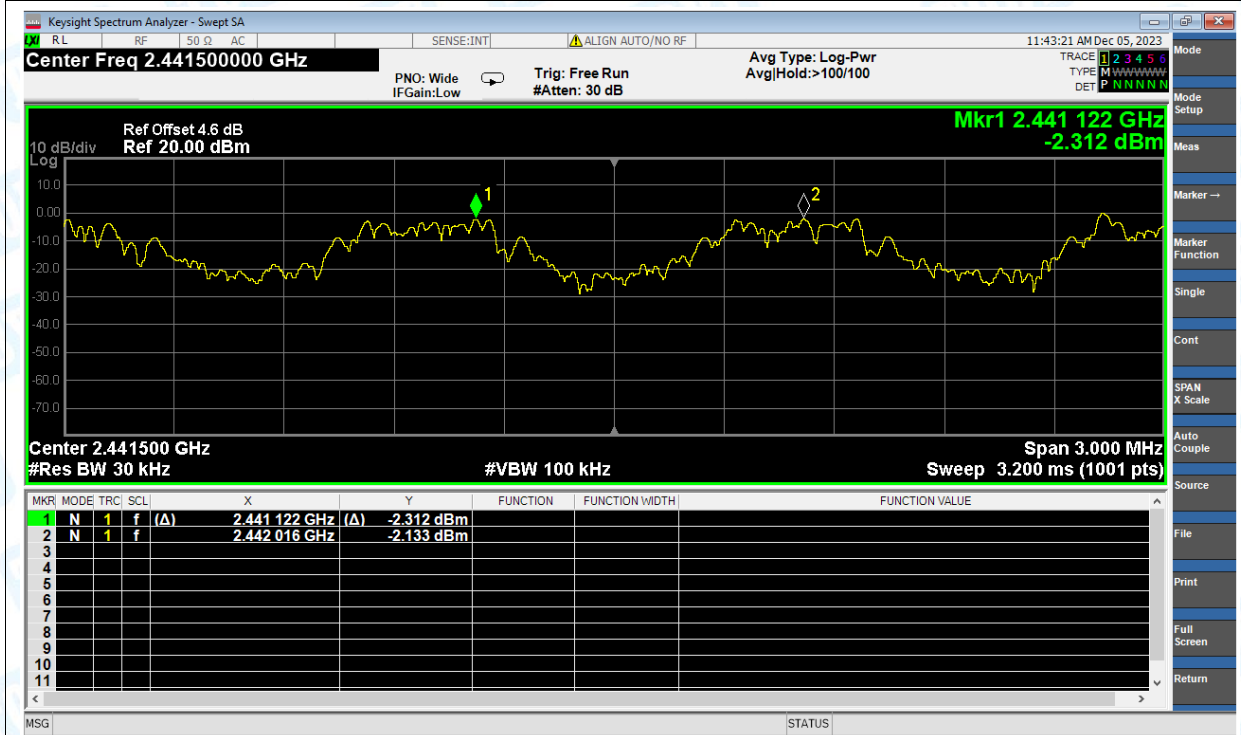


## 9. Carrier Frequencies Separation

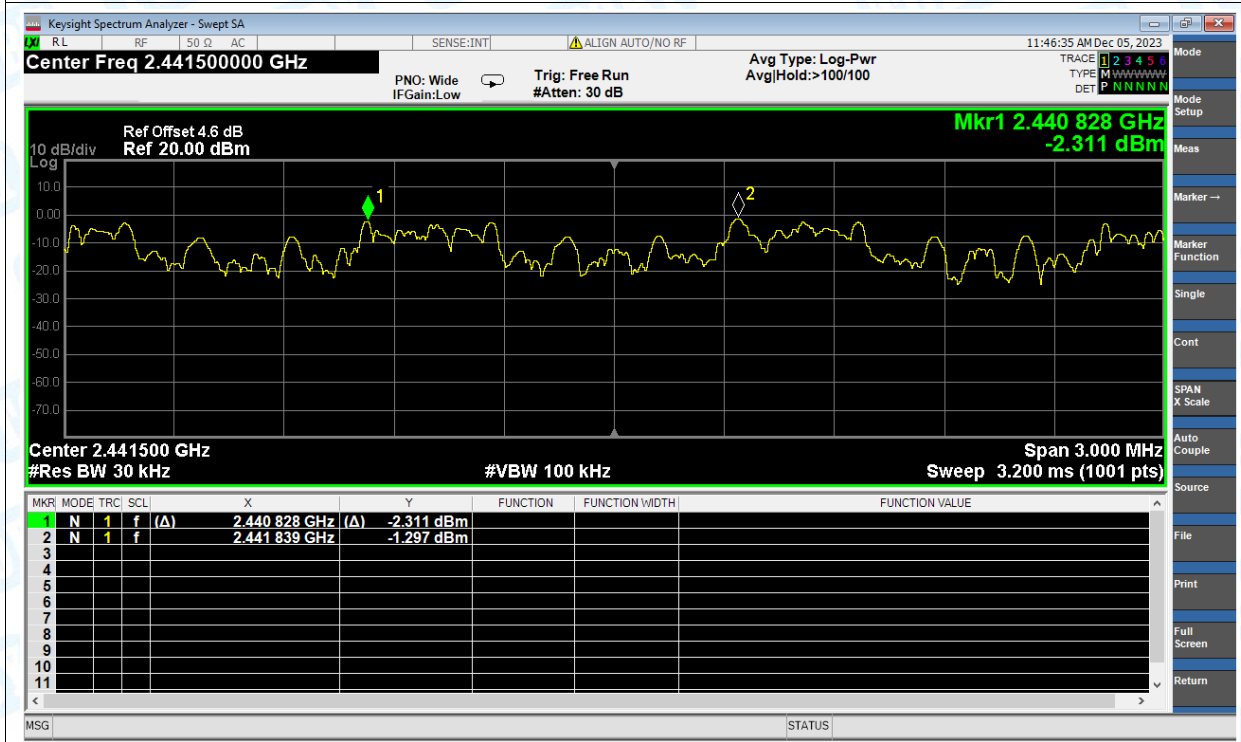
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2441.122	2442.016	0.894	0.667	Pass
NVNT	2-DH1	Ant1	2440.828	2441.839	1.011	0.853	Pass
NVNT	3-DH1	Ant1	2441.017	2442.016	0.999	0.840	Pass

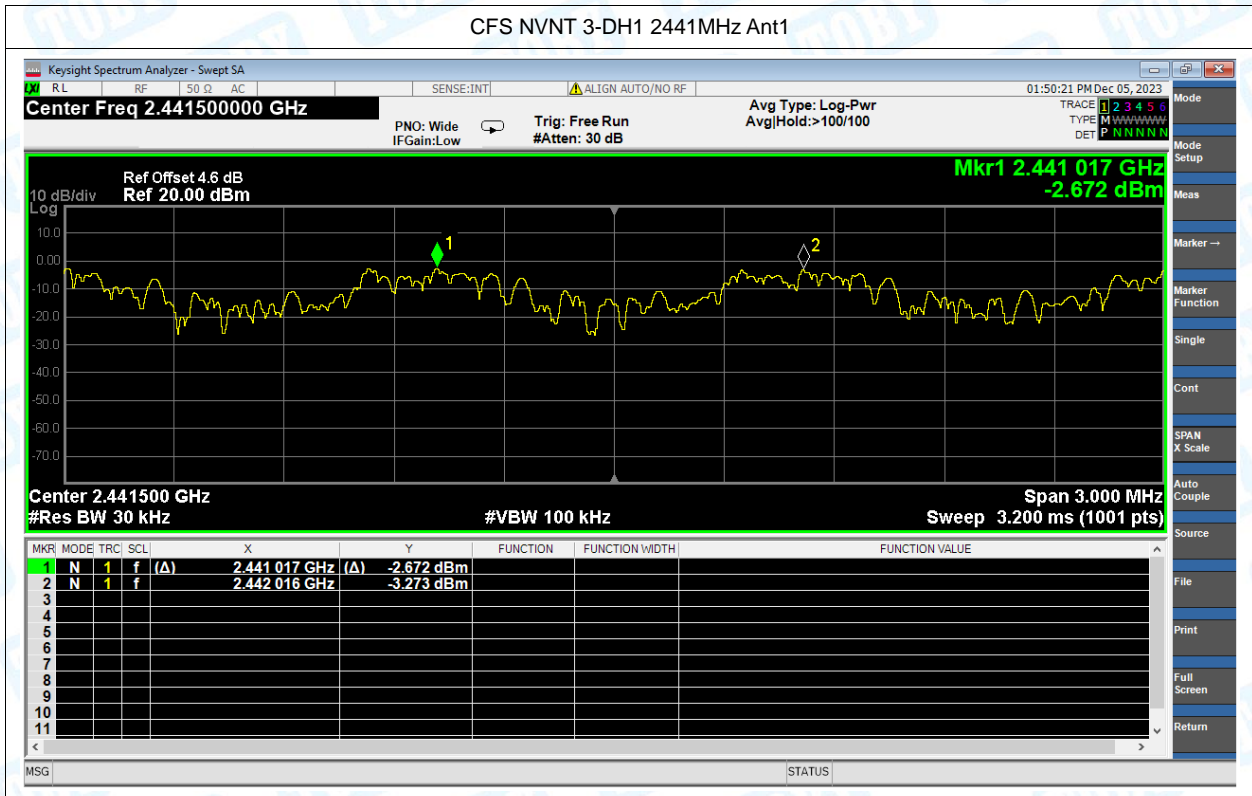
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



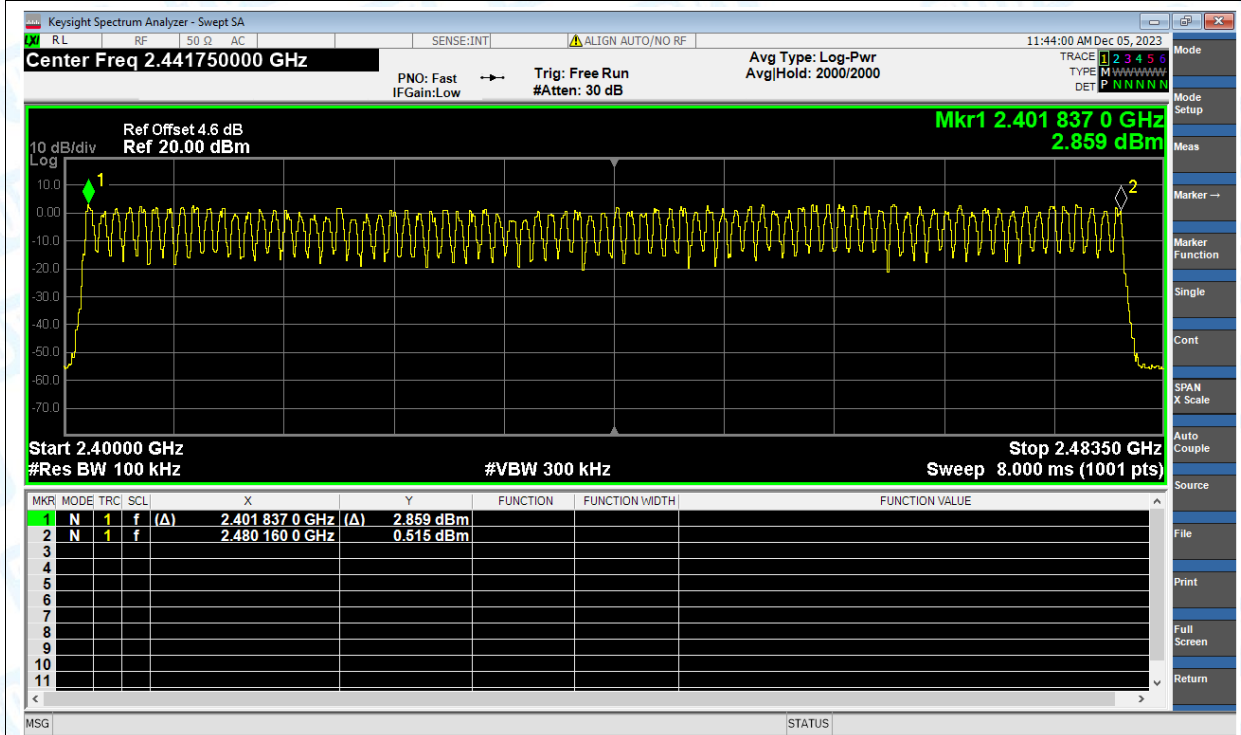


## 10. Number of Hopping Channel

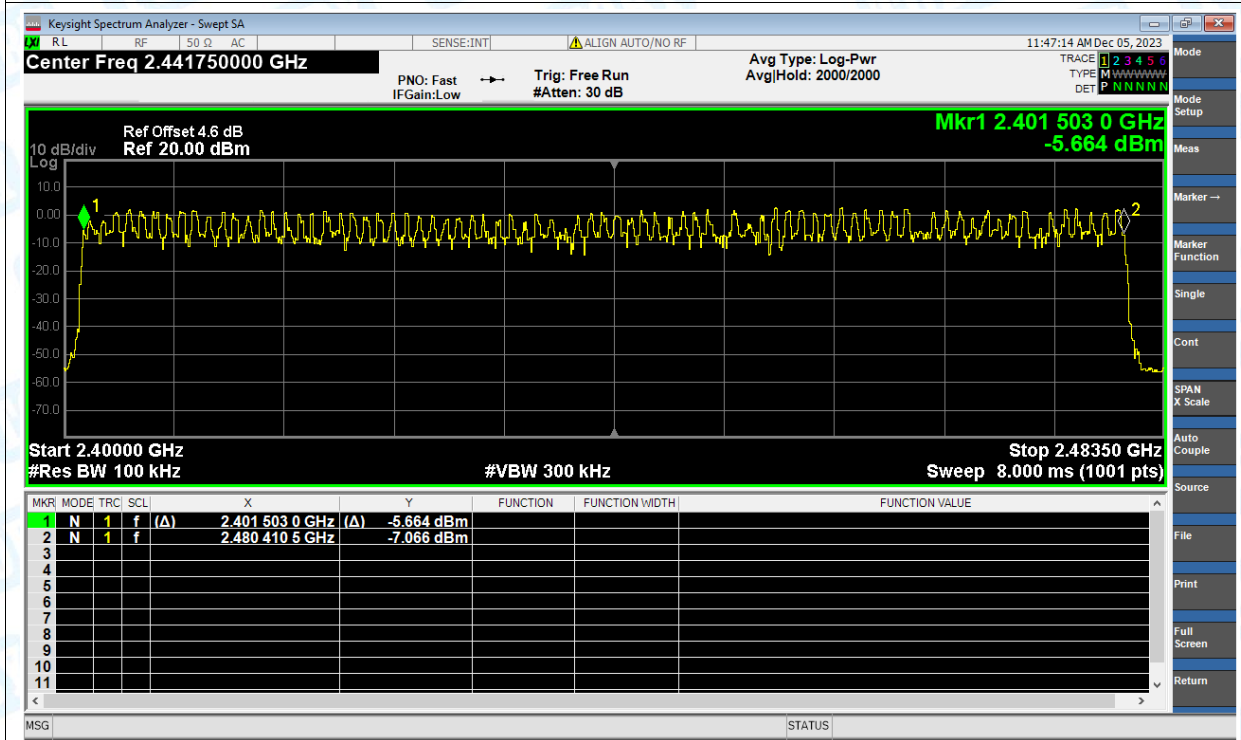
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

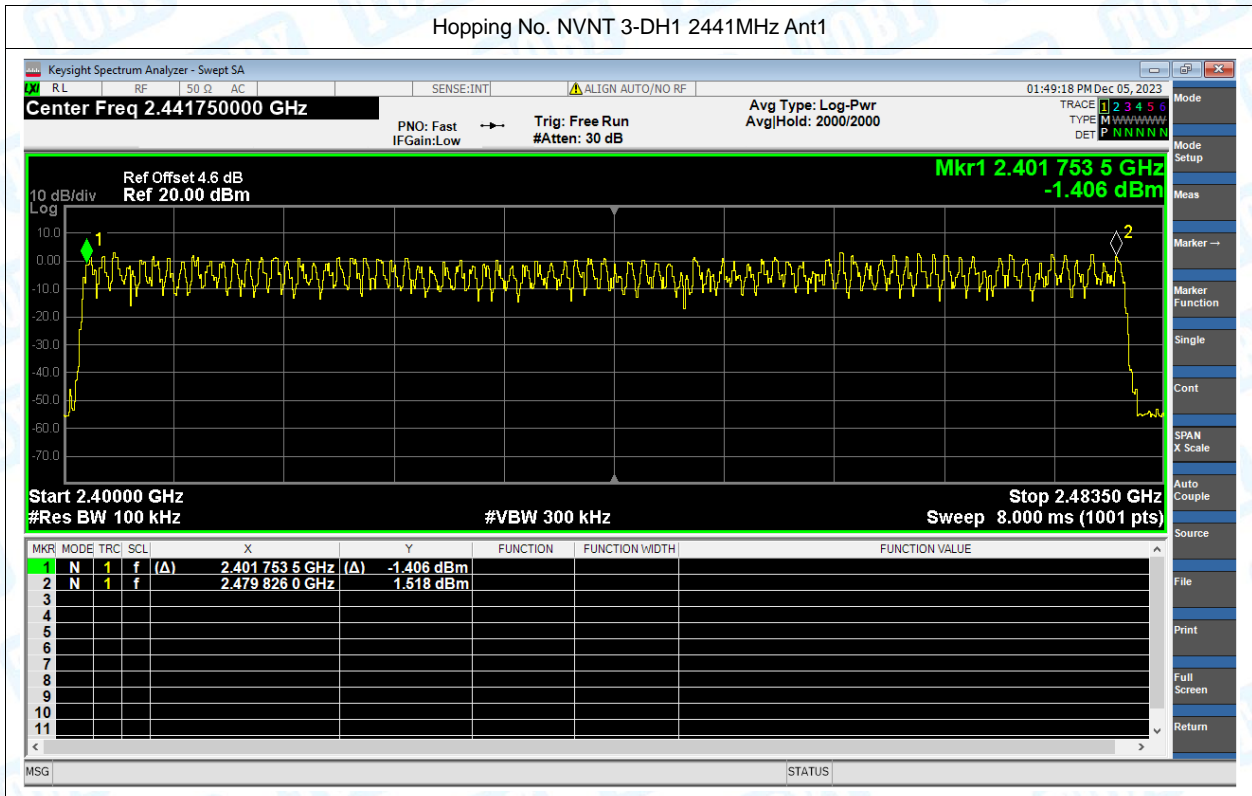
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



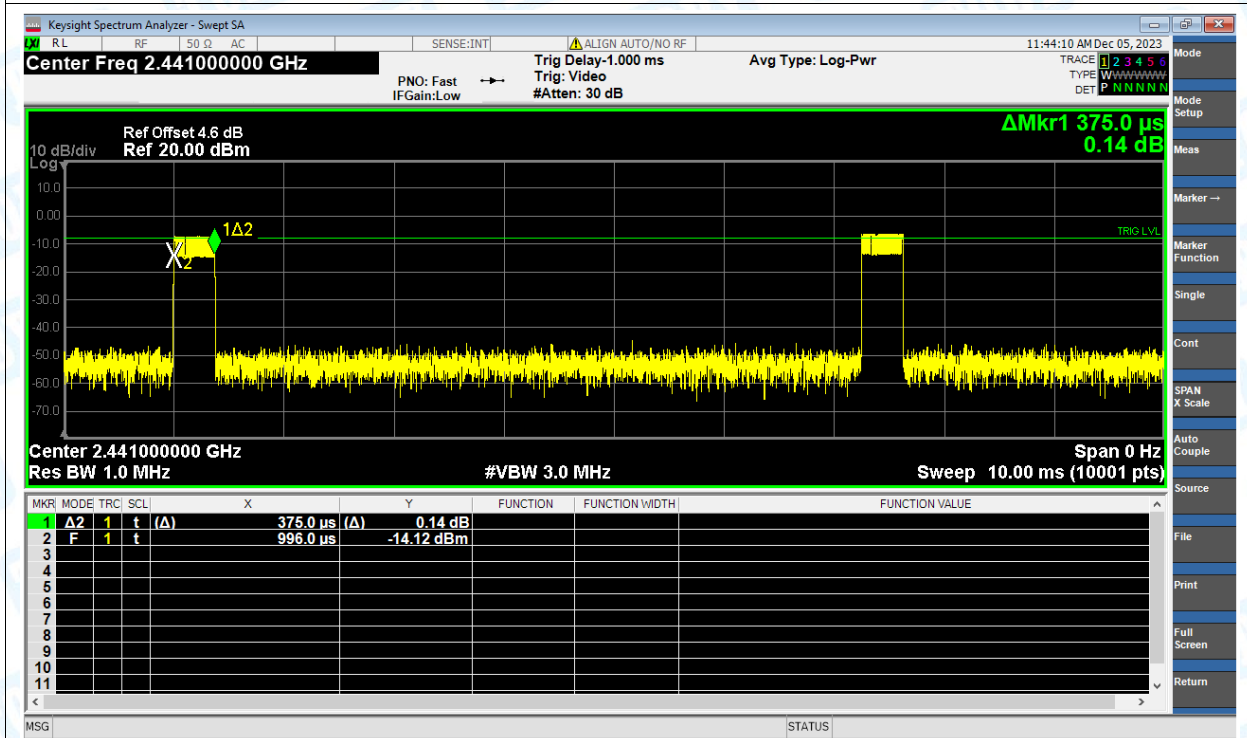


## 11. Dwell Time

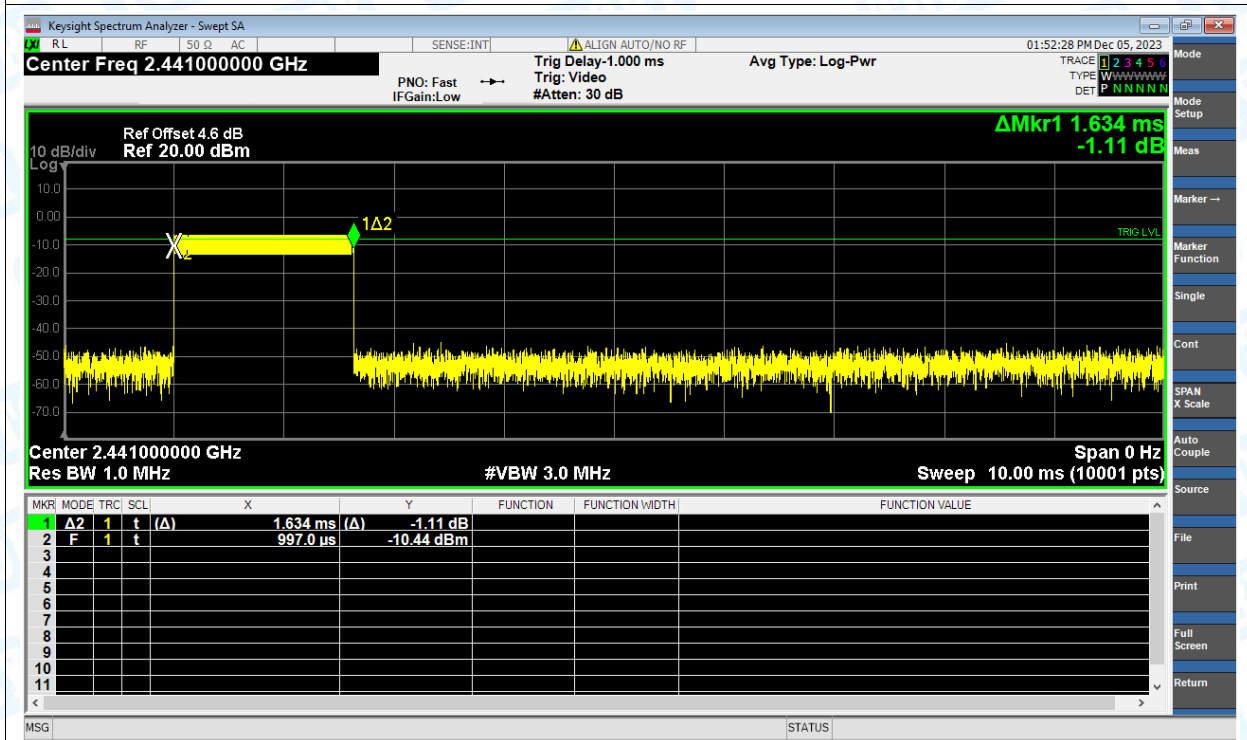
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.375	120	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.634	261.44	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.882	307.413	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.384	122.88	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.635	261.6	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.883	307.52	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.385	123.2	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.634	261.44	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.886	307.84	31600	400	Pass

Test Graphs

Dwell NVNT 1-DH1 2441MHz Ant1

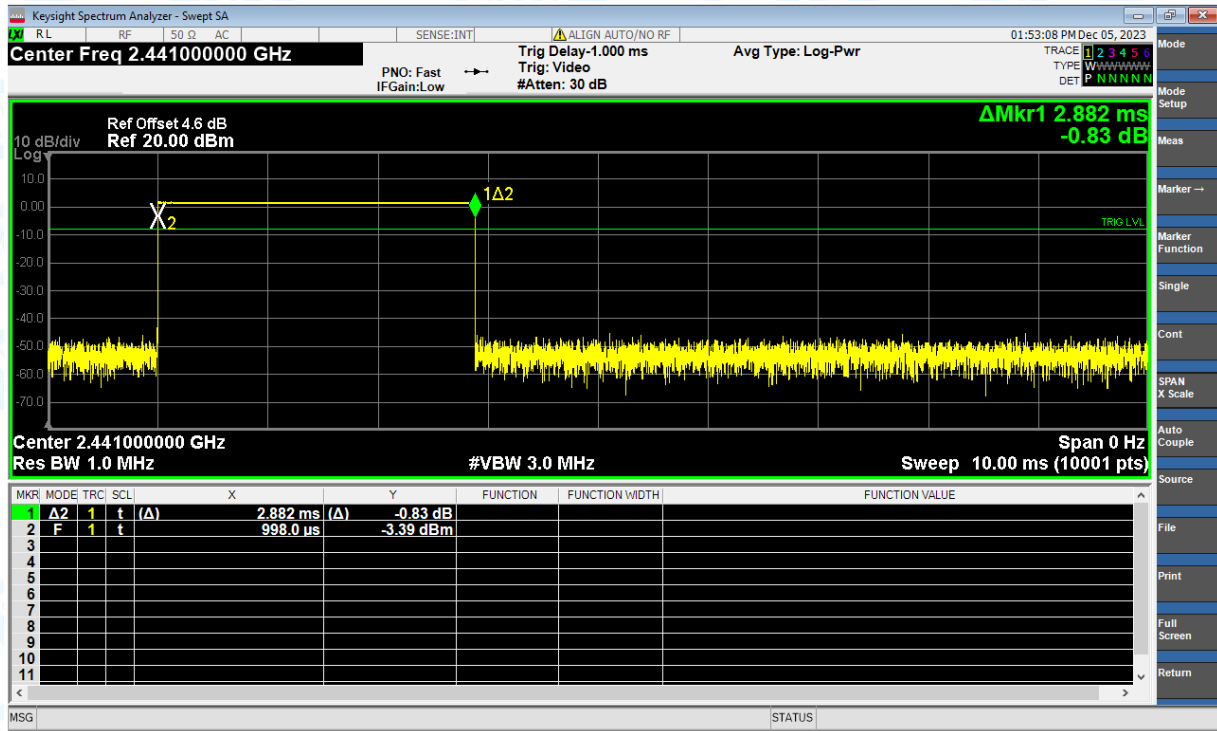


Dwell NVNT 1-DH3 2441MHz Ant1

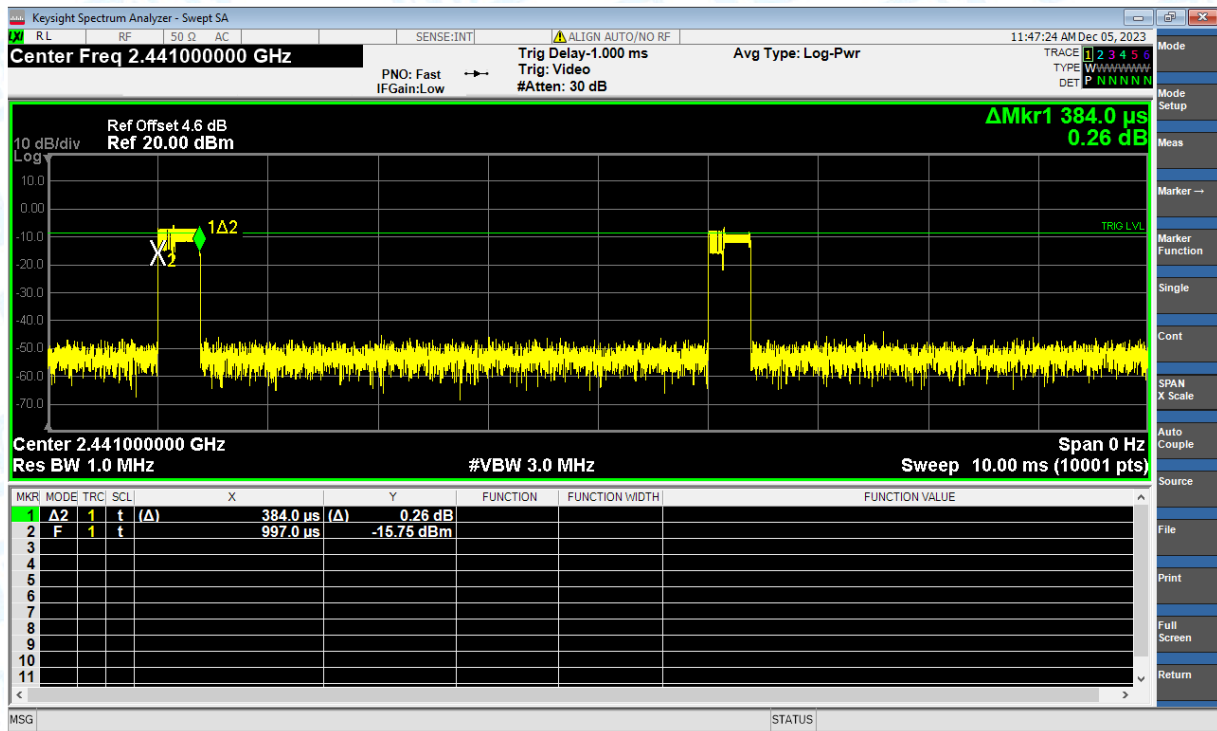




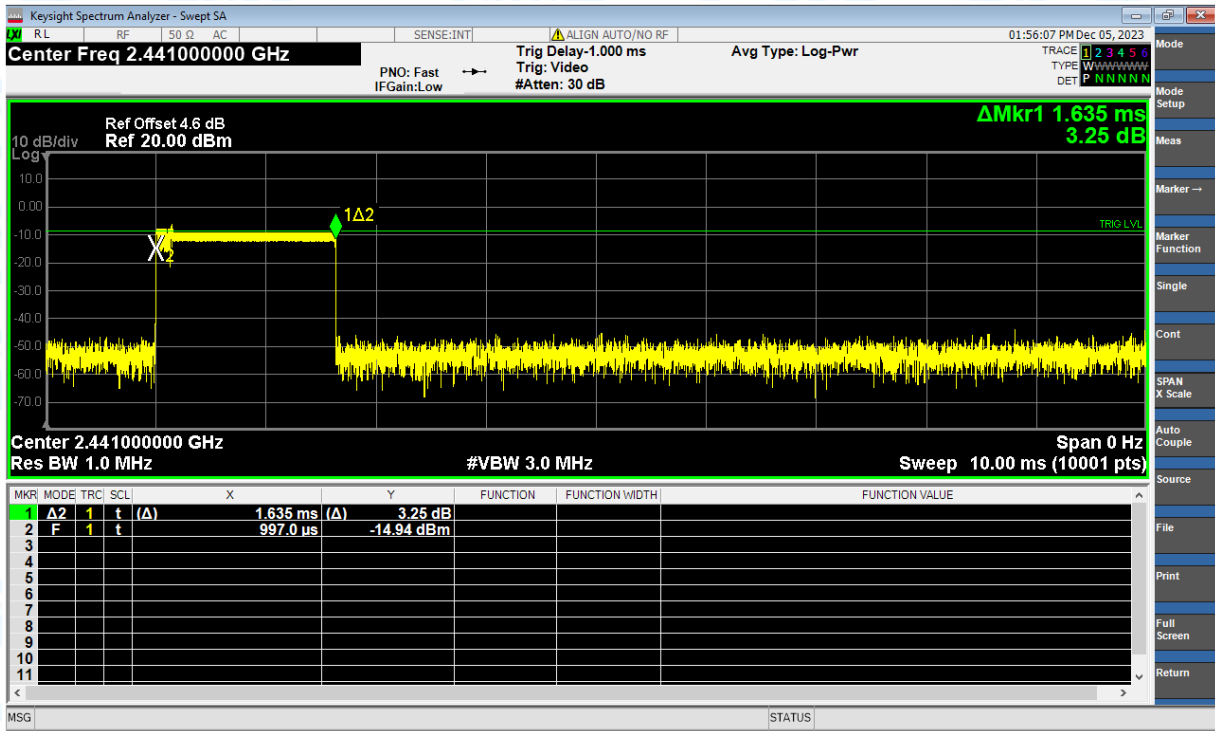
Dwell NVNT 1-DH5 2441MHz Ant1



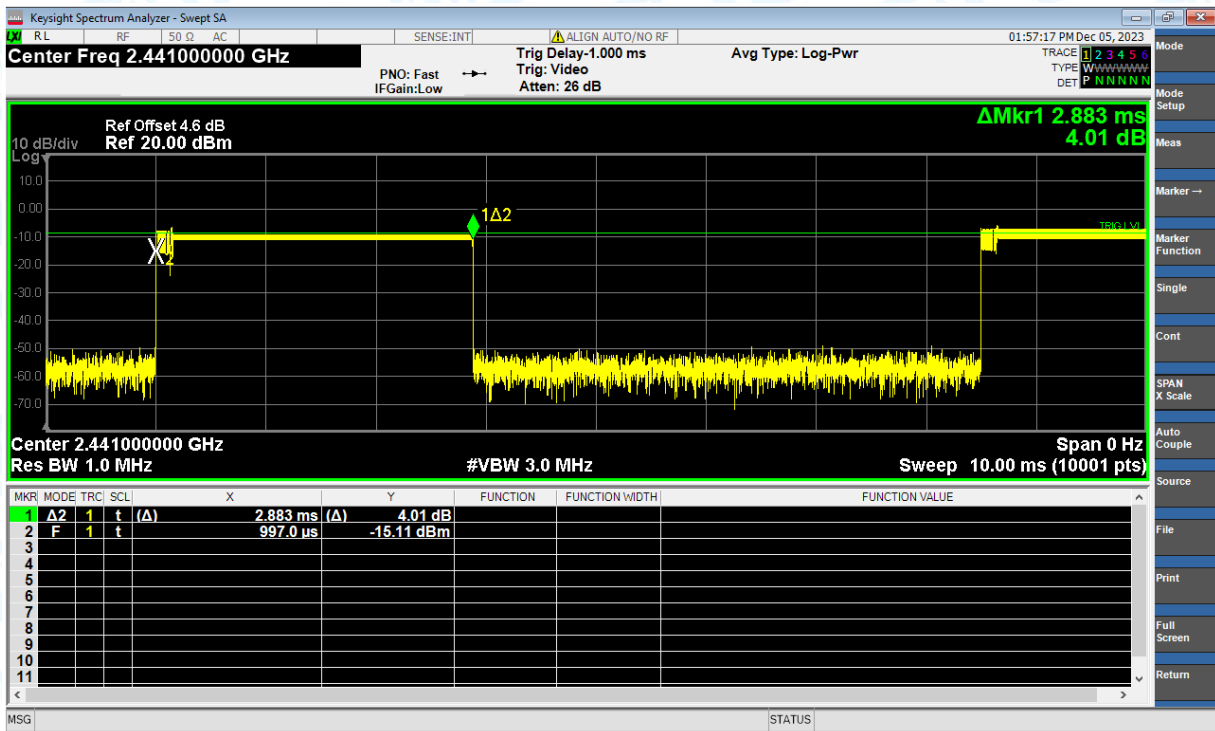
Dwell NVNT 2-DH1 2441MHz Ant1



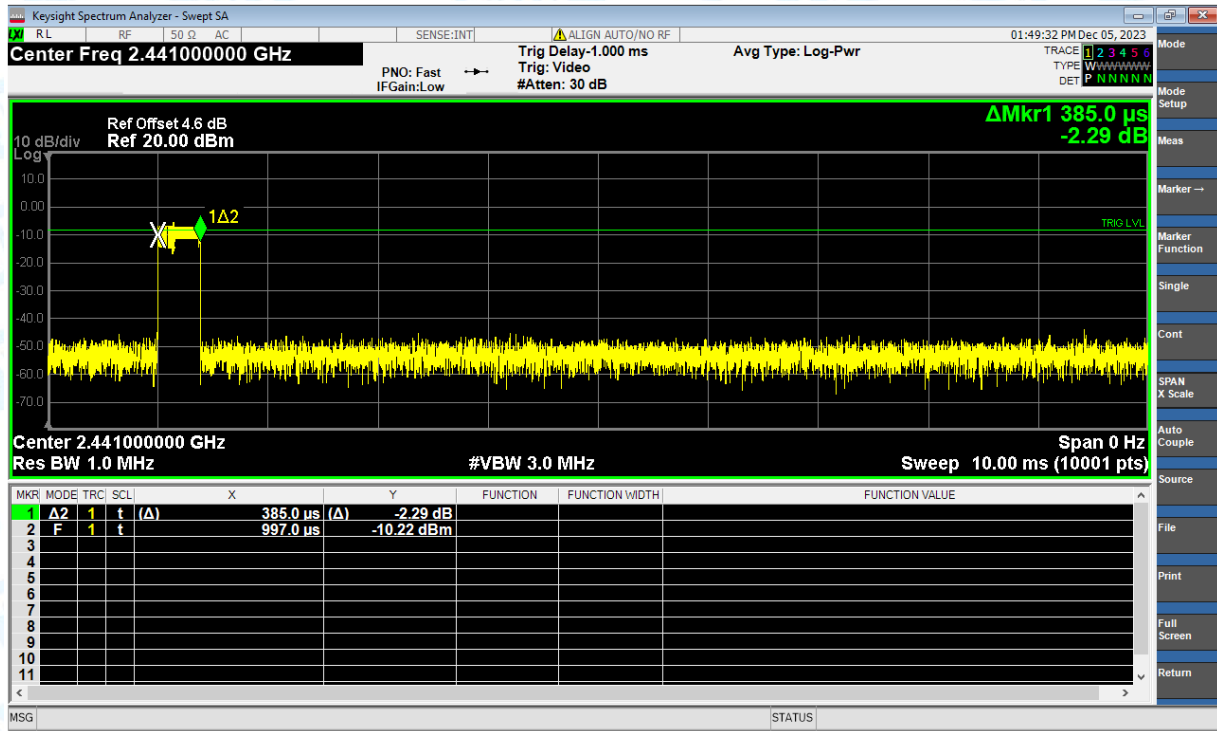
Dwell NVNT 2-DH3 2441MHz Ant1



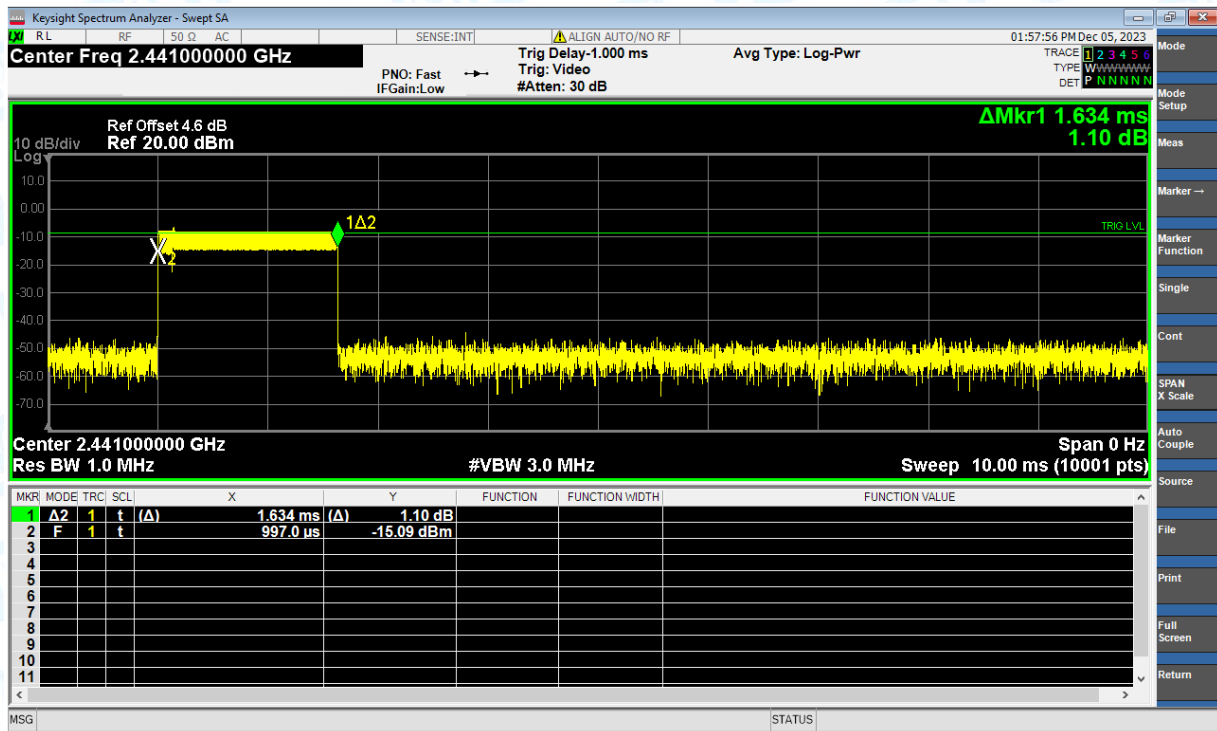
Dwell NVNT 2-DH5 2441MHz Ant1

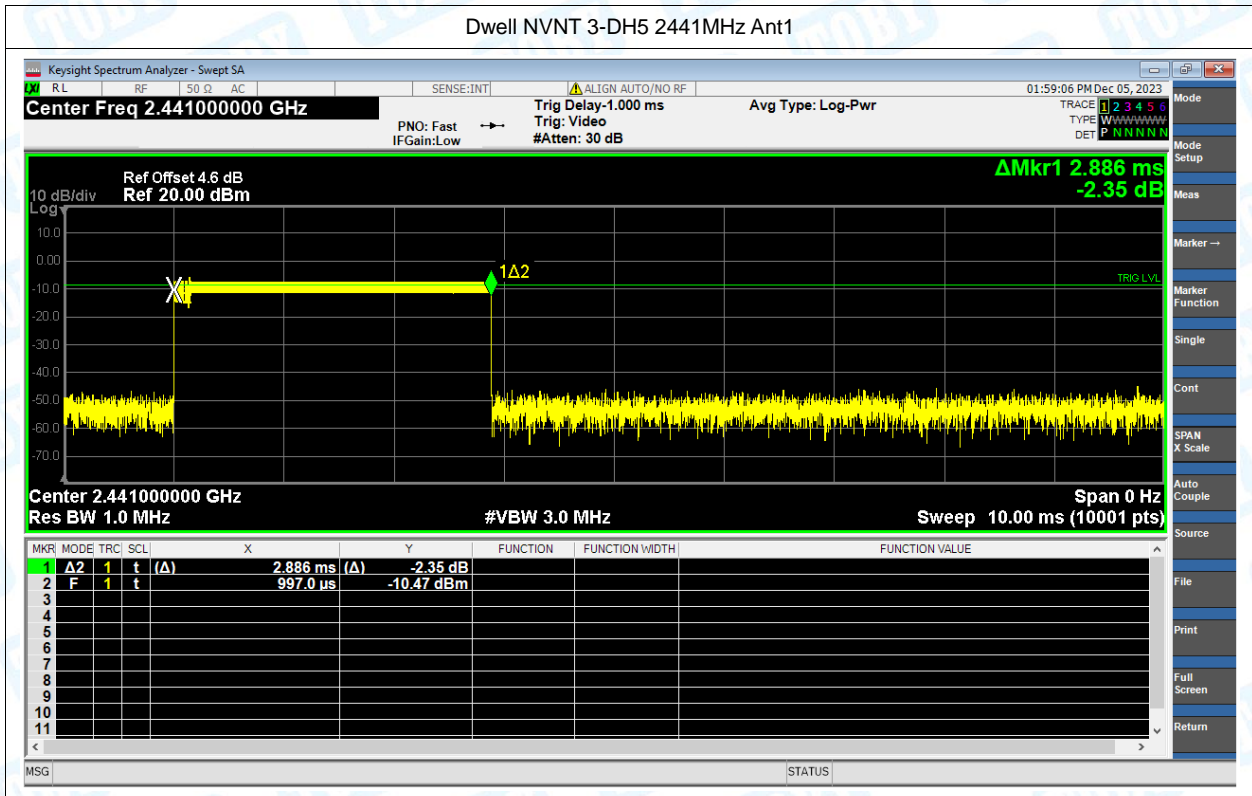


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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