

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

General Description of EUT	
Product Name:	wireless headset
Test Model:	BAM 1
Sample ID:	202311-0339-4-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Yan zhen ming
Note: For a more detailed features description, please refer to the report TBR-C-202311-0339-7 The report only show the worst case data.	

Contents

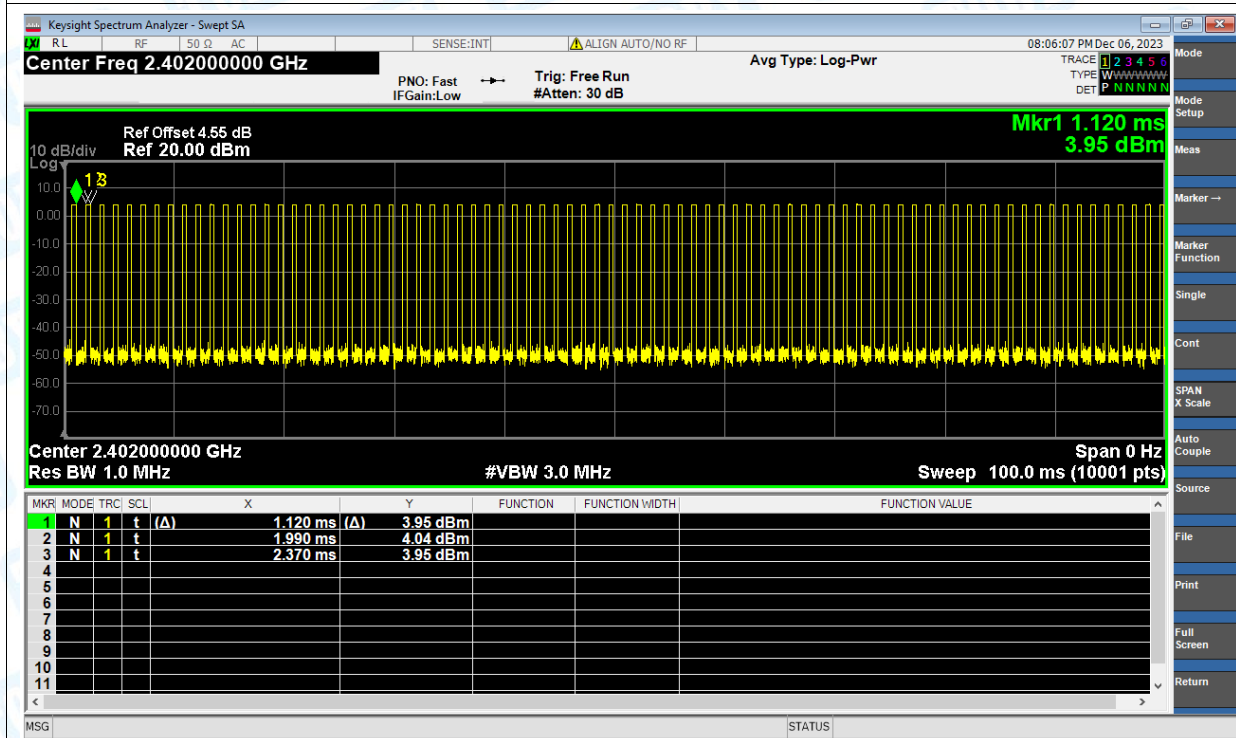
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1. Duty Cycle

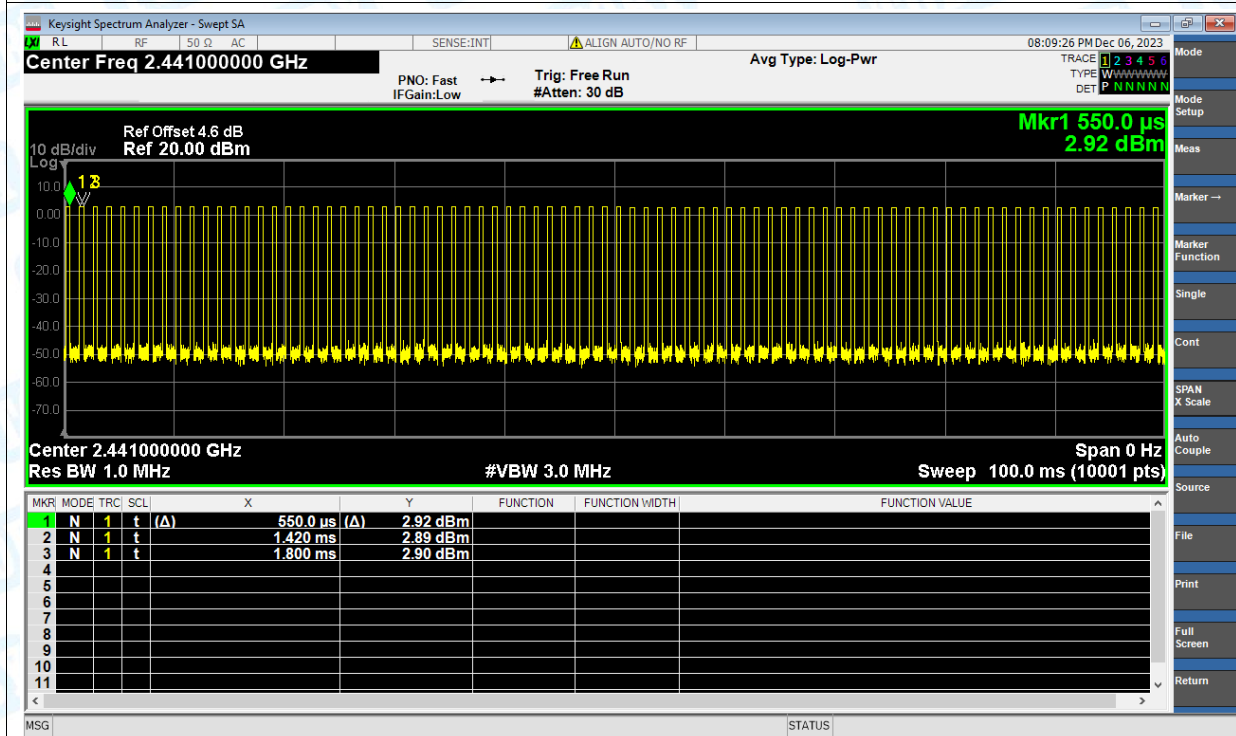
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	30.4	5.17	2.63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

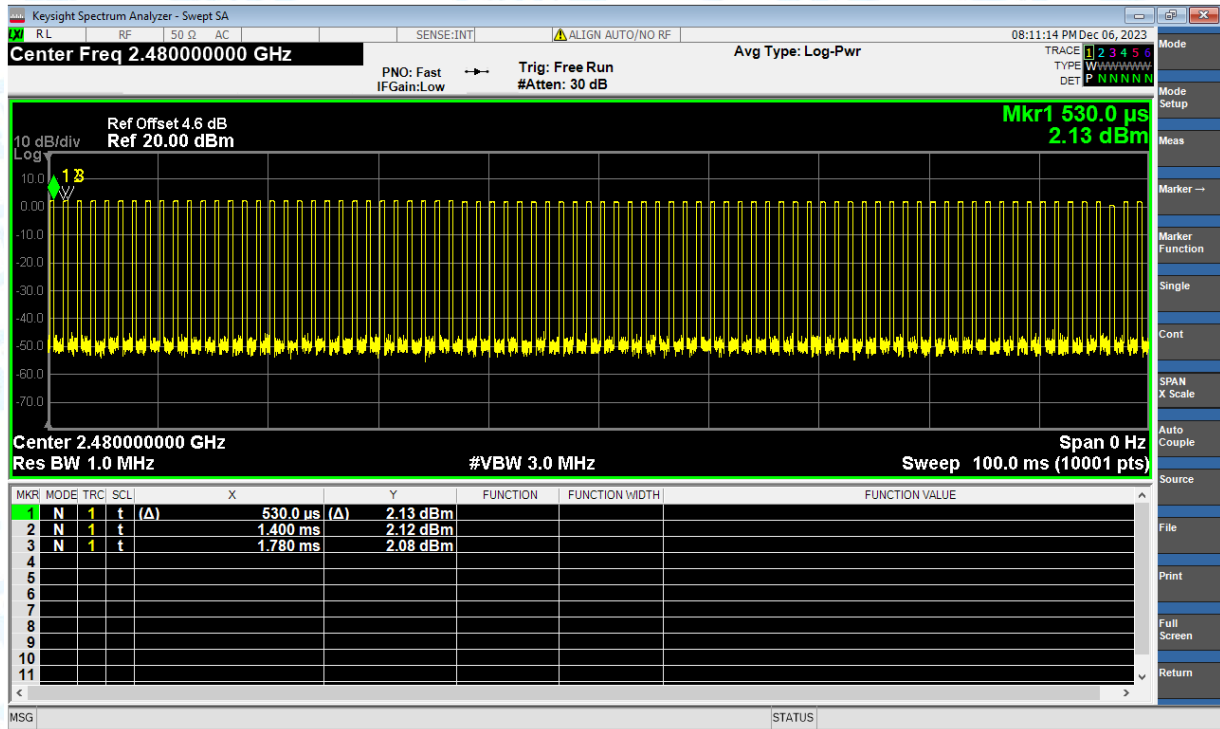
Duty Cycle NVNT 1-DH1 2402MHz Ant1



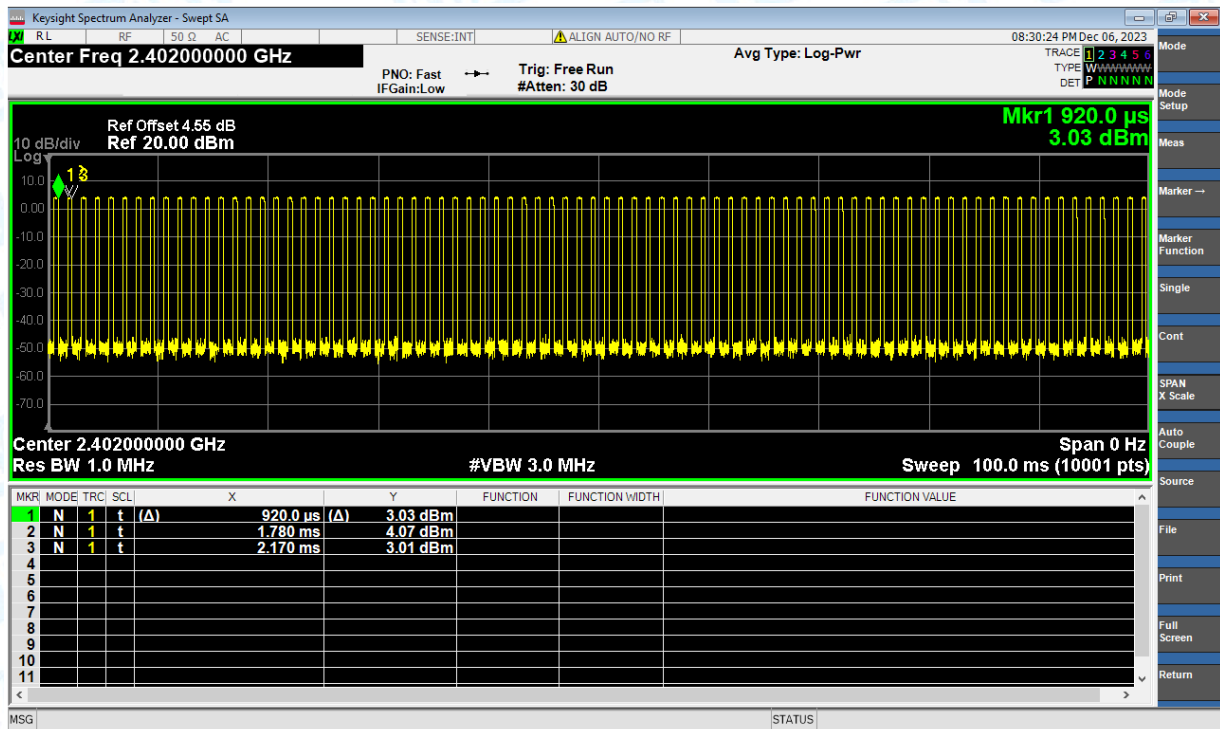
Duty Cycle NVNT 1-DH1 2441MHz Ant1



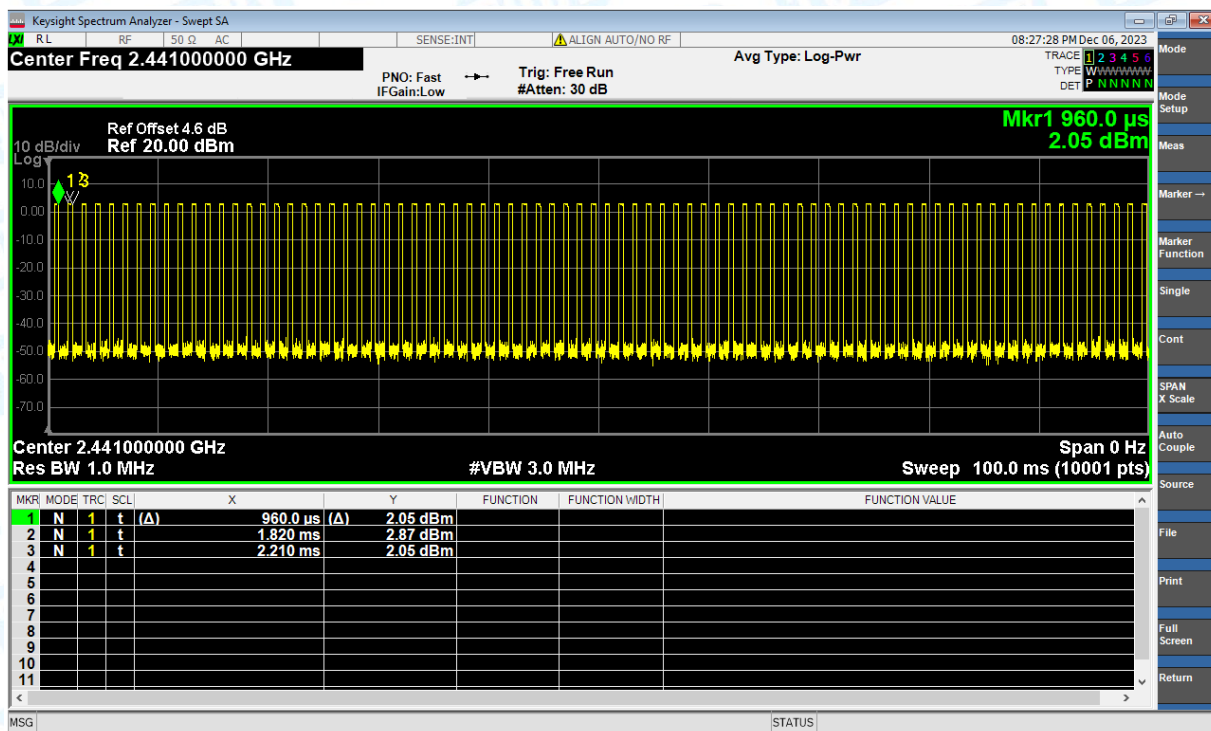
Duty Cycle NVNT 1-DH1 2480MHz Ant1



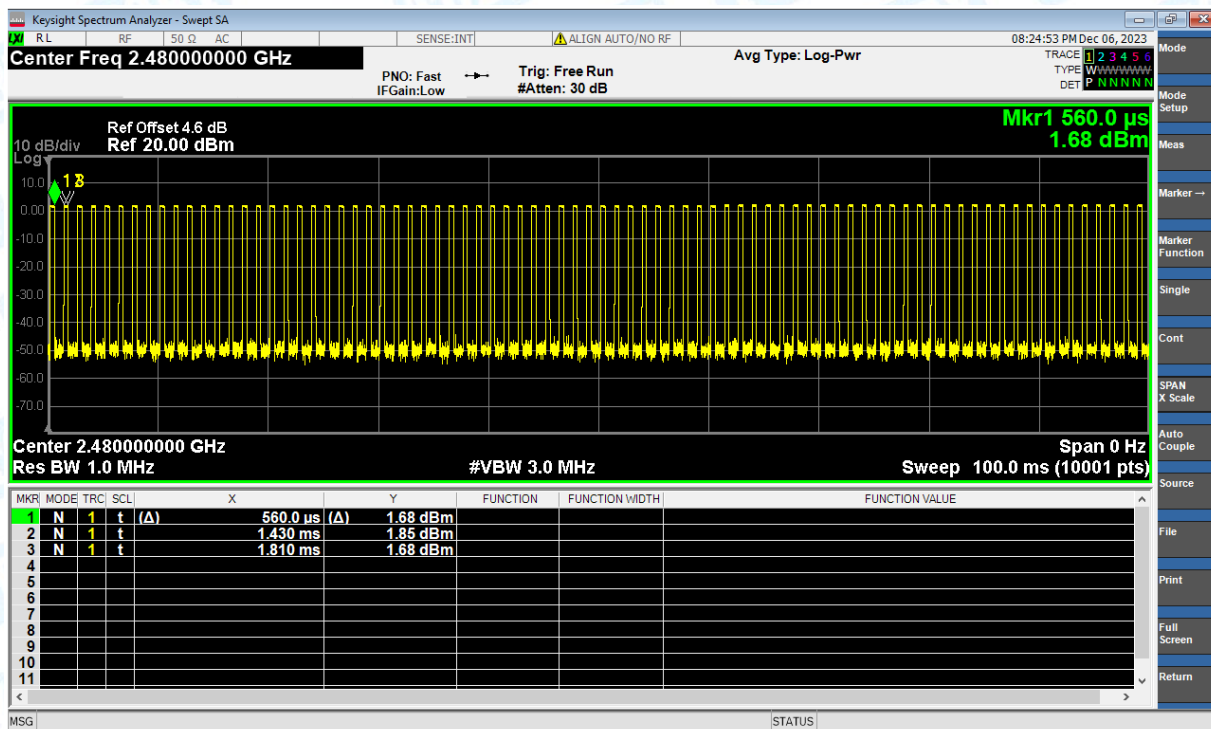
Duty Cycle NVNT 2-DH1 2402MHz Ant1



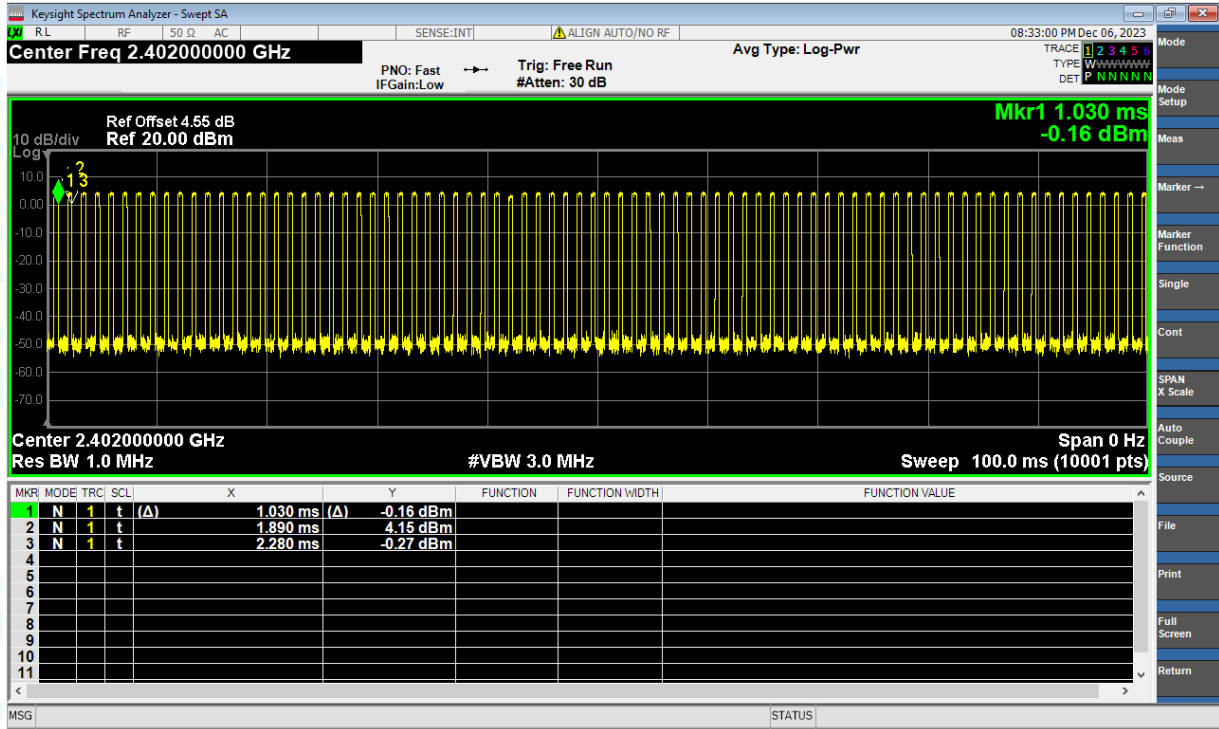
Duty Cycle NVNT 2-DH1 2441MHz Ant1



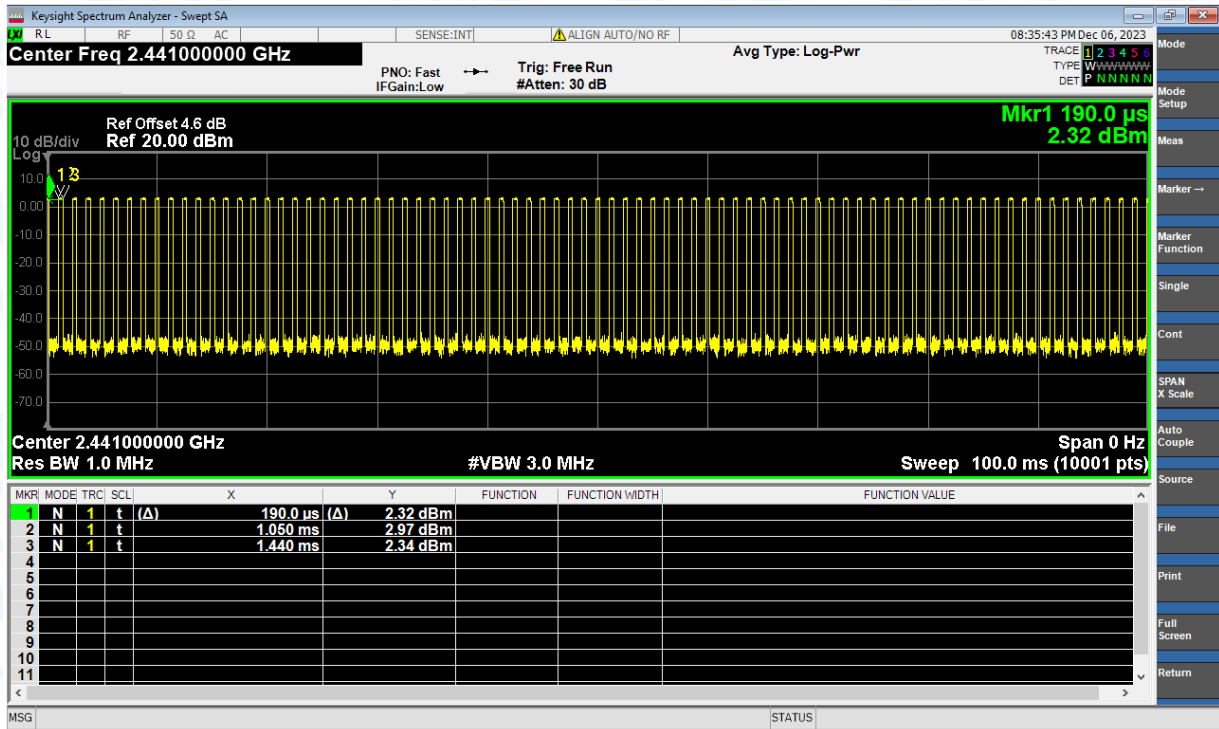
Duty Cycle NVNT 2-DH1 2480MHz Ant1

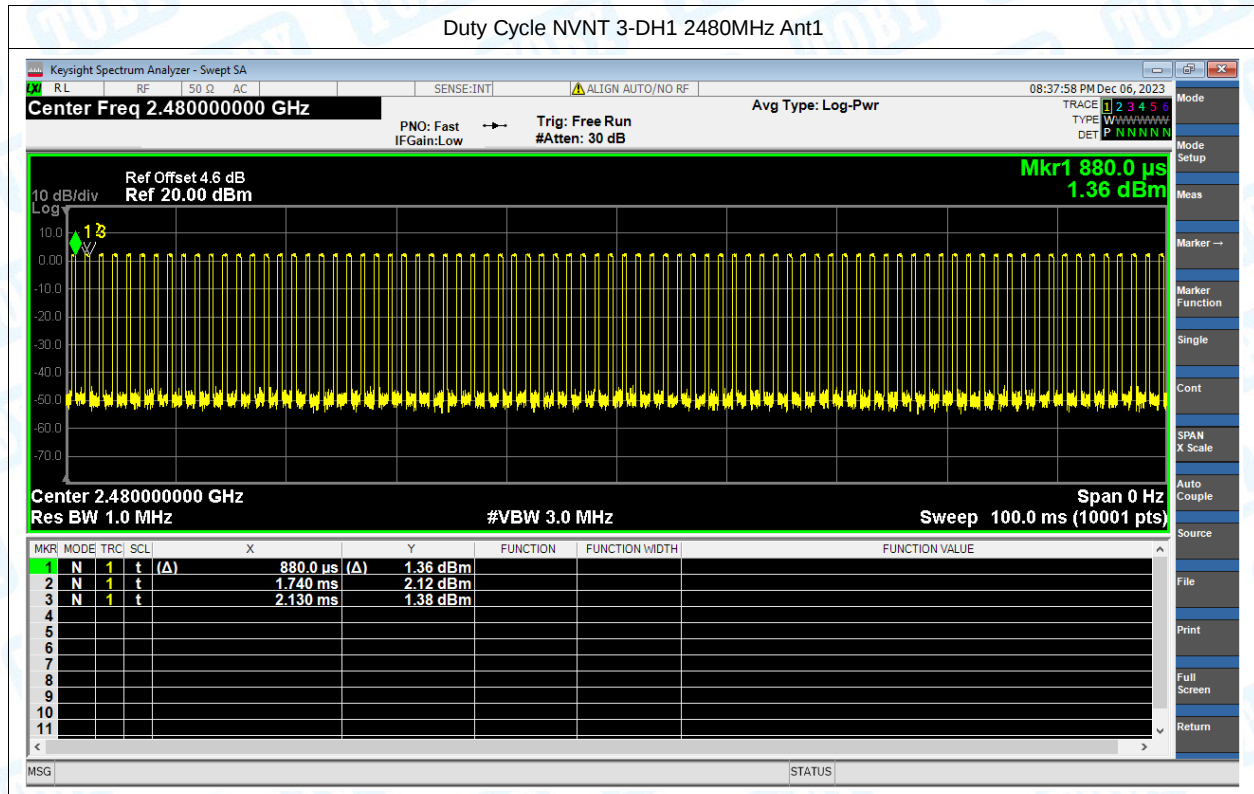


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



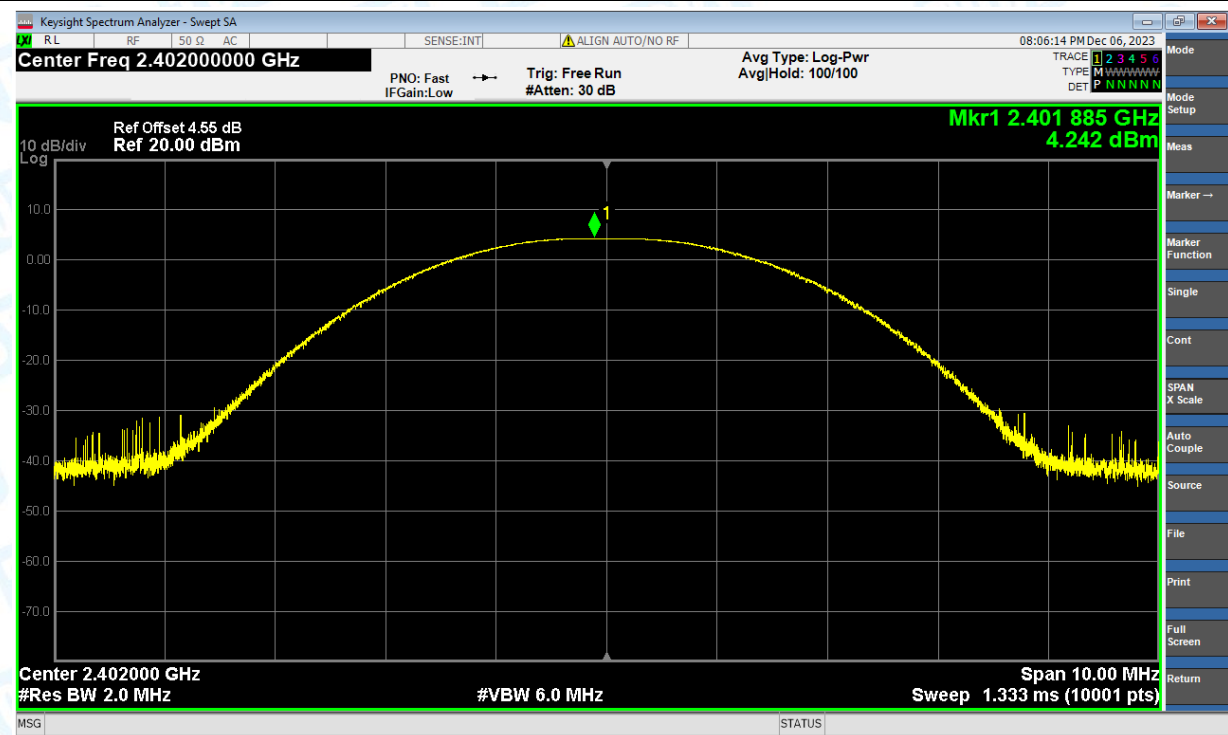


2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	4.242	0	4.242	21	Pass
NVNT	1-DH1	2441	Ant1	3.128	0	3.128	21	Pass
NVNT	1-DH1	2480	Ant1	2.299	0	2.299	21	Pass
NVNT	2-DH1	2402	Ant1	4.595	0	4.595	21	Pass
NVNT	2-DH1	2441	Ant1	3.513	0	3.513	21	Pass
NVNT	2-DH1	2480	Ant1	2.762	0	2.762	21	Pass
NVNT	3-DH1	2402	Ant1	4.811	0	4.811	21	Pass
NVNT	3-DH1	2441	Ant1	3.678	0	3.678	21	Pass
NVNT	3-DH1	2480	Ant1	3.088	0	3.088	21	Pass

Test Graphs

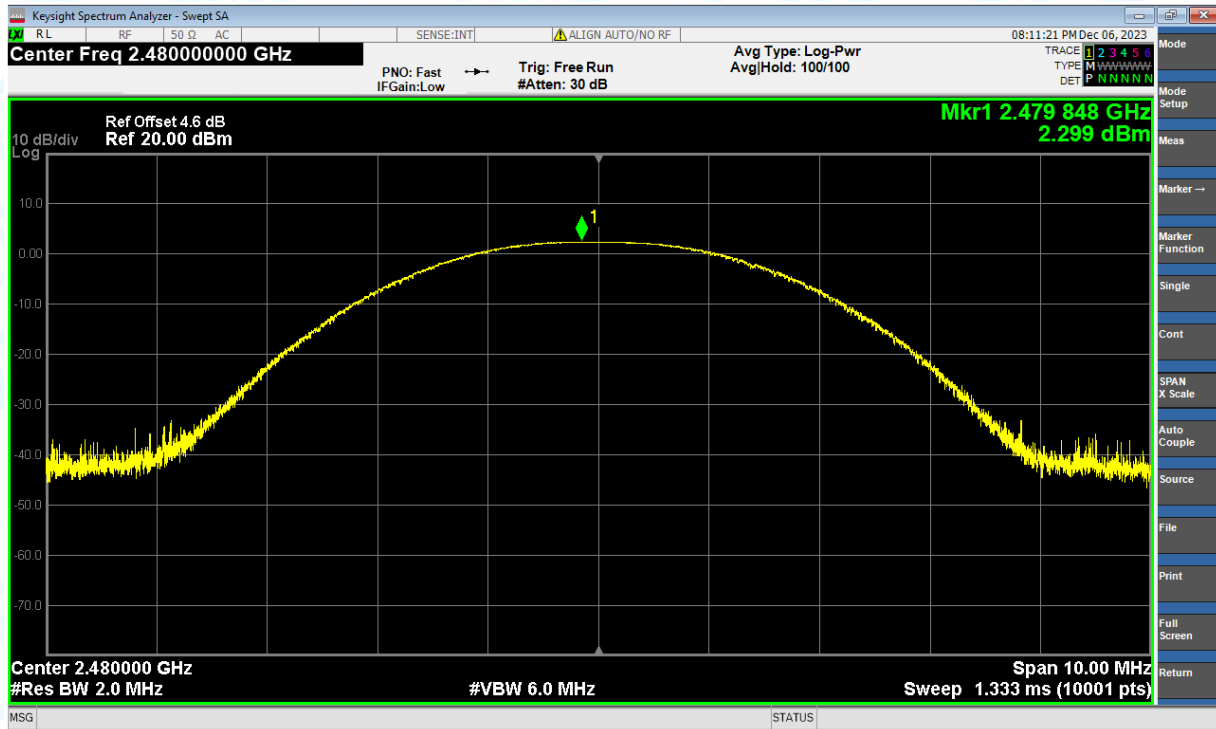
Power NVNT 1-DH1 2402MHz Ant1



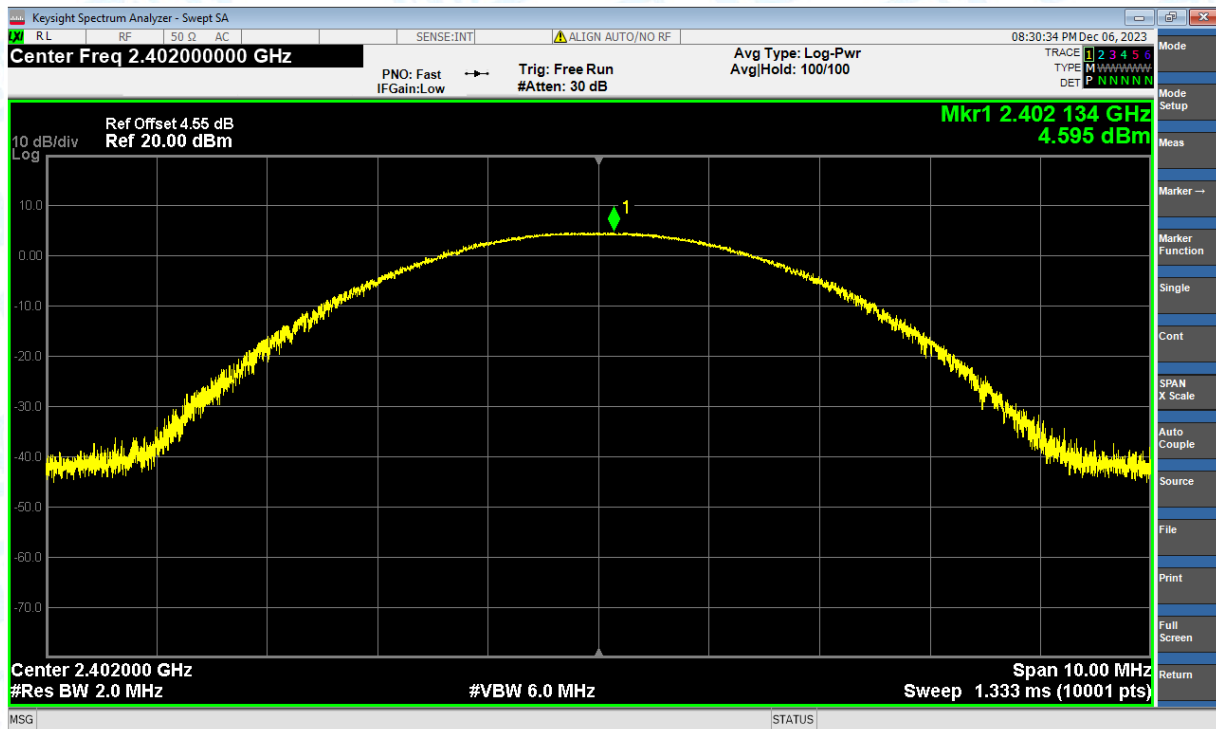
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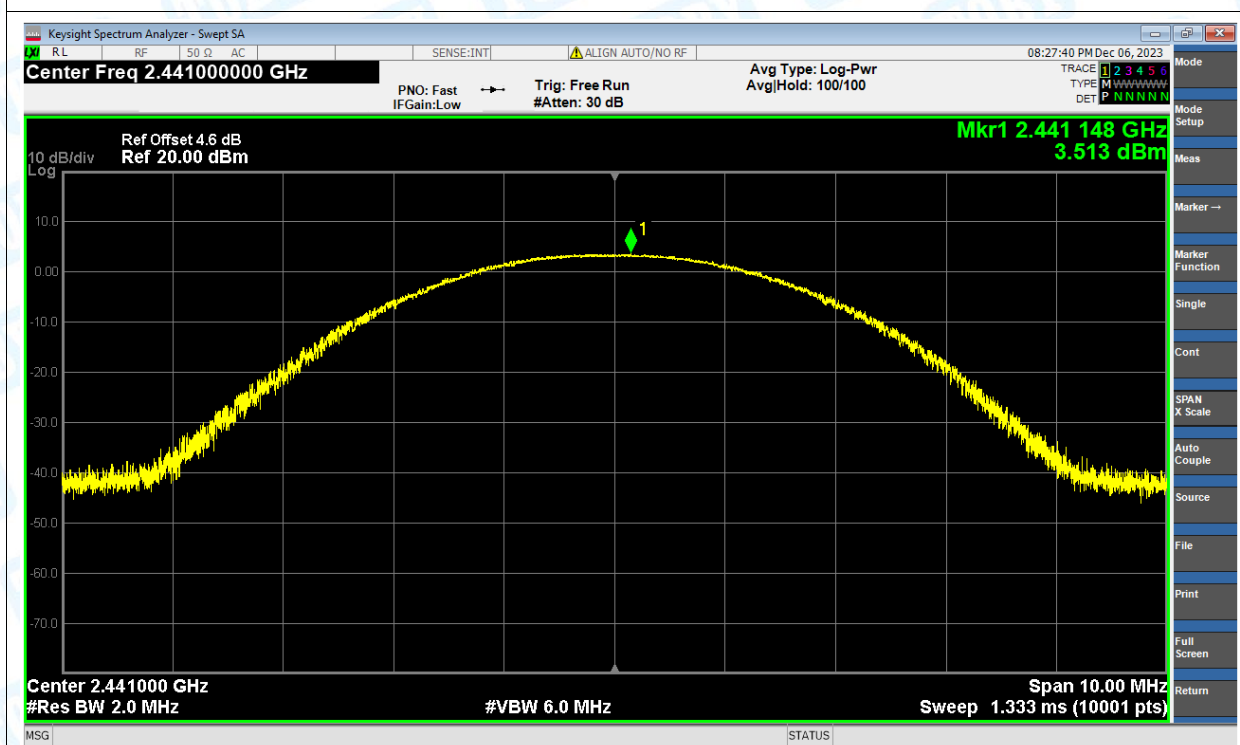
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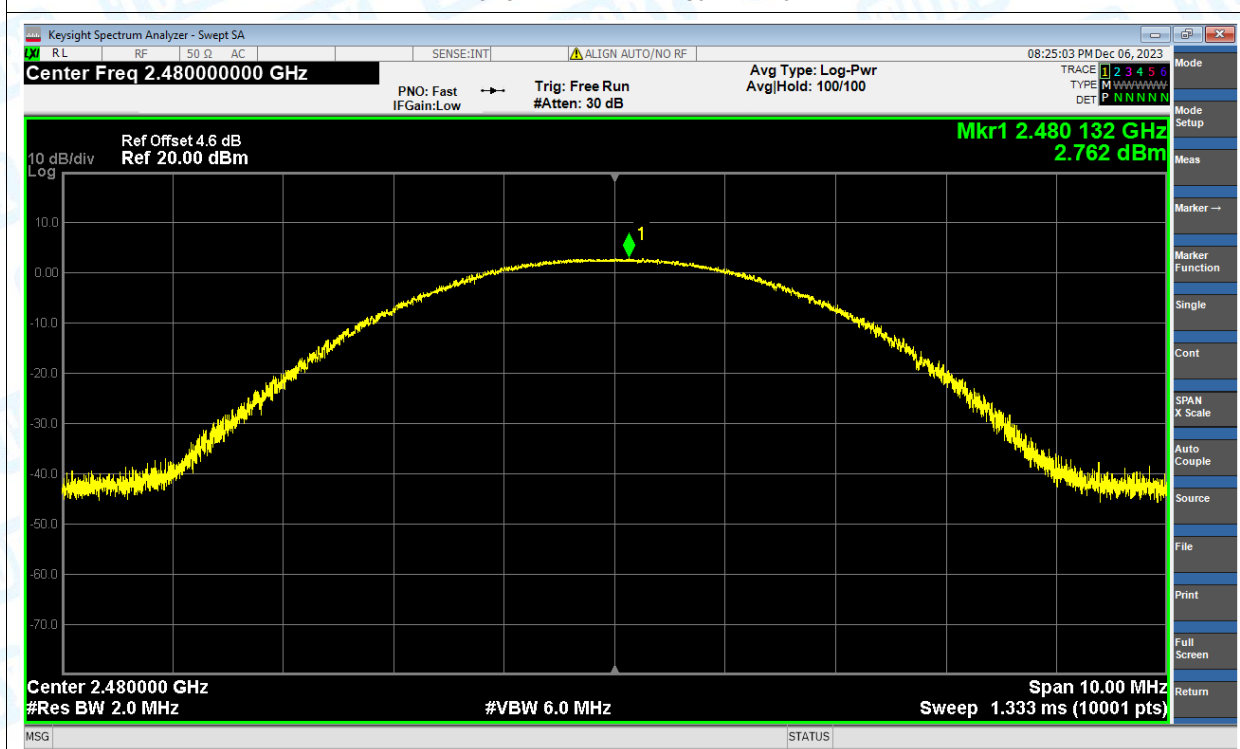
Power NVNT 2-DH1 2402MHz Ant1



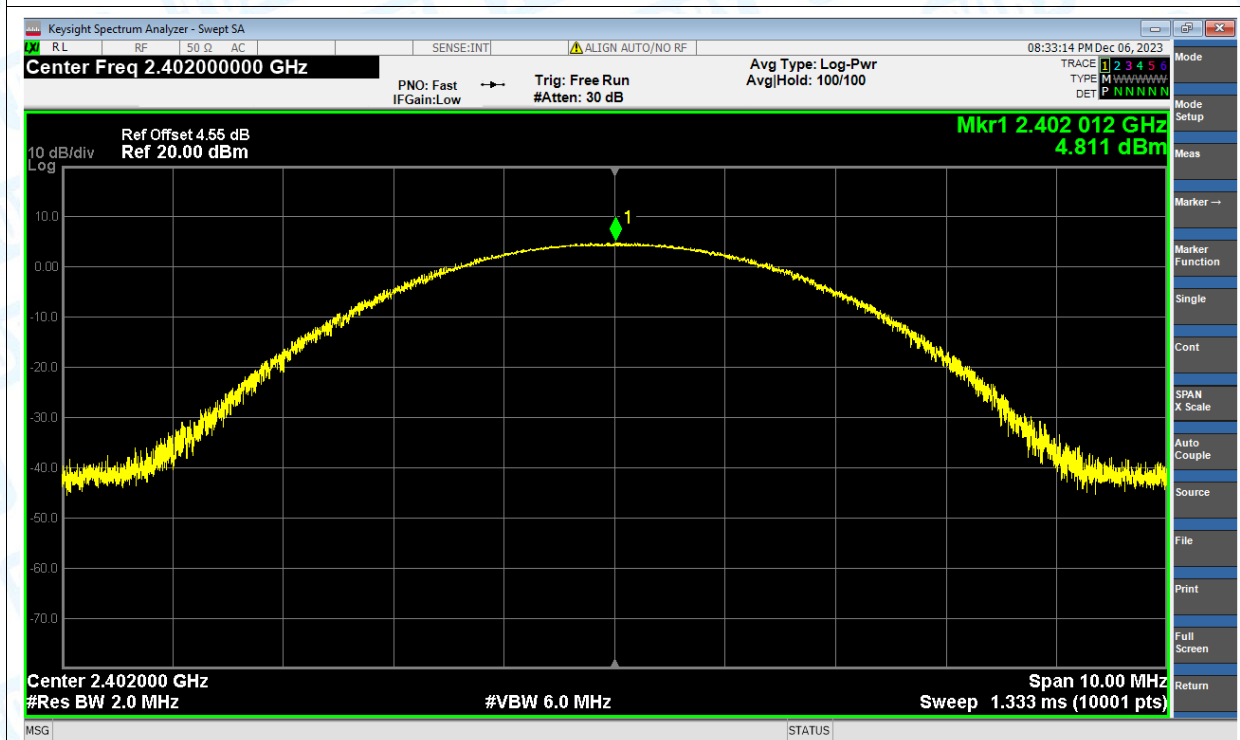
Power NVNT 2-DH1 2441MHz Ant1



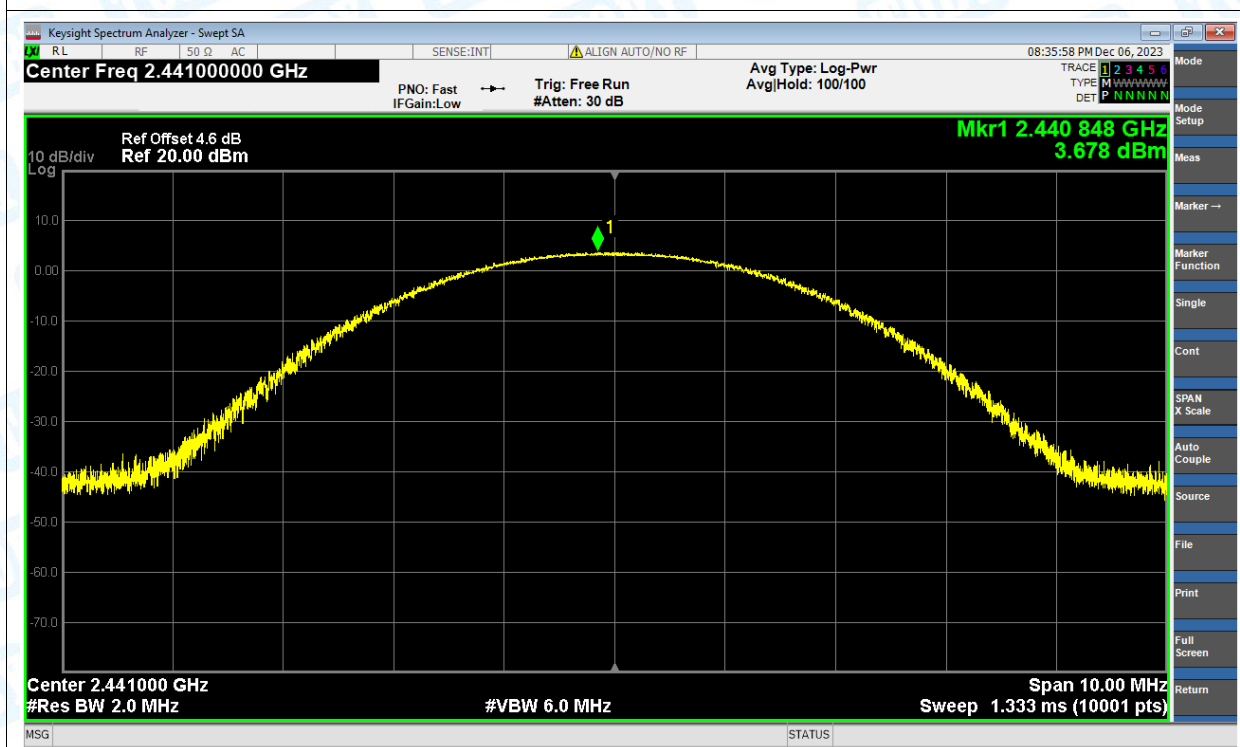
Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



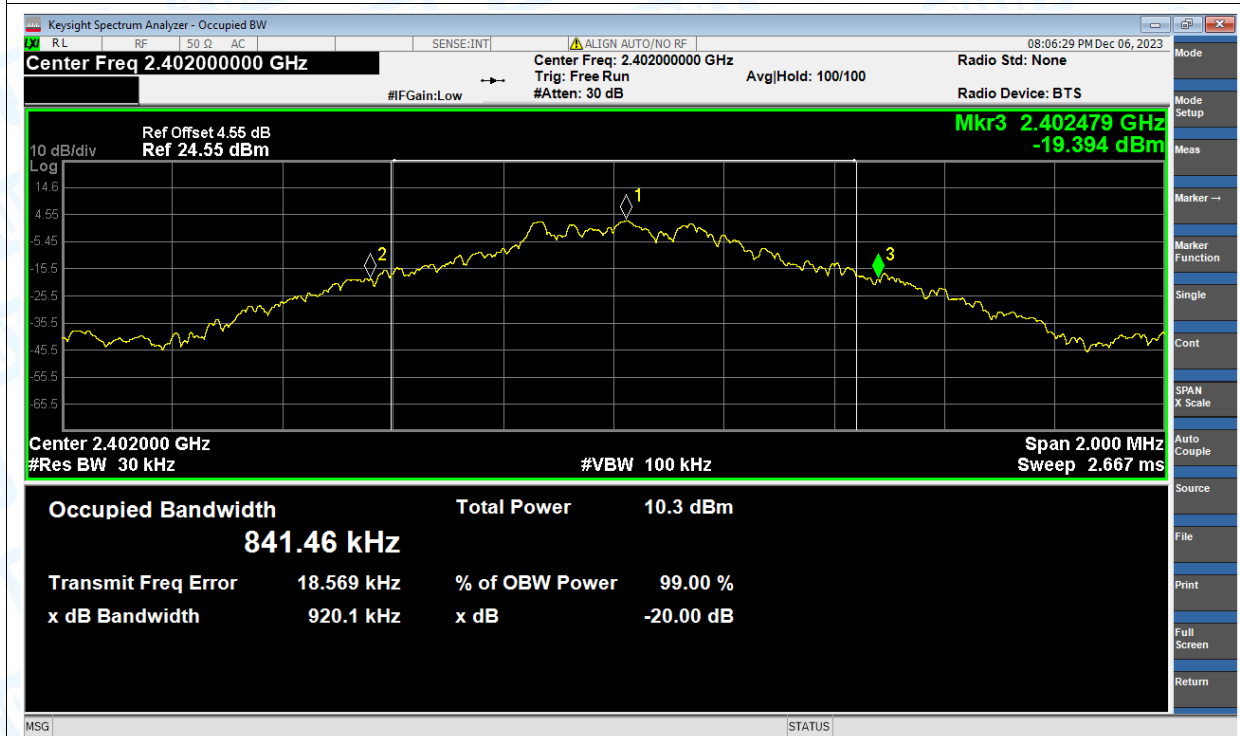


3. -20dB Bandwidth

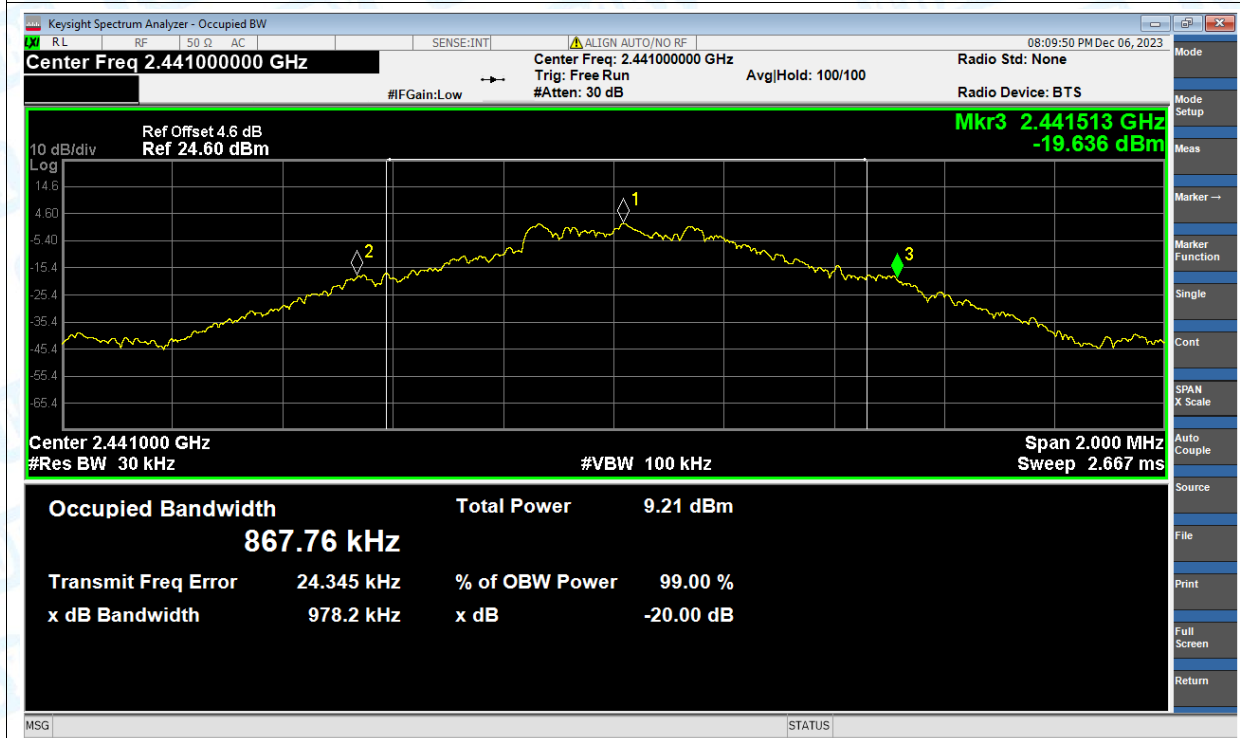
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.92	0	Pass
NVNT	1-DH1	2441	Ant1	0.98	0	Pass
NVNT	1-DH1	2480	Ant1	0.99	0	Pass
NVNT	2-DH1	2402	Ant1	1.34	0	Pass
NVNT	2-DH1	2441	Ant1	1.31	0	Pass
NVNT	2-DH1	2480	Ant1	1.27	0	Pass
NVNT	3-DH1	2402	Ant1	1.21	0	Pass
NVNT	3-DH1	2441	Ant1	1.22	0	Pass
NVNT	3-DH1	2480	Ant1	1.25	0	Pass

Test Graphs

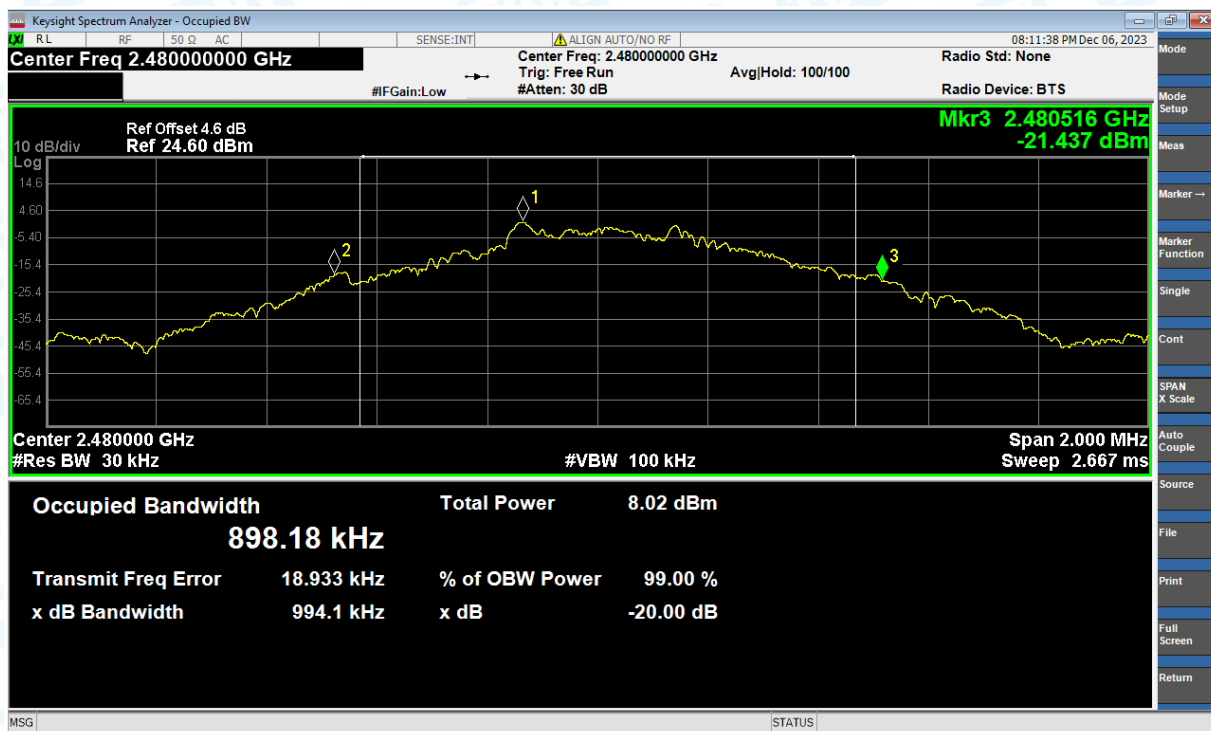
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



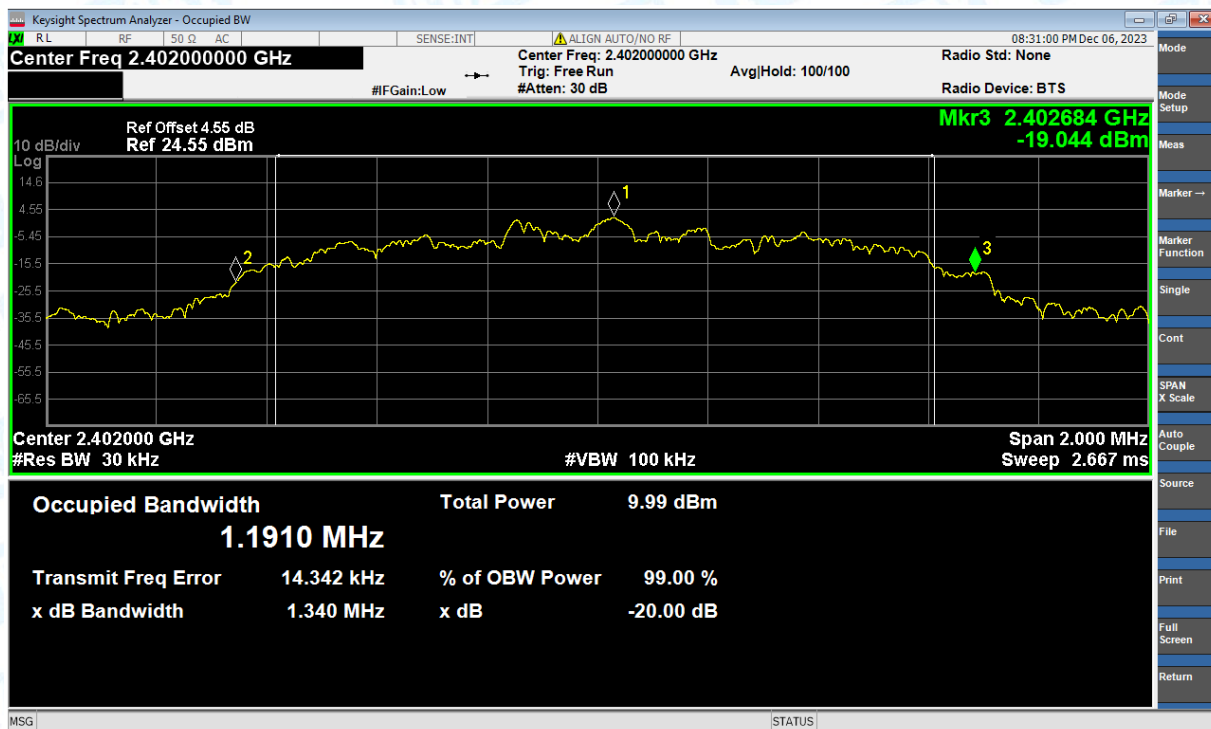
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



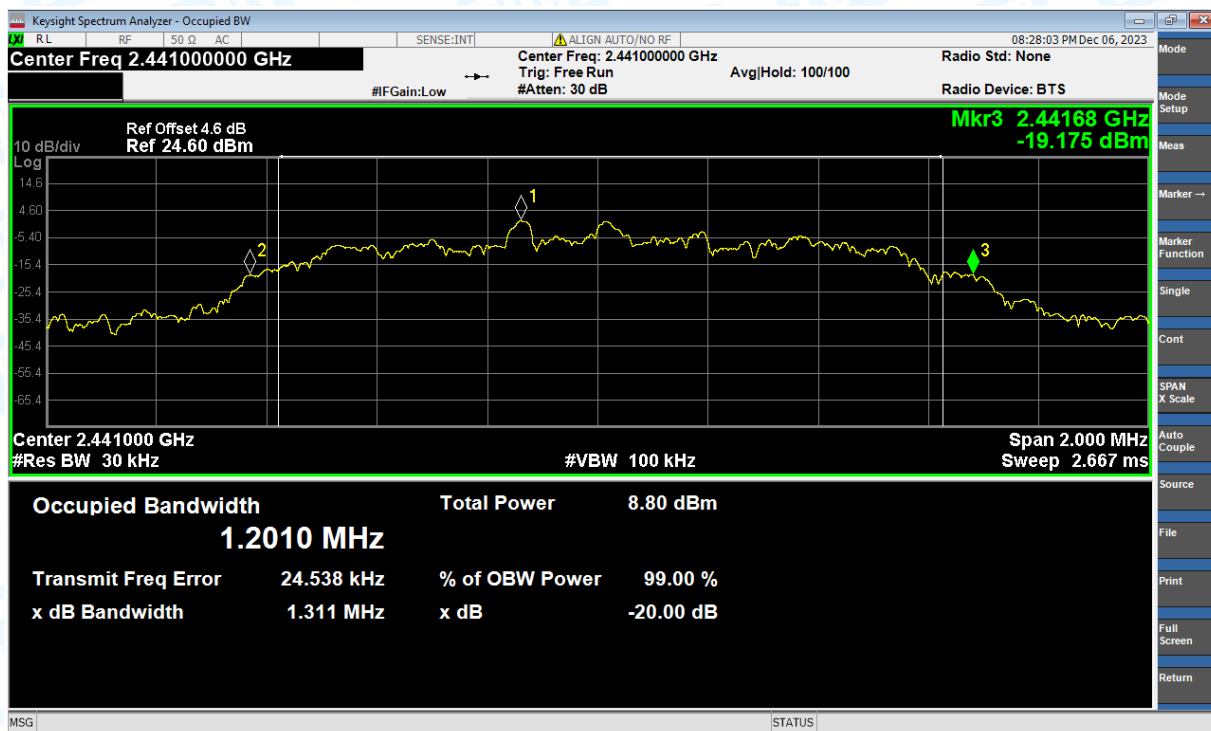
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



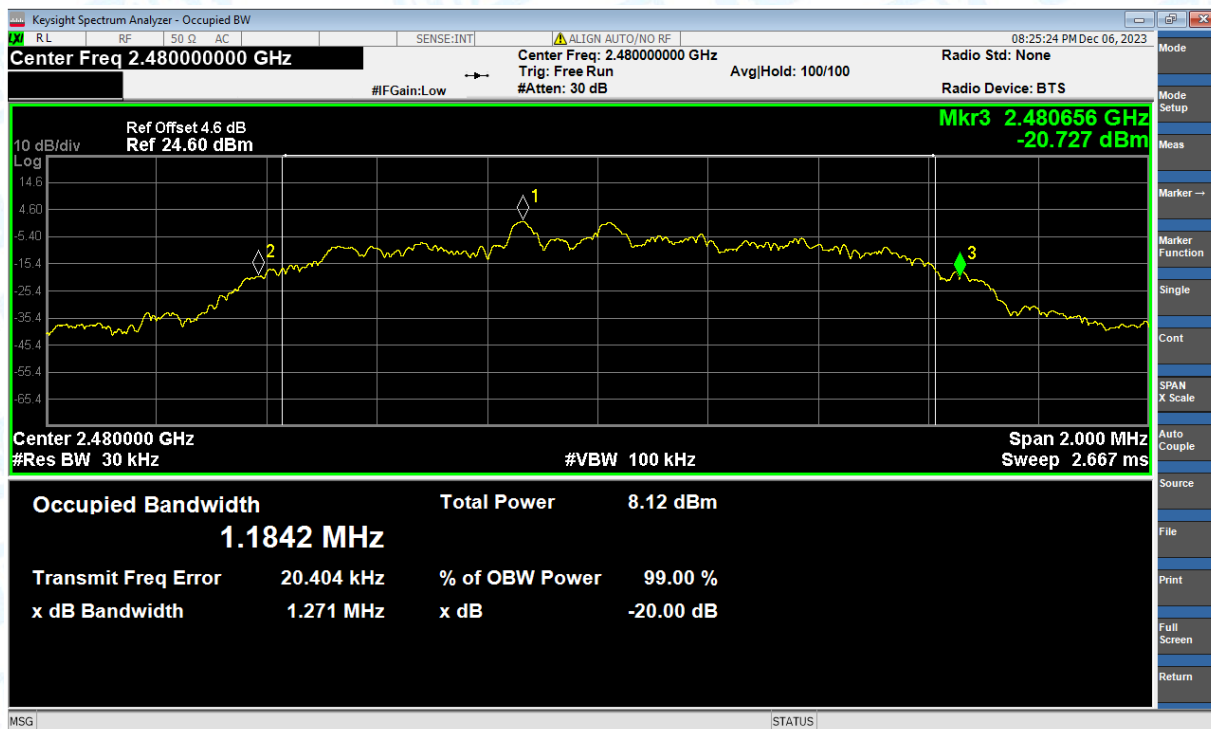
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



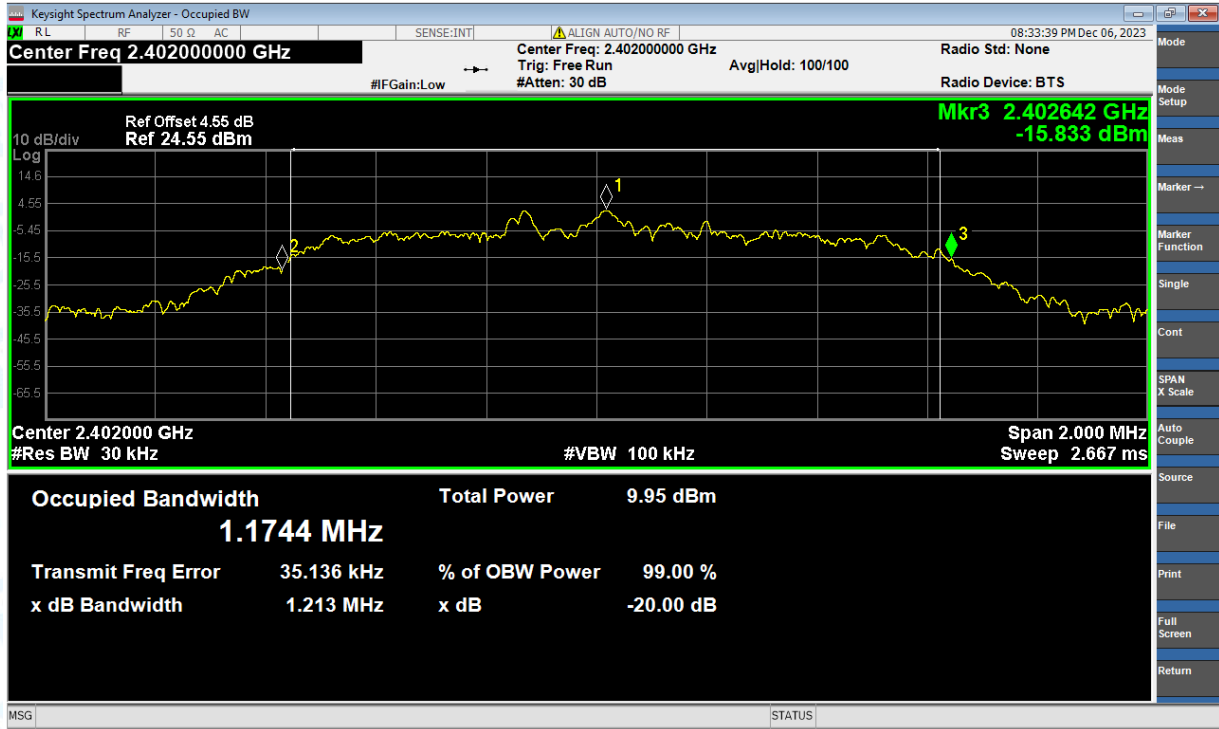
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



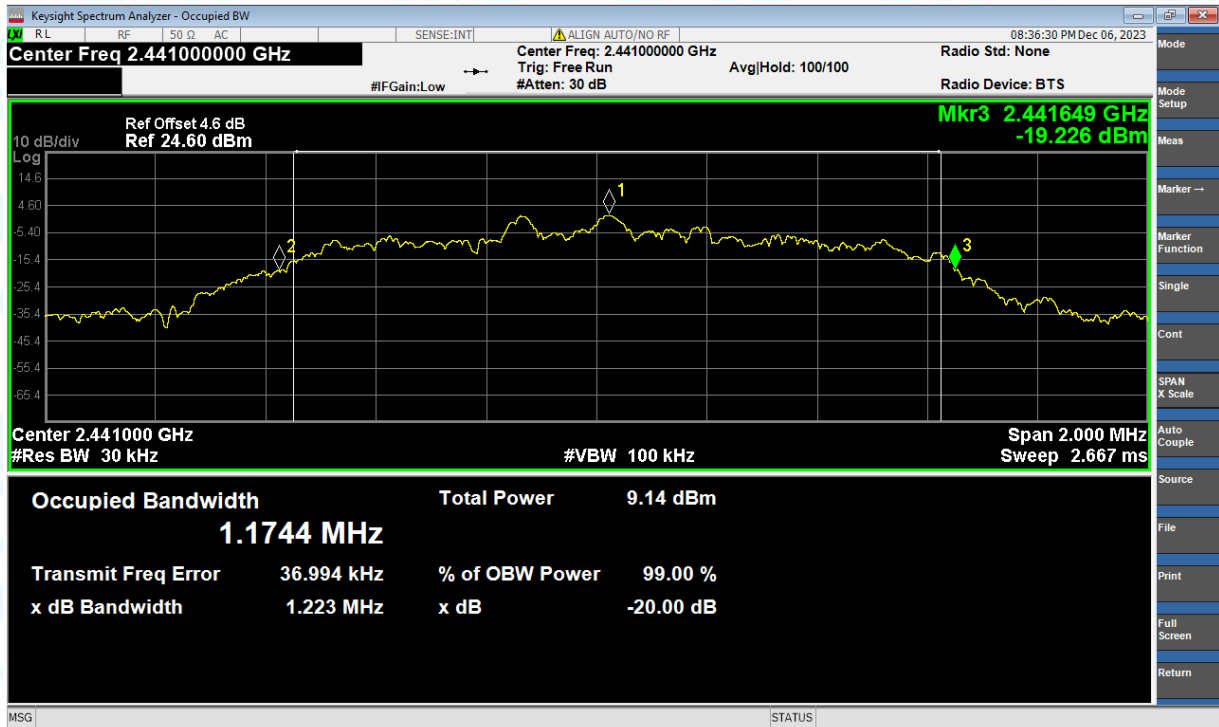
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

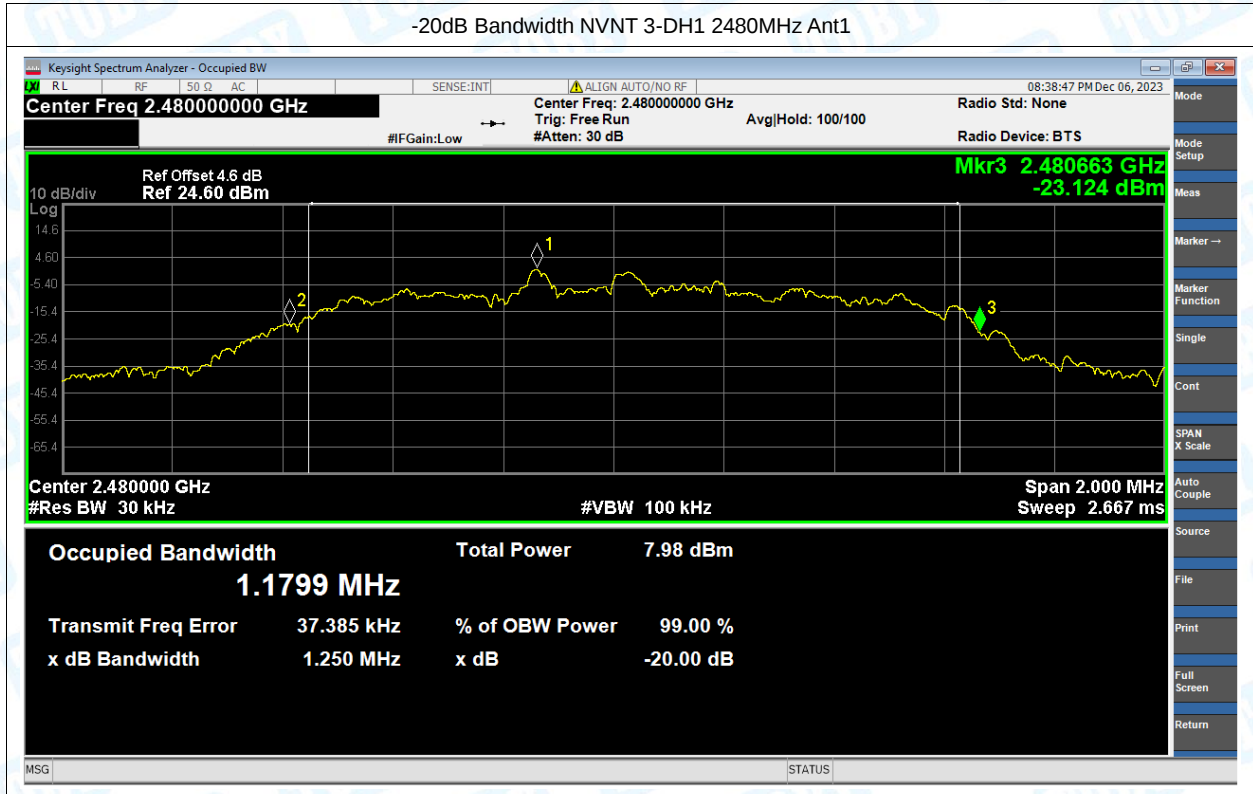


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



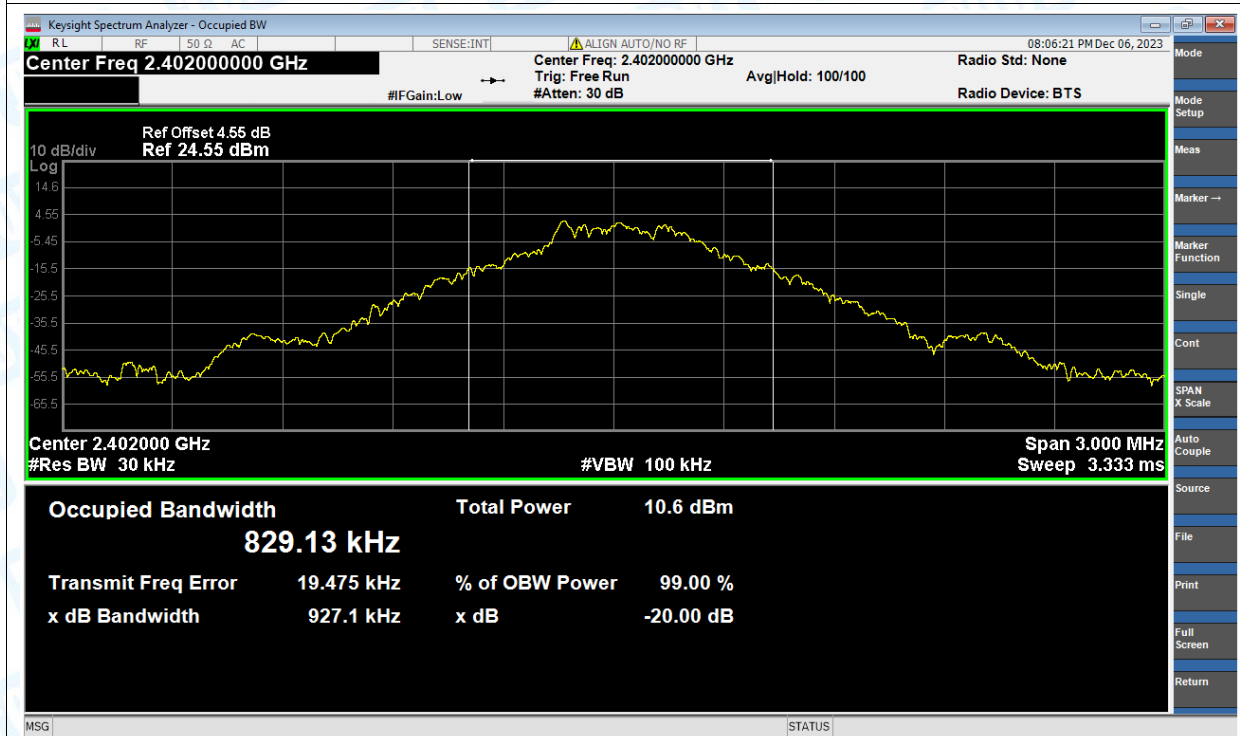


4. Occupied Channel Bandwidth

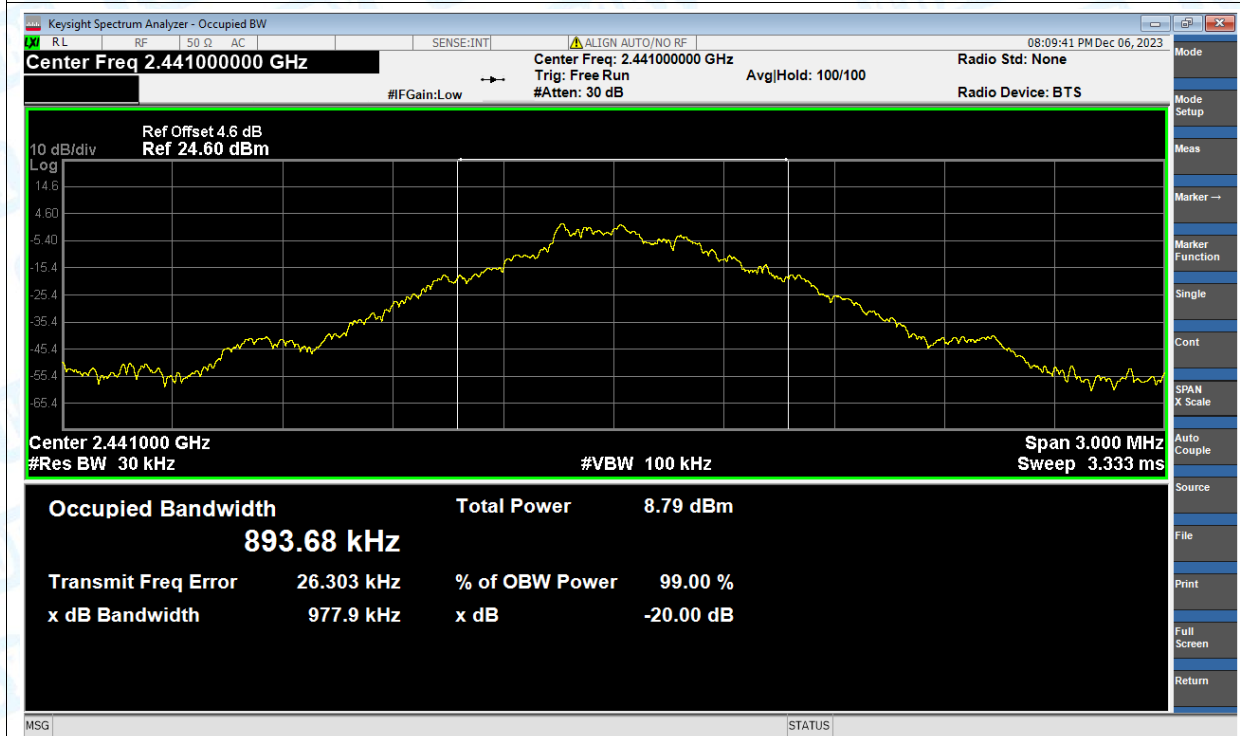
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.829
NVNT	1-DH1	2441	Ant1	0.894
NVNT	1-DH1	2480	Ant1	0.884
NVNT	2-DH1	2402	Ant1	1.212
NVNT	2-DH1	2441	Ant1	1.201
NVNT	2-DH1	2480	Ant1	1.18
NVNT	3-DH1	2402	Ant1	1.189
NVNT	3-DH1	2441	Ant1	1.18
NVNT	3-DH1	2480	Ant1	1.181

Test Graphs

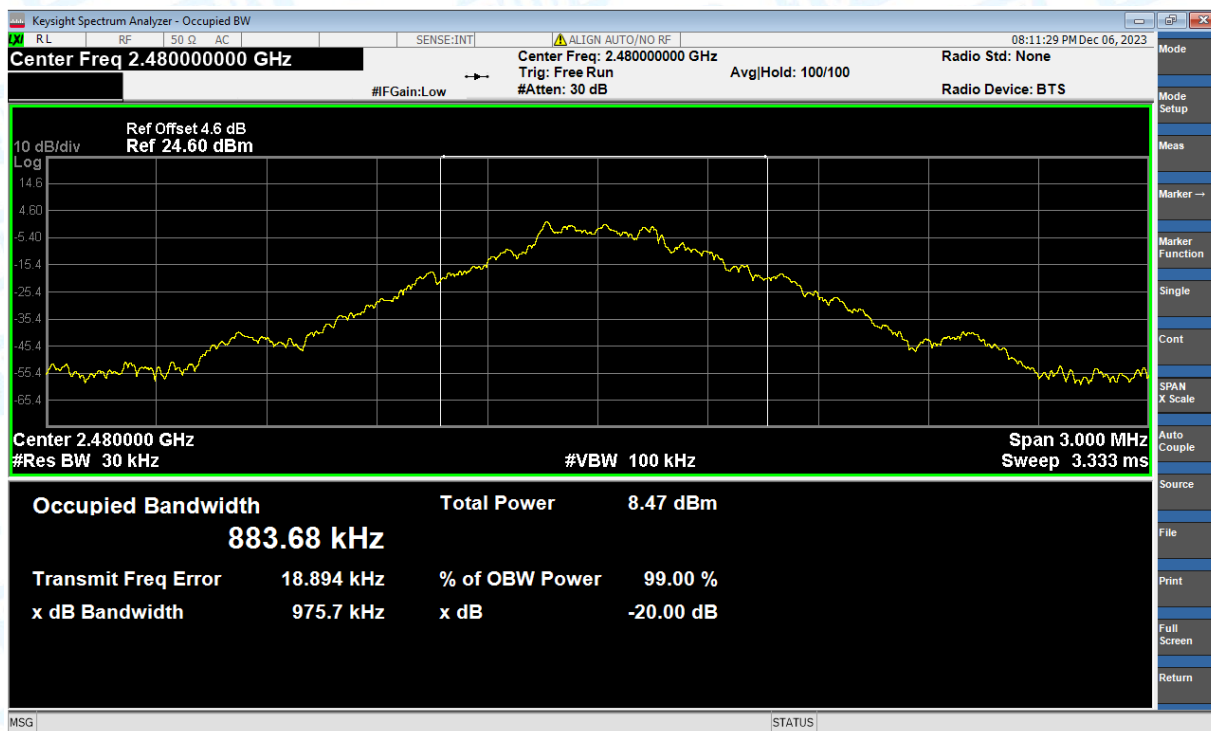
OBW NVNT 1-DH1 2402MHz Ant1



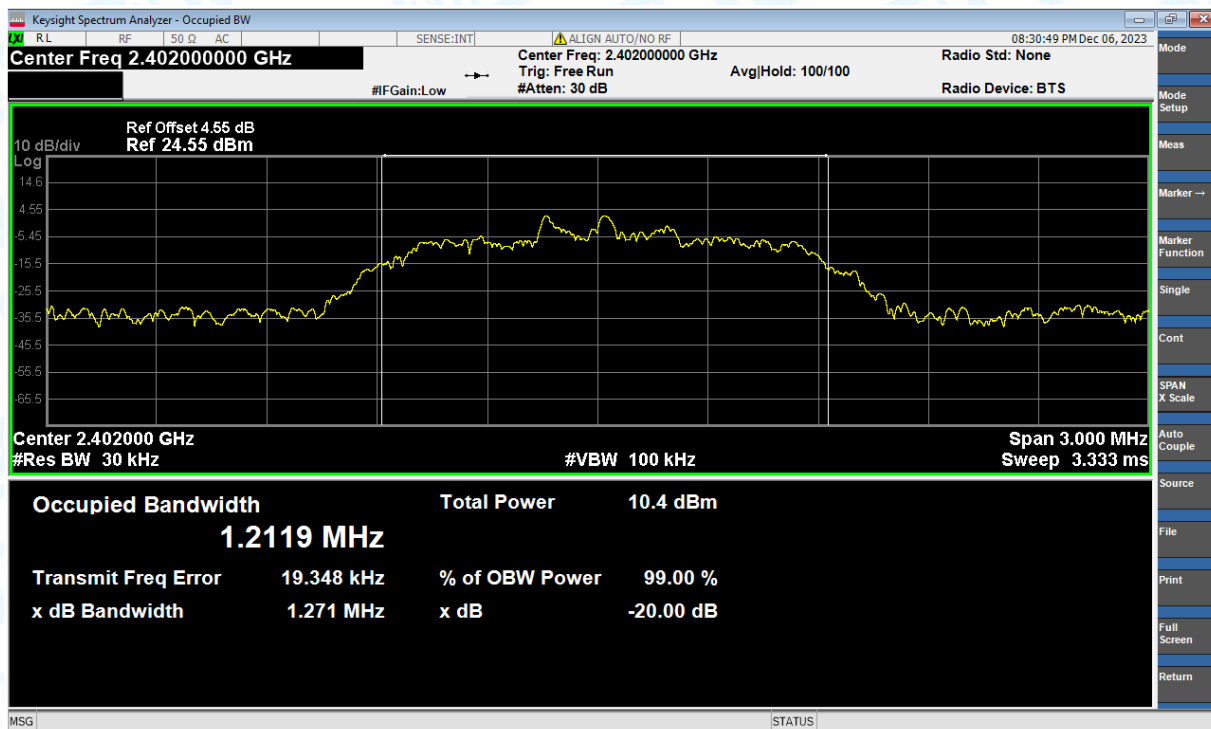
OBW NVNT 1-DH1 2441MHz Ant1



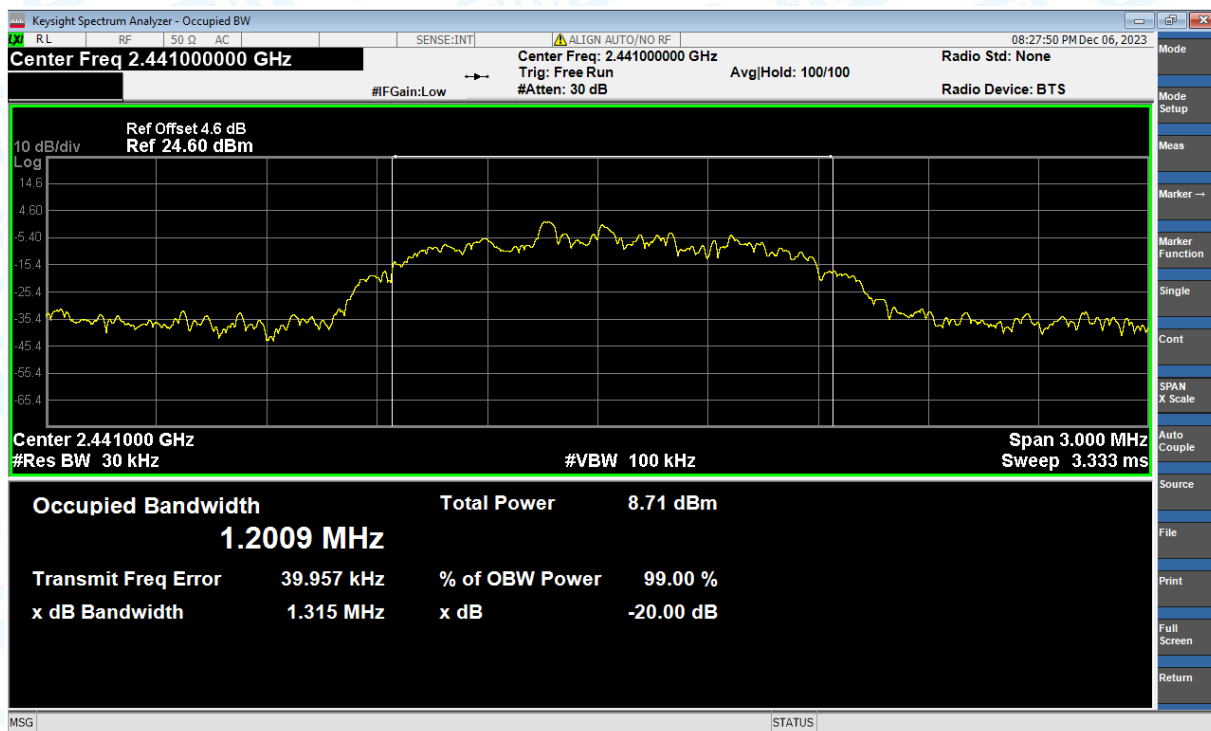
OBW NVNT 1-DH1 2480MHz Ant1



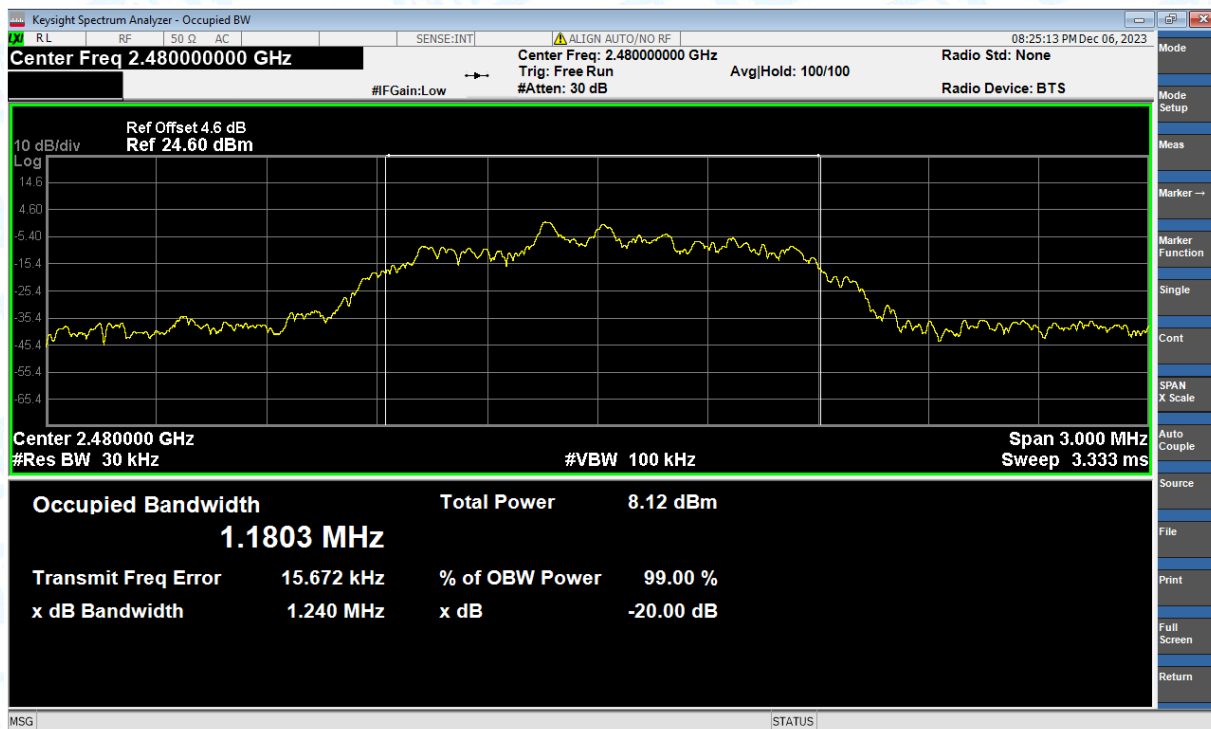
OBW NVNT 2-DH1 2402MHz Ant1



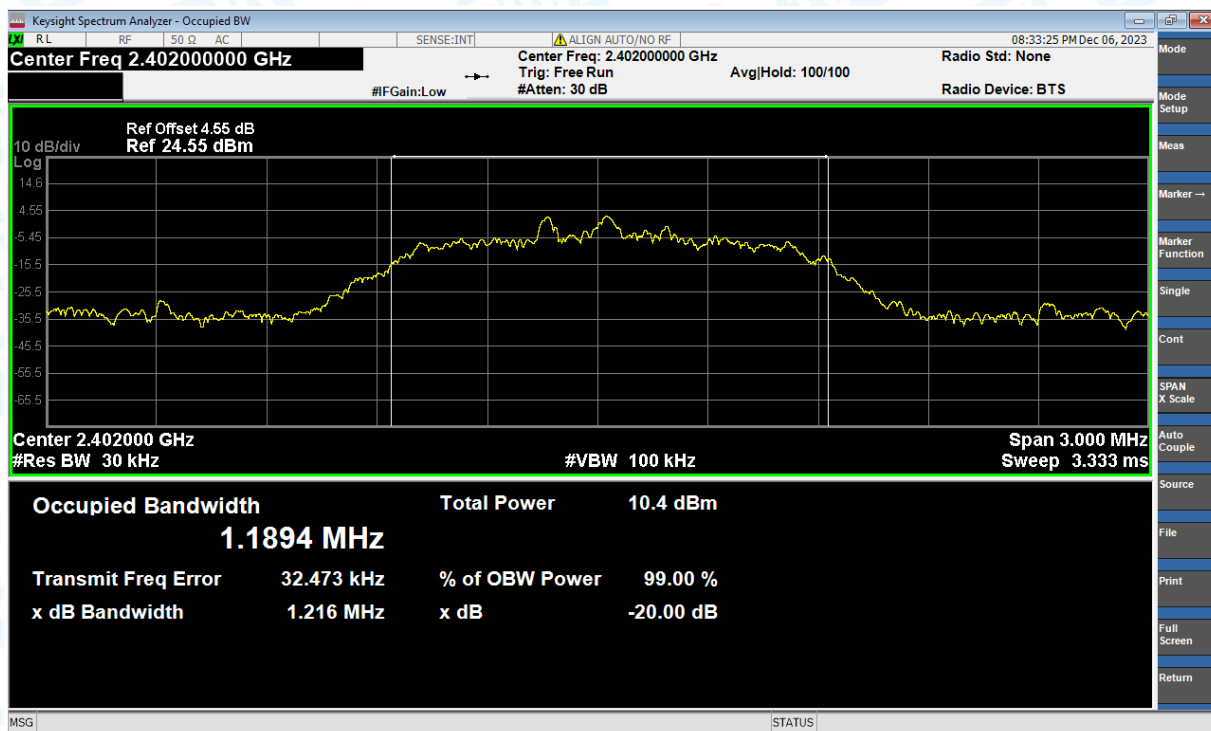
OBW NVNT 2-DH1 2441MHz Ant1



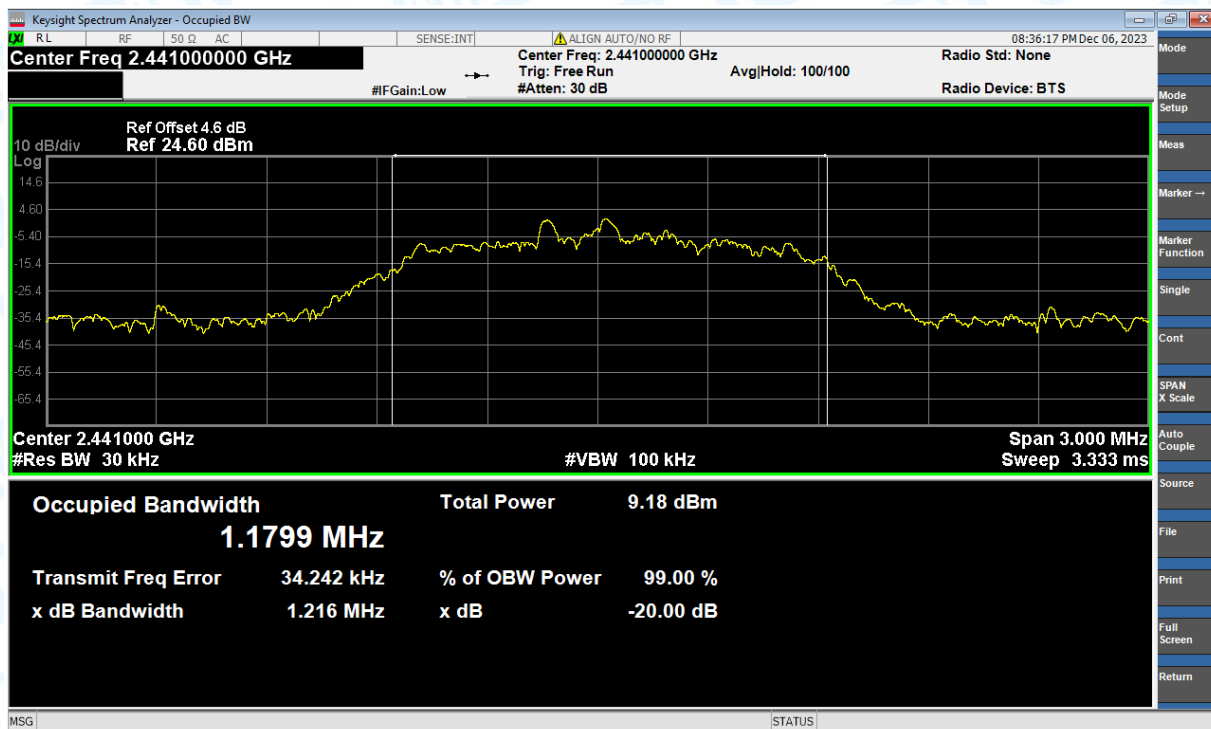
OBW NVNT 2-DH1 2480MHz Ant1

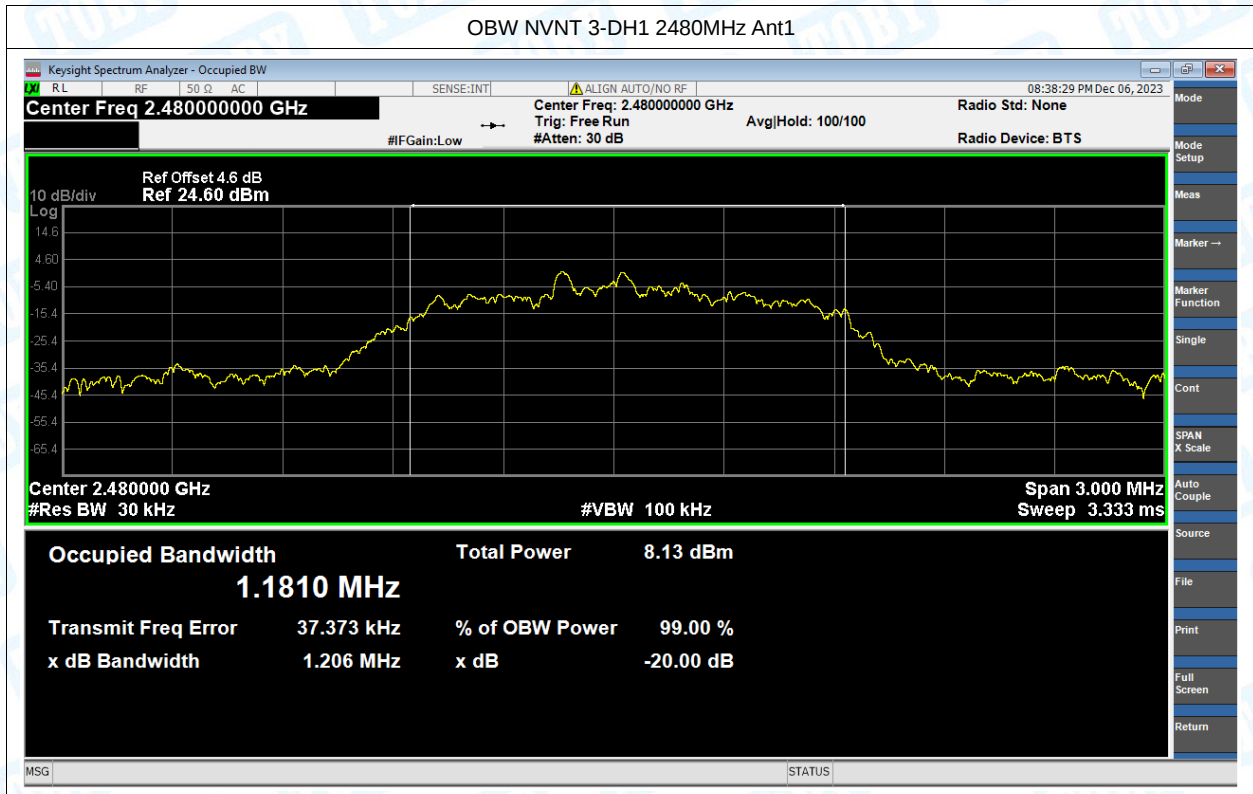


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



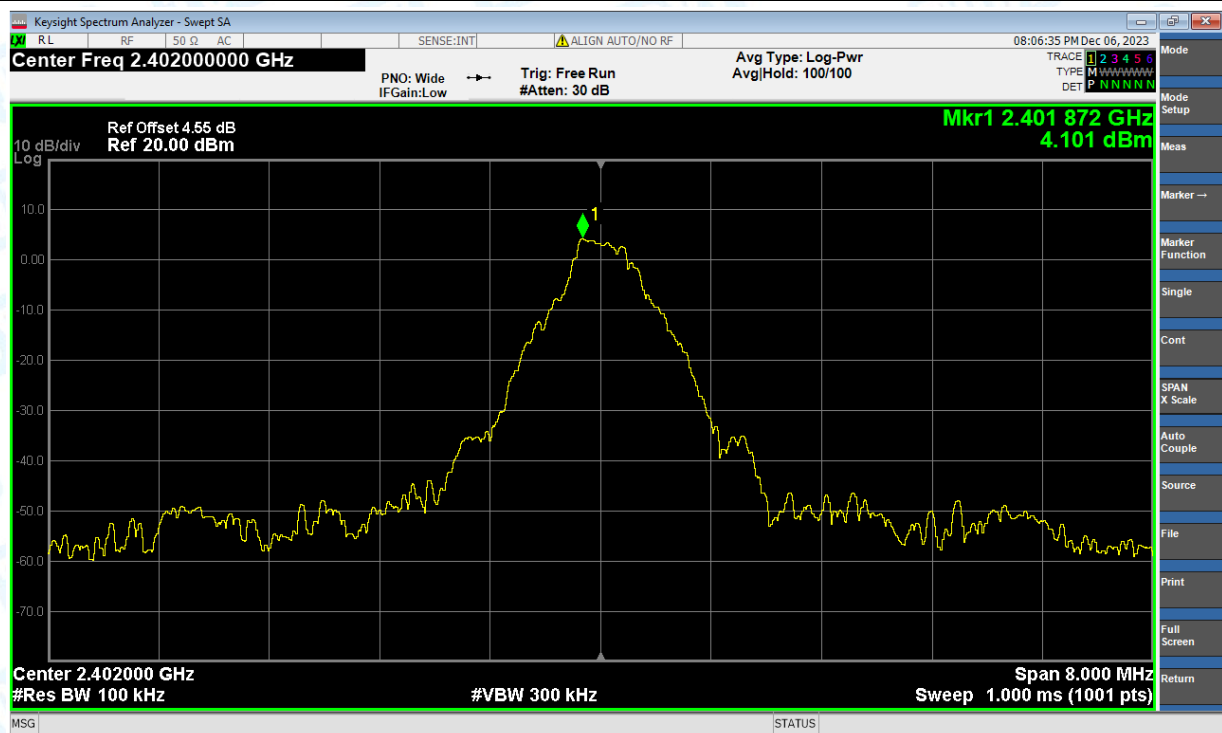


5. Band Edge

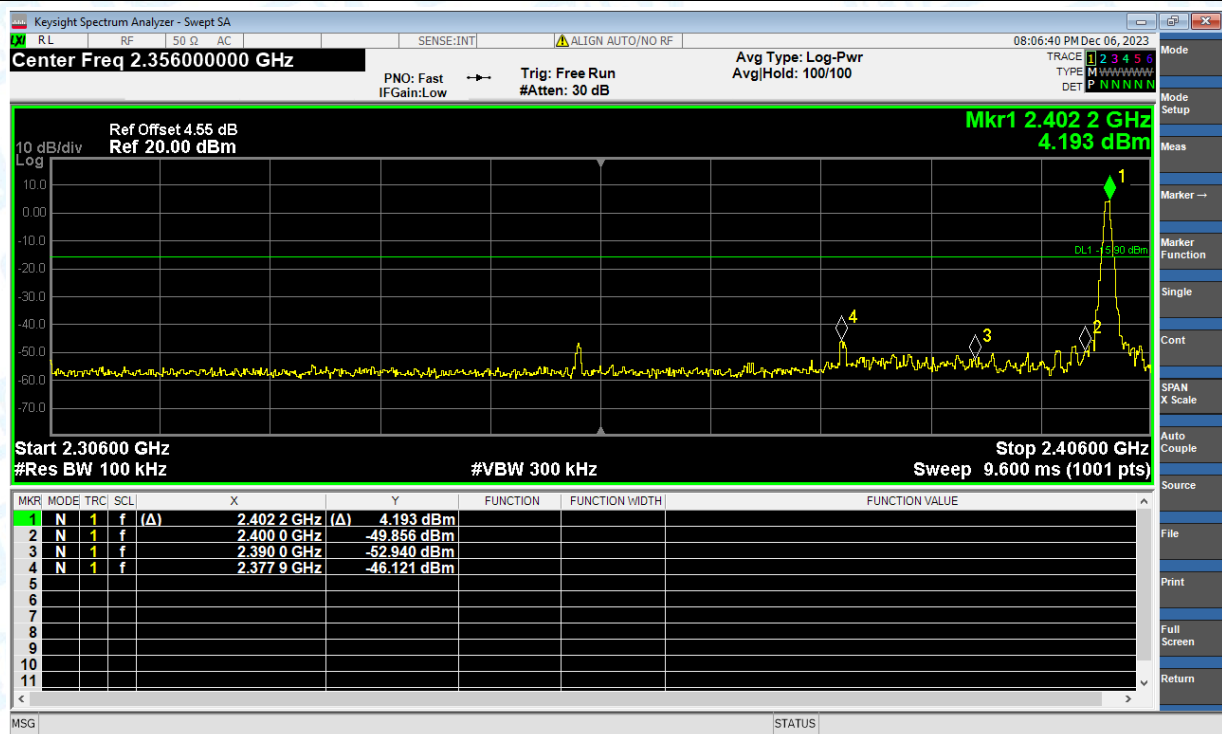
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-50.22	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-51.72	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-49.05	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-51.41	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-50.52	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-52.25	-20	Pass

Test Graphs

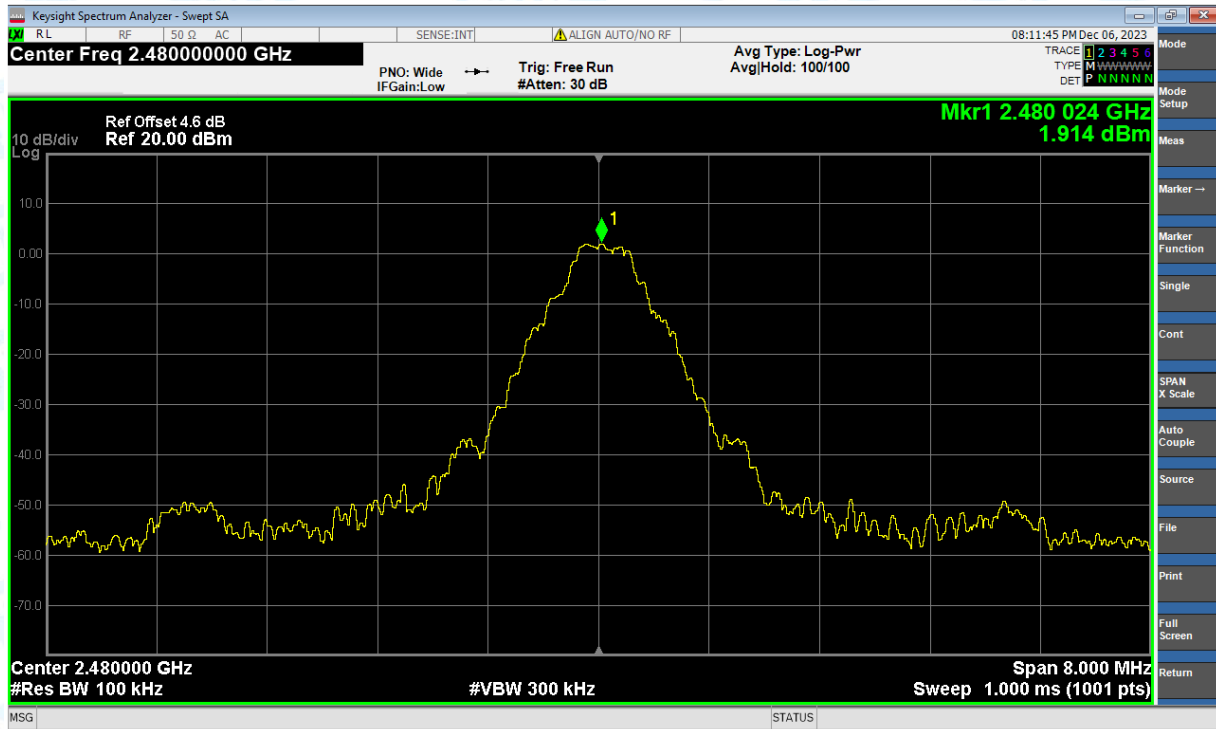
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



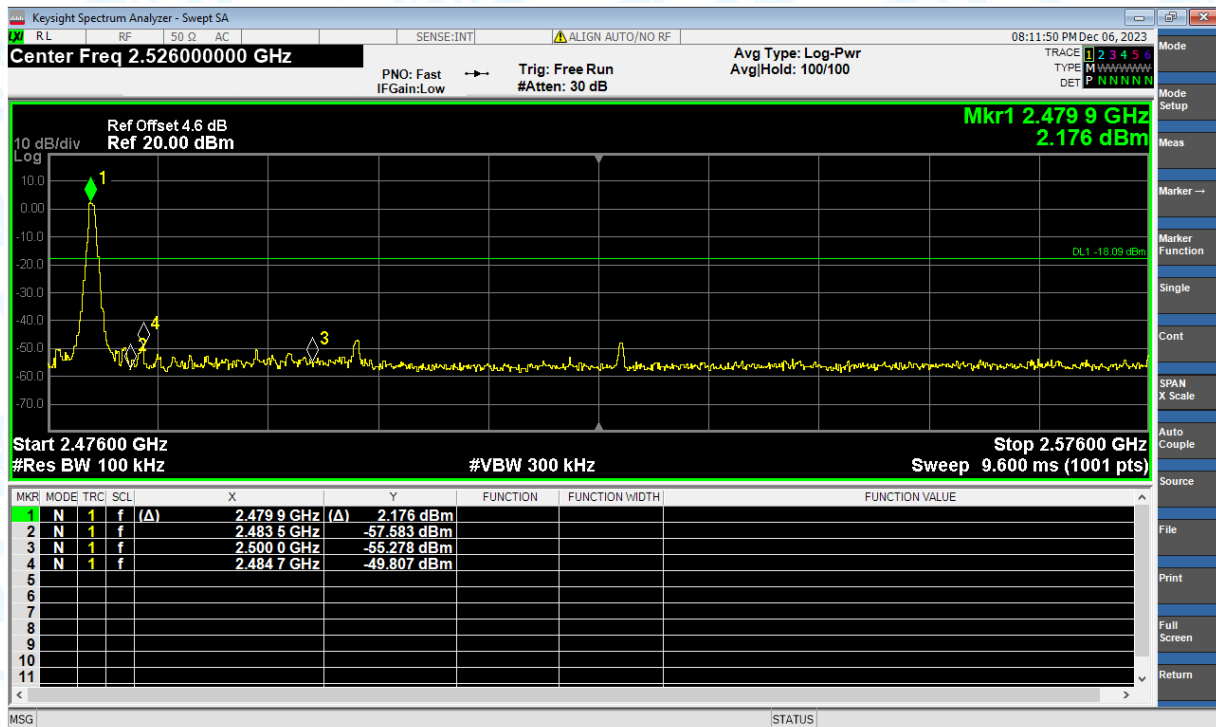
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



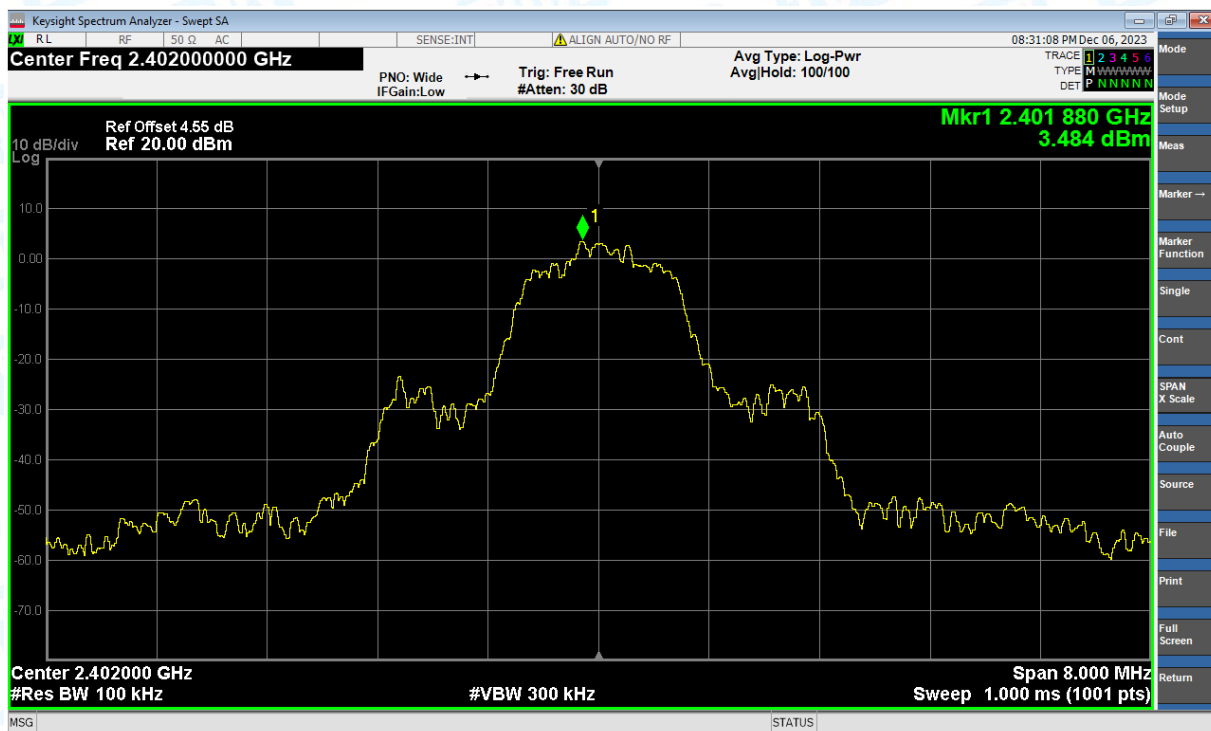
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



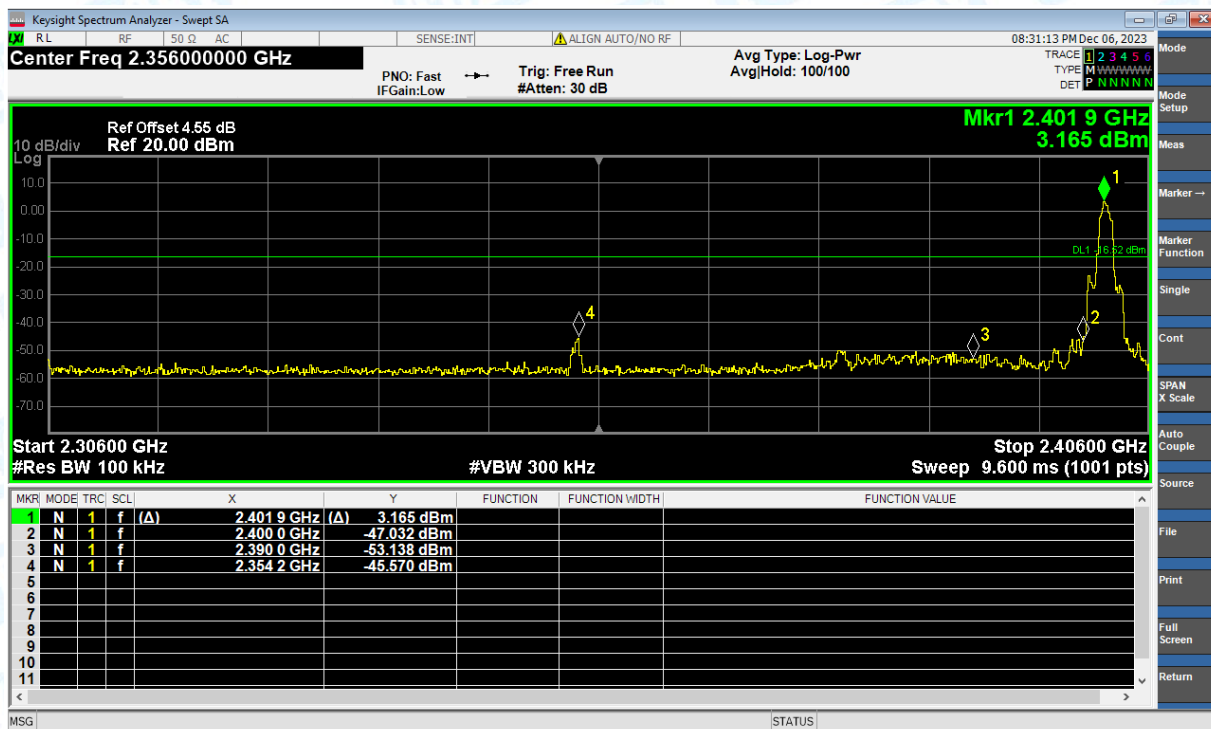
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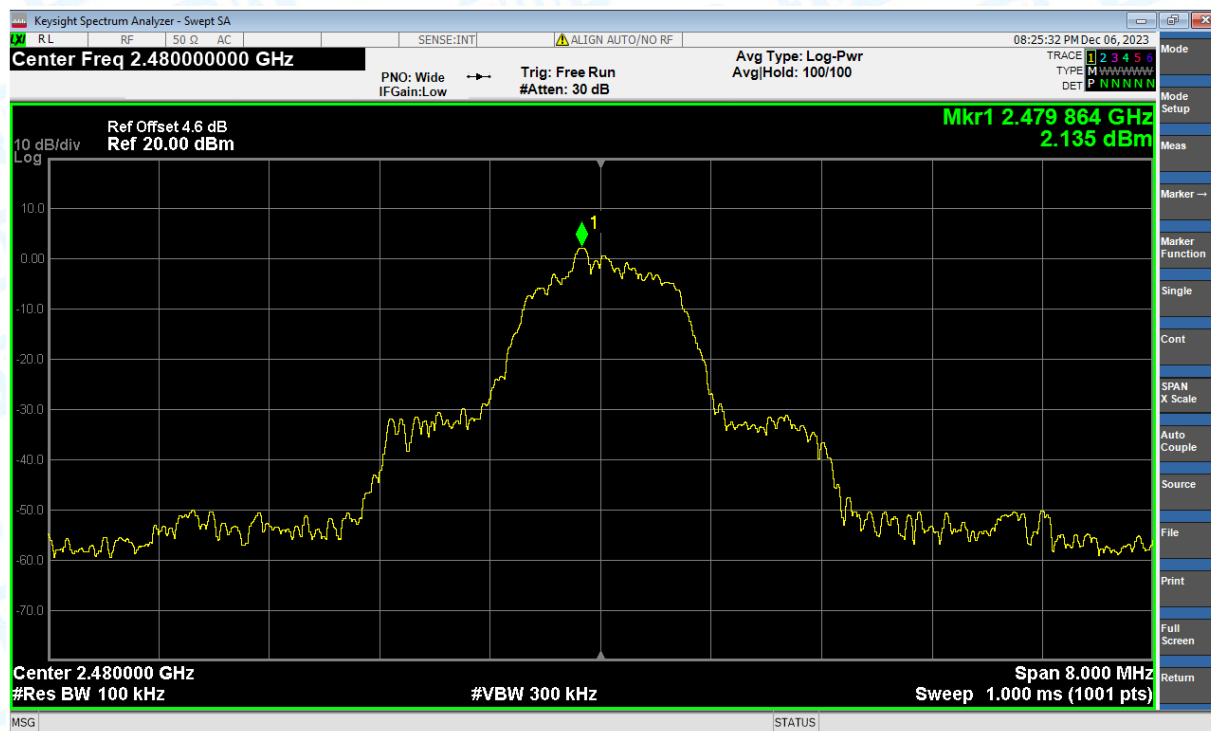
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



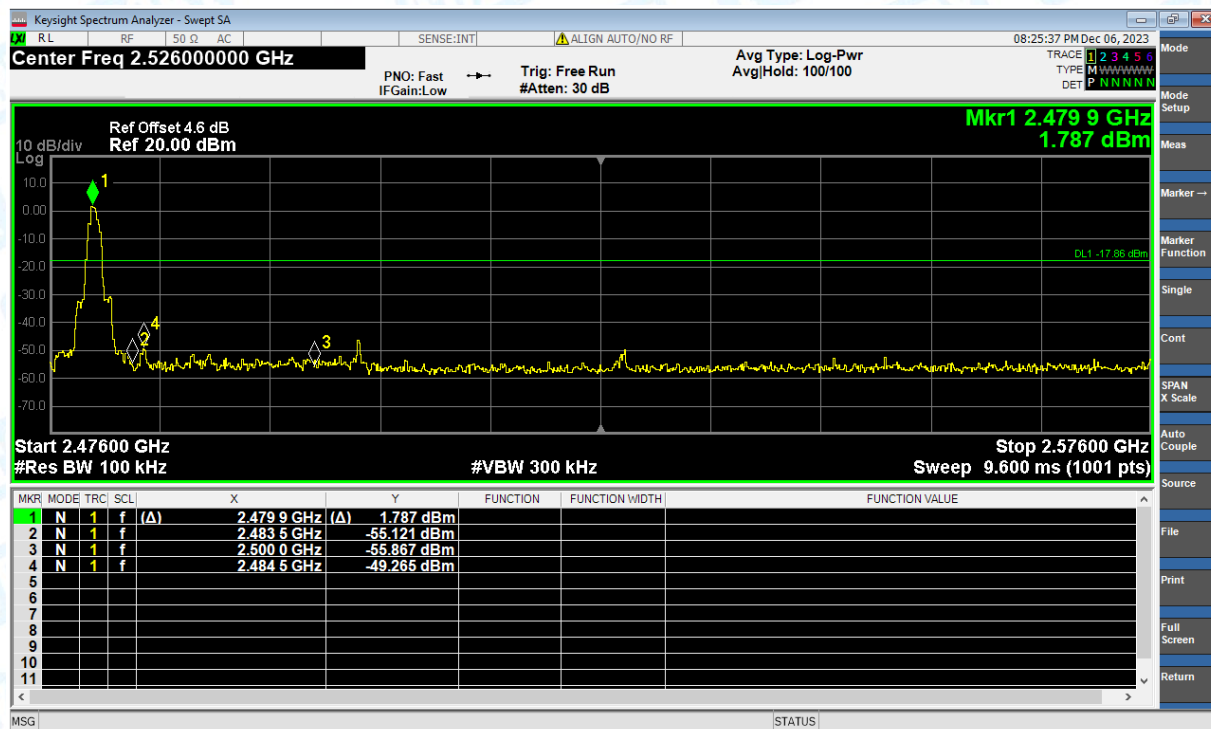
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



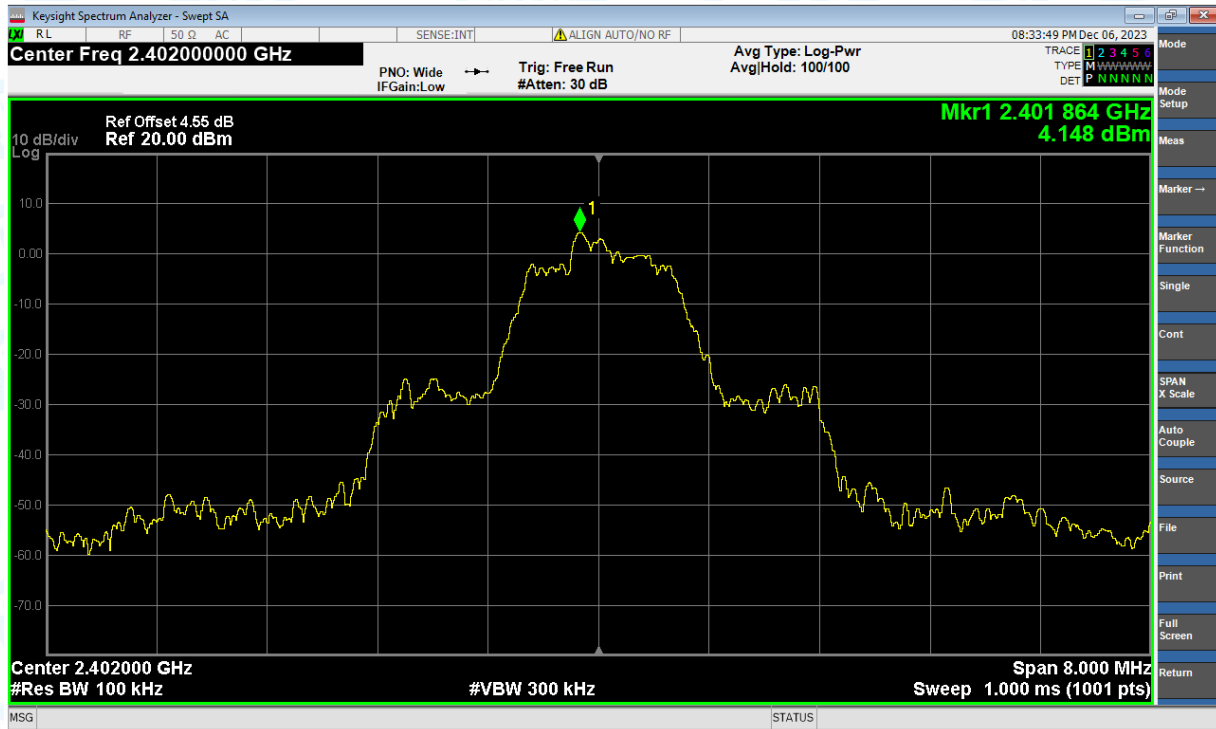
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



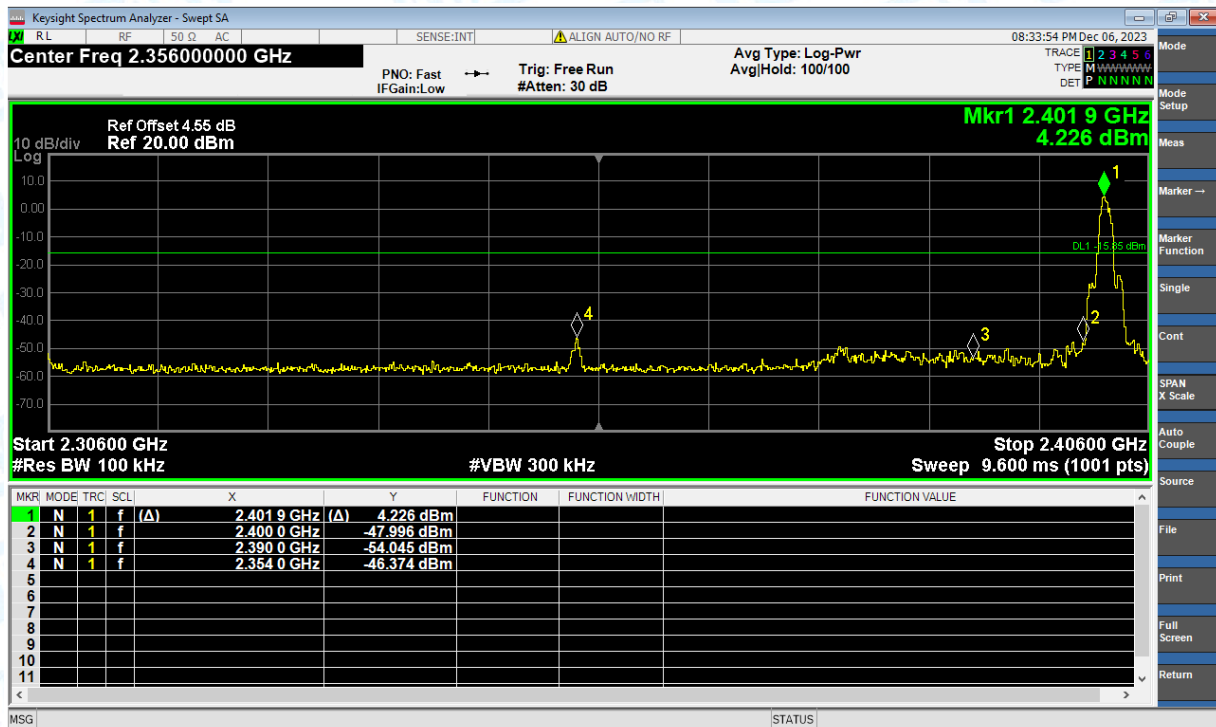
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



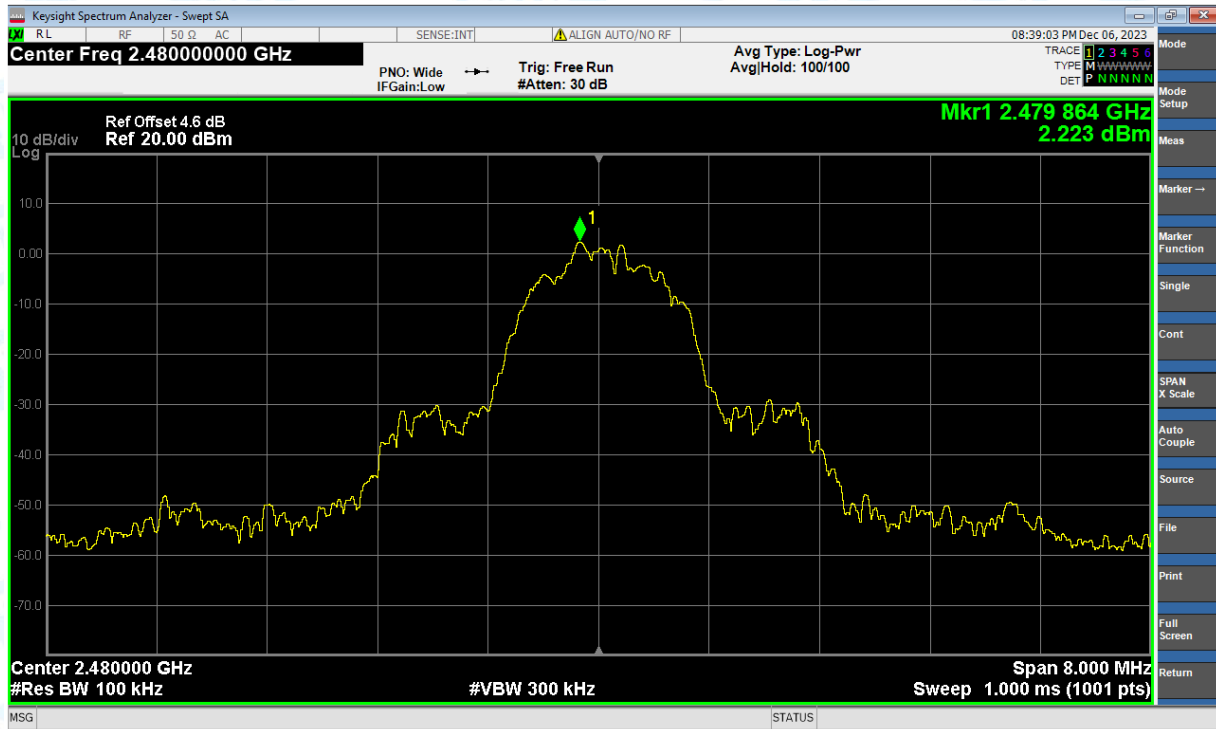
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



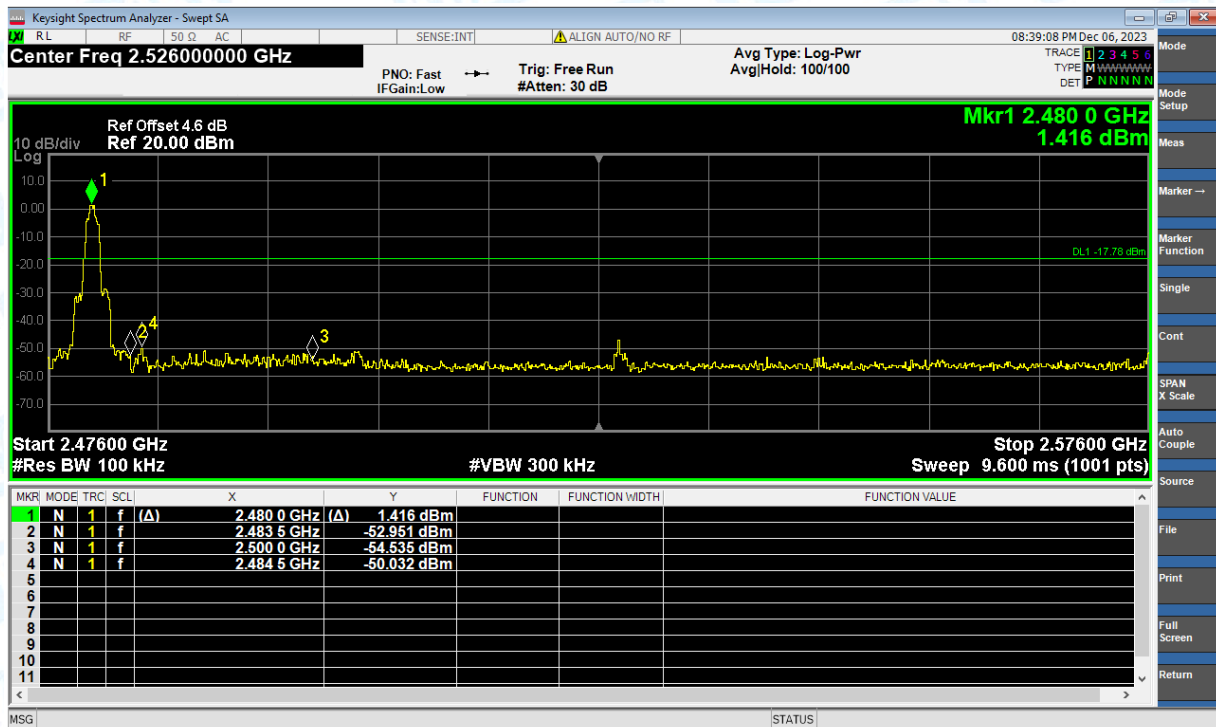
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



6. Band Edge(Hopping)

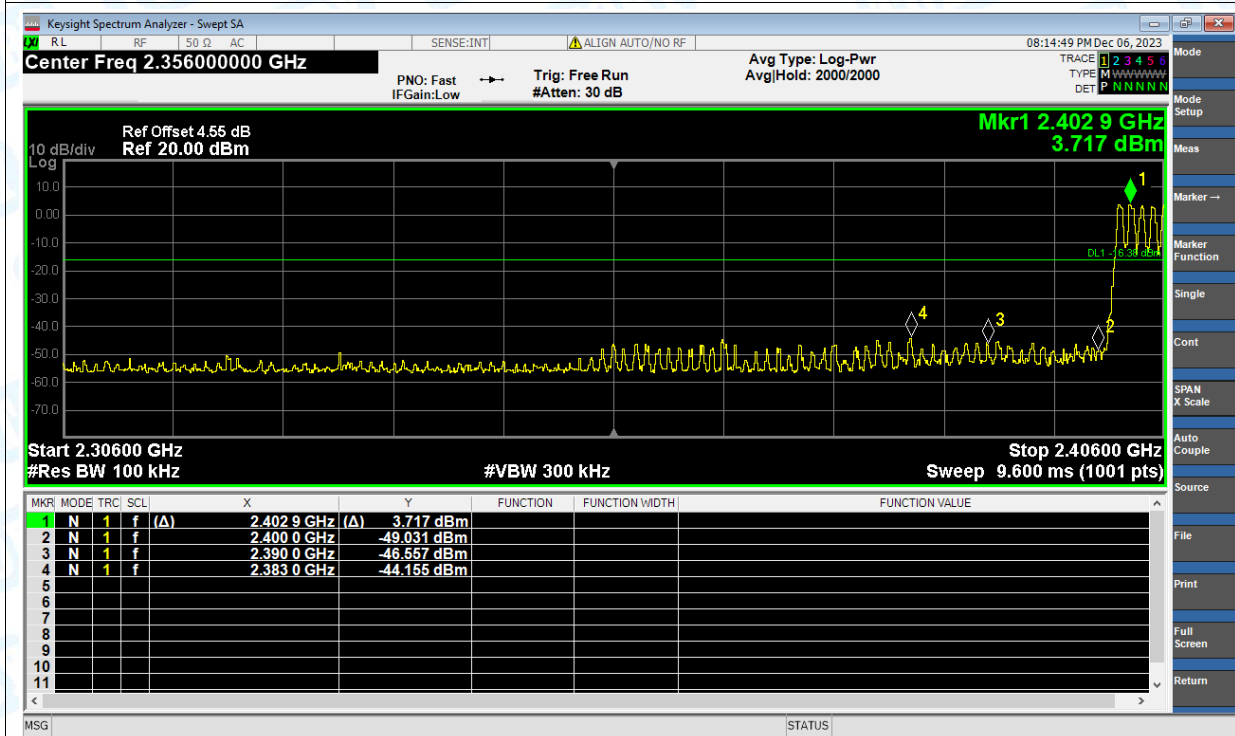
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-47.77	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-48.49	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-49.26	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-48.1	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-48.33	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-47.54	-20	Pass

Test Graphs

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



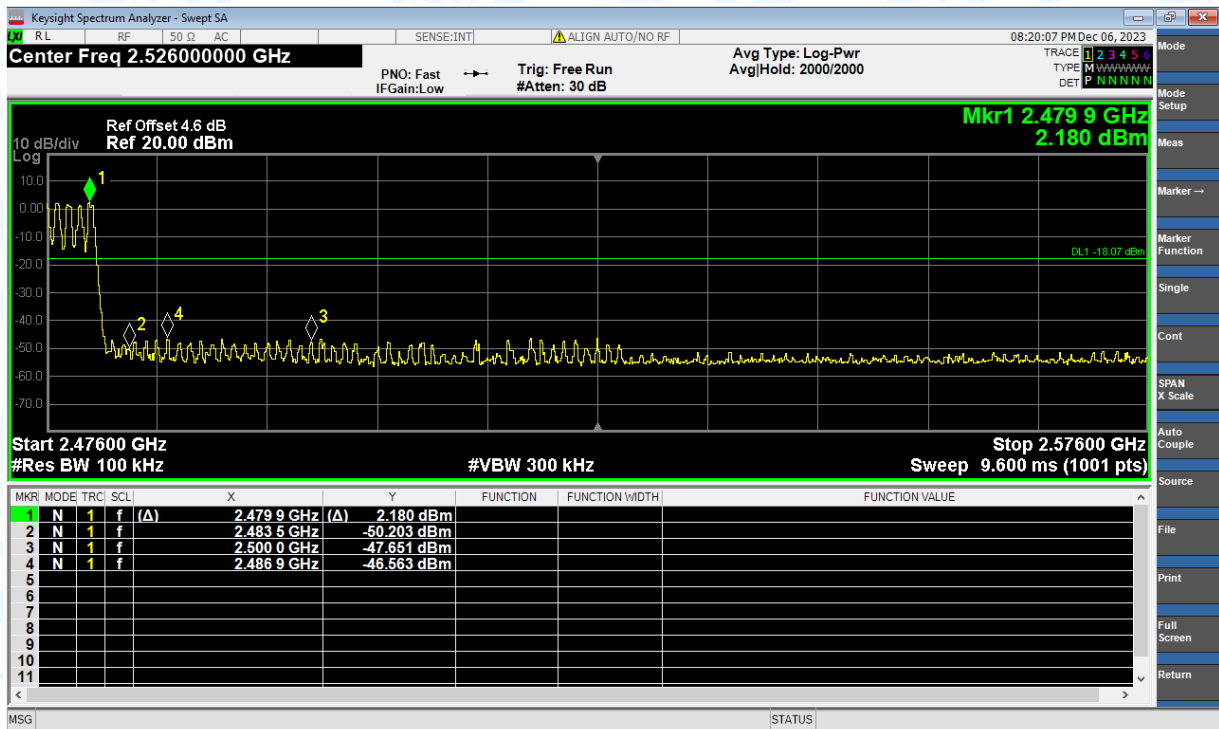
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



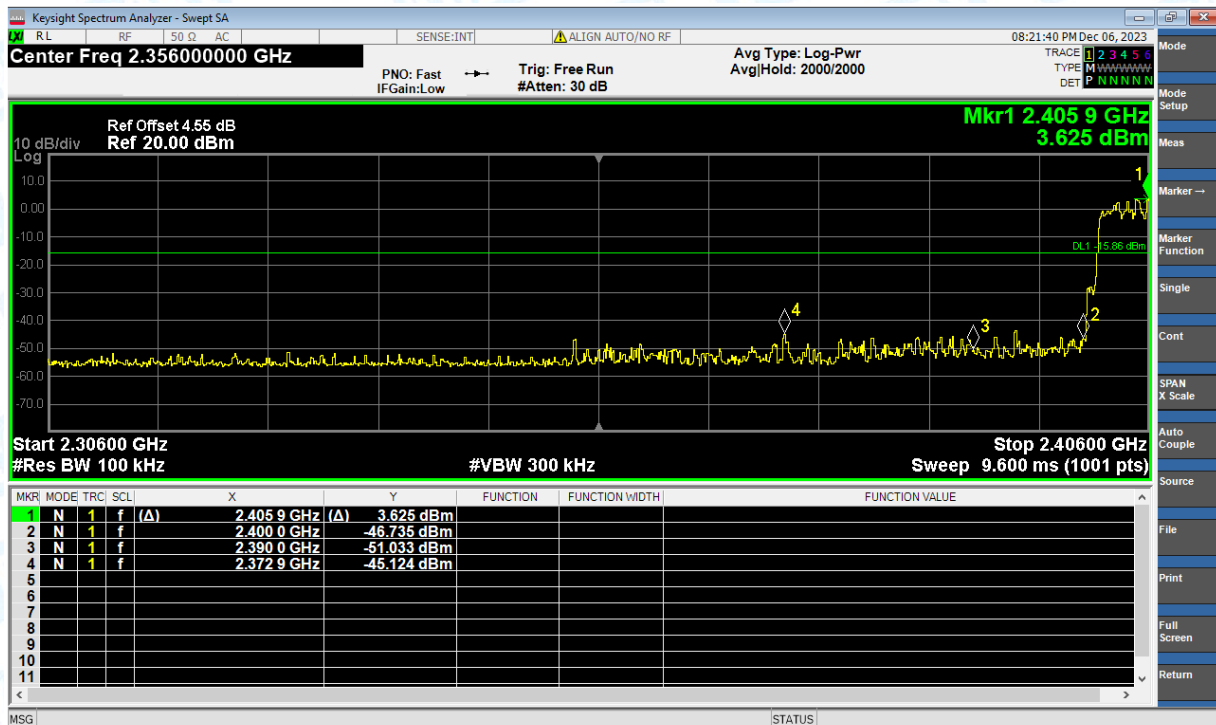
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



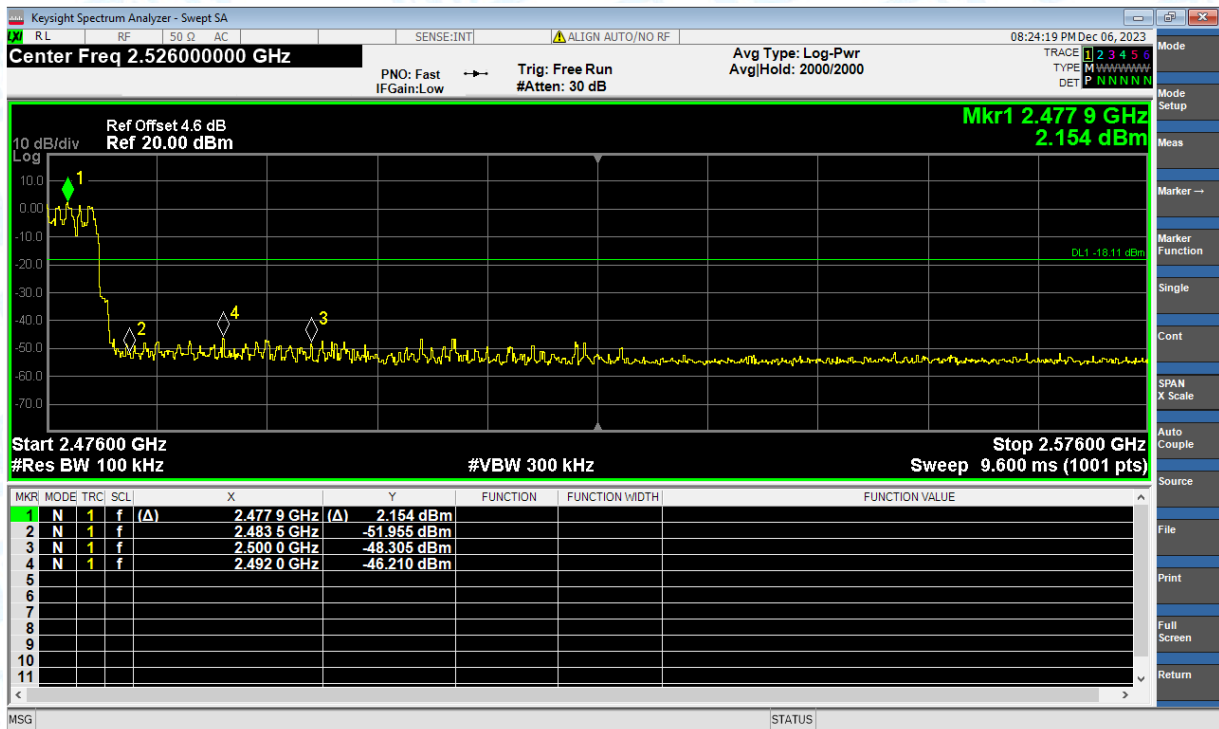
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



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



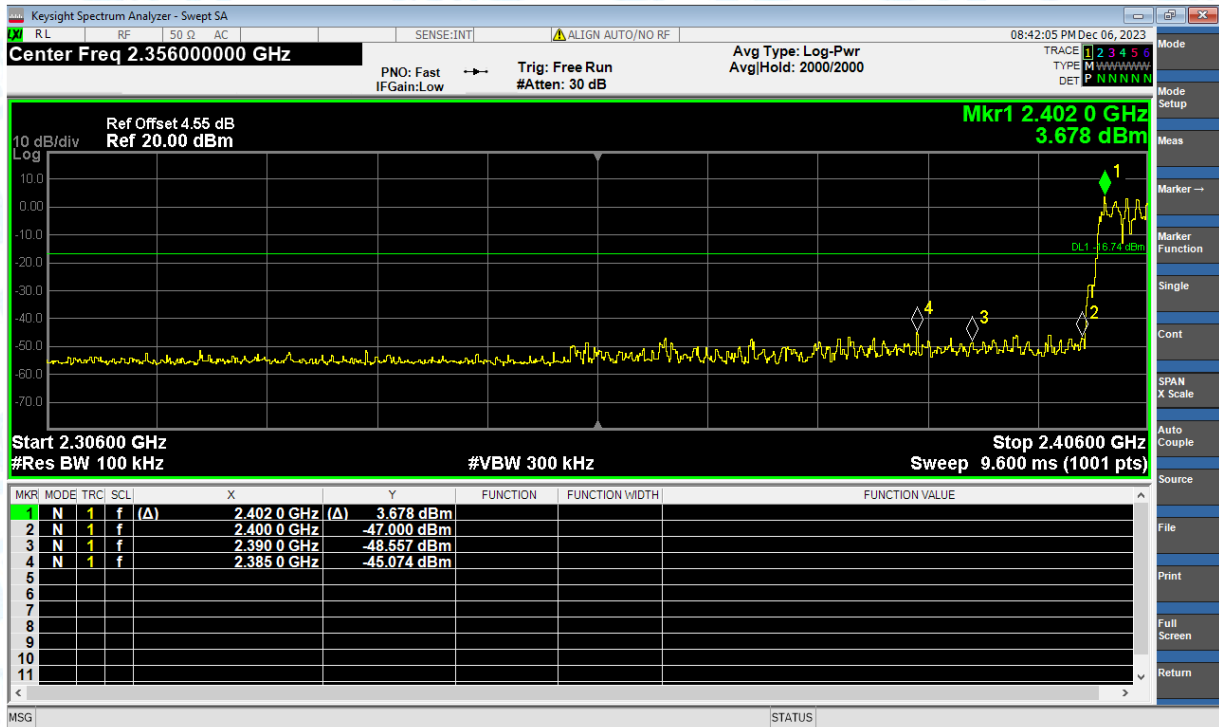
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



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



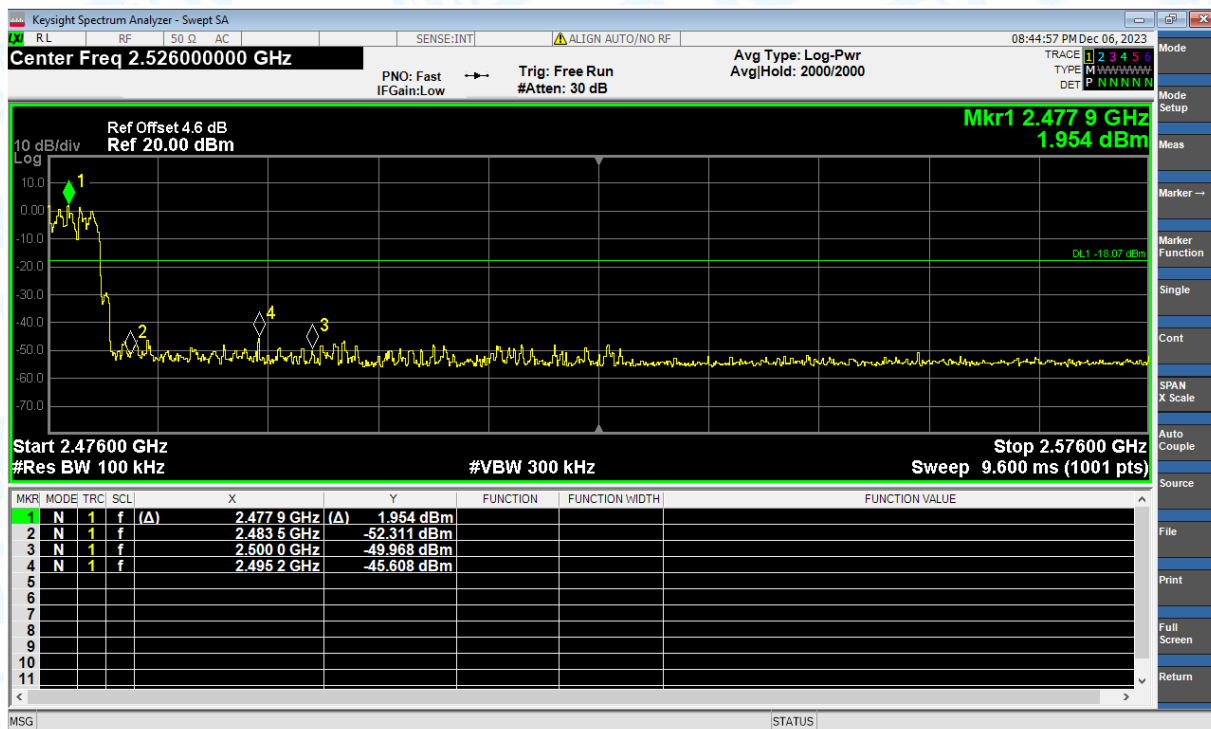
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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

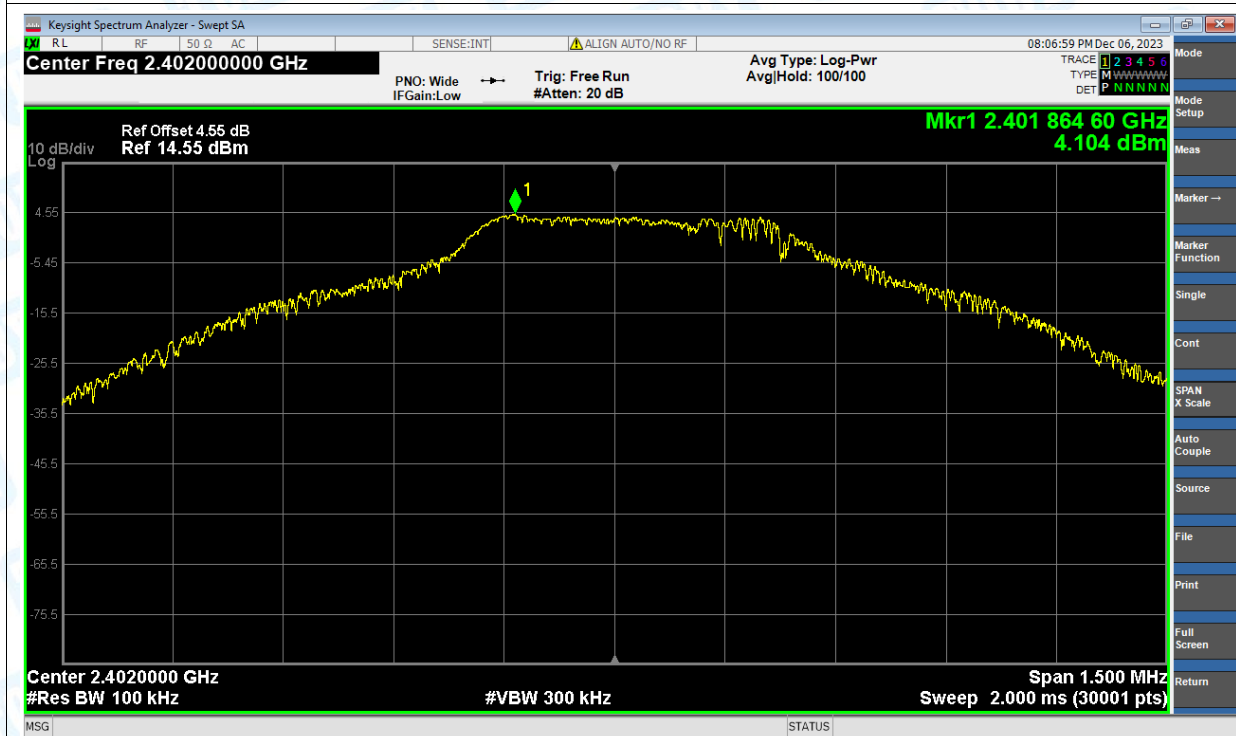


7. Conducted RF Spurious Emission

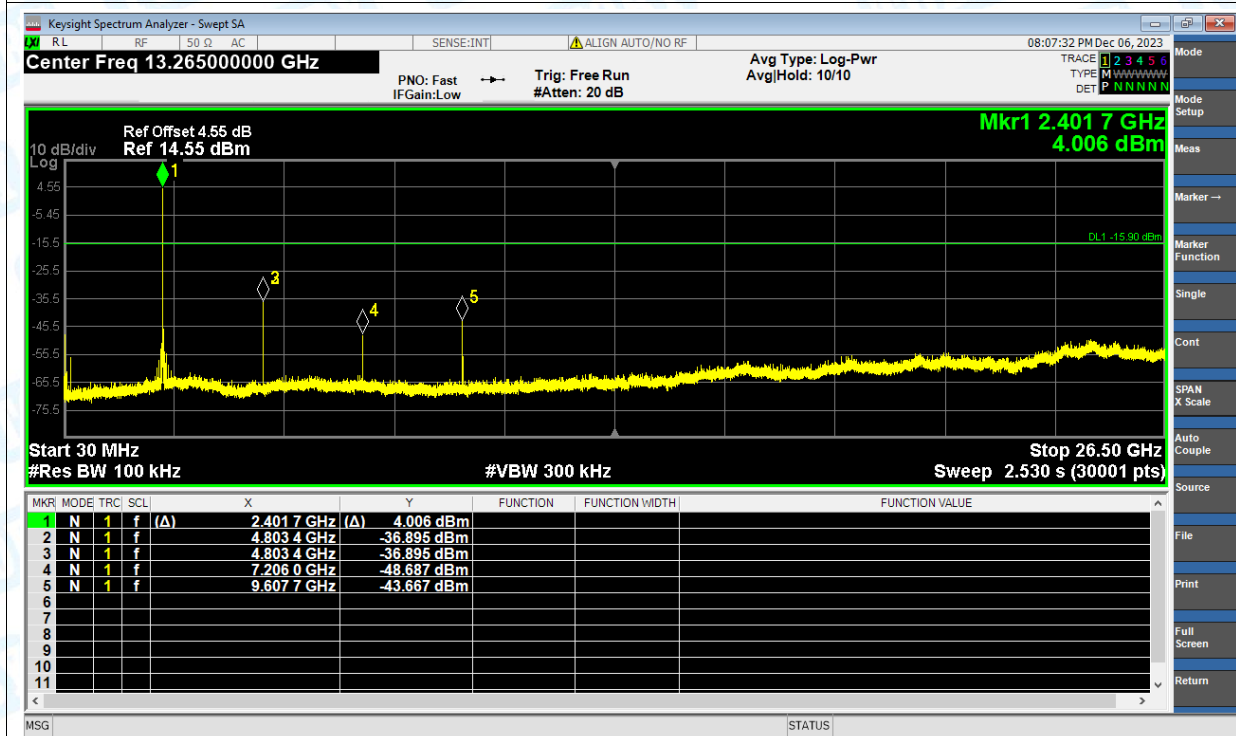
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-41	-20	Pass
NVNT	1-DH1	2441	Ant1	-38.57	-20	Pass
NVNT	1-DH1	2480	Ant1	-36.16	-20	Pass
NVNT	2-DH1	2402	Ant1	-41.38	-20	Pass
NVNT	2-DH1	2441	Ant1	-45.26	-20	Pass
NVNT	2-DH1	2480	Ant1	-40.5	-20	Pass
NVNT	3-DH1	2402	Ant1	-42.17	-20	Pass
NVNT	3-DH1	2441	Ant1	-41.47	-20	Pass
NVNT	3-DH1	2480	Ant1	-39.89	-20	Pass

Test Graphs

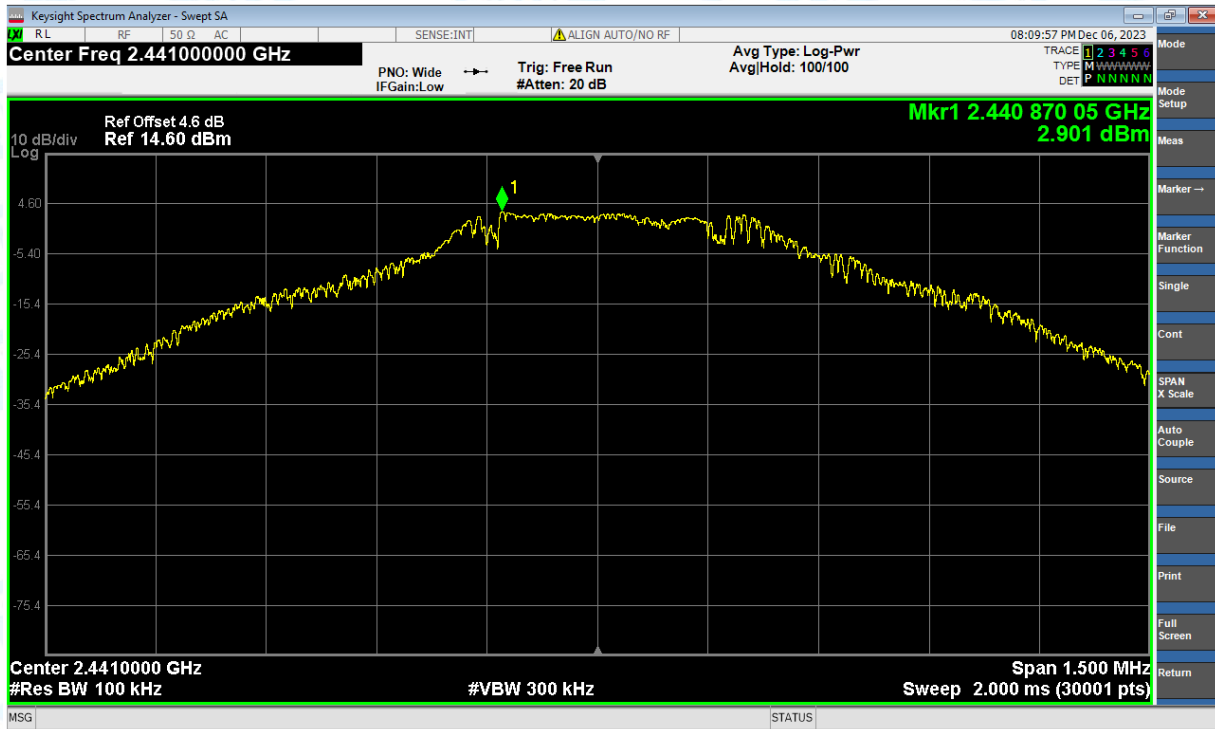
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



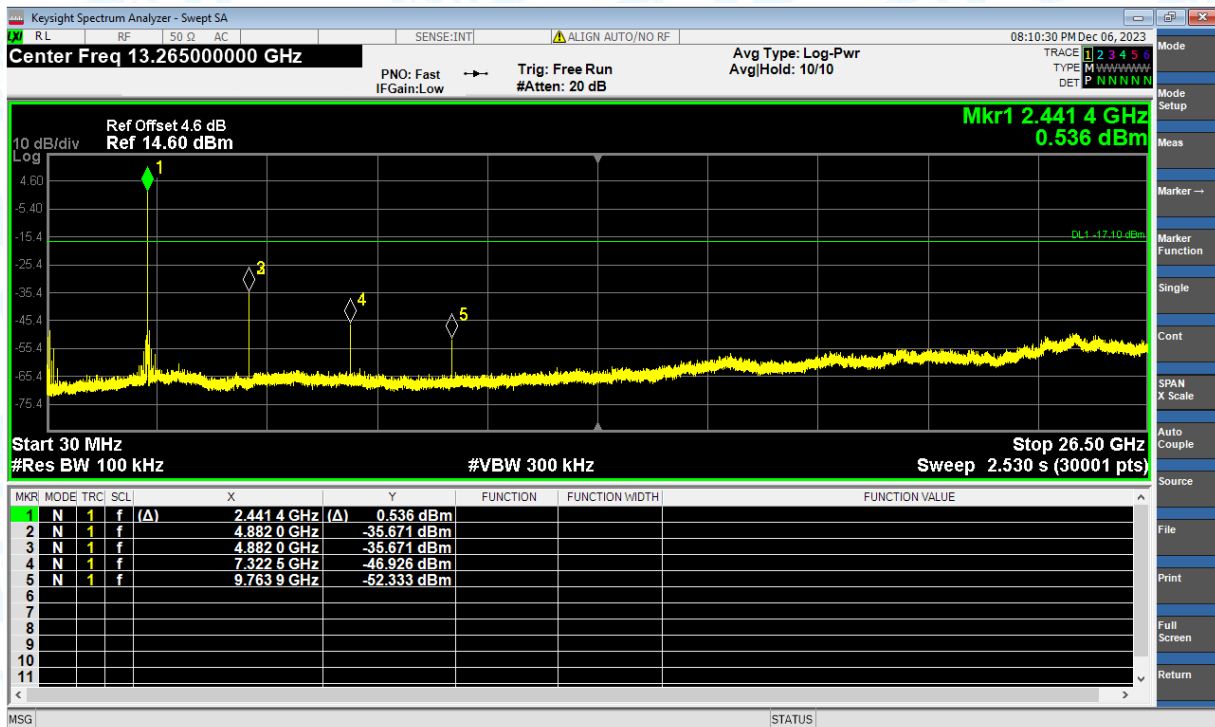
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



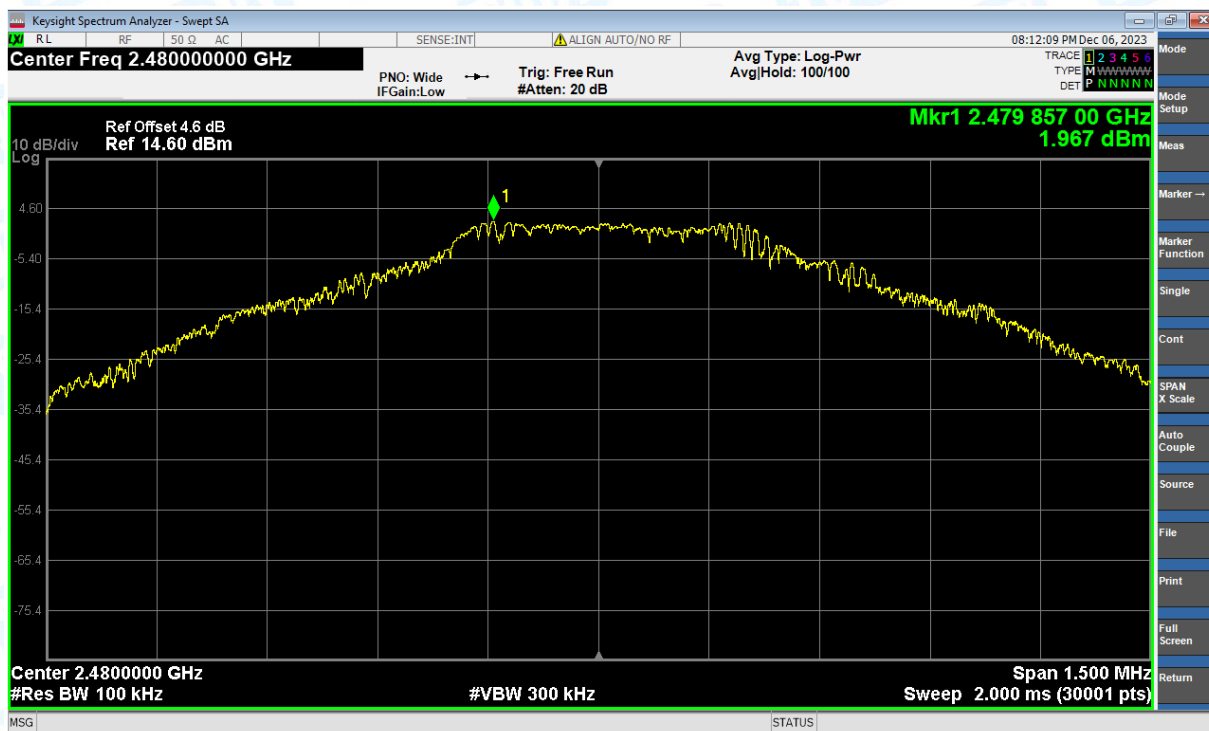
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



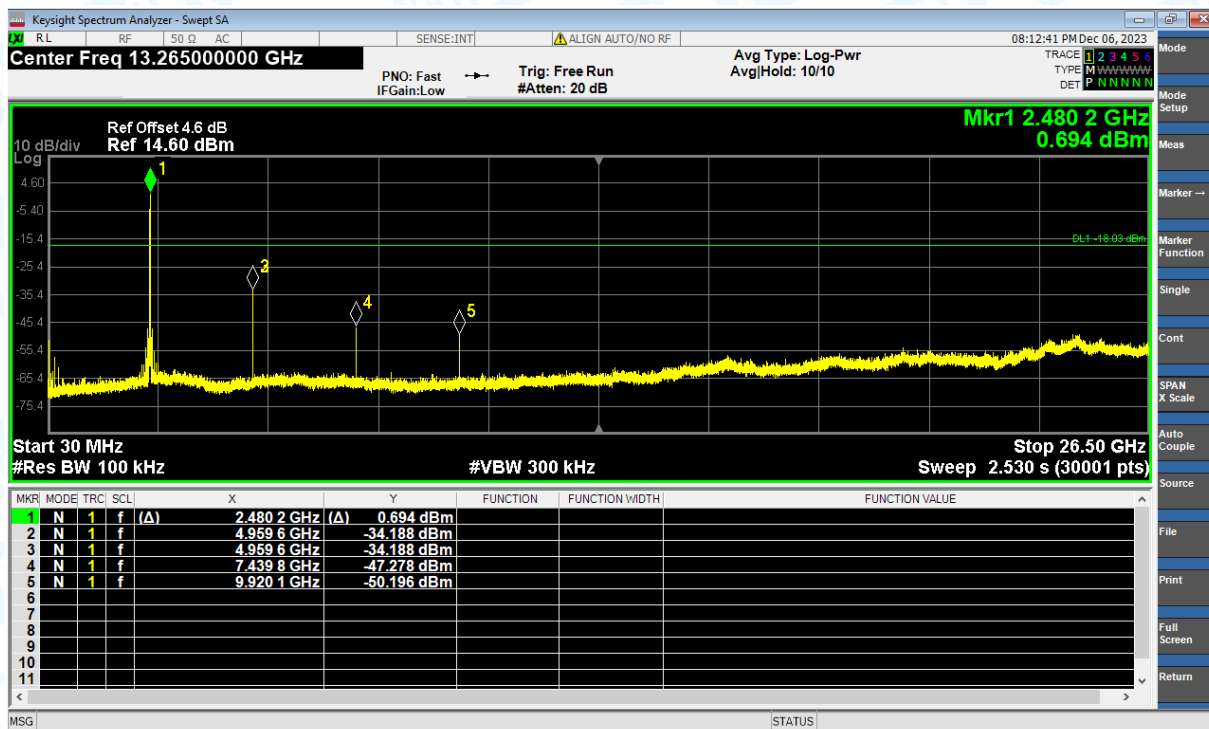
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



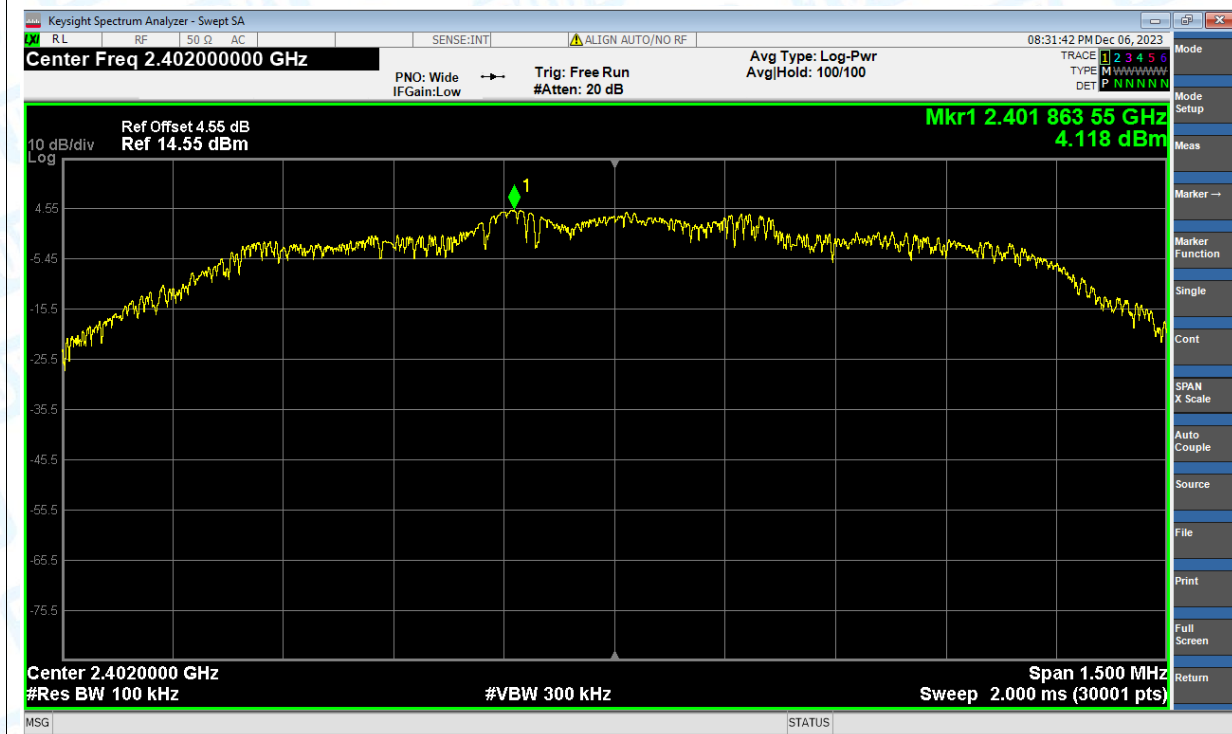
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



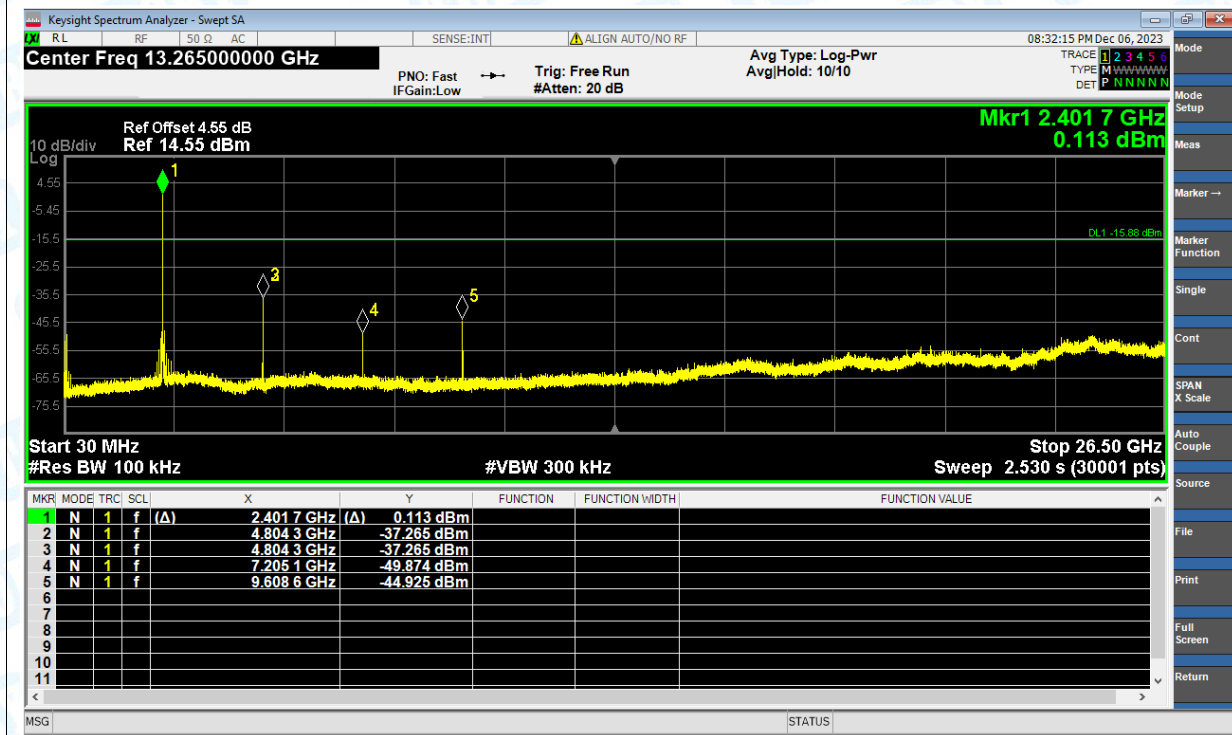
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



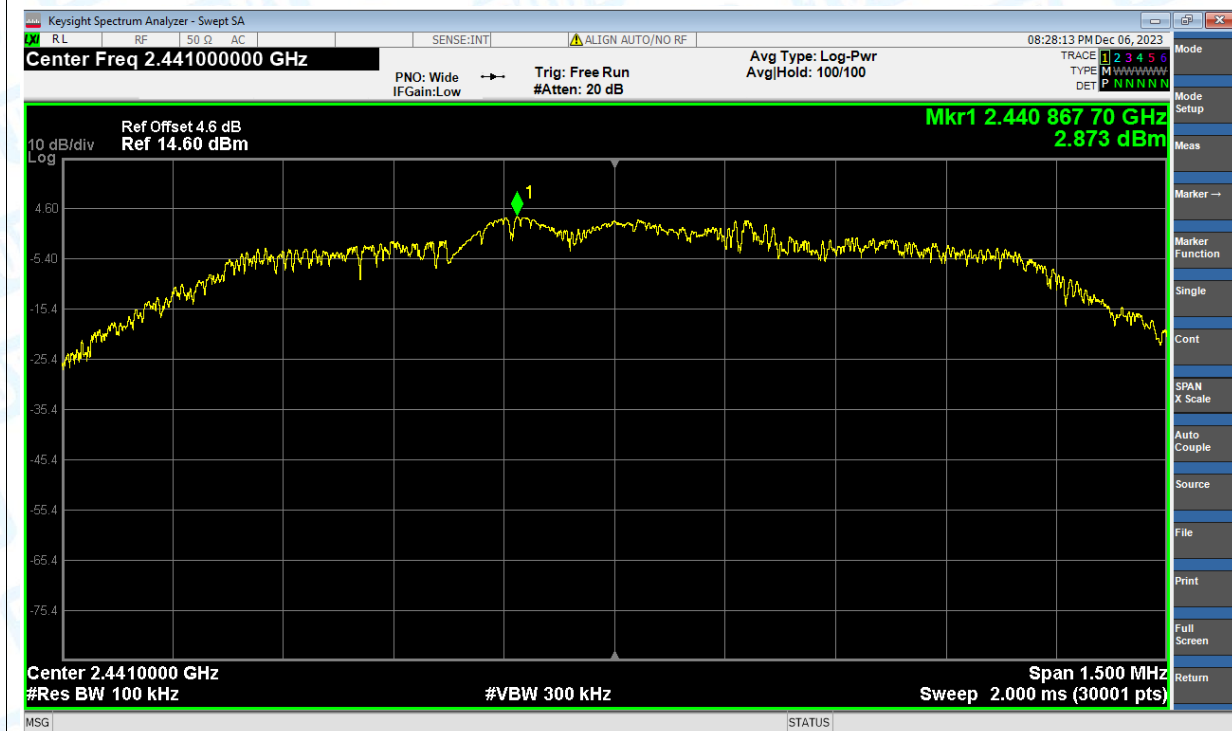
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



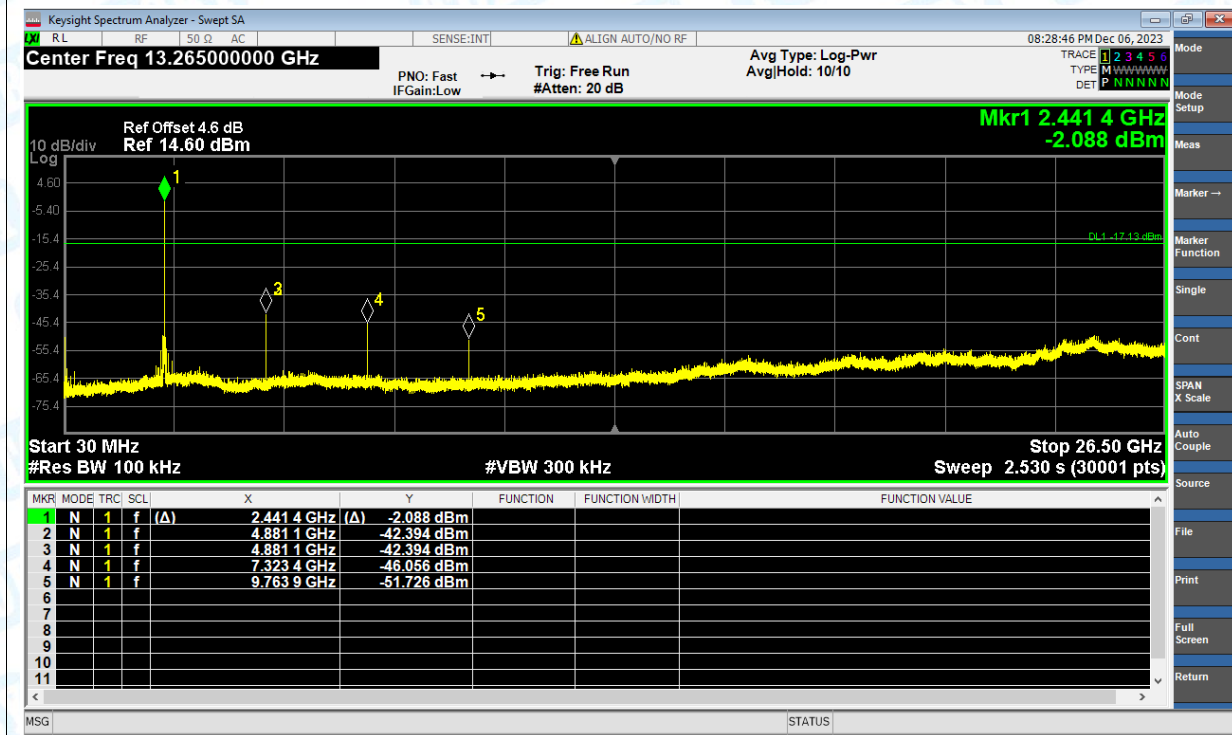
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



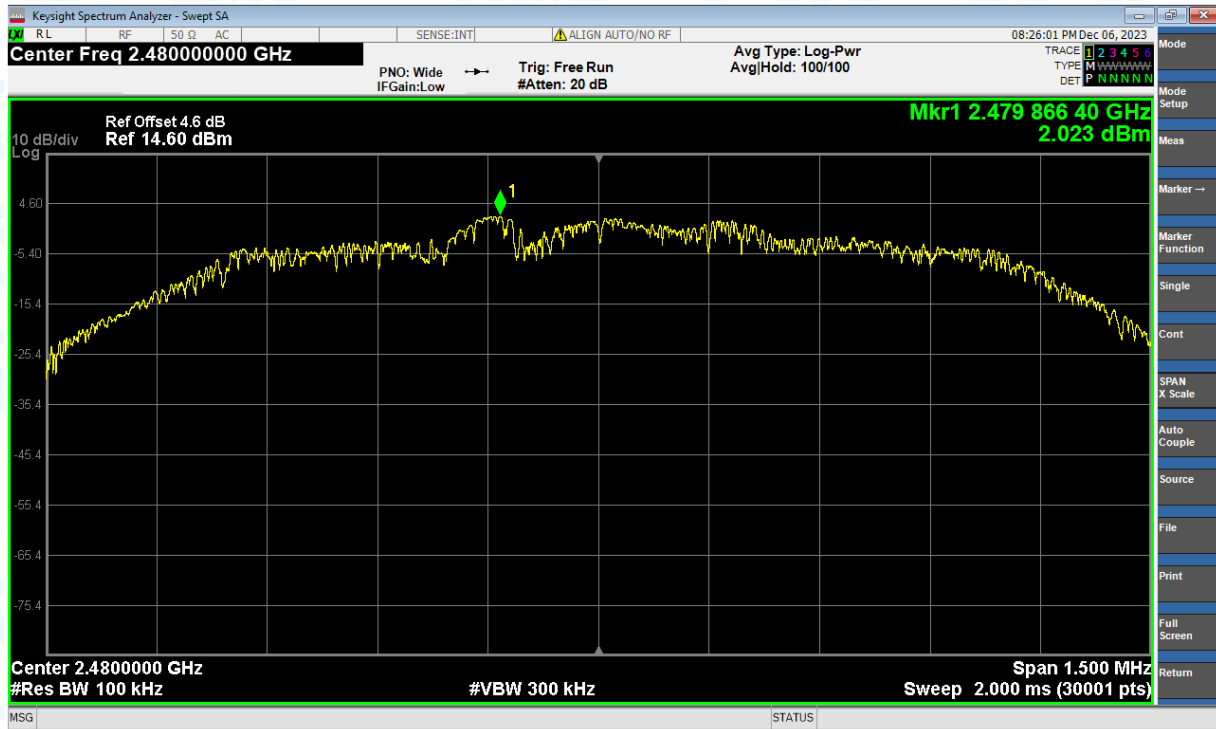
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



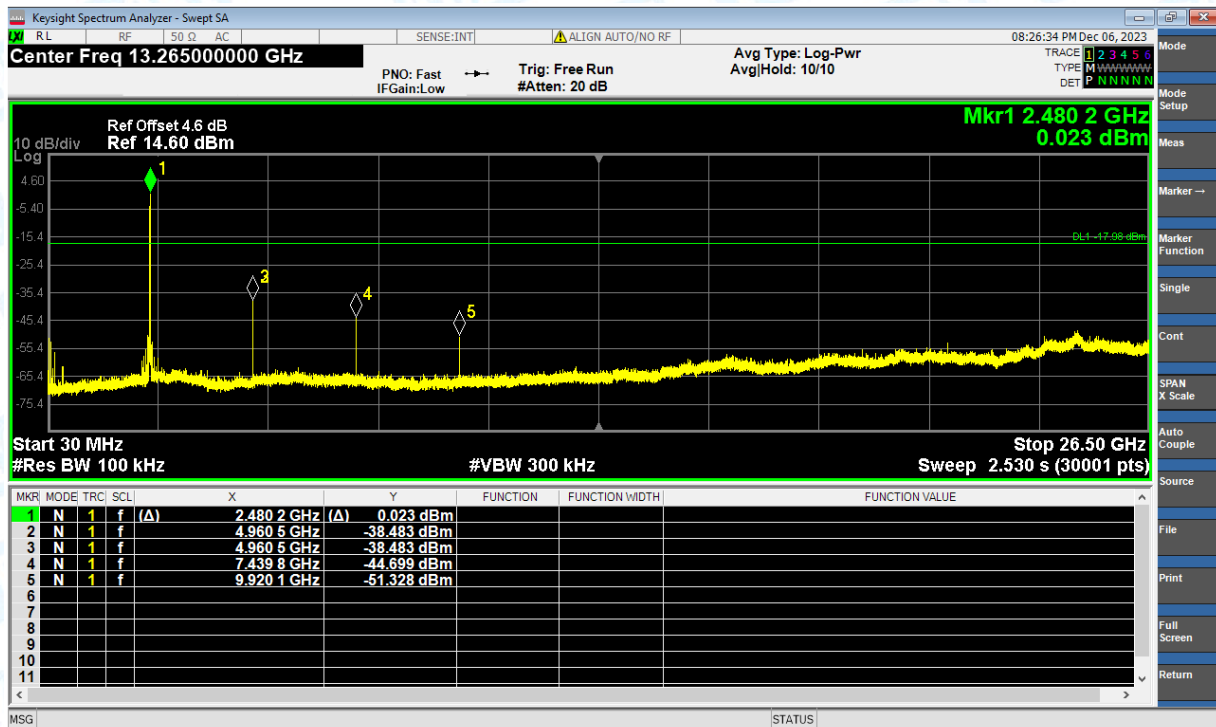
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



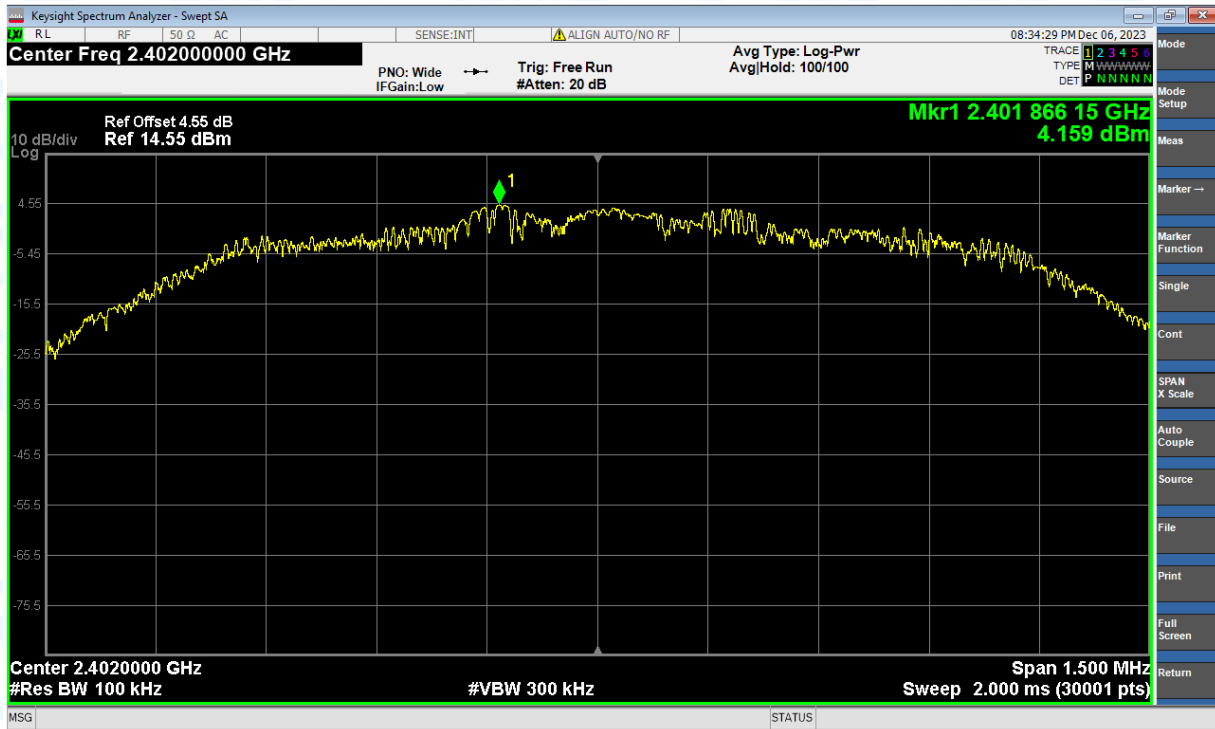
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



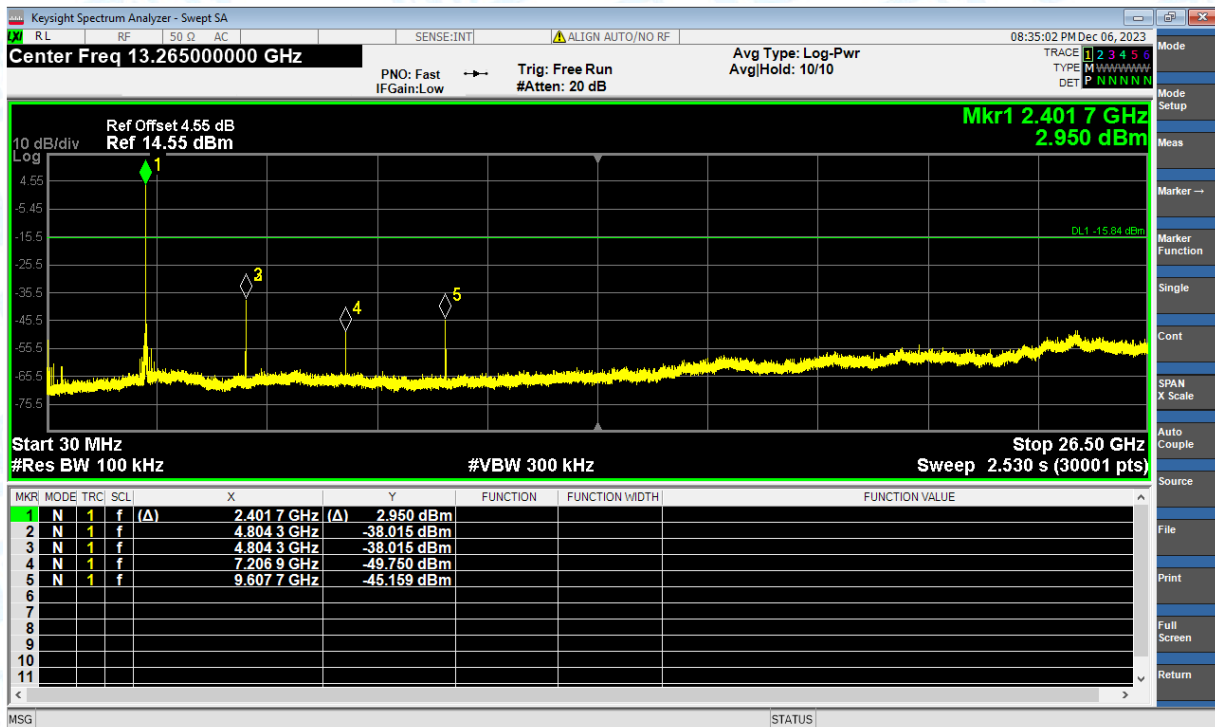
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



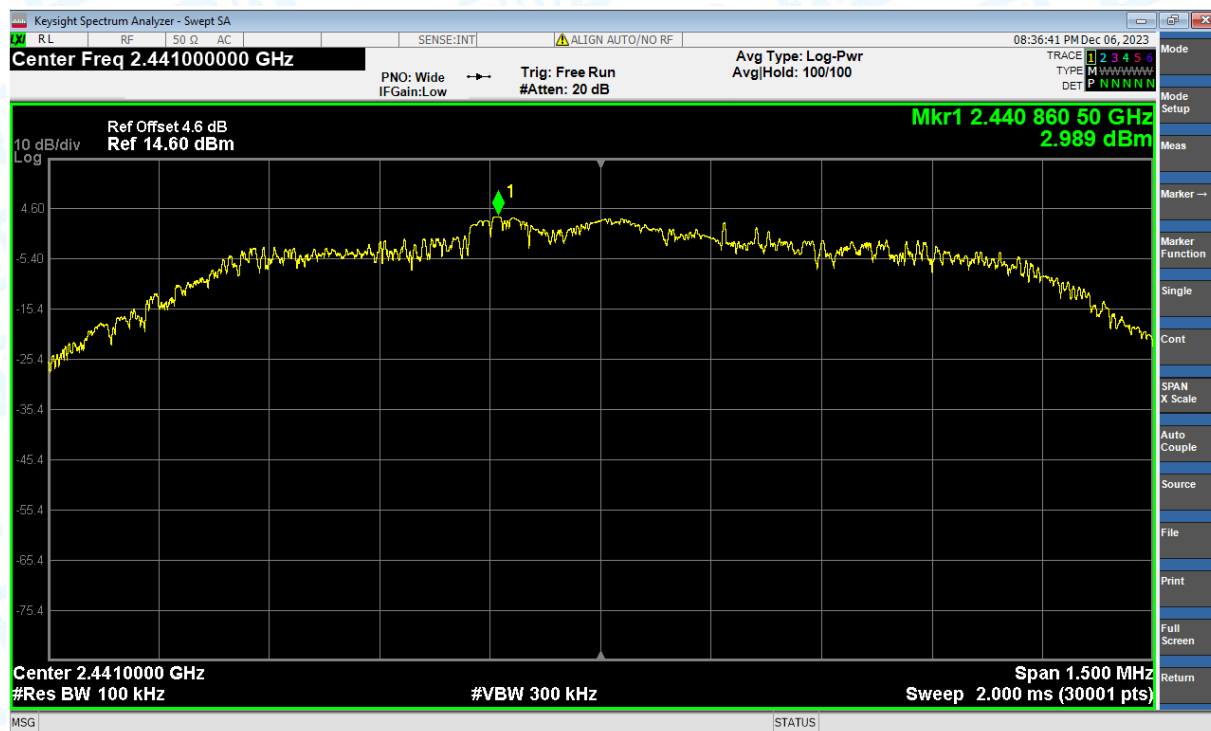
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



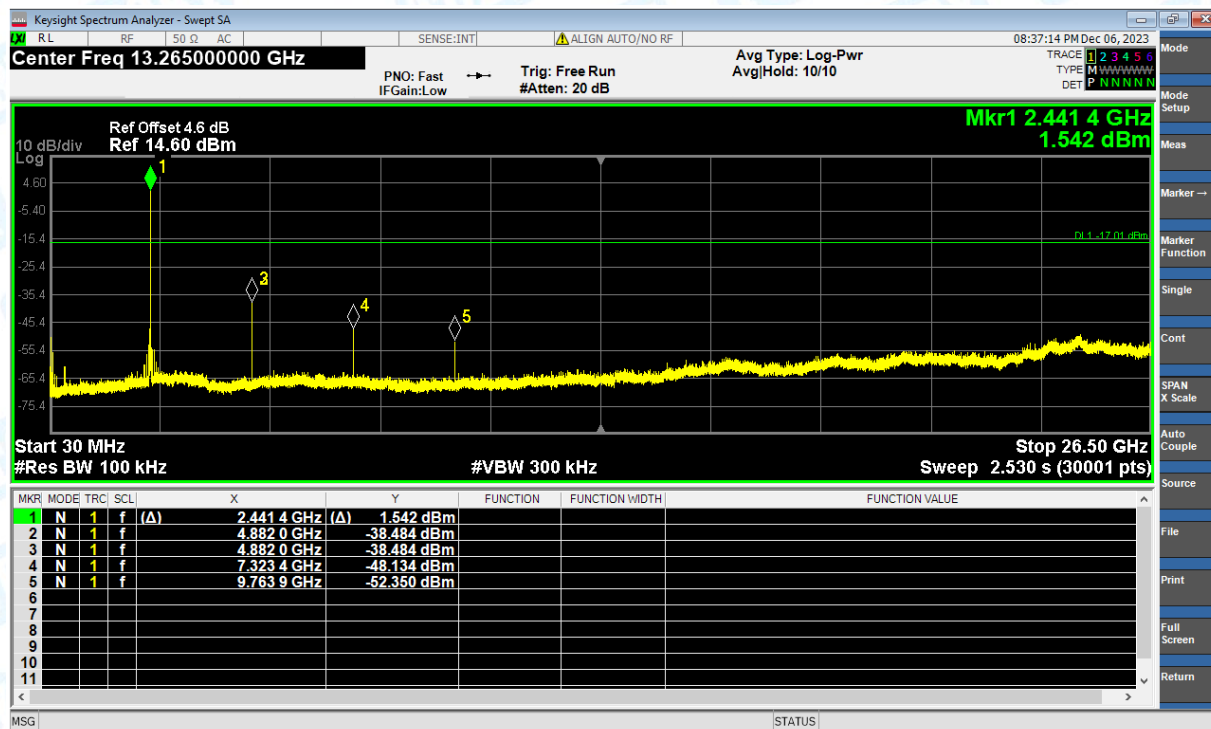
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



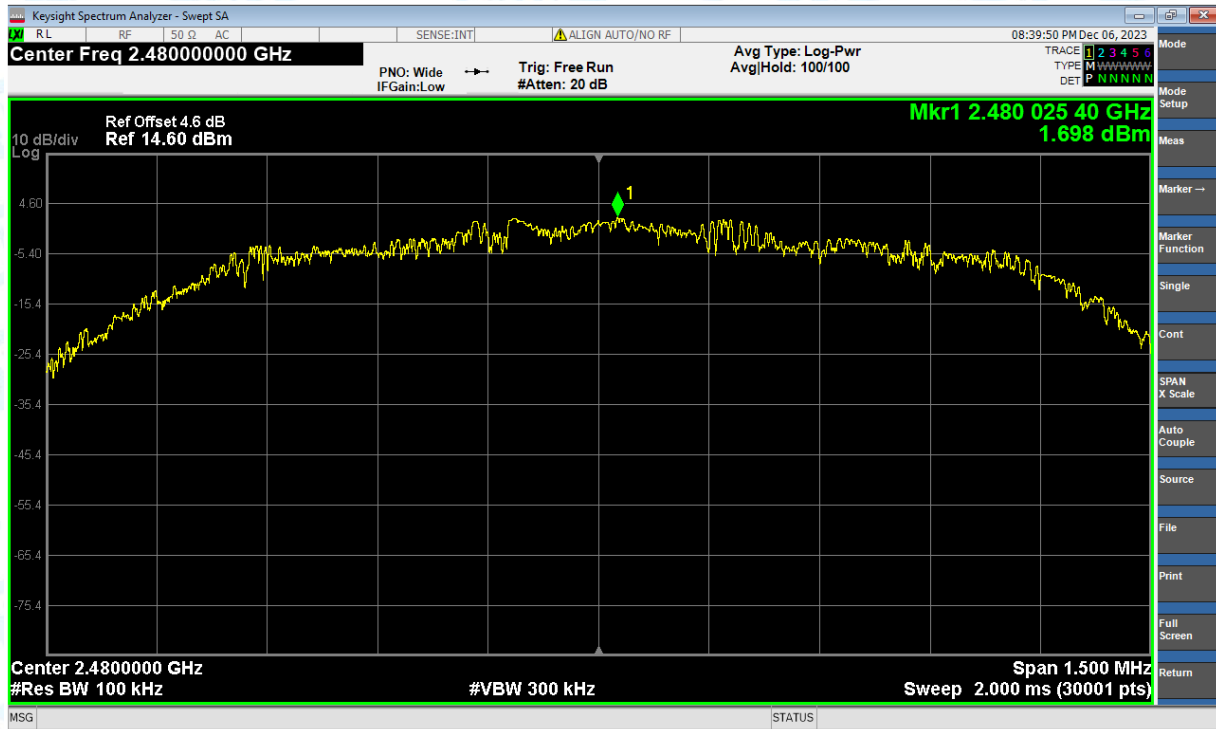
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



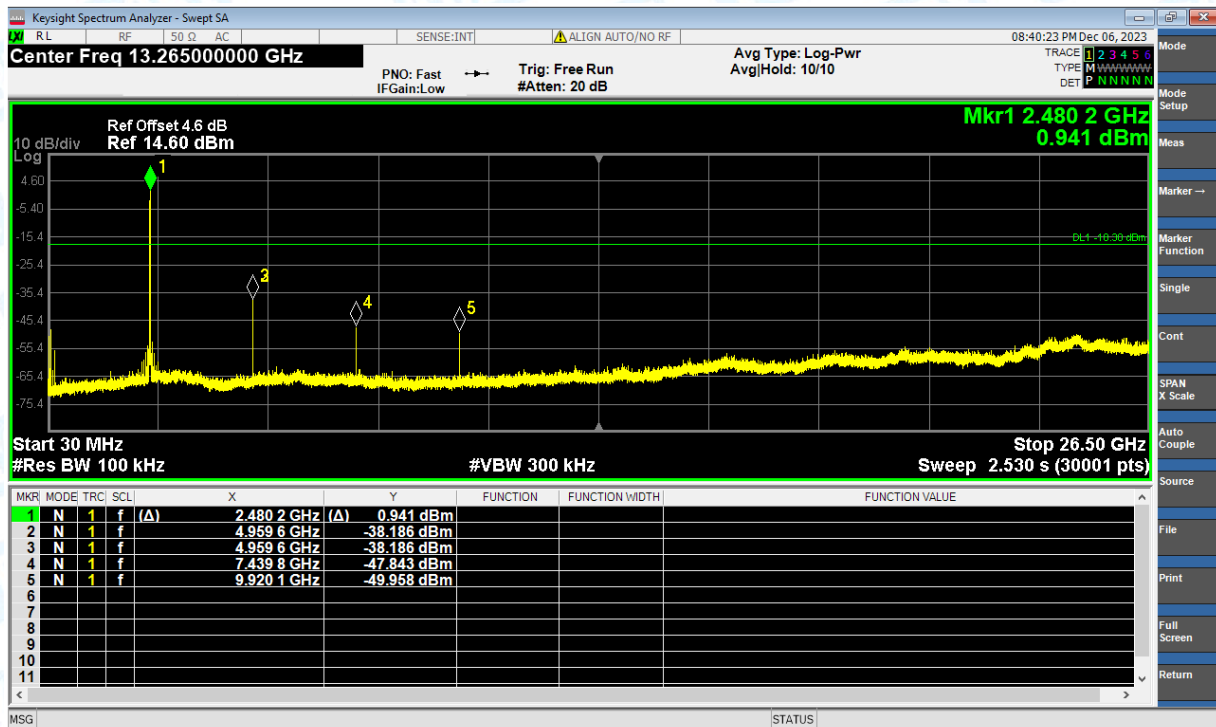
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

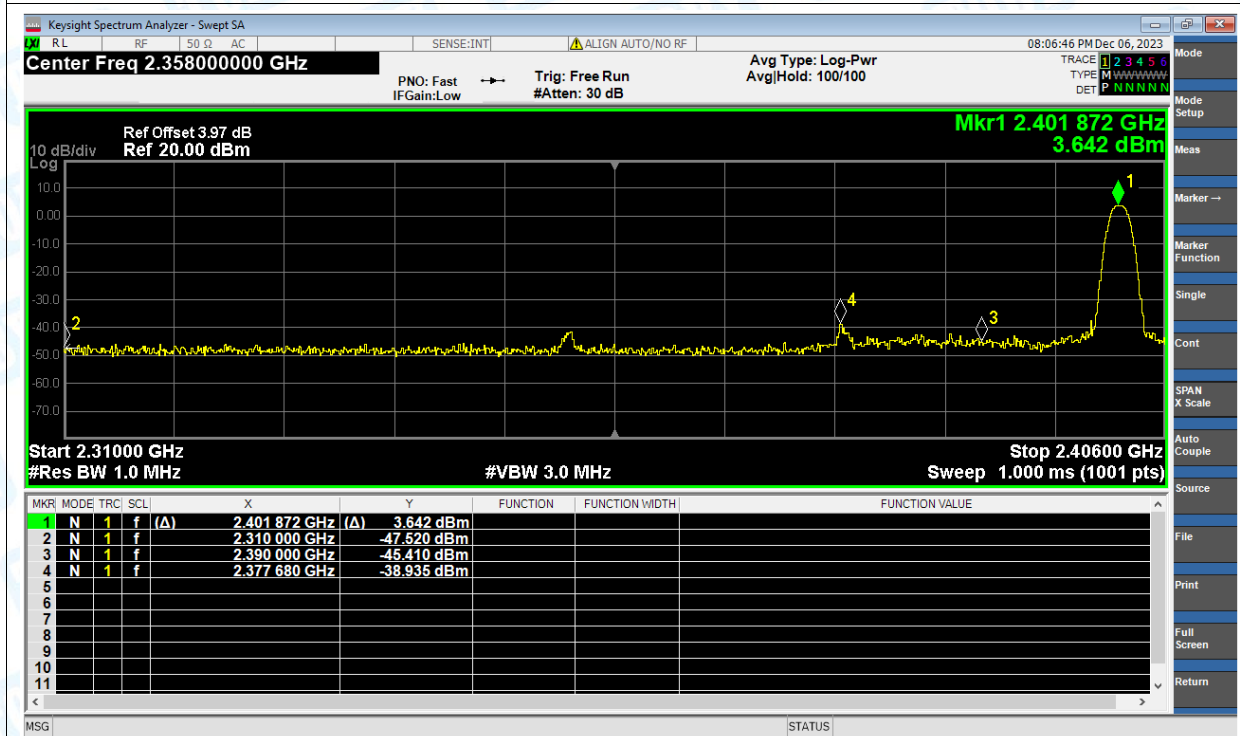


8. Restrict Band

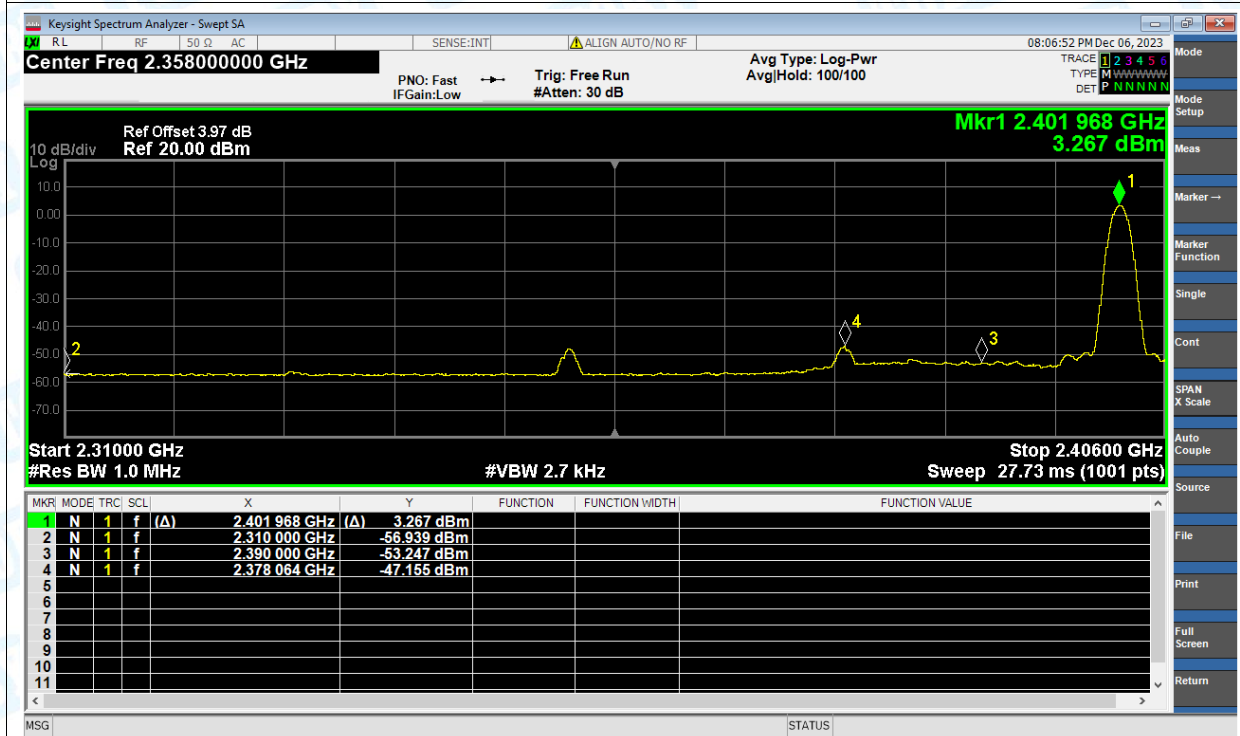
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-47.52	2	49.74	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.94	2	40.32	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2377.68	-38.94	2	58.32	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2378.064	-47.16	2	50.1	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-44.45	2	52.81	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-53.19	2	44.07	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-45.84	2	51.42	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-52.15	2	45.11	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.728	-41.07	2	56.19	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2484.616	-51.42	2	45.84	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-45.1	2	52.16	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.52	2	42.74	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.07	2	49.19	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-57.22	2	40.04	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2378.544	-41.03	2	56.23	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2354.064	-47.16	2	50.1	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-44.6	2	52.66	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-52.46	2	44.8	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-44.32	2	52.94	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-52.73	2	44.53	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2490.736	-42.15	2	55.11	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2484.616	-52.2	2	45.06	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.41	2	50.85	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-53.96	2	43.3	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-48.74	2	48.52	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.98	2	40.28	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2383.92	-41.36	2	55.9	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2378.256	-47.69	2	49.57	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-45.11	2	52.15	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-52.82	2	44.44	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-45.58	2	51.68	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-53.16	2	44.1	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.608	-40.8	2	56.46	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2484.4	-52.28	2	44.98	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-43.5	2	53.76	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-54.1	2	43.16	Average	54	Pass

Test Graphs

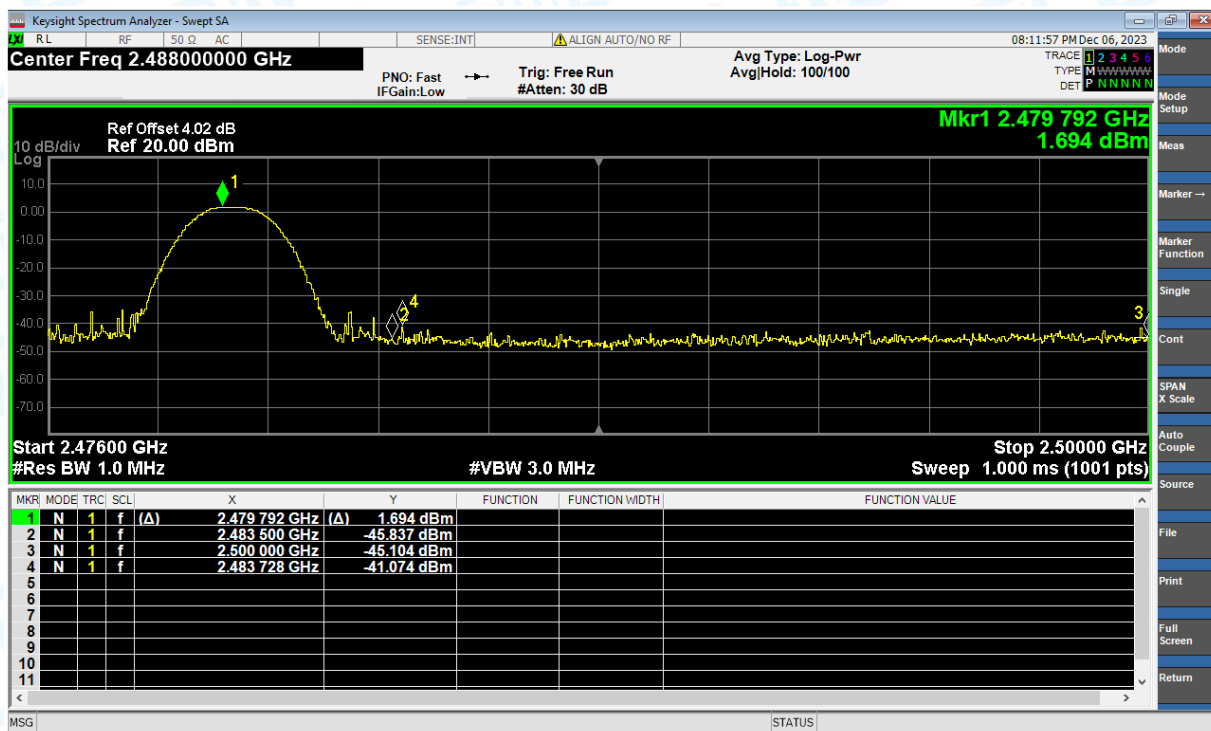
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



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



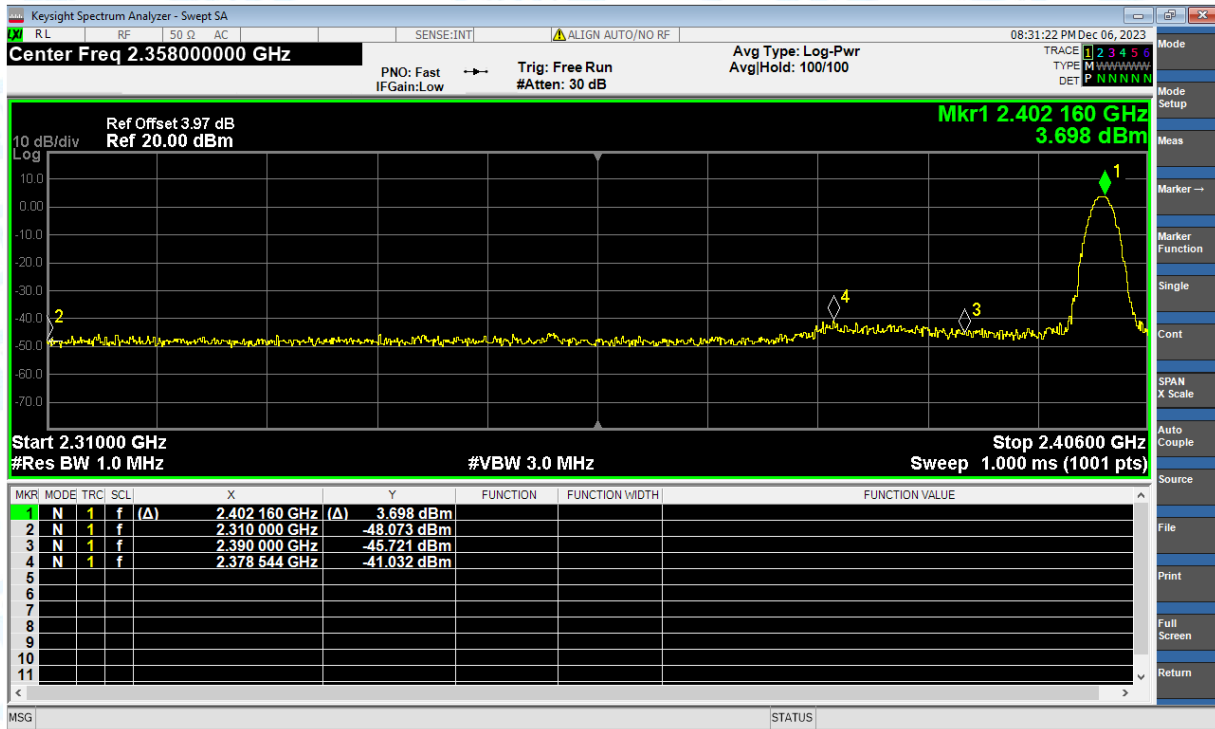
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



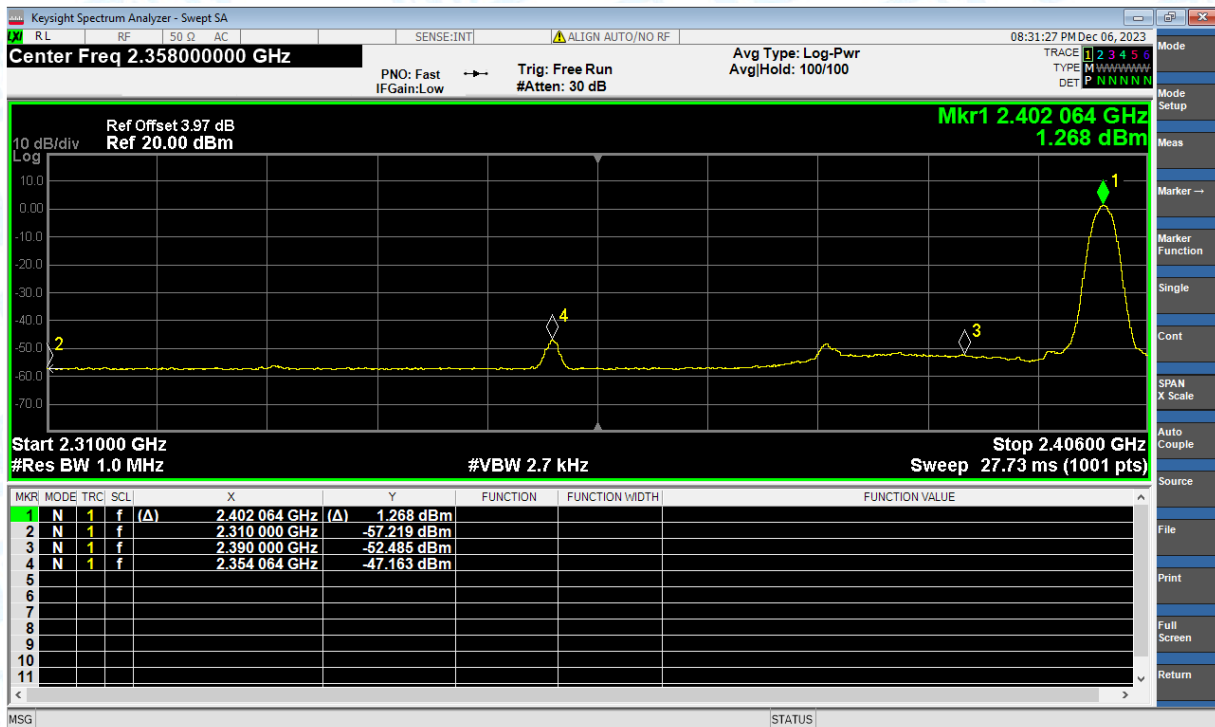
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



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



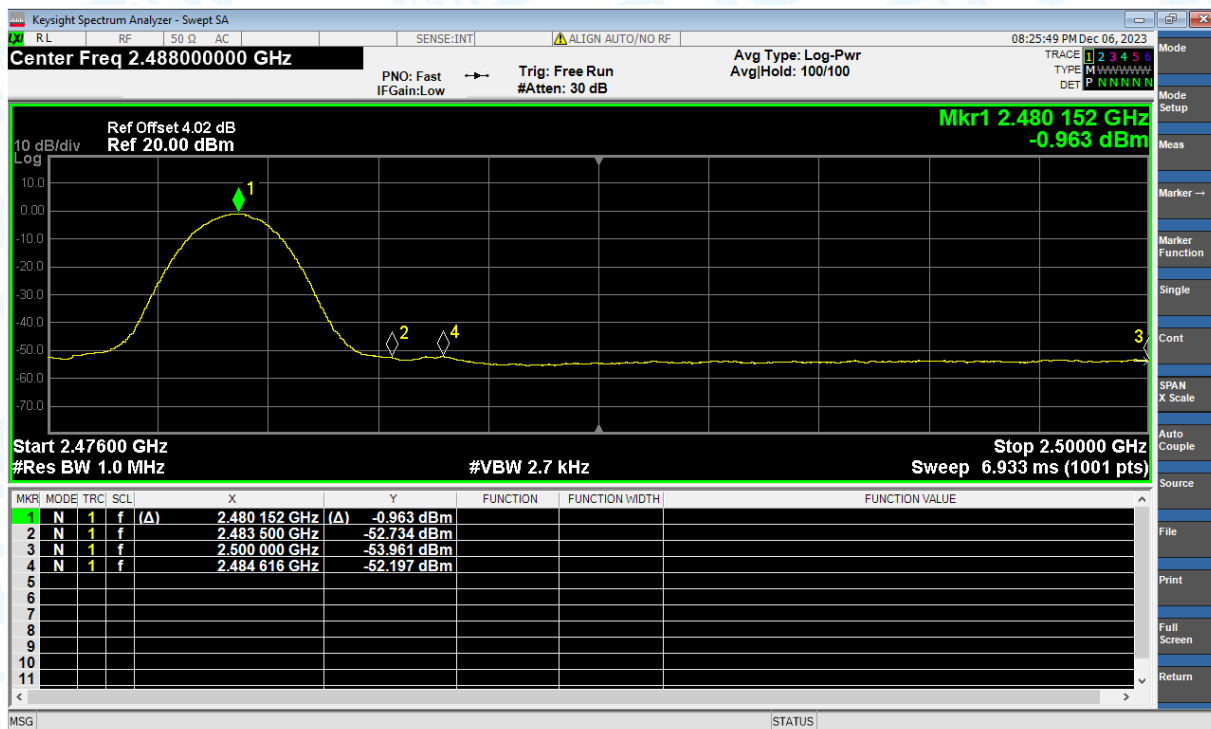
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



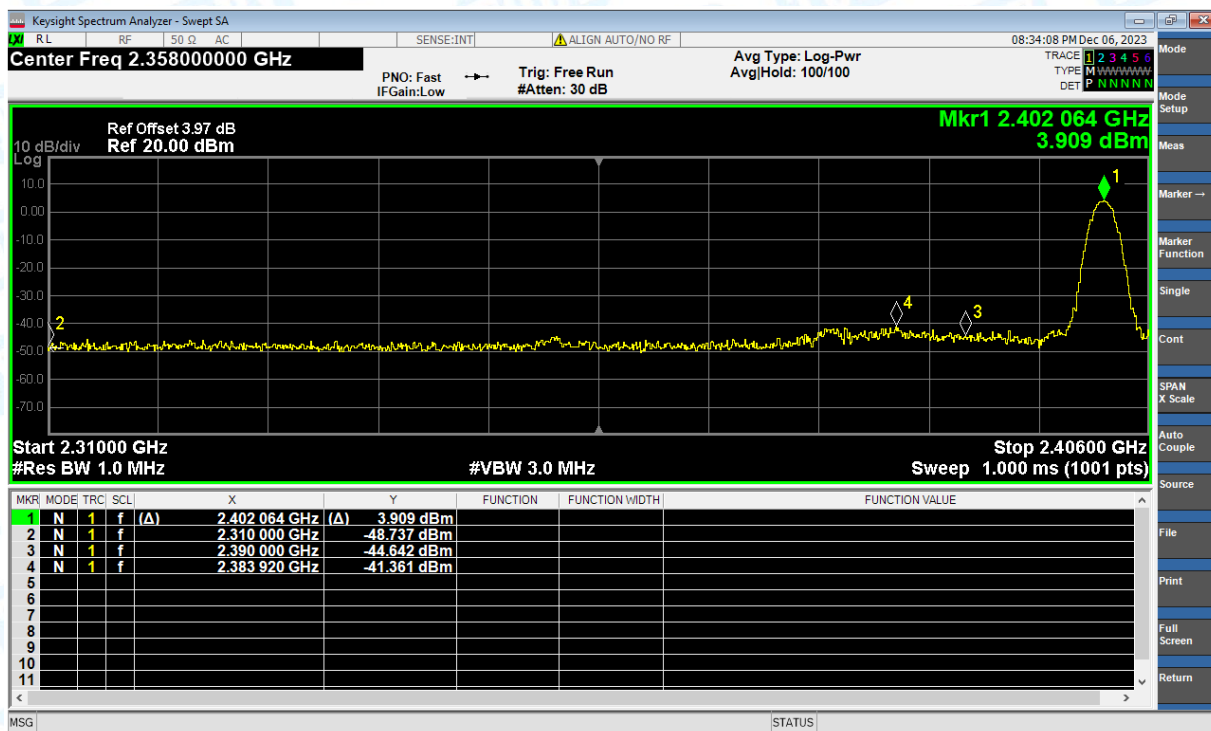
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



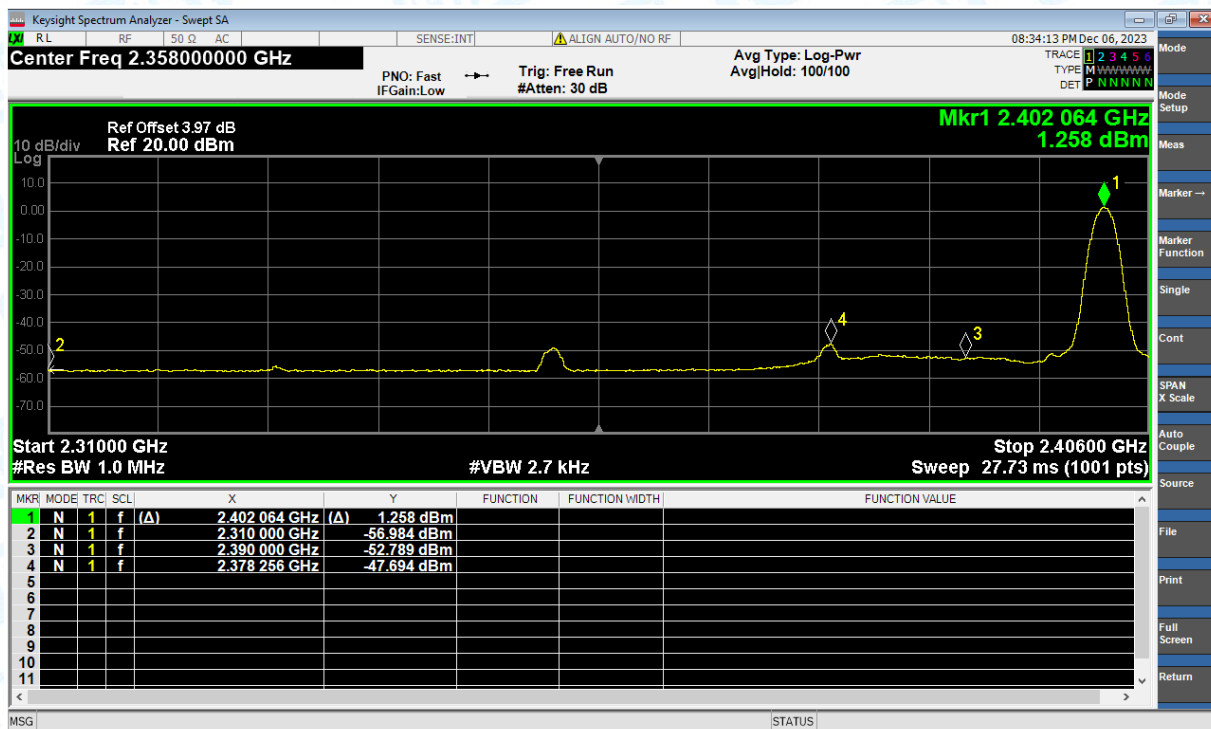
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



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



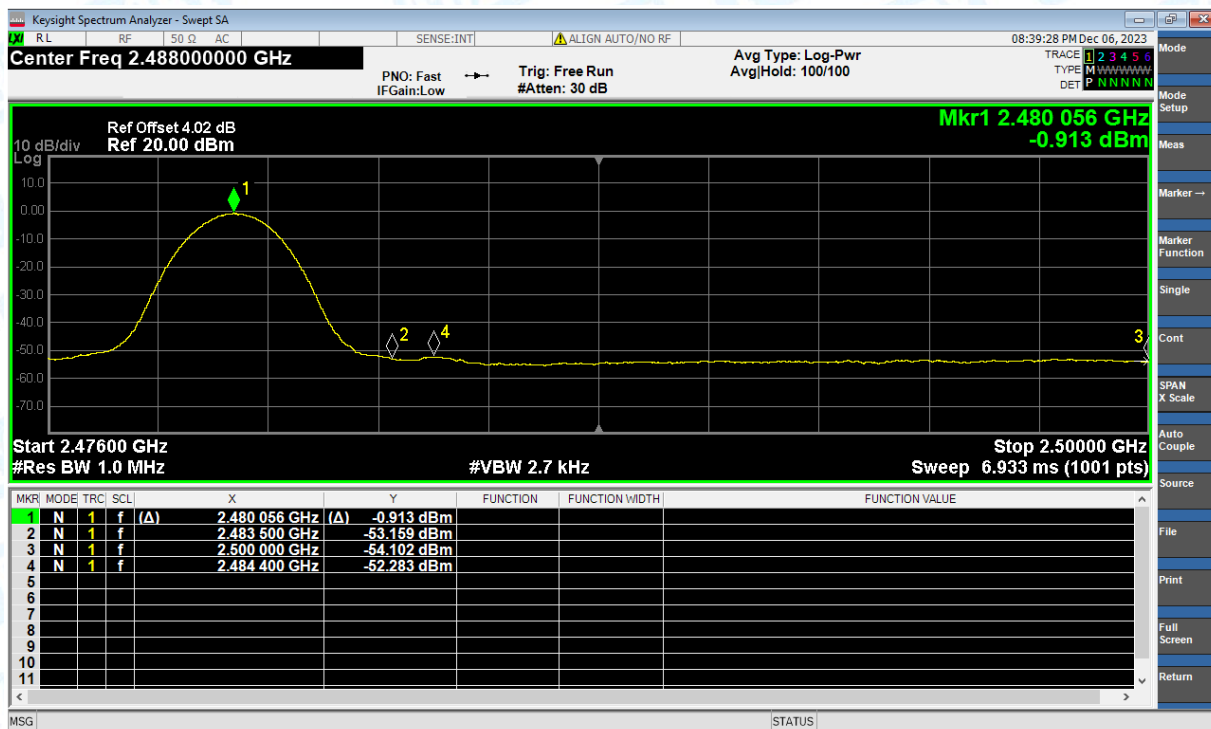
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

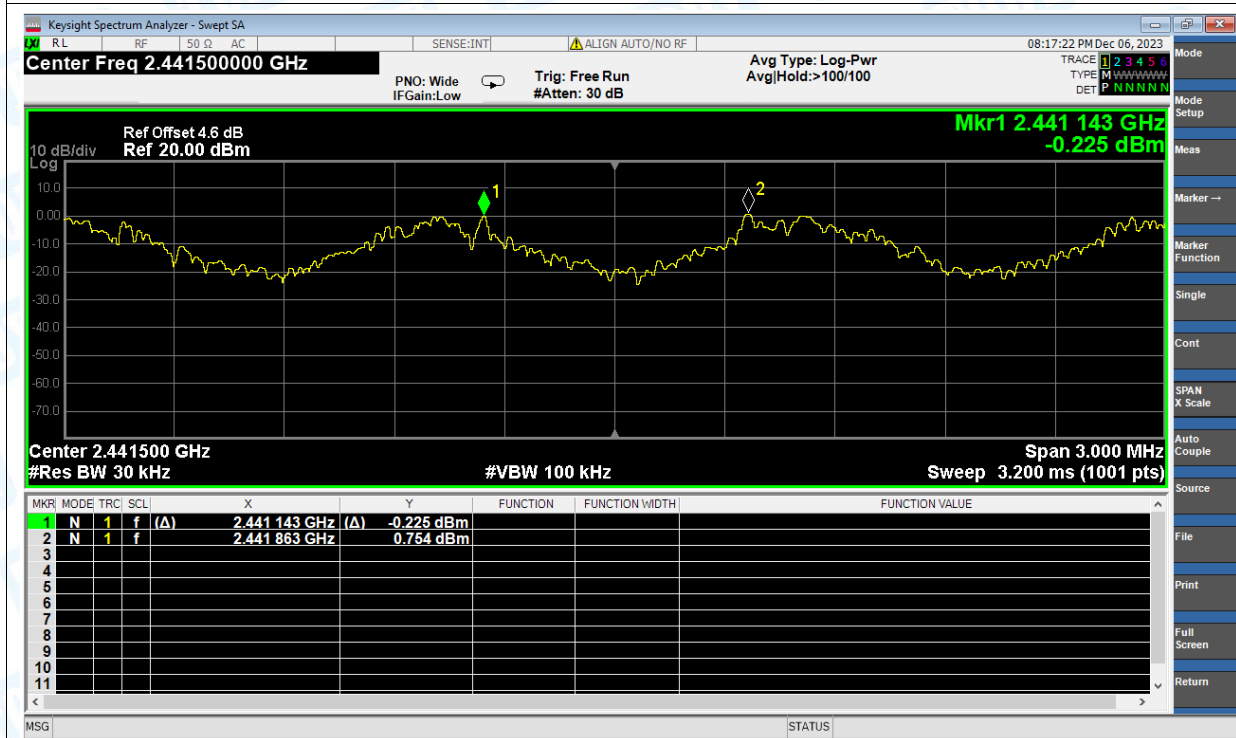


9. Carrier Frequencies Separation

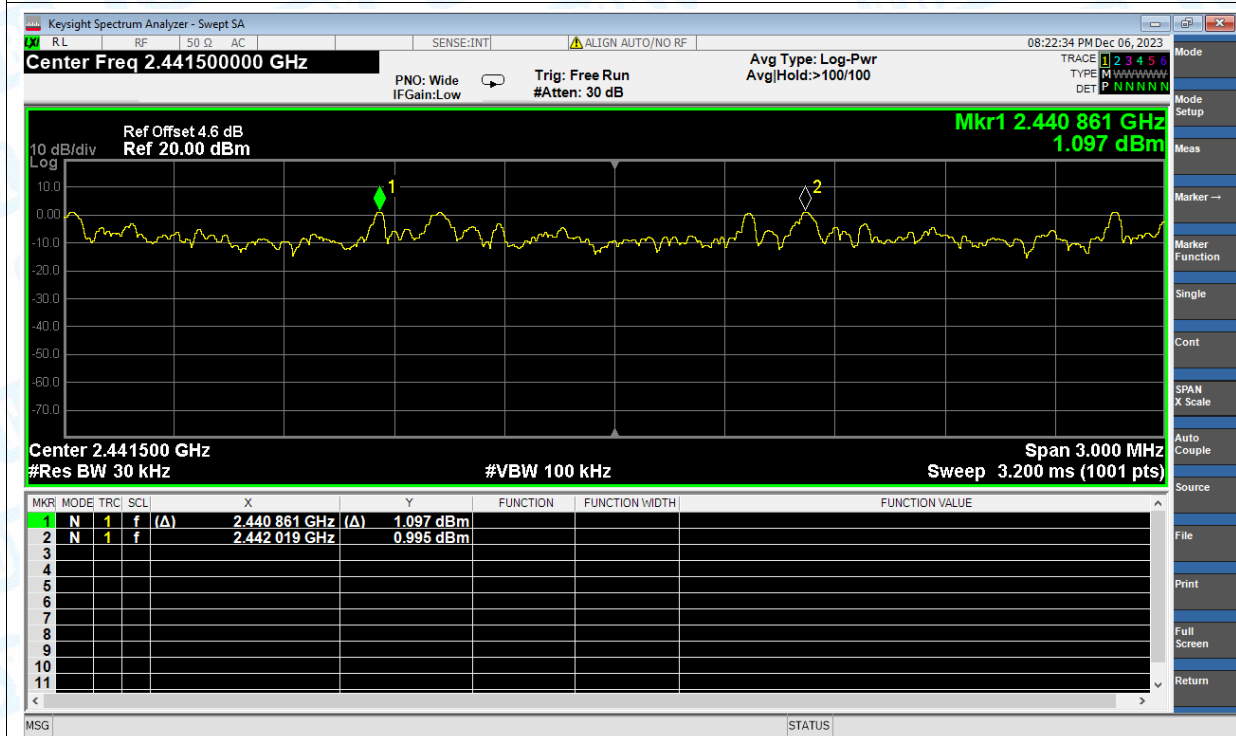
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2441.143	2441.863	0.72	0.653	Pass
NVNT	2-DH1	Ant1	2440.861	2442.019	1.158	0.025	Pass
NVNT	3-DH1	Ant1	2441.017	2442.025	1.008	0.813	Pass

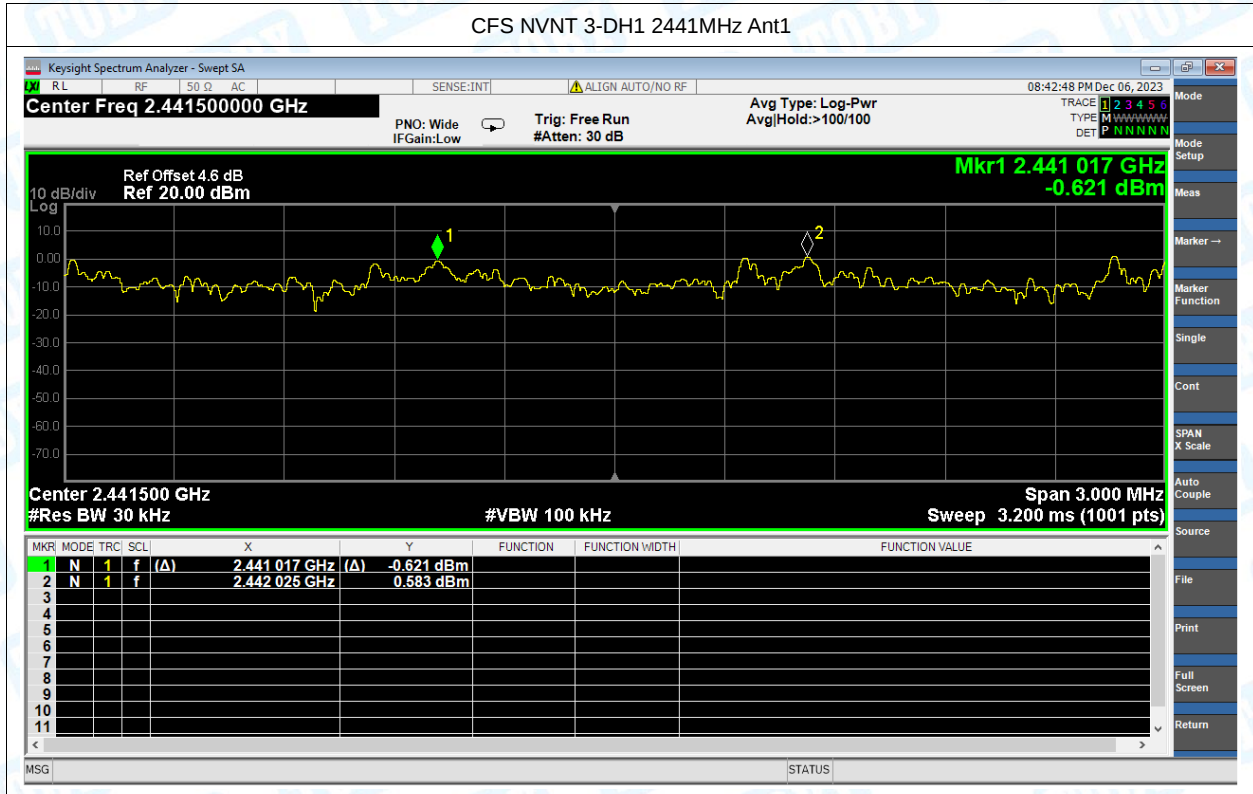
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



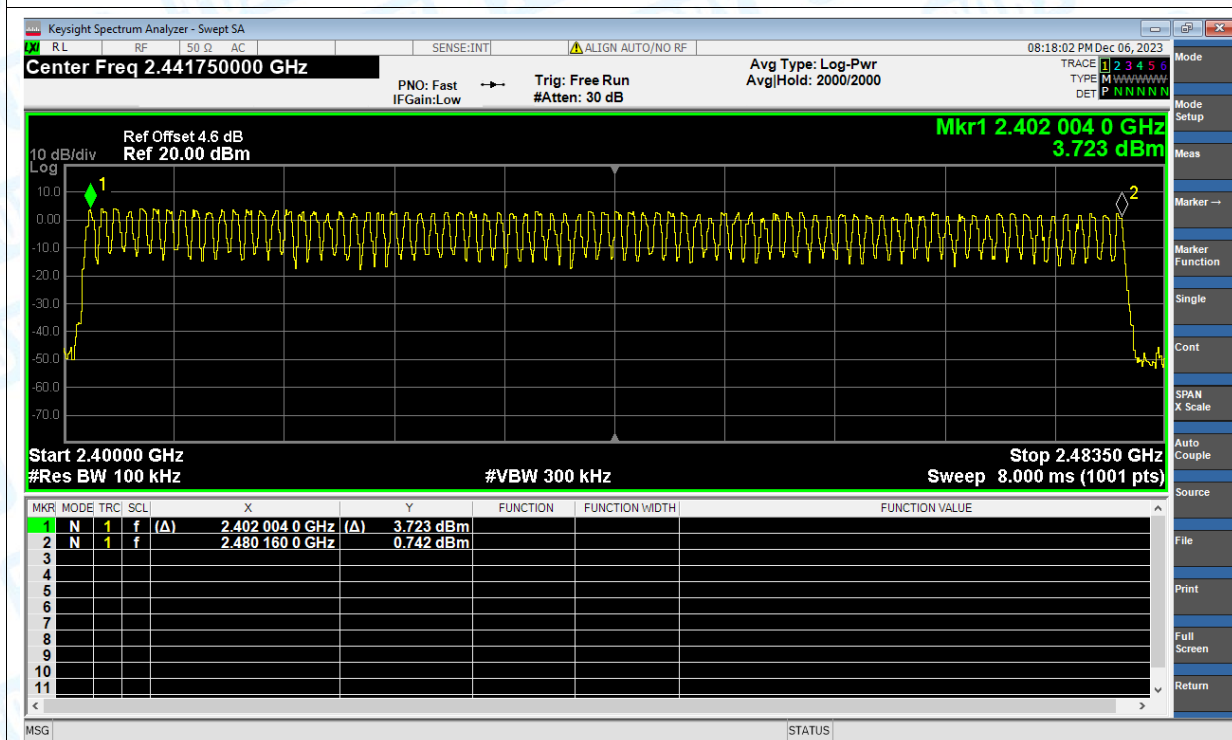


10. Number of Hopping Channel

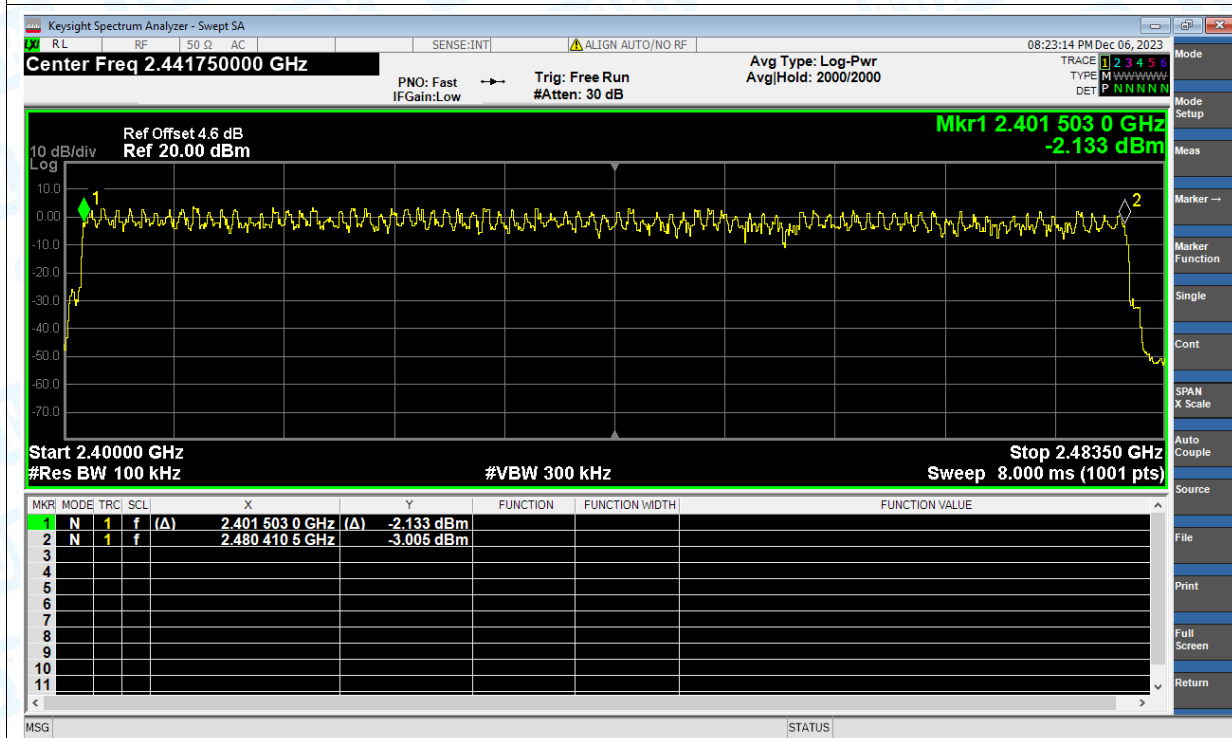
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

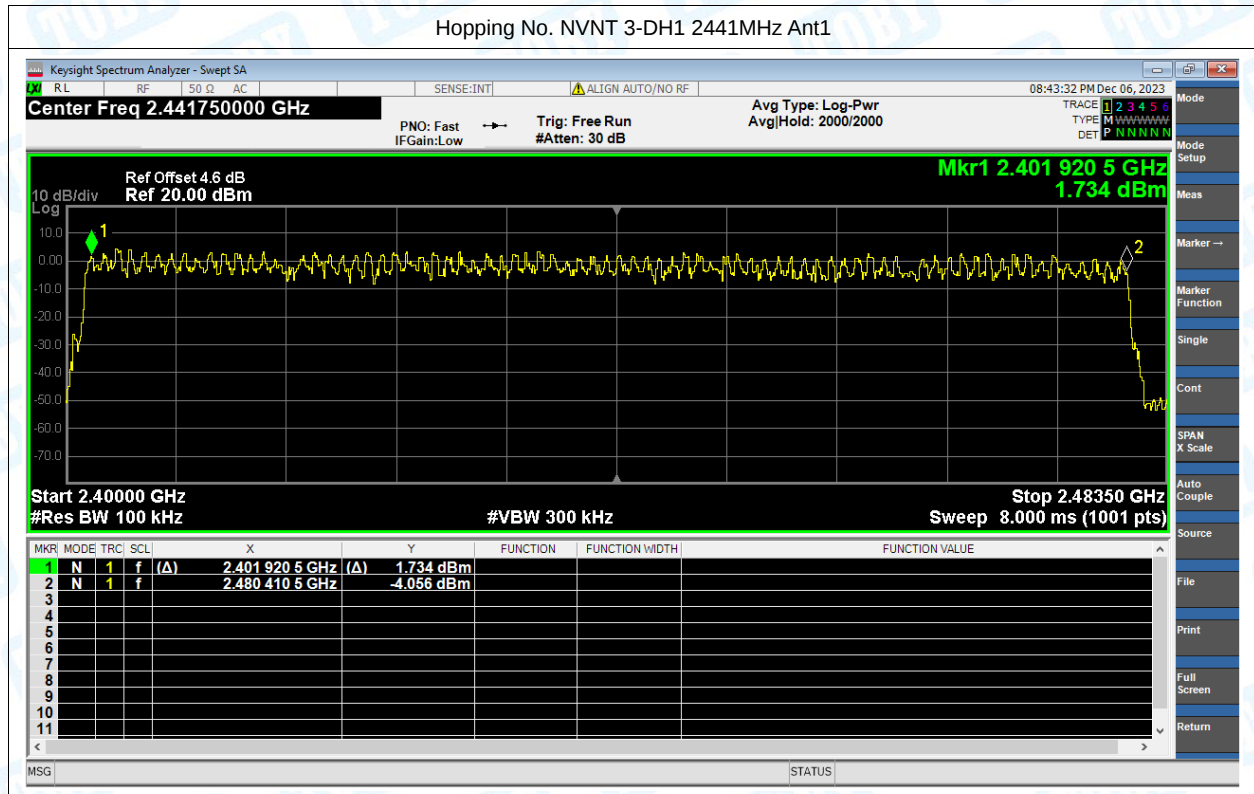
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



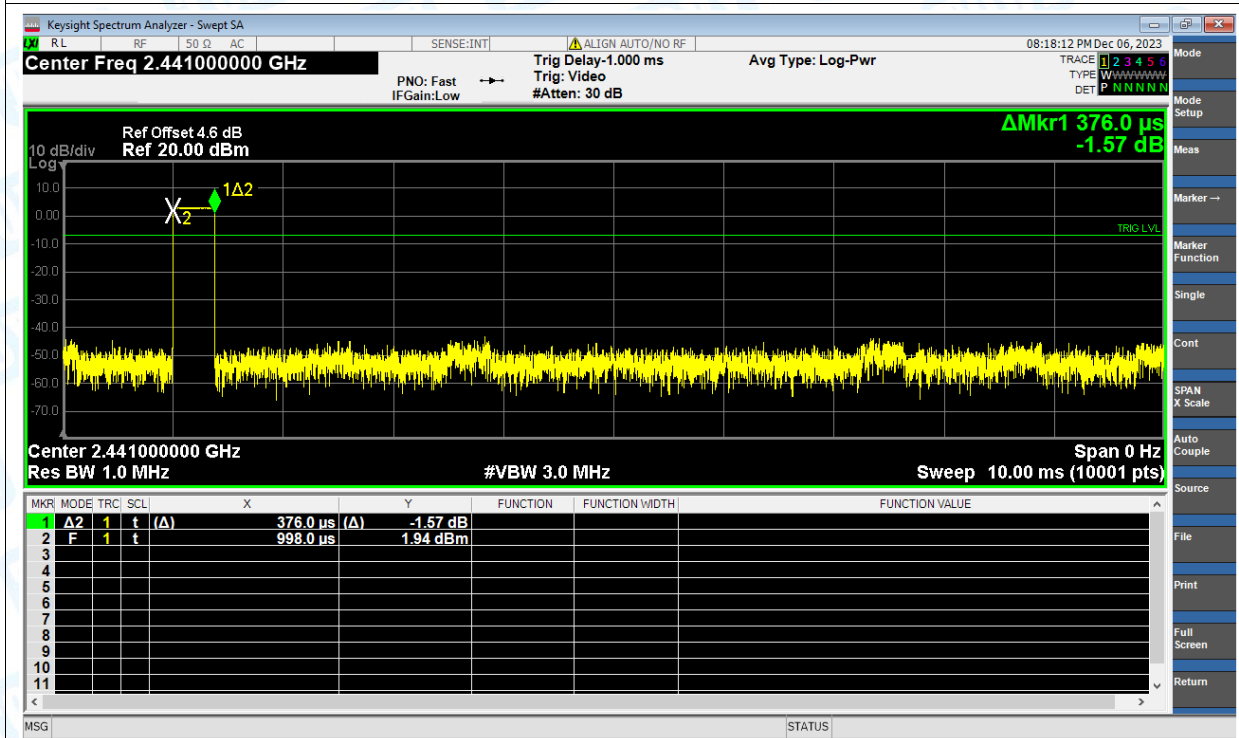


11. Dwell Time

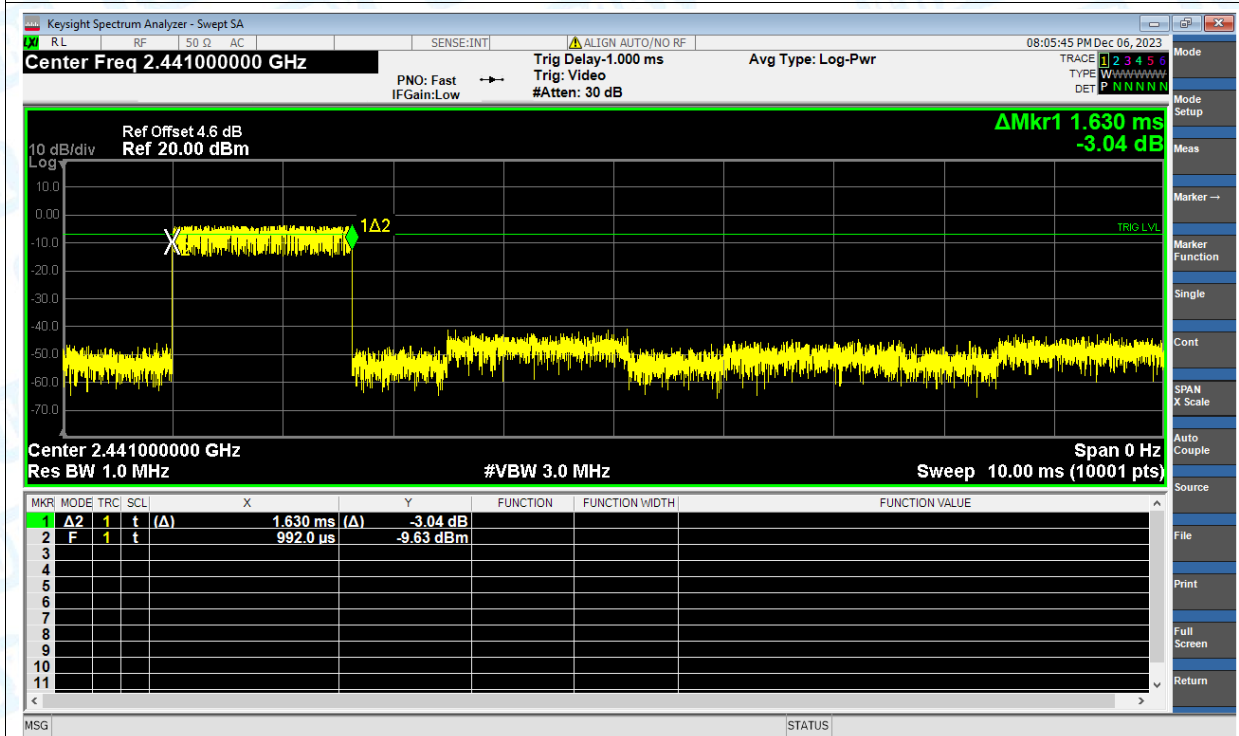
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.376	120.32	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.63	260.8	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.88	307.2	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.387	123.84	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.63	260.8	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.886	307.84	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.387	123.84	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.637	261.92	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.888	308.053	31600	400	Pass

Test Graphs

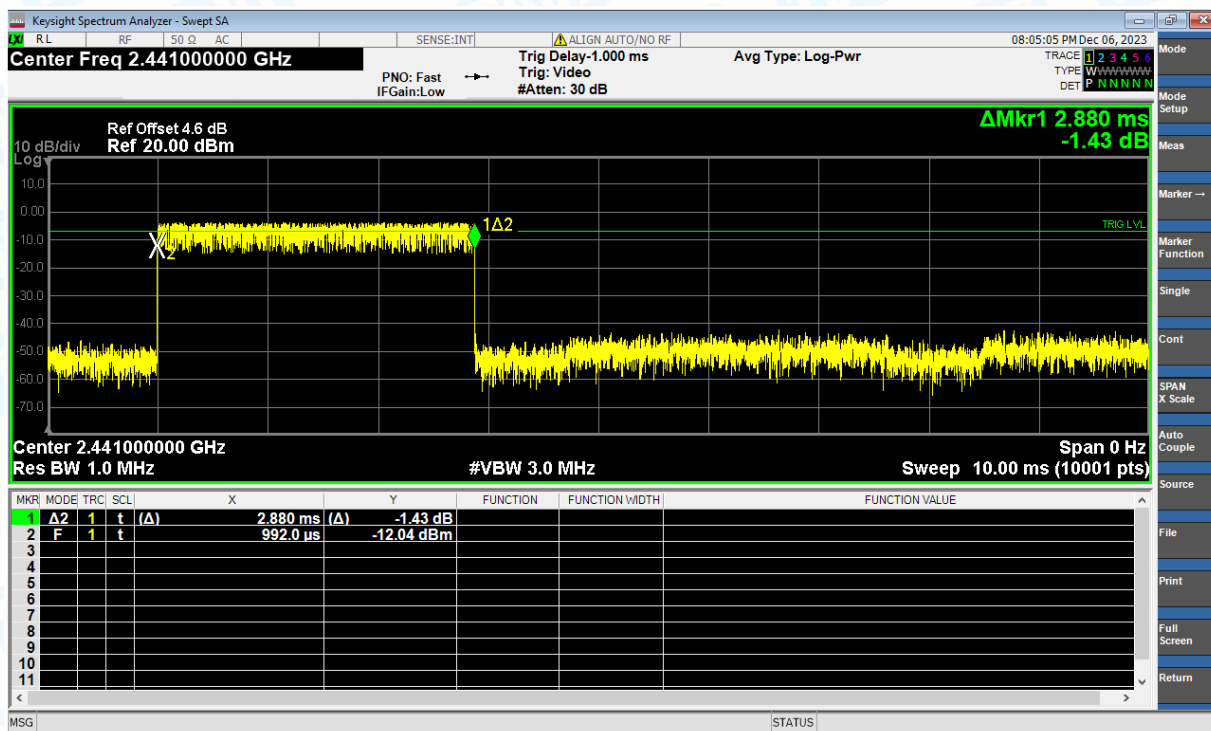
Dwell NVNT 1-DH1 2441MHz Ant1



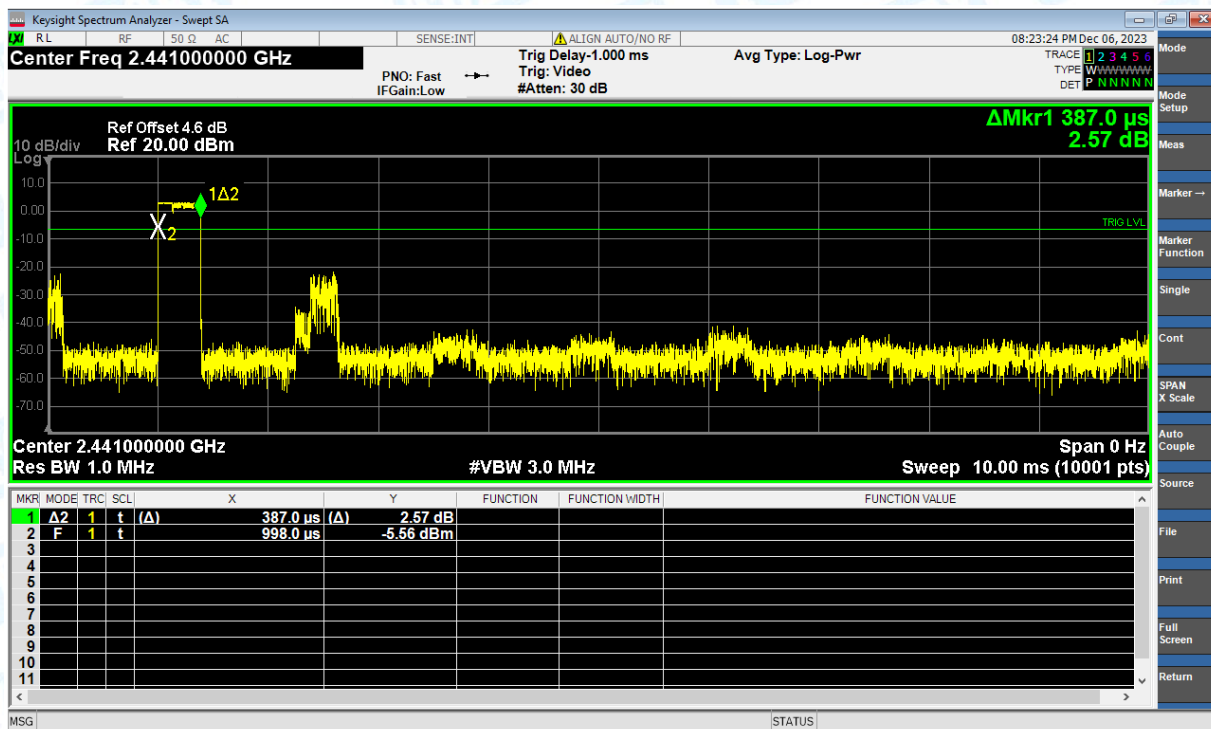
Dwell NVNT 1-DH3 2441MHz Ant1



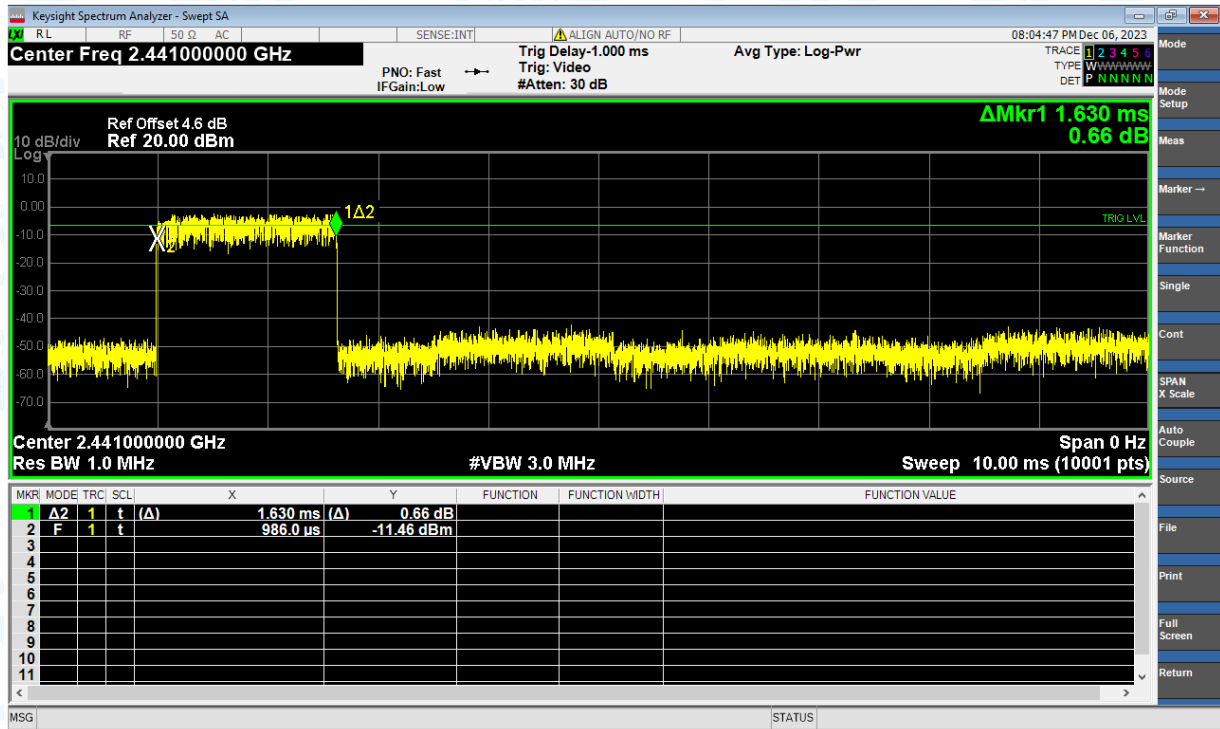
Dwell NVNT 1-DH5 2441MHz Ant1



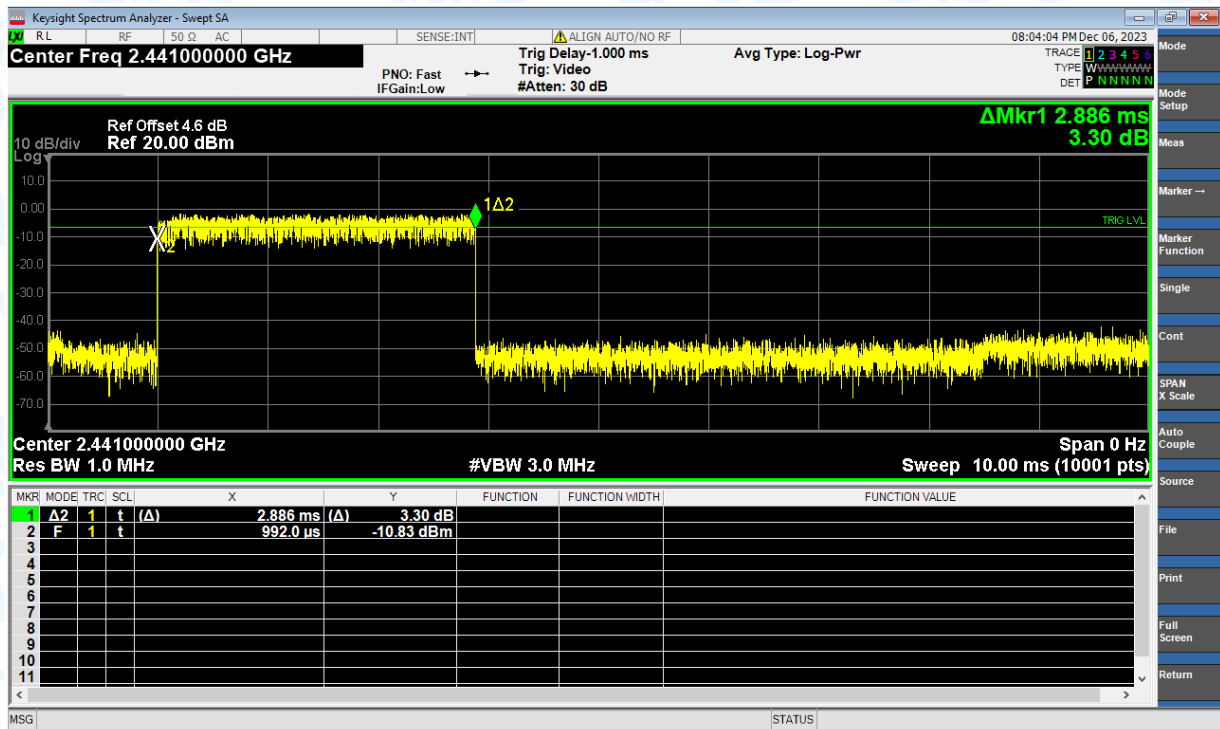
Dwell NVNT 2-DH1 2441MHz Ant1



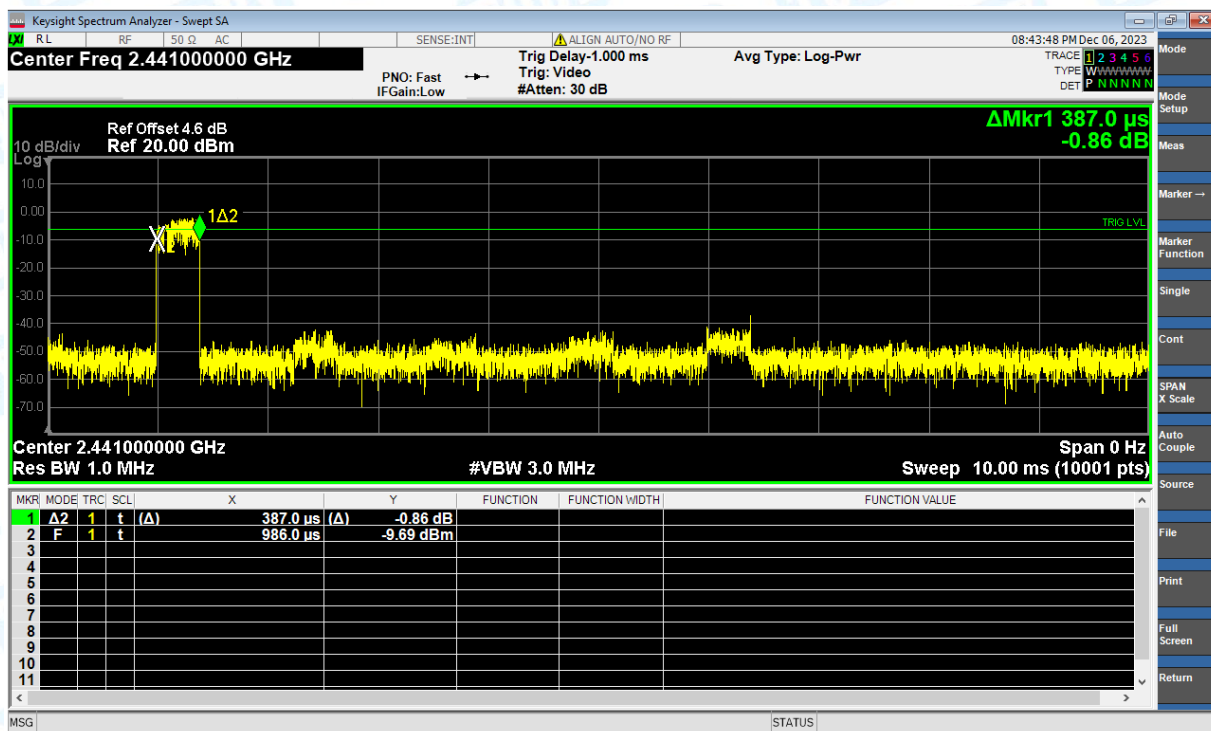
Dwell NVNT 2-DH3 2441MHz Ant1



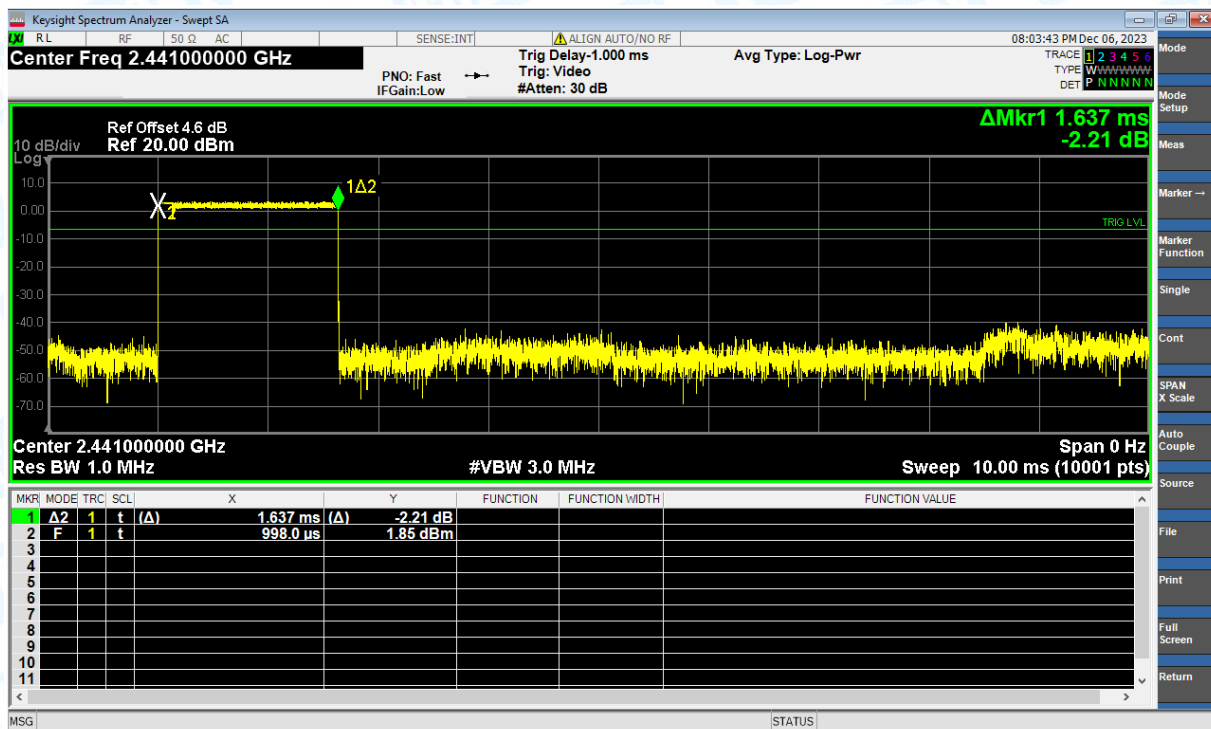
Dwell NVNT 2-DH5 2441MHz Ant1

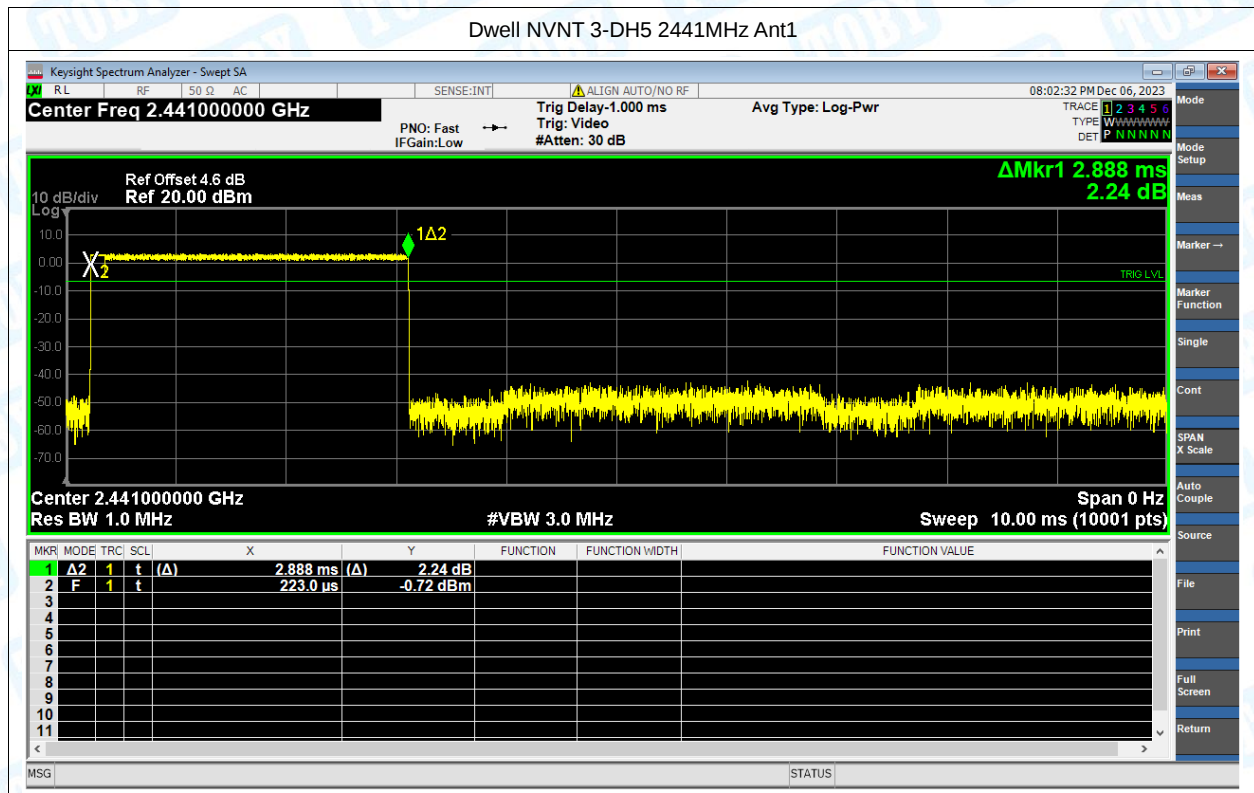


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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