

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

General Description of EUT	
Product Name:	Wireless Headphone
Test Model:	picun B5
Sample ID:	202403-0243-4-2#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	ZKN ZHOU
Note: For a more detailed features description, please refer to the report TBR-C-202403-0243-6 The report only show the worst case data.	

Contents

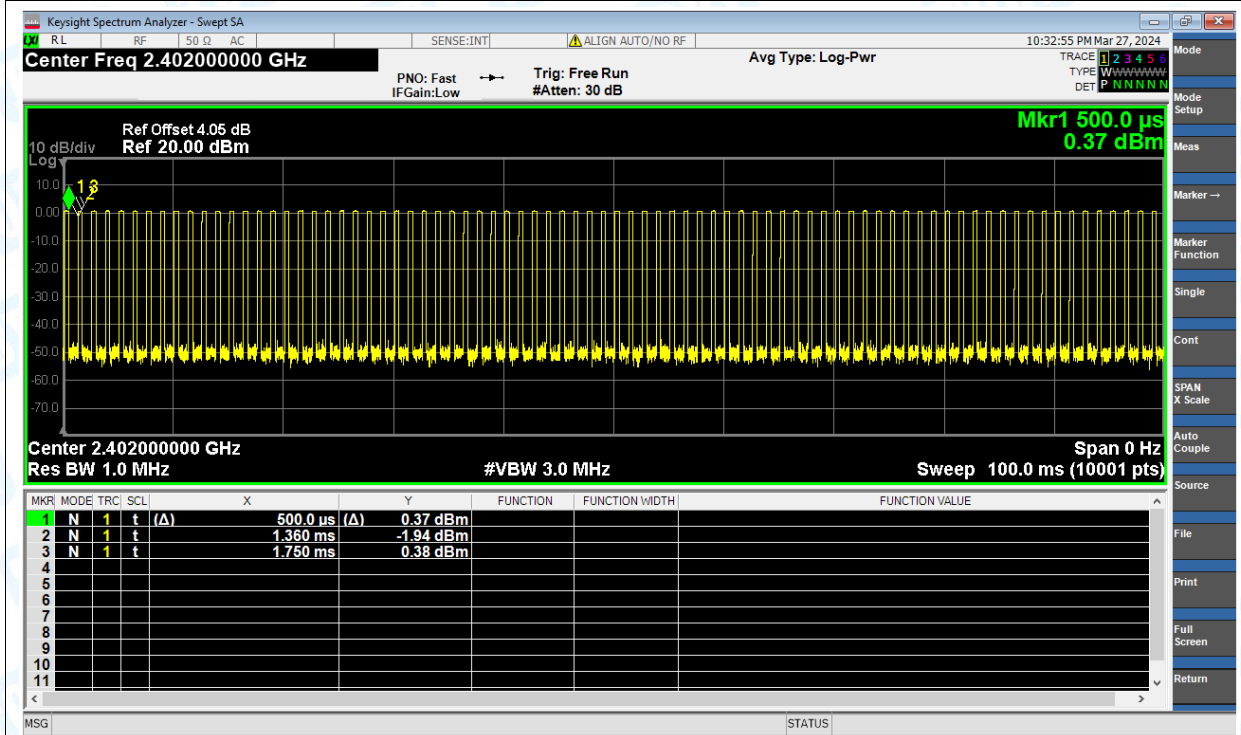
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1. Duty Cycle

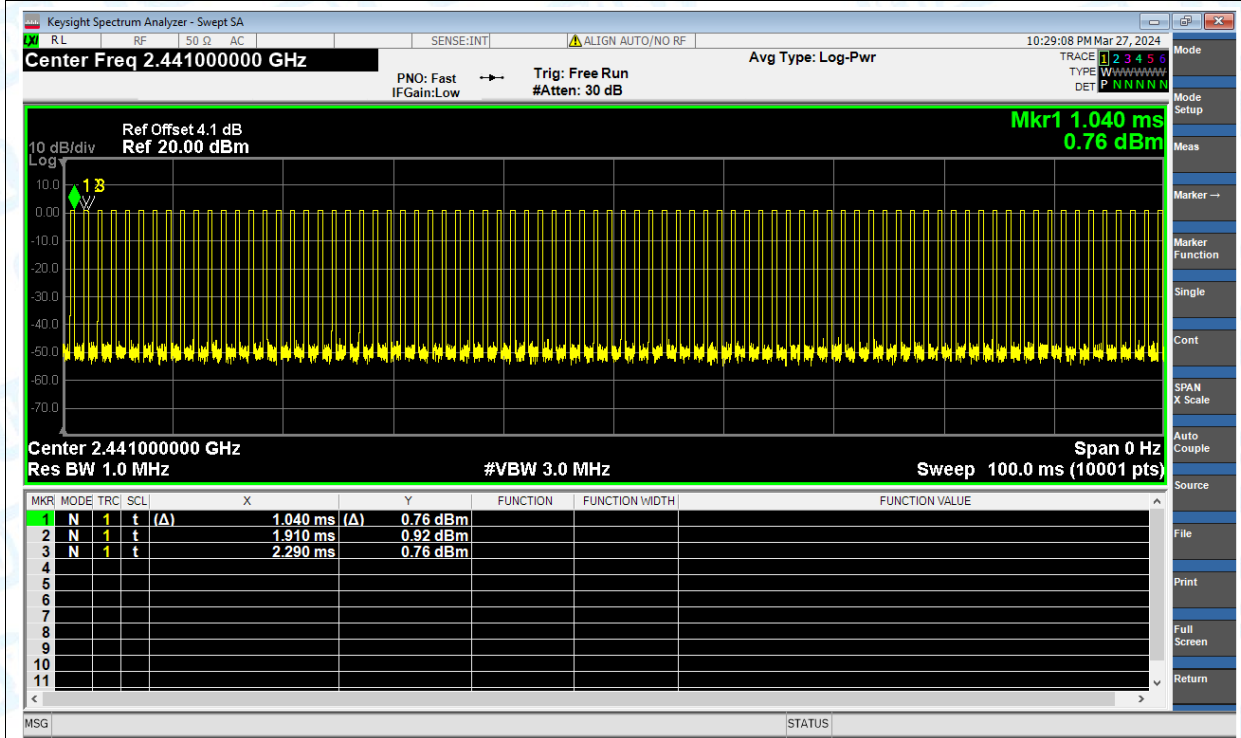
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	32	4.95	2.5
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56

Test Graphs

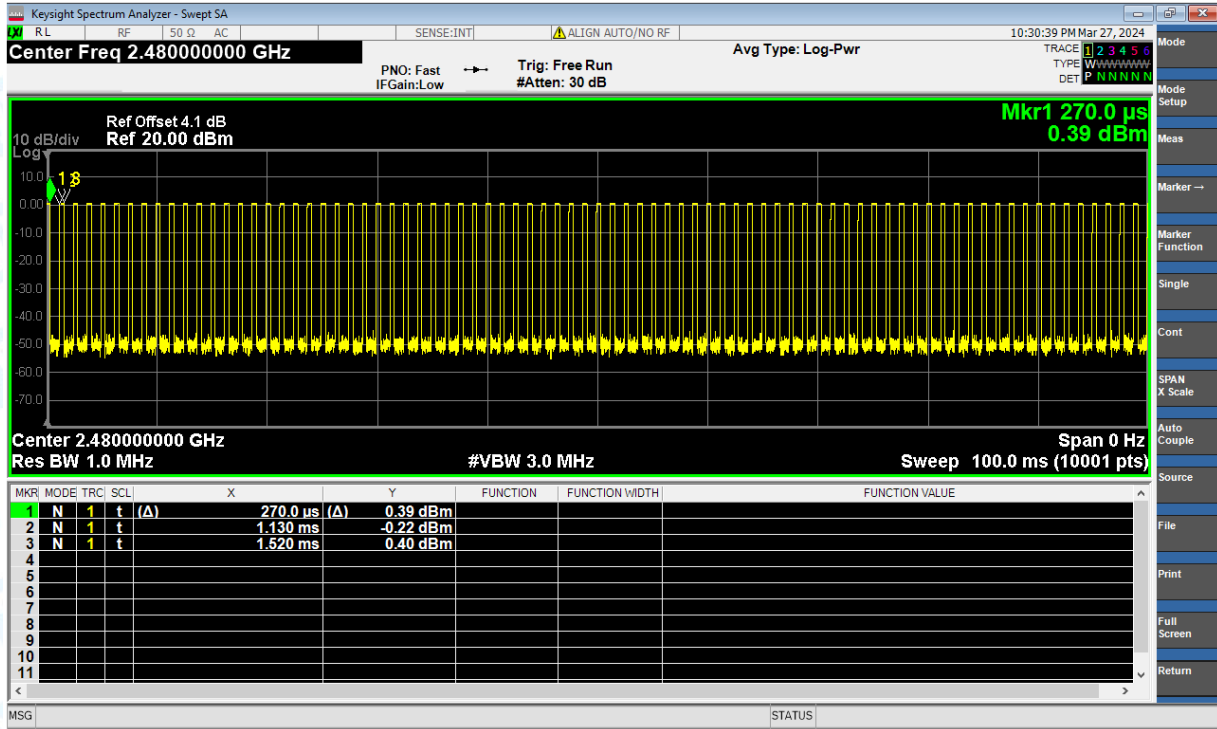
Duty Cycle NVNT 1-DH1 2402MHz Ant1



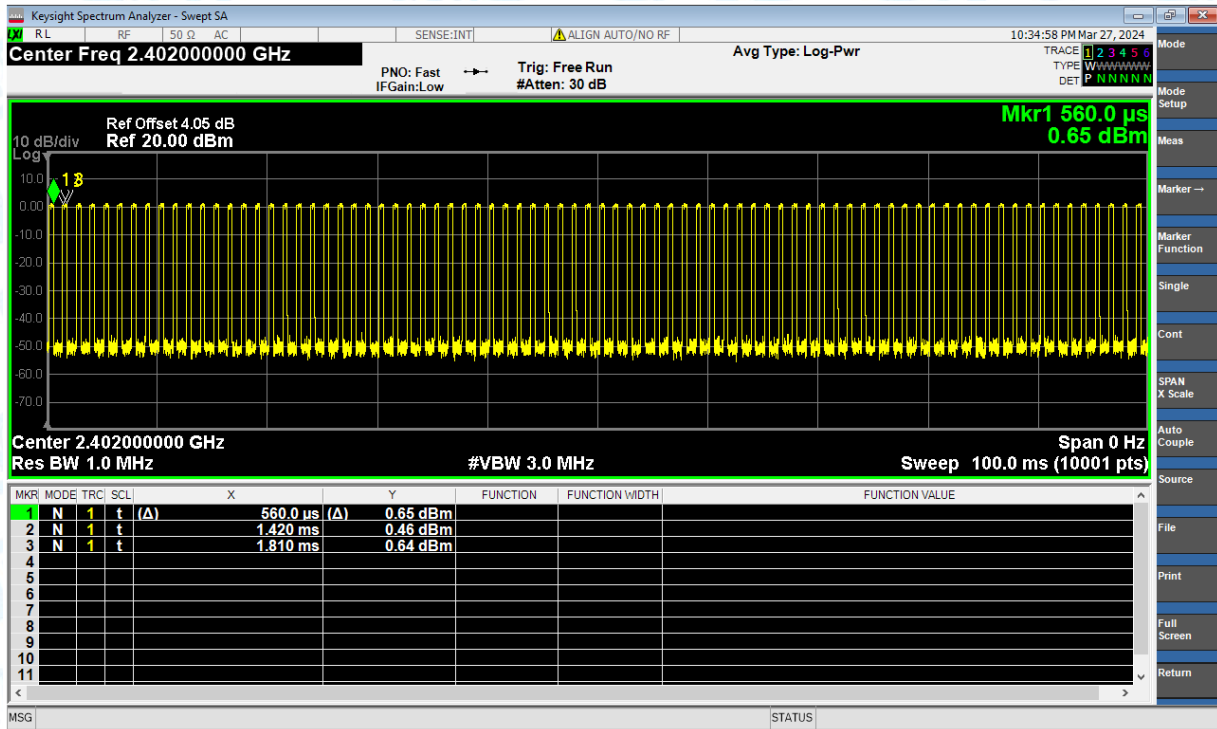
Duty Cycle NVNT 1-DH1 2441MHz Ant1



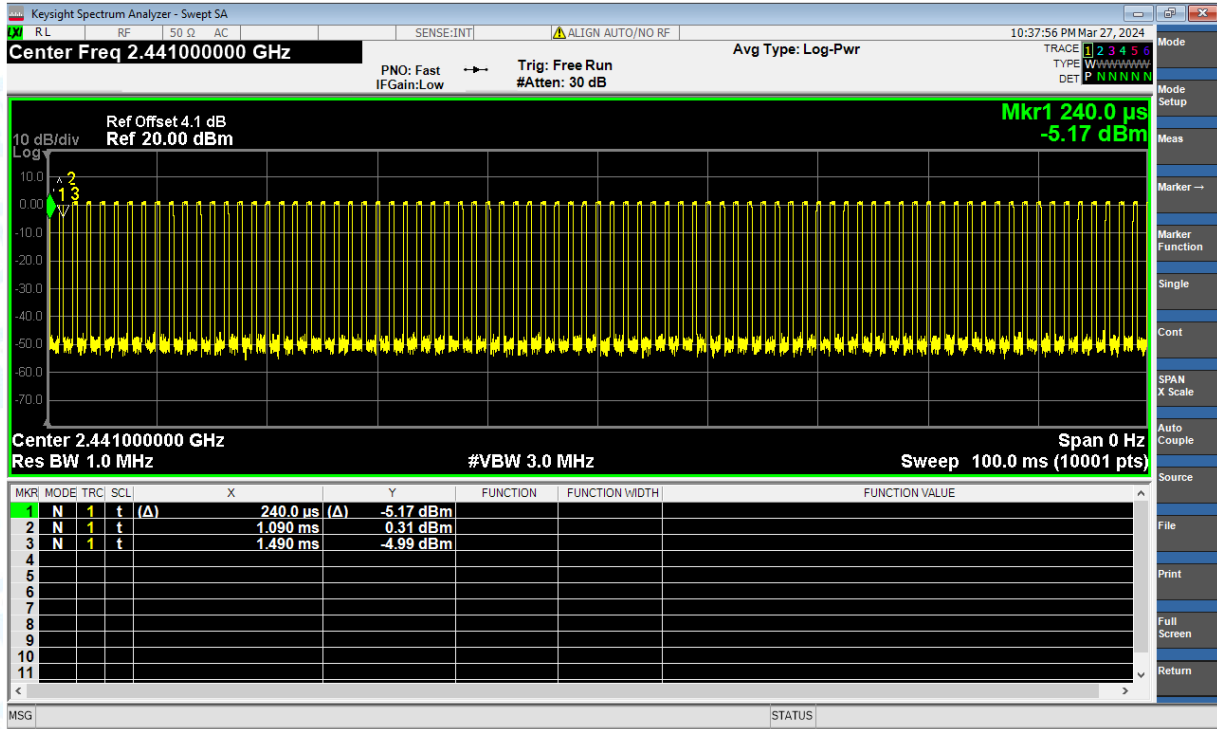
Duty Cycle NVNT 1-DH1 2480MHz Ant1



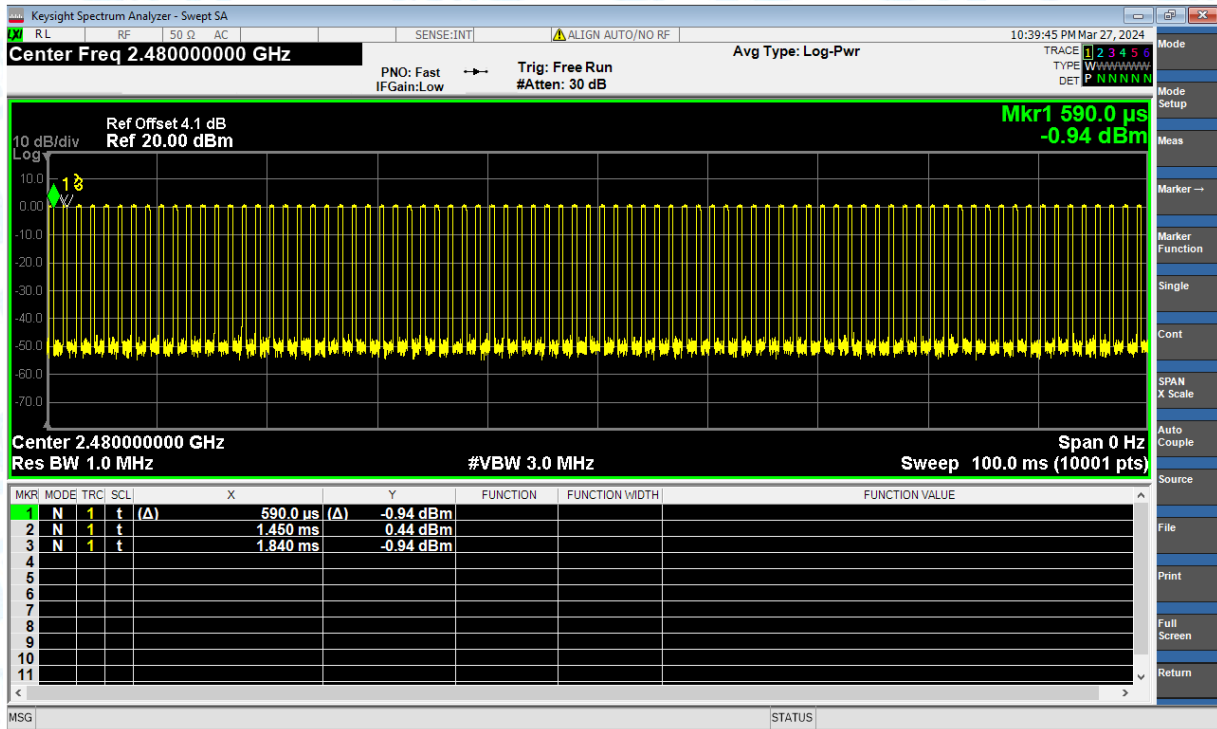
Duty Cycle NVNT 2-DH1 2402MHz Ant1



Duty Cycle NVNT 2-DH1 2441MHz Ant1



Duty Cycle NVNT 2-DH1 2480MHz Ant1

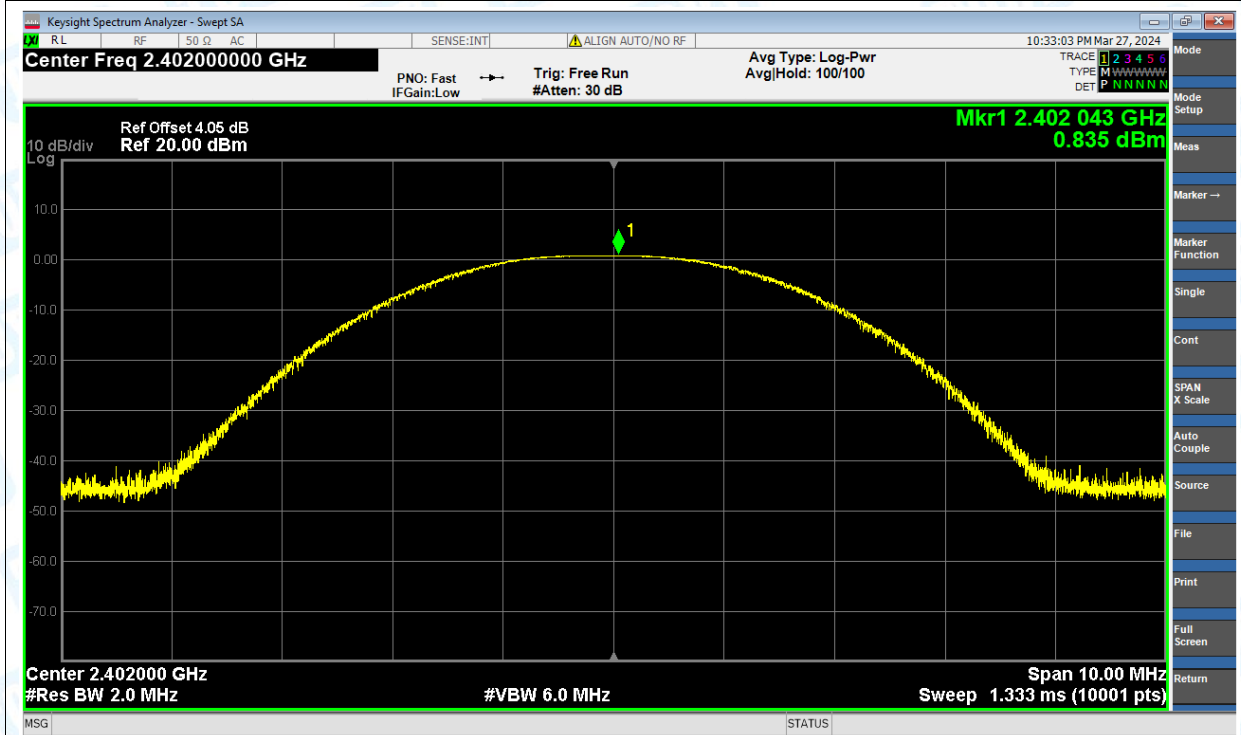


2. Maximum Conducted Output Power

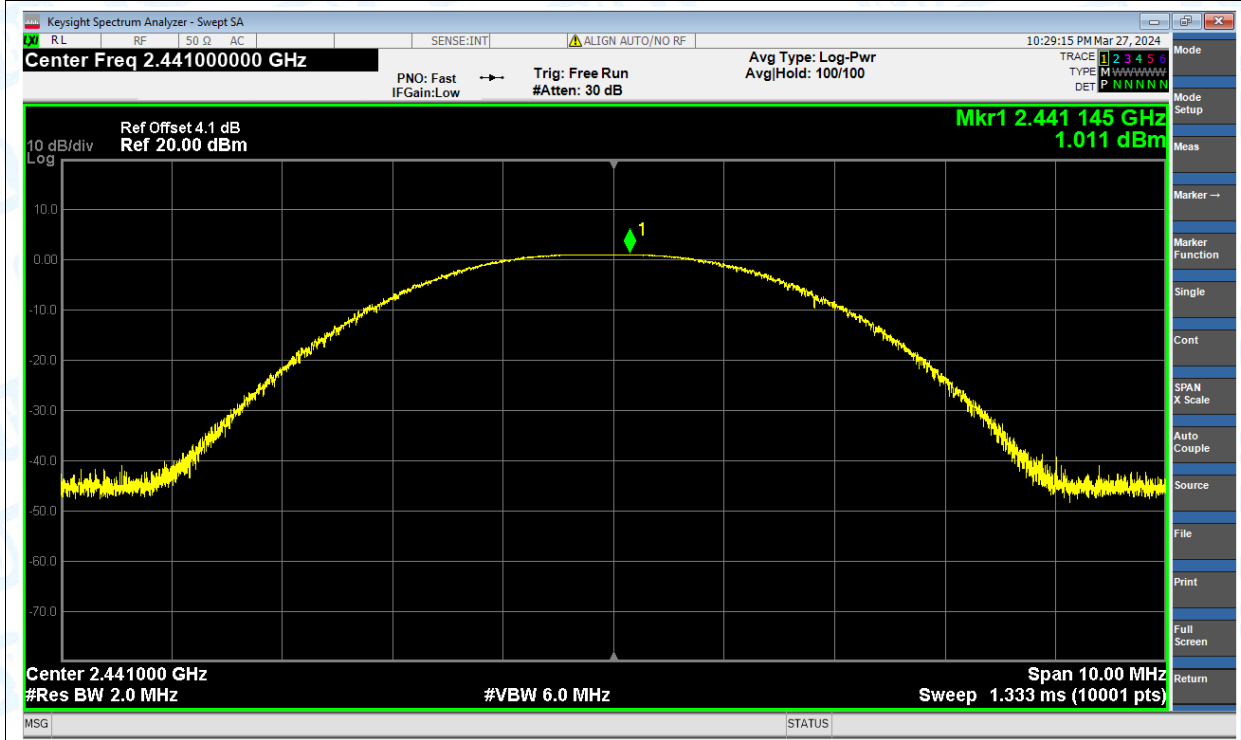
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	0.835	21	Pass
NVNT	1-DH1	2441	Ant1	1.011	21	Pass
NVNT	1-DH1	2480	Ant1	0.57	21	Pass
NVNT	2-DH1	2402	Ant1	1.673	21	Pass
NVNT	2-DH1	2441	Ant1	1.798	21	Pass
NVNT	2-DH1	2480	Ant1	1.375	21	Pass

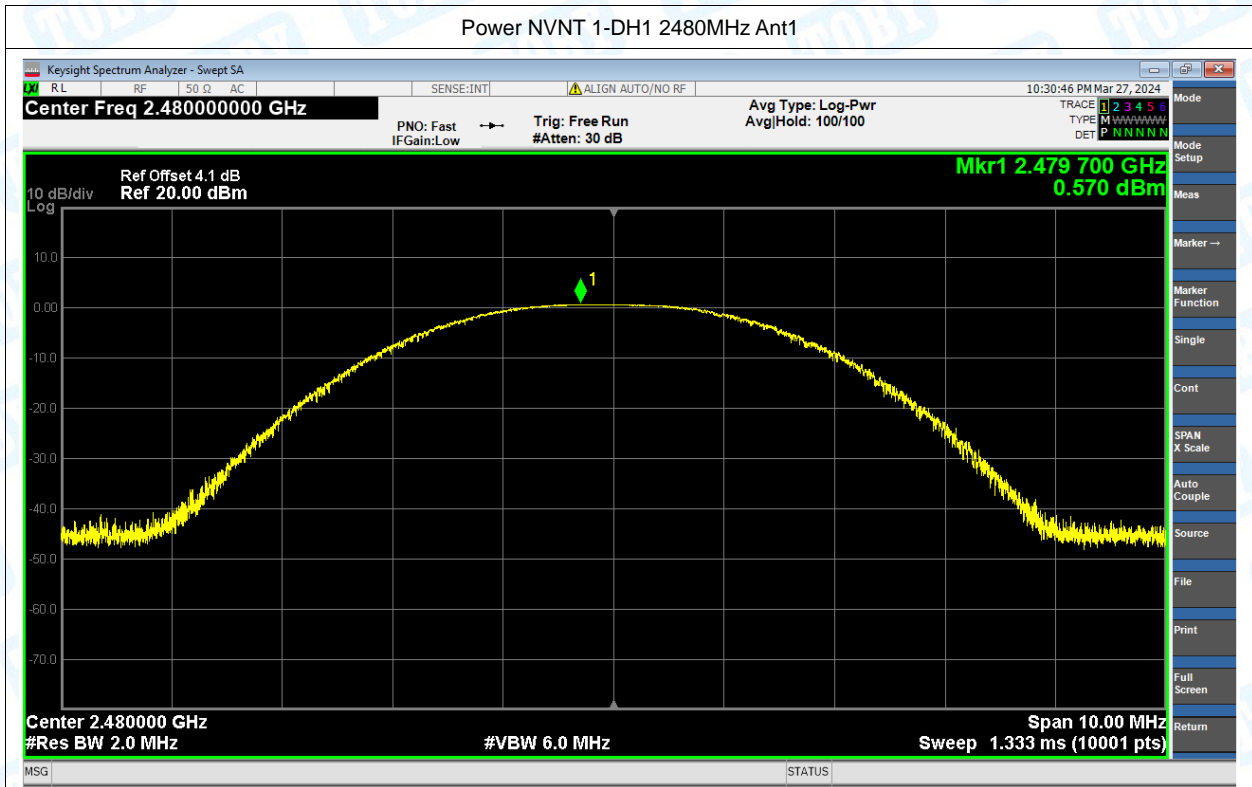
Test Graphs

Power NVNT 1-DH1 2402MHz Ant1

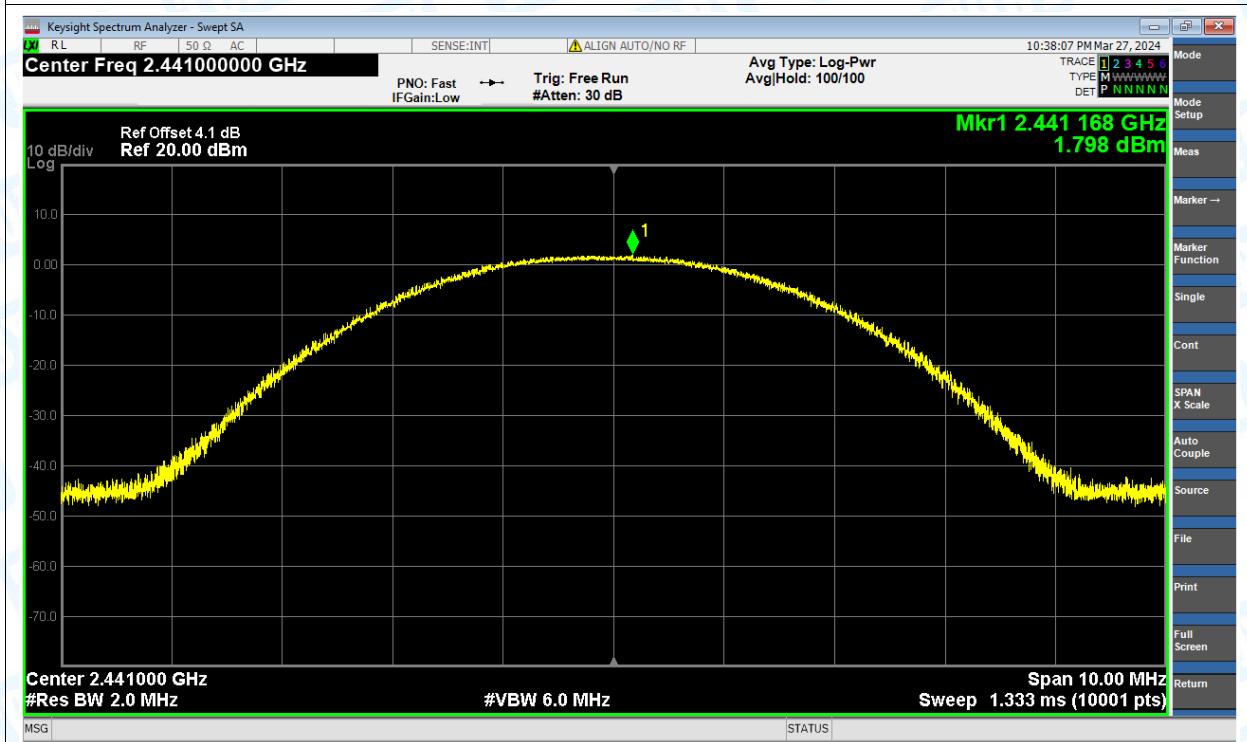


Power NVNT 1-DH1 2441MHz Ant1

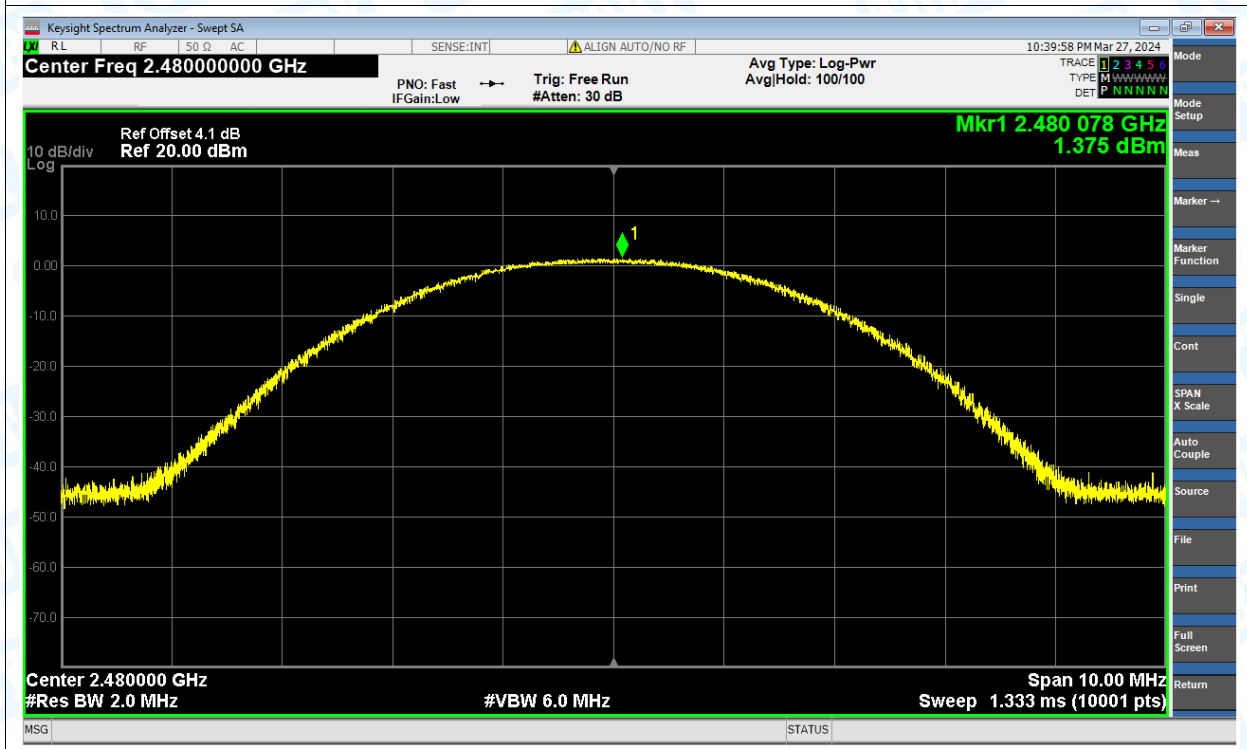




Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1



3. -20dB Bandwidth

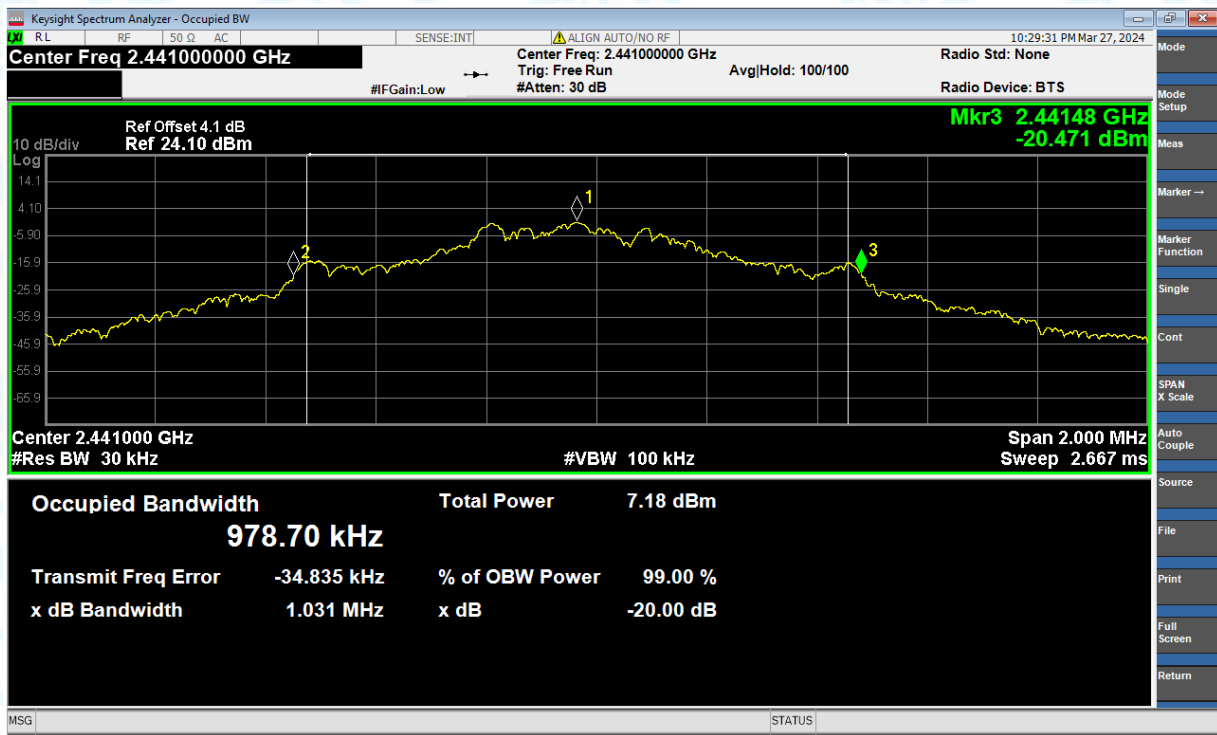
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	1.03	0	Pass
NVNT	1-DH1	2441	Ant1	1.03	0	Pass
NVNT	1-DH1	2480	Ant1	1.04	0	Pass
NVNT	2-DH1	2402	Ant1	1.3	0	Pass
NVNT	2-DH1	2441	Ant1	1.29	0	Pass
NVNT	2-DH1	2480	Ant1	1.28	0	Pass

Test Graphs

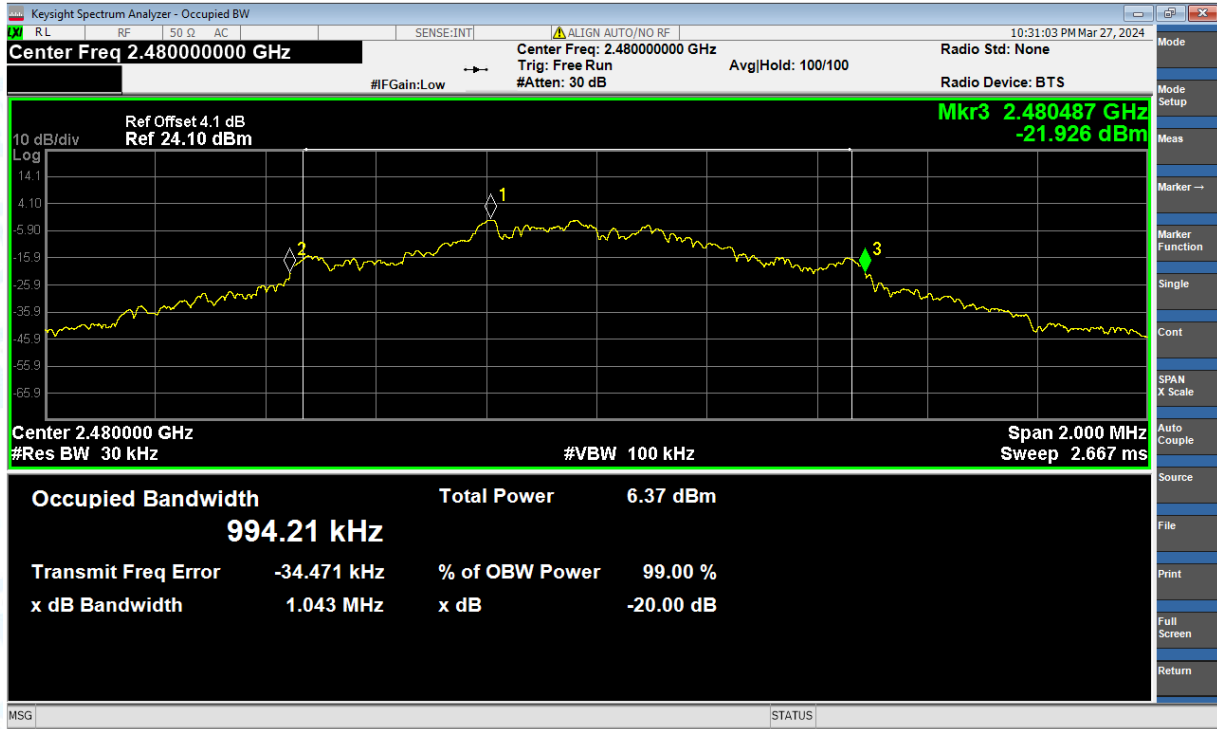
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



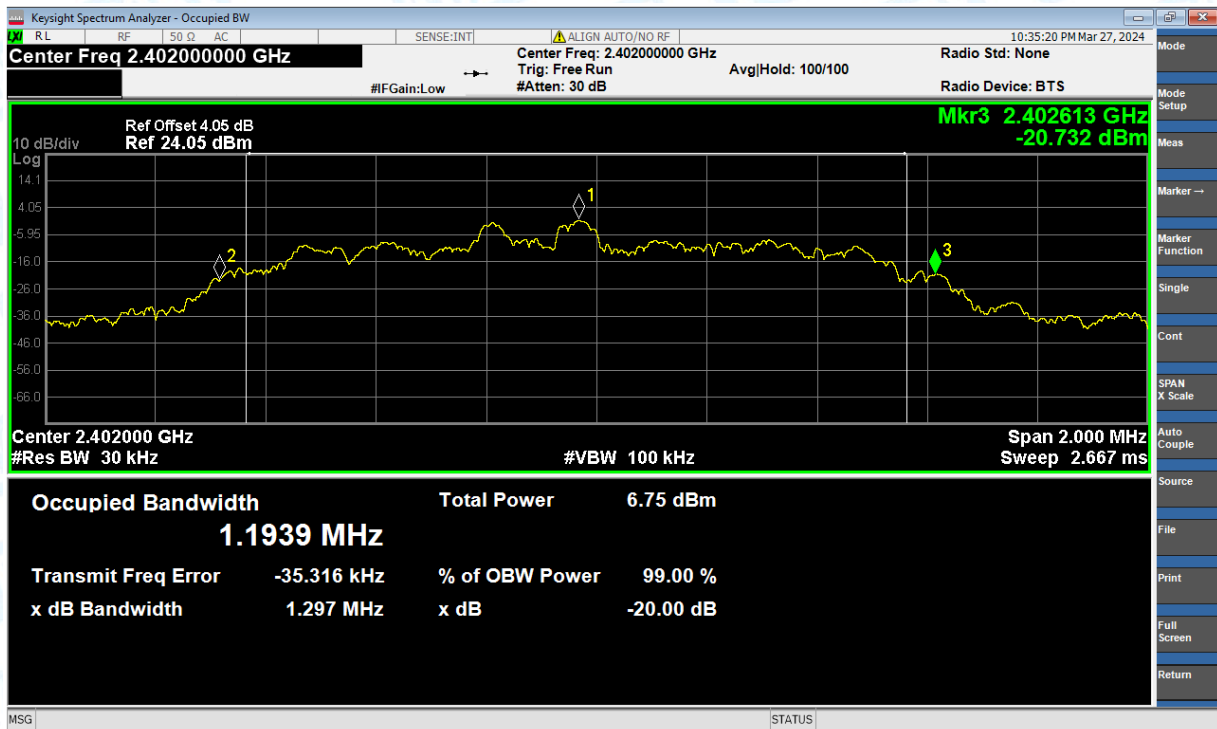
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



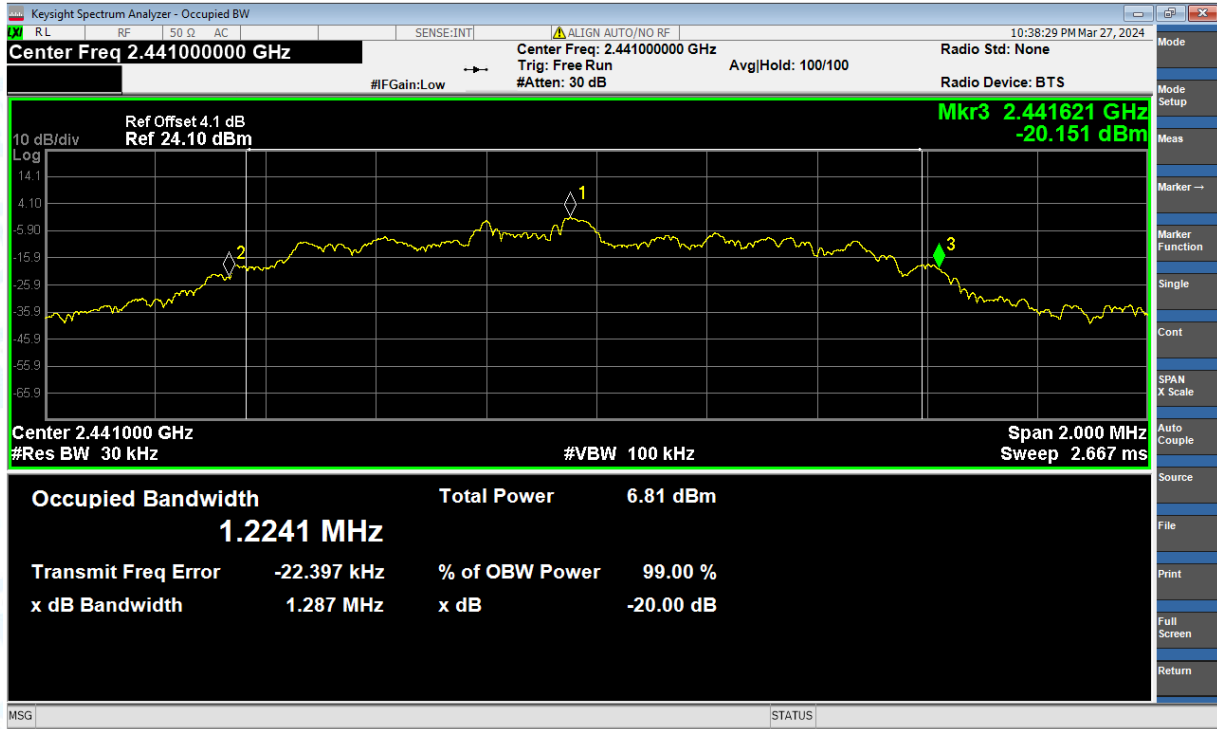
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



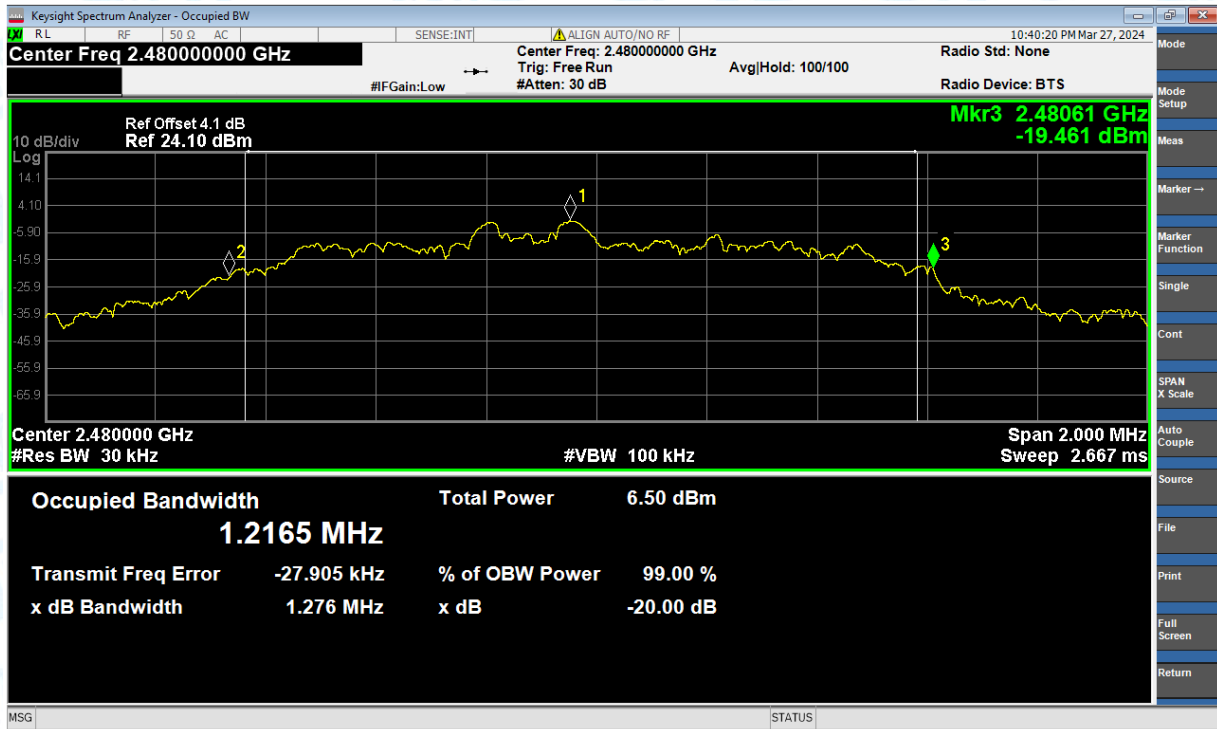
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

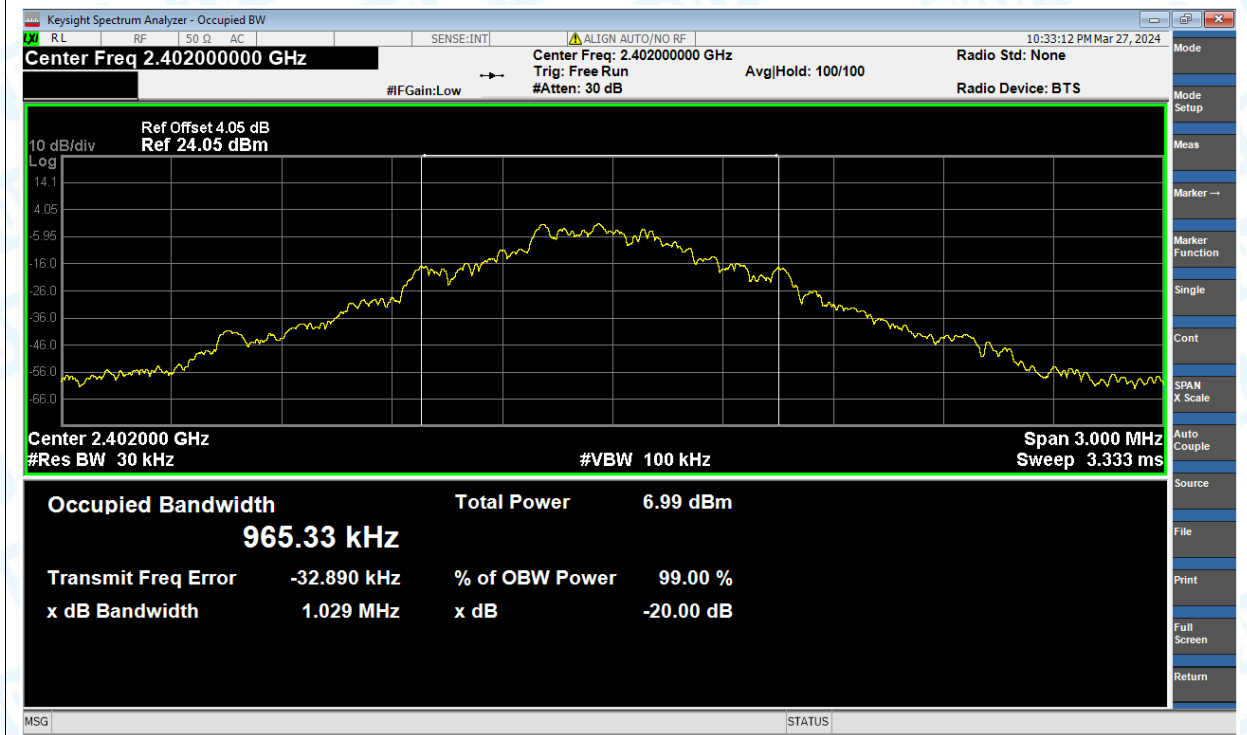


4. Occupied Channel Bandwidth

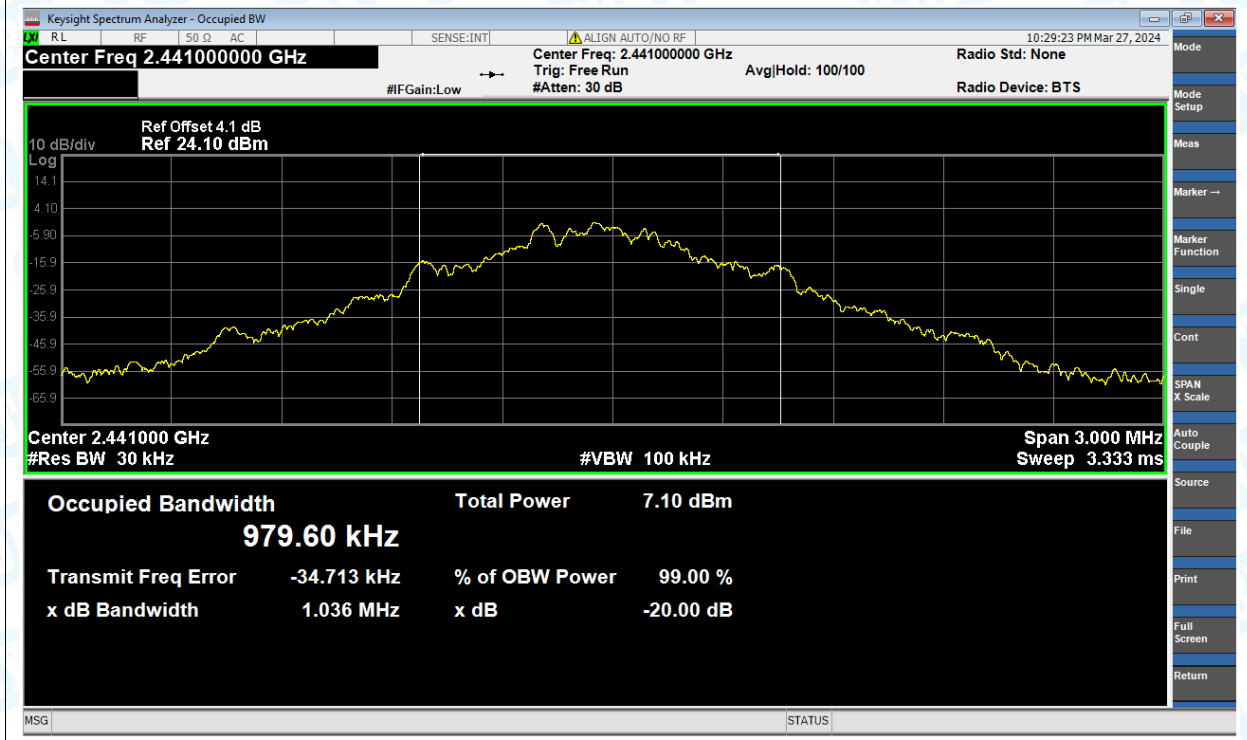
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.965
NVNT	1-DH1	2441	Ant1	0.98
NVNT	1-DH1	2480	Ant1	0.993
NVNT	2-DH1	2402	Ant1	1.189
NVNT	2-DH1	2441	Ant1	1.203
NVNT	2-DH1	2480	Ant1	1.232

Test Graphs

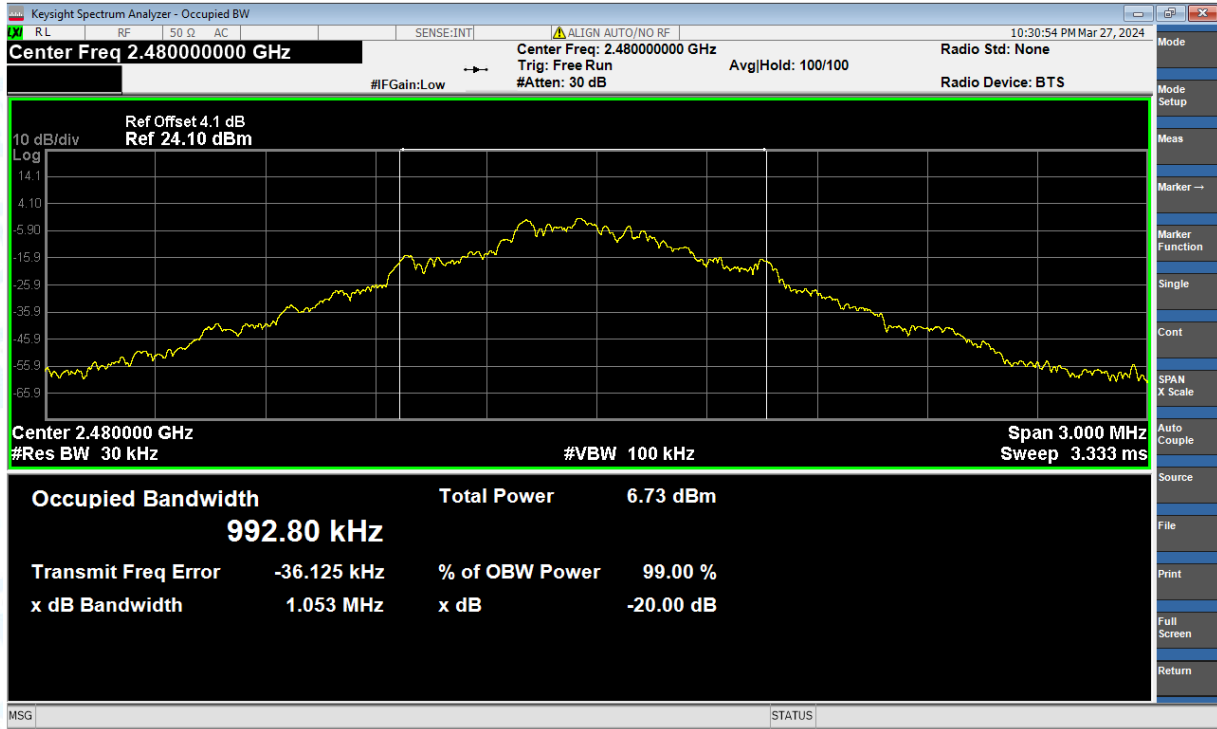
OBW NVNT 1-DH1 2402MHz Ant1



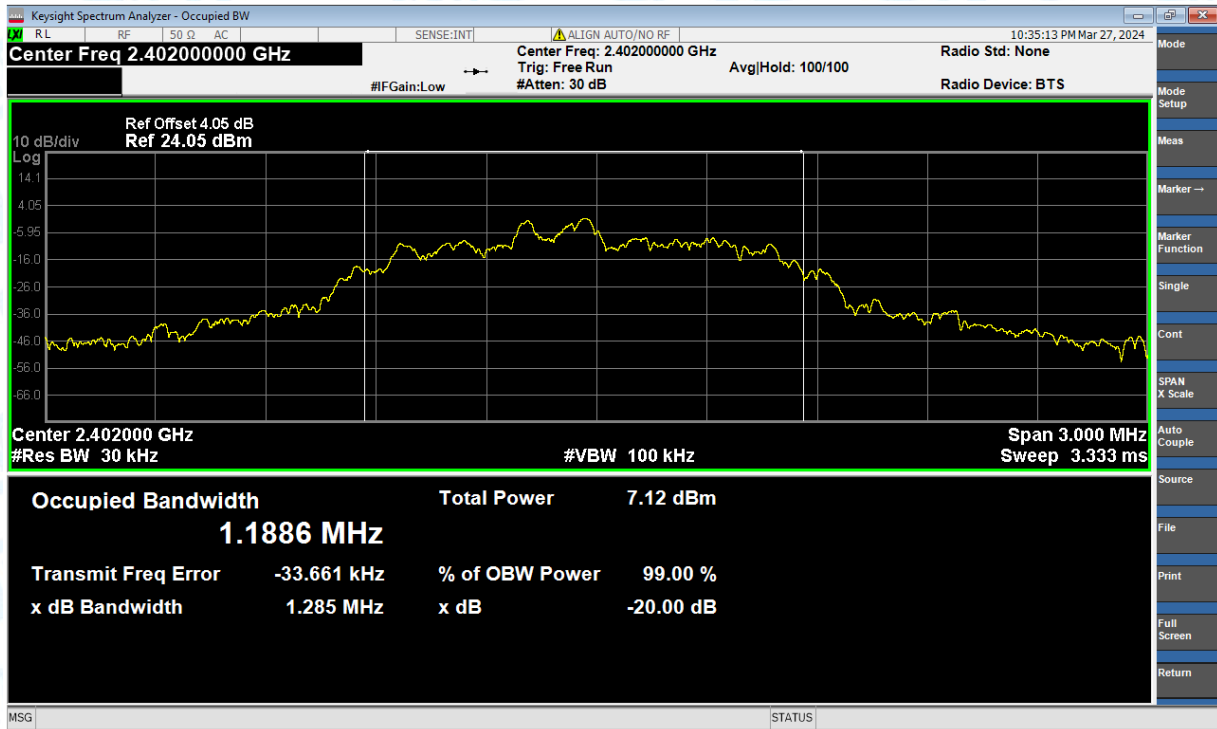
OBW NVNT 1-DH1 2441MHz Ant1



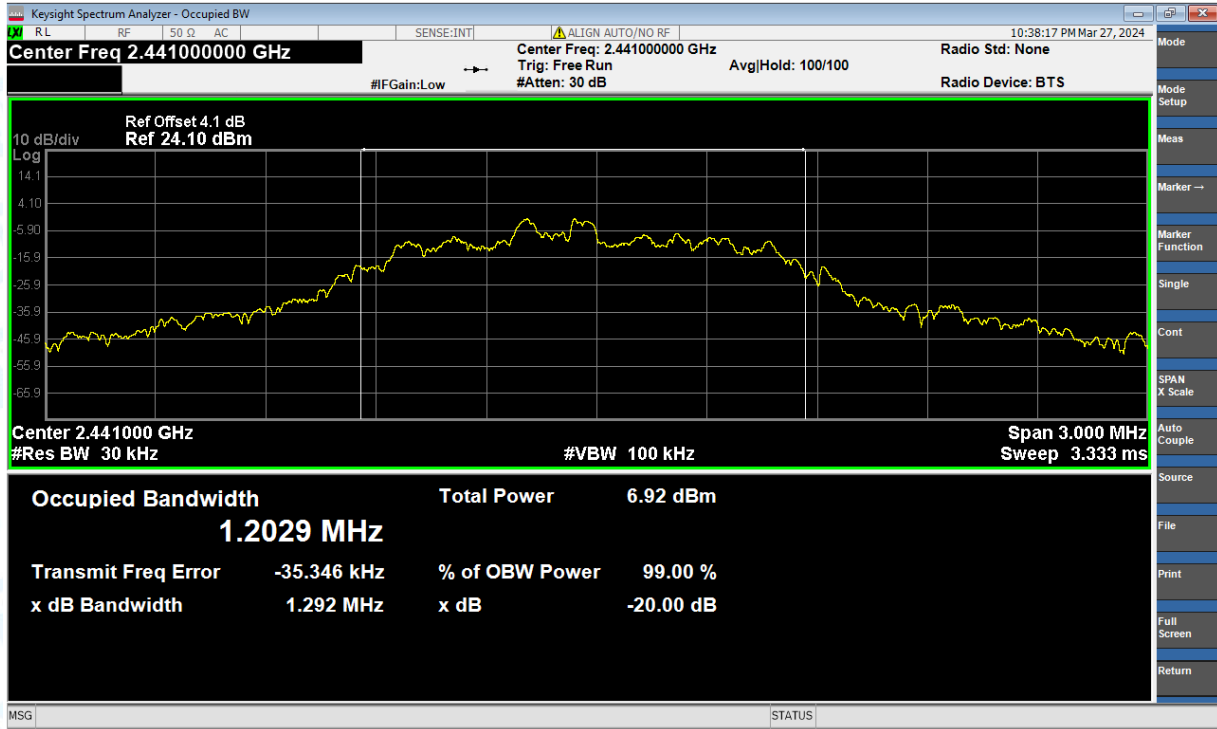
OBW NVNT 1-DH1 2480MHz Ant1



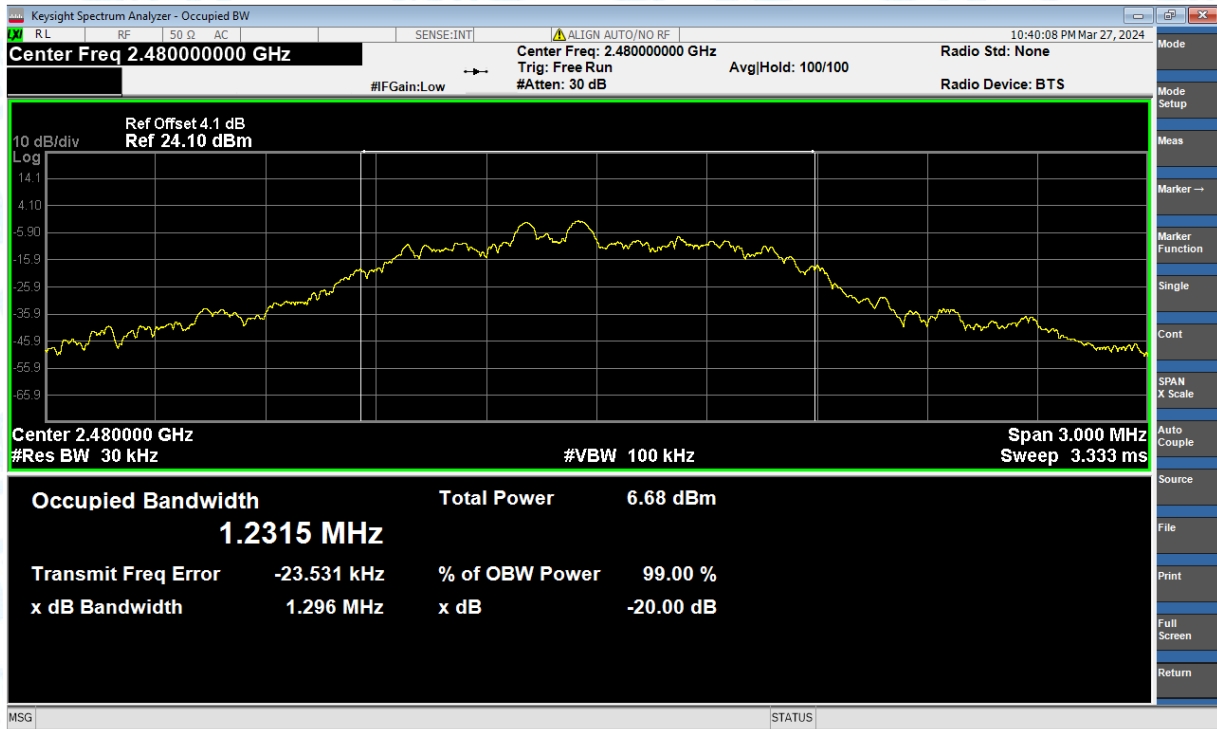
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

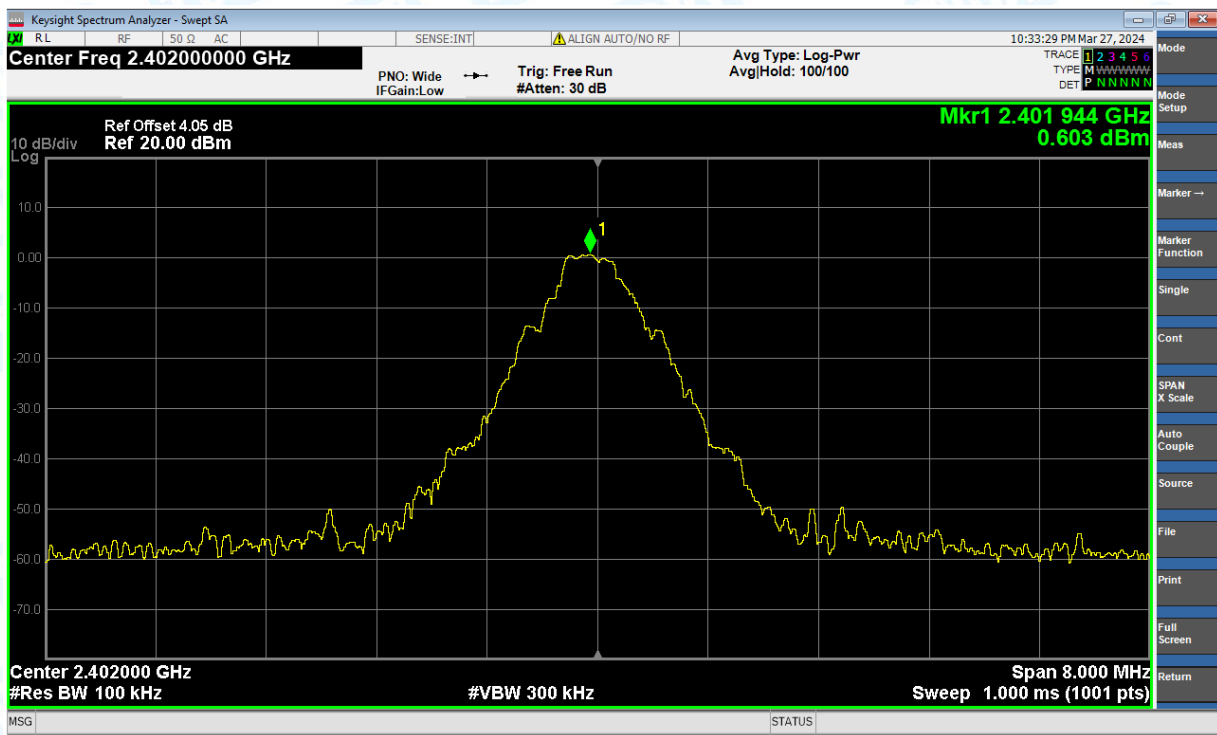


5. Band Edge

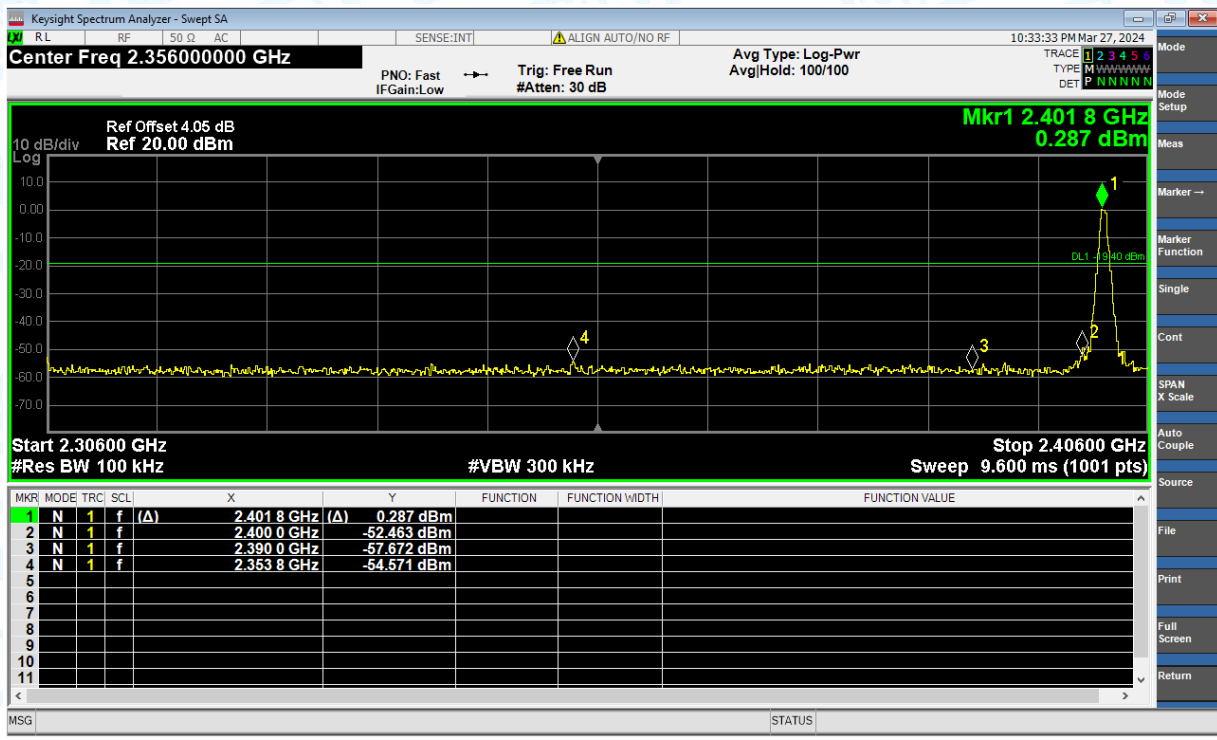
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-55.17	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-55.09	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-55.32	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-54.85	-20	Pass

Test Graphs

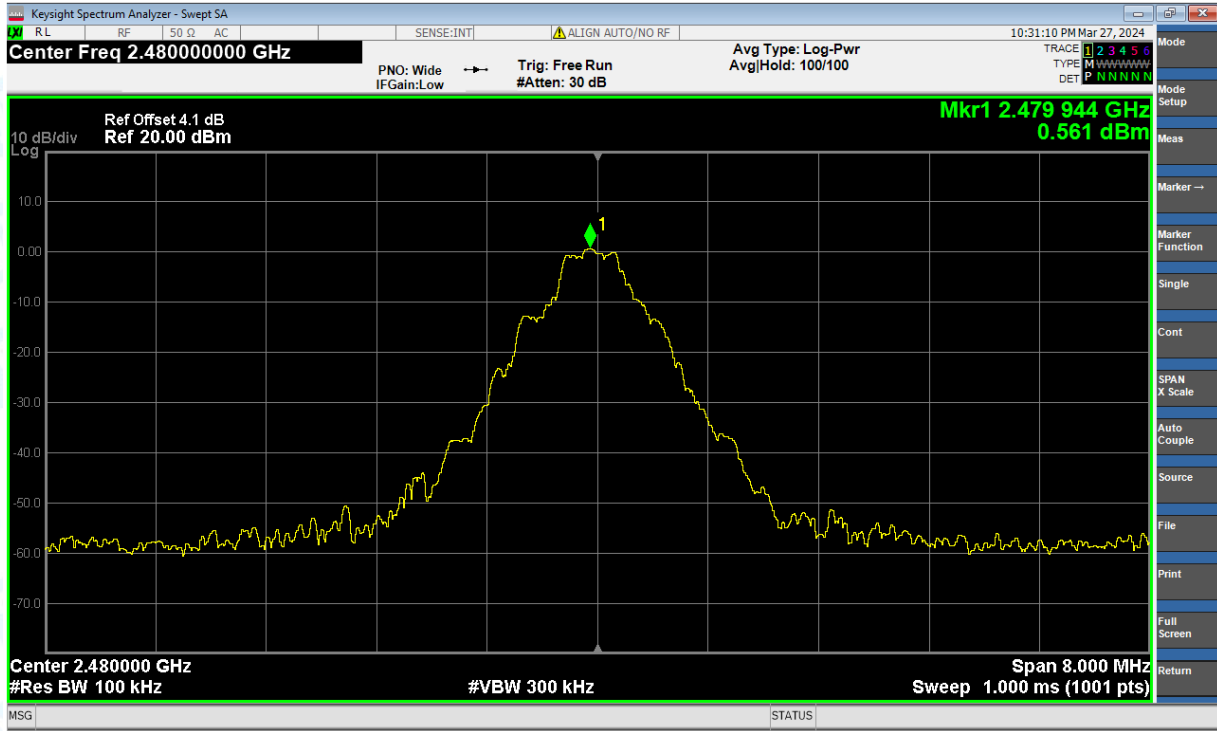
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



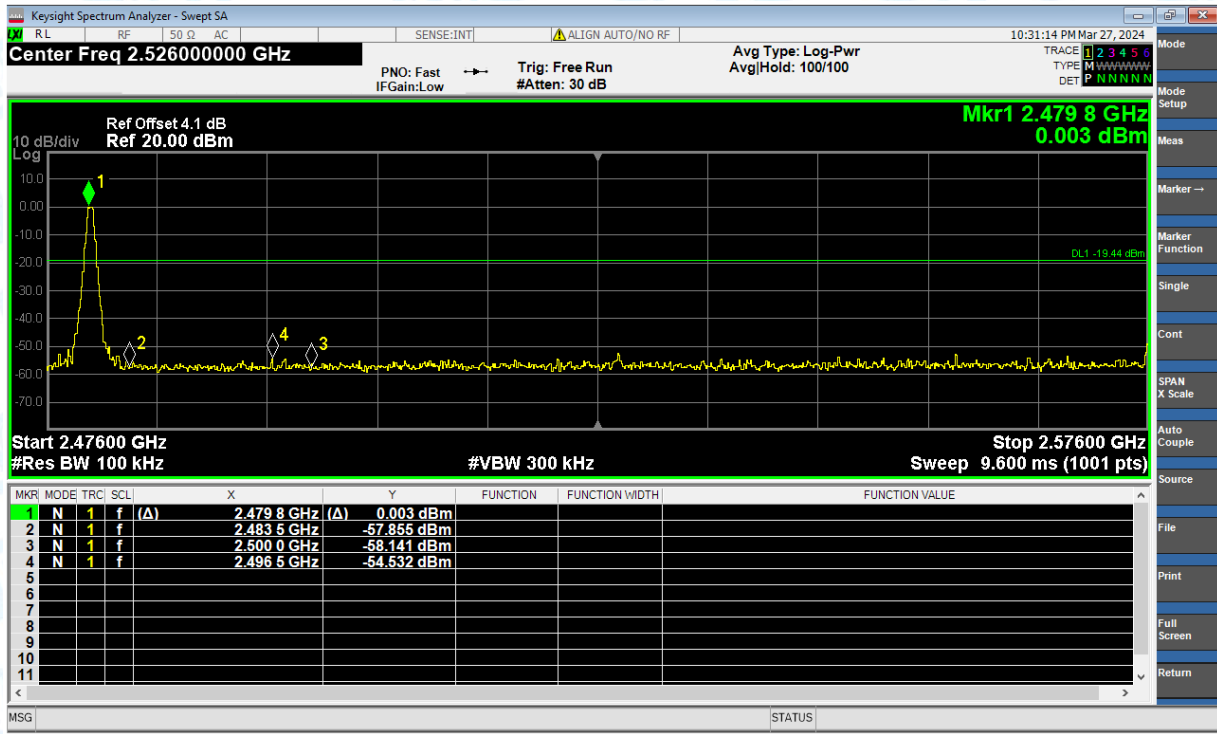
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



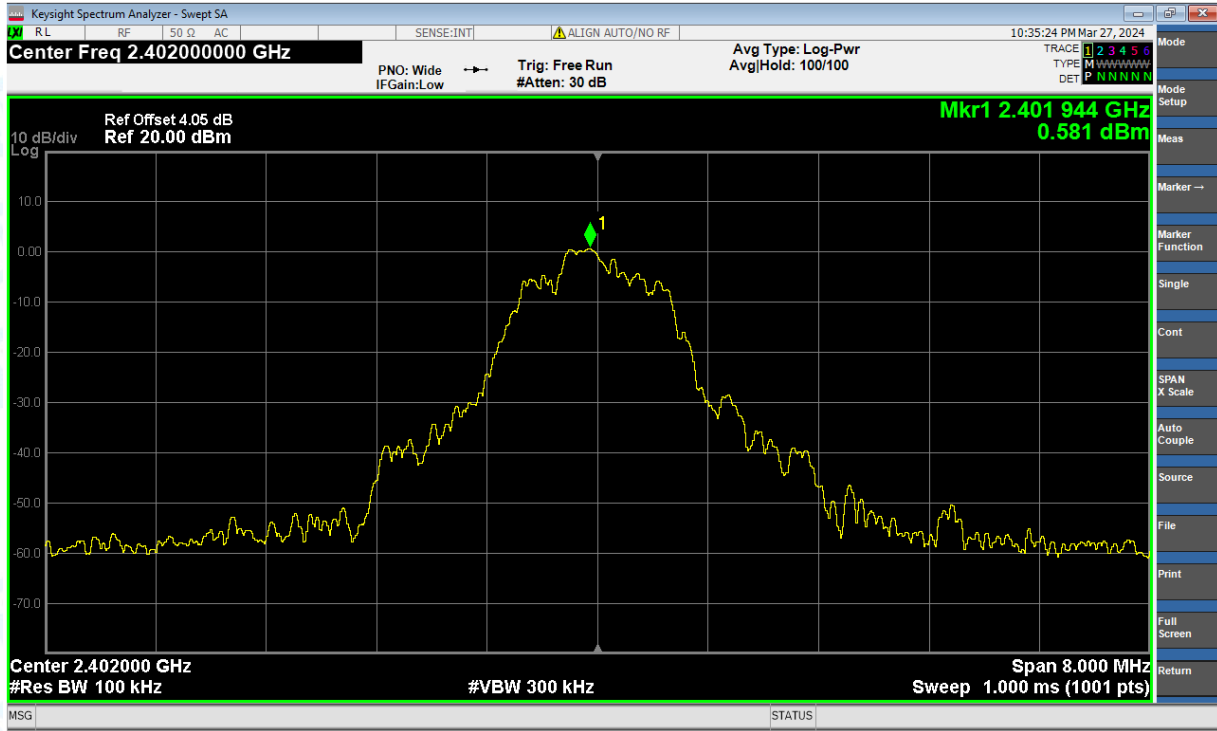
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



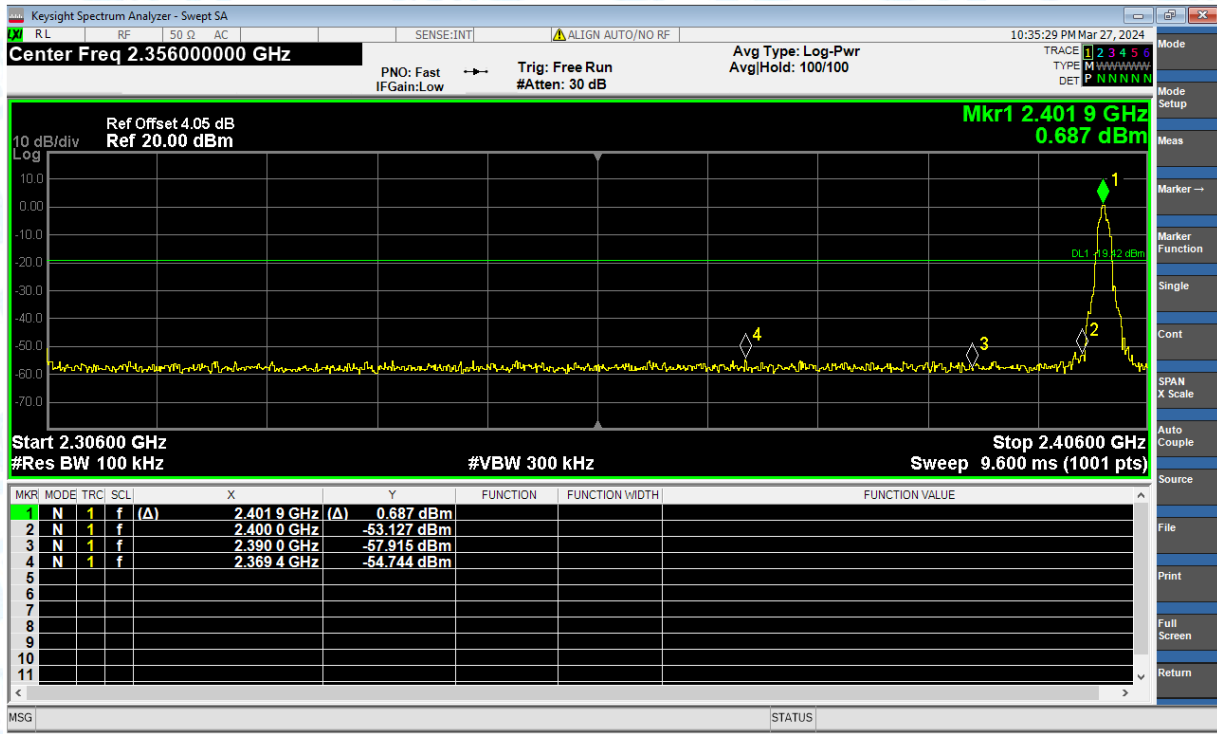
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



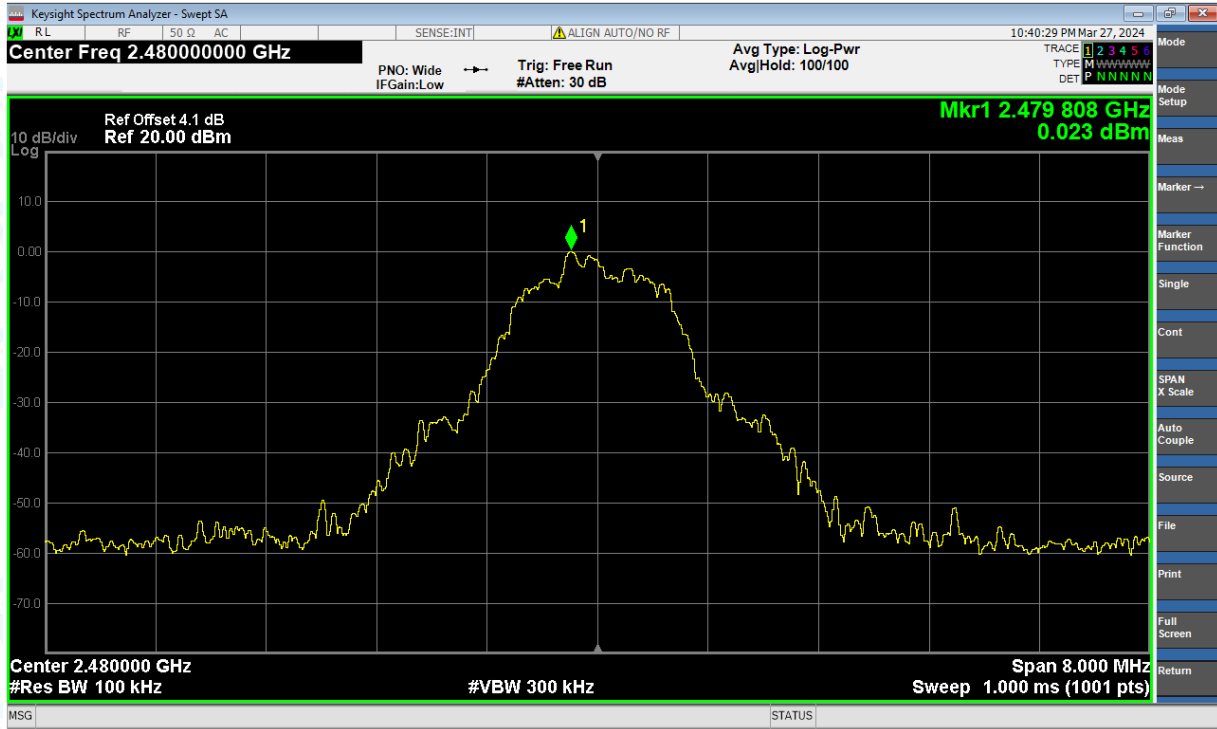
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



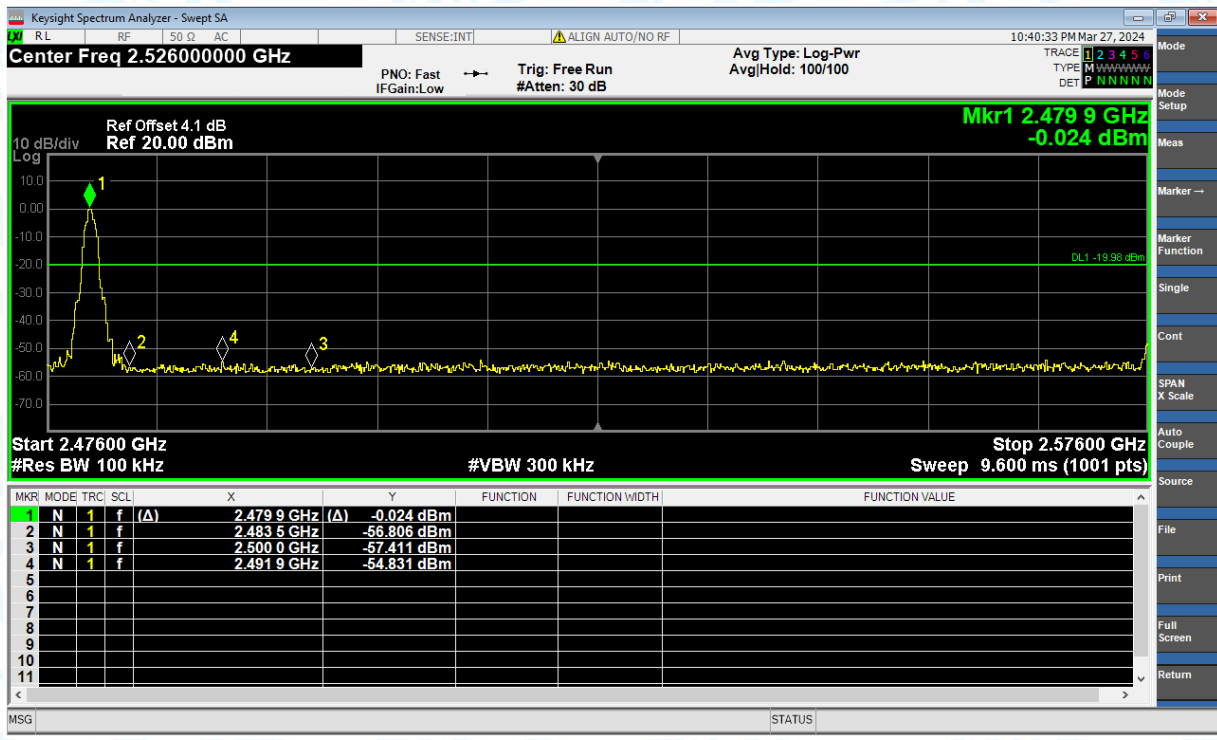
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



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



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

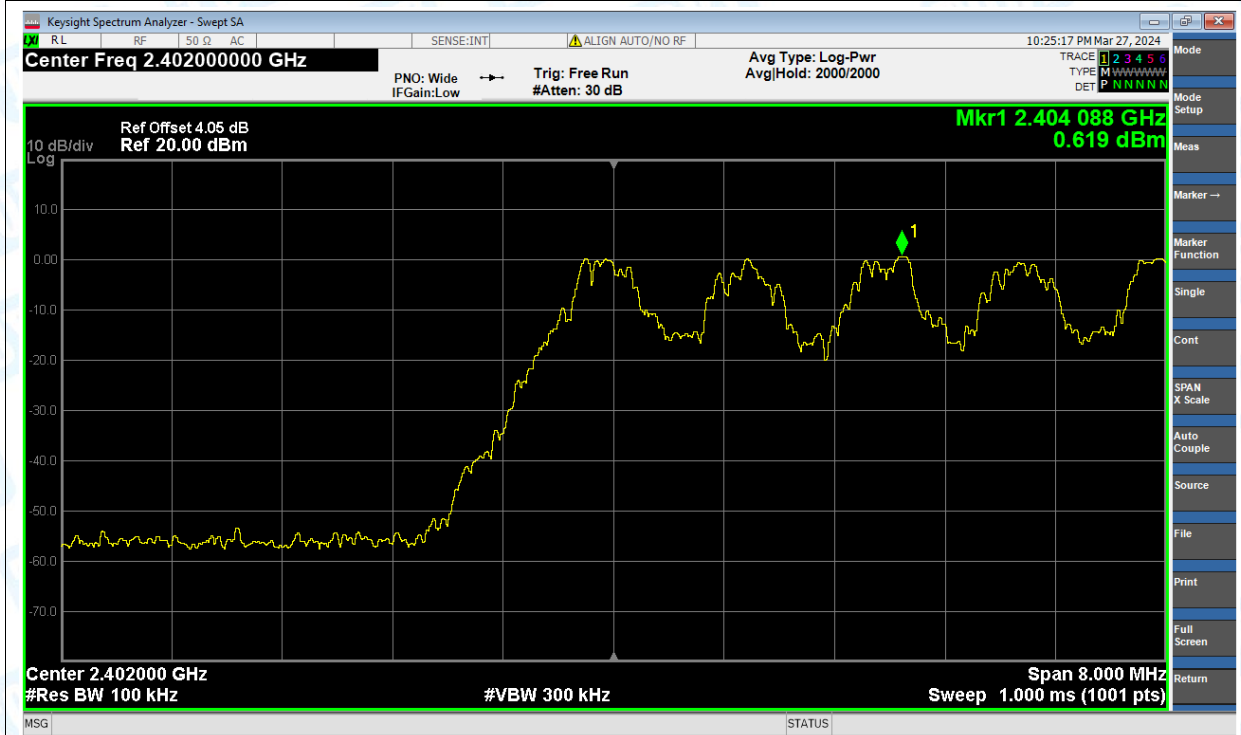


6. Band Edge(Hopping)

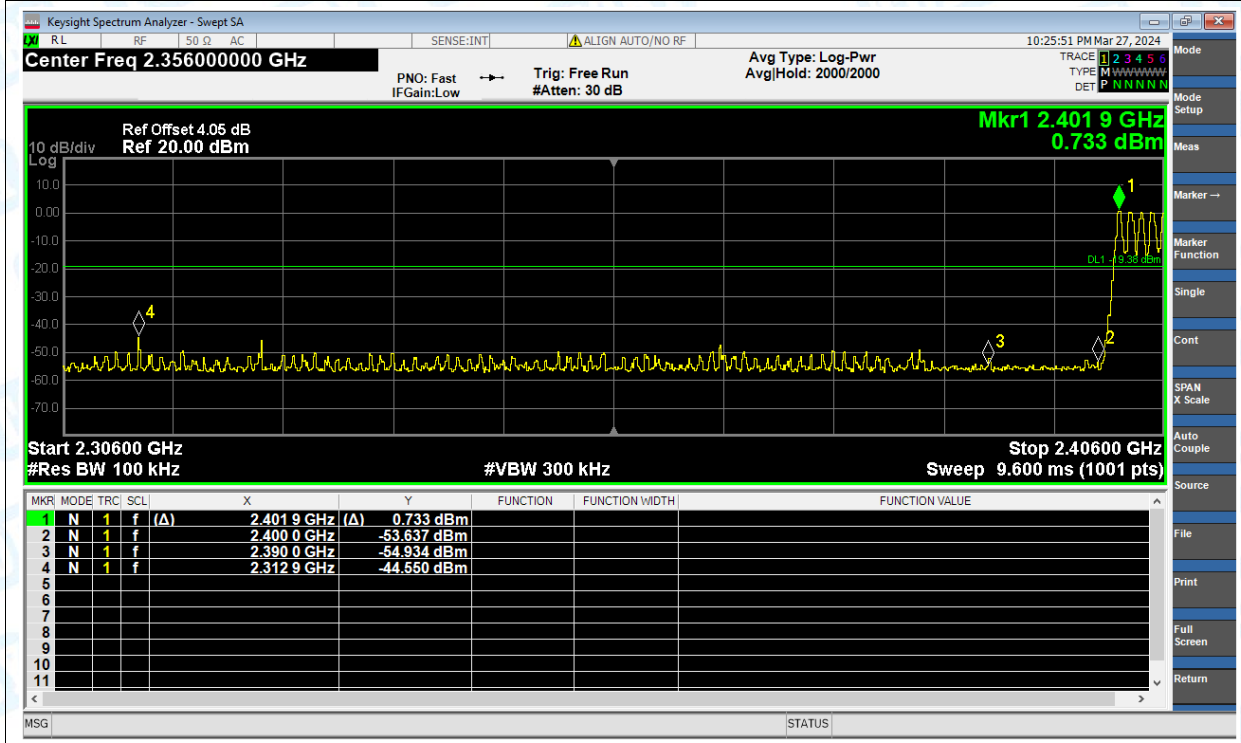
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-45.17	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-43.74	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-40.39	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-47.53	-20	Pass

Test Graphs

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



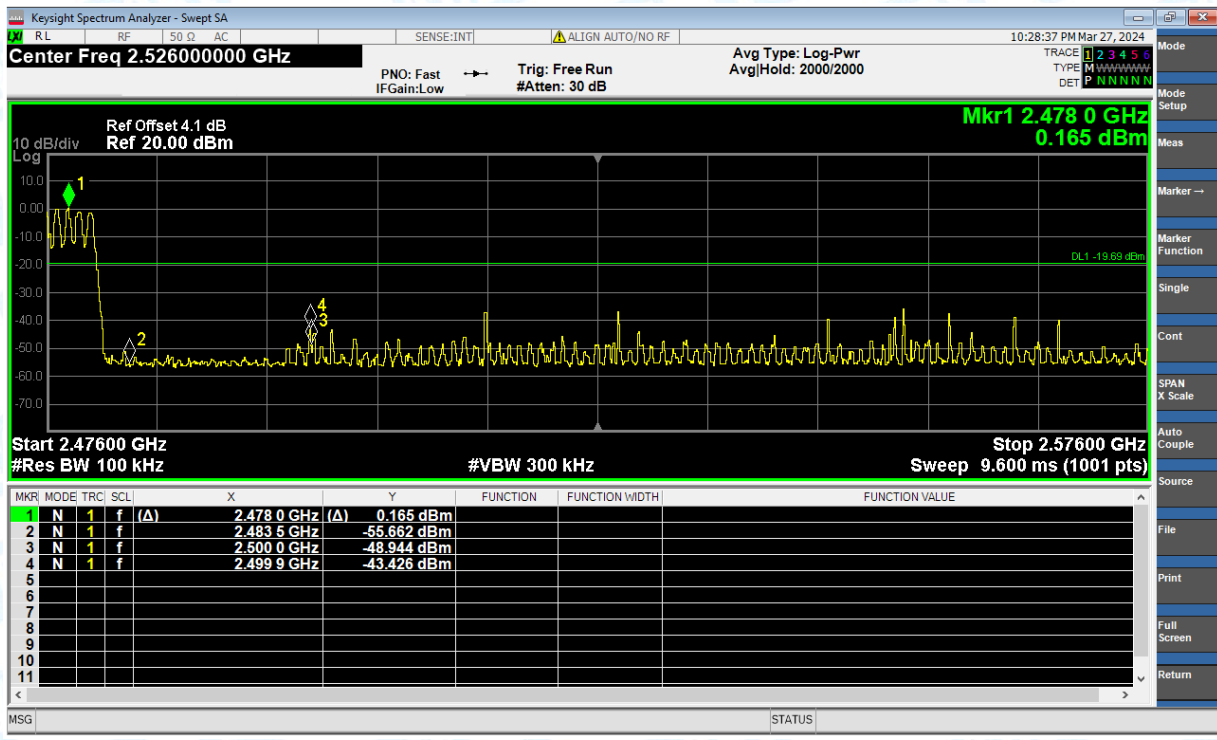
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



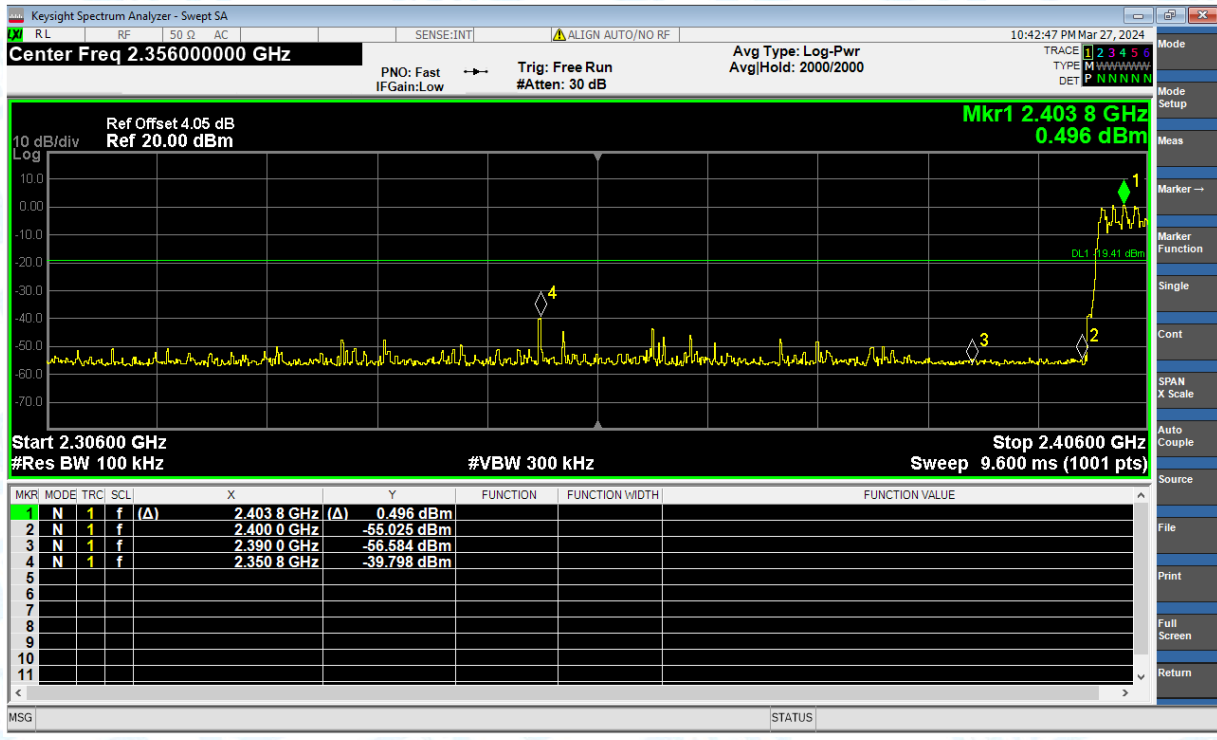
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



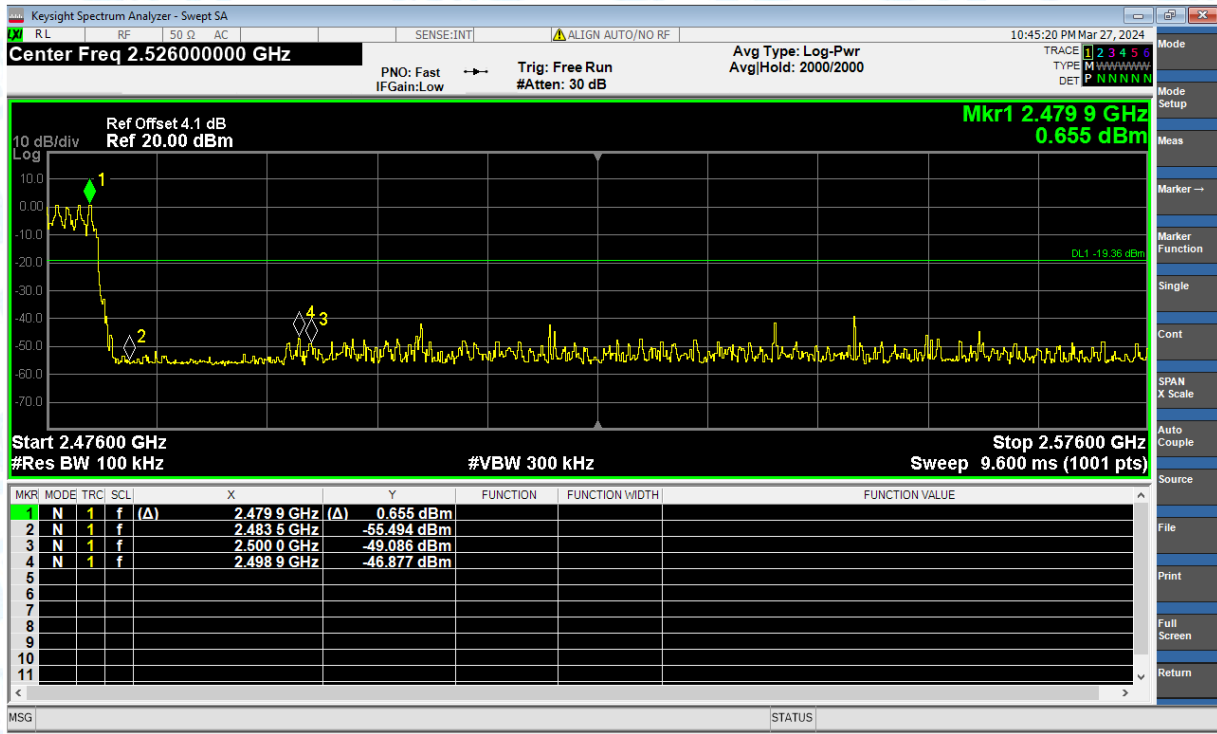
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



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



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

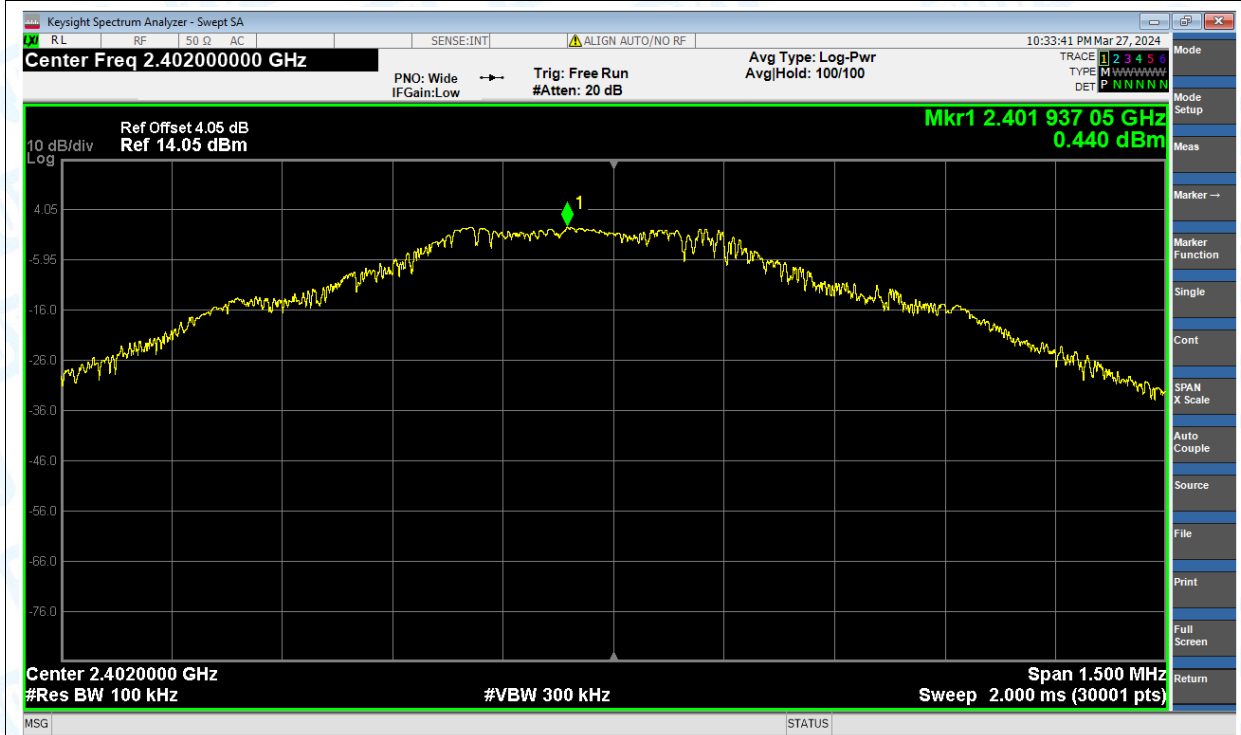


7. Conducted RF Spurious Emission

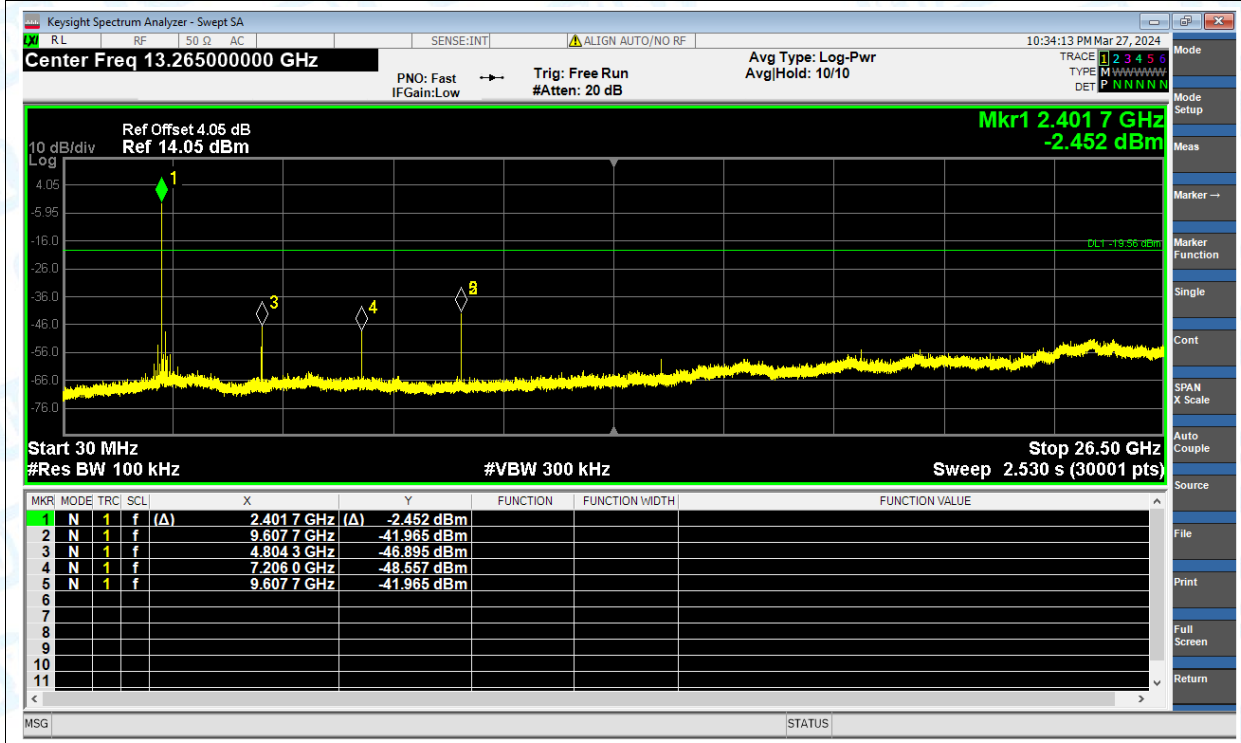
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-42.4	-20	Pass
NVNT	1-DH1	2441	Ant1	-38.68	-20	Pass
NVNT	1-DH1	2480	Ant1	-35.19	-20	Pass
NVNT	2-DH1	2402	Ant1	-41.54	-20	Pass
NVNT	2-DH1	2441	Ant1	-43.8	-20	Pass
NVNT	2-DH1	2480	Ant1	-35.3	-20	Pass

Test Graphs

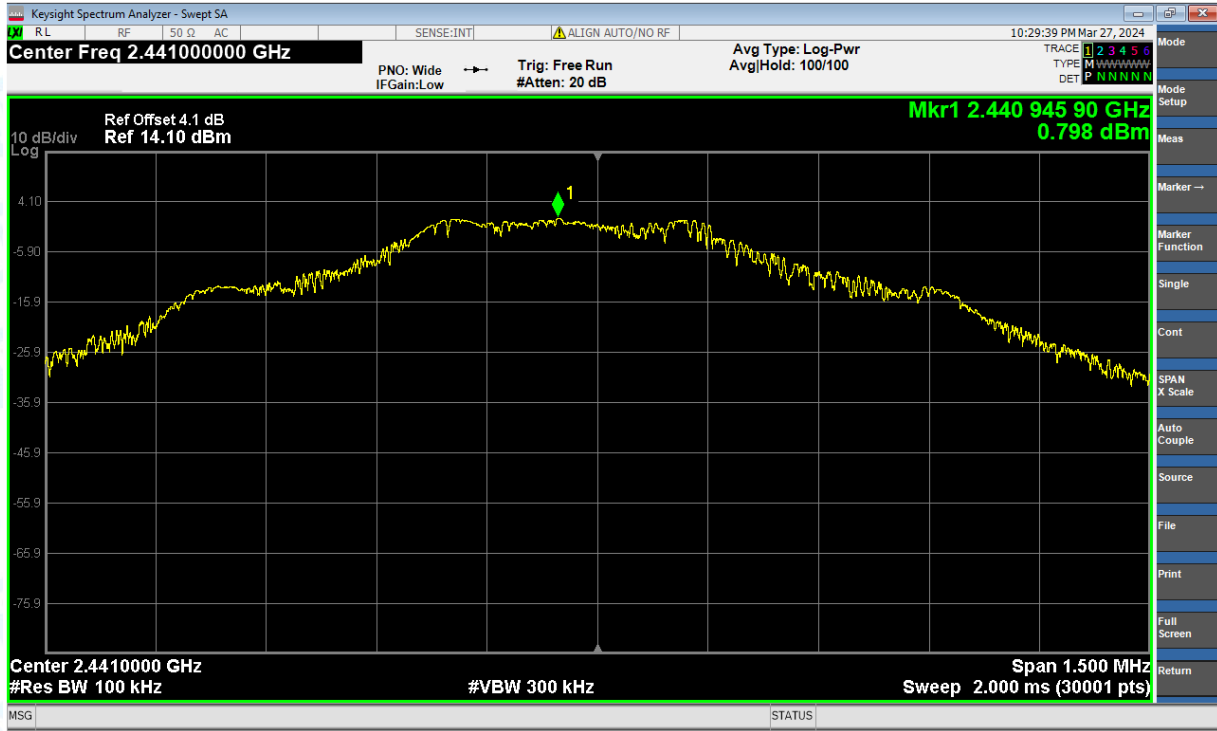
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



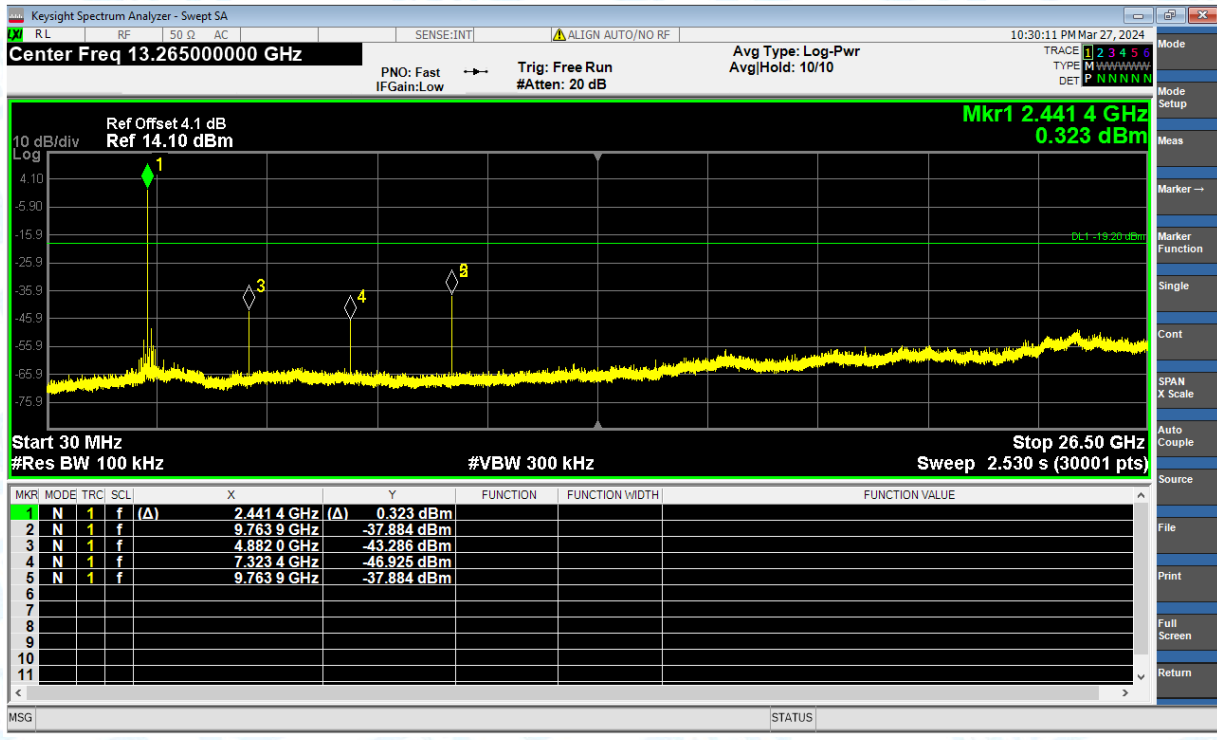
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



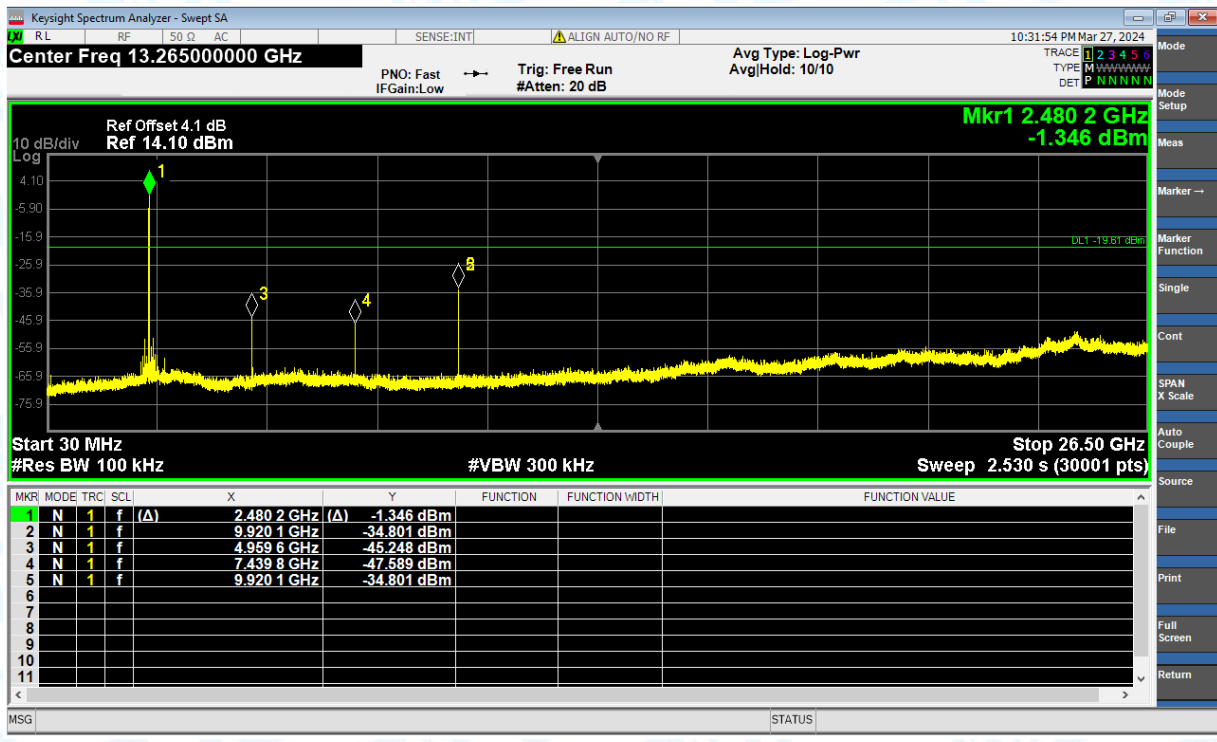
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



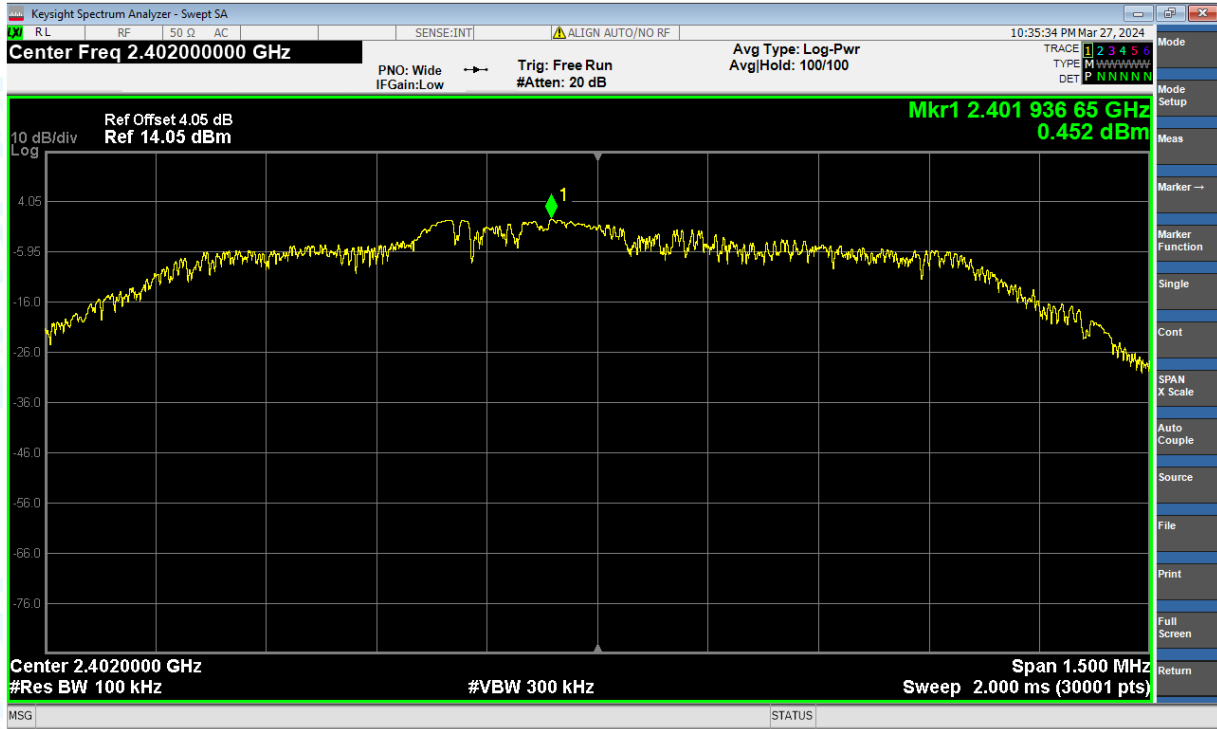
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



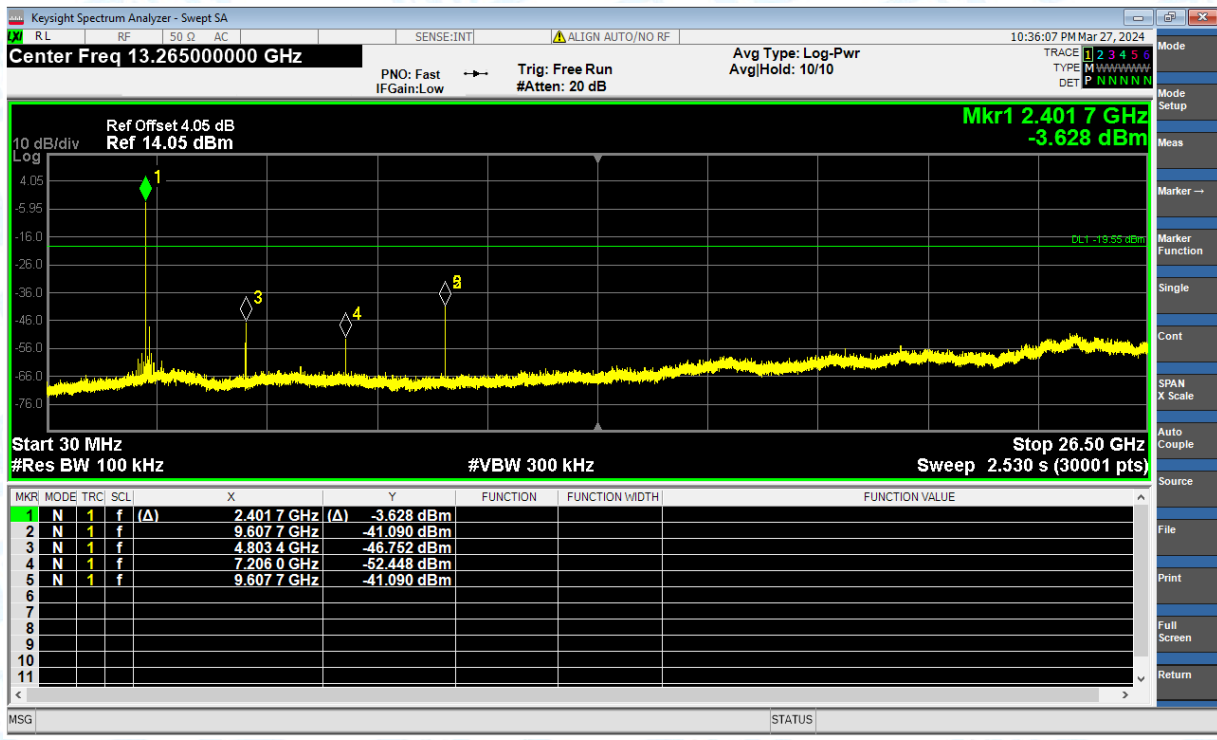
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



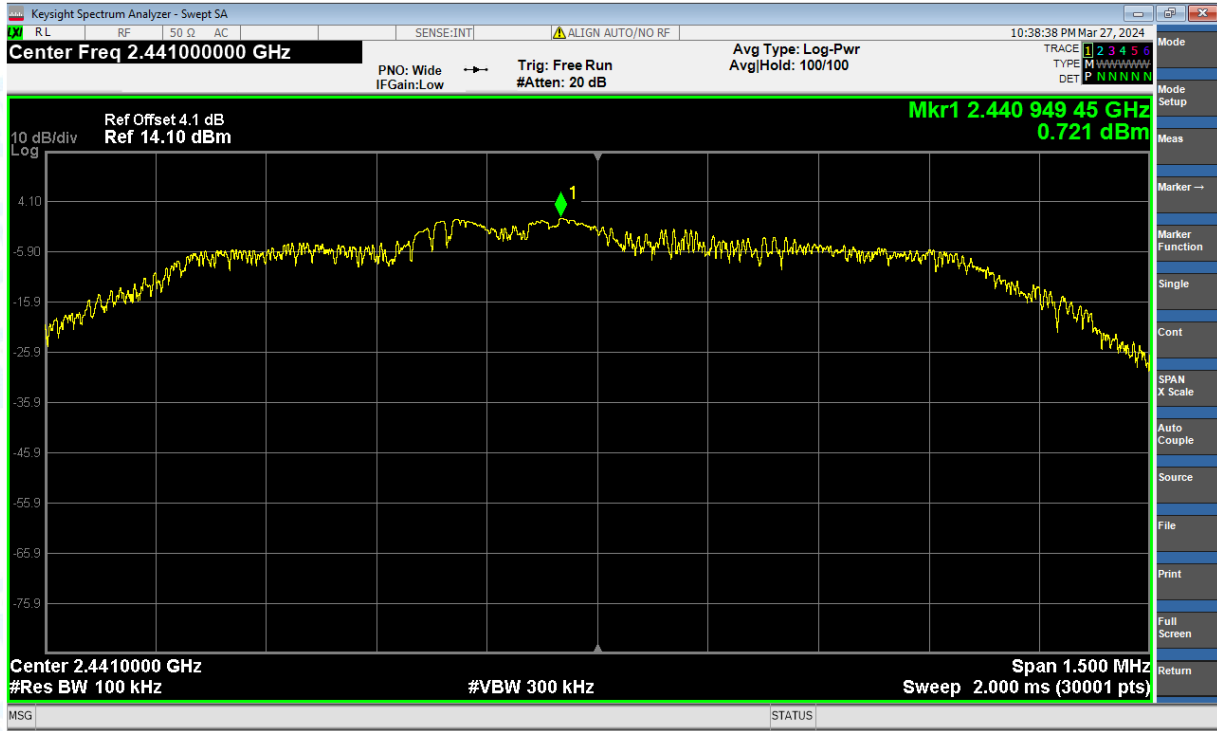
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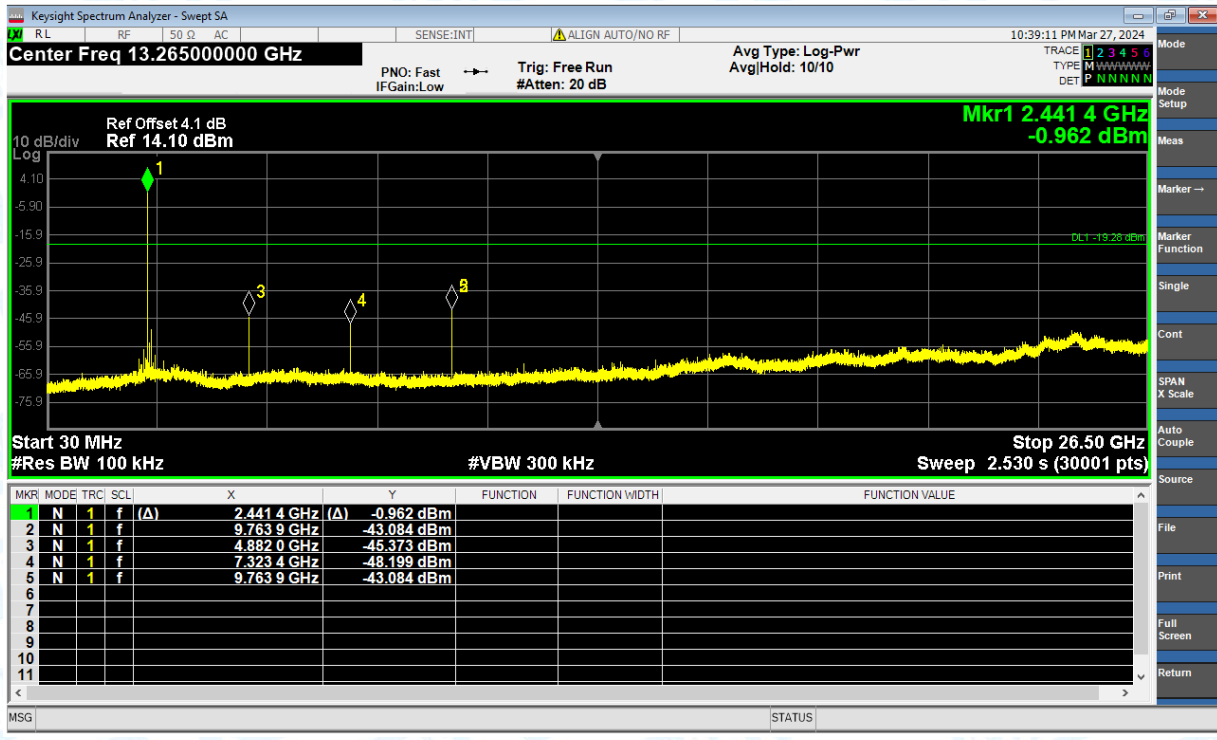
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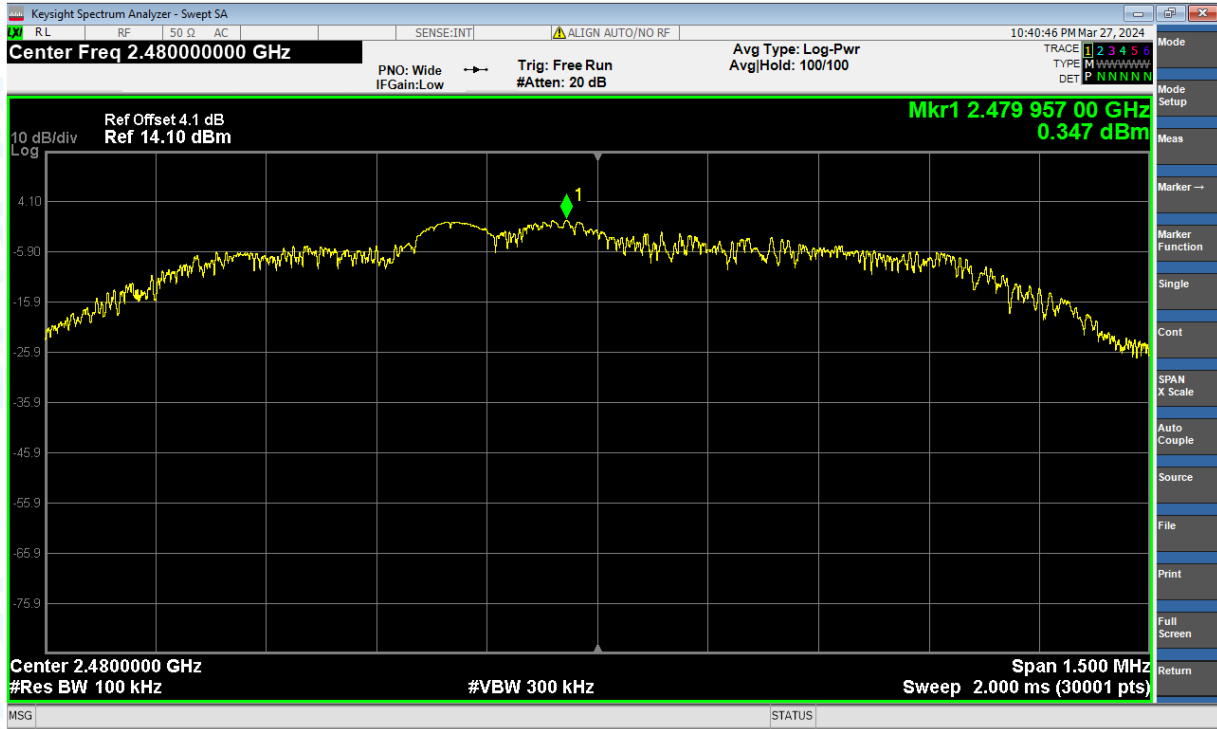
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



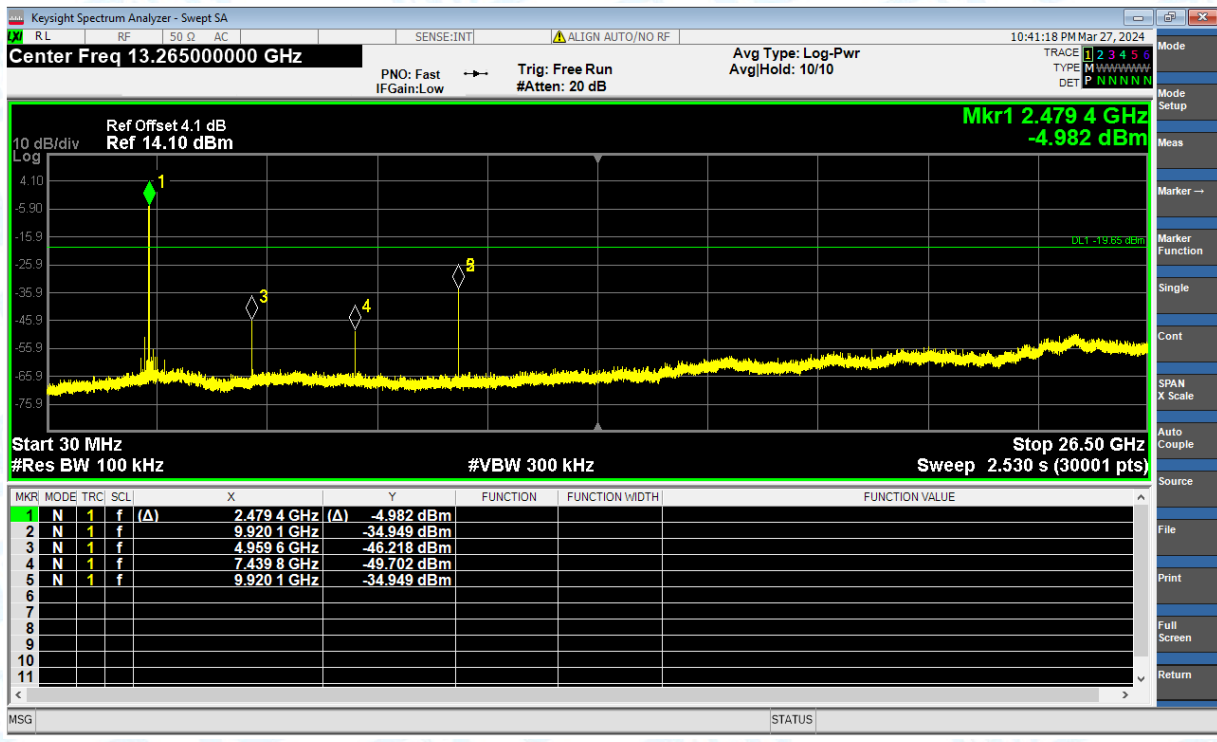
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

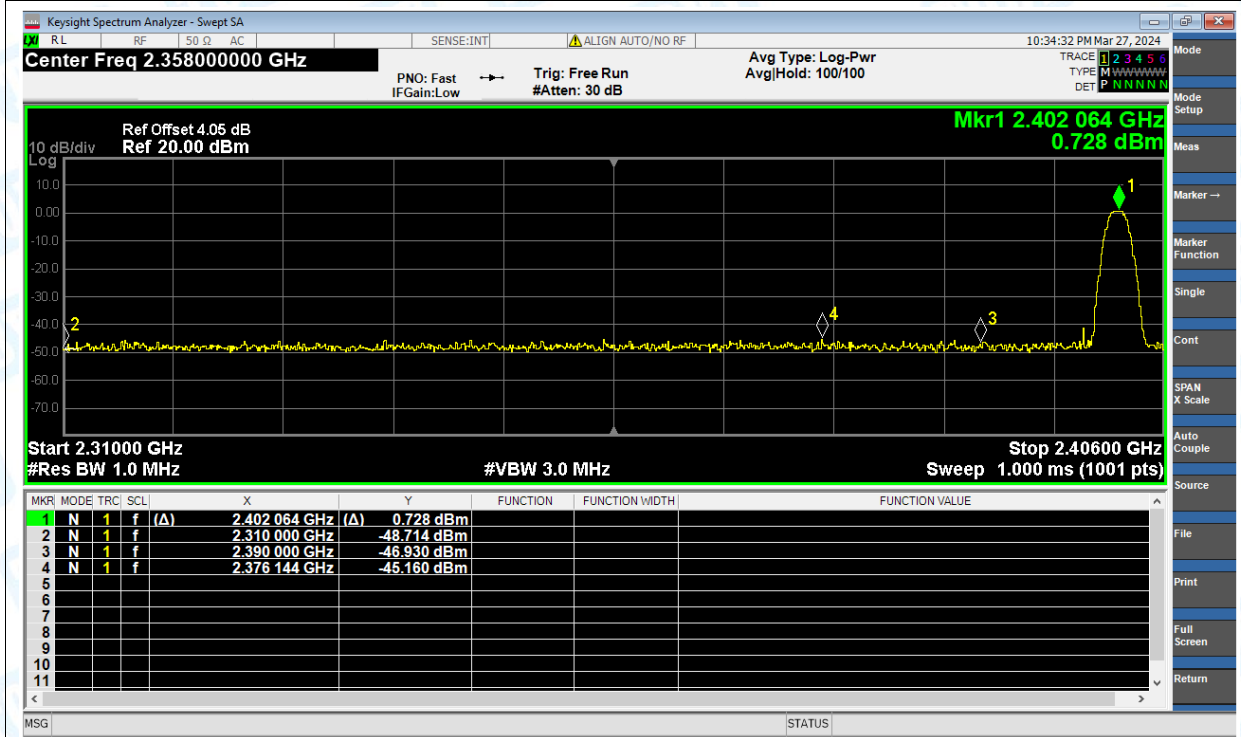


8. Restrict Band

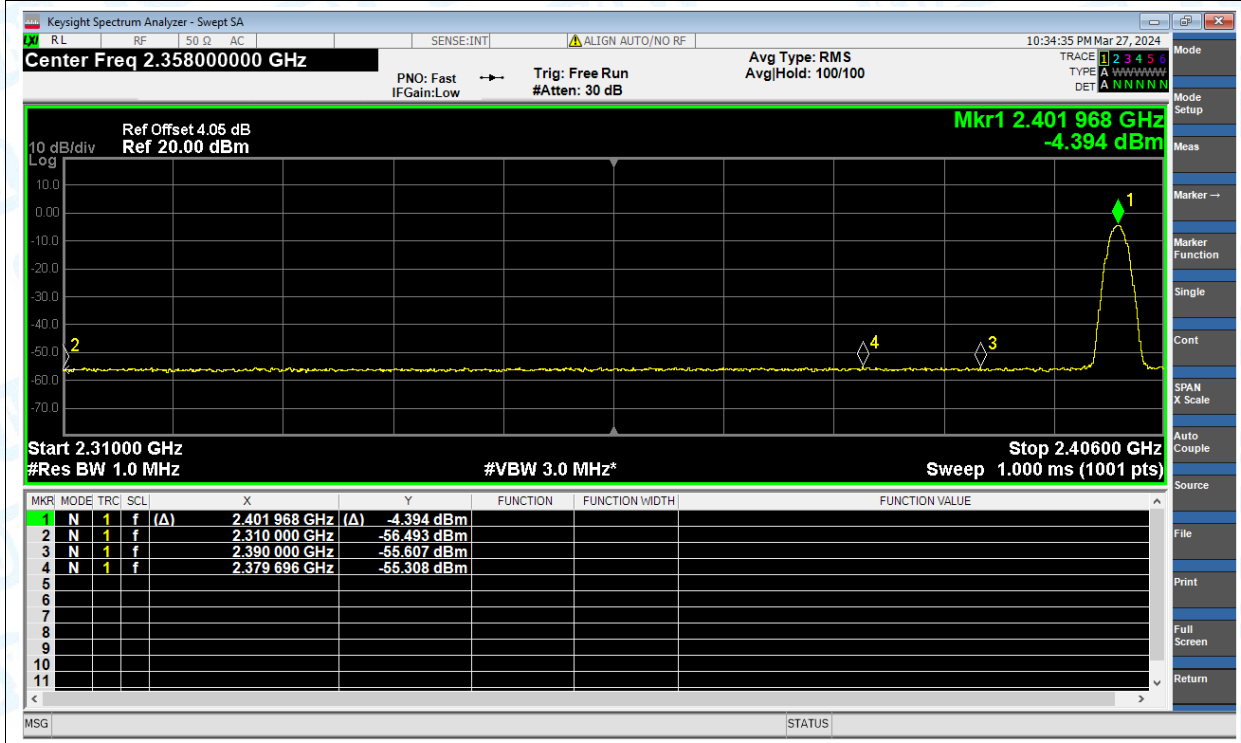
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-48.71	2	-	48.55	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.49	2	5.06	45.83	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2376.144	-45.16	2	-	52.1	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2379.696	-55.31	2	5.06	47.01	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-46.93	2	-	50.33	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.61	2	5.06	46.71	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-48.79	2	-	48.47	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.65	2	5.06	46.67	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2484.592	-44.8	2	-	52.46	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2497.456	-54.83	2	5.06	47.49	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-47.97	2	-	49.29	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.58	2	5.06	46.74	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-46.75	2	-	50.51	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.7	2	5.06	45.62	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2354.832	-44.4	2	-	52.86	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2388.24	-55.32	2	5.06	47	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.64	2	-	49.62	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.99	2	5.06	46.33	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-48.24	2	-	49.02	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-56.4	2	5.06	45.92	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2484.592	-44.13	2	-	53.13	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2497.312	-54.93	2	5.06	47.39	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.77	2	-	50.49	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.52	2	5.06	46.8	Average	54	Pass

Test Graphs

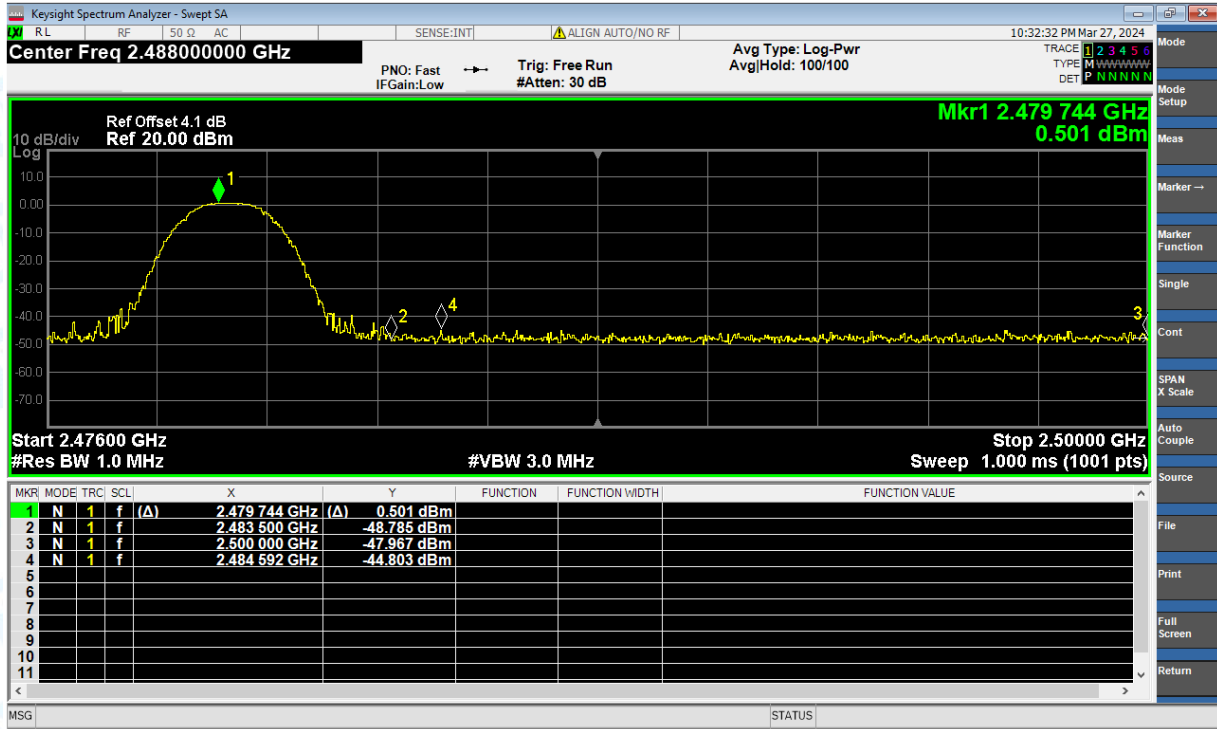
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



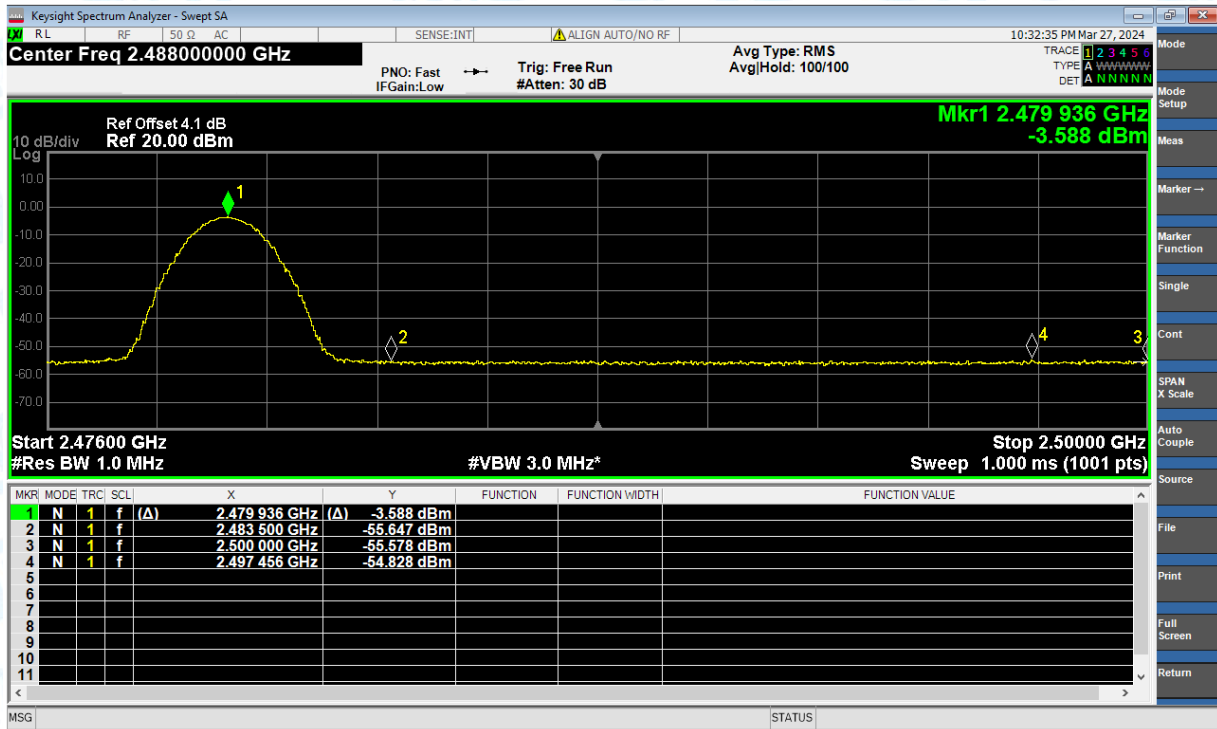
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



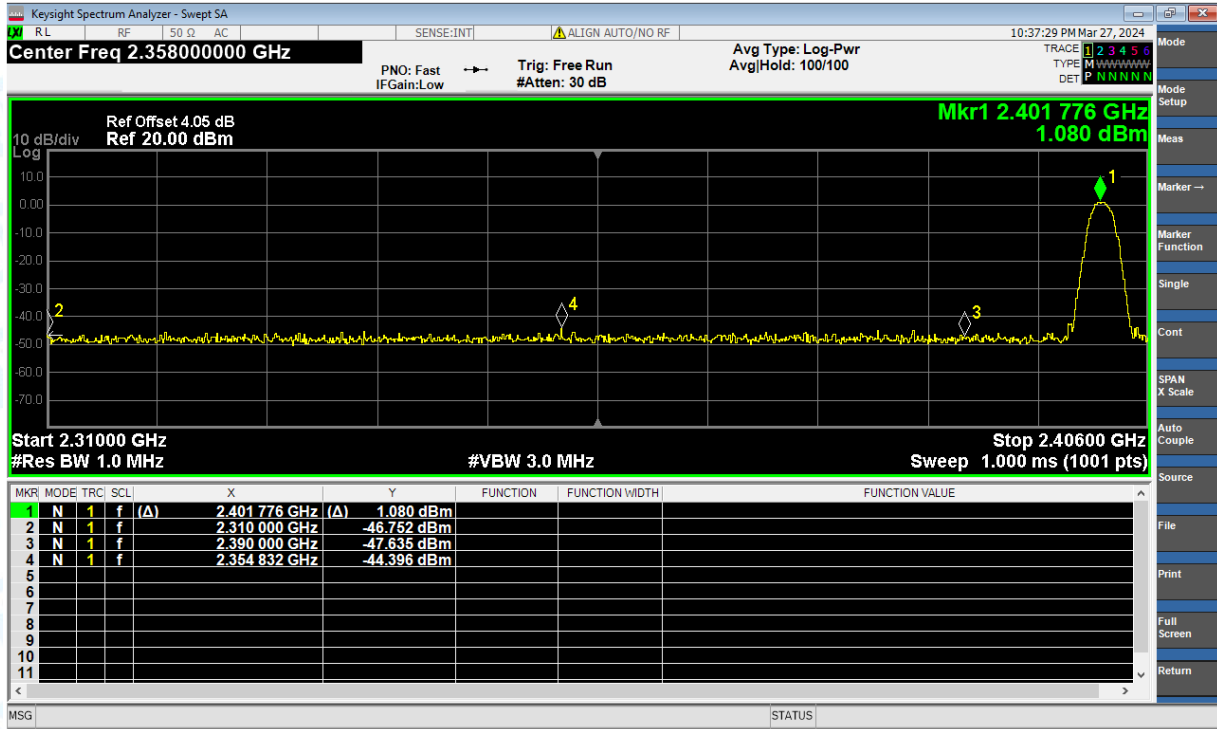
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



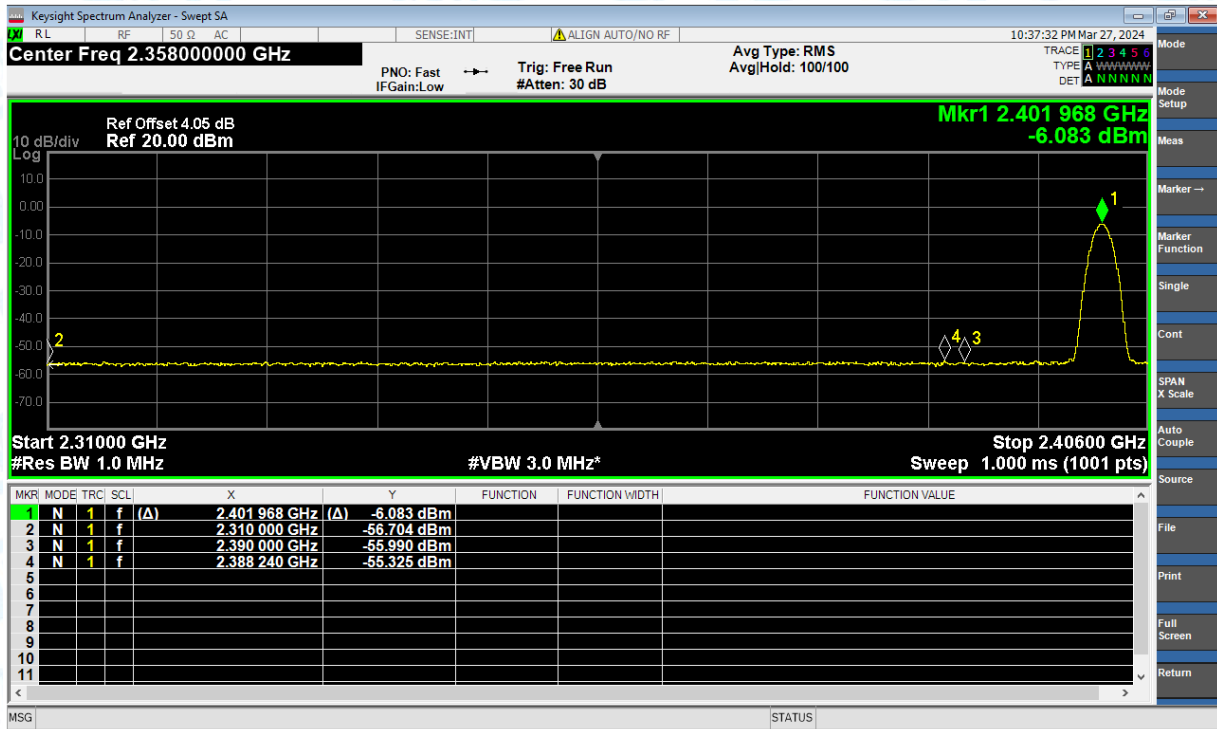
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



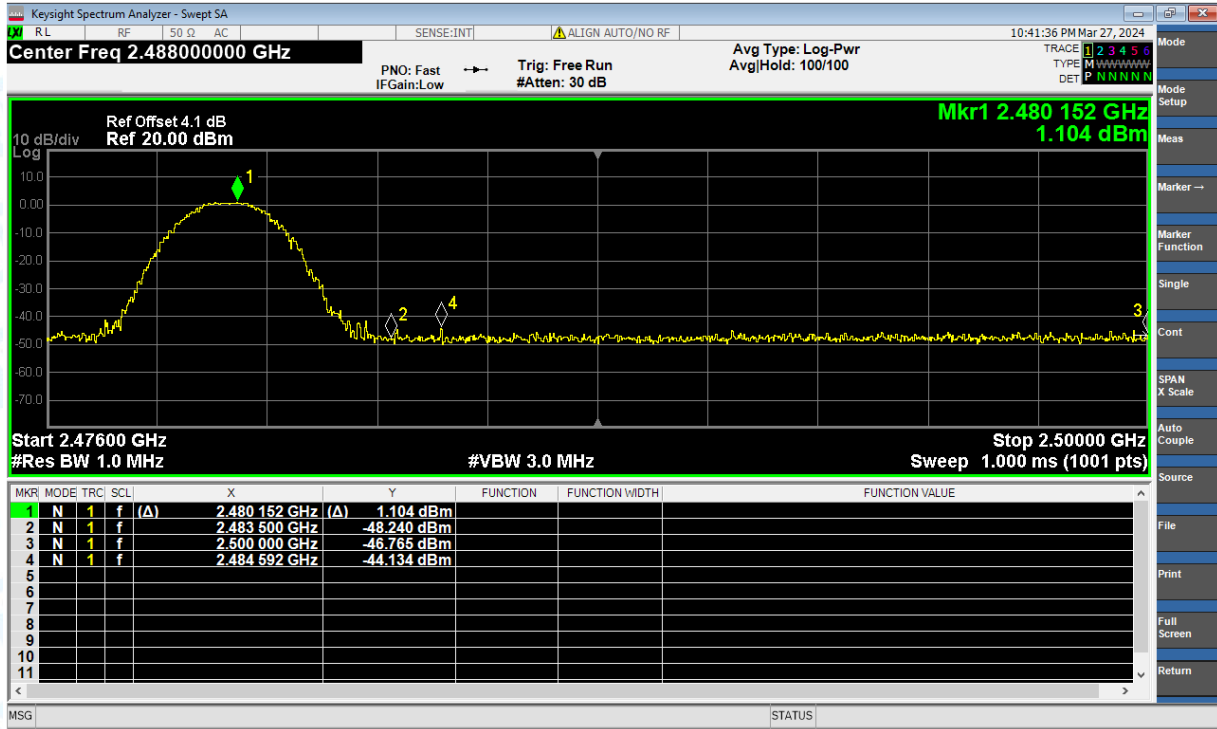
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



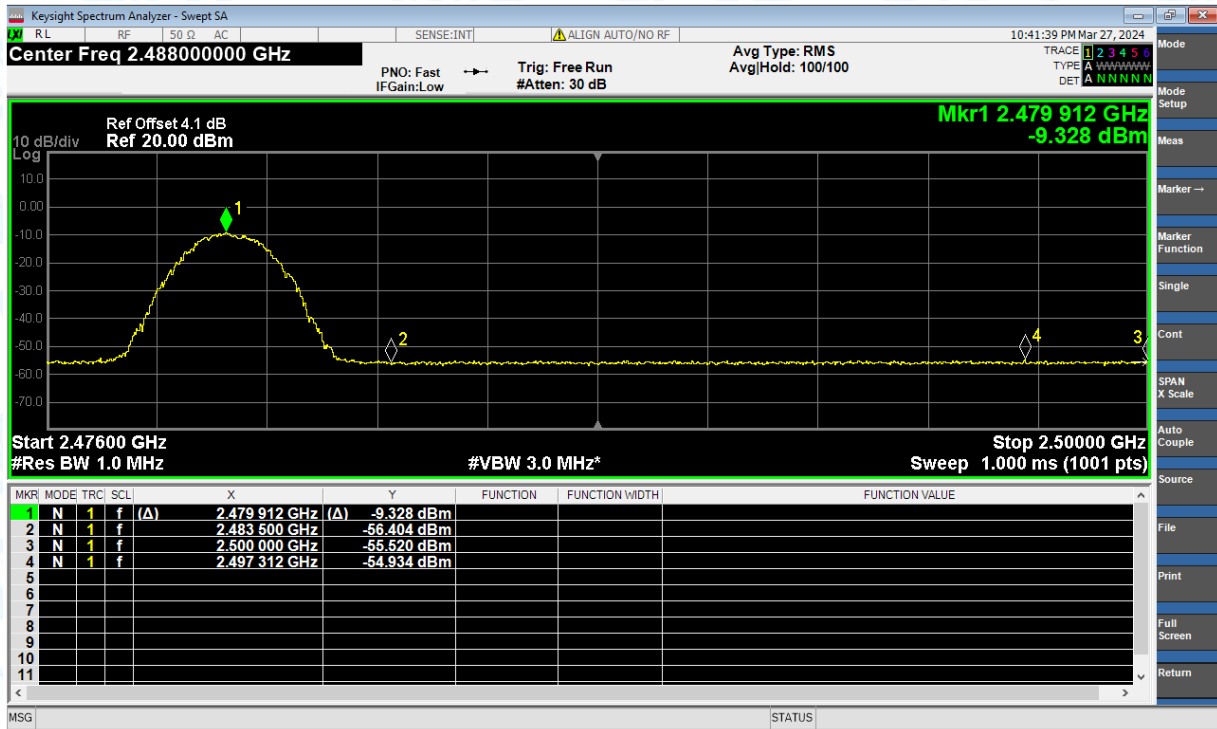
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



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



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

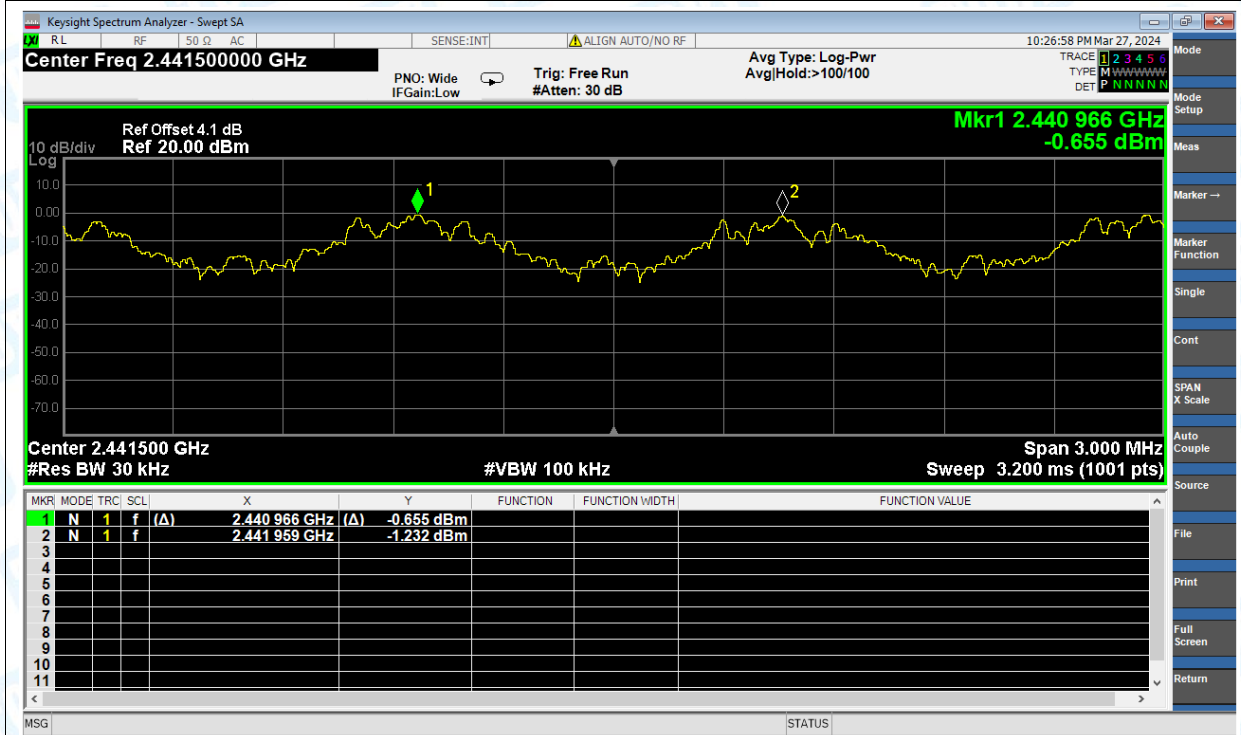


9. Carrier Frequencies Separation

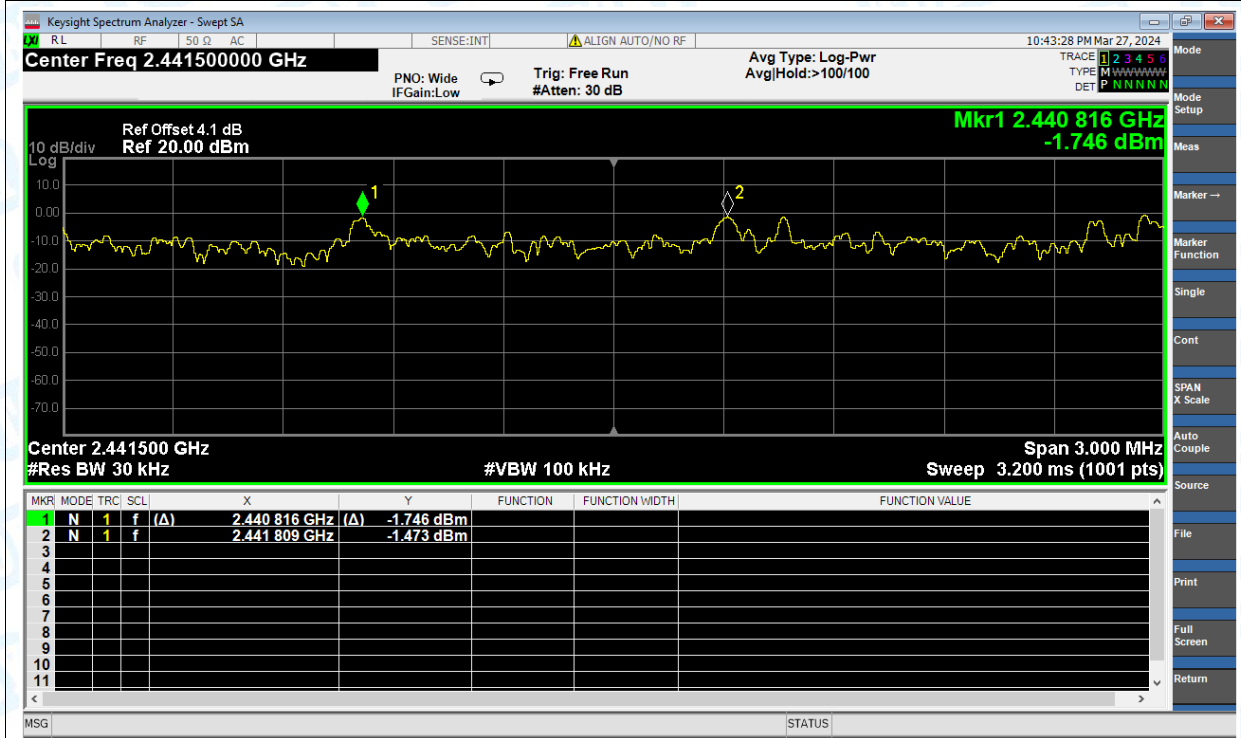
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.966	2441.959	0.993	0.025	Pass
NVNT	2-DH1	Ant1	2440.816	2441.809	0.993	0.86	Pass

Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1

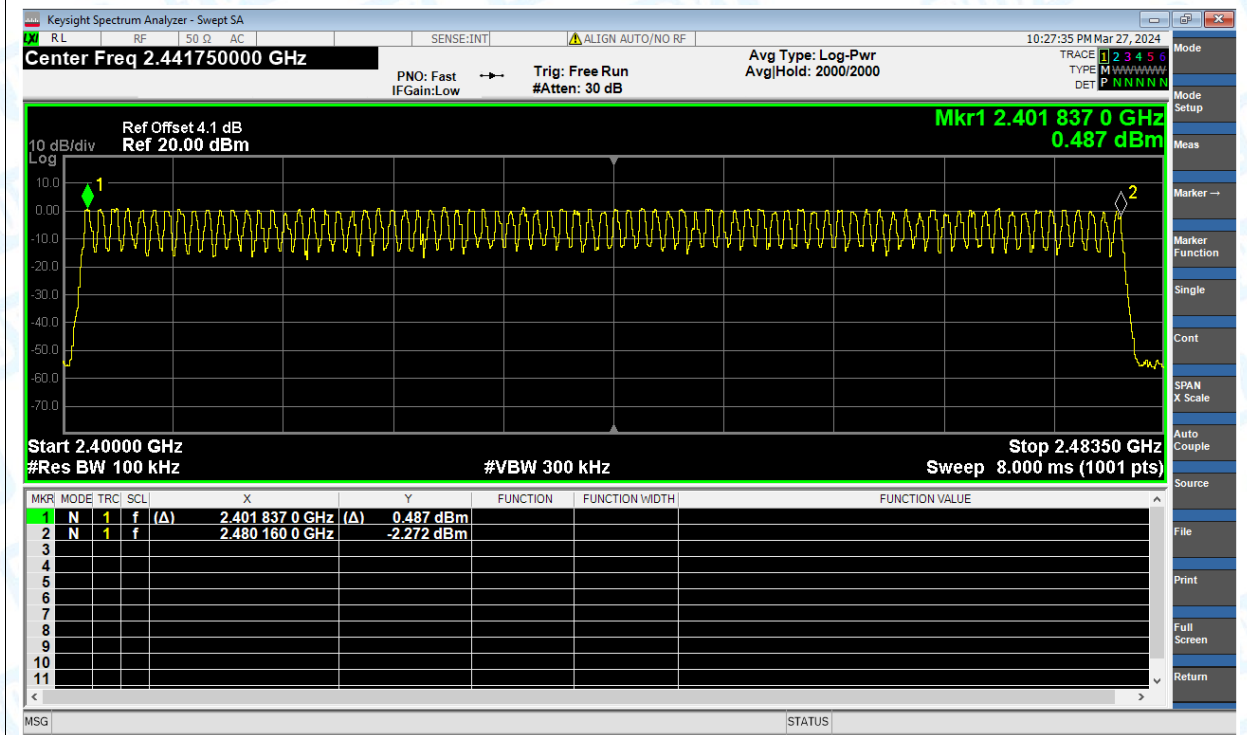


10. Number of Hopping Channel

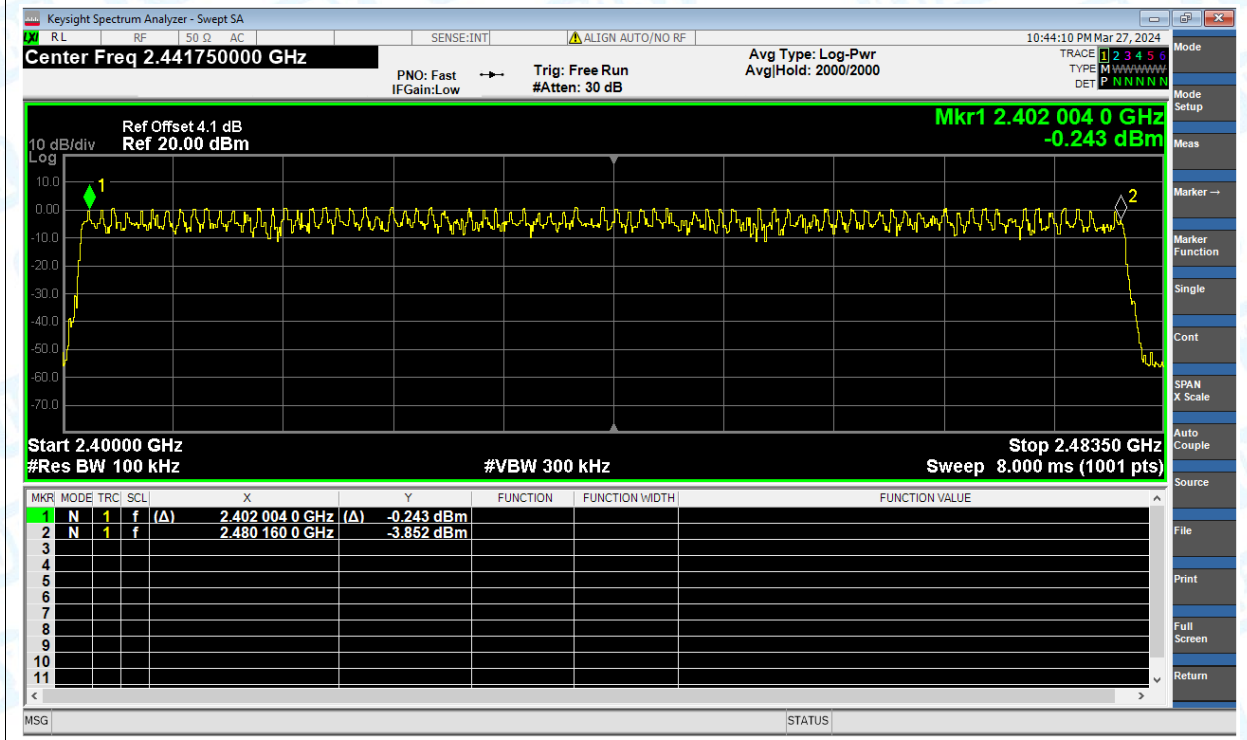
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1

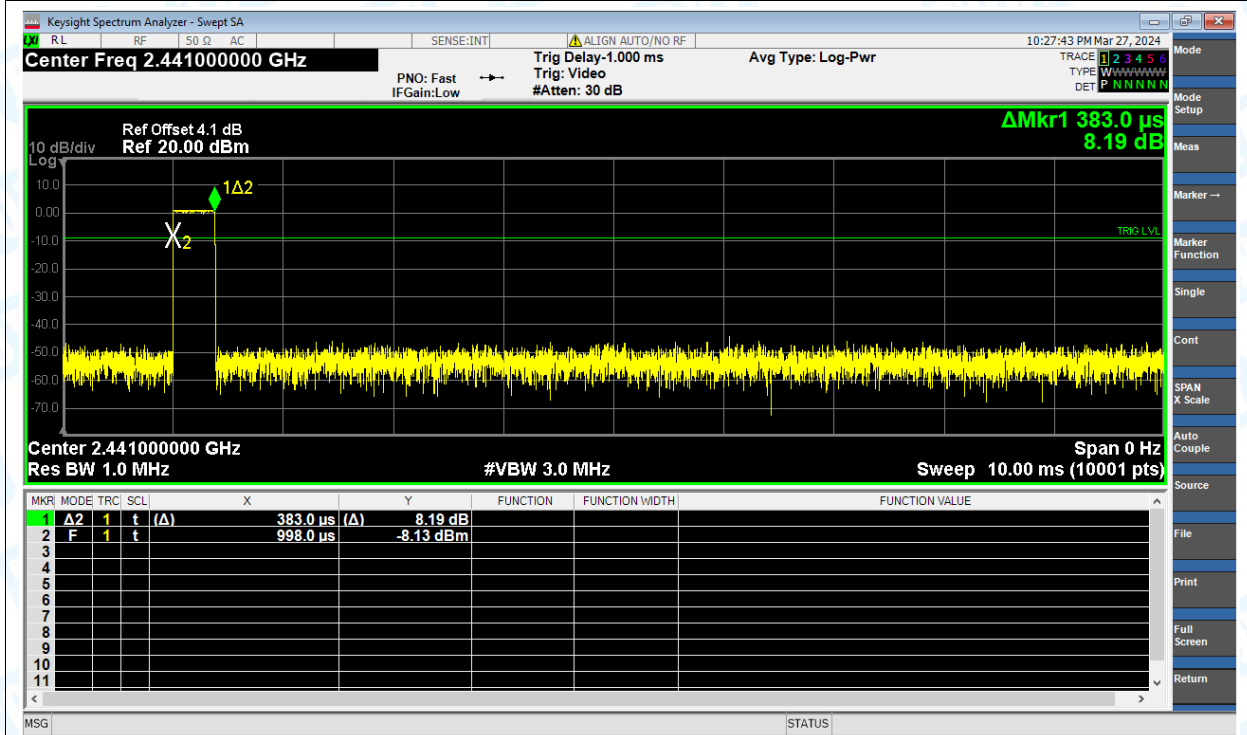


11. Dwell Time

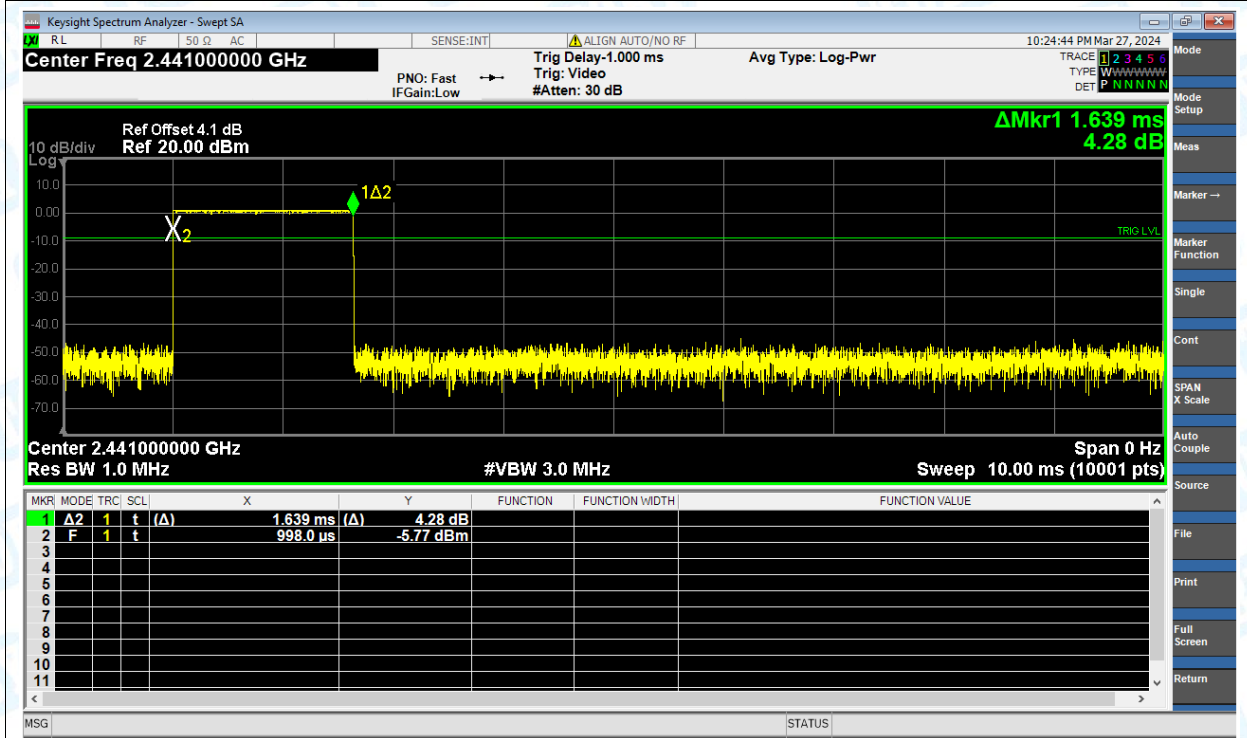
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.879	307.093	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.39	124.8	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.644	263.04	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.889	308.16	31600	400	Pass

Test Graphs

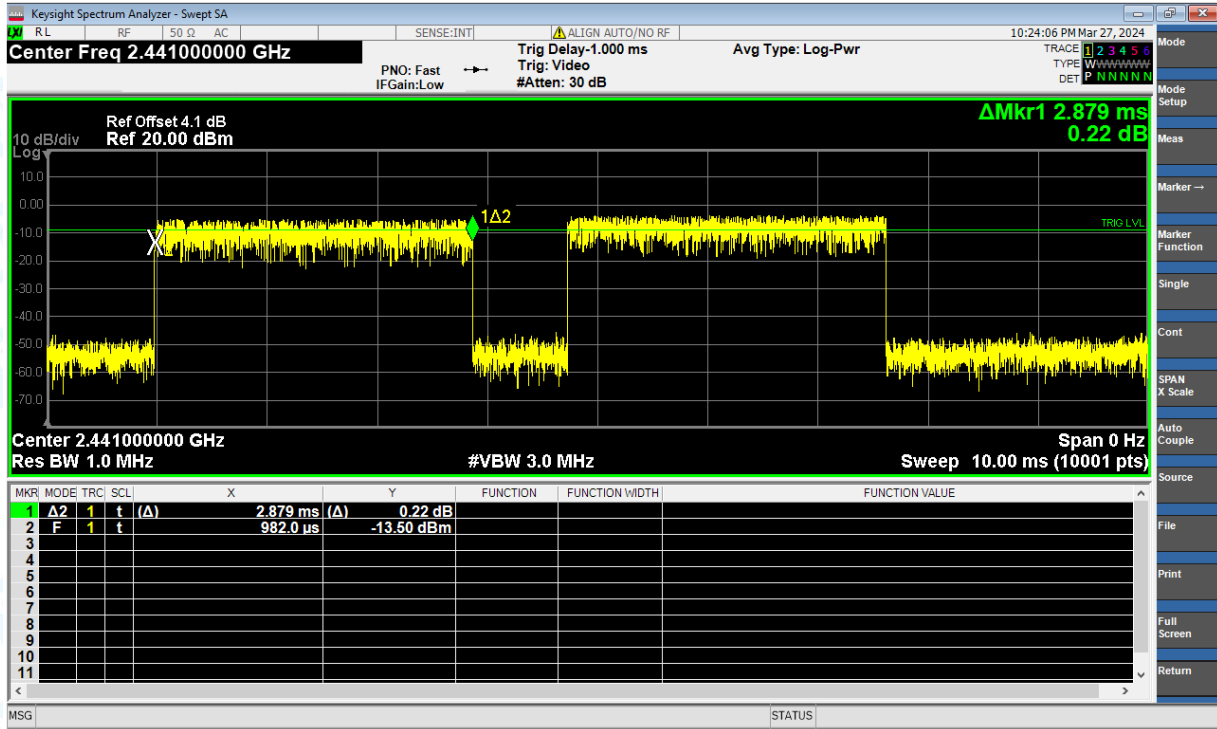
Dwell NVNT 1-DH1 2441MHz Ant1



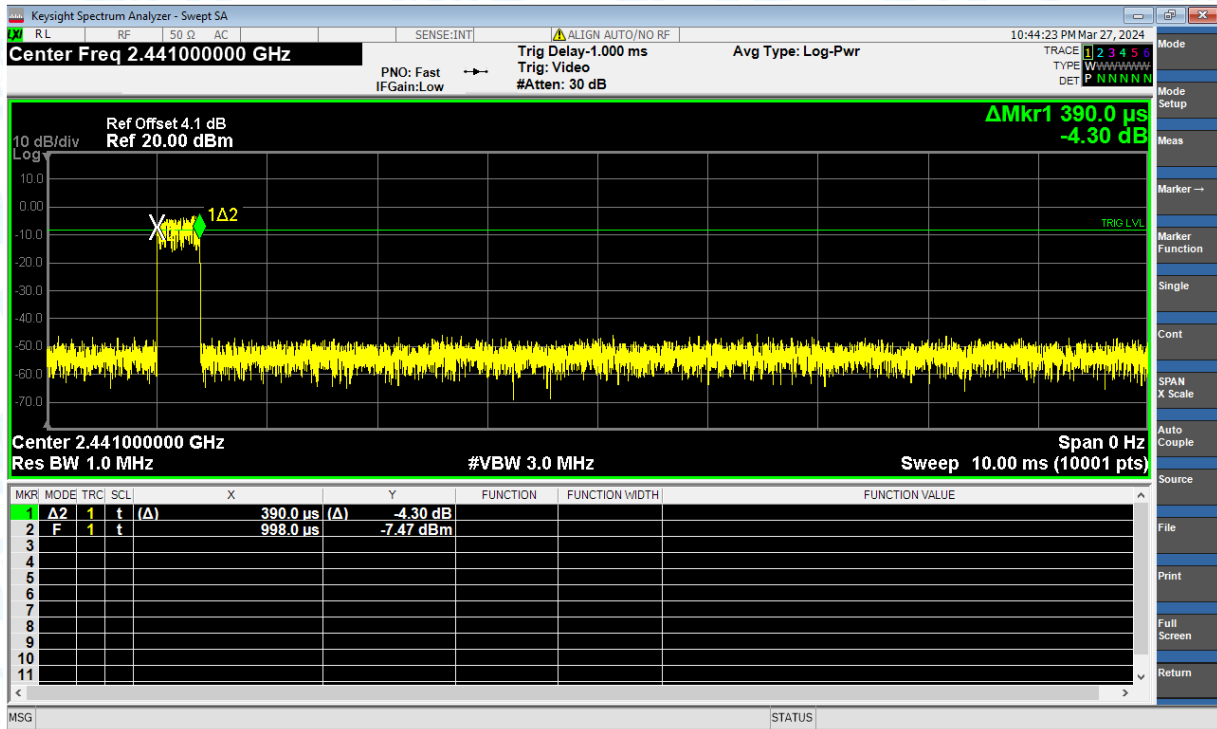
Dwell NVNT 1-DH3 2441MHz Ant1

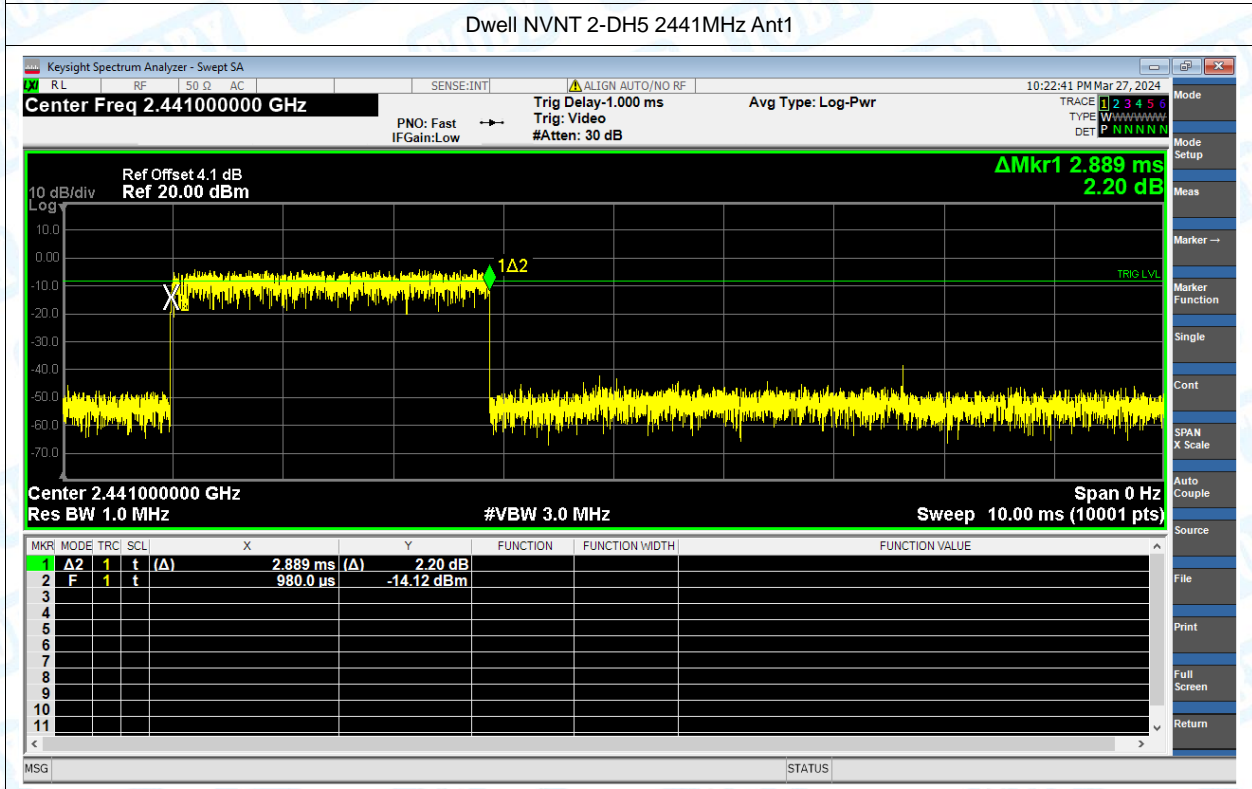
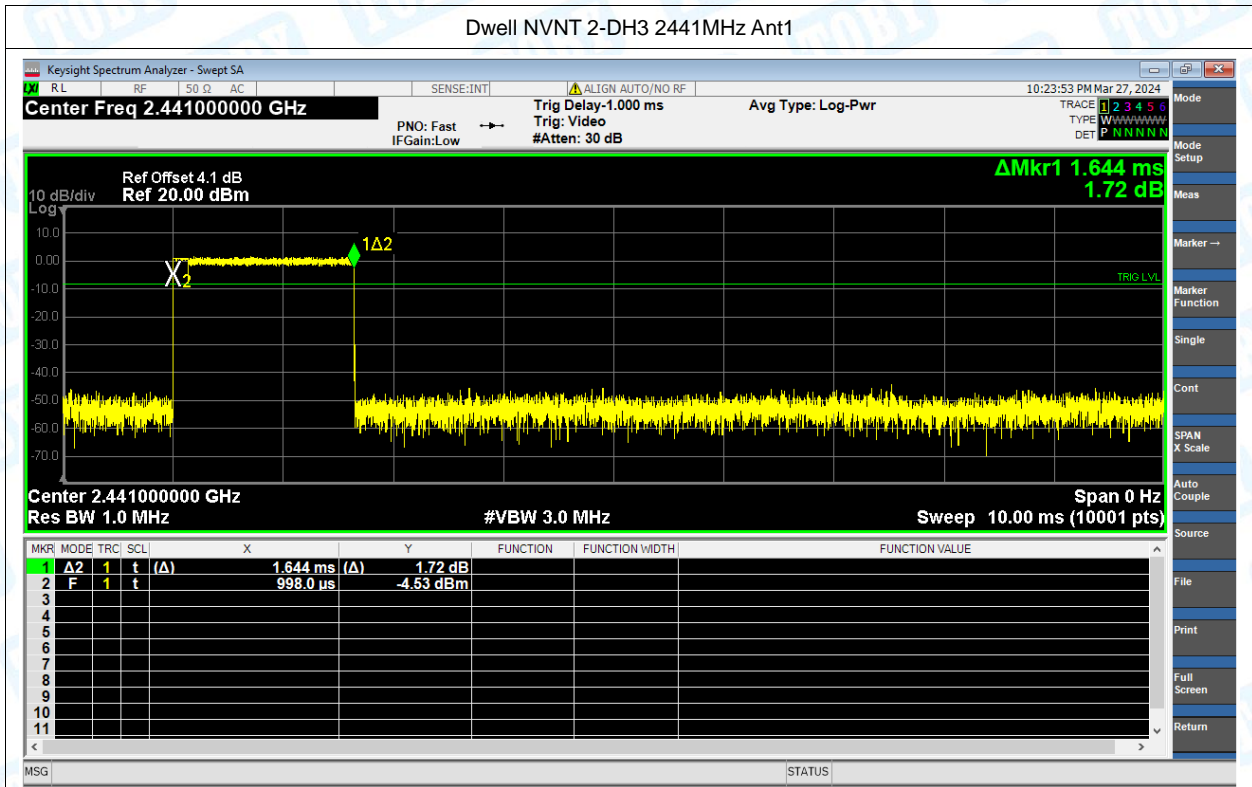


Dwell NVNT 1-DH5 2441MHz Ant1



Dwell NVNT 2-DH1 2441MHz Ant1





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