

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

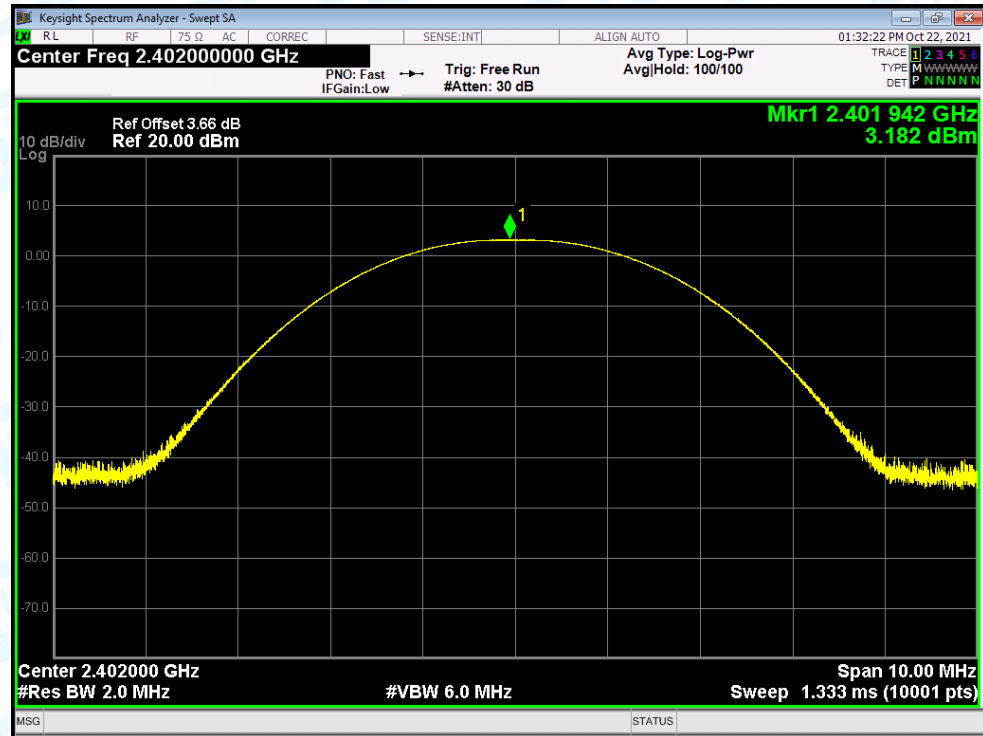
General Description of EUT	
Product Name:	Bluetooth headset
Test Model:	SA-201
Sample ID:	20210916-05-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50℃
Test Voltage:	DC3.7V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TB-FCC184081	

1. Maximum Conducted Output Power

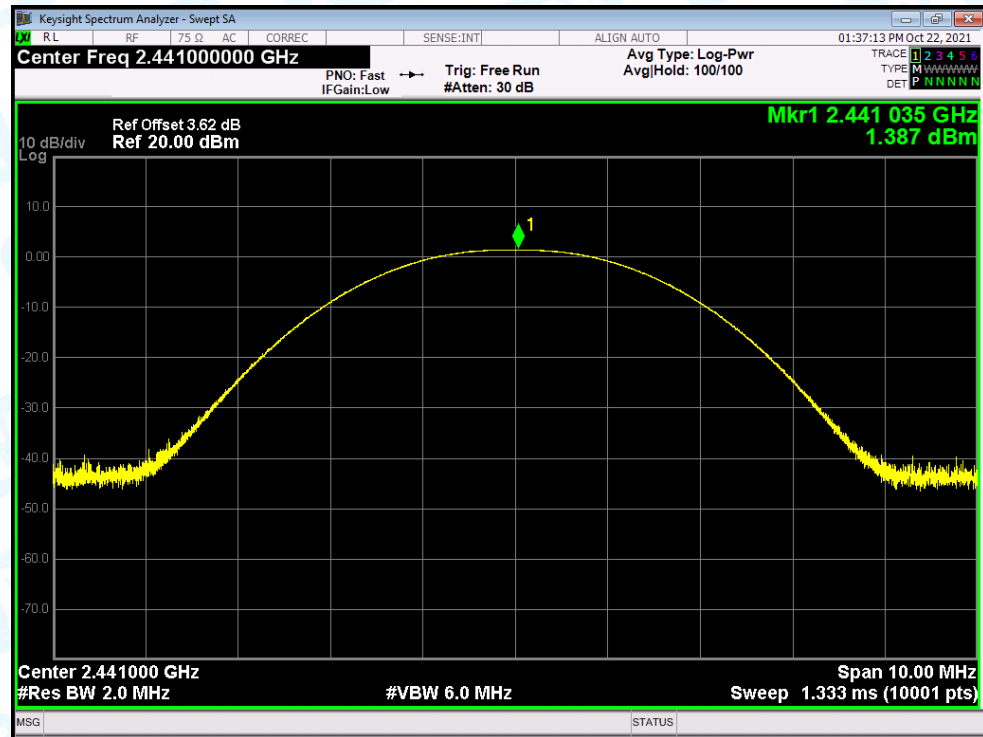
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.182	0	3.182	21	Pass
NVNT	1-DH1	2441	Ant1	1.387	0	1.387	21	Pass
NVNT	1-DH1	2480	Ant1	1.319	0	1.319	21	Pass
NVNT	2-DH1	2402	Ant1	3.267	0	3.267	21	Pass
NVNT	2-DH1	2441	Ant1	1.655	0	1.655	21	Pass
NVNT	2-DH1	2480	Ant1	1.855	0	1.855	21	Pass
NVNT	3-DH1	2402	Ant1	3.645	0	3.645	21	Pass
NVNT	3-DH1	2441	Ant1	2.095	0	2.095	21	Pass
NVNT	3-DH1	2480	Ant1	2.357	0	2.357	21	Pass

Test Graphs

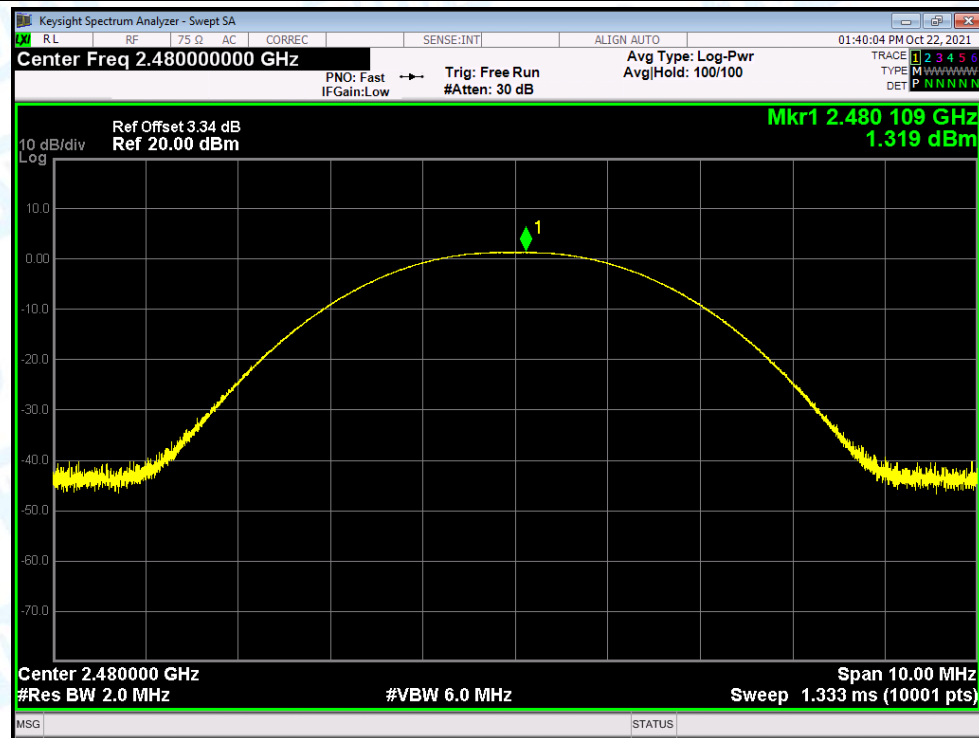
Power NVNT 1-DH1 2402MHz Ant1



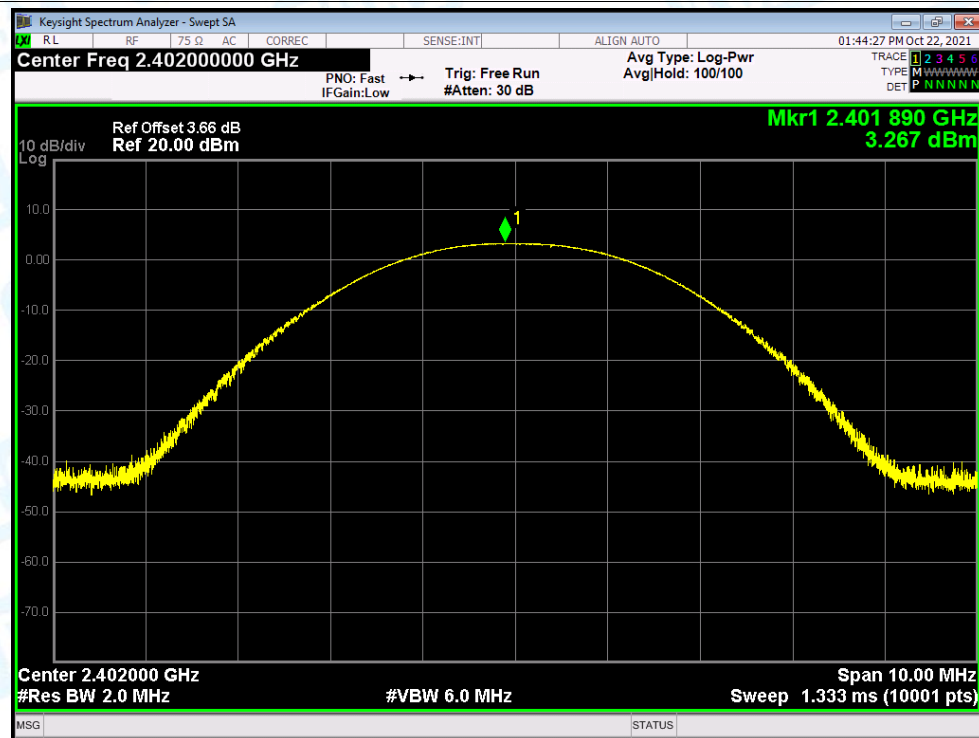
Power NVNT 1-DH1 2441MHz Ant1



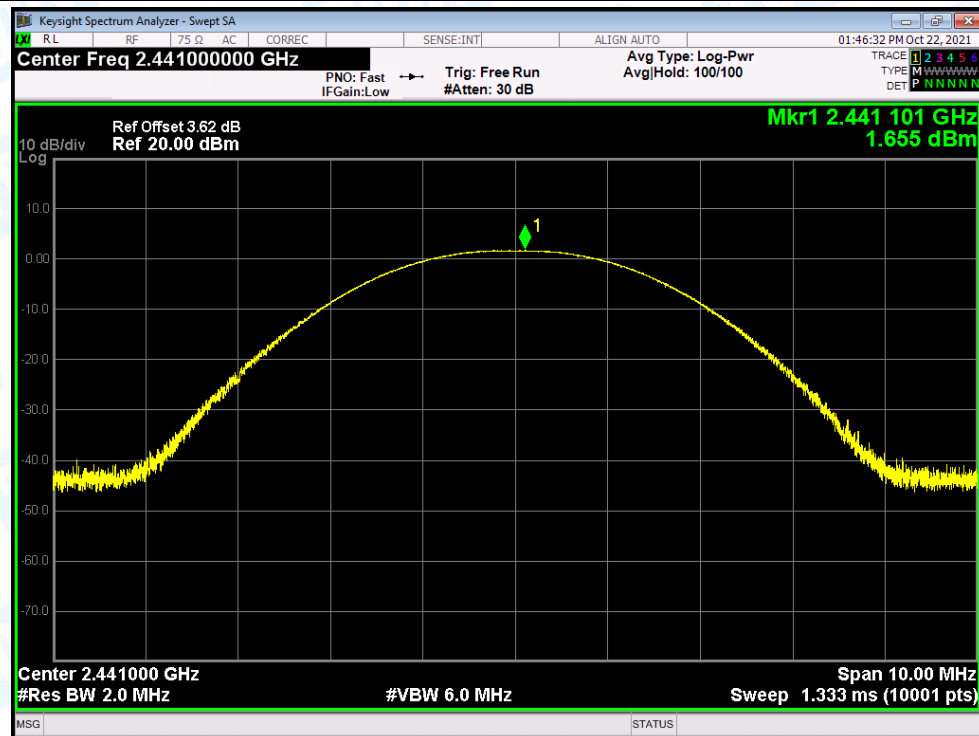
Power NVNT 1-DH1 2480MHz Ant1



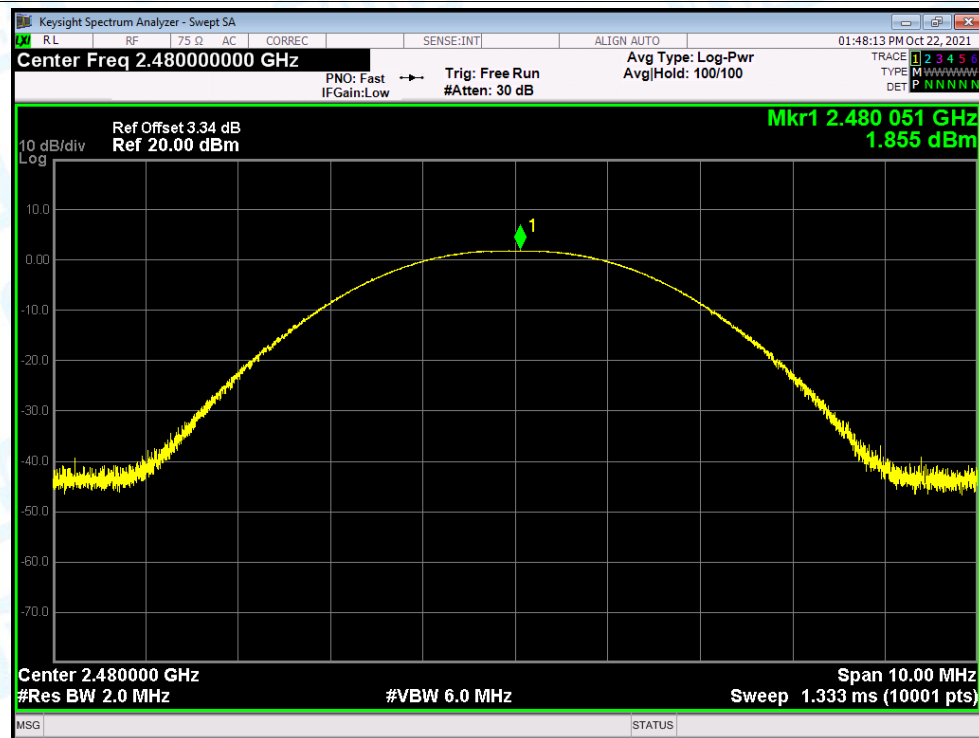
Power NVNT 2-DH1 2402MHz Ant1



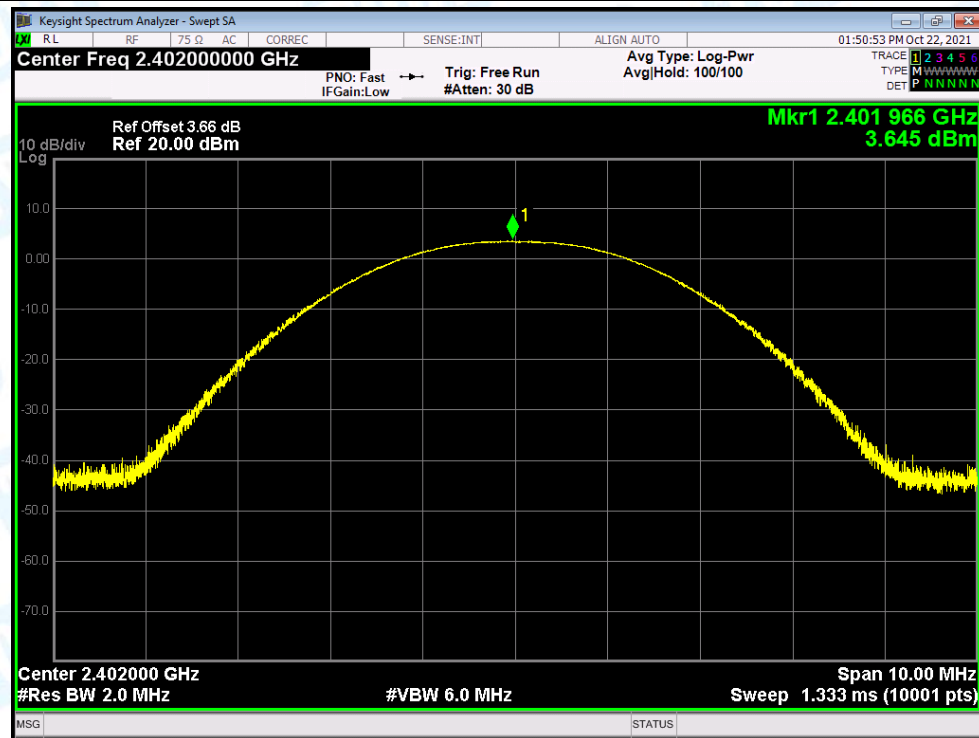
Power NVNT 2-DH1 2441MHz Ant1



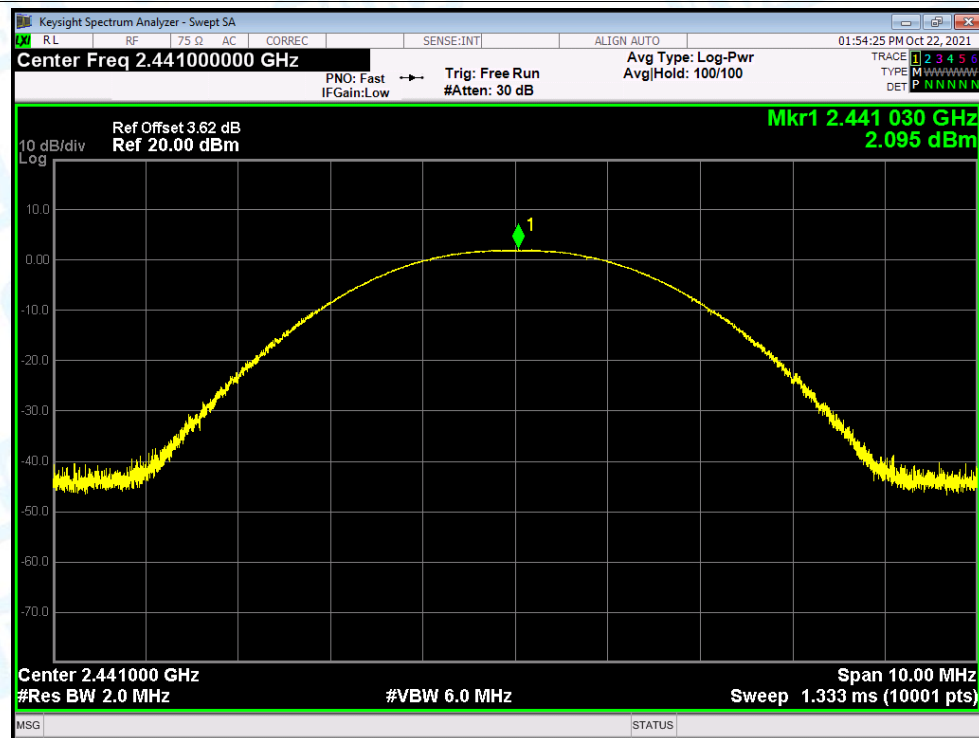
Power NVNT 2-DH1 2480MHz Ant1

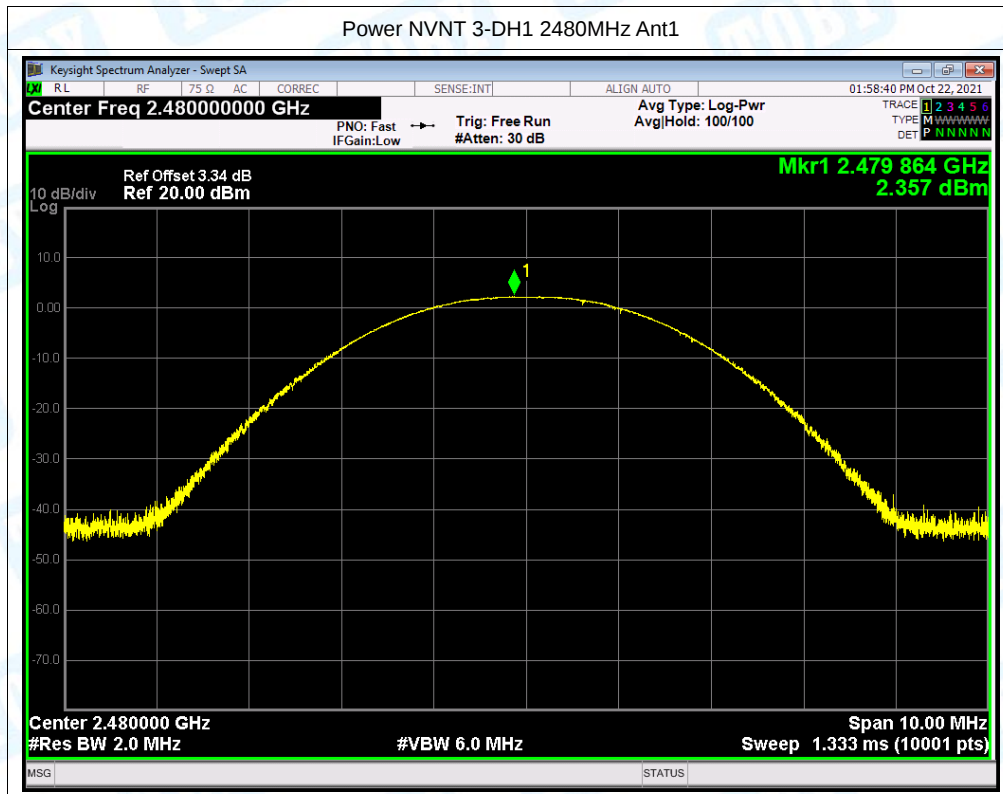


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



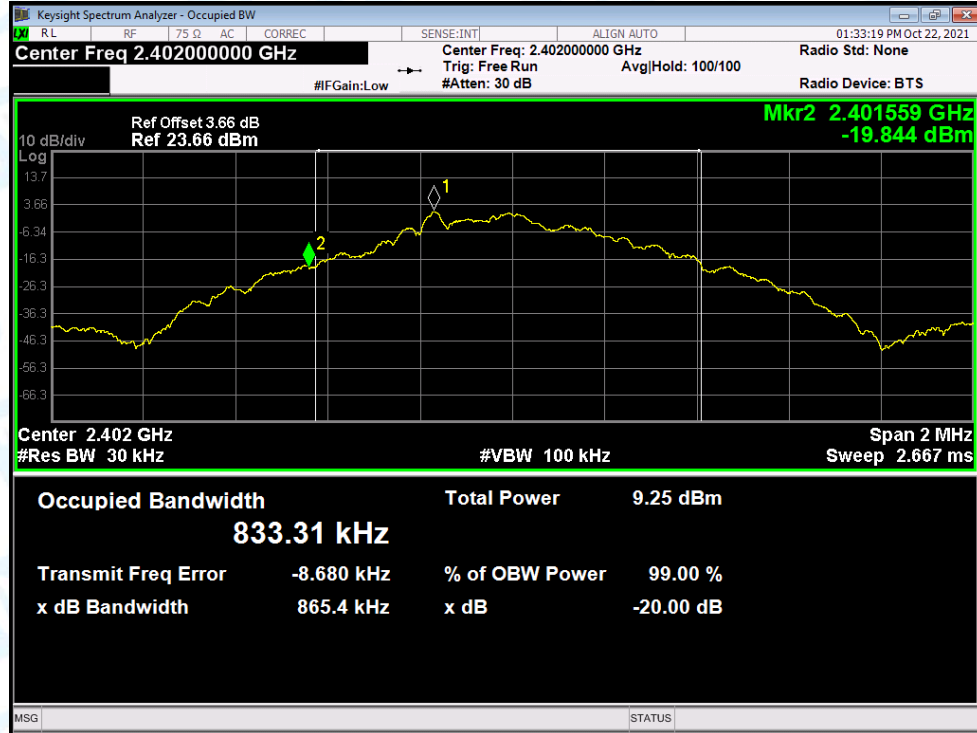


2.-20dB Bandwidth

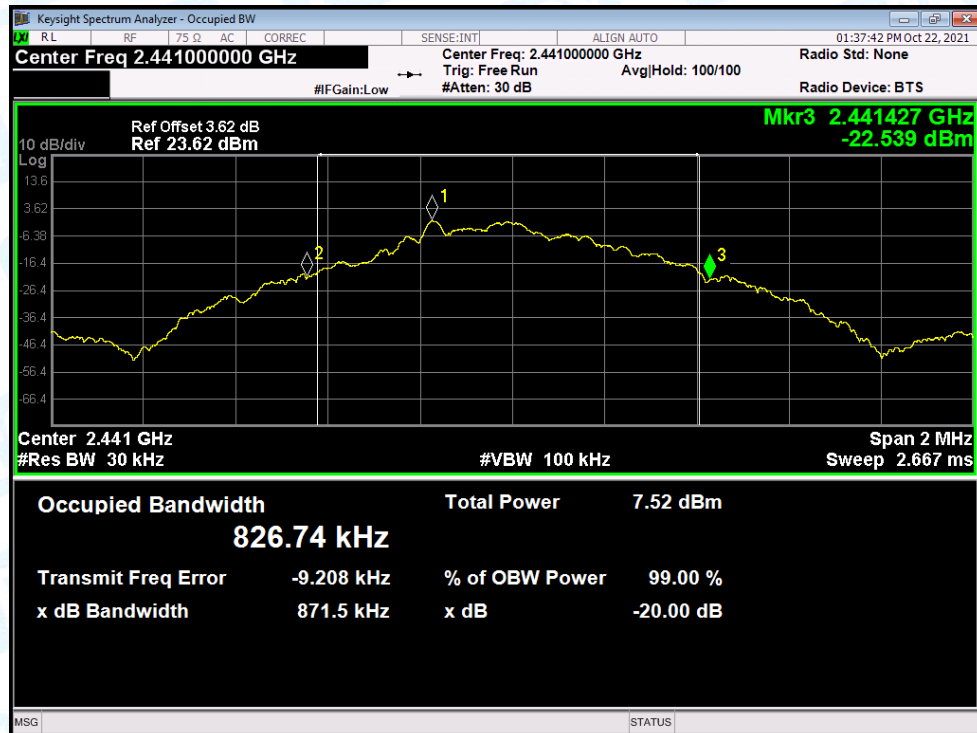
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	99% OBW (MHz)	2/3 *20dB BW (MHz)
NVNT	1-DH1	2402	Ant1	0.8654	0.83331	0.577
NVNT	1-DH1	2441	Ant1	0.8715	0.82674	0.581
NVNT	1-DH1	2480	Ant1	0.8721	0.82797	0.581
NVNT	2-DH1	2402	Ant1	1.214	1.1436	0.809
NVNT	2-DH1	2441	Ant1	1.211	1.1461	0.807
NVNT	2-DH1	2480	Ant1	1.209	1.1481	0.806
NVNT	3-DH1	2402	Ant1	1.218	1.1330	0.812
NVNT	3-DH1	2441	Ant1	1.206	1.1282	0.804
NVNT	3-DH1	2480	Ant1	1.203	1.1330	0.802

Test Graphs

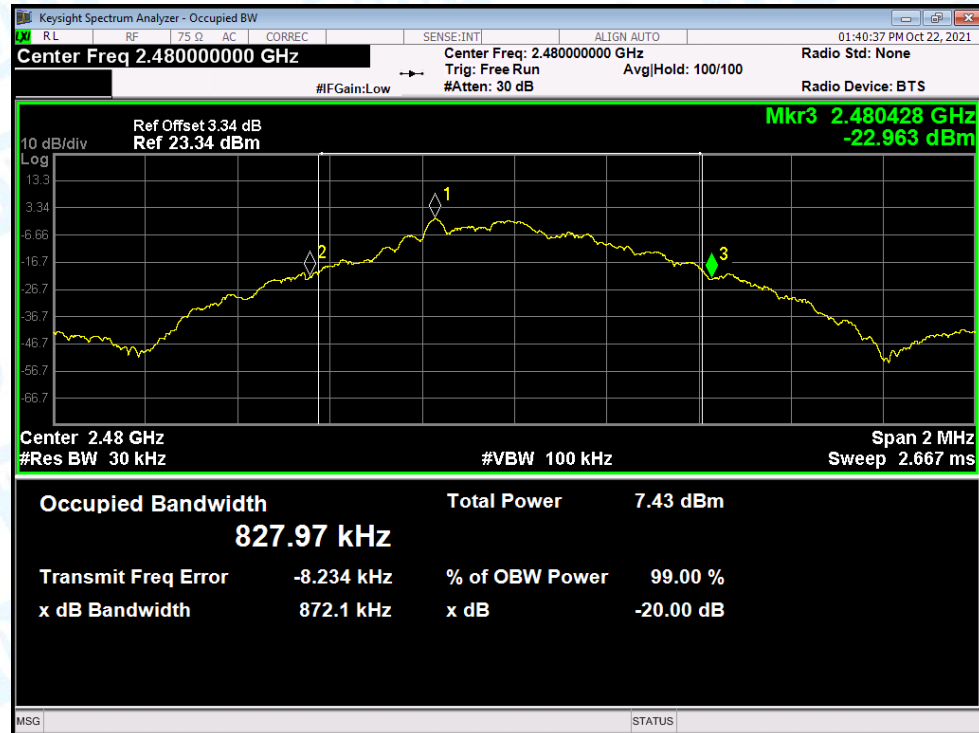
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



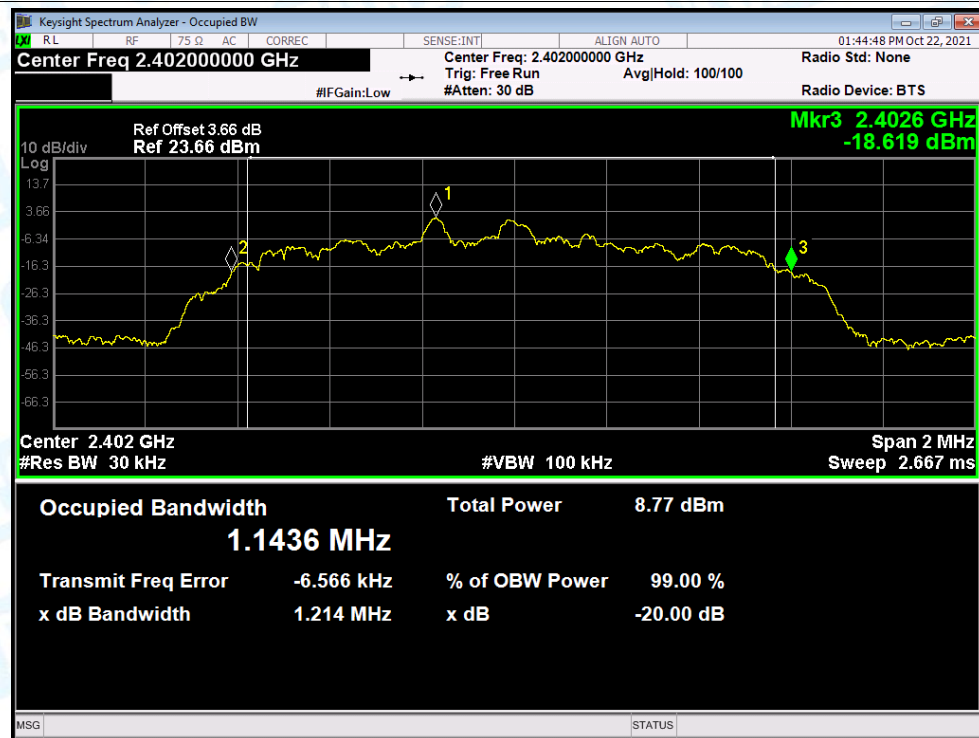
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



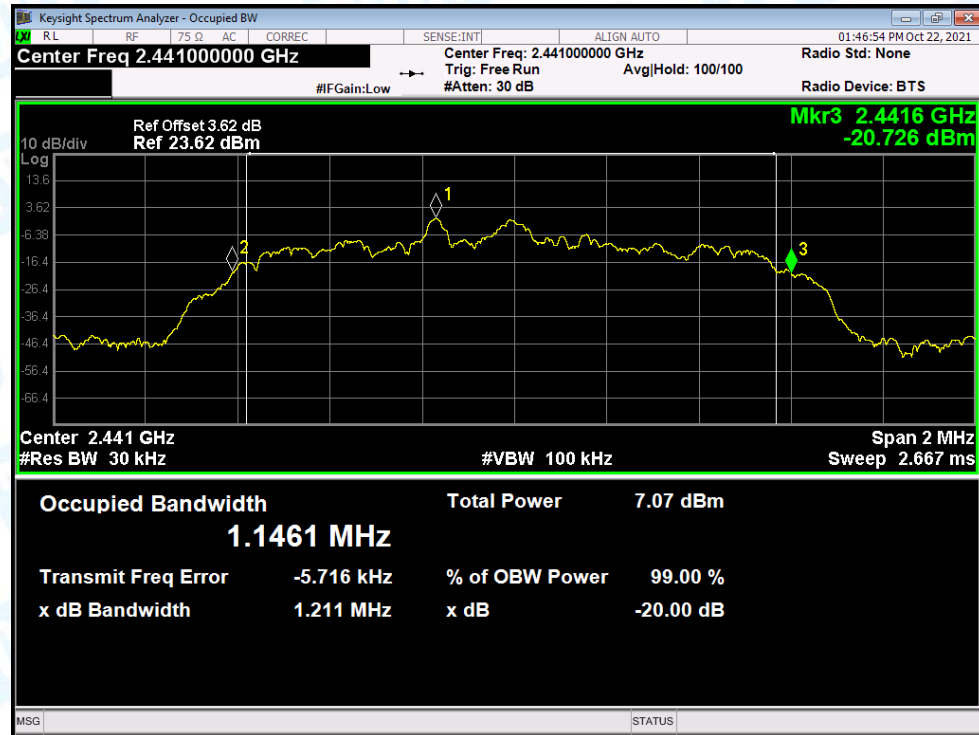
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



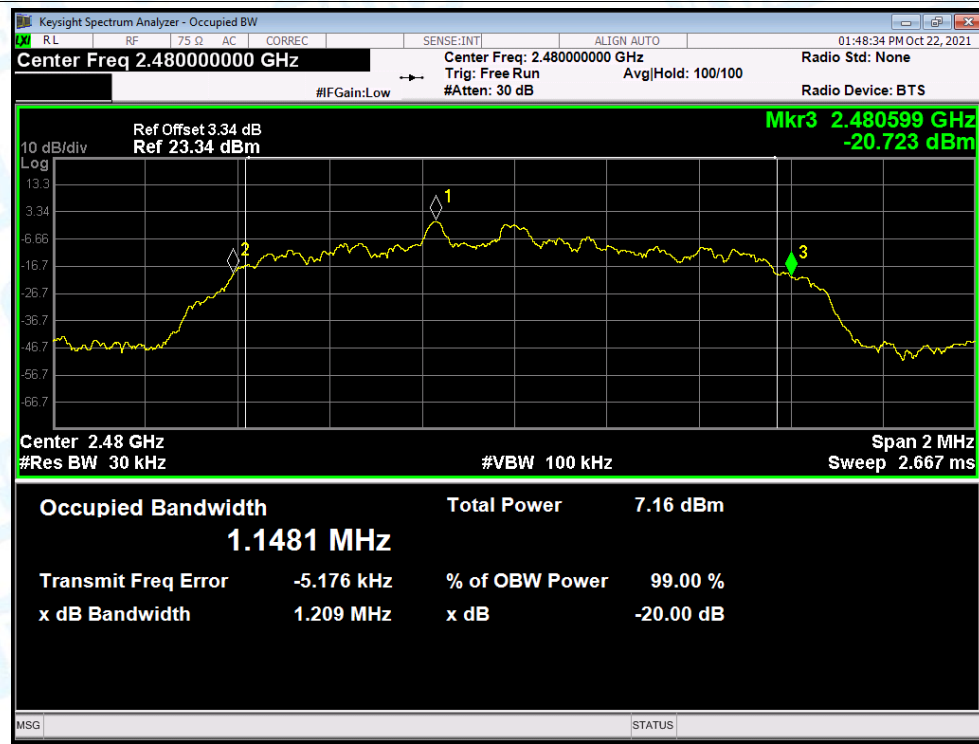
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



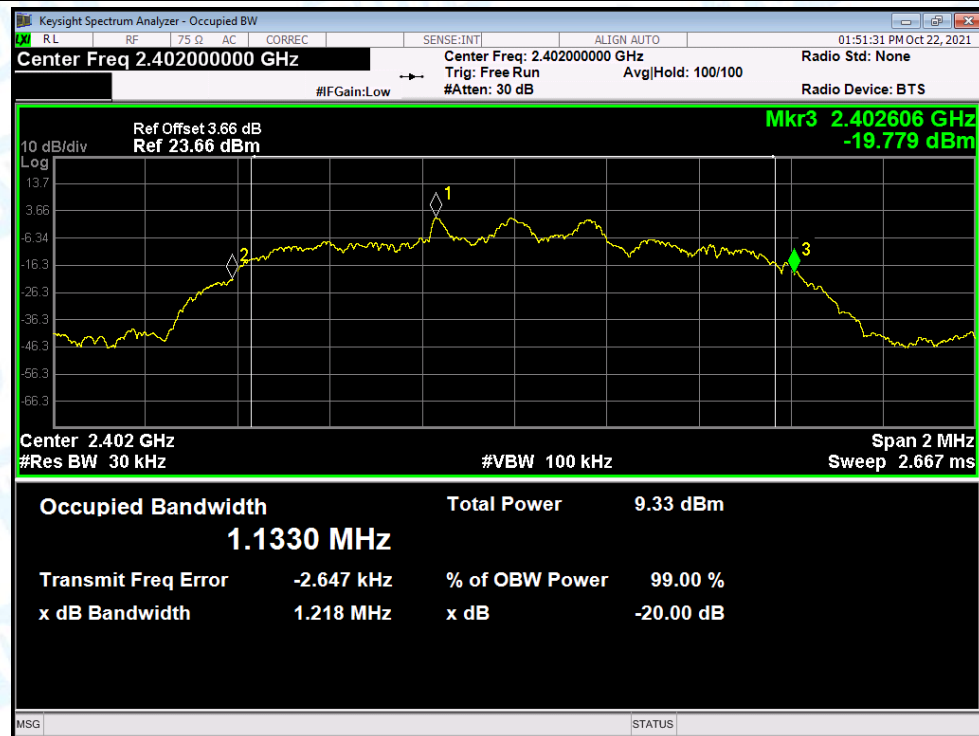
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



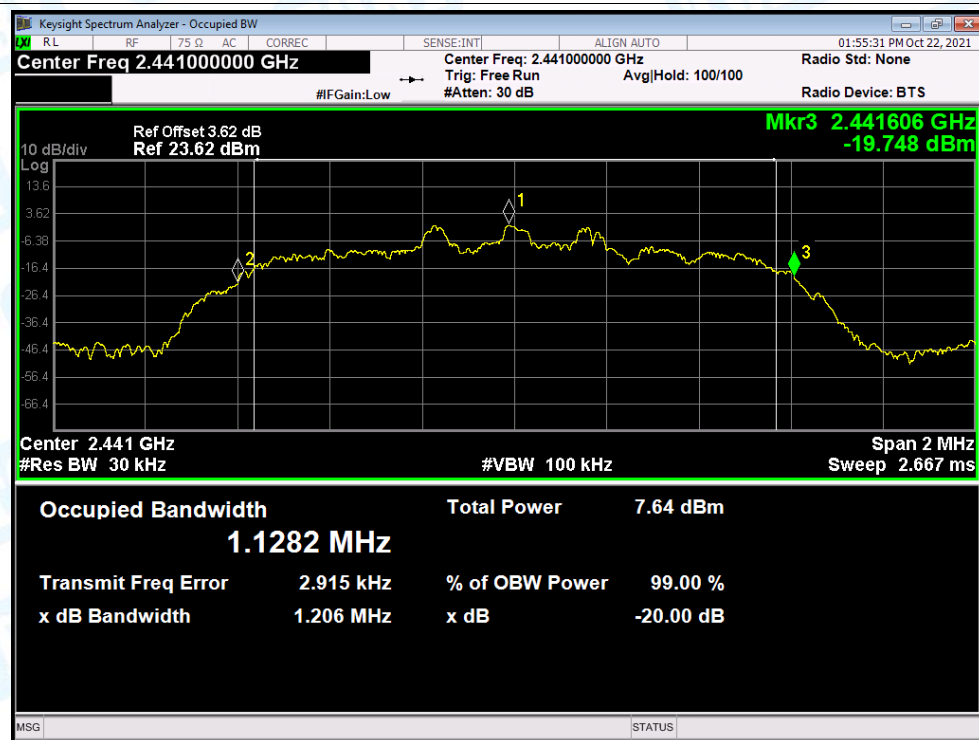
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

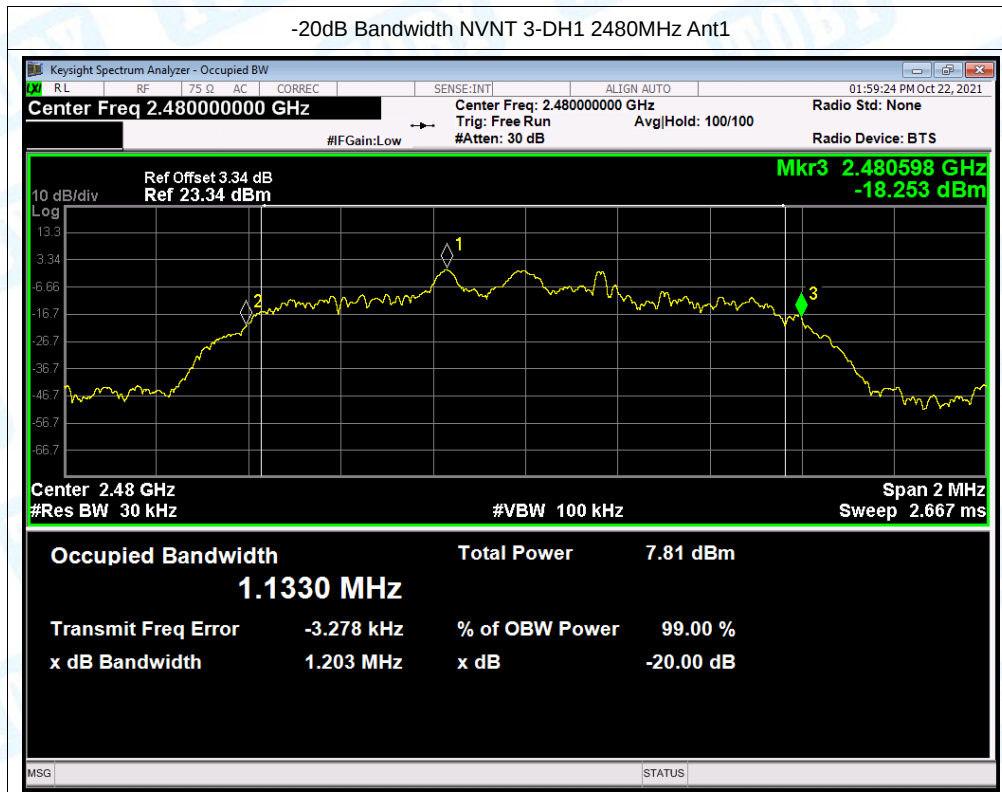


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



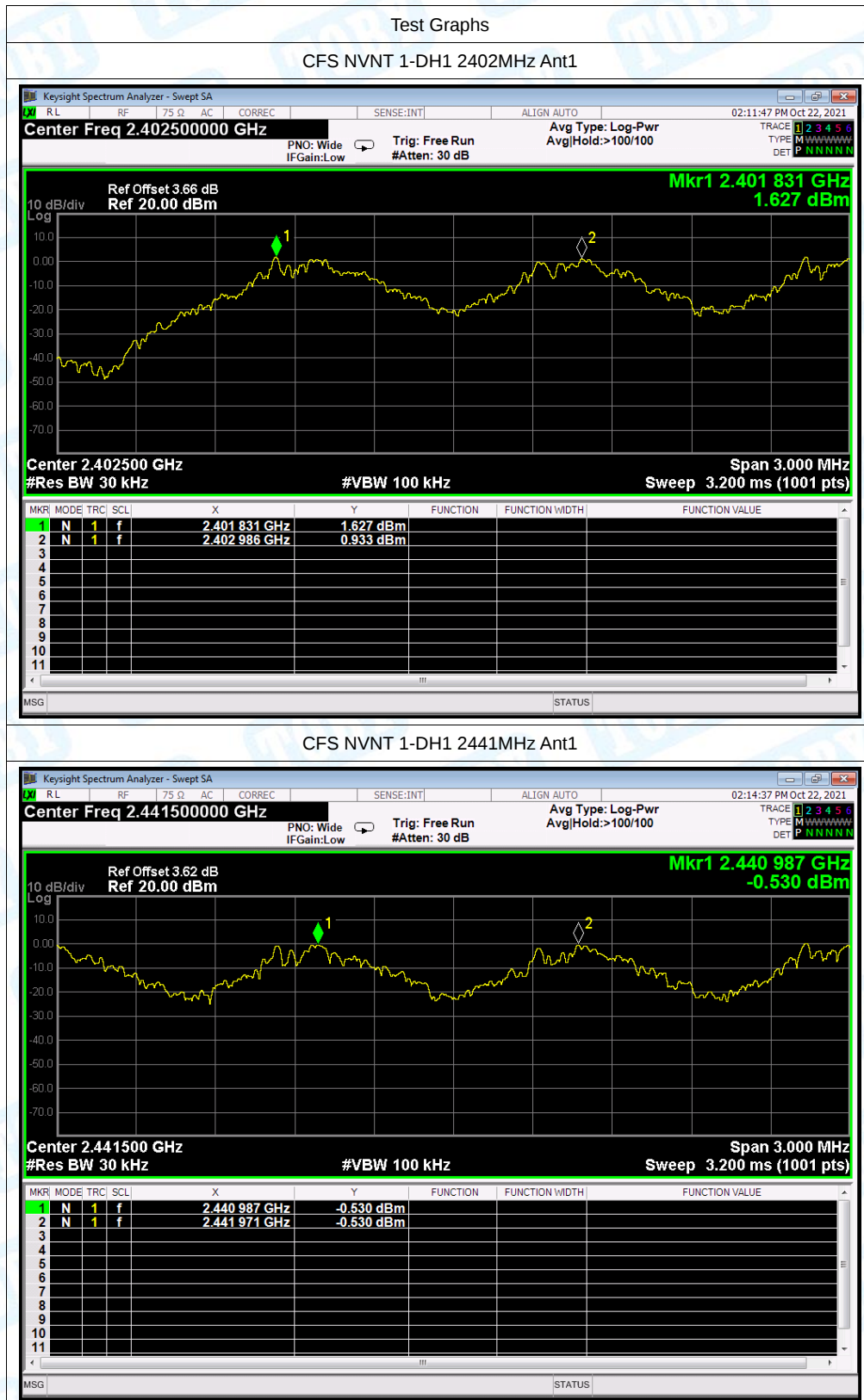
-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



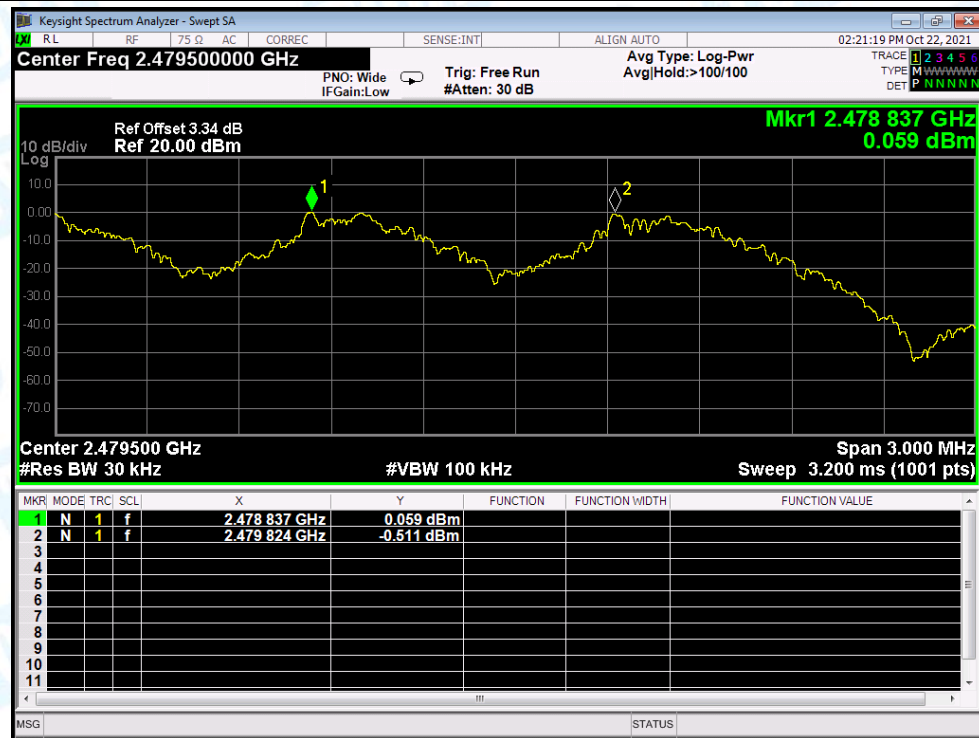


3.Carrier Frequencies Separation

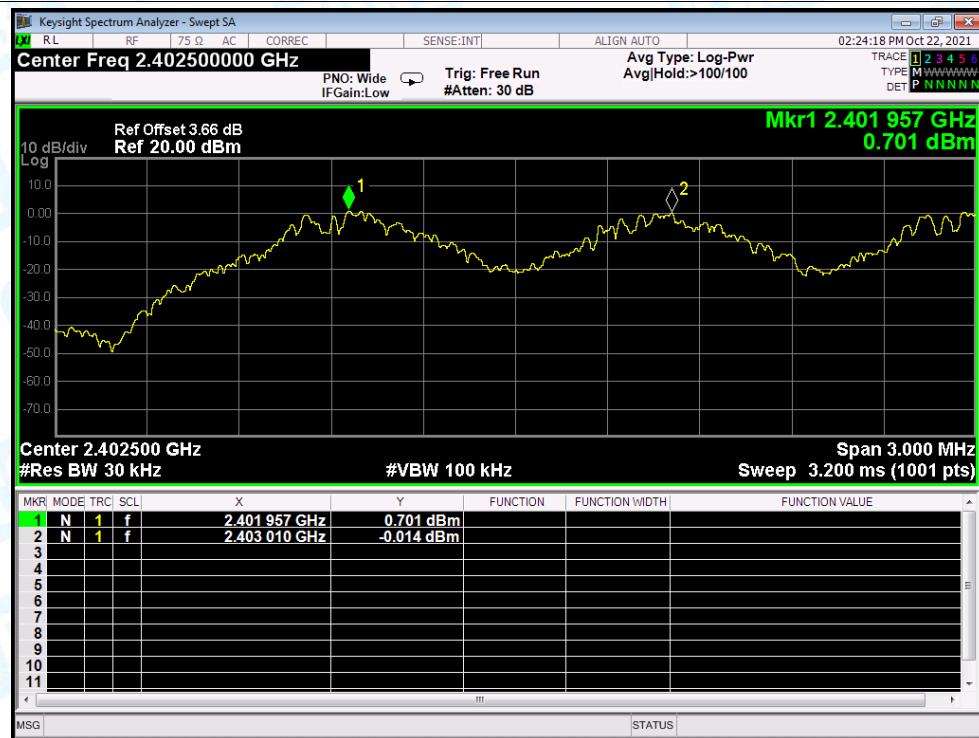
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2401.831	2402.986	1.155	0.577	Pass
NVNT	1-DH1	Ant1	2440.987	2441.971	0.984	0.581	Pass
NVNT	1-DH1	Ant1	2478.837	2479.824	0.987	0.581	Pass
NVNT	2-DH1	Ant1	2401.957	2403.01	1.053	0.809	Pass
NVNT	2-DH1	Ant1	2440.825	2441.827	1.002	0.807	Pass
NVNT	2-DH1	Ant1	2478.996	2479.824	0.828	0.806	Pass
NVNT	3-DH1	Ant1	2401.996	2402.833	0.837	0.812	Pass
NVNT	3-DH1	Ant1	2440.825	2441.824	0.999	0.804	Pass
NVNT	3-DH1	Ant1	2478.972	2479.992	1.02	0.802	Pass

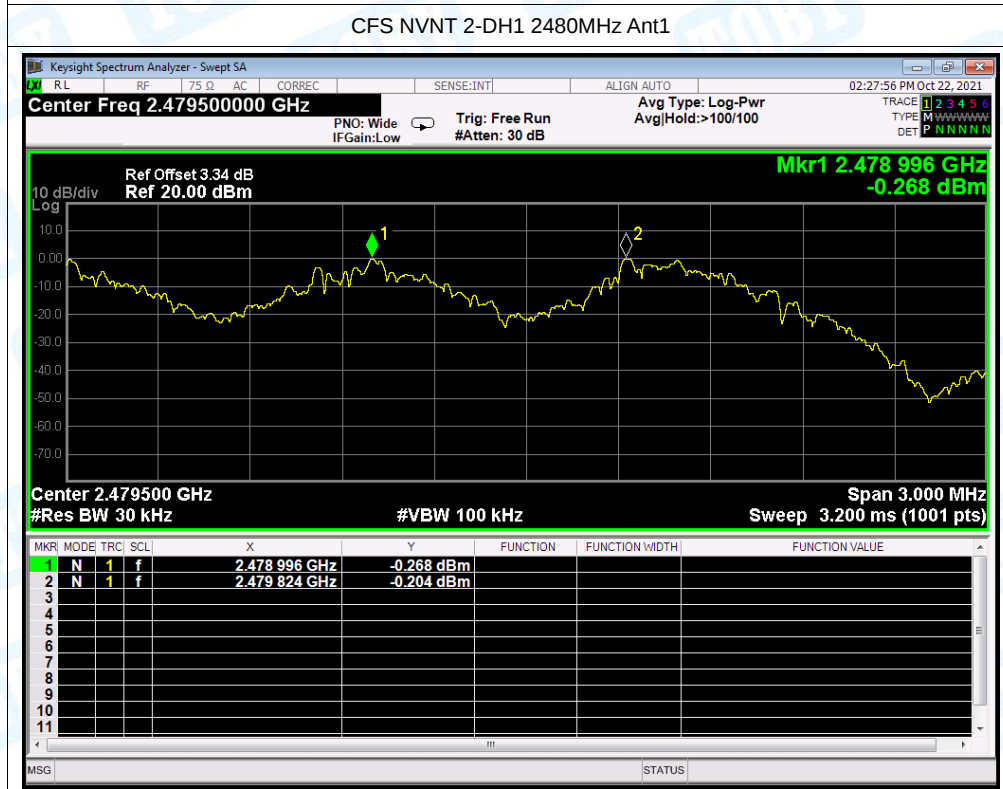
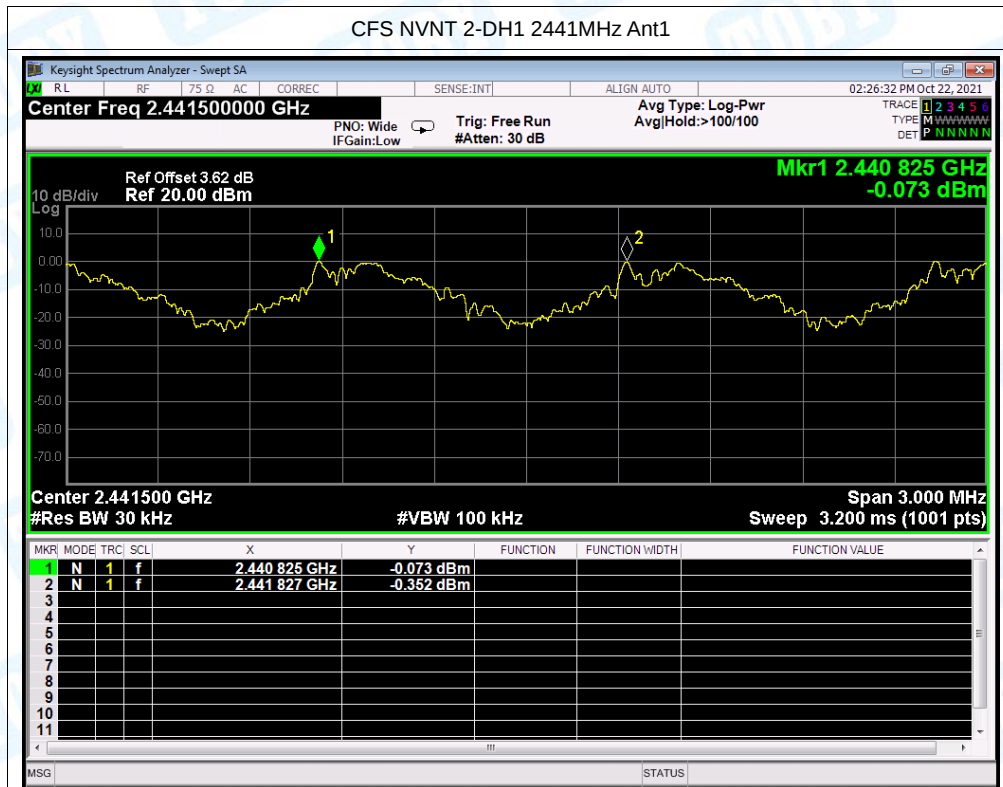


CFS NVNT 1-DH1 2480MHz Ant1

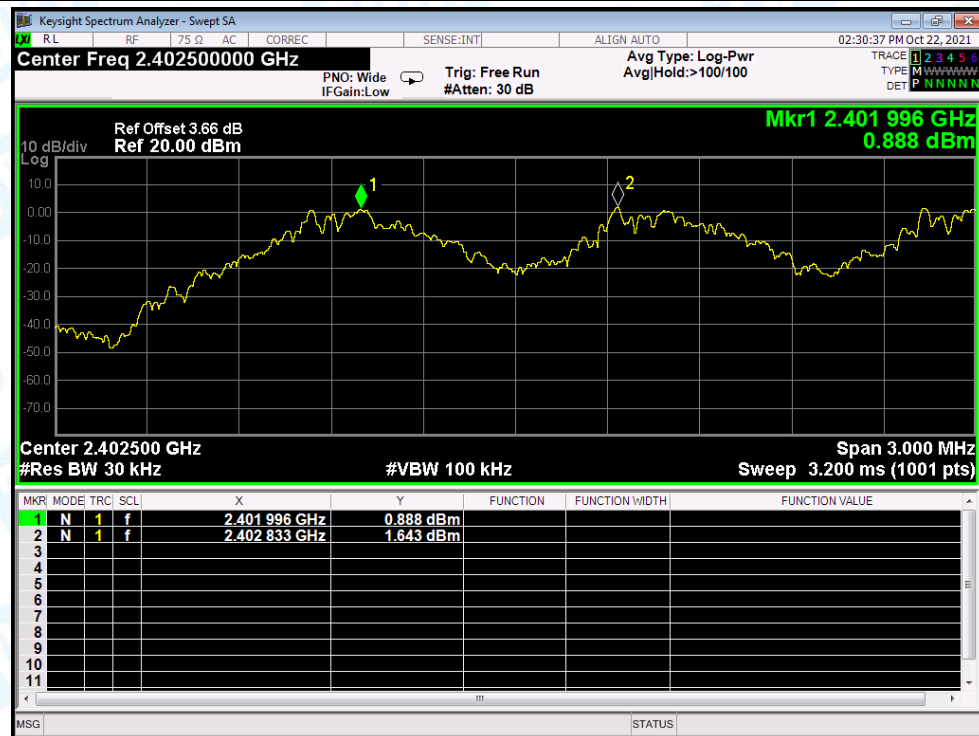


CFS NVNT 2-DH1 2402MHz Ant1



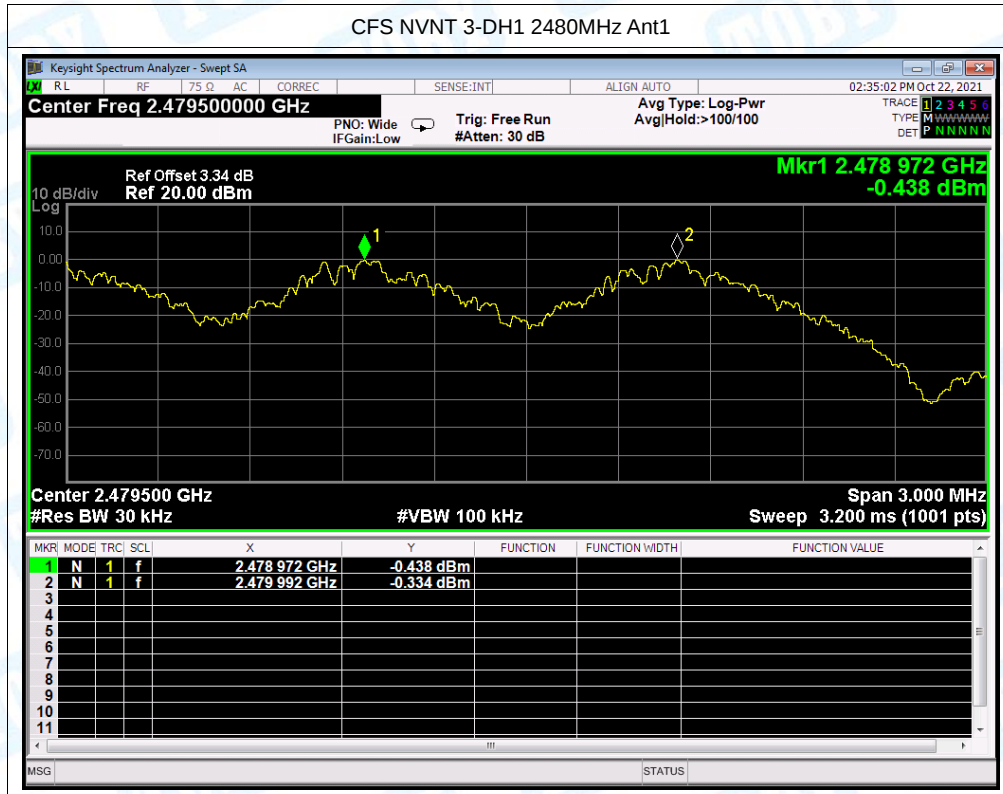


CFS NVNT 3-DH1 2402MHz Ant1



CFS NVNT 3-DH1 2441MHz Ant1

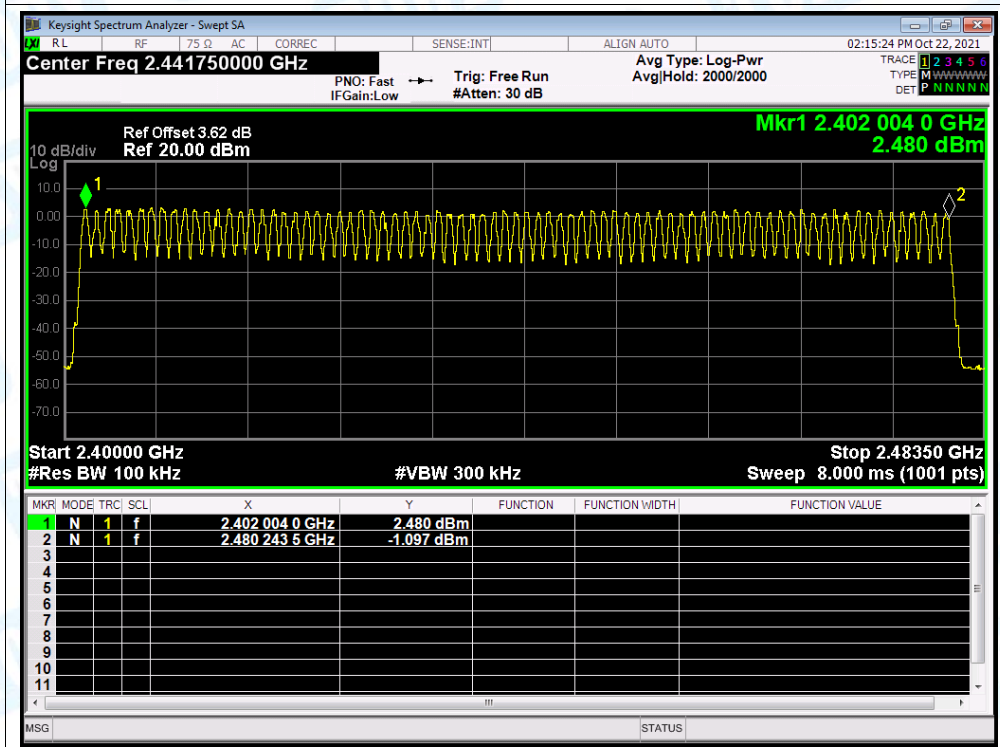




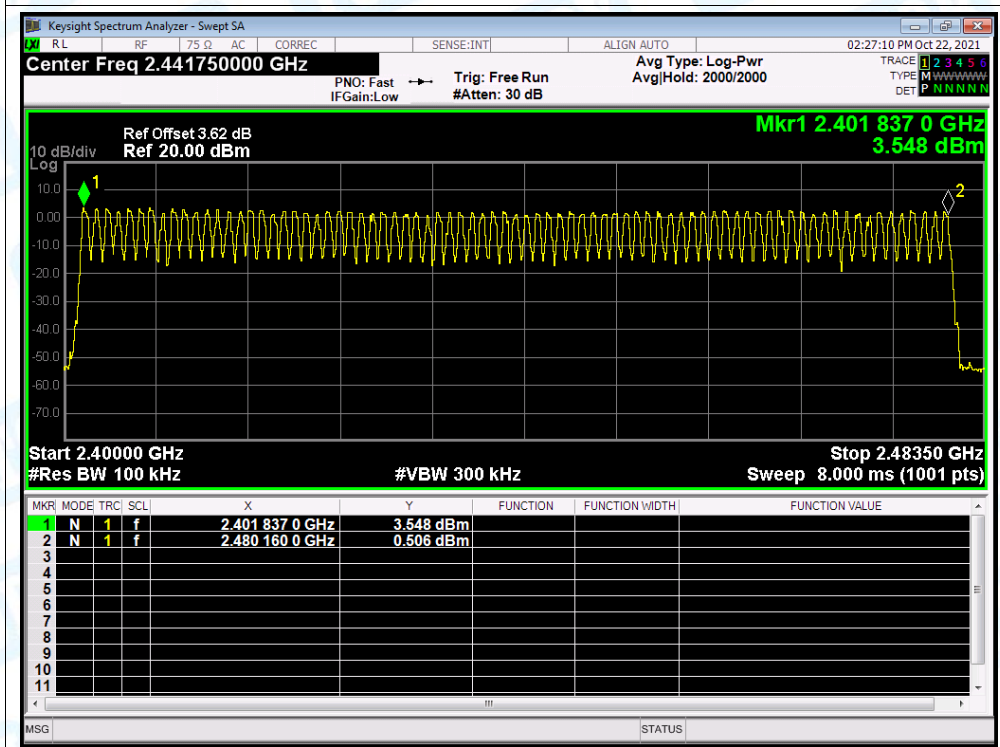
4. Number of Hopping Channel

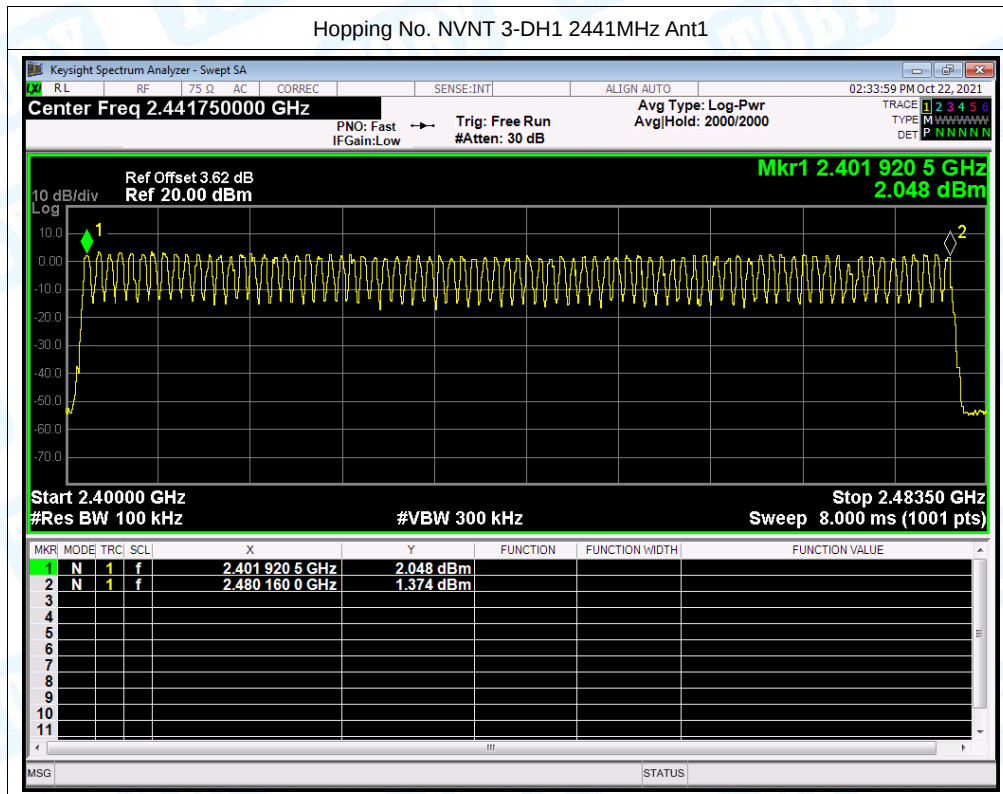
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



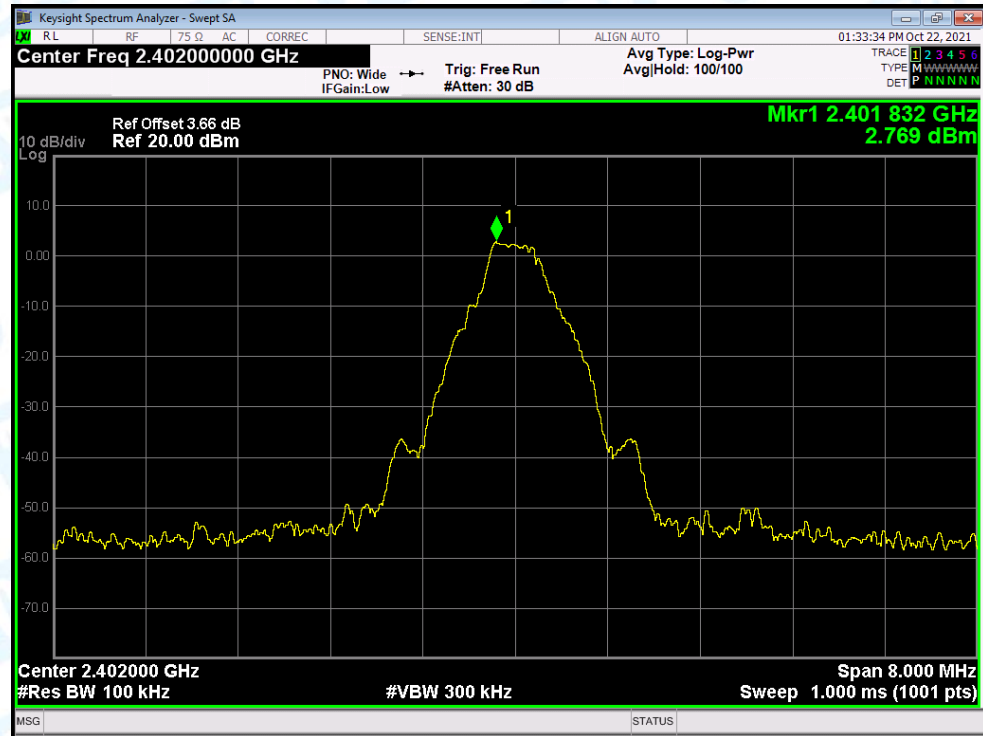


5.Band Edge

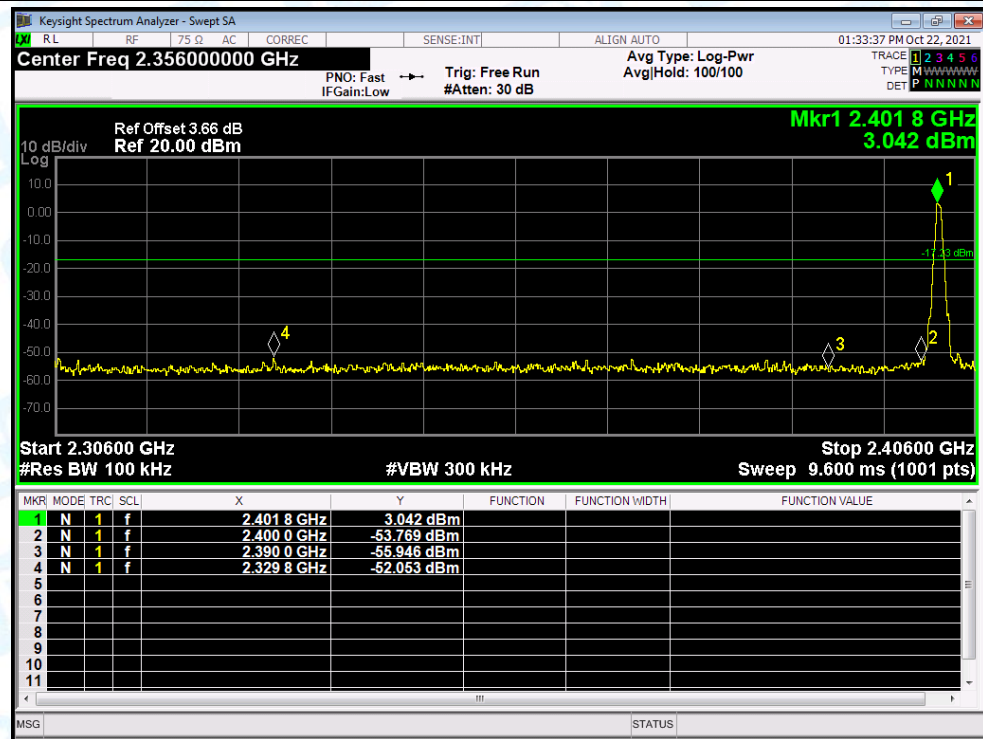
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-54.82	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-54.44	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-56.57	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-54.56	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-55.73	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.76	-20	Pass

Test Graphs

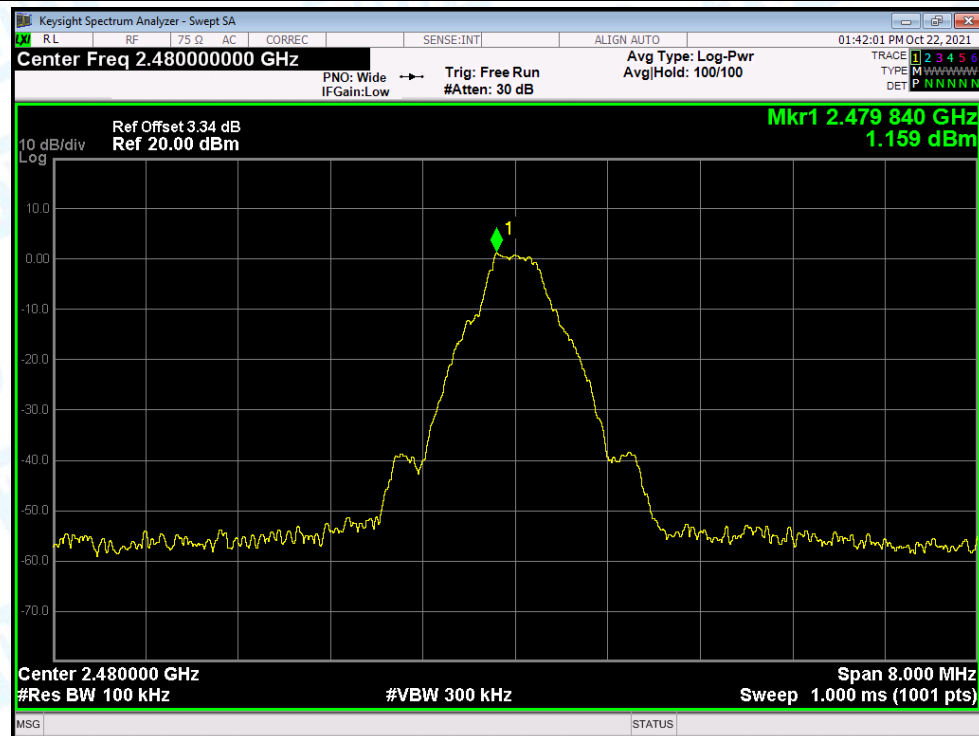
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



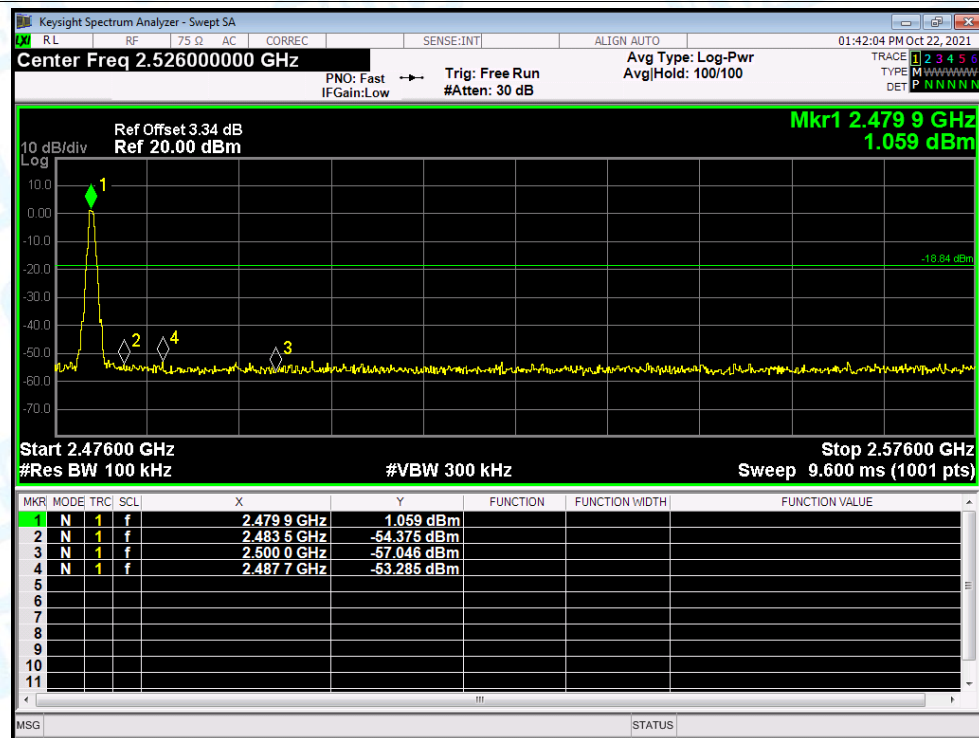
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



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



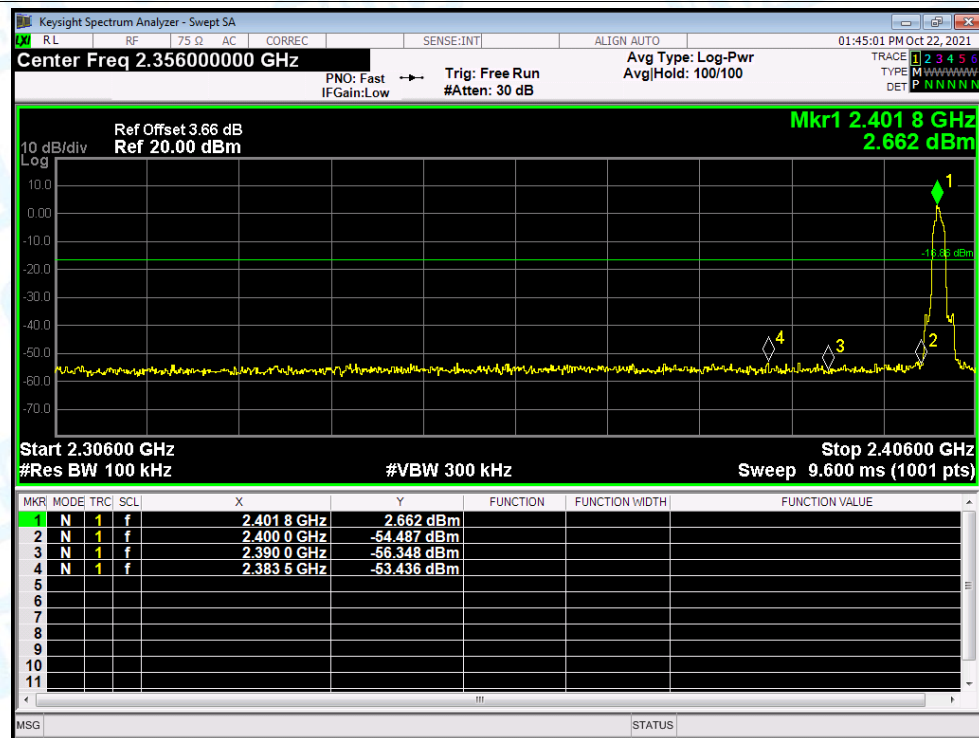
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission

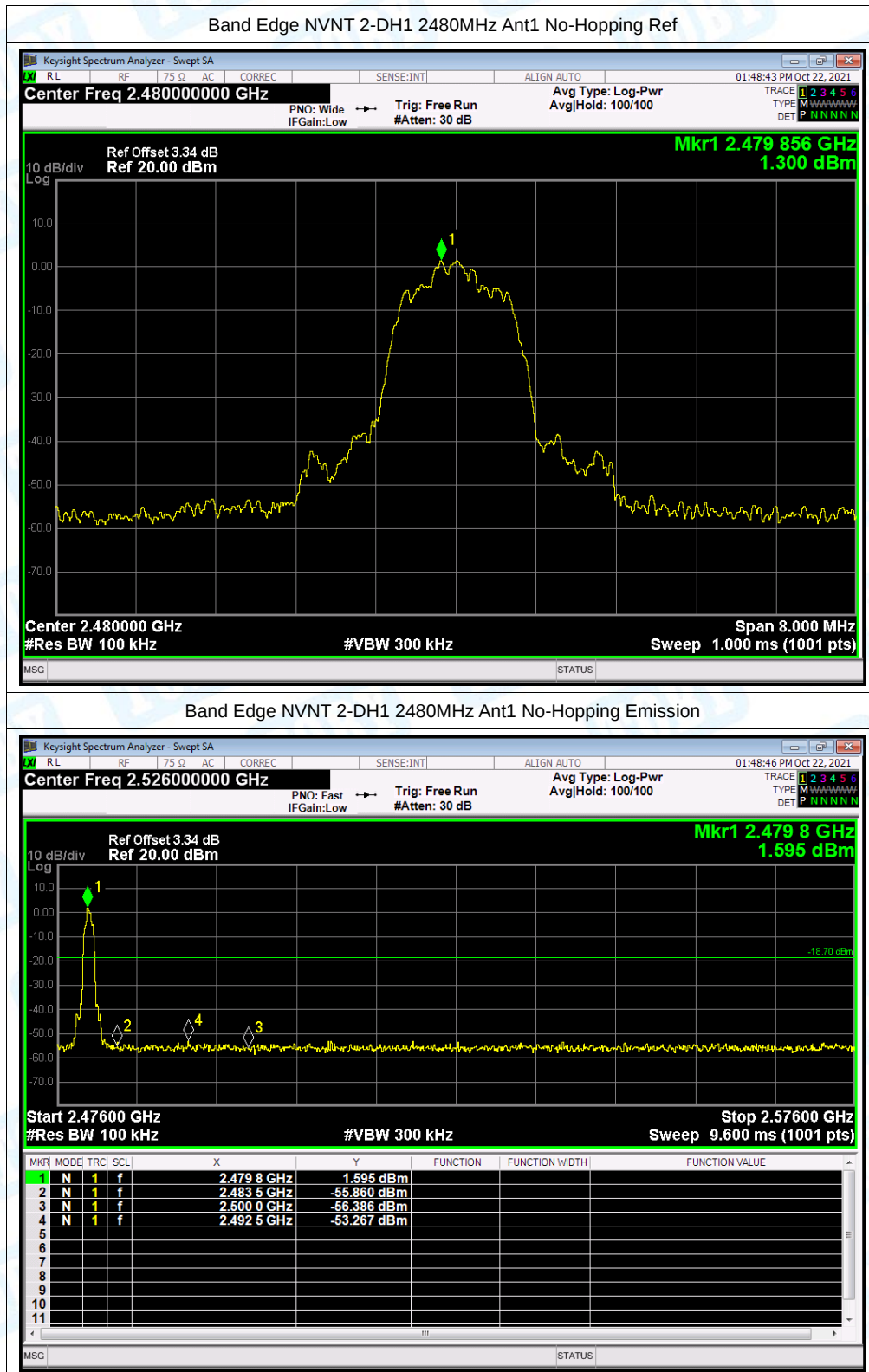


Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



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

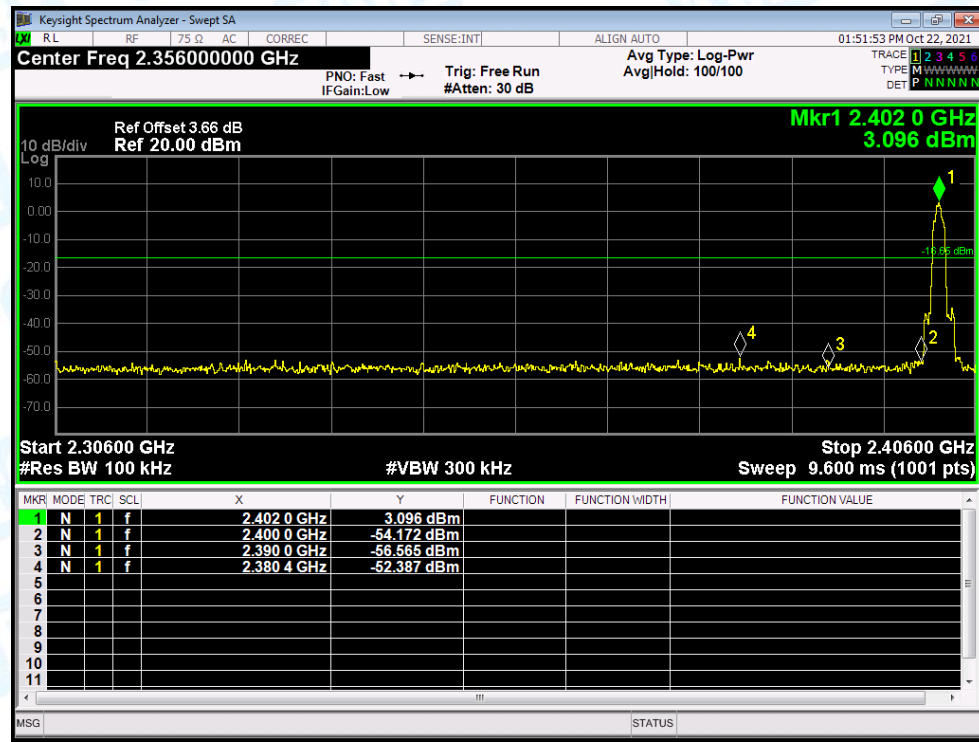


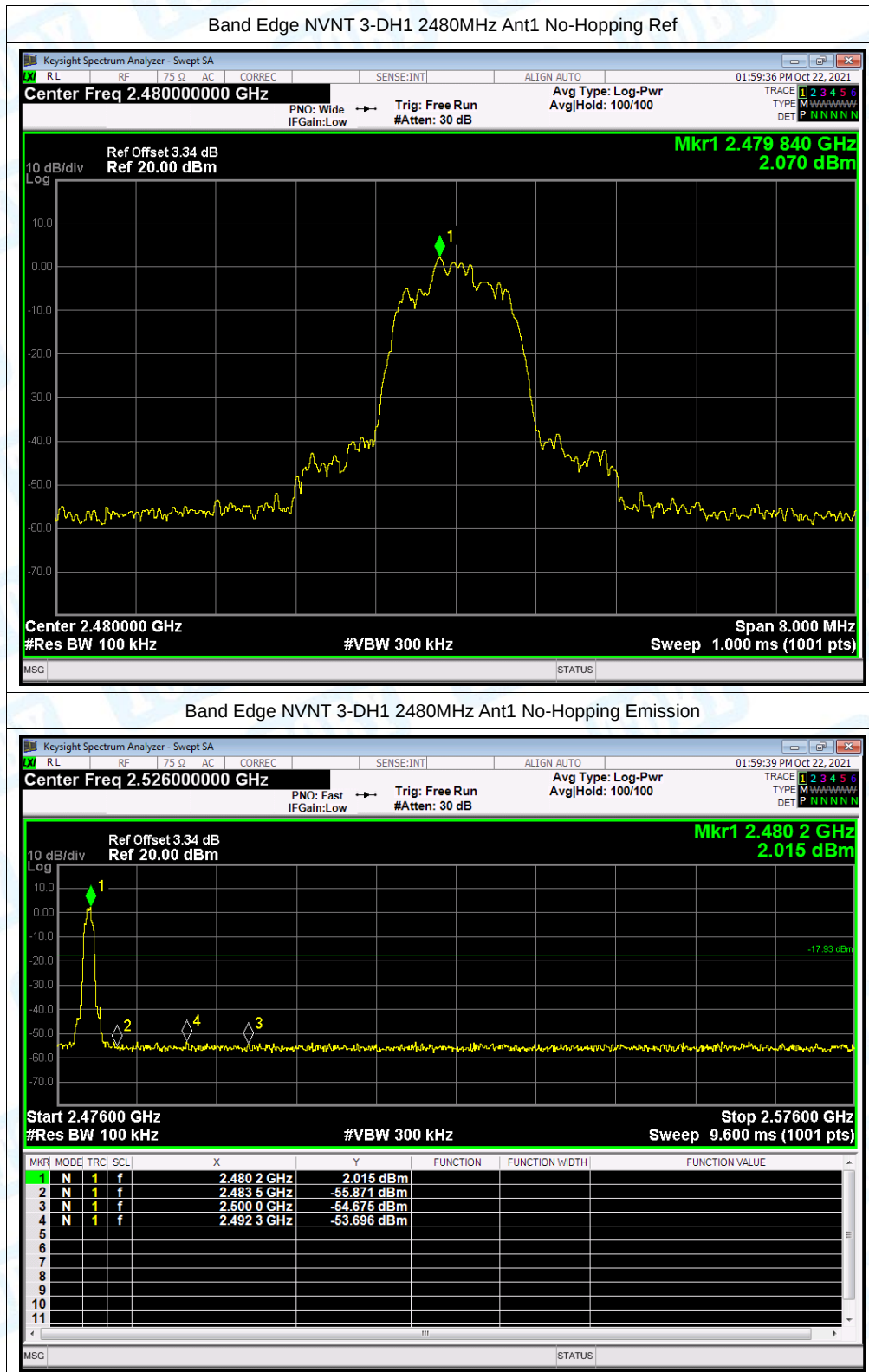


Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



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





6. Band Edge(Hopping)

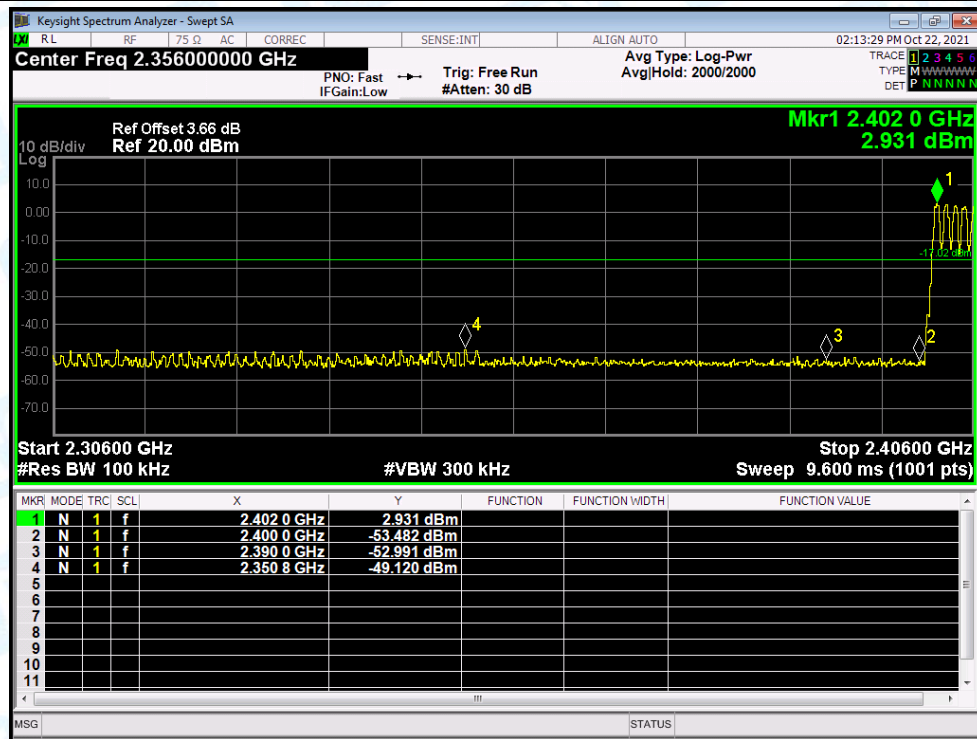
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-52.09	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-54.3	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-52.23	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-55.19	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-52.86	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-54.57	-20	Pass

Test Graphs

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



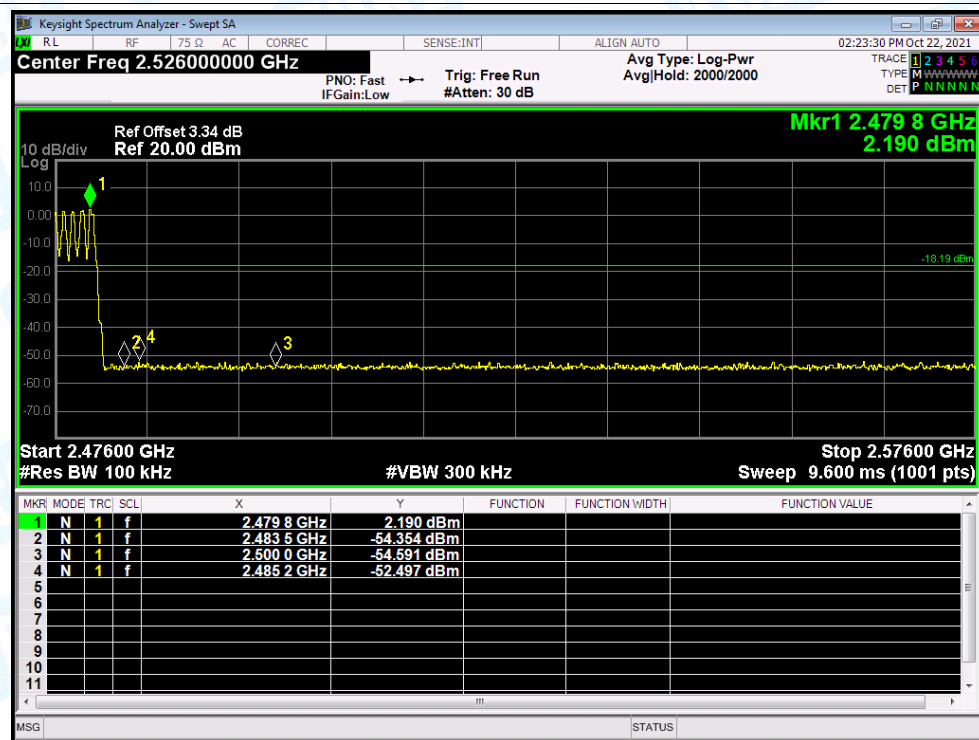
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



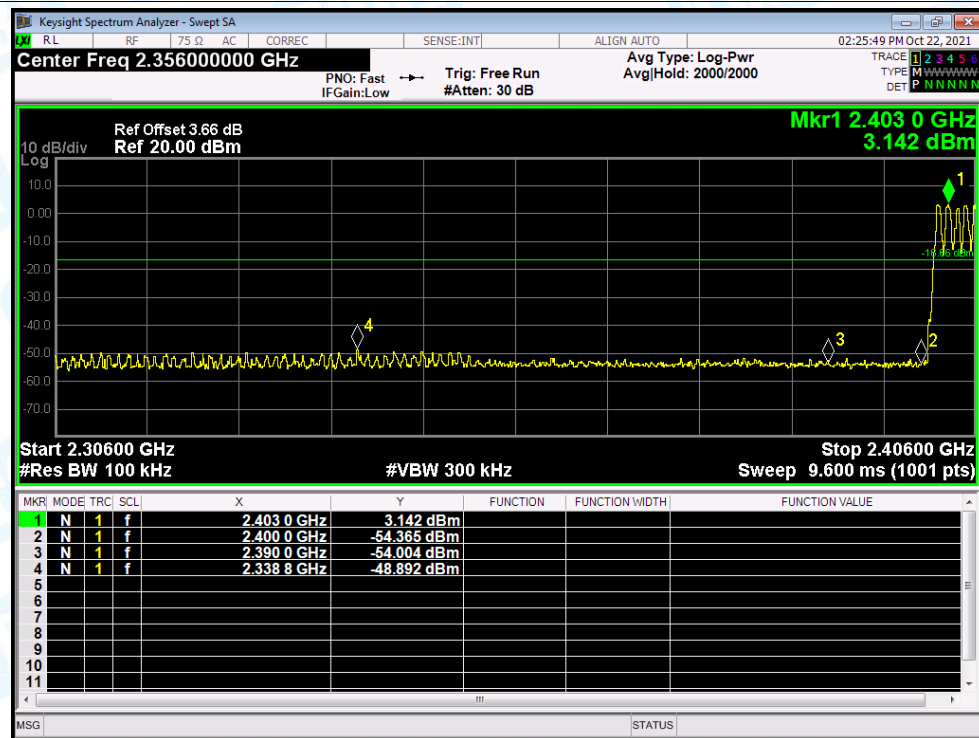
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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

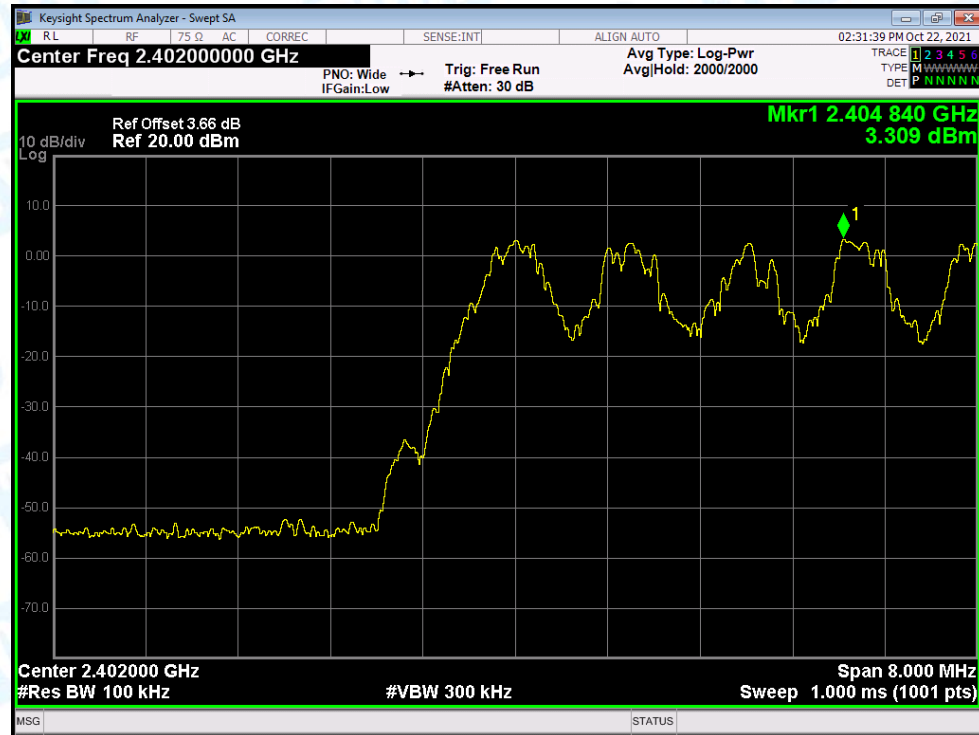


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission

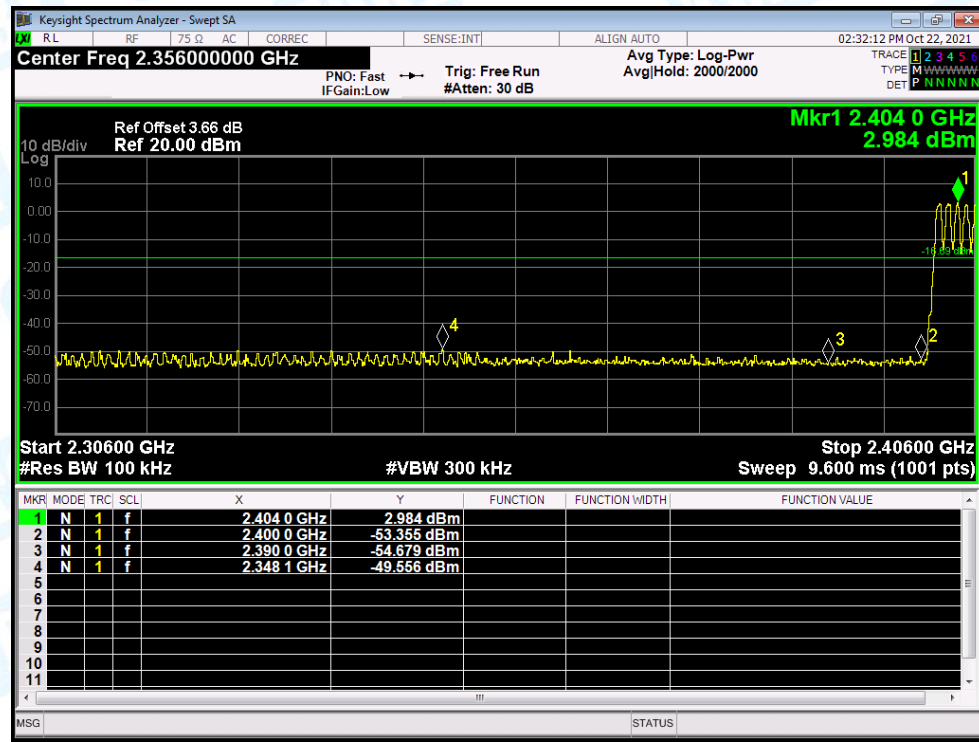




Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



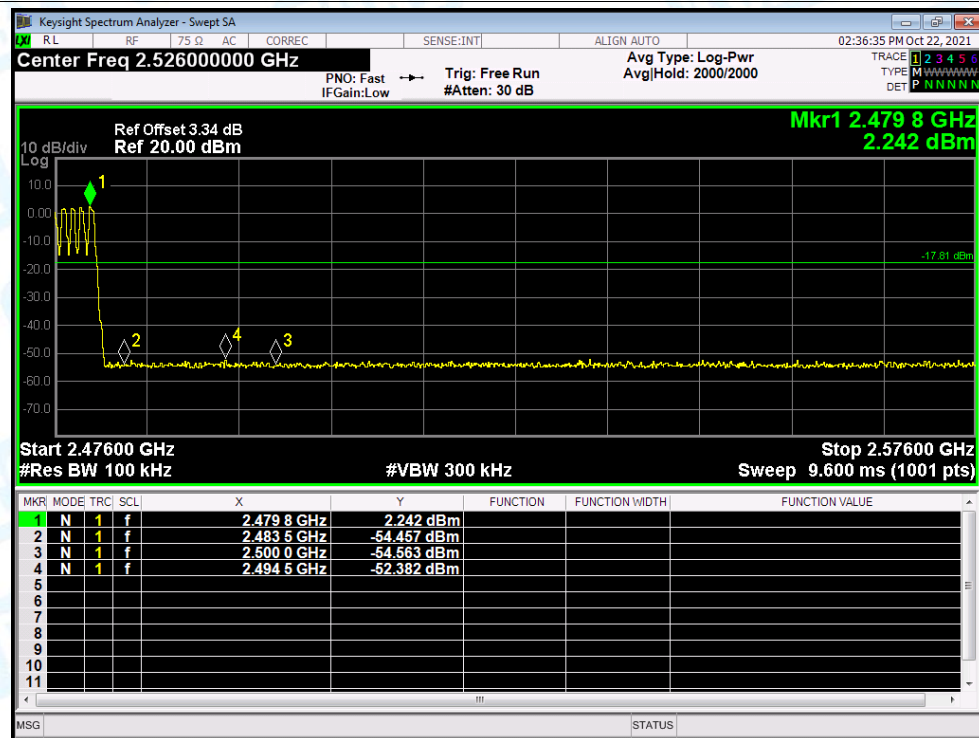
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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

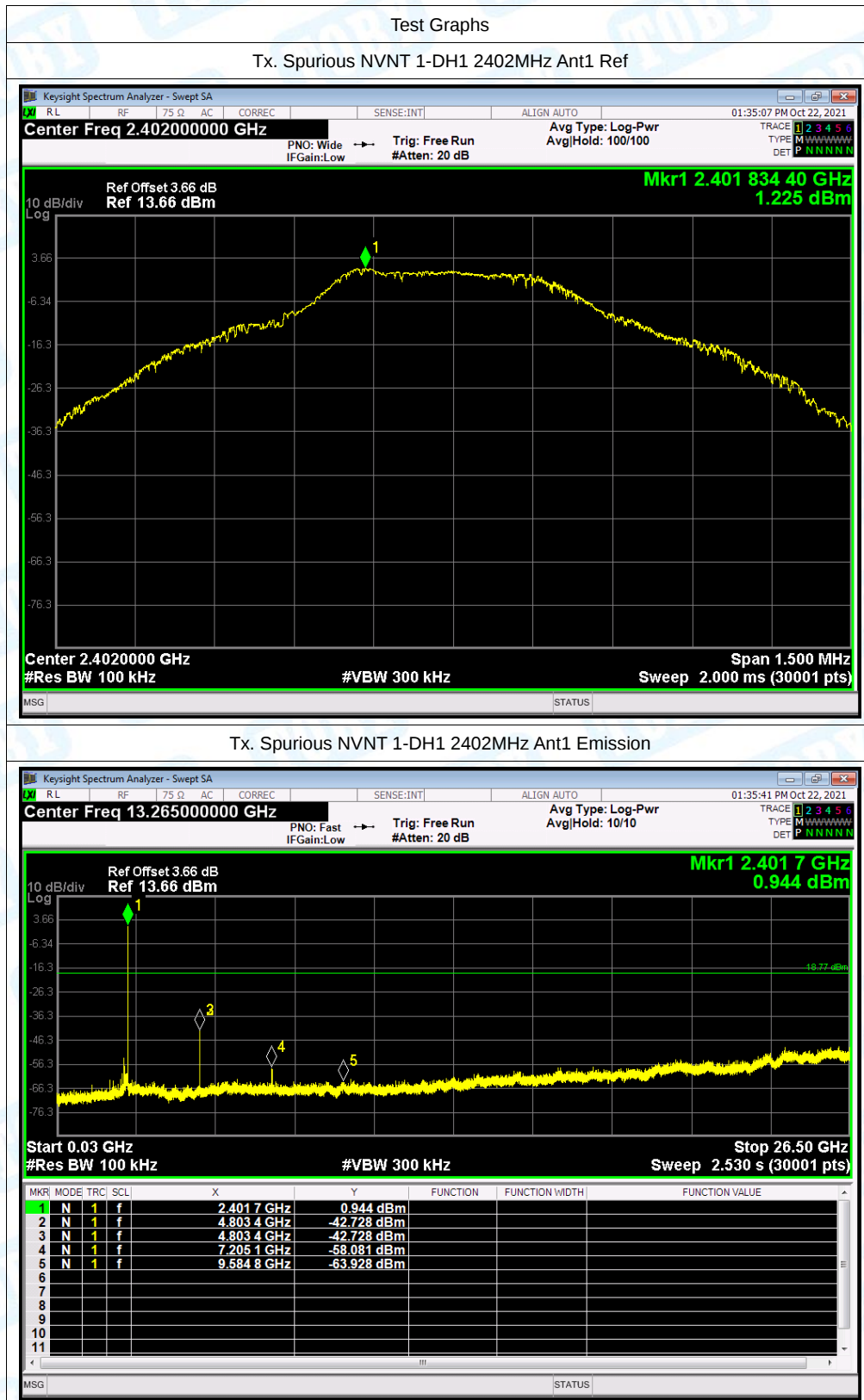


Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Emission



7. Conducted RF Spurious Emission

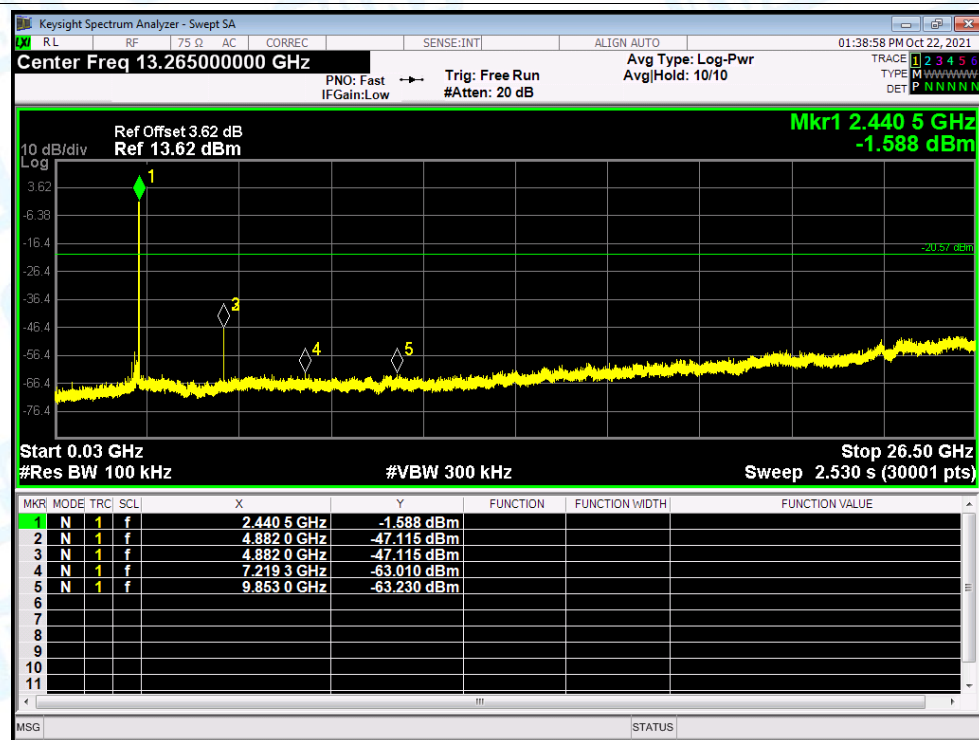
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-43.95	-20	Pass
NVNT	1-DH1	2441	Ant1	-46.54	-20	Pass
NVNT	1-DH1	2480	Ant1	-48.21	-20	Pass
NVNT	2-DH1	2402	Ant1	-46.47	-20	Pass
NVNT	2-DH1	2441	Ant1	-45.91	-20	Pass
NVNT	2-DH1	2480	Ant1	-49.25	-20	Pass
NVNT	3-DH1	2402	Ant1	-48.81	-20	Pass
NVNT	3-DH1	2441	Ant1	-44.37	-20	Pass
NVNT	3-DH1	2480	Ant1	-48.63	-20	Pass



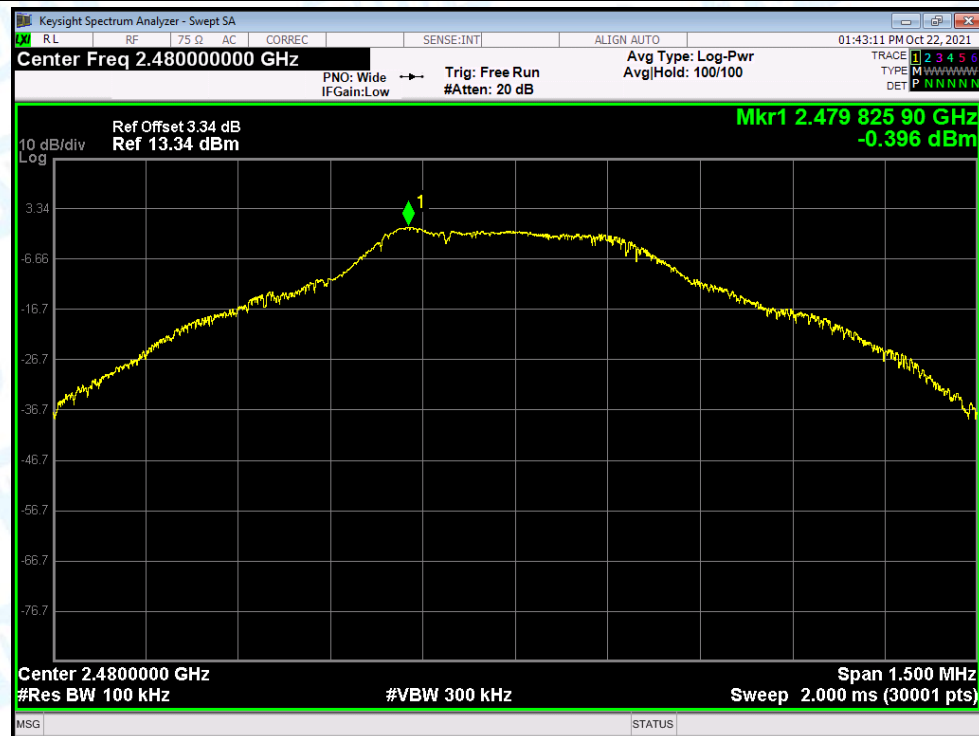
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



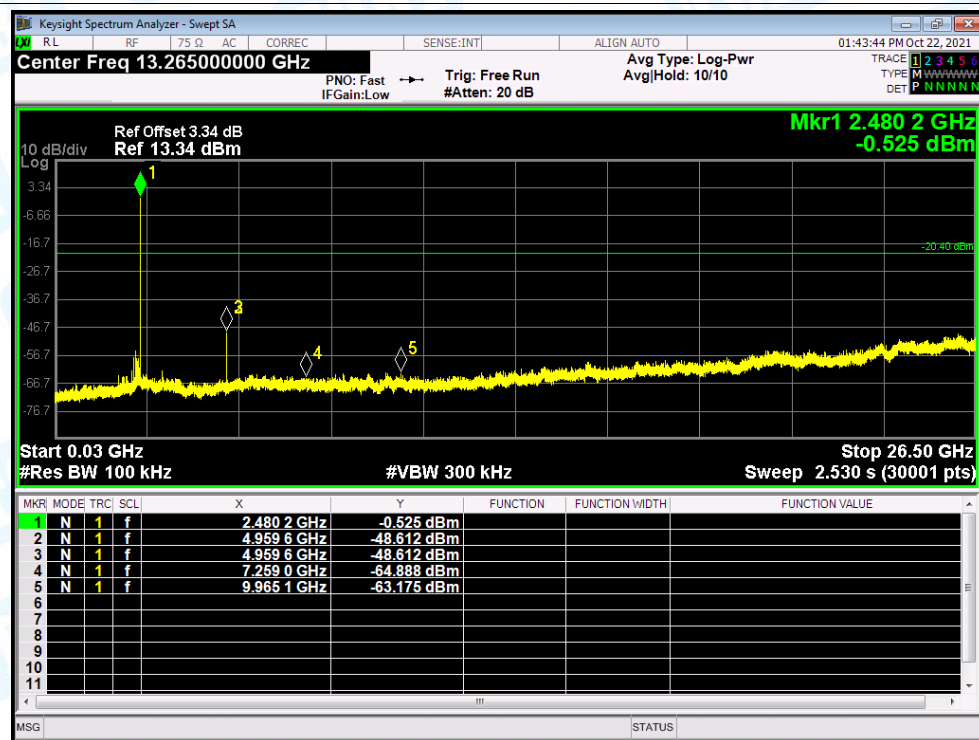
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



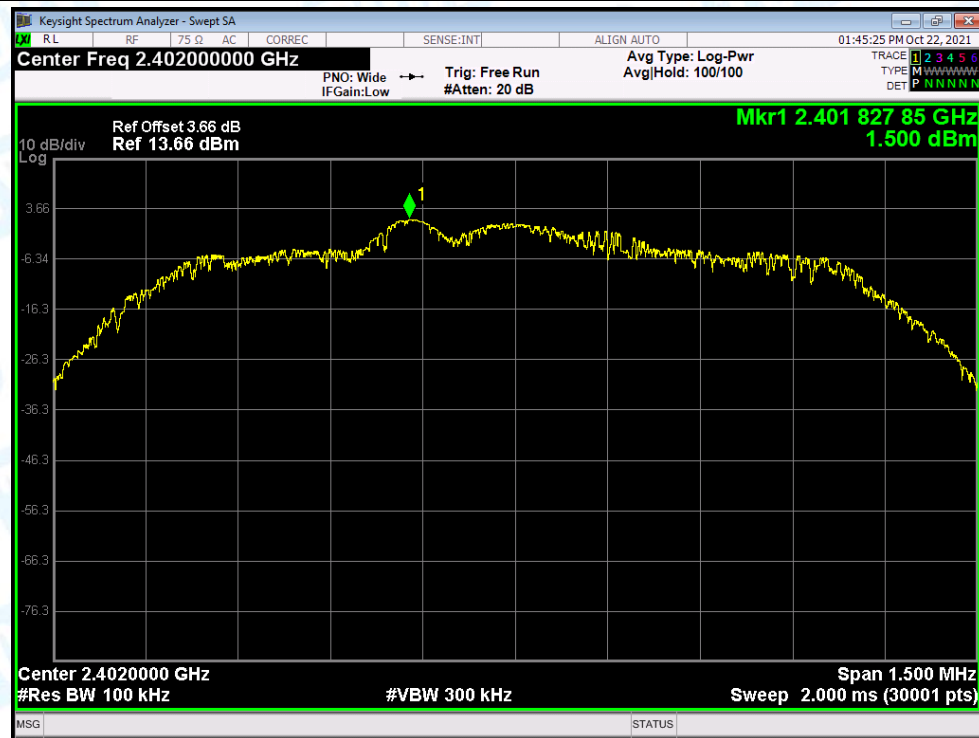
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



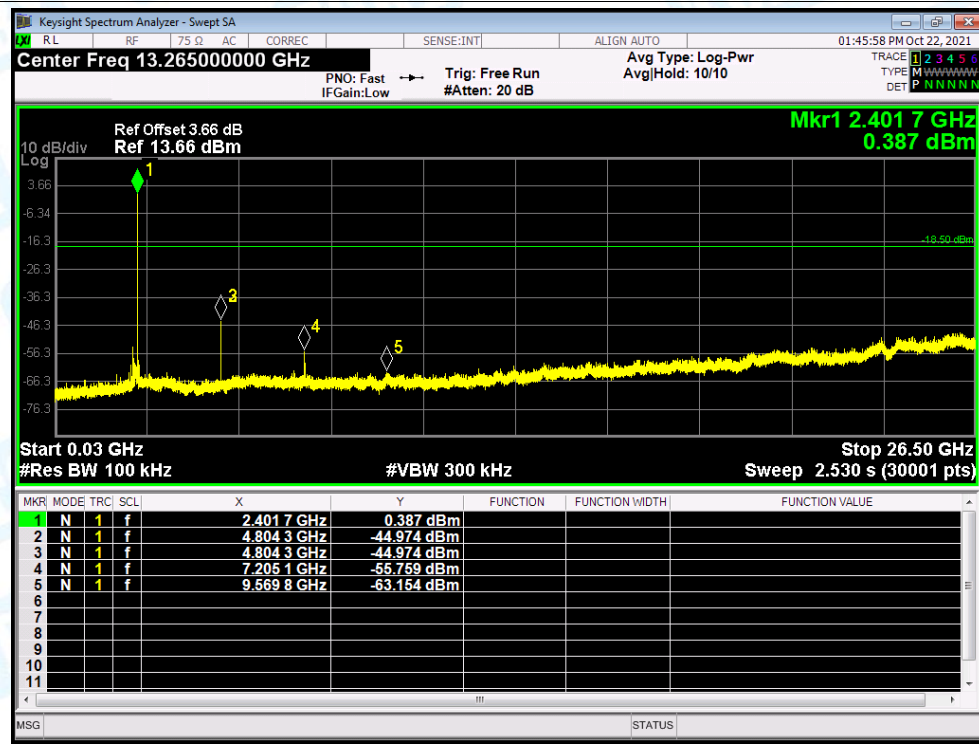
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



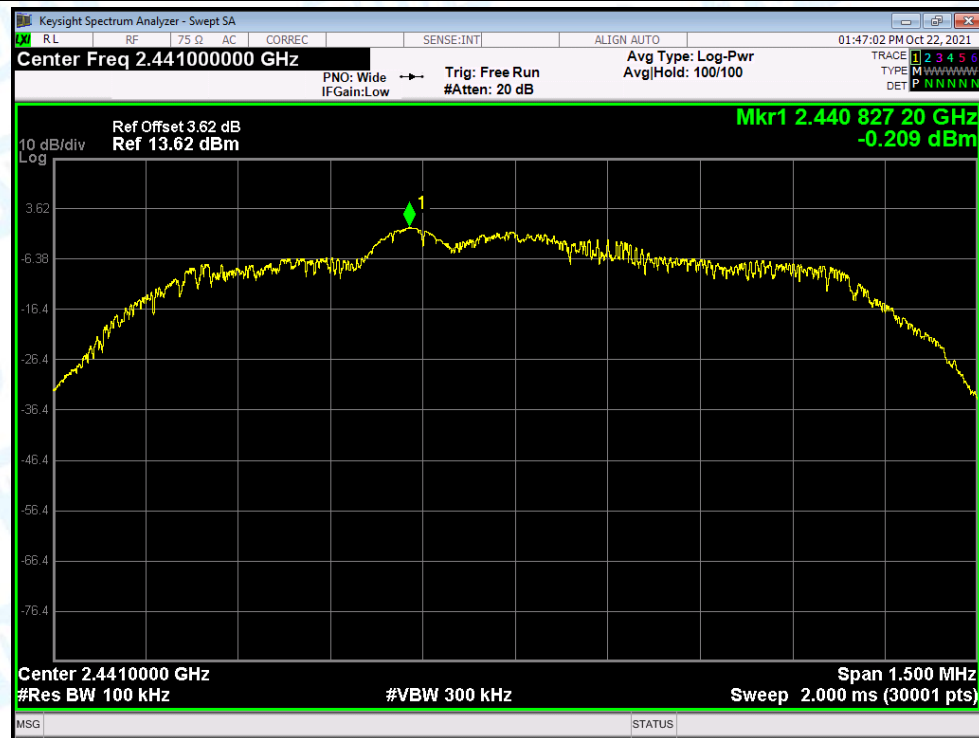
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



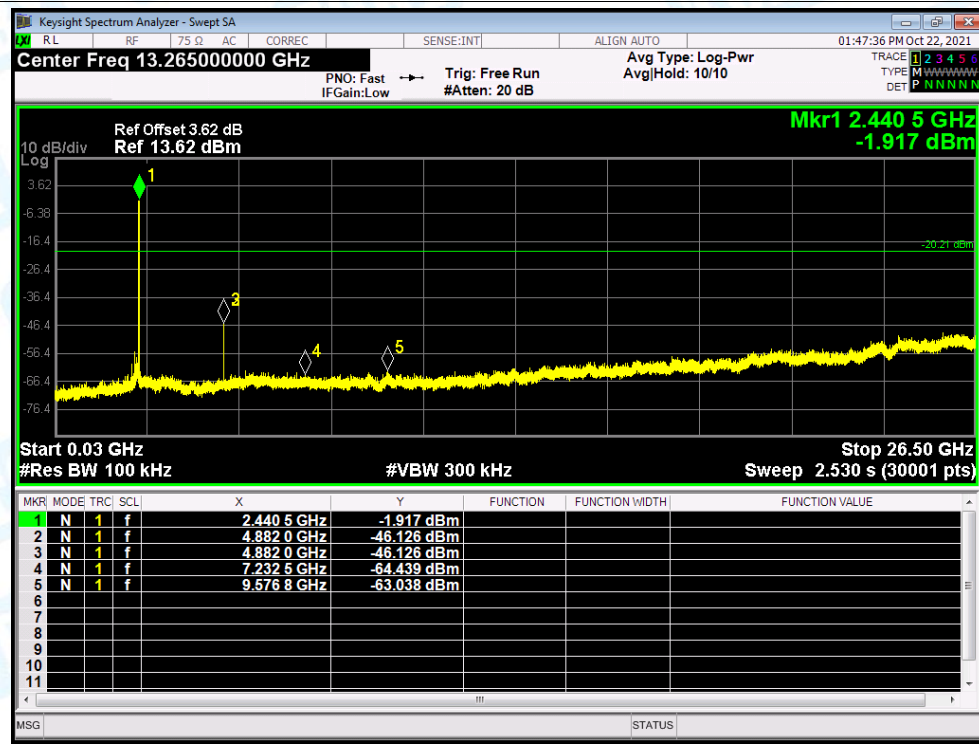
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



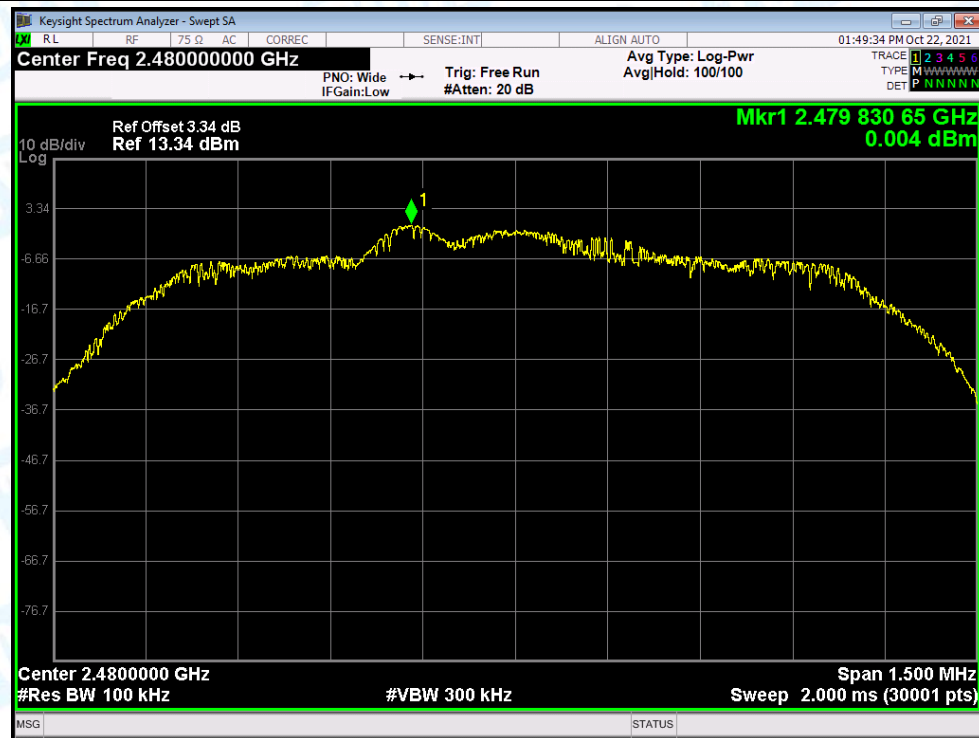
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



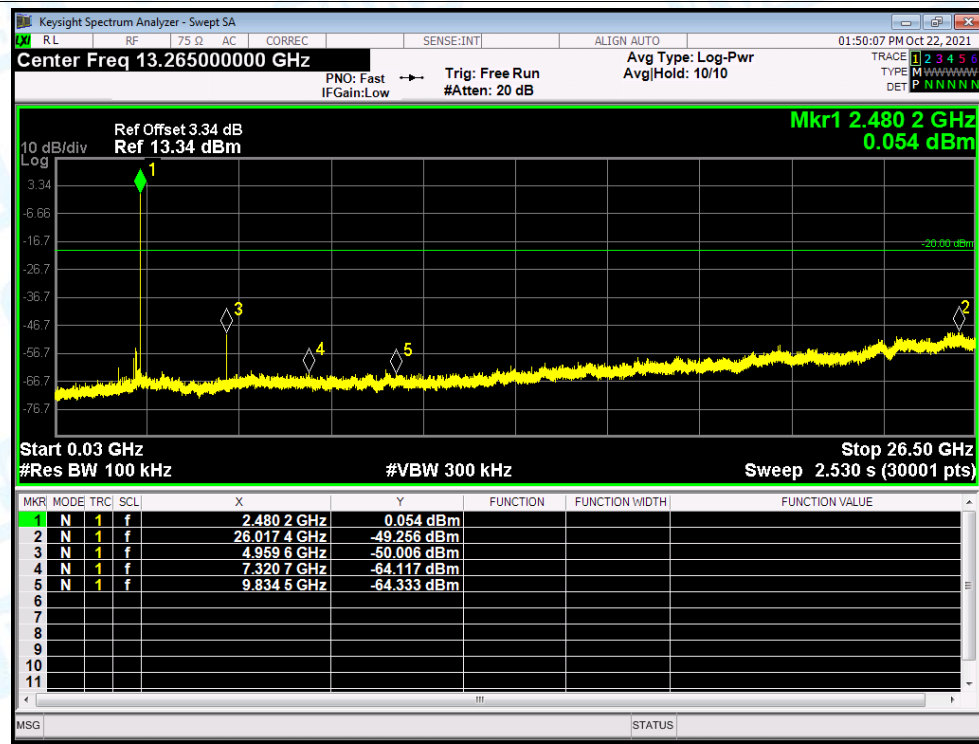
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



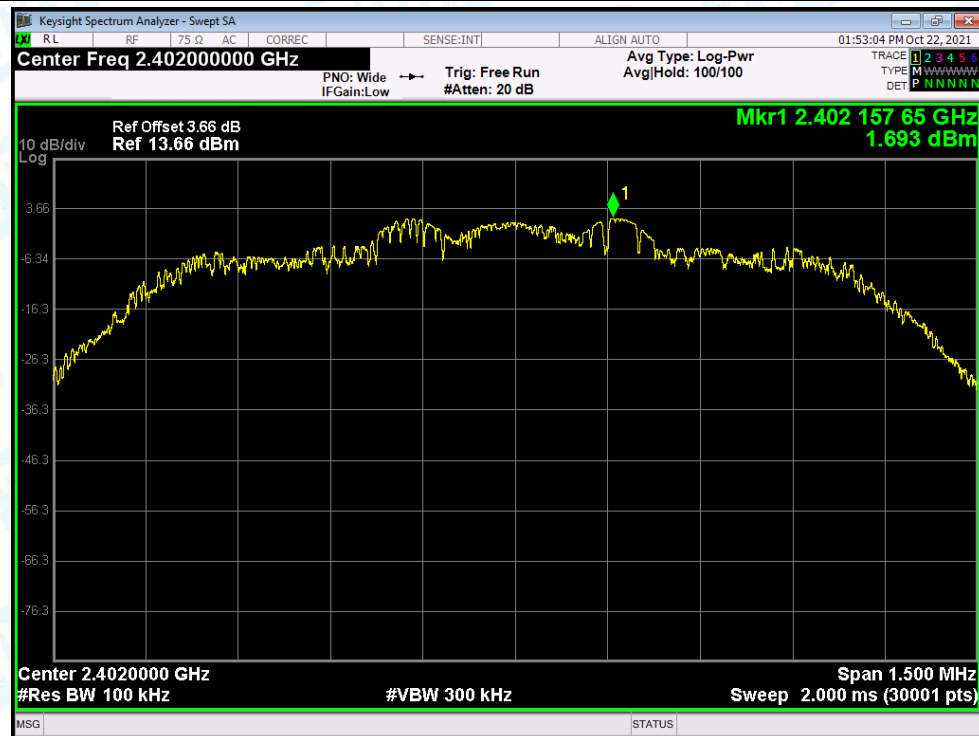
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



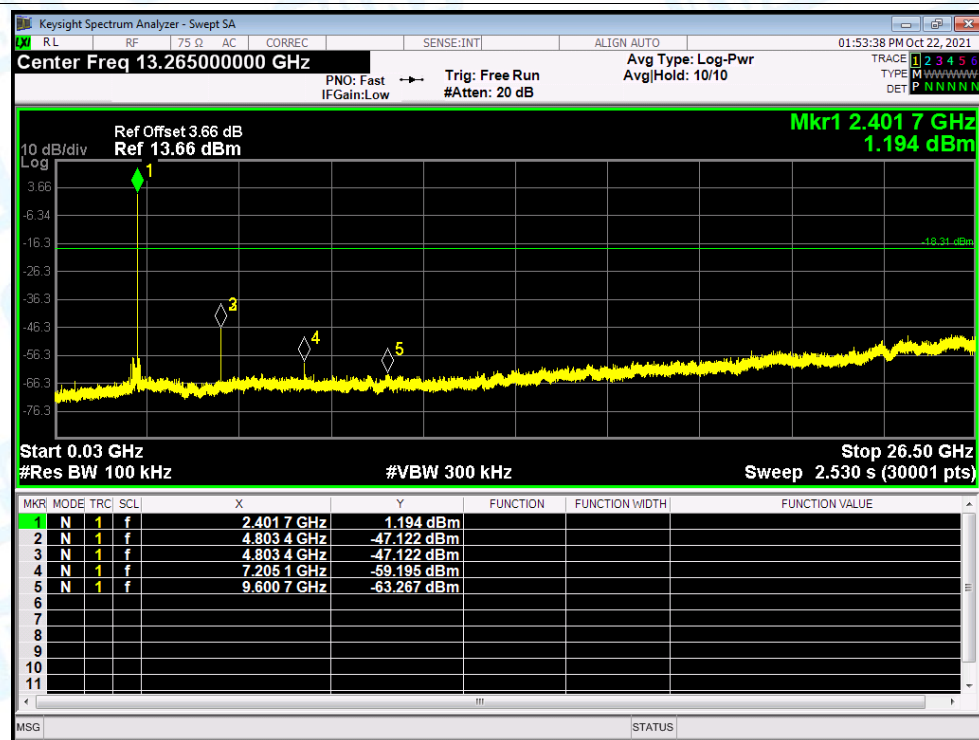
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



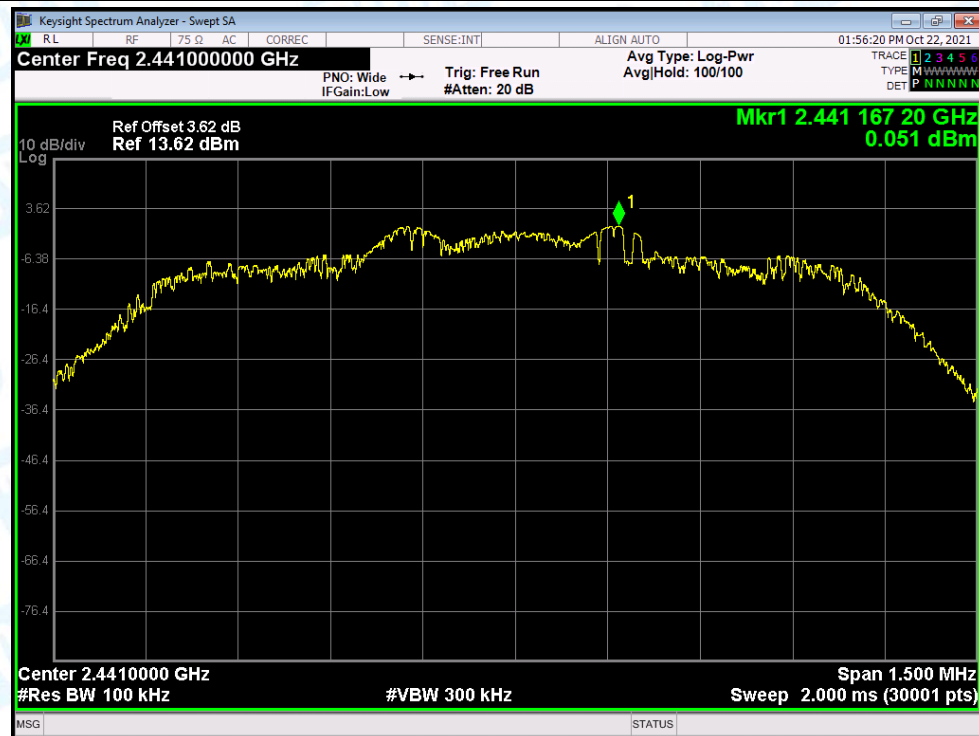
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



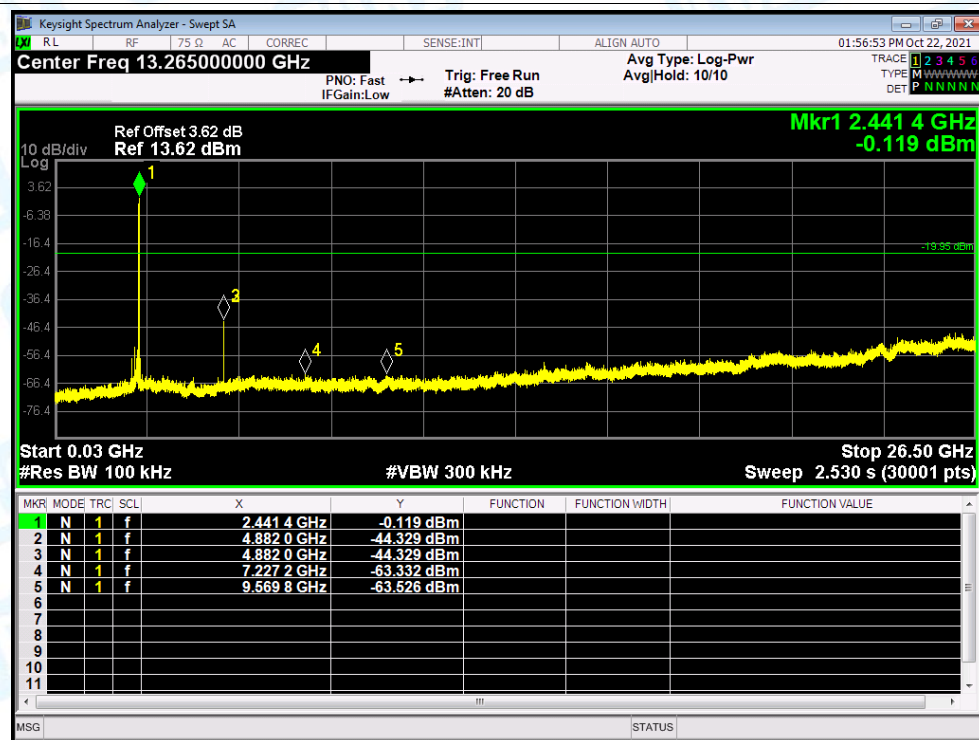
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



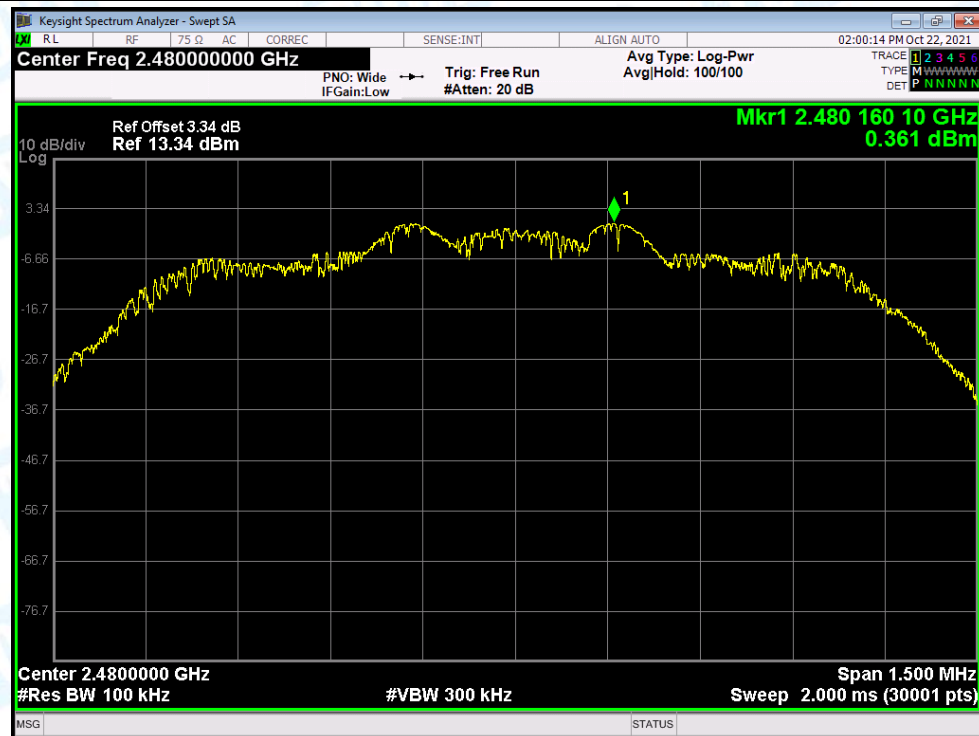
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



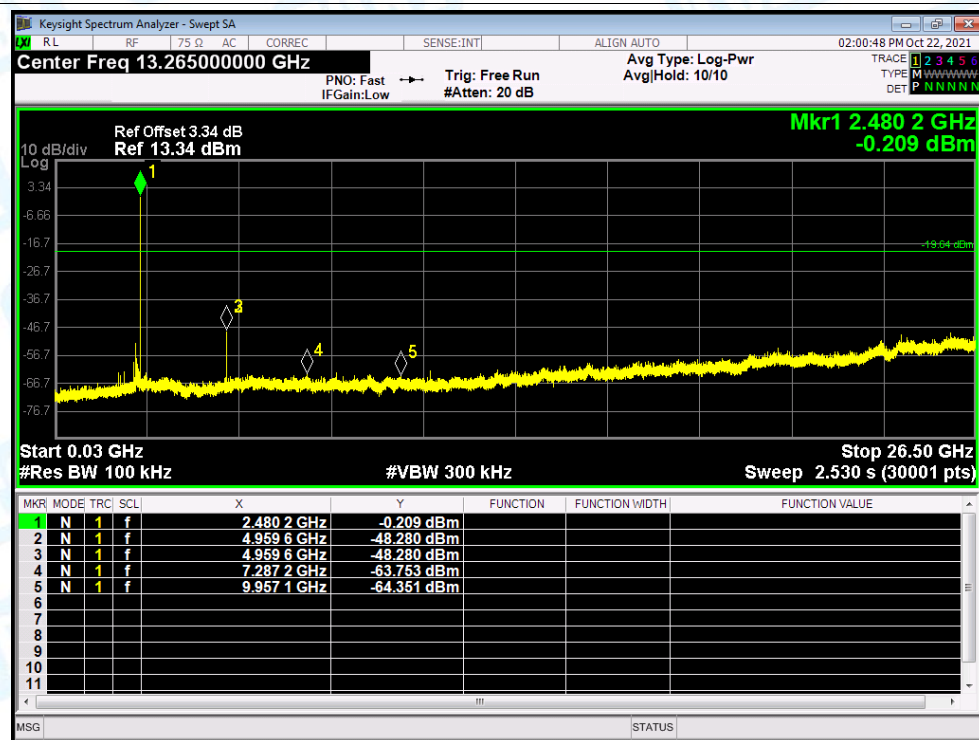
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

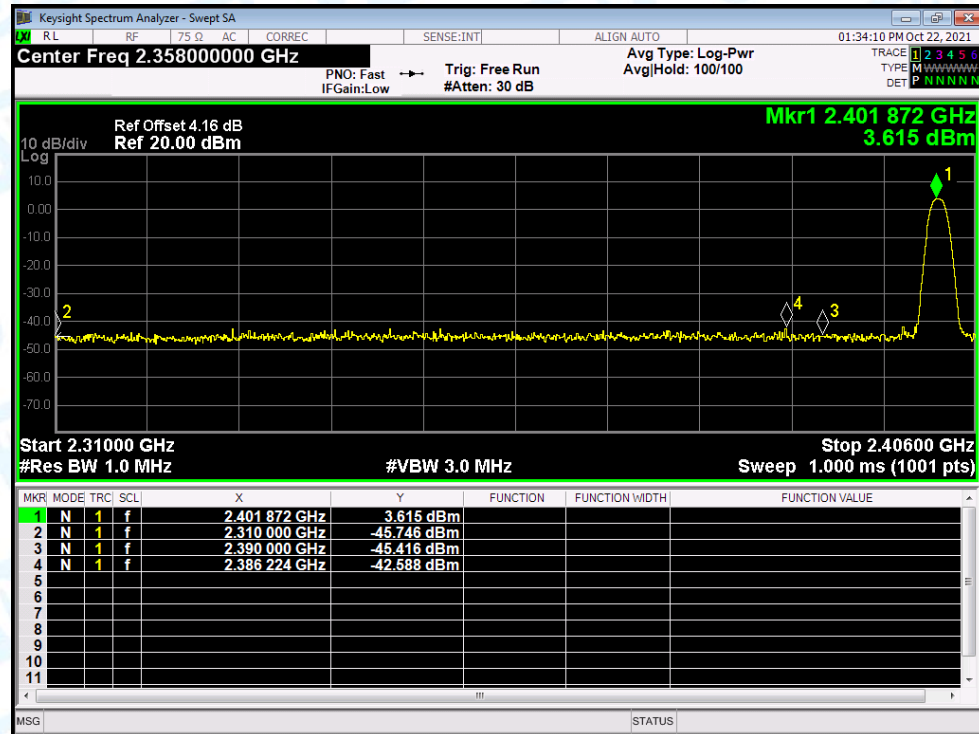


8.Restrict Band

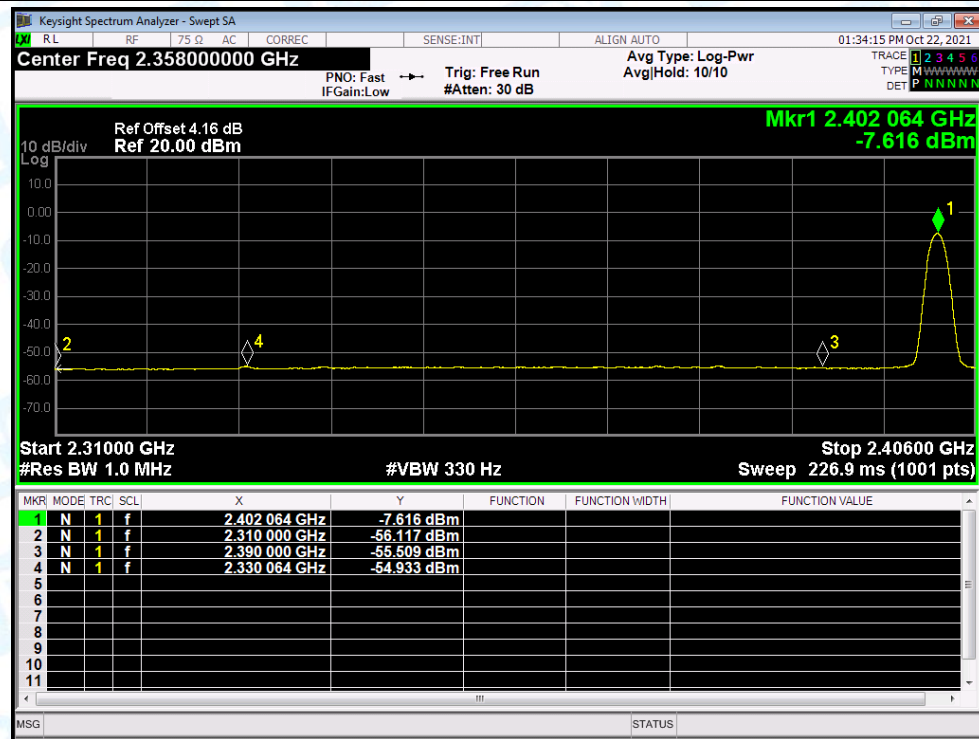
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-45.04	2	52.22	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.98	2	41.28	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2386.224	-42.58	2	54.68	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2330.064	-54.93	2	42.33	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-45.39	2	51.87	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.51	2	41.75	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-45.45	2	51.81	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.28	2	41.98	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2486.392	-42.2	2	55.06	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.536	-55.26	2	42	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.16	2	51.1	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.79	2	41.47	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-45.56	2	51.7	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	2361.072	-43.08	2	54.18	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2373.072	-55.34	2	41.92	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46.93	2	50.33	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.76	2	41.5	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-45.21	2	52.05	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.52	2	41.74	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2499.592	-42.84	2	54.42	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.608	-55.43	2	41.83	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.56	2	50.7	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.74	2	41.52	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-45.99	2	51.27	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.45	2	40.81	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2371.536	-42.5	2	54.76	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2378.928	-55.45	2	41.81	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.94	2	50.32	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.91	2	41.35	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-46.57	2	50.69	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-55.42	2	41.84	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2487.064	-42.15	2	55.11	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.608	-55.25	2	42.01	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.86	2	50.4	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.75	2	41.51	Average	54	Pass

Test Graphs

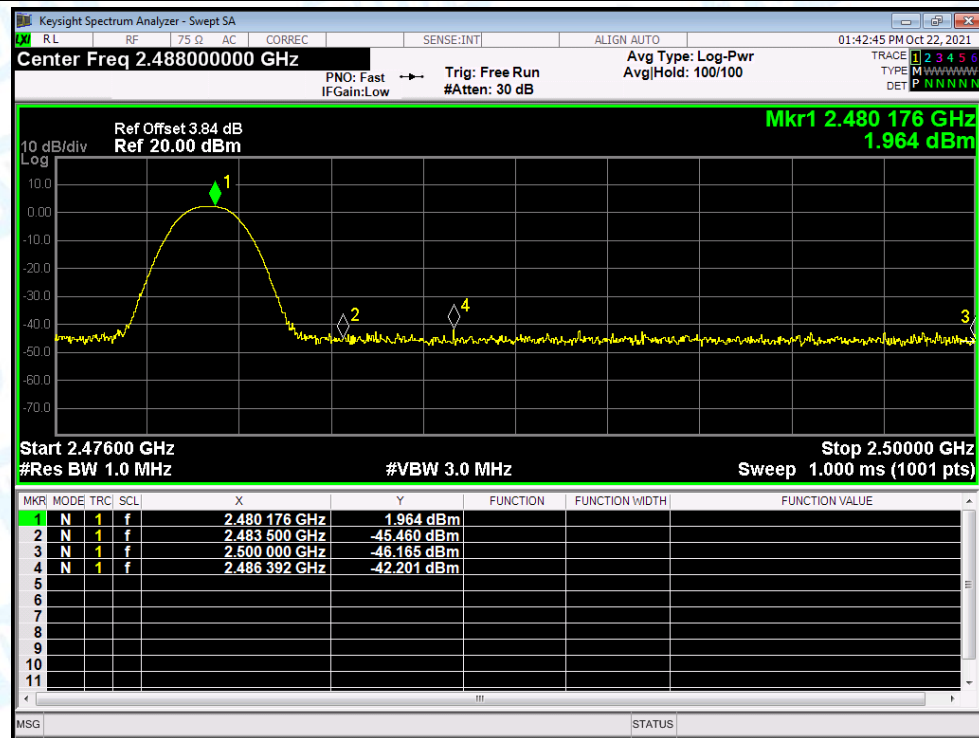
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



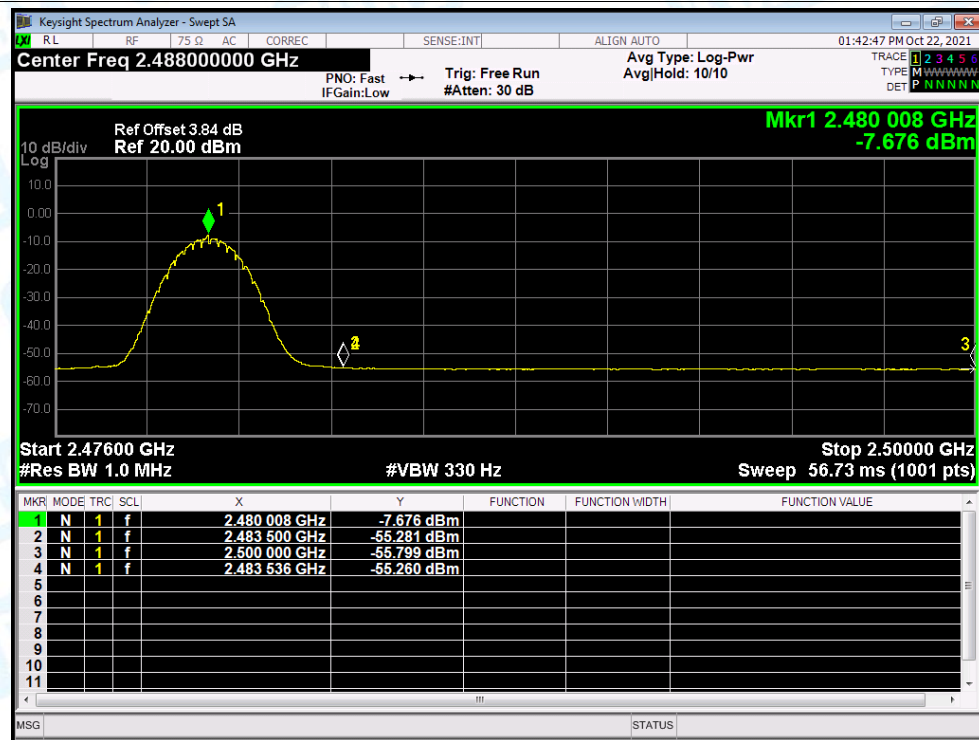
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



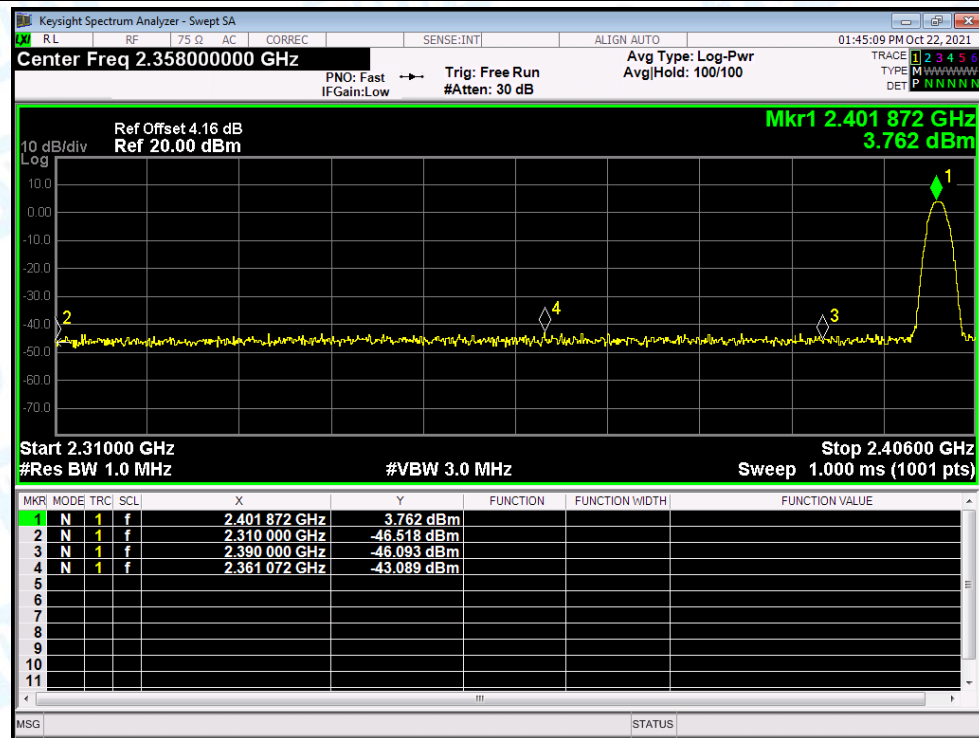
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



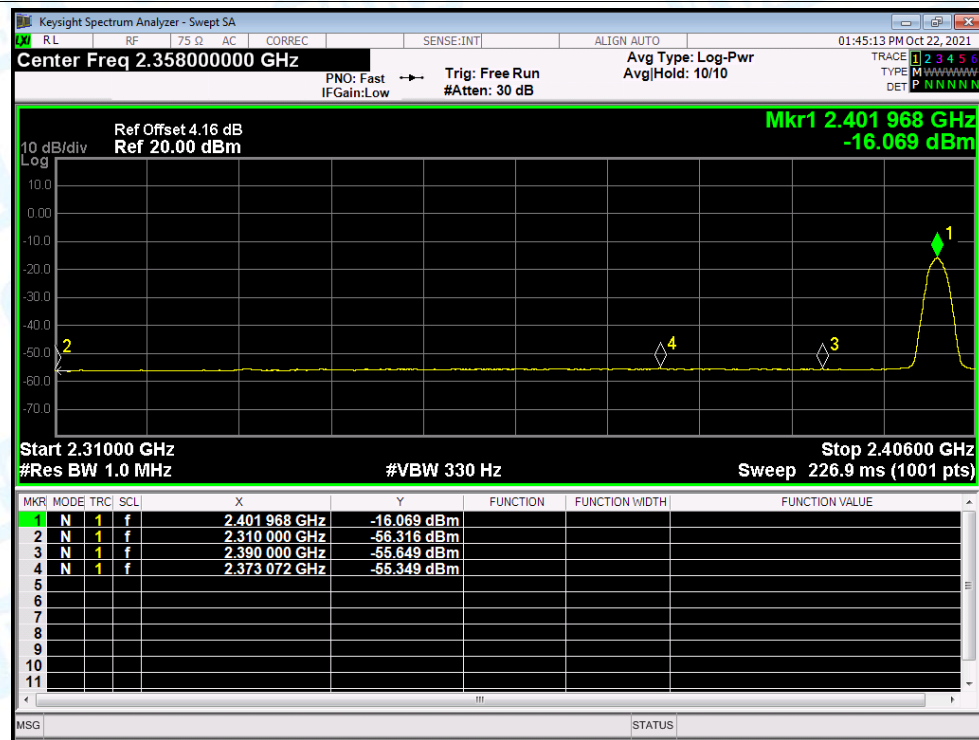
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



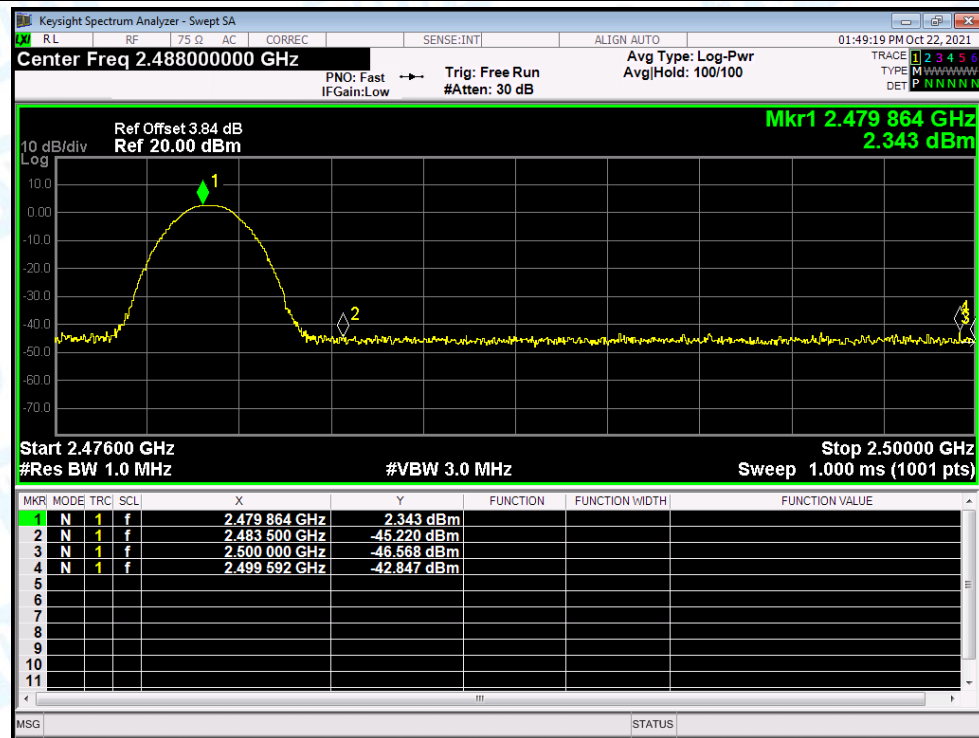
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



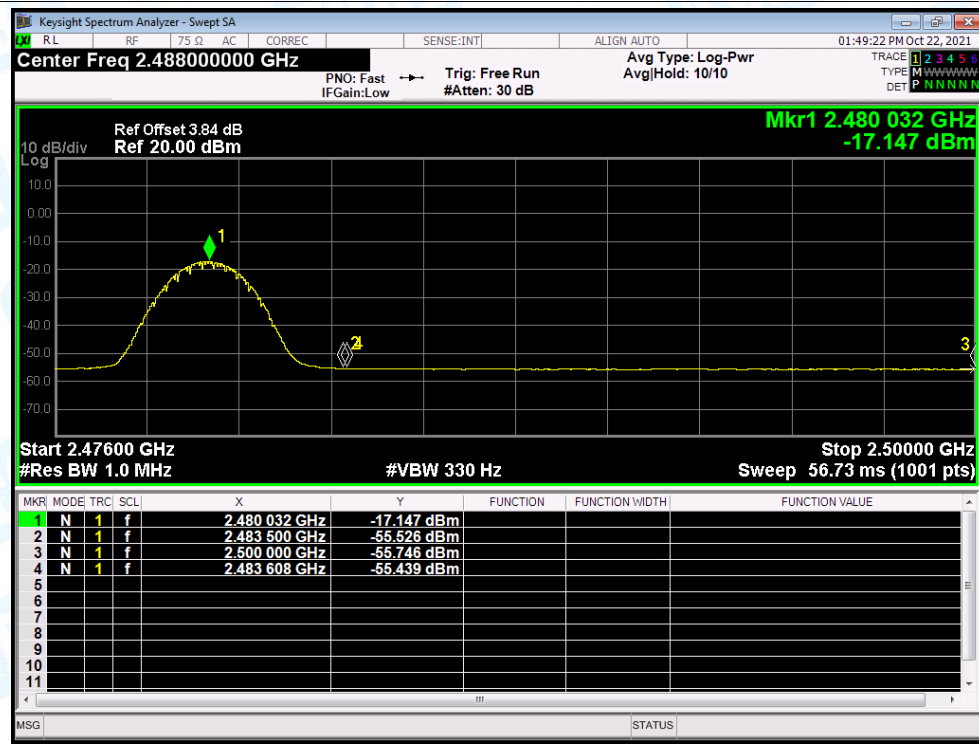
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



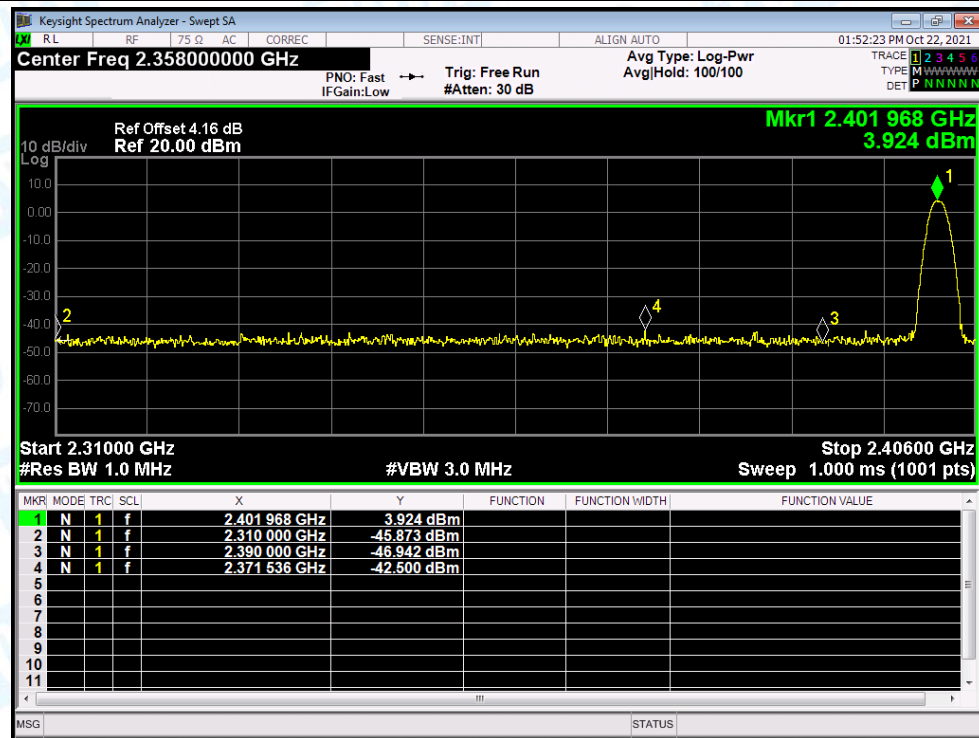
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



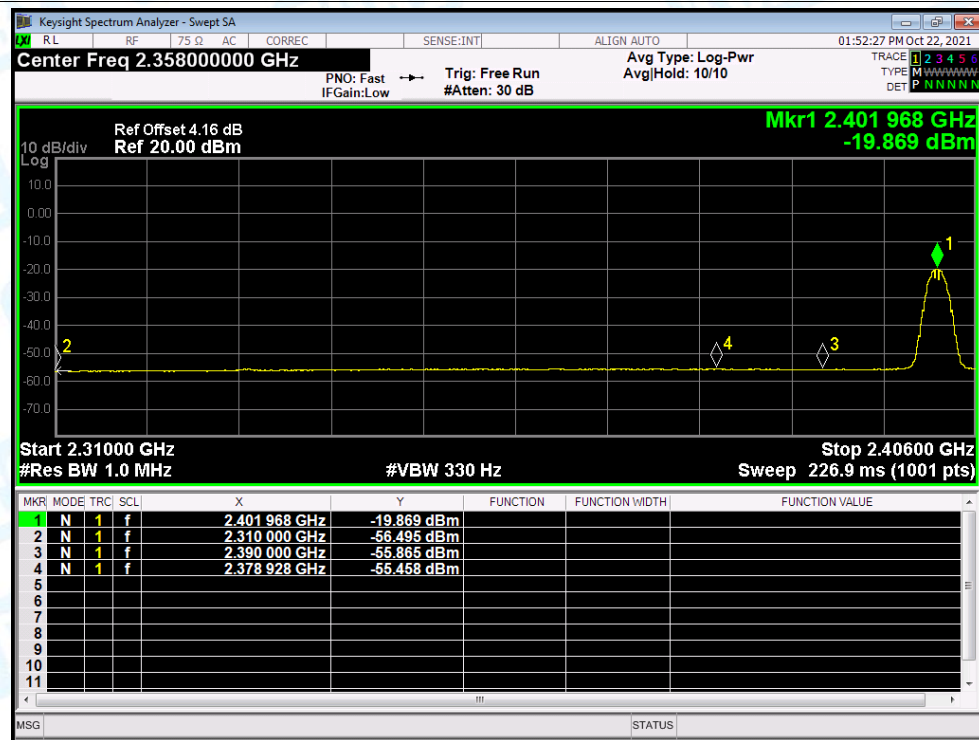
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



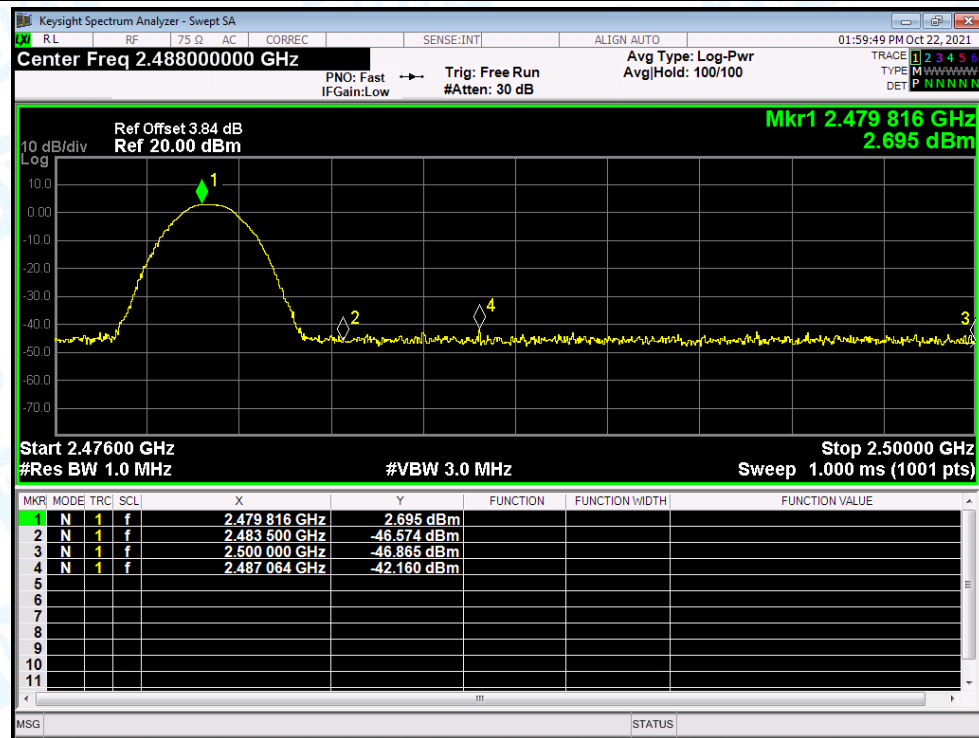
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



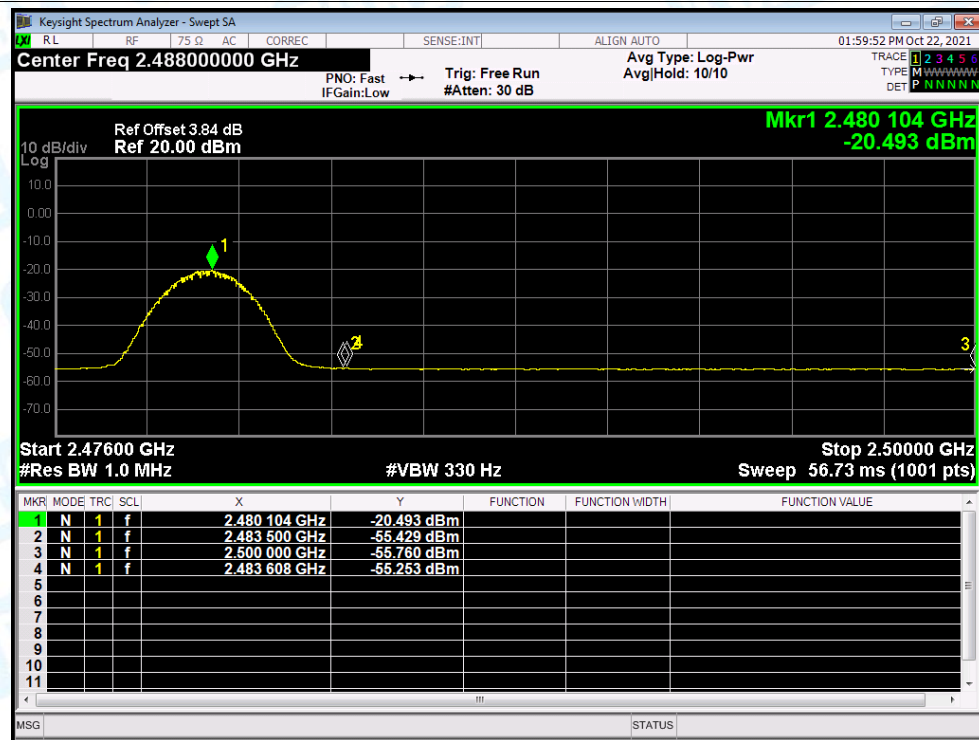
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

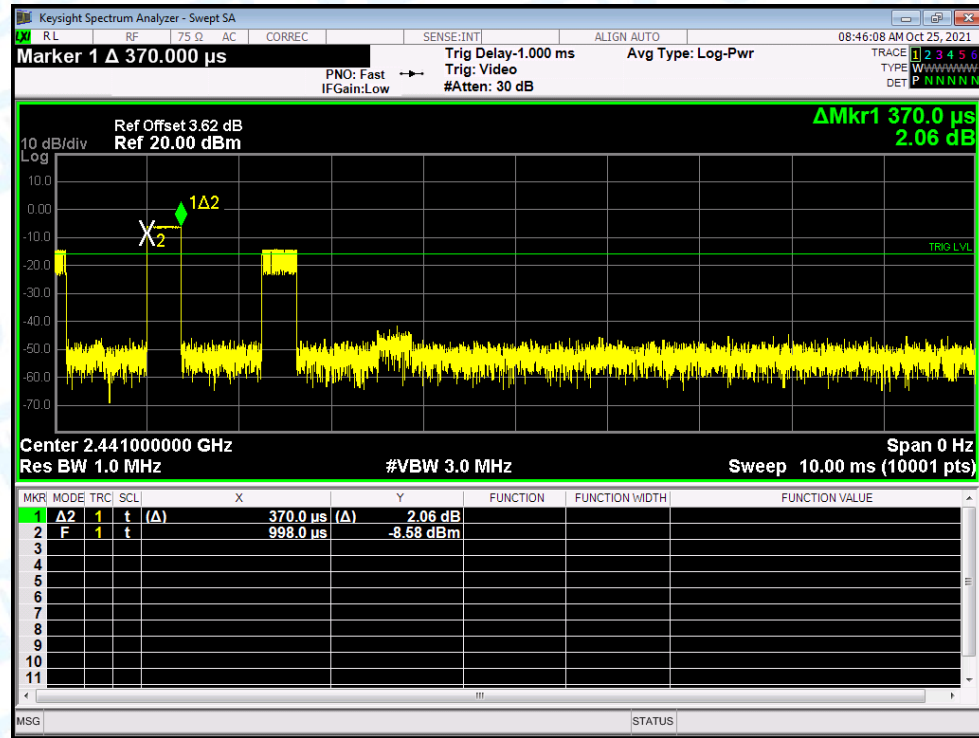


9.Dwell Time

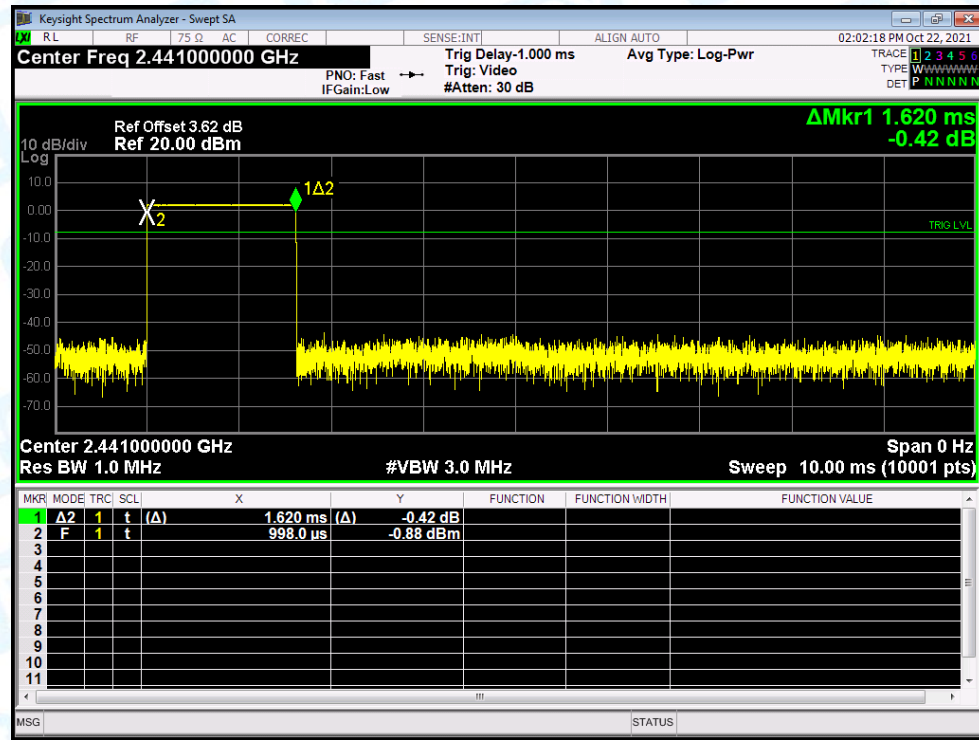
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.370	39.68	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.620	259.2	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.869	306.027	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.375	36.8	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.632	261.12	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.881	307.307	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.370	36.8	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.631	260.96	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.881	307.307	31600	400	Pass

Test Graphs

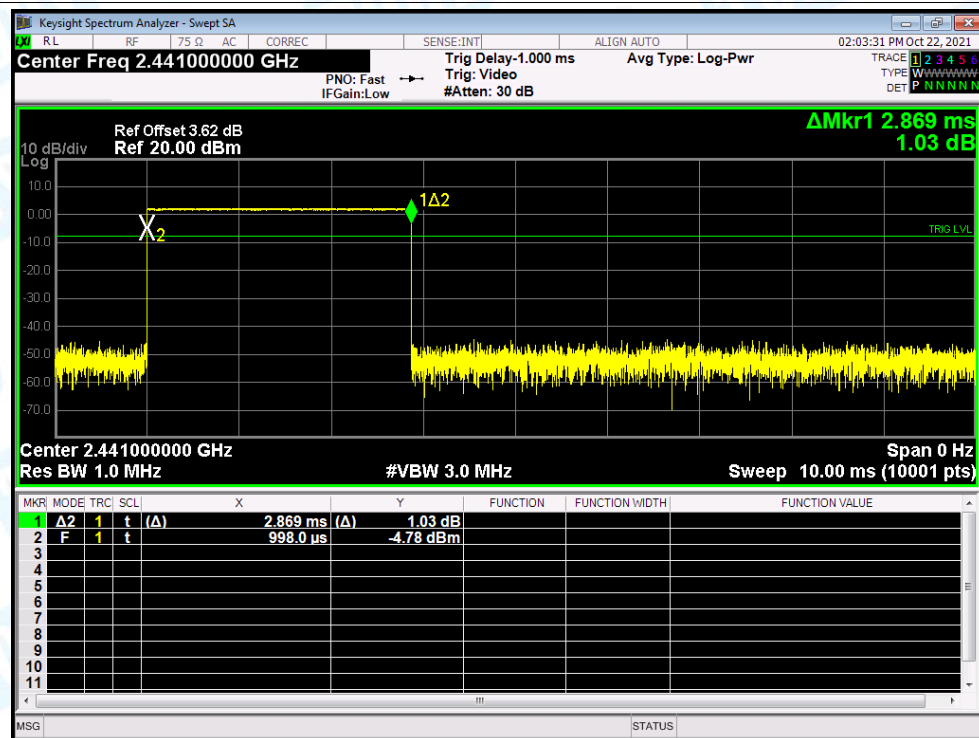
Dwell NVNT 1-DH1 2441MHz Ant1



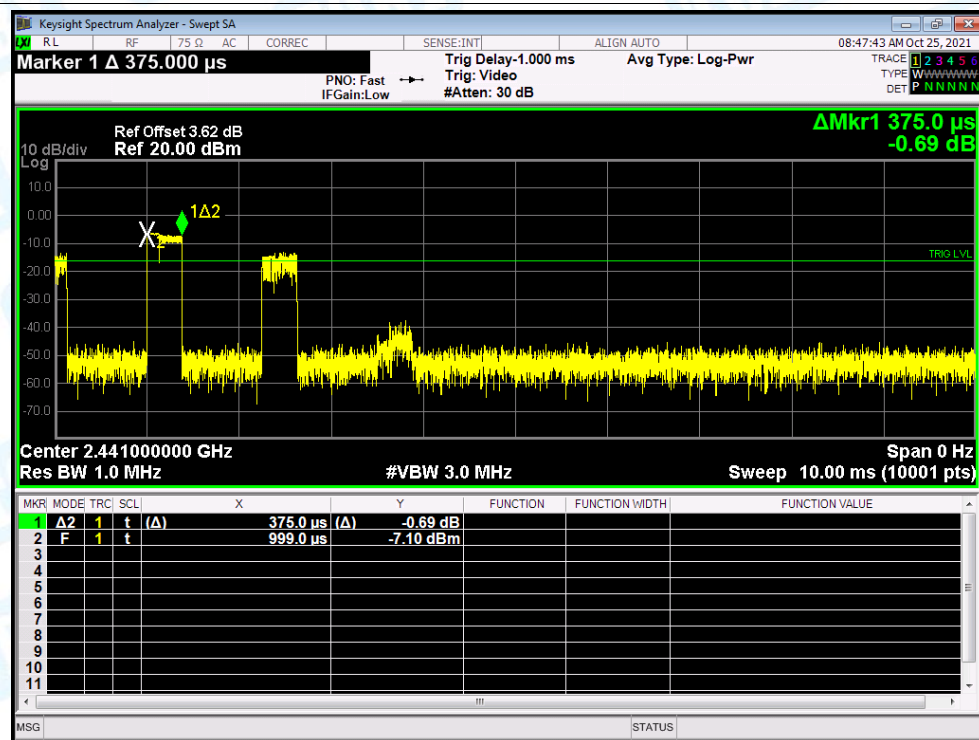
Dwell NVNT 1-DH3 2441MHz Ant1



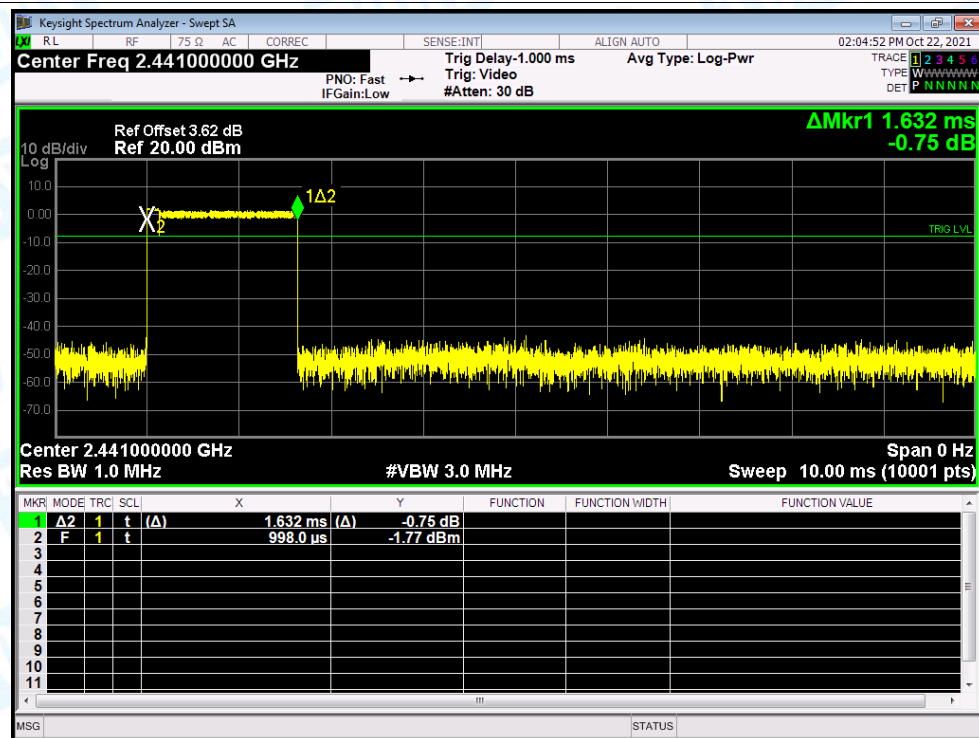
Dwell NVNT 1-DH5 2441MHz Ant1



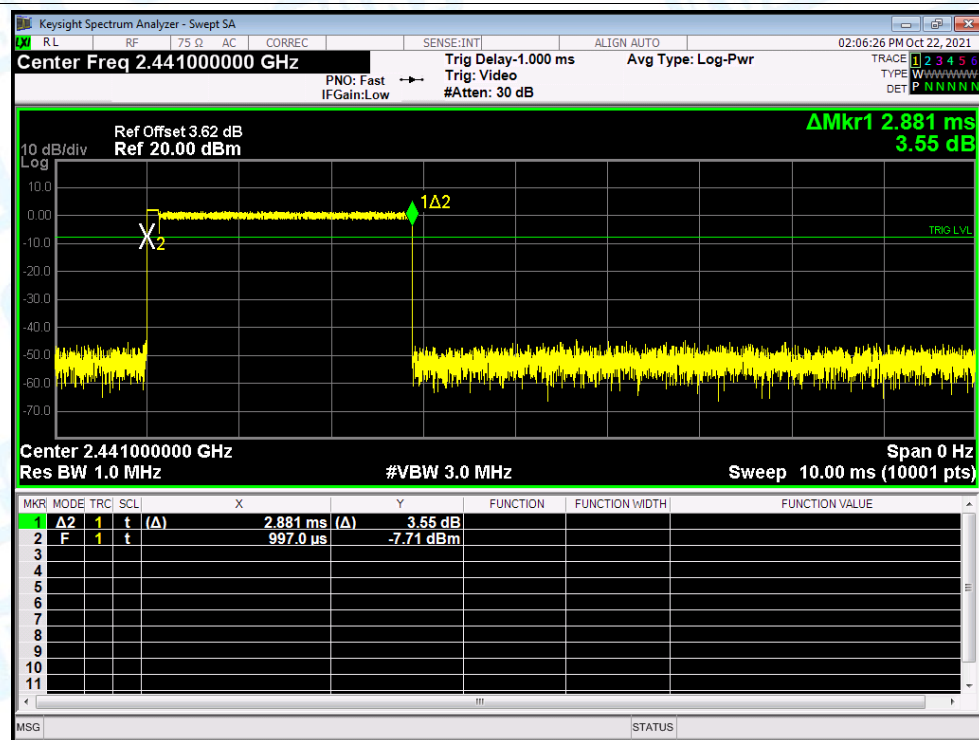
Dwell NVNT 2-DH1 2441MHz Ant1



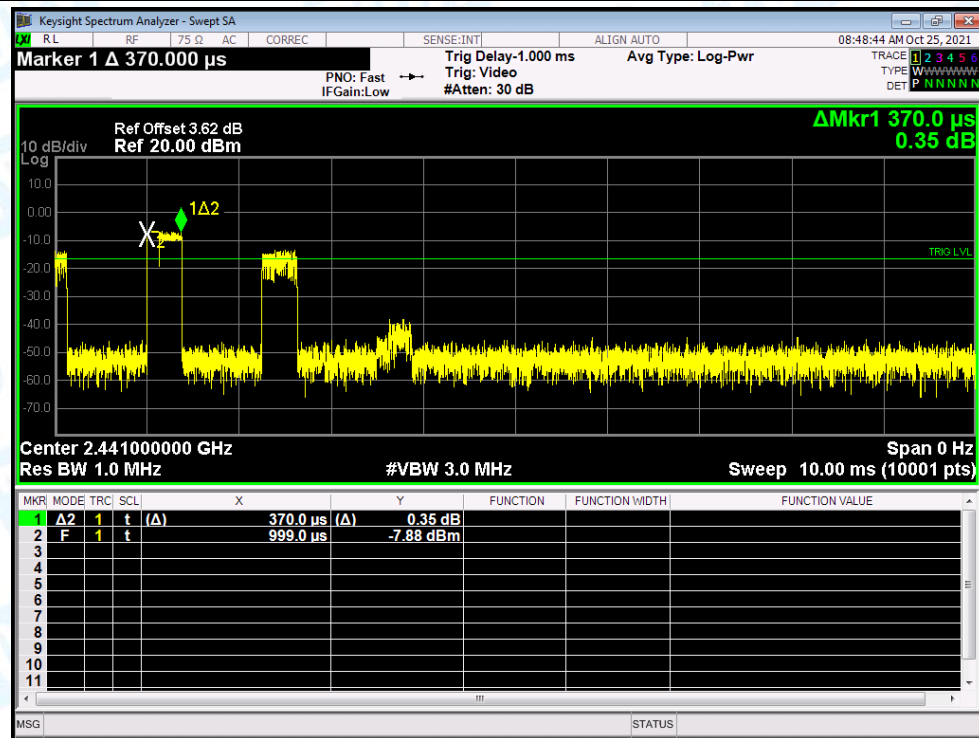
Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1



Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1

