

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

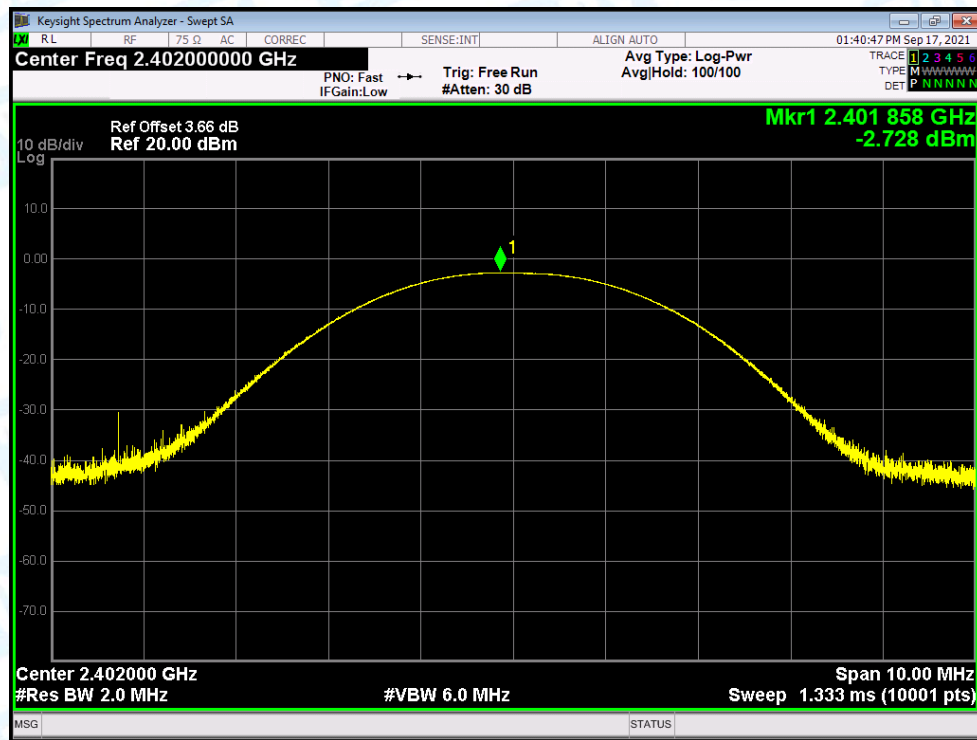
General Description of EUT	
Product Name:	True Wireless Earphone
Test Model:	XT-3
Sample ID:	20210813-06-4#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	52℃
Test Voltage:	DC3.7V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TB-FCC183833	

1.Maximum Conducted Output Power

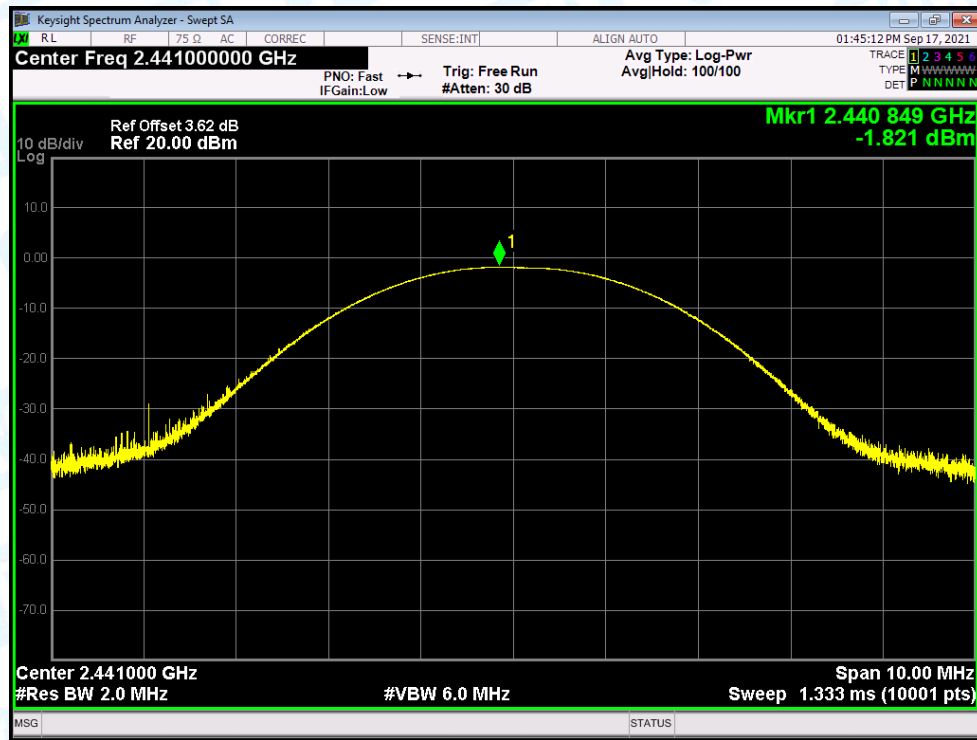
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	-2.728	0	-2.728	21	Pass
NVNT	1-DH1	2441	Ant1	-1.821	0	-1.821	21	Pass
NVNT	1-DH1	2480	Ant1	-0.81	0	-0.81	21	Pass
NVNT	2-DH1	2402	Ant1	-1.87	0	-1.87	21	Pass
NVNT	2-DH1	2441	Ant1	-0.98	0	-0.98	21	Pass
NVNT	2-DH1	2480	Ant1	-0.195	0	-0.195	21	Pass

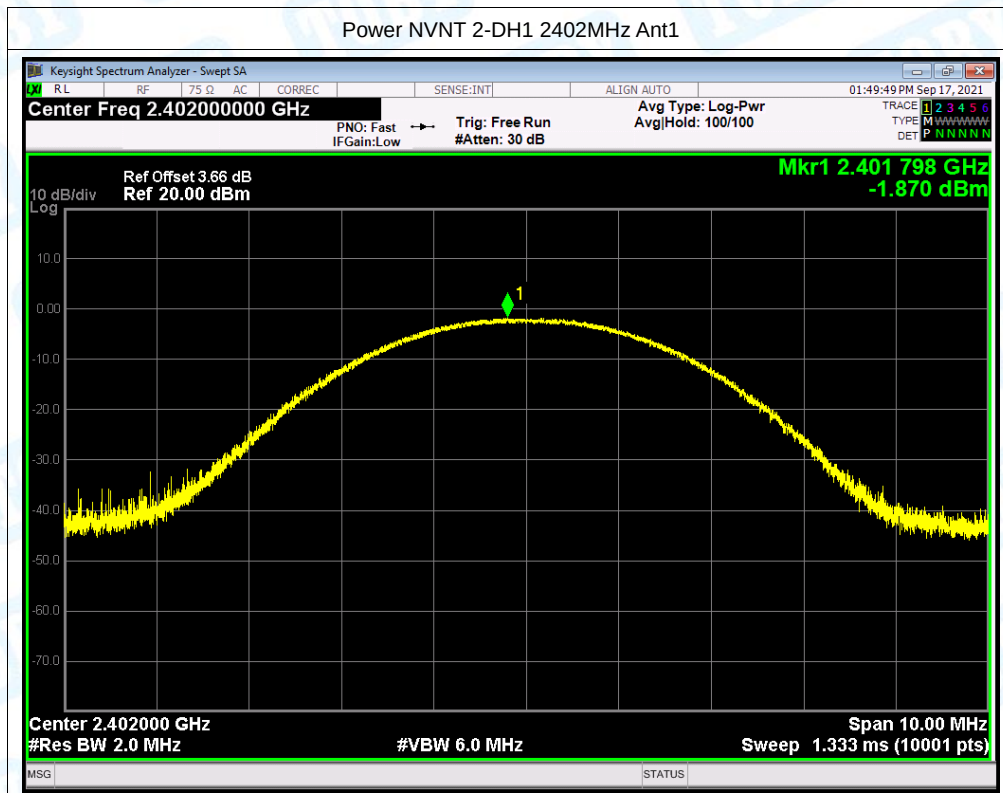
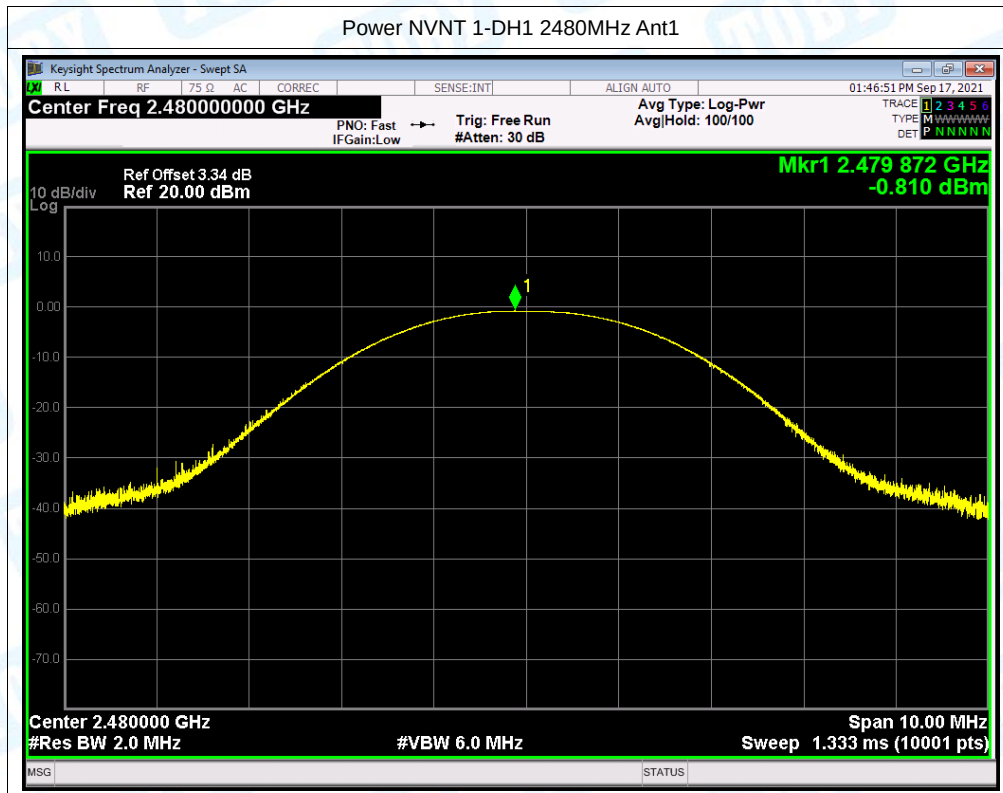
Test Graphs

Power NVNT 1-DH1 2402MHz Ant1

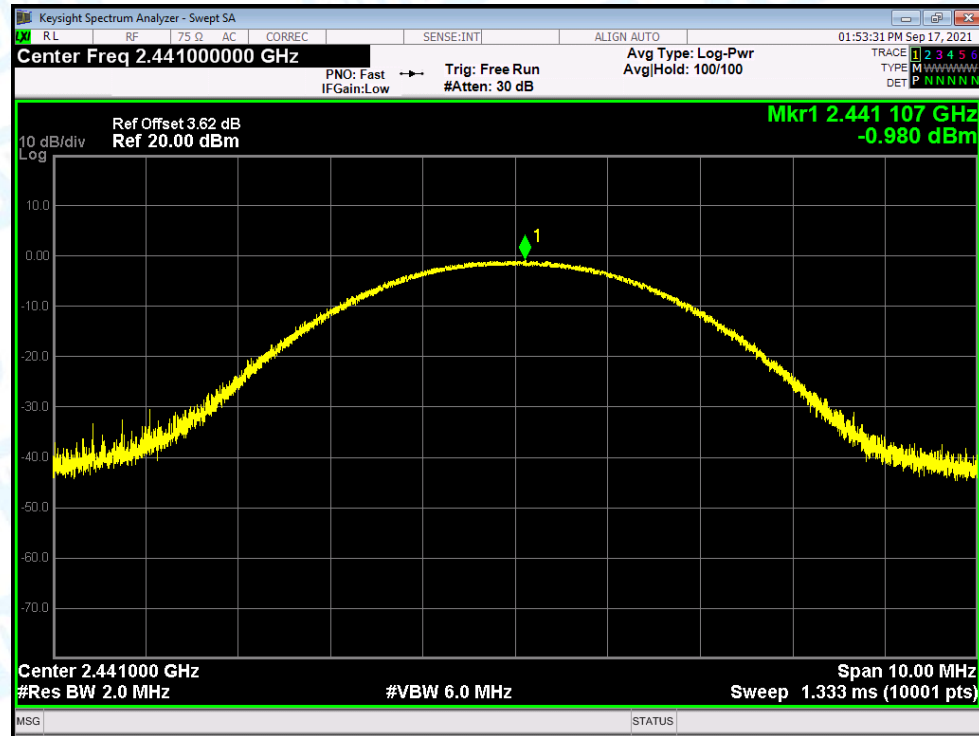


Power NVNT 1-DH1 2441MHz Ant1

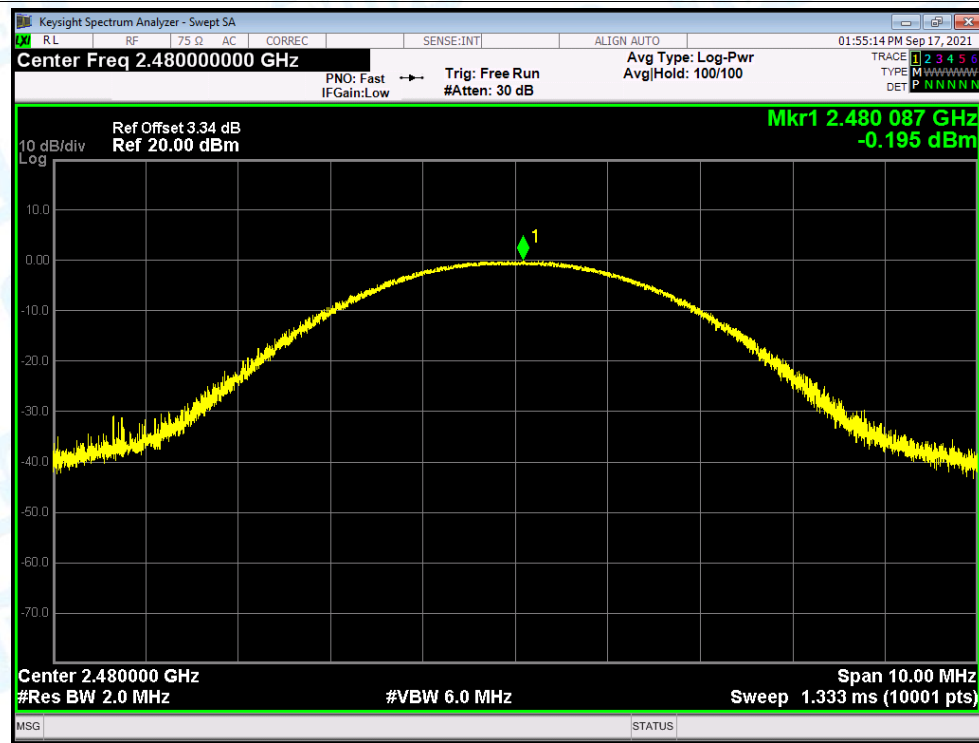




Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1



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	0.854	0.81396	0.569
NVNT	1-DH1	2441	Ant1	0.854	0.82395	0.569
NVNT	1-DH1	2480	Ant1	0.875	0.82658	0.583
NVNT	2-DH1	2402	Ant1	1.242	1.1721	0.828
NVNT	2-DH1	2441	Ant1	1.217	1.1614	0.811
NVNT	2-DH1	2480	Ant1	1.208	1.1566	0.805

Test Graphs

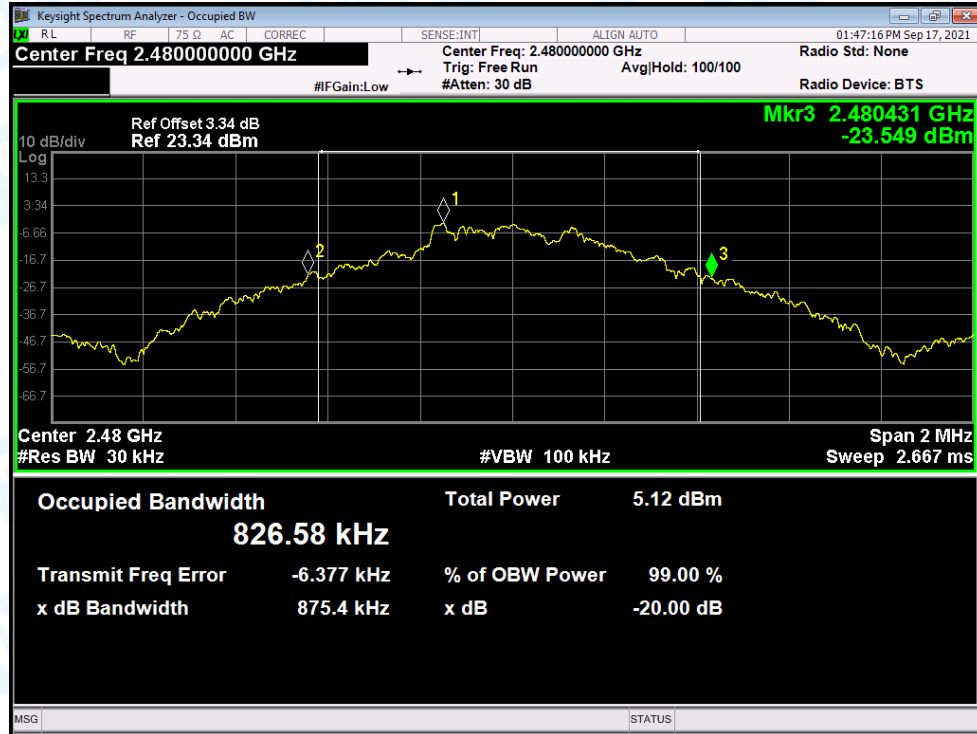
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



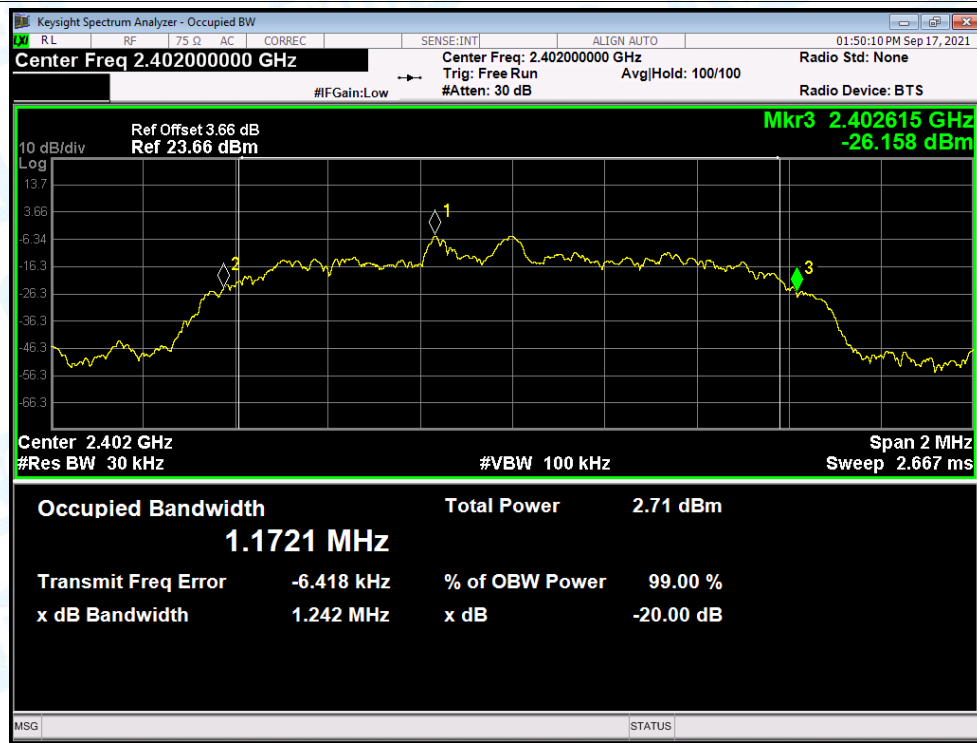
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



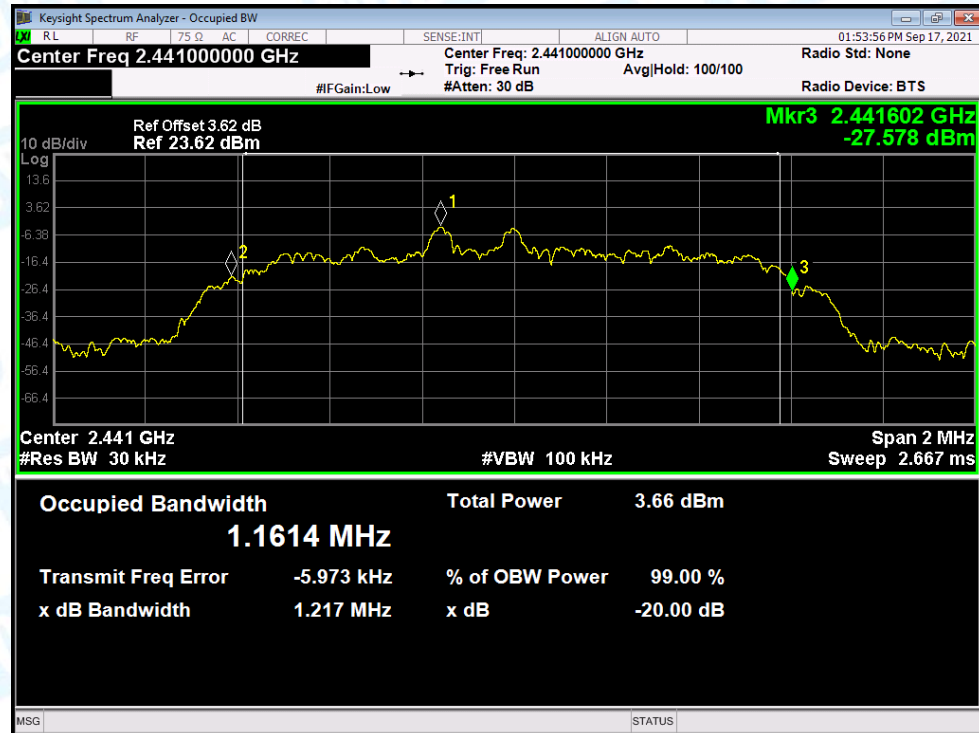
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



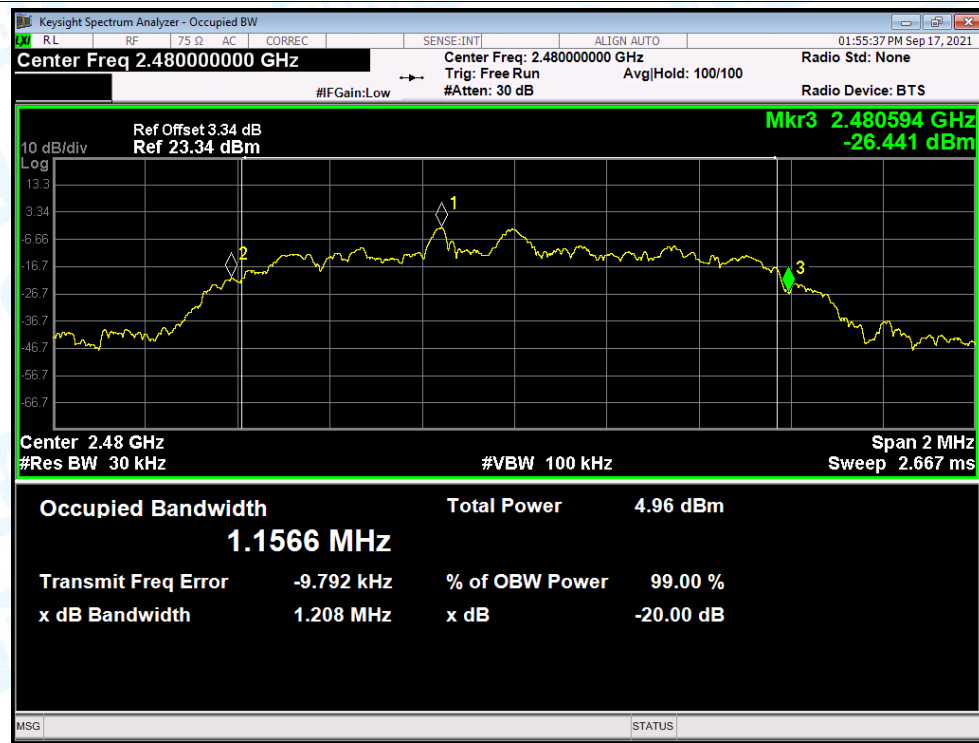
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

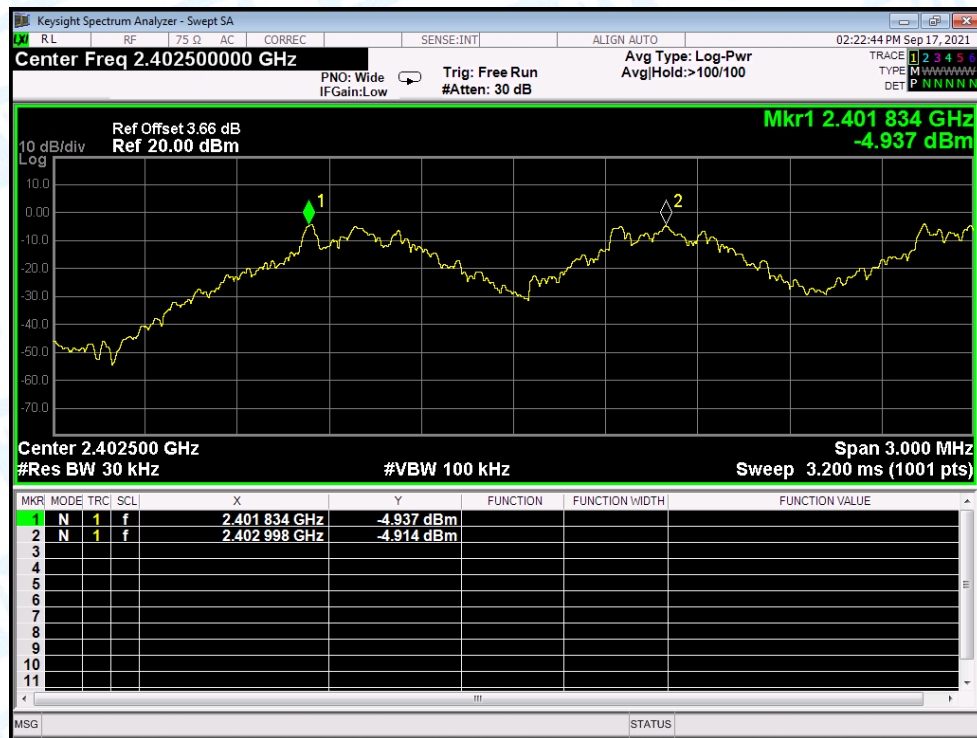


3.Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2401.834	2402.998	1.164	0.569	Pass
NVNT	1-DH1	Ant1	2440.837	2441.992	1.155	0.569	Pass
NVNT	1-DH1	Ant1	2478.84	2479.845	1.005	0.583	Pass
NVNT	2-DH1	Ant1	2401.99	2402.845	0.855	0.828	Pass
NVNT	2-DH1	Ant1	2440.846	2441.992	1.146	0.811	Pass
NVNT	2-DH1	Ant1	2478.843	2480.001	1.158	0.805	Pass

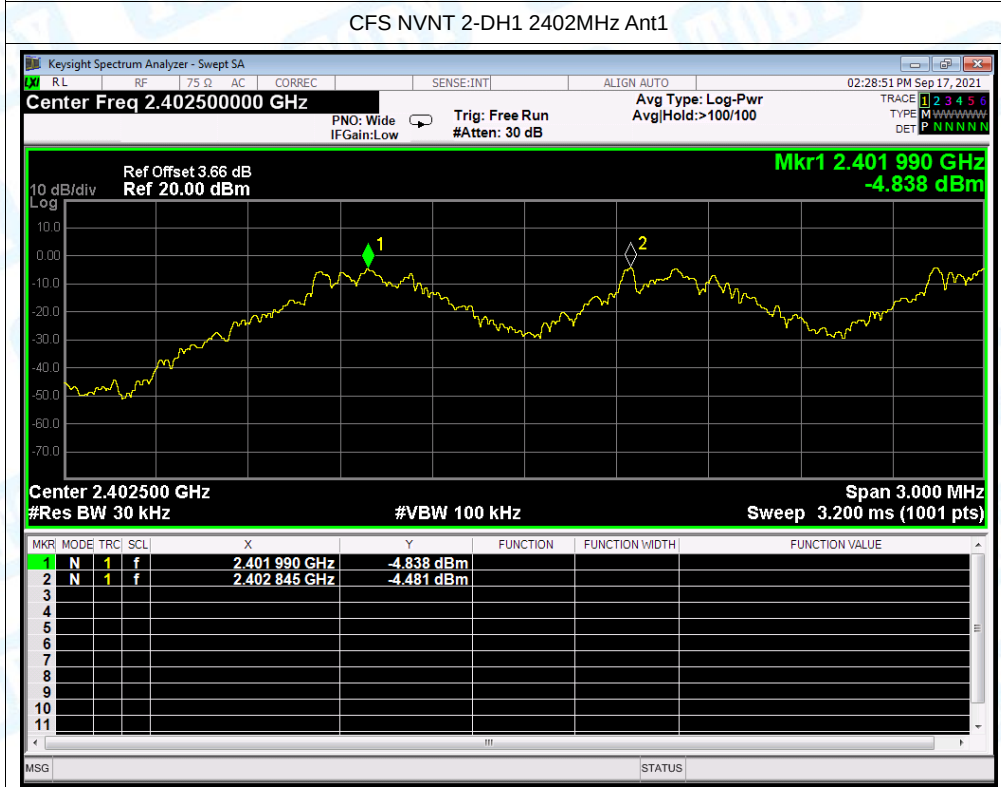
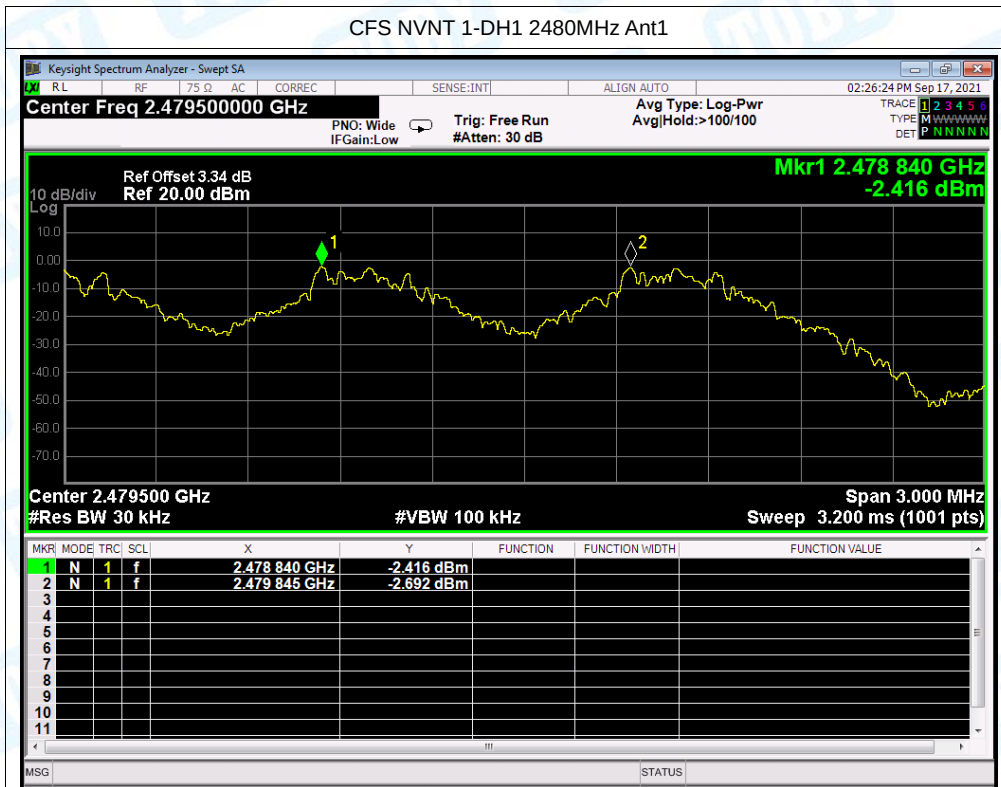
Test Graphs

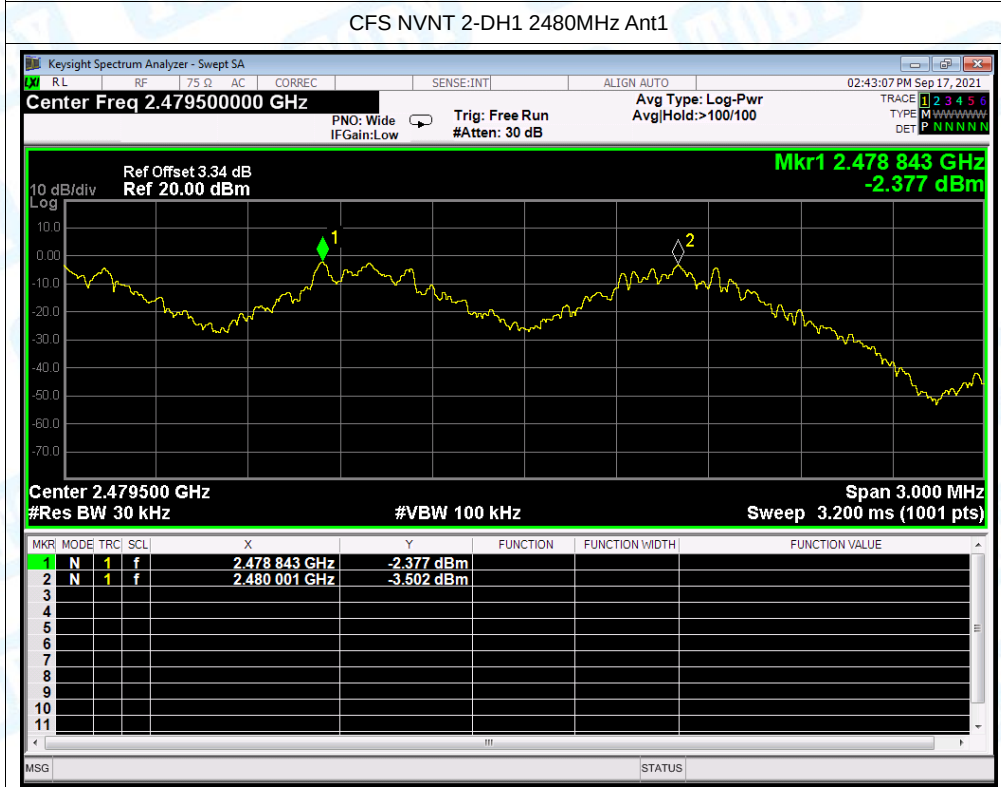
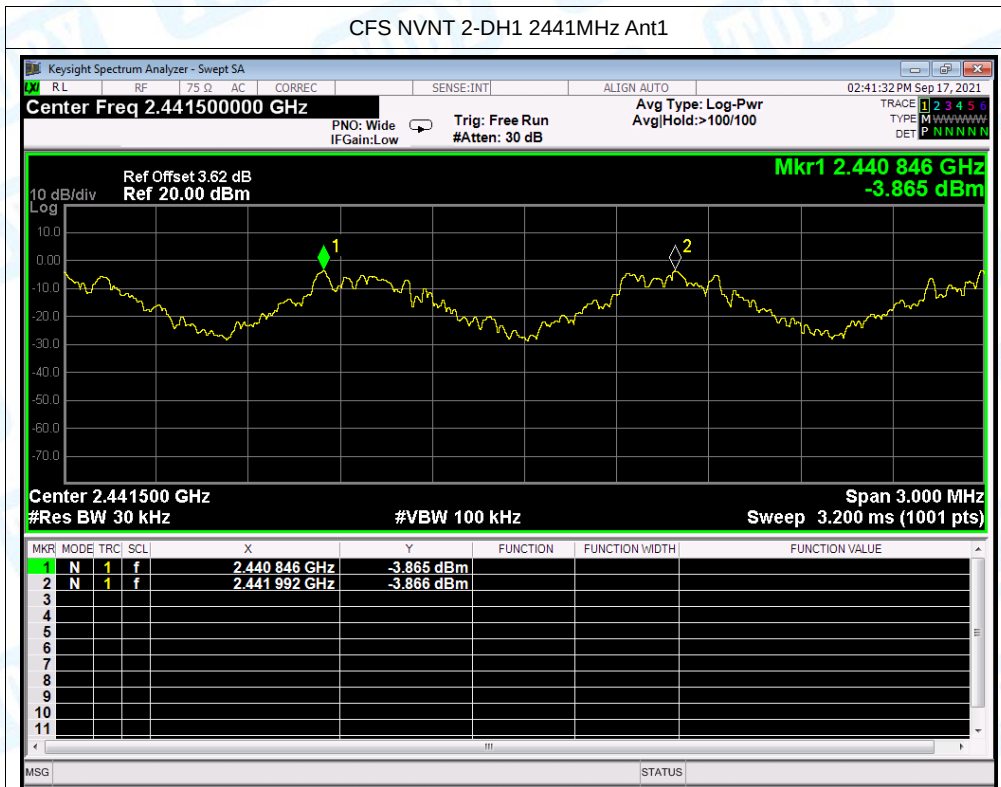
CFS NVNT 1-DH1 2402MHz Ant1



CFS NVNT 1-DH1 2441MHz Ant1

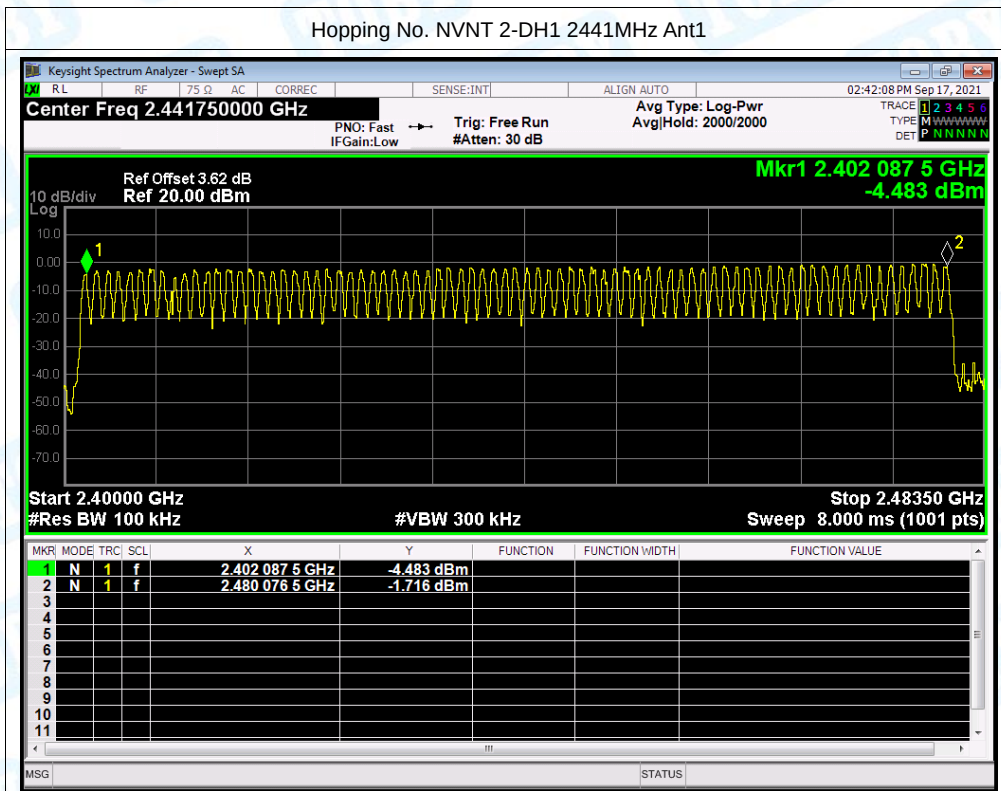
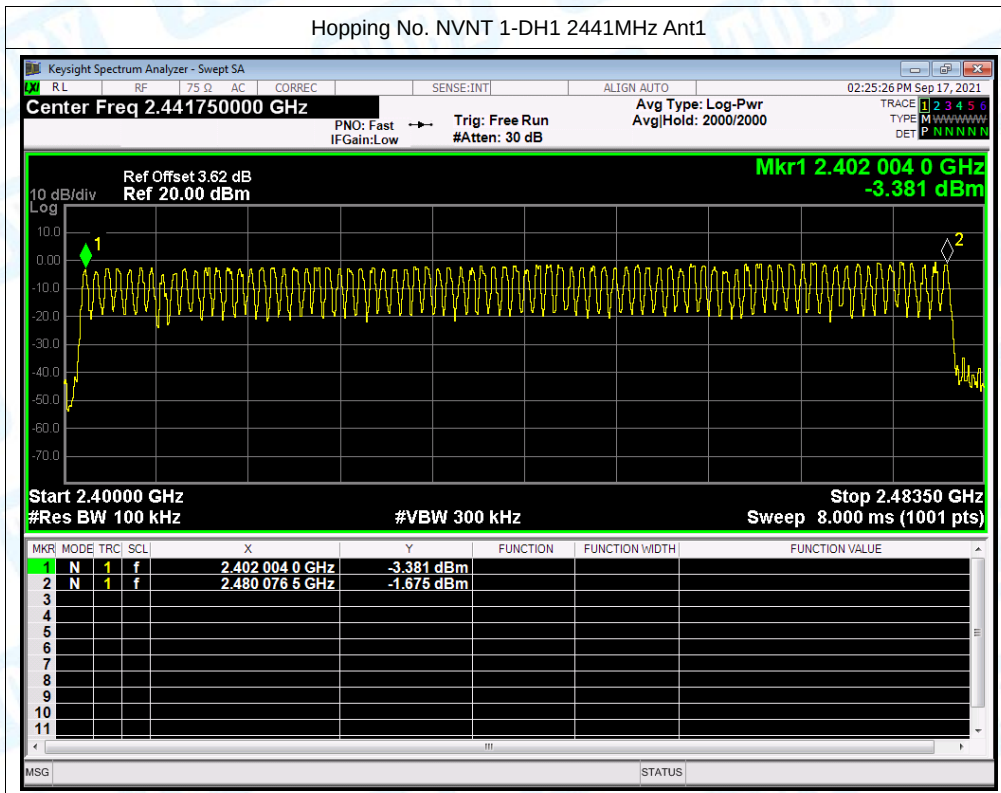






4.Number of Hopping Channel

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

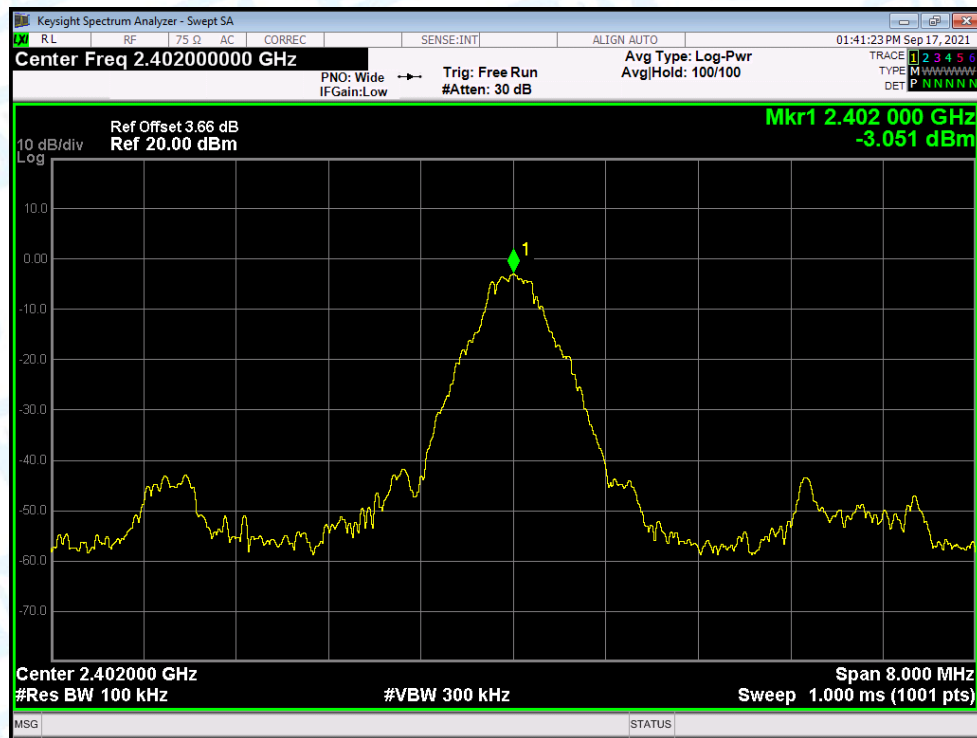


5.Band Edge

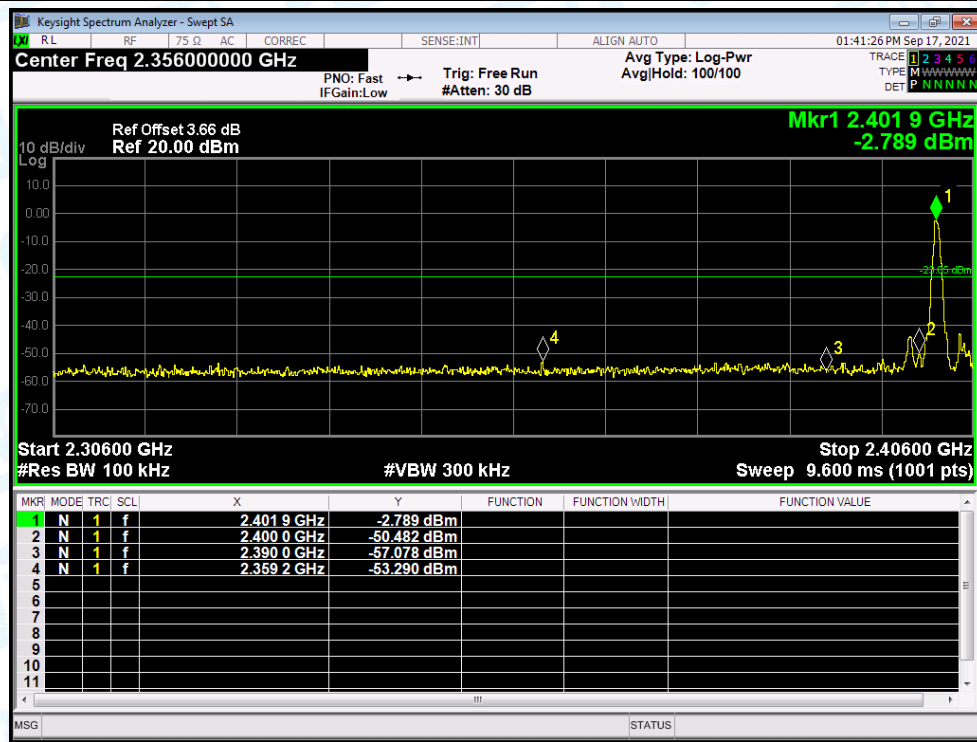
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-50.23	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-40.21	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-50.54	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-40.57	-20	Pass

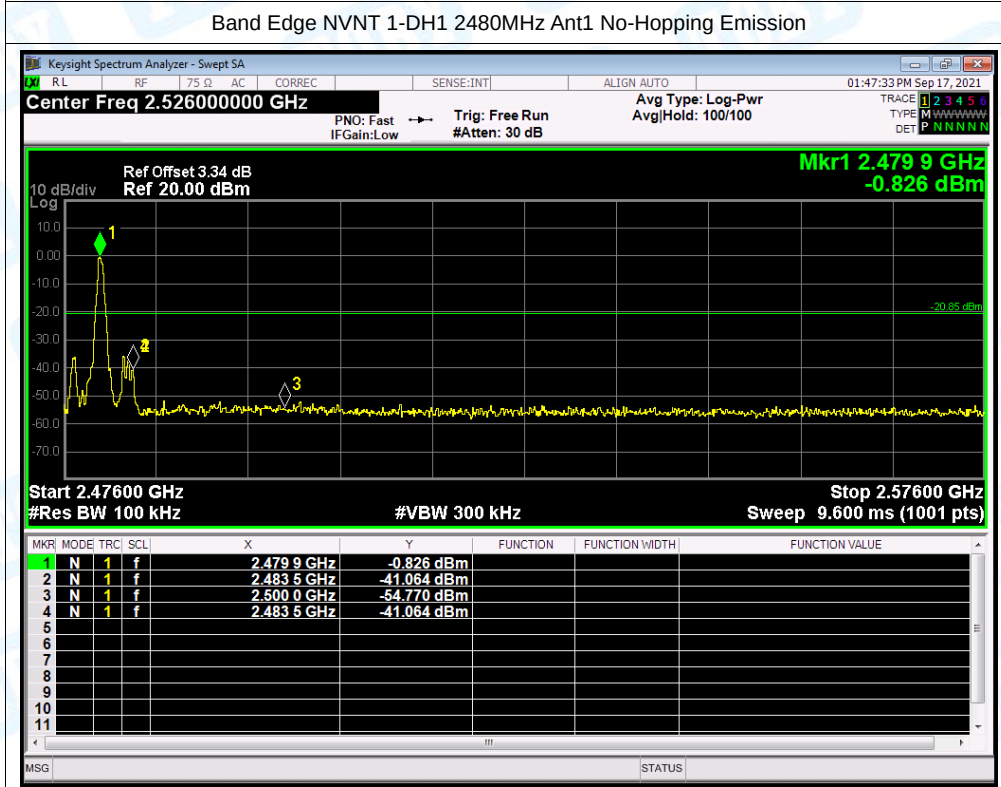
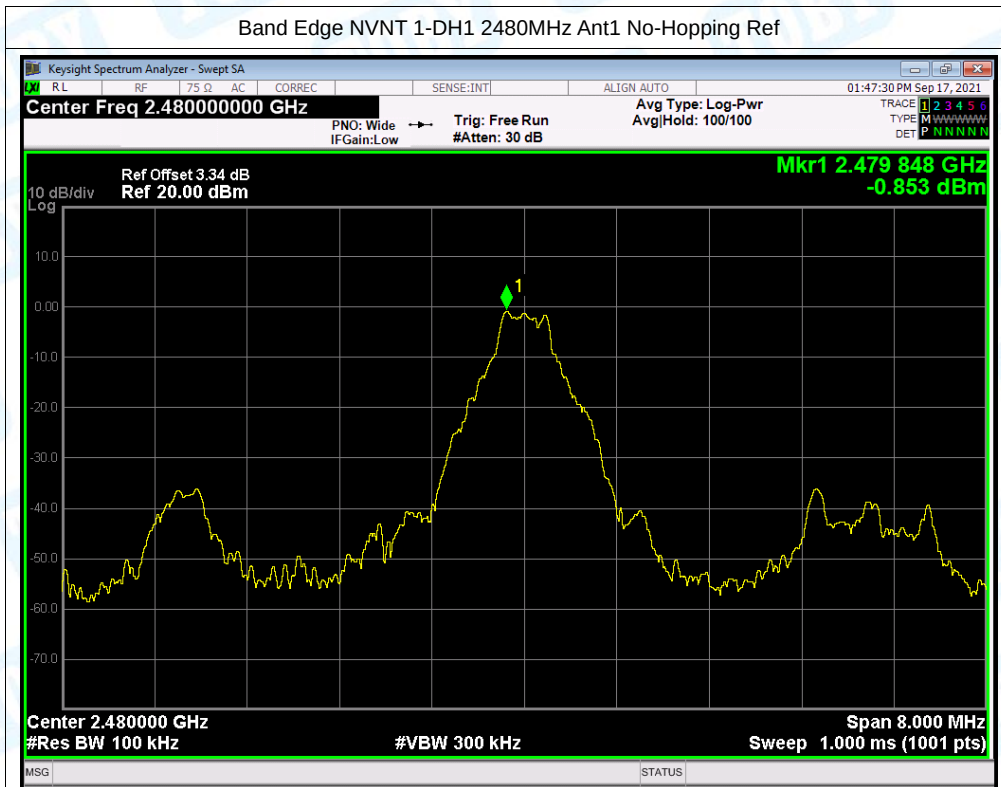
Test Graphs

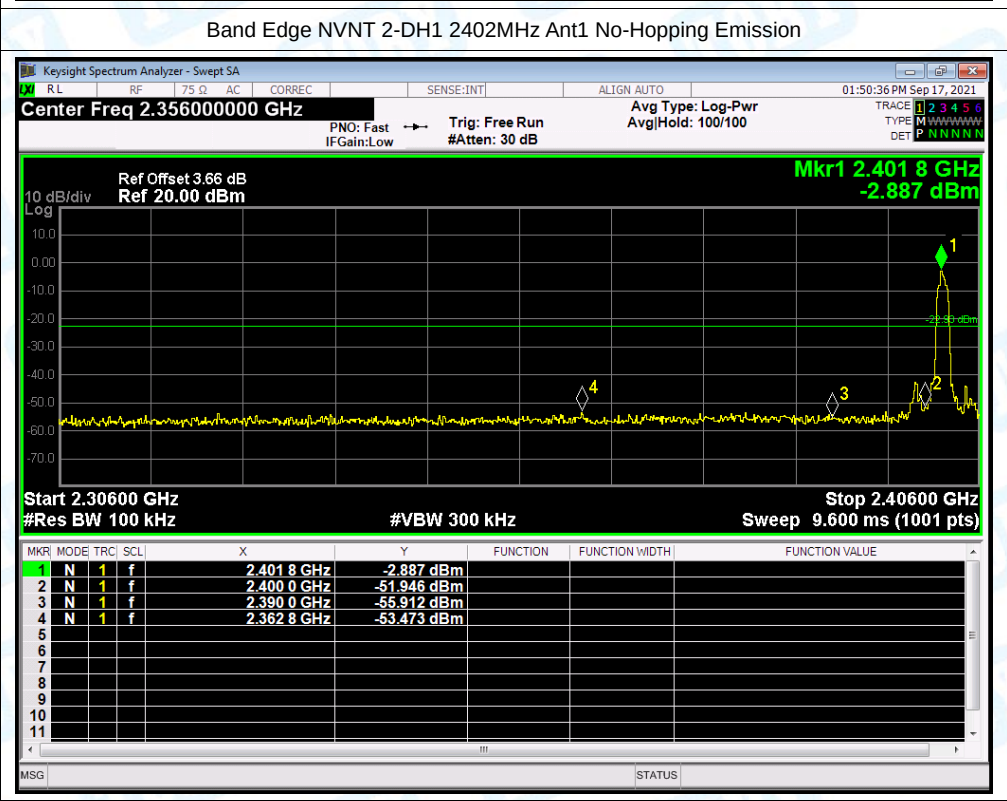
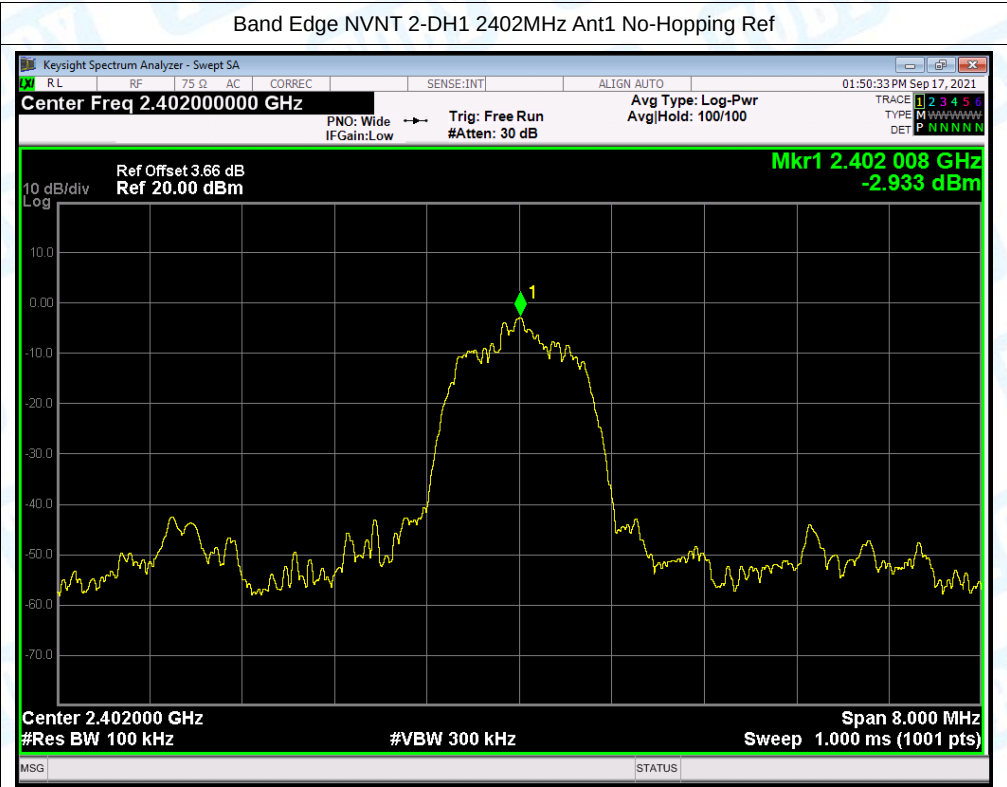
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref

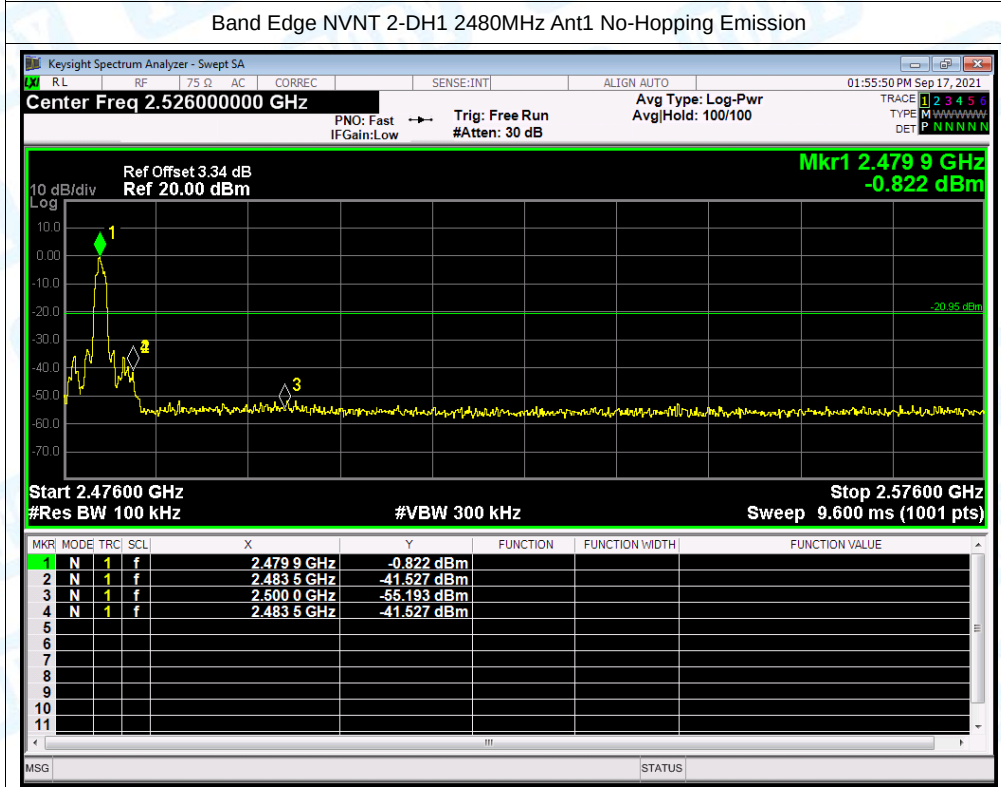
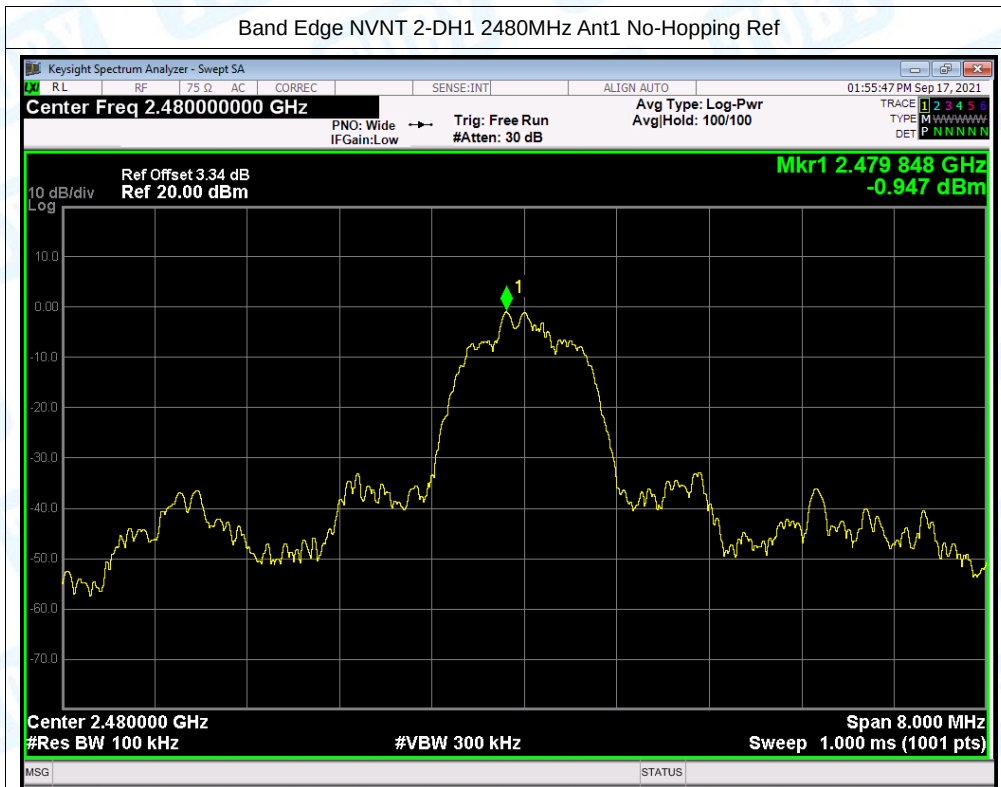


Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



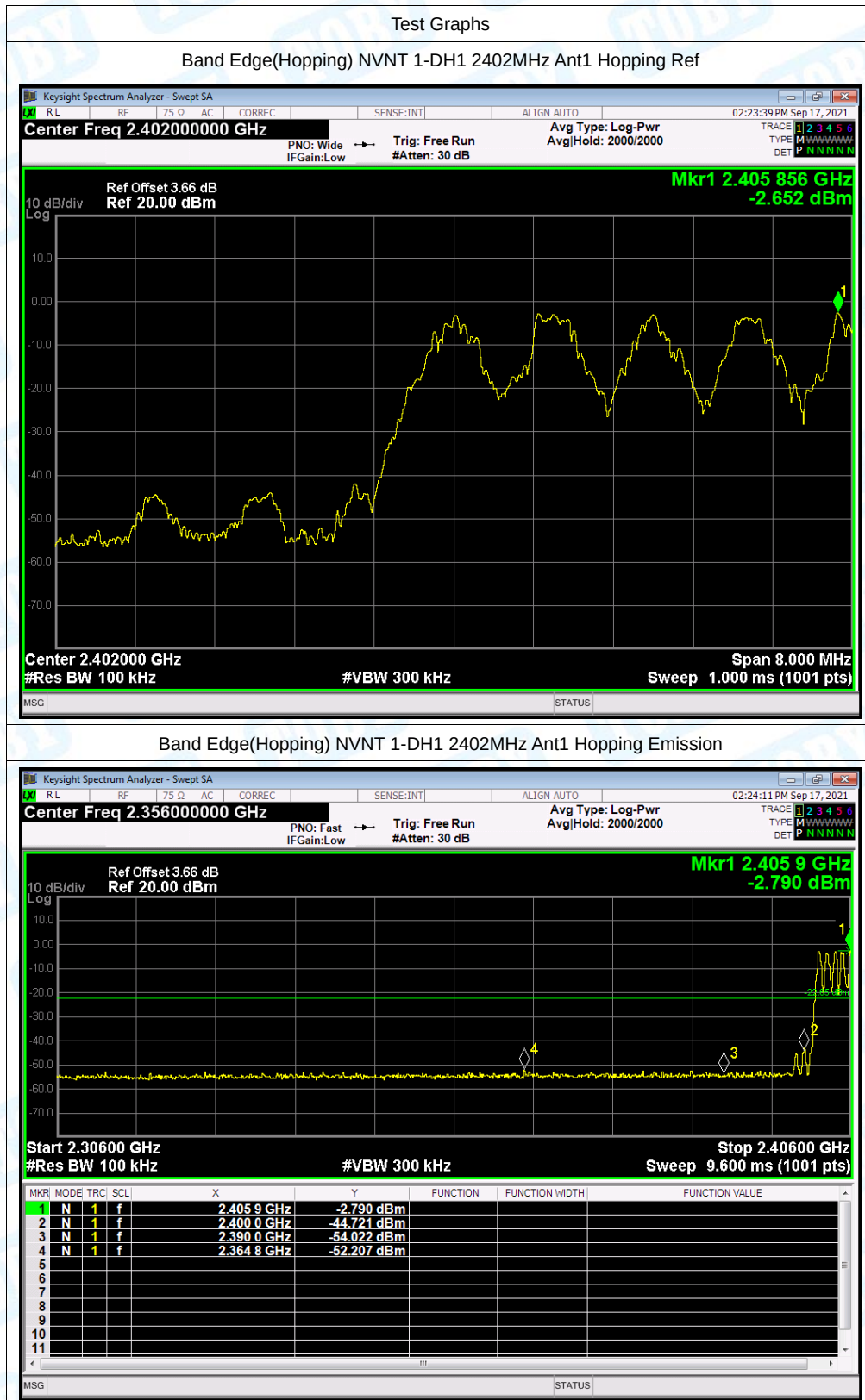






6.Band Edge(Hopping)

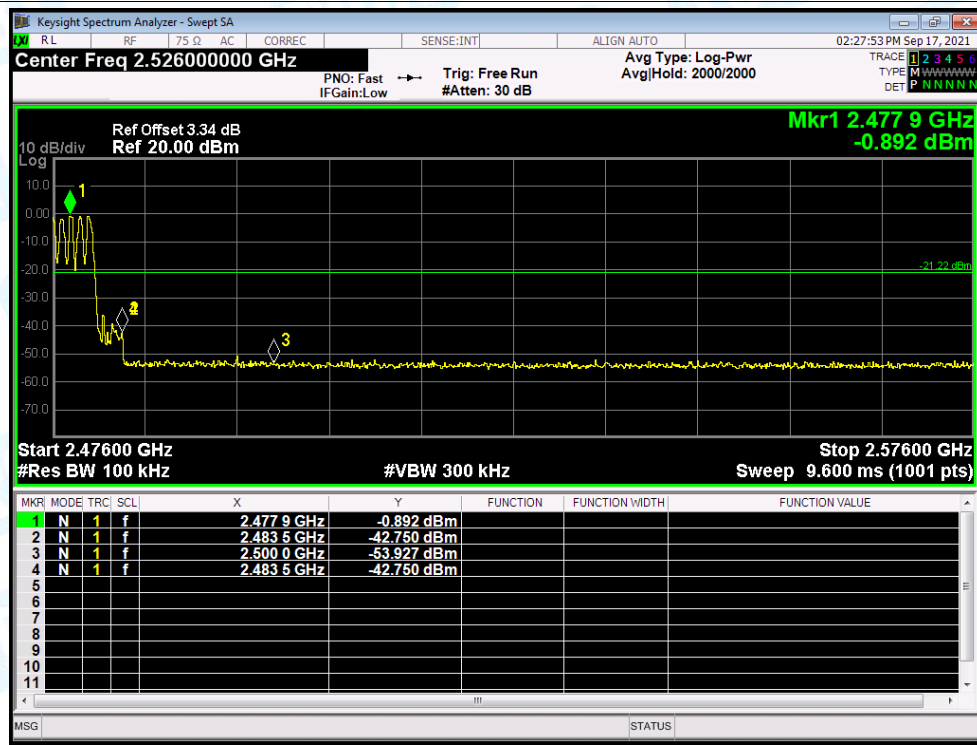
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-49.55	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-41.53	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-48.99	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-41.21	-20	Pass

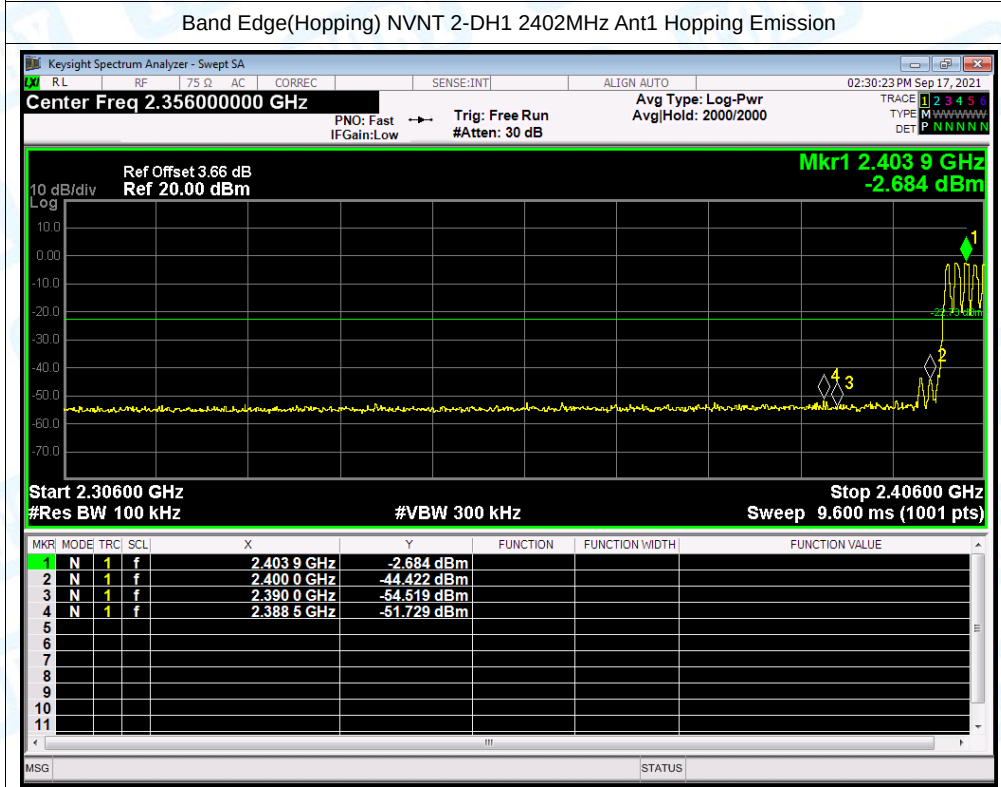
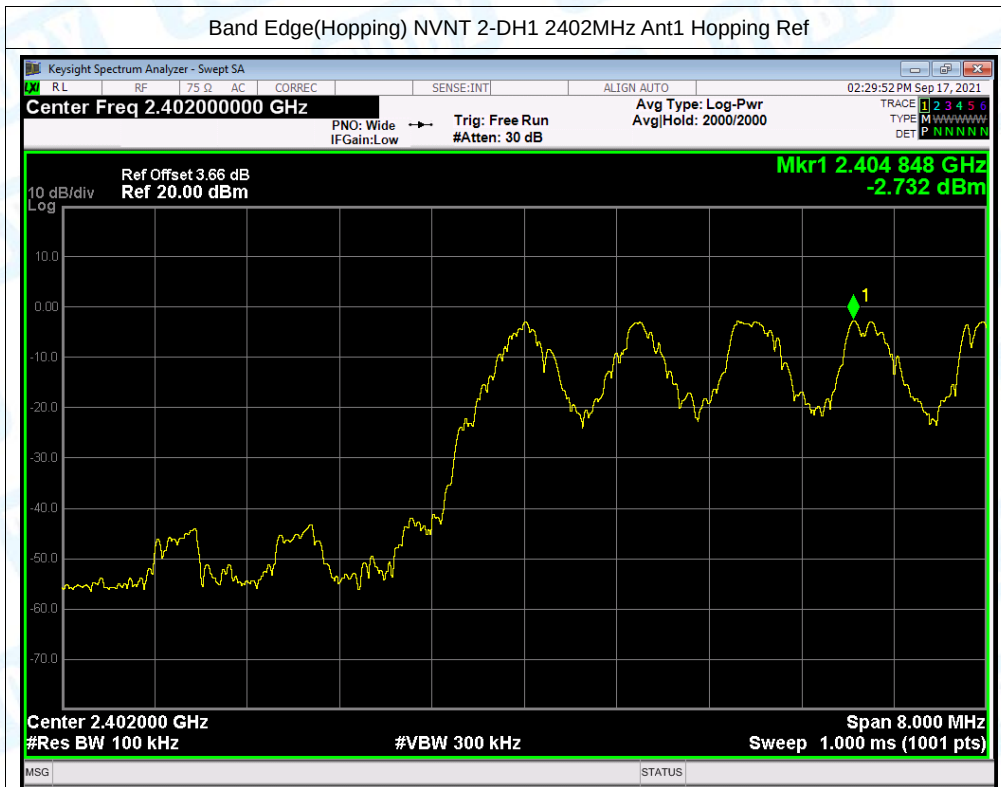


Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



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

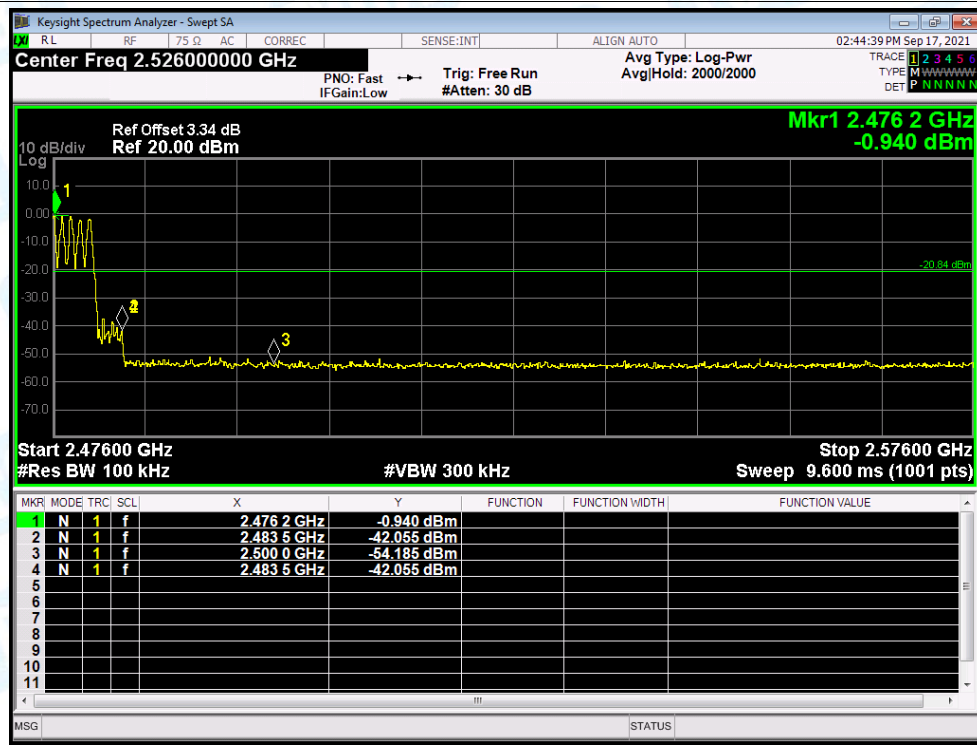




Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



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

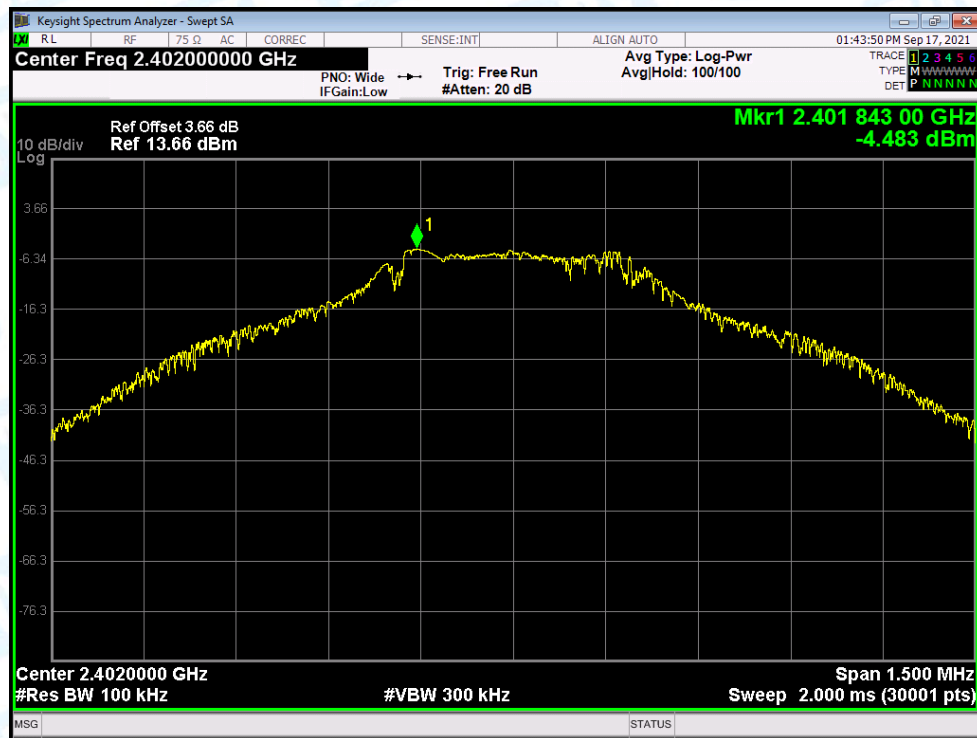


7.Conducted RF Spurious Emission

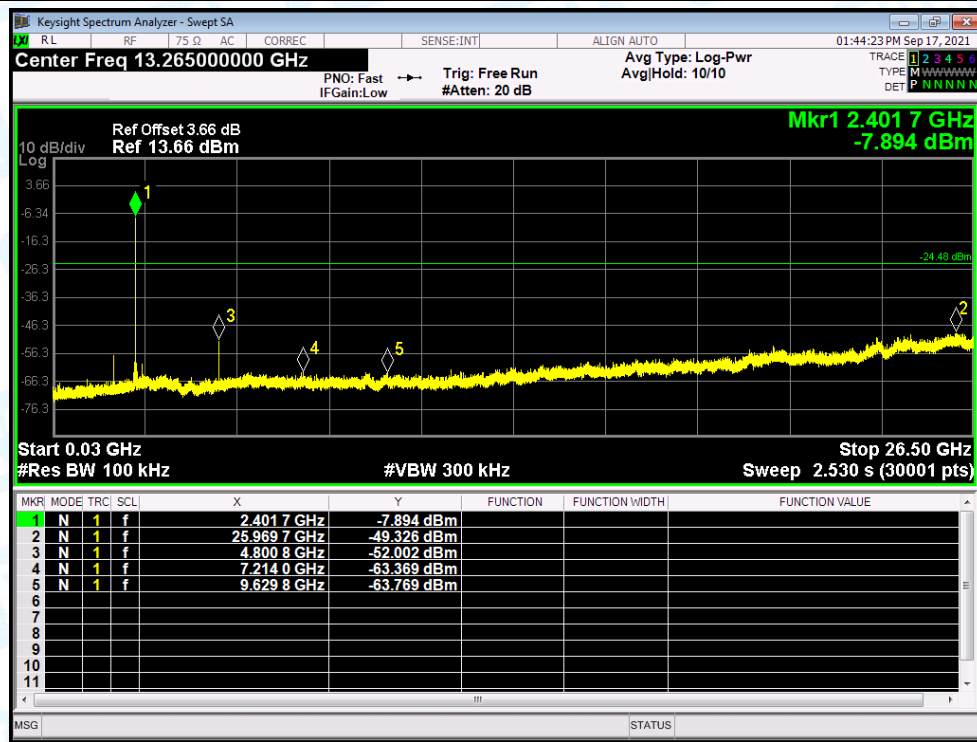
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-44.84	-20	Pass
NVNT	1-DH1	2441	Ant1	-45.39	-20	Pass
NVNT	1-DH1	2480	Ant1	-46.66	-20	Pass
NVNT	2-DH1	2402	Ant1	-44.47	-20	Pass
NVNT	2-DH1	2441	Ant1	-45.87	-20	Pass
NVNT	2-DH1	2480	Ant1	-47.3	-20	Pass

Test Graphs

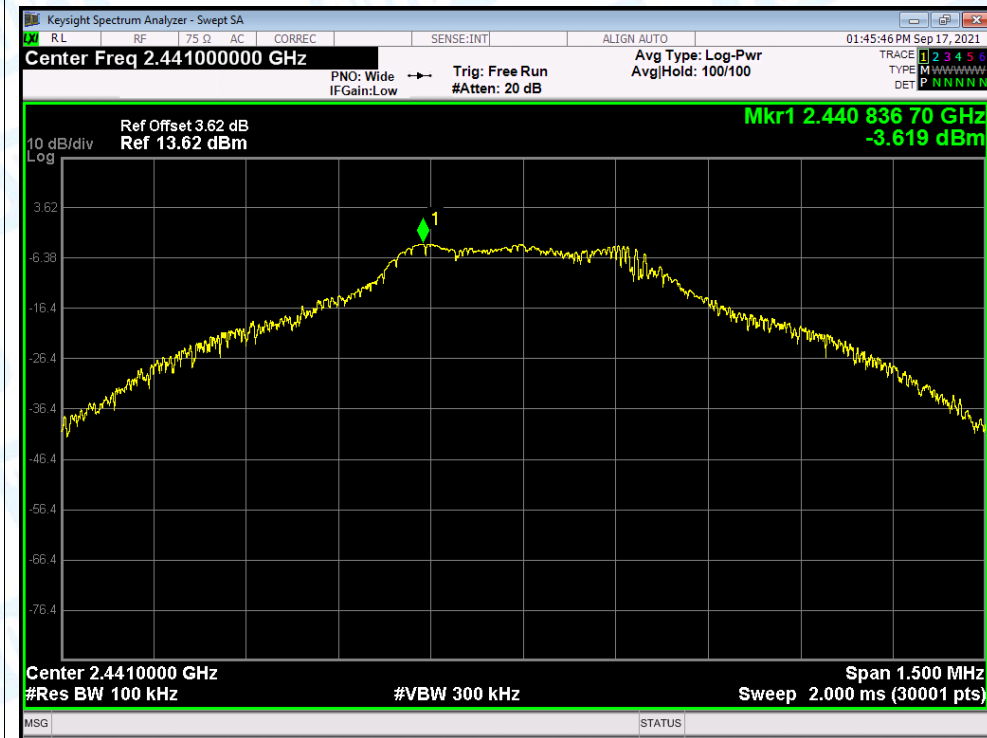
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



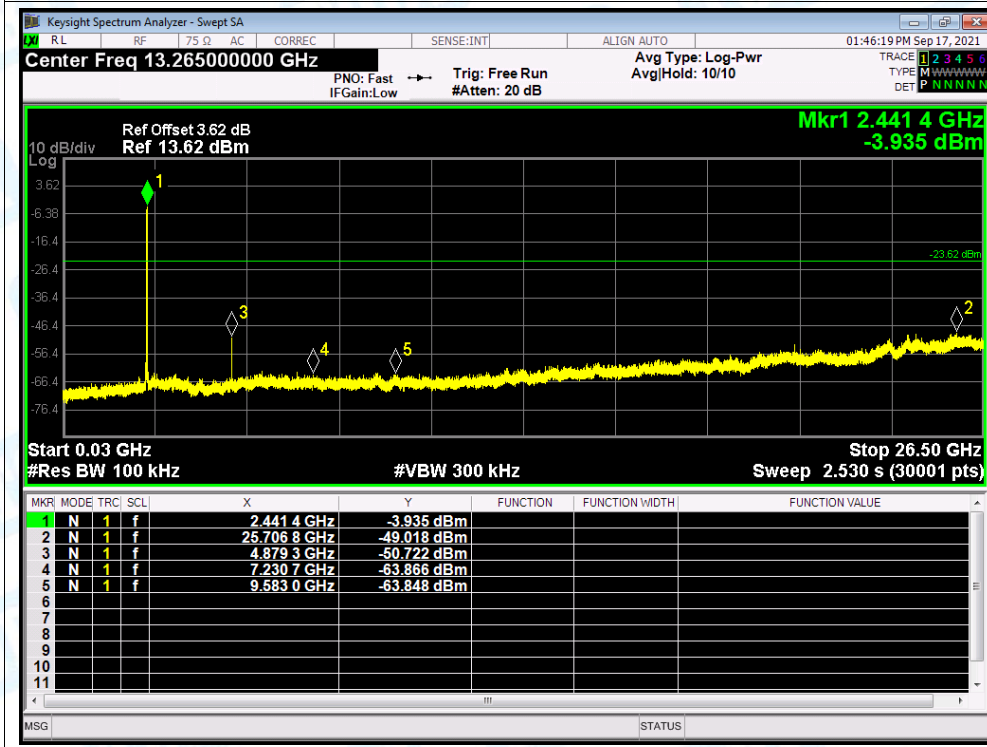
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



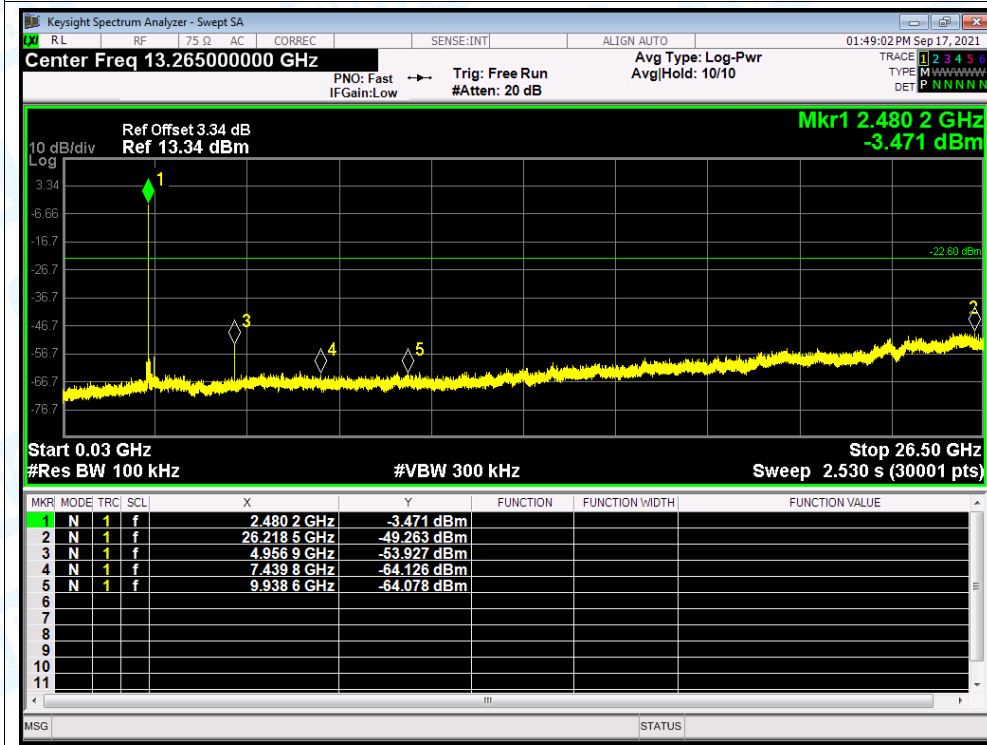
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



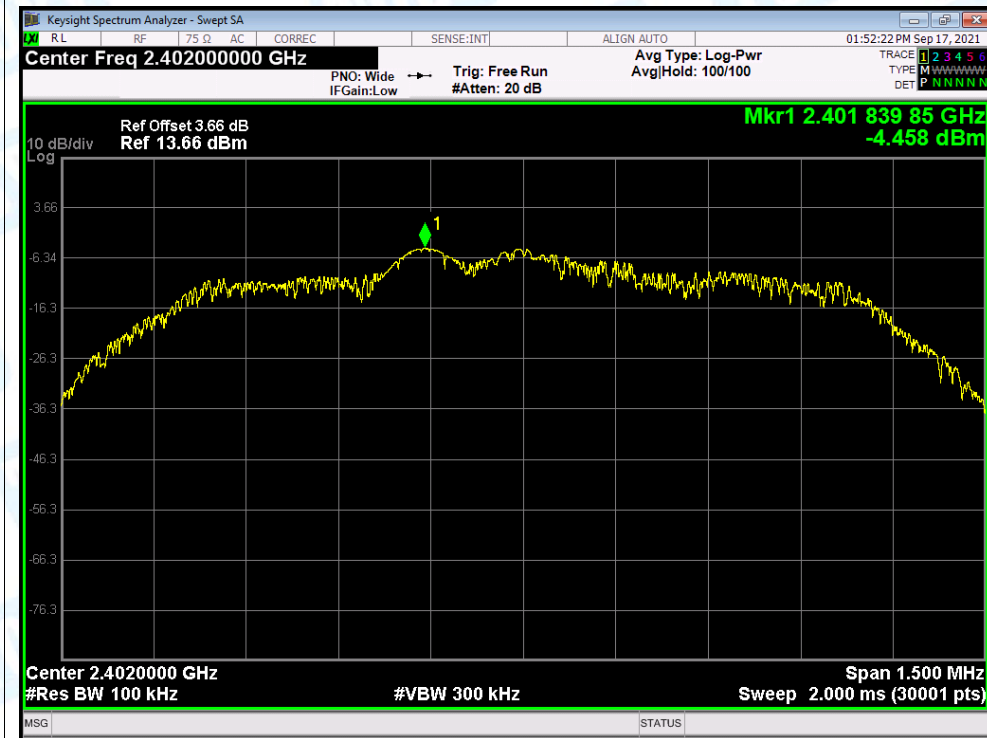
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



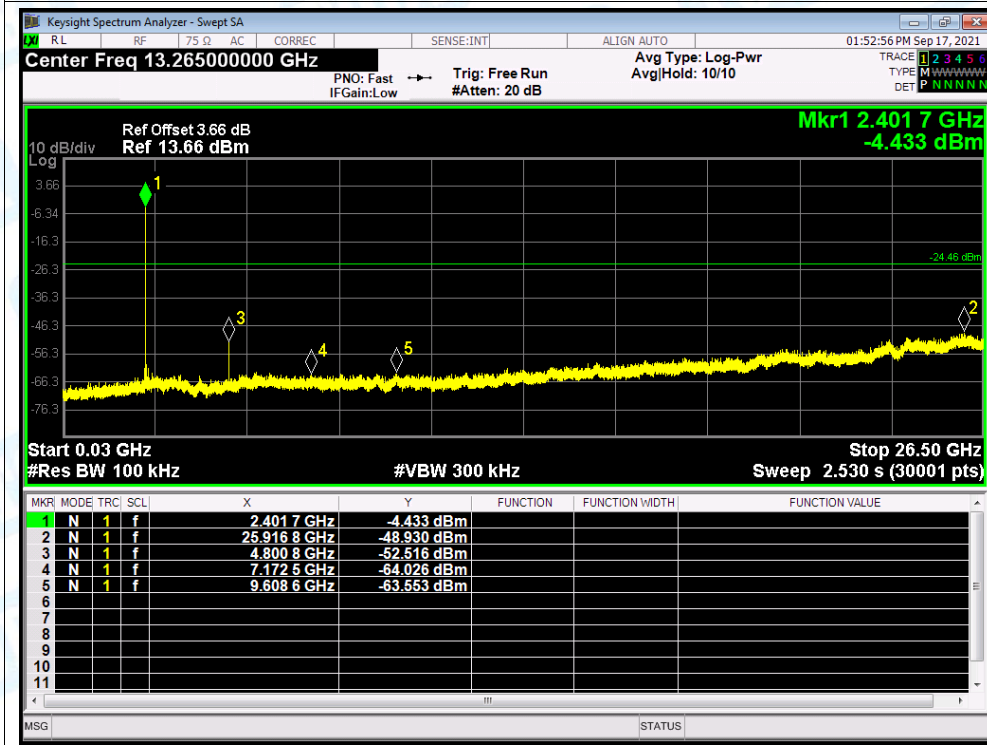
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



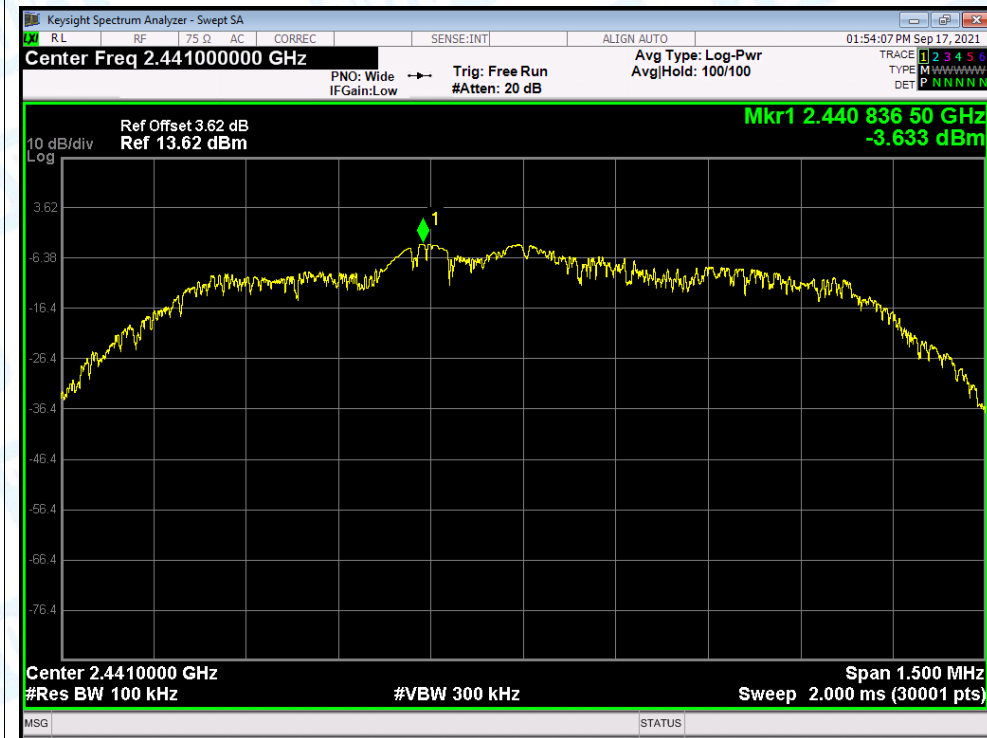
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



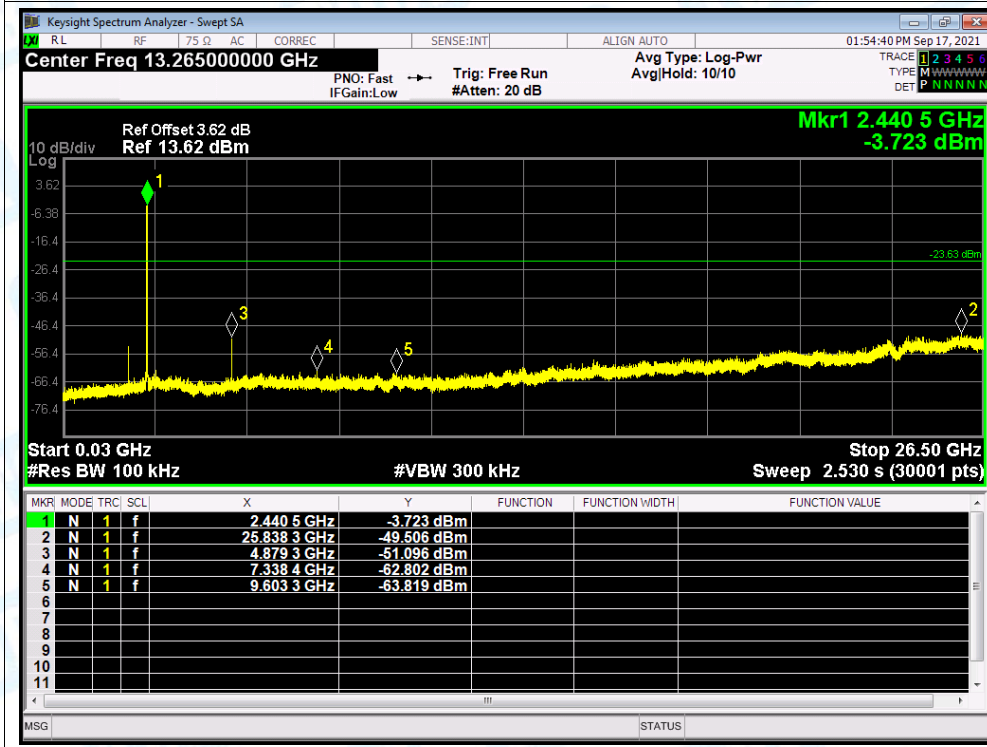
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



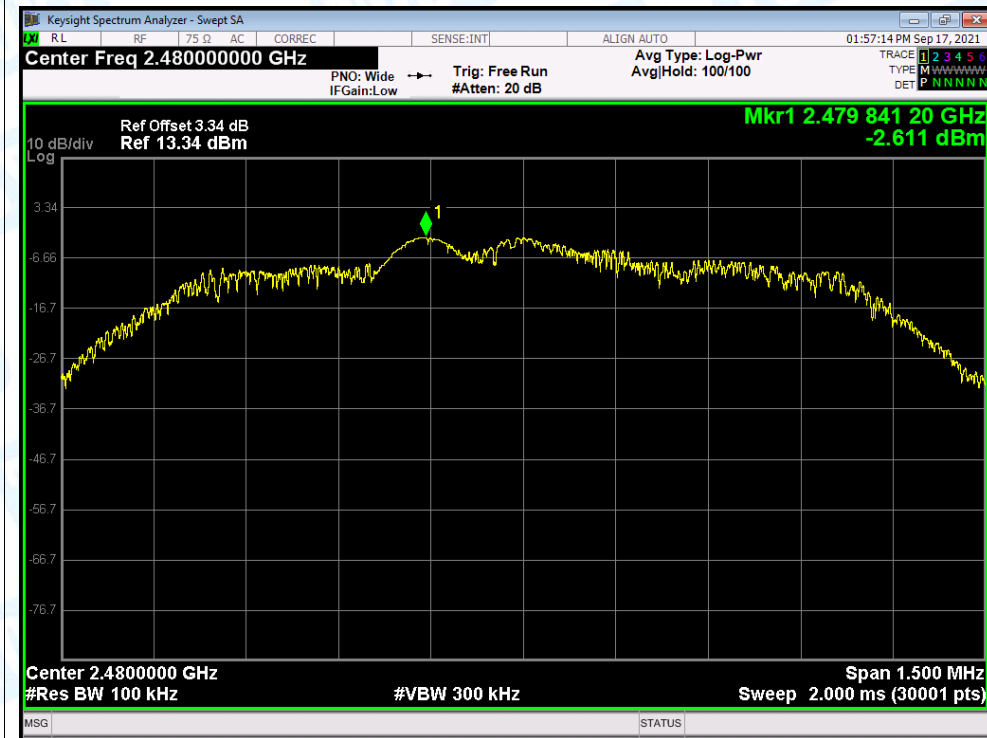
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



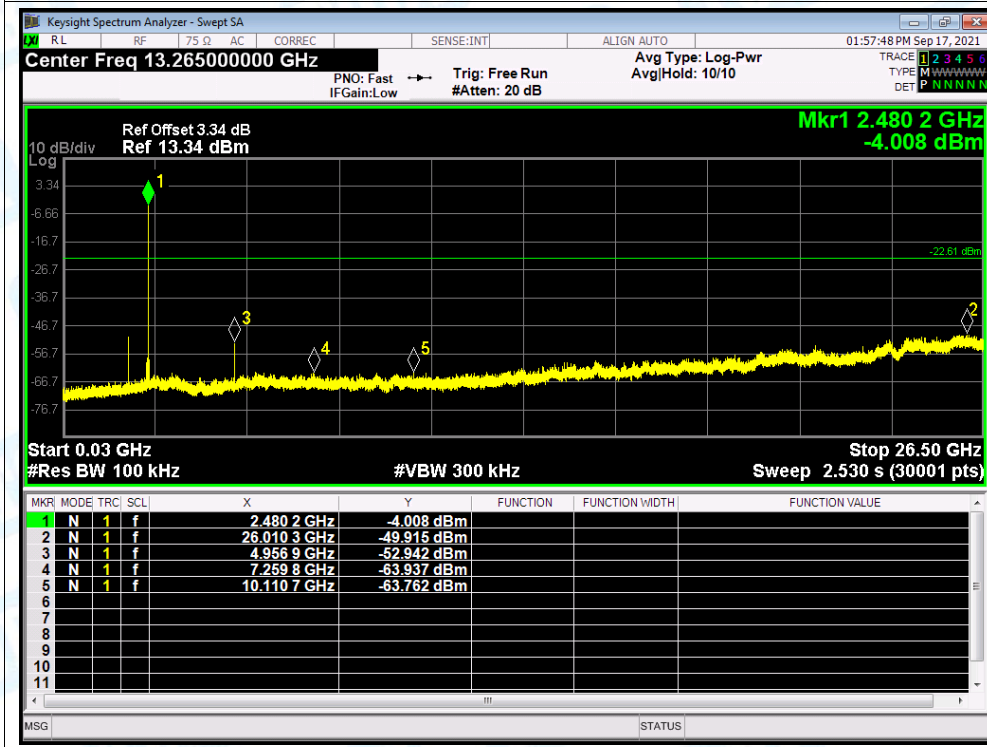
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

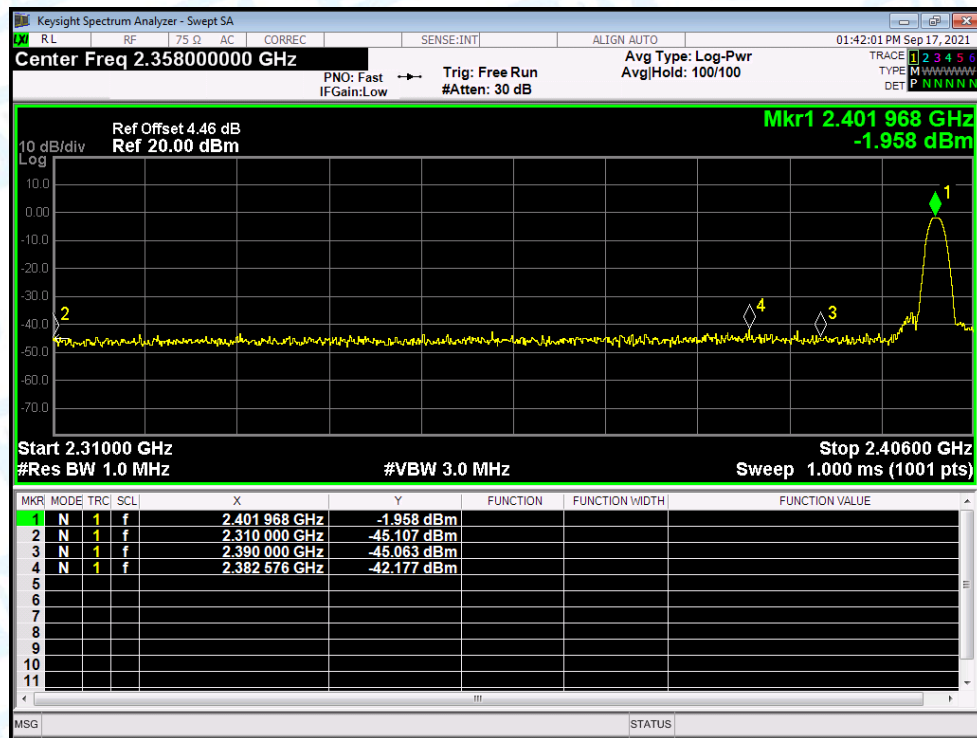


8.Restrict Band

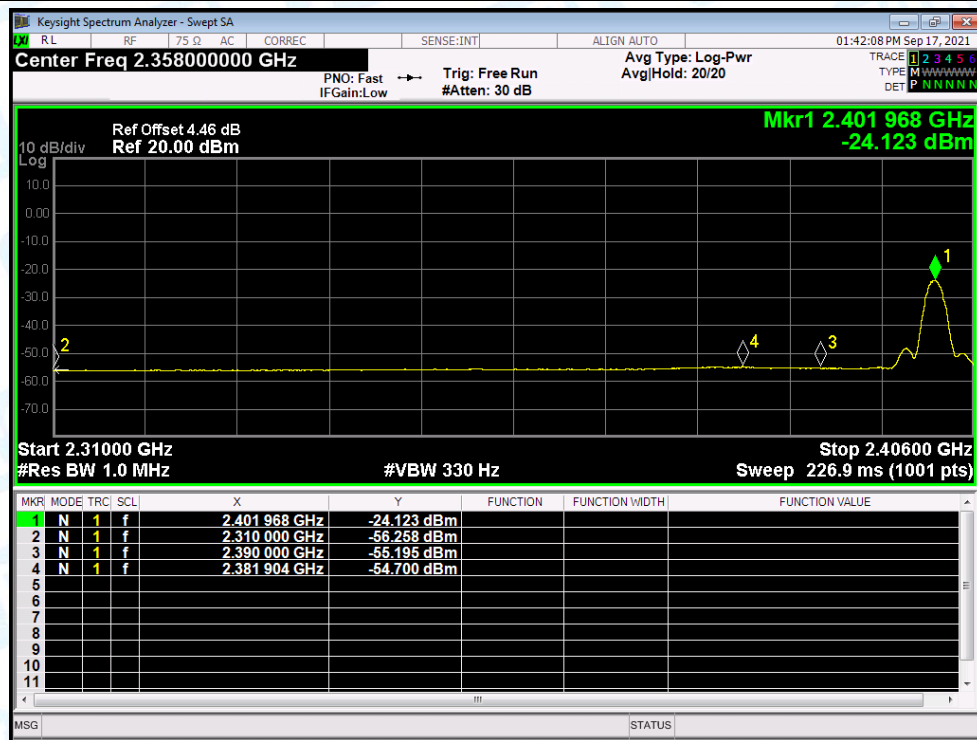
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-45.75	2	51.51	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.21	2	41.05	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2382.576	-42.17	2	55.09	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2381.904	-54.7	2	42.56	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-45.91	2	51.35	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.42	2	41.84	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-35.92	2	61.34	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-48.13	2	49.13	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.536	-34.56	2	62.7	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.512	-48.13	2	49.13	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-43.92	2	53.34	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.05	2	43.21	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-46.72	2	50.54	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.31	2	40.95	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2350.896	-42.27	2	54.99	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2380.368	-54.82	2	42.44	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-45.84	2	51.42	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.42	2	41.84	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-37.06	2	60.2	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-49.11	2	48.15	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.608	-35.08	2	62.18	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.512	-49.11	2	48.15	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-43.41	2	53.85	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-54.14	2	43.12	Average	54	Pass

Test Graphs

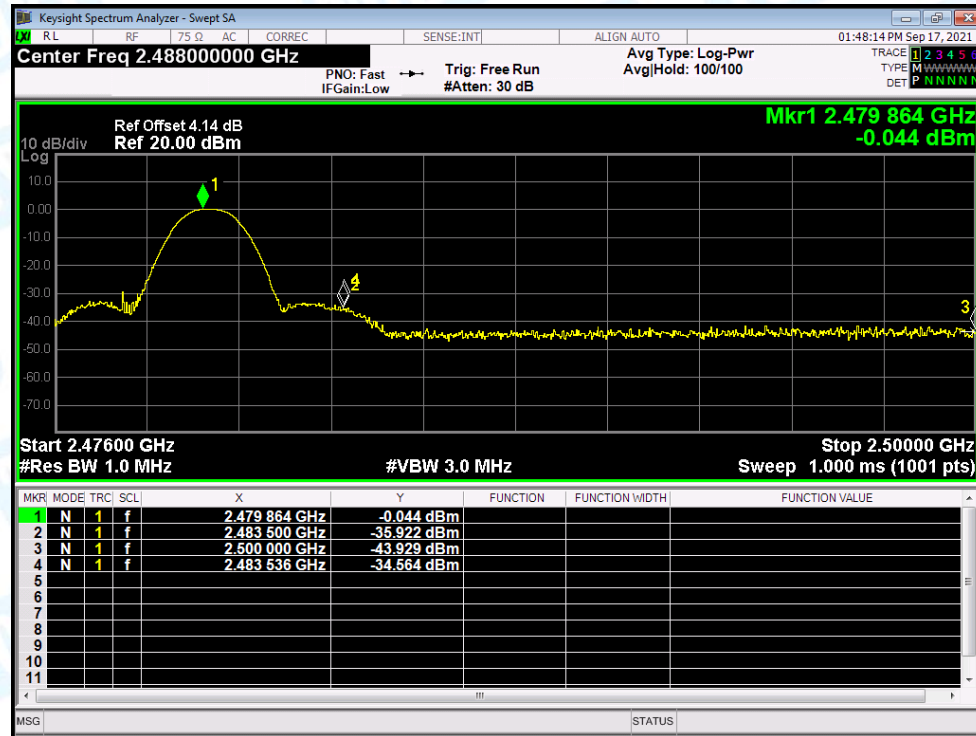
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



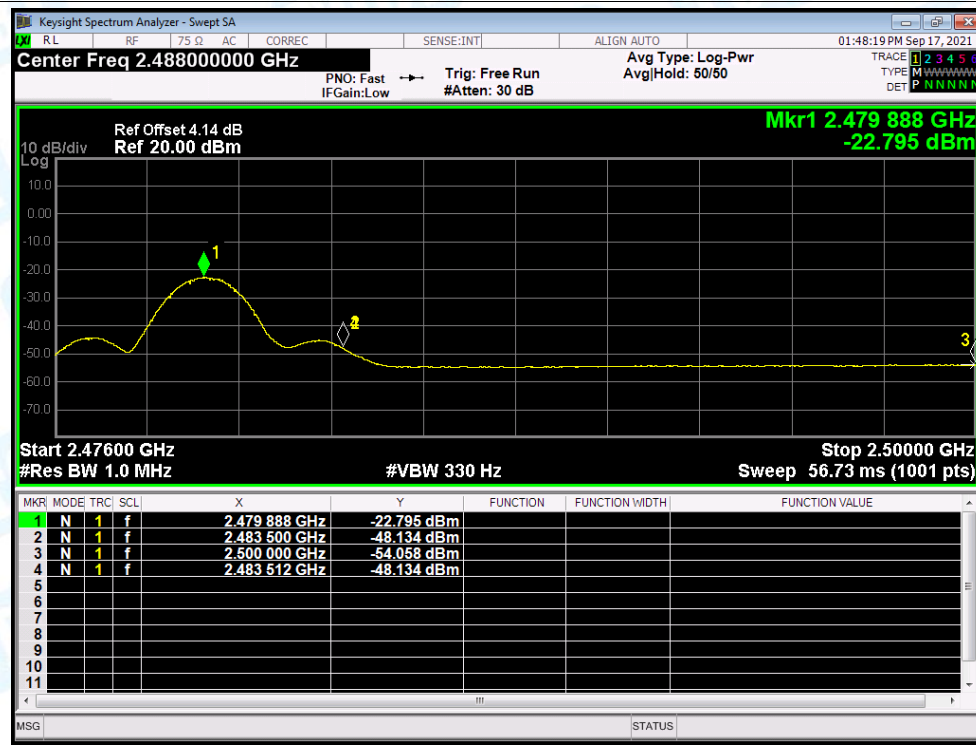
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



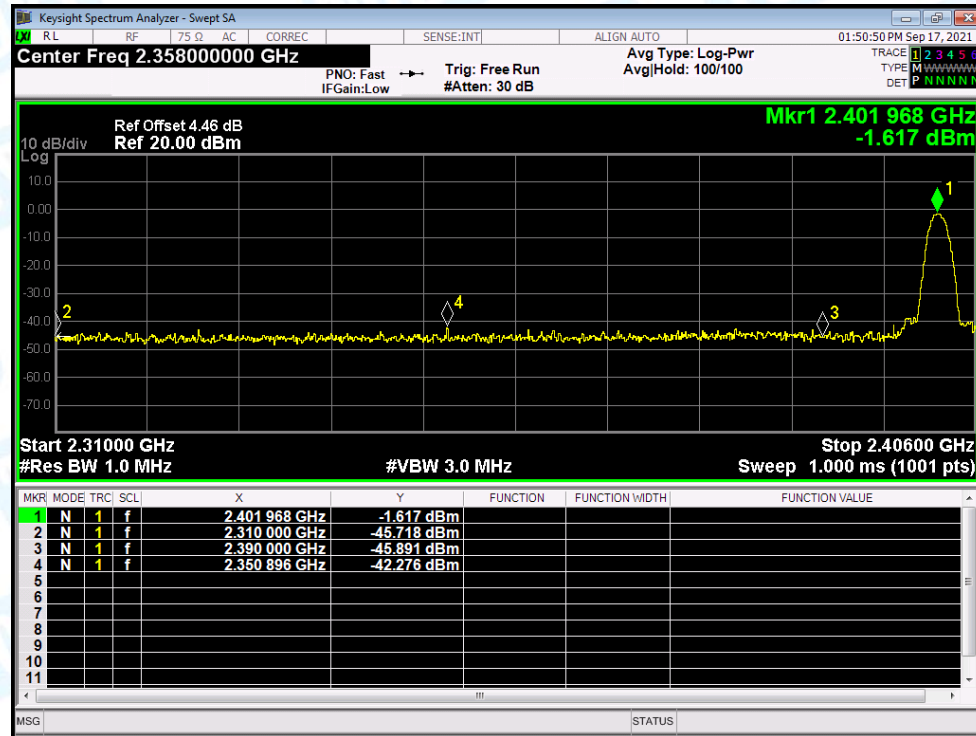
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



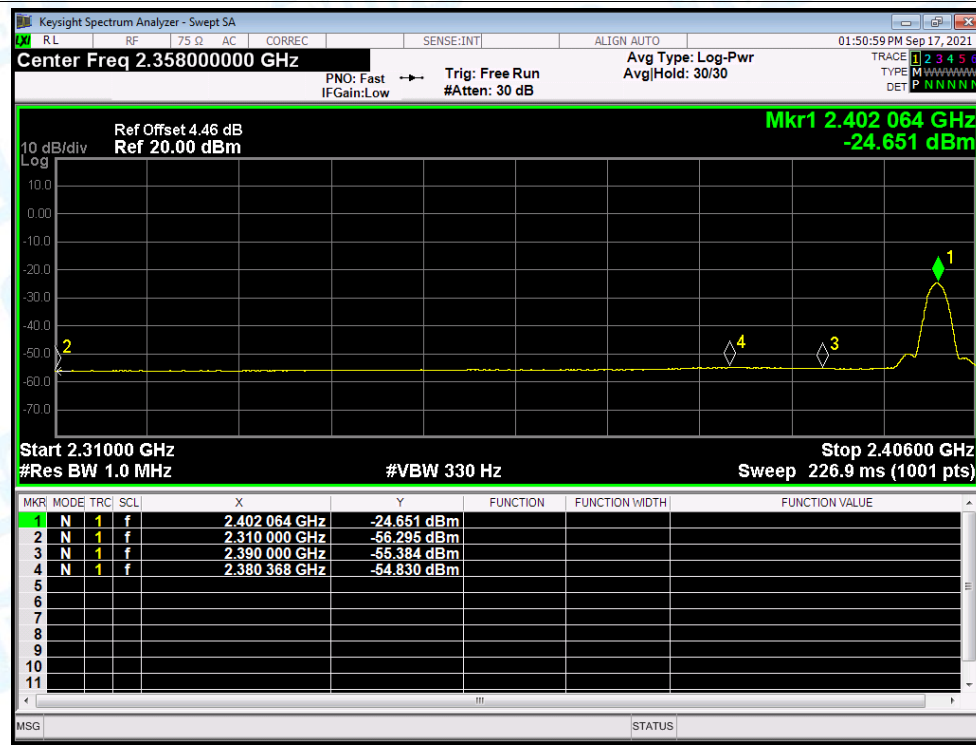
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



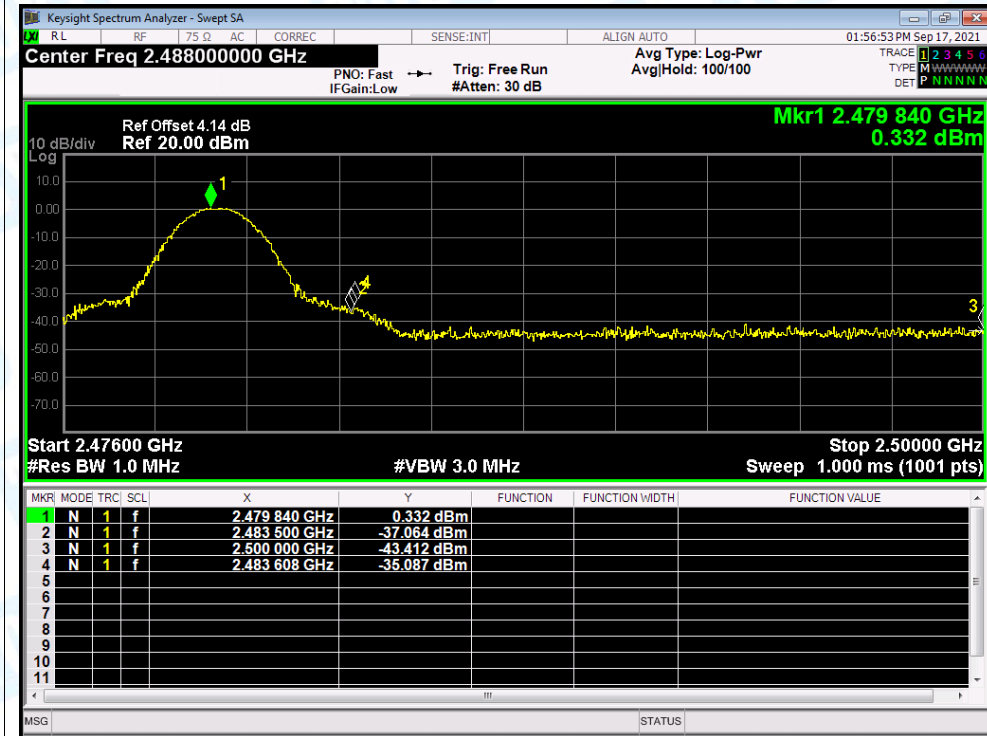
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



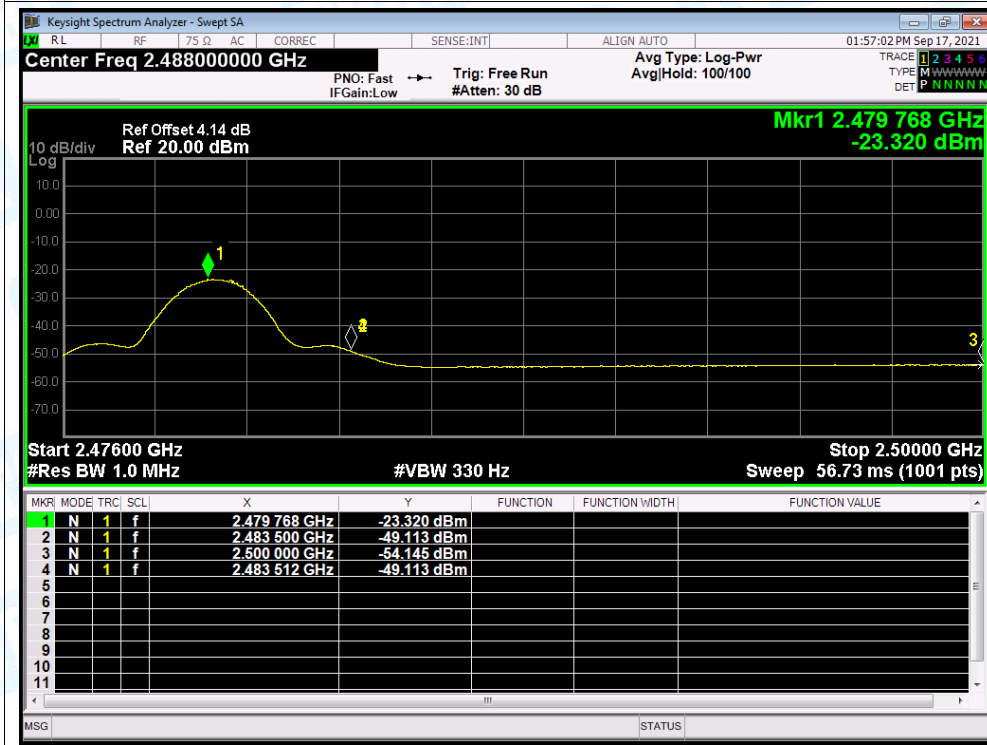
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



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



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

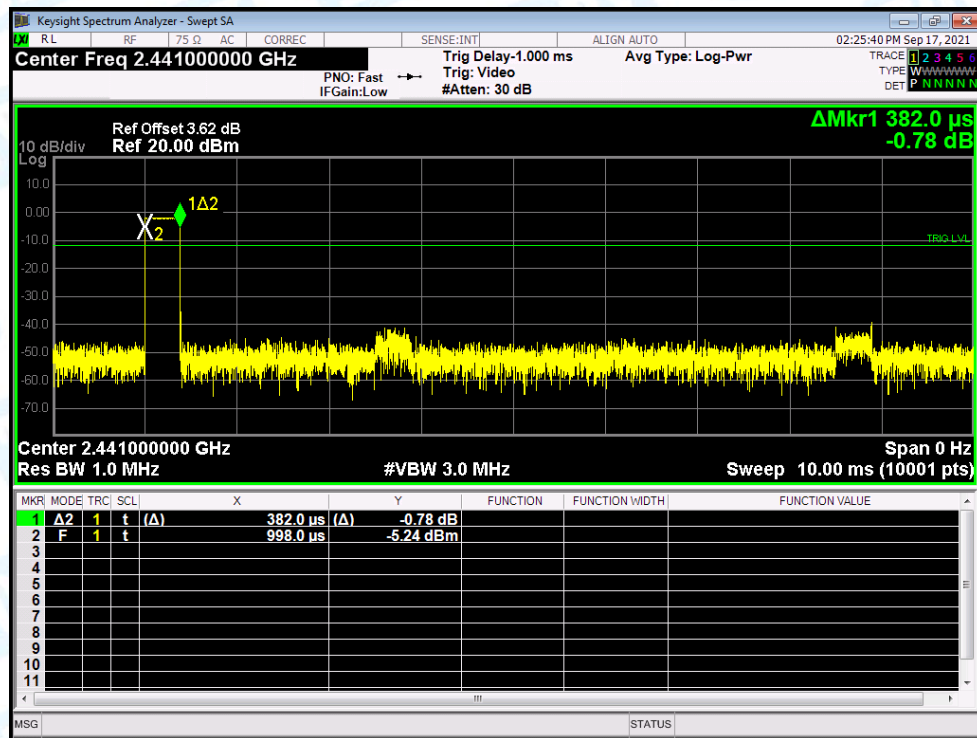


9.Dwell Time

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.382	122.24	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.382	122.24	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.637	261.92	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.891	308.373	31600	400	Pass

Test Graphs

Dwell NVNT 1-DH1 2441MHz Ant1



Dwell NVNT 1-DH3 2441MHz Ant1

