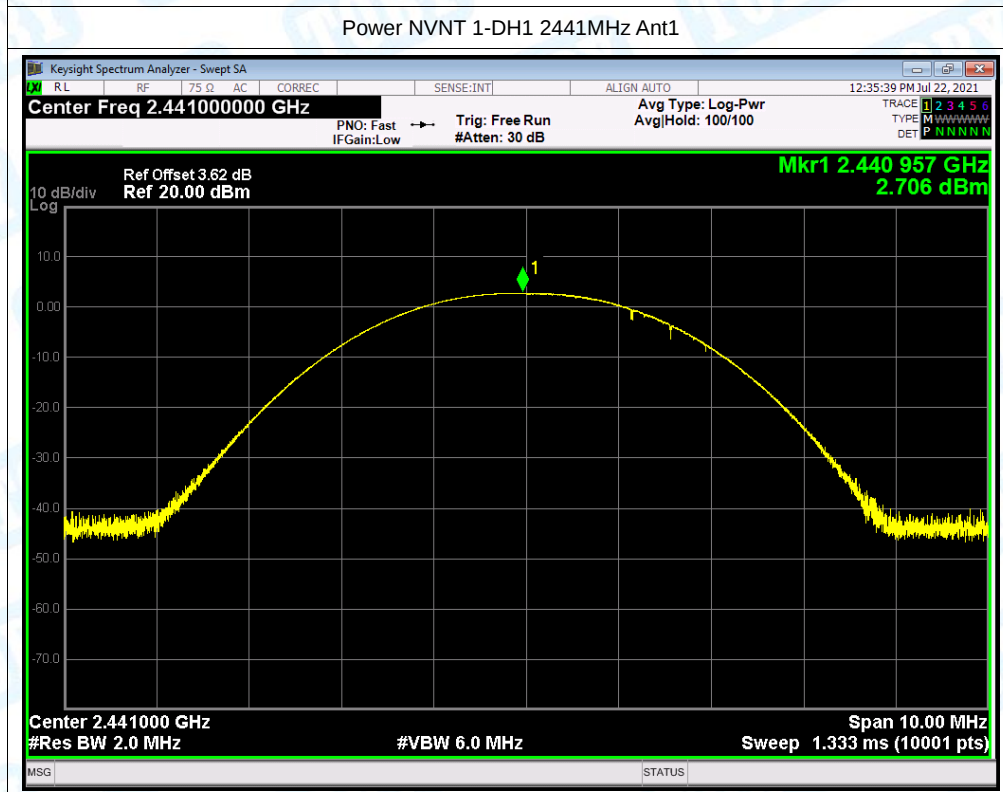


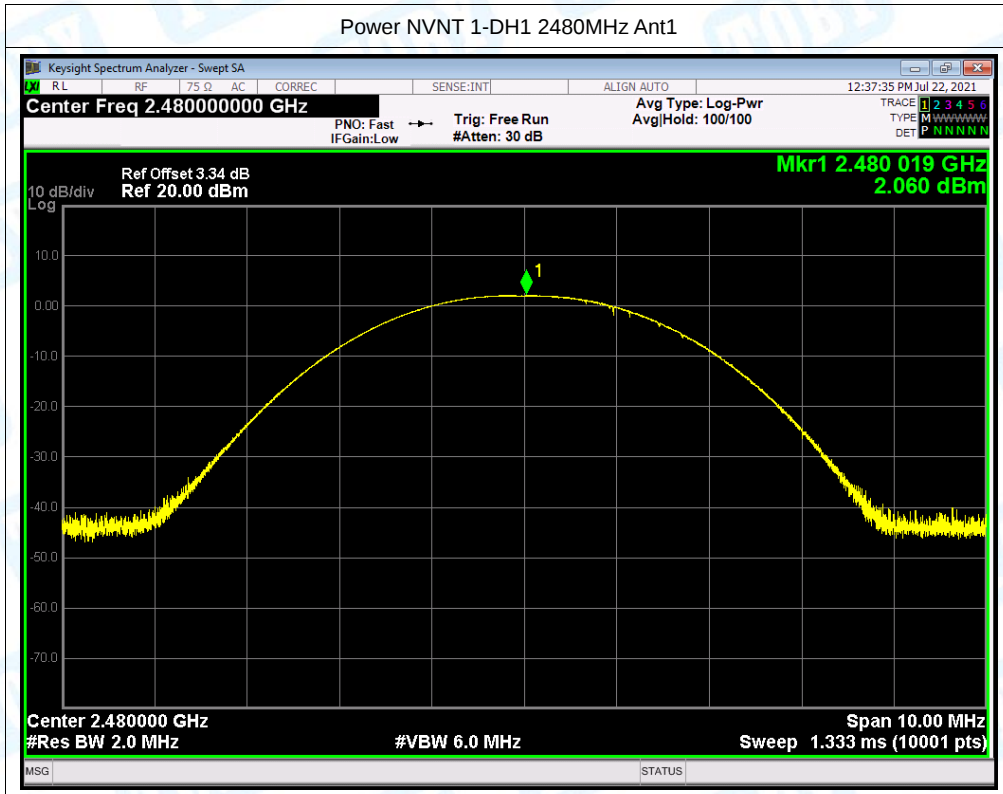
RF Test Data for Bluetooth(BDR+EDR) (Conducted Measurements)

General Description of EUT	
Product Name:	Smart Helmet
Test Model:	HA02D
Sample ID:	20210610-01-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	HeJingchang
Note: For a more detailed features description, please refer to the report TB-RF182369.	

1.Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	2.584	2.584	21	Pass
NVNT	1-DH1	2441	2.706	2.706	21	Pass
NVNT	1-DH1	2480	2.060	2.060	21	Pass





2.-20dB Bandwidth

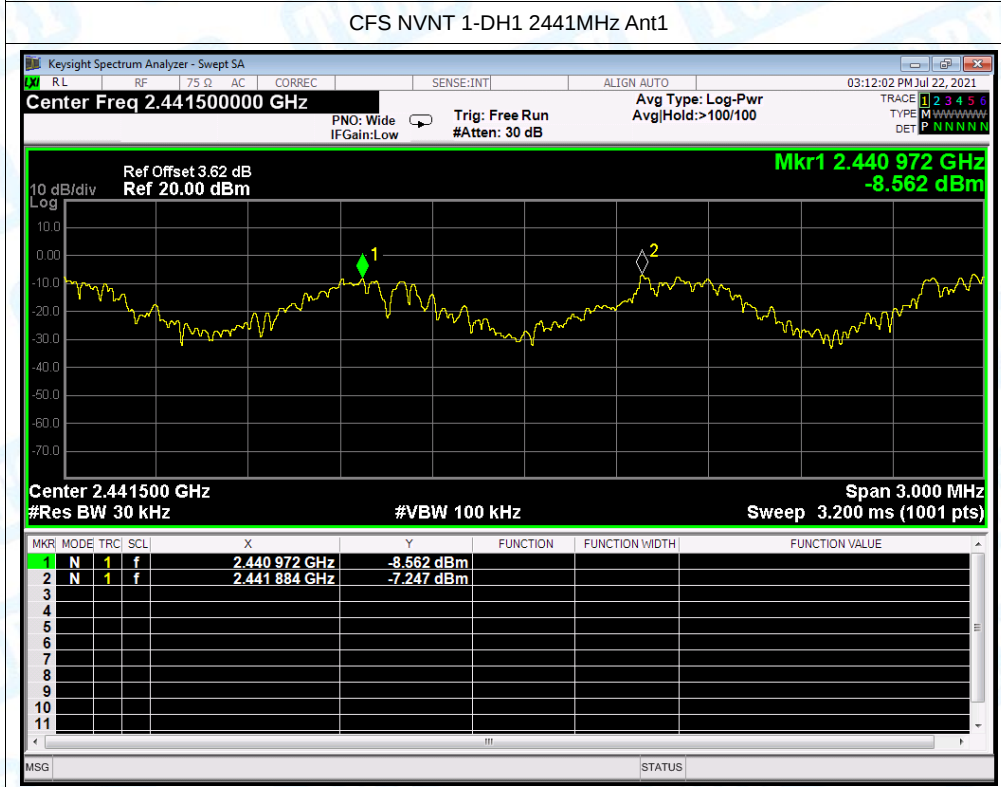
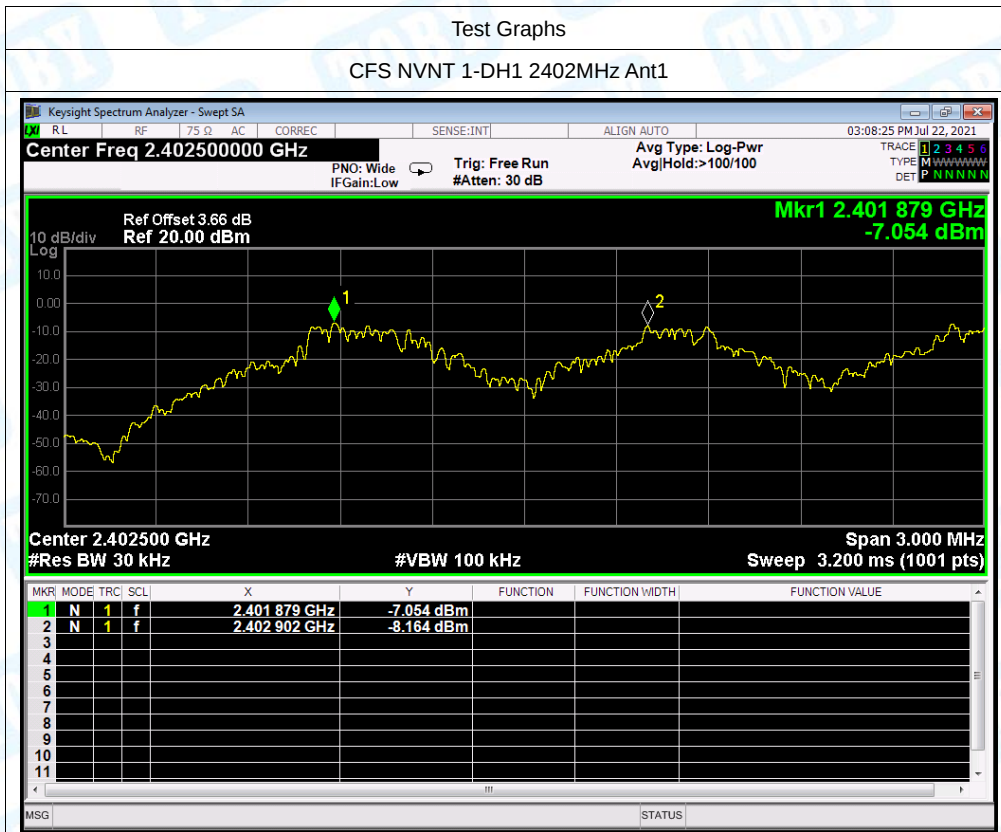
Condition	Mode	Frequency (MHz)	99% OBW (MHz)	-20 dB Bandwidth (MHz)	2/3 *20dB BW (MHz)
NVNT	1-DH1	2402	0.82947	0.734	0.489
NVNT	1-DH1	2441	0.84349	0.728	0.485
NVNT	1-DH1	2480	0.83651	0.822	0.548

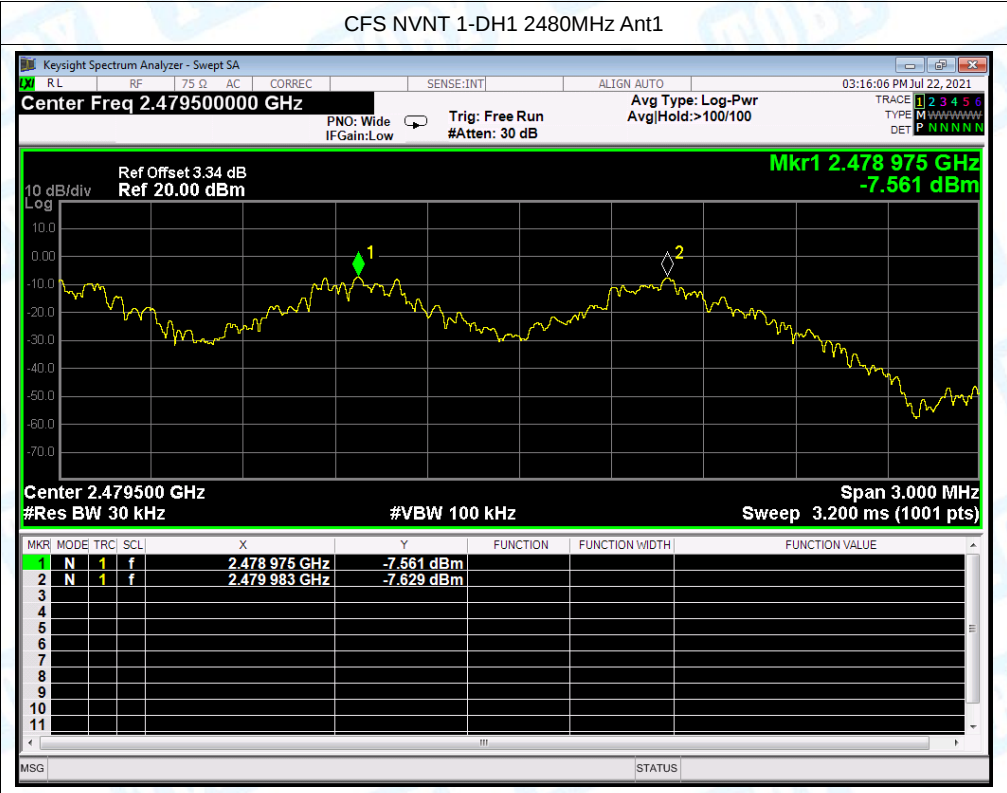




3.Carrier Frequencies Separation

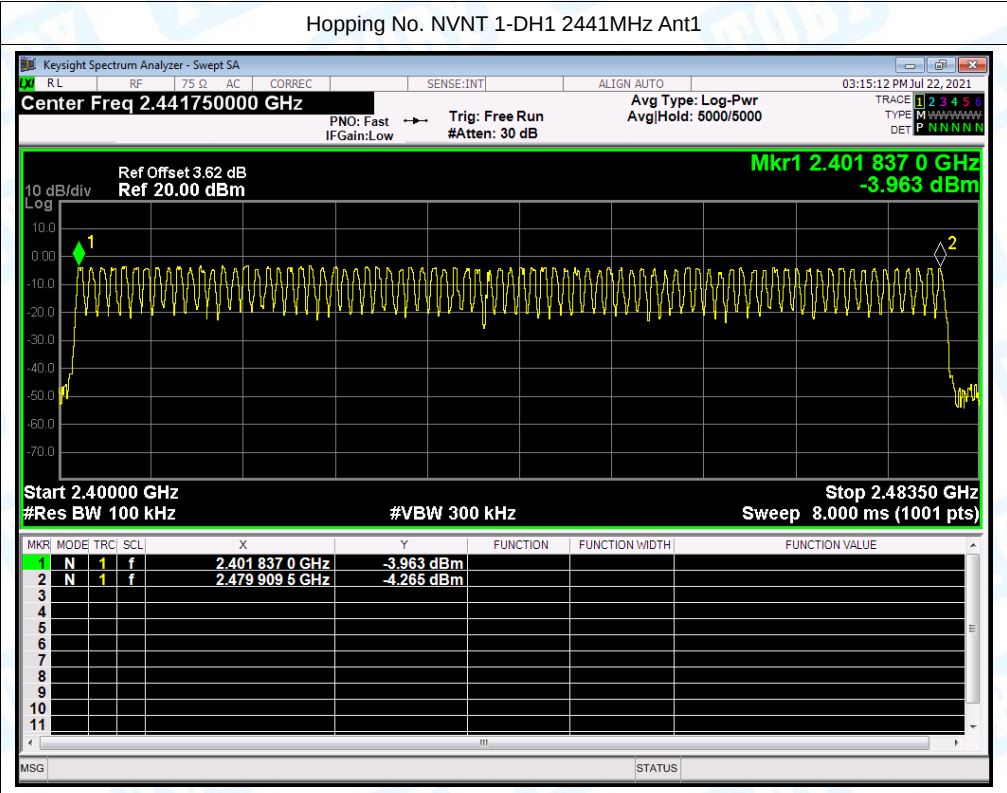
Condition	Mode	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	2401.879	2402.902	1.023	0.489	Pass
NVNT	1-DH1	2440.972	2441.884	0.912	0.485	Pass
NVNT	1-DH1	2478.975	2479.983	1.008	0.548	Pass





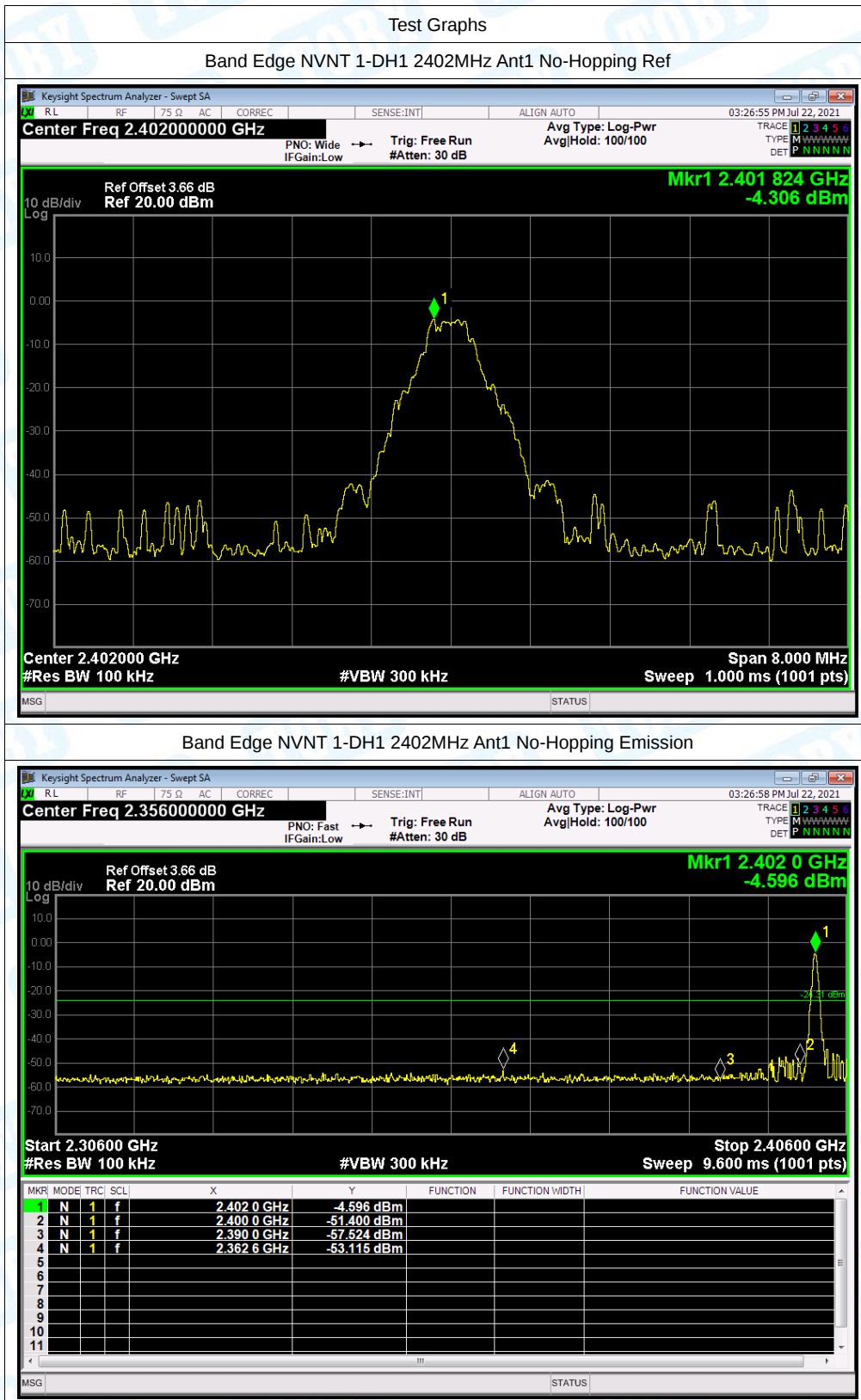
4.Number of Hopping Channel

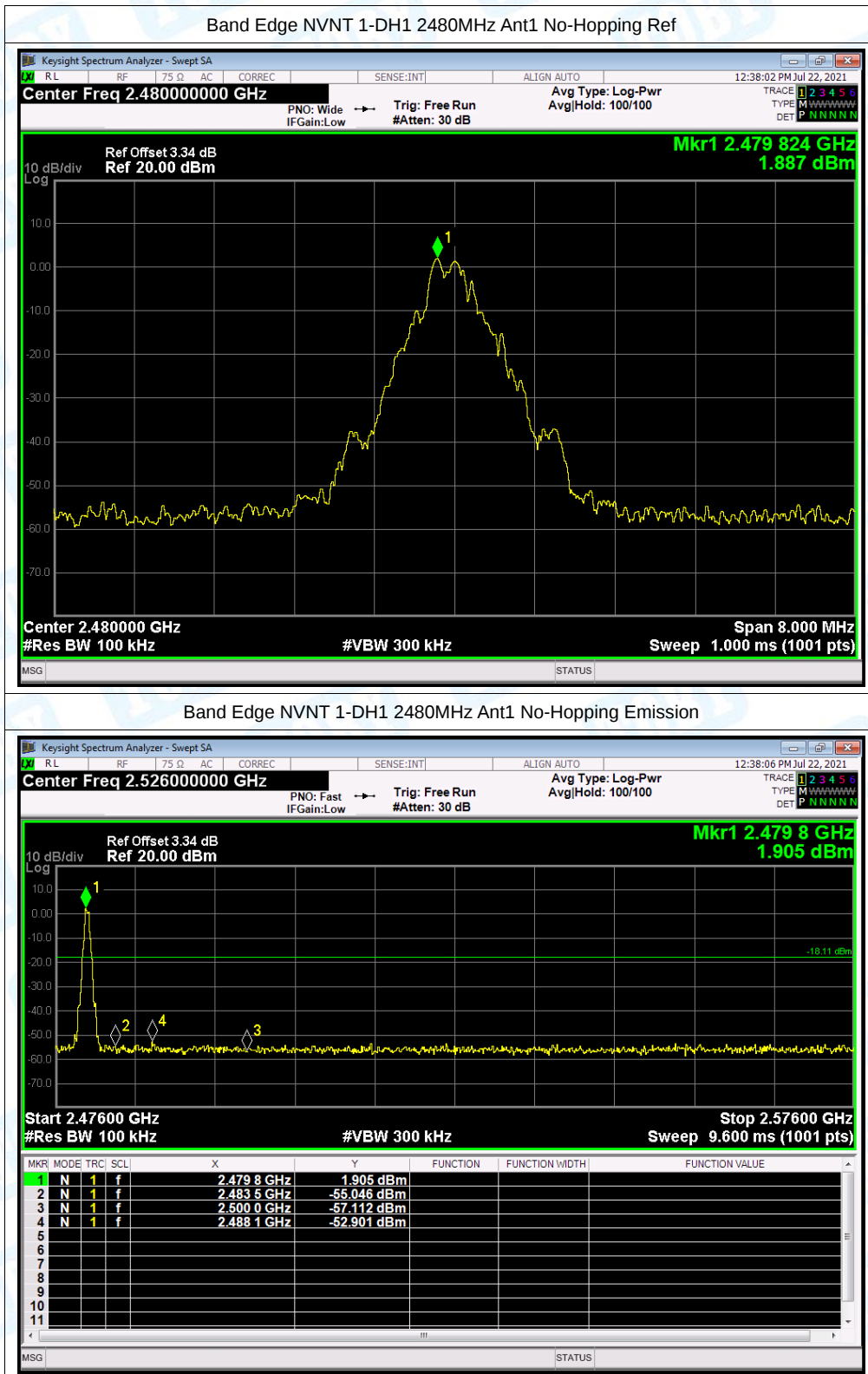
Condition	Mode	Hopping Number	Limit	Verdict
NVNT	1-DH1	79	15	Pass



5.Band Edge

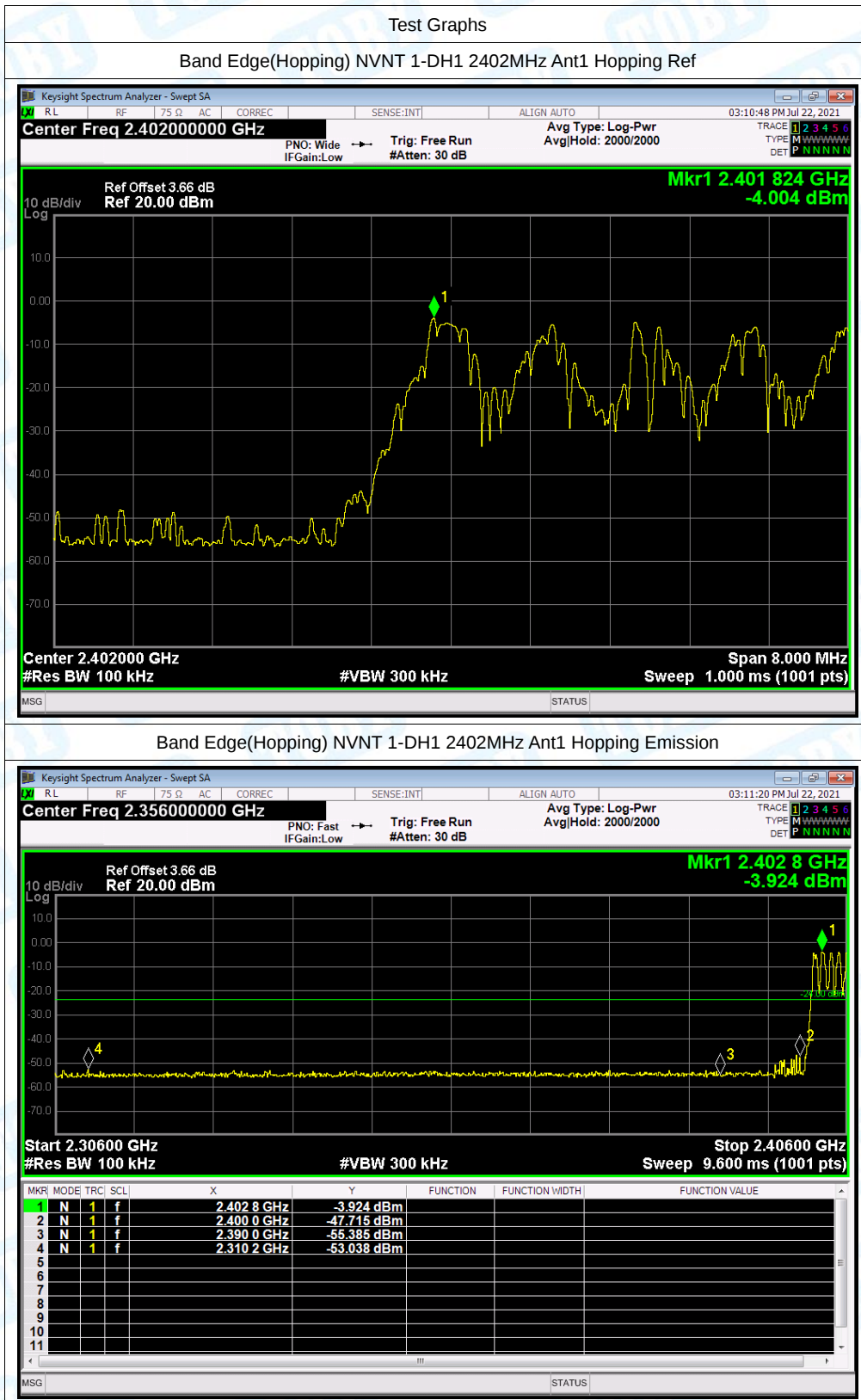
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	No-Hopping	-48.8	-20	Pass
NVNT	1-DH1	2480	No-Hopping	-54.79	-20	Pass

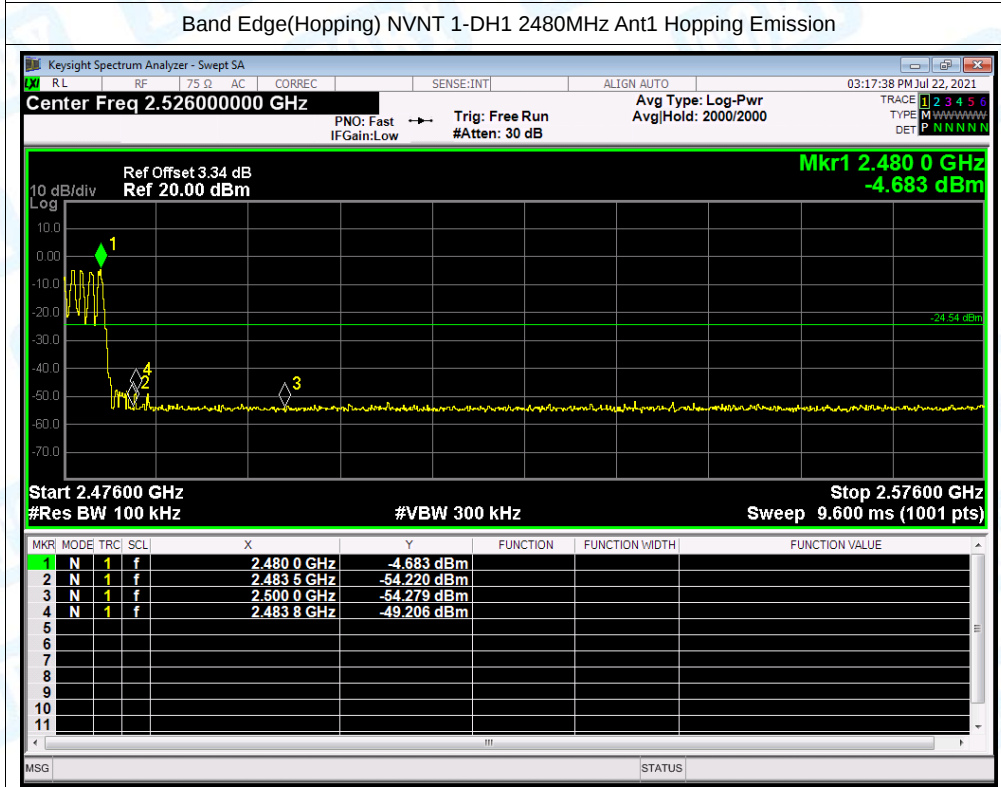




6.Band Edge(Hopping)

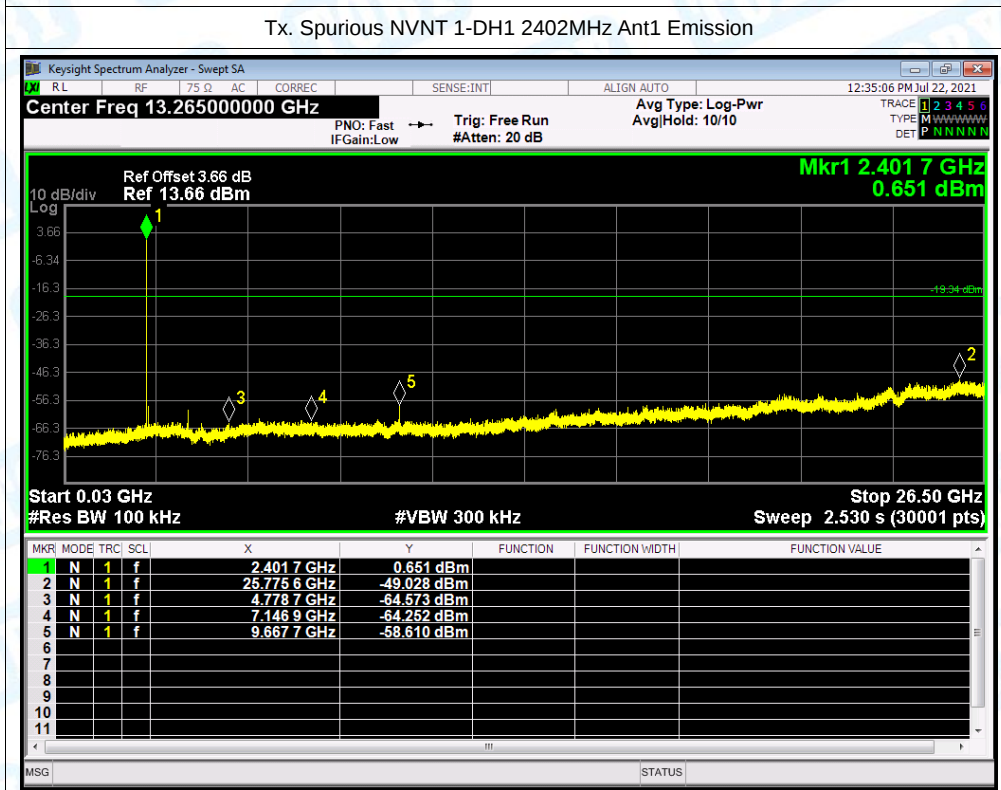
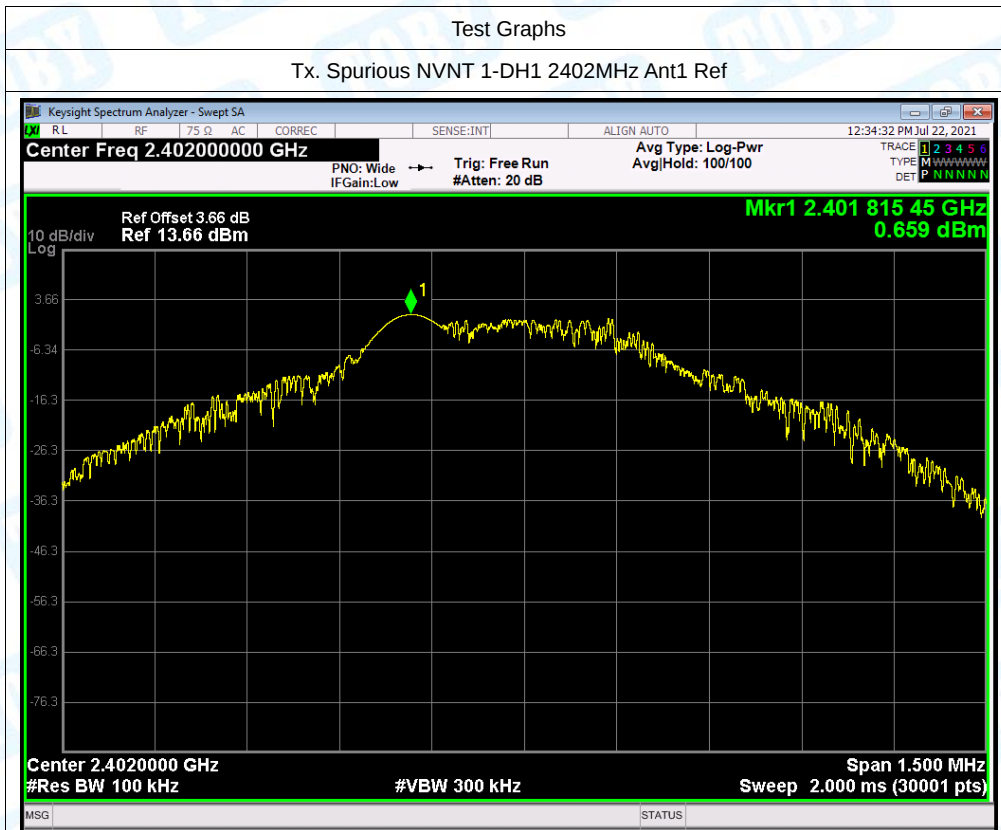
Condition	Mode	Frequency (MHz)	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Hopping	-49.03	-20	Pass
NVNT	1-DH1	2480	Hopping	-44.66	-20	Pass

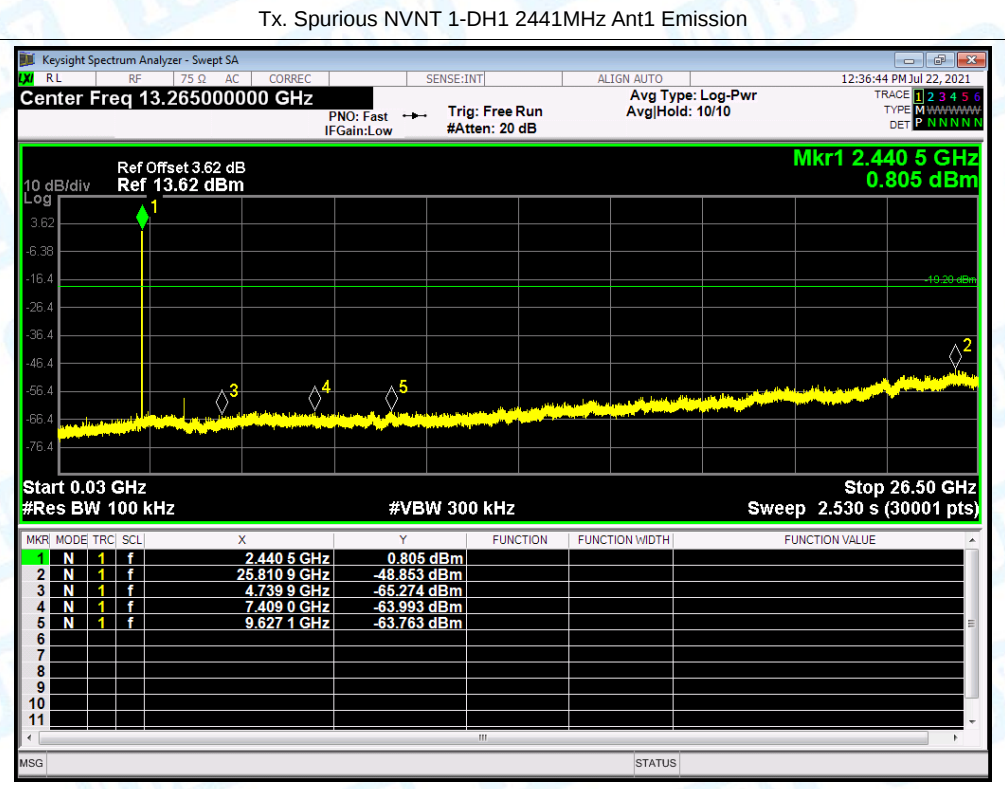
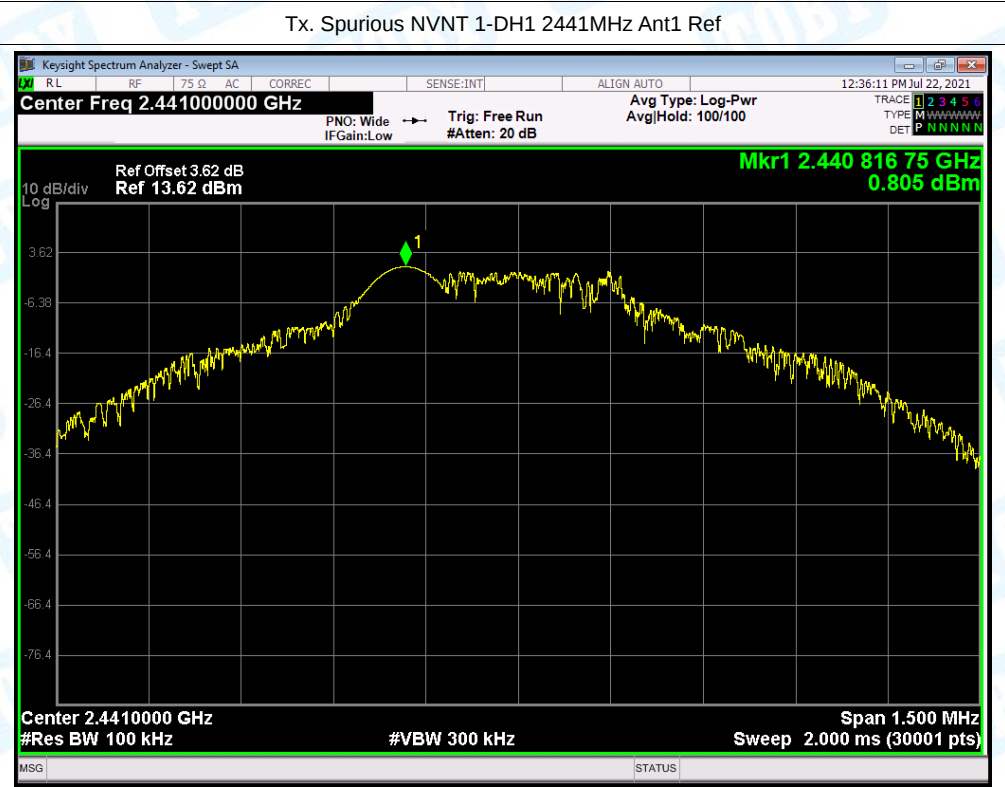




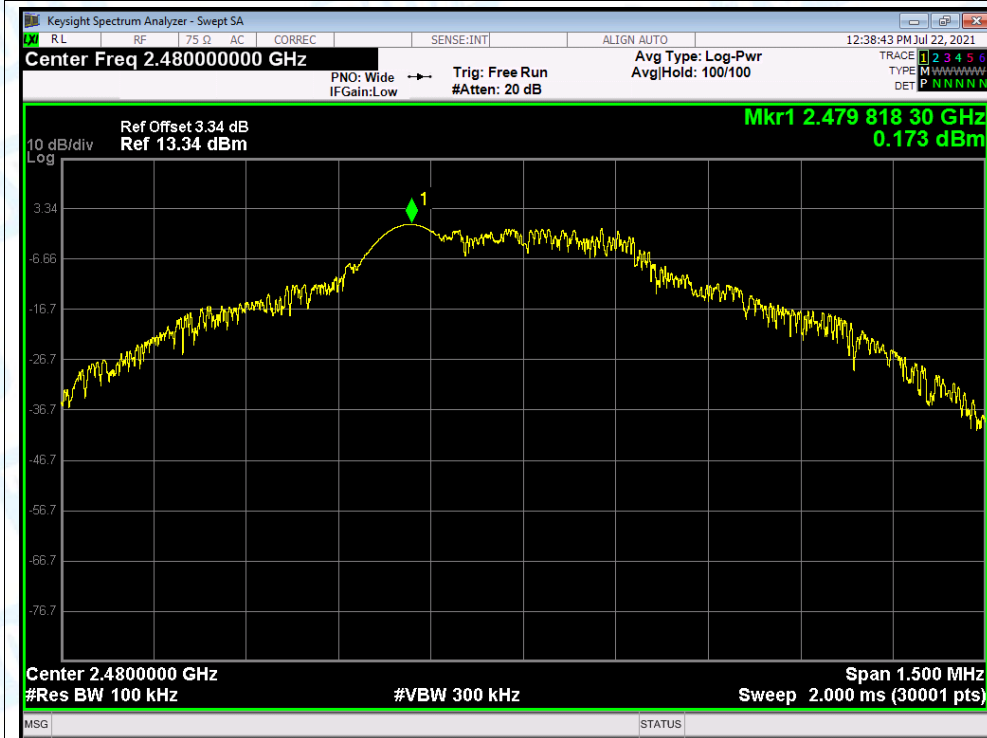
7.Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-49.68	-20	Pass
NVNT	1-DH1	2441	Ant1	-49.66	-20	Pass
NVNT	1-DH1	2480	Ant1	-49.61	-20	Pass

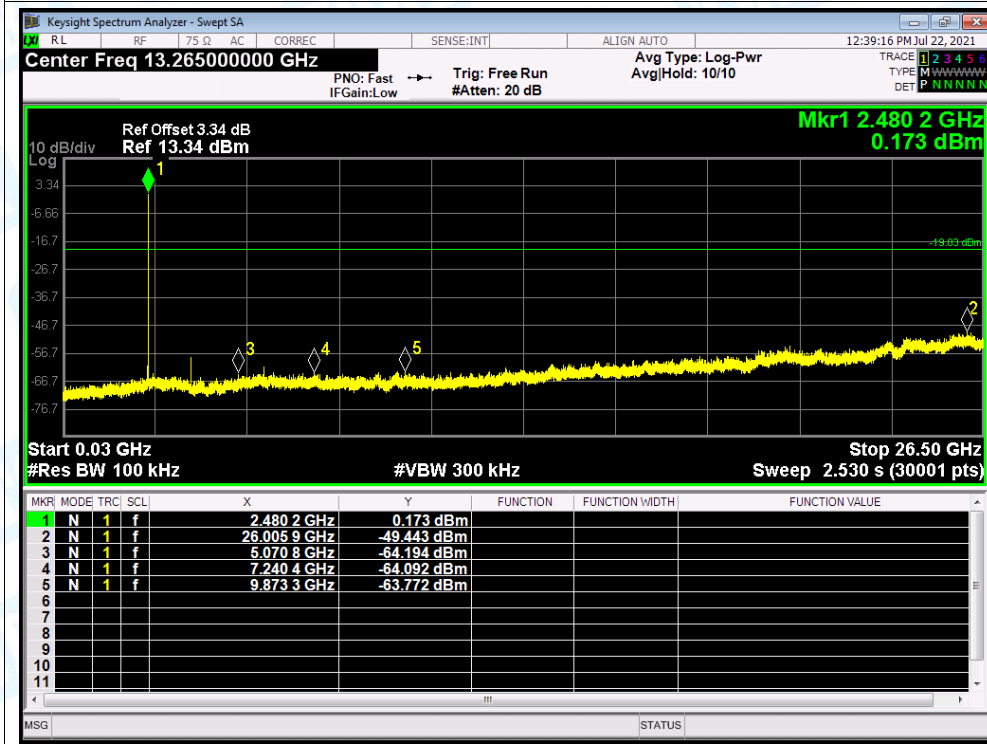




Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref

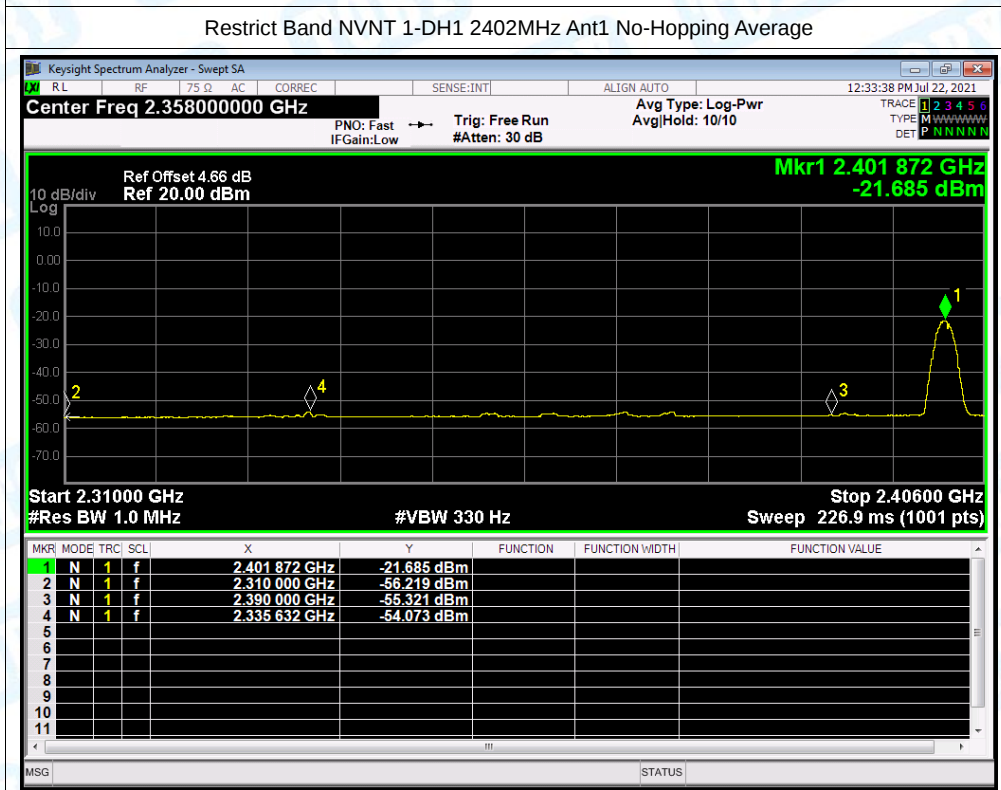
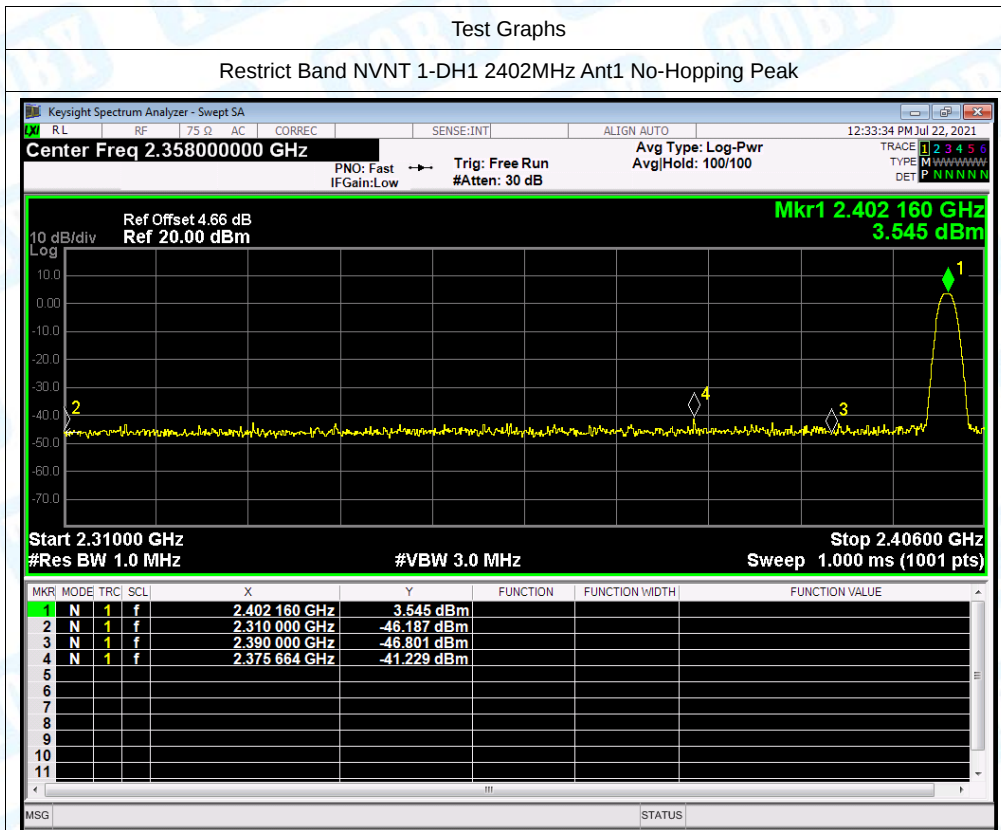


Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission

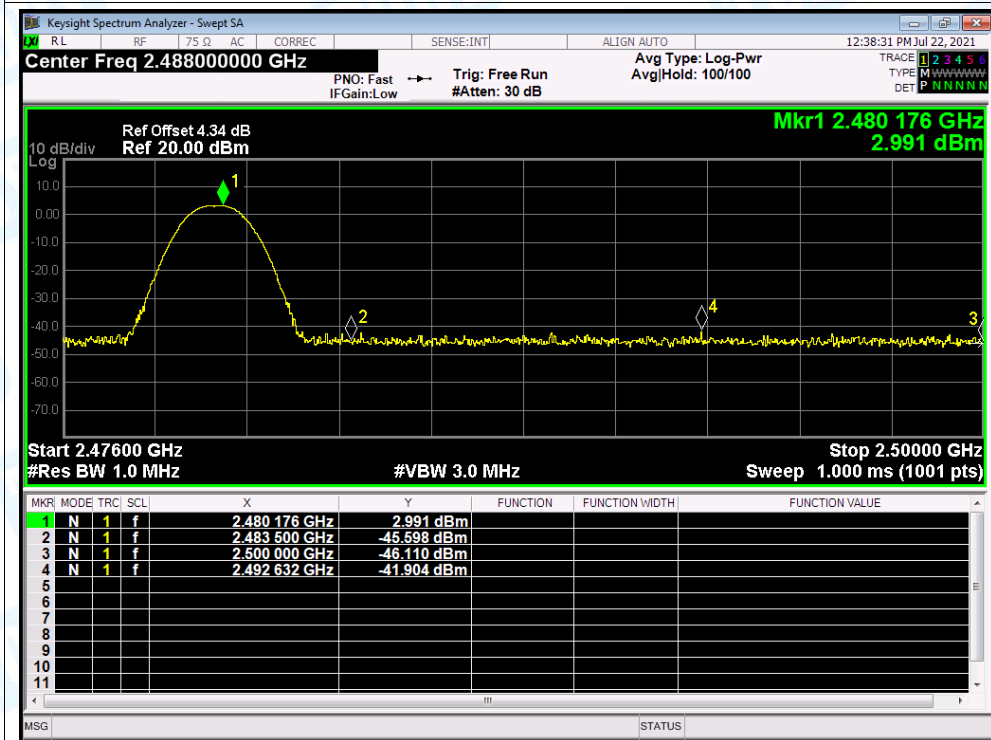


8.Restrict Band

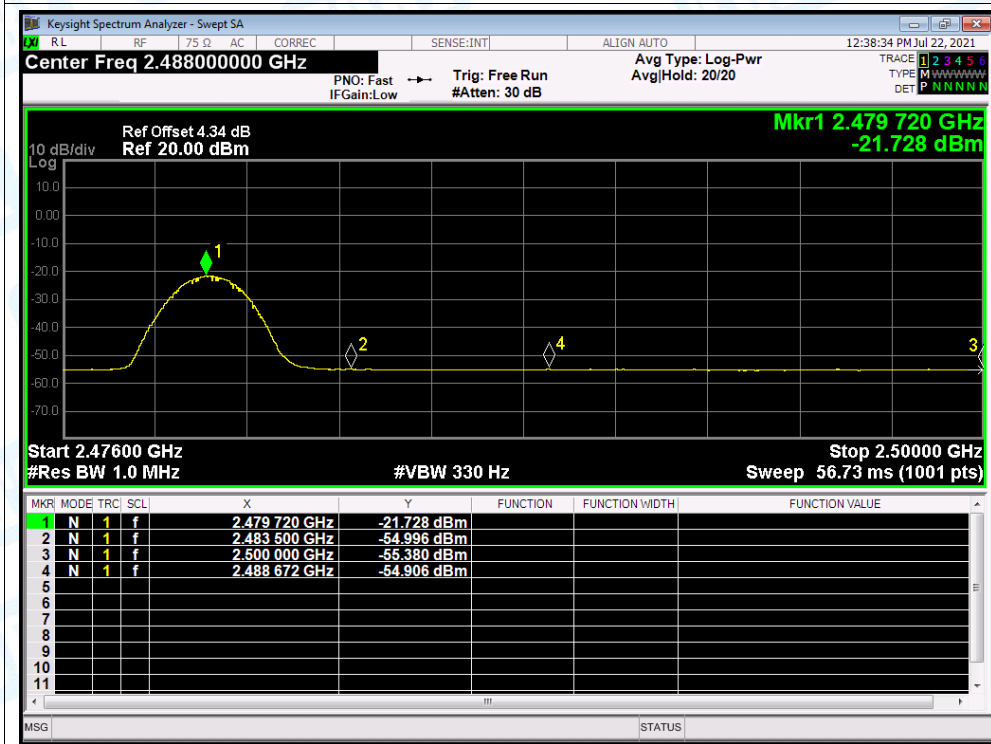
Condition	Mode	Frequency (MHz)	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	No-Hopping	2310	-46.38	2	50.88	Peak	74	Pass
NVNT	1-DH1	2402	No-Hopping	2310	-56.2	2	41.06	Average	54	Pass
NVNT	1-DH1	2402	No-Hopping	2375.664	-41.22	2	56.04	Peak	74	Pass
NVNT	1-DH1	2402	No-Hopping	2335.632	-54.07	2	43.19	Average	54	Pass
NVNT	1-DH1	2402	No-Hopping	2390	-46.36	2	50.9	Peak	74	Pass
NVNT	1-DH1	2402	No-Hopping	2390	-55.35	2	41.91	Average	54	Pass
NVNT	1-DH1	2480	No-Hopping	2483.5	-45.59	2	51.67	Peak	74	Pass
NVNT	1-DH1	2480	No-Hopping	2483.5	-54.99	2	42.27	Average	54	Pass
NVNT	1-DH1	2480	No-Hopping	2492.632	-41.9	2	55.36	Peak	74	Pass
NVNT	1-DH1	2480	No-Hopping	2488.672	-54.9	2	42.36	Average	54	Pass
NVNT	1-DH1	2480	No-Hopping	2500	-46.1	2	51.16	Peak	74	Pass
NVNT	1-DH1	2480	No-Hopping	2500	-55.37	2	41.89	Average	54	Pass



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



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

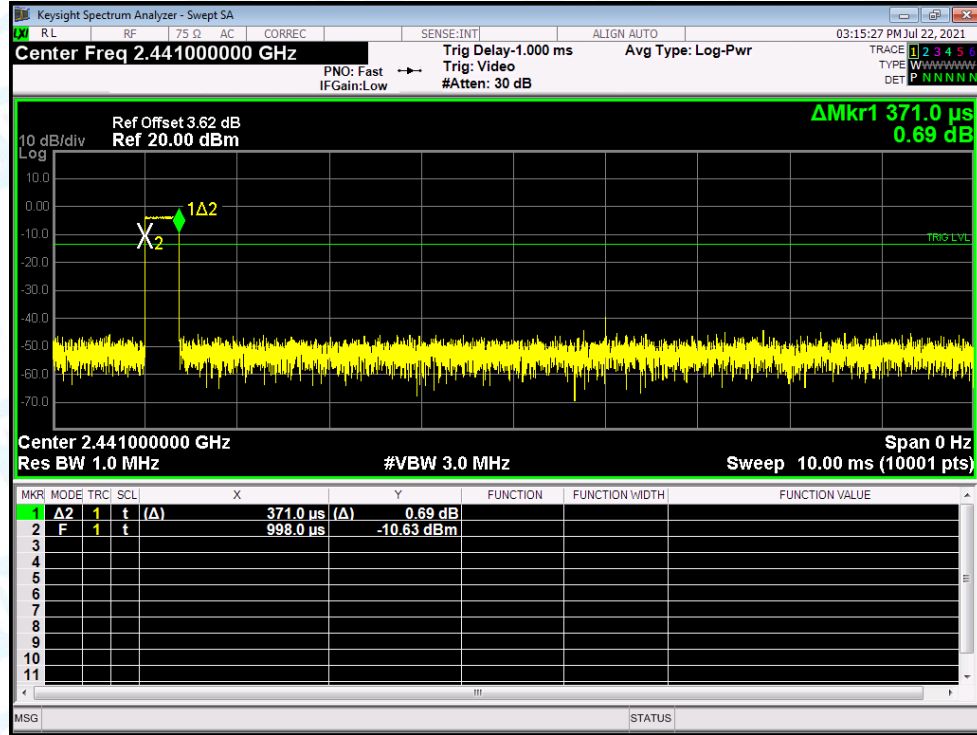


9.Dwell Time

Condition	Mode	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	0.371	118.72	31600	400	Pass
NVNT	1-DH3	2441	1.627	260.32	31600	400	Pass
NVNT	1-DH5	2441	2.875	306.667	31600	400	Pass

Test Graphs

Dwell NVNT 1-DH1 2441MHz Ant1



Dwell NVNT 1-DH3 2441MHz Ant1

