

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

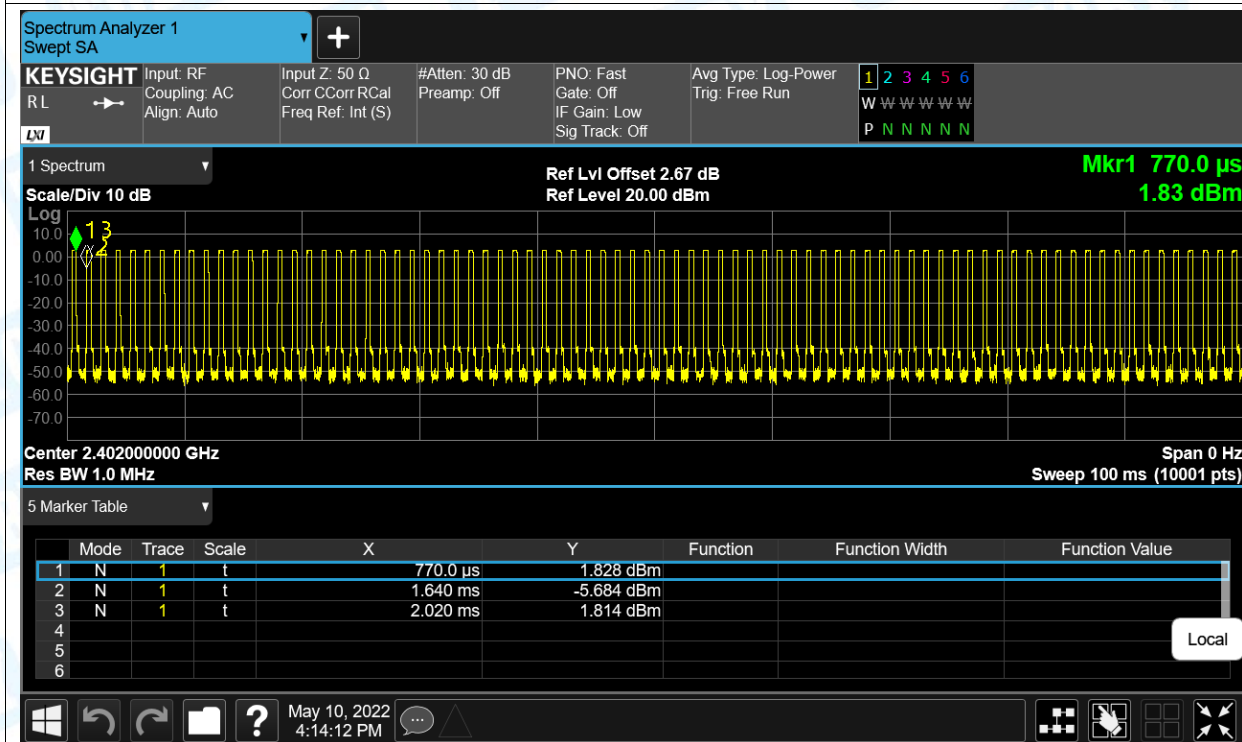
General Description of EUT	
Product Name:	2.1CH Karaoke Soundbar
Test Model:	L210K
Sample ID:	RW-C-202204-0285-1-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 18V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202204-0285-1	

1. Duty Cycle

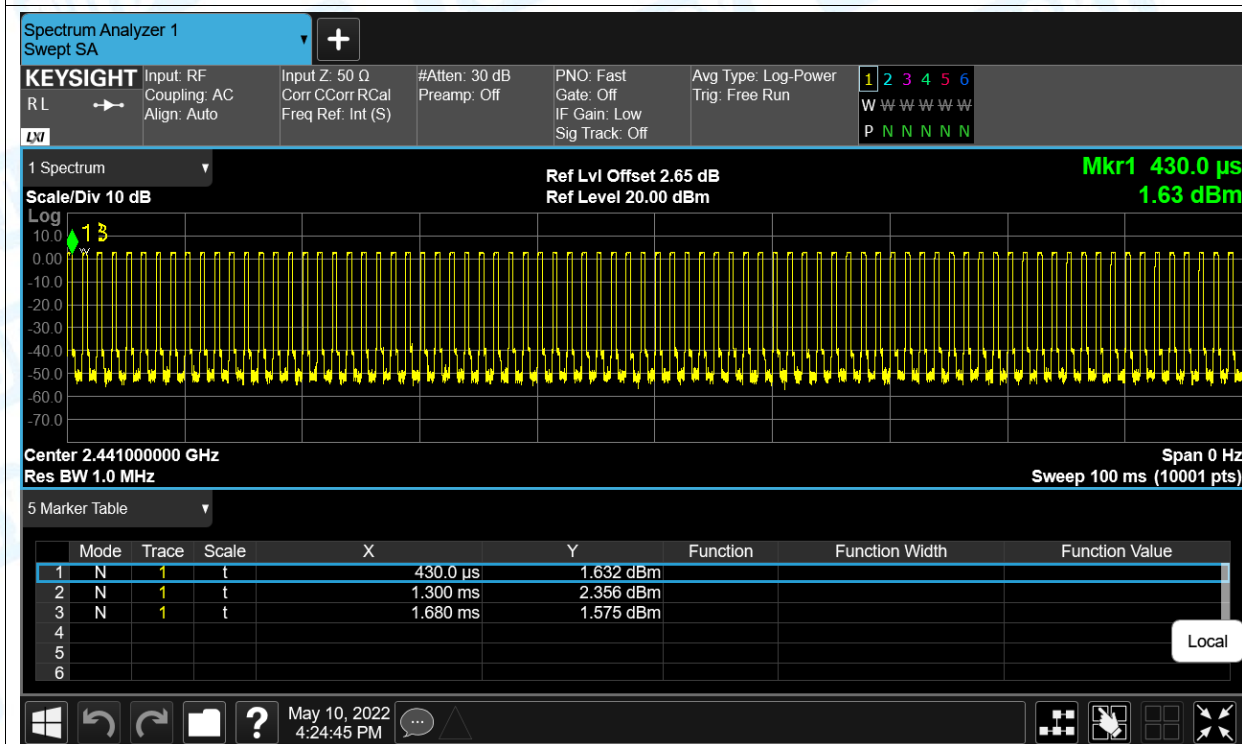
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.31	5.04	2.63
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.63
NVNT	1-DH1	2480	Ant1	31.31	5.04	2.63
NVNT	2-DH1	2402	Ant1	31.81	4.97	2.63
NVNT	2-DH1	2441	Ant1	31.8	4.98	2.63
NVNT	2-DH1	2480	Ant1	31.94	4.96	2.56
NVNT	3-DH1	2402	Ant1	31.78	4.98	2.56
NVNT	3-DH1	2441	Ant1	31.78	4.98	2.56
NVNT	3-DH1	2480	Ant1	31.82	4.97	2.63

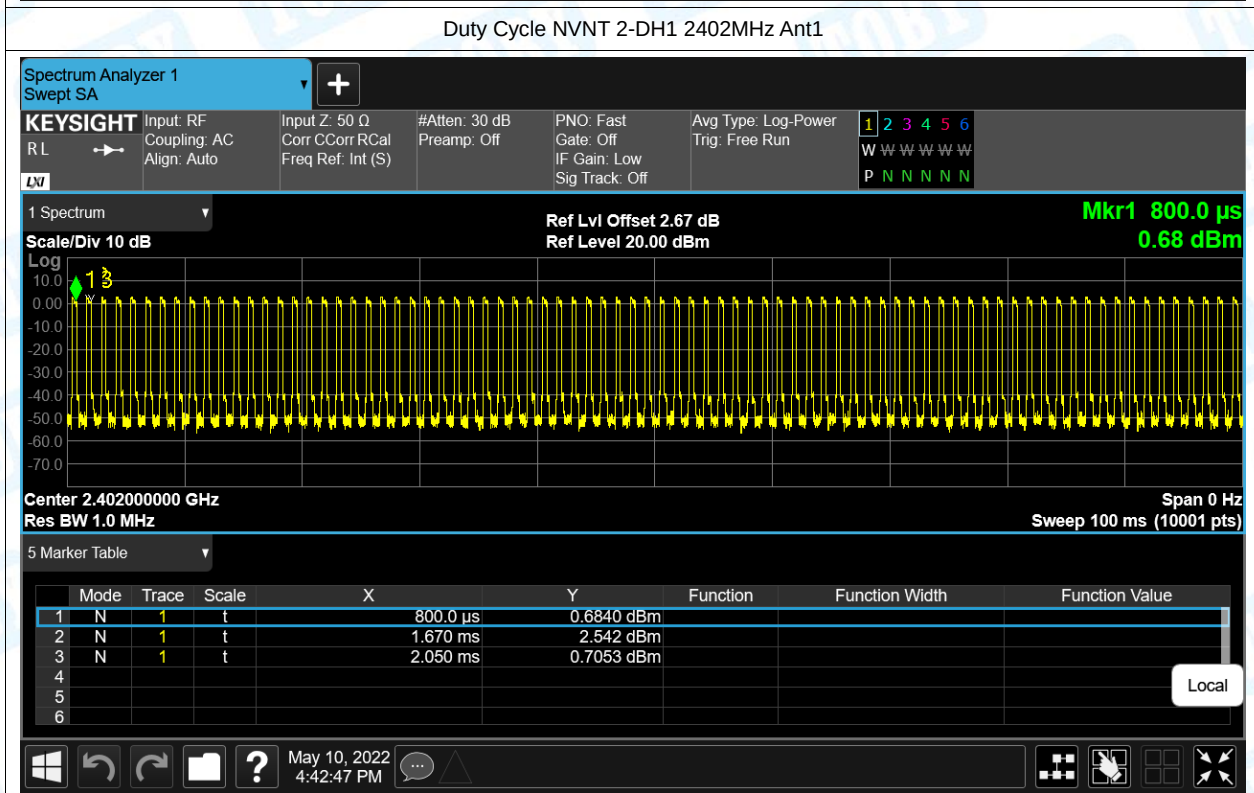
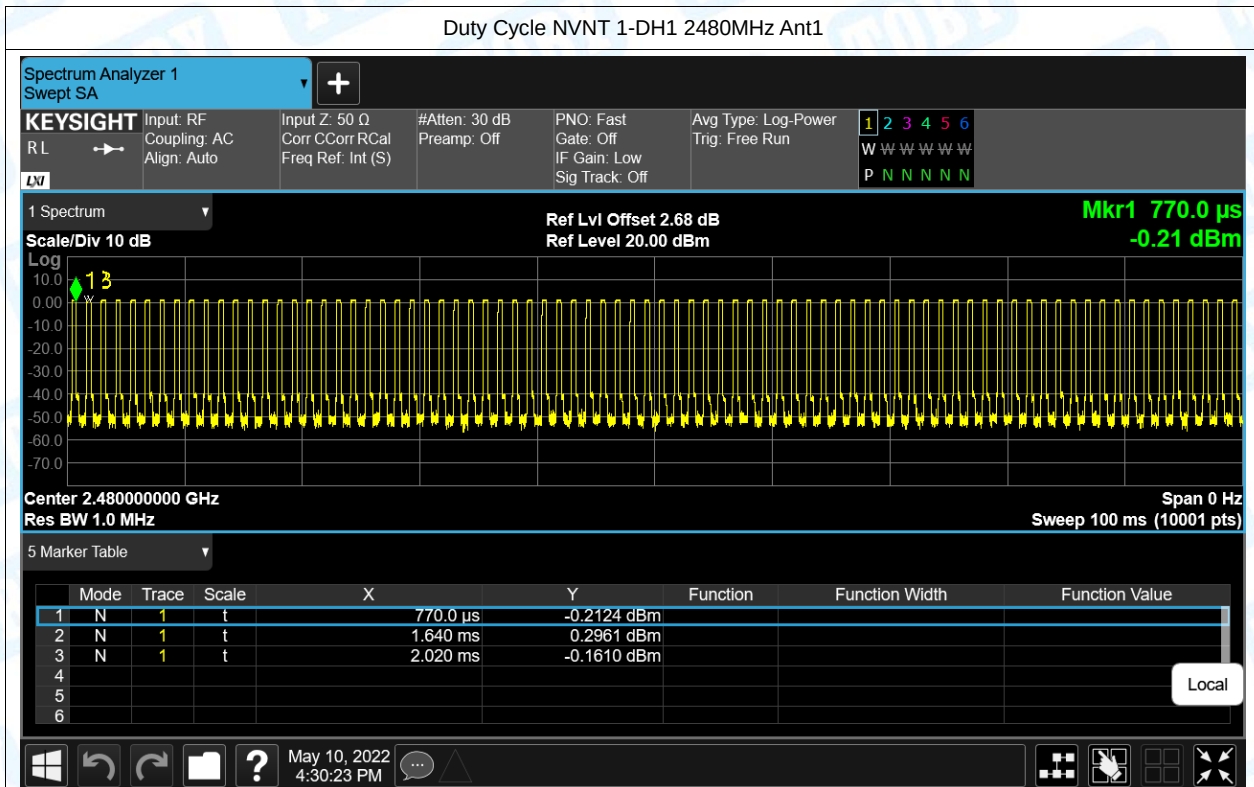
Test Graphs

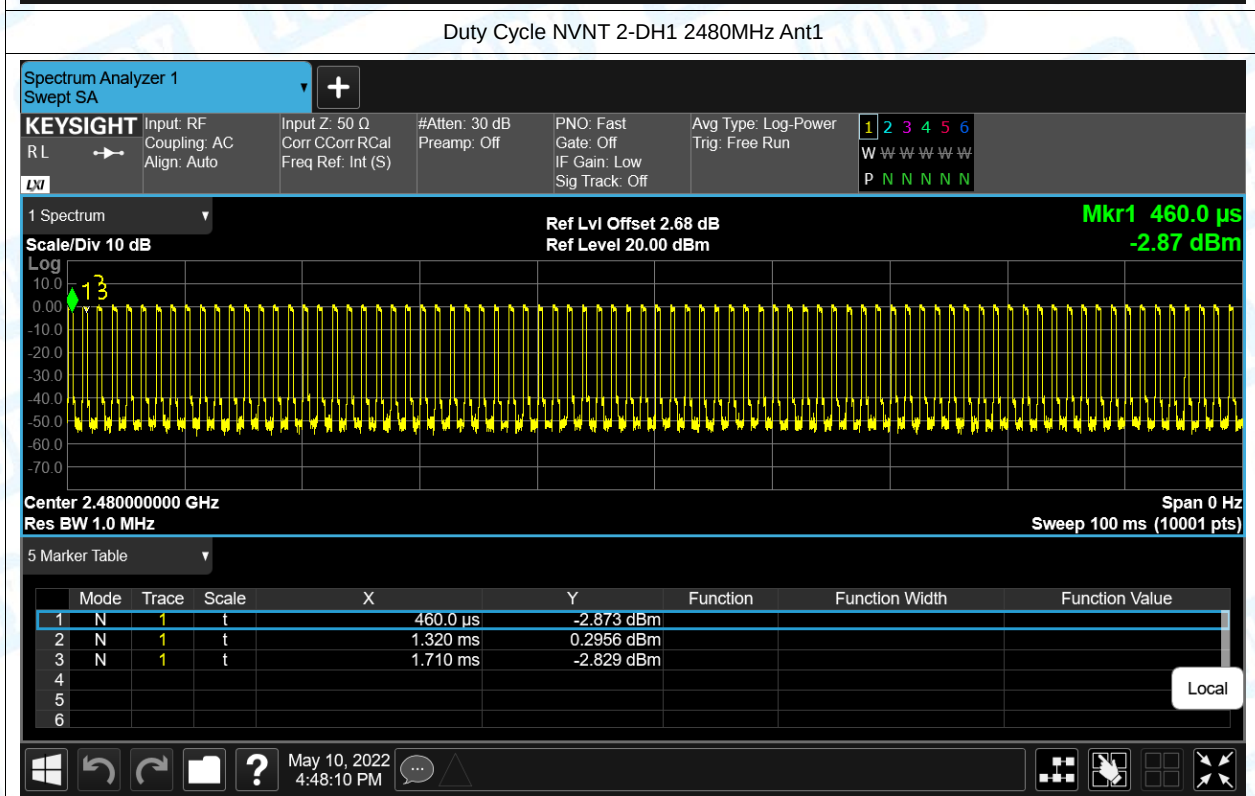
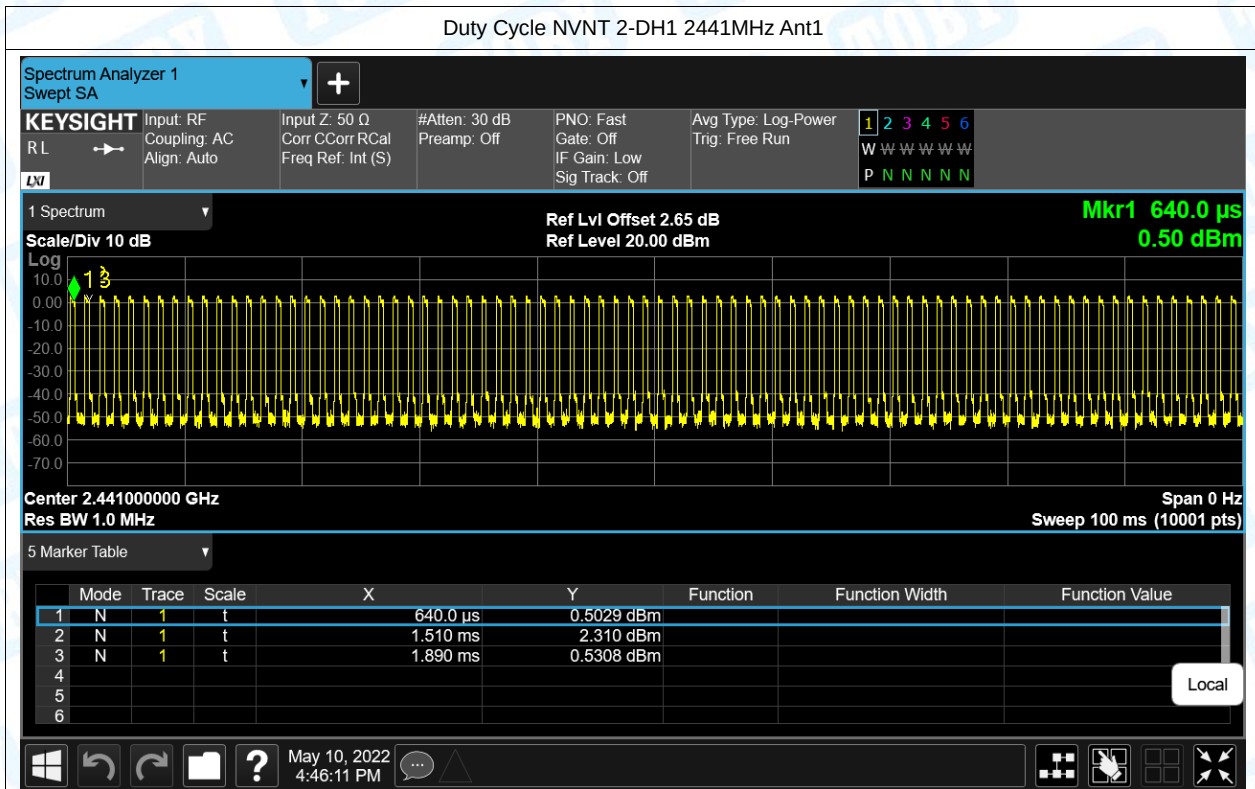
Duty Cycle NVNT 1-DH1 2402MHz Ant1

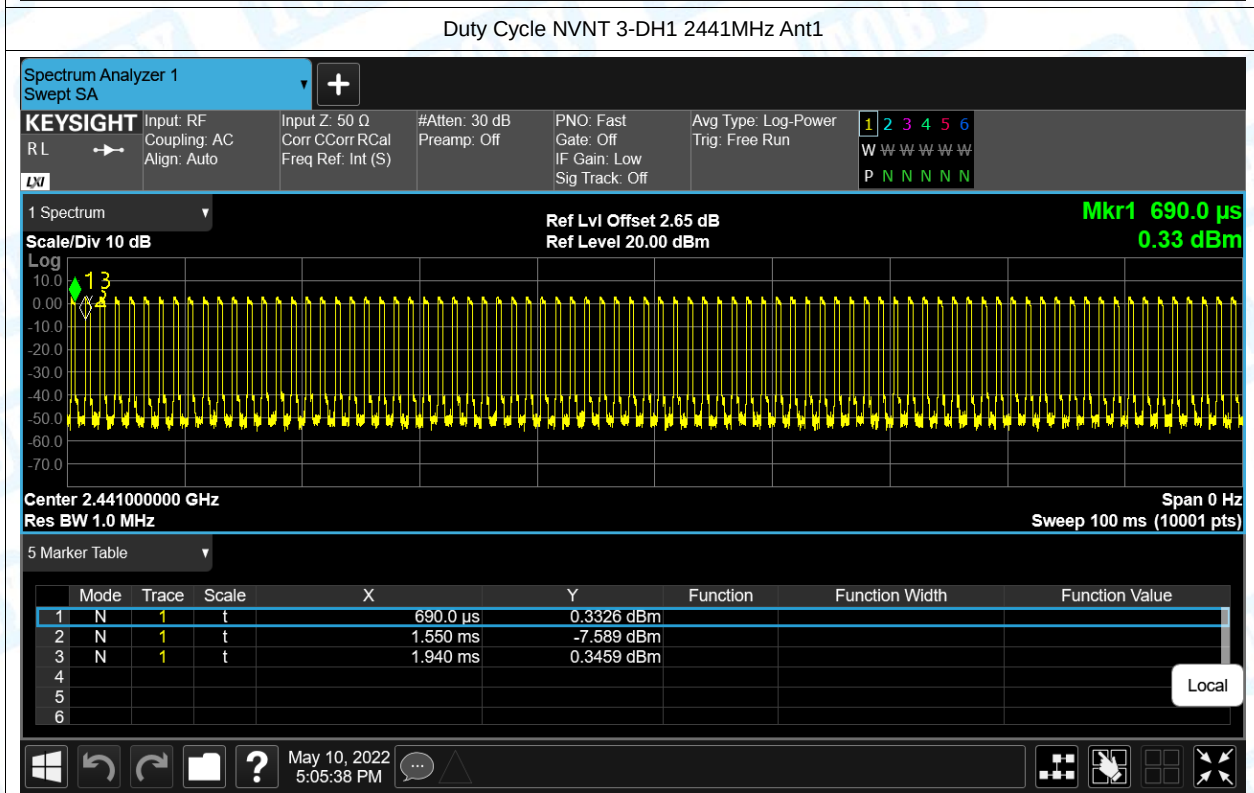
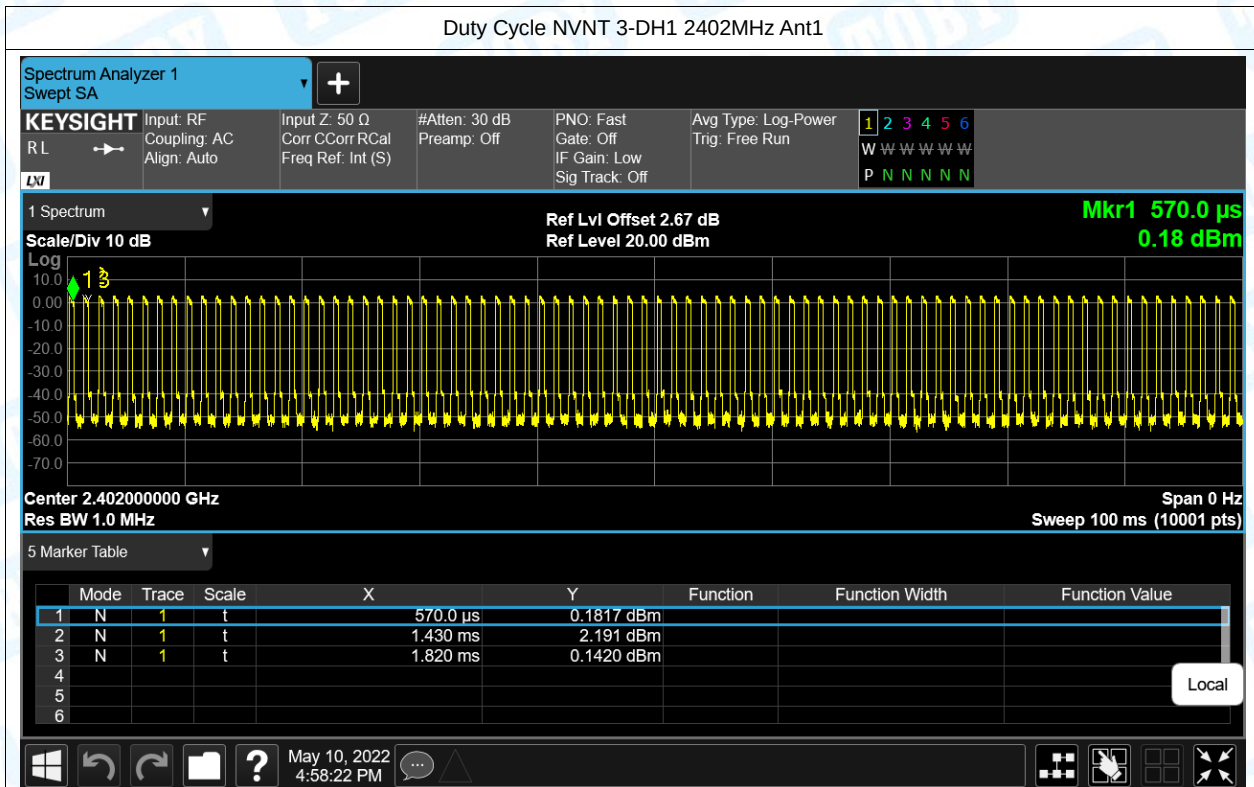


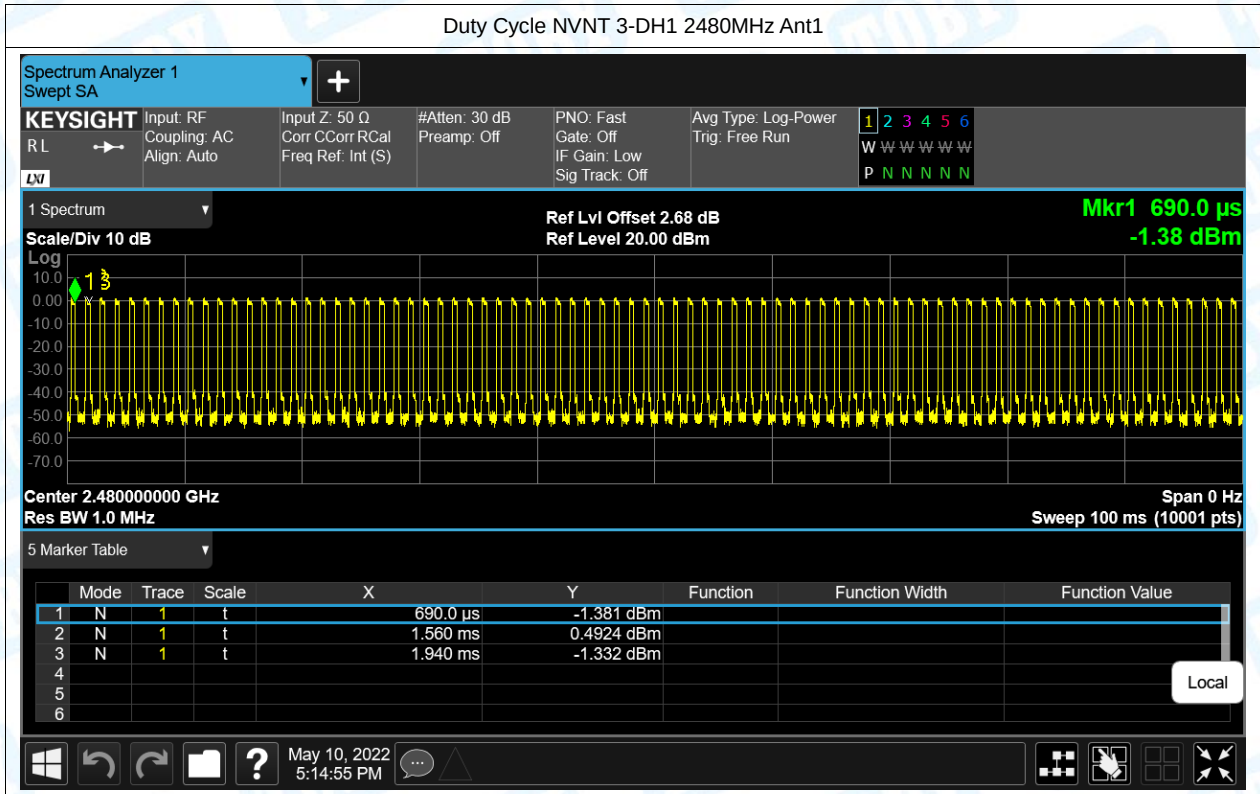
Duty Cycle NVNT 1-DH1 2441MHz Ant1









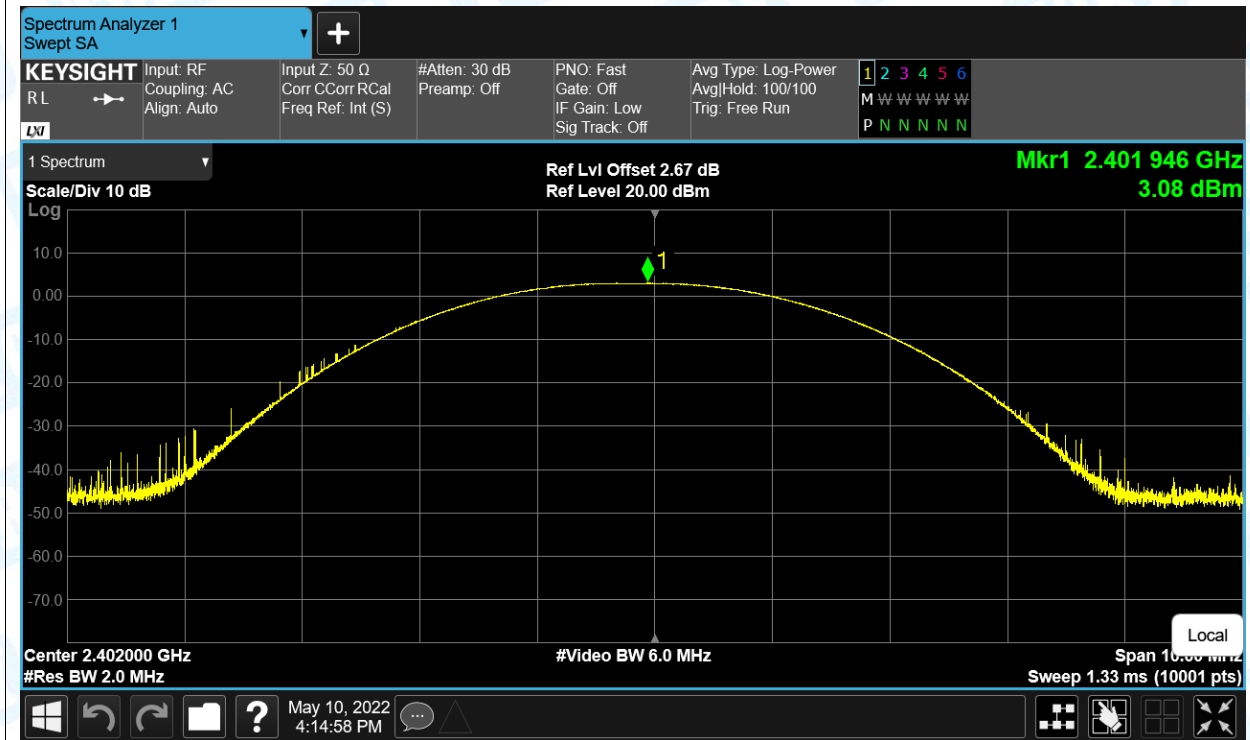


2. Maximum Conducted Output Power

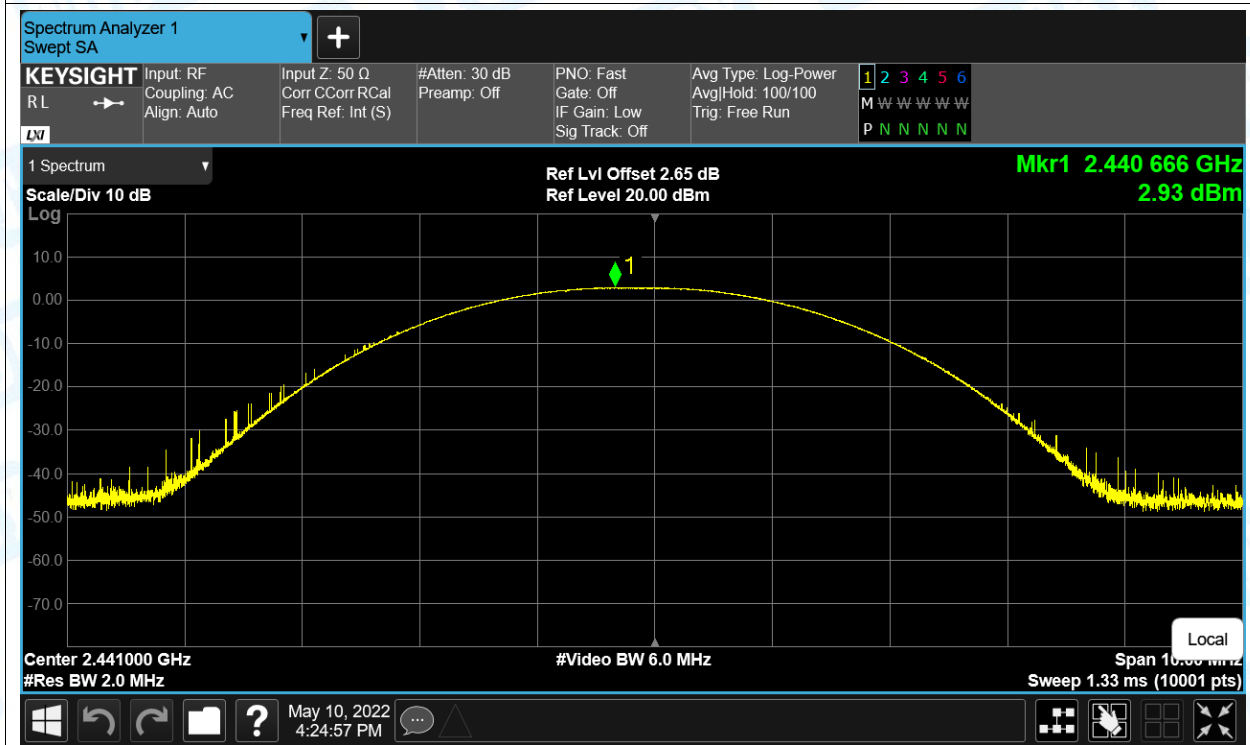
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.08	21	Pass
NVNT	1-DH1	2441	Ant1	2.93	21	Pass
NVNT	1-DH1	2480	Ant1	1.10	21	Pass
NVNT	2-DH1	2402	Ant1	3.07	21	Pass
NVNT	2-DH1	2441	Ant1	2.81	21	Pass
NVNT	2-DH1	2480	Ant1	0.94	21	Pass
NVNT	3-DH1	2402	Ant1	2.84	21	Pass
NVNT	3-DH1	2441	Ant1	2.88	21	Pass
NVNT	3-DH1	2480	Ant1	1.04	21	Pass

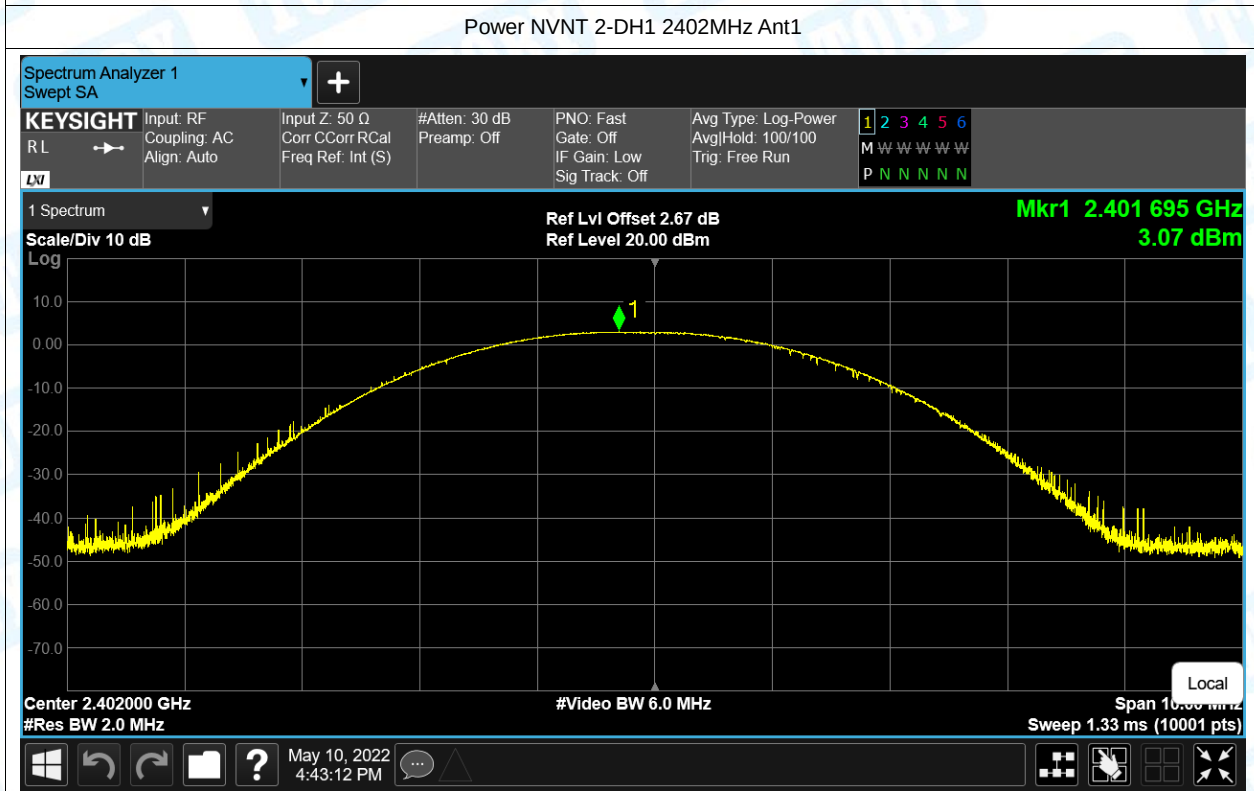
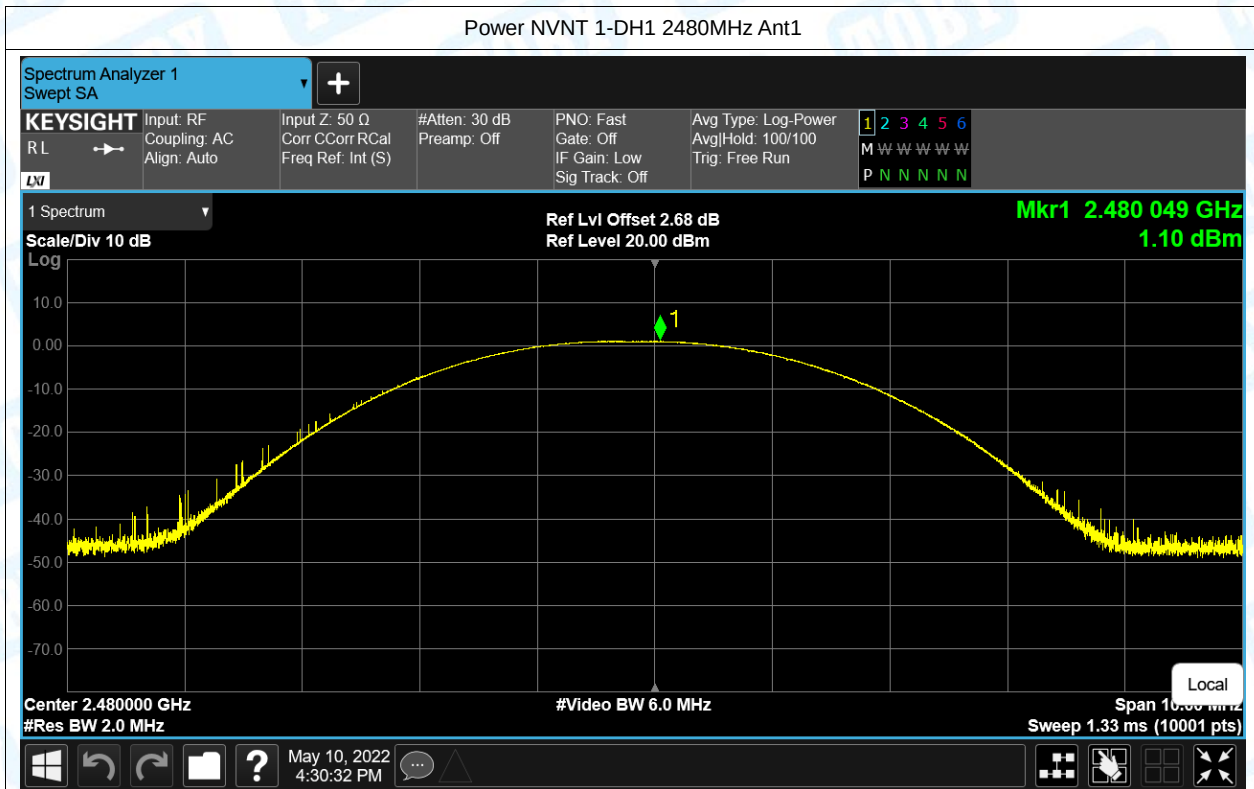
Test Graphs

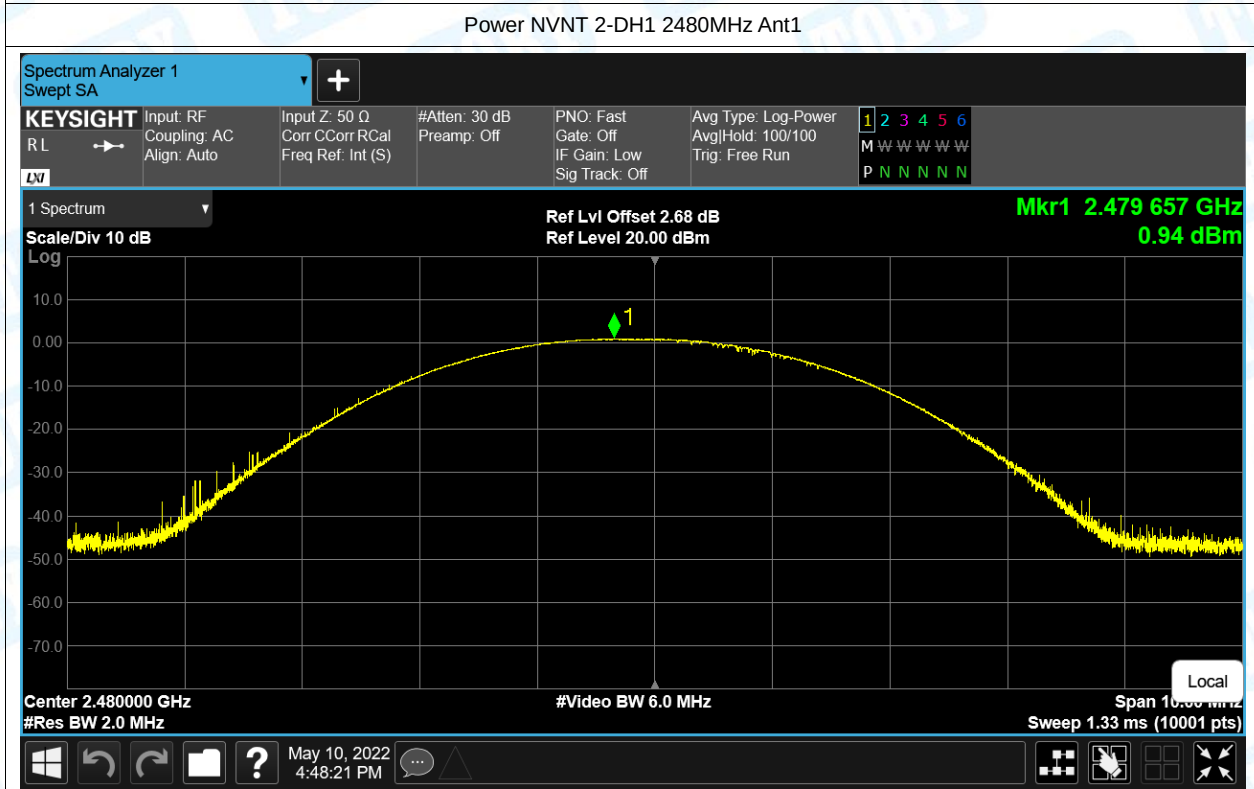
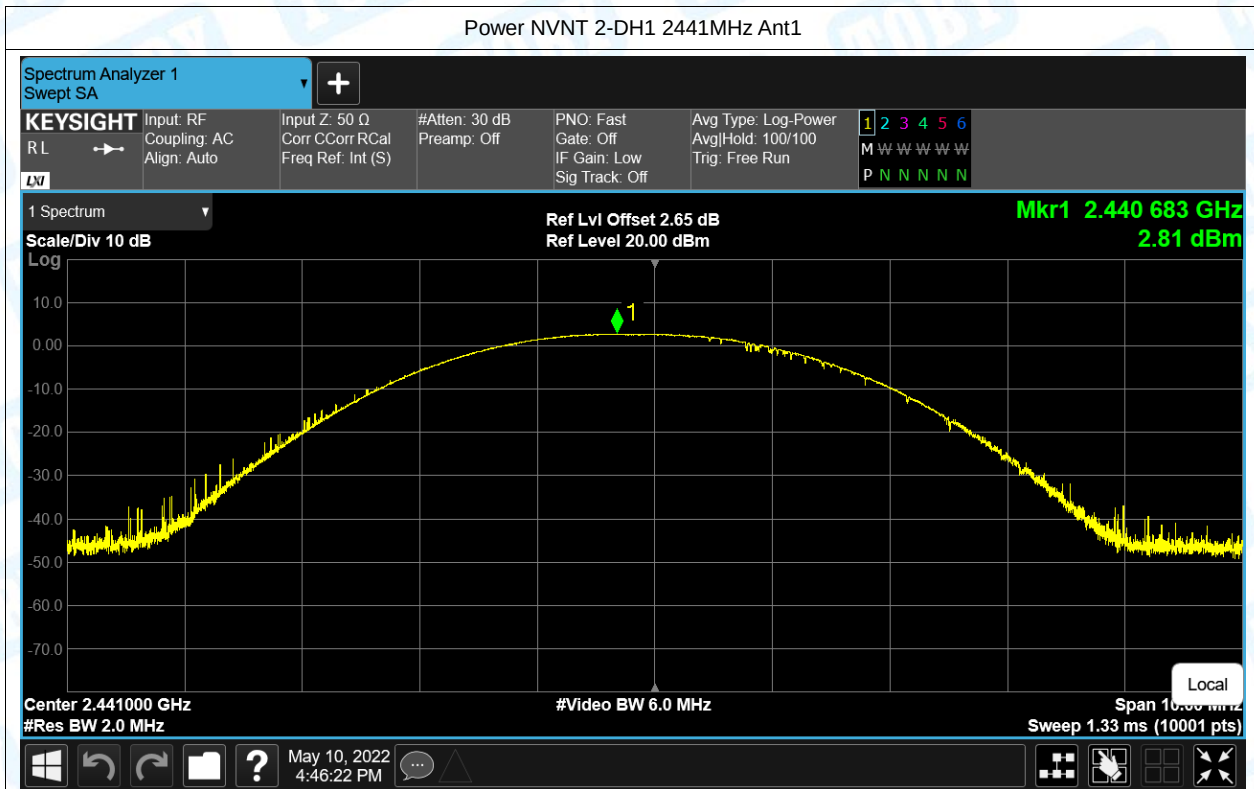
Power NVNT 1-DH1 2402MHz Ant1

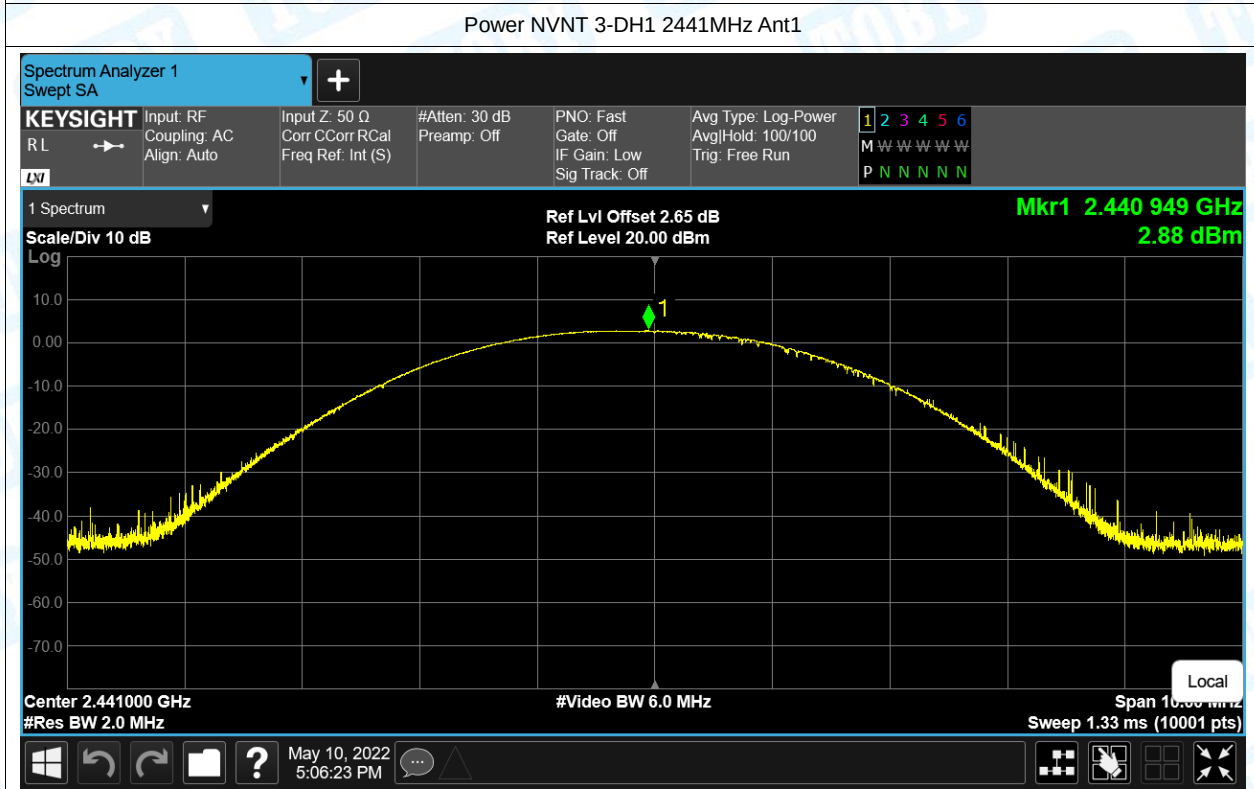


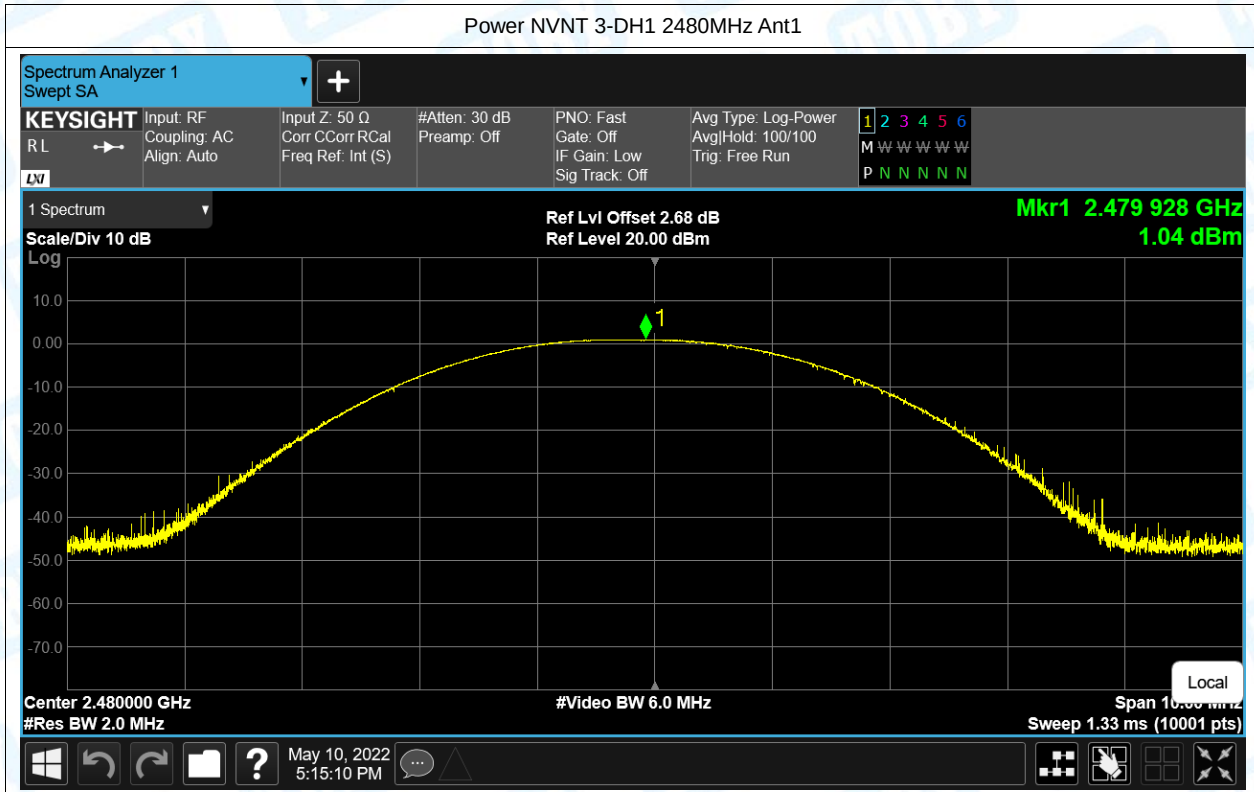
Power NVNT 1-DH1 2441MHz Ant1











3. -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.98	----	Pass
NVNT	1-DH1	2441	Ant1	1.01	----	Pass
NVNT	1-DH1	2480	Ant1	1.01	----	Pass
NVNT	2-DH1	2402	Ant1	1.3	----	Pass
NVNT	2-DH1	2441	Ant1	1.29	----	Pass
NVNT	2-DH1	2480	Ant1	1.28	----	Pass
NVNT	3-DH1	2402	Ant1	1.28	----	Pass
NVNT	3-DH1	2441	Ant1	1.28	----	Pass
NVNT	3-DH1	2480	Ant1	1.28	----	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



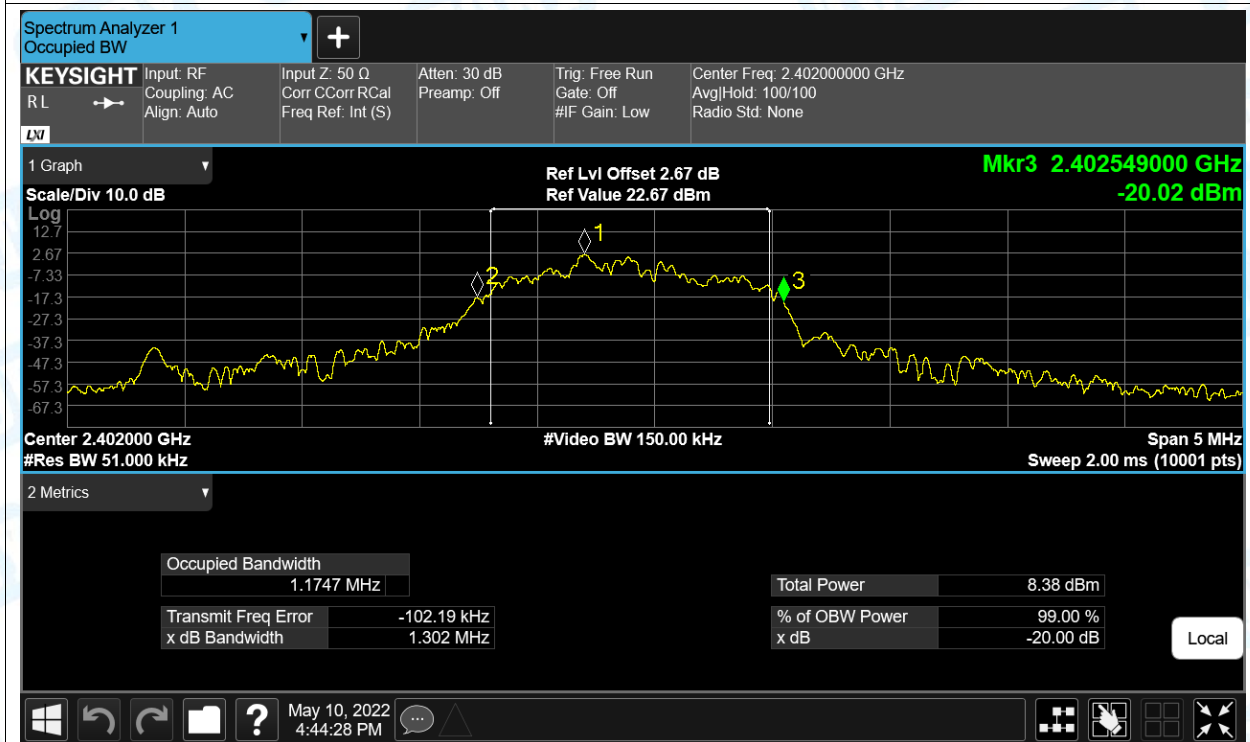
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



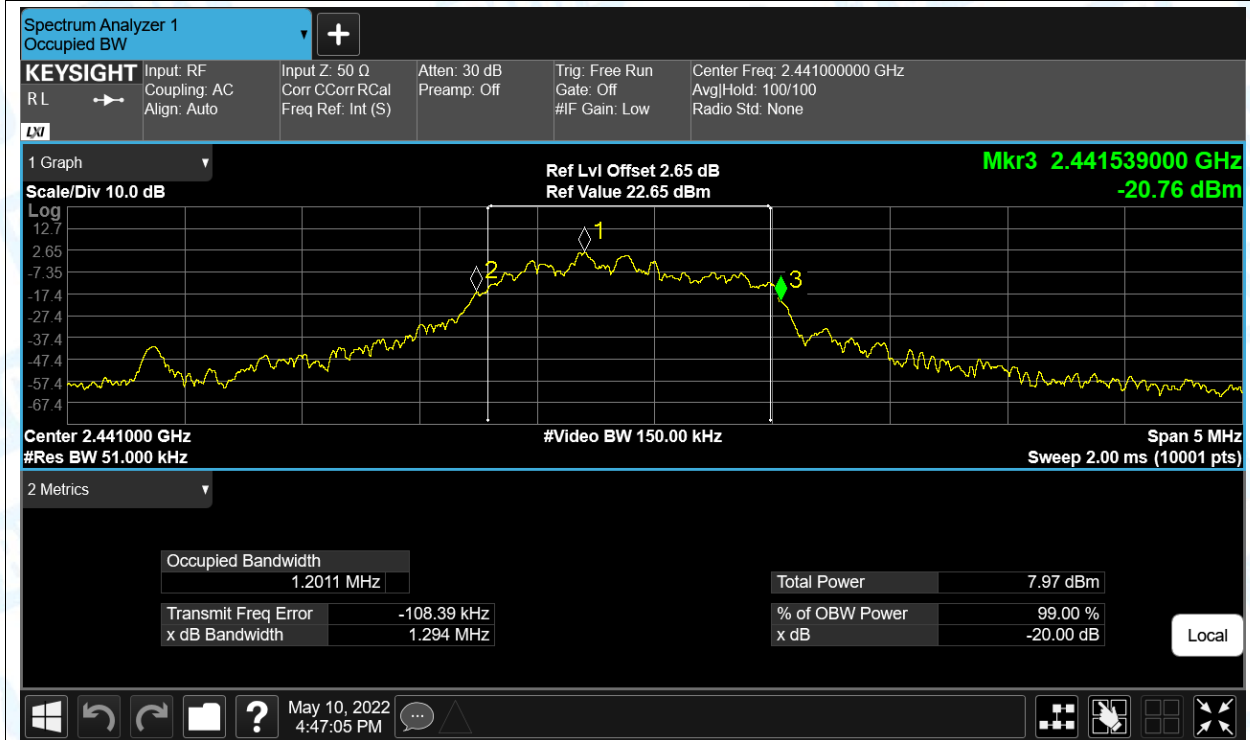
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1

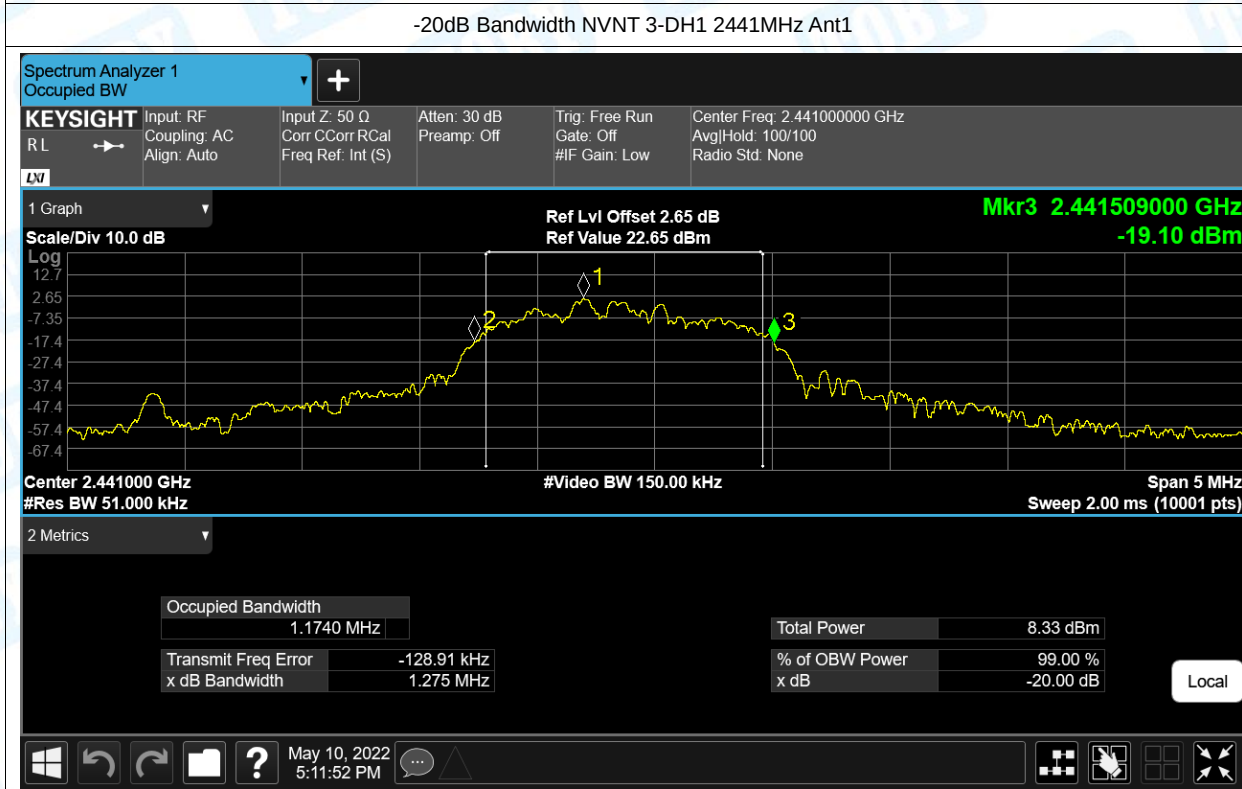
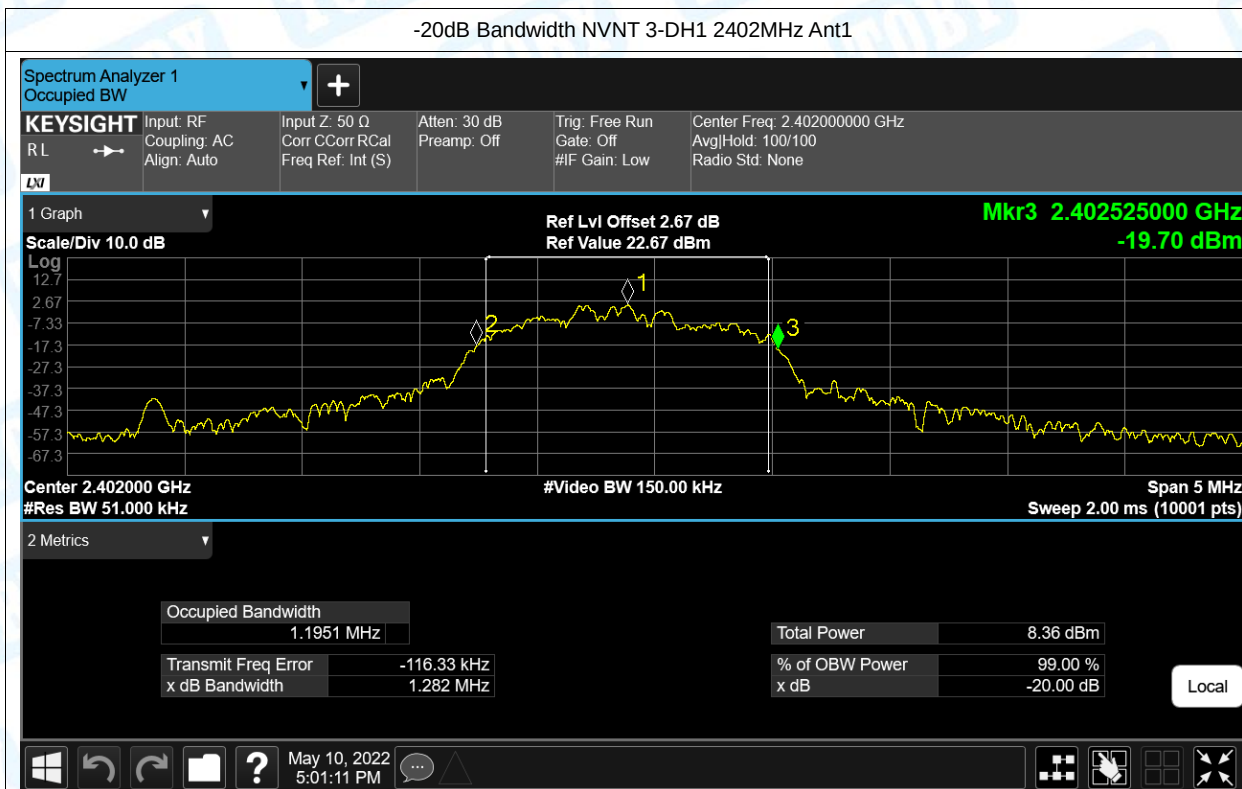


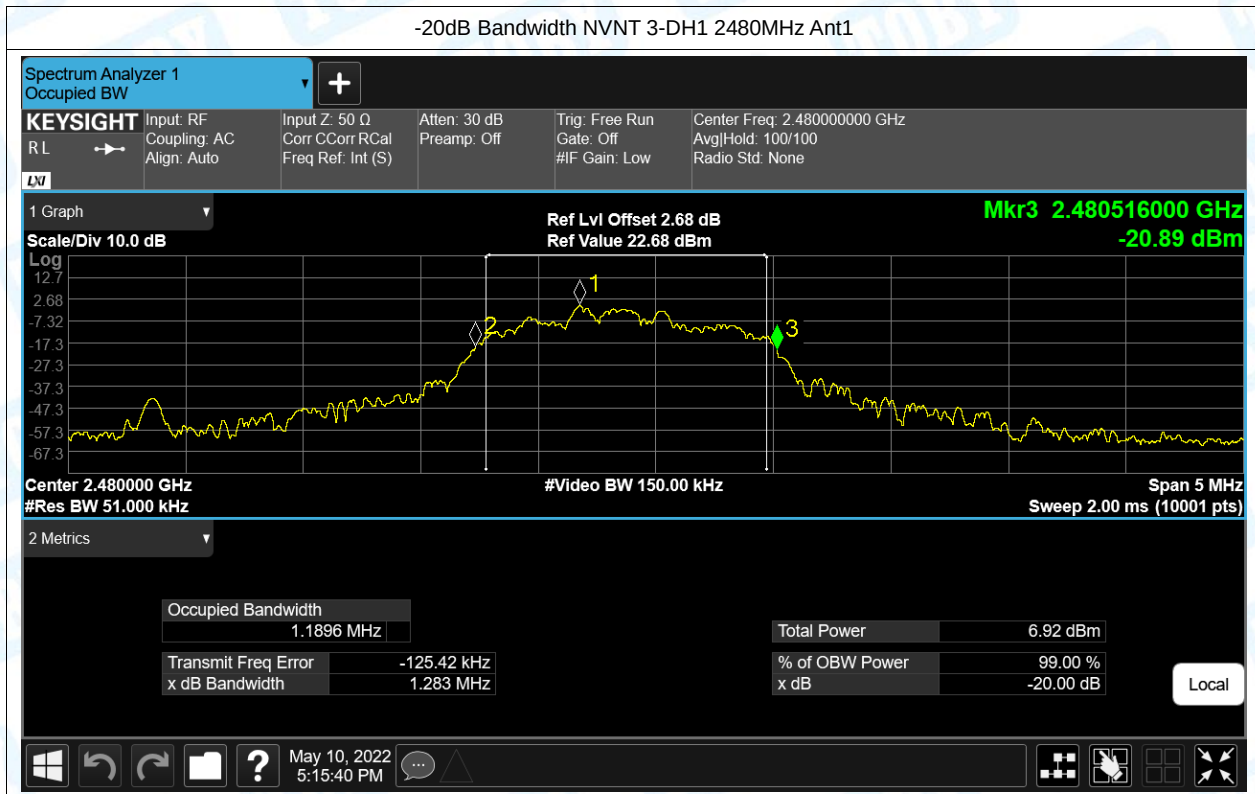
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1







4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.888
NVNT	1-DH1	2441	Ant1	0.914
NVNT	1-DH1	2480	Ant1	0.897
NVNT	2-DH1	2402	Ant1	1.194
NVNT	2-DH1	2441	Ant1	1.185
NVNT	2-DH1	2480	Ant1	1.165
NVNT	3-DH1	2402	Ant1	1.19
NVNT	3-DH1	2441	Ant1	1.184
NVNT	3-DH1	2480	Ant1	1.178

Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1



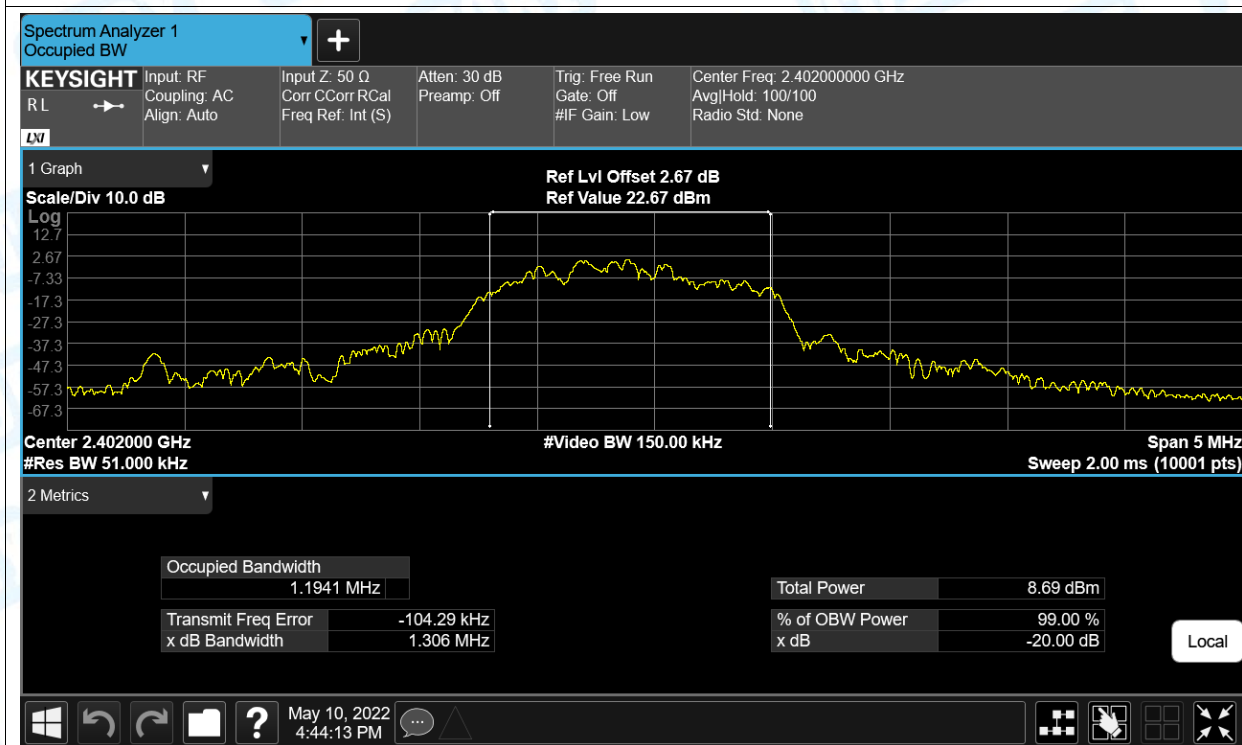
OBW NVNT 1-DH1 2441MHz Ant1



OBW NVNT 1-DH1 2480MHz Ant1



OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



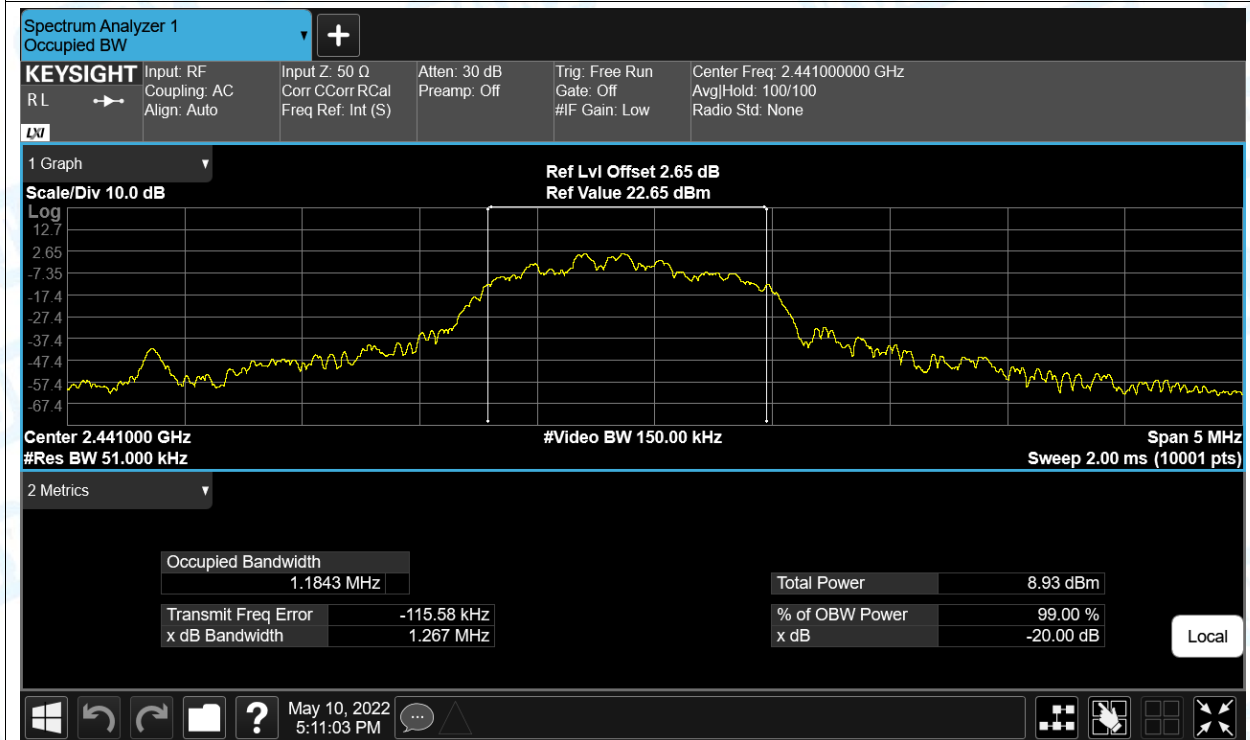
OBW NVNT 2-DH1 2480MHz Ant1

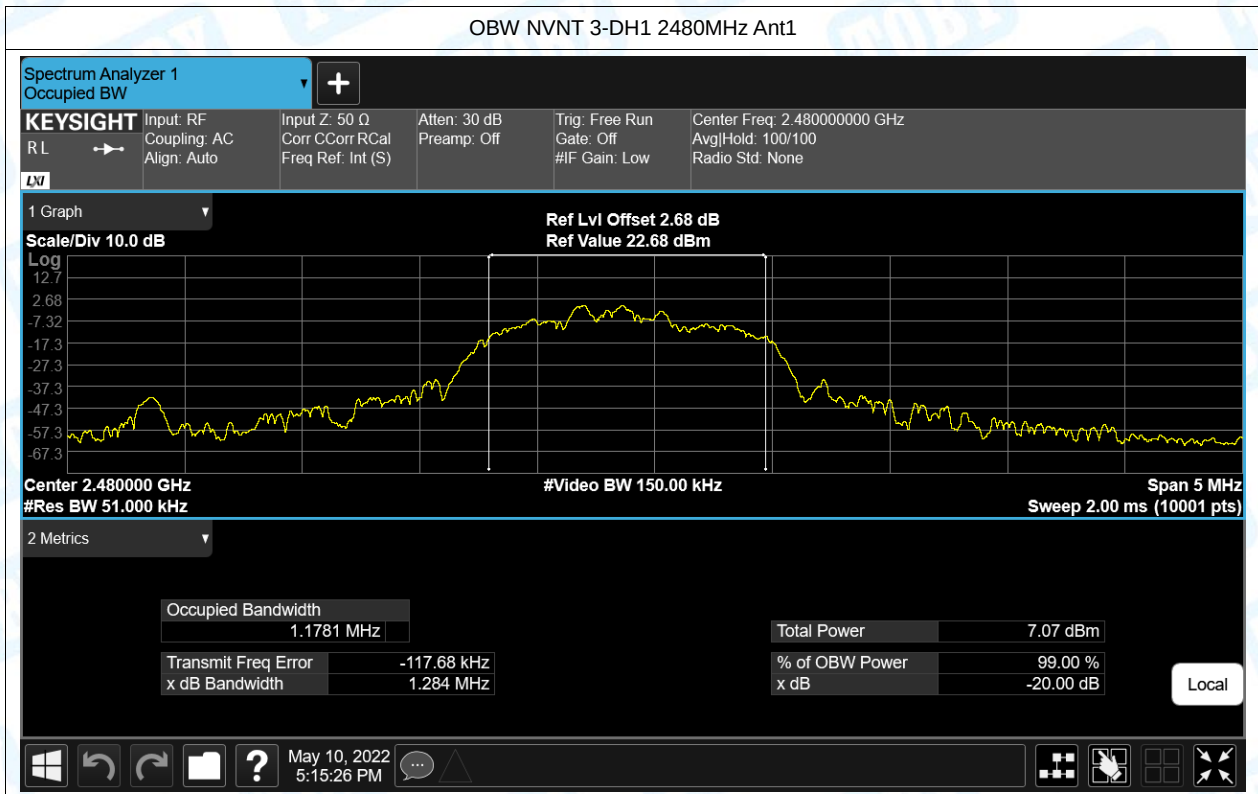


OBW NVNT 3-DH1 2402MHz Ant1



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	-50.99	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-56.38	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-50.05	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-56.69	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-51.36	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.23	-20	Pass



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

Spectrum Analyzer 1

Swept SA

KEYSIGHT

Input: RF

Coupling: AC

Align: Auto

Input Z: 50 Ω

Corr C: Corr

R: RCal

Freq Ref: Int (S)

#Atten: 30 dB

Preamp: Off

PNO: Fast

Gate: Off

IF Gain: Low

Sig Track: Off

Avg Type: Log-Power

Avg/Hold: 100/100

Trig: Free Run

1 2 3 4 5 6

M W W W W W

P N N N N N

1 Spectrum

Scale/Div 10 dB

Log

Ref Lvl Offset 2.67 dB

Ref Level 20.00 dBm

Mkr1 2.402 0 GHz

2.86 dBm

Start 2.30600 GHz

#Res BW 100 kHz

#Video BW 300 kHz

Stop 2.40600 GHz

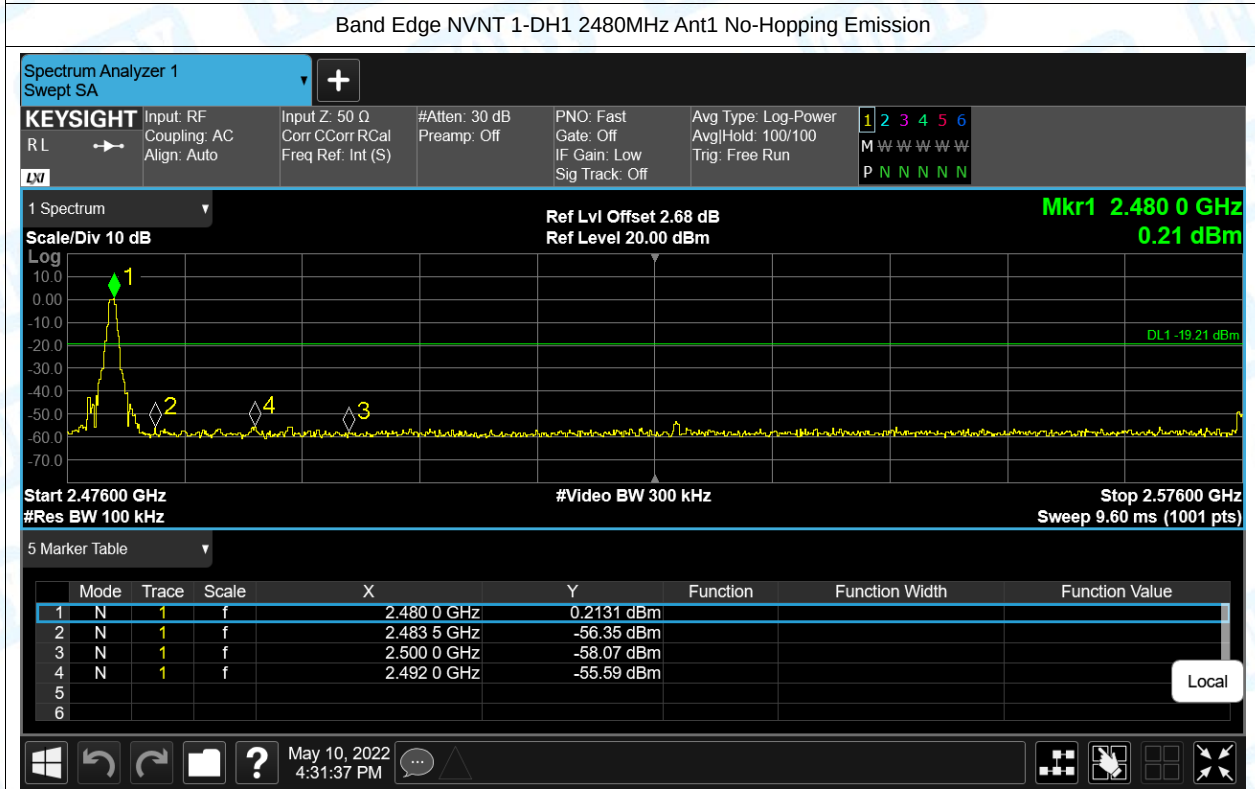
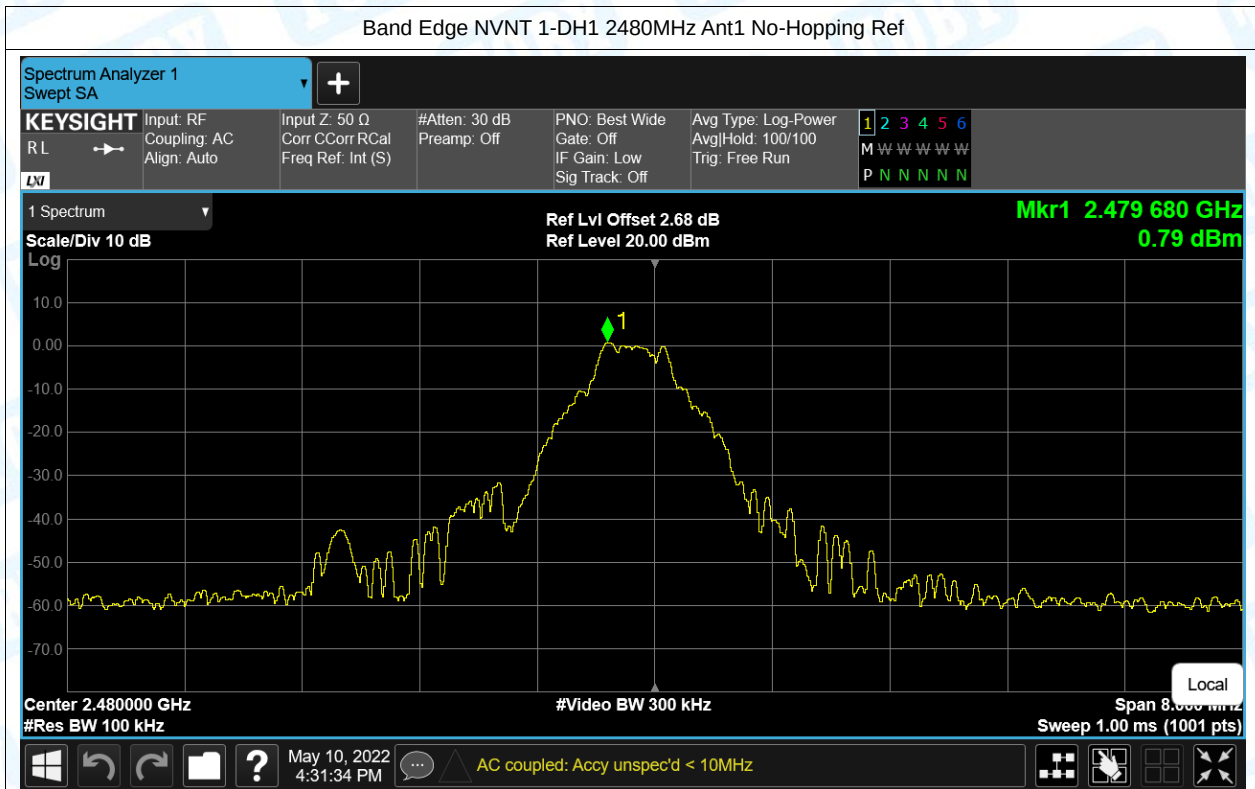
Sweep 9.60 ms (1001 pts)

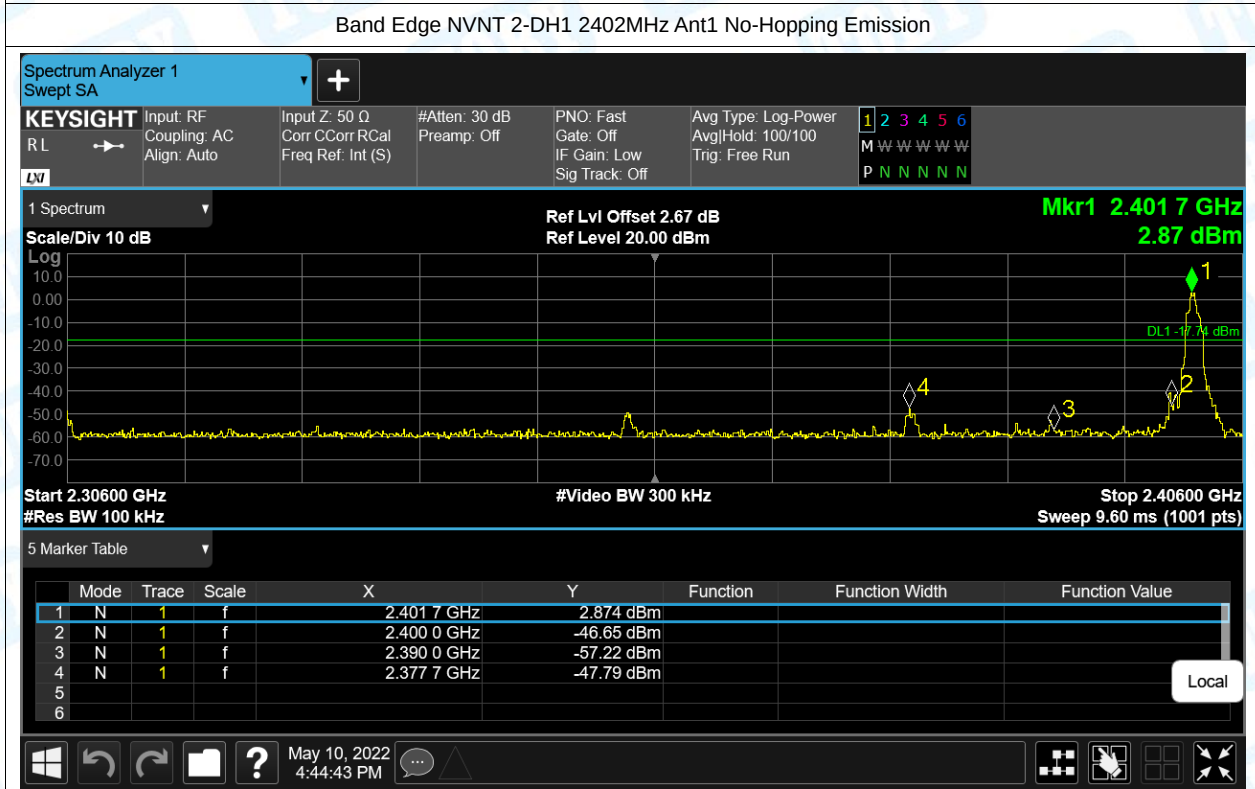
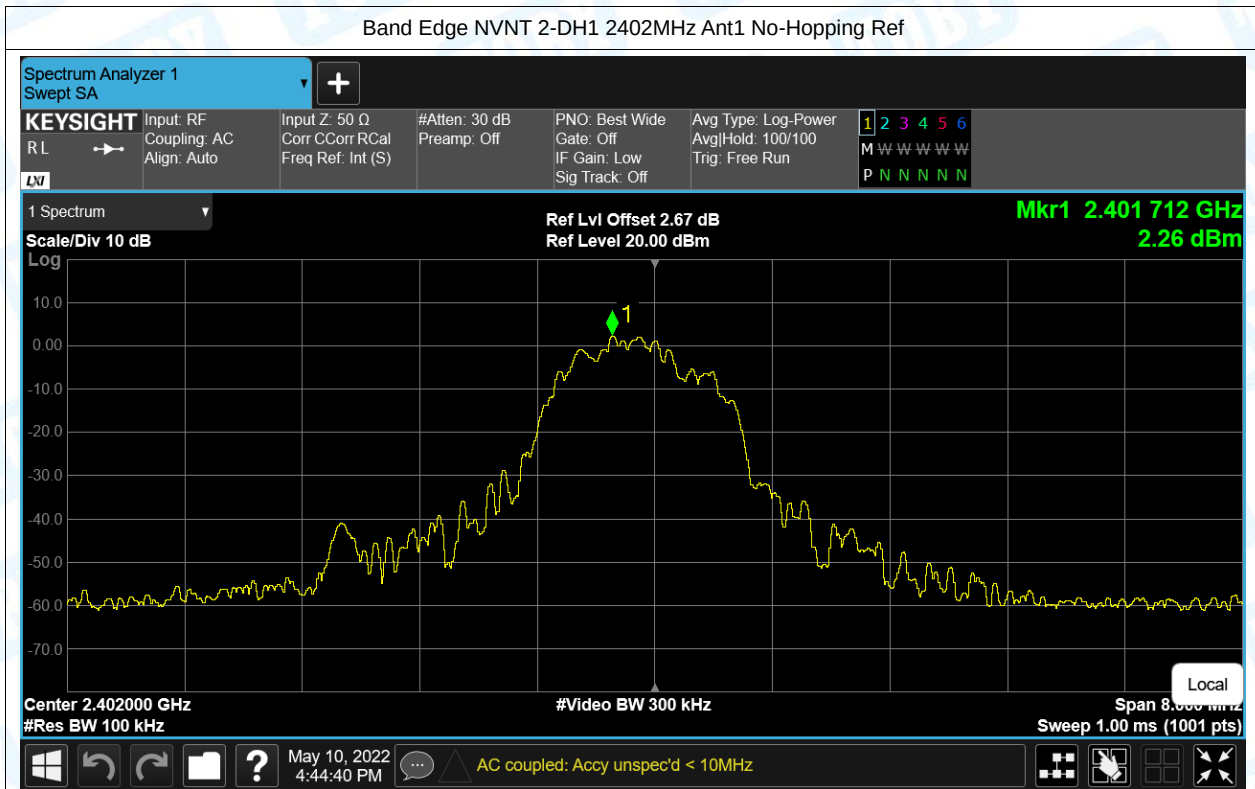
Local

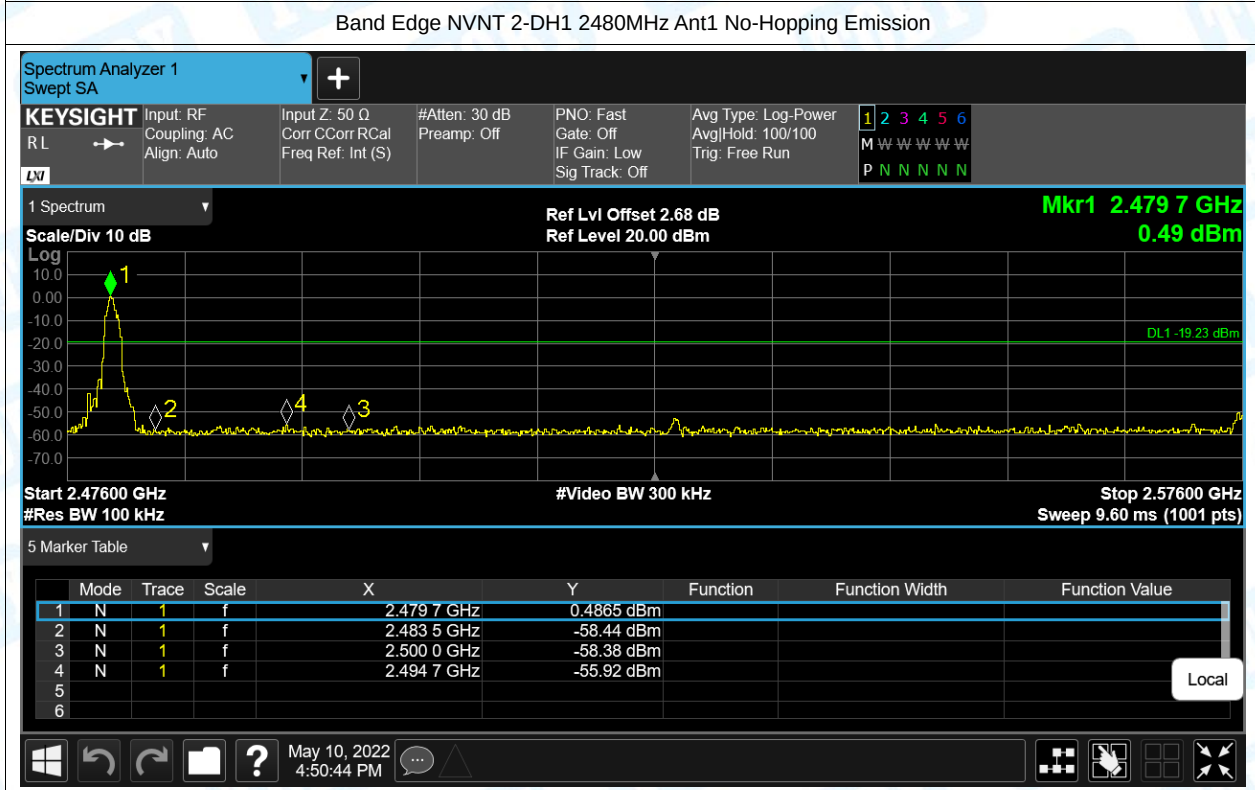
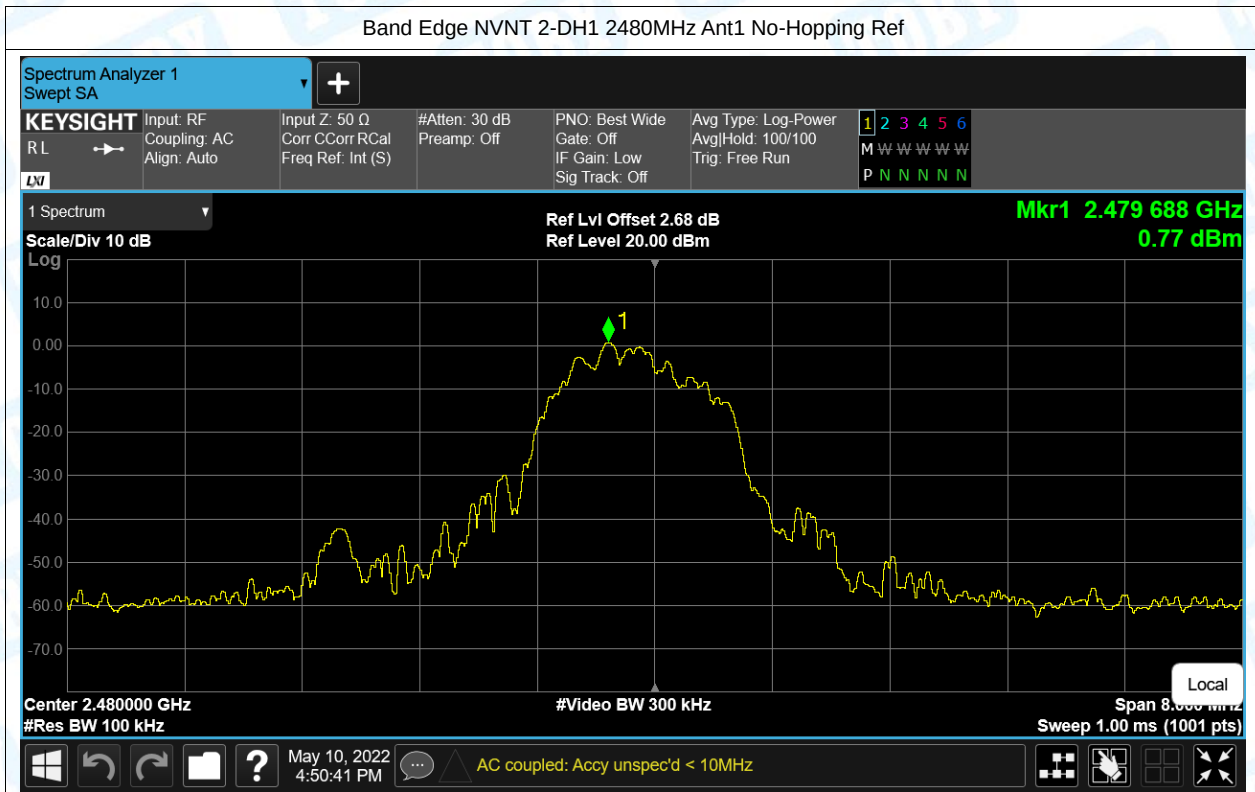
5 Marker Table

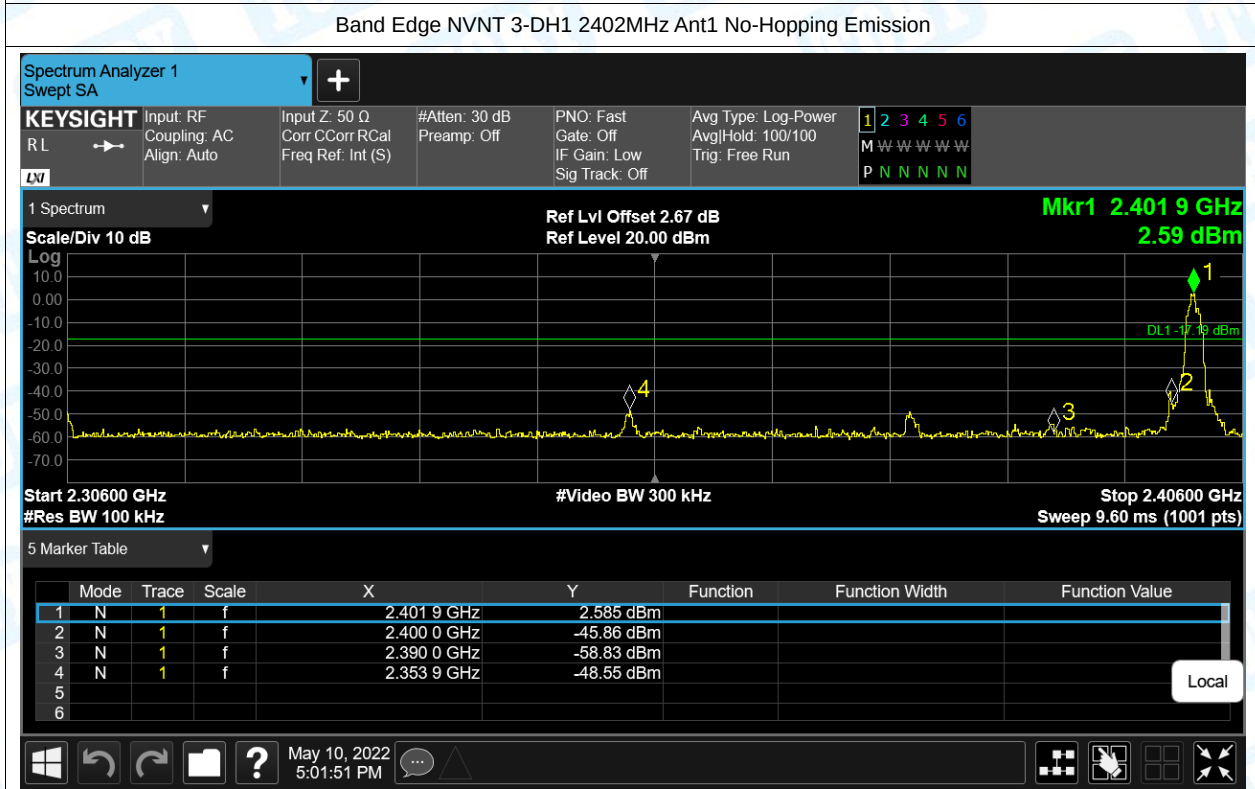
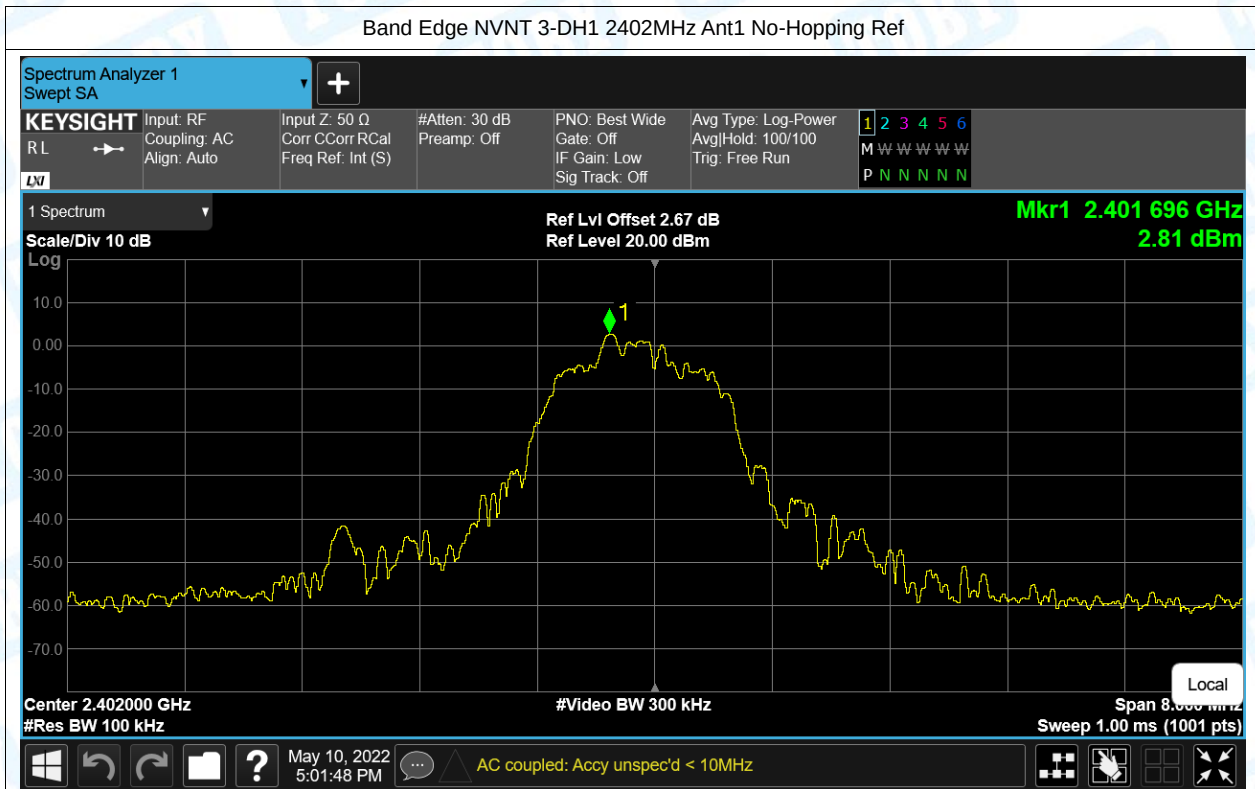
	Mode	Trace	Scale	X	Y	Function	Function Width	Function Value
1	N	1	f	2.402 0 GHz	2.864 dBm			
2	N	1	f	2.400 0 GHz	-47.23 dBm			
3	N	1	f	2.390 0 GHz	-54.38 dBm			
4	N	1	f	2.353 7 GHz	-48.16 dBm			
5								
6								

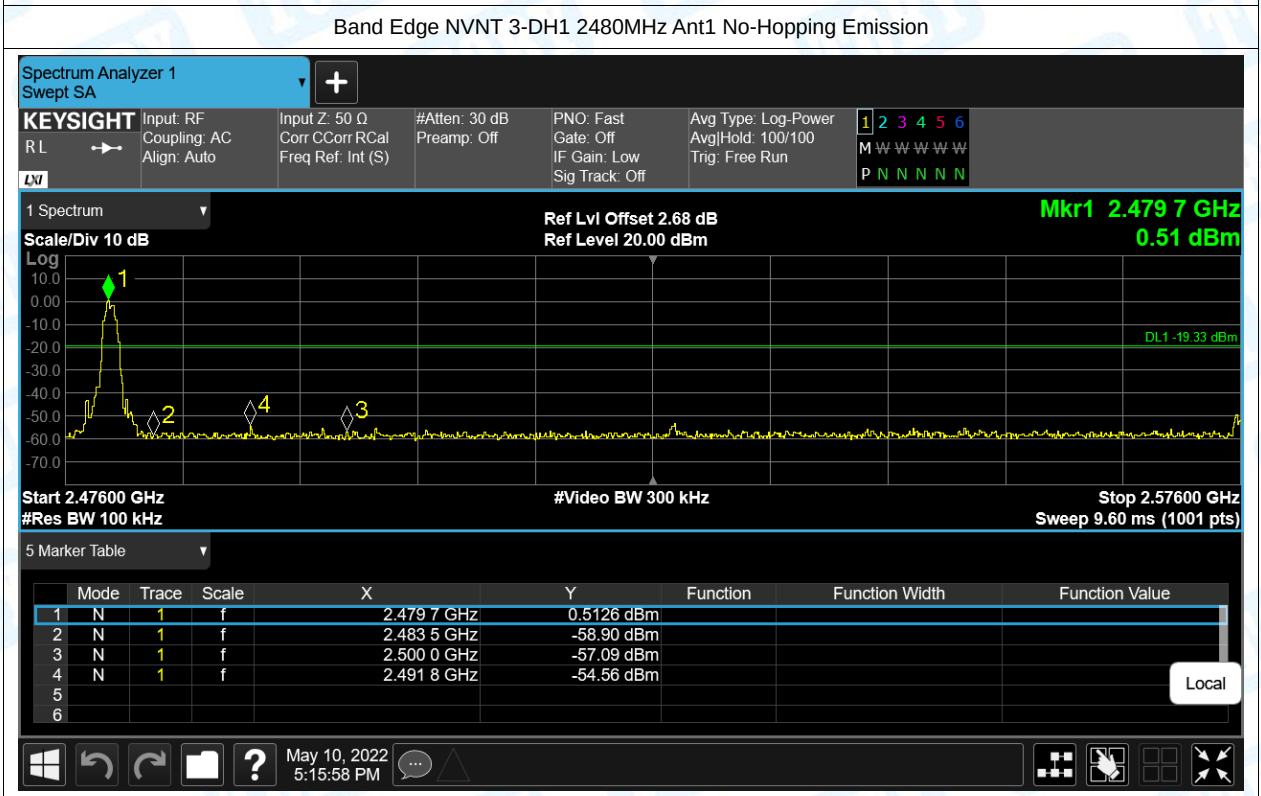
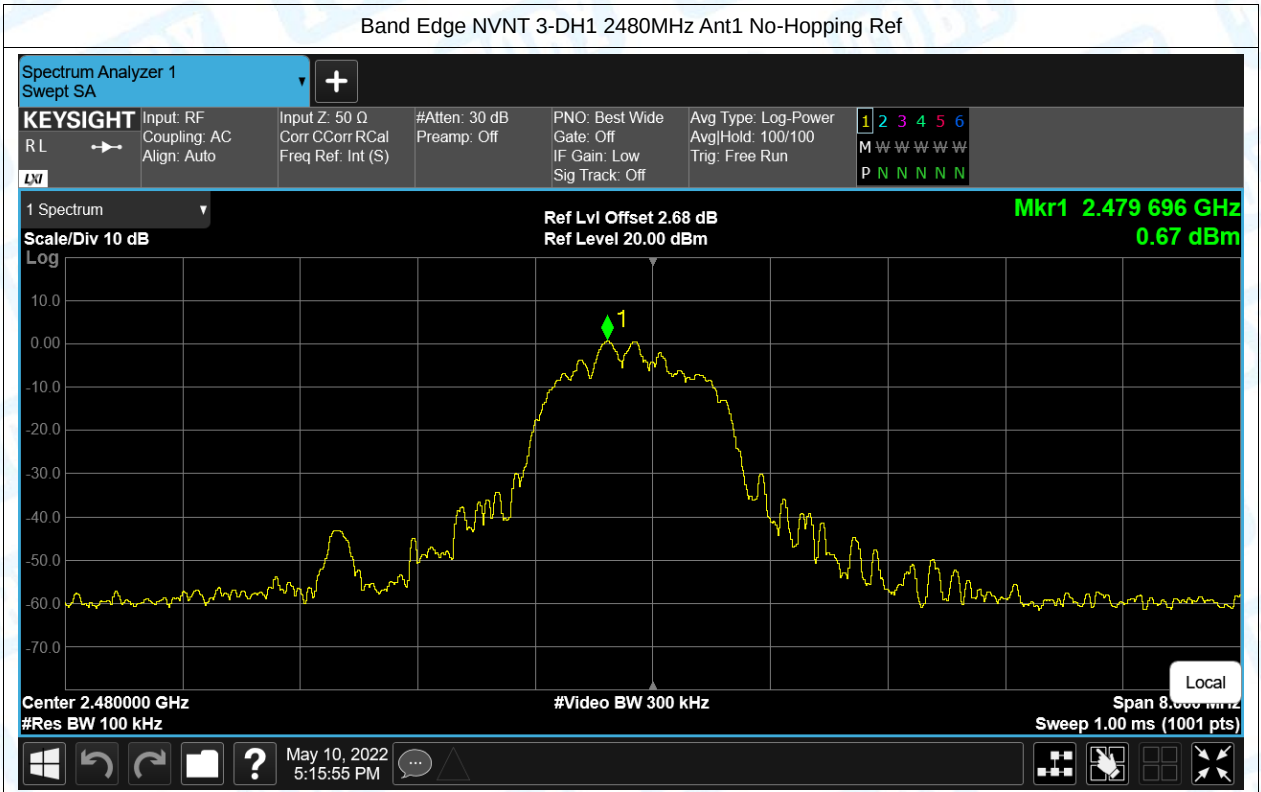
May 10, 2022 4:19:18 PM











6. Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-48.46	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-45.52	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-47.72	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-46.62	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-48.63	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-46.15	-20	Pass



