

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

General Description of EUT	
Product Name:	Wireless Headphone
Test Model:	HFF86
Sample ID:	RW-C-202208-0156-1-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202208-0156-1	

Contents

1. Duty Cycle.....	3
2. Maximum Conducted Output Power	9
3. -20dB Bandwidth	15
4. Occupied Channel Bandwidth	21
5. Band Edge	27
6. Band Edge(Hopping).....	34
7. Conducted RF Spurious Emission	41
8. Restrict Band	51
9. Carrier Frequencies Separation.....	58
10. Number of Hopping Channel	61
11. Dwell Time.....	64

1. Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	29.6	5.29	2.7
NVNT	1-DH1	2441	Ant1	29.6	5.29	2.7
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2480	Ant1	30.4	5.17	2.63

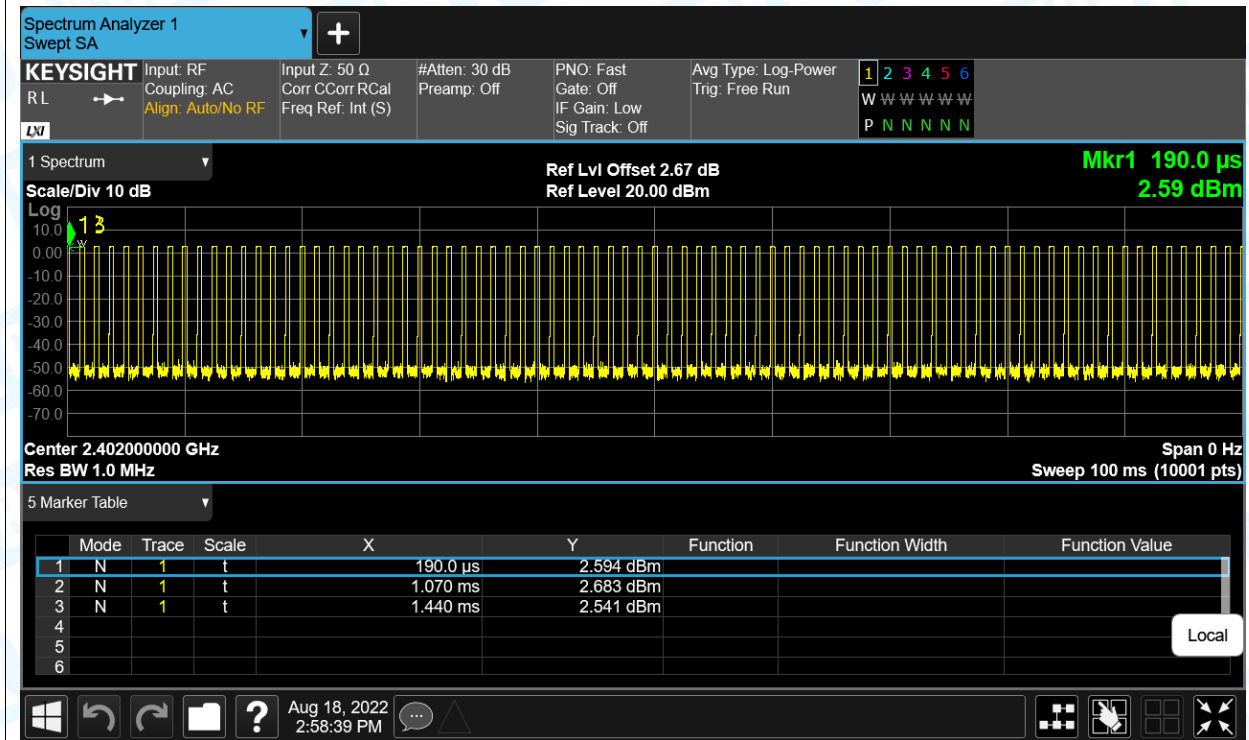
Note: $\text{Duty Cycle}(\%) = \frac{\text{ON}(\text{ms})}{\text{ON}(\text{ms}) + \text{OFF}(\text{ms})}$

$\text{ON}(\text{ms}) = \text{Maker3} - \text{Maker2}$

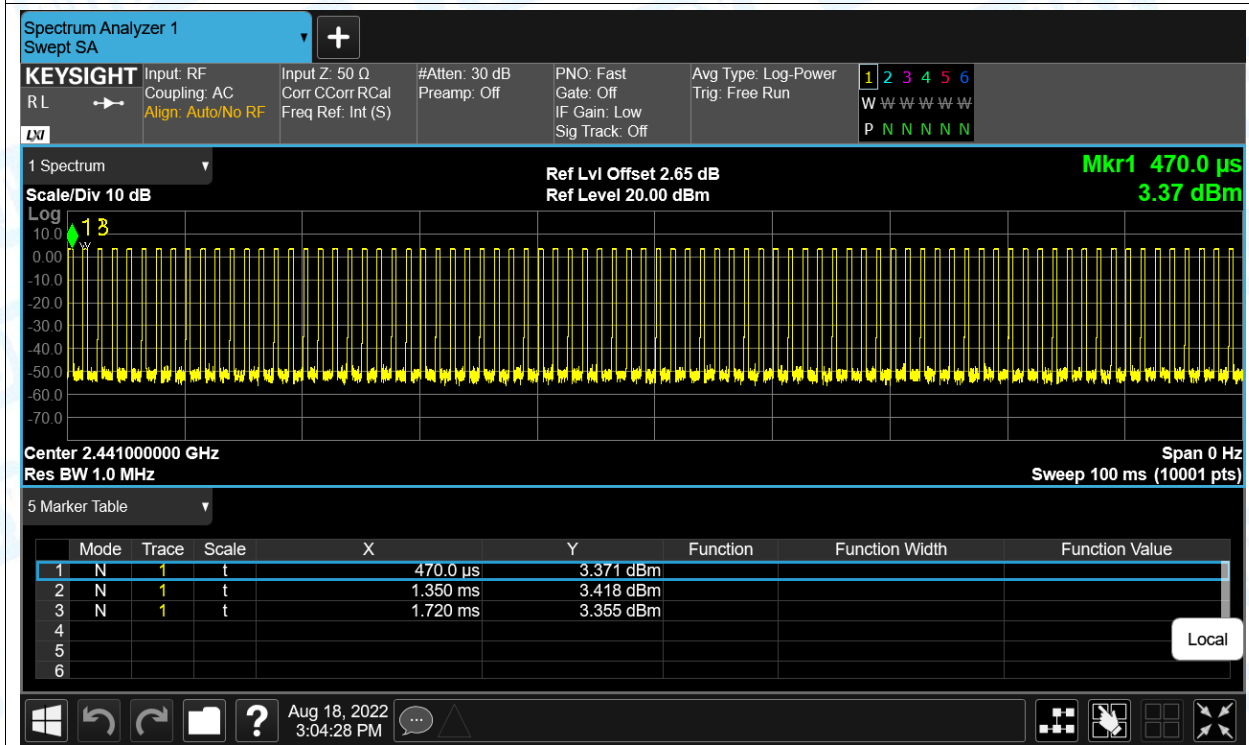
$(\text{ON}(\text{ms}) + \text{OFF}(\text{ms})) = \text{Maker3} - \text{Maker1}$

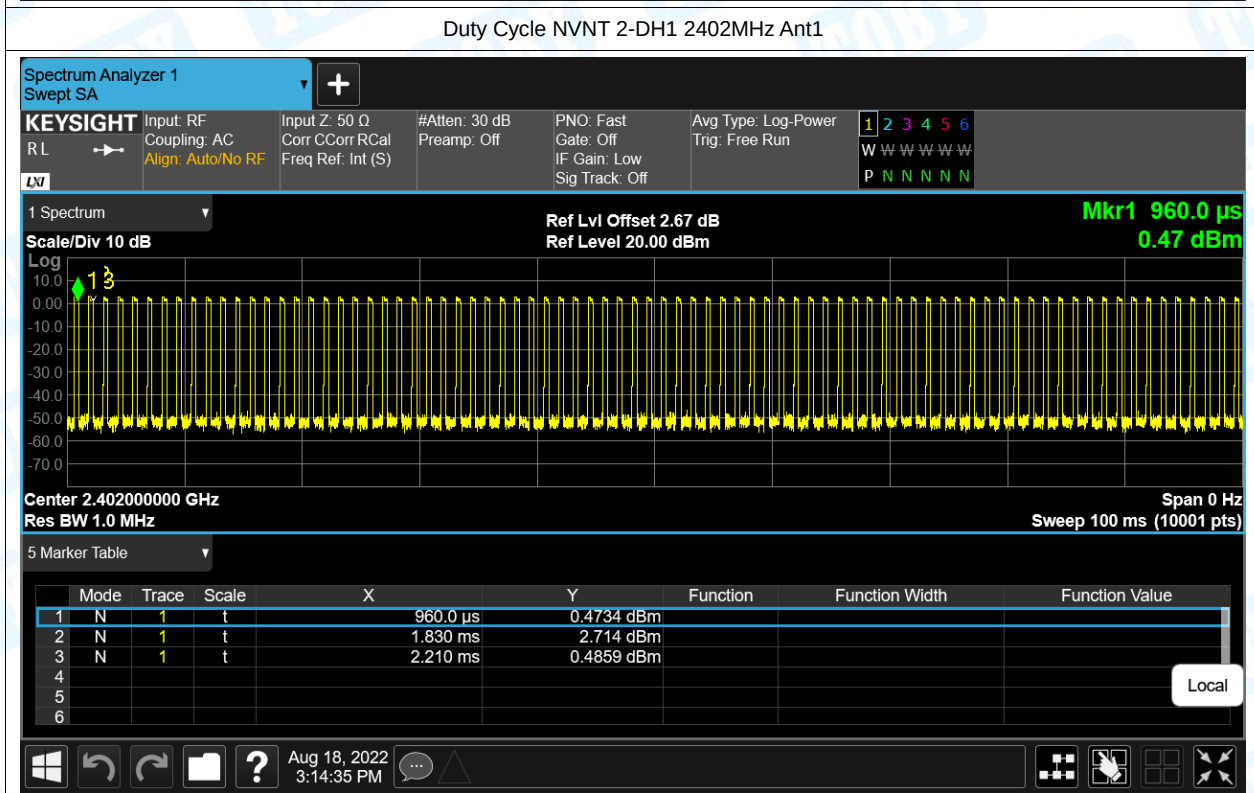
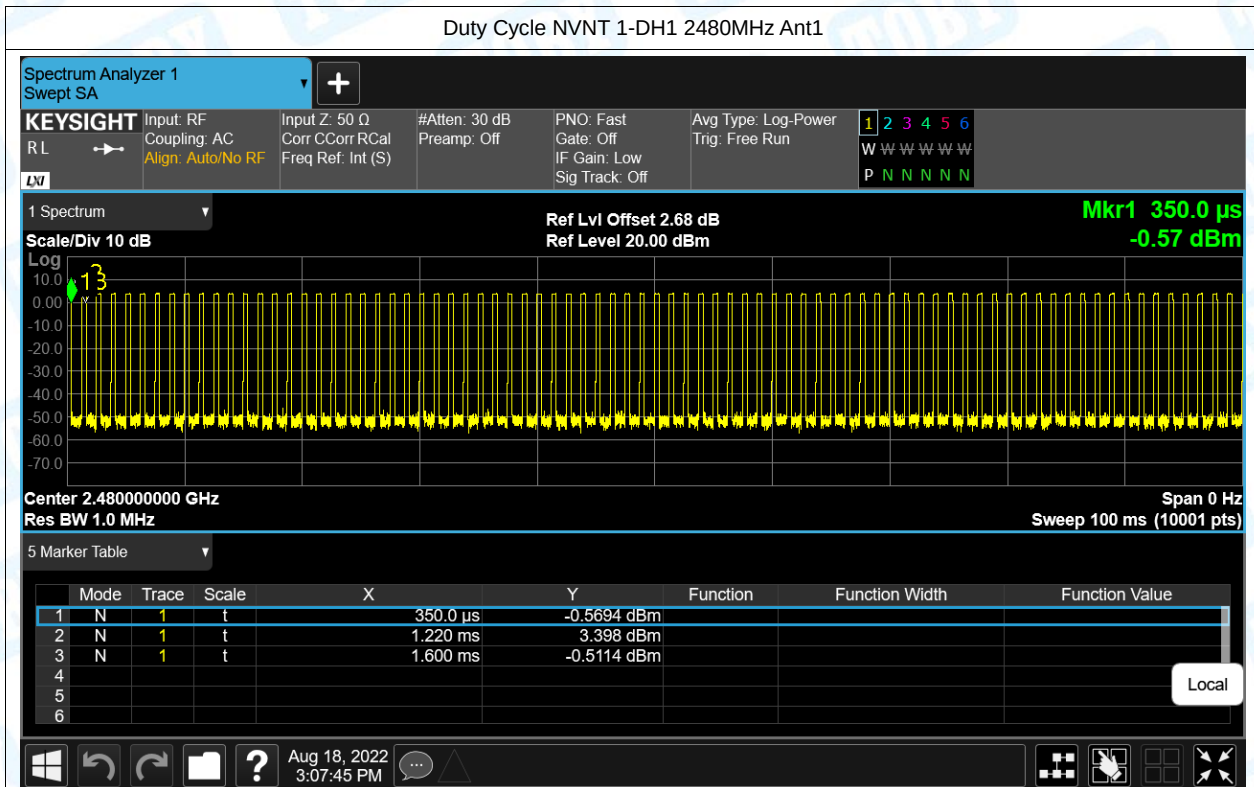
Test Graphs

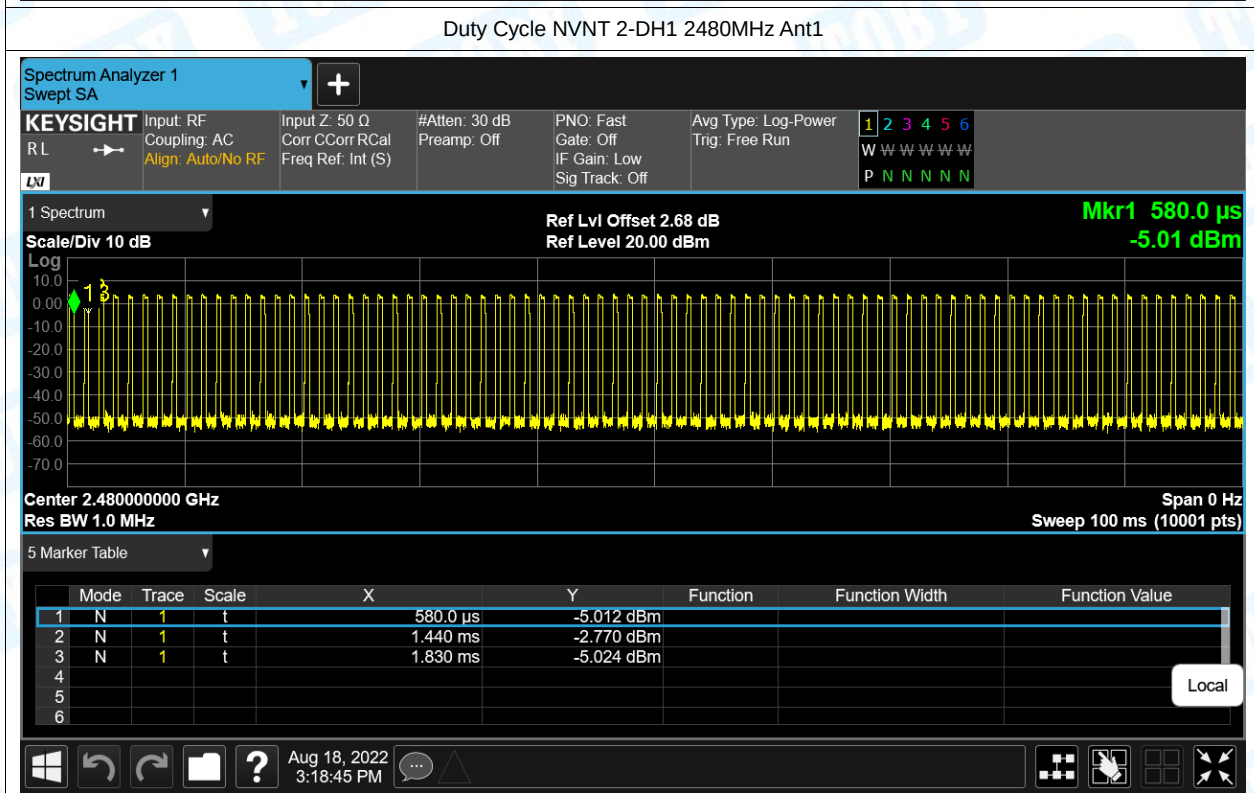
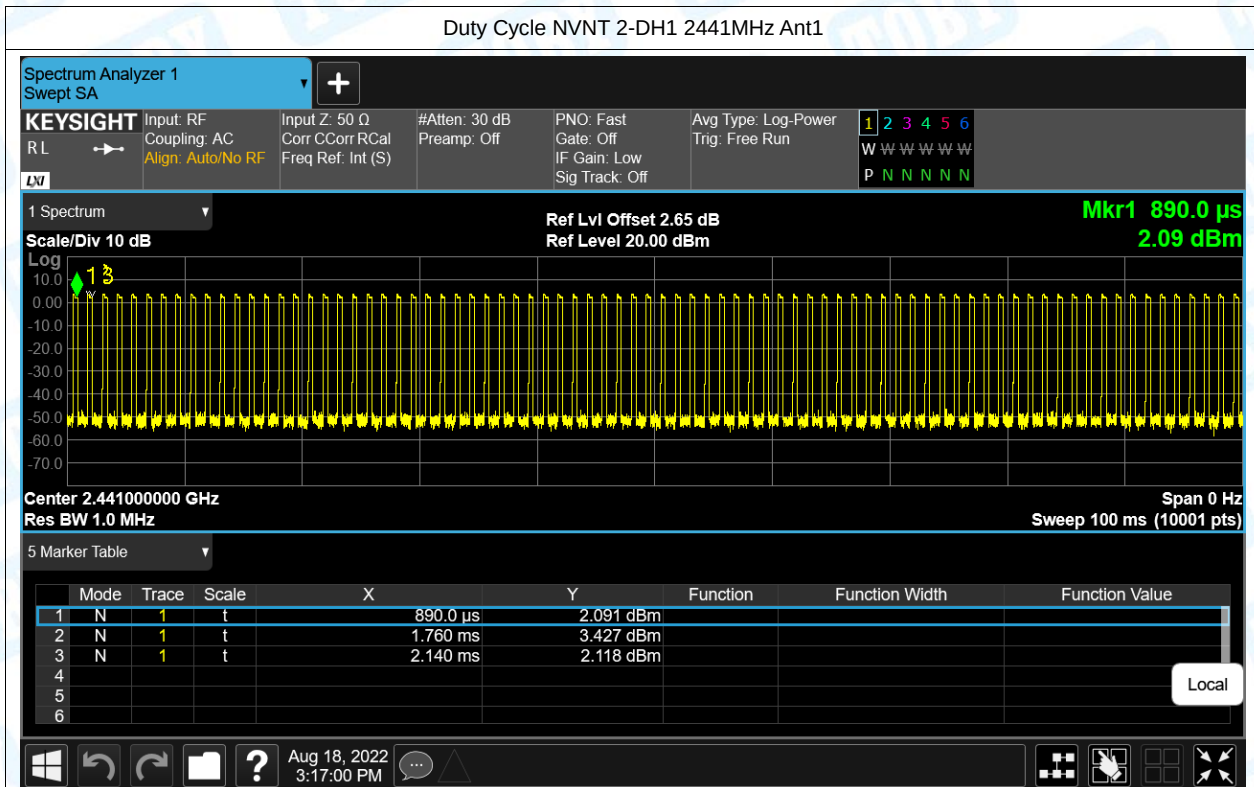
Duty Cycle NVNT 1-DH1 2402MHz Ant1



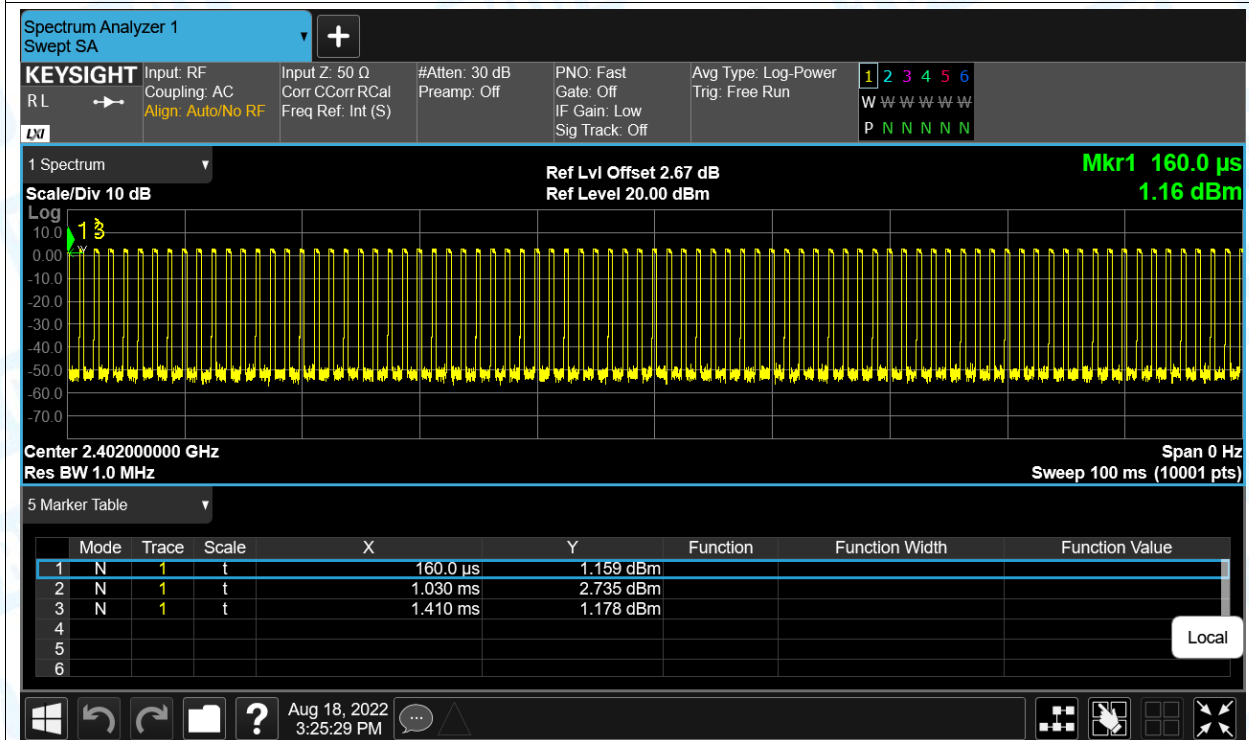
Duty Cycle NVNT 1-DH1 2441MHz Ant1



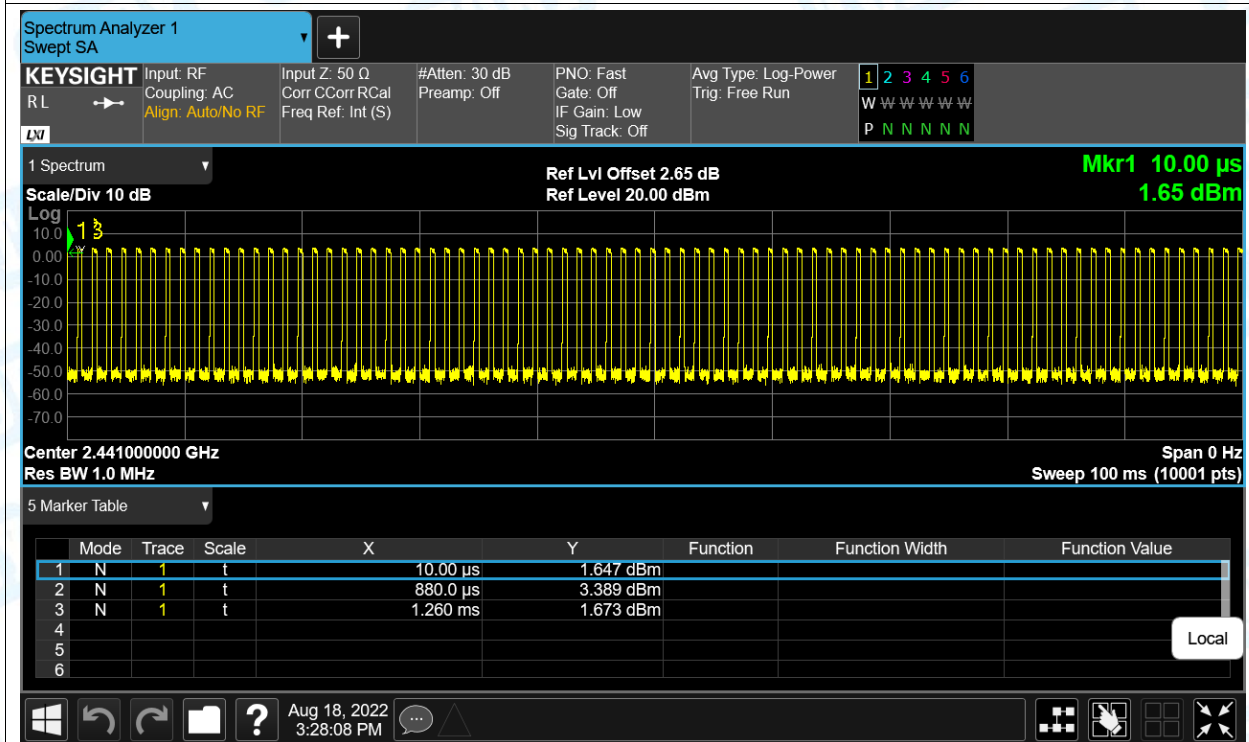


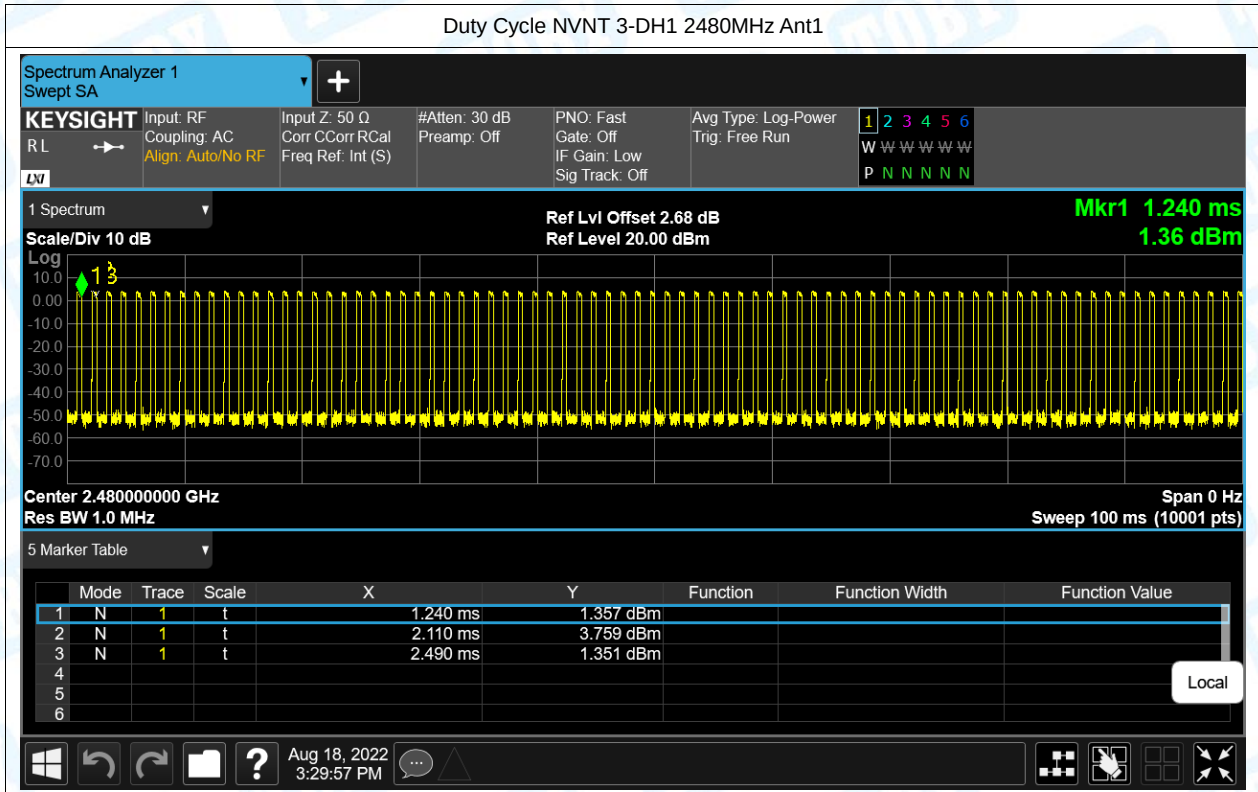


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





2. Maximum Conducted Output Power

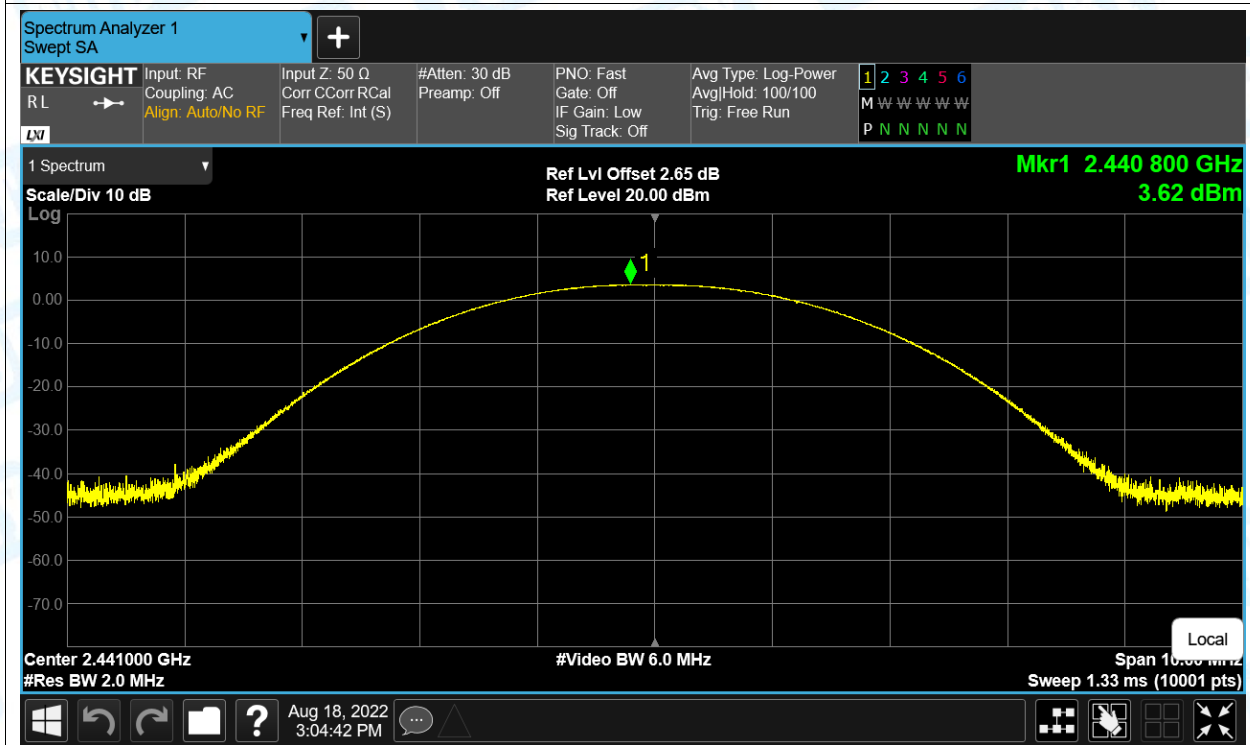
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	2.97	21	Pass
NVNT	1-DH1	2441	Ant1	3.62	21	Pass
NVNT	1-DH1	2480	Ant1	3.98	21	Pass
NVNT	2-DH1	2402	Ant1	2.93	21	Pass
NVNT	2-DH1	2441	Ant1	3.64	21	Pass
NVNT	2-DH1	2480	Ant1	4.00	21	Pass
NVNT	3-DH1	2402	Ant1	3.45	21	Pass
NVNT	3-DH1	2441	Ant1	3.95	21	Pass
NVNT	3-DH1	2480	Ant1	4.30	21	Pass

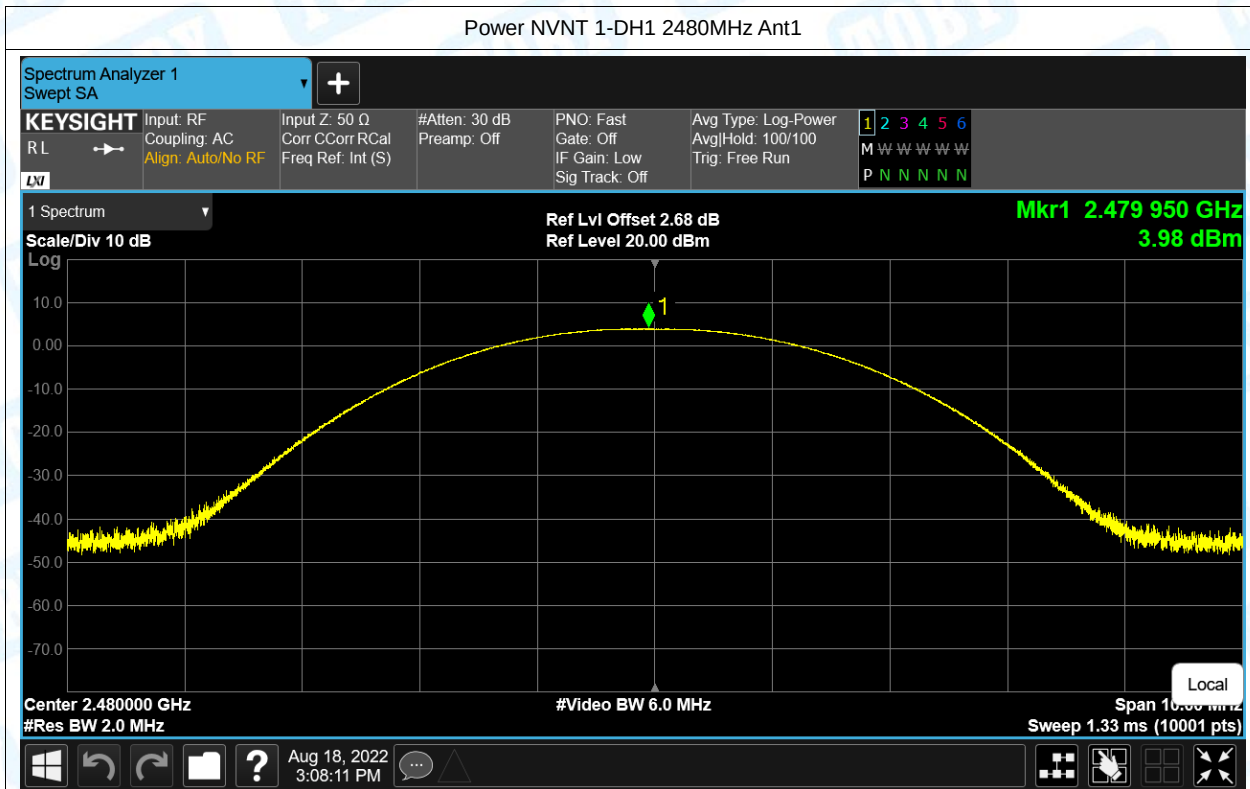
Test Graphs

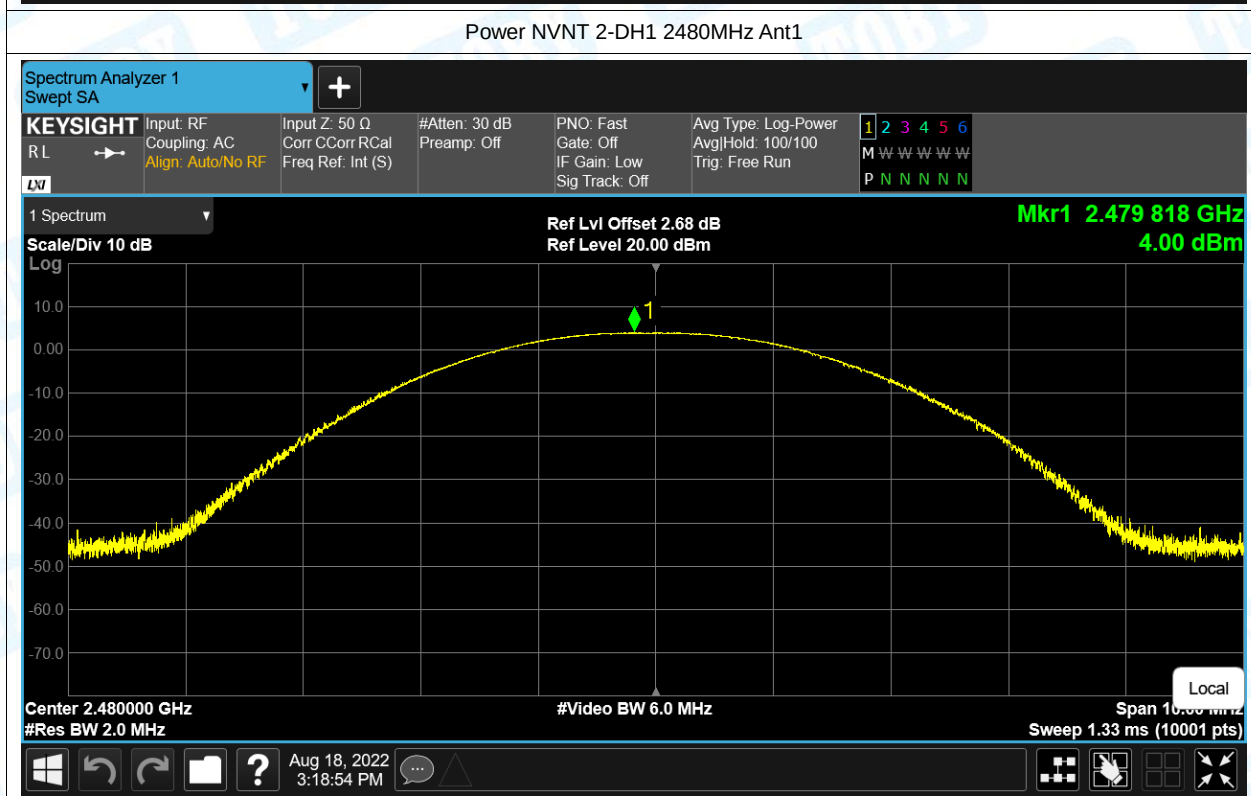
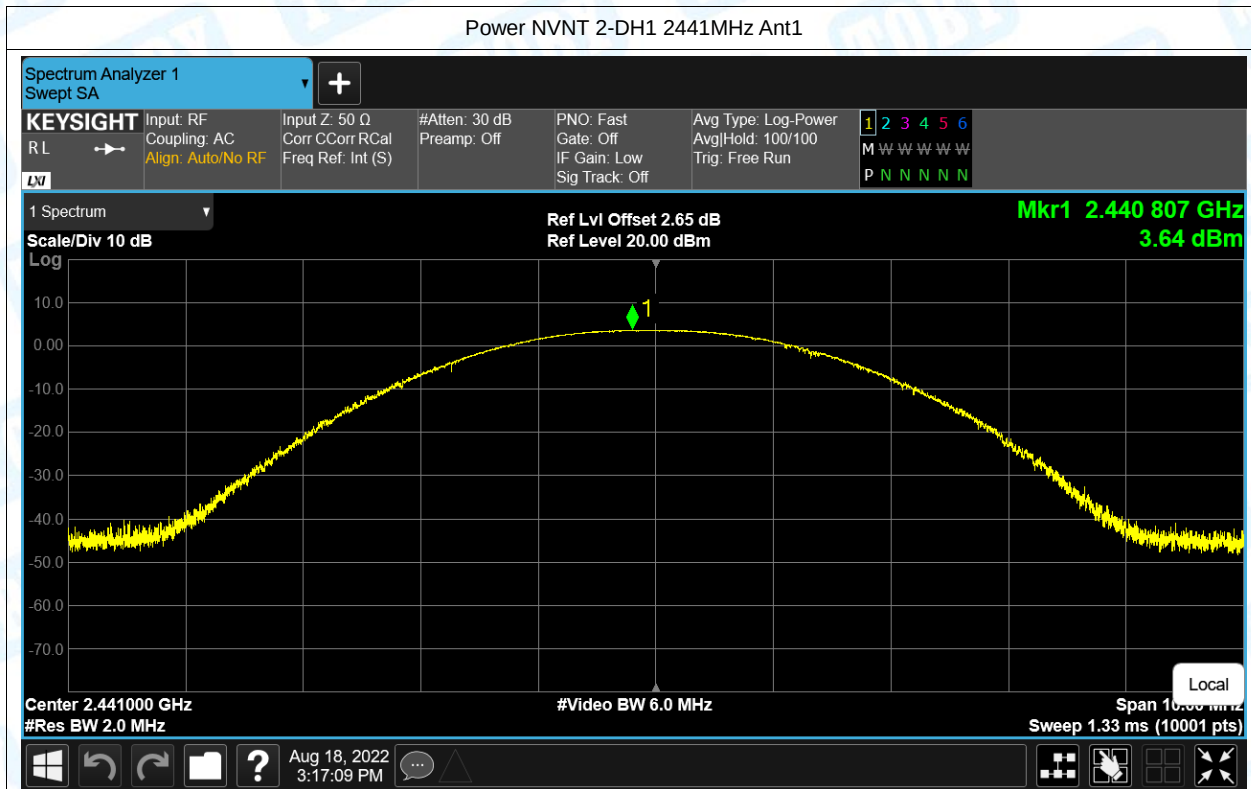
Power NVNT 1-DH1 2402MHz Ant1

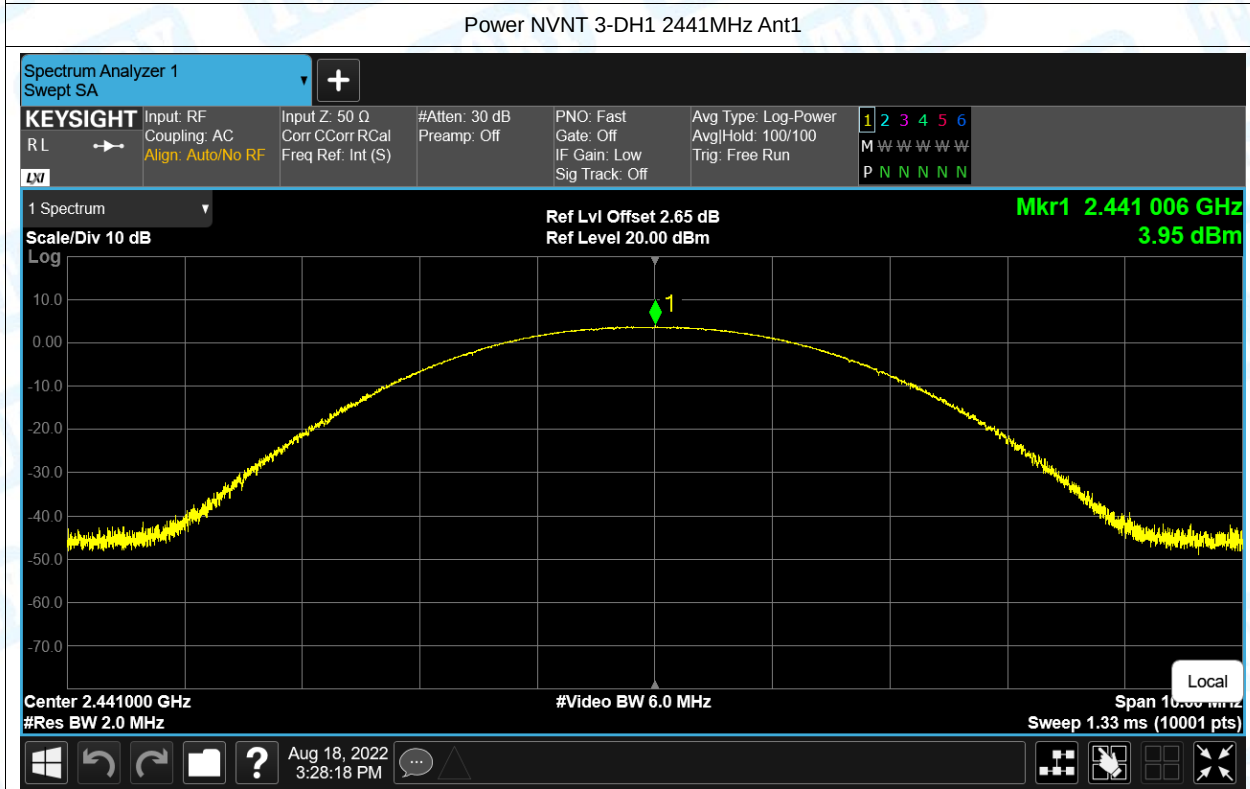
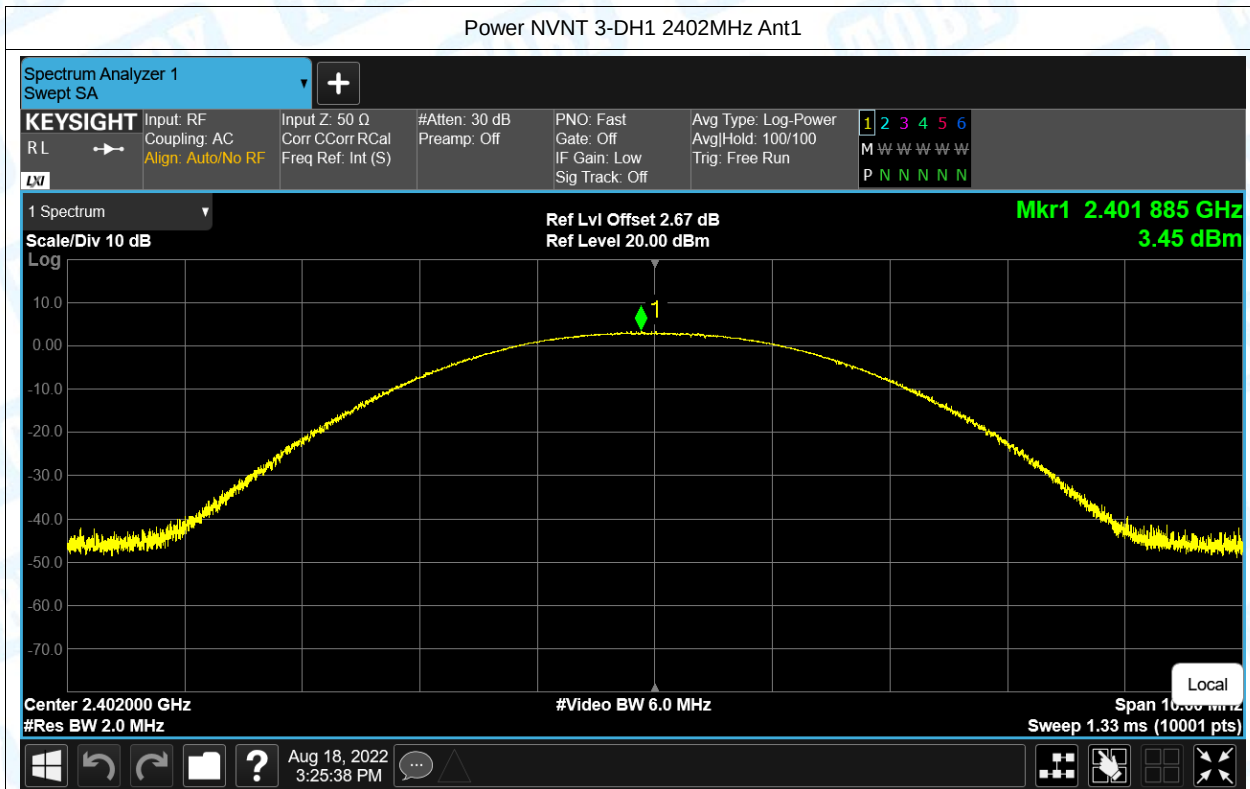


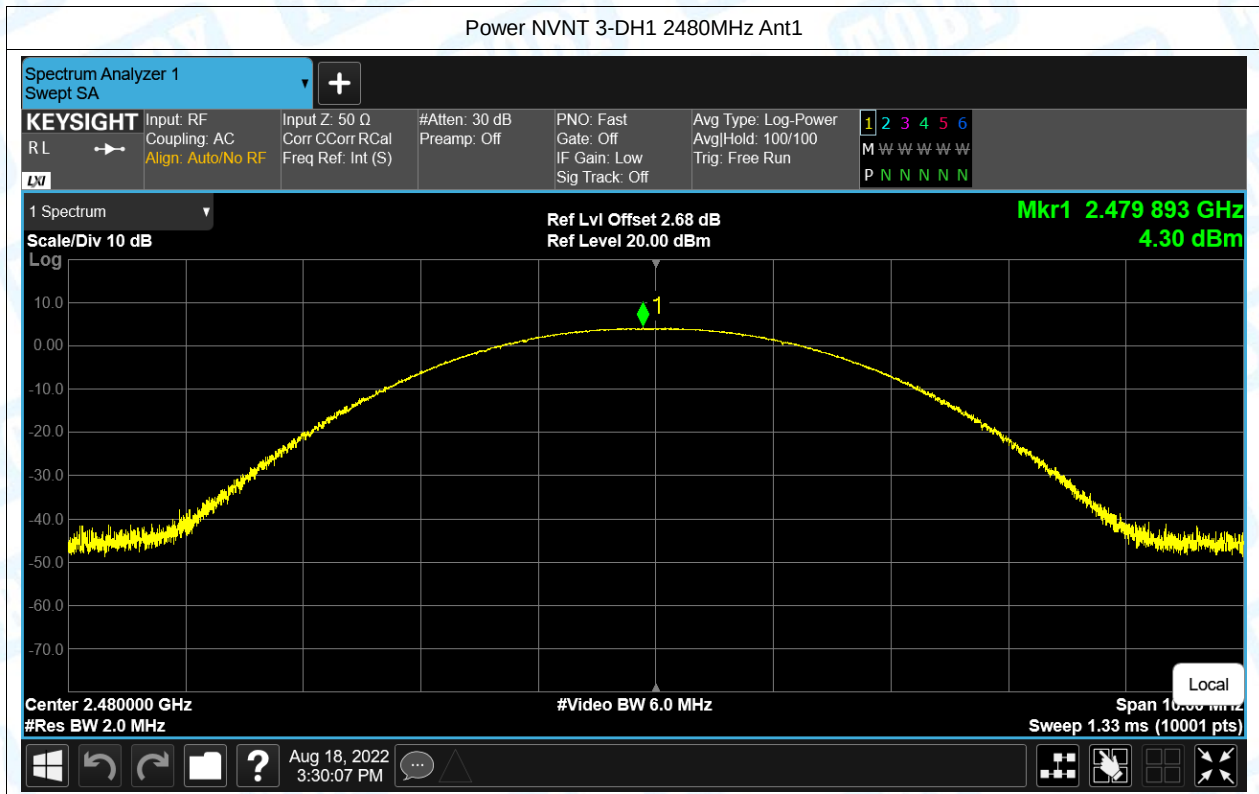
Power NVNT 1-DH1 2441MHz Ant1









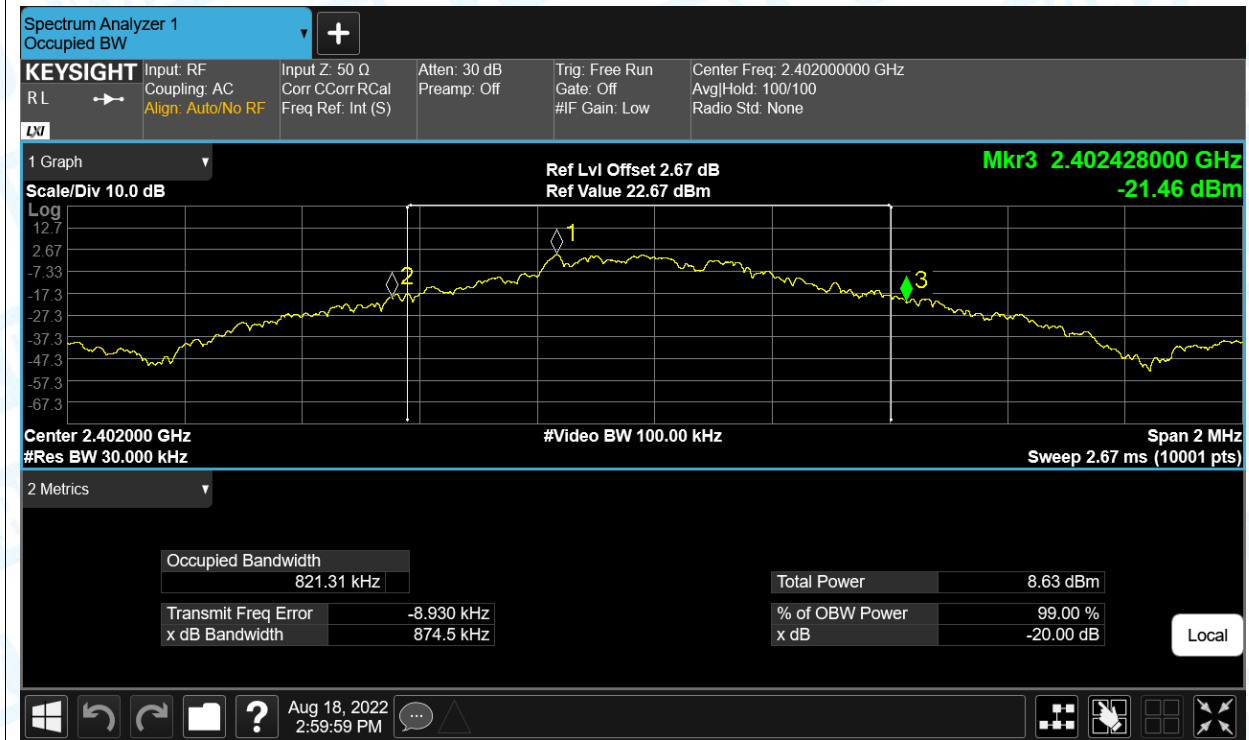


3. -20dB Bandwidth

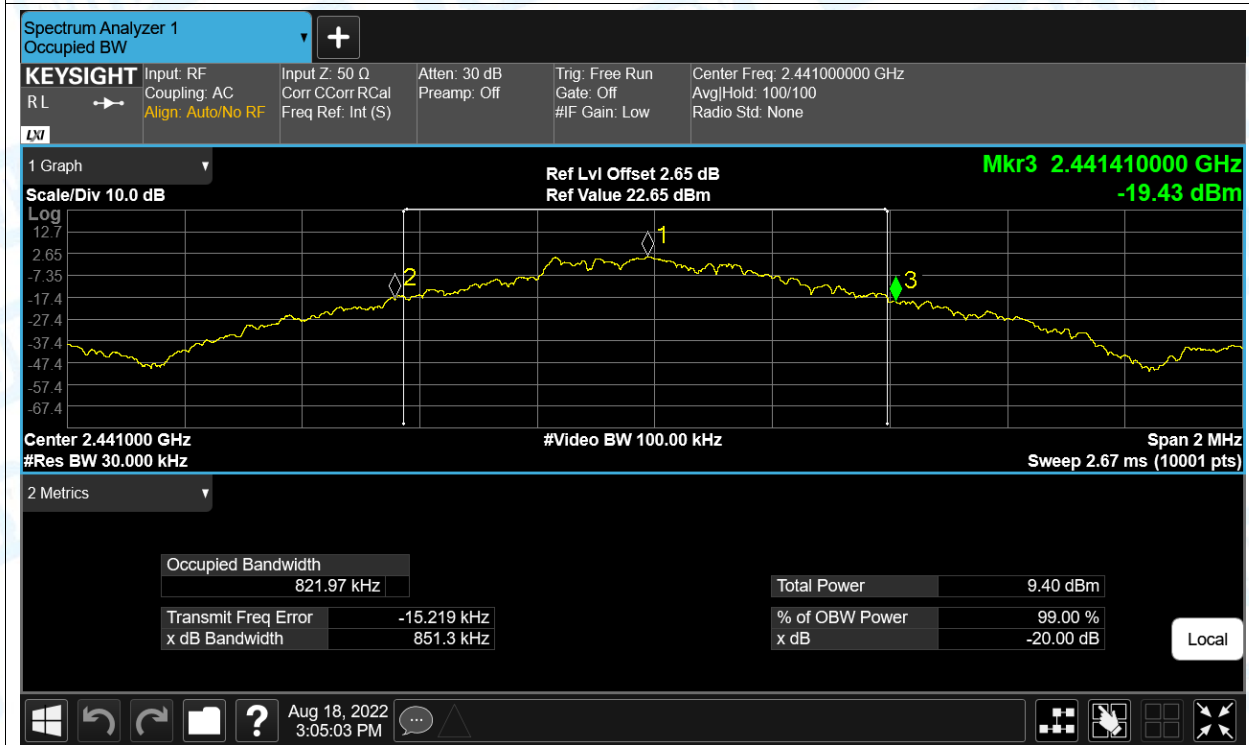
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	----	Pass
NVNT	1-DH1	2441	Ant1	0.85	----	Pass
NVNT	1-DH1	2480	Ant1	0.87	----	Pass
NVNT	2-DH1	2402	Ant1	1.21	----	Pass
NVNT	2-DH1	2441	Ant1	1.18	----	Pass
NVNT	2-DH1	2480	Ant1	1.19	----	Pass
NVNT	3-DH1	2402	Ant1	1.19	----	Pass
NVNT	3-DH1	2441	Ant1	1.20	----	Pass
NVNT	3-DH1	2480	Ant1	1.20	----	Pass

Test Graphs

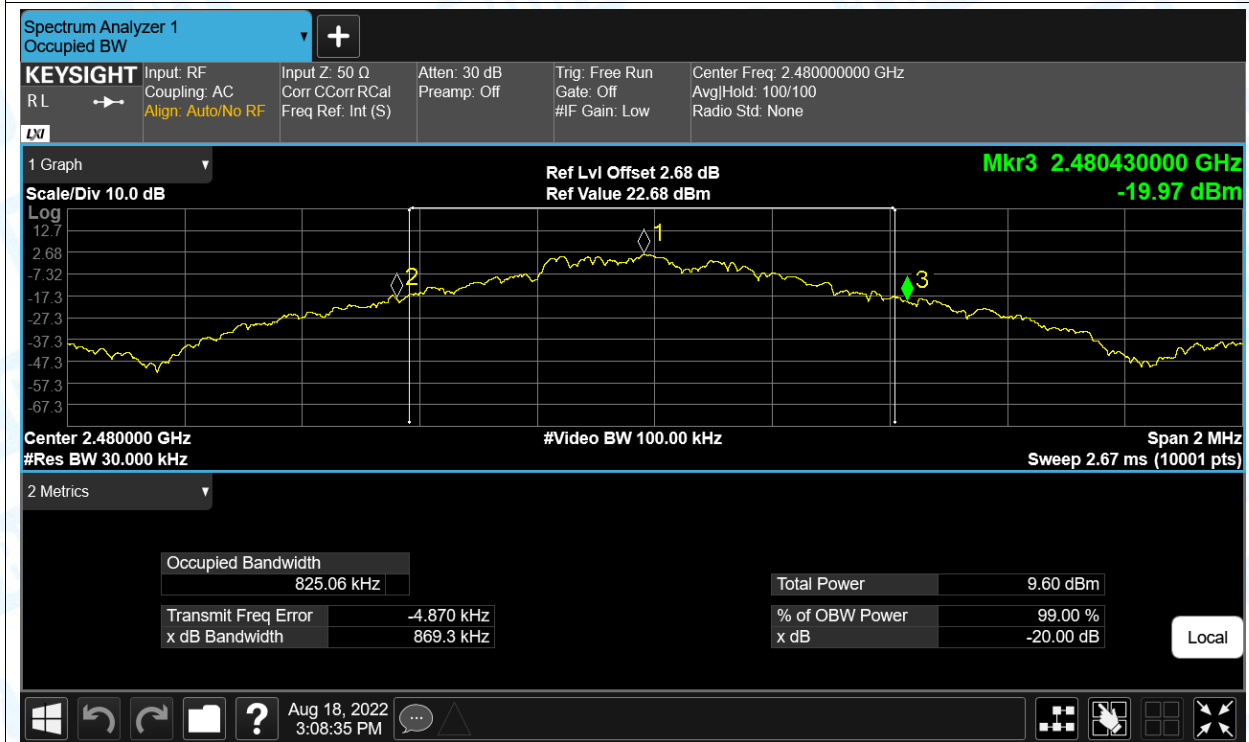
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



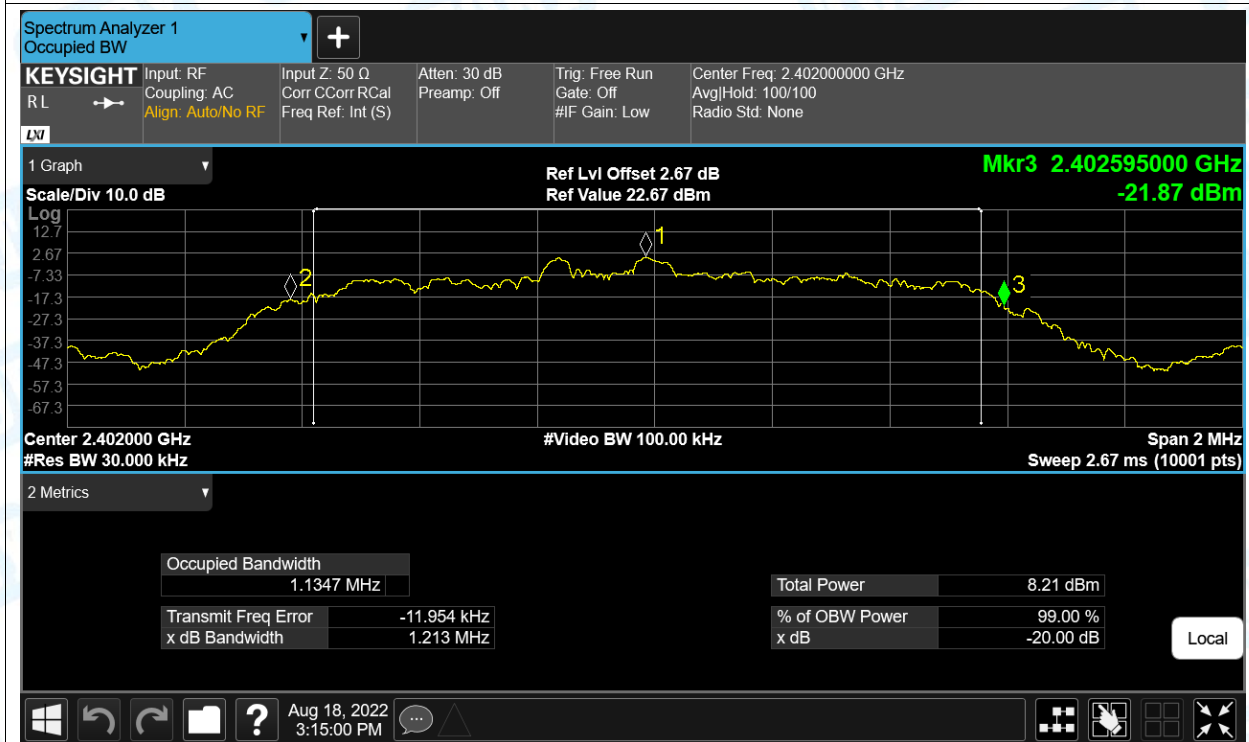
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



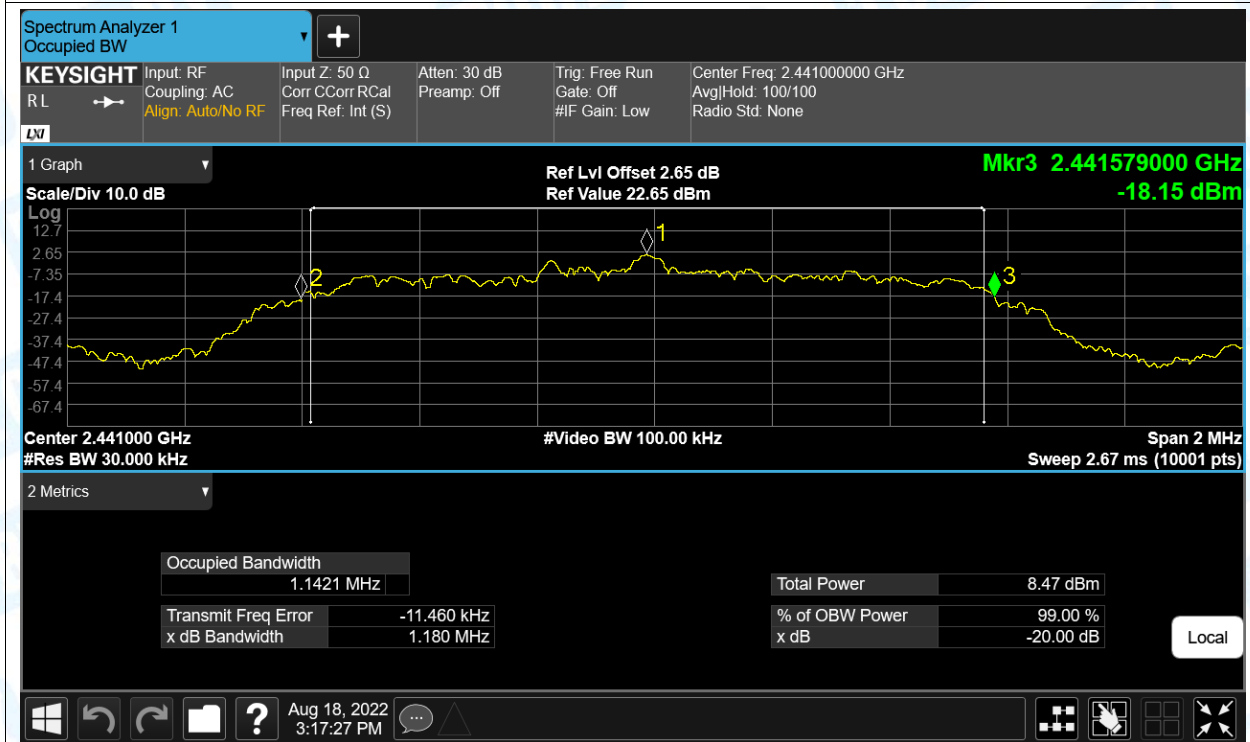
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



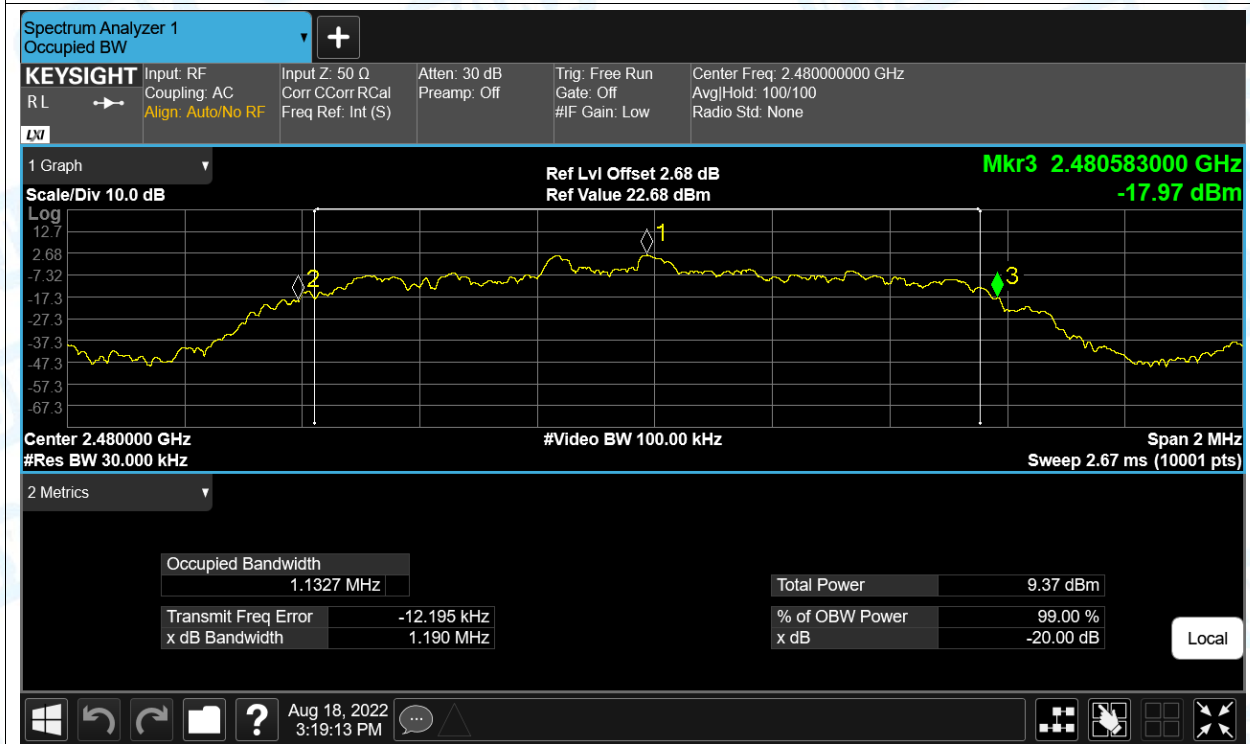
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



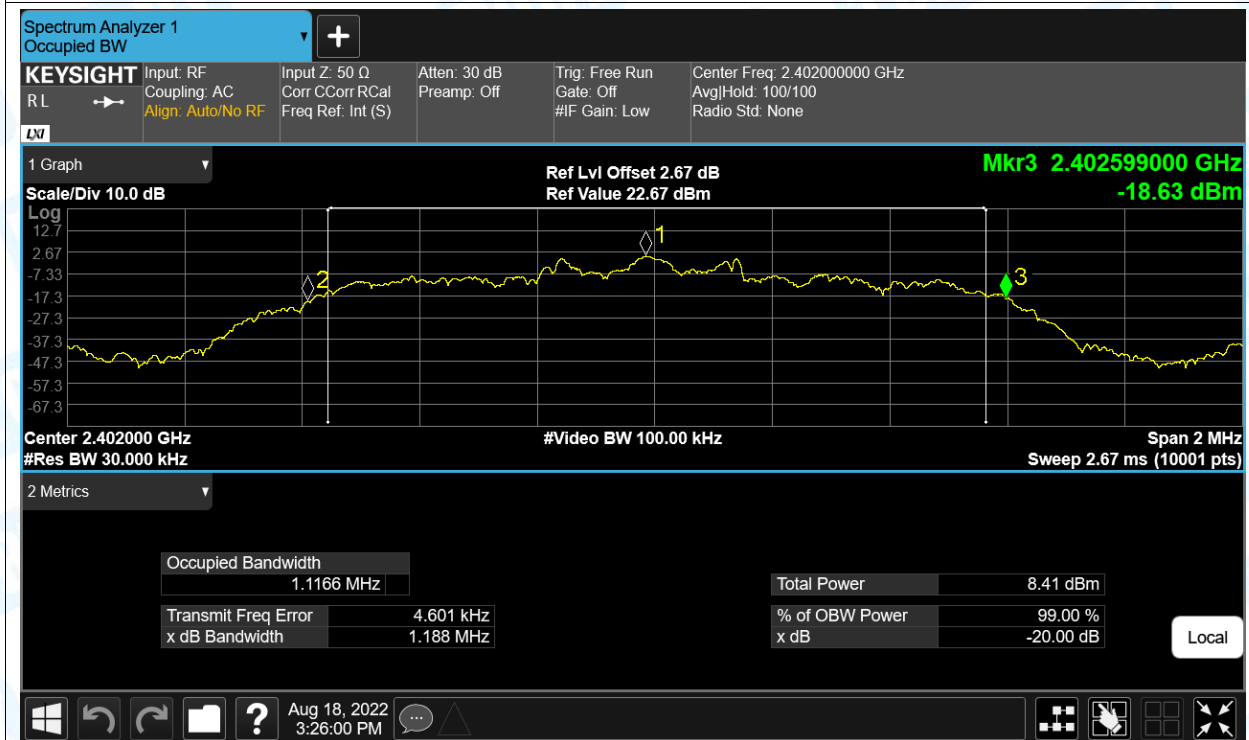
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



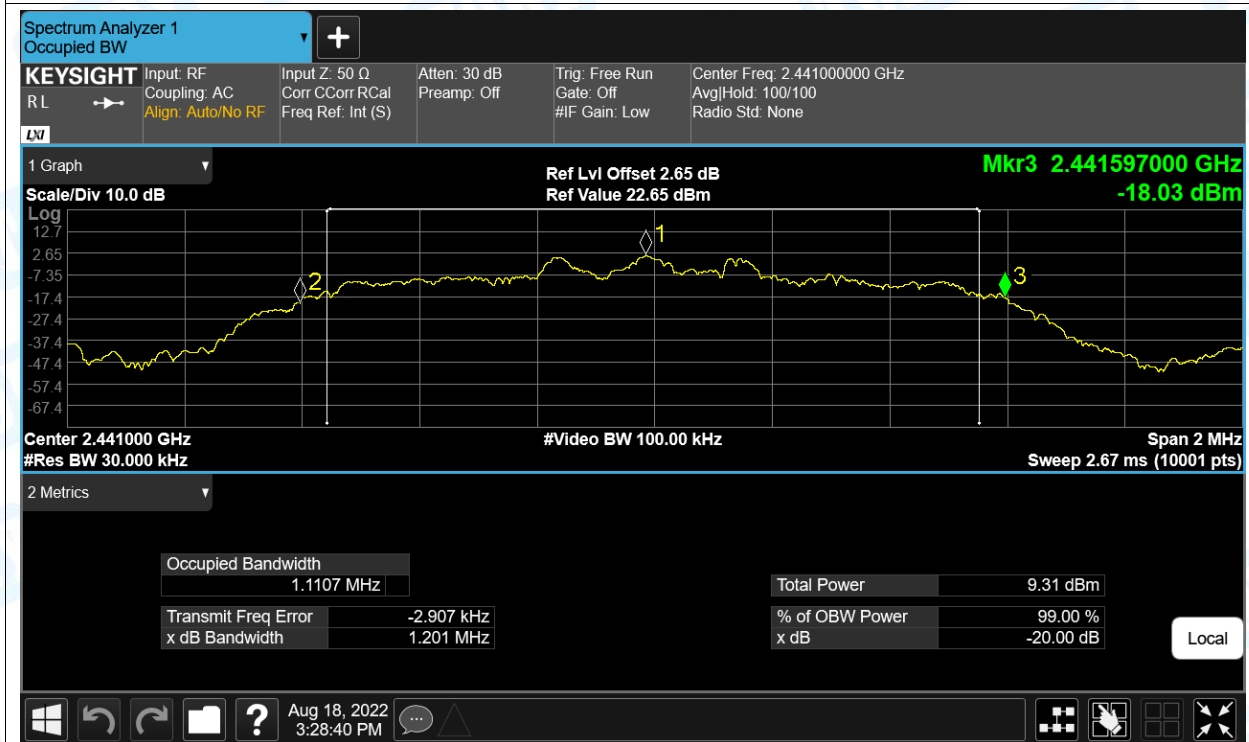
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

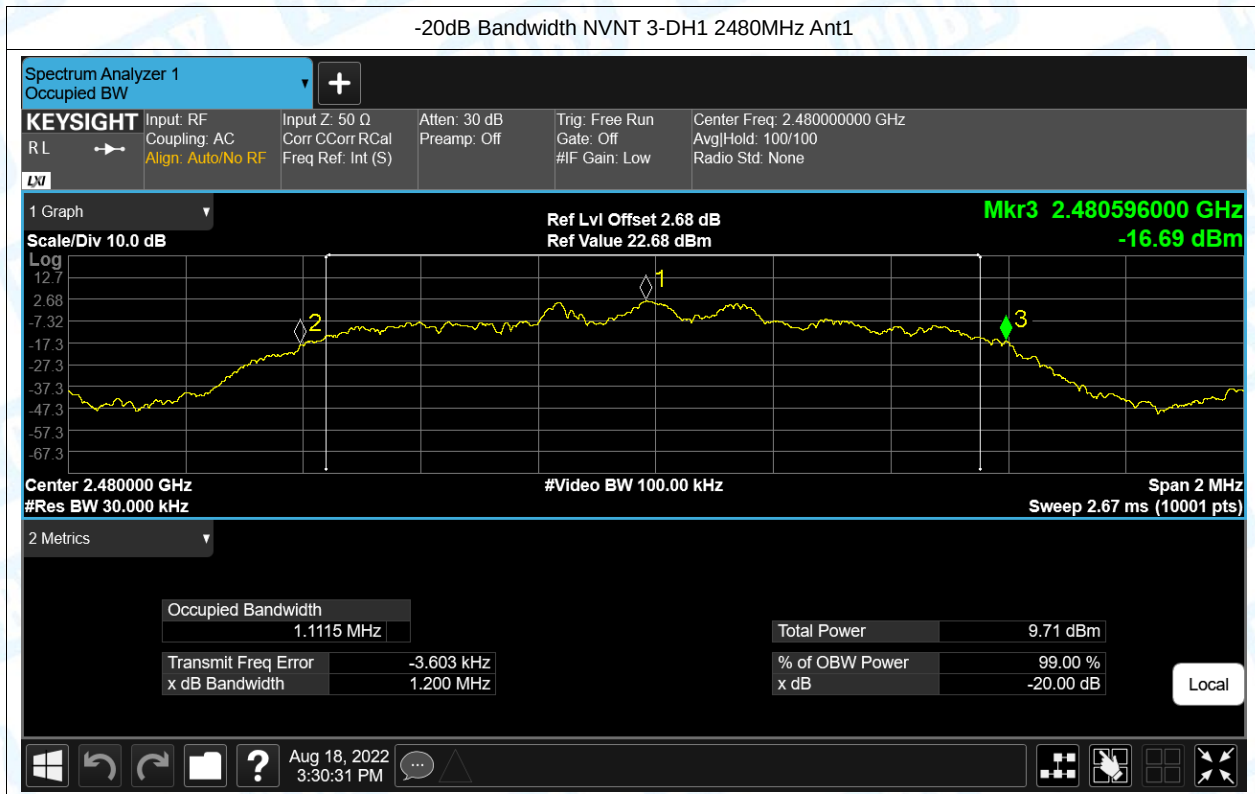


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1





4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.842
NVNT	1-DH1	2441	Ant1	0.836
NVNT	1-DH1	2480	Ant1	0.834
NVNT	2-DH1	2402	Ant1	1.126
NVNT	2-DH1	2441	Ant1	1.138
NVNT	2-DH1	2480	Ant1	1.137
NVNT	3-DH1	2402	Ant1	1.133
NVNT	3-DH1	2441	Ant1	1.109
NVNT	3-DH1	2480	Ant1	1.113

Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1



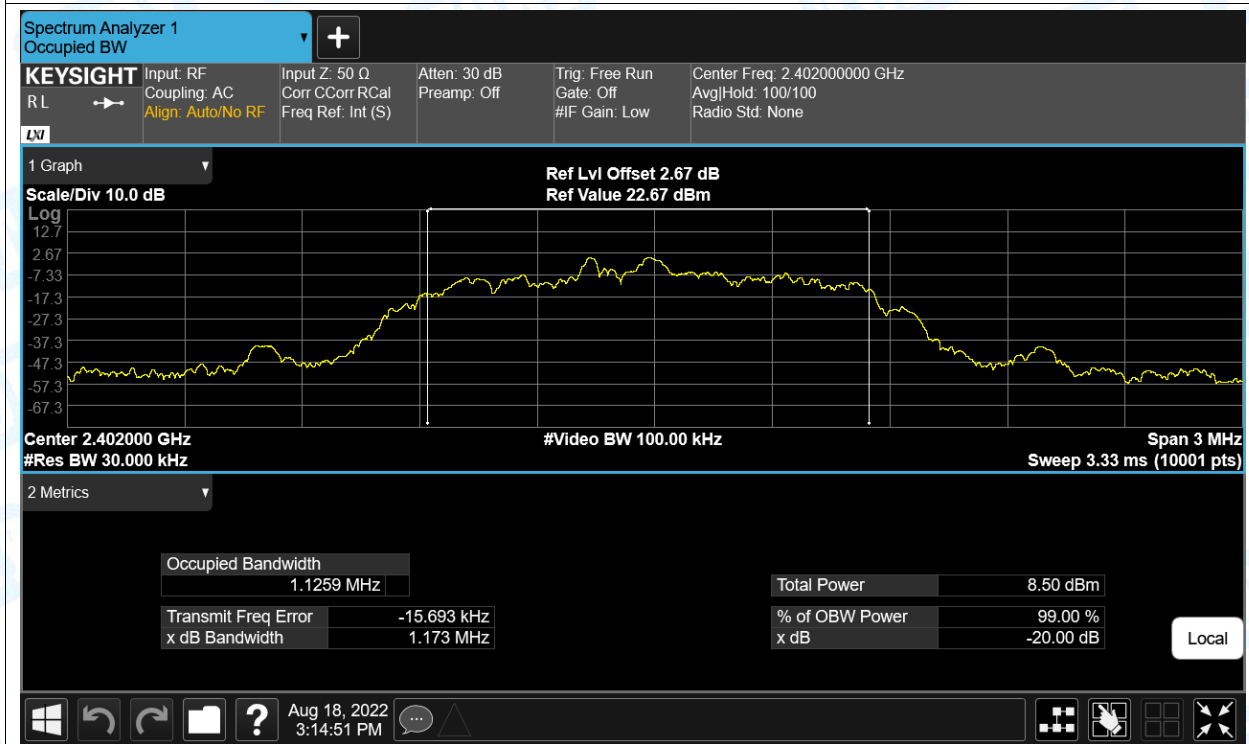
OBW NVNT 1-DH1 2441MHz Ant1



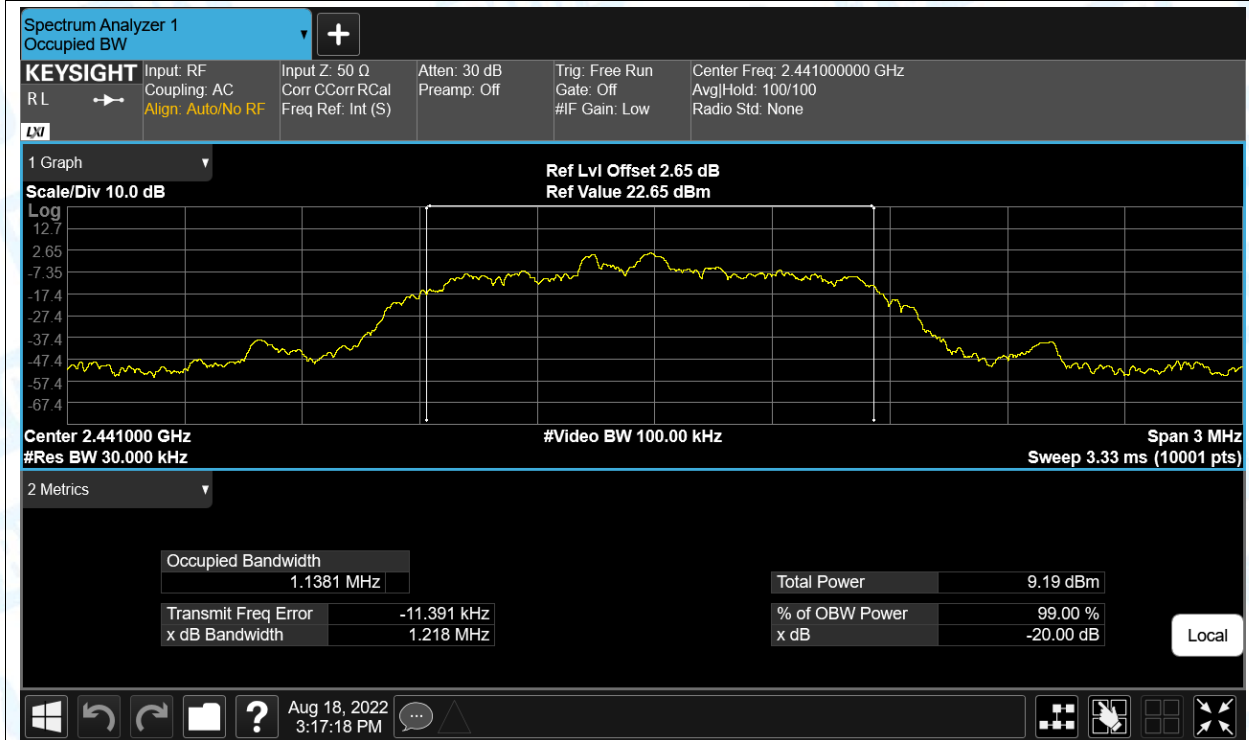
OBW NVNT 1-DH1 2480MHz Ant1



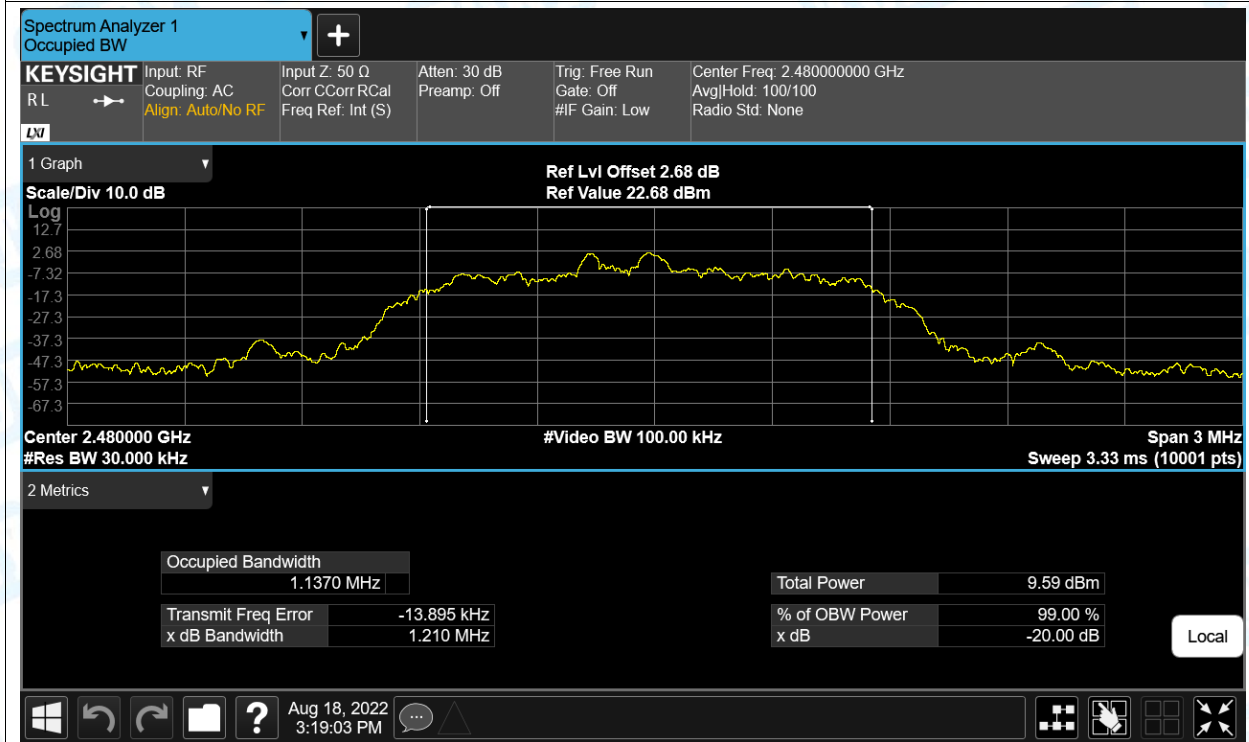
OBW NVNT 2-DH1 2402MHz Ant1



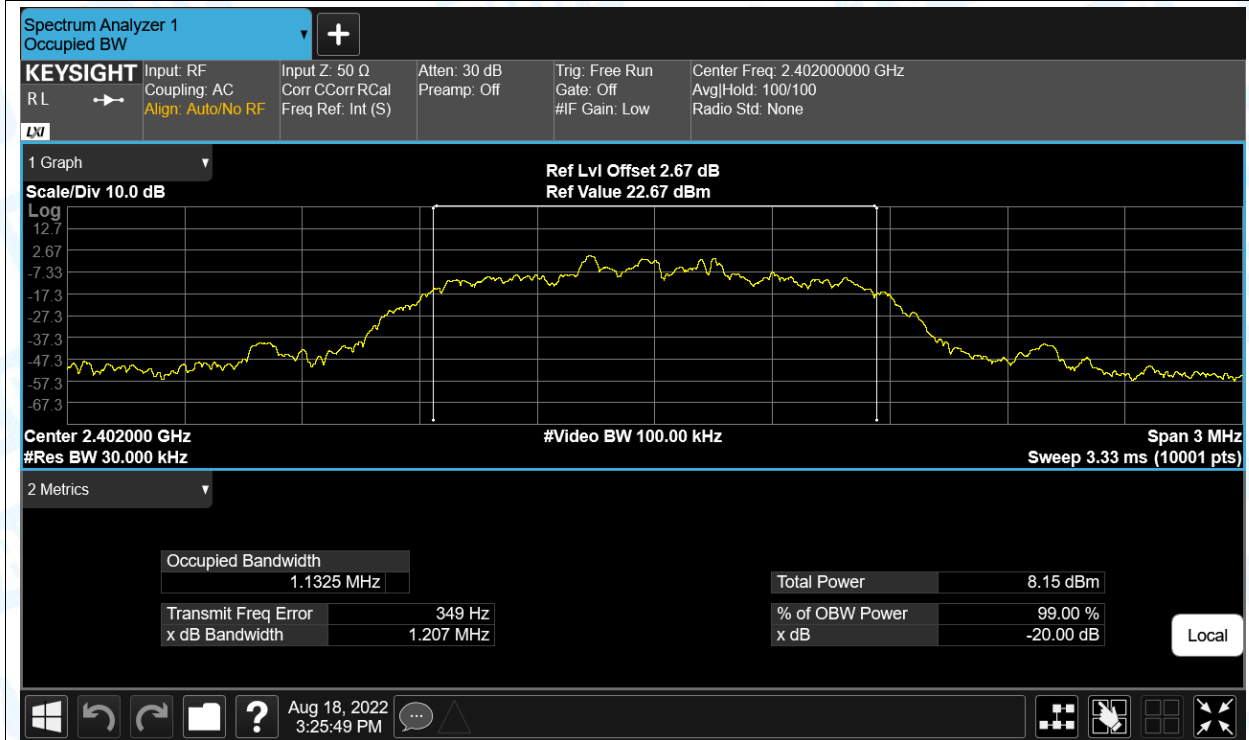
OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

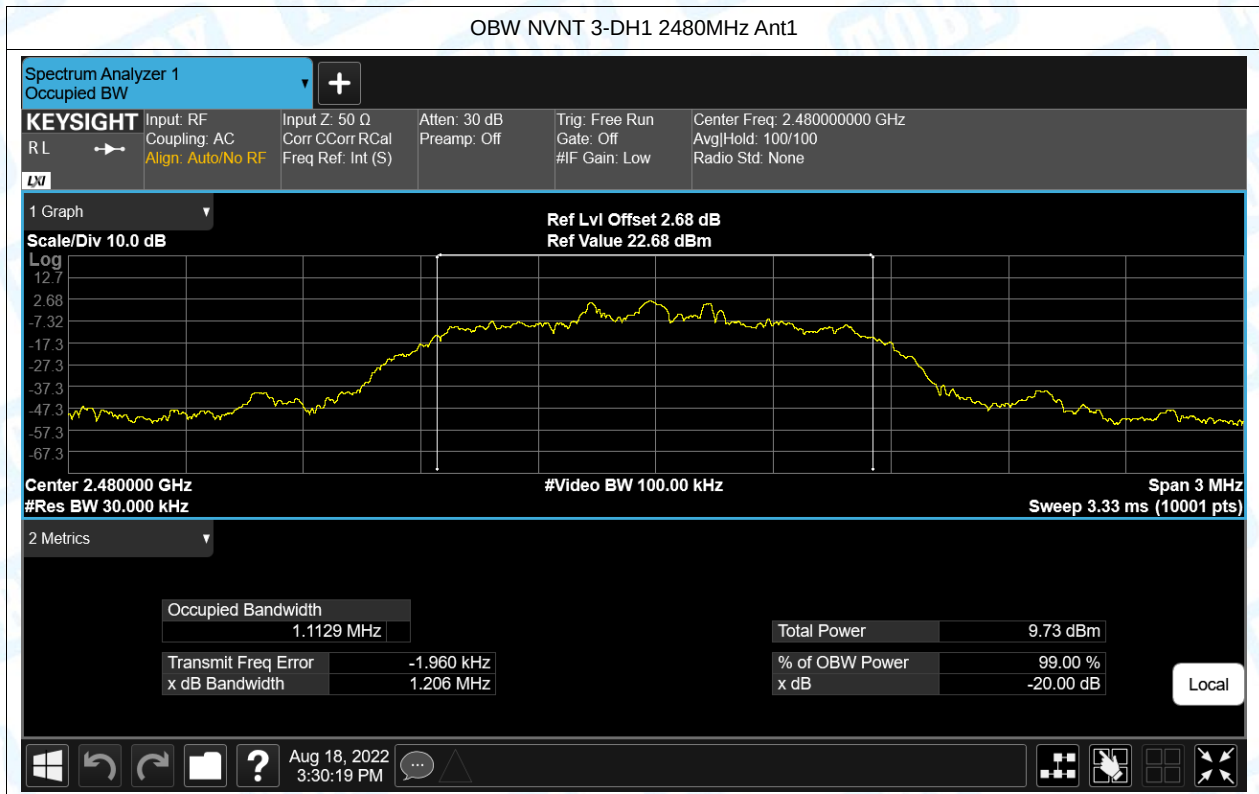


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



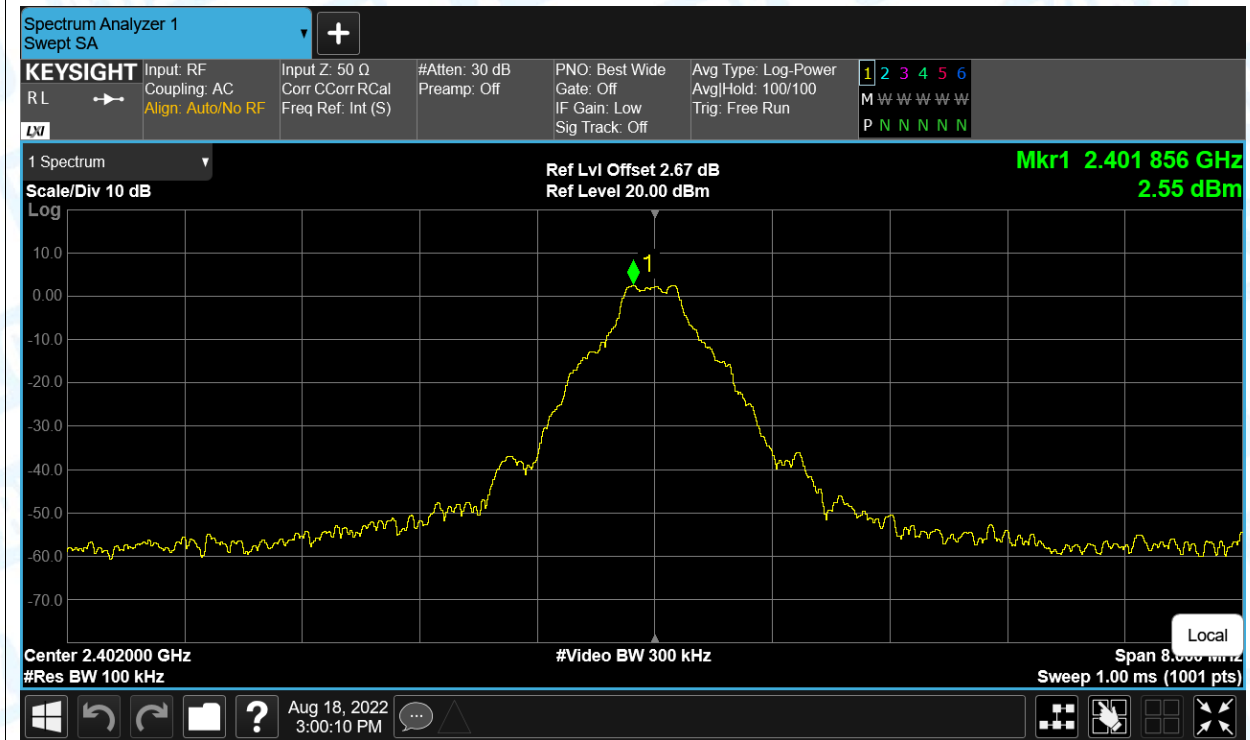


5. Band Edge

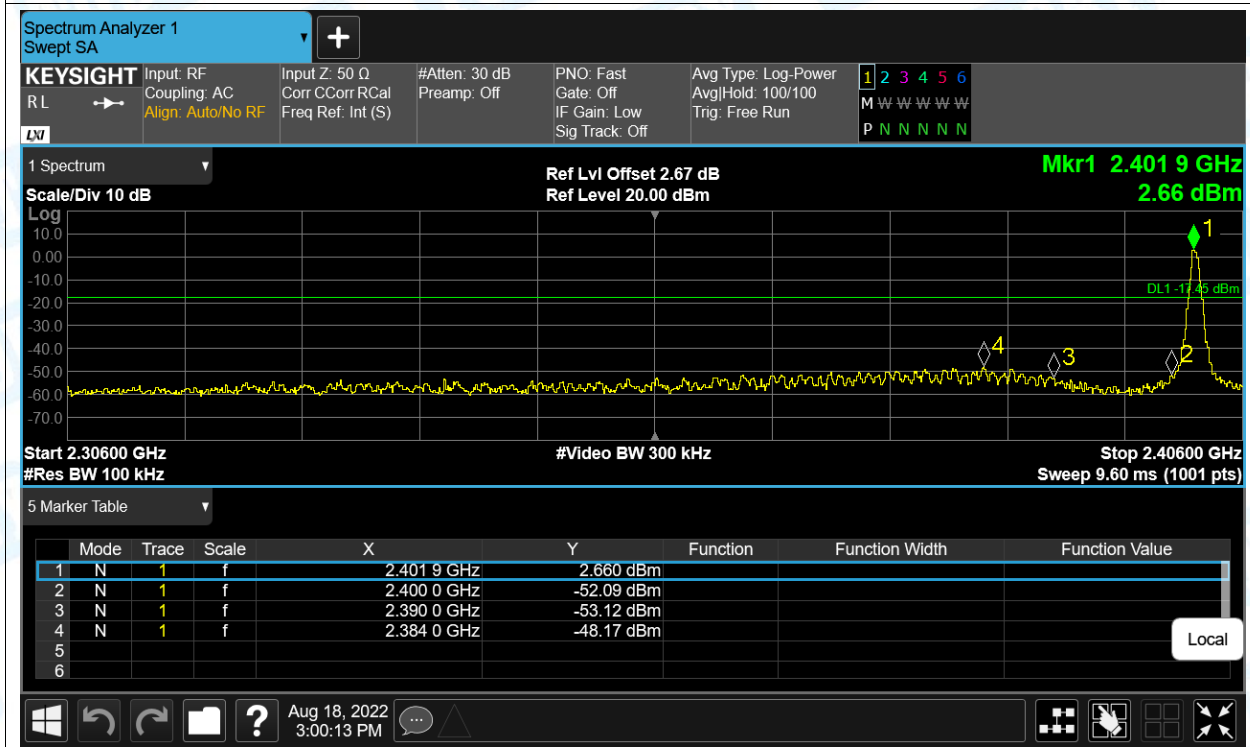
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-50.72	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-51.43	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-51.32	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-50.87	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-51.71	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-52.79	-20	Pass

Test Graphs

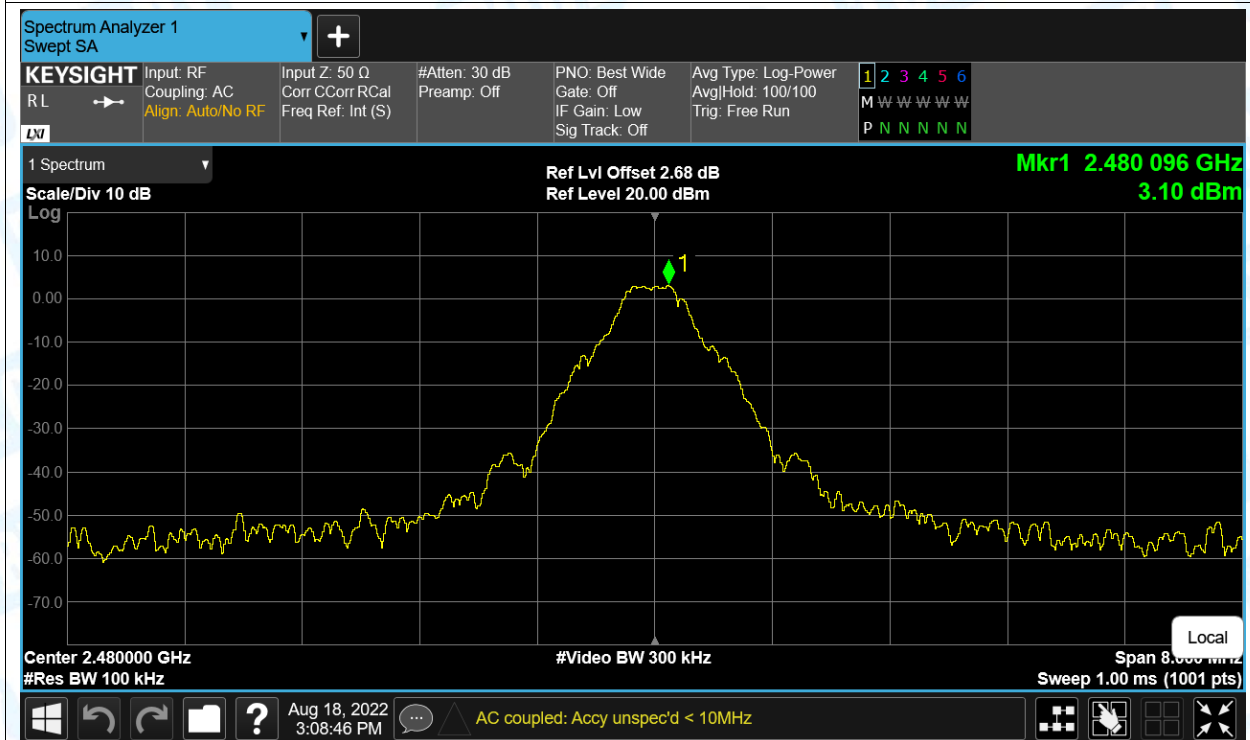
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



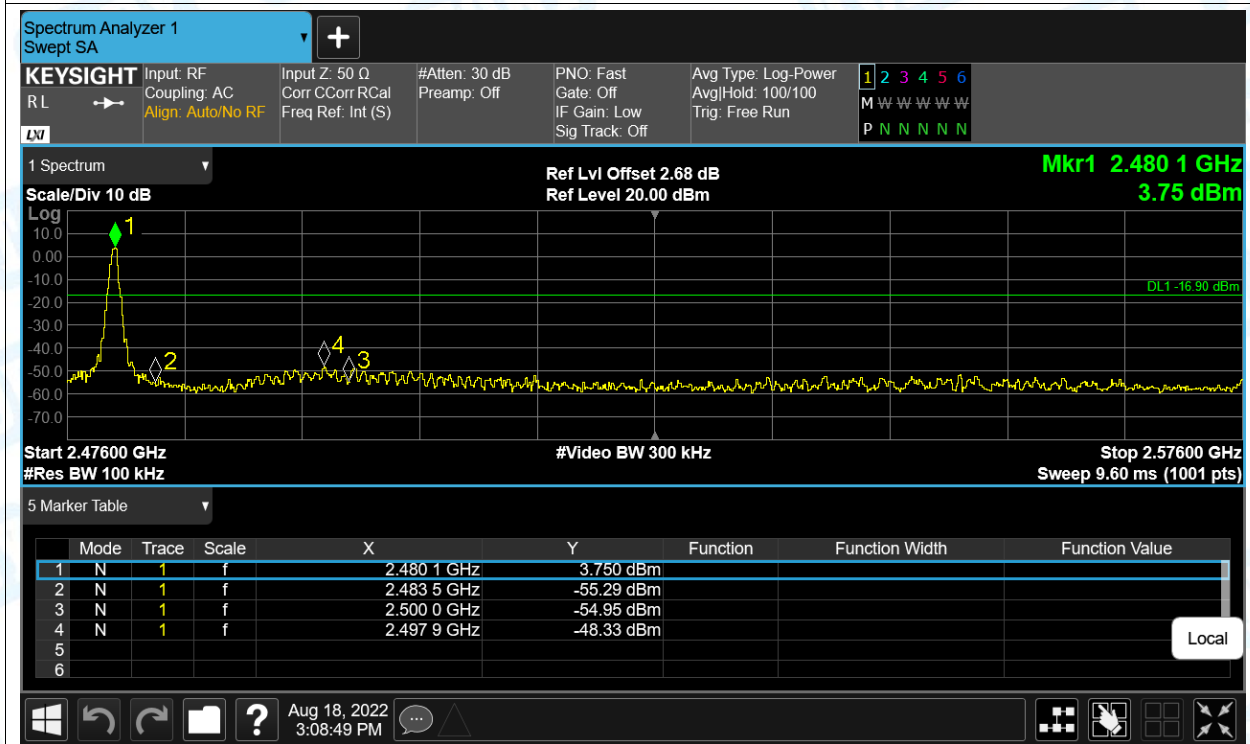
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



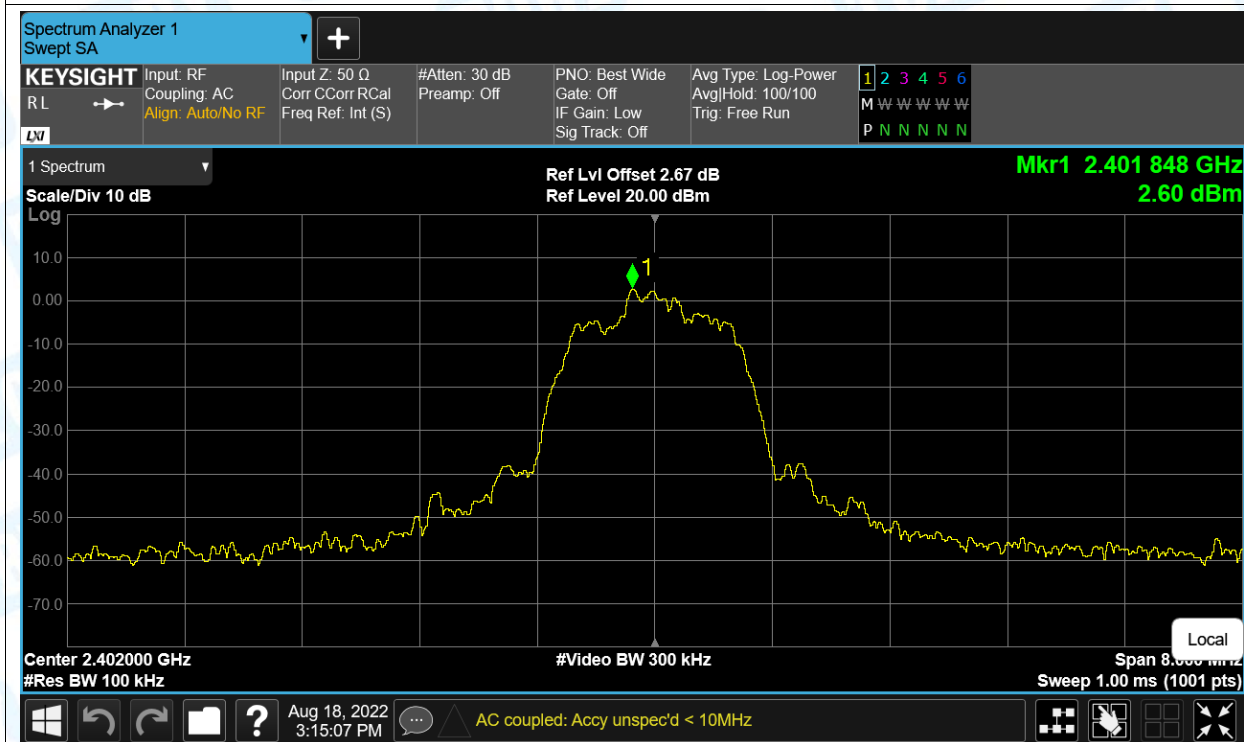
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



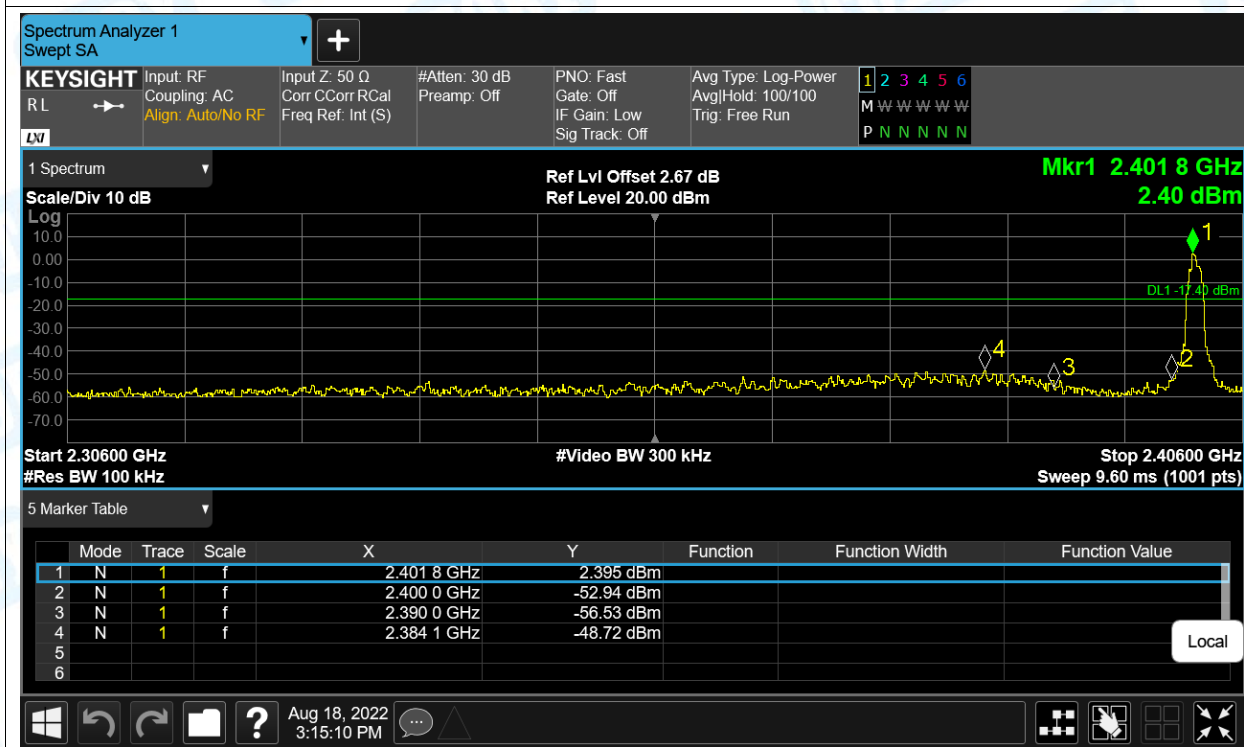
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



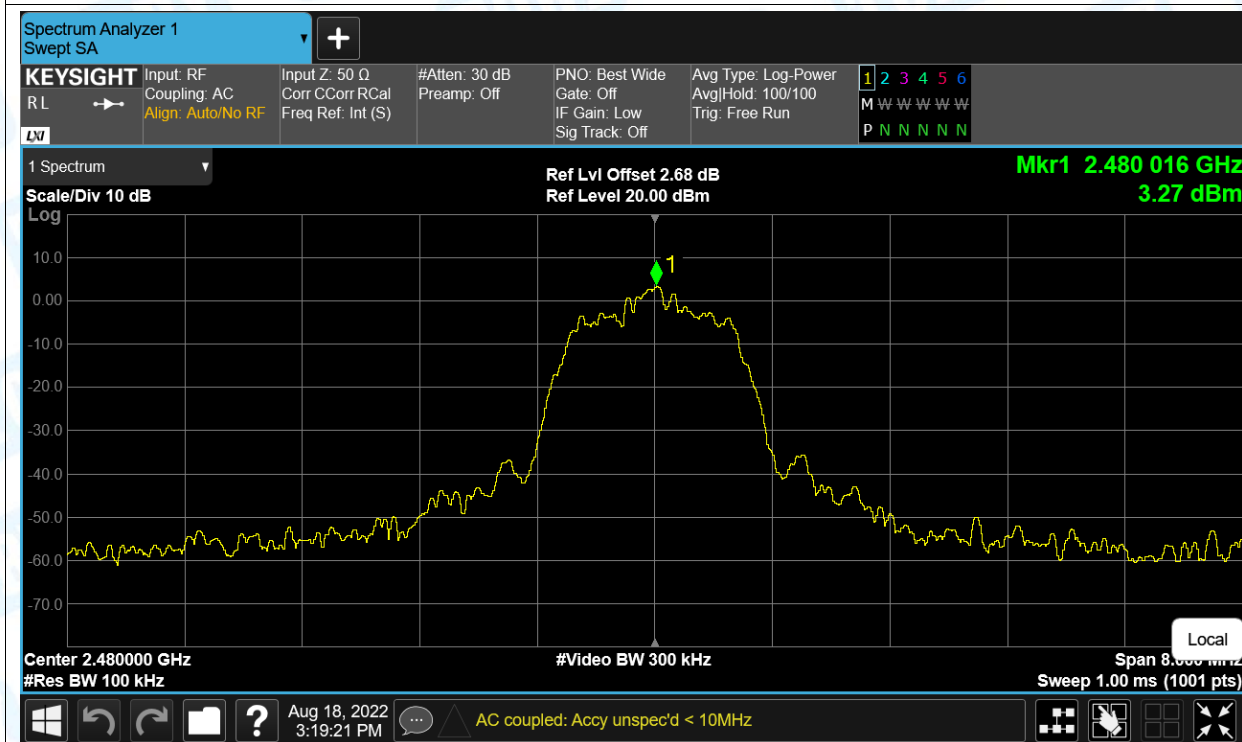
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



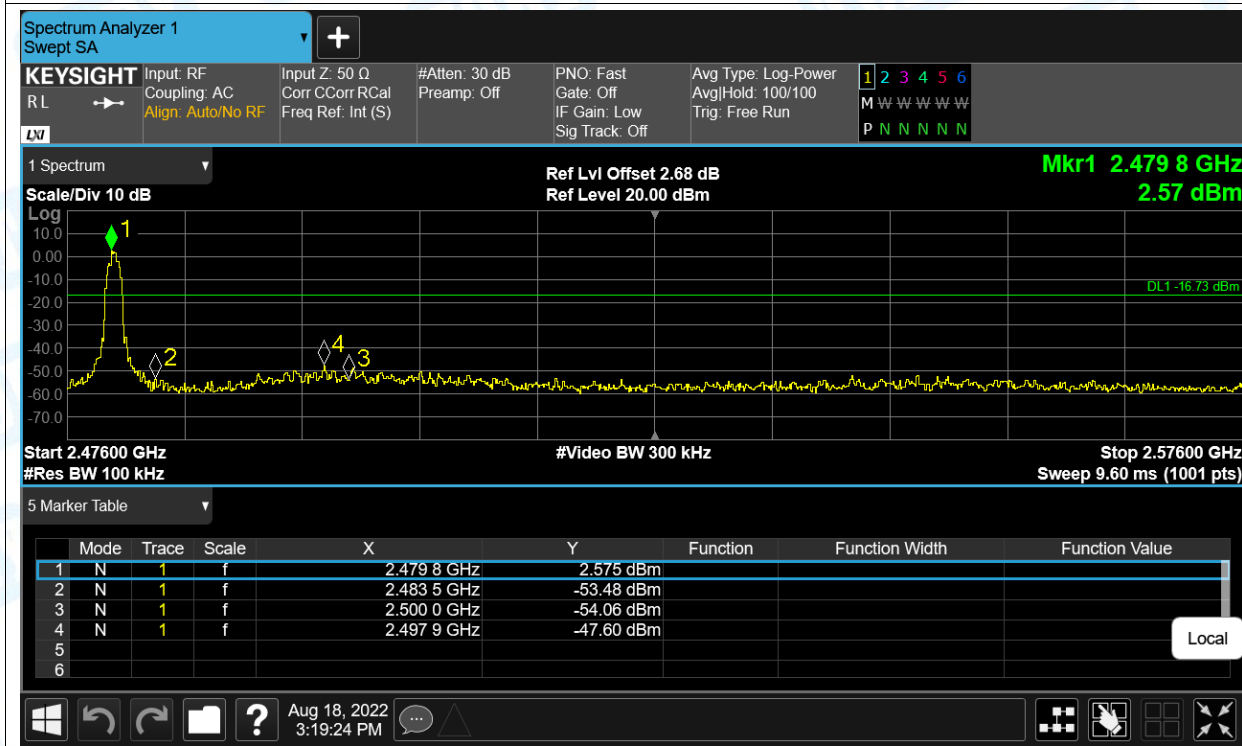
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



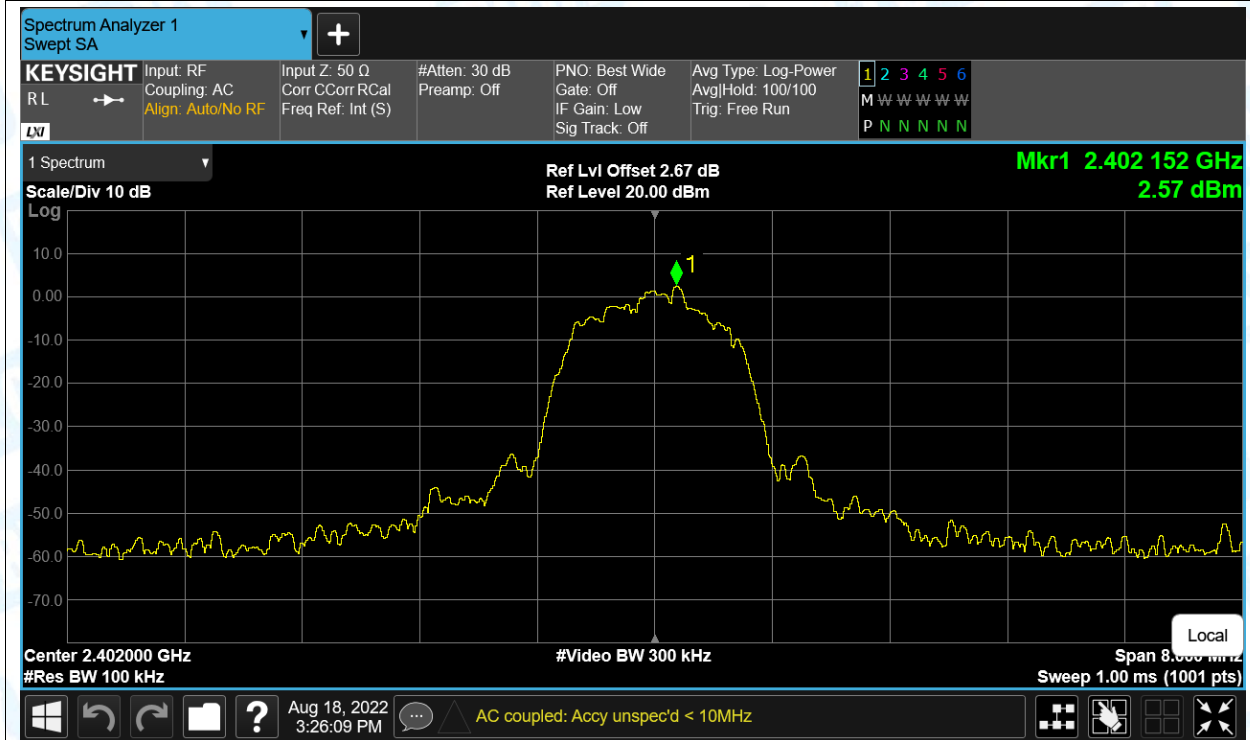
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



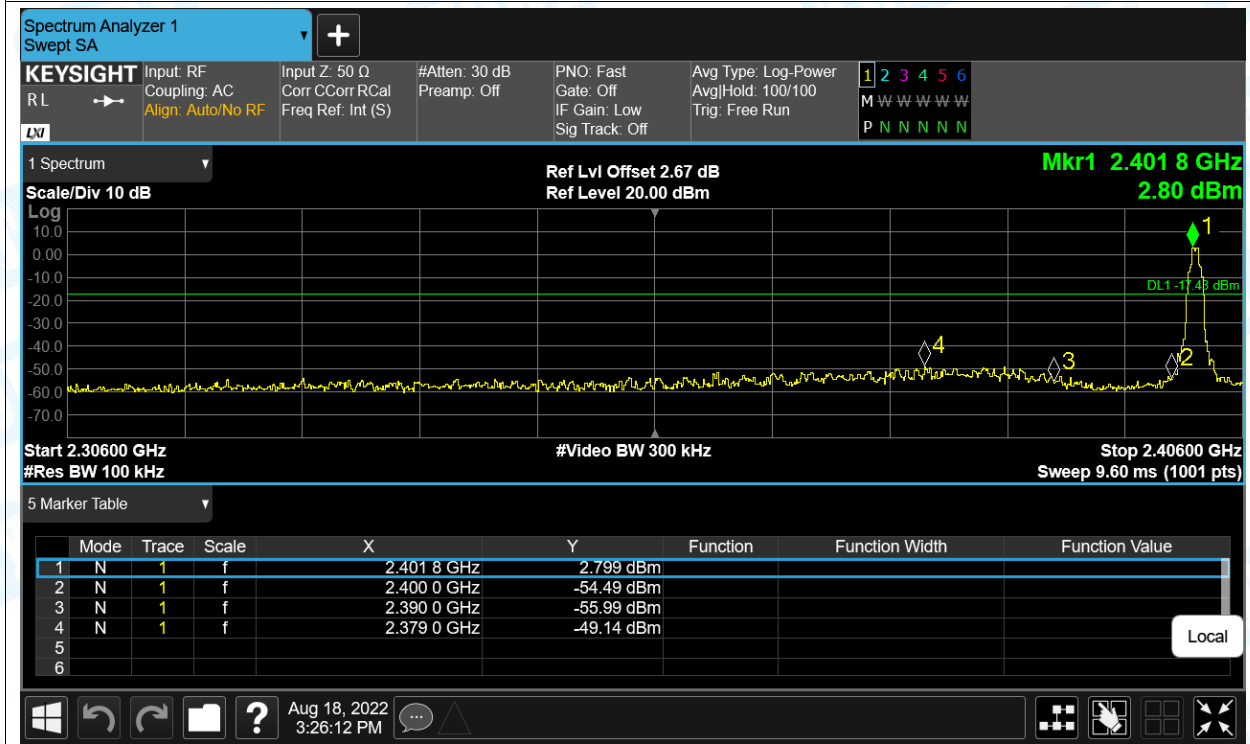
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



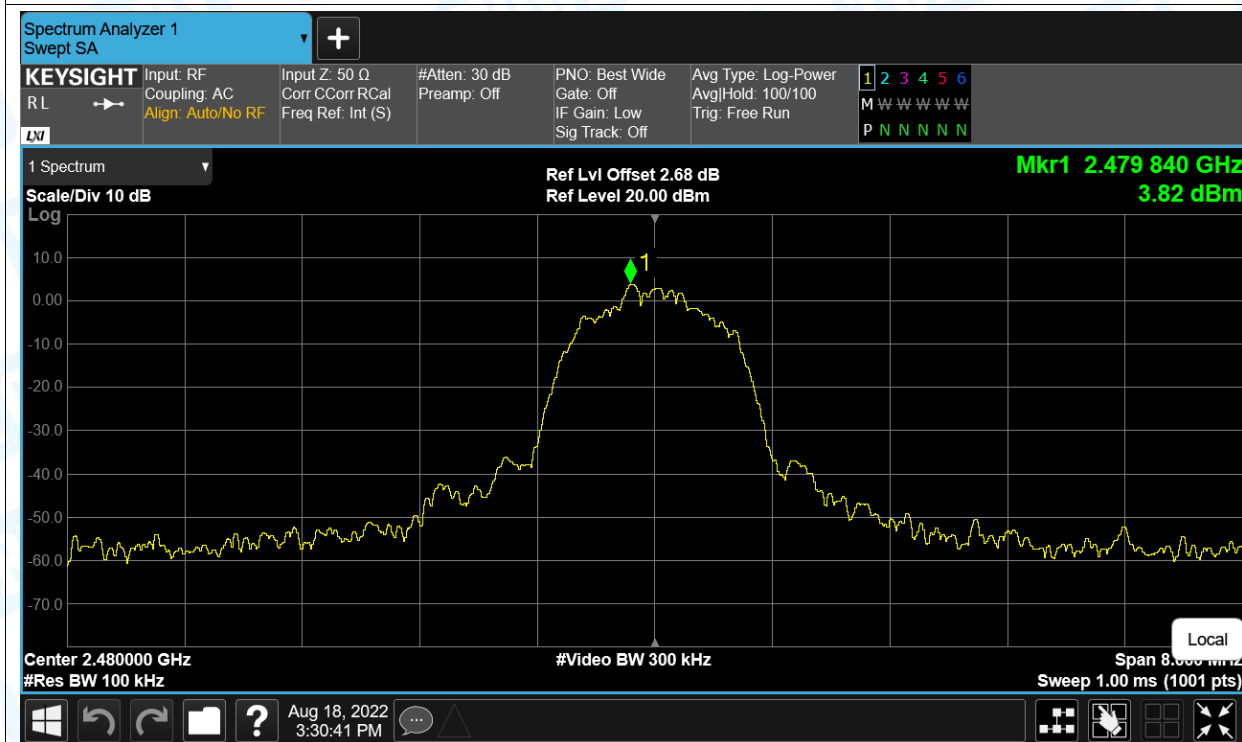
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



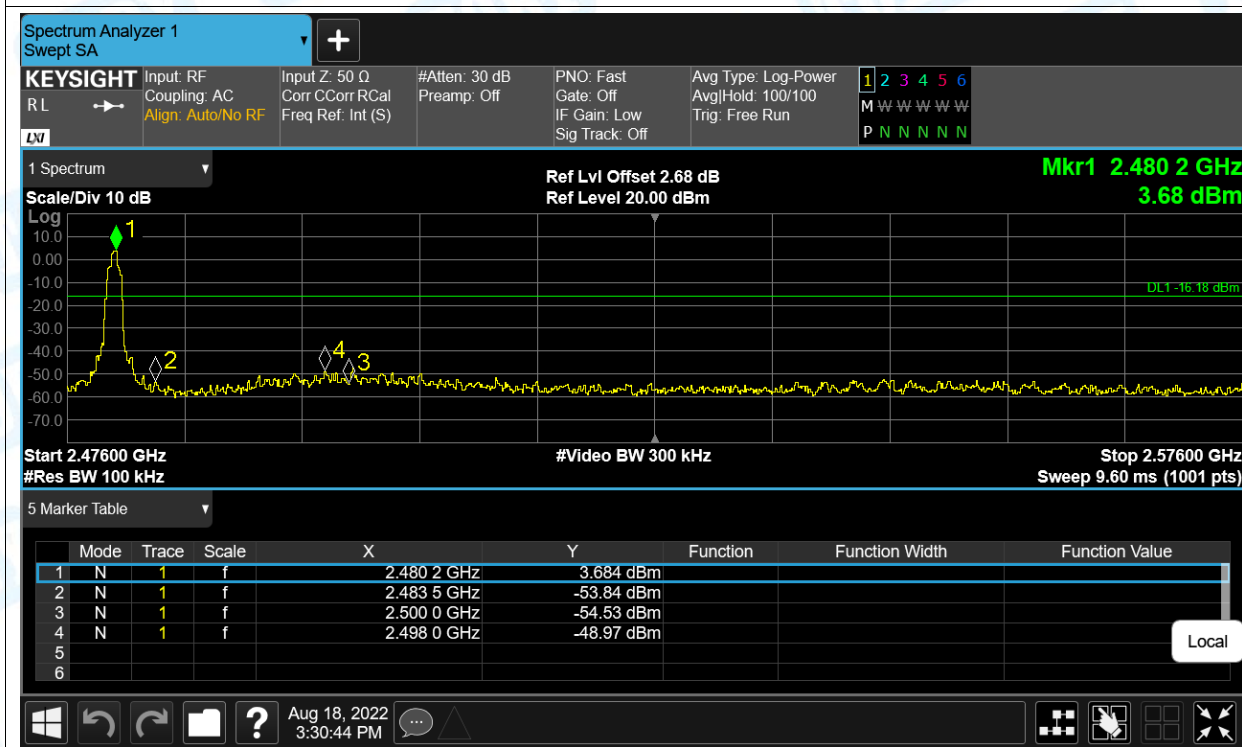
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Emission

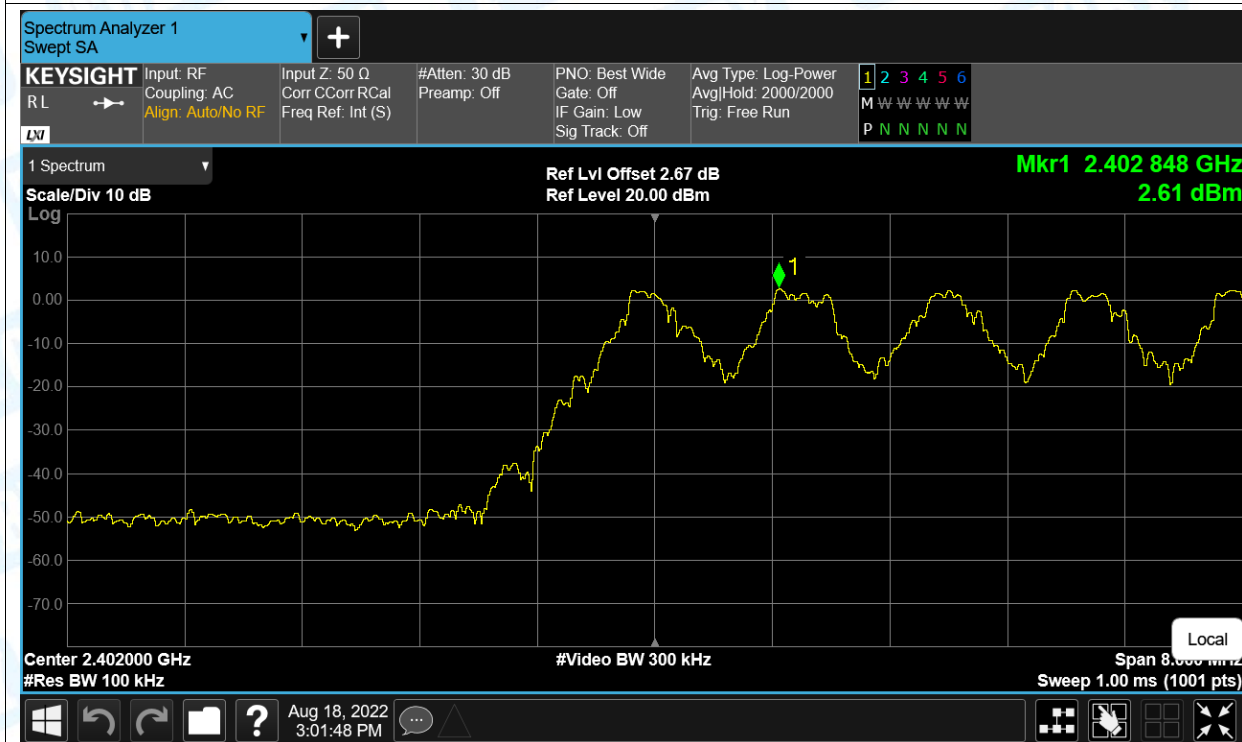


6. Band Edge(Hopping)

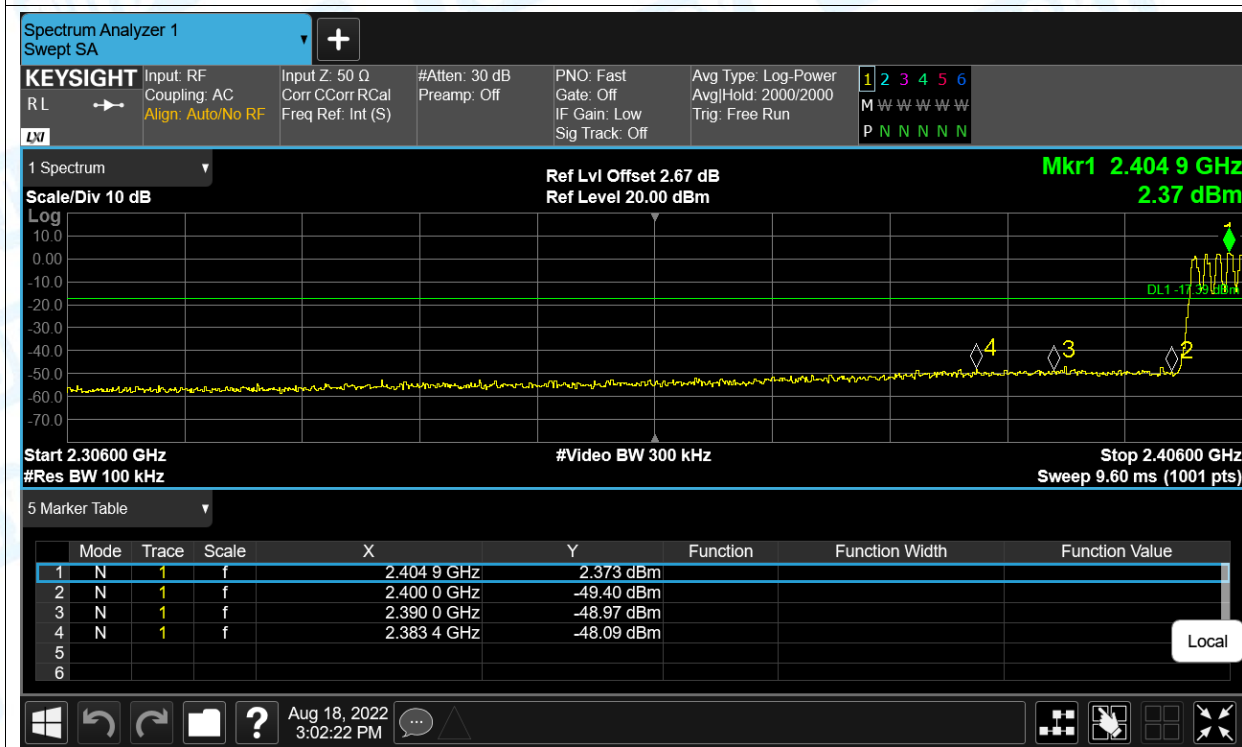
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-50.7	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-51.25	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-50.37	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-51.04	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-50.22	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-51.71	-20	Pass

Test Graphs

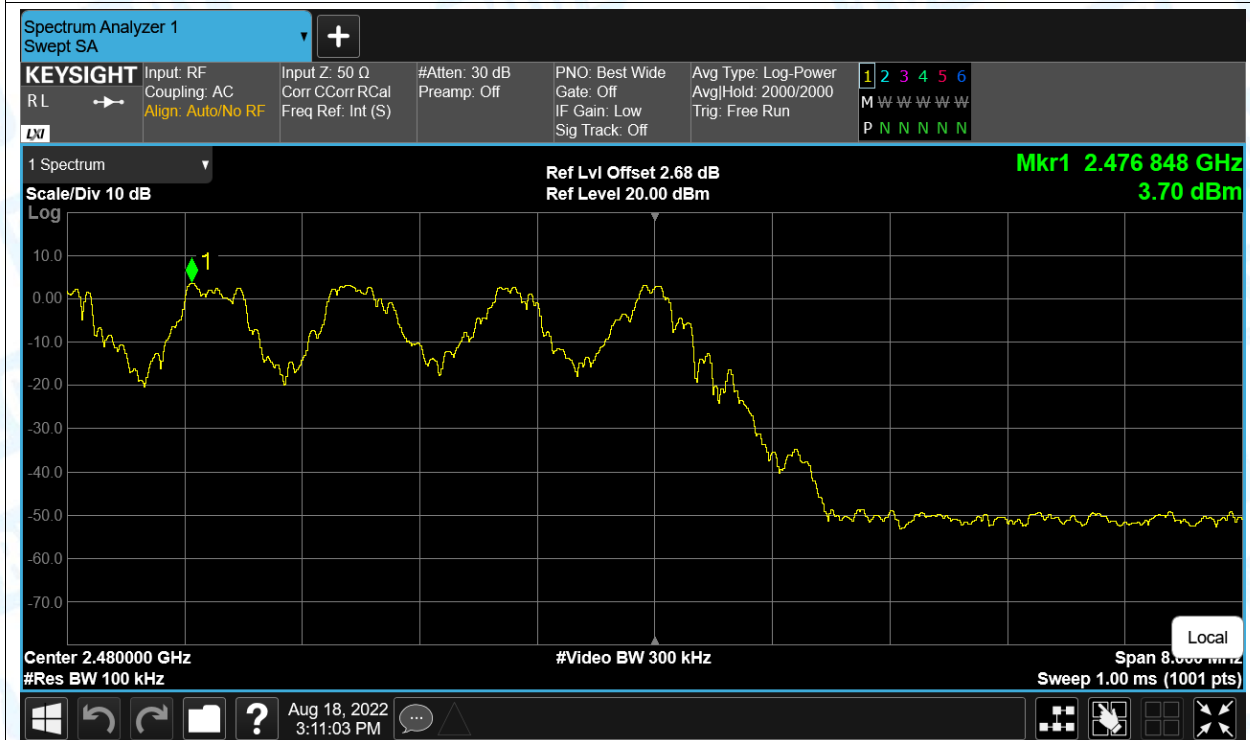
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



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

