

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

General Description of EUT	
Product Name:	Thermal printer
Test Model:	TS-i451
Sample ID:	RW-C-202205-0147-6-2#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 7.4V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202205-0147-7	

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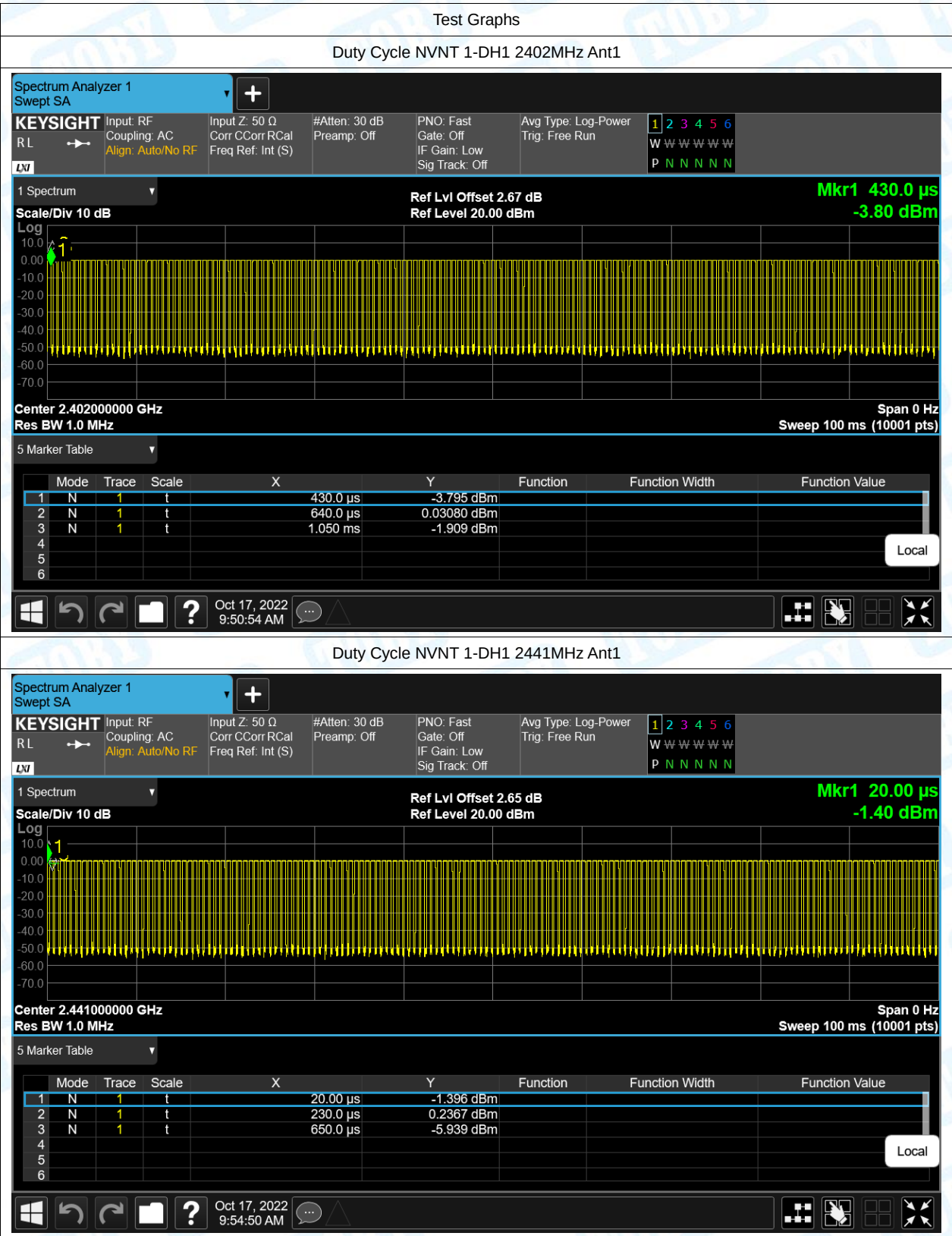
1. Duty Cycle

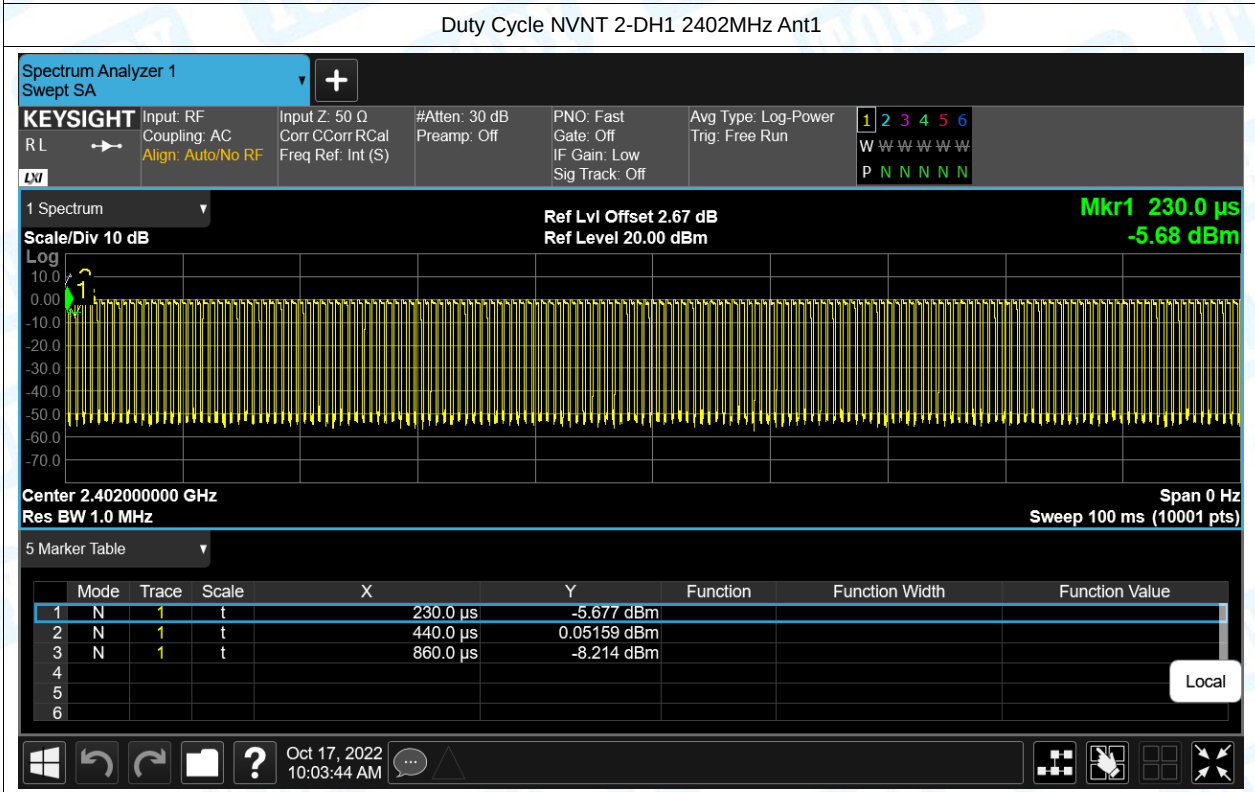
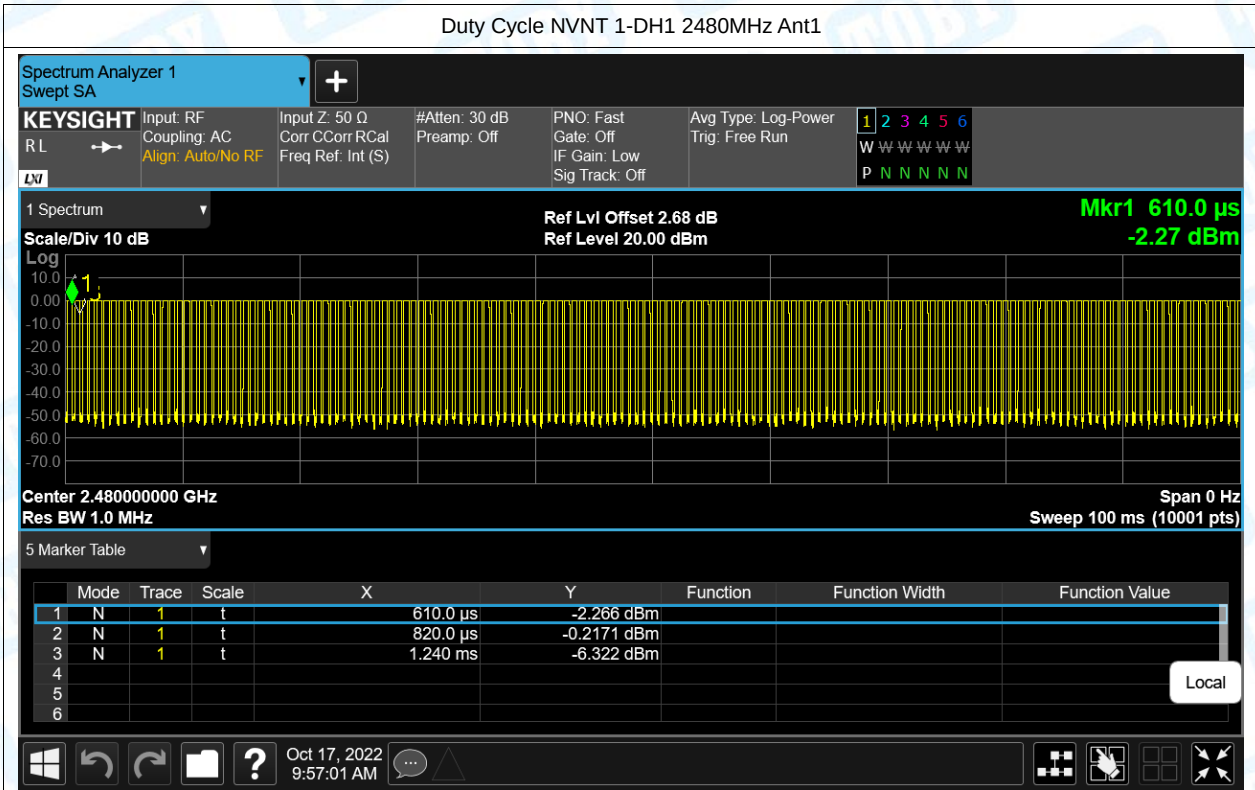
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	66.13	1.8	2.44
NVNT	1-DH1	2441	Ant1	66.67	1.76	2.38
NVNT	1-DH1	2480	Ant1	66.67	1.76	2.38
NVNT	2-DH1	2402	Ant1	66.67	1.76	2.38
NVNT	2-DH1	2441	Ant1	66.67	1.76	2.38
NVNT	2-DH1	2480	Ant1	67.74	1.69	2.38
NVNT	3-DH1	2402	Ant1	66.67	1.76	2.38
NVNT	3-DH1	2441	Ant1	67.74	1.69	2.38
NVNT	3-DH1	2480	Ant1	66.67	1.76	2.38

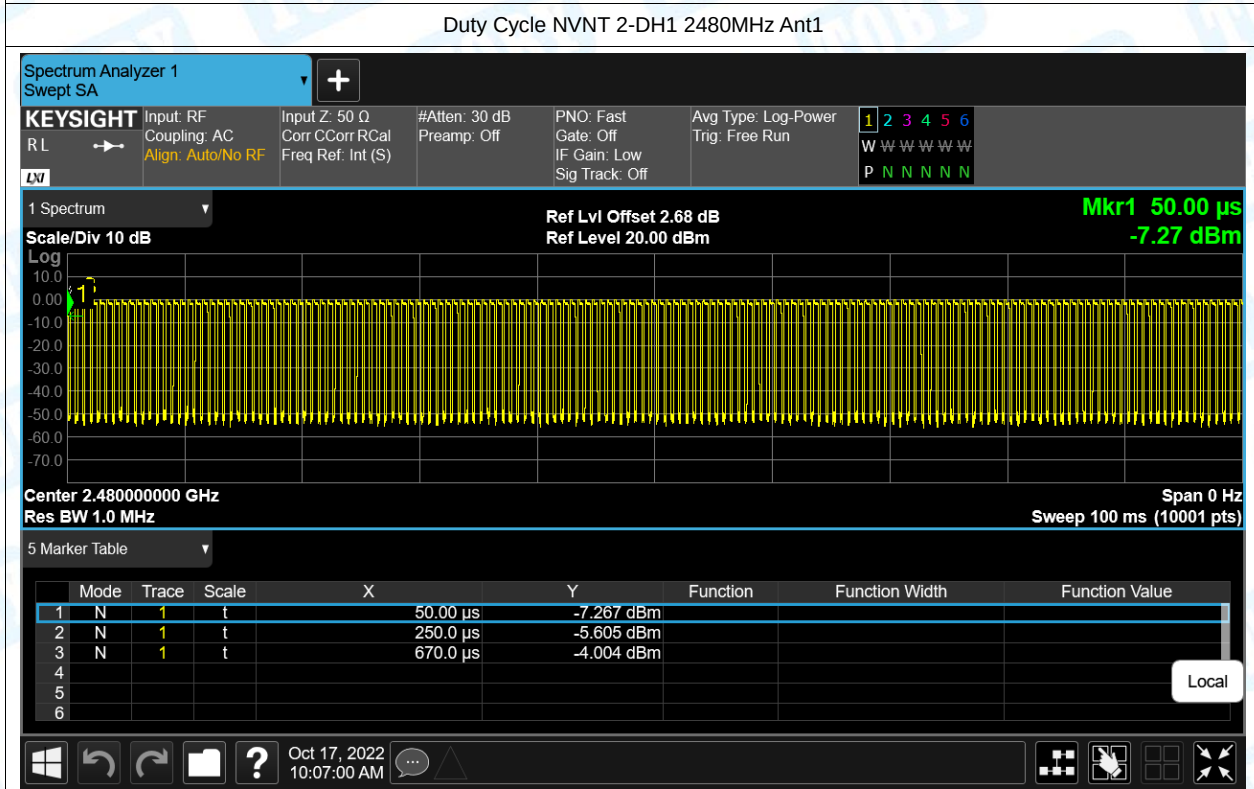
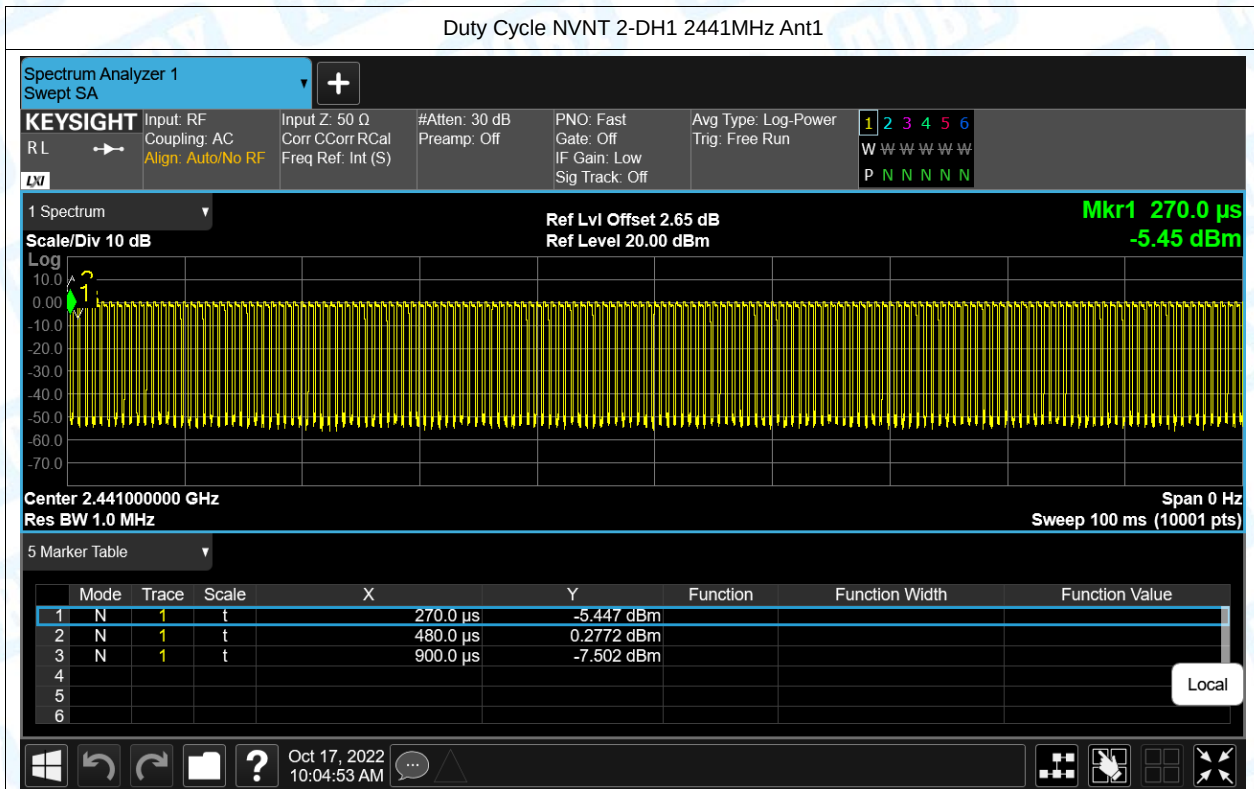
Note: $\text{Duty Cycle}(\%) = \text{ON}(\text{ms}) / (\text{ON}(\text{ms}) + \text{OFF}(\text{ms}))$

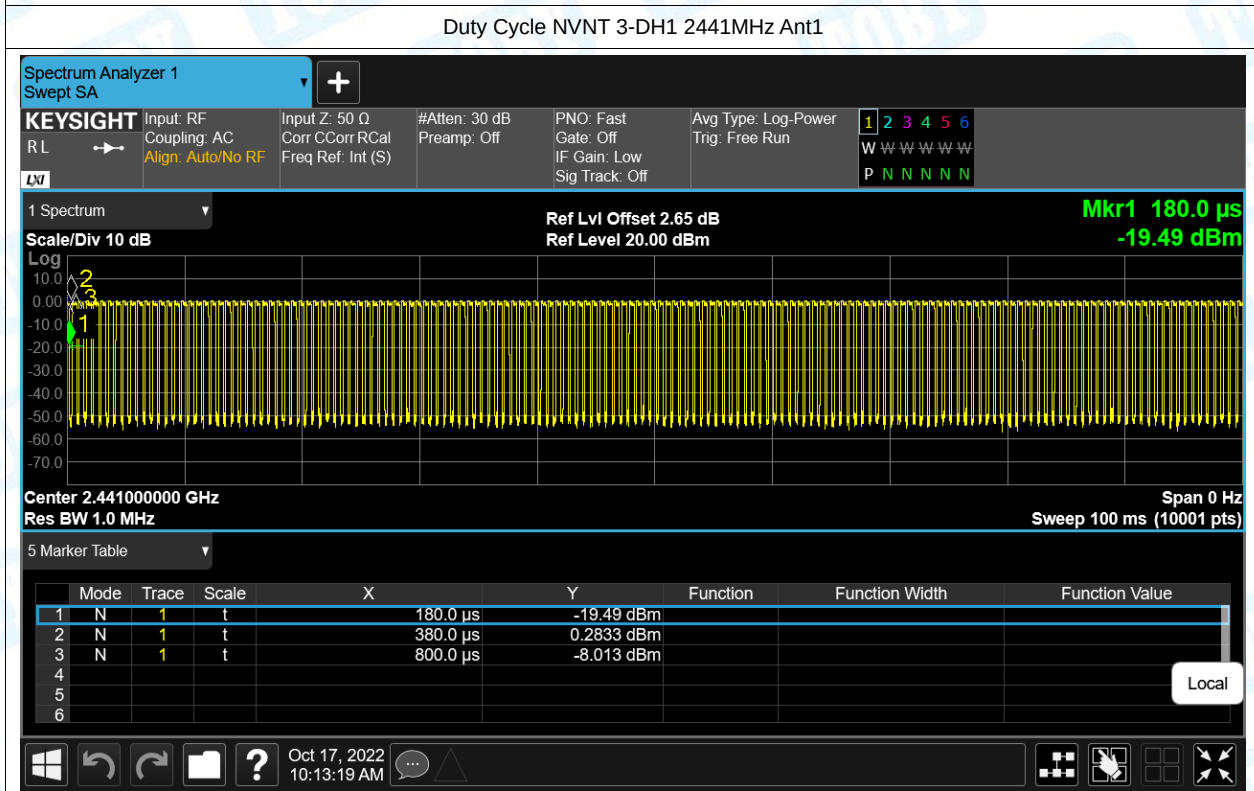
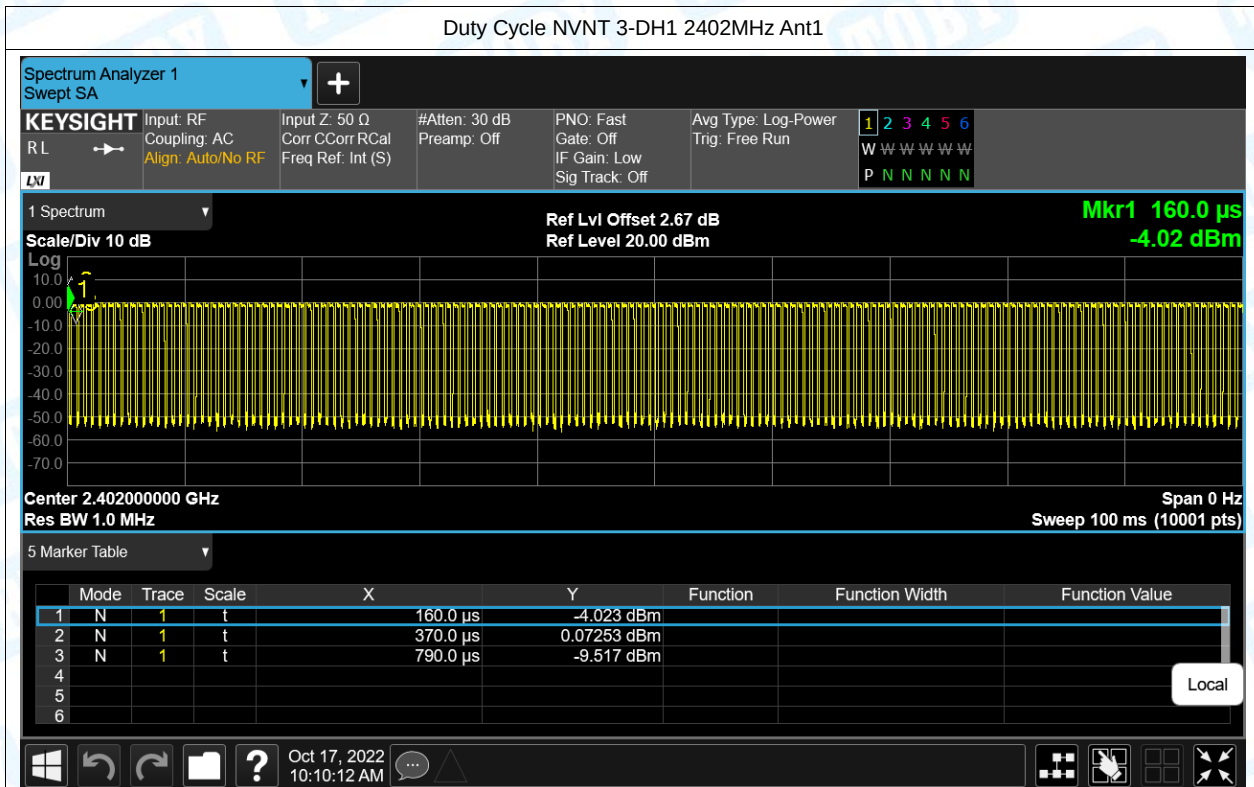
$\text{ON}(\text{ms}) = \text{Maker3} - \text{Maker2}$

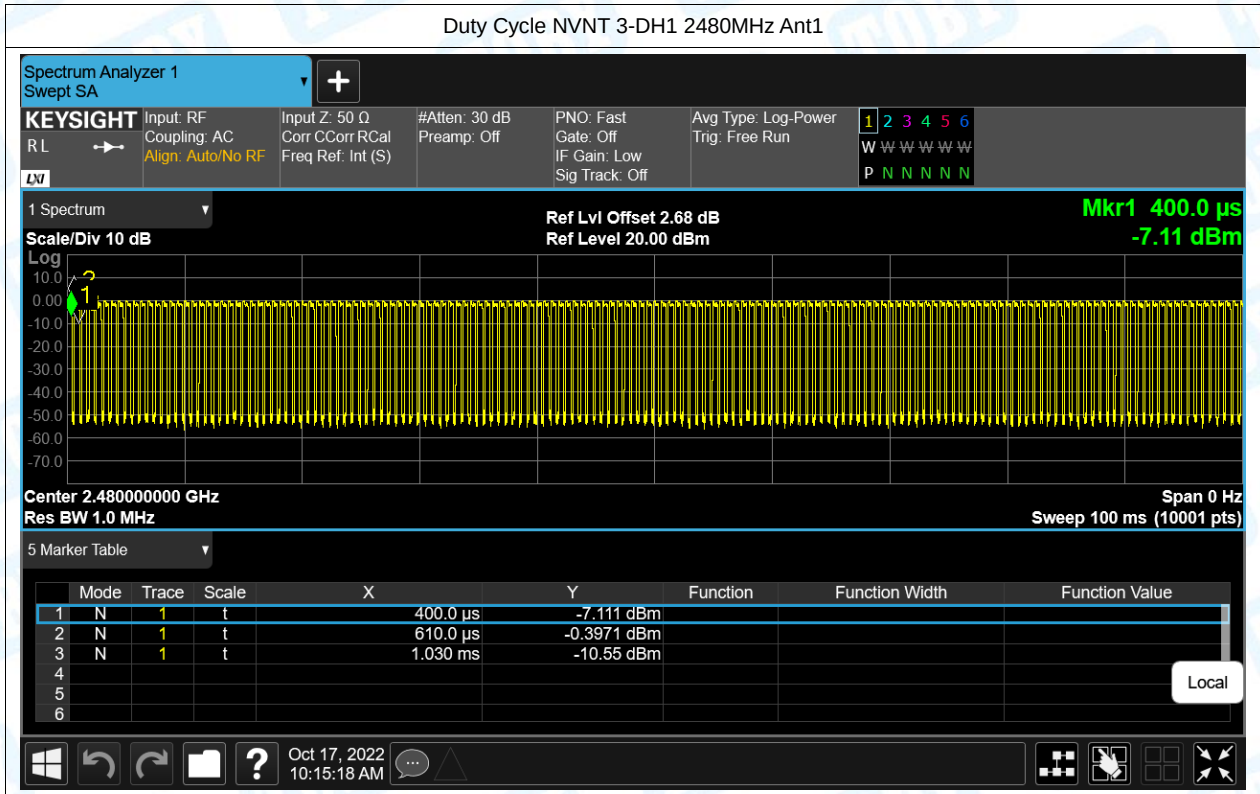
$(\text{ON}(\text{ms}) + \text{OFF}(\text{ms})) = \text{Maker3} - \text{Maker1}$









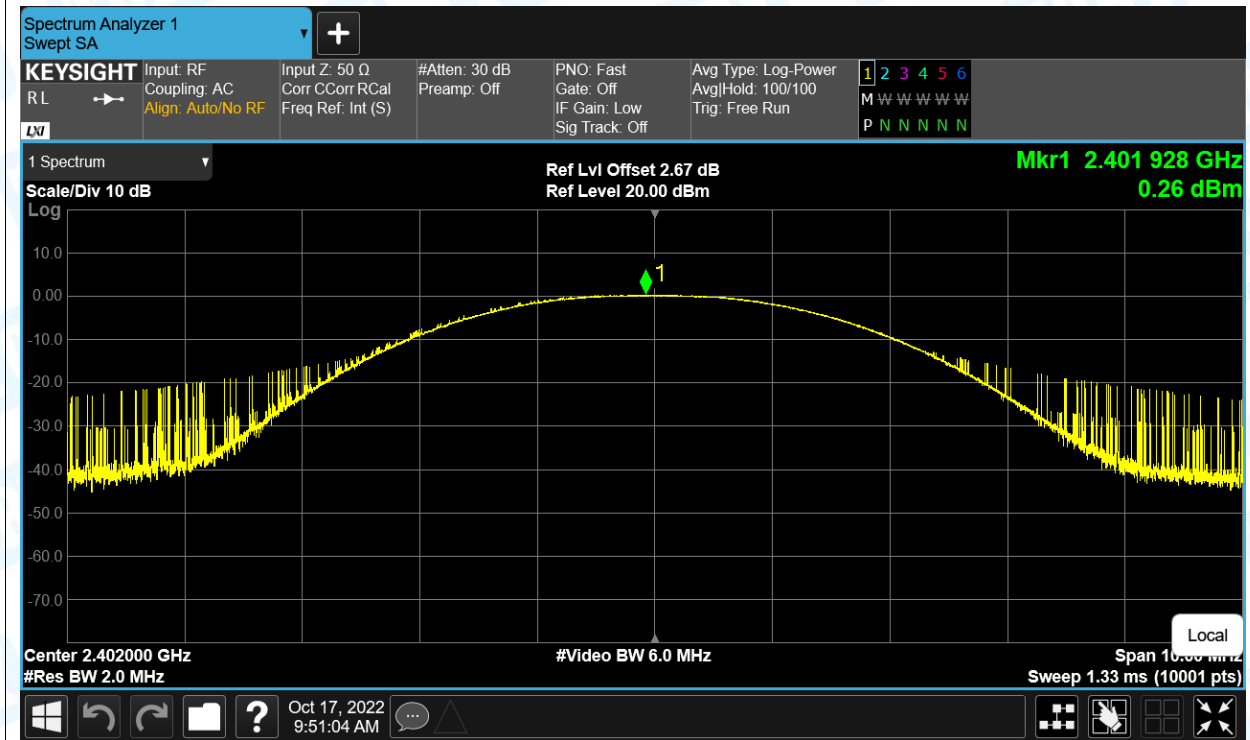


2. Maximum Conducted Output Power

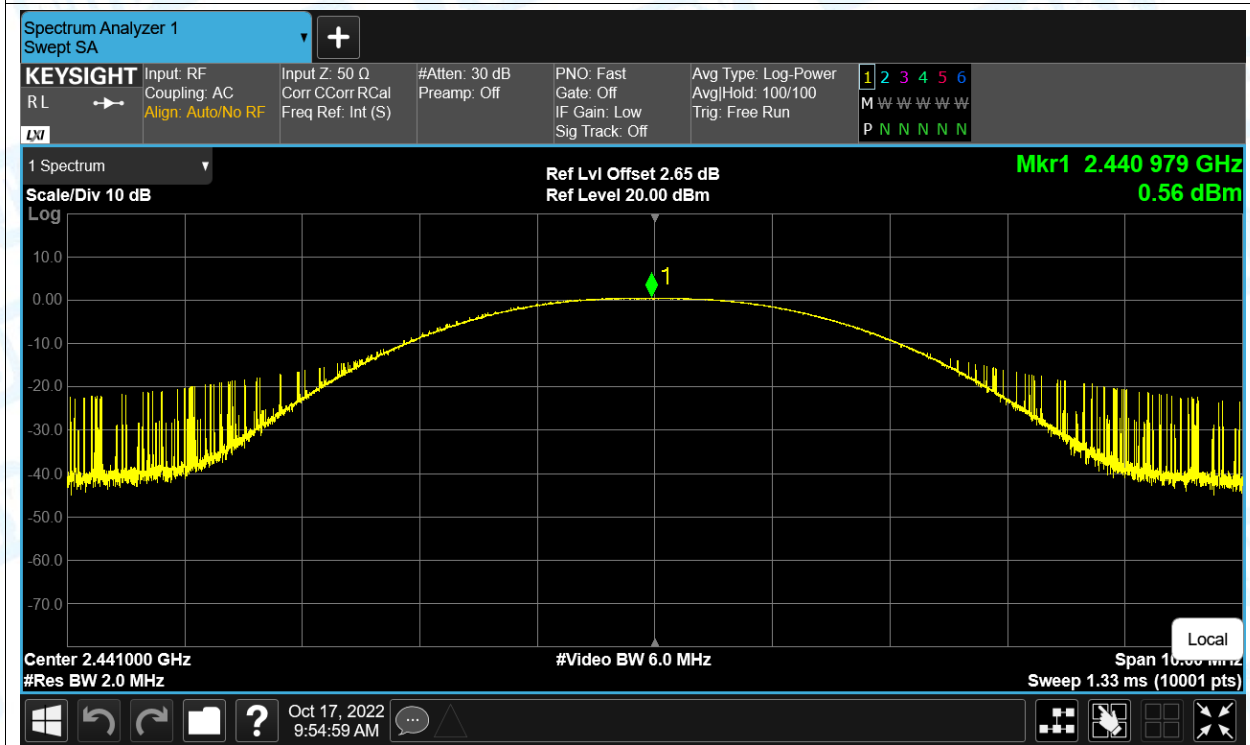
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	0.26	21	Pass
NVNT	1-DH1	2441	Ant1	0.56	21	Pass
NVNT	1-DH1	2480	Ant1	0.27	21	Pass
NVNT	2-DH1	2402	Ant1	0.28	21	Pass
NVNT	2-DH1	2441	Ant1	0.60	21	Pass
NVNT	2-DH1	2480	Ant1	0.24	21	Pass
NVNT	3-DH1	2402	Ant1	0.29	21	Pass
NVNT	3-DH1	2441	Ant1	0.59	21	Pass
NVNT	3-DH1	2480	Ant1	0.04	21	Pass

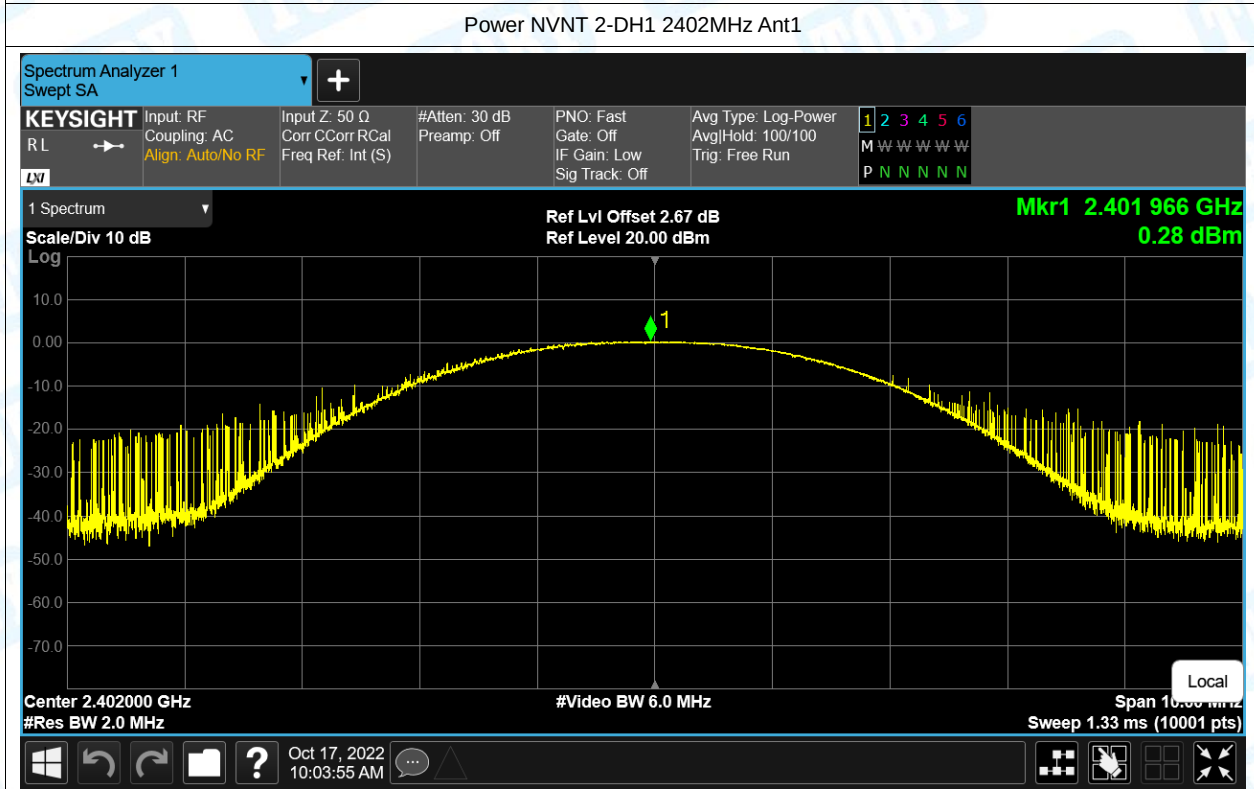
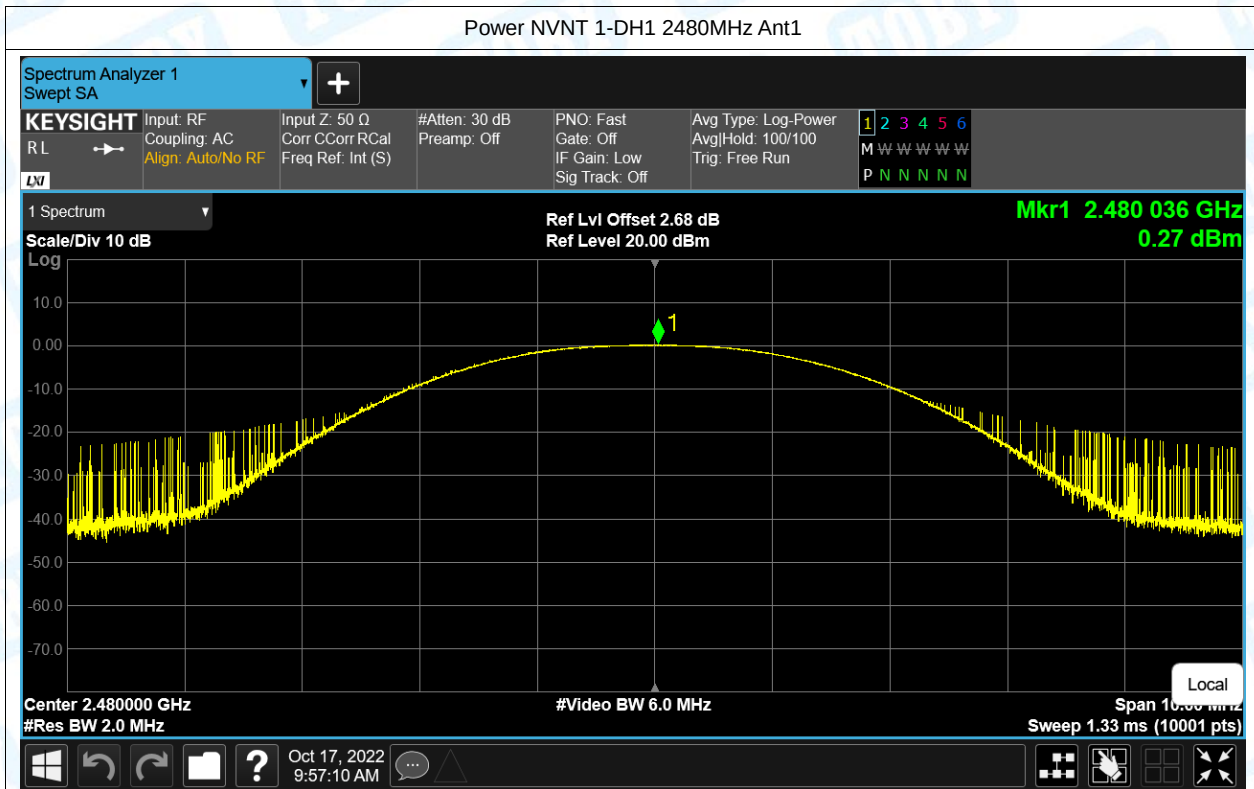
Test Graphs

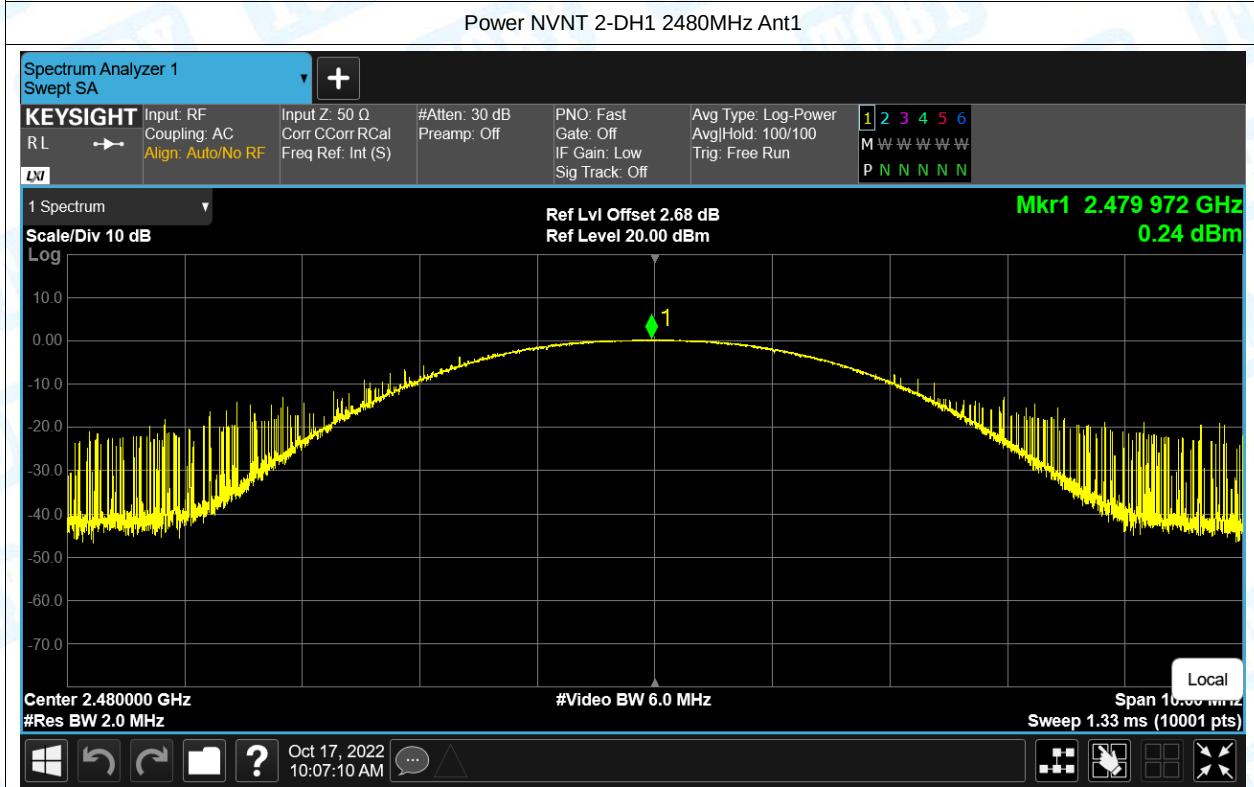
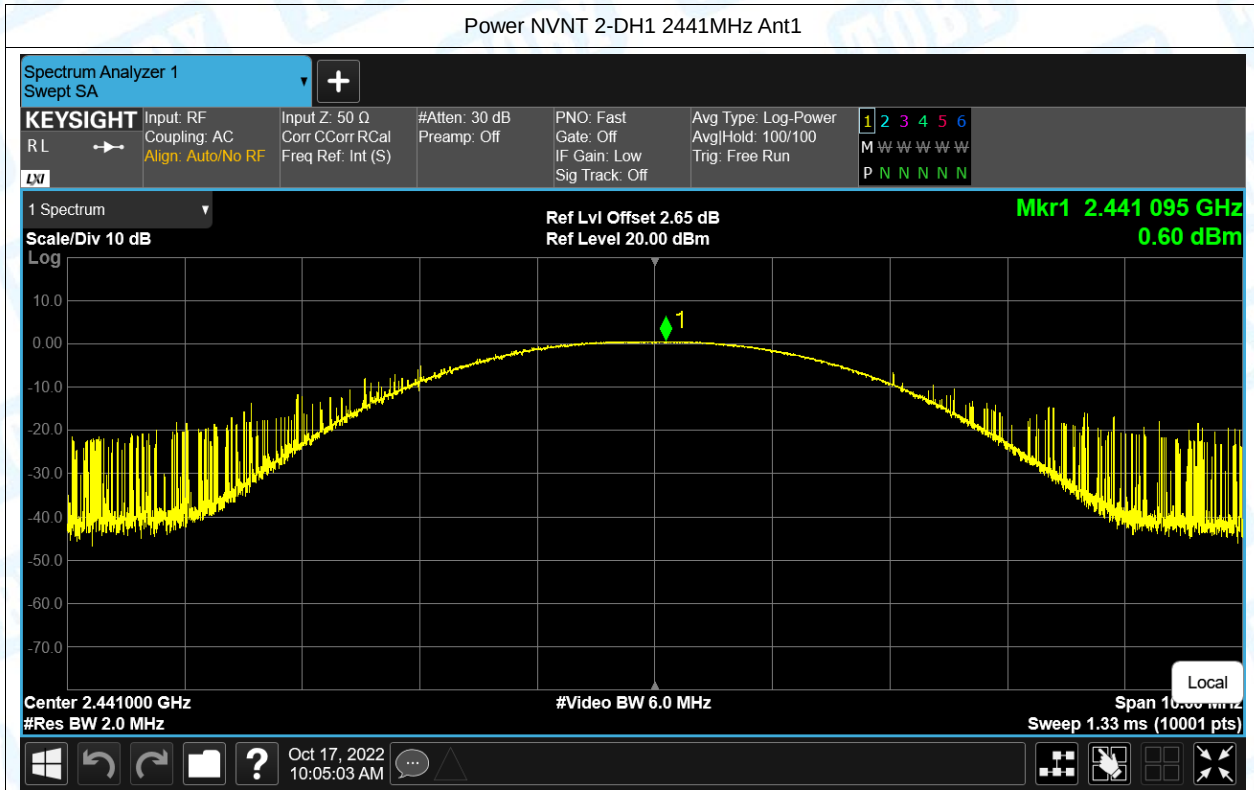
Power NVNT 1-DH1 2402MHz Ant1

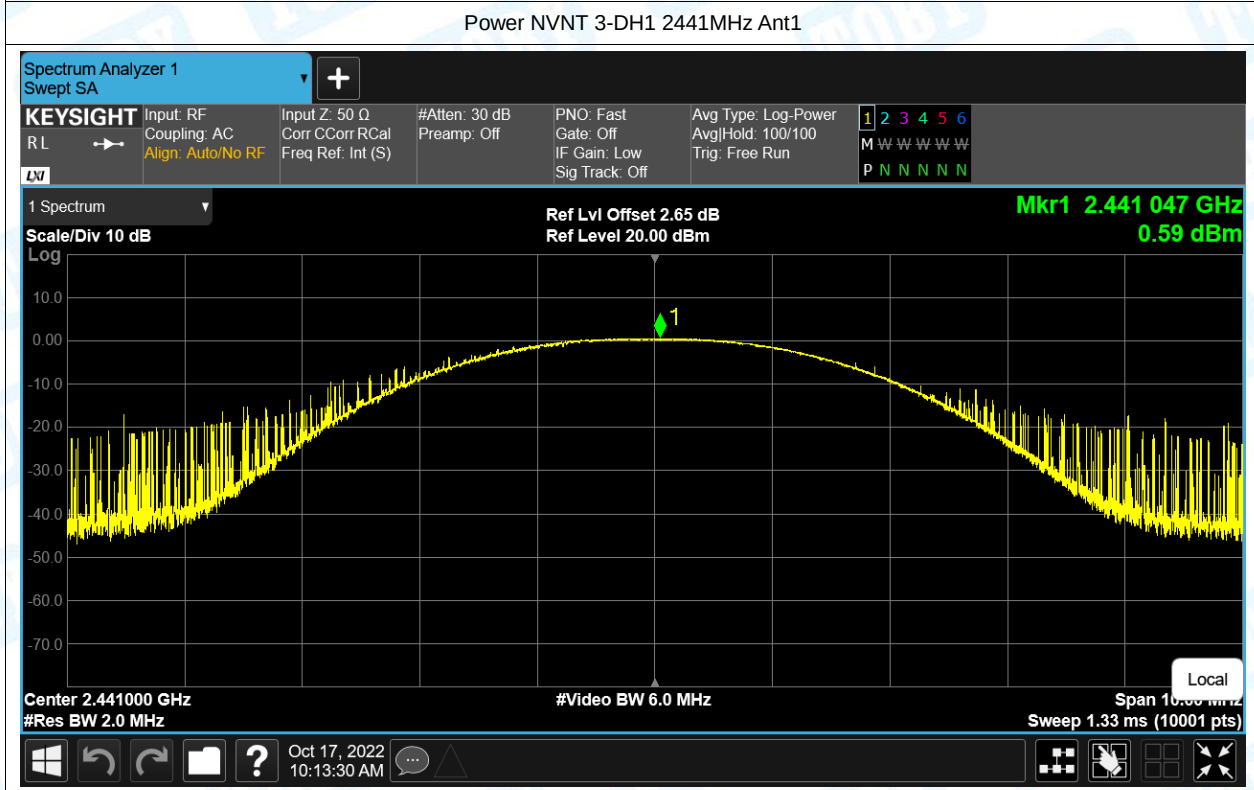


Power NVNT 1-DH1 2441MHz Ant1









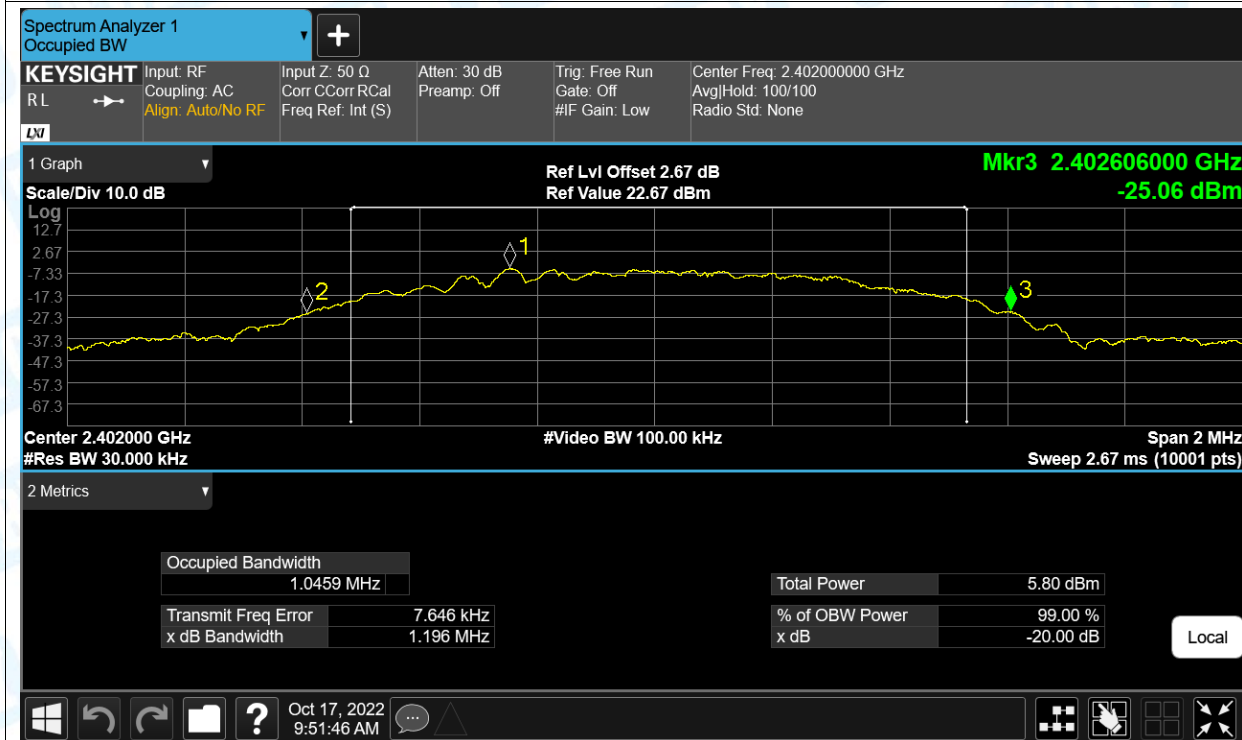


3. -20dB Bandwidth

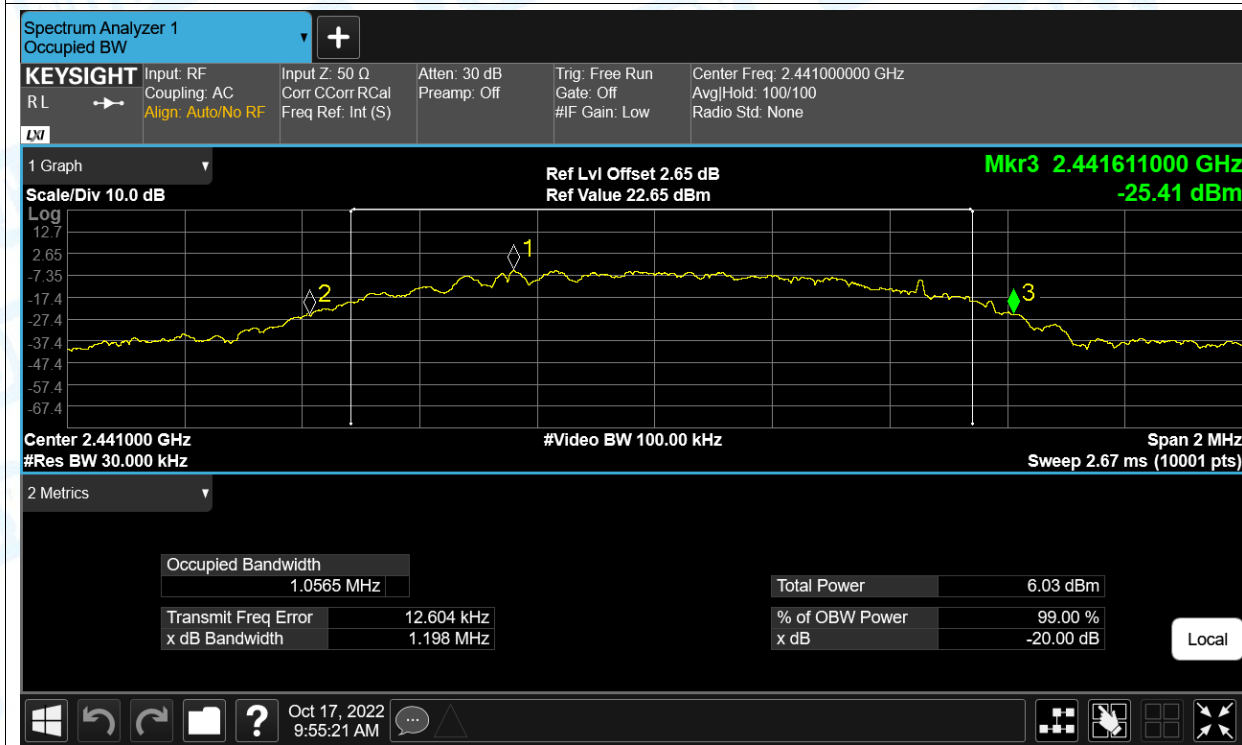
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	1.2	----	Pass
NVNT	1-DH1	2441	Ant1	1.2	----	Pass
NVNT	1-DH1	2480	Ant1	1.19	----	Pass
NVNT	2-DH1	2402	Ant1	1.33	----	Pass
NVNT	2-DH1	2441	Ant1	1.33	----	Pass
NVNT	2-DH1	2480	Ant1	1.33	----	Pass
NVNT	3-DH1	2402	Ant1	1.34	----	Pass
NVNT	3-DH1	2441	Ant1	1.32	----	Pass
NVNT	3-DH1	2480	Ant1	1.33	----	Pass

Test Graphs

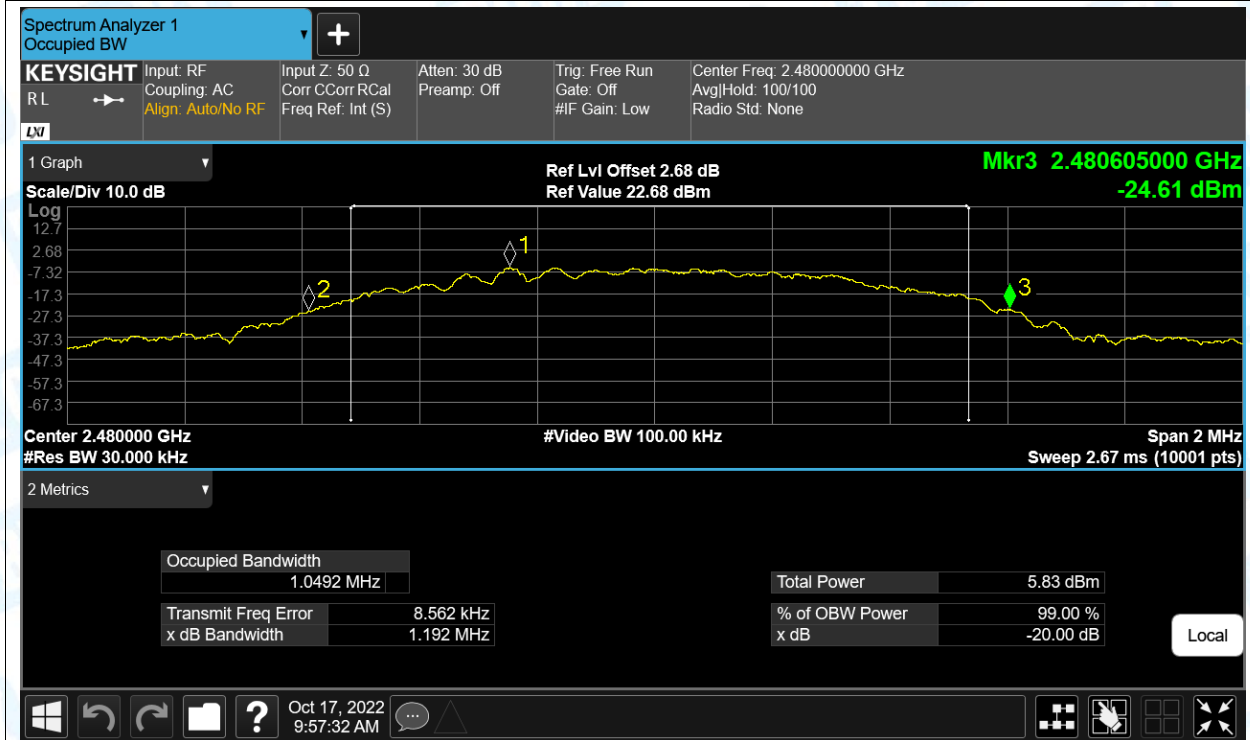
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



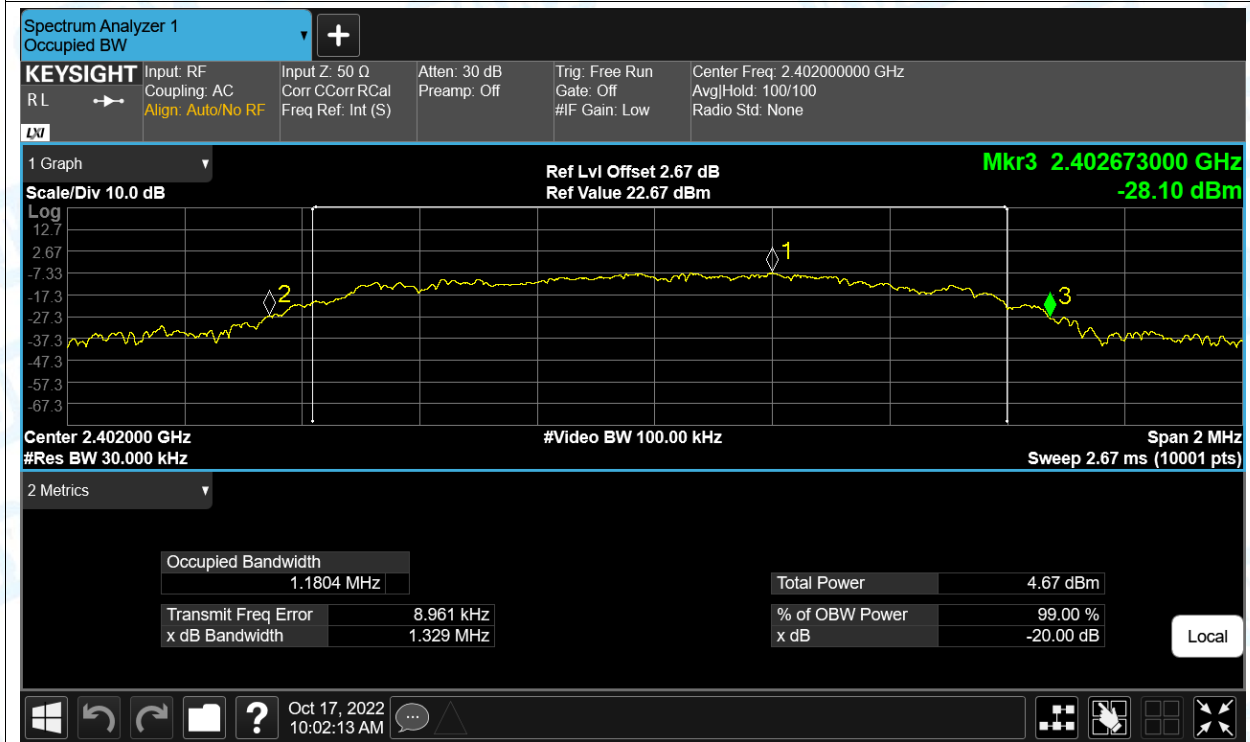
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



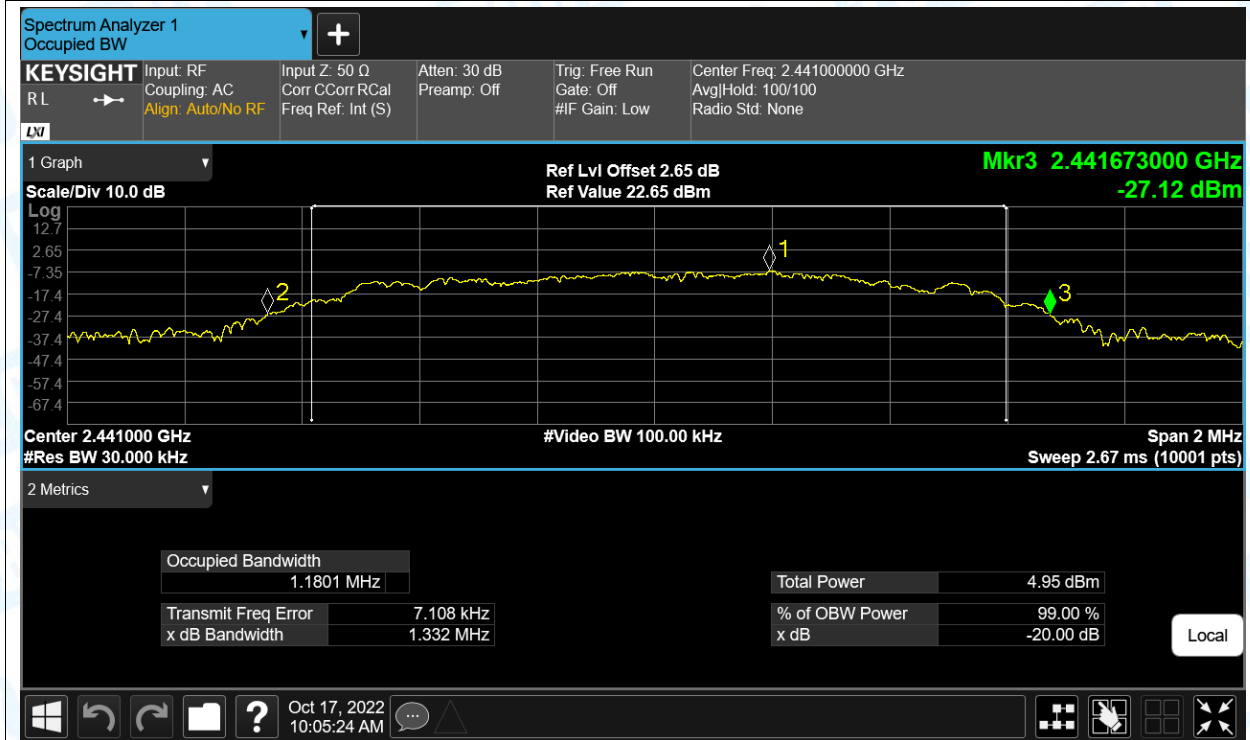
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



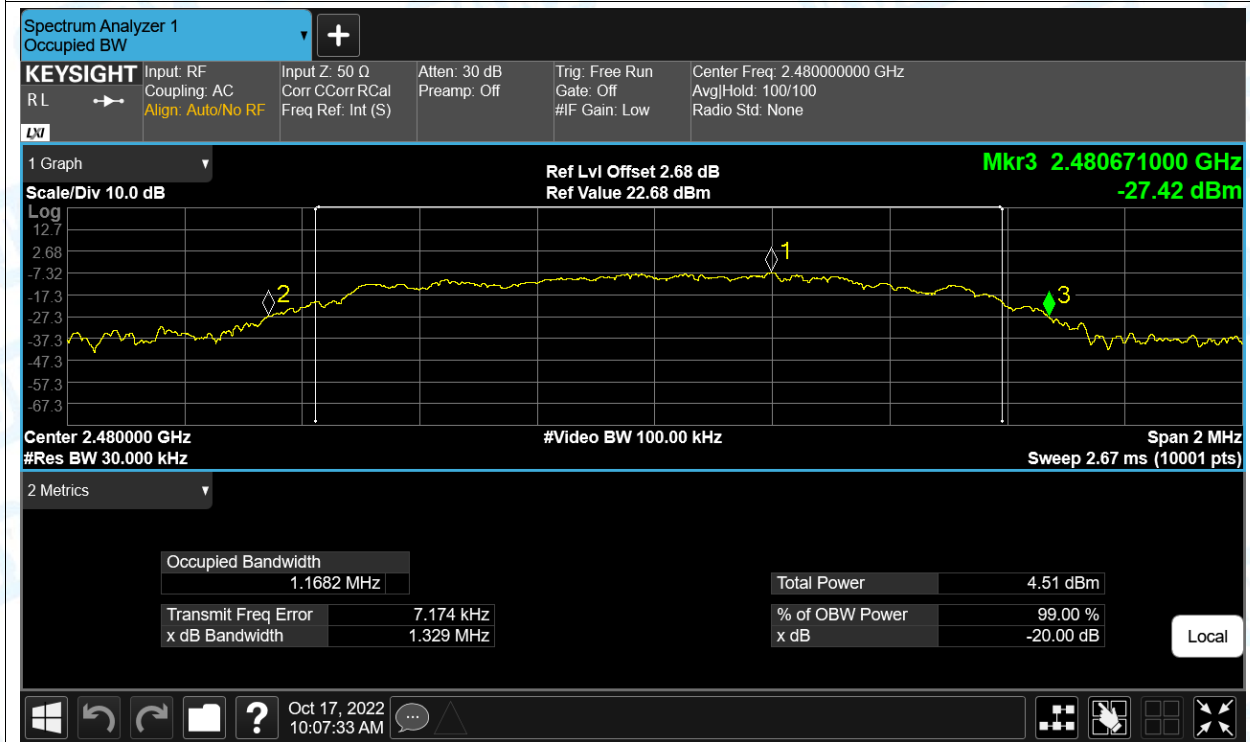
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



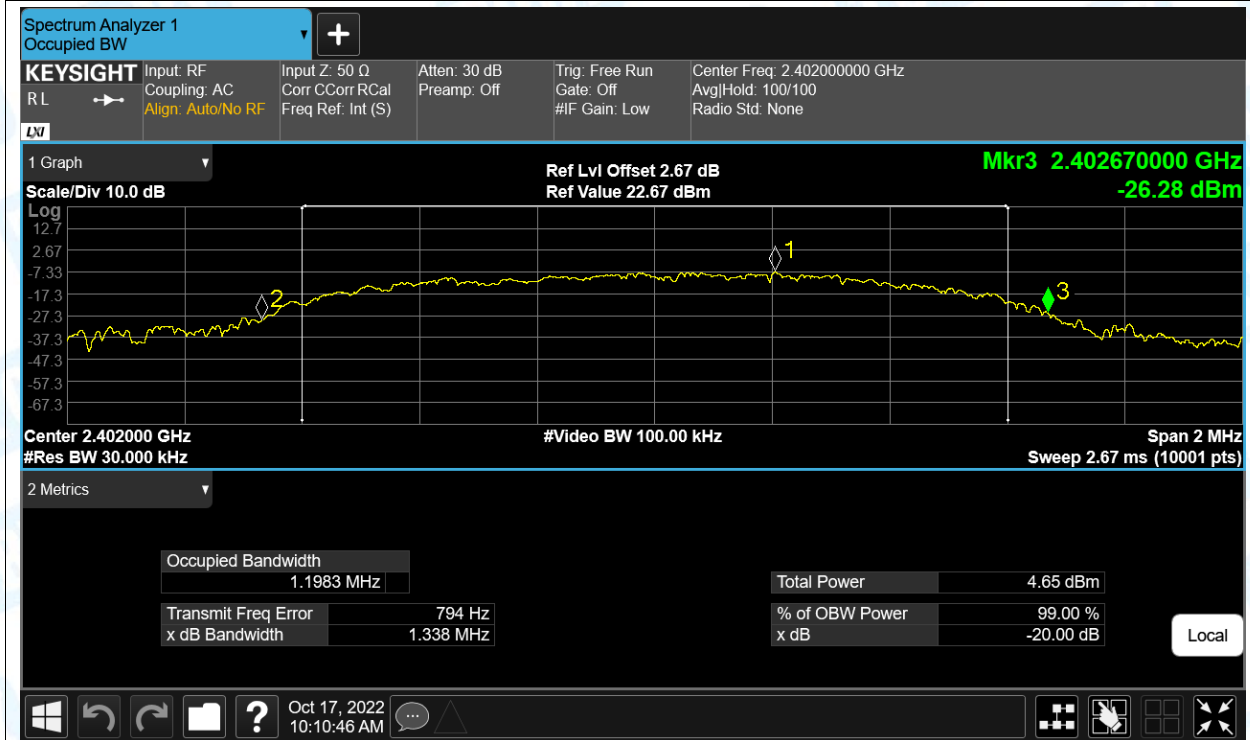
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



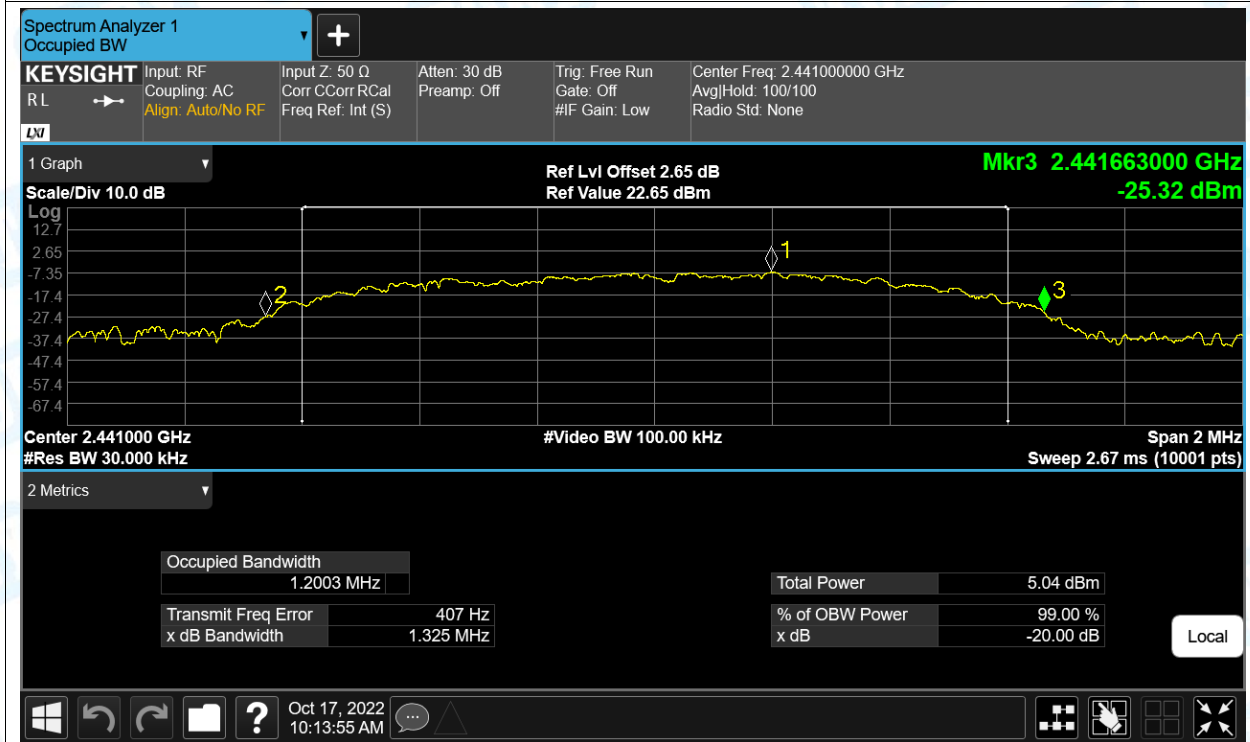
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

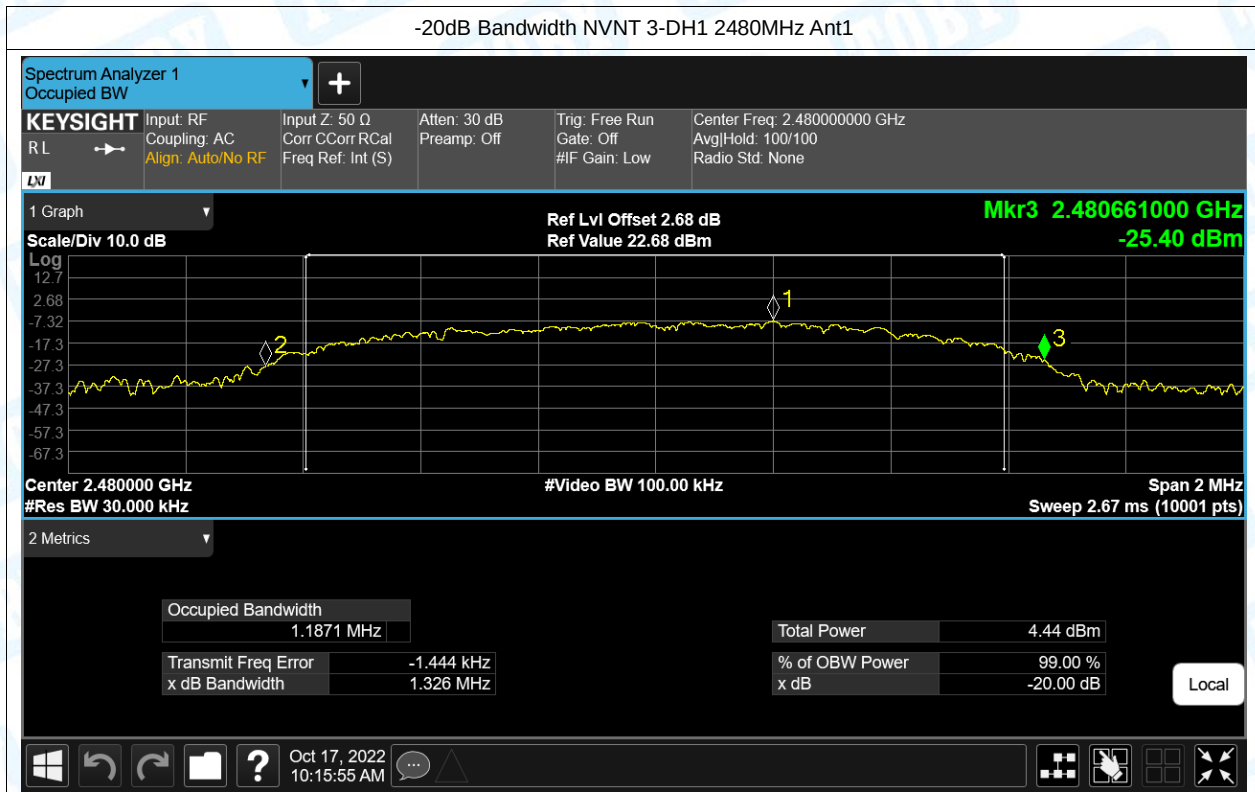


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



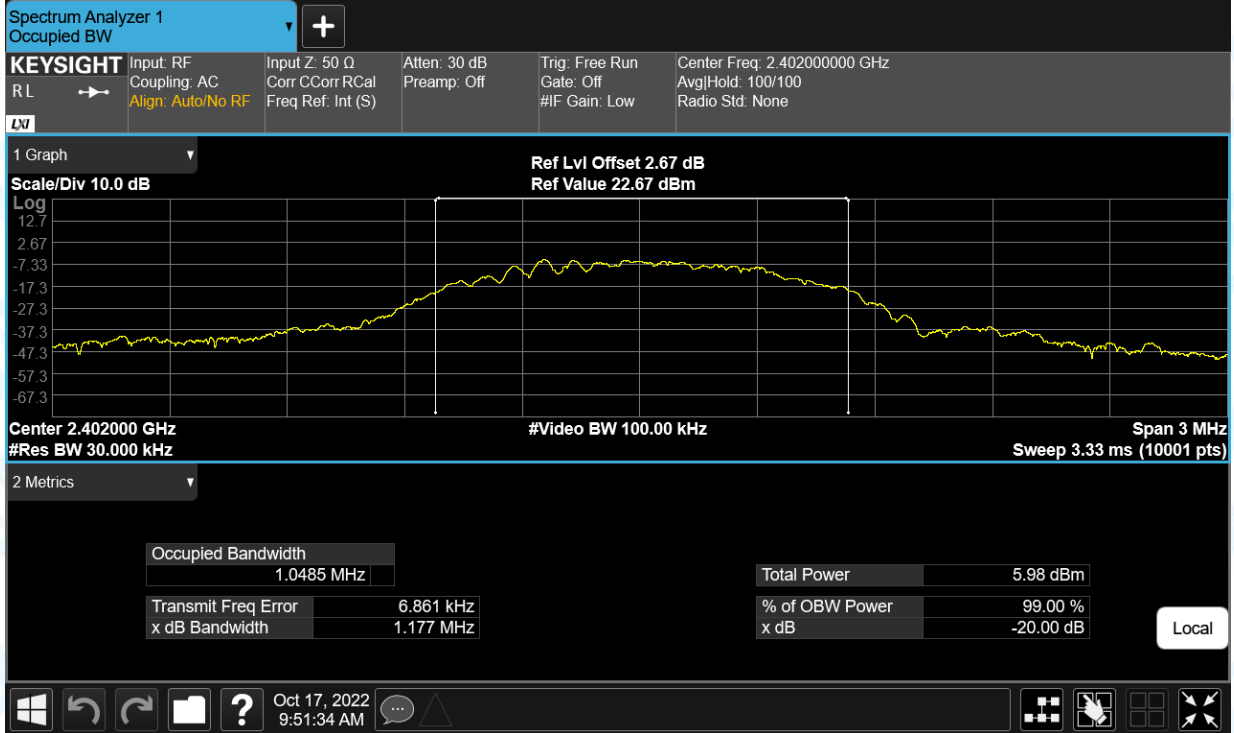


4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	1.048
NVNT	1-DH1	2441	Ant1	1.049
NVNT	1-DH1	2480	Ant1	1.056
NVNT	2-DH1	2402	Ant1	1.196
NVNT	2-DH1	2441	Ant1	1.185
NVNT	2-DH1	2480	Ant1	1.177
NVNT	3-DH1	2402	Ant1	1.208
NVNT	3-DH1	2441	Ant1	1.206
NVNT	3-DH1	2480	Ant1	1.197

Test Graphs

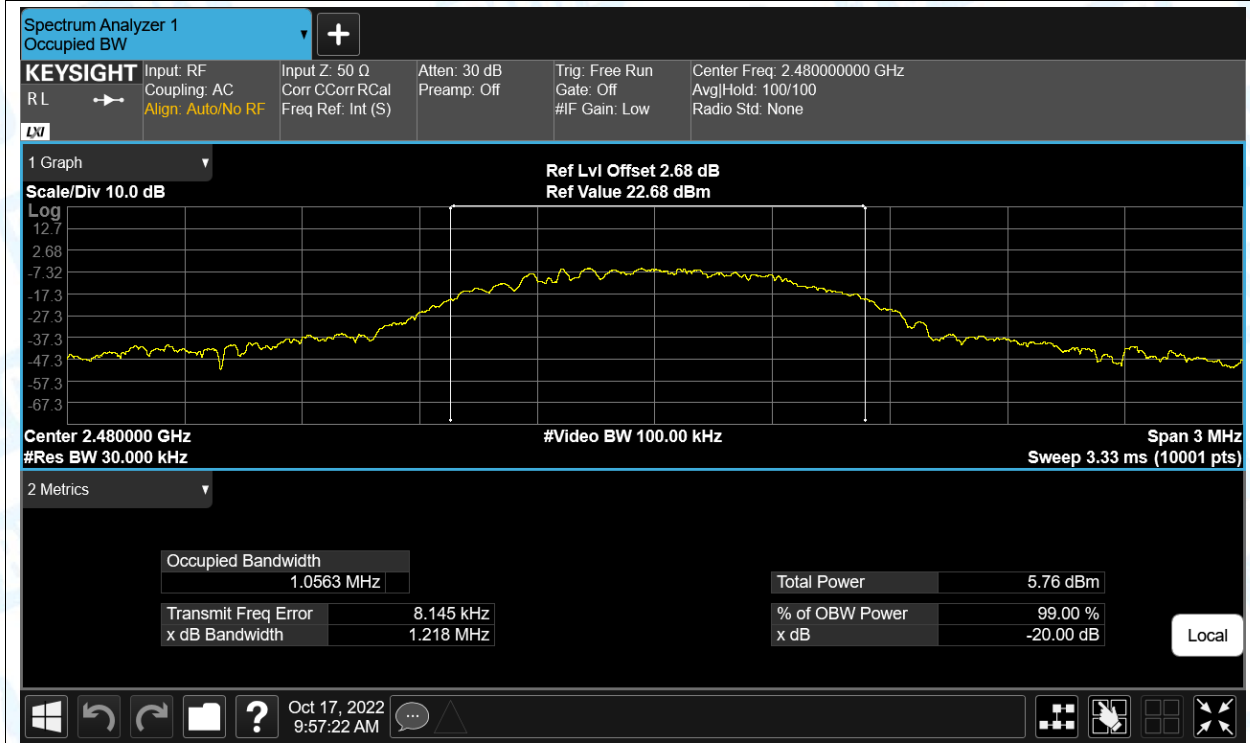
OBW NVNT 1-DH1 2402MHz Ant1



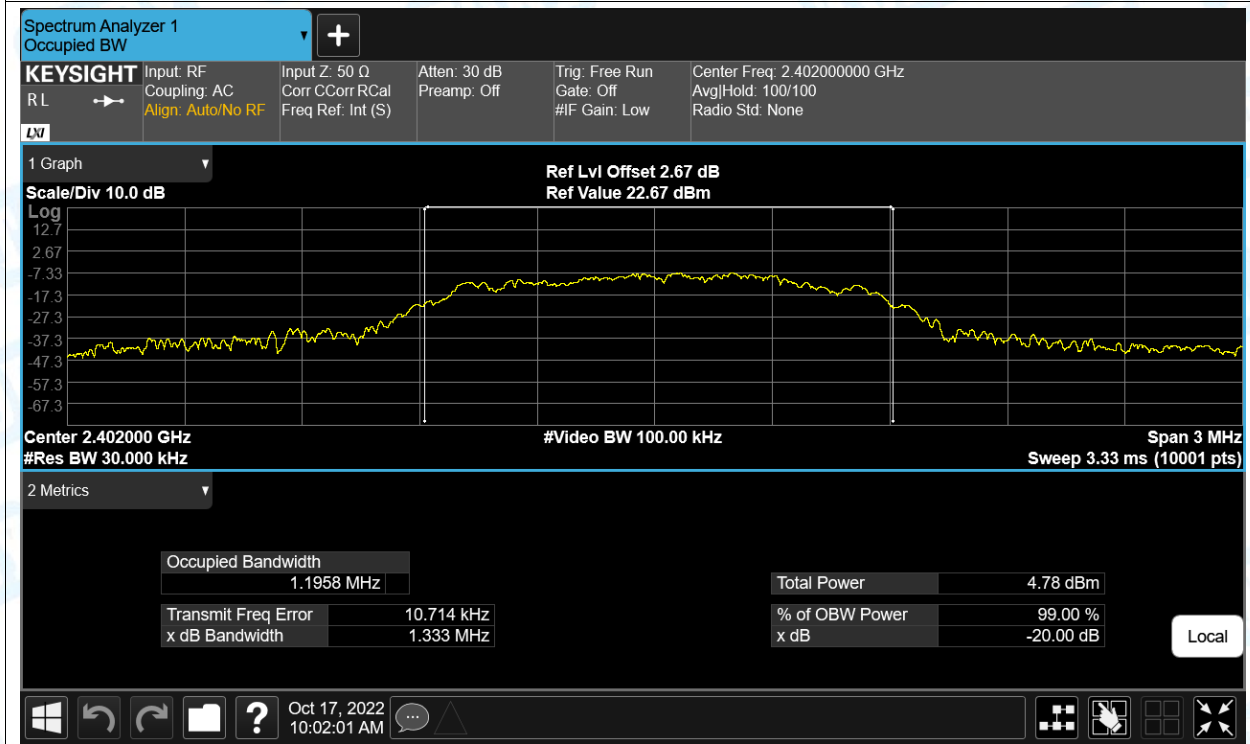
OBW NVNT 1-DH1 2441MHz Ant1



OBW NVNT 1-DH1 2480MHz Ant1



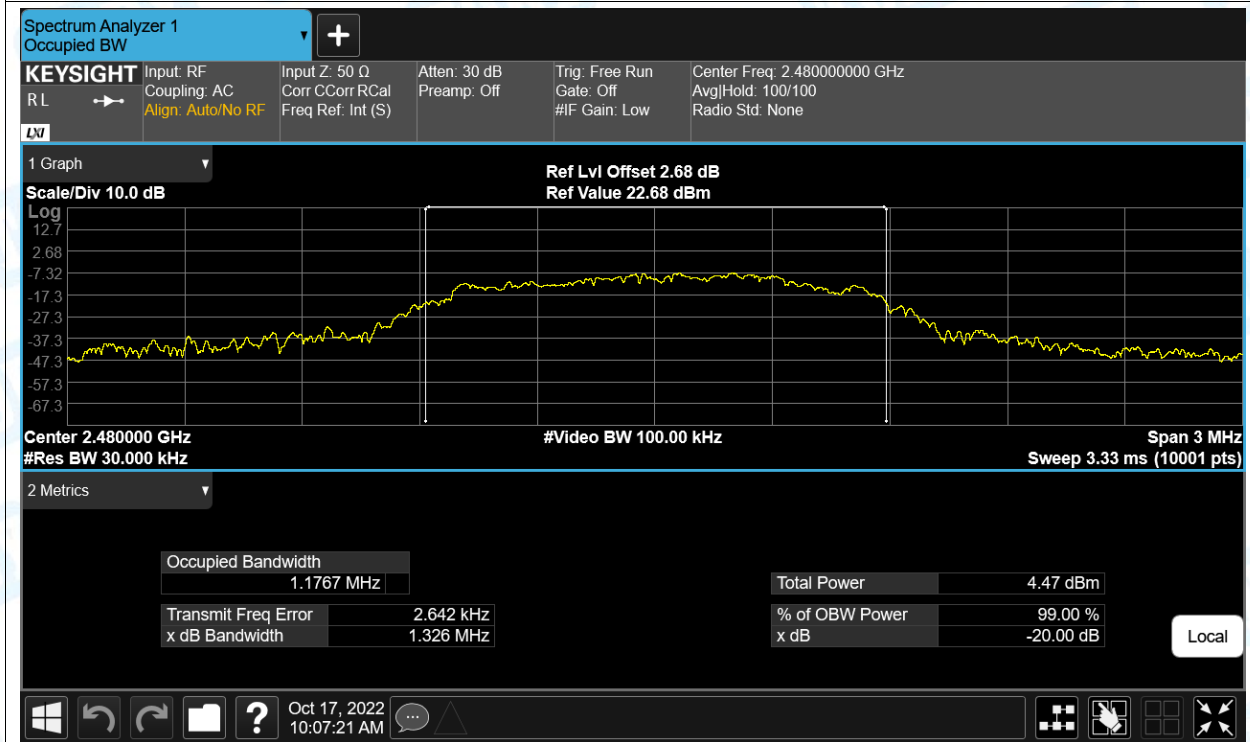
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

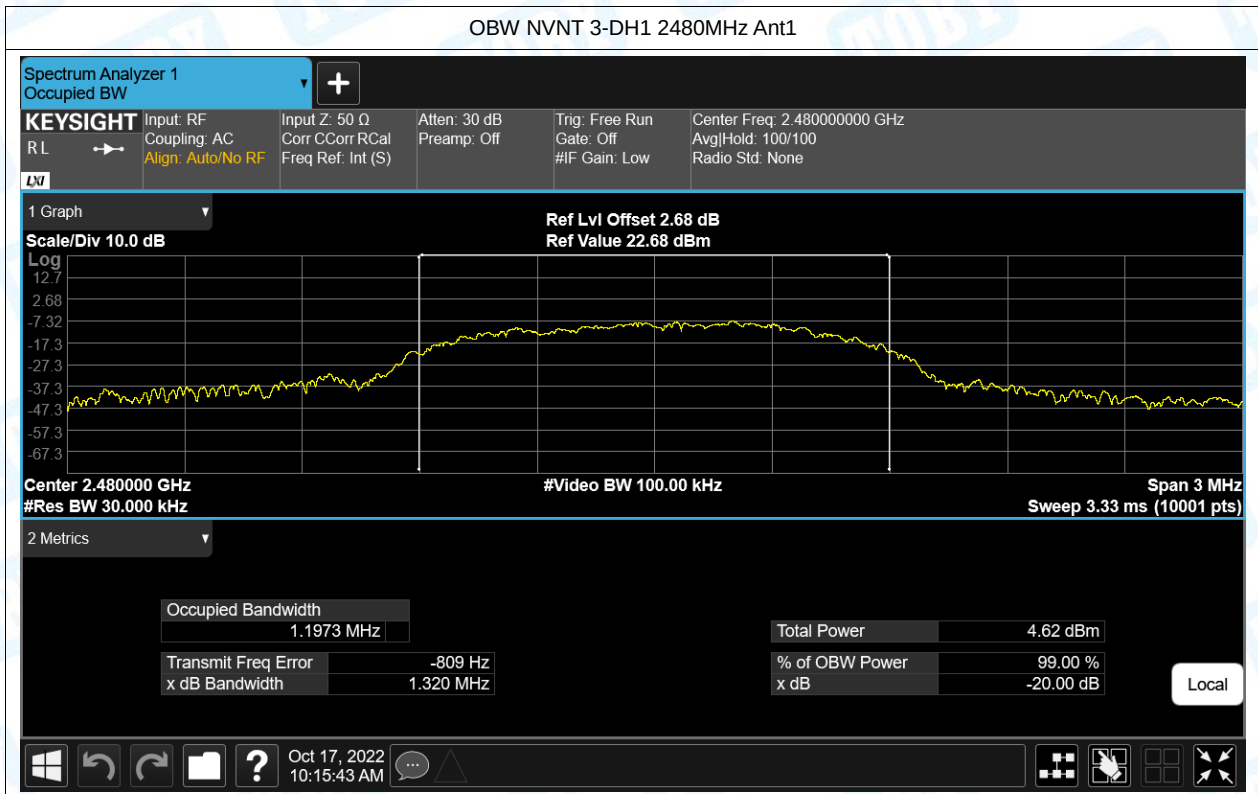


OBW NVNT 3-DH1 2402MHz Ant1



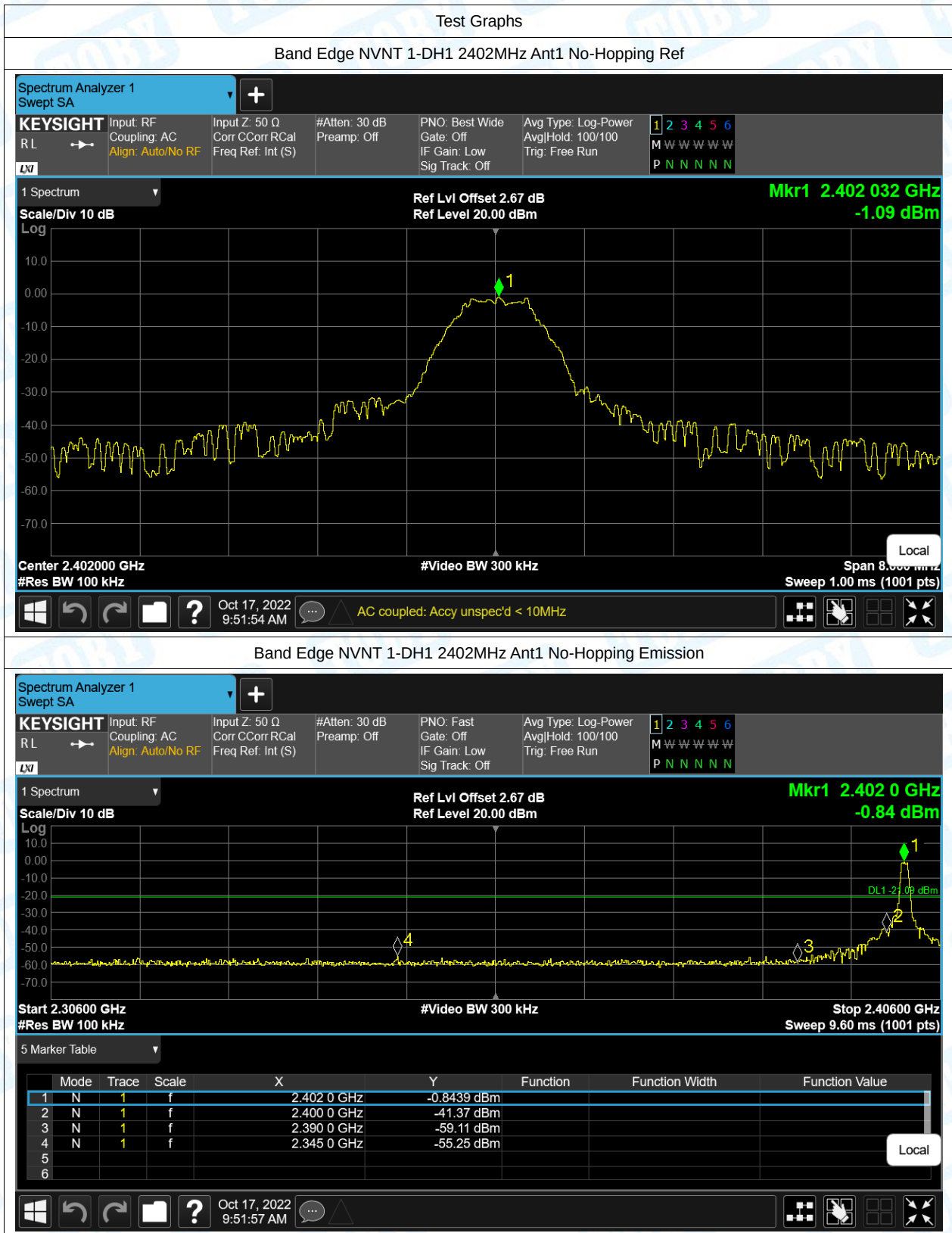
OBW NVNT 3-DH1 2441MHz Ant1

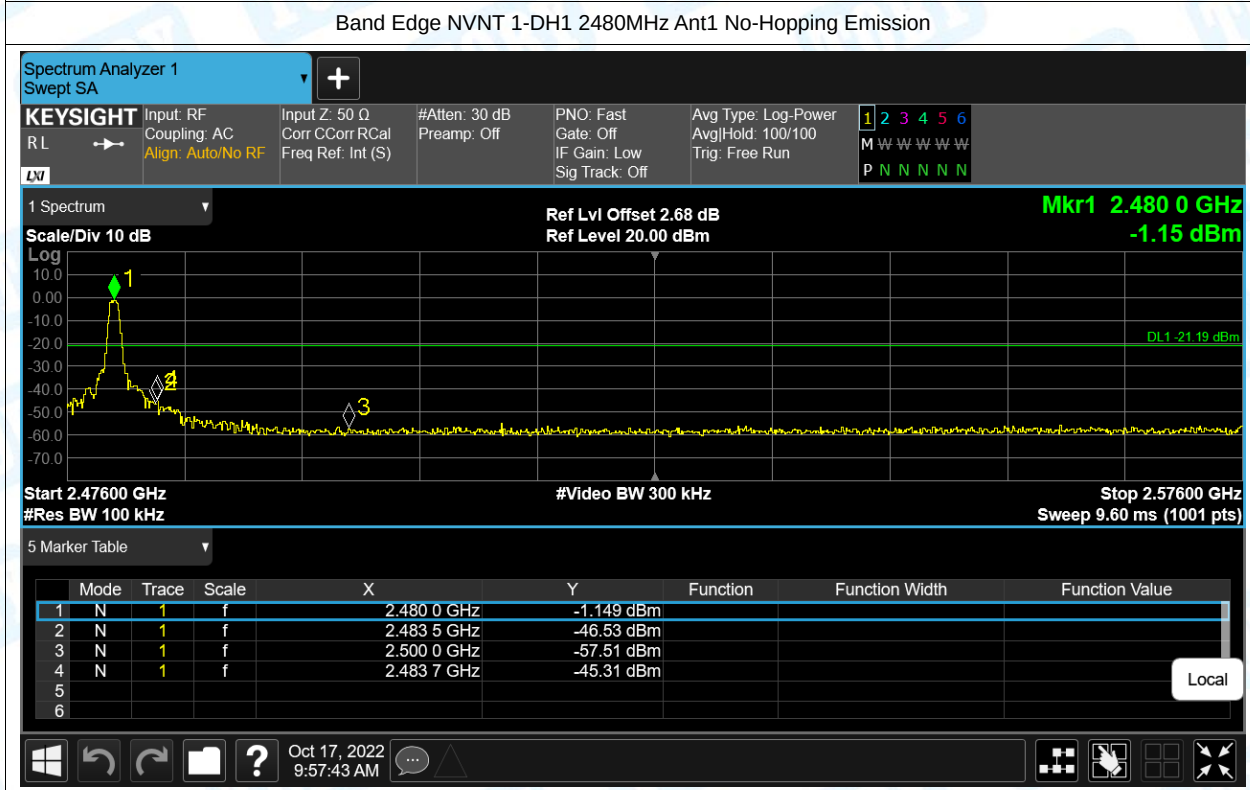
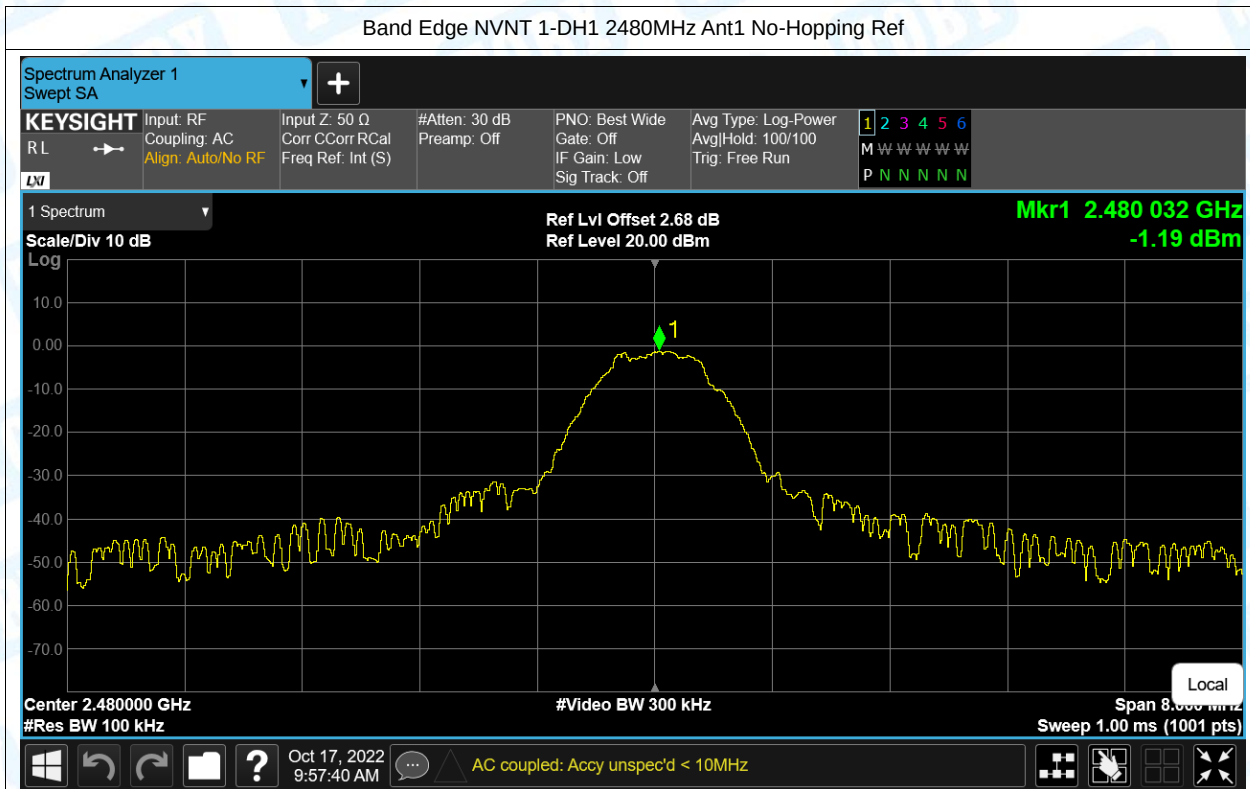


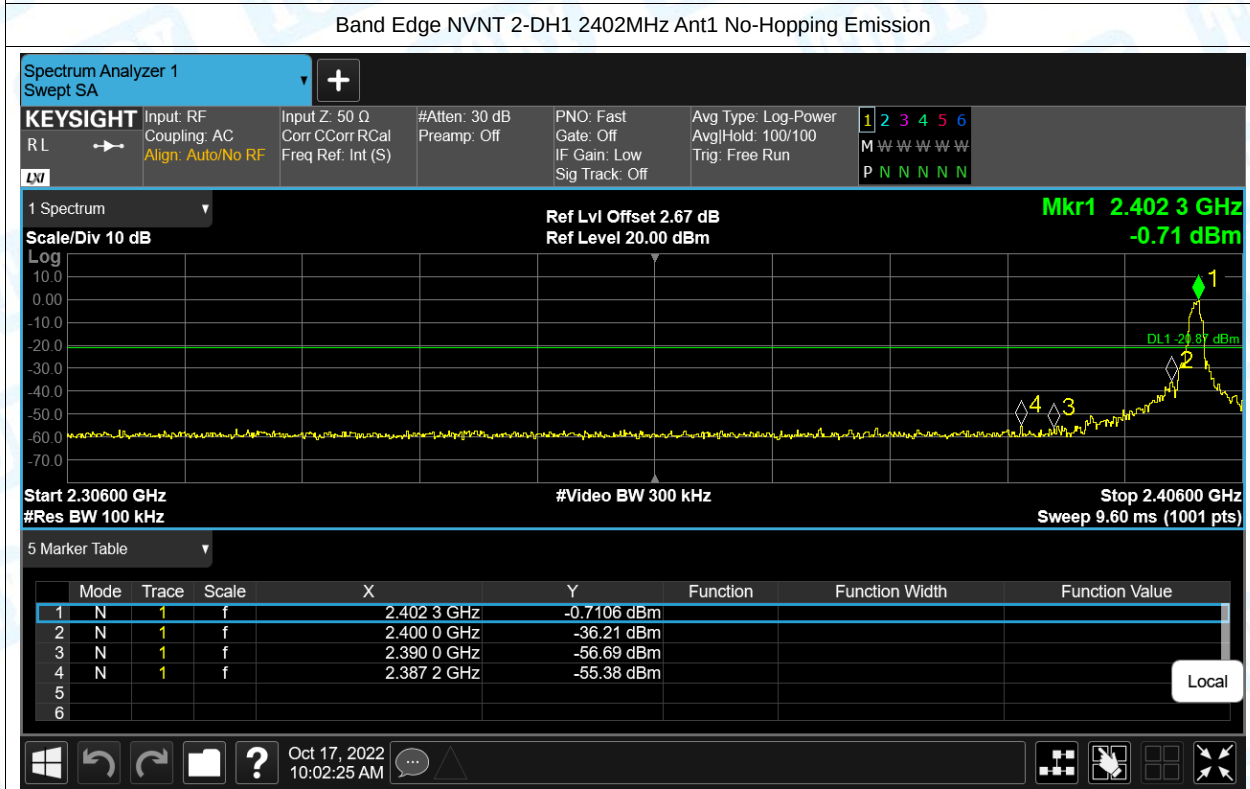
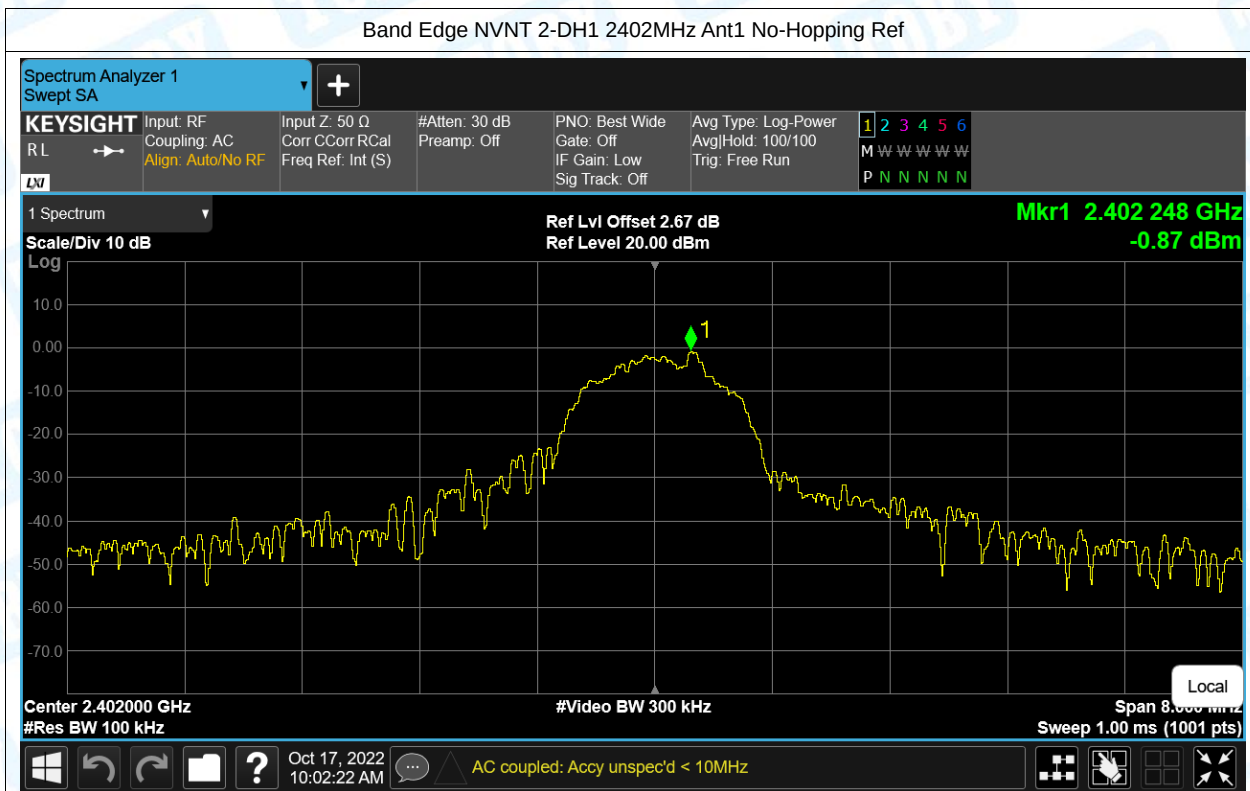


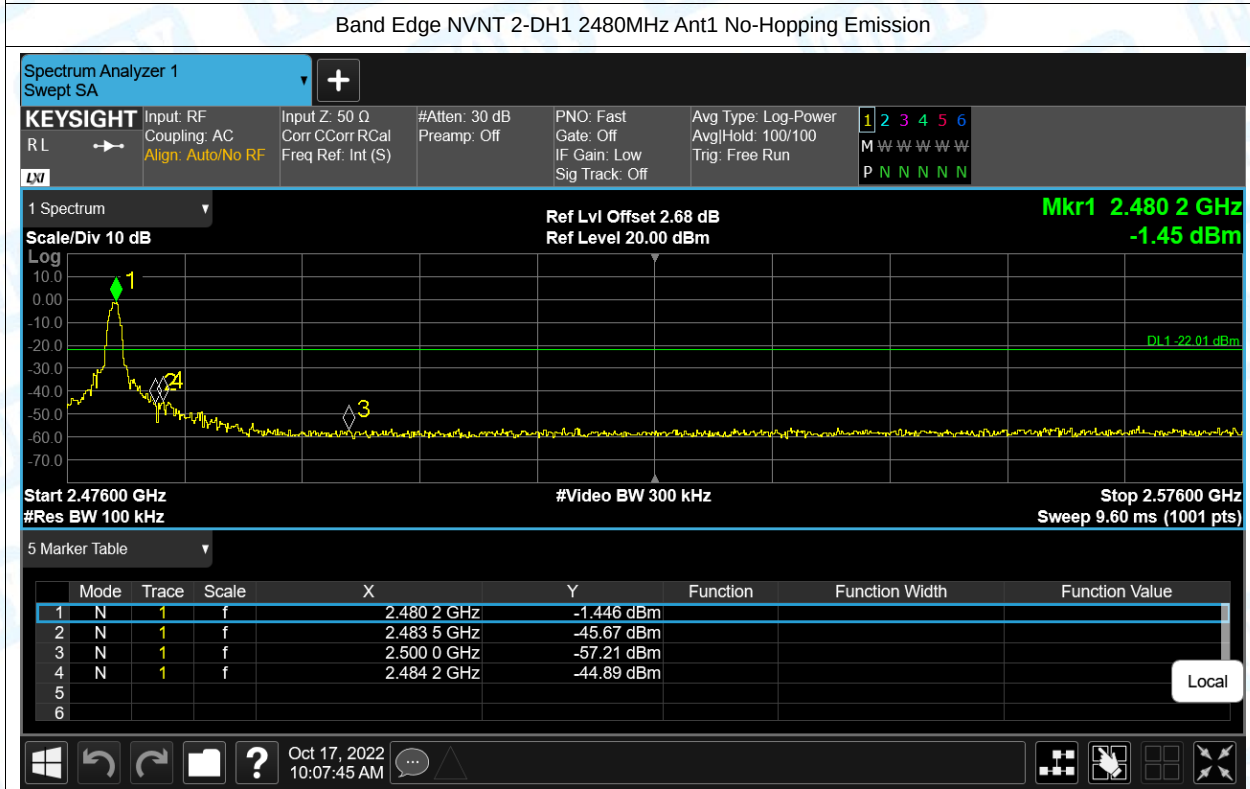
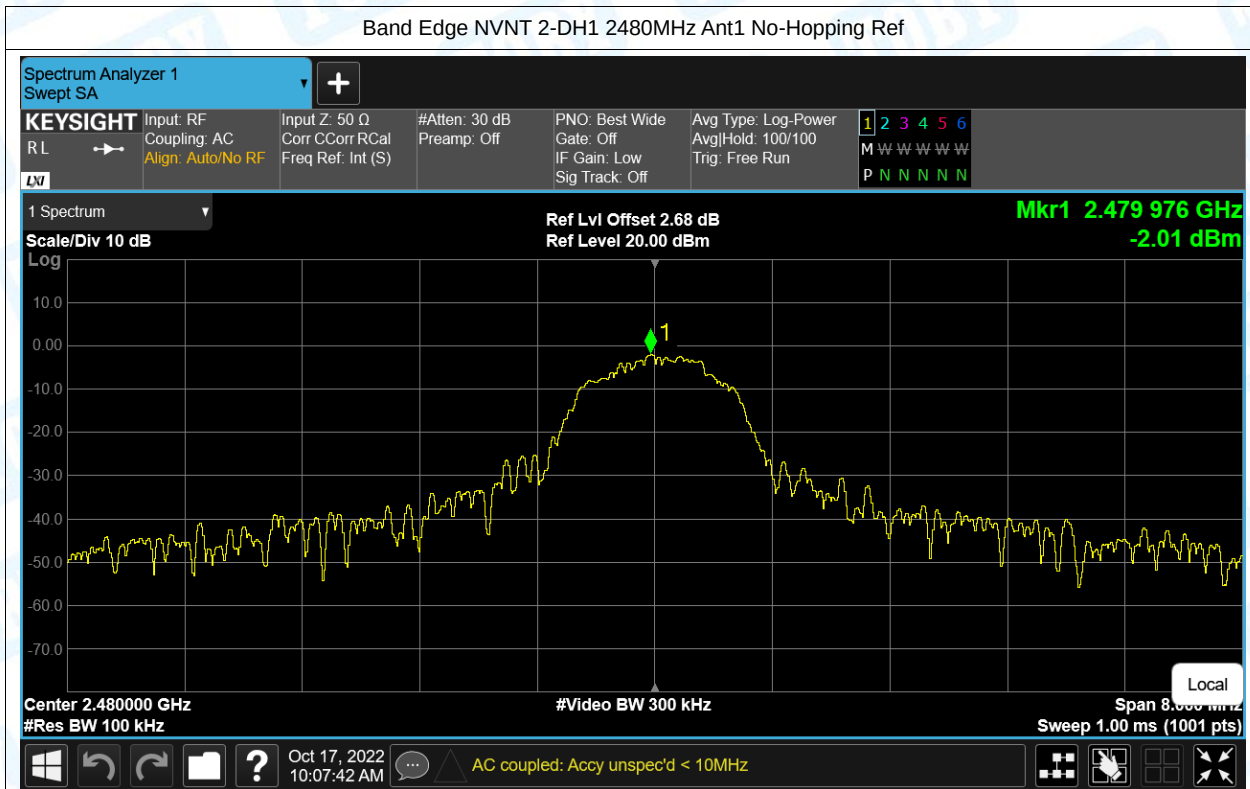
5. Band Edge

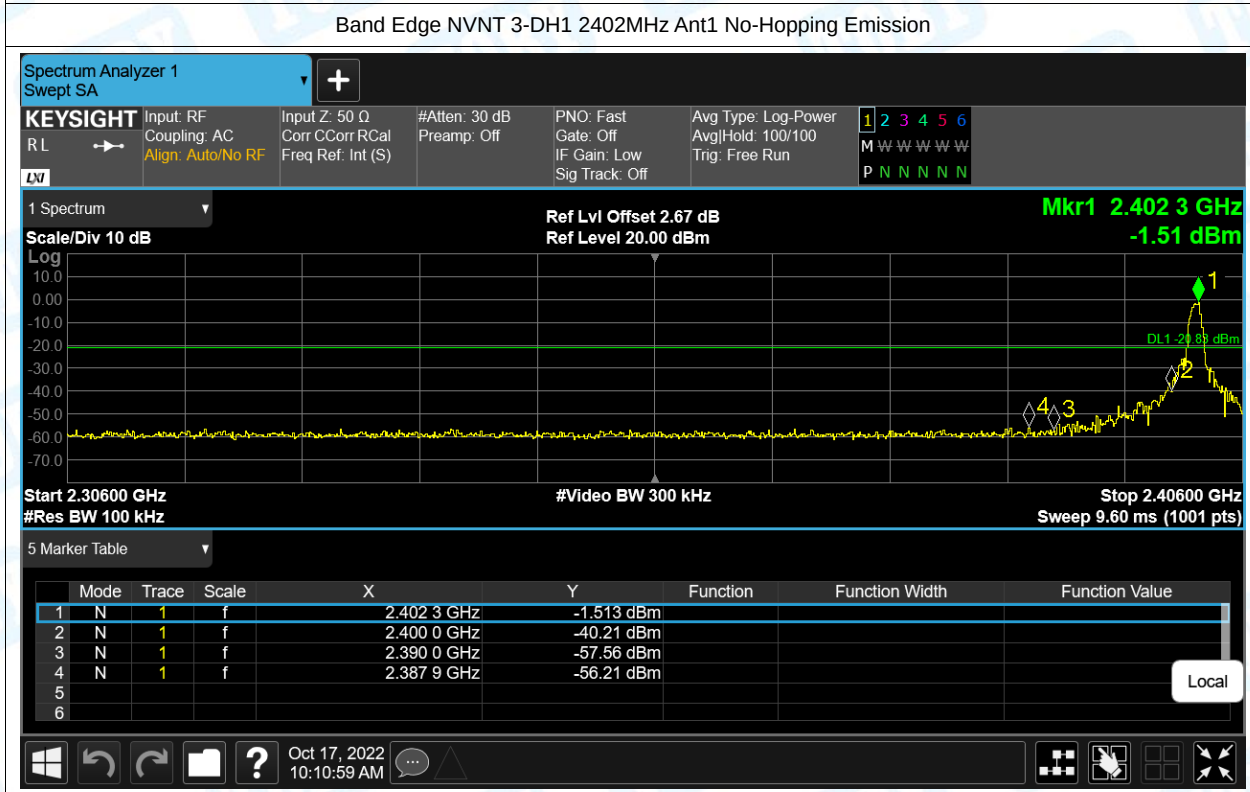
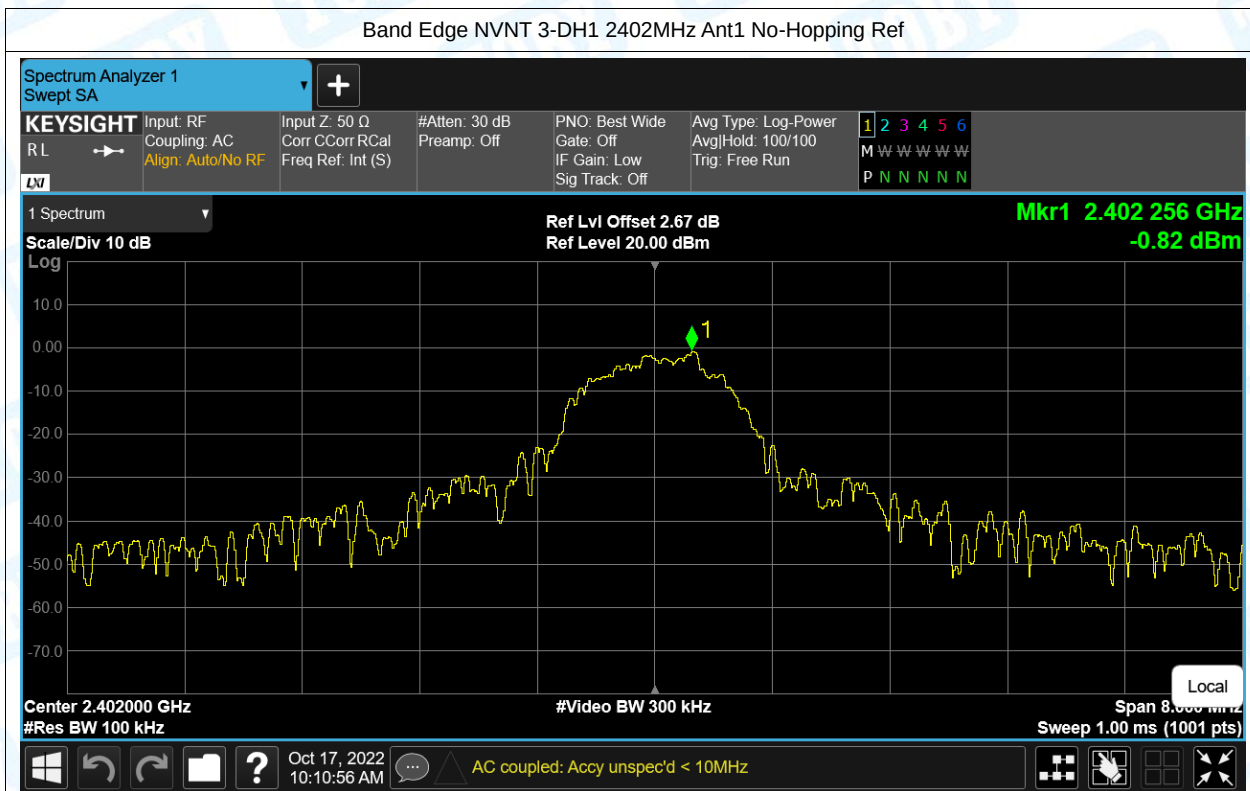
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-54.16	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-44.12	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-54.51	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-42.88	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-55.39	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-41.64	-20	Pass

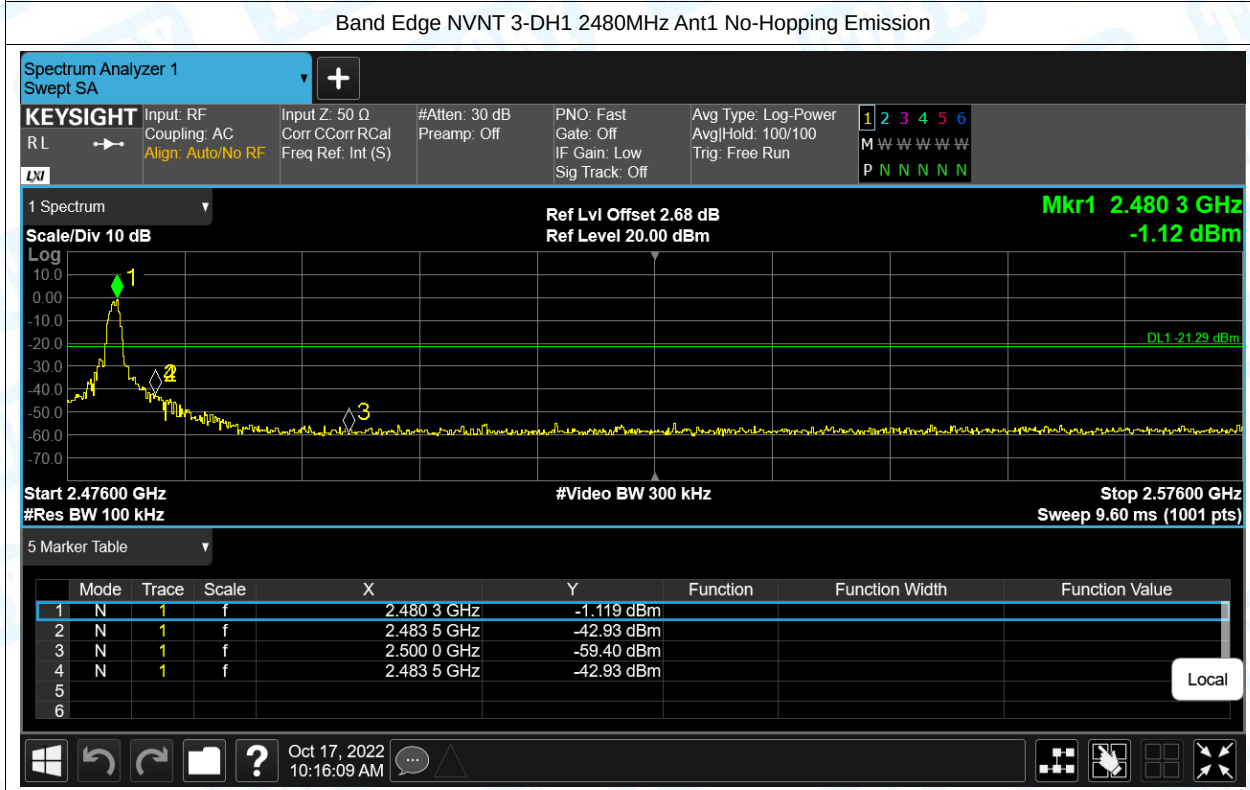
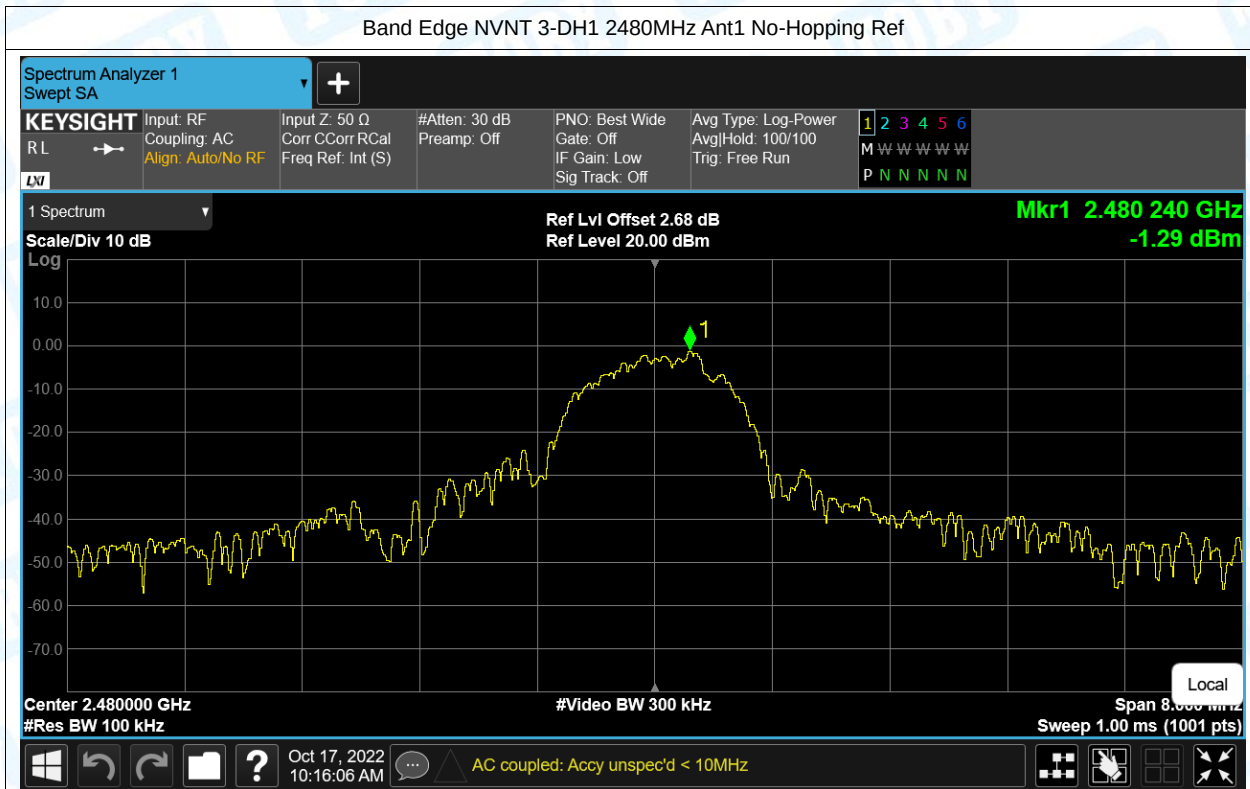












6. Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-52.79	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-47.17	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-51.15	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-44.44	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-52.34	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-44.32	-20	Pass

