

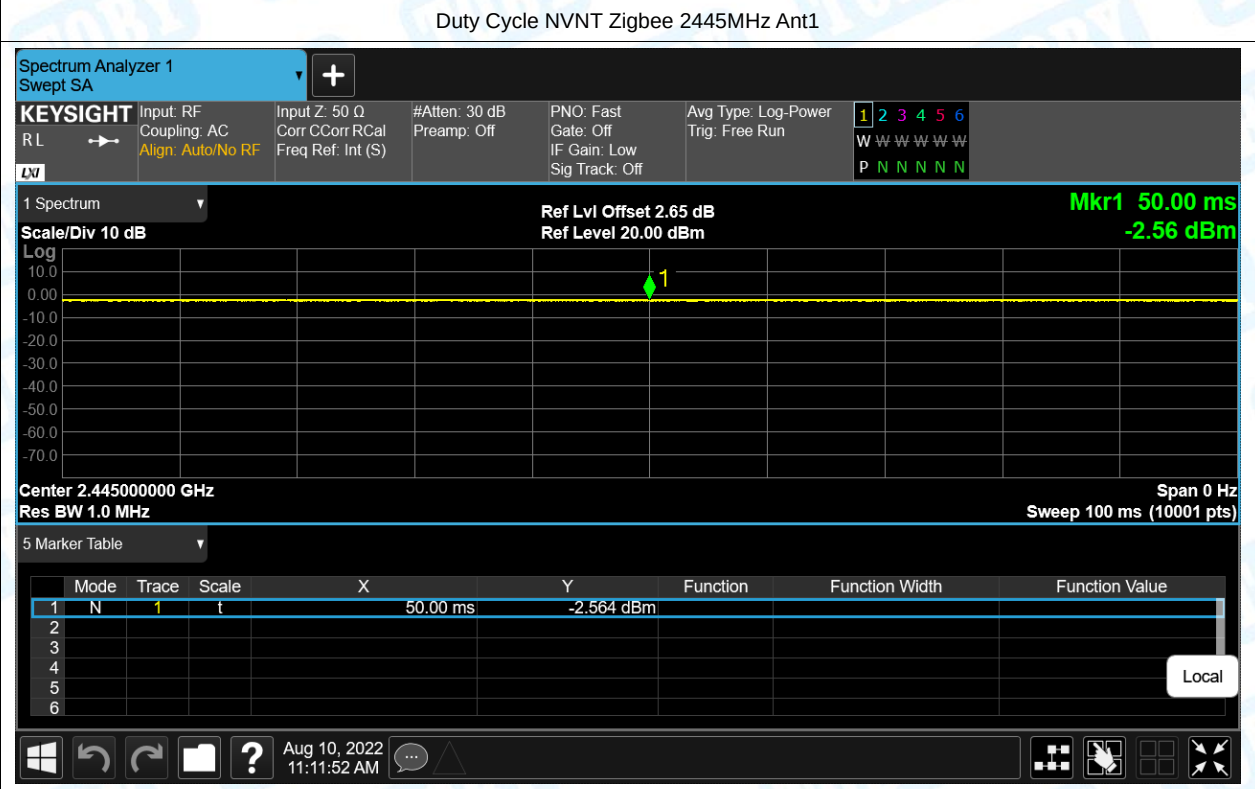
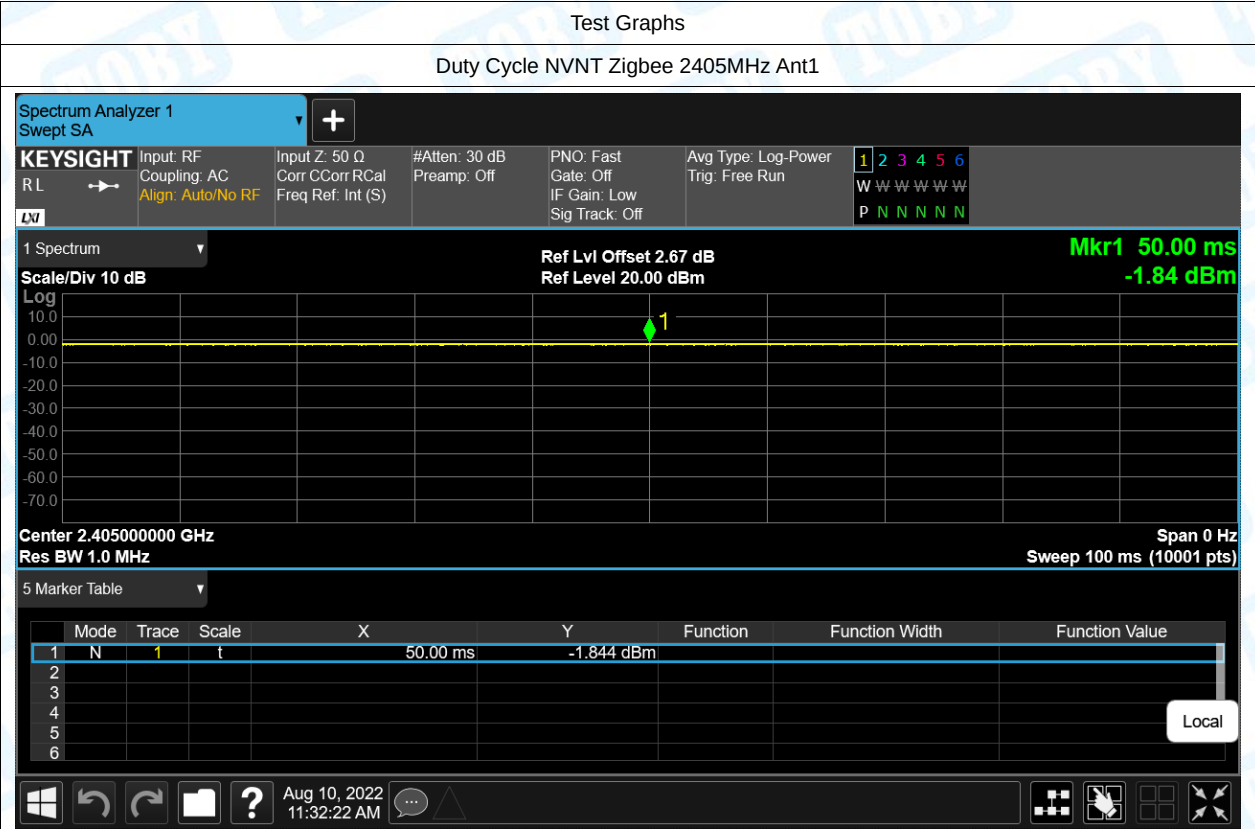
RF Test Data for Zigbee

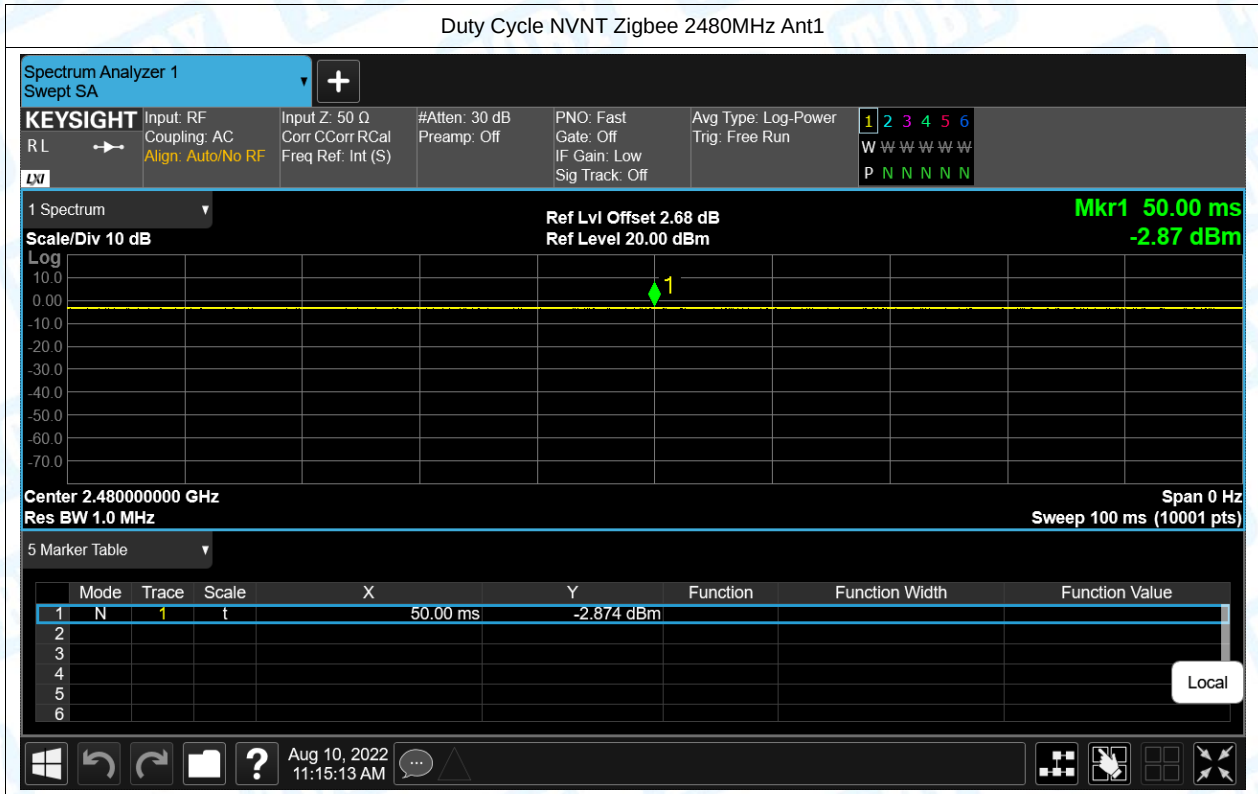
(Conducted Measurements)

General Description of EUT	
Product Name:	Smart gateway
Test Model:	TYZG1
Sample ID:	202206-0350-1-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202206-0350-11.	

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	Zigbee	2405	Ant1	100	0	0
NVNT	Zigbee	2445	Ant1	100	0	0
NVNT	Zigbee	2480	Ant1	100	0	0



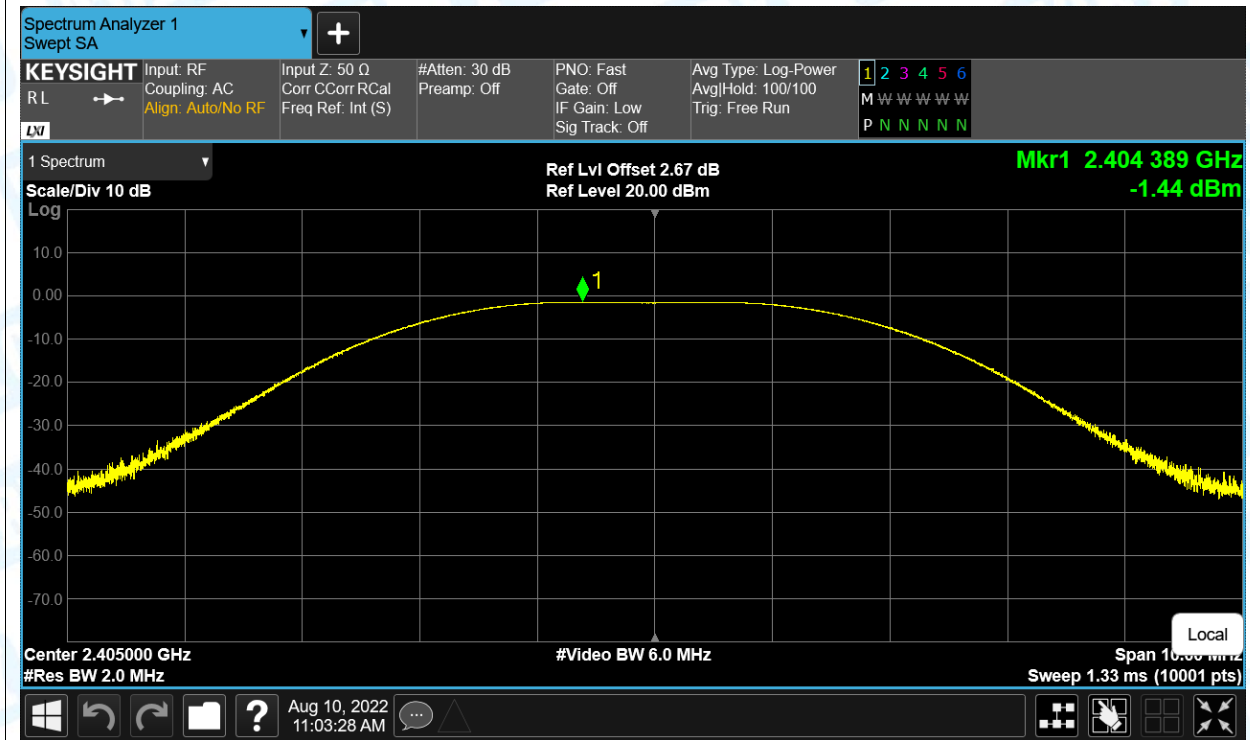


Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	Zigbee	2405	Ant1	-1.444	30	Pass
NVNT	Zigbee	2445	Ant1	-1.825	30	Pass
NVNT	Zigbee	2480	Ant1	-2.295	30	Pass

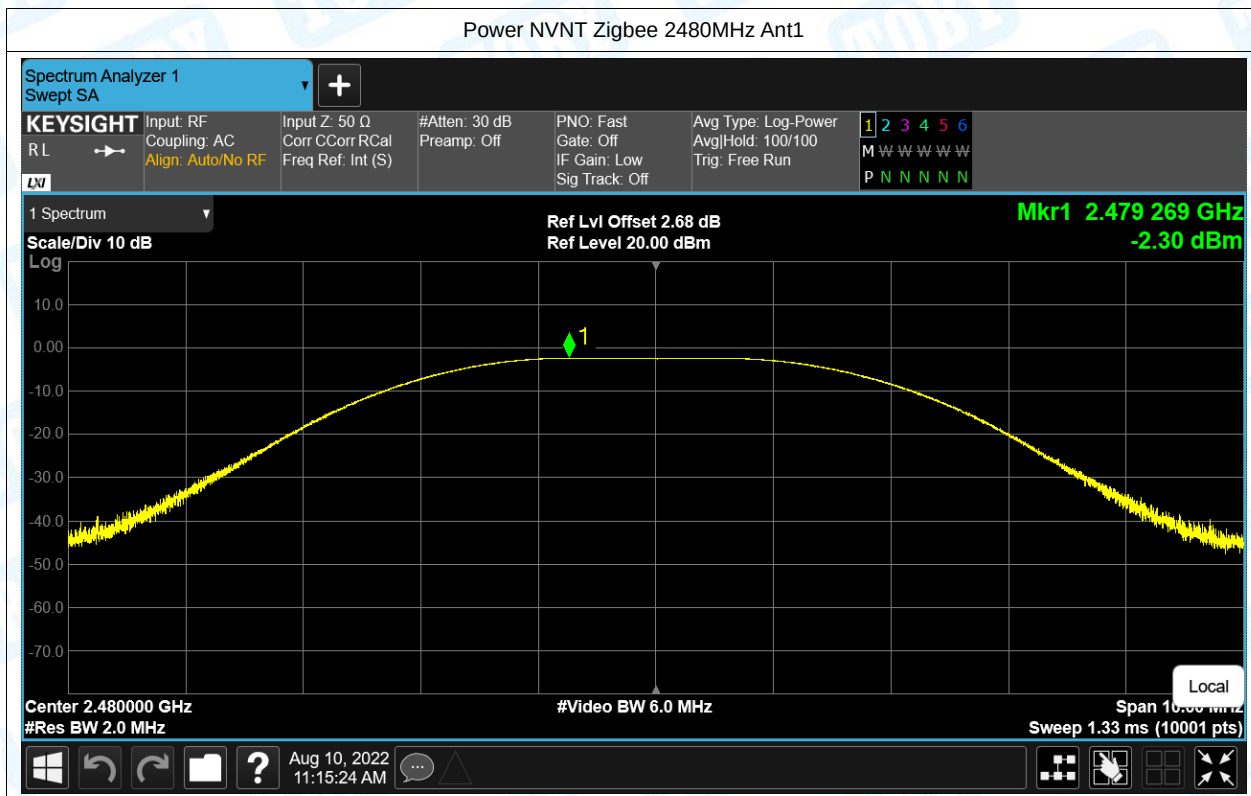
Test Graphs

Power NVNT Zigbee 2405MHz Ant1



Power NVNT Zigbee 2445MHz Ant1



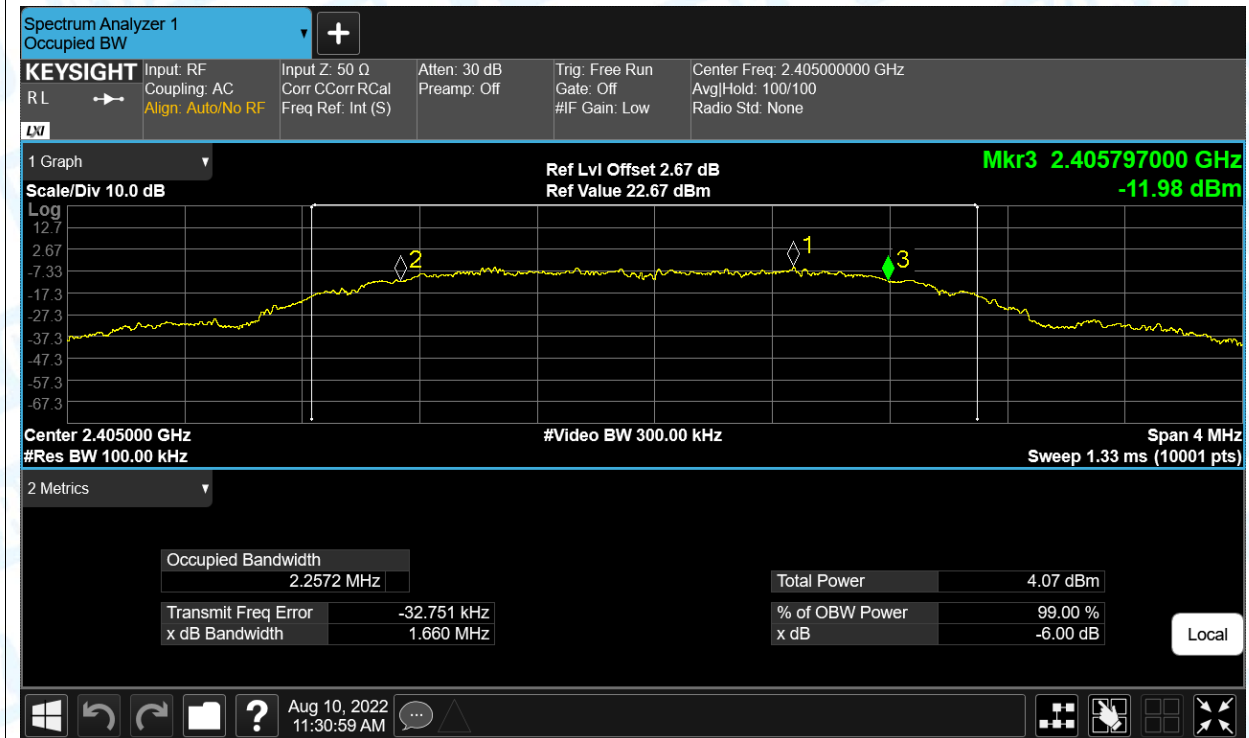


-6dB Bandwidth

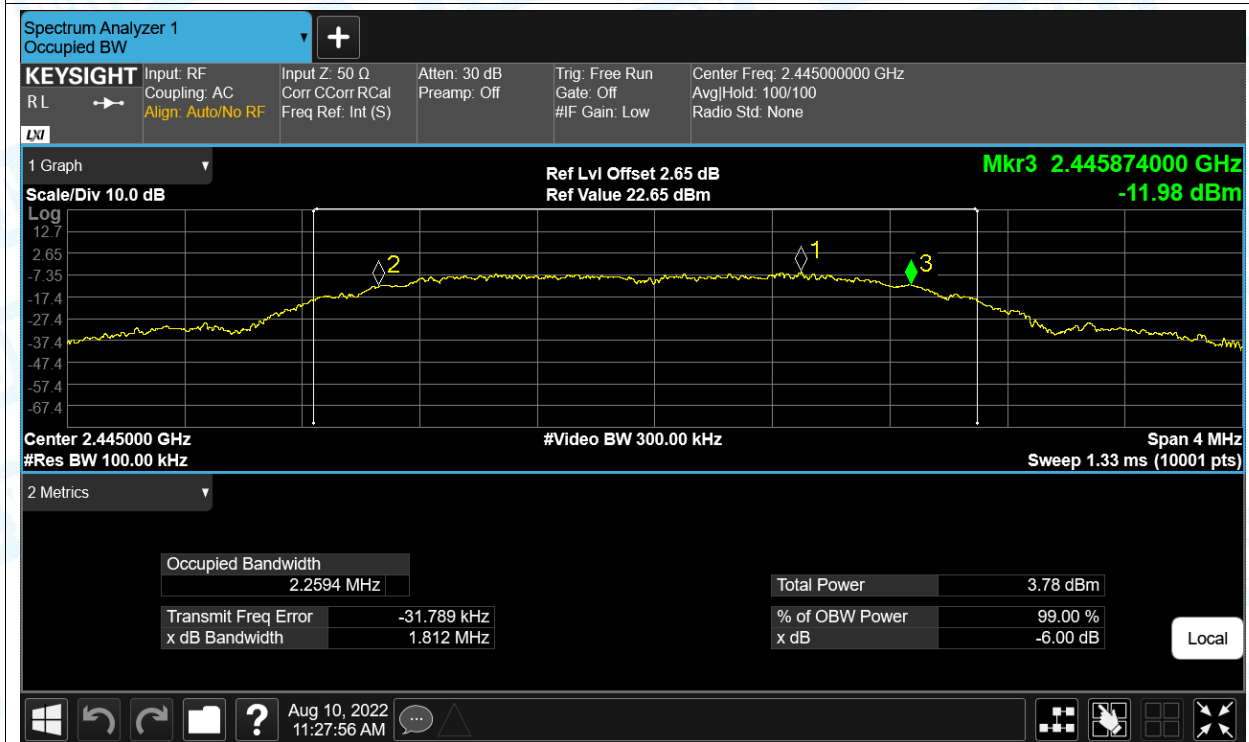
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	Zigbee	2405	Ant1	1.66	0.5	Pass
NVNT	Zigbee	2445	Ant1	1.81	0.5	Pass
NVNT	Zigbee	2480	Ant1	1.71	0.5	Pass

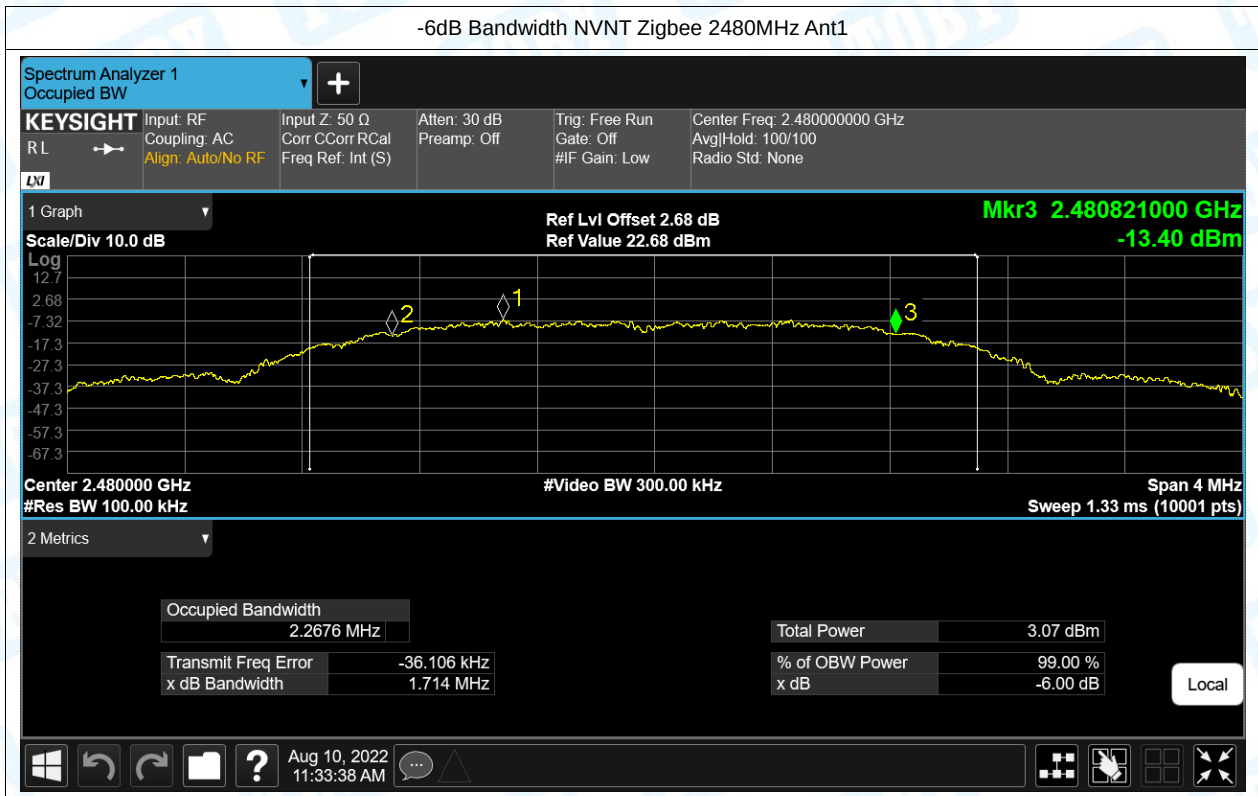
Test Graphs

-6dB Bandwidth NVNT Zigbee 2405MHz Ant1



-6dB Bandwidth NVNT Zigbee 2445MHz Ant1



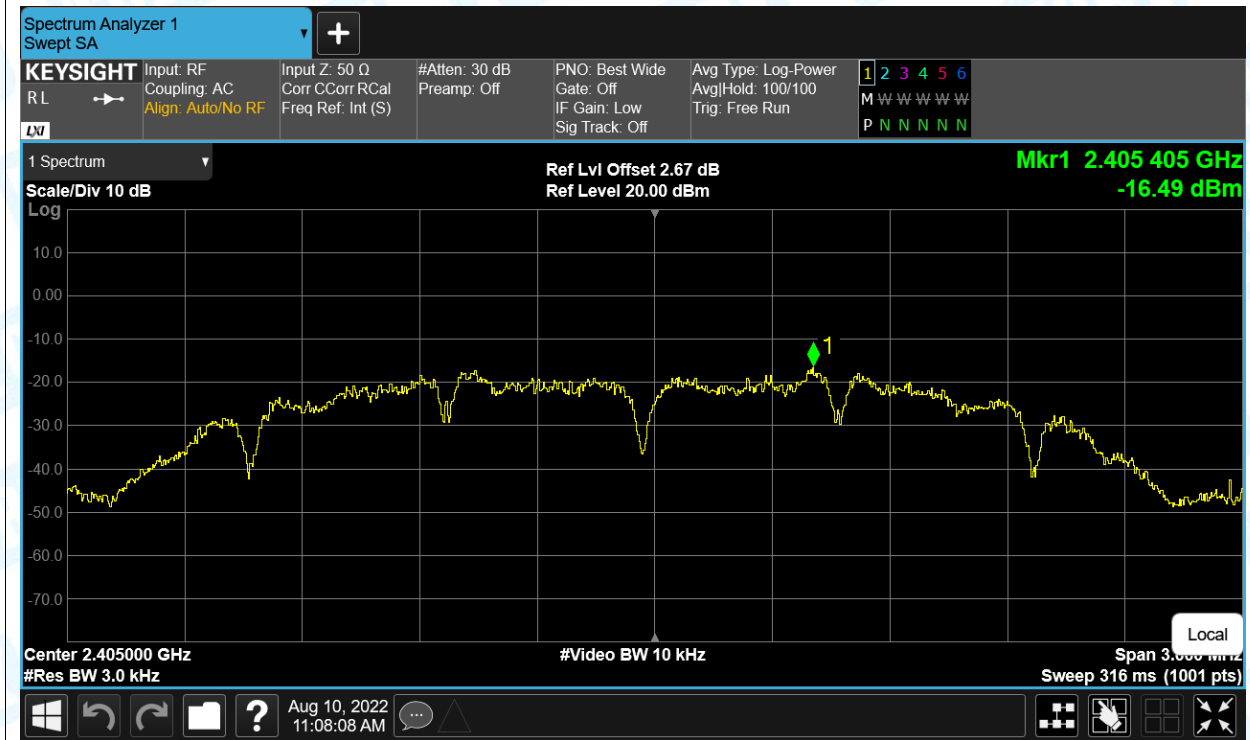


Maximum Power Spectral Density Level

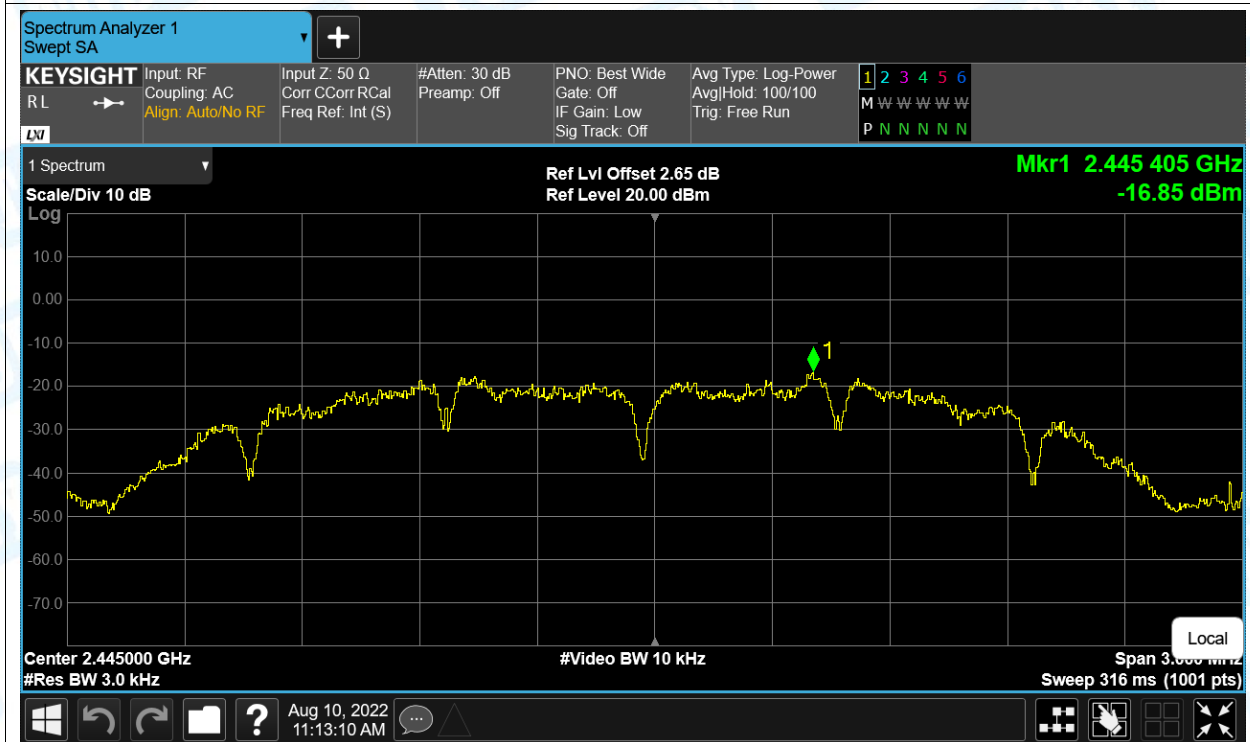
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	Zigbee	2405	Ant1	-16.491	8	Pass
NVNT	Zigbee	2445	Ant1	-16.85	8	Pass
NVNT	Zigbee	2480	Ant1	-17.677	8	Pass

Test Graphs

PSD NVNT Zigbee 2405MHz Ant1



PSD NVNT Zigbee 2445MHz Ant1



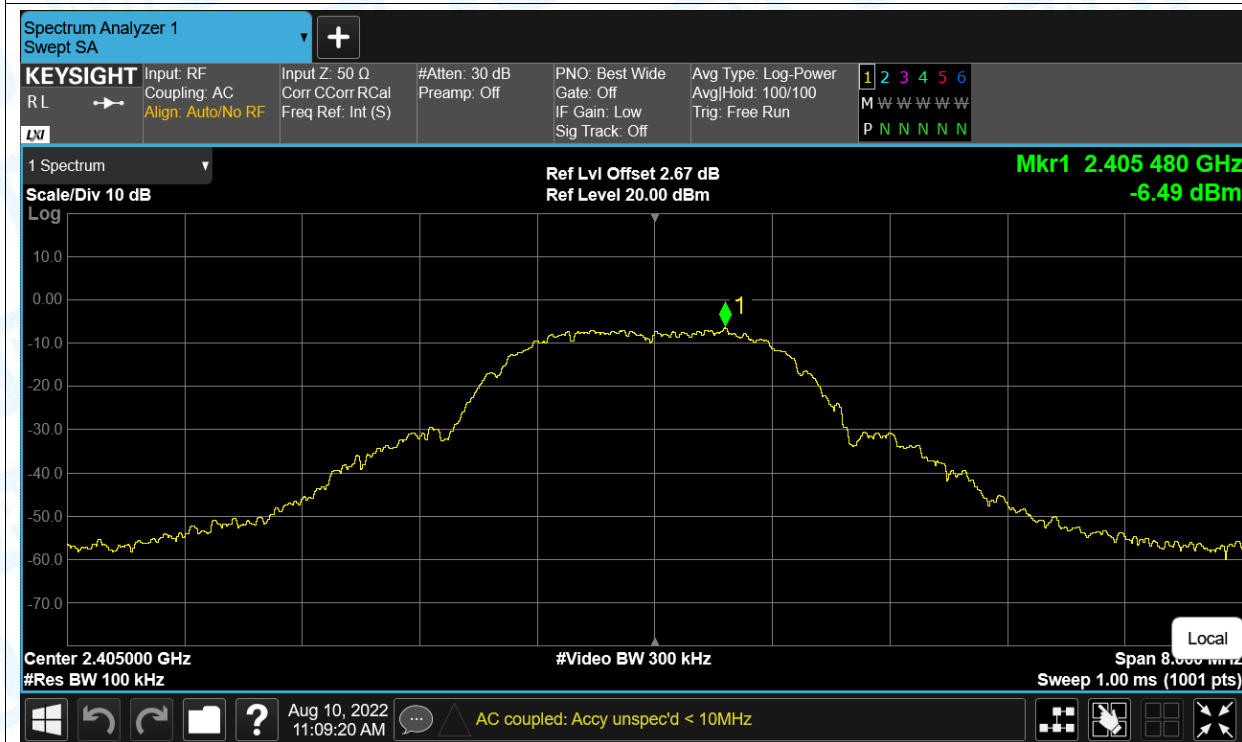


Band Edge

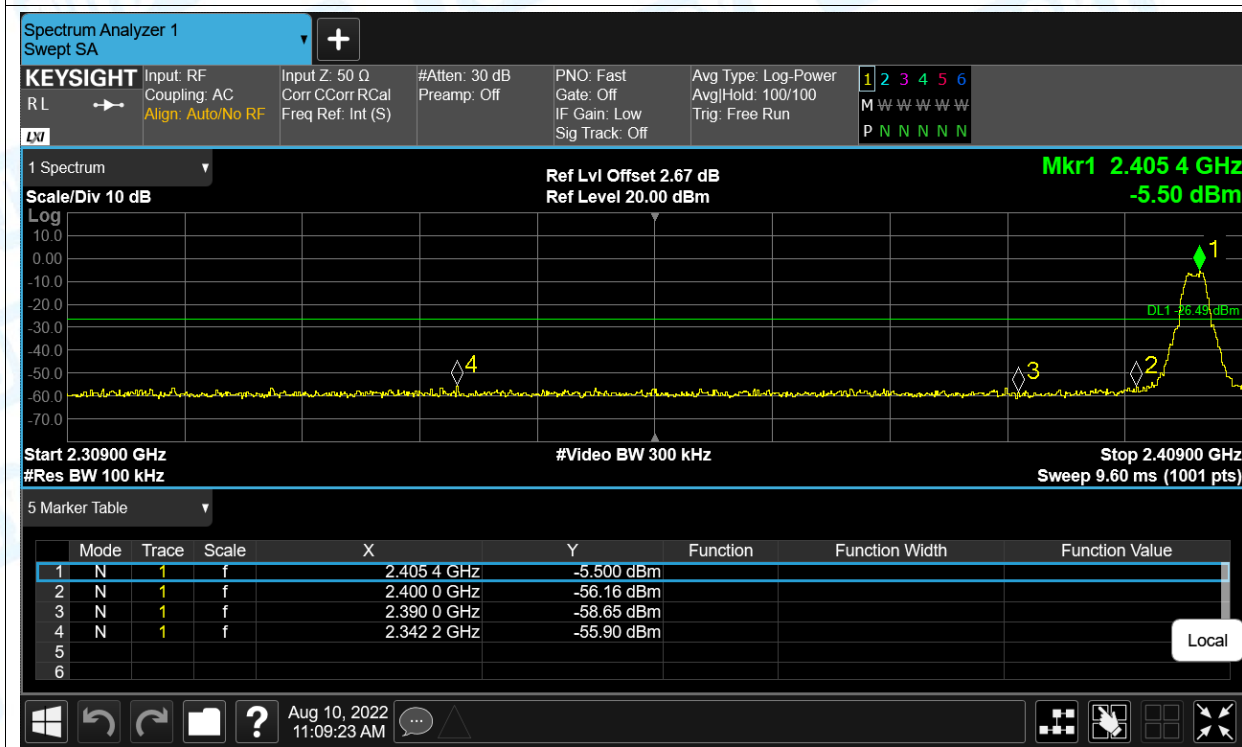
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	Zigbee	2405	Ant1	-49.41	-20	Pass
NVNT	Zigbee	2480	Ant1	-48.85	-20	Pass

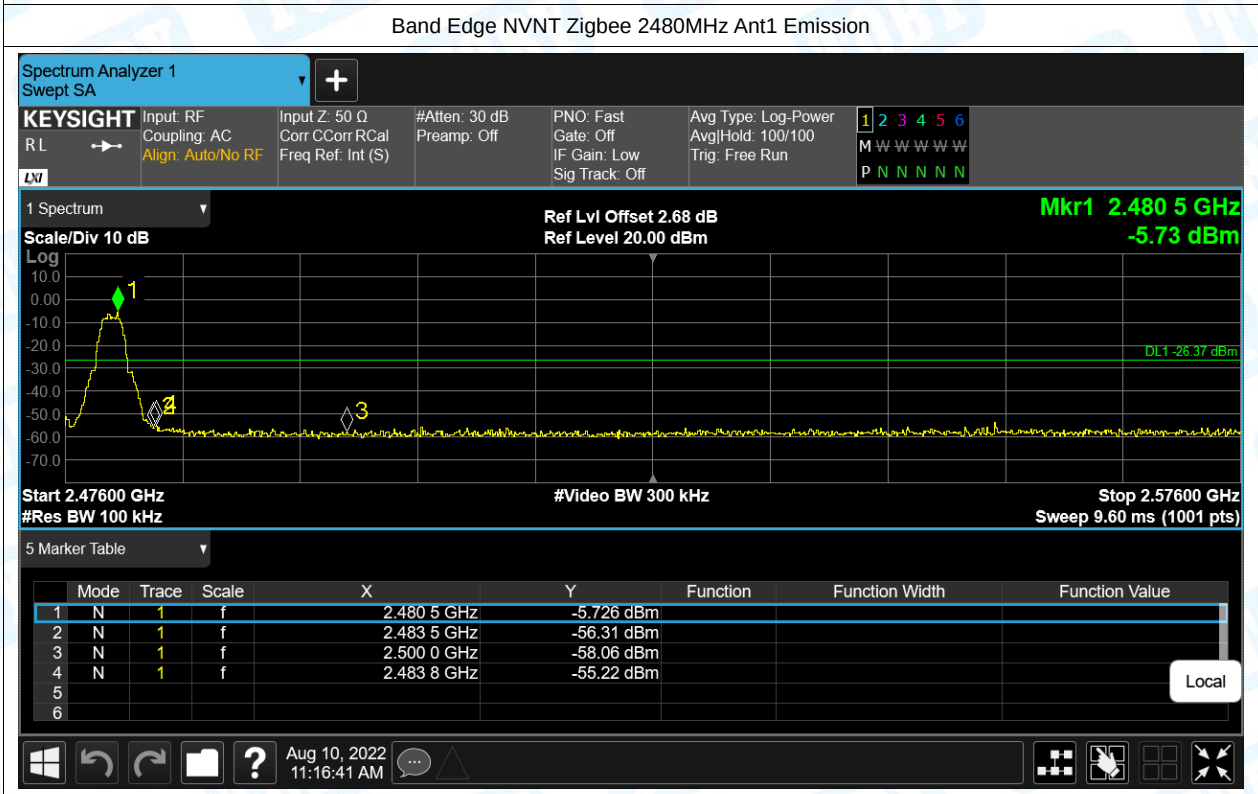
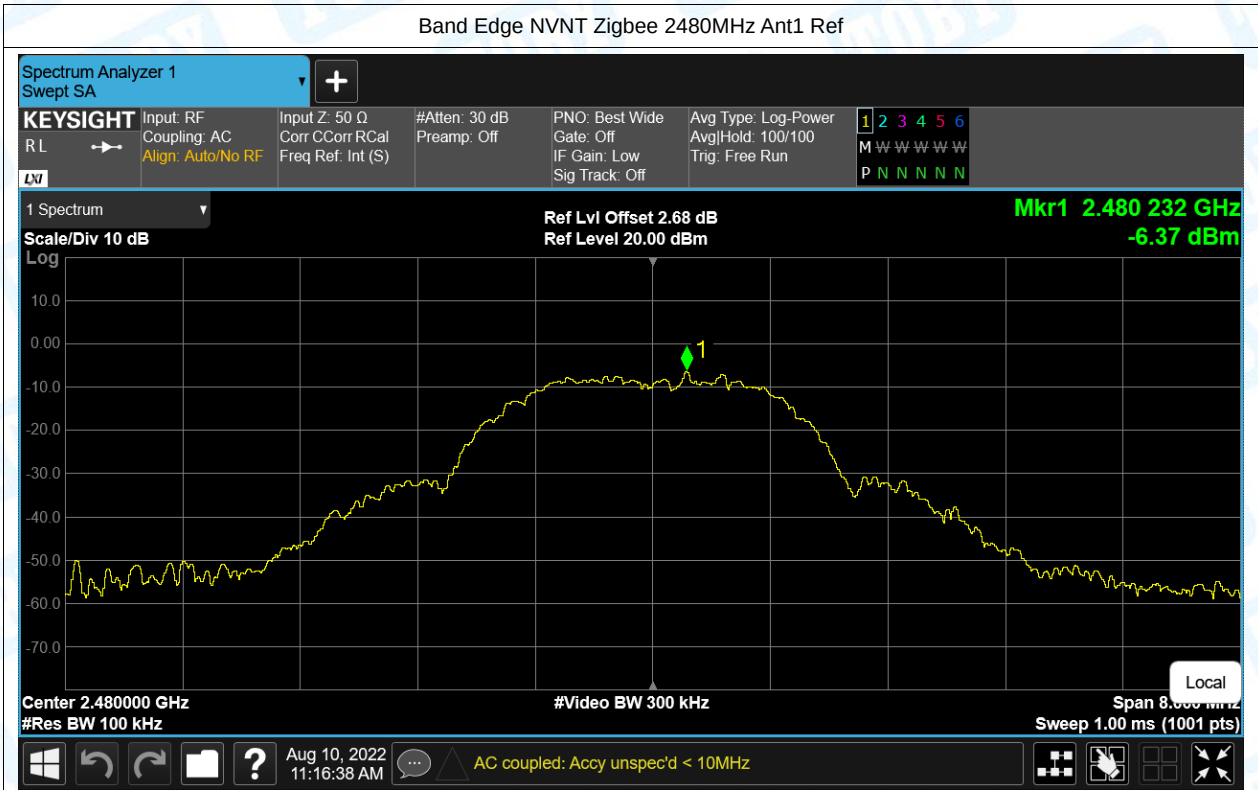
Test Graphs

Band Edge NVNT Zigbee 2405MHz Ant1 Ref



Band Edge NVNT Zigbee 2405MHz Ant1 Emission

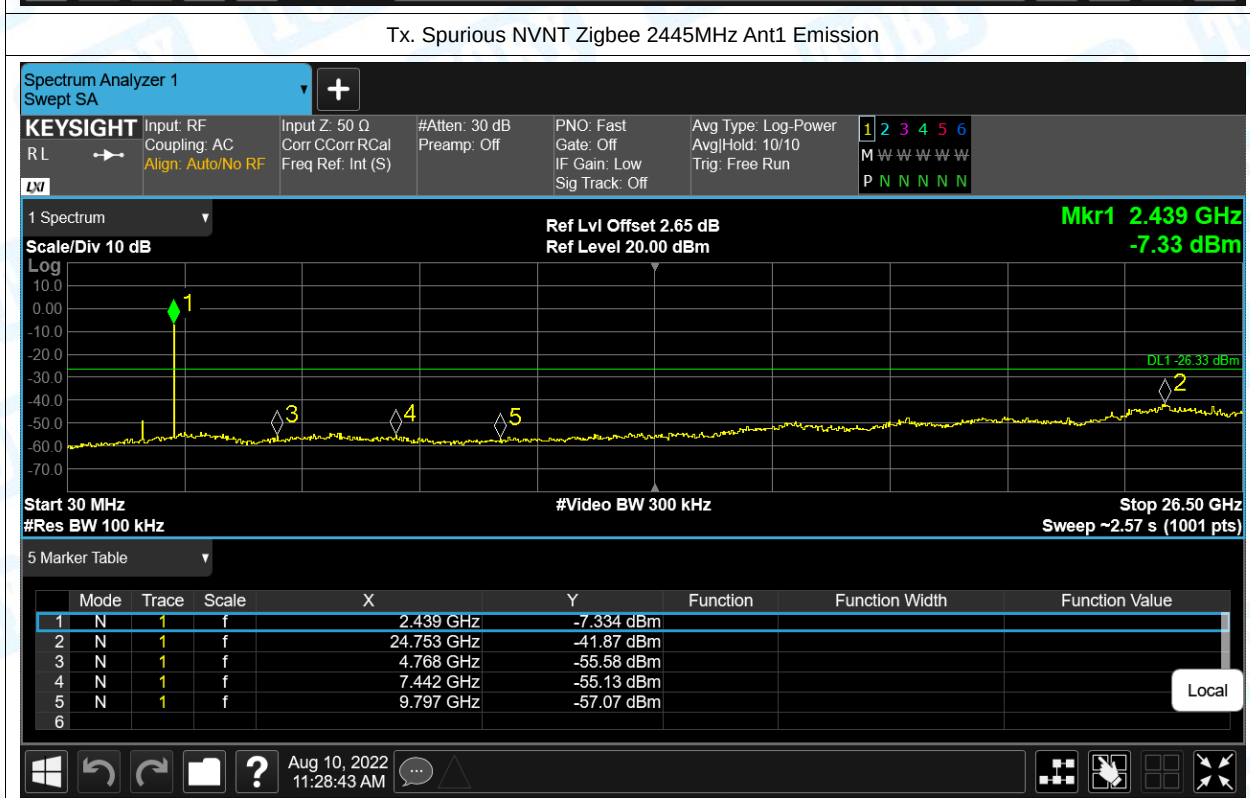
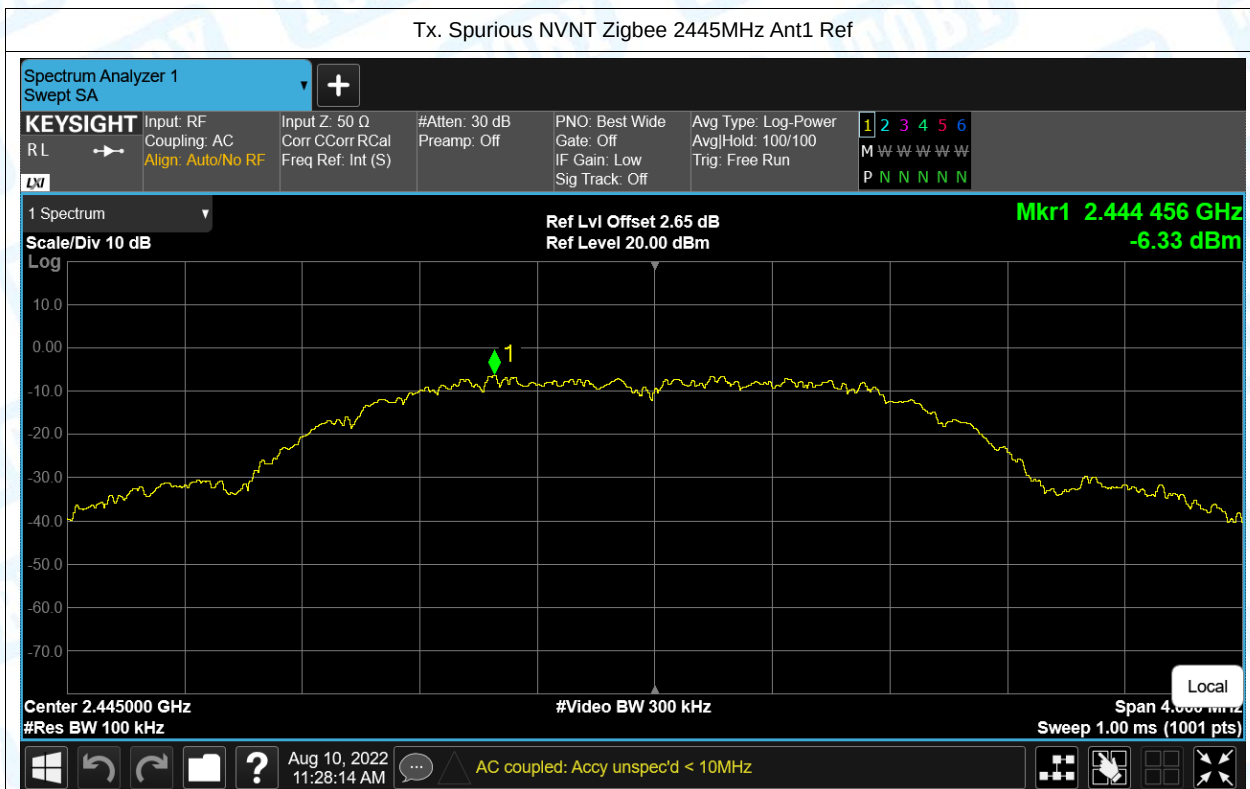


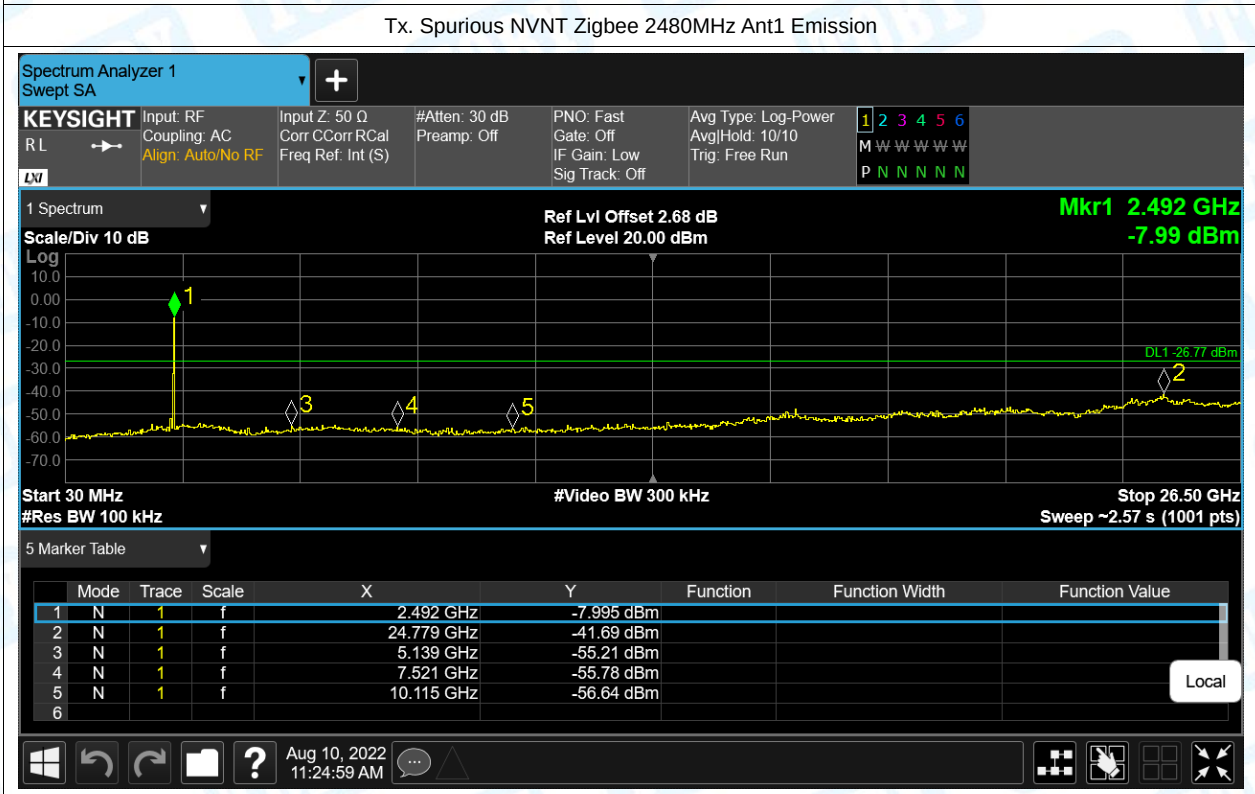
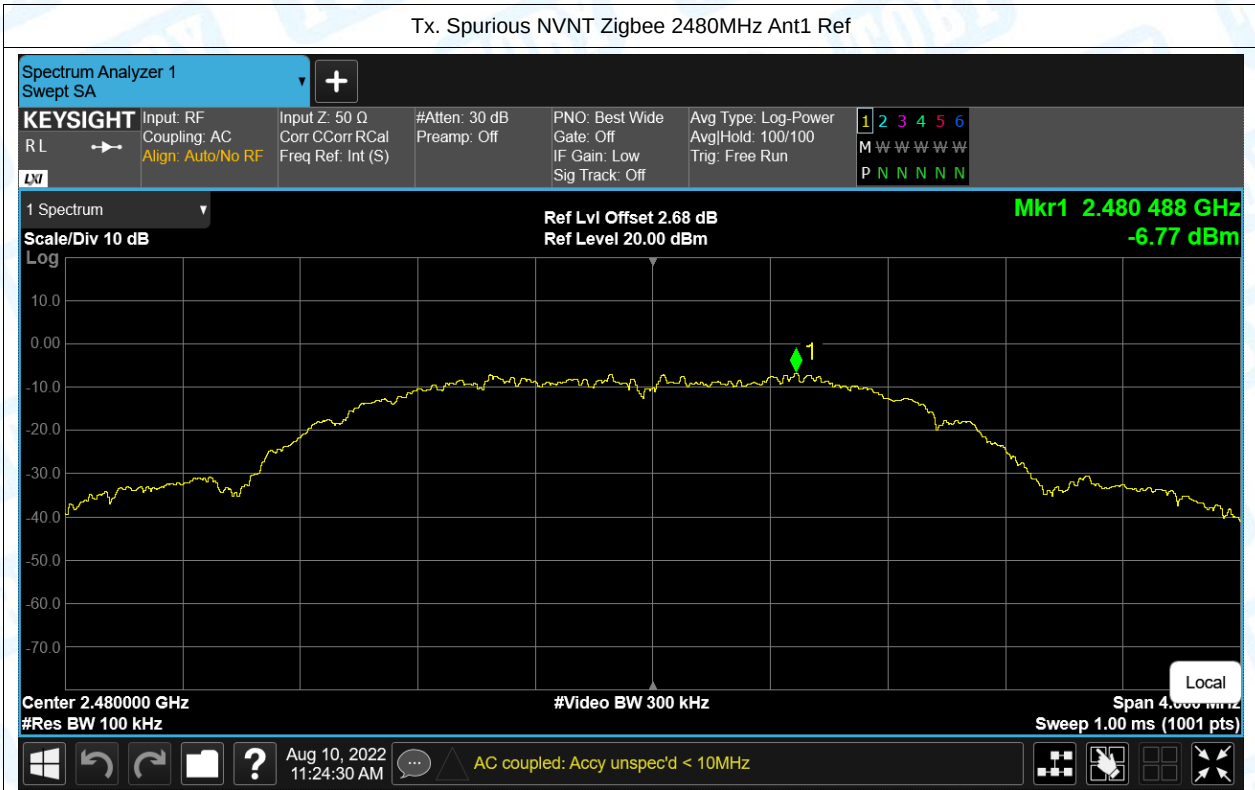


Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	Zigbee	2405	Ant1	-35.89	-20	Pass
NVNT	Zigbee	2445	Ant1	-35.54	-20	Pass
NVNT	Zigbee	2480	Ant1	-34.92	-20	Pass

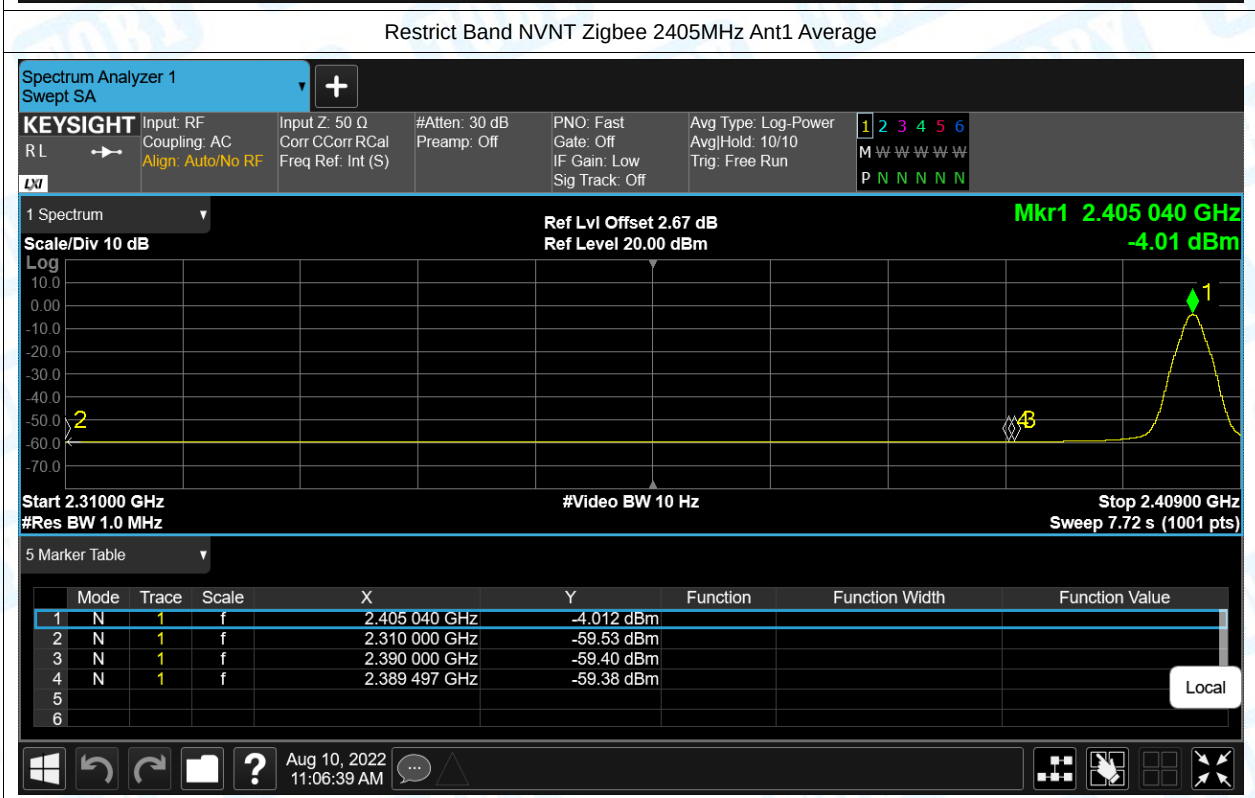
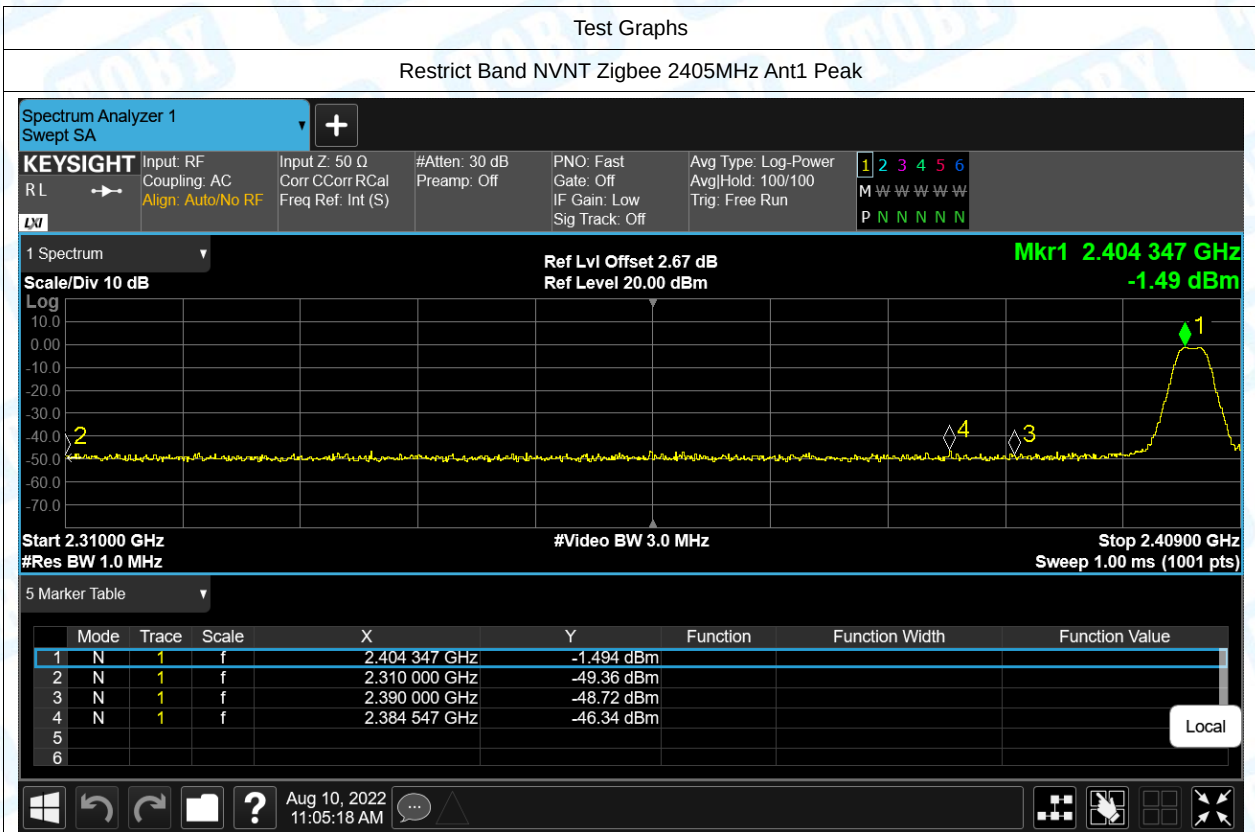




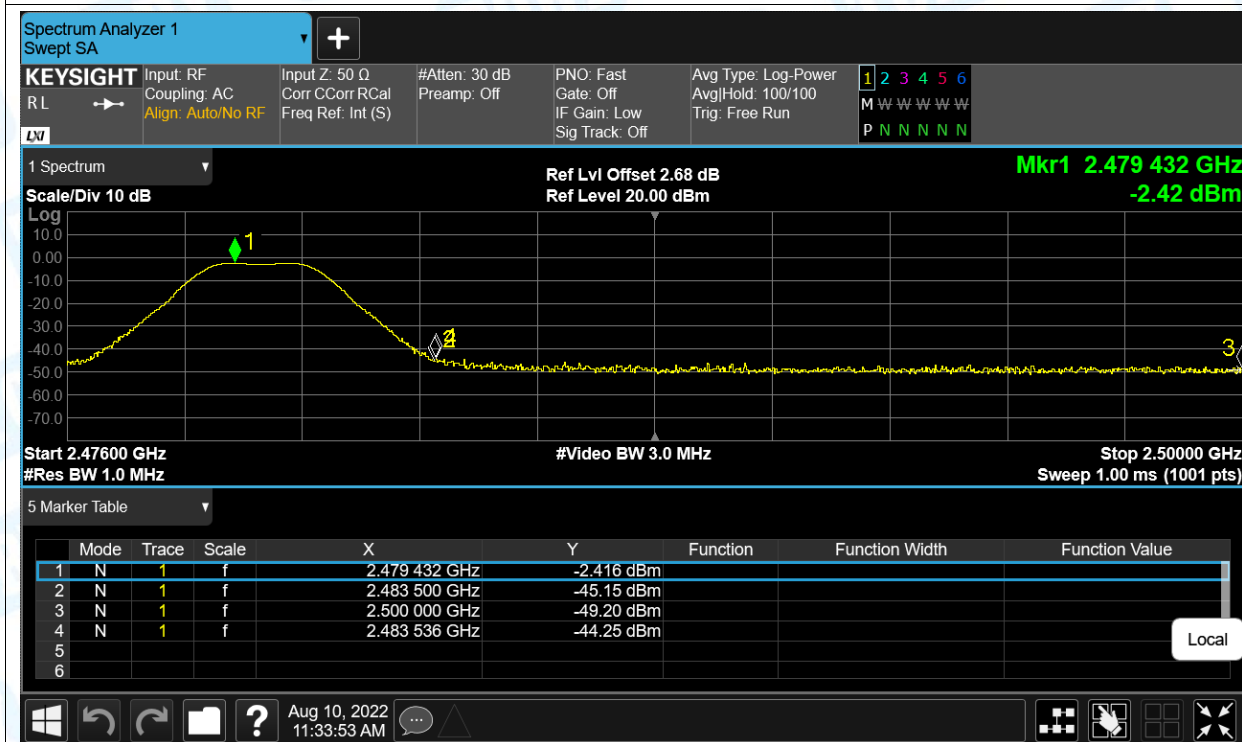


Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	Zigbee	2405	Ant1	2310	-49.36	2	47.9	Peak	74	Pass
NVNT	Zigbee	2405	Ant1	2310	-59.53	2	37.73	Average	54	Pass
NVNT	Zigbee	2405	Ant1	2384.547	-46.34	2	50.92	Peak	74	Pass
NVNT	Zigbee	2405	Ant1	2389.497	-59.38	2	37.88	Average	54	Pass
NVNT	Zigbee	2405	Ant1	2390	-49.28	2	47.98	Peak	74	Pass
NVNT	Zigbee	2405	Ant1	2390	-59.42	2	37.84	Average	54	Pass
NVNT	Zigbee	2480	Ant1	2483.5	-45.15	2	52.11	Peak	74	Pass
NVNT	Zigbee	2480	Ant1	2483.5	-54.75	2	42.51	Average	54	Pass
NVNT	Zigbee	2480	Ant1	2483.536	-44.25	2	53.01	Peak	74	Pass
NVNT	Zigbee	2480	Ant1	2483.512	-54.75	2	42.51	Average	54	Pass
NVNT	Zigbee	2480	Ant1	2500	-49.2	2	48.06	Peak	74	Pass
NVNT	Zigbee	2480	Ant1	2500	-59.23	2	38.03	Average	54	Pass



Restrict Band NVNT Zigbee 2480MHz Ant1 Peak



Restrict Band NVNT Zigbee 2480MHz Ant1 Average

