

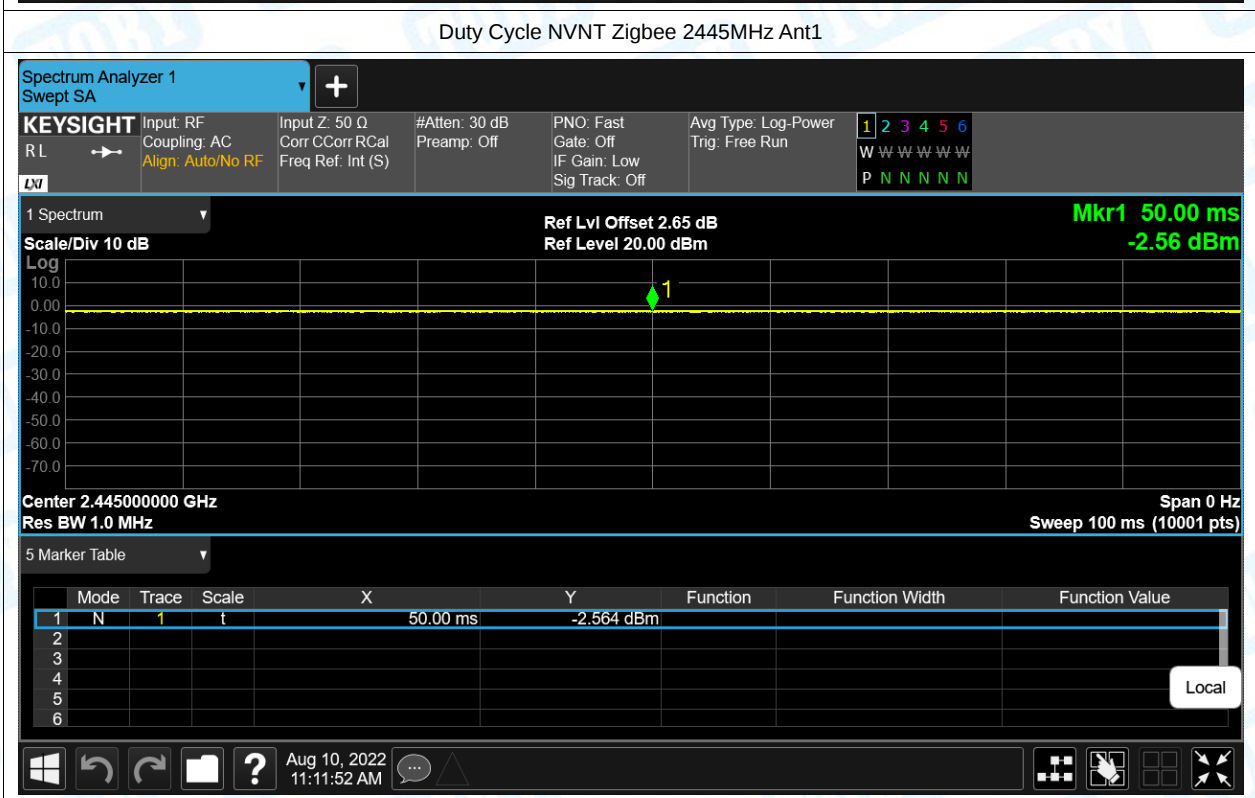
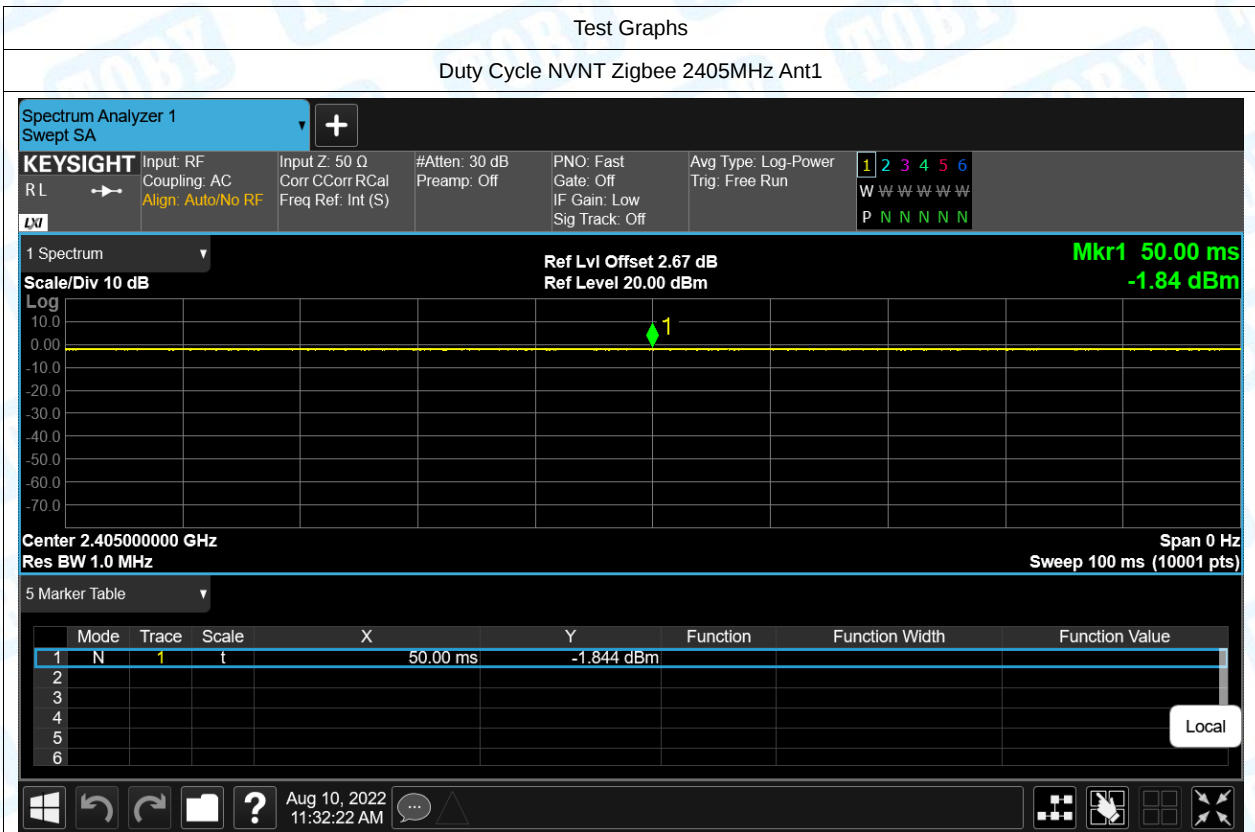
RF Test Data for Zigbee

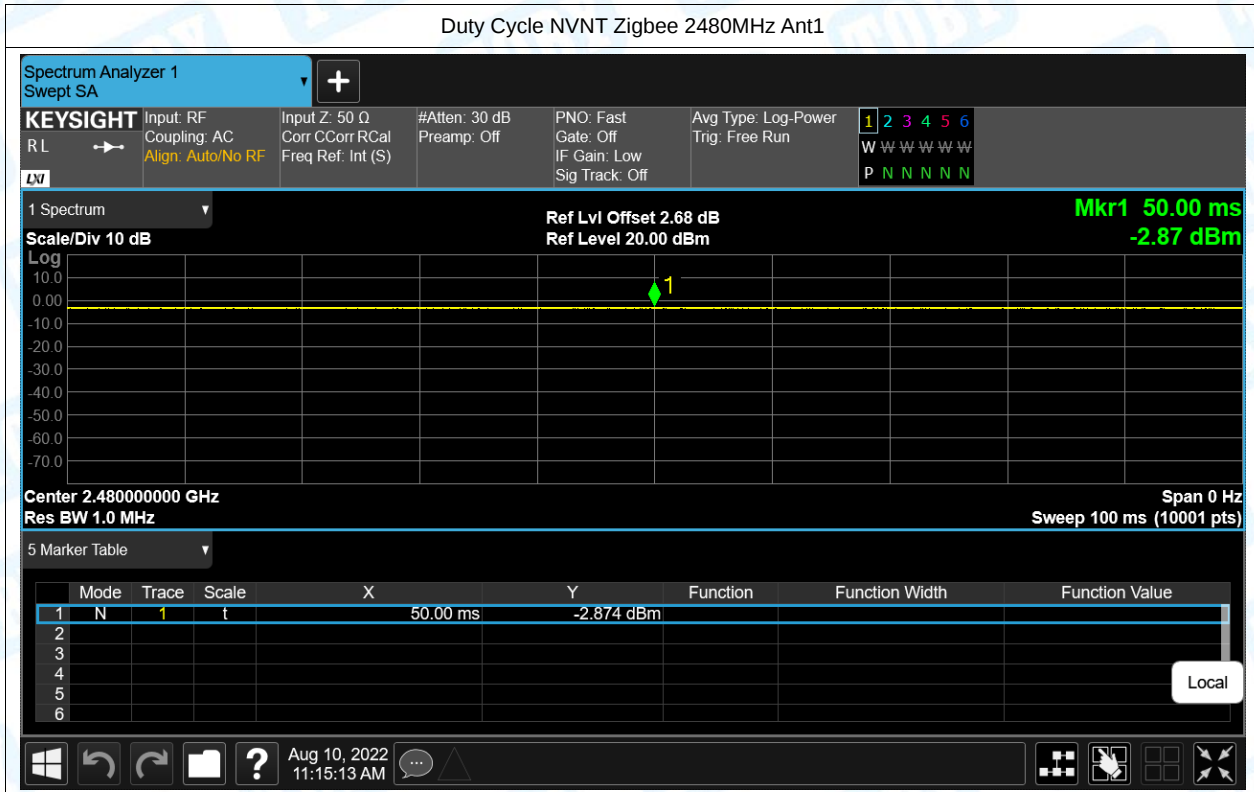
(Conducted Measurements)

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



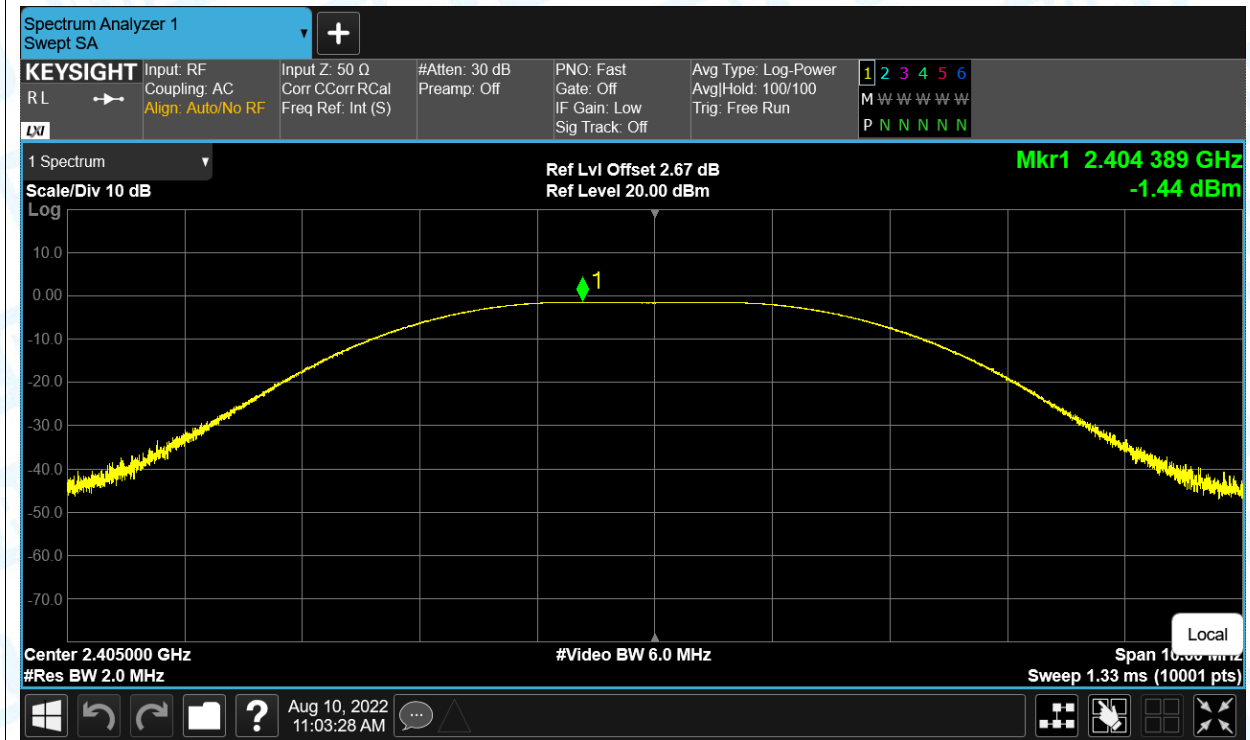


Maximum Conducted Output Power

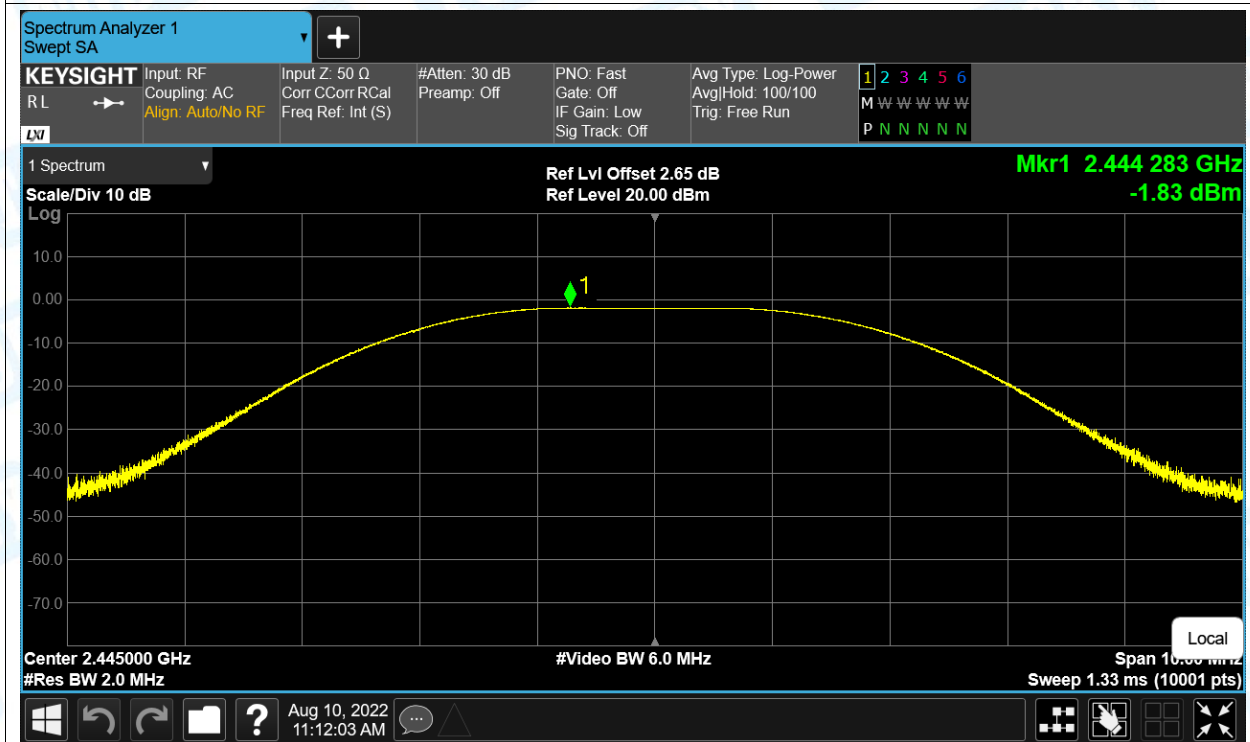
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	Zigbee	2405	Ant1	-1.444	30	Pass
NVNT	Zigbee	2445	Ant1	-1.825	30	Pass
NVNT	Zigbee	2480	Ant1	-2.295	30	Pass

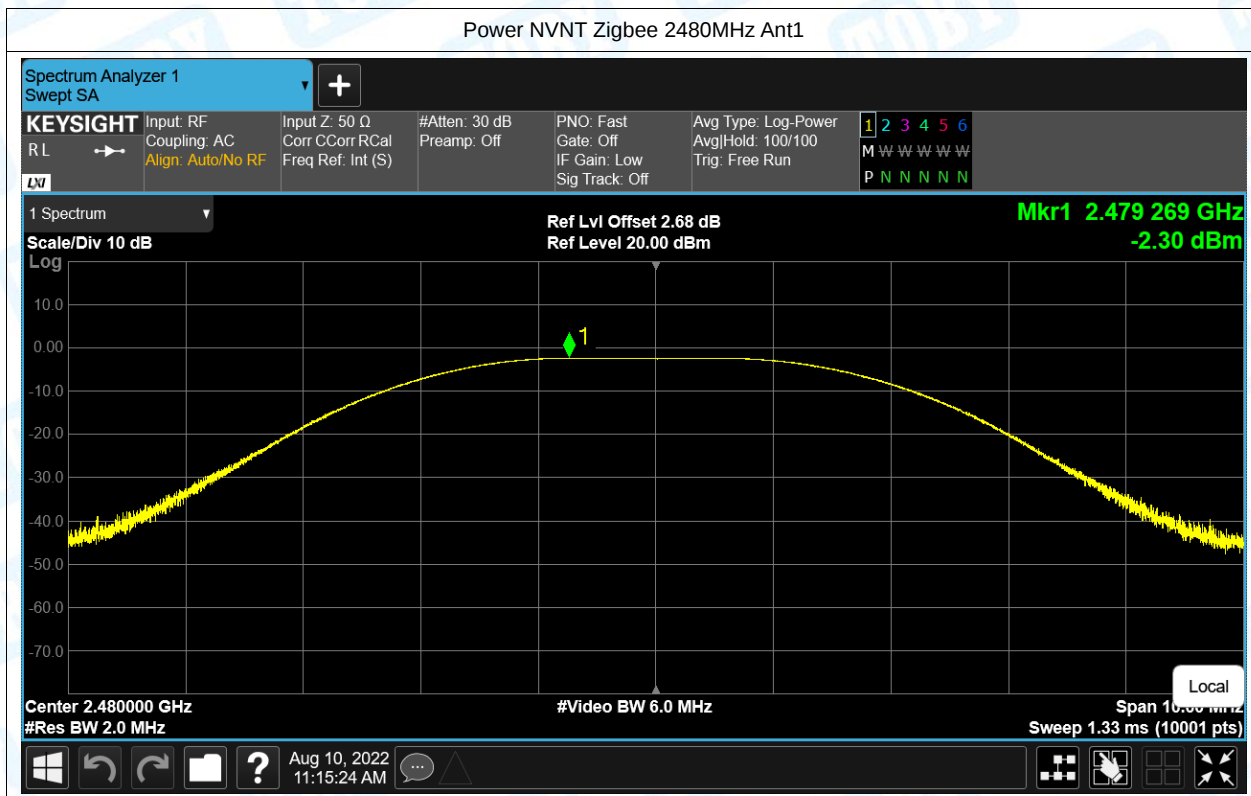
Test Graphs

Power NVNT Zigbee 2405MHz Ant1



Power NVNT Zigbee 2445MHz Ant1



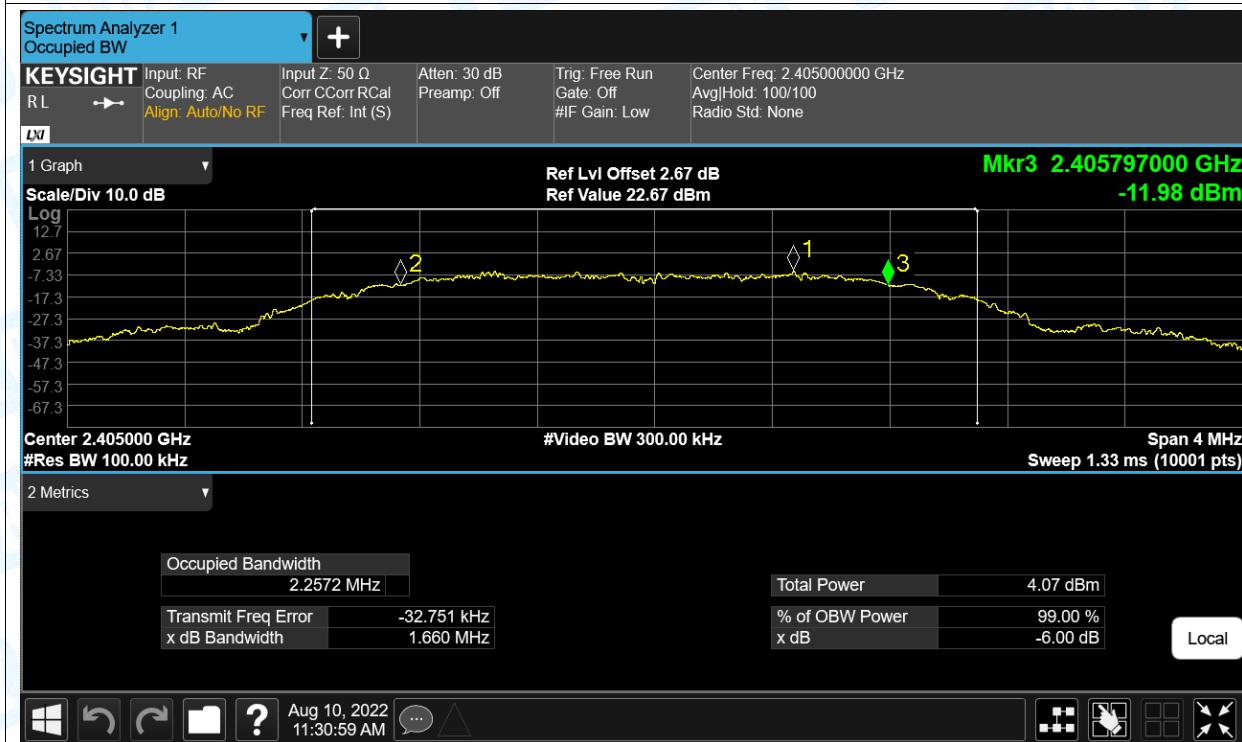


-6dB Bandwidth

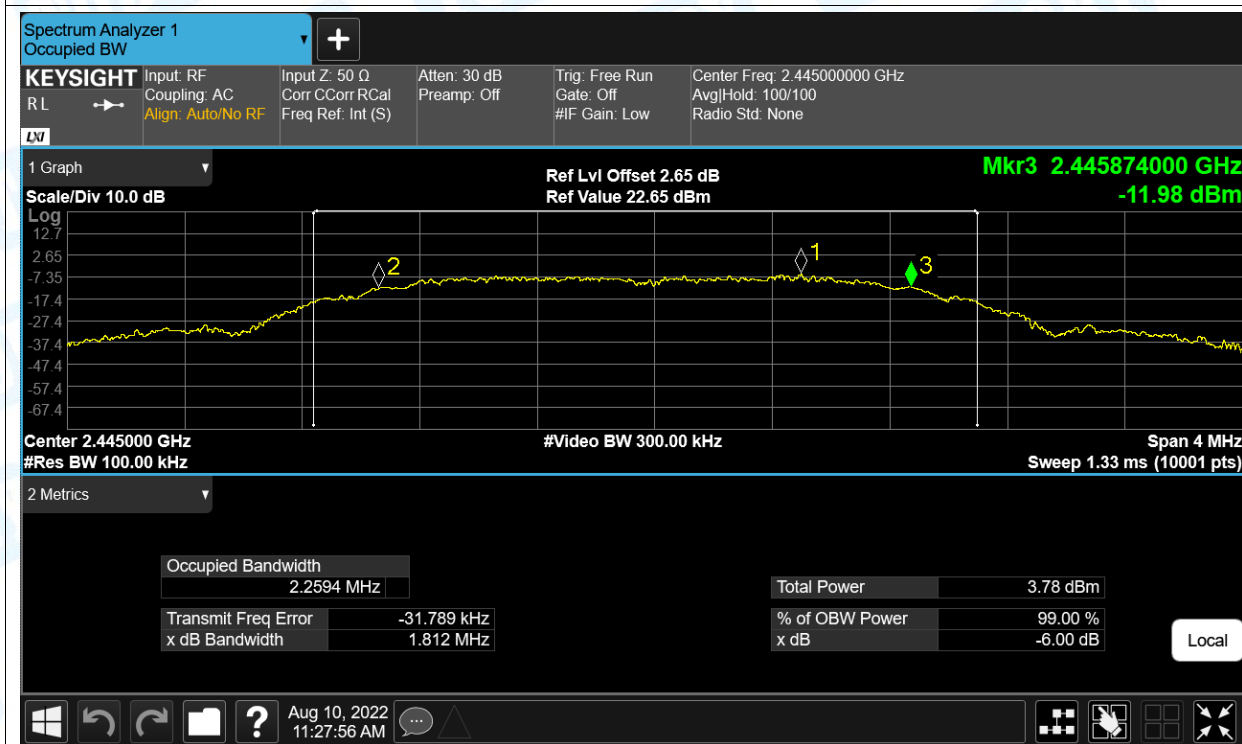
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	Zigbee	2405	Ant1	1.66	0.5	Pass
NVNT	Zigbee	2445	Ant1	1.81	0.5	Pass
NVNT	Zigbee	2480	Ant1	1.71	0.5	Pass

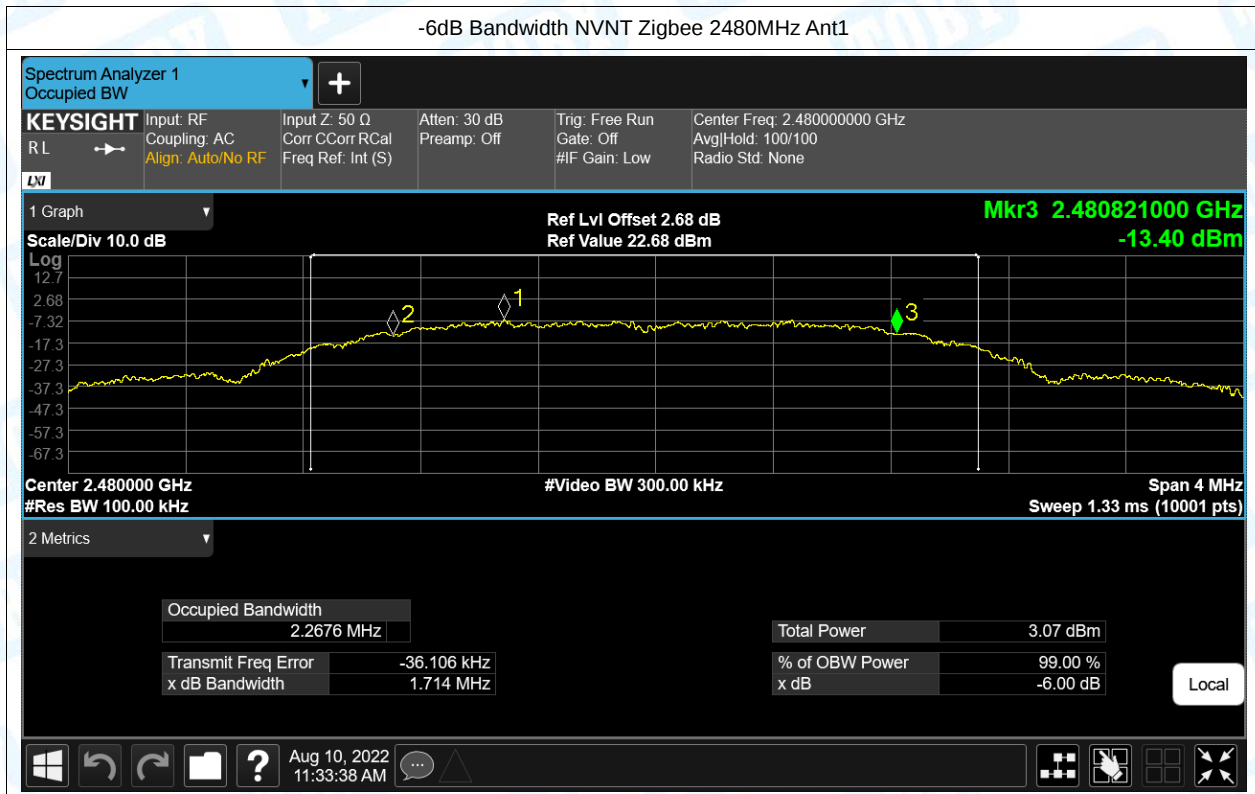
Test Graphs

-6dB Bandwidth NVNT Zigbee 2405MHz Ant1



-6dB Bandwidth NVNT Zigbee 2445MHz Ant1



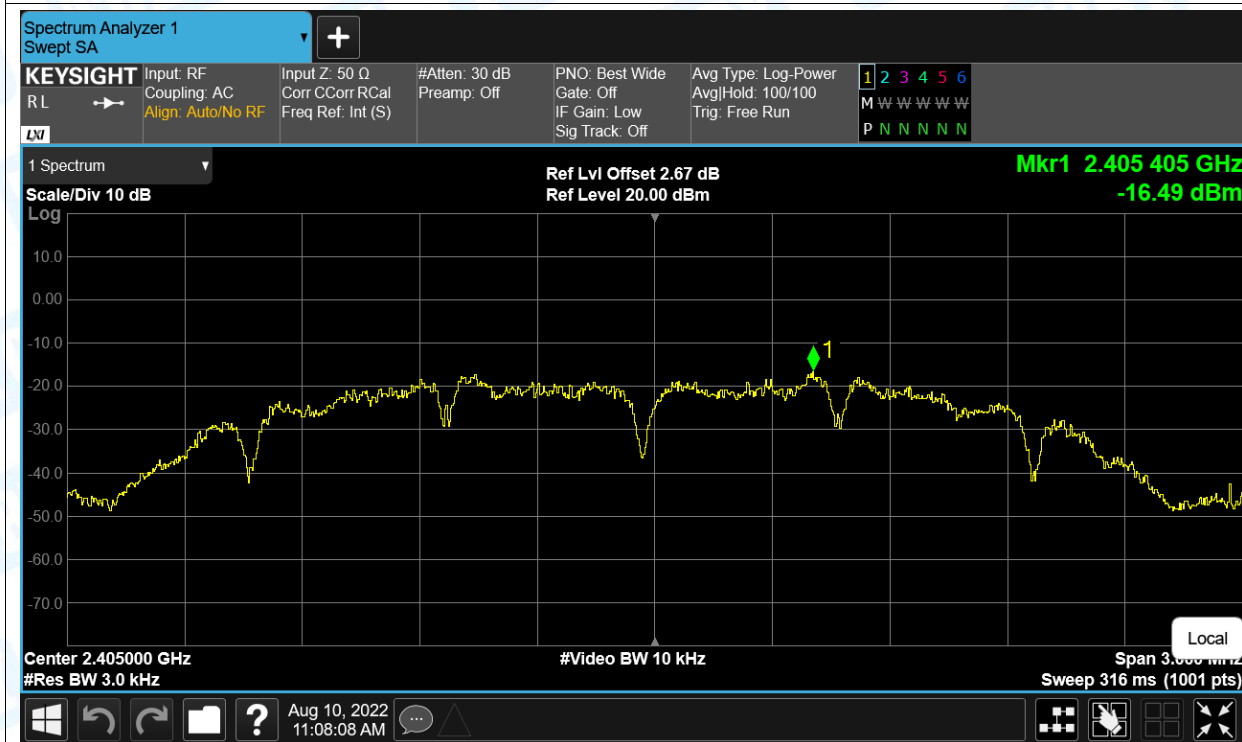


Maximum Power Spectral Density Level

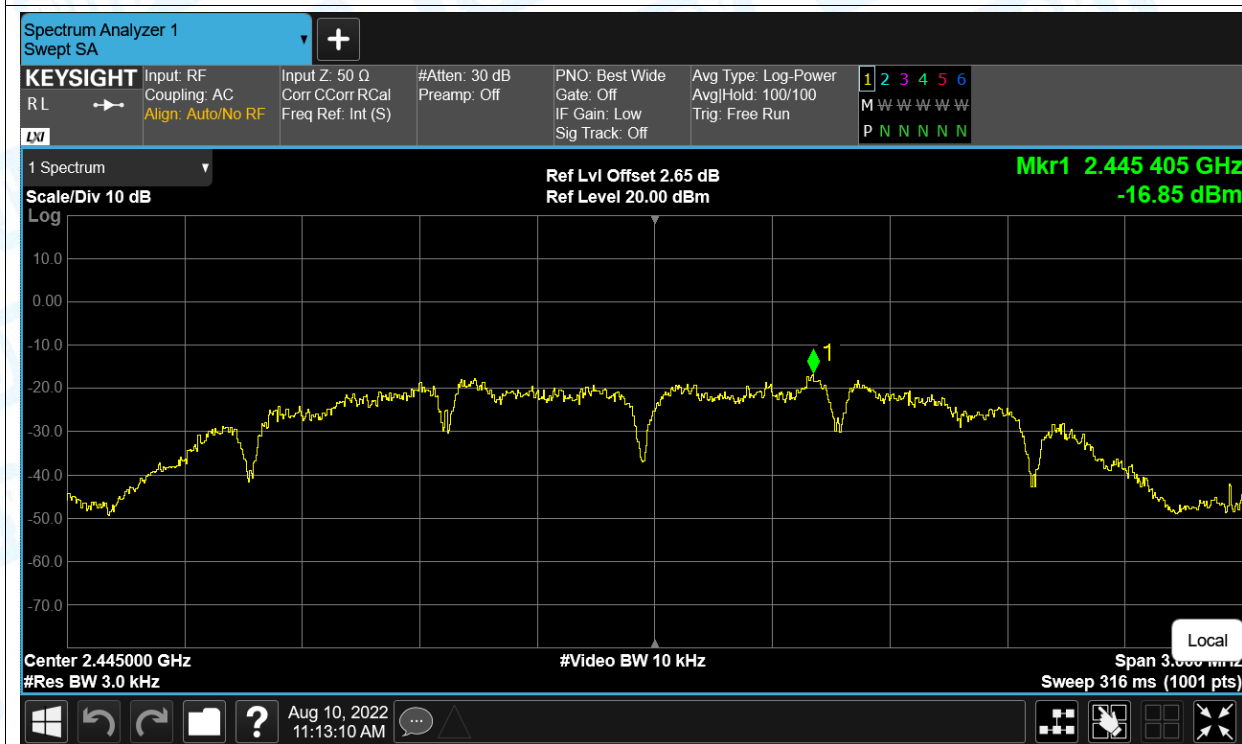
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	Zigbee	2405	Ant1	-16.491	8	Pass
NVNT	Zigbee	2445	Ant1	-16.85	8	Pass
NVNT	Zigbee	2480	Ant1	-17.677	8	Pass

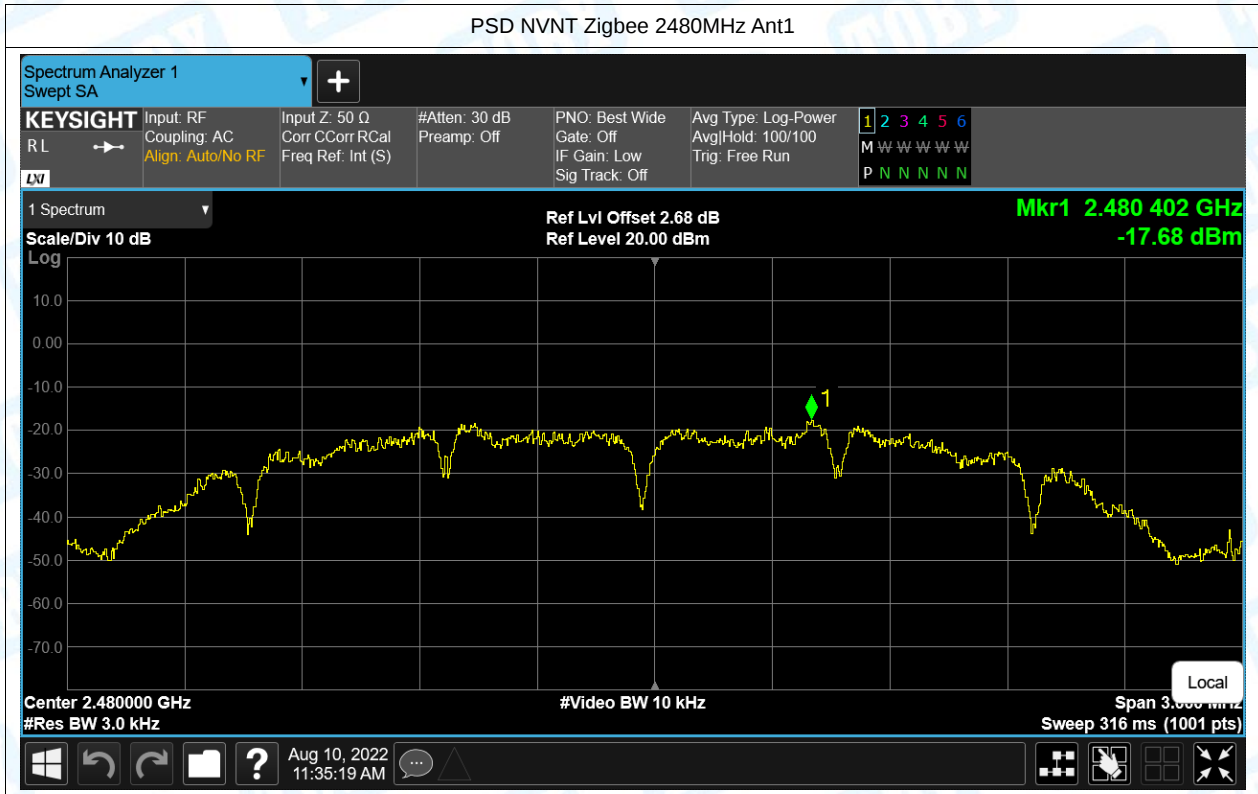
Test Graphs

PSD NVNT Zigbee 2405MHz Ant1



PSD NVNT Zigbee 2445MHz Ant1

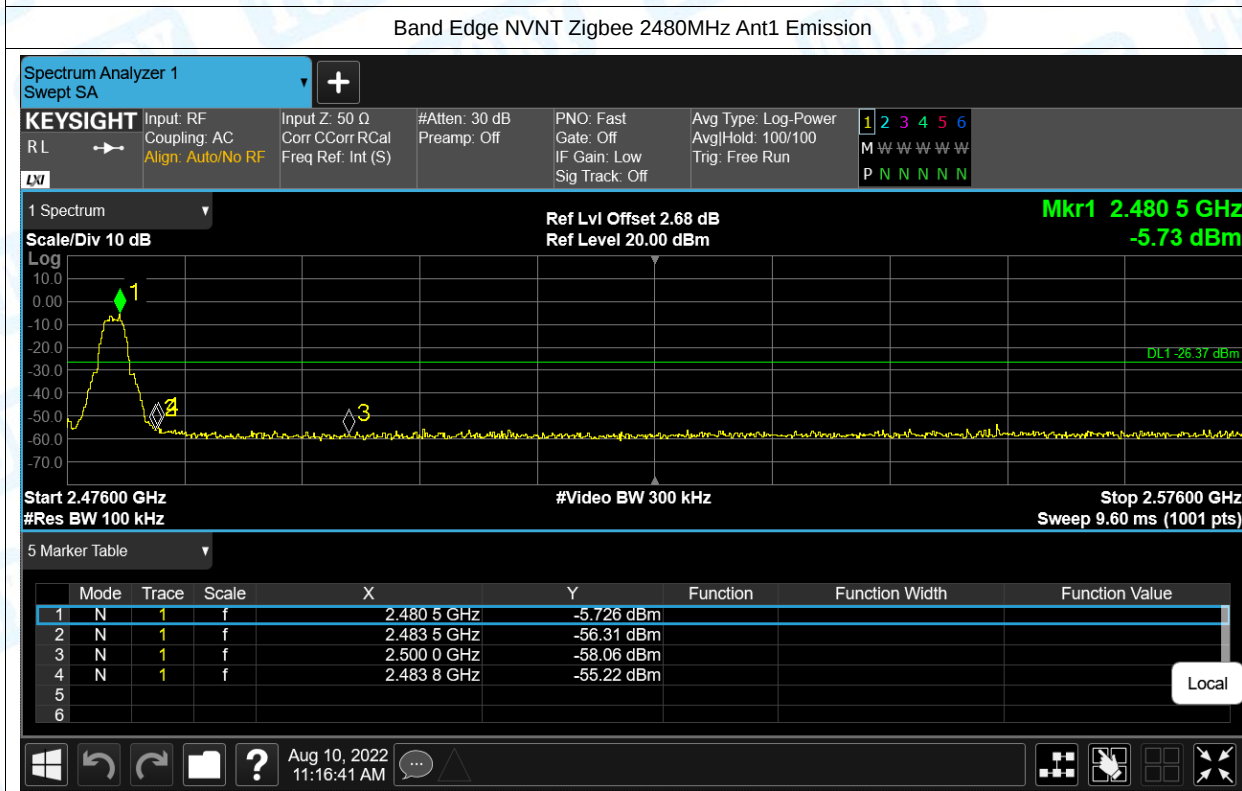
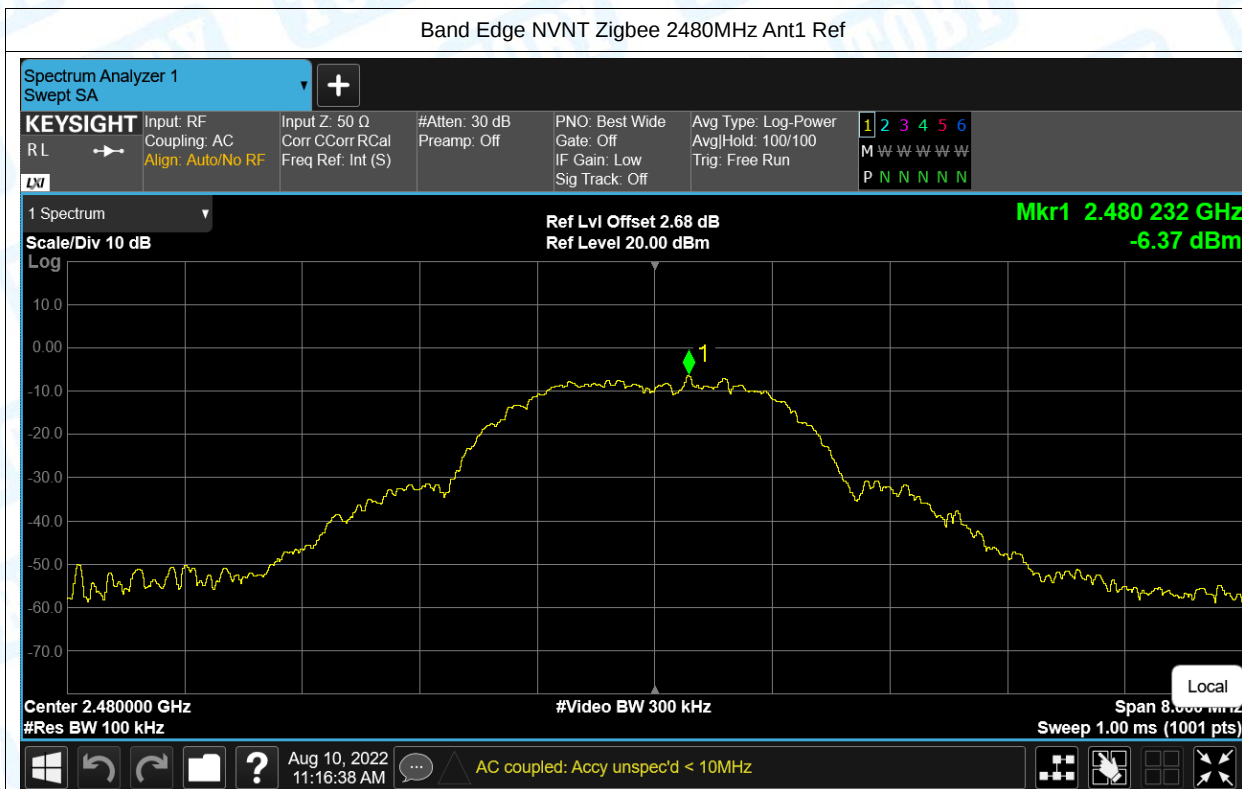




Band Edge

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

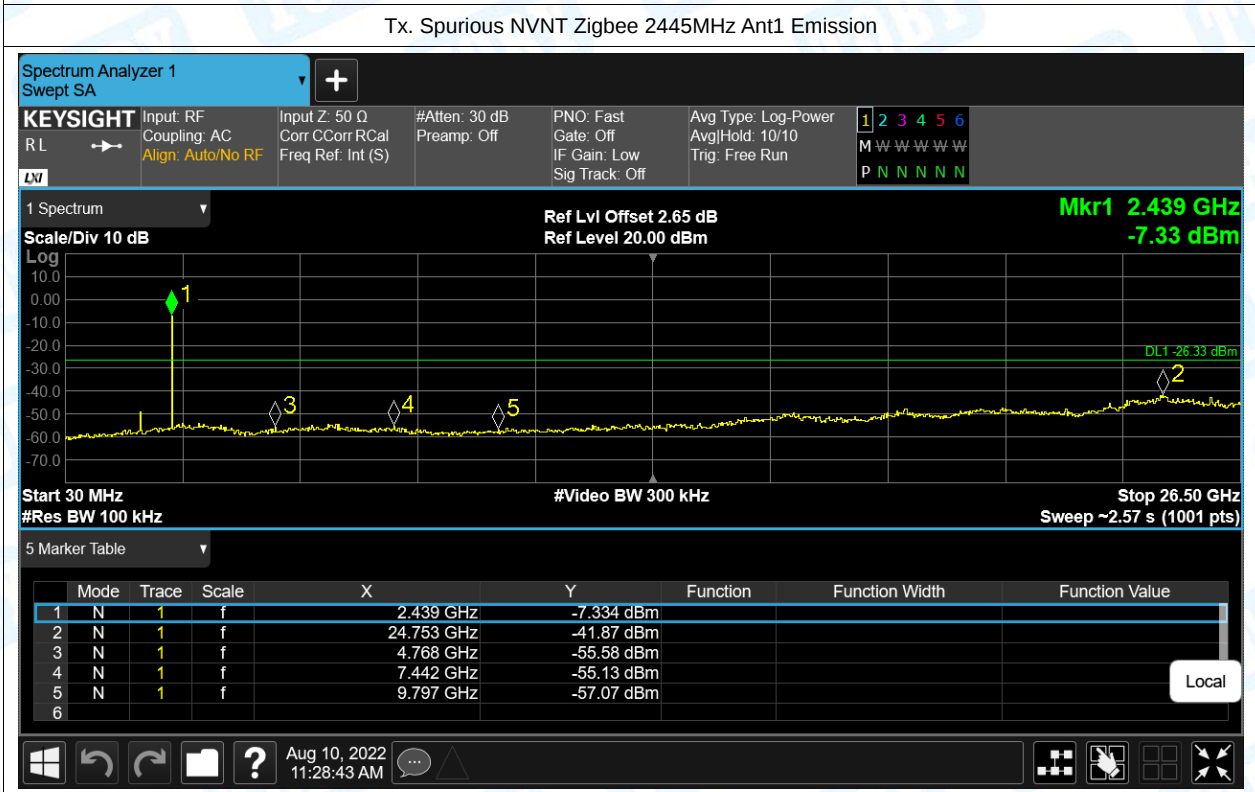
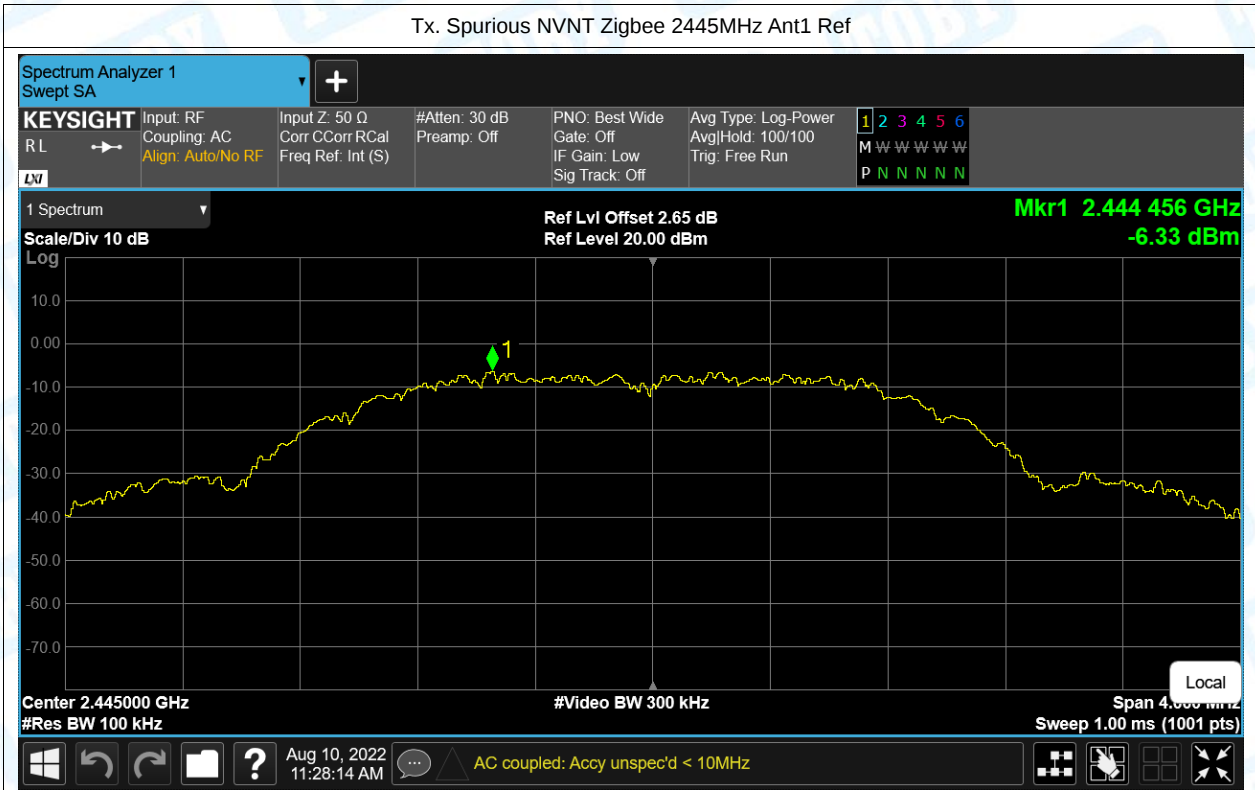


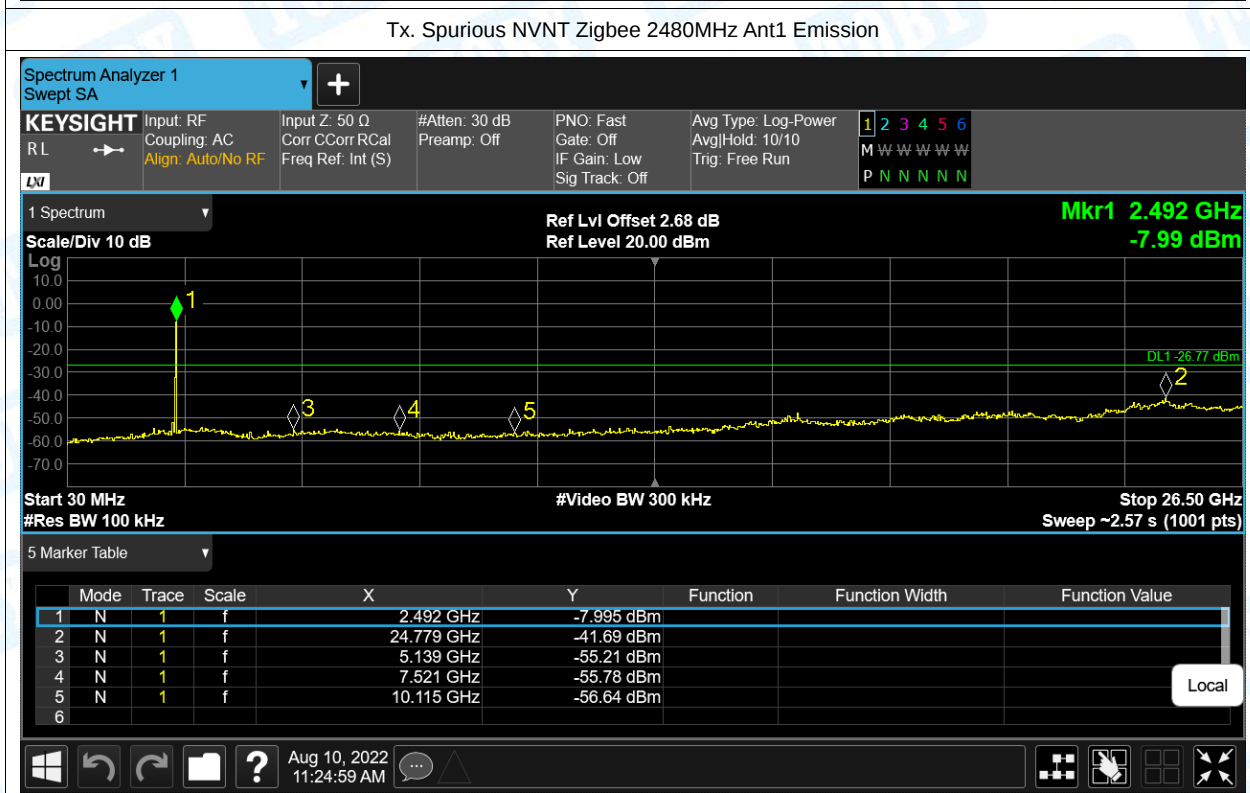
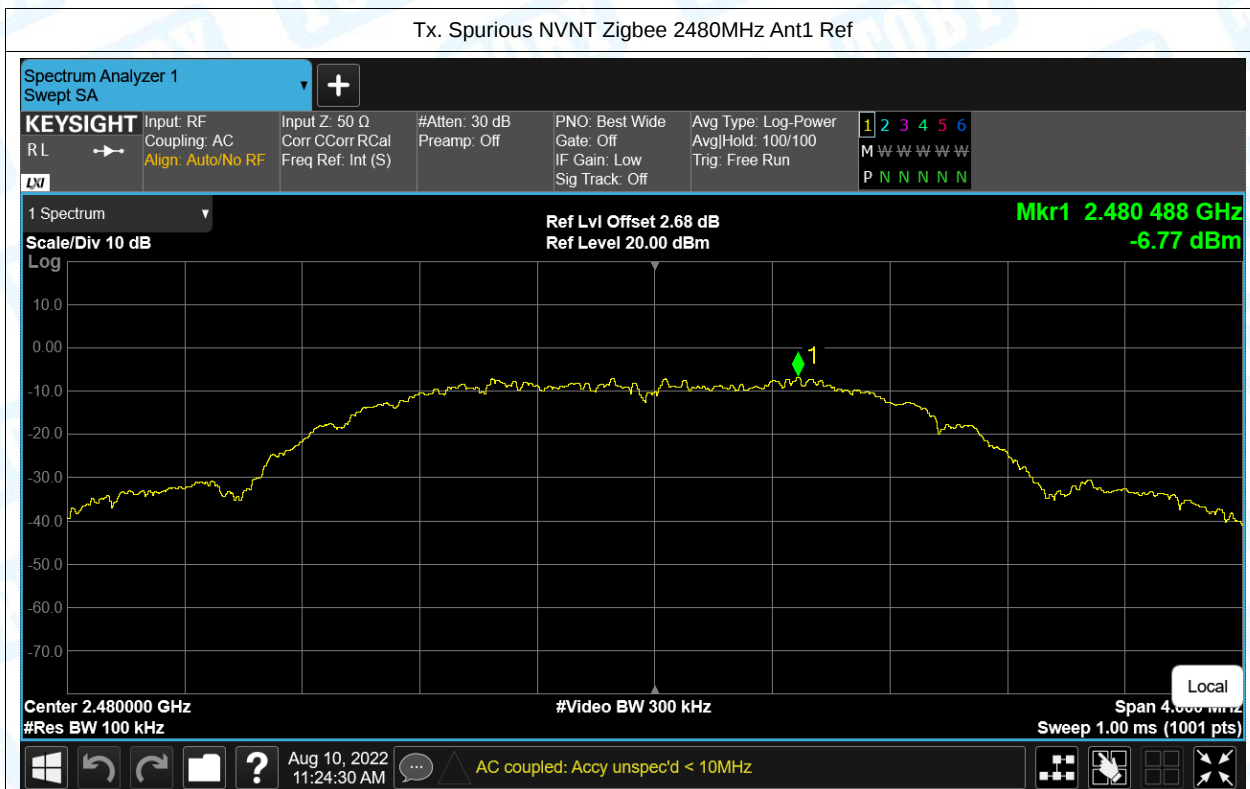


Conducted RF Spurious Emission

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

