



Appendix A

RF Test Data for Zigbee (Conducted Measurement)

Product Name: Curtain Robot Doodle ZIGBEE Charging Model

Test Model: ADCBZI02

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jerry Chu
Supervised by:	Nick Peng





A.1 -6dB Bandwidth

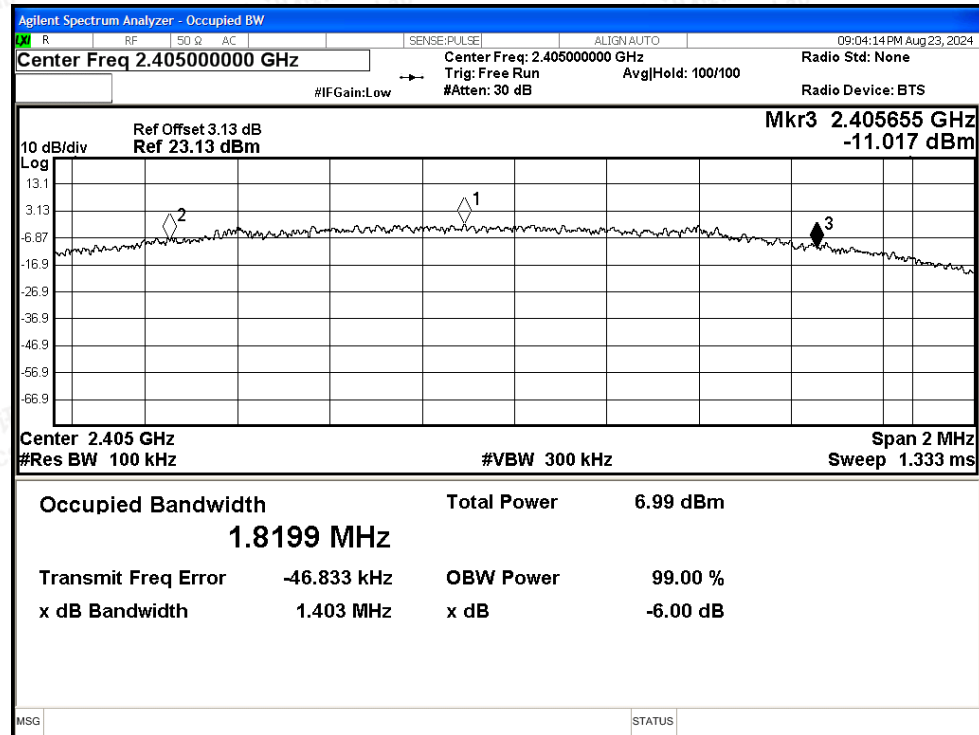
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ZIGBEE	2405	Ant	1.403	>=0.5	Pass
NVNT	ZIGBEE	2440	Ant	1.276	>=0.5	Pass
NVNT	ZIGBEE	2480	Ant	1.273	>=0.5	Pass



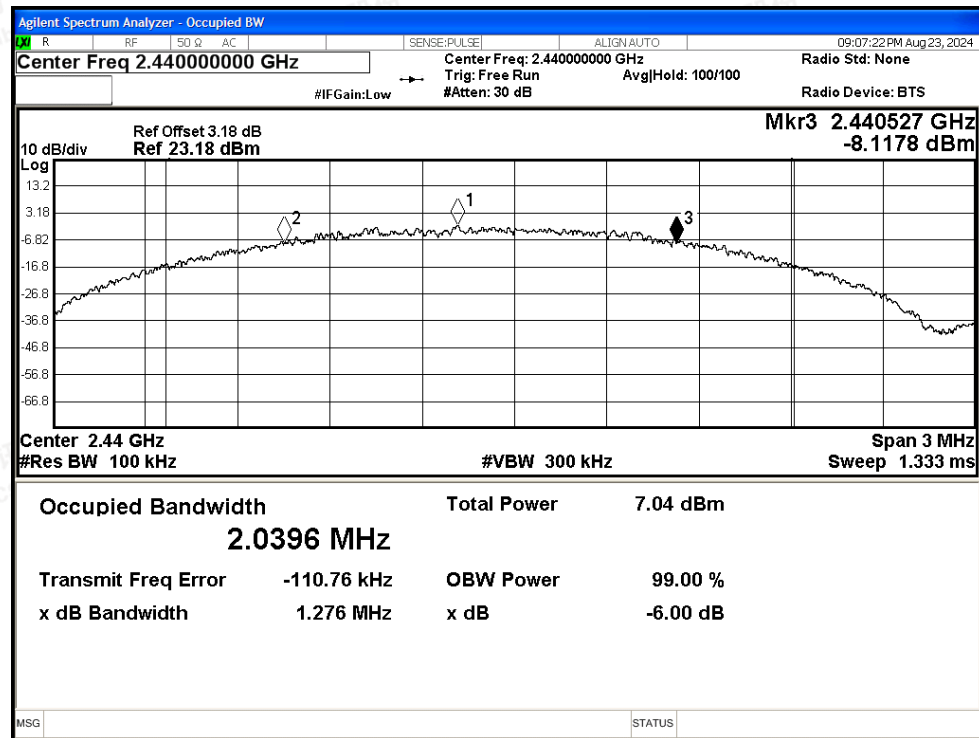


Test Graphs

-6dB Bandwidth NVNT ZIGBEE 2405MHz Ant



-6dB Bandwidth NVNT ZIGBEE 2440MHz Ant

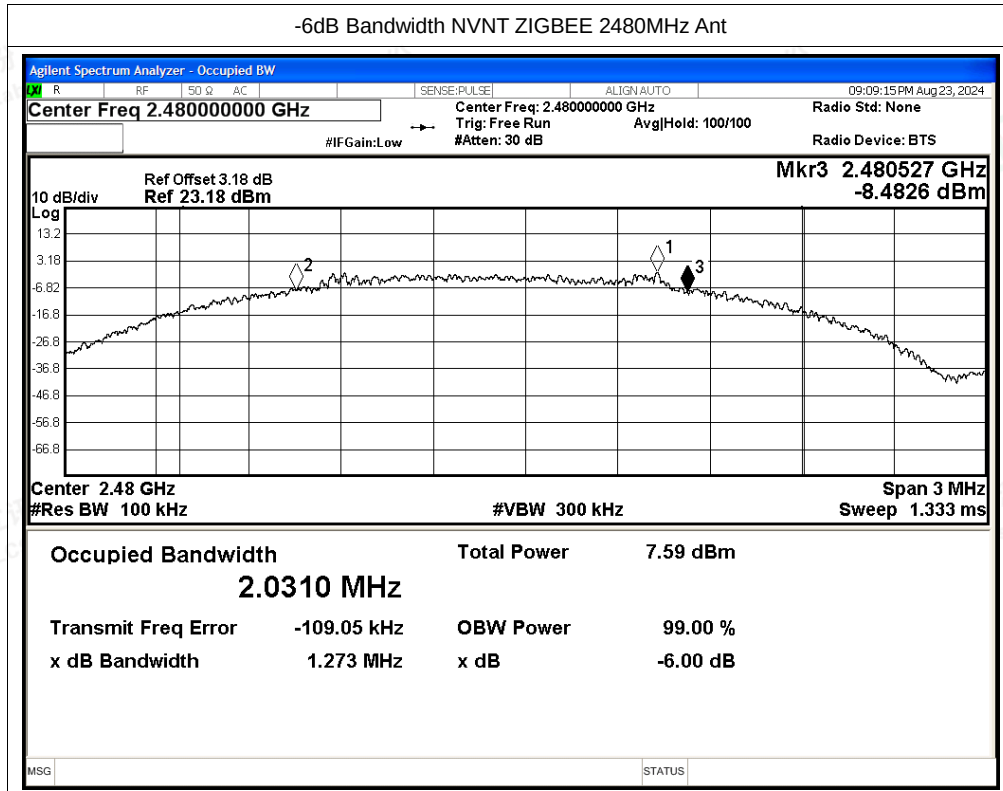


Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

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A.2 Maximum Peak Conducted Output Power

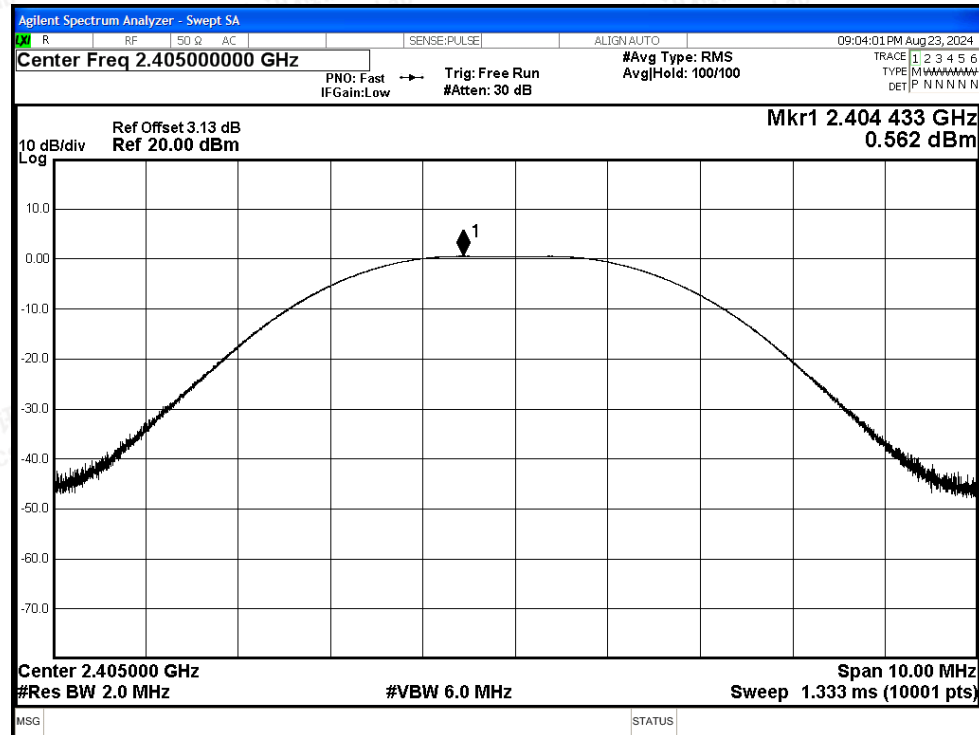
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	ZIGBEE	2405	Ant	0.56	30	Pass
NVNT	ZIGBEE	2440	Ant	0.61	30	Pass
NVNT	ZIGBEE	2480	Ant	0.88	30	Pass



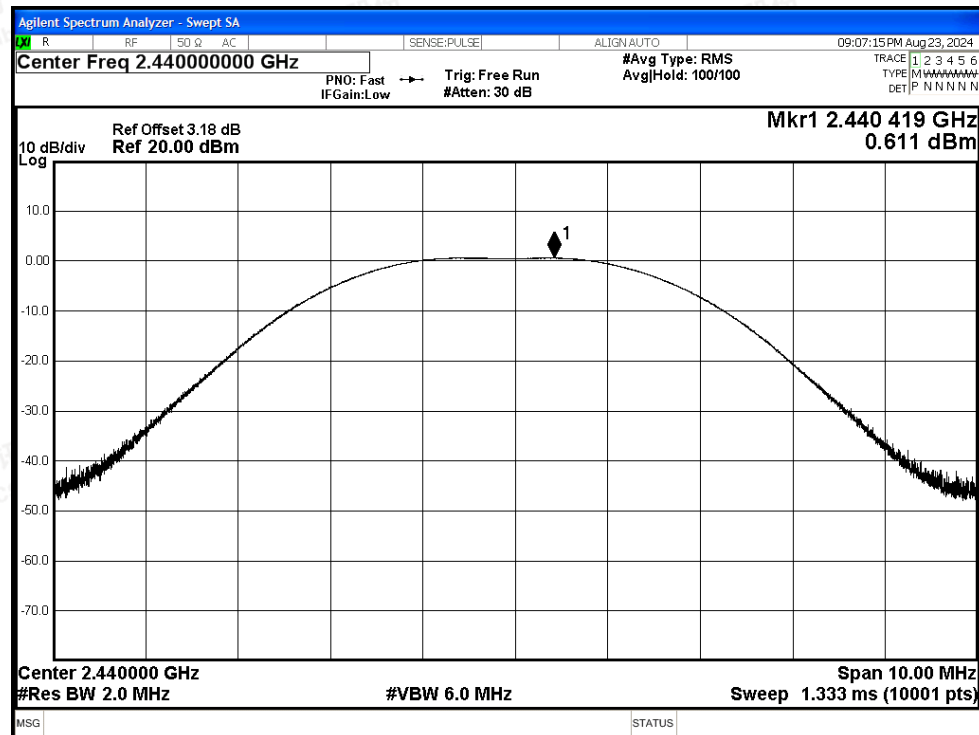


Test Graphs

Power NVNT ZIGBEE 2405MHz Ant



Power NVNT ZIGBEE 2440MHz Ant

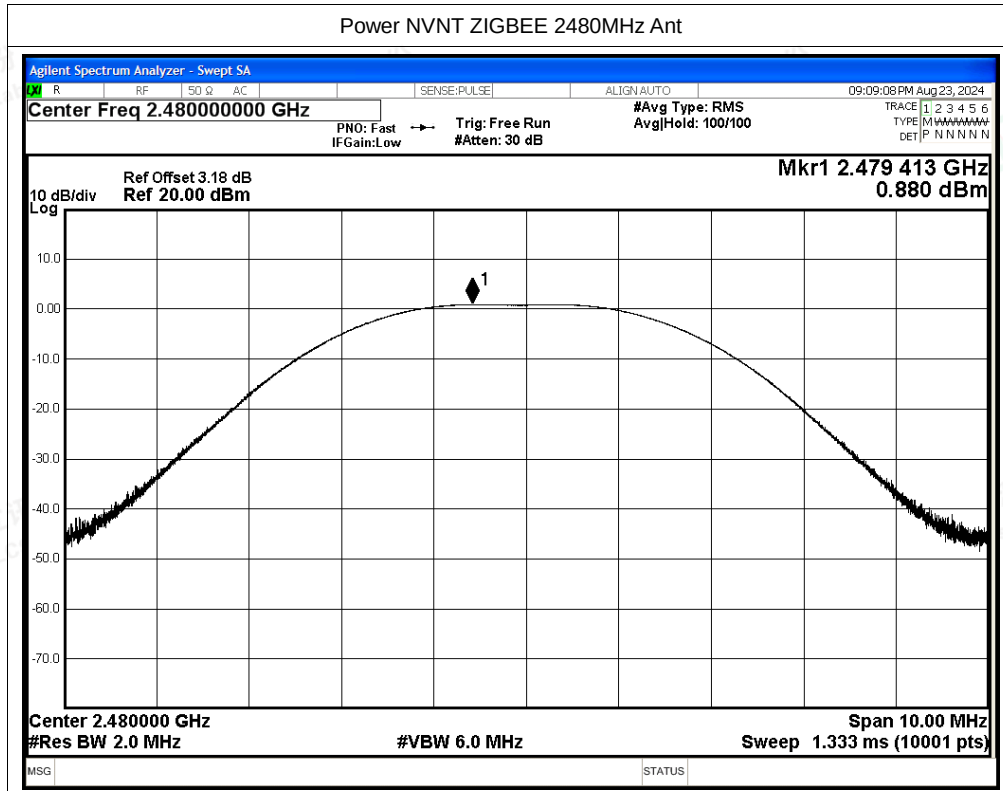


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A.3 Maximum Power Spectral Density Level

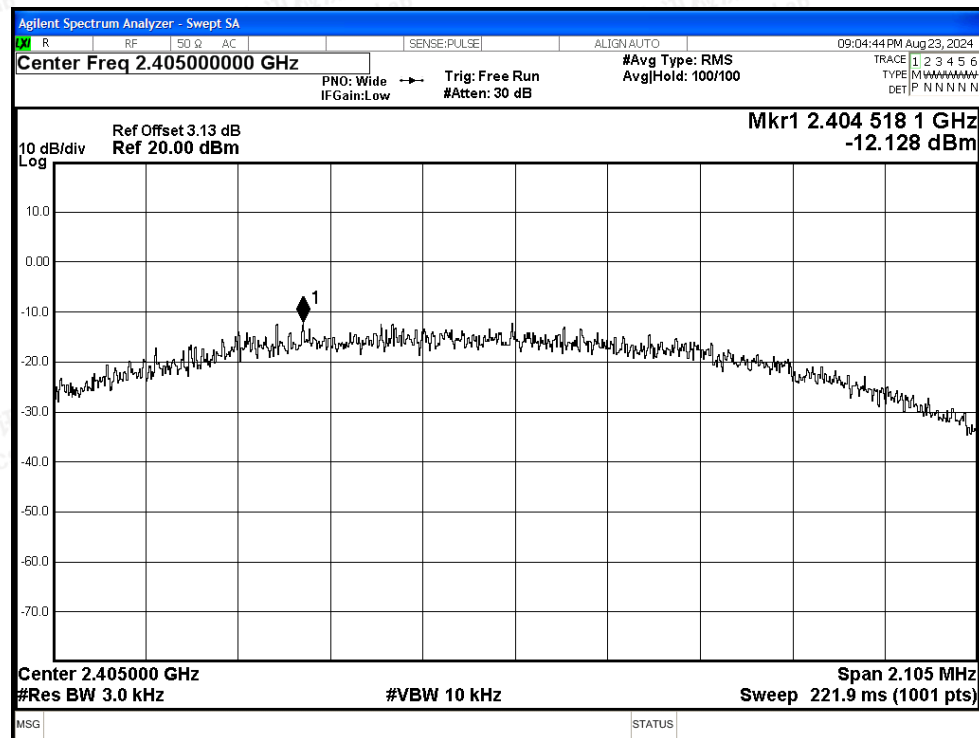
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	ZIGBEE	2405	Ant	-12.13	8	Pass
NVNT	ZIGBEE	2440	Ant	-10.55	8	Pass
NVNT	ZIGBEE	2480	Ant	-13.12	8	Pass



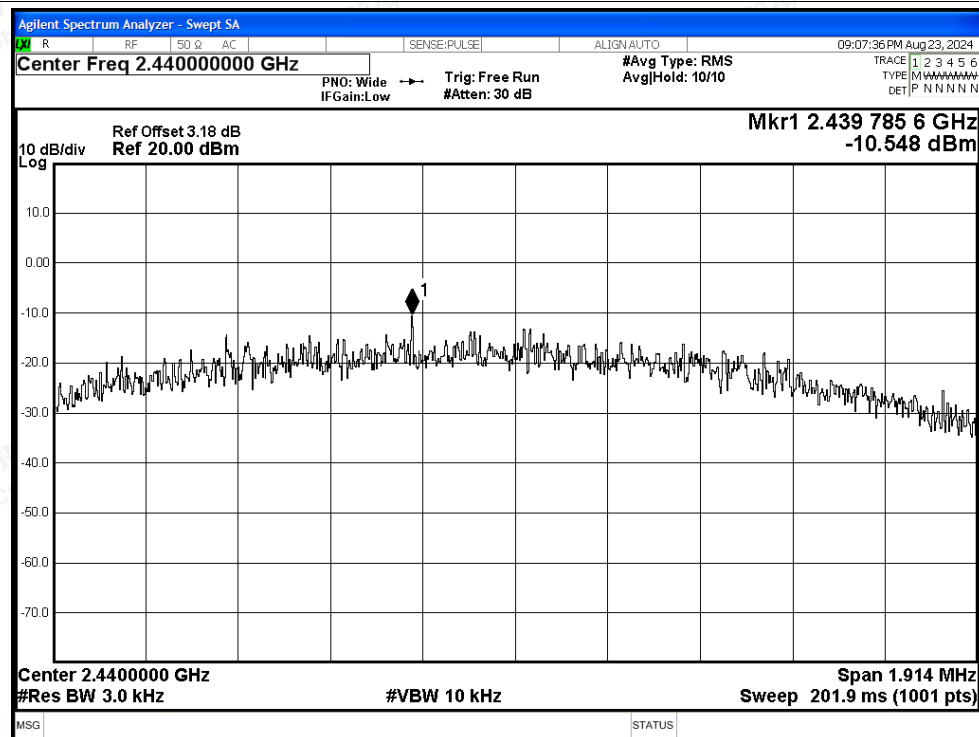


Test Graphs

PSD NVNT ZIGBEE 2405MHz Ant



PSD NVNT ZIGBEE 2440MHz Ant

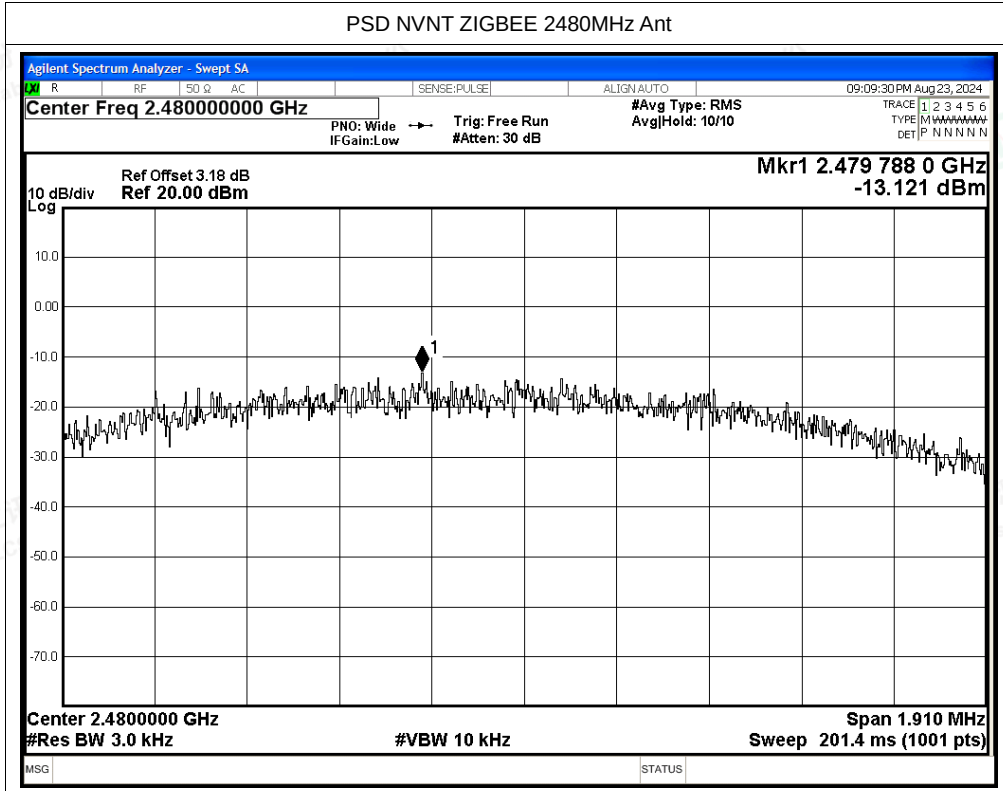


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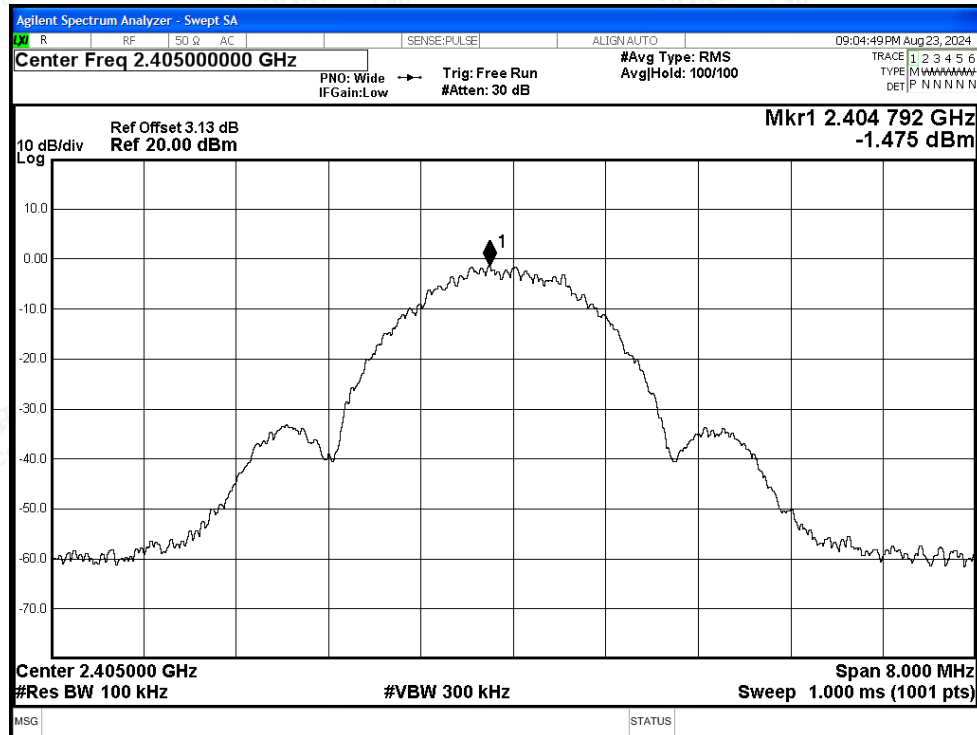
A.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ZIGBEE	2405	Ant	-52.65	-20	Pass
NVNT	ZIGBEE	2480	Ant	-54.92	-20	Pass

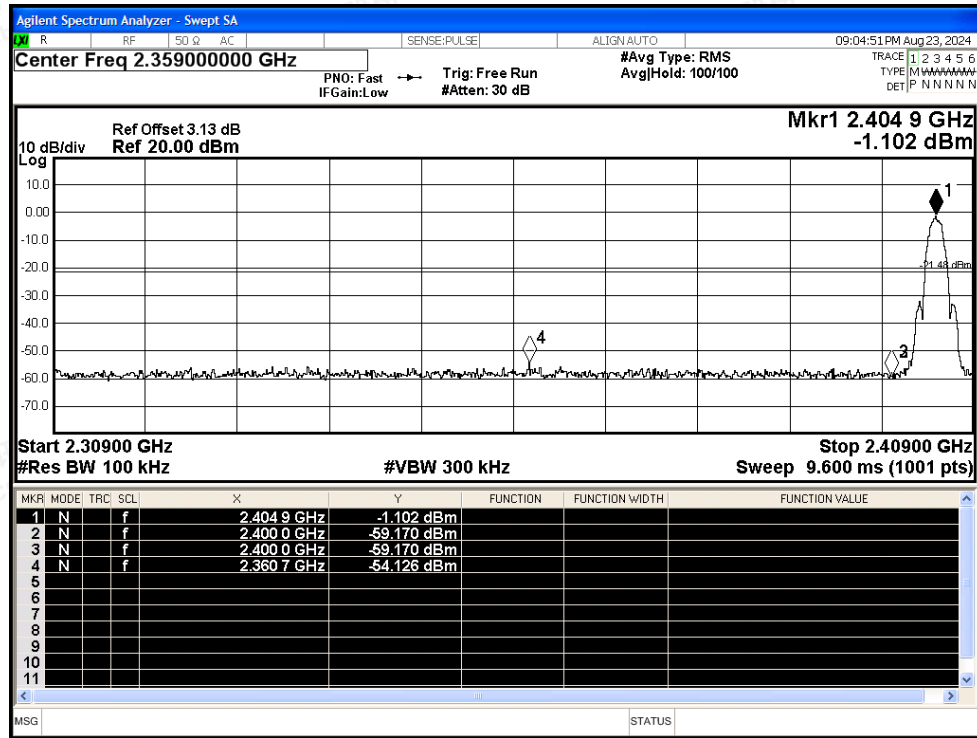


Test Graphs

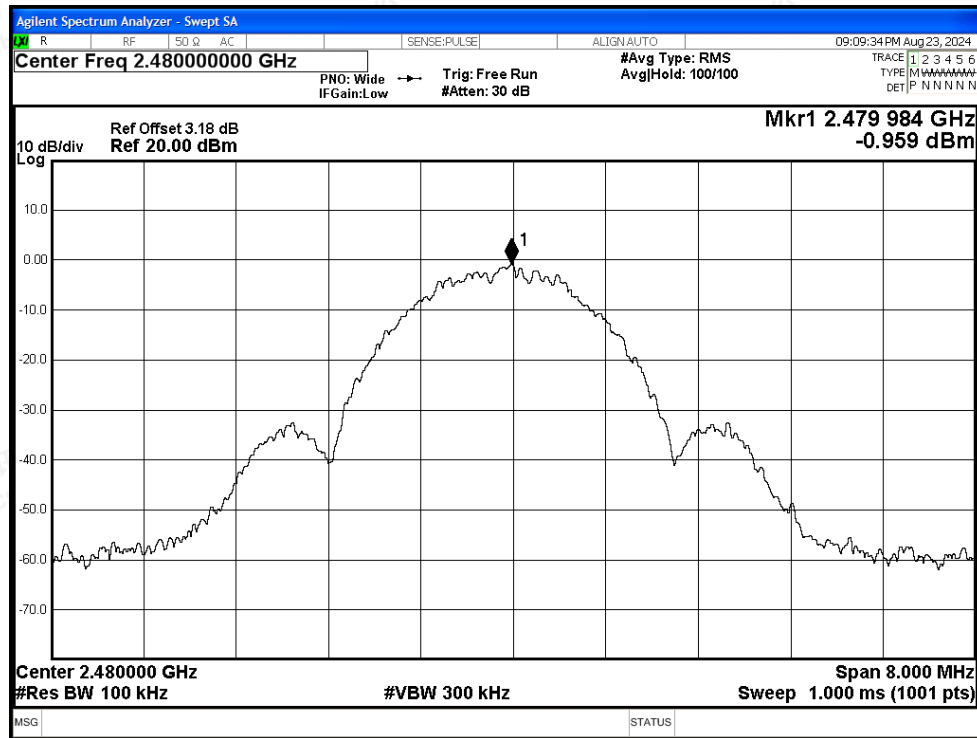
Band Edge NVNT ZIGBEE 2405MHz Ant Ref



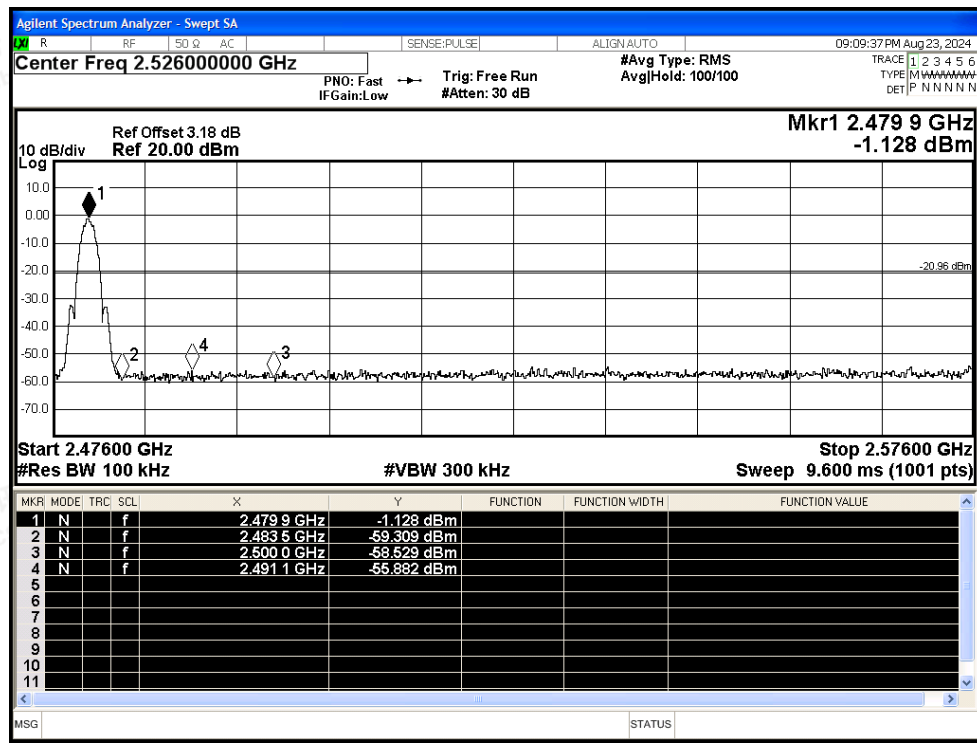
Band Edge NVNT ZIGBEE 2405MHz Ant Emission



Band Edge NVNT ZIGBEE 2480MHz Ant Ref



Band Edge NVNT ZIGBEE 2480MHz Ant Emission



A.5 Conducted RF Spurious Emission

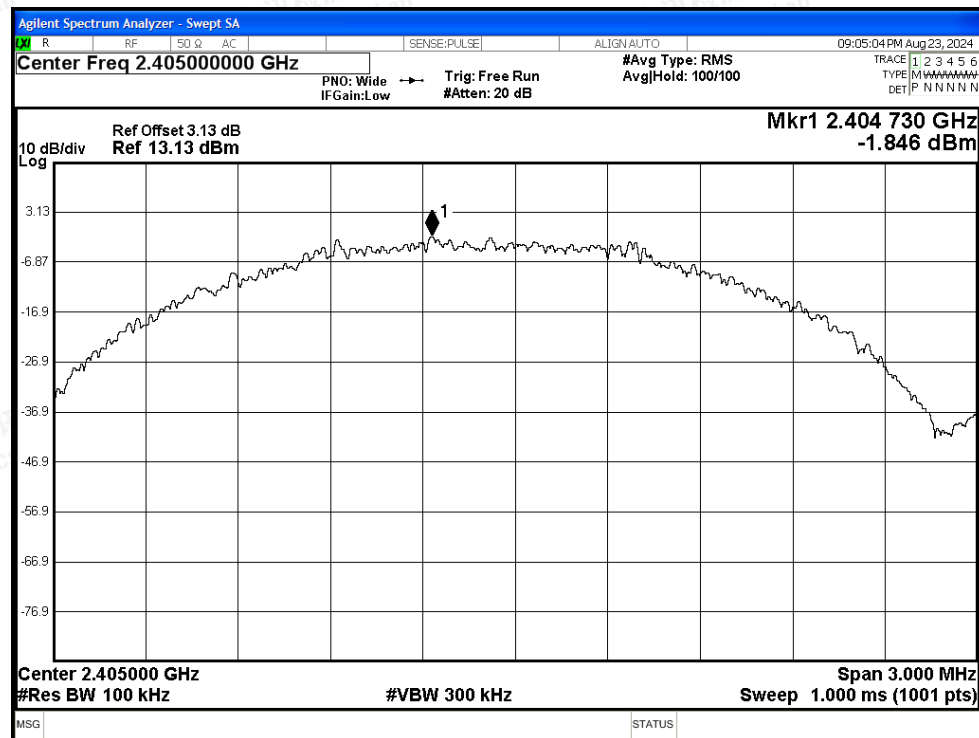
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ZIGBEE	2405	Ant	-43.48	-20	Pass
NVNT	ZIGBEE	2440	Ant	-45.65	-20	Pass
NVNT	ZIGBEE	2480	Ant	-48.27	-20	Pass



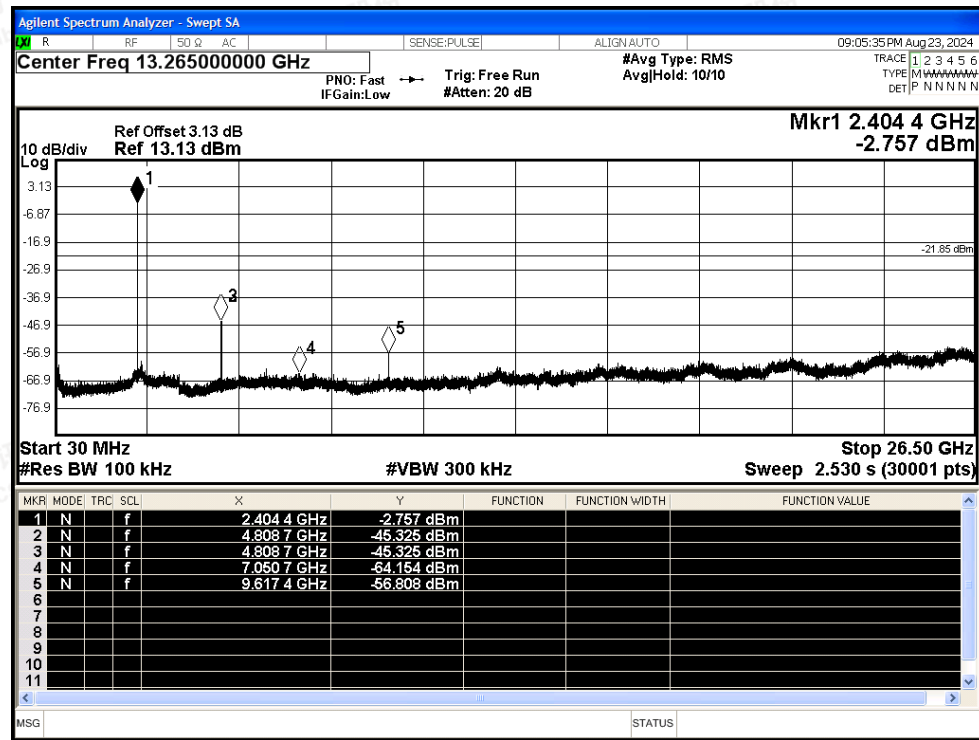


Test Graphs

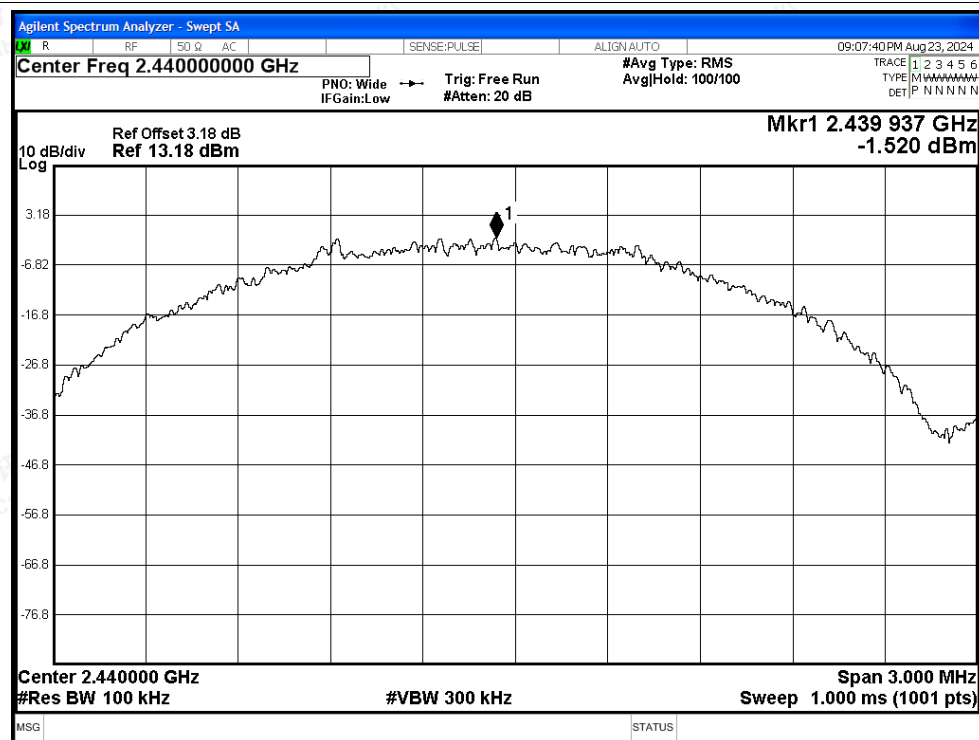
Tx. Spurious NVNT ZIGBEE 2405MHz Ant Ref



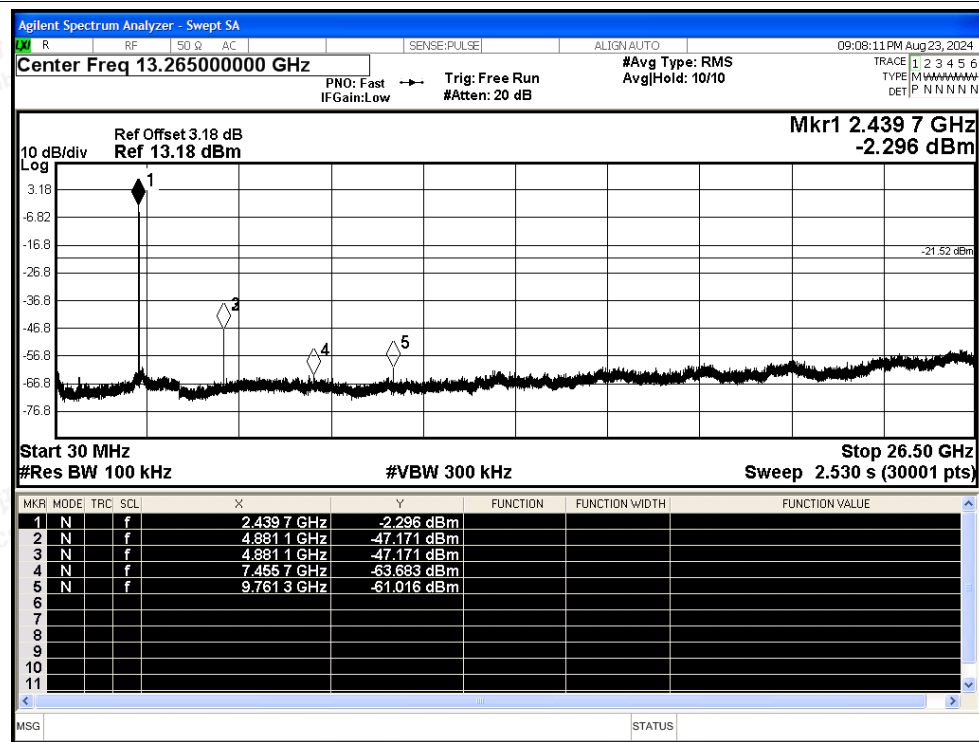
Tx. Spurious NVNT ZIGBEE 2405MHz Ant Emission



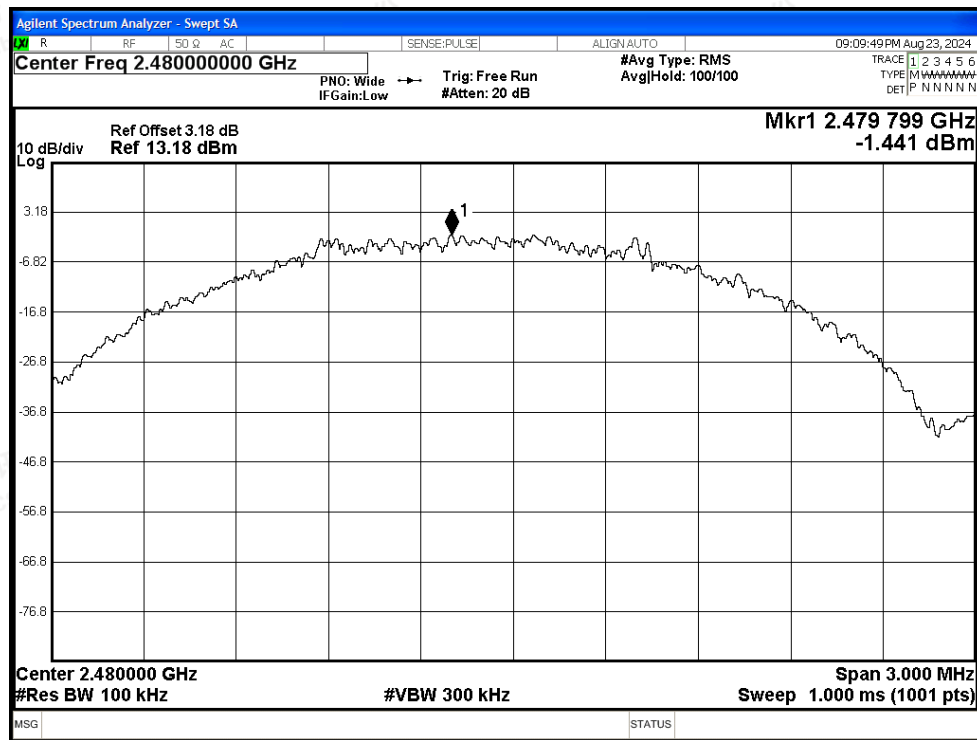
Tx. Spurious NVNT ZIGBEE 2440MHz Ant Ref



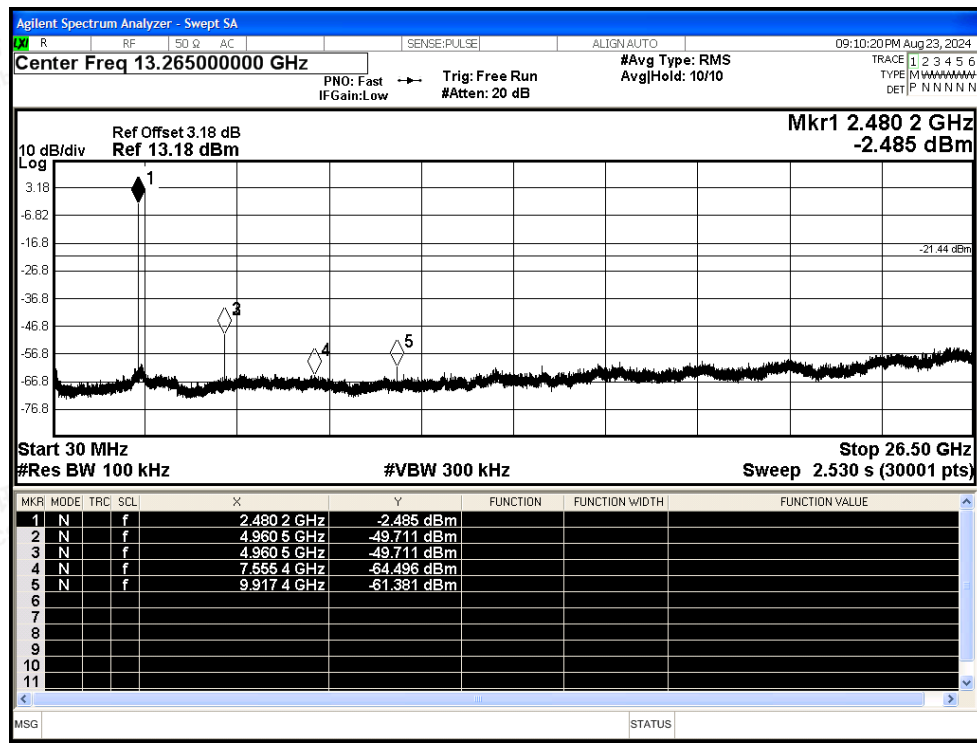
Tx. Spurious NVNT ZIGBEE 2440MHz Ant Emission



Tx. Spurious NVNT ZIGBEE 2480MHz Ant Ref



Tx. Spurious NVNT ZIGBEE 2480MHz Ant Emission





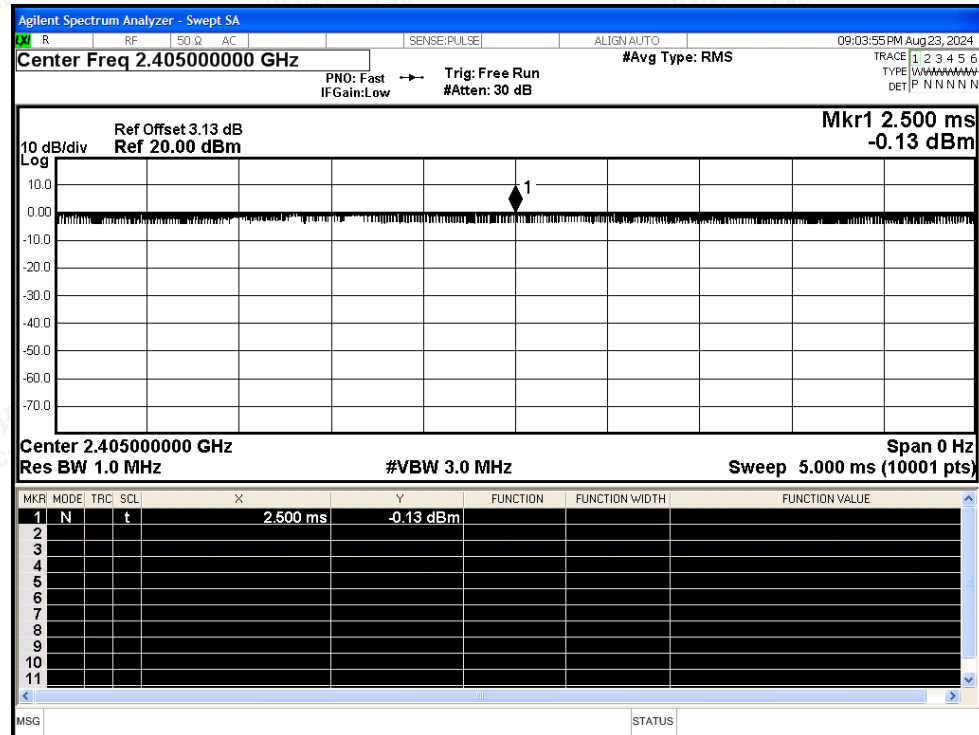
A.6 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ZIGBEE	2405	Ant	100	0	0
NVNT	ZIGBEE	2440	Ant	100	0	0
NVNT	ZIGBEE	2480	Ant	100	0	0

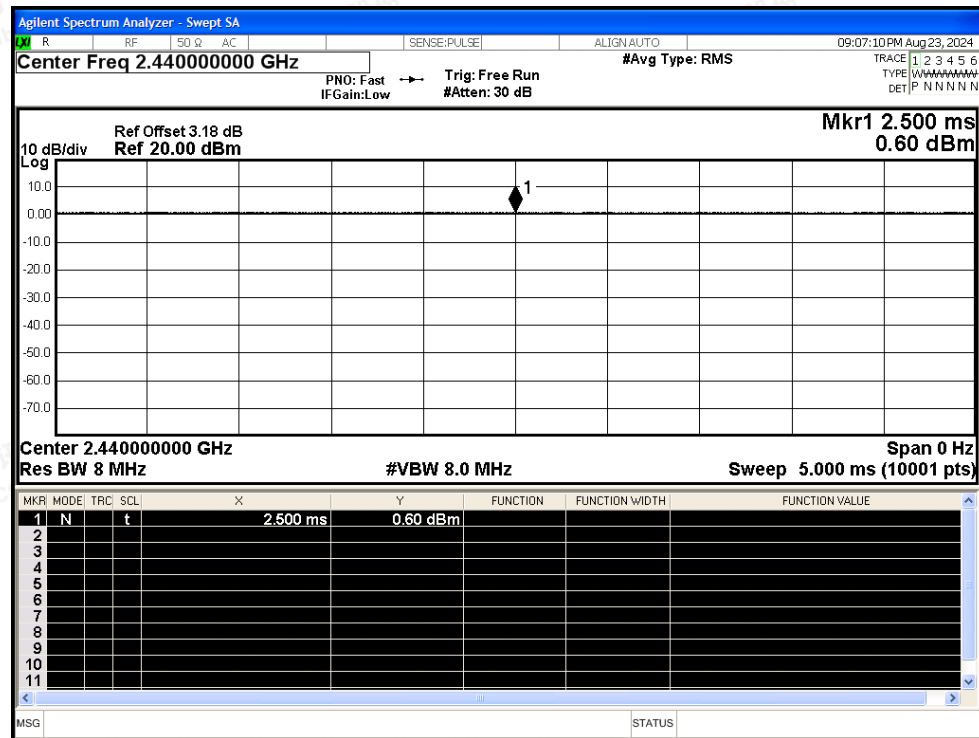


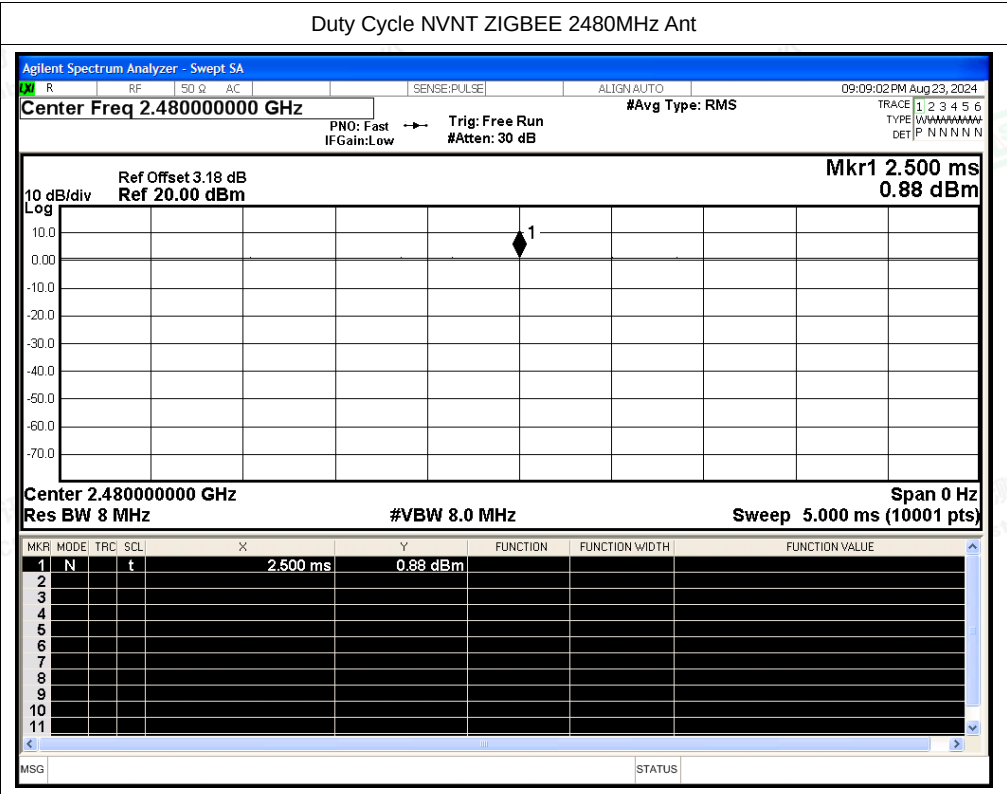
Test Graphs

Duty Cycle NVNT ZIGBEE 2405MHz Ant



Duty Cycle NVNT ZIGBEE 2440MHz Ant





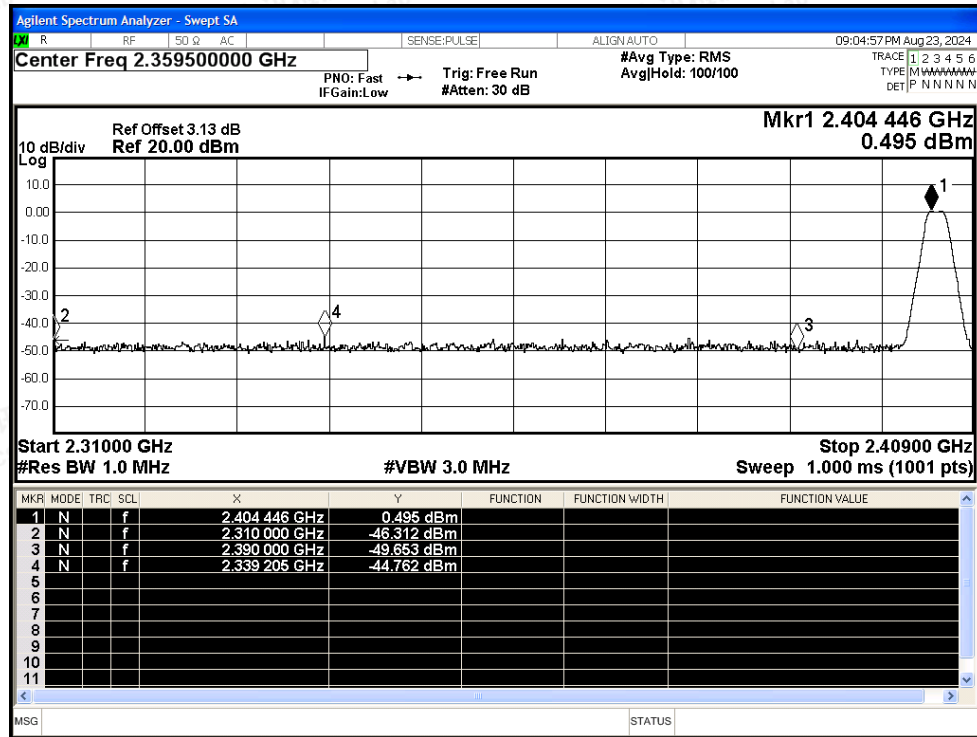
A.7 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	ZIGBEE	2405	Ant	2310	-46.31	2.9	-	51.85	Peak	74	Pass
NVNT	ZIGBEE	2405	Ant	2310	-56.33	2.9	0	41.83	Average	54	Pass
NVNT	ZIGBEE	2405	Ant	2339.205	-44.76	2.9	-	53.40	Peak	74	Pass
NVNT	ZIGBEE	2405	Ant	2360.688	-55.92	2.9	0	42.24	Average	54	Pass
NVNT	ZIGBEE	2405	Ant	2390	-49.65	2.9	-	48.51	Peak	74	Pass
NVNT	ZIGBEE	2405	Ant	2390	-57.36	2.9	0	40.80	Average	54	Pass
NVNT	ZIGBEE	2480	Ant	2483.5	-46.51	2.9	-	51.65	Peak	74	Pass
NVNT	ZIGBEE	2480	Ant	2483.5	-55.46	2.9	0	42.70	Average	54	Pass
NVNT	ZIGBEE	2480	Ant	2495.92	-45.5	2.9	-	52.66	Peak	74	Pass
NVNT	ZIGBEE	2480	Ant	2483.512	-55.46	2.9	0	42.70	Average	54	Pass
NVNT	ZIGBEE	2480	Ant	2500	-48.53	2.9	-	49.63	Peak	74	Pass
NVNT	ZIGBEE	2480	Ant	2500	-56.63	2.9	0	41.53	Average	54	Pass

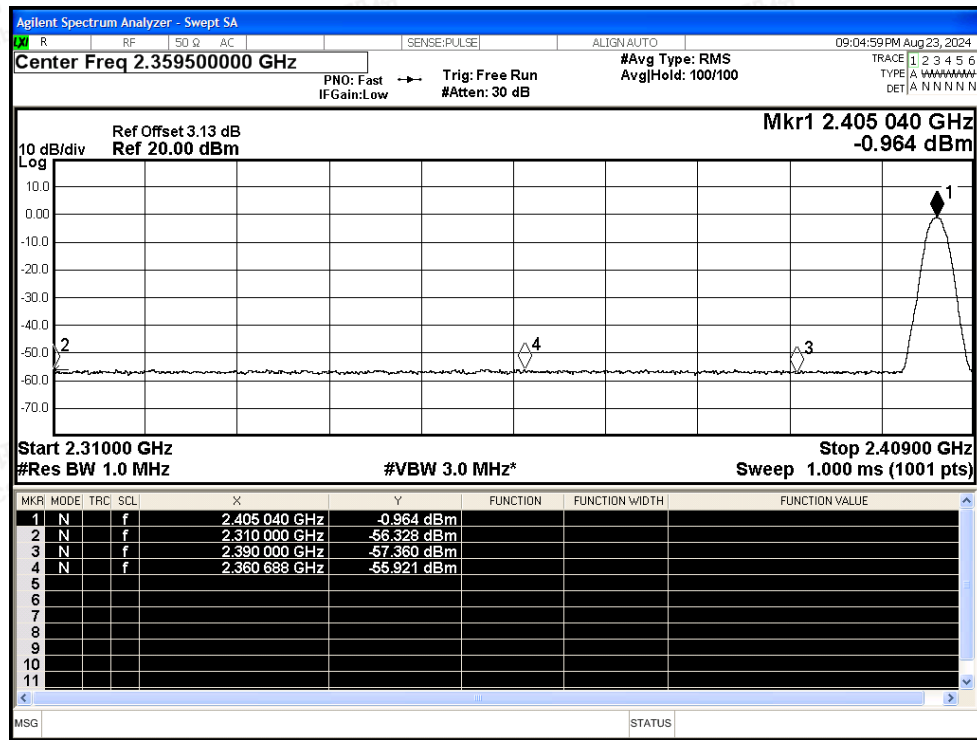


Test Graphs

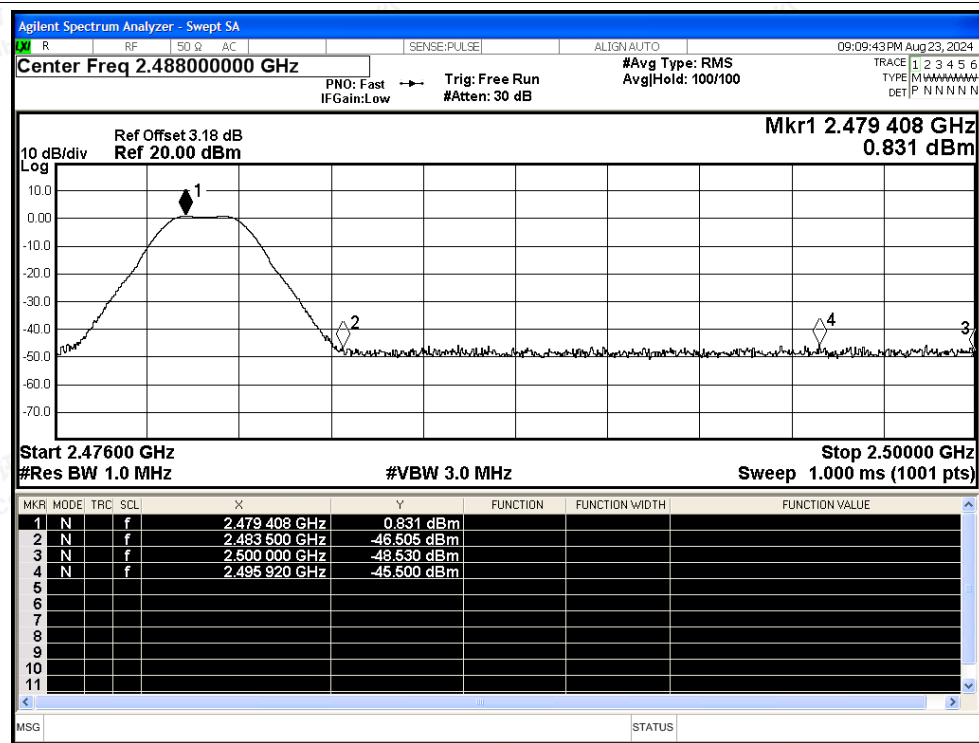
Restrict Band NVNT ZIGBEE 2405MHz Ant Peak



Restrict Band NVNT ZIGBEE 2405MHz Ant Average



Restrict Band NVNT ZIGBEE 2480MHz Ant Peak



Restrict Band NVNT ZIGBEE 2480MHz Ant Average

