

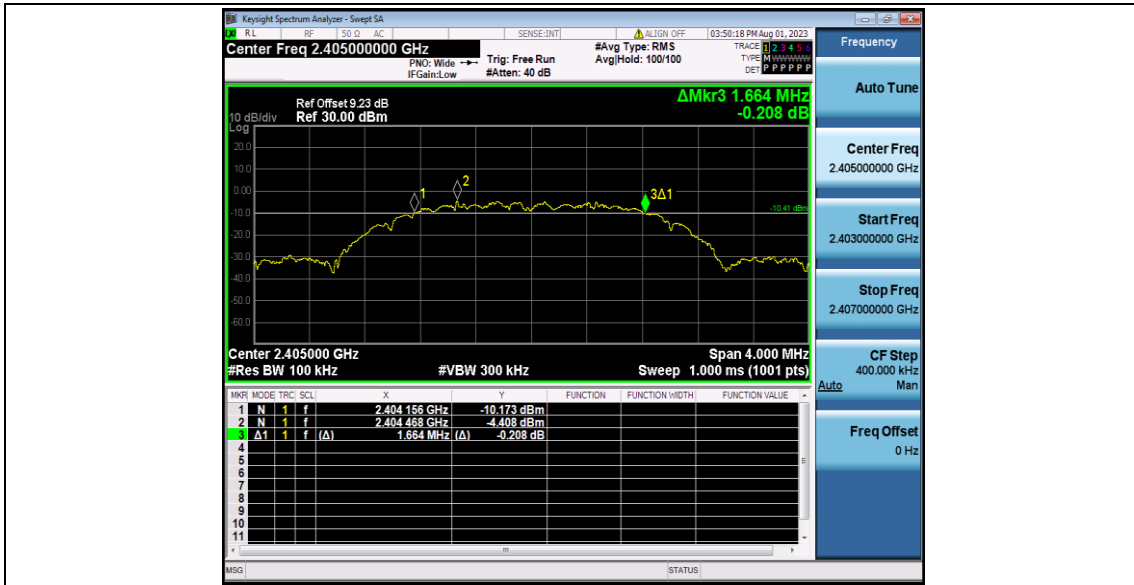
<b>Case No. :</b> <u>GTS20230619008-1-3</u>
<b>Ambient Condition:</b> <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa,
<b>Test Date:</b> <u>2023.8.1</u> <b>Test Engineer:</b> <u>Evan Ouyang</u>

## Appendix A.1: DTS Bandwidth

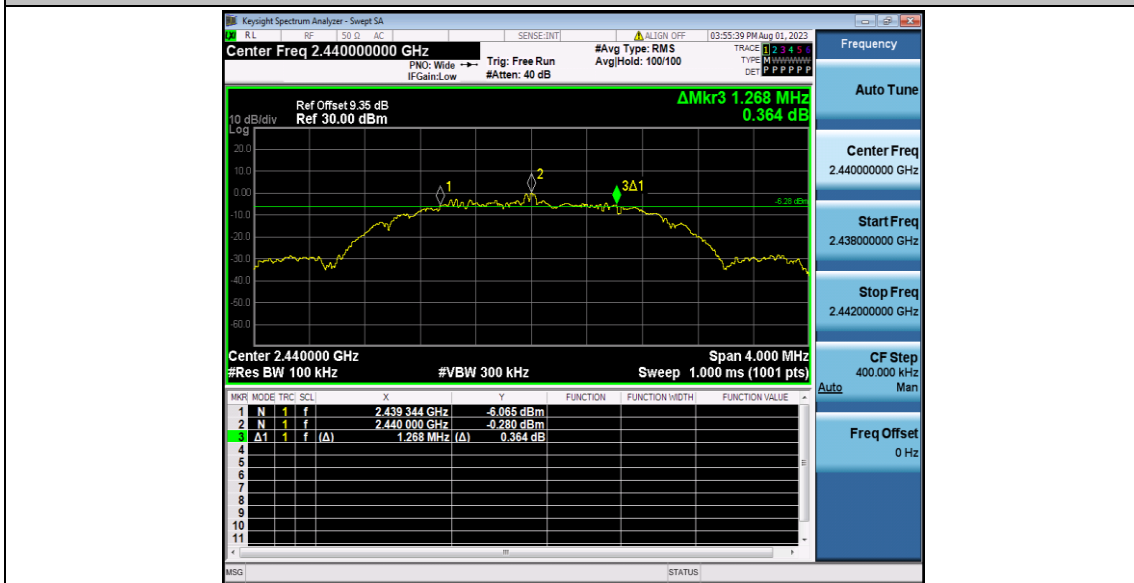
### Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
ZigBee	Ant1	2405	1.664	2404.156	2405.820	0.5	PASS
		2440	1.268	2439.344	2440.612	0.5	PASS
		2480	1.324	2479.344	2480.668	0.5	PASS

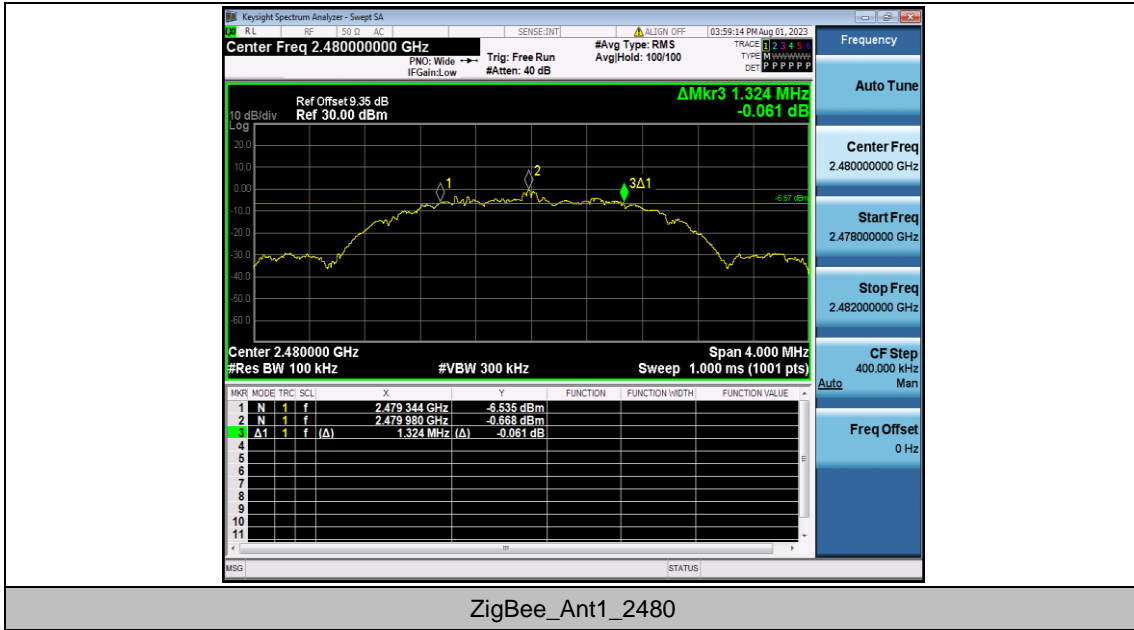
## Test Graphs



ZigBee\_Ant1\_2405



ZigBee\_Ant1\_2440



## Appendix A.2: Occupied Channel Bandwidth

### Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
ZigBee	Ant1	2405	2.2511	2403.866	2406.117	---	---
		2440	2.2405	2438.873	2441.113	---	---
		2480	2.2317	2478.871	2481.102	---	---

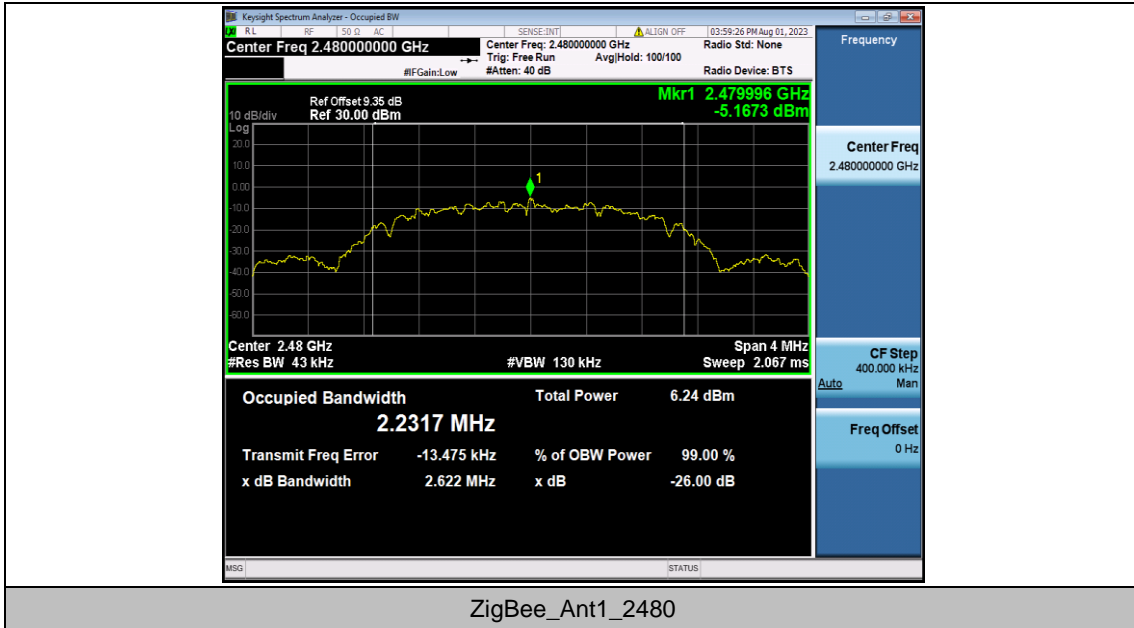
## Test Graphs



ZigBee\_Ant1\_2405



ZigBee\_Ant1\_2440



ZigBee\_Ant1\_2480

## Appendix A.3: Maximum conducted output power

### Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
ZigBee	Ant1	2405	0.57	≤30	PASS
		2440	1.88	≤30	PASS
		2480	1.45	≤30	PASS

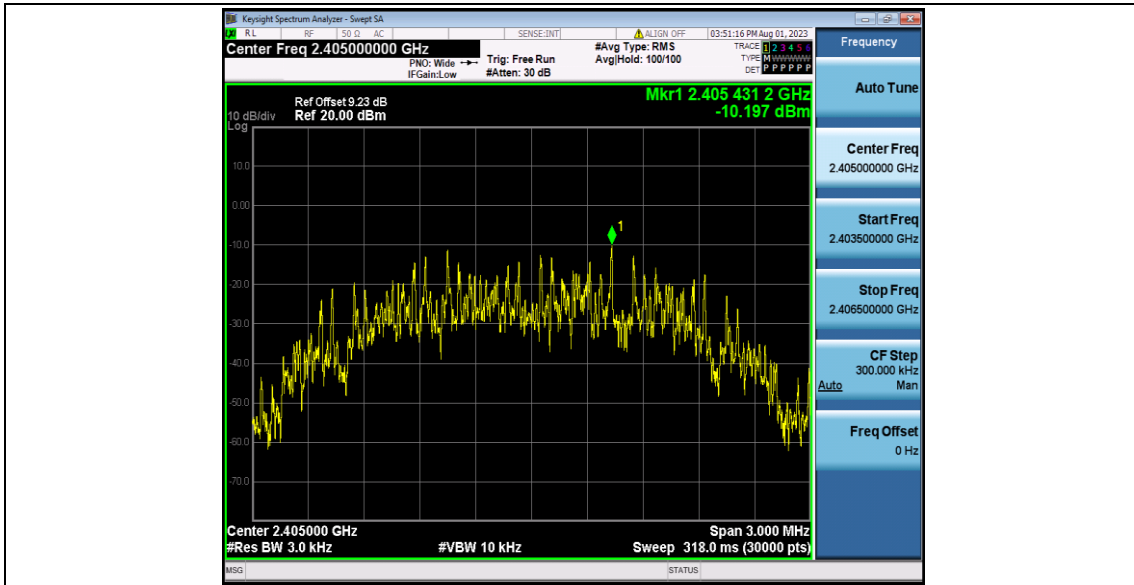
## Appendix A.4: Maximum power spectral density

### Test Result

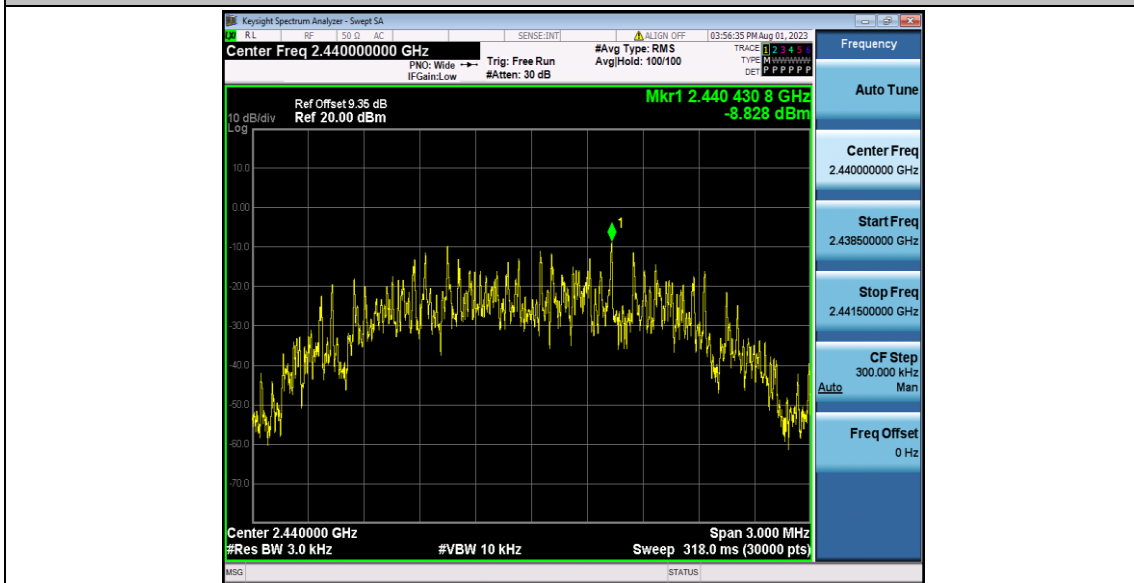
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
ZigBee	Ant1	2405	-10.2	≤8.00	PASS
		2440	-8.83	≤8.00	PASS
		2480	-9.35	≤8.00	PASS



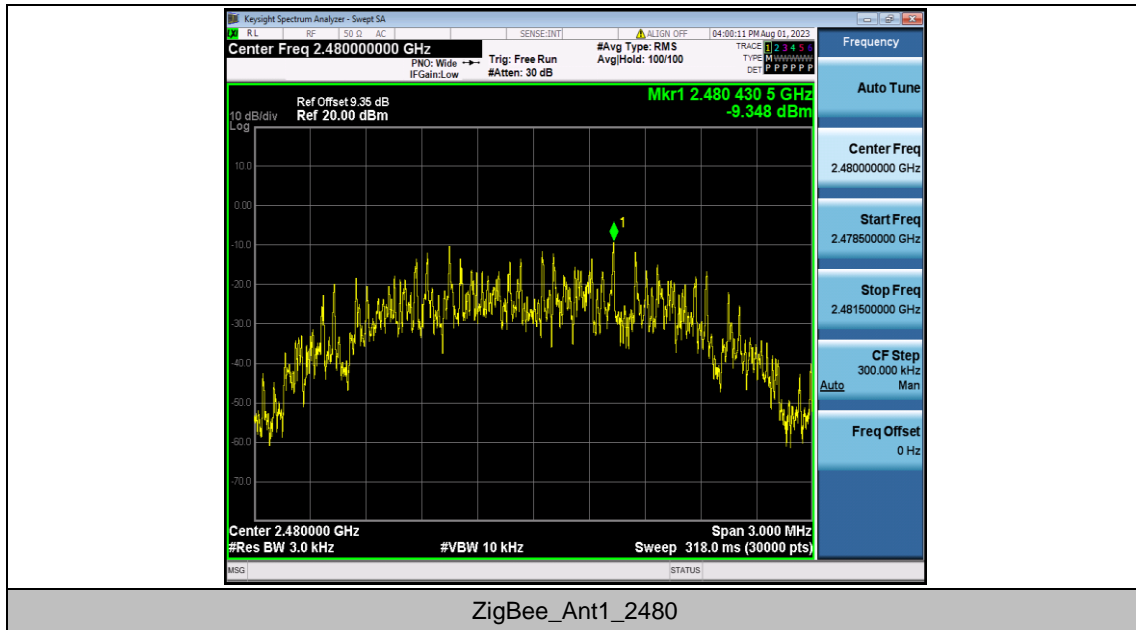
## Test Graphs



ZigBee\_Ant1\_2405



ZigBee\_Ant1\_2440



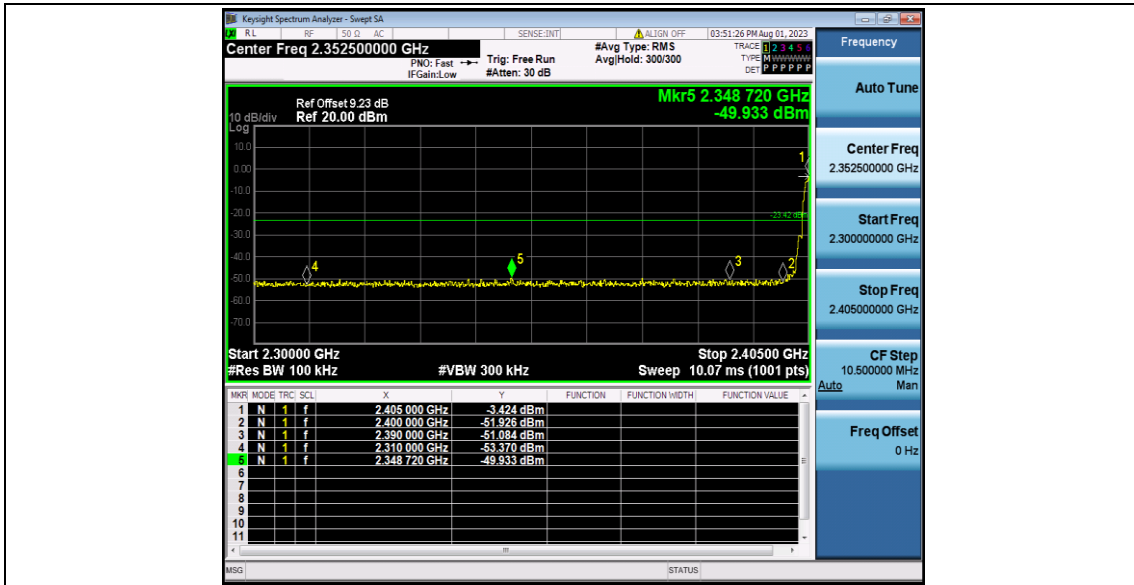
ZigBee\_Ant1\_2480

## Appendix A.5: Band edge measurements

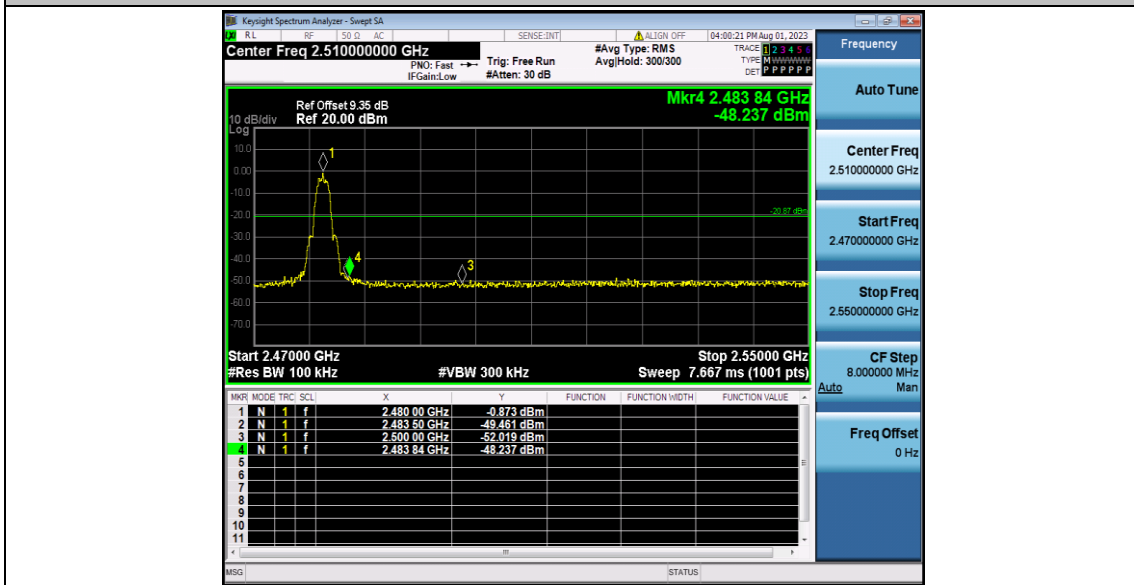
### Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
ZigBee	Ant1	Low	2405	-3.42	-49.93	≤-23.42	PASS
		High	2480	-0.87	-48.24	≤-20.87	PASS

### Test Graphs



ZigBee\_Ant1\_Low\_2405



ZigBee\_Ant1\_High\_2480

## Appendix A.6: Conducted Spurious Emission

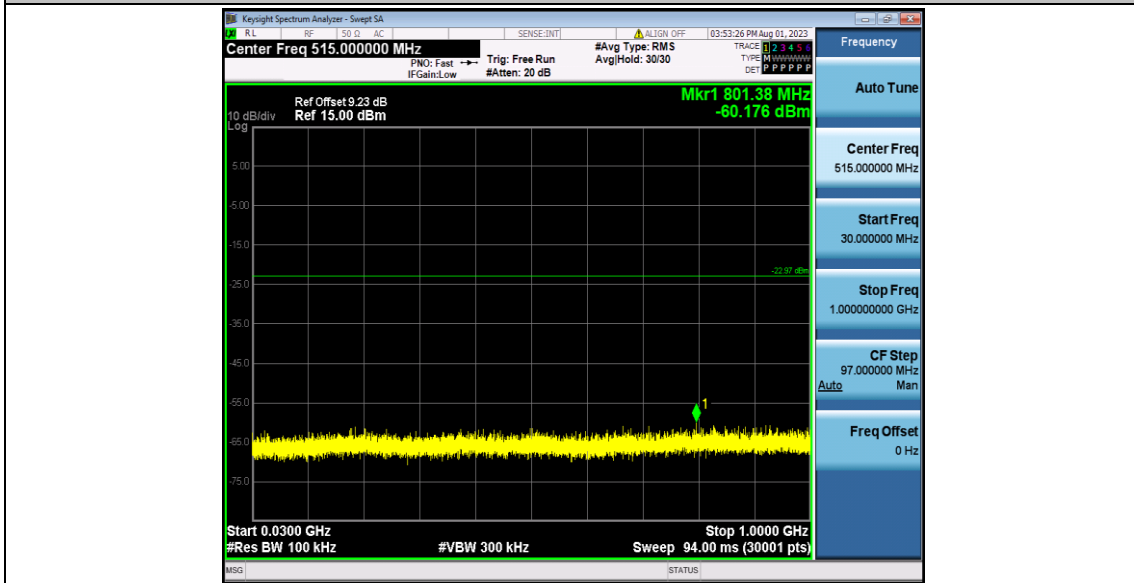
### Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
ZigBee	Ant1	2405	Reference	-2.97	-2.97	---	PASS
			30~1000	-2.97	-60.18	$\leq -22.97$	PASS
			1000~26500	-2.97	-47.39	$\leq -22.97$	PASS
		2440	Reference	-0.21	-0.21	---	PASS
			30~1000	-0.21	-60.29	$\leq -20.21$	PASS
			1000~26500	-0.21	-47.33	$\leq -20.21$	PASS
		2480	Reference	-3.56	-3.56	---	PASS
			30~1000	-3.56	-60.52	$\leq -23.56$	PASS
			1000~26500	-3.56	-46.19	$\leq -23.56$	PASS

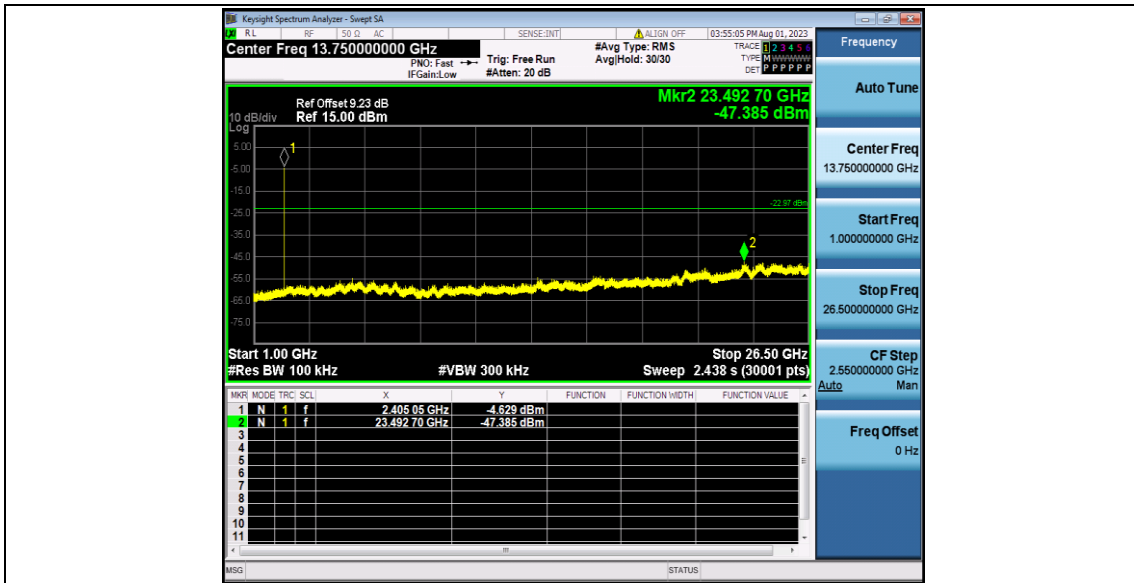
## Test Graphs



ZigBee\_Ant1\_2405\_0~Reference



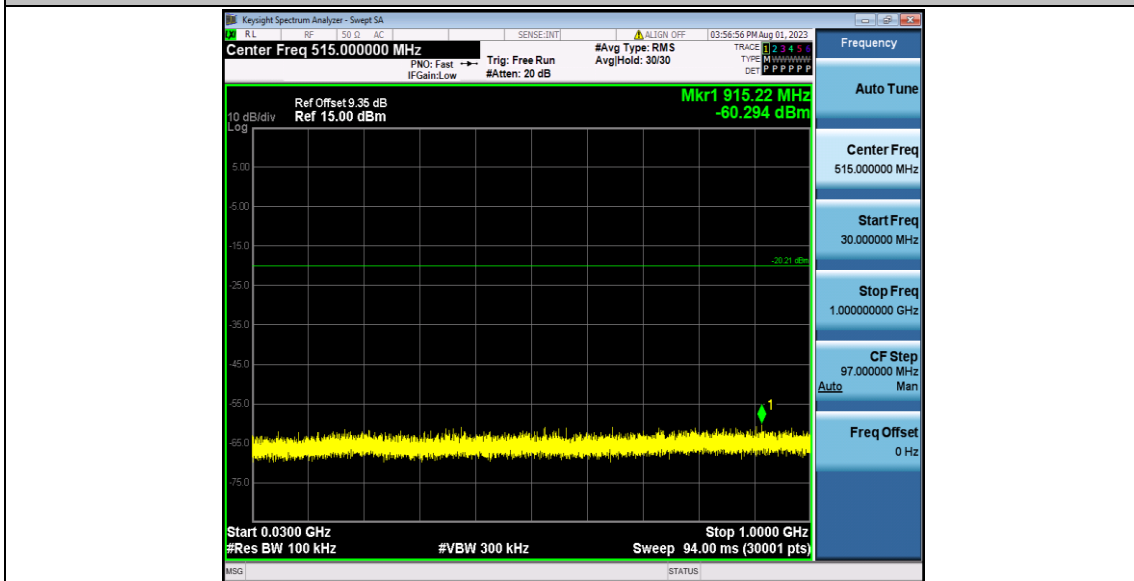
ZigBee\_Ant1\_2405\_30~1000



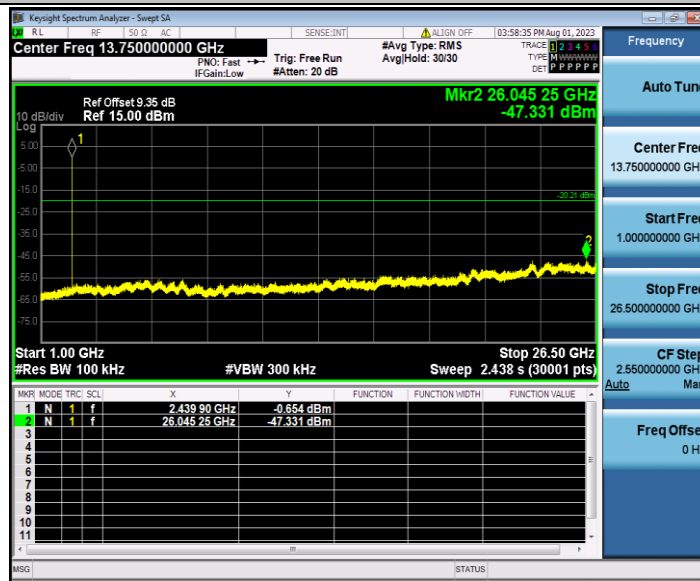
ZigBee\_Ant1\_2405\_1000~26500



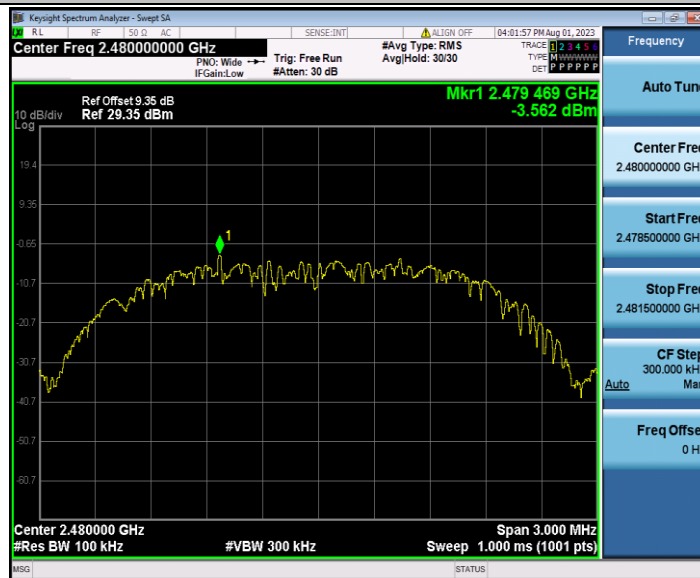
ZigBee\_Ant1\_2440\_0~Reference



ZigBee\_Ant1\_2440\_30~1000

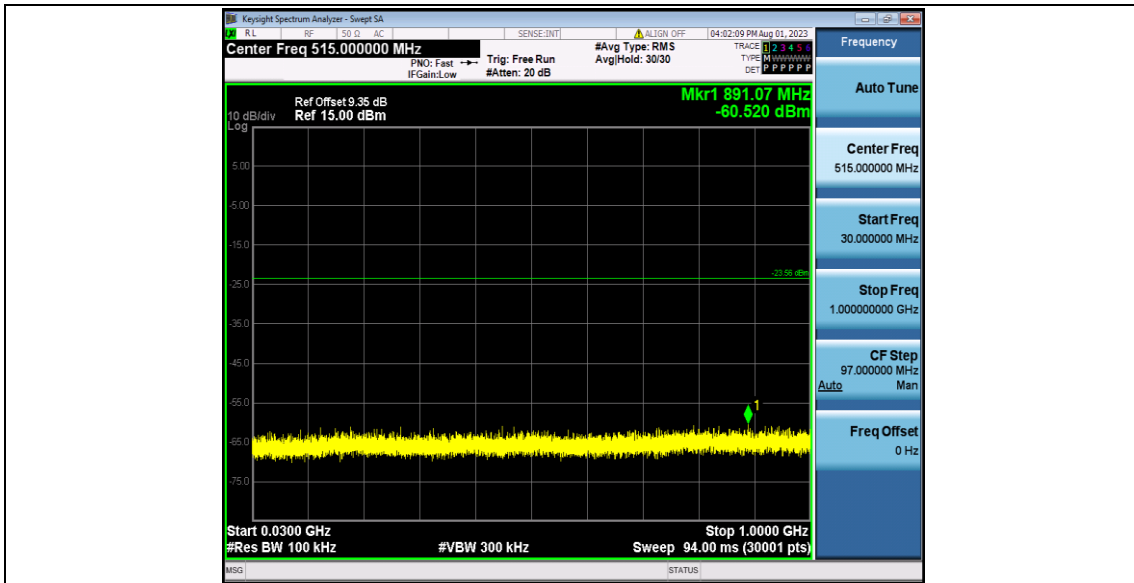


ZigBee\_Ant1\_2440\_1000~26500

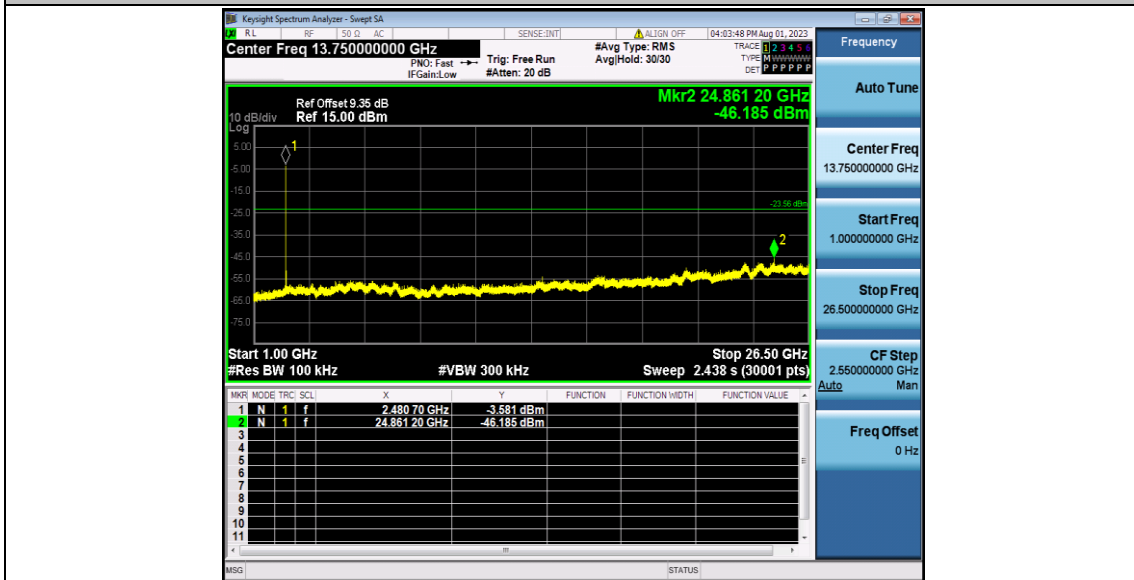


ZigBee\_Ant1\_2480\_0~Reference





ZigBee\_Ant1\_2480\_30~1000



ZigBee\_Ant1\_2480\_1000~26500

## Appendix A.7: Emissions in Restricted Bands

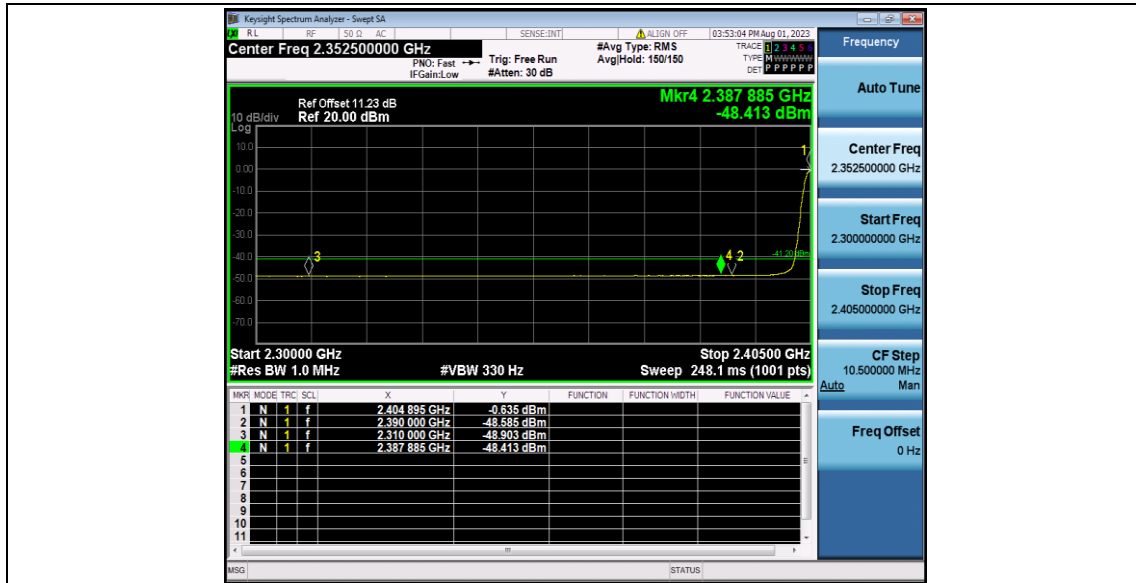
### Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
ZigBee	Ant1	Low	2405	AV	2310.000	-48.9	≤-41.20	46.30	≤54	PASS
				AV	2387.885	-48.41	≤-41.20	46.79	≤54	PASS
				AV	2390.000	-48.59	≤-41.20	46.61	≤54	PASS
				Peak	2310.000	-41.98	≤-21.20	53.22	≤74	PASS
				Peak	2365.730	-39	≤-21.20	56.20	≤74	PASS
				Peak	2390.000	-41.14	≤-21.20	54.06	≤74	PASS
		High	2480	AV	2483.500	-43.57	≤-41.20	51.63	≤54	PASS
				AV	2483.520	-43.57	≤-41.20	51.63	≤54	PASS
				AV	2500.000	-48.21	≤-41.20	46.99	≤54	PASS
				Peak	2483.500	-38.5	≤-21.20	56.70	≤74	PASS
				Peak	2483.920	-37.09	≤-21.20	58.11	≤74	PASS
				Peak	2500.000	-41.78	≤-21.20	53.42	≤74	PASS

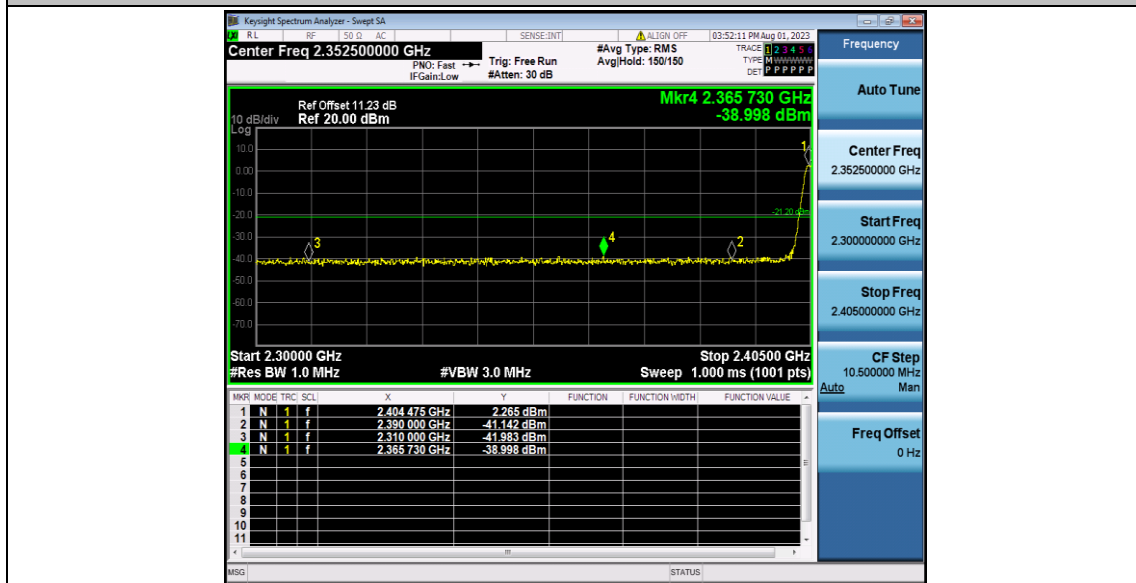
Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

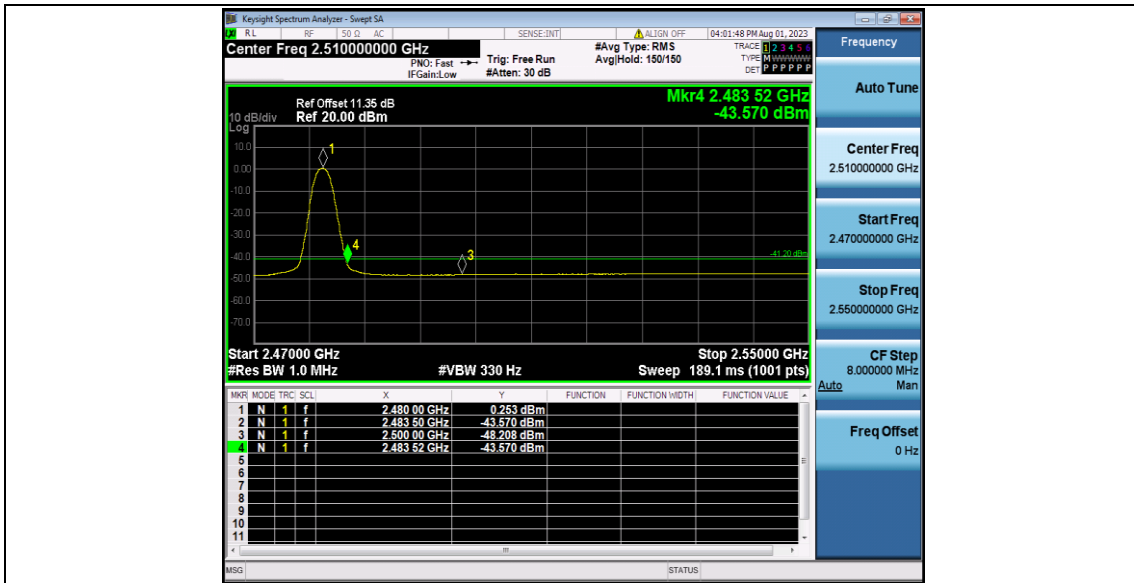
## Test Graphs



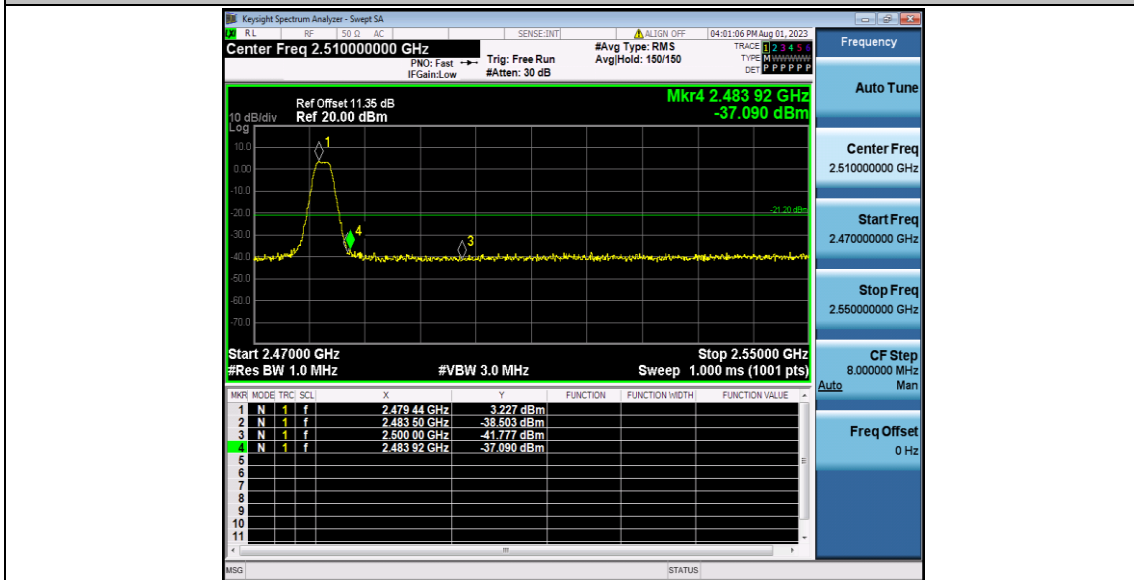
ZigBee\_Ant1\_Low\_2405\_AV



ZigBee\_Ant1\_Low\_2405\_Peak



ZigBee\_Ant1\_High\_2480\_AV



ZigBee\_Ant1\_High\_2480\_Peak