

# RF Test Data for ZigBee (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless Handwheel Controller
Test Model:	3262
Sample ID:	RW-C-202208-0186-38-2#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202208-0186-53	

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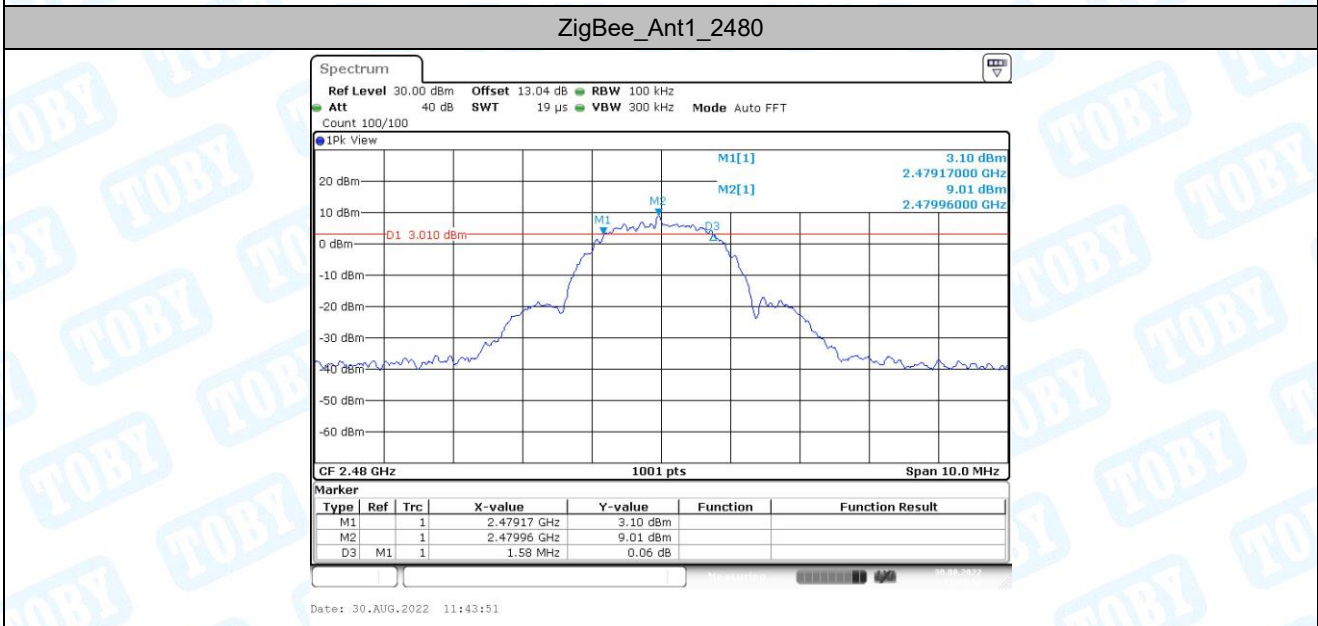
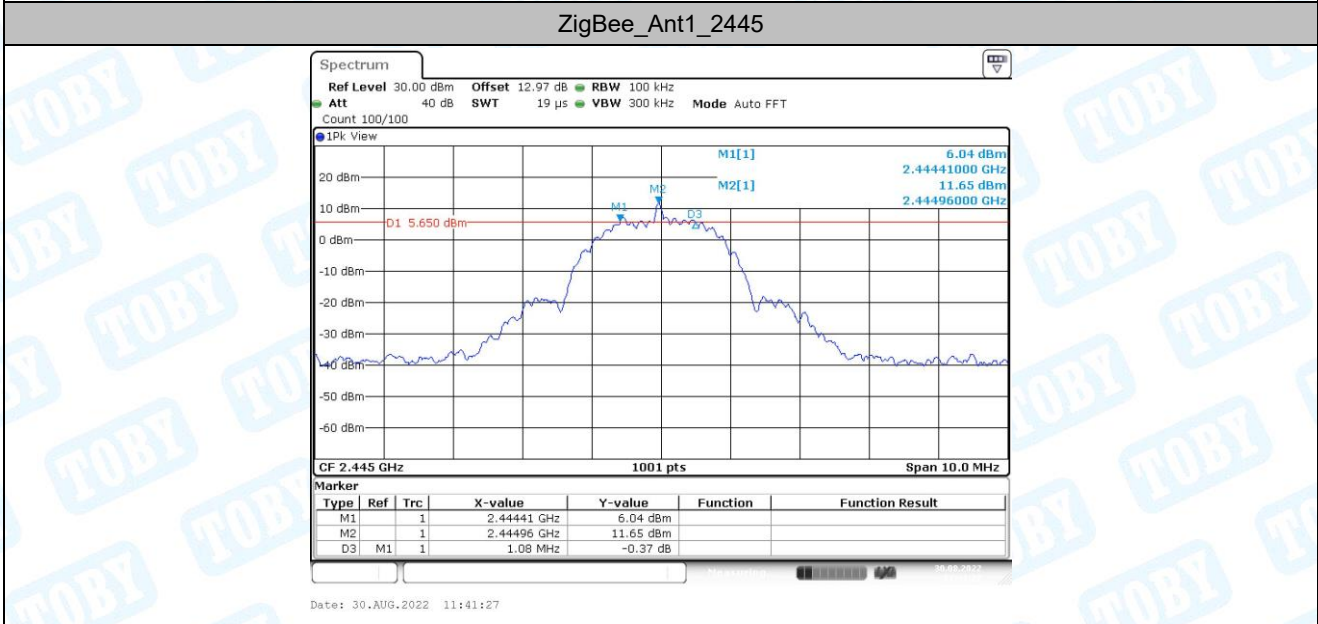
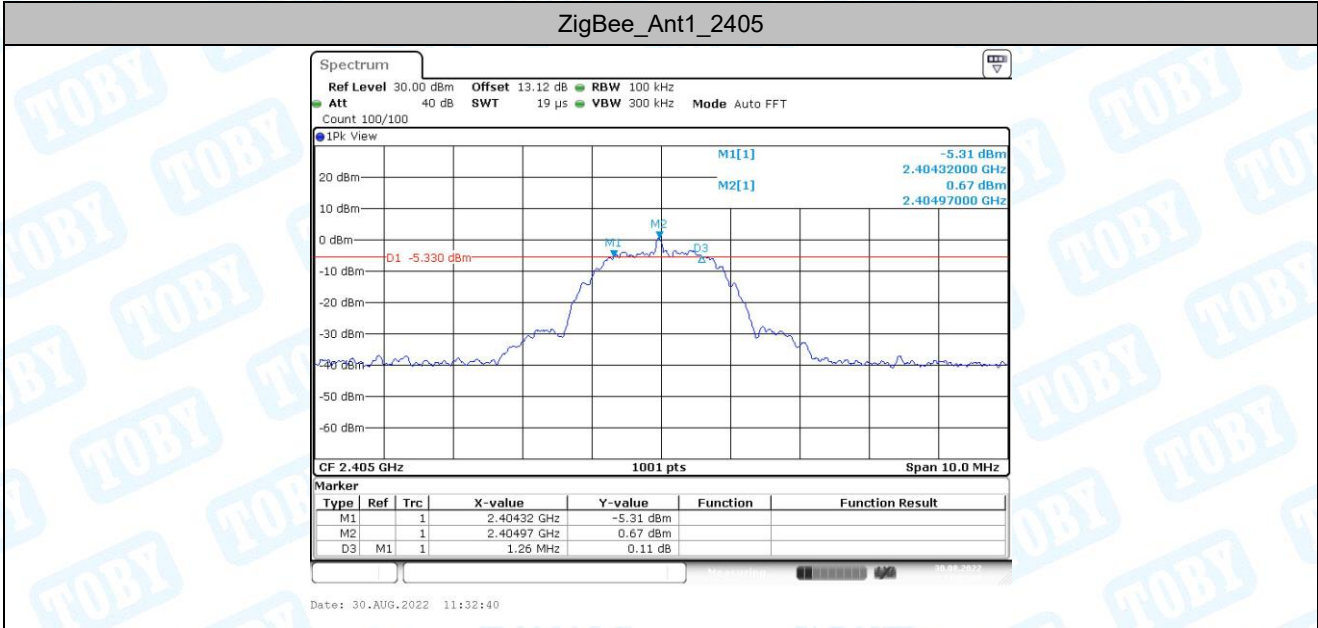
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## 1: DTS Bandwidth

### 1.1 Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
ZigBee	Ant1	2405	1.26	2404.32	2405.58	0.5	PASS
		2445	1.08	2444.41	2445.49	0.5	PASS
		2480	1.58	2479.17	2480.75	0.5	PASS

## 1.2 Test Graphs

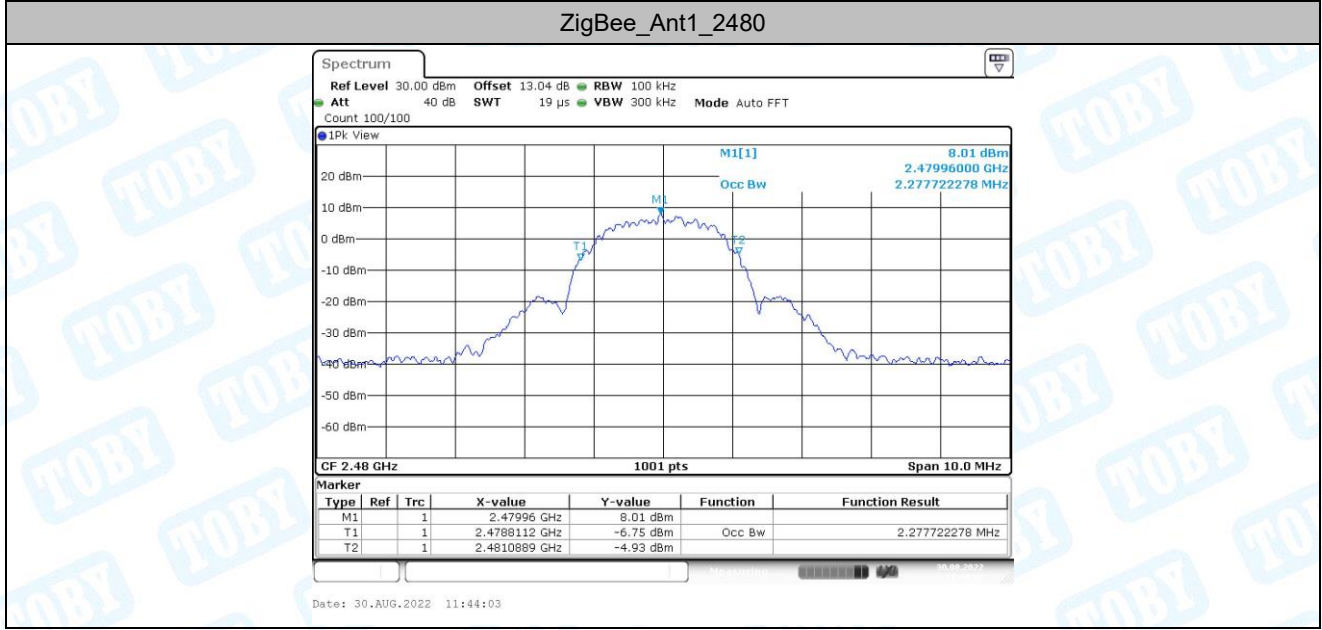
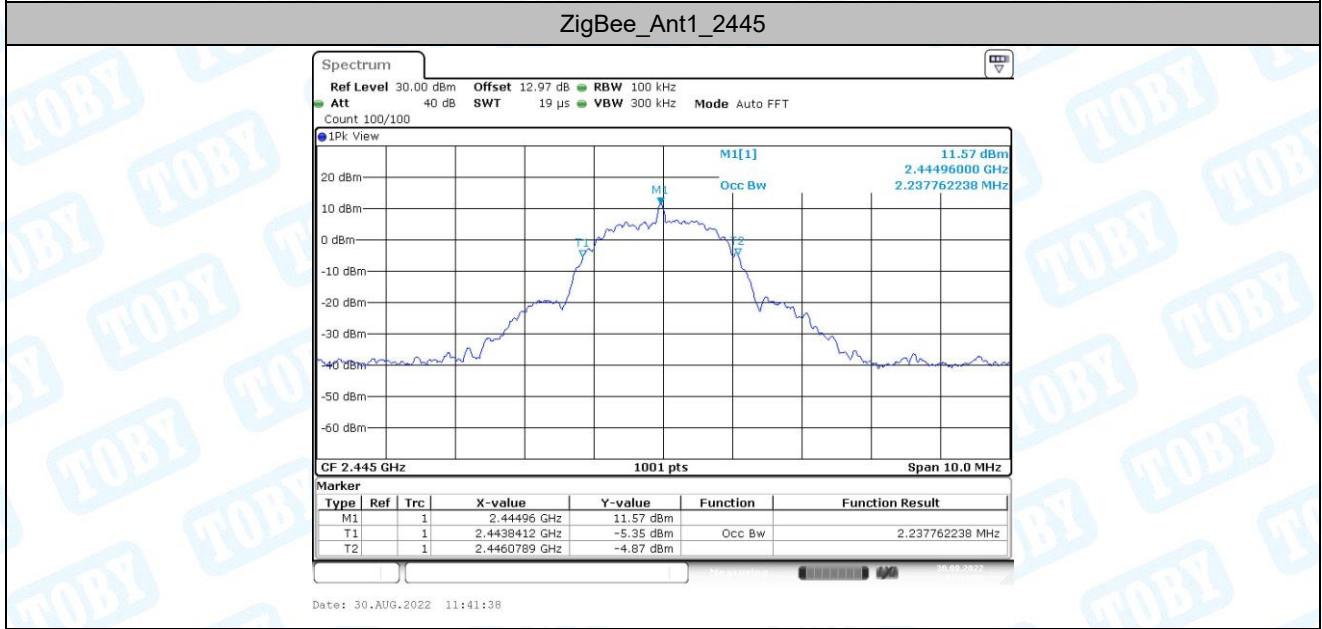
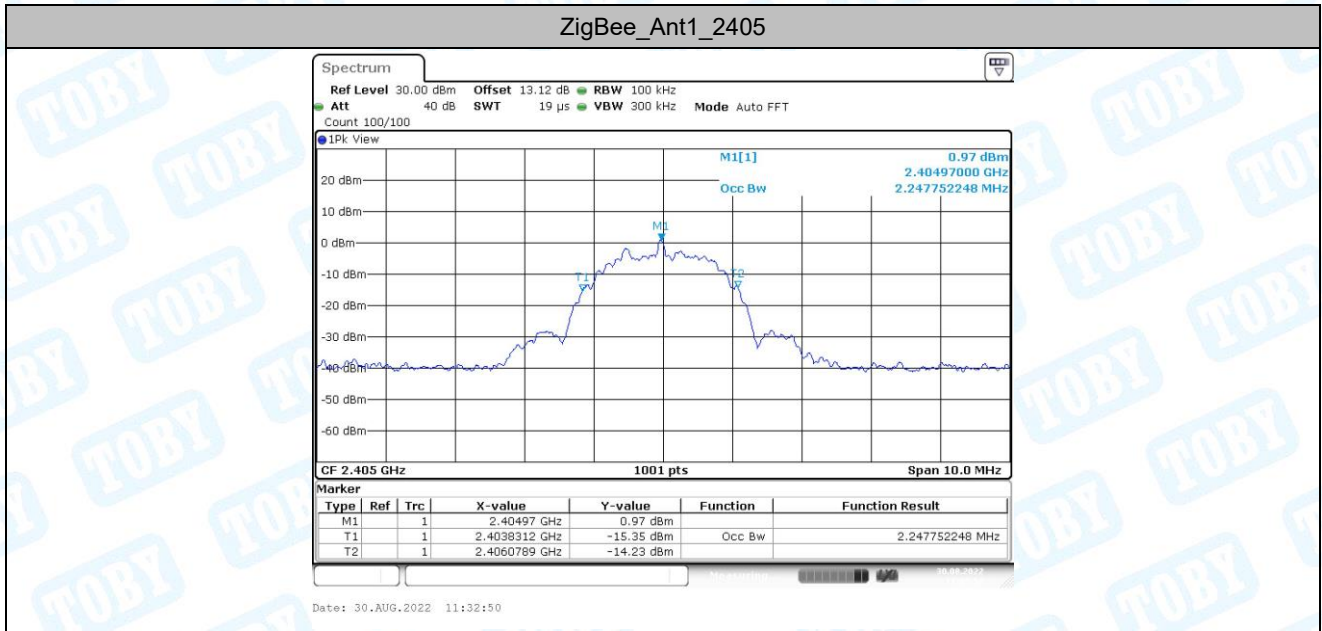


## 2: Occupied Channel Bandwidth

### 2.1 Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
ZigBee	Ant1	2405	2.248	2403.8312	2406.0789	---	---
		2445	2.238	2443.8412	2446.0789	---	---
		2480	2.278	2478.8112	2481.0889	---	---

## 2.2 Test Graphs



### 3: Maximum conducted output power

#### 3.1 Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
ZigBee	Ant1	2405	1.28	≤30	PASS
		2445	0.79	≤30	PASS
		2480	1.18	≤30	PASS

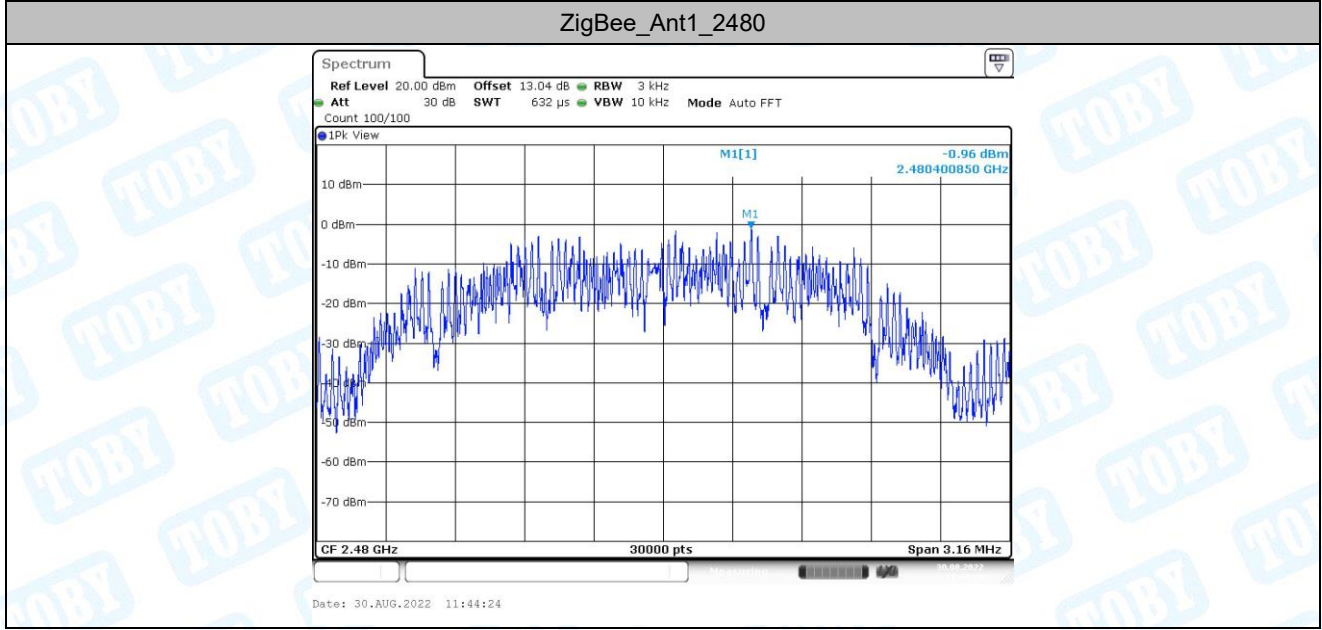
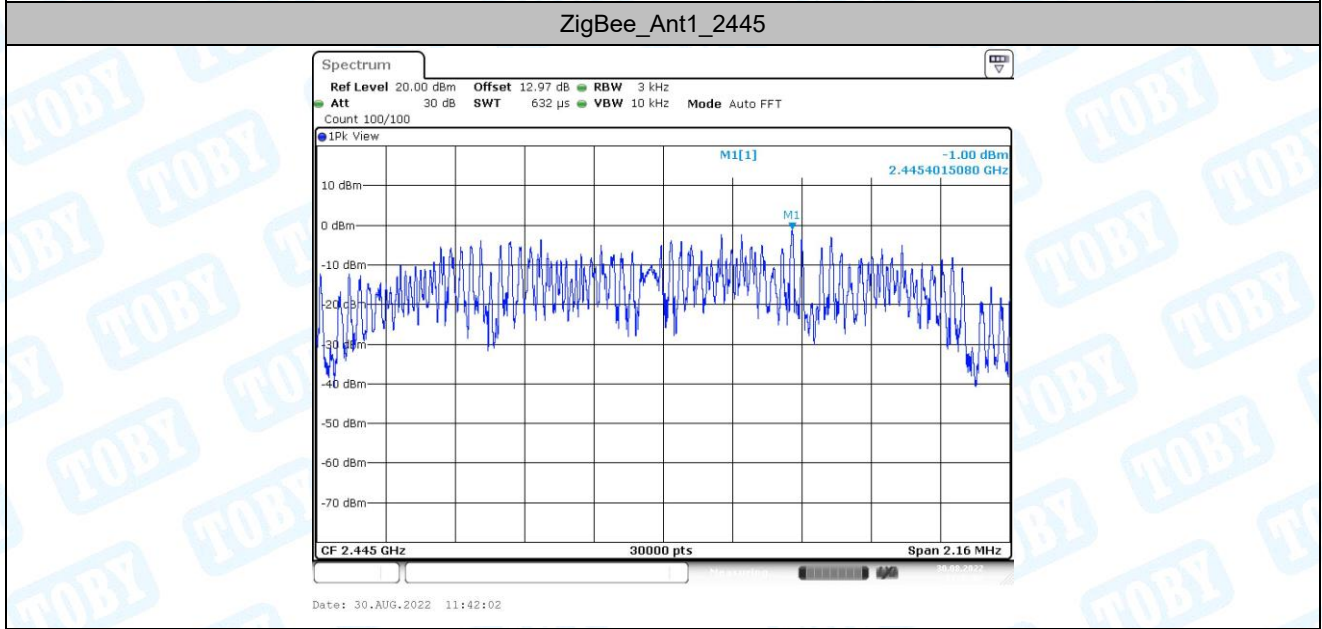
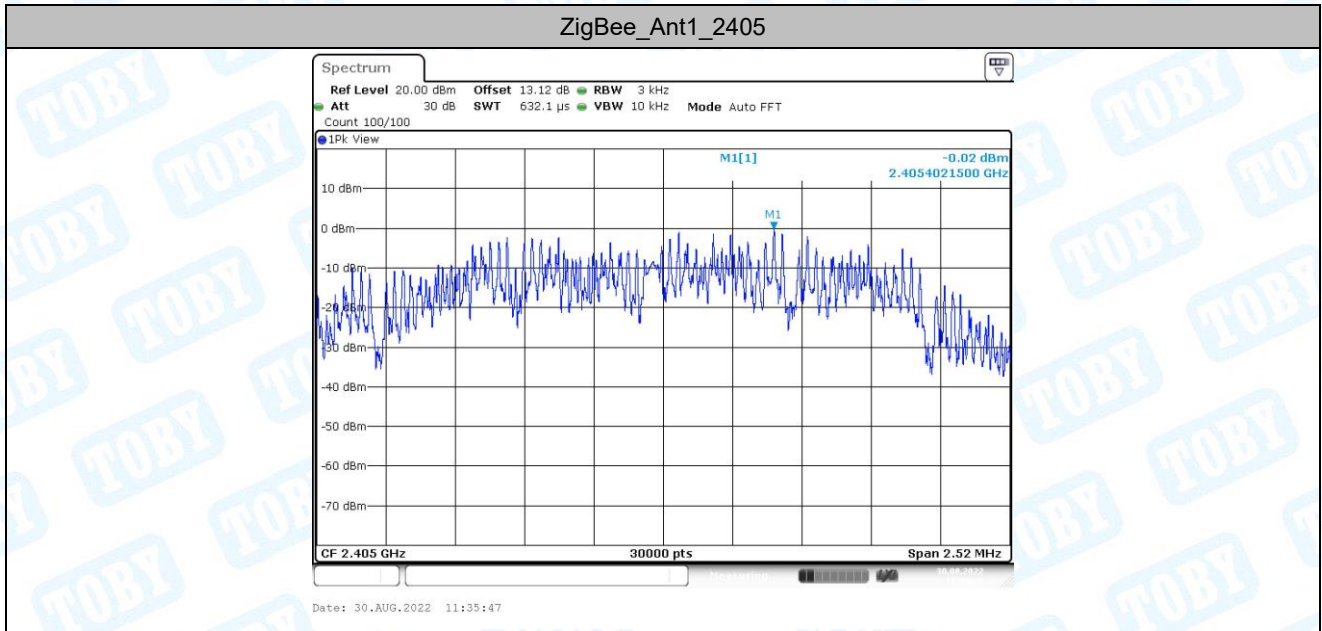
## 4: Maximum power spectral density

### 4.1 Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
ZigBee	Ant1	2405	-0.02	≤8.00	PASS
		2445	-1	≤8.00	PASS
		2480	-0.96	≤8.00	PASS



## 4.2 Test Graphs

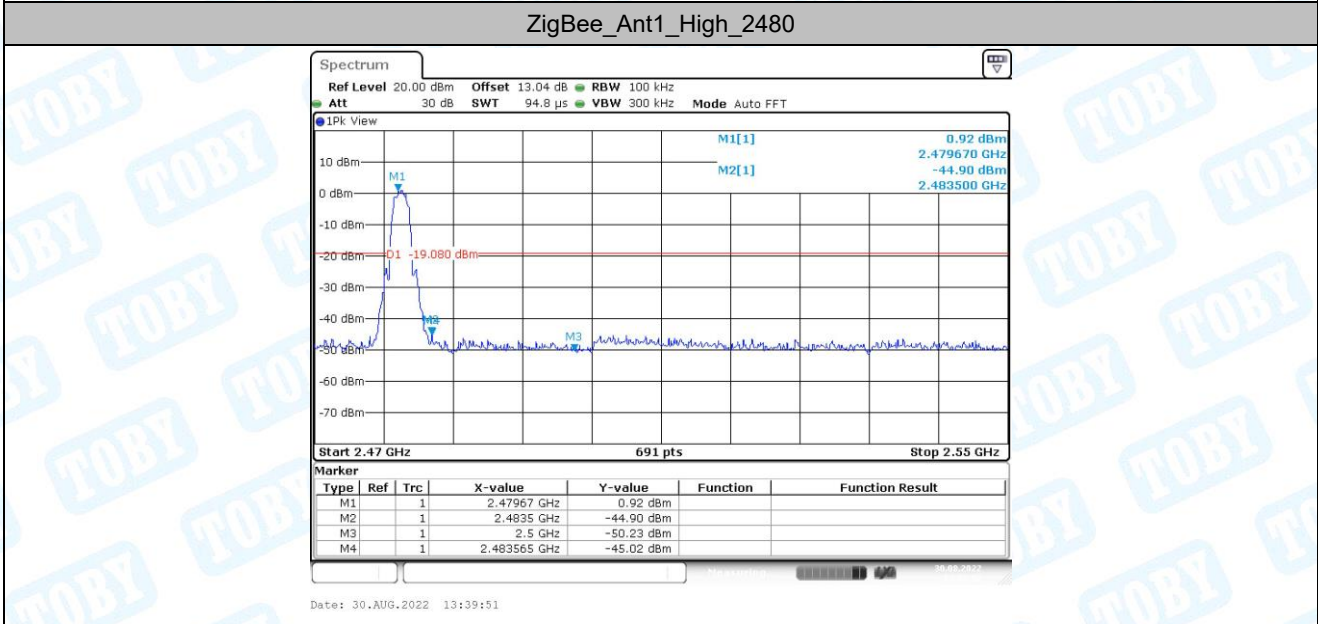
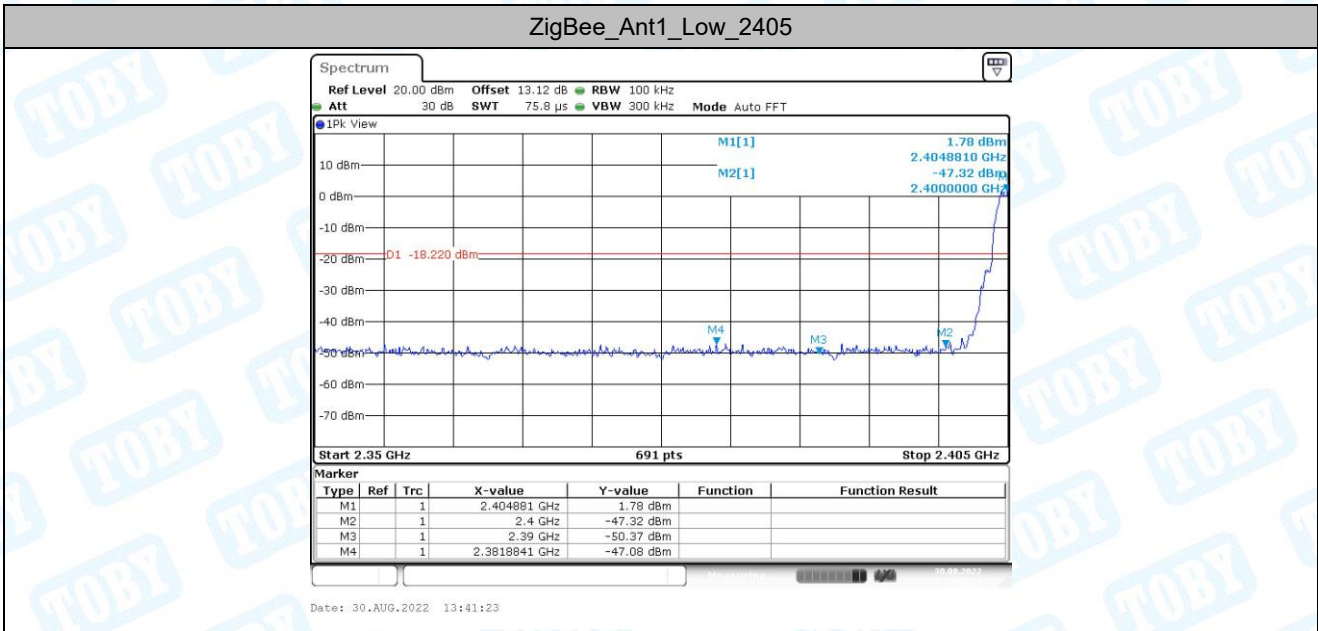


## 5: Band edge measurements

### 5.1 Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
ZigBee	Ant1	Low	2405	1.78	-47.08	≤-18.22	PASS
		High	2480	0.92	-45.02	≤-19.08	PASS

### 5.2 Test Graphs

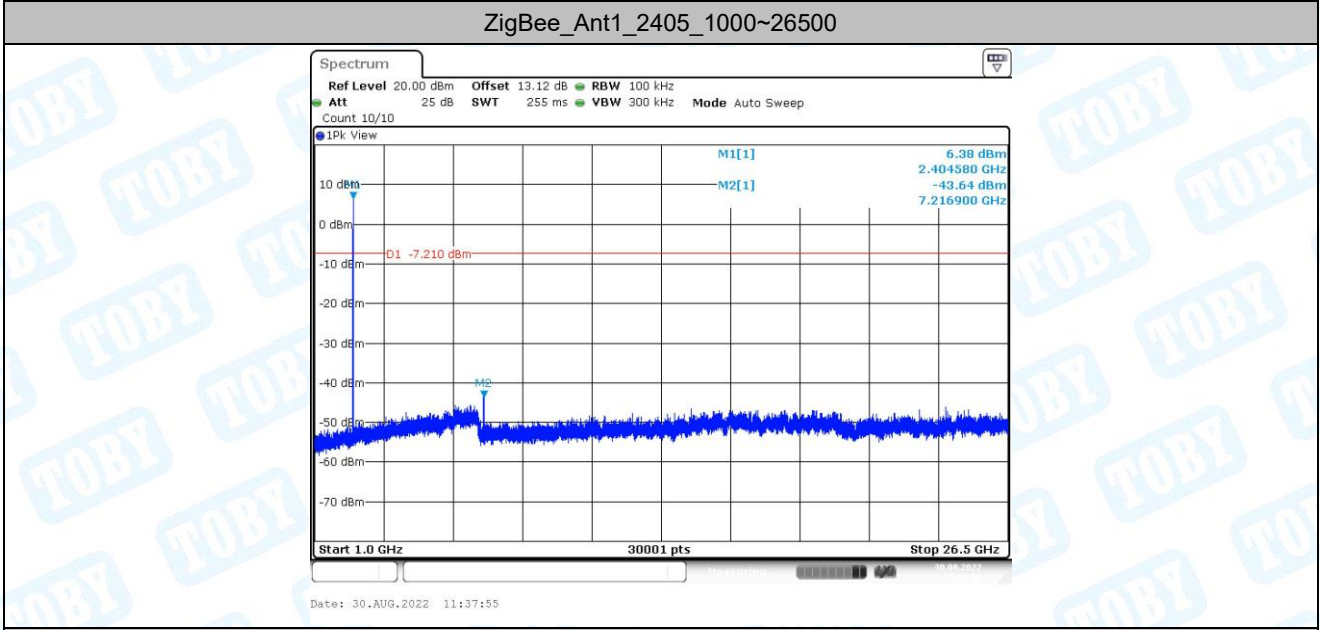
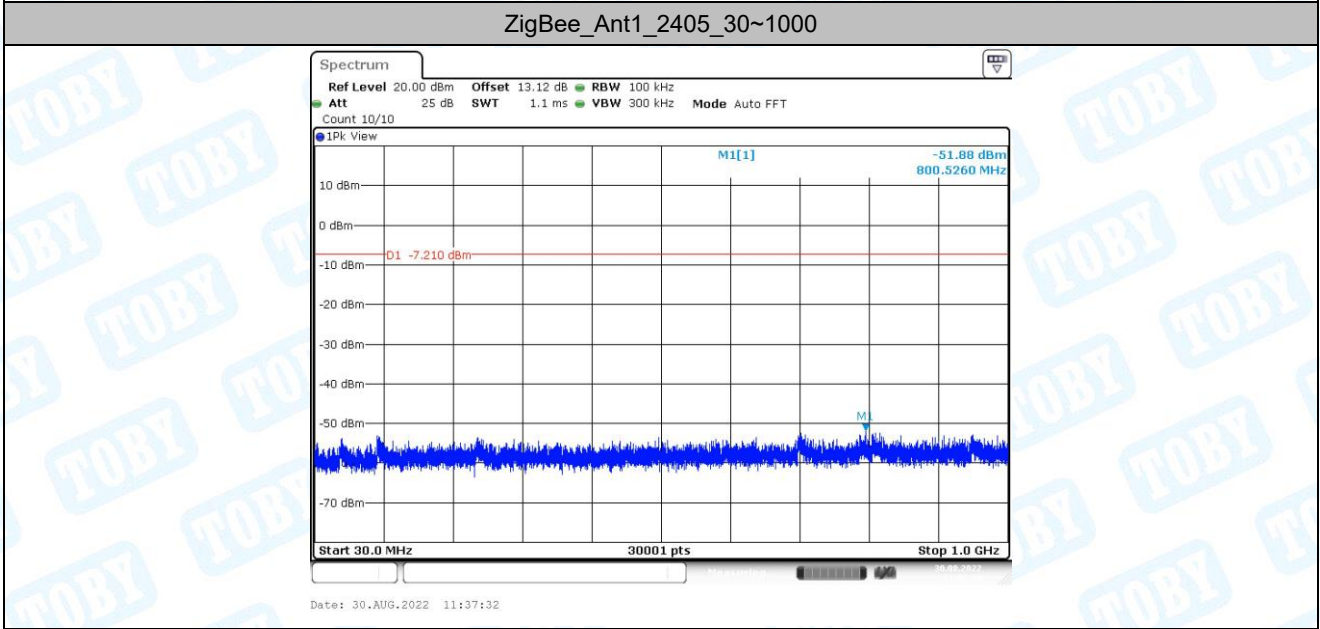
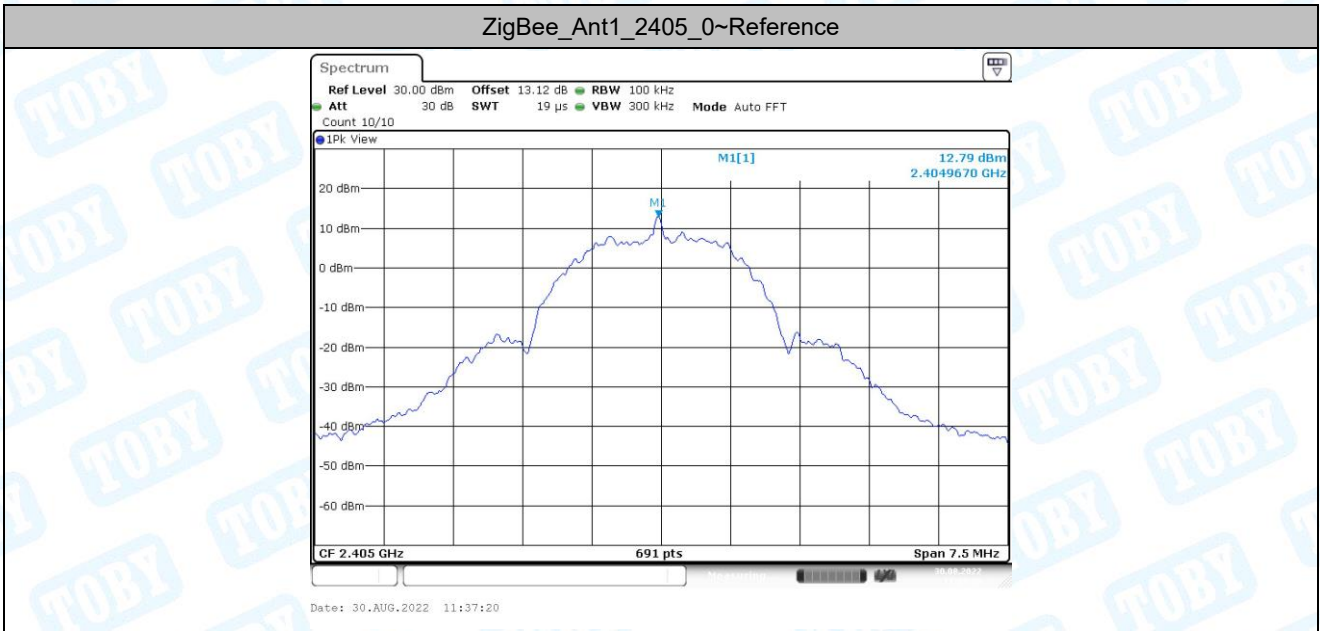


## 6: Conducted Spurious Emission

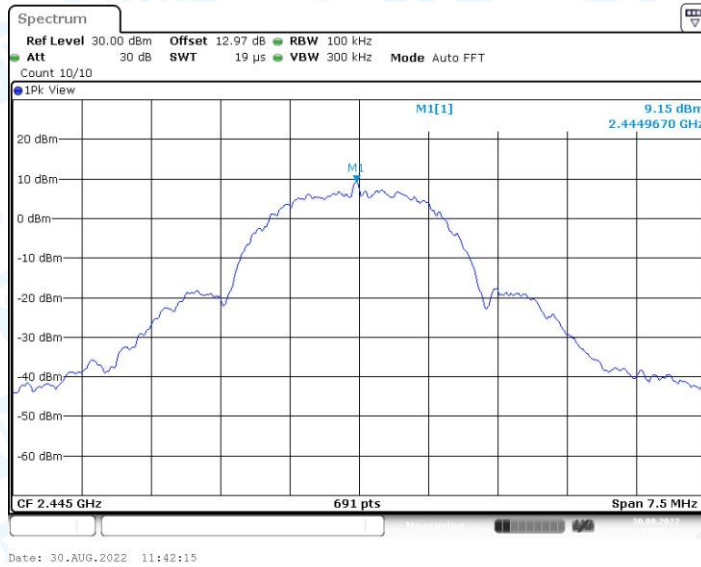
### 6.1 Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
ZigBee	Ant1	2405	Reference	12.79	12.79	---	PASS
			30~1000	12.79	-51.88	≤-7.21	PASS
			1000~26500	12.79	-43.64	≤-7.21	PASS
		2445	Reference	9.15	9.15	---	PASS
			30~1000	9.15	-52.33	≤-10.85	PASS
			1000~26500	9.15	-45.82	≤-10.85	PASS
		2480	Reference	11.94	11.94	---	PASS
			30~1000	11.94	-52.09	≤-8.06	PASS
			1000~26500	11.94	-45.07	≤-8.06	PASS

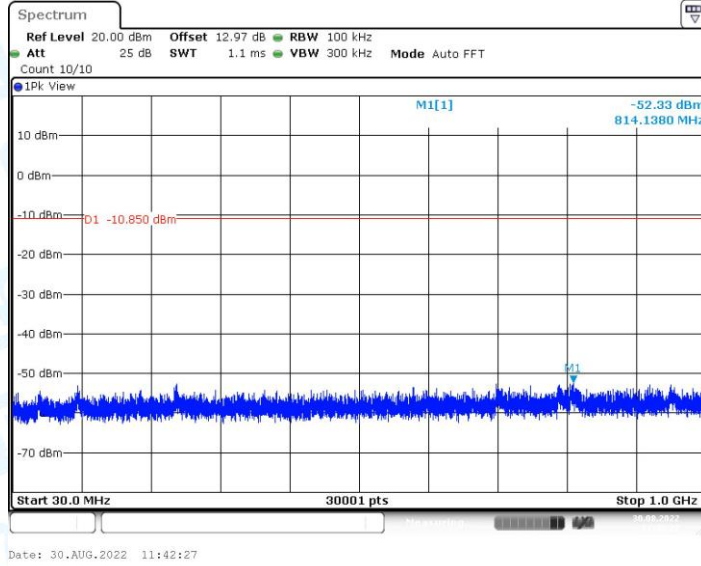
### 6.2 Test Graphs



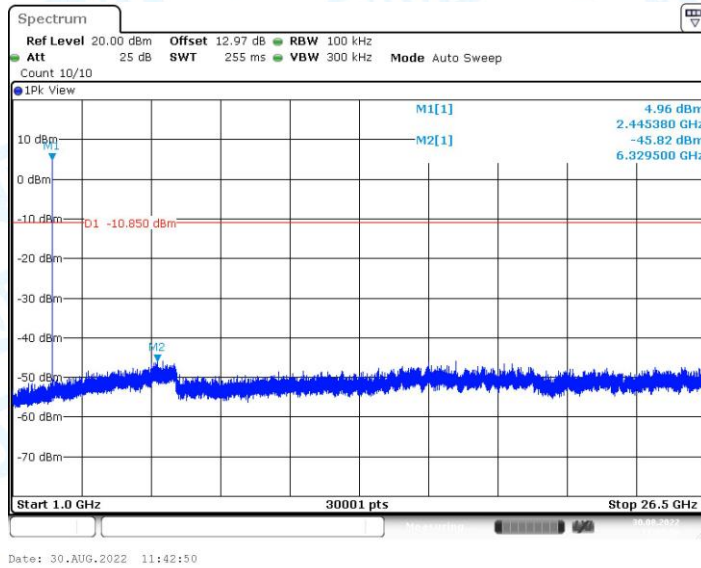
**ZigBee\_Ant1\_2445\_0~Reference**



ZigBee\_Ant1\_2445\_30~1000



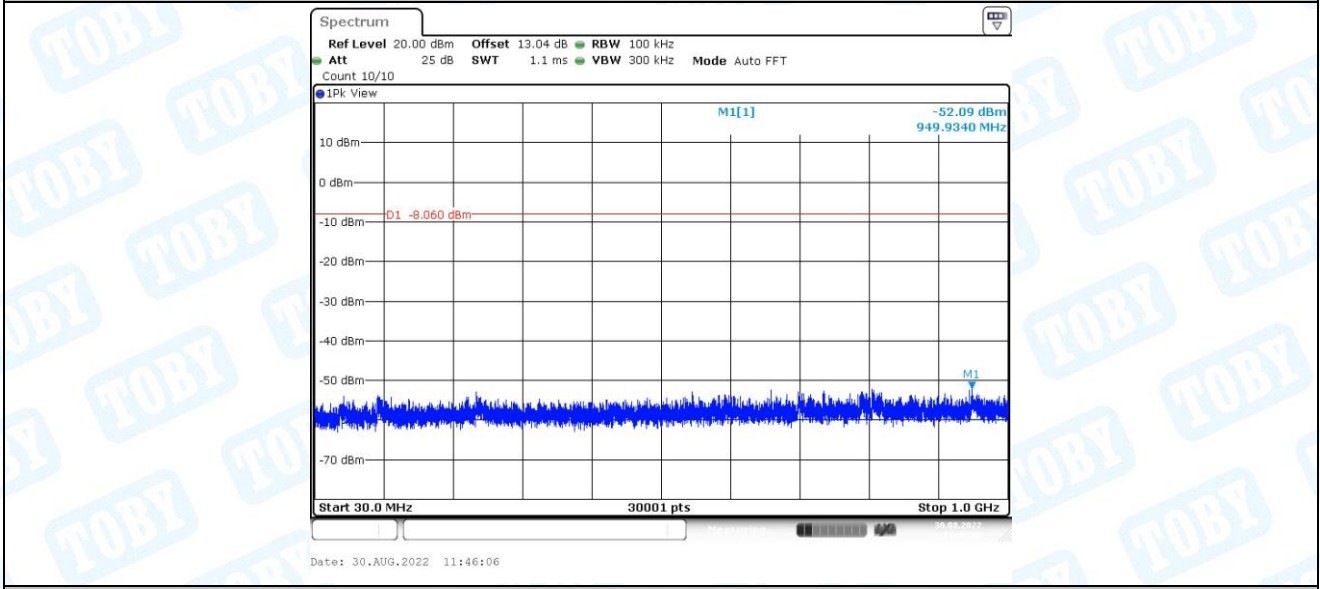
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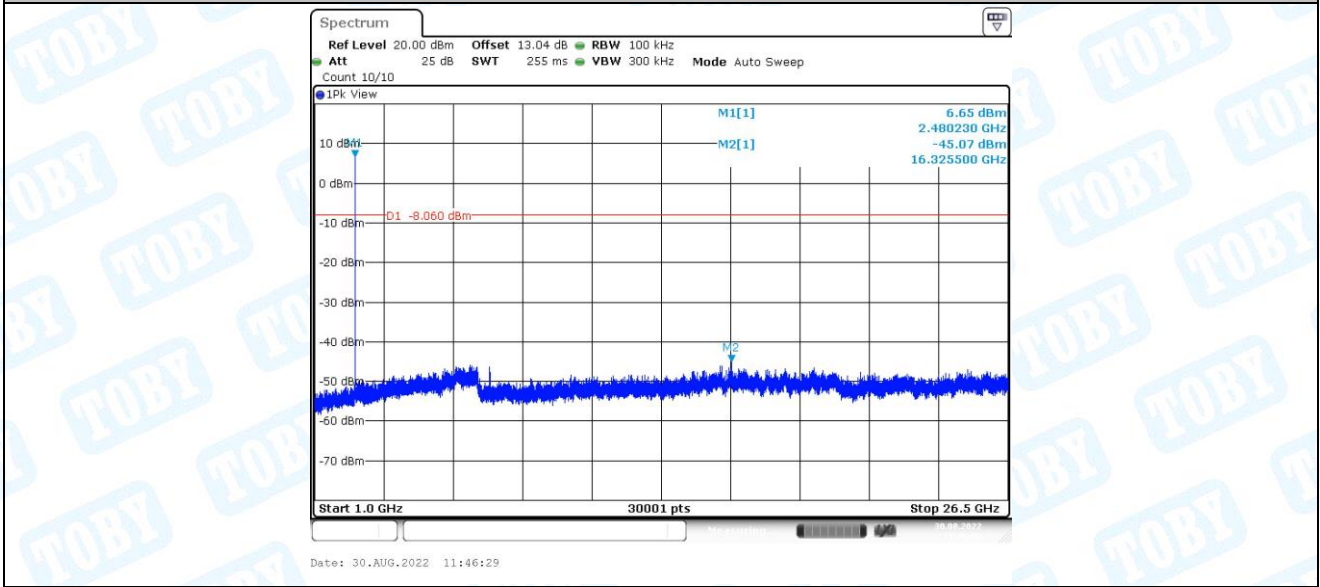
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ZigBee\_Ant1\_2480\_30~1000



ZigBee\_Ant1\_2480\_1000~26500



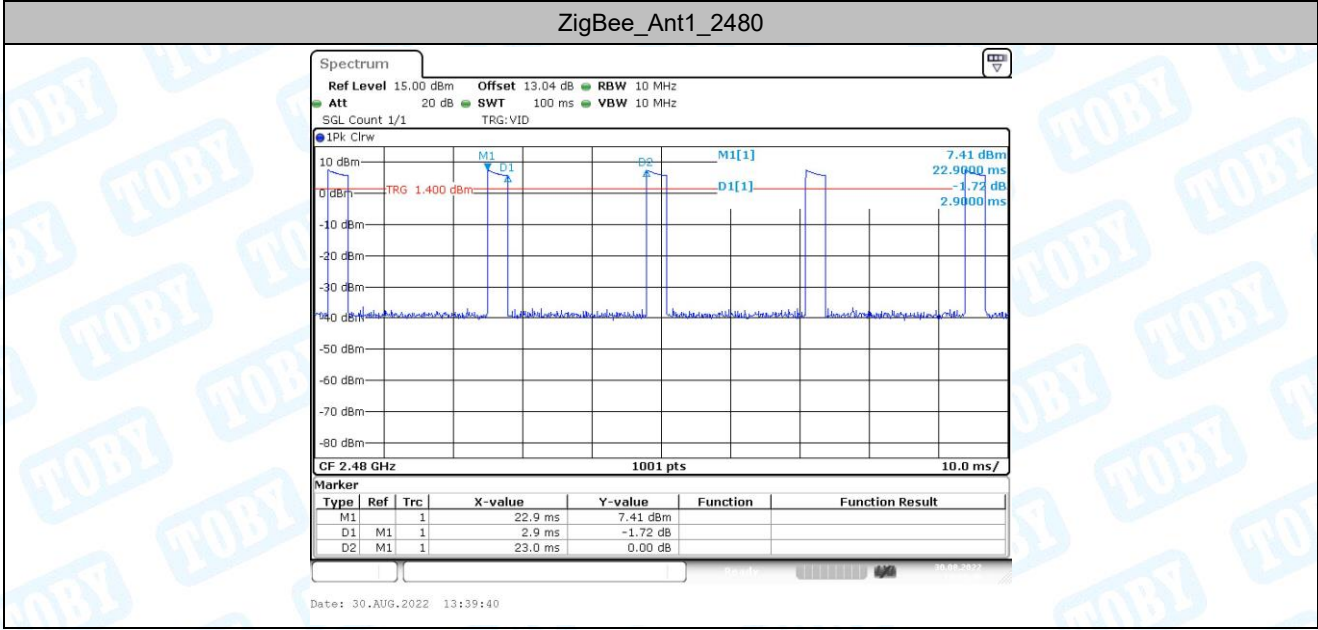
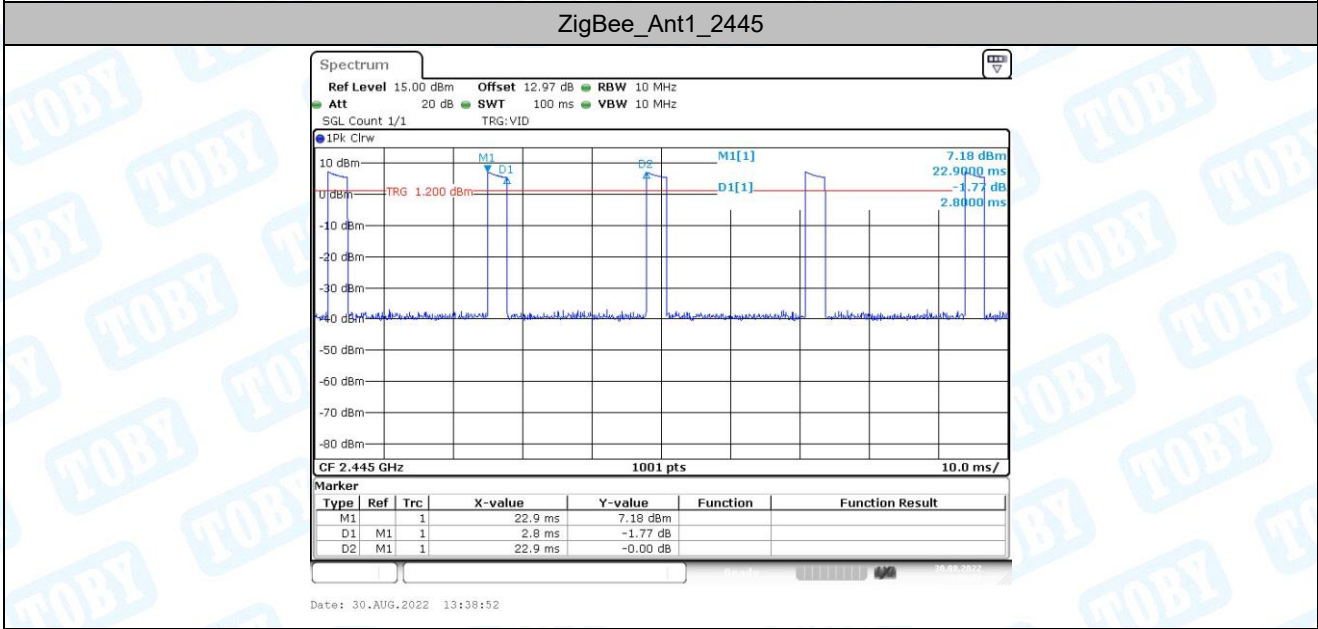
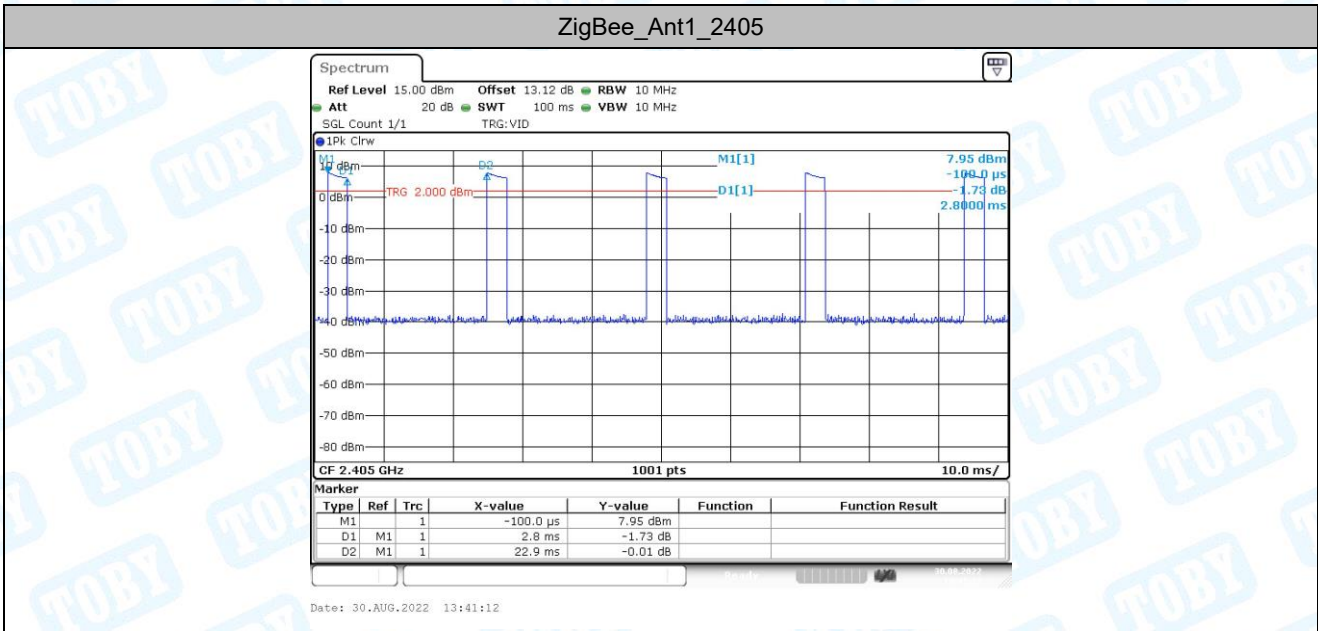
## 7: Duty Cycle

### 7.1 Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]	Limit	Verdict
ZigBee	Ant1	2405	2.80	22.90	12.23	0.357	---	---
		2445	2.80	22.90	12.23	0.357	---	---
		2480	2.90	23.00	12.61	0.345	---	---



### 7.2 Test Graphs



## 8: Emissions in Restricted Bands

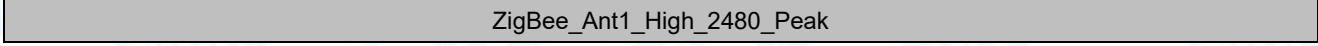
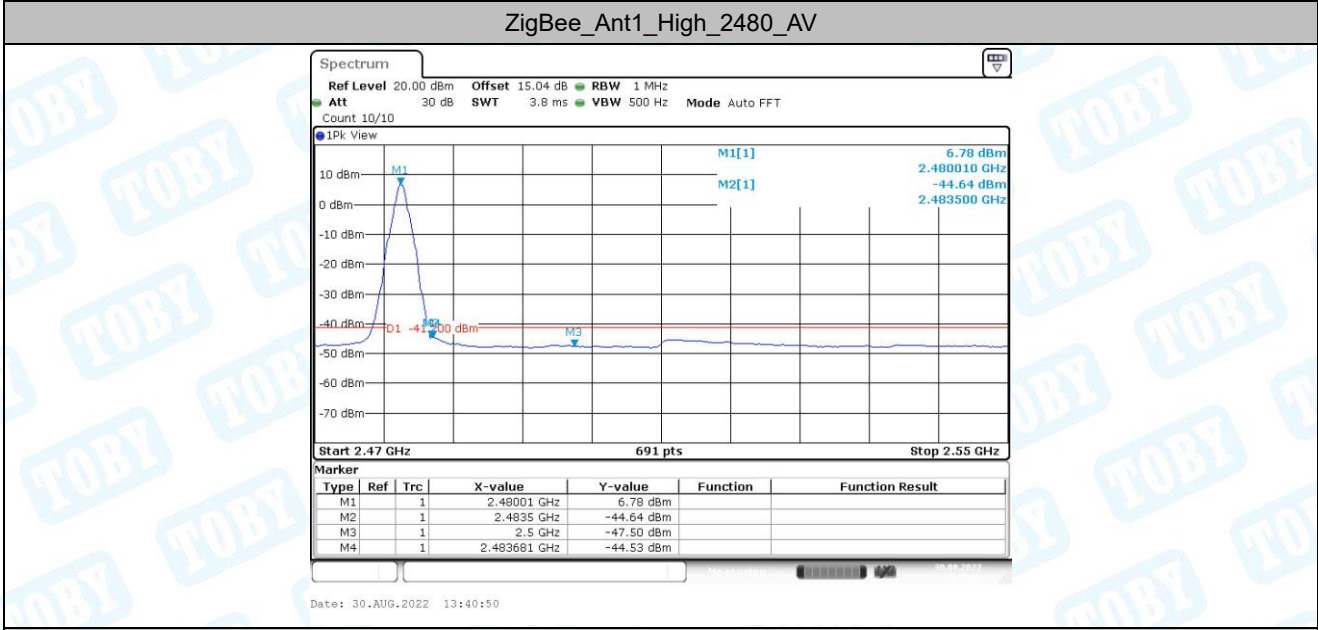
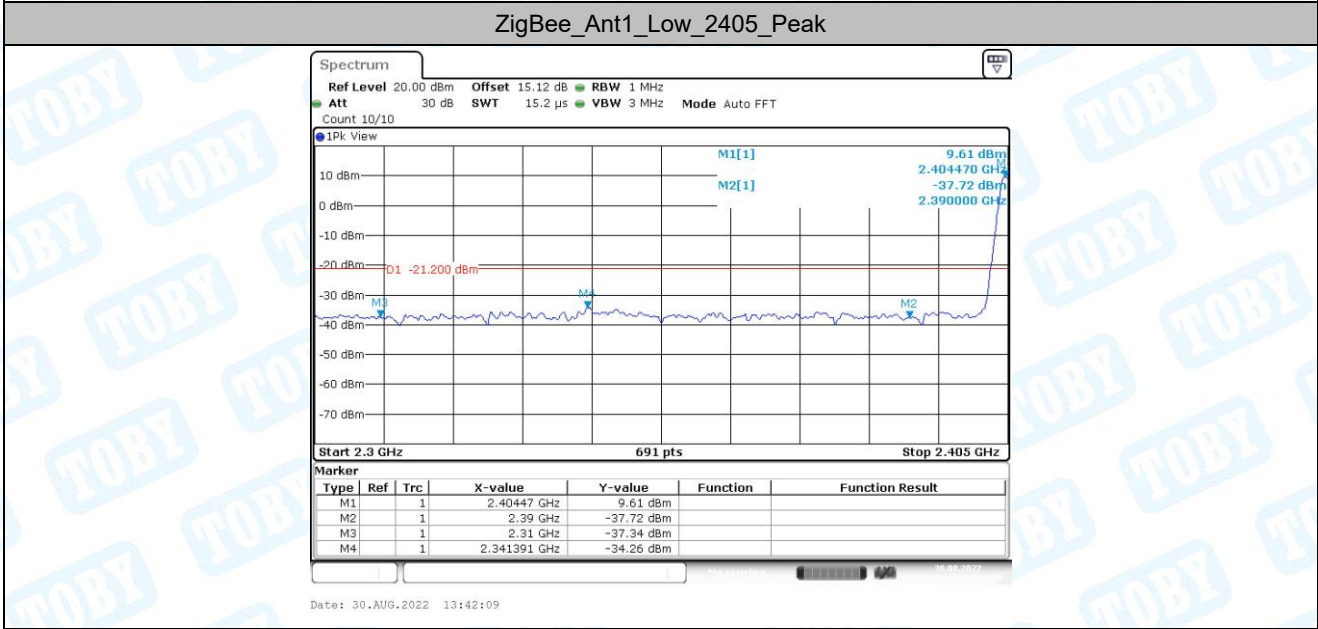
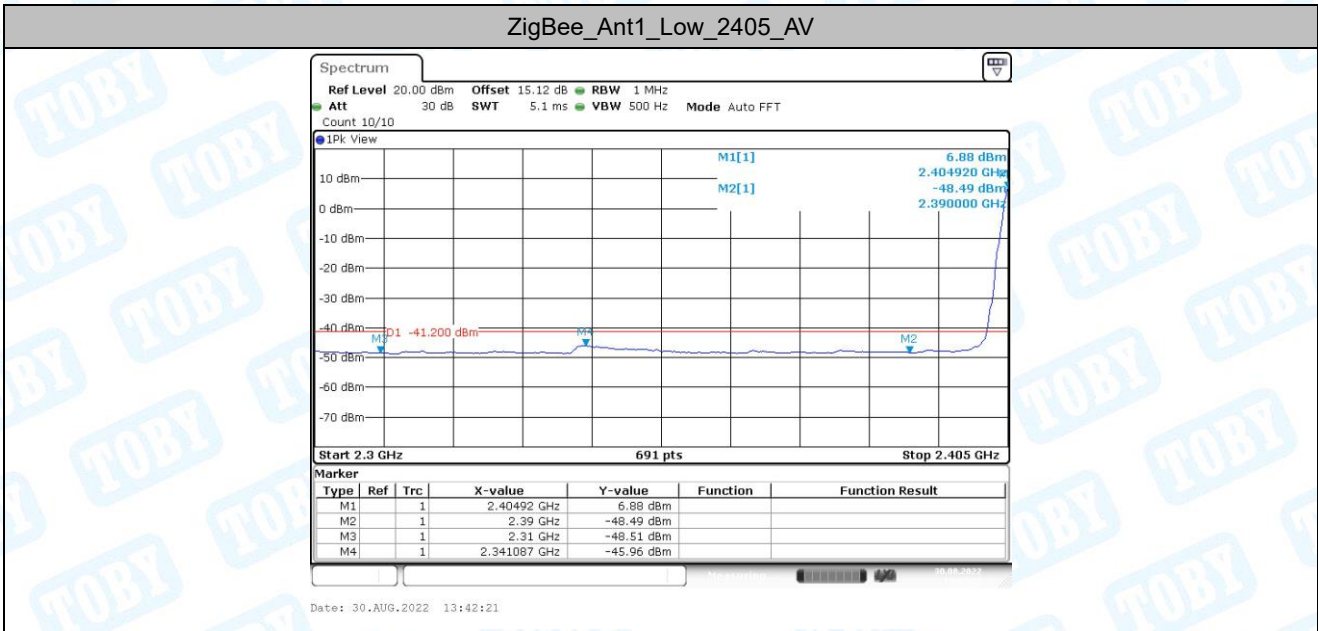
### 8.1 Test Result

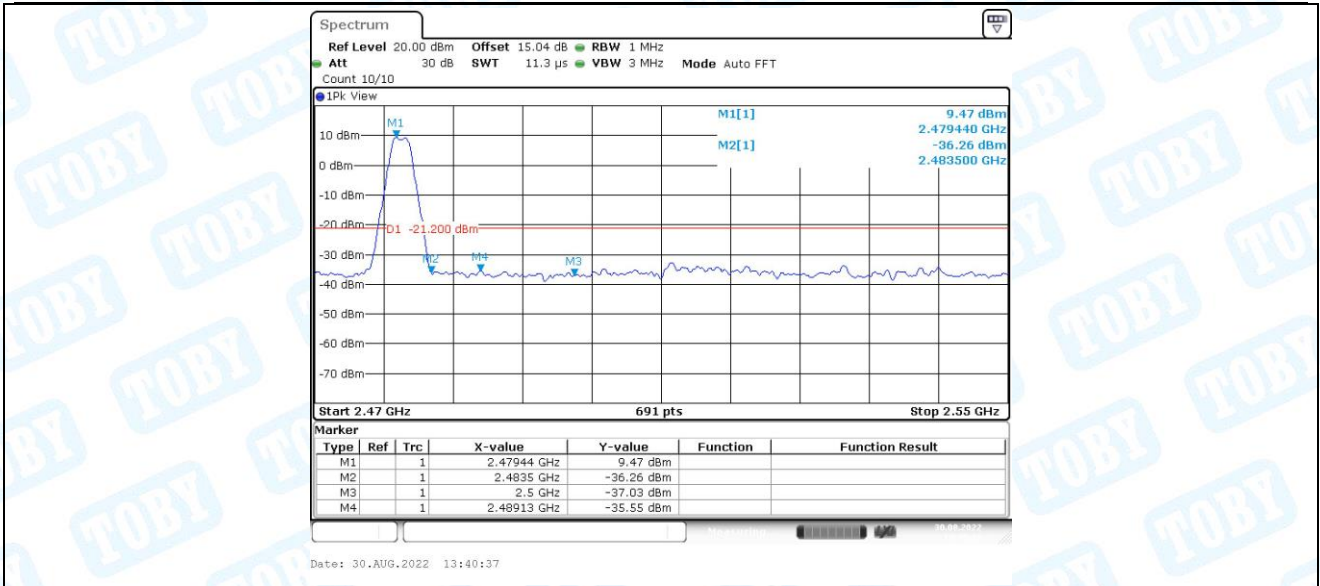
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
ZigBee	Ant1	Low	2405	AV	2310.000	-48.51	≤-41.20	PASS
				AV	2341.087	-45.96	≤-41.20	PASS
				AV	2390.000	-48.49	≤-41.20	PASS
				Peak	2310.000	-37.34	≤-21.20	PASS
				Peak	2341.391	-34.26	≤-21.20	PASS
				Peak	2390.000	-37.72	≤-21.20	PASS
		High	2480	AV	2483.500	-44.64	≤-41.20	PASS
				AV	2483.681	-44.53	≤-41.20	PASS
				AV	2500.000	-47.5	≤-41.20	PASS
				Peak	2483.500	-36.26	≤-21.20	PASS
				Peak	2489.130	-35.55	≤-21.20	PASS
				Peak	2500.000	-37.03	≤-21.20	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.

### 8.2 Test Graphs





-----END OF THE REPORT-----