

RF Test Data for ZigBee (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless Receiver Motor
Test Model:	3263
Sample ID:	RW-C-202208-0186-10-2#
Environmental Conditions	
Temperature:	25°C
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-202208-0186-17	

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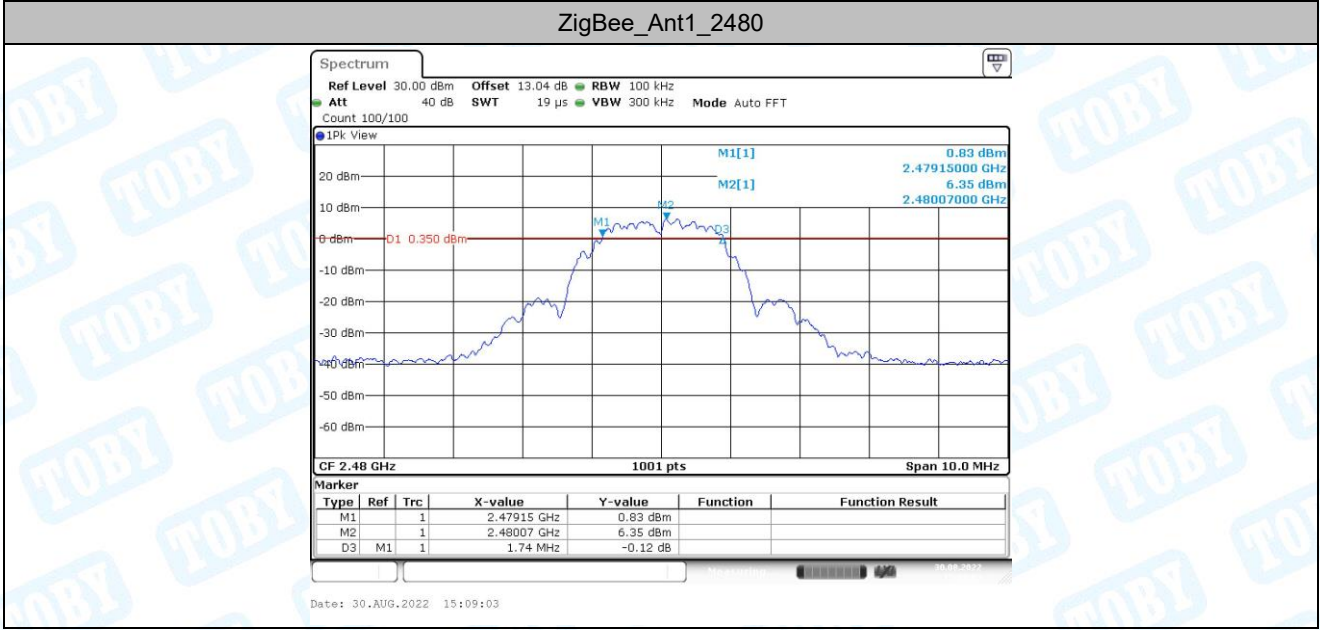
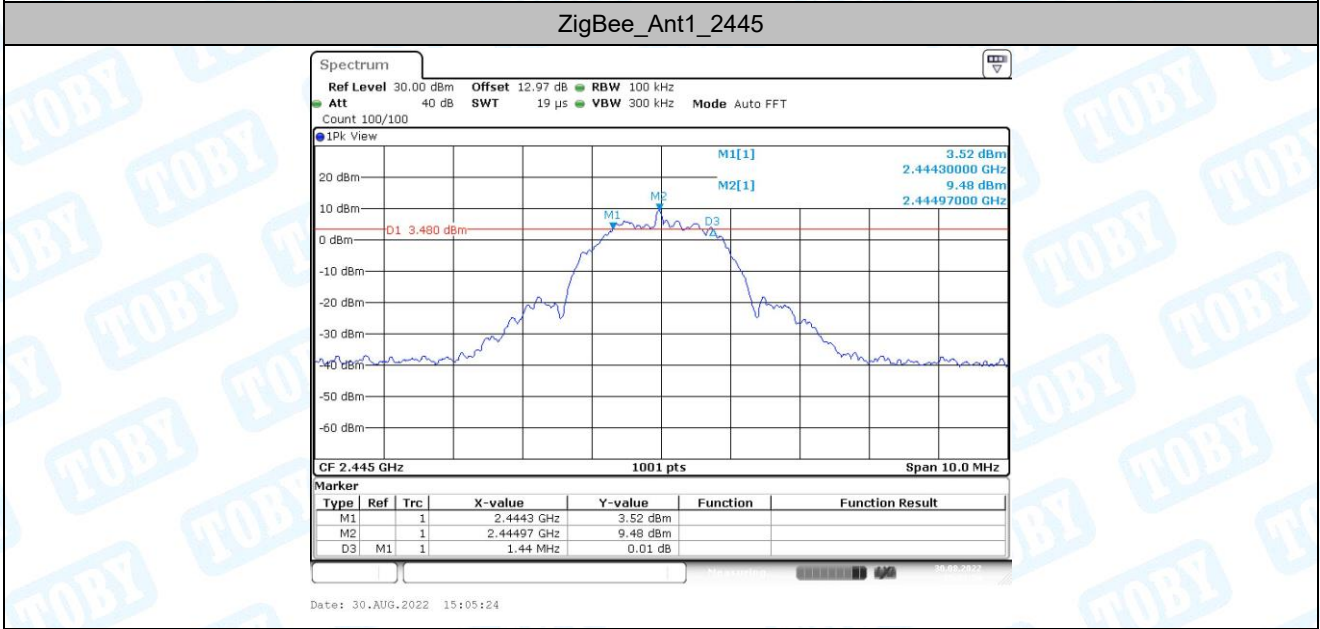
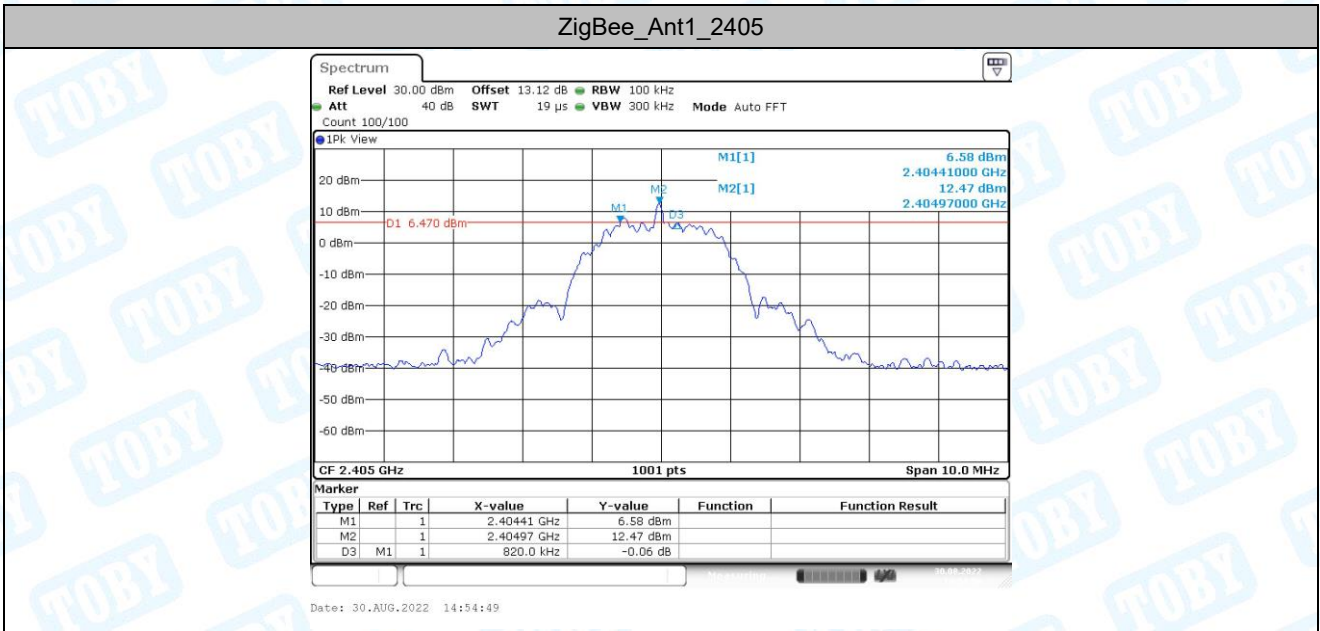
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1: DTS Bandwidth

1.1 Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
ZigBee	Ant1	2405	0.82	2404.41	2405.23	0.5	PASS
		2445	1.44	2444.30	2445.74	0.5	PASS
		2480	1.74	2479.15	2480.89	0.5	PASS

1.2 Test Graphs

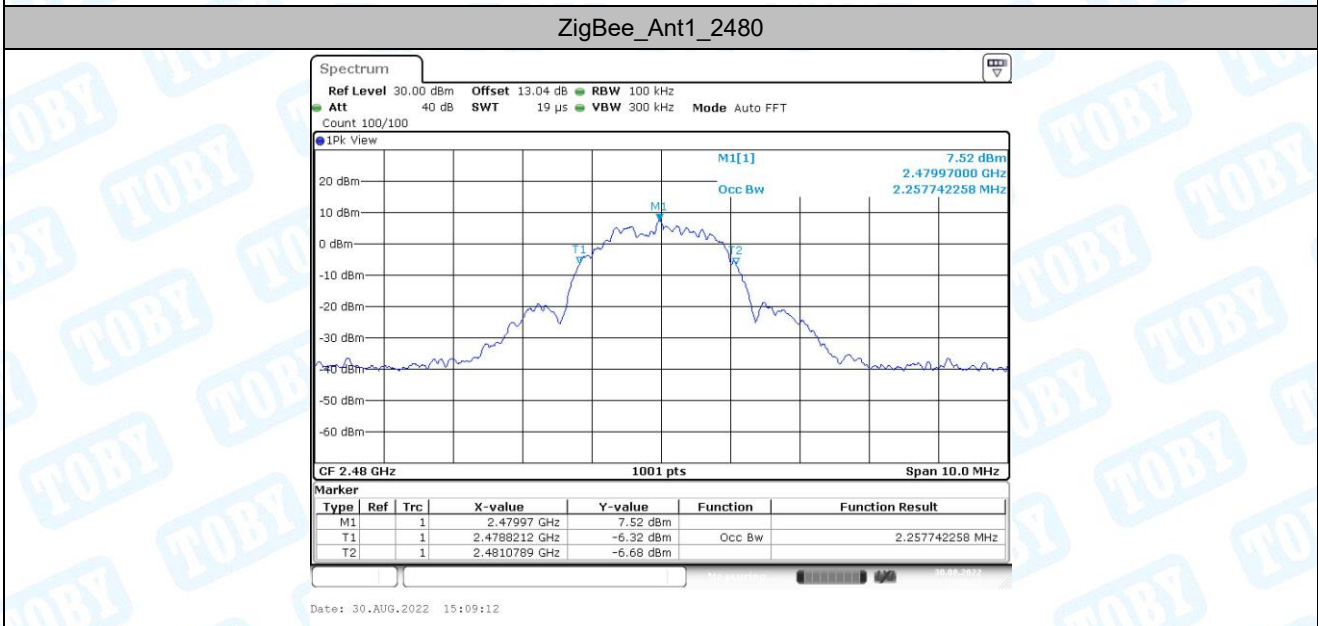
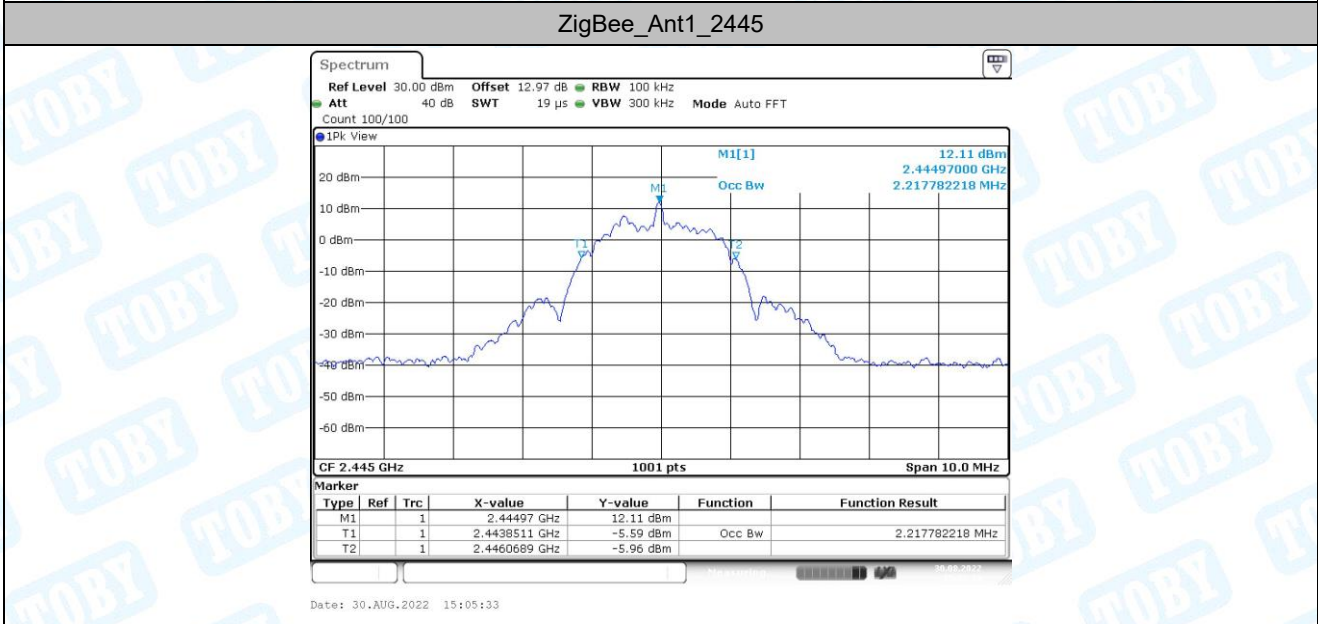
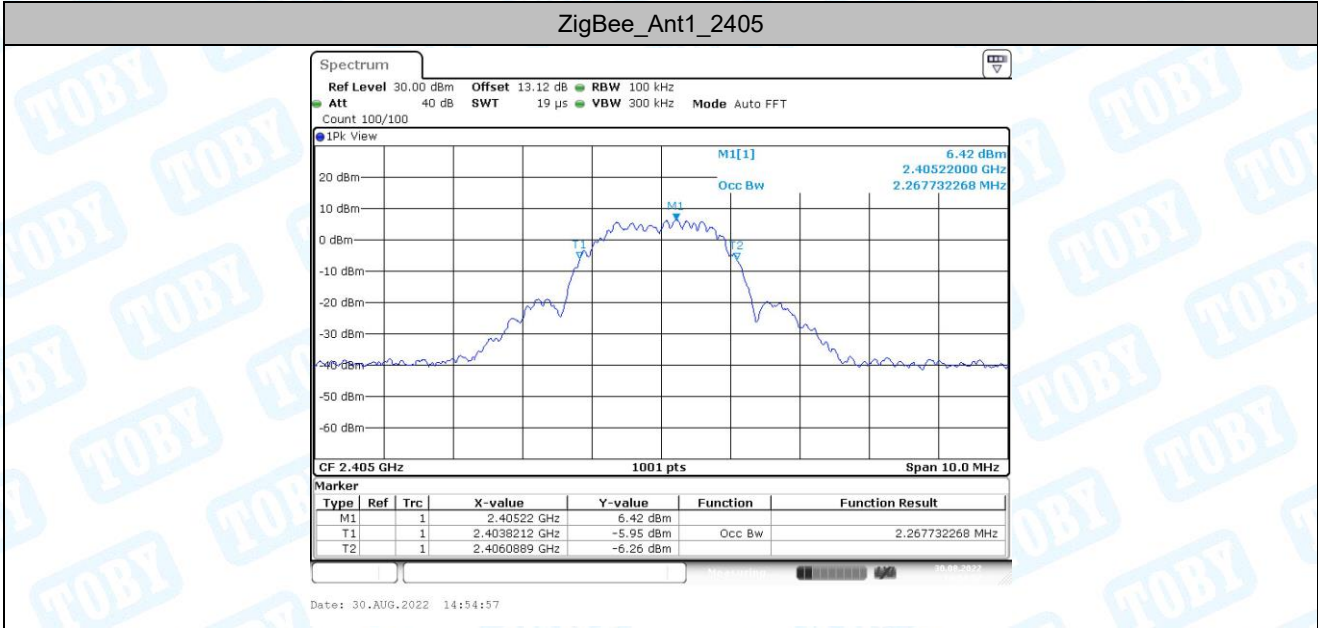


2: Occupied Channel Bandwidth

2.1 Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
ZigBee	Ant1	2405	2.268	2403.8212	2406.0889	---	---
		2445	2.218	2443.8511	2446.0689	---	---
		2480	2.258	2478.8212	2481.0789	---	---

2.2 Test Graphs



3: Maximum conducted output power

3.1 Test Result

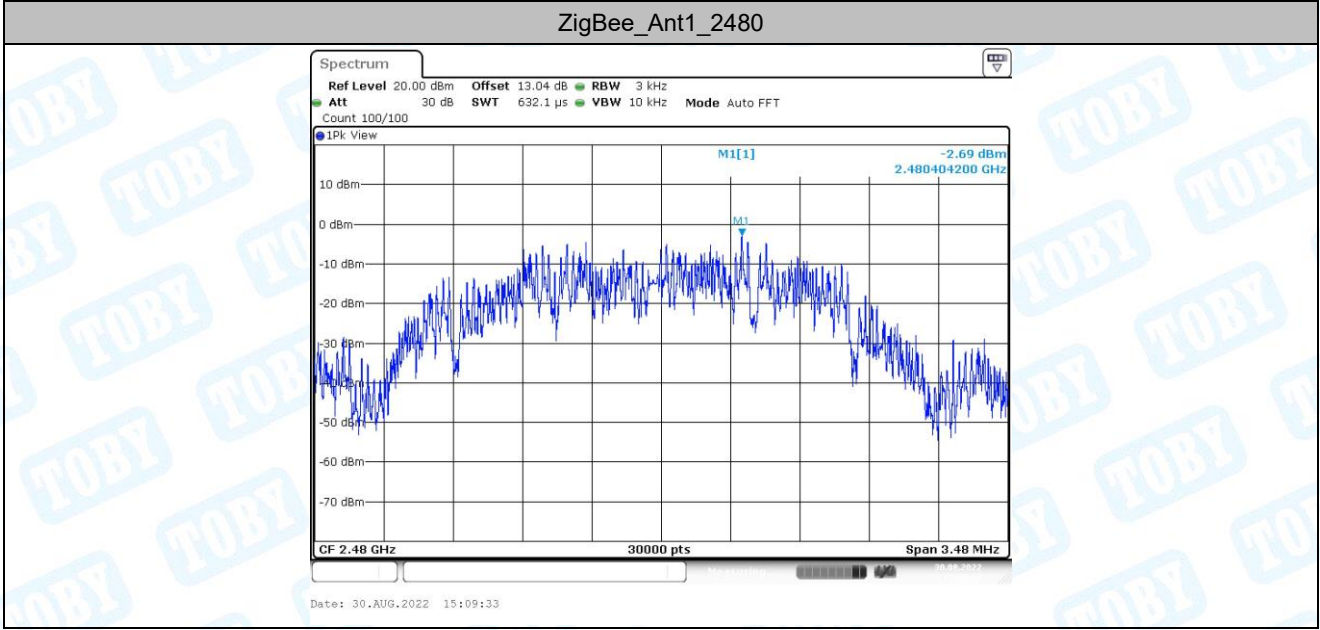
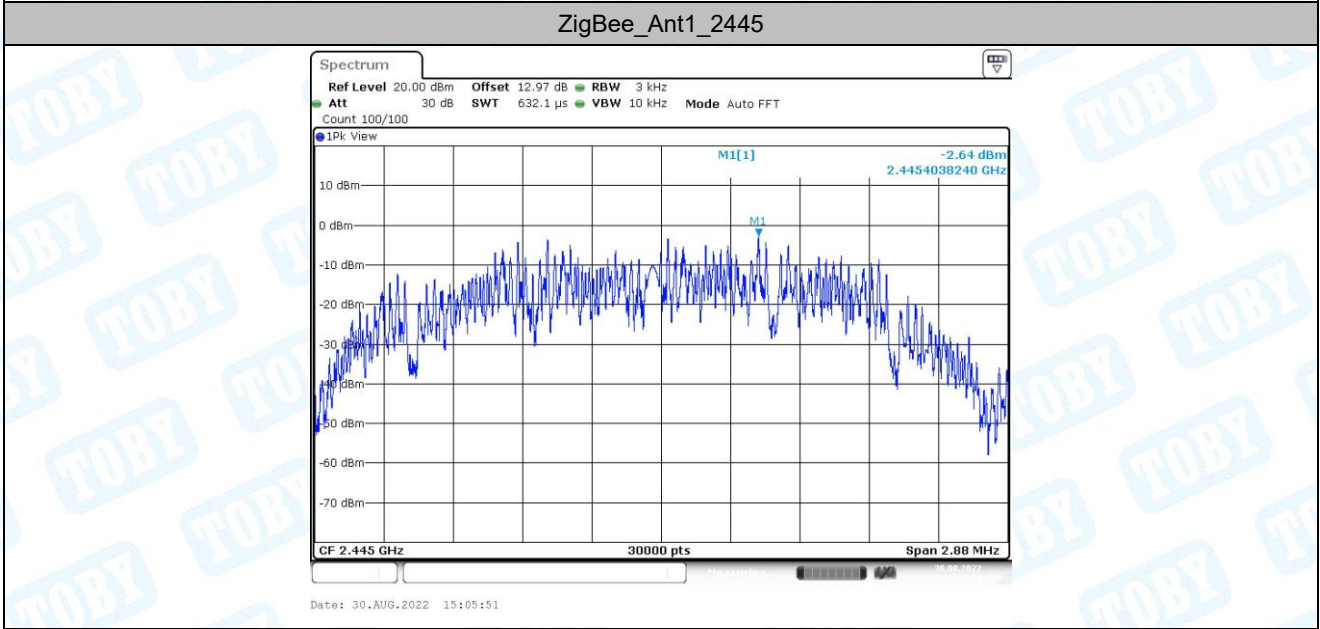
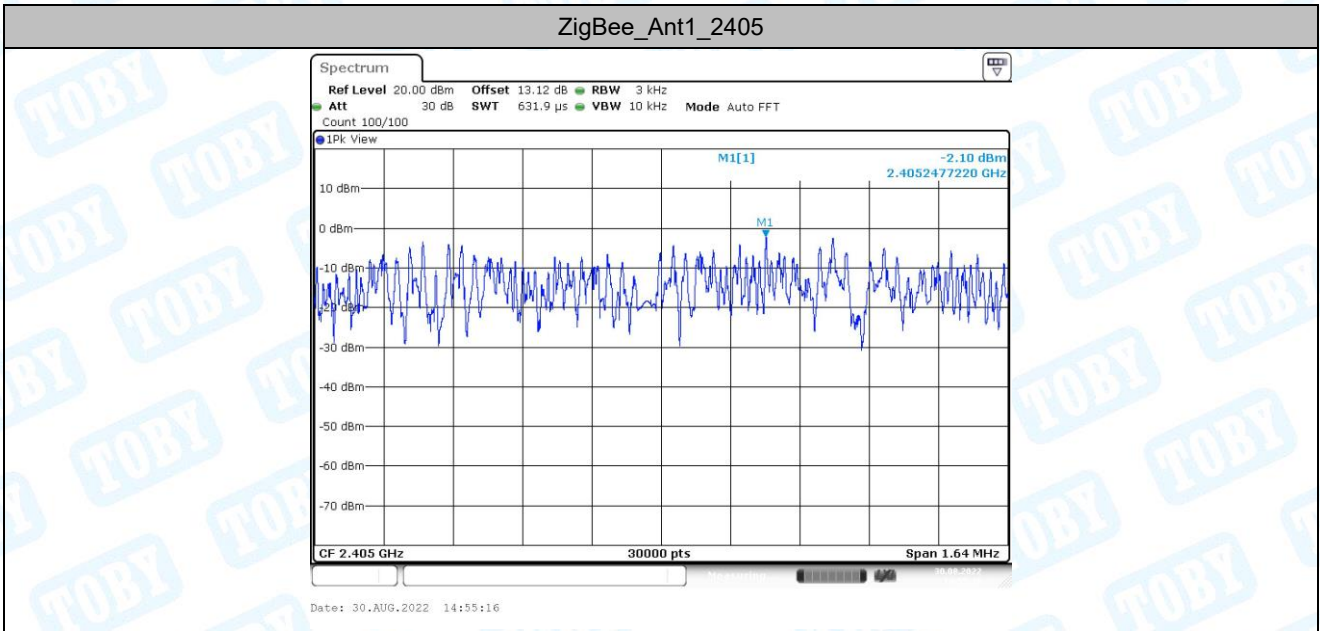
Test Mode	Antenna	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
ZigBee	Ant1	2405	0.77	≤30	PASS
		2445	0.22	≤30	PASS
		2480	0.08	≤30	PASS

4: Maximum power spectral density

4.1 Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
ZigBee	Ant1	2405	-2.1	≤8.00	PASS
		2445	-2.64	≤8.00	PASS
		2480	-2.69	≤8.00	PASS

4.2 Test Graphs

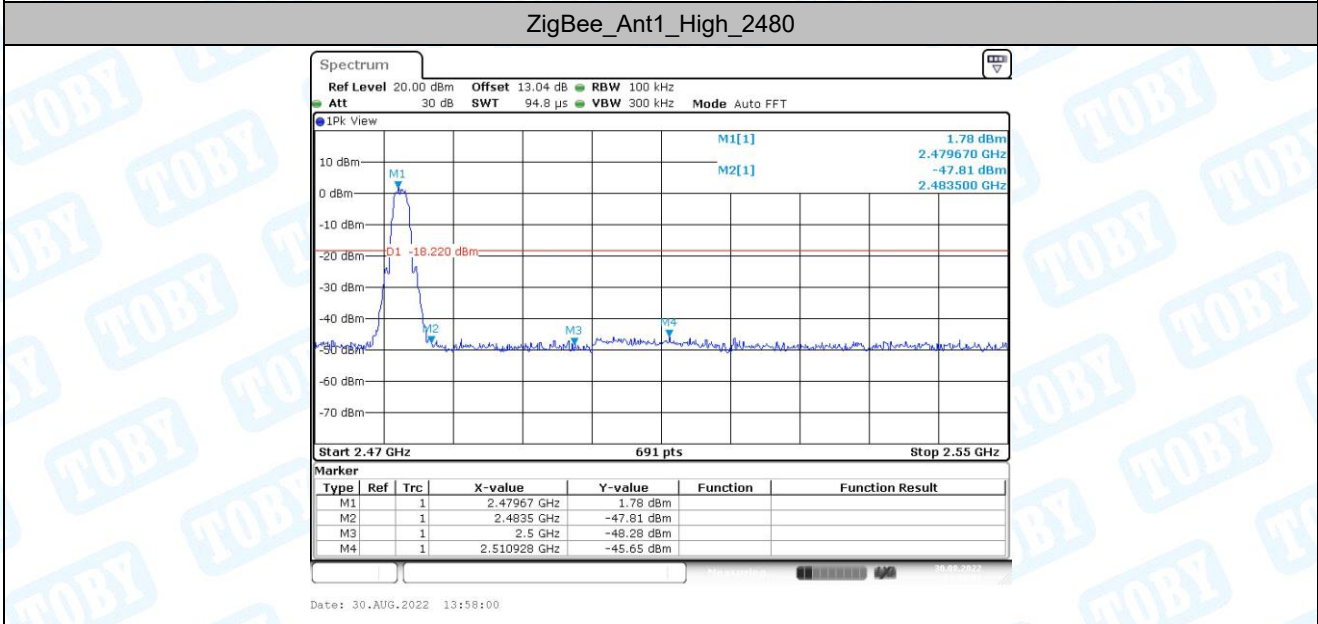
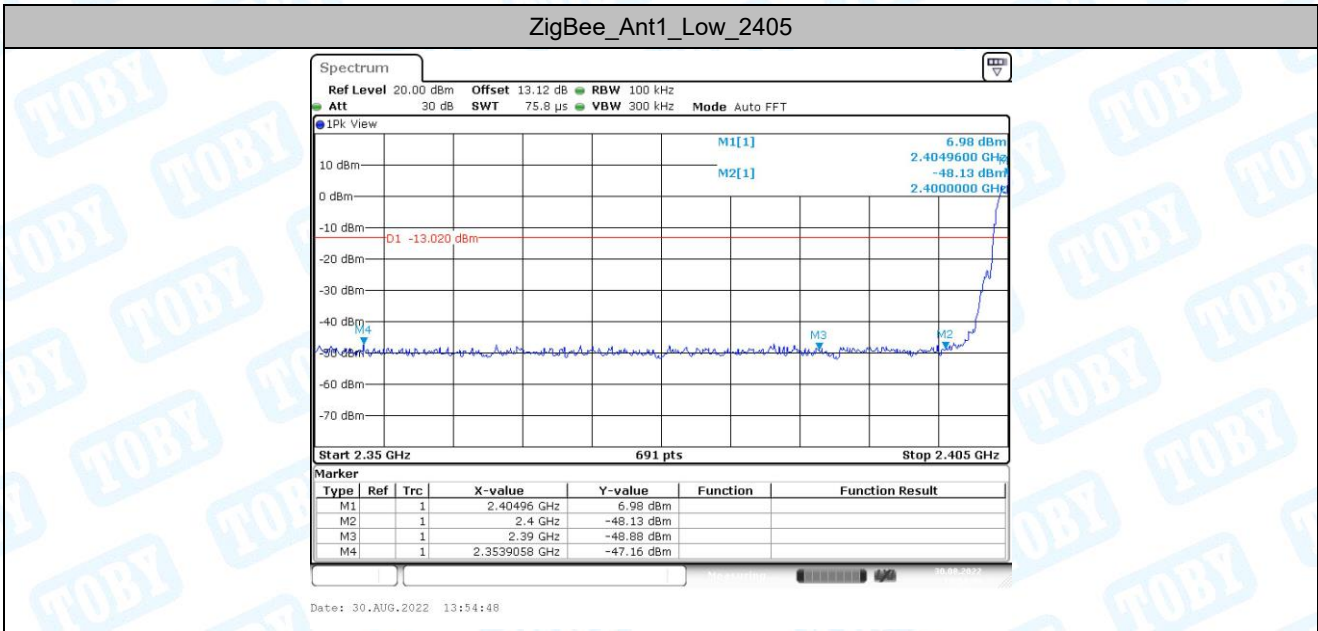


5: Band edge measurements

5.1 Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
ZigBee	Ant1	Low	2405	6.98	-47.16	≤-13.02	PASS
		High	2480	1.78	-45.65	≤-18.22	PASS

5.2 Test Graphs

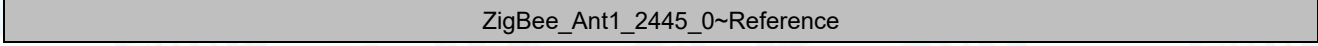
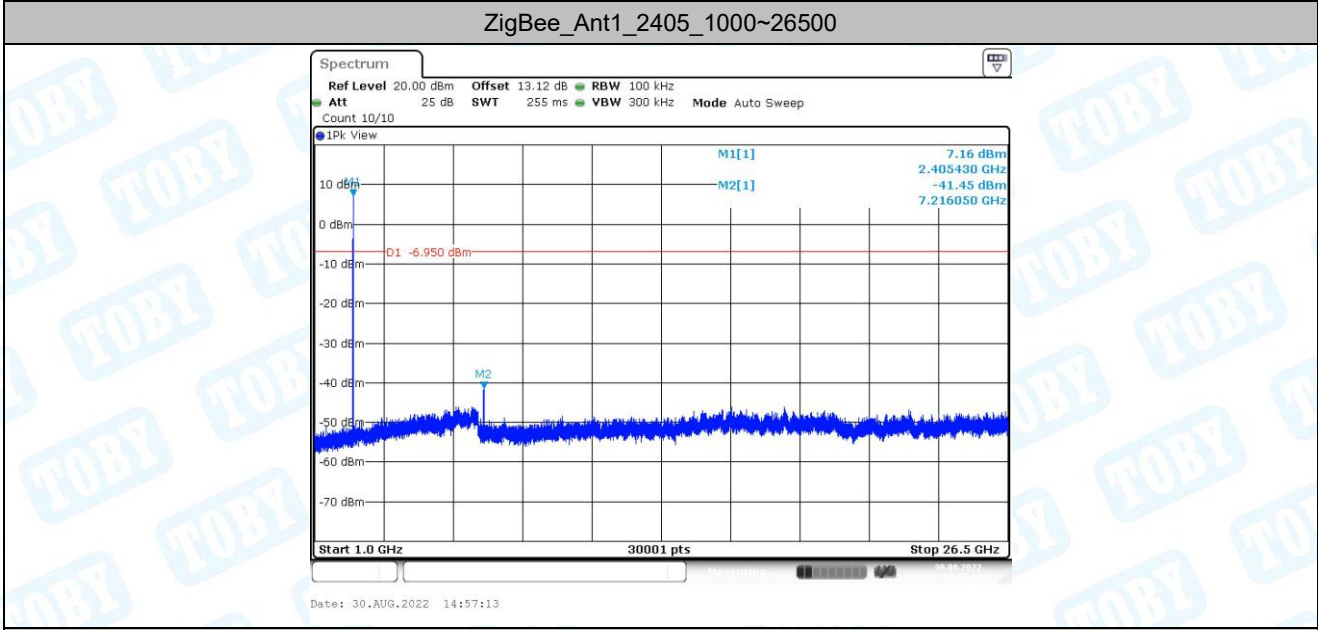
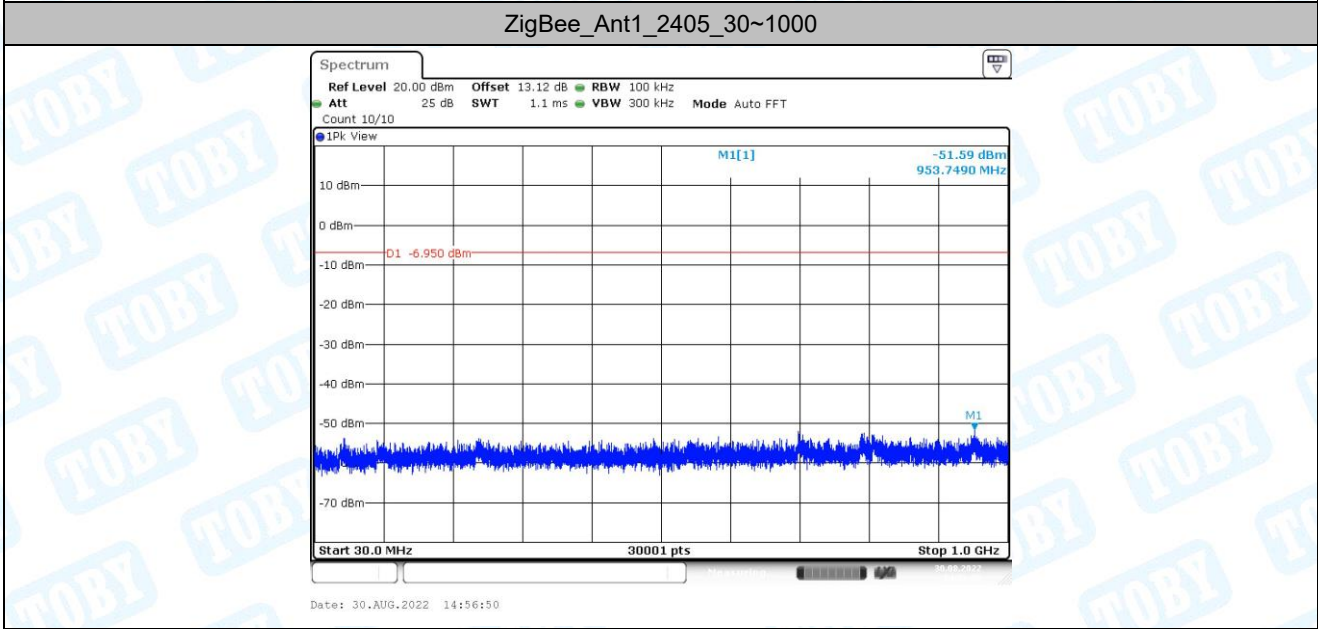
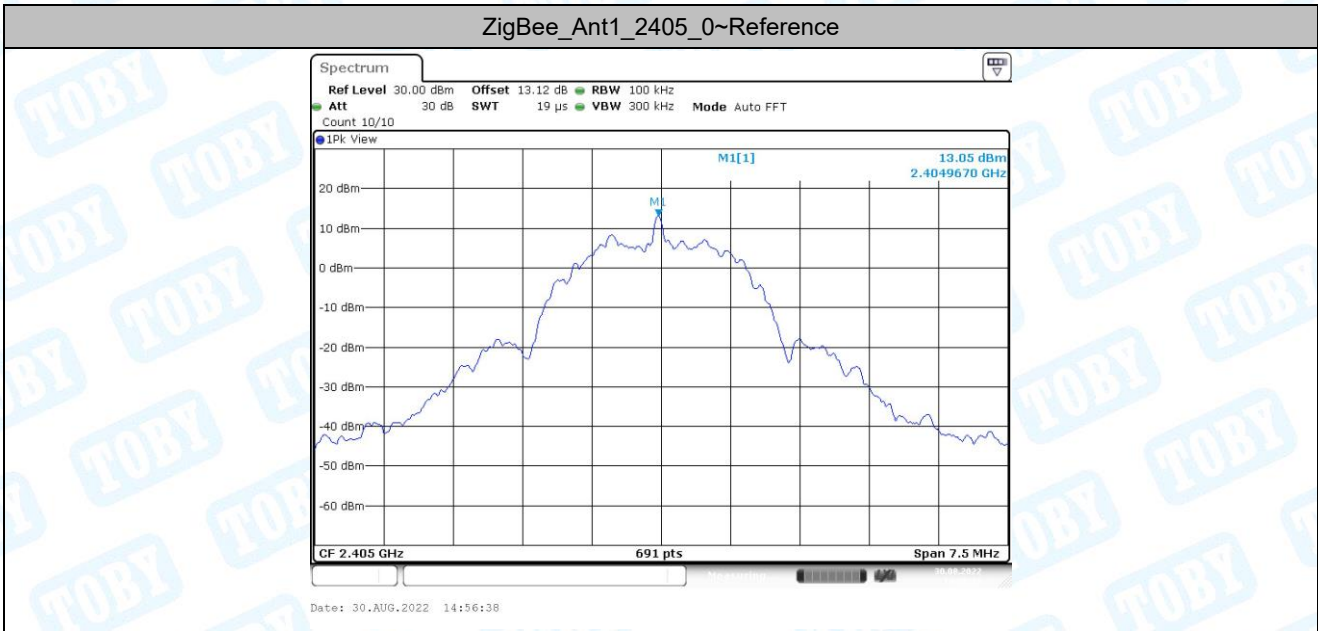


6: Conducted Spurious Emission

6.1 Test Result

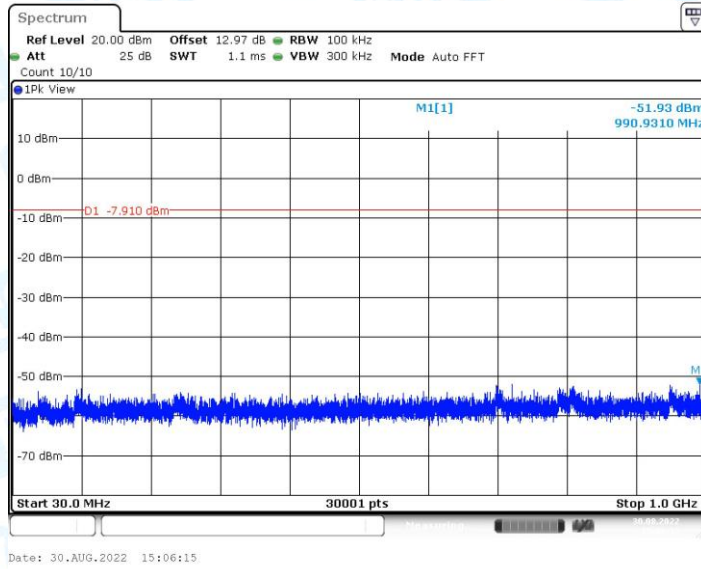
Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
ZigBee	Ant1	2405	Reference	13.05	13.05	---	PASS
			30~1000	13.05	-51.59	≤-6.95	PASS
			1000~26500	13.05	-41.45	≤-6.95	PASS
		2445	Reference	12.09	12.09	---	PASS
			30~1000	12.09	-51.93	≤-7.91	PASS
			1000~26500	12.09	-39.19	≤-7.91	PASS
		2480	Reference	12.56	12.56	---	PASS
			30~1000	12.56	-52	≤-7.44	PASS
			1000~26500	12.56	-43.4	≤-7.44	PASS

6.2 Test Graphs

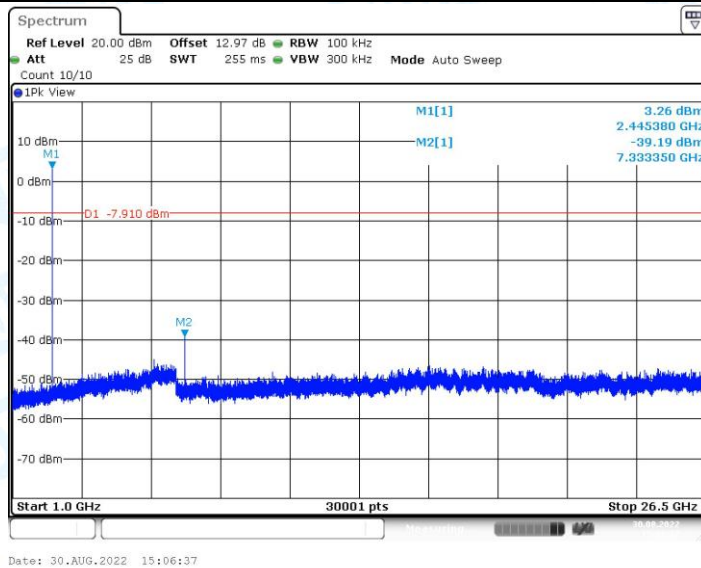




ZigBee_Ant1_2445_30~1000



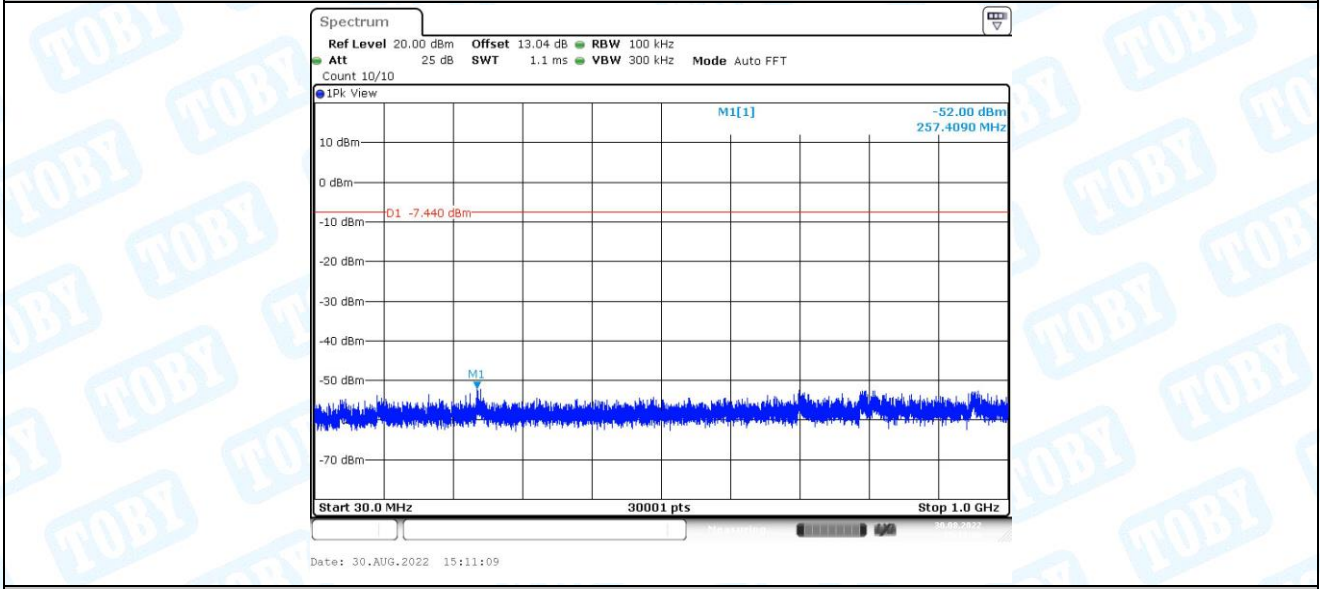
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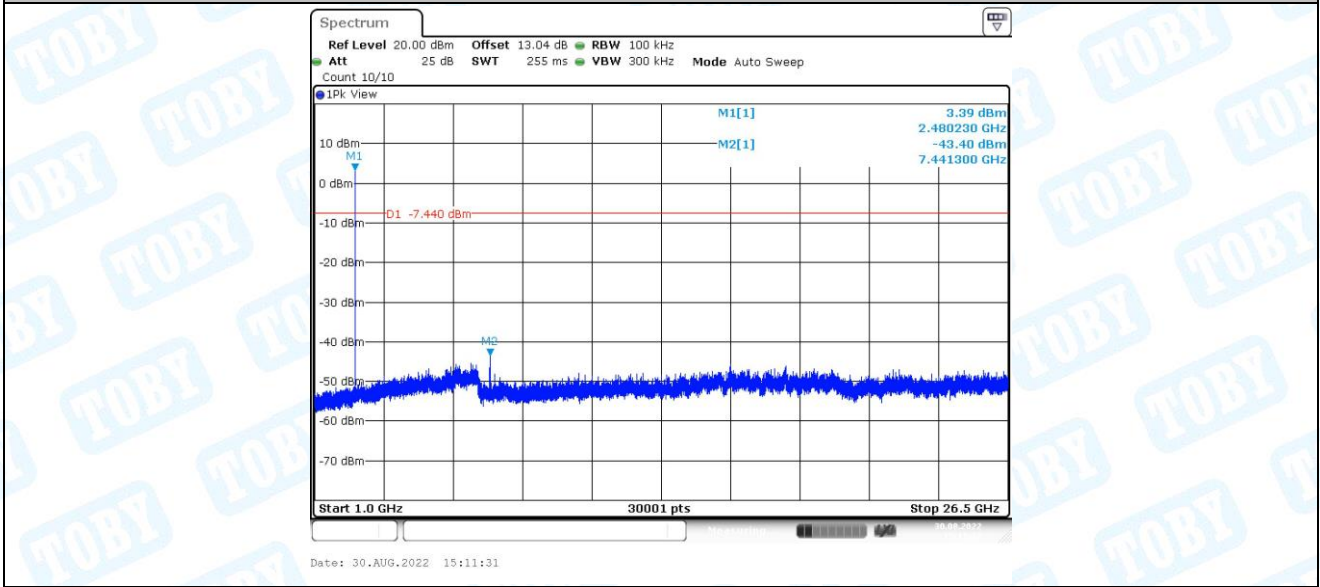
ZigBee_Ant1_2480_0~Reference



ZigBee_Ant1_2480_30~1000



ZigBee_Ant1_2480_1000~26500

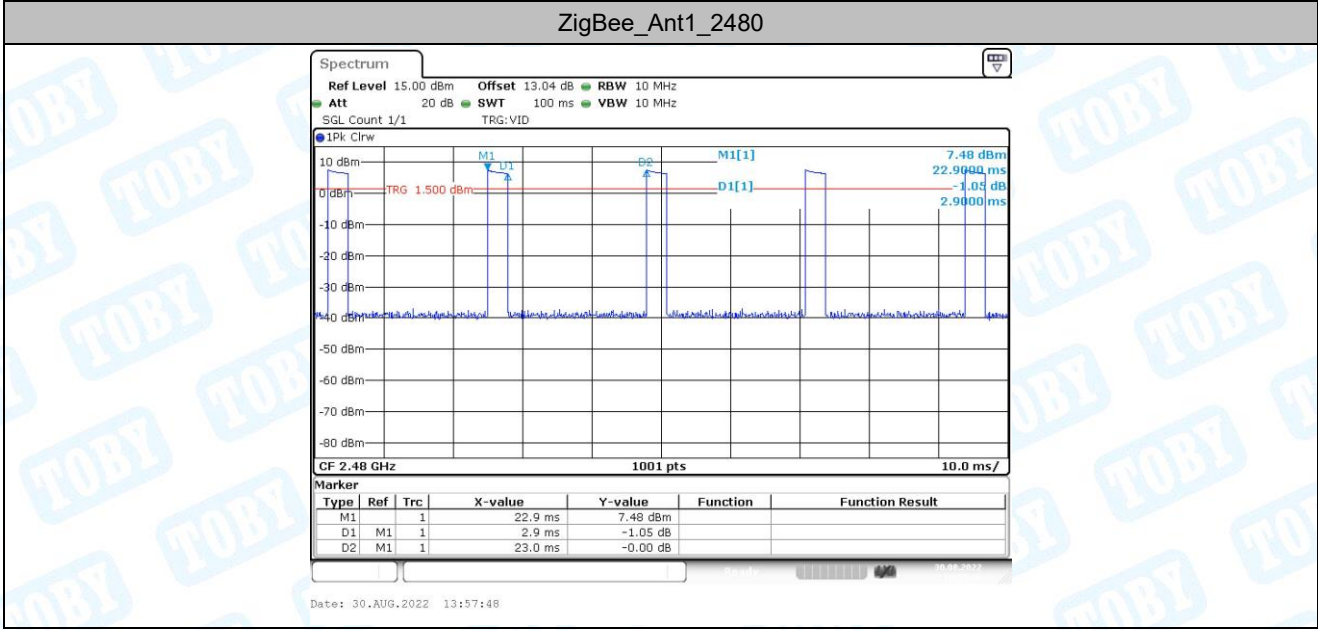
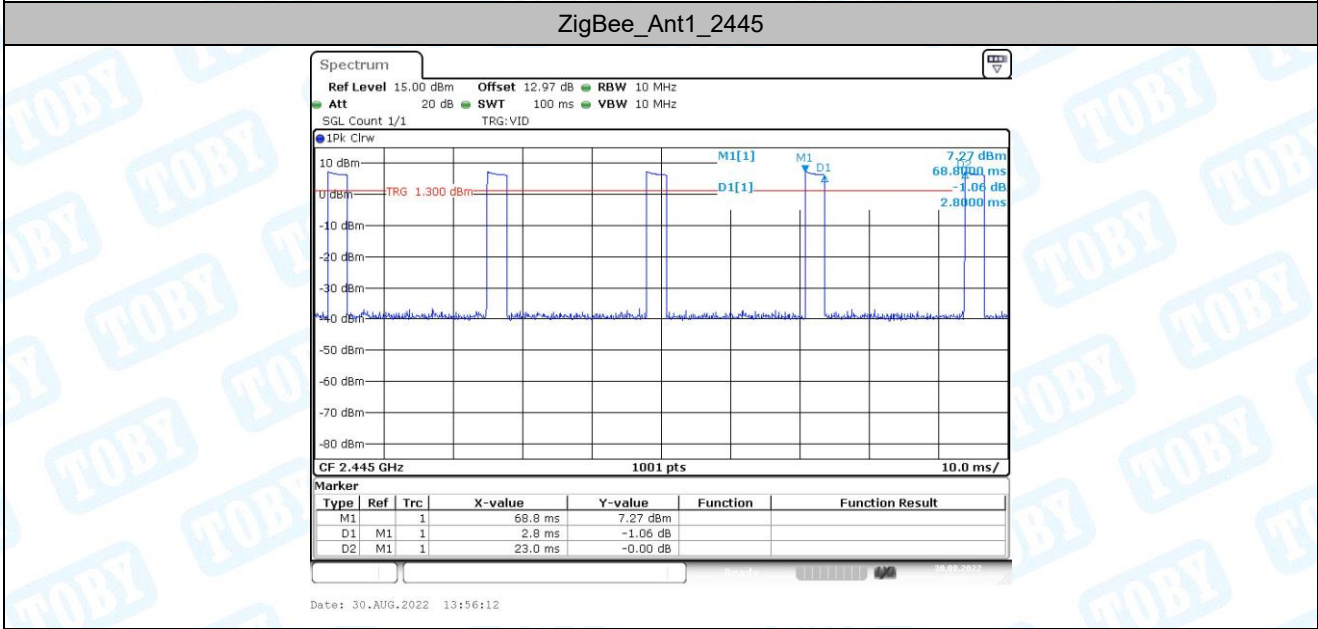
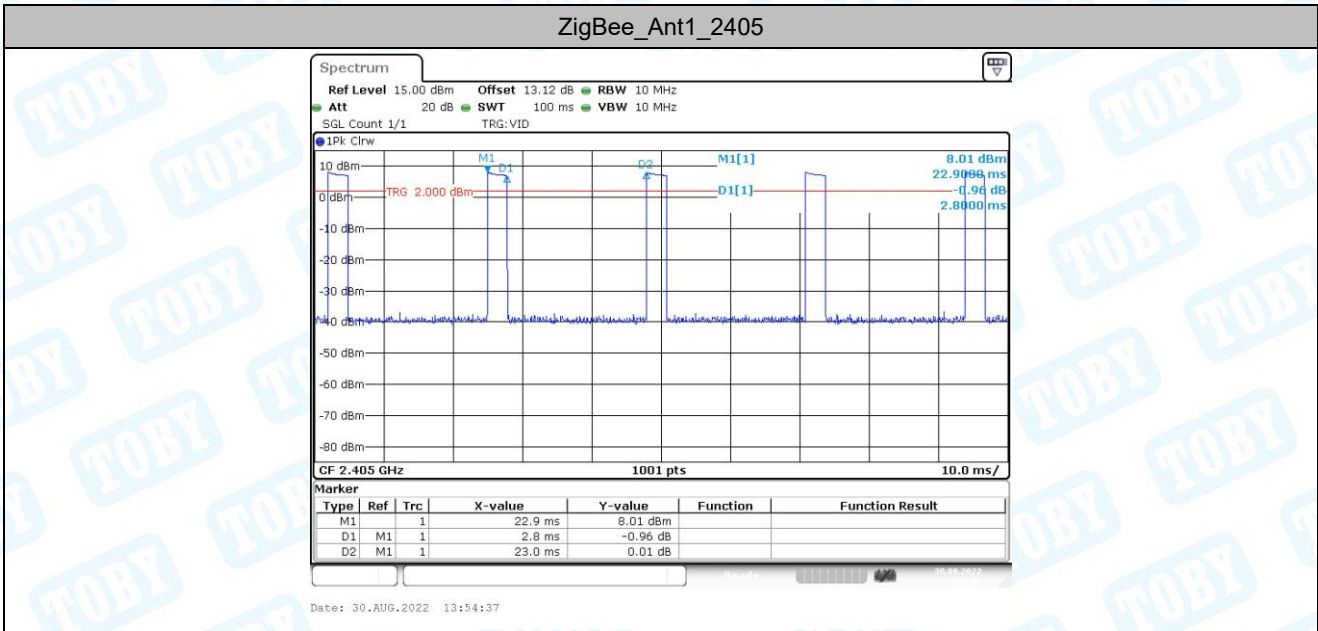


7: Duty Cycle

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	23.00	12.17	0.357	---	---
		2445	2.80	23.00	12.17	0.357	---	---
		2480	2.90	23.00	12.61	0.345	---	---

7.2 Test Graphs



8: Emissions in Restricted Bands

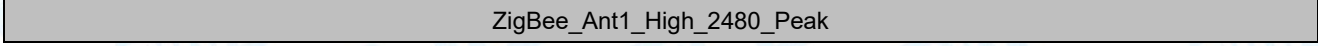
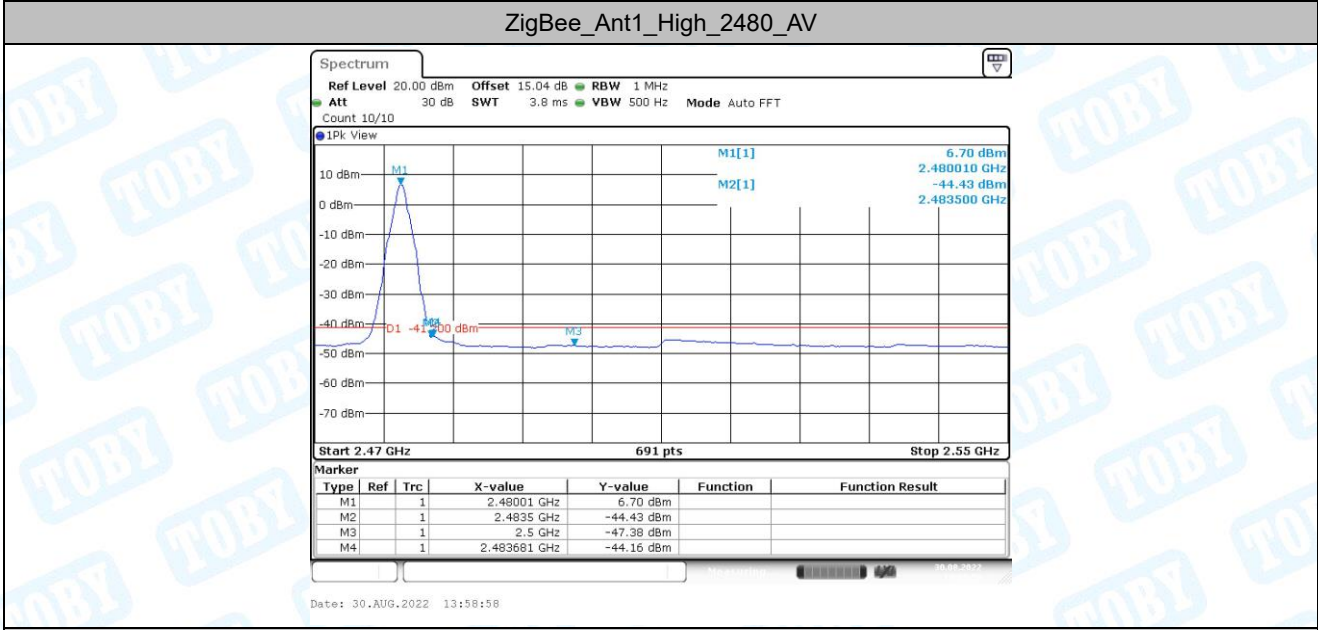
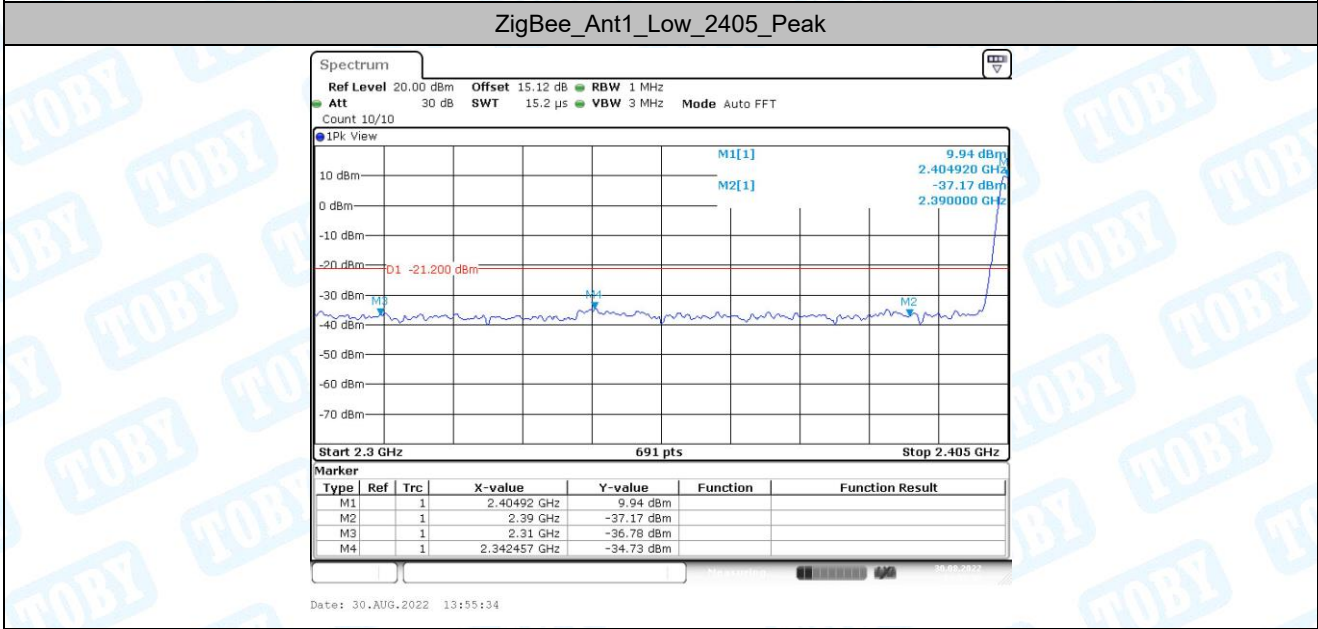
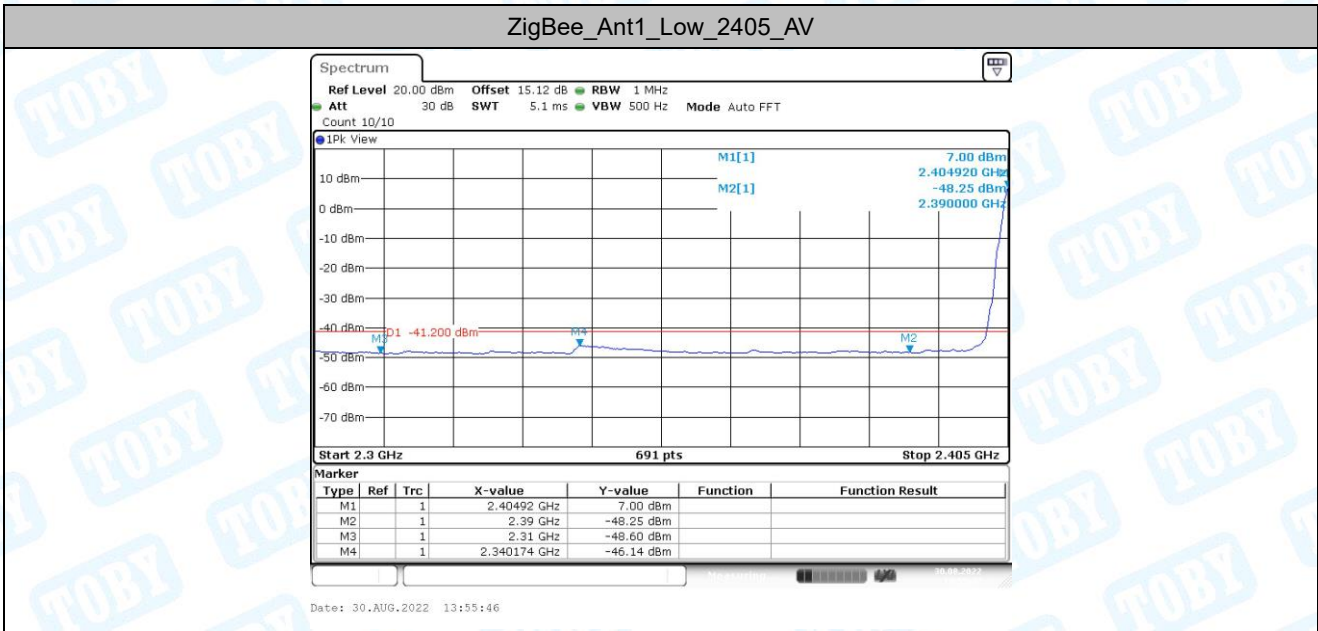
8.1 Test Result

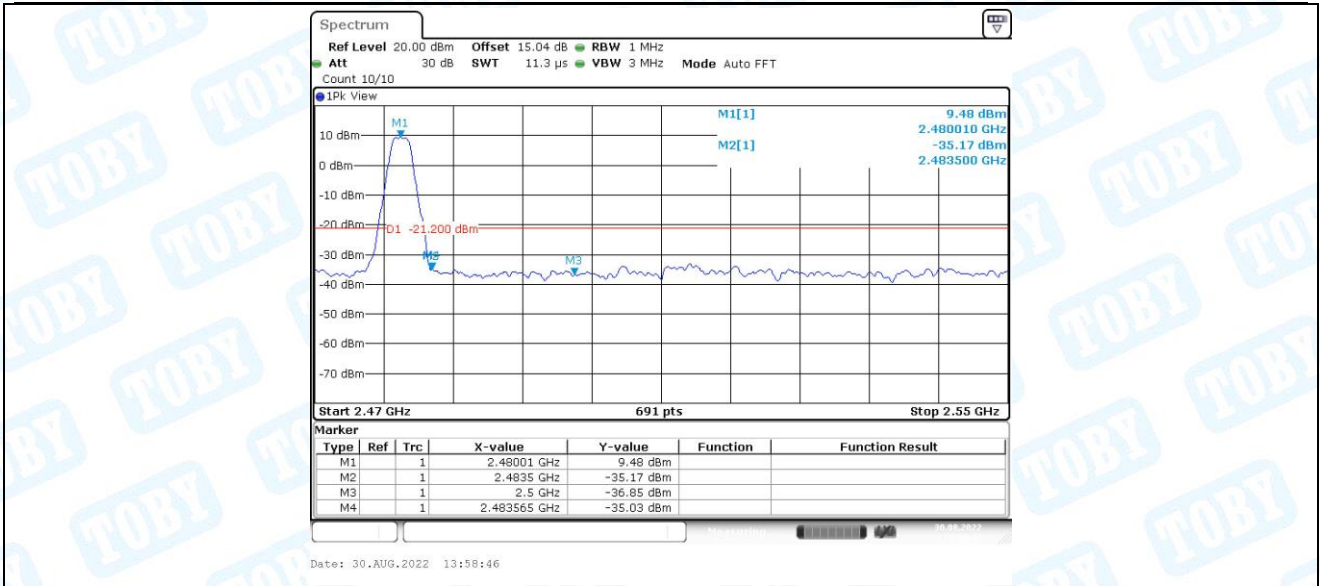
TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
ZigBee	Ant1	Low	2405	AV	2310.000	-48.6	≤-41.20	PASS
				AV	2340.174	-46.14	≤-41.20	PASS
				AV	2390.000	-48.25	≤-41.20	PASS
				Peak	2310.000	-36.78	≤-21.20	PASS
				Peak	2342.457	-34.73	≤-21.20	PASS
				Peak	2390.000	-37.17	≤-21.20	PASS
		High	2480	AV	2483.500	-44.43	≤-41.20	PASS
				AV	2483.681	-44.16	≤-41.20	PASS
				AV	2500.000	-47.38	≤-41.20	PASS
				Peak	2483.500	-35.17	≤-21.20	PASS
				Peak	2483.565	-35.03	≤-21.20	PASS
				Peak	2500.000	-36.85	≤-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-----