

RF Test Data for Bluetooth LE (Conducted Measurements)

General Description of EUT	
Product Name:	Smart watch
Test Model:	FT10M
Sample ID:	HC-C-202307-0235-01-03-2#
Environmental Conditions	
Temperature:	23.6℃
Relative Humidity:	46%
Test Voltage:	DC 3.8V
Test Engineer:	Beryl.zhang
Note: For a more detailed features description, please refer to the report TBR-C-202307-0235-8.	

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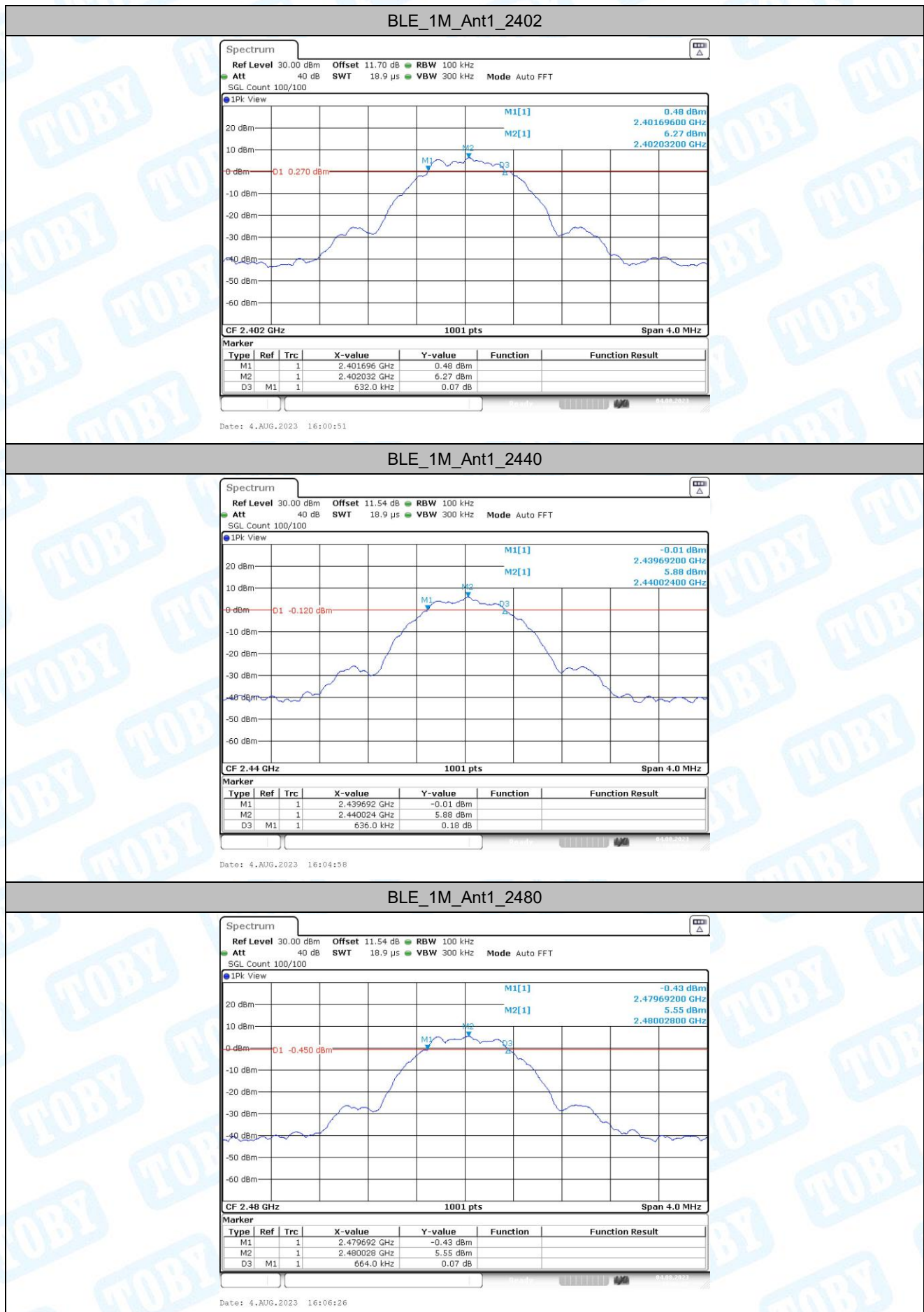
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1. DTS Bandwidth

1.1. Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.63	2401.70	2402.33	0.5	PASS
		2440	0.64	2439.69	2440.33	0.5	PASS
		2480	0.66	2479.69	2480.36	0.5	PASS

1.2. Test Graphs

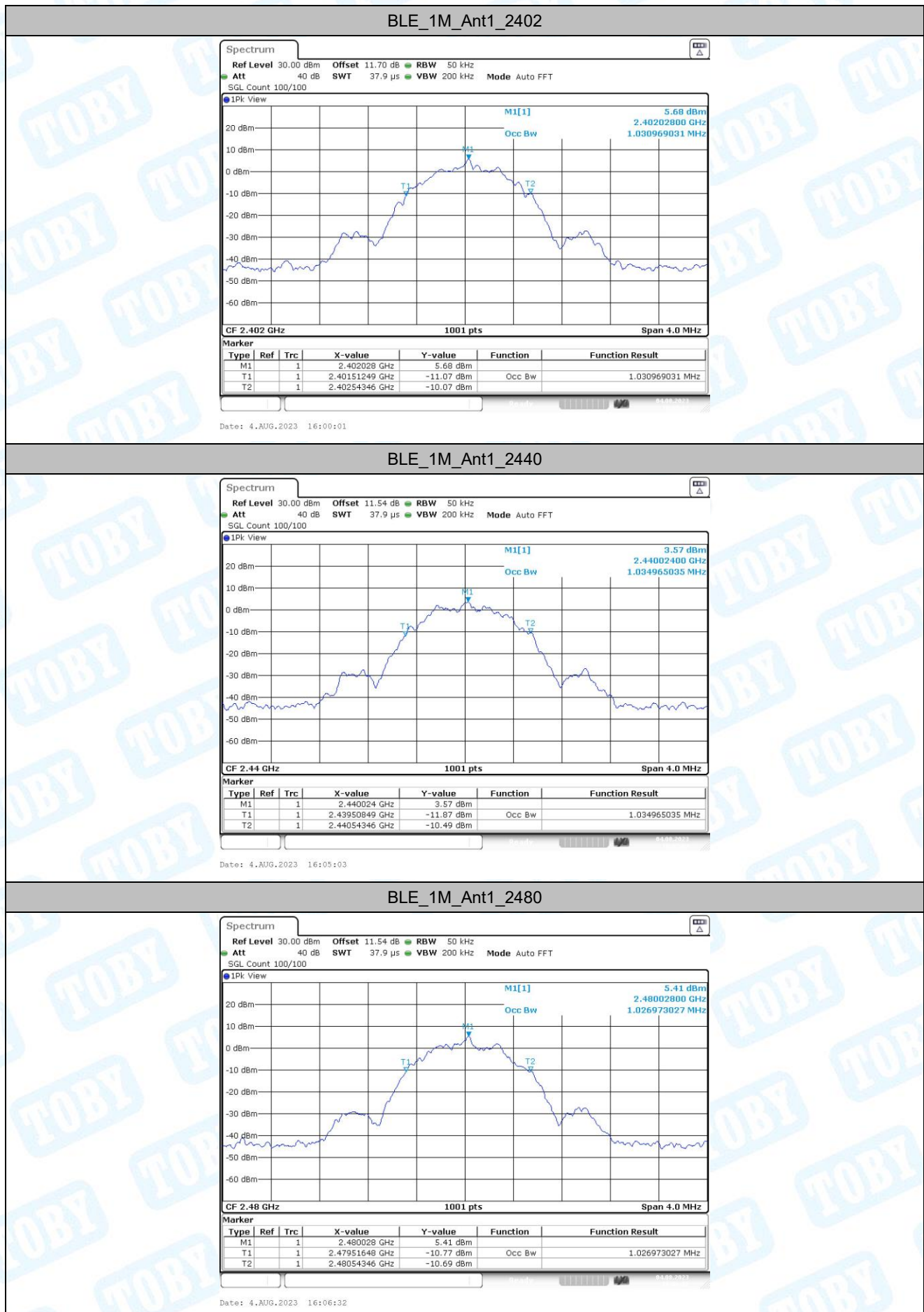


2. Occupied Channel Bandwidth

2.1. Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.031	2401.5125	2402.5435	---	---
		2440	1.035	2439.5085	2440.5435	---	---
		2480	1.027	2479.5165	2480.5435	---	---

2.2. Test Graphs

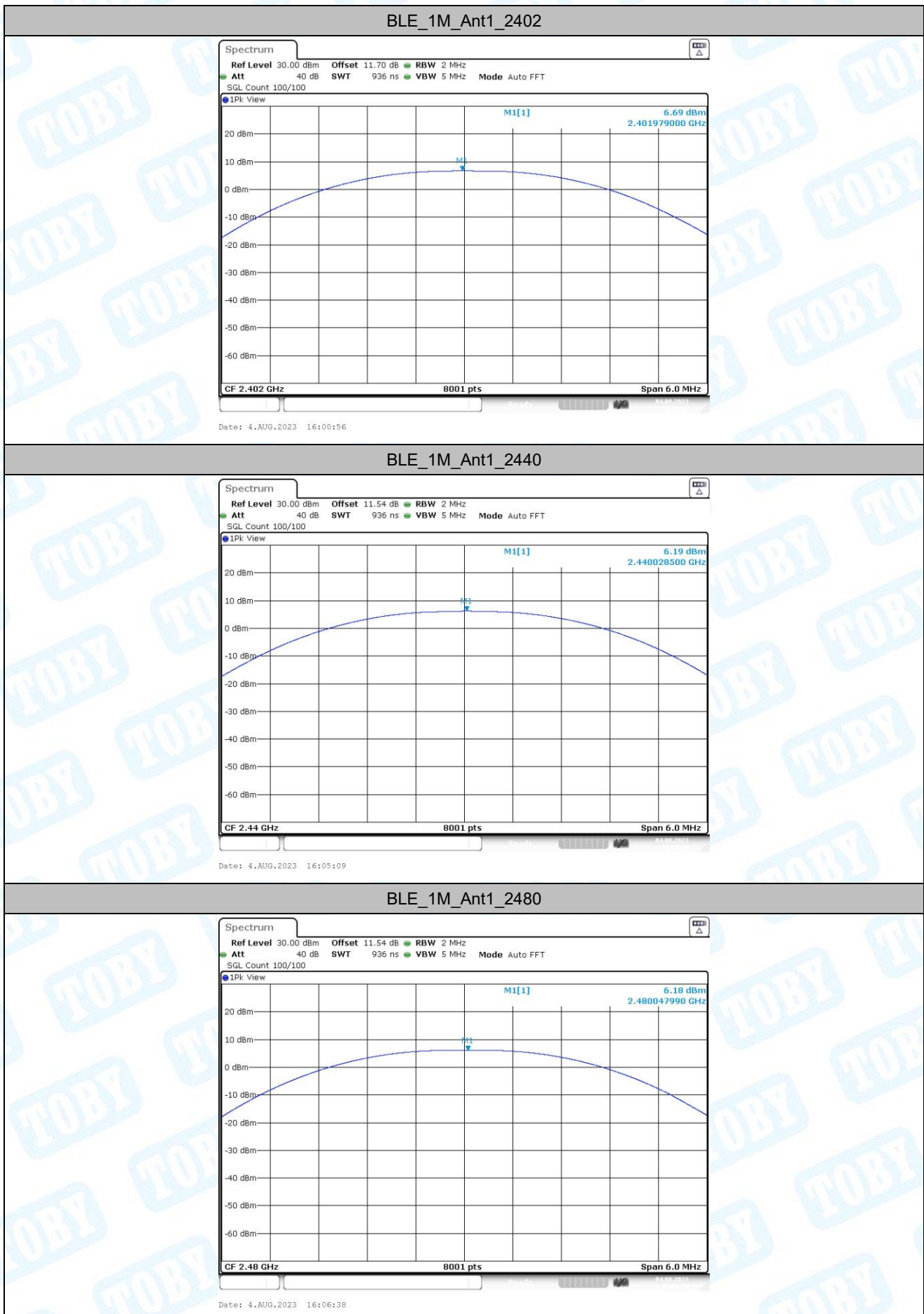


3. Maximum conducted output power

3.1. Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	6.69	≤30	PASS
		2440	6.19	≤30	PASS
		2480	6.18	≤30	PASS

3.2. Test Graphs

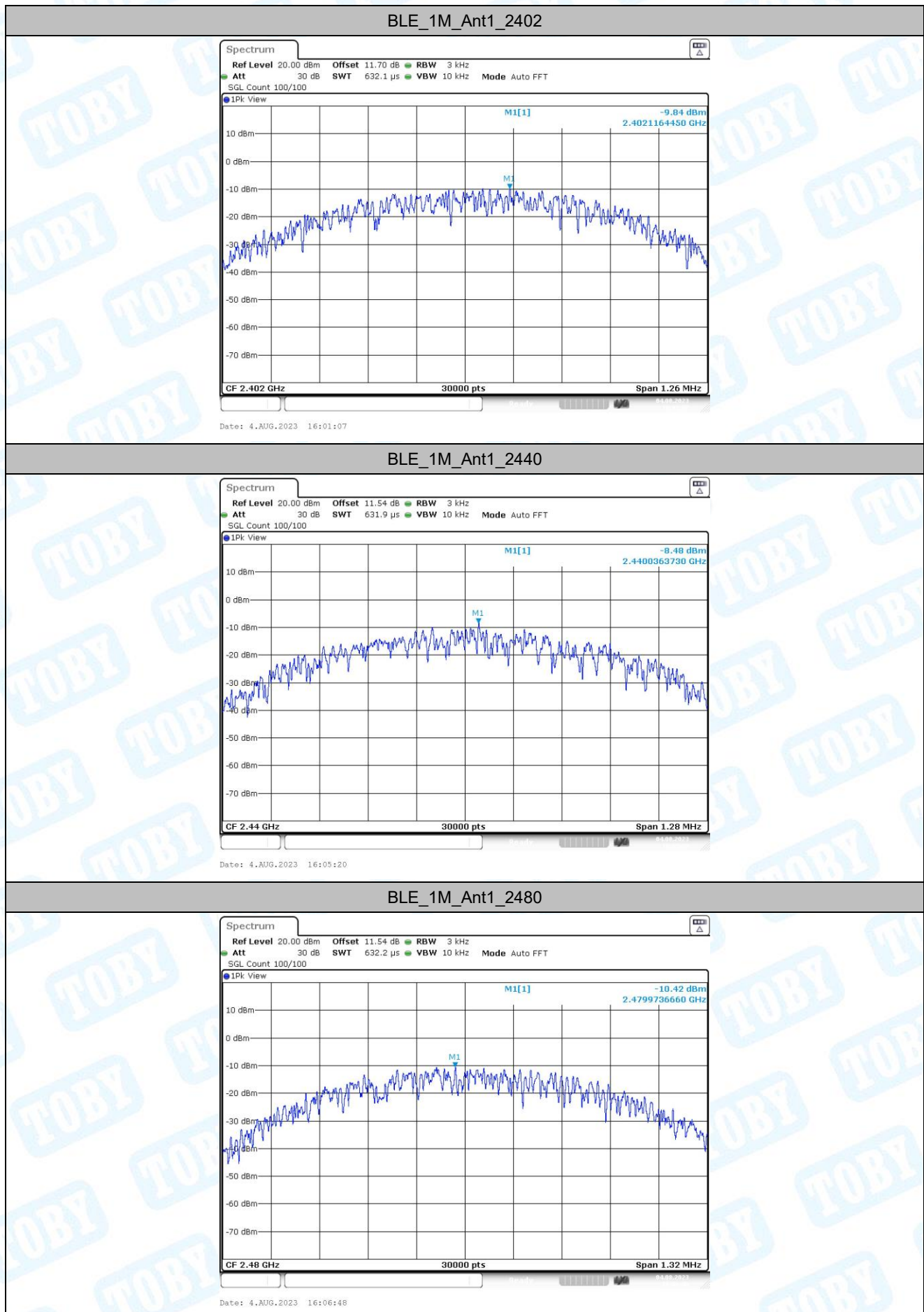


4. Maximum power spectral density

4.1. Test Result

Test Mode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-9.84	≤8.00	PASS
		2440	-8.48	≤8.00	PASS
		2480	-10.42	≤8.00	PASS

4.2. Test Graphs



5. Band edge measurements

5.1. Test Result

Test Mode	Antenna	ChName	Channel	Ref.Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.87	-49.36	≤-18.13	PASS
		High	2480	3.18	-48.37	≤-16.82	PASS

5.2. Test Graphs



6. Conducted Spurious Emission

6.1. Test Result

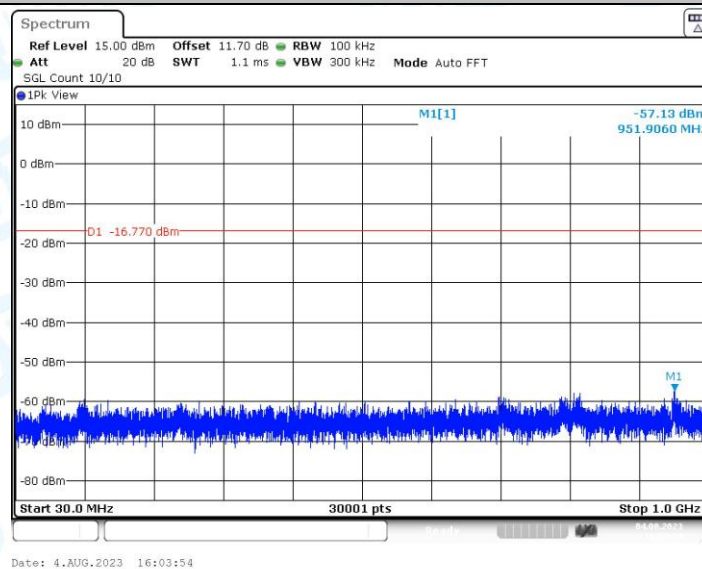
Test Mode	Antenna	Channel	Freq. Range [MHz]	Ref. Level [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	3.23	3.23	---	PASS
			30~1000	3.23	-57.13	≤-16.77	PASS
			1000~26500	3.23	-48.53	≤-16.77	PASS
		2440	Reference	6.01	6.01	---	PASS
			30~1000	6.01	-57.24	≤-13.99	PASS
			1000~26500	6.01	-48.63	≤-13.99	PASS
		2480	Reference	4.50	4.50	---	PASS
			30~1000	4.50	-57.89	≤-15.5	PASS
			1000~26500	4.50	-43.29	≤-15.5	PASS

6.2. Test Graphs

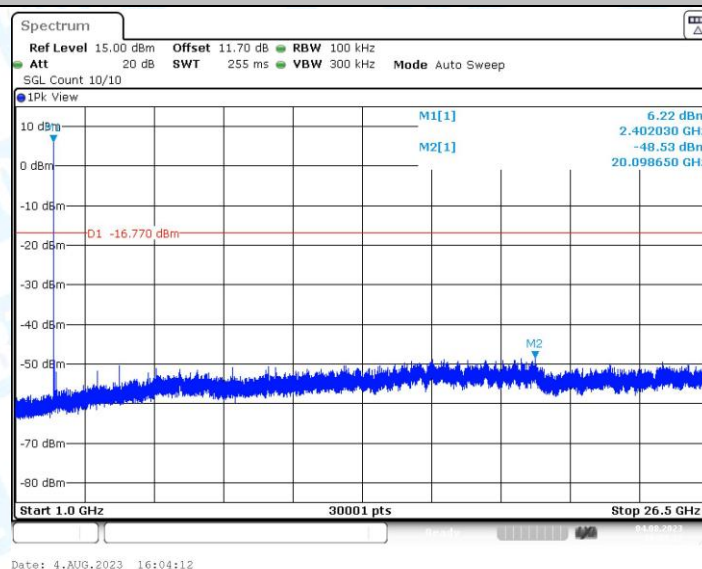
BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



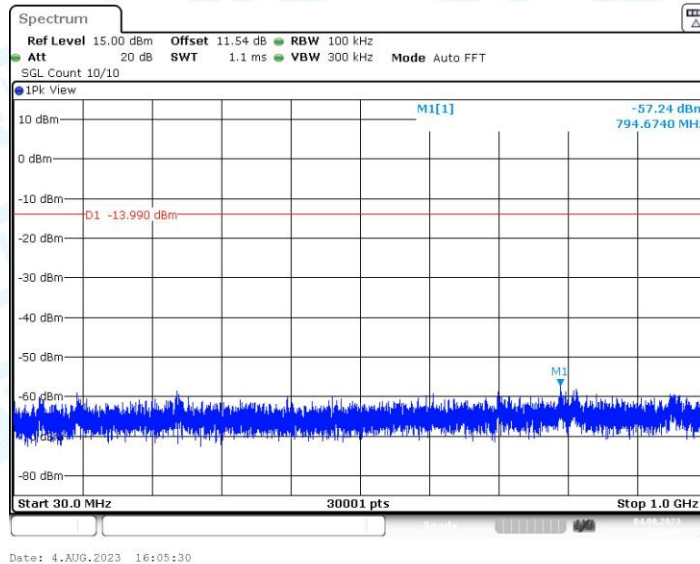
BLE_1M_Ant1_2402_1000~26500



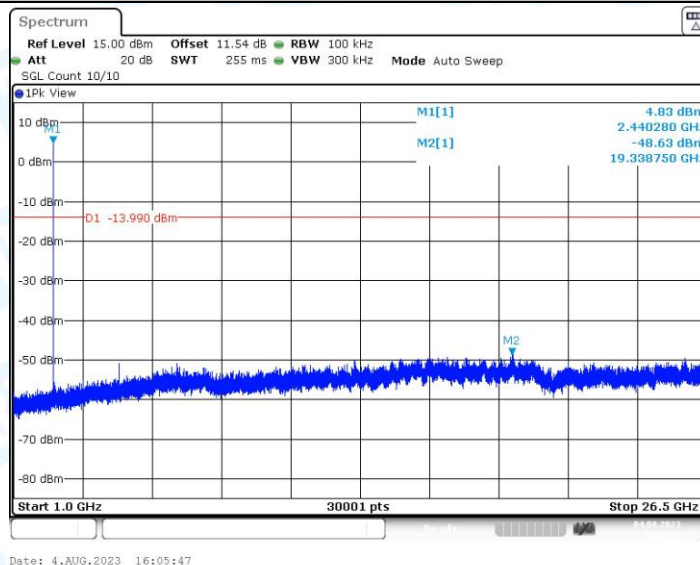
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



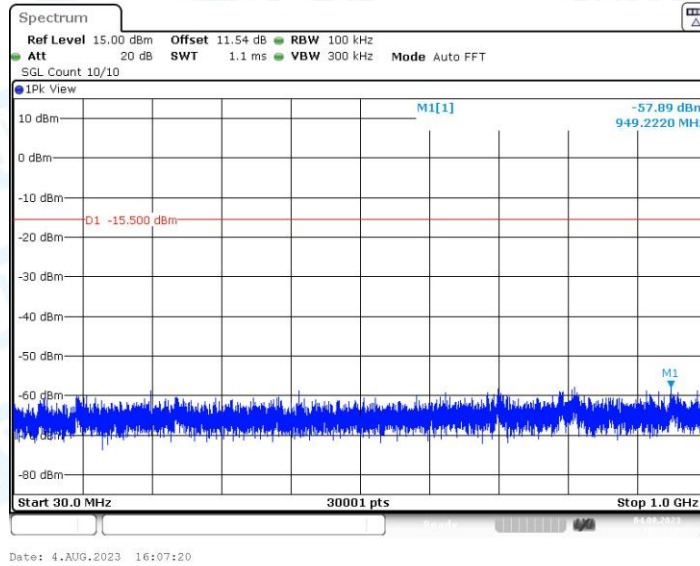
BLE_1M_Ant1_2440_1000~26500



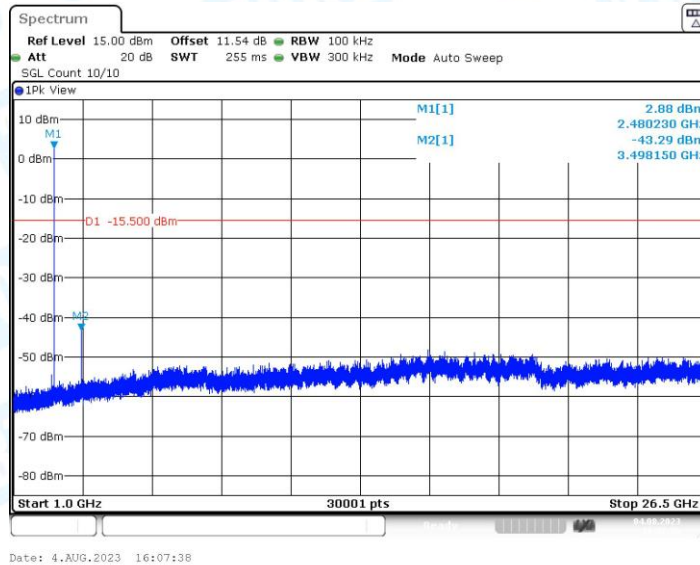
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



7. Duty Cycle

7.1. Test Result

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]	Verdict
BLE_1M	Ant1	2402	0.39	0.62	62.90	2.56	---
		2440	0.39	0.62	62.90	2.56	---
		2480	0.39	0.62	62.90	2.56	---

7.2. Test Graphs



8. Emissions in Restricted Bands

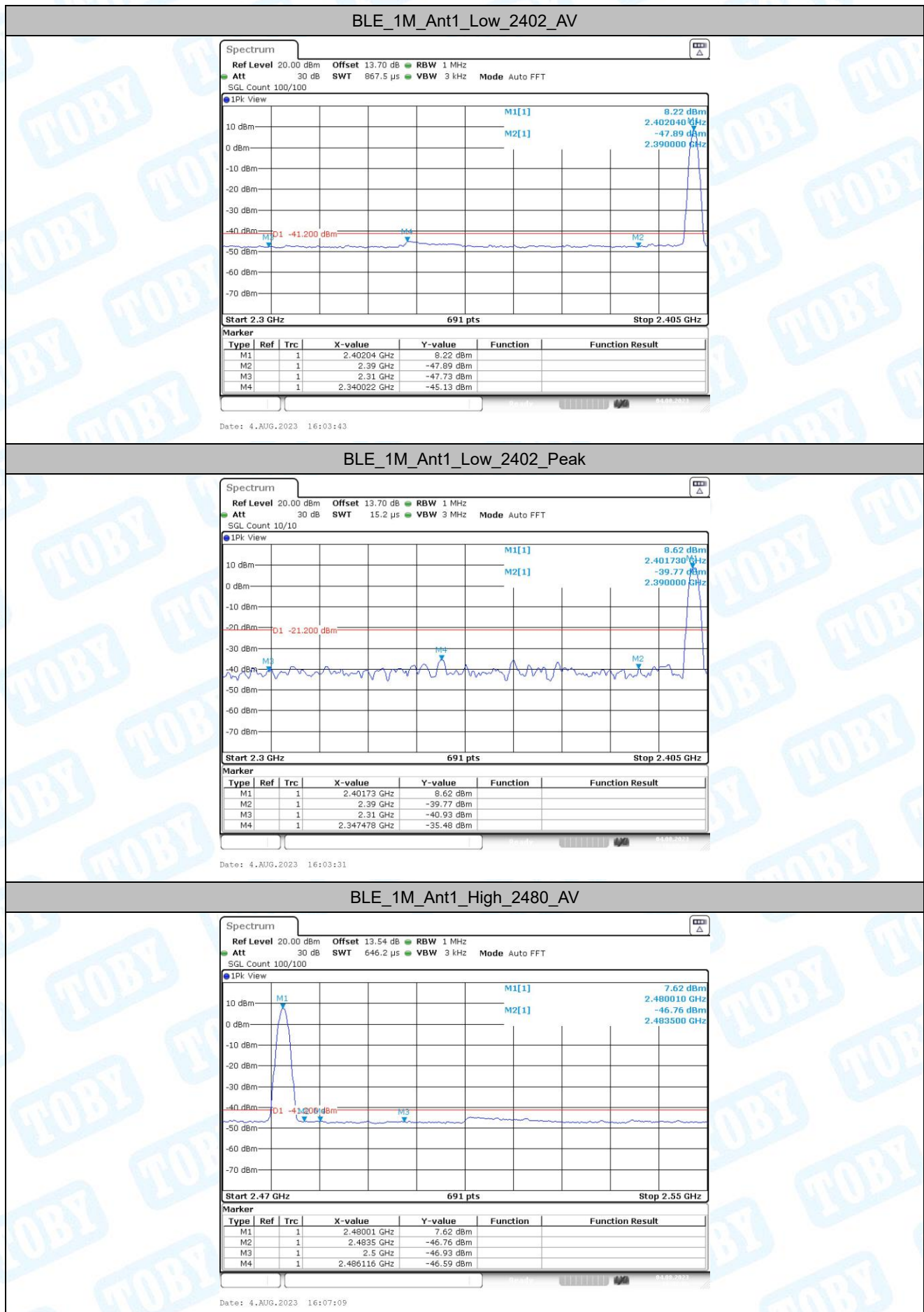
8.1. Test Result

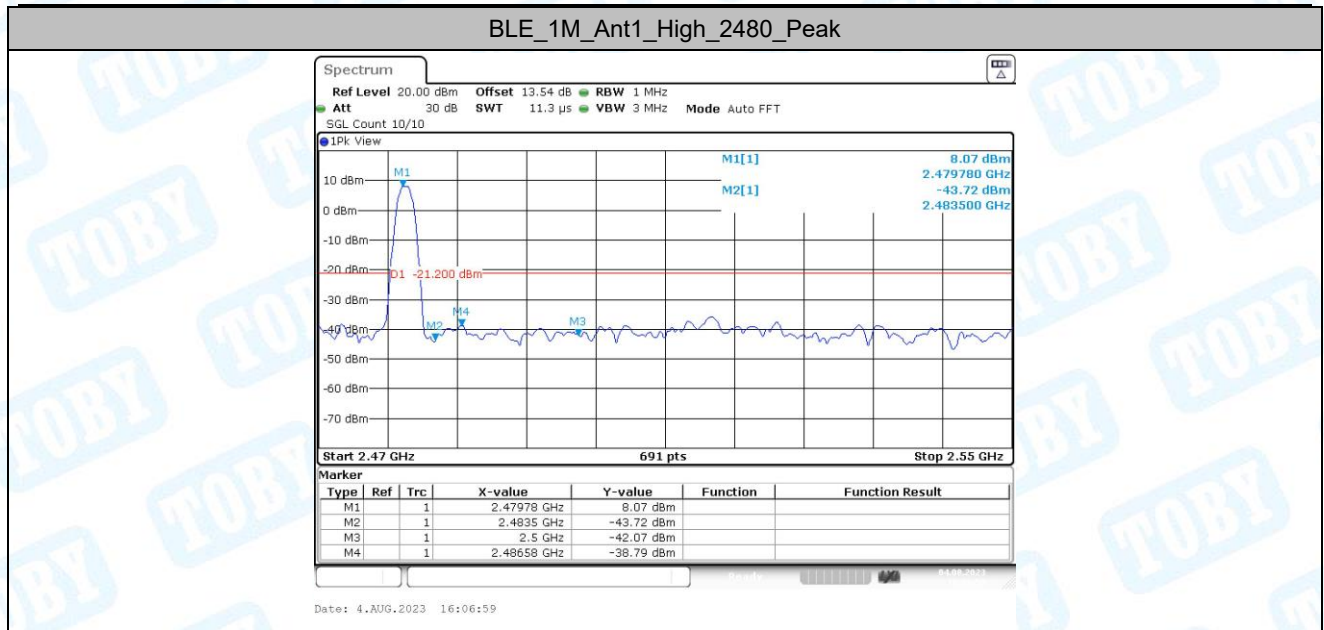
Test Mode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-47.73	≤-41.20	PASS
				AV	2340.022	-45.13	≤-41.20	PASS
				AV	2390.000	-47.89	≤-41.20	PASS
				Peak	2310.000	-40.93	≤-21.20	PASS
				Peak	2347.478	-35.48	≤-21.20	PASS
				Peak	2390.000	-39.77	≤-21.20	PASS
		High	2480	AV	2483.500	-46.76	≤-41.20	PASS
				AV	2486.116	-46.59	≤-41.20	PASS
				AV	2500.000	-46.93	≤-41.20	PASS
				Peak	2483.500	-43.72	≤-21.20	PASS
				Peak	2486.580	-38.79	≤-21.20	PASS
				Peak	2500.000	-42.07	≤-21.20	PASS

Note:

- The Antenna Gain is compensated in the graph.
- 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-----