

# RF Test Data for Bluetooth LE (Conducted Measurements)

General Description of EUT	
<b>Product Name:</b>	Wireless Handwheel Controller
<b>Test Model:</b>	3262
<b>Sample ID:</b>	RW-C-202208-0186-38-2#
Environmental Conditions	
<b>Temperature:</b>	25°C
<b>Relative Humidity:</b>	55%
<b>Test Voltage:</b>	DC 3.7V
<b>Test Engineer:</b>	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202208-0186-531	

## Contents

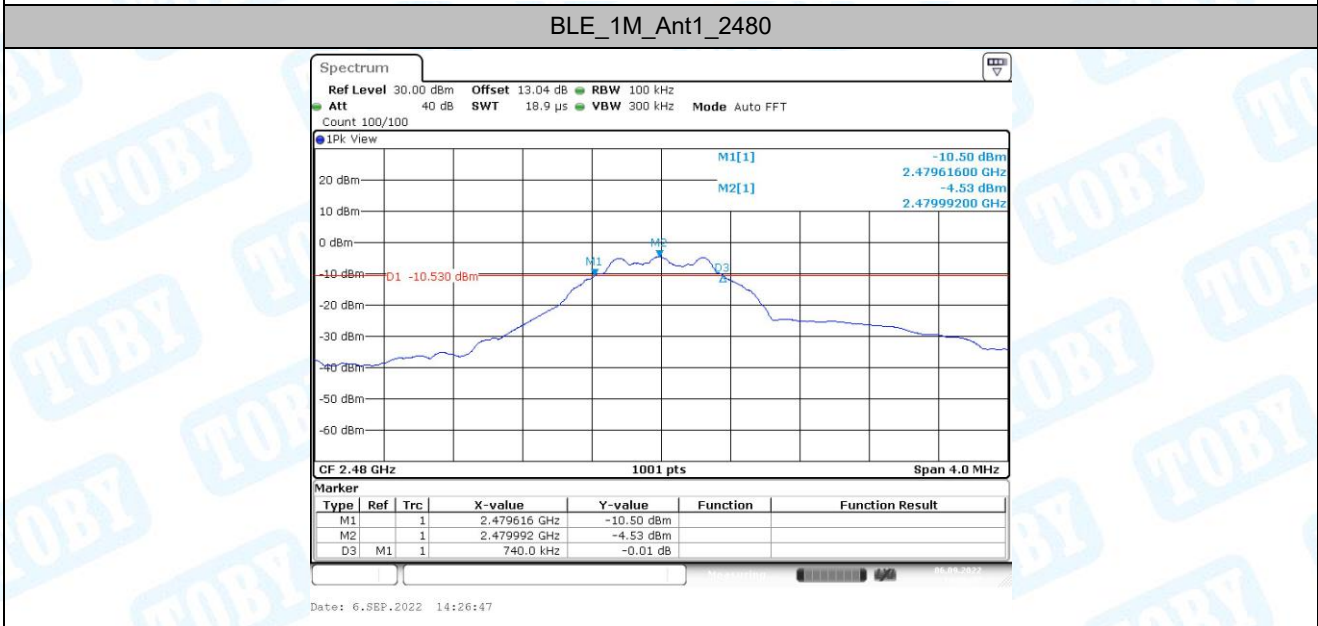
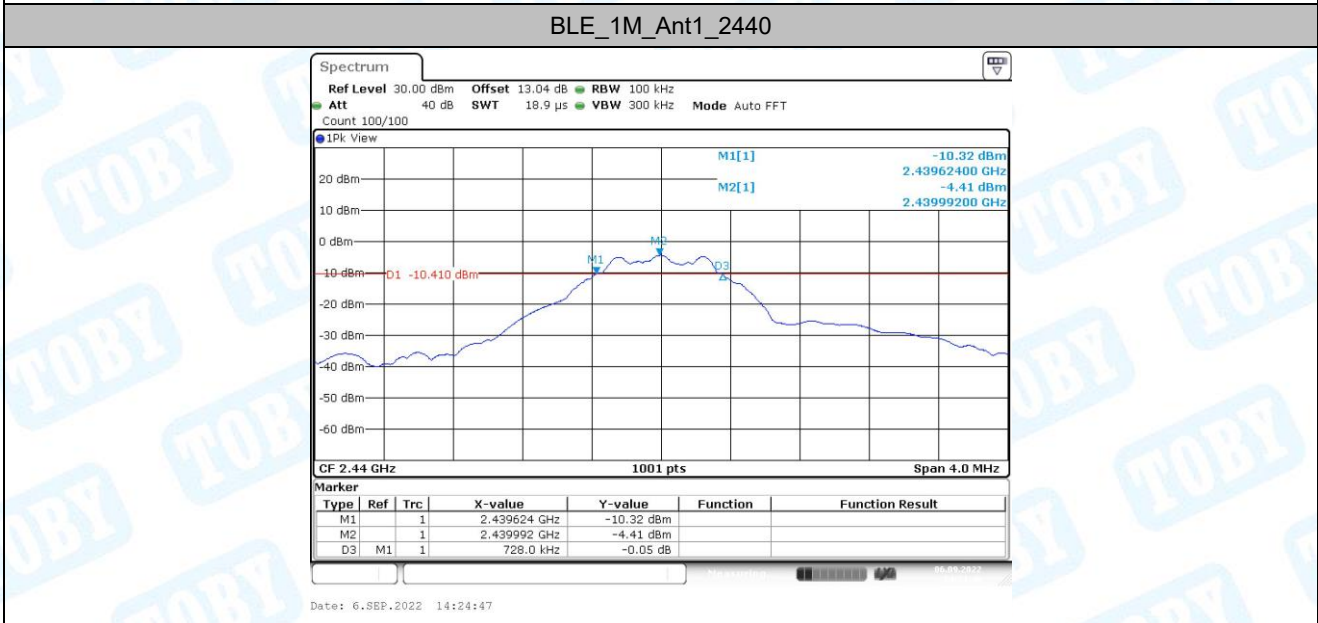
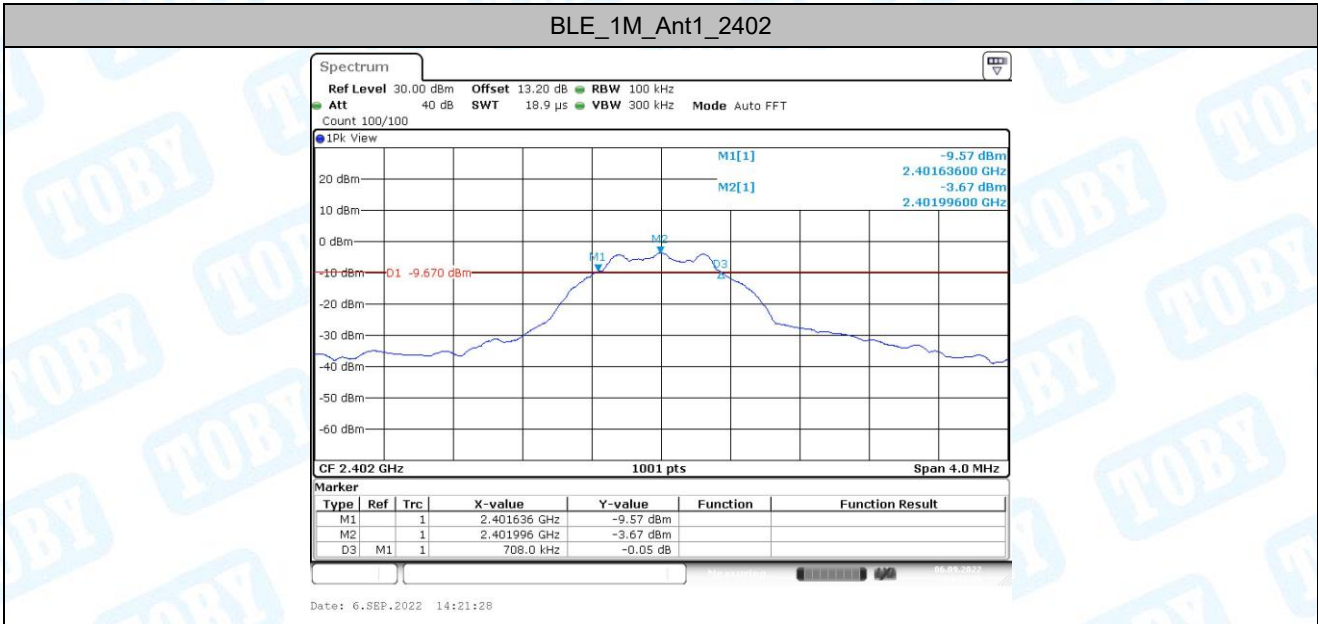
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## 1. DTS Bandwidth

### 1.1. Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.71	2401.64	2402.34	0.5	PASS
		2440	0.73	2439.62	2440.35	0.5	PASS
		2480	0.74	2479.62	2480.36	0.5	PASS

## 1.2. Test Graphs

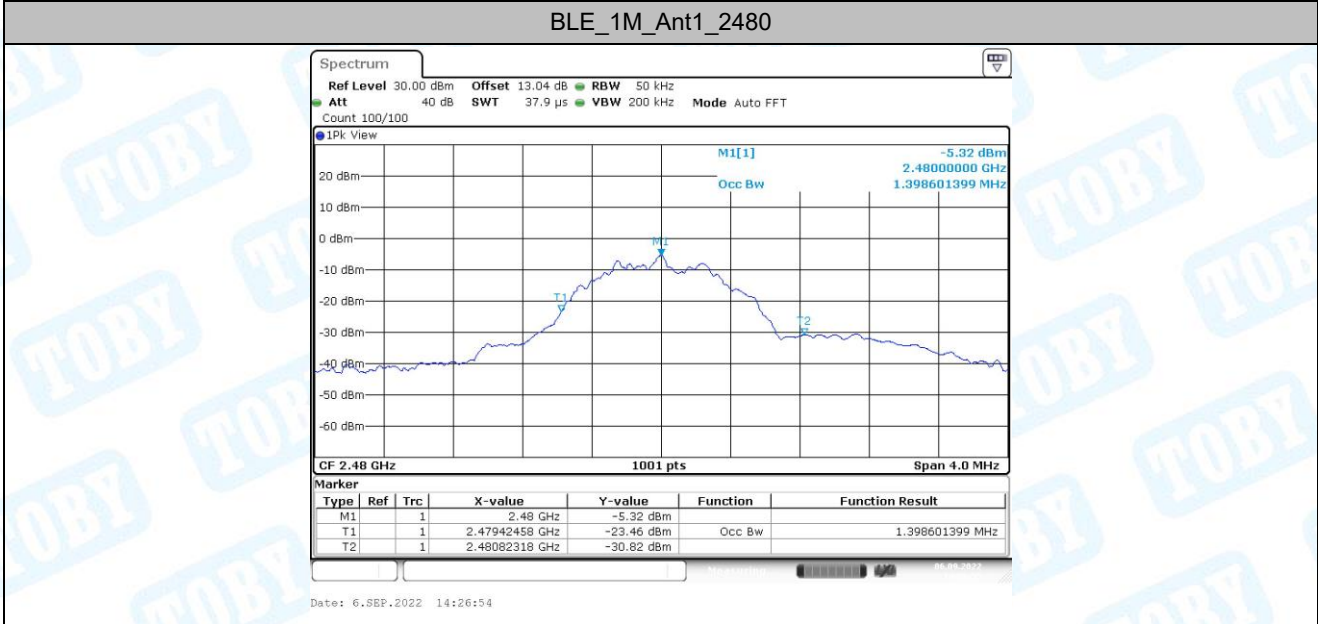
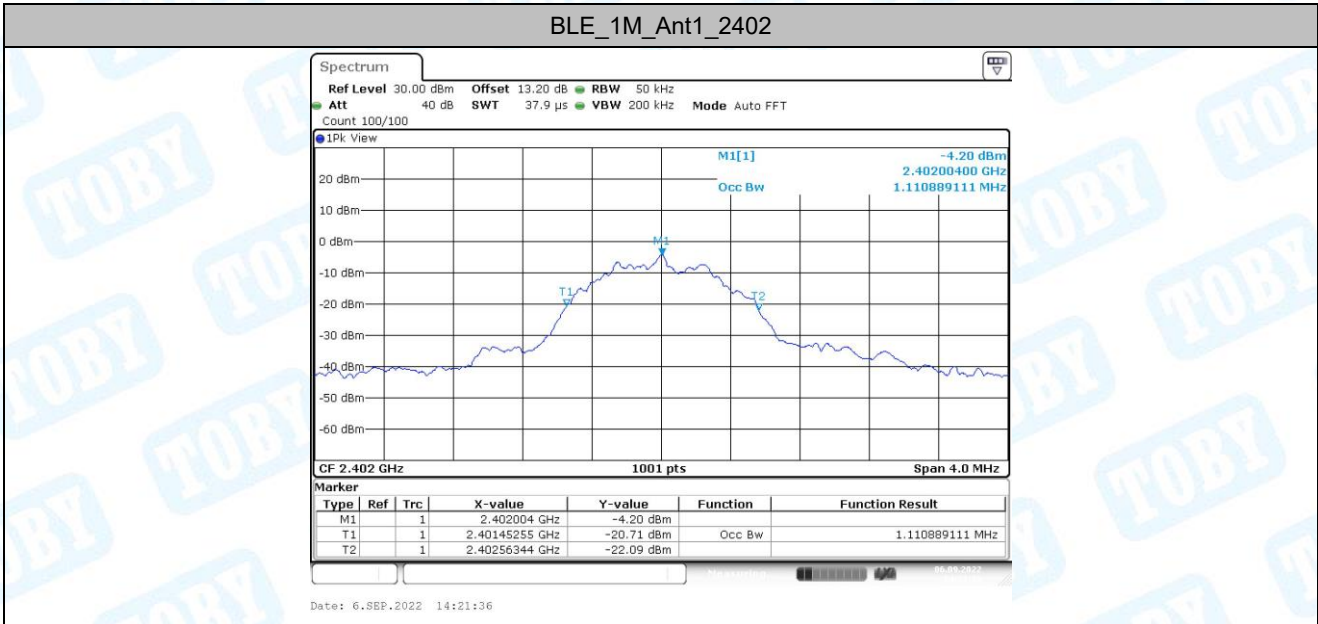


## 2. Occupied Channel Bandwidth

### 2.1. Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.111	2401.4525	2402.5634	---	---
		2440	1.239	2439.4166	2440.6553	---	---
		2480	1.399	2479.4246	2480.8232	---	---

## 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	-2.94	≤30	PASS
		2440	-3.58	≤30	PASS
		2480	-3.7	≤30	PASS

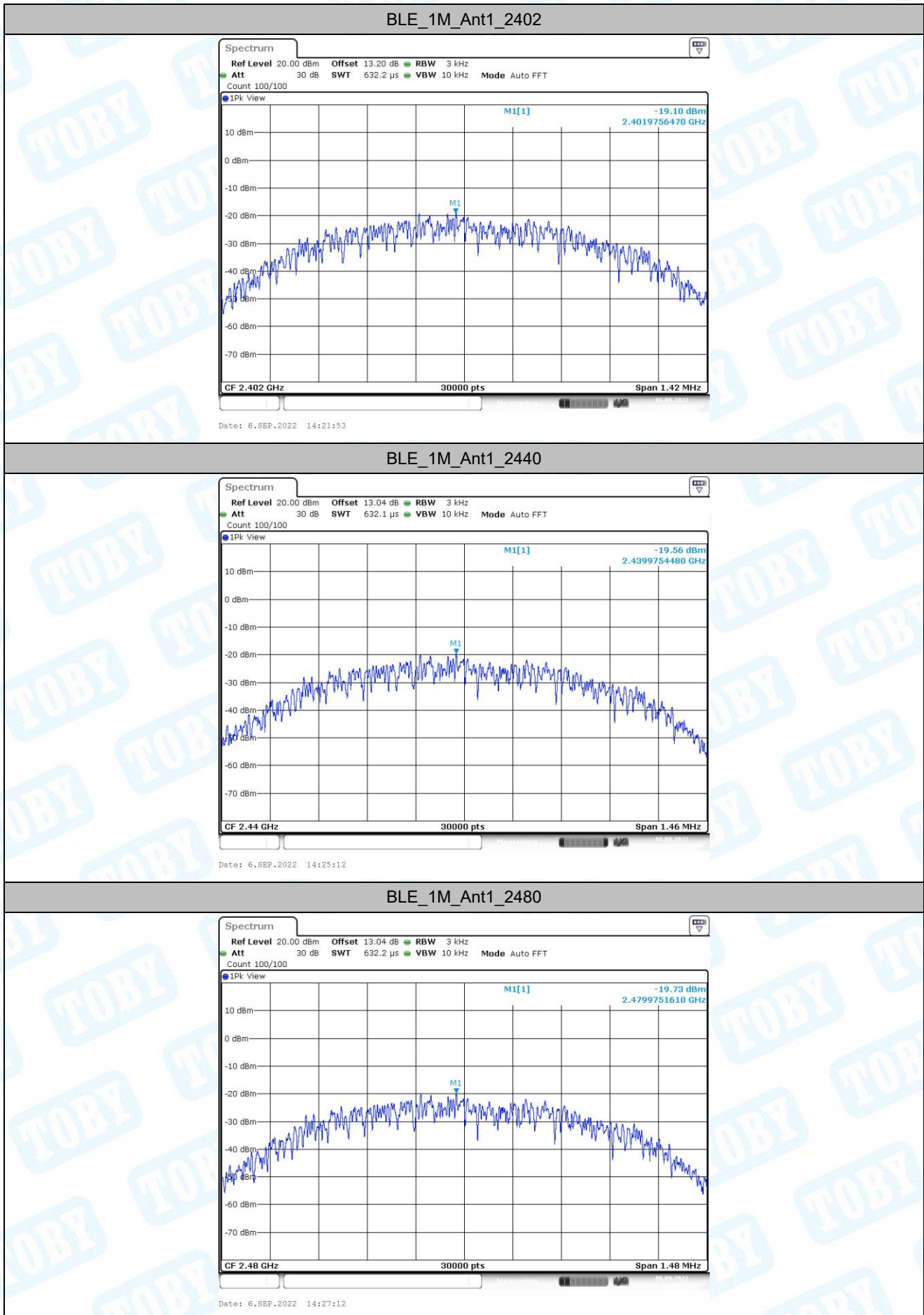
## 4. Maximum power spectral density

### 4.1. Test Result

Test Mode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.1	≤8.00	PASS
		2440	-19.56	≤8.00	PASS
		2480	-19.73	≤8.00	PASS



## 4.2. Test Graphs

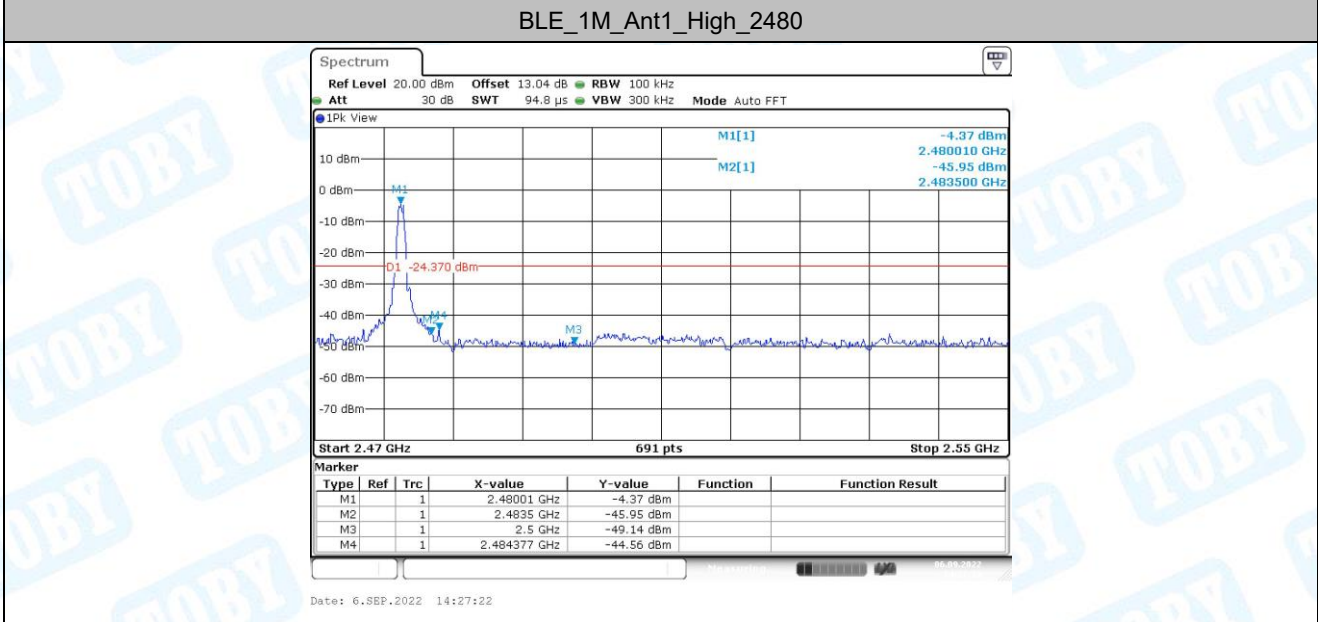


## 5. Band edge measurements

### 5.1. Test Result

Test Mode	Antenna	ChName	Channel	Ref.Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.43	-41.34	≤-23.43	PASS
		High	2480	-4.37	-44.56	≤-24.37	PASS

## 5.2. Test Graphs

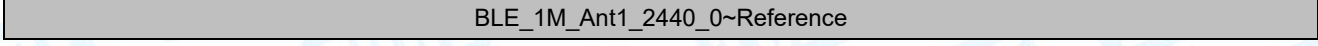
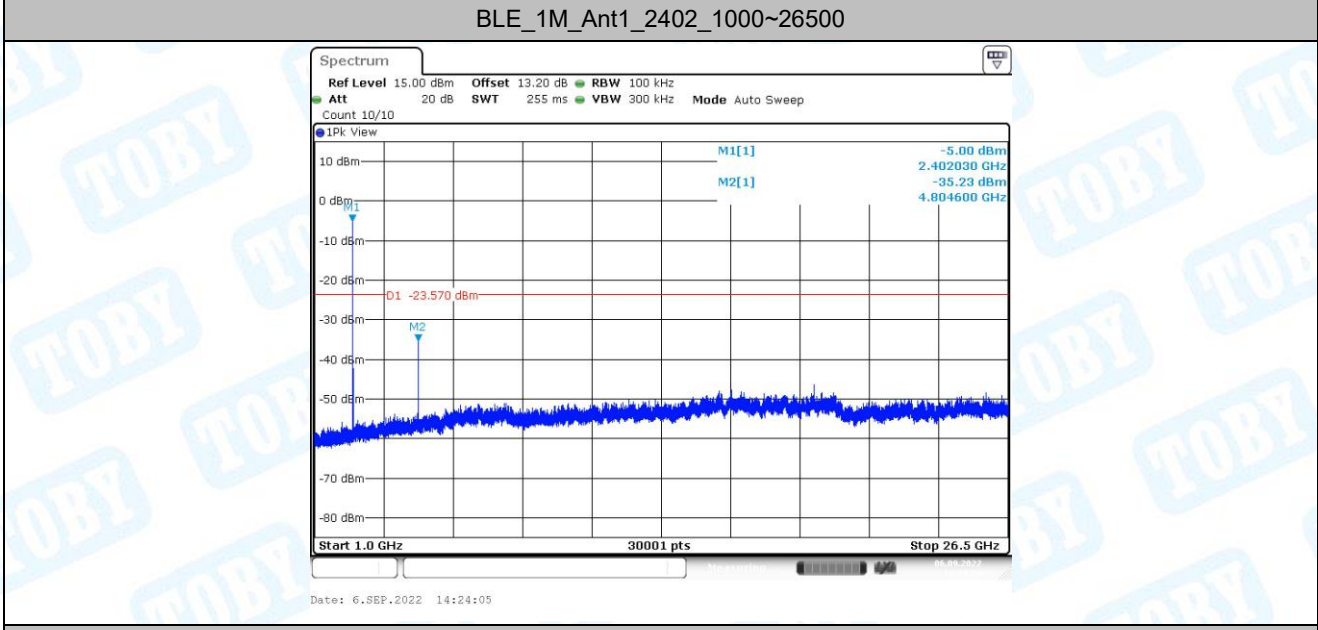
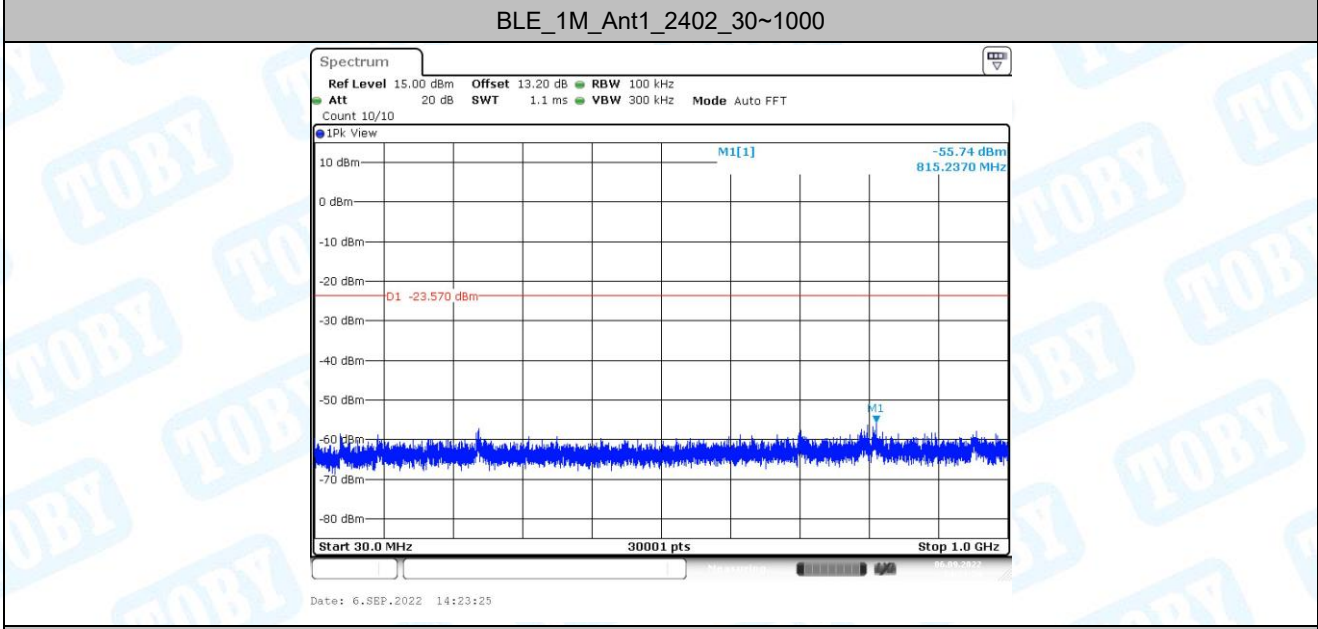
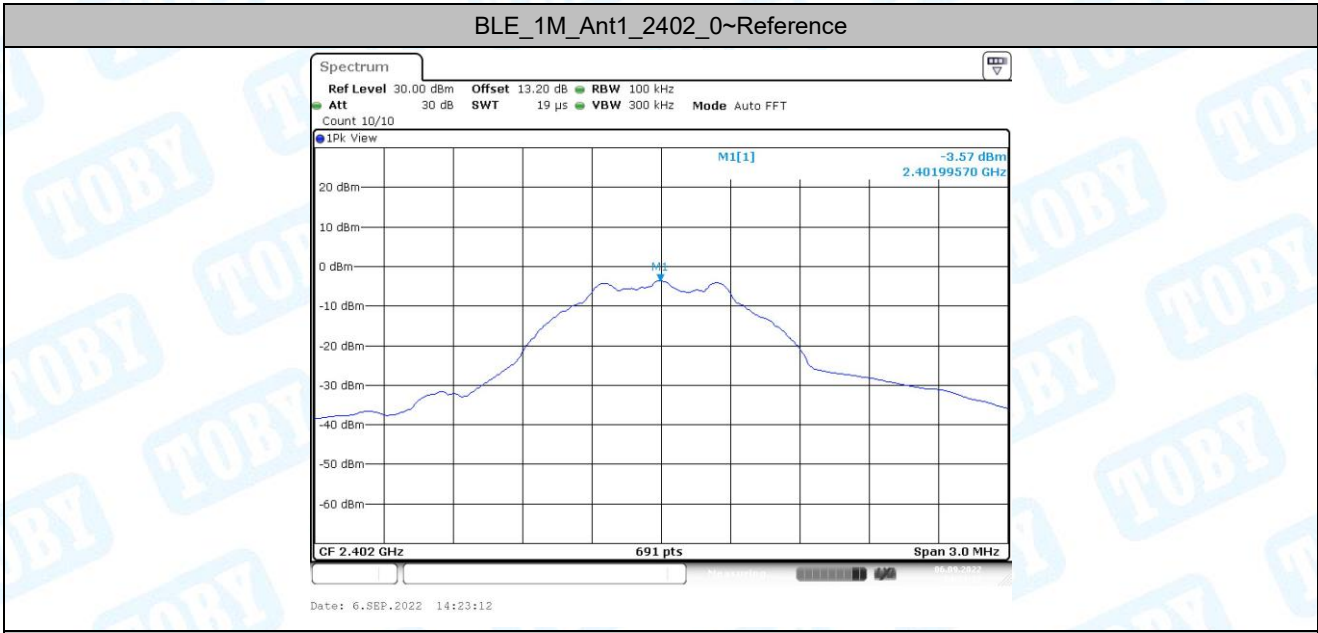


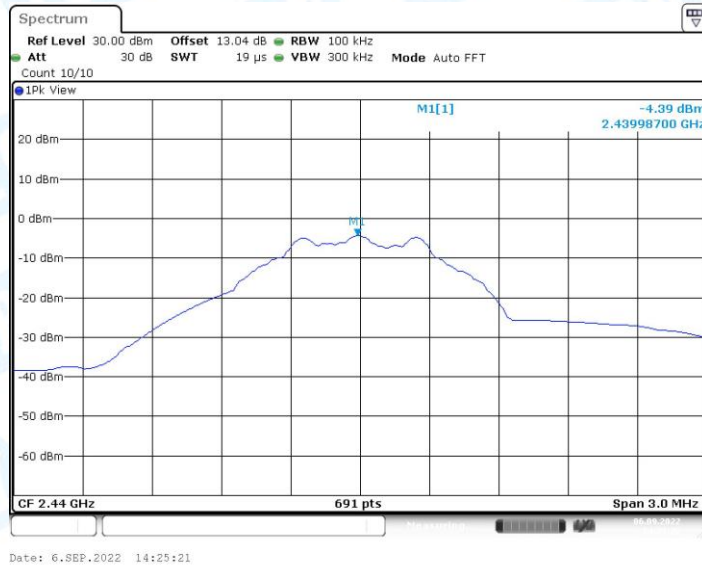
## 6. Conducted Spurious Emission

### 6.1. Test Result

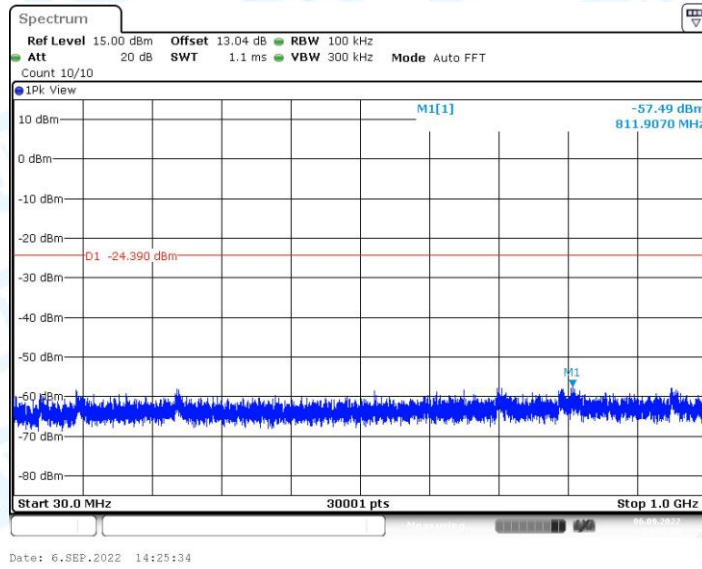
Test Mode	Antenna	Channel	Freq. Range [MHz]	Ref. Level [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.57	-3.57	---	PASS
			30~1000	-3.57	-55.74	≤-23.57	PASS
			1000~26500	-3.57	-35.23	≤-23.57	PASS
		2440	Reference	-4.39	-4.39	---	PASS
			30~1000	-4.39	-57.49	≤-24.39	PASS
			1000~26500	-4.39	-36.75	≤-24.39	PASS
		2480	Reference	-4.45	-4.45	---	PASS
			30~1000	-4.45	-57.28	≤-24.45	PASS
			1000~26500	-4.45	-40.87	≤-24.45	PASS

## 6.2. Test Graphs

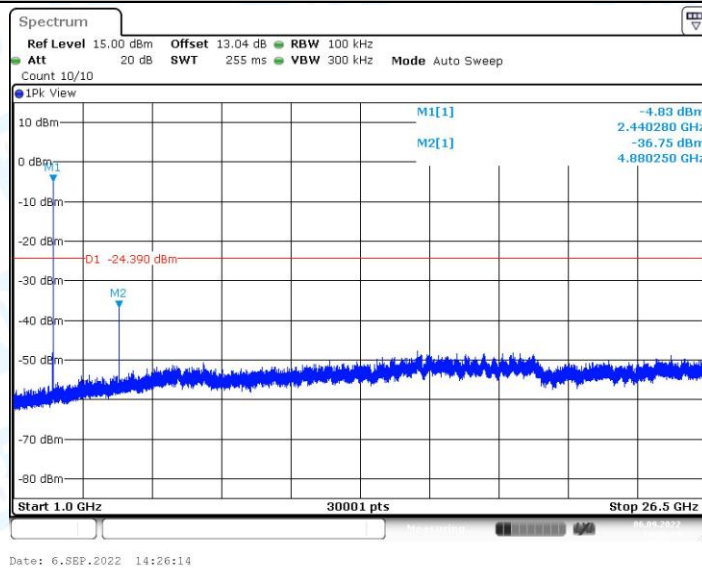




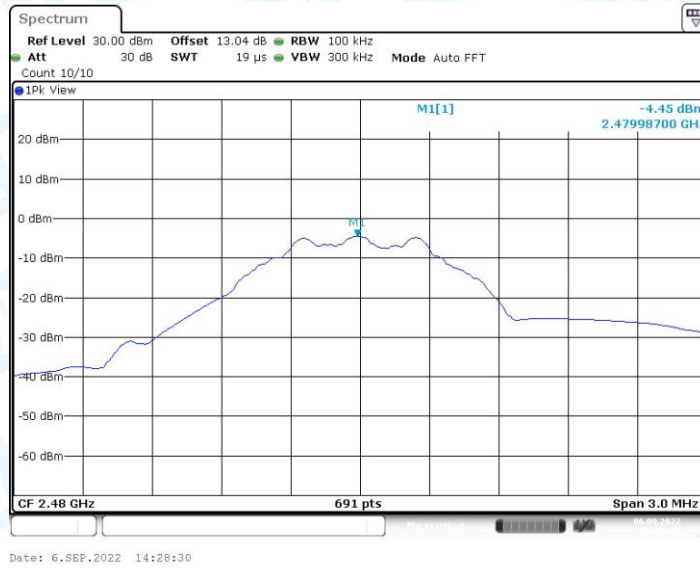
BLE\_1M\_Ant1\_2440\_30~1000



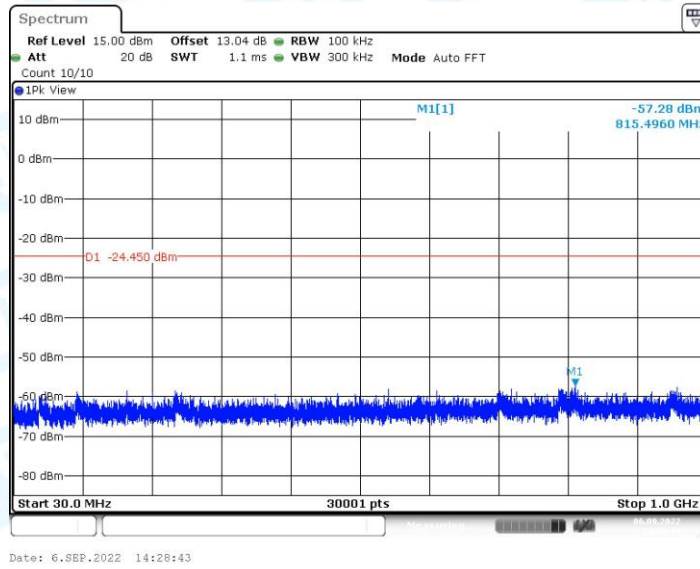
BLE\_1M\_Ant1\_2440\_1000~26500



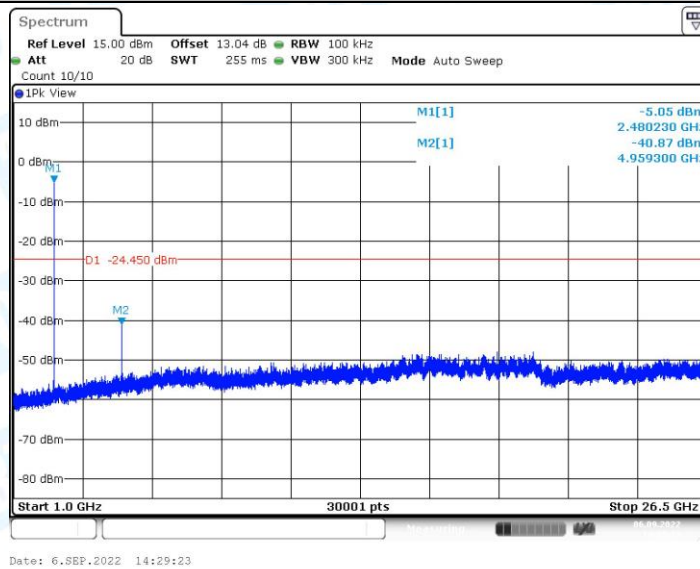
BLE\_1M\_Ant1\_2480\_0~Reference



### BLE\_1M\_Ant1\_2480\_30~1000



### BLE\_1M\_Ant1\_2480\_1000~26500



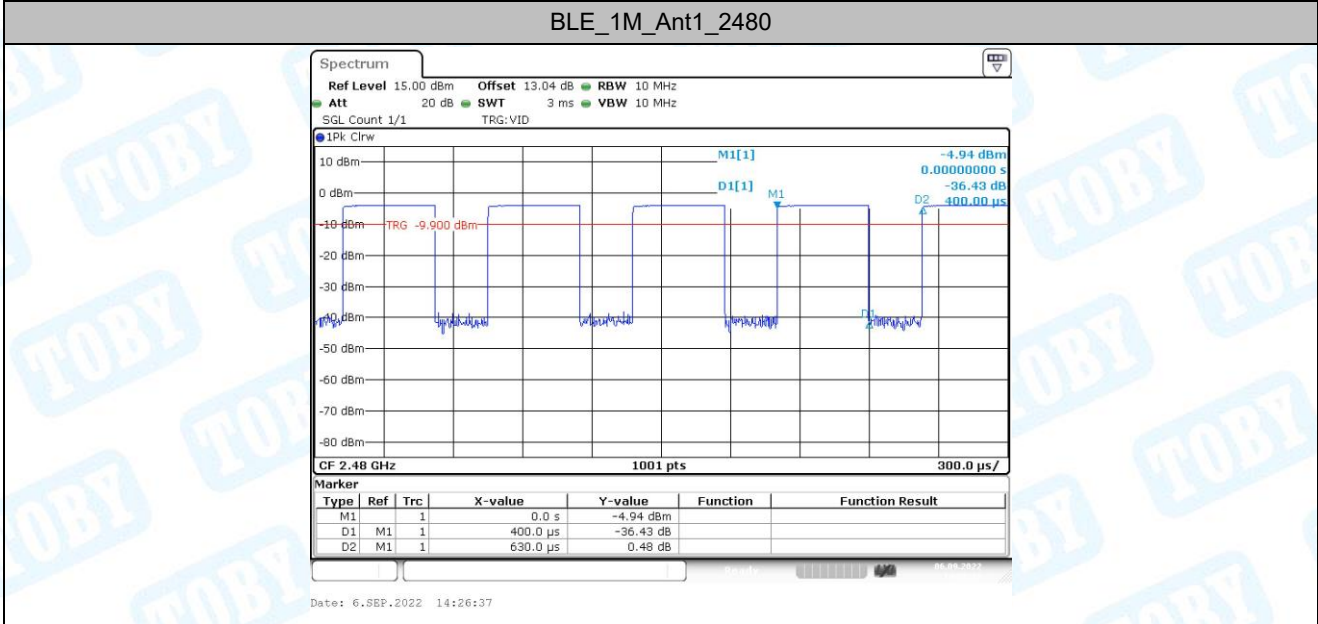
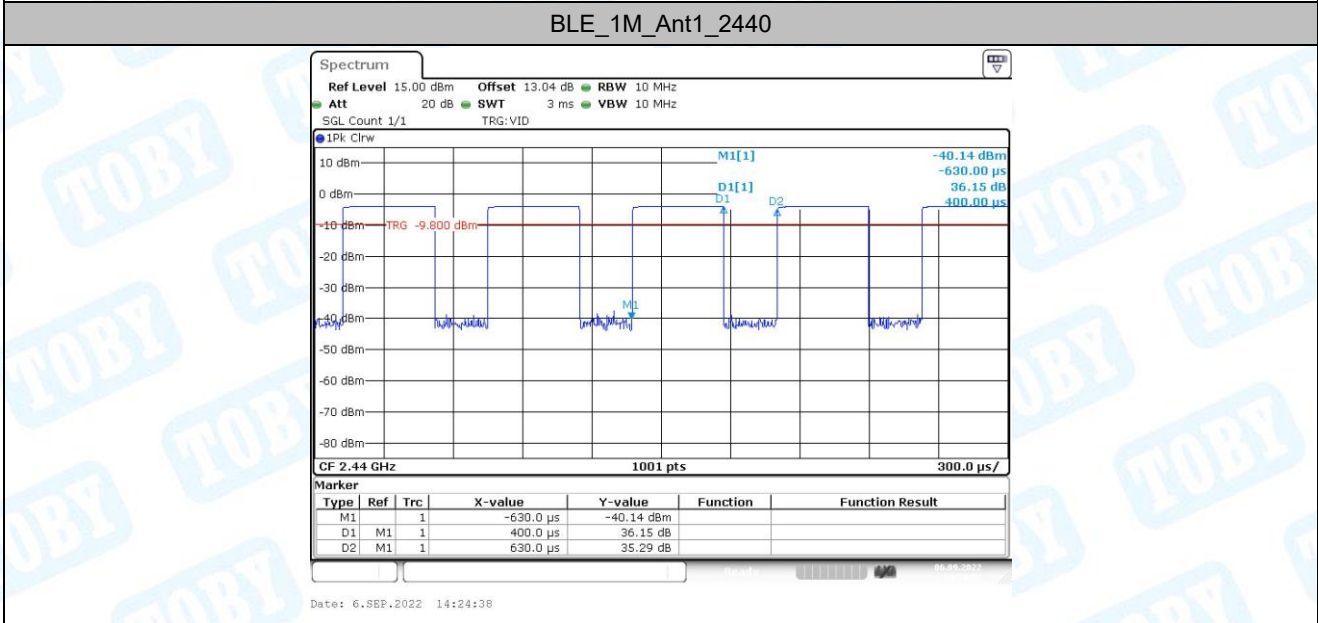
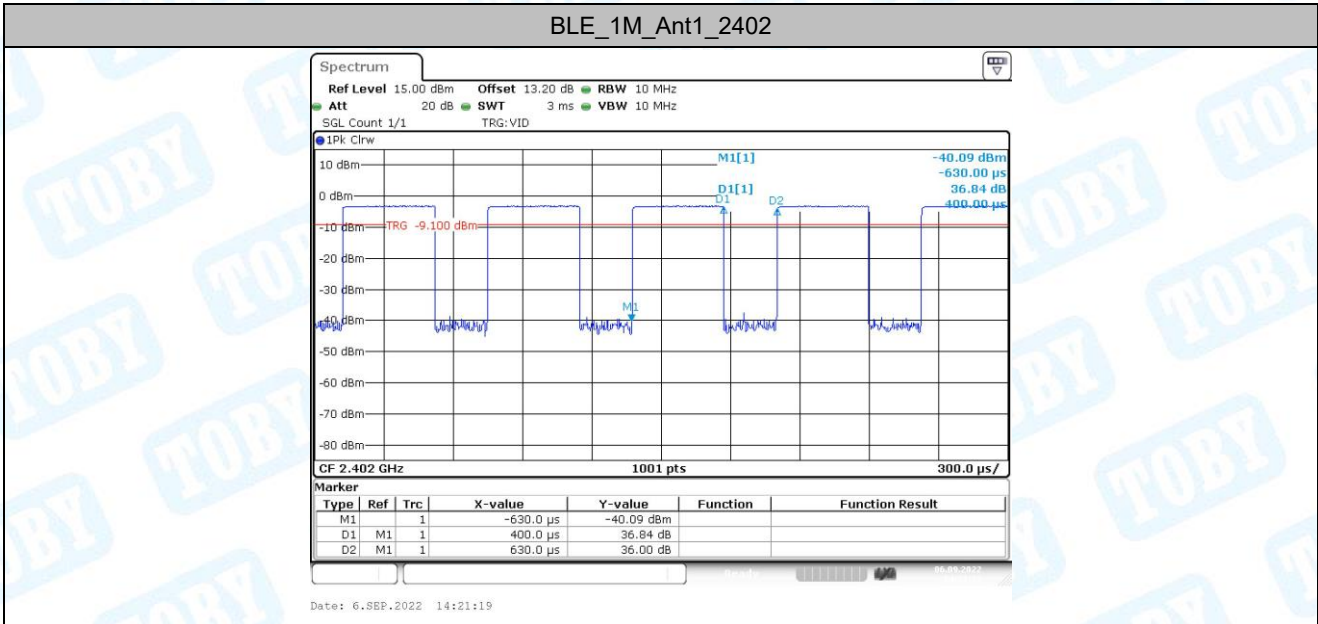
## 7. Duty Cycle

### 7.1. Test Result

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]	Limit	Verdict
BLE_1M	Ant1	2402	0.40	0.63	63.49	2.5	---	---
		2440	0.40	0.63	63.49	2.5	---	---
		2480	0.40	0.63	63.49	2.5	---	---



## 7.2. Test Graphs



## 8. Emissions in Restricted Bands

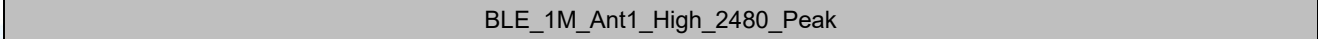
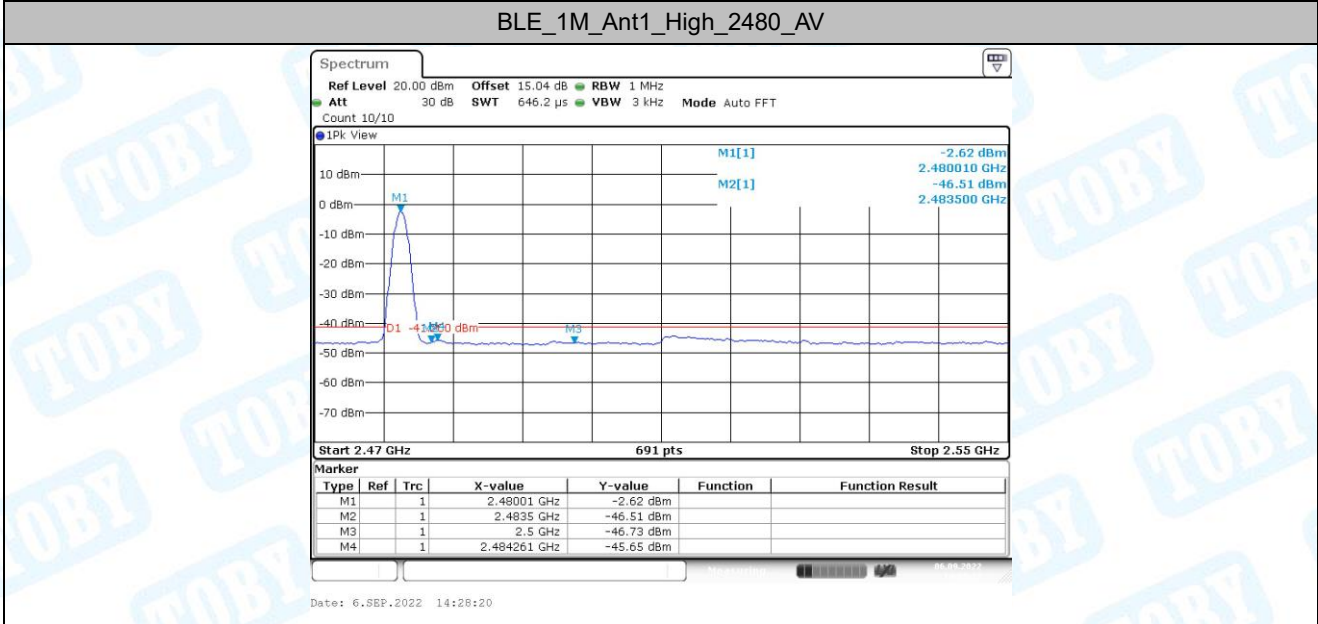
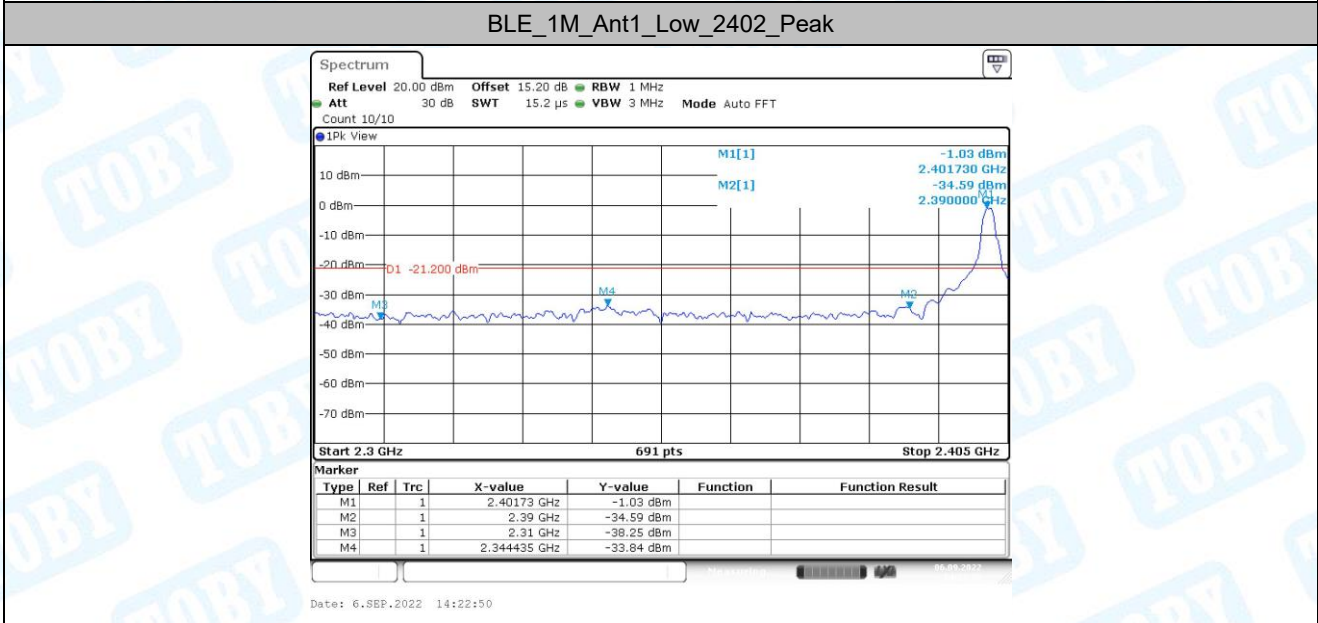
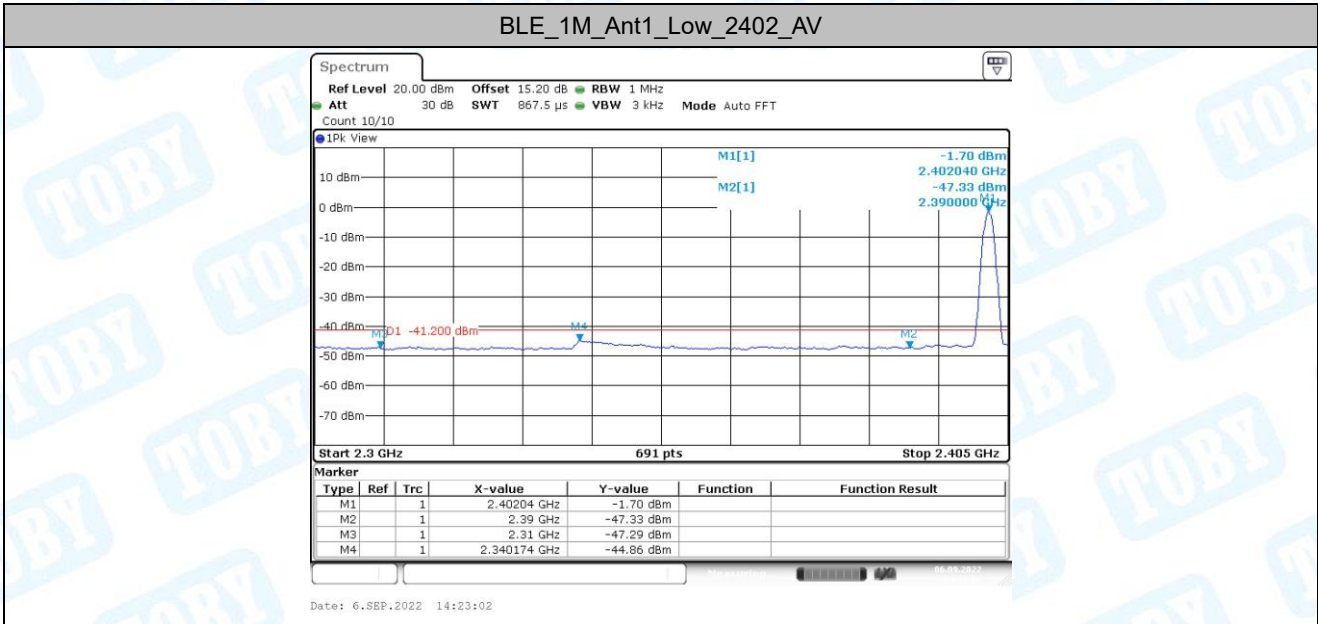
### 8.1. Test Result

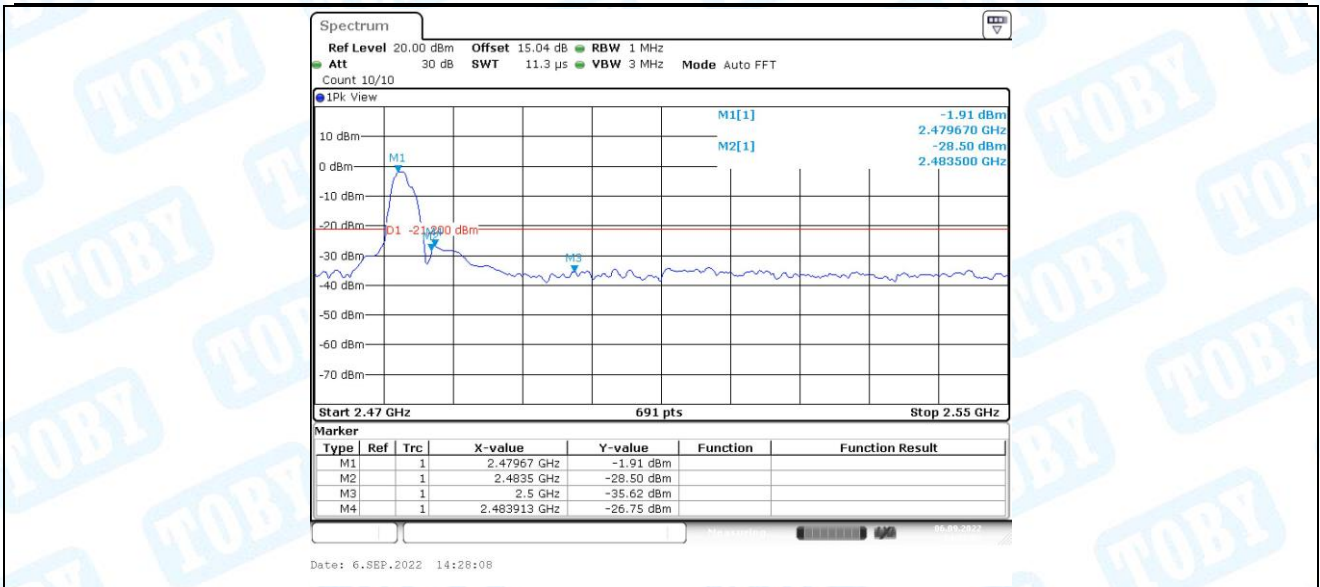
Test Mode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-47.29	≤-41.20	PASS
				AV	2340.174	-44.86	≤-41.20	PASS
				AV	2390.000	-47.33	≤-41.20	PASS
				Peak	2310.000	-38.25	≤-21.20	PASS
				Peak	2344.435	-33.84	≤-21.20	PASS
				Peak	2390.000	-34.59	≤-21.20	PASS
		High	2480	AV	2483.500	-46.51	≤-41.20	PASS
				AV	2484.261	-45.65	≤-41.20	PASS
				AV	2500.000	-46.73	≤-41.20	PASS
				Peak	2483.500	-28.5	≤-21.20	PASS
				Peak	2483.913	-26.75	≤-21.20	PASS
				Peak	2500.000	-35.62	≤-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-----