

RF Test Data for Bluetooth LE (Conducted Measurements)

General Description of EUT	
Product Name:	K3
Test Model:	DV8919
Sample ID:	HC-C-202311-0309-01-01
Environmental Conditions	
Temperature:	23.4°C
Relative Humidity:	46%
Test Voltage:	DC 5V
Test Engineer:	Zhen Zhou
Note: For a more detailed features description, please refer to the report TBR-C-202311-0309-4.	

Contents

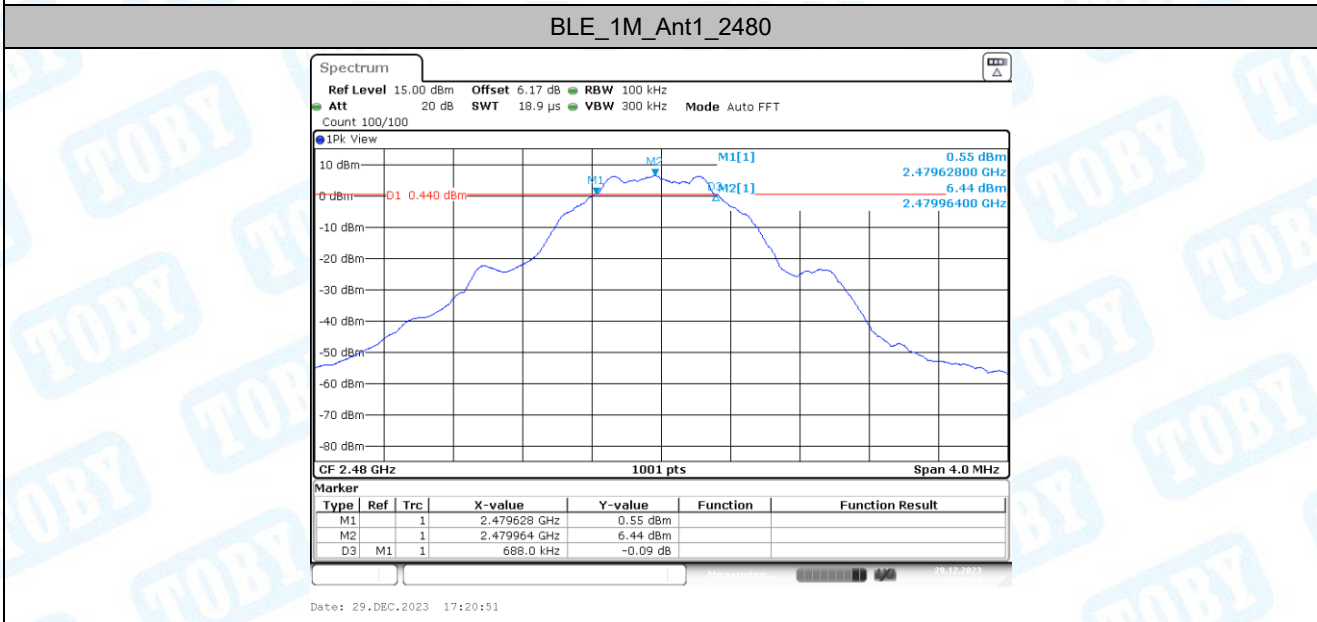
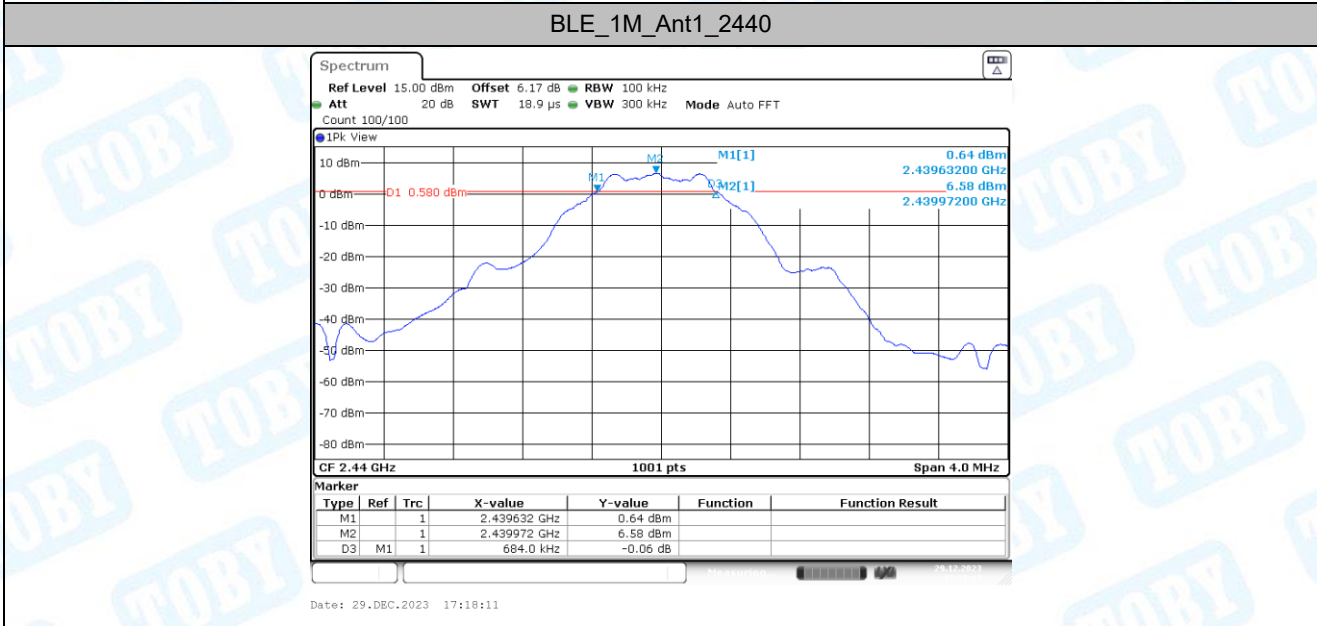
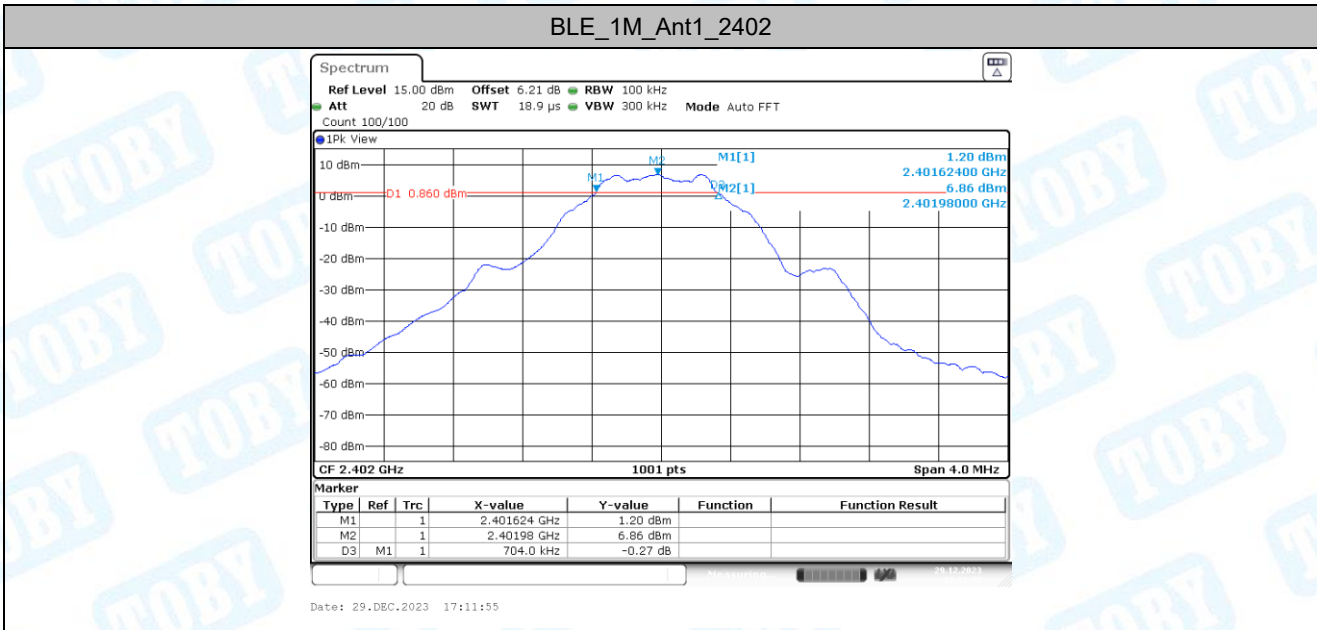
1. DTS Bandwidth.....	3
1.1. Test Result.....	3
1.2. Test Graphs.....	4
2. Occupied Channel Bandwidth.....	6
2.1. Test Result.....	6
2.2. Test Graphs.....	7
3. Maximum conducted output power.....	9
3.1. Test Result.....	9
3.2. Test Graphs.....	10
4. Maximum power spectral density.....	12
4.1. Test Result.....	12
4.2. Test Graphs.....	13
5. Band edge measurements.....	15
5.1. Test Result.....	15
5.2. Test Graphs.....	16
6. Conducted Spurious Emission.....	18
6.1. Test Result.....	18
6.2. Test Graphs.....	19
7. Duty Cycle.....	25
7.1. Test Result.....	25
7.2. Test Graphs.....	26
----End of the report----	27

1. DTS Bandwidth

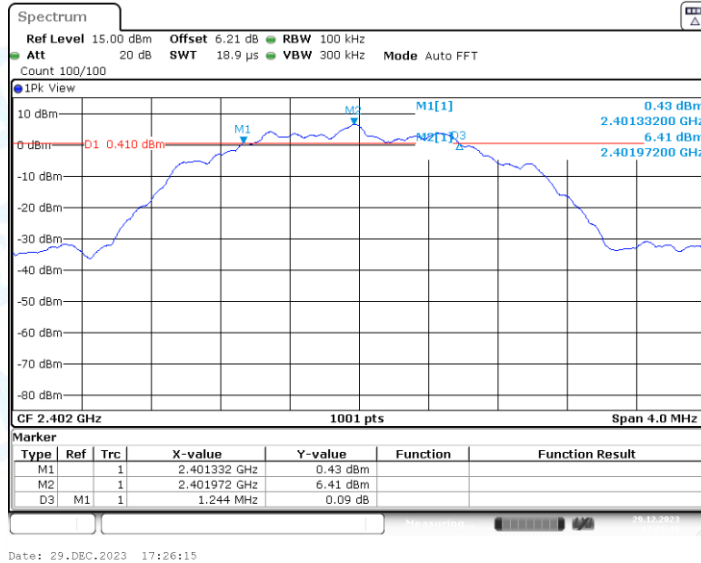
1.1. Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.70	2401.62	2402.33	0.5	PASS
		2440	0.68	2439.63	2440.32	0.5	PASS
		2480	0.69	2479.63	2480.32	0.5	PASS
BLE_2M	Ant1	2402	1.24	2401.33	2402.58	0.5	PASS
		2440	1.18	2439.38	2440.57	0.5	PASS
		2480	1.24	2479.32	2480.56	0.5	PASS

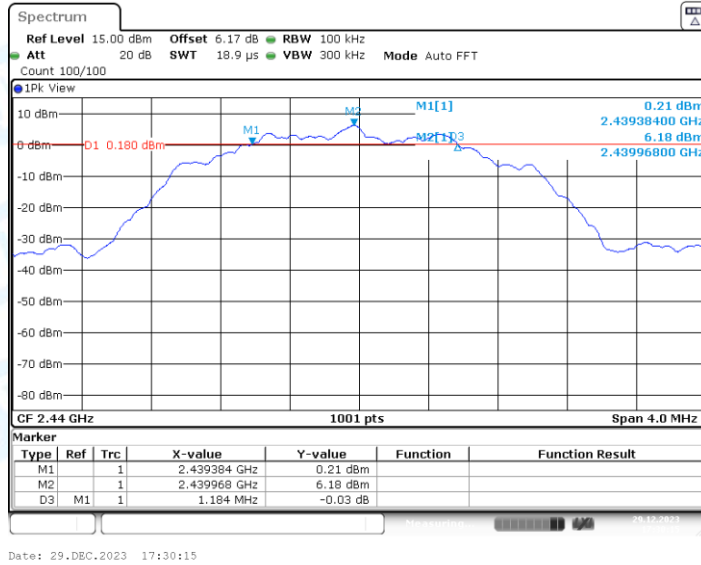
1.2. Test Graphs



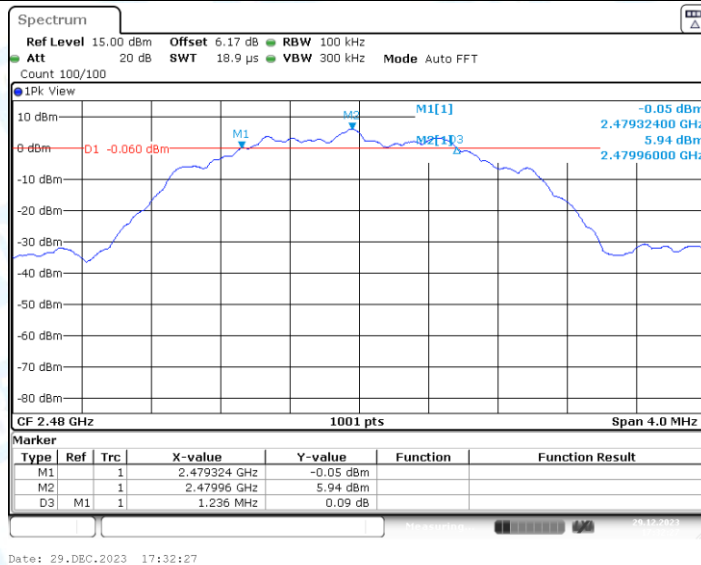
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

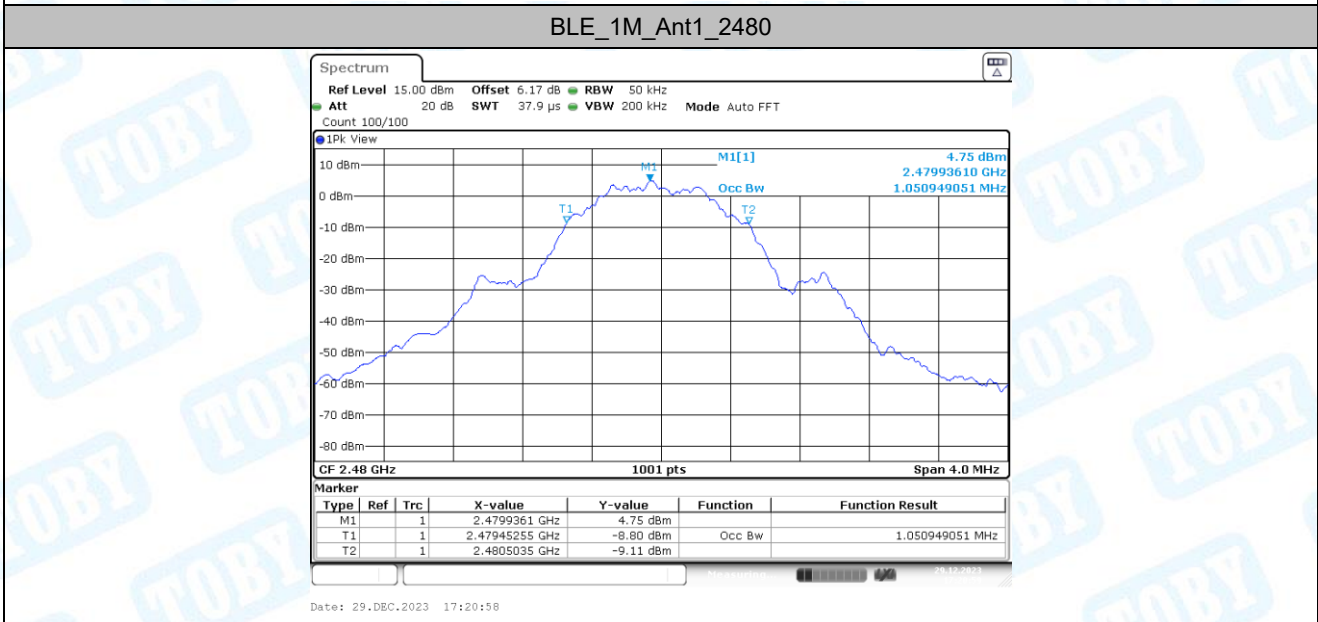
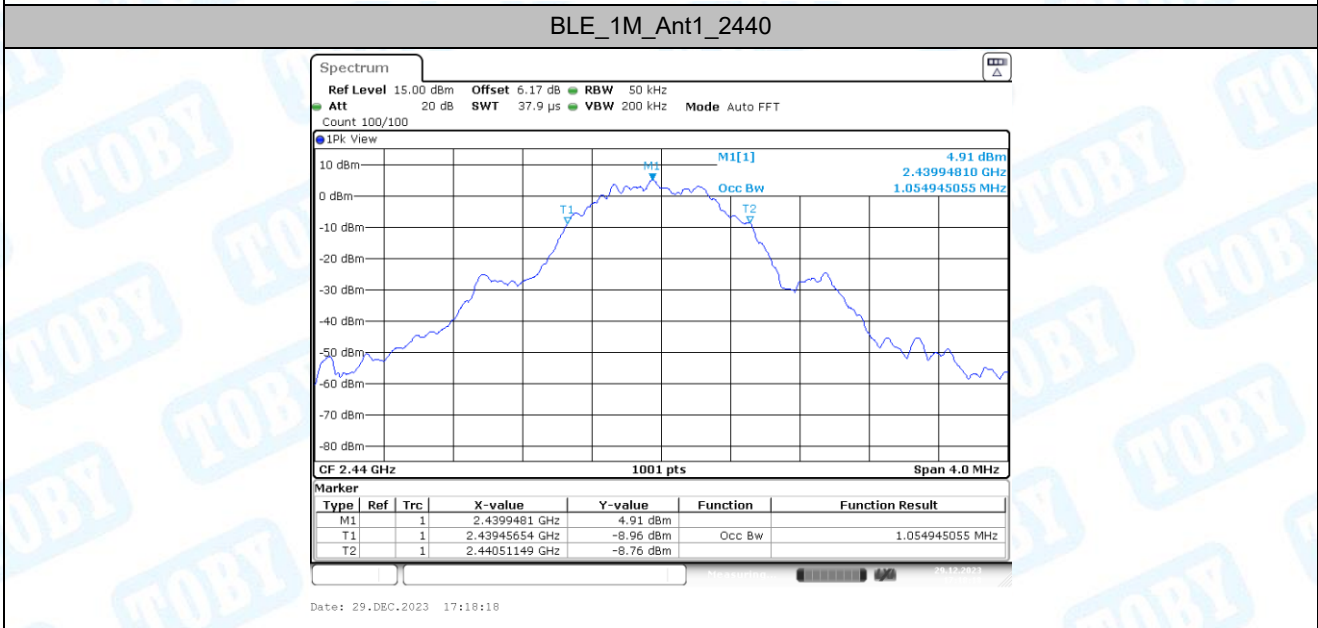


2. Occupied Channel Bandwidth

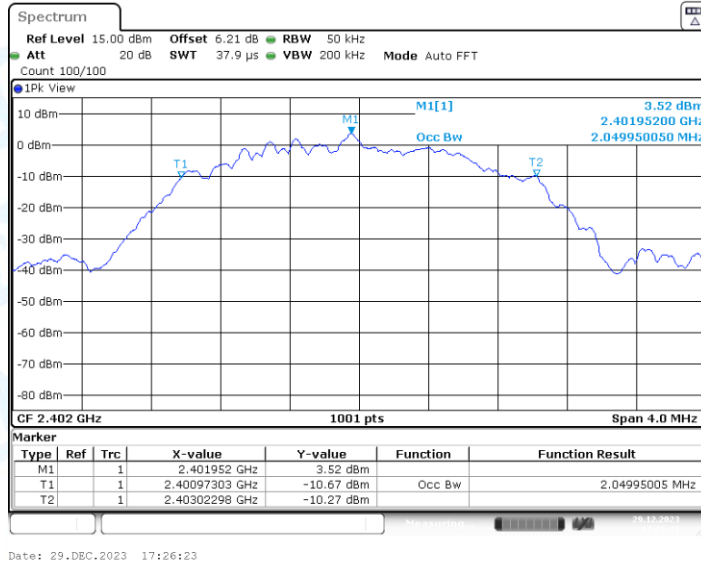
2.1. Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.055	2401.4645	2402.5195	---	---
		2440	1.055	2439.4565	2440.5115	---	---
		2480	1.051	2479.4525	2480.5035	---	---
BLE_2M	Ant1	2402	2.05	2400.9730	2403.0230	---	---
		2440	2.05	2438.9650	2441.0150	---	---
		2480	2.05	2478.9610	2481.0110	---	---

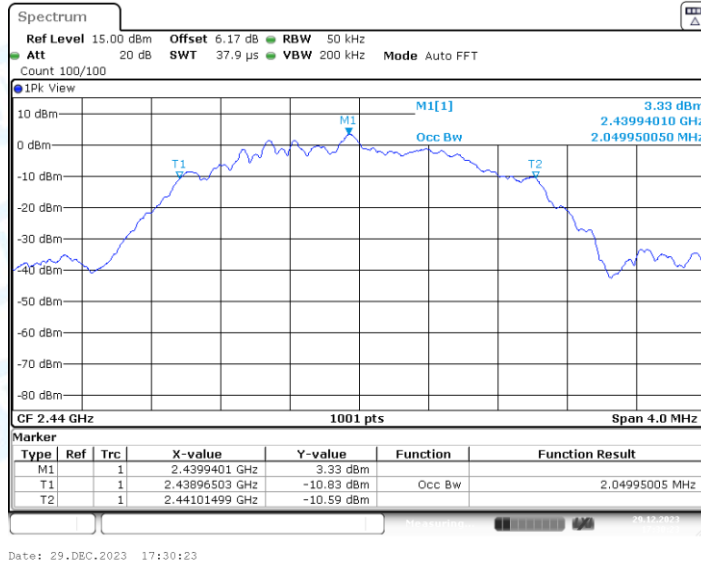
2.2. Test Graphs



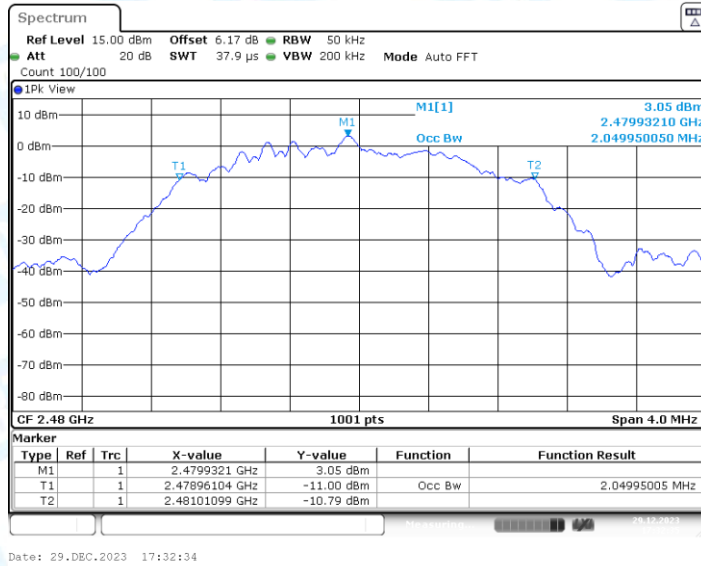
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

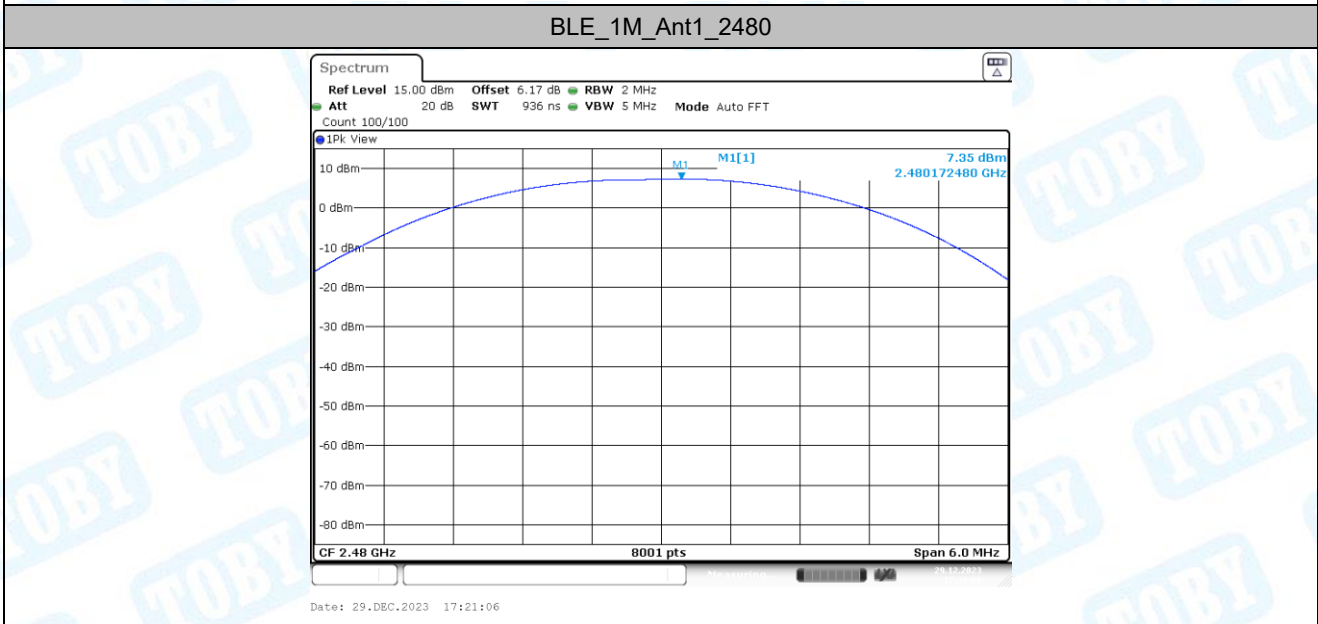
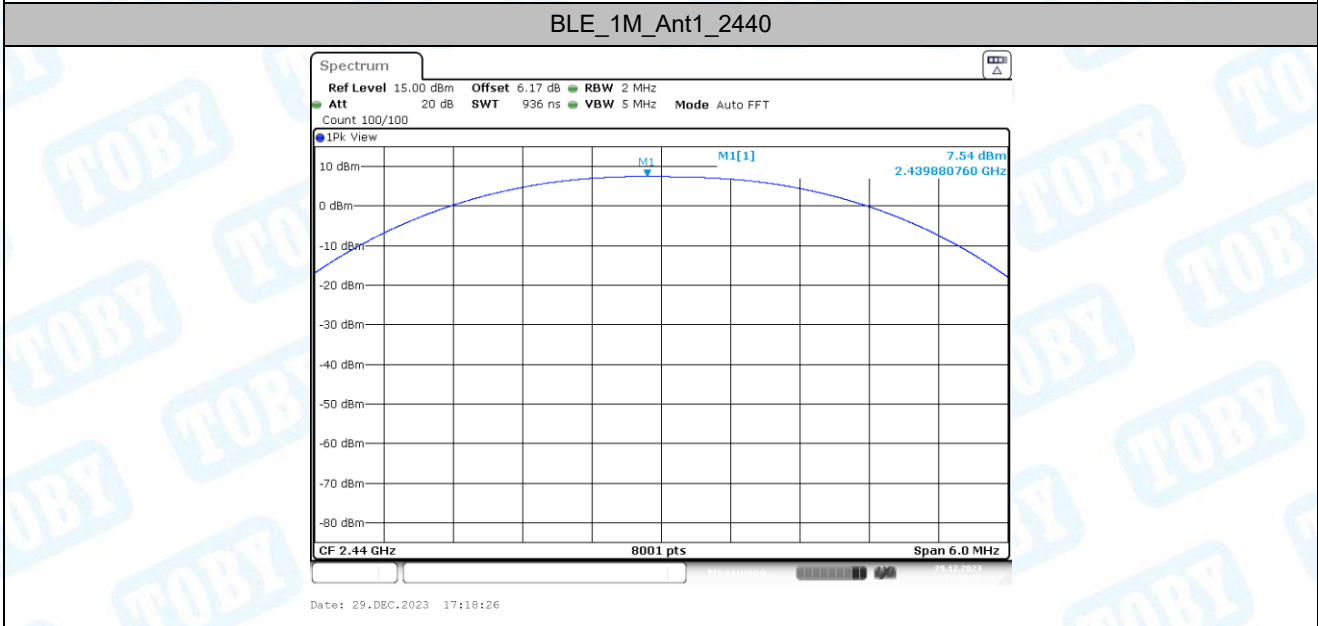
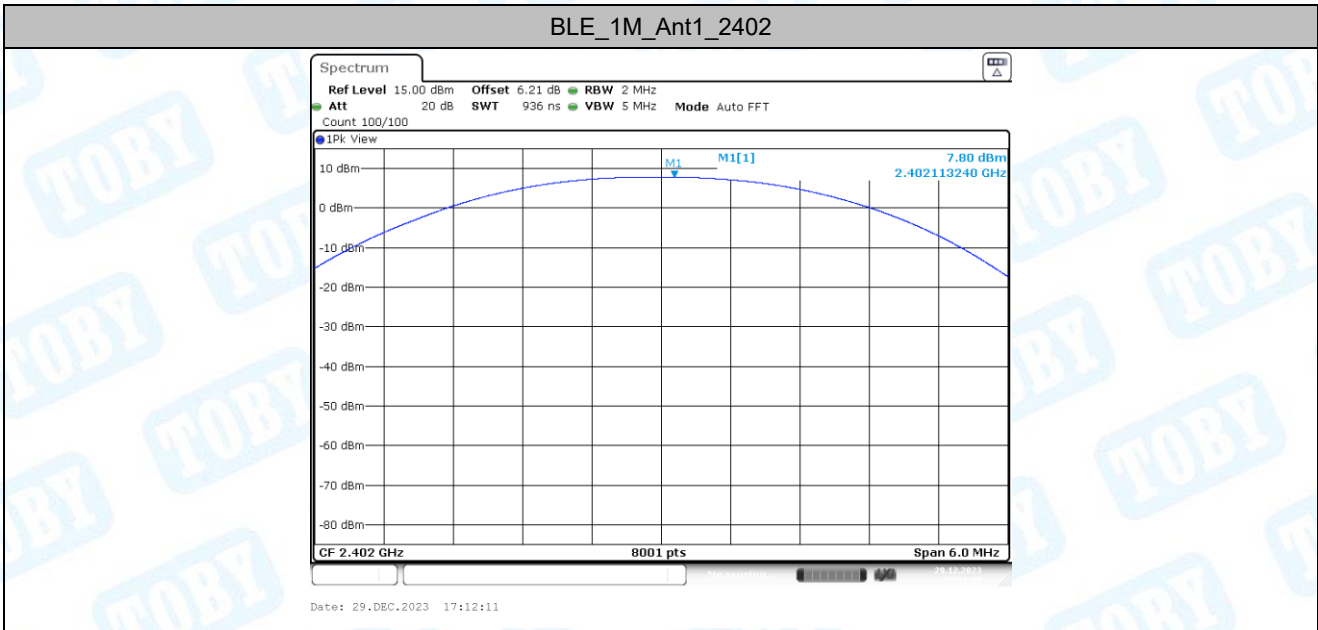


3. Maximum conducted output power

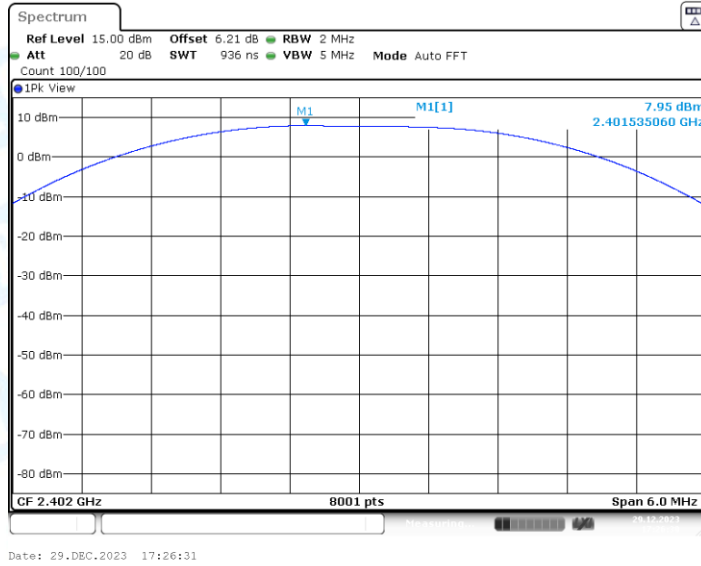
3.1. Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	7.80	≤30	PASS
		2440	7.54	≤30	PASS
		2480	7.35	≤30	PASS
BLE_2M	Ant1	2402	7.95	≤30	PASS
		2440	7.65	≤30	PASS
		2480	7.43	≤30	PASS

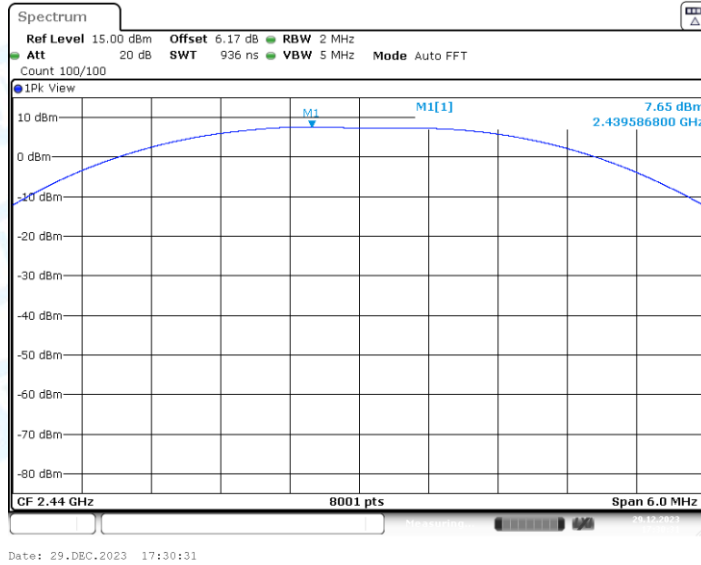
3.2. Test Graphs



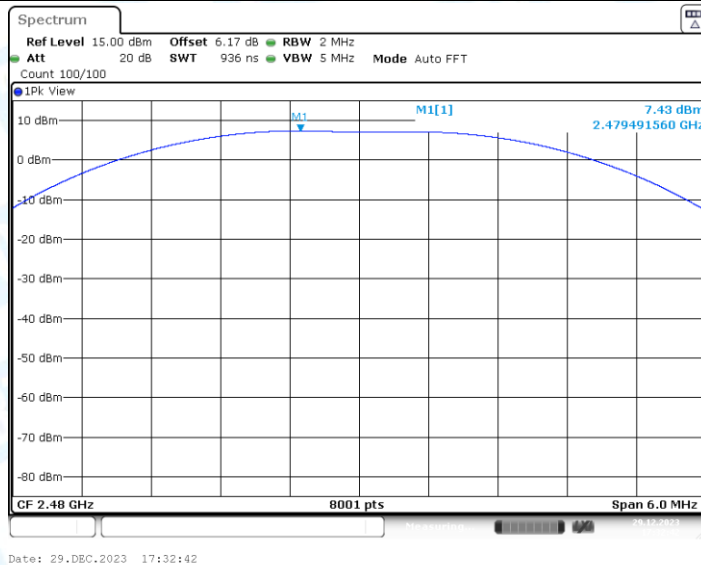
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

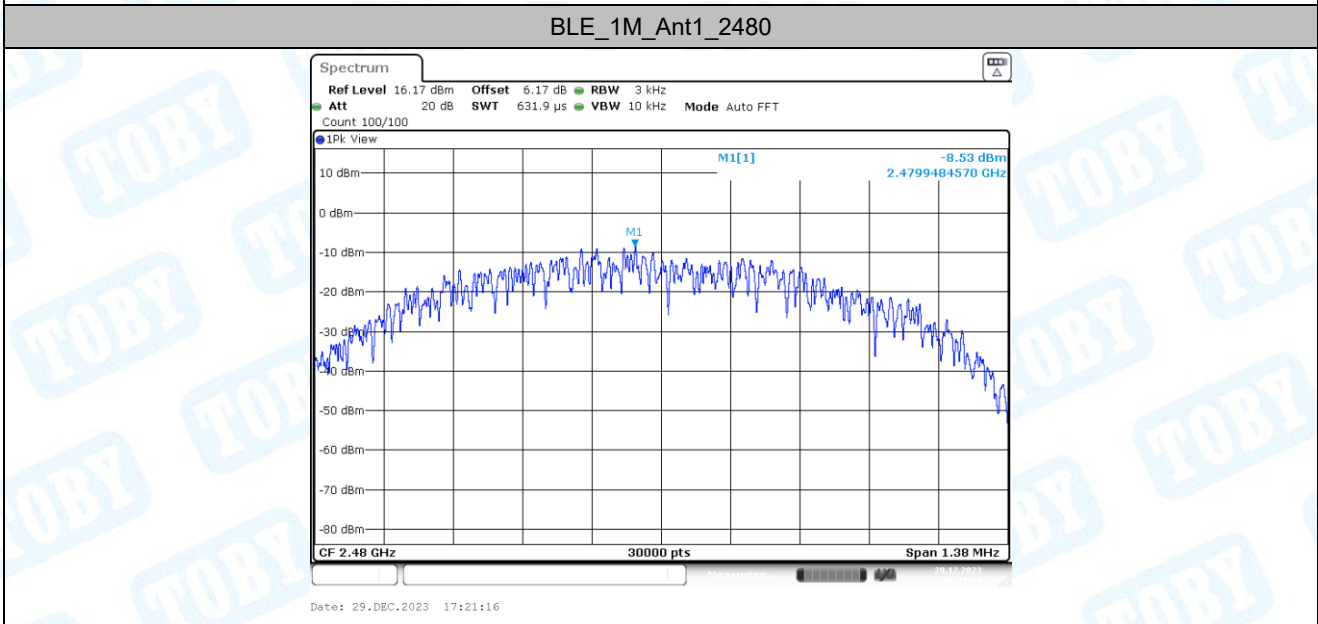
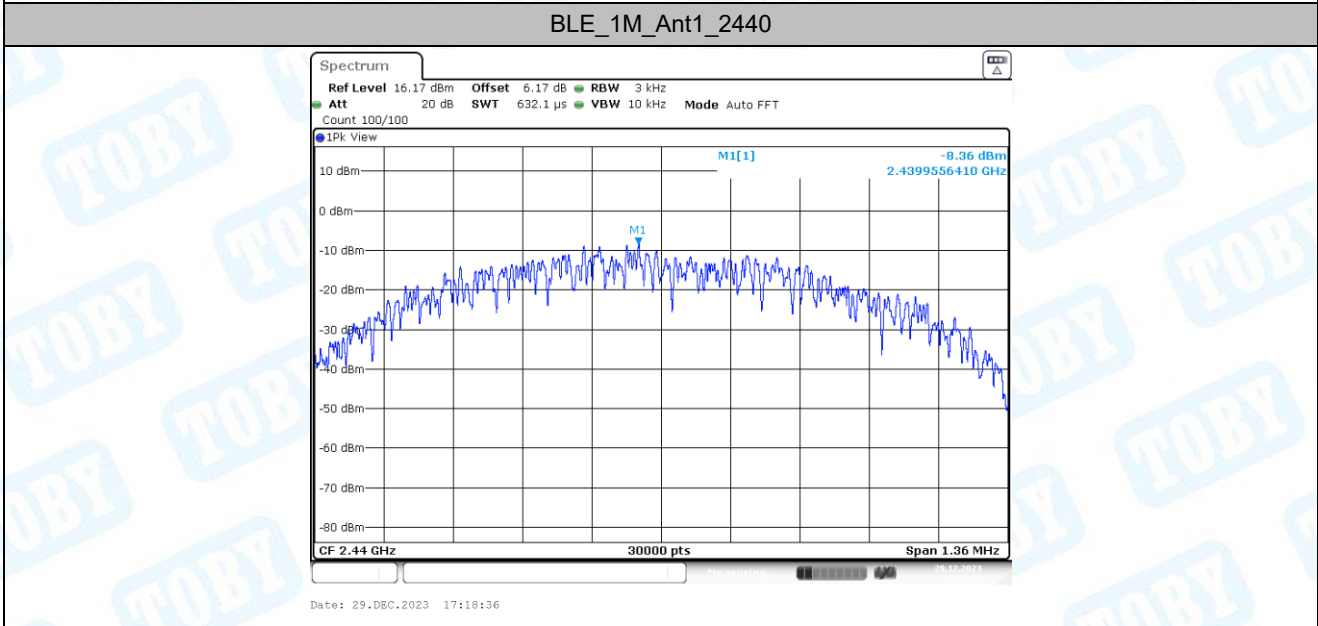
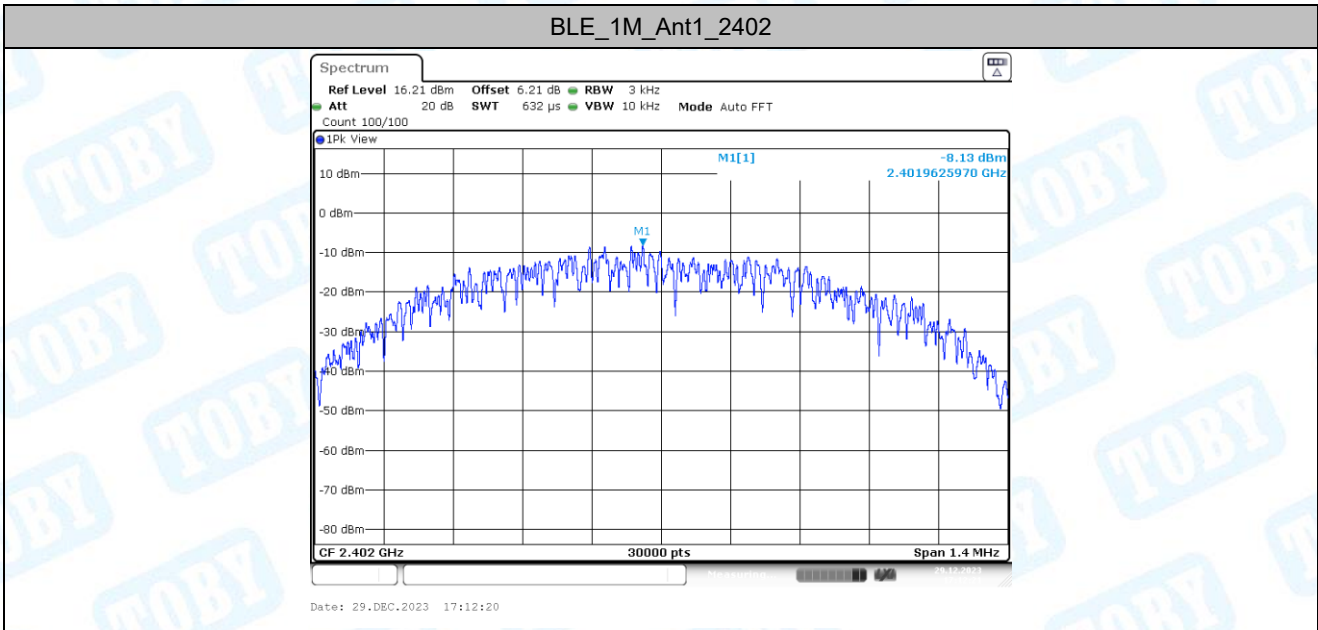


4. Maximum power spectral density

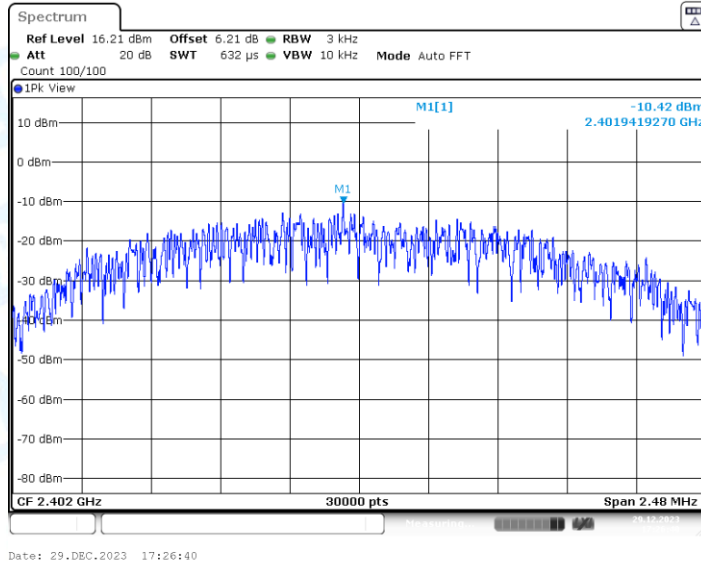
4.1. Test Result

Test Mode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-8.13	≤8.00	PASS
		2440	-8.36	≤8.00	PASS
		2480	-8.53	≤8.00	PASS
BLE_2M	Ant1	2402	-10.42	≤8.00	PASS
		2440	-10.84	≤8.00	PASS
		2480	-10.92	≤8.00	PASS

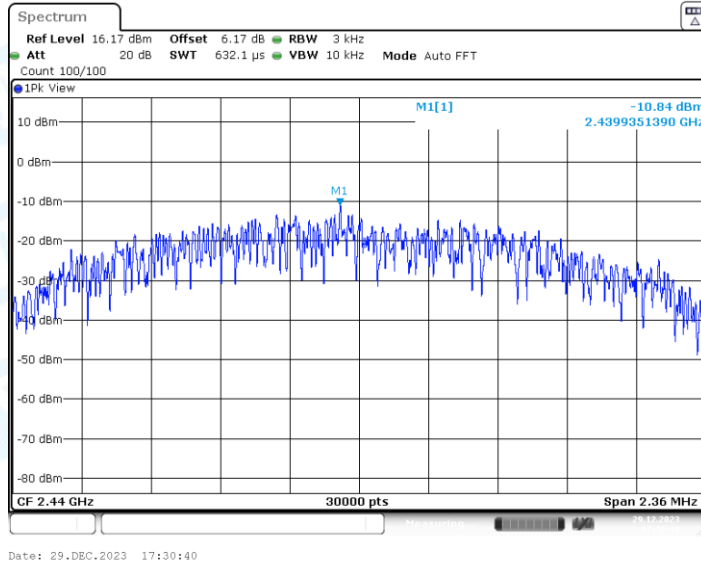
4.2. Test Graphs



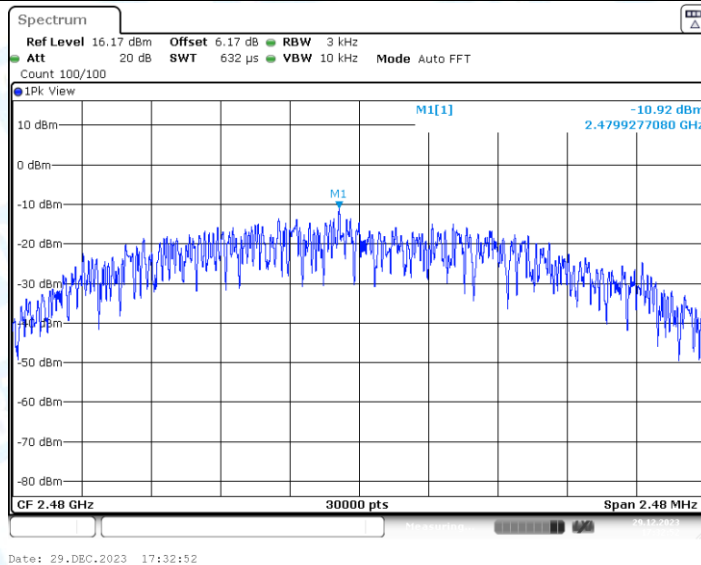
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

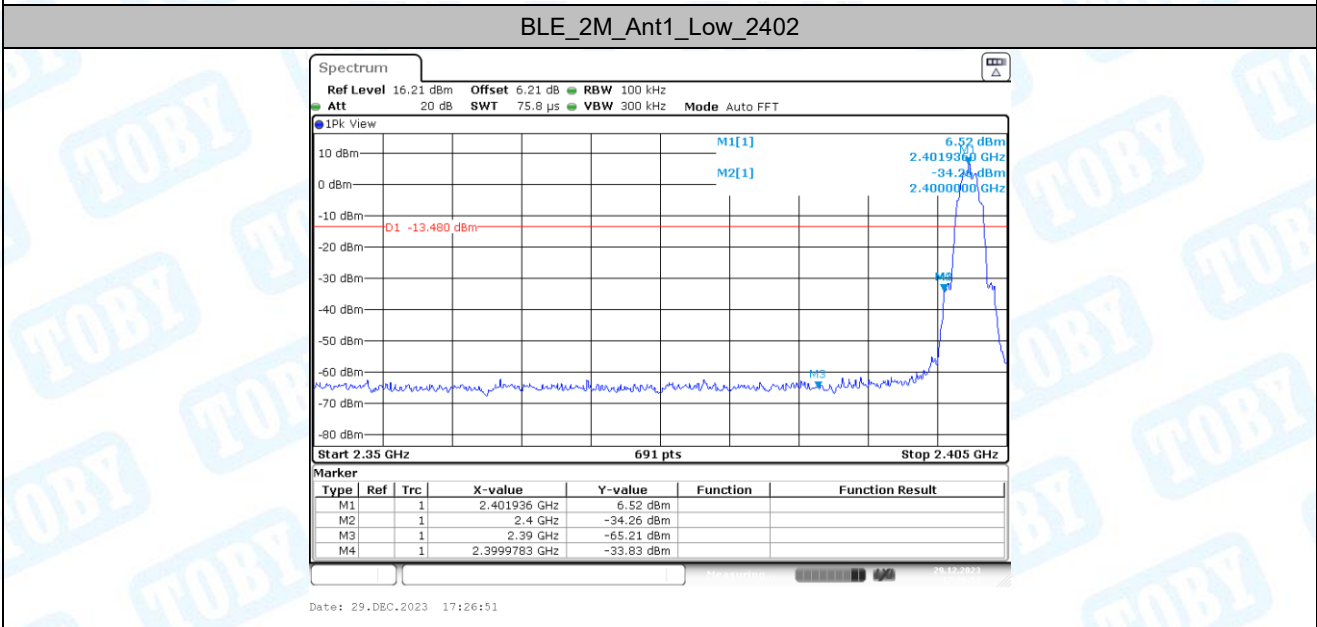
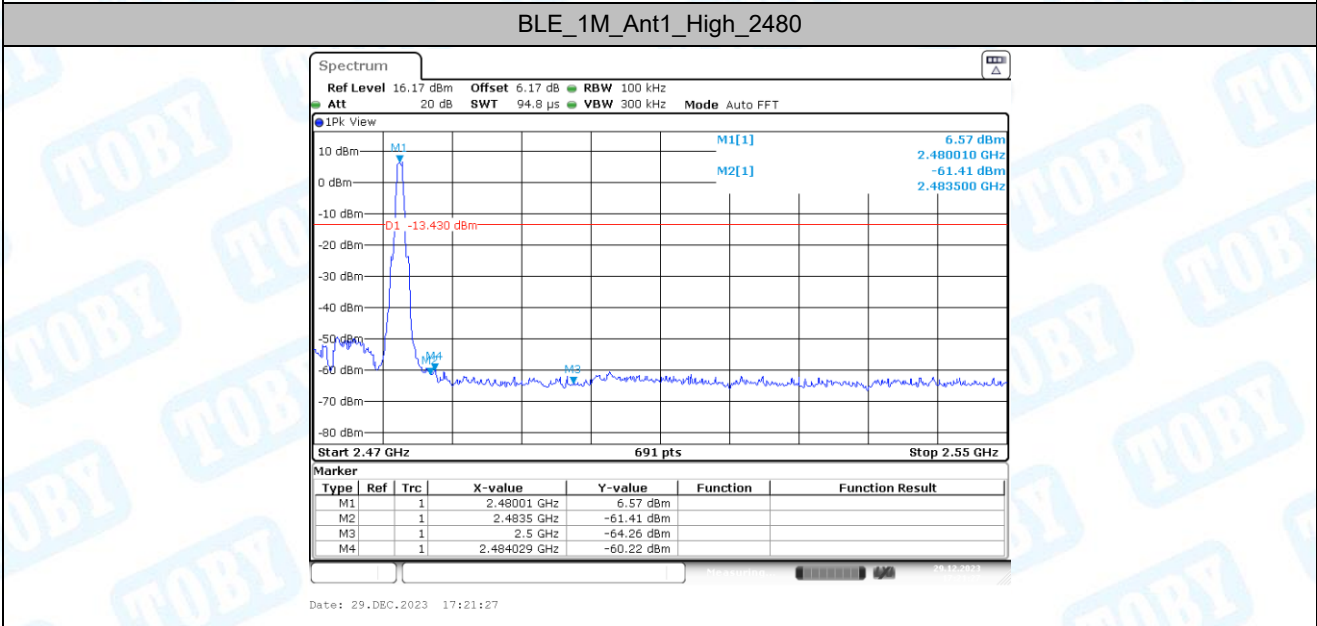
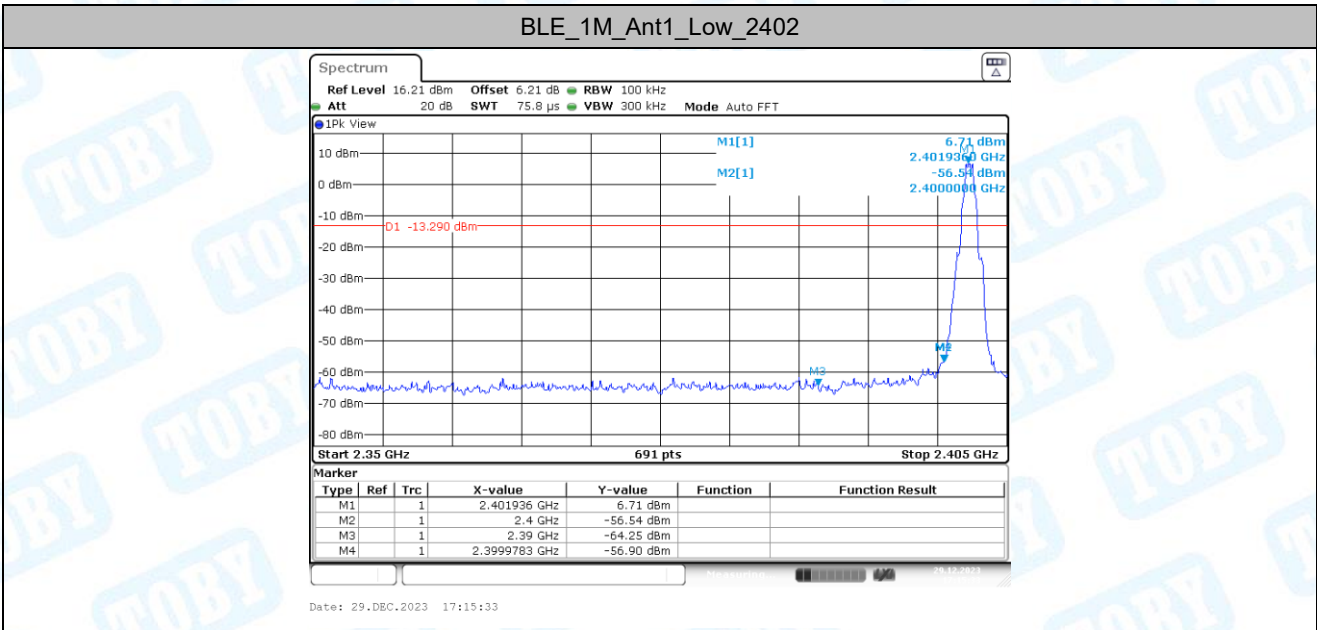


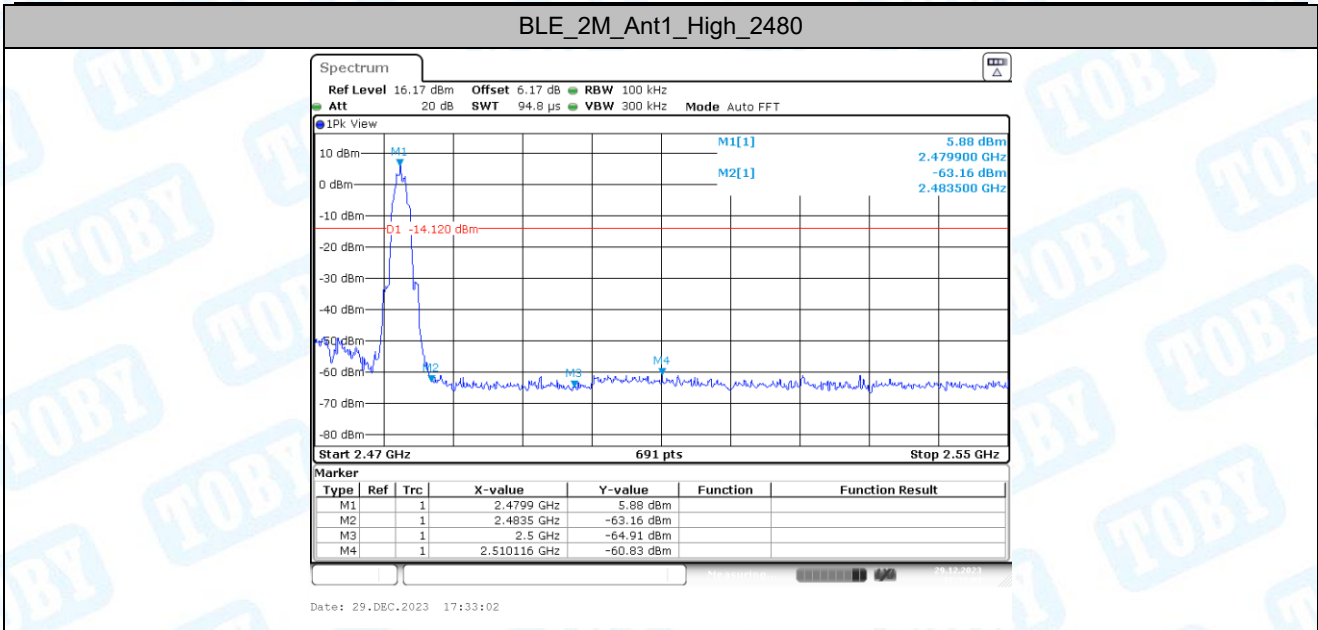
5. Band edge measurements

5.1. Test Result

Test Mode	Antenna	ChName	Channel	Ref.Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	6.71	-56.9	≤-13.29	PASS
		High	2480	6.57	-60.22	≤-13.43	PASS
BLE_2M	Ant1	Low	2402	6.52	-33.83	≤-13.48	PASS
		High	2480	5.88	-60.83	≤-14.12	PASS

5.2. Test Graphs



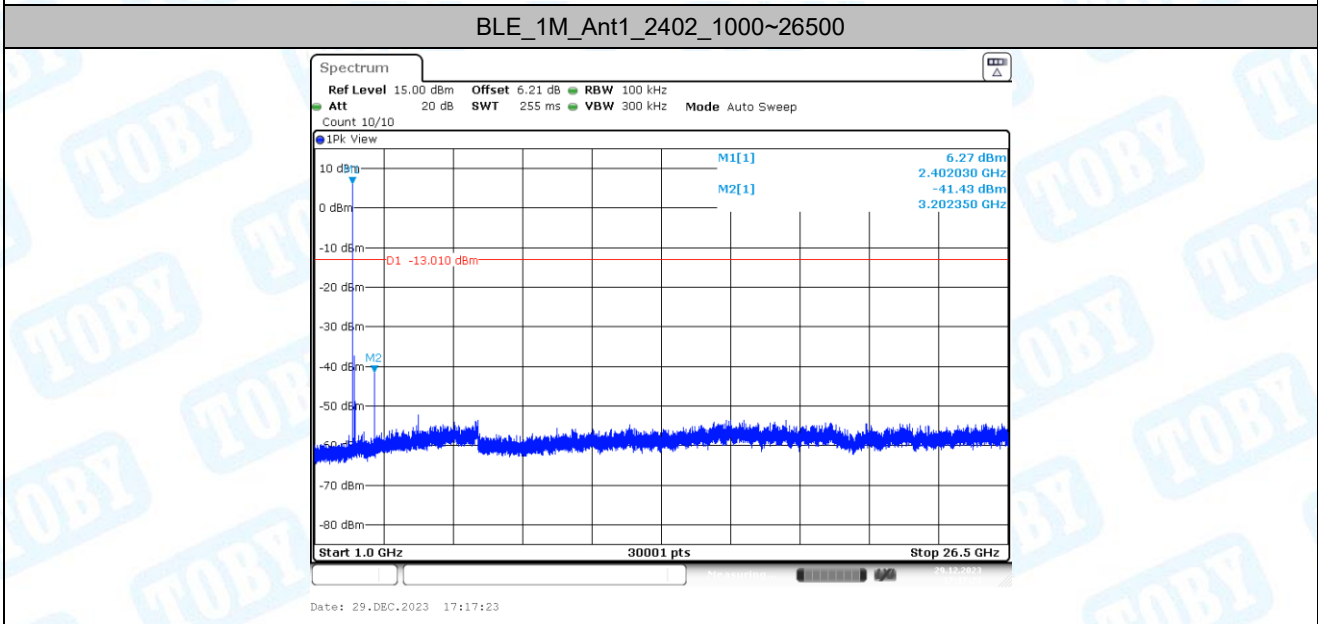
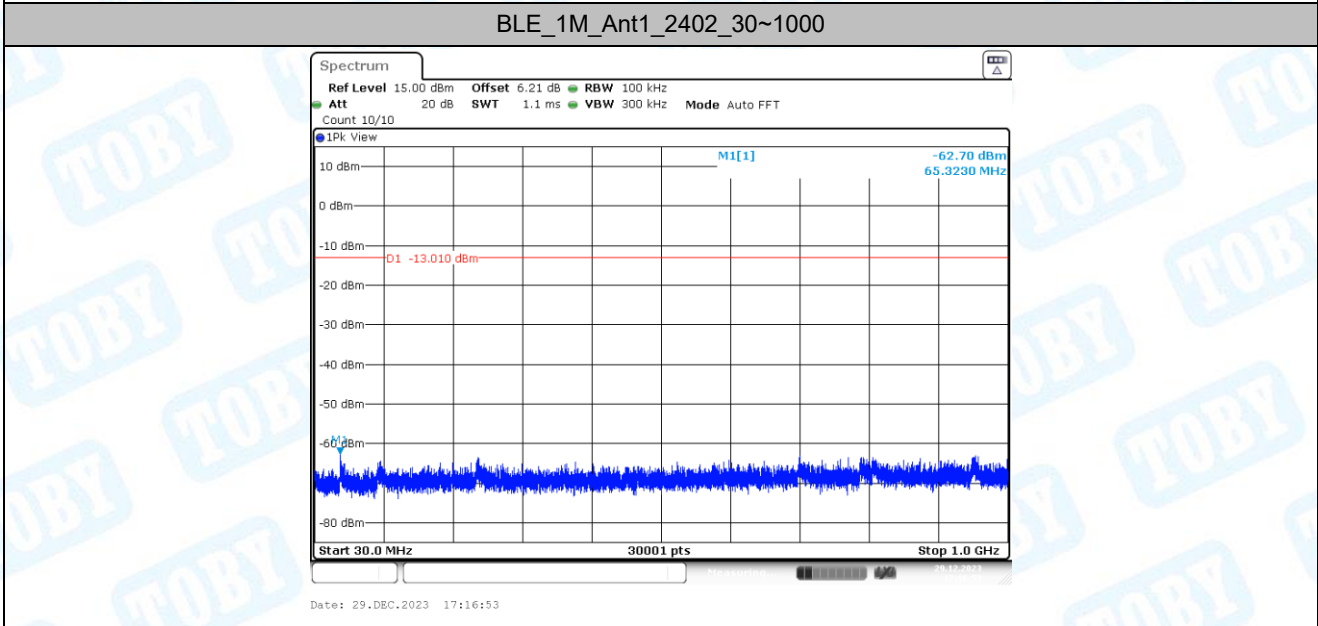
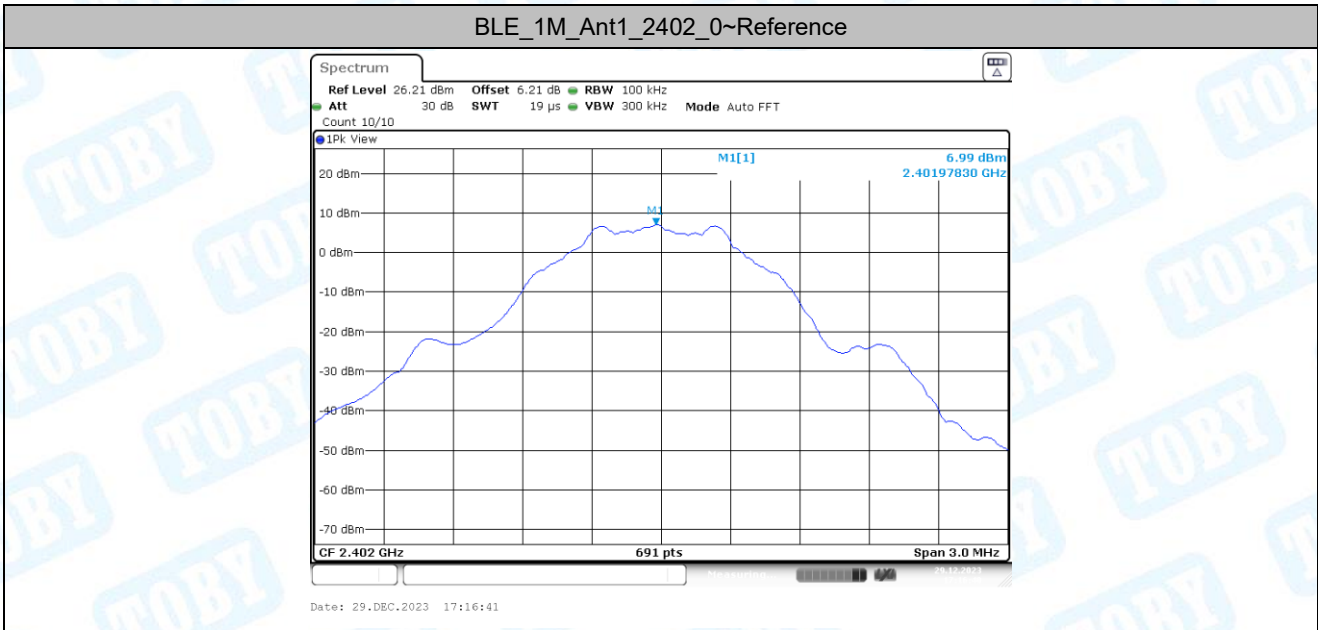


6. Conducted Spurious Emission

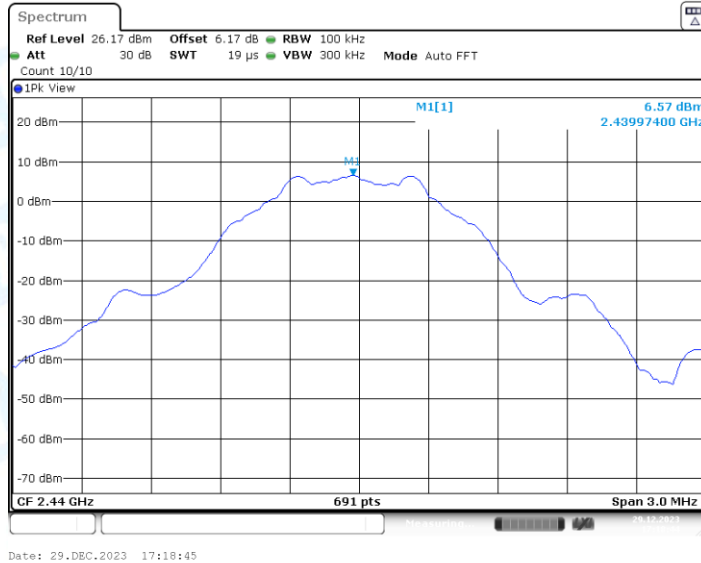
6.1. Test Result

Test Mode	Antenna	Channel	Freq. Range [MHz]	Ref. Level [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	6.99	6.99	---	PASS
			30~1000	6.99	-62.7	≤-13.01	PASS
			1000~26500	6.99	-41.43	≤-13.01	PASS
		2440	Reference	6.57	6.57	---	PASS
			30~1000	6.57	-60.98	≤-13.43	PASS
			1000~26500	6.57	-44.05	≤-13.43	PASS
		2480	Reference	6.44	6.44	---	PASS
			30~1000	6.44	-62.73	≤-13.56	PASS
			1000~26500	6.44	-46.69	≤-13.56	PASS
BLE_2M	Ant1	2402	Reference	6.39	6.39	---	PASS
			30~1000	6.39	-61.79	≤-13.61	PASS
			1000~26500	6.39	-41.58	≤-13.61	PASS
		2440	Reference	6.18	6.18	---	PASS
			30~1000	6.18	-62.59	≤-13.82	PASS
			1000~26500	6.18	-43.85	≤-13.82	PASS
		2480	Reference	6.00	6.00	---	PASS
			30~1000	6.00	-62.22	≤-14	PASS
			1000~26500	6.00	-46.68	≤-14	PASS

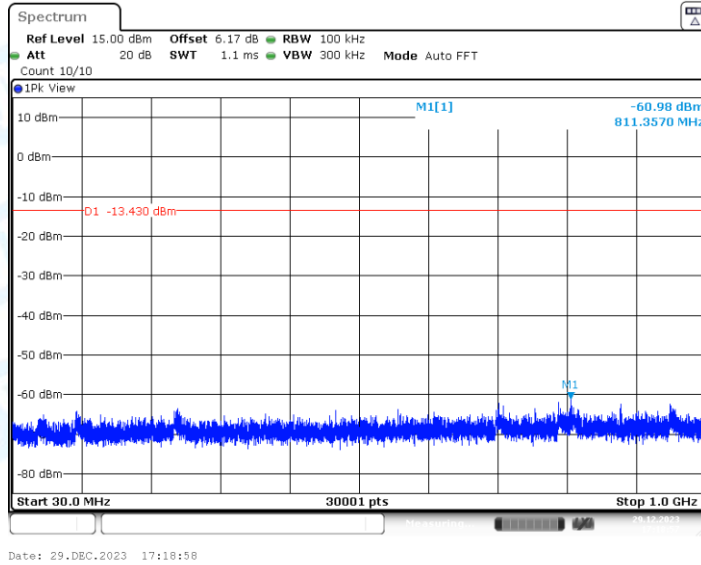
6.2. Test Graphs



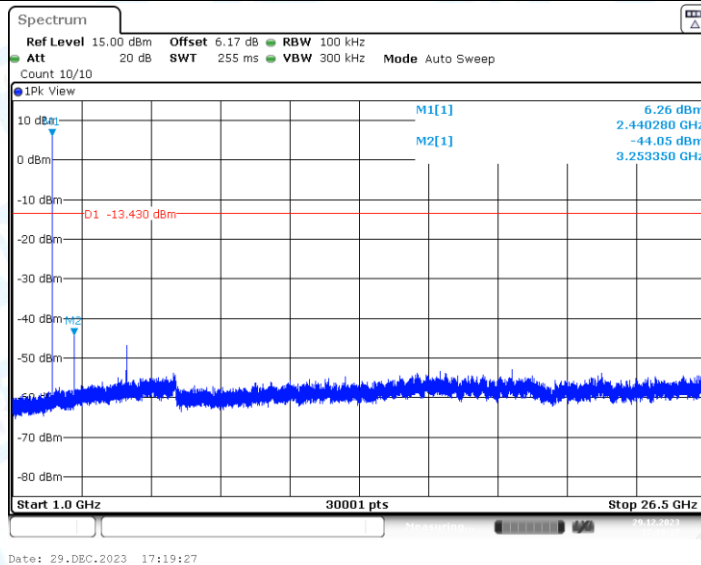
BLE_1M_Ant1_2440_0~Reference



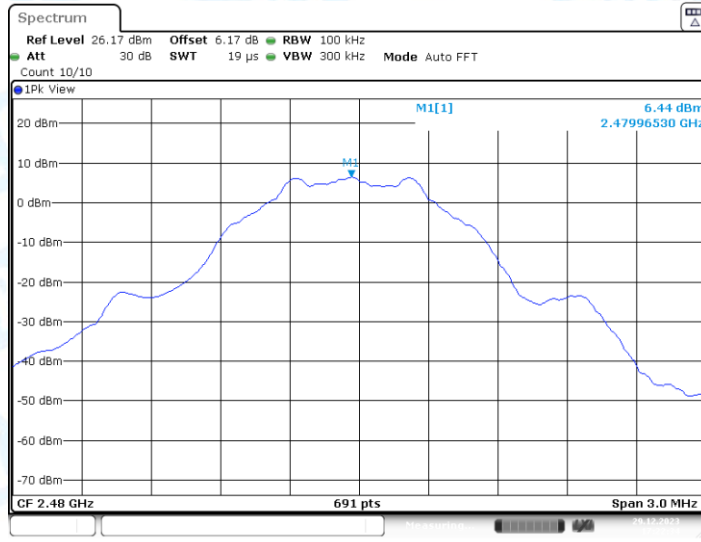
BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500

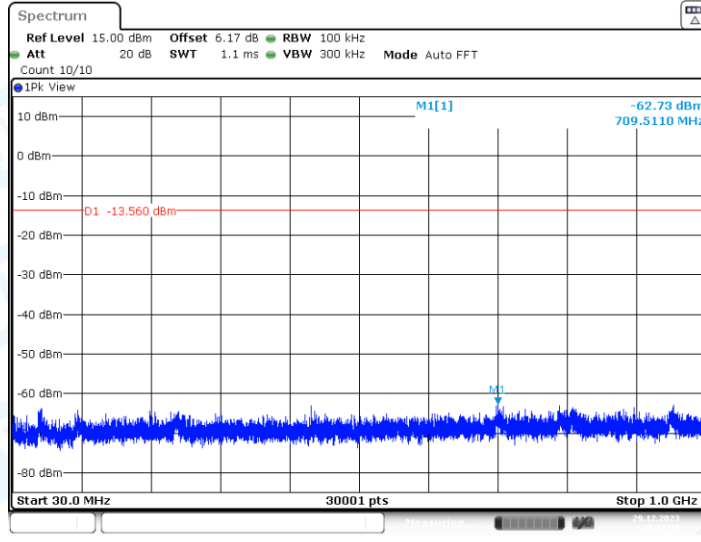


BLE_1M_Ant1_2480_0~Reference



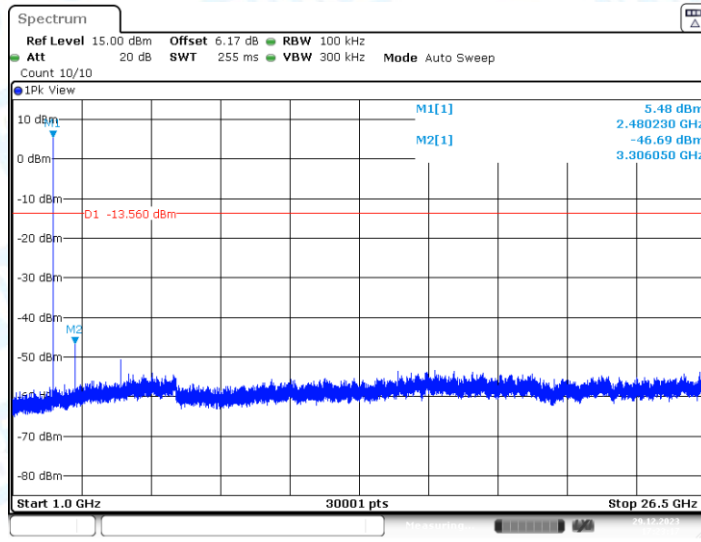
Date: 29.DEC.2023 17:22:34

BLE_1M_Ant1_2480_30~1000



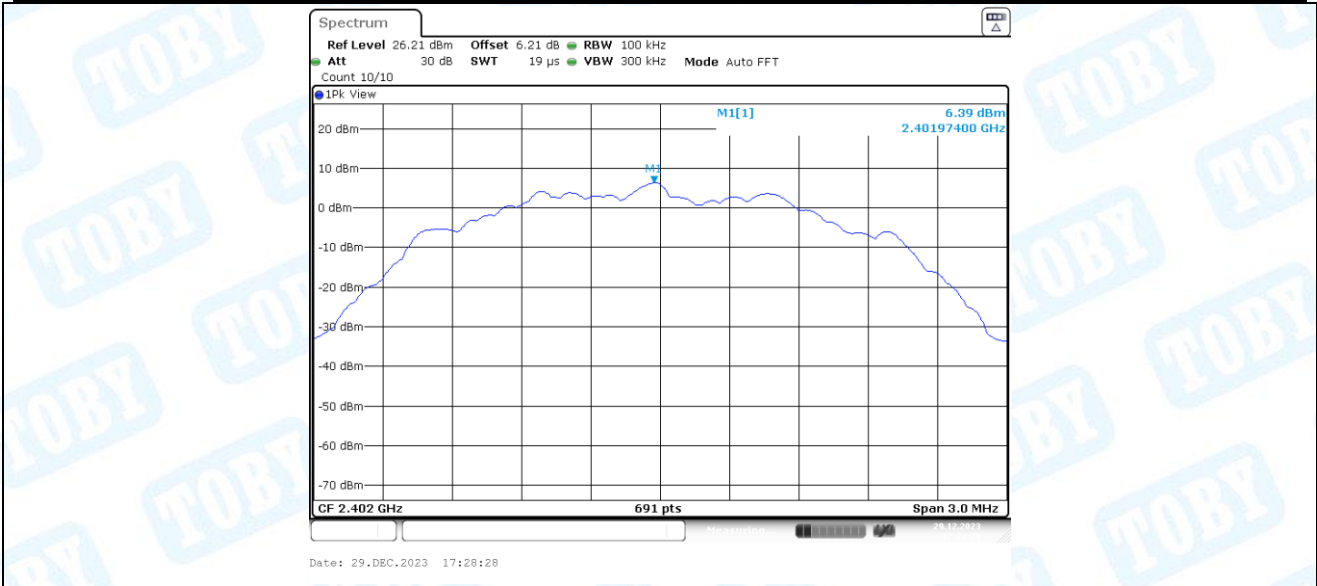
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BLE_1M_Ant1_2480_1000~26500

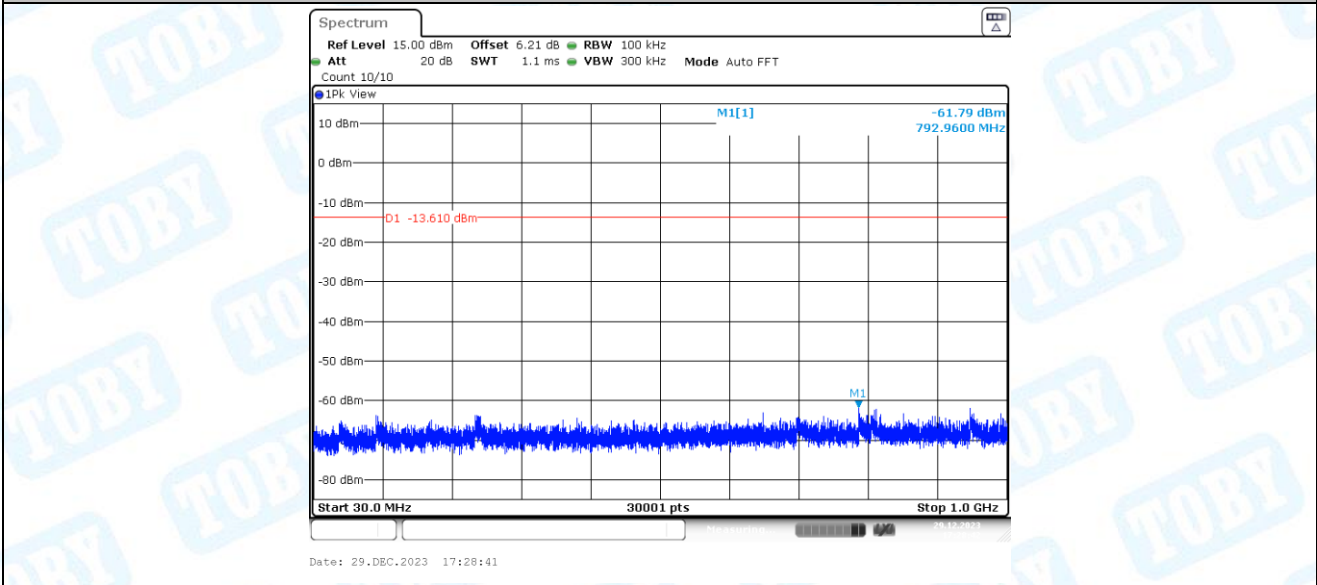


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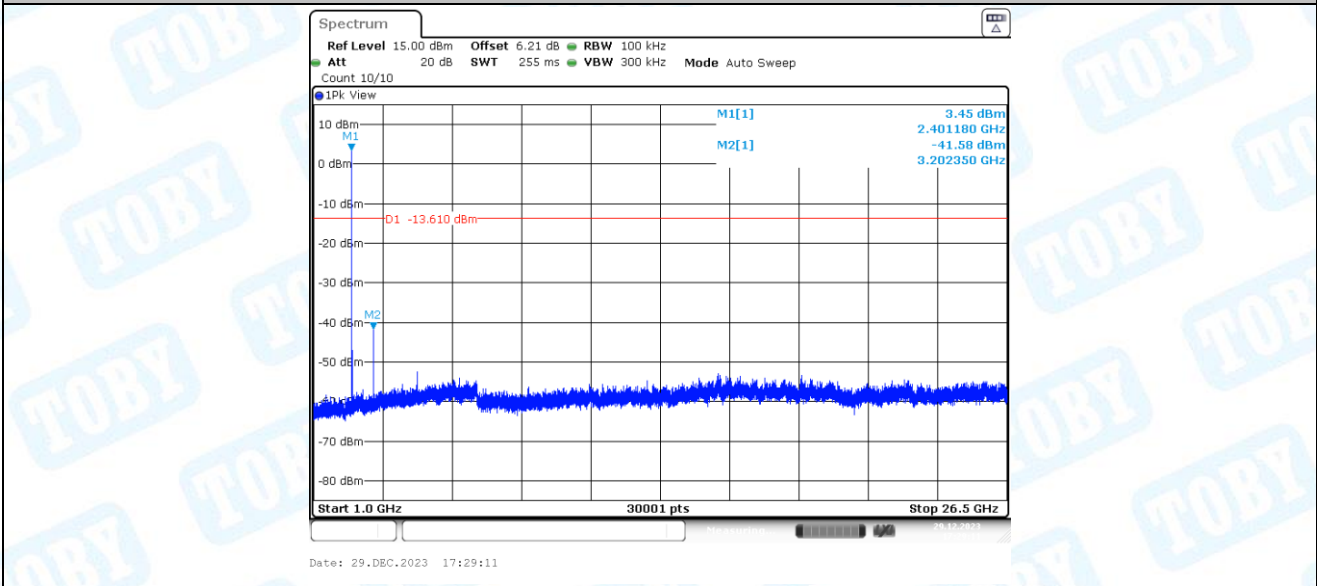
BLE_2M_Ant1_2402_0~Reference



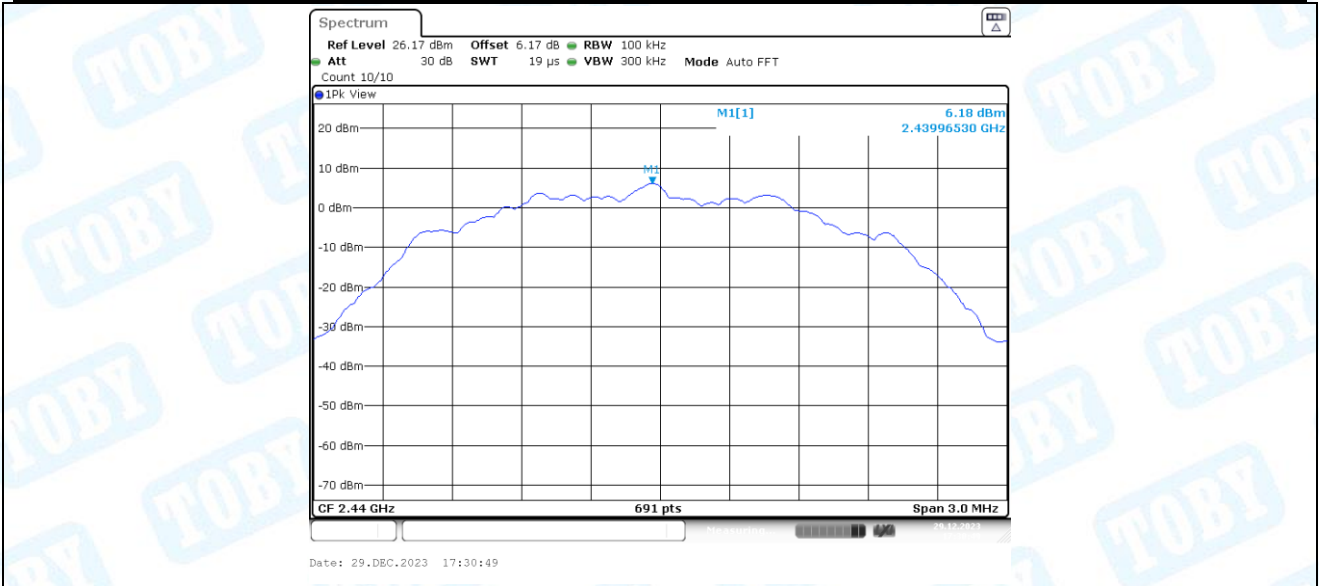
BLE_2M_Ant1_2402_30~1000



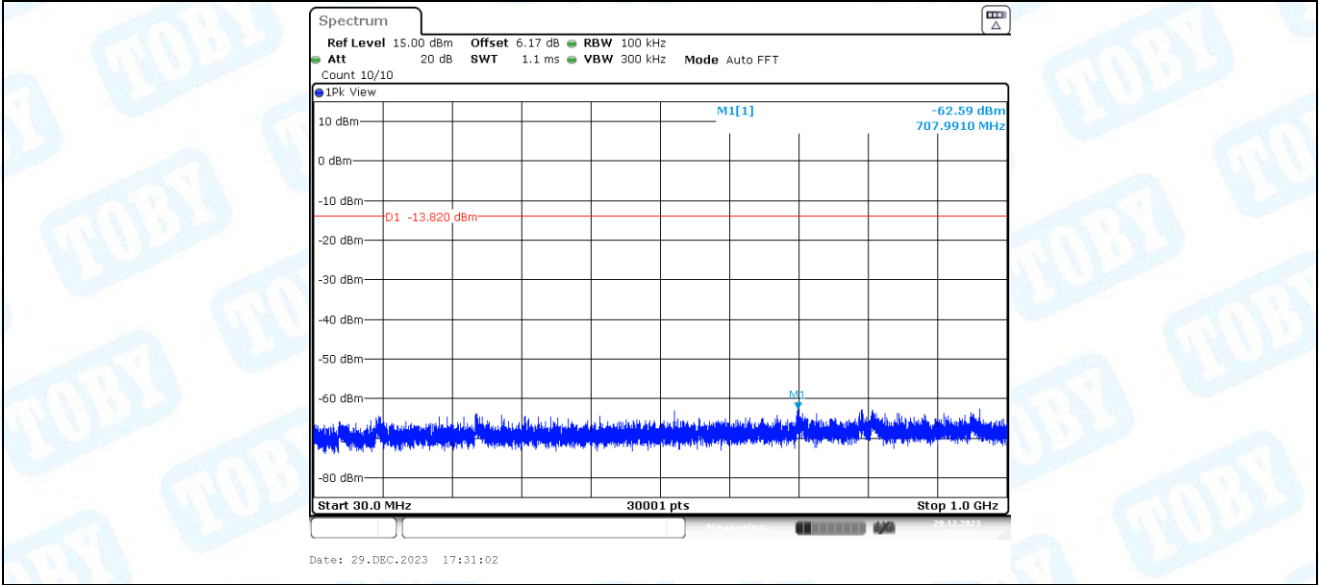
BLE_2M_Ant1_2402_1000~26500



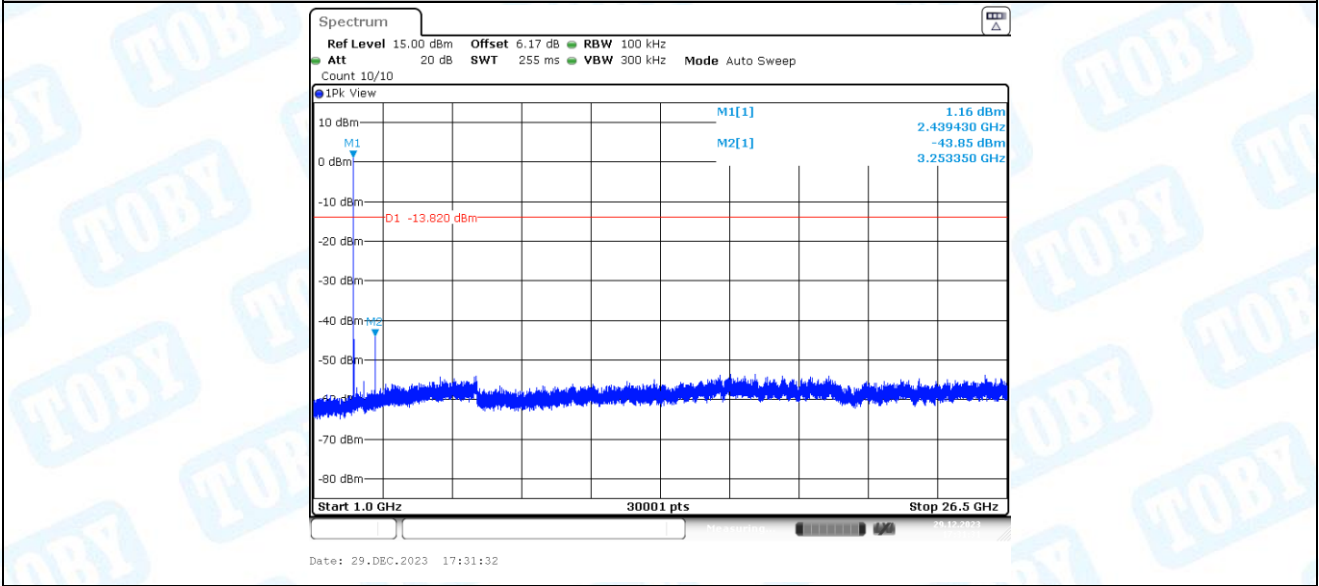
BLE_2M_Ant1_2440_0~Reference



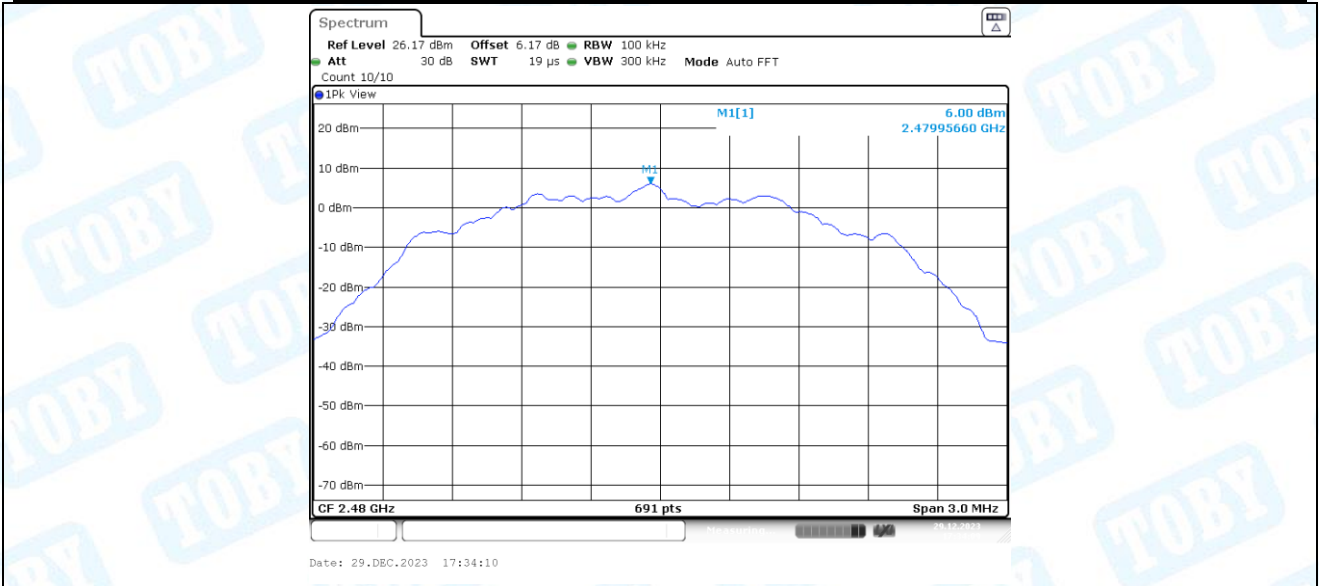
BLE_2M_Ant1_2440_30~1000



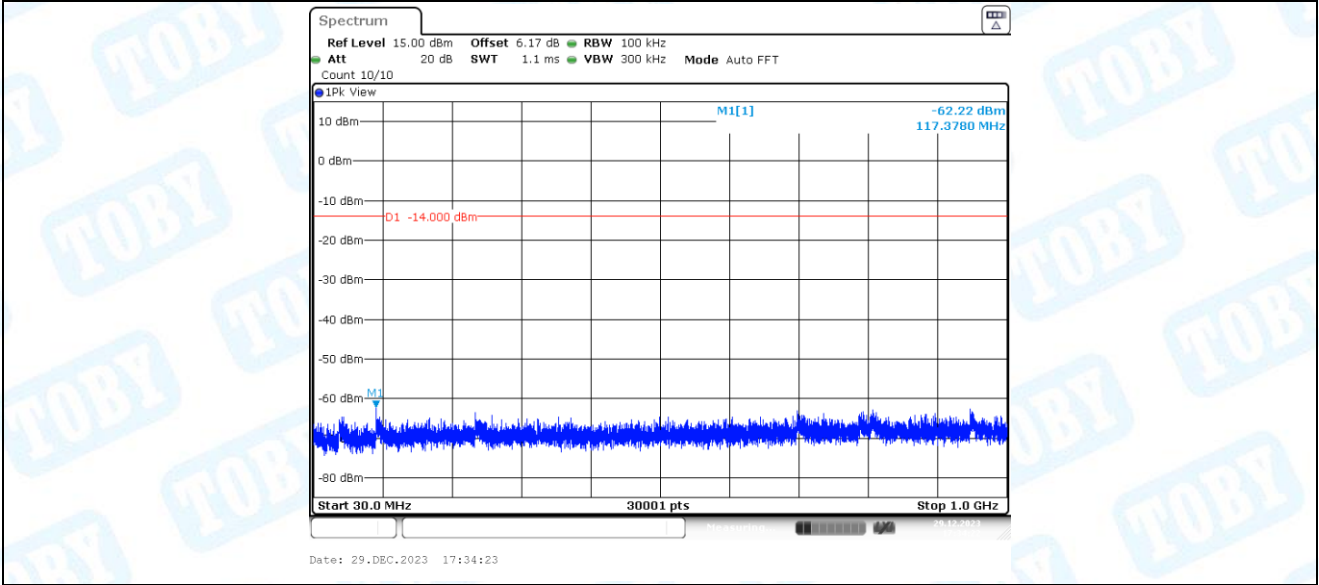
BLE_2M_Ant1_2440_1000~26500



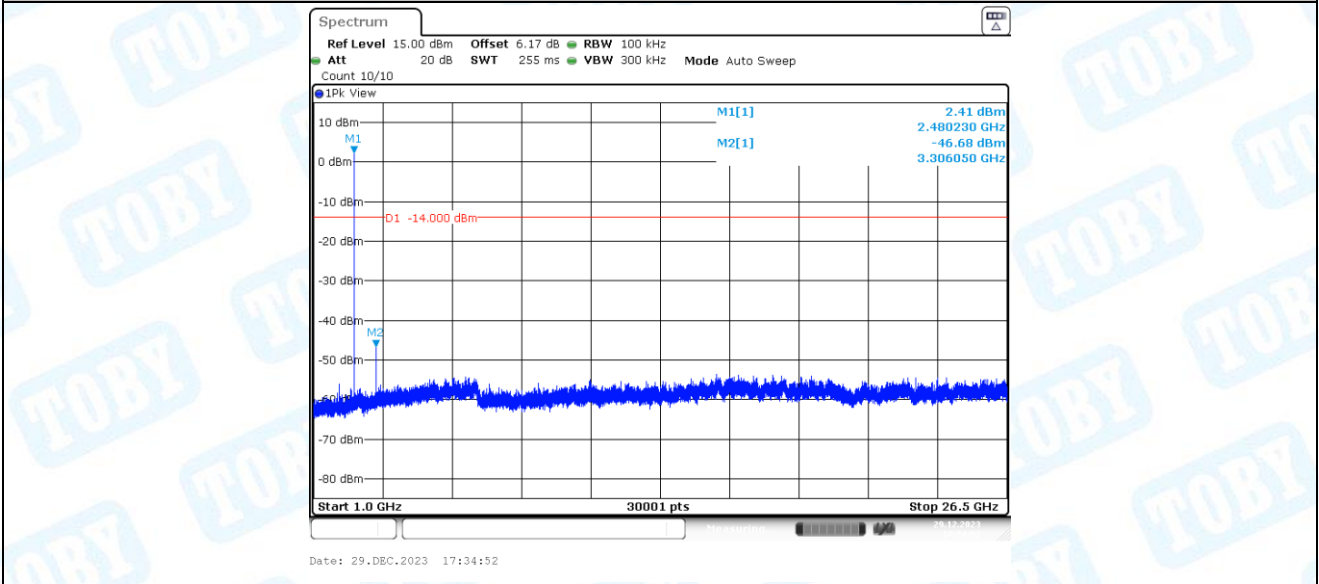
BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500

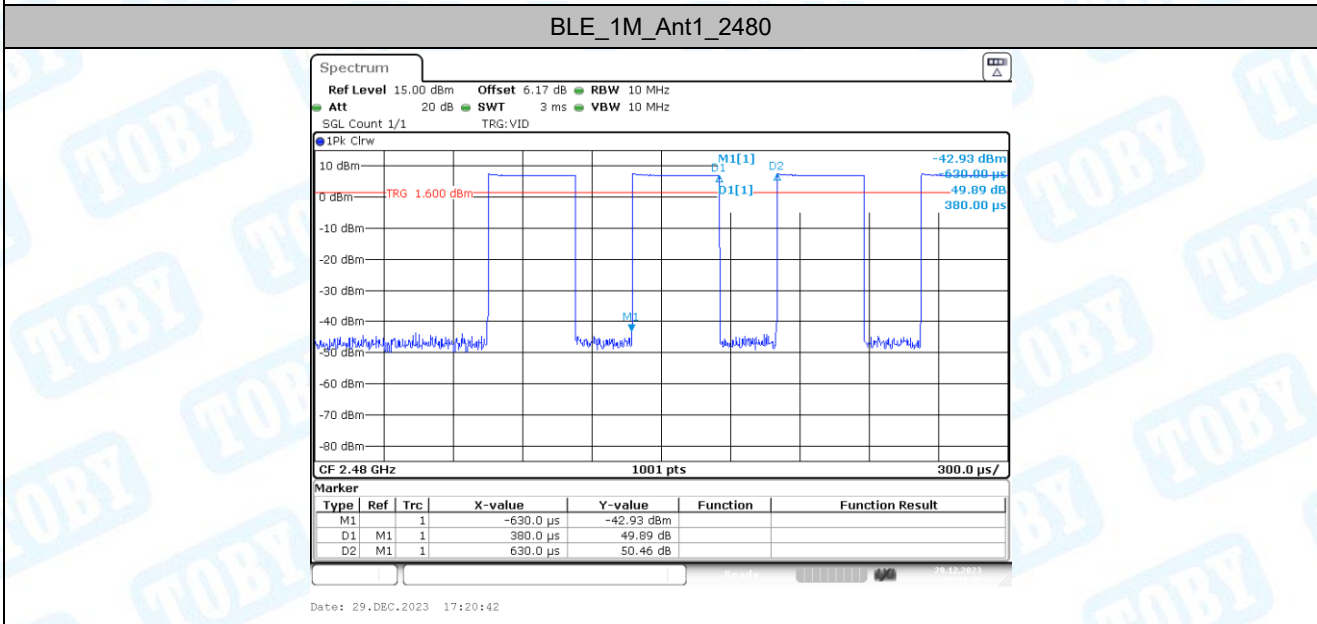
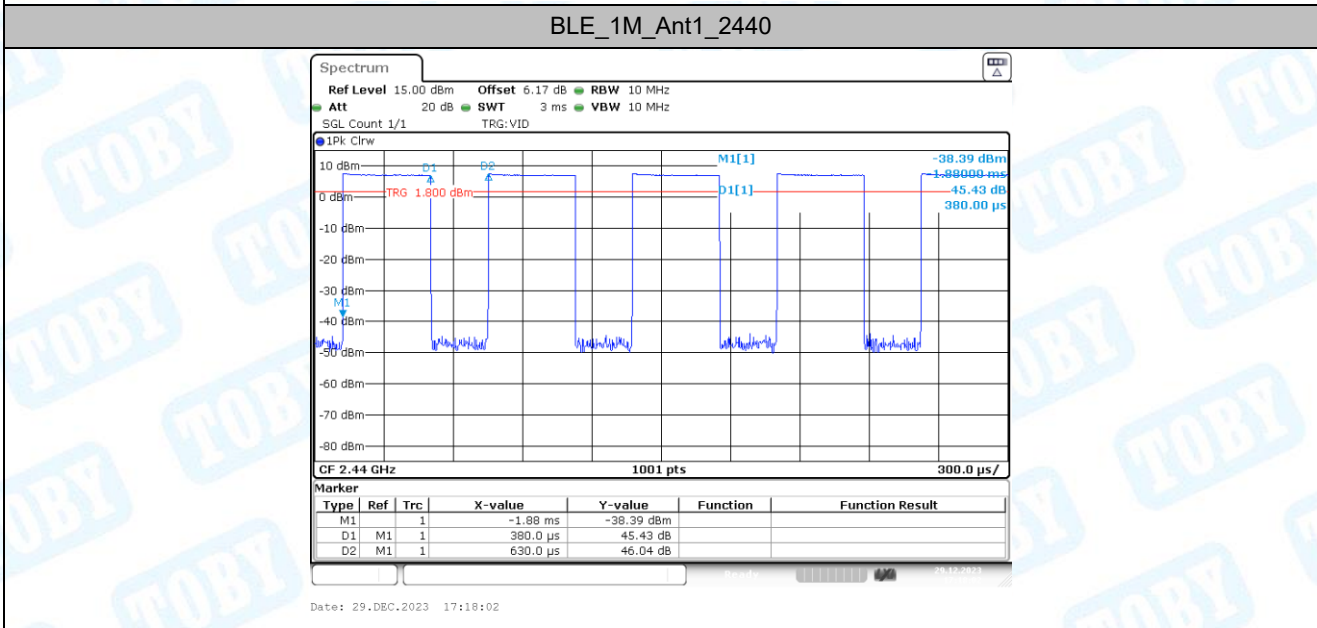
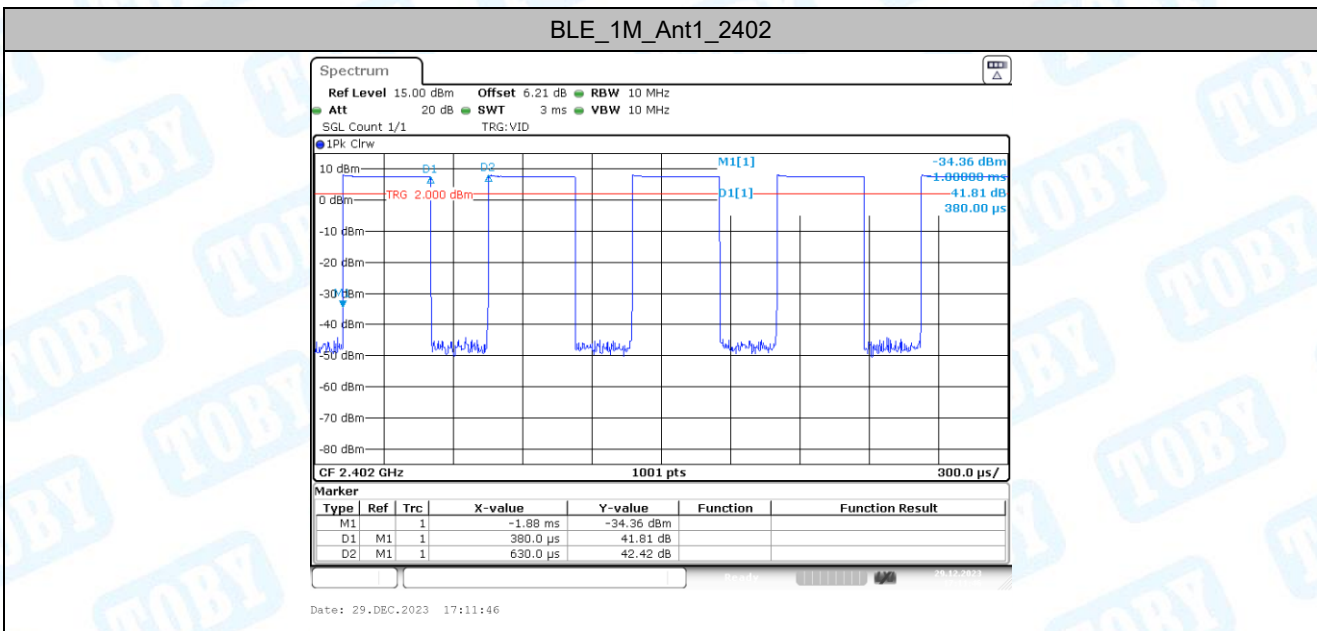


7. Duty Cycle

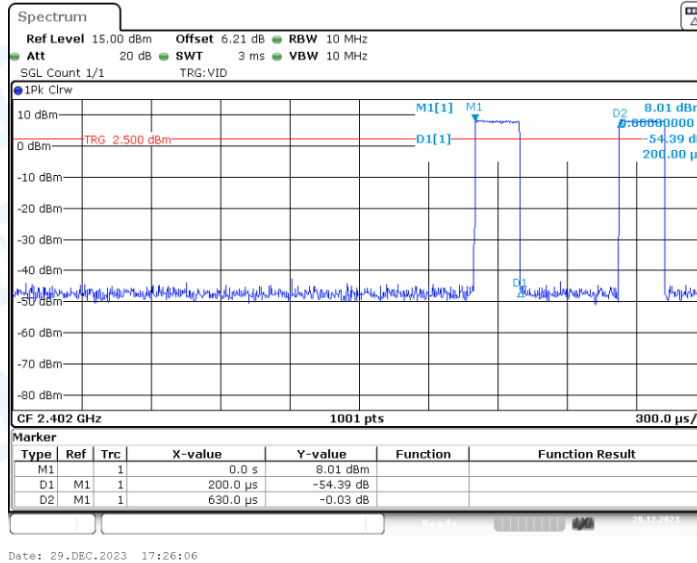
7.1. Test Result

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [KHz]	Verdict
BLE_1M	Ant1	2402	0.38	0.63	60.32	2.63	---
		2440	0.38	0.63	60.32	2.63	---
		2480	0.38	0.63	60.32	2.63	---
BLE_2M	Ant1	2402	0.20	0.63	31.75	5.00	---
		2440	0.20	0.63	31.75	5.00	---
		2480	0.20	0.63	31.75	5.00	---

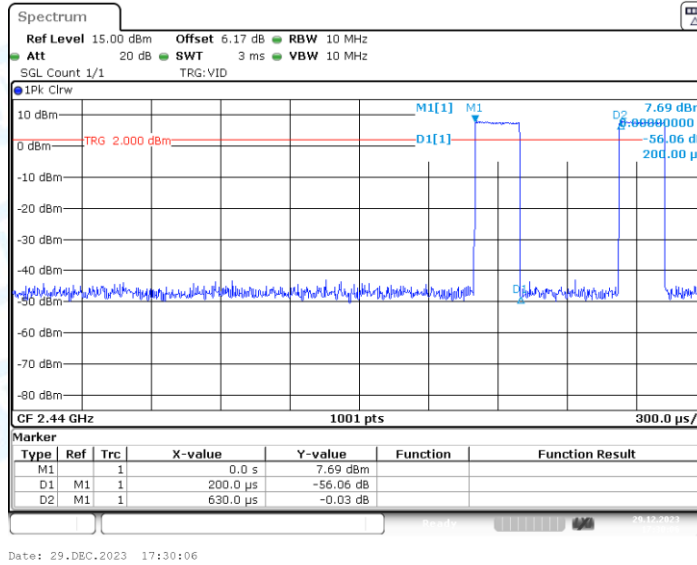
7.2. Test Graphs



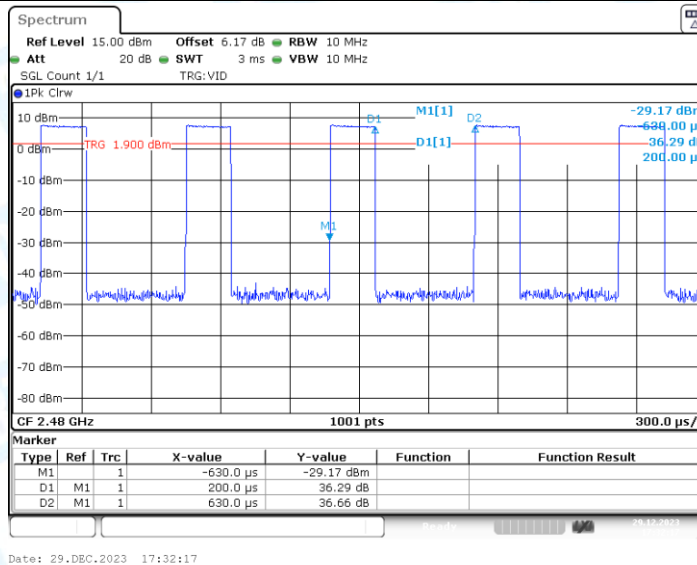
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



-----End of the report-----