

RF Test Data for BLE

(Conducted Measurements)

General Description of EUT	
EUT Name:	Body Composition Scale
Model:	BS1
Sample ID:	HC-C-202604-0404-01-01
Environmental Conditions	
Ambient Temperature:	23.5℃
Ambient Humidity:	43%
Test Power Supply:	DC 6V
Test Engineer:	Gold Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202604-0404-11. The report only show the worst case data.	

Contents

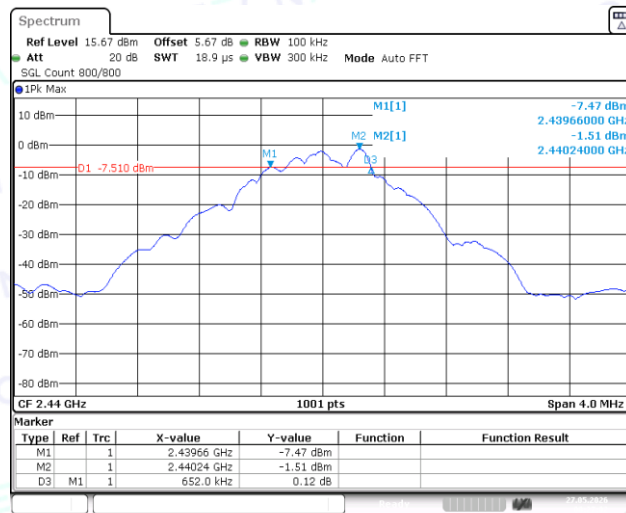
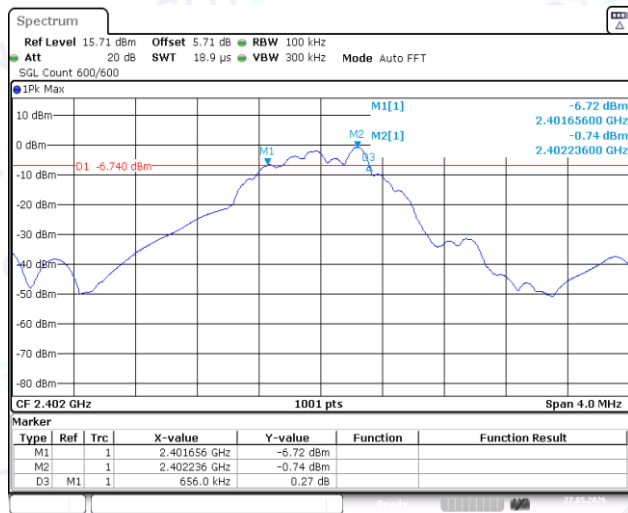
1: DTS Bandwidth.....	3
1.1 Test Result.....	3
1.2 Test Graphs	4
2: Occupied Channel Bandwidth	5
2.1 Test Result.....	5
2.2 Test Graphs	6
3: Maximum conducted output power.....	7
3.1 Test Result Peak.....	7
3.2 Test Graphs Peak.....	8
4: Maximum power spectral density	9
4.1 Test Result.....	9
4.2 Test Graphs	10
5: Band edge measurements	11
5.1 Test Result.....	11
5.2 Test Graphs	12
6: Conducted Spurious Emission.....	13
6.1 Test Result.....	13
6.2 Test Graphs	14
7: Duty Cycle	16
7.1 Test Result.....	16
7.2 Test Graphs	17
8: Emissions in Restricted Bands.....	18
8.1 Test Result.....	18
8.2 Test Graphs	19

1: DTS Bandwidth

1.1 Test Result

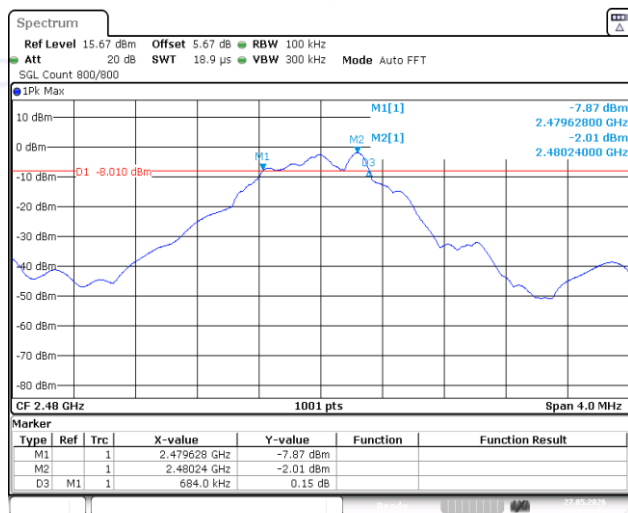
Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.66	2401.66	2402.31	0.5	PASS
BLE_1M	Ant1	2440	0.65	2439.66	2440.31	0.5	PASS
BLE_1M	Ant1	2480	0.68	2479.63	2480.31	0.5	PASS

1.2 Test Graphs



BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2440-PASS



BLE_1M-Ant1-2480-PASS

2: Occupied Channel Bandwidth

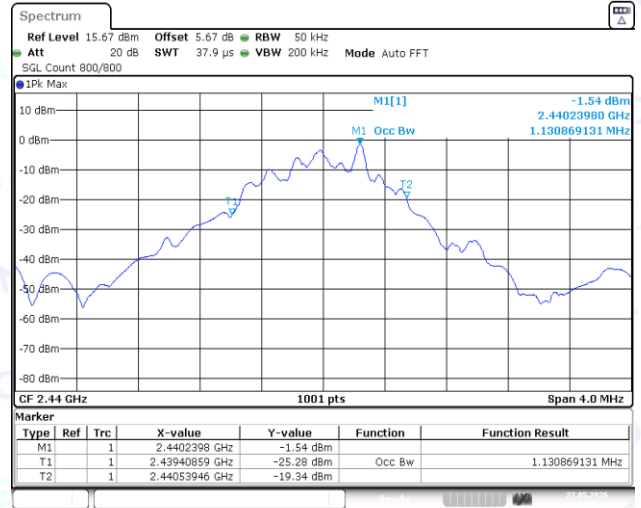
2.1 Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.1508	2401.3886	2402.5395	---	---
BLE_1M	Ant1	2440	1.1309	2439.4086	2440.5395	---	---
BLE_1M	Ant1	2480	1.0829	2479.4486	2480.5315	---	---

2.2 Test Graphs



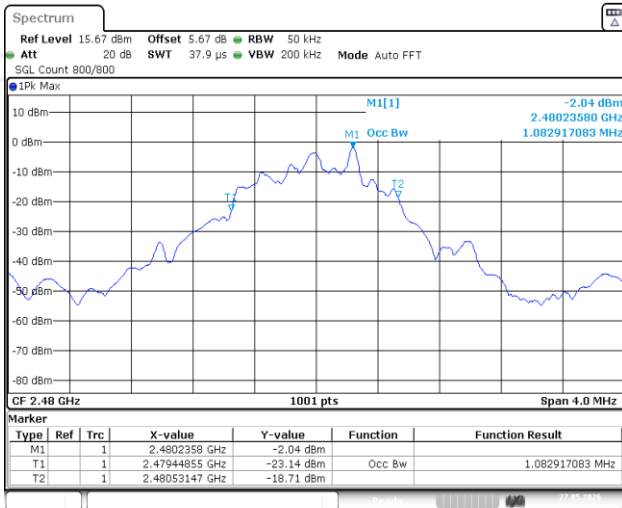
Date: 27.MAY.2026 08:11:10



Date: 27.MAY.2026 08:27:12

BLE_1M-Ant1-2402

BLE_1M-Ant1-2440



Date: 27.MAY.2026 08:29:03

BLE_1M-Ant1-2480

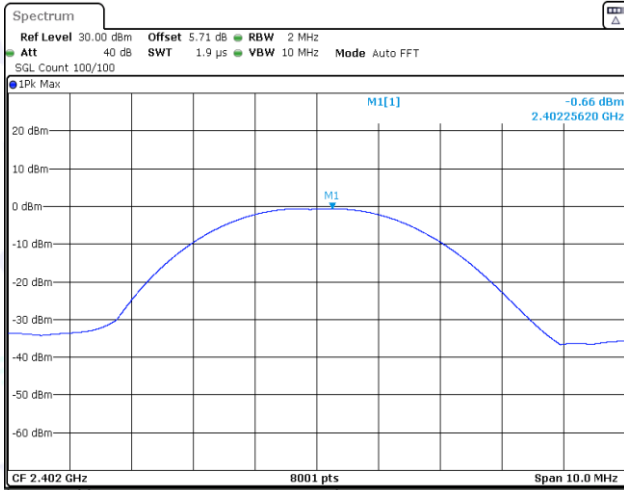
3: Maximum conducted output power

3.1 Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	EIRP[dBm]	EIRP Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.66	≤30	-2.39	≤36	PASS
BLE_1M	Ant1	2440	-1.44	≤30	-3.17	≤36	PASS
BLE_1M	Ant1	2480	-1.99	≤30	-3.72	≤36	PASS

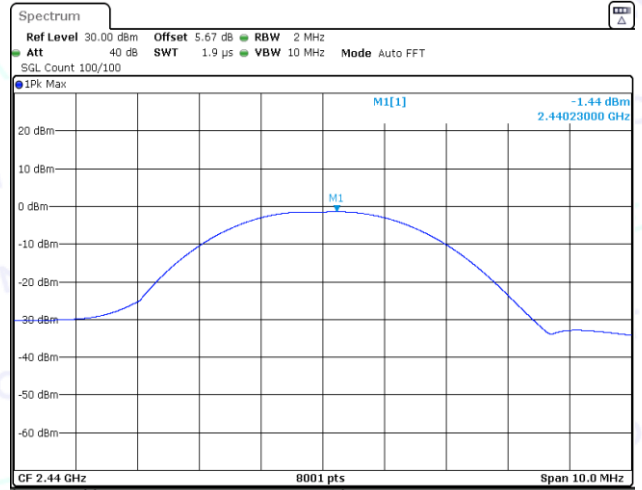
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.66	≤30	PASS
BLE_1M	Ant1	2440	-1.44	≤30	PASS
BLE_1M	Ant1	2480	-1.99	≤30	PASS

3.2 Test Graphs Peak



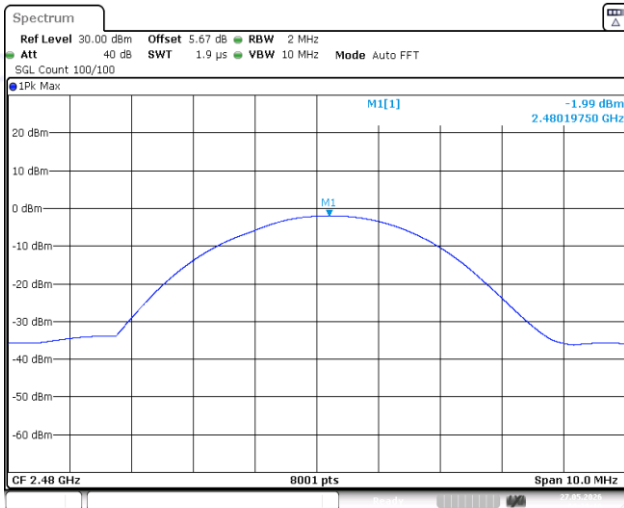
Date: 27.MAY.2026 08:11:17

BLE_1M-Ant1-2402-PASS



Date: 27.MAY.2026 08:27:19

BLE_1M-Ant1-2440-PASS



Date: 27.MAY.2026 08:29:10

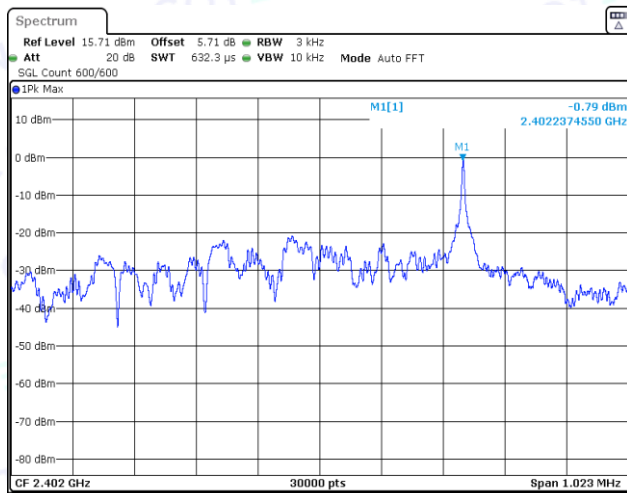
BLE_1M-Ant1-2480-PASS

4: Maximum power spectral density

4.1 Test Result

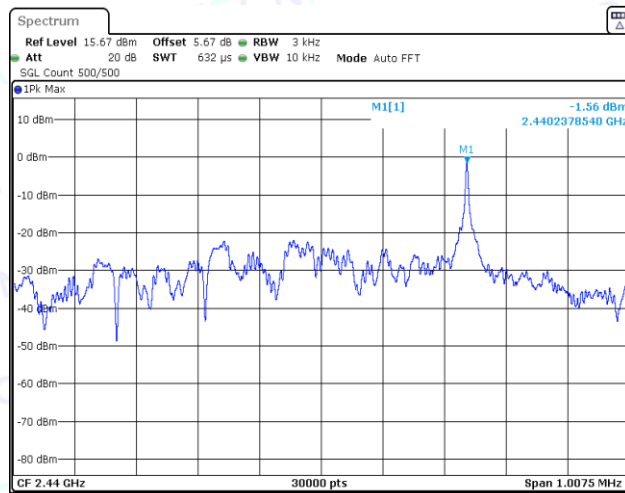
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-0.79	≤8.00	PASS
BLE_1M	Ant1	2440	-1.56	≤8.00	PASS
BLE_1M	Ant1	2480	-2.11	≤8.00	PASS

4.2 Test Graphs



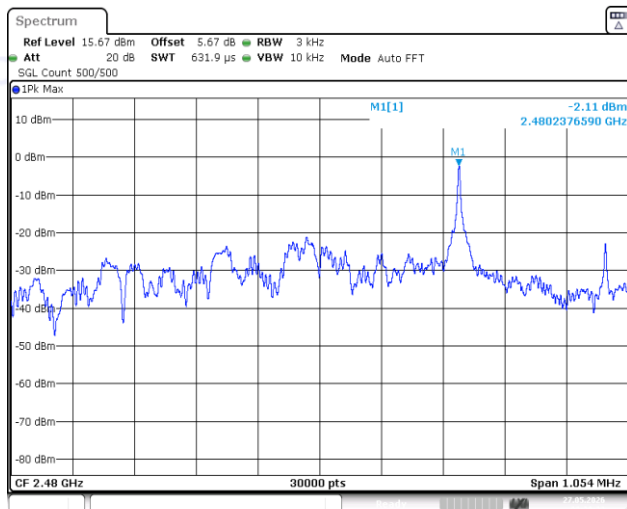
Date: 27.MAY.2026 08:11:43

BLE_1M-Ant1-2402-PASS



Date: 27.MAY.2026 08:27:41

BLE_1M-Ant1-2440-PASS



Date: 27.MAY.2026 08:29:32

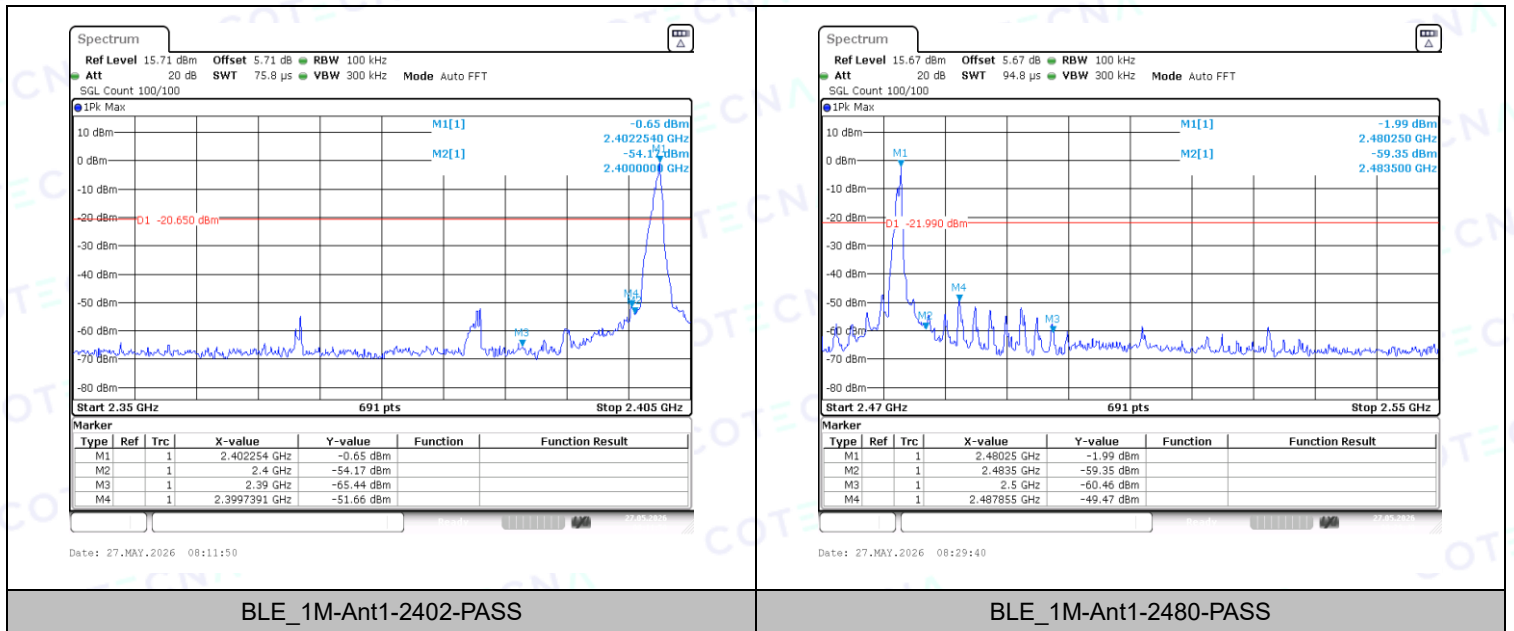
BLE_1M-Ant1-2480-PASS

5: Band edge measurements

5.1 Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.65	-51.66	≤ -20.65	PASS
BLE_1M	Ant1	High	2480	-1.99	-49.47	≤ -21.99	PASS

5.2 Test Graphs

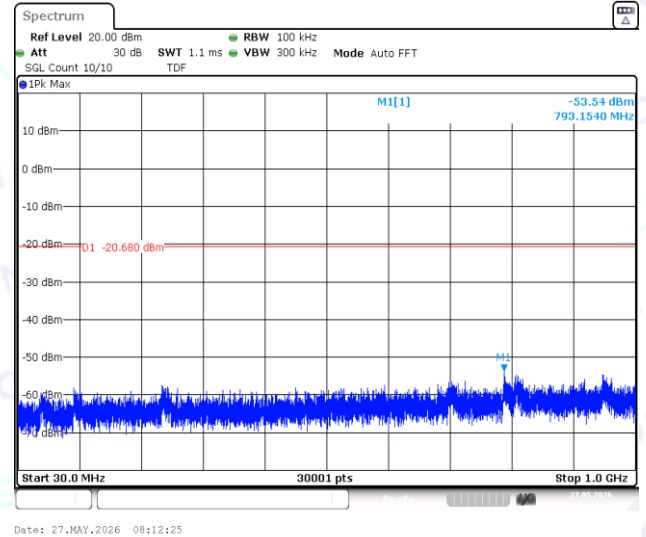
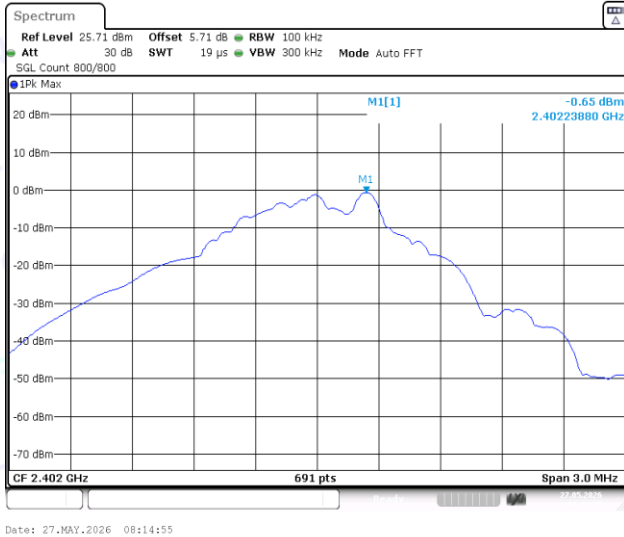


6: Conducted Spurious Emission

6.1 Test Result

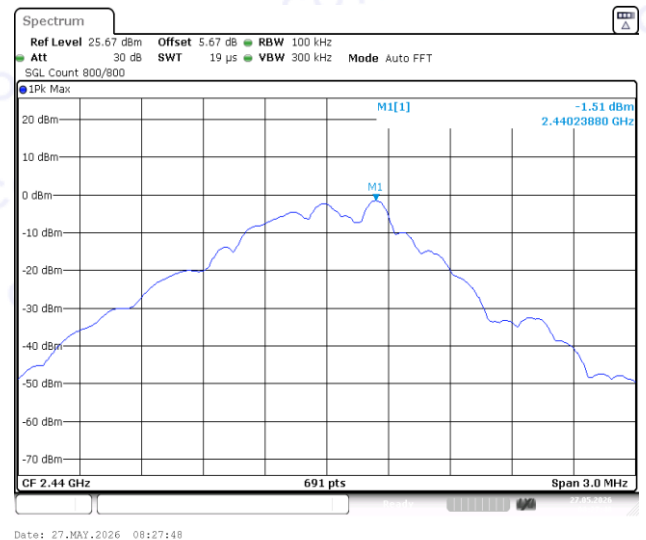
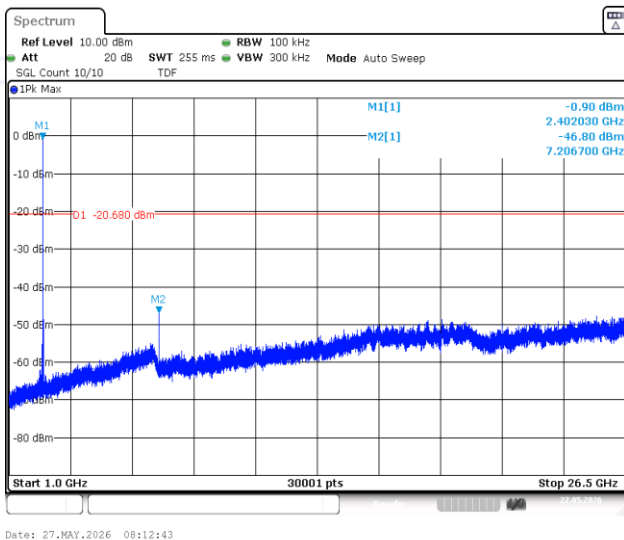
Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-0.65	-0.65	---	PASS
BLE_1M	Ant1	2402	30~1000	-0.68	-53.54	≤-20.68	PASS
BLE_1M	Ant1	2402	1000~26500	-0.68	-46.8	≤-20.68	PASS
BLE_1M	Ant1	2440	0~Reference	-1.51	-1.51	---	PASS
BLE_1M	Ant1	2440	30~1000	-1.51	-53.64	≤-21.51	PASS
BLE_1M	Ant1	2440	1000~26500	-1.51	-46.98	≤-21.51	PASS
BLE_1M	Ant1	2480	0~Reference	-2.04	-2.04	---	PASS
BLE_1M	Ant1	2480	30~1000	-2.04	-54.81	≤-22.04	PASS
BLE_1M	Ant1	2480	1000~26500	-2.04	-45.43	≤-22.04	PASS

6.2 Test Graphs



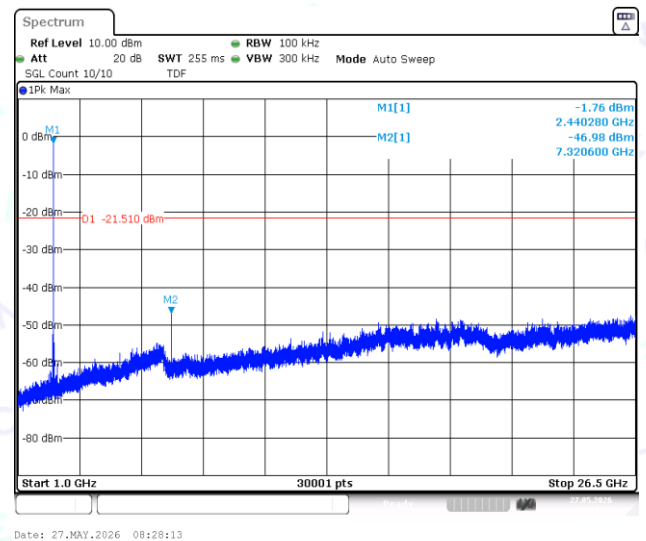
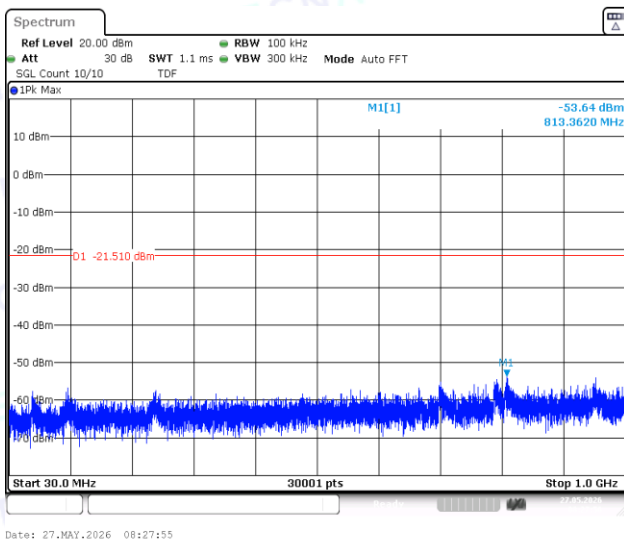
BLE_1M-Ant1-2402-0~Reference-PASS

BLE_1M-Ant1-2402-30~1000-PASS



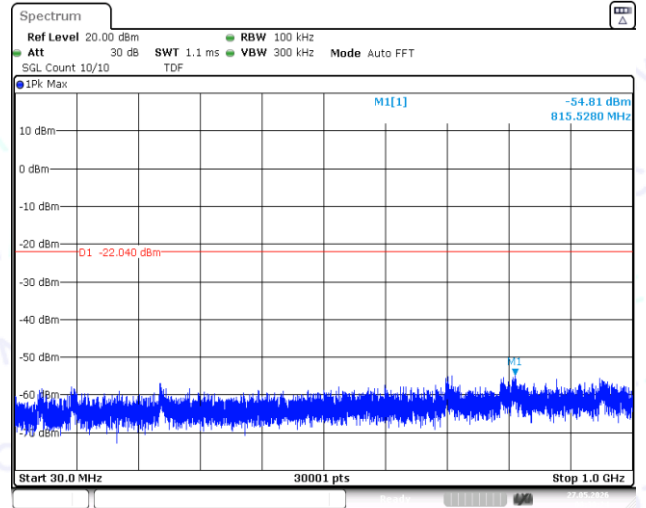
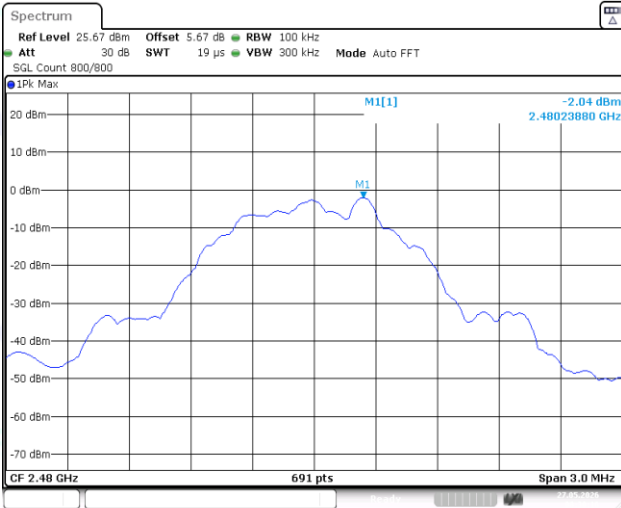
BLE_1M-Ant1-2402-1000~26500-PASS

BLE_1M-Ant1-2440-0~Reference-PASS



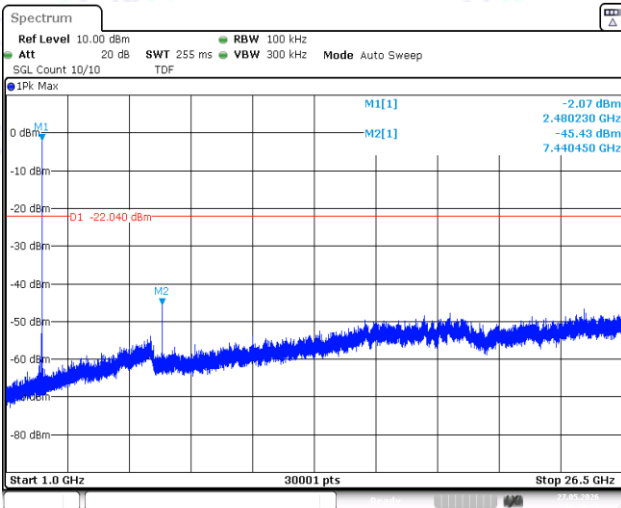
BLE_1M-Ant1-2440-30~1000-PASS

BLE_1M-Ant1-2440-1000~26500-PASS



BLE_1M-Ant1-2480-0~Reference-PASS

BLE_1M-Ant1-2480-30~1000-PASS



BLE_1M-Ant1-2480-1000~26500-PASS

7: Duty Cycle

7.1 Test Result

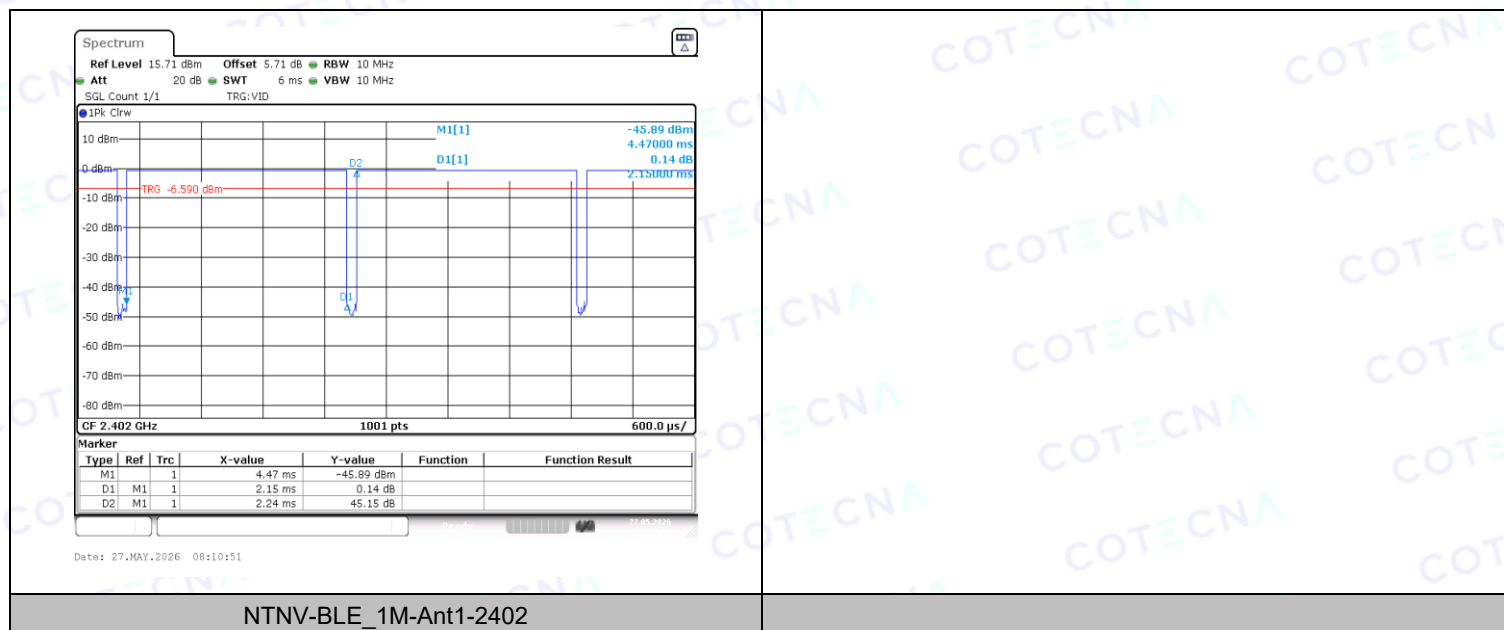
TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	1/T [kHz]
BLE_1M	Ant1	2402	2.15	2.24	95.98	0.18	0.47

Note: 1, Duty Cycle= Transmission Duration/ Transmission Period

2, DC Factor= $10 \cdot \log_{10}(1/\text{Duty Cycle})$

3, $1/T = 1/\text{Transmission Duration}$

7.2 Test Graphs



8: Emissions in Restricted Bands

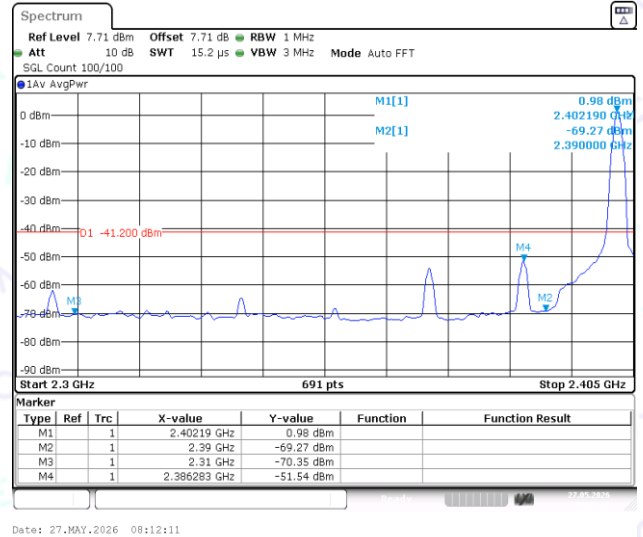
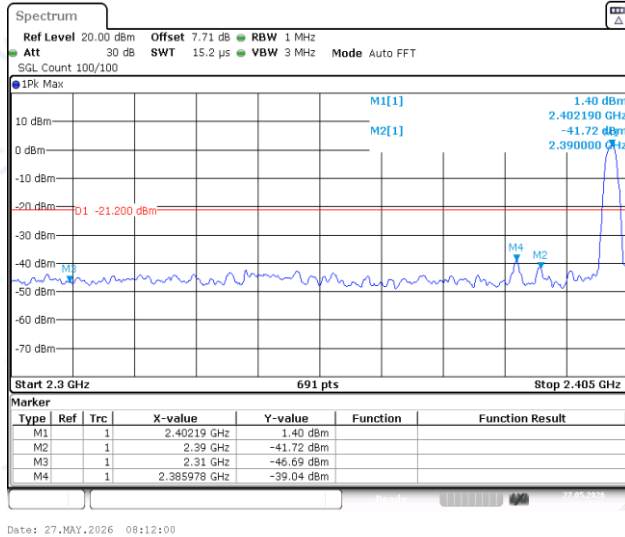
8.1 Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	Peak	2390.000	-41.72	≤-21.20	53.48	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2310.000	-46.69	≤-21.20	48.51	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2385.978	-39.04	≤-21.20	56.16	≤74	PASS
BLE_1M	Ant1	Low	2402	AV	2390.000	-69.27	≤-41.20	25.93	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2310.000	-70.35	≤-41.20	24.85	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2386.283	-51.54	≤-41.20	43.66	≤54	PASS
BLE_1M	Ant1	High	2480	Peak	2483.500	-43.4	≤-21.20	51.80	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2500.000	-46.92	≤-21.20	48.28	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2495.971	-43.75	≤-21.20	51.45	≤74	PASS
BLE_1M	Ant1	High	2480	AV	2483.500	-56	≤-41.20	39.20	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2500.000	-70.88	≤-41.20	24.32	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2496.203	-54.81	≤-41.20	40.39	≤54	PASS

Note:

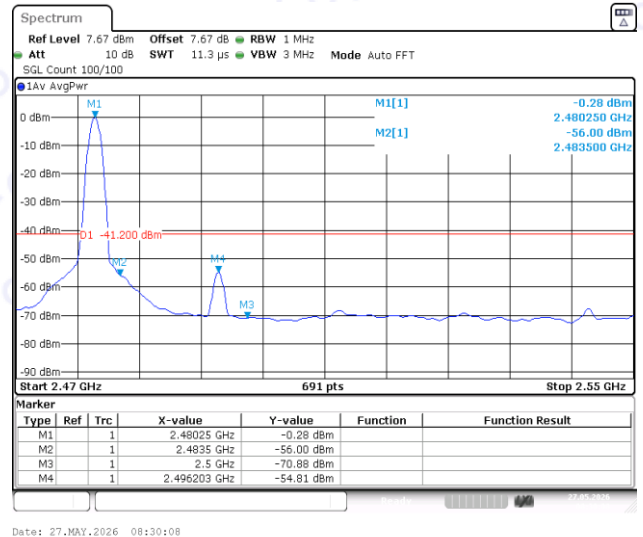
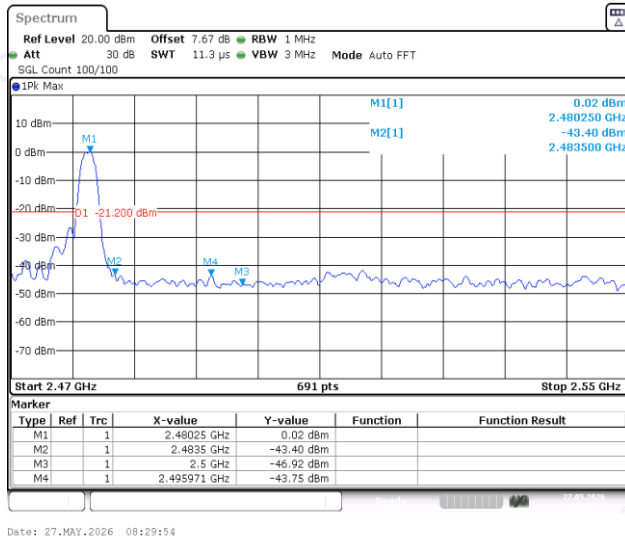
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

8.2 Test Graphs



BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2480-PASS

BLE_1M-Ant1-2480-PASS

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