

RF Test Data for Bluetooth LE (Conducted Measurements)

General Description of EUT	
Product Name:	Tractive Dog 6
Test Model:	TG6C
Sample ID:	HC-C-202505-0203-01-02#
Environmental Conditions	
Ambient Temperature:	25°C
Ambient Humidity:	55%
Test Power Supply:	DC 5V
Test Engineer:	Rick Chen
Note: For a more detailed features description, please refer to the report TBR-C-202505-0203-31	

Contents

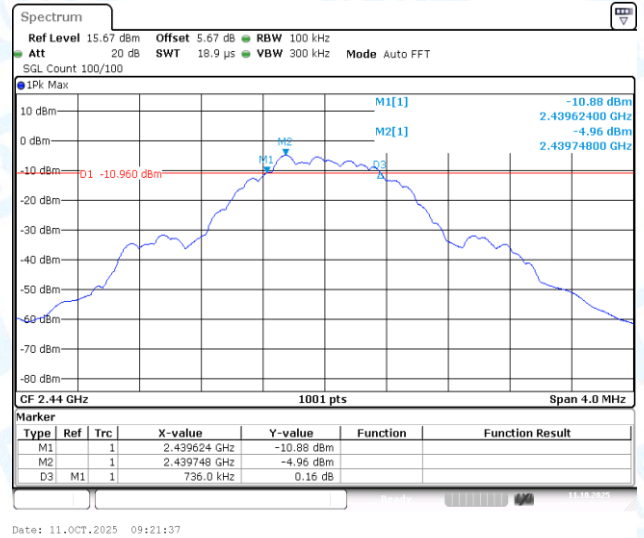
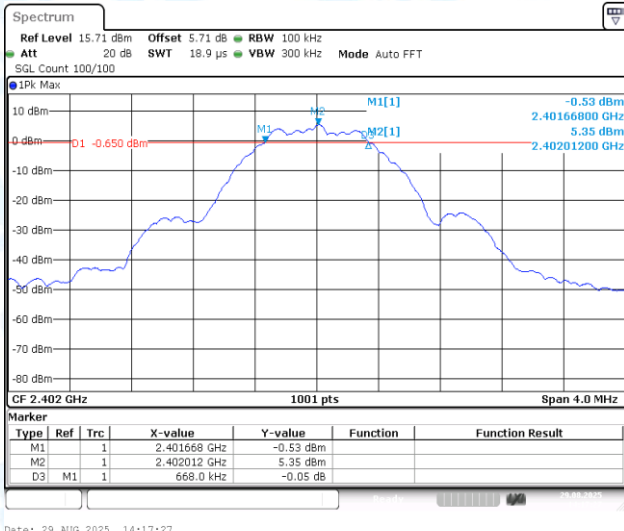
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1: DTS Bandwidth

1.1 Test Result

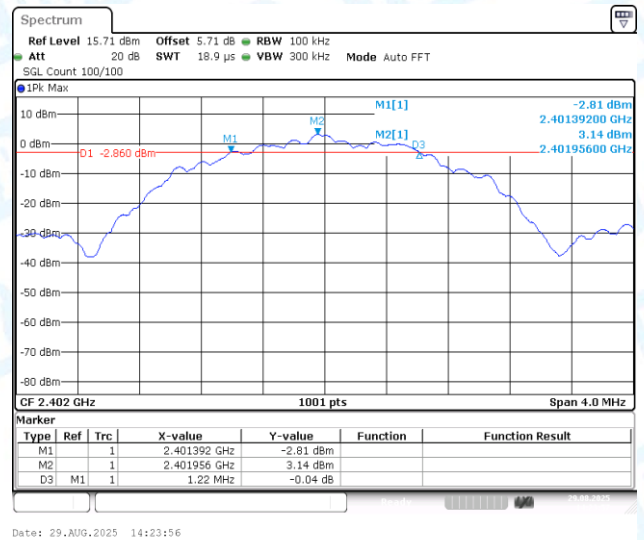
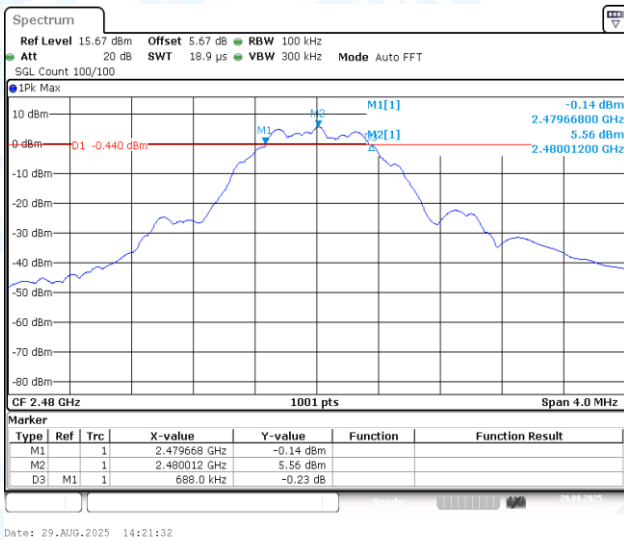
Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.67	2401.67	2402.34	0.5	PASS
BLE_1M	Ant1	2440	0.74	2439.62	2440.36	0.5	PASS
BLE_1M	Ant1	2480	0.69	2479.67	2480.36	0.5	PASS
BLE_2M	Ant1	2402	1.22	2401.39	2402.61	0.5	PASS
BLE_2M	Ant1	2440	1.08	2439.56	2440.64	0.5	PASS
BLE_2M	Ant1	2480	1.07	2479.46	2480.53	0.5	PASS

1.2 Test Graphs



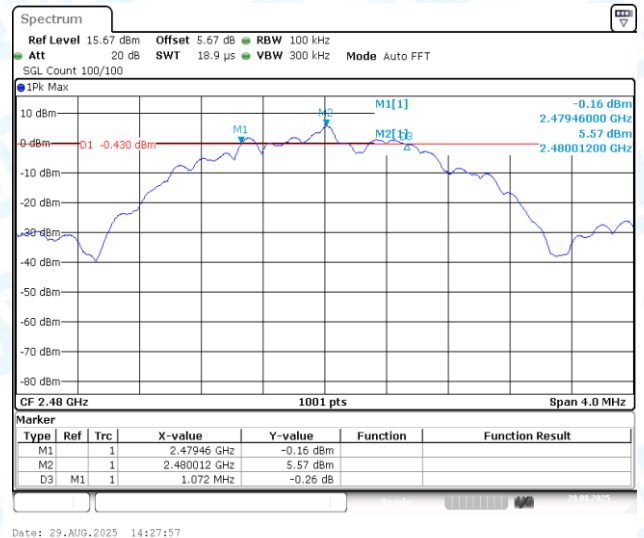
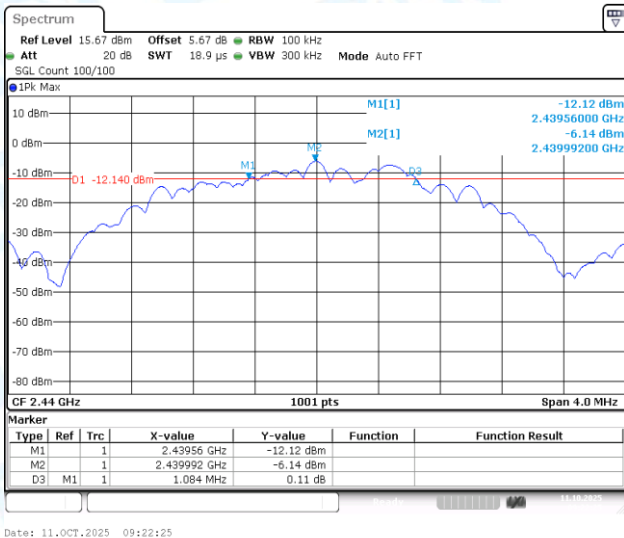
BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2440-PASS



BLE_1M-Ant1-2480-PASS

BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS

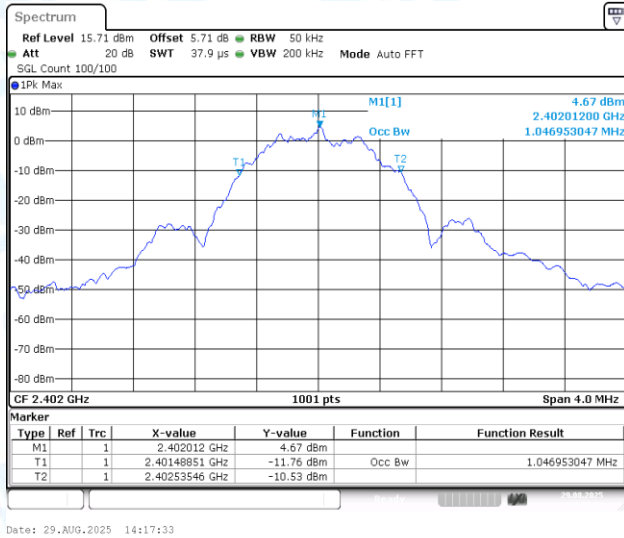
BLE_2M-Ant1-2480-PASS

2: Occupied Channel Bandwidth

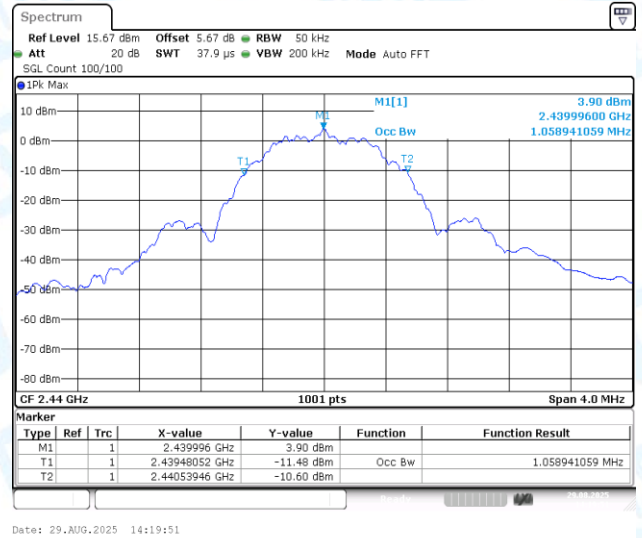
2.1 Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0470	2401.4885	2402.5355	---	---
BLE_1M	Ant1	2440	1.0589	2439.4805	2440.5395	---	---
BLE_1M	Ant1	2480	1.0509	2479.4885	2480.5395	---	---
BLE_2M	Ant1	2402	2.0140	2401.0250	2403.0390	---	---
BLE_2M	Ant1	2440	2.0460	2439.0010	2441.0470	---	---
BLE_2M	Ant1	2480	2.0579	2478.9930	2481.0509	---	---

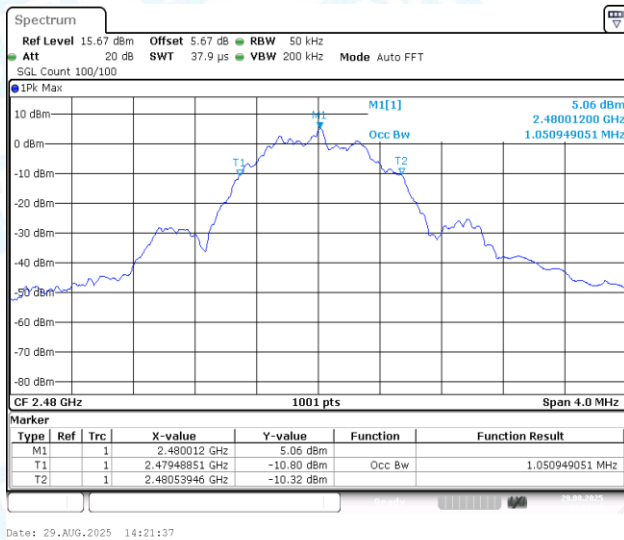
2.2 Test Graphs



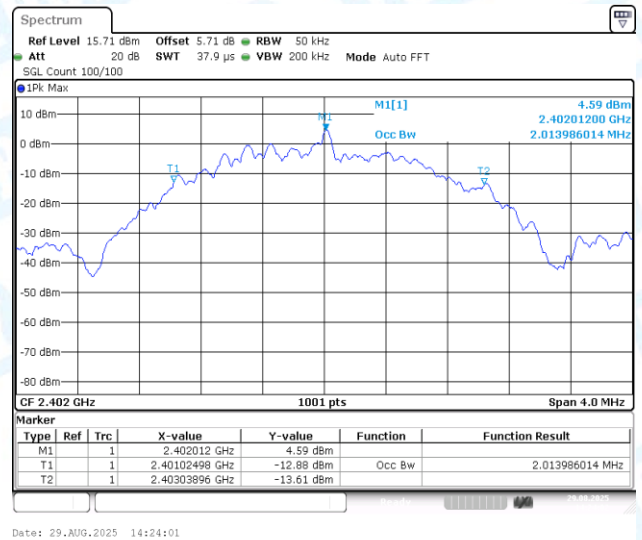
BLE_1M-Ant1-2402



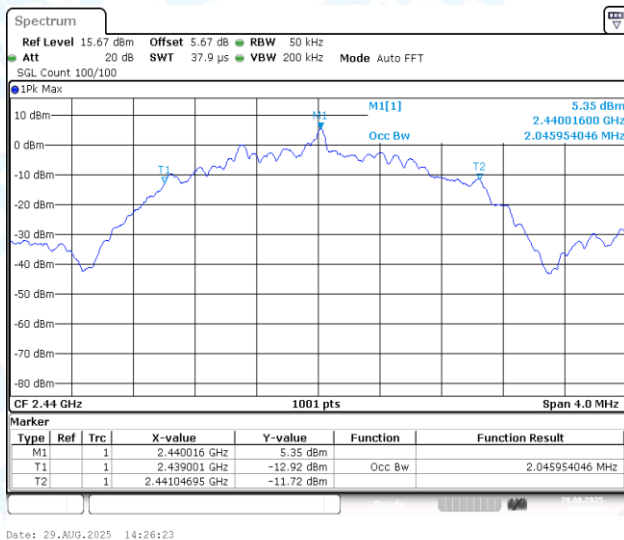
BLE_1M-Ant1-2440



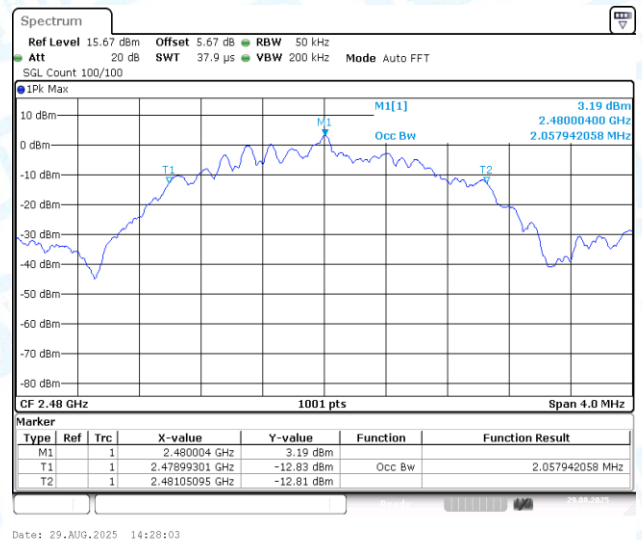
BLE_1M-Ant1-2480



BLE_2M-Ant1-2402



BLE_2M-Ant1-2440



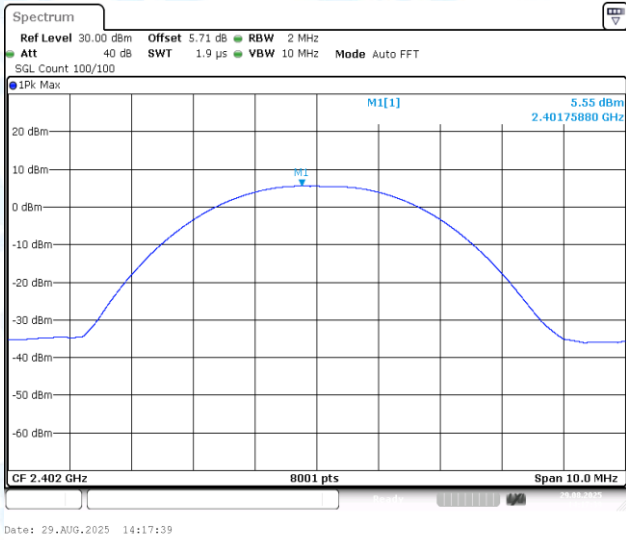
BLE_2M-Ant1-2480

3: Maximum conducted output power

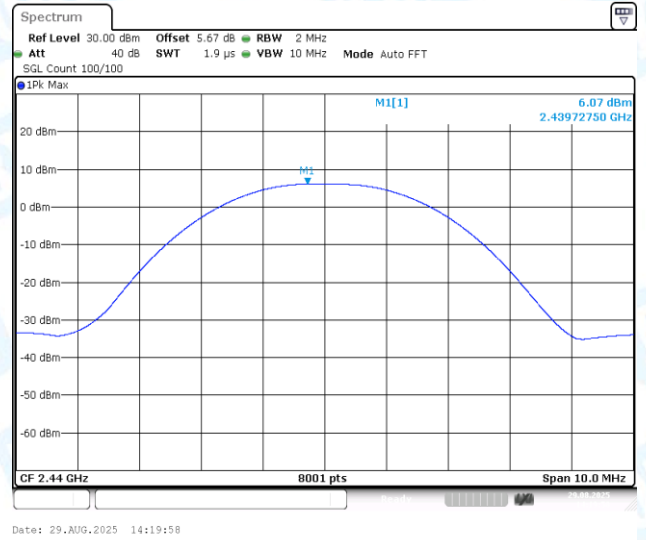
3.1 Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Gain [dBi]	EIRP[dBm]	EIRP Limit[dBm]	Verdict	
BLE_1M	Ant1	2402	5.55	≤30	-3.16	2.39	≤36	PASS	
BLE_1M	Ant1	2440	6.07	≤30	-3.16	2.91	≤36	PASS	
BLE_1M	Ant1	2480	5.67	≤30	-3.16	2.51	≤36	PASS	
BLE_2M	Ant1	2402	5.53	≤30	-3.16	2.37	≤36	PASS	
BLE_2M	Ant1	2440	6.07	≤30	-3.16	2.91	≤36	PASS	
BLE_2M	Ant1	2480	5.66	≤30	-3.16	2.50	≤36	PASS	

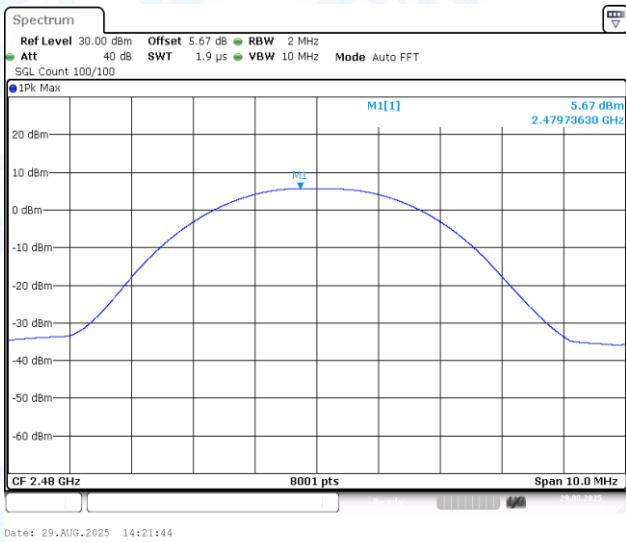
3.2 Test Graphs Peak



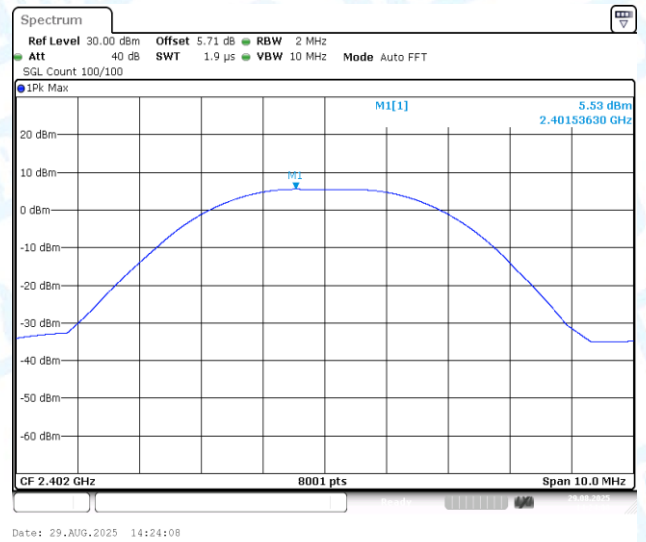
BLE_1M-Ant1-2402-PASS



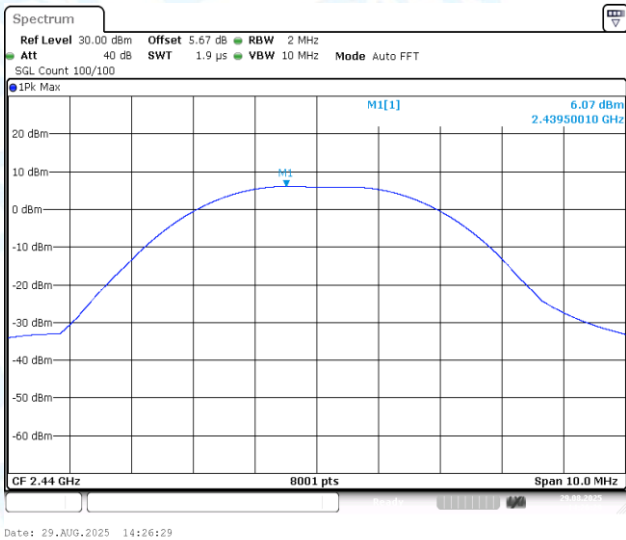
BLE_1M-Ant1-2440-PASS



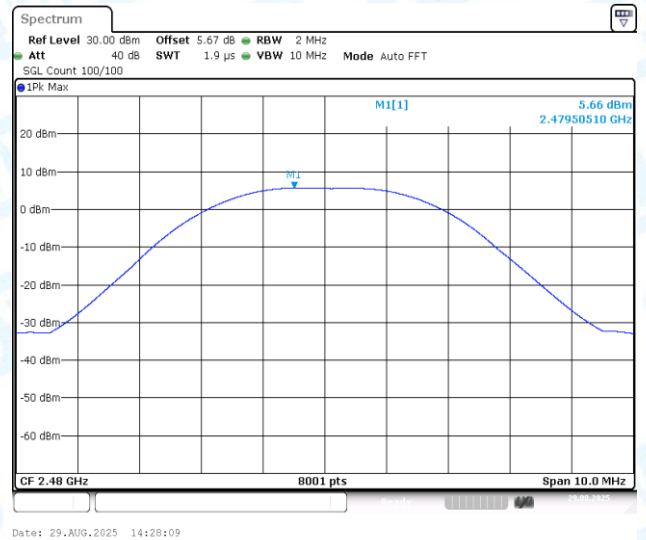
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



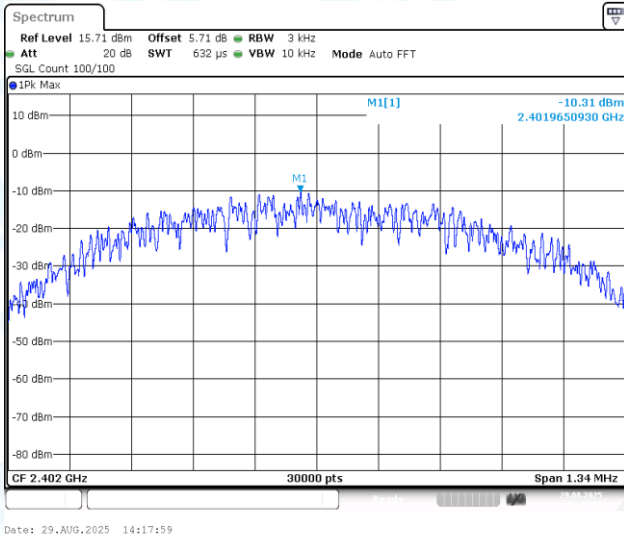
BLE_2M-Ant1-2480-PASS

4: Maximum power spectral density

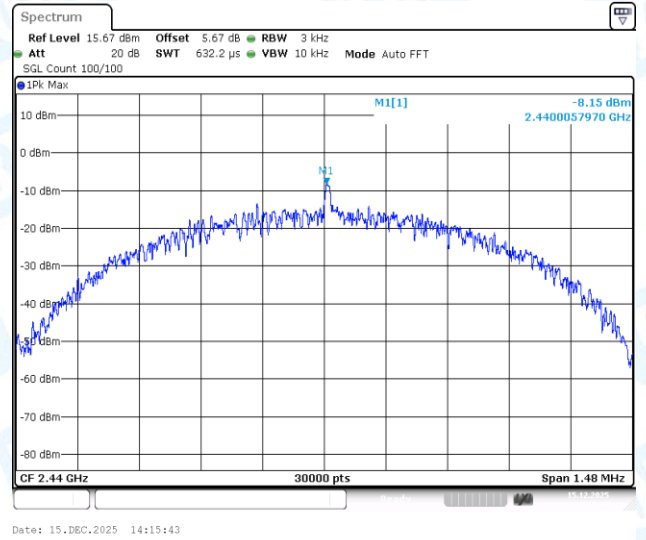
4.1 Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.31	≤8.00	PASS
BLE_1M	Ant1	2440	-8.15	≤8.00	PASS
BLE_1M	Ant1	2480	-10.04	≤8.00	PASS
BLE_2M	Ant1	2402	-12.83	≤8.00	PASS
BLE_2M	Ant1	2440	-12.05	≤8.00	PASS
BLE_2M	Ant1	2480	-12.52	≤8.00	PASS

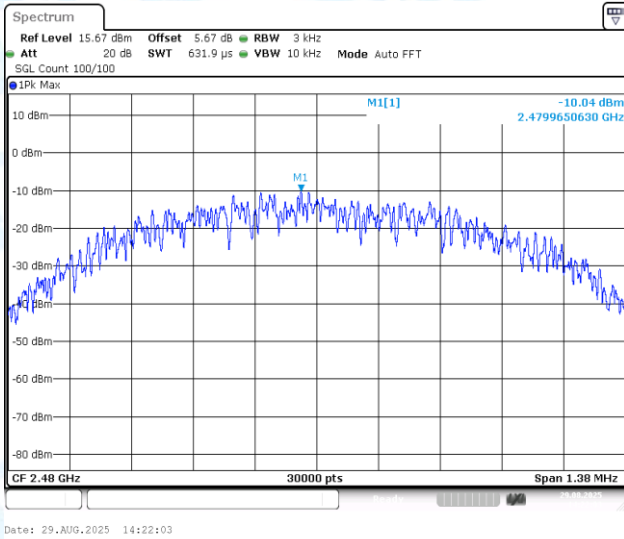
4.2 Test Graphs



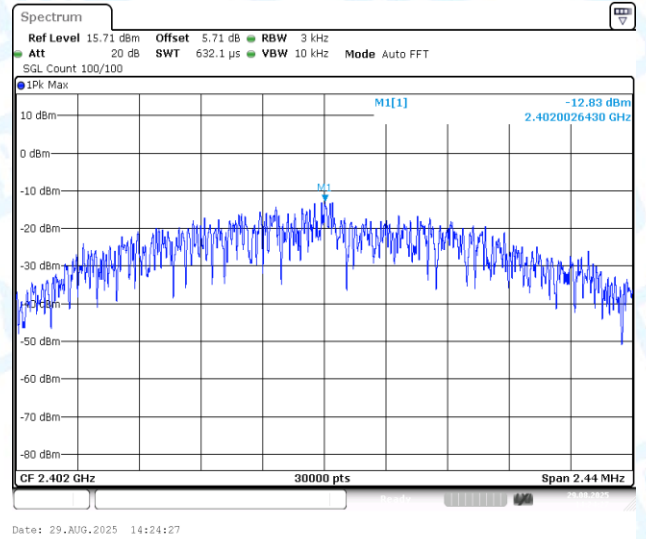
BLE_1M-Ant1-2402-PASS



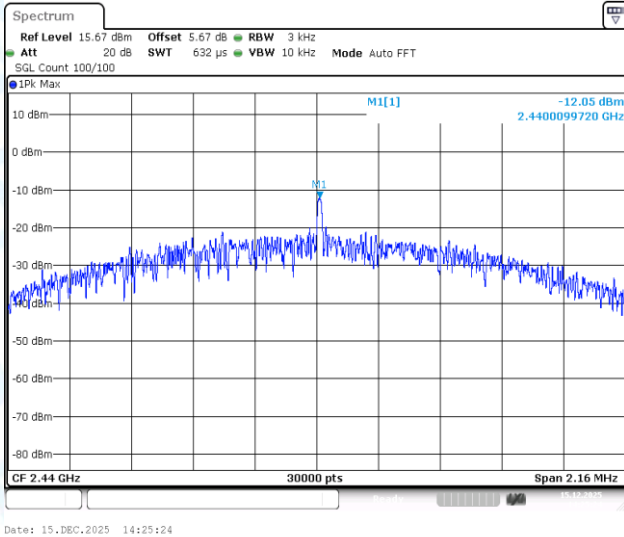
BLE_1M-Ant1-2440-PASS



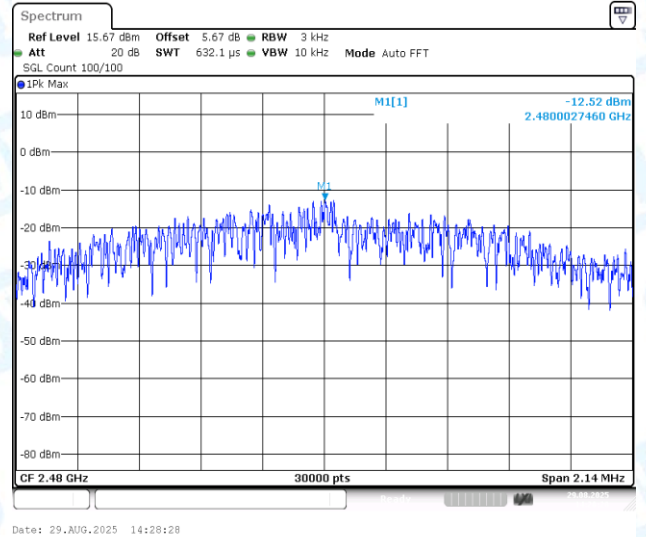
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



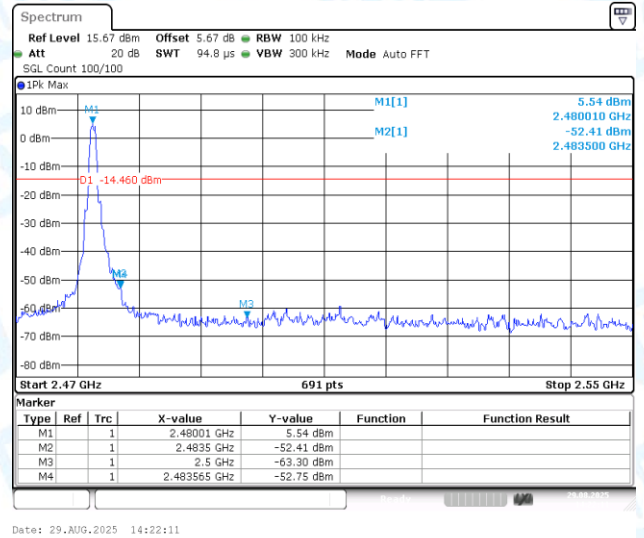
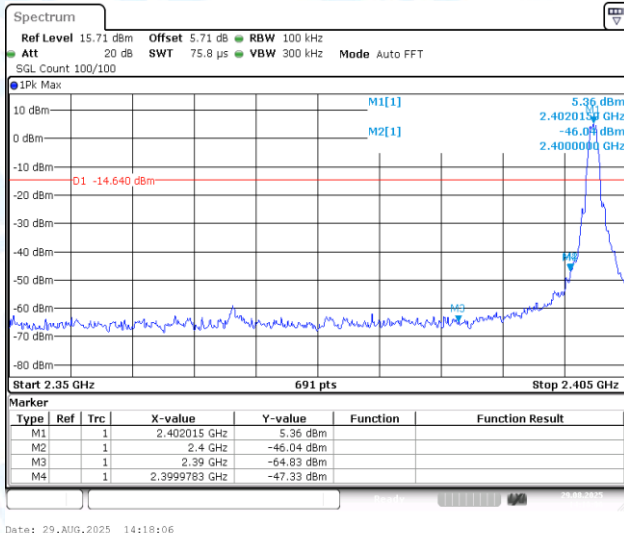
BLE_2M-Ant1-2480-PASS

5: Band edge measurements

5.1 Test Result

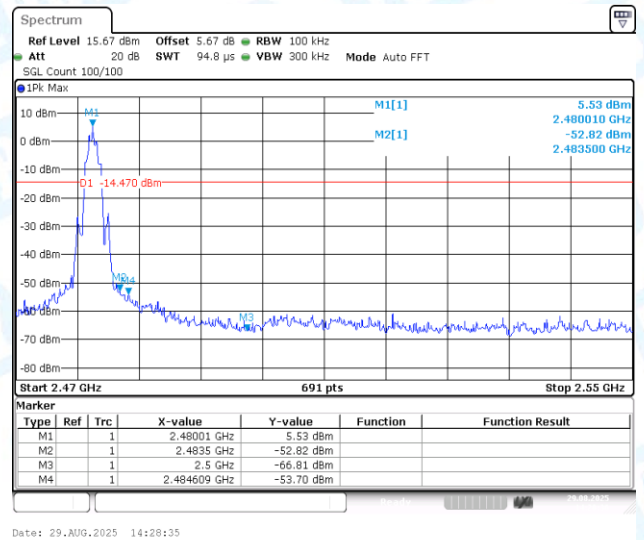
Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	5.36	-47.33	≤-14.64	PASS
BLE_1M	Ant1	High	2480	5.54	-52.75	≤-14.46	PASS
BLE_2M	Ant1	Low	2402	5.36	-28.1	≤-14.64	PASS
BLE_2M	Ant1	High	2480	5.53	-53.7	≤-14.47	PASS

5.2 Test Graphs



BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS

BLE_2M-Ant1-2480-PASS

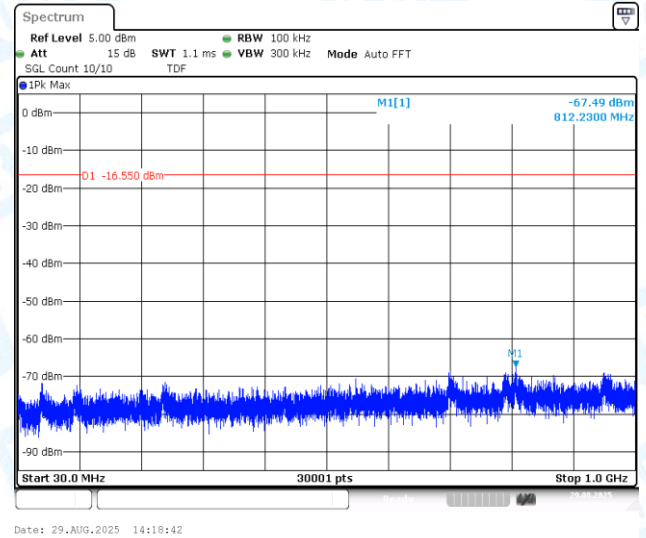
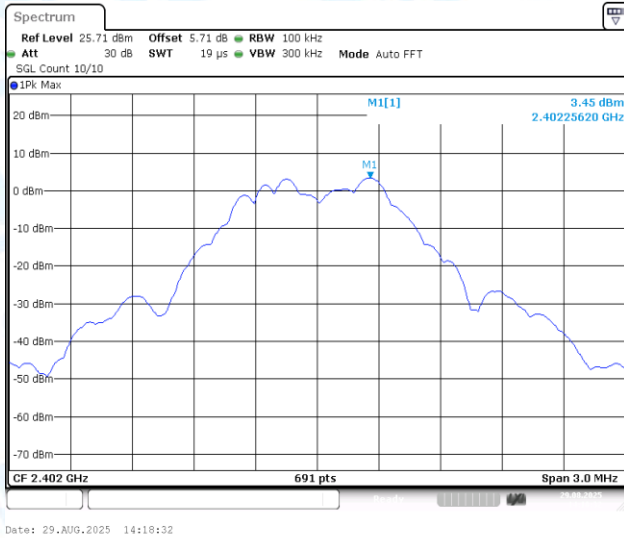
6: Conducted Spurious Emission

6.1 Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	3.45	3.45	---	PASS
BLE_1M	Ant1	2402	30~1000	3.45	-67.49	≤-16.55	PASS
BLE_1M	Ant1	2402	1000~26500	3.45	-28.02	≤-16.55	PASS
BLE_1M	Ant1	2440	0~Reference	5.91	5.91	---	PASS
BLE_1M	Ant1	2440	30~1000	5.91	-68.21	≤-14.09	PASS
BLE_1M	Ant1	2440	1000~26500	5.91	-23.4	≤-14.09	PASS
BLE_1M	Ant1	2480	0~Reference	3.04	3.04	---	PASS
BLE_1M	Ant1	2480	30~1000	3.04	-67.93	≤-16.96	PASS
BLE_1M	Ant1	2480	1000~26500	3.04	-24.33	≤-16.96	PASS
BLE_2M	Ant1	2402	0~Reference	4.68	4.68	---	PASS
BLE_2M	Ant1	2402	30~1000	4.68	-67.52	≤-15.32	PASS
BLE_2M	Ant1	2402	1000~26500	4.68	-27.07	≤-15.32	PASS
BLE_2M	Ant1	2440	0~Reference	1.23	1.23	---	PASS
BLE_2M	Ant1	2440	30~1000	1.23	-67.29	≤-18.77	PASS
BLE_2M	Ant1	2440	1000~26500	1.23	-29.25	≤-18.77	PASS
BLE_2M	Ant1	2480	0~Reference	0.34	0.34	---	PASS
BLE_2M	Ant1	2480	30~1000	0.34	-68.08	≤-19.66	PASS
BLE_2M	Ant1	2480	1000~26500	0.34	-30.51	≤-19.66	PASS

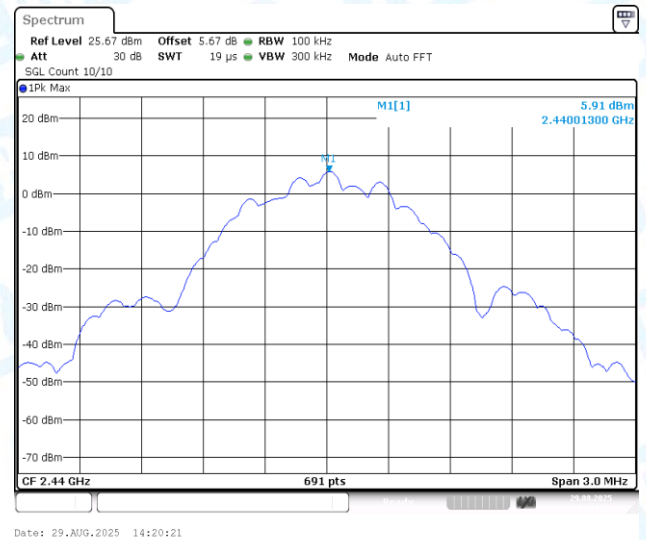
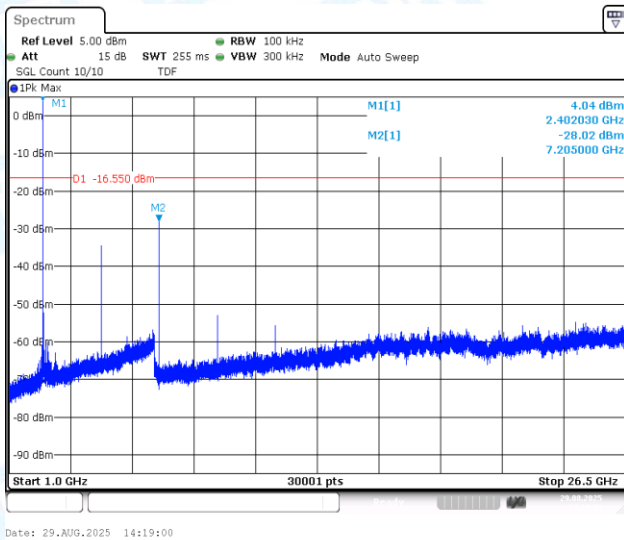
Remark: Regarding the spurious emissions from 30MHz to 40GHz, the cable loss+ Attenuator(10dB) have been set in the 'TDF' of the Spectrum Analyzer during the test.

6.2 Test Graphs



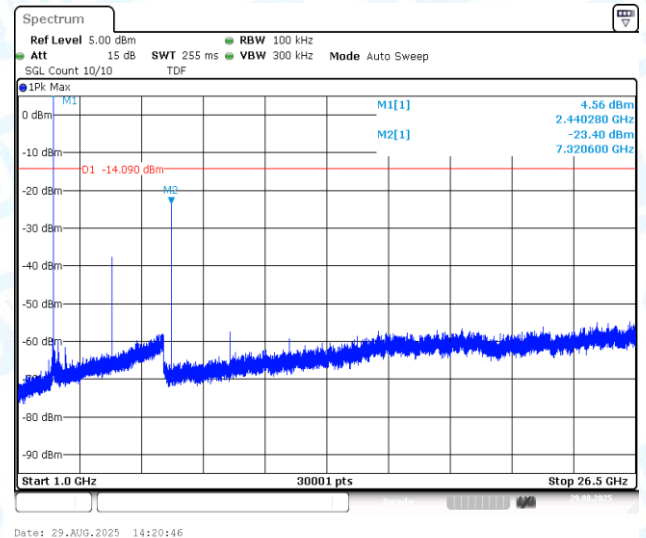
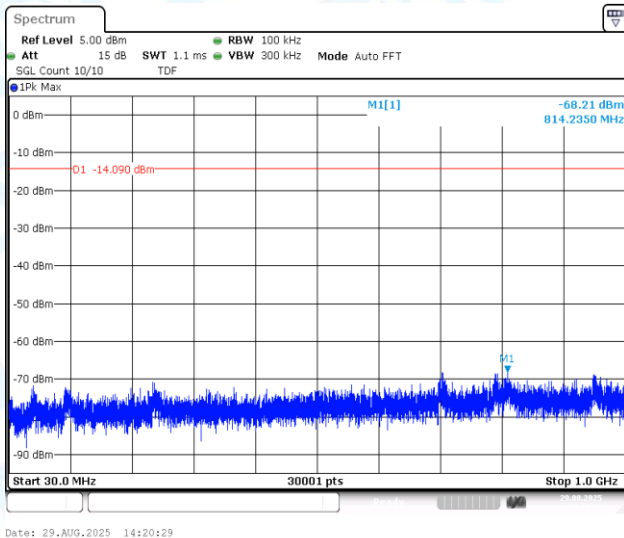
BLE_1M-Ant1-2402-0~Reference-PASS

BLE_1M-Ant1-2402-30~1000-PASS



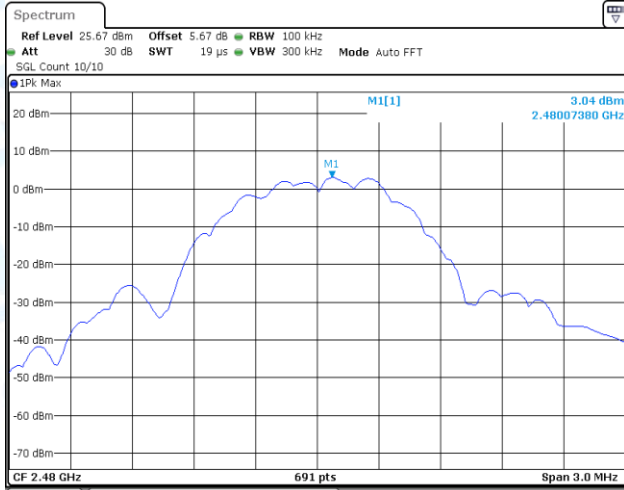
BLE_1M-Ant1-2402-1000~26500-PASS

BLE_1M-Ant1-2440-0~Reference-PASS

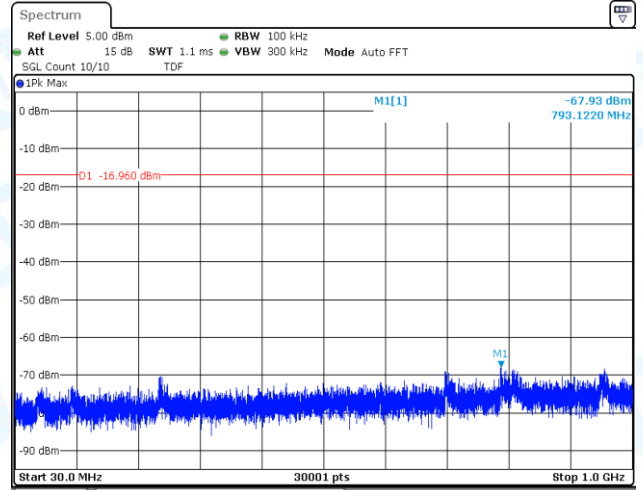


BLE_1M-Ant1-2440-30~1000-PASS

BLE_1M-Ant1-2440-1000~26500-PASS



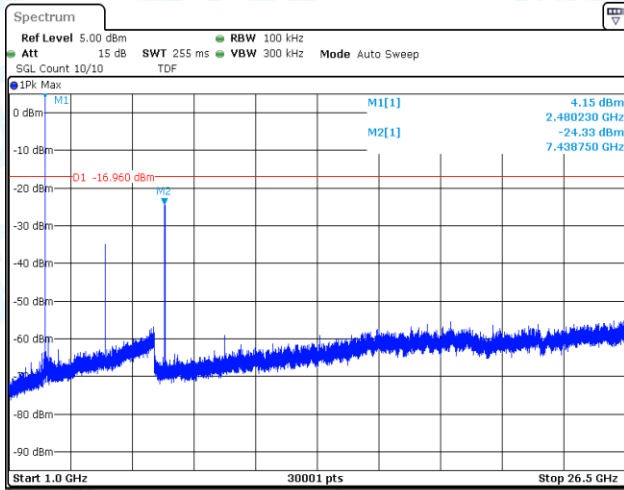
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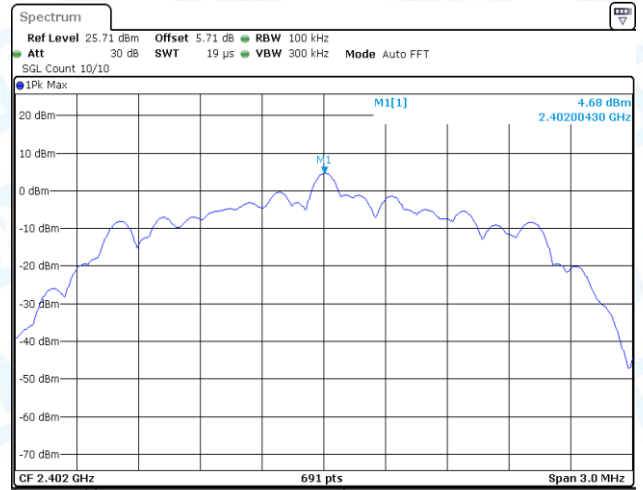
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BLE_1M-Ant1-2480-0~Reference-PASS

BLE_1M-Ant1-2480-30~1000-PASS



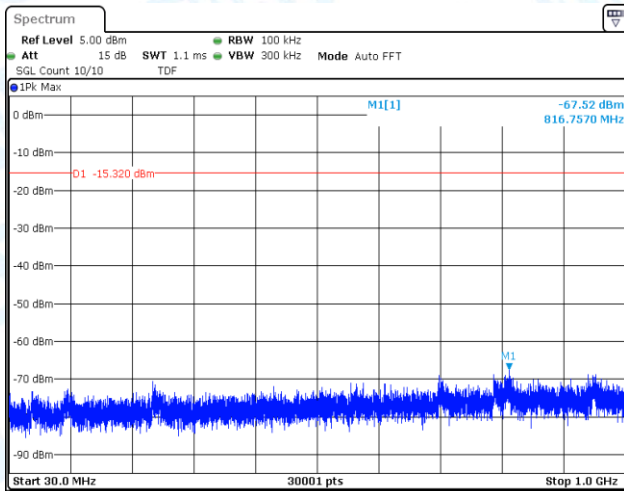
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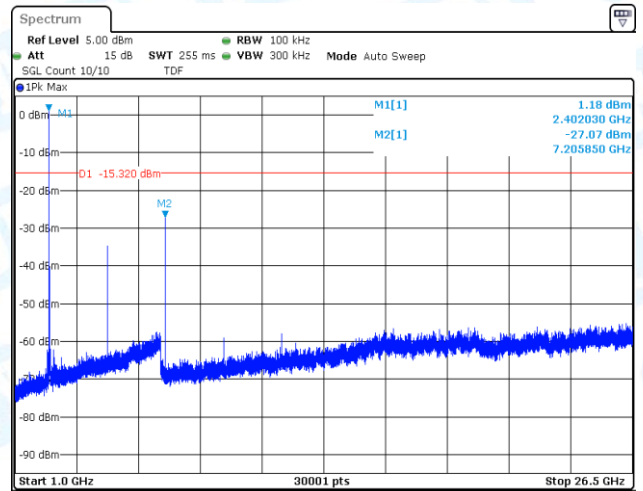
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BLE_1M-Ant1-2480-1000~26500-PASS

BLE_2M-Ant1-2402-0~Reference-PASS



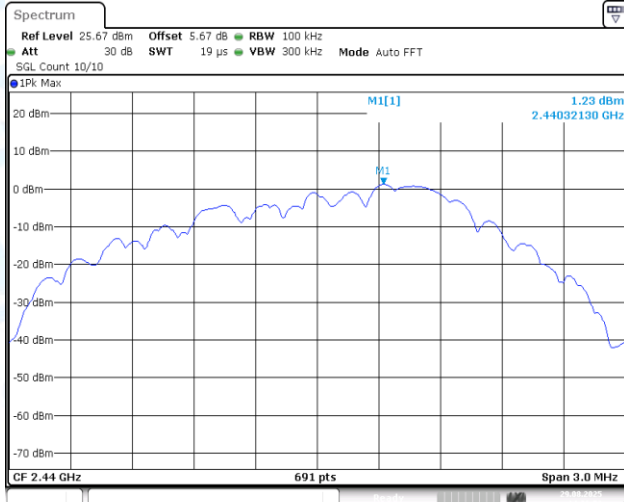
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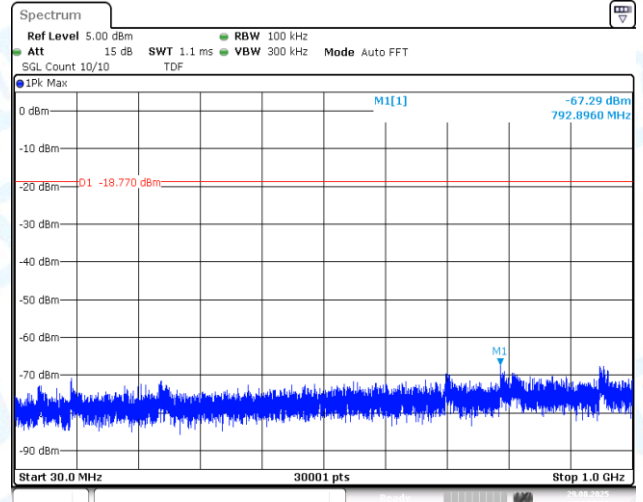
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BLE_2M-Ant1-2402-30~1000-PASS

BLE_2M-Ant1-2402-1000~26500-PASS



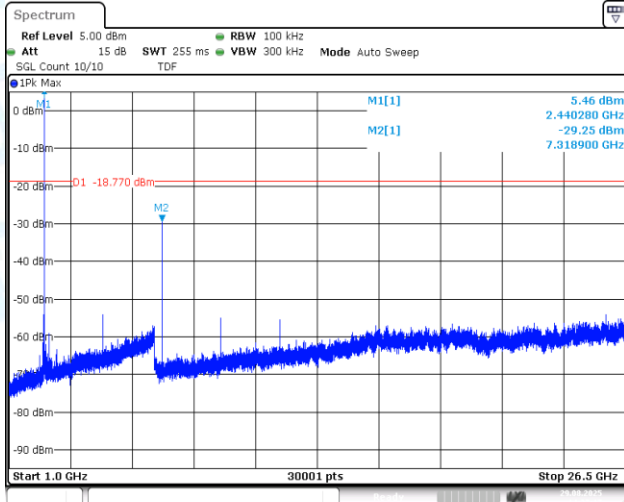
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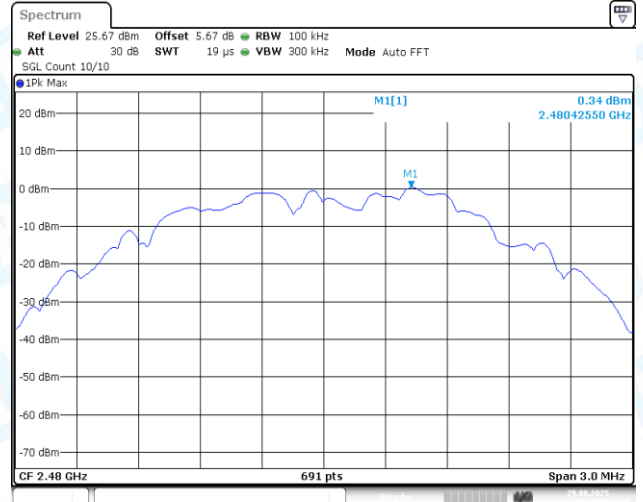
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BLE_2M-Ant1-2440-0~Reference-PASS

BLE_2M-Ant1-2440-30~1000-PASS



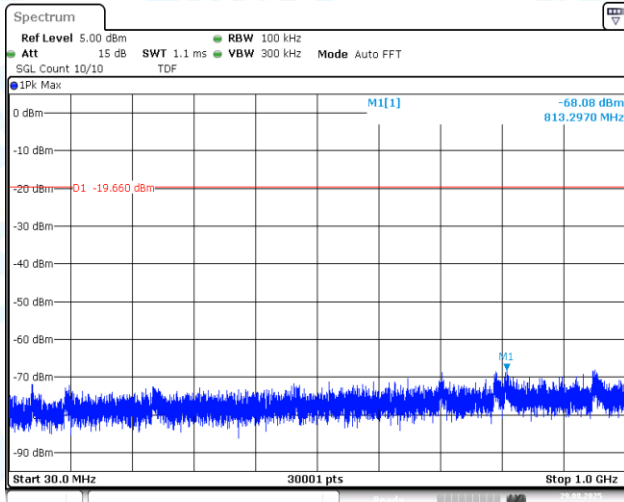
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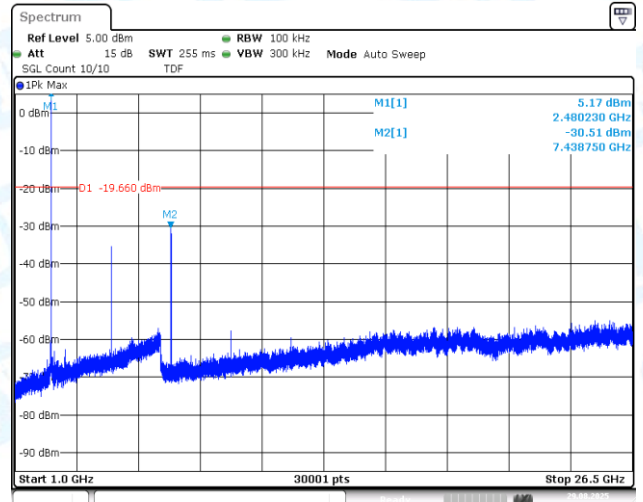
Date: 29.NOV.2025 14:47:03

BLE_2M-Ant1-2440-1000~26500-PASS

BLE_2M-Ant1-2480-0~Reference-PASS



Date: 29.NOV.2025 14:47:11



Date: 29.NOV.2025 14:47:28

BLE_2M-Ant1-2480-30~1000-PASS

BLE_2M-Ant1-2480-1000~26500-PASS

7: Duty Cycle

7.1 Test Result

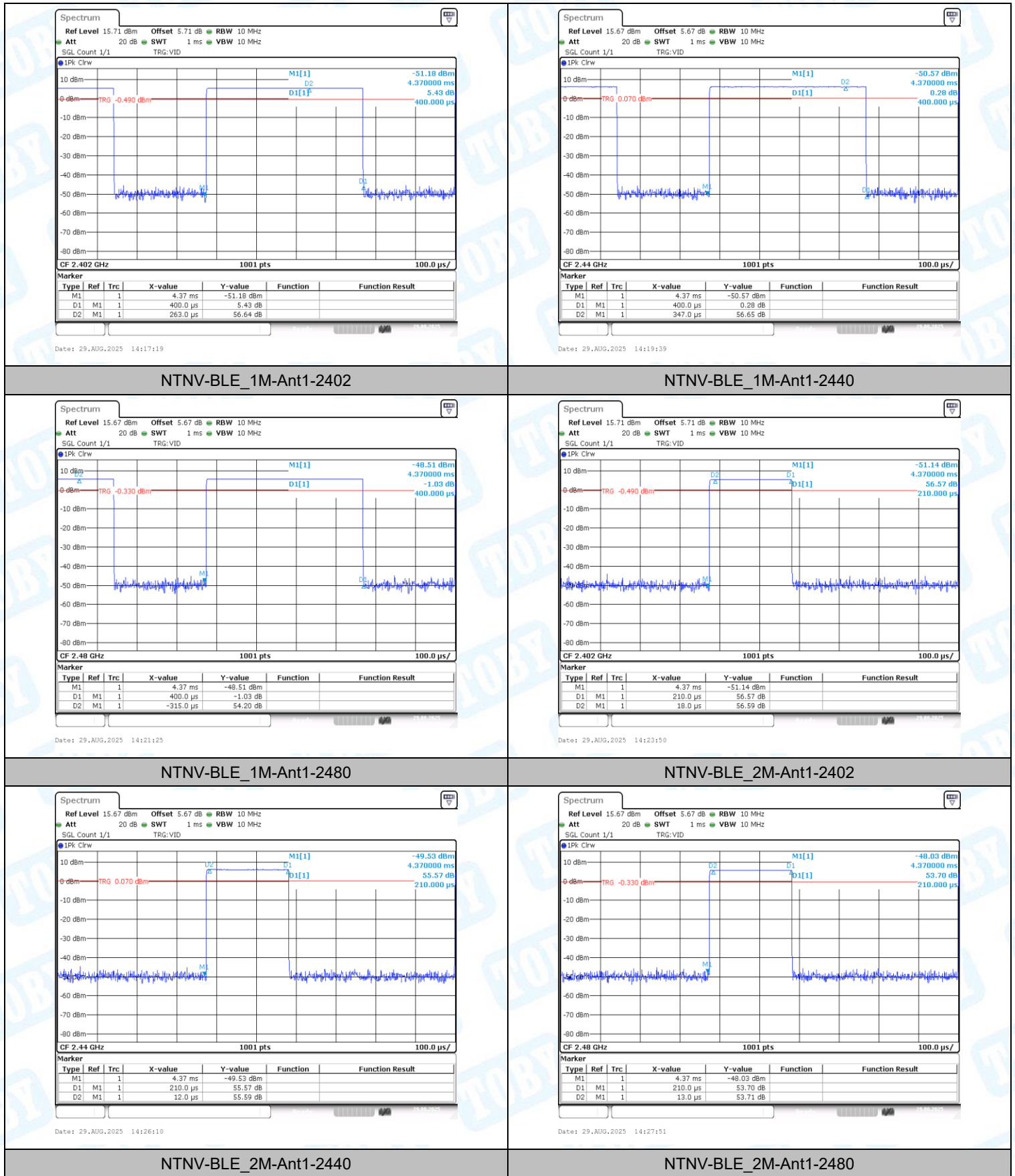
TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	1/T [kHz]
BLE_1M	Ant1	2402	0.40	0.63	63.49	1.97	2.50
BLE_1M	Ant1	2440	0.40	0.63	63.49	1.97	2.50
BLE_1M	Ant1	2480	0.40	0.63	63.49	1.97	2.50
BLE_2M	Ant1	2402	0.21	0.63	33.33	4.77	4.76
BLE_2M	Ant1	2440	0.21	0.63	33.33	4.77	4.76
BLE_2M	Ant1	2480	0.21	0.63	33.33	4.77	4.76

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



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