

RF Test Data for BLE (Conducted Measurements)

General Description of EUT	
EUT Name:	Temperature & Humidity Sensor with External Probe
Model:	ZY-T03Pro
Sample ID:	HC-C-202512-0008-02-01#
Environmental Conditions	
Ambient Temperature:	25℃
Ambient Humidity:	45%RH
Test Power Supply:	DC 3V
Test Engineer:	Kael Li
Note: For a more detailed features description, please refer to the report TBR-C-202512-0008-7.	

Contents

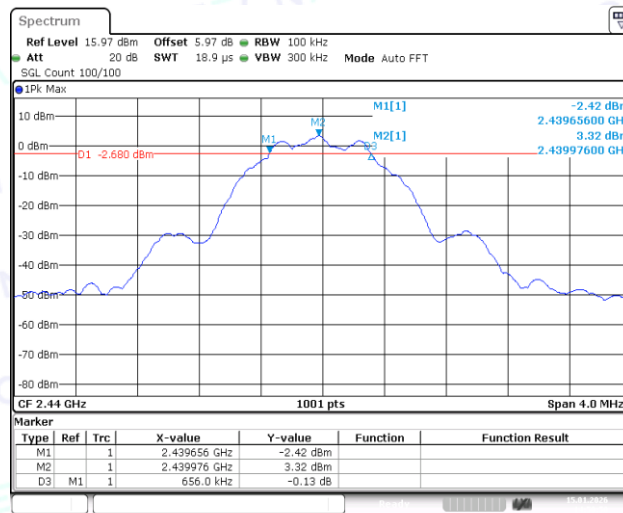
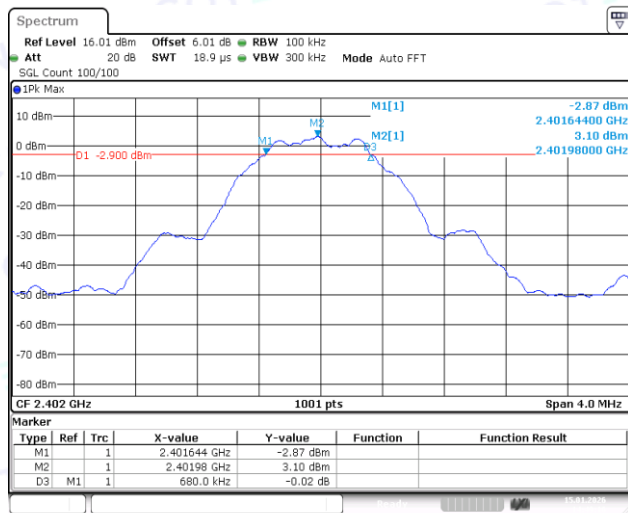
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1: DTS Bandwidth

1.1 Test Result

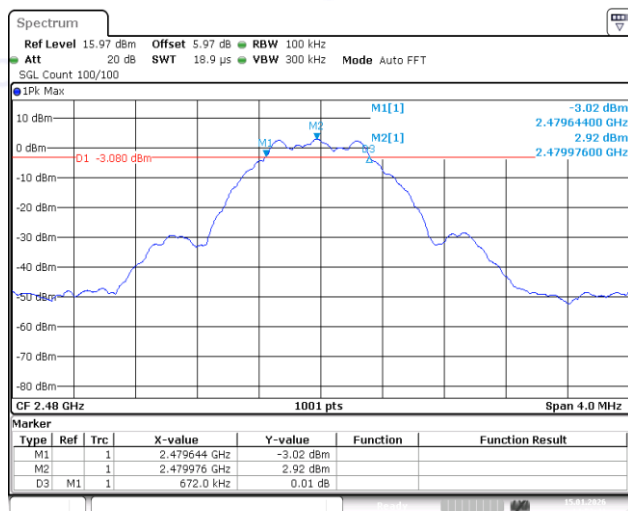
Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.68	2401.64	2402.32	0.5	PASS
BLE_1M	Ant1	2440	0.66	2439.66	2440.31	0.5	PASS
BLE_1M	Ant1	2480	0.67	2479.64	2480.32	0.5	PASS

1.2 Test Graphs



BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2440-PASS



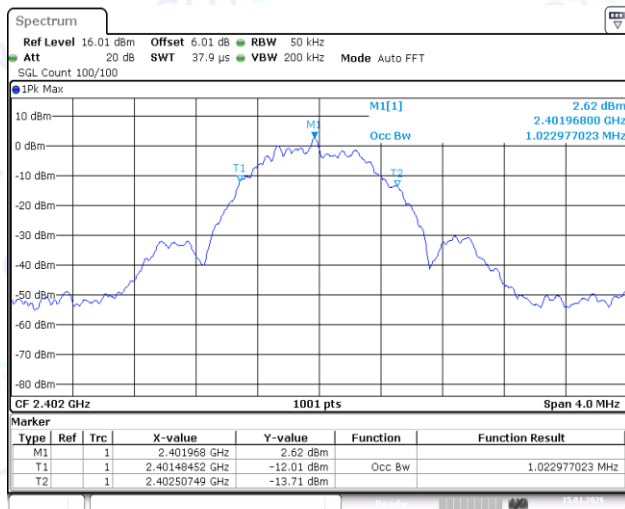
BLE_1M-Ant1-2480-PASS

2: Occupied Channel Bandwidth

2.1 Test Result

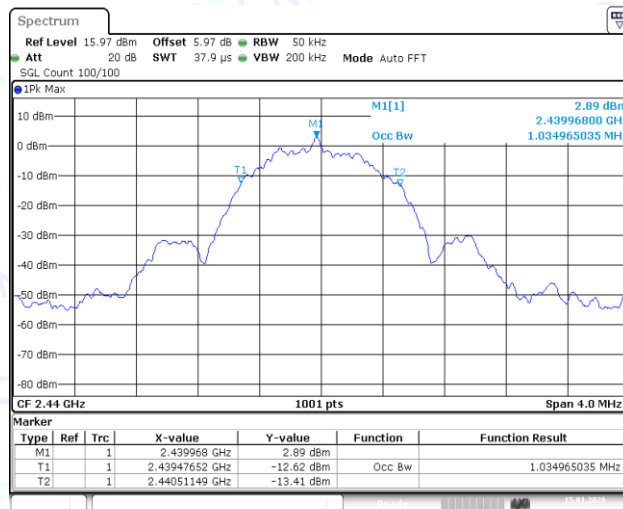
Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0230	2401.4845	2402.5075	---	---
BLE_1M	Ant1	2440	1.0350	2439.4765	2440.5115	---	---
BLE_1M	Ant1	2480	1.0270	2479.4765	2480.5035	---	---

2.2 Test Graphs



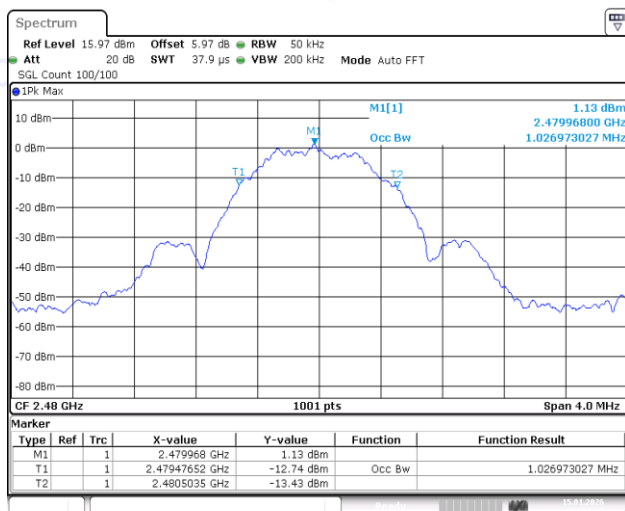
Date: 15.JAN.2026 14:49:22

BLE_1M-Ant1-2402



Date: 15.JAN.2026 14:50:55

BLE_1M-Ant1-2440



Date: 15.JAN.2026 14:53:48

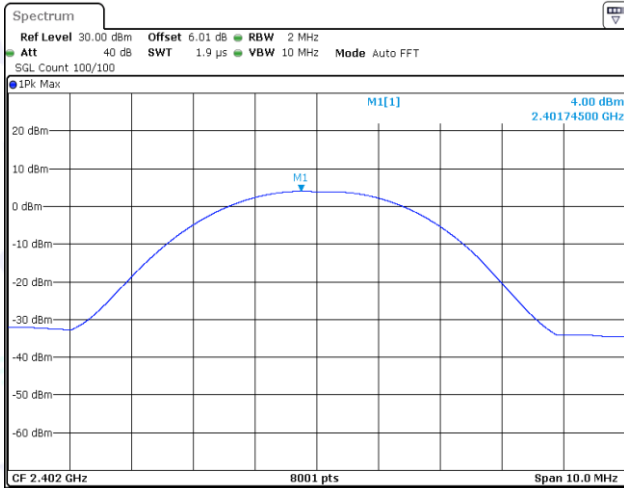
BLE_1M-Ant1-2480

3: Maximum conducted output power

3.1 Test Result Peak

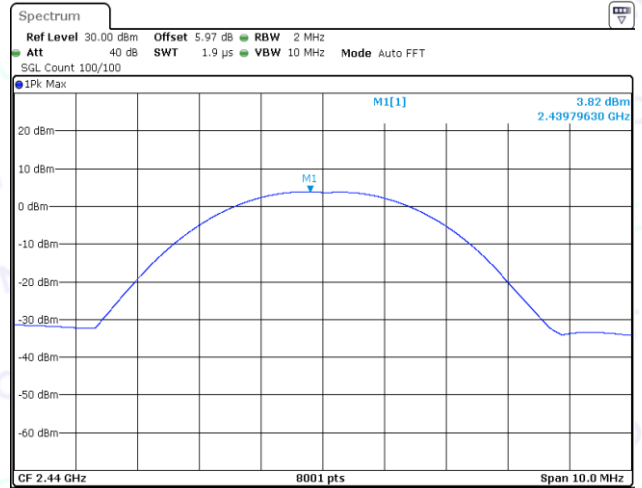
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	4.00	≤30	PASS
BLE_1M	Ant1	2440	3.82	≤30	PASS
BLE_1M	Ant1	2480	3.61	≤30	PASS

3.2 Test Graphs Peak



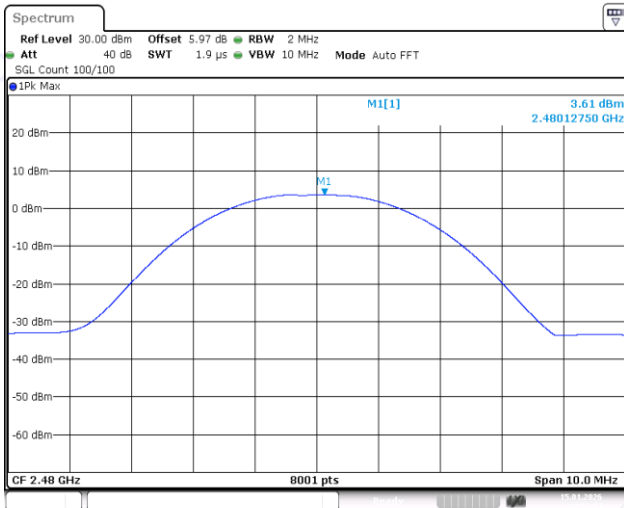
Date: 15.JAN.2026 14:49:28

BLE_1M-Ant1-2402-PASS



Date: 15.JAN.2026 14:51:01

BLE_1M-Ant1-2440-PASS



Date: 15.JAN.2026 14:53:54

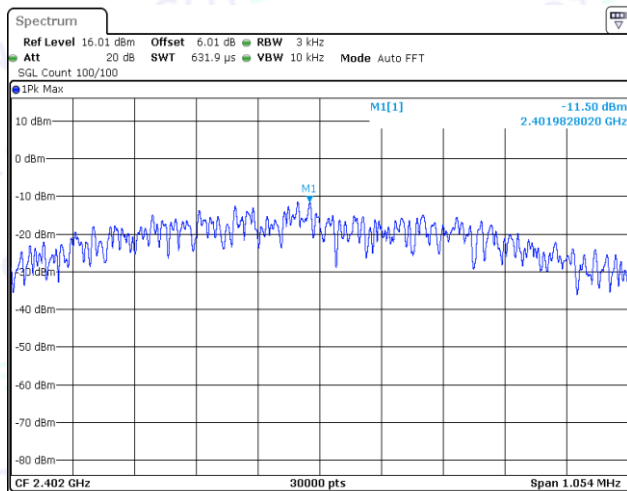
BLE_1M-Ant1-2480-PASS

4: Maximum power spectral density

4.1 Test Result

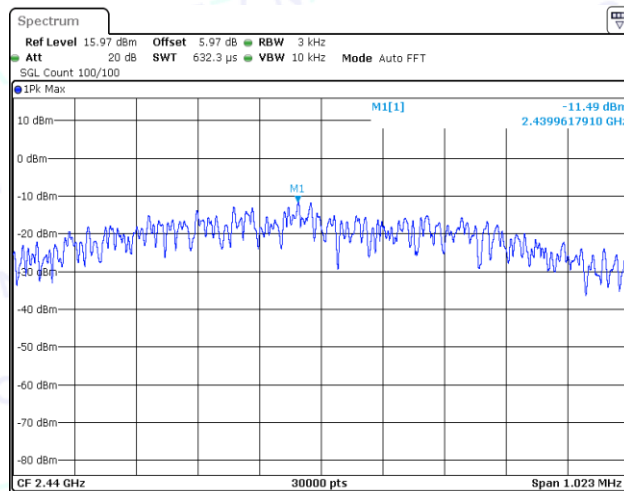
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.50	≤8.00	PASS
BLE_1M	Ant1	2440	-11.49	≤8.00	PASS
BLE_1M	Ant1	2480	-11.78	≤8.00	PASS

4.2 Test Graphs



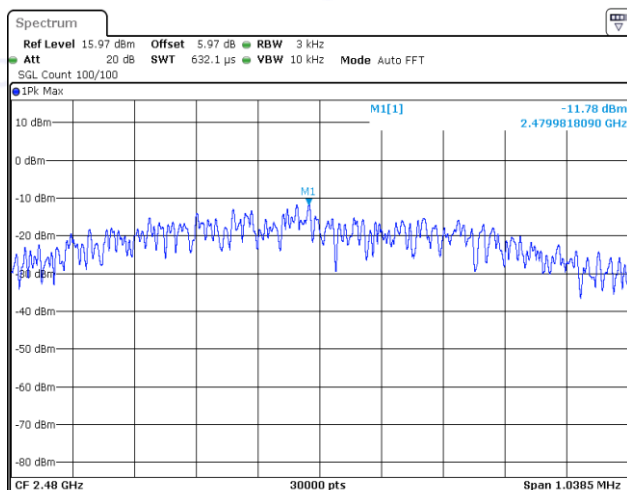
Date: 15.JAN.2026 14:49:38

BLE_1M-Ant1-2402-PASS



Date: 15.JAN.2026 14:51:11

BLE_1M-Ant1-2440-PASS



Date: 15.JAN.2026 14:54:04

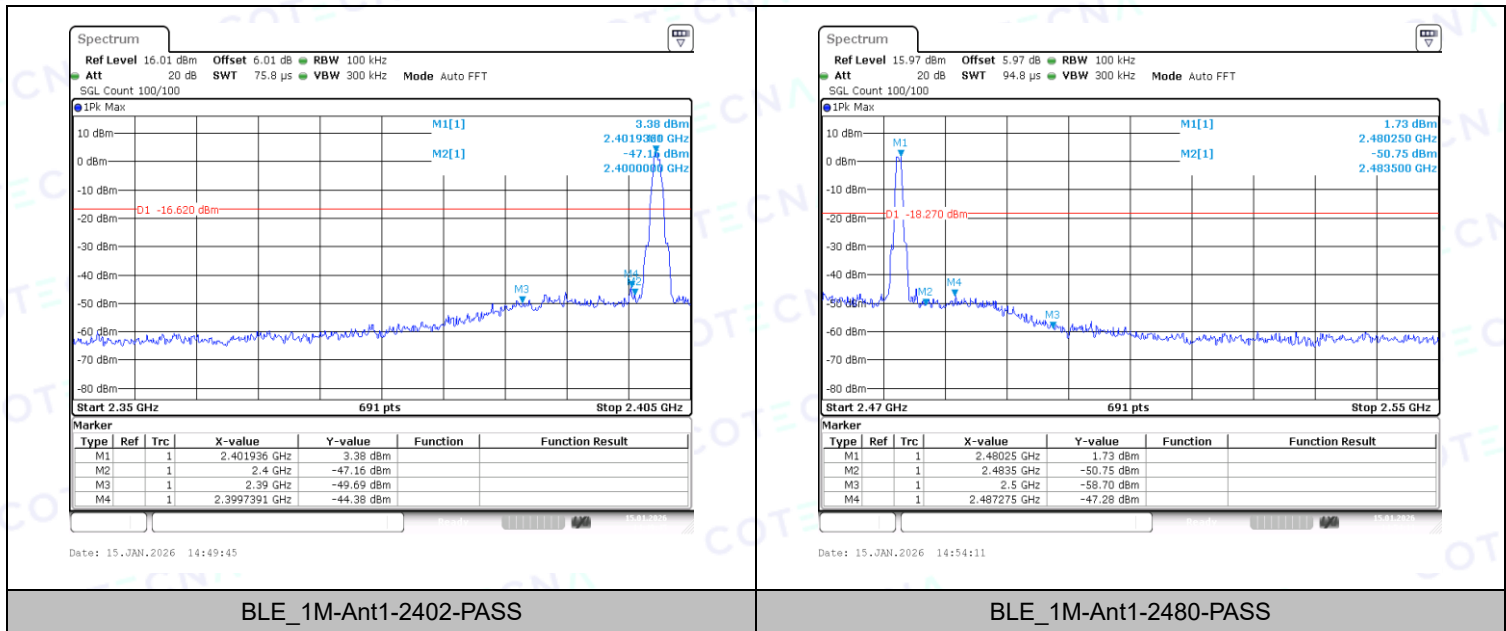
BLE_1M-Ant1-2480-PASS

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	3.38	-44.38	≤ -16.62	PASS
BLE_1M	Ant1	High	2480	1.73	-47.28	≤ -18.27	PASS

5.2 Test Graphs

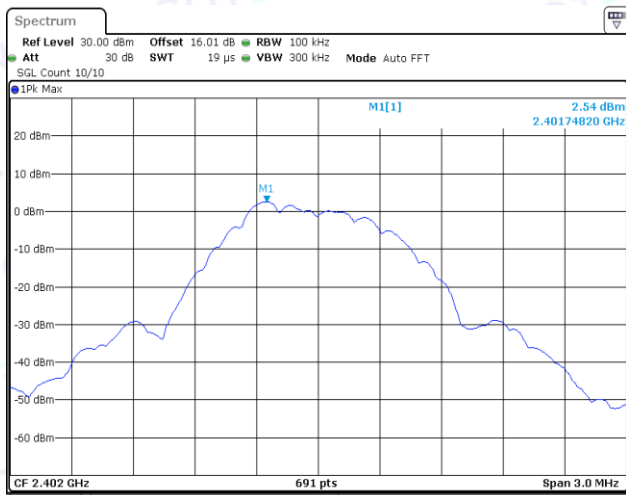


6: Conducted Spurious Emission

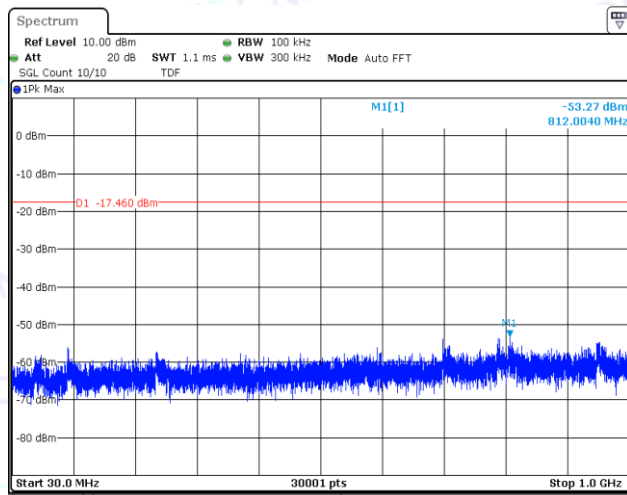
6.1 Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	2.54	2.54	---	PASS
BLE_1M	Ant1	2402	30~1000	2.54	-53.27	≤-17.46	PASS
BLE_1M	Ant1	2402	1000~26500	2.54	-45.28	≤-17.46	PASS
BLE_1M	Ant1	2440	0~Reference	1.90	1.90	---	PASS
BLE_1M	Ant1	2440	30~1000	1.90	-53.85	≤-18.1	PASS
BLE_1M	Ant1	2440	1000~26500	1.90	-44.57	≤-18.1	PASS
BLE_1M	Ant1	2480	0~Reference	3.05	3.05	---	PASS
BLE_1M	Ant1	2480	30~1000	3.05	-53.62	≤-16.95	PASS
BLE_1M	Ant1	2480	1000~26500	3.05	-44.46	≤-16.95	PASS

6.2 Test Graphs



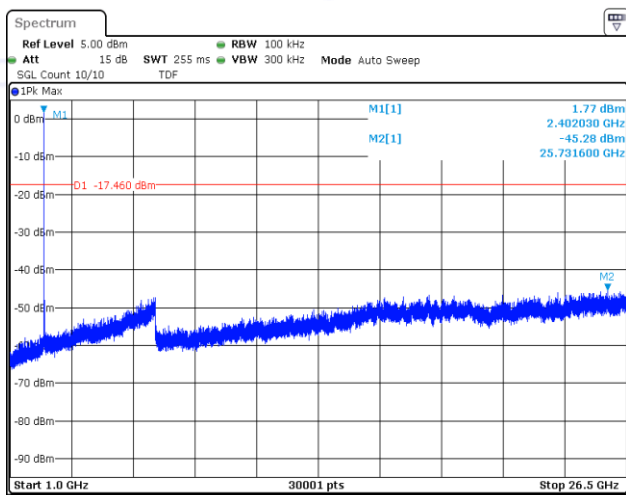
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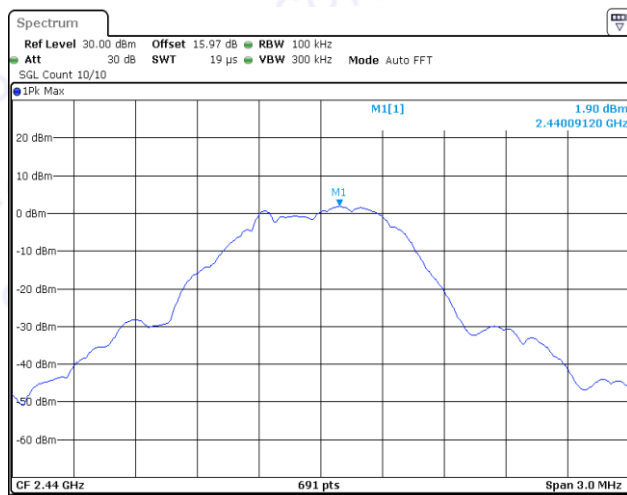
Date: 3.FEB.2026 10:36:16

BLE_1M-Ant1-2402-0~Reference-PASS

BLE_1M-Ant1-2402-30~1000-PASS



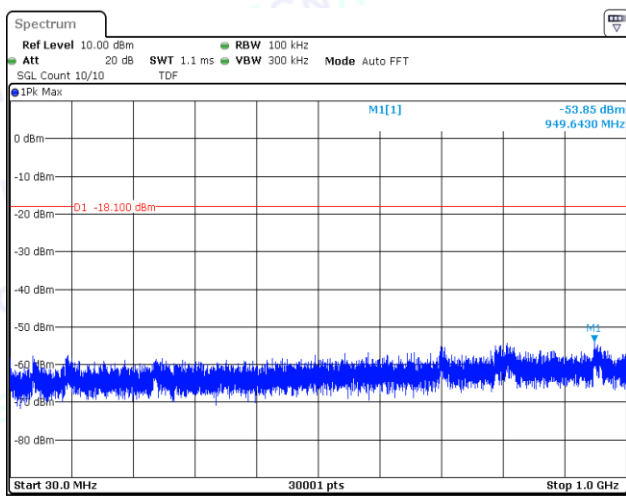
Date: 3.FEB.2026 10:36:33



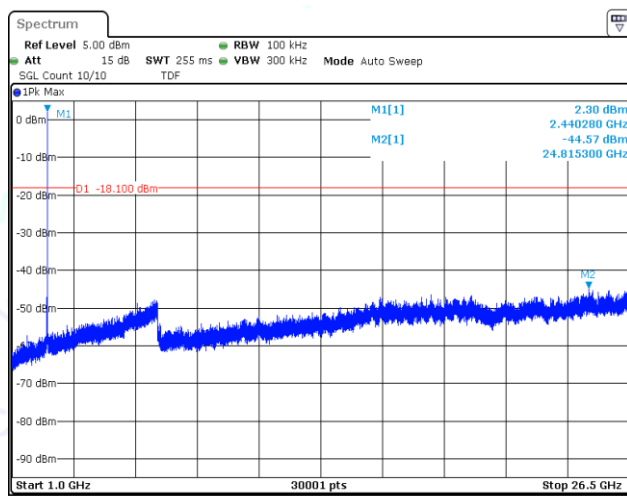
Date: 3.FEB.2026 10:36:44

BLE_1M-Ant1-2402-1000~26500-PASS

BLE_1M-Ant1-2440-0~Reference-PASS



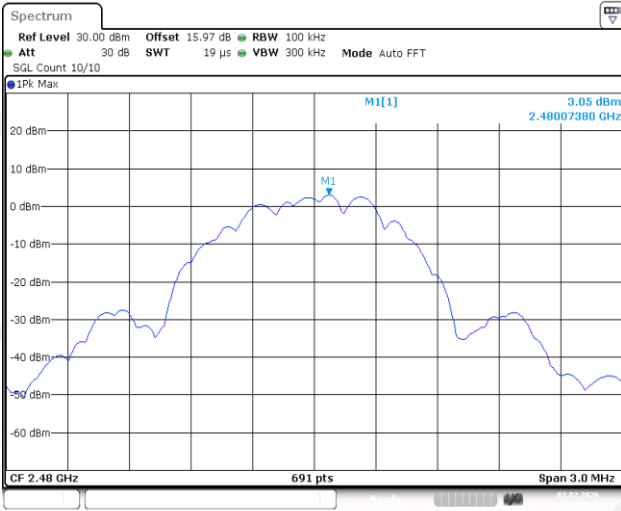
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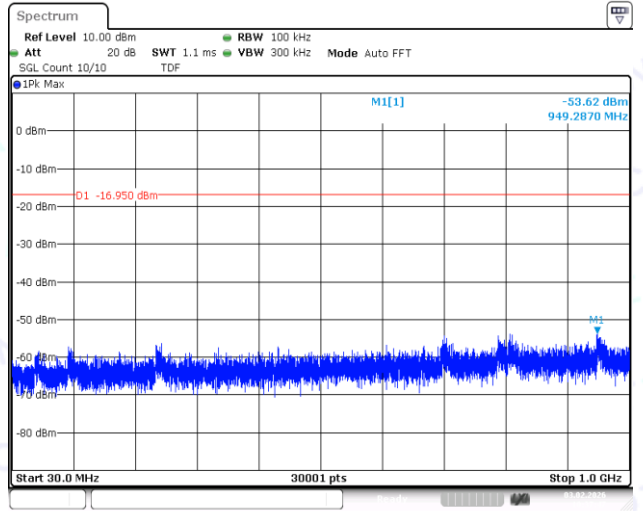
Date: 3.FEB.2026 10:37:09

BLE_1M-Ant1-2440-30~1000-PASS

BLE_1M-Ant1-2440-1000~26500-PASS



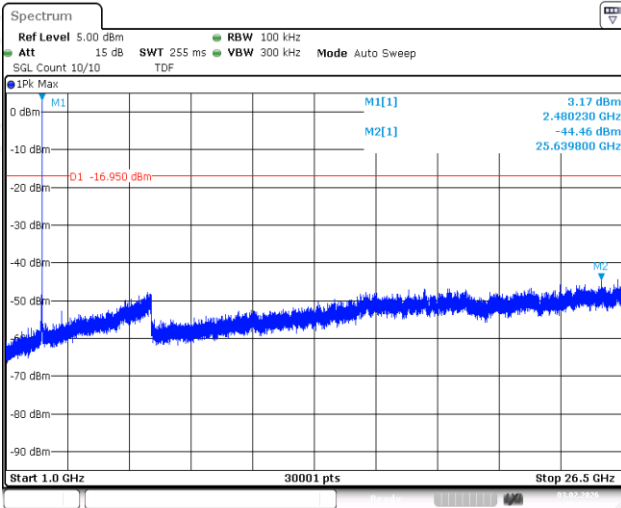
Date: 3.FEB.2026 10:37:39



Date: 3.FEB.2026 10:37:47

BLE_1M-Ant1-2480-0~Reference-PASS

BLE_1M-Ant1-2480-30~1000-PASS



Date: 3.FEB.2026 10:38:04

BLE_1M-Ant1-2480-1000~26500-PASS

7: Duty Cycle

7.1 Test Result

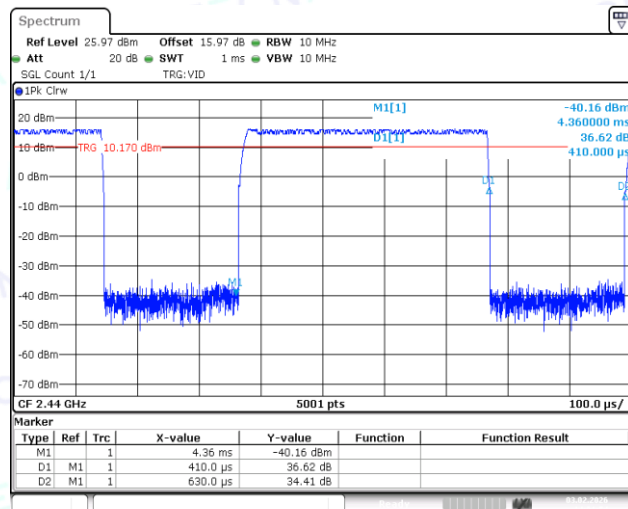
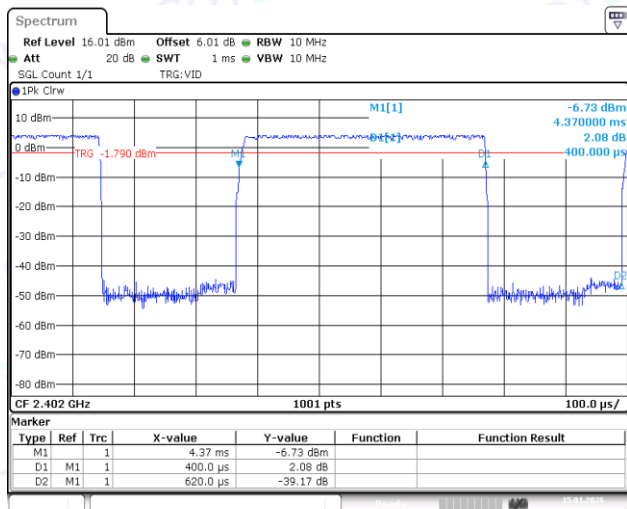
TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	1/T [kHz]
BLE_1M	Ant1	2402	0.40	0.62	64.52	1.90	2.50
BLE_1M	Ant1	2440	0.41	0.63	65.08	1.87	2.44
BLE_1M	Ant1	2480	0.40	0.62	64.52	1.90	2.50

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

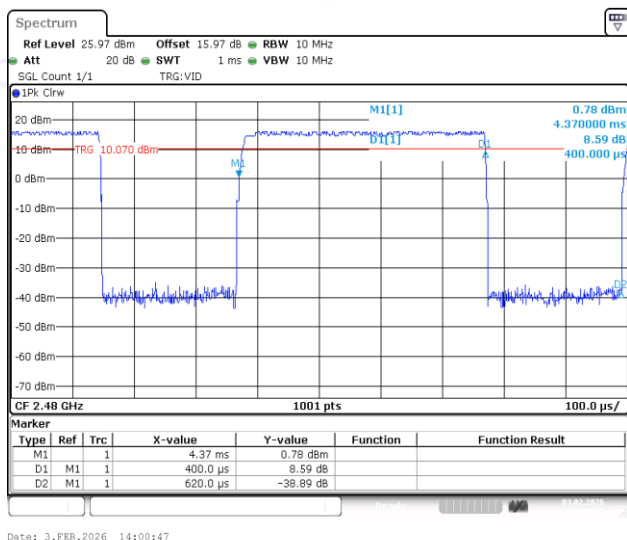
2, DC Factor= $10 \cdot \log_{10}(1/\text{Duty Cycle})$

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

7.2 Test Graphs



NTNV-BLE_1M-Ant1-2402



NTNV-BLE_1M-Ant1-2440

NTNV-BLE_1M-Ant1-2480

8: Emissions in Restricted Bands

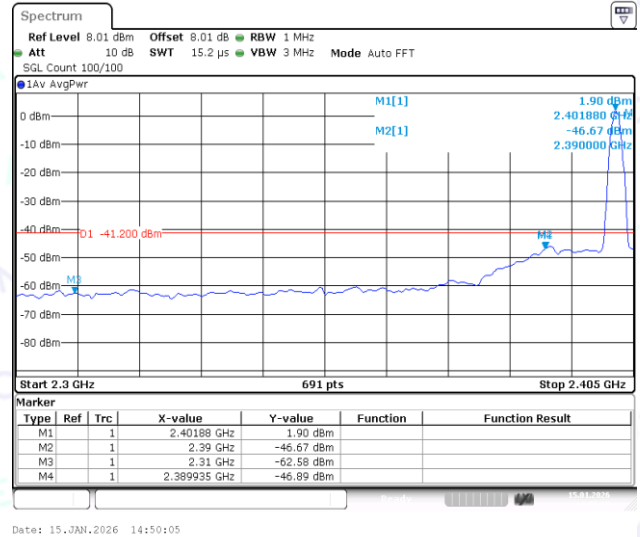
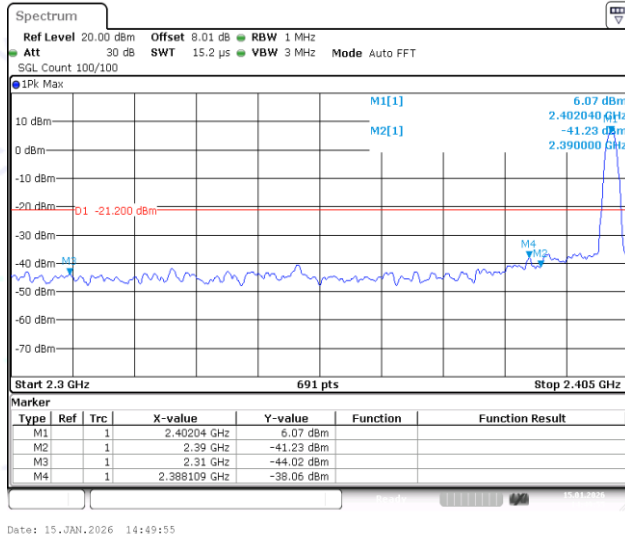
8.1 Test Result

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	-41.23	≤-21.20	53.97	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2310.000	-44.02	≤-21.20	51.18	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2388.109	-38.06	≤-21.20	57.14	≤74	PASS
BLE_1M	Ant1	Low	2402	AV	2390.000	-46.67	≤-41.20	48.53	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2310.000	-62.58	≤-41.20	32.62	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2389.935	-46.89	≤-41.20	48.31	≤54	PASS
BLE_1M	Ant1	High	2480	Peak	2483.500	-40.92	≤-21.20	54.28	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2500.000	-44.48	≤-21.20	50.72	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2489.826	-35.71	≤-21.20	59.49	≤74	PASS
BLE_1M	Ant1	High	2480	AV	2483.500	-48.01	≤-41.20	47.19	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2500.000	-55.94	≤-41.20	39.26	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2486.696	-45.42	≤-41.20	49.78	≤54	PASS

Note:

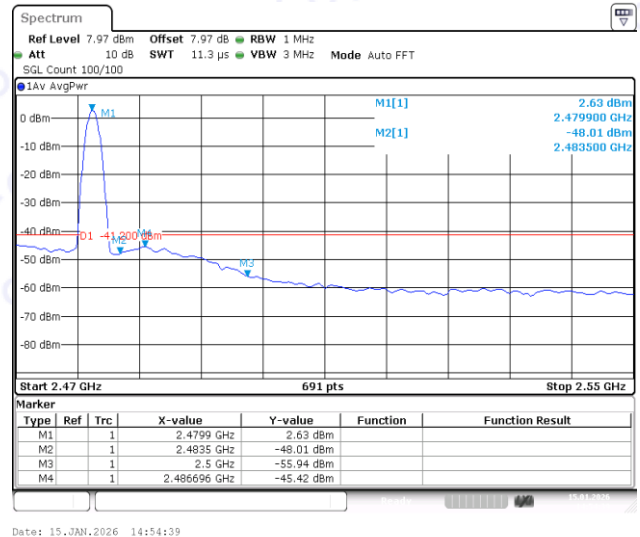
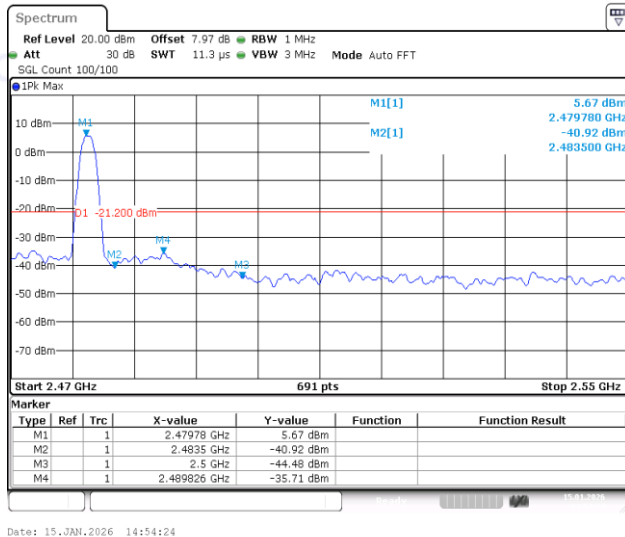
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.
3. The duty factor has been compensated into the result.

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-----