

RF Test Data for BLE (Conducted Measurements)

General Description of EUT	
EUT Name:	projector
Model:	Q5 Pro
Sample ID:	HC-C-202609-0043-01-01-2#
Test Standard:	FCC Part 15.247
Environmental Conditions	
Ambient Temperature:	25℃
Ambient Humidity:	45%RH
Test Power Supply:	AC 120V/60Hz
Test Engineer:	Lily. Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202609-0043-3	

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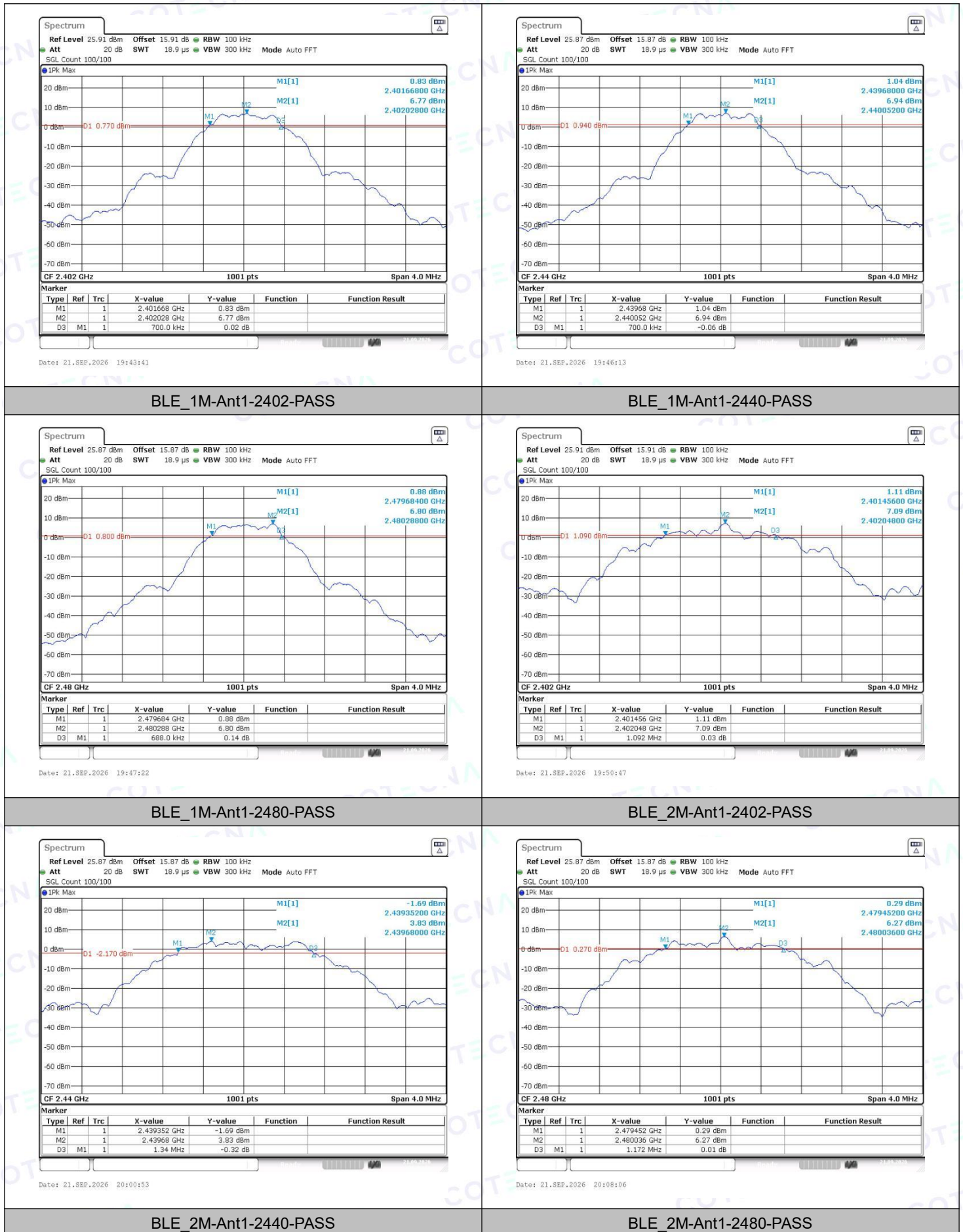
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1: DTS Bandwidth

1.1 Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.70	2401.67	2402.37	0.5	PASS
BLE_1M	Ant1	2440	0.70	2439.68	2440.38	0.5	PASS
BLE_1M	Ant1	2480	0.69	2479.68	2480.37	0.5	PASS
BLE_2M	Ant1	2402	1.09	2401.46	2402.55	0.5	PASS
BLE_2M	Ant1	2440	1.34	2439.35	2440.69	0.5	PASS
BLE_2M	Ant1	2480	1.17	2479.45	2480.62	0.5	PASS

1.2 Test Graphs

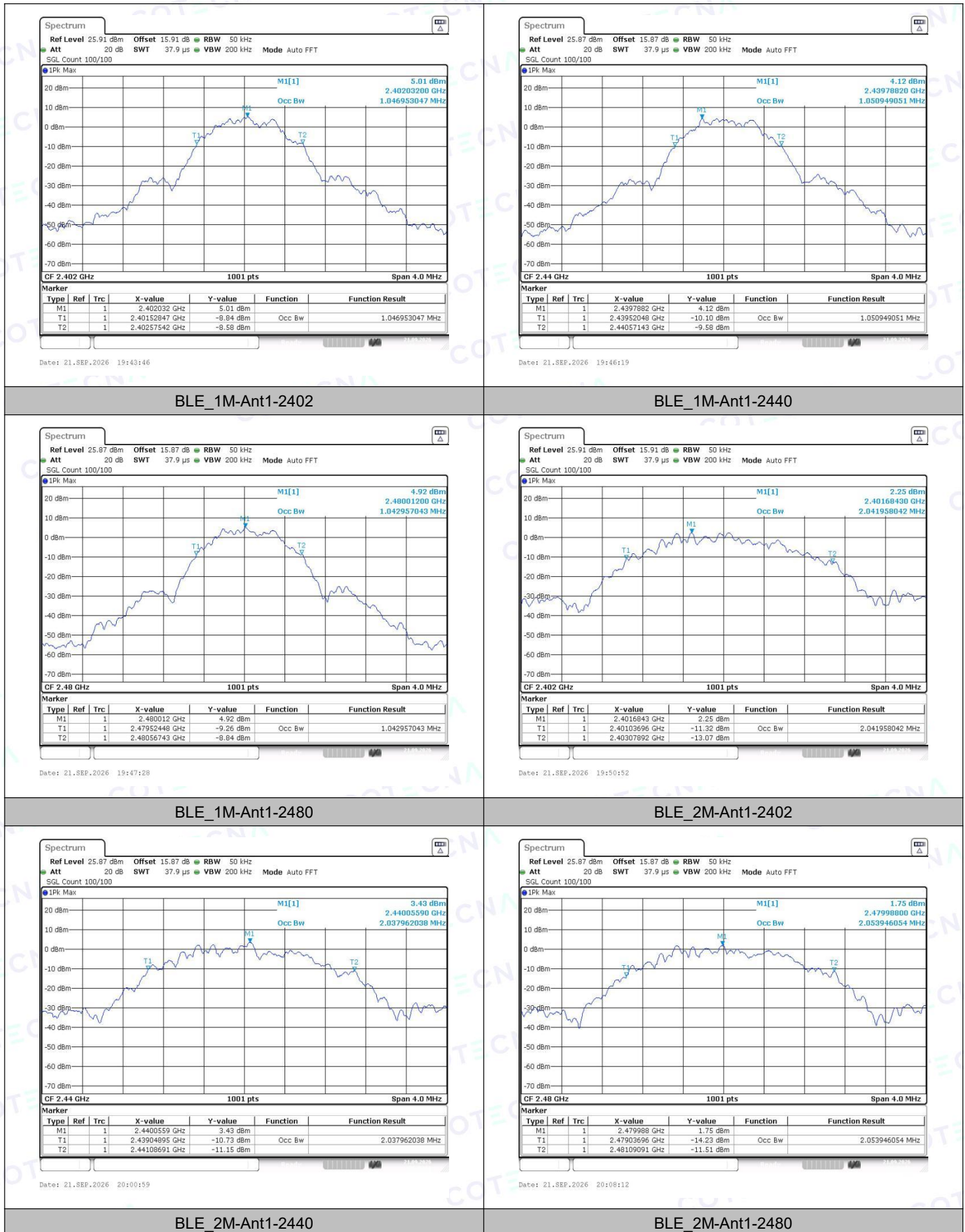


2: Occupied Channel Bandwidth

2.1 Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0470	2401.5285	2402.5754	---	---
BLE_1M	Ant1	2440	1.0509	2439.5205	2440.5714	---	---
BLE_1M	Ant1	2480	1.0430	2479.5245	2480.5674	---	---
BLE_2M	Ant1	2402	2.0420	2401.0370	2403.0789	---	---
BLE_2M	Ant1	2440	2.0380	2439.0490	2441.0869	---	---
BLE_2M	Ant1	2480	2.0539	2479.0370	2481.0909	---	---

2.2 Test Graphs

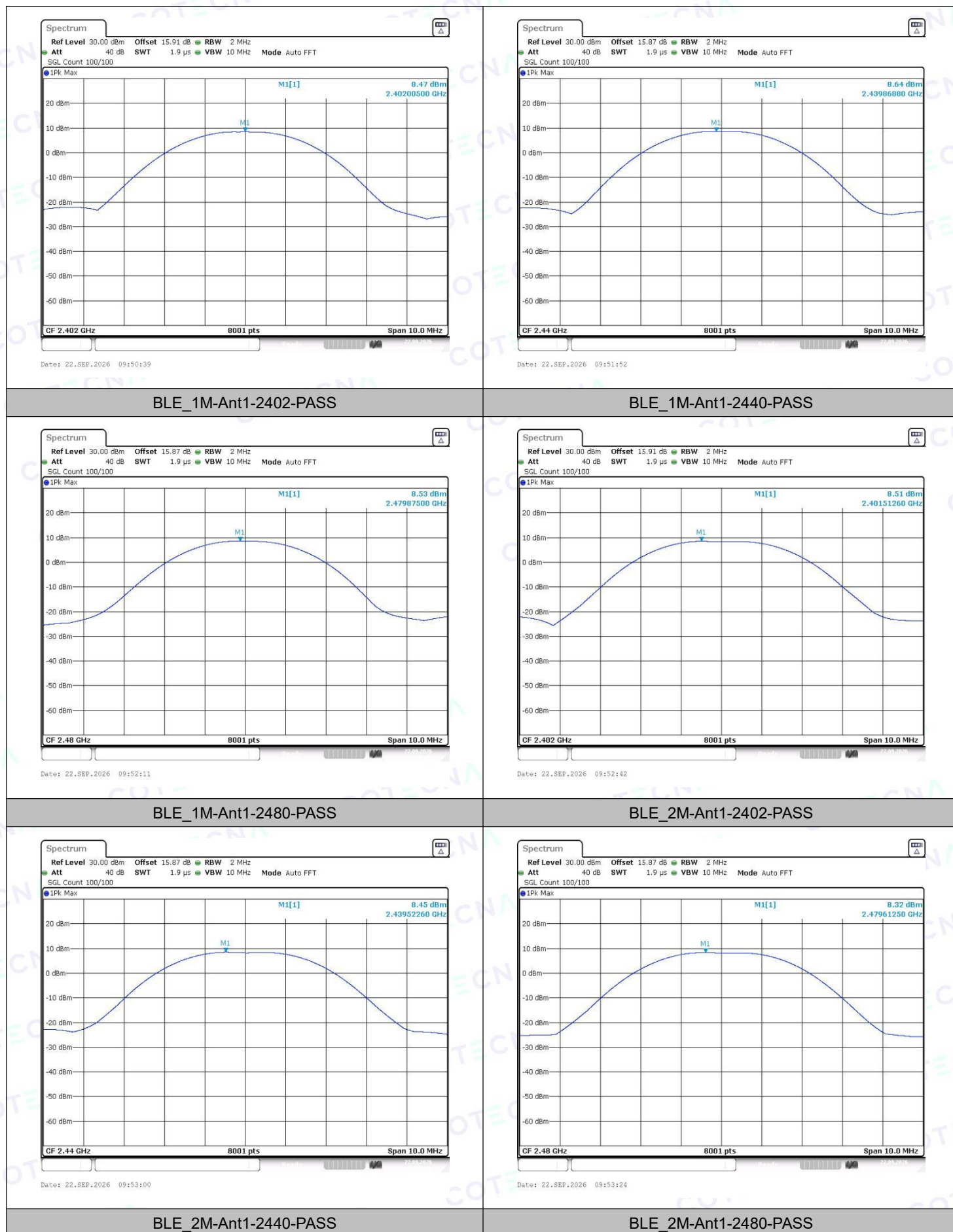


3: Maximum conducted output power

3.1 Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	8.47	≤30	PASS
BLE_1M	Ant1	2440	8.64	≤30	PASS
BLE_1M	Ant1	2480	8.53	≤30	PASS
BLE_2M	Ant1	2402	8.51	≤30	PASS
BLE_2M	Ant1	2440	8.45	≤30	PASS
BLE_2M	Ant1	2480	8.32	≤30	PASS

3.2 Test Graphs Peak

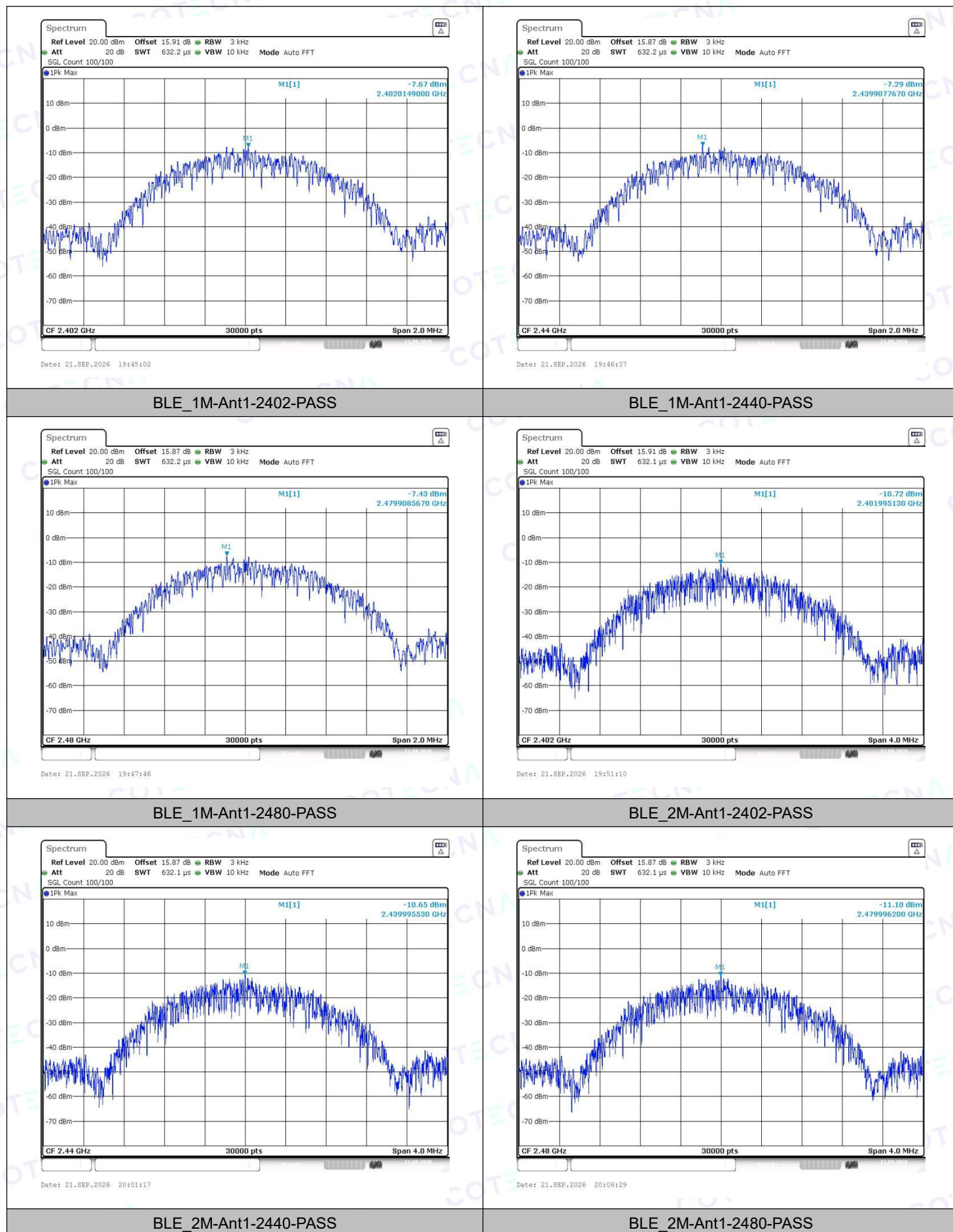


4: Maximum power spectral density

4.1 Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-7.67	≤8.00	PASS
BLE_1M	Ant1	2440	-7.29	≤8.00	PASS
BLE_1M	Ant1	2480	-7.43	≤8.00	PASS
BLE_2M	Ant1	2402	-10.72	≤8.00	PASS
BLE_2M	Ant1	2440	-10.65	≤8.00	PASS
BLE_2M	Ant1	2480	-11.10	≤8.00	PASS

4.2 Test Graphs

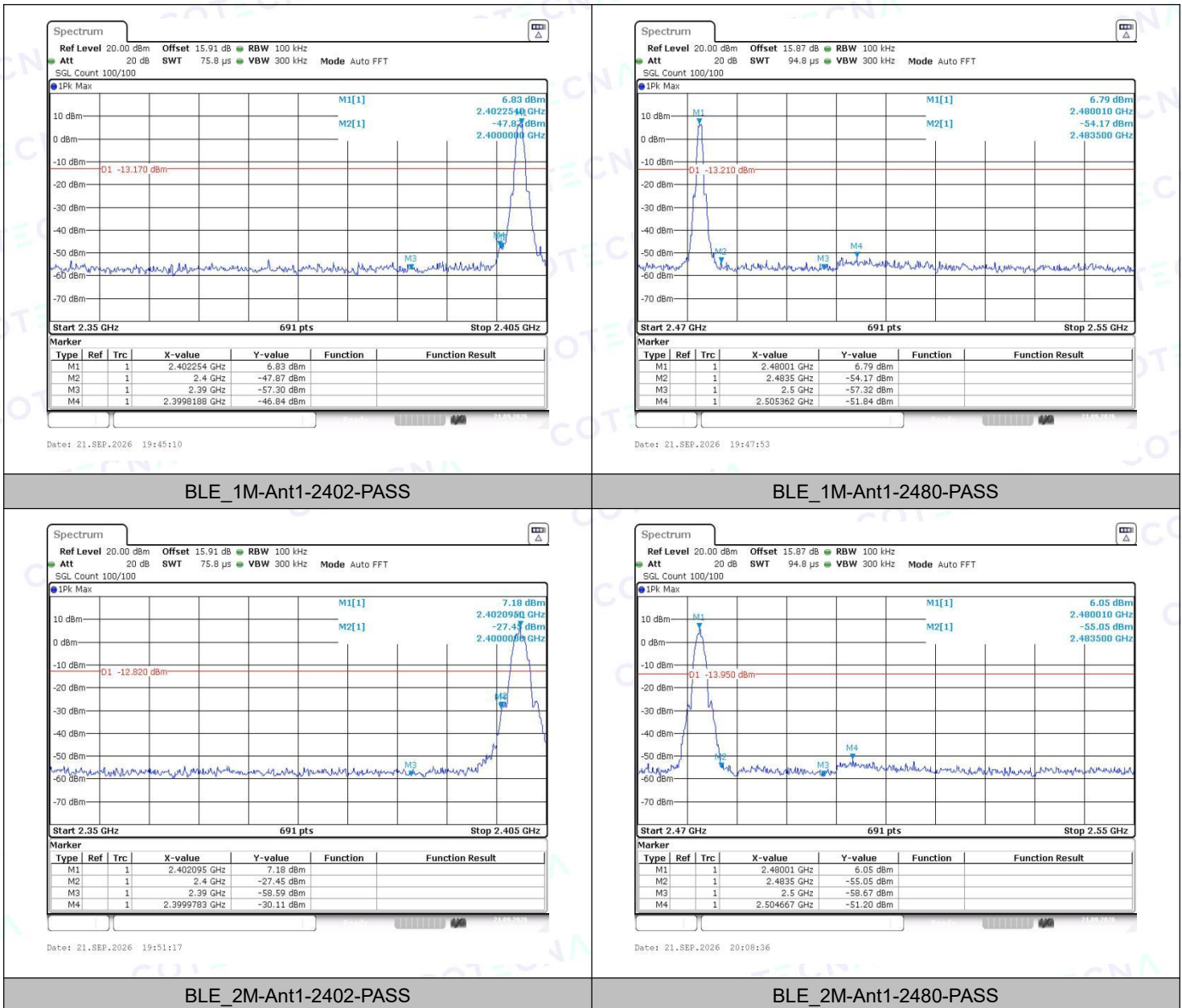


5: Band edge measurements

5.1 Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	6.83	-46.84	≤-13.17	PASS
BLE_1M	Ant1	High	2480	6.79	-51.84	≤-13.21	PASS
BLE_2M	Ant1	Low	2402	7.18	-30.11	≤-12.82	PASS
BLE_2M	Ant1	High	2480	6.05	-51.2	≤-13.95	PASS

5.2 Test Graphs

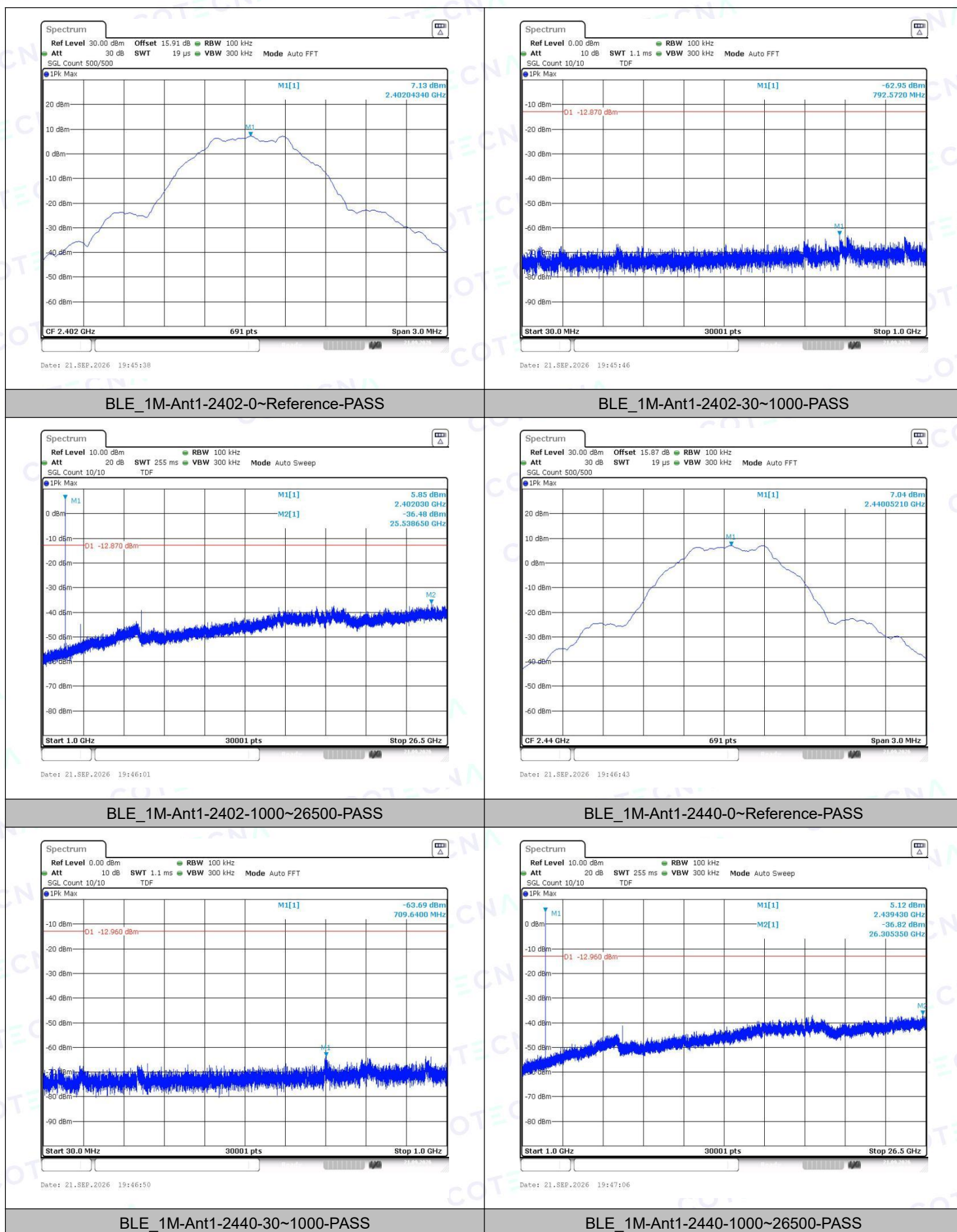


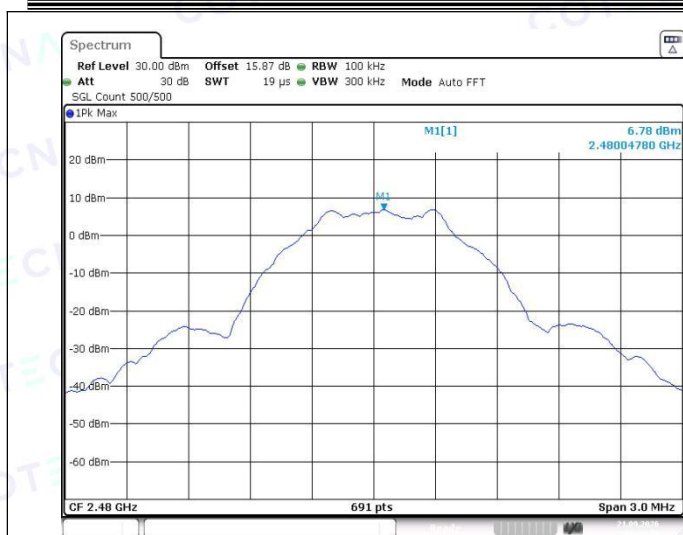
6: Conducted Spurious Emission

6.1 Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	7.13	7.13	---	PASS
BLE_1M	Ant1	2402	30~1000	7.13	-62.95	≤-12.87	PASS
BLE_1M	Ant1	2402	1000~26500	7.13	-36.48	≤-12.87	PASS
BLE_1M	Ant1	2440	0~Reference	7.04	7.04	---	PASS
BLE_1M	Ant1	2440	30~1000	7.04	-63.69	≤-12.96	PASS
BLE_1M	Ant1	2440	1000~26500	7.04	-36.82	≤-12.96	PASS
BLE_1M	Ant1	2480	0~Reference	6.78	6.78	---	PASS
BLE_1M	Ant1	2480	30~1000	6.78	-63.35	≤-13.22	PASS
BLE_1M	Ant1	2480	1000~26500	6.78	-36.67	≤-13.22	PASS
BLE_2M	Ant1	2402	0~Reference	7.17	7.17	---	PASS
BLE_2M	Ant1	2402	30~1000	7.17	-62.35	≤-12.83	PASS
BLE_2M	Ant1	2402	1000~26500	7.17	-37.16	≤-12.83	PASS
BLE_2M	Ant1	2440	0~Reference	7.08	7.08	---	PASS
BLE_2M	Ant1	2440	30~1000	7.08	-63.52	≤-12.92	PASS
BLE_2M	Ant1	2440	1000~26500	7.08	-36.73	≤-12.92	PASS
BLE_2M	Ant1	2480	0~Reference	6.75	6.75	---	PASS
BLE_2M	Ant1	2480	30~1000	6.75	-62.36	≤-13.25	PASS
BLE_2M	Ant1	2480	1000~26500	6.75	-36.51	≤-13.25	PASS

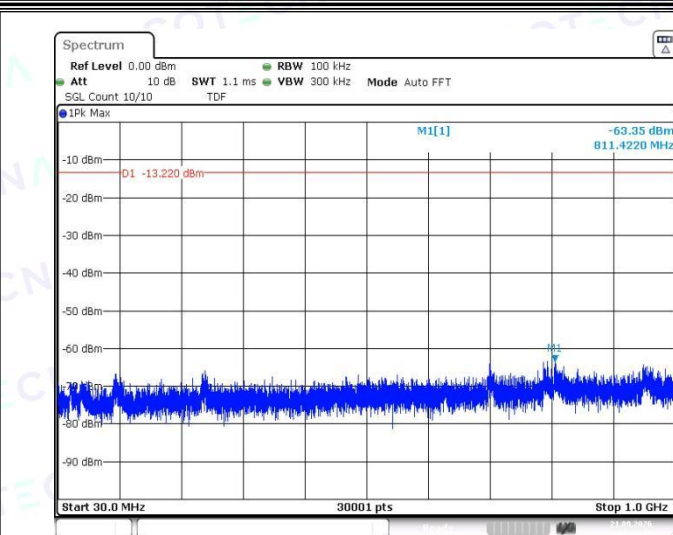
6.2 Test Graphs





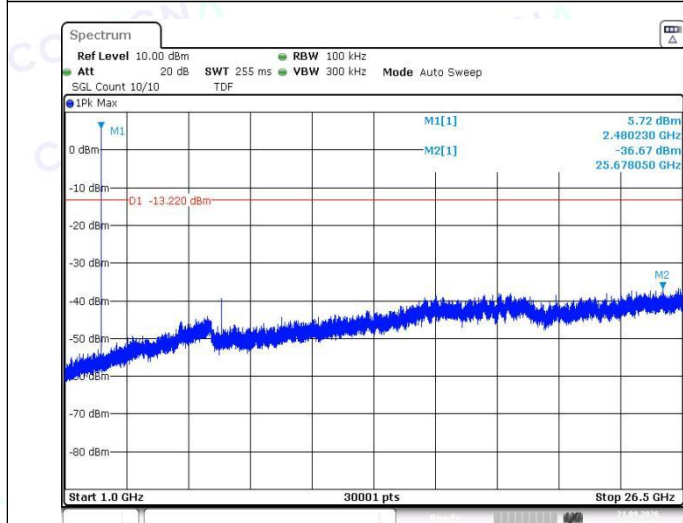
Date: 21.SEP.2026 19:48:29

BLE_1M-Ant1-2480-0~Reference-PASS



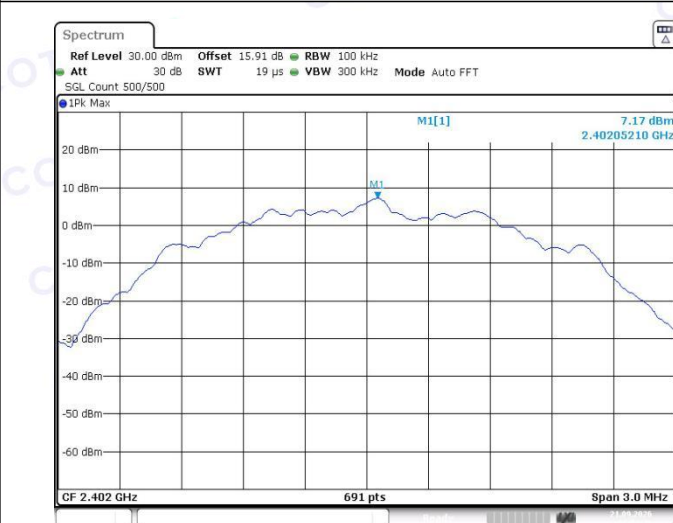
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BLE_1M-Ant1-2480-30~1000-PASS



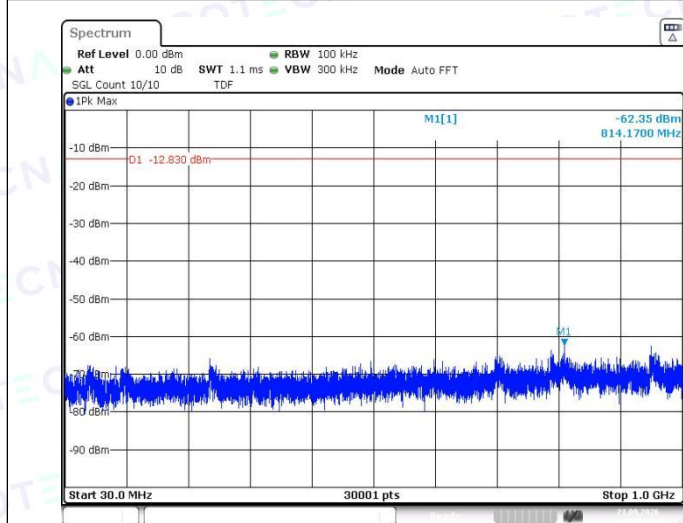
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BLE_1M-Ant1-2480-1000~26500-PASS



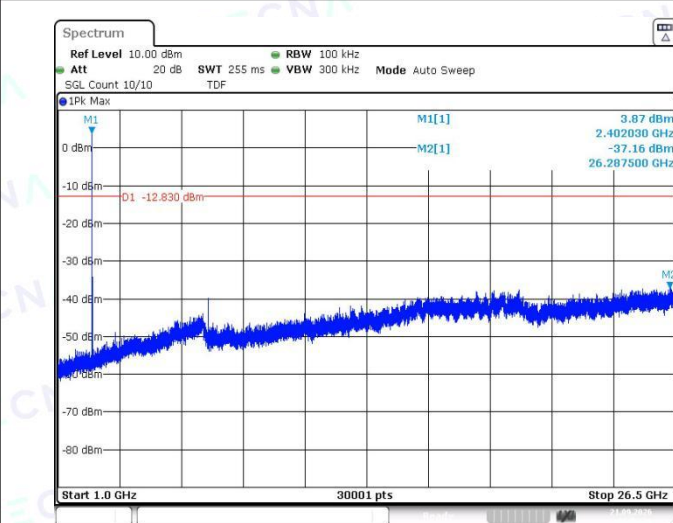
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BLE_2M-Ant1-2402-0~Reference-PASS



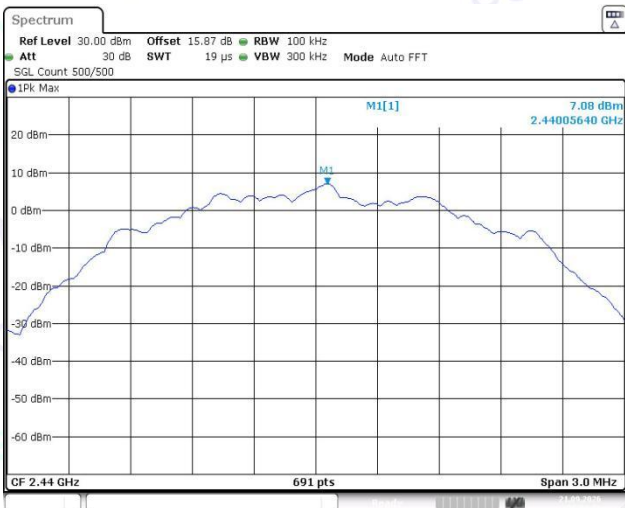
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BLE_2M-Ant1-2402-30~1000-PASS



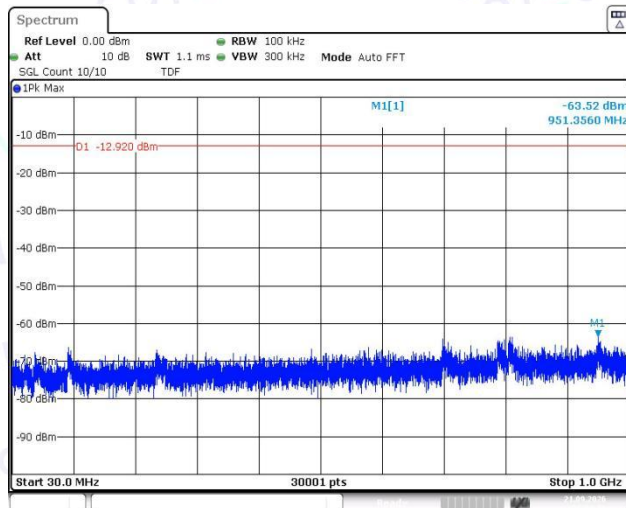
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BLE_2M-Ant1-2402-1000~26500-PASS



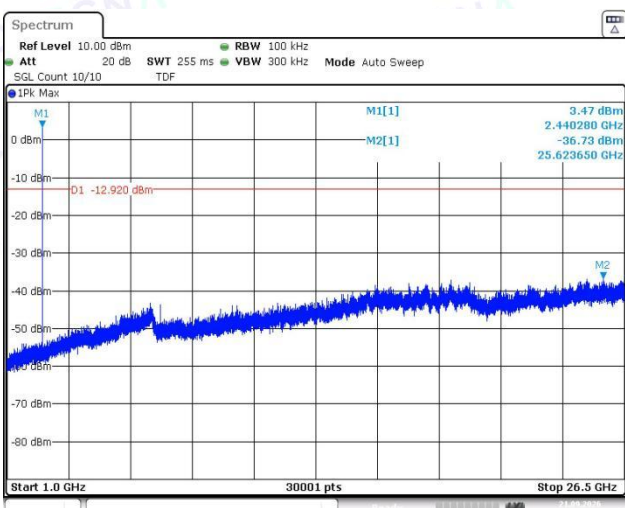
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BLE_2M-Ant1-2440-0~Reference-PASS



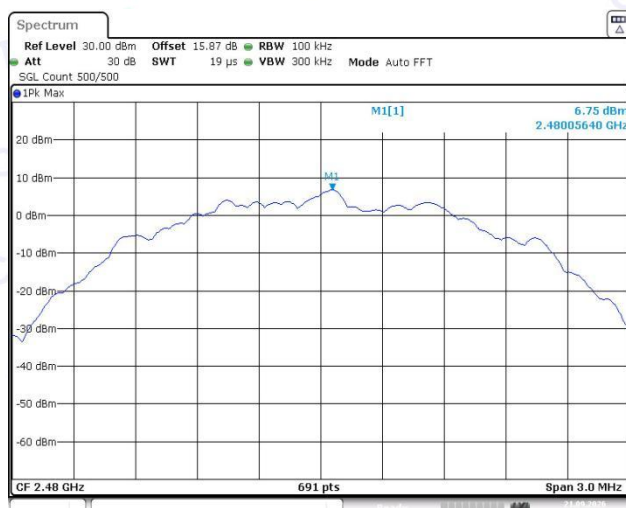
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BLE_2M-Ant1-2440-30~1000-PASS



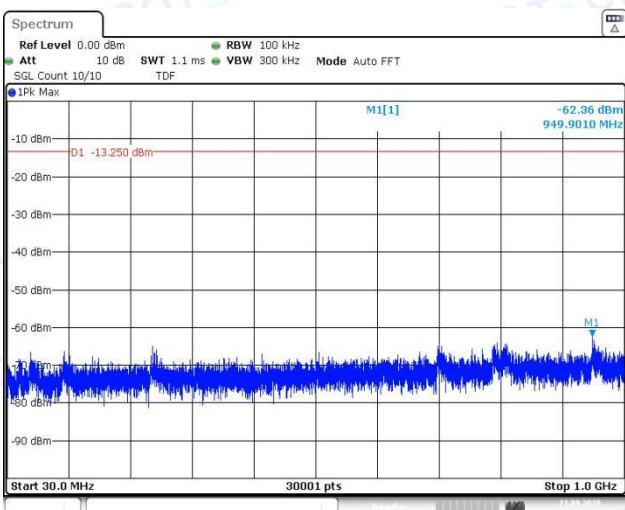
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BLE_2M-Ant1-2440-1000~26500-PASS



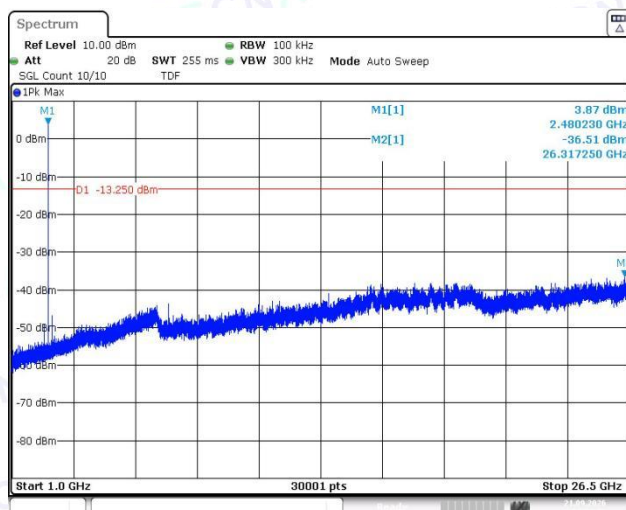
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BLE_2M-Ant1-2480-0~Reference-PASS



Date: 21.SEP.2026 20:09:19

BLE_2M-Ant1-2480-30~1000-PASS



Date: 21.SEP.2026 20:09:35

BLE_2M-Ant1-2480-1000~26500-PASS

7: Duty Cycle

7.1 Test Result

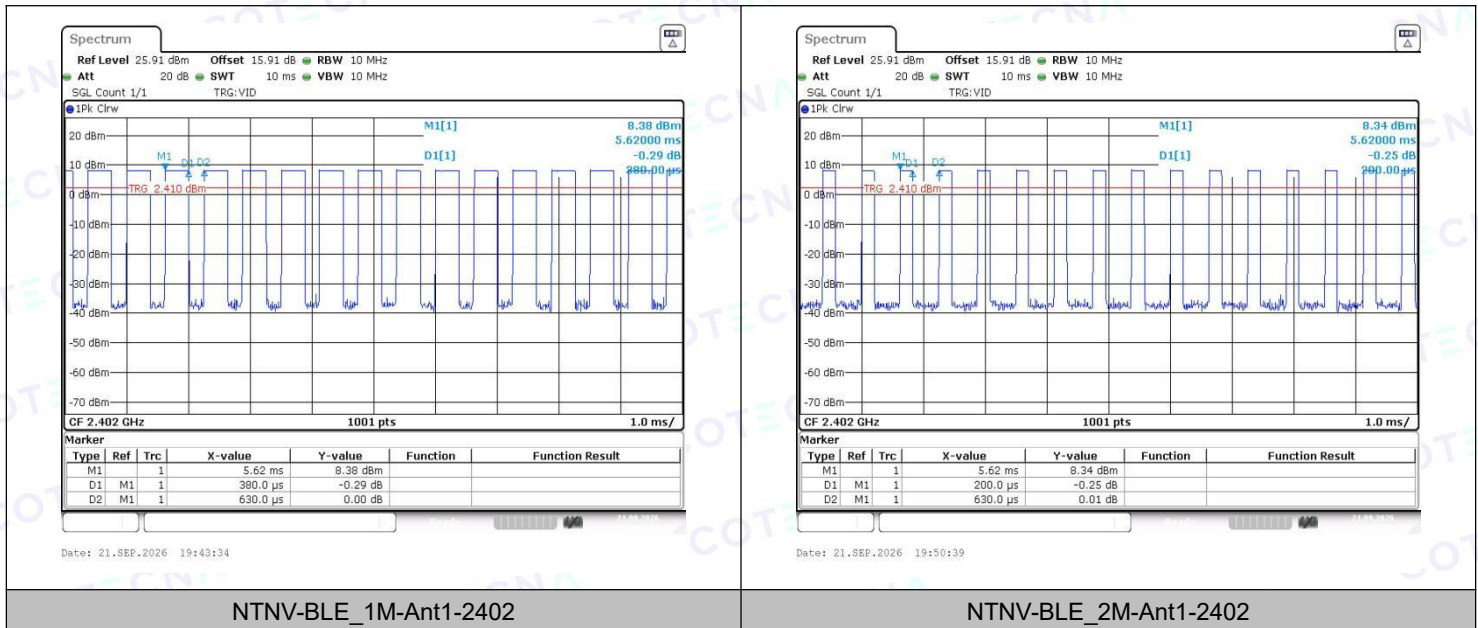
TestMode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor	1/T [kHz]
BLE_1M	Ant1	2402	0.38	0.63	60.32	2.20	2.63
BLE_2M	Ant1	2402	0.20	0.63	31.75	4.98	5.00

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

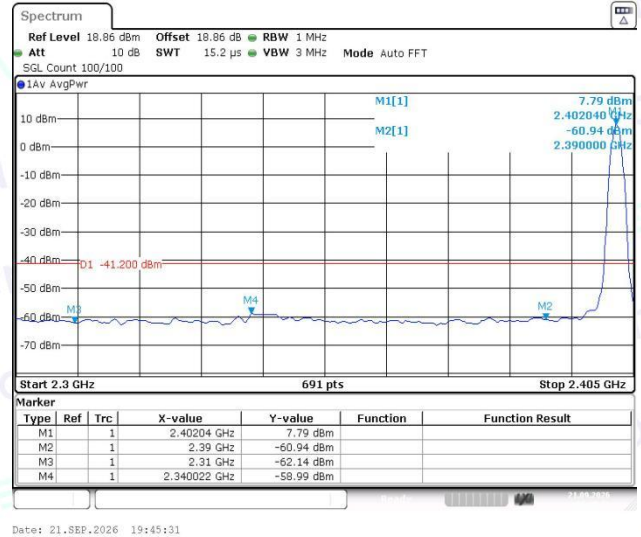
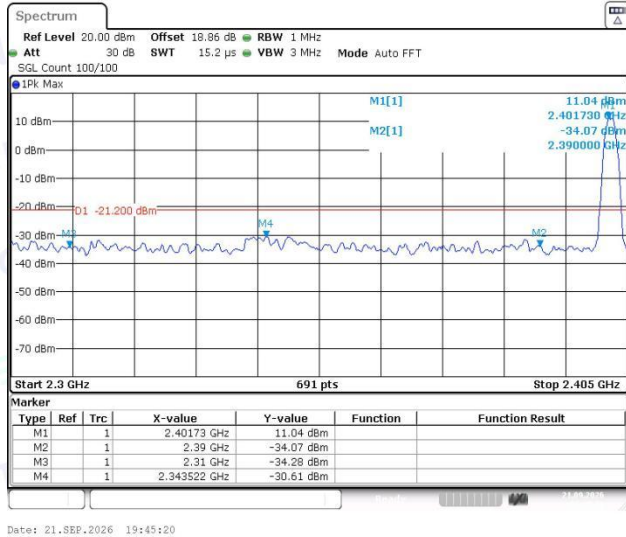
8.1 Test Result

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	-34.07	≤-21.20	61.13	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2310.000	-34.28	≤-21.20	60.92	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2343.522	-30.61	≤-21.20	64.59	≤74	PASS
BLE_1M	Ant1	Low	2402	AV	2390.000	-60.94	≤-41.20	34.26	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2310.000	-62.14	≤-41.20	33.06	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2340.022	-58.99	≤-41.20	36.21	≤54	PASS
BLE_1M	Ant1	High	2480	Peak	2483.500	-34.49	≤-21.20	60.71	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2500.000	-35.34	≤-21.20	59.86	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2484.841	-32	≤-21.20	63.20	≤74	PASS
BLE_1M	Ant1	High	2480	AV	2483.500	-57.74	≤-41.20	37.46	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2500.000	-60.8	≤-41.20	34.40	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2483.913	-57.38	≤-41.20	37.82	≤54	PASS
BLE_2M	Ant1	Low	2402	Peak	2390.000	-35.36	≤-21.20	59.84	≤74	PASS
BLE_2M	Ant1	Low	2402	Peak	2310.000	-32.73	≤-21.20	62.47	≤74	PASS
BLE_2M	Ant1	Low	2402	Peak	2341.696	-31.7	≤-21.20	63.50	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2390.000	-61.16	≤-41.20	34.04	≤54	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-61.98	≤-41.20	33.22	≤54	PASS
BLE_2M	Ant1	Low	2402	AV	2341.543	-59.04	≤-41.20	36.16	≤54	PASS
BLE_2M	Ant1	High	2480	Peak	2483.500	-35.22	≤-21.20	59.98	≤74	PASS
BLE_2M	Ant1	High	2480	Peak	2500.000	-34.96	≤-21.20	60.24	≤74	PASS
BLE_2M	Ant1	High	2480	Peak	2485.304	-31.33	≤-21.20	63.87	≤74	PASS
BLE_2M	Ant1	High	2480	AV	2483.500	-49.28	≤-41.20	45.92	≤54	PASS
BLE_2M	Ant1	High	2480	AV	2500.000	-61.47	≤-41.20	33.73	≤54	PASS
BLE_2M	Ant1	High	2480	AV	2483.565	-51.06	≤-41.20	44.14	≤54	PASS

Note:

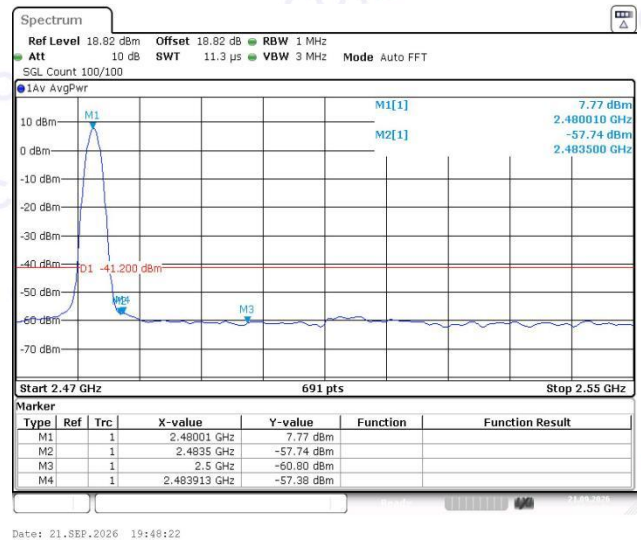
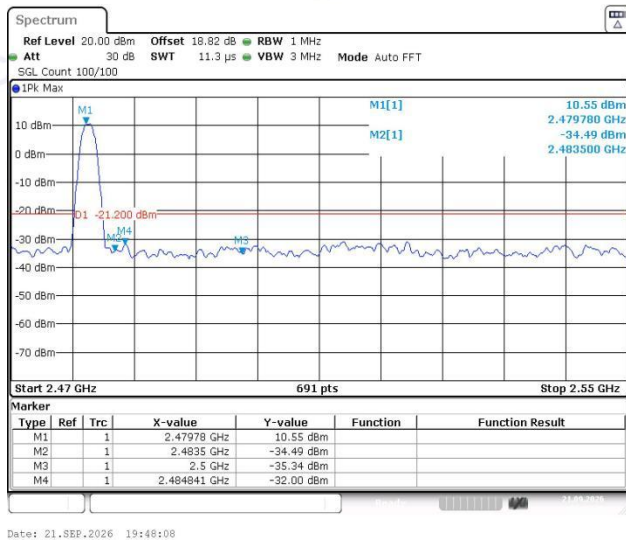
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

8.2 Test Graphs



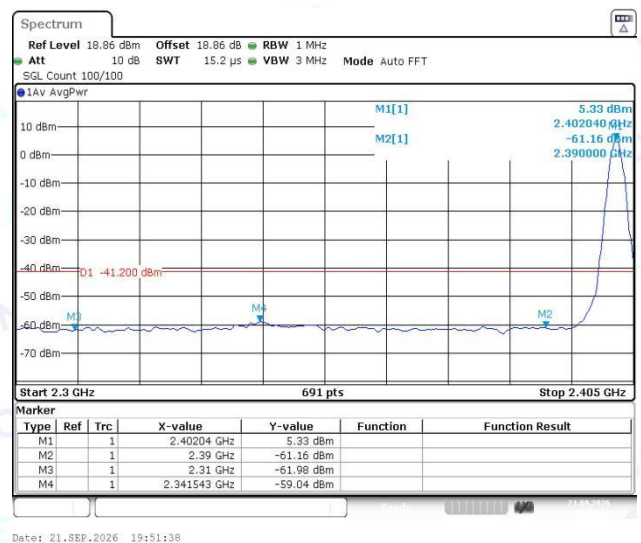
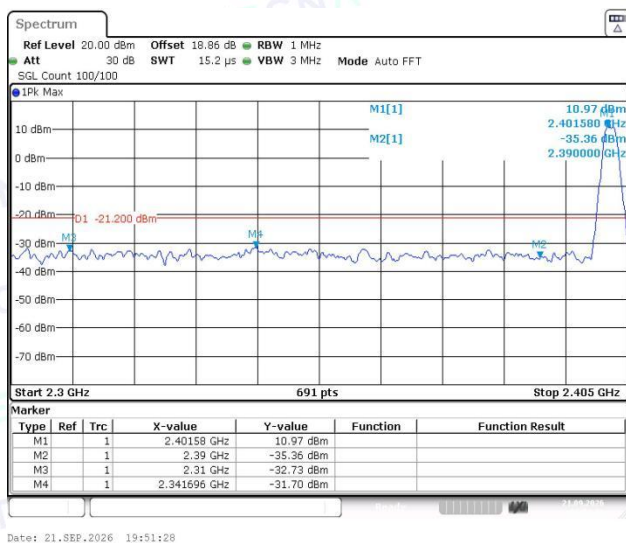
BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2402-PASS



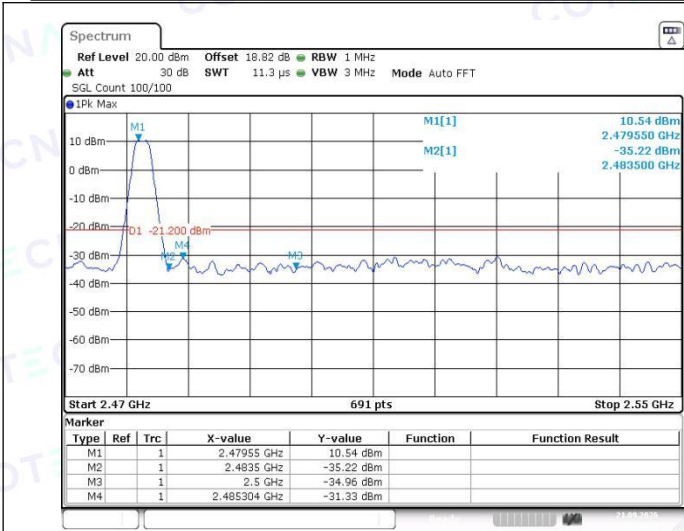
BLE_1M-Ant1-2480-PASS

BLE_1M-Ant1-2480-PASS

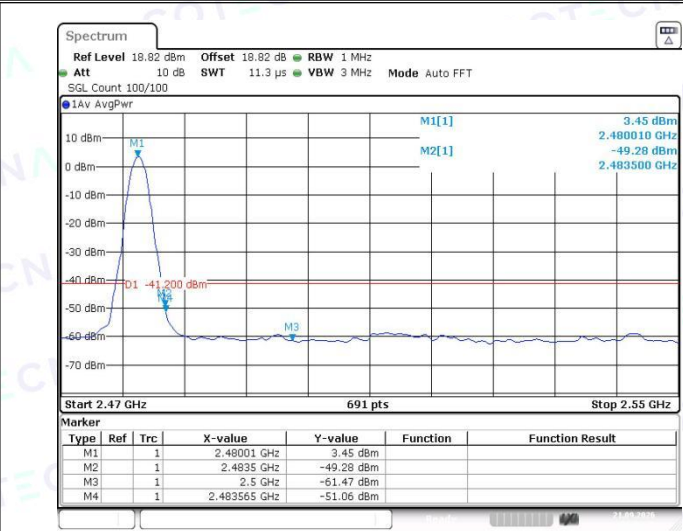


BLE_2M-Ant1-2402-PASS

BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2480-PASS



BLE_2M-Ant1-2480-PASS

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