

Appendix for Bluetooth BLE

Model: ANY-NX1

BTL-FCCP-2-2203G020

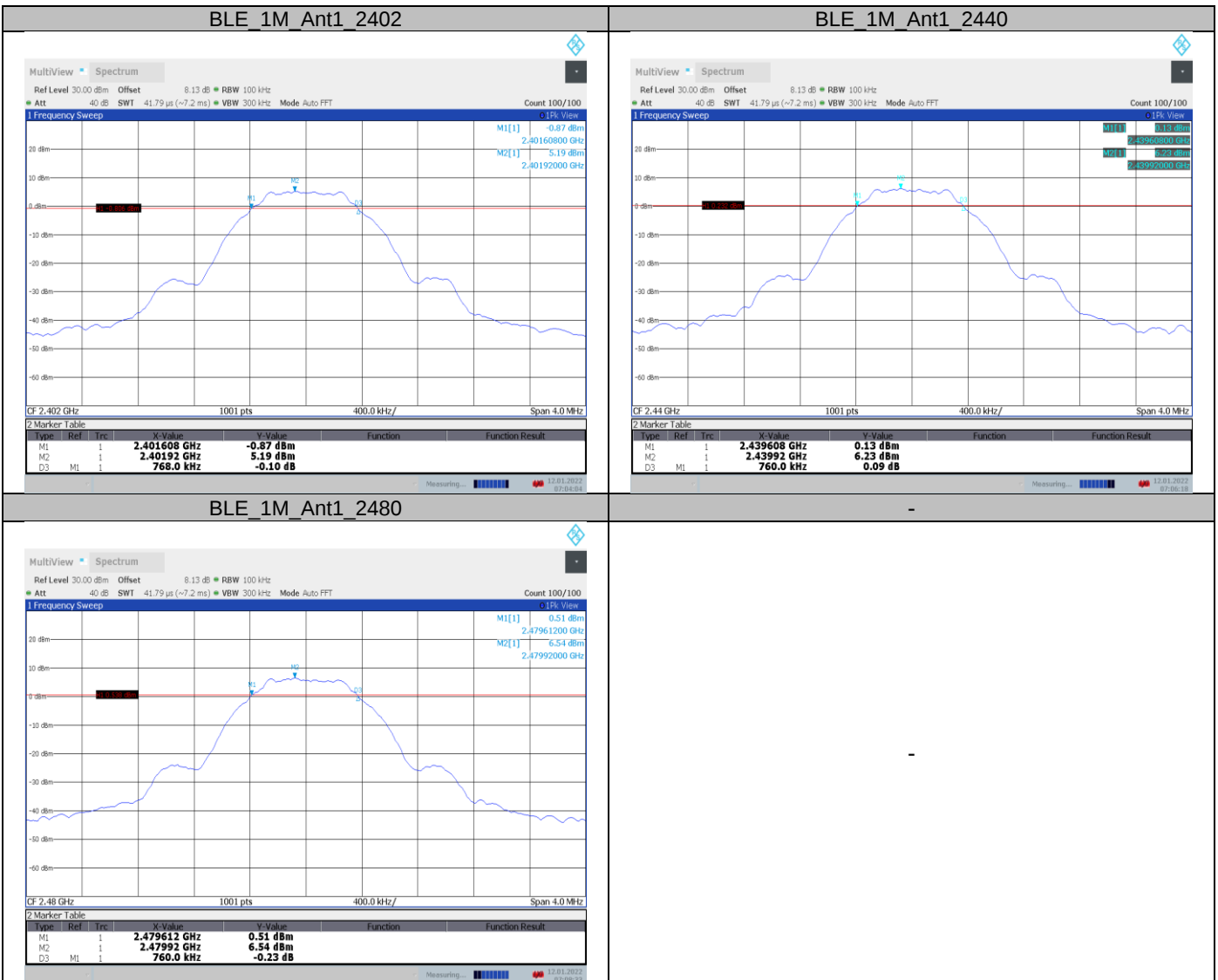
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1. APPENDIX A: 6 DB BANDWIDTH

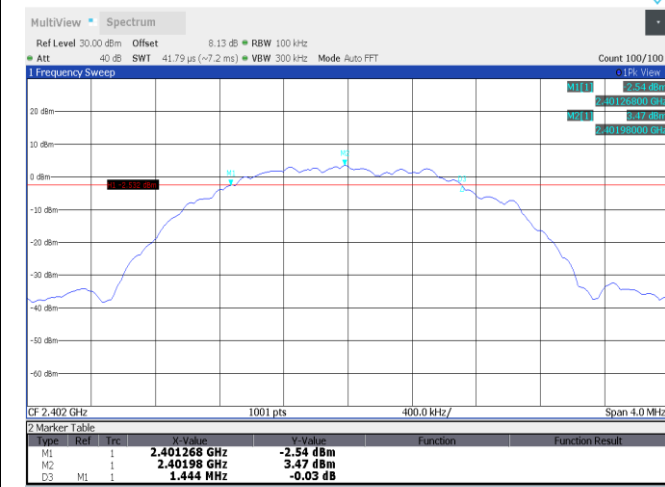
1.1 TEST RESULT

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	0.768	2401.608	2402.376	0.5	PASS
		2440	0.760	2439.608	2440.368	0.5	PASS
		2480	0.760	2479.612	2480.372	0.5	PASS
BLE_2M	Ant1	2402	1.444	2401.268	2402.712	0.5	PASS
		2440	1.396	2439.300	2440.696	0.5	PASS
		2480	1.452	2479.252	2480.704	0.5	PASS

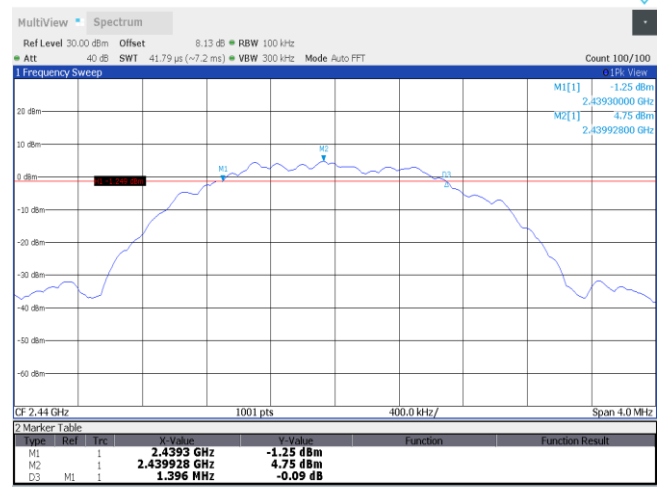
1.2 TEST GRAPHS



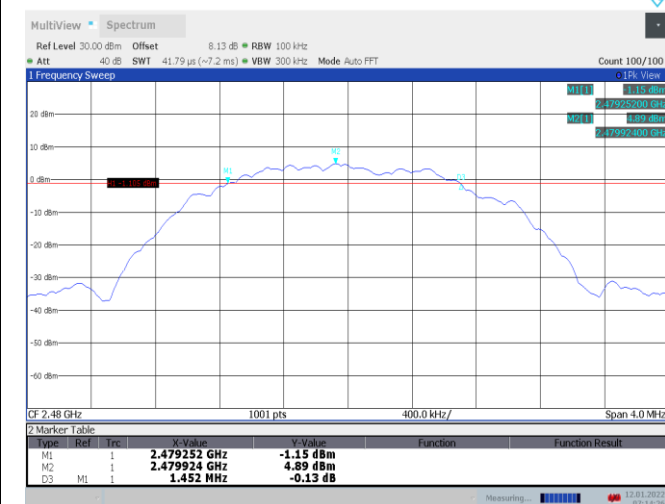
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

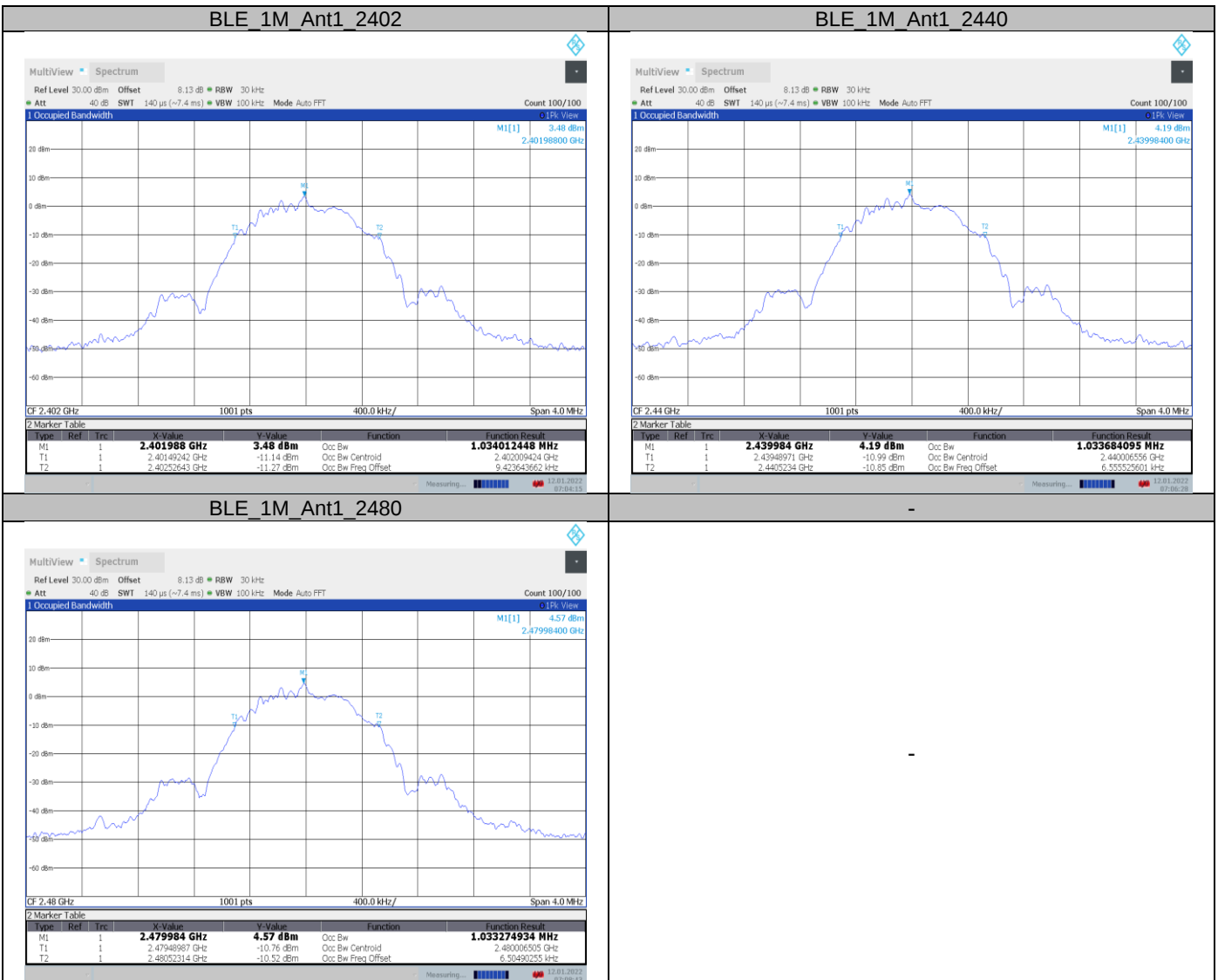


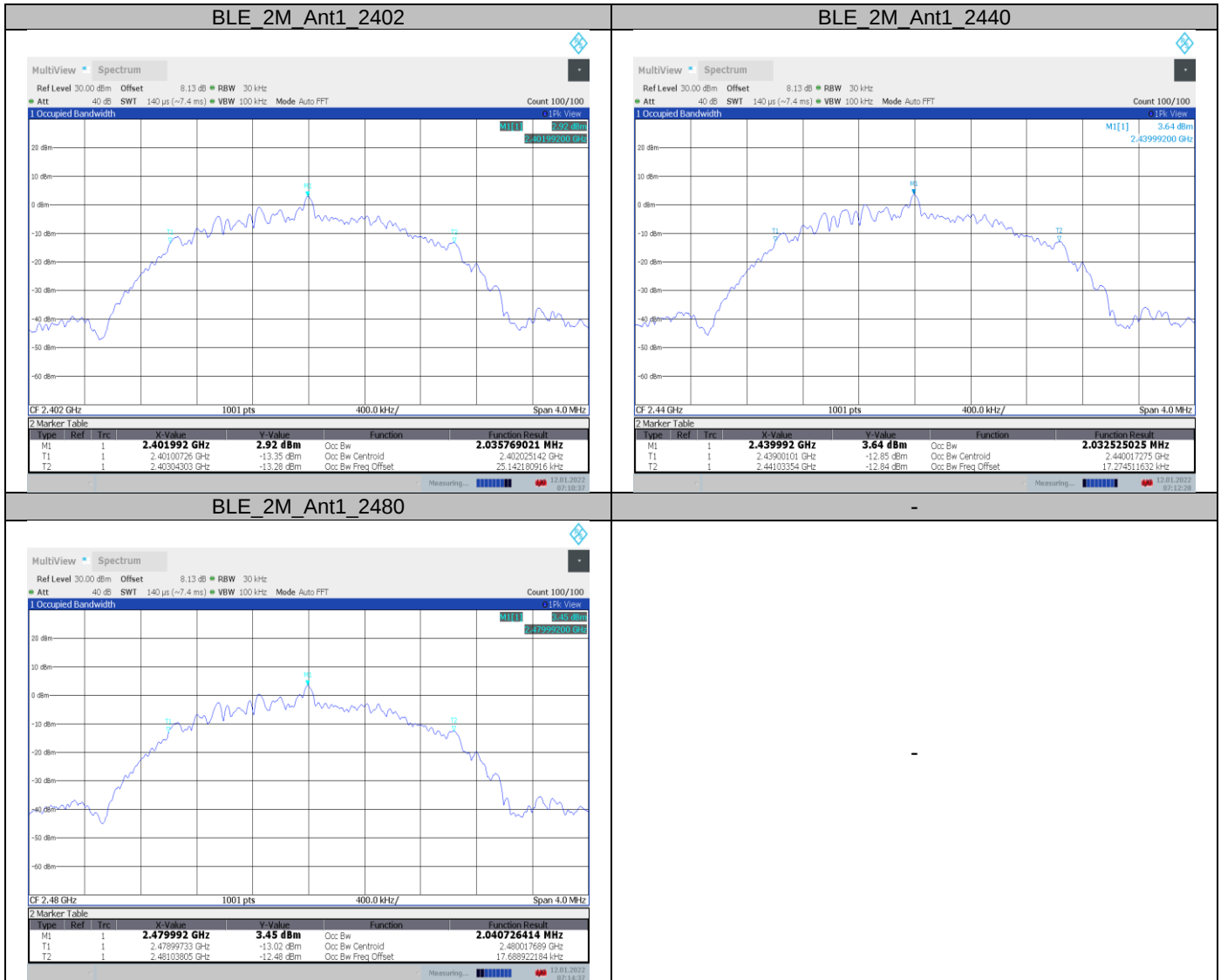
2. APPENDIX B: 99% EMISSION BANDWIDTH

2.1 TEST RESULT

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	1.034	2401.492	2402.526	---	PASS
		2440	1.034	2439.490	2440.523	---	PASS
		2480	1.033	2479.490	2480.523	---	PASS
BLE_2M	Ant1	2402	2.036	2401.007	2403.043	---	PASS
		2440	2.033	2439.001	2441.034	---	PASS
		2480	2.041	2478.997	2481.038	---	PASS

2.2 TEST GRAPHS



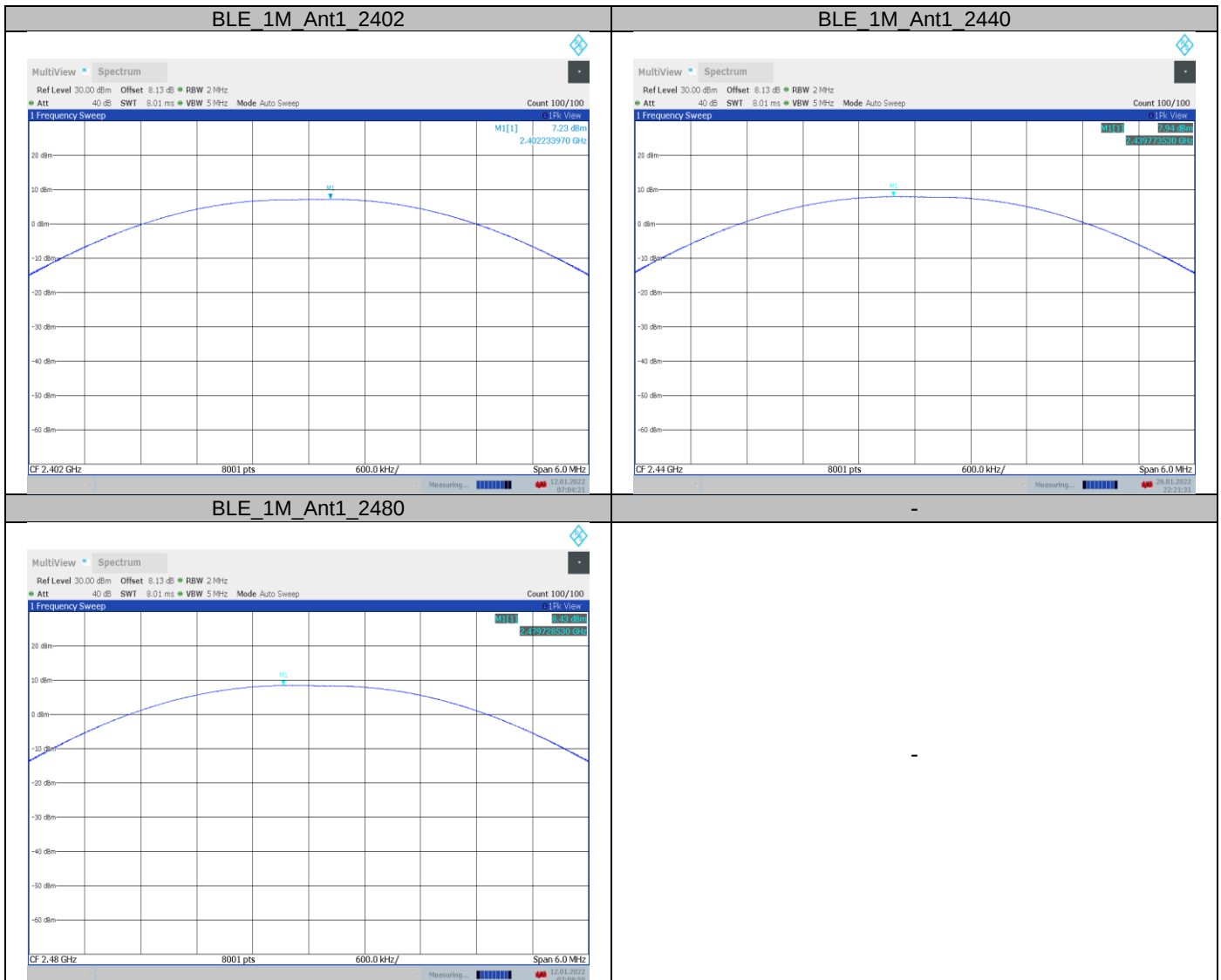


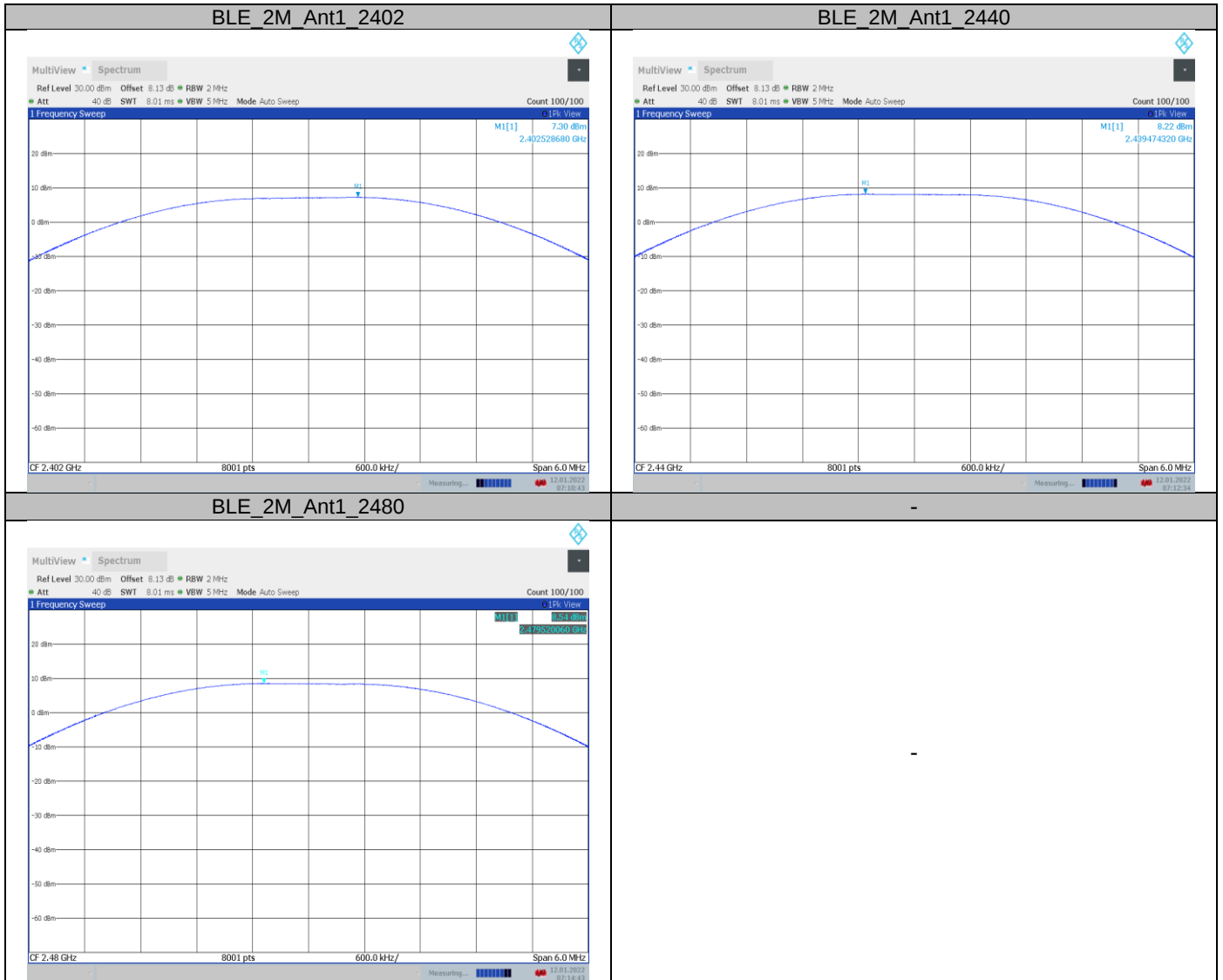
3. APPENDIX C: MAXIMUM OUTPUT POWER

3.1 TEST RESULT

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Peak Power Limit [dBm]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
BLE_1M	Ant1	2402	7.23	≤ 30	7.23	≤ 36	PASS
		2440	7.94	≤ 30	6.74	≤ 36	PASS
		2480	8.43	≤ 30	8.43	≤ 36	PASS
BLE_2M	Ant1	2402	7.3	≤ 30	7.3	≤ 36	PASS
		2440	8.22	≤ 30	8.22	≤ 36	PASS
		2480	8.54	≤ 30	8.54	≤ 36	PASS

3.2 TEST GRAPHS



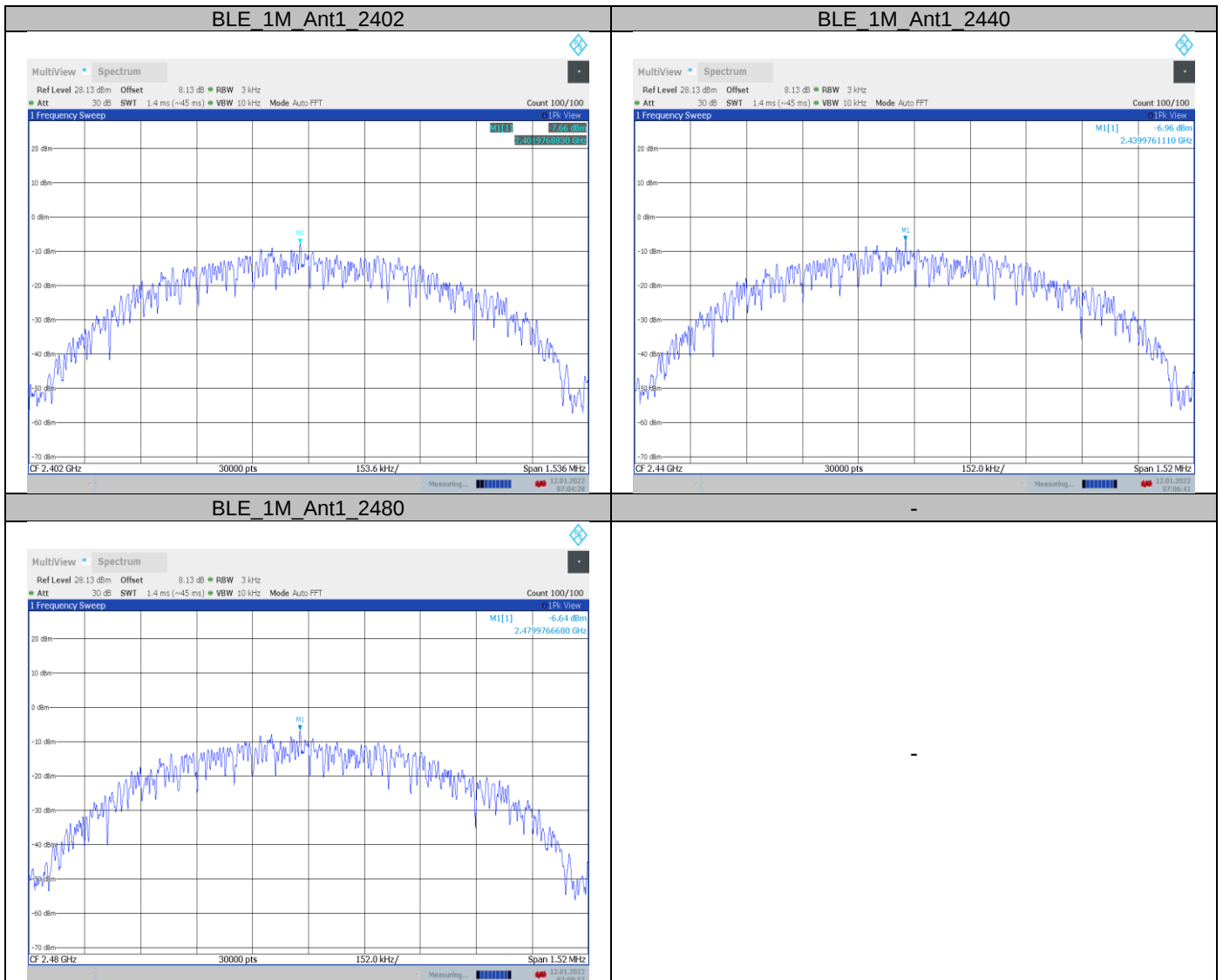


4. APPENDIX D: POWER SPECTRAL DENSITY

4.1 TEST RESULT

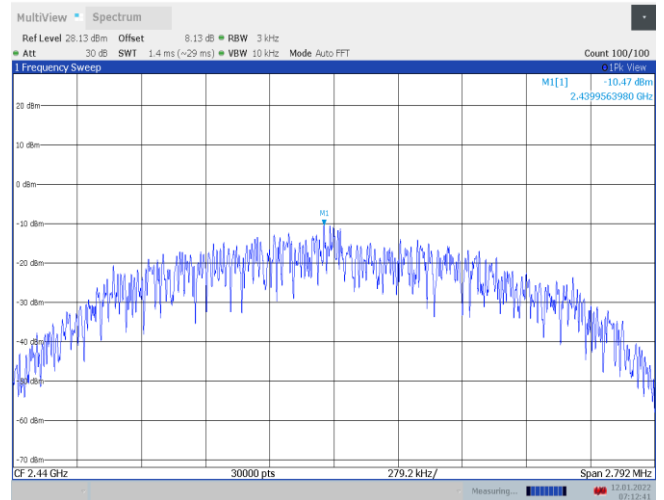
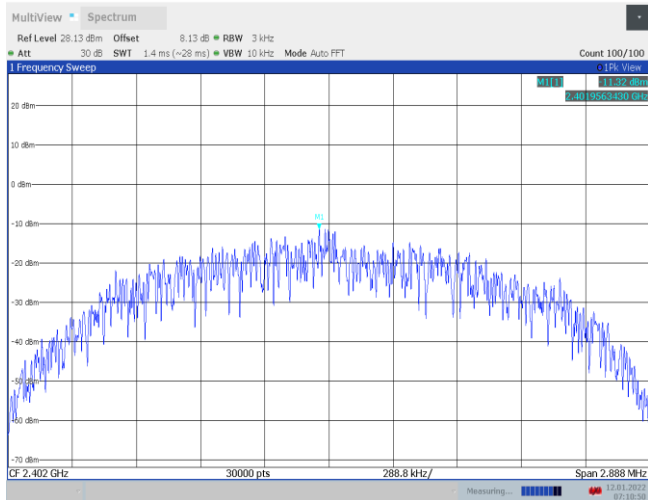
Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-7.66	<=8	PASS
		2440	-6.96	<=8	PASS
		2480	-6.64	<=8	PASS
BLE_2M	Ant1	2402	-11.32	<=8	PASS
		2440	-10.47	<=8	PASS
		2480	-10.19	<=8	PASS

4.2 TEST GRAPHS

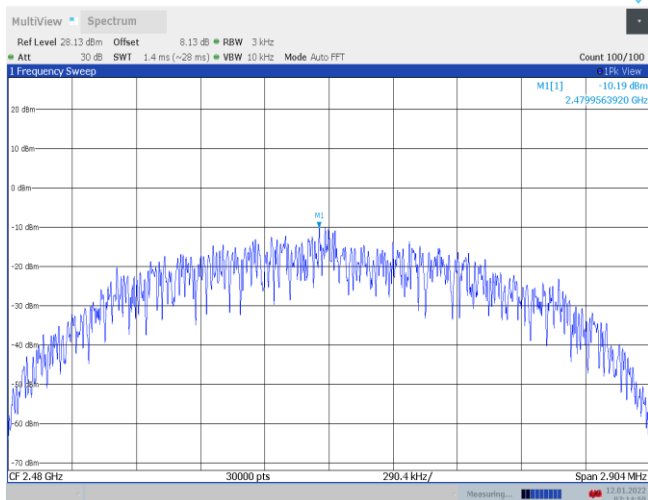


BLE_2M_Ant1_2402

BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



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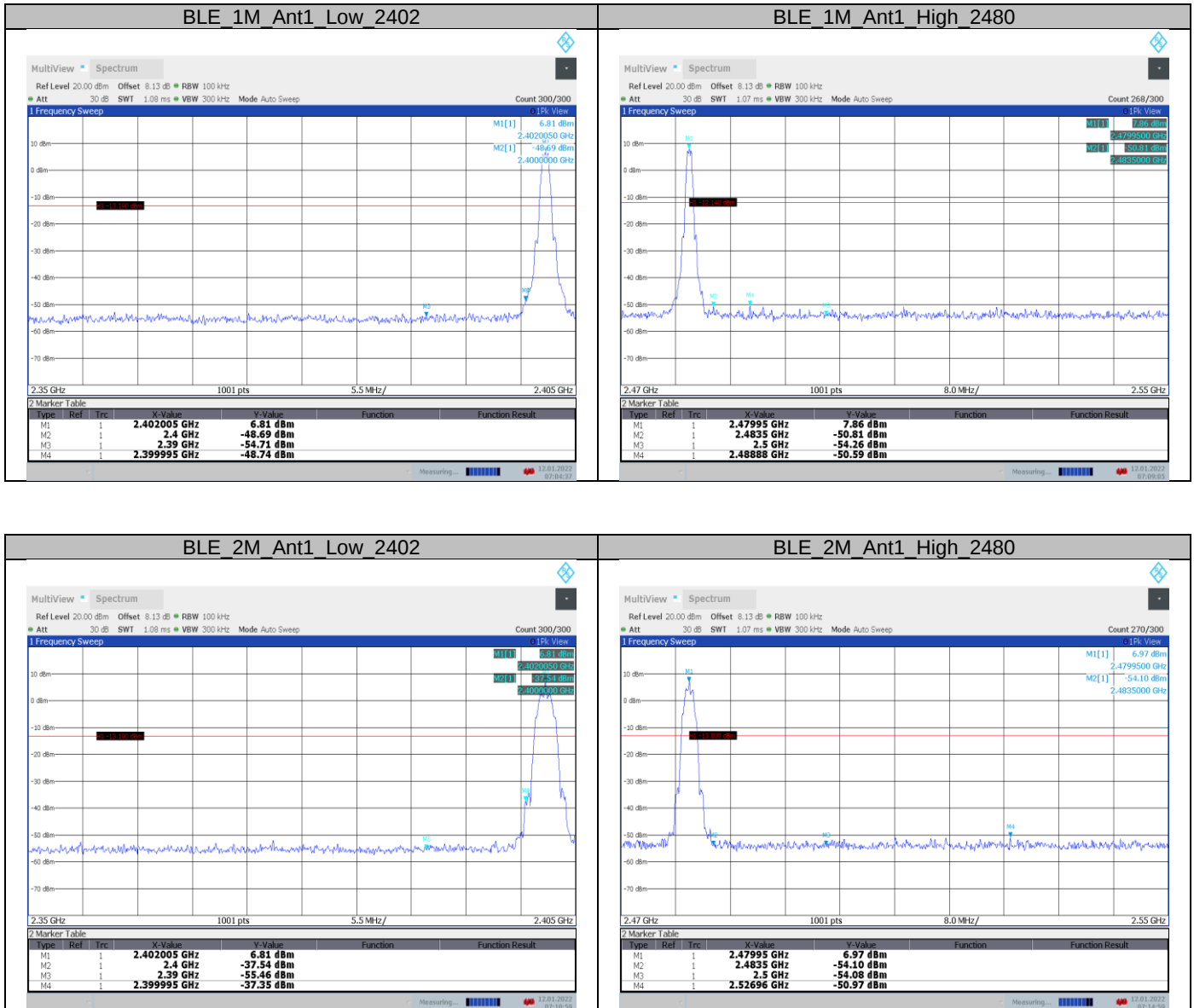
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5. APPENDIX F: BAND EDGE MEASUREMENTS

5.1 TEST RESULT

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	6.81	-48.74	<=-13.19	PASS
		High	2480	7.86	-50.59	<=-12.14	PASS
BLE_2M	Ant1	Low	2402	6.81	-37.35	<=-13.19	PASS
		High	2480	6.97	-50.97	<=-13.03	PASS

5.2 TEST GRAPHS

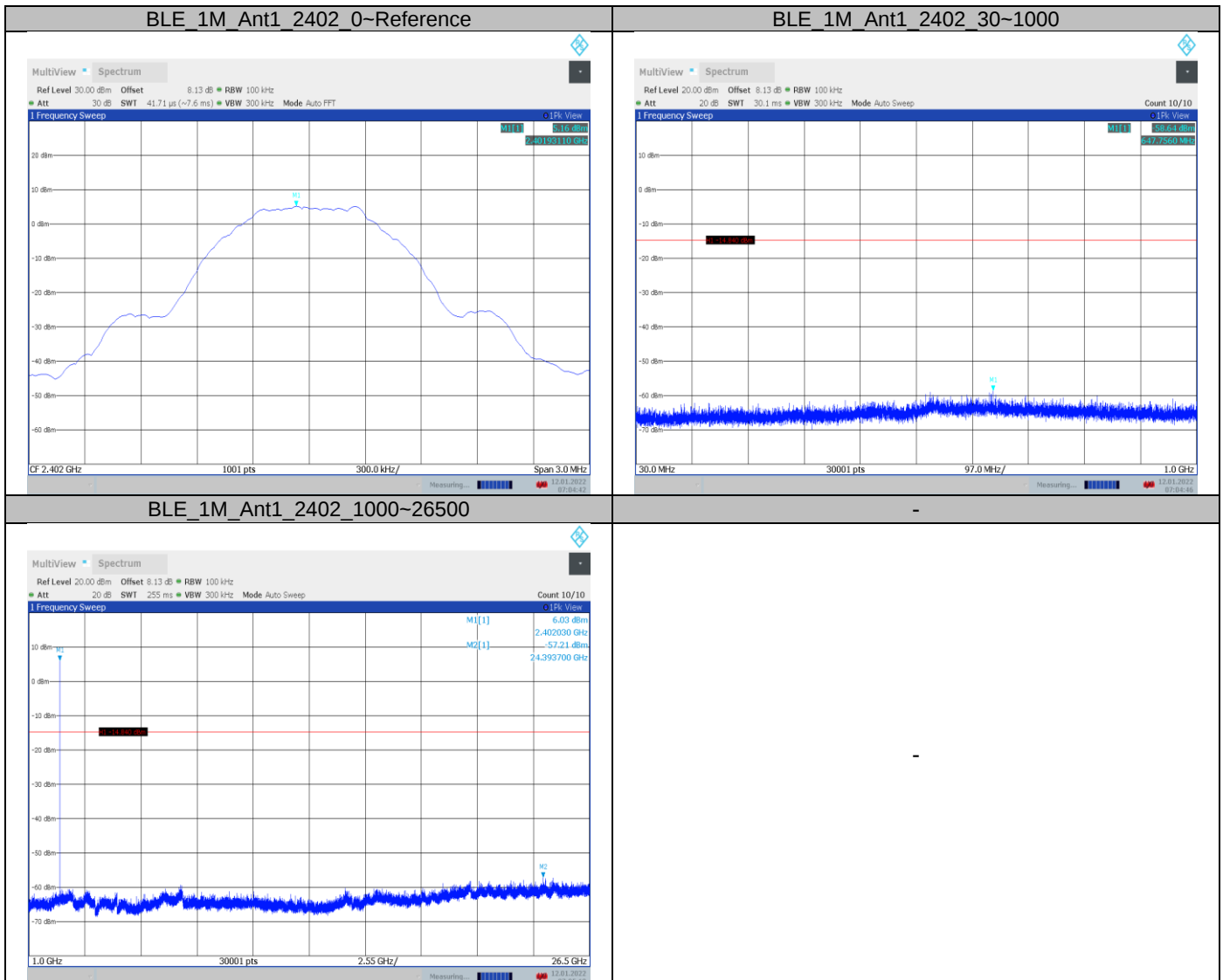


6. APPENDIX G: CONDUCTED SPURIOUS EMISSION

6.1 TEST RESULT

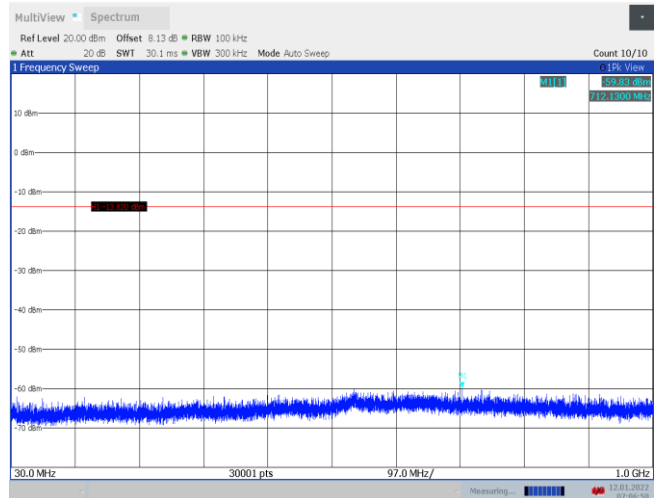
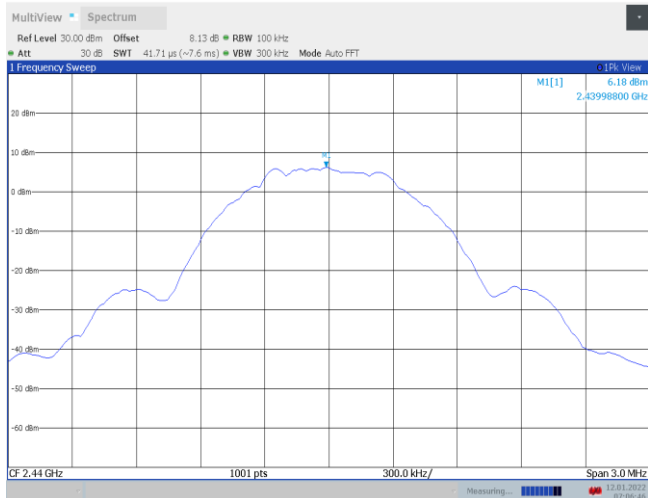
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	5.16	5.16	---	PASS
			30~1000	5.16	-58.64	<=-14.84	PASS
			1000~26500	5.16	-57.21	<=-14.84	PASS
		2440	Reference	6.18	6.18	---	PASS
			30~1000	6.18	-59.83	<=-13.82	PASS
			1000~26500	6.18	-57.43	<=-13.82	PASS
		2480	Reference	6.28	6.28	---	PASS
			30~1000	6.28	-59.41	<=-13.72	PASS
			1000~26500	6.28	-57.65	<=-13.72	PASS
BLE_2M	Ant1	2402	Reference	3.39	3.39	---	PASS
			30~1000	3.39	-59.44	<=-16.61	PASS
			1000~26500	3.39	-57.89	<=-16.61	PASS
		2440	Reference	4.28	4.28	---	PASS
			30~1000	4.28	-59.32	<=-15.72	PASS
			1000~26500	4.28	-57.73	<=-15.72	PASS
		2480	Reference	4.79	4.79	---	PASS
			30~1000	4.79	-59.2	<=-15.21	PASS
			1000~26500	4.79	-57.49	<=-15.21	PASS

6.2 TEST GRAPHS

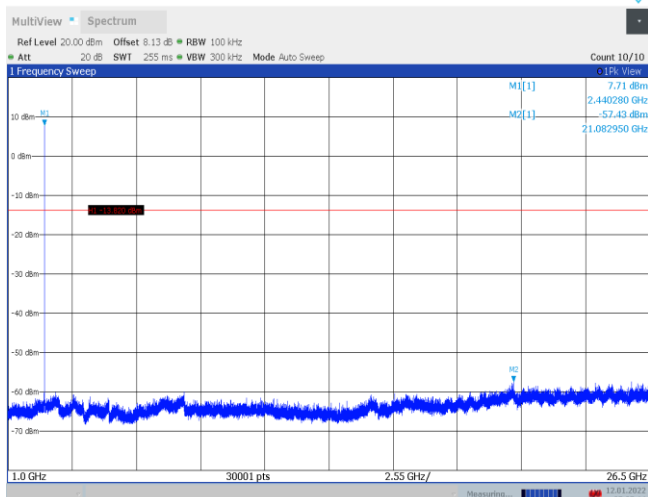


BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000

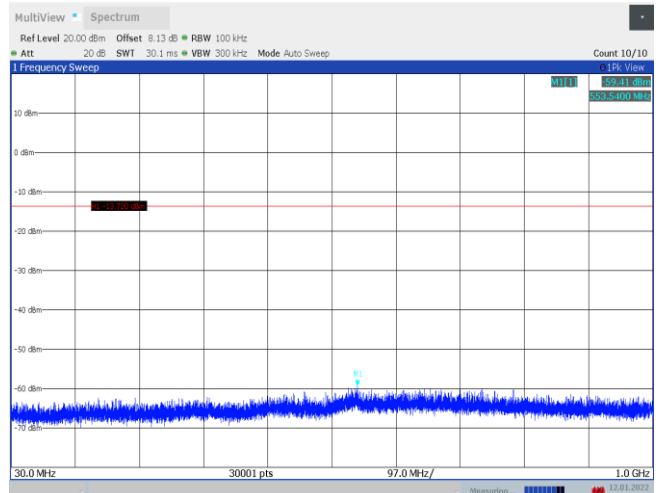
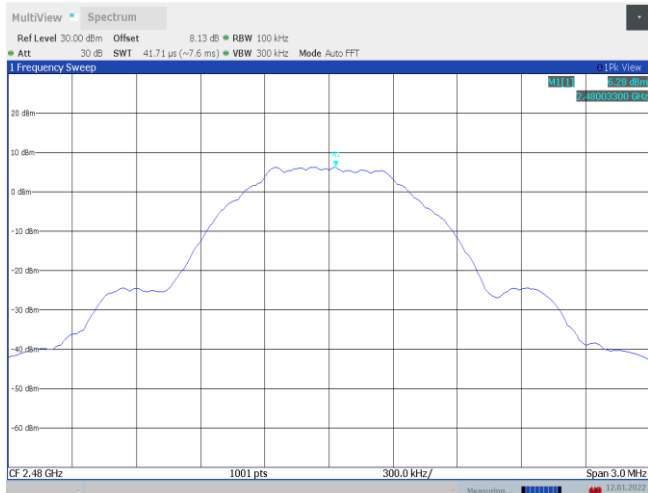


BLE_1M_Ant1_2440_1000~26500

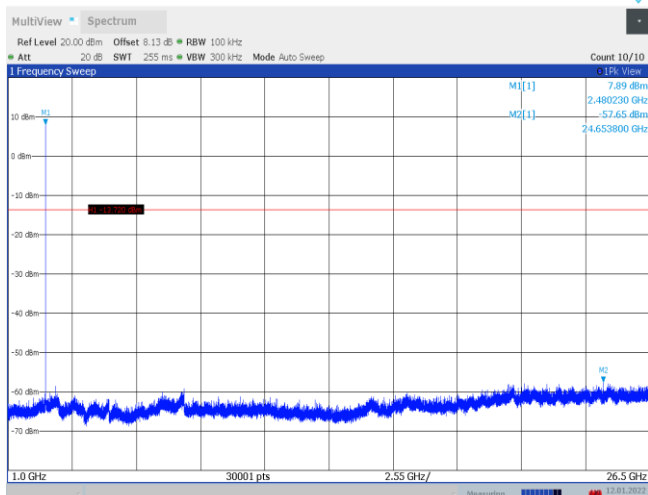


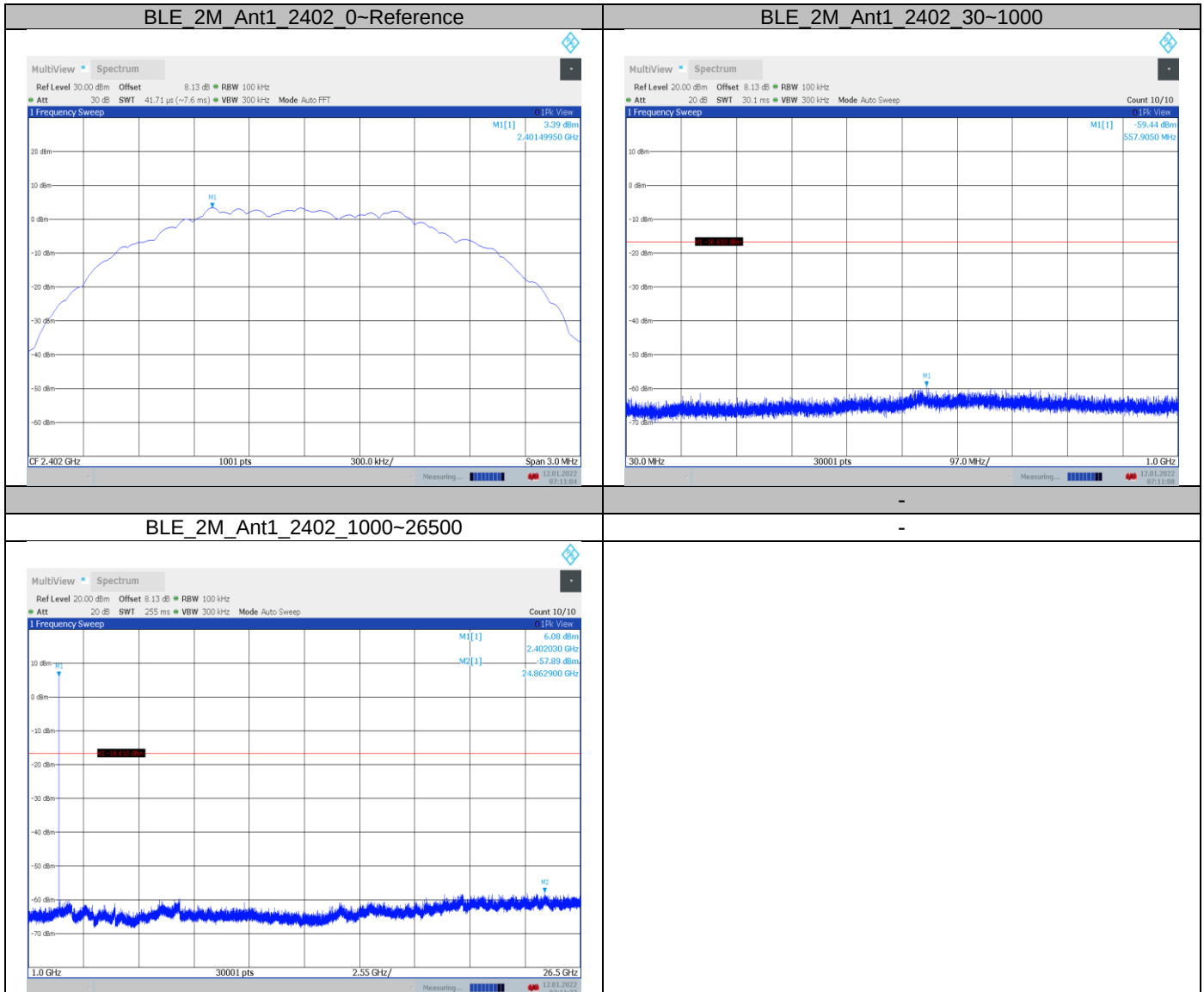
BLE_1M_Ant1_2480_0~Reference

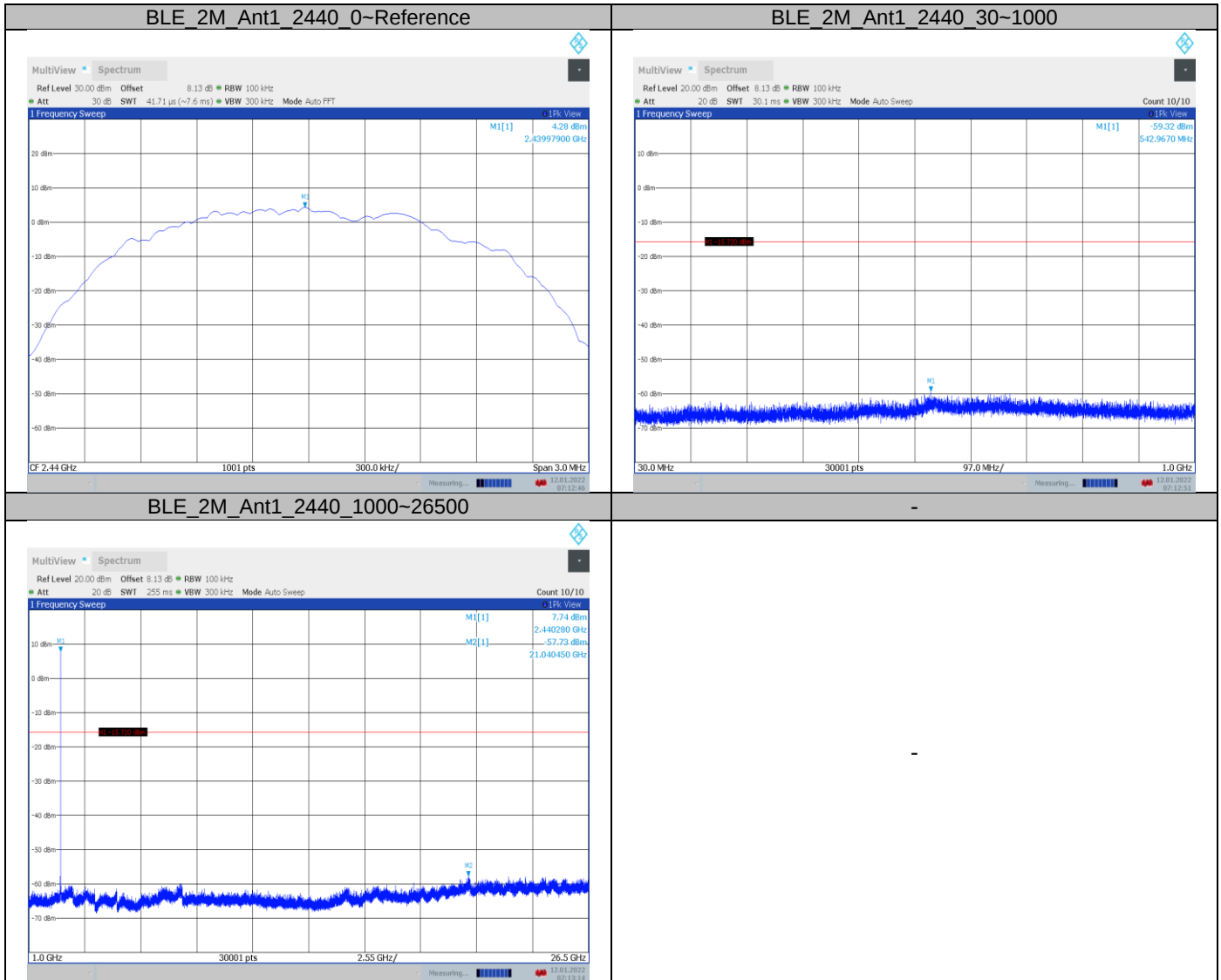
BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

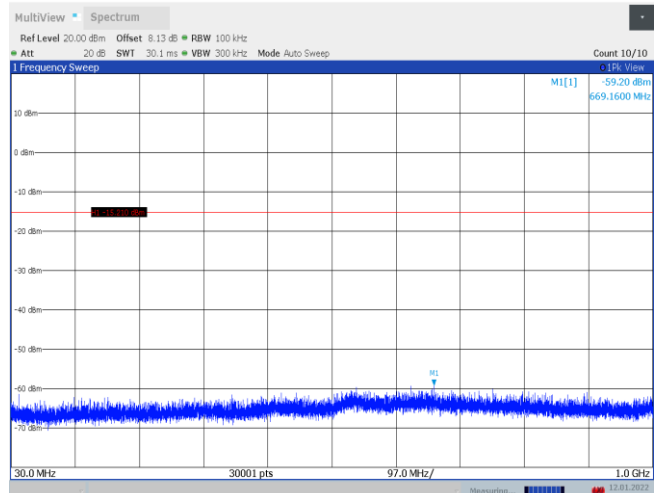
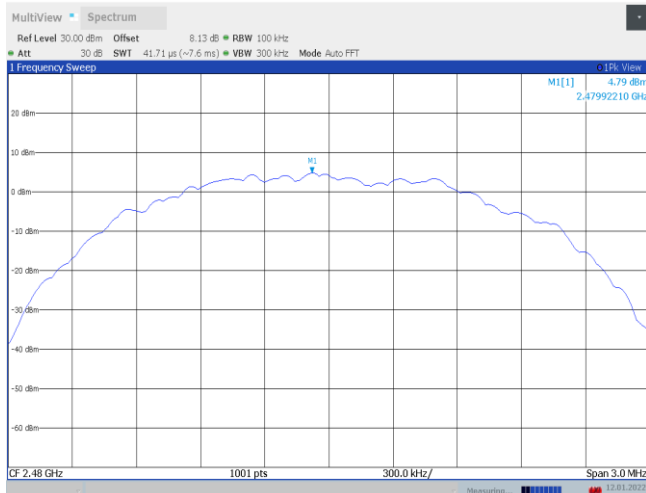




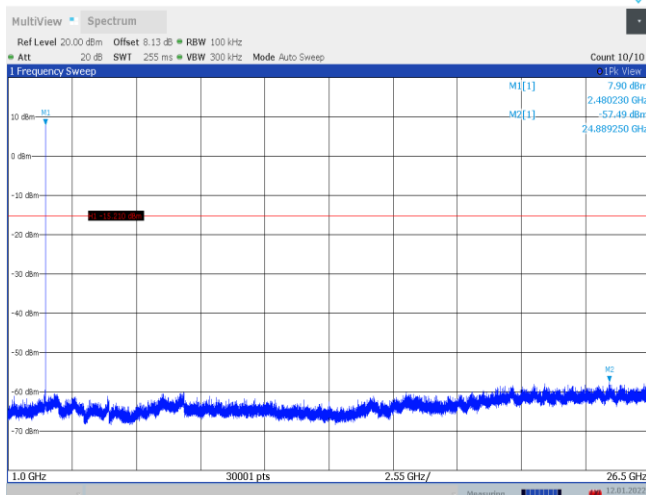


BLE_2M_Ant1_2480_0~Reference

BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500

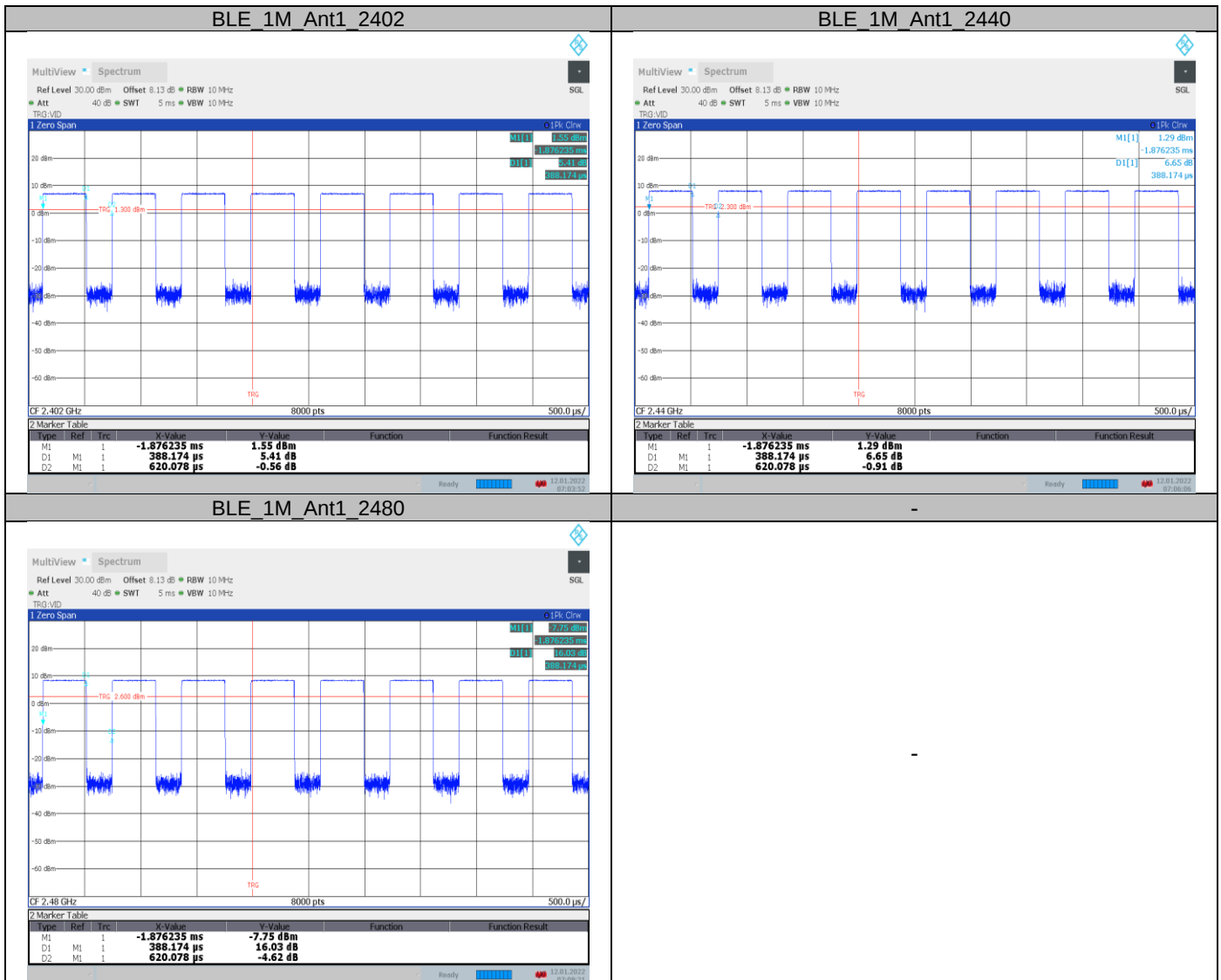


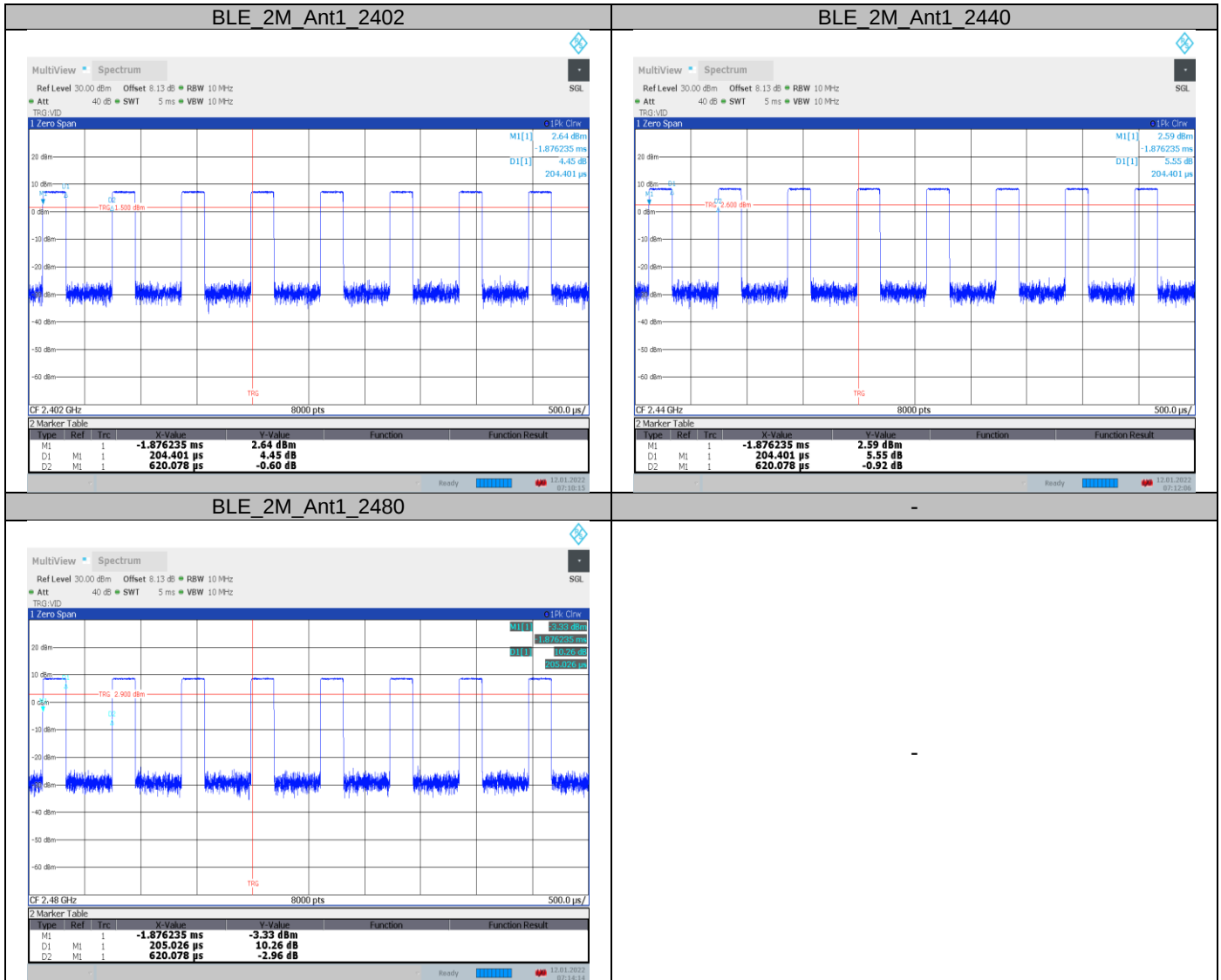
7. APPENDIX H: DUTY CYCLE

7.1 TEST RESULT

Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.39	0.62	62.90	2.01
		2440	0.39	0.62	62.90	2.01
		2480	0.39	0.62	62.90	2.01
BLE_2M	Ant1	2402	0.20	0.62	32.26	4.91
		2440	0.20	0.62	32.26	4.91
		2480	0.21	0.62	33.87	4.70

7.2 TEST GRAPHS





End of Test Report