

















13.3. Appendix A3: Min emission bandwidth

13.3.1. Test Result

Test Mode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5720 UNII- 3	3.2	5725	5728.200	0.5	PASS
		5745	15.960	5736.880	5752.840	0.5	PASS
		5785	16.400	5776.840	5793.240	0.5	PASS
		5825	16.400	5816.800	5833.200	0.5	PASS
11N20SISO	Ant1	5720 UNII- 3	3.84	5725	5728.840	0.5	PASS
		5745	16.120	5737.200	5753.320	0.5	PASS
		5785	17.440	5776.200	5793.640	0.5	PASS
		5825	16.520	5816.800	5833.320	0.5	PASS
11N40SISO	Ant1	5710 UNII- 3	2.52	5725	5727.520	0.5	PASS
		5755	35.280	5737.320	5772.600	0.5	PASS
		5795	35.520	5777.320	5812.840	0.5	PASS



13.3.2. Test Graphs









13.4. Appendix B: Maximum AVG conducted output power

13.4.1. Test Result

Test Mode	Antenna	Channel	Power [dBm]	FCC Limit [dBm]	ISED Limit [dBm]	EIRP [dBm]	ISED Limit [dBm]	Verdict
11A	Ant1	5180	15.56	<=23.98	---	19.73	<=22.22	PASS
		5200	16.13	<=23.98	---	20.30	<=22.19	PASS
		5240	15.66	<=23.98	---	19.83	<=22.22	PASS
		5260	15.07	<=23.82	<=23.24	19.24	<=29.24	PASS
		5280	15.29	<=23.88	<=23.23	19.46	<=29.23	PASS
		5320	15.11	<=23.81	<=23.21	19.28	<=29.21	PASS
		5500	14.92	<=23.82	<=23.19	19.09	<=29.19	PASS
		5580	15.50	<=23.81	<=23.22	19.67	<=29.22	PASS
		5700	15.19	<=23.98	<=23.21	19.36	<=29.21	PASS
		5720_UNII-2C	13.22	<=23.51	<=22.28	17.39	<=28.28	PASS
		5720_UNII-3	5.44	<=30	<=30	---	---	PASS
		5745	14.44	<=30	<=30	---	---	PASS
		5785	14.32	<=30	<=30	---	---	PASS
		5825	14.14	<=30	<=30	---	---	PASS
11N20SISO	Ant1	5180	15.83	<=23.98	---	20.0	<=22.21	PASS
		5200	15.63	<=23.98	---	19.8	<=22.23	PASS
		5240	15.31	<=23.98	---	19.48	<=22.23	PASS
		5260	15.06	<=23.91	<=23.21	19.23	<=29.21	PASS
		5280	15.19	<=23.90	<=23.20	19.36	<=29.20	PASS
		5320	15.16	<=23.87	<=23.19	19.33	<=29.19	PASS
		5500	15.19	<=23.76	<=23.21	19.36	<=29.21	PASS
		5580	15.62	<=23.86	<=23.20	19.79	<=29.20	PASS
		5700	15.14	<=23.90	<=23.23	19.31	<=29.23	PASS
		5720_UNII-2C	13.34	<=22.96	<=22.43	17.51	<=28.43	PASS
		5720_UNII-3	6.36	<=30	<=30	---	---	PASS
		5745	14.20	<=30	<=30	---	---	PASS
		5785	14.29	<=30	<=30	---	---	PASS
		5825	14.18	<=30	<=30	---	---	PASS
11N40SISO	Ant1	5190	14.58	<=23.98	---	18.75	<=23	PASS
		5230	13.35	<=23.98	---	17.52	<=23	PASS
		5270	12.82	<=23.98	<=23.98	16.99	<=30	PASS
		5310	13.81	<=23.98	<=23.98	17.98	<=30	PASS
		5510	12.57	<=23.98	<=23.98	16.74	<=30	PASS
		5550	12.82	<=23.98	<=23.98	16.99	<=30	PASS
		5670	12.90	<=23.98	<=23.98	17.07	<=30	PASS
		5710_UNII-2C	12.89	<=23.98	<=23.98	17.06	<=30	PASS
		5710_UNII-3	0.92	<=30	<=30	---	---	PASS
		5755	11.92	<=30	<=30	---	---	PASS
		5795	11.91	<=30	<=30	---	---	PASS

Note : The Duty Cycle Factor is compensated in the result.

13.5. Appendix C: Maximum power spectral density

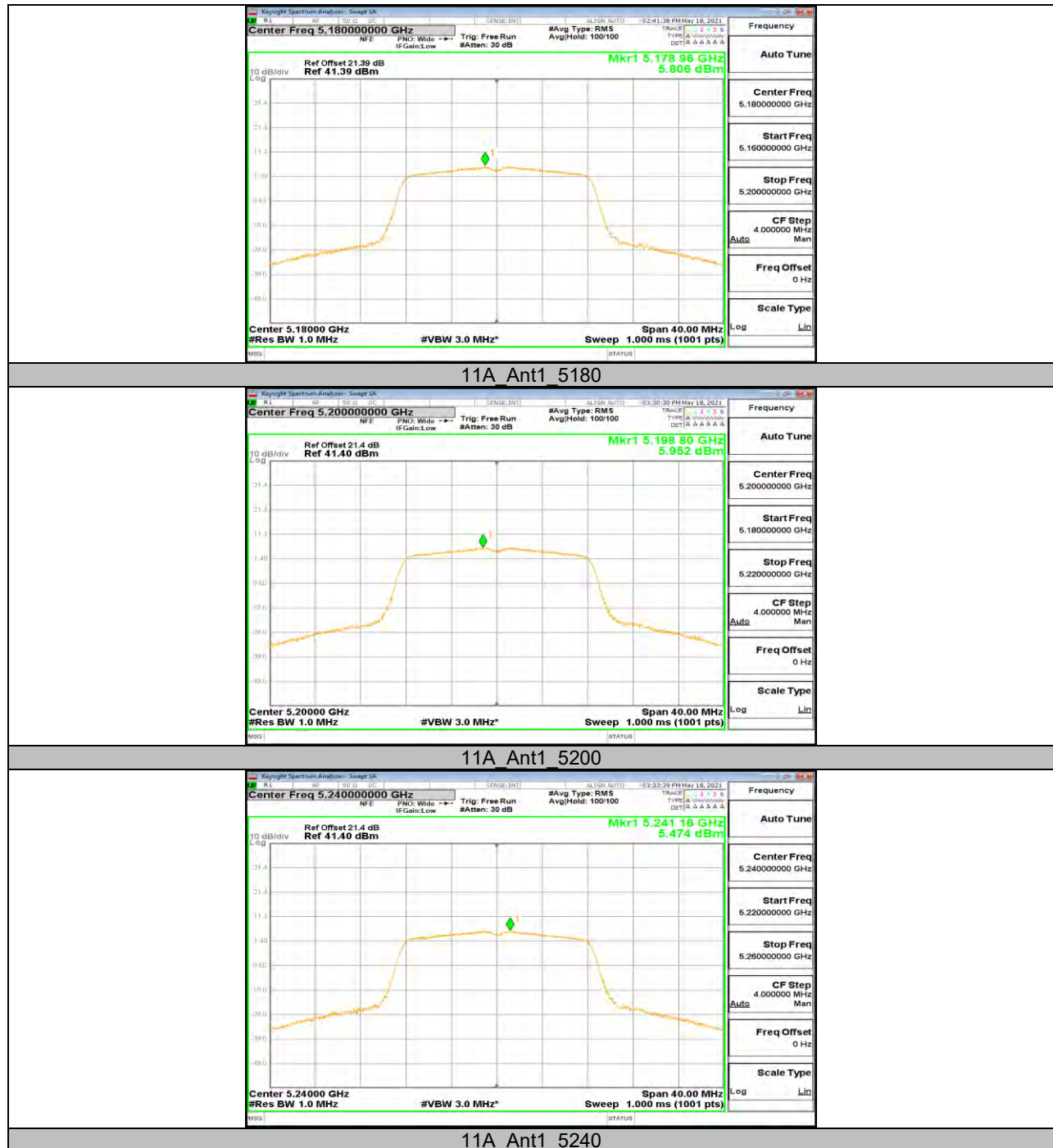
13.5.1. Test Result

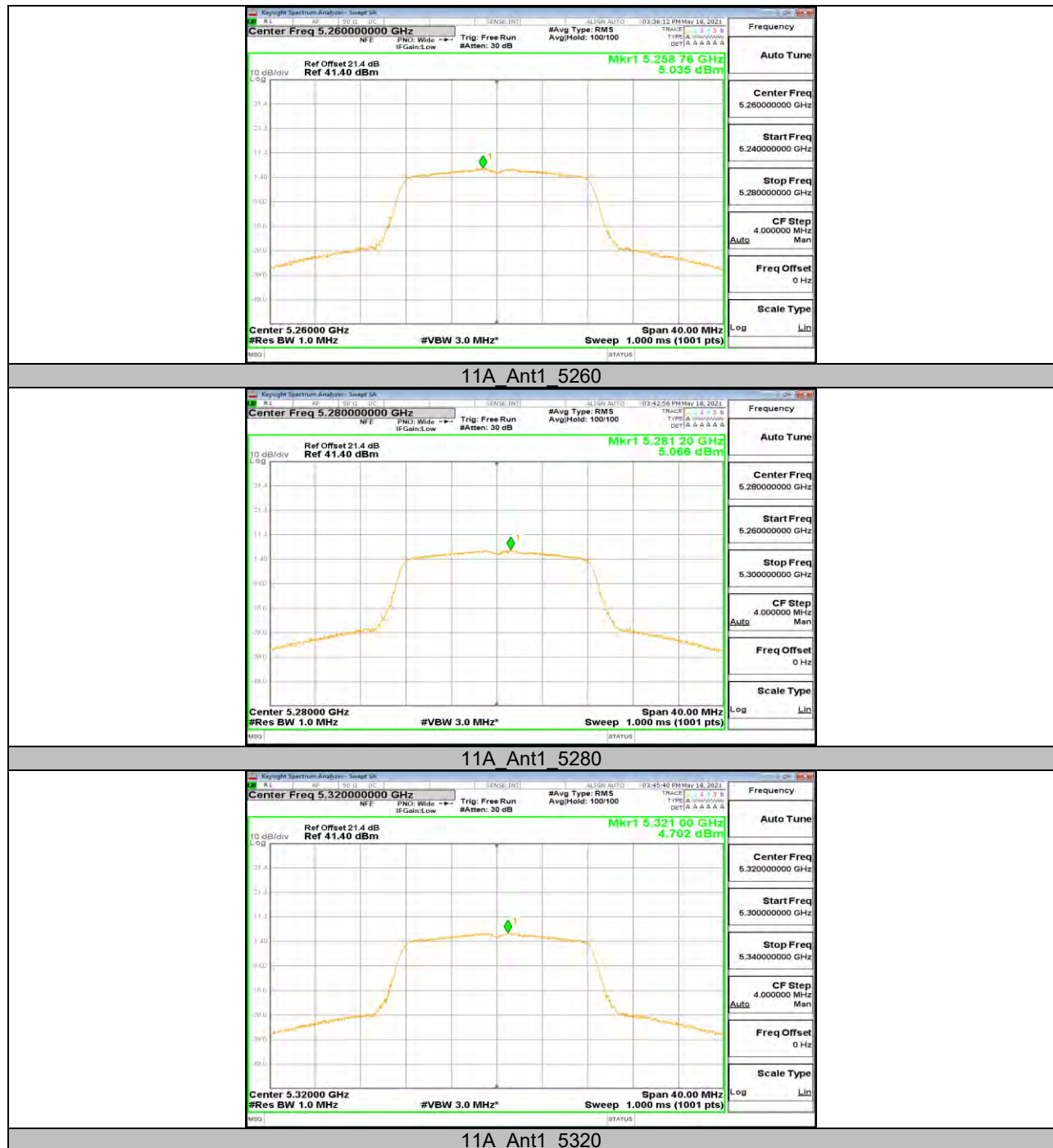
Test Mode	Antenna	Channel	Power [dBm/MHz]	Limit [dBm/MHz]	EIRP [dBm/MHz]	ISED Limit [dBm/MHz]	Verdict
11A	Ant1	5180	5.81	<=11	9.31	<=10	PASS
		5200	5.95	<=11	9.45	<=10	PASS
		5240	5.47	<=11	8.97	<=10	PASS
		5260	5.04	<=11	---	---	PASS
		5280	5.07	<=11	---	---	PASS
		5320	4.7	<=11	---	---	PASS
		5500	4.83	<=11	---	---	PASS
		5580	5.5	<=11	---	---	PASS
		5700	4.98	<=11	---	---	PASS
		5720_UNII-2C	3.96	<=11	---	---	PASS
		5720_UNII-3	-0.4	<=11	---	---	PASS
		5745	1.71	<=30	---	---	PASS
		5785	1.25	<=30	---	---	PASS
		5825	1.14	<=30	---	---	PASS
11N20SISO	Ant1	5180	5.96	<=11	9.46	<=10	PASS
		5200	5.4	<=11	8.90	<=10	PASS
		5240	5.38	<=11	8.88	<=10	PASS
		5260	4.93	<=11	---	---	PASS
		5280	5.08	<=11	---	---	PASS
		5320	5	<=11	---	---	PASS
		5500	5.21	<=11	---	---	PASS
		5580	5.44	<=11	---	---	PASS
		5700	5.05	<=11	---	---	PASS
		5720_UNII-2C	4.15	<=11	---	---	PASS
		5720_UNII-3	-0.34	<=11	---	---	PASS
		5745	1.49	<=30	---	---	PASS
		5785	1.71	<=30	---	---	PASS
		5825	1.23	<=30	---	---	PASS
11N40SISO	Ant1	5190	0.68	<=11	4.18	<=10	PASS
		5230	-0.22	<=11	3.28	<=10	PASS
		5270	-0.74	<=11	---	---	PASS
		5310	-0.1	<=11	---	---	PASS
		5510	-1.19	<=11	---	---	PASS
		5550	-0.8	<=11	---	---	PASS
		5670	-0.73	<=11	---	---	PASS
		5710_UNII-2C	-0.53	<=11	---	---	PASS
		5710_UNII-3	-5.72	<=11	---	---	PASS
		5755	-4.86	<=30	---	---	PASS
		5795	-4.79	<=30	---	---	PASS

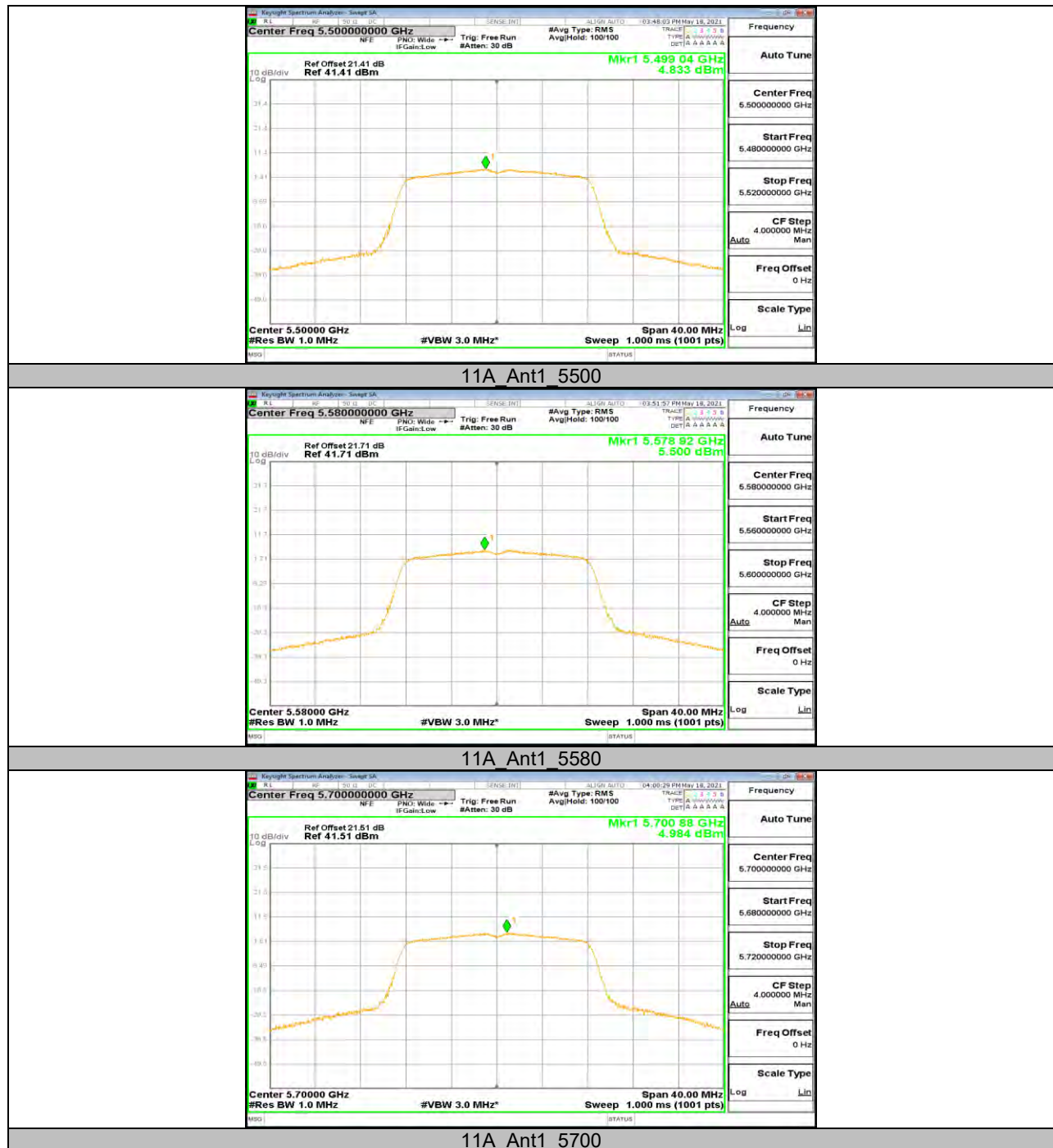
Note : 1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

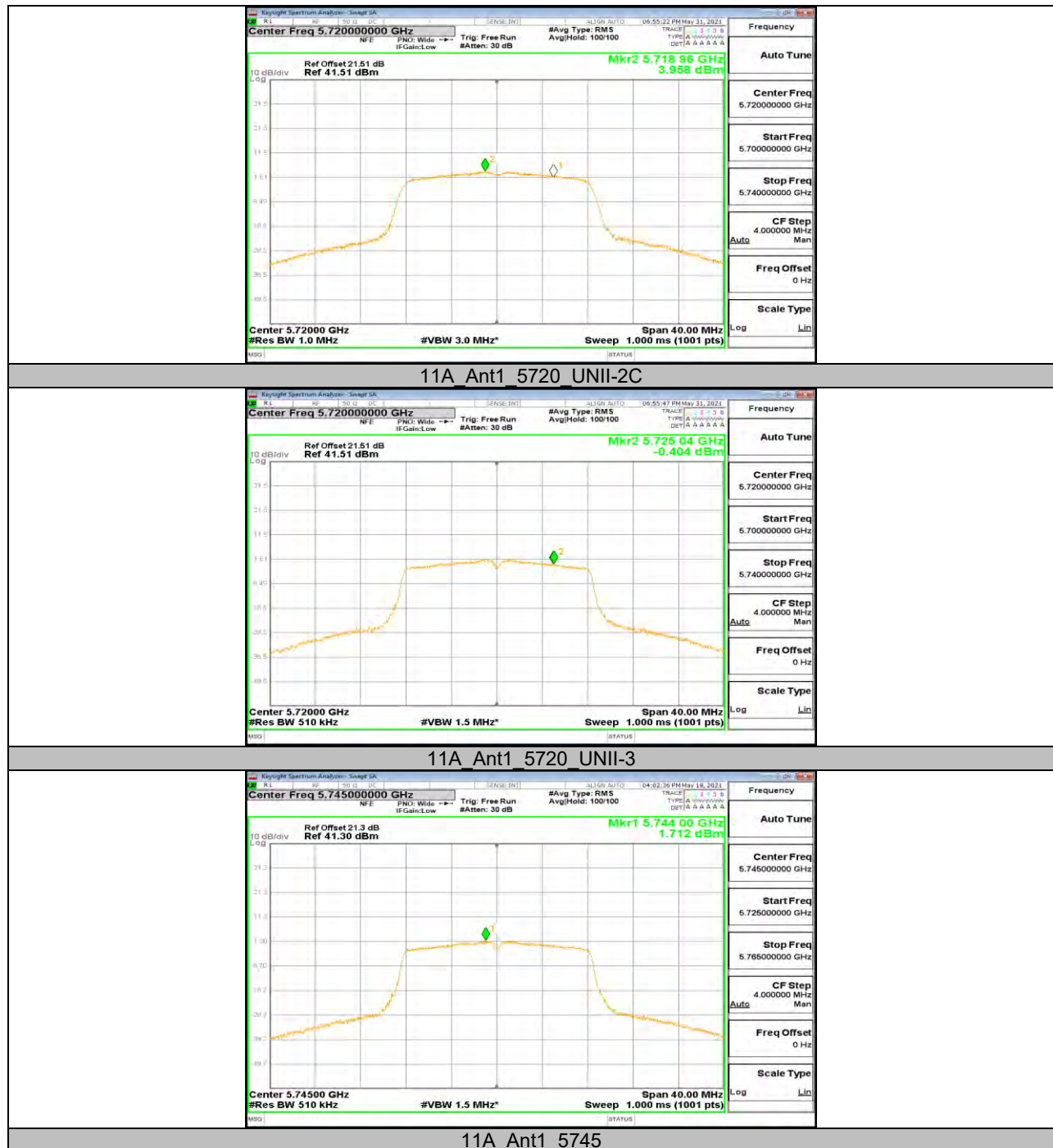


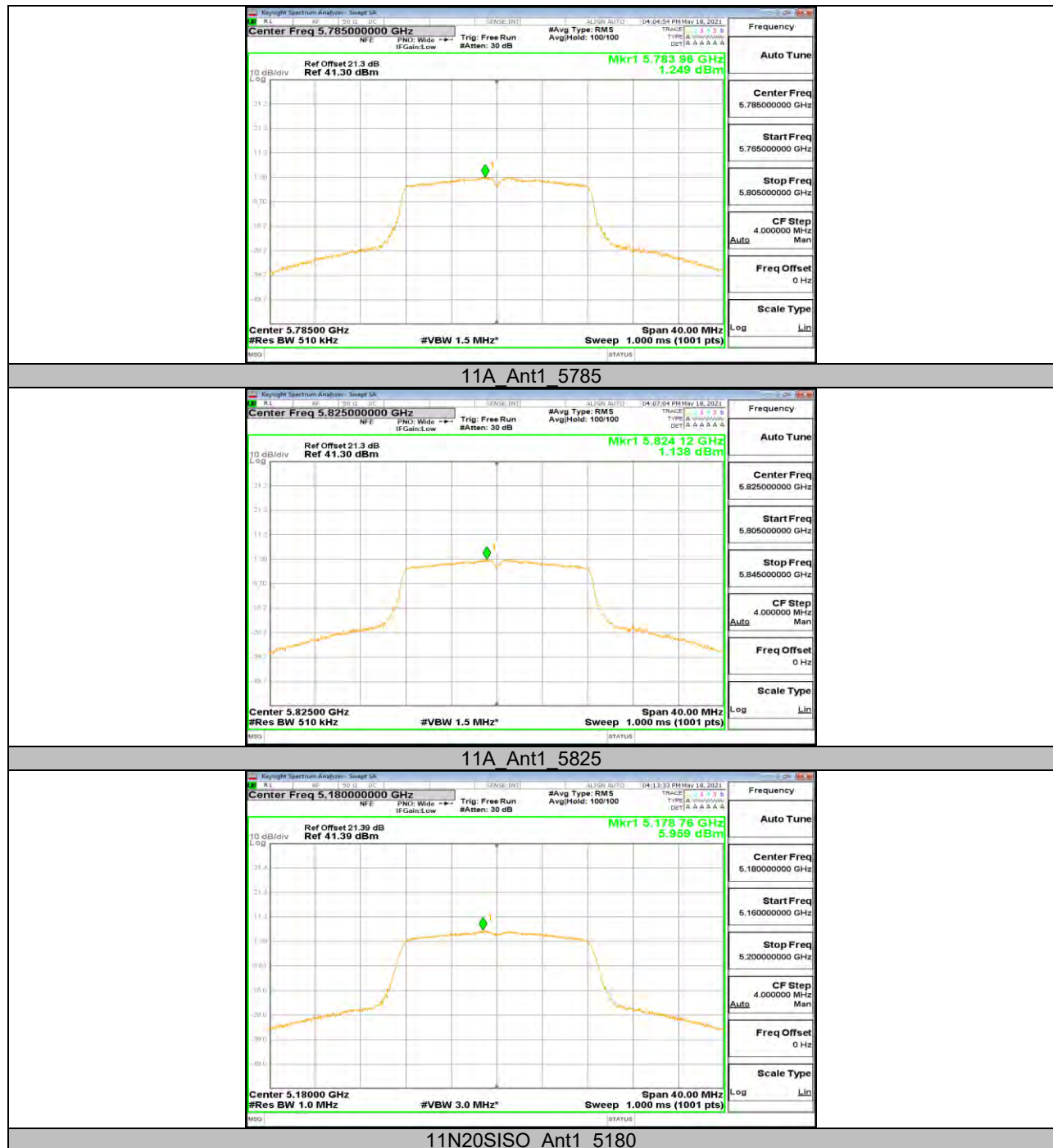
13.5.2. Test Graphs

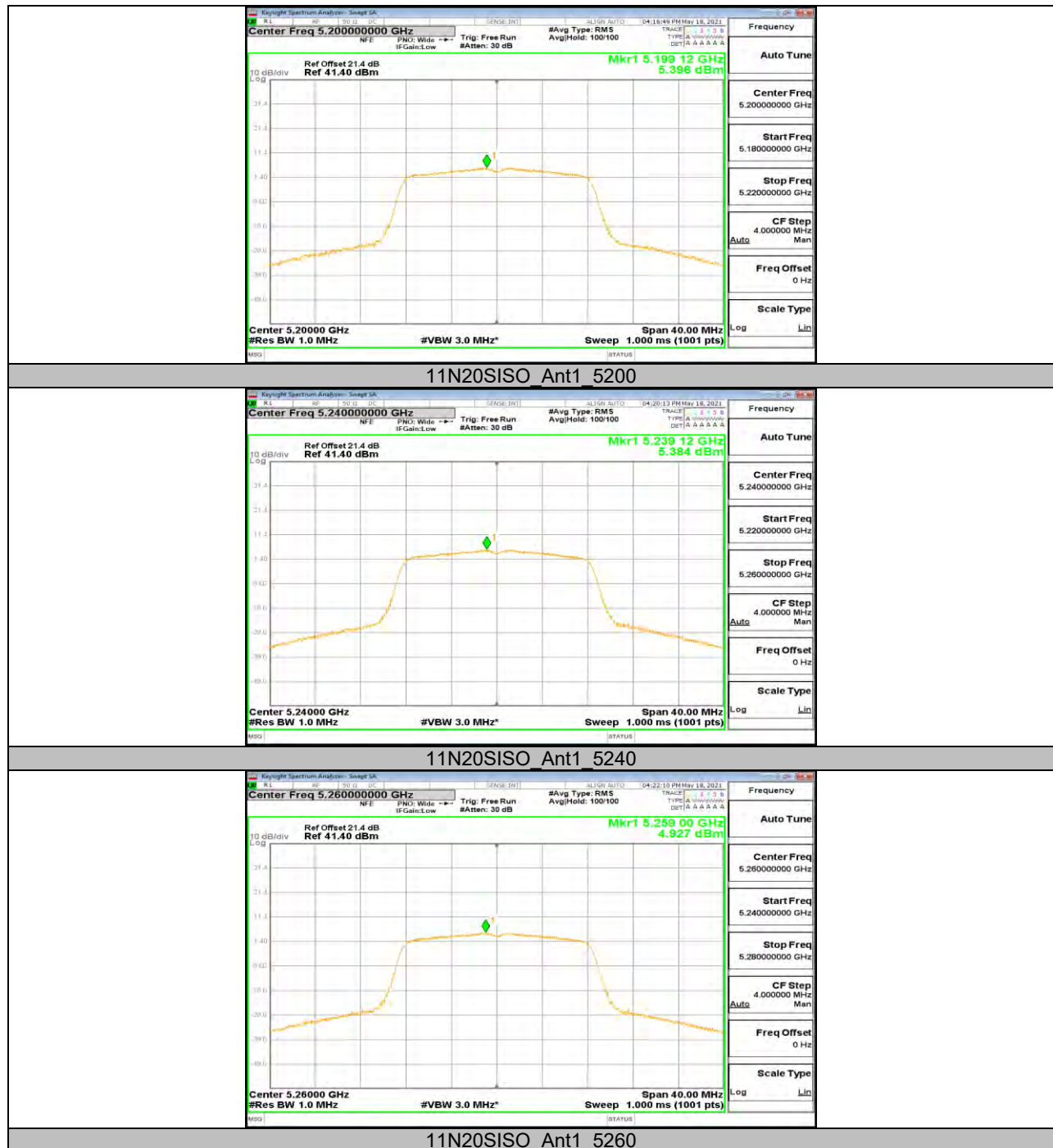


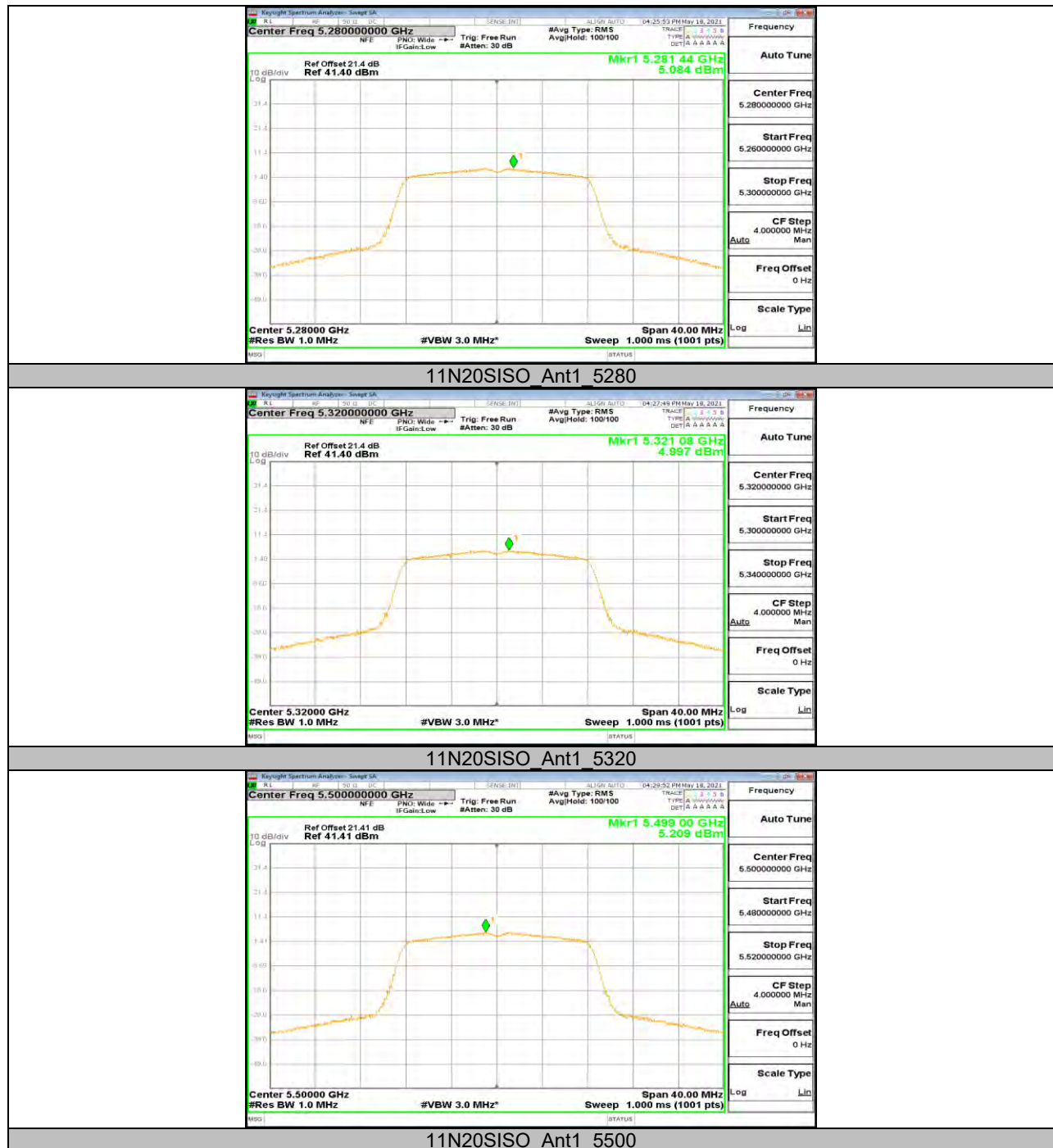


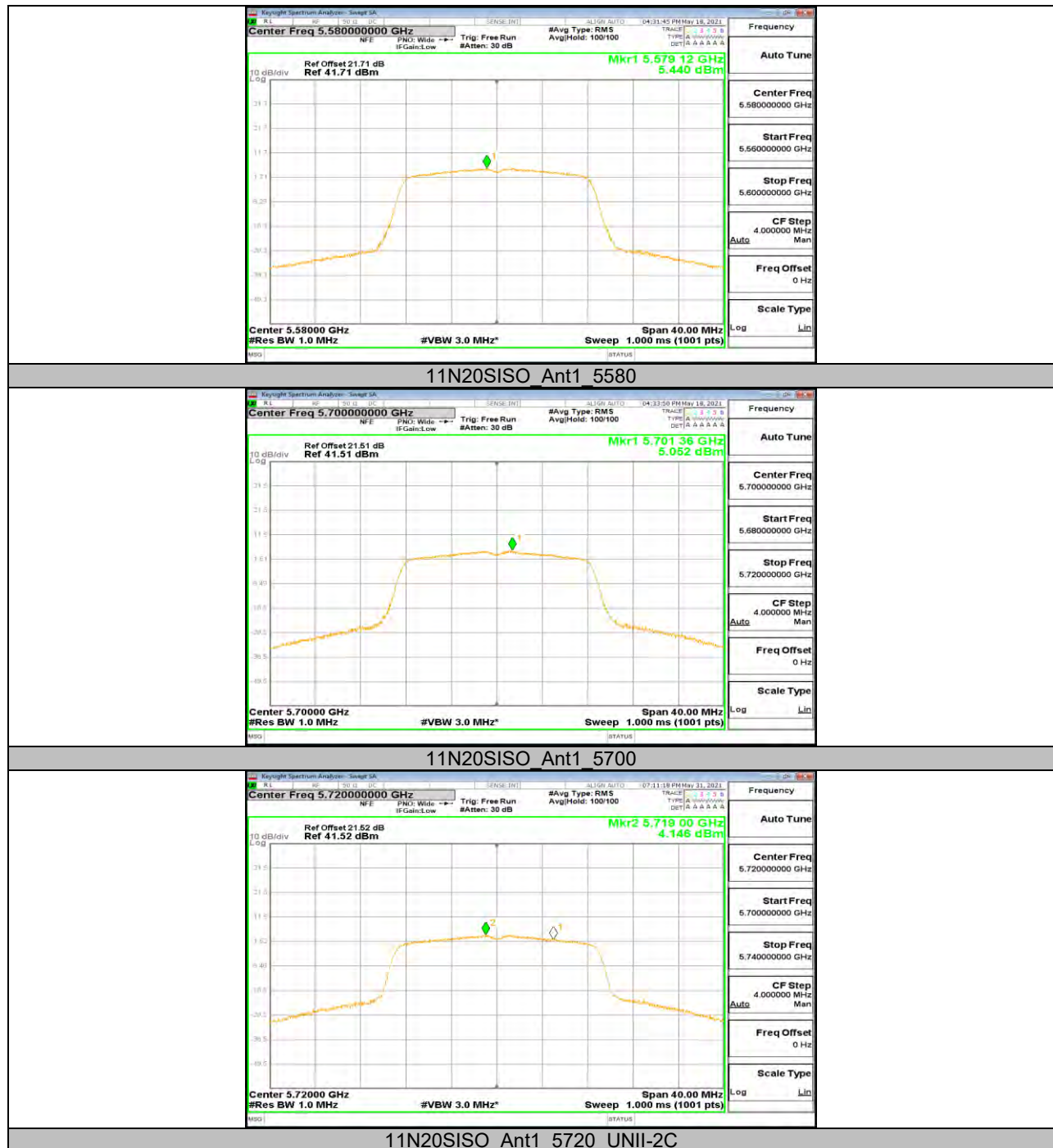


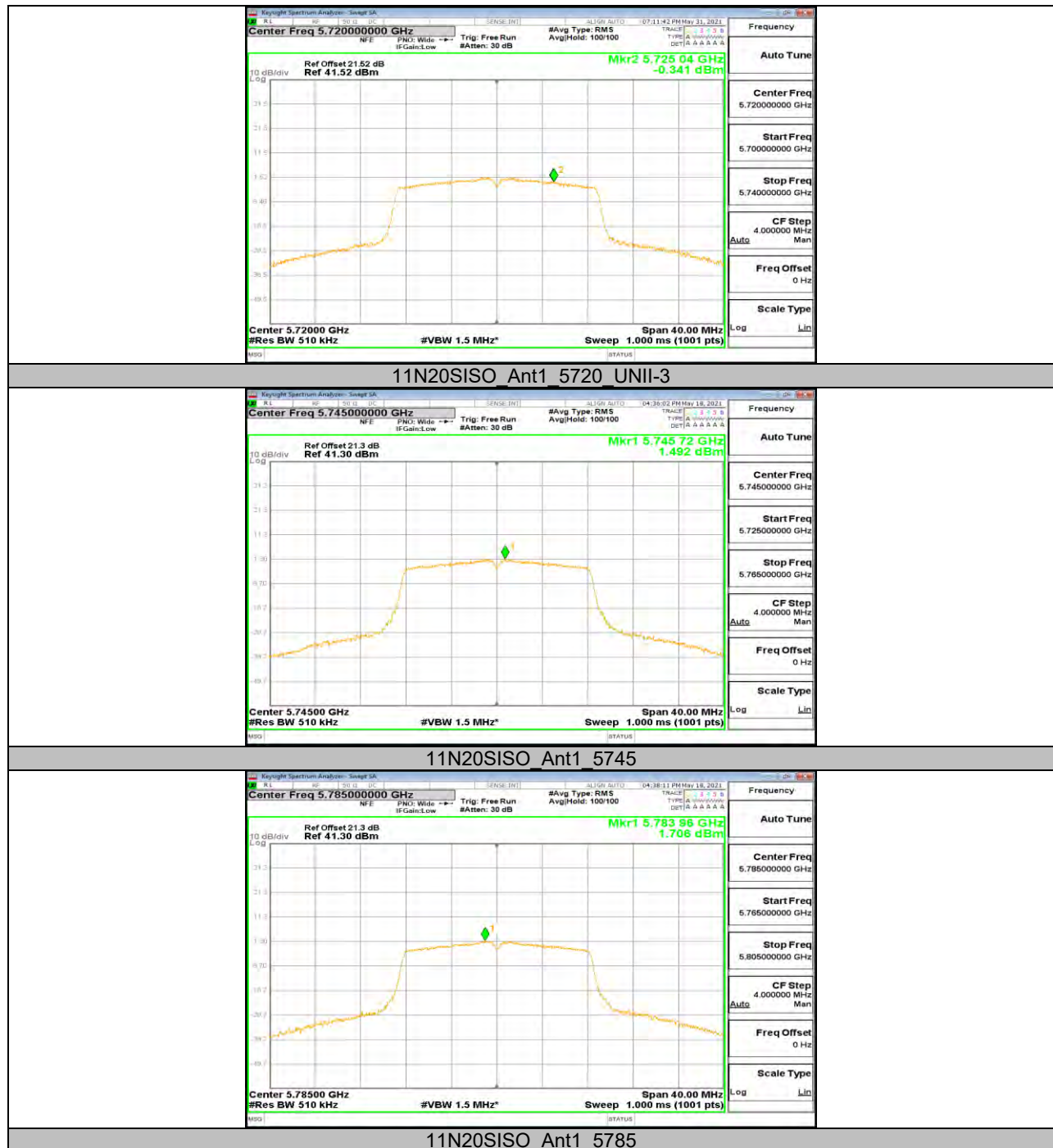


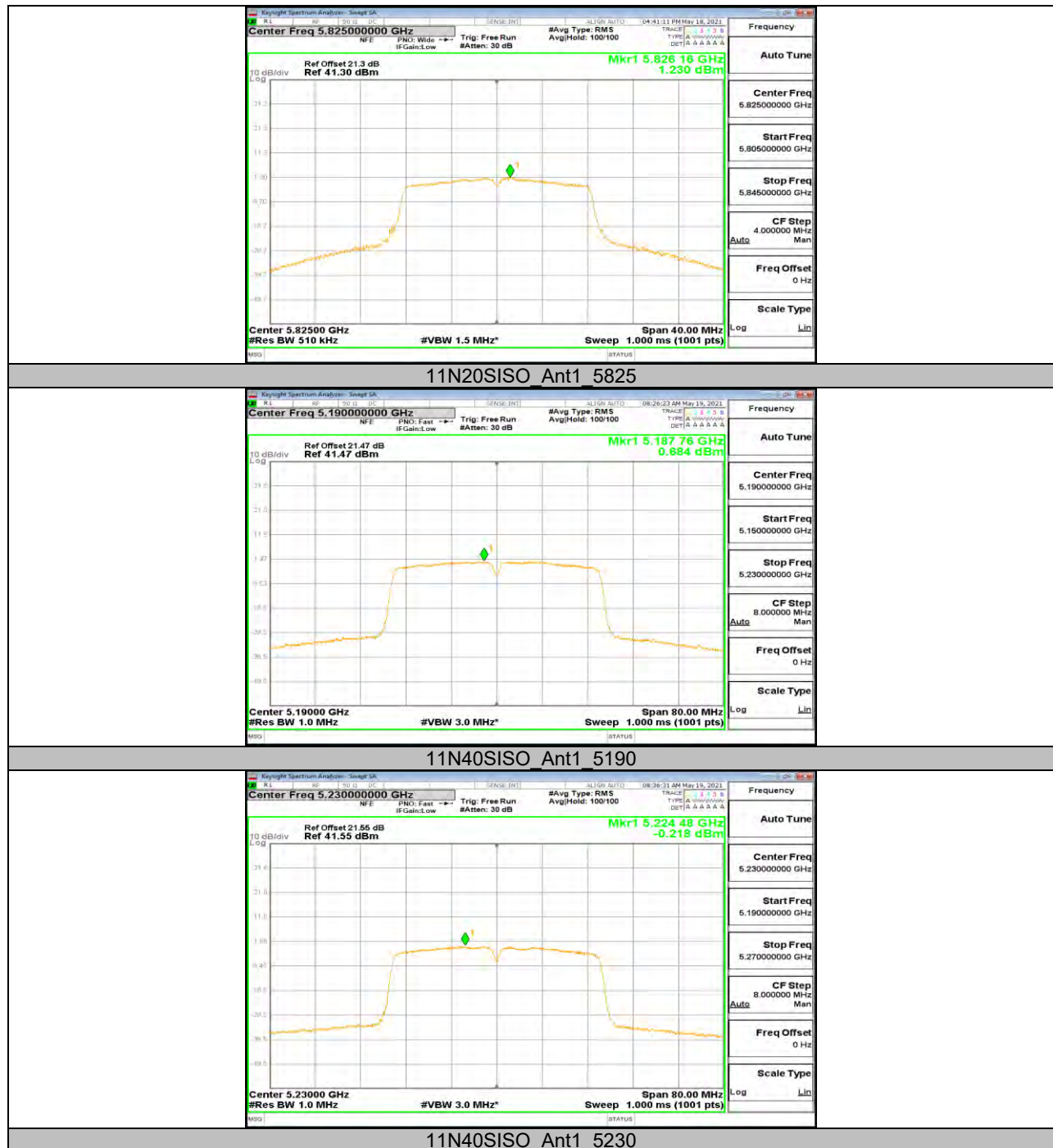


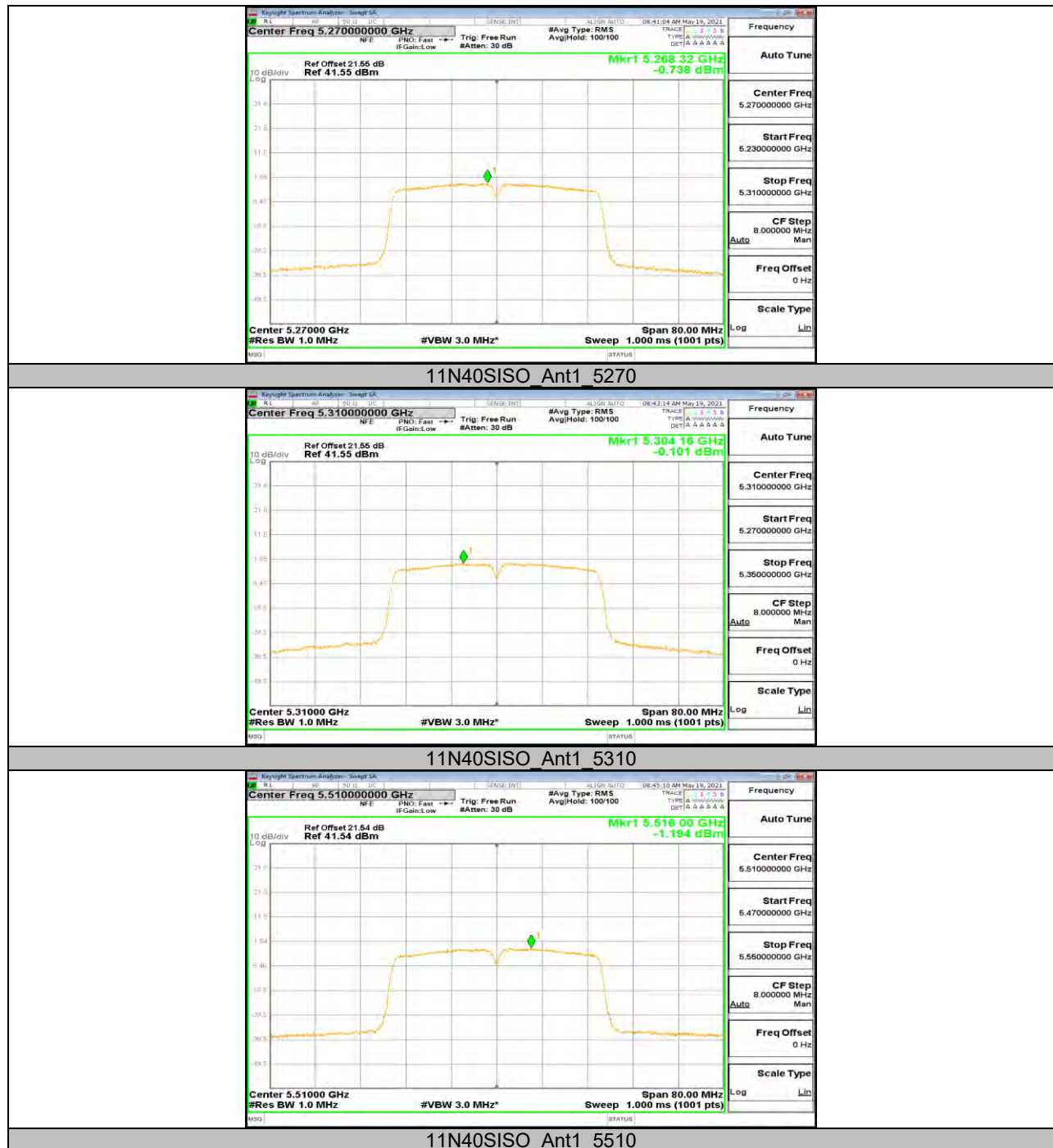


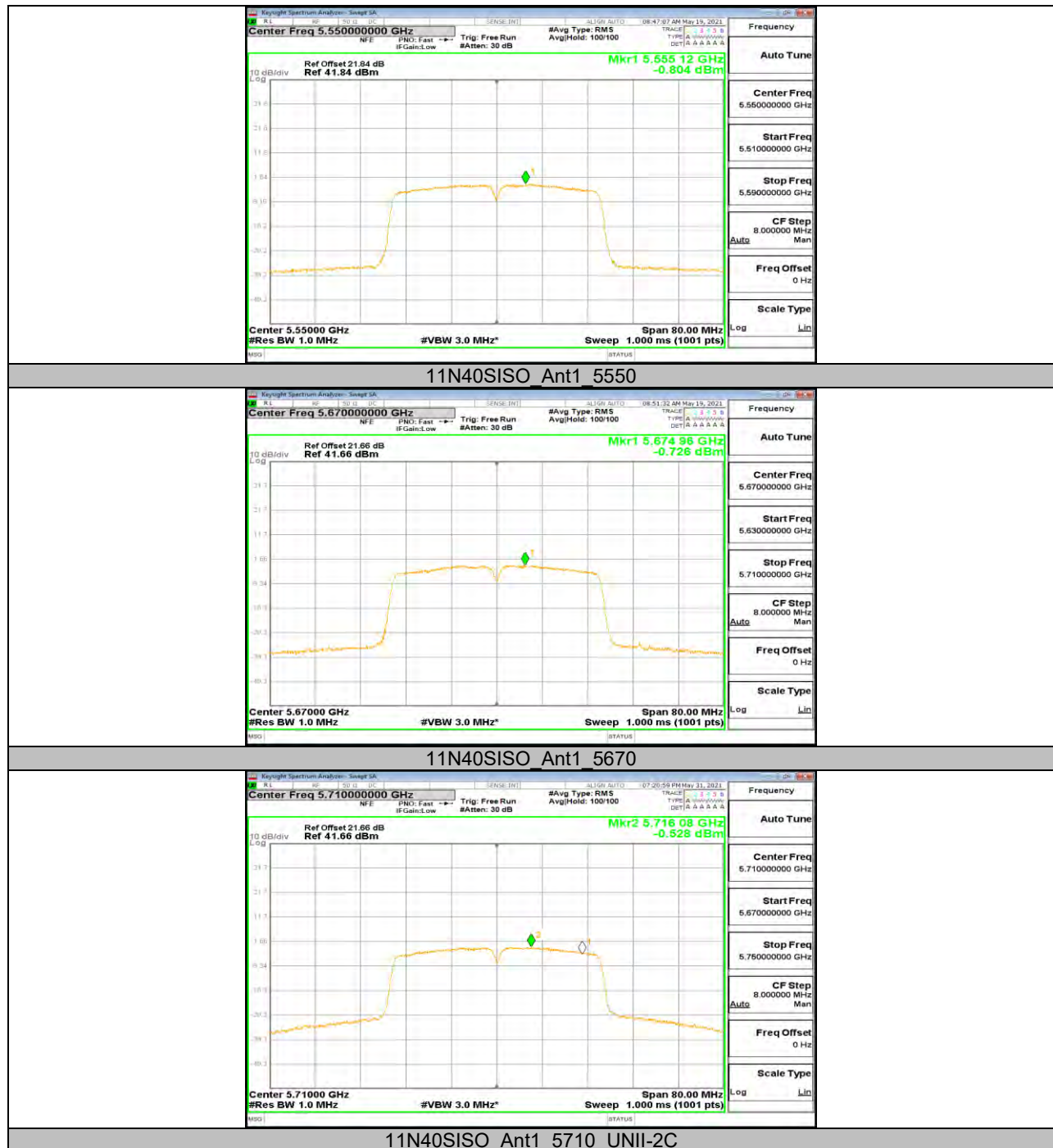
















13.6. Appendix D: Duty Cycle

13.6.1. Test Result

Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11A	1.39	1.43	0.9720	97.20	0.12	0.72	1
11N20SISO	1.39	1.43	0.9720	97.20	0.12	0.72	1
11N40SISO	0.65	0.68	0.9559	95.59	0.20	1.54	2

Note:

Duty Cycle Correction Factor= $10\log(1/x)$.

Where: x is Duty Cycle (Linear)

Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.



13.6.2. Test Graphs





13.7. Appendix E: Frequency Stability

Test Result

Frequency Error vs. Voltage									
802.11a:5200MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
T _N	V _L	5199.9902	-1.89	5200.0079	1.52	5199.9871	-2.47	5200.0071	1.36
T _N	V _N	5199.9922	-1.50	5200.0096	1.84	5199.9815	-3.56	5199.9806	-3.74
T _N	V _H	5200.0092	1.77	5199.9842	-3.04	5199.9904	-1.84	5200.0024	0.46
Frequency Error vs. Temperature									
802.11a: 5200 MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
40	V _N	5200.0004	0.08	5200.0005	0.10	5199.9778	-4.27	5200.0150	2.88
30	V _N	5199.9976	-0.47	5199.9759	-4.63	5199.9999	-0.02	5200.0203	3.91
20	V _N	5199.9852	-2.86	5200.0068	1.31	5199.9921	-1.52	5200.0065	1.24
10	V _N	5200.0096	1.84	5200.0146	2.80	5199.9882	-2.27	5199.9803	-3.79
0	V _N	5200.0112	2.16	5200.0234	4.50	5200.0192	3.69	5200.0191	3.68

Frequency Error vs. Voltage									
802.11a: 5825 MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
T _N	V _L	5825.0153	2.63	5824.9819	-3.11	5824.9763	-4.07	5824.9774	-3.88
T _N	V _N	5824.9959	-0.70	5825.0003	0.04	5824.9821	-3.08	5825.0167	2.86
T _N	V _H	5825.0191	3.28	5824.9944	-0.96	5824.9779	-3.79	5825.0127	2.18
Frequency Error vs. Temperature									
802.11a:5825MHz									
Temp.	Volt.	0 Minute		2 Minute		5 Minute		10 Minute	
		Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)
40	V _N	5824.9944	-0.95	5825.0023	0.39	5825.0071	1.22	5824.9852	-2.54
30	V _N	5824.9876	-2.12	5825.0212	3.65	5824.9803	-3.38	5825.0210	3.61
20	V _N	5825.0018	0.31	5825.0135	2.32	5825.0239	4.10	5824.9773	-3.90
10	V _N	5825.0017	0.29	5824.9789	-3.62	5824.9928	-1.23	5825.0117	2.01
0	V _N	5825.0139	2.39	5825.0096	1.65	5824.9854	-2.51	5824.9943	-0.97

Note: All the modes have been tested, only the worst data was recorded in the report.

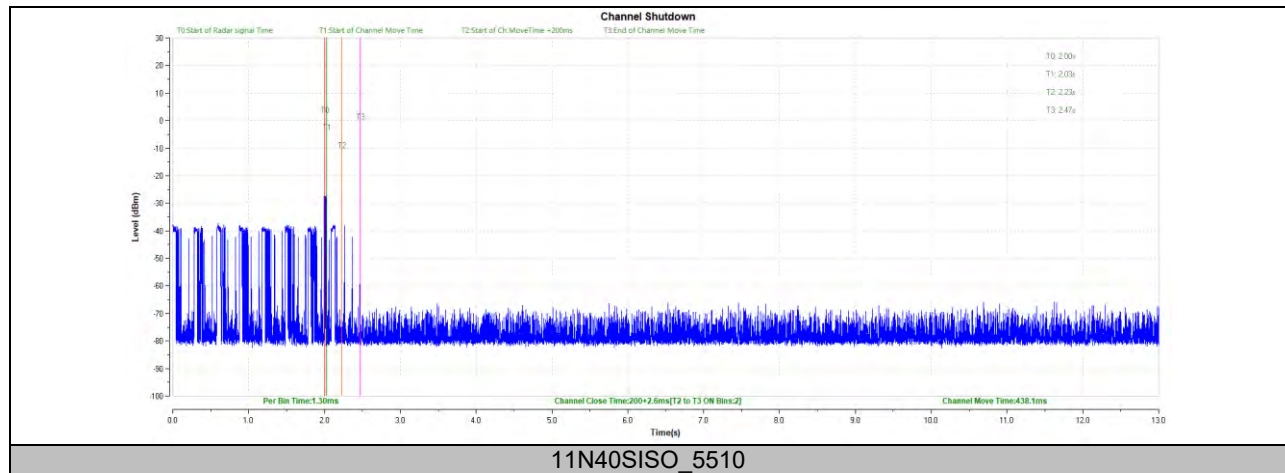


13.8. Appendix I: Channel Move Time and Channel Closing Transmission Time

13.8.1. Test Result

Test Mode	Channel	CCT[ms]	Limit[ms]	CMT[ms]	Limit[ms]	Verdict
11N40SISO	5510	200+2.6	200+60	438.1	10000	PASS

13.8.2. Test Graphs



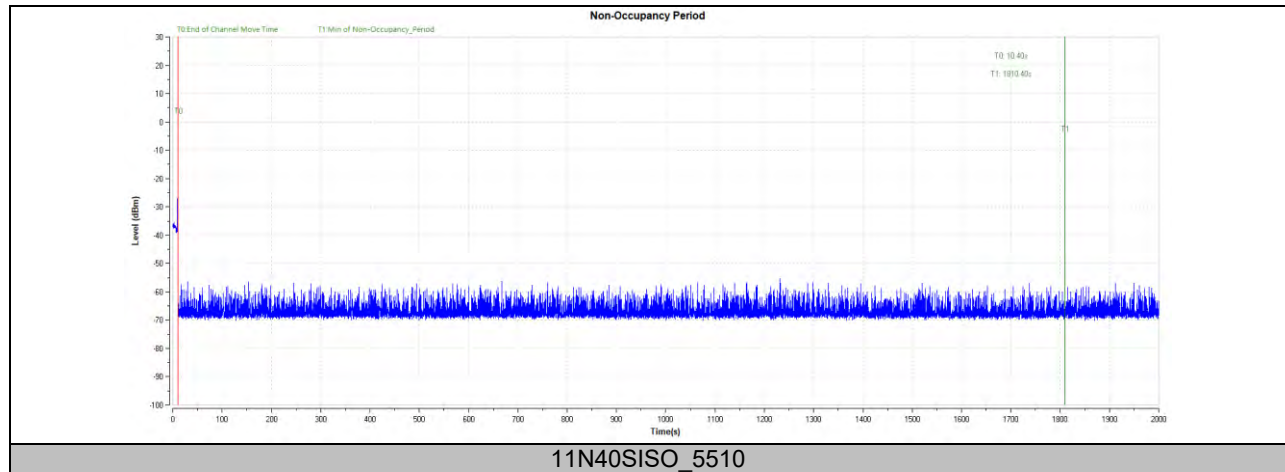


13.9. Appendix J: Non-Occupancy Period

13.9.1. Test Result

Test Mode	Channel	Result	Limit[s]	Verdict
11N40SISO	5510	see test graph	≥ 1800	PASS

13.9.2. Test Graphs



Note: All the modes have been tested, only the worst data was recorded in the report.

END OF REPORT