



11.4. Appendix B: Maximum conducted output power
11.4.1. Test Result

Test Mode	Antenna	Channel	Power [dBm]	Limit [dBm]	EIRP [dBm]	Limit [dBm]	Verdict
11A20	Ant1	5180	15.16	<=23.98	17.18	<=22.20	PASS
	Ant2	5180	17.38	<=23.98	19.4	<=22.21	PASS
	Ant1	5200	14.80	<=23.98	16.82	<=22.21	PASS
	Ant2	5200	16.71	<=23.98	18.73	<=22.20	PASS
	Ant1	5240	15.77	<=23.98	17.79	<=22.20	PASS
	Ant2	5240	15.66	<=23.98	17.68	<=22.21	PASS
	Ant1	5745	10.16	<=30	/	/	PASS
	Ant2	5745	10.17	<=30	/	/	PASS
	Ant1	5785	10.04	<=30	/	/	PASS
	Ant2	5785	9.95	<=30	/	/	PASS
	Ant1	5825	9.11	<=30	/	/	PASS
	Ant2	5825	9.68	<=30	/	/	PASS
11N20MIMO	Ant1	5180	9.55	<=23.98	14.58	<=22.47	PASS
	Ant2	5180	10.85	<=23.98	15.88	<=22.44	PASS
	total	5180	13.3	<=23.98	18.33	<=22.44	PASS
	Ant1	5200	9.25	<=23.98	14.28	<=22.47	PASS
	Ant2	5200	10.35	<=23.98	15.38	<=22.45	PASS
	total	5200	12.8	<=23.98	17.83	<=22.45	PASS
	Ant1	5240	10.31	<=23.98	15.34	<=22.47	PASS
	Ant2	5240	9.78	<=23.98	14.81	<=22.45	PASS
	total	5240	13.1	<=23.98	18.13	<=22.45	PASS
	Ant1	5745	6.34	<=30	/	/	PASS
	Ant2	5745	6.96	<=30	/	/	PASS
	total	5745	9.7	<=30	/	/	PASS
	Ant1	5785	6.09	<=30	/	/	PASS
	Ant2	5785	6.94	<=30	/	/	PASS
	total	5785	9.5	<=30	/	/	PASS
	Ant1	5825	6.23	<=30	/	/	PASS
	Ant2	5825	6.99	<=30	/	/	PASS
	total	5825	9.6	<=30	/	/	PASS
11N40MIMO	Ant1	5190	12.77	<=24	17.80	<=23	PASS
	Ant2	5190	13.69	<=24	18.72	<=23	PASS
	total	5190	16.3	<=24	21.33	<=23	PASS
	Ant1	5230	13.15	<=24	18.18	<=23	PASS
	Ant2	5230	12.23	<=24	17.26	<=23	PASS
	total	5230	15.7	<=24	20.73	<=23	PASS
	Ant1	5755	6.79	<=30	/	/	PASS
	Ant2	5755	7.42	<=30	/	/	PASS
	total	5755	10.1	<=30	/	/	PASS
	Ant1	5795	6.41	<=30	/	/	PASS
	Ant2	5795	6.96	<=30	/	/	PASS
	total	5795	9.7	<=30	/	/	PASS
11AC20MIMO	Ant1	5180	9.54	<=23.98	14.57	<=22.46	PASS
	Ant2	5180	10.90	<=23.98	15.93	<=22.48	PASS
	total	5180	13.3	<=23.98	18.33	<=22.48	PASS
	Ant1	5200	9.39	<=23.98	14.42	<=22.46	PASS
	Ant2	5200	10.44	<=23.98	15.47	<=22.47	PASS
	total	5200	13.0	<=23.98	18.03	<=22.47	PASS
	Ant1	5240	10.38	<=23.98	15.41	<=22.47	PASS



	Ant2	5240	9.78	<=23.98	14.81	<=22.47	PASS
	total	5240	13.1	<=23.98	18.13	<=22.47	PASS
	Ant1	5745	6.41	<=30	/	/	PASS
	Ant2	5745	7.18	<=30	/	/	PASS
	total	5745	9.8	<=30	/	/	PASS
	Ant1	5785	6.34	<=30	/	/	PASS
	Ant2	5785	7.05	<=30	/	/	PASS
	total	5785	9.7	<=30	/	/	PASS
	Ant1	5825	6.34	<=30	/	/	PASS
	Ant2	5825	7.09	<=30	/	/	PASS
	total	5825	9.7	<=30	/	/	PASS
	11AC40MIMO	Ant1	5190	12.82	<=24	17.85	<=23
Ant2		5190	13.68	<=24	18.71	<=23	PASS
total		5190	16.3	<=24	21.33	<=23	PASS
Ant1		5230	13.17	<=24	18.2	<=23	PASS
Ant2		5230	12.30	<=24	17.33	<=23	PASS
total		5230	15.8	<=24	20.83	<=23	PASS
Ant1		5755	6.87	<=30	/	/	PASS
Ant2		5755	7.39	<=30	/	/	PASS
total		5755	10.1	<=30	/	/	PASS
Ant1		5795	6.45	<=30	/	/	PASS
Ant2		5795	7.03	<=30	/	/	PASS
total		5795	9.8	<=30	/	/	PASS
11AC80MIMO	Ant1	5210	12.39	<=24	17.42	<=23	PASS
	Ant2	5210	11.27	<=24	16.30	<=23	PASS
	total	5210	14.9	<=24	19.93	<=23	PASS
	Ant1	5775	6.58	<=30	/	/	PASS
	Ant2	5775	7.16	<=30	/	/	PASS
	total	5775	9.9	<=30	/	/	PASS

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2. The Duty Cycle Factor (refer to section 7.1) had already compensated to the test data.

11.5. Appendix C: Maximum power spectral density

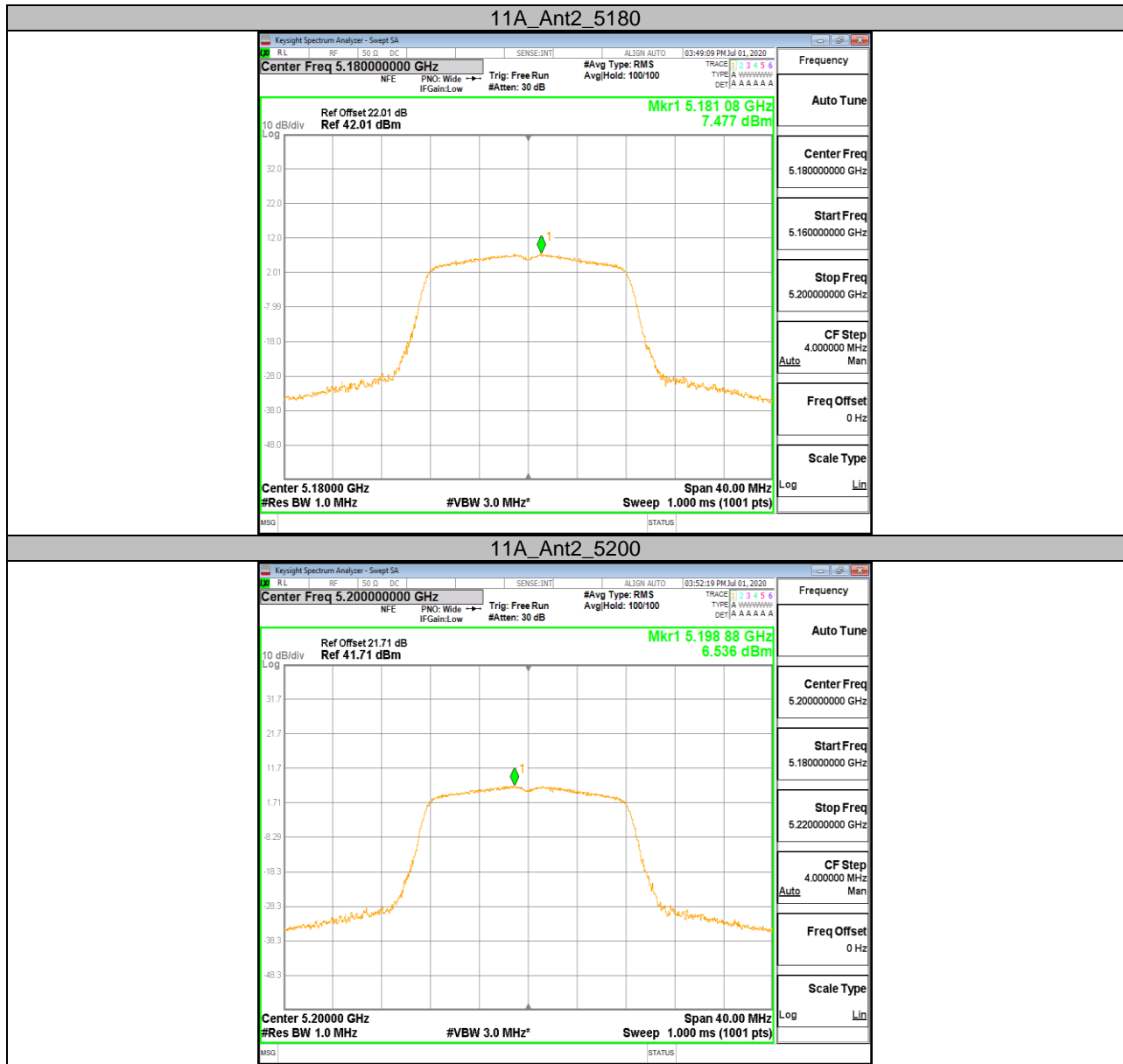
11.5.1. Test Result

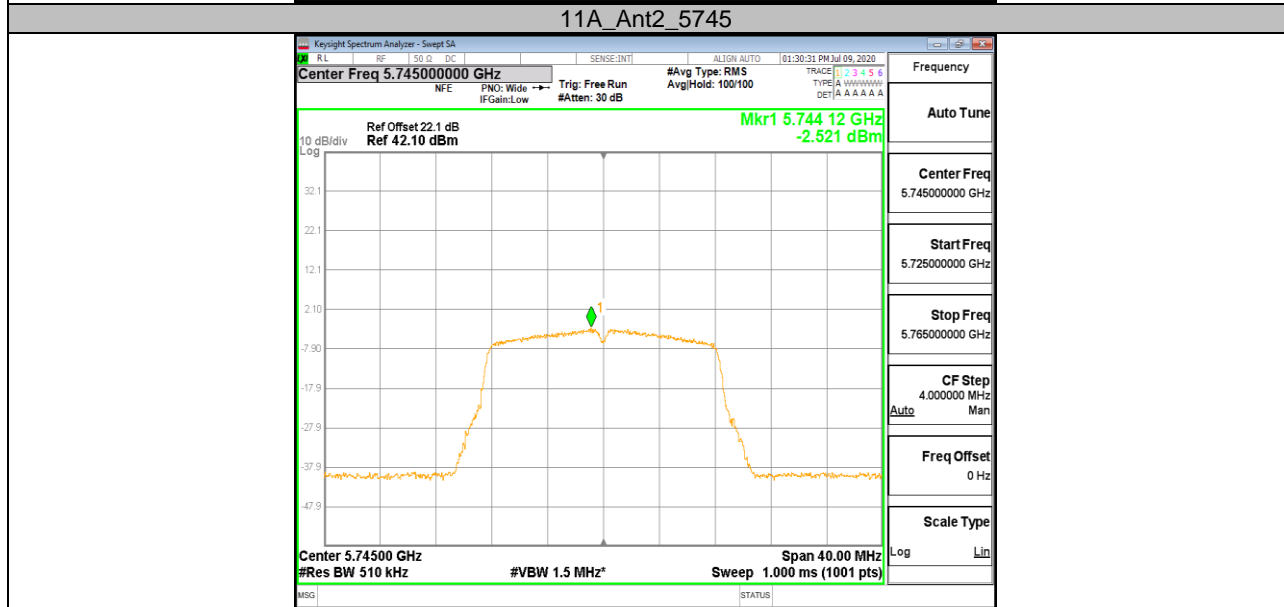
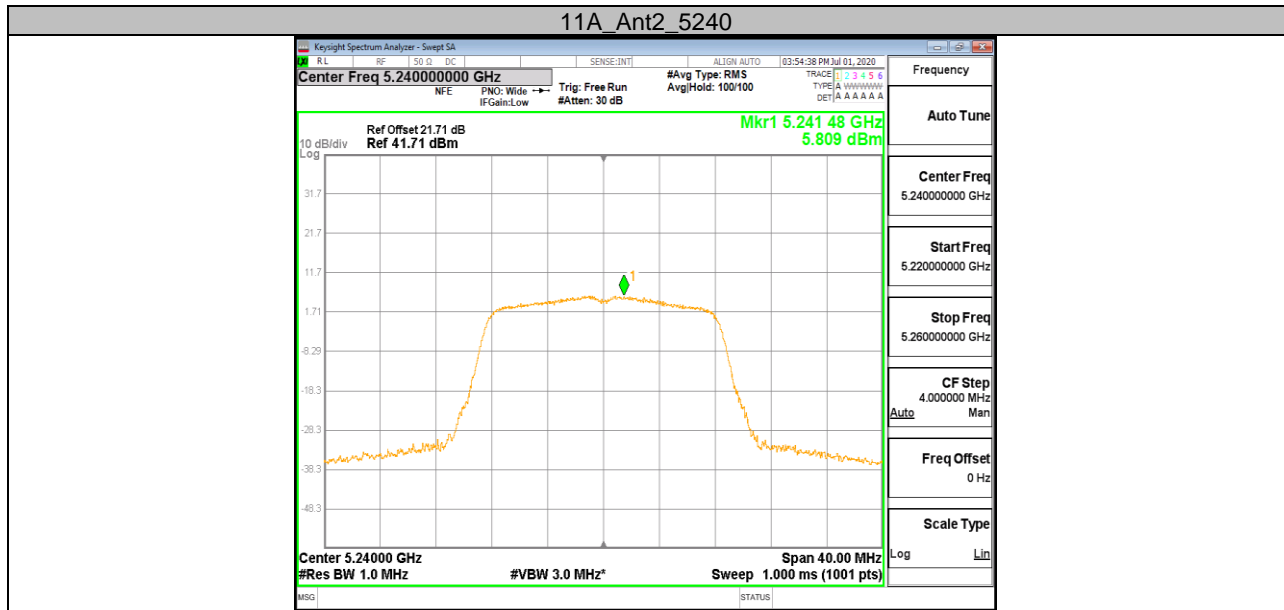
Test Mode	Antenna	Channel	Power [dBm/MHz]	Limit [dBm/MHz]	EIRP [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A20	Ant2	5180	7.48	<=11	9.50	<=10	PASS
		5200	6.54	<=11	8.56	<=10	PASS
		5240	5.81	<=11	7.83	<=10	PASS
		5745	-2.52	<=30	---	<=---	PASS
		5785	-2.81	<=30	---	<=---	PASS
		5825	-3.27	<=30	---	<=---	PASS
11AC20MIMO	Ant1	5180	-0.85	<=11	4.18	<=10	PASS
	Ant2	5180	0.68	<=11	5.71	<=10	PASS
	total	5180	2.99	<=11	8.02	<=10	PASS
	Ant1	5200	-1.05	<=11	3.98	<=10	PASS
	Ant2	5200	0.14	<=11	5.17	<=10	PASS
	total	5200	2.60	<=11	7.63	<=10	PASS
	Ant1	5240	-0.17	<=11	4.86	<=10	PASS
	Ant2	5240	-0.36	<=11	4.67	<=10	PASS
	total	5240	2.75	<=11	7.78	<=10	PASS
	Ant1	5745	-6.42	<=30	---	<=---	PASS
	Ant2	5745	-5.65	<=30	---	<=---	PASS
	total	5745	-3.01	<=30	---	<=---	PASS
	Ant1	5785	-6.62	<=30	---	<=---	PASS
	Ant2	5785	-6.18	<=30	---	<=---	PASS
	total	5785	-3.38	<=30	---	<=---	PASS
	Ant1	5825	-6.52	<=30	---	<=---	PASS
	Ant2	5825	-6.14	<=30	---	<=---	PASS
	total	5825	-3.33	<=30	---	<=---	PASS
11AC40MIMO	Ant1	5190	-1.03	<=11	4.00	<=10	PASS
	Ant2	5190	-0.19	<=11	4.84	<=10	PASS
	total	5190	2.42	<=11	7.45	<=10	PASS
	Ant1	5230	-0.45	<=11	4.58	<=10	PASS
	Ant2	5230	-1.39	<=11	3.64	<=10	PASS
	total	5230	2.12	<=11	7.15	<=10	PASS
	Ant1	5755	-9.38	<=30	---	<=---	PASS
	Ant2	5755	-9.15	<=30	---	<=---	PASS
	total	5755	-6.25	<=30	---	<=---	PASS
	Ant1	5795	-10.08	<=30	---	<=---	PASS
	Ant2	5795	-9.35	<=30	---	<=---	PASS
	total	5795	-6.69	<=30	---	<=---	PASS
11AC80MIMO	Ant1	5210	-3.42	<=11	1.61	<=10	PASS
	Ant2	5210	-4.09	<=11	0.94	<=10	PASS
	total	5210	-0.73	<=11	4.30	<=10	PASS
	Ant1	5775	-13.01	<=30	---	<=---	PASS
	Ant2	5775	-12.89	<=30	---	<=---	PASS
	total	5775	-9.94	<=30	---	<=---	PASS

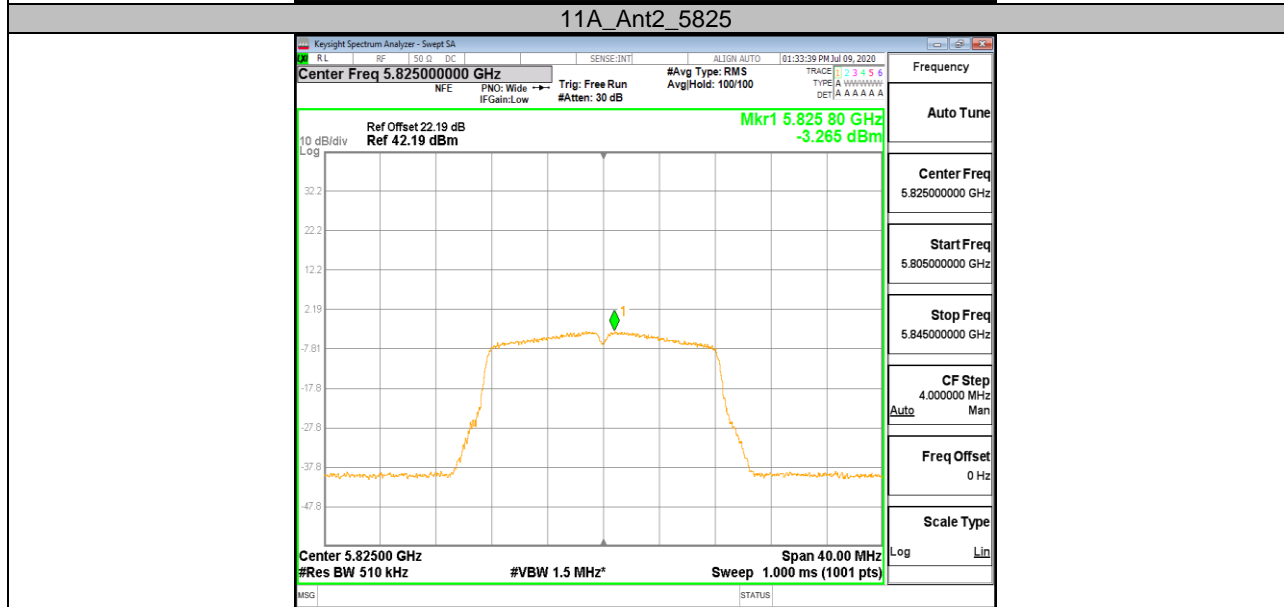
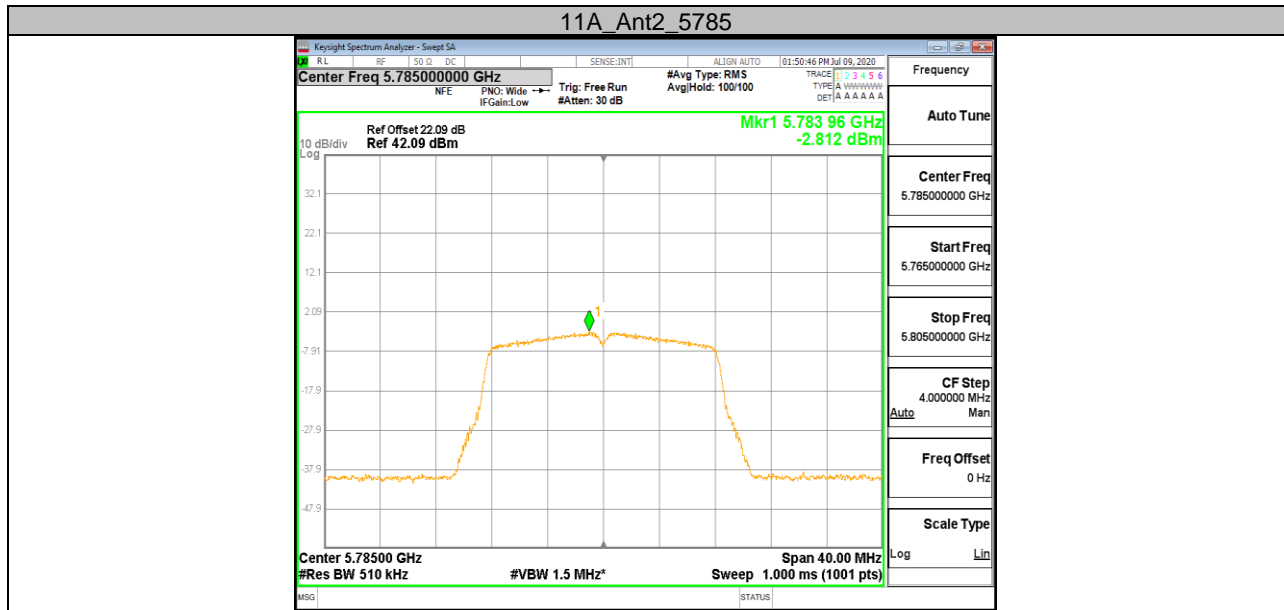
Note : 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

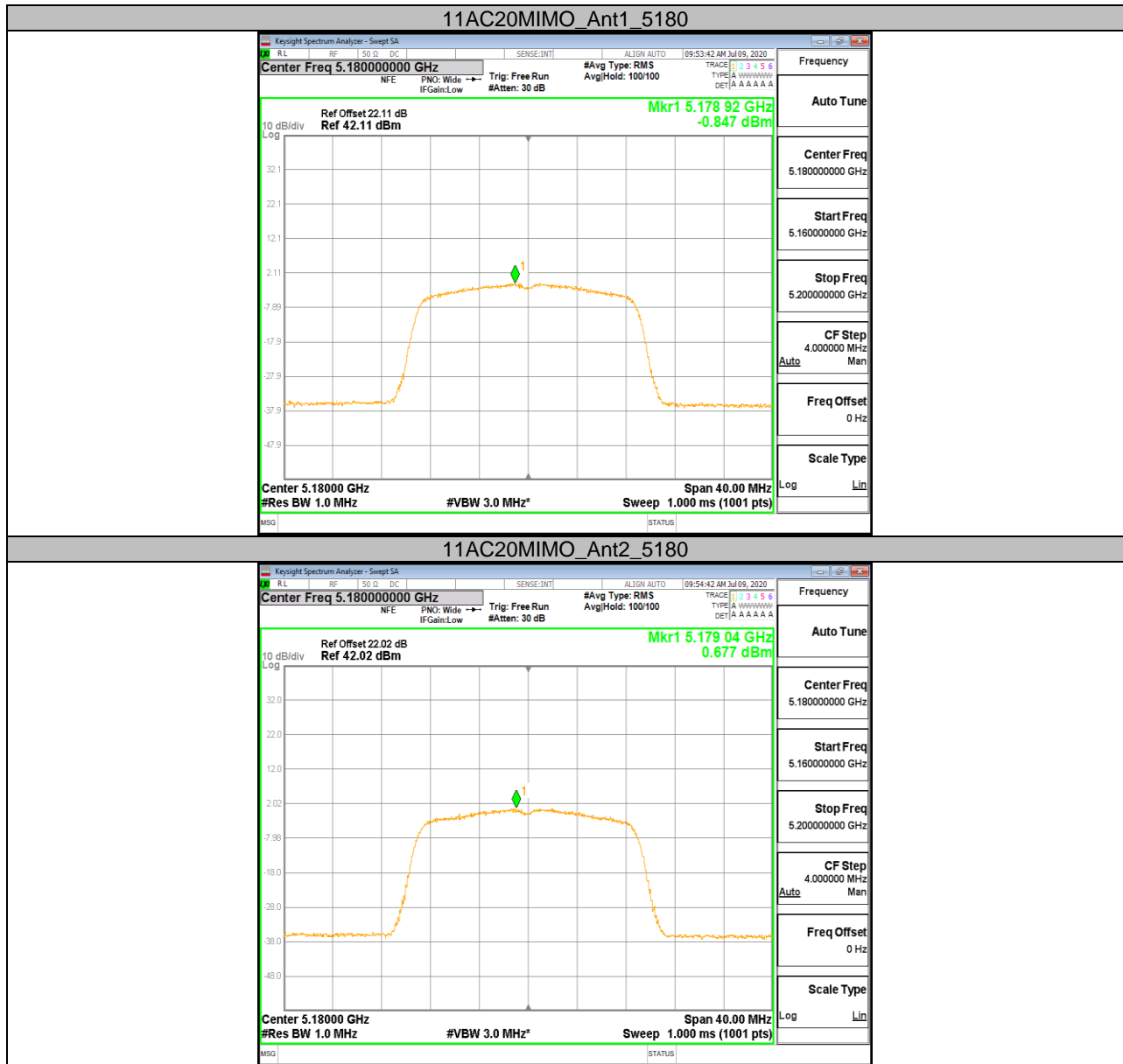
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

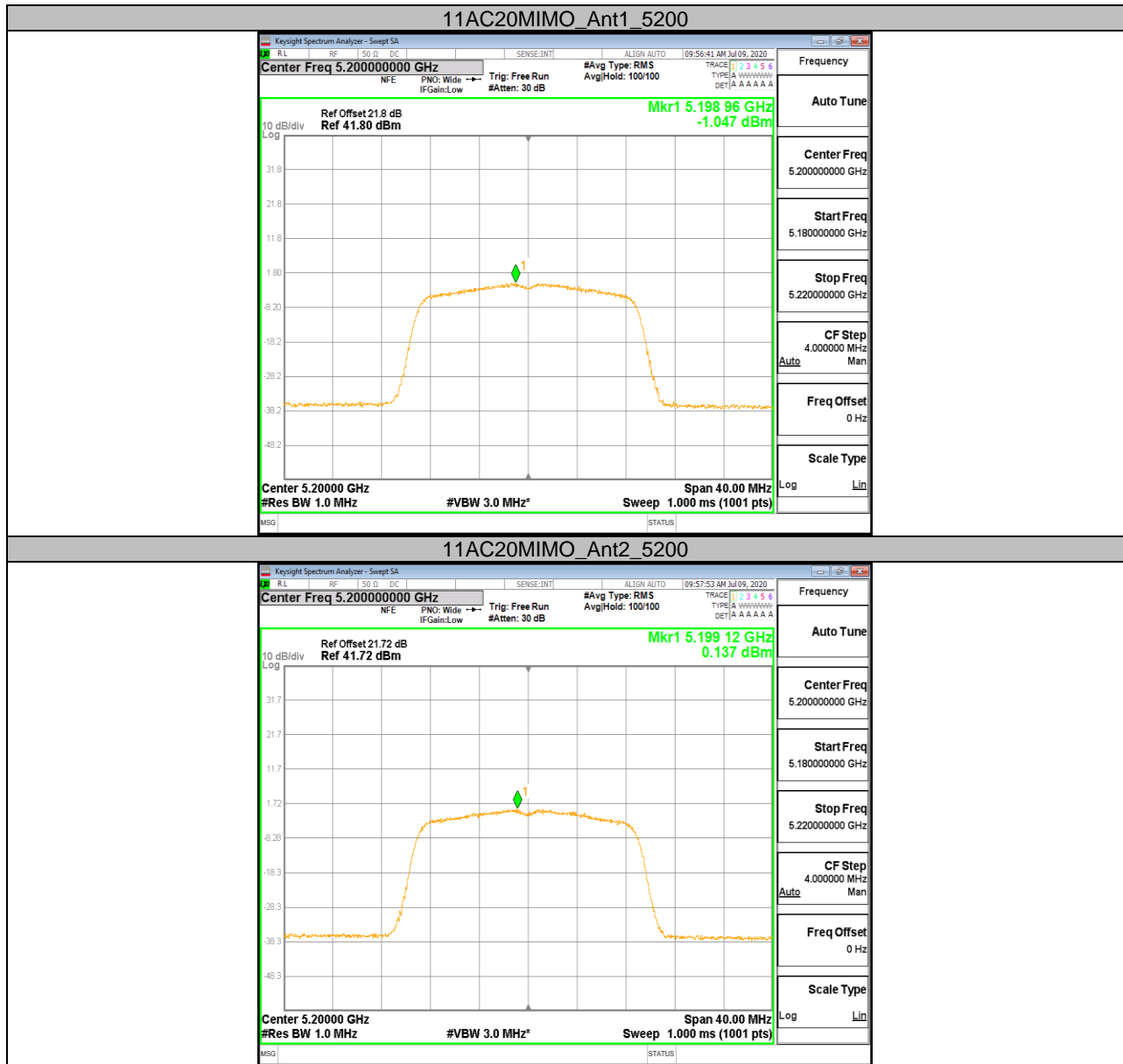
11.5.2. Test Graphs

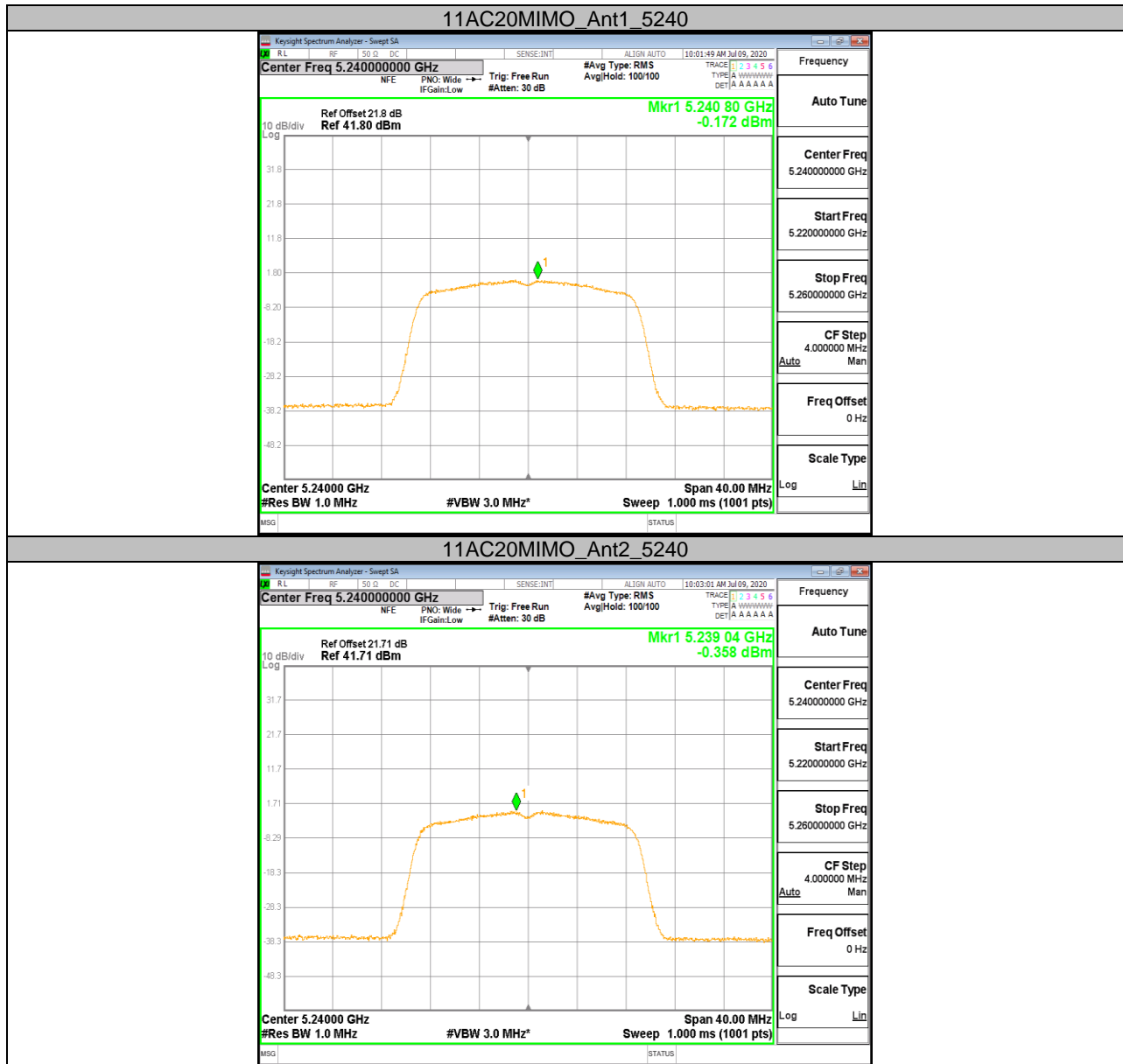


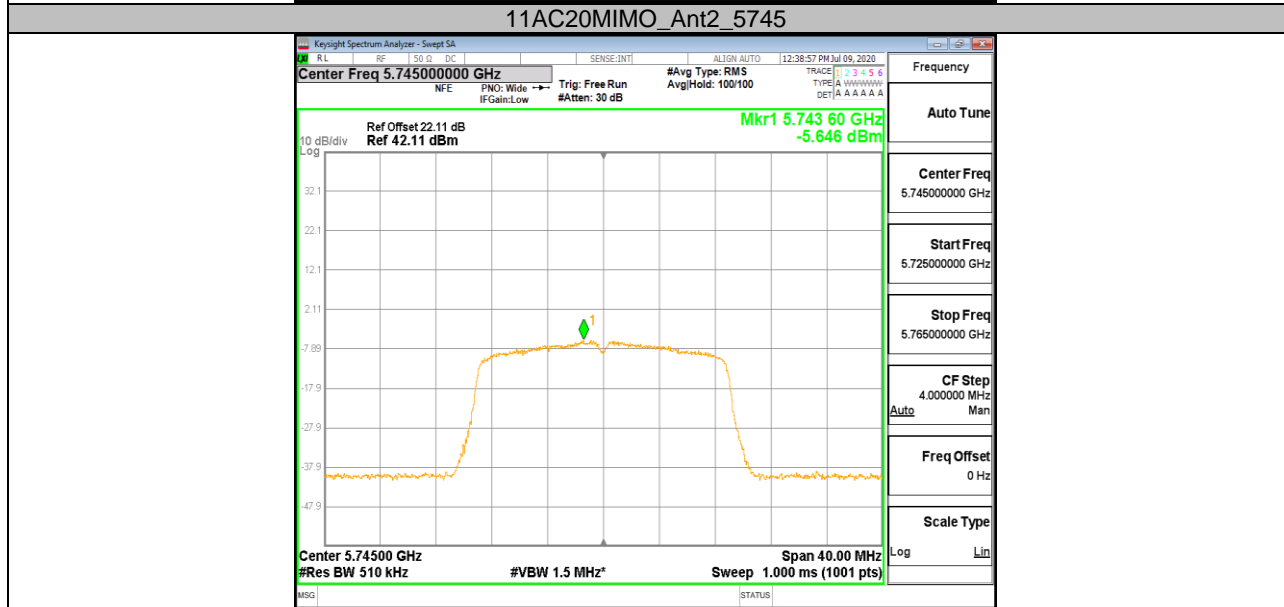
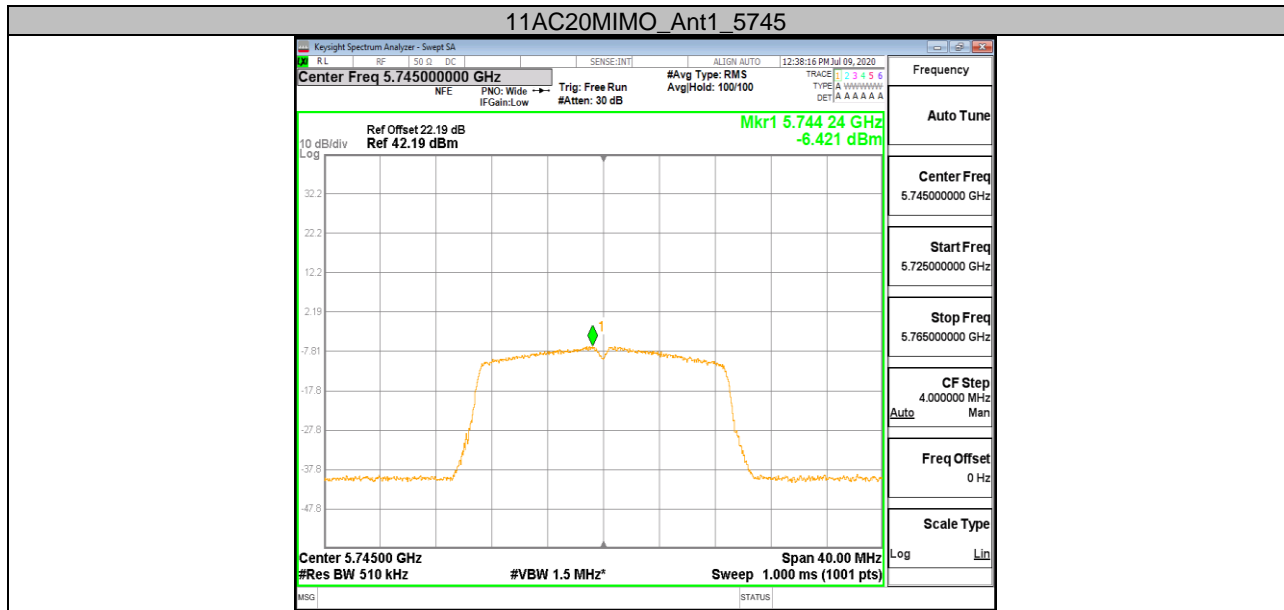


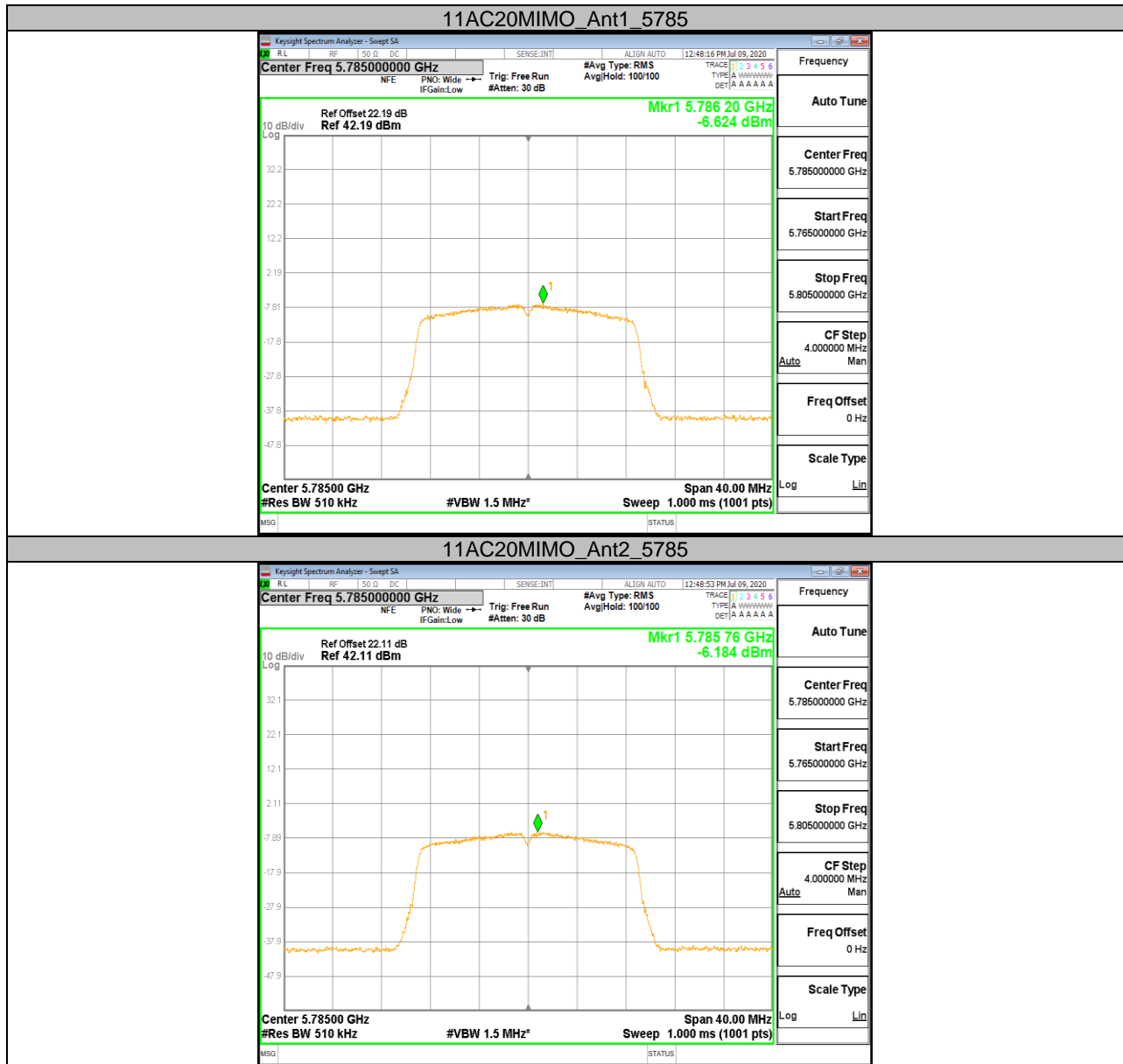


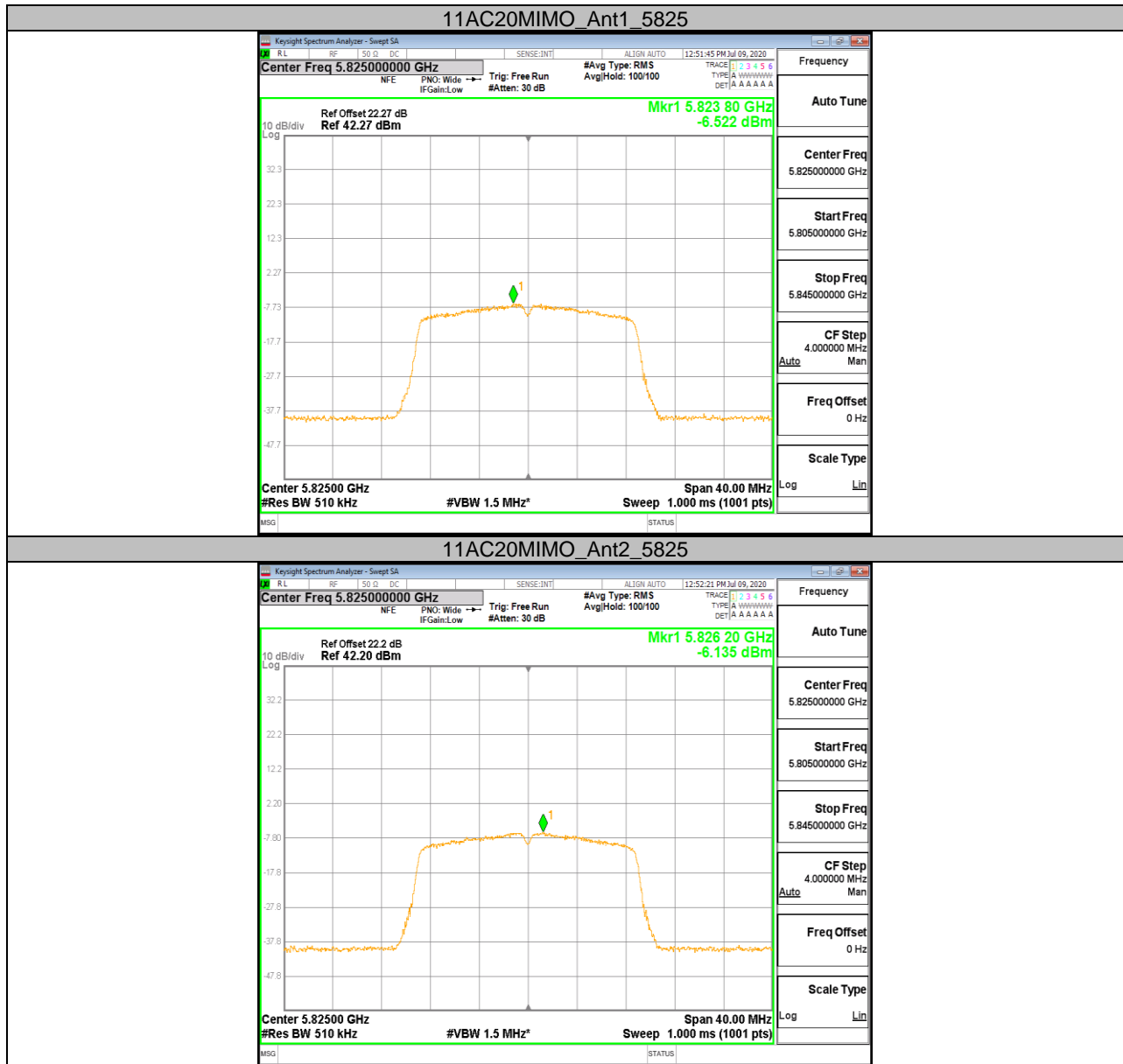


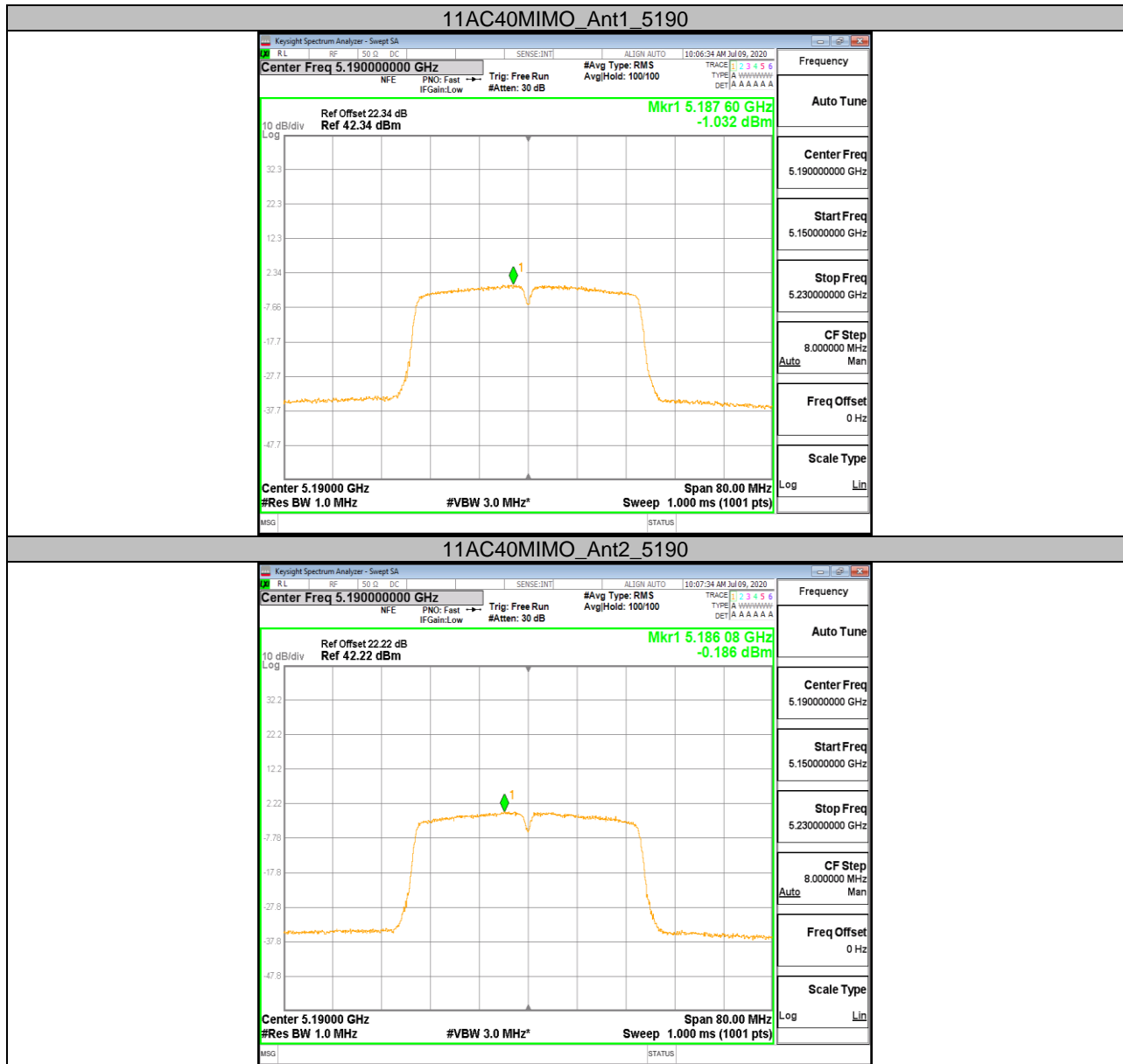


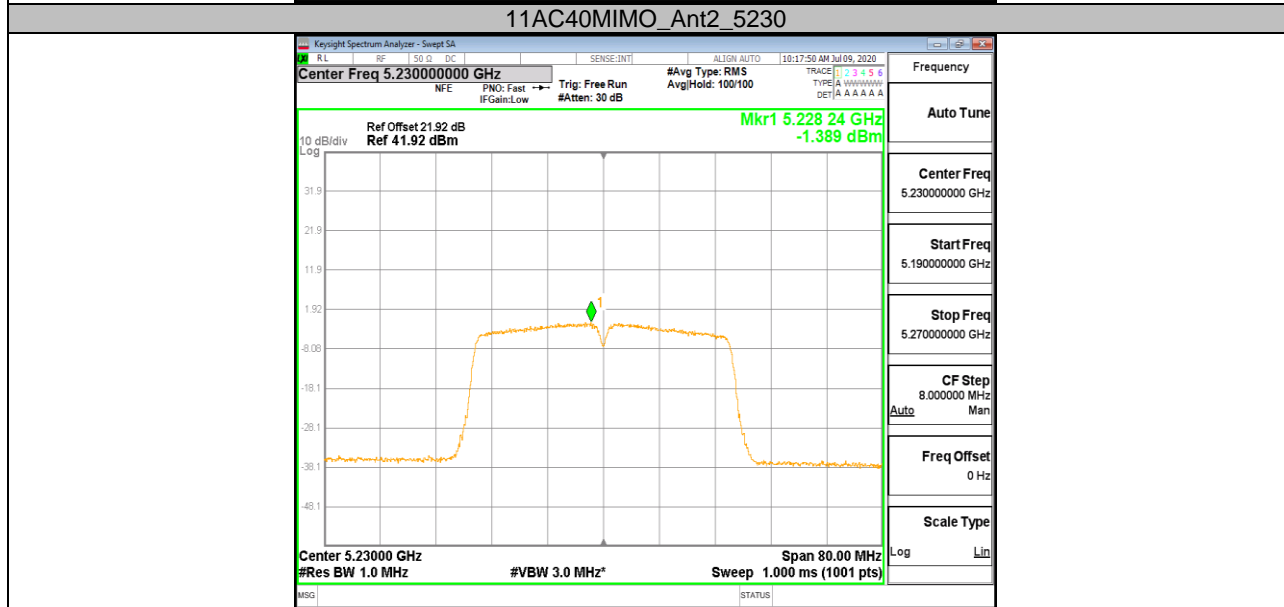
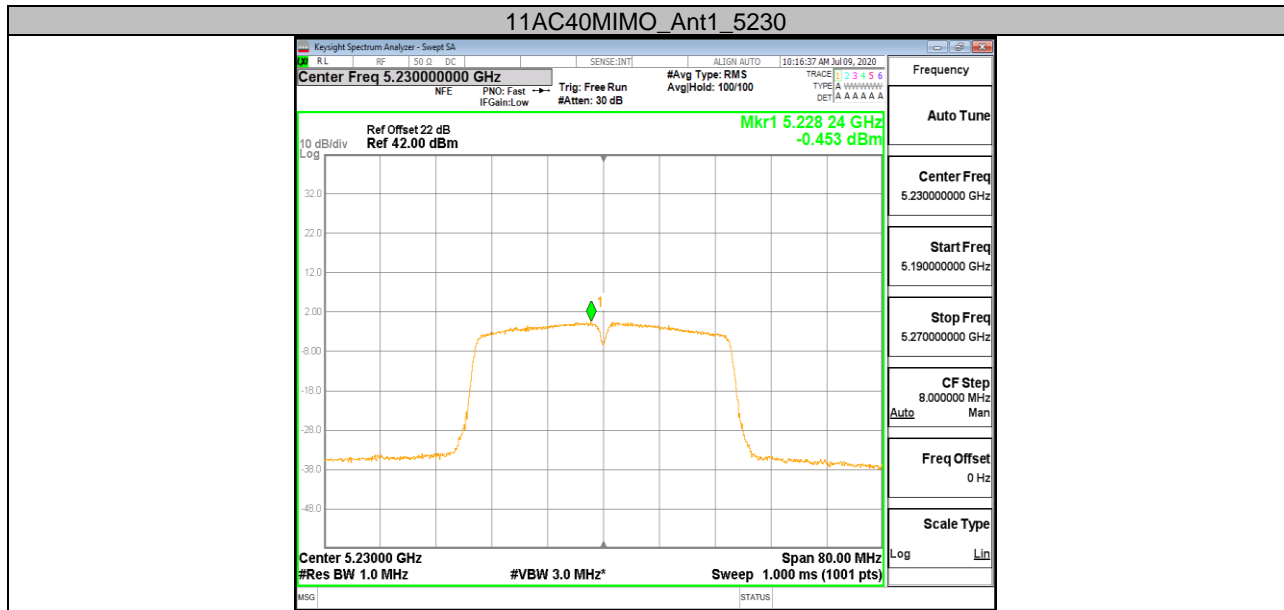


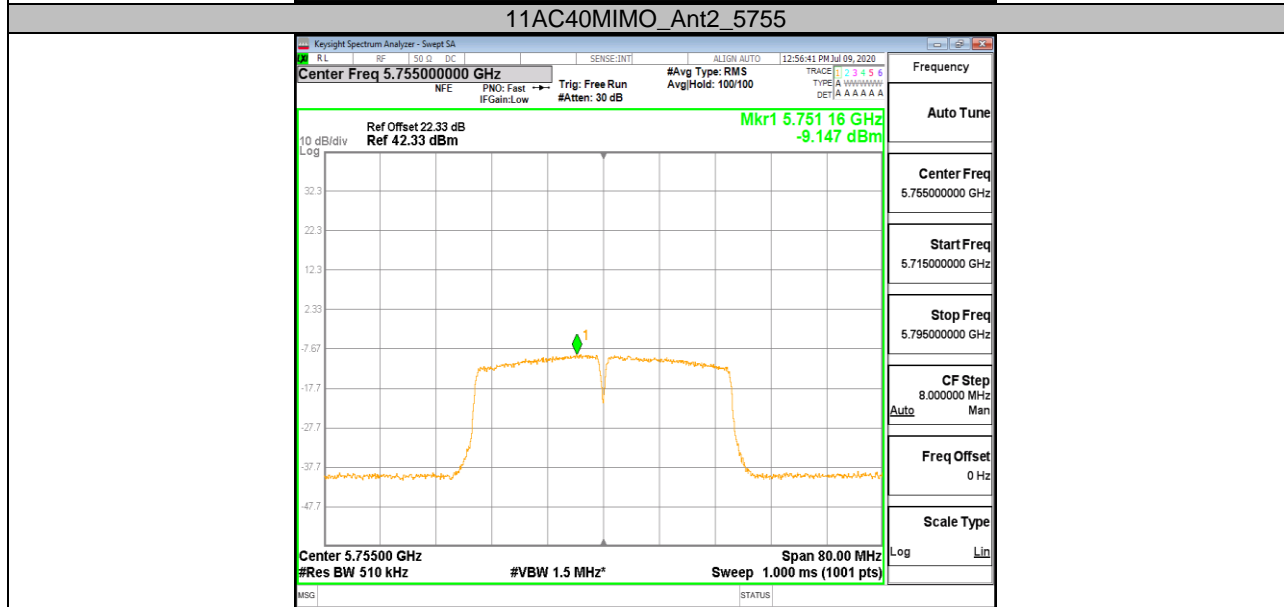
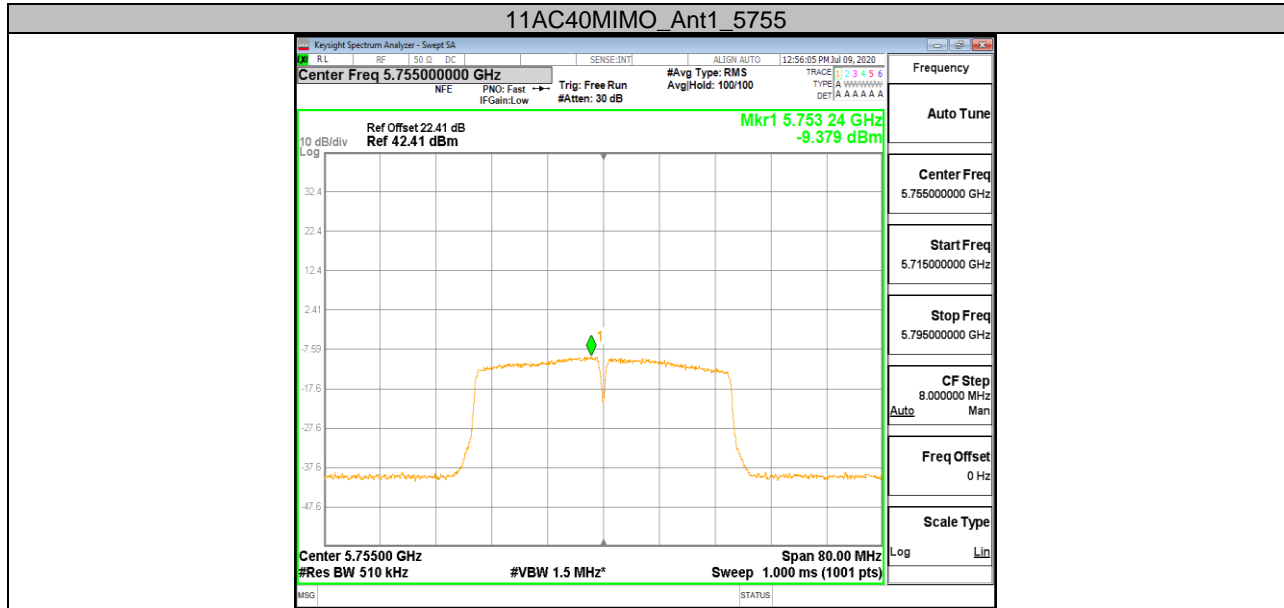


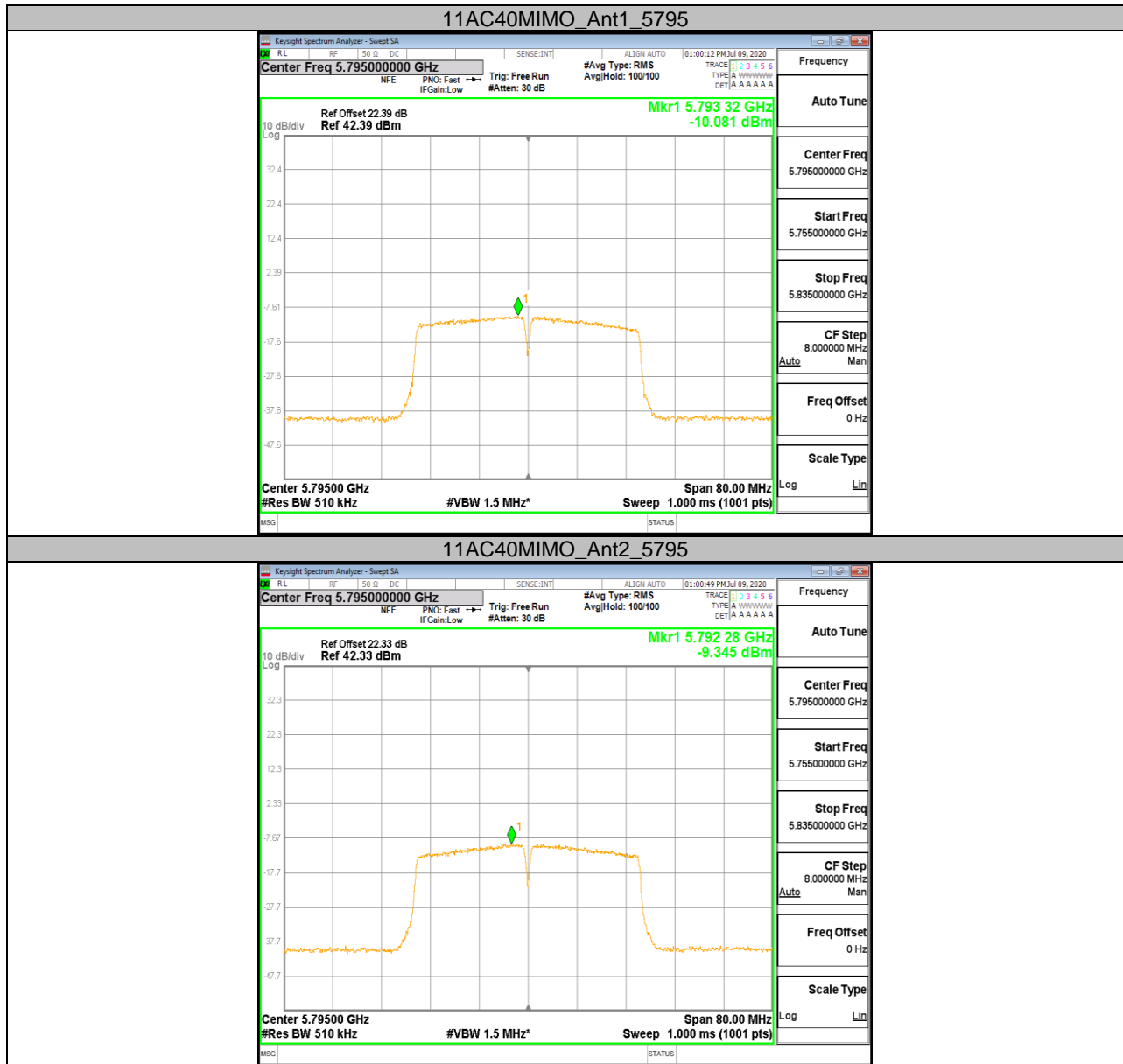


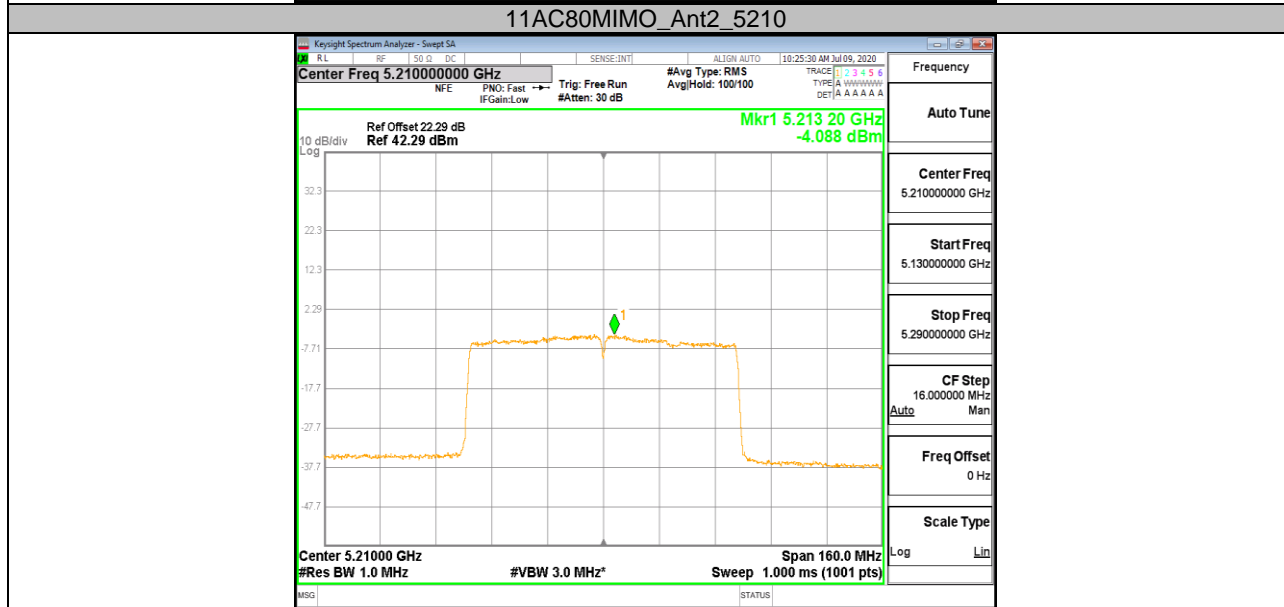
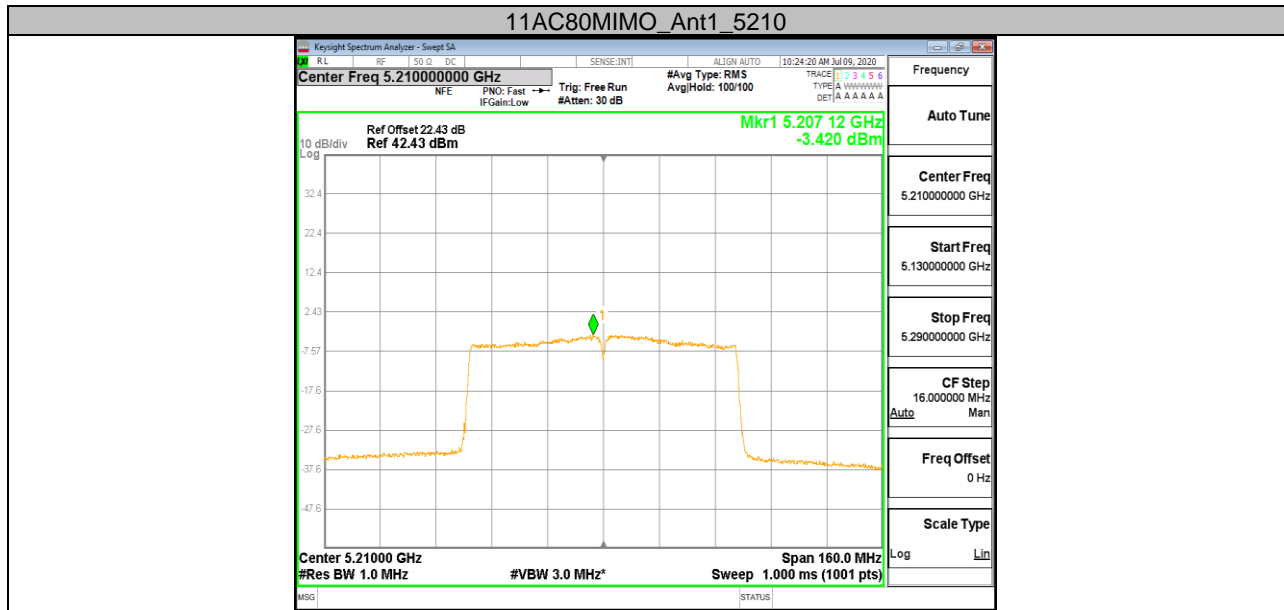
















11.6. Appendix D: Duty Cycle
11.6.1. Test Result

Test 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)
11A20	1.390	1.455	0.955	95.5%	0.20	0.72	1.0
11AC20MIMO	1.310	1.374	0.953	95.3%	0.21	0.76	1.0
11AC40MIMO	0.650	0.714	0.910	91.0%	0.41	1.54	2.0
11AC80MIMO	0.322	0.386	0.834	83.4%	0.79	3.11	4.0

Note:

Duty Cycle Correction Factor=10log (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.



11.6.2. Test Graphs







11.7. Appendix E: Frequency Stability
11.7.1. Test Result

Frequency Error vs. Voltage									
802.11a20:5200MHz									
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)
TN	VL	5200.0040	0.76	5199.9967	-0.64	5200.0120	2.30	5199.9995	-0.10
TN	VN	5200.0185	3.55	5199.9955	-0.86	5200.0194	3.73	5199.9868	-2.54
TN	VH	5200.0060	1.16	5199.9804	-3.77	5200.0060	1.15	5199.9942	-1.11
Frequency Error vs. Temperature									
802.11a20:5200MHz									
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)
40	VN	5200.0213	4.09	5200.0183	3.51	5199.9897	-1.98	5199.9795	-3.93
30	VN	5200.0195	3.74	5200.0020	0.38	5200.0178	3.42	5199.9835	-3.17
20	VN	5199.9876	-2.38	5199.9911	-1.72	5199.9947	-1.03	5200.0027	0.51
10	VN	5200.0054	1.04	5199.9839	-3.10	5200.0163	3.14	5200.0093	1.79
0	VN	5200.0023	0.45	5199.9897	-1.97	5200.0164	3.15	5200.0159	3.05
Frequency Error vs. Voltage									
802.11a20:5825MHz									
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)
TN	VL	5825.0044	0.76	5824.9788	-3.64	5824.9952	-0.83	5824.9937	-1.09
TN	VN	5825.0178	3.06	5824.9927	-1.26	5825.0072	1.24	5825.0119	2.04
TN	VH	5824.9999	-0.01	5824.9985	-0.26	5825.0214	3.67	5824.9973	-0.47
Frequency Error vs. Temperature									
802.11a20:5825MHz									
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	VN	5824.9913	-1.49	5825.0188	3.23	5825.0000	0.00	5825.0057	0.98
30	VN	5825.0011	0.20	5824.9948	-0.89	5824.9819	-3.11	5825.0093	1.60
20	VN	5824.9979	-0.36	5825.0167	2.86	5825.0136	2.33	5825.0175	3.00
10	VN	5824.9958	-0.72	5824.9792	-3.57	5825.0204	3.50	5825.0077	1.32
0	VN	5824.9768	-3.98	5824.9993	-0.11	5824.9813	-3.20	5824.9941	-1.02

Note: All the test modes have been tested, only the worst data record in the report.

END OF REPORT