

Appendix A: Test Results of 5GHz Wi-Fi

APPENDIX A: TEST RESULTS OF 5GHZ WI-FI.....	1
APPENDIX A.1: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	2
APPENDIX A.2: TEST RESULTS OF FREQUENCY STABILITY	49
APPENDIX A.3: TEST RESULTS OF 26dB BANDWIDTH	51
APPENDIX A.4: TEST RESULTS OF 99% BANDWIDTH.....	75
APPENDIX A.5: TEST RESULTS OF 6dB BANDWIDTH	99
APPENDIX A.6: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	105
30MHz - 1GHz (Worst case)	105
1GHz - 18GHz	107
APPENDIX A.7: TEST RESULTS OF DYNAMIC FREQUENCY SELECTION (DFS)	219
DFS Detection Thresholds	219
Channel Move Time and Channel Closing Transmission Time	221
Non-Occupancy Period.....	224
APPENDIX A.8: TEST RESULTS OF CONDUCTED EMISSION	226

Appendix A.1: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Channel	Result [dBm/MHz for band U-NII-1, U-NII-2A, U-NII-2C; dBm/500KHz] for U-NII-3	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	3.68	≤11.00	PASS
	Ant2	5180	5.56	≤11.00	PASS
	Ant1	5200	3.79	≤11.00	PASS
	Ant2	5200	5.47	≤11.00	PASS
	Ant1	5240	3.09	≤11.00	PASS
	Ant2	5240	4.25	≤11.00	PASS
	Ant1	5260	2.07	≤11.00	PASS
	Ant2	5260	4.21	≤11.00	PASS
	Ant1	5280	2.37	≤11.00	PASS
	Ant2	5280	4.12	≤11.00	PASS
	Ant1	5320	2.3	≤11.00	PASS
	Ant2	5320	4.25	≤11.00	PASS
	Ant1	5500	-4.28	≤11.00	PASS
	Ant2	5500	-3.48	≤11.00	PASS
	Ant1	5580	-0.67	≤11.00	PASS
	Ant2	5580	0.85	≤11.00	PASS
	Ant1	5700	-0.99	≤11.00	PASS
	Ant2	5700	1.5	≤11.00	PASS
	Ant1	5720	1.76	≤11.00	PASS
	Ant2	5720	2.14	≤11.00	PASS
	Ant1	5745	-0.35	≤30.00	PASS
	Ant2	5745	-0.71	≤30.00	PASS
	Ant1	5785	-0.15	≤30.00	PASS
	Ant2	5785	-0.92	≤30.00	PASS
11N20MIMO	Ant1	5825	-1.49	≤30.00	PASS
	Ant2	5825	-0.55	≤30.00	PASS
	Ant1	5180	0.8	≤11.00	PASS
	Ant2	5180	3.5	≤11.00	PASS
	total	5180	5.37	≤8.70	PASS
	Ant1	5200	0.78	≤11.00	PASS
	Ant2	5200	3.31	≤11.00	PASS
	total	5200	5.24	≤8.70	PASS
	Ant1	5240	0.69	≤11.00	PASS
	Ant2	5240	2.52	≤11.00	PASS
	total	5240	4.71	≤8.70	PASS
	Ant1	5260	-0.63	≤11.00	PASS
	Ant2	5260	2.48	≤11.00	PASS
	total	5260	4.21	≤8.70	PASS
	Ant1	5280	0	≤11.00	PASS
	Ant2	5280	2.81	≤11.00	PASS
	total	5280	4.64	≤8.70	PASS
	Ant1	5320	0.66	≤11.00	PASS
	Ant2	5320	2.69	≤11.00	PASS
	total	5320	4.80	≤8.70	PASS
	Ant1	5500	-3	≤11.00	PASS
	Ant2	5500	-1.81	≤11.00	PASS
	total	5500	0.65	≤8.70	PASS
	Ant1	5580	-2.1	≤11.00	PASS
	Ant2	5580	0.45	≤11.00	PASS
	total	5580	2.37	≤8.70	PASS
	Ant1	5700	3.34	≤11.00	PASS
	Ant2	5700	6.17	≤11.00	PASS
	total	5700	7.99	≤8.70	PASS
	Ant1	5720	-0.27	≤11.00	PASS
	Ant2	5720	-0.04	≤11.00	PASS
	total	5720	2.86	≤8.70	PASS
	Ant1	5745	0.4	≤30.00	PASS

	Ant2	5745	0.25	≤30.00	PASS
	total	5745	3.34	≤27.70	PASS
	Ant1	5785	0.29	≤30.00	PASS
	Ant2	5785	0.4	≤30.00	PASS
	total	5785	3.36	≤27.70	PASS
	Ant1	5825	-0.62	≤30.00	PASS
	Ant2	5825	0.03	≤30.00	PASS
	total	5825	2.73	≤27.70	PASS
11N40MIMO	Ant1	5190	-1.17	≤11.00	PASS
	Ant2	5190	1.14	≤11.00	PASS
	total	5190	3.15	≤8.70	PASS
	Ant1	5230	-1.53	≤11.00	PASS
	Ant2	5230	0.83	≤11.00	PASS
	total	5230	2.82	≤8.70	PASS
	Ant1	5270	-2.48	≤11.00	PASS
	Ant2	5270	0.19	≤11.00	PASS
	total	5270	2.07	≤8.70	PASS
	Ant1	5310	-5.08	≤11.00	PASS
	Ant2	5310	-2.17	≤11.00	PASS
	total	5310	-0.38	≤8.70	PASS
	Ant1	5510	-10.05	≤11.00	PASS
	Ant2	5510	-8.88	≤11.00	PASS
	total	5510	-6.42	≤8.70	PASS
	Ant1	5550	-4.11	≤11.00	PASS
	Ant2	5550	-3.41	≤11.00	PASS
	total	5550	-0.74	≤8.70	PASS
	Ant1	5670	-4.38	≤11.00	PASS
	Ant2	5670	-3.79	≤11.00	PASS
	total	5670	-1.06	≤8.70	PASS
	Ant1	5710	0.26	≤11.00	PASS
	Ant2	5710	-0.38	≤11.00	PASS
	total	5710	2.96	≤8.70	PASS
	Ant1	5755	-4.35	≤30.00	PASS
	Ant2	5755	-5.37	≤30.00	PASS
	total	5755	-1.82	≤27.70	PASS
	Ant1	5795	-4.66	≤30.00	PASS
	Ant2	5795	-4.57	≤30.00	PASS
	total	5795	-1.6	≤27.70	PASS
11AC20MIMO	Ant1	5180	0.99	≤11.00	PASS
	Ant2	5180	3.65	≤11.00	PASS
	total	5180	5.53	≤8.70	PASS
	Ant1	5200	0.93	≤11.00	PASS
	Ant2	5200	3.65	≤11.00	PASS
	total	5200	5.51	≤8.70	PASS
	Ant1	5240	1.04	≤11.00	PASS
	Ant2	5240	2.71	≤11.00	PASS
	total	5240	4.97	≤8.70	PASS
	Ant1	5260	-0.28	≤11.00	PASS
	Ant2	5260	2.77	≤11.00	PASS
	total	5260	4.52	≤8.70	PASS
	Ant1	5280	-0.2	≤11.00	PASS
	Ant2	5280	2.56	≤11.00	PASS
	total	5280	4.41	≤8.70	PASS
	Ant1	5320	0.45	≤11.00	PASS
	Ant2	5320	2.48	≤11.00	PASS
	total	5320	4.59	≤8.70	PASS
	Ant1	5500	-3	≤11.00	PASS
	Ant2	5500	-0.79	≤11.00	PASS
	total	5500	1.25	≤8.70	PASS
	Ant1	5580	-1.91	≤11.00	PASS
	Ant2	5580	0.61	≤11.00	PASS
	total	5580	2.54	≤8.70	PASS
	Ant1	5700	-2.46	≤11.00	PASS

	Ant2	5700	0.31	≤11.00	PASS
	total	5700	2.15	≤8.70	PASS
	Ant1	5720	0.92	≤11.00	PASS
	Ant2	5720	1.4	≤11.00	PASS
	total	5720	4.18	≤8.70	PASS
	Ant1	5745	-1.85	≤30.00	PASS
	Ant2	5745	-2.48	≤30.00	PASS
	total	5745	0.86	≤27.70	PASS
	Ant1	5785	-2.05	≤30.00	PASS
	Ant2	5785	-1.91	≤30.00	PASS
	total	5785	1.03	≤27.70	PASS
	Ant1	5825	-2.76	≤30.00	PASS
	Ant2	5825	-1.98	≤30.00	PASS
	total	5825	0.66	≤27.70	PASS
11AC40MIMO	Ant1	5190	-1.11	≤11.00	PASS
	Ant2	5190	1.32	≤11.00	PASS
	total	5190	3.28	≤8.70	PASS
	Ant1	5230	-1.54	≤11.00	PASS
	Ant2	5230	0.18	≤11.00	PASS
	total	5230	2.41	≤8.70	PASS
	Ant1	5270	-2.1	≤11.00	PASS
	Ant2	5270	-0.07	≤11.00	PASS
	total	5270	2.04	≤8.70	PASS
	Ant1	5310	-4.52	≤11.00	PASS
	Ant2	5310	-2.66	≤11.00	PASS
	total	5310	-0.48	≤8.70	PASS
	Ant1	5510	-10.41	≤11.00	PASS
	Ant2	5510	-8.35	≤11.00	PASS
	total	5510	-6.25	≤8.70	PASS
	Ant1	5550	-4.15	≤11.00	PASS
	Ant2	5550	-2.96	≤11.00	PASS
	total	5550	-0.50	≤8.70	PASS
	Ant1	5670	-4.26	≤11.00	PASS
	Ant2	5670	-3.23	≤11.00	PASS
	total	5670	-0.70	≤8.70	PASS
	Ant1	5710	-0.52	≤11.00	PASS
	Ant2	5710	-0.09	≤11.00	PASS
	total	5710	2.71	≤8.70	PASS
	Ant1	5755	-4.63	≤30.00	PASS
	Ant2	5755	-4.58	≤30.00	PASS
	total	5755	-1.59	≤27.70	PASS
	Ant1	5795	-4.93	≤30.00	PASS
	Ant2	5795	-4.48	≤30.00	PASS
	total	5795	-1.69	≤27.70	PASS
11AC80MIMO	Ant1	5210	-4.54	≤11.00	PASS
	Ant2	5210	-2.51	≤11.00	PASS
	total	5210	-0.40	≤8.70	PASS
	Ant1	5290	-5.02	≤11.00	PASS
	Ant2	5290	-2.84	≤11.00	PASS
	total	5290	-0.78	≤8.70	PASS
	Ant1	5530	-11.89	≤11.00	PASS
	Ant2	5530	-10.86	≤11.00	PASS
	total	5530	-8.33	≤8.70	PASS
	Ant1	5610	-10.71	≤11.00	PASS
	Ant2	5610	-10.57	≤11.00	PASS
	total	5610	-7.63	≤8.70	PASS
	Ant1	5690	0.86	≤11.00	PASS
	Ant2	5690	0.14	≤11.00	PASS
	total	5690	3.53	≤8.70	PASS
	Ant1	5775	-8.76	≤30.00	PASS
	Ant2	5775	-7.94	≤30.00	PASS
	total	5775	-5.32	≤27.70	PASS

*For the WLAN 5GHz 802.11n/802.11ac, the directional gain is 8.3dBi for MIMO mode, thus the power limit should be reduced by 2.3dB.

The Duty Cycle Factor is compensated in the tables.

As for the band 5.725–5.850 GHz, a narrower RBW (300KHz) used, thus a factor $10 \cdot \log(500 \text{ kHz/RBW})$ added to the final results.

11A_Ant1_5180



11A_Ant2_5180



11A_Ant1_5200



11A Ant2 5200



11A Ant1 5240



11A Ant2 5240



11A Ant1 5260



11A Ant2 5260



11A Ant1 5280



11A_Ant2_5280



11A_Ant1_5320



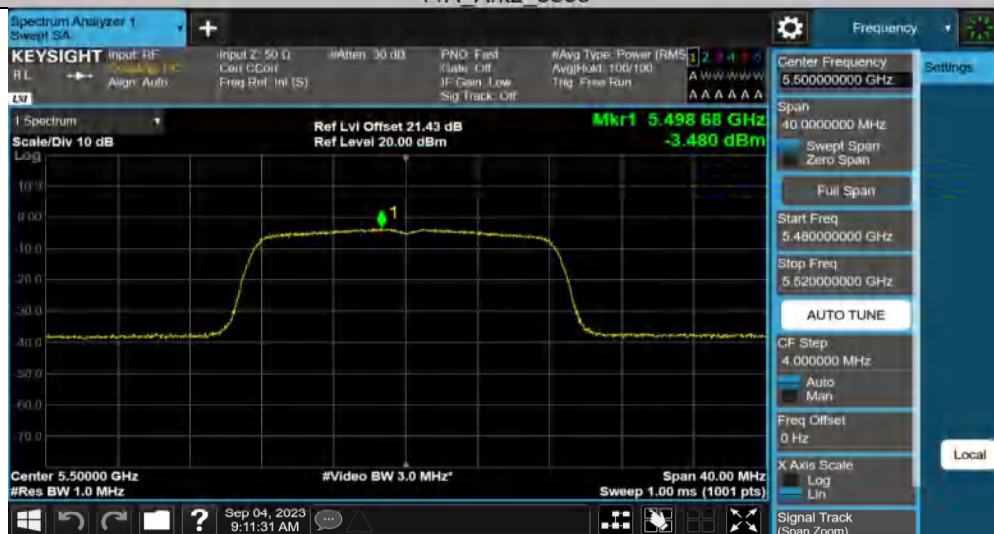
11A Ant2 5320



11A Ant1 5500



11A Ant2 5500



11A Ant1 5580

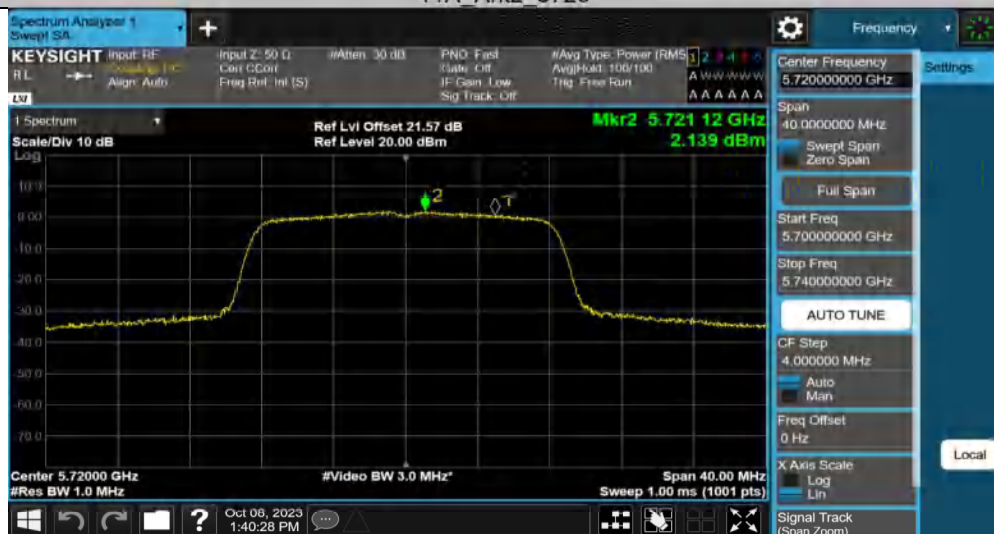




11A Ant1 5720



11A Ant2 5720



11A Ant1 5745



11A Ant2 5745



11A Ant1 5785



11A Ant2 5785



11A Ant1 5825



11A Ant2 5825



11N20MIMO Ant1 5180



11N20MIMO Ant2 5180



11N20MIMO Ant1 5200



11N20MIMO Ant2 5200



11N20MIMO Ant1 5240



11N20MIMO Ant2 5240



11N20MIMO Ant1 5260



11N20MIMO Ant2 5260



11N20MIMO Ant1 5280



11N20MIMO Ant2 5280



11N20MIMO Ant1 5320



11N20MIMO Ant2 5320



11N20MIMO Ant1 5500



11N20MIMO Ant2 5500



11N20MIMO Ant1 5580



11N20MIMO Ant2 5580



11N20MIMO Ant1 5700



11N20MIMO Ant2 5700



11N20MIMO Ant1 5720



11N20MIMO Ant2 5720



11N20MIMO Ant1 5745



11N20MIMO Ant2 5745