





11AC80MIMO Ant1 5290



11AC80MIMO Ant2 5530

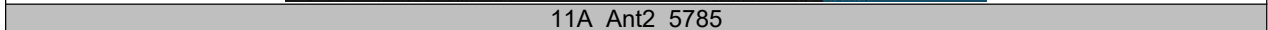


11AC80MIMO Ant1 5690





6dB Bandwidth:









11N20MIMO Ant1 5825



11N20MIMO Ant2 5825



11N40MIMO Ant1 5755



11N40MIMO Ant2 5755



11N40MIMO Ant1 5795



11N40MIMO Ant2 5795











10. Maximum Output Power

10.1. Block Diagram of Test Setup

Same as section 8.1

10.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	<input type="checkbox"/> Outdoor Access Point: 1 W (30 dBm)	5150-5250
	<input type="checkbox"/> Indoor Access Point: 1 W (30 dBm)	
	<input type="checkbox"/> Fixed Point-To-Point Access Points: 1 W (30 dBm)	
	<input checked="" type="checkbox"/> Client Devices: 250 mW (24 dBm)	
	Shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz.	5250-5350 5470-5725
	Shall not exceed 1 Watt (30 dBm).	5725-5850

ISED RSS-247 ISSUE 2		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power or e.i.r.p.	The maximum e.i.r.p. shall not exceed 200 mW (23 dBm) or 10 + 10 log ₁₀ B, dBm, whichever power is less. B is the 99 % emission bandwidth in megahertz.	5150-5250
	a. The maximum conducted output power shall not exceed 250 mW (24 dBm) or 11 + 10 log ₁₀ B dBm, whichever is less.	5250-5350
	b. The maximum e.i.r.p. shall not exceed 1.0 W (30 dBm) or 17 + 10 log ₁₀ B dBm, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.	5250-5350 5470-5600 5650-5725
	Shall not exceed 1 Watt (30 dBm). The e.i.r.p. shall not exceed 4 W	5725-5850

Note: The above limits are based upon the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

10.3. Test Procedure

- (1) Connect each EUT's antenna output to power meter by RF cable and attenuator
- (2) Add each antenna port's results to get the total output power of EUT.

10.4. Test Result

Test Mode	Ant.	Freq. (MHz)	Channel Power (dBm)	DC Factor (dBm)	Result (dBm)	Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)	Verdict	
11A	Ant1	5180	9.91	1.36	11.27	≤24.00	16.21	≤23.00	PASS	
	Ant2	5180	9.84	1.36	11.20	≤24.00	15.28	≤23.00	PASS	
	Ant1	5200	10.77	1.38	12.15	≤24.00	17.09	≤23.00	PASS	
	Ant2	5200	10.56	1.36	11.92	≤24.00	16.00	≤23.00	PASS	
	Ant1	5240	10.47	1.36	11.83	≤24.00	16.77	≤23.00	PASS	
	Ant2	5240	10.13	1.38	11.51	≤24.00	15.59	≤23.00	PASS	
	Ant1	5260	10.98	1.36	12.34	≤23.61	17.28	≤24.00	PASS	
	Ant2	5260	10.08	1.36	11.44	≤23.52	15.52	≤24.00	PASS	
	Ant1	5280	11.42	1.38	12.80	≤23.48	17.74	≤24.00	PASS	
	Ant2	5280	9.99	1.36	11.35	≤23.59	15.43	≤24.00	PASS	
	Ant1	5320	10.29	1.36	11.65	≤23.55	16.59	≤24.00	PASS	
	Ant2	5320	9.00	1.38	10.38	≤23.53	14.46	≤24.00	PASS	
	Ant1	5500	8.84	1.38	10.22	≤23.69	15.16	≤24.00	PASS	
	Ant2	5500	9.08	1.38	10.46	≤23.63	14.54	≤24.00	PASS	
	Ant1	5580	9.87	1.36	11.23	≤23.45	16.17	≤24.00	PASS	
	Ant2	5580	10.56	1.36	11.92	≤23.56	16.00	≤24.00	PASS	
	Ant1	5700	12.66	1.36	14.02	≤23.71	18.96	≤24.00	PASS	
	Ant2	5700	8.27	1.36	9.63	≤23.70	13.71	≤24.00	PASS	
	Ant1	5720_U NII-2C	11.58	1.38	12.96	≤22.49	17.90	≤24.00	PASS	
	Ant2	5720_U NII-2C	6.82	1.36	8.18	≤22.44	12.26	≤24.00	PASS	
	Ant1	5720_U NII-3	3.65	1.38	5.03	≤30.00	9.97	≤36.00	PASS	
	Ant2	5720_U NII-3	-1.51	1.36	-0.15	≤30.00	3.93	≤36.00	PASS	
	Ant1	5745	13.36	1.36	14.72	≤30.00	19.66	≤36.00	PASS	
	Ant2	5745	9.55	1.36	10.91	≤30.00	14.99	≤36.00	PASS	
	Ant1	5785	12.31	1.38	13.69	≤30.00	18.63	≤36.00	PASS	
	Ant2	5785	8.68	1.38	10.06	≤30.00	14.14	≤36.00	PASS	
	Ant1	5825	12.13	1.36	13.49	≤30.00	18.43	≤36.00	PASS	
	Ant2	5825	7.40	1.38	8.78	≤30.00	12.86	≤36.00	PASS	
	11N20MI MO	Ant1	5180	7.18	1.44	8.62	≤24.00	13.56	≤23.00	PASS
		Ant2	5180	8.84	1.47	10.31	≤24.00	14.39	≤23.00	PASS
total		5180	---	---	12.56	≤24.00	17.50	≤23.00	PASS	
Ant1		5200	9.04	1.44	10.48	≤24.00	15.42	≤23.00	PASS	
Ant2		5200	9.36	1.44	10.80	≤24.00	14.88	≤23.00	PASS	
total		5200	---	---	13.65	≤24.00	18.59	≤23.00	PASS	
Ant1		5240	9.16	1.43	10.59	≤24.00	15.53	≤23.00	PASS	
Ant2		5240	9.01	1.44	10.45	≤24.00	14.53	≤23.00	PASS	
total		5240	---	---	13.53	≤24.00	18.47	≤23.00	PASS	
Ant1		5260	10.45	1.47	11.92	≤23.73	16.86	≤24.00	PASS	
Ant2		5260	8.93	1.44	10.37	≤23.71	14.45	≤24.00	PASS	
total		5260	---	---	14.22	≤23.98	19.16	≤24.00	PASS	
Ant1		5280	10.16	1.47	11.63	≤23.79	16.57	≤24.00	PASS	
Ant2		5280	8.83	1.44	10.27	≤23.81	14.35	≤24.00	PASS	
total		5280	---	---	14.01	≤23.98	18.95	≤24.00	PASS	
Ant1		5320	9.71	1.43	11.14	≤23.84	16.08	≤24.00	PASS	
Ant2		5320	7.50	1.47	8.97	≤23.70	13.05	≤24.00	PASS	
total		5320	---	---	13.20	≤23.98	18.14	≤24.00	PASS	
Ant1		5500	7.66	1.44	9.10	≤23.79	14.04	≤24.00	PASS	
Ant2		5500	6.82	1.44	8.26	≤23.84	12.34	≤24.00	PASS	
total		5500	---	---	11.71	≤23.98	16.65	≤24.00	PASS	
Ant1		5580	9.63	1.43	11.06	≤23.83	16.00	≤24.00	PASS	
Ant2		5580	7.04	1.44	8.48	≤23.78	12.56	≤24.00	PASS	
total		5580	---	---	12.97	≤23.98	17.91	≤24.00	PASS	

	Ant1	5700	9.91	1.43	11.34	≤23.80	16.28	≤24.00	PASS	
	Ant2	5700	2.81	1.47	4.28	≤23.73	8.36	≤24.00	PASS	
	total	5700	---	---	12.12	≤23.98	17.06	≤24.00	PASS	
	Ant1	5720_U NII-2C	9.21	1.44	10.65	≤22.55	15.59	≤24.00	PASS	
	Ant2	5720_U NII-2C	3.56	1.44	5.00	≤22.67	9.08	≤24.00	PASS	
	total	5720_U NII-2C	---	---	11.70	≤23.98	16.64	≤24.00	PASS	
	Ant1	5720_U NII-3	1.54	1.44	2.98	≤30.00	7.92	≤36.00	PASS	
	Ant2	5720_U NII-3	-4.49	1.44	-3.05	≤30.00	1.03	≤36.00	PASS	
	total	5720_U NII-3	---	---	3.95	≤30.00	8.89	≤36.00	PASS	
	Ant1	5745	11.15	1.44	12.59	≤30.00	17.53	≤36.00	PASS	
	Ant2	5745	2.30	1.43	3.73	≤30.00	7.81	≤36.00	PASS	
	total	5745	---	---	13.12	≤30.00	18.06	≤36.00	PASS	
	Ant1	5785	9.01	1.44	10.45	≤30.00	15.39	≤36.00	PASS	
	Ant2	5785	2.36	1.43	3.79	≤30.00	7.87	≤36.00	PASS	
	total	5785	---	---	11.30	≤30.00	16.24	≤36.00	PASS	
	Ant1	5825	10.28	1.47	11.75	≤30.00	16.69	≤36.00	PASS	
	Ant2	5825	4.33	1.43	5.76	≤30.00	9.84	≤36.00	PASS	
	total	5825	---	---	12.73	≤30.00	17.67	≤36.00	PASS	
11N40MI MO	Ant1	5190	6.97	2.54	9.51	≤24.00	14.45	≤36.00	PASS	
	Ant2	5190	7.23	2.54	9.77	≤24.00	13.85	≤23.00	PASS	
	total	5190	---	---	12.65	≤24.00	17.59	≤23.00	PASS	
	Ant1	5230	8.23	2.58	10.81	≤24.00	15.75	≤23.00	PASS	
	Ant2	5230	7.07	2.58	9.65	≤24.00	13.73	≤23.00	PASS	
	total	5230	---	---	13.28	≤24.00	18.22	≤23.00	PASS	
	Ant1	5270	8.09	2.54	10.63	≤24.00	15.57	≤24.00	PASS	
	Ant2	5270	6.86	2.54	9.40	≤24.00	13.48	≤24.00	PASS	
	total	5270	---	---	13.07	≤24.00	18.01	≤24.00	PASS	
	Ant1	5310	6.51	2.54	9.05	≤24.00	13.99	≤24.00	PASS	
	Ant2	5310	5.69	2.54	8.23	≤24.00	12.31	≤24.00	PASS	
	total	5310	---	---	11.67	≤24.00	16.61	≤24.00	PASS	
	Ant1	5510	7.97	2.54	10.51	≤24.00	15.45	≤24.00	PASS	
	Ant2	5510	3.67	2.51	6.18	≤24.00	10.26	≤24.00	PASS	
	total	5510	---	---	11.87	≤24.00	16.81	≤24.00	PASS	
	Ant1	5550	7.35	2.54	9.89	≤24.00	14.83	≤24.00	PASS	
	Ant2	5550	6.98	2.54	9.52	≤24.00	13.60	≤24.00	PASS	
	total	5550	---	---	12.72	≤24.00	17.66	≤24.00	PASS	
	Ant1	5670	9.54	2.58	12.12	≤24.00	17.06	≤24.00	PASS	
	Ant2	5670	7.06	2.58	9.64	≤24.00	13.72	≤24.00	PASS	
	total	5670	---	---	14.06	≤24.00	19.00	≤24.00	PASS	
		Ant1	5710_U NII-2C	8.90	2.58	11.48	≤24.00	16.42	≤24.00	PASS
		Ant2	5710_U NII-2C	3.15	2.54	5.69	≤24.00	9.77	≤24.00	PASS
		total	5710_U NII-2C	---	---	12.50	≤24.00	17.44	≤24.00	PASS
		Ant1	5710_U NII-3	-5.59	2.58	-3.01	≤30.00	1.93	≤36.00	PASS
		Ant2	5710_U NII-3	-11.35	2.54	-8.81	≤30.00	-4.73	≤36.00	PASS
		total	5710_U NII-3	---	---	-2.00	≤30.00	2.94	≤36.00	PASS
		Ant1	5755	9.85	2.58	12.43	≤30.00	17.37	≤36.00	PASS
		Ant2	5755	2.57	2.58	5.15	≤30.00	9.23	≤36.00	PASS
		total	5755	---	---	13.17	≤30.00	18.11	≤36.00	PASS
		Ant1	5795	8.67	2.54	11.21	≤30.00	16.15	≤36.00	PASS