

			TPC_H	16.51	≤23.47	PASS
total	5260		TPC_L	15.73	≤23.47	PASS
			TPC_H	22.22	≤23.47	PASS
Ant1	5280		TPC_L	9.54	≤23.47	PASS
			TPC_H	15.92	≤23.47	PASS
Ant2	5280		TPC_L	9.60	≤23.47	PASS
			TPC_H	16.19	≤23.47	PASS
Ant3	5280		TPC_L	9.38	≤23.47	PASS
			TPC_H	15.96	≤23.47	PASS
Ant4	5280		TPC_L	10.06	≤23.47	PASS
			TPC_H	16.37	≤23.47	PASS
total	5280		TPC_L	15.67	≤23.47	PASS
			TPC_H	22.13	≤23.47	PASS
Ant1	5320		TPC_L	9.22	≤23.47	PASS
			TPC_H	15.59	≤23.47	PASS
Ant2	5320		TPC_L	9.30	≤23.47	PASS
			TPC_H	15.79	≤23.47	PASS
Ant3	5320		TPC_L	9.14	≤23.47	PASS
			TPC_H	15.55	≤23.47	PASS
Ant4	5320		TPC_L	9.23	≤23.47	PASS
			TPC_H	15.57	≤23.47	PASS
total	5320		TPC_L	15.24	≤23.47	PASS
			TPC_H	21.65	≤23.47	PASS
Ant1	5500		TPC_L	8.50	≤23.47	PASS
			TPC_H	15.44	≤23.47	PASS
Ant2	5500		TPC_L	9.51	≤23.47	PASS
			TPC_H	15.73	≤23.47	PASS
Ant3	5500		TPC_L	9.46	≤23.47	PASS
			TPC_H	16.01	≤23.47	PASS
Ant4	5500		TPC_L	9.37	≤23.47	PASS
			TPC_H	15.61	≤23.47	PASS
total	5500		TPC_L	15.25	≤23.47	PASS
			TPC_H	21.72	≤23.47	PASS
Ant1	5580		TPC_L	9.14	≤23.47	PASS
			TPC_H	15.63	≤23.47	PASS
Ant2	5580		TPC_L	10.37	≤23.47	PASS
			TPC_H	16.65	≤23.47	PASS
Ant3	5580		TPC_L	9.92	≤23.47	PASS
			TPC_H	16.73	≤23.47	PASS
Ant4	5580		TPC_L	10.24	≤23.47	PASS
			TPC_H	16.35	≤23.47	PASS
total	5580		TPC_L	15.96	≤23.47	PASS

	Ant1	5700	TPC_H	22.38	≤23.47	PASS
			TPC_L	9.21	≤23.47	PASS
	Ant2	5700	TPC_H	15.59	≤23.47	PASS
			TPC_L	10.66	≤23.47	PASS
	Ant3	5700	TPC_H	16.94	≤23.47	PASS
			TPC_L	9.67	≤23.47	PASS
	Ant4	5700	TPC_H	16.18	≤23.47	PASS
			TPC_L	10.27	≤23.47	PASS
	total	5700	TPC_H	16.72	≤23.47	PASS
			TPC_L	16.01	≤23.47	PASS
	Ant1	5745	NA	21.31	≤29.49	PASS
	Ant2	5745	NA	22.38	≤29.49	PASS
	Ant3	5745	NA	22.53	≤29.49	PASS
	Ant4	5745	NA	22.31	≤29.49	PASS
	total	5745	NA	28.18	≤29.49	PASS
	Ant1	5785	NA	23.21	≤29.49	PASS
	Ant2	5785	NA	23.21	≤29.49	PASS
	Ant3	5785	NA	23.16	≤29.49	PASS
	Ant4	5785	NA	22.87	≤29.49	PASS
	total	5785	NA	29.14	≤29.49	PASS
	Ant1	5825	NA	21.68	≤29.49	PASS
	Ant2	5825	NA	22.53	≤29.49	PASS
	Ant3	5825	NA	22.21	≤29.49	PASS
	Ant4	5825	NA	21.83	≤29.49	PASS
total	5825	NA	28.10	≤29.49	PASS	
11AX40MIMO	Ant1	5190	NA	14.12	≤29.49	PASS
	Ant2	5190	NA	14.78	≤29.49	PASS
	Ant3	5190	NA	14.63	≤29.49	PASS
	Ant4	5190	NA	14.35	≤29.49	PASS
	total	5190	NA	20.50	≤29.49	PASS
	Ant1	5230	NA	22.44	≤29.49	PASS
	Ant2	5230	NA	23.83	≤29.49	PASS
	Ant3	5230	NA	23.48	≤29.49	PASS
	Ant4	5230	NA	23.19	≤29.49	PASS
	total	5230	NA	29.29	≤29.49	PASS
	Ant1	5270	TPC_L	10.06	≤23.47	PASS
			TPC_H	16.59	≤23.47	PASS
	Ant2	5270	TPC_L	11.22	≤23.47	PASS
			TPC_H	17.56	≤23.47	PASS
	Ant3	5270	TPC_L	10.57	≤23.47	PASS
			TPC_H	17.15	≤23.47	PASS

	Ant4	5270	TPC_L	11.09	≤23.47	PASS
			TPC_H	17.48	≤23.47	PASS
	total	5270	TPC_L	16.78	≤23.47	PASS
			TPC_H	23.23	≤23.47	PASS
	Ant1	5310	TPC_L	7.75	≤23.47	PASS
			TPC_H	14.02	≤23.47	PASS
	Ant2	5310	TPC_L	7.82	≤23.47	PASS
			TPC_H	14.31	≤23.47	PASS
	Ant3	5310	TPC_L	8.36	≤23.47	PASS
			TPC_H	14.57	≤23.47	PASS
	Ant4	5310	TPC_L	7.69	≤23.47	PASS
			TPC_H	14.22	≤23.47	PASS
	total	5310	TPC_L	13.93	≤23.47	PASS
			TPC_H	20.31	≤23.47	PASS
	Ant1	5510	TPC_L	8.06	≤23.47	PASS
			TPC_H	14.34	≤23.47	PASS
	Ant2	5510	TPC_L	8.15	≤23.47	PASS
			TPC_H	14.73	≤23.47	PASS
	Ant3	5510	TPC_L	8.47	≤23.47	PASS
			TPC_H	14.76	≤23.47	PASS
	Ant4	5510	TPC_L	7.84	≤23.47	PASS
			TPC_H	14.18	≤23.47	PASS
	total	5510	TPC_L	14.16	≤23.47	PASS
			TPC_H	20.53	≤23.47	PASS
	Ant1	5550	TPC_L	10.48	≤23.47	PASS
			TPC_H	16.83	≤23.47	PASS
	Ant2	5550	TPC_L	11.46	≤23.47	PASS
			TPC_H	17.62	≤23.47	PASS
	Ant3	5550	TPC_L	11.14	≤23.47	PASS
			TPC_H	17.48	≤23.47	PASS
Ant4	5550	TPC_L	10.71	≤23.47	PASS	
		TPC_H	17.52	≤23.47	PASS	
total	5550	TPC_L	16.98	≤23.47	PASS	
		TPC_H	23.39	≤23.47	PASS	
Ant1	5670	TPC_L	10.49	≤23.47	PASS	
		TPC_H	16.82	≤23.47	PASS	
Ant2	5670	TPC_L	10.68	≤23.47	PASS	
		TPC_H	17.13	≤23.47	PASS	
Ant3	5670	TPC_L	10.98	≤23.47	PASS	
		TPC_H	17.57	≤23.47	PASS	
Ant4	5670	TPC_L	10.75	≤23.47	PASS	
		TPC_H	17.19	≤23.47	PASS	

	total	5670	TPC_L	16.75	≤23.47	PASS
			TPC_H	23.21	≤23.47	PASS
	Ant1	5755	NA	22.85	≤29.49	PASS
	Ant2	5755	NA	23.05	≤29.49	PASS
	Ant3	5755	NA	23.09	≤29.49	PASS
	Ant4	5755	NA	23.39	≤29.49	PASS
	total	5755	NA	29.12	≤29.49	PASS
	Ant1	5795	NA	23.22	≤29.49	PASS
	Ant2	5795	NA	23.64	≤29.49	PASS
	Ant3	5795	NA	23.74	≤29.49	PASS
	Ant4	5795	NA	22.52	≤29.49	PASS
total	5795	NA	29.33	≤29.49	PASS	
11AX80MIMO	Ant1	5210	NA	14.06	≤29.49	PASS
	Ant2	5210	NA	14.52	≤29.49	PASS
	Ant3	5210	NA	14.31	≤29.49	PASS
	Ant4	5210	NA	14.22	≤29.49	PASS
	total	5210	NA	20.30	≤29.49	PASS
	Ant1	5290	TPC_L	8.03	≤23.47	PASS
			TPC_H	14.55	≤23.47	PASS
	Ant2	5290	TPC_L	7.62	≤23.47	PASS
			TPC_H	14.07	≤23.47	PASS
	Ant3	5290	TPC_L	7.93	≤23.47	PASS
			TPC_H	14.28	≤23.47	PASS
	Ant4	5290	TPC_L	8.12	≤23.47	PASS
			TPC_H	14.37	≤23.47	PASS
	total	5290	TPC_L	13.95	≤23.47	PASS
			TPC_H	20.34	≤23.47	PASS
	Ant1	5530	TPC_L	7.45	≤23.47	PASS
			TPC_H	14.04	≤23.47	PASS
	Ant2	5530	TPC_L	8.37	≤23.47	PASS
			TPC_H	14.75	≤23.47	PASS
	Ant3	5530	TPC_L	7.90	≤23.47	PASS
			TPC_H	14.68	≤23.47	PASS
	Ant4	5530	TPC_L	8.08	≤23.47	PASS
			TPC_H	14.49	≤23.47	PASS
	total	5530	TPC_L	13.98	≤23.47	PASS
			TPC_H	20.52	≤23.47	PASS
	Ant1	5610	TPC_L	10.35	≤23.47	PASS
			TPC_H	16.87	≤23.47	PASS
	Ant2	5610	TPC_L	10.81	≤23.47	PASS
			TPC_H	17.19	≤23.47	PASS
	Ant3	5610	TPC_L	10.74	≤23.47	PASS

	Ant4	5610	TPC_H	17.08	≤23.47	PASS
			TPC_L	10.99	≤23.47	PASS
			TPC_H	17.41	≤23.47	PASS
	total	5610	TPC_L	16.75	≤23.47	PASS
			TPC_H	23.16	≤23.47	PASS
	Ant1	5775	NA	22.79	≤29.49	PASS
	Ant2	5775	NA	23.33	≤29.49	PASS
	Ant3	5775	NA	23.71	≤29.49	PASS
	Ant4	5775	NA	23.14	≤29.49	PASS
total	5775	NA	29.28	≤29.49	PASS	
11AX160MIMO	Ant1	5250_UNII-1	TPC_L	7.69	≤29.49	PASS
			TPC_H	13.98	≤29.49	PASS
	Ant2	5250_UNII-1	TPC_L	6.60	≤29.49	PASS
			TPC_H	13.14	≤29.49	PASS
	Ant3	5250_UNII-1	TPC_L	7.99	≤29.49	PASS
			TPC_H	14.31	≤29.49	PASS
	Ant4	5250_UNII-1	TPC_L	6.92	≤29.49	PASS
			TPC_H	13.49	≤29.49	PASS
	total	5250_UNII-1	TPC_L	13.36	≤29.49	PASS
			TPC_H	19.77	≤29.49	PASS
	Ant1	5250_UNII-2A	TPC_L	6.98	≤23.47	PASS
			TPC_H	13.32	≤23.47	PASS
	Ant2	5250_UNII-2A	TPC_L	5.81	≤23.47	PASS
			TPC_H	12.29	≤23.47	PASS
	Ant3	5250_UNII-2A	TPC_L	5.81	≤23.47	PASS
			TPC_H	12.15	≤23.47	PASS
	Ant4	5250_UNII-2A	TPC_L	5.62	≤23.47	PASS
			TPC_H	12.08	≤23.47	PASS
	total	5250_UNII-2A	TPC_L	12.11	≤23.47	PASS
			TPC_H	18.51	≤23.47	PASS
	Ant1	5570	TPC_L	8.72	≤23.47	PASS
			TPC_H	14.97	≤23.47	PASS
	Ant2	5570	TPC_L	9.16	≤23.47	PASS
			TPC_H	15.44	≤23.47	PASS
	Ant3	5570	TPC_L	8.91	≤23.47	PASS
			TPC_H	15.28	≤23.47	PASS
	Ant4	5570	TPC_L	8.59	≤23.47	PASS
			TPC_H	15.06	≤23.47	PASS
total	5570	TPC_L	14.87	≤23.47	PASS	
		TPC_H	21.21	≤23.47	PASS	

Note: The Duty Cycle Factor is compensated in the test system

Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, \dots, G_N dBi

If transmit signals are correlated, then Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi

[Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

Directional gain = 6.51dBi

3.5 Power Spectral Density

3.5.1 Limit

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Power Spectral Density	Master device: 17 dBm/MHz Client device: 11 dBm/MHz	5150-5250
		11 dBm/MHz	5250-5350
		11 dBm/MHz	5470-5725
		30 dBm/500 kHz	5725-5850

Note:

- For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 300kHz and VBW at 1500kHz if the spectrum analyzer does not have 500 kHz RBW. Then, add 10 log (500 kHz/300 kHz) to the measured result, i.e. 2.22 dB.
- During the test of U-NII 3 PSD, the measurement result with RBW=300kHz has been added 2.22 dB by compensating offset, offset=cable loss+duty factor+10log(500kHz/300kHz).

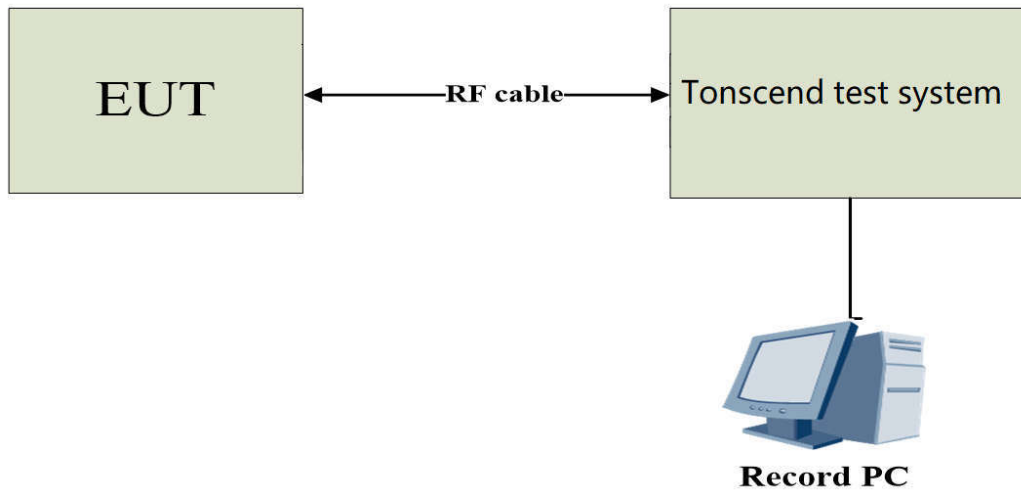
3.5.2 Test Procedure

Test Method	
<input checked="" type="radio"/> Conducted Measurement	<input type="radio"/> Radiated Measurement
Test Channels	
<input checked="" type="radio"/> Lowest, Middle and Highest Channel	<input type="radio"/> Lowest and Highest Channel
Environmental conditions	
<input checked="" type="radio"/> Normal	<input type="radio"/> Normal and Extreme
Note: <input checked="" type="radio"/> :Test <input type="radio"/> :No Test	

a) The EUT was directly connected to the tonscond test system and antenna output port as show in the block diagram below. Spectrum analyser settings as following:

Centre Frequency	The centre frequency of the channel under test
RBW	= 1 MHz (Band1/2/3); = 500kHz (Band4)
VBW	≥3 x RBW
Frequency span	2 x Nominal Channel Bandwidth
Detector Mode	RMS
Trace Mode	Max Hold
Sweep Time	Auto Couple

3.5.3 Test Setup



3.5.4 The Result

Test Mode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A-CDD	Ant1	5180	8.56	≤16.49	PASS
	Ant2	5180	9.46	≤16.49	PASS
	Ant3	5180	9.75	≤16.49	PASS
	Ant4	5180	8.99	≤16.49	PASS
	total	5180	15.23	≤16.49	PASS
	Ant1	5200	10.50	≤16.49	PASS
	Ant2	5200	10.32	≤16.49	PASS
	Ant3	5200	10.34	≤16.49	PASS
	Ant4	5200	10.31	≤16.49	PASS
	total	5200	16.39	≤16.49	PASS
	Ant1	5240	9.88	≤16.49	PASS
	Ant2	5240	10.22	≤16.49	PASS
	Ant3	5240	10.90	≤16.49	PASS
	Ant4	5240	10.40	≤16.49	PASS
	total	5240	16.39	≤16.49	PASS
	Ant1	5260	4.39	≤10.49	PASS
	Ant2	5260	4.09	≤10.49	PASS
	Ant3	5260	4.45	≤10.49	PASS
	Ant4	5260	4.76	≤10.49	PASS
	total	5260	10.45	≤10.49	PASS
	Ant1	5280	4.39	≤10.49	PASS
	Ant2	5280	4.55	≤10.49	PASS
	Ant3	5280	3.97	≤10.49	PASS
	Ant4	5280	4.71	≤10.49	PASS
	total	5280	10.43	≤10.49	PASS
	Ant1	5320	3.21	≤10.49	PASS
	Ant2	5320	5.12	≤10.49	PASS
	Ant3	5320	4.60	≤10.49	PASS
	Ant4	5320	4.34	≤10.49	PASS
	total	5320	10.39	≤10.49	PASS
	Ant1	5500	4.89	≤10.49	PASS
	Ant2	5500	4.29	≤10.49	PASS
Ant3	5500	4.01	≤10.49	PASS	
Ant4	5500	4.31	≤10.49	PASS	
total	5500	10.41	≤10.49	PASS	
Ant1	5580	3.41	≤10.49	PASS	
Ant2	5580	4.75	≤10.49	PASS	
Ant3	5580	4.61	≤10.49	PASS	
Ant4	5580	4.28	≤10.49	PASS	
total	5580	10.31	≤10.49	PASS	

	Ant1	5700	3.81	≤10.49	PASS
	Ant2	5700	4.23	≤10.49	PASS
	Ant3	5700	3.73	≤10.49	PASS
	Ant4	5700	4.98	≤10.49	PASS
	total	5700	10.24	≤10.49	PASS
	Ant1	5745	9.69	≤29.49	PASS
	Ant2	5745	10.39	≤29.49	PASS
	Ant3	5745	10.04	≤29.49	PASS
	Ant4	5745	10.39	≤29.49	PASS
	total	5745	16.16	≤29.49	PASS
	Ant1	5785	10.08	≤29.49	PASS
	Ant2	5785	10.00	≤29.49	PASS
	Ant3	5785	13.27	≤29.49	PASS
	Ant4	5785	10.23	≤29.49	PASS
	total	5785	17.16	≤29.49	PASS
	Ant1	5825	9.74	≤29.49	PASS
	Ant2	5825	9.85	≤29.49	PASS
	Ant3	5825	9.31	≤29.49	PASS
	Ant4	5825	8.84	≤29.49	PASS
	total	5825	15.47	≤29.49	PASS
11N20MIMO	Ant1	5180	7.98	≤16.49	PASS
	Ant2	5180	9.45	≤16.49	PASS
	Ant3	5180	9.45	≤16.49	PASS
	Ant4	5180	8.62	≤16.49	PASS
	total	5180	14.94	≤16.49	PASS
	Ant1	5200	9.35	≤16.49	PASS
	Ant2	5200	10.74	≤16.49	PASS
	Ant3	5200	10.57	≤16.49	PASS
	Ant4	5200	9.58	≤16.49	PASS
	total	5200	16.12	≤16.49	PASS
	Ant1	5240	9.52	≤16.49	PASS
	Ant2	5240	10.71	≤16.49	PASS
	Ant3	5240	9.92	≤16.49	PASS
	Ant4	5240	10.10	≤16.49	PASS
	total	5240	16.10	≤16.49	PASS
	Ant1	5260	3.91	≤10.49	PASS
	Ant2	5260	4.71	≤10.49	PASS
	Ant3	5260	4.01	≤10.49	PASS
	Ant4	5260	4.84	≤10.49	PASS
	total	5260	10.41	≤10.49	PASS
Ant1	5280	3.72	≤10.49	PASS	
Ant2	5280	4.02	≤10.49	PASS	

	Ant3	5280	3.94	≤10.49	PASS
	Ant4	5280	5.09	≤10.49	PASS
	total	5280	10.25	≤10.49	PASS
	Ant1	5320	3.41	≤10.49	PASS
	Ant2	5320	4.56	≤10.49	PASS
	Ant3	5320	4.18	≤10.49	PASS
	Ant4	5320	4.20	≤10.49	PASS
	total	5320	10.13	≤10.49	PASS
	Ant1	5500	4.62	≤10.49	PASS
	Ant2	5500	4.01	≤10.49	PASS
	Ant3	5500	4.58	≤10.49	PASS
	Ant4	5500	4.61	≤10.49	PASS
	total	5500	10.48	≤10.49	PASS
	Ant1	5580	4.27	≤10.49	PASS
	Ant2	5580	4.30	≤10.49	PASS
	Ant3	5580	4.39	≤10.49	PASS
	Ant4	5580	4.40	≤10.49	PASS
	total	5580	10.36	≤10.49	PASS
	Ant1	5700	3.97	≤10.49	PASS
	Ant2	5700	4.62	≤10.49	PASS
	Ant3	5700	4.72	≤10.49	PASS
	Ant4	5700	4.20	≤10.49	PASS
	total	5700	10.41	≤10.49	PASS
	Ant1	5745	8.34	≤29.49	PASS
	Ant2	5745	9.18	≤29.49	PASS
	Ant3	5745	9.53	≤29.49	PASS
	Ant4	5745	9.70	≤29.49	PASS
	total	5745	15.24	≤29.49	PASS
	Ant1	5785	9.09	≤29.49	PASS
	Ant2	5785	9.33	≤29.49	PASS
	Ant3	5785	9.89	≤29.49	PASS
	Ant4	5785	8.70	≤29.49	PASS
total	5785	15.29	≤29.49	PASS	
Ant1	5825	8.11	≤29.49	PASS	
Ant2	5825	8.72	≤29.49	PASS	
Ant3	5825	8.18	≤29.49	PASS	
Ant4	5825	7.69	≤29.49	PASS	
total	5825	14.21	≤29.49	PASS	
11N40MIMO	Ant1	5190	0.77	≤16.49	PASS
	Ant2	5190	1.64	≤16.49	PASS
	Ant3	5190	1.87	≤16.49	PASS
	Ant4	5190	0.01	≤16.49	PASS

	total	5190	7.15	≤16.49	PASS
	Ant1	5230	8.88	≤16.49	PASS
	Ant2	5230	10.25	≤16.49	PASS
	Ant3	5230	9.85	≤16.49	PASS
	Ant4	5230	9.47	≤16.49	PASS
	total	5230	15.66	≤16.49	PASS
	Ant1	5270	2.69	≤10.49	PASS
	Ant2	5270	3.66	≤10.49	PASS
	Ant3	5270	3.07	≤10.49	PASS
	Ant4	5270	3.76	≤10.49	PASS
	total	5270	9.34	≤10.49	PASS
	Ant1	5310	2.17	≤10.49	PASS
	Ant2	5310	3.49	≤10.49	PASS
	Ant3	5310	3.12	≤10.49	PASS
	Ant4	5310	3.11	≤10.49	PASS
	total	5310	9.02	≤10.49	PASS
	Ant1	5510	2.79	≤10.49	PASS
	Ant2	5510	3.89	≤10.49	PASS
	Ant3	5510	3.92	≤10.49	PASS
	Ant4	5510	4.21	≤10.49	PASS
	total	5510	9.76	≤10.49	PASS
	Ant1	5550	3.11	≤10.49	PASS
	Ant2	5550	3.72	≤10.49	PASS
	Ant3	5550	4.36	≤10.49	PASS
	Ant4	5550	3.23	≤10.49	PASS
	total	5550	9.65	≤10.49	PASS
	Ant1	5670	3.06	≤10.49	PASS
	Ant2	5670	4.62	≤10.49	PASS
	Ant3	5670	3.94	≤10.49	PASS
	Ant4	5670	4.50	≤10.49	PASS
	total	5670	10.09	≤10.49	PASS
	Ant1	5755	7.04	≤29.49	PASS
	Ant2	5755	7.89	≤29.49	PASS
	Ant3	5755	7.99	≤29.49	PASS
	Ant4	5755	9.24	≤29.49	PASS
	total	5755	14.13	≤29.49	PASS
	Ant1	5795	4.15	≤29.49	PASS
	Ant2	5795	4.98	≤29.49	PASS
	Ant3	5795	5.45	≤29.49	PASS
	Ant4	5795	5.17	≤29.49	PASS
	total	5795	10.98	≤29.49	PASS
11AC20MIMO	Ant1	5180	5.53	≤16.49	PASS

	Ant2	5180	6.67	≤16.49	PASS
	Ant3	5180	6.96	≤16.49	PASS
	Ant4	5180	5.14	≤16.49	PASS
	total	5180	12.16	≤16.49	PASS
	Ant1	5200	9.91	≤16.49	PASS
	Ant2	5200	10.21	≤16.49	PASS
	Ant3	5200	11.12	≤16.49	PASS
	Ant4	5200	10.25	≤16.49	PASS
	total	5200	16.42	≤16.49	PASS
	Ant1	5240	9.33	≤16.49	PASS
	Ant2	5240	10.36	≤16.49	PASS
	Ant3	5240	9.91	≤16.49	PASS
	Ant4	5240	10.39	≤16.49	PASS
	total	5240	16.04	≤16.49	PASS
	Ant1	5260	3.71	≤10.49	PASS
	Ant2	5260	4.34	≤10.49	PASS
	Ant3	5260	3.60	≤10.49	PASS
	Ant4	5260	4.43	≤10.49	PASS
	total	5260	10.06	≤10.49	PASS
	Ant1	5280	3.91	≤10.49	PASS
	Ant2	5280	4.77	≤10.49	PASS
	Ant3	5280	4.30	≤10.49	PASS
	Ant4	5280	4.41	≤10.49	PASS
	total	5280	10.38	≤10.49	PASS
	Ant1	5320	3.32	≤10.49	PASS
	Ant2	5320	4.60	≤10.49	PASS
	Ant3	5320	4.50	≤10.49	PASS
	Ant4	5320	4.47	≤10.49	PASS
	total	5320	10.27	≤10.49	PASS
	Ant1	5500	4.43	≤10.49	PASS
	Ant2	5500	4.44	≤10.49	PASS
	Ant3	5500	4.81	≤10.49	PASS
	Ant4	5500	4.02	≤10.49	PASS
	total	5500	10.45	≤10.49	PASS
	Ant1	5580	3.69	≤10.49	PASS
	Ant2	5580	4.74	≤10.49	PASS
	Ant3	5580	4.97	≤10.49	PASS
	Ant4	5580	4.34	≤10.49	PASS
	total	5580	10.48	≤10.49	PASS
	Ant1	5700	4.08	≤10.49	PASS
	Ant2	5700	4.58	≤10.49	PASS
	Ant3	5700	4.50	≤10.49	PASS

	Ant4	5700	4.32	≤10.49	PASS
	total	5700	10.39	≤10.49	PASS
	Ant1	5745	7.99	≤29.49	PASS
	Ant2	5745	8.59	≤29.49	PASS
	Ant3	5745	9.34	≤29.49	PASS
	Ant4	5745	9.31	≤29.49	PASS
	total	5745	14.86	≤29.49	PASS
	Ant1	5785	9.13	≤29.49	PASS
	Ant2	5785	9.42	≤29.49	PASS
	Ant3	5785	13.19	≤29.49	PASS
	Ant4	5785	9.15	≤29.49	PASS
	total	5785	16.63	≤29.49	PASS
	Ant1	5825	7.83	≤29.49	PASS
	Ant2	5825	7.47	≤29.49	PASS
	Ant3	5825	7.93	≤29.49	PASS
	Ant4	5825	7.69	≤29.49	PASS
	total	5825	13.75	≤29.49	PASS
	11AC40MIMO	Ant1	5190	-2.07	≤16.49
Ant2		5190	-0.80	≤16.49	PASS
Ant3		5190	-0.96	≤16.49	PASS
Ant4		5190	-3.13	≤16.49	PASS
total		5190	4.38	≤16.49	PASS
Ant1		5230	8.43	≤16.49	PASS
Ant2		5230	10.03	≤16.49	PASS
Ant3		5230	10.25	≤16.49	PASS
Ant4		5230	9.12	≤16.49	PASS
total		5230	15.54	≤16.49	PASS
Ant1		5270	2.57	≤10.49	PASS
Ant2		5270	3.42	≤10.49	PASS
Ant3		5270	2.88	≤10.49	PASS
Ant4		5270	3.12	≤10.49	PASS
total		5270	9.03	≤10.49	PASS
Ant1		5310	2.34	≤10.49	PASS
Ant2		5310	3.83	≤10.49	PASS
Ant3		5310	3.50	≤10.49	PASS
Ant4		5310	3.41	≤10.49	PASS
total		5310	9.33	≤10.49	PASS
Ant1		5510	2.71	≤10.49	PASS
Ant2		5510	3.61	≤10.49	PASS
Ant3		5510	4.15	≤10.49	PASS
Ant4		5510	3.45	≤10.49	PASS
total		5510	9.53	≤10.49	PASS

	Ant1	5550	2.33	≤10.49	PASS
	Ant2	5550	3.57	≤10.49	PASS
	Ant3	5550	3.51	≤10.49	PASS
	Ant4	5550	3.55	≤10.49	PASS
	total	5550	9.29	≤10.49	PASS
	Ant1	5670	2.62	≤10.49	PASS
	Ant2	5670	4.01	≤10.49	PASS
	Ant3	5670	2.92	≤10.49	PASS
	Ant4	5670	3.56	≤10.49	PASS
	total	5670	9.33	≤10.49	PASS
	Ant1	5755	4.78	≤29.49	PASS
	Ant2	5755	5.77	≤29.49	PASS
	Ant3	5755	6.04	≤29.49	PASS
	Ant4	5755	7.02	≤29.49	PASS
	total	5755	12.00	≤29.49	PASS
	Ant1	5795	3.83	≤29.49	PASS
	Ant2	5795	5.18	≤29.49	PASS
	Ant3	5795	5.66	≤29.49	PASS
	Ant4	5795	4.95	≤29.49	PASS
	total	5795	10.98	≤29.49	PASS
11AC80MIMO	Ant1	5210	-4.07	≤16.49	PASS
	Ant2	5210	-2.98	≤16.49	PASS
	Ant3	5210	-3.12	≤16.49	PASS
	Ant4	5210	-4.36	≤16.49	PASS
	total	5210	2.43	≤16.49	PASS
	Ant1	5290	-0.87	≤10.49	PASS
	Ant2	5290	0.46	≤10.49	PASS
	Ant3	5290	-0.33	≤10.49	PASS
	Ant4	5290	0.55	≤10.49	PASS
	total	5290	6.01	≤10.49	PASS
	Ant1	5530	-0.25	≤10.49	PASS
	Ant2	5530	0.89	≤10.49	PASS
	Ant3	5530	0.79	≤10.49	PASS
	Ant4	5530	0.35	≤10.49	PASS
	total	5530	6.49	≤10.49	PASS
	Ant1	5610	-0.53	≤10.49	PASS
	Ant2	5610	0.90	≤10.49	PASS
	Ant3	5610	0.42	≤10.49	PASS
	Ant4	5610	1.21	≤10.49	PASS
	total	5610	6.57	≤10.49	PASS
Ant1	5775	3.81	≤29.49	PASS	
Ant2	5775	4.38	≤29.49	PASS	

	Ant3	5775	4.80	≤29.49	PASS
	Ant4	5775	4.60	≤29.49	PASS
	total	5775	10.43	≤29.49	PASS
11AC160MIMO	Ant1	5250_UNII-1	-3.91	≤16.49	PASS
	Ant2	5250_UNII-1	-3.41	≤16.49	PASS
	Ant3	5250_UNII-1	-3.17	≤16.49	PASS
	Ant4	5250_UNII-1	-3.09	≤16.49	PASS
	total	5250_UNII-1	2.64	≤16.49	PASS
	Ant1	5250_UNII-2A	-3.56	≤10.49	PASS
	Ant2	5250_UNII-2A	-2.83	≤10.49	PASS
	Ant3	5250_UNII-2A	-3.19	≤10.49	PASS
	Ant4	5250_UNII-2A	-2.86	≤10.49	PASS
	total	5250_UNII-2A	2.92	≤10.49	PASS
	Ant1	5570	-3.12	≤10.49	PASS
	Ant2	5570	-1.87	≤10.49	PASS
	Ant3	5570	-2.50	≤10.49	PASS
	Ant4	5570	-2.29	≤10.49	PASS
	total	5570	3.60	≤10.49	PASS
	11AX20MIMO	Ant1	5180	3.08	≤16.49
Ant2		5180	3.99	≤16.49	PASS
Ant3		5180	4.28	≤16.49	PASS
Ant4		5180	2.58	≤16.49	PASS
total		5180	9.56	≤16.49	PASS
Ant1		5200	9.79	≤16.49	PASS
Ant2		5200	10.90	≤16.49	PASS
Ant3		5200	10.71	≤16.49	PASS
Ant4		5200	10.09	≤16.49	PASS
total		5200	16.42	≤16.49	PASS
Ant1		5240	9.57	≤16.49	PASS
Ant2		5240	10.31	≤16.49	PASS
Ant3		5240	10.37	≤16.49	PASS
Ant4		5240	10.50	≤16.49	PASS
total		5240	16.22	≤16.49	PASS
Ant1		5260	3.85	≤10.49	PASS
Ant2		5260	4.53	≤10.49	PASS
Ant3		5260	3.92	≤10.49	PASS
Ant4		5260	4.45	≤10.49	PASS
total		5260	10.22	≤10.49	PASS
Ant1		5280	3.51	≤10.49	PASS
Ant2		5280	4.17	≤10.49	PASS
Ant3		5280	4.06	≤10.49	PASS
Ant4		5280	4.43	≤10.49	PASS

	total	5280	10.08	≤10.49	PASS
	Ant1	5320	3.52	≤10.49	PASS
	Ant2	5320	4.71	≤10.49	PASS
	Ant3	5320	4.43	≤10.49	PASS
	Ant4	5320	4.45	≤10.49	PASS
	total	5320	10.32	≤10.49	PASS
	Ant1	5500	4.22	≤10.49	PASS
	Ant2	5500	4.76	≤10.49	PASS
	Ant3	5500	4.08	≤10.49	PASS
	Ant4	5500	4.68	≤10.49	PASS
	total	5500	10.47	≤10.49	PASS
	Ant1	5580	3.60	≤10.49	PASS
	Ant2	5580	4.71	≤10.49	PASS
	Ant3	5580	4.77	≤10.49	PASS
	Ant4	5580	4.30	≤10.49	PASS
	total	5580	10.39	≤10.49	PASS
	Ant1	5700	4.15	≤10.49	PASS
	Ant2	5700	4.33	≤10.49	PASS
	Ant3	5700	4.83	≤10.49	PASS
	Ant4	5700	4.31	≤10.49	PASS
	total	5700	10.43	≤10.49	PASS
	Ant1	5745	7.69	≤29.49	PASS
	Ant2	5745	8.49	≤29.49	PASS
	Ant3	5745	8.27	≤29.49	PASS
	Ant4	5745	8.93	≤29.49	PASS
	total	5745	14.39	≤29.49	PASS
	Ant1	5785	8.43	≤29.49	PASS
	Ant2	5785	8.62	≤29.49	PASS
	Ant3	5785	12.02	≤29.49	PASS
	Ant4	5785	8.11	≤29.49	PASS
	total	5785	15.64	≤29.49	PASS
	Ant1	5825	7.13	≤29.49	PASS
Ant2	5825	7.54	≤29.49	PASS	
Ant3	5825	7.47	≤29.49	PASS	
Ant4	5825	6.99	≤29.49	PASS	
total	5825	13.31	≤29.49	PASS	
11AX40MIMO	Ant1	5190	-1.72	≤16.49	PASS
	Ant2	5190	-0.37	≤16.49	PASS
	Ant3	5190	-0.30	≤16.49	PASS
	Ant4	5190	-2.28	≤16.49	PASS
	total	5190	4.94	≤16.49	PASS
	Ant1	5230	7.87	≤16.49	PASS

	Ant2	5230	9.65	≤16.49	PASS
	Ant3	5230	8.90	≤16.49	PASS
	Ant4	5230	8.63	≤16.49	PASS
	total	5230	14.83	≤16.49	PASS
	Ant1	5270	2.26	≤10.49	PASS
	Ant2	5270	3.10	≤10.49	PASS
	Ant3	5270	2.64	≤10.49	PASS
	Ant4	5270	3.15	≤10.49	PASS
	total	5270	8.82	≤10.49	PASS
	Ant1	5310	-2.98	≤10.49	PASS
	Ant2	5310	-1.76	≤10.49	PASS
	Ant3	5310	-2.00	≤10.49	PASS
	Ant4	5310	-2.51	≤10.49	PASS
	total	5310	3.73	≤10.49	PASS
	Ant1	5510	-2.08	≤10.49	PASS
	Ant2	5510	-1.25	≤10.49	PASS
	Ant3	5510	-1.06	≤10.49	PASS
	Ant4	5510	-1.16	≤10.49	PASS
	total	5510	4.65	≤10.49	PASS
	Ant1	5550	2.70	≤10.49	PASS
	Ant2	5550	3.81	≤10.49	PASS
	Ant3	5550	3.34	≤10.49	PASS
	Ant4	5550	3.47	≤10.49	PASS
	total	5550	9.37	≤10.49	PASS
	Ant1	5670	2.46	≤10.49	PASS
	Ant2	5670	3.59	≤10.49	PASS
	Ant3	5670	3.10	≤10.49	PASS
	Ant4	5670	3.72	≤10.49	PASS
	total	5670	9.27	≤10.49	PASS
	Ant1	5755	5.64	≤29.49	PASS
	Ant2	5755	6.50	≤29.49	PASS
	Ant3	5755	6.89	≤29.49	PASS
Ant4	5755	7.74	≤29.49	PASS	
total	5755	12.78	≤29.49	PASS	
Ant1	5795	4.55	≤29.49	PASS	
Ant2	5795	5.46	≤29.49	PASS	
Ant3	5795	6.12	≤29.49	PASS	
Ant4	5795	5.54	≤29.49	PASS	
total	5795	11.47	≤29.49	PASS	
11AX80MIMO	Ant1	5210	-5.14	≤16.49	PASS
	Ant2	5210	-4.38	≤16.49	PASS
	Ant3	5210	-4.61	≤16.49	PASS

	Ant4	5210	-5.75	≤16.49	PASS
	total	5210	1.08	≤16.49	PASS
	Ant1	5290	-4.99	≤10.49	PASS
	Ant2	5290	-3.92	≤10.49	PASS
	Ant3	5290	-4.23	≤10.49	PASS
	Ant4	5290	-4.03	≤10.49	PASS
	total	5290	1.75	≤10.49	PASS
	Ant1	5530	-4.58	≤10.49	PASS
	Ant2	5530	-3.49	≤10.49	PASS
	Ant3	5530	-3.42	≤10.49	PASS
	Ant4	5530	-3.75	≤10.49	PASS
	total	5530	2.23	≤10.49	PASS
	Ant1	5610	-1.92	≤10.49	PASS
	Ant2	5610	-0.54	≤10.49	PASS
	Ant3	5610	-0.57	≤10.49	PASS
	Ant4	5610	-0.11	≤10.49	PASS
	total	5610	5.29	≤10.49	PASS
	Ant1	5775	3.31	≤29.49	PASS
	Ant2	5775	3.77	≤29.49	PASS
	Ant3	5775	3.94	≤29.49	PASS
Ant4	5775	4.13	≤29.49	PASS	
total	5775	9.82	≤29.49	PASS	
11AX160MIMO	Ant1	5250_UNII-1	-6.32	≤16.49	PASS
	Ant2	5250_UNII-1	-5.82	≤16.49	PASS
	Ant3	5250_UNII-1	-5.48	≤16.49	PASS
	Ant4	5250_UNII-1	-5.98	≤16.49	PASS
	total	5250_UNII-1	0.13	≤16.49	PASS
	Ant1	5250_UNII-2A	-6.10	≤10.49	PASS
	Ant2	5250_UNII-2A	-5.62	≤10.49	PASS
	Ant3	5250_UNII-2A	-5.78	≤10.49	PASS
	Ant4	5250_UNII-2A	-5.71	≤10.49	PASS
	total	5250_UNII-2A	0.22	≤10.49	PASS
	Ant1	5570	-5.68	≤10.49	PASS
	Ant2	5570	-4.43	≤10.49	PASS
	Ant3	5570	-4.73	≤10.49	PASS
	Ant4	5570	-4.84	≤10.49	PASS
	total	5570	1.12	≤10.49	PASS



Note: The Duty Cycle Factor is compensated in the test system

Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, \dots, G_N dBi

If transmit signals are correlated, then Directional gain = $10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2 / N_{ANT}]$ dBi

[Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]

Directional gain = 6.51dBi



