

Appendix A:Test Data

Duty cycle						
Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11a	5180	1.424	1.592	89.447	0.484	0.702
802.11n HT20	5180	1.336	1.504	88.830	0.514	0.749
802.11n HT40	5190	0.670	0.840	79.762	0.982	1.493

RF power setting in Test SW

Mode	CH	Frequency (MHz)	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11a	36	5180	18000	18000	-	-	TeraTerm
	40	5200	20000	20000	-	-	
	48	5240	19500	19500	-	-	
	149	5745	20000	20000	-	-	
	157	5785	20000	20000	-	-	
	165	5825	20000	20000	-	-	
802.11n HT20	36	5180	18000	18000	-	-	TeraTerm
	40	5200	20000	20000	-	-	
	48	5240	19500	19500	-	-	
	149	5745	20000	20000	-	-	
	157	5785	20000	20000	-	-	
	165	5825	20000	20000	-	-	
802.11n HT40	38	5190	13000	13000	-	-	TeraTerm
	46	5230	20000	20000	-	-	
	151	5755	20000	20000	-	-	
	159	5795	20000	20000	-	-	

Maximum Conducted Output Power Measurement

Mode	Data Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total	
				dBm	dBm	dBm	dBm	dBm	
802.11a	6M	36	5180	12.55	14.04	-	-	-	30.00
		40	5200	14.42	15.81	-	-	-	30.00
		48	5240	13.35	14.93	-	-	-	30.00
		149	5745	12.17	12.34	-	-	-	30.00
		157	5785	11.29	11.09	-	-	-	30.00
		165	5825	10.60	10.19	-	-	-	30.00
802.11n HT20	6.5M	36	5180	12.72	14.14	-	-	-	30.00
		40	5200	14.13	15.42	-	-	-	30.00
		48	5240	13.22	14.78	-	-	-	30.00
		149	5745	11.97	12.04	-	-	-	30.00
		157	5785	11.01	10.81	-	-	-	30.00
		165	5825	10.49	9.94	-	-	-	30.00
802.11n HT40	13.5M	38	5190	7.74	9.03	-	-	-	30.00
		46	5230	11.71	13.32	-	-	-	30.00
		151	5755	10.17	10.31	-	-	-	30.00
		159	5795	9.29	9.10	-	-	-	30.00

26 dB & 99 % RF Bandwidth Measurement										
Mode	CH	Freq. (MHz)	99 % Bandwidth				26 dB Bandwidth			
			Ant-0	Ant-1	Ant-2	Ant-3	Ant-0	Ant-1	Ant-2	Ant-3
			MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz
802.11a	36	5180	-	17.557	-	-	-	30.950	-	-
	40	5200	-	20.365	-	-	-	36.530	-	-
	48	5240	-	19.099	-	-	-	34.120	-	-
802.11n HT20	36	5180	-	18.573	-	-	-	31.110	-	-
	40	5200	-	20.292	-	-	-	35.530	-	-
	48	5240	-	19.283	-	-	-	31.290	-	-
802.11n HT40	38	5190	-	36.262	-	-	-	45.380	-	-
	46	5230	-	36.799	-	-	-	69.670	-	-

Band III + IV_6 dB & 99 % RF Bandwidth Measurement										
Mode	CH	Freq. (MHz)	99 % Bandwidth				6 dB Bandwidth			
			Ant-0	Ant-1	Ant-2	Ant-3	Ant-0	Ant-1	Ant-2	Ant-3
			MHz	MHz	MHz	MHz	kHz	kHz	kHz	kHz
802.11a	149	5745	-	19.556	-	-	-	15120	-	-
	157	5785	-	19.496	-	-	-	15120	-	-
	165	5825	-	19.425	-	-	-	15120	-	-
802.11n HT20	149	5745	-	19.939	-	-	-	15120	-	-
	157	5785	-	20.088	-	-	-	15120	-	-
	165	5825	-	19.827	-	-	-	15120	-	-
802.11n HT40	151	5755	-	36.906	-	-	-	33850	-	-
	159	5795	-	36.836	-	-	-	33850	-	-

Power Spectral Density Measurement									
Mode	CH	Frequency (MHz)	Measurement				Duty Factor	Calculated	Limit
			Ant-0	Ant-1	Ant-2	Ant-3		Total	
			dBm/MHz	dBm/MHz	dBm/MHz	dBm/MHz	dB	dBm/MHz	dBm/MHz
802.11a	36	5180	-	3.148	-	-	0.484	3.632	17.000
	40	5200	-	4.736	-	-	0.484	5.220	17.000
	48	5240	-	3.799	-	-	0.484	4.283	17.000
802.11n HT20	36	5180	-	3.083	-	-	0.514	3.597	17.000
	40	5200	-	4.640	-	-	0.514	5.154	17.000
	48	5240	-	3.318	-	-	0.514	3.832	17.000
802.11n HT40	38	5190	-	-5.342	-	-	0.982	-4.360	17.000
	46	5230	-	-0.696	-	-	0.982	0.286	17.000

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.

Band III_ Power Spectral Density Measurement													
Mode	CH	Frequency (MHz)	Measurement								Calculated	Limit	PASS/FAIL
			Ant-0		Ant-1		Ant-2		Ant-3		Total		
			dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/500 kHz	dBm/500 kHz	
802.11a	149	5745	-	-	-7.354	0.120	-	-	-	-	-	30.00	PASS
	157	5785	-	-	-8.357	-0.883	-	-	-	-	-	30.00	PASS
	165	5825	-	-	-9.644	-2.170	-	-	-	-	-	30.00	PASS
802.11n HT20	149	5745	-	-	-7.679	-0.175	-	-	-	-	-	30.00	PASS
	157	5785	-	-	-8.863	-1.359	-	-	-	-	-	30.00	PASS
	165	5825	-	-	-9.680	-2.176	-	-	-	-	-	30.00	PASS
802.11n HT40	151	5755	-	-	-13.009	-5.037	-	-	-	-	-	30.00	PASS
	159	5795	-	-	-14.475	-6.503	-	-	-	-	-	30.00	PASS

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.
 Conversion ration = 10*Log(500 k/100 k)