

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)
802.11b	2412	8.485	9.065	93.602	0.287	0.118
802.11g	2412	1.425	2.045	69.682	1.569	0.702
802.11n HT20	2412	1.325	1.955	67.775	1.689	0.755
802.11n HT40	2422	0.655	1.275	51.373	2.893	1.527
802.11n VHT20	2412	1.338	1.965	68.092	1.669	0.747
802.11n VHT40	2422	0.660	1.280	51.563	2.877	1.515
802.11ax HE20	2412	1.050	1.650	63.636	1.963	0.952
802.11ax HE40	2422	0.068	0.085	80.000	0.969	14.706

2.4 GHz Band							
Mode	Channel	Freq. (MHz)	RF power setting in Test SW				Test SW Version
			Ant-0	Ant-1	Ant-2	Ant-3	
802.11b	1	2412	10.00	10.00	-	-	Command
802.11b	6	2437	10.00	10.00	-	-	
802.11b	11	2462	10.00	10.00	-	-	
802.11g	1	2412	8.50	8.50	-	-	
802.11g	6	2437	8.50	8.50	-	-	
802.11g	11	2462	8.50	8.50	-	-	
802.11n HT20	1	2412	9.00	9.00	-	-	
802.11n HT20	6	2437	9.00	9.00	-	-	
802.11n HT20	11	2462	9.00	9.00	-	-	
802.11n HT40	3	2422	10.00	10.00	-	-	
802.11n HT40	6	2437	10.00	10.00	-	-	
802.11n HT40	9	2452	10.00	10.00	-	-	
802.11n VHT20	1	2412	9.00	9.00	-	-	
802.11n VHT20	6	2437	9.00	9.00	-	-	
802.11n VHT20	11	2462	9.00	9.00	-	-	
802.11n VHT40	3	2422	10.00	10.00	-	-	
802.11n VHT40	6	2437	10.00	10.00	-	-	
802.11n VHT40	9	2452	9.50	9.50	-	-	
802.11ax HE20	1	2412	9.00	9.00	-	-	
802.11ax HE20	6	2437	9.00	9.00	-	-	
802.11ax HE20	11	2462	9.00	9.00	-	-	
802.11ax HE40	3	2422	10.00	10.00	-	-	
802.11ax HE40	6	2437	10.00	10.00	-	-	
802.11ax HE40	9	2452	10.00	10.00	-	-	

2.4 GHz Band																		
Mode	CH	Freq. (MHz)	Data Rate	Avg Conducted Power (dBm)					Peak Conducted Power (dBm)					Conducted Power Limit (dBm)				
				Ant-0	Ant-1	Ant-2	Ant-3	SUM	Ant-0	Ant-1	Ant-2	Ant-3	SUM	Ant-0	Ant-1	Ant-2	Ant-3	SUM
802.11b	1	2412	1M	14.10	13.82	-	-	16.97	16.89	16.64	-	-	19.78	30.00	30.00	-	-	30.00
802.11b	6	2437	1M	14.14	13.78	-	-	16.97	16.98	16.64	-	-	19.82	30.00	30.00	-	-	30.00
802.11b	11	2462	1M	14.17	13.74	-	-	16.97	16.99	16.76	-	-	19.89	30.00	30.00	-	-	30.00
802.11g	1	2412	6M	11.82	11.46	-	-	14.65	22.17	21.94	-	-	25.07	30.00	30.00	-	-	30.00
802.11g	6	2437	6M	11.89	11.60	-	-	14.76	20.09	19.71	-	-	22.91	30.00	30.00	-	-	30.00
802.11g	11	2462	6M	11.99	11.76	-	-	14.89	20.11	19.92	-	-	23.03	30.00	30.00	-	-	30.00
802.11n HT20	1	2412	13M	11.64	11.57	-	-	14.61	22.05	21.22	-	-	24.67	30.00	30.00	-	-	30.00
802.11n HT20	6	2437	13M	11.62	11.56	-	-	14.60	20.04	20.02	-	-	23.04	30.00	30.00	-	-	30.00
802.11n HT20	11	2462	13M	11.73	11.61	-	-	14.68	20.41	20.18	-	-	23.31	30.00	30.00	-	-	30.00
802.11n HT40	3	2422	27M	11.76	11.46	-	-	14.63	22.28	22.04	-	-	25.17	30.00	30.00	-	-	30.00
802.11n HT40	6	2437	27M	11.72	11.40	-	-	14.58	22.09	21.92	-	-	25.02	30.00	30.00	-	-	30.00
802.11n HT40	9	2452	27M	11.78	11.51	-	-	14.66	22.14	21.77	-	-	24.97	30.00	30.00	-	-	30.00
802.11n VHT20	1	2412	MCS0	11.85	11.55	-	-	14.71	21.88	21.64	-	-	24.77	30.00	30.00	-	-	30.00
802.11n VHT20	6	2437	MCS0	11.60	11.80	-	-	14.71	20.35	19.96	-	-	23.17	30.00	30.00	-	-	30.00
802.11n VHT20	11	2462	MCS0	11.74	11.73	-	-	14.74	22.07	21.69	-	-	24.894	30.00	30.00	-	-	30.00
802.11n VHT40	3	2422	MCS0	11.59	11.79	-	-	14.70	22.65	22.48	-	-	25.58	30.00	30.00	-	-	30.00
802.11n VHT40	6	2437	MCS0	11.69	11.74	-	-	14.72	22.64	22.51	-	-	25.59	30.00	30.00	-	-	30.00
802.11n VHT40	9	2452	MCS0	11.84	11.60	-	-	14.73	22.83	22.54	-	-	25.698	30.00	30.00	-	-	30.00
802.11ax HE20	1	2412	MCS0	11.95	11.85	-	-	14.91	21.83	21.41	-	-	24.64	30.00	30.00	-	-	30.00
802.11ax HE20	6	2437	MCS0	12.05	11.83	-	-	14.95	20.56	20.31	-	-	23.45	30.00	30.00	-	-	30.00
802.11ax HE20	11	2462	MCS0	12.09	11.75	-	-	14.94	20.69	20.14	-	-	23.43	30.00	30.00	-	-	30.00
802.11ax HE40	3	2422	MCS0	12.04	11.80	-	-	14.93	22.42	21.75	-	-	25.11	30.00	30.00	-	-	30.00
802.11ax HE40	6	2437	MCS0	12.02	11.77	-	-	14.91	22.16	21.71	-	-	24.95	30.00	30.00	-	-	30.00
802.11ax HE40	9	2452	MCS0	12.08	11.85	-	-	14.98	22.45	21.79	-	-	25.14	30.00	30.00	-	-	30.00

6 dB Bandwidth						
Mode	Freq. (MHz)	6 dB Bandwidth (kHz)				6 dB Bandwidth Min.Limit (kHz)
		Ant-0	Ant-1	Ant-2	Ant-3	
802.11b	2412	8102	8066	-	-	≥ 500
802.11b	2437	8083	8106	-	-	≥ 500
802.11b	2462	8572	8097	-	-	≥ 500
802.11g	2412	15150	15150	-	-	≥ 500
802.11g	2437	15510	16320	-	-	≥ 500
802.11g	2462	15470	16330	-	-	≥ 500
802.11n VHT20	2412	15150	16320	-	-	≥ 500
802.11n VHT20	2437	15780	16590	-	-	≥ 500
802.11n VHT20	2462	15990	16590	-	-	≥ 500
802.11n VHT40	2422	35190	35180	-	-	≥ 500
802.11n VHT40	2437	35190	35190	-	-	≥ 500
802.11n VHT40	2452	35190	35180	-	-	≥ 500
802.11ax HE20	2412	18320	18280	-	-	≥ 500
802.11ax HE20	2437	18590	18320	-	-	≥ 500
802.11ax HE20	2462	18540	17790	-	-	≥ 500
802.11ax HE40	2422	36000	35250	-	-	≥ 500
802.11ax HE40	2437	35990	35780	-	-	≥ 500
802.11ax HE40	2452	37050	35760	-	-	≥ 500

99 % Occupied BW					
Mode	Freq. (MHz)	99 % Occupied BW (MHz)			
		Ant-0	Ant-1	Ant-2	Ant-3
802.11b	2412	12.550	12.475	-	-
802.11b	2437	12.599	12.573	-	-
802.11b	2462	12.558	12.549	-	-
802.11g	2412	16.724	16.435	-	-
802.11g	2437	17.857	17.069	-	-
802.11g	2462	17.870	17.034	-	-
802.11n VHT20	2412	17.611	17.475	-	-
802.11n VHT20	2437	18.482	17.878	-	-
802.11n VHT20	2462	18.500	17.883	-	-
802.11n VHT40	2422	36.084	36.381	-	-
802.11n VHT40	2437	36.133	36.377	-	-
802.11n VHT40	2452	36.205	36.402	-	-
802.11ax HE20	2412	18.761	18.782	-	-
802.11ax HE20	2437	19.060	19.056	-	-
802.11ax HE20	2462	19.043	19.067	-	-
802.11ax HE40	2422	37.852	37.891	-	-
802.11ax HE40	2437	37.865	37.879	-	-
802.11ax HE40	2452	37.887	37.922	-	-

Maximum Power Spectral Density Measurement											
Mode	Freq. (MHz)	Measurement (dBm/3 kHz)					Max.Limit (dBm/ 3 kHz)				
		Ant-0	Ant-1	Ant-2	Ant-3	SUM	Ant-0	Ant-1	Ant-2	Ant-3	SUM
802.11b	2412	4.09	3.82	-	-	6.97	8.00	8.00	-	-	8.00
802.11b	2437	4.03	3.77	-	-	6.91	8.00	8.00	-	-	8.00
802.11b	2462	4.20	3.86	-	-	7.04	8.00	8.00	-	-	8.00
802.11g	2412	-12.24	-13.71	-	-	-9.90	8.00	8.00	-	-	8.00
802.11g	2437	-11.95	-13.47	-	-	-9.63	8.00	8.00	-	-	8.00
802.11g	2462	-12.64	-13.08	-	-	-9.84	8.00	8.00	-	-	8.00
802.11n VHT20	2412	-12.90	-12.26	-	-	-9.56	8.00	8.00	-	-	8.00
802.11n VHT20	2437	-12.43	-12.90	-	-	-9.65	8.00	8.00	-	-	8.00
802.11n VHT20	2462	-12.79	-12.02	-	-	-9.38	8.00	8.00	-	-	8.00
802.11n VHT40	2422	-16.04	-15.97	-	-	-12.99	8.00	8.00	-	-	8.00
802.11n VHT40	2437	-15.43	-15.41	-	-	-12.41	8.00	8.00	-	-	8.00
802.11n VHT40	2452	-16.57	-16.00	-	-	-13.27	8.00	8.00	-	-	8.00
802.11ax HE20	2412	-13.77	-14.00	-	-	-10.87	8.00	8.00	-	-	8.00
802.11ax HE20	2437	-13.58	-13.94	-	-	-10.75	8.00	8.00	-	-	8.00
802.11ax HE20	2462	-13.53	-14.15	-	-	-10.82	8.00	8.00	-	-	8.00
802.11ax HE40	2422	-11.48	-12.13	-	-	-8.78	8.00	8.00	-	-	8.00
802.11ax HE40	2437	-11.42	-12.20	-	-	-8.78	8.00	8.00	-	-	8.00
802.11ax HE40	2452	-11.45	-11.91	-	-	-8.66	8.00	8.00	-	-	8.00