

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	8.370	9.000	93.000	0.315	0.119
802.11g	2412	1.390	2.010	69.154	1.602	0.719
802.11n HT20	2412	1.300	1.950	66.667	1.761	0.769
802.11n HT40	2422	0.640	1.280	50.000	3.010	1.563
802.11n VHT20	2412	1.310	1.950	67.179	1.728	0.763
802.11n VHT40	2422	0.650	1.280	50.781	2.943	1.538
802.11ax HE20	2412	1.015	1.645	61.702	2.097	0.985
802.11ax HE40	2422	0.535	1.115	47.982	3.189	1.869

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	7.50	7.50	-	-	adb
802.11b	6	2437	10.00	10.00	-	-	
802.11b	11	2462	7.50	7.50	-	-	
802.11g	1	2412	13.50	13.50	-	-	
802.11g	6	2437	13.50	13.50	-	-	
802.11g	11	2462	13.50	13.50	-	-	
802.11n HT20	1	2412	13.50	13.50	-	-	
802.11n HT20	6	2437	13.50	13.50	-	-	
802.11n HT20	11	2462	13.50	13.50	-	-	
802.11n HT40	3	2422	13.00	13.00	-	-	
802.11n HT40	6	2437	13.50	13.50	-	-	
802.11n HT40	9	2452	13.00	13.00	-	-	
802.11n VHT20	1	2412	13.50	13.50	-	-	
802.11n VHT20	6	2437	13.50	13.50	-	-	
802.11n VHT20	11	2462	13.50	13.50	-	-	
802.11n VHT40	3	2422	13.00	13.00	-	-	
802.11n VHT40	6	2437	13.50	13.50	-	-	
802.11n VHT40	9	2452	13.00	13.00	-	-	
802.11ax HE20	1	2412	13.50	13.50	-	-	
802.11ax HE20	6	2437	13.50	13.50	-	-	
802.11ax HE20	11	2462	13.50	13.50	-	-	
802.11ax HE40	3	2422	13.00	13.00	-	-	
802.11ax HE40	6	2437	13.50	13.50	-	-	
802.11ax HE40	9	2452	13.00	13.00	-	-	

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	15.23	12.98	-	-	17.25	17.82	15.78	-	-	19.93	30.00	30.00	-	-	30.00
802.11b	6	2437	1M	11.79	11.41	-	-	14.61	14.75	14.34	-	-	17.56	30.00	30.00	-	-	30.00
802.11b	11	2462	1M	14.99	12.97	-	-	17.10	17.94	15.83	-	-	20.02	30.00	30.00	-	-	30.00
802.11g	1	2412	6M	14.01	13.67	-	-	16.86	22.66	21.73	-	-	25.23	30.00	30.00	-	-	30.00
802.11g	6	2437	6M	14.63	14.27	-	-	17.47	22.29	21.65	-	-	24.99	30.00	30.00	-	-	30.00
802.11g	11	2462	6M	14.12	13.66	-	-	16.91	21.89	21.31	-	-	24.62	30.00	30.00	-	-	30.00
802.11n HT20	1	2412	13M	13.00	12.65	-	-	15.84	22.27	21.43	-	-	24.88	30.00	30.00	-	-	29.70
802.11n HT20	6	2437	13M	13.71	13.38	-	-	16.56	21.71	21.32	-	-	24.53	30.00	30.00	-	-	29.70
802.11n HT20	11	2462	13M	13.15	12.75	-	-	15.97	21.21	20.78	-	-	24.01	30.00	30.00	-	-	29.70
802.11n HT40	3	2422	27M	13.24	13.23	-	-	16.25	22.89	22.19	-	-	25.56	30.00	30.00	-	-	29.70
802.11n HT40	6	2437	27M	13.46	13.28	-	-	16.38	23.01	22.27	-	-	25.67	30.00	30.00	-	-	29.70
802.11n HT40	9	2452	27M	13.14	12.88	-	-	16.02	22.85	22.27	-	-	25.58	30.00	30.00	-	-	29.70
802.11n VHT20	1	2412	MCS0	13.00	12.78	-	-	15.90	22.28	21.66	-	-	24.99	30.00	30.00	-	-	29.70
802.11n VHT20	6	2437	MCS0	13.74	13.46	-	-	16.61	21.71	21.46	-	-	24.60	30.00	30.00	-	-	29.70
802.11n VHT20	11	2462	MCS0	13.26	12.85	-	-	16.07	21.35	20.87	-	-	24.13	30.00	30.00	-	-	29.70
802.11n VHT40	3	2422	MCS0	13.37	13.28	-	-	16.34	22.95	22.27	-	-	25.63	30.00	30.00	-	-	29.70
802.11n VHT40	6	2437	MCS0	13.60	13.42	-	-	16.52	23.07	22.37	-	-	25.74	30.00	30.00	-	-	29.70
802.11n VHT40	9	2452	MCS0	13.23	12.96	-	-	16.11	22.92	22.38	-	-	25.67	30.00	30.00	-	-	29.70
802.11ax HE20	1	2412	MCS0	13.16	12.92	-	-	16.05	22.47	21.69	-	-	25.11	30.00	30.00	-	-	29.70
802.11ax HE20	6	2437	MCS0	13.84	13.56	-	-	16.71	21.84	21.51	-	-	24.69	30.00	30.00	-	-	29.70
802.11ax HE20	11	2462	MCS0	13.36	12.94	-	-	16.16	21.44	21.01	-	-	24.24	30.00	30.00	-	-	29.70
802.11ax HE40	3	2422	MCS0	13.42	13.38	-	-	16.41	23.08	22.41	-	-	25.77	30.00	30.00	-	-	29.70
802.11ax HE40	6	2437	MCS0	13.62	13.48	-	-	16.56	23.11	22.39	-	-	25.78	30.00	30.00	-	-	29.70
802.11ax HE40	9	2452	MCS0	13.33	13.02	-	-	16.19	23.05	22.44	-	-	25.77	30.00	30.00	-	-	29.70

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	8110	8096	-	-	≥ 500
802.11b	2437	7577	8094	-	-	≥ 500
802.11b	2462	8091	7619	-	-	≥ 500
802.11g	2412	15160	15140	-	-	≥ 500
802.11g	2437	15350	15170	-	-	≥ 500
802.11g	2462	15750	15160	-	-	≥ 500
802.11ax HE20	2412	18400	18470	-	-	≥ 500
802.11ax HE20	2437	17130	17980	-	-	≥ 500
802.11ax HE20	2462	18580	17660	-	-	≥ 500
802.11ax HE40	2422	37650	37090	-	-	≥ 500
802.11ax HE40	2437	35150	35170	-	-	≥ 500
802.11ax HE40	2452	36930	37640	-	-	≥ 500

99 % Occupied BW					
Mode	Freq. (MHz)	99 % Occupied BW (MHz)			
		Ant-0	Ant-1	Ant-2	Ant-3
802.11b	2412	12.862	13.151	-	-
802.11b	2437	12.387	12.671	-	-
802.11b	2462	12.407	12.586	-	-
802.11g	2412	16.496	16.897	-	-
802.11g	2437	16.877	17.625	-	-
802.11g	2462	16.953	17.454	-	-
802.11ax HE20	2412	18.792	18.845	-	-
802.11ax HE20	2437	19.004	19.102	-	-
802.11ax HE20	2462	19.035	19.023	-	-
802.11ax HE40	2422	37.817	37.810	-	-
802.11ax HE40	2437	37.622	37.684	-	-
802.11ax HE40	2452	37.776	37.781	-	-

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	5.16	3.07	-	-	7.25	8.00	8.00	-	-	7.70
802.11b	2437	2.24	0.07	-	-	4.30	8.00	8.00	-	-	7.70
802.11b	2462	5.22	3.25	-	-	7.36	8.00	8.00	-	-	7.70
802.11g	2412	-9.58	-10.59	-	-	-7.05	8.00	8.00	-	-	7.70
802.11g	2437	-10.02	-9.41	-	-	-6.69	8.00	8.00	-	-	7.70
802.11g	2462	-11.13	-10.27	-	-	-7.67	8.00	8.00	-	-	7.70
802.11ax HE20	2412	-11.73	-10.99	-	-	-8.33	8.00	8.00	-	-	7.70
802.11ax HE20	2437	-10.36	-10.29	-	-	-7.31	8.00	8.00	-	-	7.70
802.11ax HE20	2462	-11.46	-11.37	-	-	-8.40	8.00	8.00	-	-	7.70
802.11ax HE40	2422	-13.68	-13.92	-	-	-10.79	8.00	8.00	-	-	7.70
802.11ax HE40	2437	-12.41	-13.14	-	-	-9.75	8.00	8.00	-	-	7.70
802.11ax HE40	2452	-14.04	-14.67	-	-	-11.33	8.00	8.00	-	-	7.70

電波暴露量之評估									
Band	Frequency (MHz)	Limit mW/cm ²	Distance	Power	ANT Gain	Numeric Gain	Duty Cycle	Power with Duty cycle	Power Density
			cm	(dBm)				(mW)	mW/cm ²
			[R]	[P]				[P]x[G]	[S]
2.4G_WLAN	2412-2462 MHz	1.00	20	16.71	6.30	4.27	1.00	200.163	0.0398