

Appendix A: Test Data

Duty cycle						
Band	Frequency (MHz)	On time (ms)	On+off time (ms)	Duty cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
802.11b	2412	5.000	5.000	100.000	0.000	0.010
802.11g	2412	2.105	2.110	99.763	0.010	0.010
802.11ax HE20	2412	10.000	10.000	100.000	0.000	0.010
802.11ax HE40	2422	10.000	10.000	100.000	0.000	0.010

2.4 GHz Band																		
Mod.	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	19.75	19.62	-	-	22.70	21.69	22.27	-	-	25.00	30.00	30.00	-	-	30.00
802.11b	6	2437	1M	19.88	19.48	-	-	22.69	22.13	21.96	-	-	25.06	30.00	30.00	-	-	30.00
802.11b	11	2462	1M	19.72	19.74	-	-	22.74	21.85	22.28	-	-	25.08	30.00	30.00	-	-	30.00
802.11g	1	2412	6M	18.36	17.94	-	-	21.17	26.84	26.14	-	-	29.51	30.00	30.00	-	-	30.00
802.11g	6	2437	6M	19.75	19.65	-	-	22.71	25.72	26.66	-	-	29.23	30.00	30.00	-	-	30.00
802.11g	11	2462	6M	18.80	18.29	-	-	21.56	24.97	26.06	-	-	28.56	30.00	30.00	-	-	30.00
802.11n HT20	1	2412	13M	18.11	17.82	-	-	20.98	26.85	26.24	-	-	29.57	30.00	30.00	-	-	30.00
802.11n HT20	6	2437	13M	19.73	19.60	-	-	22.68	25.94	27.29	-	-	29.68	30.00	30.00	-	-	30.00
802.11n HT20	11	2462	13M	18.75	18.04	-	-	21.42	25.21	26.14	-	-	28.71	30.00	30.00	-	-	30.00
802.11n HT40	3	2422	27M	18.35	17.55	-	-	20.98	26.27	25.75	-	-	29.03	30.00	30.00	-	-	30.00
802.11n HT40	6	2437	27M	18.84	20.61	-	-	22.82	24.88	28.29	-	-	29.92	30.00	30.00	-	-	30.00
802.11n HT40	9	2452	27M	19.40	17.46	-	-	21.55	26.33	25.07	-	-	28.76	30.00	30.00	-	-	30.00
802.11n VHT20	1	2412	13M	18.15	17.86	-	-	21.02	26.89	26.28	-	-	29.61	30.00	30.00	-	-	30.00
802.11n VHT20	6	2437	13M	19.61	19.80	-	-	22.72	25.83	27.42	-	-	29.71	30.00	30.00	-	-	30.00
802.11n VHT20	11	2462	13M	18.76	18.17	-	-	21.49	25.36	26.16	-	-	28.79	30.00	30.00	-	-	30.00
802.11n VHT40	3	2422	27M	18.43	17.69	-	-	21.09	26.29	25.81	-	-	29.07	30.00	30.00	-	-	30.00
802.11n VHT40	6	2437	27M	19.55	19.78	-	-	22.68	25.67	27.39	-	-	29.62	30.00	30.00	-	-	30.00
802.11n VHT40	9	2452	27M	19.48	17.61	-	-	21.66	26.40	25.12	-	-	28.82	30.00	30.00	-	-	30.00

Mod.	CH	Freq. (MHz)	RU	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
802.11ax HE20	1	2412	Full	MCS0	18.18	17.89	-	-	21.05	26.92	26.31	-	-	29.64	30.00	30.00	-	-	30.00
802.11ax HE20	6	2437	Full	MCS0	19.47	19.83	-	-	22.66	25.71	27.47	-	-	29.69	30.00	30.00	-	-	30.00
802.11ax HE20	11	2462	Full	MCS0	18.81	18.31	-	-	21.58	25.48	26.19	-	-	28.86	30.00	30.00	-	-	30.00
802.11ax HE40	3	2422	Full	MCS0	18.57	17.80	-	-	21.21	26.34	25.86	-	-	29.12	30.00	30.00	-	-	30.00
802.11ax HE40	6	2437	Full	MCS0	19.50	19.61	-	-	22.57	25.62	27.21	-	-	29.50	30.00	30.00	-	-	30.00
802.11ax HE40	9	2452	Full	MCS0	19.59	17.64	-	-	21.73	26.53	25.24	-	-	28.94	30.00	30.00	-	-	30.00

6 dB Bandwidth						
Mod.	Freq. (MHz)	6 dB Bandwidth (kHz)				6 dB Bandwidth Min.Limit (kHz)
		Ant-0	Ant-1	Ant-2	Ant-3	
802.11b	2412	9180	8093	-	-	≥ 500
802.11b	2437	8330	8098	-	-	≥ 500
802.11b	2462	10010	8109	-	-	≥ 500
802.11b	2467	10110	8573	-	-	≥ 500
802.11b	2472	8119	8590	-	-	≥ 500
802.11g	2412	15980	15970	-	-	≥ 500
802.11g	2437	16320	16390	-	-	≥ 500
802.11g	2462	16080	16120	-	-	≥ 500
802.11g	2467	16330	16380	-	-	≥ 500
802.11g	2472	16360	15960	-	-	≥ 500
802.11ax HE20	2412	18590	18410	-	-	≥ 500
802.11ax HE20	2437	18900	18820	-	-	≥ 500
802.11ax HE20	2462	18820	18570	-	-	≥ 500
802.11ax HE20	2467	18920	18990	-	-	≥ 500
802.11ax HE20	2472	18940	18520	-	-	≥ 500
802.11ax HE40	2422	36230	35970	-	-	≥ 500
802.11ax HE40	2437	37780	37880	-	-	≥ 500
802.11ax HE40	2452	37930	36570	-	-	≥ 500
802.11ax HE40	2457	37760	37150	-	-	≤ 500
802.11ax HE40	2462	37630	37240	-	-	≤ 500

99 % Occupied BW					
Mod.	Freq. (MHz)	99 % Occupied BW (MHz)			
		Ant-0	Ant-1	Ant-2	Ant-3
802.11b	2412	14.708	12.750	-	-
802.11b	2437	14.018	13.198	-	-
802.11b	2462	16.301	13.127	-	-
802.11b	2467	16.233	13.364	-	-
802.11b	2472	13.339	13.314	-	-
802.11g	2412	16.403	16.381	-	-
802.11g	2437	16.949	16.485	-	-
802.11g	2462	16.617	16.450	-	-
802.11g	2467	16.871	16.513	-	-
802.11g	2472	16.503	16.416	-	-
802.11ax HE20	2412	18.889	18.853	-	-
802.11ax HE20	2437	19.199	18.955	-	-
802.11ax HE20	2462	19.033	18.919	-	-
802.11ax HE20	2467	19.009	18.994	-	-
802.11ax HE20	2472	18.974	18.924	-	-
802.11ax HE40	2422	37.705	37.687	-	-
802.11ax HE40	2437	38.841	37.975	-	-
802.11ax HE40	2452	37.902	37.783	-	-
802.11ax HE40	2457	37.944	37.851	-	-
802.11ax HE40	2462	37.932	37.943	-	-

Maximum Power Spectral Density Measurement											
Mod.	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	-1.48	-5.11	-	-	0.08	8.00	8.00	-	-	8.00
802.11b	2437	-2.77	-6.85	-	-	-1.34	8.00	8.00	-	-	8.00
802.11b	2462	-4.13	-6.66	-	-	-2.21	8.00	8.00	-	-	8.00
802.11b	2467	-3.09	-7.87	-	-	-1.84	8.00	8.00	-	-	8.00
802.11b	2472	-7.84	-7.51	-	-	-4.66	8.00	8.00	-	-	8.00
802.11g	2412	-8.36	-8.26	-	-	-5.30	8.00	8.00	-	-	8.00
802.11g	2437	-4.45	-7.27	-	-	-2.63	8.00	8.00	-	-	8.00
802.11g	2462	-6.52	-6.44	-	-	-3.47	8.00	8.00	-	-	8.00
802.11g	2467	-6.56	-7.20	-	-	-3.86	8.00	8.00	-	-	8.00
802.11g	2472	-14.75	-12.91	-	-	-10.73	8.00	8.00	-	-	8.00
802.11ax HE20	2412	-8.13	-8.80	-	-	-5.44	8.00	8.00	-	-	8.00
802.11ax HE20	2437	-5.66	-6.41	-	-	-3.01	8.00	8.00	-	-	8.00
802.11ax HE20	2462	-6.82	-7.58	-	-	-4.17	8.00	8.00	-	-	8.00
802.11ax HE20	2467	-8.65	-8.35	-	-	-5.49	8.00	8.00	-	-	8.00
802.11ax HE20	2472	-21.13	-20.00	-	-	-17.52	8.00	8.00	-	-	8.00
802.11ax HE40	2422	-9.60	-10.09	-	-	-6.83	8.00	8.00	-	-	8.00
802.11ax HE40	2437	-7.77	-9.76	-	-	-5.64	8.00	8.00	-	-	8.00
802.11ax HE40	2452	-9.11	-10.73	-	-	-6.83	8.00	8.00	-	-	8.00
802.11ax HE40	2457	-9.55	-9.92	-	-	-5.64	8.00	8.00	-	-	8.00
802.11ax HE40	2462	-14.71	-15.30	-	-	-6.83	8.00	8.00	-	-	8.00

Beamforming on																		
2.4 GHz Band																		
Mod.	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
802.11n HT20	1	2412	13M	14.43	14.14	-	-	17.30	23.23	22.81	-	-	26.04	30.00	30.00	-	-	30.00
802.11n HT20	6	2437	13M	16.07	16.64	-	-	19.37	24.00	24.69	-	-	27.37	30.00	30.00	-	-	30.00
802.11n HT20	11	2462	13M	15.14	14.93	-	-	18.05	24.05	23.89	-	-	26.98	30.00	30.00	-	-	30.00
802.11n HT20	12	2467	13M	13.76	13.53	-	-	16.66	21.27	21.16	-	-	24.23	30.00	30.00	-	-	30.00
802.11n HT20	13	2472	13M	1.55	2.00	-	-	4.79	10.43	10.65	-	-	13.55	30.00	30.00	-	-	30.00
802.11n HT40	3	2422	27M	14.34	15.30	-	-	17.86	22.97	23.03	-	-	26.01	30.00	30.00	-	-	30.00
802.11n HT40	6	2437	27M	16.87	16.41	-	-	19.66	24.98	24.74	-	-	27.87	30.00	30.00	-	-	30.00
802.11n HT40	9	2452	27M	14.85	15.46	-	-	18.18	23.49	23.80	-	-	26.66	30.00	30.00	-	-	30.00
802.11n HT40	10	2457	27M	15.06	14.78	-	-	17.93	23.56	22.96	-	-	26.28	30.00	30.00	-	-	30.00
802.11n HT40	11	2462	27M	9.13	8.82	-	-	11.99	17.75	17.13	-	-	20.46	30.00	30.00	-	-	30.00
802.11n VHT20	1	2412	13M	14.55	14.18	-	-	17.38	23.36	22.84	-	-	26.12	30.00	30.00	-	-	30.00
802.11n VHT20	6	2437	13M	16.10	16.74	-	-	19.44	24.06	24.83	-	-	27.47	30.00	30.00	-	-	30.00
802.11n VHT20	11	2462	13M	15.28	15.03	-	-	18.17	24.07	23.90	-	-	27.00	30.00	30.00	-	-	30.00
802.11n VHT20	12	2467	13M	13.82	13.59	-	-	16.72	21.33	21.20	-	-	24.28	30.00	30.00	-	-	30.00
802.11n VHT20	13	2472	13M	1.66	2.12	-	-	4.91	10.57	10.79	-	-	13.69	30.00	30.00	-	-	30.00
802.11n VHT40	3	2422	27M	14.42	15.37	-	-	17.93	23.01	23.06	-	-	26.05	30.00	30.00	-	-	30.00
802.11n VHT40	6	2437	27M	16.96	16.52	-	-	19.76	25.05	24.88	-	-	27.98	30.00	30.00	-	-	30.00
802.11n VHT40	9	2452	27M	14.96	15.53	-	-	18.26	23.60	23.87	-	-	26.75	30.00	30.00	-	-	30.00
802.11n VHT40	10	2457	27M	15.12	14.93	-	-	18.04	23.65	23.09	-	-	26.39	30.00	30.00	-	-	30.00
802.11n VHT40	11	2462	27M	9.21	8.83	-	-	12.03	17.86	17.21	-	-	20.56	30.00	30.00	-	-	30.00

Mod.	CH	Freq. (MHz)	RU	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
802.11ax HE20	1	2412	Full	MCS0	14.67	14.26	-	-	17.48	23.46	22.92	-	-	26.21	30.00	30.00	-	-	30.00
802.11ax HE20	6	2437	Full	MCS0	16.13	16.76	-	-	19.47	24.16	24.89	-	-	27.55	30.00	30.00	-	-	30.00
802.11ax HE20	11	2462	Full	MCS0	15.39	15.13	-	-	18.27	24.12	23.98	-	-	27.06	30.00	30.00	-	-	30.00
802.11ax HE20	12	2467	Full	MCS0	13.96	13.72	-	-	16.85	21.44	21.28	-	-	24.37	30.00	30.00	-	-	30.00
802.11ax HE20	13	2472	Full	MCS0	1.79	2.21	-	-	5.02	10.69	10.92	-	-	13.82	30.00	30.00	-	-	30.00
802.11ax HE40	3	2422	Full	MCS0	14.51	15.47	-	-	18.03	23.12	23.18	-	-	26.16	30.00	30.00	-	-	30.00
802.11ax HE40	6	2437	Full	MCS0	16.99	16.61	-	-	19.81	25.16	24.92	-	-	28.05	30.00	30.00	-	-	30.00
802.11ax HE40	9	2452	Full	MCS0	15.04	15.56	-	-	18.32	23.74	23.88	-	-	26.82	30.00	30.00	-	-	30.00
802.11ax HE40	10	2457	Full	MCS0	15.21	14.94	-	-	18.09	23.74	23.14	-	-	26.46	30.00	30.00	-	-	30.00
802.11ax HE40	11	2462	Full	MCS0	9.36	8.85	-	-	12.12	18.01	17.24	-	-	20.65	30.00	30.00	-	-	30.00