Appendix A. Test Data

Full RU

Duty cycle						
Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle (%)	Duty Factor (dB)	1/T Minimun VBW (kHz)
802.11a	5845	1.780	1.782	99.888	0.005	0.010
802.11ac VHT20	5845	1.675	1.676	99.940	0.003	0.010
802.11ac VHT40	5835	4.950	5.115	96.774	0.142	0.202
802.11ac VHT80	5855	1.179	1.272	92.689	0.330	0.848
802.11ax HE20	5845	1.287	1.293	99.536	0.020	0.010
802.11ax HE40	5835	3.910	4.090	95.599	0.195	0.256
802.11ax HE80	5855	0.984	1.077	91.365	0.392	1.016

RF power setting in Test SW								
Mode	CH	Frequency (MHz)		Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11a	169	5845		15	-	-	-	CMD.
	173	5865		15	-	-	-	
	177	5885		15	-	-	-	
802.11n HT20	169	5845		15	-	-	-	CMD.
	173	5865		15	-	-	-	
	177	5885		15	-	-	-	
802.11n HT40	167	5835		15	-	-	-	CMD.
	175	5875		15	-	-	-	
802.11ac VHT20	169	5845		15	-	-	-	CMD.
	173	5865		15	-	-	-	
	177	5885		15	-	-	-	
802.11ac VHT40	167	5835		15	-	-	-	CMD.
	175	5875		15	-	-	-	
802.11ac VHT80	171	5855		15	-	-	-	CMD.
802.11ax HE20	169	5845	Full	15	-	-	-	CMD.
	173	5865	Full	15	-	-	-	
	177	5885	Full	15	-	-	-	
802.11ax HE40	167	5835	Full	15	-	-	-	CMD.
	175	5875	Full	15	-	-	-	
802.11ax HE80	171	5855	Full	15	-	-	-	CMD.

Maximum Conducted Output Power Measurement													
Mode	Date Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit	E.I.R.P		EIRP Power Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total		Gain	Calculated Results	
				dBm	dBm	dBm	dBm	dBm	dBm	dBi	dBm	dBm
802.11a	6M	169	5845	16.64	-	-	-	-	-	5.10	21.74	30.00
		173	5865	16.17	-	-	-	-	-	5.10	21.27	30.00
		177	5885	16.08	-	-	-	-	-	5.10	21.18	30.00
802.11n HT20	6.5M	169	5845	16.75	-	-	-	-	-	5.10	21.85	30.00
		173	5865	16.30	-	-	-	-	-	5.10	21.4	30.00
		177	5885	16.17	-	-	-	-	-	5.10	21.27	30.00
802.11n HT40	13.5M	167	5835	17.14	-	-	-	-	-	5.10	22.24	30.00
		175	5875	16.29	-	-	-	-	-	5.10	21.39	30.00

Mode	Date Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit	E.I.R.P		EIRP Power Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total		Gain	Calculated Results	
				dBm	dBm	dBm	dBm	dBm	dBm	dBi	dBm	dBm
802.11ac VHT20	MCS 0	169	5845	16.76	-	-	-	-	-	5.10	21.86	30.00
		173	5865	16.31	-	-	-	-	-	5.10	21.41	30.00
		177	5885	16.17	-	-	-	-	-	5.10	21.27	30.00
802.11ac VHT40	MCS 0	167	5835	17.18	-	-	-	-	-	5.10	22.28	30.00
		175	5875	16.32	-	-	-	-	-	5.10	21.42	30.00
802.11ac VHT80	MCS 0	171	5855	16.75	-	-	-	-	-	5.10	21.85	30.00

Mode	Date Rate or Sub-test	CH	Freq. (MHz)	RU	Average power					Limit	E.I.R.P		EIRP Power Limit
					Ant-0	Ant-1	Ant-2	Ant-3	Total		Gain	Calculated Results	
					dBm	dBm	dBm	dBm	dBm	dBm	dBi	dBm	dBm
802.11ax HE20	MCS 0	169	5845	Full	17.30	-	-	-	-	-	5.10	22.40	30.00
		173	5865	Full	16.88	-	-	-	-	-	5.10	21.98	30.00
		177	5885	Full	16.79	-	-	-	-	-	5.10	21.89	30.00
802.11ax HE40	MCS0	167	5835	Full	17.58	-	-	-	-	-	5.10	22.68	30.00
		175	5230	Full	16.92	-	-	-	-	-	5.10	22.02	30.00
802.11ax HE80	MCS 0	171	5855	Full	17.26	-	-	-	-	-	5.10	22.36	30.00

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	169	5845	17.328	---	---	---	16440.000	-	-	-
	173	5865	17.246	---	---	---	16440.000	-	-	-
	177	5865	17.157	---	---	---	16480.000	-	-	-
802.11ac VHT20	169	5845	18.010	---	---	---	17280.000	-	-	-
	173	5865	18.035	---	---	---	17400.000	-	-	-
	177	5865	18.032	---	---	---	17540.000	-	-	-
802.11ac VHT40	167	5835	36.687	---	---	---	35880.000	-	-	-
	175	5875	36.675	---	---	---	35770.000	-	-	-
802.11ac VHT80	171	5855	76.581	---	---	---	76390.000	-	-	-
802.11ax HE20	169	5845	18.932	---	---	---	18300.000	-	-	-
	173	5865	18.933	---	---	---	18440.000	-	-	-
	177	5865	18.936	---	---	---	18590.000	-	-	-
802.11ax HE40	167	5835	37.790	---	---	---	37010.000	-	-	-
	175	5875	37.846	---	---	---	37250.000	-	-	-
802.11ax HE80	171	5855	77.906	---	---	---	78190.000	-	-	-

Band IV_ Power Spectral Density Measurement															
Mode	CH	Frequency (MHz)	Measurement								Calculated			EIRPLimit	PASS/FAIL
			Ant-0		Ant-1		Ant-2		Ant-3		Total	Gain	EIRP Total		
			dBm/100 kHz	dBm/1MHz	dBm/100 kHz	dBm/1MHz	dBm/100 kHz	dBm/1MHz	dBm/100 kHz	dBm/1MHz	dBm/1MHz	dBi	dBm/1MHz		
802.11a	169	5845	-3.831	6.174	-	-	-	-	-	-	-	5.100	11.27	14.00	PASS
	173	5865	-3.914	6.091	-	-	-	-	-	-	-	5.100	11.19	14.00	PASS
	177	5865	-3.422	6.583	-	-	-	-	-	-	-	5.100	11.68	14.00	PASS
802.11ac VHT20	169	5845	-3.853	6.150	-	-	-	-	-	-	-	5.100	11.25	14.00	PASS
	173	5865	-4.114	5.889	-	-	-	-	-	-	-	5.100	10.99	14.00	PASS
	177	5865	-4.129	5.874	-	-	-	-	-	-	-	5.100	10.97	14.00	PASS
802.11ac VHT40	167	5835	-7.263	2.879	-	-	-	-	-	-	-	5.100	7.98	14.00	PASS
	175	5875	-7.767	2.375	-	-	-	-	-	-	-	5.100	7.48	14.00	PASS
802.11ac VHT80	171	5855	-10.763	-0.433	-	-	-	-	-	-	-	5.100	4.67	14.00	PASS
802.11ax HE20	169	5845	-4.669	5.351	-	-	-	-	-	-	-	5.100	10.45	14.00	PASS
	173	5865	-5.165	4.855	-	-	-	-	-	-	-	5.100	9.96	14.00	PASS
	177	5865	-5.106	4.914	-	-	-	-	-	-	-	5.100	10.01	14.00	PASS
802.11ax HE40	167	5835	-7.397	2.798	-	-	-	-	-	-	-	5.100	7.90	14.00	PASS
	175	5875	-8.122	2.073	-	-	-	-	-	-	-	5.100	7.17	14.00	PASS
802.11ax HE80	171	5855	-10.896	-0.504	-	-	-	-	-	-	-	5.100	4.60	14.00	PASS

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

Partial RU

Duty cycle								
Mode	Frequency (MHz)	RU	RU Number	on time (ms)	on+off time (ms)	Duty cycle (%)	Duty Factor (dB)	1/T Minimun VBW (kHz)
802.11ax HE20	5845	26	0	1.287	1.293	99.536	0.020	0.010
802.11ax HE40	5835	26	0	3.910	4.090	95.599	0.195	0.256
802.11ax HE80	5855	26	0	0.984	1.077	91.365	0.392	1.016

RF power setting in Test SW									
Mode	CH	Frequency (MHz)	RU	RU Number	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11ax HE20	169	5845	26	0	6	0	0	0	CMD.
	177	5885	26	8	6	0	0	0	
802.11ax HE40	167	5835	26	0	4	0	0	0	
	175	5875	26	17	4	0	0	0	
802.11ax HE80	171	5855	26	0	-0.5	0	0	0	
				36	0	0	0	0	

Maximum Conducted Output Power Measurement														
Mode	Date Rate or Sub-test	CH	Freq. (MHz)	RU	RU Number	Average power					Limit	E.I.R.P		EIRP Power Limit
						Ant-0	Ant-1	Ant-2	Ant-3	Total		Gain	Calculated Results	
						dBm	dBm	dBm	dBm	dBm	dBm	dBi	dBm	dBm
802.11ax HE20	MCS 0	169	5845	26	0	6.14	-	-	-	-	-	5.10	11.24	30.00
		173	5865	26	0	5.73	-	-	-	-	-	5.10	10.83	30.00
		177	5885	26	8	5.39	-	-	-	-	-	5.10	10.49	30.00
802.11ax HE40	MCS0	167	5835	26	0	3.33	-	-	-	-	-	5.10	8.43	30.00
		175	5875	26	17	2.50	-	-	-	-	-	5.10	7.60	30.00
802.11ax HE80	MCS 0	171	5855	26	0	0.08	-	-	-	-	-	5.10	5.18	30.00
					36	-0.13	-	-	-	-	-	5.10	4.97	30.00

Band IV_ Power Spectral Density Measurement

Mode	CH	Frequency (MHz)	RU	RU Num.	Measurement								Calculated			EIRPLimit	PASS/FAIL
					Ant-0		Ant-1		Ant-2		Ant-3		Total	Gain	EIRP Total		
					dBm/100 kHz	dBm/1MHz	dBm/100 kHz	dBm/1MHz	dBm/100 kHz	dBm/1MHz	dBm/100 kHz	dBm/1MHz	dBm/1MHz	dBi	dBm/1MHz		
802.11ax HE20	169	5845	26	0	-4.913	5.107	-	-	-	-	-	-	5.107	5.100	10.21	14.00	PASS
	177	5865	26	8	-5.382	4.638	-	-	-	-	-	-	4.638	5.100	9.74	14.00	PASS
802.11ax HE40	167	5835	26	0	-7.811	2.384	-	-	-	-	-	-	2.384	5.100	7.48	14.00	PASS
	175	5875	26	17	-8.534	1.661	-	-	-	-	-	-	1.661	5.100	6.76	14.00	PASS
802.11ax HE80	171	5855	26	0	-11.248	-0.856	-	-	-	-	-	-	-0.856	5.100	4.24	14.00	PASS
				36	-11.384	-0.992	-	-	-	-	-	-	-0.992	5.100	4.11	14.00	PASS

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