Appendix A. Test Data

Full RU						
Duty cycle						
Band	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	1.677	99.881	0.005	0.010
802.11ac VHT40	5835	4.950	5.130	96.491	0.155	0.202
802.11ac VHT80	5855	1.179	1.275	92.471	0.340	0.848
802.11ax HE20	5845	1.287	1.290	99.767	0.010	0.010
802.11ax HE40	5835	3.900	4.080	95.588	0.196	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		16	-	-	-	CMD.
	173	5865		16	-	-	-	
	177	5885		16	-	-	-	
802.11n HT20	169	5845		16	-	-	-	CMD.
	173	5865		16	-	-	-	
	177	5885		16	-	-	-	
802.11n HT40	167	5835		16	-	-	-	CMD.
	175	5875		16	-	-	-	
802.11ac VHT20	169	5845		16	-	-	-	CMD.
	173	5865		16	-	-	-	
	177	5885		16	-	-	-	
802.11ac VHT40	167	5835		16	-	-	-	CMD.
	175	5875		16	-	-	-	
802.11ac VHT80	171	5855		14	-	-	-	CMD.
802.11ax HE20	169	5845	Full	16	-	-	-	CMD.
	173	5865	Full	16	-	-	-	
	177	5885	Full	16	-	-	-	
802.11ax HE40	167	5835	Full	16	-	-	-	CMD.
	175	5875	Full	16	-	-	-	
802.11ax HE80	171	5855	Full	14	-	-	-	CMD.

<table>
<tr><td colspan="16">Maximum Conducted Output Power Measurement</td></tr>
</table>

Band	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	15.12	-	-	-	-	-	5.10	20.22	30.00
		173	5865	14.88	-	-	-	-	-	5.10	19.98	30.00
		177	5885	14.61	-	-	-	-	-	5.10	19.71	30.00
802.11n HT20	6.5M	169	5845	15.03	-	-	-	-	-	5.10	20.13	30.00
		173	5865	14.81	-	-	-	-	-	5.10	19.91	30.00
		177	5885	14.65	-	-	-	-	-	5.10	19.75	30.00
802.11n HT40	13.5M	167	5835	15.07	-	-	-	-	-	5.10	20.17	30.00
		175	5875	14.66	-	-	-	-	-	5.10	19.76	30.00

Band	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	15.08	-	-	-	-	-	5.10	20.18	30.00
		173	5865	14.84	-	-	-	-	-	5.10	19.94	30.00
		177	5885	14.66	-	-	-	-	-	5.10	19.76	30.00
802.11ac VHT40	MCS 0	167	5835	15.11	-	-	-	-	-	5.10	20.21	30.00
		175	5875	14.71	-	-	-	-	-	5.10	19.81	30.00
802.11ac VHT80	MCS 0	171	5855	11.86	-	-	-	-	-	5.10	16.96	30.00

Band	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	15.36	-	-	-	-	-	5.10	20.46	30.00
		173	5865	Full	15.03	-	-	-	-	-	5.10	20.13	30.00
		177	5885	Full	14.84	-	-	-	-	-	5.10	19.94	30.00
802.11ax HE40	MCS0	167	5835	Full	15.43	-	-	-	-	-	5.10	20.53	30.00
		175	5230	Full	15.03	-	-	-	-	-	5.10	20.13	30.00
802.11ax HE80	MCS 0	171	5855	Full	12.22	-	-	-	-	-	5.10	17.32	30.00

Band III + IV_6 dB & 99 % RF Bandwidth Measurement										
Band	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	17.302	---	---	---	16450.000	-	-	-
	173	5865	17.354	---	---	---	16460.000	-	-	-
	177	5865	17.368	---	---	---	16460.000	-	-	-
802.11ac VHT20	169	5845	18.134	---	---	---	17580.000	-	-	-
	173	5865	18.104	---	---	---	17600.000	-	-	-
	177	5865	18.171	---	---	---	17620.000	-	-	-
802.11ac VHT40	167	5835	36.705	---	---	---	35820.000	-	-	-
	175	5875	36.736	---	---	---	35790.000	-	-	-
802.11ac VHT80	171	5855	76.676	---	---	---	76450.000	-	-	-
802.11ax HE20	169	5845	18.942	---	---	---	18440.000	-	-	-
	173	5865	18.951	---	---	---	18590.000	-	-	-
	177	5865	18.944	---	---	---	18580.000	-	-	-
802.11ax HE40	167	5835	37.875	---	---	---	37140.000	-	-	-
	175	5875	37.809	---	---	---	37330.000	-	-	-
802.11ax HE80	171	5855	77.911	---	---	---	78270.000	-	-	-

Band IV_ Power Spectral Density Measurement																
Band	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	-5.281	4.724	-	-	-	-	-	-	-	5.100	9.82	14.00	PASS
	173	5865	-5.485	4.520	-	-	-	-	-	-	-	5.100	9.62	14.00	PASS
	177	5865	-5.684	4.321	-	-	-	-	-	-	-	5.100	9.42	14.00	PASS
802.11ac VHT20	169	5845	-5.377	4.628	-	-	-	-	-	-	-	5.100	9.73	14.00	PASS
	173	5865	-5.921	4.084	-	-	-	-	-	-	-	5.100	9.18	14.00	PASS
	177	5865	-5.937	4.068	-	-	-	-	-	-	-	5.100	9.17	14.00	PASS
802.11ac VHT40	167	5835	-8.523	1.632	-	-	-	-	-	-	-	5.100	6.73	14.00	PASS
	175	5875	-8.570	1.585	-	-	-	-	-	-	-	5.100	6.69	14.00	PASS
802.11ac VHT80	171	5855	-14.393	-4.053	-	-	-	-	-	-	-	5.100	1.05	14.00	PASS
802.11ax HE20	169	5845	-6.162	3.848	-	-	-	-	-	-	-	5.100	8.95	14.00	PASS
	173	5865	-6.637	3.373	-	-	-	-	-	-	-	5.100	8.47	14.00	PASS
	177	5865	-6.408	3.602	-	-	-	-	-	-	-	5.100	8.70	14.00	PASS
802.11ax HE40	167	5835	-9.583	0.613	-	-	-	-	-	-	-	5.100	5.71	14.00	PASS
	175	5875	-9.883	0.313	-	-	-	-	-	-	-	5.100	5.41	14.00	PASS
802.11ax HE80	171	5855	-13.955	-3.563	-	-	-	-	-	-	-	5.100	1.54	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								
Band	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	5180	26	0	1.287	1.290	99.767	0.010	0.010
802.11ax HE40	5190	26	0	3.900	4.080	95.588	0.196	0.256
802.11ax HE80	5210	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	7	0	0	0	CMD.
	177	5885	26	8	7	0	0	0	
802.11ax HE40	167	5835	26	0	4.5	0	0	0	
	175	5875	26	17	4.5	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															
Band	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	4.64	-	-	-	-	-	5.10	9.74	30.00
		177	5885	26	8	4.17	-	-	-	-	-	5.10	9.27	30.00
802.11ax HE40	MCS0	167	5835	26	0	1.03	-	-	-	-	-	5.10	6.13	30.00
		175	5875	26	17	0.78	-	-	-	-	-	5.10	5.88	30.00
802.11ax HE80	MCS 0	171	5855	26	0	-2.64	-	-	-	-	-	5.10	2.46	30.00
					36	-2.36	-	-	-	-	-	5.10	2.74	30.00

Band IV_ Power Spectral Density Measurement																	
Band	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	-6.377	3.633	-	-	-	-	-	-	3.633	5.100	8.73	14.00	PASS
	177	5865	26	8	-6.846	3.164	-	-	-	-	-	-	3.164	5.100	8.26	14.00	PASS
802.11ax HE40	167	5835	26	0	-10.196	0.000	-	-	-	-	-	-	0.000	5.100	5.10	14.00	PASS
	175	5875	26	17	-10.219	-0.023	-	-	-	-	-	-	-0.023	5.100	5.08	14.00	PASS
802.11ax HE80	171	5855	26	0	-14.045	-3.653	-	-	-	-	-	-	-3.653	5.100	1.45	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)