

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)
802.11a	5180	1.446	1.578	91.635	0.379	0.692
802.11n HT20	5180	1.356	1.488	91.129	0.403	0.737
802.11n HT40	5190	0.672	0.798	84.211	0.746	1.488
802.11ac VHT20	5180	1.362	1.530	89.020	0.505	0.734
802.11ac VHT40	5190	0.678	0.840	80.714	0.930	1.475
802.11ac VHT80	5210	0.338	0.492	68.699	1.630	2.959

5 GHz Band Config			
Mod.	Channel	Freq. (MHz)	Data Rate
802.11a	36	5180	6M
802.11a	40	5200	6M
802.11a	44	5220	6M
802.11a	48	5240	6M
802.11n HT20	36	5180	6.5M
802.11n HT20	40	5200	6.5M
802.11n HT20	44	5220	6.5M
802.11n HT20	48	5240	6.5M
802.11n HT40	38	5190	13.5M
802.11n HT40	46	5230	13.5M
802.11ac VHT20	36	5180	MCS 0
802.11ac VHT20	40	5200	MCS 0
802.11ac VHT20	44	5220	MCS 0
802.11ac VHT20	48	5240	MCS 0
802.11ac VHT40	38	5190	MCS 0
802.11ac VHT40	46	5230	MCS 0
802.11ac VHT80	42	5210	MCS 0

Maximum Conducted Output Power Measurement								
Band	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	dBm
802.11a	36	5180	14.39	-	-	-	-	N/A
	40	5200	17.40	-	-	-	-	N/A
	48	5240	17.39	-	-	-	-	N/A
802.11n HT20	36	5180	14.56	-	-	-	-	N/A
	40	5200	17.33	-	-	-	-	N/A
	48	5240	17.01	-	-	-	-	N/A
802.11n HT40	38	5190	10.99	-	-	-	-	N/A
	46	5230	16.81	-	-	-	-	N/A
Band	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	dBm
802.11ac VHT20	36	5180	14.76	-	-	-	-	N/A
	40	5200	17.57	-	-	-	-	N/A
	48	5240	17.36	-	-	-	-	N/A
802.11ac VHT40	38	5190	11.32	-	-	-	-	N/A
	46	5230	17.05	-	-	-	-	N/A
802.11ac VHT80	42	5210	9.49	-	-	-	-	N/A

26 dB & 99 % RF Bandwidth Measurement

Band	CH	Freq. (MHz)	99 % Bandwidth				26 dB Bandwidth			
			Ant-0	Ant-1	Ant-2	Ant-3	Ant-0	Ant-1	Ant-2	Ant-3
			MHz	MHz	MHz	MHz	MHz	MHz	MHz	MHz
802.11a	36	5180	16.424	-	-	-	20.290	-	-	-
	40	5200	28.299	-	-	-	40.900	-	-	-
	48	5240	18.192	-	-	-	33.990	-	-	-
802.11ac VHT20	36	5180	17.516	-	-	-	20.970	-	-	-
	40	5200	19.091	-	-	-	35.030	-	-	-
	48	5240	18.756	-	-	-	33.230	-	-	-
802.11ac VHT40	38	5190	35.959	-	-	-	44.840	-	-	-
	46	5230	38.527	-	-	-	74.820	-	-	-
802.11ac VHT80	42	5210	74.993	-	-	-	81.820	-	-	-

Power Spectral Density Measurement									
Band	CH	Frequency (MHz)	Measurement				Duty Factor	Calculated	Limit
			Ant-0	Ant-1	Ant-2	Ant-3		Total	
			dBm/MHz	dBm/MHz	dBm/MHz	dBm/MHz		dBm/MHz	
802.11a	36	5180	3.103	-	-	-	0.379	3.482	17.000
	40	5200	6.105	-	-	-	0.379	6.484	17.000
	48	5240	4.934	-	-	-	0.379	5.313	17.000
802.11ac VHT20	36	5180	2.935	-	-	-	0.505	3.440	17.000
	40	5200	5.673	-	-	-	0.505	6.178	17.000
	48	5240	4.602	-	-	-	0.505	5.107	17.000
802.11ac VHT40	38	5190	-3.748	-	-	-	0.930	-2.818	17.000
	46	5230	1.258	-	-	-	0.930	2.188	17.000
802.11ac VHT80	42	5210	-9.508	-	-	-	1.630	-7.878	17.000

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.