

Appendix A. Test Data

QCN5054

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	1.430	1.600	89.375	0.488	0.699
802.11ax HE20	5180	5.480	5.760	95.139	0.216	0.182
802.11ax HE40	5190	5.480	5.780	94.810	0.231	0.182
802.11ax HE80	5210	5.480	5.720	95.804	0.186	0.182

QCN5054							
Mode	CH	Frequency (MHz)	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11a	36	5180	15.5	15.5	15.5	15.5	QSPR 5.0-00188
	40	5200	15.5	15.5	15.5	15.5	
	44	5220	15.5	15.5	15.5	15.5	
	48	5240	15.5	15.5	15.5	15.5	
	149	5745	21	21	21	21	
	157	5785	21	21	21	21	
	165	5825	21	21	21	21	
802.11n HT20	36	5180	16	16	16	16	QSPR 5.0-00188
	40	5200	16	16	16	16	
	44	5220	16	16	16	16	
	48	5240	16	16	16	16	
	149	5745	21	21	21	21	
	157	5785	21	21	21	21	
	165	5825	20.5	20.5	20.5	20.5	
802.11n HT40	38	5190	14.5	14.5	14.5	14.5	QSPR 5.0-00188
	46	5230	17.5	17.5	17.5	17.5	
	151	5755	20	20	20	20	
	159	5795	20	20	20	20	

RF power setting in Test SW

Mode	CH	Frequency (MHz)	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11ac VHT20	36	5180	16	16	16	16	QSPR 5.0-00188
	40	5200	16	16	16	16	
	44	5220	16	16	16	16	
	48	5240	16	16	16	16	
	149	5745	21	21	21	21	
	157	5785	21	21	21	21	
	165	5825	20.5	20.5	20.5	20.5	
802.11ac VHT40	38	5190	14.5	14.5	14.5	14.5	QSPR 5.0-00188
	46	5230	17.5	17.5	17.5	17.5	
	151	5755	20	20	20	20	
	159	5795	20	20	20	20	
802.11ac VHT80	42	5210	13.5	13.5	13.5	13.5	QSPR 5.0-00188
	155	5775	16.5	16.5	16.5	16.5	

RF power setting in Test SW

Mode	CH	Frequency (MHz)		Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11ax HE20	36	5180	Full	16	16	16	16	QSPR 5.0-00188
	40	5200	Full	16	16	16	16	
	44	5220	Full	16	16	16	16	
	48	5240	Full	16	16	16	16	
	149	5745	Full	21	21	21	21	
	157	5785	Full	21	21	21	21	
	165	5825	Full	20.5	20.5	20.5	20.5	
802.11ax HE40	38	5190	Full	14.5	14.5	14.5	14.5	QSPR 5.0-00188
	46	5230	Full	17.5	17.5	17.5	17.5	
	151	5755	Full	20	20	20	20	
	159	5795	Full	20	20	20	20	
802.11ax HE80	42	5210	Full	13.5	13.5	13.5	13.5	QSPR 5.0-00188
	155	5775	Full	16.5	16.5	16.5	16.5	

QCN5054									
Band	Date Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total	
				dBm	dBm	dBm	dBm	dBm	
802.11a	6M	36	5180	16.76	16.57	16.68	17.00	22.78	30.00
		40	5200	16.81	16.60	16.72	16.97	22.80	30.00
		44	5220	16.78	16.52	16.66	16.90	22.74	30.00
		48	5240	16.61	16.23	16.62	16.98	22.64	30.00
		149	5745	22.02	22.15	22.45	22.01	28.18	30.00
		157	5785	21.90	22.05	22.32	21.93	28.07	30.00
		165	5825	22.00	22.35	22.27	22.07	28.20	30.00
802.11n HT20	26M	36	5180	17.25	17.29	17.34	17.22	23.30	30.00
		40	5200	17.24	17.05	17.48	17.29	23.29	30.00
		44	5220	17.16	16.99	17.39	17.22	23.21	30.00
		48	5240	16.94	16.81	17.28	17.36	23.12	30.00
		149	5745	21.80	22.08	22.60	21.96	28.14	30.00
		157	5785	21.74	21.77	22.49	21.77	27.97	30.00
		165	5825	21.51	21.81	21.71	21.42	27.64	30.00
802.11n HT40	54M	38	5190	15.78	15.97	16.11	16.03	21.99	30.00
		46	5230	18.54	18.45	18.90	18.76	24.69	30.00
		151	5755	21.78	21.74	22.17	21.71	27.87	30.00
		159	5795	21.41	21.81	21.98	21.42	27.68	30.00
Band	Date Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total	
				dBm	dBm	dBm	dBm	dBm	
802.11ac VHT20	26M	36	5180	17.33	17.40	17.42	17.32	23.39	30.00
		40	5200	17.27	17.15	17.58	17.43	23.38	30.00
		44	5220	17.18	17.10	17.50	17.36	23.31	30.00
		48	5240	16.96	16.95	17.40	17.49	23.23	30.00
		149	5745	21.93	22.12	22.68	21.99	28.21	30.00
		157	5785	21.82	21.91	22.55	21.82	28.06	30.00
		165	5825	21.63	21.84	21.75	21.50	27.70	30.00
802.11ac VHT40	54M	38	5190	15.87	16.04	16.24	16.16	22.10	30.00
		46	5230	18.59	18.53	19.03	18.87	24.78	30.00
		151	5755	21.85	21.84	22.27	21.81	27.97	30.00
		159	5795	21.49	21.87	22.01	21.56	27.76	30.00
802.11ac VHT80	117.2M	42	5210	14.82	14.66	14.92	14.89	20.84	30.00
		155	5775	18.01	18.10	18.21	17.85	24.07	30.00

Band	Date Rate or Sub-test	CH	Freq. (MHz)	RU	Average power					Limit
					Ant-0	Ant-1	Ant-2	Ant-3	Total	
					dBm	dBm	dBm	dBm	dBm	
802.11ax HE20	MCS 0	36	5180	Full	17.40	17.42	17.52	17.42	23.46	30.00
		40	5200	Full	17.31	17.26	17.63	17.47	23.44	30.00
		44	5220	Full	17.25	17.20	17.55	17.38	23.37	30.00
		48	5240	Full	16.98	17.01	17.54	17.50	23.29	30.00
		149	5745	Full	22.03	22.16	22.75	22.06	28.28	30.00
		157	5785	Full	21.88	22.05	22.60	21.93	28.15	30.00
		165	5825	Full	21.65	21.91	21.82	21.57	27.76	30.00
802.11ax HE40	MCS0	38	5190	Full	15.99	16.06	16.30	16.26	22.18	30.00
		46	5230	Full	18.62	18.65	19.05	19.01	24.86	30.00
		151	5755	Full	21.97	21.94	22.32	21.87	28.05	30.00
		159	5795	Full	21.62	21.91	22.08	21.61	27.83	30.00
802.11ax HE80	MCS 0	42	5210	Full	14.90	14.75	15.00	14.96	20.92	30.00
		155	5775	Full	18.12	18.18	18.32	17.91	24.16	30.00

QCN5054										
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	16.568	16.517	16.528	16.540	19.850	19.460	19.570	19.550
	40	5200	16.533	16.550	16.531	16.510	19.360	19.790	19.610	19.640
	48	5240	16.541	16.501	16.528	16.511	19.850	19.610	19.750	19.470
802.11ax HE20	36	5180	19.059	19.001	18.998	19.005	21.060	21.490	21.530	21.520
	40	5200	18.971	19.070	19.037	19.041	20.970	21.260	21.520	21.320
	48	5240	18.986	18.955	19.021	18.988	21.400	21.420	21.340	21.460
802.11ax HE40	38	5190	37.806	37.807	37.894	37.898	41.500	41.150	41.710	41.040
	46	5230	37.871	37.892	37.879	37.920	41.650	43.110	42.300	41.570
802.11ax HE80	42	5210	77.229	77.365	77.312	77.308	82.570	82.310	82.960	82.480

Band III _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	149	5745	27.231	28.286	27.497	26.041	15790.000	15720.000	15680.000	16340.000
	157	5785	28.041	28.781	29.489	25.250	15360.000	16060.000	16030.000	15890.000
	165	5825	28.283	29.233	29.204	26.814	15780.000	15710.000	16050.000	16320.000
802.11ax HE20	149	5745	24.013	25.778	28.133	25.864	18650.000	18640.000	18940.000	18170.000
	157	5785	26.680	26.515	27.318	26.039	18540.000	18550.000	18770.000	18610.000
	165	5825	23.199	26.802	24.259	22.879	18660.000	18630.000	18620.000	18770.000
802.11ax HE40	151	5755	50.105	51.004	56.919	50.036	37910.000	37920.000	37860.000	37730.000
	159	5795	49.724	53.474	58.215	49.585	37840.000	37590.000	36640.000	38080.000
802.11ax HE80	155	5775	77.169	77.196	77.185	77.158	77870.000	77280.000	76170.000	76460.000

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	5.624	5.568	5.503	5.500	0.488	12.057	12.350
	40	5200	5.516	5.382	5.416	5.490	0.488	11.960	12.350
	48	5240	5.400	5.557	5.452	5.528	0.488	11.993	12.350
802.11ax HE20	36	5180	5.720	5.731	5.603	5.665	0.216	11.917	12.350
	40	5200	5.552	5.547	5.799	5.757	0.216	11.902	12.350
	48	5240	5.568	5.487	5.712	5.822	0.216	11.886	12.350
802.11ax HE40	38	5190	1.290	1.425	1.570	1.695	0.231	7.750	12.350
	46	5230	4.146	4.169	4.547	4.613	0.231	10.626	12.350
802.11ax HE80	42	5210	-3.182	-2.919	-2.932	-3.034	0.186	3.191	12.350

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

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Band	CH	Frequency (MHz)	Measurement								Calculated	Limit	PASS/FAIL
			Ant-0		Ant-1		Ant-2		Ant-3		Total		
			dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/500 kHz	dBm/500 kHz	
802.11a	149	5745	1.491	8.969	1.949	9.427	1.887	9.365	1.626	9.104	15.240	25.31	PASS
	157	5785	1.222	8.700	1.627	9.105	1.636	9.114	1.371	8.849	14.966	25.31	PASS
	165	5825	1.077	8.555	1.509	8.987	1.518	8.996	1.408	8.886	14.880	25.31	PASS
802.11ax HE20	149	5745	0.348	7.554	0.297	7.503	0.533	7.739	0.259	7.465	13.587	25.31	PASS
	157	5785	0.030	7.236	0.294	7.500	0.319	7.525	0.303	7.509	13.465	25.31	PASS
	165	5825	-0.274	6.932	-0.234	6.972	-0.150	7.056	-0.362	6.844	12.972	25.31	PASS
802.11ax HE40	151	5755	-2.475	4.746	-2.610	4.611	-2.186	5.035	-2.553	4.668	10.789	25.31	PASS
	159	5795	-2.612	4.609	-2.543	4.678	-2.162	5.059	-2.747	4.474	10.731	25.31	PASS
802.11ax HE80	155	5775	-9.896	-2.720	-9.748	-2.572	-8.859	-1.683	-10.263	-3.087	3.536	25.31	PASS

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

Conversion ration = 10*Log(500 k/100 k)

QCN5054_Beamforming on

RF power setting in Test SW							
Mode	CH	Frequency (MHz)	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11n HT20	36	5180	9.5	9.5	9.5	9.5	QSPR 5.0-00188
	40	5200	9.5	9.5	9.5	9.5	
	44	5220	9.5	9.5	9.5	9.5	
	48	5240	9.5	9.5	9.5	9.5	
	149	5745	14	14	14	14	
	157	5785	14	14	14	14	
	165	5825	13.5	13.5	13.5	13.5	
802.11n HT40	38	5190	8	8	8	8	QSPR 5.0-00188
	46	5230	11	11	11	11	
	151	5755	13.5	13.5	13.5	13.5	
	159	5795	13.5	13.5	13.5	13.5	

RF power setting in Test SW							
Mode	CH	Frequency (MHz)	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11ac VHT20	36	5180	9.5	9.5	9.5	9.5	QSPR 5.0-00188
	40	5200	9.5	9.5	9.5	9.5	
	44	5220	9.5	9.5	9.5	9.5	
	48	5240	9.5	9.5	9.5	9.5	
	149	5745	14	14	14	14	
	157	5785	14	14	14	14	
	165	5825	13.5	13.5	13.5	13.5	
802.11ac VHT40	38	5190	8	8	8	8	QSPR 5.0-00188
	46	5230	11	11	11	11	
	151	5755	13.5	13.5	13.5	13.5	
	159	5795	13.5	13.5	13.5	13.5	
802.11ac VHT80	42	5210	7	7	7	7	QSPR 5.0-00188
	155	5775	10	10	10	10	

RF power setting in Test SW								
Mode	CH	Frequency (MHz)		Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11ax HE20	36	5180	Full	9.5	9.5	9.5	9.5	QSPR 5.0-00188
	40	5200	Full	9.5	9.5	9.5	9.5	
	44	5220	Full	9.5	9.5	9.5	9.5	
	48	5240	Full	9.5	9.5	9.5	9.5	
	149	5745	Full	14	14	14	14	
	157	5785	Full	14	14	14	14	
	165	5825	Full	13.5	13.5	13.5	13.5	
802.11ax HE40	38	5190	Full	8	8	8	8	QSPR 5.0-00188
	46	5230	Full	11	11	11	11	
	151	5755	Full	13.5	13.5	13.5	13.5	
	159	5795	Full	13.5	13.5	13.5	13.5	
802.11ax HE80	42	5210	Full	7	7	7	7	QSPR 5.0-00188
	155	5775	Full	10	10	10	10	

Maximum Conducted Output Power Measurement									
Band	Data Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total	
				dBm	dBm	dBm	dBm	dBm	
802.11n HT20	26M	36	5180	10.49	10.97	10.51	11.05	16.78	25.35
		40	5200	10.47	10.60	10.80	10.88	16.71	25.35
		44	5220	10.46	10.50	10.72	10.79	16.64	25.35
		48	5240	10.32	10.40	10.57	10.89	16.57	25.35
		149	5745	15.64	15.63	16.13	15.64	21.79	25.31
		157	5785	15.53	15.53	15.84	15.34	21.58	25.31
		165	5825	14.92	15.38	15.12	15.12	21.16	25.31
802.11n HT40	54M	38	5190	9.03	9.32	9.37	9.74	15.39	25.35
		46	5230	12.05	12.11	12.22	12.49	18.24	25.35
		151	5755	15.37	15.09	15.48	15.19	21.31	25.31
		159	5795	14.97	15.14	15.33	14.87	21.10	25.31
Band	Data Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total	
				dBm	dBm	dBm	dBm	dBm	
802.11ac VHT20	26M	36	5180	10.71	11.11	10.72	11.11	16.94	25.35
		40	5200	10.61	10.84	10.98	11.04	16.89	25.35
		44	5220	10.64	10.64	10.79	10.84	16.75	25.35
		48	5240	10.48	10.55	10.78	11.01	16.73	25.35
		149	5745	15.77	15.84	16.22	15.71	21.91	25.31
		157	5785	15.61	15.60	15.94	15.48	21.68	25.31
		165	5825	15.07	15.49	15.22	15.17	21.26	25.31
802.11ac VHT40	54M	38	5190	9.22	9.54	9.51	9.84	15.55	25.35
		46	5230	12.13	12.23	12.46	12.57	18.37	25.35
		151	5755	15.56	15.15	15.61	15.26	21.42	25.31
		159	5795	15.18	15.21	15.40	15.03	21.23	25.31
802.11ac VHT80	117.2M	42	5210	7.87	8.06	8.52	8.40	14.24	25.35
		155	5775	11.75	11.63	11.99	11.59	17.76	25.31

Band	Date Rate or Sub-test	CH	Freq. (MHz)	RU	Average power					Limit
					Ant-0	Ant-1	Ant-2	Ant-3	Total	
					dBm	dBm	dBm	dBm	dBm	
802.11ax HE20	MCS 0	36	5180	Full	11.02	11.32	11.07	11.32	17.21	25.35
		40	5200	Full	10.95	11.10	11.20	11.25	17.15	25.35
		44	5220	Full	10.89	11.04	11.15	11.17	17.08	25.35
		48	5240	Full	10.81	10.83	11.05	11.30	17.02	25.35
		149	5745	Full	16.00	16.18	16.47	15.98	22.18	25.31
		157	5785	Full	15.84	15.98	16.16	15.83	21.98	25.31
		165	5825	Full	15.34	15.75	15.50	15.46	21.54	25.31
802.11ax HE40	MCS0	38	5190	Full	9.58	9.78	9.83	10.16	15.86	25.35
		46	5230	Full	12.43	12.55	12.72	12.86	18.66	25.35
		151	5755	Full	15.77	15.49	15.99	15.63	21.74	25.31
		159	5795	Full	15.50	15.55	15.66	15.41	21.55	25.31
802.11ax HE80	MCS 0	42	5210	Full	8.15	8.30	8.78	8.73	14.52	25.35
		155	5775	Full	12.01	12.02	12.22	11.82	18.04	25.31

QCA9889

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	2.042	2.132	95.779	0.187	0.490
802.11ac VHT20	5180	1.906	1.996	95.491	0.200	0.525
802.11ac VHT40	5190	0.948	0.975	97.231	0.122	1.055
802.11ac VHT80	5210	0.462	0.494	93.478	0.293	2.167

RF power setting in Test SW							
Mode	CH	Frequency (MHz)	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11a	36	5180	17.5	-	-	-	QSPR 5.0-00188
	40	5200	21	-	-	-	
	44	5220	21	-	-	-	
	48	5240	16.5	-	-	-	
	149	5745	10	-	-	-	
	157	5785	9.5	-	-	-	
	165	5825	10	-	-	-	
802.11n HT20	36	5180	17.5	-	-	-	QSPR 5.0-00188
	40	5200	20	-	-	-	
	44	5220	20	-	-	-	
	48	5240	16	-	-	-	
	149	5745	10	-	-	-	
	157	5785	9.5	-	-	-	
	165	5825	10.5	-	-	-	
802.11n HT40	38	5190	12.5	-	-	-	QSPR 5.0-00188
	46	5230	16.5	-	-	-	
	151	5755	12	-	-	-	
	159	5795	11.5	-	-	-	

RF power setting in Test SW

Mode	CH	Frequency (MHz)	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11ac VHT20	36	5180	17.5	-	-	-	QSPR 5.0-00188
	40	5200	20	-	-	-	
	44	5220	20	-	-	-	
	48	5240	16	-	-	-	
	149	5745	10	-	-	-	
	157	5785	9.5	-	-	-	
	165	5825	10.5	-	-	-	
802.11ac VHT40	38	5190	12.5	-	-	-	QSPR 5.0-00188
	46	5230	16.5	-	-	-	
	151	5755	12	-	-	-	
	159	5795	11.5	-	-	-	
802.11ac VHT80	42	5210	9.5	-	-	-	QSPR 5.0-00188
	155	5775	13	-	-	-	

Maximum Conducted Output Power Measurement									
Band	Date Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total	
				dBm	dBm	dBm	dBm	dBm	
802.11a	6M	36	5180	17.45	-	-	-	-	29.83
		40	5200	19.52	-	-	-	-	29.83
		44	5220	19.46	-	-	-	-	29.83
		48	5240	16.42	-	-	-	-	29.83
		149	5745	10.45	-	-	-	-	29.83
		157	5785	10.51	-	-	-	-	29.83
		165	5825	10.48	-	-	-	-	29.83
802.11n HT20	6.5M	36	5180	17.29	-	-	-	-	29.83
		40	5200	18.86	-	-	-	-	29.83
		44	5220	18.80	-	-	-	-	29.83
		48	5240	15.89	-	-	-	-	29.83
		149	5745	10.34	-	-	-	-	29.83
		157	5785	10.29	-	-	-	-	29.83
		165	5825	10.68	-	-	-	-	29.83
802.11n HT40	13.5M	38	5190	12.80	-	-	-	-	29.83
		46	5230	16.30	-	-	-	-	29.83
		151	5755	11.58	-	-	-	-	29.83
		159	5795	11.49	-	-	-	-	29.83
Band	Date Rate or Sub-test	CH	Frequency (MHz)	Average power					Limit
				Ant-0	Ant-1	Ant-2	Ant-3	Total	
				dBm	dBm	dBm	dBm	dBm	
802.11ac VHT20	6.5M	36	5180	17.43	-	-	-	-	29.83
		40	5200	18.93	-	-	-	-	29.83
		44	5220	18.85	-	-	-	-	29.83
		48	5240	15.98	-	-	-	-	29.83
		149	5745	10.41	-	-	-	-	29.83
		157	5785	10.37	-	-	-	-	29.83
		165	5825	10.79	-	-	-	-	29.83
802.11ac VHT40	13.5M	38	5190	12.87	-	-	-	-	29.83
		46	5230	16.45	-	-	-	-	29.83
		151	5755	11.65	-	-	-	-	29.83
		159	5795	11.56	-	-	-	-	29.83
802.11ac VHT80	29.3M	42	5210	9.84	-	-	-	-	29.83
		155	5775	12.62	-	-	-	-	29.83

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	20.490	-	-	-	36.270	-	-	-
	40	5200	28.746	-	-	-	44.720	-	-	-
	48	5240	18.831	-	-	-	30.900	-	-	-
802.11ac VHT20	36	5180	21.250	-	-	-	39.550	-	-	-
	40	5200	28.048	-	-	-	46.070	-	-	-
	48	5240	19.206	-	-	-	31.410	-	-	-
802.11ac VHT40	38	5190	37.339	-	-	-	54.210	-	-	-
	46	5230	38.114	-	-	-	69.870	-	-	-
802.11ac VHT80	42	5210	77.090	-	-	-	85.200	-	-	-

Band III_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	149	5745	17.913	-	-	-	16330.000	-	-	-
	157	5785	17.856	-	-	-	16320.000	-	-	-
	165	5825	17.818	-	-	-	16330.000	-	-	-
802.11ac VHT20	149	5745	18.918	-	-	-	17590.000	-	-	-
	157	5785	18.899	-	-	-	17530.000	-	-	-
	165	5825	18.890	-	-	-	17590.000	-	-	-
802.11ac VHT40	151	5755	38.116	-	-	-	36410.000	-	-	-
	159	5795	38.068	-	-	-	36920.000	-	-	-
802.11ac VHT80	155	5775	82.878	-	-	-	76770.000	-	-	-

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	5.933	-	-	-	0.187	6.120	16.830
	40	5200	7.761	-	-	-	0.187	7.948	16.830
	48	5240	5.036	-	-	-	0.187	5.223	16.830
802.11ac VHT20	36	5180	5.533	-	-	-	0.200	5.733	16.830
	40	5200	6.883	-	-	-	0.200	7.083	16.830
	48	5240	4.175	-	-	-	0.200	4.375	16.830
802.11ac VHT40	38	5190	-2.403	-	-	-	0.122	-2.281	16.830
	46	5230	1.786	-	-	-	0.122	1.908	16.830
802.11ac VHT80	42	5210	-7.754	-	-	-	0.293	-7.461	16.830

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

Band III_ Power Spectral Density Measurement													
Band	CH	Frequency (MHz)	Measurement								Calculated	Limit	PASS/FAIL
			Ant-0		Ant-1		Ant-2		Ant-3		Total		
			dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/100 kHz	dBm/500 kHz	dBm/500 kHz	dBm/500 kHz	
802.11a	149	5745	-10.461	-3.284	-	-	-	-	-	-		29.83	PASS
	157	5785	-10.546	-3.369	-	-	-	-	-	-		29.83	PASS
	165	5825	-10.538	-3.361	-	-	-	-	-	-		29.83	PASS
802.11ac VHT20	149	5745	-10.629	-3.439	-	-	-	-	-	-		29.83	PASS
	157	5785	-10.696	-3.506	-	-	-	-	-	-		29.83	PASS
	165	5825	-9.617	-2.427	-	-	-	-	-	-		29.83	PASS
802.11ac VHT40	151	5755	-12.456	-5.344	-	-	-	-	-	-		29.83	PASS
	159	5795	-12.393	-5.281	-	-	-	-	-	-		29.83	PASS
802.11ac VHT80	155	5775	-14.237	-6.954	-	-	-	-	-	-		29.83	PASS

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

Conversion ration = 10*Log(500 k/100 k)