

Appendix A. Test Data

Duty cycle						
Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle (%)	Duty Factor (dB)	1/T Minimun VBW (kHz)
802.11a	5180	1.405	1.450	96.897	0.137	0.712
802.11n HT20	5180	1.320	1.365	96.703	0.146	0.758
802.11n HT40	5190	0.655	0.707	92.645	0.332	1.527
802.11ac VHT20	5180	1.035	1.085	95.392	0.205	0.966
802.11ac VHT40	5190	0.663	0.713	92.987	0.316	1.508
802.11ac VHT80	5210	0.328	0.381	86.089	0.651	3.049
802.11ax HE20	5180	1.038	1.087	95.492	0.200	0.963
802.11ax HE40	5190	0.553	0.605	91.405	0.390	1.808
802.11ax HE80	5210	0.300	0.354	84.746	0.719	3.333

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	19	19	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	19	19	-	-	
	48	5240	18	18	-	-	
	52	5260	17	17	-	-	
	56	5280	16.5	16.5	-	-	
	64	5320	16	16	-	-	
	100	5500	18	18	-	-	
	112	5560	17.5	17.5	-	-	
	140	5700	18.5	18.5	-	-	
	144	5720	18	18	-	-	
	149	5745	19.5	19.5	-	-	
	157	5785	17.5	17.5	-	-	
802.11n HT20	36	5180	16.5	16.5	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	16.5	16.5	-	-	
	48	5240	15.5	15.5	-	-	
	52	5260	15	15	-	-	
	56	5280	15.5	15.5	-	-	
	64	5320	15	15	-	-	
	100	5500	15.5	15.5	-	-	
	112	5560	15.5	15.5	-	-	
	140	5700	17	17	-	-	
	144	5720	16	16	-	-	
	149	5745	16.5	16.5	-	-	
	157	5785	15.5	15.5	-	-	
802.11n HT40	38	5190	17.5	17.5	-	-	QA UI(MT7981) v0.0.2.78
	46	5230	17.5	17.5	-	-	
	54	5270	17.5	17.5	-	-	
	62	5310	17.5	17.5	-	-	
	102	5510	17.5	17.5	-	-	
	110	5550	17.5	17.5	-	-	
	134	5670	18.5	18.5	-	-	
	142	5710	18	18	-	-	
	151	5755	18.5	18.5	-	-	
159	5795	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
802.11ac VHT20	36	5180	16.5	16.5	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	16.5	16.5	-	-	
	48	5240	15.5	15.5	-	-	
	52	5260	15	15	-	-	
	56	5280	15.5	15.5	-	-	
	64	5320	15	15	-	-	
	100	5500	15.5	15.5	-	-	
	112	5560	15.5	15.5	-	-	
	140	5700	17	17	-	-	
	144	5720	16	16	-	-	
	149	5745	16.5	16.5	-	-	
	157	5785	15.5	15.5	-	-	
802.11ac VHT40	165	5825	16.5	16.5	-	-	QA UI(MT7981) v0.0.2.78
	38	5190	17.5	17.5	-	-	
	46	5230	17.5	17.5	-	-	
	54	5270	17.5	17.5	-	-	
	62	5310	17.5	17.5	-	-	
	102	5510	17.5	17.5	-	-	
	110	5550	17.5	17.5	-	-	
	134	5670	18.5	18.5	-	-	
	142	5710	18	18	-	-	
151	5755	18.5	18.5	-	-		
802.11ac VHT80	159	5795	16.5	16.5	-	-	QA UI(MT7981) v0.0.2.78
	42	5210	13.5	13.5	-	-	
	58	5290	14.5	14.5	-	-	
	106	5530	16	16	-	-	
	122	5610	18.5	18.5	-	-	
	138	5690	20.5	20.5	-	-	
155	5775	19.5	19.5	-	-		

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	17	17	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	17	17	-	-	
	48	5240	15.5	15.5	-	-	
	52	5260	15	15	-	-	
	56	5280	15	15	-	-	
	64	5320	15	15	-	-	
	100	5500	16	16	-	-	
	112	5560	15.5	15.5	-	-	
	140	5700	16.5	16.5	-	-	
	144	5720	16	16	-	-	
	149	5745	16.5	16.5	-	-	
	157	5785	15.5	15.5	-	-	
802.11ax HE40	38	5190	17	17	-	-	QA UI(MT7981) v0.0.2.78
	46	5230	16	16	-	-	
	54	5270	15.5	15.5	-	-	
	62	5310	17	17	-	-	
	102	5510	17.5	17.5	-	-	
	110	5550	17.5	17.5	-	-	
	134	5670	18	18	-	-	
	142	5710	17.5	17.5	-	-	
	151	5755	18.5	18.5	-	-	
802.11ax HE80	42	5210	14.5	14.5	-	-	QA UI(MT7981) v0.0.2.78
	58	5290	15	15	-	-	
	106	5530	16.5	16.5	-	-	
	122	5610	18	18	-	-	
	138	5690	20.5	20.5	-	-	
	155	5775	19.5	19.5	-	-	

Maximum Conducted Output Power Measurement								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11a	36	5180	20.60	20.01	-	-	23.32	30.00
	40	5200	20.61	20.09	-	-	23.36	30.00
	48	5240	20.05	19.43	-	-	22.76	30.00
	52	5260	18.88	17.98	-	-	21.46	24.00
	56	5280	18.29	17.65	-	-	20.99	24.00
	64	5320	17.57	16.85	-	-	20.23	24.00
	100	5500	18.89	18.01	-	-	21.48	24.00
	112	5560	18.22	17.63	-	-	20.94	24.00
	140	5700	18.75	18.18	-	-	21.48	24.00
	144	5720	18.63	18.02	-	-	21.34	22.89
	149	5745	19.57	18.52	-	-	22.08	30.00
	157	5785	17.75	17.09	-	-	20.44	30.00
165	5825	17.53	16.76	-	-	20.17	30.00	
802.11n HT20	36	5180	16.48	15.87	-	-	19.19	30.00
	40	5200	16.46	15.89	-	-	19.19	30.00
	48	5240	15.86	15.27	-	-	18.58	30.00
	52	5260	15.41	14.59	-	-	18.03	24.00
	56	5280	15.88	15.21	-	-	18.56	24.00
	64	5320	14.99	14.34	-	-	17.68	24.00
	100	5500	14.67	13.77	-	-	17.25	23.80
	112	5560	14.70	14.22	-	-	17.47	23.80
	140	5700	15.49	14.90	-	-	18.21	23.80
	144	5720	14.88	14.19	-	-	17.55	23.80
	149	5745	15.00	14.00	-	-	17.53	29.96
	157	5785	14.12	13.53	-	-	16.84	29.96
165	5825	14.94	14.28	-	-	17.63	29.96	
802.11n HT40	38	5190	17.70	16.98	-	-	20.37	30.00
	46	5230	17.85	17.24	-	-	20.57	30.00
	54	5270	17.82	17.10	-	-	20.49	24.00
	62	5310	17.72	17.02	-	-	20.40	24.00
	102	5510	16.86	16.06	-	-	19.49	23.80
	110	5550	16.64	16.24	-	-	19.46	23.80
	134	5670	17.57	16.51	-	-	20.08	23.80
	142	5710	16.79	16.24	-	-	19.54	23.80
	151	5755	17.15	16.25	-	-	19.74	29.96
159	5795	15.09	14.48	-	-	17.81	29.96	

Maximum Conducted Output Power Measurement								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11ac VHT20	36	5180	16.59	15.96	-	-	19.30	30.00
	40	5200	16.63	15.99	-	-	19.34	30.00
	48	5240	15.99	15.37	-	-	18.71	30.00
	52	5260	15.51	14.76	-	-	18.17	24.00
	56	5280	15.97	15.29	-	-	18.66	24.00
	64	5320	15.14	14.49	-	-	17.84	24.00
	100	5500	14.77	13.87	-	-	17.36	23.80
	112	5560	14.77	14.29	-	-	17.55	23.80
	140	5700	15.67	15.02	-	-	18.37	23.80
	144	5720	14.96	14.29	-	-	17.65	22.82
	149	5745	15.07	14.09	-	-	17.62	29.96
	157	5785	14.22	13.65	-	-	16.96	29.96
165	5825	15.09	14.39	-	-	17.77	29.96	
802.11ac VHT40	38	5190	17.73	17.14	-	-	20.45	30.00
	46	5230	17.91	17.39	-	-	20.66	30.00
	54	5270	17.90	17.17	-	-	20.56	24.00
	62	5310	17.75	17.15	-	-	20.47	24.00
	102	5510	17.03	16.17	-	-	19.63	23.80
	110	5550	16.70	16.41	-	-	19.56	23.80
	134	5670	17.58	16.58	-	-	20.11	23.80
	142	5710	16.97	16.36	-	-	19.68	23.80
	151	5755	17.23	16.33	-	-	19.81	29.96
159	5795	15.16	14.57	-	-	17.88	29.96	
802.11ac VHT80	42	5210	12.94	12.38	-	-	15.68	30.00
	58	5290	13.93	13.23	-	-	16.60	24.00
	106	5530	14.39	13.90	-	-	17.16	23.80
	122	5610	17.02	16.44	-	-	19.75	23.80
	138	5690	18.94	18.10	-	-	21.55	23.80
	155	5775	17.60	16.84	-	-	20.25	29.96

Maximum Conducted Output Power Measurement								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	dBm
802.11ax HE20	36	5180	17.19	16.59	-	-	19.91	30.00
	40	5200	17.16	16.53	-	-	19.87	30.00
	48	5240	16.15	15.47	-	-	18.83	30.00
	52	5260	15.61	14.84	-	-	18.25	24.00
	56	5280	15.57	14.99	-	-	18.30	24.00
	64	5320	15.19	14.52	-	-	17.88	24.00
	100	5500	15.35	14.44	-	-	17.93	23.80
	112	5560	14.98	14.43	-	-	17.72	23.80
	140	5700	15.21	14.64	-	-	17.94	23.80
	144	5720	15.09	14.42	-	-	17.78	22.85
	149	5745	15.13	14.19	-	-	17.70	29.96
	157	5785	14.34	13.73	-	-	17.06	29.96
165	5825	15.16	14.39	-	-	17.80	29.96	
802.11ax HE40	38	5190	17.46	16.78	-	-	20.14	30.00
	46	5230	16.56	16.00	-	-	19.30	30.00
	54	5270	16.07	15.33	-	-	18.73	24.00
	62	5310	17.47	16.80	-	-	20.16	24.00
	102	5510	17.13	16.30	-	-	19.75	23.80
	110	5550	16.97	16.60	-	-	19.80	23.80
	134	5670	17.27	16.17	-	-	19.77	23.80
	142	5710	16.78	16.03	-	-	19.43	23.80
	151	5755	17.35	16.46	-	-	19.94	29.96
159	5795	16.95	16.31	-	-	19.65	29.96	
802.11ax HE80	42	5210	14.25	13.67	-	-	16.98	30.00
	58	5290	14.73	14.06	-	-	17.42	24.00
	106	5530	15.24	14.63	-	-	17.95	23.80
	122	5610	16.83	16.34	-	-	19.60	23.80
	138	5690	19.23	18.40	-	-	21.84	23.80
	155	5775	17.93	17.10	-	-	20.54	29.96

Maximum Conducted Output Power Measurement_Transmit power control								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11a	52	5260	12.88	11.98	-	-	15.46	18.00
	56	5280	12.29	11.65	-	-	14.99	18.00
	64	5320	11.57	10.85	-	-	14.23	18.00
	100	5500	12.89	12.01	-	-	15.48	18.00
	112	5560	12.22	11.63	-	-	14.94	18.00
	140	5700	12.75	12.18	-	-	15.48	18.00
	144	5720	12.63	12.02	-	-	15.34	16.89
802.11n HT20	52	5260	9.41	8.59	-	-	12.03	18.00
	56	5280	9.88	9.21	-	-	12.56	18.00
	64	5320	8.99	8.34	-	-	11.68	18.00
	100	5500	8.67	7.77	-	-	11.25	17.80
	112	5560	8.70	8.22	-	-	11.47	17.80
	140	5700	9.49	8.90	-	-	12.21	17.80
	144	5720	8.88	8.19	-	-	11.55	17.80
802.11n HT40	54	5270	11.82	11.10	-	-	14.49	18.00
	62	5310	11.72	11.02	-	-	14.40	18.00
	102	5510	10.86	10.06	-	-	13.49	17.80
	110	5550	10.64	10.24	-	-	13.46	17.80
	134	5670	11.57	10.51	-	-	14.08	17.80
	142	5710	10.79	10.24	-	-	13.54	17.80

Maximum Conducted Output Power Measurement_Transmit power control								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11ac VHT20	52	5260	9.51	8.76	-	-	12.17	18.00
	56	5280	9.97	9.29	-	-	12.66	18.00
	64	5320	9.14	8.49	-	-	11.84	18.00
	100	5500	8.77	7.87	-	-	11.36	17.80
	112	5560	8.77	8.29	-	-	11.55	17.80
	140	5700	9.67	9.02	-	-	12.37	17.80
	144	5720	8.96	8.29	-	-	11.65	16.82
802.11ac VHT40	54	5270	11.90	11.17	-	-	14.56	18.00
	62	5310	11.75	11.15	-	-	14.47	18.00
	102	5510	11.03	10.17	-	-	13.63	17.80
	110	5550	10.70	10.41	-	-	13.56	17.80
	134	5670	11.58	10.58	-	-	14.11	17.80
	142	5710	10.97	10.36	-	-	13.68	17.80
802.11ac VHT80	58	5290	7.93	7.23	-	-	10.60	18.00
	106	5530	8.39	7.90	-	-	11.16	17.80
	122	5610	11.02	10.44	-	-	13.75	17.80
	138	5690	12.94	12.10	-	-	15.55	17.80

Maximum Conducted Output Power Measurement_Transmit power control								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11ax HE20	52	5260	9.61	8.84	-	-	12.25	18.00
	56	5280	9.57	8.99	-	-	12.30	18.00
	64	5320	9.19	8.52	-	-	11.88	18.00
	100	5500	9.35	8.44	-	-	11.93	17.80
	112	5560	8.98	8.43	-	-	11.72	17.80
	140	5700	9.21	8.64	-	-	11.94	17.80
	144	5720	9.09	8.42	-	-	11.78	16.85
802.11ax HE40	54	5270	10.07	9.33	-	-	12.73	18.00
	62	5310	11.47	10.80	-	-	14.16	18.00
	102	5510	11.13	10.30	-	-	13.75	17.80
	110	5550	10.97	10.60	-	-	13.80	17.80
	134	5670	11.27	10.17	-	-	13.77	17.80
	142	5710	10.78	10.03	-	-	13.43	17.80
802.11ax HE80	58	5290	8.73	8.06	-	-	11.42	18.00
	106	5530	9.24	8.63	-	-	11.95	17.80
	122	5610	10.83	10.34	-	-	13.60	17.80
	138	5690	13.23	12.40	-	-	15.84	17.80

26 dB & 99 % RF Bandwidth Measurement

Mode	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	17.286	17.073	-	-	28.800	28.930	-	-
	40	5200	17.369	17.098	-	-	31.120	28.350	-	-
	48	5240	17.091	16.852	-	-	22.620	20.390	-	-
	52	5260	16.927	16.702	-	-	22.010	20.740	-	-
	56	5280	16.871	16.688	-	-	21.900	21.070	-	-
	64	5320	17.229	17.009	-	-	26.610	27.570	-	-
	100	5500	17.188	17.113	-	-	28.870	27.850	-	-
	112	5560	16.892	16.719	-	-	21.590	21.130	-	-
	140	5700	17.208	17.080	-	-	27.760	25.780	-	-
144	5720	13.360	13.304	-	-	15.510	15.470	-	-	
802.11ac VHT20	36	5180	18.354	18.145	-	-	31.480	27.460	-	-
	40	5200	18.395	18.147	-	-	29.710	29.670	-	-
	48	5240	18.058	17.790	-	-	20.700	20.360	-	-
	52	5260	18.022	17.806	-	-	22.830	21.450	-	-
	56	5280	18.078	17.803	-	-	22.690	21.790	-	-
	64	5320	18.376	18.127	-	-	33.010	27.050	-	-
	100	5500	18.329	18.138	-	-	31.500	28.540	-	-
	112	5560	18.043	17.844	-	-	22.740	21.640	-	-
	140	5700	18.303	18.012	-	-	26.690	26.900	-	-
144	5720	13.913	13.835	-	-	16.170	15.930	-	-	
802.11ac VHT40	38	5190	36.736	36.466	-	-	56.890	48.970	-	-
	46	5230	36.407	36.193	-	-	41.230	40.750	-	-
	54	5270	36.225	36.253	-	-	41.320	41.150	-	-
	62	5310	36.731	36.439	-	-	58.690	56.420	-	-
	102	5510	36.677	36.530	-	-	61.900	54.360	-	-
	110	5550	36.381	36.208	-	-	41.250	40.610	-	-
	134	5670	36.827	36.661	-	-	56.640	62.230	-	-
	142	5710	32.981	32.880	-	-	35.530	35.250	-	-
802.11ac VHT80	42	5210	75.732	75.599	-	-	111.180	113.720	-	-
	58	5290	75.752	75.604	-	-	100.540	109.020	-	-
	106	5530	75.629	75.468	-	-	99.950	102.860	-	-
	122	5610	75.240	75.107	-	-	80.550	80.280	-	-
	138	5690	72.141	72.113	-	-	92.360	85.560	-	-

26 dB & 99 % RF Bandwidth Measurement

Mode	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
802.11ax HE20	36	5180	19.246	19.201	-	-	28.100	31.810	-	-
	40	5200	19.310	19.240	-	-	32.240	32.840	-	-
	48	5240	18.917	18.912	-	-	20.130	20.170	-	-
	52	5260	19.063	19.087	-	-	22.110	22.360	-	-
	56	5280	19.079	19.053	-	-	22.290	22.430	-	-
	64	5320	19.199	19.247	-	-	27.150	28.510	-	-
	100	5500	19.185	19.205	-	-	27.760	29.060	-	-
	112	5560	19.114	19.082	-	-	22.380	22.490	-	-
	140	5700	19.250	19.199	-	-	27.420	25.230	-	-
144	5720	14.468	14.490	-	-	16.130	16.020	-	-	
802.11ax HE40	38	5190	37.845	37.921	-	-	46.180	55.510	-	-
	46	5230	37.681	37.603	-	-	39.920	39.970	-	-
	54	5270	37.657	37.544	-	-	39.990	39.920	-	-
	62	5310	37.909	37.865	-	-	52.090	49.070	-	-
	102	5510	37.812	37.834	-	-	52.100	46.680	-	-
	110	5550	37.716	37.631	-	-	40.020	39.780	-	-
	134	5670	37.942	38.015	-	-	51.870	62.600	-	-
802.11ax HE80	42	5210	77.259	77.285	-	-	96.270	103.710	-	-
	58	5290	77.357	77.332	-	-	98.650	102.790	-	-
	106	5530	77.276	77.241	-	-	95.720	98.270	-	-
	122	5610	76.982	76.884	-	-	81.110	80.830	-	-
138	5690	73.013	73.021	-	-	75.580	75.630	-	-	

Band III_6 dB & 99 % RF Bandwidth Measurement

Mode	CH	Freq. (MHz)	99 % Bandwidth				6 dB Bandwidth				6dB Limit
			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	144	5720	4.083	4.106	-	-	3194	3201	-	-	≥ 500 kHz
	149	5745	17.529	17.329	-	-	16060	16350	-	-	
	157	5785	17.135	16.910	-	-	16300	16350	-	-	
	165	5825	17.396	17.276	-	-	16310	16350	-	-	
802.11ac VHT20	144	5720	4.336	4.274	-	-	3826	3832	-	-	
	149	5745	18.541	18.177	-	-	17540	17580	-	-	
	157	5785	18.294	17.975	-	-	17560	17600	-	-	
	165	5825	18.644	18.235	-	-	17570	17590	-	-	
802.11ac VHT40	142	5710	3.899	3.833	-	-	3183	3190	-	-	
	151	5755	36.760	36.674	-	-	35130	35120	-	-	
	159	5795	36.533	36.298	-	-	35140	35130	-	-	
802.11ac VHT80	138	5690	5.887	7.929	-	-	3164	3186	-	-	
	155	5775	75.166	75.137	-	-	75130	75120	-	-	
802.11ax HE20	144	5720	4.726	4.707	-	-	4479	4552	-	-	
	149	5745	19.289	19.289	-	-	18760	18800	-	-	
	157	5785	19.228	19.172	-	-	18690	18760	-	-	
	165	5825	19.357	19.306	-	-	18870	18680	-	-	
802.11ax HE40	142	5710	4.162	4.162	-	-	4057	4066	-	-	
	151	5755	37.866	37.988	-	-	35130	36090	-	-	
	159	5795	37.803	37.822	-	-	35140	35120	-	-	
802.11ax HE80	138	5690	4.370	4.899	-	-	4058	4069	-	-	
	155	5775	76.947	76.953	-	-	75540	75140	-	-	

Power Spectral Density Measurement									
Mode	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	dB	dBm/MHz	dBm/MHz
802.11a	36	5180	9.676	9.104	-	-	0.137	12.547	17.000
	40	5200	9.654	8.939	-	-	0.137	12.458	17.000
	48	5240	8.809	8.246	-	-	0.137	11.684	17.000
	52	5260	8.271	7.299	-	-	0.137	10.959	11.000
	56	5280	7.896	6.920	-	-	0.137	10.583	11.000
	64	5320	6.586	6.349	-	-	0.137	9.616	11.000
	100	5500	8.145	6.853	-	-	0.137	10.694	10.800
	112	5560	7.545	6.888	-	-	0.137	10.376	10.800
	140	5700	7.863	7.124	-	-	0.137	10.656	10.800
	144	5720	7.495	7.021	-	-	0.137	10.412	10.800
802.11ac VHT20	36	5180	5.447	5.107	-	-	0.205	8.496	17.000
	40	5200	5.383	4.665	-	-	0.205	8.254	17.000
	48	5240	4.425	3.760	-	-	0.205	7.320	17.000
	52	5260	4.541	3.686	-	-	0.205	7.350	11.000
	56	5280	4.661	4.115	-	-	0.205	7.612	11.000
	64	5320	3.823	3.303	-	-	0.205	6.786	11.000
	100	5500	3.513	2.646	-	-	0.205	6.316	10.800
	112	5560	3.856	3.217	-	-	0.205	6.763	10.800
	140	5700	4.237	3.881	-	-	0.205	7.278	10.800
	144	5720	3.756	2.956	-	-	0.205	6.590	10.800
802.11ac VHT40	38	5190	4.170	3.425	-	-	0.316	7.139	17.000
	46	5230	4.418	3.522	-	-	0.316	7.319	17.000
	54	5270	4.278	3.536	-	-	0.316	7.249	11.000
	62	5310	4.203	3.558	-	-	0.316	7.219	11.000
	102	5510	3.438	2.390	-	-	0.316	6.271	10.800
	110	5550	3.000	3.114	-	-	0.316	6.383	10.800
	134	5670	3.909	2.256	-	-	0.316	6.486	10.800
	142	5710	3.386	2.565	-	-	0.316	6.321	10.800
802.11ac VHT80	42	5210	-4.245	-4.340	-	-	0.651	-0.631	17.000
	58	5290	-2.684	-3.486	-	-	0.651	0.594	11.000
	106	5530	-2.139	-2.774	-	-	0.651	1.216	10.800
	122	5610	0.412	-0.454	-	-	0.651	3.661	10.800
	138	5690	2.208	1.316	-	-	0.651	5.445	10.800

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

Power Spectral Density Measurement									
Mode	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	dB	dBm/MHz	dBm/MHz
802.11ax HE20	36	5180	5.892	5.383	-	-	0.200	8.856	17.000
	40	5200	5.819	5.008	-	-	0.200	8.643	17.000
	48	5240	4.635	4.237	-	-	0.200	7.651	17.000
	52	5260	4.559	3.708	-	-	0.200	7.365	11.000
	56	5280	4.485	3.699	-	-	0.200	7.320	11.000
	64	5320	3.569	2.926	-	-	0.200	6.470	11.000
	100	5500	4.464	2.801	-	-	0.200	6.922	10.800
	112	5560	3.693	3.034	-	-	0.200	6.587	10.800
	140	5700	3.907	2.902	-	-	0.200	6.644	10.800
	144	5720	3.694	2.934	-	-	0.200	6.541	10.800
802.11ax HE40	38	5190	3.753	2.904	-	-	0.390	6.750	17.000
	46	5230	2.775	1.947	-	-	0.390	5.781	17.000
	54	5270	2.559	1.377	-	-	0.390	5.408	11.000
	62	5310	3.708	3.083	-	-	0.390	6.807	11.000
	102	5510	3.807	2.337	-	-	0.390	6.535	10.800
	110	5550	3.229	2.793	-	-	0.390	6.417	10.800
	134	5670	3.106	2.356	-	-	0.390	6.148	10.800
802.11ax HE80	42	5210	-2.855	-3.307	-	-	0.719	0.654	17.000
	58	5290	-2.427	-2.957	-	-	0.719	1.045	11.000
	106	5530	-1.876	-1.915	-	-	0.719	1.834	10.800
	122	5610	-0.162	-0.670	-	-	0.719	3.321	10.800
	138	5690	2.411	1.513	-	-	0.719	5.714	10.800

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

Band III_ Power Spectral Density Measurement

Mode	CH	Frequency (MHz)	Measurement								Duty Factor	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	dB	dBm/500 kHz	dBm/500 kHz	
802.11a	144	5720	-2.404	4.722	-2.839	4.288	-	-	-	-	0.137	7.521	29.96	PASS
	149	5745	-0.212	6.914	-1.063	6.064	-	-	-	-	0.137	9.520	29.96	PASS
	157	5785	-1.590	5.536	-2.772	4.355	-	-	-	-	0.137	7.996	29.96	PASS
	165	5825	-2.593	4.533	-3.062	4.065	-	-	-	-	0.137	7.316	29.96	PASS
802.11ac VHT20	144	5720	-6.162	1.032	-6.919	0.276	-	-	-	-	0.205	3.681	29.96	PASS
	149	5745	-5.164	2.031	-6.516	0.679	-	-	-	-	0.205	4.418	29.96	PASS
	157	5785	-5.255	1.939	-5.916	1.278	-	-	-	-	0.205	4.632	29.96	PASS
	165	5825	-5.419	1.776	-5.930	1.265	-	-	-	-	0.205	4.538	29.96	PASS
802.11ac VHT40	142	5710	-8.092	-0.787	-8.672	-1.366	-	-	-	-	0.316	1.943	29.96	PASS
	151	5755	-5.404	1.902	-6.026	1.279	-	-	-	-	0.316	4.612	29.96	PASS
	159	5795	-6.952	0.353	-7.808	-0.502	-	-	-	-	0.316	2.957	29.96	PASS
802.11ac VHT80	138	5690	-9.778	-2.138	-10.520	-2.880	-	-	-	-	0.651	0.517	29.96	PASS
	155	5775	-8.169	-0.529	-8.247	-0.607	-	-	-	-	0.651	2.443	29.96	PASS
802.11ax HE20	144	5720	-6.826	0.364	-7.302	-0.112	-	-	-	-	0.200	3.143	29.96	PASS
	149	5745	-5.956	1.234	-6.988	0.202	-	-	-	-	0.200	3.759	29.96	PASS
	157	5785	-6.403	0.787	-6.742	0.448	-	-	-	-	0.200	3.631	29.96	PASS
	165	5825	-5.930	1.260	-6.906	0.284	-	-	-	-	0.200	3.809	29.96	PASS
802.11ax HE40	142	5710	-9.841	-2.461	-10.318	-2.938	-	-	-	-	0.390	0.317	29.96	PASS
	151	5755	-5.611	1.769	-6.685	0.695	-	-	-	-	0.390	4.276	29.96	PASS
	159	5795	-6.318	1.062	-6.825	0.555	-	-	-	-	0.390	3.826	29.96	PASS
802.11ax HE80	138	5690	-10.155	-2.446	-10.405	-2.696	-	-	-	-	0.719	0.441	29.96	PASS
	155	5775	-8.335	-0.627	-9.215	-1.506	-	-	-	-	0.719	1.966	29.96	PASS

Note: Power Density = measured result + 10 log (1/duty cycle) + Conversion ratio = measured result + duty factory.
Conversion ratio = 10*Log(500 k/100 k)

Beamforming on

Duty cycle

Mode	Frequency (MHz)	on time (ms)	on+off time (ms)	Duty cycle (%)	Duty Factor (dB)	1/T Minimun VBW (kHz)
802.11n HT20	5180	2.534	2.580	98.217	0.078	0.010
802.11n HT40	5190	2.433	2.505	97.105	0.128	0.411
802.11ac VHT20	5180	2.534	2.587	97.944	0.090	0.395
802.11ac VHT40	5190	2.435	2.505	97.216	0.123	0.411
802.11ac VHT80	5210	1.156	1.233	93.714	0.282	0.865
802.11ax HE20	5180	2.532	2.590	97.766	0.098	0.395
802.11ax HE40	5190	1.953	2.011	97.122	0.127	0.512
802.11ax HE80	5210	0.945	1.030	91.773	0.373	1.058

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	37	37	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	37	37	-	-	
	48	5240	35	35	-	-	
	52	5260	33	33	-	-	
	56	5280	32	32	-	-	
	64	5320	31	31	-	-	
	100	5500	35	35	-	-	
	112	5560	34	34	-	-	
	140	5700	36	36	-	-	
	144	5720	35	35	-	-	
	149	5745	38	38	-	-	
	157	5785	34	34	-	-	
802.11n HT20	36	5180	33	33	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	33	33	-	-	
	48	5240	31	31	-	-	
	52	5260	30	30	-	-	
	56	5280	31	31	-	-	
	64	5320	30	30	-	-	
	100	5500	31	31	-	-	
	112	5560	31	31	-	-	
	140	5700	34	34	-	-	
	144	5720	32	32	-	-	
	149	5745	33	33	-	-	
	157	5785	31	31	-	-	
802.11n HT40	38	5190	35	35	-	-	QA UI(MT7981) v0.0.2.78
	46	5230	35	35	-	-	
	54	5270	35	35	-	-	
	62	5310	35	35	-	-	
	102	5510	35	35	-	-	
	110	5550	35	35	-	-	
	134	5670	37	37	-	-	
	142	5710	36	36	-	-	
	151	5755	37	37	-	-	
159	5795	33	33	-	-		

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	33	33	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	33	33	-	-	
	48	5240	31	31	-	-	
	52	5260	30	30	-	-	
	56	5280	31	31	-	-	
	64	5320	30	30	-	-	
	100	5500	31	31	-	-	
	112	5560	31	31	-	-	
	140	5700	34	34	-	-	
	144	5720	32	32	-	-	
	149	5745	33	33	-	-	
	157	5785	31	31	-	-	
802.11ac VHT40	165	5825	33	33	-	-	QA UI(MT7981) v0.0.2.78
	38	5190	35	35	-	-	
	46	5230	35	35	-	-	
	54	5270	35	35	-	-	
	62	5310	35	35	-	-	
	102	5510	35	35	-	-	
	110	5550	35	35	-	-	
	134	5670	37	37	-	-	
	142	5710	36	36	-	-	
151	5755	37	37	-	-		
802.11ac VHT80	159	5795	33	33	-	-	QA UI(MT7981) v0.0.2.78
	42	5210	27	27	-	-	
	58	5290	29	29	-	-	
	106	5530	32	32	-	-	
	122	5610	37	37	-	-	
	138	5690	41	41	-	-	
155	5775	39	39	-	-		

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	34	34	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	34	34	-	-	
	48	5240	31	31	-	-	
	52	5260	30	30	-	-	
	56	5280	30	30	-	-	
	64	5320	30	30	-	-	
	100	5500	32	32	-	-	
	112	5560	31	31	-	-	
	140	5700	33	33	-	-	
	144	5720	32	32	-	-	
	149	5745	33	33	-	-	
	157	5785	31	31	-	-	
802.11ax HE40	38	5190	34	34	-	-	QA UI(MT7981) v0.0.2.78
	46	5230	32	32	-	-	
	54	5270	31	31	-	-	
	62	5310	34	34	-	-	
	102	5510	35	35	-	-	
	110	5550	35	35	-	-	
	134	5670	36	36	-	-	
	142	5710	35	35	-	-	
	151	5755	37	37	-	-	
	159	5795	36	36	-	-	
802.11ax HE80	42	5210	29	29	-	-	QA UI(MT7981) v0.0.2.78
	58	5290	30	30	-	-	
	106	5530	33	33	-	-	
	122	5610	36	36	-	-	
	138	5690	41	41	-	-	
	155	5775	39	39	-	-	

RF power setting in Test SW

Mode	CH	Frequency (MHz)	Ant-0	Ant-1	Ant-2	Ant-3	Test SW Version
802.11be EHT20	36	5180	-	-	-	-	QA UI(MT7981) v0.0.2.78
	40	5200	-	-	-	-	
	48	5240	-	-	-	-	
	52	5260	-	-	-	-	
	56	5280	-	-	-	-	
	64	5320	-	-	-	-	
	100	5500	-	-	-	-	
	112	5560	-	-	-	-	
	140	5700	-	-	-	-	
	144	5720	-	-	-	-	
	149	5745	-	-	-	-	
	157	5785	-	-	-	-	
802.11be EHT40	38	5190	-	-	-	-	QA UI(MT7981) v0.0.2.78
	46	5230	-	-	-	-	
	54	5270	-	-	-	-	
	62	5310	-	-	-	-	
	102	5510	-	-	-	-	
	110	5550	-	-	-	-	
	134	5670	-	-	-	-	
	142	5710	-	-	-	-	
	151	5755	-	-	-	-	
802.11be EHT80	42	5210	-	-	-	-	QA UI(MT7981) v0.0.2.78
	58	5290	-	-	-	-	
	106	5530	-	-	-	-	
	122	5610	-	-	-	-	
	138	5690	-	-	-	-	
	155	5775	-	-	-	-	

Maximum Conducted Output Power Measurement								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11a	36	5180	20.47	19.91	-	-	23.21	30.00
	40	5200	20.54	19.98	-	-	23.28	30.00
	48	5240	19.95	19.33	-	-	22.66	30.00
	52	5260	18.79	17.85	-	-	21.36	24.00
	56	5280	18.20	17.54	-	-	20.89	24.00
	64	5320	17.51	16.76	-	-	20.16	24.00
	100	5500	18.75	17.92	-	-	21.37	24.00
	112	5560	18.13	17.53	-	-	20.85	24.00
	140	5700	18.69	18.05	-	-	21.39	24.00
	144	5720	18.50	17.86	-	-	21.20	22.89
	149	5745	19.45	18.40	-	-	21.97	30.00
	157	5785	17.69	17.02	-	-	20.38	30.00
165	5825	17.40	16.69	-	-	20.07	30.00	
802.11n HT20	36	5180	16.32	15.68	-	-	19.02	30.00
	40	5200	16.30	15.68	-	-	19.01	30.00
	48	5240	15.66	15.06	-	-	18.38	30.00
	52	5260	15.23	14.46	-	-	17.87	24.00
	56	5280	15.70	15.00	-	-	18.37	24.00
	64	5320	14.81	14.12	-	-	17.49	24.00
	100	5500	14.50	13.62	-	-	17.09	23.80
	112	5560	14.51	14.04	-	-	17.29	23.80
	140	5700	15.30	14.72	-	-	18.03	23.80
	144	5720	14.73	13.99	-	-	17.38	23.80
	149	5745	14.82	13.88	-	-	17.38	29.96
	157	5785	14.00	13.35	-	-	16.70	29.96
165	5825	14.79	14.15	-	-	17.49	29.96	
802.11n HT40	38	5190	17.42	16.68	-	-	20.07	30.00
	46	5230	17.60	16.98	-	-	20.31	30.00
	54	5270	17.52	16.75	-	-	20.16	24.00
	62	5310	17.38	16.77	-	-	20.09	24.00
	102	5510	16.59	15.78	-	-	19.21	23.80
	110	5550	16.39	15.94	-	-	19.18	23.80
	134	5670	17.23	16.19	-	-	19.75	23.80
	142	5710	16.53	15.96	-	-	19.26	23.80
	151	5755	16.86	15.96	-	-	19.44	29.96
159	5795	14.83	14.21	-	-	17.54	29.96	

Maximum Conducted Output Power Measurement

Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11ac VHT20	36	5180	16.53	15.78	-	-	19.18	30.00
	40	5200	16.58	15.98	-	-	19.30	30.00
	48	5240	15.90	15.24	-	-	18.59	30.00
	52	5260	15.42	14.66	-	-	18.07	24.00
	56	5280	15.88	15.27	-	-	18.60	24.00
	64	5320	15.13	14.47	-	-	17.82	24.00
	100	5500	14.60	13.80	-	-	17.23	23.80
	112	5560	14.74	14.27	-	-	17.52	23.80
	140	5700	15.63	15.03	-	-	18.35	23.80
	144	5720	14.94	14.21	-	-	17.60	22.82
	149	5745	14.98	14.13	-	-	17.59	29.96
	157	5785	14.16	13.64	-	-	16.92	29.96
165	5825	14.98	14.26	-	-	17.65	29.96	
802.11ac VHT40	38	5190	17.59	17.01	-	-	20.32	30.00
	46	5230	17.86	17.28	-	-	20.59	30.00
	54	5270	17.77	17.12	-	-	20.47	24.00
	62	5310	17.69	17.08	-	-	20.41	24.00
	102	5510	16.90	16.08	-	-	19.52	23.80
	110	5550	16.64	16.31	-	-	19.49	23.80
	134	5670	17.44	16.52	-	-	20.02	23.80
	142	5710	16.83	16.21	-	-	19.54	23.80
	151	5755	17.12	16.28	-	-	19.73	29.96
159	5795	15.05	14.52	-	-	17.81	29.96	
802.11ac VHT80	42	5210	12.66	12.13	-	-	15.42	30.00
	58	5290	13.63	12.93	-	-	16.31	24.00
	106	5530	14.10	13.59	-	-	16.86	23.80
	122	5610	16.73	16.22	-	-	19.49	23.80
	138	5690	18.64	17.86	-	-	21.28	23.80
	155	5775	17.29	16.55	-	-	19.95	29.96

Maximum Conducted Output Power Measurement								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11ax HE20	36	5180	17.19	16.51	-	-	19.87	30.00
	40	5200	17.03	16.34	-	-	19.71	30.00
	48	5240	16.07	15.33	-	-	18.72	30.00
	52	5260	15.49	14.85	-	-	18.19	24.00
	56	5280	15.52	14.88	-	-	18.22	24.00
	64	5320	15.12	14.39	-	-	17.78	24.00
	100	5500	15.28	14.28	-	-	17.82	23.80
	112	5560	14.97	14.38	-	-	17.69	23.80
	140	5700	15.05	14.63	-	-	17.85	23.80
	144	5720	15.06	14.37	-	-	17.74	22.85
	149	5745	15.04	14.05	-	-	17.58	29.96
	157	5785	14.32	13.72	-	-	17.04	29.96
165	5825	15.09	14.32	-	-	17.73	29.96	
802.11ax HE40	38	5190	17.25	16.61	-	-	19.95	30.00
	46	5230	16.44	15.79	-	-	19.13	30.00
	54	5270	15.93	15.17	-	-	18.57	24.00
	62	5310	17.30	16.61	-	-	19.98	24.00
	102	5510	16.84	16.19	-	-	19.53	23.80
	110	5550	16.79	16.44	-	-	19.63	23.80
	134	5670	17.10	15.96	-	-	19.57	23.80
	142	5710	16.64	15.88	-	-	19.28	23.80
	151	5755	17.18	16.33	-	-	19.78	29.96
159	5795	16.77	16.11	-	-	19.46	29.96	
802.11ax HE80	42	5210	14.01	13.45	-	-	16.75	30.00
	58	5290	14.49	13.79	-	-	17.17	24.00
	106	5530	14.98	14.41	-	-	17.72	23.80
	122	5610	16.61	16.04	-	-	19.35	23.80
	138	5690	18.99	18.10	-	-	21.58	23.80
	155	5775	17.71	16.90	-	-	20.34	29.96

Maximum Conducted Output Power Measurement_Transmit power control								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11a	52	5260	12.79	11.85	-	-	15.36	18.00
	56	5280	12.20	11.54	-	-	14.89	18.00
	64	5320	11.51	10.76	-	-	14.16	18.00
	100	5500	12.75	11.92	-	-	15.37	18.00
	112	5560	12.13	11.53	-	-	14.85	18.00
	140	5700	12.69	12.05	-	-	15.39	18.00
	144	5720	12.50	11.86	-	-	15.20	16.89
802.11n HT20	52	5260	9.23	8.46	-	-	11.87	18.00
	56	5280	9.70	9.00	-	-	12.37	18.00
	64	5320	8.81	8.12	-	-	11.49	18.00
	100	5500	8.50	7.62	-	-	11.09	17.80
	112	5560	8.51	8.04	-	-	11.29	17.80
	140	5700	9.30	8.72	-	-	12.03	17.80
	144	5720	8.73	7.99	-	-	11.38	17.80
802.11n HT40	54	5270	11.52	10.75	-	-	14.16	18.00
	62	5310	11.38	10.77	-	-	14.09	18.00
	102	5510	10.59	9.78	-	-	13.21	17.80
	110	5550	10.39	9.94	-	-	13.18	17.80
	134	5670	11.23	10.19	-	-	13.75	17.80
	142	5710	10.53	9.96	-	-	13.26	17.80

Maximum Conducted Output Power Measurement_Transmit power control								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11ac VHT20	52	5260	9.42	8.66	-	-	12.07	18.00
	56	5280	9.88	9.27	-	-	12.60	18.00
	64	5320	9.13	8.47	-	-	11.82	18.00
	100	5500	8.60	7.80	-	-	11.23	17.80
	112	5560	8.74	8.27	-	-	11.52	17.80
	140	5700	9.63	9.03	-	-	12.35	17.80
	144	5720	8.94	8.21	-	-	11.60	16.82
802.11ac VHT40	54	5270	11.77	11.12	-	-	14.47	18.00
	62	5310	11.69	11.08	-	-	14.41	18.00
	102	5510	10.90	10.08	-	-	13.52	17.80
	110	5550	10.64	10.31	-	-	13.49	17.80
	134	5670	11.44	10.52	-	-	14.02	17.80
	142	5710	10.83	10.21	-	-	13.54	17.80
802.11ac VHT80	58	5290	7.63	6.93	-	-	10.31	18.00
	106	5530	8.10	7.59	-	-	10.86	17.80
	122	5610	10.73	10.22	-	-	13.49	17.80
	138	5690	12.64	11.86	-	-	15.28	17.80

Maximum Conducted Output Power Measurement_Transmit power control								
Mode	CH	Frequency (MHz)	Average power					Limit
			Ant-0	Ant-1	Ant-2	Ant-3	Total	
			dBm	dBm	dBm	dBm	dBm	
802.11ax HE20	52	5260	9.49	8.85	-	-	12.19	18.00
	56	5280	9.52	8.88	-	-	12.22	18.00
	64	5320	9.12	8.39	-	-	11.78	18.00
	100	5500	9.28	8.28	-	-	11.82	17.80
	112	5560	8.97	8.38	-	-	11.69	17.80
	140	5700	9.05	8.63	-	-	11.85	17.80
	144	5720	9.06	8.37	-	-	11.74	16.85
802.11ax HE40	54	5270	9.93	9.17	-	-	12.57	18.00
	62	5310	11.30	10.61	-	-	13.98	18.00
	102	5510	10.84	10.19	-	-	13.53	17.80
	110	5550	10.79	10.44	-	-	13.63	17.80
	134	5670	11.10	9.96	-	-	13.57	17.80
	142	5710	10.64	9.88	-	-	13.28	17.80
802.11ax HE80	58	5290	8.49	7.79	-	-	11.17	18.00
	106	5530	8.98	8.41	-	-	11.72	17.80
	122	5610	10.61	10.04	-	-	13.35	17.80
	138	5690	12.99	12.10	-	-	15.58	17.80