802.11ax-HE40 26dB Bandwidth & 99% Bandwidth

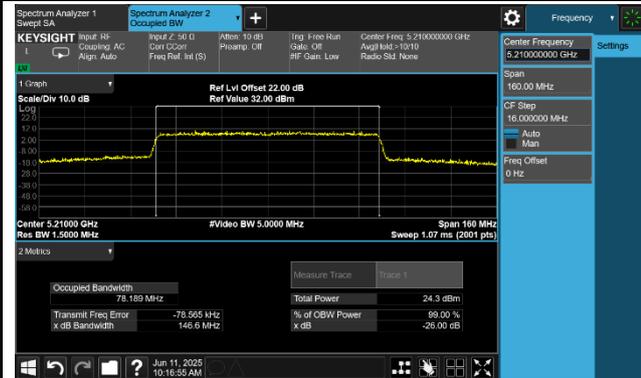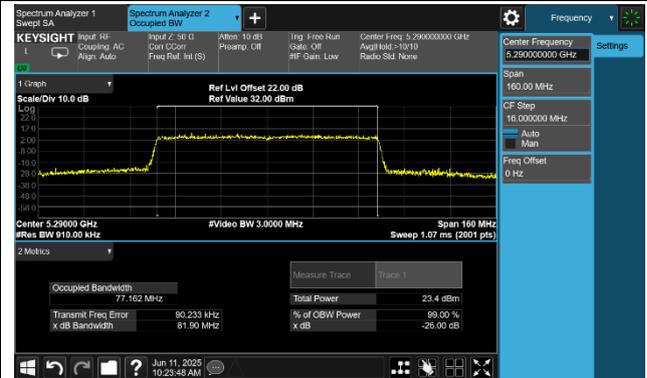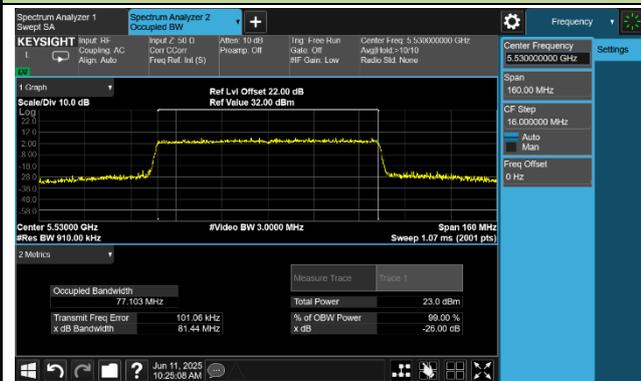| Channel 151 (5755MHz)	Channel 159 (5795MHz)

802.11ax-HE80 26dB Bandwidth & 99% Bandwidth

Channel 42 (5210MHz)	Channel 58 (5290MHz)

Channel 106 (5530MHz)	Channel 122 (5610MHz)
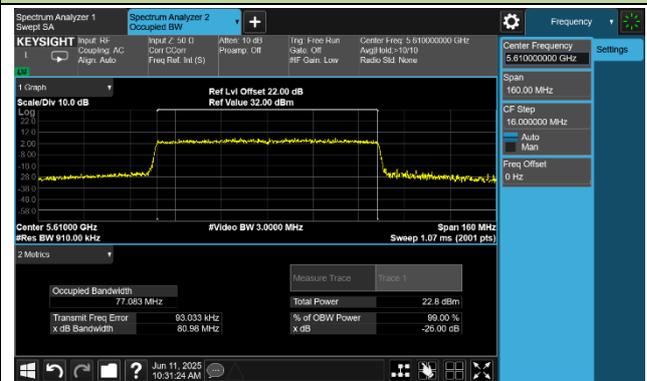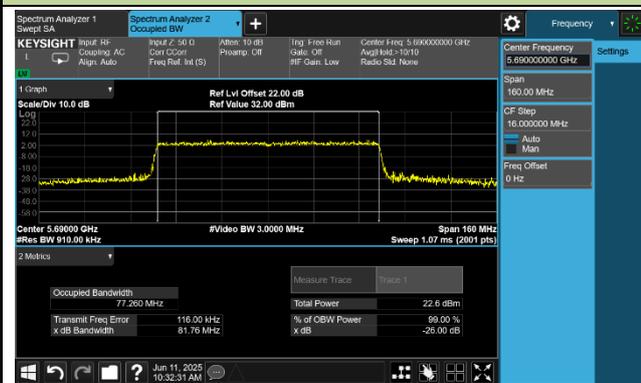
Channel 138 (5690MHz)	Channel 155 (5775MHz)
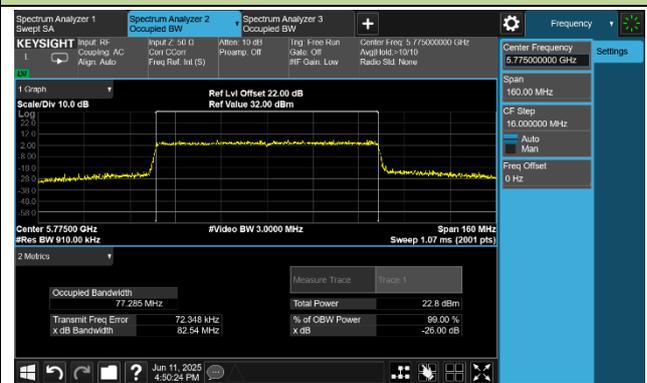
A.3 6dB Bandwidth Test Result

Test Site	SIP-TR1	Test Engineer	Alan Yu
Test Date	2025-06-11		

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
11a	6Mbps	149	5745	16.37	≥0.5
11a	6Mbps	157	5785	16.37	≥0.5
11a	6Mbps	165	5825	16.35	≥0.5
11ac-VHT20	MCS0	149	5745	17.59	≥0.5
11ac-VHT20	MCS0	157	5785	17.59	≥0.5
11ac-VHT20	MCS0	165	5825	17.59	≥0.5
11ac-VHT40	MCS0	151	5755	37.81	≥0.5
11ac-VHT40	MCS0	159	5795	37.39	≥0.5
11ac-VHT80	MCS0	155	5775	77.73	≥0.5
11ax-HE20	MCS0	149	5745	18.30	≥0.5
11ax-HE20	MCS0	157	5785	18.18	≥0.5
11ax-HE20	MCS0	165	5825	17.93	≥0.5
11ax-HE40	MCS0	151	5755	38.00	≥0.5
11ax-HE40	MCS0	159	5795	37.81	≥0.5
11ax-HE80	MCS0	155	5775	77.39	≥0.5

802.11a 6dB Bandwidth	
Channel 149 (5745MHz)	**Channel 157 (5785MHz)**
Channel 165 (5825MHz)	
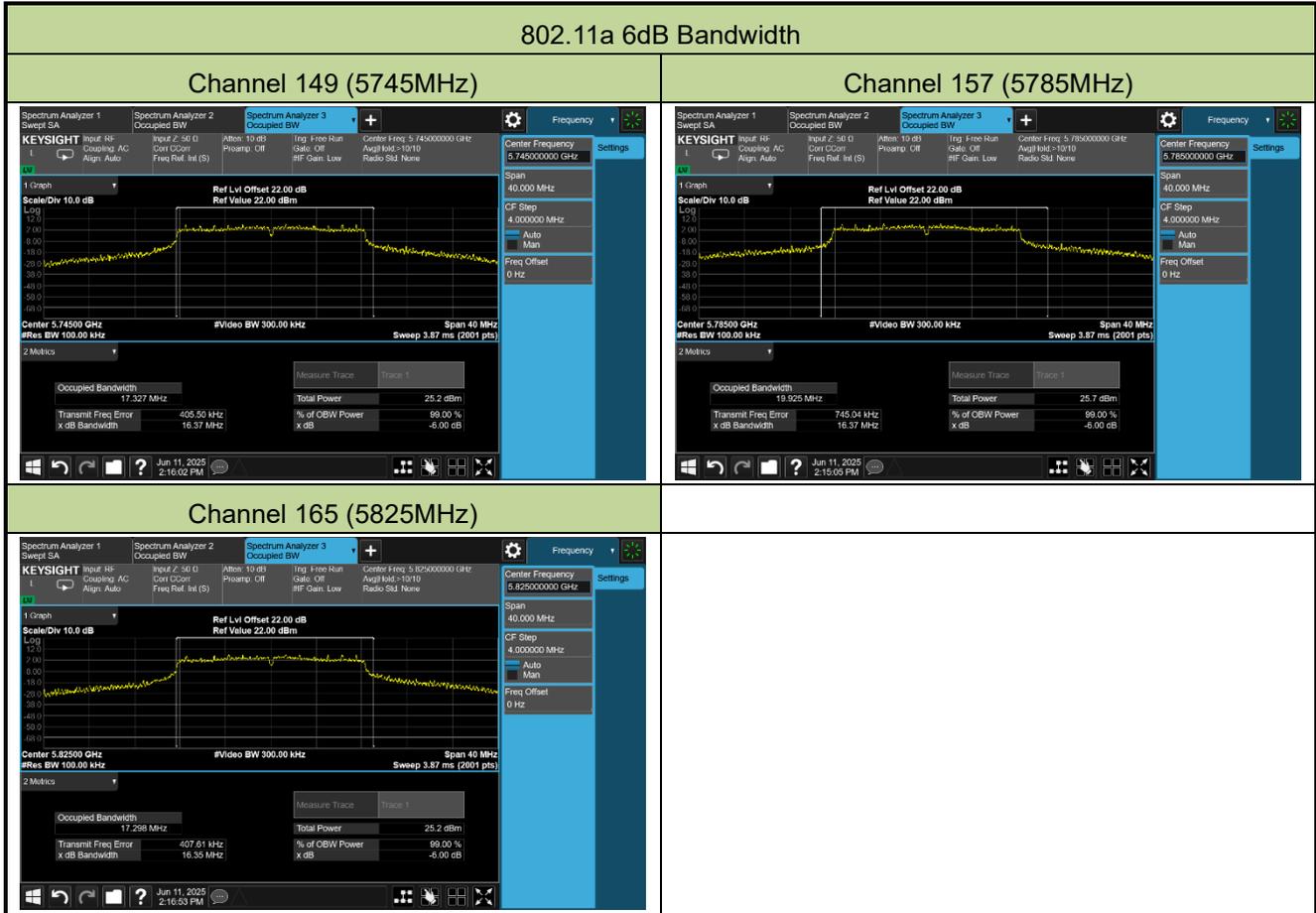
802.11ac-VHT20 6dB Bandwidth

Channel 149 (5745MHz)	Channel 157 (5785MHz)
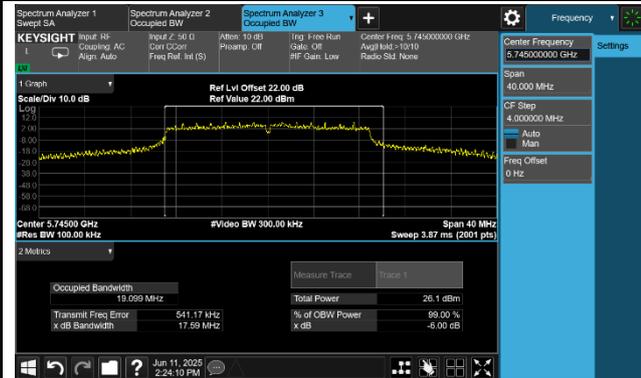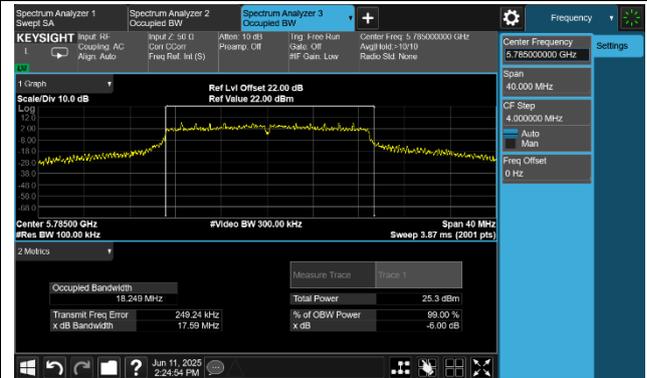
Channel 165 (5825MHz)	

802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)	Channel 159 (5795MHz)
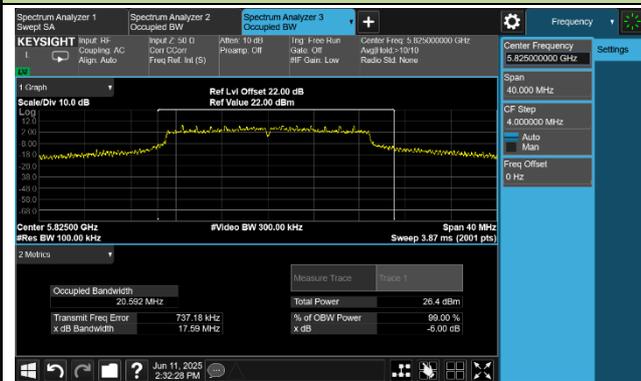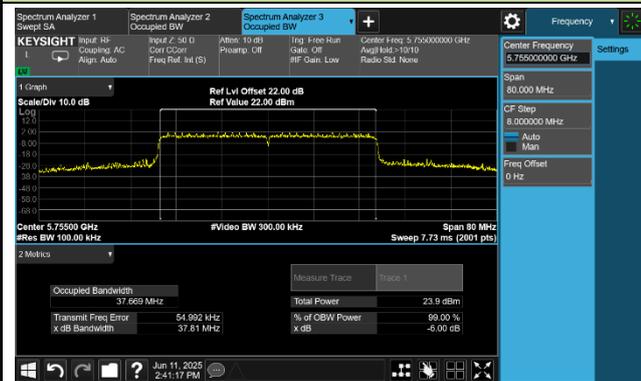
802.11ac-VHT80 6dB Bandwidth	
Channel 155 (5775MHz)	
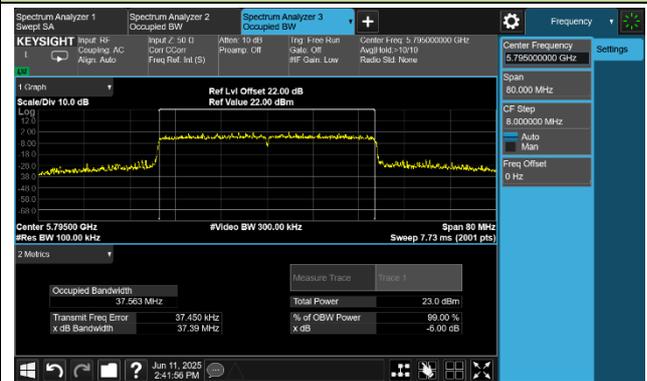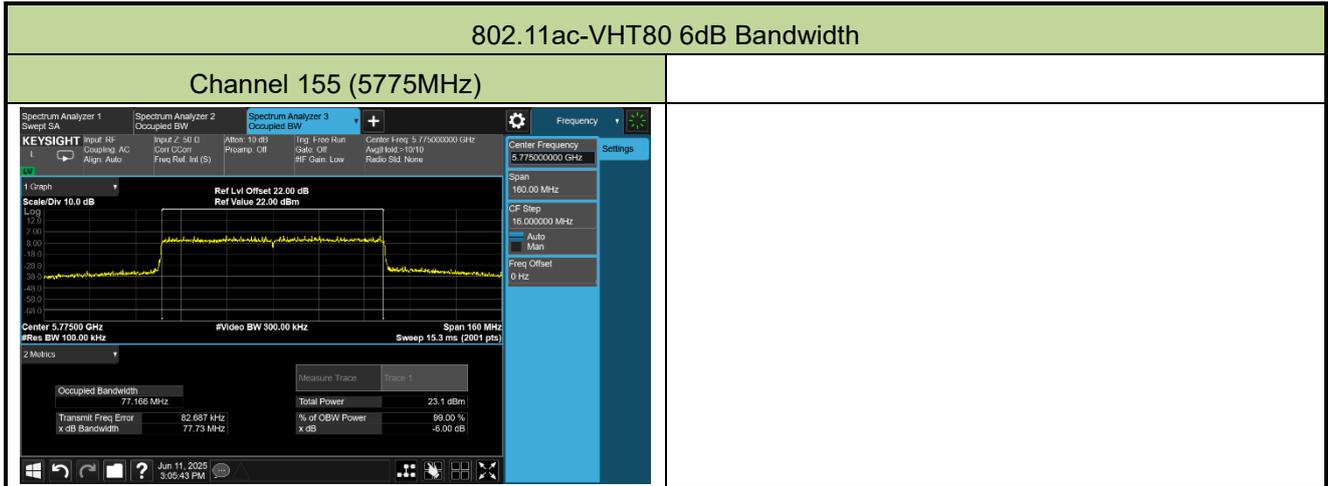
802.11ax-HE20 6dB Bandwidth	
Channel 149 (5745MHz)	**Channel 157 (5785MHz)**
Channel 165 (5825MHz)	
802.11ac-VHT40 6dB Bandwidth	
Channel 151 (5755MHz)	**Channel 159 (5795MHz)**
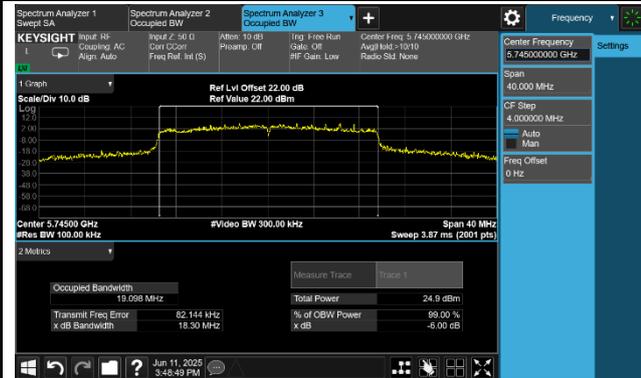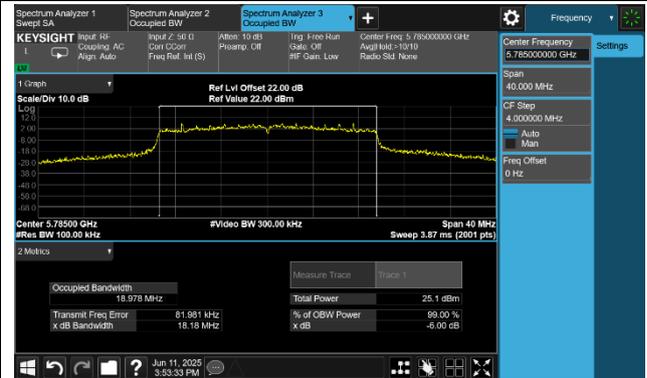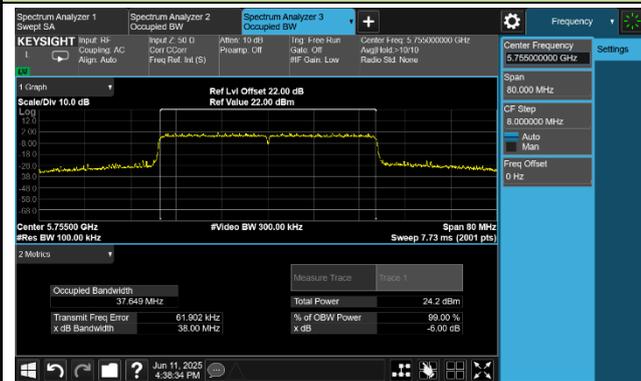
802.11ax-HE80 6dB Bandwidth	
Channel 155 (5775MHz)	
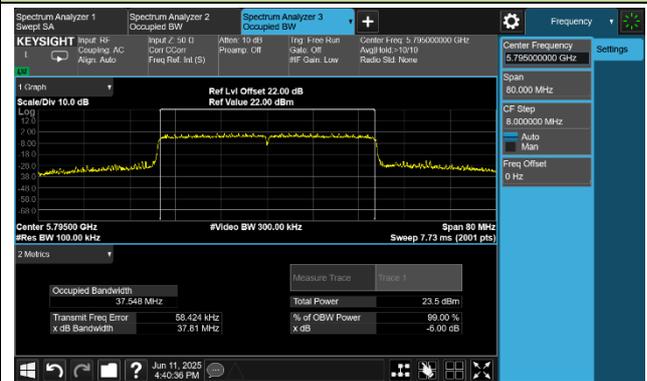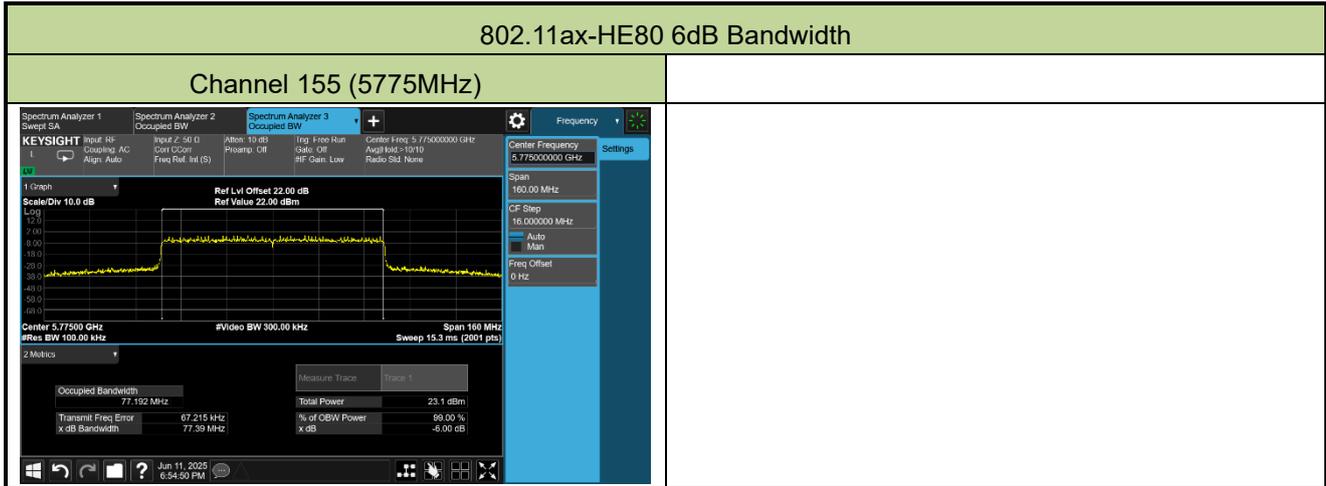
A.4 Output Power Test Result

Test Site	SIP-TR1	Test Engineer	Alan Yu
Test Date	2025-06-10 ~ 2025-06-20		

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Power Limit (dBm)
				Ant 0	Ant 1		
11a	6Mbps	36	5180	15.82	16.82	19.36	≤ 23.98
11a	6Mbps	44	5220	17.62	19.12	21.44	≤ 23.98
11a	6Mbps	48	5240	17.66	19.03	21.41	≤ 23.98
11a	6Mbps	52	5260	17.78	18.65	21.25	≤ 23.98
11a	6Mbps	60	5300	17.82	18.37	21.11	≤ 23.98
11a	6Mbps	64	5320	17.03	17.08	20.07	≤ 23.98
11a	6Mbps	100	5500	13.83	14.93	17.43	≤ 23.98
11a	6Mbps	116	5580	17.96	19.01	21.53	≤ 23.98
11a	6Mbps	140	5700	13.26	13.62	16.45	≤ 23.98
11a	6Mbps	144	5720	17.32	18.10	20.74	≤ 23.43
11a	6Mbps	149	5745	18.12	19.14	21.67	≤ 30.00
11a	6Mbps	157	5785	18.31	19.22	21.80	≤ 30.00
11a	6Mbps	165	5825	18.38	19.31	21.88	≤ 30.00
11ac-VHT20	MCS0	36	5180	16.06	17.22	19.69	≤ 23.98
11ac-VHT20	MCS0	44	5220	17.35	18.82	21.16	≤ 23.98
11ac-VHT20	MCS0	48	5240	17.28	18.72	21.07	≤ 23.98
11ac-VHT20	MCS0	52	5260	18.25	18.79	21.54	≤ 23.98
11ac-VHT20	MCS0	60	5300	18.16	18.61	21.40	≤ 23.98
11ac-VHT20	MCS0	64	5320	16.83	17.56	20.22	≤ 23.98
11ac-VHT20	MCS0	100	5500	12.56	13.29	15.95	≤ 23.98
11ac-VHT20	MCS0	116	5580	18.32	19.25	21.82	≤ 23.98
11ac-VHT20	MCS0	140	5700	12.74	13.05	15.91	≤ 23.98
11ac-VHT20	MCS0	144	5720	17.95	18.88	21.45	≤ 23.98
11ac-VHT20	MCS0	149	5745	18.40	19.15	21.80	≤ 30.00
11ac-VHT20	MCS0	157	5785	18.26	19.18	21.75	≤ 30.00
11ac-VHT20	MCS0	165	5825	18.05	19.14	21.64	≤ 30.00

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Power Limit (dBm)
				Ant 0	Ant 1		
11ac-VHT40	MCS0	38	5190	12.98	13.95	16.50	≤ 23.98
11ac-VHT40	MCS0	46	5230	15.16	16.34	18.80	≤ 23.98
11ac-VHT40	MCS0	54	5270	15.22	16.00	18.64	≤ 23.98
11ac-VHT40	MCS0	62	5310	12.53	13.56	16.09	≤ 23.98
11ac-VHT40	MCS0	102	5510	10.71	11.56	14.17	≤ 23.98
11ac-VHT40	MCS0	110	5550	14.82	16.23	18.59	≤ 23.98
11ac-VHT40	MCS0	134	5670	14.62	15.78	18.25	≤ 23.98
11ac-VHT40	MCS0	142	5710	15.12	16.23	18.72	≤ 23.98
11ac-VHT40	MCS0	151	5755	16.02	16.22	19.13	≤ 30.00
11ac-VHT40	MCS0	159	5795	15.77	16.21	19.01	≤ 30.00
11ac-VHT80	MCS0	42	5210	12.33	12.88	15.62	≤ 23.98
11ac-VHT80	MCS0	58	5290	11.44	12.34	14.92	≤ 23.98
11ac-VHT80	MCS0	106	5530	12.16	13.18	15.71	≤ 23.98
11ac-VHT80	MCS0	122	5610	14.98	16.11	18.59	≤ 23.98
11ac-VHT80	MCS0	138	5690	15.06	16.38	18.78	≤ 23.98
11ac-VHT80	MCS0	155	5775	15.52	16.26	18.92	≤ 30.00
11ax-HE20	MCS0	36	5180	15.45	16.64	19.10	≤ 23.98
11ax-HE20	MCS0	44	5220	17.70	19.01	21.41	≤ 23.98
11ax-HE20	MCS0	48	5240	17.41	18.99	21.28	≤ 23.98
11ax-HE20	MCS0	52	5260	17.59	18.56	21.11	≤ 23.98
11ax-HE20	MCS0	60	5300	17.68	18.29	21.01	≤ 23.98
11ax-HE20	MCS0	64	5320	16.22	16.95	19.61	≤ 23.98
11ax-HE20	MCS0	100	5500	13.66	14.71	17.23	≤ 23.98
11ax-HE20	MCS0	116	5580	17.96	18.86	21.44	≤ 23.98
11ax-HE20	MCS0	140	5700	12.21	12.60	15.42	≤ 23.98
11ax-HE20	MCS0	144	5720	18.33	19.11	21.75	≤ 23.28
11ax-HE20	MCS0	149	5745	18.32	19.09	21.73	≤ 30.00
11ax-HE20	MCS0	157	5785	17.81	19.12	21.52	≤ 30.00
11ax-HE20	MCS0	165	5825	18.17	19.34	21.80	≤ 30.00

Test Mode	Data Rate MCS	Channel No.	Freq. (MHz)	Average Power (dBm)		Total Average Power (dBm)	Power Limit (dBm)
				Ant 0	Ant 1		
11ax-HE40	MCS0	38	5190	11.67	12.53	15.13	≤ 23.98
11ax-HE40	MCS0	46	5230	15.19	16.18	18.72	≤ 23.98
11ax-HE40	MCS0	54	5270	15.06	16.13	18.64	≤ 23.98
11ax-HE40	MCS0	62	5310	11.89	12.94	15.46	≤ 23.98
11ax-HE40	MCS0	102	5510	10.22	11.38	13.85	≤ 23.98
11ax-HE40	MCS0	110	5550	15.01	16.30	18.71	≤ 23.98
11ax-HE40	MCS0	134	5670	14.18	15.18	17.72	≤ 23.98
11ax-HE40	MCS0	142	5710	14.92	16.29	18.67	≤ 23.98
11ax-HE40	MCS0	151	5755	15.79	16.17	18.99	≤ 30.00
11ax-HE40	MCS0	159	5795	15.56	16.30	18.96	≤ 30.00
11ax-HE80	MCS0	42	5210	12.10	12.70	15.42	≤ 23.98
11ax-HE80	MCS0	58	5290	11.48	12.34	14.94	≤ 23.98
11ax-HE80	MCS0	106	5530	11.79	12.79	15.33	≤ 23.98
11ax-HE80	MCS0	122	5610	15.15	16.36	18.81	≤ 23.98
11ax-HE80	MCS0	138	5690	15.18	16.16	18.71	≤ 23.98
11ax-HE80	MCS0	155	5775	16.20	16.29	19.26	≤ 30.00

Note 1: Total Average Power (dBm) = $10*\log \{10^{(\text{Ant 0 Average Power}/10)} + 10^{(\text{Ant 1 Average Power}/10)}\}$.

Note 2: For Band-Crossing channel, Average Power Limit = 23.98dBm or $11+10*\log_{10}EBW_{2C}$ which is less.

A.5 Power Spectral Density Test Result

Test Site	SIP-TR1	Test Engineer	Alan Yu
Test Date	2025-06-10 ~ 2025-07-16		
Test Item	Power Spectral Density (UNII-Band 1 & UNII-2a & UNII-2c)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/ MHz)
				Ant 0	Ant 1			
11a	6Mbps	36	5180	4.983	6.159	98.41	8.621	≤ 11.00
11a	6Mbps	44	5220	6.799	7.888	98.41	10.388	≤ 11.00
11a	6Mbps	48	5240	7.301	7.862	98.41	10.601	≤ 11.00
11a	6Mbps	52	5260	7.230	7.584	98.41	10.421	≤ 11.00
11a	6Mbps	60	5300	7.455	7.520	98.41	10.498	≤ 11.00
11a	6Mbps	64	5320	6.624	7.297	98.41	9.984	≤ 11.00
11a	6Mbps	100	5500	3.137	4.304	98.41	6.770	≤ 11.00
11a	6Mbps	116	5580	7.642	7.843	98.41	10.754	≤ 11.00
11a	6Mbps	140	5700	2.474	3.330	98.41	5.933	≤ 11.00
11a	6Mbps	144	5720	6.780	7.496	98.41	10.163	≤ 11.00
11ac-VHT20	MCS0	36	5180	5.504	6.110	97.98	8.916	≤ 11.00
11ac-VHT20	MCS0	44	5220	7.649	6.038	97.98	10.017	≤ 11.00
11ac-VHT20	MCS0	48	5240	6.368	7.856	97.98	10.274	≤ 11.00
11ac-VHT20	MCS0	52	5260	7.207	7.419	97.98	10.413	≤ 11.00
11ac-VHT20	MCS0	60	5300	7.400	7.367	97.98	10.482	≤ 11.00
11ac-VHT20	MCS0	64	5320	5.880	6.403	97.98	9.248	≤ 11.00
11ac-VHT20	MCS0	100	5500	1.926	2.150	97.98	5.138	≤ 11.00
11ac-VHT20	MCS0	116	5580	7.382	8.048	97.98	10.827	≤ 11.00
11ac-VHT20	MCS0	140	5700	1.582	2.336	97.98	5.074	≤ 11.00
11ac-VHT20	MCS0	144	5720	6.892	7.413	97.98	10.259	≤ 11.00
11ac-VHT40	MCS0	38	5190	-1.046	-0.055	97.64	2.592	≤ 11.00
11ac-VHT40	MCS0	46	5230	1.548	2.655	97.64	5.251	≤ 11.00
11ac-VHT40	MCS0	54	5270	1.632	2.225	97.64	5.053	≤ 11.00
11ac-VHT40	MCS0	62	5310	-1.211	-0.167	97.64	2.456	≤ 11.00
11ac-VHT40	MCS0	102	5510	-3.178	-2.637	97.64	0.215	≤ 11.00
11ac-VHT40	MCS0	110	5550	1.080	2.583	97.64	5.010	≤ 11.00
11ac-VHT40	MCS0	134	5670	0.705	1.860	97.64	4.435	≤ 11.00
11ac-VHT40	MCS0	142	5710	1.195	2.573	97.64	5.052	≤ 11.00

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD (dBm/ MHz)		Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/ MHz)
				Ant 0	Ant 1			
11ac-VHT80	MCS0	42	5210	-4.471	-4.067	97.82	-1.158	≤ 11.00
11ac-VHT80	MCS0	58	5290	-5.332	-4.411	97.82	-1.741	≤ 11.00
11ac-VHT80	MCS0	106	5530	-4.724	-3.712	97.82	-1.083	≤ 11.00
11ac-VHT80	MCS0	122	5610	-1.589	-0.490	97.82	2.101	≤ 11.00
11ac-VHT80	MCS0	138	5690	-1.769	-0.560	97.82	1.983	≤ 11.00
11ax-HE20	MCS0	36	5180	4.704	5.801	98.07	8.297	≤ 11.00
11ax-HE20	MCS0	44	5220	7.329	7.801	98.07	10.582	≤ 11.00
11ax-HE20	MCS0	48	5240	7.064	8.128	98.07	10.639	≤ 11.00
11ax-HE20	MCS0	52	5260	7.124	7.713	98.07	10.439	≤ 11.00
11ax-HE20	MCS0	60	5300	7.206	7.309	98.07	10.268	≤ 11.00
11ax-HE20	MCS0	64	5320	5.373	5.916	98.07	8.663	≤ 11.00
11ax-HE20	MCS0	100	5500	2.637	3.881	98.07	6.314	≤ 11.00
11ax-HE20	MCS0	116	5580	7.099	8.098	98.07	10.637	≤ 11.00
11ax-HE20	MCS0	140	5700	1.243	1.933	98.07	4.612	≤ 11.00
11ax-HE20	MCS0	144	5720	7.220	8.361	98.07	10.838	≤ 11.00
11ax-HE40	MCS0	38	5190	-3.829	-2.950	97.86	-0.263	≤ 11.00
11ax-HE40	MCS0	46	5230	-0.088	1.149	97.86	3.679	≤ 11.00
11ax-HE40	MCS0	54	5270	-0.075	1.024	97.86	3.613	≤ 11.00
11ax-HE40	MCS0	62	5310	-3.214	-2.321	97.86	0.360	≤ 11.00
11ax-HE40	MCS0	102	5510	-5.300	-4.248	97.86	-1.638	≤ 11.00
11ax-HE40	MCS0	110	5550	-0.263	1.189	97.86	3.628	≤ 11.00
11ax-HE40	MCS0	134	5670	-1.338	0.008	97.86	2.491	≤ 11.00
11ax-HE40	MCS0	142	5710	-0.839	0.997	97.86	3.280	≤ 11.00
11ax-HE80	MCS0	42	5210	-6.360	-5.598	97.84	-2.857	≤ 11.00
11ax-HE80	MCS0	58	5290	-6.845	-5.740	97.84	-3.152	≤ 11.00
11ax-HE80	MCS0	106	5530	-6.383	-5.329	97.84	-2.719	≤ 11.00
11ax-HE80	MCS0	122	5610	-2.950	-1.707	97.84	0.821	≤ 11.00
11ax-HE80	MCS0	138	5690	-4.900	-1.996	97.84	-0.105	≤ 11.00

Note 1: When EUT duty cycle < 98%, the total PSD (dBm/MHz) =10*log {10$^{(Ant\ 0\ AVGPSD/10)}$ + 10$^{(Ant\ 1\ AVGPSD/10)}$} +10*log (1/Duty cycle).

When EUT duty cycle ≥ 98%, the total PSD (dBm/MHz) =10*log {10$^{(Ant\ 0\ AVGPSD/10)}$ + 10$^{(Ant\ 1\ AVGPSD/10)}$}.

Test Site	SIP-TR1	Test Engineer	Alan Yu
Test Date	2025-06-11 ~ 2025-06-20		
Test Item	Power Spectral Density (UNII-Band 3)		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	AVPSD (dBm/ 510kHz)		Duty Cycle (%)	Total PSD (dBm/ 510kHz)	PSD Limit (dBm/ 500kHz)
				Ant 0	Ant 1			
11a	6Mbps	149	5745	3.586	5.085	98.41	7.410	≤ 30.00
11a	6Mbps	157	5785	4.818	5.641	98.41	8.259	≤ 30.00
11a	6Mbps	165	5825	4.226	6.158	98.41	8.309	≤ 30.00
11ac-VHT20	MCS0	149	5745	4.478	5.803	97.98	8.290	≤ 30.00
11ac-VHT20	MCS0	157	5785	3.997	4.883	97.98	7.561	≤ 30.00
11ac-VHT20	MCS0	165	5825	4.260	5.567	97.98	8.061	≤ 30.00
11ac-VHT40	MCS0	151	5755	-1.987	-1.466	97.64	1.395	≤ 30.00
11ac-VHT40	MCS0	159	5795	-1.991	-0.108	97.64	2.166	≤ 30.00
11ac-VHT80	MCS0	155	5775	-4.532	-3.268	97.82	-0.748	≤ 30.00
11ax-HE20	MCS0	149	5745	3.659	5.575	98.07	7.732	≤ 30.00
11ax-HE20	MCS0	157	5785	3.780	5.303	98.07	7.618	≤ 30.00
11ax-HE20	MCS0	165	5825	3.480	5.734	98.07	7.762	≤ 30.00
11ax-HE40	MCS0	151	5755	-3.161	-1.921	97.86	0.607	≤ 30.00
11ax-HE40	MCS0	159	5795	-3.420	-1.948	97.86	0.482	≤ 30.00
11ax-HE80	MCS0	155	5775	-6.485	-4.663	97.84	-2.374	≤ 30.00

Note 1:

When EUT duty cycle < 98%, the total PSD (dBm/510kHz) =10*log {10^(Ant 0 AVGPSD/10) + 10^(Ant 1 AVGPSD/10)} +10*log (1/Duty cycle).

When EUT duty cycle ≥ 98%, the total PSD (dBm/510kHz) =10*log {10^(Ant 0 AVGPSD/10) + 10^(Ant 1 AVGPSD/10)}.

802.11a Power Spectral Density- Ant 0

Channel 36 (5180MHz)

Channel 44 (5220MHz)

Channel 48 (5240MHz)

Channel 52 (5260MHz)

Channel 60 (5300MHz)

Channel 64 (5320MHz)

Channel 100 (5500MHz)

Channel 116 (5580MHz)

802.11a Power Spectral Density- Ant 0

Channel 140 (5700MHz)	Channel 144(5720MHz)

Channel 149 (5745MHz)	Channel 157 (5785MHz)

Channel 165 (5825MHz)	

802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 36 (5180MHz)

Channel 44 (5220MHz)

Channel 48 (5240MHz)

Channel 52 (5260MHz)

Channel 60 (5300MHz)

Channel 64 (5320MHz)
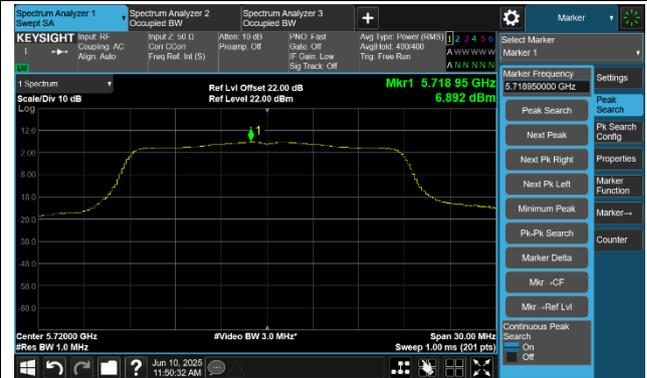

Channel 100 (5500MHz)

Channel 116 (5580MHz)

802.11ac-VHT20 Power Spectral Density- Ant 0

Channel 140 (5700MHz)	Channel 144(5720MHz)

Channel 149 (5745MHz)	Channel 157 (5785MHz)

Channel 165 (5825MHz)	

802.11ac-VHT40 Power Spectral Density- Ant 0

Channel 38 (5190MHz)

Channel 46 (5230MHz)

Channel 54 (5270MHz)

Channel 62 (5310MHz)

Channel 102 (5510MHz)

Channel 110 (5550MHz)

Channel 134 (5670MHz)

Channel 142(5710MHz)

802.11ac-VHT40 Power Spectral Density- Ant 0

Channel 151 (5755MHz)	Channel 159 (5795MHz)

802.11ac-VHT80 Power Spectral Density- Ant 0

Channel 42 (5210MHz)

Channel 58 (5290MHz)

Channel 106 (5530MHz)

Channel 122 (5610MHz)

Channel 138 (5690MHz)

Channel 155 (5775MHz)