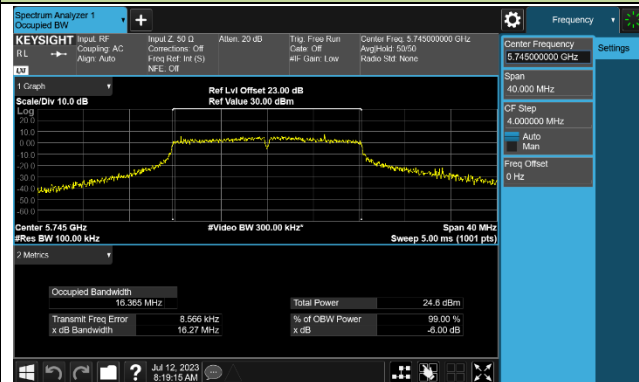
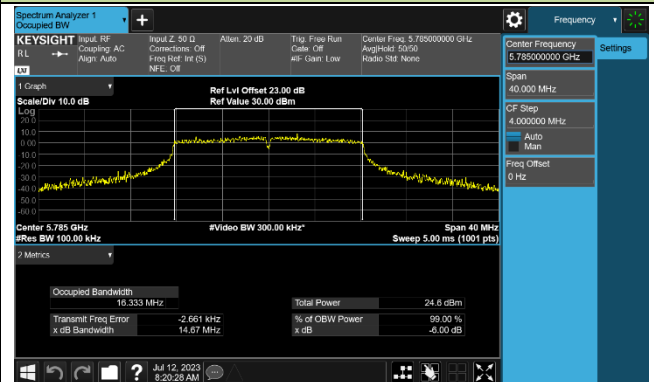


802.11a 6dB Bandwidth

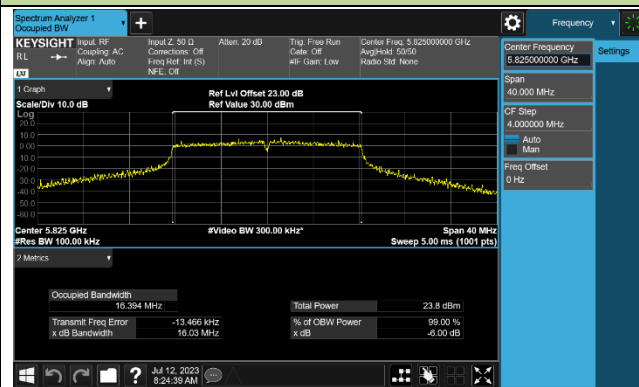
Channel 149 (5745MHz)



Channel 157 (5785MHz)

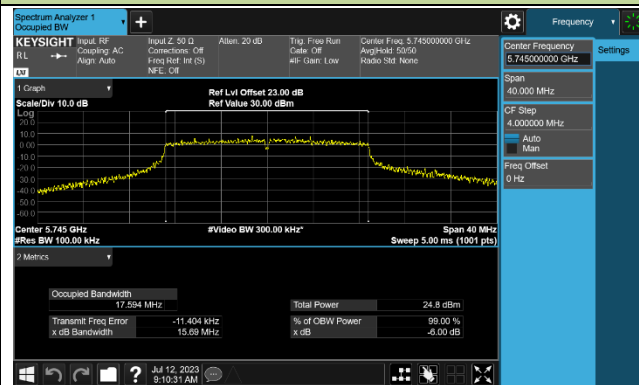


Channel 165 (5825MHz)

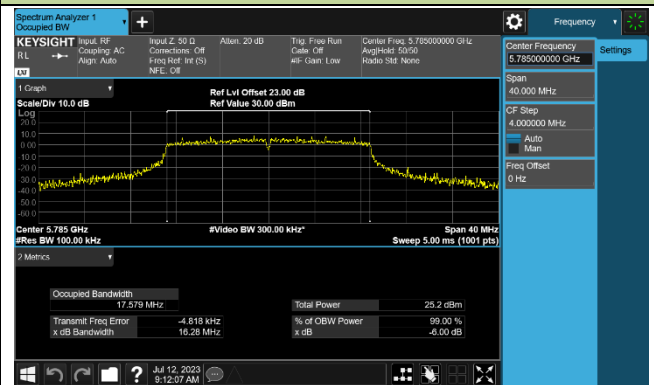


802.11ac-VHT20 6dB Bandwidth

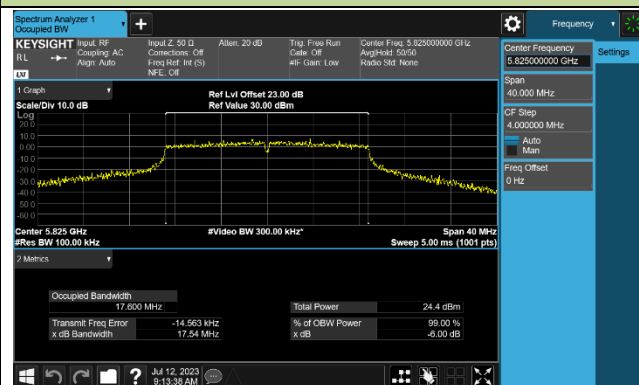
Channel 149 (5745MHz)



Channel 157 (5785MHz)

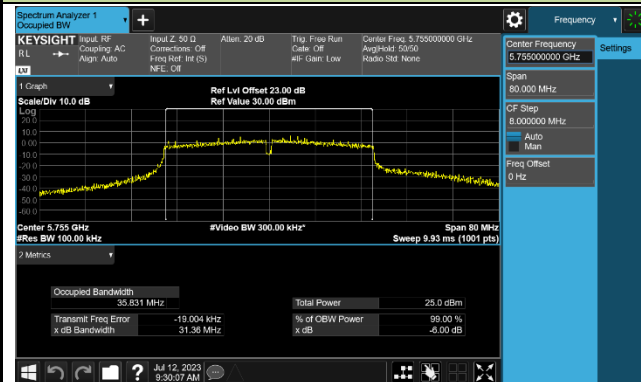


Channel 165 (5825MHz)

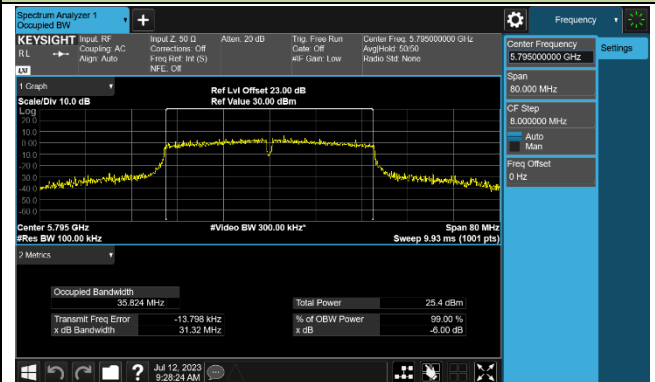


802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)

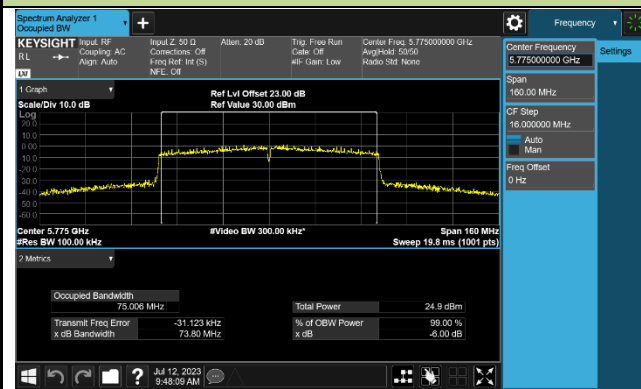


Channel 159 (5795MHz)



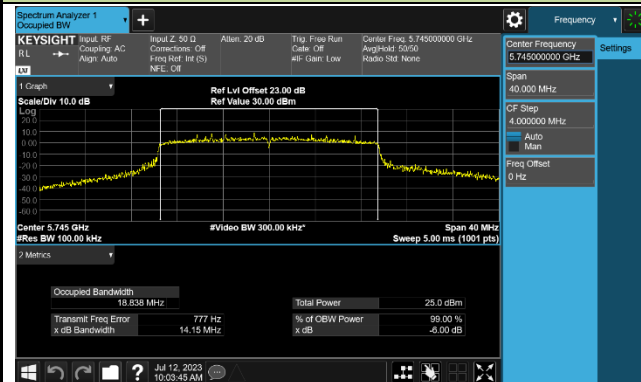
802.11ac-VHT80 6dB Bandwidth

Channel 155 (5775MHz)

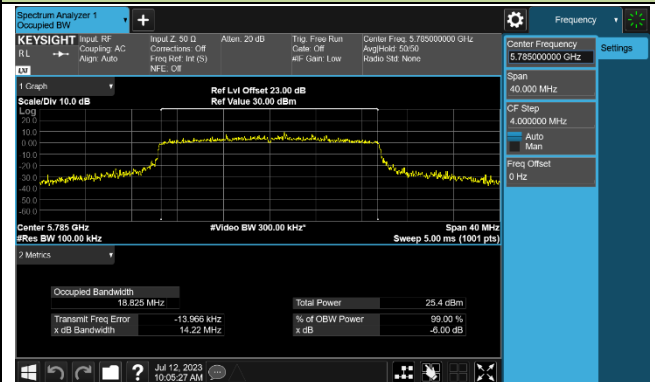


802.11ax-HE20 6dB Bandwidth

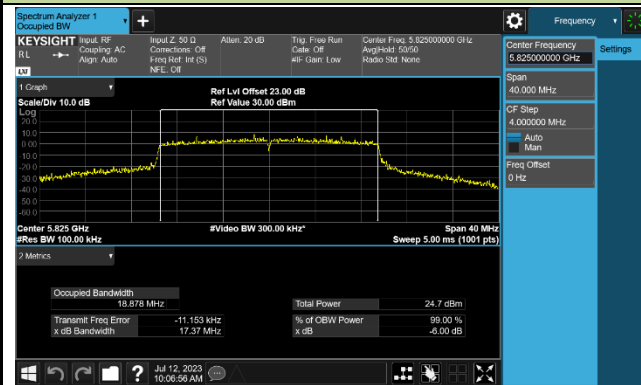
Channel 149 (5745MHz)



Channel 157 (5785MHz)

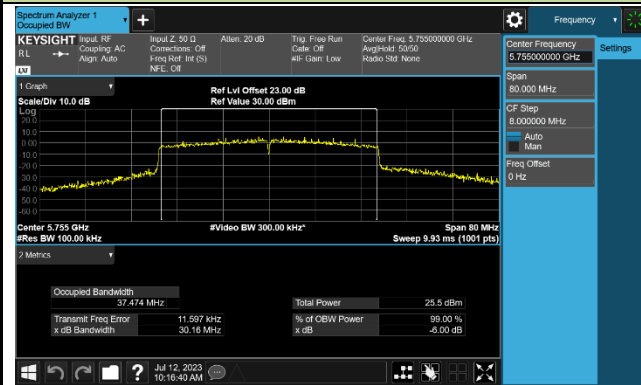


Channel 165 (5825MHz)

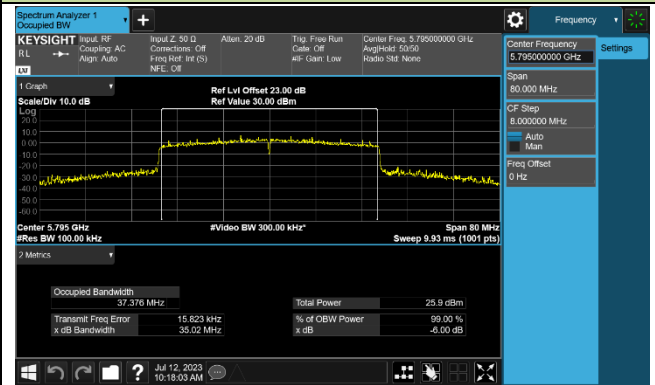


802.11ax-HE40 6dB Bandwidth

Channel 151 (5755MHz)

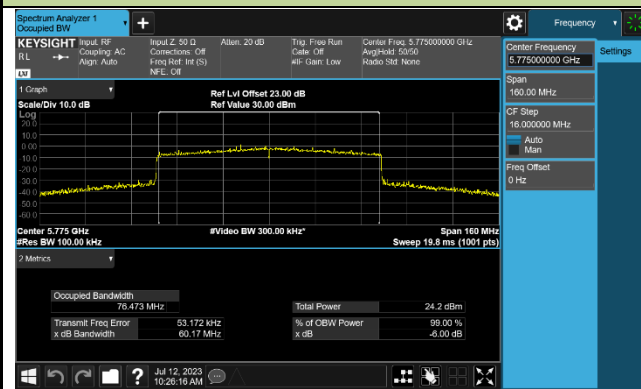


Channel 159 (5795MHz)



802.11ax-HE80 6dB Bandwidth

Channel 155 (5775MHz)



7.4. Output Power Measurement

7.4.1. Test Limit

For the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

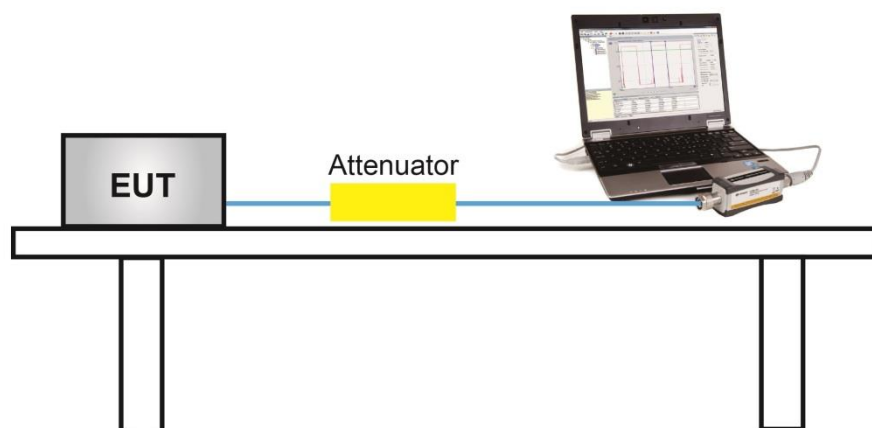
7.4.2. Test Procedure Used

KDB 789033D02v02r01- Section E)3)b) Method PM-G

7.4.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

7.4.4. Test Setup



7.4.5. Test Result

Product	AX6000 Ceiling Mount Wi-Fi 6 Access Point	Test Engineer	Xuan Yu
Test Site	SR6	Test Date	2023/07/07~2023/07/13
Test Mode	CDD Mode		

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Power Limit (dBm)	Result
11a	6Mbps	36	5180	20.15	20.08	20.57	20.04	26.24	≤ 30.00	Pass
11a	6Mbps	44	5220	20.21	20.48	20.30	20.03	26.28	≤ 30.00	Pass
11a	6Mbps	48	5240	20.41	20.47	20.14	20.02	26.28	≤ 30.00	Pass
11a	6Mbps	52	5260	14.34	14.42	13.57	13.79	20.07	≤ 23.98	Pass
11a	6Mbps	60	5300	14.32	14.22	13.45	13.41	19.89	≤ 23.98	Pass
11a	6Mbps	64	5320	14.37	14.31	13.44	13.22	19.89	≤ 23.98	Pass
11a	6Mbps	100	5500	14.58	14.49	13.56	13.88	20.17	≤ 23.98	Pass
11a	6Mbps	116	5580	15.04	14.80	13.70	14.17	20.48	≤ 23.98	Pass
11a	6Mbps	140	5700	15.11	14.81	13.80	14.25	20.54	≤ 23.98	Pass
11a	6Mbps	144	5720	14.71	14.69	13.22	13.70	20.15	≤ 22.69	Pass
11a	6Mbps	149	5745	21.38	21.22	21.65	20.33	27.19	≤ 30.00	Pass
11a	6Mbps	157	5785	21.29	20.96	21.17	20.19	26.94	≤ 30.00	Pass
11a	6Mbps	165	5825	20.22	20.58	20.11	20.32	26.33	≤ 30.00	Pass
11ac-VHT20	MCS0	36	5180	20.06	19.35	20.25	19.77	25.89	≤ 30.00	Pass
11ac-VHT20	MCS0	40	5220	19.96	19.32	19.88	19.67	25.74	≤ 30.00	Pass
11ac-VHT20	MCS0	48	5240	20.01	19.42	19.82	19.63	25.75	≤ 30.00	Pass
11ac-VHT20	MCS0	52	5260	14.60	14.41	13.64	13.70	20.13	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	14.38	14.15	13.33	13.52	19.89	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	14.41	14.19	13.35	13.47	19.90	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	14.85	15.04	13.42	14.58	20.54	≤ 23.98	Pass
11ac-VHT20	MCS0	116	5580	15.36	15.26	13.71	14.66	20.82	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	15.06	15.43	13.86	14.94	20.88	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	14.57	14.00	13.55	14.29	20.14	≤ 22.74	Pass
11ac-VHT20	MCS0	149	5745	20.90	20.01	21.61	20.21	26.75	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	21.26	20.21	22.10	20.55	27.11	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	20.40	20.30	20.92	20.75	26.62	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT40	MCS0	38	5190	17.06	15.66	16.40	15.56	22.23	≤ 30.00	Pass
11ac-VHT40	MCS0	46	5230	20.50	20.72	20.82	20.23	26.59	≤ 30.00	Pass
11ac-VHT40	MCS0	54	5270	16.73	16.44	15.79	15.80	22.23	≤ 23.98	Pass
11ac-VHT40	MCS0	62	5310	16.53	16.20	15.42	15.41	21.94	≤ 23.98	Pass
11ac-VHT40	MCS0	102	5510	16.31	16.08	15.55	15.65	21.93	≤ 23.98	Pass
11ac-VHT40	MCS0	110	5550	16.63	16.55	15.72	16.08	22.28	≤ 23.98	Pass
11ac-VHT40	MCS0	134	5670	16.24	16.61	15.22	15.97	22.06	≤ 23.98	Pass
11ac-VHT40	MCS0	142	5710	16.60	16.50	15.51	15.90	22.17	≤ 23.98	Pass
11ac-VHT40	MCS0	151	5755	20.98	20.26	21.58	20.33	26.84	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	21.22	20.50	21.85	20.51	27.08	≤ 30.00	Pass
11ac-VHT80	MCS0	42	5210	17.45	16.11	16.73	15.82	22.59	≤ 30.00	Pass
11ac-VHT80	MCS0	58	5290	18.85	17.04	17.44	16.53	23.57	≤ 23.98	Pass
11ac-VHT80	MCS0	106	5530	18.40	17.20	17.91	16.20	23.52	≤ 23.98	Pass
11ac-VHT80	MCS0	122	5610	18.68	17.51	18.30	17.12	23.97	≤ 23.98	Pass
11ac-VHT80	MCS0	138	5690	18.11	17.02	17.89	17.23	23.61	≤ 23.98	Pass
11ac-VHT80	MCS0	155	5775	20.55	20.07	21.30	20.52	26.65	≤ 30.00	Pass
11ac-VHT160	MCS0	50	5250	16.41	14.69	15.70	14.77	21.47	≤ 23.98	Pass
11ac-VHT160	MCS0	114	5570	18.56	17.72	17.35	16.90	23.70	≤ 23.98	Pass
11ax-HE20	MCS0	36	5180	20.17	19.21	20.35	19.77	25.92	≤ 30.00	Pass
11ax-HE20	MCS0	40	5220	19.99	19.30	20.03	19.54	25.75	≤ 30.00	Pass
11ax-HE20	MCS0	48	5240	19.87	19.48	19.91	19.63	25.75	≤ 30.00	Pass
11ax-HE20	MCS0	52	5260	15.10	14.60	14.06	14.33	20.56	≤ 23.98	Pass
11ax-HE20	MCS0	60	5300	14.90	14.51	13.55	14.05	20.30	≤ 23.98	Pass
11ax-HE20	MCS0	64	5320	14.95	14.63	13.65	14.11	20.38	≤ 23.98	Pass
11ax-HE20	MCS0	100	5500	14.40	14.31	13.63	14.11	20.14	≤ 23.98	Pass
11ax-HE20	MCS0	116	5580	14.81	14.64	13.65	14.27	20.39	≤ 23.98	Pass
11ax-HE20	MCS0	140	5700	14.99	14.66	13.67	14.67	20.55	≤ 23.98	Pass
11ax-HE20	MCS0	144	5720	14.83	14.32	13.41	14.40	20.29	≤ 22.85	Pass
11ax-HE20	MCS0	149	5745	21.02	20.04	21.82	20.11	26.83	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	21.35	20.70	22.17	20.35	27.22	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	20.51	20.71	21.02	20.81	26.79	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ax-HE40	MCS0	38	5190	16.55	15.29	16.09	15.56	21.92	≤ 30.00	Pass
11ax-HE40	MCS0	46	5230	21.11	21.43	21.47	20.41	27.15	≤ 30.00	Pass
11ax-HE40	MCS0	54	5270	16.95	16.56	15.81	15.95	22.36	≤ 23.98	Pass
11ax-HE40	MCS0	62	5310	16.73	16.43	15.82	15.65	22.20	≤ 23.98	Pass
11ax-HE40	MCS0	102	5510	16.51	16.56	15.59	16.09	22.23	≤ 23.98	Pass
11ax-HE40	MCS0	110	5550	16.82	16.83	15.82	16.45	22.52	≤ 23.98	Pass
11ax-HE40	MCS0	134	5670	16.55	16.84	15.44	16.32	22.34	≤ 23.98	Pass
11ax-HE40	MCS0	142	5710	16.41	16.09	15.35	15.65	21.91	≤ 23.98	Pass
11ax-HE40	MCS0	151	5755	21.75	21.09	22.59	20.11	27.50	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	22.05	21.59	22.77	20.31	27.79	≤ 30.00	Pass
11ax-HE80	MCS0	42	5210	19.42	18.38	19.11	18.09	24.80	≤ 30.00	Pass
11ax-HE80	MCS0	58	5290	18.61	17.45	17.61	16.74	23.68	≤ 23.98	Pass
11ax-HE80	MCS0	106	5530	18.30	17.98	17.41	17.70	23.88	≤ 23.98	Pass
11ax-HE80	MCS0	122	5610	18.40	17.82	17.10	17.08	23.66	≤ 23.98	Pass
11ax-HE80	MCS0	138	5690	17.83	18.13	17.02	17.89	23.76	≤ 23.98	Pass
11ax-HE80	MCS0	155	5775	20.90	20.66	21.21	20.43	26.83	≤ 30.00	Pass
11ax-HE160	MCS0	50	5250	18.44	17.66	17.48	17.31	23.77	≤ 23.98	Pass
11ax-HE160	MCS0	114	5570	18.89	17.40	18.13	17.02	23.94	≤ 23.98	Pass

Note 1:

The Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$.

Note 2:

For 5250- 5350MHz and 5470 - 5725MHz Band: Average Power Limit (dBm) = 23.98 dBm.

For 5150 - 5250MHz and 5725 - 5850MHz Bands: Average Power Limit (dBm) = 30 dBm.

For 802.11a Ch144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) = 22.69$ dBm.

For 802.11ac Ch144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) = 22.74$ dBm.

For 802.11ax Ch144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) = 22.85$ dBm.

Product	AX6000 Ceiling Mount Wi-Fi 6 Access Point	Test Engineer	Xuan Yu
Test Site	SR6	Test Date	2023/07/07~2023/07/13
Test Mode	Beamforming Mode		

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT20	MCS0	36	5180	20.06	19.35	20.25	19.77	25.89	≤ 27.98	Pass
11ac-VHT20	MCS0	40	5220	19.96	19.32	19.88	19.67	25.74	≤ 27.98	Pass
11ac-VHT20	MCS0	48	5240	20.01	19.42	19.82	19.63	25.75	≤ 27.98	Pass
11ac-VHT20	MCS0	52	5260	14.60	14.41	13.64	13.70	20.13	≤ 21.96	Pass
11ac-VHT20	MCS0	60	5300	14.38	14.15	13.33	13.52	19.89	≤ 21.96	Pass
11ac-VHT20	MCS0	64	5320	14.41	14.19	13.35	13.47	19.90	≤ 21.96	Pass
11ac-VHT20	MCS0	100	5500	14.85	15.04	13.42	14.58	20.54	≤ 21.96	Pass
11ac-VHT20	MCS0	116	5580	15.36	15.26	13.71	14.66	20.82	≤ 21.96	Pass
11ac-VHT20	MCS0	140	5700	15.06	15.43	13.86	14.94	20.88	≤ 21.96	Pass
11ac-VHT20	MCS0	144	5720	14.57	14.00	13.55	14.29	20.14	≤ 20.72	Pass
11ac-VHT20	MCS0	149	5745	20.90	20.01	21.61	20.21	26.75	≤ 27.98	Pass
11ac-VHT20	MCS0	157	5785	21.26	20.21	22.10	20.55	27.11	≤ 27.98	Pass
11ac-VHT20	MCS0	165	5825	20.40	20.30	20.92	20.75	26.62	≤ 27.98	Pass
11ac-VHT40	MCS0	38	5190	17.06	15.66	16.40	15.56	22.23	≤ 27.98	Pass
11ac-VHT40	MCS0	46	5230	20.50	20.72	20.82	20.23	26.59	≤ 27.98	Pass
11ac-VHT40	MCS0	54	5270	16.35	16.01	15.45	15.39	21.84	≤ 21.96	Pass
11ac-VHT40	MCS0	62	5310	16.15	15.82	15.03	15.00	21.55	≤ 21.96	Pass
11ac-VHT40	MCS0	102	5510	15.92	15.68	15.15	15.25	21.53	≤ 21.96	Pass
11ac-VHT40	MCS0	110	5550	16.22	16.17	15.30	15.72	21.89	≤ 21.96	Pass
11ac-VHT40	MCS0	134	5670	15.85	16.25	14.87	15.54	21.68	≤ 21.96	Pass
11ac-VHT40	MCS0	142	5710	16.23	16.07	15.10	15.45	21.76	≤ 21.96	Pass
11ac-VHT40	MCS0	151	5755	20.98	20.26	21.58	20.33	26.84	≤ 27.98	Pass
11ac-VHT40	MCS0	159	5795	21.22	20.50	21.85	20.51	27.08	≤ 27.98	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT80	MCS0	42	5210	17.45	16.11	16.73	15.82	22.59	≤ 27.98	Pass
11ac-VHT80	MCS0	58	5290	16.20	15.86	15.19	15.45	21.71	≤ 21.96	Pass
11ac-VHT80	MCS0	106	5530	16.60	15.64	14.90	15.67	21.77	≤ 21.96	Pass
11ac-VHT80	MCS0	122	5610	16.12	16.16	14.91	15.88	21.82	≤ 21.96	Pass
11ac-VHT80	MCS0	138	5690	15.88	16.18	14.63	16.06	21.75	≤ 21.96	Pass
11ac-VHT80	MCS0	155	5775	20.55	20.07	21.30	20.52	26.65	≤ 27.98	Pass
11ac-VHT160	MCS0	50	5250	16.41	14.69	15.70	14.77	21.47	≤ 21.96	Pass
11ac-VHT160	MCS0	114	5570	15.80	15.46	14.82	15.48	21.42	≤ 21.96	Pass
11ax-HE20	MCS0	36	5180	20.17	19.21	20.35	19.77	25.92	≤ 27.98	Pass
11ax-HE20	MCS0	40	5220	19.99	19.30	20.03	19.54	25.75	≤ 27.98	Pass
11ax-HE20	MCS0	48	5240	19.87	19.48	19.91	19.63	25.75	≤ 27.98	Pass
11ax-HE20	MCS0	52	5260	15.10	14.60	14.06	14.33	20.56	≤ 21.96	Pass
11ax-HE20	MCS0	60	5300	14.90	14.51	13.55	14.05	20.30	≤ 21.96	Pass
11ax-HE20	MCS0	64	5320	14.95	14.63	13.65	14.11	20.38	≤ 21.96	Pass
11ax-HE20	MCS0	100	5500	14.40	14.31	13.63	14.11	20.14	≤ 21.96	Pass
11ax-HE20	MCS0	116	5580	14.81	14.64	13.65	14.27	20.39	≤ 21.96	Pass
11ax-HE20	MCS0	140	5700	14.99	14.66	13.67	14.67	20.55	≤ 21.96	Pass
11ax-HE20	MCS0	144	5720	14.83	14.32	13.41	14.40	20.29	≤ 20.83	Pass
11ax-HE20	MCS0	149	5745	21.02	20.04	21.82	20.11	26.83	≤ 27.98	Pass
11ax-HE20	MCS0	157	5785	21.35	20.70	22.17	20.35	27.22	≤ 27.98	Pass
11ax-HE20	MCS0	165	5825	20.51	20.71	21.02	20.81	26.79	≤ 27.98	Pass
11ax-HE40	MCS0	38	5190	16.55	15.29	16.09	15.56	21.92	≤ 27.98	Pass
11ax-HE40	MCS0	46	5230	21.11	21.43	21.47	20.41	27.15	≤ 27.98	Pass
11ax-HE40	MCS0	54	5270	16.37	16.20	15.37	15.45	21.89	≤ 21.96	Pass
11ax-HE40	MCS0	62	5310	16.33	15.98	15.42	15.21	21.78	≤ 21.96	Pass
11ax-HE40	MCS0	102	5510	16.13	16.20	15.10	15.67	21.82	≤ 21.96	Pass
11ax-HE40	MCS0	110	5550	16.01	16.05	15.01	15.87	21.78	≤ 21.96	Pass
11ax-HE40	MCS0	134	5670	16.15	16.37	15.01	15.89	21.91	≤ 21.96	Pass
11ax-HE40	MCS0	142	5710	15.99	15.51	14.98	15.25	21.47	≤ 21.96	Pass
11ax-HE40	MCS0	151	5755	21.75	21.09	22.59	20.11	27.50	≤ 27.98	Pass
11ax-HE40	MCS0	159	5795	22.05	21.59	22.77	20.31	27.79	≤ 27.98	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ax-HE80	MCS0	42	5210	19.42	18.38	19.11	18.09	24.80	≤ 27.98	Pass
11ax-HE80	MCS0	58	5290	16.05	15.86	14.96	15.37	21.60	≤ 21.96	Pass
11ax-HE80	MCS0	106	5530	16.16	15.54	14.65	15.61	21.54	≤ 21.96	Pass
11ax-HE80	MCS0	122	5610	16.27	15.91	14.67	15.20	21.58	≤ 21.96	Pass
11ax-HE80	MCS0	138	5690	15.78	15.63	14.49	15.54	21.41	≤ 21.96	Pass
11ax-HE80	MCS0	155	5775	20.90	20.66	21.21	20.43	26.83	≤ 27.98	Pass
11ax-HE160	MCS0	50	5250	16.57	14.70	15.63	14.91	21.54	≤ 21.96	Pass
11ax-HE160	MCS0	114	5570	16.15	15.85	15.01	15.65	21.71	≤ 21.96	Pass

Note 1:

The Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\}$.

Note 2:

For 5125 - 5250MHz Band: Average Power Limit (dBm) = 30 - (8.02- 6) = 27.98dBm

For 5250 - 5350MHz and 5470 - 5725MHz Band: Average Power Limit (dBm) = 23.98 - (8.02- 6) = 21.96dBm.

For 5725 - 5850MHz Band: Average Power Limit (dBm) = 30- (8.02- 6) = 27.98dBm.

For 802.11ac Ch144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2)$ - (8.02- 6)=20.72 dBm

For 802.11ax Ch144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2)$ - (8.02- 6)=20.83 dBm

7.5. Transmit Power Control

7.5.1. Test Limit

The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

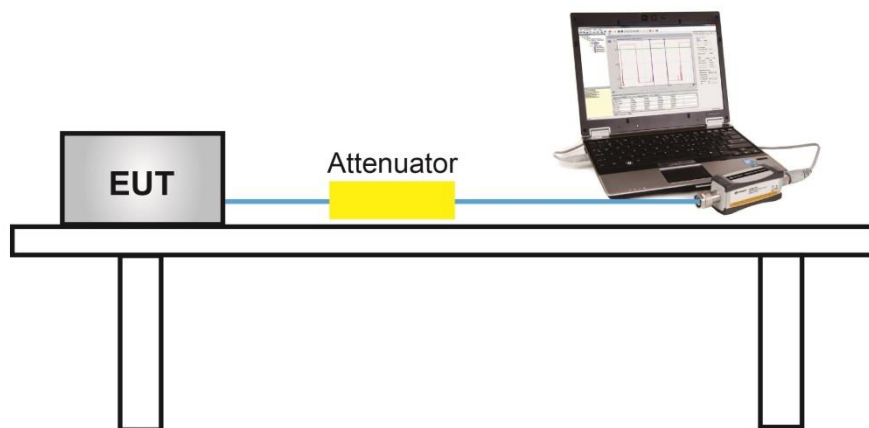
7.5.2. Test Procedure Used

KDB 789033 D02v02r01- Section E)3)b) Method PM-G

7.5.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

7.5.4. Test Setup



7.5.5. Test Result

Device supports TPC mechanism, details refer to the operational description.

7.6. Power Spectral Density Measurement

7.6.1. Test Limit

For the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

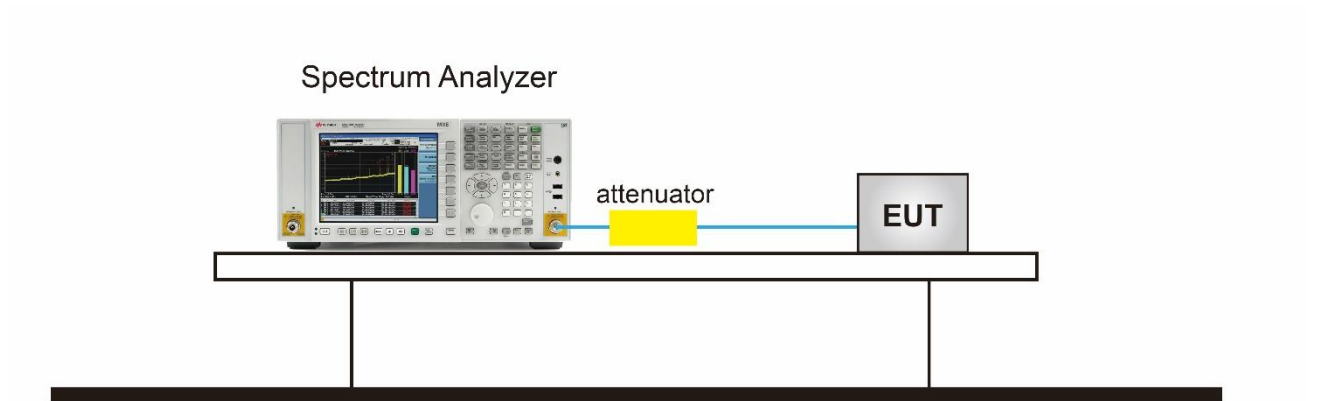
7.6.2. Test Procedure Used

KDB 789033 D02v02r01-SectionF

7.6.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz, if measurement bandwidth of Maximum PSD is specified in 500 kHz,
RBW = 510 kHz
4. VBW = 3MHz
5. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
10. Add $10 \cdot \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \cdot \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

7.6.4. Test Setup



7.6.5.Test Result

Product	AX6000 Ceiling Mount Wi-Fi 6 Access Point	Test Engineer	Xuan Yu
Test Site	SR6	Test Date	2023/07/07~2023/07/13
Mode	Power Spectral Density (U-NII- 1/-2a / -2c) CDD Mode		

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11a	6Mbps	36	5180	8.578	8.325	9.154	8.367	95.83%	14.824	≤ 14.98	Pass
11a	6Mbps	44	5220	8.979	8.462	8.466	8.078	95.83%	14.714	≤ 14.98	Pass
11a	6Mbps	48	5240	8.651	8.189	8.407	8.275	95.83%	14.590	≤ 14.98	Pass
11a	6Mbps	52	5260	2.858	2.360	1.961	2.572	95.83%	8.656	≤ 8.98	Pass
11a	6Mbps	60	5300	3.082	2.569	1.739	2.560	95.83%	8.719	≤ 8.98	Pass
11a	6Mbps	64	5320	2.965	2.157	2.007	2.534	95.83%	8.637	≤ 8.98	Pass
11a	6Mbps	100	5500	3.077	2.348	2.197	3.160	95.83%	8.922	≤ 8.98	Pass
11a	6Mbps	116	5580	3.652	1.552	2.398	2.800	95.83%	8.872	≤ 8.98	Pass
11a	6Mbps	140	5700	3.400	2.173	2.572	2.604	95.83%	8.916	≤ 8.98	Pass
11a	6Mbps	144	5720	3.355	1.099	1.740	2.580	95.83%	8.483	≤ 8.98	Pass
11ac-VHT20	MCS0	36	5180	8.448	8.039	8.919	8.020	95.75%	14.581	≤ 14.98	Pass
11ac-VHT20	MCS0	40	5220	8.716	8.068	8.684	8.105	95.75%	14.613	≤ 14.98	Pass
11ac-VHT20	MCS0	48	5240	8.358	8.514	8.427	8.143	95.75%	14.572	≤ 14.98	Pass
11ac-VHT20	MCS0	52	5260	2.922	2.453	1.965	2.281	95.75%	8.628	≤ 8.98	Pass
11ac-VHT20	MCS0	60	5300	2.855	2.255	1.710	2.127	95.75%	8.465	≤ 8.98	Pass
11ac-VHT20	MCS0	64	5320	2.712	2.707	1.660	2.397	95.75%	8.599	≤ 8.98	Pass
11ac-VHT20	MCS0	100	5500	3.369	2.674	2.107	2.774	95.75%	8.963	≤ 8.98	Pass
11ac-VHT20	MCS0	116	5580	3.580	2.529	2.274	1.790	95.75%	8.803	≤ 8.98	Pass
11ac-VHT20	MCS0	140	5700	3.410	1.920	2.334	2.095	95.75%	8.689	≤ 8.98	Pass
11ac-VHT20	MCS0	144	5720	3.247	1.710	1.724	3.149	95.75%	8.730	≤ 8.98	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11ac-VHT40	MCS0	38	5190	3.180	2.304	2.767	3.002	91.59%	9.228	≤ 14.98	Pass
11ac-VHT40	MCS0	46	5230	6.666	6.585	6.747	6.492	91.59%	13.026	≤ 14.98	Pass
11ac-VHT40	MCS0	54	5270	2.564	2.861	1.982	1.884	91.59%	8.744	≤ 8.98	Pass
11ac-VHT40	MCS0	62	5310	2.408	2.649	1.974	1.747	91.59%	8.611	≤ 8.98	Pass
11ac-VHT40	MCS0	102	5510	2.371	2.841	1.582	2.375	91.59%	8.717	≤ 8.98	Pass
11ac-VHT40	MCS0	110	5550	2.494	2.940	1.543	2.399	91.59%	8.775	≤ 8.98	Pass
11ac-VHT40	MCS0	134	5670	2.266	3.058	1.293	2.726	91.59%	8.787	≤ 8.98	Pass
11ac-VHT40	MCS0	142	5710	2.753	2.734	1.533	2.407	91.59%	8.786	≤ 8.98	Pass
11ac-VHT80	MCS0	42	5210	0.257	-0.071	0.184	0.333	85.49%	6.880	≤ 14.98	Pass
11ac-VHT80	MCS0	58	5290	2.092	1.874	1.349	1.721	85.49%	8.469	≤ 8.98	Pass
11ac-VHT80	MCS0	106	5530	2.245	2.014	1.259	1.642	85.49%	8.507	≤ 8.98	Pass
11ac-VHT80	MCS0	122	5610	2.825	2.523	1.339	1.803	85.49%	8.863	≤ 8.98	Pass
11ac-VHT80	MCS0	138	5690	2.574	2.408	1.332	2.442	85.49%	8.918	≤ 8.98	Pass
11ac-VHT160	MCS0	50	5250	-3.265	-3.660	-3.301	-3.405	76.38%	3.786	≤ 8.98	Pass
11ac-VHT160	MCS0	114	5570	-1.217	-1.487	-2.314	-1.472	76.38%	5.587	≤ 8.98	Pass
11ax-HE20	MCS0	36	5180	8.597	7.997	8.640	8.051	94.93%	14.578	≤ 14.98	Pass
11ax-HE20	MCS0	44	5220	8.592	8.034	8.800	8.260	94.93%	14.678	≤ 14.98	Pass
11ax-HE20	MCS0	48	5240	8.688	8.204	8.547	8.111	94.93%	14.641	≤ 14.98	Pass
11ax-HE20	MCS0	52	5260	3.270	2.191	2.079	2.053	94.93%	8.676	≤ 8.98	Pass
11ax-HE20	MCS0	60	5300	3.310	2.335	2.038	1.874	94.93%	8.673	≤ 8.98	Pass
11ax-HE20	MCS0	64	5320	3.362	2.415	2.158	1.984	94.93%	8.760	≤ 8.98	Pass
11ax-HE20	MCS0	100	5500	2.530	2.232	1.805	2.319	94.93%	8.476	≤ 8.98	Pass
11ax-HE20	MCS0	116	5580	2.863	2.563	1.820	2.505	94.93%	8.701	≤ 8.98	Pass
11ax-HE20	MCS0	140	5700	2.950	2.527	1.846	2.839	94.93%	8.808	≤ 8.98	Pass
11ax-HE20	MCS0	144	5720	2.825	2.816	1.745	2.666	94.93%	8.782	≤ 8.98	Pass

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/ MHz)	Ant 1 PSD (dBm/ MHz)	Ant 2 PSD (dBm/ MHz)	Ant 3 PSD (dBm/ MHz)	Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/M Hz)	Result
11ax-HE40	MCS0	38	5190	3.012	2.055	2.801	1.833	93.33%	8.774	≤ 14.98	Pass
11ax-HE40	MCS0	46	5230	8.075	7.238	8.227	7.507	93.33%	14.101	≤ 14.98	Pass
11ax-HE40	MCS0	54	5270	3.028	2.944	2.027	2.106	93.33%	8.871	≤ 8.98	Pass
11ax-HE40	MCS0	62	5310	3.183	2.943	2.054	2.121	93.33%	8.924	≤ 8.98	Pass
11ax-HE40	MCS0	102	5510	2.599	2.925	2.079	2.740	93.33%	8.917	≤ 8.98	Pass
11ax-HE40	MCS0	110	5550	2.684	2.782	1.870	2.867	93.33%	8.889	≤ 8.98	Pass
11ax-HE40	MCS0	134	5670	2.403	3.146	1.469	2.854	93.33%	8.833	≤ 8.98	Pass
11ax-HE40	MCS0	142	5710	2.837	2.379	1.392	1.924	93.33%	8.486	≤ 8.98	Pass
11ax-HE80	MCS0	42	5210	2.851	1.852	2.539	1.908	93.90%	8.602	≤ 14.98	Pass
11ax-HE80	MCS0	58	5290	2.994	2.343	1.774	1.359	93.90%	8.455	≤ 8.98	Pass
11ax-HE80	MCS0	106	5530	2.535	2.903	1.578	2.046	93.90%	8.588	≤ 8.98	Pass
11ax-HE80	MCS0	122	5610	2.961	2.868	1.795	1.776	93.90%	8.681	≤ 8.98	Pass
11ax-HE80	MCS0	122	5690	2.979	2.644	1.291	2.310	93.90%	8.644	≤ 8.98	Pass
11ax-HE160	MCS0	50	5250	2.445	1.745	2.784	1.061	94.89%	8.307	≤ 8.98	Pass
11ax-HE160	MCS0	114	5570	-0.577	-0.431	-1.686	-1.078	94.89%	5.333	≤ 8.98	Pass

Note 1: When EUT duty cycle ≥ 98%,

the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/MHz).

When EUT duty cycle < 98%,

the total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\} + 10 \cdot \log (1/\text{Duty Cycle})$ (dBm/MHz).

Note 2:

For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) = 17 - (8.02 - 6) = 14.98dBm/MHz.

For 5250 - 5350MHz and 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11 - (8.02 - 6) = 8.98dBm/MHz.

Product	AX6000 Ceiling Mount Wi-Fi 6 Access Point	Test Engineer	Xuan Yu
Test Site	SR6	Test Date	2023/07/07~2023/07/13
Test Item	Power Spectral Density (U-NII-3) CDD Mode		

Test Mode	Data Rate/MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/510KHz)	Ant 1 PSD (dBm/510KHz)	Ant 2 PSD (dBm/510KHz)	Ant 3 PSD (dBm/510KHz)	Duty Cycle (%)	Total PSD (dBm/510kHz)	Limit (dBm/500kHz)	Result
11a	6Mbps	149	5745	7.313	6.744	7.156	6.352	95.83%	13.113	≤ 27.98	Pass
11a	6Mbps	157	5785	6.894	6.253	6.785	6.608	95.83%	12.847	≤ 27.98	Pass
11a	6Mbps	165	5825	6.281	5.675	6.242	6.494	95.83%	12.389	≤ 27.98	Pass
11ac-VHT20	MCS0	149	5745	6.654	6.429	7.370	6.784	95.75%	13.033	≤ 27.98	Pass
11ac-VHT20	MCS0	157	5785	6.943	6.624	7.369	7.101	95.75%	13.227	≤ 27.98	Pass
11ac-VHT20	MCS0	165	5825	6.627	6.694	6.762	7.177	95.75%	13.030	≤ 27.98	Pass
11ac-VHT40	MCS0	151	5755	4.570	3.872	4.703	4.012	91.59%	10.706	≤ 27.98	Pass
11ac-VHT40	MCS0	159	5795	5.477	4.476	5.268	4.869	91.59%	11.441	≤ 27.98	Pass
11ac-VHT80	MCS0	155	5775	1.588	0.844	1.997	1.013	85.49%	8.086	≤ 27.98	Pass
11ax-HE20	MCS0	149	5745	6.768	6.121	7.052	5.926	94.93%	12.738	≤ 27.98	Pass
11ax-HE20	MCS0	157	5785	7.425	6.740	7.215	6.428	94.93%	13.216	≤ 27.98	Pass
11ax-HE20	MCS0	165	5825	6.557	6.424	6.707	6.513	94.93%	12.798	≤ 27.98	Pass
11ax-HE40	MCS0	151	5755	5.792	5.076	5.483	4.293	93.33%	11.517	≤ 27.98	Pass
11ax-HE40	MCS0	159	5795	5.933	5.243	5.778	4.772	93.33%	11.776	≤ 27.98	Pass
11ax-HE80	MCS0	155	5775	1.724	1.309	1.785	1.068	93.90%	7.775	≤ 27.98	Pass

Note 1: When EUT duty cycle ≥ 98%,

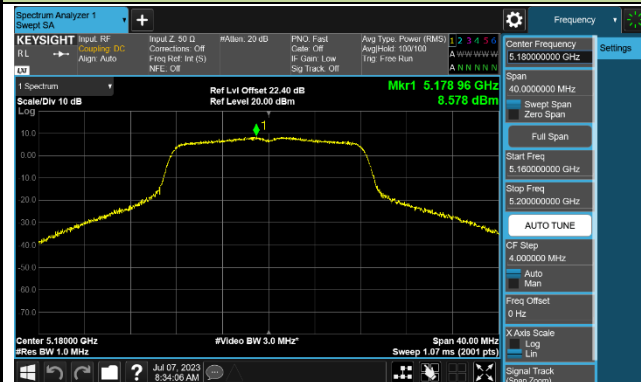
the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/510kHz).

When EUT duty cycle < 98%, the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/510kHz) + $10 \cdot \log (1/\text{Duty Cycle})$.

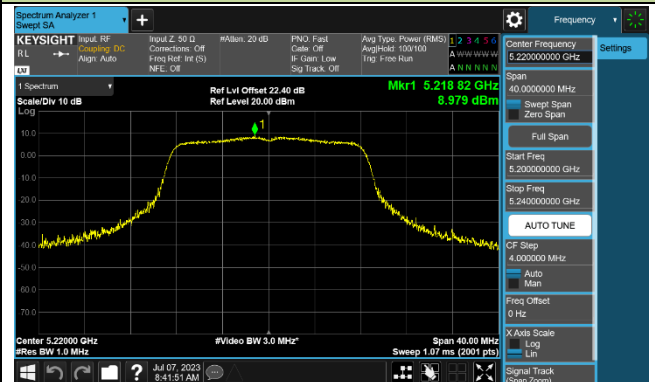
Note 2: PSD Limit (dBm/500kHz) = 30 - (8.02 - 6) = 27.98 (dBm/500kHz).

802.11a Power Spectral Density - Ant 0

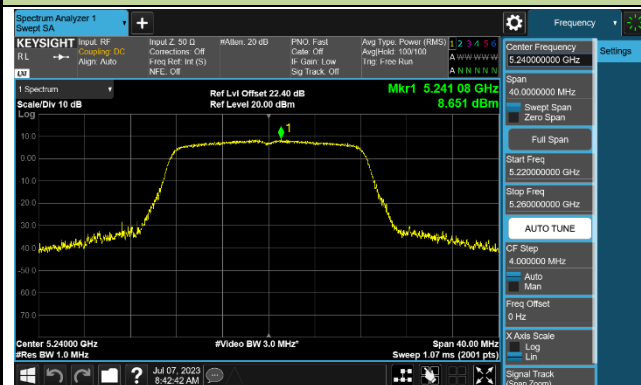
Channel 36 (5180MHz)



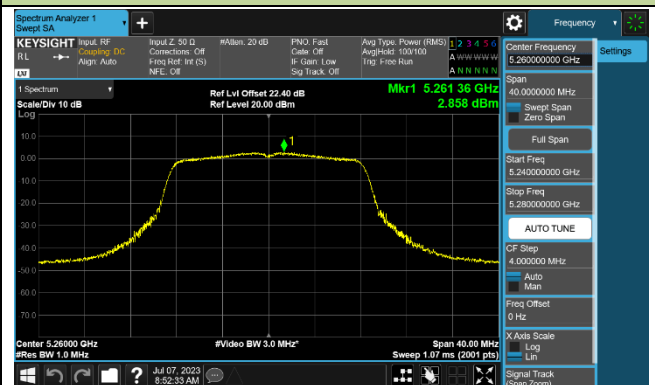
Channel 44 (5220MHz)



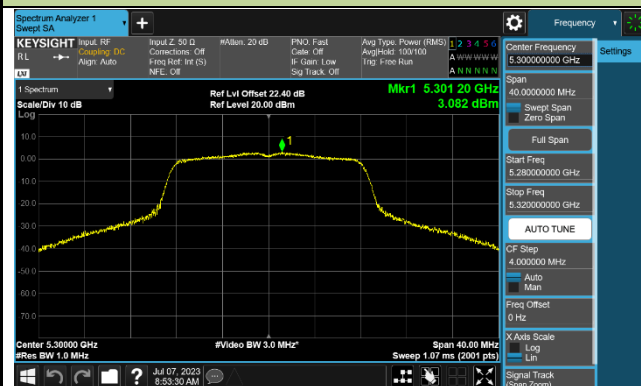
Channel 48 (5240MHz)



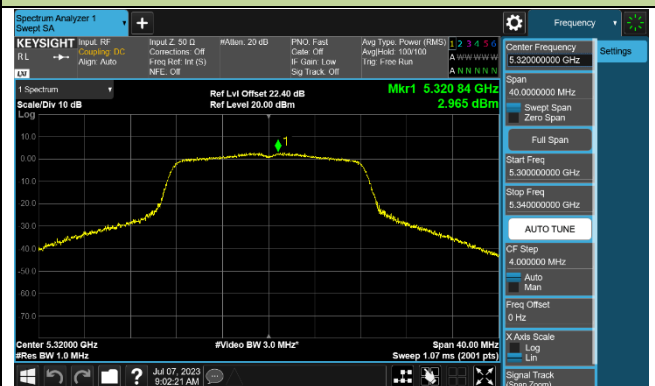
Channel 52 (5260MHz)



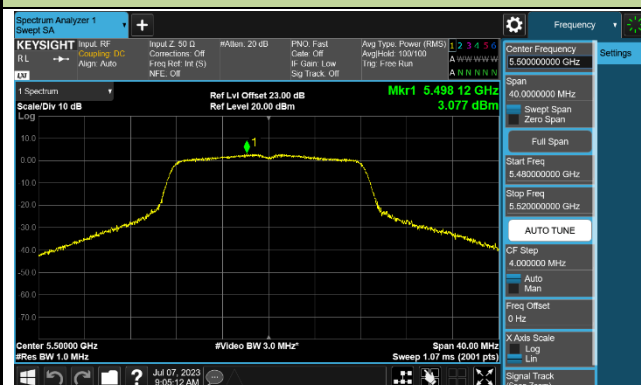
Channel 60 (5300MHz)



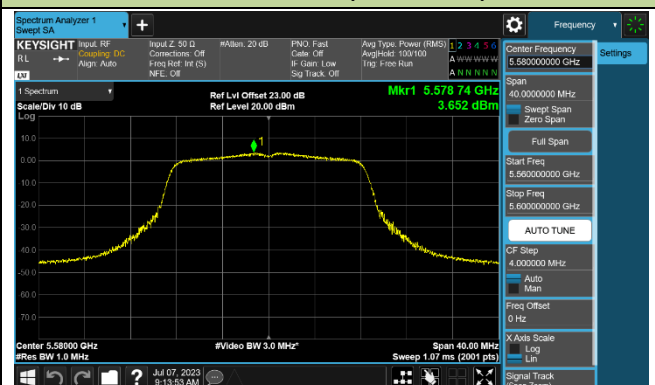
Channel 64 (5320MHz)

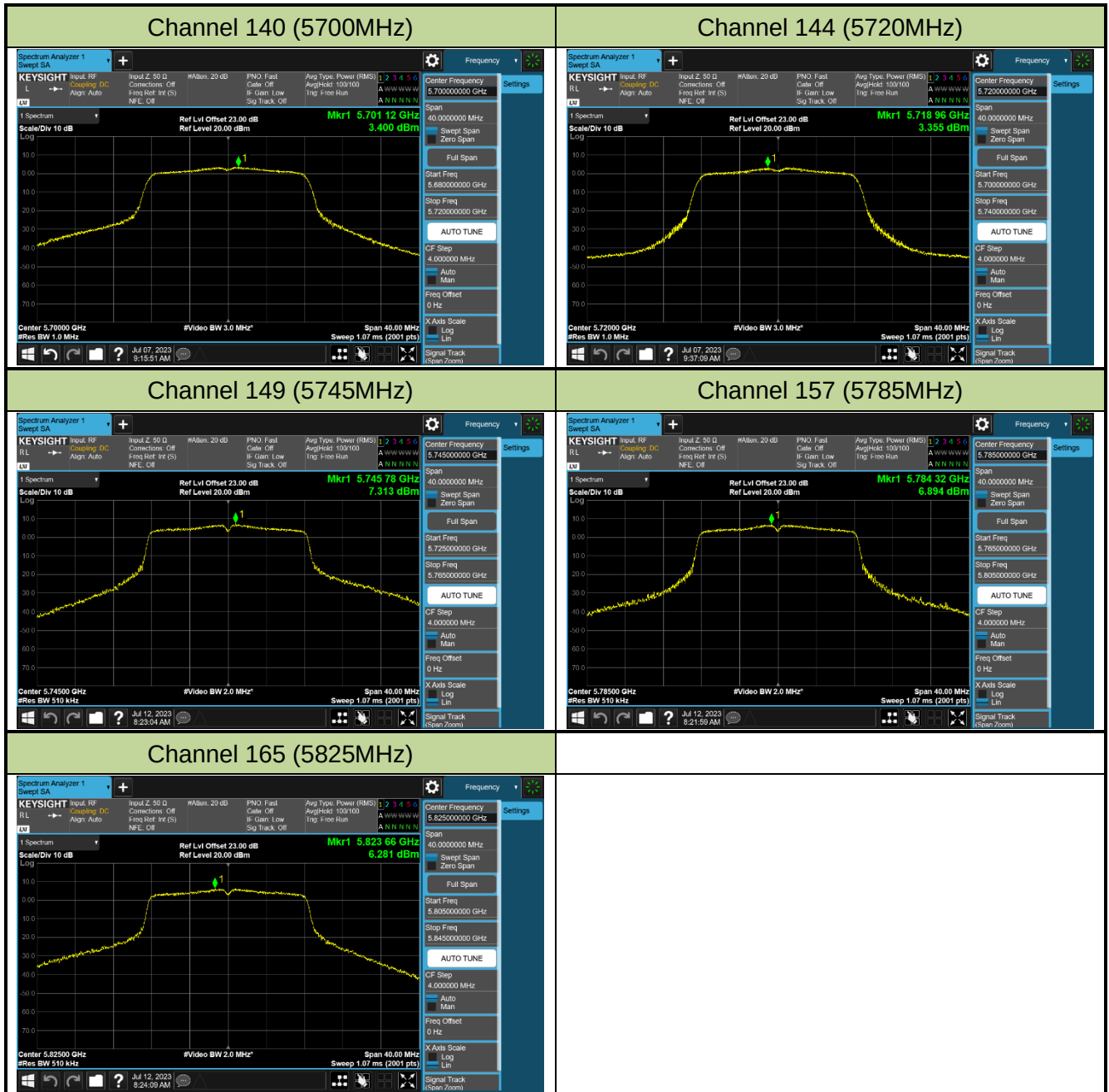


Channel 100 (5500MHz)



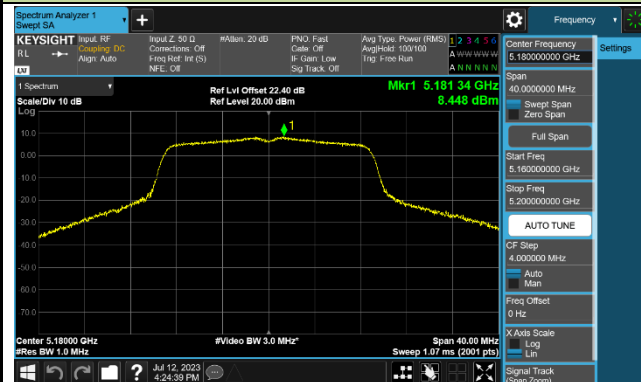
Channel 116 (5580MHz)



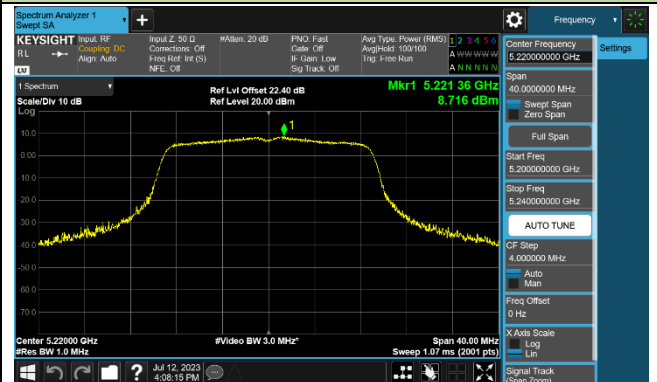


802.11ac-VHT20 Power Spectral Density - Ant 0

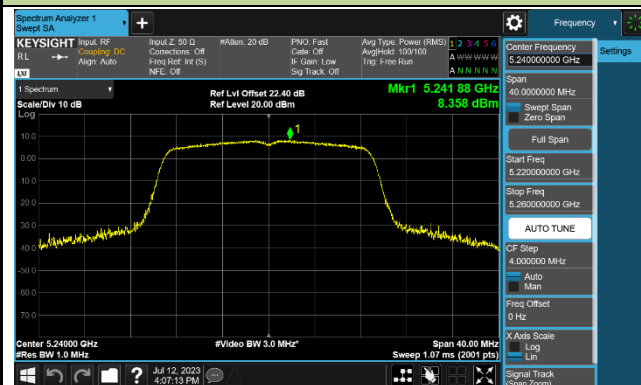
Channel 36 (5180MHz)



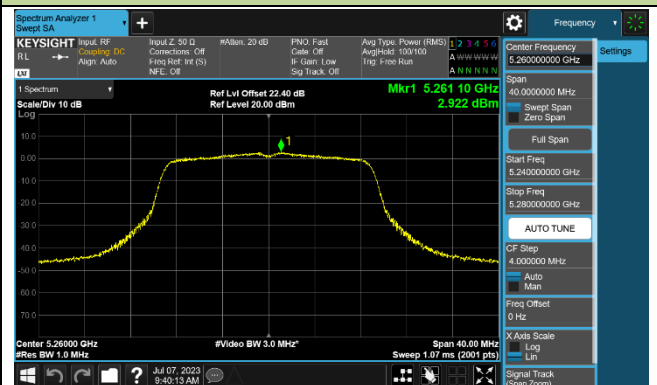
Channel 44 (5220MHz)



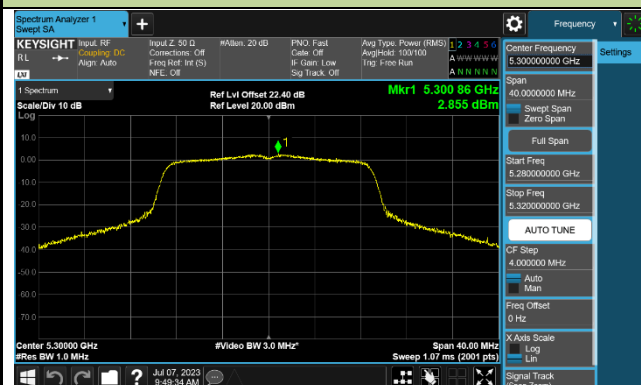
Channel 48 (5240MHz)



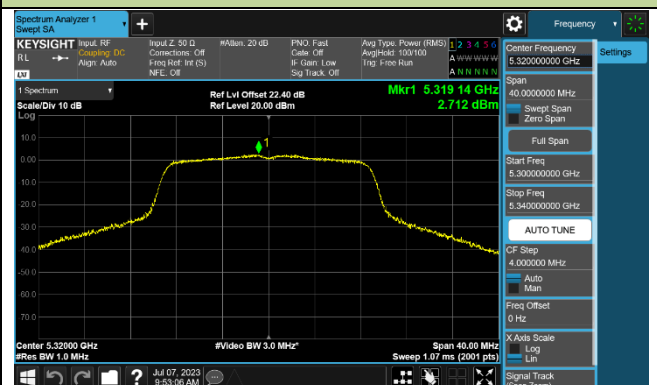
Channel 52 (5260MHz)



Channel 60 (5300MHz)



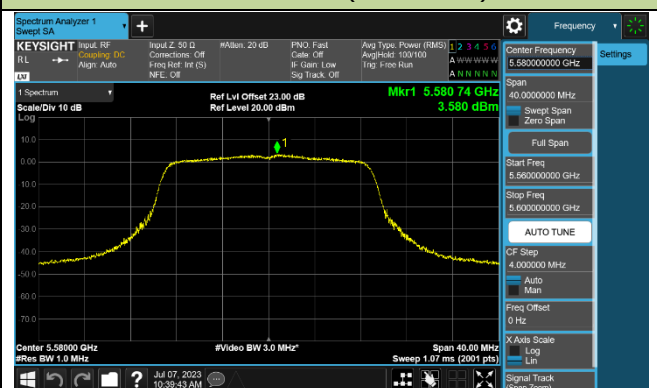
Channel 64 (5320MHz)

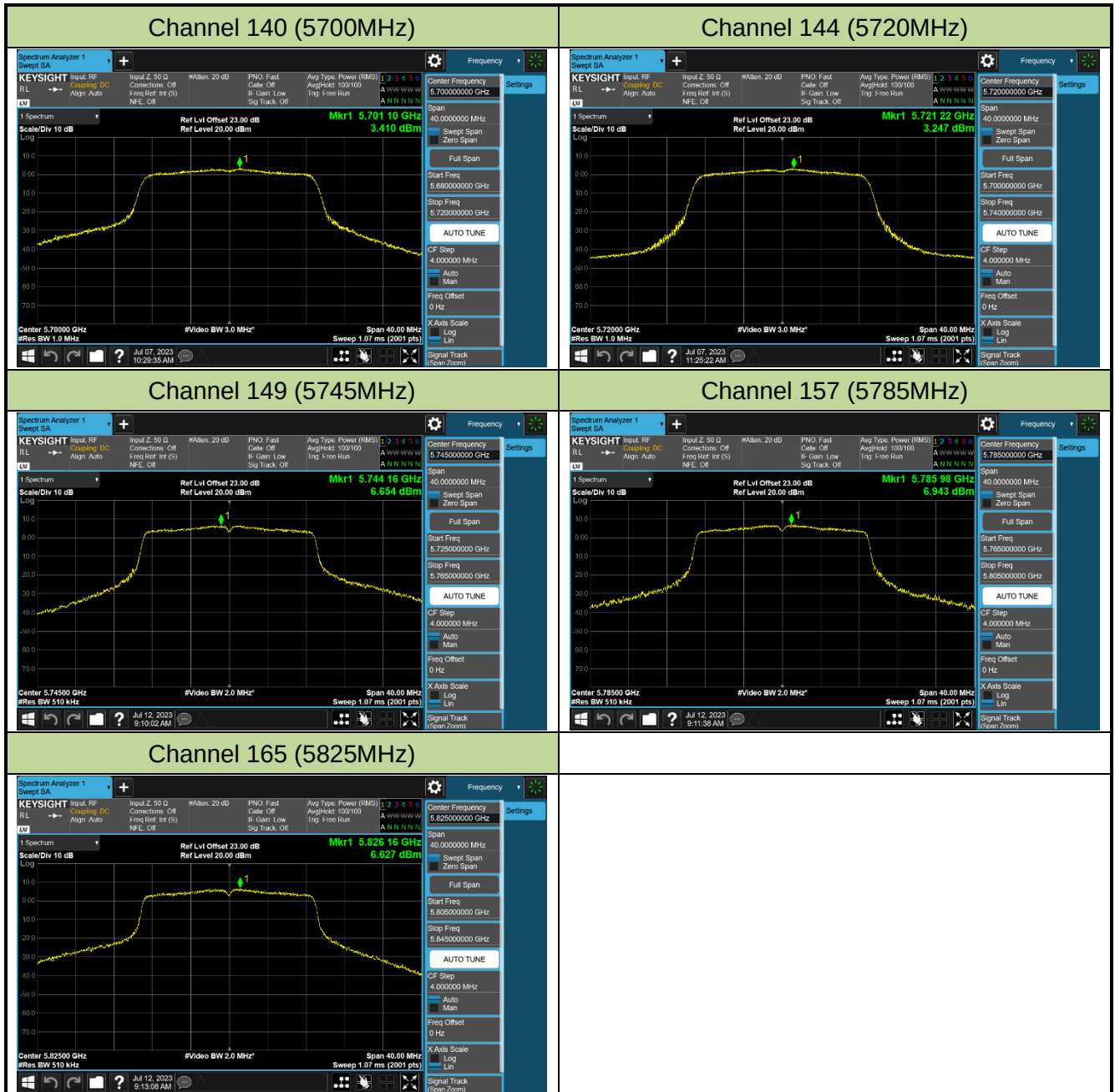


Channel 100 (5500MHz)



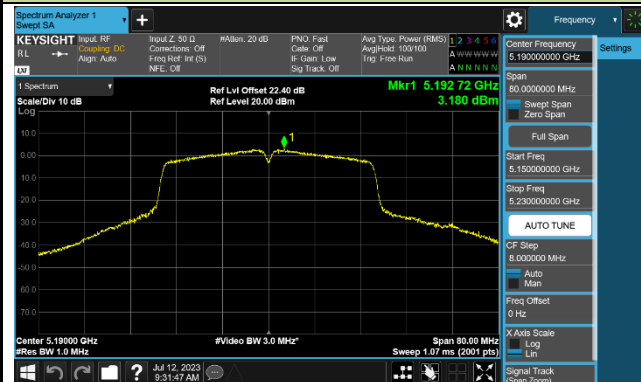
Channel 116 (5580MHz)



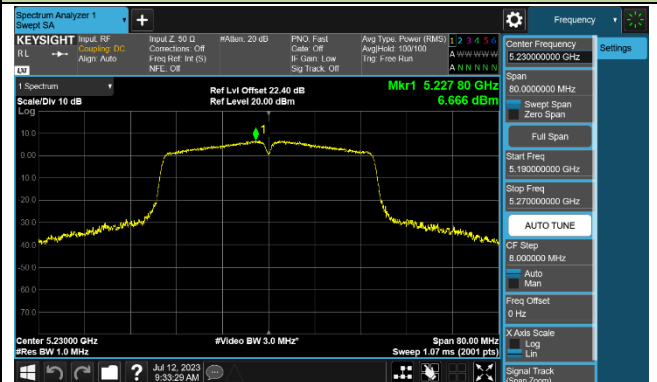


802.11ac-VHT40 Power Spectral Density - Ant 0

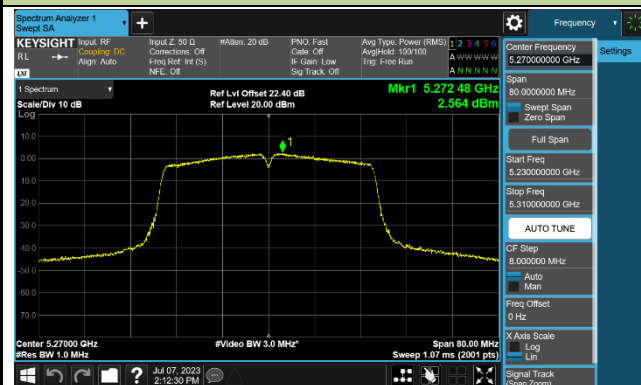
Channel 38 (5190MHz)



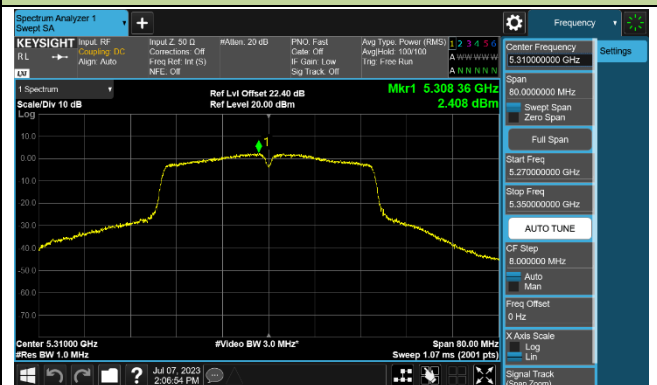
Channel 46 (5230MHz)



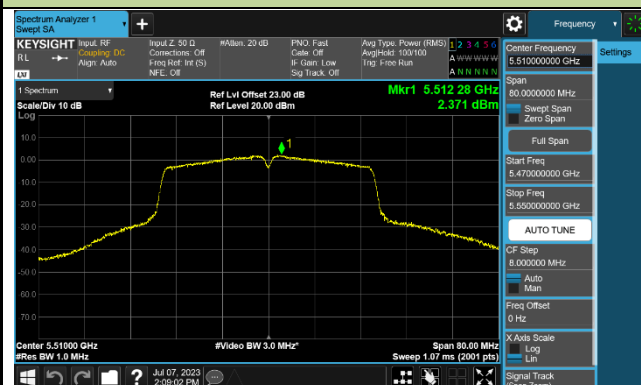
Channel 54 (5270MHz)



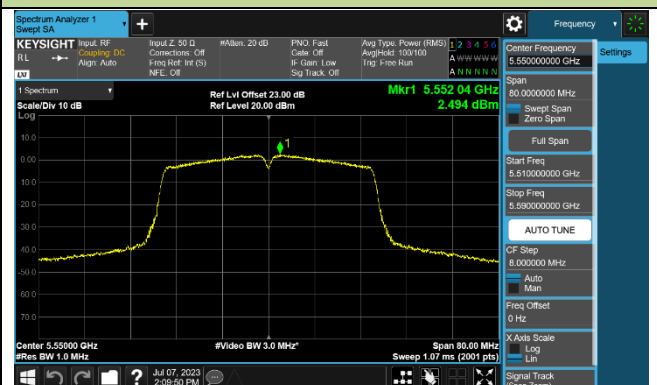
Channel 62 (5310MHz)



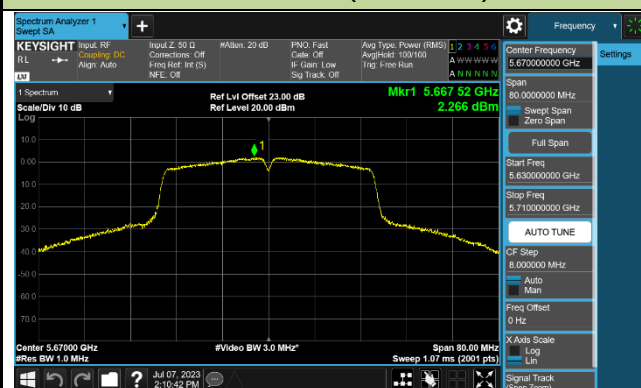
Channel 102 (5510MHz)



Channel 110 (5550MHz)



Channel 134 (5670MHz)



Channel 142 (5710MHz)

