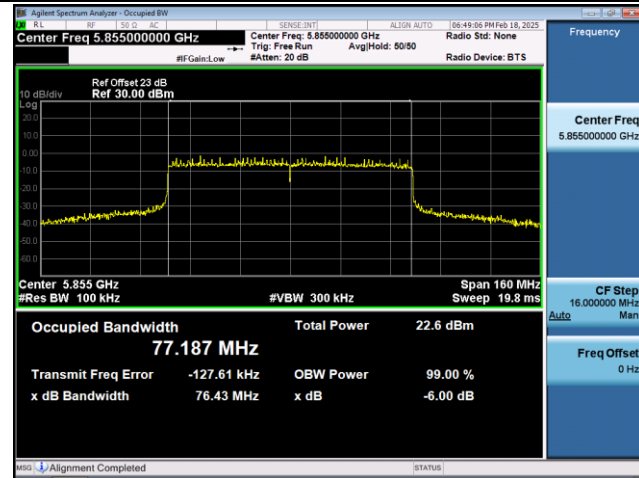


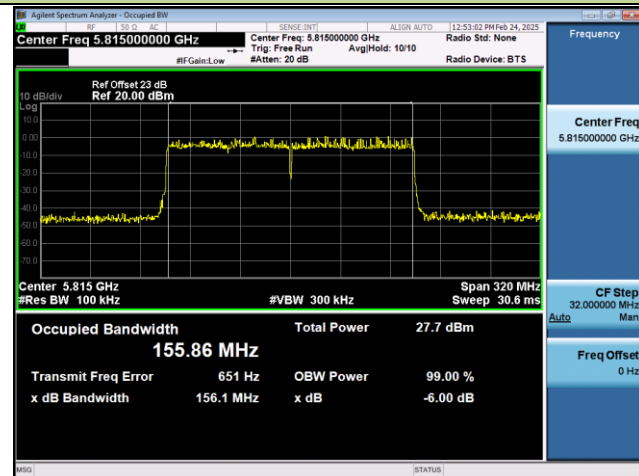
802.11 ax-HE80 6dB Bandwidth

Channel 171 (5855MHz)



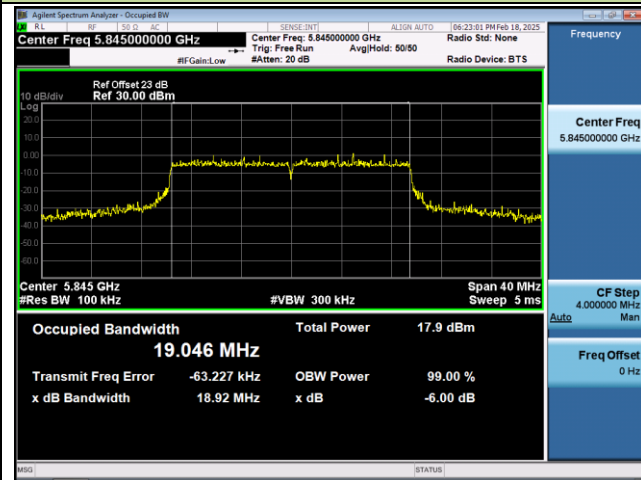
802.11 ax-HE160 6dB Bandwidth

Channel 163 (5815MHz)

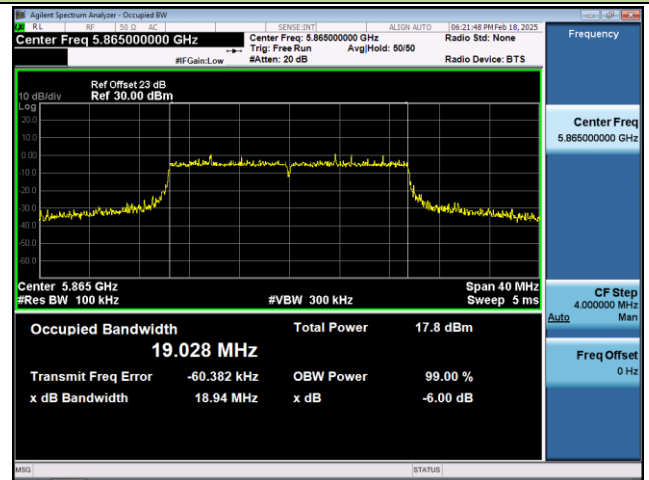


802.11be-EHT20 6dB Bandwidth

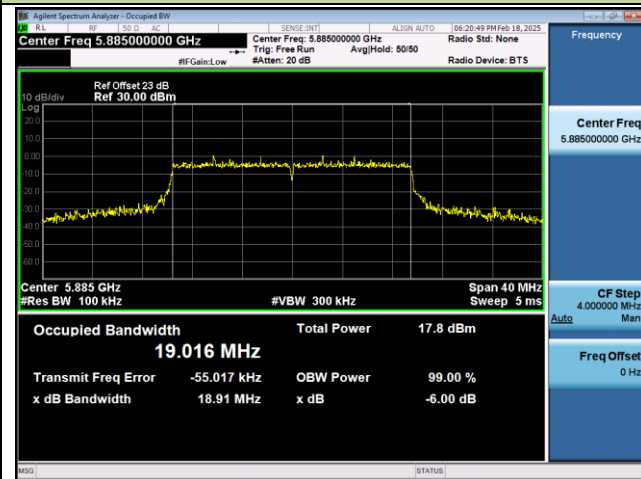
Channel 169 (5845MHz)



Channel 173 (5865MHz)



Channel 177 (5885MHz)



802.11be-EHT40 6dB Bandwidth

Channel 167 (5835MHz)

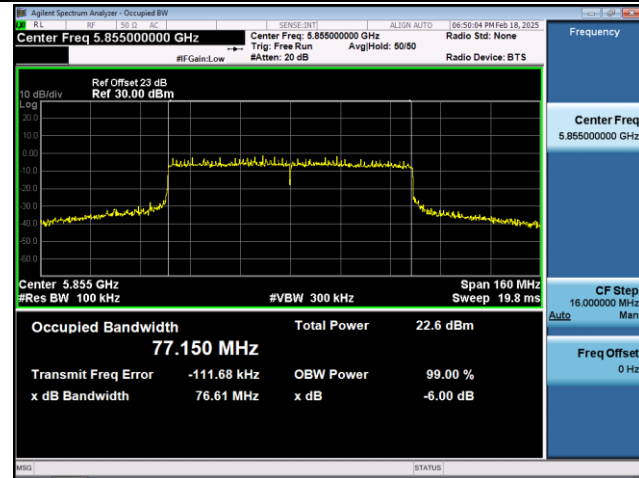


Channel 175 (5875MHz)



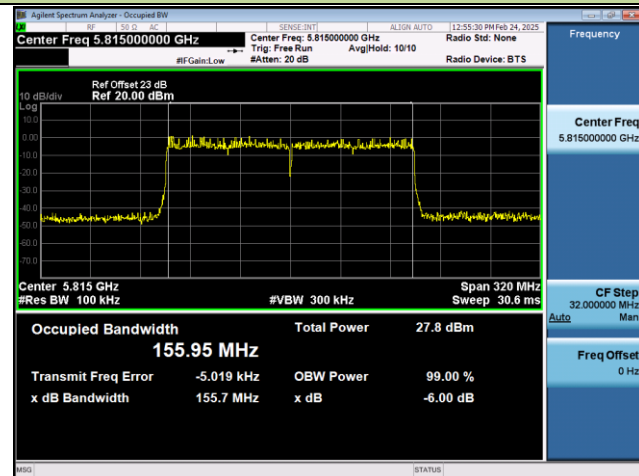
802.11be-EHT80 6dB Bandwidth

Channel 171 (5855MHz)



802.11be-EHT160 6dB Bandwidth

Channel 163 (5815MHz)



7.4. Output Power Measurement

7.4.1. Test Limit

For an indoor access point operating in the 5.850-5.895 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 33 dBm. Indoor access points operating on a channel that spans the 5.725-5.850 GHz and 5.850-5.895 GHz bands must not exceed an e.i.r.p. of 36 dBm.

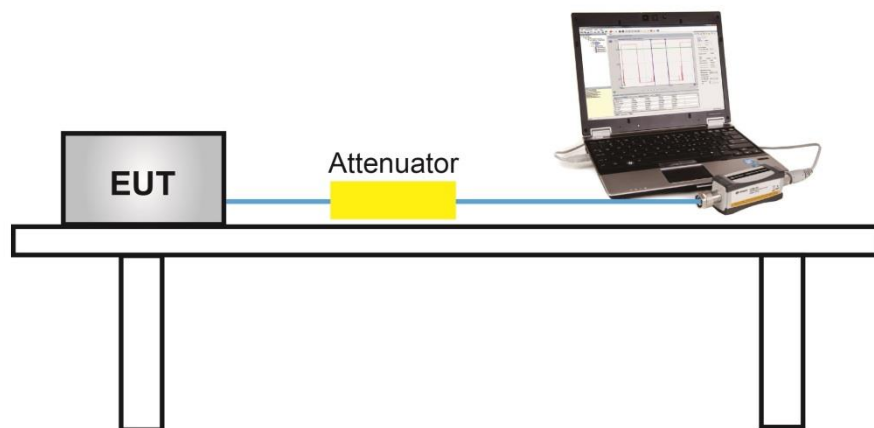
7.4.2. Test Procedure Used

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	BE6500 Dual-Band Wi-Fi 7 Gaming Router	Test	Peter
Test Site	SR6	Test Date	2025/2/18
Test Mode	CDD Mode		

Test Mode	Data Rate	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Ant Gain (dBi)	Total EIRP Power (dBm)	Average Power Limit (dBm)	Result
11a	6Mbps	169	5845	13.42	13.83	12.84	12.91	6.22	25.51	≤ 36.00	Pass
11a	6Mbps	173	5865	13.46	13.86	12.84	12.75	6.22	25.49	≤ 36.00	Pass
11a	6Mbps	177	5885	13.06	13.72	12.43	12.73	6.22	25.25	≤ 36.00	Pass
11ac-VHT20	MCS0	169	5845	13.45	13.85	13.04	12.95	6.22	25.58	≤ 36.00	Pass
11ac-VHT20	MCS0	173	5865	13.46	13.84	12.97	12.82	6.22	25.53	≤ 36.00	Pass
11ac-VHT20	MCS0	177	5885	13.44	13.80	12.83	12.84	6.22	25.49	≤ 36.00	Pass
11ac-VHT40	MCS0	167	5835	16.33	16.50	15.88	15.79	6.22	28.38	≤ 36.00	Pass
11ac-VHT40	MCS0	175	5875	16.14	16.42	15.76	15.78	6.22	28.27	≤ 36.00	Pass
11ac-VHT80	MCS0	171	5855	19.21	19.43	19.30	18.77	6.22	31.43	≤ 36.00	Pass
11ac-VHT160	MCS0	163	5815	19.90	20.15	20.04	19.00	6.22	32.04	≤ 36.00	Pass
11ax-HE20	MCS0	169	5845	13.64	13.88	13.21	13.01	6.22	25.69	≤ 36.00	Pass
11ax-HE20	MCS0	173	5865	13.54	13.89	13.19	13.06	6.22	25.67	≤ 36.00	Pass
11ax-HE20	MCS0	177	5885	13.58	13.87	13.11	12.92	6.22	25.63	≤ 36.00	Pass
11ax-HE40	MCS0	167	5835	16.45	16.77	15.98	15.96	6.22	28.54	≤ 36.00	Pass
11ax-HE40	MCS0	175	5875	16.36	16.60	15.91	15.96	6.22	28.46	≤ 36.00	Pass
11ax-HE80	MCS0	171	5855	19.20	19.43	19.40	18.66	6.22	31.42	≤ 36.00	Pass
11ax-HE160	MCS0	163	5815	21.32	21.33	21.62	20.73	6.22	33.50	≤ 36.00	Pass
11be-EHT20	MCS0	169	5845	13.67	14.09	13.14	12.93	6.22	25.72	≤ 36.00	Pass
11be-EHT20	MCS0	173	5865	13.56	14.01	13.21	12.99	6.22	25.70	≤ 36.00	Pass
11be-EHT20	MCS0	177	5885	13.55	13.86	13.05	13.01	6.22	25.62	≤ 36.00	Pass
11be-EHT40	MCS0	167	5835	16.39	16.68	15.97	15.98	6.22	28.51	≤ 36.00	Pass
11be-EHT40	MCS0	175	5875	16.28	16.42	15.90	15.94	6.22	28.38	≤ 36.00	Pass
11be-EHT80	MCS0	171	5855	19.30	19.51	19.45	18.60	6.22	31.47	≤ 36.00	Pass
11be-EHT160	MCS0	163	5815	21.28	21.13	21.60	20.55	6.22	33.40	≤ 36.00	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 5725 - 5850MHz Bands: Average Power Limit (dBm) = 36 dBm.

7.5. Power Spectral Density Measurement

7.5.1. Test Limit

For an indoor access point operating in the 5.850-5.895 GHz band, the maximum power spectral density must not exceed 20 dBm e.i.r.p. in any 1-megahertz band.

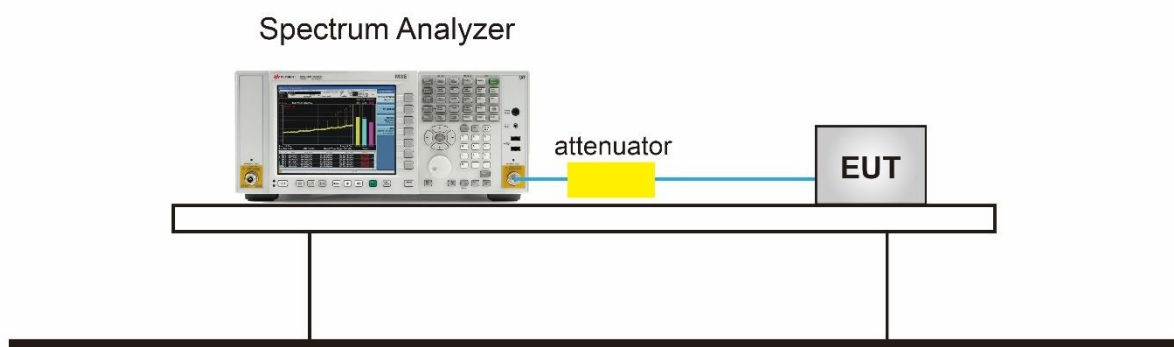
7.5.2. Test Procedure Used

KDB 789033 D02v02r01-SectionF

7.5.3. 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
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.

7.5.4. Test Setup



7.5.5.Test Result

Product	BE6500 Dual-Band Wi-Fi 7 Gaming Router	Test Engineer	Peter
Test Site	SR6	Test Date	2025/2/18
Mode	Power Spectral Density (U-NII- 4) CDD Mode		

Test Mode	Data Rate	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Duty Cycle (%)	Ant Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
11a	6Mbps	169	5845	2.046	2.213	1.666	0.899	95.12%	11.90	19.873	≤20.00	Pass
11a	6Mbps	173	5865	2.079	2.577	1.374	0.917	95.12%	11.90	19.921	≤20.00	Pass
11a	6Mbps	177	5885	1.957	1.983	1.731	0.761	95.12%	11.90	19.773	≤20.00	Pass
11ac-VHT20	MCS0	169	5845	1.780	2.311	1.395	0.989	98.32%	11.90	19.640	≤20.00	Pass
11ac-VHT20	MCS0	173	5865	1.957	2.133	1.483	0.755	98.32%	11.90	19.608	≤20.00	Pass
11ac-VHT20	MCS0	177	5885	2.007	1.849	1.443	0.908	98.32%	11.90	19.566	≤20.00	Pass
11ac-VHT40	MCS0	167	5835	1.565	1.742	1.314	1.016	96.86%	11.90	19.477	≤20.00	Pass
11ac-VHT40	MCS0	175	5875	1.723	1.626	1.649	1.030	96.86%	11.90	19.575	≤20.00	Pass
11ac-VHT80	MCS0	171	5855	1.849	2.035	2.005	0.950	93.51%	11.90	19.944	≤20.00	Pass
11ac-VHT160	MCS0	163	5815	0.125	0.021	0.478	-0.736	88.95%	11.90	18.423	≤20.00	Pass
11ax-HE20	MCS0	169	5845	1.865	2.169	1.522	0.655	97.96%	11.90	19.599	≤20.00	Pass
11ax-HE20	MCS0	173	5865	1.926	1.979	1.442	0.778	97.96%	11.90	19.568	≤20.00	Pass
11ax-HE20	MCS0	177	5885	1.805	2.073	1.260	0.917	96.06%	11.90	19.632	≤20.00	Pass
11ax-HE40	MCS0	167	5835	1.752	2.050	1.806	1.025	96.06%	11.90	19.770	≤20.00	Pass
11ax-HE40	MCS0	175	5875	1.736	1.886	1.636	1.085	96.06%	11.90	19.691	≤20.00	Pass
11ax-HE80	MCS0	171	5855	1.519	1.815	1.860	1.157	92.39%	11.90	19.861	≤20.00	Pass
11ax-VHT160	MCS0	163	5815	1.338	1.437	1.743	-0.116	87.73%	11.90	19.646	≤20.00	Pass
11be-EHT20	MCS0	169	5845	1.835	2.049	1.399	1.195	97.84%	11.90	19.648	≤20.00	Pass
11be-EHT20	MCS0	173	5865	2.089	1.964	1.408	0.695	97.84%	11.90	19.588	≤20.00	Pass
11be-EHT20	MCS0	177	5885	1.847	1.986	1.406	1.078	97.84%	11.90	19.609	≤20.00	Pass
11be-EHT40	MCS0	167	5835	1.893	1.933	1.571	1.080	95.95%	11.90	19.733	≤20.00	Pass
11be-EHT40	MCS0	175	5875	1.802	1.965	1.715	1.174	95.95%	11.90	19.774	≤20.00	Pass
11be-EHT80	MCS0	171	5855	1.621	2.100	2.088	1.148	93.21%	11.90	19.983	≤20.00	Pass
11be-EHT160	MCS0	163	5815	1.184	1.425	1.907	0.152	87.80%	11.90	19.699	≤20.00	Pass

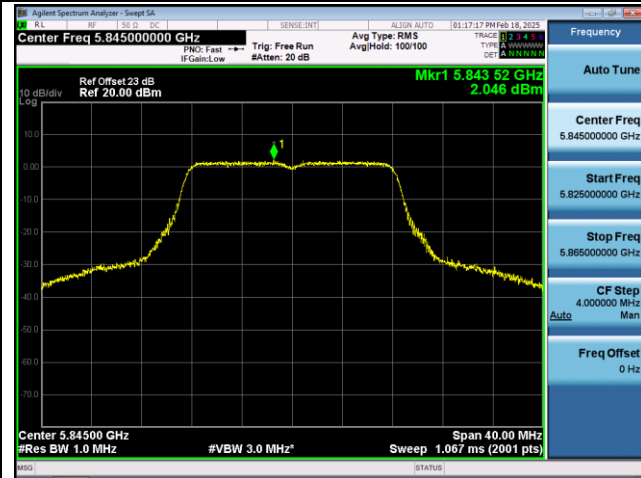
Note 1: The total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 Average Power} / 10)} + 10^{(\text{Ant 1 Average Power} / 10)} + 10^{(\text{Ant 2 Average Power} / 10)} + 10^{(\text{Ant 3 Average Power} / 10)}\} + 10 \cdot \log (1/\text{Duty Cycle})$ (dBm/MHz).

Note 2: EIRP PSD (dBm/MHz) = Total PSD (dBm/MHz) + Antenna Gain (dBi).

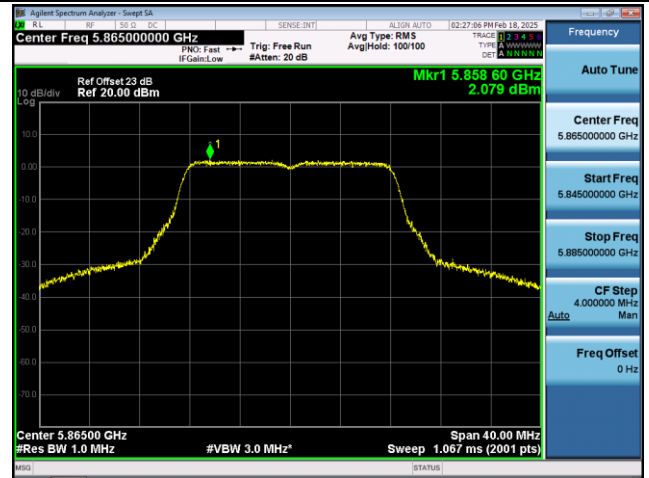
Note 3: For Channels span the 5.725-5.850 GHz and 5.850-5.895 GHz bands, we record the maximum level of 5.725-5.850 GHz and 5.850-5.895 GHz with RBW=1MHz, and the level complied with the 5.850-5.895 GHz EIRP PSD Limit.

802.11a Power Spectral Density - Ant 0

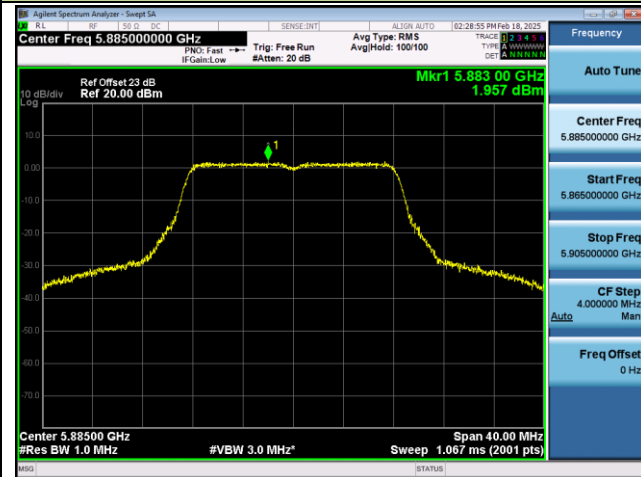
Channel 169 (5845MHz)



Channel 173 (5865MHz)

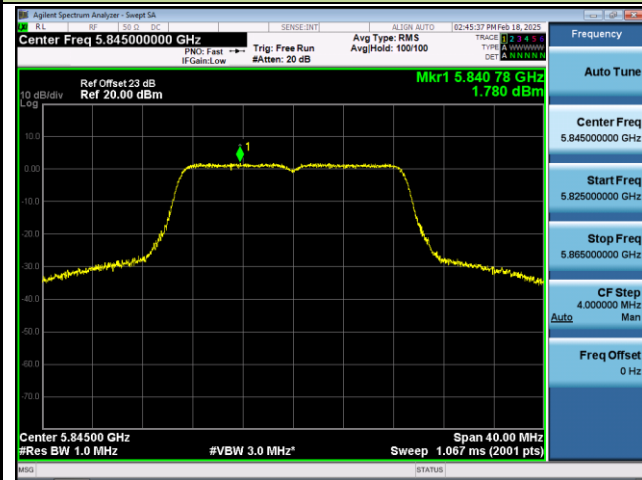


Channel 177 (5885MHz)



802.11ac-VHT20 Power Spectral Density - Ant 0

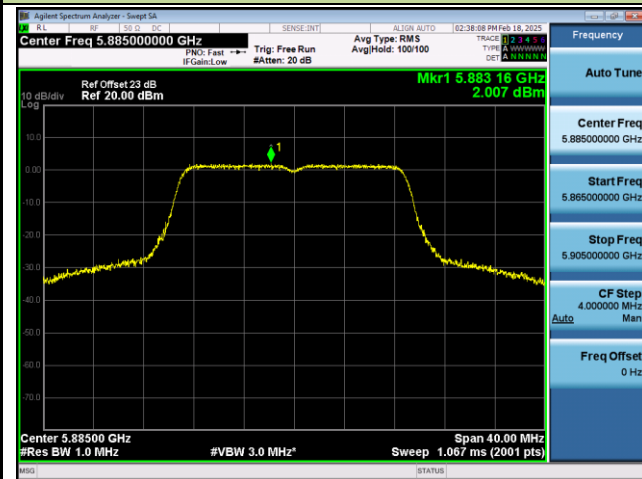
Channel 169 (5845MHz)



Channel 173 (5865MHz)

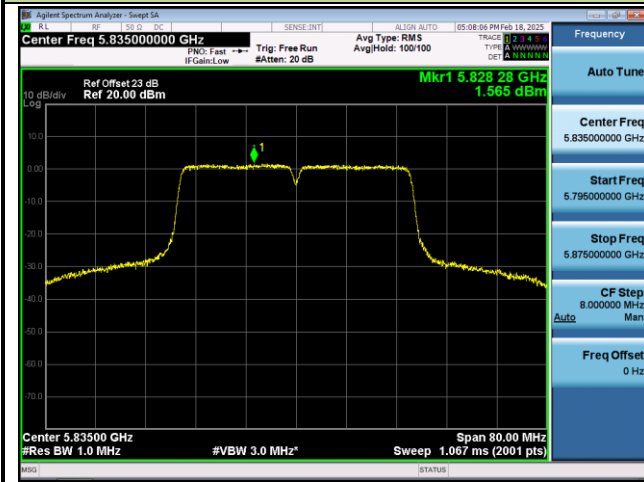


Channel 177 (5885MHz)



802.11ac-VHT40 Power Spectral Density - Ant 0

Channel 167 (5835MHz)

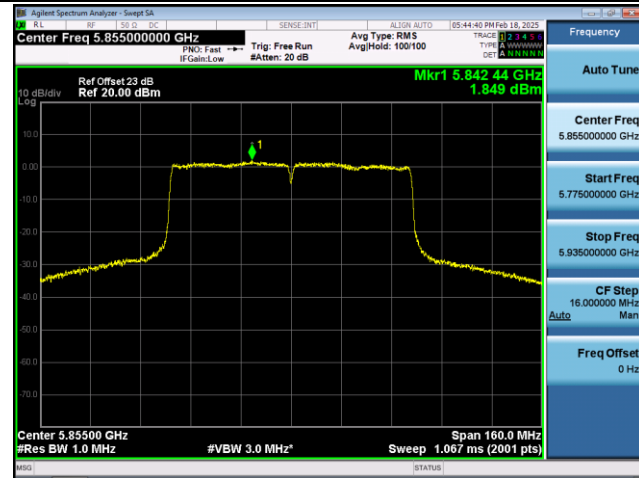


Channel 175 (5875MHz)



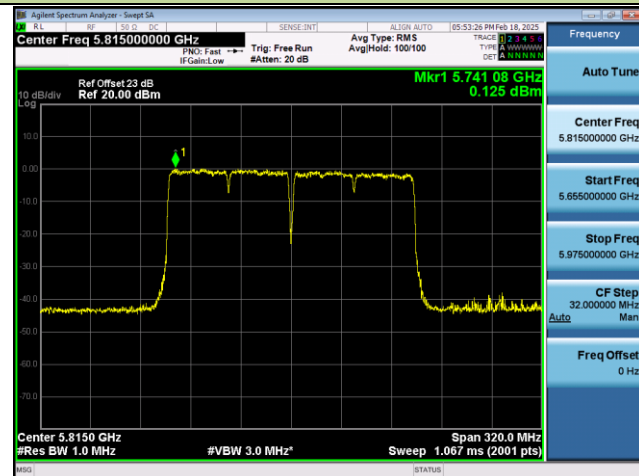
802.11ac-VHT80 Power Spectral Density - Ant 0

Channel 171 (5855MHz)



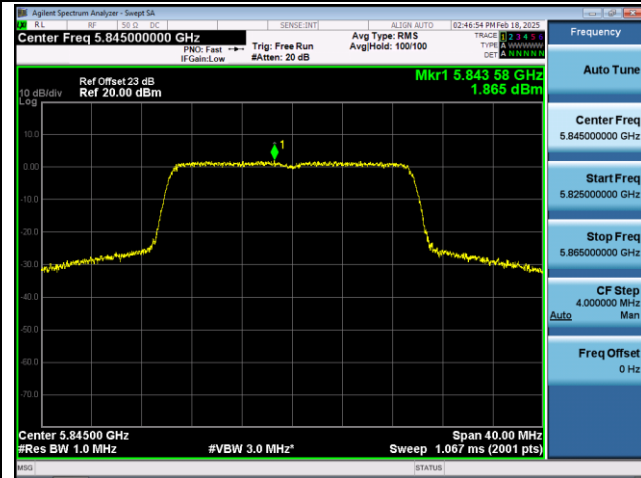
802.11ac-VHT160 Power Spectral Density - Ant 0

Channel 163 (5815MHz)

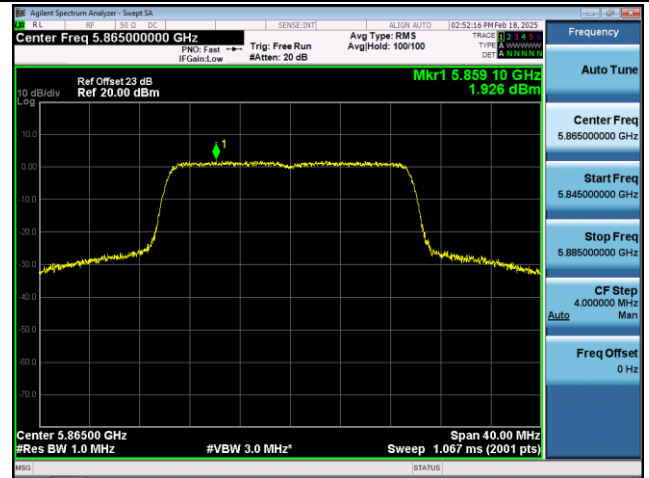


802.11ax-HE20 Power Spectral Density - Ant 0

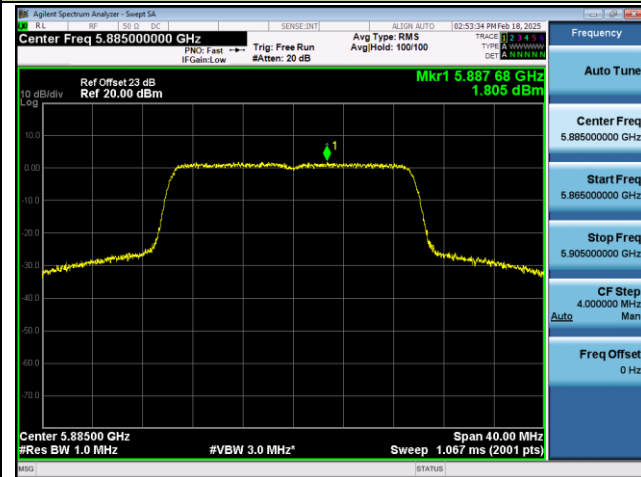
Channel 169 (5845MHz)



Channel 173 (5865MHz)

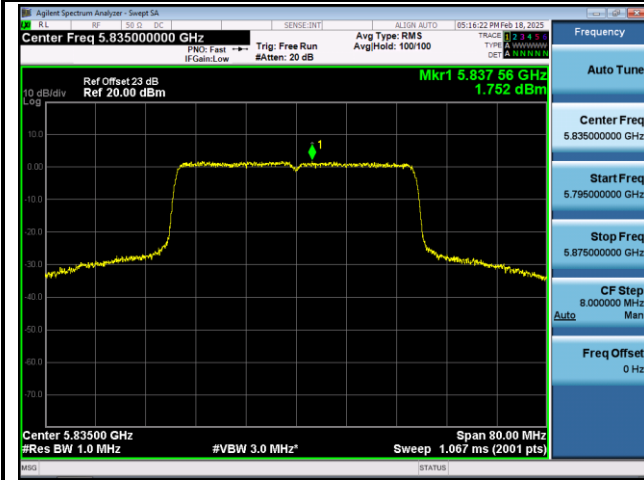


Channel 177 (5885MHz)



802.11 ax-HE40 Power Spectral Density - Ant 0

Channel 167 (5835MHz)

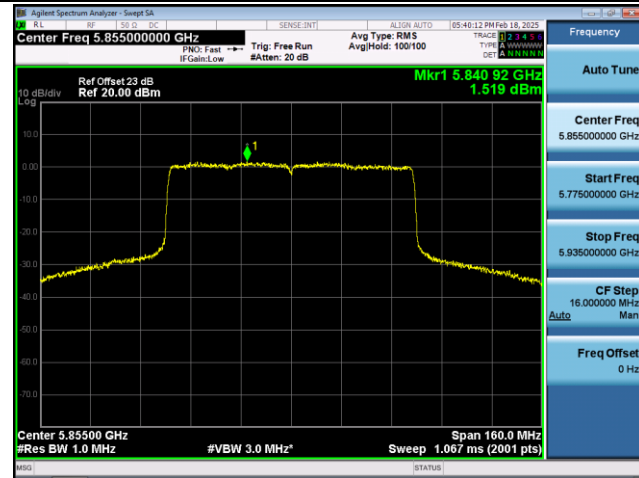


Channel 175 (5875MHz)



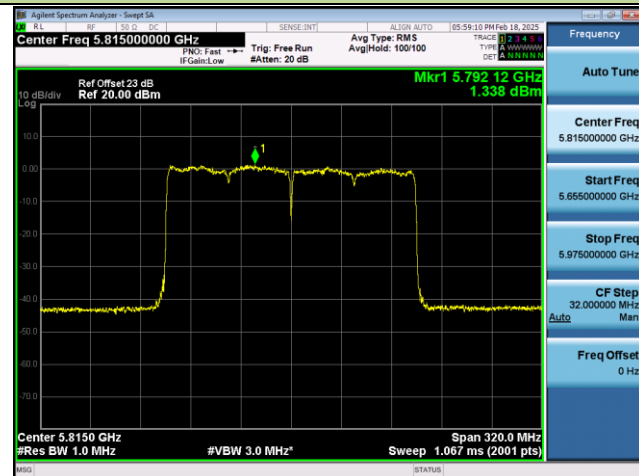
802.11 ax-HE80 Power Spectral Density - Ant 0

Channel 171 (5855MHz)



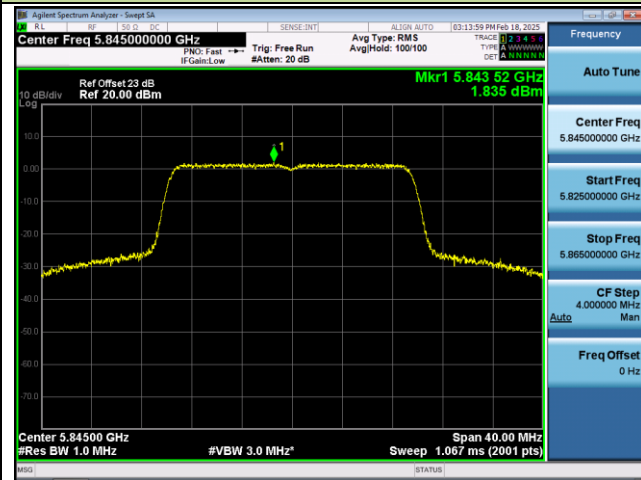
802.11 ax-HE160 Power Spectral Density - Ant 0

Channel 163 (5815MHz)

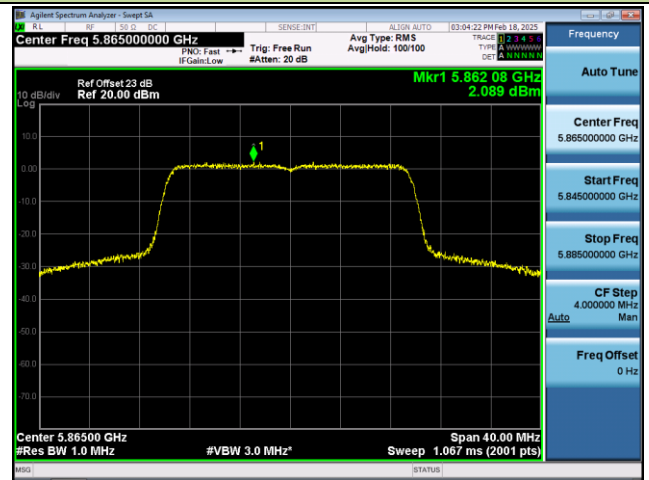


802.11 be-EHT20 Power Spectral Density - Ant 0

Channel 169 (5845MHz)



Channel 173 (5865MHz)

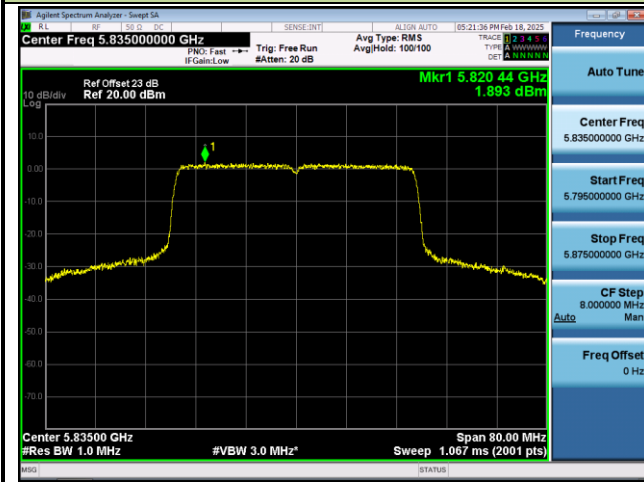


Channel 177 (5885MHz)



802.11 be-EHT40 Power Spectral Density - Ant 0

Channel 167 (5835MHz)

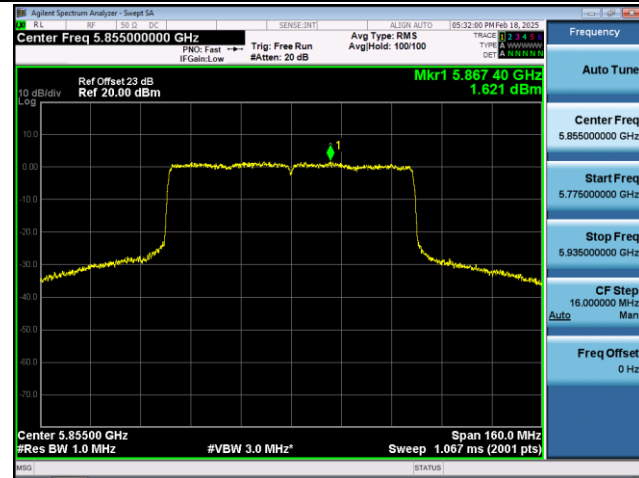


Channel 175 (5875MHz)



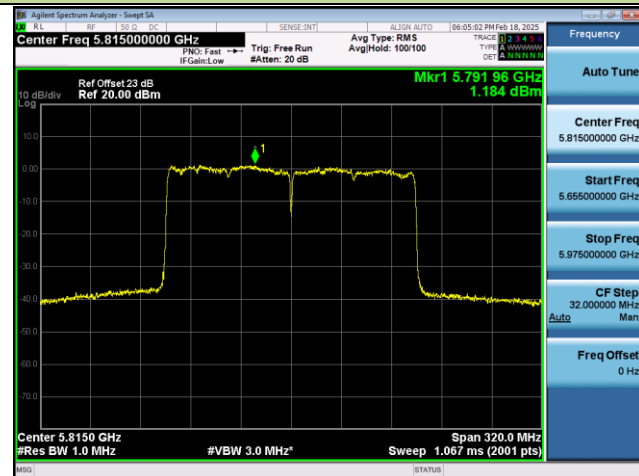
802.11 be-EHT80 Power Spectral Density - Ant 0

Channel 171 (5855MHz)



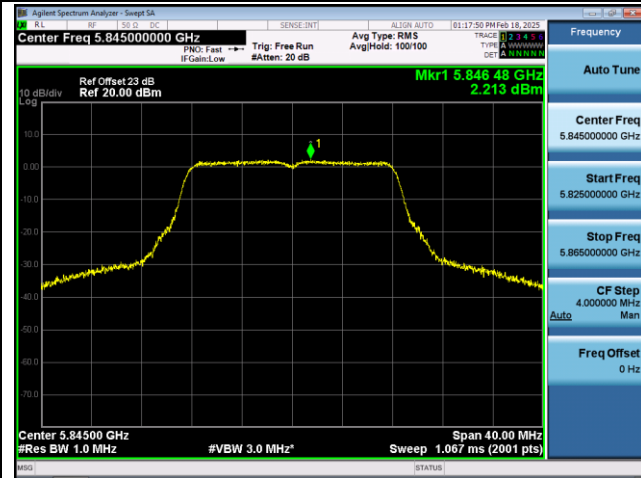
802.11be-EHT160 Power Spectral Density - Ant 0

Channel 163 (5815MHz)



802.11a Power Spectral Density - Ant 1

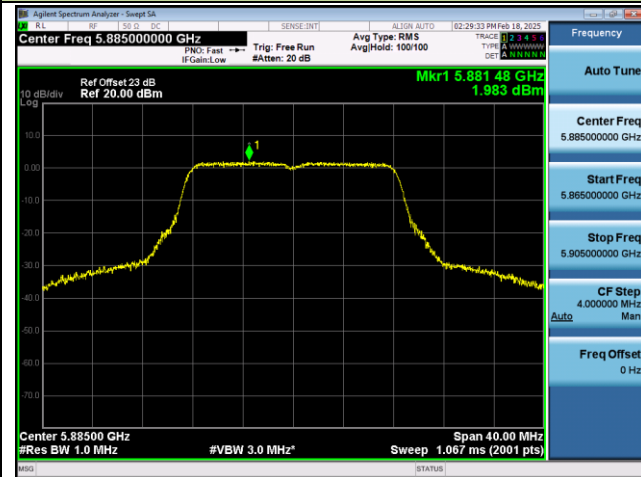
Channel 169 (5845MHz)



Channel 173 (5865MHz)

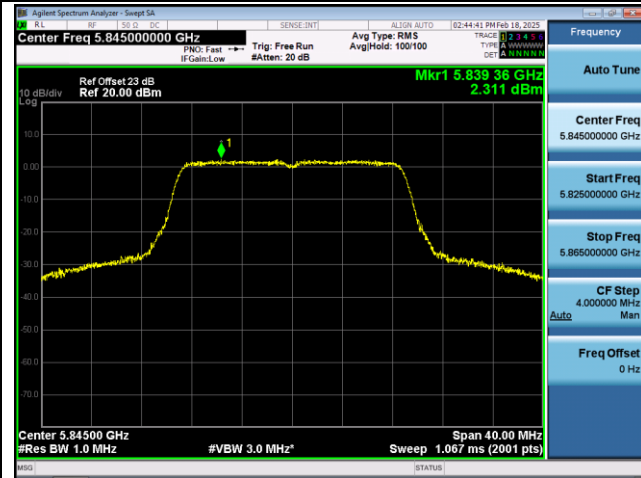


Channel 177 (5885MHz)

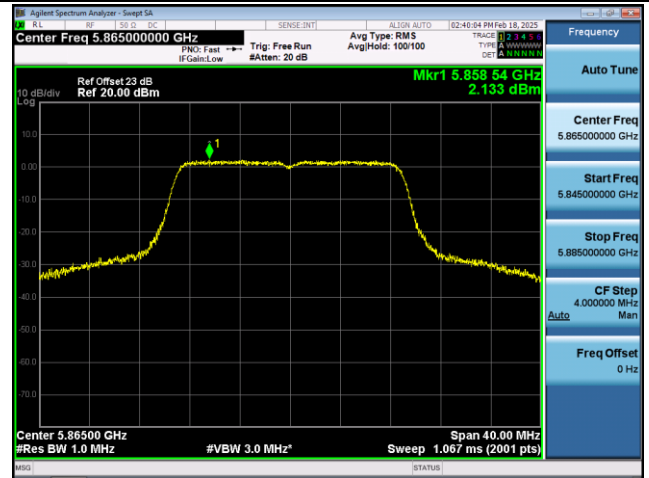


802.11ac-VHT20 Power Spectral Density - Ant 1

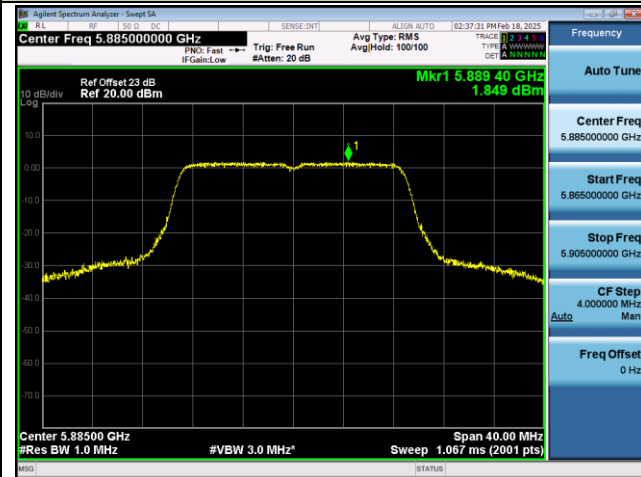
Channel 169 (5845MHz)



Channel 173 (5865MHz)

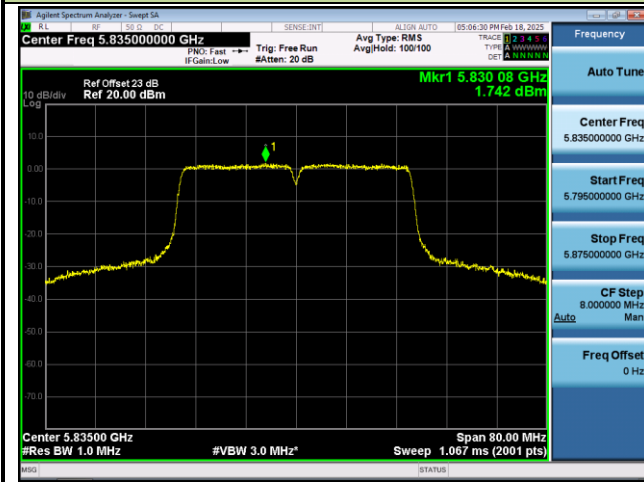


Channel 177 (5885MHz)



802.11ac-VHT40 Power Spectral Density - Ant 1

Channel 167 (5835MHz)

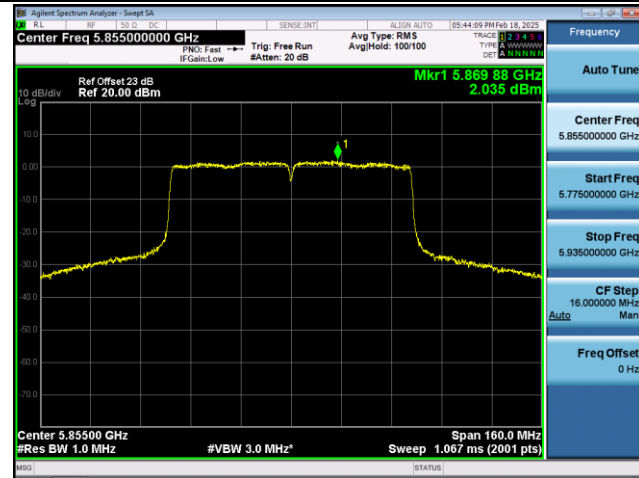


Channel 175 (5875MHz)



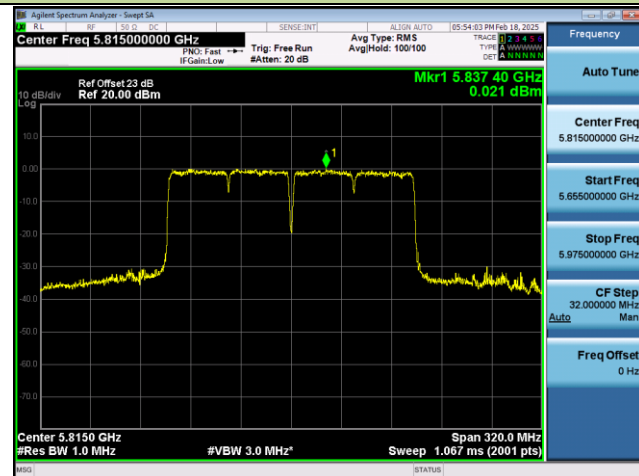
802.11ac-VHT80 Power Spectral Density - Ant 1

Channel 171 (5855MHz)



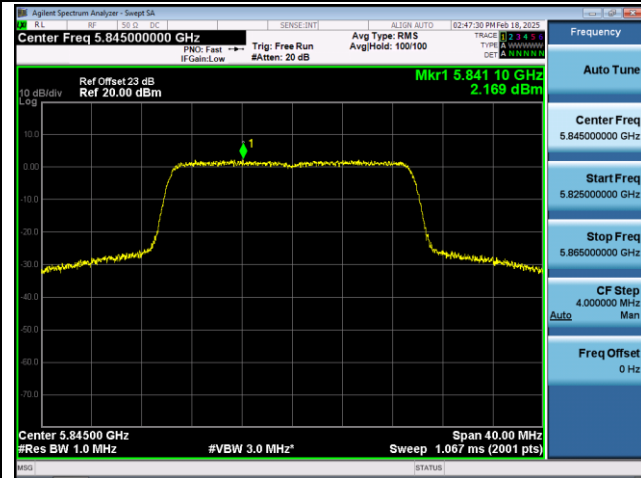
802.11ac-VHT160 Power Spectral Density - Ant 1

Channel 163 (5815MHz)

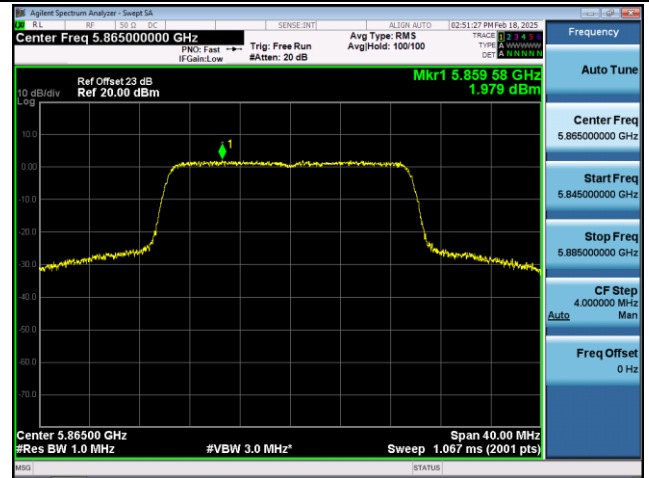


802.11ax-HE20 Power Spectral Density - Ant 1

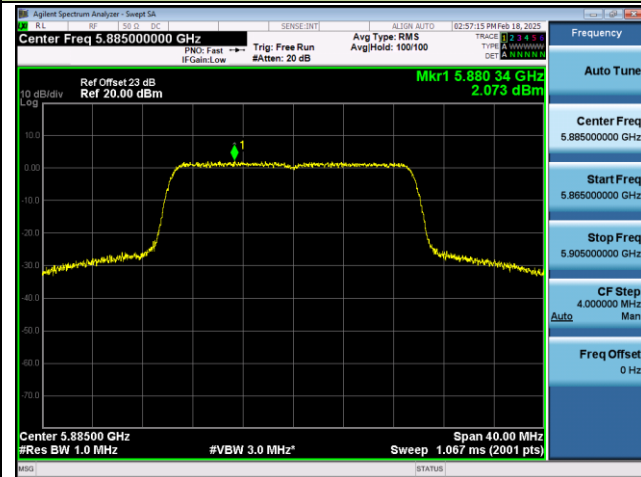
Channel 169 (5845MHz)



Channel 173 (5865MHz)

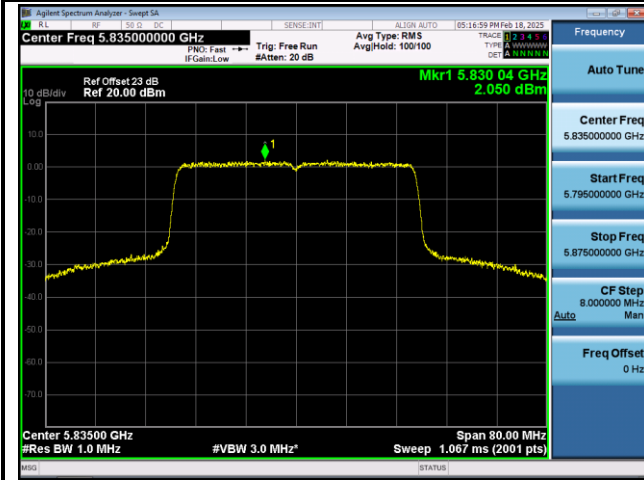


Channel 177 (5885MHz)

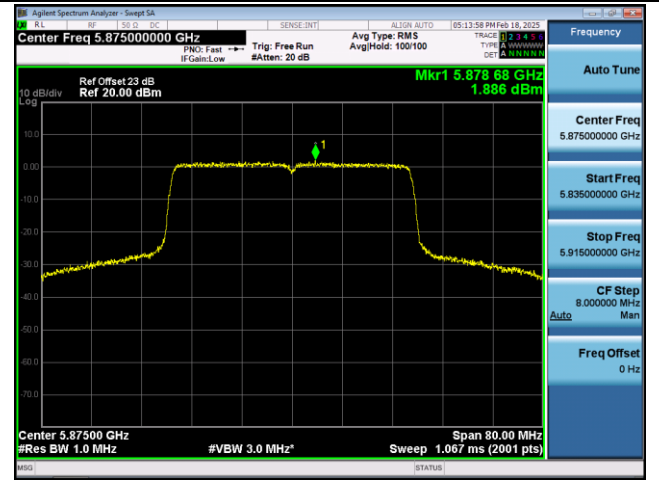


802.11 ax-HE40 Power Spectral Density - Ant 1

Channel 167 (5835MHz)

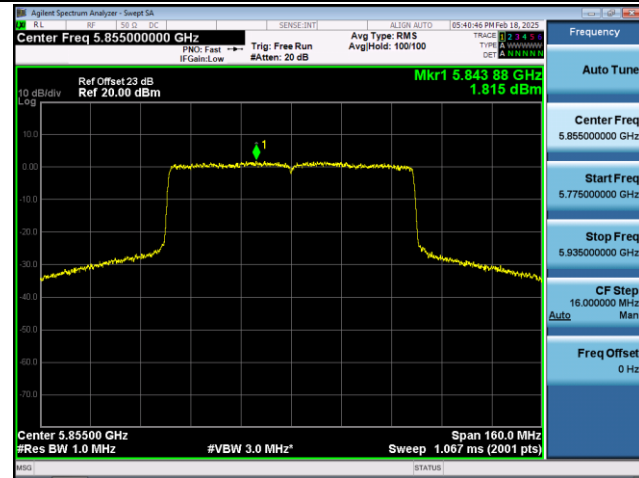


Channel 175 (5875MHz)



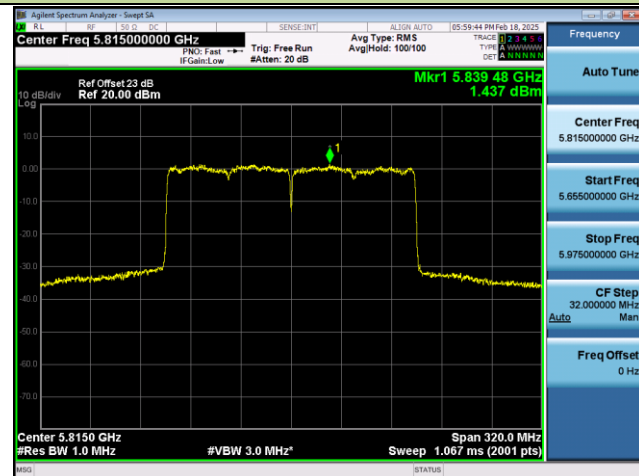
802.11 ax-HE80 Power Spectral Density - Ant 1

Channel 171 (5855MHz)



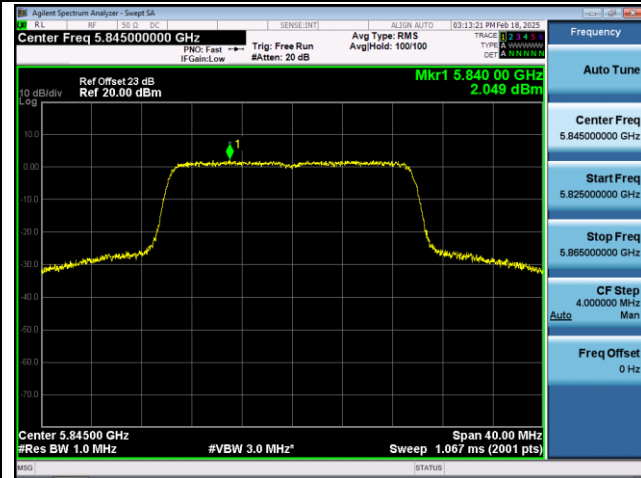
802.11 ax-HE160 Power Spectral Density - Ant 1

Channel 163 (5815MHz)

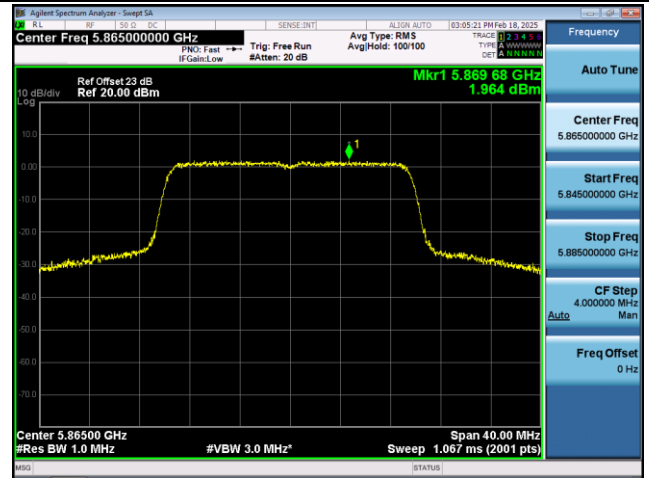


802.11 be-EHT20 Power Spectral Density - Ant 1

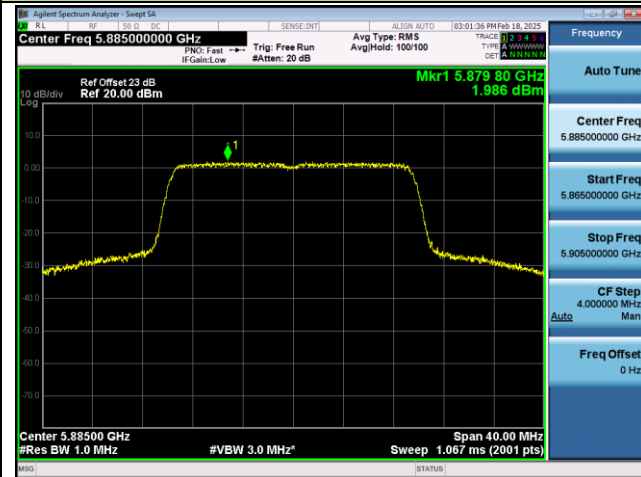
Channel 169 (5845MHz)



Channel 173 (5865MHz)

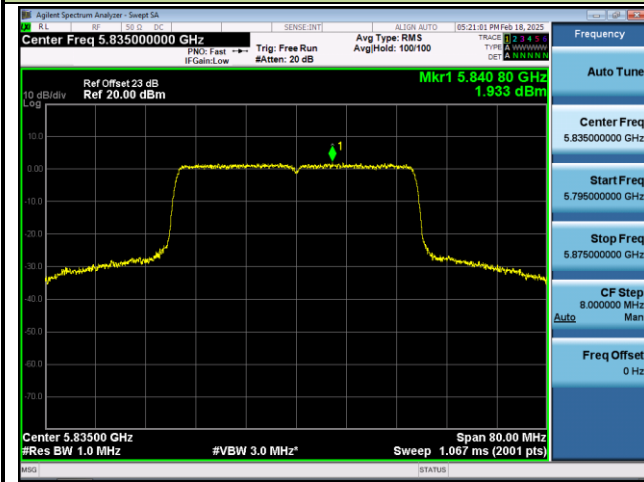


Channel 177 (5885MHz)



802.11 be-EHT40 Power Spectral Density - Ant 1

Channel 167 (5835MHz)

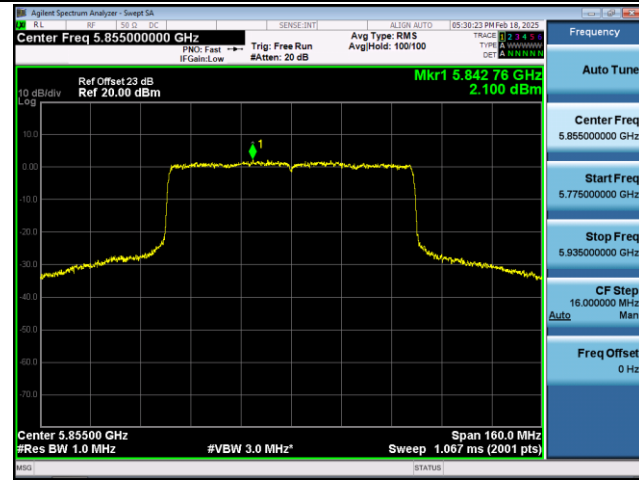


Channel 175 (5875MHz)



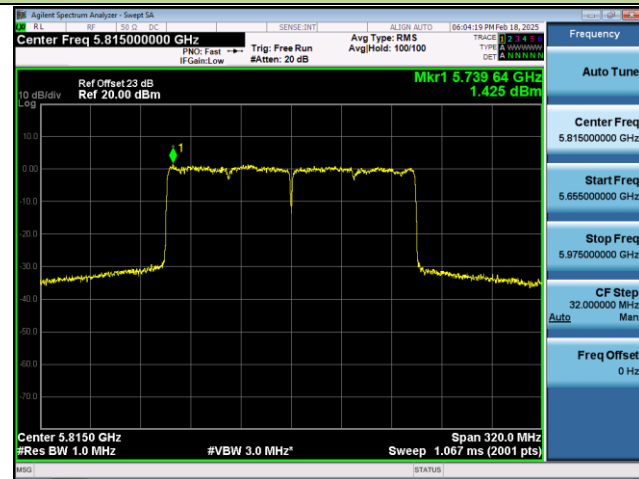
802.11 be-EHT80 Power Spectral Density - Ant 1

Channel 171 (5855MHz)



802.11be-EHT160 Power Spectral Density - Ant 1

Channel 163 (5815MHz)



802.11a Power Spectral Density - Ant 2

Channel 169 (5845MHz)



Channel 173 (5865MHz)



Channel 177 (5885MHz)

