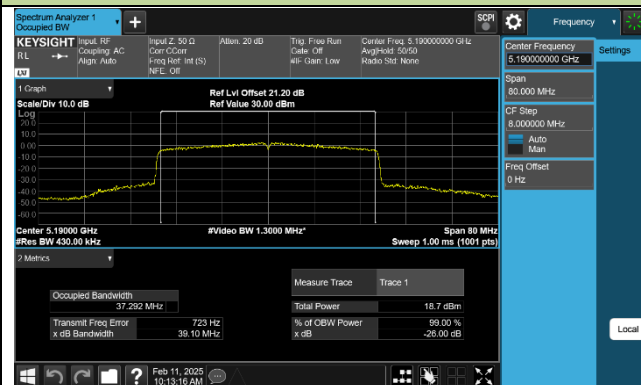
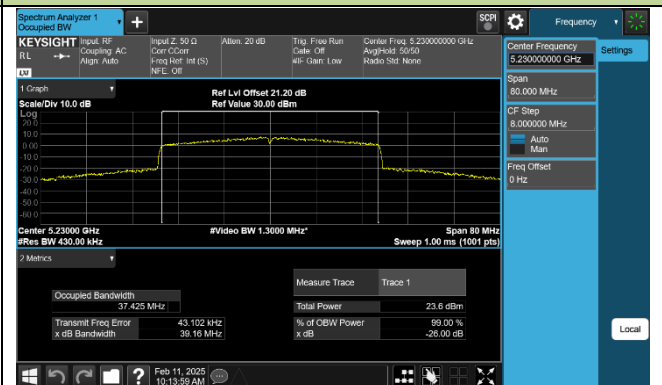


802.11be-EHT40 26dB Bandwidth & 99% Bandwidth

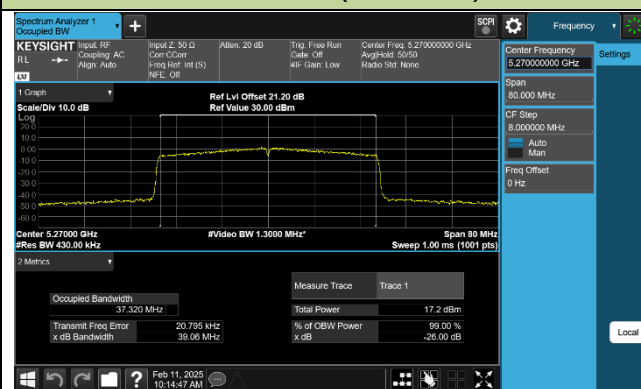
Channel 38 (5190MHz)



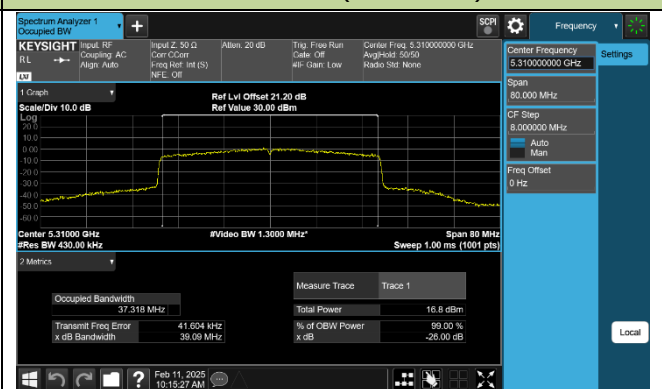
Channel 46 (5230MHz)



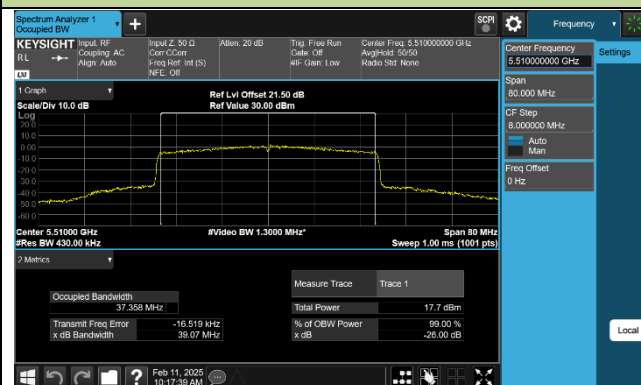
Channel 54 (5270MHz)



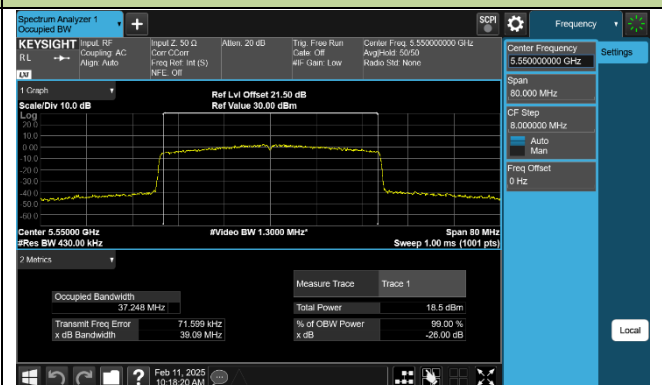
Channel 62 (5310MHz)



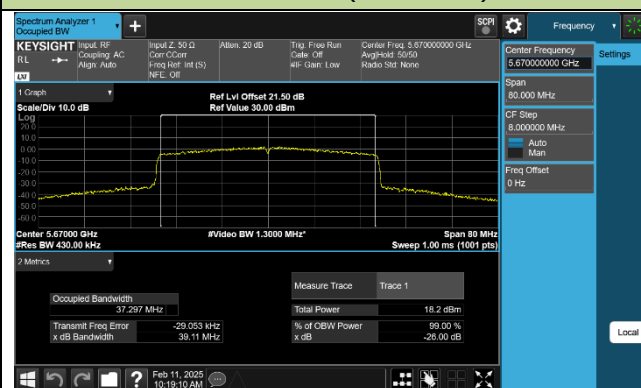
Channel 102 (5510MHz)



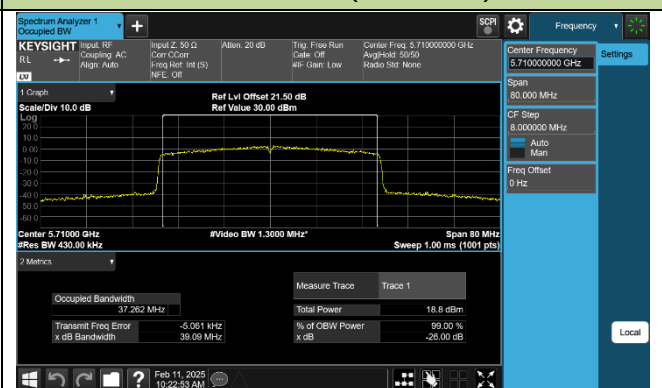
Channel 110 (5550MHz)



Channel 134 (5670MHz)



Channel 142 (5710MHz)



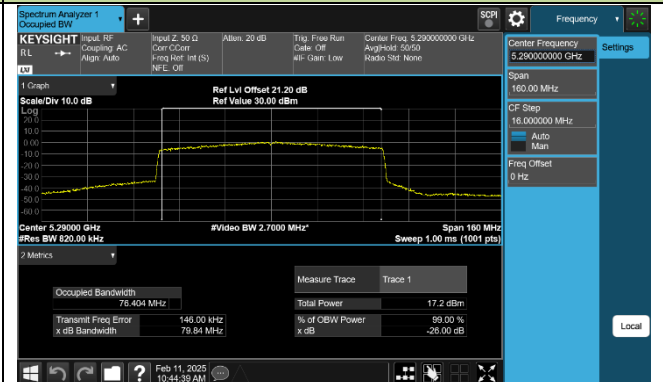


802.11be-EHT80 26dB Bandwidth & 99% Bandwidth

Channel 42 (5210MHz)



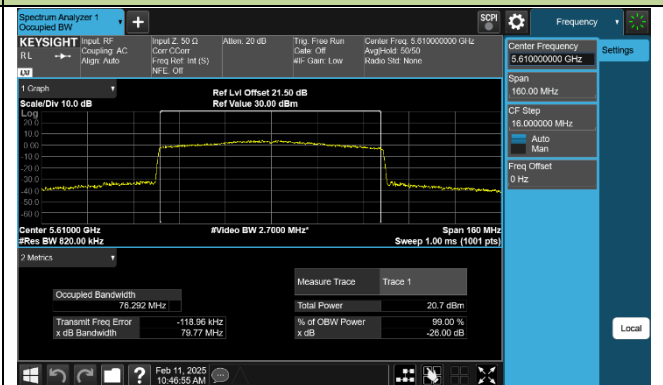
Channel 58 (5290MHz)



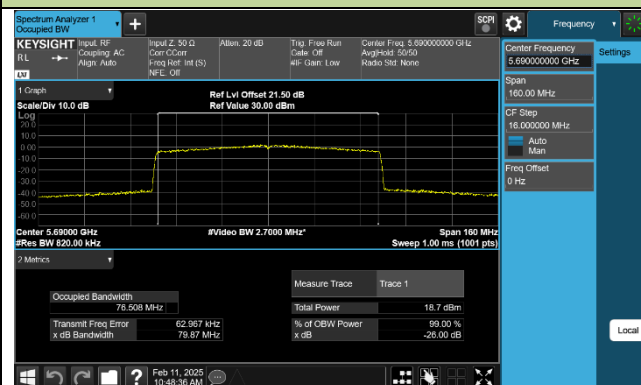
Channel 106 (5530MHz)



Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)



802.11be-EHT160 26dB Bandwidth & 99% Bandwidth

Channel 50 (5250MHz)



Channel 114 (5570MHz)



7.3. 6dB Bandwidth Measurement

7.3.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

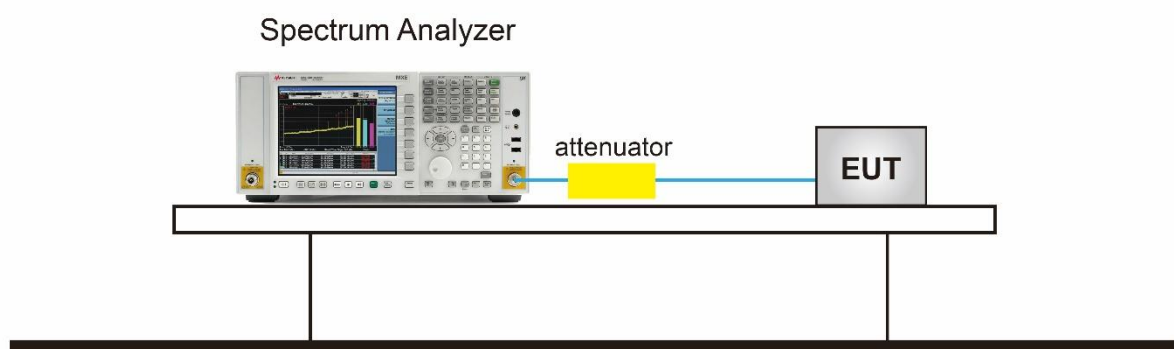
7.3.2. Test Procedure used

KDB 789033 D02v02r01- Section C.2

7.3.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 100 kHz.
3. VBW $3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3.4. Test Setup



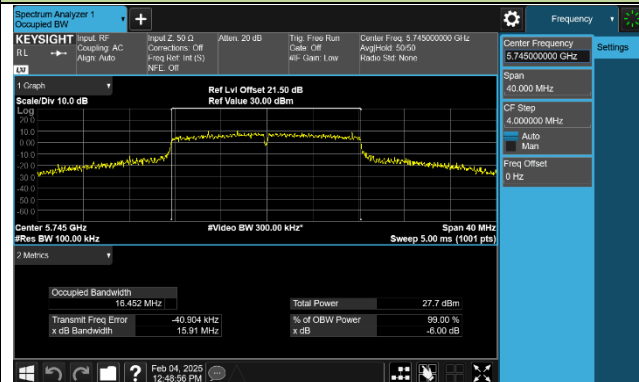
7.3.5.TestResult

Product	BE14000 Whole Home Mesh Wi-Fi 7 System	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/2/4
Test Mode	CDD (Ant1) _with Ant0+1+2		

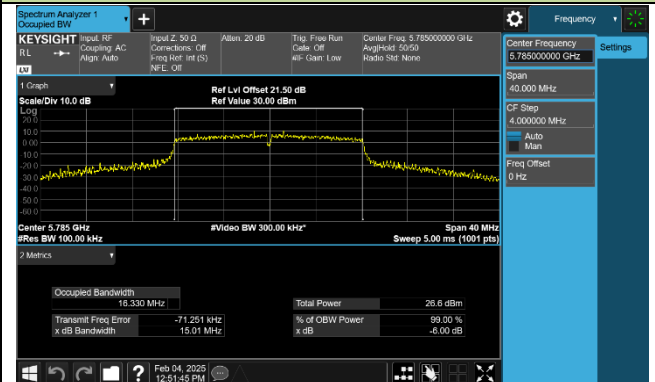
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a	6Mbps	149	5745	15.910	≥ 0.5	Pass
802.11a	6Mbps	157	5785	15.010	≥ 0.5	Pass
802.11a	6Mbps	165	5825	15.060	≥ 0.5	Pass
802.11ac-VHT20	MCS0	149	5745	17.150	≥ 0.5	Pass
802.11ac-VHT20	MCS0	157	5785	15.660	≥ 0.5	Pass
802.11ac-VHT20	MCS0	165	5825	17.540	≥ 0.5	Pass
802.11ac-VHT40	MCS0	151	5755	34.410	≥ 0.5	Pass
802.11ac-VHT40	MCS0	159	5795	35.040	≥ 0.5	Pass
802.11ac-VHT80	MCS0	155	5775	57.690	≥ 0.5	Pass
802.11ax-HE20	MCS0	149	5745	16.850	≥ 0.5	Pass
802.11ax-HE20	MCS0	157	5785	17.090	≥ 0.5	Pass
802.11ax-HE20	MCS0	165	5825	18.440	≥ 0.5	Pass
802.11ax-HE40	MCS0	151	5755	26.390	≥ 0.5	Pass
802.11ax-HE40	MCS0	159	5795	26.420	≥ 0.5	Pass
802.11ax-HE80	MCS0	155	5775	56.310	≥ 0.5	Pass
802.11be-EHT20	MCS0	149	5745	16.190	≥ 0.5	Pass
802.11be-EHT20	MCS0	157	5785	17.420	≥ 0.5	Pass
802.11be-EHT20	MCS0	165	5825	16.580	≥ 0.5	Pass
802.11be-EHT40	MCS0	151	5755	30.100	≥ 0.5	Pass
802.11be-EHT40	MCS0	159	5795	25.120	≥ 0.5	Pass
802.11be-EHT80	MCS0	155	5775	65.110	≥ 0.5	Pass

802.11a 6dB Bandwidth

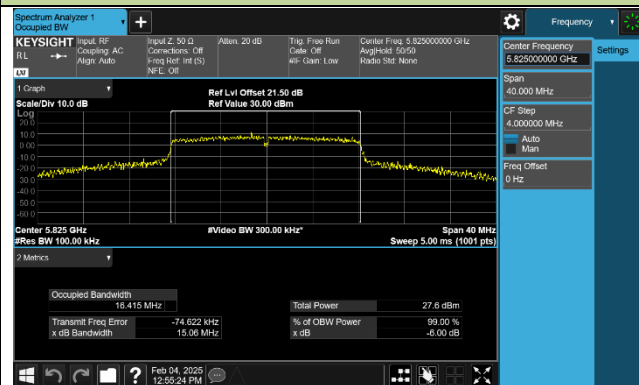
Channel 149 (5745MHz)



Channel 157 (5785MHz)

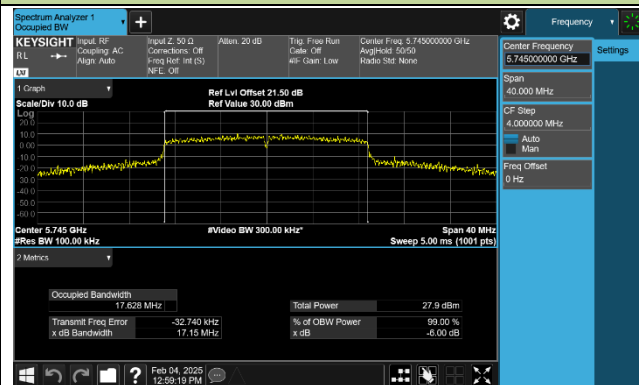


Channel 165 (5825MHz)

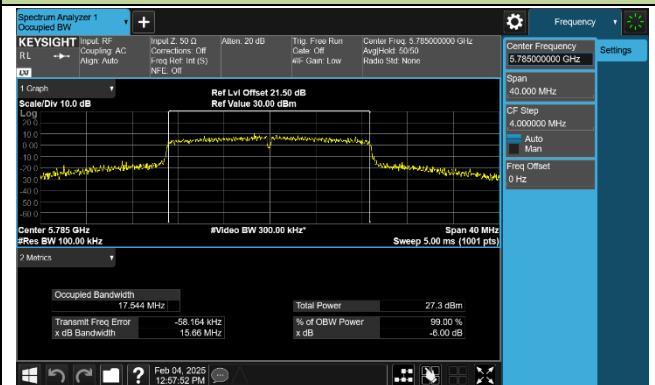


802.11ac-VHT20 6dB Bandwidth

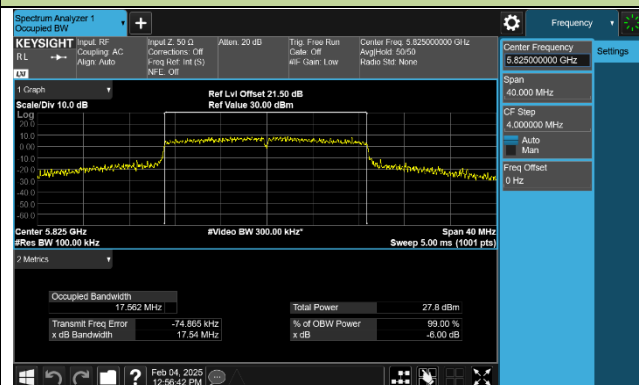
Channel 149 (5745MHz)



Channel 157 (5785MHz)

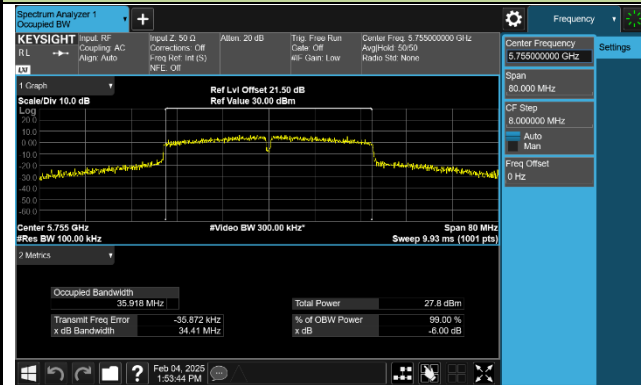


Channel 165 (5825MHz)

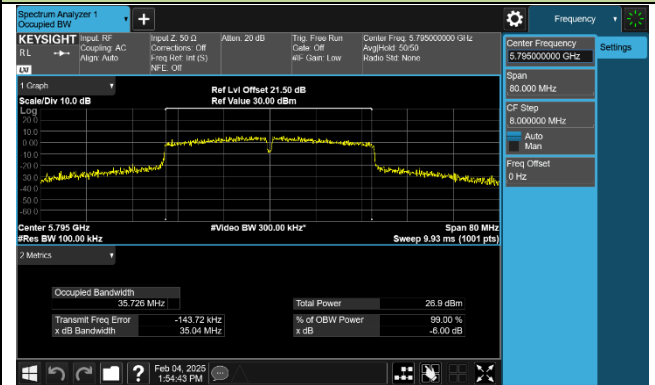


802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)

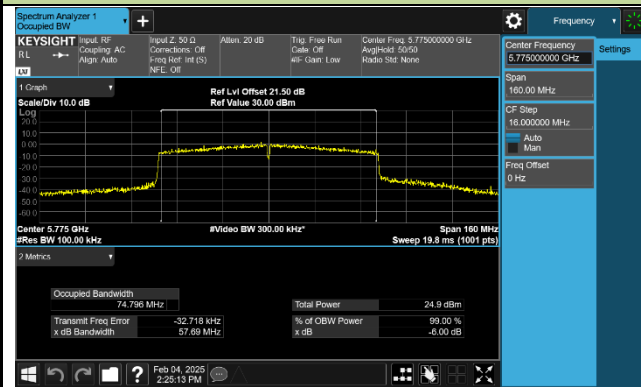


Channel 159 (5795MHz)



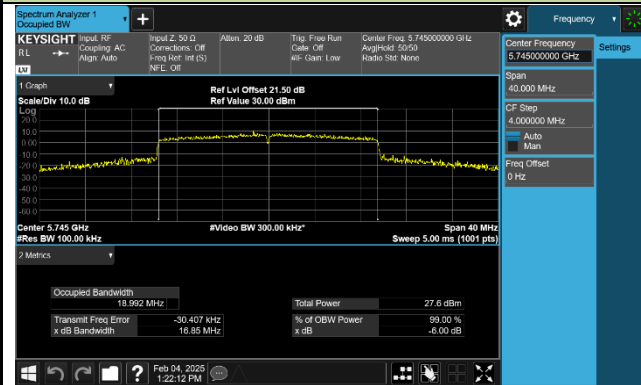
802.11ac-VHT80 6dB Bandwidth

Channel 155 (5775MHz)

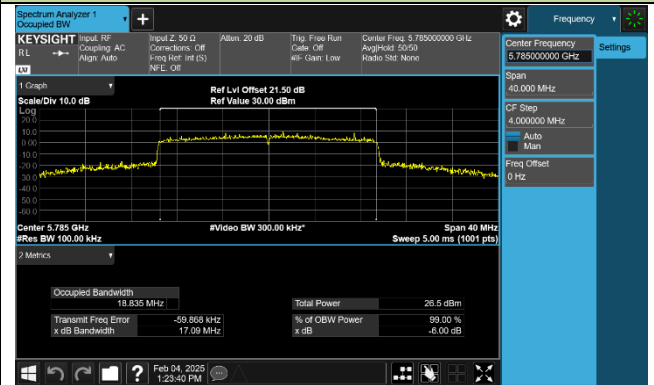


802.11ax-HE20 6dB Bandwidth

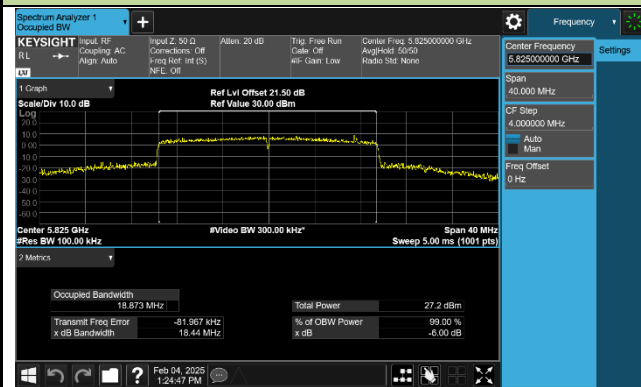
Channel 149 (5745MHz)



Channel 157 (5785MHz)

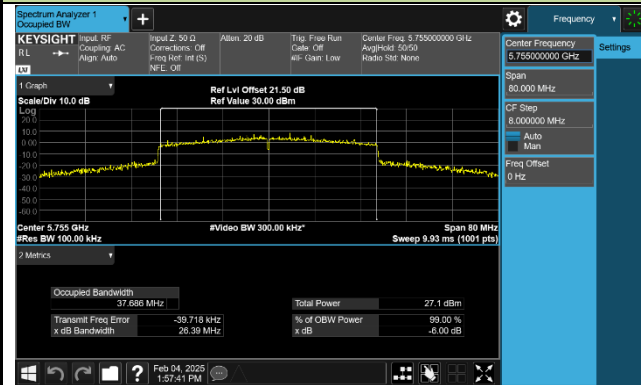


Channel 165 (5825MHz)

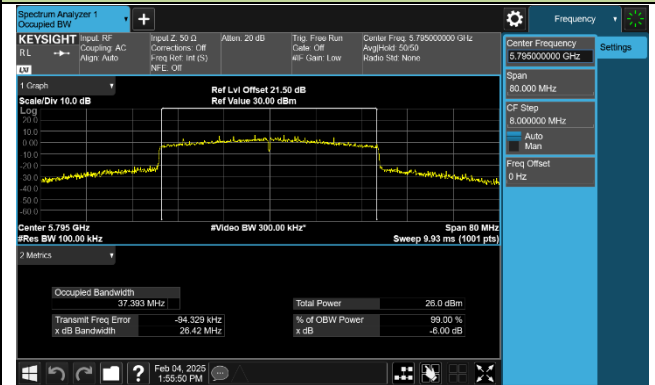


802.11ax-HE40 6dB Bandwidth

Channel 151 (5755MHz)

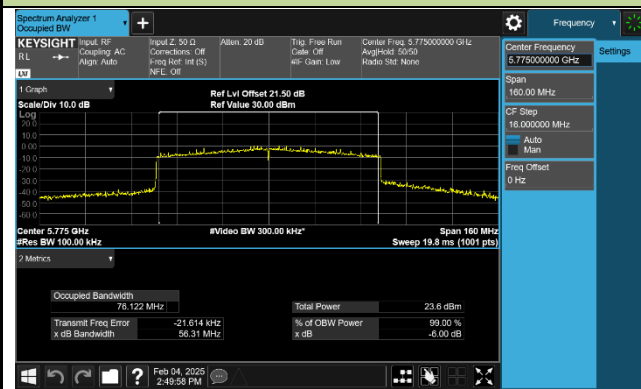


Channel 159 (5795MHz)



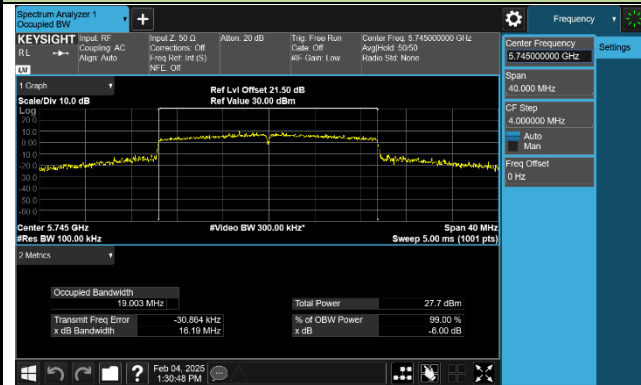
802.11ax-HE80 6dB Bandwidth

Channel 155 (5775MHz)

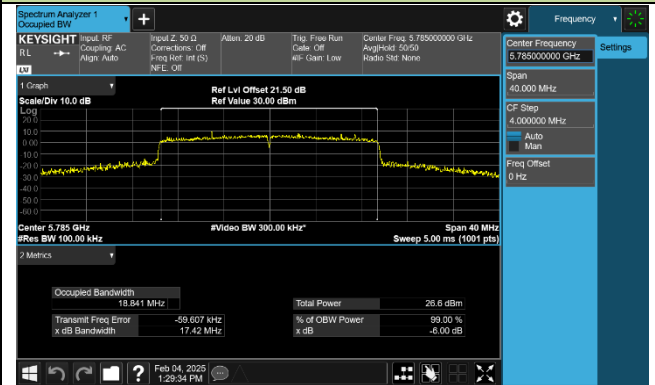


802.11be-EHT20 6dB Bandwidth

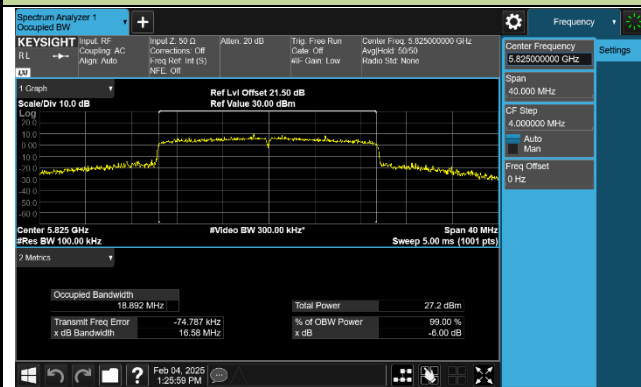
Channel 149 (5745MHz)



Channel 157 (5785MHz)

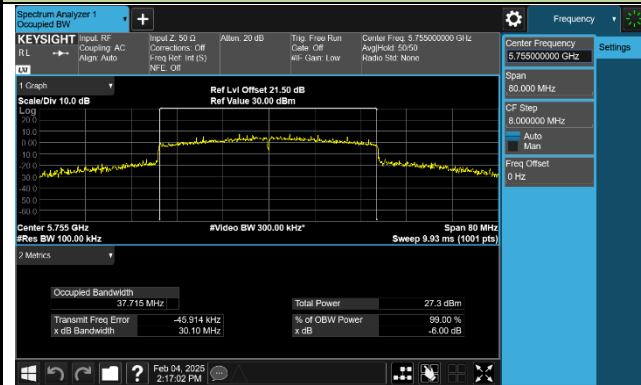


Channel 165 (5825MHz)

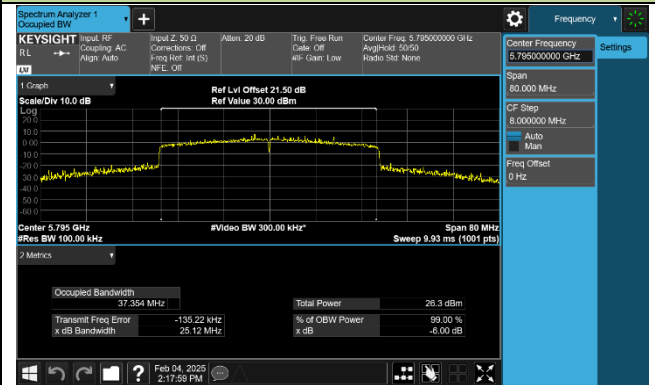


802.11be-EHT 40 6dB Bandwidth

Channel 151 (5755MHz)

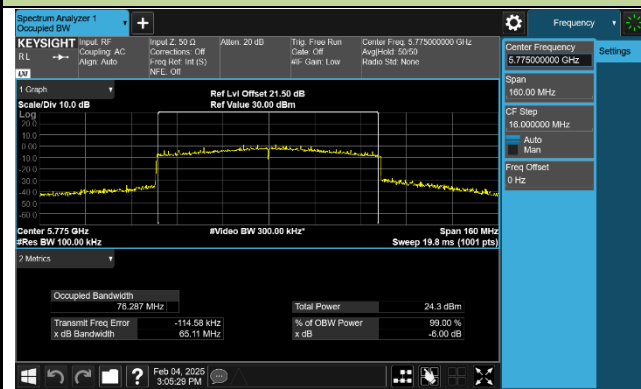


Channel 159 (5795MHz)



802.11be-EHT 80 6dB Bandwidth

Channel 155 (5775MHz)

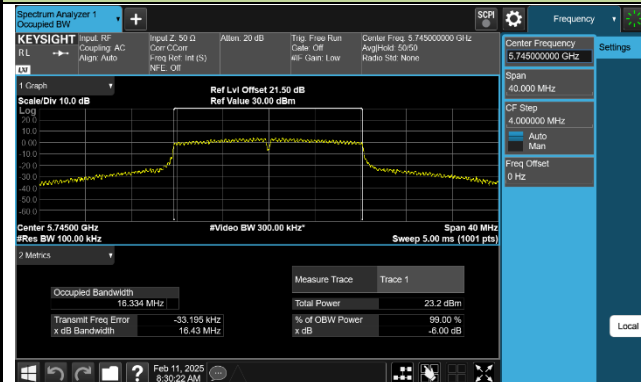


Product	BE14000 Whole Home Mesh Wi-Fi 7 System	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/2/11
Test Mode	CDD (Ant0) _with Ant0+1+3		

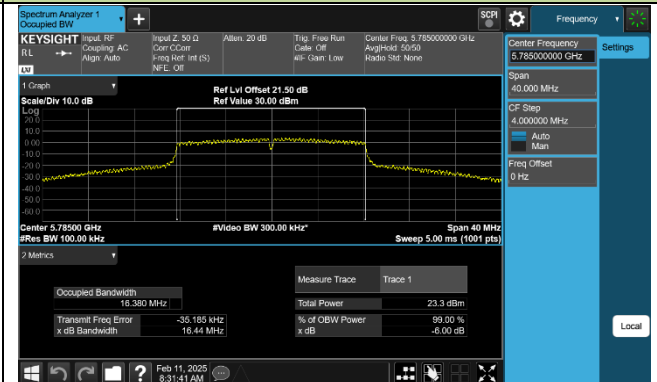
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
802.11a	6Mbps	149	5745	16.43	≥ 0.5	Pass
802.11a	6Mbps	157	5785	16.44	≥ 0.5	Pass
802.11a	6Mbps	165	5825	16.44	≥ 0.5	Pass
802.11ac-VHT20	MCS0	149	5745	17.66	≥ 0.5	Pass
802.11ac-VHT20	MCS0	157	5785	17.65	≥ 0.5	Pass
802.11ac-VHT20	MCS0	165	5825	17.58	≥ 0.5	Pass
802.11ac-VHT40	MCS0	151	5755	34.69	≥ 0.5	Pass
802.11ac-VHT40	MCS0	159	5795	34.09	≥ 0.5	Pass
802.11ac-VHT80	MCS0	155	5775	68.53	≥ 0.5	Pass
802.11ax-HE20	MCS0	149	5745	19.05	≥ 0.5	Pass
802.11ax-HE20	MCS0	157	5785	19.02	≥ 0.5	Pass
802.11ax-HE20	MCS0	165	5825	19.06	≥ 0.5	Pass
802.11ax-HE40	MCS0	151	5755	35.26	≥ 0.5	Pass
802.11ax-HE40	MCS0	159	5795	34.52	≥ 0.5	Pass
802.11ax-HE80	MCS0	155	5775	71.16	≥ 0.5	Pass
802.11be-EHT20	MCS0	149	5745	19.02	≥ 0.5	Pass
802.11be-EHT20	MCS0	157	5785	19.06	≥ 0.5	Pass
802.11be-EHT20	MCS0	165	5825	19.05	≥ 0.5	Pass
802.11be-EHT40	MCS0	151	5755	34.34	≥ 0.5	Pass
802.11be-EHT40	MCS0	159	5795	34.00	≥ 0.5	Pass
802.11be-EHT80	MCS0	155	5775	72.71	≥ 0.5	Pass

802.11a 6dB Bandwidth

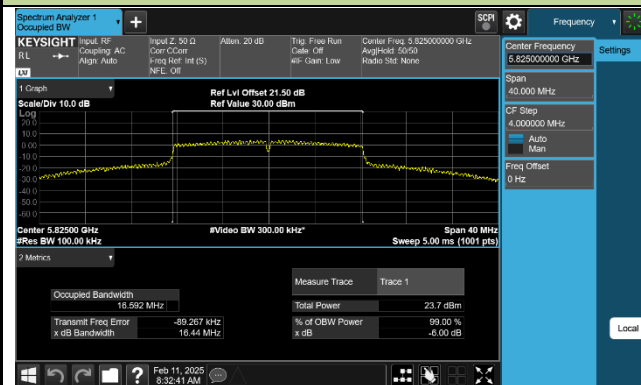
Channel 149 (5745MHz)



Channel 157 (5785MHz)

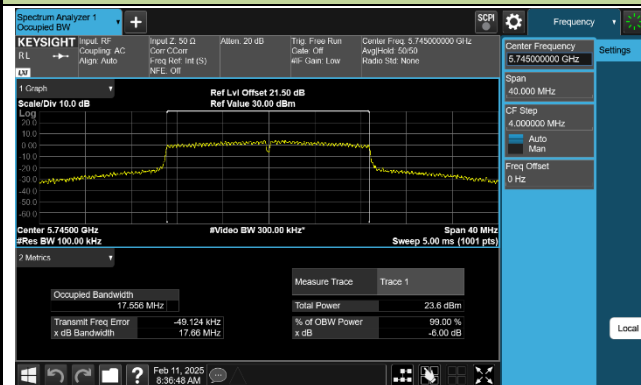


Channel 165 (5825MHz)

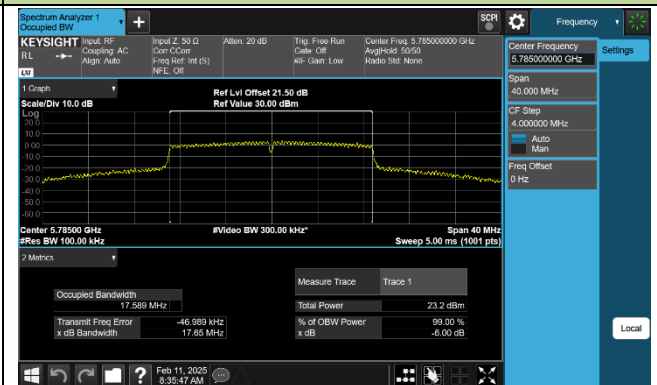


802.11ac-VHT20 6dB Bandwidth

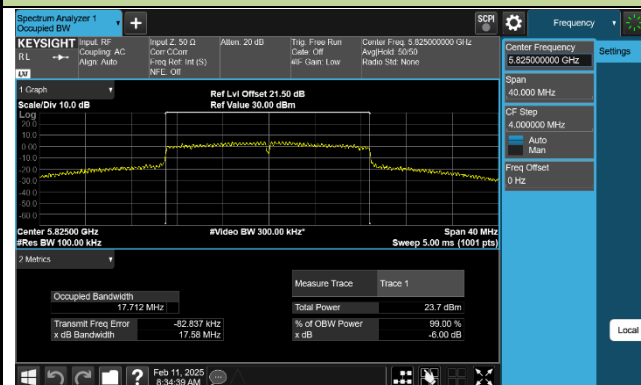
Channel 149 (5745MHz)



Channel 157 (5785MHz)

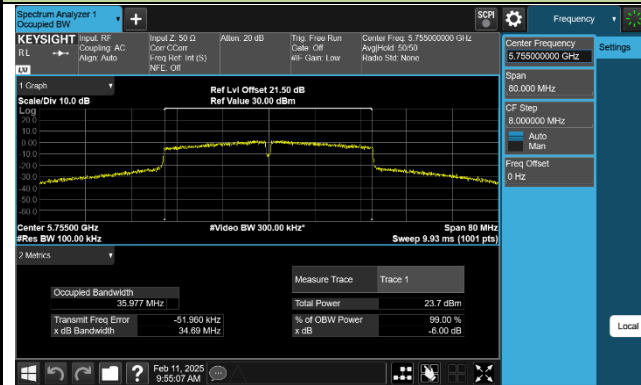


Channel 165 (5825MHz)

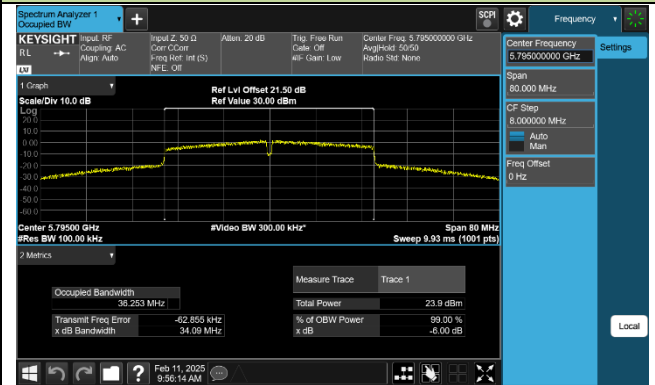


802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)

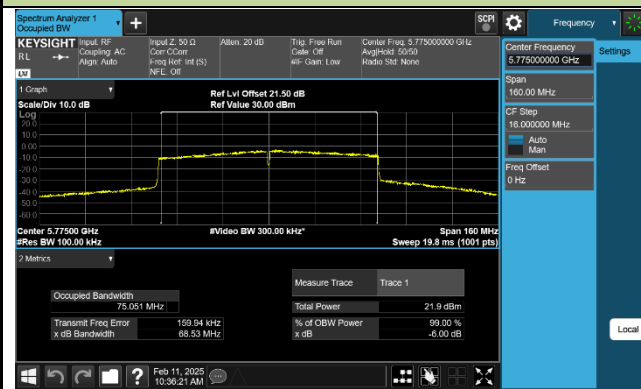


Channel 159 (5795MHz)



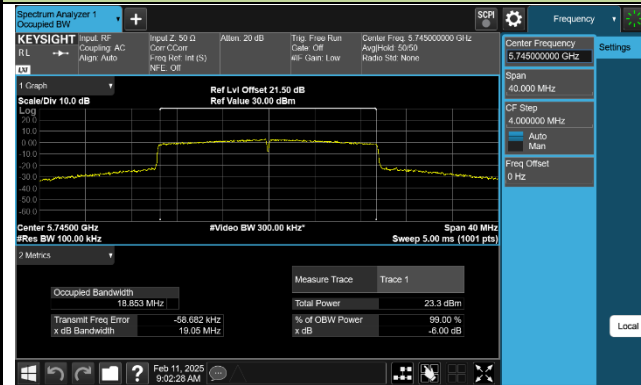
802.11ac-VHT80 6dB Bandwidth

Channel 155 (5775MHz)

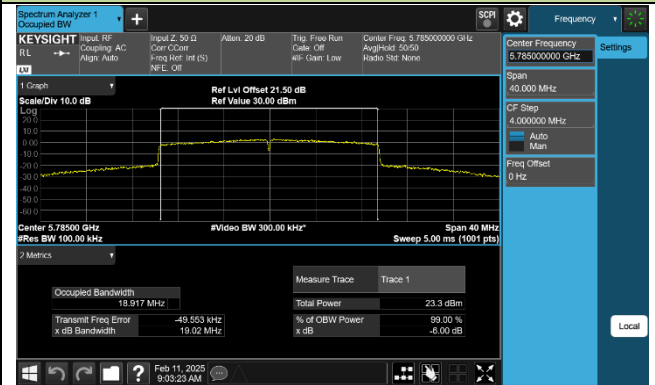


802.11ax-HE20 6dB Bandwidth

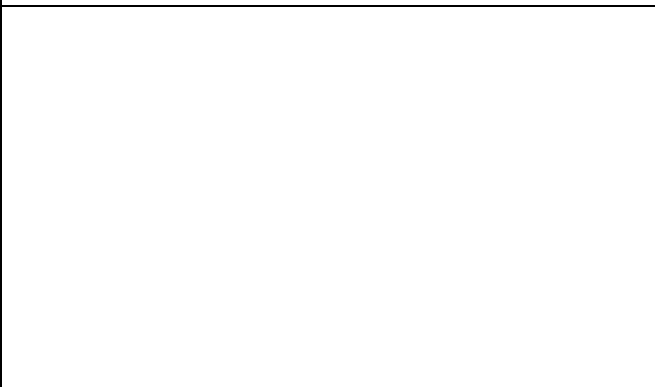
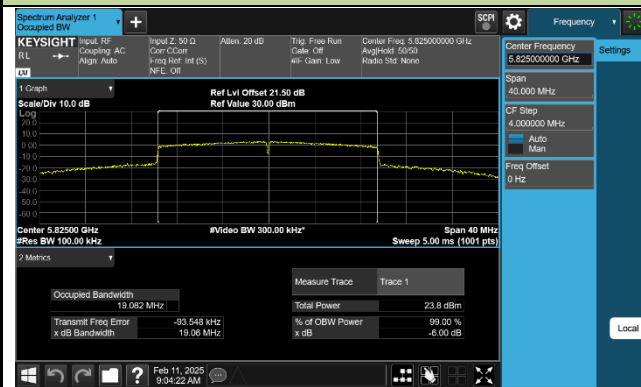
Channel 149 (5745MHz)



Channel 157 (5785MHz)

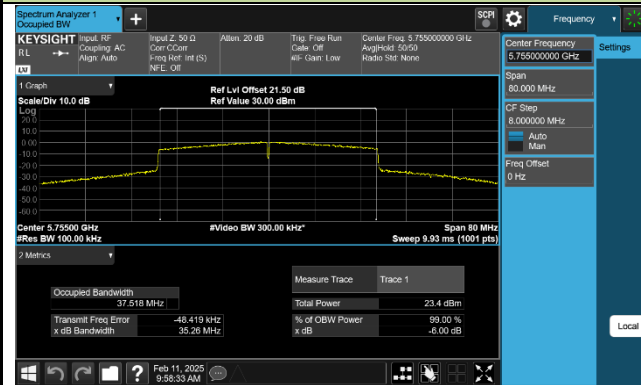


Channel 165 (5825MHz)

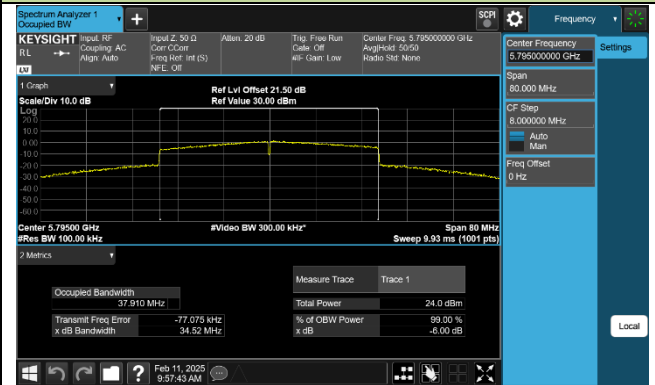


802.11ax-HE40 6dB Bandwidth

Channel 151 (5755MHz)

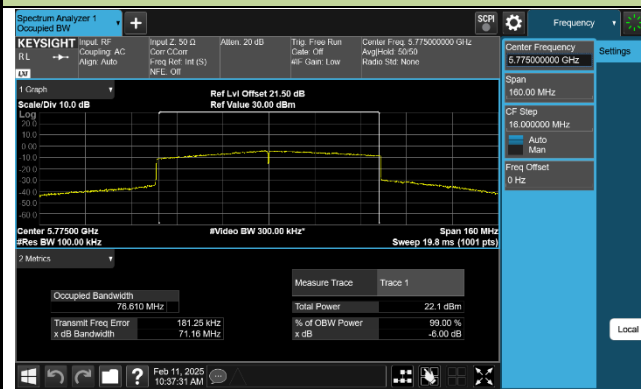


Channel 159 (5795MHz)



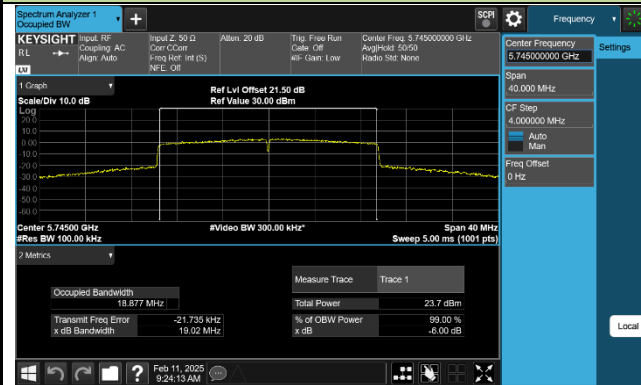
802.11ax-HE80 6dB Bandwidth

Channel 155 (5775MHz)

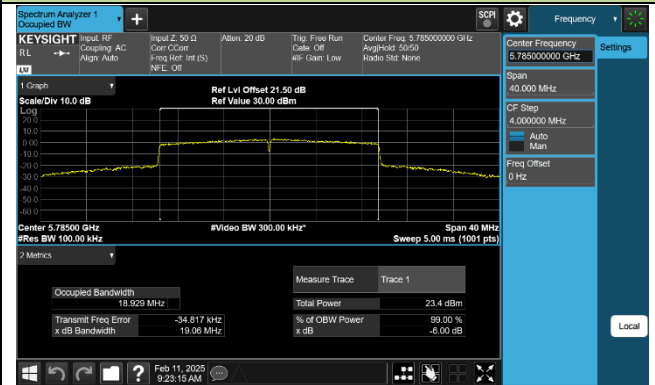


802.11be-EHT20 6dB Bandwidth

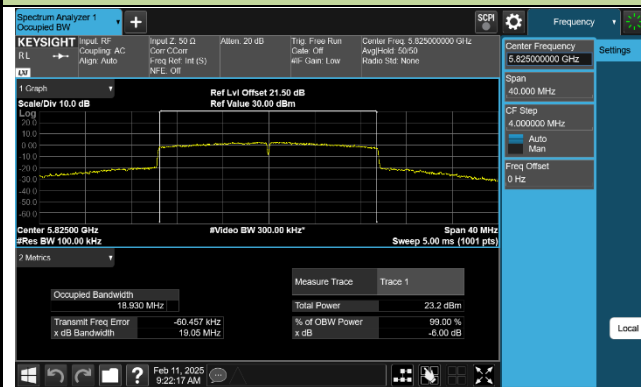
Channel 149 (5745MHz)



Channel 157 (5785MHz)

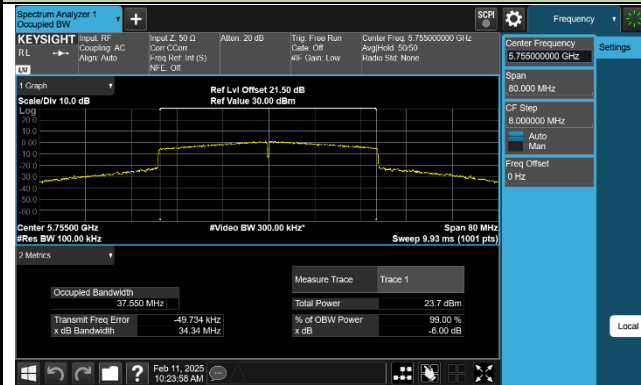


Channel 165 (5825MHz)

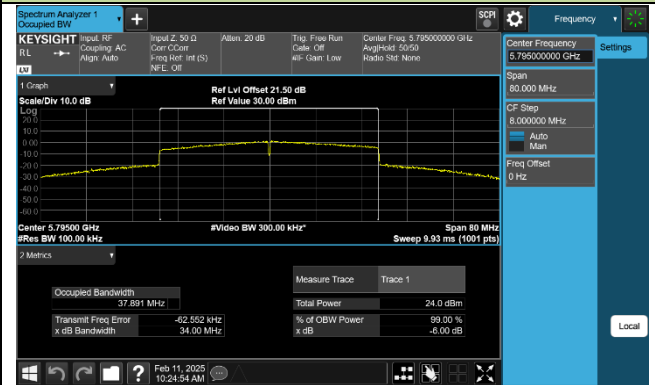


802.11be-EHT 40 6dB Bandwidth

Channel 151 (5755MHz)

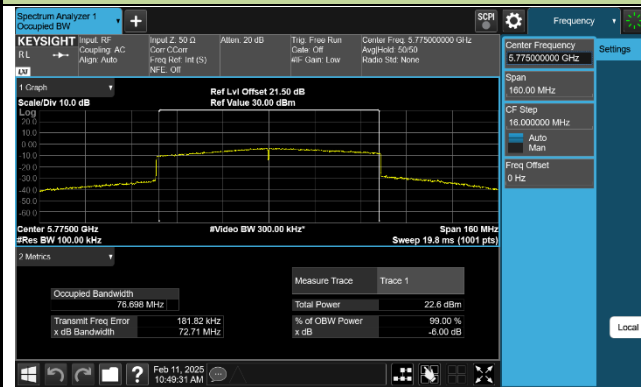


Channel 159 (5795MHz)



802.11be-EHT 80 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.

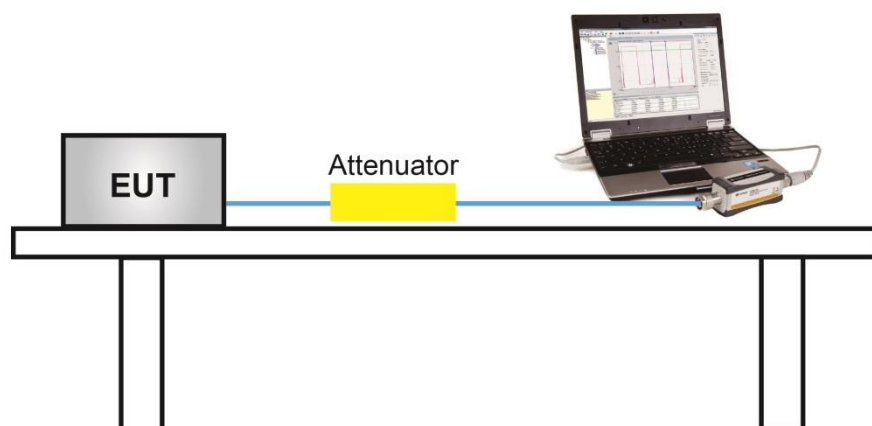
7.4.2. Test Procedure Used

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	BE14000 Whole Home Mesh Wi-Fi 7 System	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/1/17~2025/2/5
Test Mode	CDD Mode (Ant0+Ant1+Ant2)		

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Total Average Power(dBm)	Average Power Limit (dBm)	Result
11a	6Mbps	36	5180	20.70	20.98	19.88	25.32	≤ 30.00	Pass
11a	6Mbps	40	5200	22.44	22.71	21.50	27.02	≤ 30.00	Pass
11a	6Mbps	48	5240	21.54	22.13	21.68	26.56	≤ 30.00	Pass
11a	6Mbps	52	5260	14.44	15.87	15.43	20.06	≤ 23.98	Pass
11a	6Mbps	60	5300	14.13	16.24	16.09	20.36	≤ 23.98	Pass
11a	6Mbps	64	5320	14.30	16.06	15.98	20.29	≤ 23.98	Pass
11a	6Mbps	100	5500	16.42	17.11	16.92	21.60	≤ 23.98	Pass
11a	6Mbps	116	5580	16.81	16.41	16.42	21.32	≤ 23.98	Pass
11a	6Mbps	140	5700	16.24	17.66	16.47	21.61	≤ 23.98	Pass
11a	6Mbps	144	5720	15.22	17.21	15.61	20.87	≤ 22.45	Pass
11a	6Mbps	149	5745	23.07	24.19	22.78	28.16	≤ 30.00	Pass
11a	6Mbps	157	5785	23.05	23.15	23.22	27.91	≤ 30.00	Pass
11a	6Mbps	165	5825	22.74	24.00	23.18	28.11	≤ 30.00	Pass
11ac-VHT20	MCS0	36	5180	21.30	21.34	20.34	25.79	≤ 30.00	Pass
11ac-VHT20	MCS0	40	5200	22.76	22.50	22.00	27.20	≤ 30.00	Pass
11ac-VHT20	MCS0	48	5240	21.55	21.80	21.55	26.41	≤ 30.00	Pass
11ac-VHT20	MCS0	52	5260	14.43	15.62	15.28	19.91	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	14.30	15.85	15.94	20.20	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	14.16	15.57	15.91	20.05	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	16.03	16.57	17.15	21.38	≤ 23.98	Pass
11ac-VHT20	MCS0	116	5580	17.24	16.11	16.08	21.28	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	16.27	17.17	16.60	21.47	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	15.96	17.48	16.36	21.42	≤ 22.57	Pass
11ac-VHT20	MCS0	149	5745	23.00	23.67	22.91	27.98	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	23.63	22.89	23.69	28.19	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	23.30	23.24	23.40	28.09	≤ 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)	Total Average Power(dBm)	Average Power Limit (dBm)	Result
11ac-VHT40	MCS0	38	5190	19.30	19.48	18.39	23.85	≤ 30.00	Pass
11ac-VHT40	MCS0	46	5230	23.44	23.63	22.28	27.93	≤ 30.00	Pass
11ac-VHT40	MCS0	54	5270	16.77	18.01	17.71	22.30	≤ 23.98	Pass
11ac-VHT40	MCS0	62	5310	16.68	18.19	18.29	22.55	≤ 23.98	Pass
11ac-VHT40	MCS0	102	5510	17.52	18.19	18.67	22.92	≤ 23.98	Pass
11ac-VHT40	MCS0	110	5550	17.82	18.47	18.75	23.14	≤ 23.98	Pass
11ac-VHT40	MCS0	134	5670	18.17	18.87	18.41	23.26	≤ 23.98	Pass
11ac-VHT40	MCS0	142	5710	18.01	19.00	18.09	23.16	≤ 23.98	Pass
11ac-VHT40	MCS0	151	5755	23.14	23.51	22.66	27.89	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	23.69	22.14	23.60	27.97	≤ 30.00	Pass
11ac-VHT80	MCS0	42	5210	17.05	17.42	16.63	21.82	≤ 30.00	Pass
11ac-VHT80	MCS0	58	5290	16.82	19.11	18.76	23.11	≤ 23.98	Pass
11ac-VHT80	MCS0	106	5530	18.27	18.93	19.43	23.67	≤ 23.98	Pass
11ac-VHT80	MCS0	122	5610	19.60	18.67	18.57	23.74	≤ 23.98	Pass
11ac-VHT80	MCS0	138	5690	18.09	19.41	18.58	23.50	≤ 23.98	Pass
11ac-VHT80	MCS0	155	5775	21.24	21.44	21.48	26.16	≤ 30.00	Pass
11ac-VHT160	MCS0	50	5250	15.81	16.18	16.08	20.80	≤ 23.98	Pass
11ac-VHT160	MCS0	114	5570	16.48	17.29	17.47	21.87	≤ 23.98	Pass
11ax-HE20	MCS0	36	5180	20.31	20.64	19.54	24.96	≤ 30.00	Pass
11ax-HE20	MCS0	40	5200	22.50	22.14	21.75	26.91	≤ 30.00	Pass
11ax-HE20	MCS0	48	5240	22.24	22.44	22.33	27.11	≤ 30.00	Pass
11ax-HE20	MCS0	52	5260	14.79	15.77	15.64	20.19	≤ 23.98	Pass
11ax-HE20	MCS0	60	5300	14.40	16.02	16.10	20.35	≤ 23.98	Pass
11ax-HE20	MCS0	64	5320	14.32	15.76	16.17	20.26	≤ 23.98	Pass
11ax-HE20	MCS0	100	5500	15.54	16.15	16.73	20.94	≤ 23.98	Pass
11ax-HE20	MCS0	116	5580	16.66	15.63	15.70	20.79	≤ 23.98	Pass
11ax-HE20	MCS0	140	5700	15.82	16.86	16.28	21.11	≤ 23.98	Pass
11ax-HE20	MCS0	144	5720	15.58	17.00	15.89	20.97	≤ 22.72	Pass
11ax-HE20	MCS0	149	5745	23.21	23.88	23.05	28.17	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	23.34	22.65	23.45	27.93	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	23.02	23.05	23.15	27.84	≤ 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)	Total Average Power(dBm)	Average Power Limit (dBm)	Result
11ax-HE40	MCS0	38	5190	18.34	18.73	17.65	23.03	≤ 30.00	Pass
11ax-HE40	MCS0	46	5230	23.38	23.43	23.17	28.10	≤ 30.00	Pass
11ax-HE40	MCS0	54	5270	16.46	17.87	17.47	22.08	≤ 23.98	Pass
11ax-HE40	MCS0	62	5310	16.76	18.38	18.46	22.71	≤ 23.98	Pass
11ax-HE40	MCS0	102	5510	17.61	18.40	18.93	23.12	≤ 23.98	Pass
11ax-HE40	MCS0	110	5550	17.62	18.21	18.61	22.94	≤ 23.98	Pass
11ax-HE40	MCS0	134	5670	18.40	19.12	18.71	23.52	≤ 23.98	Pass
11ax-HE40	MCS0	142	5710	18.32	19.33	18.27	23.44	≤ 23.98	Pass
11ax-HE40	MCS0	151	5755	23.32	23.71	22.91	28.10	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	23.53	22.06	23.45	27.83	≤ 30.00	Pass
11ax-HE80	MCS0	42	5210	16.59	16.85	16.40	21.39	≤ 30.00	Pass
11ax-HE80	MCS0	58	5290	16.10	18.18	17.98	22.29	≤ 23.98	Pass
11ax-HE80	MCS0	106	5530	18.56	19.26	19.65	23.95	≤ 23.98	Pass
11ax-HE80	MCS0	122	5610	19.55	18.52	18.40	23.63	≤ 23.98	Pass
11ax-HE80	MCS0	138	5690	18.60	19.61	18.99	23.86	≤ 23.98	Pass
11ax-HE80	MCS0	155	5775	20.88	21.02	21.15	25.79	≤ 30.00	Pass
11ax-HE160	MCS0	50	5250	16.38	17.11	16.69	21.51	≤ 23.98	Pass
11ax-HE160	MCS0	114	5570	16.47	17.08	17.67	21.87	≤ 23.98	Pass
11be-EHT20	MCS0	36	5180	20.17	20.72	19.55	24.94	≤ 30.00	Pass
11be-EHT20	MCS0	40	5200	22.89	22.55	22.21	27.33	≤ 30.00	Pass
11be-EHT20	MCS0	48	5240	22.23	22.48	22.35	27.13	≤ 30.00	Pass
11be-EHT20	MCS0	52	5260	14.64	15.77	15.58	20.13	≤ 23.98	Pass
11be-EHT20	MCS0	60	5300	14.33	16.14	16.18	20.40	≤ 23.98	Pass
11be-EHT20	MCS0	64	5320	14.75	15.75	16.14	20.36	≤ 23.98	Pass
11be-EHT20	MCS0	100	5500	16.18	16.72	17.29	21.52	≤ 23.98	Pass
11be-EHT20	MCS0	116	5580	16.63	15.76	15.64	20.80	≤ 23.98	Pass
11be-EHT20	MCS0	140	5700	15.87	16.87	16.20	21.10	≤ 23.98	Pass
11be-EHT20	MCS0	144	5720	16.11	17.68	16.34	21.54	≤ 22.72	Pass
11be-EHT20	MCS0	149	5745	23.22	23.83	22.96	28.12	≤ 30.00	Pass
11be-EHT20	MCS0	157	5785	23.37	22.63	23.44	27.93	≤ 30.00	Pass
11be-EHT20	MCS0	165	5825	23.07	23.01	23.18	27.86	≤ 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)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11be-EHT40	MCS0	38	5190	18.42	18.74	17.60	23.05	≤ 30.00	Pass
11be-EHT40	MCS0	46	5230	23.23	23.39	23.07	28.00	≤ 30.00	Pass
11be-EHT40	MCS0	54	5270	16.41	17.76	17.44	22.01	≤ 23.98	Pass
11be-EHT40	MCS0	62	5310	16.14	17.83	17.95	22.15	≤ 23.98	Pass
11be-EHT40	MCS0	102	5510	17.78	18.30	18.84	23.10	≤ 23.98	Pass
11be-EHT40	MCS0	110	5550	18.05	18.64	19.07	23.38	≤ 23.98	Pass
11be-EHT40	MCS0	134	5670	18.40	18.98	18.65	23.45	≤ 23.98	Pass
11be-EHT40	MCS0	142	5710	18.19	19.34	18.45	23.46	≤ 23.98	Pass
11be-EHT40	MCS0	151	5755	23.30	23.68	22.86	28.06	≤ 30.00	Pass
11be-EHT40	MCS0	159	5795	23.88	22.48	23.61	28.14	≤ 30.00	Pass
11be-EHT80	MCS0	42	5210	16.66	16.76	16.45	21.40	≤ 30.00	Pass
11be-EHT80	MCS0	58	5290	16.17	18.07	17.88	22.22	≤ 23.98	Pass
11be-EHT80	MCS0	106	5530	18.46	19.20	19.67	23.91	≤ 23.98	Pass
11be-EHT80	MCS0	122	5610	19.80	18.77	18.75	23.91	≤ 23.98	Pass
11be-EHT80	MCS0	138	5690	18.49	19.66	18.81	23.79	≤ 23.98	Pass
11be-EHT80	MCS0	155	5775	21.38	21.50	21.68	26.29	≤ 30.00	Pass
11be-EHT160	MCS0	50	5250	15.85	16.44	16.38	21.00	≤ 23.98	Pass
11be-EHT160	MCS0	114	5570	16.39	17.35	17.64	21.93	≤ 23.98	Pass

Note 1:

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

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 Channel 144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2)$

Product	BE14000 Whole Home Mesh Wi-Fi 7 System	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/2/5~2025/2/8
Test Mode	CDD Mode (Ant0+Ant1+Ant3)		

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power(dBm)	Average Power Limit (dBm)	Result
11a	6Mbps	36	5180	21.54	20.88	20.07	25.64	≤ 30.00	Pass
11a	6Mbps	40	5200	21.98	21.80	21.00	26.38	≤ 30.00	Pass
11a	6Mbps	48	5240	21.22	21.35	21.80	26.24	≤ 30.00	Pass
11a	6Mbps	52	5260	14.56	15.87	16.26	20.39	≤ 23.98	Pass
11a	6Mbps	60	5300	14.22	16.09	16.25	20.38	≤ 23.98	Pass
11a	6Mbps	64	5320	14.19	15.88	15.63	20.07	≤ 23.98	Pass
11a	6Mbps	100	5500	14.73	15.21	16.50	20.32	≤ 23.98	Pass
11a	6Mbps	116	5580	16.25	15.59	14.89	20.38	≤ 23.98	Pass
11a	6Mbps	140	5700	15.02	16.43	15.84	20.57	≤ 23.98	Pass
11a	6Mbps	144	5720	14.39	16.66	16.11	20.59	≤ 22.41	Pass
11a	6Mbps	149	5745	22.25	23.11	23.60	27.79	≤ 30.00	Pass
11a	6Mbps	157	5785	23.05	22.67	23.52	27.87	≤ 30.00	Pass
11a	6Mbps	165	5825	23.35	23.71	22.57	28.01	≤ 30.00	Pass
11ac-VHT20	MCS0	36	5180	21.86	20.94	20.00	25.77	≤ 30.00	Pass
11ac-VHT20	MCS0	40	5200	21.86	21.52	21.01	26.25	≤ 30.00	Pass
11ac-VHT20	MCS0	48	5240	21.01	21.25	21.50	26.03	≤ 30.00	Pass
11ac-VHT20	MCS0	52	5260	14.77	15.89	16.58	20.58	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	14.07	16.04	16.18	20.30	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	14.56	16.45	16.02	20.52	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	15.16	15.80	17.02	20.83	≤ 23.98	Pass
11ac-VHT20	MCS0	116	5580	16.45	15.16	14.78	20.29	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	15.02	16.98	16.45	21.00	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	14.54	16.32	16.11	20.50	≤ 22.56	Pass
11ac-VHT20	MCS0	149	5745	22.64	23.51	23.92	28.16	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	23.17	22.51	23.52	27.86	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	23.15	23.75	22.45	27.92	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power(dBm)	Average Power Limit (dBm)	Result
11ac-VHT40	MCS0	38	5190	18.86	17.98	16.97	22.78	≤ 30.00	Pass
11ac-VHT40	MCS0	46	5230	23.02	23.42	23.28	28.01	≤ 30.00	Pass
11ac-VHT40	MCS0	54	5270	16.65	18.10	18.44	22.57	≤ 23.98	Pass
11ac-VHT40	MCS0	62	5310	16.74	18.48	18.13	22.62	≤ 23.98	Pass
11ac-VHT40	MCS0	102	5510	17.11	17.98	18.96	22.85	≤ 23.98	Pass
11ac-VHT40	MCS0	110	5550	17.61	18.59	18.87	23.16	≤ 23.98	Pass
11ac-VHT40	MCS0	134	5670	18.20	19.32	17.92	23.29	≤ 23.98	Pass
11ac-VHT40	MCS0	142	5710	17.71	19.36	18.74	23.43	≤ 23.98	Pass
11ac-VHT40	MCS0	151	5755	22.72	23.39	23.82	28.10	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	23.61	22.24	23.33	27.87	≤ 30.00	Pass
11ac-VHT80	MCS0	42	5210	18.32	18.95	16.93	22.92	≤ 30.00	Pass
11ac-VHT80	MCS0	58	5290	16.95	18.07	17.80	22.40	≤ 23.98	Pass
11ac-VHT80	MCS0	106	5530	18.73	19.20	19.41	23.89	≤ 23.98	Pass
11ac-VHT80	MCS0	122	5610	19.84	19.18	17.93	23.82	≤ 23.98	Pass
11ac-VHT80	MCS0	138	5690	17.97	19.61	18.57	23.54	≤ 23.98	Pass
11ac-VHT80	MCS0	155	5775	23.15	22.70	22.25	27.49	≤ 30.00	Pass
11ac-VHT160	MCS0	50	5250	17.05	17.52	16.97	21.96	≤ 23.98	Pass
11ac-VHT160	MCS0	114	5570	18.16	17.00	17.03	22.20	≤ 23.98	Pass
11ax-HE20	MCS0	36	5180	21.01	19.97	19.33	24.93	≤ 30.00	Pass
11ax-HE20	MCS0	40	5200	21.54	21.41	20.79	26.03	≤ 30.00	Pass
11ax-HE20	MCS0	48	5240	21.01	21.67	21.80	26.28	≤ 30.00	Pass
11ax-HE20	MCS0	52	5260	14.45	15.91	16.41	20.44	≤ 23.98	Pass
11ax-HE20	MCS0	60	5300	14.25	16.36	16.45	20.57	≤ 23.98	Pass
11ax-HE20	MCS0	64	5320	14.28	16.16	15.76	20.24	≤ 23.98	Pass
11ax-HE20	MCS0	100	5500	15.21	16.01	17.03	20.92	≤ 23.98	Pass
11ax-HE20	MCS0	116	5580	16.16	15.62	15.05	20.40	≤ 23.98	Pass
11ax-HE20	MCS0	140	5700	15.03	16.58	16.10	20.72	≤ 23.98	Pass
11ax-HE20	MCS0	144	5720	14.63	16.50	16.10	20.59	≤ 22.71	Pass
11ax-HE20	MCS0	149	5745	22.27	23.71	23.34	27.92	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	23.08	22.57	23.72	27.92	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	23.27	23.77	22.77	28.06	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power(dBm)	Average Power Limit (dBm)	Result
11ax-HE40	MCS0	38	5190	18.83	18.17	17.31	22.92	≤ 30.00	Pass
11ax-HE40	MCS0	46	5230	23.05	23.58	23.38	28.11	≤ 30.00	Pass
11ax-HE40	MCS0	54	5270	16.77	18.42	18.65	22.79	≤ 23.98	Pass
11ax-HE40	MCS0	62	5310	16.75	18.67	18.41	22.79	≤ 23.98	Pass
11ax-HE40	MCS0	102	5510	17.54	18.56	19.58	23.41	≤ 23.98	Pass
11ax-HE40	MCS0	110	5550	17.72	18.81	19.01	23.32	≤ 23.98	Pass
11ax-HE40	MCS0	134	5670	18.32	19.45	18.07	23.43	≤ 23.98	Pass
11ax-HE40	MCS0	142	5710	19.14	17.34	18.53	23.17	≤ 23.98	Pass
11ax-HE40	MCS0	151	5755	22.31	23.27	23.48	27.82	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	23.72	22.58	23.44	28.04	≤ 30.00	Pass
11ax-HE80	MCS0	42	5210	18.03	17.83	17.13	22.45	≤ 30.00	Pass
11ax-HE80	MCS0	58	5290	17.63	18.75	18.80	23.20	≤ 23.98	Pass
11ax-HE80	MCS0	106	5530	18.00	19.06	19.69	23.74	≤ 23.98	Pass
11ax-HE80	MCS0	122	5610	19.45	18.73	17.95	23.52	≤ 23.98	Pass
11ax-HE80	MCS0	138	5690	18.40	19.85	18.90	23.86	≤ 23.98	Pass
11ax-HE80	MCS0	155	5775	23.20	22.83	22.70	27.69	≤ 30.00	Pass
11ax-HE160	MCS0	50	5250	16.55	17.09	16.11	21.37	≤ 23.98	Pass
11ax-HE160	MCS0	114	5570	18.14	19.10	19.05	23.56	≤ 23.98	Pass
11be-EHT20	MCS0	36	5180	20.89	20.23	18.97	24.87	≤ 30.00	Pass
11be-EHT20	MCS0	40	5200	21.40	21.36	20.76	25.95	≤ 30.00	Pass
11be-EHT20	MCS0	48	5240	21.68	21.98	22.26	26.75	≤ 30.00	Pass
11be-EHT20	MCS0	52	5260	14.92	16.21	16.87	20.84	≤ 23.98	Pass
11be-EHT20	MCS0	60	5300	14.33	16.11	16.28	20.43	≤ 23.98	Pass
11be-EHT20	MCS0	64	5320	14.72	16.43	16.33	20.67	≤ 23.98	Pass
11be-EHT20	MCS0	100	5500	15.33	16.14	17.12	21.03	≤ 23.98	Pass
11be-EHT20	MCS0	116	5580	16.45	16.22	15.52	20.85	≤ 23.98	Pass
11be-EHT20	MCS0	140	5700	15.57	17.16	16.54	21.24	≤ 23.98	Pass
11be-EHT20	MCS0	144	5720	15.12	17.19	16.88	21.26	≤ 22.71	Pass
11be-EHT20	MCS0	149	5745	22.57	23.55	24.12	28.23	≤ 30.00	Pass
11be-EHT20	MCS0	157	5785	22.99	22.71	23.61	27.89	≤ 30.00	Pass
11be-EHT20	MCS0	165	5825	22.82	23.93	22.37	27.86	≤ 30.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11be-EHT40	MCS0	38	5190	19.71	19.13	17.80	23.72	≤ 30.00	Pass
11be-EHT40	MCS0	46	5230	23.22	23.16	23.43	28.04	≤ 30.00	Pass
11be-EHT40	MCS0	54	5270	16.54	17.88	18.21	22.37	≤ 23.98	Pass
11be-EHT40	MCS0	62	5310	16.44	18.38	18.33	22.58	≤ 23.98	Pass
11be-EHT40	MCS0	102	5510	17.60	19.12	19.77	23.69	≤ 23.98	Pass
11be-EHT40	MCS0	110	5550	17.73	18.51	19.21	23.30	≤ 23.98	Pass
11be-EHT40	MCS0	134	5670	18.15	19.25	18.16	23.32	≤ 23.98	Pass
11be-EHT40	MCS0	142	5710	17.78	19.55	18.88	23.57	≤ 23.98	Pass
11be-EHT40	MCS0	151	5755	22.68	23.70	23.95	28.25	≤ 30.00	Pass
11be-EHT40	MCS0	159	5795	23.43	22.74	23.52	28.01	≤ 30.00	Pass
11be-EHT80	MCS0	42	5210	18.78	18.30	17.59	23.02	≤ 30.00	Pass
11be-EHT80	MCS0	58	5290	17.32	18.79	17.56	22.71	≤ 23.98	Pass
11be-EHT80	MCS0	106	5530	17.75	18.69	19.72	23.57	≤ 23.98	Pass
11be-EHT80	MCS0	122	5610	19.86	19.20	18.30	23.94	≤ 23.98	Pass
11be-EHT80	MCS0	138	5690	18.11	19.97	18.84	23.81	≤ 23.98	Pass
11be-EHT80	MCS0	155	5775	23.66	22.97	23.00	27.99	≤ 30.00	Pass
11be-EHT160	MCS0	50	5250	17.23	17.02	17.26	21.94	≤ 23.98	Pass
11be-EHT160	MCS0	114	5570	18.88	19.12	18.71	23.68	≤ 23.98	Pass

Note 1:

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

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 Channel 144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2)$

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.

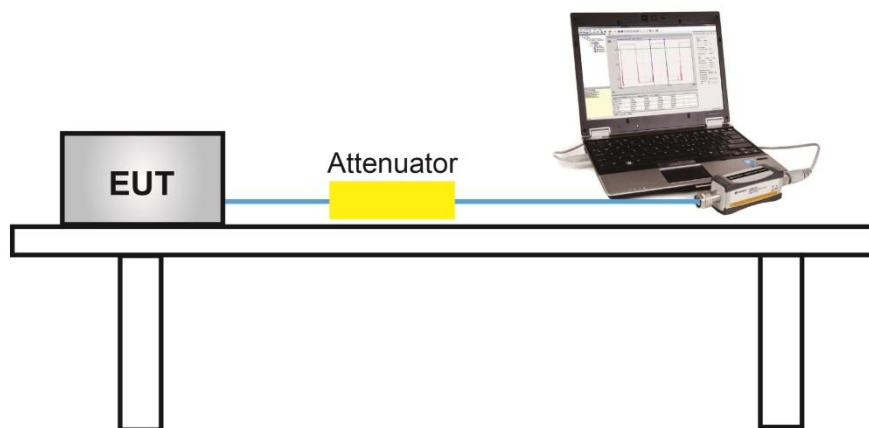
7.5.2. Test Procedure Used

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

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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.