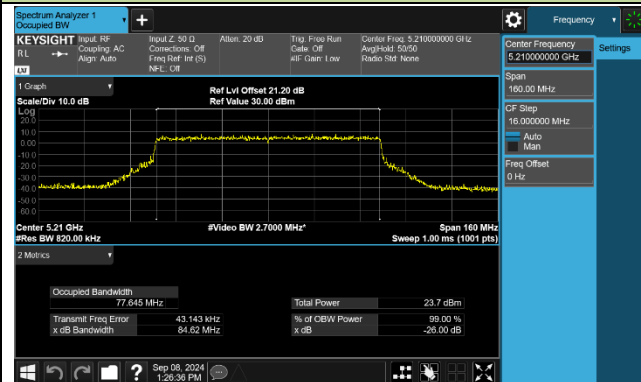
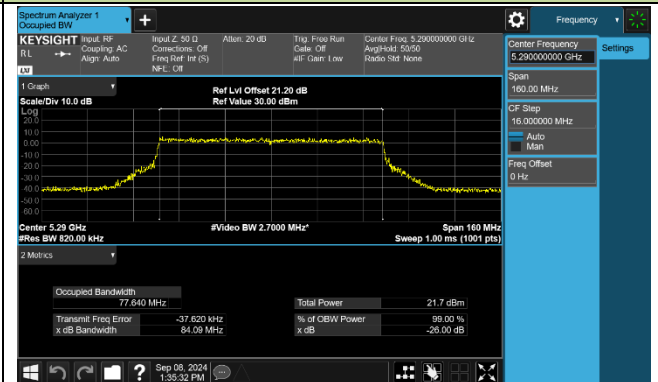


802.11ax-HE80 26dB Bandwidth & 99% Bandwidth

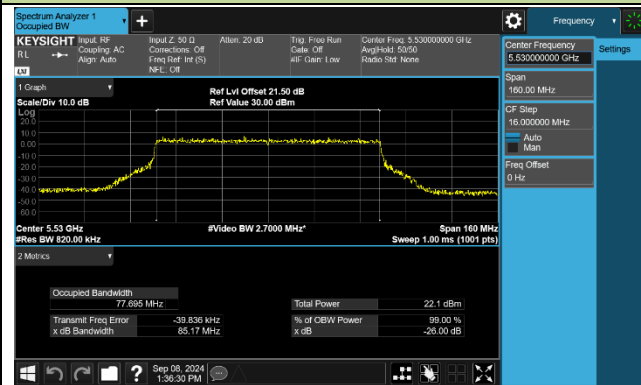
Channel 42 (5210MHz)



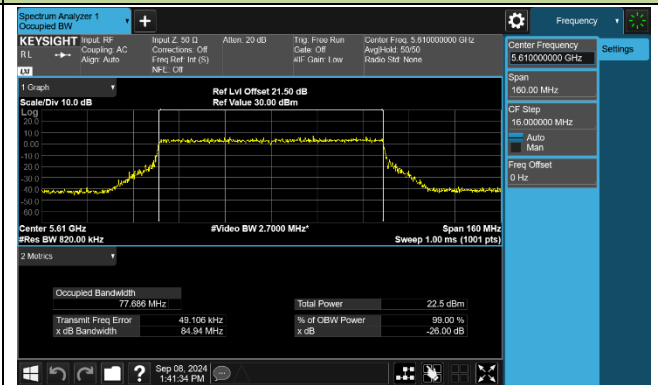
Channel 58 (5290MHz)



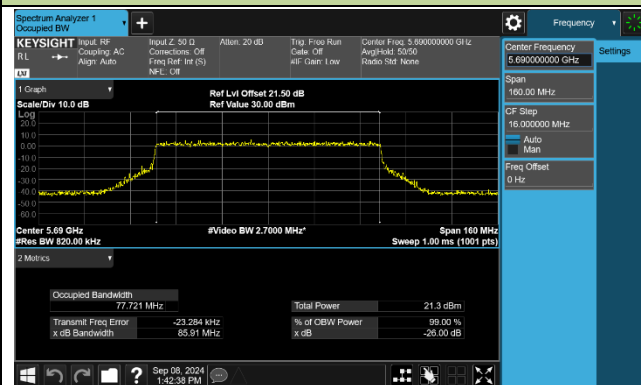
Channel 106 (5530MHz)



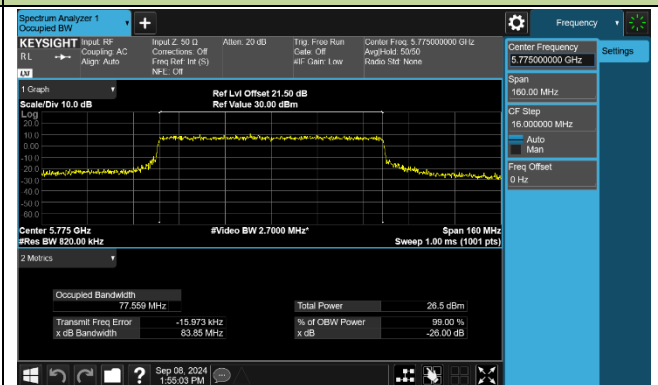
Channel 122 (5610MHz)



Channel 138 (5690MHz)

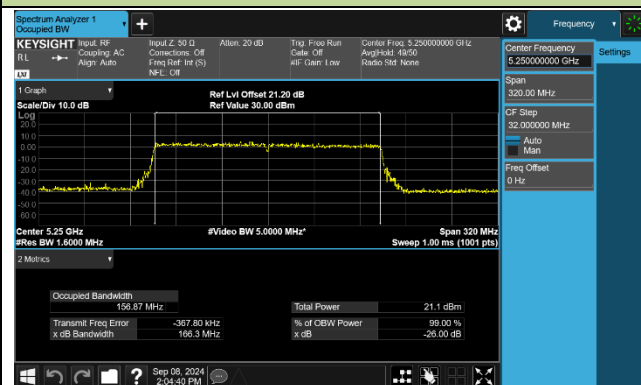


Channel 155 (5775MHz)

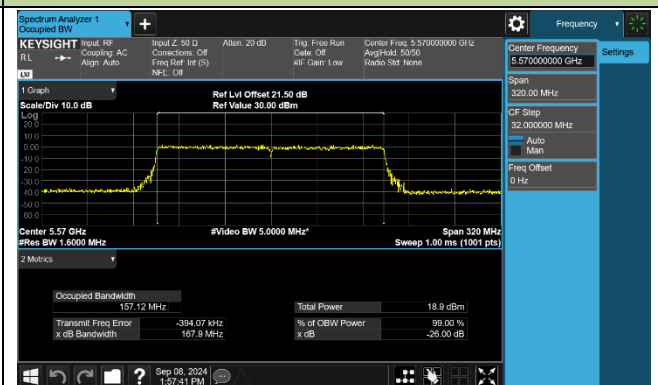


802.11ax-HE160 26dB Bandwidth & 99% Bandwidth

Channel 50 (5250MHz)

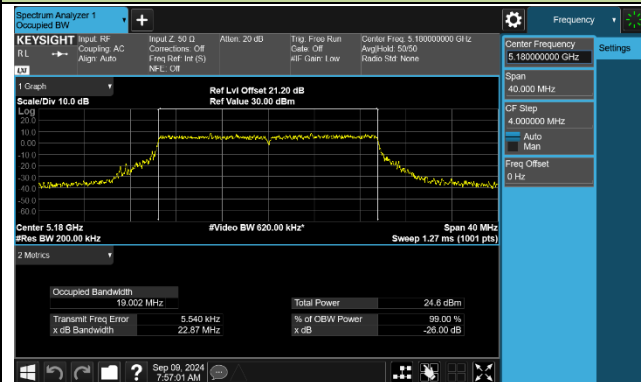


Channel 114 (5570MHz)

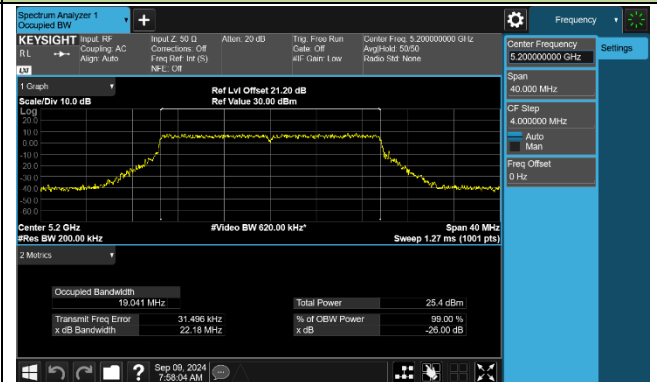


802.11be-EHT20 26dB Bandwidth & 99% Bandwidth

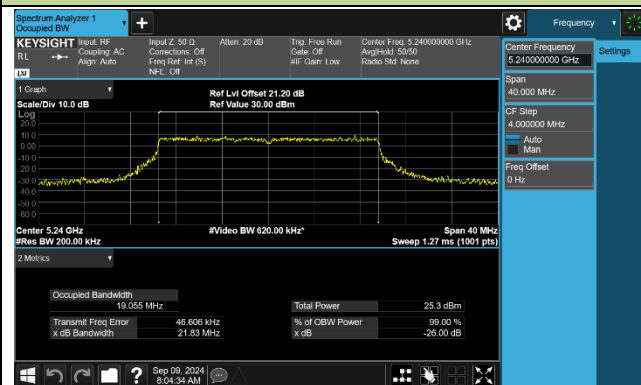
Channel 36 (5180MHz)



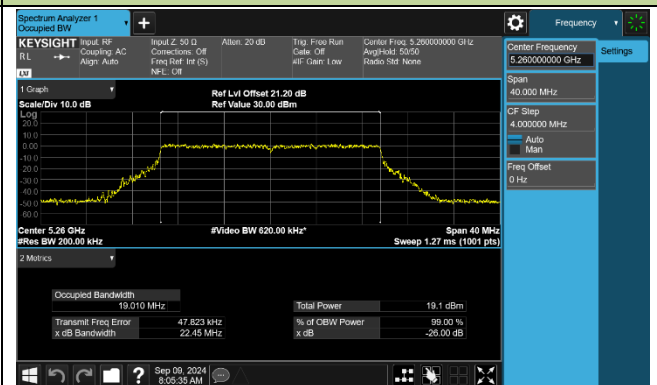
Channel 40 (5200MHz)



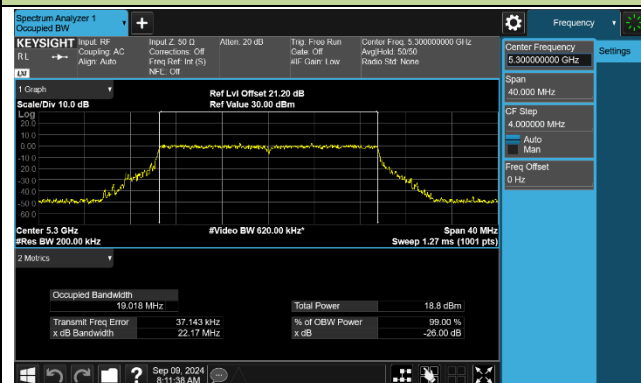
Channel 48 (5240MHz)



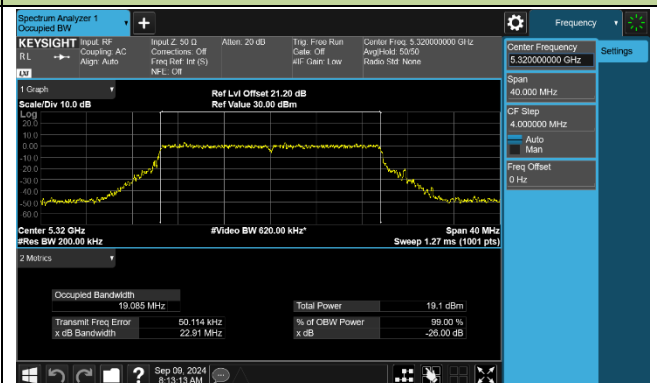
Channel 52 (5260MHz)



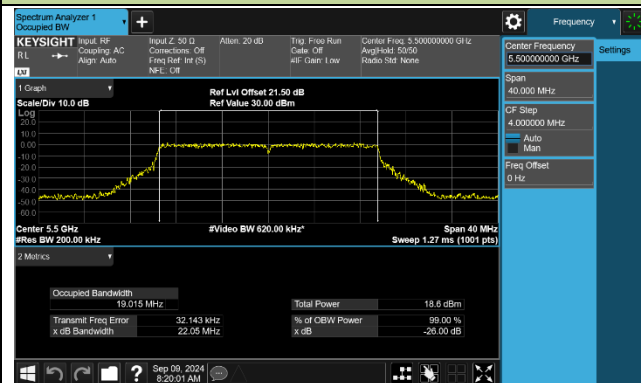
Channel 60 (5300MHz)



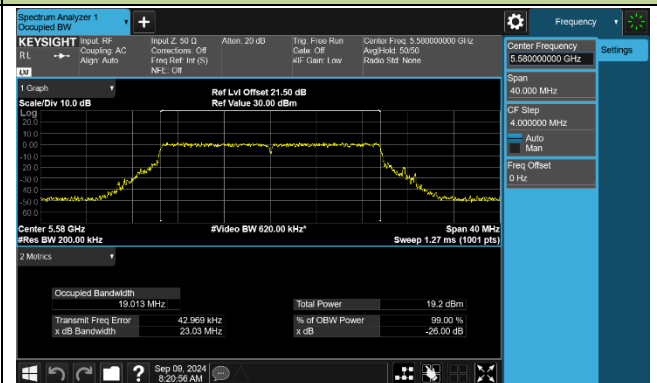
Channel 64 (5320MHz)

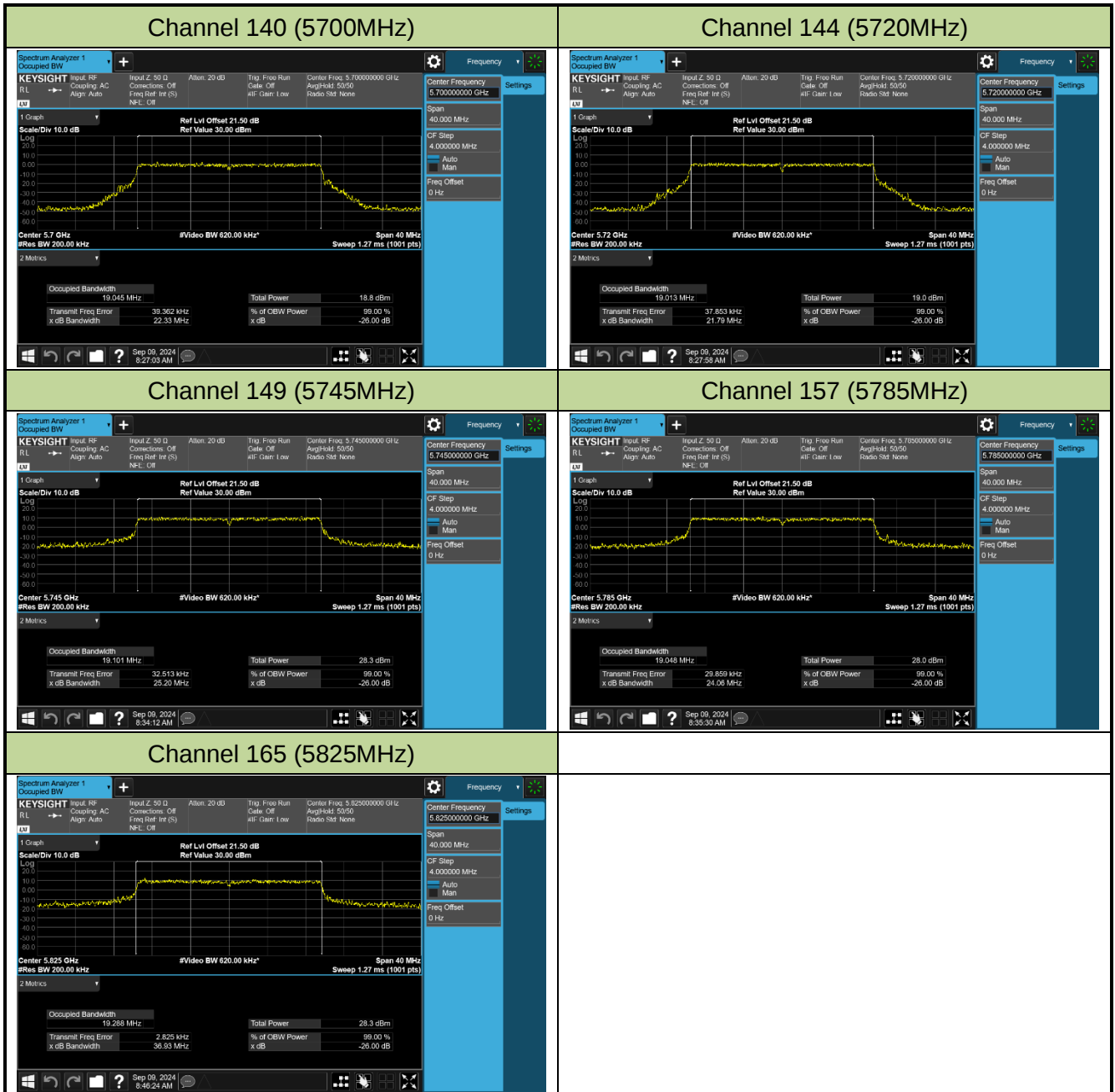


Channel 100 (5500MHz)



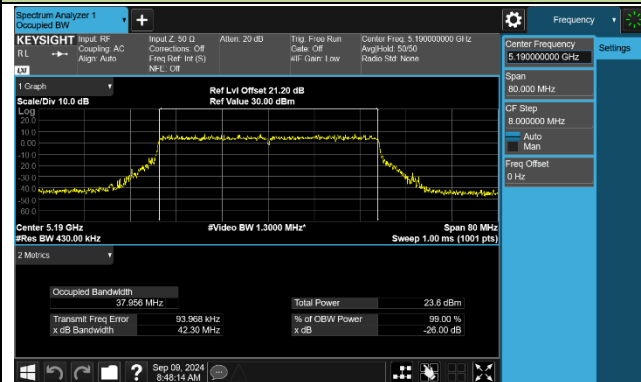
Channel 116 (5580MHz)



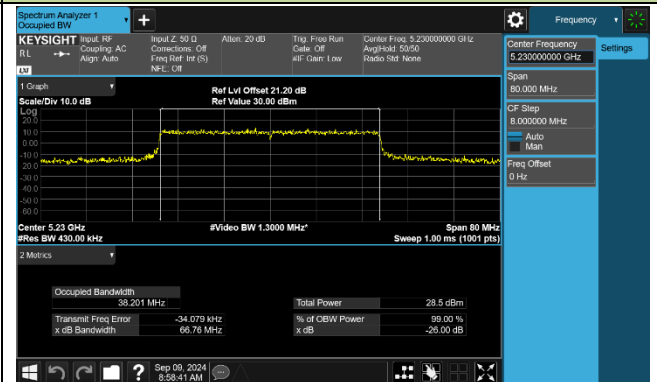


802.11be-EHT40 26dB Bandwidth & 99% Bandwidth

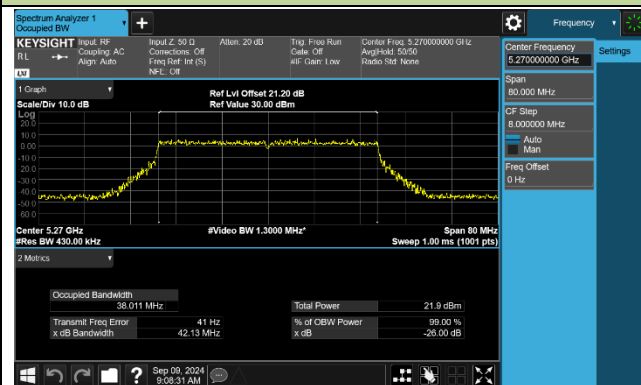
Channel 38 (5190MHz)



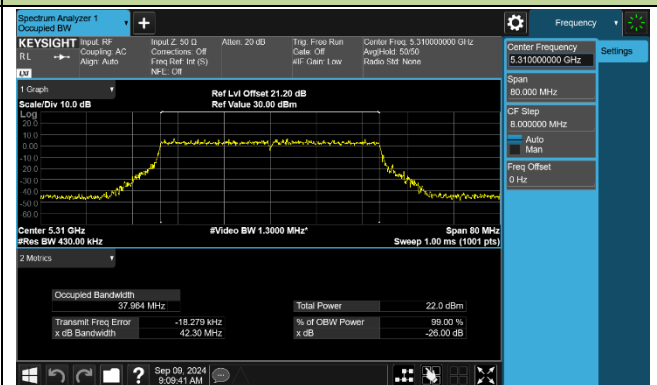
Channel 46 (5230MHz)



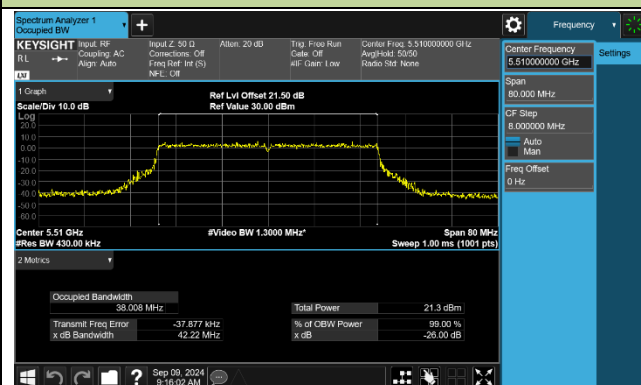
Channel 54 (5270MHz)



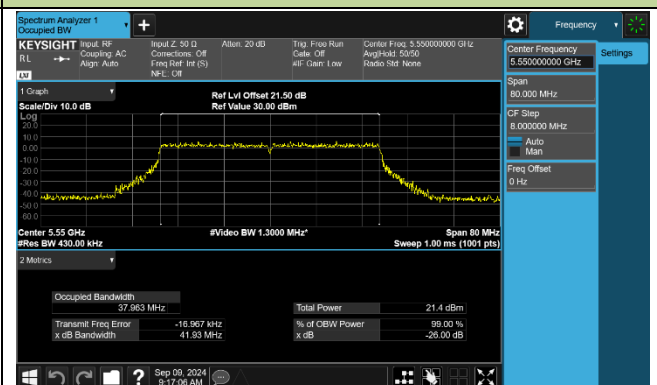
Channel 62 (5310MHz)



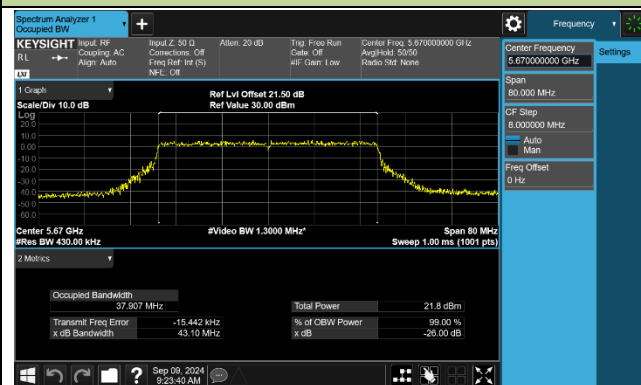
Channel 102 (5510MHz)



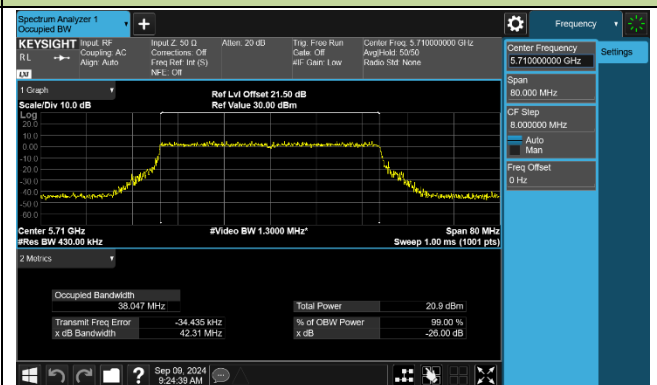
Channel 110 (5550MHz)

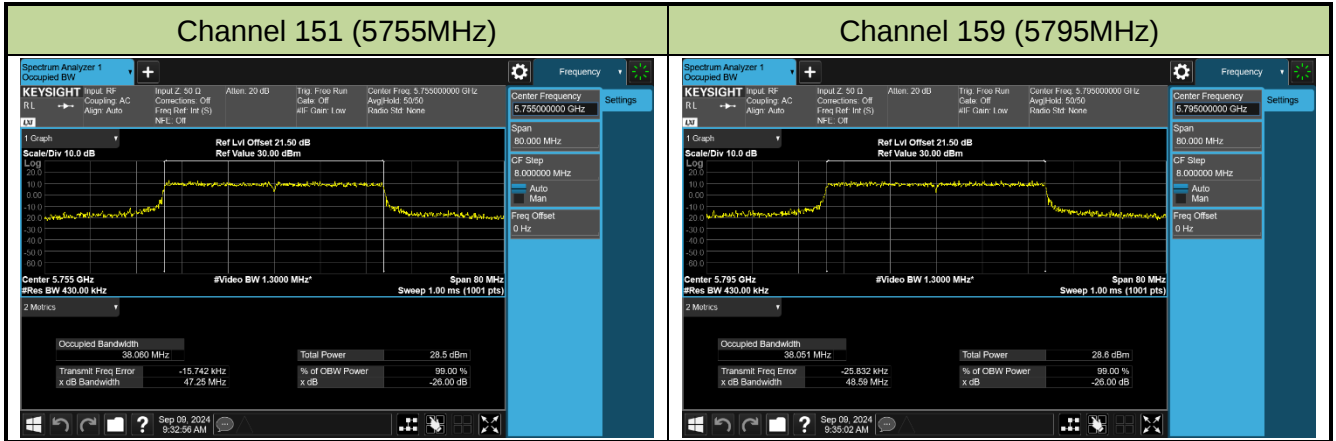


Channel 134 (5670MHz)



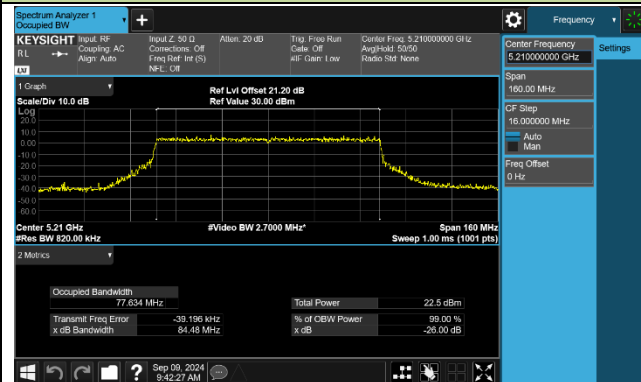
Channel 142 (5710MHz)



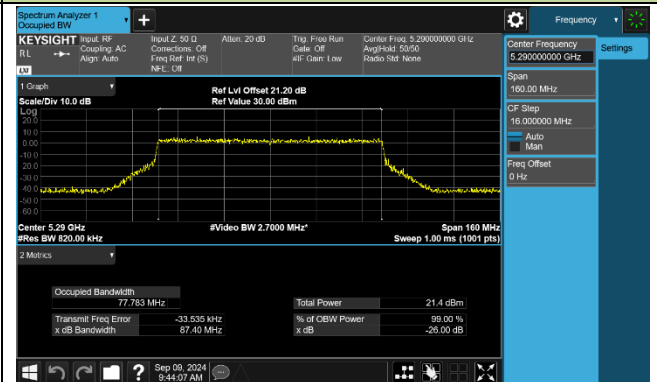


802.11be-EHT80 26dB Bandwidth & 99% Bandwidth

Channel 42 (5210MHz)



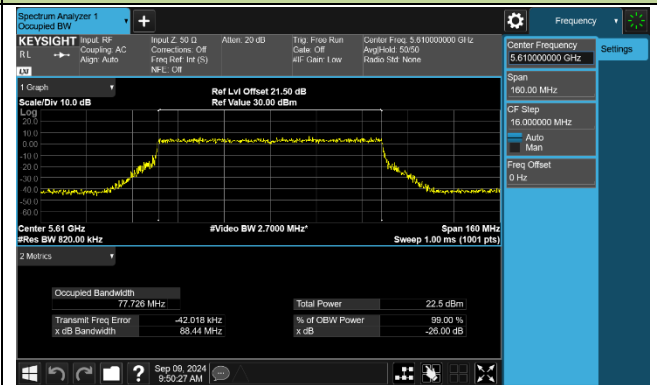
Channel 58 (5290MHz)



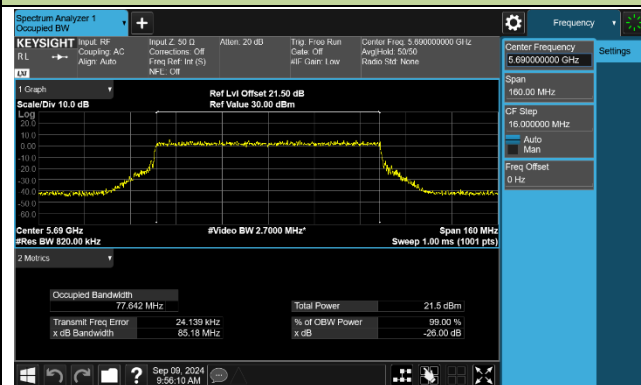
Channel 106 (5530MHz)



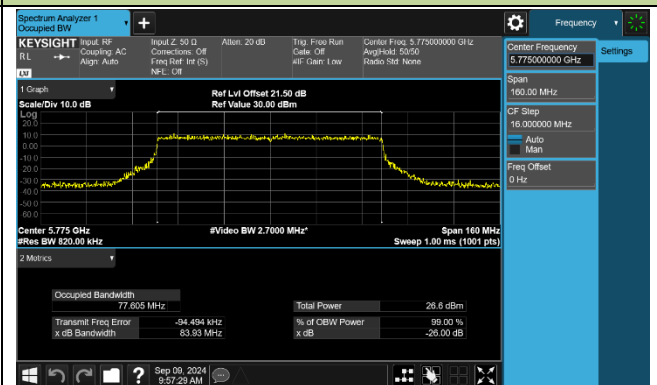
Channel 122 (5610MHz)



Channel 138 (5690MHz)

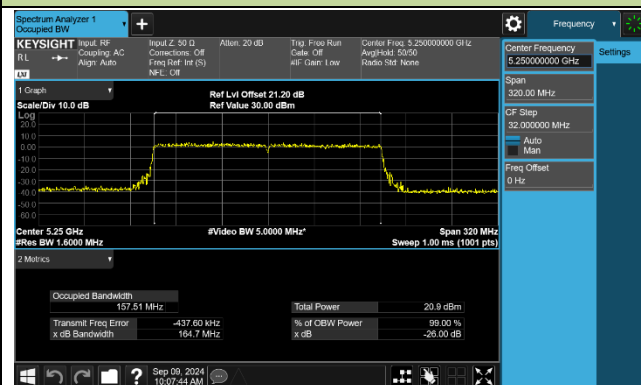


Channel 155 (5775MHz)

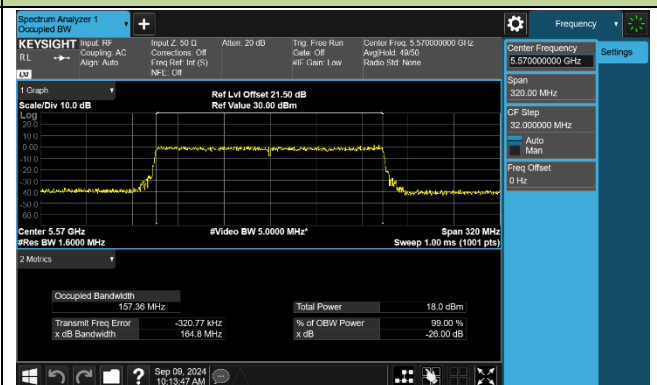


802.11be-EHT160 26dB Bandwidth & 99% Bandwidth

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.

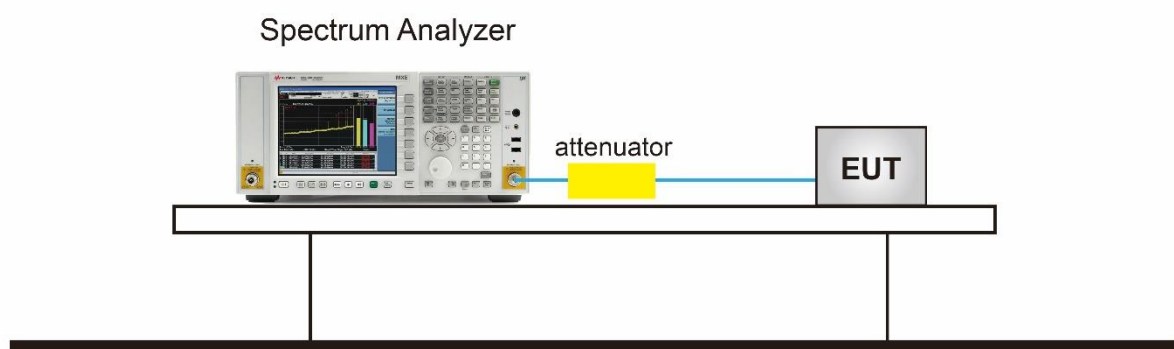
7.3.2. Test Procedure used

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



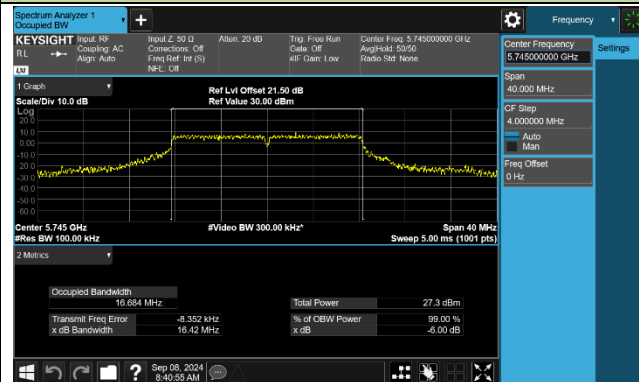
7.3.5.TestResult

Product	BE19000 Tri-Band Wi-Fi 7 Router	Test Engineer	Peter
Test Site	SR6	Test Date	2024/9/9

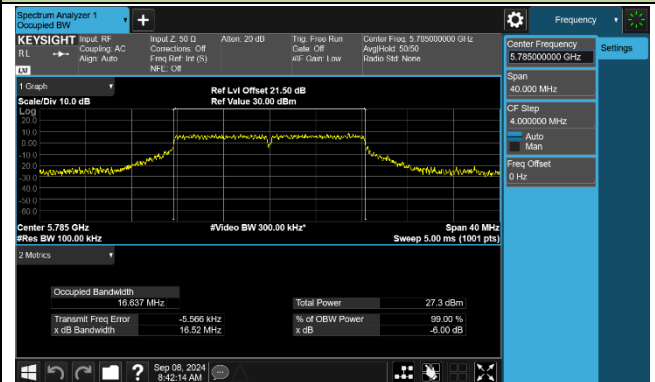
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 3						
802.11a	6Mbps	149	5745	16.420	≥ 0.5	Pass
802.11a	6Mbps	157	5785	16.520	≥ 0.5	Pass
802.11a	6Mbps	165	5825	16.330	≥ 0.5	Pass
802.11ac-VHT20	MCS0	149	5745	17.640	≥ 0.5	Pass
802.11ac-VHT20	MCS0	157	5785	17.630	≥ 0.5	Pass
802.11ac-VHT20	MCS0	165	5825	17.600	≥ 0.5	Pass
802.11ac-VHT40	MCS0	151	5755	36.390	≥ 0.5	Pass
802.11ac-VHT40	MCS0	159	5795	36.440	≥ 0.5	Pass
802.11ac-VHT80	MCS0	155	5775	76.450	≥ 0.5	Pass
802.11ax-HE20	MCS0	149	5745	18.920	≥ 0.5	Pass
802.11ax-HE20	MCS0	157	5785	19.010	≥ 0.5	Pass
802.11ax-HE20	MCS0	165	5825	19.000	≥ 0.5	Pass
802.11ax-HE40	MCS0	151	5755	38.230	≥ 0.5	Pass
802.11ax-HE40	MCS0	159	5795	37.980	≥ 0.5	Pass
802.11ax-HE80	MCS0	155	5775	78.070	≥ 0.5	Pass
802.11be-EHT20	MCS0	149	5745	19.090	≥ 0.5	Pass
802.11be-EHT20	MCS0	157	5785	18.920	≥ 0.5	Pass
802.11be-EHT20	MCS0	165	5825	19.040	≥ 0.5	Pass
802.11be-EHT40	MCS0	151	5755	38.250	≥ 0.5	Pass
802.11be-EHT40	MCS0	159	5795	38.170	≥ 0.5	Pass
802.11be-EHT80	MCS0	155	5775	78.130	≥ 0.5	Pass

802.11a 6dB Bandwidth

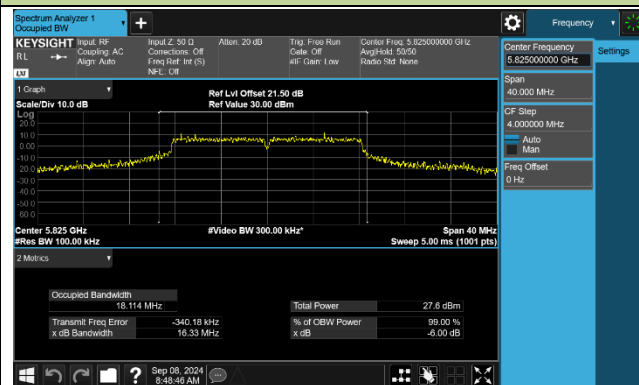
Channel 149 (5745MHz)



Channel 157 (5785MHz)

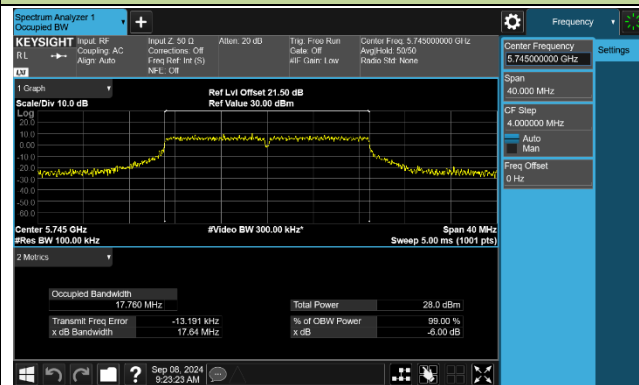


Channel 165 (5825MHz)

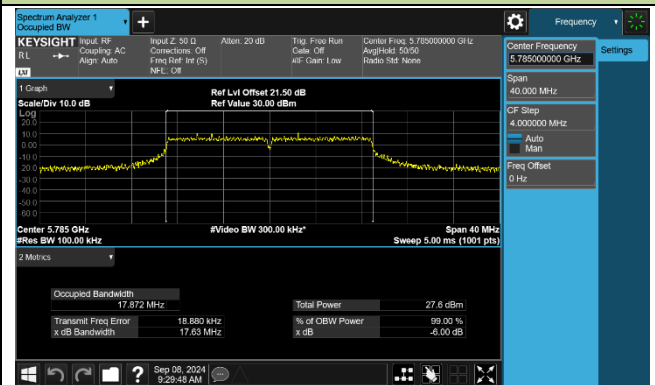


802.11ac-VHT20 6dB Bandwidth

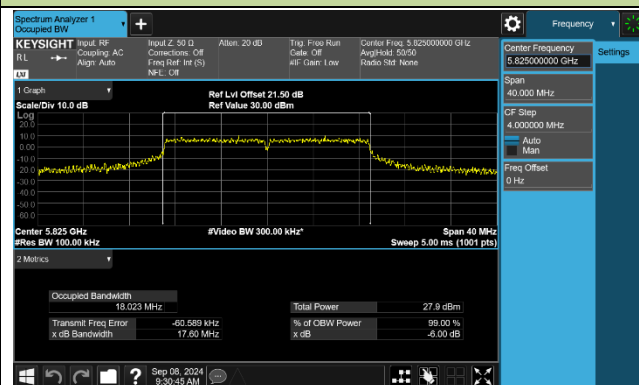
Channel 149 (5745MHz)



Channel 157 (5785MHz)

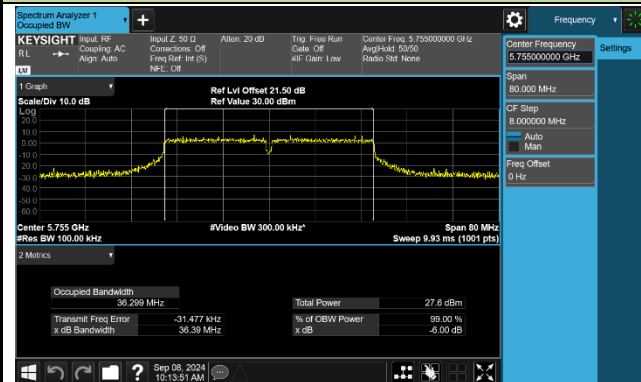


Channel 165 (5825MHz)

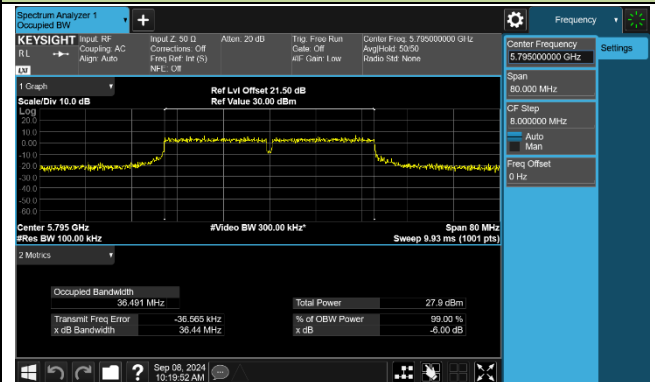


802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)

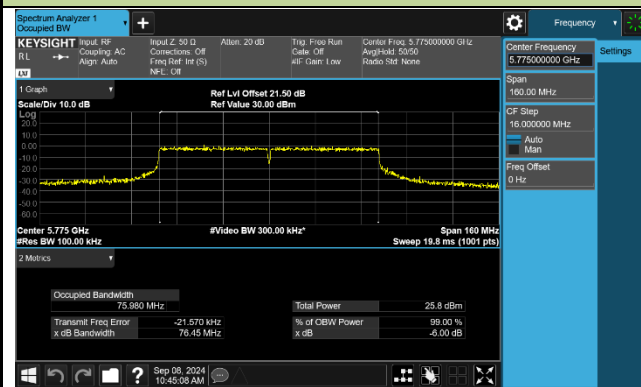


Channel 159 (5795MHz)



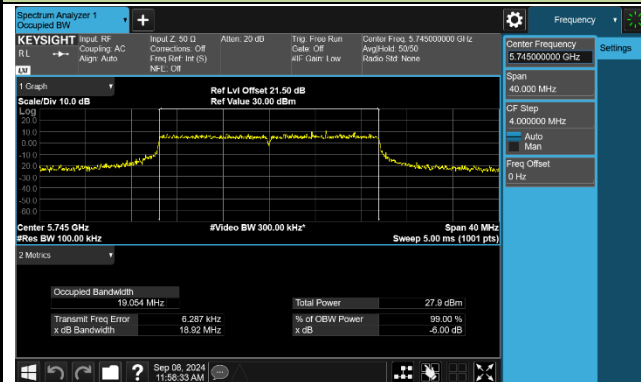
802.11ac-VHT80 6dB Bandwidth

Channel 155 (5775MHz)

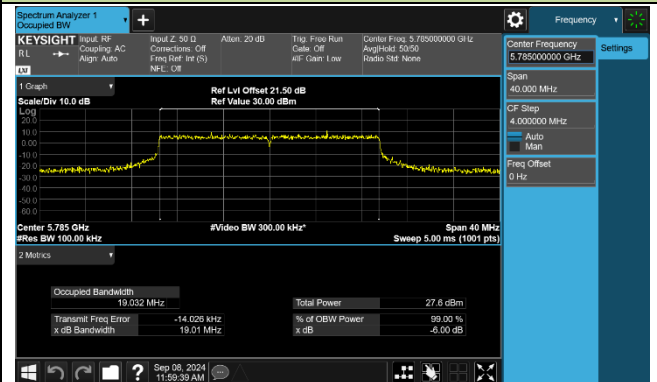


802.11ax-HE20 6dB Bandwidth

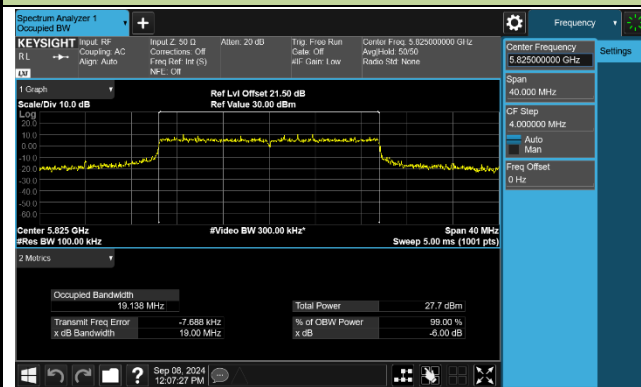
Channel 149 (5745MHz)



Channel 157 (5785MHz)

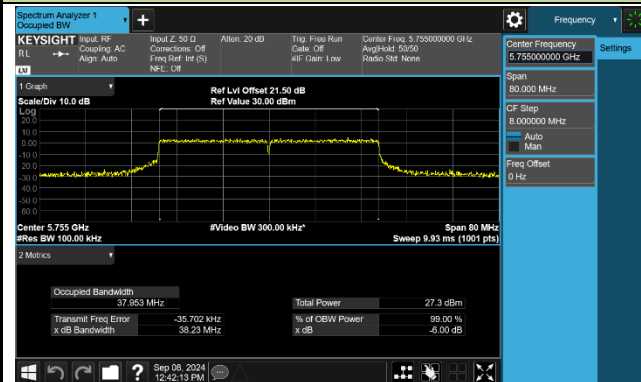


Channel 165 (5825MHz)

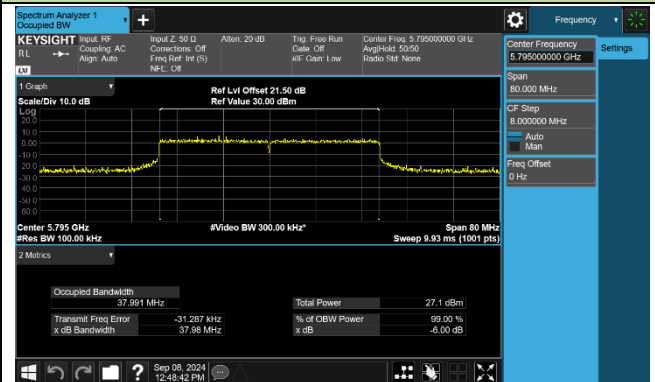


802.11ax-HE40 6dB Bandwidth

Channel 151 (5755MHz)

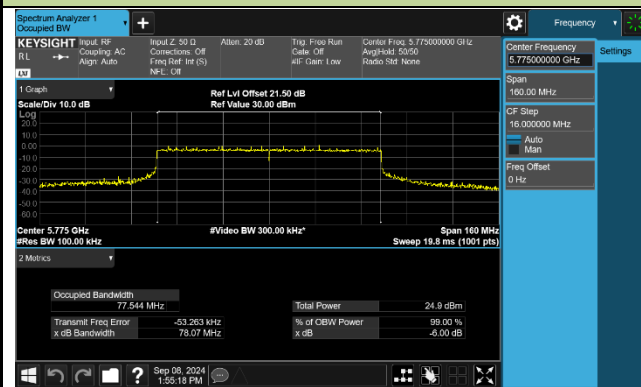


Channel 159 (5795MHz)



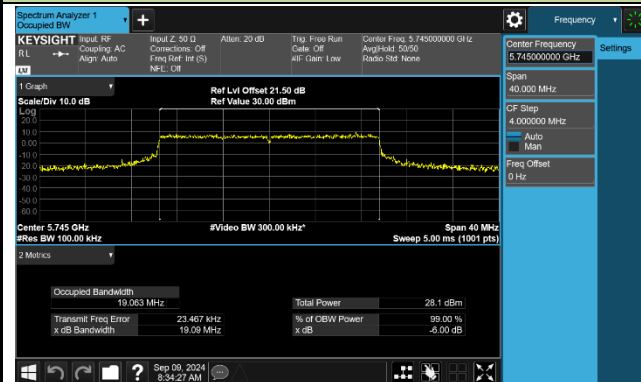
802.11ax-HE80 6dB Bandwidth

Channel 155 (5775MHz)

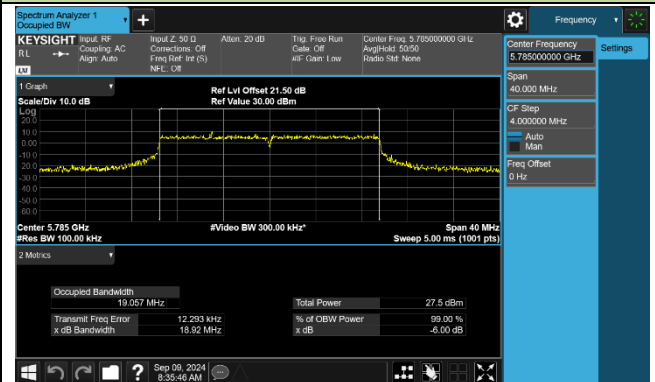


802.11be-EHT20 6dB Bandwidth

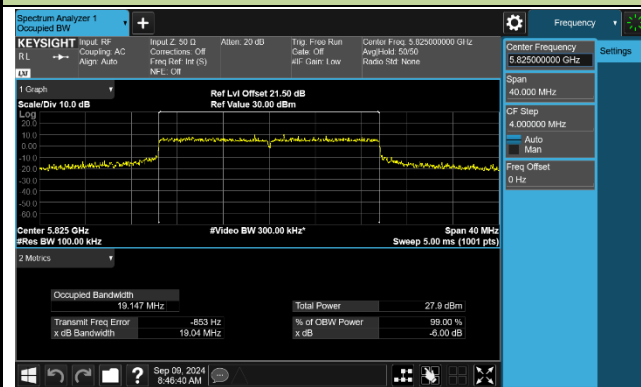
Channel 149 (5745MHz)



Channel 157 (5785MHz)

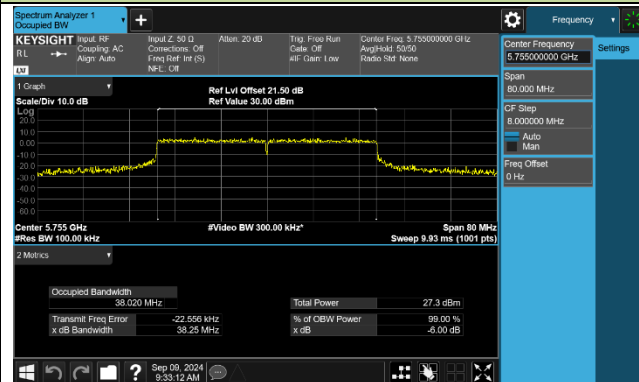


Channel 165 (5825MHz)

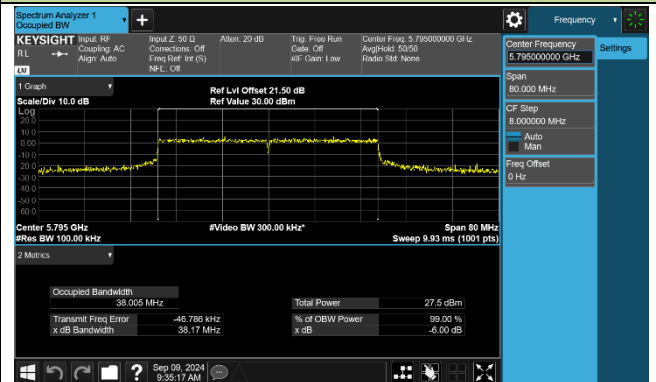


802.11be-EHT40 6dB Bandwidth

Channel 151 (5755MHz)

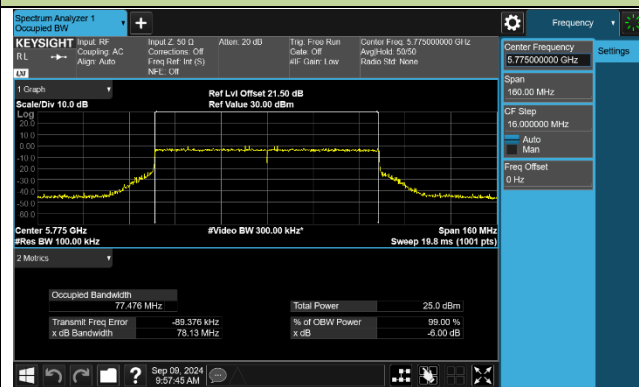


Channel 159 (5795MHz)



802.11be-EHT80 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.

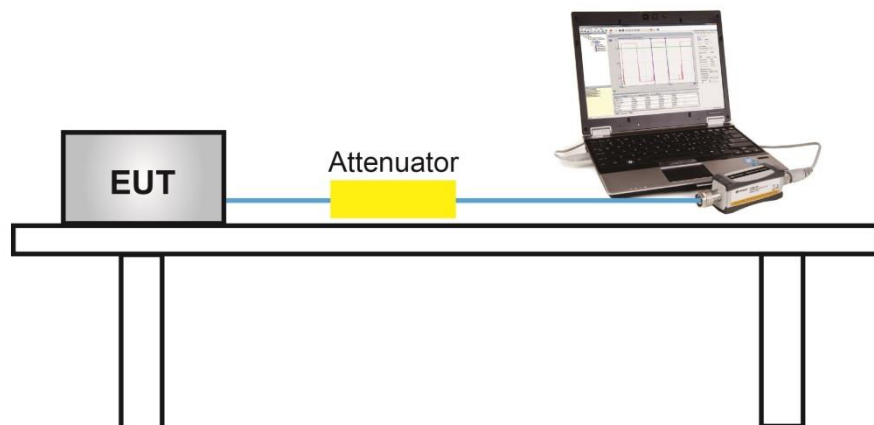
7.4.2. Test Procedure Used

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	BE19000 Tri-Band Wi-Fi 7 Router	Test Engineer	Peter
Test Site	SR6	Test Date	2024/9/6
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)	Average Power Limit (dBm)	Result
11a	6Mbps	36	5180	19.99	19.89	20.63	20.90	26.39	≤ 30.00	Pass
11a	6Mbps	40	5200	20.28	20.00	20.77	21.60	26.73	≤ 30.00	Pass
11a	6Mbps	48	5240	19.87	19.83	20.72	21.19	26.46	≤ 30.00	Pass
11a	6Mbps	52	5260	13.44	13.38	14.34	14.75	20.04	≤ 23.98	Pass
11a	6Mbps	60	5300	13.43	13.41	14.42	14.80	20.08	≤ 23.98	Pass
11a	6Mbps	64	5320	13.82	14.02	15.11	15.57	20.71	≤ 23.98	Pass
11a	6Mbps	100	5500	13.32	12.99	14.40	14.68	19.93	≤ 23.98	Pass
11a	6Mbps	116	5580	11.99	12.70	13.85	14.23	19.30	≤ 23.98	Pass
11a	6Mbps	140	5700	13.05	13.25	14.04	14.15	19.67	≤ 23.98	Pass
11a	6Mbps	144	5720	13.56	13.43	14.18	14.70	20.02	≤ 22.99	Pass
11a	6Mbps	149	5745	22.98	22.89	23.58	24.30	29.50	≤ 30.00	Pass
11a	6Mbps	157	5785	22.98	23.55	23.57	23.95	29.55	≤ 30.00	Pass
11a	6Mbps	165	5825	23.15	23.02	23.57	24.20	29.53	≤ 30.00	Pass
11ac-VHT20	MCS0	36	5180	19.97	19.95	20.67	21.25	26.51	≤ 30.00	Pass
11ac-VHT20	MCS0	40	5200	20.36	20.00	20.83	21.78	26.82	≤ 30.00	Pass
11ac-VHT20	MCS0	48	5240	19.95	19.95	20.92	21.34	26.60	≤ 30.00	Pass
11ac-VHT20	MCS0	52	5260	14.04	13.95	14.79	15.34	20.59	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	13.39	13.47	14.33	14.90	20.09	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	13.21	13.33	14.30	14.80	19.98	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	13.29	13.09	14.60	14.70	20.00	≤ 23.98	Pass
11ac-VHT20	MCS0	116	5580	13.08	12.61	14.07	13.90	19.48	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	13.52	13.65	14.57	14.69	20.16	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	12.80	13.42	13.30	14.20	19.48	≤ 23.05	Pass
11ac-VHT20	MCS0	149	5745	23.07	23.00	23.78	24.50	29.65	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	22.76	23.15	23.27	23.90	29.31	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	23.35	23.30	23.82	24.10	29.68	≤ 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	18.36	18.40	18.78	19.97	24.95	≤ 30.00	Pass
11ac-VHT40	MCS0	46	5230	23.22	23.18	23.89	24.32	29.70	≤ 30.00	Pass
11ac-VHT40	MCS0	54	5270	17.25	17.11	17.83	17.43	23.43	≤ 23.98	Pass
11ac-VHT40	MCS0	62	5310	16.74	16.62	17.37	17.41	23.07	≤ 23.98	Pass
11ac-VHT40	MCS0	102	5510	16.24	15.96	17.27	17.24	22.74	≤ 23.98	Pass
11ac-VHT40	MCS0	110	5550	16.35	16.02	17.43	17.99	23.04	≤ 23.98	Pass
11ac-VHT40	MCS0	134	5670	16.72	16.66	17.75	17.99	23.34	≤ 23.98	Pass
11ac-VHT40	MCS0	142	5710	16.41	16.40	17.25	17.10	22.83	≤ 23.98	Pass
11ac-VHT40	MCS0	151	5755	22.77	22.70	23.48	24.31	29.39	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	22.96	23.11	23.52	23.79	29.38	≤ 30.00	Pass
11ac-VHT80	MCS0	42	5210	16.93	16.50	17.17	17.90	23.18	≤ 30.00	Pass
11ac-VHT80	MCS0	58	5290	17.34	17.34	17.65	17.99	23.61	≤ 23.98	Pass
11ac-VHT80	MCS0	106	5530	17.15	16.97	17.56	18.40	23.58	≤ 23.98	Pass
11ac-VHT80	MCS0	122	5610	16.92	16.54	17.88	18.02	23.41	≤ 23.98	Pass
11ac-VHT80	MCS0	138	5690	17.23	17.55	17.20	18.60	23.70	≤ 23.98	Pass
11ac-VHT80	MCS0	155	5775	21.64	22.02	22.30	22.75	28.22	≤ 30.00	Pass
11ac-VHT160	MCS0	50	5250	16.14	16.02	16.61	16.67	22.39	≤ 23.98	Pass
11ac-VHT160	MCS0	114	5570	12.64	12.73	12.98	13.41	18.97	≤ 23.98	Pass
11ax-HE20	MCS0	36	5180	19.99	20.08	20.77	21.17	26.55	≤ 30.00	Pass
11ax-HE20	MCS0	40	5200	20.36	20.44	20.98	21.91	26.99	≤ 30.00	Pass
11ax-HE20	MCS0	48	5240	19.49	19.58	20.33	20.85	26.12	≤ 30.00	Pass
11ax-HE20	MCS0	52	5260	14.06	14.03	14.93	15.42	20.67	≤ 23.98	Pass
11ax-HE20	MCS0	60	5300	13.51	13.56	14.45	14.93	20.18	≤ 23.98	Pass
11ax-HE20	MCS0	64	5320	13.80	13.72	14.84	15.17	20.45	≤ 23.98	Pass
11ax-HE20	MCS0	100	5500	13.37	13.26	14.57	14.65	20.03	≤ 23.98	Pass
11ax-HE20	MCS0	116	5580	13.70	13.41	14.50	14.70	20.13	≤ 23.98	Pass
11ax-HE20	MCS0	140	5700	13.67	13.89	14.60	14.74	20.27	≤ 23.98	Pass
11ax-HE20	MCS0	144	5720	13.66	13.59	14.15	14.91	20.13	≤ 23.05	Pass
11ax-HE20	MCS0	149	5745	23.10	23.30	23.90	24.60	29.79	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	23.07	23.60	23.73	24.40	29.75	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	23.42	24.25	23.70	24.06	29.89	≤ 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	19.96	19.82	20.50	20.71	26.28	≤ 30.00	Pass
11ax-HE40	MCS0	46	5230	23.51	23.17	23.65	24.63	29.80	≤ 30.00	Pass
11ax-HE40	MCS0	54	5270	17.24	17.00	17.42	17.70	23.37	≤ 23.98	Pass
11ax-HE40	MCS0	62	5310	16.79	16.15	17.04	17.35	22.88	≤ 23.98	Pass
11ax-HE40	MCS0	102	5510	16.30	16.00	17.54	17.82	23.01	≤ 23.98	Pass
11ax-HE40	MCS0	110	5550	16.64	16.52	17.98	18.04	23.37	≤ 23.98	Pass
11ax-HE40	MCS0	134	5670	16.74	16.54	17.52	17.84	23.21	≤ 23.98	Pass
11ax-HE40	MCS0	142	5710	16.81	16.77	17.54	17.51	23.19	≤ 23.98	Pass
11ax-HE40	MCS0	151	5755	22.87	22.88	23.57	24.00	29.38	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	22.60	23.00	23.64	24.00	29.36	≤ 30.00	Pass
11ax-HE80	MCS0	42	5210	18.85	18.12	18.71	19.82	24.94	≤ 30.00	Pass
11ax-HE80	MCS0	58	5290	16.99	17.02	17.68	18.34	23.56	≤ 23.98	Pass
11ax-HE80	MCS0	106	5530	17.11	16.78	17.35	18.00	23.35	≤ 23.98	Pass
11ax-HE80	MCS0	122	5610	17.15	16.56	17.88	18.31	23.55	≤ 23.98	Pass
11ax-HE80	MCS0	138	5690	17.37	17.02	17.55	18.35	23.62	≤ 23.98	Pass
11ax-HE80	MCS0	155	5775	20.82	20.97	21.45	22.00	27.36	≤ 30.00	Pass
11ax-HE160	MCS0	50	5250	17.05	16.68	17.45	17.91	23.32	≤ 23.98	Pass
11ax-HE160	MCS0	114	5570	13.71	13.68	14.36	14.99	20.24	≤ 23.98	Pass
11be-EHT20	MCS0	36	5180	20.14	20.03	20.70	21.29	26.59	≤ 30.00	Pass
11be-EHT20	MCS0	40	5200	20.39	20.58	20.88	21.88	26.99	≤ 30.00	Pass
11be-EHT20	MCS0	48	5240	19.94	19.97	21.06	21.42	26.67	≤ 30.00	Pass
11be-EHT20	MCS0	52	5260	14.18	14.00	14.89	15.35	20.66	≤ 23.98	Pass
11be-EHT20	MCS0	60	5300	13.50	13.70	14.35	14.90	20.17	≤ 23.98	Pass
11be-EHT20	MCS0	64	5320	13.47	13.73	14.70	14.87	20.25	≤ 23.98	Pass
11be-EHT20	MCS0	100	5500	13.42	13.24	14.60	14.65	20.05	≤ 23.98	Pass
11be-EHT20	MCS0	116	5580	13.70	13.35	14.50	14.78	20.14	≤ 23.98	Pass
11be-EHT20	MCS0	140	5700	13.56	13.87	14.50	14.68	20.20	≤ 23.98	Pass
11be-EHT20	MCS0	144	5720	14.09	13.91	14.80	15.33	20.59	≤ 23.01	Pass
11be-EHT20	MCS0	149	5745	23.28	23.24	23.87	24.54	29.79	≤ 30.00	Pass
11be-EHT20	MCS0	157	5785	23.65	23.15	23.45	24.05	29.61	≤ 30.00	Pass
11be-EHT20	MCS0	165	5825	23.50	23.32	23.90	24.40	29.82	≤ 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
11be-EHT40	MCS0	38	5190	18.78	18.31	19.06	19.40	24.93	≤ 30.00	Pass
11be-EHT40	MCS0	46	5230	23.28	23.33	23.61	24.47	29.72	≤ 30.00	Pass
11be-EHT40	MCS0	54	5270	17.22	16.87	17.57	17.91	23.43	≤ 23.98	Pass
11be-EHT40	MCS0	62	5310	17.54	17.22	17.98	18.02	23.72	≤ 23.98	Pass
11be-EHT40	MCS0	102	5510	16.17	16.48	17.52	17.34	22.93	≤ 23.98	Pass
11be-EHT40	MCS0	110	5550	16.23	16.07	17.32	17.67	22.90	≤ 23.98	Pass
11be-EHT40	MCS0	134	5670	16.82	16.61	17.60	17.84	23.27	≤ 23.98	Pass
11be-EHT40	MCS0	142	5710	16.20	16.25	17.04	17.18	22.71	≤ 23.98	Pass
11be-EHT40	MCS0	151	5755	22.29	22.66	23.40	24.02	29.16	≤ 30.00	Pass
11be-EHT40	MCS0	159	5795	22.50	22.92	23.60	24.12	29.35	≤ 30.00	Pass
11be-EHT80	MCS0	42	5210	18.04	17.54	18.18	18.90	24.21	≤ 30.00	Pass
11be-EHT80	MCS0	58	5290	16.75	16.85	17.95	17.92	23.43	≤ 23.98	Pass
11be-EHT80	MCS0	106	5530	17.27	16.77	18.15	18.35	23.70	≤ 23.98	Pass
11be-EHT80	MCS0	122	5610	16.92	16.72	17.98	18.50	23.61	≤ 23.98	Pass
11be-EHT80	MCS0	138	5690	16.81	16.71	17.57	17.65	23.23	≤ 23.98	Pass
11be-EHT80	MCS0	155	5775	21.22	21.42	21.62	22.40	27.71	≤ 30.00	Pass
11be-EHT160	MCS0	50	5250	17.14	16.65	17.71	17.85	23.38	≤ 23.98	Pass
11be-EHT160	MCS0	114	5570	13.08	12.99	13.79	14.43	19.63	≤ 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 Channel 144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2)$

Product	BE19000 Tri-Band Wi-Fi 7 Router	Test Engineer	Peter
Test Site	SR6	Test Date	2024/9/6
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	19.97	19.95	20.67	21.25	26.51	≤ 27.61	Pass
11ac-VHT20	MCS0	40	5200	20.36	20.00	20.83	21.78	26.82	≤ 27.61	Pass
11ac-VHT20	MCS0	48	5240	19.95	19.95	20.92	21.34	26.60	≤ 27.61	Pass
11ac-VHT20	MCS0	52	5260	14.04	13.95	14.79	15.34	20.59	≤ 21.38	Pass
11ac-VHT20	MCS0	60	5300	13.39	13.47	14.33	14.90	20.09	≤ 21.38	Pass
11ac-VHT20	MCS0	64	5320	13.21	13.33	14.30	14.80	19.98	≤ 21.38	Pass
11ac-VHT20	MCS0	100	5500	13.29	13.09	14.60	14.70	20.00	≤ 20.96	Pass
11ac-VHT20	MCS0	116	5580	13.08	12.61	14.07	13.90	19.48	≤ 20.96	Pass
11ac-VHT20	MCS0	140	5700	13.52	13.65	14.57	14.69	20.16	≤ 20.96	Pass
11ac-VHT20	MCS0	144	5720	12.80	13.42	13.30	14.20	19.48	≤ 20.03	Pass
11ac-VHT20	MCS0	149	5745	21.10	21.10	20.80	21.60	27.18	≤ 27.86	Pass
11ac-VHT20	MCS0	157	5785	20.88	21.22	21.34	21.90	27.37	≤ 27.86	Pass
11ac-VHT20	MCS0	165	5825	21.15	21.23	21.55	21.79	27.46	≤ 27.86	Pass
11ac-VHT40	MCS0	38	5190	18.36	18.40	18.78	19.97	24.95	≤ 27.61	Pass
11ac-VHT40	MCS0	46	5230	20.78	20.67	21.15	21.52	27.06	≤ 27.61	Pass
11ac-VHT40	MCS0	54	5270	14.52	14.71	14.99	15.20	20.88	≤ 21.38	Pass
11ac-VHT40	MCS0	62	5310	14.55	14.82	14.88	14.91	20.81	≤ 21.38	Pass
11ac-VHT40	MCS0	102	5510	14.10	13.89	14.55	14.72	20.35	≤ 20.96	Pass
11ac-VHT40	MCS0	110	5550	13.80	13.88	15.11	15.52	20.66	≤ 20.96	Pass
11ac-VHT40	MCS0	134	5670	13.55	13.62	14.51	14.77	20.17	≤ 20.96	Pass
11ac-VHT40	MCS0	142	5710	14.22	14.27	14.98	15.07	20.67	≤ 20.96	Pass
11ac-VHT40	MCS0	151	5755	21.34	20.87	20.95	21.53	27.20	≤ 27.86	Pass
11ac-VHT40	MCS0	159	5795	21.69	21.57	21.88	21.90	27.78	≤ 27.86	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	16.93	16.50	17.17	17.90	23.18	≤ 27.61	Pass
11ac-VHT80	MCS0	58	5290	17.34	17.34	17.65	17.99	20.60	≤ 21.38	Pass
11ac-VHT80	MCS0	106	5530	17.15	16.97	17.56	18.40	20.54	≤ 20.96	Pass
11ac-VHT80	MCS0	122	5610	16.92	16.54	17.88	18.02	20.55	≤ 20.96	Pass
11ac-VHT80	MCS0	138	5690	17.23	17.55	17.20	18.60	20.56	≤ 20.96	Pass
11ac-VHT80	MCS0	155	5775	21.64	22.02	22.30	22.75	26.67	≤ 27.86	Pass
11ac-VHT160	MCS0	50	5250	14.56	14.23	14.77	14.95	20.66	≤ 21.38	Pass
11ac-VHT160	MCS0	114	5570	12.64	12.73	12.98	13.41	18.97	≤ 20.96	Pass
11ax-HE20	MCS0	36	5180	19.99	20.08	20.77	21.17	26.55	≤ 27.61	Pass
11ax-HE20	MCS0	40	5200	20.36	20.44	20.98	21.91	26.99	≤ 27.61	Pass
11ax-HE20	MCS0	48	5240	19.49	19.58	20.33	20.85	26.12	≤ 27.61	Pass
11ax-HE20	MCS0	52	5260	14.06	14.03	14.93	15.42	20.67	≤ 21.38	Pass
11ax-HE20	MCS0	60	5300	13.51	13.56	14.45	14.93	20.18	≤ 21.38	Pass
11ax-HE20	MCS0	64	5320	13.80	13.72	14.84	15.17	20.45	≤ 21.38	Pass
11ax-HE20	MCS0	100	5500	13.37	13.26	14.57	14.65	20.03	≤ 20.96	Pass
11ax-HE20	MCS0	116	5580	13.70	13.41	14.50	14.70	20.13	≤ 20.96	Pass
11ax-HE20	MCS0	140	5700	13.67	13.89	14.60	14.74	20.27	≤ 20.96	Pass
11ax-HE20	MCS0	144	5720	13.36	13.39	13.87	14.61	19.86	≤ 20.03	Pass
11ax-HE20	MCS0	149	5745	20.12	20.24	20.88	20.99	26.59	≤ 27.86	Pass
11ax-HE20	MCS0	157	5785	20.79	20.88	21.02	21.46	27.07	≤ 27.86	Pass
11ax-HE20	MCS0	165	5825	21.17	21.00	21.78	21.56	27.41	≤ 27.86	Pass
11ax-HE40	MCS0	38	5190	19.96	19.82	20.50	20.71	26.28	≤ 27.61	Pass
11ax-HE40	MCS0	46	5230	20.88	21.02	21.15	21.74	27.23	≤ 27.61	Pass
11ax-HE40	MCS0	54	5270	14.89	14.98	15.02	15.13	21.03	≤ 21.38	Pass
11ax-HE40	MCS0	62	5310	14.98	14.52	15.12	15.20	20.98	≤ 21.38	Pass
11ax-HE40	MCS0	102	5510	14.88	14.17	15.00	15.23	20.86	≤ 20.96	Pass
11ax-HE40	MCS0	110	5550	14.10	14.32	14.95	15.12	20.66	≤ 20.96	Pass
11ax-HE40	MCS0	134	5670	13.95	14.03	15.00	15.11	20.58	≤ 20.96	Pass
11ax-HE40	MCS0	142	5710	14.30	14.47	14.99	15.45	20.85	≤ 20.96	Pass
11ax-HE40	MCS0	151	5755	20.54	20.75	21.17	21.66	27.07	≤ 27.86	Pass
11ax-HE40	MCS0	159	5795	21.35	21.44	22.07	22.20	27.80	≤ 27.86	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	18.85	18.12	18.71	19.82	24.94	≤ 27.61	Pass
11ax-HE80	MCS0	58	5290	14.56	14.60	14.54	14.92	20.68	≤ 21.38	Pass
11ax-HE80	MCS0	106	5530	14.21	14.30	15.17	14.95	20.70	≤ 20.96	Pass
11ax-HE80	MCS0	122	5610	14.02	14.60	14.87	14.88	20.63	≤ 20.96	Pass
11ax-HE80	MCS0	138	5690	14.22	14.51	14.65	14.70	20.54	≤ 20.96	Pass
11ax-HE80	MCS0	155	5775	20.82	20.97	21.45	22.00	27.36	≤ 27.86	Pass
11ax-HE160	MCS0	50	5250	14.67	14.98	15.12	15.31	21.05	≤ 21.38	Pass
11ax-HE160	MCS0	114	5570	13.71	13.68	14.36	14.99	20.24	≤ 20.96	Pass
11be-EHT20	MCS0	36	5180	20.14	20.03	20.70	21.29	26.59	≤ 27.61	Pass
11be-EHT20	MCS0	40	5200	20.39	20.58	20.88	21.88	26.99	≤ 27.61	Pass
11be-EHT20	MCS0	48	5240	19.94	19.97	21.06	21.42	26.67	≤ 27.61	Pass
11be-EHT20	MCS0	52	5260	14.18	14.00	14.89	15.35	20.66	≤ 21.38	Pass
11be-EHT20	MCS0	60	5300	13.50	13.70	14.35	14.90	20.17	≤ 21.38	Pass
11be-EHT20	MCS0	64	5320	13.47	13.73	14.70	14.87	20.25	≤ 21.38	Pass
11be-EHT20	MCS0	100	5500	13.42	13.24	14.60	14.65	20.05	≤ 20.96	Pass
11be-EHT20	MCS0	116	5580	13.70	13.35	14.50	14.78	20.14	≤ 20.96	Pass
11be-EHT20	MCS0	140	5700	13.56	13.87	14.50	14.68	20.20	≤ 20.96	Pass
11be-EHT20	MCS0	144	5720	13.21	13.27	13.67	14.12	19.60	≤ 19.99	Pass
11be-EHT20	MCS0	149	5745	20.45	20.25	21.58	21.72	27.07	≤ 27.86	Pass
11be-EHT20	MCS0	157	5785	21.02	21.14	21.76	21.88	27.49	≤ 27.86	Pass
11be-EHT20	MCS0	165	5825	21.19	21.05	21.53	22.12	27.51	≤ 27.86	Pass
11be-EHT40	MCS0	38	5190	18.78	18.31	19.06	19.40	24.93	≤ 27.61	Pass
11be-EHT40	MCS0	46	5230	20.72	20.88	21.22	21.95	27.24	≤ 27.61	Pass
11be-EHT40	MCS0	54	5270	14.75	15.02	15.14	15.67	21.18	≤ 21.38	Pass
11be-EHT40	MCS0	62	5310	14.56	14.87	14.99	15.56	21.03	≤ 21.38	Pass
11be-EHT40	MCS0	102	5510	14.96	14.56	14.92	14.13	20.68	≤ 20.96	Pass
11be-EHT40	MCS0	110	5550	14.27	14.17	14.87	15.29	20.69	≤ 20.96	Pass
11be-EHT40	MCS0	134	5670	14.01	14.27	15.45	15.37	20.84	≤ 20.96	Pass
11be-EHT40	MCS0	142	5710	14.35	14.51	14.98	15.32	20.83	≤ 20.96	Pass
11be-EHT40	MCS0	151	5755	20.76	20.45	20.87	21.98	27.08	≤ 27.86	Pass
11be-EHT40	MCS0	159	5795	21.22	21.34	22.15	22.02	27.72	≤ 27.86	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
11be-EHT80	MCS0	42	5210	18.04	17.54	18.18	18.90	24.21	≤ 27.61	Pass
11be-EHT80	MCS0	58	5290	14.34	14.82	14.87	15.23	20.85	≤ 21.38	Pass
11be-EHT80	MCS0	106	5530	14.45	14.56	15.21	14.94	20.82	≤ 20.96	Pass
11be-EHT80	MCS0	122	5610	13.98	14.53	14.78	15.11	20.64	≤ 20.96	Pass
11be-EHT80	MCS0	138	5690	14.50	14.21	15.12	14.99	20.74	≤ 20.96	Pass
11be-EHT80	MCS0	155	5775	21.22	21.42	21.62	22.40	27.71	≤ 27.86	Pass
11be-EHT160	MCS0	50	5250	14.53	14.94	15.00	15.31	20.97	≤ 21.38	Pass
11be-EHT160	MCS0	114	5570	13.08	12.99	13.79	14.43	19.63	≤ 20.96	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 - (8.39- 6) = 27.61dBm

For 5250 - 5350MHz Band: Average Power Limit (dBm) = 23.98 - (8.60- 6) = 21.38dBm.

For 5470 - 5725MHz Band: Average Power Limit (dBm) = 23.98 - (9.02- 6) = 20.96dBm.

For 5725 - 5850MHz Band: Average Power Limit (dBm) = 30- (8.14- 6) = 27.86dBm.

For Channel 144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + BW_{26\text{dBc}}/2) - (9.02- 6)$

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.

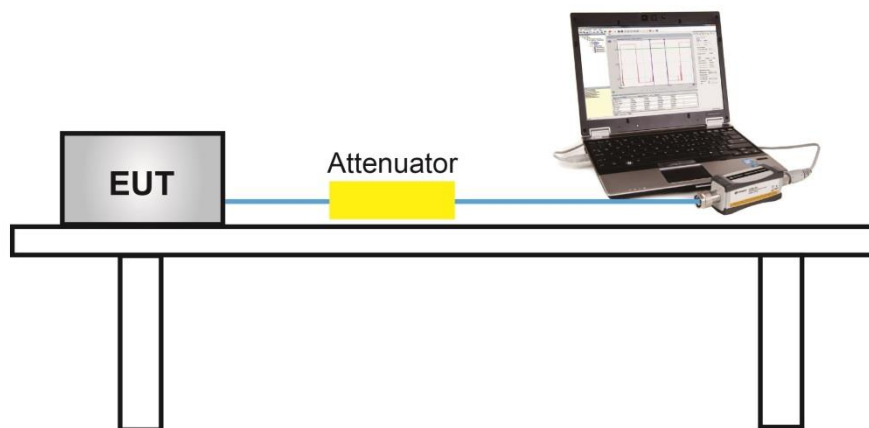
7.5.2. Test Procedure Used

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.

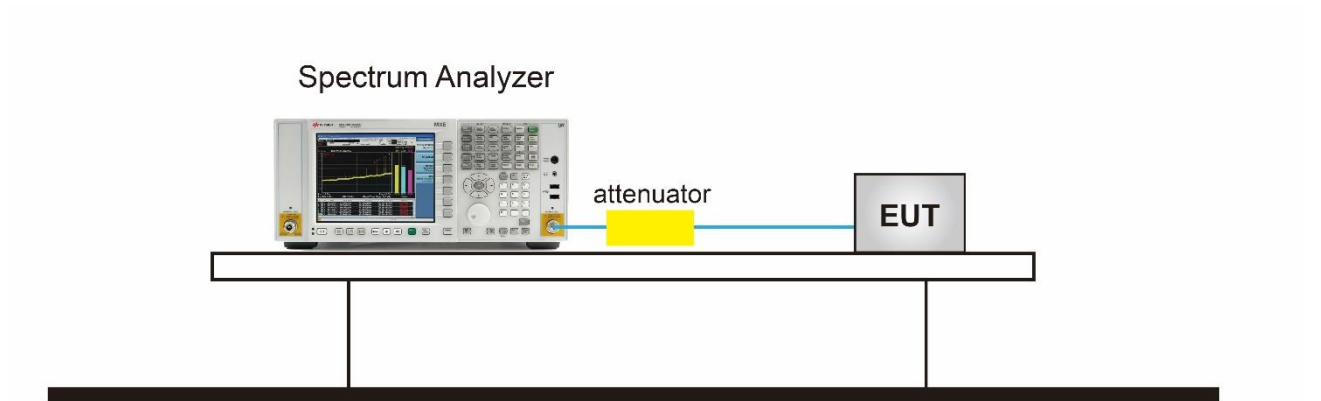
7.6.2. Test Procedure Used

KDB 789033 D02v02r01-Section F

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	BE19000 Tri-Band Wi-Fi 7 Router	Test Engineer	Peter
Test Site	SR6	Test Date	2024/8/26~2024/9/9
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	7.786	7.397	8.448	8.708	96.82%	14.277	≤ 14.61	Pass
11a	6Mbps	40	5200	7.967	7.658	8.626	9.253	96.82%	14.581	≤ 14.61	Pass
11a	6Mbps	48	5240	7.841	7.682	8.767	8.946	96.82%	14.505	≤ 14.61	Pass
11a	6Mbps	52	5260	1.158	1.448	2.111	2.376	96.82%	7.962	≤ 8.40	Pass
11a	6Mbps	60	5300	1.539	1.543	2.491	2.654	96.82%	8.249	≤ 8.40	Pass
11a	6Mbps	64	5320	0.835	1.033	2.403	2.833	96.82%	8.022	≤ 8.40	Pass
11a	6Mbps	100	5500	0.923	1.169	2.301	2.195	96.82%	7.850	≤ 7.98	Pass
11a	6Mbps	116	5580	1.111	0.848	1.842	2.830	96.82%	7.888	≤ 7.98	Pass
11a	6Mbps	140	5700	0.752	0.869	1.743	1.990	96.82%	7.533	≤ 7.98	Pass
11a	6Mbps	144	5720	1.385	1.041	1.502	2.148	96.82%	7.699	≤ 7.98	Pass
11ac-VHT20	MCS0	36	5180	7.349	7.336	8.401	8.340	96.99%	14.040	≤ 14.61	Pass
11ac-VHT20	MCS0	40	5200	7.582	7.092	8.280	9.174	96.99%	14.257	≤ 14.61	Pass
11ac-VHT20	MCS0	48	5240	7.405	7.467	8.637	8.860	96.99%	14.296	≤ 14.61	Pass
11ac-VHT20	MCS0	52	5260	1.644	1.548	2.397	2.947	96.99%	8.326	≤ 8.40	Pass
11ac-VHT20	MCS0	60	5300	1.109	1.388	2.234	2.668	96.99%	8.049	≤ 8.40	Pass
11ac-VHT20	MCS0	64	5320	0.664	1.253	2.173	2.717	96.99%	7.927	≤ 8.40	Pass
11ac-VHT20	MCS0	100	5500	0.567	0.822	2.201	2.135	96.99%	7.648	≤ 7.98	Pass
11ac-VHT20	MCS0	116	5580	0.657	0.572	1.495	2.337	96.99%	7.479	≤ 7.98	Pass
11ac-VHT20	MCS0	140	5700	0.938	1.010	1.647	2.003	96.99%	7.576	≤ 7.98	Pass
11ac-VHT20	MCS0	144	5720	0.938	0.799	1.139	2.155	96.99%	7.445	≤ 7.98	Pass
11ac-VHT40	MCS0	38	5190	2.751	2.643	3.295	3.337	94.08%	9.303	≤ 14.61	Pass
11ac-VHT40	MCS0	46	5230	7.594	7.324	8.400	9.125	94.08%	14.455	≤ 14.61	Pass
11ac-VHT40	MCS0	54	5270	1.371	1.767	2.717	2.352	94.08%	8.368	≤ 8.40	Pass
11ac-VHT40	MCS0	62	5310	1.380	1.574	2.768	2.309	94.08%	8.330	≤ 8.40	Pass
11ac-VHT40	MCS0	102	5510	0.674	0.883	2.145	1.855	94.08%	7.720	≤ 7.98	Pass
11ac-VHT40	MCS0	110	5550	0.547	0.409	1.900	2.072	94.08%	7.583	≤ 7.98	Pass
11ac-VHT40	MCS0	134	5670	1.072	1.247	1.880	2.129	94.08%	7.890	≤ 7.98	Pass
11ac-VHT40	MCS0	142	5710	0.918	0.964	1.597	1.514	94.08%	7.545	≤ 7.98	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-VHT80	MCS0	42	5210	-1.803	-2.201	-1.569	-0.619	96.13%	4.684	≤ 14.61	Pass
11ac-VHT80	MCS0	58	5290	-1.921	-1.894	-1.047	-0.902	96.13%	4.776	≤ 8.40	Pass
11ac-VHT80	MCS0	106	5530	-1.746	-2.062	-0.326	-0.344	96.13%	5.144	≤ 7.98	Pass
11ac-VHT80	MCS0	122	5610	-2.069	-2.286	-0.902	0.188	96.13%	5.041	≤ 7.98	Pass
11ac-VHT80	MCS0	138	5690	-2.056	-2.100	-1.440	-1.632	96.13%	4.394	≤ 7.98	Pass
11ac-VHT160	MCS0	50	5250	-4.481	-5.266	-4.876	-4.561	96.37%	1.396	≤ 8.40	Pass
11ac-VHT160	MCS0	114	5570	-8.077	-7.934	-6.960	-6.682	96.37%	-1.190	≤ 7.98	Pass
11ax-HE20	MCS0	36	5180	7.369	7.135	8.129	8.815	98.00%	14.021	≤ 14.61	Pass
11ax-HE20	MCS0	40	5200	7.631	7.345	8.145	9.111	98.00%	14.220	≤ 14.61	Pass
11ax-HE20	MCS0	48	5240	6.984	7.019	7.572	7.945	98.00%	13.507	≤ 14.61	Pass
11ax-HE20	MCS0	52	5260	1.520	1.290	2.402	2.786	98.00%	8.151	≤ 8.40	Pass
11ax-HE20	MCS0	60	5300	1.038	1.424	2.388	2.489	98.00%	7.987	≤ 8.40	Pass
11ax-HE20	MCS0	64	5320	1.154	1.607	2.404	2.562	98.00%	8.078	≤ 8.40	Pass
11ax-HE20	MCS0	100	5500	0.878	0.964	1.796	1.914	98.00%	7.522	≤ 7.98	Pass
11ax-HE20	MCS0	116	5580	0.777	0.756	1.640	2.519	98.00%	7.594	≤ 7.98	Pass
11ax-HE20	MCS0	140	5700	0.779	0.872	1.742	1.848	98.00%	7.446	≤ 7.98	Pass
11ax-HE20	MCS0	144	5720	1.097	0.842	1.278	1.961	98.00%	7.423	≤ 7.98	Pass
11ax-HE40	MCS0	38	5190	4.170	4.384	4.613	5.032	96.92%	10.718	≤ 14.61	Pass
11ax-HE40	MCS0	46	5230	7.920	7.302	8.442	8.968	96.92%	14.358	≤ 14.61	Pass
11ax-HE40	MCS0	54	5270	1.844	1.588	2.540	2.342	96.92%	8.252	≤ 8.40	Pass
11ax-HE40	MCS0	62	5310	1.141	1.433	2.377	2.174	96.92%	7.968	≤ 8.40	Pass
11ax-HE40	MCS0	102	5510	0.650	0.445	1.830	1.830	96.92%	7.393	≤ 7.98	Pass
11ax-HE40	MCS0	110	5550	0.537	0.430	1.604	2.065	96.92%	7.371	≤ 7.98	Pass
11ax-HE40	MCS0	134	5670	1.074	1.229	1.953	2.318	96.92%	7.830	≤ 7.98	Pass
11ax-HE40	MCS0	142	5710	1.364	1.002	1.971	1.769	96.92%	7.699	≤ 7.98	Pass
11ax-HE80	MCS0	42	5210	0.179	-0.146	0.129	1.142	97.09%	6.503	≤ 14.61	Pass
11ax-HE80	MCS0	58	5290	-1.747	-1.808	-0.693	-0.805	97.09%	4.916	≤ 8.40	Pass
11ax-HE80	MCS0	106	5530	-1.852	-2.039	-0.535	-0.551	97.09%	4.961	≤ 7.98	Pass
11ax-HE80	MCS0	122	5610	-1.970	-2.282	-0.979	-0.056	97.09%	4.917	≤ 7.98	Pass
11ax-HE80	MCS0	122	5690	-2.125	-1.834	-1.154	-0.986	97.09%	4.649	≤ 7.98	Pass
11ax-HE160	MCS0	50	5250	-3.834	-4.646	-3.339	-3.339	97.51%	2.372	≤ 8.40	Pass
11ax-HE160	MCS0	114	5570	-7.130	-7.084	-5.456	-5.824	97.51%	-0.179	≤ 7.98	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
11be-EHT20	MCS0	36	5180	7.250	7.310	8.268	8.430	98.00%	13.956	≤ 14.61	Pass
11be-EHT20	MCS0	40	5200	7.301	7.495	8.042	9.170	98.00%	14.173	≤ 14.61	Pass
11be-EHT20	MCS0	48	5240	7.285	7.157	8.841	8.731	98.00%	14.182	≤ 14.61	Pass
11be-EHT20	MCS0	52	5260	1.443	1.621	2.346	2.604	98.00%	8.139	≤ 8.40	Pass
11be-EHT20	MCS0	60	5300	1.018	1.220	2.083	2.490	98.00%	7.853	≤ 8.40	Pass
11be-EHT20	MCS0	64	5320	1.110	1.766	2.542	2.791	98.00%	8.210	≤ 8.40	Pass
11be-EHT20	MCS0	100	5500	0.848	0.716	1.739	1.775	98.00%	7.405	≤ 7.98	Pass
11be-EHT20	MCS0	116	5580	0.710	0.578	1.690	2.566	98.00%	7.571	≤ 7.98	Pass
11be-EHT20	MCS0	140	5700	0.704	0.823	1.624	1.714	98.00%	7.348	≤ 7.98	Pass
11be-EHT20	MCS0	144	5720	1.350	1.188	1.901	2.339	98.00%	7.827	≤ 7.98	Pass
11be-EHT40	MCS0	38	5190	2.785	3.024	3.125	3.582	97.89%	9.252	≤ 14.61	Pass
11be-EHT40	MCS0	46	5230	7.517	7.257	8.222	8.782	97.89%	14.099	≤ 14.61	Pass
11be-EHT40	MCS0	54	5270	1.644	1.505	2.465	2.163	97.89%	8.075	≤ 8.40	Pass
11be-EHT40	MCS0	62	5310	1.440	1.490	2.690	2.840	97.89%	8.277	≤ 8.40	Pass
11be-EHT40	MCS0	102	5510	1.013	0.527	1.760	1.572	97.89%	7.358	≤ 7.98	Pass
11be-EHT40	MCS0	110	5550	0.999	0.810	1.770	2.230	97.89%	7.604	≤ 7.98	Pass
11be-EHT40	MCS0	134	5670	1.469	0.882	2.050	2.047	97.89%	7.752	≤ 7.98	Pass
11be-EHT40	MCS0	142	5710	0.936	1.071	1.645	1.827	97.89%	7.499	≤ 7.98	Pass
11be-EHT80	MCS0	42	5210	-0.793	-0.968	-0.198	0.384	97.54%	5.768	≤ 14.61	Pass
11be-EHT80	MCS0	58	5290	-1.791	-1.731	-0.662	-0.578	97.54%	4.976	≤ 8.40	Pass
11be-EHT80	MCS0	106	5530	-1.838	-2.005	-0.513	-0.112	97.54%	5.089	≤ 7.98	Pass
11be-EHT80	MCS0	122	5610	-1.677	-2.237	-1.024	-0.049	97.54%	4.959	≤ 7.98	Pass
11be-EHT80	MCS0	138	5690	-1.893	-2.114	-1.369	-1.122	97.54%	4.522	≤ 7.98	Pass
11be-EHT160	MCS0	50	5250	-3.960	-4.541	-3.550	-3.371	96.55%	2.340	≤ 8.40	Pass
11be-EHT160	MCS0	114	5570	-7.961	-7.901	-6.689	-6.626	96.55%	-1.075	≤ 7.98	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 - (8.39 - 6) = 14.61dBm/MHz.

For 5250 - 5350MHz Band: PSD Limit (dBm/MHz) = 11 - (8.60 - 6) = 8.40dBm/MHz.

For 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11 - (9.02 - 6) = 7.98dBm/MHz.

Product	BE19000 Tri-Band Wi-Fi 7 Router	Test Engineer	Peter
Test Site	SR6	Test Date	2024/8/26~2024/9/9
Test Item	Power Spectral Density (U-NII-3) CDD Mode		

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/510 KHz)	Ant 1 PSD (dBm/510 KHz)	Ant 2 PSD (dBm/510 KHz)	Ant 3 PSD (dBm/510 KHz)	Duty Cycle (%)	Total PSD (dBm/ 510kHz)	Limit (dBm/ 500kHz)	Result
11a	6Mbps	149	5745	7.318	7.451	8.033	8.766	96.82%	14.091	≤ 27.86	Pass
11a	6Mbps	157	5785	7.013	7.892	8.153	8.932	96.82%	14.212	≤ 27.86	Pass
11a	6Mbps	165	5825	7.962	7.828	8.096	9.199	96.82%	14.468	≤ 27.86	Pass
11ac-VHT20	MCS0	149	5745	7.766	7.538	8.191	9.203	96.99%	14.376	≤ 27.86	Pass
11ac-VHT20	MCS0	157	5785	7.298	7.839	8.068	8.606	96.99%	14.131	≤ 27.86	Pass
11ac-VHT20	MCS0	165	5825	7.225	7.141	7.569	8.384	96.99%	13.762	≤ 27.86	Pass
11ac-VHT40	MCS0	151	5755	4.594	4.504	5.234	5.868	94.08%	11.371	≤ 27.86	Pass
11ac-VHT40	MCS0	159	5795	4.340	4.873	5.239	6.134	94.08%	11.482	≤ 27.86	Pass
11ac-VHT80	MCS0	155	5775	0.045	0.519	0.767	1.558	96.13%	6.949	≤ 27.86	Pass
11ax-HE20	MCS0	149	5745	7.632	7.691	8.207	8.871	98.00%	14.238	≤ 27.86	Pass
11ax-HE20	MCS0	157	5785	7.253	7.587	7.891	8.640	98.00%	13.982	≤ 27.86	Pass
11ax-HE20	MCS0	165	5825	7.261	7.346	7.980	8.871	98.00%	14.022	≤ 27.86	Pass
11ax-HE40	MCS0	151	5755	4.624	4.653	5.573	5.949	96.92%	11.395	≤ 27.86	Pass
11ax-HE40	MCS0	159	5795	4.494	5.113	5.288	6.135	96.92%	11.454	≤ 27.86	Pass
11ax-HE80	MCS0	155	5775	-0.503	0.322	0.403	1.154	97.09%	6.532	≤ 27.86	Pass
11be-EHT20	MCS0	149	5745	7.732	7.676	9.611	8.252	98.00%	14.500	≤ 27.86	Pass
11be-EHT20	MCS0	157	5785	7.662	8.122	8.277	8.870	98.00%	14.363	≤ 27.86	Pass
11be-EHT20	MCS0	165	5825	7.118	7.030	8.108	8.562	98.00%	13.862	≤ 27.86	Pass
11be-EHT40	MCS0	151	5755	4.374	4.723	4.888	5.883	97.89%	11.118	≤ 27.86	Pass
11be-EHT40	MCS0	159	5795	4.477	4.876	5.580	6.140	97.89%	11.429	≤ 27.86	Pass
11be-EHT80	MCS0	155	5775	-0.209	0.633	0.837	1.277	97.54%	6.796	≤ 27.86	Pass

Note 1: When EUT duty cycle ≥ 98%,

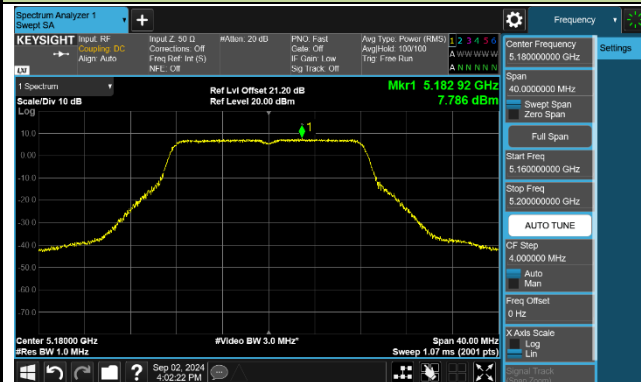
the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/510kHz).

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) + $10 \cdot \log (1/\text{Duty Cycle})$.

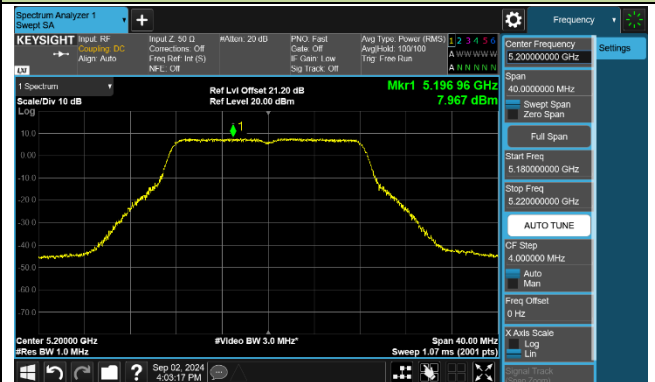
Note 2: PSD Limit (dBm/500kHz) = 30 - (8.14- 6) = 27.86 (dBm/500kHz).

802.11a Power Spectral Density - Ant 0

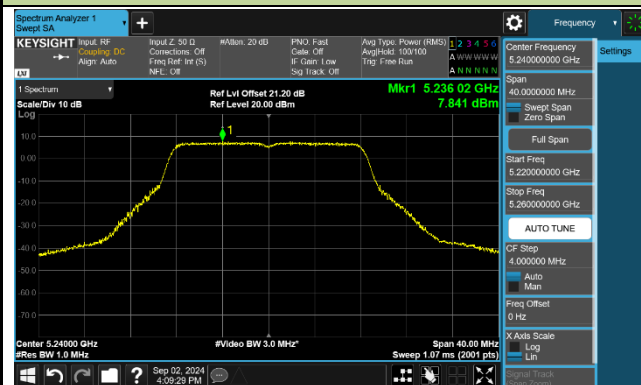
Channel 36 (5180MHz)



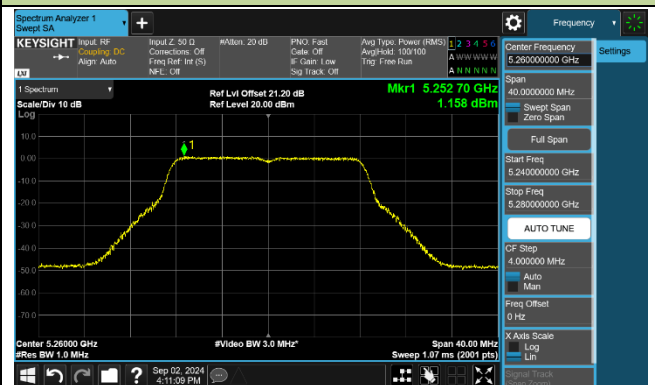
Channel 40 (5200MHz)



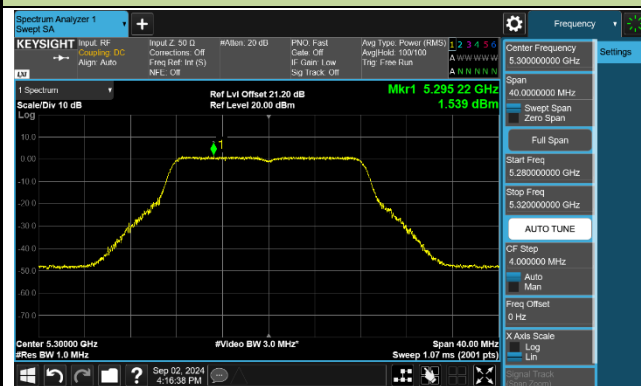
Channel 48 (5240MHz)



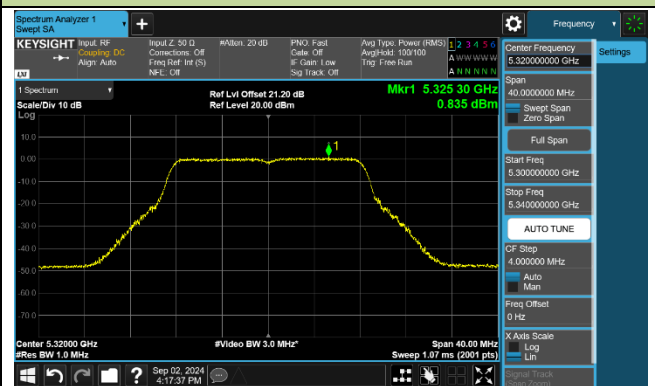
Channel 52 (5260MHz)



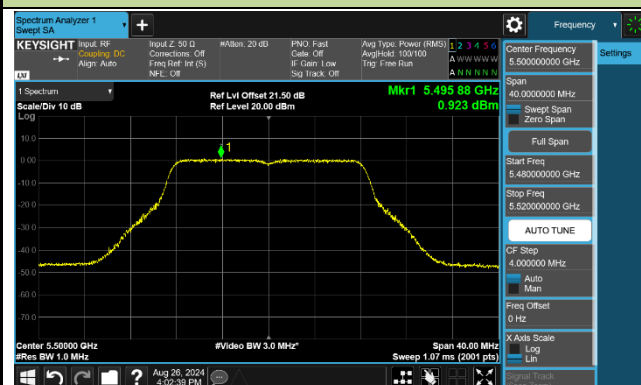
Channel 60 (5300MHz)



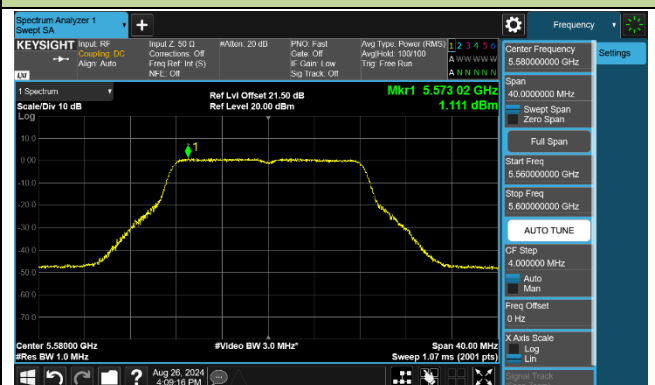
Channel 64 (5320MHz)



Channel 100 (5500MHz)



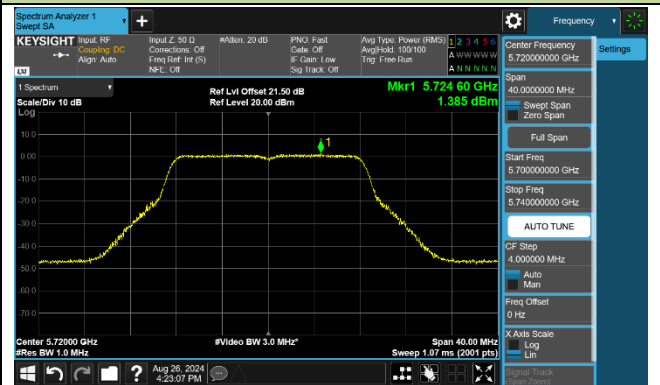
Channel 116 (5580MHz)



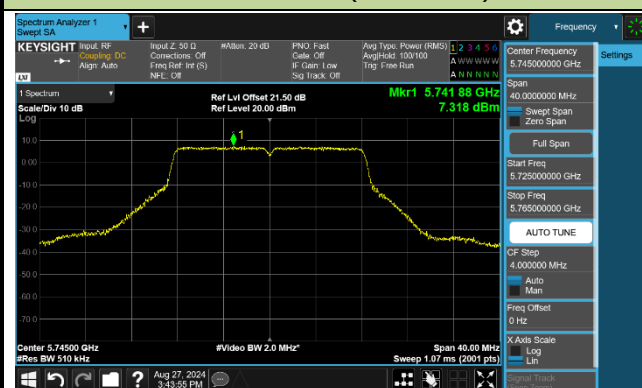
Channel 140 (5700MHz)



Channel 144 (5720MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)



Channel 165 (5825MHz)

