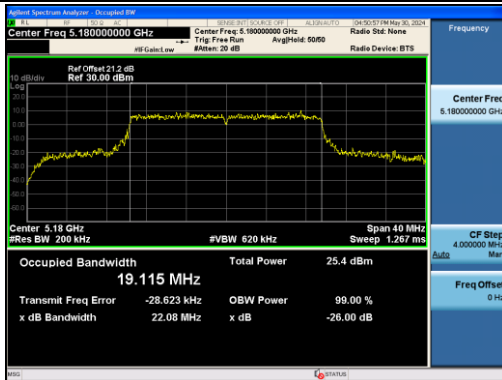
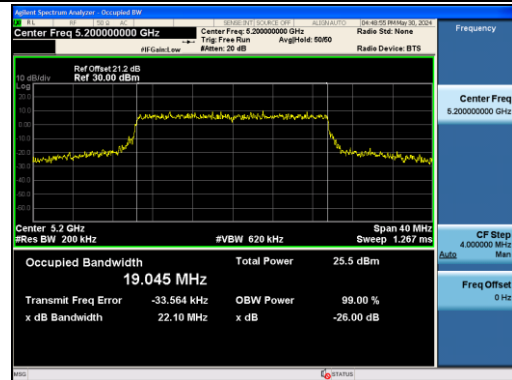


802.11be-EHT20 26dB Bandwidth & 99% Bandwidth

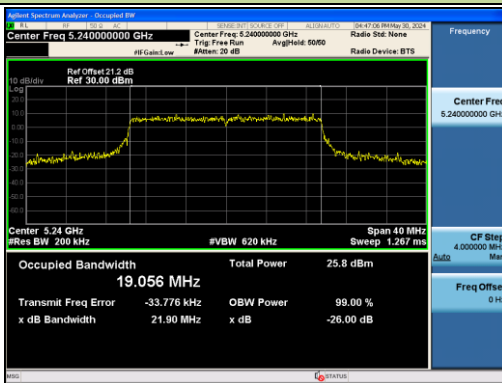
Channel 36 (5180MHz)



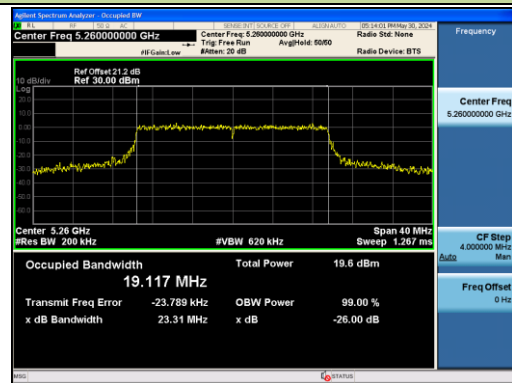
Channel 40 (5200MHz)



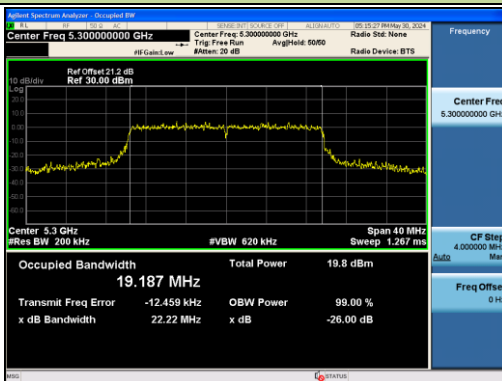
Channel 48 (5240MHz)



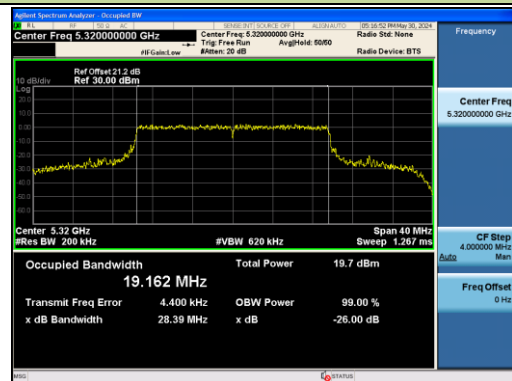
Channel 52 (5260MHz)



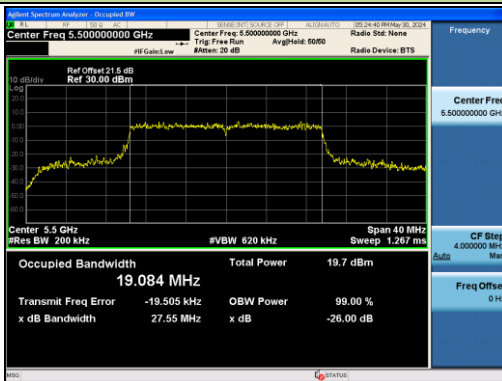
Channel 60 (5300MHz)



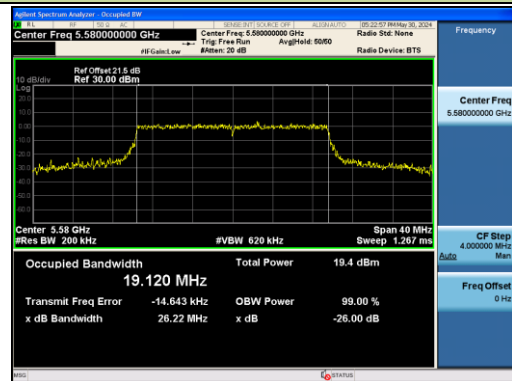
Channel 64 (5320MHz)



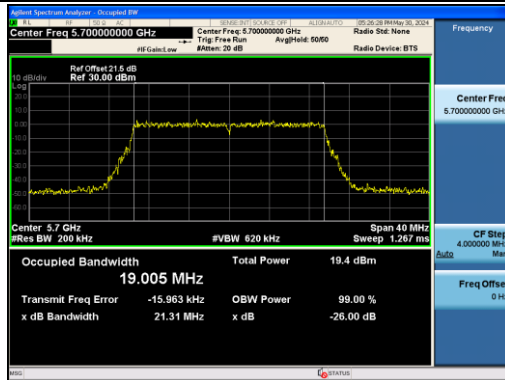
Channel 100 (5500MHz)



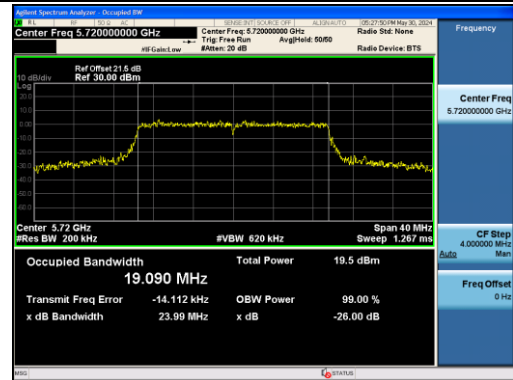
Channel 116 (5580MHz)



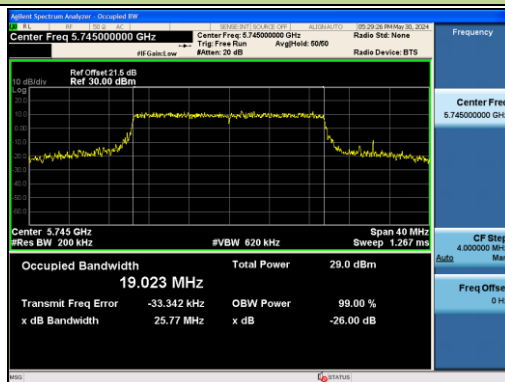
Channel 140 (5700MHz)



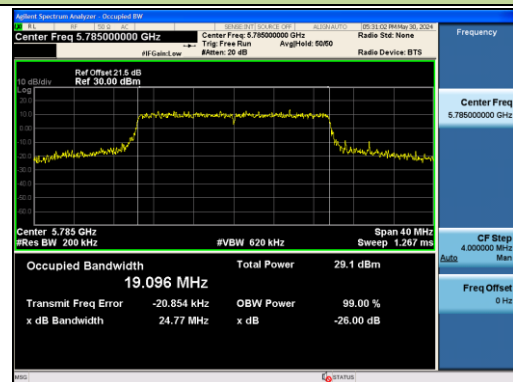
Channel 144 (5720MHz)



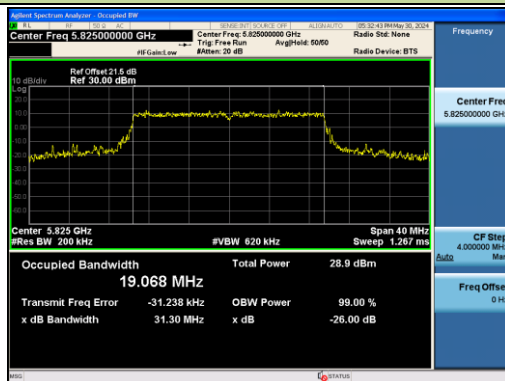
Channel 149 (5745MHz)



Channel 157 (5785MHz)

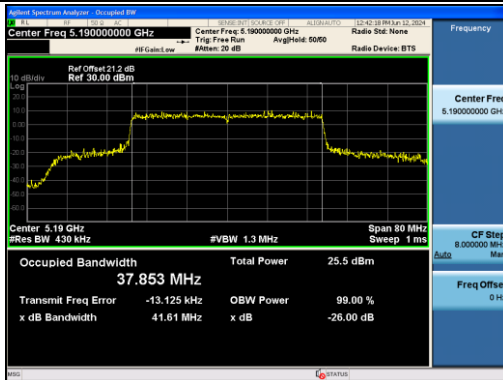


Channel 165 (5825MHz)

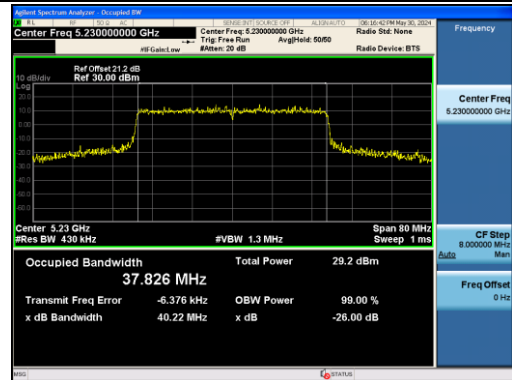


802.11be-EHT40 26dB Bandwidth & 99% Bandwidth

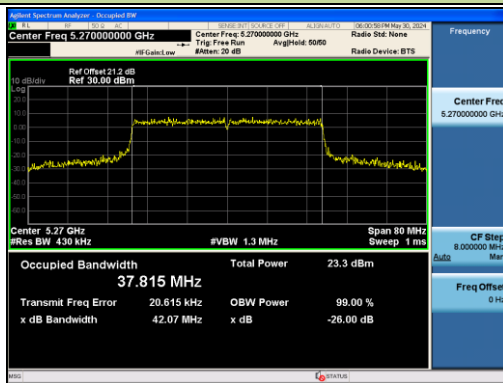
Channel 38 (5190MHz)



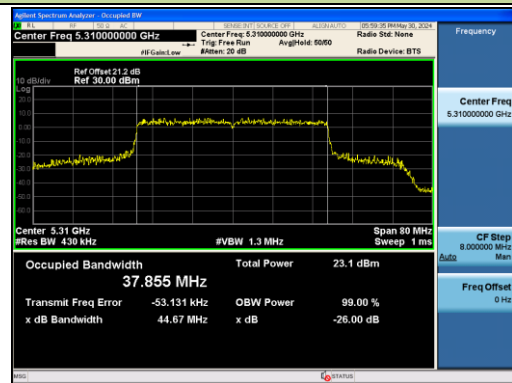
Channel 46 (5230MHz)



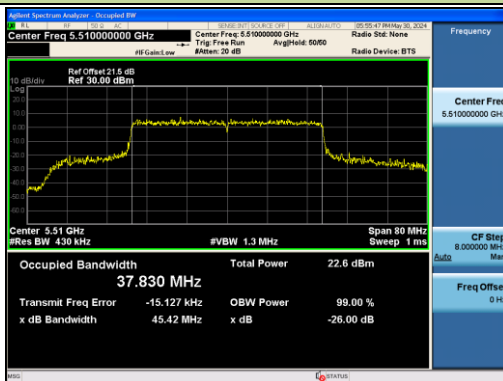
Channel 54 (5270MHz)



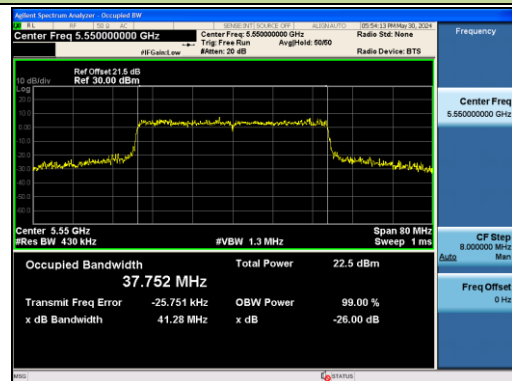
Channel 62 (5310MHz)



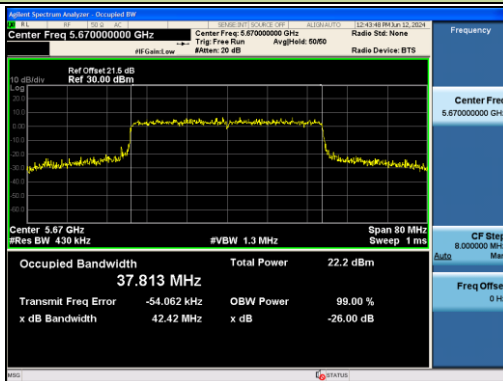
Channel 102 (5510MHz)



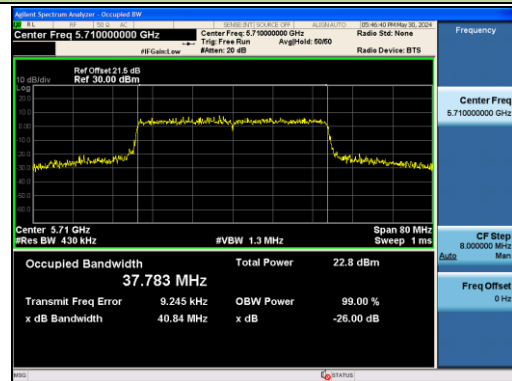
Channel 110 (5550MHz)

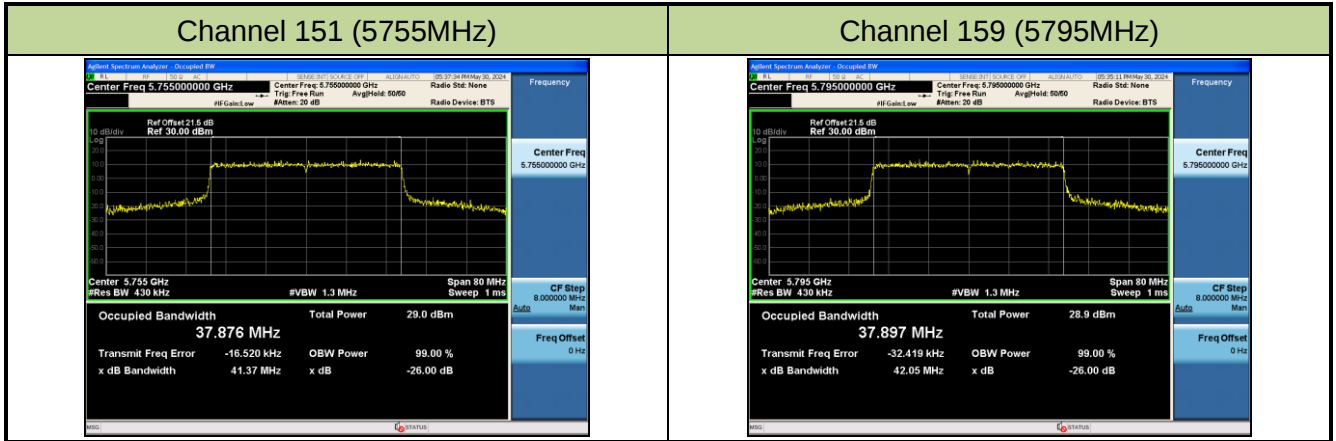


Channel 134 (5670MHz)



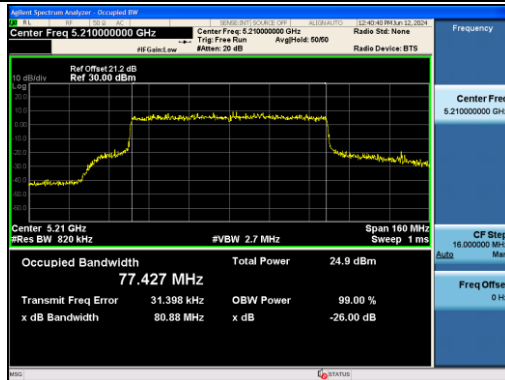
Channel 142 (5710MHz)



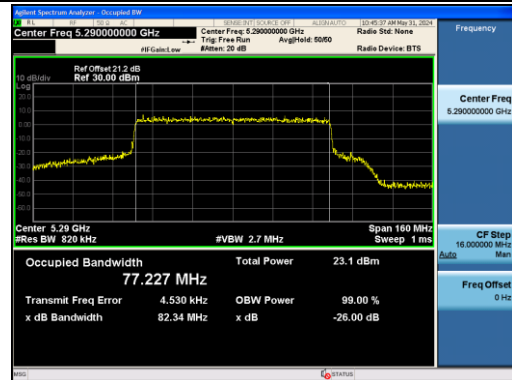


802.11be-EHT80 26dB Bandwidth & 99% Bandwidth

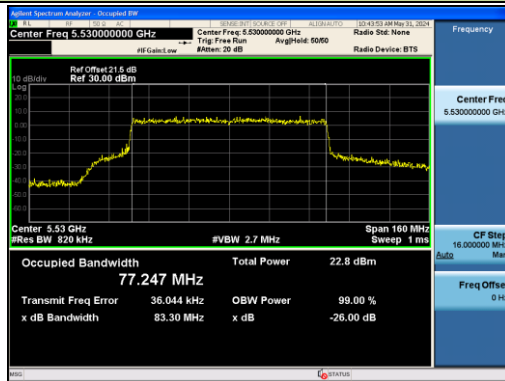
Channel 42 (5210MHz)



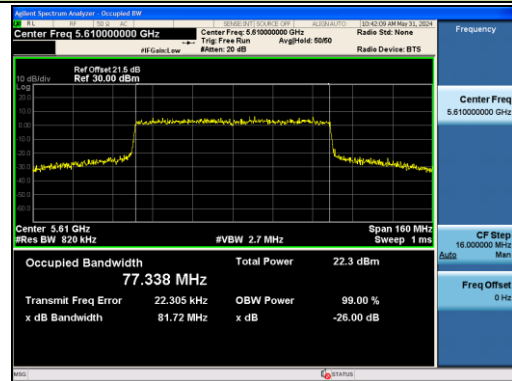
Channel 58 (5290MHz)



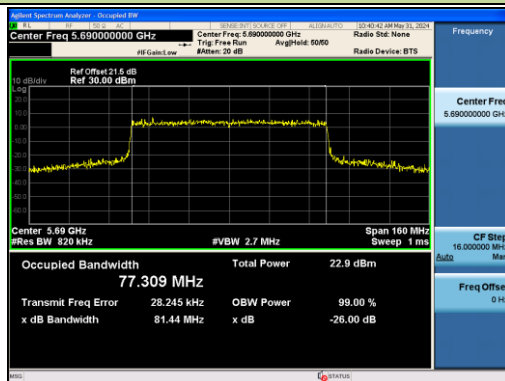
Channel 106 (5530MHz)



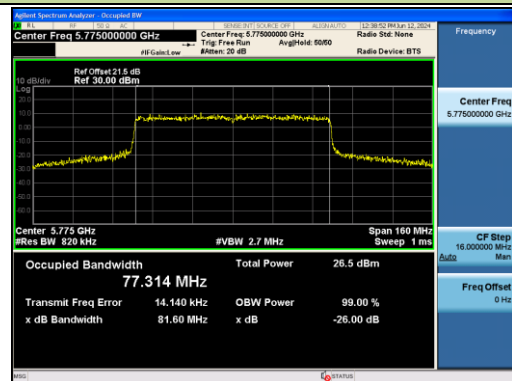
Channel 122 (5610MHz)



Channel 138 (5690MHz)

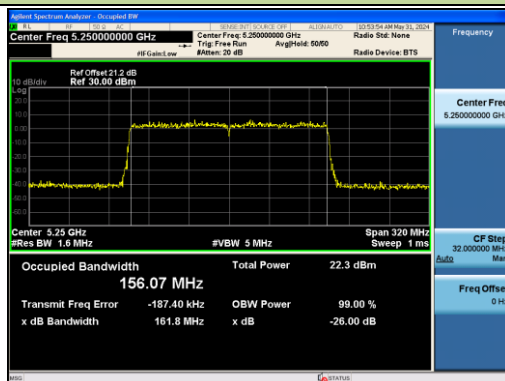


Channel 155 (5775MHz)

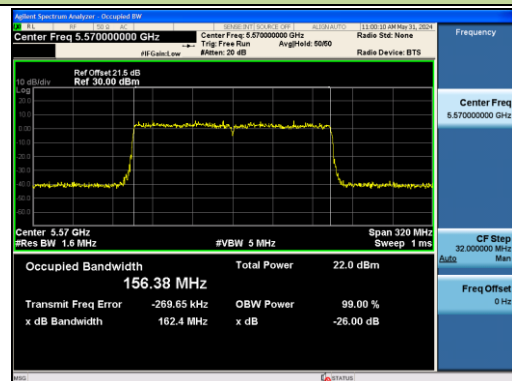


802.11be-EHT160 26dB Bandwidth & 99% Bandwidth

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.

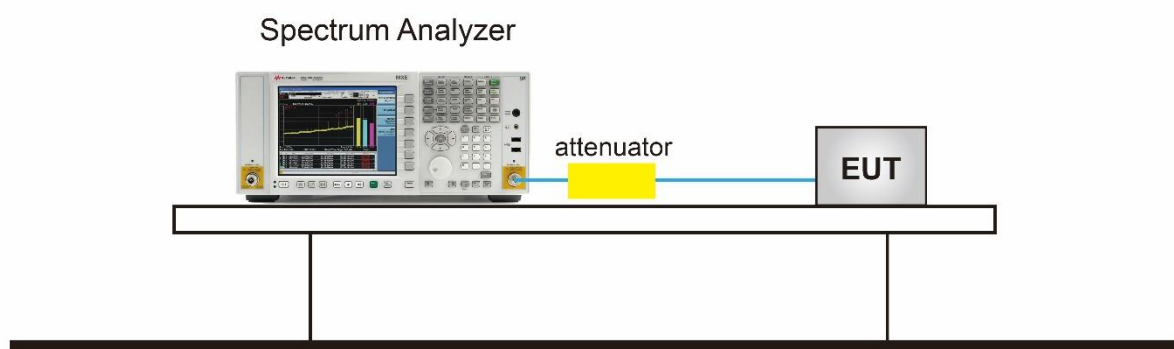
7.3.2. Test Procedure used

KDB 789033 D02v02r01- Section II(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



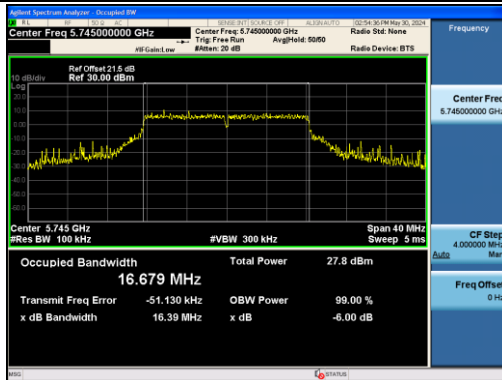
7.3.5.TestResult

Product	BE6500 Dual-Band Wi-Fi 7 Router	Test Engineer	Wen
Test Site	SR6	Test Date	2024/5/30~2024/6/12

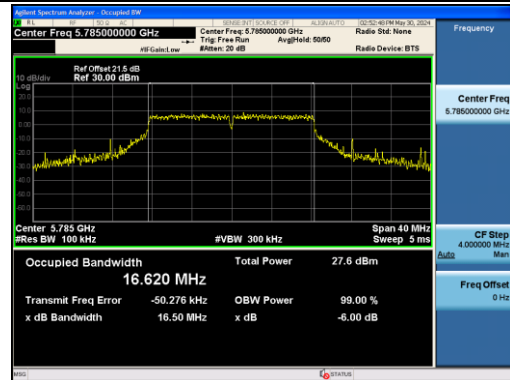
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 3						
802.11a	6Mbps	149	5745	16.39	≥ 0.5	Pass
802.11a	6Mbps	157	5785	16.50	≥ 0.5	Pass
802.11a	6Mbps	165	5825	16.42	≥ 0.5	Pass
802.11ac-VHT20	MCS0	149	5745	17.70	≥ 0.5	Pass
802.11ac-VHT20	MCS0	157	5785	17.79	≥ 0.5	Pass
802.11ac-VHT20	MCS0	165	5825	17.62	≥ 0.5	Pass
802.11ac-VHT40	MCS0	151	5755	36.46	≥ 0.5	Pass
802.11ac-VHT40	MCS0	159	5795	36.49	≥ 0.5	Pass
802.11ac-VHT80	MCS0	155	5775	76.50	≥ 0.5	Pass
802.11ax-HE20	MCS0	149	5745	18.97	≥ 0.5	Pass
802.11ax-HE20	MCS0	157	5785	18.99	≥ 0.5	Pass
802.11ax-HE20	MCS0	165	5825	18.80	≥ 0.5	Pass
802.11ax-HE40	MCS0	151	5755	37.81	≥ 0.5	Pass
802.11ax-HE40	MCS0	159	5795	37.65	≥ 0.5	Pass
802.11ax-HE80	MCS0	155	5775	77.58	≥ 0.5	Pass
802.11be-EHT20	MCS0	149	5745	18.91	≥ 0.5	Pass
802.11be-EHT20	MCS0	157	5785	18.97	≥ 0.5	Pass
802.11be-EHT20	MCS0	165	5825	19.01	≥ 0.5	Pass
802.11be-EHT40	MCS0	151	5755	37.22	≥ 0.5	Pass
802.11be-EHT40	MCS0	159	5795	37.20	≥ 0.5	Pass
802.11be-EHT80	MCS0	155	5775	77.53	≥ 0.5	Pass

802.11a 6dB Bandwidth

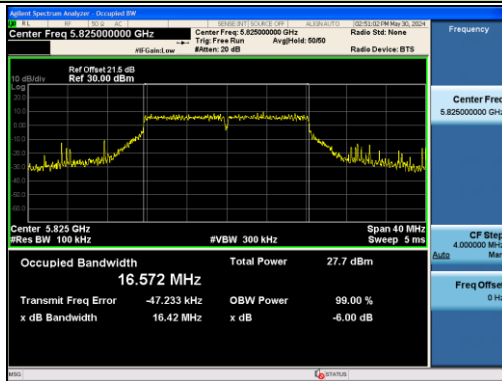
Channel 149 (5745MHz)



Channel 157 (5785MHz)

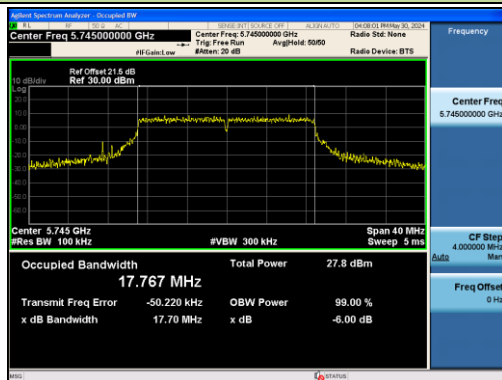


Channel 165 (5825MHz)

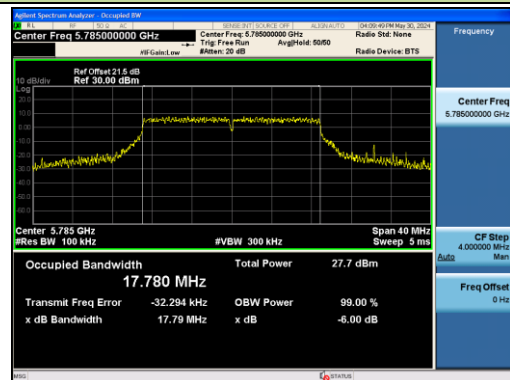


802.11ac-VHT20 6dB Bandwidth

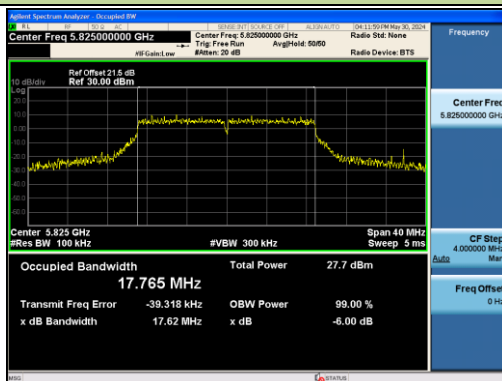
Channel 149 (5745MHz)



Channel 157 (5785MHz)

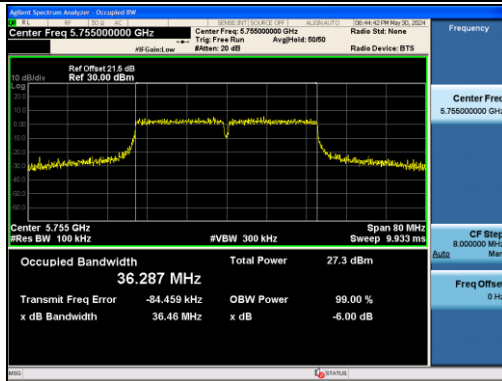


Channel 165 (5825MHz)

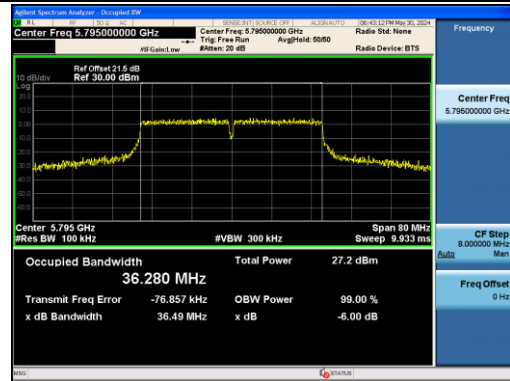


802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)

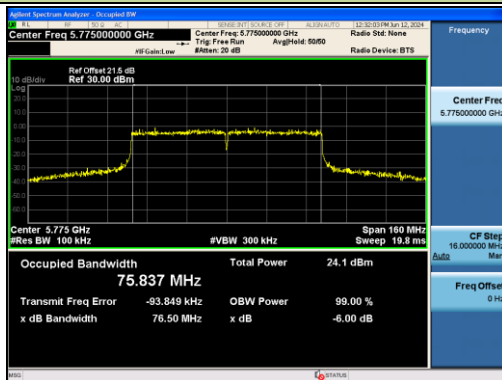


Channel 159 (5795MHz)



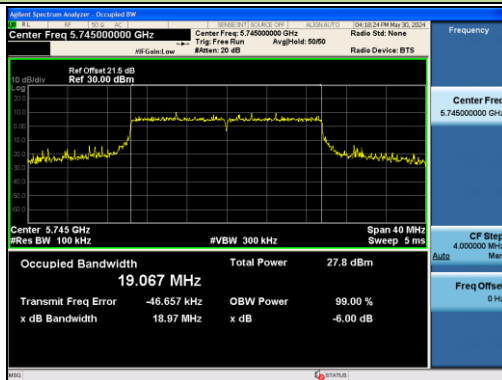
802.11ac-VHT80 6dB Bandwidth

Channel 155 (5775MHz)

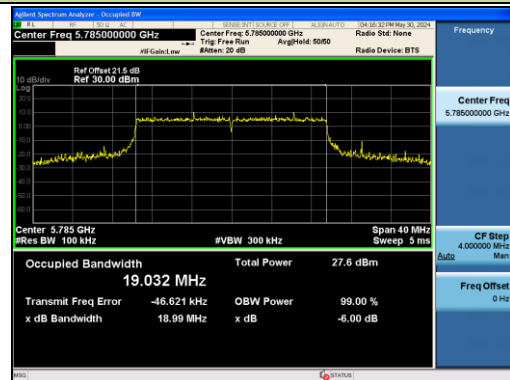


802.11ax-HE20 6dB Bandwidth

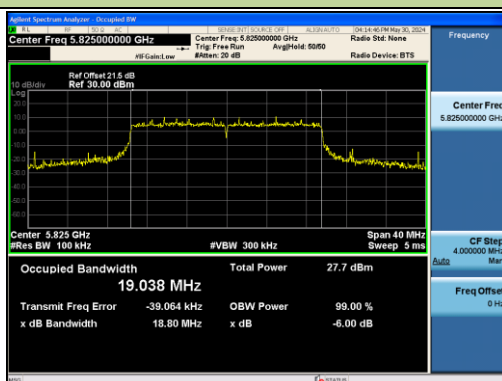
Channel 149 (5745MHz)



Channel 157 (5785MHz)

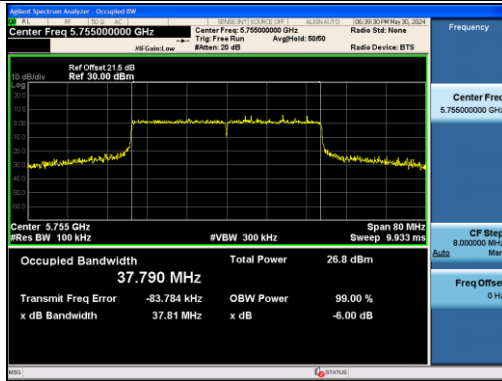


Channel 165 (5825MHz)

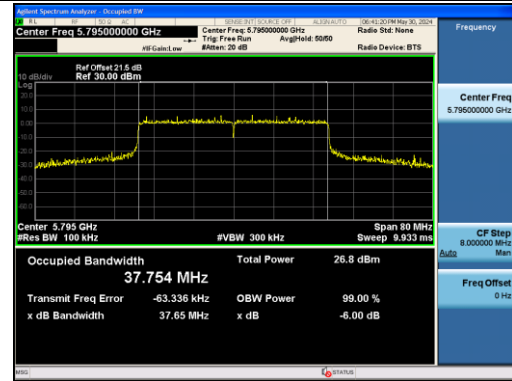


802.11ax-HE40 6dB Bandwidth

Channel 151 (5755MHz)

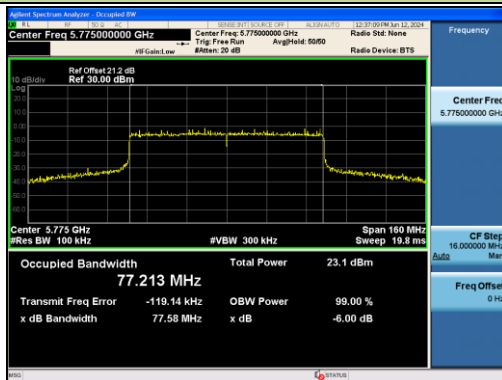


Channel 159 (5795MHz)



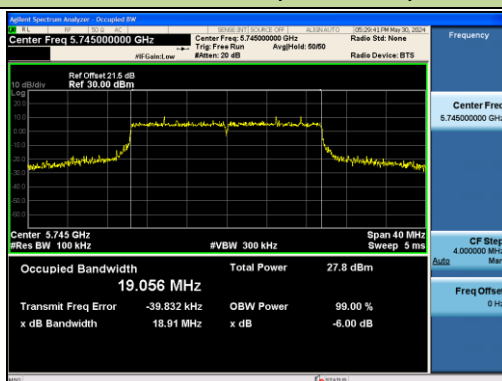
802.11ax-HE80 6dB Bandwidth

Channel 155 (5775MHz)

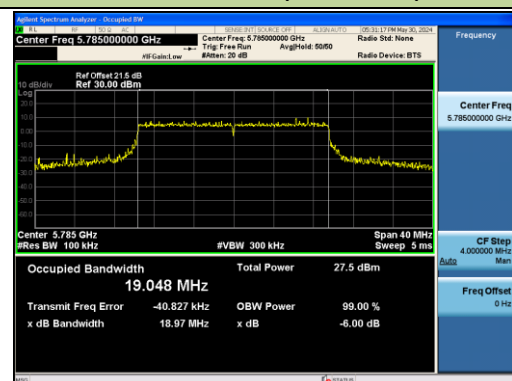


802.11be-EHT20 6dB Bandwidth

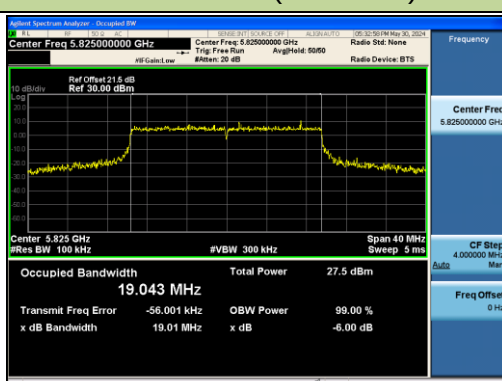
Channel 149 (5745MHz)



Channel 157 (5785MHz)

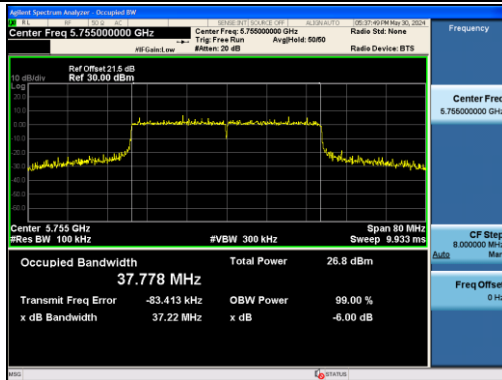


Channel 165 (5825MHz)

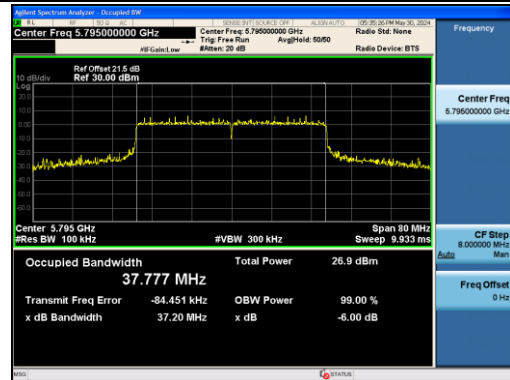


802.11be-EHT 40 6dB Bandwidth

Channel 151 (5755MHz)

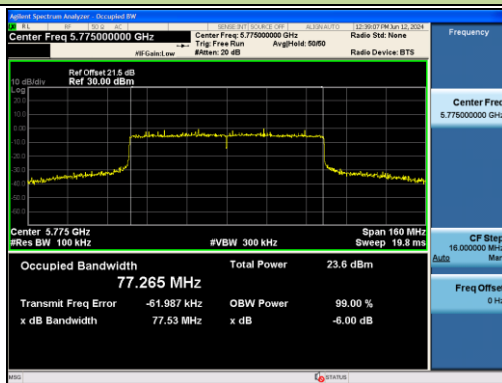


Channel 159 (5795MHz)



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.

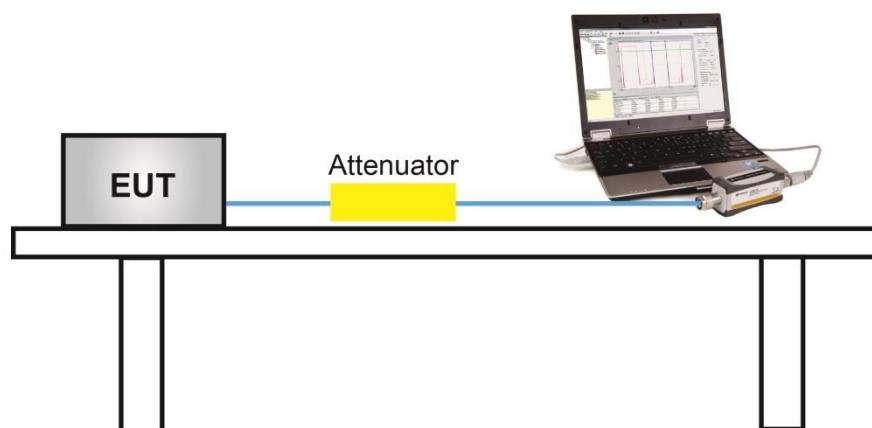
7.4.2. Test Procedure Used

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	BE6500 Dual-Band Wi-Fi 7 Router	Test Engineer	Wen
Test Site	SR6	Test Date	2024/5/30
Test Mode	CDD Mode		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Ant 3 Average Power (dBm)	Total Average Power (dBm)	Power Limit (dBm)	Result
11a	6Mbps	36	5180	20.84	20.39	20.38	20.78	26.62	≤ 30.00	Pass
11a	6Mbps	40	5200	20.85	20.42	20.33	20.68	26.60	≤ 30.00	Pass
11a	6Mbps	48	5240	20.73	20.26	20.18	20.70	26.50	≤ 30.00	Pass
11a	6Mbps	52	5260	14.86	14.23	14.33	14.51	20.51	≤ 23.98	Pass
11a	6Mbps	60	5300	14.42	14.05	14.25	14.42	20.31	≤ 23.98	Pass
11a	6Mbps	64	5320	14.37	13.99	14.17	14.39	20.25	≤ 23.98	Pass
11a	6Mbps	100	5500	14.68	14.45	14.21	14.72	20.54	≤ 23.98	Pass
11a	6Mbps	116	5580	14.71	14.43	14.16	14.84	20.56	≤ 23.98	Pass
11a	6Mbps	140	5700	14.17	14.46	14.13	14.23	20.27	≤ 23.98	Pass
11a	6Mbps	144	5720	14.21	14.32	13.91	14.25	20.20	≤ 22.27	Pass
11a	6Mbps	149	5745	23.78	24.20	23.72	24.17	29.99	≤ 30.00	Pass
11a	6Mbps	157	5785	23.77	24.18	23.72	24.16	29.98	≤ 30.00	Pass
11a	6Mbps	165	5825	23.75	24.17	23.68	24.14	29.96	≤ 30.00	Pass
11ac-VHT20	MCS0	36	5180	20.99	20.38	20.36	20.76	26.65	≤ 30.00	Pass
11ac-VHT20	MCS0	40	5200	20.95	20.37	20.29	20.82	26.64	≤ 30.00	Pass
11ac-VHT20	MCS0	48	5240	20.85	20.32	20.26	20.76	26.58	≤ 30.00	Pass
11ac-VHT20	MCS0	52	5260	14.54	14.90	14.10	14.65	20.58	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	14.53	14.01	14.18	14.49	20.33	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	14.44	14.08	14.05	14.43	20.27	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	15.11	14.65	14.29	14.99	20.79	≤ 23.98	Pass
11ac-VHT20	MCS0	116	5580	15.11	14.66	14.34	15.12	20.84	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	14.46	14.79	14.25	14.79	20.60	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	14.53	14.72	14.19	14.59	20.53	≤ 22.45	Pass
11ac-VHT20	MCS0	149	5745	23.62	23.94	23.59	24.17	29.86	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	23.53	23.81	23.61	24.11	29.79	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	23.42	23.83	23.75	24.08	29.80	≤ 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)	Power Limit (dBm)	Result
11ac-VHT40	MCS0	38	5190	21.59	21.11	21.27	21.02	27.27	≤ 30.00	Pass
11ac-VHT40	MCS0	46	5230	24.08	23.45	23.77	23.39	29.70	≤ 30.00	Pass
11ac-VHT40	MCS0	54	5270	17.68	17.48	17.42	17.28	23.49	≤ 23.98	Pass
11ac-VHT40	MCS0	62	5310	17.51	17.35	17.19	17.13	23.32	≤ 23.98	Pass
11ac-VHT40	MCS0	102	5510	18.07	17.36	17.71	17.81	23.77	≤ 23.98	Pass
11ac-VHT40	MCS0	110	5550	18.04	17.33	17.53	17.63	23.66	≤ 23.98	Pass
11ac-VHT40	MCS0	134	5670	17.65	17.28	17.42	17.26	23.43	≤ 23.98	Pass
11ac-VHT40	MCS0	142	5710	17.56	17.23	17.46	17.41	23.44	≤ 23.98	Pass
11ac-VHT40	MCS0	151	5755	23.76	23.98	23.81	23.62	29.82	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	23.87	23.92	23.72	23.63	29.81	≤ 30.00	Pass
11ac-VHT80	MCS0	42	5210	19.81	19.67	20.10	20.28	25.99	≤ 30.00	Pass
11ac-VHT80	MCS0	58	5290	17.83	17.79	17.86	17.99	23.89	≤ 23.98	Pass
11ac-VHT80	MCS0	106	5530	18.11	17.96	17.85	17.84	23.96	≤ 23.98	Pass
11ac-VHT80	MCS0	122	5610	17.85	17.71	17.75	18.08	23.87	≤ 23.98	Pass
11ac-VHT80	MCS0	138	5690	18.02	17.86	17.82	18.01	23.95	≤ 23.98	Pass
11ac-VHT80	MCS0	155	5775	20.74	20.82	20.51	21.36	26.89	≤ 30.00	Pass
11ac-VHT160	MCS0	50	5250	18.16	17.59	17.84	17.86	23.89	≤ 23.98	Pass
11ac-VHT160	MCS0	114	5570	17.98	17.92	17.88	18.01	23.97	≤ 23.98	Pass
11ax-HE20	MCS0	36	5180	21.08	20.42	20.55	20.93	26.77	≤ 30.00	Pass
11ax-HE20	MCS0	40	5200	21.01	20.48	20.63	20.98	26.80	≤ 30.00	Pass
11ax-HE20	MCS0	48	5240	20.96	20.43	20.48	20.85	26.71	≤ 30.00	Pass
11ax-HE20	MCS0	52	5260	14.76	14.24	14.35	14.53	20.50	≤ 23.98	Pass
11ax-HE20	MCS0	60	5300	14.53	14.18	14.27	14.54	20.40	≤ 23.98	Pass
11ax-HE20	MCS0	64	5320	14.47	14.12	14.18	14.47	20.33	≤ 23.98	Pass
11ax-HE20	MCS0	100	5500	14.83	14.55	14.23	14.91	20.66	≤ 23.98	Pass
11ax-HE20	MCS0	116	5580	14.91	14.67	14.31	15.07	20.77	≤ 23.98	Pass
11ax-HE20	MCS0	140	5700	14.47	14.83	14.45	14.84	20.67	≤ 23.98	Pass
11ax-HE20	MCS0	144	5720	14.41	14.71	14.36	15.02	20.65	≤ 22.63	Pass
11ax-HE20	MCS0	149	5745	23.71	23.96	23.73	24.31	29.95	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	23.68	24.01	23.71	24.12	29.90	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	23.61	23.92	23.75	24.13	29.88	≤ 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)	Power Limit (dBm)	Result
11ax-HE40	MCS0	38	5190	21.28	20.59	20.94	20.87	26.95	≤ 30.00	Pass
11ax-HE40	MCS0	46	5230	24.13	23.74	23.88	23.87	29.93	≤ 30.00	Pass
11ax-HE40	MCS0	54	5270	17.52	17.26	17.29	17.32	23.37	≤ 23.98	Pass
11ax-HE40	MCS0	62	5310	17.32	17.33	17.08	17.08	23.22	≤ 23.98	Pass
11ax-HE40	MCS0	102	5510	18.09	17.21	17.59	17.63	23.66	≤ 23.98	Pass
11ax-HE40	MCS0	110	5550	18.32	17.66	17.64	17.92	23.91	≤ 23.98	Pass
11ax-HE40	MCS0	134	5670	17.49	17.16	17.06	17.15	23.24	≤ 23.98	Pass
11ax-HE40	MCS0	142	5710	17.52	17.34	17.19	17.33	23.37	≤ 23.98	Pass
11ax-HE40	MCS0	151	5755	23.71	24.03	23.68	23.73	29.81	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	23.75	23.99	23.59	23.56	29.75	≤ 30.00	Pass
11ax-HE80	MCS0	42	5210	19.85	19.61	20.11	20.14	25.95	≤ 30.00	Pass
11ax-HE80	MCS0	58	5290	17.92	17.93	17.88	18.03	23.96	≤ 23.98	Pass
11ax-HE80	MCS0	106	5530	18.21	18.03	17.39	18.09	23.96	≤ 23.98	Pass
11ax-HE80	MCS0	122	5610	17.89	17.91	17.81	18.16	23.97	≤ 23.98	Pass
11ax-HE80	MCS0	138	5690	18.09	17.79	17.69	18.21	23.97	≤ 23.98	Pass
11ax-HE80	MCS0	155	5775	20.74	20.84	20.52	21.44	26.92	≤ 30.00	Pass
11ax-HE160	MCS0	50	5250	18.27	17.79	17.93	17.56	23.92	≤ 23.98	Pass
11ax-HE160	MCS0	114	5570	17.98	17.82	17.76	17.83	23.87	≤ 23.98	Pass
11be-EHT20	MCS0	36	5180	21.05	20.51	20.62	20.98	26.82	≤ 30.00	Pass
11be-EHT20	MCS0	40	5200	21.13	20.47	20.63	20.89	26.81	≤ 30.00	Pass
11be-EHT20	MCS0	48	5240	20.98	20.35	20.49	20.92	26.71	≤ 30.00	Pass
11be-EHT20	MCS0	52	5260	14.58	14.20	14.37	14.77	20.51	≤ 23.98	Pass
11be-EHT20	MCS0	60	5300	14.45	14.23	14.17	14.66	20.40	≤ 23.98	Pass
11be-EHT20	MCS0	64	5320	14.49	14.23	14.24	14.65	20.43	≤ 23.98	Pass
11be-EHT20	MCS0	100	5500	14.66	14.61	14.23	14.85	20.61	≤ 23.98	Pass
11be-EHT20	MCS0	116	5580	14.80	14.63	14.29	14.87	20.67	≤ 23.98	Pass
11be-EHT20	MCS0	140	5700	14.48	14.79	14.37	14.64	20.59	≤ 23.98	Pass
11be-EHT20	MCS0	144	5720	14.59	14.89	14.32	14.81	20.68	≤ 22.63	Pass
11be-EHT20	MCS0	149	5745	23.74	24.03	23.76	24.27	29.98	≤ 30.00	Pass
11be-EHT20	MCS0	157	5785	23.76	23.89	23.73	24.18	29.91	≤ 30.00	Pass
11be-EHT20	MCS0	165	5825	23.61	23.89	23.73	24.14	29.87	≤ 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)	Power Limit (dBm)	Result
11be-EHT40	MCS0	38	5190	21.31	20.68	20.96	20.74	26.95	≤ 30.00	Pass
11be-EHT40	MCS0	46	5230	24.23	23.84	23.99	23.61	29.94	≤ 30.00	Pass
11be-EHT40	MCS0	54	5270	17.65	17.24	17.15	17.28	23.35	≤ 23.98	Pass
11be-EHT40	MCS0	62	5310	17.42	17.15	17.09	17.21	23.24	≤ 23.98	Pass
11be-EHT40	MCS0	102	5510	18.23	17.06	17.43	17.73	23.65	≤ 23.98	Pass
11be-EHT40	MCS0	110	5550	18.26	17.62	17.62	17.86	23.87	≤ 23.98	Pass
11be-EHT40	MCS0	134	5670	17.62	17.29	17.27	17.36	23.41	≤ 23.98	Pass
11be-EHT40	MCS0	142	5710	17.62	17.19	17.19	17.34	23.36	≤ 23.98	Pass
11be-EHT40	MCS0	151	5755	23.79	24.03	23.72	23.69	29.83	≤ 30.00	Pass
11be-EHT40	MCS0	159	5795	23.72	24.01	23.62	23.67	29.78	≤ 30.00	Pass
11be-EHT80	MCS0	42	5210	19.63	19.48	19.91	19.97	25.77	≤ 30.00	Pass
11be-EHT80	MCS0	58	5290	17.81	18.03	17.82	17.93	23.92	≤ 23.98	Pass
11be-EHT80	MCS0	106	5530	18.22	18.03	17.43	18.08	23.97	≤ 23.98	Pass
11be-EHT80	MCS0	122	5610	18.13	17.88	17.72	18.06	23.97	≤ 23.98	Pass
11be-EHT80	MCS0	138	5690	18.08	17.93	17.71	17.99	23.95	≤ 23.98	Pass
11be-EHT80	MCS0	155	5775	20.99	21.06	20.82	21.65	27.16	≤ 30.00	Pass
11be-EHT160	MCS0	50	5250	18.28	17.73	17.83	17.85	23.95	≤ 23.98	Pass
11be-EHT160	MCS0	114	5570	17.99	17.73	17.76	17.98	23.89	≤ 23.98	Pass

Note 1:

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

Note 2:

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

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

For 802.11a Ch144, Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) = 22.27$ dBm.

For 802.11ac Ch144, Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) = 22.45$ dBm.

For 802.11ax Ch144, Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) = 22.63$ dBm.

For 802.11be Ch144, Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) = 22.63$ dBm.

Product	BE6500 Dual-Band Wi-Fi 7 Router	Test Engineer	Wen
Test Site	SR6	Test Date	2024/5/30
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)	Power Limit (dBm)	Result
11ac-VHT20	MCS0	36	5180	20.99	20.38	20.36	20.76	26.65	≤ 27.80	Pass
11ac-VHT20	MCS0	40	5200	20.95	20.37	20.29	20.82	26.64	≤ 27.80	Pass
11ac-VHT20	MCS0	48	5240	20.85	20.32	20.26	20.76	26.58	≤ 27.80	Pass
11ac-VHT20	MCS0	52	5260	14.54	14.90	14.10	14.65	20.58	≤ 21.66	Pass
11ac-VHT20	MCS0	60	5300	14.53	14.01	14.18	14.49	20.33	≤ 21.66	Pass
11ac-VHT20	MCS0	64	5320	14.44	14.08	14.05	14.43	20.27	≤ 21.66	Pass
11ac-VHT20	MCS0	100	5500	15.11	14.65	14.29	14.99	20.79	≤ 21.46	Pass
11ac-VHT20	MCS0	116	5580	15.11	14.66	14.34	15.12	20.84	≤ 21.46	Pass
11ac-VHT20	MCS0	140	5700	14.46	14.79	14.25	14.79	20.60	≤ 21.46	Pass
11ac-VHT20	MCS0	144	5720	13.68	14.01	13.44	13.95	19.80	≤ 19.93	Pass
11ac-VHT20	MCS0	149	5745	22.09	22.57	21.93	22.52	28.31	≤ 28.48	Pass
11ac-VHT20	MCS0	157	5785	22.03	22.43	21.96	22.43	28.24	≤ 28.48	Pass
11ac-VHT20	MCS0	165	5825	22.01	22.41	21.88	22.36	28.19	≤ 28.48	Pass
11ac-VHT40	MCS0	38	5190	21.59	21.11	21.27	21.02	27.27	≤ 27.80	Pass
11ac-VHT40	MCS0	46	5230	21.58	21.26	21.33	21.23	27.37	≤ 27.80	Pass
11ac-VHT40	MCS0	54	5270	15.23	15.12	15.01	15.23	21.17	≤ 21.66	Pass
11ac-VHT40	MCS0	62	5310	15.29	15.11	14.92	15.25	21.17	≤ 21.66	Pass
11ac-VHT40	MCS0	102	5510	15.71	15.05	15.02	15.51	21.35	≤ 21.46	Pass
11ac-VHT40	MCS0	110	5550	15.68	15.03	14.88	15.35	21.27	≤ 21.46	Pass
11ac-VHT40	MCS0	134	5670	15.21	15.14	14.85	15.06	21.09	≤ 21.46	Pass
11ac-VHT40	MCS0	142	5710	15.11	14.95	14.93	14.97	21.01	≤ 21.46	Pass
11ac-VHT40	MCS0	151	5755	22.08	22.39	21.91	22.09	28.14	≤ 28.48	Pass
11ac-VHT40	MCS0	159	5795	21.98	22.23	21.92	22.07	28.07	≤ 28.48	Pass
11ac-VHT80	MCS0	42	5210	19.81	19.67	20.10	20.28	25.99	≤ 27.80	Pass
11ac-VHT80	MCS0	58	5290	15.09	15.23	15.42	15.46	21.32	≤ 21.66	Pass
11ac-VHT80	MCS0	106	5530	15.23	14.99	14.87	15.44	21.16	≤ 21.46	Pass
11ac-VHT80	MCS0	122	5610	15.35	15.18	15.06	15.33	21.25	≤ 21.46	Pass
11ac-VHT80	MCS0	138	5690	15.18	15.07	15.11	15.19	21.16	≤ 21.46	Pass
11ac-VHT80	MCS0	155	5775	20.74	20.82	20.51	21.36	26.89	≤ 28.48	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)	Power Limit (dBm)	Result
11ac-VHT160	MCS0	50	5250	15.46	15.08	15.16	15.42	21.30	≤ 21.66	Pass
11ac-VHT160	MCS0	114	5570	15.52	15.27	15.23	15.58	21.42	≤ 21.46	Pass
11ax-HE20	MCS0	36	5180	21.08	20.42	20.55	20.93	26.77	≤ 27.80	Pass
11ax-HE20	MCS0	40	5200	21.01	20.48	20.63	20.98	26.80	≤ 27.80	Pass
11ax-HE20	MCS0	48	5240	20.96	20.43	20.48	20.85	26.71	≤ 27.80	Pass
11ax-HE20	MCS0	52	5260	14.76	14.24	14.35	14.53	20.50	≤ 21.66	Pass
11ax-HE20	MCS0	60	5300	14.53	14.18	14.27	14.54	20.40	≤ 21.66	Pass
11ax-HE20	MCS0	64	5320	14.47	14.12	14.18	14.47	20.33	≤ 21.66	Pass
11ax-HE20	MCS0	100	5500	14.83	14.55	14.23	14.91	20.66	≤ 21.46	Pass
11ax-HE20	MCS0	116	5580	14.91	14.67	14.31	15.07	20.77	≤ 21.46	Pass
11ax-HE20	MCS0	140	5700	14.47	14.83	14.45	14.84	20.67	≤ 21.46	Pass
11ax-HE20	MCS0	144	5720	13.87	14.13	13.68	14.13	19.98	≤ 20.10	Pass
11ax-HE20	MCS0	149	5745	22.25	22.61	22.23	22.62	28.45	≤ 28.48	Pass
11ax-HE20	MCS0	157	5785	22.16	22.42	22.18	22.64	28.38	≤ 28.48	Pass
11ax-HE20	MCS0	165	5825	22.09	22.49	22.25	22.62	28.39	≤ 28.48	Pass
11ax-HE40	MCS0	38	5190	21.28	20.59	20.94	20.87	26.95	≤ 27.80	Pass
11ax-HE40	MCS0	46	5230	21.53	21.45	21.53	21.39	27.50	≤ 27.80	Pass
11ax-HE40	MCS0	54	5270	15.01	15.22	15.19	15.13	21.16	≤ 21.66	Pass
11ax-HE40	MCS0	62	5310	15.15	15.23	15.12	15.09	21.17	≤ 21.66	Pass
11ax-HE40	MCS0	102	5510	15.78	15.18	15.20	15.51	21.45	≤ 21.46	Pass
11ax-HE40	MCS0	110	5550	15.69	15.09	15.11	15.57	21.39	≤ 21.46	Pass
11ax-HE40	MCS0	134	5670	15.33	15.27	15.04	15.18	21.23	≤ 21.46	Pass
11ax-HE40	MCS0	142	5710	15.31	15.13	15.01	15.17	21.18	≤ 21.46	Pass
11ax-HE40	MCS0	151	5755	22.18	22.59	22.09	22.23	28.30	≤ 28.48	Pass
11ax-HE40	MCS0	159	5795	22.16	22.43	22.09	22.17	28.24	≤ 28.48	Pass
11ax-HE80	MCS0	42	5210	19.85	19.61	20.11	20.14	25.95	≤ 27.80	Pass
11ax-HE80	MCS0	58	5290	15.19	15.53	15.52	15.62	21.49	≤ 21.66	Pass
11ax-HE80	MCS0	106	5530	15.43	15.13	15.07	15.58	21.33	≤ 21.46	Pass
11ax-HE80	MCS0	122	5610	15.45	15.39	15.21	15.61	21.44	≤ 21.46	Pass
11ax-HE80	MCS0	138	5690	15.22	15.35	15.16	15.38	21.30	≤ 21.46	Pass
11ax-HE80	MCS0	155	5775	20.74	20.84	20.52	21.44	26.92	≤ 28.48	Pass
11ax-HE160	MCS0	50	5250	15.76	15.39	15.58	15.57	21.60	≤ 21.66	Pass
11ax-HE160	MCS0	114	5570	15.46	15.21	15.07	15.39	21.31	≤ 21.46	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)	Power Limit (dBm)	Result
11be-EHT20	MCS0	36	5180	21.05	20.51	20.62	20.98	26.82	≤ 27.80	Pass
11be-EHT20	MCS0	40	5200	21.13	20.47	20.63	20.89	26.81	≤ 27.80	Pass
11be-EHT20	MCS0	48	5240	20.98	20.35	20.49	20.92	26.71	≤ 27.80	Pass
11be-EHT20	MCS0	52	5260	14.58	14.20	14.37	14.77	20.51	≤ 21.66	Pass
11be-EHT20	MCS0	60	5300	14.45	14.23	14.17	14.66	20.40	≤ 21.66	Pass
11be-EHT20	MCS0	64	5320	14.49	14.23	14.24	14.65	20.43	≤ 21.66	Pass
11be-EHT20	MCS0	100	5500	14.66	14.61	14.23	14.85	20.61	≤ 21.46	Pass
11be-EHT20	MCS0	116	5580	14.80	14.63	14.29	14.87	20.67	≤ 21.46	Pass
11be-EHT20	MCS0	140	5700	14.48	14.79	14.37	14.64	20.59	≤ 21.46	Pass
11be-EHT20	MCS0	144	5720	13.81	14.11	13.69	14.16	19.97	≤ 20.11	Pass
11be-EHT20	MCS0	149	5745	22.22	22.58	22.14	22.78	28.46	≤ 28.48	Pass
11be-EHT20	MCS0	157	5785	22.16	22.47	22.16	22.66	28.39	≤ 28.48	Pass
11be-EHT20	MCS0	165	5825	22.11	22.32	22.02	22.53	28.27	≤ 28.48	Pass
11be-EHT40	MCS0	38	5190	21.31	20.68	20.96	20.74	26.95	≤ 27.80	Pass
11be-EHT40	MCS0	46	5230	21.87	21.55	21.49	21.36	27.59	≤ 27.80	Pass
11be-EHT40	MCS0	54	5270	15.25	15.15	15.08	15.11	21.17	≤ 21.66	Pass
11be-EHT40	MCS0	62	5310	15.13	15.21	15.01	14.96	21.10	≤ 21.66	Pass
11be-EHT40	MCS0	102	5510	15.89	15.18	15.07	15.46	21.43	≤ 21.46	Pass
11be-EHT40	MCS0	110	5550	15.62	15.12	15.13	15.46	21.36	≤ 21.46	Pass
11be-EHT40	MCS0	134	5670	15.33	15.23	15.03	15.19	21.22	≤ 21.46	Pass
11be-EHT40	MCS0	142	5710	15.23	15.13	14.97	15.14	21.14	≤ 21.46	Pass
11be-EHT40	MCS0	151	5755	22.18	22.55	22.06	22.22	28.28	≤ 28.48	Pass
11be-EHT40	MCS0	159	5795	22.08	22.43	21.93	22.11	28.16	≤ 28.48	Pass
11be-EHT80	MCS0	42	5210	19.63	19.48	19.91	19.97	25.77	≤ 27.80	Pass
11be-EHT80	MCS0	58	5290	15.25	15.54	15.64	15.69	21.55	≤ 21.66	Pass
11be-EHT80	MCS0	106	5530	15.52	15.19	15.09	15.52	21.35	≤ 21.46	Pass
11be-EHT80	MCS0	122	5610	15.47	15.29	15.30	15.63	21.45	≤ 21.46	Pass
11be-EHT80	MCS0	138	5690	15.33	15.22	15.05	15.37	21.26	≤ 21.46	Pass
11be-EHT80	MCS0	155	5775	20.99	21.06	20.82	21.65	27.16	≤ 28.48	Pass
11be-EHT160	MCS0	50	5250	15.75	15.31	15.50	15.66	21.58	≤ 21.66	Pass
11be-EHT160	MCS0	114	5570	15.39	15.21	15.27	15.56	21.38	≤ 21.46	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) = $30 - (8.20 - 6) = 27.80\text{dBm}$

For 5250 - 5350MHz Band: Average Power Limit (dBm) = $23.98 - (8.32 - 6) = 21.66\text{dBm}$.

For 5470 - 5725MHz Band: Average Power Limit (dBm) = $23.98 - (8.52 - 6) = 21.46\text{dBm}$.

For 5725 - 5850MHz Band: Average Power Limit (dBm) = $30 - (7.52 - 6) = 28.48\text{dBm}$.

For 802.11ac Ch144, Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) - (8.52 - 6) = 19.93\text{ dBm}$.

For 802.11ax Ch144, Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) - (8.52 - 6) = 20.10\text{ dBm}$.

For 802.11be Ch144, Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) - (8.52 - 6) = 20.11\text{ dBm}$.

7.5. Transmit Power Control

7.5.1. Test Limit

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

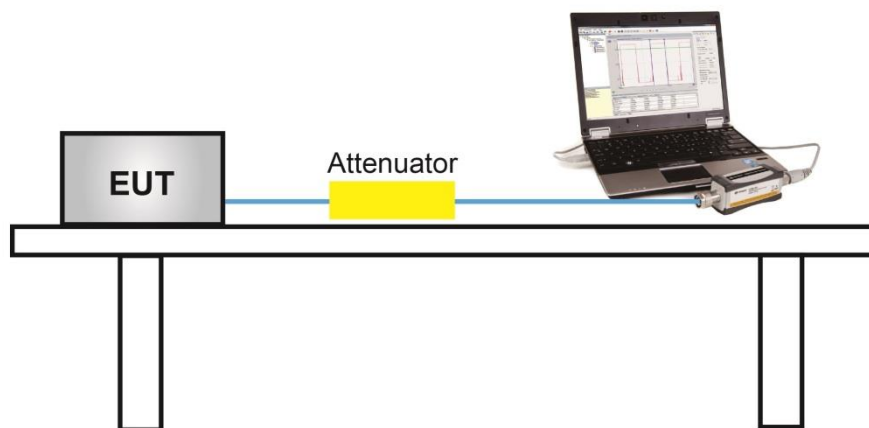
7.5.2. Test Procedure Used

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

7.5.3. Test Setting

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

7.5.4. Test Setup



7.5.5. Test Result

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

7.6. Power Spectral Density Measurement

7.6.1. Test Limit

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

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

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

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

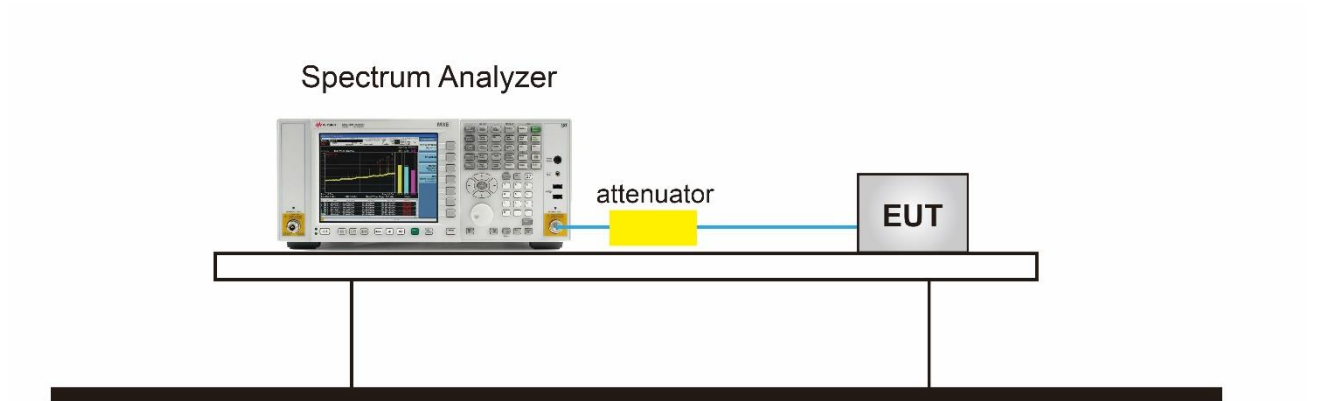
7.6.2. Test Procedure Used

KDB 789033 D02v02r01-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	BE6500 Dual-Band Wi-Fi 7 Router	Test Engineer	Wen
Test Site	SR6	Test Date	2024/5/30~2024/6/12
Mode	Power Spectral Density (U-NII- 1/-2a / -2c) CDD Mode		

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Ant 2 PSD (dBm/MHz)	Ant 3 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11a	6Mbps	36	5180	8.739	7.410	7.460	8.806	98.00%	14.263	≤ 14.80	Pass
11a	6Mbps	44	5220	9.019	7.799	7.673	8.807	98.00%	14.473	≤ 14.80	Pass
11a	6Mbps	48	5240	8.990	8.072	7.861	8.908	98.00%	14.594	≤ 14.80	Pass
11a	6Mbps	52	5260	3.048	2.076	1.863	2.957	98.00%	8.625	≤ 8.68	Pass
11a	6Mbps	60	5300	3.015	2.092	1.978	3.017	98.00%	8.661	≤ 8.68	Pass
11a	6Mbps	64	5320	2.964	2.104	1.912	2.993	98.00%	8.629	≤ 8.68	Pass
11a	6Mbps	100	5500	2.521	1.879	2.217	2.728	98.00%	8.456	≤ 8.48	Pass
11a	6Mbps	116	5580	2.418	1.920	2.366	2.648	98.00%	8.454	≤ 8.48	Pass
11a	6Mbps	140	5700	2.473	1.935	1.926	2.439	98.00%	8.309	≤ 8.48	Pass
11a	6Mbps	144	5720	2.420	1.927	2.027	2.650	98.00%	8.374	≤ 8.48	Pass
11ac-VHT20	MCS0	36	5180	8.720	8.448	8.200	8.663	99.39%	14.560	≤ 14.80	Pass
11ac-VHT20	MCS0	40	5220	8.846	8.367	8.272	8.566	99.39%	14.566	≤ 14.80	Pass
11ac-VHT20	MCS0	48	5240	8.838	8.334	8.363	9.037	99.39%	14.701	≤ 14.80	Pass
11ac-VHT20	MCS0	52	5260	2.622	2.399	2.403	2.895	99.39%	8.632	≤ 8.68	Pass
11ac-VHT20	MCS0	60	5300	2.803	2.451	2.432	2.785	99.39%	8.669	≤ 8.68	Pass
11ac-VHT20	MCS0	64	5320	2.712	2.521	2.438	2.753	99.39%	8.655	≤ 8.68	Pass
11ac-VHT20	MCS0	100	5500	2.569	2.271	2.171	2.646	99.39%	8.466	≤ 8.48	Pass
11ac-VHT20	MCS0	116	5580	2.671	2.200	2.242	2.538	99.39%	8.465	≤ 8.48	Pass
11ac-VHT20	MCS0	140	5700	2.228	2.564	2.241	2.652	99.39%	8.473	≤ 8.48	Pass
11ac-VHT20	MCS0	144	5720	2.364	2.594	2.171	2.578	99.39%	8.478	≤ 8.48	Pass
11ac-VHT40	MCS0	38	5190	6.442	6.028	5.756	6.289	98.67%	12.215	≤ 14.80	Pass
11ac-VHT40	MCS0	46	5230	8.675	8.463	8.806	8.869	98.67%	14.785	≤ 14.80	Pass
11ac-VHT40	MCS0	54	5270	2.505	2.586	2.530	2.698	98.67%	8.659	≤ 8.68	Pass
11ac-VHT40	MCS0	62	5310	2.682	2.458	2.521	2.713	98.67%	8.674	≤ 8.68	Pass
11ac-VHT40	MCS0	102	5510	2.694	2.243	2.247	2.383	98.67%	8.475	≤ 8.48	Pass
11ac-VHT40	MCS0	110	5550	2.801	1.888	1.840	2.517	98.67%	8.360	≤ 8.48	Pass
11ac-VHT40	MCS0	134	5670	2.413	2.444	1.778	2.514	98.67%	8.376	≤ 8.48	Pass
11ac-VHT40	MCS0	142	5710	2.463	2.349	2.273	2.489	98.67%	8.473	≤ 8.48	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/M Hz)	Ant 1 PSD (dBm/M Hz)	Ant 2 PSD (dBm/M Hz)	Ant 3 PSD (dBm/M Hz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11ac-VHT80	MCS0	42	5210	1.827	1.924	2.241	2.356	95.91%	8.294	≤ 14.80	Pass
11ac-VHT80	MCS0	58	5290	0.302	0.563	0.680	0.592	95.91%	6.738	≤ 8.68	Pass
11ac-VHT80	MCS0	106	5530	0.279	0.225	-0.200	0.351	95.91%	6.371	≤ 8.48	Pass
11ac-VHT80	MCS0	122	5610	-0.153	-0.520	-0.649	-0.090	95.91%	5.855	≤ 8.48	Pass
11ac-VHT80	MCS0	138	5690	0.033	-0.165	-0.056	0.117	95.91%	6.185	≤ 8.48	Pass
11ac-VHT160	MCS0	50	5250	-2.325	-3.034	-2.799	-2.873	97.41%	3.385	≤ 8.68	Pass
11ac-VHT160	MCS0	114	5570	-2.437	-2.948	-3.419	-2.710	97.41%	3.271	≤ 8.48	Pass
11ax-HE20	MCS0	36	5180	8.722	8.398	8.168	8.511	98.91%	14.522	≤ 14.80	Pass
11ax-HE20	MCS0	44	5220	8.581	8.081	8.211	8.750	98.91%	14.482	≤ 14.80	Pass
11ax-HE20	MCS0	48	5240	8.972	8.436	8.530	8.679	98.91%	14.727	≤ 14.80	Pass
11ax-HE20	MCS0	52	5260	2.776	2.313	2.366	2.882	98.91%	8.659	≤ 8.68	Pass
11ax-HE20	MCS0	60	5300	2.710	2.267	2.368	2.865	98.91%	8.627	≤ 8.68	Pass
11ax-HE20	MCS0	64	5320	2.696	2.244	2.446	2.753	98.91%	8.608	≤ 8.68	Pass
11ax-HE20	MCS0	100	5500	2.464	2.192	2.121	2.476	98.91%	8.384	≤ 8.48	Pass
11ax-HE20	MCS0	116	5580	2.244	2.066	2.232	2.515	98.91%	8.335	≤ 8.48	Pass
11ax-HE20	MCS0	140	5700	2.175	2.466	2.318	2.587	98.91%	8.457	≤ 8.48	Pass
11ax-HE20	MCS0	144	5720	2.331	2.409	2.200	2.608	98.91%	8.458	≤ 8.48	Pass
11ax-HE40	MCS0	38	5190	6.126	5.586	5.318	5.952	98.01%	11.865	≤ 14.80	Pass
11ax-HE40	MCS0	46	5230	8.691	8.520	8.704	8.803	98.01%	14.789	≤ 14.80	Pass
11ax-HE40	MCS0	54	5270	2.669	2.241	2.489	2.796	98.01%	8.662	≤ 8.68	Pass
11ax-HE40	MCS0	62	5310	2.563	2.381	2.595	2.602	98.01%	8.644	≤ 8.68	Pass
11ax-HE40	MCS0	102	5510	2.631	2.135	2.265	2.250	98.01%	8.432	≤ 8.48	Pass
11ax-HE40	MCS0	110	5550	2.608	2.156	2.134	2.558	98.01%	8.478	≤ 8.48	Pass
11ax-HE40	MCS0	134	5670	2.156	2.136	1.939	2.141	98.01%	8.202	≤ 8.48	Pass
11ax-HE40	MCS0	142	5710	2.372	2.280	2.271	2.408	98.01%	8.441	≤ 8.48	Pass
11ax-HE80	MCS0	42	5210	1.919	1.750	2.162	2.419	97.47%	8.202	≤ 14.80	Pass
11ax-HE80	MCS0	58	5290	0.224	0.509	0.474	0.394	97.47%	6.534	≤ 8.68	Pass
11ax-HE80	MCS0	106	5530	1.063	0.547	0.143	0.107	97.47%	6.615	≤ 8.48	Pass
11ax-HE80	MCS0	122	5610	0.038	-0.209	-0.136	-0.311	97.47%	5.979	≤ 8.48	Pass
11ax-HE80	MCS0	138	5690	0.263	0.265	0.101	0.021	97.47%	6.296	≤ 8.48	Pass
11ax-HE160	MCS0	50	5250	-1.881	-2.842	-2.669	-2.604	98.18%	3.617	≤ 8.68	Pass
11ax-HE160	MCS0	114	5570	-2.098	-2.554	-3.097	-2.753	98.18%	3.490	≤ 8.48	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	8.692	8.483	8.266	8.433	98.60%	14.553	≤ 14.80	Pass
11be-EHT20	MCS0	44	5220	9.012	8.372	8.564	8.642	98.60%	14.736	≤ 14.80	Pass
11be-EHT20	MCS0	48	5240	8.880	8.592	8.563	8.713	98.60%	14.771	≤ 14.80	Pass
11be-EHT20	MCS0	52	5260	2.567	2.321	2.498	2.651	98.60%	8.593	≤ 8.68	Pass
11be-EHT20	MCS0	60	5300	2.493	2.474	2.582	2.748	98.60%	8.658	≤ 8.68	Pass
11be-EHT20	MCS0	64	5320	2.567	2.321	2.363	2.984	98.60%	8.649	≤ 8.68	Pass
11be-EHT20	MCS0	100	5500	2.592	2.191	2.043	2.287	98.60%	8.365	≤ 8.48	Pass
11be-EHT20	MCS0	116	5580	2.414	2.154	1.960	2.388	98.60%	8.315	≤ 8.48	Pass
11be-EHT20	MCS0	140	5700	2.221	2.503	2.121	2.668	98.60%	8.466	≤ 8.48	Pass
11be-EHT20	MCS0	144	5720	2.256	2.429	2.295	2.554	98.60%	8.467	≤ 8.48	Pass
11be-EHT40	MCS0	38	5190	6.417	5.450	5.821	5.615	97.70%	11.963	≤ 14.80	Pass
11be-EHT40	MCS0	46	5230	8.989	8.309	8.557	8.791	97.70%	14.791	≤ 14.80	Pass
11be-EHT40	MCS0	54	5270	2.529	2.545	2.318	2.617	97.70%	8.626	≤ 8.68	Pass
11be-EHT40	MCS0	62	5310	2.572	2.369	2.490	2.649	97.70%	8.643	≤ 8.68	Pass
11be-EHT40	MCS0	102	5510	2.531	2.241	2.191	2.241	97.70%	8.425	≤ 8.48	Pass
11be-EHT40	MCS0	110	5550	2.578	2.143	2.180	2.511	97.70%	8.479	≤ 8.48	Pass
11be-EHT40	MCS0	134	5670	2.345	2.105	2.164	2.441	97.70%	8.388	≤ 8.48	Pass
11be-EHT40	MCS0	142	5710	2.297	2.132	2.302	2.280	97.70%	8.375	≤ 8.48	Pass
11be-EHT80	MCS0	42	5210	1.600	1.510	2.205	2.201	97.66%	8.014	≤ 14.80	Pass
11be-EHT80	MCS0	58	5290	0.141	0.557	0.683	0.566	97.66%	6.615	≤ 8.68	Pass
11be-EHT80	MCS0	106	5530	0.765	0.477	-0.378	0.455	97.66%	6.473	≤ 8.48	Pass
11be-EHT80	MCS0	122	5610	0.149	-0.169	-0.445	-0.049	97.66%	6.000	≤ 8.48	Pass
11be-EHT80	MCS0	138	5690	0.287	0.232	0.089	0.164	97.66%	6.317	≤ 8.48	Pass
11be-EHT160	MCS0	50	5250	-1.560	-2.789	-2.399	-2.530	98.54%	3.790	≤ 8.68	Pass
11be-EHT160	MCS0	114	5570	-1.990	-2.831	-2.811	-2.585	98.54%	3.544	≤ 8.48	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 - (8.20 - 6) = 14.80dBm/MHz.

For 5250 - 5350MHz Band: PSD Limit (dBm/MHz) = 11 - (8.32 - 6) = 8.68dBm/MHz.

For 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11 - (8.52 - 6) = 8.48dBm/MHz.

Product	BE6500 Dual-Band Wi-Fi 7 Router	Test Engineer	Wen
Test Site	SR6	Test Date	2024/5/30~2024/6/12
Test Item	Power Spectral Density (U-NII-3) CDD Mode		

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/510KHz)	Ant 1 PSD (dBm/510KHz)	Ant 2 PSD (dBm/510KHz)	Ant 3 PSD (dBm/510KHz)	Duty Cycle (%)	Total PSD (dBm/510k Hz)	Limit (dBm/500kHz)	Result
11a	6Mbps	149	5745	8.928	9.207	9.065	9.835	98.00%	15.381	≤ 28.48	Pass
11a	6Mbps	157	5785	9.189	9.242	9.029	9.875	98.00%	15.454	≤ 28.48	Pass
11a	6Mbps	165	5825	8.994	8.917	8.963	9.838	98.00%	15.303	≤ 28.48	Pass
11ac-VHT20	MCS0	149	5745	9.007	9.448	9.010	9.328	99.39%	15.250	≤ 28.48	Pass
11ac-VHT20	MCS0	157	5785	8.898	9.500	9.104	9.539	99.39%	15.316	≤ 28.48	Pass
11ac-VHT20	MCS0	165	5825	8.887	9.248	8.973	9.524	99.39%	15.213	≤ 28.48	Pass
11ac-VHT40	MCS0	151	5755	5.968	6.328	6.081	6.298	98.67%	12.250	≤ 28.48	Pass
11ac-VHT40	MCS0	159	5795	5.940	6.372	5.777	6.025	98.67%	12.113	≤ 28.48	Pass
11ac-VHT80	MCS0	155	5775	-0.154	0.285	-0.178	0.848	95.91%	6.423	≤ 28.48	Pass
11ax-HE20	MCS0	149	5745	8.891	9.644	8.976	9.663	98.91%	15.377	≤ 28.48	Pass
11ax-HE20	MCS0	157	5785	9.035	9.594	9.053	9.700	98.91%	15.424	≤ 28.48	Pass
11ax-HE20	MCS0	165	5825	8.879	9.476	8.816	9.292	98.91%	15.193	≤ 28.48	Pass
11ax-HE40	MCS0	151	5755	6.089	6.556	6.180	6.115	98.01%	12.347	≤ 28.48	Pass
11ax-HE40	MCS0	159	5795	6.226	6.458	6.389	6.140	98.01%	12.413	≤ 28.48	Pass
11ax-HE80	MCS0	155	5775	0.133	0.182	-0.211	0.695	97.47%	6.344	≤ 28.48	Pass
11be-EHT20	MCS0	149	5745	9.077	9.643	9.004	9.469	98.60%	15.388	≤ 28.48	Pass
11be-EHT20	MCS0	157	5785	9.139	9.682	9.277	9.580	98.60%	15.507	≤ 28.48	Pass
11be-EHT20	MCS0	165	5825	8.813	9.421	8.973	9.516	98.60%	15.273	≤ 28.48	Pass
11be-EHT40	MCS0	151	5755	6.268	6.343	6.450	6.164	97.70%	12.429	≤ 28.48	Pass
11be-EHT40	MCS0	159	5795	6.348	6.575	6.392	6.216	97.70%	12.507	≤ 28.48	Pass
11be-EHT80	MCS0	155	5775	0.152	0.529	0.061	1.280	97.66%	6.656	≤ 28.48	Pass

Note 1: When EUT duty cycle ≥ 98%,

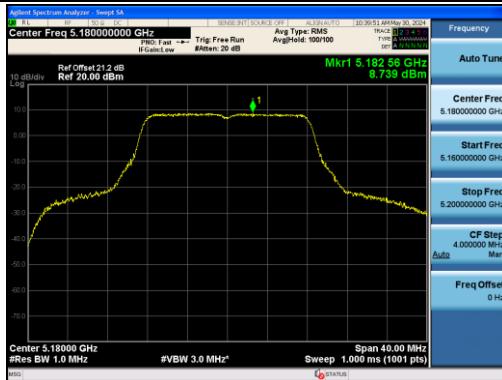
the total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} + 10^{(\text{Ant 3 PSD}/10)}\}$ (dBm/510kHz).

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

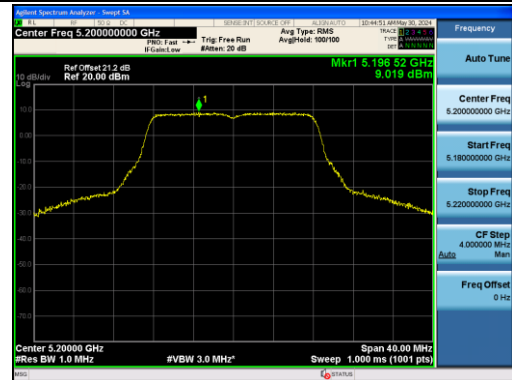
Note 2: PSD Limit (dBm/500kHz) = 30 - (7.52 - 6) = 28.48 (dBm/500kHz).

802.11a Power Spectral Density - Ant 0

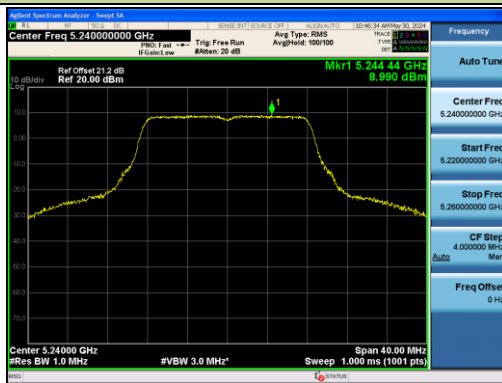
Channel 36 (5180MHz)



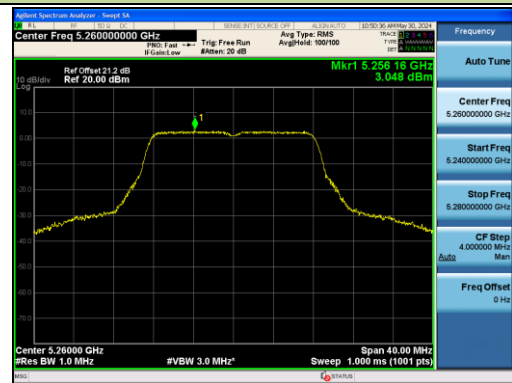
Channel 40 (5200MHz)



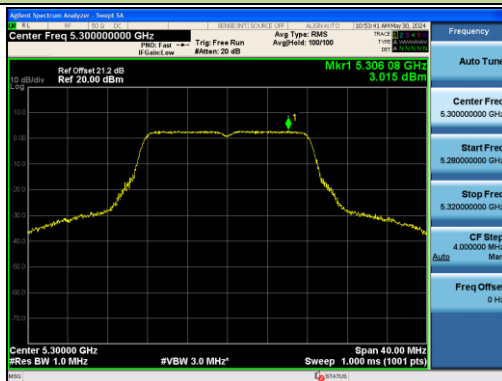
Channel 48 (5240MHz)



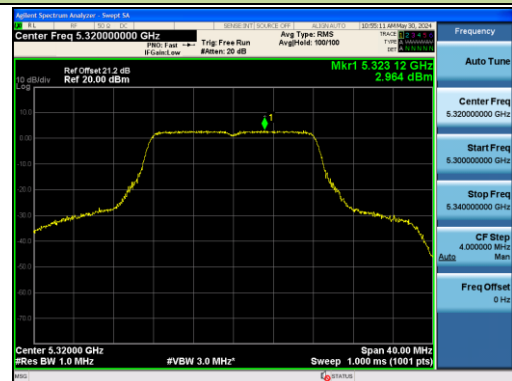
Channel 52 (5260MHz)



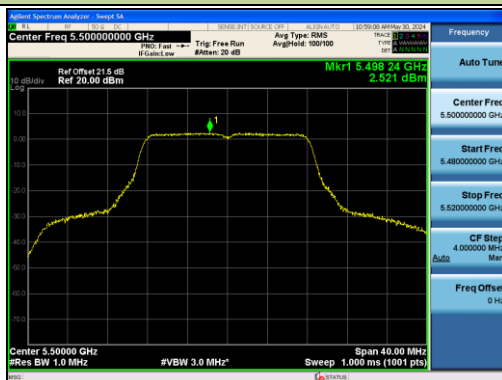
Channel 60 (5300MHz)



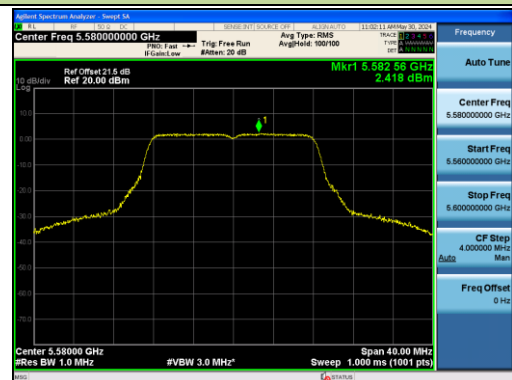
Channel 64 (5320MHz)



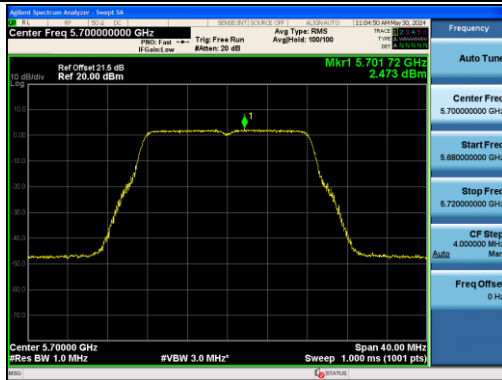
Channel 100 (5500MHz)



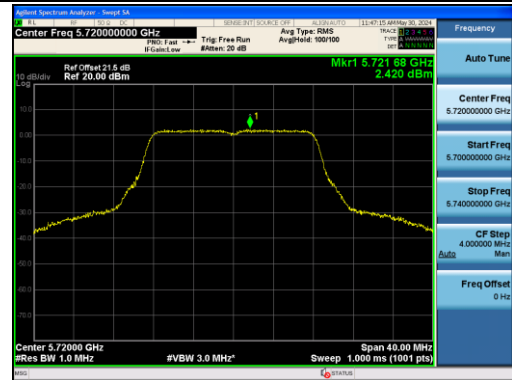
Channel 116 (5580MHz)



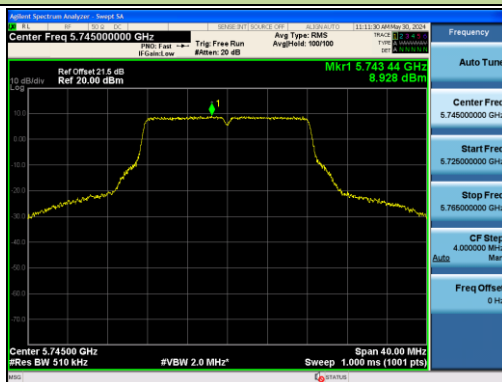
Channel 140 (5700MHz)



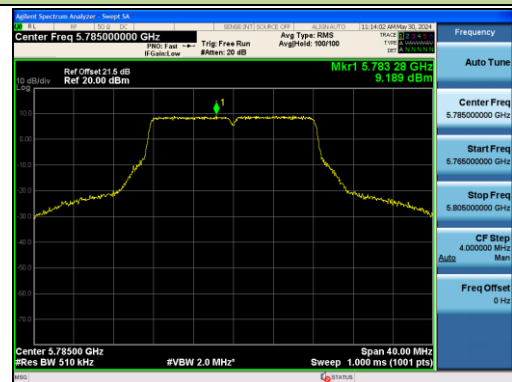
Channel 144 (5720MHz)



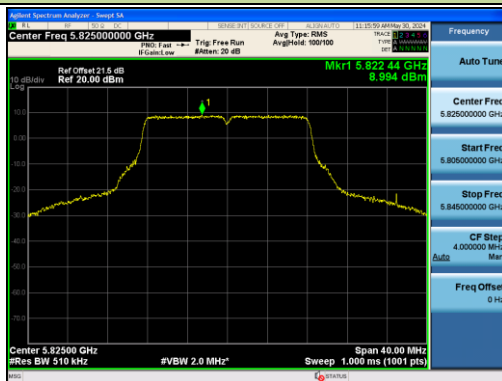
Channel 149 (5745MHz)



Channel 157 (5785MHz)

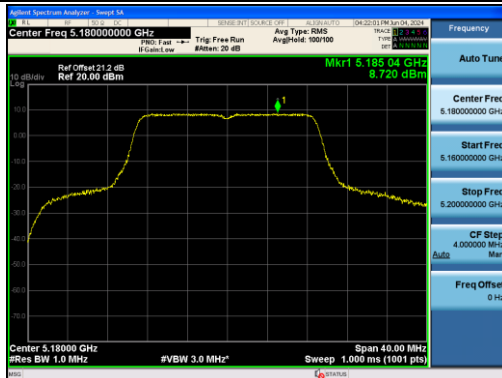


Channel 165 (5825MHz)

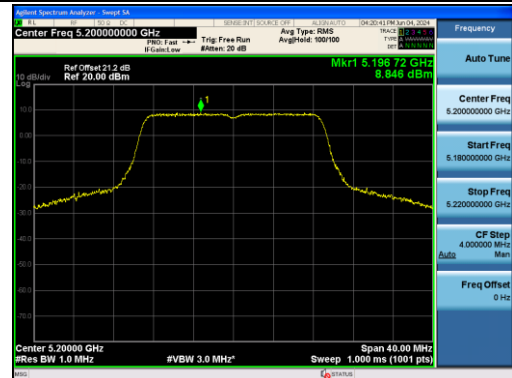


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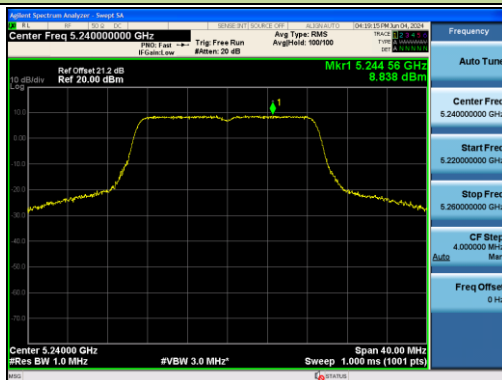
Channel 36 (5180MHz)



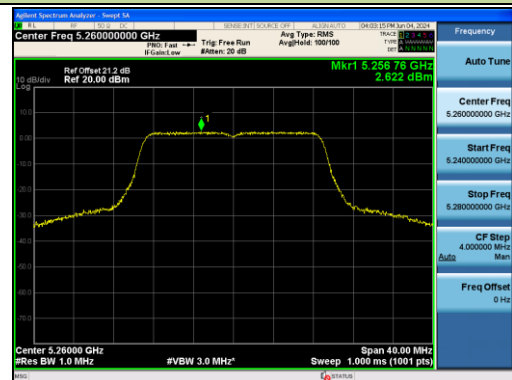
Channel 40 (5200MHz)



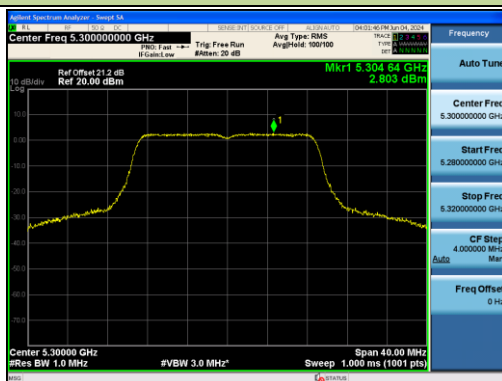
Channel 48 (5240MHz)



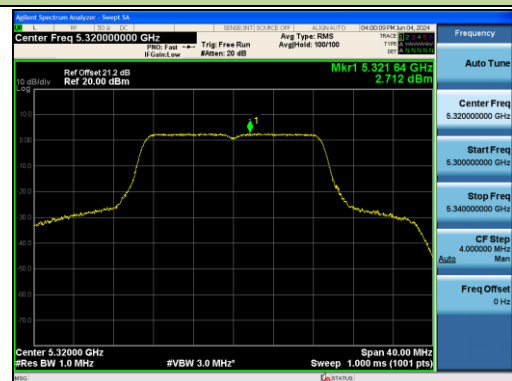
Channel 52 (5260MHz)



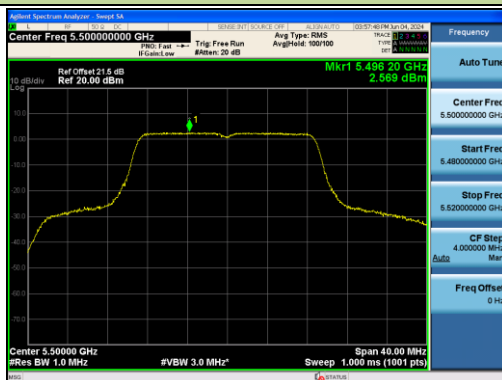
Channel 60 (5300MHz)



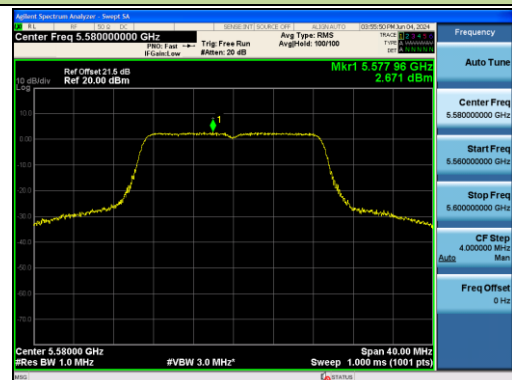
Channel 64 (5320MHz)



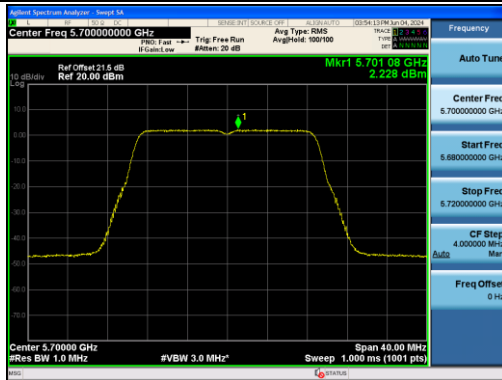
Channel 100 (5500MHz)



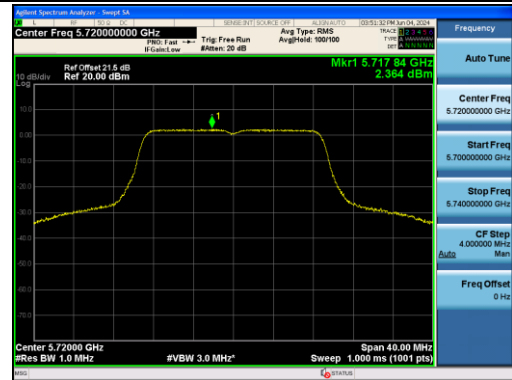
Channel 116 (5580MHz)



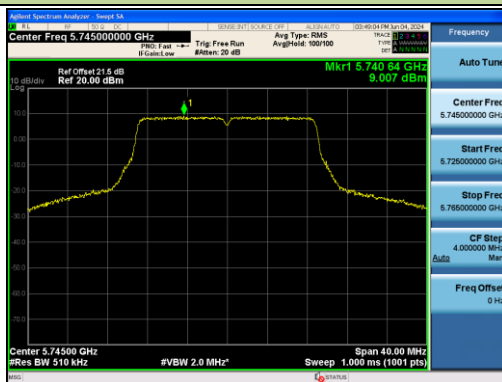
Channel 140 (5700MHz)



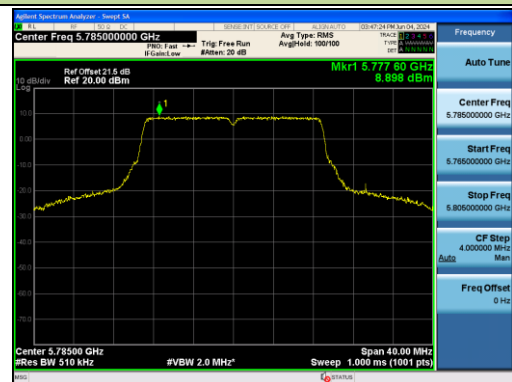
Channel 144 (5720MHz)



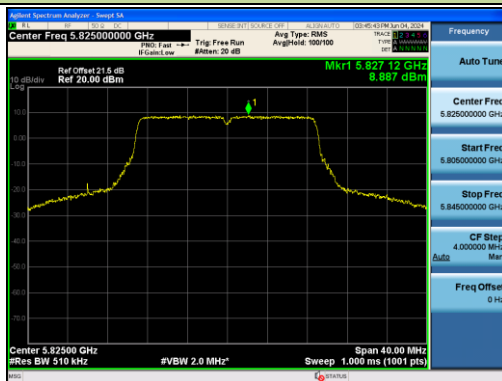
Channel 149 (5745MHz)



Channel 157 (5785MHz)

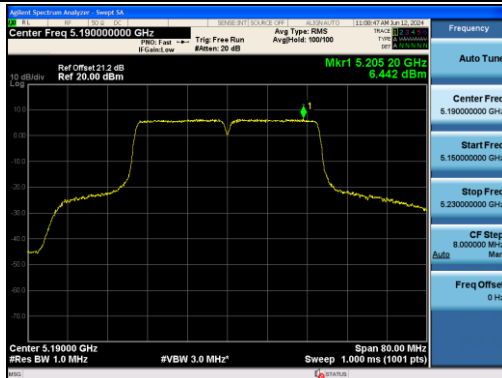


Channel 165 (5825MHz)

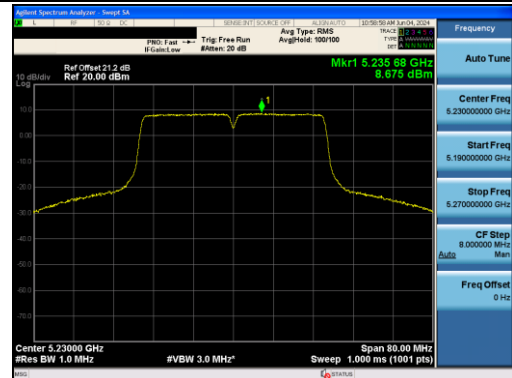


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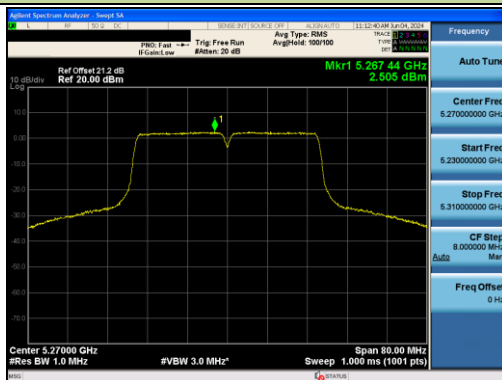
Channel 38 (5190MHz)



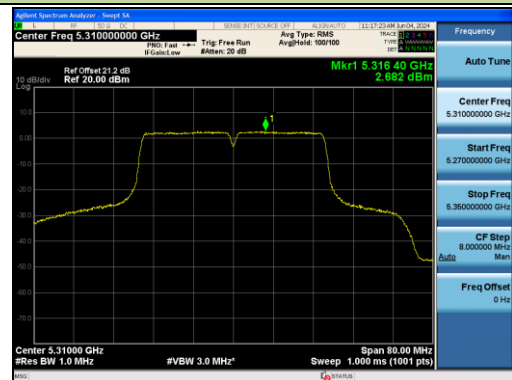
Channel 46 (5230MHz)



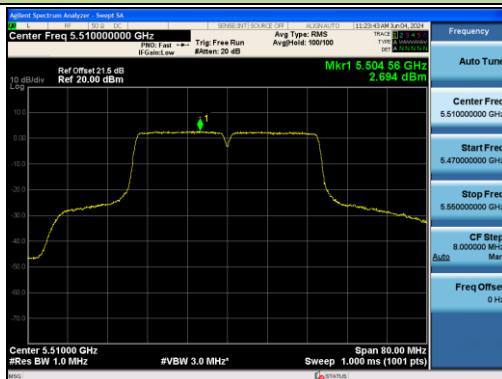
Channel 54 (5270MHz)



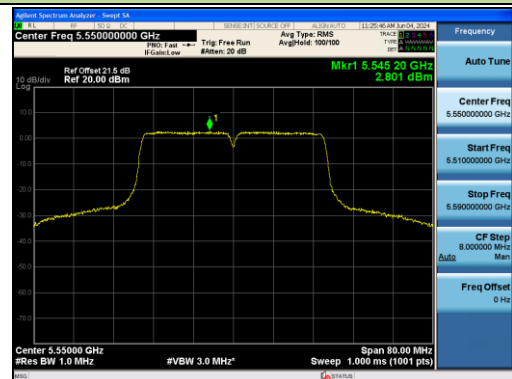
Channel 62 (5310MHz)



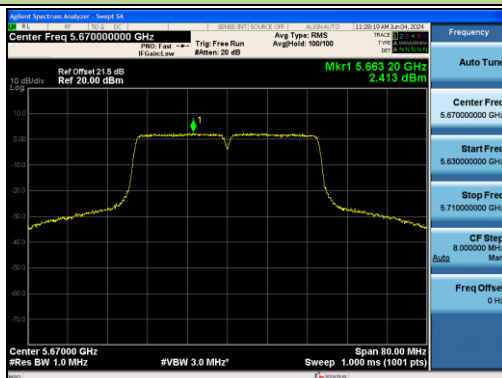
Channel 102 (5510MHz)



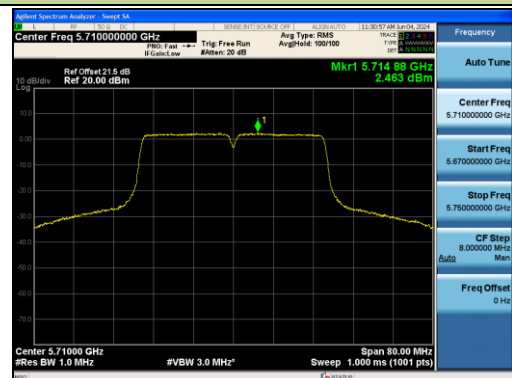
Channel 110 (5550MHz)

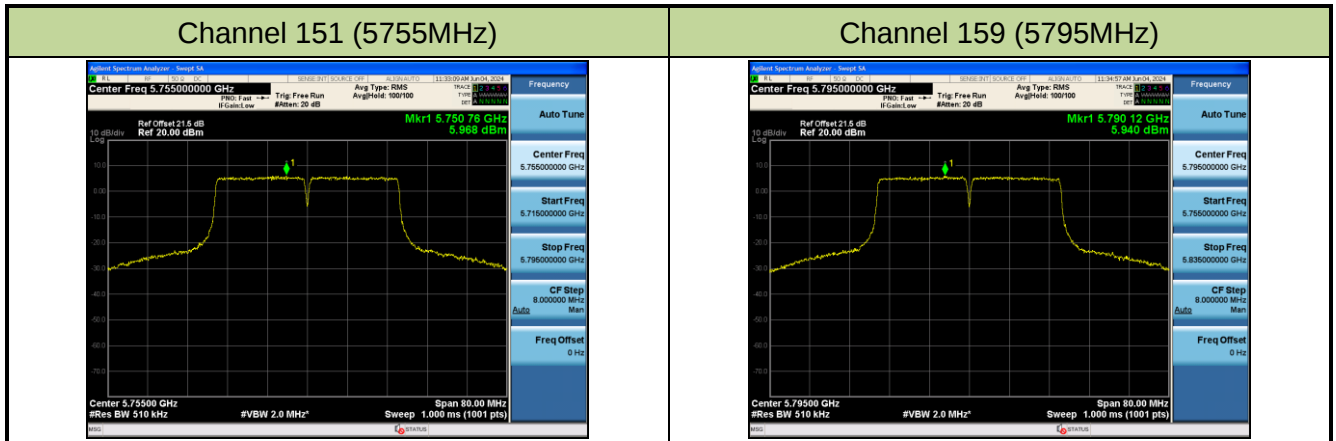


Channel 134 (5670MHz)



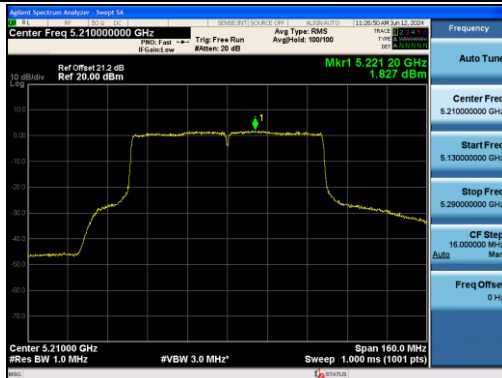
Channel 142 (5710MHz)



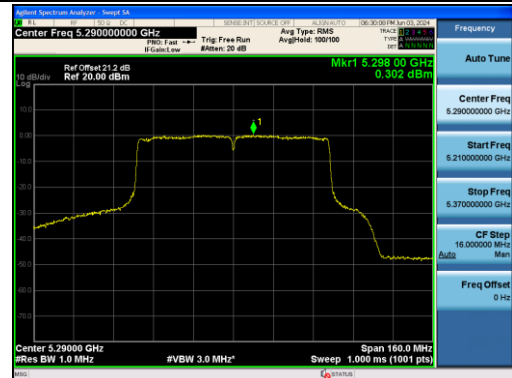


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Channel 42 (5210MHz)



Channel 58 (5290MHz)



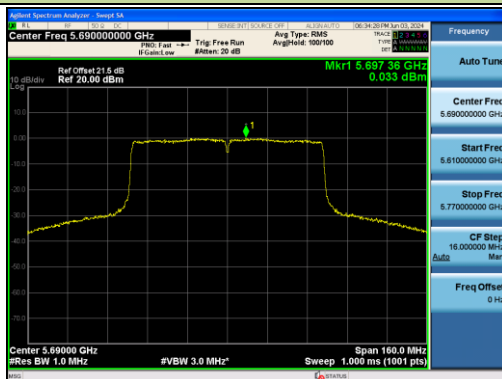
Channel 106 (5530MHz)



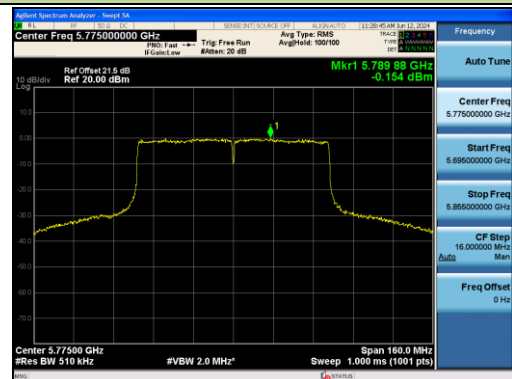
Channel 122 (5610MHz)



Channel 138 (5690MHz)

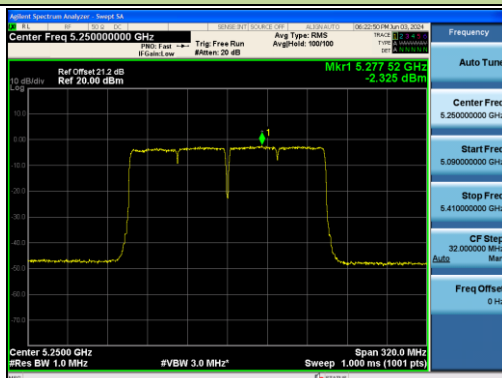


Channel 155 (5775MHz)



802.11ac-VHT160 Power Spectral Density - Ant 0

Channel 50 (5250MHz)



Channel 114 (5570MHz)

