

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ax-HE40	MCS0	38	5190	17.73	18.33	21.05	≤ 29.91	Pass
11ax-HE40	MCS0	46	5230	24.43	24.72	27.59	≤ 29.91	Pass
11ax-HE40	MCS0	54	5270	19.26	19.23	22.26	≤ 23.83	Pass
11ax-HE40	MCS0	62	5310	17.98	18.40	21.21	≤ 23.83	Pass
11ax-HE40	MCS0	102	5510	18.82	18.93	21.89	≤ 23.98	Pass
11ax-HE40	MCS0	110	5550	20.46	20.70	23.59	≤ 23.98	Pass
11ax-HE40	MCS0	134	5670	20.75	20.43	23.60	≤ 23.98	Pass
11ax-HE40	MCS0	142	5710	20.35	21.13	23.77	≤ 23.98	Pass
11ax-HE40	MCS0	151	5755	25.04	24.40	27.74	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	25.81	26.27	29.06	≤ 30.00	Pass
11ax-HE80	MCS0	42	5210	16.22	16.82	19.54	≤ 29.91	Pass
11ax-HE80	MCS0	58	5290	15.47	15.97	18.74	≤ 23.83	Pass
11ax-HE80	MCS0	106	5530	20.39	21.02	23.73	≤ 23.98	Pass
11ax-HE80	MCS0	122	5610	20.79	20.52	23.67	≤ 23.98	Pass
11ax-HE80	MCS0	138	5690	20.65	20.41	23.54	≤ 23.98	Pass
11ax-HE80	MCS0	155	5775	23.36	23.33	26.36	≤ 30.00	Pass
11ax-HE160	MCS0	50	5250	16.13	16.99	19.59	≤ 23.83	Pass
11ax-HE160	MCS0	114	5570	17.10	17.87	20.51	≤ 23.98	Pass
11be-EHT20	MCS0	36	5180	18.18	19.14	21.70	≤ 29.91	Pass
11be-EHT20	MCS0	40	5200	22.47	22.87	25.68	≤ 29.91	Pass
11be-EHT20	MCS0	48	5240	22.00	22.83	25.45	≤ 29.91	Pass
11be-EHT20	MCS0	52	5260	16.60	16.90	19.76	≤ 23.83	Pass
11be-EHT20	MCS0	60	5300	16.66	16.76	19.72	≤ 23.83	Pass
11be-EHT20	MCS0	64	5320	16.44	17.08	19.78	≤ 23.83	Pass
11be-EHT20	MCS0	100	5500	17.78	17.54	20.67	≤ 23.98	Pass
11be-EHT20	MCS0	116	5580	17.25	17.59	20.43	≤ 23.98	Pass
11be-EHT20	MCS0	140	5700	17.10	18.00	20.58	≤ 23.98	Pass
11be-EHT20	MCS0	144	5720	16.73	18.20	20.54	≤ 22.94	Pass
11be-EHT20	MCS0	149	5745	26.56	26.17	29.38	≤ 30.00	Pass
11be-EHT20	MCS0	157	5785	26.57	26.04	29.32	≤ 30.00	Pass
11be-EHT20	MCS0	165	5825	25.28	25.49	28.40	≤ 30.00	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11be-EHT40	MCS0	38	5190	17.51	18.31	20.94	≤ 29.91	Pass
11be-EHT40	MCS0	46	5230	24.67	24.79	27.74	≤ 29.91	Pass
11be-EHT40	MCS0	54	5270	19.22	19.17	22.21	≤ 23.83	Pass
11be-EHT40	MCS0	62	5310	18.07	18.48	21.29	≤ 23.83	Pass
11be-EHT40	MCS0	102	5510	19.29	19.50	22.41	≤ 23.98	Pass
11be-EHT40	MCS0	110	5550	20.35	20.64	23.51	≤ 23.98	Pass
11be-EHT40	MCS0	134	5670	19.93	19.81	22.88	≤ 23.98	Pass
11be-EHT40	MCS0	142	5710	20.19	20.84	23.54	≤ 23.98	Pass
11be-EHT40	MCS0	151	5755	25.56	24.82	28.22	≤ 30.00	Pass
11be-EHT40	MCS0	159	5795	25.66	26.21	28.95	≤ 30.00	Pass
11be-EHT80	MCS0	42	5210	16.91	17.70	20.33	≤ 29.91	Pass
11be-EHT80	MCS0	58	5290	17.77	17.95	20.87	≤ 23.83	Pass
11be-EHT80	MCS0	106	5530	18.99	19.96	22.51	≤ 23.98	Pass
11be-EHT80	MCS0	122	5610	20.87	20.50	23.70	≤ 23.98	Pass
11be-EHT80	MCS0	138	5690	20.77	20.52	23.66	≤ 23.98	Pass
11be-EHT80	MCS0	155	5775	23.56	23.37	26.48	≤ 30.00	Pass
11be-EHT160	MCS0	50	5250	16.95	17.11	20.04	≤ 23.83	Pass
11be-EHT160	MCS0	114	5570	17.10	18.05	20.61	≤ 23.98	Pass

Note 1:

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

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	BE9700 Tri-Band Wi-Fi 7 Router	Test Engineer	Owen
Test Site	SR6	Test Date	2024/12/2~2024/12/26
Test Mode	Beamforming Mode		

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT20	MCS0	36	5180	18.50	19.25	21.90	≤ 27.04	Pass
11ac-VHT20	MCS0	40	5200	22.80	23.10	25.96	≤ 27.04	Pass
11ac-VHT20	MCS0	48	5240	22.07	22.83	25.48	≤ 27.04	Pass
11ac-VHT20	MCS0	52	5260	16.10	16.36	19.24	≤ 20.94	Pass
11ac-VHT20	MCS0	60	5300	16.34	16.60	19.48	≤ 20.94	Pass
11ac-VHT20	MCS0	64	5320	16.21	17.99	20.20	≤ 20.94	Pass
11ac-VHT20	MCS0	100	5500	17.00	17.25	20.14	≤ 22.26	Pass
11ac-VHT20	MCS0	116	5580	17.27	17.75	20.53	≤ 22.26	Pass
11ac-VHT20	MCS0	140	5700	16.37	17.62	20.05	≤ 22.26	Pass
11ac-VHT20	MCS0	144	5720	16.62	18.23	20.51	≤ 21.23	Pass
11ac-VHT20	MCS0	149	5745	26.30	25.77	29.05	≤ 29.29	Pass
11ac-VHT20	MCS0	157	5785	26.49	25.88	29.21	≤ 29.29	Pass
11ac-VHT20	MCS0	165	5825	25.32	25.38	28.36	≤ 29.29	Pass
11ac-VHT40	MCS0	38	5190	17.14	18.00	20.60	≤ 27.04	Pass
11ac-VHT40	MCS0	46	5230	23.87	24.07	26.98	≤ 27.04	Pass
11ac-VHT40	MCS0	54	5270	17.92	17.78	20.86	≤ 20.94	Pass
11ac-VHT40	MCS0	62	5310	17.76	17.80	20.79	≤ 20.94	Pass
11ac-VHT40	MCS0	102	5510	19.10	19.23	22.18	≤ 22.26	Pass
11ac-VHT40	MCS0	110	5550	18.80	19.00	21.91	≤ 22.26	Pass
11ac-VHT40	MCS0	134	5670	19.18	19.21	22.21	≤ 22.26	Pass
11ac-VHT40	MCS0	142	5710	18.78	19.32	22.07	≤ 22.26	Pass
11ac-VHT40	MCS0	151	5755	25.12	24.80	27.97	≤ 29.29	Pass
11ac-VHT40	MCS0	159	5795	26.11	25.90	29.02	≤ 29.29	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ac-VHT80	MCS0	42	5210	17.05	17.79	20.45	≤ 27.04	Pass
11ac-VHT80	MCS0	58	5290	16.08	16.73	19.43	≤ 20.94	Pass
11ac-VHT80	MCS0	106	5530	18.67	19.24	21.97	≤ 22.26	Pass
11ac-VHT80	MCS0	122	5610	19.45	18.96	22.22	≤ 22.26	Pass
11ac-VHT80	MCS0	138	5690	19.31	19.00	22.17	≤ 22.26	Pass
11ac-VHT80	MCS0	155	5775	23.00	22.92	25.97	≤ 29.29	Pass
11ac-VHT160	MCS0	50	5250	16.53	17.45	20.02	≤ 20.94	Pass
11ac-VHT160	MCS0	114	5570	17.66	18.80	21.28	≤ 22.26	Pass
11ax-HE20	MCS0	36	5180	18.16	19.00	21.61	≤ 27.04	Pass
11ax-HE20	MCS0	40	5200	22.51	23.30	25.93	≤ 27.04	Pass
11ax-HE20	MCS0	48	5240	22.46	23.00	25.75	≤ 27.04	Pass
11ax-HE20	MCS0	52	5260	16.68	16.51	19.61	≤ 20.94	Pass
11ax-HE20	MCS0	60	5300	16.52	17.10	19.83	≤ 20.94	Pass
11ax-HE20	MCS0	64	5320	16.42	16.91	19.68	≤ 20.94	Pass
11ax-HE20	MCS0	100	5500	16.71	16.69	19.71	≤ 22.26	Pass
11ax-HE20	MCS0	116	5580	17.68	18.20	20.96	≤ 22.26	Pass
11ax-HE20	MCS0	140	5700	16.09	17.46	19.84	≤ 22.26	Pass
11ax-HE20	MCS0	144	5720	16.59	18.13	20.44	≤ 21.26	Pass
11ax-HE20	MCS0	149	5745	26.25	25.61	28.95	≤ 29.29	Pass
11ax-HE20	MCS0	157	5785	26.32	25.56	28.97	≤ 29.29	Pass
11ax-HE20	MCS0	165	5825	25.49	25.58	28.55	≤ 29.29	Pass
11ax-HE40	MCS0	38	5190	17.73	18.33	21.05	≤ 27.04	Pass
11ax-HE40	MCS0	46	5230	23.81	24.13	26.98	≤ 27.04	Pass
11ax-HE40	MCS0	54	5270	17.70	17.67	20.70	≤ 20.94	Pass
11ax-HE40	MCS0	62	5310	17.37	17.78	20.59	≤ 20.94	Pass
11ax-HE40	MCS0	102	5510	18.82	18.93	21.89	≤ 22.26	Pass
11ax-HE40	MCS0	110	5550	18.88	19.02	21.96	≤ 22.26	Pass
11ax-HE40	MCS0	134	5670	19.23	18.89	22.07	≤ 22.26	Pass
11ax-HE40	MCS0	142	5710	18.76	19.56	22.19	≤ 22.26	Pass
11ax-HE40	MCS0	151	5755	25.04	24.40	27.74	≤ 29.29	Pass
11ax-HE40	MCS0	159	5795	25.81	26.27	29.06	≤ 29.29	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11ax-HE80	MCS0	42	5210	16.22	16.82	19.54	≤ 27.04	Pass
11ax-HE80	MCS0	58	5290	15.47	15.97	18.74	≤ 20.94	Pass
11ax-HE80	MCS0	106	5530	18.78	19.56	22.20	≤ 22.26	Pass
11ax-HE80	MCS0	122	5610	19.24	18.98	22.12	≤ 22.26	Pass
11ax-HE80	MCS0	138	5690	19.10	18.88	22.00	≤ 22.26	Pass
11ax-HE80	MCS0	155	5775	23.36	23.33	26.36	≤ 29.29	Pass
11ax-HE160	MCS0	50	5250	16.13	16.99	19.59	≤ 20.94	Pass
11ax-HE160	MCS0	114	5570	17.10	17.87	20.51	≤ 22.26	Pass
11be-EHT20	MCS0	36	5180	18.18	19.14	21.70	≤ 27.04	Pass
11be-EHT20	MCS0	40	5200	22.47	22.87	25.68	≤ 27.04	Pass
11be-EHT20	MCS0	48	5240	22.00	22.83	25.45	≤ 27.04	Pass
11be-EHT20	MCS0	52	5260	16.60	16.90	19.76	≤ 20.94	Pass
11be-EHT20	MCS0	60	5300	16.66	16.76	19.72	≤ 20.94	Pass
11be-EHT20	MCS0	64	5320	16.44	17.08	19.78	≤ 20.94	Pass
11be-EHT20	MCS0	100	5500	17.78	17.54	20.67	≤ 22.26	Pass
11be-EHT20	MCS0	116	5580	17.25	17.59	20.43	≤ 22.26	Pass
11be-EHT20	MCS0	140	5700	17.10	18.00	20.58	≤ 22.26	Pass
11be-EHT20	MCS0	144	5720	16.73	18.20	20.54	≤ 21.22	Pass
11be-EHT20	MCS0	149	5745	26.22	25.78	29.02	≤ 29.29	Pass
11be-EHT20	MCS0	157	5785	26.27	25.76	29.03	≤ 29.29	Pass
11be-EHT20	MCS0	165	5825	25.28	25.49	28.40	≤ 29.29	Pass
11be-EHT40	MCS0	38	5190	17.51	18.31	20.94	≤ 27.04	Pass
11be-EHT40	MCS0	46	5230	23.77	24.00	26.90	≤ 27.04	Pass
11be-EHT40	MCS0	54	5270	17.78	17.60	20.70	≤ 20.94	Pass
11be-EHT40	MCS0	62	5310	17.54	17.88	20.72	≤ 20.94	Pass
11be-EHT40	MCS0	102	5510	18.72	18.98	21.86	≤ 22.26	Pass
11be-EHT40	MCS0	110	5550	18.89	19.12	22.02	≤ 22.26	Pass
11be-EHT40	MCS0	134	5670	19.30	19.17	22.25	≤ 22.26	Pass
11be-EHT40	MCS0	142	5710	19.10	18.98	22.05	≤ 22.26	Pass
11be-EHT40	MCS0	151	5755	25.56	24.82	28.22	≤ 29.29	Pass
11be-EHT40	MCS0	159	5795	25.66	26.21	28.95	≤ 29.29	Pass

Test Mode	Data Rate/ MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Total Average Power (dBm)	Average Power Limit (dBm)	Result
11be-EHT80	MCS0	42	5210	16.91	17.70	20.33	≤ 27.04	Pass
11be-EHT80	MCS0	58	5290	17.77	17.95	20.87	≤ 20.94	Pass
11be-EHT80	MCS0	106	5530	18.42	19.51	22.01	≤ 22.26	Pass
11be-EHT80	MCS0	122	5610	19.40	18.88	22.16	≤ 22.26	Pass
11be-EHT80	MCS0	138	5690	19.23	19.00	22.13	≤ 22.26	Pass
11be-EHT80	MCS0	155	5775	23.56	23.37	26.48	≤ 29.29	Pass
11be-EHT160	MCS0	50	5250	16.95	17.11	20.04	≤ 20.94	Pass
11be-EHT160	MCS0	114	5570	17.10	18.05	20.61	≤ 22.26	Pass

Note 1:

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

Note 2:

For 5125 - 5250MHz Band: Average Power Limit (dBm) = 30 - (8.96- 6) = 27.04dBm

For 5250 - 5350MHz Band: Average Power Limit (dBm) = 23.98 - (9.04- 6) = 20.94dBm.

For 5470 - 5725MHz Band: Average Power Limit (dBm) = 23.98 - (7.72- 6) = 22.26dBm.

For 5725 - 5850MHz Band: Average Power Limit (dBm) = 30- (6.71- 6) = 29.29dBm.

For Channel 144 (5720MHz), Average Power Limit (dBm) = $11 + 10 \cdot \log(5\text{MHz} + BW_{26\text{dBc}}/2) - (7.72- 6)$

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.

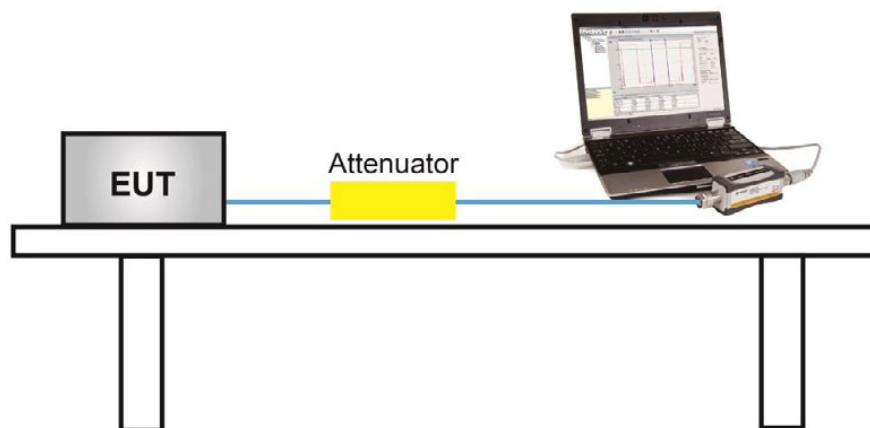
7.5.2. Test Procedure Used

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.

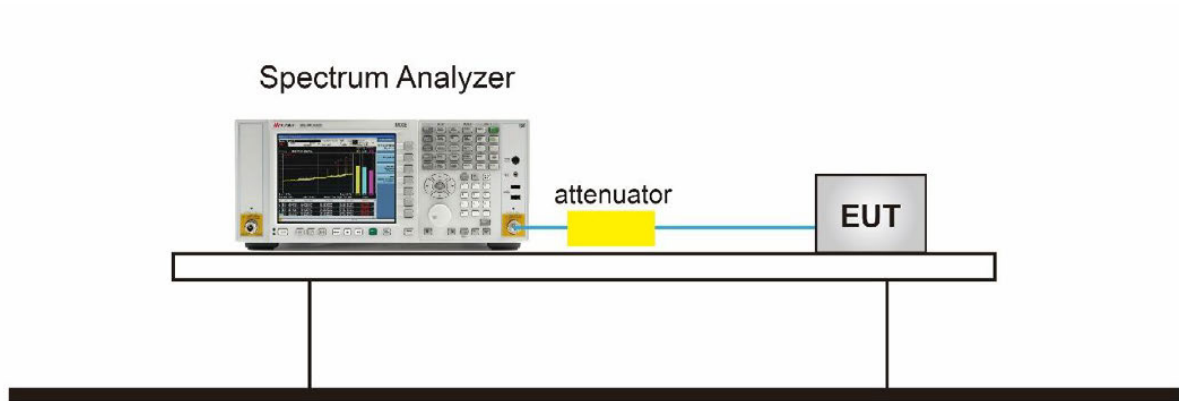
7.6.2. Test Procedure Used

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	BE9700 Tri-Band Wi-Fi 7 Router	Test Engineer	Owen
Test Site	SR6	Test Date	2024/12/2~2024/12/26
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)	Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
11a	6Mbps	36	5180	7.444	8.493	98.55%	11.074	≤ 14.04	Pass
11a	6Mbps	40	5200	10.629	10.990	98.55%	13.887	≤ 14.04	Pass
11a	6Mbps	48	5240	10.260	11.094	98.55%	13.771	≤ 14.04	Pass
11a	6Mbps	52	5260	4.746	4.562	98.55%	7.729	≤ 7.96	Pass
11a	6Mbps	60	5300	4.650	4.860	98.55%	7.830	≤ 7.96	Pass
11a	6Mbps	64	5320	4.587	4.956	98.55%	7.849	≤ 7.96	Pass
11a	6Mbps	100	5500	5.846	5.842	98.55%	8.918	≤ 9.28	Pass
11a	6Mbps	116	5580	5.509	6.296	98.55%	8.994	≤ 9.28	Pass
11a	6Mbps	140	5700	4.159	5.758	98.55%	8.105	≤ 9.28	Pass
11a	6Mbps	144	5720	4.989	6.586	98.55%	8.934	≤ 9.28	Pass
11ac-VHT20	MCS0	36	5180	6.789	7.443	99.13%	10.177	≤ 14.04	Pass
11ac-VHT20	MCS0	40	5200	10.695	11.190	99.13%	13.998	≤ 14.04	Pass
11ac-VHT20	MCS0	48	5240	10.635	11.192	99.13%	13.971	≤ 14.04	Pass
11ac-VHT20	MCS0	52	5260	4.654	4.553	99.13%	7.652	≤ 7.96	Pass
11ac-VHT20	MCS0	60	5300	4.594	4.866	99.13%	7.780	≤ 7.96	Pass
11ac-VHT20	MCS0	64	5320	4.680	4.930	99.13%	7.855	≤ 7.96	Pass
11ac-VHT20	MCS0	100	5500	5.854	5.724	99.13%	8.838	≤ 9.28	Pass
11ac-VHT20	MCS0	116	5580	5.210	6.056	99.13%	8.702	≤ 9.28	Pass
11ac-VHT20	MCS0	140	5700	4.442	6.012	99.13%	8.346	≤ 9.28	Pass
11ac-VHT20	MCS0	144	5720	6.330	6.121	99.13%	9.275	≤ 9.28	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11ac-VHT40	MCS0	38	5190	2.425	3.405	99.09%	5.993	≤ 14.04	Pass
11ac-VHT40	MCS0	46	5230	10.704	10.416	99.09%	13.612	≤ 14.04	Pass
11ac-VHT40	MCS0	54	5270	4.538	4.178	99.09%	7.412	≤ 7.96	Pass
11ac-VHT40	MCS0	62	5310	3.247	4.016	99.09%	6.699	≤ 7.96	Pass
11ac-VHT40	MCS0	102	5510	4.489	4.849	99.09%	7.723	≤ 9.28	Pass
11ac-VHT40	MCS0	110	5550	5.692	6.065	99.09%	8.933	≤ 9.28	Pass
11ac-VHT40	MCS0	134	5670	5.437	5.765	99.09%	8.654	≤ 9.28	Pass
11ac-VHT40	MCS0	142	5710	5.379	6.233	99.09%	8.877	≤ 9.28	Pass
11ac-VHT80	MCS0	42	5210	0.995	1.624	97.89%	4.424	≤ 14.04	Pass
11ac-VHT80	MCS0	58	5290	-1.076	-0.278	97.89%	2.444	≤ 7.96	Pass
11ac-VHT80	MCS0	106	5530	1.411	2.566	97.89%	5.130	≤ 9.28	Pass
11ac-VHT80	MCS0	122	5610	2.872	3.057	97.89%	6.068	≤ 9.28	Pass
11ac-VHT80	MCS0	138	5690	2.295	2.282	97.89%	5.391	≤ 9.28	Pass
11ac-VHT160	MCS0	50	5250	-3.954	-2.405	98.51%	-0.035	≤ 7.96	Pass
11ac-VHT160	MCS0	114	5570	-1.924	-1.540	98.51%	1.348	≤ 9.28	Pass
11ax-HE20	MCS0	36	5180	5.951	7.397	99.50%	9.766	≤ 14.04	Pass
11ax-HE20	MCS0	40	5200	10.424	10.892	99.50%	13.696	≤ 14.04	Pass
11ax-HE20	MCS0	48	5240	10.535	11.225	99.50%	13.926	≤ 14.04	Pass
11ax-HE20	MCS0	52	5260	4.646	4.935	99.50%	7.825	≤ 7.96	Pass
11ax-HE20	MCS0	60	5300	4.501	4.950	99.50%	7.763	≤ 7.96	Pass
11ax-HE20	MCS0	64	5320	4.231	4.727	99.50%	7.518	≤ 7.96	Pass
11ax-HE20	MCS0	100	5500	4.985	4.977	99.50%	8.013	≤ 9.28	Pass
11ax-HE20	MCS0	116	5580	5.910	6.209	99.50%	9.094	≤ 9.28	Pass
11ax-HE20	MCS0	140	5700	3.794	4.879	99.50%	7.402	≤ 9.28	Pass
11ax-HE20	MCS0	144	5720	4.790	6.320	99.50%	8.654	≤ 9.28	Pass

Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/ MHz)	Ant 1 PSD (dBm/ MHz)	Duty Cycle (%)	Total PSD (dBm/ MHz)	PSD Limit (dBm/MHz)	Result
11ax-HE40	MCS0	38	5190	2.665	3.878	97.91%	6.416	≤ 14.04	Pass
11ax-HE40	MCS0	46	5230	10.901	9.958	97.91%	13.557	≤ 14.04	Pass
11ax-HE40	MCS0	54	5270	4.534	4.616	97.91%	7.677	≤ 7.96	Pass
11ax-HE40	MCS0	62	5310	3.380	4.110	97.91%	6.862	≤ 7.96	Pass
11ax-HE40	MCS0	102	5510	4.028	4.253	97.91%	7.244	≤ 9.28	Pass
11ax-HE40	MCS0	110	5550	5.663	6.196	97.91%	9.040	≤ 9.28	Pass
11ax-HE40	MCS0	134	5670	5.872	5.730	97.91%	8.904	≤ 9.28	Pass
11ax-HE40	MCS0	142	5710	5.483	6.437	97.91%	9.088	≤ 9.28	Pass
11ax-HE80	MCS0	42	5210	-1.470	-0.661	98.85%	2.014	≤ 14.04	Pass
11ax-HE80	MCS0	58	5290	-1.575	-0.675	98.85%	1.959	≤ 7.96	Pass
11ax-HE80	MCS0	106	5530	2.955	3.392	98.85%	6.240	≤ 9.28	Pass
11ax-HE80	MCS0	122	5610	3.138	3.463	98.85%	6.364	≤ 9.28	Pass
11ax-HE80	MCS0	122	5690	3.134	3.270	98.85%	6.263	≤ 9.28	Pass
11ax-HE160	MCS0	50	5250	-3.999	-3.099	98.94%	-0.469	≤ 7.96	Pass
11ax-HE160	MCS0	114	5570	-2.327	-1.272	98.94%	1.289	≤ 9.28	Pass
11be-EHT20	MCS0	36	5180	6.237	7.335	99.70%	9.844	≤ 14.04	Pass
11be-EHT20	MCS0	40	5200	10.362	10.799	99.70%	13.609	≤ 14.04	Pass
11be-EHT20	MCS0	48	5240	10.270	10.841	99.70%	13.588	≤ 14.04	Pass
11be-EHT20	MCS0	52	5260	4.686	5.042	99.70%	7.891	≤ 7.96	Pass
11be-EHT20	MCS0	60	5300	4.315	4.847	99.70%	7.612	≤ 7.96	Pass
11be-EHT20	MCS0	64	5320	4.401	5.012	99.70%	7.741	≤ 7.96	Pass
11be-EHT20	MCS0	100	5500	5.639	5.546	99.70%	8.616	≤ 9.28	Pass
11be-EHT20	MCS0	116	5580	5.383	5.944	99.70%	8.696	≤ 9.28	Pass
11be-EHT20	MCS0	140	5700	5.259	6.427	99.70%	8.905	≤ 9.28	Pass
11be-EHT20	MCS0	144	5720	4.802	6.695	99.70%	8.874	≤ 9.28	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/MHz)	Ant 1 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11be-EHT40	MCS0	38	5190	2.765	3.591	97.88%	6.301	≤ 14.04	Pass
11be-EHT40	MCS0	46	5230	11.009	10.155	97.88%	13.706	≤ 14.04	Pass
11be-EHT40	MCS0	54	5270	4.778	4.669	97.88%	7.827	≤ 7.96	Pass
11be-EHT40	MCS0	62	5310	3.443	3.999	97.88%	6.833	≤ 7.96	Pass
11be-EHT40	MCS0	102	5510	4.346	5.025	97.88%	7.802	≤ 9.28	Pass
11be-EHT40	MCS0	110	5550	5.674	5.985	97.88%	8.936	≤ 9.28	Pass
11be-EHT40	MCS0	134	5670	4.757	5.075	97.88%	8.022	≤ 9.28	Pass
11be-EHT40	MCS0	142	5710	5.284	6.277	97.88%	8.912	≤ 9.28	Pass
11be-EHT80	MCS0	42	5210	-0.546	0.076	98.62%	2.847	≤ 14.04	Pass
11be-EHT80	MCS0	58	5290	0.585	1.204	98.62%	3.976	≤ 7.96	Pass
11be-EHT80	MCS0	106	5530	1.947	3.088	98.62%	5.626	≤ 9.28	Pass
11be-EHT80	MCS0	122	5610	3.200	3.199	98.62%	6.270	≤ 9.28	Pass
11be-EHT80	MCS0	138	5690	2.903	3.179	98.62%	6.114	≤ 9.28	Pass
11be-EHT160	MCS0	50	5250	-3.411	-2.642	99.06%	0.042	≤ 7.96	Pass
11be-EHT160	MCS0	114	5570	-2.607	-1.749	99.06%	0.894	≤ 9.28	Pass

Note 1: Total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\} + 10 \cdot \log (1/\text{Duty Cycle})(\text{dBm/MHz})$.

Note 2:

For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) = 17 - (8.96 - 6) = 14.04dBm/MHz.

For 5250 - 5350MHz Band: PSD Limit (dBm/MHz) = 11 - (9.04 - 6) = 7.96dBm/MHz.

For 5470 - 5725MHz Band: PSD Limit (dBm/MHz) = 11 - (7.72 - 6) = 9.28dBm/MHz.

Product	BE9700 Tri-Band Wi-Fi 7 Router	Test Engineer	Owen
Test Site	SR6	Test Date	2024/12/2~2024/12/26
Test Item	Power Spectral Density (U-NII-3) CDD Mode		

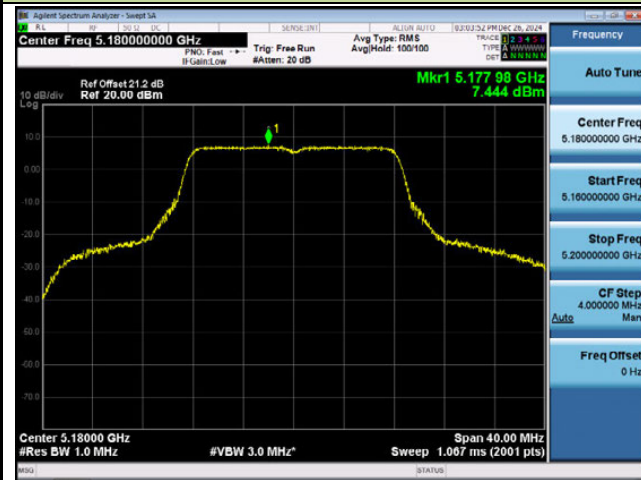
Test Mode	Data Rate/ MCS	Ch. No.	Freq. (MHz)	Ant 0 PSD (dBm/ 510KHz)	Ant 1 PSD (dBm/ 510KHz)	Duty Cycle (%)	Total PSD (dBm/ 510kHz)	Limit (dBm/ 500kHz)	Result
11a	6Mbps	149	5745	11.734	11.379	98.55%	14.634	≤ 29.29	Pass
11a	6Mbps	157	5785	11.996	11.161	98.55%	14.672	≤ 29.29	Pass
11a	6Mbps	165	5825	11.180	10.917	98.55%	14.124	≤ 29.29	Pass
11ac-VHT20	MCS0	149	5745	11.700	11.225	99.13%	14.517	≤ 29.29	Pass
11ac-VHT20	MCS0	157	5785	11.676	10.829	99.13%	14.321	≤ 29.29	Pass
11ac-VHT20	MCS0	165	5825	11.034	10.639	99.13%	13.889	≤ 29.29	Pass
11ac-VHT40	MCS0	151	5755	7.662	7.382	99.09%	10.574	≤ 29.29	Pass
11ac-VHT40	MCS0	159	5795	8.830	8.264	99.09%	11.606	≤ 29.29	Pass
11ac-VHT80	MCS0	155	5775	2.543	3.160	97.89%	5.965	≤ 29.29	Pass
11ax-HE20	MCS0	149	5745	11.407	10.983	99.50%	14.232	≤ 29.29	Pass
11ax-HE20	MCS0	157	5785	11.515	11.274	99.50%	14.428	≤ 29.29	Pass
11ax-HE20	MCS0	165	5825	10.781	10.898	99.50%	13.872	≤ 29.29	Pass
11ax-HE40	MCS0	151	5755	7.441	7.120	97.91%	10.385	≤ 29.29	Pass
11ax-HE40	MCS0	159	5795	8.333	8.880	97.91%	11.717	≤ 29.29	Pass
11ax-HE80	MCS0	155	5775	2.950	3.637	98.85%	6.368	≤ 29.29	Pass
11be-EHT20	MCS0	149	5745	11.315	11.044	99.70%	14.205	≤ 29.29	Pass
11be-EHT20	MCS0	157	5785	10.840	11.485	99.70%	14.198	≤ 29.29	Pass
11be-EHT20	MCS0	165	5825	11.458	10.700	99.70%	14.119	≤ 29.29	Pass
11be-EHT40	MCS0	151	5755	8.358	8.008	97.88%	11.290	≤ 29.29	Pass
11be-EHT40	MCS0	159	5795	8.110	8.727	97.88%	11.533	≤ 29.29	Pass
11be-EHT80	MCS0	155	5775	3.104	3.300	98.62%	6.274	≤ 29.29	Pass

Note 1: The total PSD (dBm/510kHz) = $10 \cdot \log \{10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)}\}$ (dBm/510kHz) + $10 \cdot \log (1/\text{Duty Cycle})$.

Note 2: PSD Limit (dBm/500kHz) = 30 - (6.71 - 6) = 29.29 (dBm/500kHz).

802.11a Power Spectral Density - Ant 0

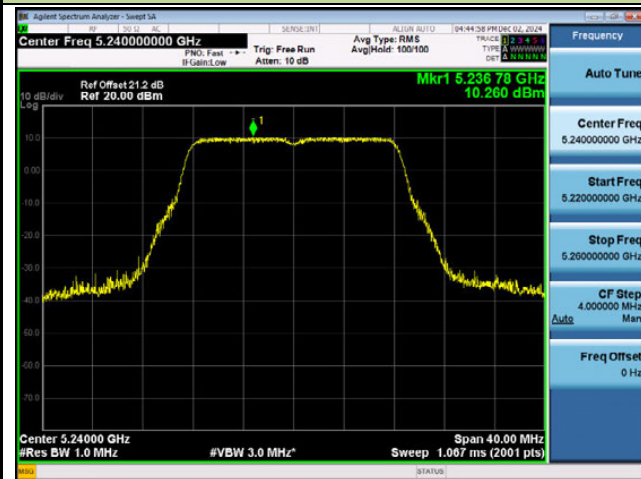
Channel 36 (5180MHz)



Channel 40 (5200MHz)



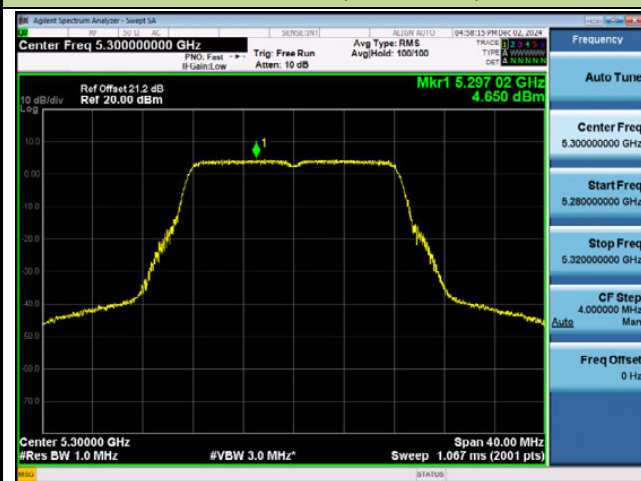
Channel 48 (5240MHz)



Channel 52 (5260MHz)

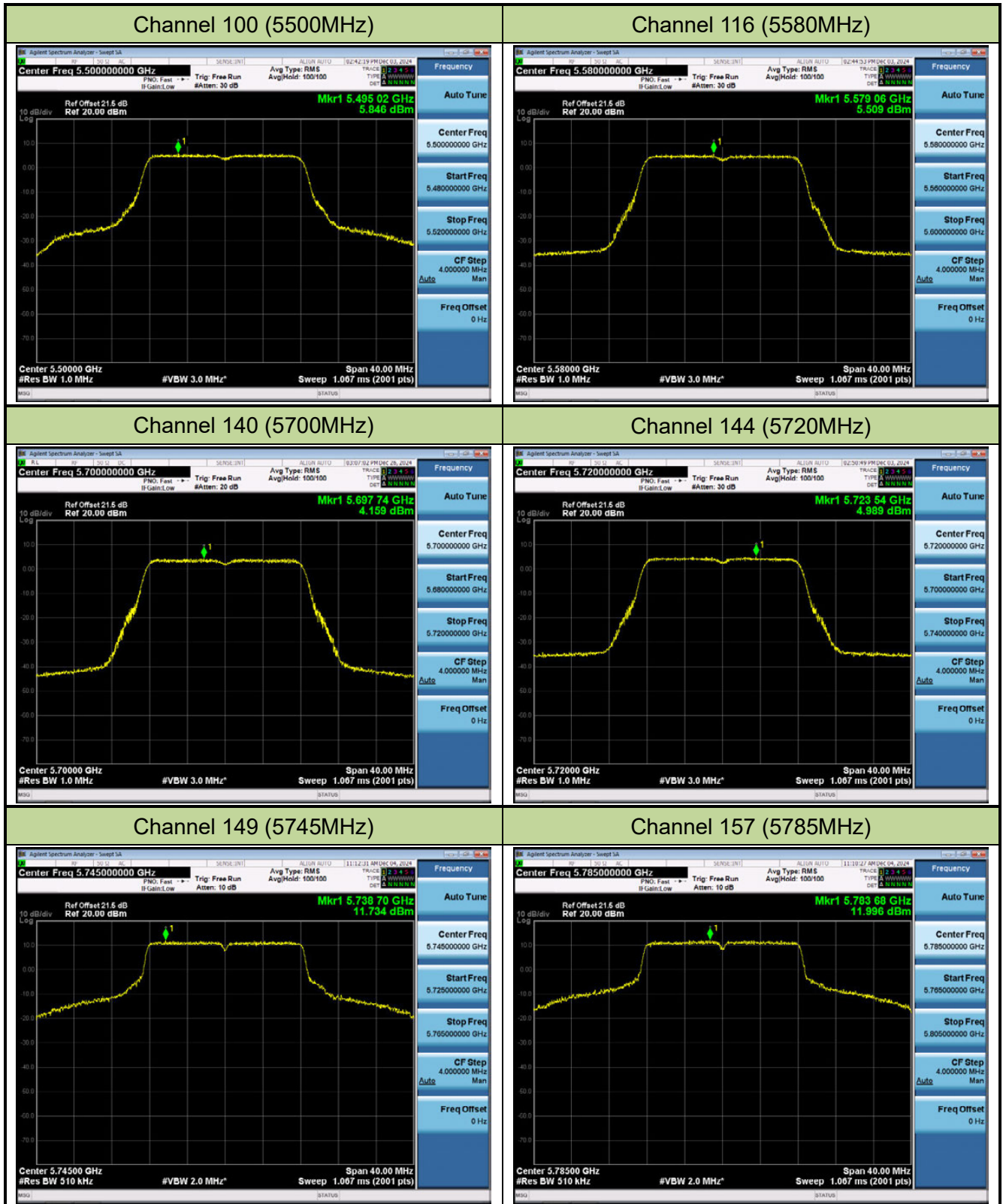


Channel 60 (5300MHz)

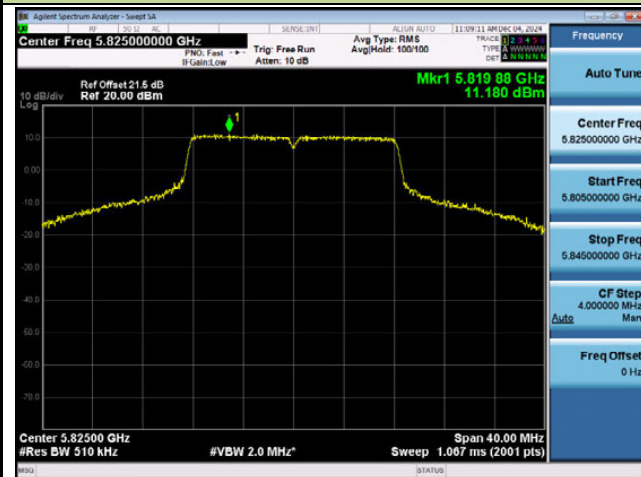


Channel 64 (5320MHz)



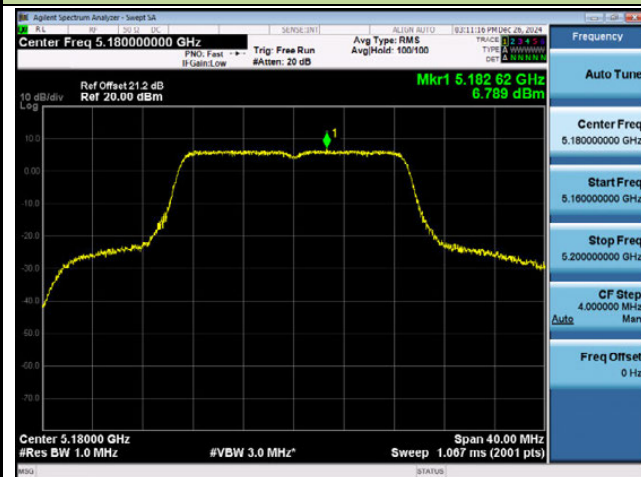


Channel 165 (5825MHz)



802.11ac-VHT20 Power Spectral Density - Ant 0

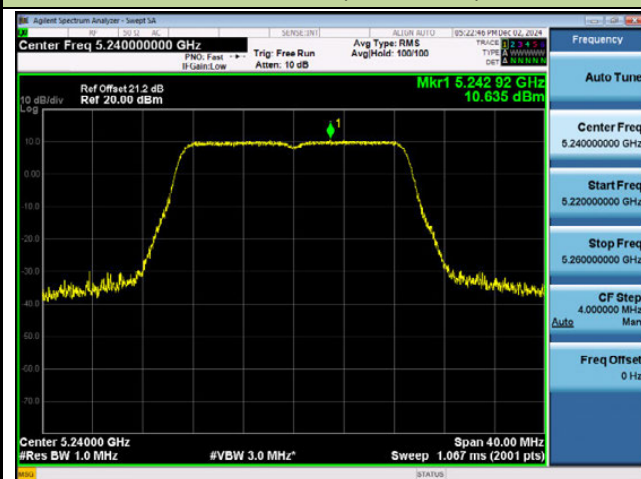
Channel 36 (5180MHz)



Channel 40 (5200MHz)



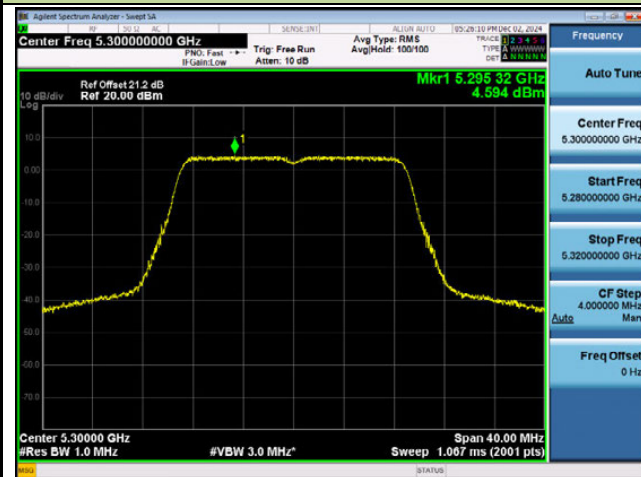
Channel 48 (5240MHz)



Channel 52 (5260MHz)



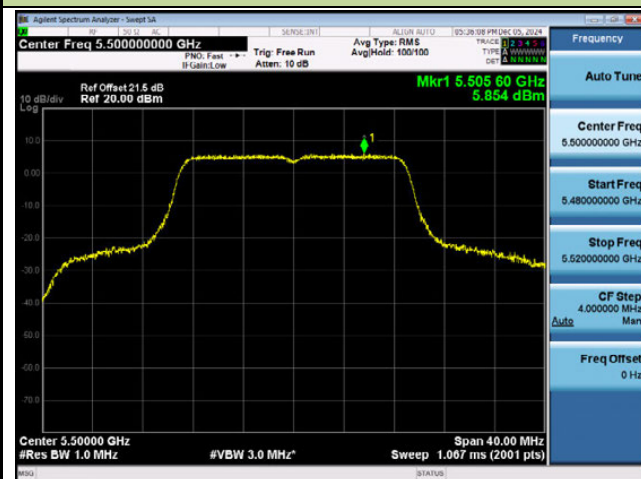
Channel 60 (5300MHz)



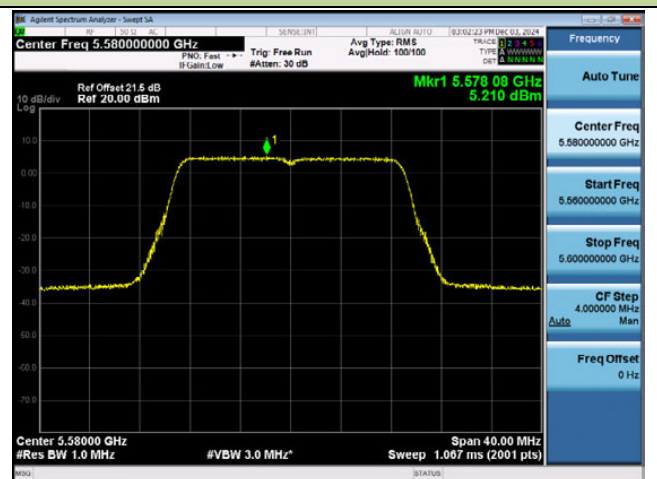
Channel 64 (5320MHz)



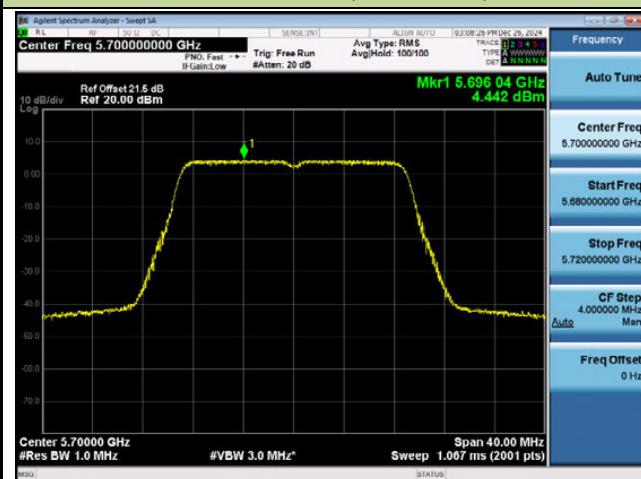
Channel 100 (5500MHz)



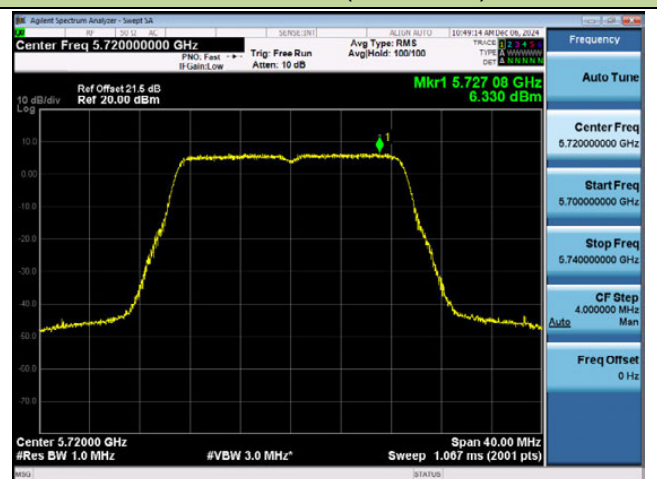
Channel 116 (5580MHz)



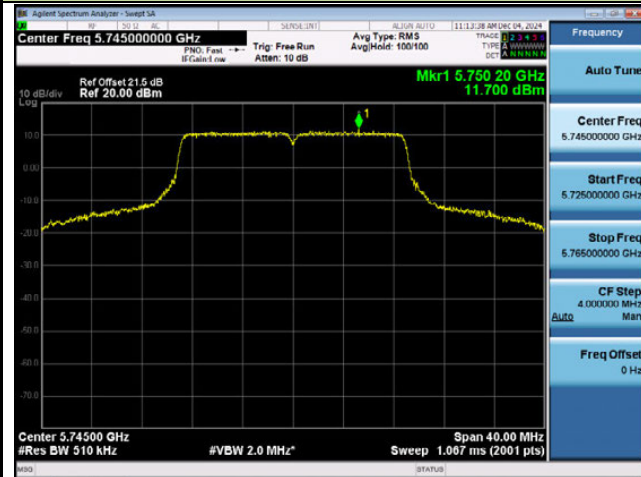
Channel 140 (5700MHz)



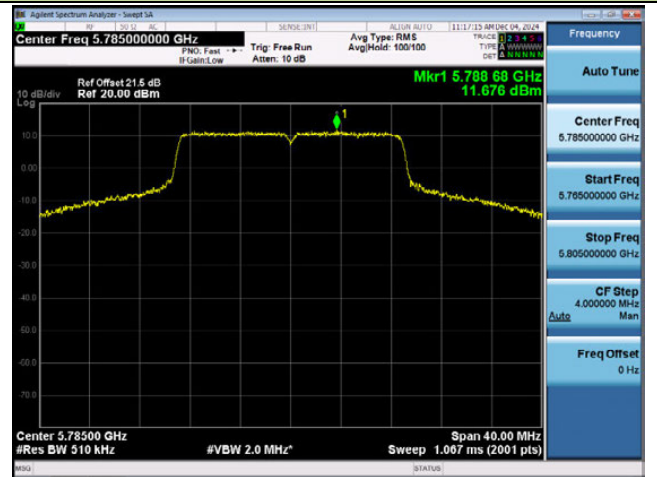
Channel 144 (5720MHz)



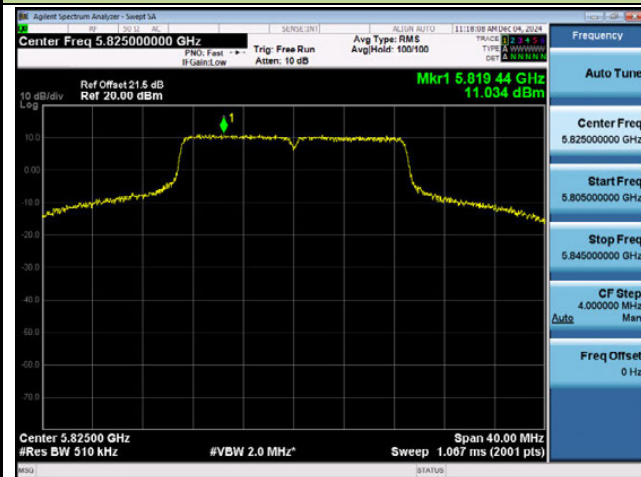
Channel 149 (5745MHz)



Channel 157 (5785MHz)

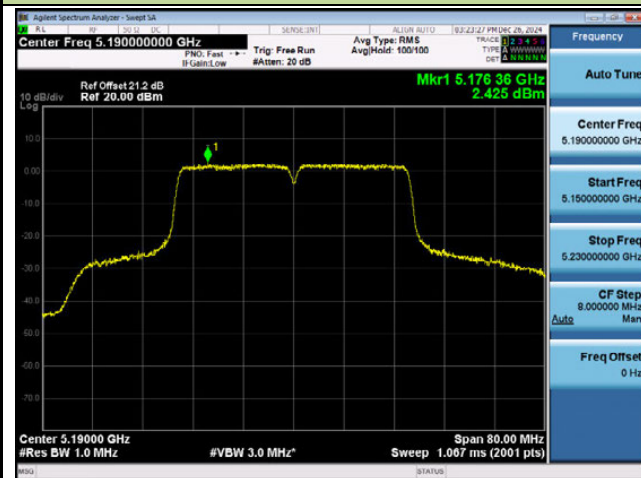


Channel 165 (5825MHz)

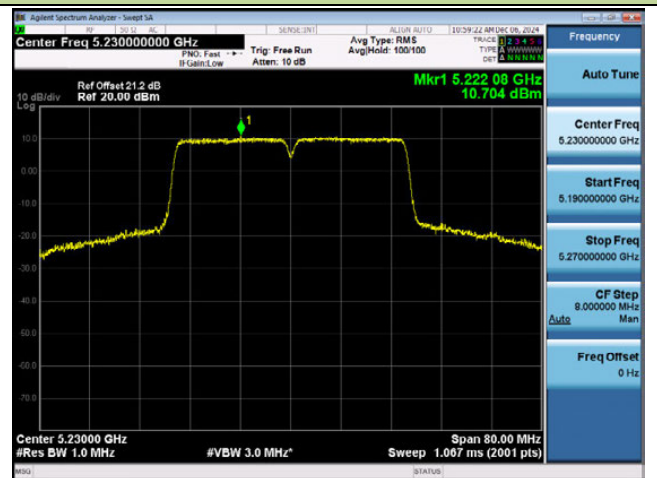


802.11ac-VHT40 Power Spectral Density - Ant 0

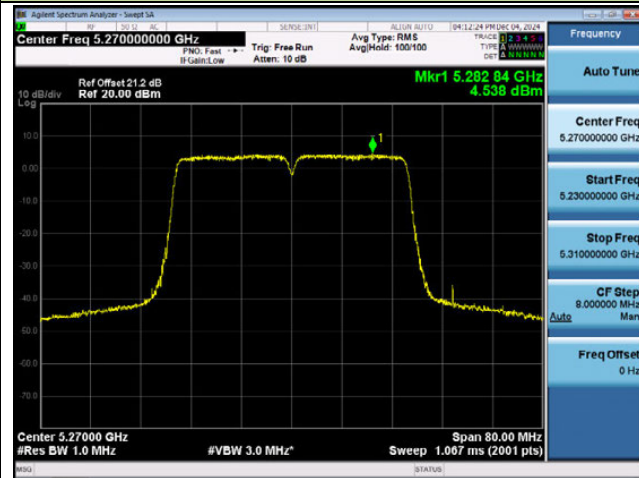
Channel 38 (5190MHz)



Channel 46 (5230MHz)



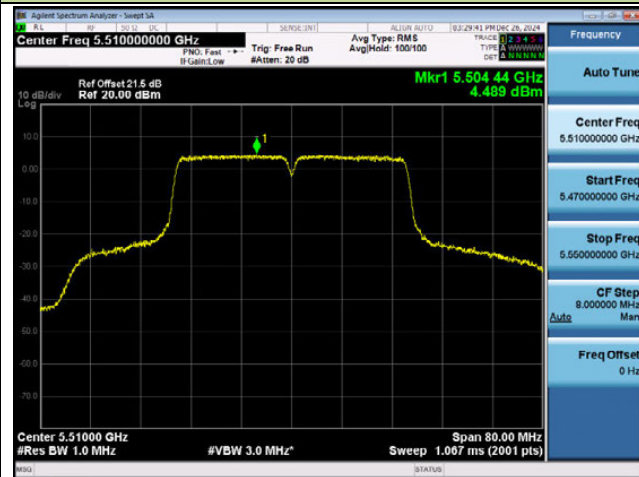
Channel 54 (5270MHz)



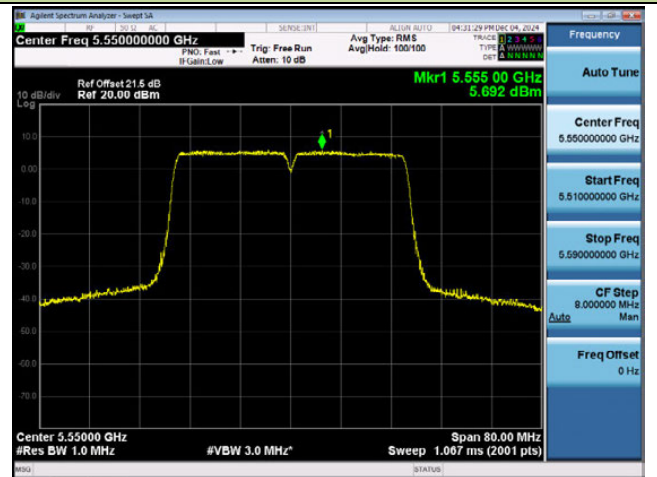
Channel 62 (5310MHz)



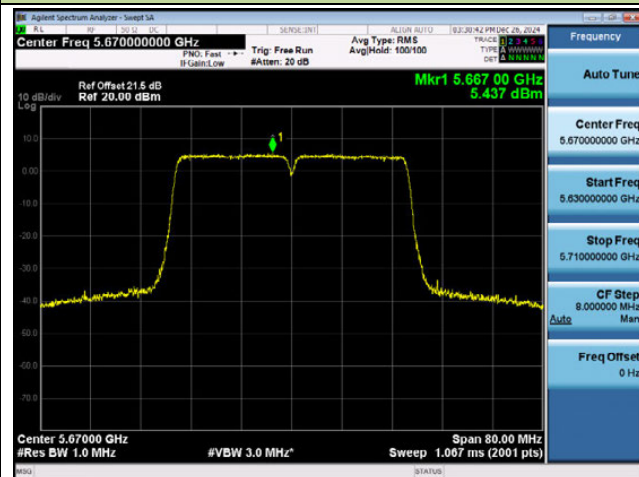
Channel 102 (5510MHz)



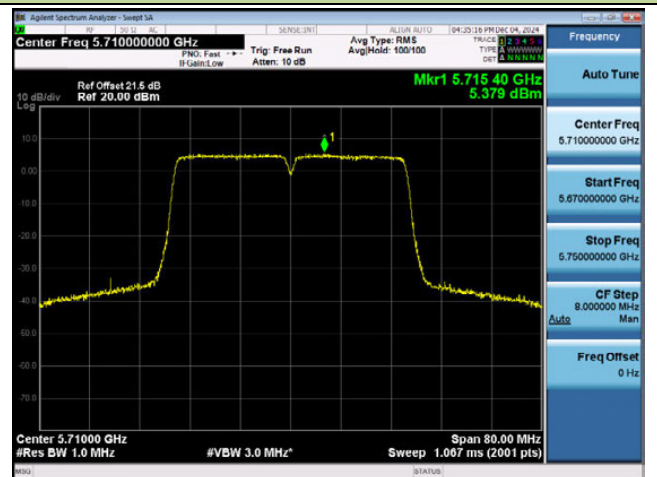
Channel 110 (5550MHz)



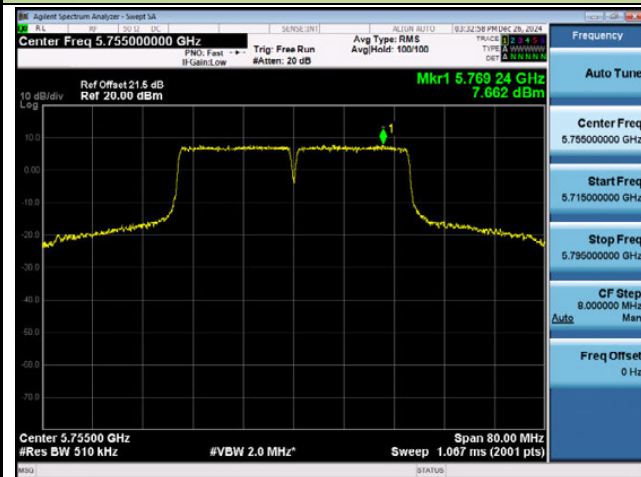
Channel 134 (5670MHz)



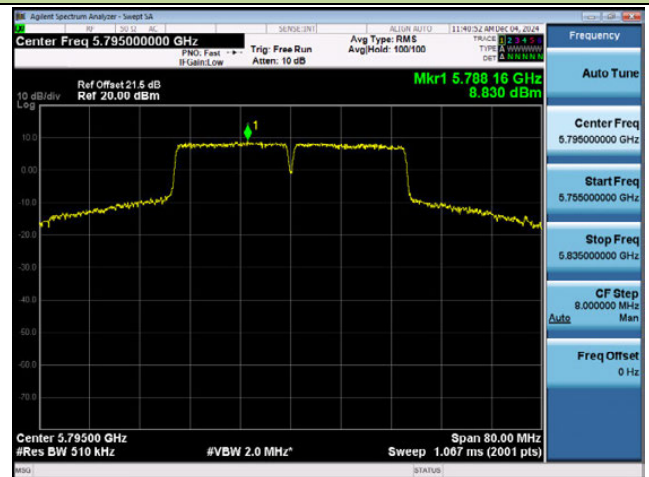
Channel 142 (5710MHz)



Channel 151 (5755MHz)

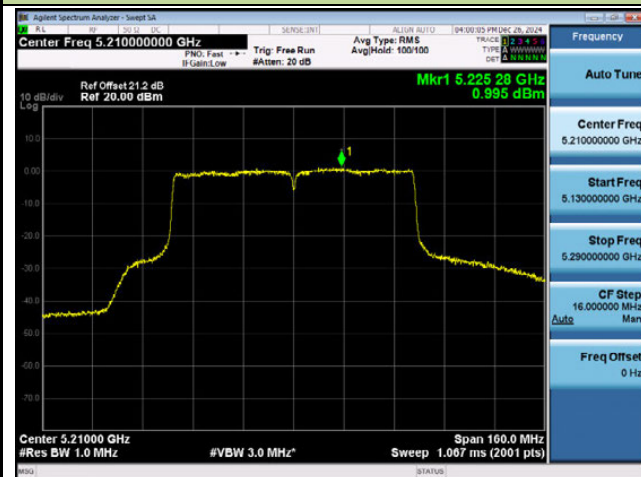


Channel 159 (5795MHz)



802.11ac-VHT80 Power Spectral Density - Ant 0

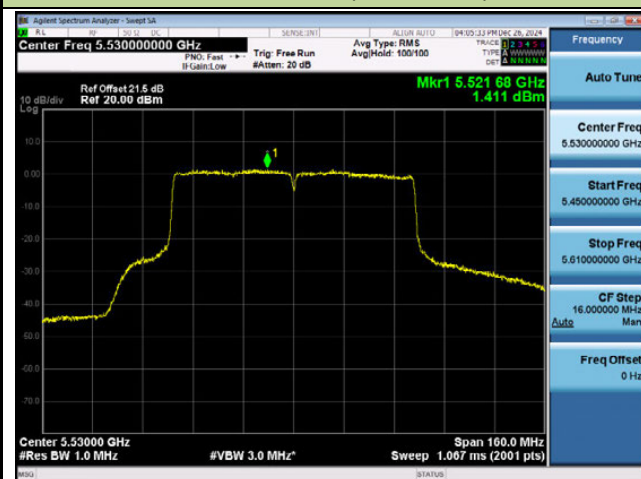
Channel 42 (5210MHz)



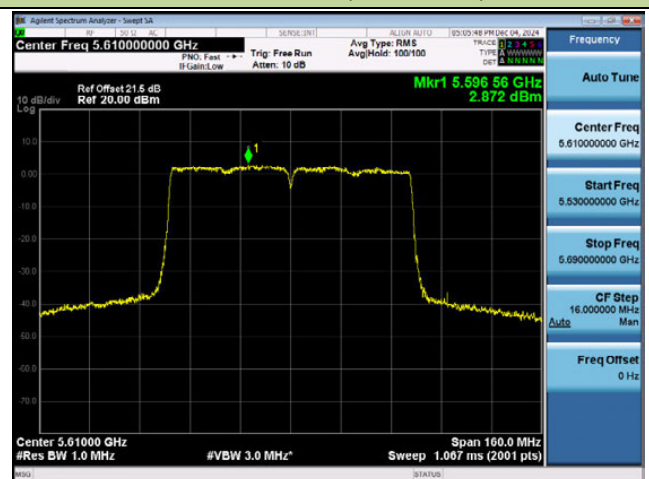
Channel 58 (5290MHz)



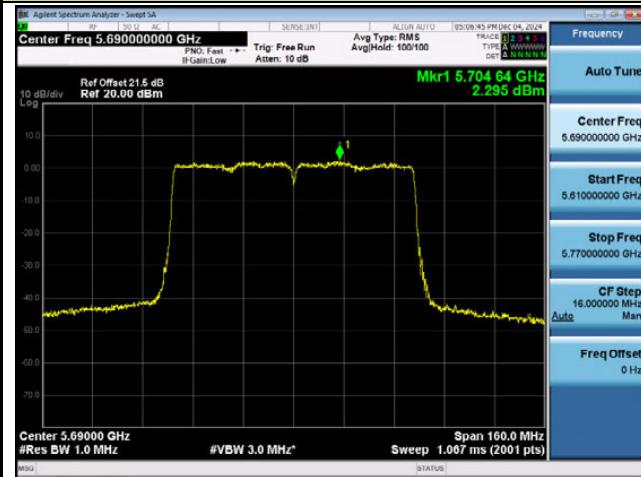
Channel 106 (5530MHz)



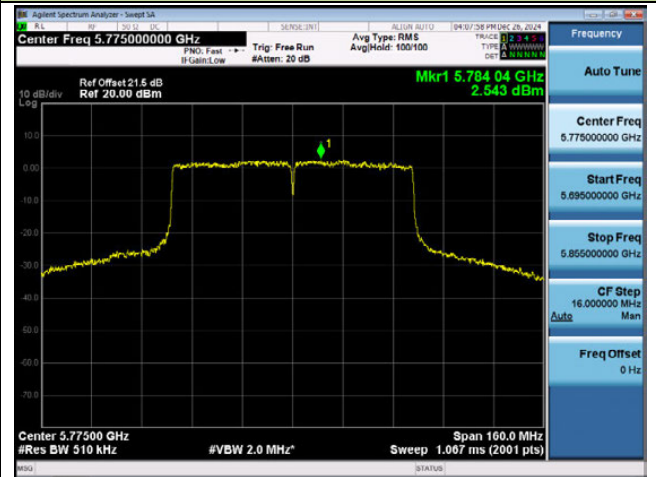
Channel 122 (5610MHz)



Channel 138 (5690MHz)

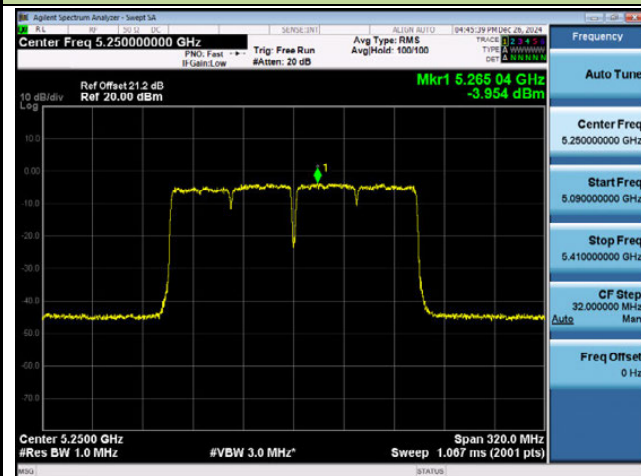


Channel 155 (5775MHz)

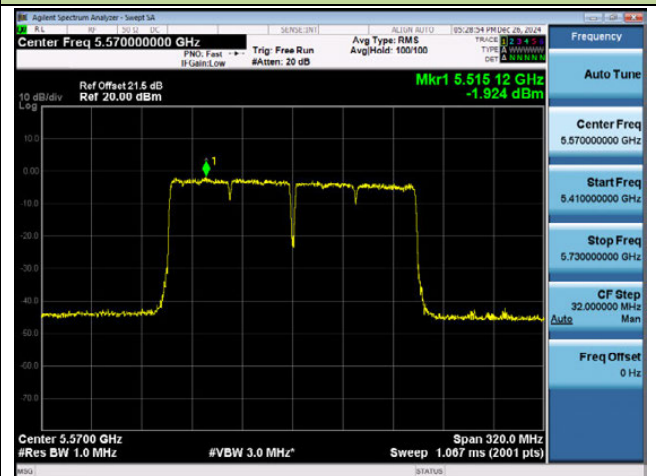


802.11ac-VHT160 Power Spectral Density - Ant 0

Channel 50 (5250MHz)

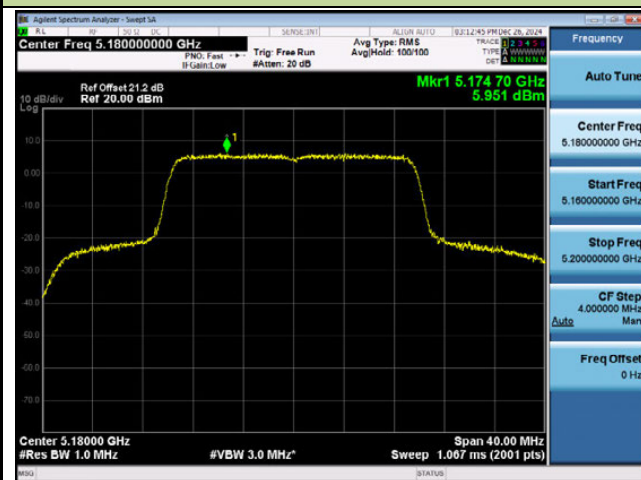


Channel 114 (5570MHz)

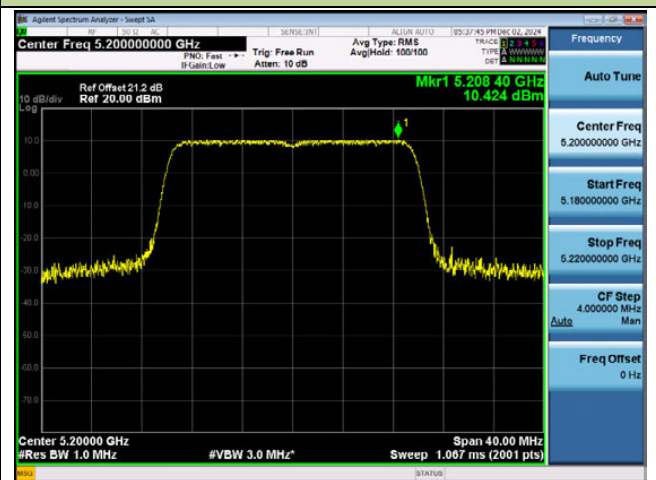


802.11ax-HE20 Power Spectral Density - Ant 0

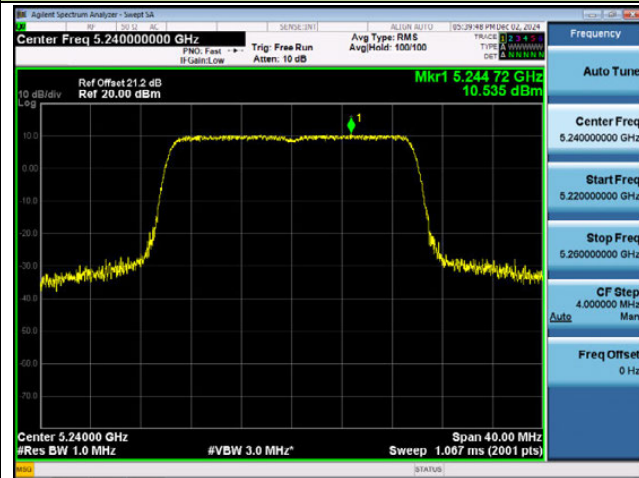
Channel 36 (5180MHz)



Channel 40 (5200MHz)



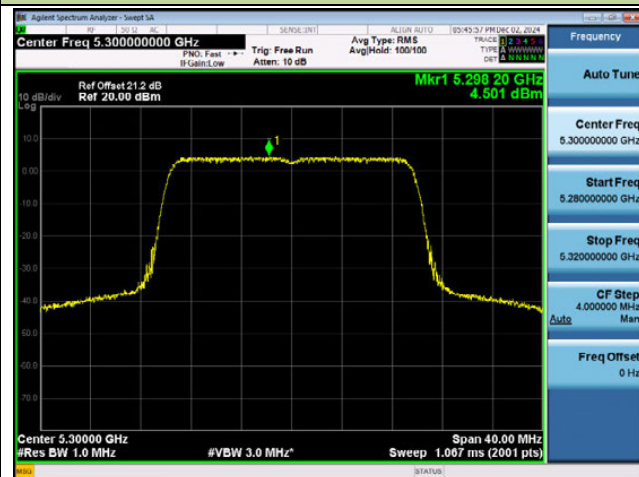
Channel 48 (5240MHz)



Channel 52 (5260MHz)



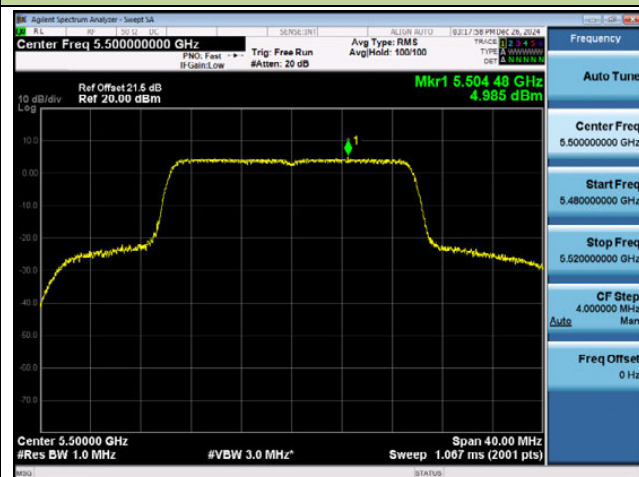
Channel 60 (5300MHz)



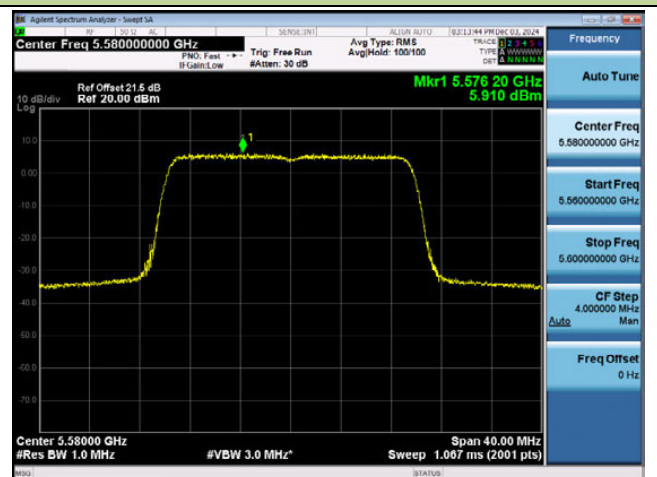
Channel 64 (5320MHz)



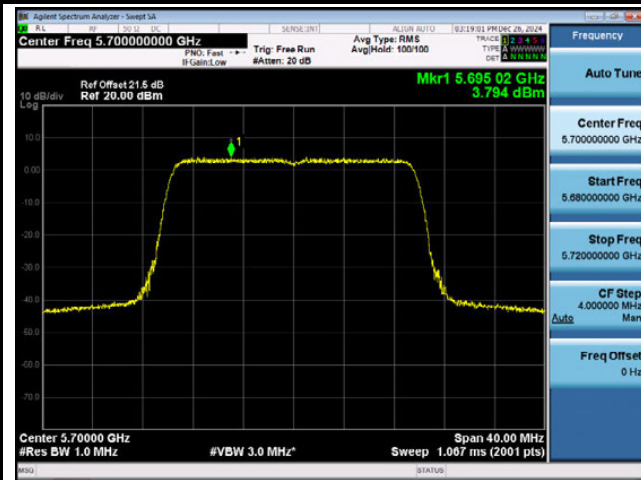
Channel 100 (5500MHz)



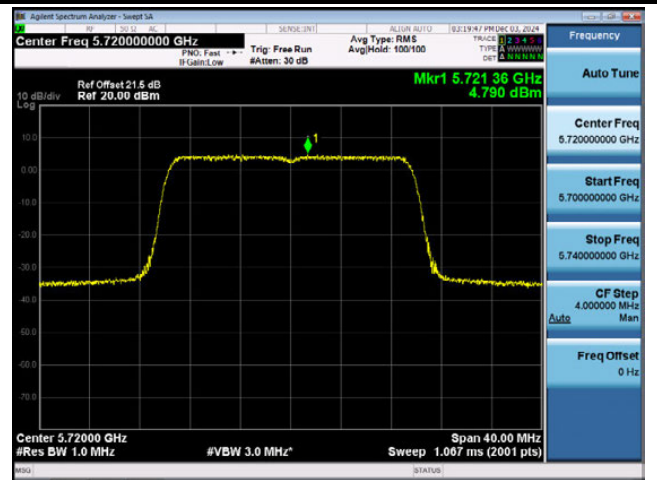
Channel 116 (5580MHz)



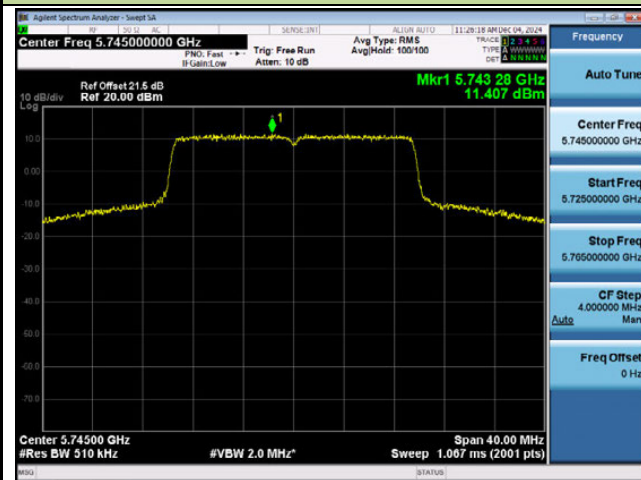
Channel 140 (5700MHz)



Channel 144 (5720MHz)



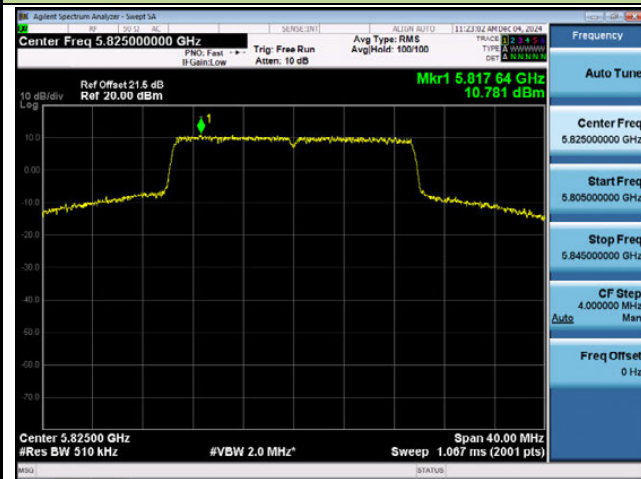
Channel 149 (5745MHz)



Channel 157 (5785MHz)

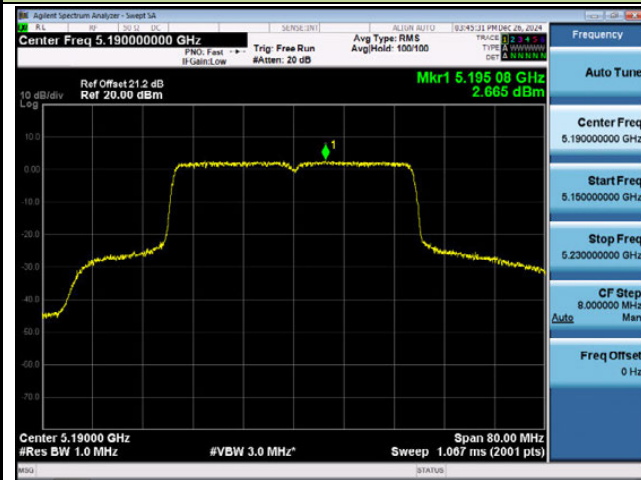


Channel 165 (5825MHz)

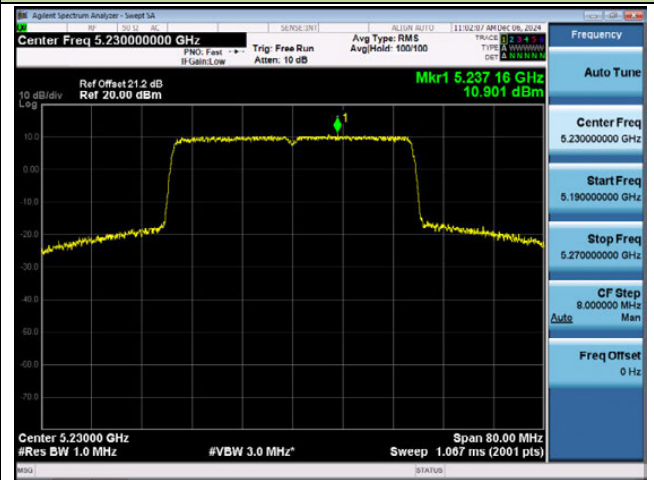


802.11ax-HE40 Power Spectral Density - Ant 0

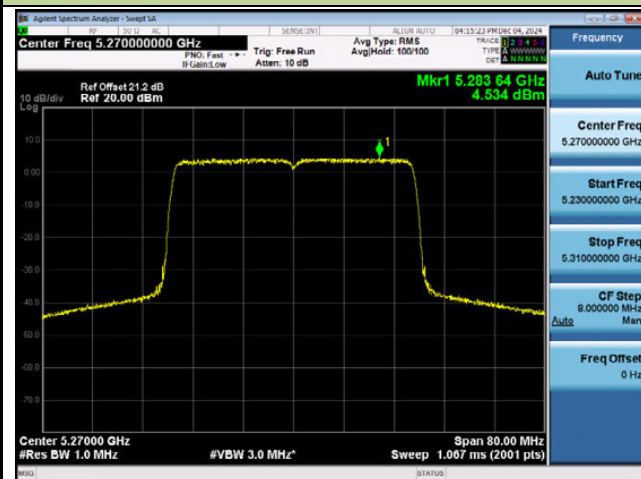
Channel 38 (5190MHz)



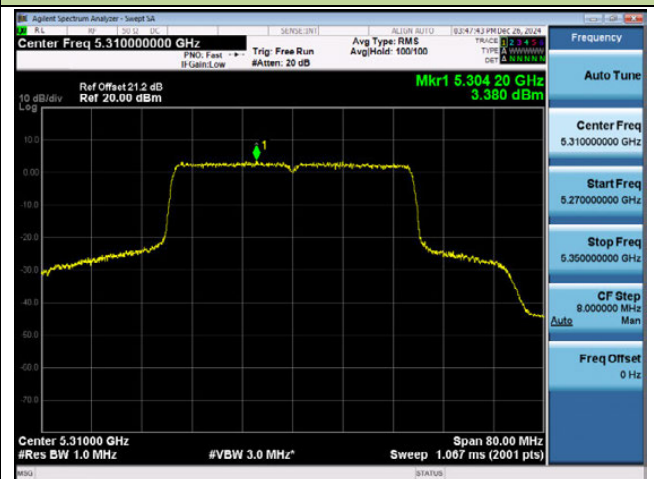
Channel 46 (5230MHz)



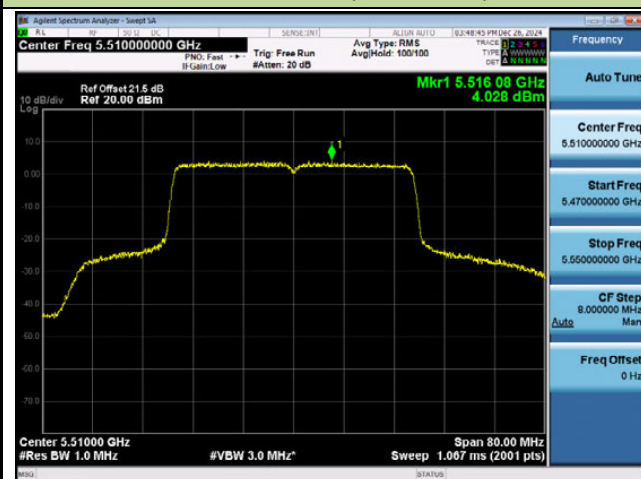
Channel 54 (5270MHz)



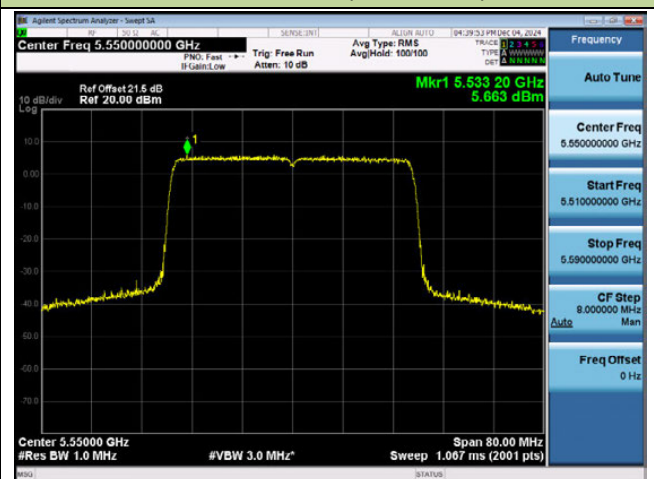
Channel 62 (5310MHz)



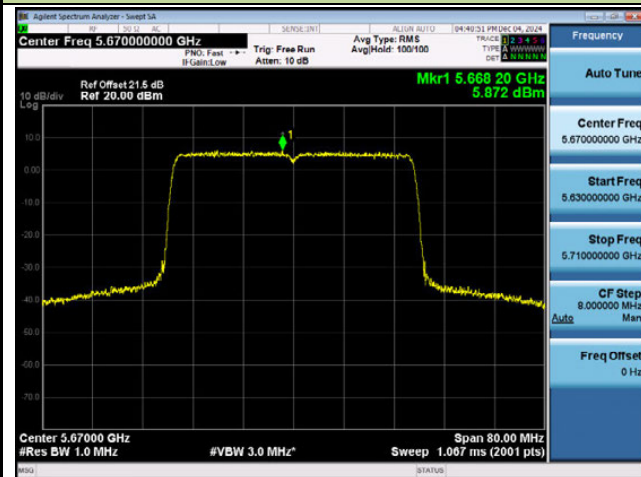
Channel 102 (5510MHz)



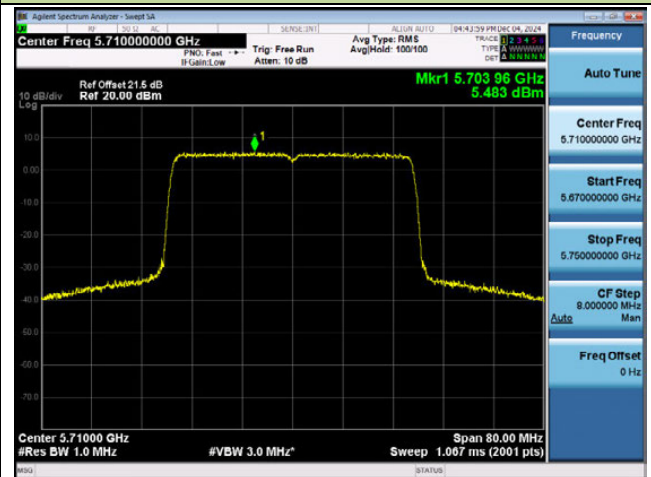
Channel 110 (5550MHz)



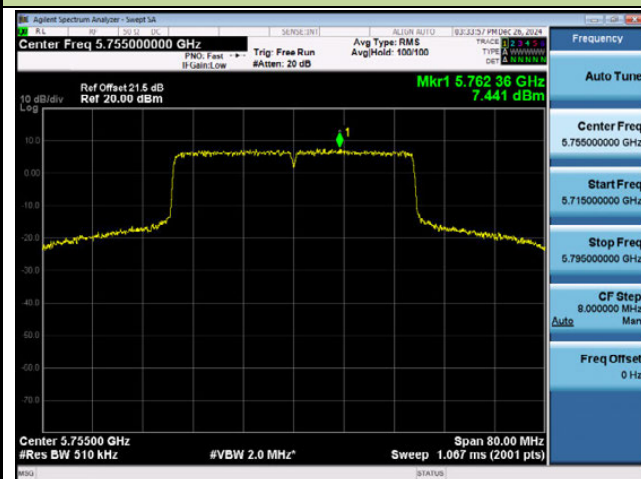
Channel 134 (5670MHz)



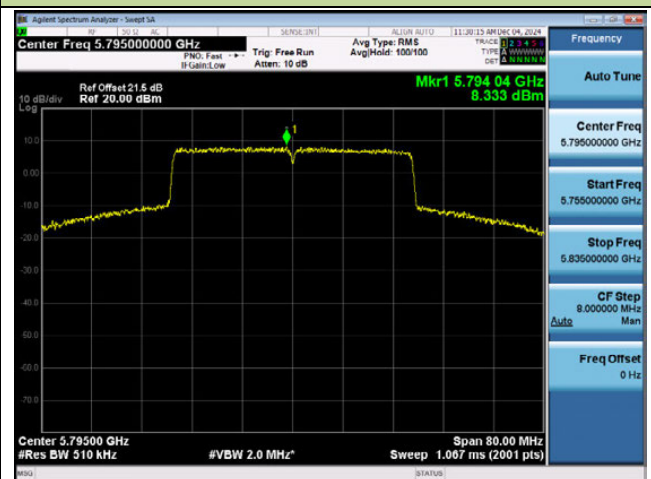
Channel 142 (5710MHz)



Channel 151 (5755MHz)

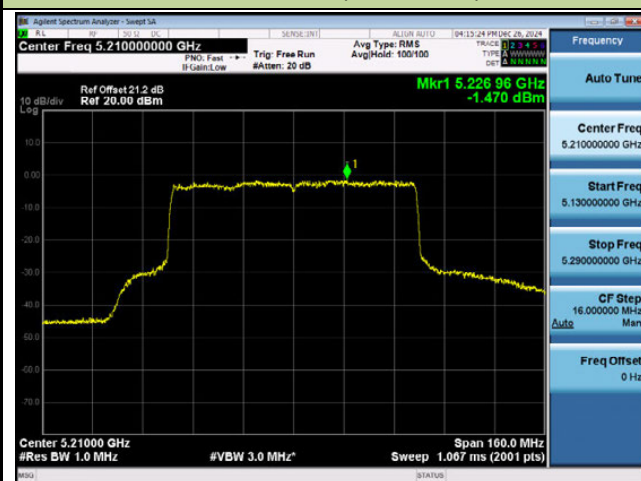


Channel 159 (5795MHz)



802.11ax-HE80 Power Spectral Density - Ant 0

Channel 42 (5210MHz)



Channel 58 (5290MHz)

