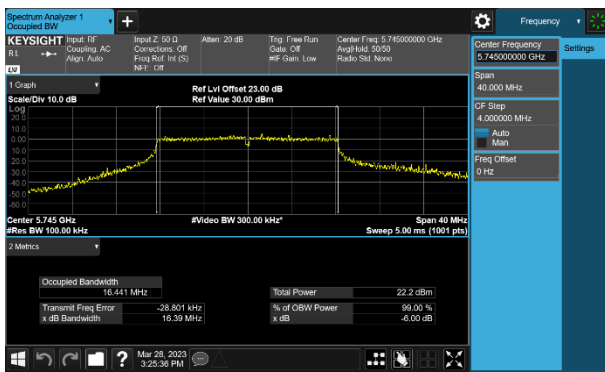
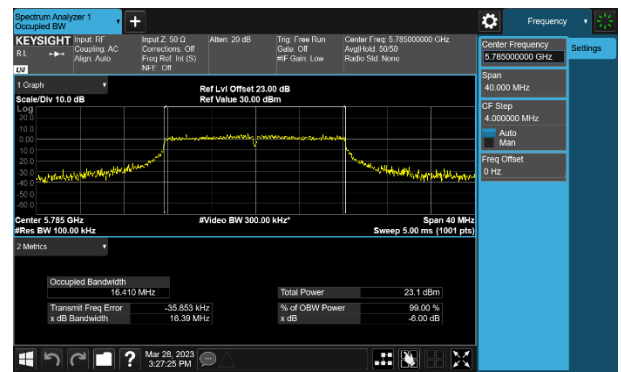


### 802.11a 6dB Bandwidth

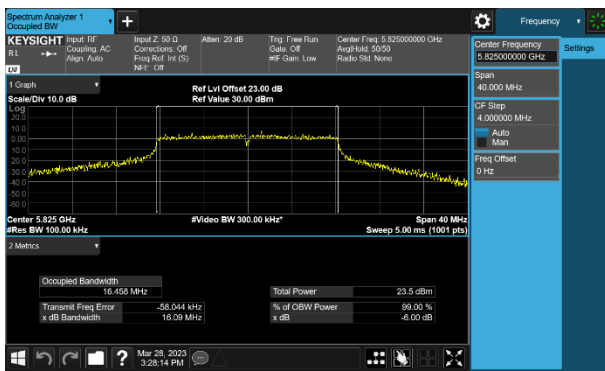
#### Channel 149 (5745MHz)



#### Channel 157 (5785MHz)

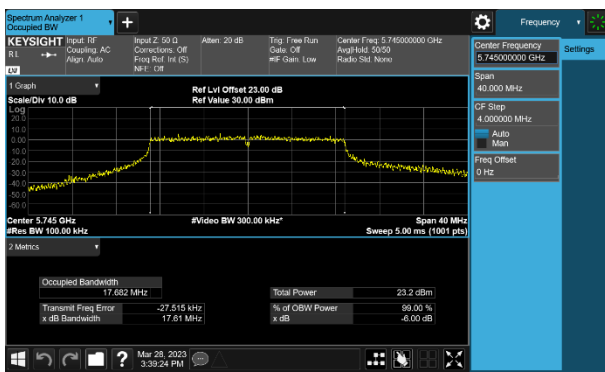


#### Channel 165 (5825MHz)

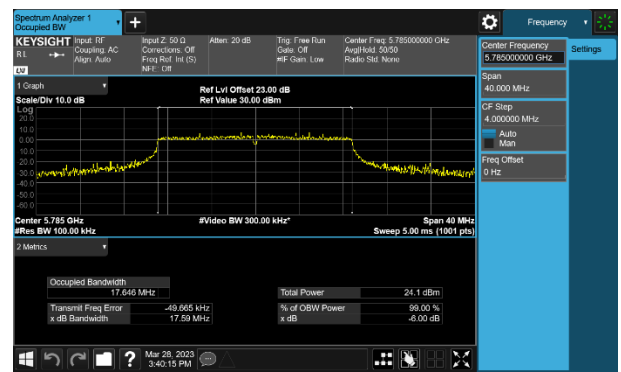


### 802.11ac-VHT20 6dB Bandwidth

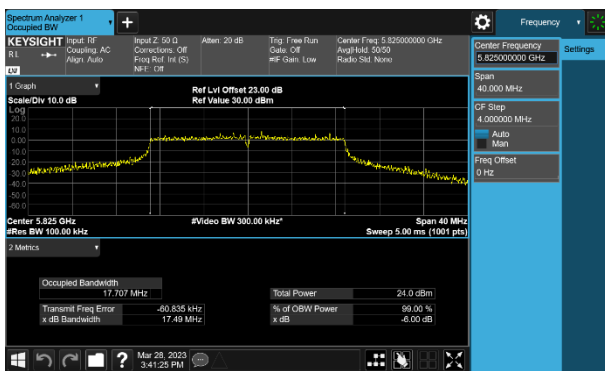
#### Channel 149 (5745MHz)



#### Channel 157 (5785MHz)

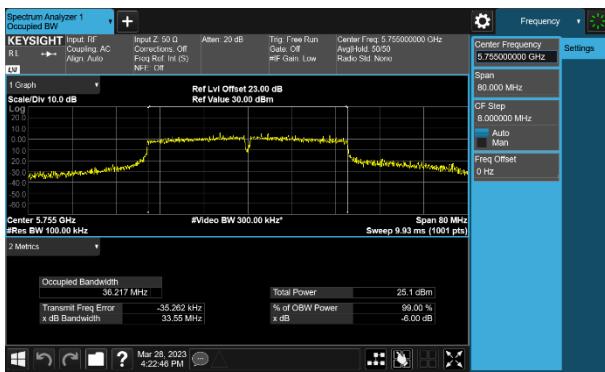


#### Channel 165 (5825MHz)

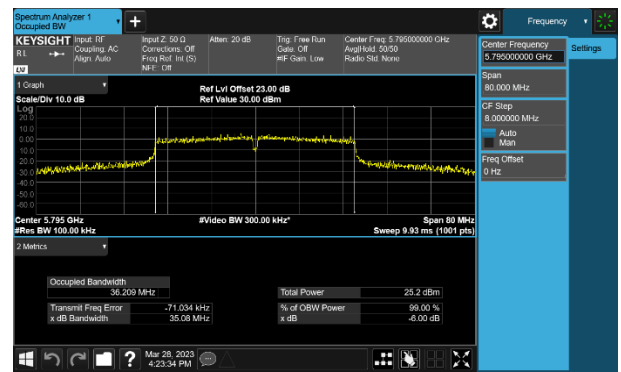


802.11ac-VHT40 6dB Bandwidth

Channel 151 (5755MHz)

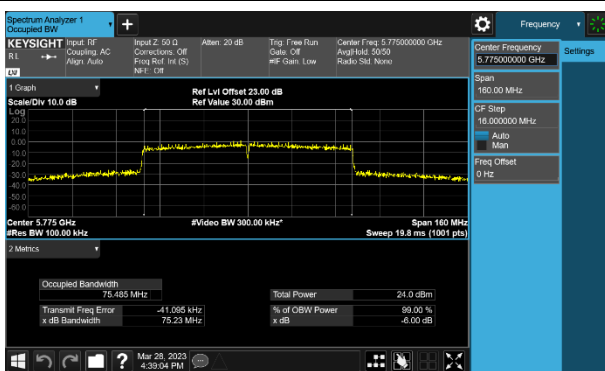


Channel 159 (5795MHz)



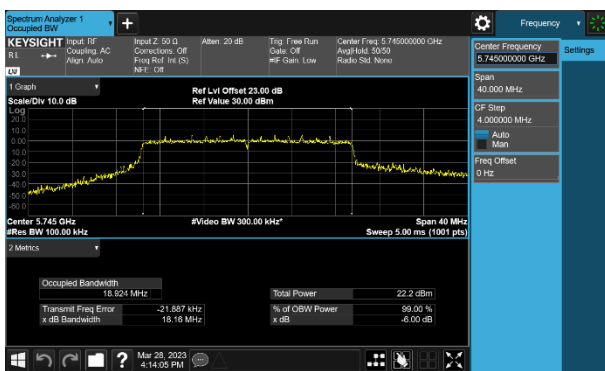
802.11ac-VHT80 6dB Bandwidth

Channel 155 (5775MHz)

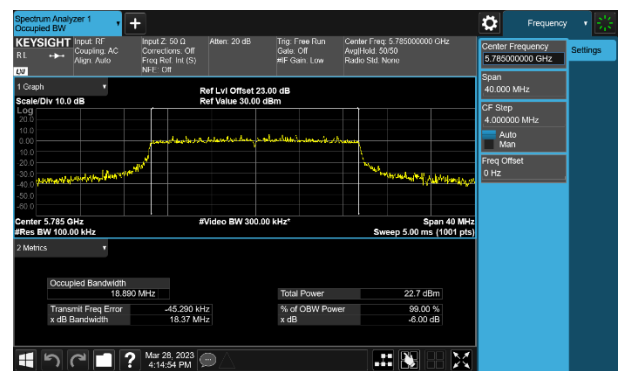


802.11ax-HE20 6dB Bandwidth

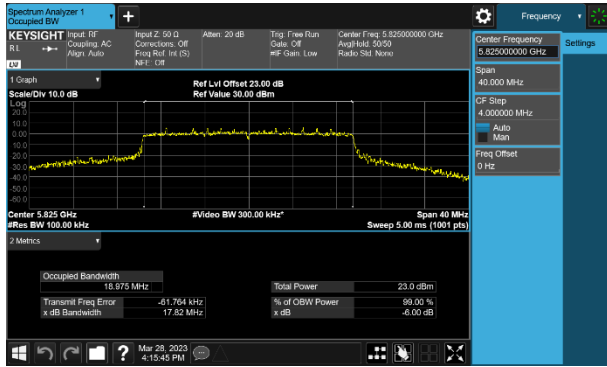
Channel 149 (5745MHz)



Channel 157 (5785MHz)

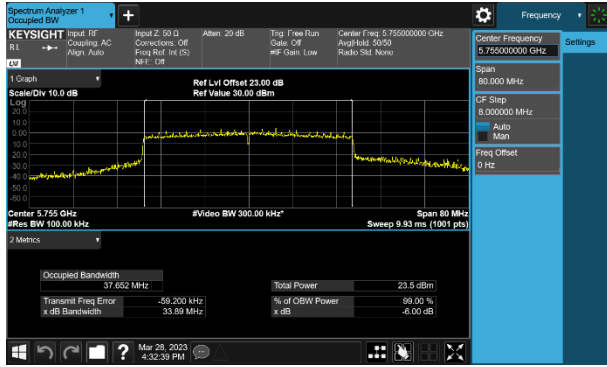


**Channel 165 (5825MHz)**

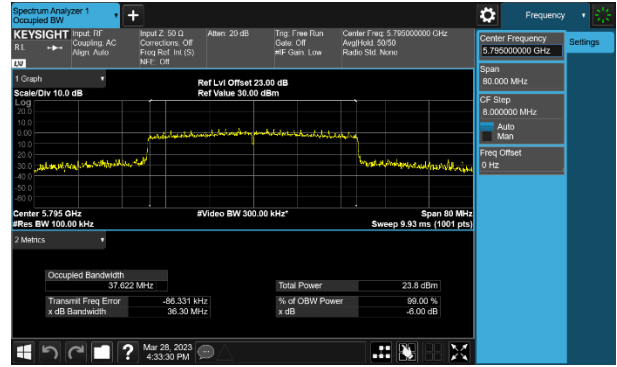


**802.11ax-HE40 6dB Bandwidth**

**Channel 151 (5755MHz)**

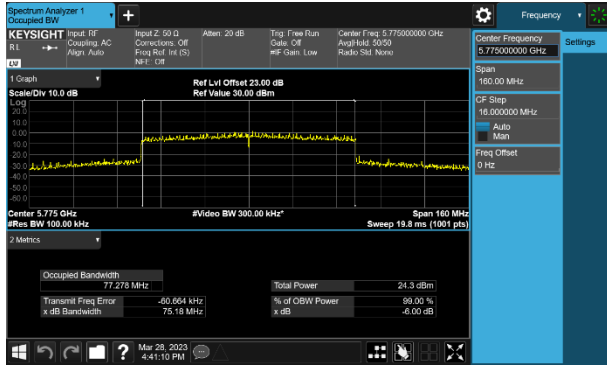


**Channel 159 (5795MHz)**



**802.11ax-HE80 6dB Bandwidth**

**Channel 155 (5775MHz)**



## 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.

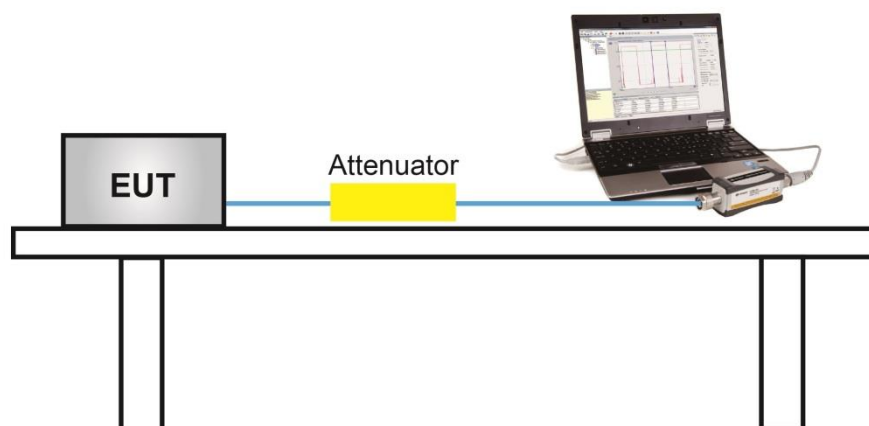
### 7.4.2. Test Procedure Used

KDB 789033D02v02r01- Section II) 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	AX3000 Ceiling Mount Wi-Fi 6 Access Point	Test Engineer	Marvin
Test Site	SR6	Test Date	2023/3/25
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)	Total Average Power (dBm)	Power Limit (dBm)	Result
11a	6Mbps	36	5180	21.07	21.00	21.23	25.87	≤ 30.00	Pass
11a	6Mbps	44	5220	19.55	19.64	19.74	24.42	≤ 30.00	Pass
11a	6Mbps	48	5240	19.10	19.11	19.33	23.95	≤ 30.00	Pass
11a	6Mbps	52	5260	16.12	16.30	16.36	21.03	≤ 23.98	Pass
11a	6Mbps	60	5300	15.74	16.03	16.03	20.71	≤ 23.98	Pass
11a	6Mbps	64	5320	15.31	16.08	16.06	20.60	≤ 23.98	Pass
11a	6Mbps	100	5500	16.00	16.20	16.58	21.04	≤ 23.98	Pass
11a	6Mbps	116	5580	16.02	16.50	16.93	21.27	≤ 23.98	Pass
11a	6Mbps	140	5700	16.00	16.53	16.64	21.17	≤ 23.98	Pass
11a	6Mbps	144	5720	15.80	16.35	16.55	21.02	≤ 22.72	Pass
11a	6Mbps	149	5745	17.92	18.15	18.45	22.95	≤ 30.00	Pass
11a	6Mbps	157	5785	18.90	18.74	19.22	23.73	≤ 30.00	Pass
11a	6Mbps	165	5825	18.73	18.96	19.41	23.81	≤ 30.00	Pass
11ac-VHT20	MCS0	36	5180	21.98	22.07	22.23	26.87	≤ 30.00	Pass
11ac-VHT20	MCS0	40	5220	20.36	20.48	20.50	25.22	≤ 30.00	Pass
11ac-VHT20	MCS0	48	5240	18.84	18.97	18.98	23.70	≤ 30.00	Pass
11ac-VHT20	MCS0	52	5260	16.69	16.78	17.10	21.63	≤ 23.98	Pass
11ac-VHT20	MCS0	60	5300	15.88	16.30	16.35	20.95	≤ 23.98	Pass
11ac-VHT20	MCS0	64	5320	16.04	16.34	16.35	21.02	≤ 23.98	Pass
11ac-VHT20	MCS0	100	5500	16.61	16.55	16.84	21.44	≤ 23.98	Pass
11ac-VHT20	MCS0	116	5580	17.03	16.60	17.04	21.67	≤ 23.98	Pass
11ac-VHT20	MCS0	140	5700	16.80	16.73	16.94	21.60	≤ 23.98	Pass
11ac-VHT20	MCS0	144	5720	16.55	16.49	16.66	21.34	≤ 22.81	Pass
11ac-VHT20	MCS0	149	5745	19.08	19.48	19.61	24.17	≤ 30.00	Pass
11ac-VHT20	MCS0	157	5785	19.92	20.28	20.49	25.01	≤ 30.00	Pass
11ac-VHT20	MCS0	165	5825	19.84	19.52	20.13	24.61	≤ 30.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Total Average Power (dBm)	Power Limit (dBm)	Result
11ac-VHT40	MCS0	38	5190	20.59	20.12	20.56	25.20	≤ 30.00	Pass
11ac-VHT40	MCS0	46	5230	22.21	22.22	22.18	26.97	≤ 30.00	Pass
11ac-VHT40	MCS0	54	5270	18.83	18.84	18.84	23.61	≤ 23.98	Pass
11ac-VHT40	MCS0	62	5310	16.92	17.08	17.24	21.85	≤ 23.98	Pass
11ac-VHT40	MCS0	102	5510	18.98	18.78	19.11	23.73	≤ 23.98	Pass
11ac-VHT40	MCS0	110	5550	19.17	18.62	19.10	23.74	≤ 23.98	Pass
11ac-VHT40	MCS0	134	5670	18.22	17.86	18.10	22.83	≤ 23.98	Pass
11ac-VHT40	MCS0	142	5710	18.24	18.11	18.34	23.00	≤ 23.98	Pass
11ac-VHT40	MCS0	151	5755	20.42	20.56	20.85	25.38	≤ 30.00	Pass
11ac-VHT40	MCS0	159	5795	20.38	20.62	20.79	25.37	≤ 30.00	Pass
11ac-VHT80	MCS0	42	5210	17.28	17.04	17.40	22.01	≤ 30.00	Pass
11ac-VHT80	MCS0	58	5290	15.82	15.94	15.79	20.62	≤ 23.98	Pass
11ac-VHT80	MCS0	106	5530	18.22	18.04	18.60	23.06	≤ 23.98	Pass
11ac-VHT80	MCS0	122	5610	18.94	18.76	19.12	23.71	≤ 23.98	Pass
11ac-VHT80	MCS0	138	5690	19.12	18.97	19.00	23.80	≤ 23.98	Pass
11ac-VHT80	MCS0	155	5775	19.50	19.13	19.68	24.21	≤ 30.00	Pass
11ac-VHT160	MCS0	50	5250	14.89	14.91	15.07	19.73	≤ 23.98	Pass
11ac-VHT160	MCS0	114	5570	16.15	15.77	16.27	20.84	≤ 23.98	Pass
11ax-HE20	MCS0	36	5180	22.35	22.21	22.51	27.13	≤ 30.00	Pass
11ax-HE20	MCS0	44	5220	22.03	21.96	22.07	26.79	≤ 30.00	Pass
11ax-HE20	MCS0	48	5240	21.29	21.56	21.62	26.26	≤ 30.00	Pass
11ax-HE20	MCS0	52	5260	16.92	17.08	17.27	21.86	≤ 23.98	Pass
11ax-HE20	MCS0	60	5300	16.84	17.00	17.02	21.73	≤ 23.98	Pass
11ax-HE20	MCS0	64	5320	16.83	16.82	17.04	21.67	≤ 23.98	Pass
11ax-HE20	MCS0	100	5500	16.93	16.57	17.00	21.61	≤ 23.98	Pass
11ax-HE20	MCS0	116	5580	17.14	16.91	17.64	22.01	≤ 23.98	Pass
11ax-HE20	MCS0	140	5700	17.24	16.90	17.13	21.86	≤ 23.98	Pass
11ax-HE20	MCS0	144	5720	17.48	17.17	17.29	22.09	≤ 22.90	Pass
11ax-HE20	MCS0	149	5745	18.55	18.73	18.88	23.49	≤ 30.00	Pass
11ax-HE20	MCS0	157	5785	18.85	18.91	19.10	23.73	≤ 30.00	Pass
11ax-HE20	MCS0	165	5825	18.99	18.83	19.36	23.84	≤ 30.00	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Total Average Power (dBm)	Power Limit (dBm)	Result
11ax-HE40	MCS0	38	5190	20.50	20.30	20.57	25.23	≤ 30.00	Pass
11ax-HE40	MCS0	46	5230	22.04	21.91	22.05	26.77	≤ 30.00	Pass
11ax-HE40	MCS0	54	5270	19.06	18.91	19.20	23.83	≤ 23.98	Pass
11ax-HE40	MCS0	62	5310	17.33	17.33	17.57	22.18	≤ 23.98	Pass
11ax-HE40	MCS0	102	5510	18.94	18.48	19.08	23.61	≤ 23.98	Pass
11ax-HE40	MCS0	110	5550	19.10	18.65	19.19	23.76	≤ 23.98	Pass
11ax-HE40	MCS0	134	5670	19.23	18.91	19.11	23.86	≤ 23.98	Pass
11ax-HE40	MCS0	142	5710	18.95	18.75	18.91	23.64	≤ 23.98	Pass
11ax-HE40	MCS0	151	5755	20.01	20.08	20.42	24.94	≤ 30.00	Pass
11ax-HE40	MCS0	159	5795	20.17	20.35	20.42	25.09	≤ 30.00	Pass
11ax-HE80	MCS0	42	5210	16.81	16.91	17.06	21.70	≤ 30.00	Pass
11ax-HE80	MCS0	58	5290	15.38	15.22	15.55	20.16	≤ 23.98	Pass
11ax-HE80	MCS0	106	5530	17.80	17.56	18.15	22.61	≤ 23.98	Pass
11ax-HE80	MCS0	122	5610	19.12	18.16	19.16	23.61	≤ 23.98	Pass
11ax-HE80	MCS0	138	5690	19.21	18.57	19.20	23.77	≤ 23.98	Pass
11ax-HE80	MCS0	155	5775	20.60	20.71	20.88	25.50	≤ 30.00	Pass
11ax-HE160	MCS0	50	5250	15.06	15.15	15.33	19.95	≤ 23.98	Pass
11ax-HE160	MCS0	114	5570	16.62	16.45	17.17	21.53	≤ 23.98	Pass

Note 1:

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

Note 2:

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

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

For a\_ch144 (5720MHz), Average Power Limit (dBm) =  $11 + 10 \cdot \log(5\text{MHz} + \text{BW}26\text{dBc}/2) = 22.72$  dBm

For ac\_ch144 (5720MHz), Average Power Limit (dBm) =  $11 + 10 \cdot \log(5\text{MHz} + \text{BW}26\text{dBc}/2) = 22.81$  dBm

For ax\_ch144 (5720MHz), Average Power Limit (dBm) =  $11 + 10 \cdot \log(5\text{MHz} + \text{BW}26\text{dBc}/2) = 22.90$  dBm

Product	AX3000 Ceiling Mount Wi-Fi 6 Access Point	Test Engineer	Marvin
Test Site	SR6	Test Date	2023/3/25
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)	Total Average Power (dBm)	Power Limit (dBm)	Result
11ac-VHT20	MCS0	36	5180	21.98	22.07	22.23	26.87	≤ 29.23	Pass
11ac-VHT20	MCS0	44	5220	20.36	20.48	20.50	25.22	≤ 29.23	Pass
11ac-VHT20	MCS0	48	5240	18.84	18.97	18.98	23.70	≤ 29.23	Pass
11ac-VHT20	MCS0	52	5260	16.69	16.78	17.10	21.63	≤ 23.21	Pass
11ac-VHT20	MCS0	60	5300	15.88	16.30	16.35	20.95	≤ 23.21	Pass
11ac-VHT20	MCS0	64	5320	16.04	16.34	16.35	21.02	≤ 23.21	Pass
11ac-VHT20	MCS0	100	5500	16.61	16.55	16.84	21.44	≤ 23.21	Pass
11ac-VHT20	MCS0	116	5580	17.03	16.60	17.04	21.67	≤ 23.21	Pass
11ac-VHT20	MCS0	140	5700	16.80	16.73	16.94	21.60	≤ 23.21	Pass
11ac-VHT20	MCS0	144	5720	16.55	16.49	16.66	21.34	≤ 22.03	Pass
11ac-VHT20	MCS0	149	5745	19.08	19.48	19.61	24.17	≤ 29.23	Pass
11ac-VHT20	MCS0	157	5785	19.92	20.28	20.49	25.01	≤ 29.23	Pass
11ac-VHT20	MCS0	165	5825	19.84	19.52	20.13	24.61	≤ 29.23	Pass
11ac-VHT40	MCS0	38	5190	20.59	20.12	20.56	25.20	≤ 29.23	Pass
11ac-VHT40	MCS0	46	5230	22.21	22.22	22.18	26.97	≤ 29.23	Pass
11ac-VHT40	MCS0	54	5270	18.29	18.27	18.34	23.07	≤ 23.21	Pass
11ac-VHT40	MCS0	62	5310	16.92	17.08	17.24	21.85	≤ 23.21	Pass
11ac-VHT40	MCS0	102	5510	18.06	17.82	18.22	22.81	≤ 23.21	Pass
11ac-VHT40	MCS0	110	5550	18.42	18.02	18.36	23.04	≤ 23.21	Pass
11ac-VHT40	MCS0	134	5670	18.22	17.86	18.10	22.83	≤ 23.21	Pass
11ac-VHT40	MCS0	142	5710	18.24	18.11	18.34	23.00	≤ 23.21	Pass
11ac-VHT40	MCS0	151	5755	20.42	20.56	20.85	25.38	≤ 29.23	Pass
11ac-VHT40	MCS0	159	5795	20.38	20.62	20.79	25.37	≤ 29.23	Pass



Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Total Average Power (dBm)	Power Limit (dBm)	Result
11ac-VHT80	MCS0	42	5210	17.28	17.04	17.40	22.01	≤ 29.23	Pass
11ac-VHT80	MCS0	58	5290	15.82	15.94	15.79	20.62	≤ 23.21	Pass
11ac-VHT80	MCS0	106	5530	18.22	18.04	18.60	23.06	≤ 23.21	Pass
11ac-VHT80	MCS0	122	5610	18.03	17.79	18.02	22.72	≤ 23.21	Pass
11ac-VHT80	MCS0	138	5690	18.21	18.00	18.18	22.90	≤ 23.21	Pass
11ac-VHT80	MCS0	155	5775	19.50	19.13	19.68	24.21	≤ 29.23	Pass
11ac-VHT160	MCS0	50	5250	14.89	14.91	15.07	19.73	≤ 23.21	Pass
11ac-VHT160	MCS0	114	5570	16.15	15.77	16.27	20.84	≤ 23.21	Pass
11ax-HE20	MCS0	36	5180	22.35	22.21	22.51	27.13	≤ 29.23	Pass
11ax-HE20	MCS0	44	5220	22.03	21.96	22.07	26.79	≤ 29.23	Pass
11ax-HE20	MCS0	48	5240	21.29	21.56	21.62	26.26	≤ 29.23	Pass
11ax-HE20	MCS0	52	5260	16.92	17.08	17.27	21.86	≤ 23.21	Pass
11ax-HE20	MCS0	60	5300	16.84	17.00	17.02	21.73	≤ 23.21	Pass
11ax-HE20	MCS0	64	5320	16.83	16.82	17.04	21.67	≤ 23.21	Pass
11ax-HE20	MCS0	100	5500	16.93	16.57	17.00	21.61	≤ 23.21	Pass
11ax-HE20	MCS0	116	5580	17.14	16.91	17.64	22.01	≤ 23.21	Pass
11ax-HE20	MCS0	140	5700	17.24	16.90	17.13	21.86	≤ 23.21	Pass
11ax-HE20	MCS0	144	5720	17.48	17.17	17.29	22.09	≤ 22.13	Pass
11ax-HE20	MCS0	149	5745	18.55	18.73	18.88	23.49	≤ 29.23	Pass
11ax-HE20	MCS0	157	5785	18.85	18.91	19.10	23.73	≤ 29.23	Pass
11ax-HE20	MCS0	165	5825	18.99	18.83	19.36	23.84	≤ 29.23	Pass
11ax-HE40	MCS0	38	5190	20.50	20.30	20.57	25.23	≤ 29.23	Pass
11ax-HE40	MCS0	46	5230	22.04	21.91	22.05	26.77	≤ 29.23	Pass
11ax-HE40	MCS0	54	5270	18.12	18.26	18.34	23.01	≤ 23.21	Pass
11ax-HE40	MCS0	62	5310	17.33	17.33	17.57	22.18	≤ 23.21	Pass
11ax-HE40	MCS0	102	5510	17.96	17.75	18.22	22.75	≤ 23.21	Pass
11ax-HE40	MCS0	110	5550	18.39	17.80	18.28	22.94	≤ 23.21	Pass
11ax-HE40	MCS0	134	5670	18.26	17.93	18.25	22.92	≤ 23.21	Pass
11ax-HE40	MCS0	142	5710	18.47	18.19	18.41	23.13	≤ 23.21	Pass
11ax-HE40	MCS0	151	5755	20.01	20.08	20.42	24.94	≤ 29.23	Pass
11ax-HE40	MCS0	159	5795	20.17	20.35	20.42	25.09	≤ 29.23	Pass

Test Mode	Data Rate/MCS	Channel No.	Freq. (MHz)	Ant 0 Average Power (dBm)	Ant 1 Average Power (dBm)	Ant 2 Average Power (dBm)	Total Average Power (dBm)	Power Limit (dBm)	Result
11ax-HE80	MCS0	42	5210	16.81	16.91	17.06	21.70	≤ 29.23	Pass
11ax-HE80	MCS0	58	5290	15.38	15.22	15.55	20.16	≤ 23.21	Pass
11ax-HE80	MCS0	106	5530	17.80	17.56	18.15	22.61	≤ 23.21	Pass
11ax-HE80	MCS0	122	5610	18.20	17.77	18.12	22.81	≤ 23.21	Pass
11ax-HE80	MCS0	138	5690	18.11	17.93	18.08	22.81	≤ 23.21	Pass
11ax-HE80	MCS0	155	5775	20.60	20.71	20.88	25.50	≤ 29.23	Pass
11ax-HE160	MCS0	50	5250	15.06	15.15	15.33	19.95	≤ 23.21	Pass
11ax-HE160	MCS0	114	5570	16.62	16.45	17.17	21.53	≤ 23.21	Pass

Note 1:

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

Note 2:

For 5150 - 5250MHz and 5725 - 5850MHz Band: Average Power Limit (dBm) = 30 - (6.77- 6) = 29.23dBm

For 5250 - 5350MHz and 5470 - 5725MHz Band: Average Power Limit (dBm) = 23.98 - (6.77- 6) = 23.21dBm.

For ac\_ch144 (5720MHz), Average Power Limit (dBm) =  $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) - (6.77- 6) = 22.03\text{dBm}$

For ax\_ch144 (5720MHz), Average Power Limit (dBm) =  $11 + 10 \cdot \log(5\text{MHz} + \text{BW}_{26\text{dBc}}/2) - (6.77- 6) = 22.13\text{dBm}$

## 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.

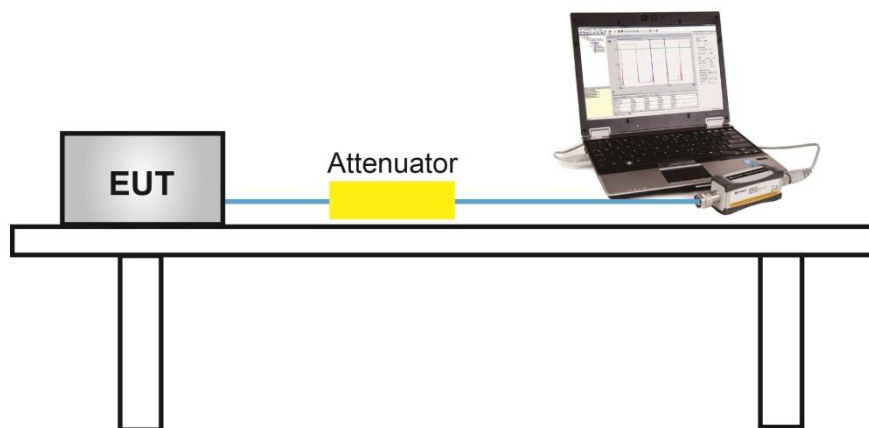
### 7.5.2. Test Procedure Used

KDB 789033 D02v02r01- Section II) 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.

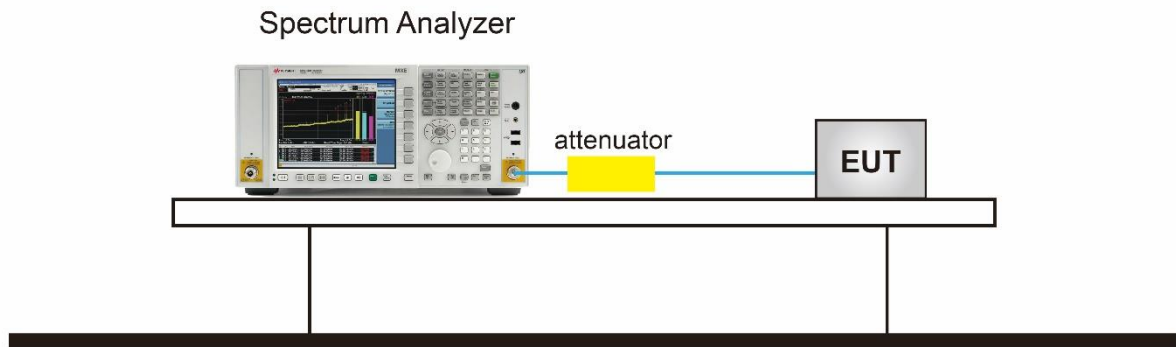
### 7.6.2. Test Procedure Used

KDB 789033 D02v02r01-Section II) 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	AX3000 Ceiling Mount Wi-Fi 6 Access Point	Test Engineer	Marvin
Test Site	SR6	Test Date	2023/3/20~2023/3/27
Mode	Power Spectral Density (U-NII- 1/-2a / -2c) CDD Mode		

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	PSD (dBm/MHz)			Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
				Ant 0	Ant 1	Ant 2				
11a	6Mbps	36	5180	9.418	9.149	9.568	96.41%	14.312	≤16.23	Pass
11a	6Mbps	44	5220	7.383	7.092	7.945	96.41%	12.418	≤16.23	Pass
11a	6Mbps	48	5240	6.728	6.727	7.435	96.41%	11.906	≤16.23	Pass
11a	6Mbps	52	5260	4.927	5.336	4.833	96.41%	9.968	≤10.23	Pass
11a	6Mbps	60	5300	4.874	5.158	5.032	96.41%	9.953	≤10.23	Pass
11a	6Mbps	64	5320	4.846	5.135	5.059	96.41%	9.945	≤10.23	Pass
11a	6Mbps	100	5500	5.061	5.102	5.257	96.41%	10.071	≤10.23	Pass
11a	6Mbps	116	5580	5.144	4.912	5.366	96.41%	10.075	≤10.23	Pass
11a	6Mbps	140	5700	5.123	5.205	5.173	96.41%	10.097	≤10.23	Pass
11a	6Mbps	144	5720	5.169	5.177	5.036	96.41%	10.058	≤10.23	Pass
11ac-VHT20	MCS0	36	5180	9.306	10.286	9.512	95.80%	14.680	≤16.23	Pass
11ac-VHT20	MCS0	44	5220	8.022	8.400	7.932	95.80%	13.080	≤16.23	Pass
11ac-VHT20	MCS0	48	5240	6.074	6.606	6.727	95.80%	11.436	≤16.23	Pass
11ac-VHT20	MCS0	52	5260	5.030	5.274	5.149	95.80%	10.110	≤10.23	Pass
11ac-VHT20	MCS0	60	5300	4.691	5.042	4.769	95.80%	9.794	≤10.23	Pass
11ac-VHT20	MCS0	64	5320	4.612	5.254	4.725	95.80%	9.830	≤10.23	Pass
11ac-VHT20	MCS0	100	5500	5.164	5.050	5.035	95.80%	10.041	≤10.23	Pass
11ac-VHT20	MCS0	116	5580	5.126	4.984	4.967	95.80%	9.984	≤10.23	Pass
11ac-VHT20	MCS0	140	5700	5.069	4.838	5.203	95.80%	9.997	≤10.23	Pass
11ac-VHT20	MCS0	144	5720	4.931	4.765	4.782	95.80%	9.784	≤10.23	Pass
11ac-VHT40	MCS0	38	5190	5.601	6.498	5.846	92.72%	11.098	≤16.23	Pass
11ac-VHT40	MCS0	46	5230	9.046	9.337	9.268	92.72%	14.318	≤16.23	Pass
11ac-VHT40	MCS0	54	5270	4.782	4.896	4.963	92.72%	9.980	≤10.23	Pass
11ac-VHT40	MCS0	62	5310	2.210	3.253	2.915	92.72%	7.914	≤10.23	Pass
11ac-VHT40	MCS0	102	5510	4.554	4.929	4.943	92.72%	9.912	≤10.23	Pass
11ac-VHT40	MCS0	110	5550	4.810	4.953	5.038	92.72%	10.034	≤10.23	Pass
11ac-VHT40	MCS0	134	5670	4.824	4.485	4.700	92.72%	9.771	≤10.23	Pass
11ac-VHT40	MCS0	142	5710	5.045	4.402	5.098	92.72%	9.959	≤10.23	Pass

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	PSD (dBm/MHz)			Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
				Ant 0	Ant 1	Ant 2				
11ac-VHT80	MCS0	42	5210	-0.929	-0.231	-0.209	85.33%	5.016	≤16.23	Pass
11ac-VHT80	MCS0	58	5290	-2.217	-1.218	-1.515	85.33%	3.830	≤10.23	Pass
11ac-VHT80	MCS0	106	5530	0.042	0.523	0.852	85.33%	5.945	≤10.23	Pass
11ac-VHT80	MCS0	122	5610	1.329	1.305	1.353	85.33%	6.789	≤10.23	Pass
11ac-VHT80	MCS0	138	5690	1.756	1.608	1.929	85.33%	7.227	≤10.23	Pass
11ac-VHT160	MCS0	50	5250	-4.477	-4.656	-4.686	76.97%	1.303	≤10.23	Pass
11ac-VHT160	MCS0	114	5570	-3.784	-3.526	-3.019	76.97%	2.477	≤10.23	Pass
11ax-HE20	MCS0	36	5180	8.690	9.794	9.542	85.04%	14.842	≤16.23	Pass
11ax-HE20	MCS0	44	5220	8.520	8.870	9.203	85.04%	14.348	≤16.23	Pass
11ax-HE20	MCS0	48	5240	7.923	8.827	9.050	85.04%	14.102	≤16.23	Pass
11ax-HE20	MCS0	52	5260	4.586	4.729	4.569	85.04%	10.104	≤10.23	Pass
11ax-HE20	MCS0	60	5300	4.605	4.724	4.562	85.04%	10.106	≤10.23	Pass
11ax-HE20	MCS0	64	5320	4.550	4.559	4.722	85.04%	10.086	≤10.23	Pass
11ax-HE20	MCS0	100	5500	4.429	4.374	4.448	85.04%	9.892	≤10.23	Pass
11ax-HE20	MCS0	116	5580	4.449	4.613	4.404	85.04%	9.965	≤10.23	Pass
11ax-HE20	MCS0	140	5700	4.765	4.437	4.454	85.04%	10.030	≤10.23	Pass
11ax-HE20	MCS0	144	5720	4.770	4.384	4.488	85.04%	10.025	≤10.23	Pass
11ax-HE40	MCS0	38	5190	4.917	5.362	5.172	84.93%	10.635	≤16.23	Pass
11ax-HE40	MCS0	46	5230	6.486	6.794	7.011	84.93%	12.250	≤16.23	Pass
11ax-HE40	MCS0	54	5270	4.599	4.643	4.581	84.93%	10.088	≤10.23	Pass
11ax-HE40	MCS0	62	5310	2.133	2.856	2.966	84.93%	8.148	≤10.23	Pass
11ax-HE40	MCS0	102	5510	4.318	4.225	4.512	84.93%	9.834	≤10.23	Pass
11ax-HE40	MCS0	110	5550	4.260	4.049	4.478	84.93%	9.746	≤10.23	Pass
11ax-HE40	MCS0	134	5670	4.621	4.478	4.273	84.93%	9.940	≤10.23	Pass
11ax-HE40	MCS0	142	5710	4.490	4.394	4.666	84.93%	9.999	≤10.23	Pass
11ax-HE80	MCS0	42	5210	-0.920	-0.461	-0.314	84.63%	4.939	≤16.23	Pass
11ax-HE80	MCS0	58	5290	-1.612	-1.503	-1.480	84.63%	3.965	≤10.23	Pass
11ax-HE80	MCS0	106	5530	0.485	0.446	0.477	84.63%	5.965	≤10.23	Pass
11ax-HE80	MCS0	122	5610	1.673	1.497	1.775	84.63%	7.146	≤10.23	Pass
11ax-HE80	MCS0	122	5690	1.681	1.850	1.996	84.63%	7.340	≤10.23	Pass
11ax-HE160	MCS0	50	5250	-4.629	-4.197	-4.809	83.92%	0.995	≤10.23	Pass
11ax-HE160	MCS0	114	5570	-2.838	-2.796	-2.922	83.92%	2.681	≤10.23	Pass

Note 1: When EUT duty cycle ≥ 98%,

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

When EUT duty cycle < 98%,

the total PSD (dBm/MHz) =  $10 \cdot \log \{ 10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} \} + 10 \cdot \log (1/\text{Duty Cycle})$  (dBm/MHz).

Note 2:

For 5150 - 5250MHz Band: PSD Limit (dBm/MHz) =  $17 - (6.77 - 6) = 16.23$  dBm/MHz.

For 5250 - 5350MHz and 5470 - 5725MHz Band: PSD Limit (dBm/MHz) =  $11 - (6.77 - 6) = 10.23$  dBm/MHz.

.



Product	AX3000 Ceiling Mount Wi-Fi 6 Access Point	Test Engineer	Marvin
Test Site	SR6	Test Date	2023/3/20~2023/3/27
Test Item	Power Spectral Density (U-NII-3) CDD Mode		

Test Mode	Data Rate /MCS	Ch. No.	Freq. (MHz)	PSD (dBm/MHz)			Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
				Ant 0	Ant 1	Ant 2				
11a	6Mbps	149	5745	3.889	4.139	3.989	96.41%	8.937	≤ 29.23	Pass
11a	6Mbps	157	5785	4.614	4.963	5.064	96.41%	9.815	≤ 29.23	Pass
11a	6Mbps	165	5825	4.884	4.562	5.438	96.41%	9.907	≤ 29.23	Pass
11ac-VHT20	MCS0	149	5745	4.252	4.773	4.519	95.80%	9.477	≤ 29.23	Pass
11ac-VHT20	MCS0	157	5785	5.061	5.691	5.530	95.80%	10.393	≤ 29.23	Pass
11ac-VHT20	MCS0	165	5825	5.224	5.099	5.761	95.80%	10.329	≤ 29.23	Pass
11ac-VHT40	MCS0	151	5755	3.540	4.501	4.170	92.72%	9.188	≤ 29.23	Pass
11ac-VHT40	MCS0	159	5795	3.902	4.351	4.315	92.72%	9.294	≤ 29.23	Pass
11ac-VHT80	MCS0	155	5775	0.005	0.199	0.312	85.33%	5.634	≤ 29.23	Pass
11ax-HE20	MCS0	149	5745	3.086	3.686	3.183	85.04%	8.801	≤ 29.23	Pass
11ax-HE20	MCS0	157	5785	3.211	3.281	3.705	85.04%	8.880	≤ 29.23	Pass
11ax-HE20	MCS0	165	5825	3.458	3.412	3.931	85.04%	9.082	≤ 29.23	Pass
11ax-HE40	MCS0	151	5755	2.163	2.447	2.702	84.93%	7.924	≤ 29.23	Pass
11ax-HE40	MCS0	159	5795	2.989	2.960	2.736	84.93%	8.377	≤ 29.23	Pass
11ax-HE80	MCS0	155	5775	0.362	0.874	0.668	84.63%	6.136	≤ 29.23	Pass

Note 1: When EUT duty cycle ≥ 98%,

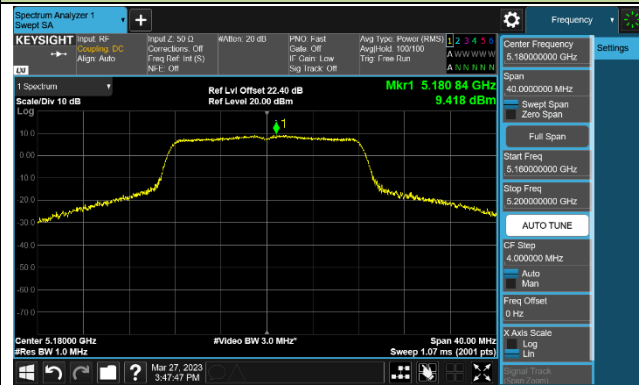
the total PSD (dBm/510kHz) =  $10 \cdot \log \{ 10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} \}$  (dBm/510kHz)

When EUT duty cycle < 98%, the total PSD (dBm/510kHz) =  $10 \cdot \log \{ 10^{(\text{Ant 0 PSD}/10)} + 10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)} \}$  (dBm/510kHz) +  $10 \cdot \log (1/\text{Duty Cycle})$ .

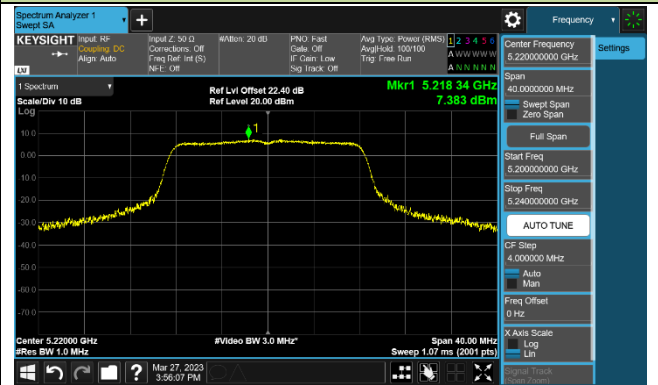
Note 2: PSD Limit (dBm/500kHz) = 30 - (6.77 - 6) = 29.23dBm/500kHz.

### 802.11a Power Spectral Density - Ant 0

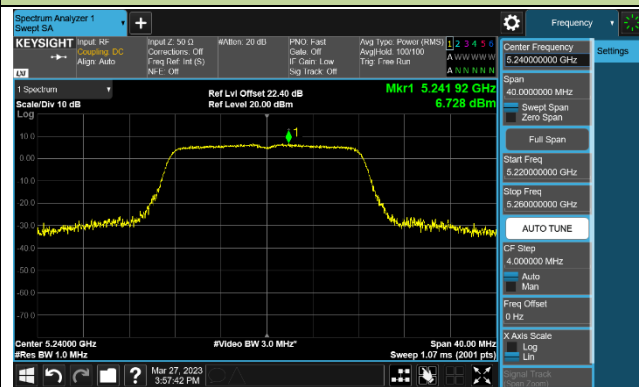
#### Channel 36 (5180MHz)



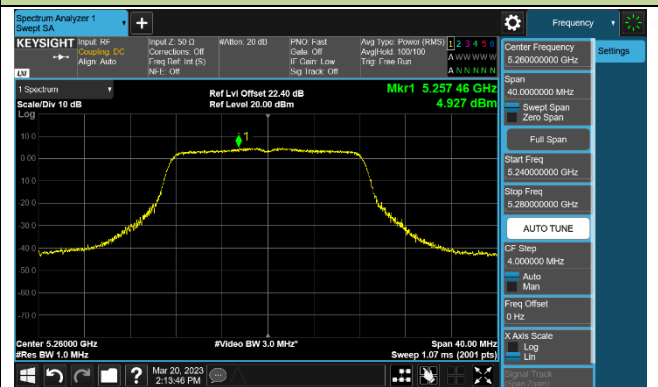
#### Channel 44 (5220MHz)



#### Channel 48 (5240MHz)



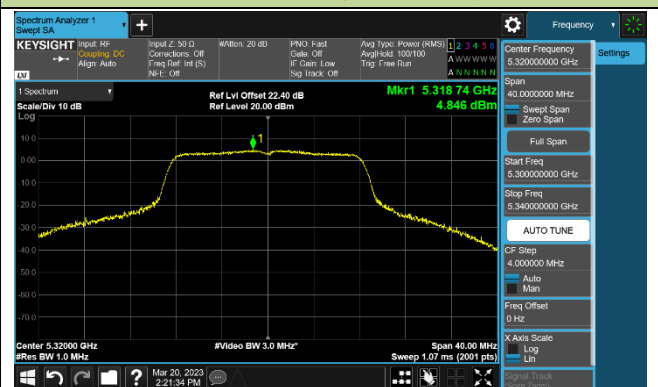
#### Channel 52 (5260MHz)



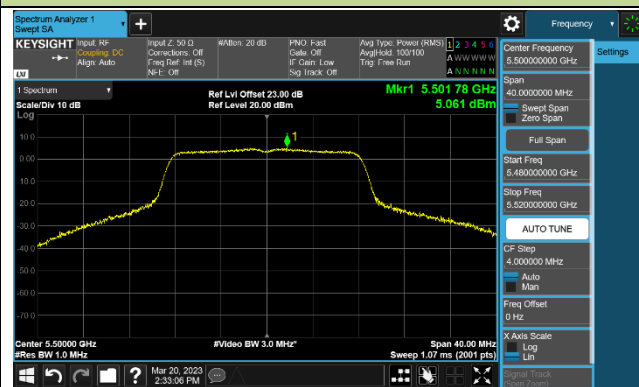
#### Channel 60 (5300MHz)



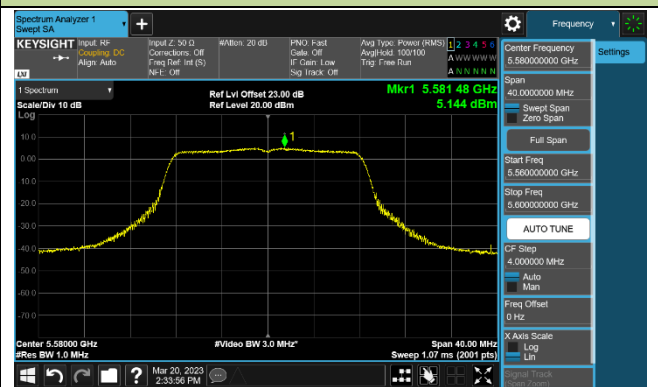
#### Channel 64 (5320MHz)

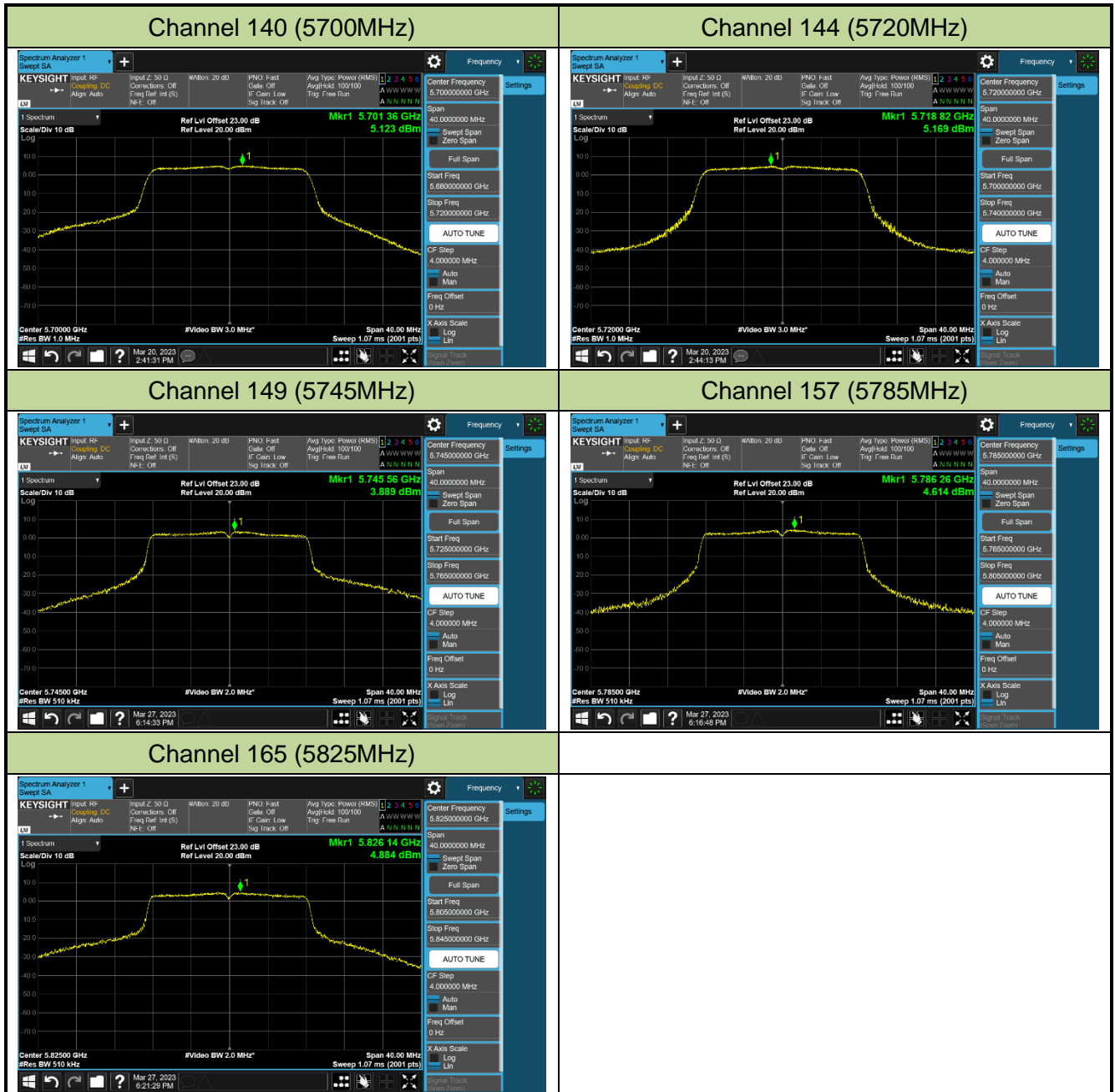


#### Channel 100 (5500MHz)



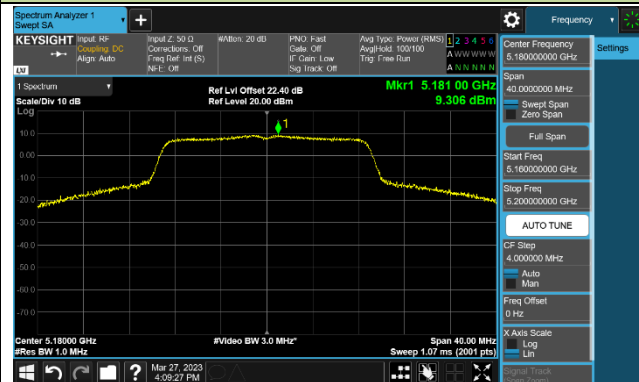
#### Channel 116 (5580MHz)



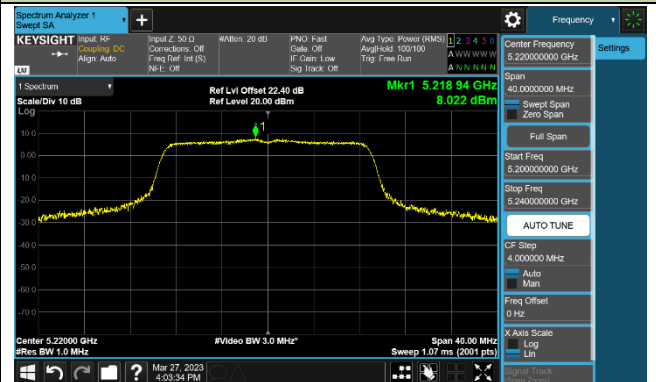


## 802.11ac-VHT20 Power Spectral Density - Ant 0

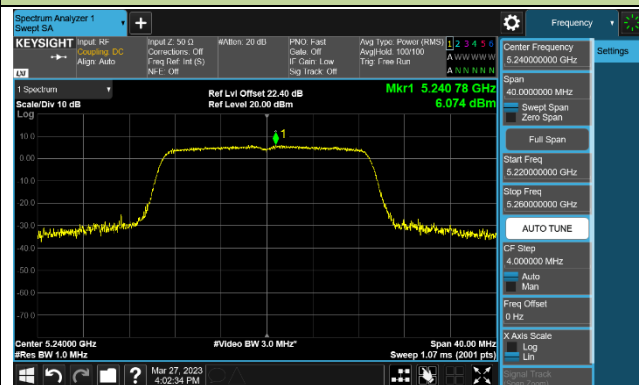
Channel 36 (5180MHz)



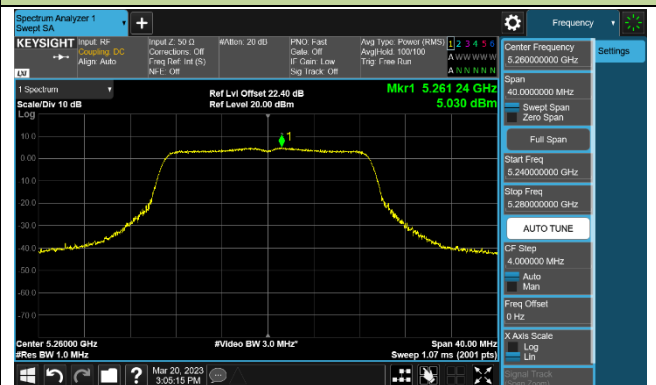
Channel 44 (5220MHz)



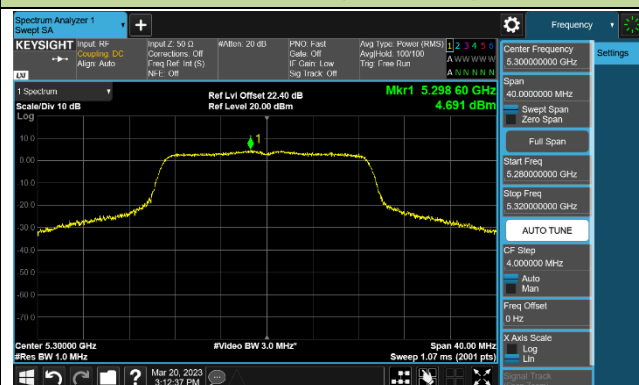
Channel 48 (5240MHz)



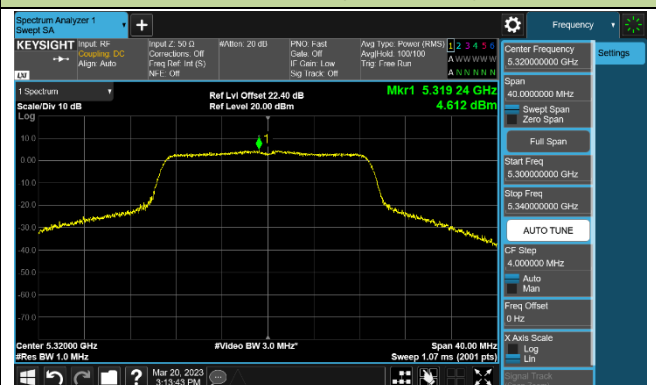
Channel 52 (5260MHz)



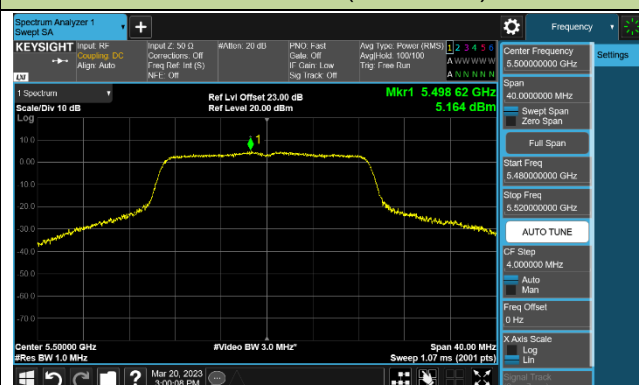
Channel 60 (5300MHz)



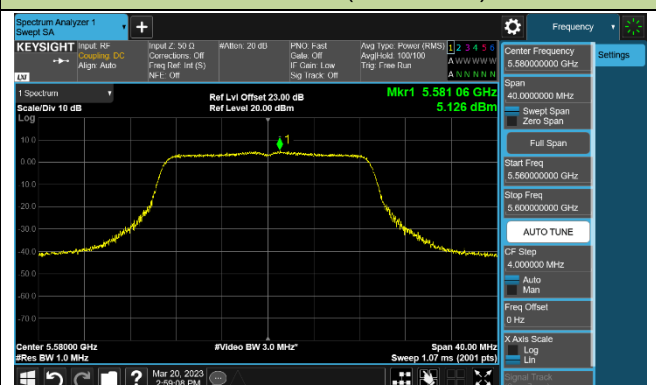
Channel 64 (5320MHz)

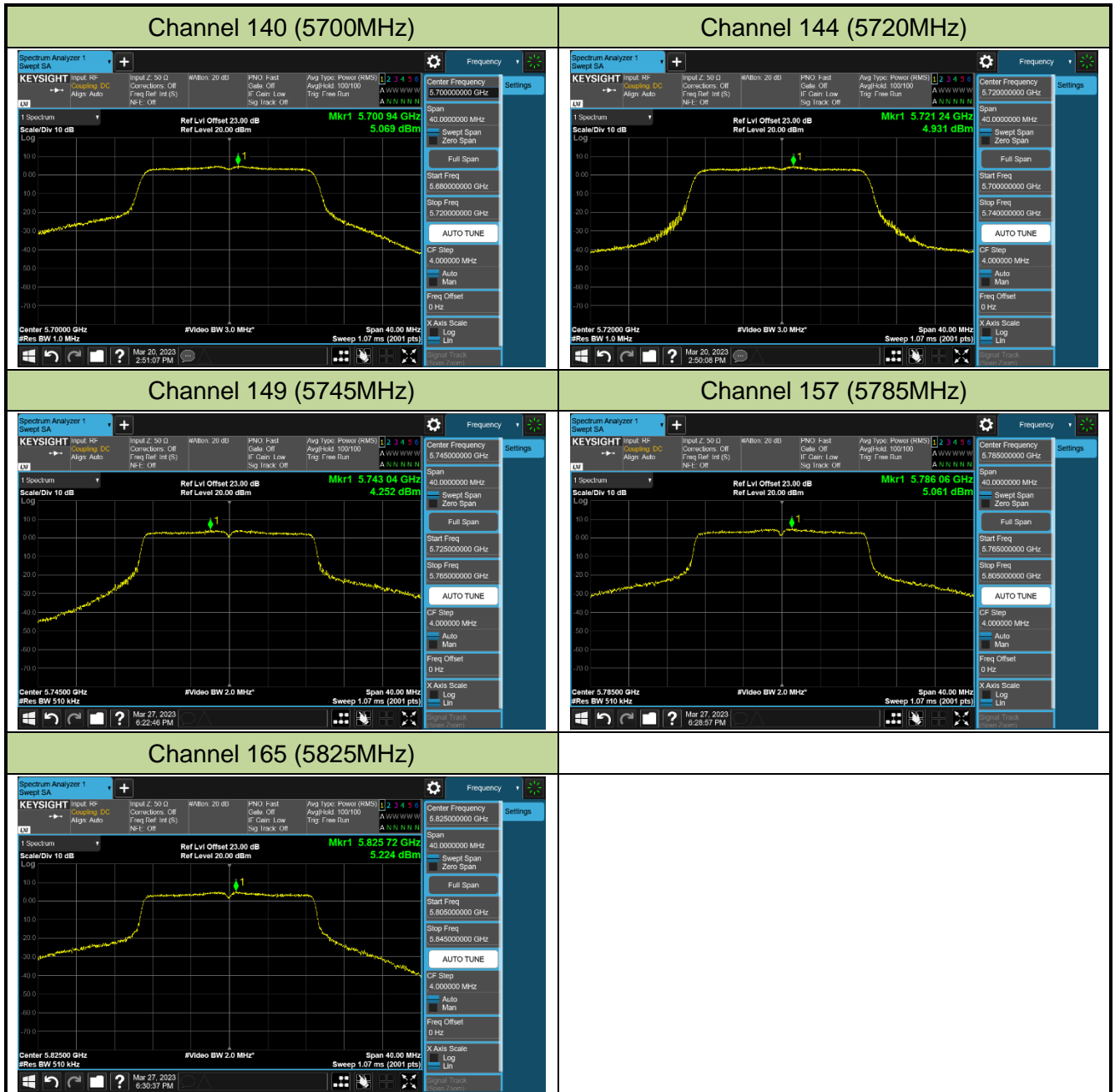


Channel 100 (5500MHz)



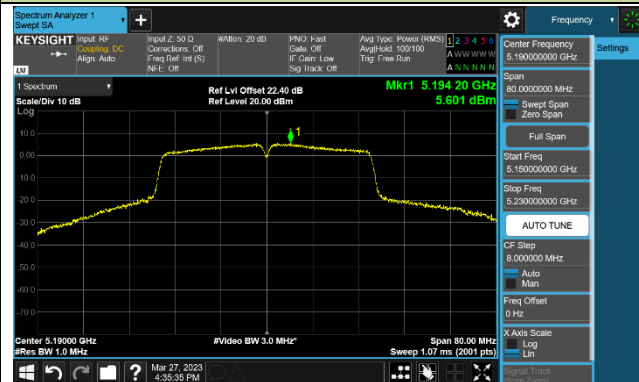
Channel 116 (5580MHz)



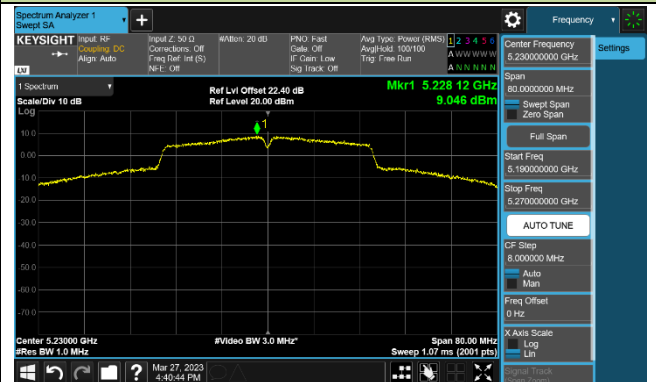


## 802.11ac-VHT40 Power Spectral Density - Ant 0

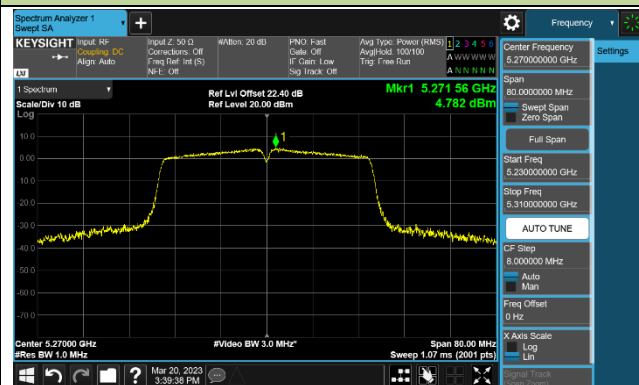
Channel 38 (5190MHz)



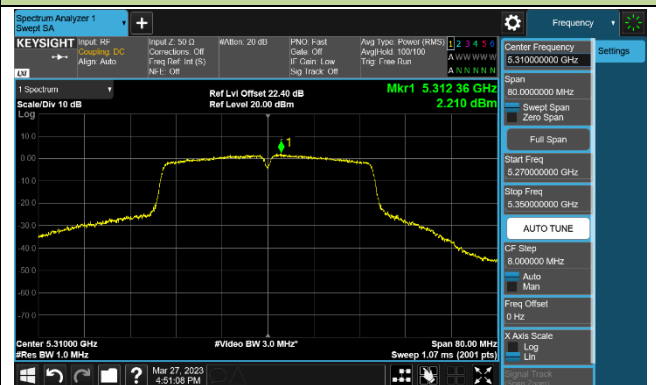
Channel 46 (5230MHz)



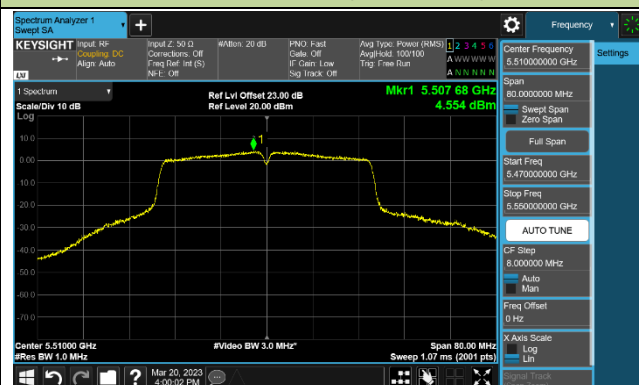
Channel 54 (5270MHz)



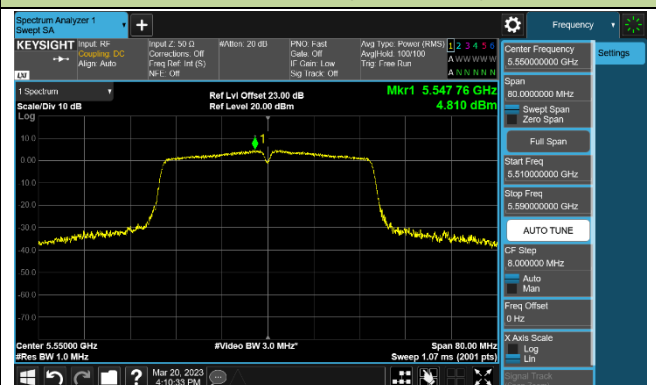
Channel 62 (5310MHz)



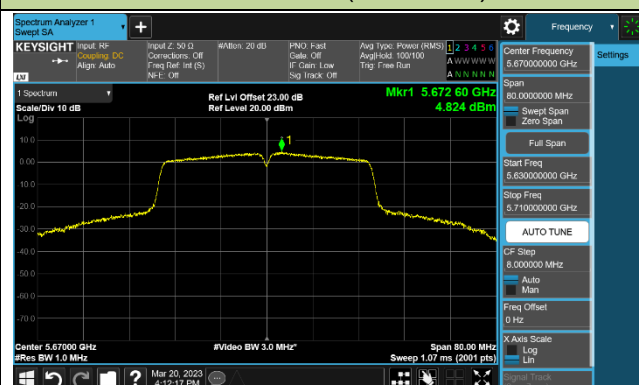
Channel 102 (5510MHz)



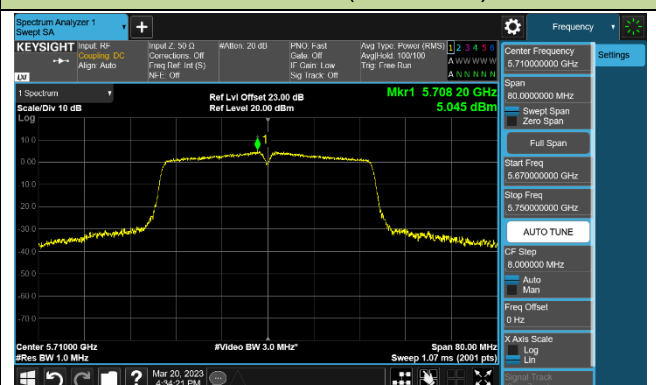
Channel 110 (5550MHz)

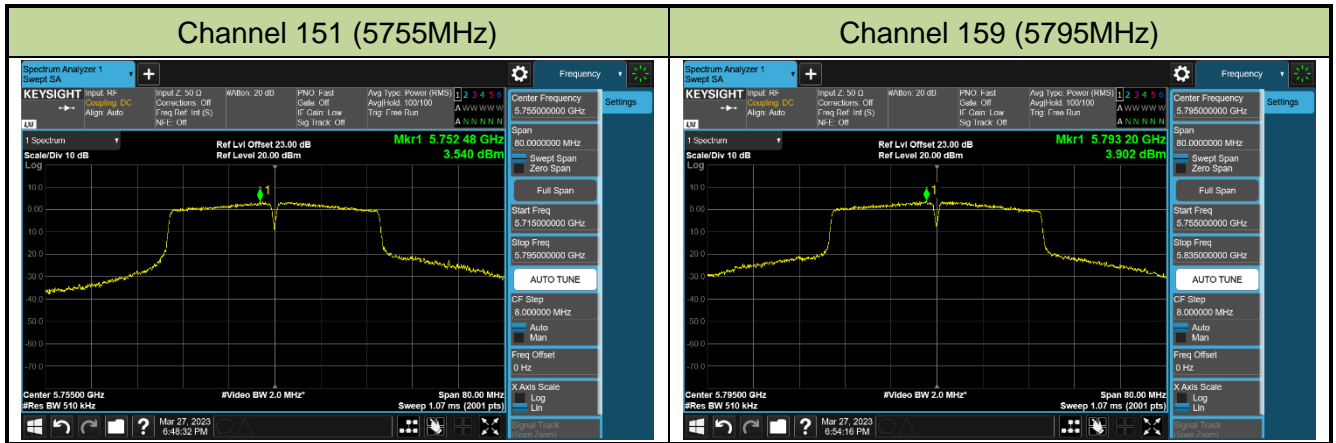


Channel 134 (5670MHz)



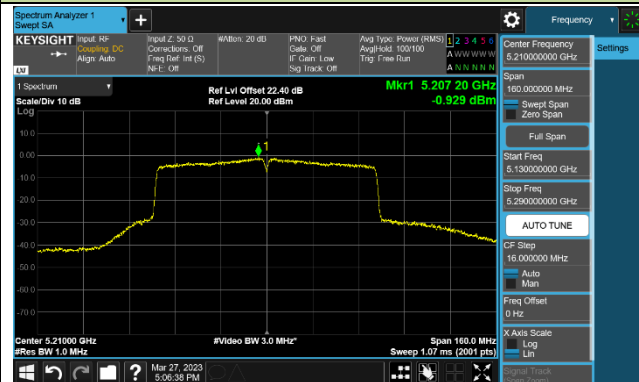
Channel 142 (5710MHz)



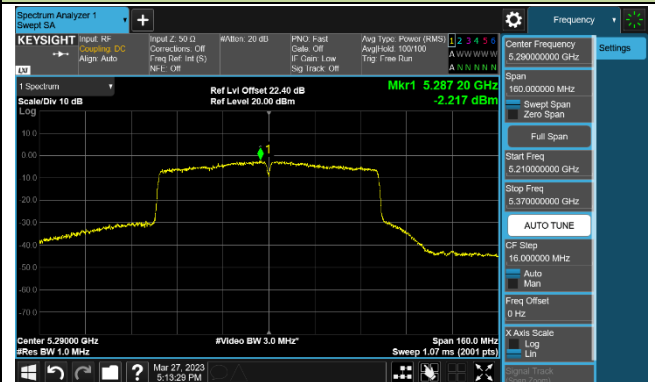


## 802.11ac-VHT80 Power Spectral Density - Ant 0

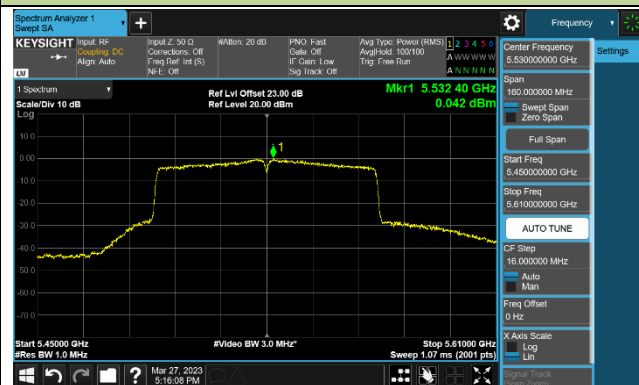
Channel 42 (5210MHz)



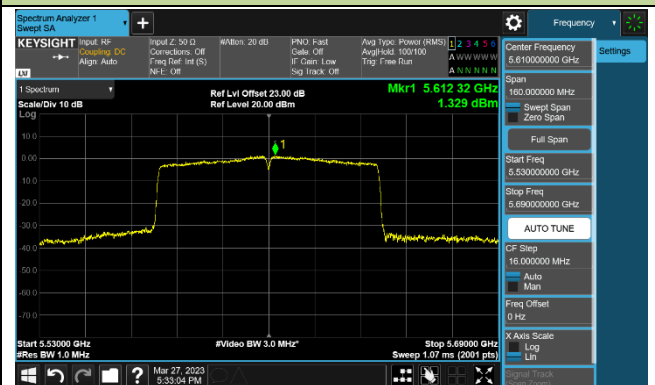
Channel 58 (5290MHz)



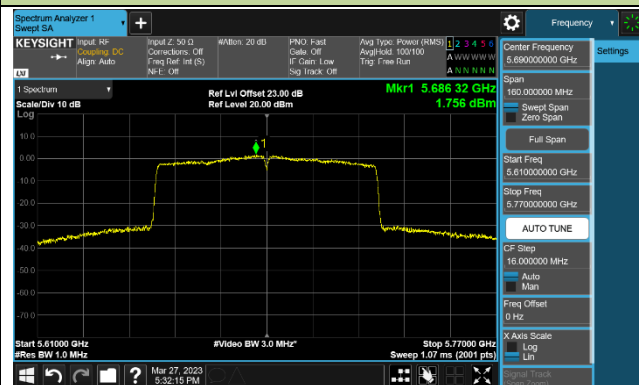
Channel 106 (5530MHz)



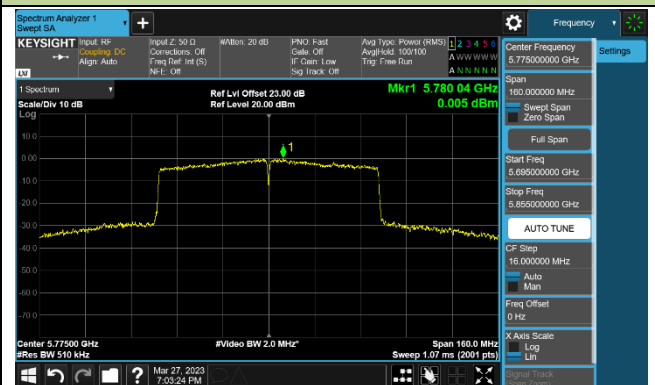
Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)



## 802.11ac-VHT160 Power Spectral Density - Ant 0

Channel 50 (5250MHz)



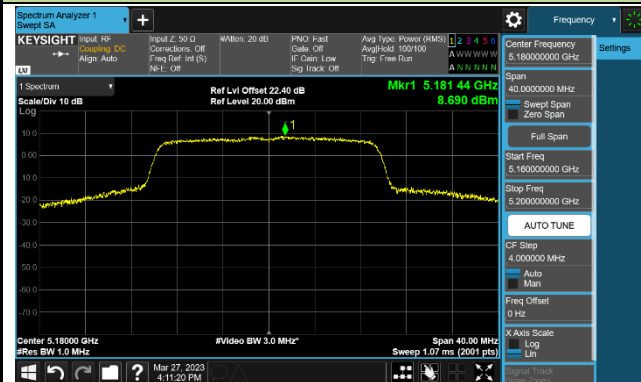
Channel 114 (5570MHz)



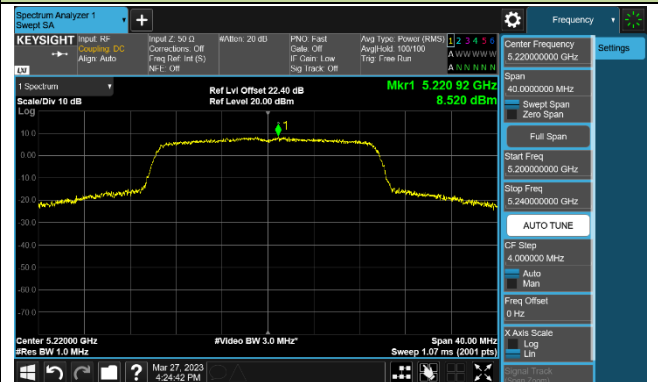


## 802.11ax-HE20 Power Spectral Density - Ant 0

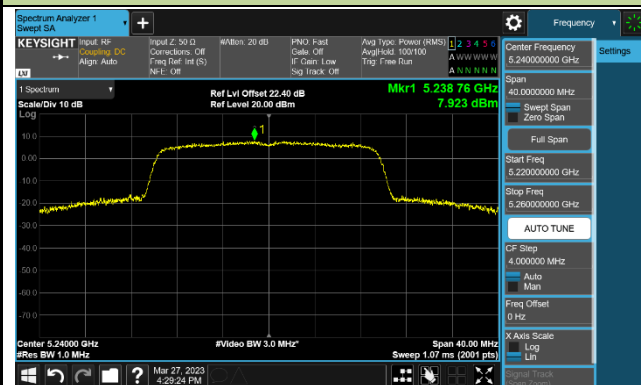
Channel 36 (5180MHz)



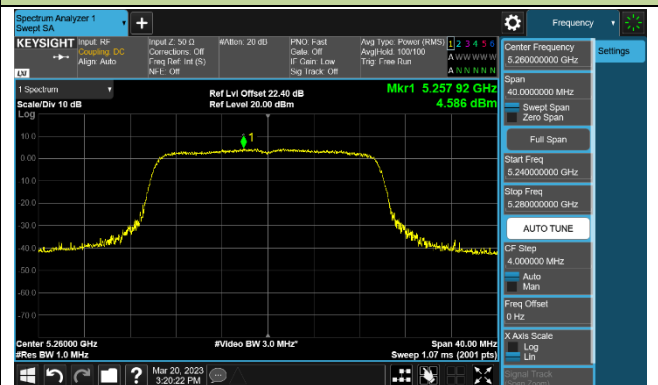
Channel 44 (5220MHz)



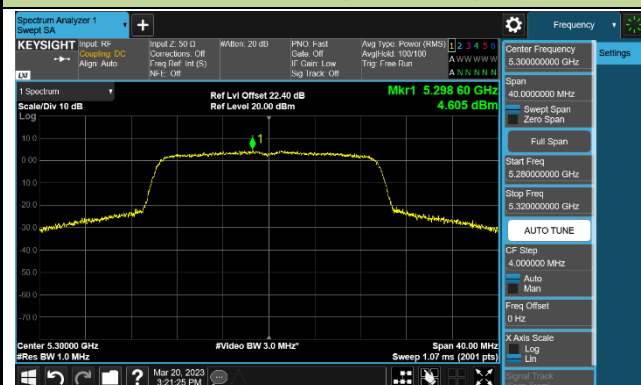
Channel 48 (5240MHz)



Channel 52 (5260MHz)



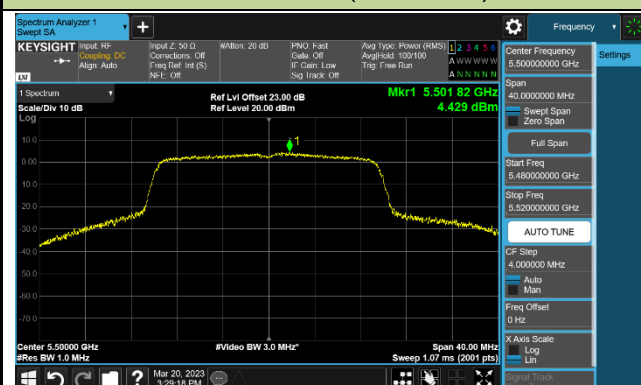
Channel 60 (5300MHz)



Channel 64 (5320MHz)

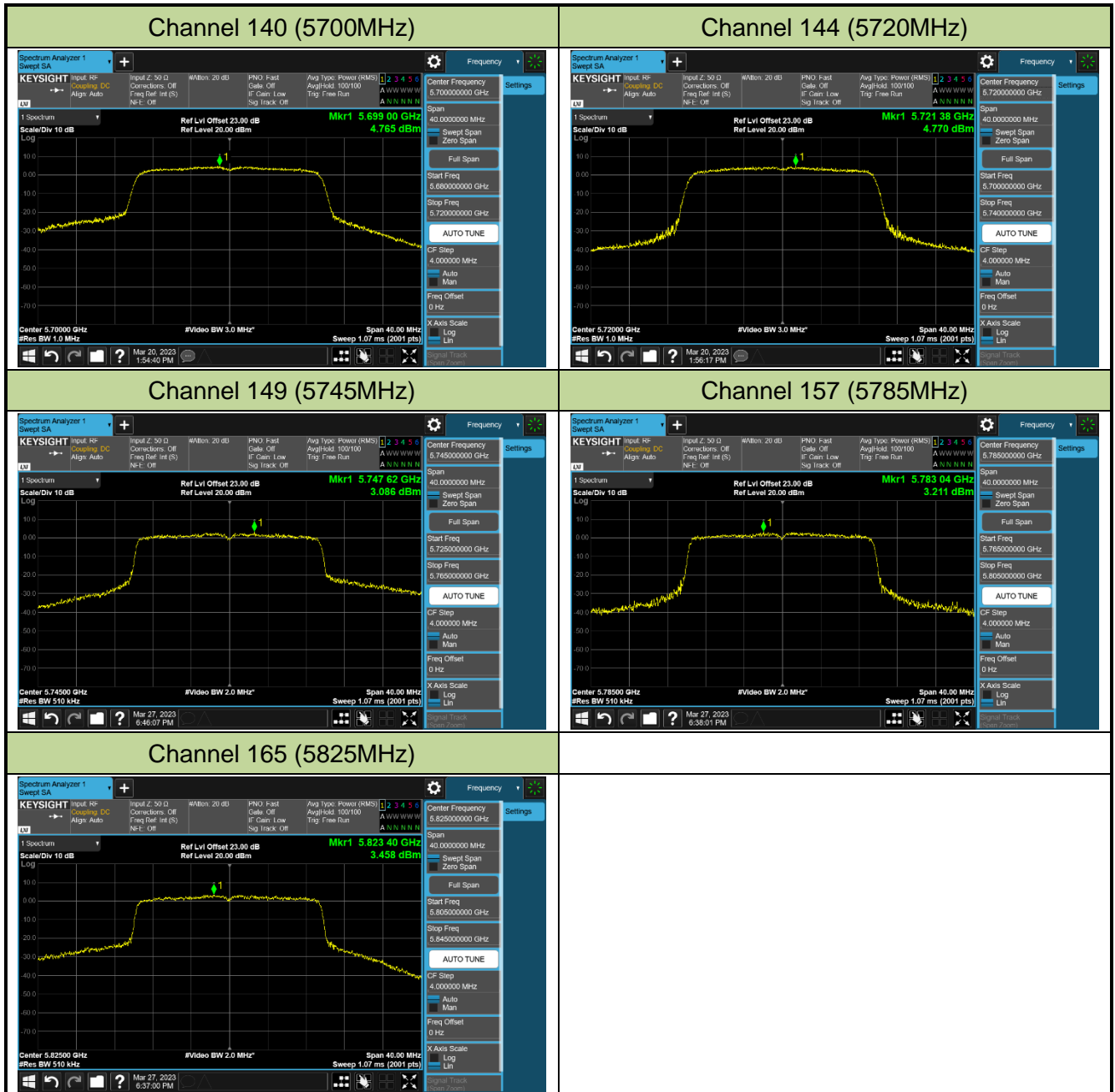


Channel 100 (5500MHz)



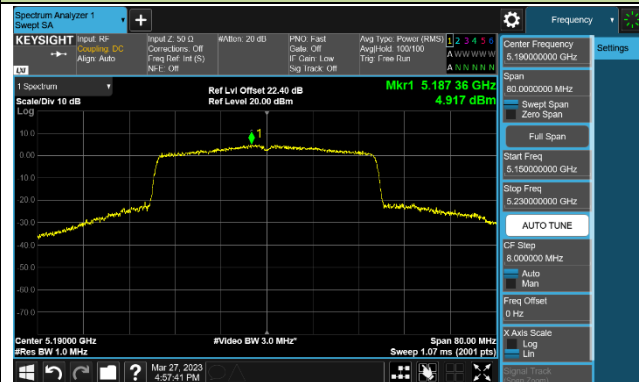
Channel 116 (5580MHz)



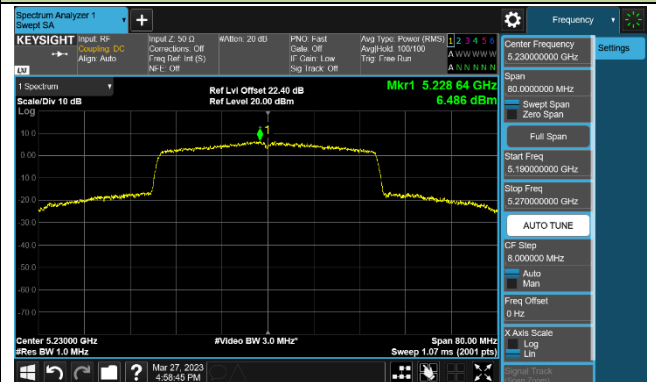


## 802.11ax-HE40 Power Spectral Density - Ant 0

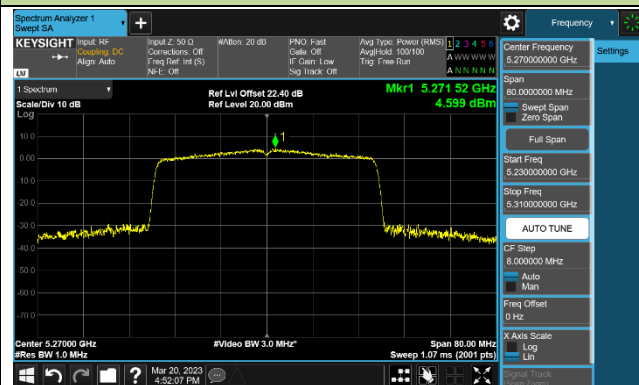
Channel 38 (5190MHz)



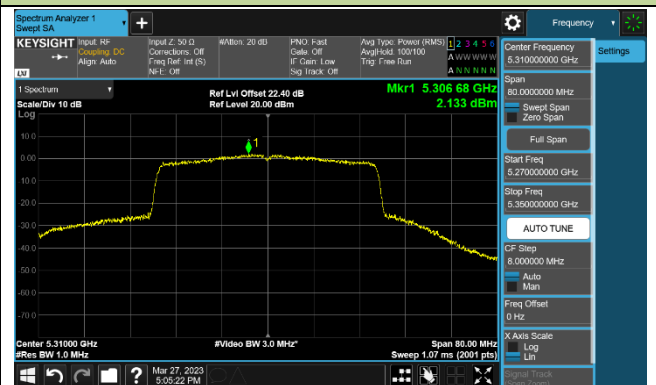
Channel 46 (5230MHz)



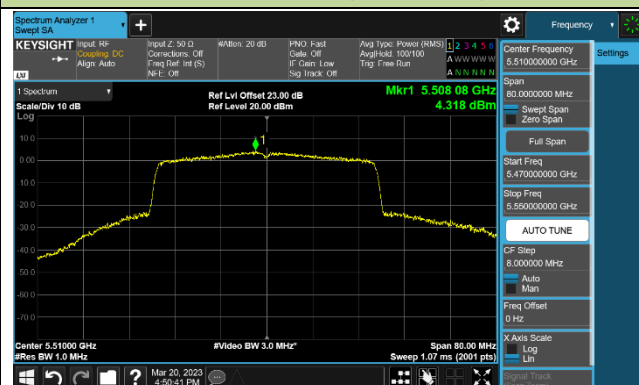
Channel 54 (5270MHz)



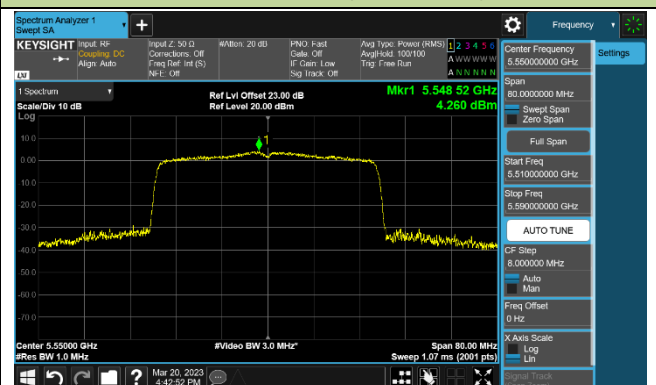
Channel 62 (5310MHz)



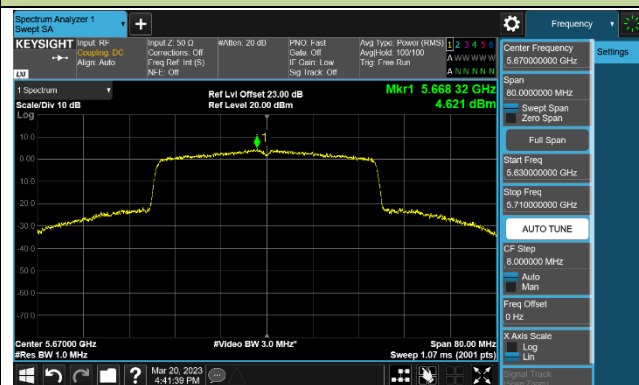
Channel 102 (5510MHz)



Channel 110 (5550MHz)



Channel 134 (5670MHz)



Channel 142 (5710MHz)

