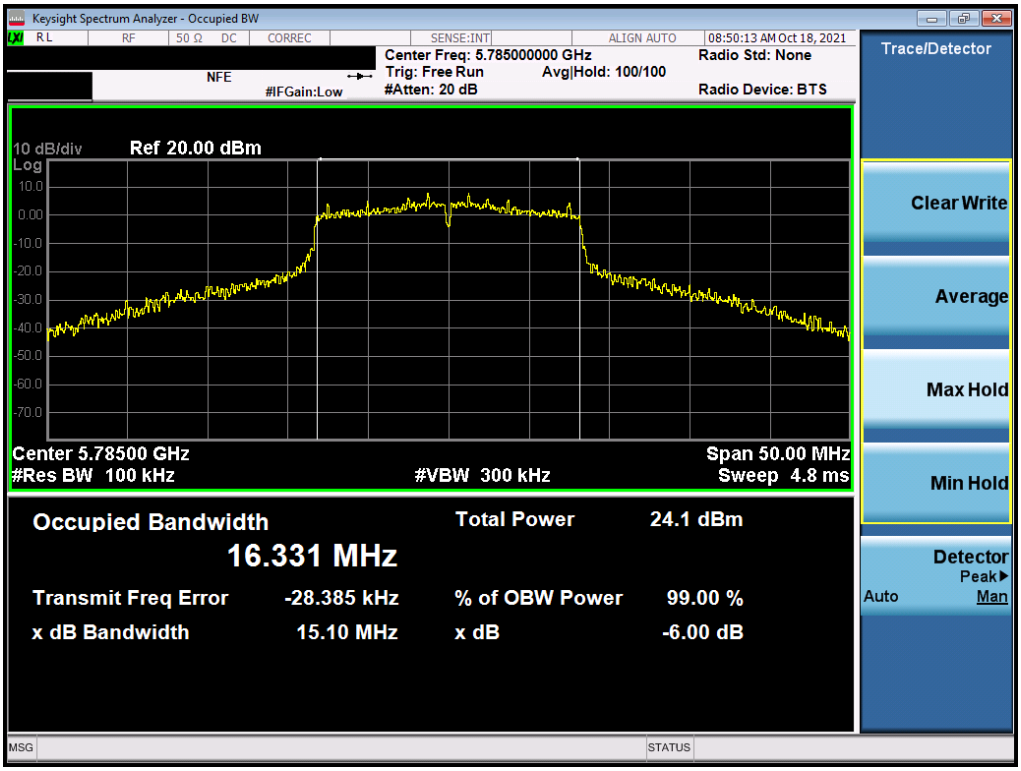
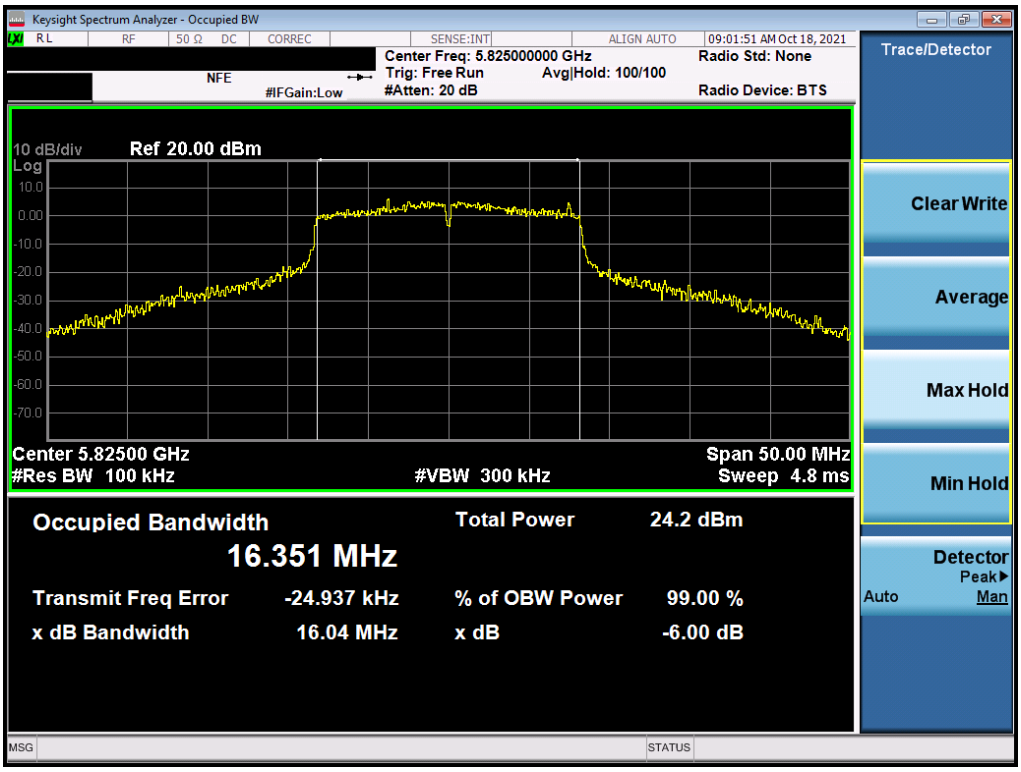
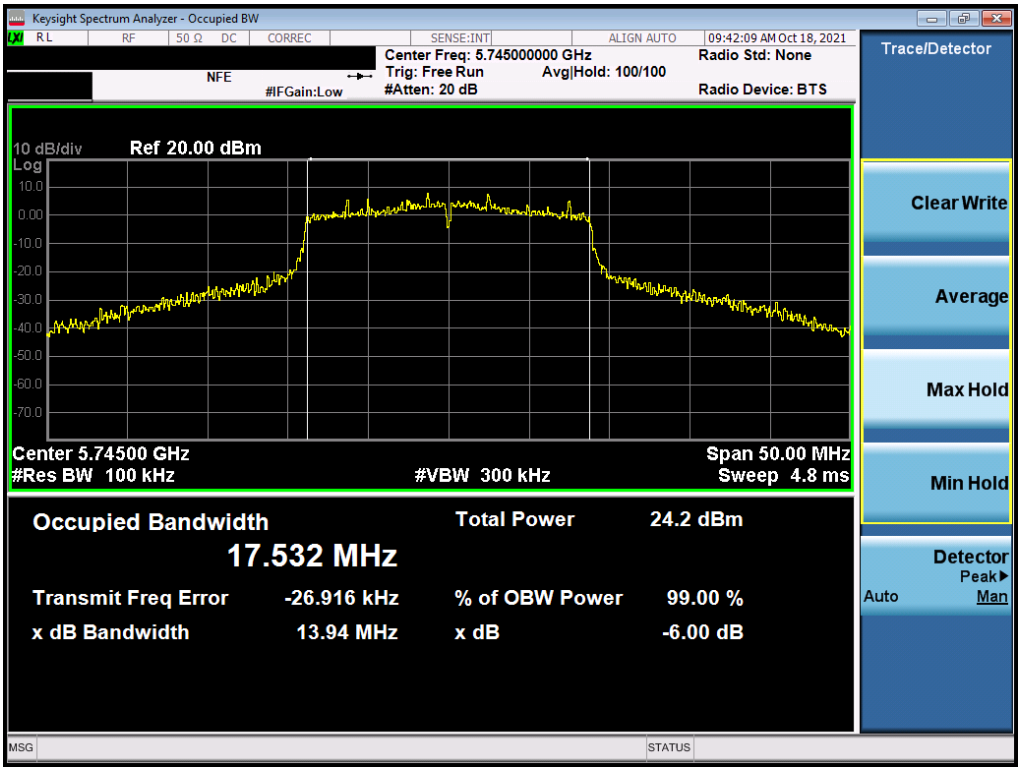


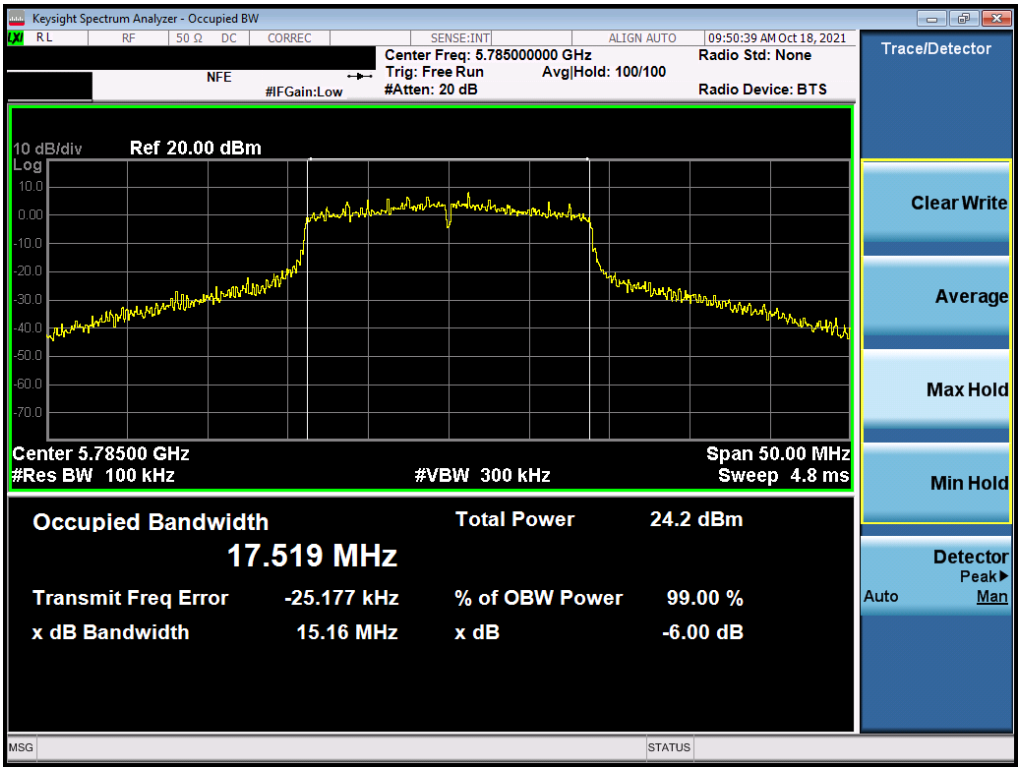

**Plot 7-104. 6dB Bandwidth Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 157)**



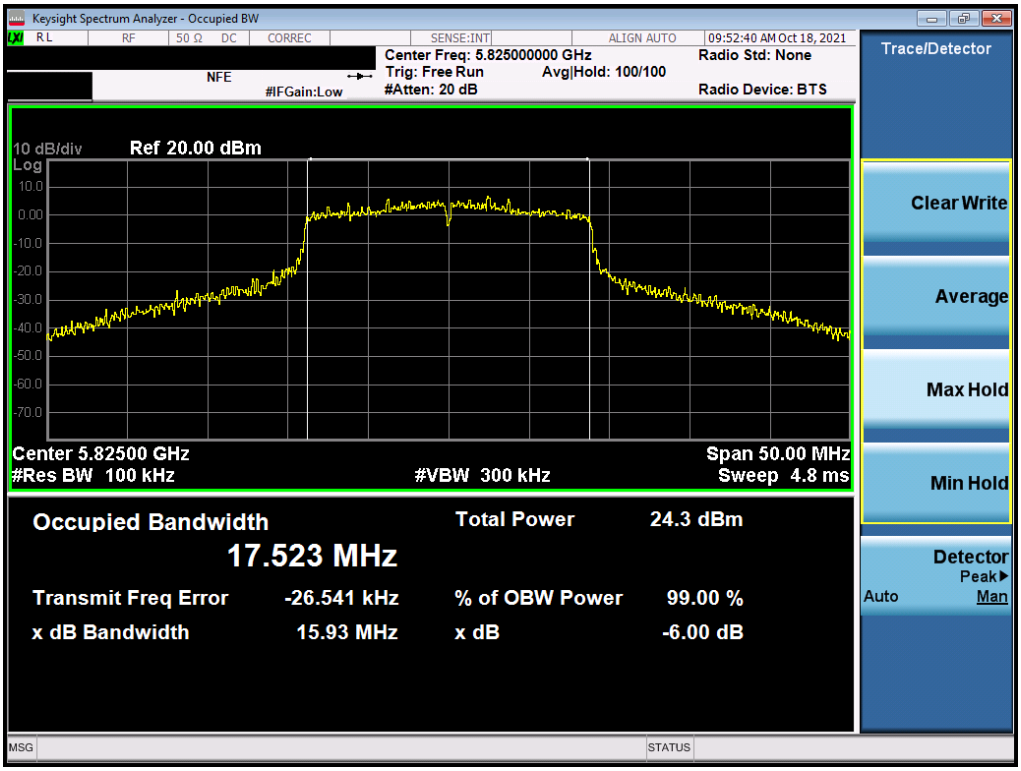

**Plot 7-105. 6dB Bandwidth Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 165)**



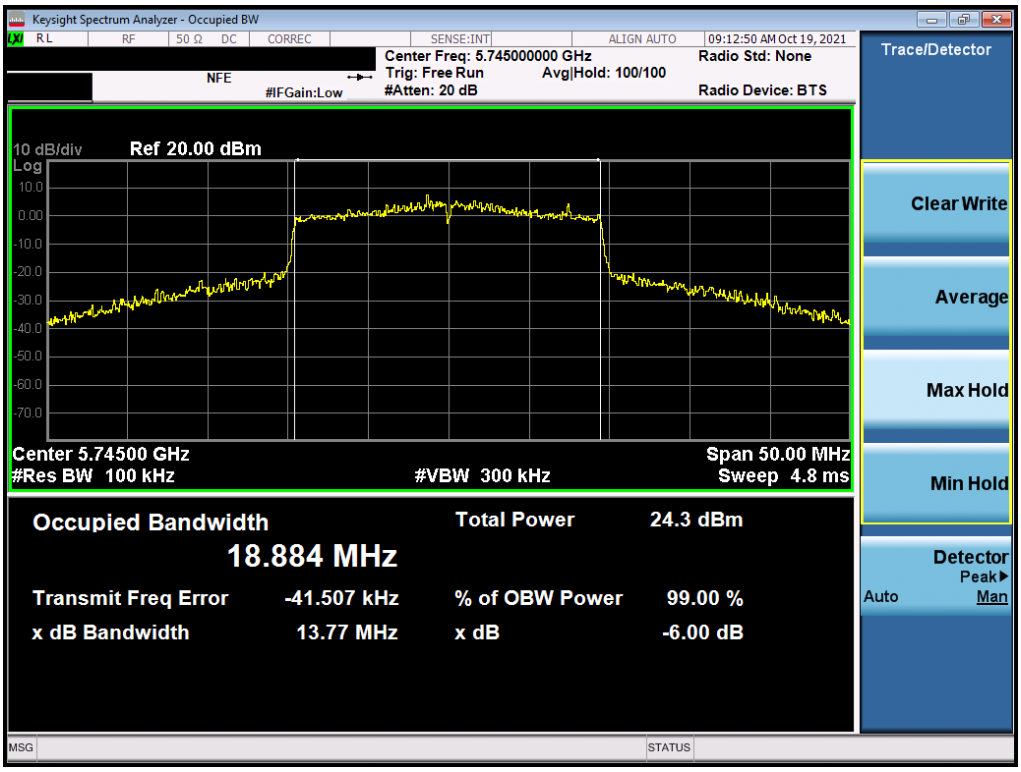

**Plot 7-106. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)**



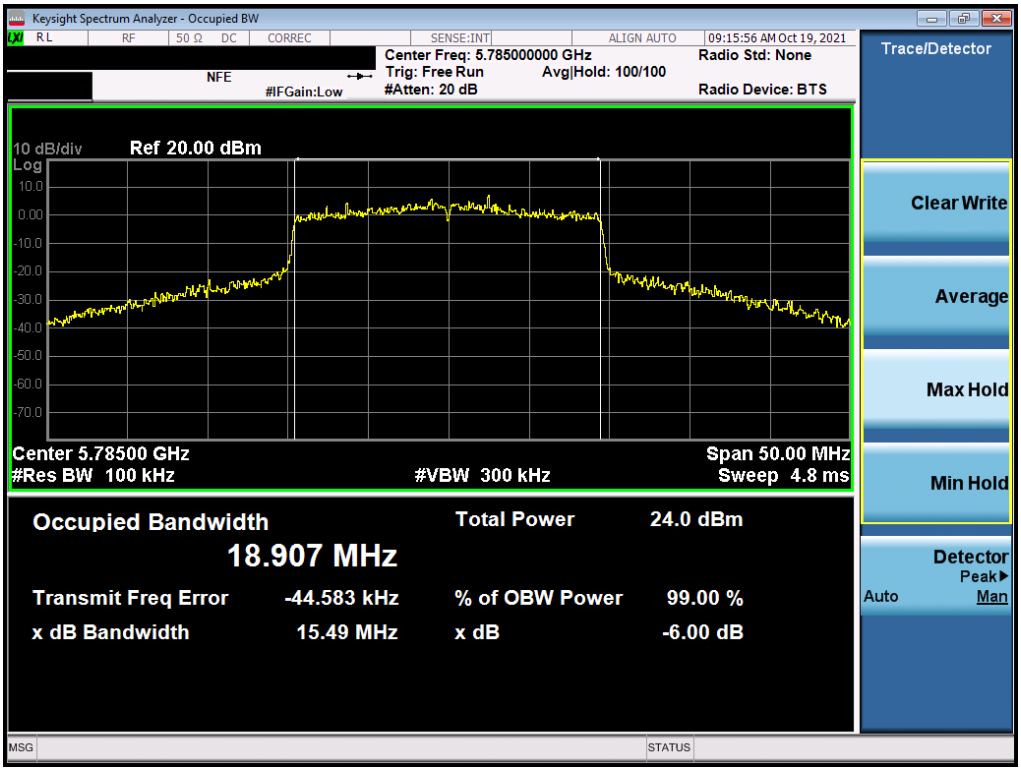

**Plot 7-107. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)**



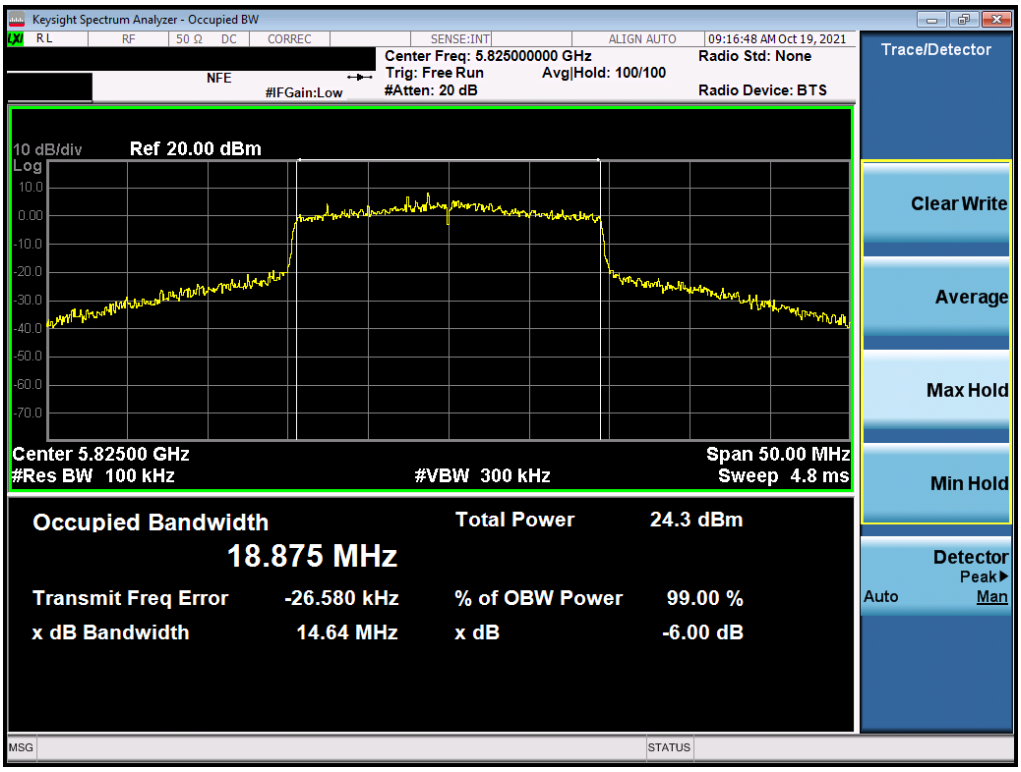

**Plot 7-108. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)**



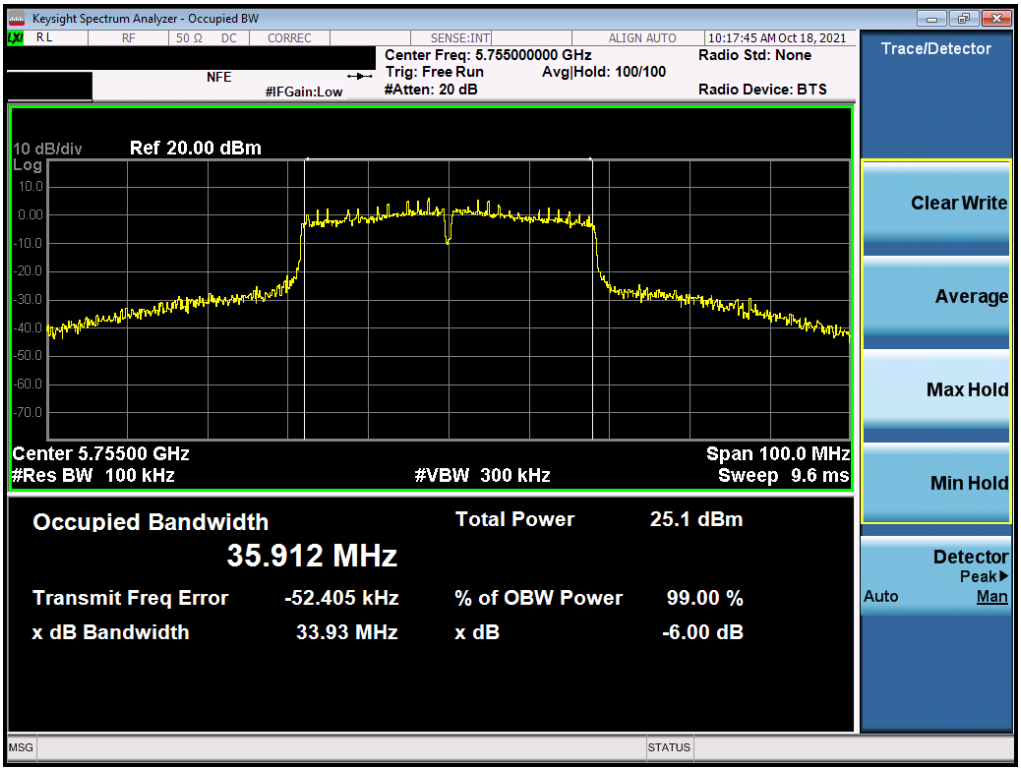

**Plot 7-109. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 3) – Ch. 149)**




**Plot 7-110. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 3) – Ch. 157)**




**Plot 7-111. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 3) – Ch. 165)**

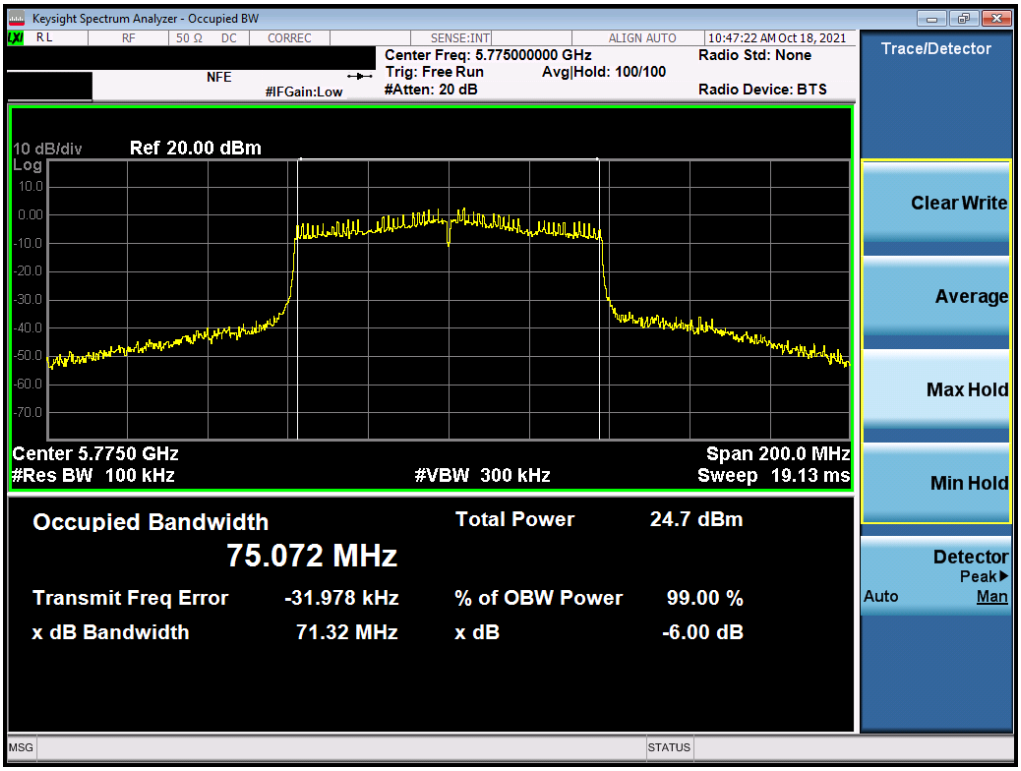



**Plot 7-112. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) – Ch. 151)**


**Plot 7-113. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) – Ch. 159)**


**Plot 7-114. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 3) – Ch. 151)**


**Plot 7-115. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 3) – Ch. 159)**

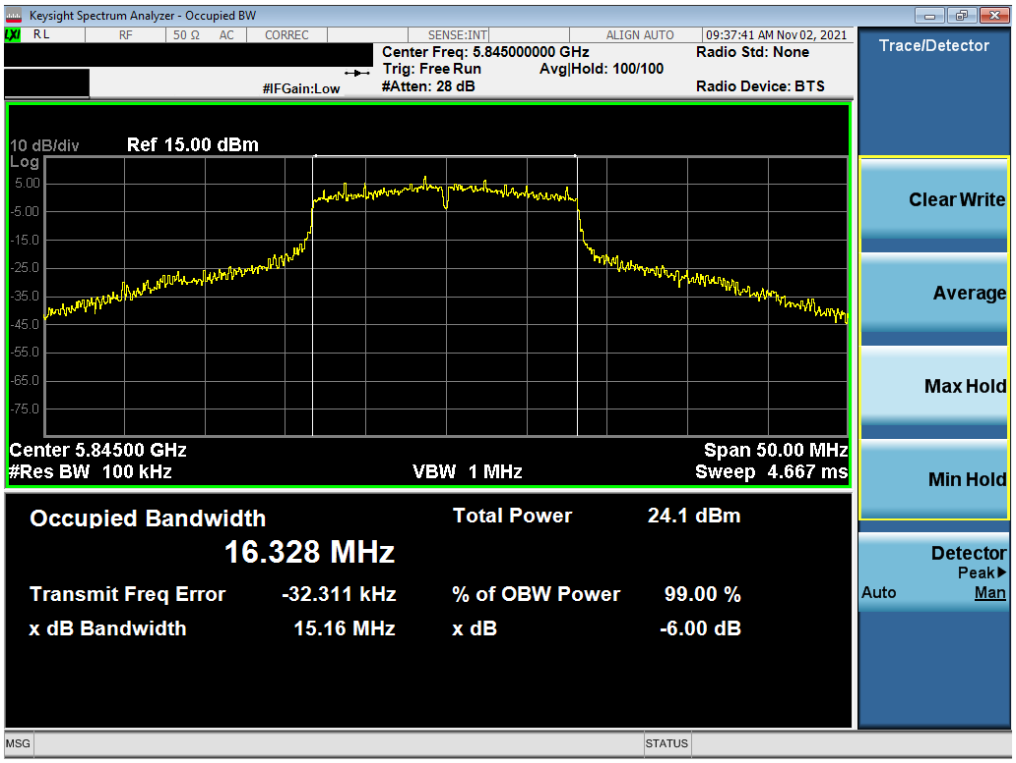



**Plot 7-116. 6dB Bandwidth Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 3) – Ch. 155)**

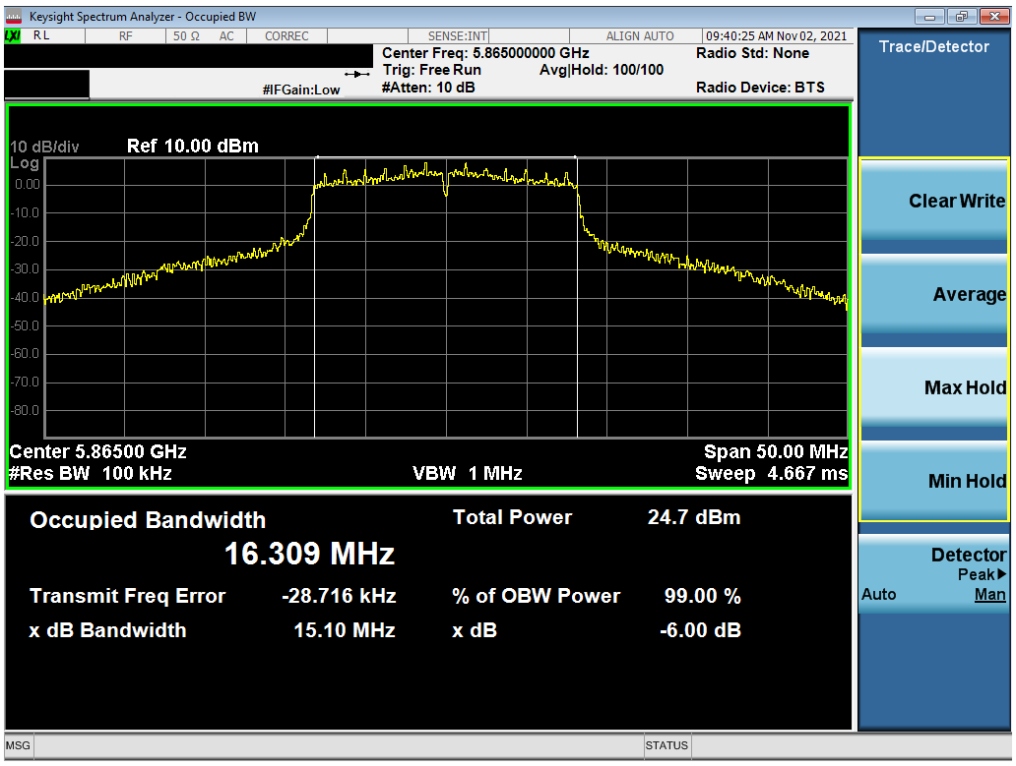

**Plot 7-117. 6dB Bandwidth Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 3) – Ch. 155)**

| | Frequency [MHz] | Channel No. | 802.11 Mode | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|---|---|---|---|---|---|
| Band 3/4 | 5845 | 169 | a | 6 | 15.16 |
| Band 4 | 5865 | 173 | a | 6 | 15.10 |
| | 5885 | 177 | a | 6 | 15.11 |
| Band 3/4 | 5845 | 169 | n (20MHz) | 6.5/7.2 (MCS0) | 15.17 |
| Band 4 | 5865 | 173 | n (20MHz) | 6.5/7.2 (MCS0) | 15.03 |
| | 5885 | 177 | n (20MHz) | 6.5/7.2 (MCS0) | 15.17 |
| Band 3/4 | 5845 | 169 | ax (20MHz) | 6.5/7.2 (MCS0) | 15.13 |
| Band 4 | 5865 | 173 | ax (20MHz) | 6.5/7.2 (MCS0) | 15.15 |
| | 5885 | 177 | ax (20MHz) | 6.5/7.2 (MCS0) | 15.45 |
| Band 3/4 | 5835 | 167 | n (40MHz) | 13.5/15 (MCS0) | 35.10 |
| Band 4 | 5875 | 175 | n (40MHz) | 13.5/15 (MCS0) | 35.18 |
| Band 3/4 | 5835 | 167 | ax (40MHz) | 13.5/15 (MCS0) | 35.22 |
| Band 4 | 5875 | 175 | ax (40MHz) | 13.5/15 (MCS0) | 35.17 |
| Band 3/4 | 5855 | 171 | ax (80MHz) | 29.3/32.5 (MCS0) | 72.45 |

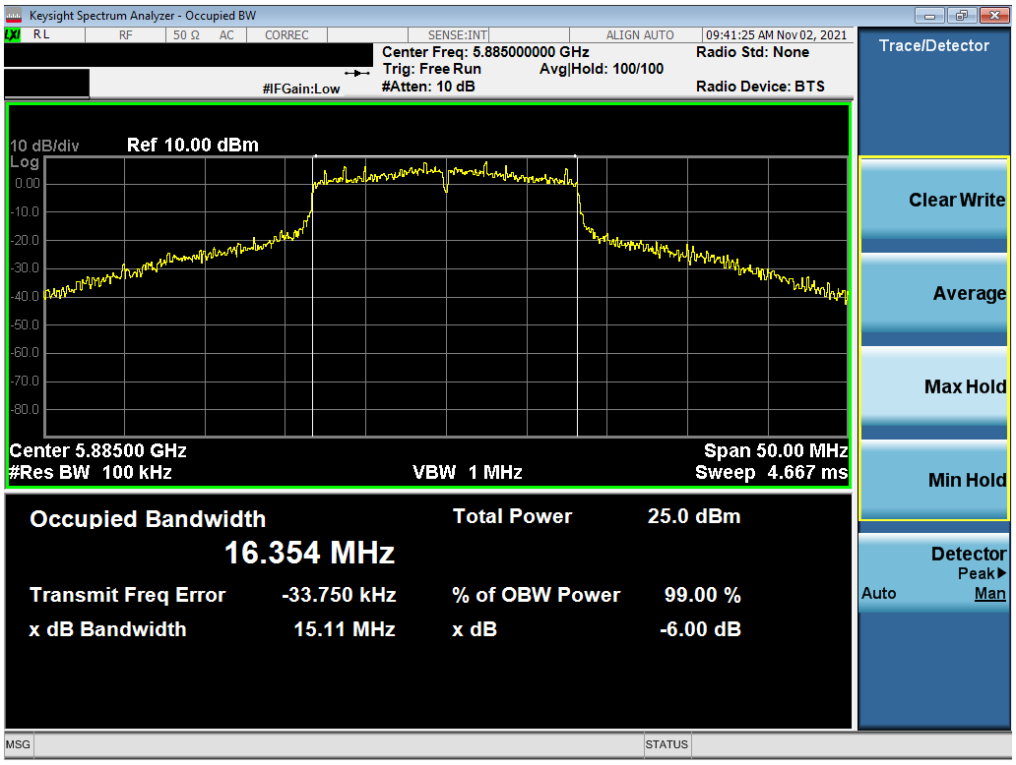
**Table 7-5. Conducted Bandwidth Measurements UNII 4 SISO ANT1**



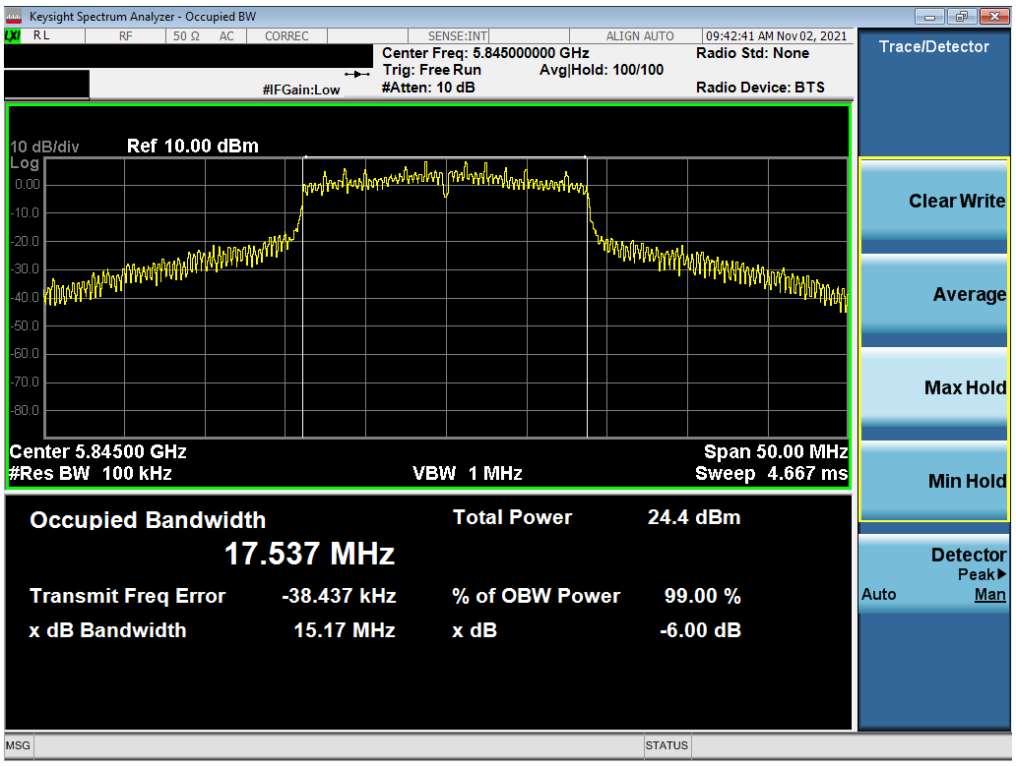

**Plot 7-118. 6dB Bandwidth Plot SISO ANT1 (802.11a (UNII Band 3/4) – Ch. 169)**



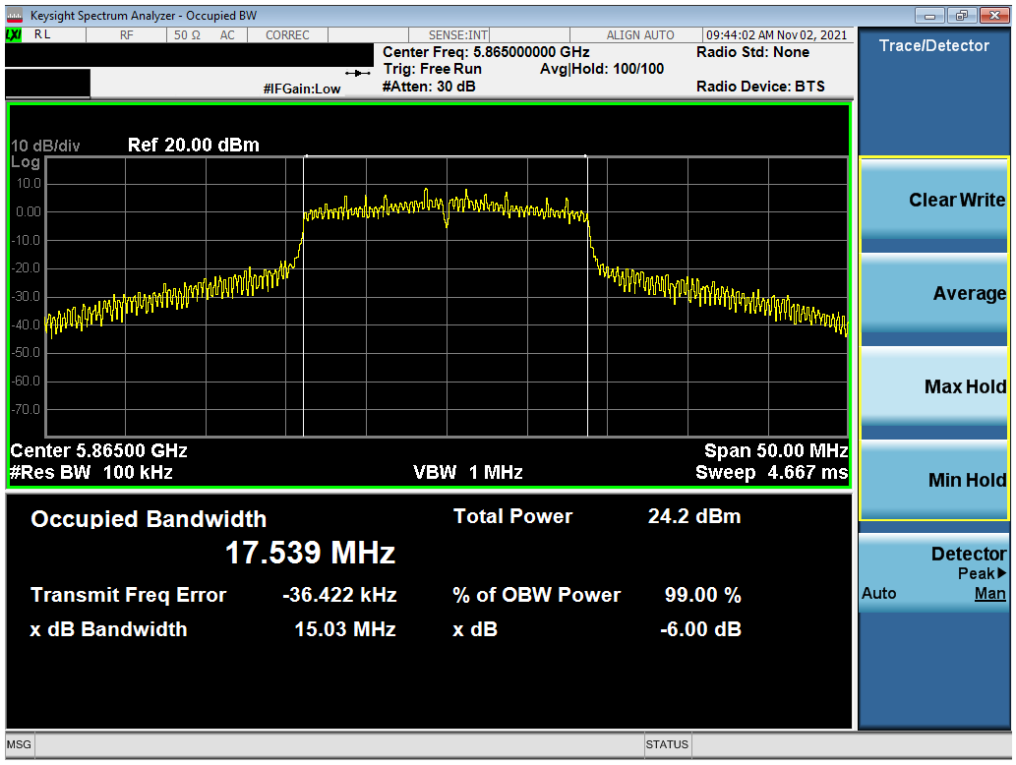

**Plot 7-119. 6dB Bandwidth Plot SISO ANT1 (802.11a (UNII Band 4) – Ch. 173)**



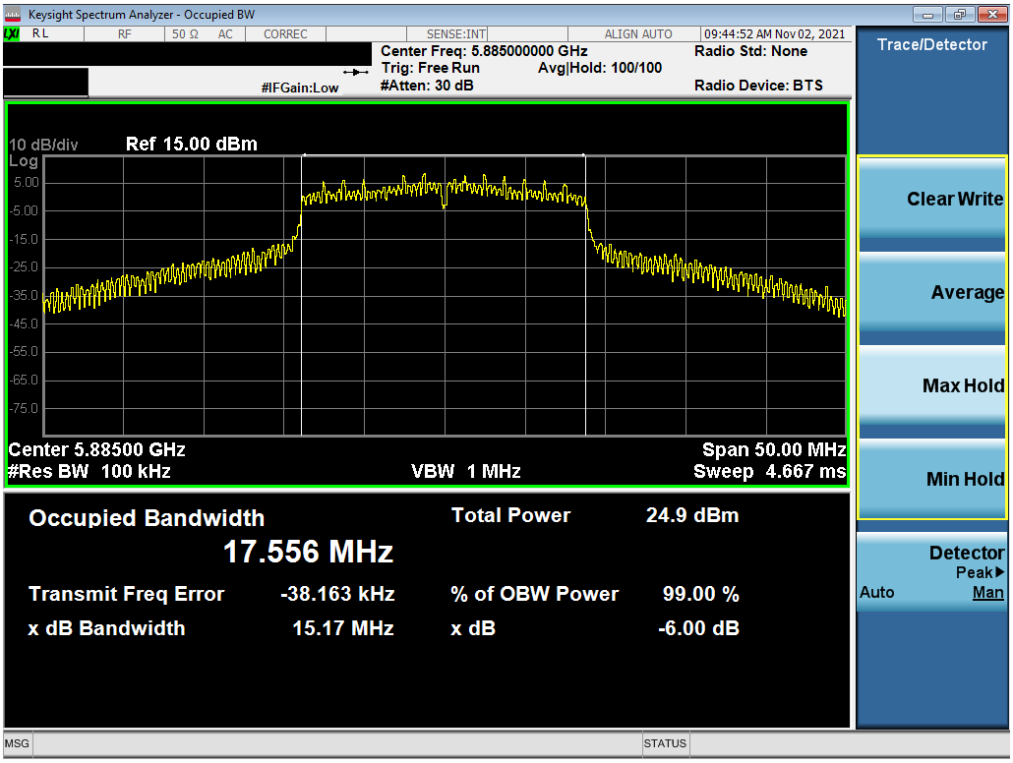

**Plot 7-120. 6dB Bandwidth Plot SISO ANT1 (802.11a (UNII Band 4) – Ch. 177)**



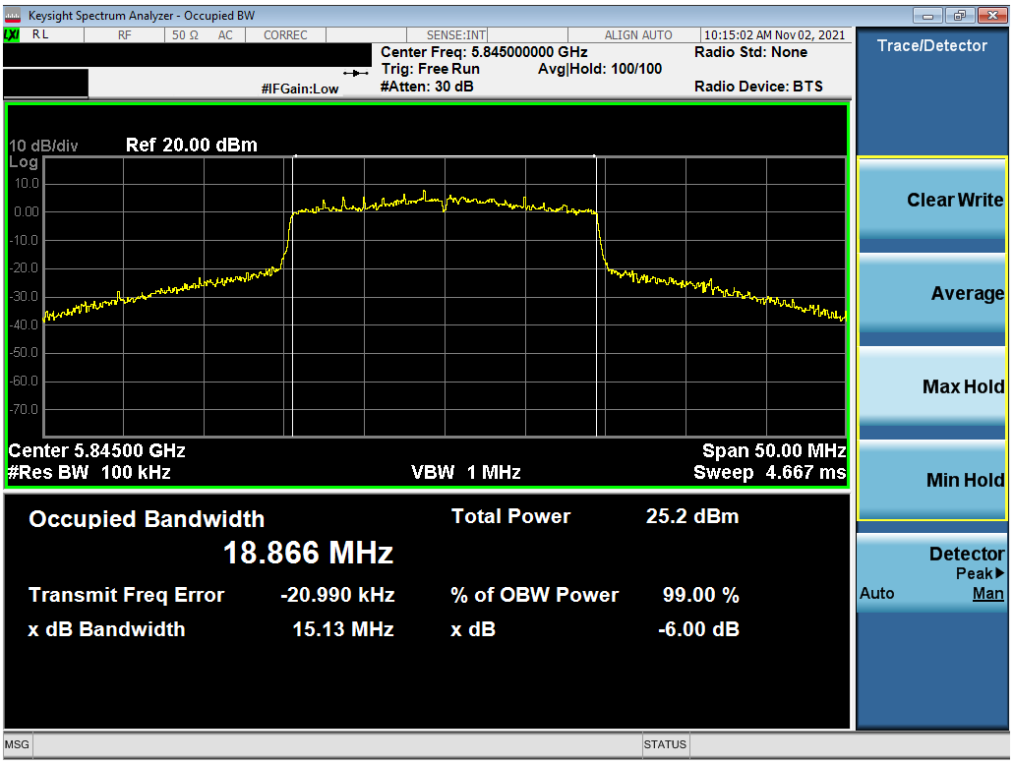

**Plot 7-121. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3/4) – Ch. 169)**



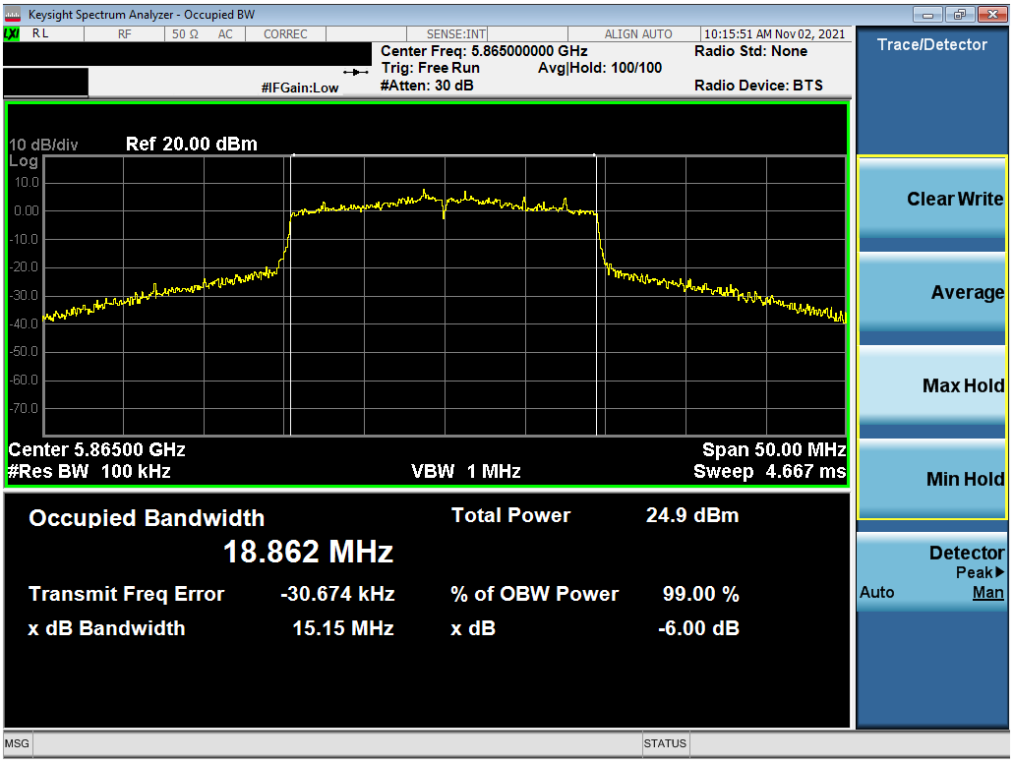

**Plot 7-122. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 4) – Ch. 173)**



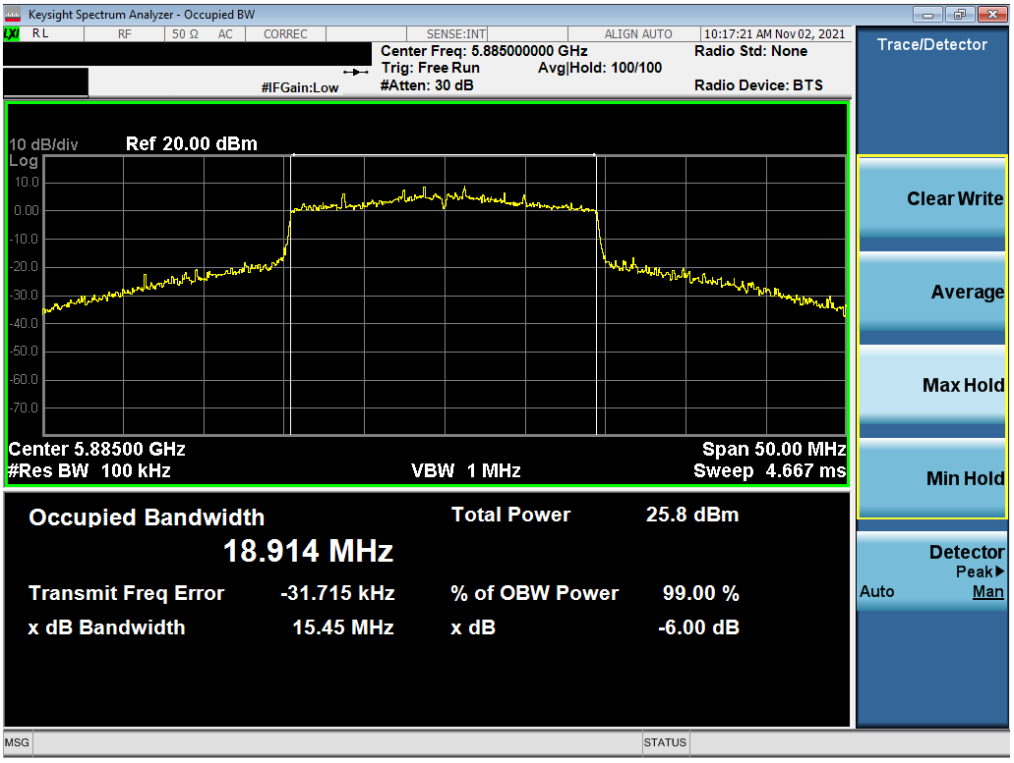

**Plot 7-123. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 4) – Ch. 177)**



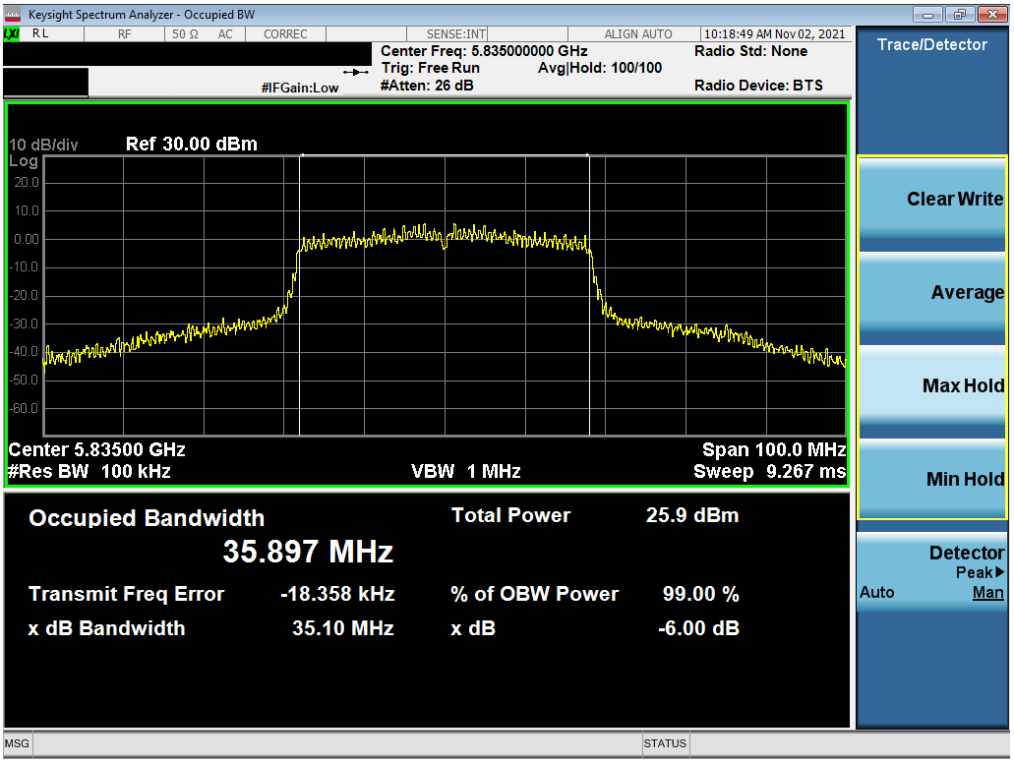

**Plot 7-124. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 3/4) – Ch. 169)**



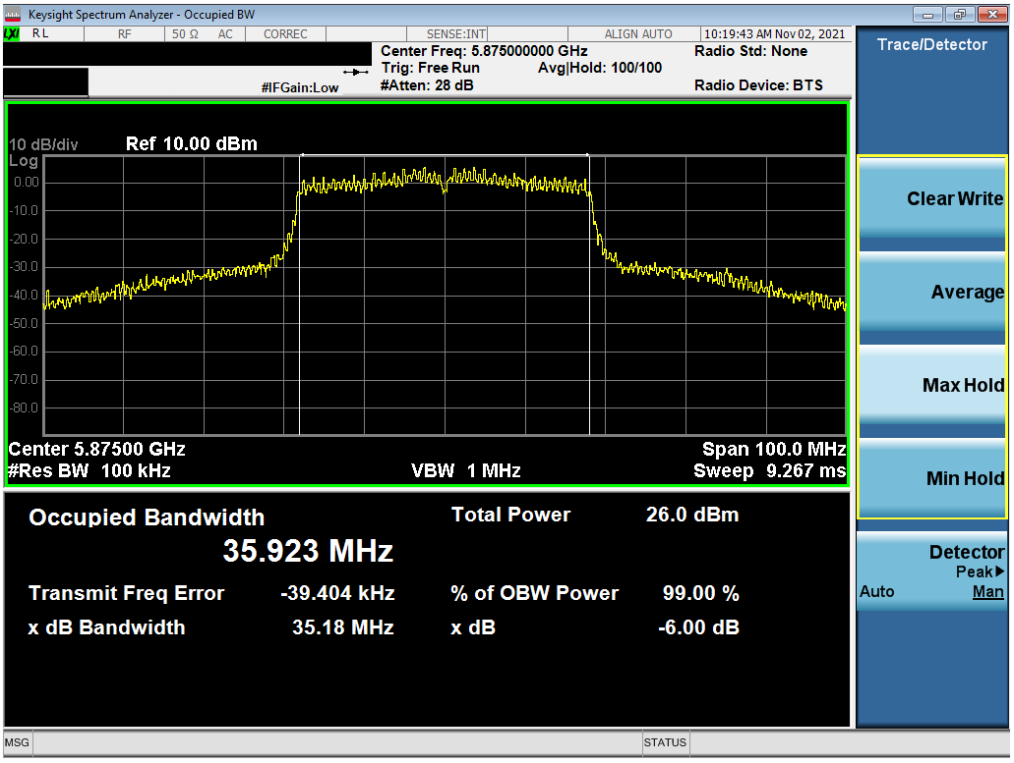

**Plot 7-125. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 4) – Ch. 173)**



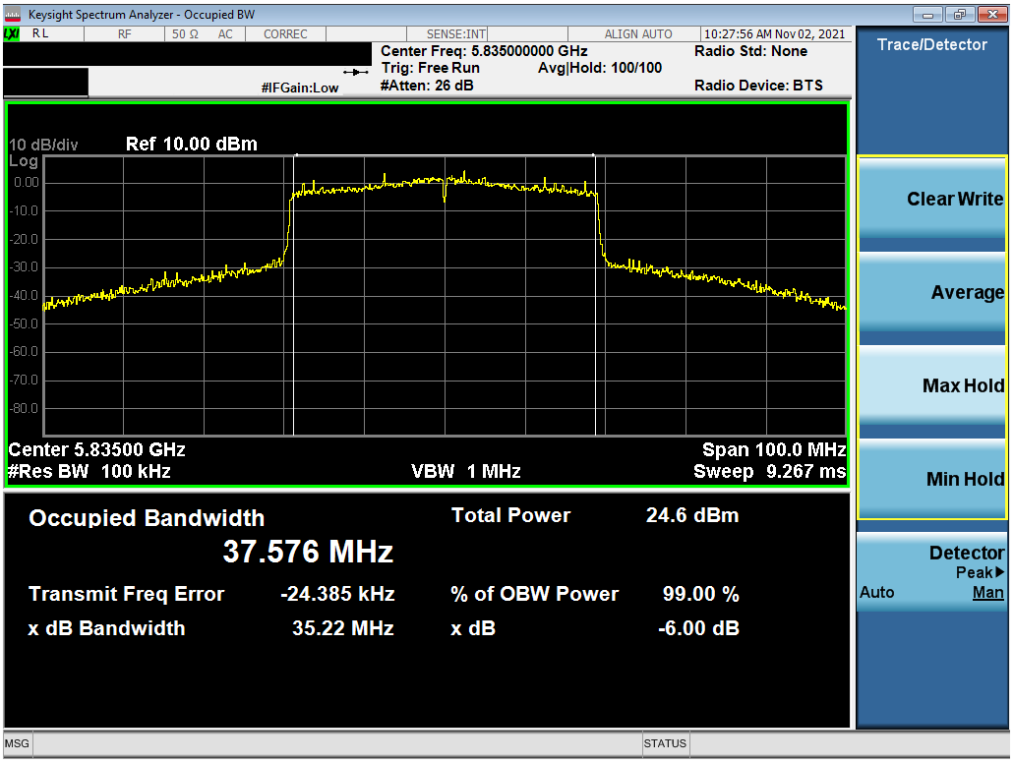

**Plot 7-126. 6dB Bandwidth Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 4) – Ch. 177)**



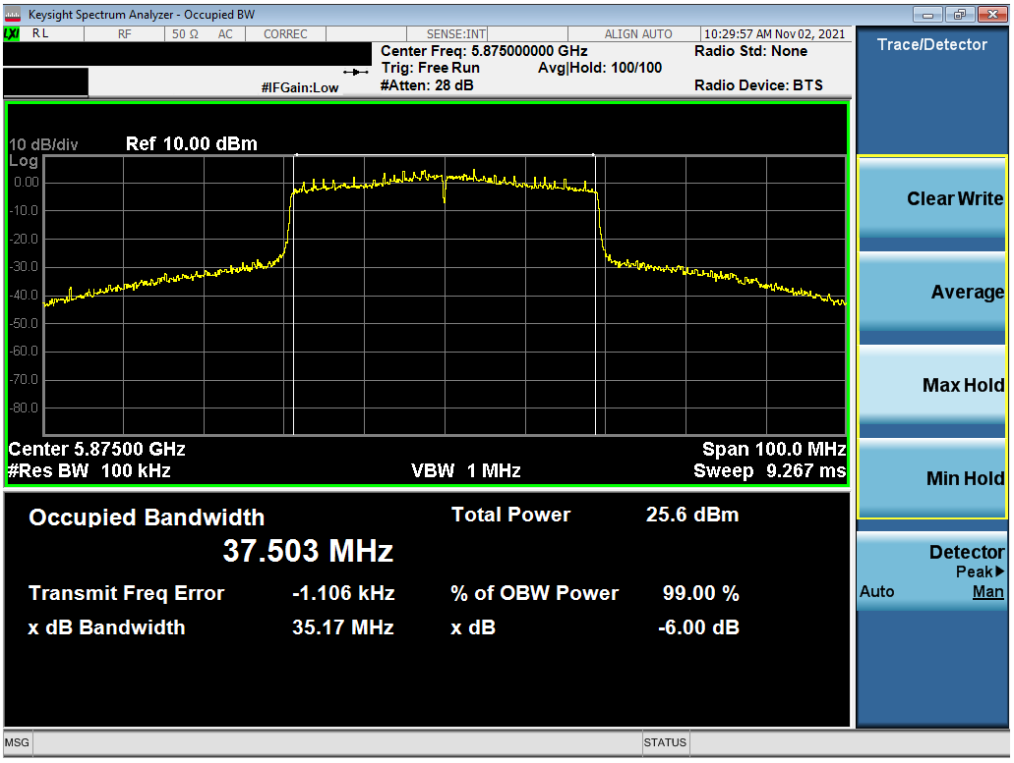

**Plot 7-127. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3/4) – Ch. 167)**



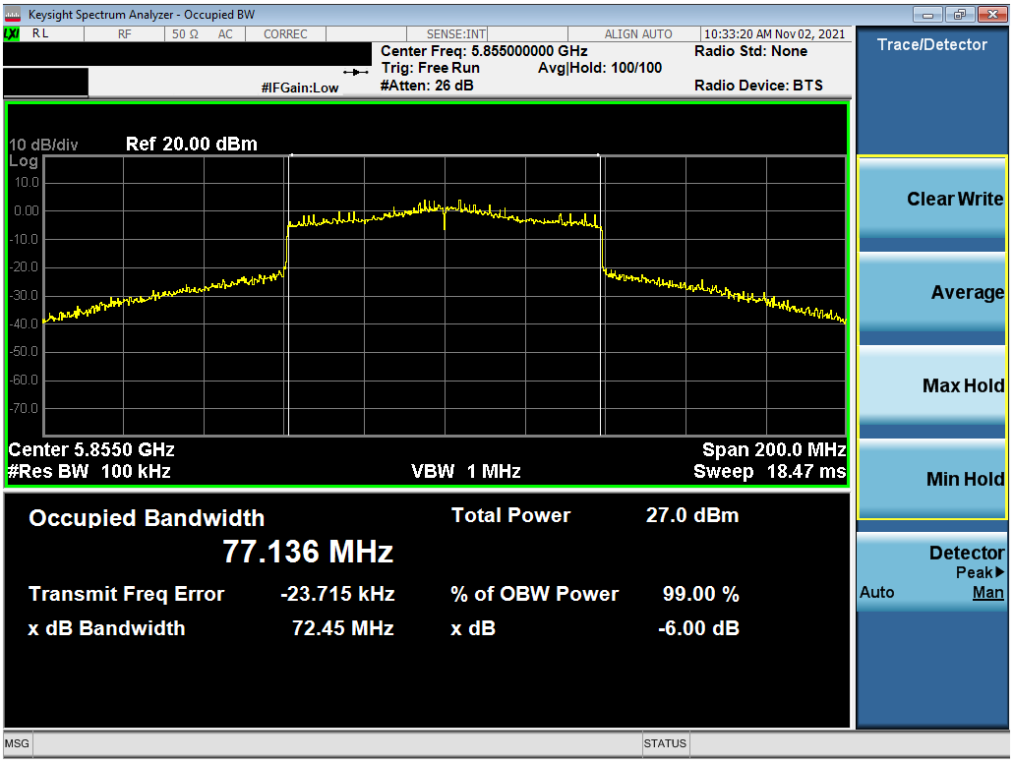

**Plot 7-128. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 4) – Ch. 175)**




**Plot 7-129. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 3/4) – Ch. 167)**




**Plot 7-130. 6dB Bandwidth Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 4) – Ch. 175)**

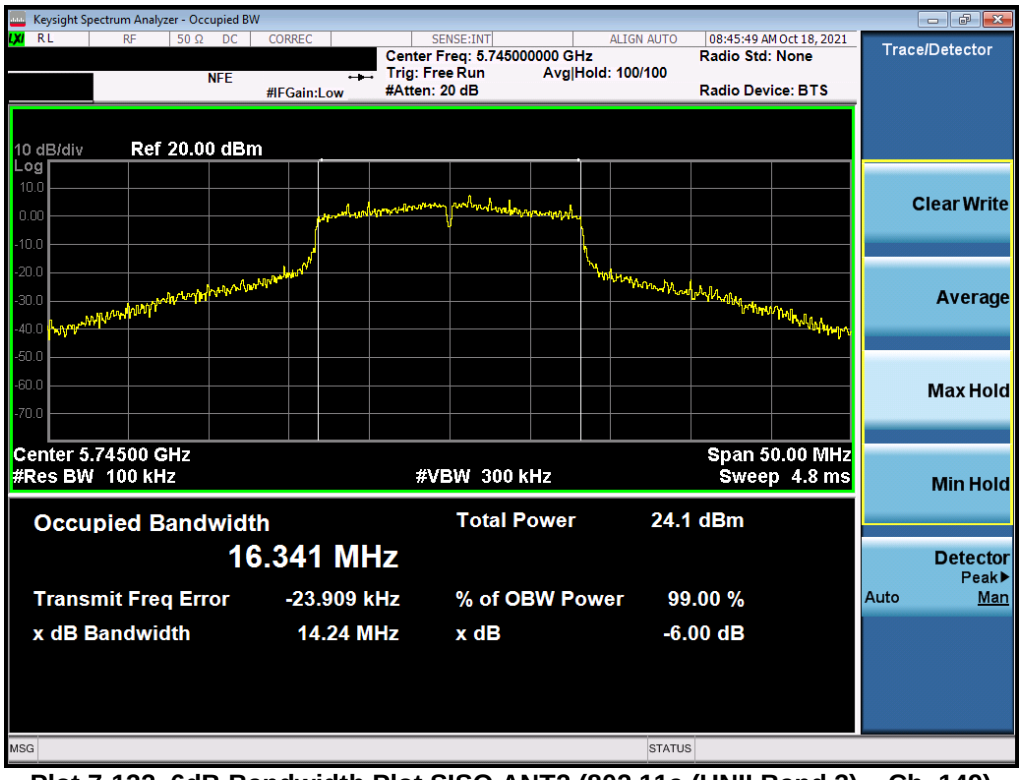



**Plot 7-131. 6dB Bandwidth Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 3/4) – Ch. 171)**

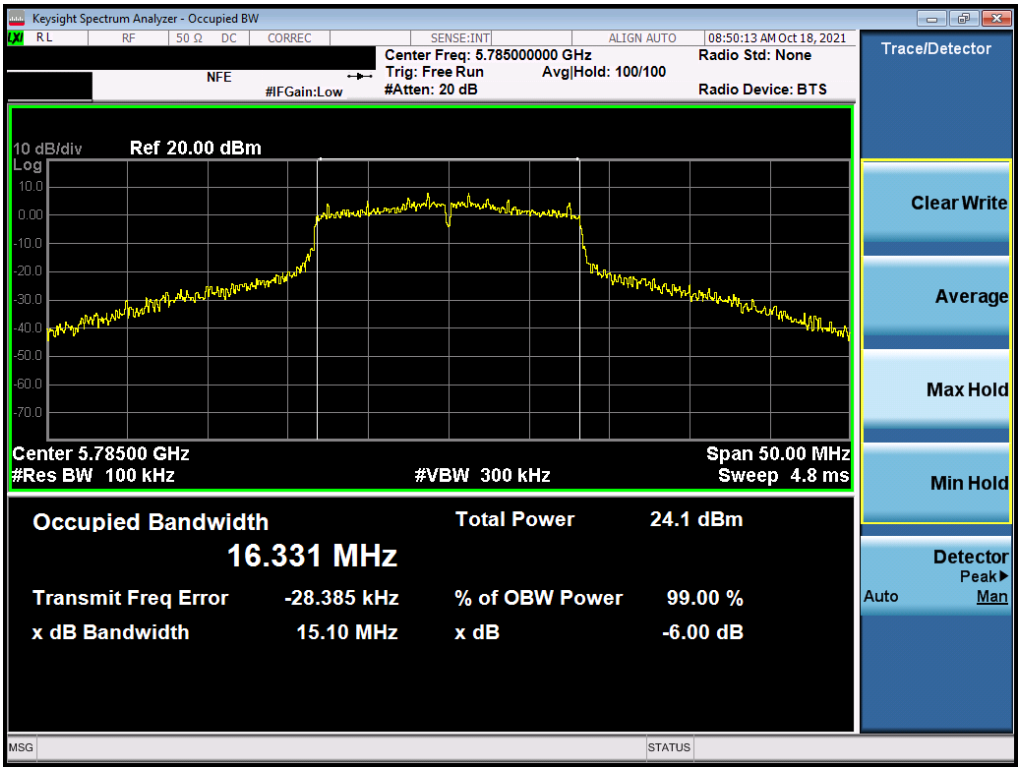
## SISO Antenna-2 6dB Bandwidth Measurements

| | Frequency [MHz] | Channel No. | 802.11 Mode | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|---|---|---|---|---|---|
| Band 3 | 5745 | 149 | a | 6 | 14.24 |
| | 5785 | 157 | a | 6 | 15.10 |
| | 5825 | 165 | a | 6 | 16.04 |
| | 5745 | 149 | n (20MHz) | 6.5/7.2 (MCS0) | 13.94 |
| | 5785 | 157 | n (20MHz) | 6.5/7.2 (MCS0) | 15.16 |
| | 5825 | 165 | n (20MHz) | 6.5/7.2 (MCS0) | 15.93 |
| | 5745 | 149 | ax (20MHz) | 6.5/7.2 (MCS0) | 13.77 |
| | 5785 | 157 | ax (20MHz) | 6.5/7.2 (MCS0) | 15.49 |
| | 5825 | 165 | ax (20MHz) | 6.5/7.2 (MCS0) | 14.64 |
| | 5755 | 151 | n (40MHz) | 13.5/15 (MCS0) | 33.93 |
| | 5795 | 159 | n (40MHz) | 13.5/15 (MCS0) | 35.06 |
| | 5755 | 151 | ax (40MHz) | 13.5/15 (MCS0) | 23.10 |
| | 5795 | 159 | ax (40MHz) | 13.5/15 (MCS0) | 30.34 |
| | 5775 | 155 | ac (80MHz) | 29.3/32.5 (MCS0) | 71.32 |
| | 5775 | 155 | ax (80MHz) | 29.3/32.5 (MCS0) | 70.07 |

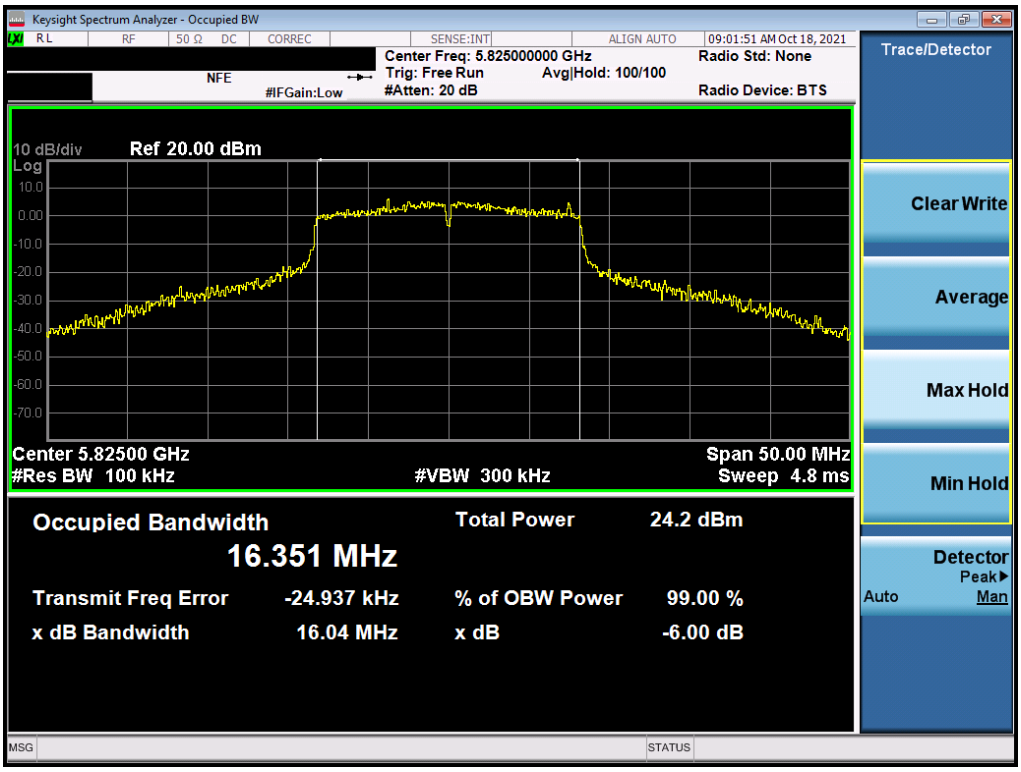
**Table 7-6. Conducted Bandwidth Measurements UNII 3 SISO ANT2**



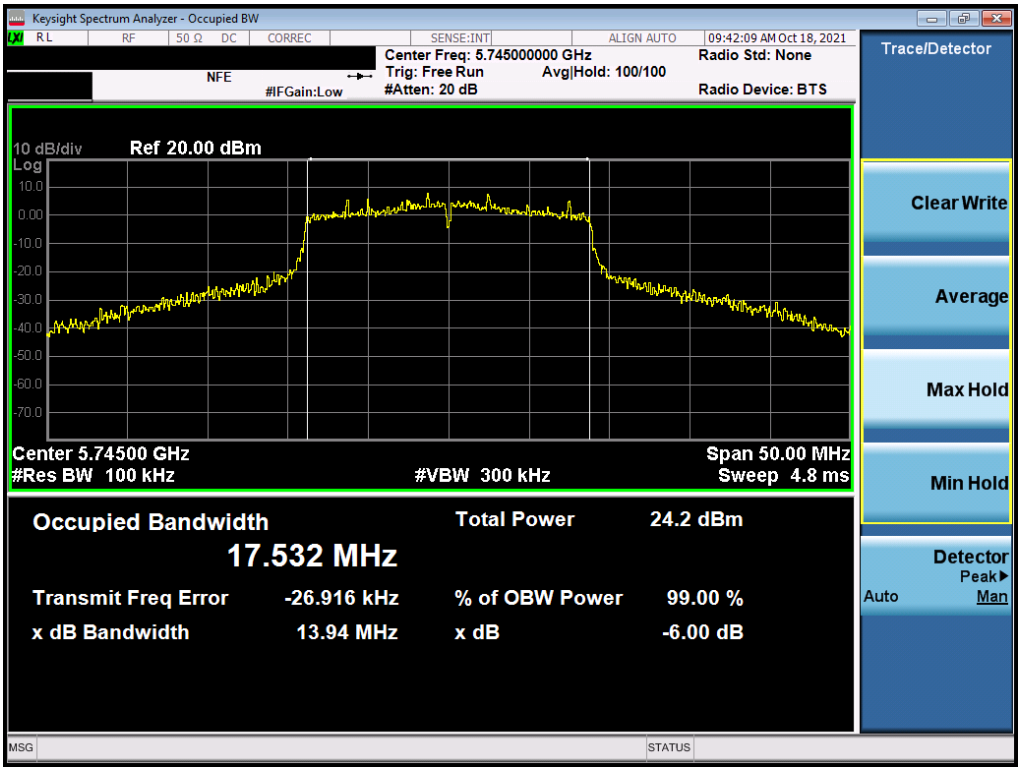

**Plot 7-132. 6dB Bandwidth Plot SISO ANT2 (802.11a (UNII Band 3) – Ch. 149)**



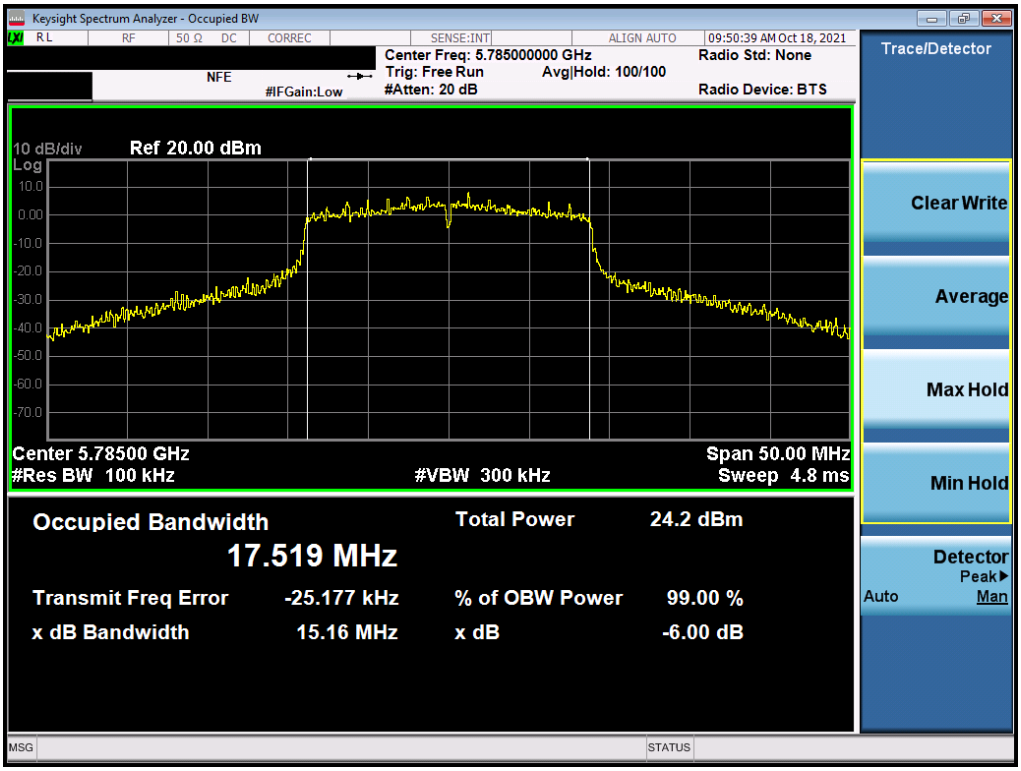

**Plot 7-133. 6dB Bandwidth Plot SISO ANT2 (802.11a (UNII Band 3) – Ch. 157)**



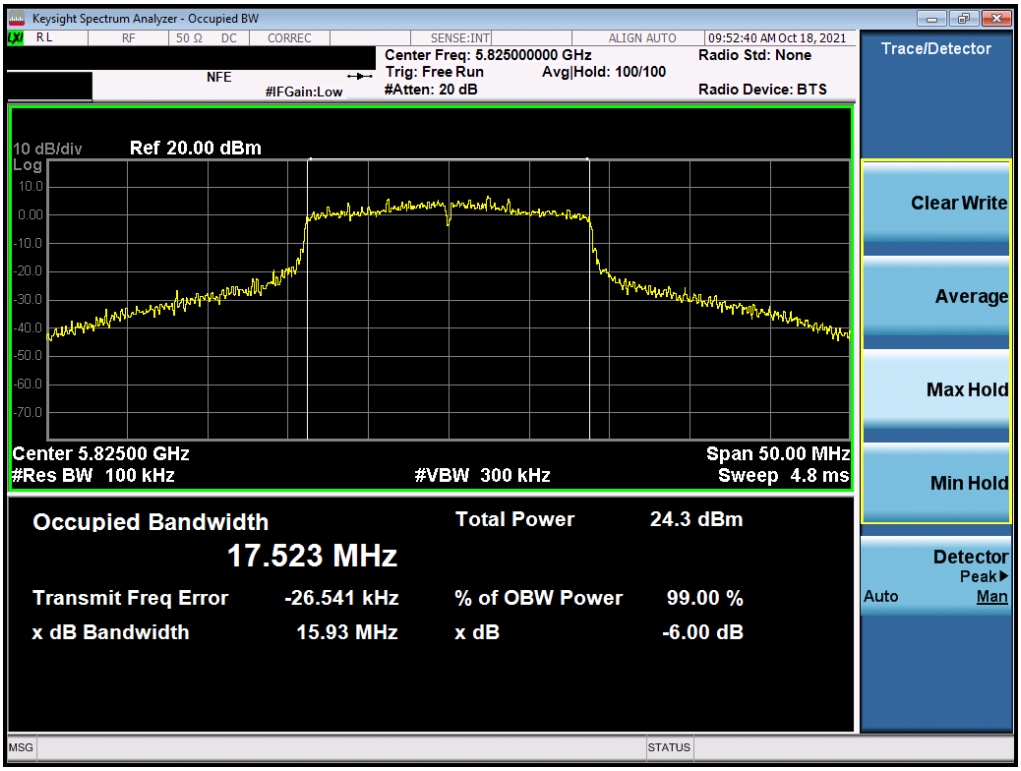

**Plot 7-134. 6dB Bandwidth Plot SISO ANT2 (802.11a (UNII Band 3) – Ch. 165)**



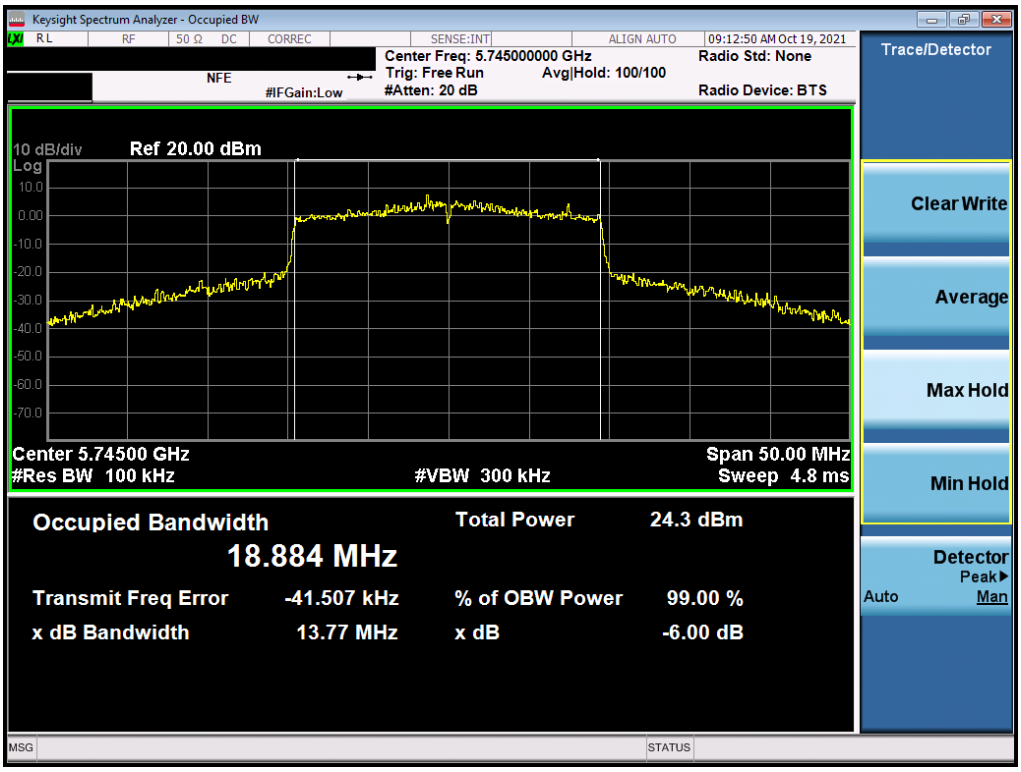

**Plot 7-135. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)**



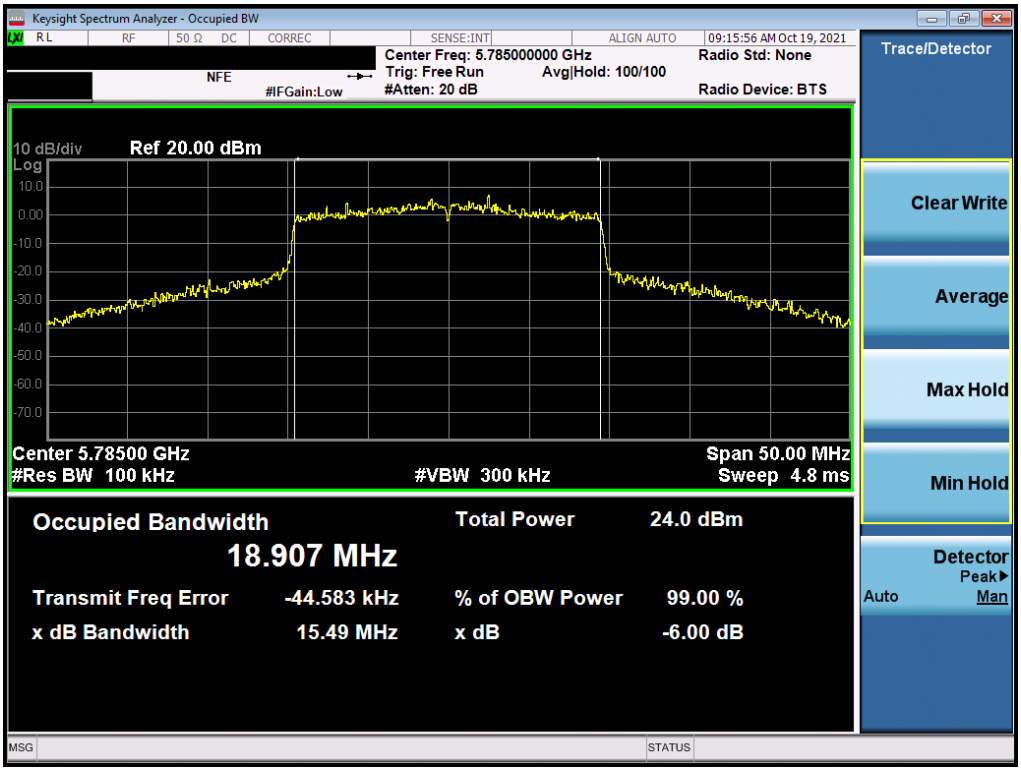

**Plot 7-136. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)**



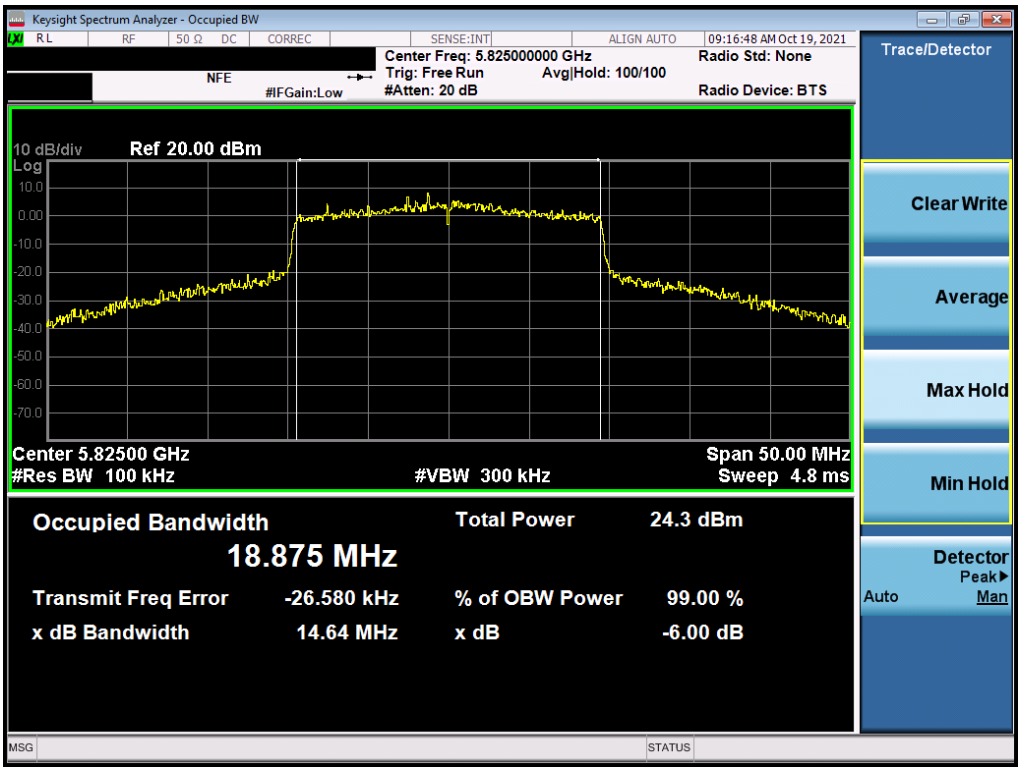

**Plot 7-137. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)**



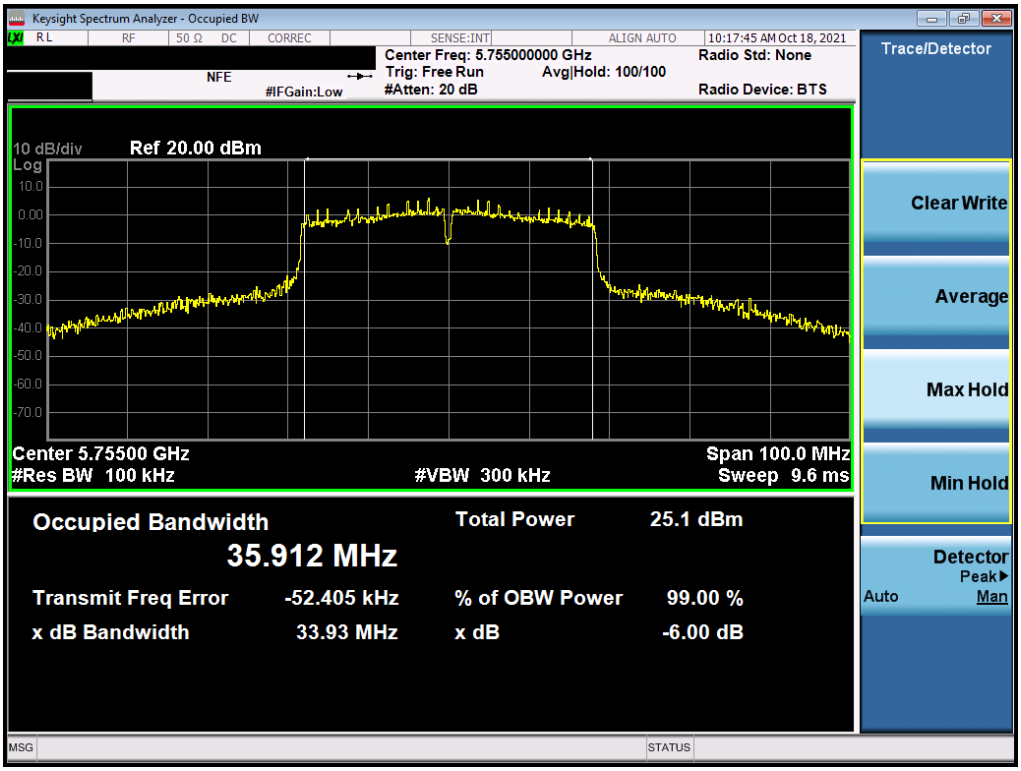

**Plot 7-138. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax (UNII Band 3) – Ch. 149)**




**Plot 7-139. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax (UNII Band 3) – Ch. 157)**




**Plot 7-140. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax (UNII Band 3) – Ch. 165)**

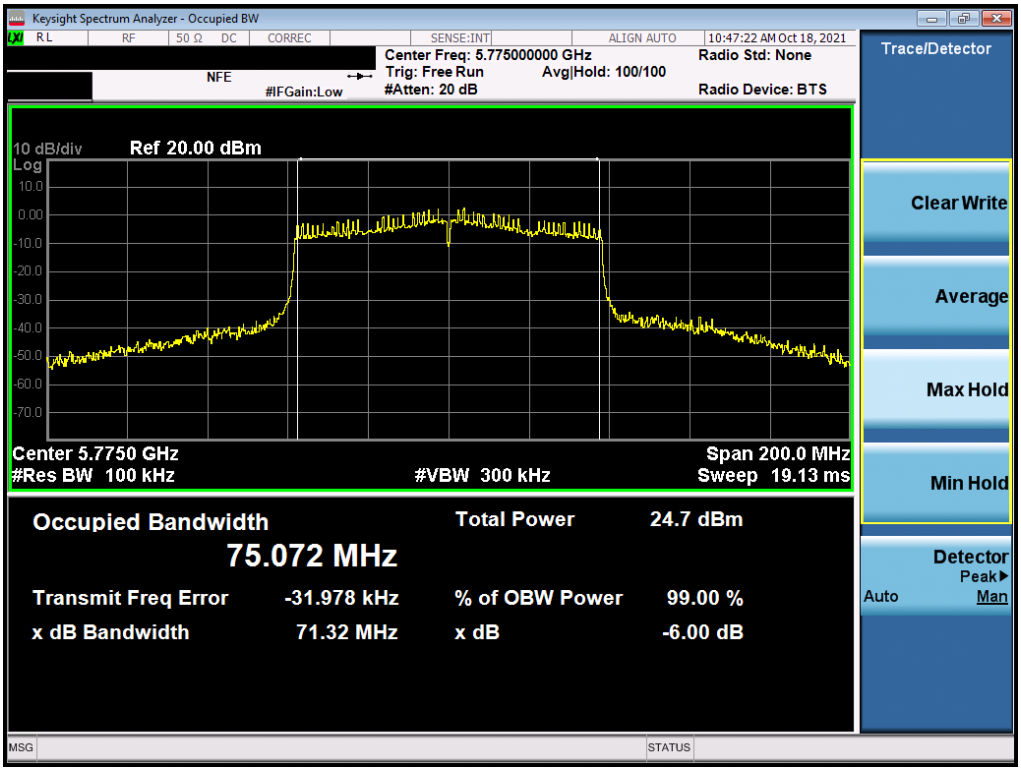



**Plot 7-141. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 3) – Ch. 151)**


**Plot 7-142. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 3) – Ch. 159)**


**Plot 7-143. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 3) – Ch. 151)**


**Plot 7-144. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 3) – Ch. 159)**

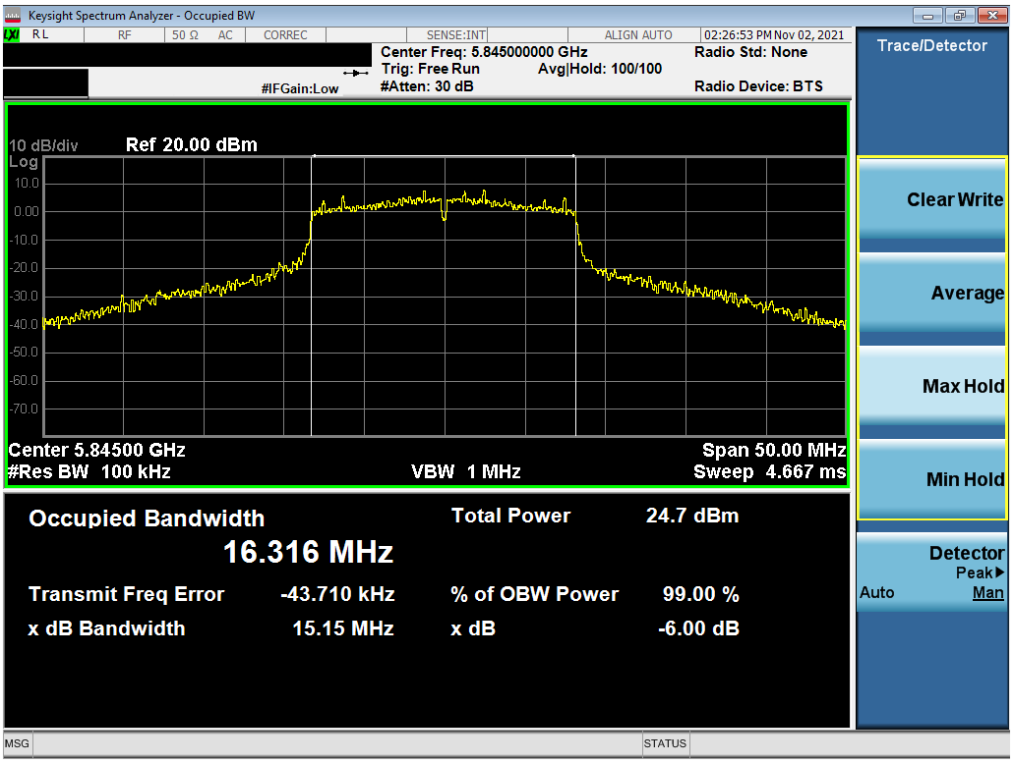



**Plot 7-145. 6dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ac (UNII Band 3) – Ch. 155)**

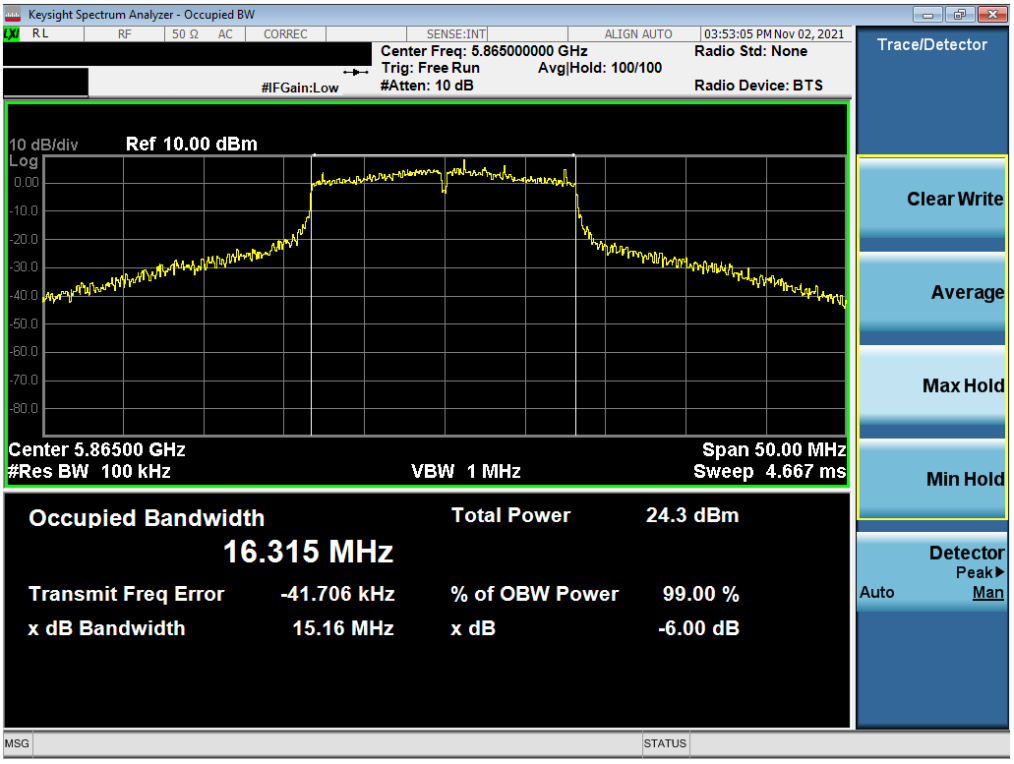

**Plot 7-146. 6dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ax (UNII Band 3) – Ch. 155)**

| | Frequency [MHz] | Channel No. | 802.11 Mode | Data Rate [Mbps] | Measured 6dB Bandwidth [MHz] |
|---|---|---|---|---|---|
| Band 3/4 | 5845 | 169 | a | 6 | 15.15 |
| Band 4 | 5865 | 173 | a | 6 | 15.16 |
| | 5885 | 177 | a | 6 | 15.08 |
| Band 3/4 | 5845 | 169 | n (20MHz) | 6.5/7.2 (MCS0) | 15.12 |
| Band 4 | 5865 | 173 | n (20MHz) | 6.5/7.2 (MCS0) | 15.06 |
| | 5885 | 177 | n (20MHz) | 6.5/7.2 (MCS0) | 15.06 |
| Band 3/4 | 5845 | 169 | ax (20MHz) | 6.5/7.2 (MCS0) | 15.12 |
| Band 4 | 5865 | 173 | ax (20MHz) | 6.5/7.2 (MCS0) | 15.21 |
| | 5885 | 177 | ax (20MHz) | 6.5/7.2 (MCS0) | 15.23 |
| Band 3/4 | 5835 | 167 | n (40MHz) | 13.5/15 (MCS0) | 35.40 |
| Band 4 | 5875 | 175 | n (40MHz) | 13.5/15 (MCS0) | 35.17 |
| Band 3/4 | 5835 | 167 | ax (40MHz) | 13.5/15 (MCS0) | 35.40 |
| Band 4 | 5875 | 175 | ax (40MHz) | 13.5/15 (MCS0) | 34.79 |
| Band 3/4 | 5855 | 171 | ax (80MHz) | 29.3/32.5 (MCS0) | 72.15 |

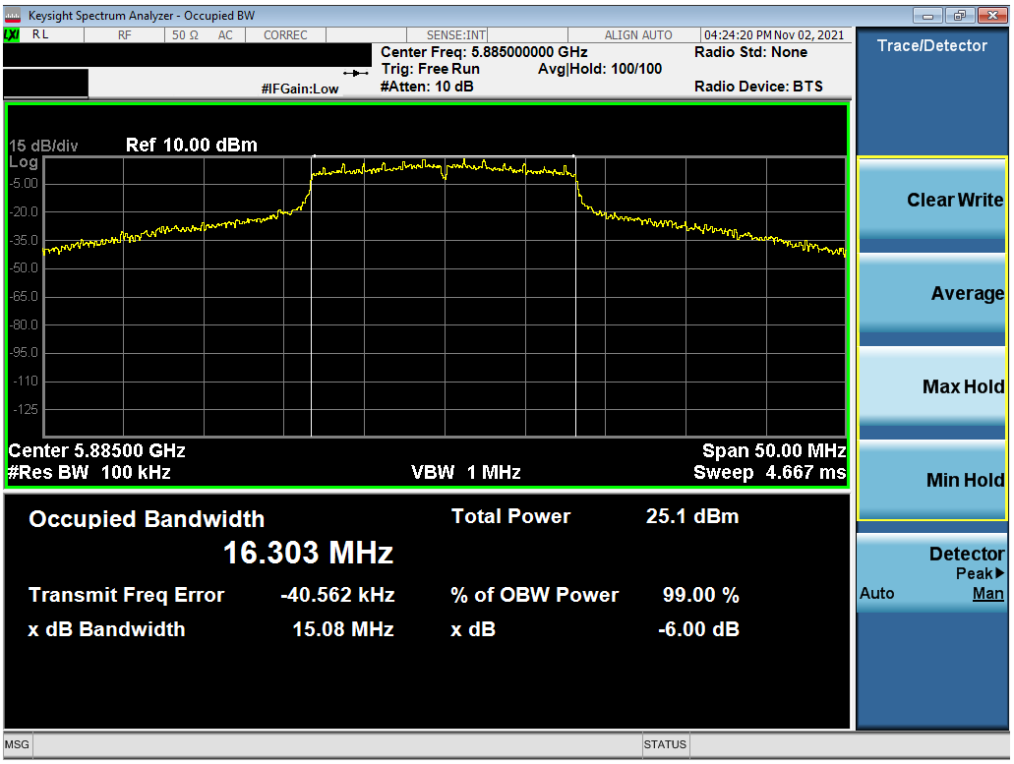
**Table 7-7. Conducted Bandwidth Measurements UNII 4 SISO ANT2**



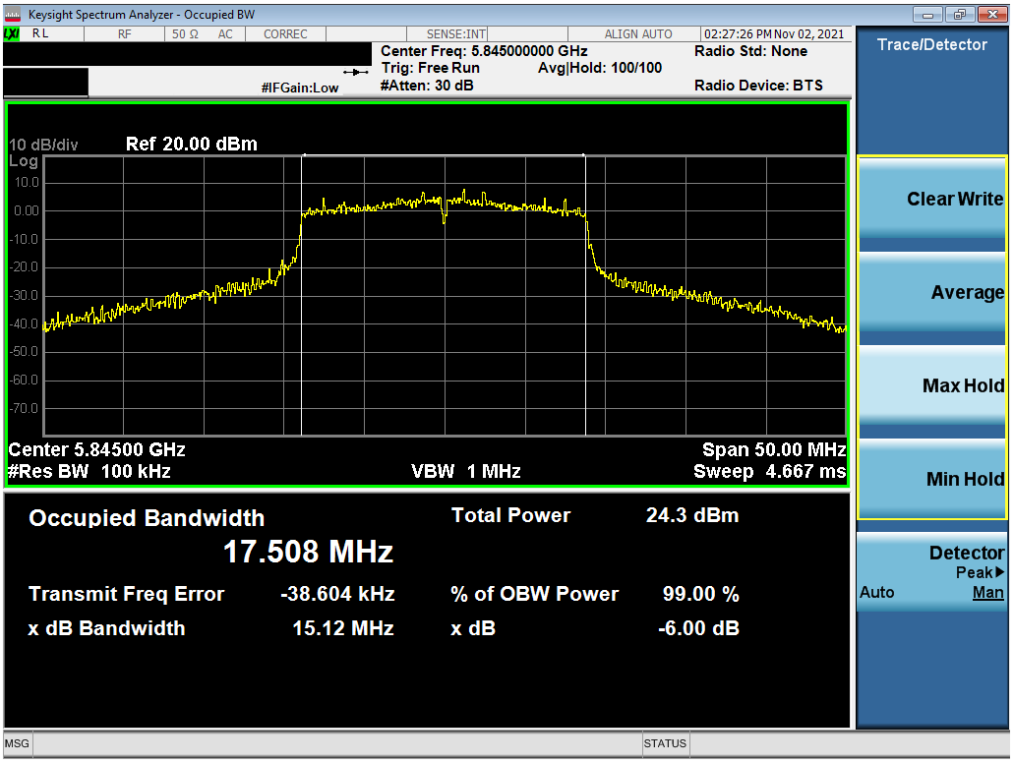

**Plot 7-147. 6dB Bandwidth Plot SISO ANT2 (802.11a (UNII Band 3/4) – Ch. 169)**



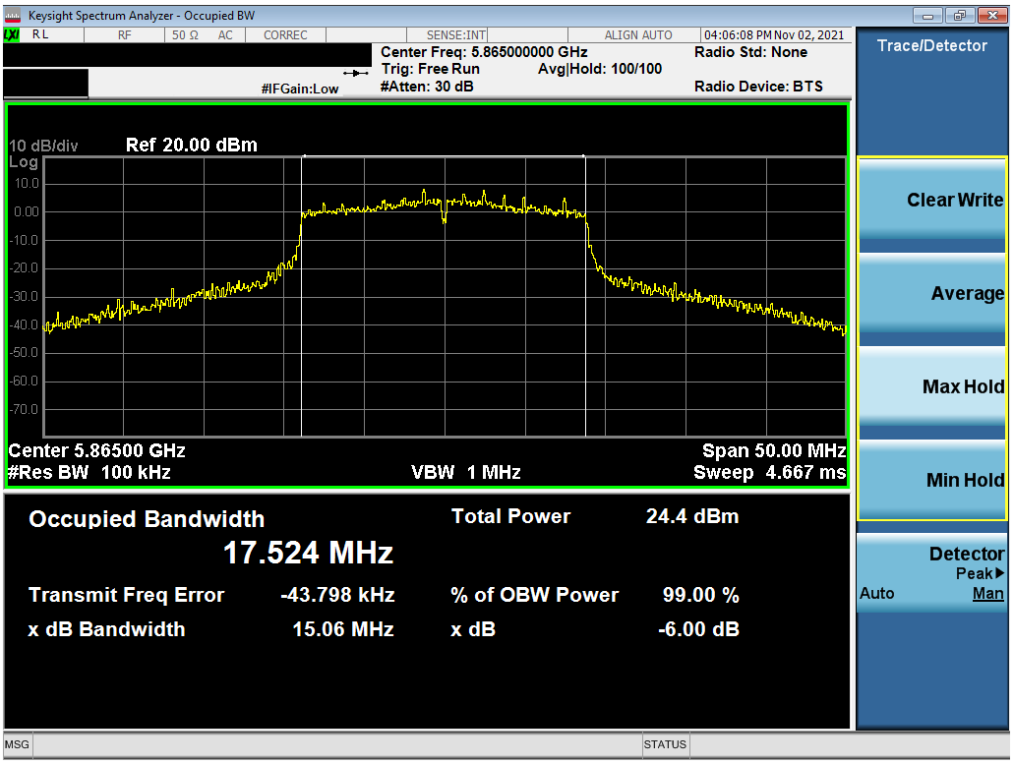

**Plot 7-148. 6dB Bandwidth Plot SISO ANT2 (802.11a (UNII Band 4) – Ch. 173)**



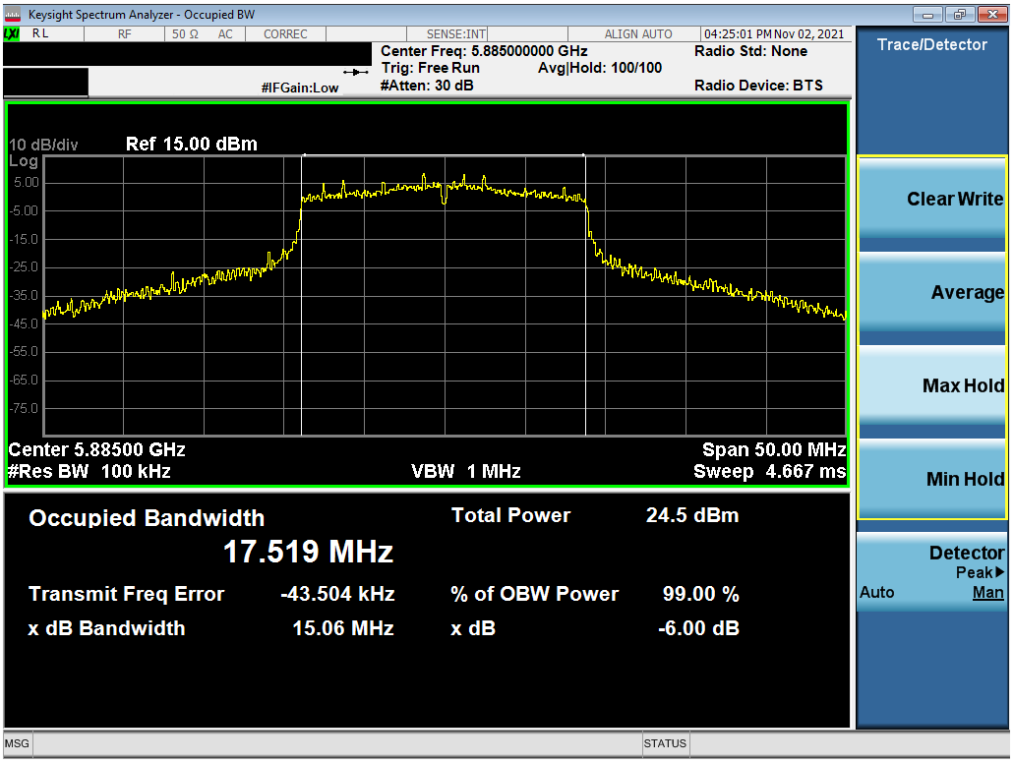

**Plot 7-149. 6dB Bandwidth Plot SISO ANT2 (802.11a (UNII Band 4) – Ch. 177)**



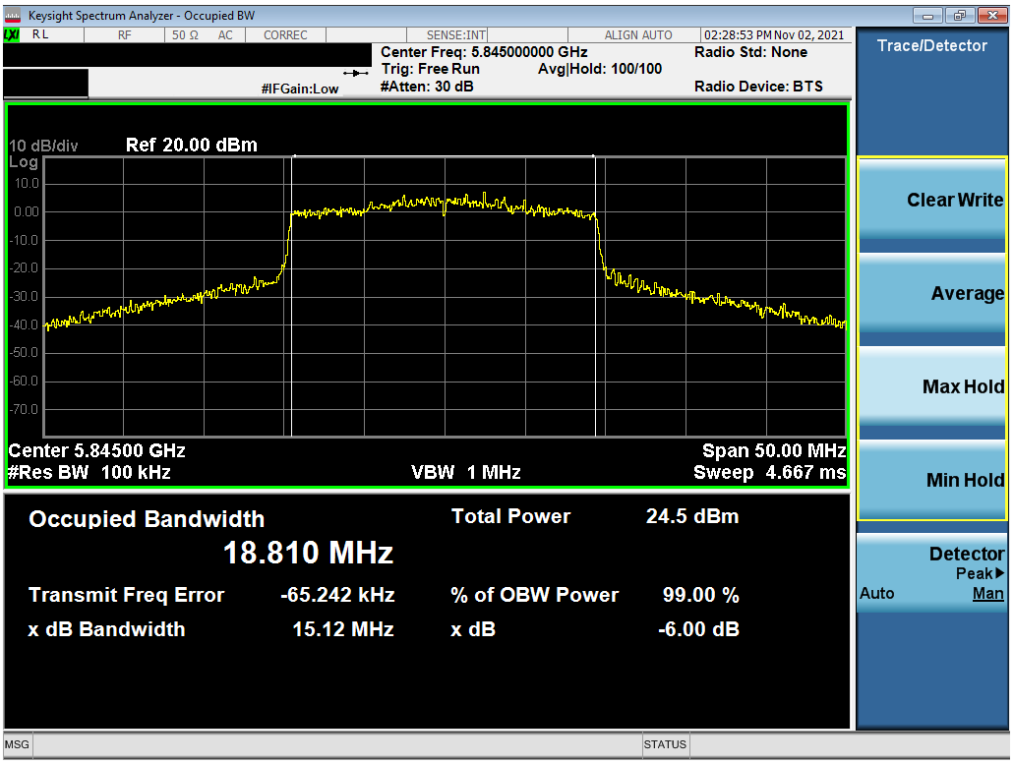

**Plot 7-150. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 3/4) – Ch. 169)**



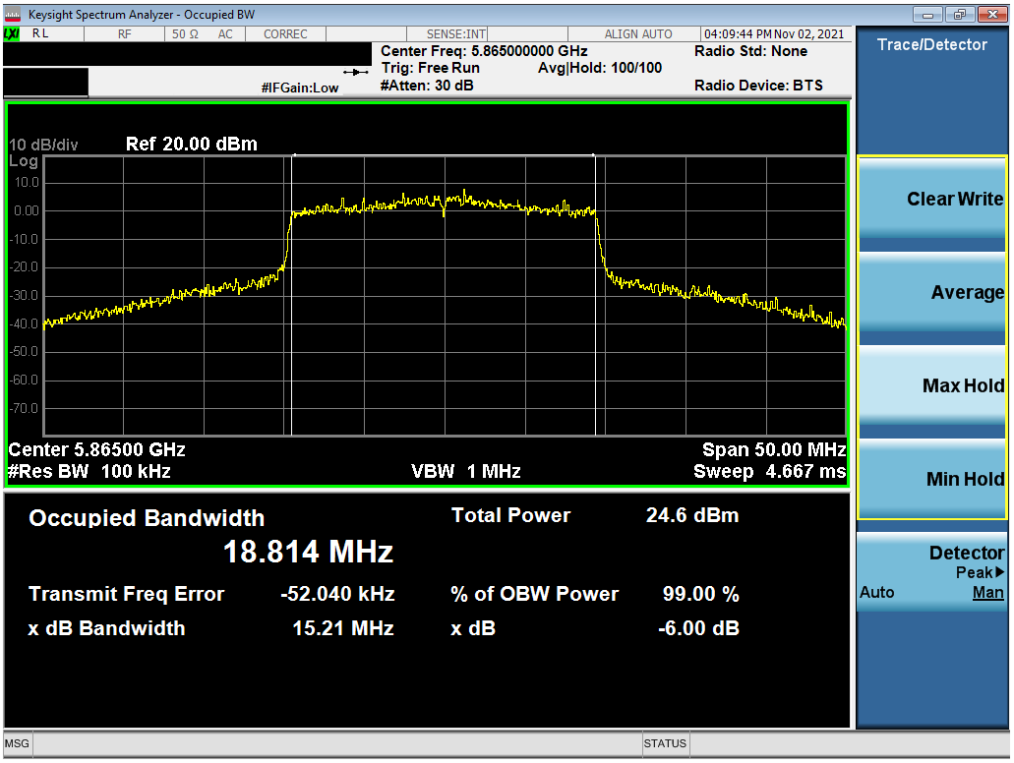

**Plot 7-151. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 4) – Ch. 173)**



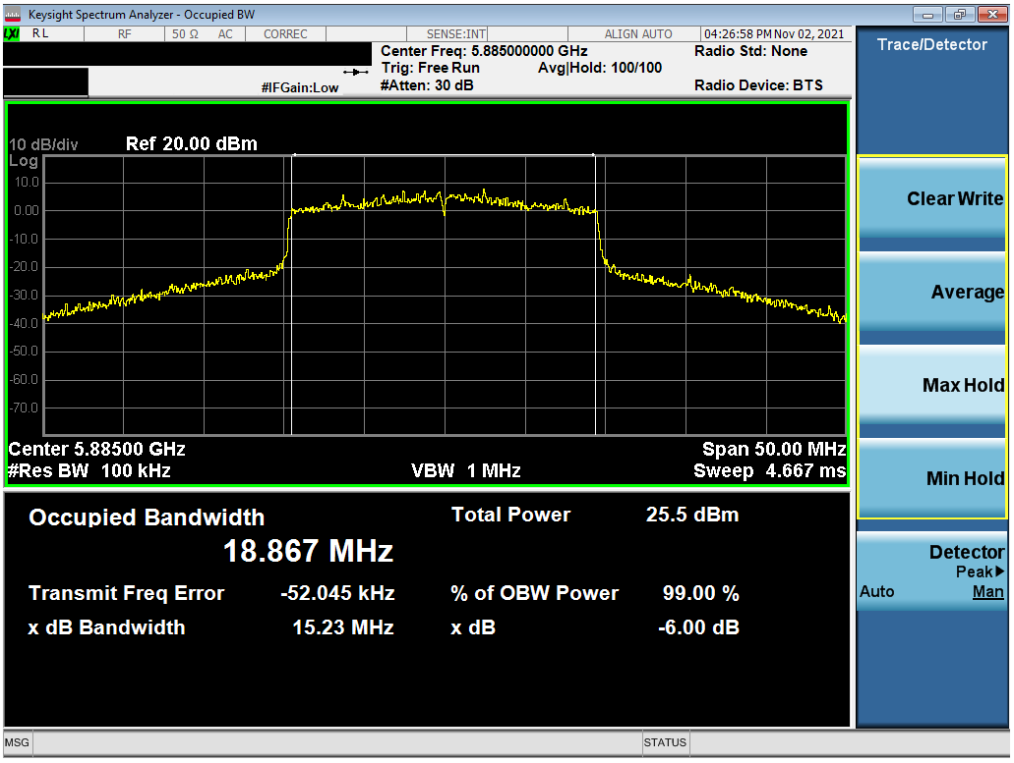

**Plot 7-152. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11n (UNII Band 4) – Ch. 177)**



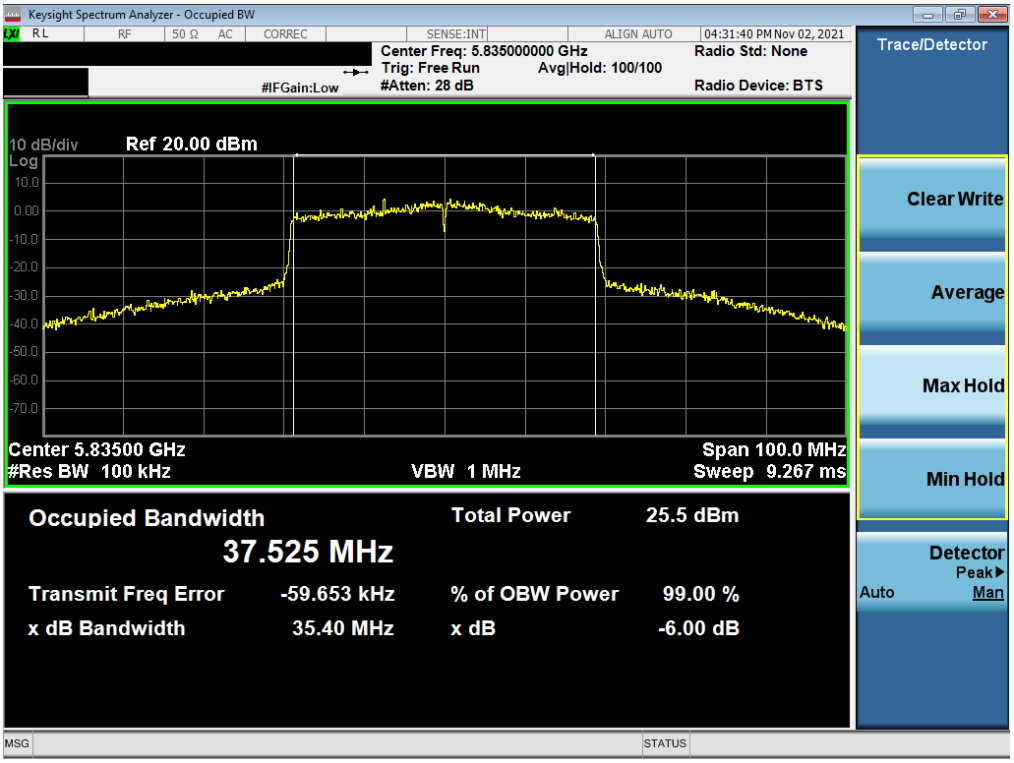

**Plot 7-153. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax (UNII Band 3/4) – Ch. 169)**



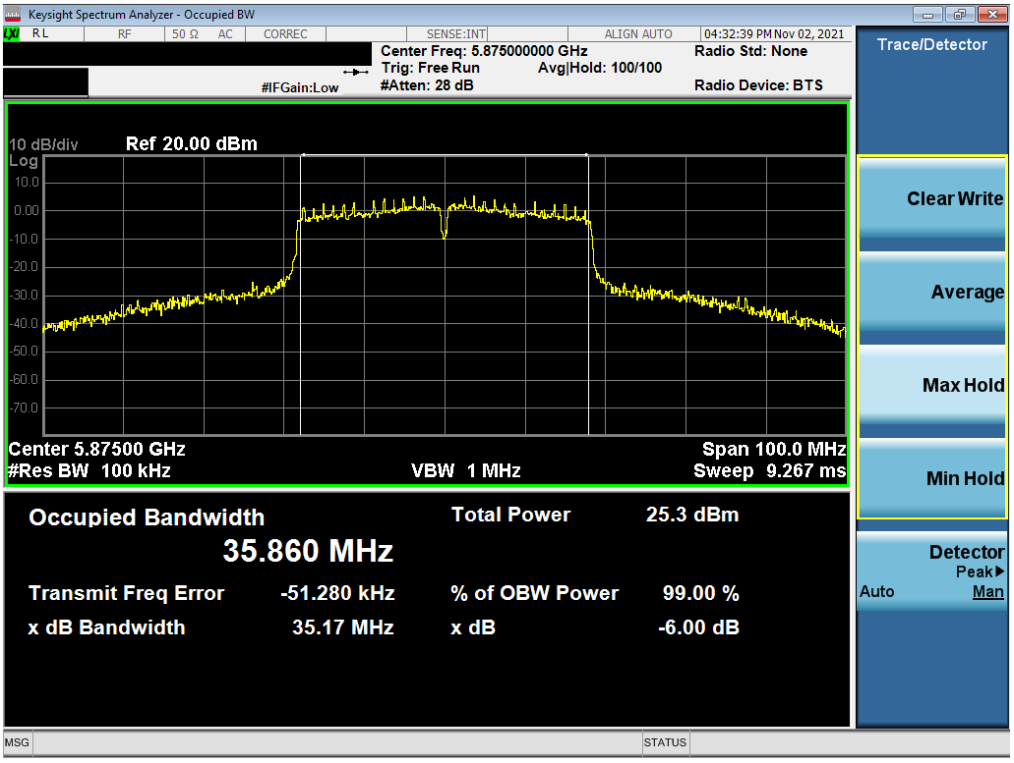

**Plot 7-154. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax (UNII Band 4) – Ch. 173)**



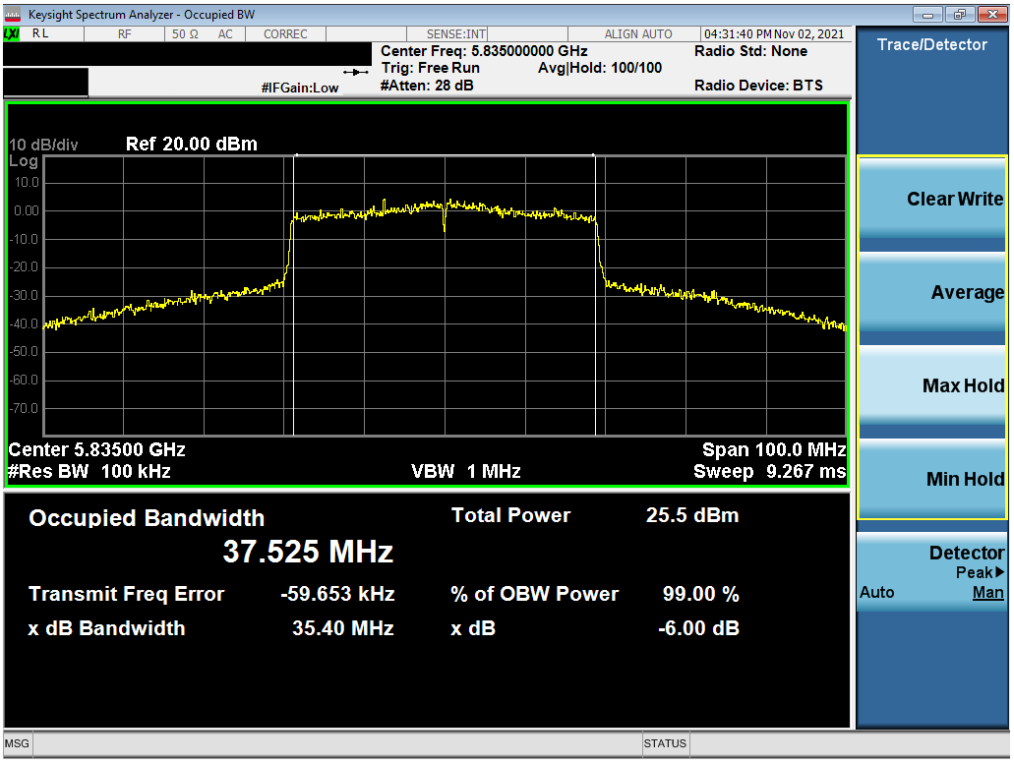

**Plot 7-155. 6dB Bandwidth Plot SISO ANT2 (20MHz BW 802.11ax (UNII Band 4) – Ch. 177)**



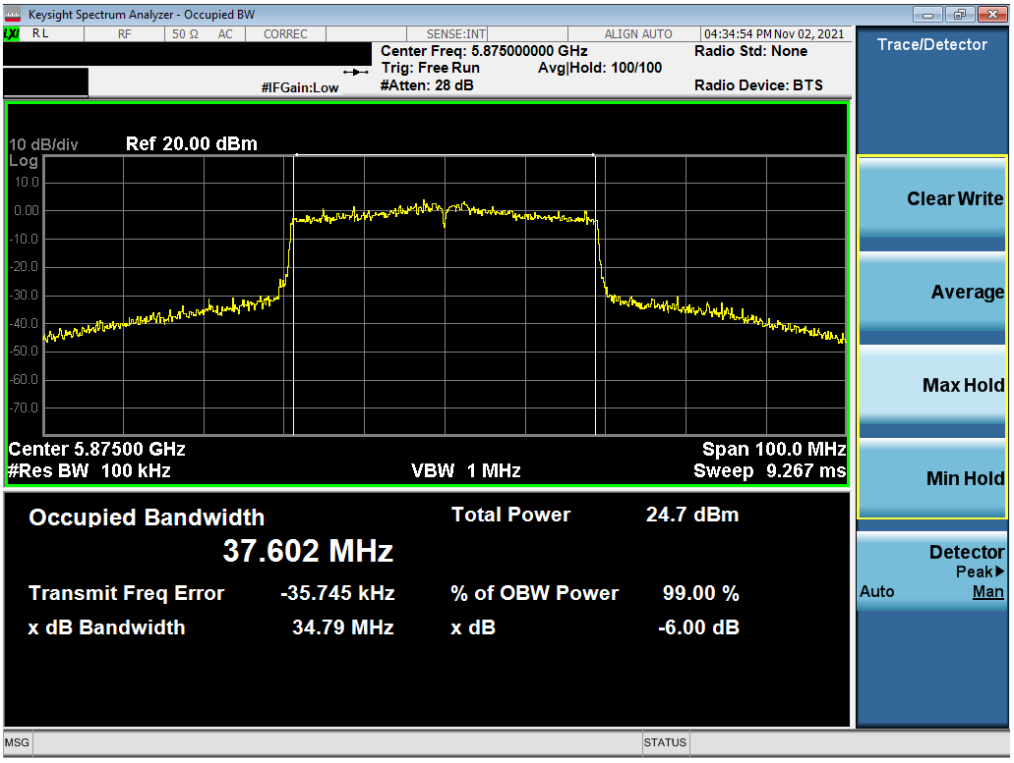

**Plot 7-156. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 3/4) – Ch. 167)**



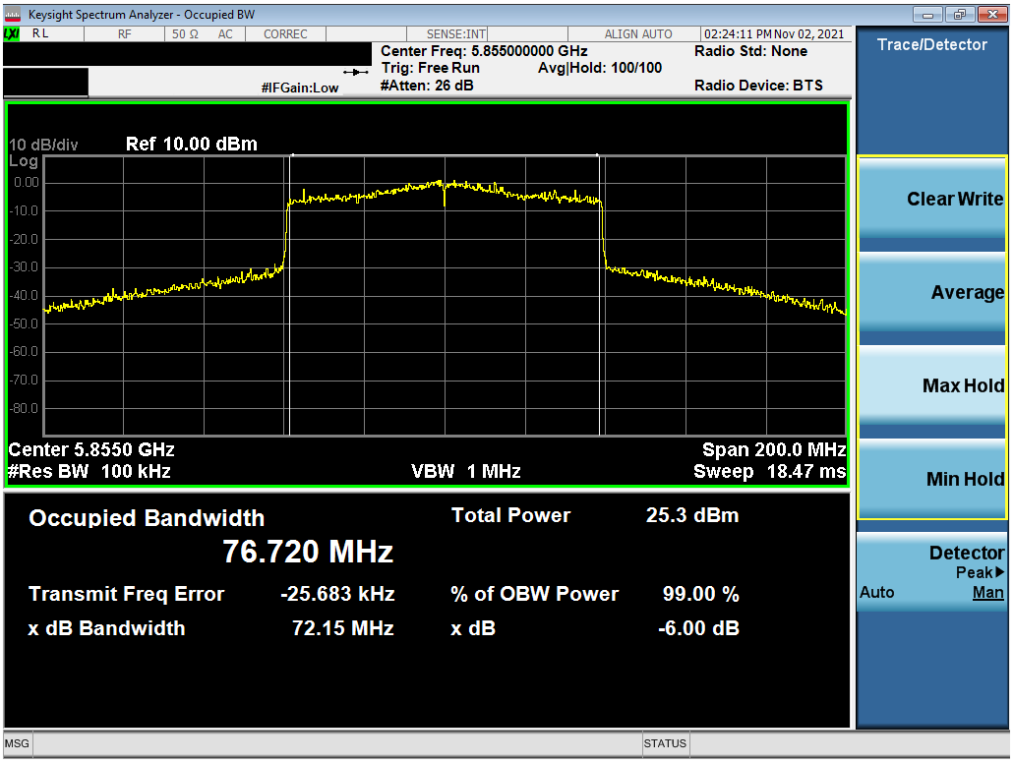

**Plot 7-157. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11n (UNII Band 4) – Ch. 175)**




**Plot 7-158. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 3/4) – Ch. 167)**




**Plot 7-159. 6dB Bandwidth Plot SISO ANT2 (40MHz BW 802.11ax (UNII Band 4) – Ch. 175)**




**Plot 7-160. 6dB Bandwidth Plot SISO ANT2 (80MHz BW 802.11ax (UNII Band 3/4) – Ch. 171)**

## 7.4 UNII Output Power Measurement – 802.11a/n/ac/ax

**§15.407(a.1.iv) §15.407(a.2) §15.407(a.3); RSS-247 [6.2]**

### Test Overview and Limits

A transmitter antenna terminal of the EUT is connected to the input of an RF pulse power sensor. Measurement is made using a broadband average power meter while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies.

***In the 5.15 – 5.25GHz band, the maximum permissible conducted output power is 250mW (23.98dBm). The maximum e.i.r.p. shall not exceed the lesser of 200 mW or 10 + 10 log10B, dBm.***

***In the 5.25 – 5.35GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) or 11 dBm + 10log$_{10}$(26dB BW) = 11 dBm + 10log$_{10}$(19.36) = 23.87dBm. The maximum e.i.r.p. shall not exceed the lesser of 1.0 W or 17 + 10 log10B, dBm.***

***In the 5.47 – 5.725GHz band, the maximum permissible conducted output power is the lesser of 250mW (23.98dBm) or 11 dBm + 10log$_{10}$(26dB BW) = 11 dBm + 10log$_{10}$(19.58) = 23.92dBm. The maximum e.i.r.p. shall not exceed the lesser of 1.0 W or 17 + 10 log10B, dBm.***

***In the 5.725 – 5.850GHz band, the maximum permissible conducted output power is 1W (30dBm). The maximum e.i.r.p. is 36 dBm.***

***In the 5.850 – 5.895 GHz band, the maximum permissible e.i.r.p is 30dBm.***

### Test Procedure Used

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G
KDB 789033 D02 v02r01 – Section E)3)b) Method PM-G
ANSI C63.10-2013 – Section 14.2 Measure-and-Sum Technique
KDB 662911 v02r01 – Section E)1) Measure-and-Sum Technique

### Test Settings

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.

### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.


**Figure 7-3. Test Instrument & Measurement Setup**

### Test Notes

Per RSS-247 Section 6.2.3, transmission on channels which overlap the 5600-5650 MHz is prohibited. This device operates under these frequencies only under the control of a certified master device and does not support active scanning on these channels. This device does not transmit any beacons or initiate any transmissions in UNII Bands 2A or 2C.

## SISO Antenna-1 Conducted Output Power Measurements

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | IEEE Transmission Mode | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 802.11a | 802.11n | 802.11ac | 802.11ax | | |
| | 5180 | 36 | AVG | 17.95 | 16.89 | 16.87 | 16.91 | 23.98 | -6.03 |
| | 5200 | 40 | AVG | 17.96 | 17.85 | 17.85 | 17.81 | 23.98 | -6.02 |
| | 5220 | 44 | AVG | 17.98 | 17.84 | 17.86 | 17.85 | 23.98 | -6.00 |
| | 5240 | 48 | AVG | 17.97 | 17.82 | 17.81 | 17.81 | 23.98 | -6.01 |
| | 5260 | 52 | AVG | 17.98 | 17.83 | 17.80 | 17.87 | 23.98 | -6.00 |
| | 5280 | 56 | AVG | 17.96 | 17.79 | 17.79 | 17.74 | 23.98 | -6.02 |
| | 5300 | 60 | AVG | 17.92 | 17.78 | 17.78 | 17.77 | 23.98 | -6.06 |
| | 5320 | 64 | AVG | 17.71 | 17.99 | 17.94 | 17.51 | 23.98 | -5.99 |
| | 5500 | 100 | AVG | 17.72 | 17.97 | 17.55 | 17.97 | 23.98 | -6.01 |
| | 5600 | 120 | AVG | 17.96 | 17.87 | 17.87 | 17.84 | 23.98 | -6.02 |
| | 5620 | 124 | AVG | 17.96 | 17.91 | 17.91 | 17.91 | 23.98 | -6.02 |
| | 5720 | 144 | AVG | 17.85 | 17.96 | 17.77 | 17.95 | 23.98 | -6.02 |
| | 5745 | 149 | AVG | 17.63 | 17.71 | 17.89 | 17.78 | 30.00 | -12.11 |
| | 5785 | 157 | AVG | 17.91 | 17.98 | 17.79 | 17.74 | 30.00 | -12.02 |
| | 5825 | 165 | AVG | 17.57 | 17.96 | 17.89 | 17.81 | 30.00 | -12.04 |

**Table 7-8. SISO ANT1 20MHz BW (UNII) Maximum Conducted Output Power**

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | IEEE Transmission Mode | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | 802.11n | 802.11ac | 802.11ax | | |
| | 5190 | 38 | AVG | 17.23 | 17.24 | 17.29 | 23.98 | -6.74 |
| | 5230 | 46 | AVG | 17.74 | 17.77 | 17.62 | 23.98 | -6.21 |
| | 5270 | 54 | AVG | 17.65 | 17.96 | 17.81 | 23.98 | -6.02 |
| | 5310 | 62 | AVG | 17.44 | 17.44 | 17.51 | 23.98 | -6.54 |
| | 5510 | 102 | AVG | 17.62 | 17.96 | 17.89 | 23.98 | -6.02 |
| | 5590 | 118 | AVG | 17.86 | 17.88 | 17.98 | 23.98 | -6.10 |
| | 5630 | 126 | AVG | 17.79 | 17.86 | 17.74 | 23.98 | -6.12 |
| | 5710 | 142 | AVG | 17.66 | 17.69 | 17.58 | 23.98 | -6.29 |
| | 5755 | 151 | AVG | 17.85 | 17.89 | 17.68 | 30.00 | -12.11 |
| | 5795 | 159 | AVG | 17.74 | 17.67 | 17.58 | 30.00 | -12.26 |

**Table 7-9. SISO ANT1 40MHz BW (UNII) Maximum Conducted Output Power**

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | IEEE Transmission Mode | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|
| | | | | 802.11ac | 802.11ax | | |
| | 5210 | 42 | AVG | 16.93 | 16.65 | 23.98 | -7.05 |
| | 5290 | 58 | AVG | 17.66 | 17.52 | 23.98 | -6.32 |
| | 5530 | 106 | AVG | 17.62 | 17.13 | 23.98 | -6.36 |
| | 5610 | 122 | AVG | 17.93 | 17.83 | 23.98 | -6.05 |
| | 5690 | 138 | AVG | 17.75 | 17.74 | 23.98 | -6.23 |
| | 5775 | 155 | AVG | 17.76 | 17.83 | 30.00 | -12.24 |

**Table 7-10. SISO ANT1 80MHz BW (UNII) Maximum Conducted Output Power**

| 5GHz (UNII 4) | Freq [MHz] | BW [MHz] | Channel | Detector | IEEE Transmission Mode | | | | Ant. Gain [dBi] | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 802.11a | 802.11n | 802.11ac | 802.11ax | | | | |
| | 5845 | 20 | 169 | AVG | 17.69 | 17.92 | 17.89 | 17.70 | -6.20 | 11.72 | 30.00 | -18.28 |
| | 5865 | | 173 | AVG | 17.76 | 17.95 | 17.93 | 17.71 | -6.20 | 11.75 | 30.00 | -18.25 |
| | 5885 | | 177 | AVG | 17.92 | 17.69 | 17.70 | 17.86 | -6.20 | 11.72 | 30.00 | -18.28 |
| | 5835 | 40 | 167 | AVG | | 17.74 | 17.71 | 17.76 | -6.20 | 11.54 | 30.00 | -18.46 |
| | 5875 | | 175 | AVG | | 17.64 | 17.61 | 17.62 | -6.20 | 11.44 | 30.00 | -18.56 |
| | 5855 | 80 | 171 | AVG | | | 17.51 | 17.71 | -6.20 | 11.51 | 30.00 | -18.49 |

**Table 7-11. SISO ANT1 UNII 4 Maximum Conducted Output Power and e.i.r.p.**

## SISO Antenna-2 Conducted Output Power Measurements

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | IEEE Transmission Mode | | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | 802.11a | 802.11n | 802.11ac | 802.11ax | | |
| | 5180 | 36 | AVG | 17.85 | 16.69 | 16.59 | 16.83 | 23.98 | -6.13 |
| | 5200 | 40 | AVG | 17.85 | 17.65 | 17.90 | 17.77 | 23.98 | -6.08 |
| | 5220 | 44 | AVG | 17.75 | 17.60 | 17.85 | 17.73 | 23.98 | -6.13 |
| | 5240 | 48 | AVG | 17.79 | 17.55 | 17.84 | 17.68 | 23.98 | -6.14 |
| | 5260 | 52 | AVG | 17.95 | 17.72 | 17.84 | 17.75 | 23.98 | -6.03 |
| | 5280 | 56 | AVG | 17.89 | 17.69 | 17.86 | 17.69 | 23.98 | -6.09 |
| | 5300 | 60 | AVG | 17.83 | 17.67 | 17.72 | 17.74 | 23.98 | -6.15 |
| | 5320 | 64 | AVG | 17.81 | 17.65 | 17.73 | 17.59 | 23.98 | -6.17 |
| | 5500 | 100 | AVG | 17.81 | 17.91 | 17.75 | 17.79 | 23.98 | -6.07 |
| | 5600 | 120 | AVG | 17.94 | 17.79 | 17.63 | 17.85 | 23.98 | -6.04 |
| | 5620 | 124 | AVG | 17.88 | 17.70 | 17.59 | 17.90 | 23.98 | -6.10 |
| | 5720 | 144 | AVG | 17.60 | 17.76 | 17.72 | 17.55 | 23.98 | -6.22 |
| | 5745 | 149 | AVG | 17.94 | 17.83 | 17.64 | 17.96 | 30.00 | -12.06 |
| | 5785 | 157 | AVG | 17.86 | 17.71 | 17.69 | 17.55 | 30.00 | -12.14 |
| | 5825 | 165 | AVG | 17.89 | 17.75 | 17.77 | 17.69 | 30.00 | -12.11 |

**Table 7-12. SISO ANT2 20MHz BW (UNII) Maximum Conducted Output Power**

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | IEEE Transmission Mode | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | 802.11n | 802.11ac | 802.11ax | | |
| | 5190 | 38 | AVG | 17.65 | 17.67 | 17.63 | 23.98 | -6.31 |
| | 5230 | 46 | AVG | 17.95 | 17.64 | 17.95 | 23.98 | -6.03 |
| | 5270 | 54 | AVG | 17.96 | 17.55 | 17.92 | 23.98 | -6.02 |
| | 5310 | 62 | AVG | 17.94 | 17.95 | 17.79 | 23.98 | -6.03 |
| | 5510 | 102 | AVG | 17.84 | 17.94 | 17.59 | 23.98 | -6.04 |
| | 5590 | 118 | AVG | 17.83 | 17.82 | 17.72 | 23.98 | -6.15 |
| | 5630 | 126 | AVG | 17.62 | 17.62 | 17.49 | 23.98 | -6.36 |
| | 5710 | 142 | AVG | 17.95 | 17.99 | 17.89 | 23.98 | -5.99 |
| | 5755 | 151 | AVG | 17.70 | 17.82 | 17.72 | 30.00 | -12.18 |
| | 5795 | 159 | AVG | 17.73 | 17.84 | 17.72 | 30.00 | -12.16 |

**Table 7-13. SISO ANT2 40MHz BW (UNII) Maximum Conducted Output Power**

| | Freq [MHz] | Channel | Detector | IEEE Transmission Mode | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|
| | | | | 802.11ac | 802.11ax | | |
| 5GHz (80MHz Bandwidth) | 5210 | 42 | AVG | 16.91 | 16.50 | 23.98 | -7.07 |
| | 5290 | 58 | AVG | 17.67 | 17.91 | 23.98 | -6.31 |
| | 5530 | 106 | AVG | 17.7 | 17.96 | 23.98 | -6.28 |
| | 5610 | 122 | AVG | 17.95 | 17.79 | 23.98 | -6.03 |
| | 5690 | 138 | AVG | 17.66 | 17.66 | 23.98 | -6.32 |
| | 5775 | 155 | AVG | 17.96 | 17.47 | 30.00 | -12.04 |

**Table 7-14. SISO ANT2 80MHz BW (UNII) Maximum Conducted Output Power**

| | Freq [MHz] | BW [MHz] | Channel | Detector | IEEE Transmission Mode | | | | Ant. Gain [dBi] | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 802.11a | 802.11n | 802.11ac | 802.11ax | | | | |
| 5GHz (UNII 4) | 5845 | 20 | 169 | AVG | 17.95 | 17.46 | 17.78 | 17.57 | -7.80 | 10.15 | 30.00 | -19.85 |
| | 5865 | | 173 | AVG | 17.95 | 17.79 | 17.80 | 17.60 | -7.80 | 10.15 | 30.00 | -19.85 |
| | 5885 | | 177 | AVG | 17.85 | 17.81 | 17.81 | 17.58 | -7.80 | 10.05 | 30.00 | -19.95 |
| | 5835 | 40 | 167 | AVG | | 17.98 | 17.56 | 17.65 | -7.80 | 10.18 | 30.00 | -19.82 |
| | 5875 | | 175 | AVG | | 17.87 | 17.81 | 17.68 | -7.80 | 10.07 | 30.00 | -19.93 |
| | 5855 | 80 | 171 | AVG | | | 17.69 | 17.85 | -7.80 | 10.05 | 30.00 | -19.95 |

**Table 7-15. SISO ANT2 UNII 4 Maximum Conducted Output Power and e.i.r.p.**

## MIMO Maximum Conducted Output Power Measurements

| | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| 5GHz (20MHz Bandwidth) | 5180 | 36 | AVG | 17.95 | 17.85 | 20.91 | 23.98 | -3.07 |
| | 5200 | 40 | AVG | 17.96 | 17.85 | 20.92 | 23.98 | -3.06 |
| | 5220 | 44 | AVG | 17.98 | 17.75 | 20.88 | 23.98 | -3.10 |
| | 5240 | 48 | AVG | 17.97 | 17.79 | 20.89 | 23.98 | -3.09 |
| | 5260 | 52 | AVG | 17.98 | 17.95 | 20.98 | 23.98 | -3.00 |
| | 5280 | 56 | AVG | 17.96 | 17.89 | 20.94 | 23.98 | -3.04 |
| | 5300 | 60 | AVG | 17.92 | 17.83 | 20.89 | 23.98 | -3.09 |
| | 5320 | 64 | AVG | 17.71 | 17.81 | 20.77 | 23.98 | -3.21 |
| | 5500 | 100 | AVG | 17.72 | 17.81 | 20.78 | 23.98 | -3.20 |
| | 5600 | 120 | AVG | 17.96 | 17.94 | 20.96 | 23.98 | -3.02 |
| | 5620 | 124 | AVG | 17.96 | 17.88 | 20.93 | 23.98 | -3.05 |
| | 5720 | 144 | AVG | 17.85 | 17.60 | 20.74 | 23.98 | -3.24 |
| | 5745 | 149 | AVG | 17.63 | 17.94 | 20.80 | 30.00 | -9.20 |
| | 5785 | 157 | AVG | 17.91 | 17.86 | 20.90 | 30.00 | -9.10 |
| | 5825 | 165 | AVG | 17.57 | 17.89 | 20.74 | 30.00 | -9.26 |

**Table 7-16. MIMO 20MHz BW 802.11a (UNII) Maximum Conducted Output Power**

| | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| 5GHz (20MHz Bandwidth) | 5180 | 36 | AVG | 16.89 | 16.69 | 19.80 | 23.98 | -4.18 |
| | 5200 | 40 | AVG | 17.85 | 17.65 | 20.76 | 23.98 | -3.22 |
| | 5220 | 44 | AVG | 17.84 | 17.60 | 20.73 | 23.98 | -3.25 |
| | 5240 | 48 | AVG | 17.82 | 17.55 | 20.70 | 23.98 | -3.28 |
| | 5260 | 52 | AVG | 17.83 | 17.72 | 20.79 | 23.98 | -3.19 |
| | 5280 | 56 | AVG | 17.79 | 17.69 | 20.75 | 23.98 | -3.23 |
| | 5300 | 60 | AVG | 17.78 | 17.67 | 20.74 | 23.98 | -3.24 |
| | 5320 | 64 | AVG | 17.99 | 17.65 | 20.83 | 23.98 | -3.15 |
| | 5500 | 100 | AVG | 17.97 | 17.91 | 20.95 | 23.98 | -3.03 |
| | 5600 | 120 | AVG | 17.87 | 17.79 | 20.84 | 23.98 | -3.14 |
| | 5620 | 124 | AVG | 17.91 | 17.70 | 20.82 | 23.98 | -3.16 |
| | 5720 | 144 | AVG | 17.96 | 17.76 | 20.87 | 23.98 | -3.11 |
| | 5745 | 149 | AVG | 17.71 | 17.83 | 20.78 | 30.00 | -9.22 |
| | 5785 | 157 | AVG | 17.98 | 17.71 | 20.86 | 30.00 | -9.14 |
| | 5825 | 165 | AVG | 17.96 | 17.75 | 20.87 | 30.00 | -9.13 |

**Table 7-17. MIMO 20MHz BW 802.11n (UNII) Maximum Conducted Output Power**

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| | 5180 | 36 | AVG | 16.87 | 16.59 | 19.74 | 23.98 | -4.24 |
| | 5200 | 40 | AVG | 17.85 | 17.90 | 20.89 | 23.98 | -3.09 |
| | 5220 | 44 | AVG | 17.86 | 17.85 | 20.87 | 23.98 | -3.11 |
| | 5240 | 48 | AVG | 17.81 | 17.84 | 20.84 | 23.98 | -3.14 |
| | 5260 | 52 | AVG | 17.80 | 17.84 | 20.83 | 23.98 | -3.15 |
| | 5280 | 56 | AVG | 17.79 | 17.86 | 20.84 | 23.98 | -3.14 |
| | 5300 | 60 | AVG | 17.78 | 17.72 | 20.76 | 23.98 | -3.22 |
| | 5320 | 64 | AVG | 17.94 | 17.73 | 20.85 | 23.98 | -3.13 |
| | 5500 | 100 | AVG | 17.55 | 17.75 | 20.66 | 23.98 | -3.32 |
| | 5600 | 120 | AVG | 17.87 | 17.63 | 20.76 | 23.98 | -3.22 |
| | 5620 | 124 | AVG | 17.91 | 17.59 | 20.76 | 23.98 | -3.22 |
| | 5720 | 144 | AVG | 17.77 | 17.72 | 20.76 | 23.98 | -3.22 |
| | 5745 | 149 | AVG | 17.89 | 17.64 | 20.78 | 30.00 | -9.22 |
| | 5785 | 157 | AVG | 17.79 | 17.69 | 20.75 | 30.00 | -9.25 |
| | 5825 | 165 | AVG | 17.89 | 17.77 | 20.84 | 30.00 | -9.16 |

**Table 7-18. MIMO 20MHz BW 802.11ac (UNII) Maximum Conducted Output Power**

| 5GHz (20MHz Bandwidth) | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| | 5180 | 36 | AVG | 16.91 | 16.83 | 19.88 | 23.98 | -4.10 |
| | 5200 | 40 | AVG | 17.81 | 17.77 | 20.80 | 23.98 | -3.18 |
| | 5220 | 44 | AVG | 17.85 | 17.73 | 20.80 | 23.98 | -3.18 |
| | 5240 | 48 | AVG | 17.81 | 17.68 | 20.76 | 23.98 | -3.22 |
| | 5260 | 52 | AVG | 17.87 | 17.75 | 20.82 | 23.98 | -3.16 |
| | 5280 | 56 | AVG | 17.74 | 17.69 | 20.73 | 23.98 | -3.25 |
| | 5300 | 60 | AVG | 17.77 | 17.74 | 20.77 | 23.98 | -3.21 |
| | 5320 | 64 | AVG | 17.51 | 17.59 | 20.56 | 23.98 | -3.42 |
| | 5500 | 100 | AVG | 17.97 | 17.79 | 20.89 | 23.98 | -3.09 |
| | 5600 | 120 | AVG | 17.84 | 17.85 | 20.86 | 23.98 | -3.12 |
| | 5620 | 124 | AVG | 17.91 | 17.90 | 20.92 | 23.98 | -3.06 |
| | 5720 | 144 | AVG | 17.95 | 17.55 | 20.76 | 23.98 | -3.22 |
| | 5745 | 149 | AVG | 17.78 | 17.96 | 20.88 | 30.00 | -9.12 |
| | 5785 | 157 | AVG | 17.74 | 17.55 | 20.66 | 30.00 | -9.34 |
| | 5825 | 165 | AVG | 17.81 | 17.69 | 20.76 | 30.00 | -9.24 |

**Table 7-19. MIMO 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power**

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| | 5190 | 38 | AVG | 17.23 | 17.65 | 20.46 | 23.98 | -3.52 |
| | 5230 | 46 | AVG | 17.74 | 17.95 | 20.86 | 23.98 | -3.12 |
| | 5270 | 54 | AVG | 17.65 | 17.96 | 20.82 | 23.98 | -3.16 |
| | 5310 | 62 | AVG | 17.44 | 17.94 | 20.71 | 23.98 | -3.27 |
| | 5510 | 102 | AVG | 17.62 | 17.84 | 20.74 | 23.98 | -3.24 |
| | 5590 | 118 | AVG | 17.86 | 17.83 | 20.86 | 23.98 | -3.12 |
| | 5630 | 126 | AVG | 17.79 | 17.62 | 20.72 | 23.98 | -3.26 |
| | 5710 | 142 | AVG | 17.66 | 17.95 | 20.82 | 23.98 | -3.16 |
| | 5755 | 151 | AVG | 17.85 | 17.70 | 20.79 | 30.00 | -9.21 |
| | 5795 | 159 | AVG | 17.74 | 17.73 | 20.75 | 30.00 | -9.25 |

**Table 7-20. MIMO 40MHz BW 802.11n (UNII) Maximum Conducted Output Power**

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| | 5190 | 38 | AVG | 17.24 | 17.67 | 20.47 | 23.98 | -3.51 |
| | 5230 | 46 | AVG | 17.77 | 17.64 | 20.72 | 23.98 | -3.26 |
| | 5270 | 54 | AVG | 17.96 | 17.55 | 20.77 | 23.98 | -3.21 |
| | 5310 | 62 | AVG | 17.44 | 17.95 | 20.71 | 23.98 | -3.27 |
| | 5510 | 102 | AVG | 17.96 | 17.94 | 20.96 | 23.98 | -3.02 |
| | 5590 | 118 | AVG | 17.88 | 17.82 | 20.86 | 23.98 | -3.12 |
| | 5630 | 126 | AVG | 17.86 | 17.62 | 20.75 | 23.98 | -3.23 |
| | 5710 | 142 | AVG | 17.69 | 17.99 | 20.85 | 23.98 | -3.13 |
| | 5755 | 151 | AVG | 17.89 | 17.82 | 20.87 | 30.00 | -9.13 |
| | 5795 | 159 | AVG | 17.67 | 17.84 | 20.77 | 30.00 | -9.23 |

**Table 7-21. MIMO 40MHz BW 802.11ac (UNII) Maximum Conducted Output Power**

| 5GHz (40MHz Bandwidth) | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| | 5190 | 38 | AVG | 17.29 | 17.63 | 20.47 | 23.98 | -3.51 |
| | 5230 | 46 | AVG | 17.62 | 17.95 | 20.80 | 23.98 | -3.18 |
| | 5270 | 54 | AVG | 17.81 | 17.92 | 20.88 | 23.98 | -3.10 |
| | 5310 | 62 | AVG | 17.51 | 17.79 | 20.66 | 23.98 | -3.32 |
| | 5510 | 102 | AVG | 17.89 | 17.59 | 20.75 | 23.98 | -3.23 |
| | 5590 | 118 | AVG | 17.98 | 17.72 | 20.86 | 23.98 | -3.12 |
| | 5630 | 126 | AVG | 17.74 | 17.49 | 20.63 | 23.98 | -3.35 |
| | 5710 | 142 | AVG | 17.58 | 17.89 | 20.75 | 23.98 | -3.23 |
| | 5755 | 151 | AVG | 17.68 | 17.72 | 20.71 | 30.00 | -9.29 |
| | 5795 | 159 | AVG | 17.58 | 17.72 | 20.66 | 30.00 | -9.34 |

**Table 7-22. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power**

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| | 5210 | 42 | AVG | 16.93 | 16.91 | 19.93 | 23.98 | -4.05 |
| | 5290 | 58 | AVG | 17.66 | 17.67 | 20.68 | 23.98 | -3.30 |
| | 5530 | 106 | AVG | 17.62 | 17.70 | 20.67 | 23.98 | -3.31 |
| | 5610 | 122 | AVG | 17.93 | 17.95 | 20.95 | 23.98 | -3.03 |
| | 5690 | 138 | AVG | 17.75 | 17.66 | 20.72 | 23.98 | -3.26 |
| | 5775 | 155 | AVG | 17.76 | 17.96 | 20.87 | 30.00 | -9.13 |

**Table 7-23. MIMO 80MHz BW 802.11ac (UNII) Maximum Conducted Output Power**

| 5GHz (80MHz Bandwidth) | Freq [MHz] | Channel | Detector | Conducted Power [dBm] | | | Conducted Power Limit [dBm] | Conducted Power Margin [dB] |
|---|---|---|---|---|---|---|---|---|
| | | | | ANT1 | ANT2 | MIMO | | |
| | 5210 | 42 | AVG | 16.65 | 16.50 | 19.59 | 23.98 | -4.39 |
| | 5290 | 58 | AVG | 17.52 | 17.91 | 20.73 | 23.98 | -3.25 |
| | 5530 | 106 | AVG | 17.13 | 17.96 | 20.58 | 23.98 | -3.40 |
| | 5610 | 122 | AVG | 17.83 | 17.79 | 20.82 | 23.98 | -3.16 |
| | 5690 | 138 | AVG | 17.74 | 17.66 | 20.71 | 23.98 | -3.27 |
| | 5775 | 155 | AVG | 17.83 | 17.47 | 20.66 | 30.00 | -9.34 |

**Table 7-24. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power**

| 5GHz (UNII 4) | Freq [MHz] | BW [MHz] | Channel | Detector | Conducted Power [dBm] | | | Directional Gain [dBm] | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | | |
| | 5845 | 20 | 169 | AVG | 17.69 | 17.95 | 20.83 | -3.95 | 16.88 | 30.00 | -13.12 |
| | 5865 | | 173 | AVG | 17.76 | 17.95 | 20.87 | -3.95 | 16.92 | 30.00 | -13.08 |
| | 5885 | | 177 | AVG | 17.92 | 17.85 | 20.90 | -3.95 | 16.95 | 30.00 | -13.05 |

**Table 7-25. MIMO 802.11a (UNII 4) Maximum Conducted Output Power and e.i.r.p.**

| 5GHz (UNII 4) | Freq [MHz] | BW [MHz] | Channel | Detector | Conducted Power [dBm] | | | Directional Gain [dBm] | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | | |
| | 5845 | 20 | 169 | AVG | 17.92 | 17.46 | 20.71 | -3.95 | 16.76 | 30.00 | -13.24 |
| | 5865 | | 173 | AVG | 17.95 | 17.79 | 20.88 | -3.95 | 16.93 | 30.00 | -13.07 |
| | 5885 | | 177 | AVG | 17.69 | 17.81 | 20.76 | -3.95 | 16.81 | 30.00 | -13.19 |
| | 5835 | 40 | 167 | AVG | 17.74 | 17.98 | 20.87 | -3.95 | 16.92 | 30.00 | -13.08 |
| | 5875 | | 175 | AVG | 17.64 | 17.87 | 20.77 | -3.95 | 16.82 | 30.00 | -13.18 |

**Table 7-26. MIMO 802.11n (UNII 4) Maximum Conducted Output Power and e.i.r.p.**

| 5GHz (UNII 4) | Freq [MHz] | BW [MHz] | Channel | Detector | Conducted Power [dBm] | | | Directional Gain [dBm] | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | | |
| | 5845 | 20 | 169 | AVG | 17.89 | 17.78 | 20.85 | -3.95 | 16.90 | 30.00 | -13.10 |
| | 5865 | | 173 | AVG | 17.93 | 17.80 | 20.88 | -3.95 | 16.93 | 30.00 | -13.07 |
| | 5885 | | 177 | AVG | 17.70 | 17.81 | 20.77 | -3.95 | 16.82 | 30.00 | -13.18 |
| | 5835 | 40 | 167 | AVG | 17.71 | 17.56 | 20.65 | -3.95 | 16.70 | 30.00 | -13.30 |
| | 5875 | | 175 | AVG | 17.61 | 17.81 | 20.72 | -3.95 | 16.77 | 30.00 | -13.23 |
| | 5855 | 80 | 171 | AVG | 17.51 | 17.69 | 20.61 | -3.95 | 16.66 | 30.00 | -13.34 |

**Table 7-27. MIMO 802.11ac (UNII 4) Maximum Conducted Output Power and e.i.r.p.**

| 5GHz (UNII 4) | Freq [MHz] | BW [MHz] | Channel | Detector | Conducted Power [dBm] | | | Directional Gain [dBm] | Max e.i.r.p. [dBm] | Max e.i.r.p. Limit [dBm] | e.i.r.p. Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ANT1 | ANT2 | MIMO | | | | |
| | 5845 | 20 | 169 | AVG | 17.70 | 17.57 | 20.65 | -3.95 | 16.70 | 30.00 | -13.30 |
| | 5865 | | 173 | AVG | 17.71 | 17.60 | 20.67 | -3.95 | 16.72 | 30.00 | -13.28 |
| | 5885 | | 177 | AVG | 17.86 | 17.58 | 20.73 | -3.95 | 16.78 | 30.00 | -13.22 |
| | 5835 | 40 | 167 | AVG | 17.76 | 17.65 | 20.72 | -3.95 | 16.77 | 30.00 | -13.23 |
| | 5875 | | 175 | AVG | 17.62 | 17.68 | 20.66 | -3.95 | 16.71 | 30.00 | -13.29 |
| | 5855 | 80 | 171 | AVG | 17.71 | 17.85 | 20.79 | -3.95 | 16.84 | 30.00 | -13.16 |

**Table 7-28. MIMO 802.11ax (UNII 4) Maximum Conducted Output Power and e.i.r.p.**

**Note:**

Per ANSI C63.10-2013 and KDB 662911 v02r01 Section E)1), the conducted powers at Antenna-1 and Antenna-2 were first measured separately during MIMO transmission as shown in the section above. The measured values were then summed in linear power units then converted back to dBm.

Per ANSI C63.10-2013 Section 14.4.3, the directional gain is calculated using the following formula, where $G_N$ is the gain of the nth antenna and $N_{ANT}$, the total number of antennas used.

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] \text{ dBi}$$

**Sample MIMO Calculation:**

At 5180MHz in 802.11n (20MHz BW) mode, the average conducted output power was measured to be 16.89 dBm for Antenna-1 and 16.69 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

(16.89 dBm + 16.69 dBm) = (48.87 mW + 46.67 mW) = 95.53 mW = 19.80 dBm

**Sample e.i.r.p. Calculation:**

At 5180MHz in 802.11n (20MHz BW) mode, the average MIMO conducted power was calculated to be N/A dBm with directional gain of -3.72 dBi.

e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

19.80 dBm + -3.72 dBi = 16.08 dBm

## 7.5 Maximum Power Spectral Density – 802.11a/n/ac/ax

**§15.407(a.1.iv) §15.407(a.2) §15.407(a.3); RSS-247 [6.2]**

### Test Overview and Limit

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, was used to measure the power spectral density.

***In the 5.15 – 5.25GHz, 5.25 – 5.35GHz, 5.47 – 5.725GHz bands, the maximum permissible power spectral density is 11dBm/MHz.***

***In the 5.725 – 5.850GHz band, the maximum permissible power spectral density is 30dBm/500kHz.***

***In the 5.850 – 5.855, the maximum power spectral density must not exceed 14dBm/MHz e.i.r.p.***

### Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2
KDB 789033 D02 v02r01 – Section F
ANSI C63.10-2013 – Section 14.3.2.2 Measure-and-Sum Technique
KDB 662911 v02r01 – Section E)2) Measure-and-Sum Technique

### Test Settings

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire emission bandwidth of the signal
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points ≥ 2 x (span/RBW)
6. Sweep time = auto
7. Detector = power averaging (RMS)
8. Trigger was set to free run for all modes
9. Trace was averaged over 100 sweeps
10. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

### Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.


**Figure 7-4. Test Instrument & Measurement Setup**

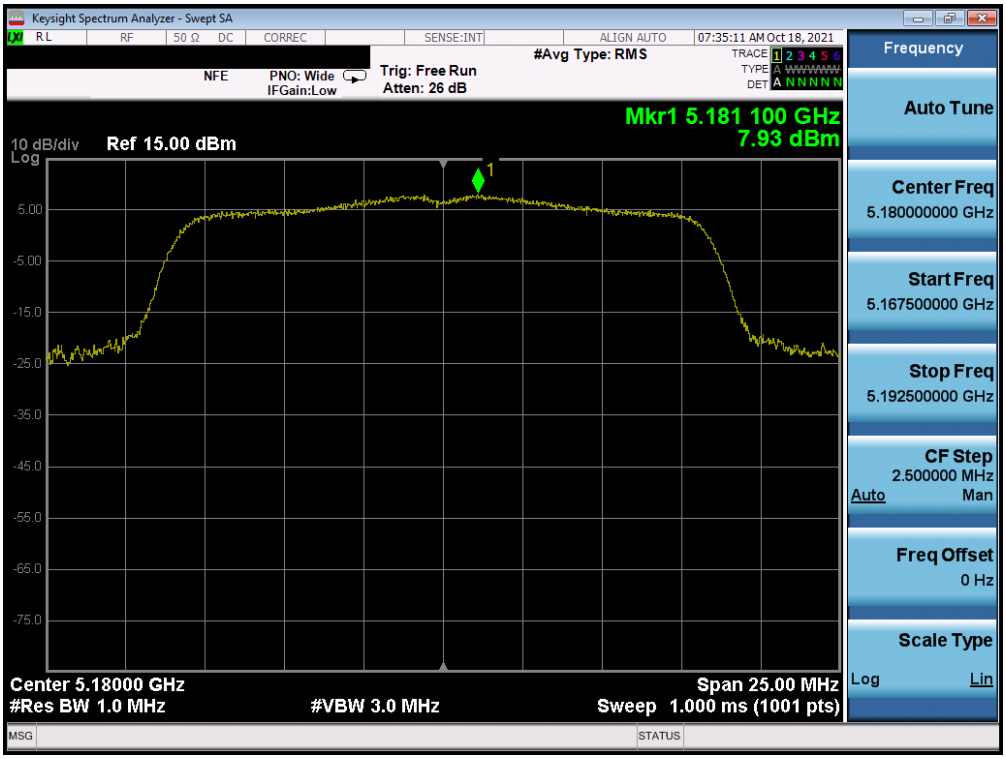
### Test Notes

None

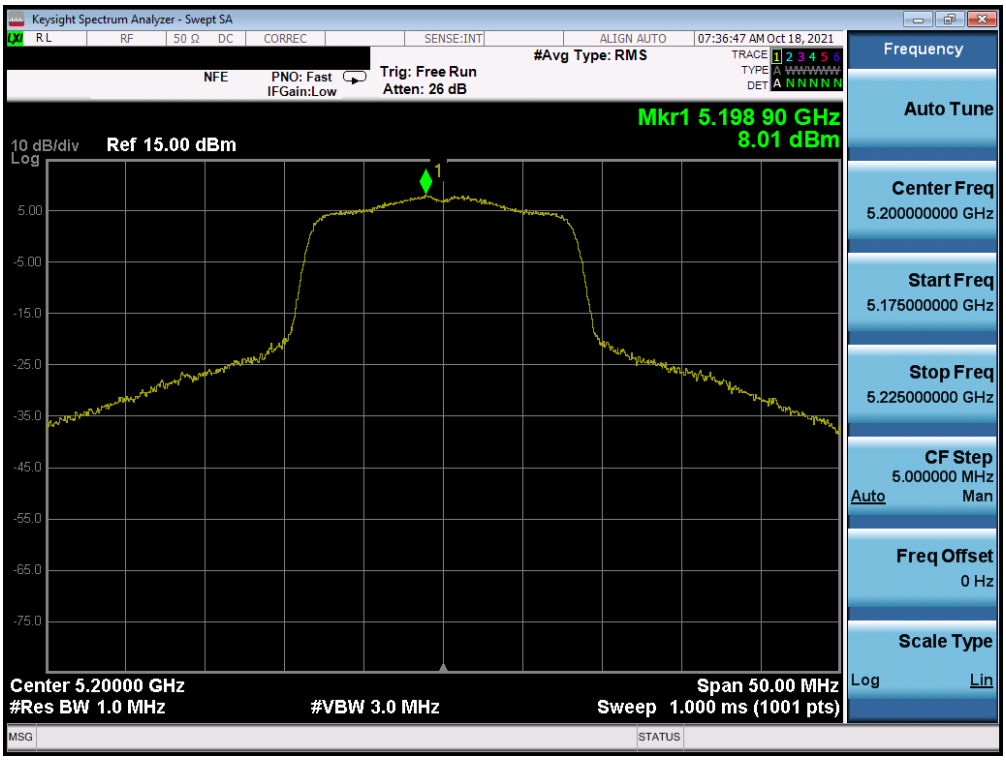
## SISO Antenna-1 Power Spectral Density Measurements

| | Frequency [MHz] | Channel No. | 802.11 Mode | Data Rate [Mbps] | Measured Power Density [dBm] | Max Power Density [dBm/MHz] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| Band 1 | 5180 | 36 | a | 6 | 7.93 | 11.0 | -3.07 |
| | 5200 | 40 | a | 6 | 8.01 | 11.0 | -2.99 |
| | 5240 | 48 | a | 6 | 7.85 | 11.0 | -3.15 |
| | 5180 | 36 | n (20MHz) | 6.5/7.2 (MCS0) | 7.77 | 11.0 | -3.23 |
| | 5200 | 40 | n (20MHz) | 6.5/7.2 (MCS0) | 7.42 | 11.0 | -3.58 |
| | 5240 | 48 | n (20MHz) | 6.5/7.2 (MCS0) | 7.36 | 11.0 | -3.64 |
| | 5180 | 36 | ax (20MHz) | 6.5/7.2 (MCS0) | 7.93 | 11.0 | -3.07 |
| | 5200 | 40 | ax (20MHz) | 6.5/7.2 (MCS0) | 8.01 | 11.0 | -2.99 |
| | 5240 | 48 | ax (20MHz) | 6.5/7.2 (MCS0) | 7.85 | 11.0 | -3.15 |
| | 5190 | 38 | n (40MHz) | 13.5/15 (MCS0) | 4.38 | 11.0 | -6.62 |
| | 5230 | 46 | n (40MHz) | 13.5/15 (MCS0) | 4.29 | 11.0 | -6.71 |
| | 5190 | 38 | ax (40MHz) | 13.5/15 (MCS0) | 5.05 | 11.0 | -5.95 |
| | 5230 | 46 | ax (40MHz) | 13.5/15 (MCS0) | 4.64 | 11.0 | -6.36 |
| | 5210 | 42 | ac (80MHz) | 29.3/32.5 (MCS0) | 0.50 | 11.0 | -10.50 |
| | 5210 | 42 | ax (80MHz) | 29.3/32.5 (MCS0) | 2.16 | 11.0 | -8.84 |
| Band 2A | 5260 | 52 | a | 6 | 8.00 | 11.0 | -3.00 |
| | 5280 | 56 | a | 6 | 7.93 | 11.0 | -3.07 |
| | 5320 | 64 | a | 6 | 7.35 | 11.0 | -3.65 |
| | 5260 | 52 | n (20MHz) | 6.5/7.2 (MCS0) | 7.12 | 11.0 | -3.88 |
| | 5280 | 56 | n (20MHz) | 6.5/7.2 (MCS0) | 7.99 | 11.0 | -3.01 |
| | 5320 | 64 | n (20MHz) | 6.5/7.2 (MCS0) | 7.15 | 11.0 | -3.85 |
| | 5260 | 52 | ax (20MHz) | 6.5/7.2 (MCS0) | 7.29 | 11.0 | -3.71 |
| | 5280 | 56 | ax (20MHz) | 6.5/7.2 (MCS0) | 7.56 | 11.0 | -3.44 |
| | 5320 | 64 | ax (20MHz) | 6.5/7.2 (MCS0) | 7.70 | 11.0 | -3.30 |
| | 5270 | 54 | n (40MHz) | 13.5/15 (MCS0) | 4.02 | 11.0 | -6.98 |
| | 5310 | 62 | n (40MHz) | 13.5/15 (MCS0) | 3.84 | 11.0 | -7.16 |
| | 5270 | 54 | ax (40MHz) | 13.5/15 (MCS0) | 4.99 | 11.0 | -6.01 |
| | 5310 | 62 | ax (40MHz) | 13.5/15 (MCS0) | 4.50 | 11.0 | -6.50 |
| | 5290 | 58 | ac (80MHz) | 29.3/32.5 (MCS0) | 0.82 | 11.0 | -10.18 |
| | 5290 | 58 | ax (80MHz) | 29.3/32.5 (MCS0) | 2.17 | 11.0 | -8.83 |
| Band 2C | 5500 | 100 | a | 6 | 7.60 | 11.0 | -3.40 |
| | 5600 | 120 | a | 6 | 7.52 | 11.0 | -3.48 |
| | 5720 | 144 | a | 6 | 8.11 | 11.0 | -2.89 |
| | 5500 | 100 | n (20MHz) | 6.5/7.2 (MCS0) | 7.42 | 11.0 | -3.58 |
| | 5600 | 120 | n (20MHz) | 6.5/7.2 (MCS0) | 7.28 | 11.0 | -3.72 |
| | 5720 | 144 | n (20MHz) | 6.5/7.2 (MCS0) | 7.96 | 11.0 | -3.04 |
| | 5500 | 100 | ax (20MHz) | 6.5/7.2 (MCS0) | 7.79 | 11.0 | -3.21 |
| | 5600 | 120 | ax (20MHz) | 6.5/7.2 (MCS0) | 8.24 | 11.0 | -2.76 |
| | 5720 | 144 | ax (20MHz) | 6.5/7.2 (MCS0) | 8.03 | 11.0 | -2.97 |
| | 5510 | 102 | n (40MHz) | 13.5/15 (MCS0) | 4.03 | 11.0 | -6.97 |
| | 5590 | 118 | n (40MHz) | 13.5/15 (MCS0) | 4.63 | 11.0 | -6.37 |
| | 5710 | 142 | n (40MHz) | 13.5/15 (MCS0) | 4.23 | 11.0 | -6.77 |
| | 5510 | 102 | ax (40MHz) | 13.5/15 (MCS0) | 5.56 | 11.0 | -5.44 |
| | 5590 | 118 | ax (40MHz) | 13.5/15 (MCS0) | 5.33 | 11.0 | -5.67 |
| | 5710 | 142 | ax (40MHz) | 13.5/15 (MCS0) | 5.92 | 11.0 | -5.08 |
| | 5530 | 106 | ac (80MHz) | 29.3/32.5 (MCS0) | 0.56 | 11.0 | -10.44 |
| | 5610 | 122 | ac (80MHz) | 29.3/32.5 (MCS0) | 0.85 | 11.0 | -10.15 |
| | 5690 | 138 | ac (80MHz) | 29.3/32.5 (MCS0) | 2.60 | 11.0 | -8.40 |
| | 5530 | 106 | ax (80MHz) | 29.3/32.5 (MCS0) | 2.45 | 11.0 | -8.55 |
| | 5610 | 122 | ax (80MHz) | 29.3/32.5 (MCS0) | 2.72 | 11.0 | -8.28 |
| | 5690 | 138 | ax (80MHz) | 29.3/32.5 (MCS0) | 1.67 | 11.0 | -9.33 |

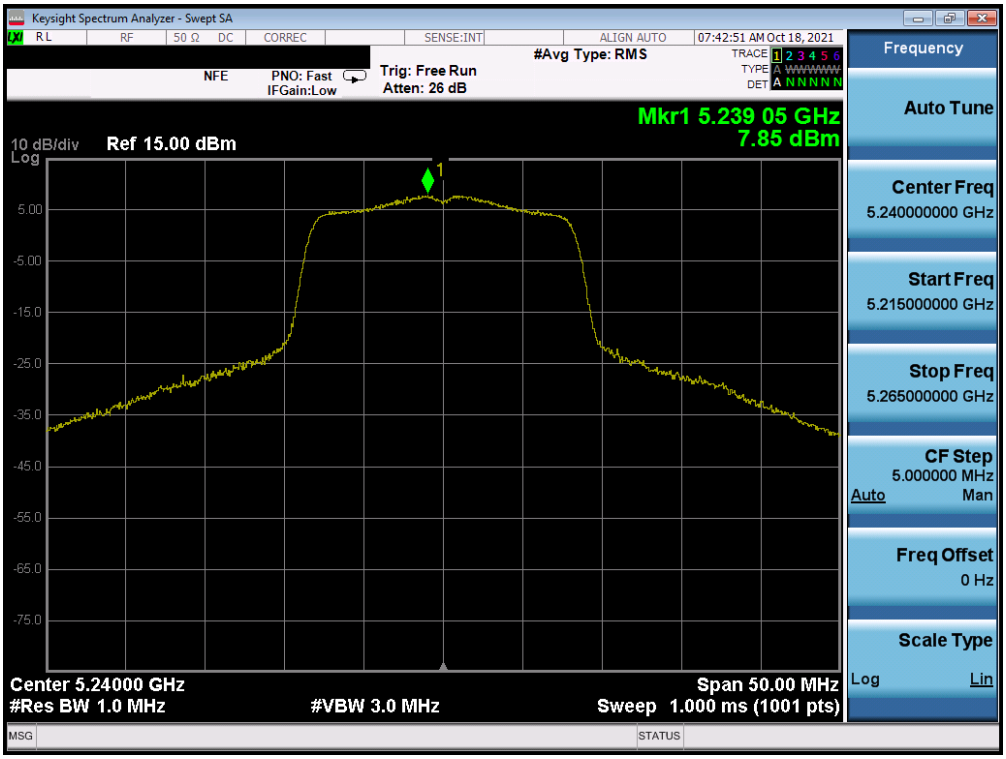
**Table 7-29. Bands 1, 2A, 2C Conducted Power Spectral Density Measurements SISO ANT1**



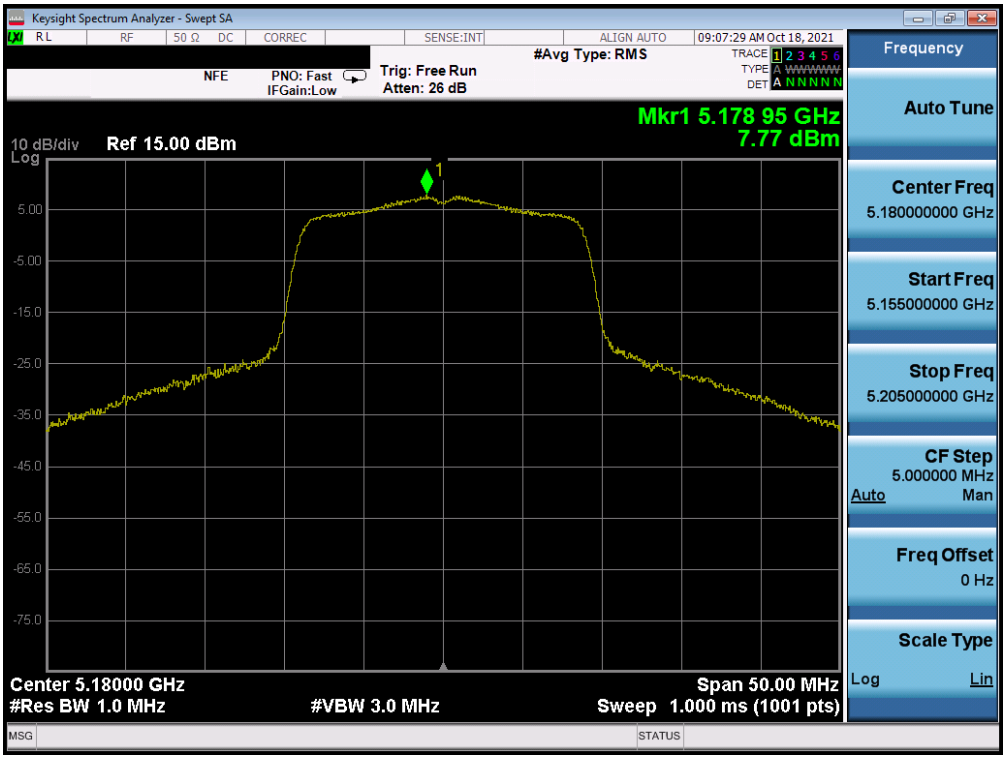

**Plot 7-161. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 1) – Ch. 36)**



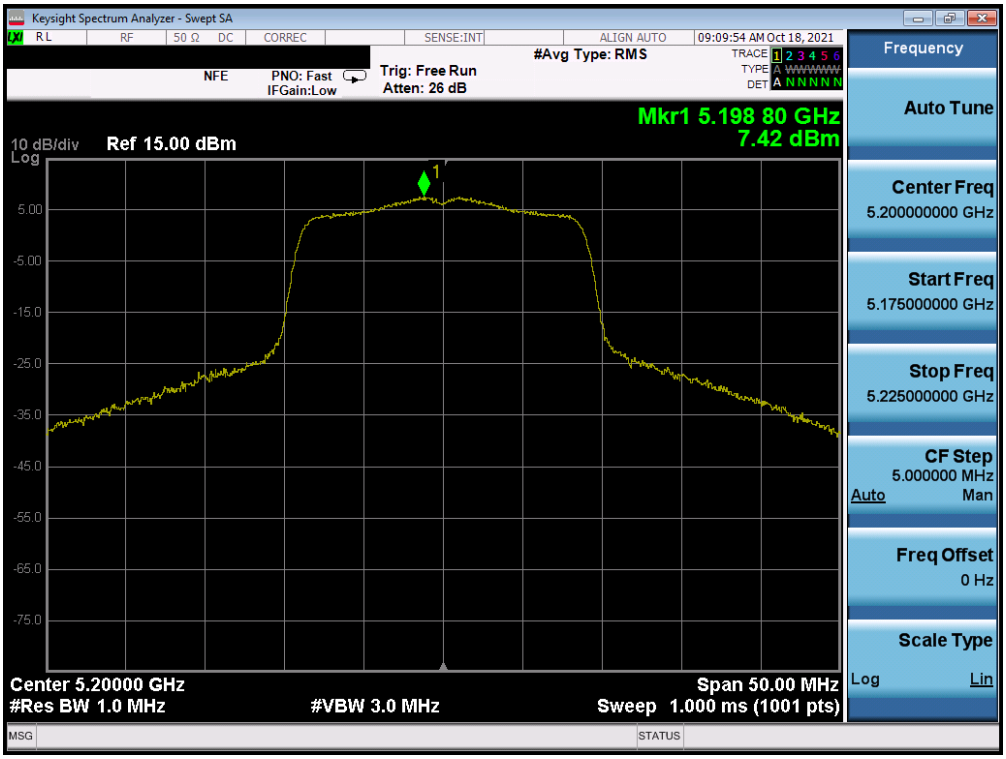

**Plot 7-162. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 1) – Ch. 40)**



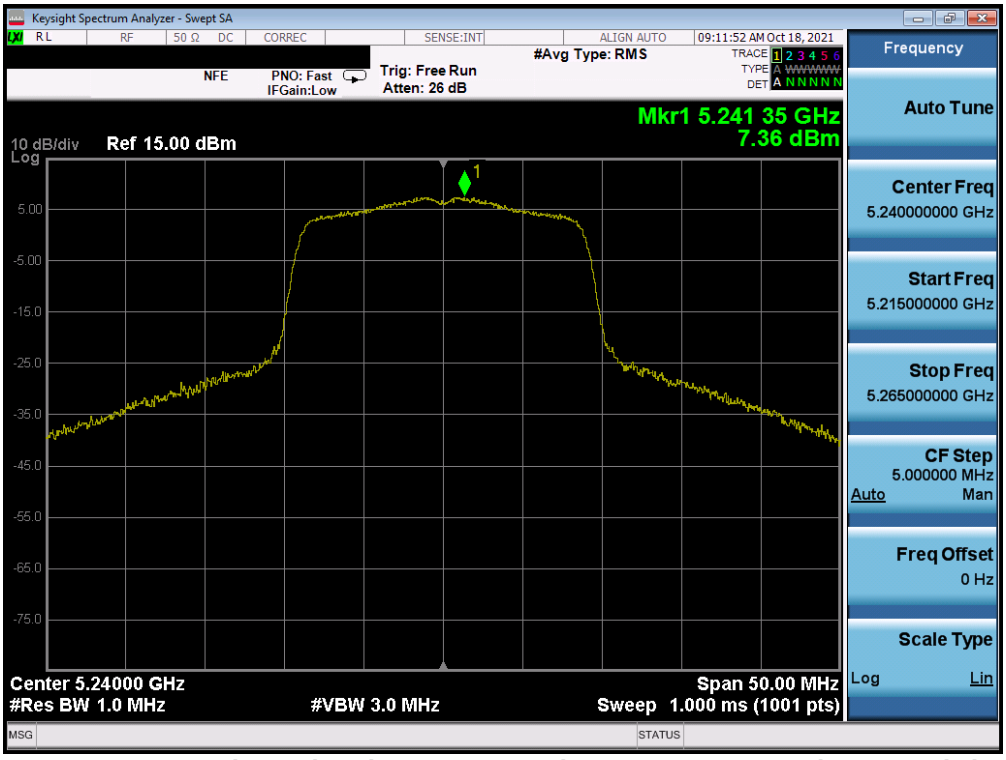

**Plot 7-163. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 1) – Ch. 48)**



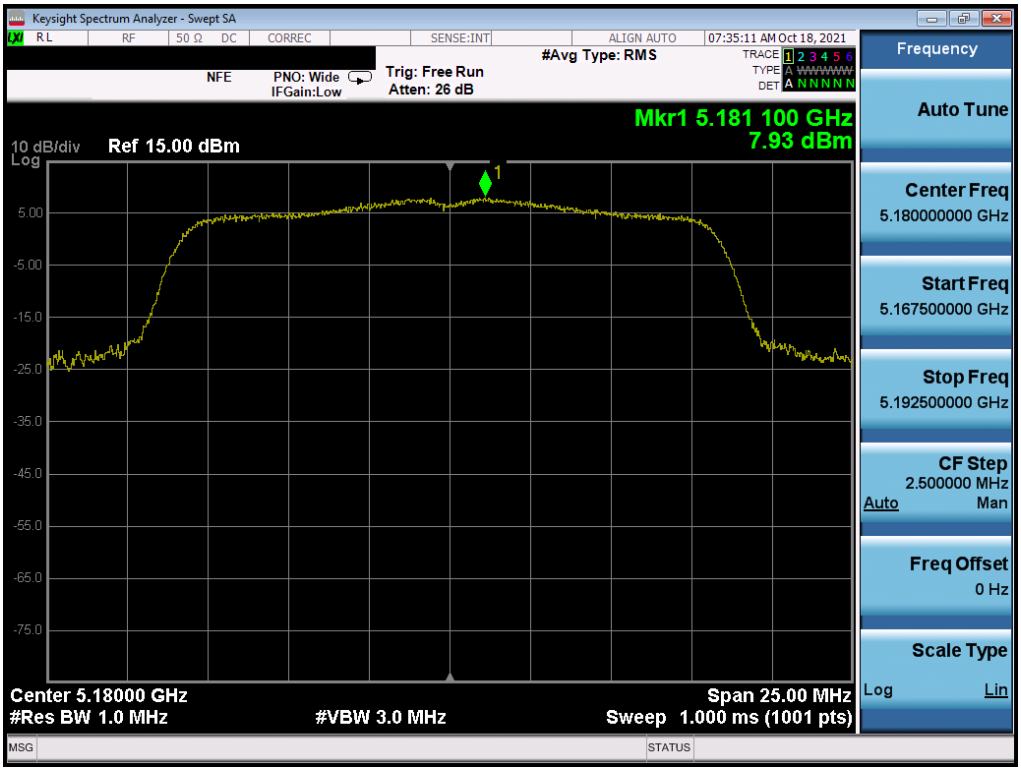

**Plot 7-164. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 1) – Ch. 36)**



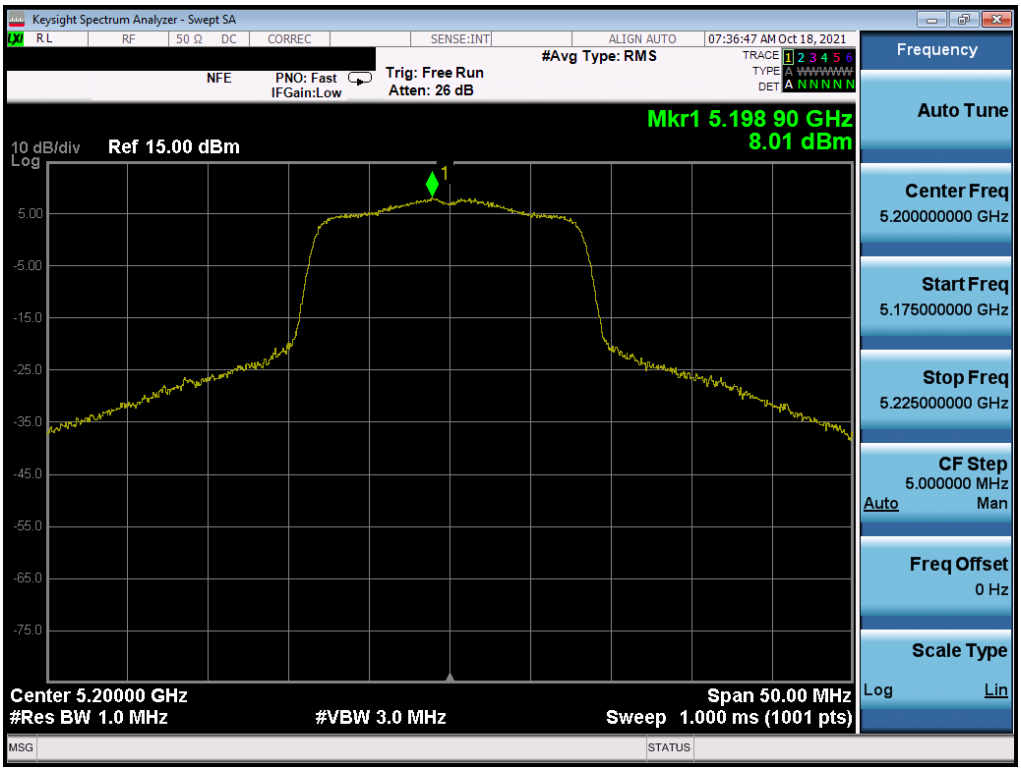

**Plot 7-165. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 1) – Ch. 40)**



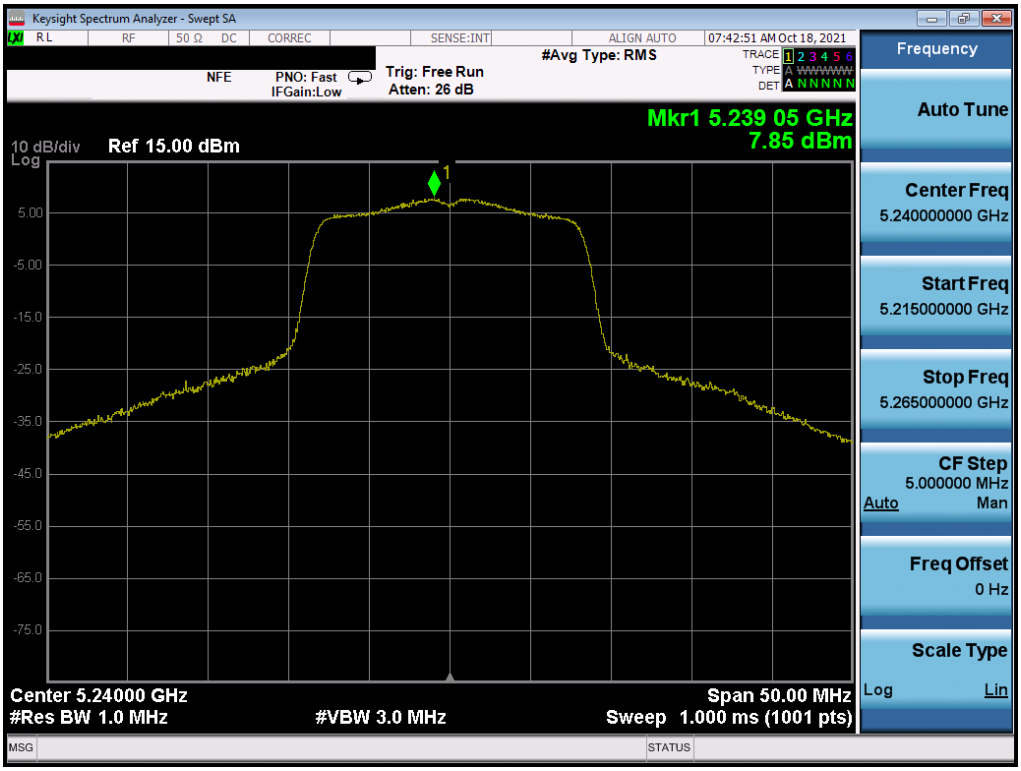

**Plot 7-166. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 1) – Ch. 48)**



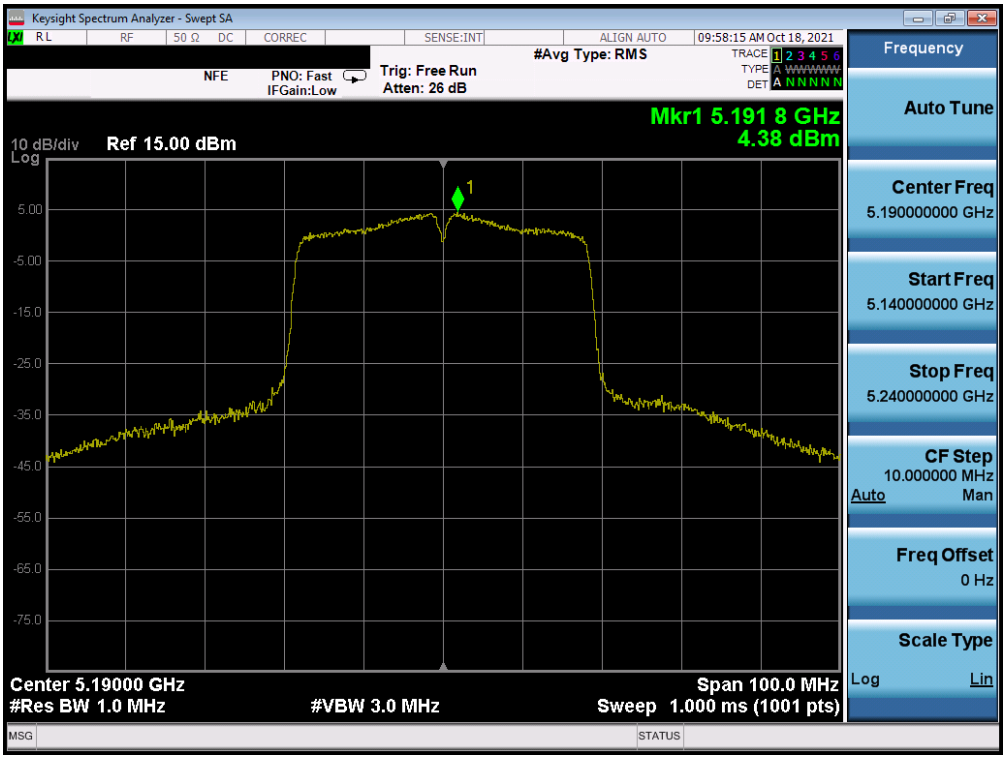

**Plot 7-167. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 1) – Ch. 36)**



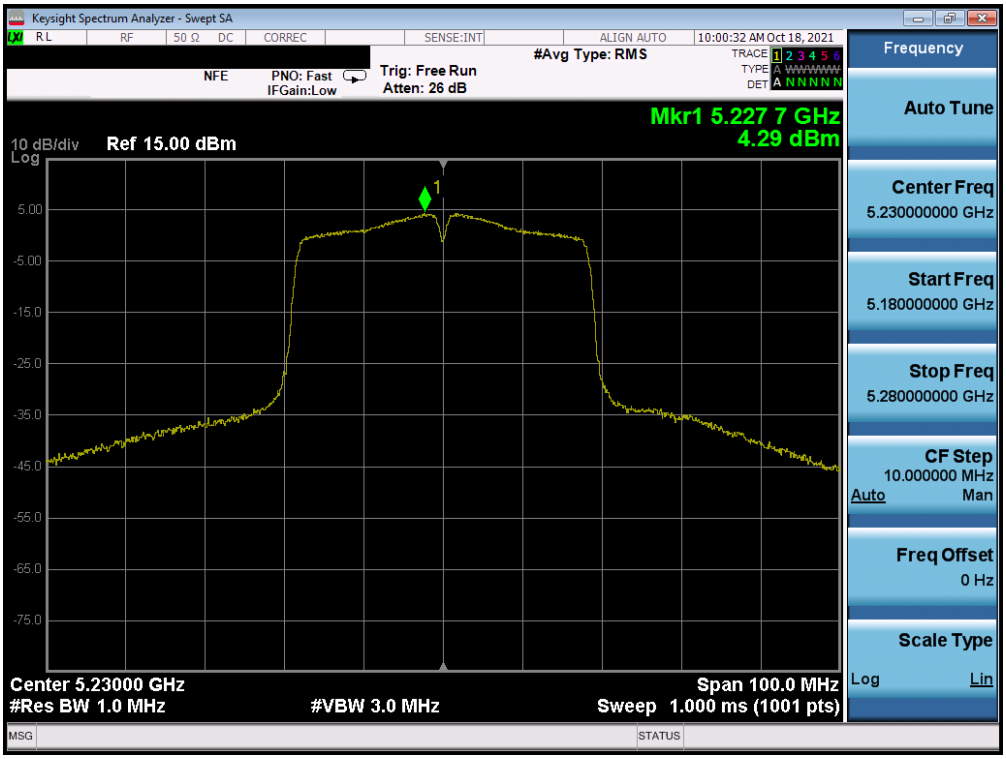

**Plot 7-168. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 1) – Ch. 40)**



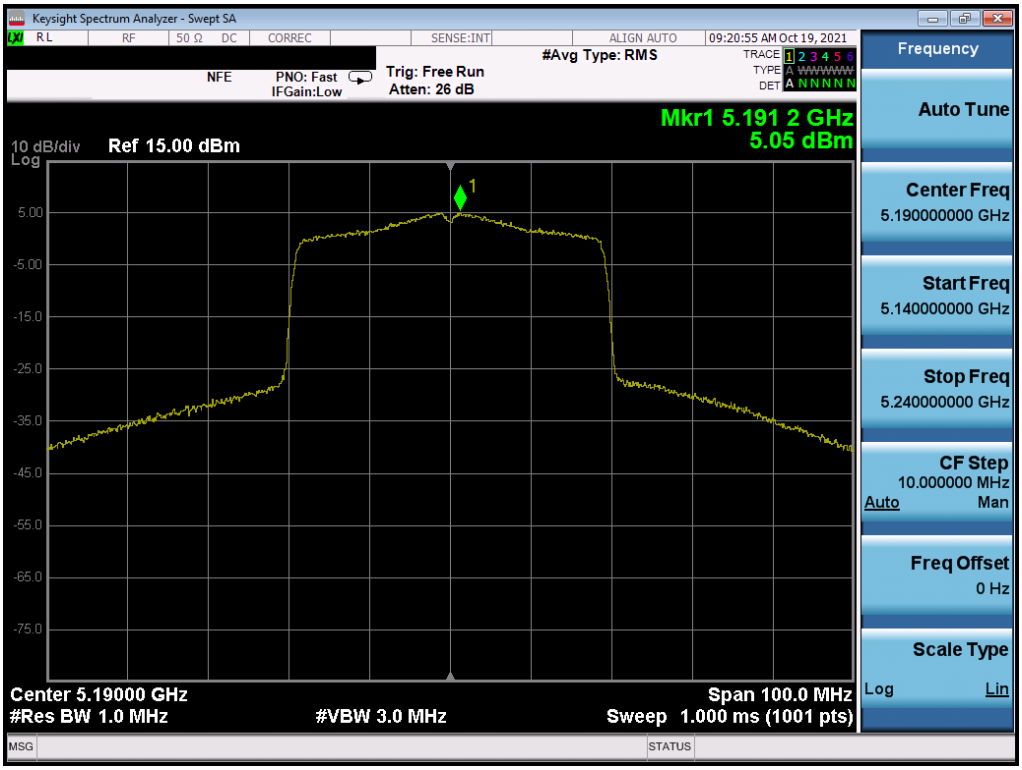

**Plot 7-169. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 1) – Ch. 48)**



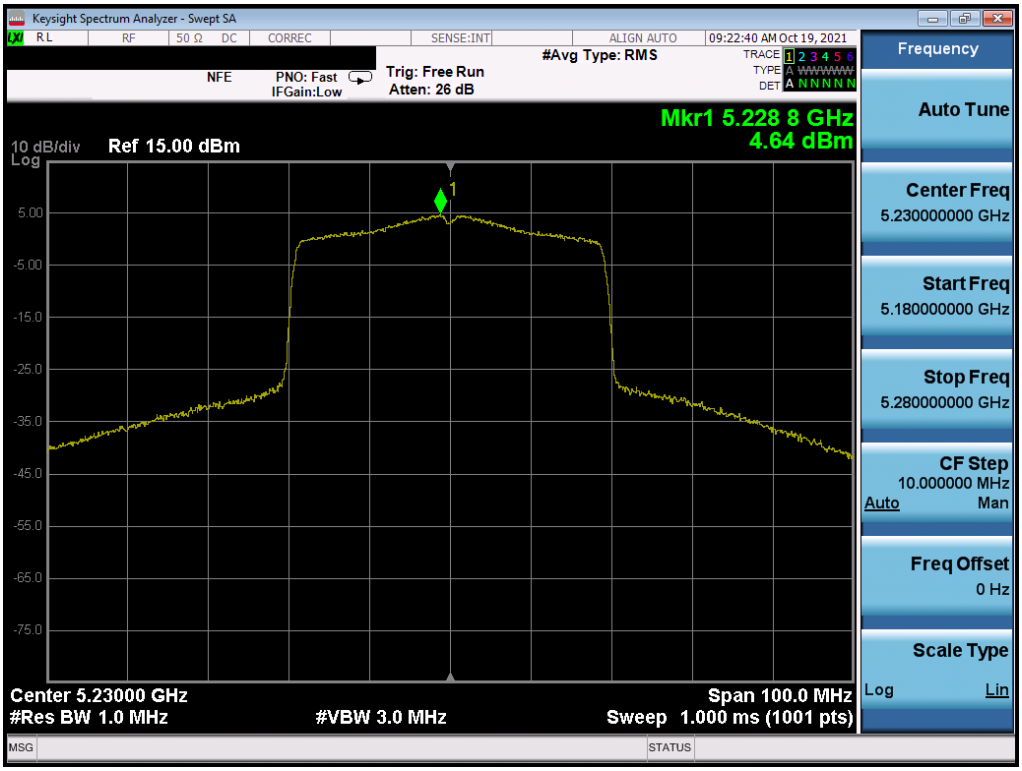

**Plot 7-170. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 1) – Ch. 38)**



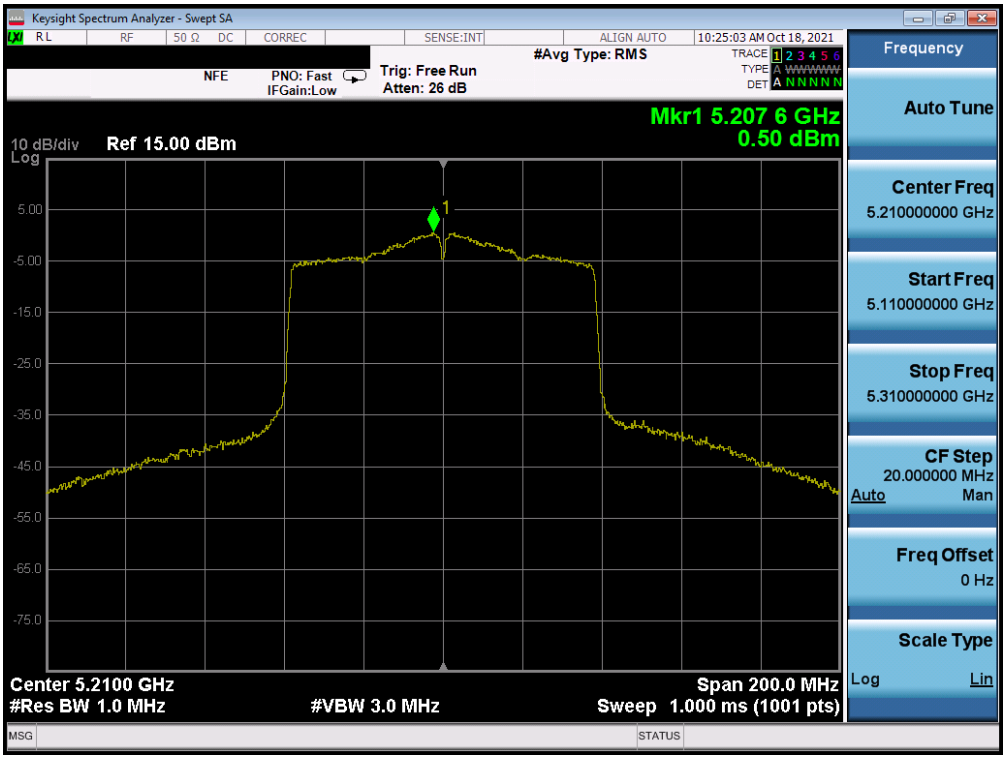

**Plot 7-171. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 1) – Ch. 46)**



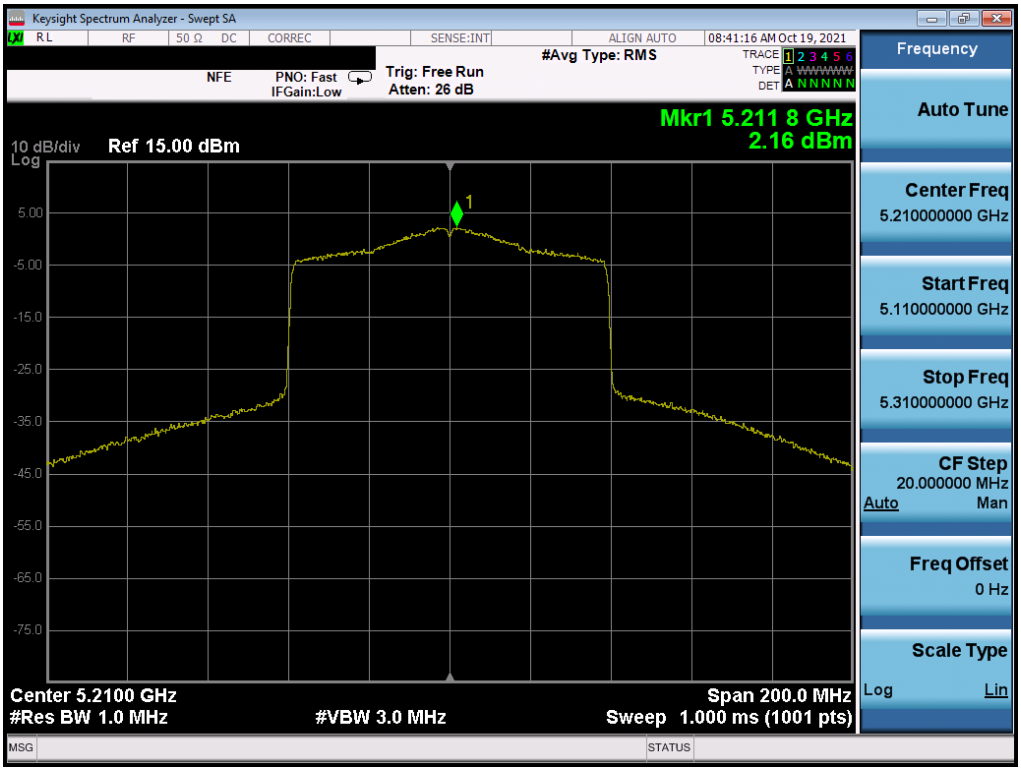

**Plot 7-172. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 1) – Ch. 38)**



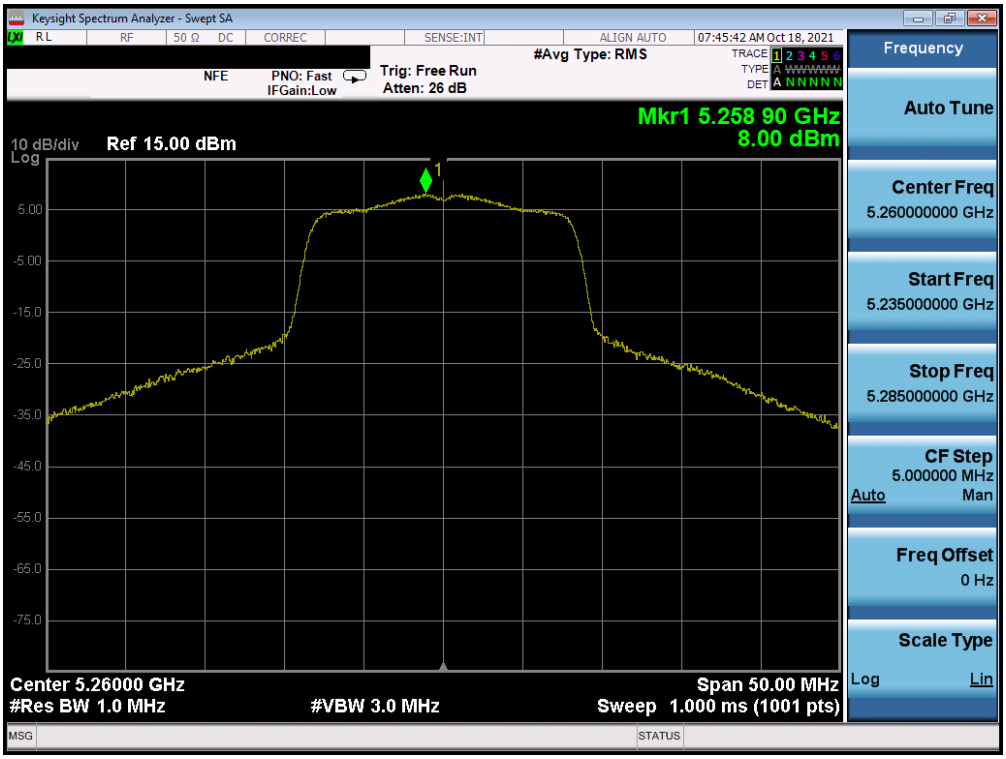

**Plot 7-173. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 1) – Ch. 46)**



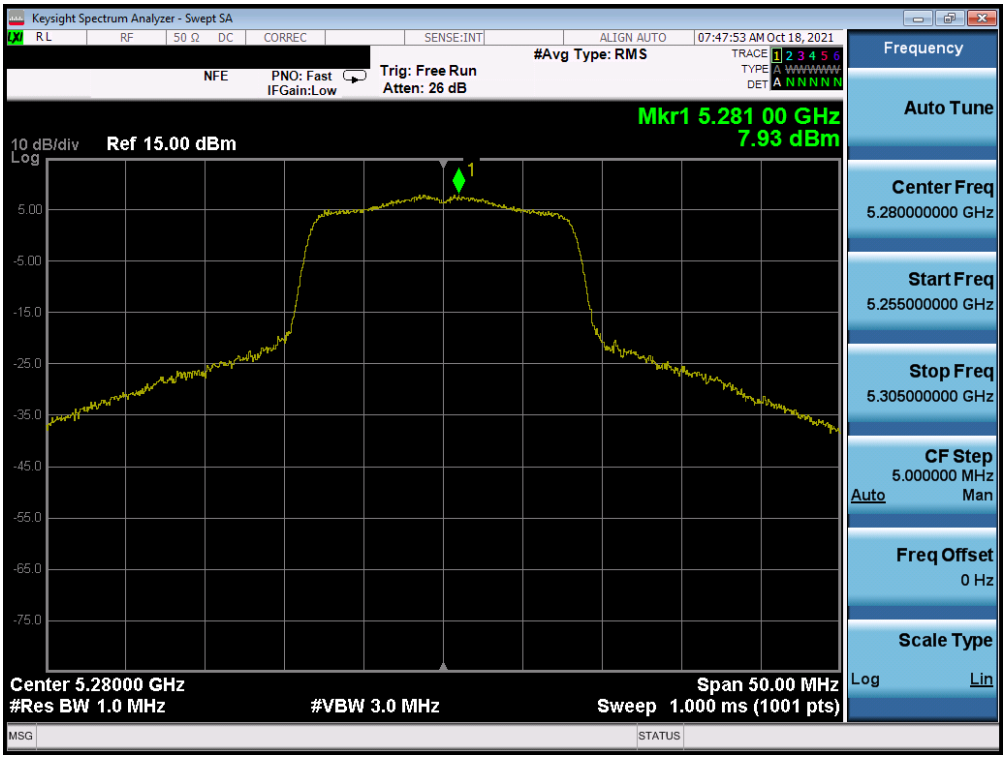

**Plot 7-174. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 1) – Ch. 42)**



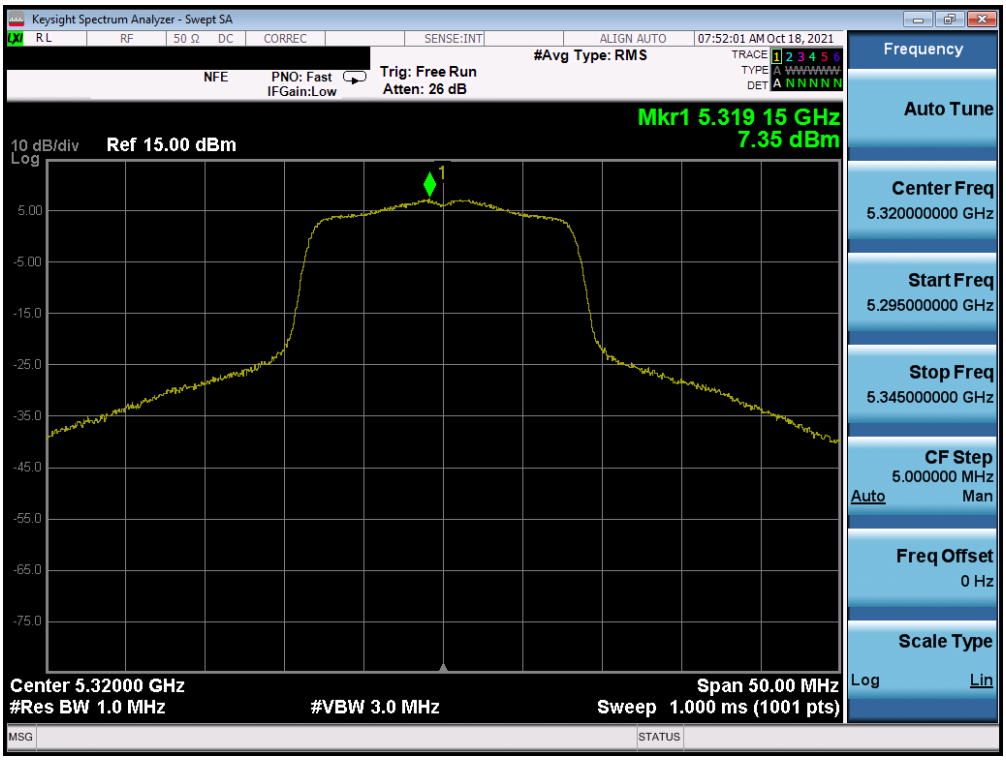

**Plot 7-175. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 1) – Ch. 42)**



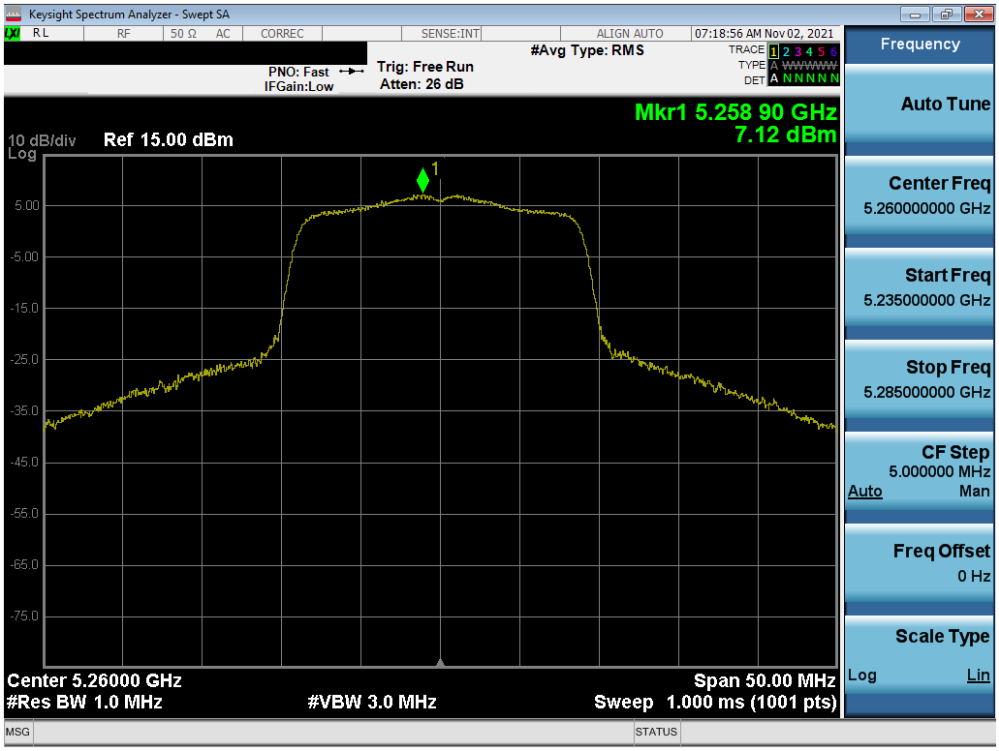

**Plot 7-176. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2A) – Ch. 52)**



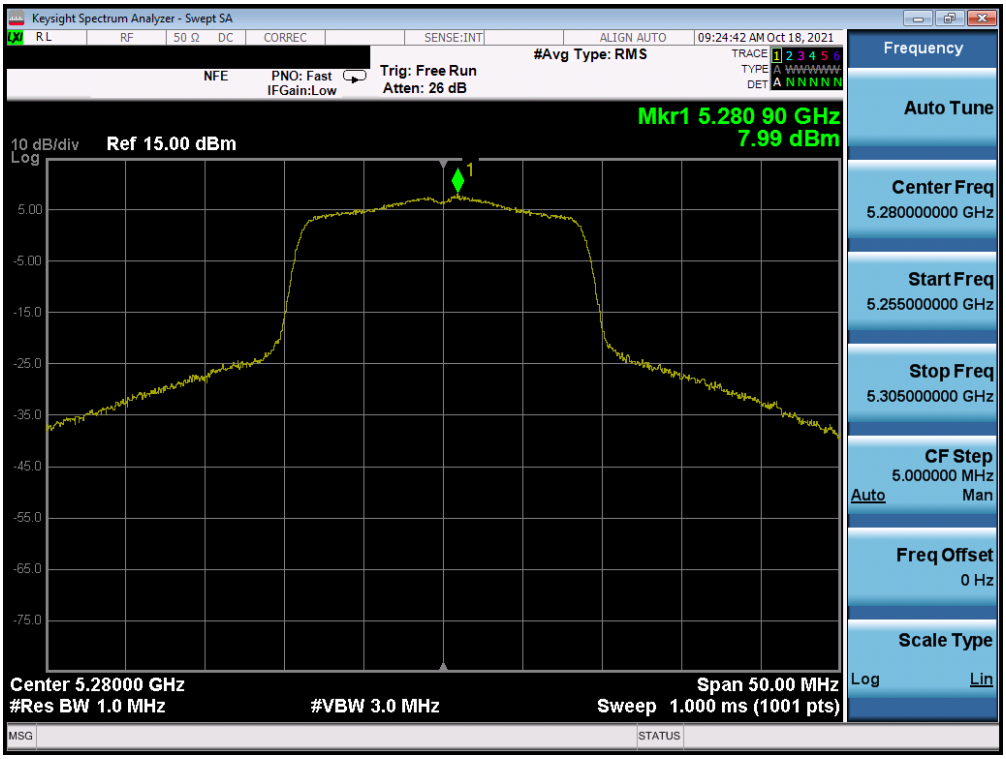

**Plot 7-177. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2A) – Ch. 56)**



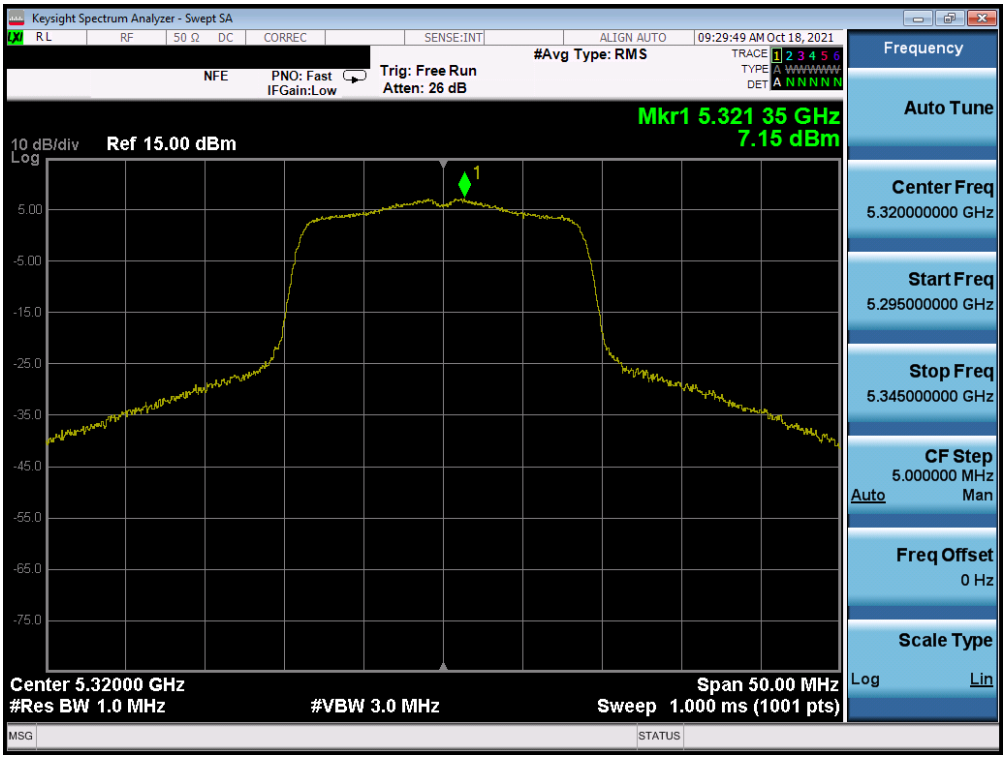

**Plot 7-178. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2A) – Ch. 64)**



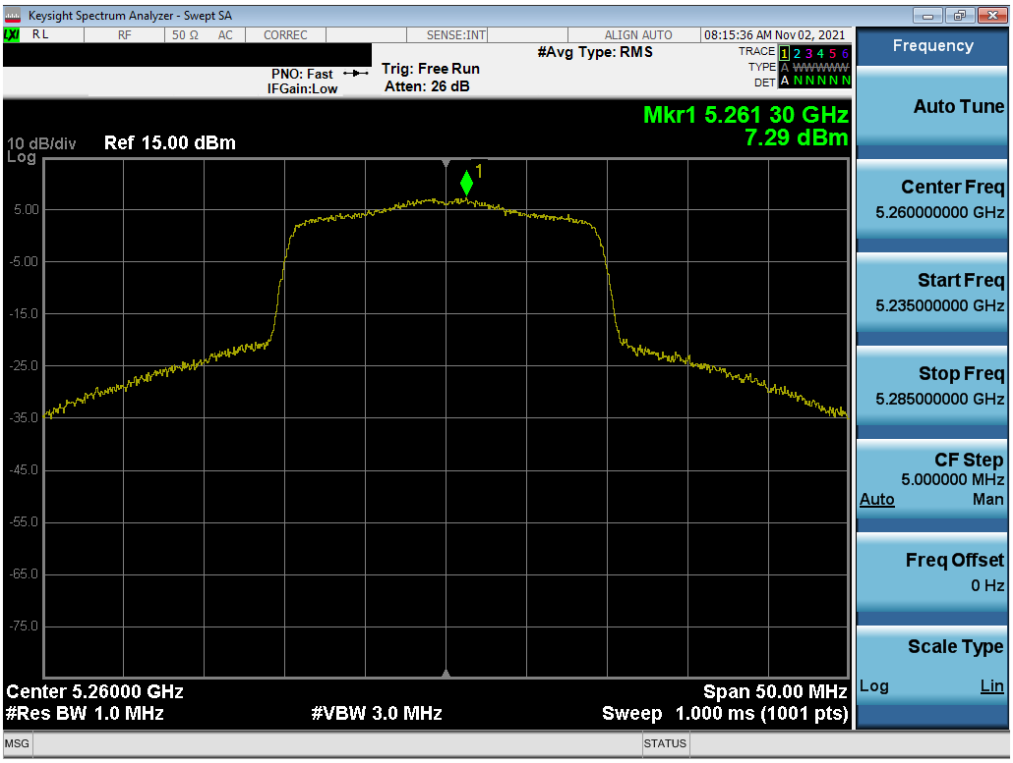

**Plot 7-179. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 52)**



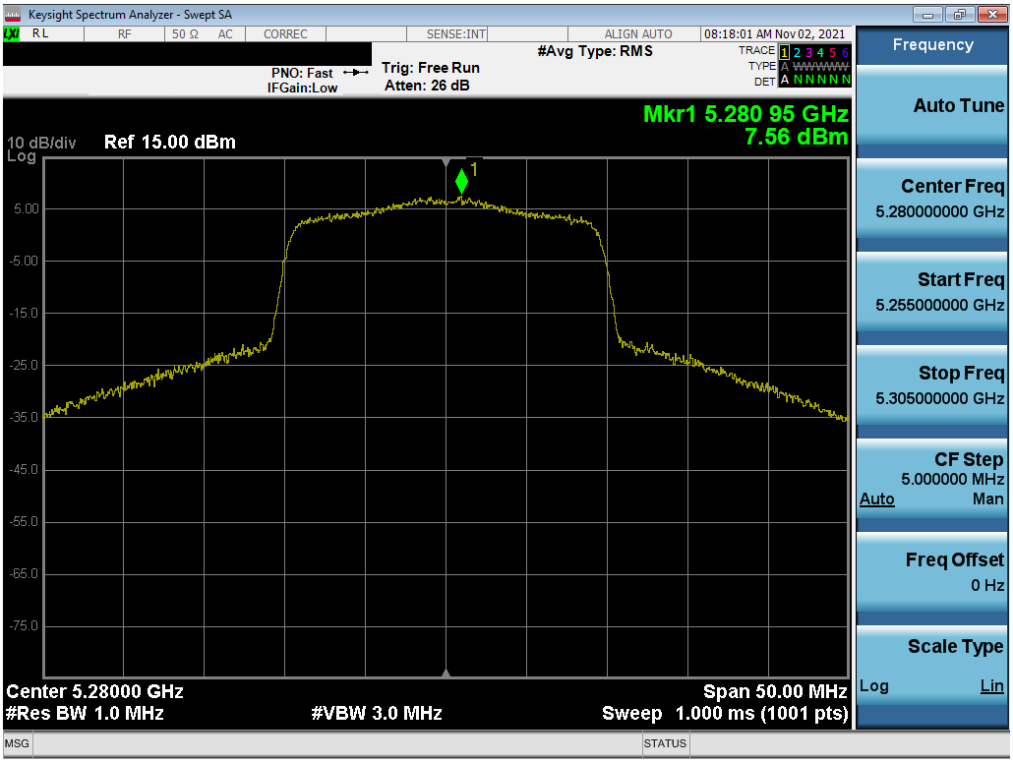

**Plot 7-180. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 56)**



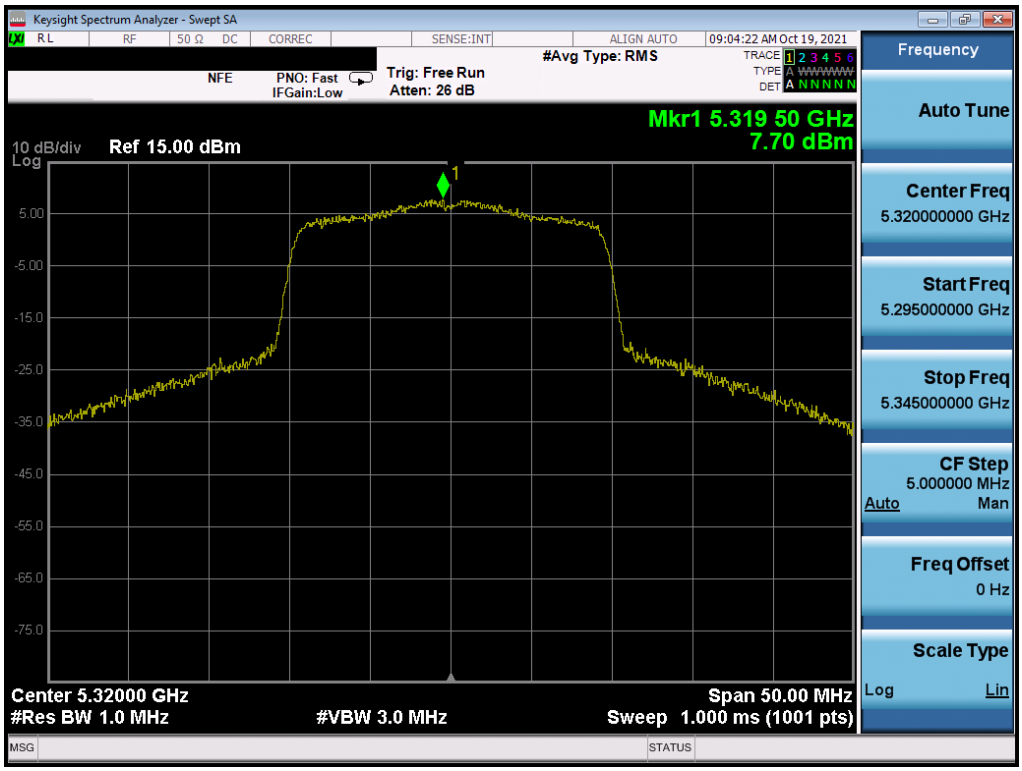

**Plot 7-181. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2A) – Ch. 64)**



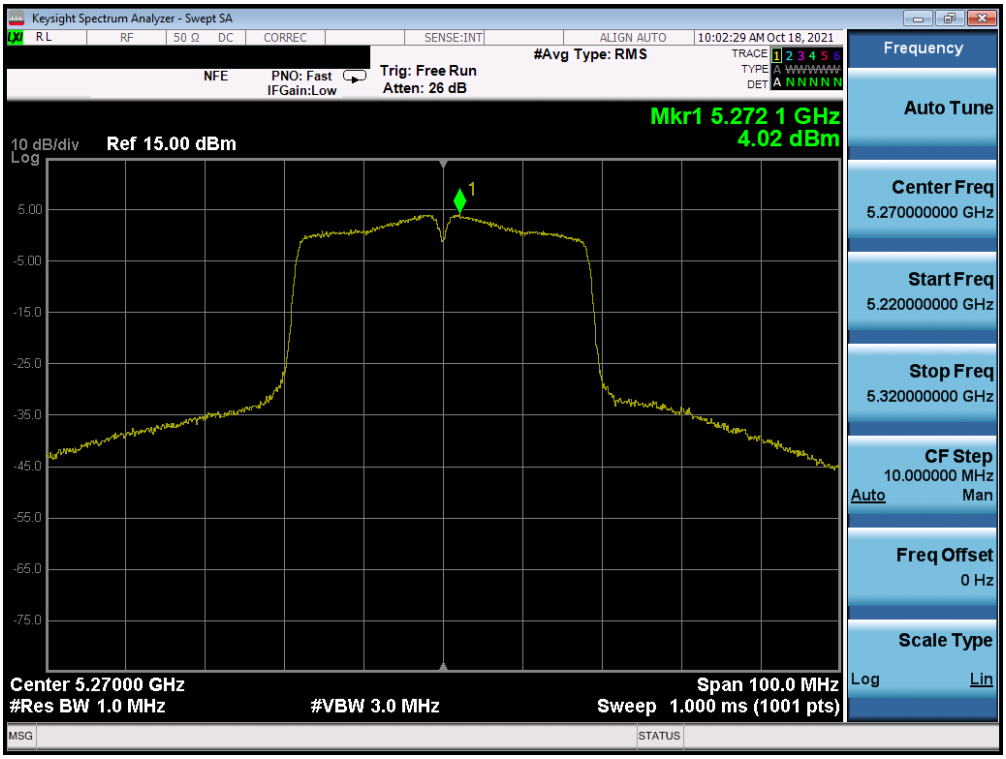

**Plot 7-182. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 52)**



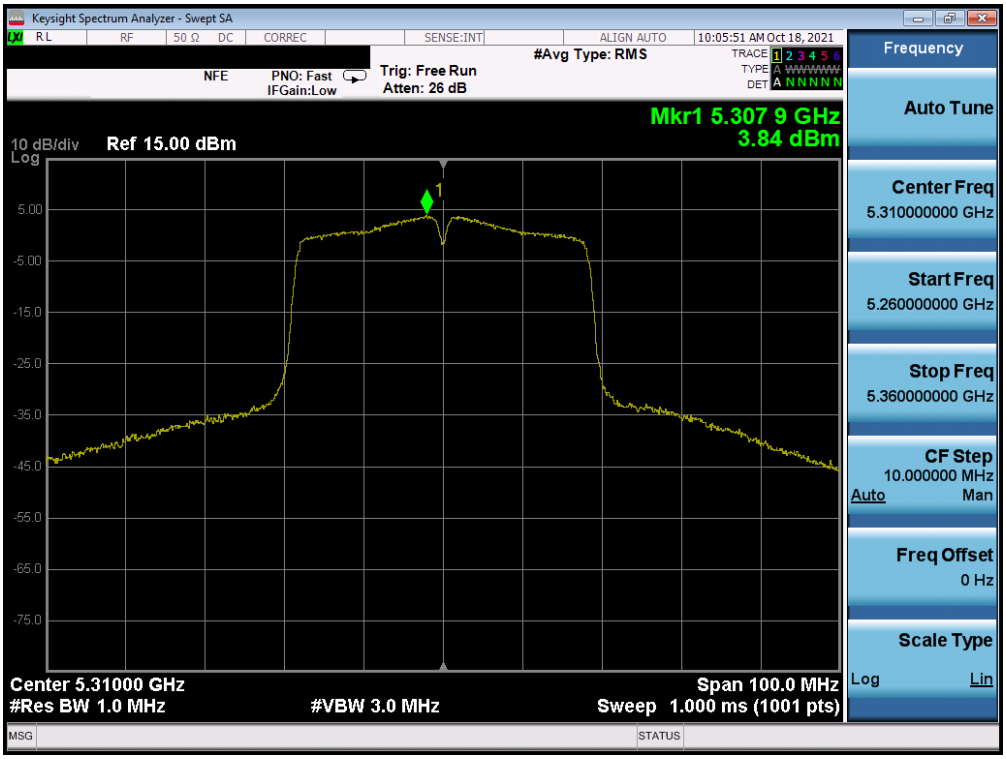

**Plot 7-183. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 56)**



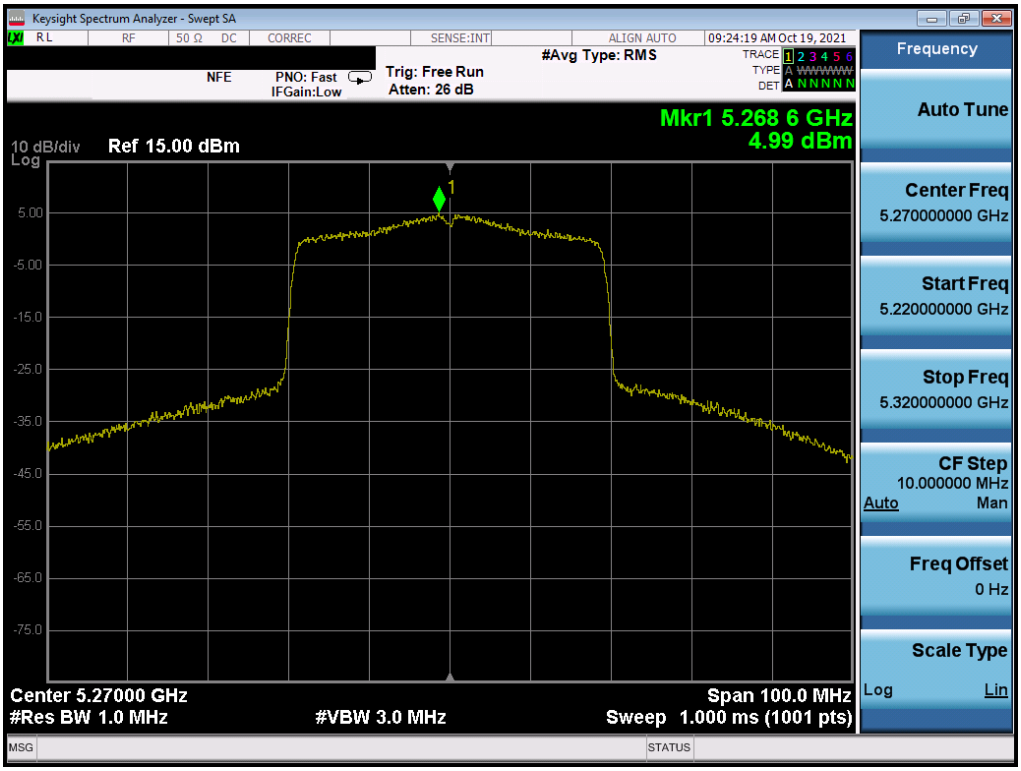

**Plot 7-184. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 2A) – Ch. 64)**



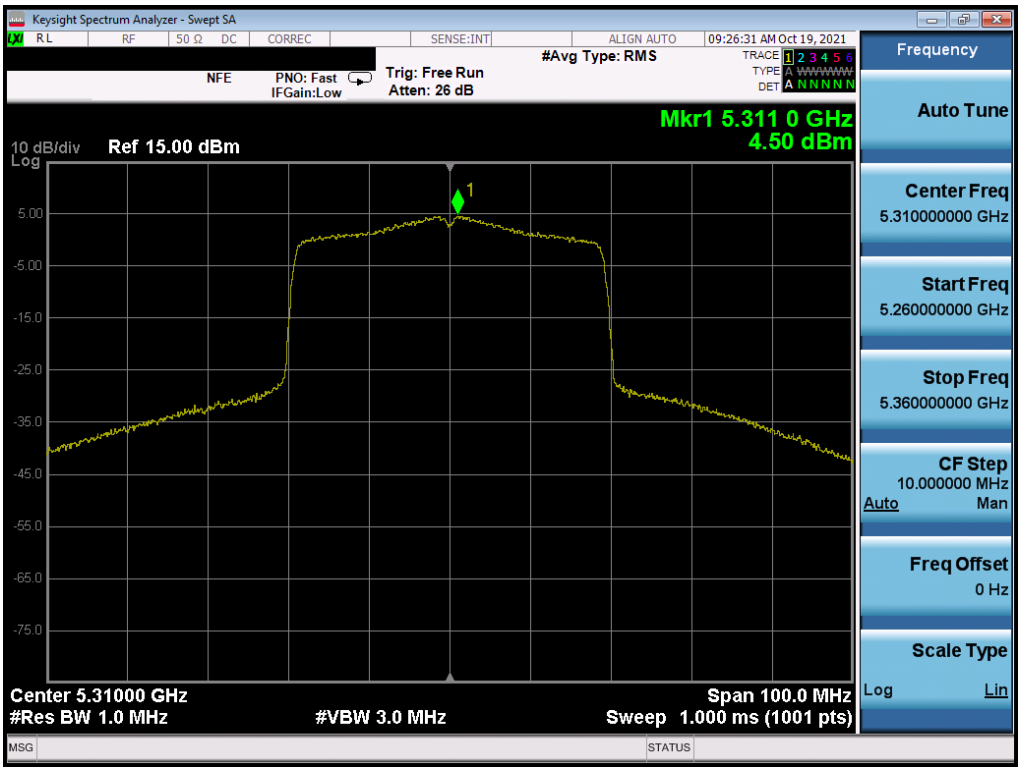

**Plot 7-185. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2A) – Ch. 54)**



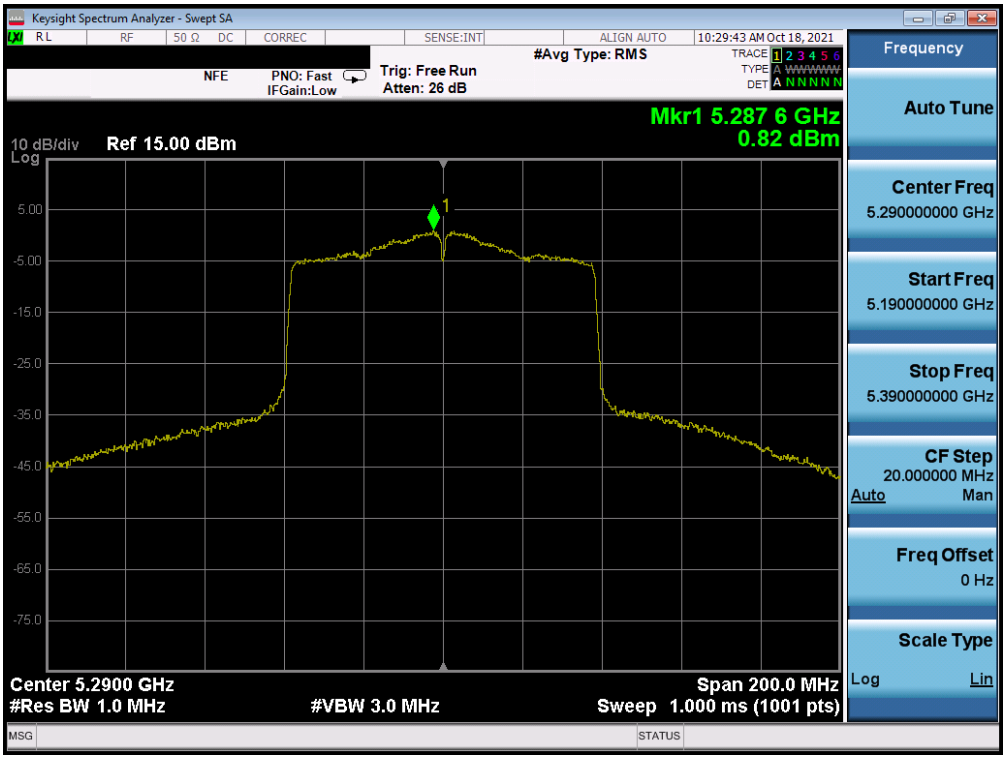

**Plot 7-186. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2A) – Ch. 62)**




**Plot 7-187. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2A) – Ch. 54)**

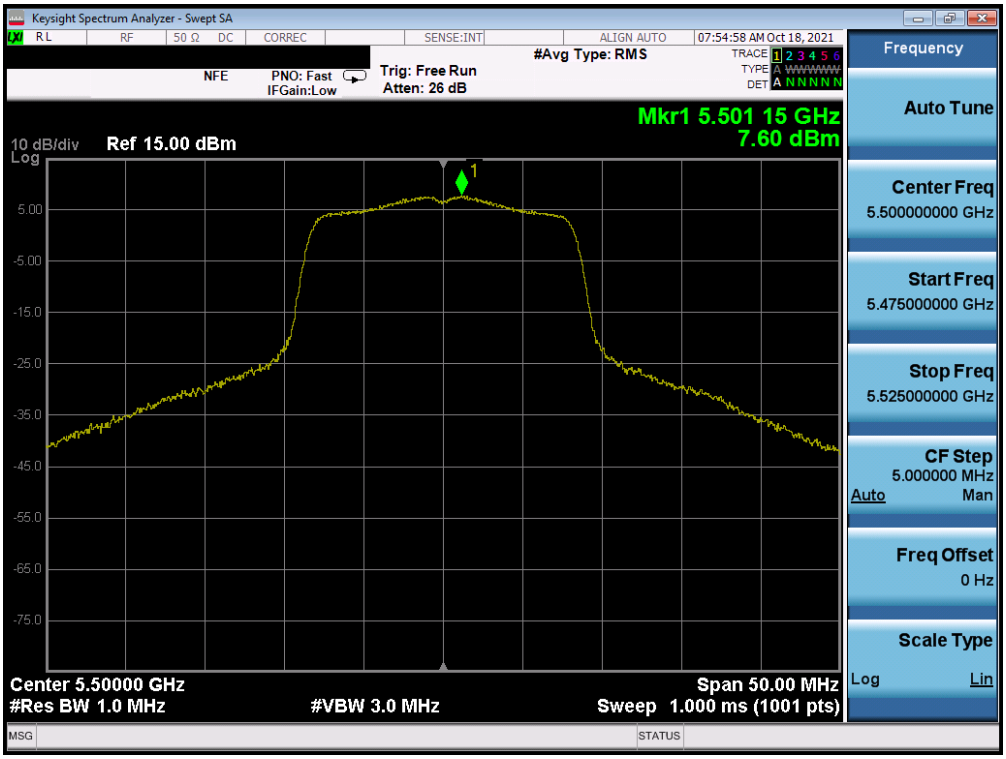



**Plot 7-188. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2A) – Ch. 62)**

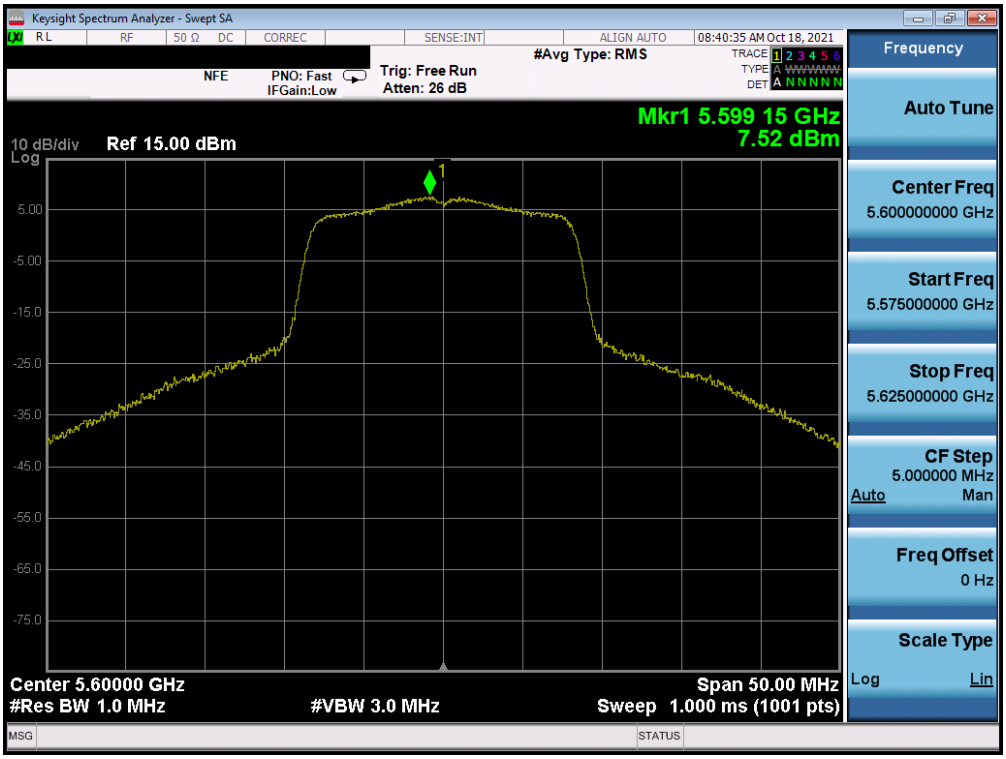



**Plot 7-189. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2A) – Ch. 58)**

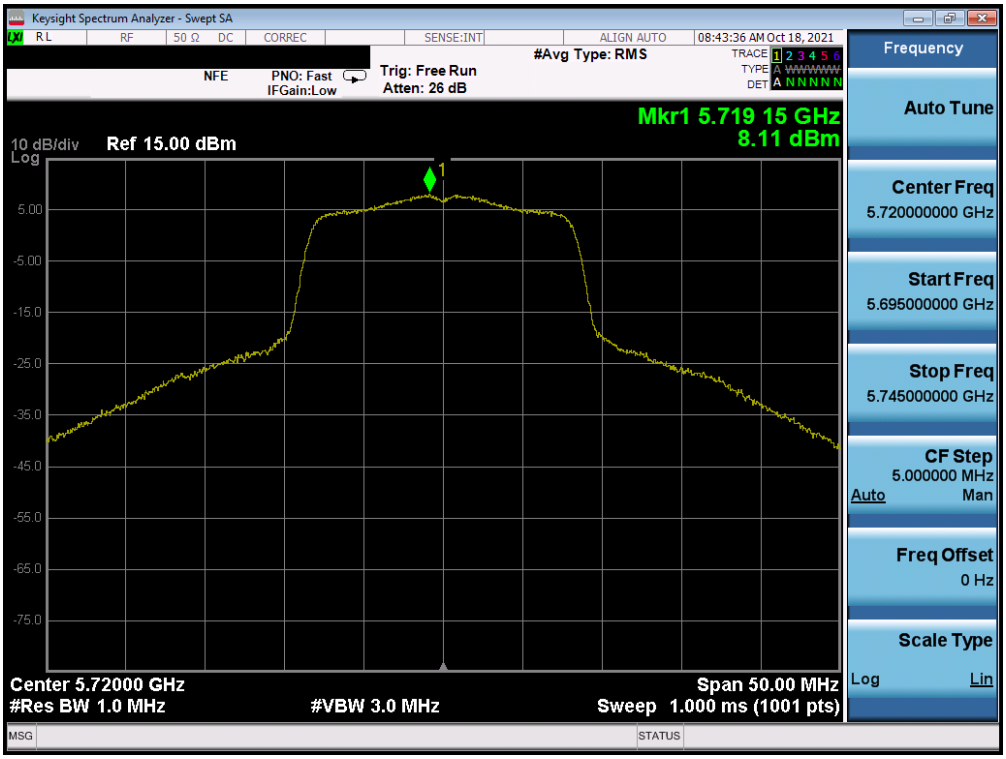

**Plot 7-190. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 2A) – Ch. 58)**



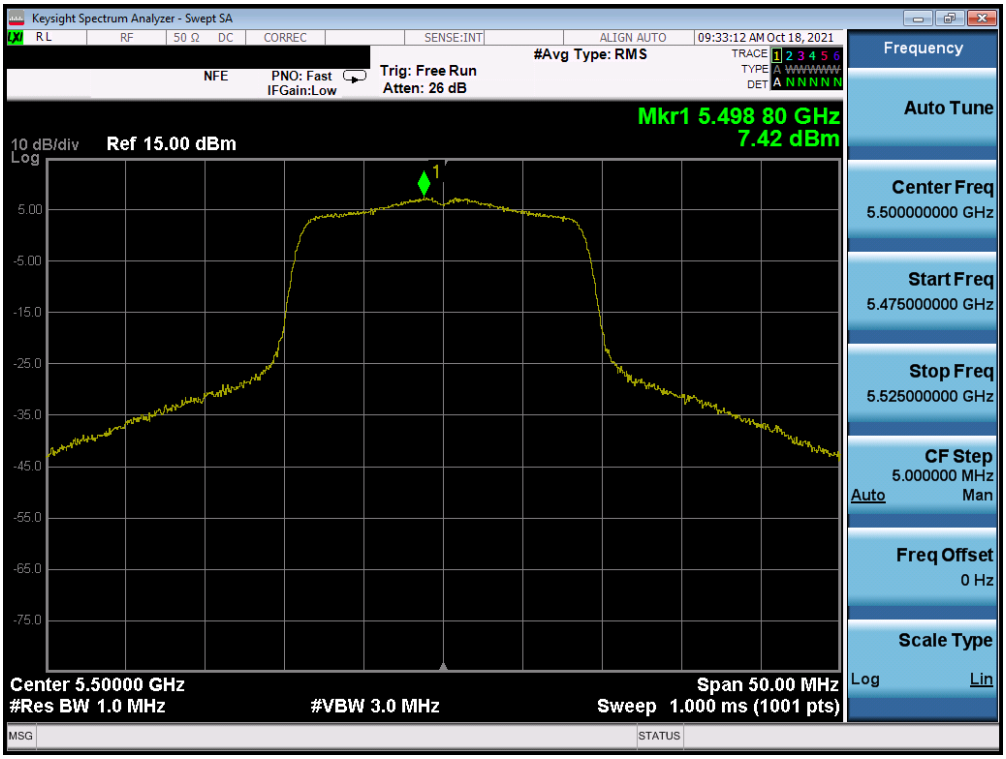

**Plot 7-191. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) – Ch. 100)**



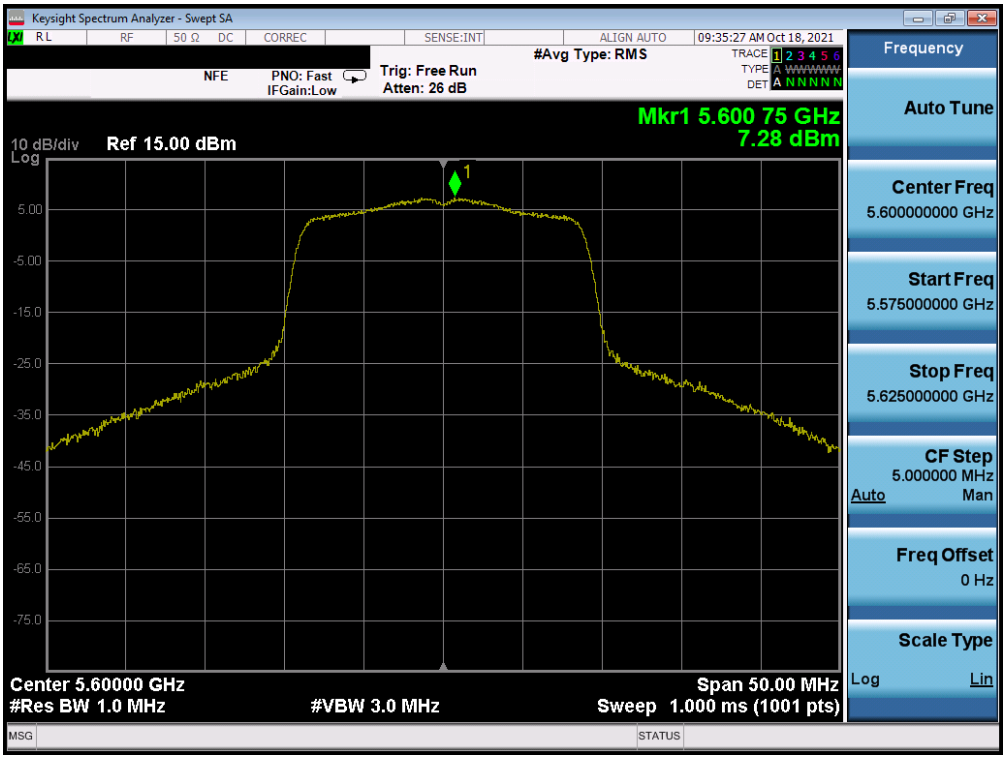

**Plot 7-192. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) – Ch. 120)**



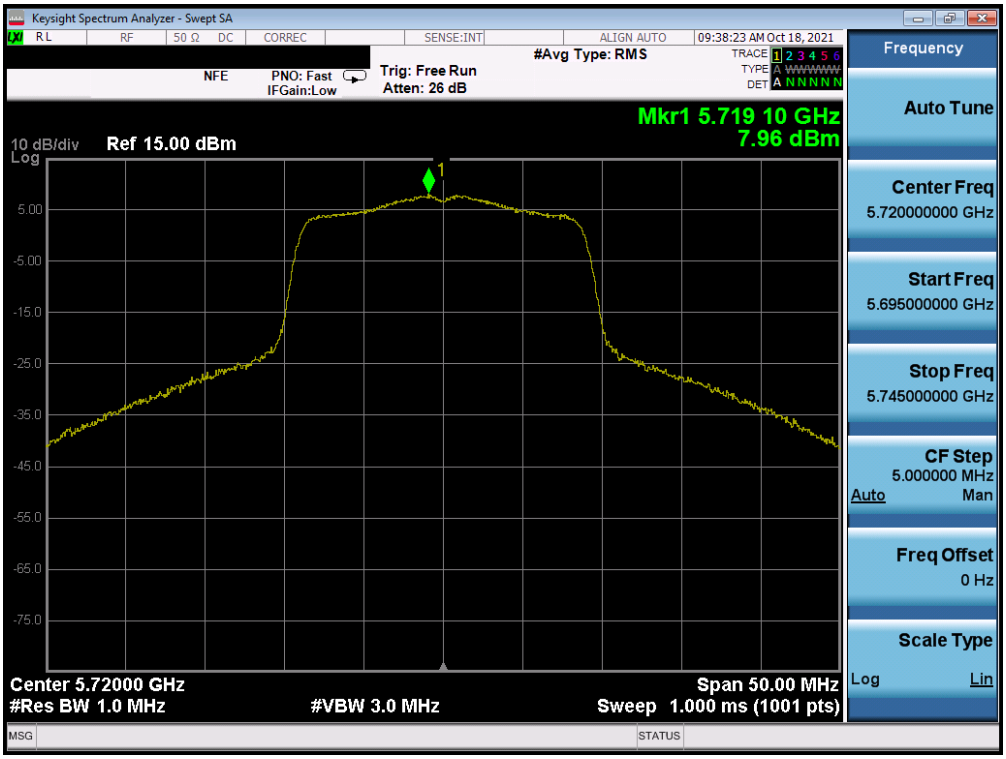

**Plot 7-193. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 2C) – Ch. 144)**



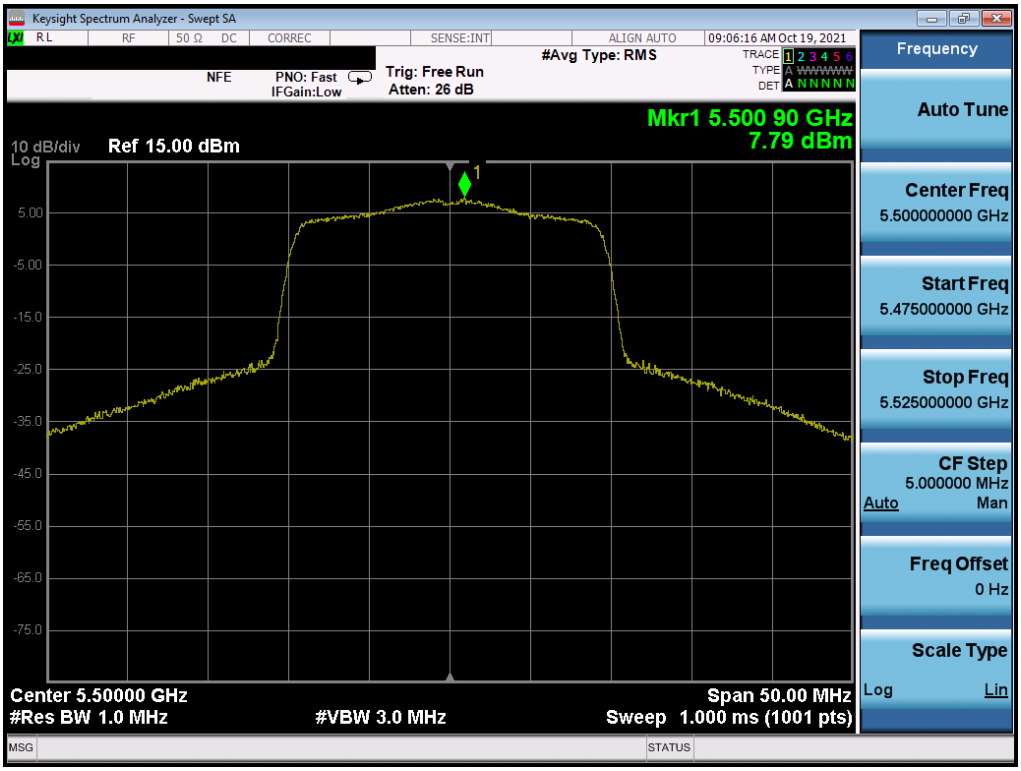

**Plot 7-194. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 100)**



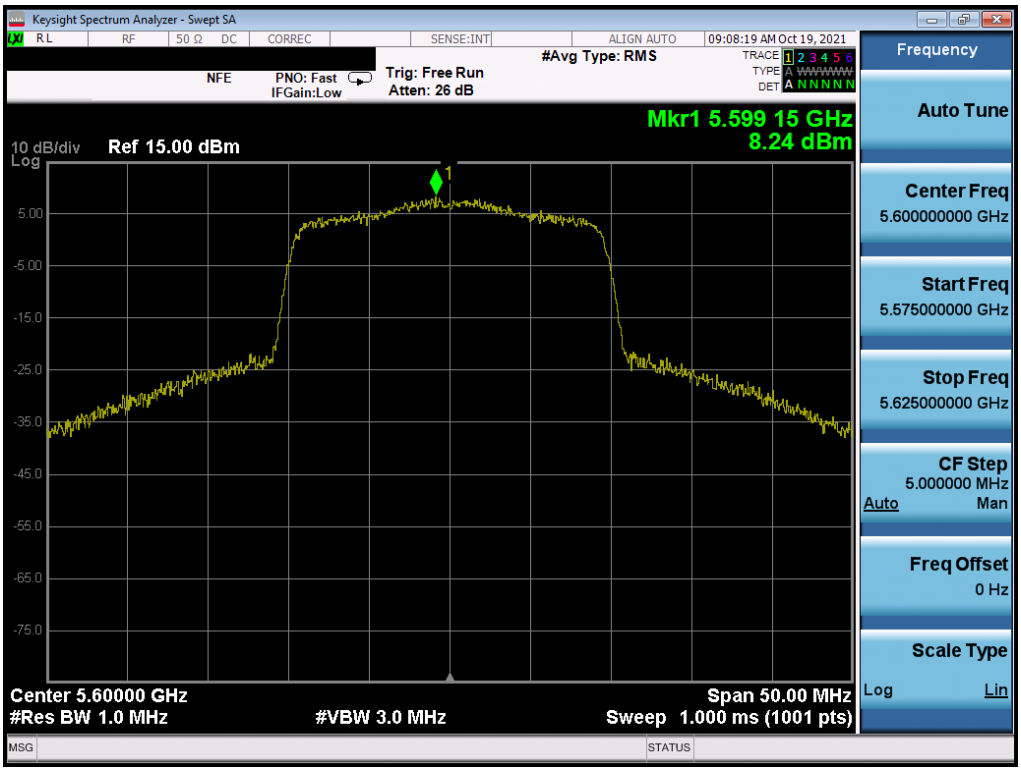

**Plot 7-195. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 120)**



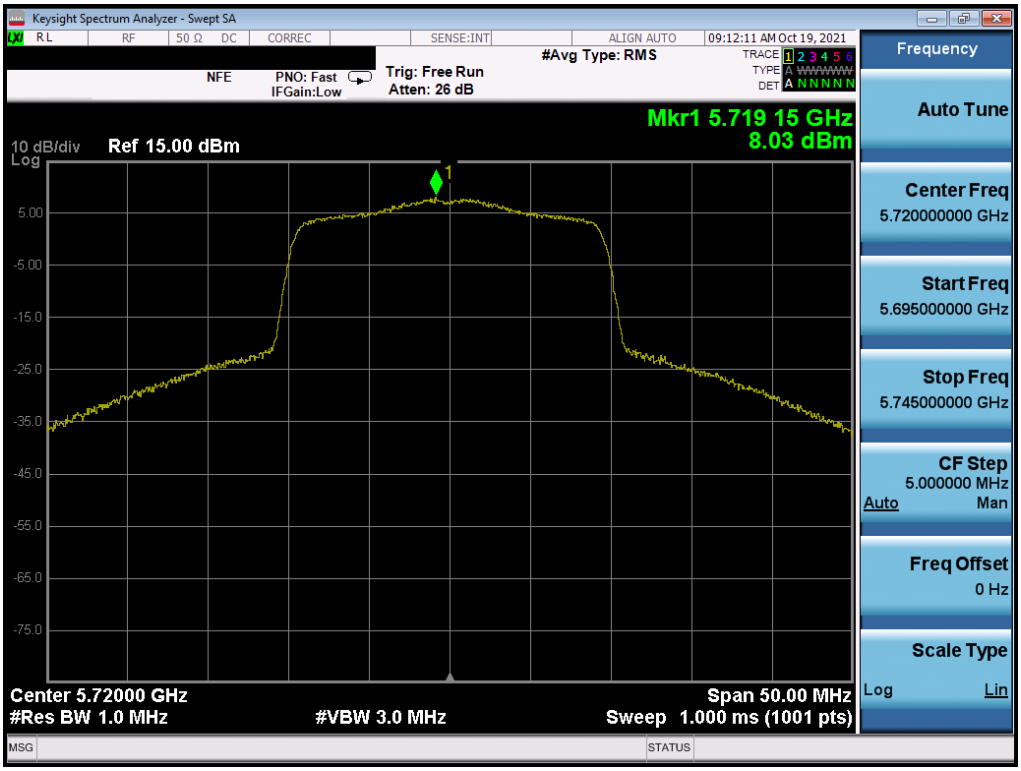

**Plot 7-196. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 2C) – Ch. 144)**



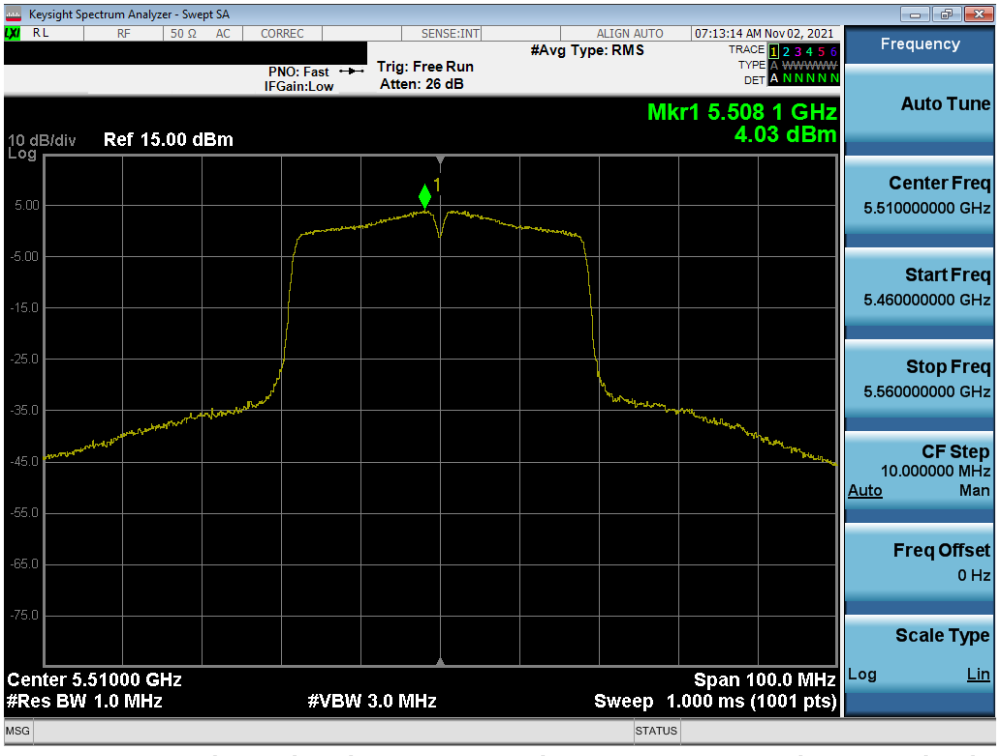

**Plot 7-197. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 100)**



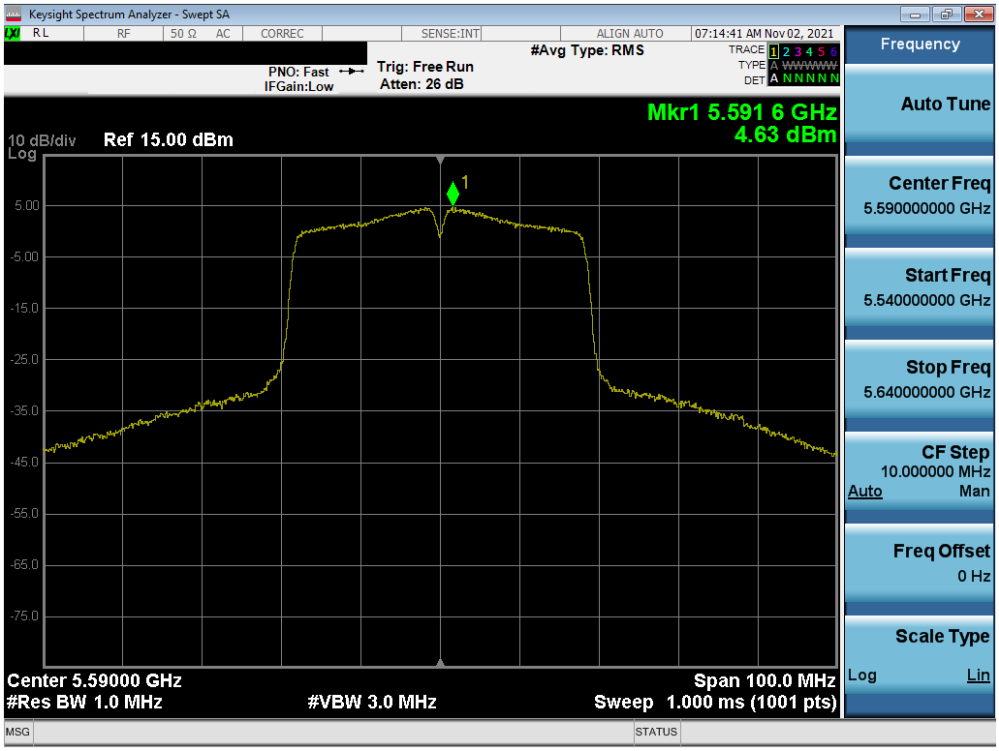

**Plot 7-198. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 120)**



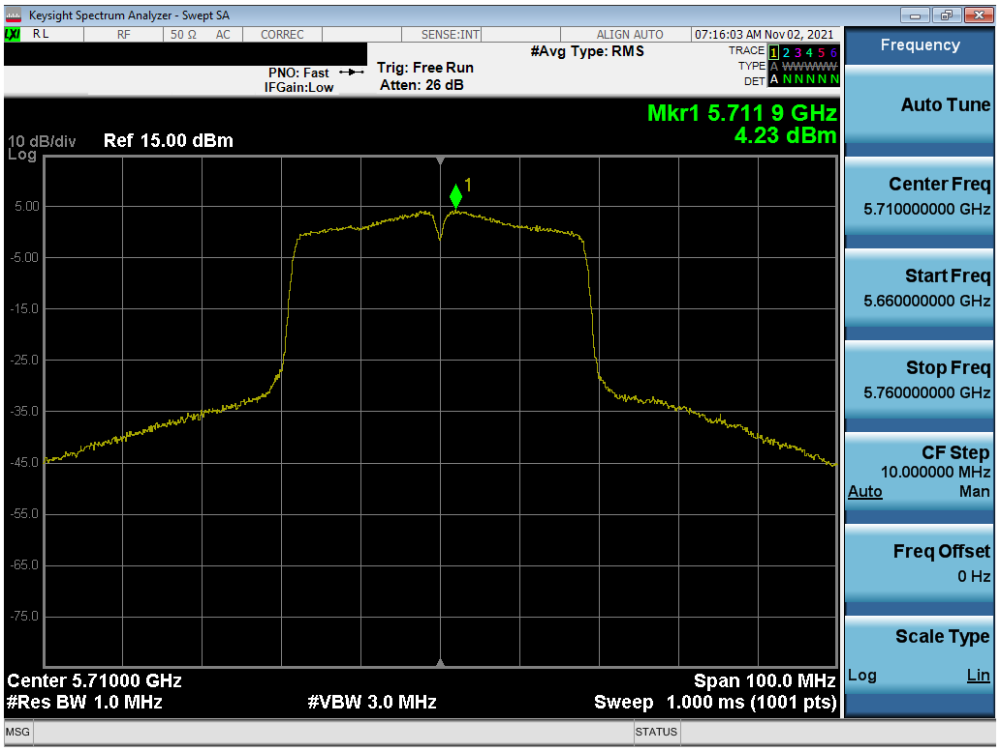

**Plot 7-199. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 2C) – Ch. 144)**



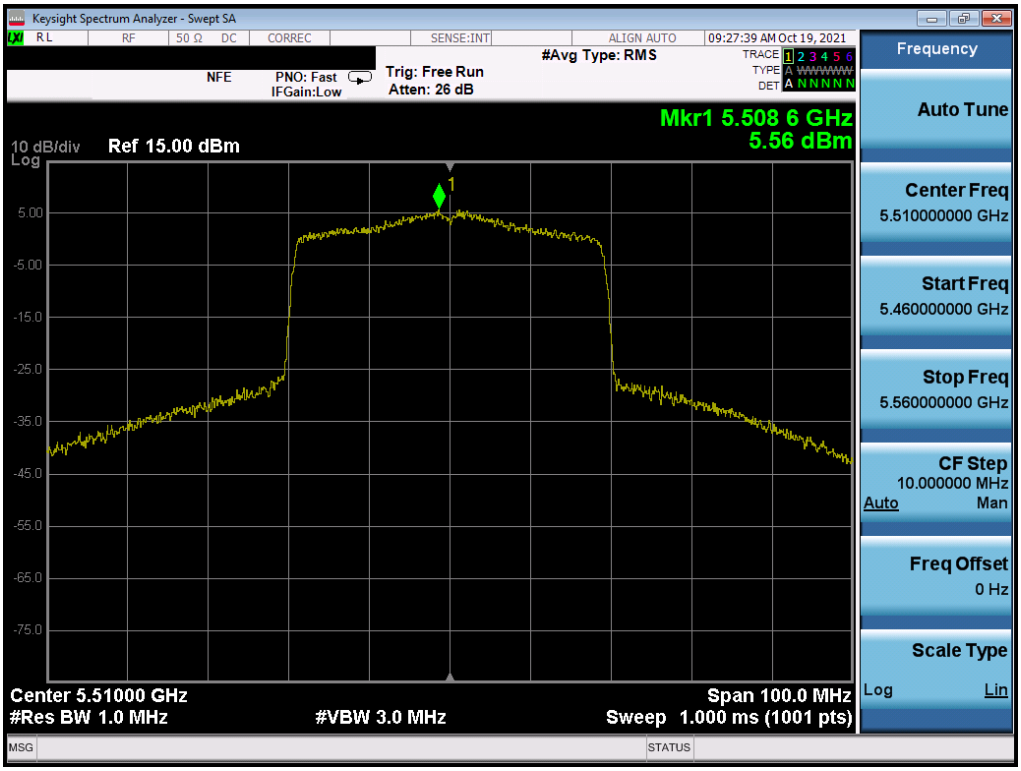

**Plot 7-200. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) – Ch. 102)**



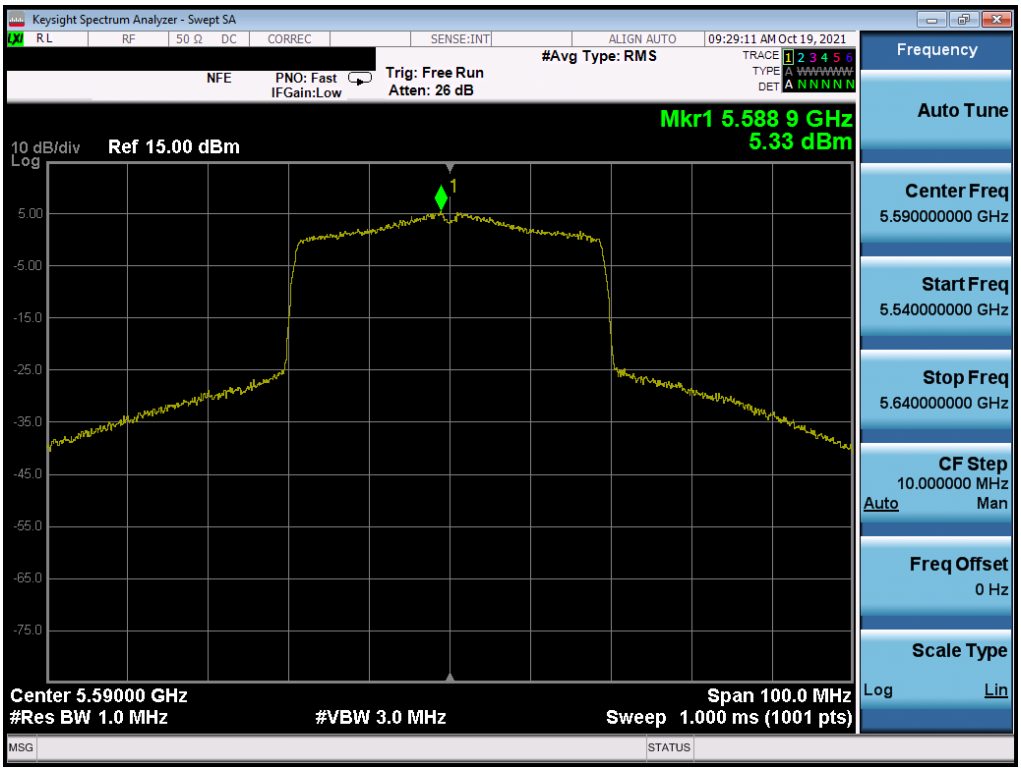

**Plot 7-201. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) – Ch. 118)**



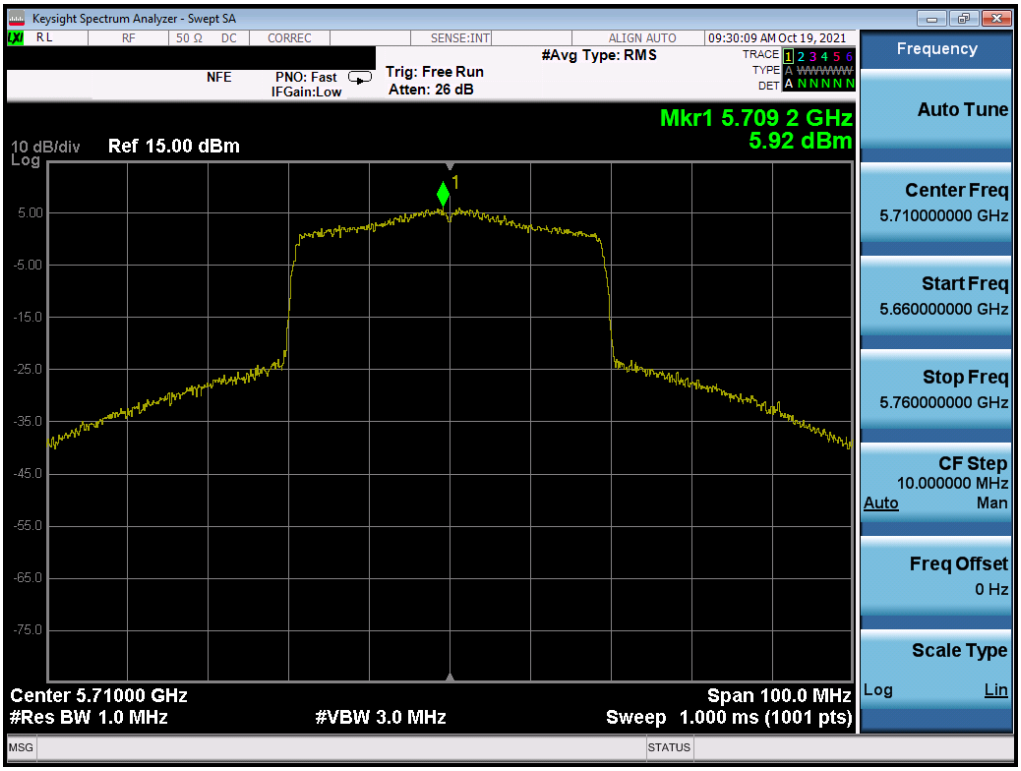

**Plot 7-202. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 2C) – Ch. 142)**



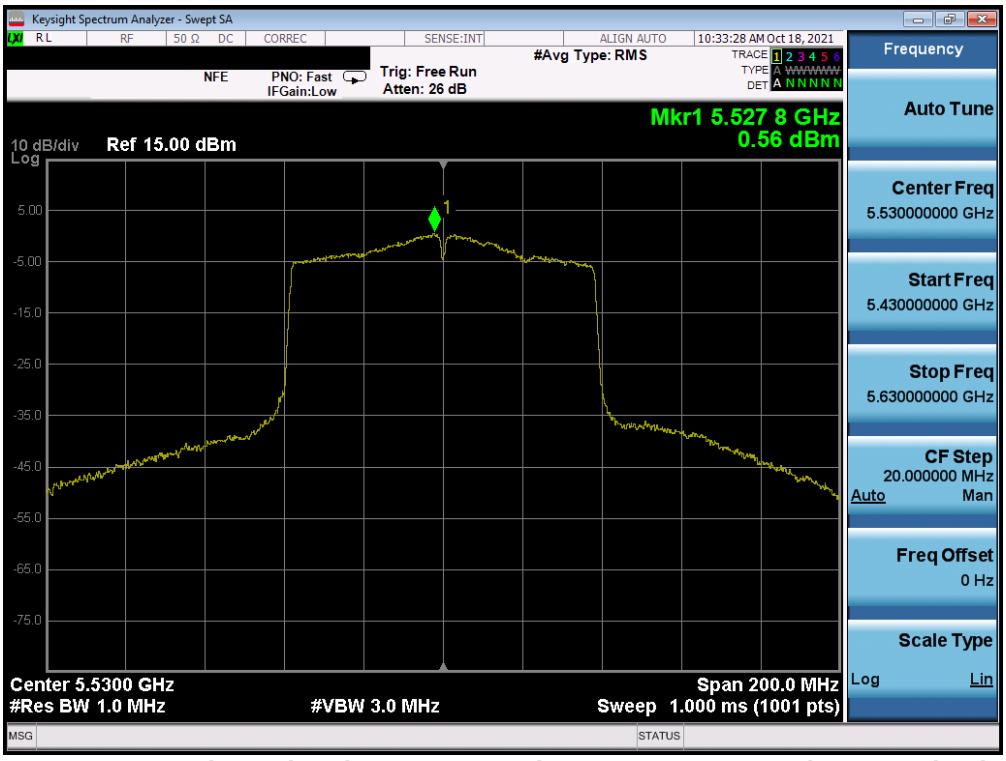

**Plot 7-203. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 102)**



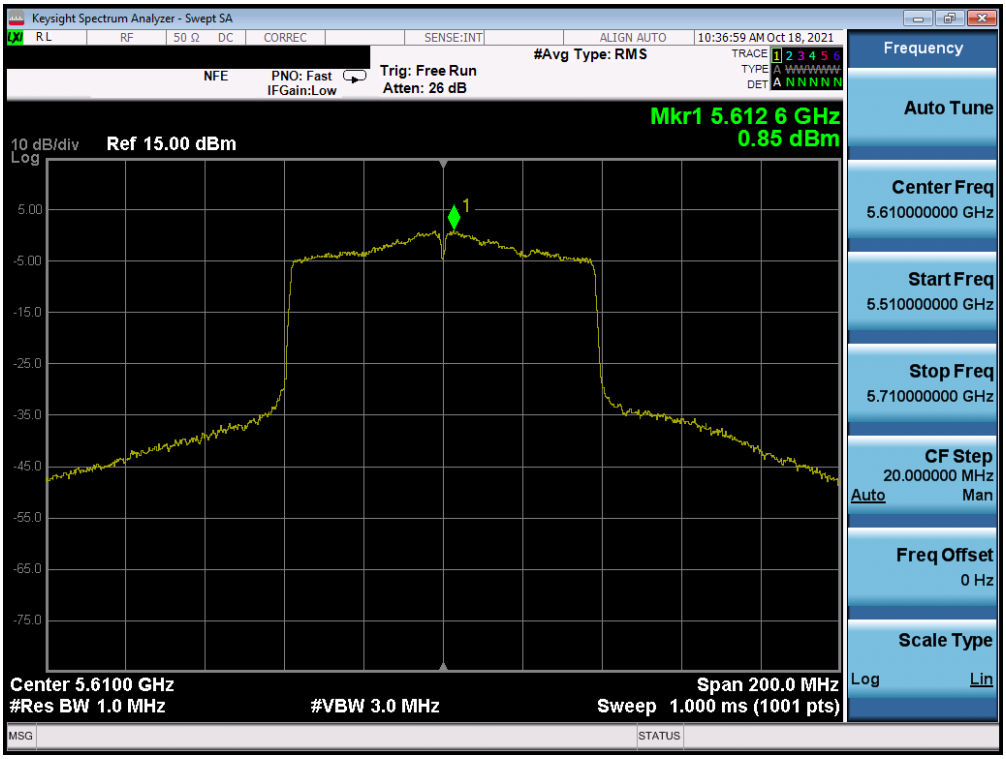

**Plot 7-204. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 118)**



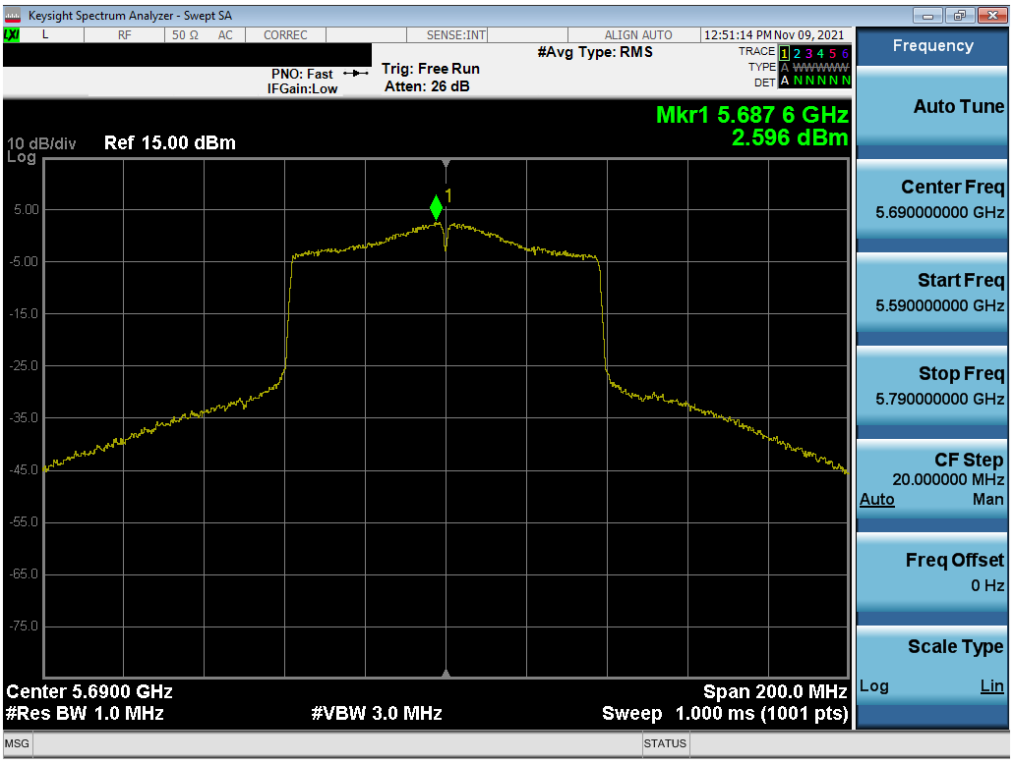

**Plot 7-205. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11ax (UNII Band 2C) – Ch. 142)**



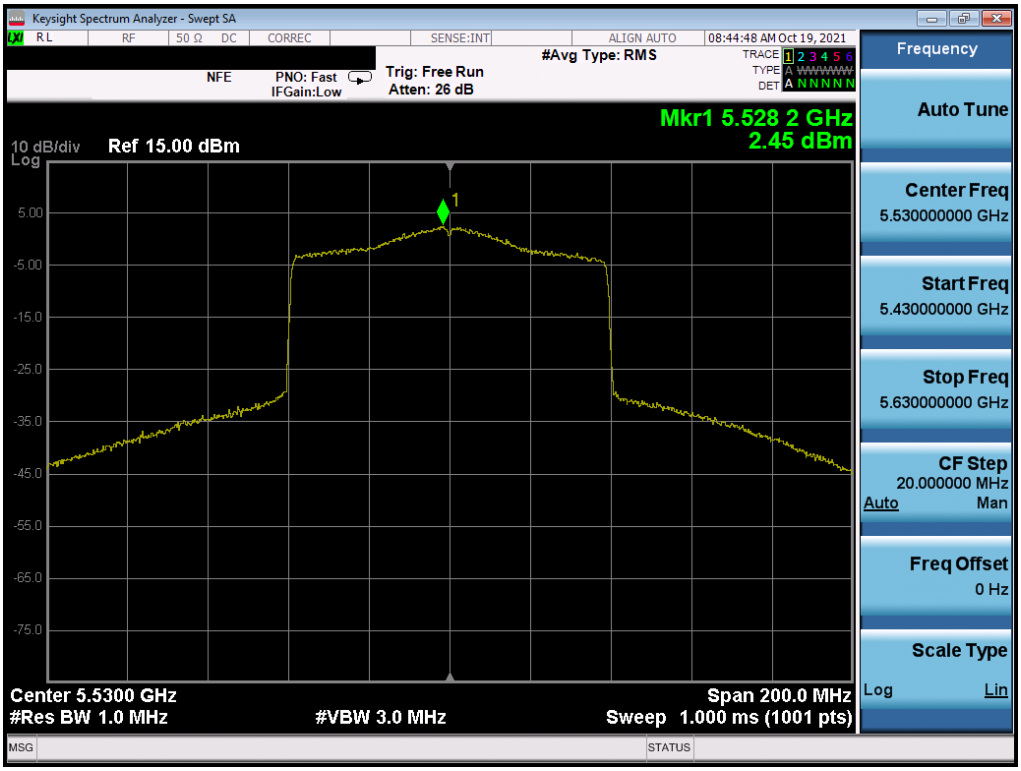

**Plot 7-206. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 106)**



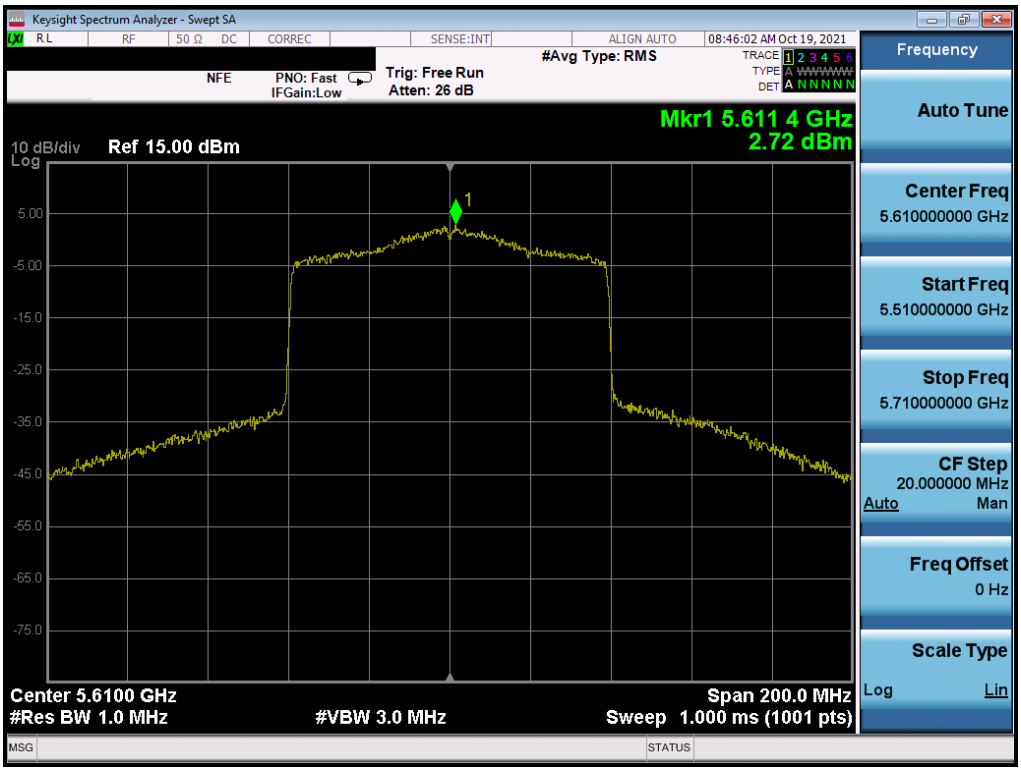

**Plot 7-207. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 122)**



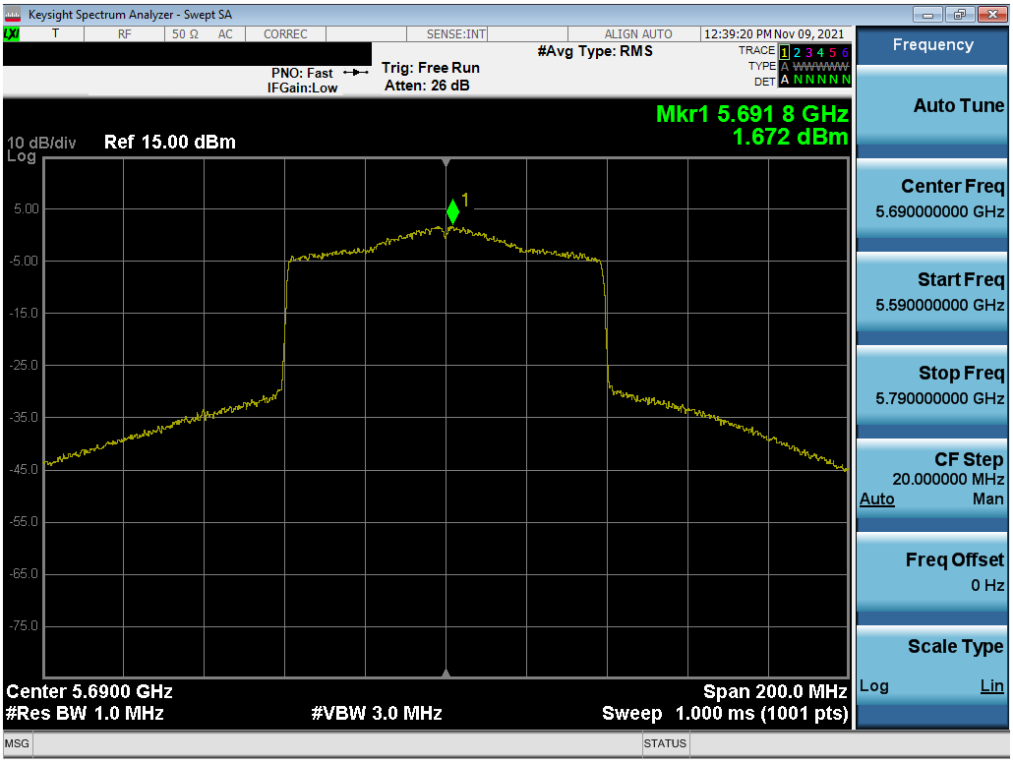

**Plot 7-208. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 2C) – Ch. 138)**




**Plot 7-209. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 106)**



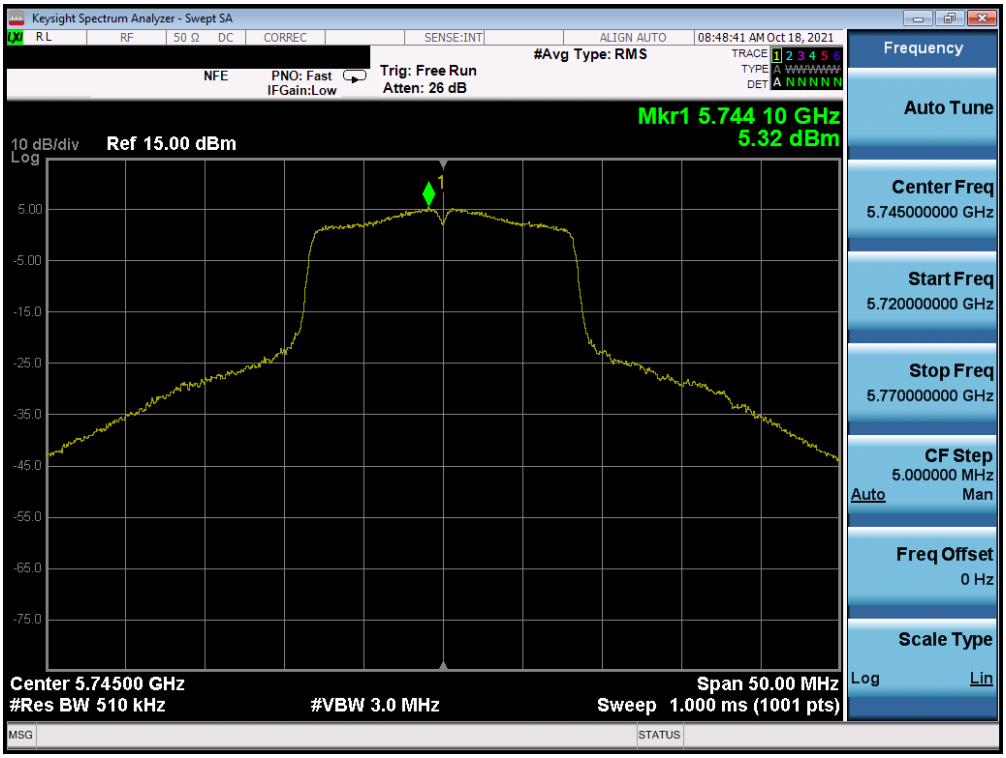

**Plot 7-210. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 122)**



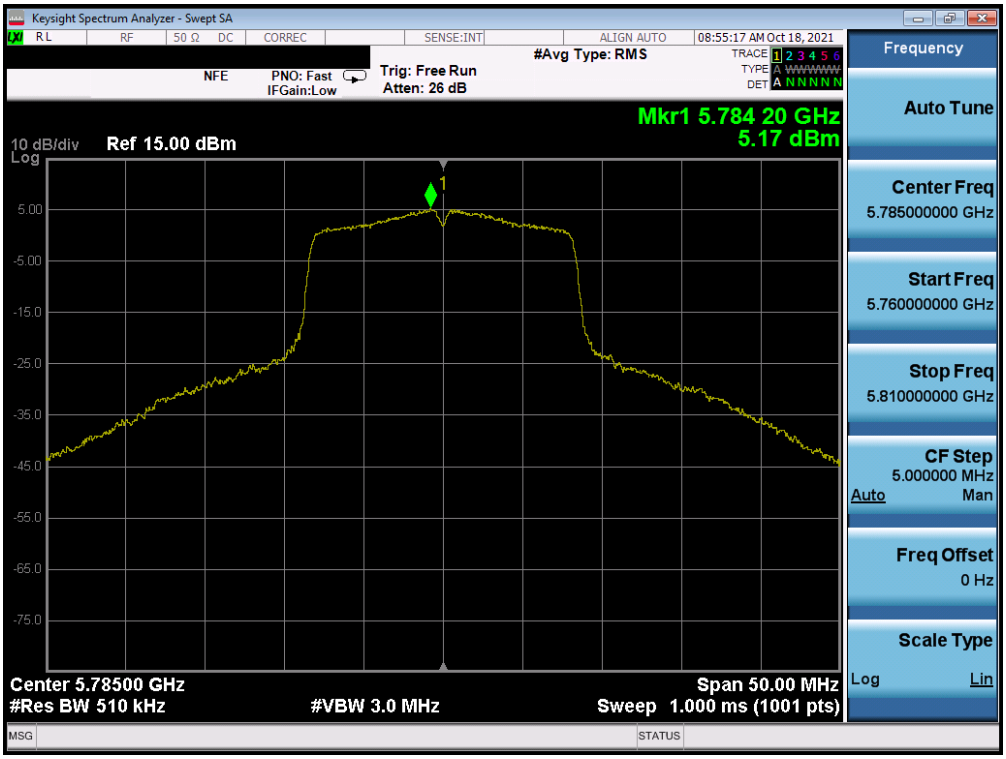

**Plot 7-211. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 2C) – Ch. 138)**

| | Frequency [MHz] | Channel No. | 802.11 Mode | Data Rate [Mbps] | Measured Power Density [dBm] | Max Permissible Power Density [dBm/500kHz] | Margin [dB] |
|---|---|---|---|---|---|---|---|
| Band 3 | 5745 | 149 | a | 6 | 5.32 | 30.0 | -24.69 |
| | 5785 | 157 | a | 6 | 5.17 | 30.0 | -24.83 |
| | 5825 | 165 | a | 6 | 5.37 | 30.0 | -24.63 |
| | 5745 | 149 | n (20MHz) | 6.5/7.2 (MCS0) | 5.39 | 30.0 | -24.61 |
| | 5785 | 157 | n (20MHz) | 6.5/7.2 (MCS0) | 4.81 | 30.0 | -25.19 |
| | 5825 | 165 | n (20MHz) | 6.5/7.2 (MCS0) | 5.06 | 30.0 | -24.94 |
| | 5745 | 149 | ax (20MHz) | 6.5/7.2 (MCS0) | 5.06 | 30.0 | -24.94 |
| | 5785 | 157 | ax (20MHz) | 6.5/7.2 (MCS0) | 5.37 | 30.0 | -24.63 |
| | 5825 | 165 | ax (20MHz) | 6.5/7.2 (MCS0) | 5.07 | 30.0 | -24.93 |
| | 5755 | 151 | n (40MHz) | 13.5/15 (MCS0) | 2.21 | 30.0 | -27.79 |
| | 5795 | 159 | n (40MHz) | 13.5/15 (MCS0) | 1.73 | 30.0 | -28.27 |
| | 5755 | 151 | ax (40MHz) | 13.5/15 (MCS0) | 2.79 | 30.0 | -27.21 |
| | 5795 | 159 | ax (40MHz) | 13.5/15 (MCS0) | 2.52 | 30.0 | -27.48 |
| | 5775 | 155 | ac (80MHz) | 29.3/32.5 (MCS0) | -0.71 | 30.0 | -30.71 |
| | 5775 | 155 | ax (80MHz) | 29.3/32.5 (MCS0) | -0.37 | 30.0 | -30.37 |

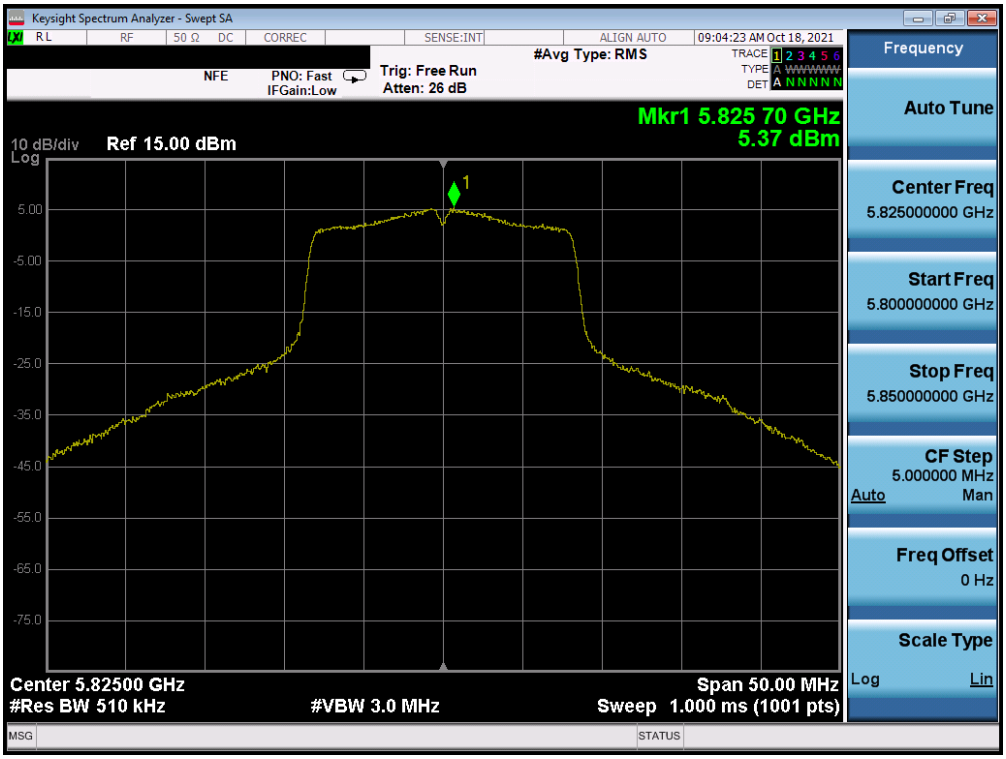
**Table 7-30. Band 3 Conducted Power Spectral Density Measurements UNII 3 SISO ANT1**



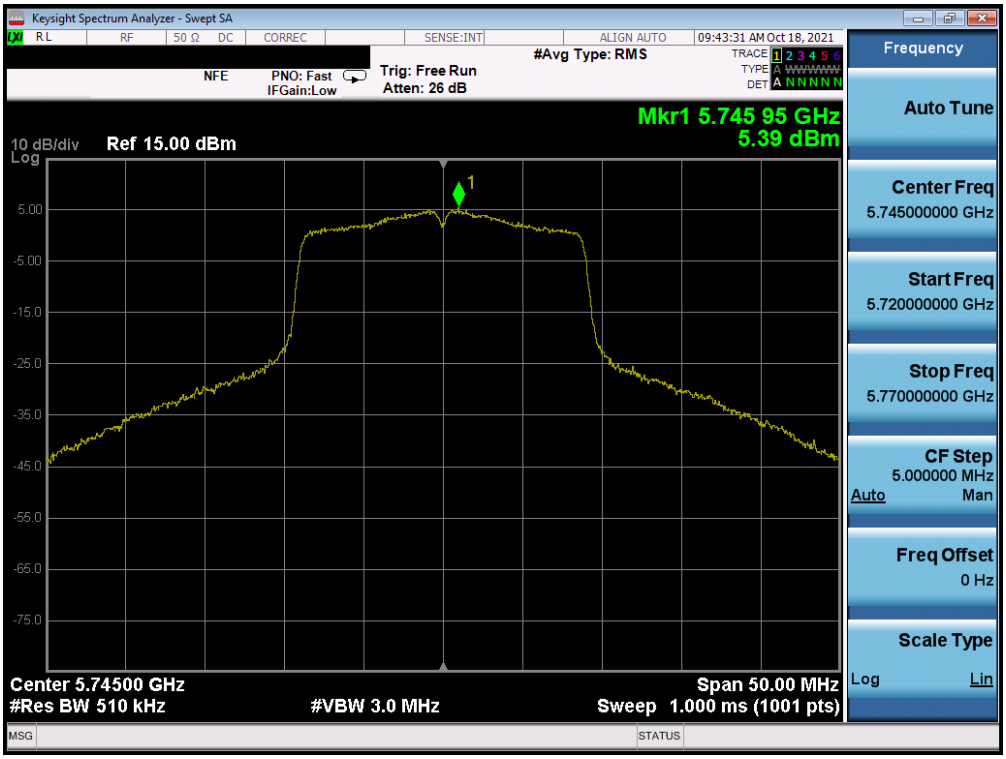

**Plot 7-212. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 149)**



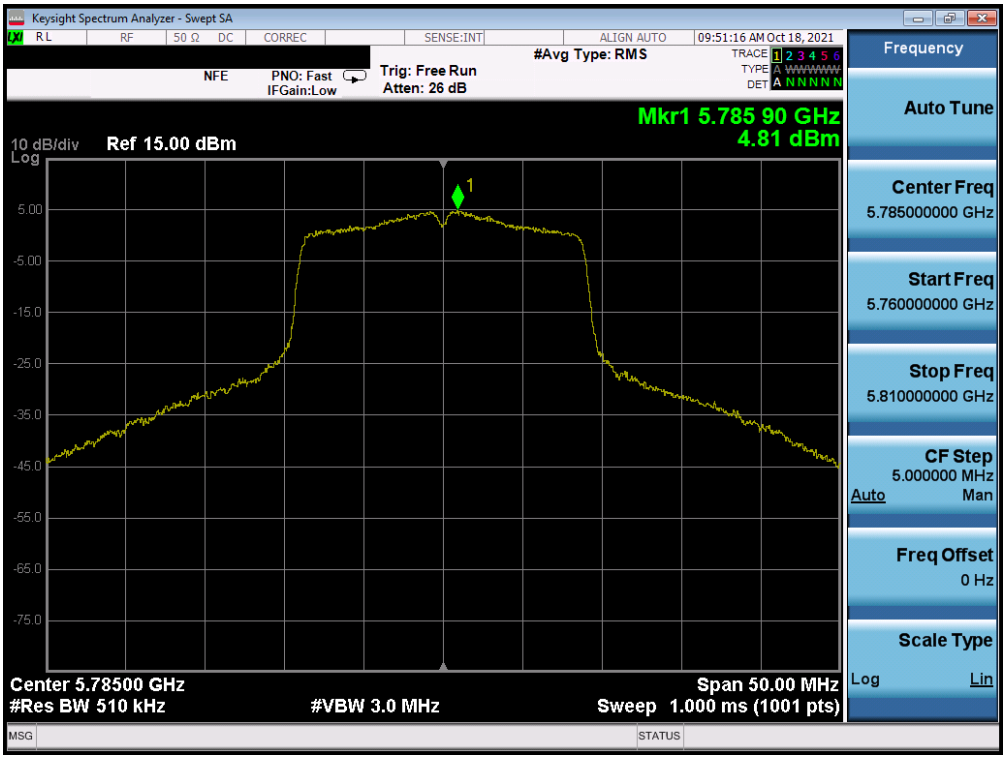

**Plot 7-213. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 157)**



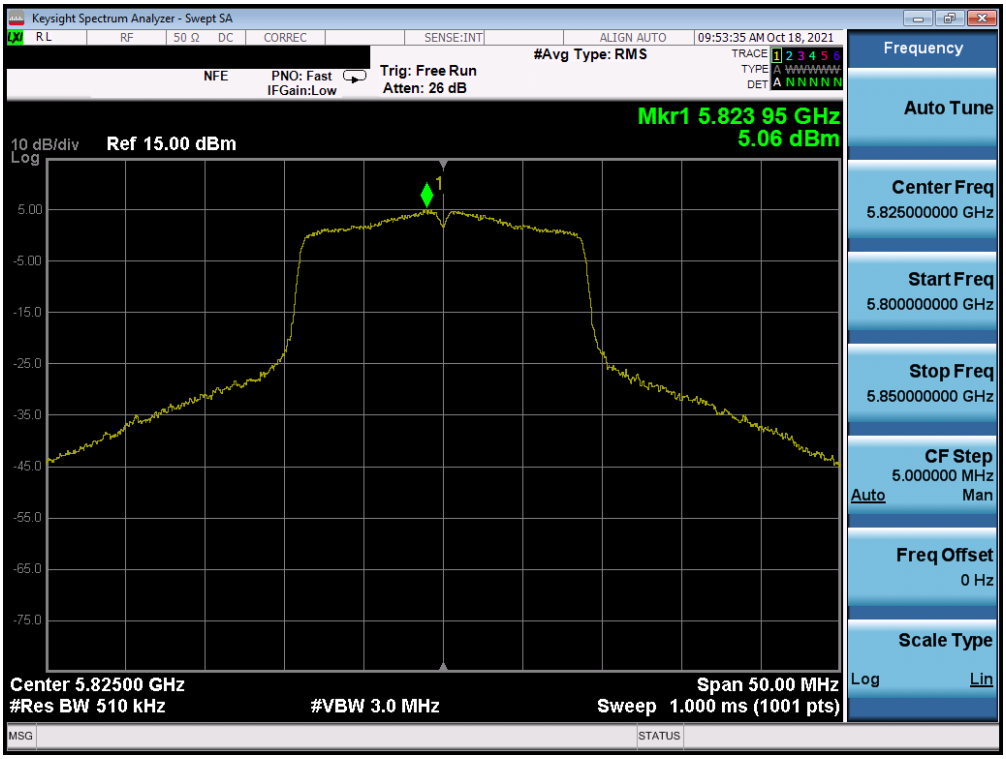

**Plot 7-214. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3) – Ch. 165)**



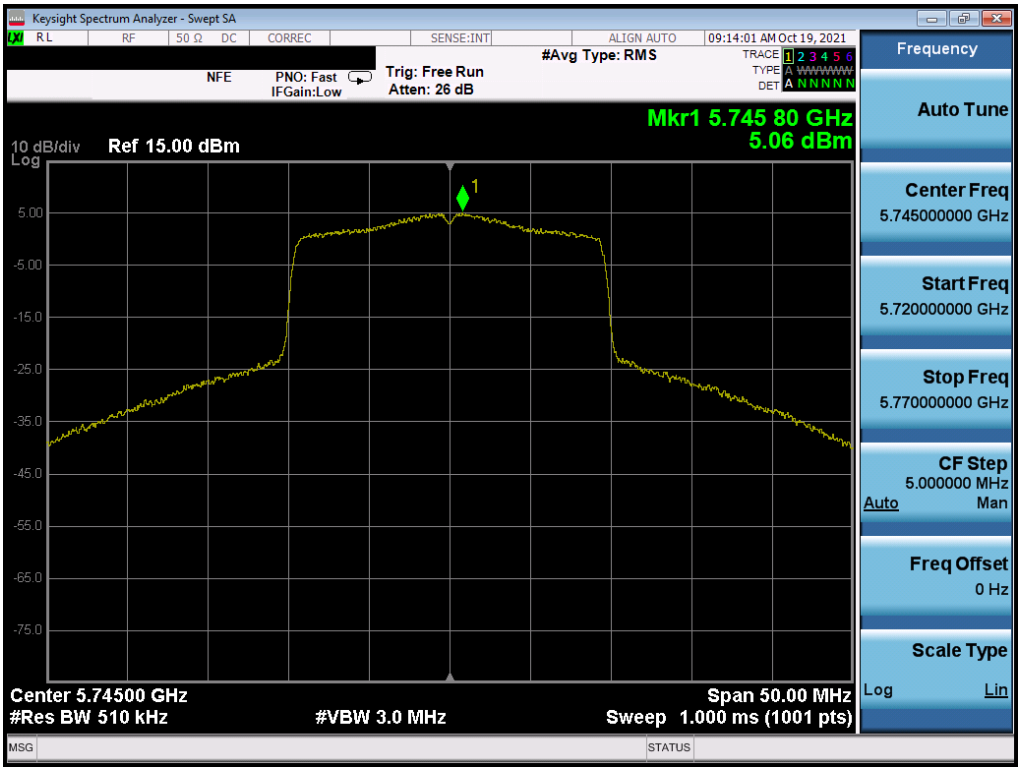

**Plot 7-215. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 149)**




**Plot 7-216. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 157)**

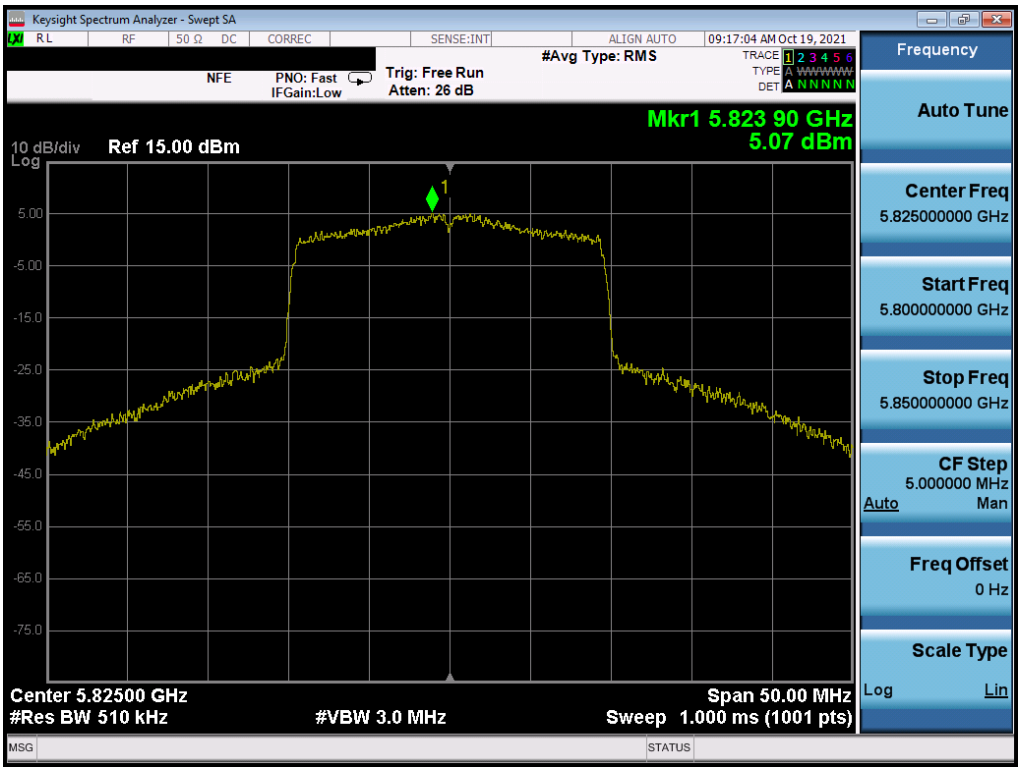



**Plot 7-217. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3) – Ch. 165)**

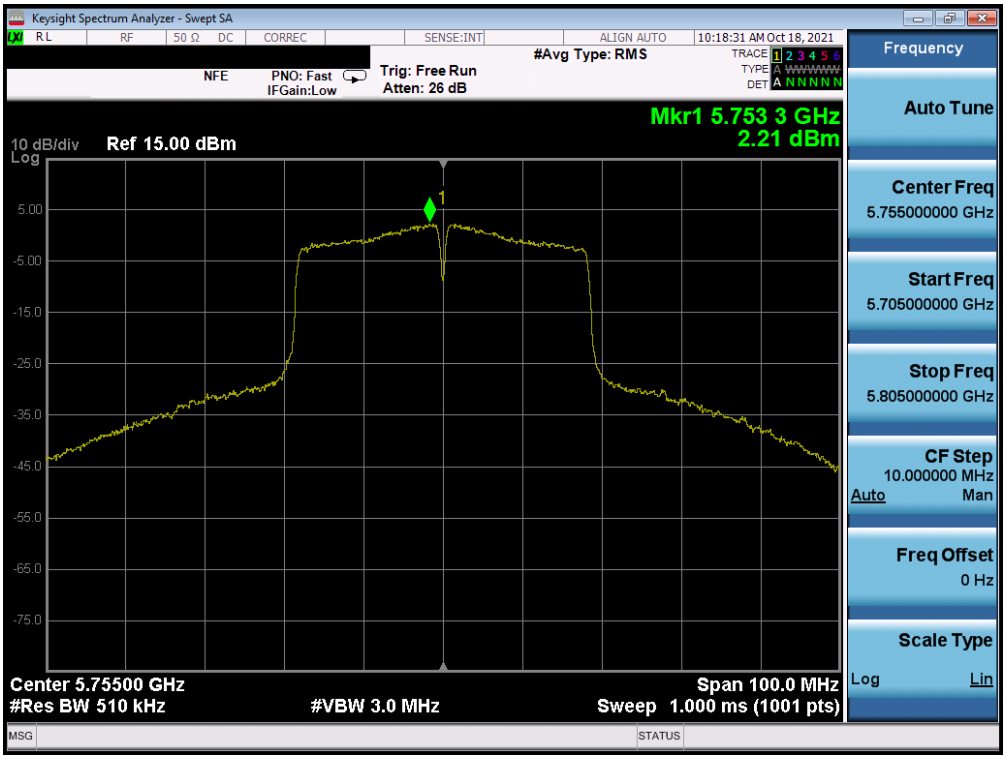



**Plot 7-218. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 3) – Ch. 149)**

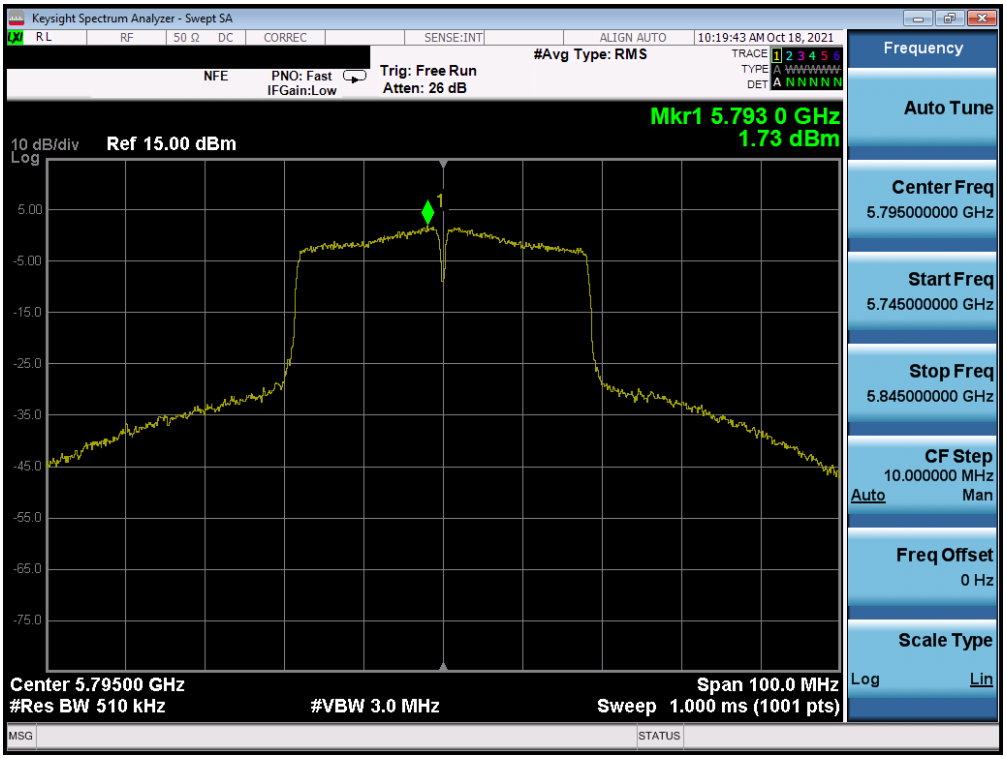

**Plot 7-219. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 3) – Ch. 157)**



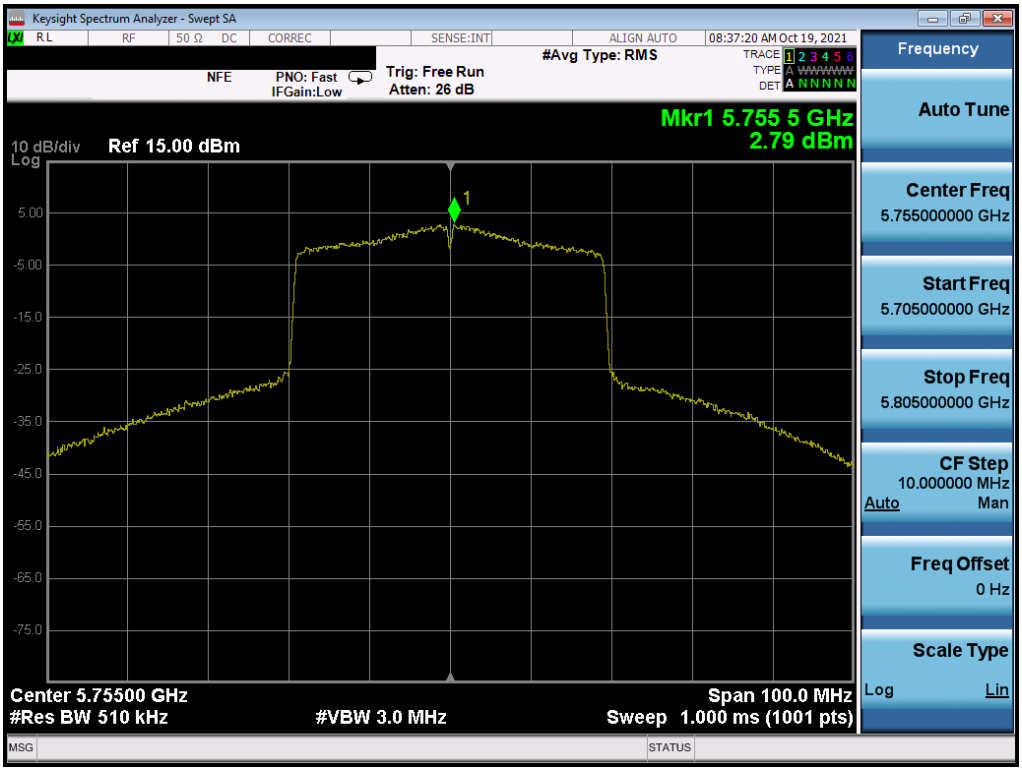

**Plot 7-220. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 3) – Ch. 165)**



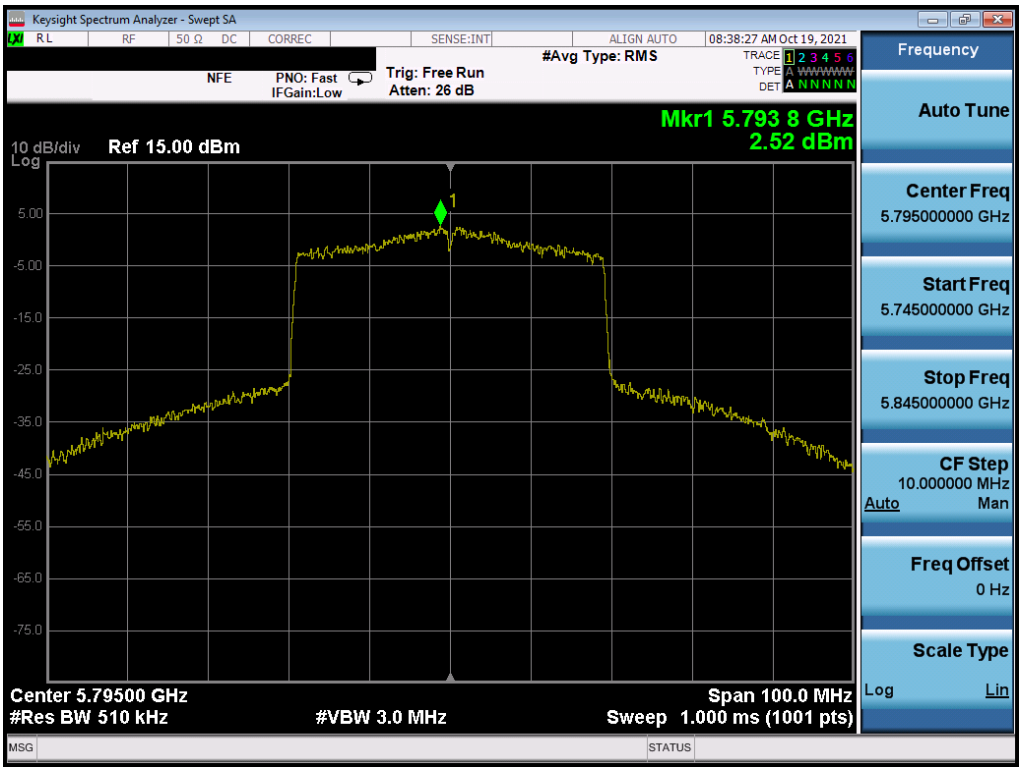

**Plot 7-221. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) – Ch. 151)**



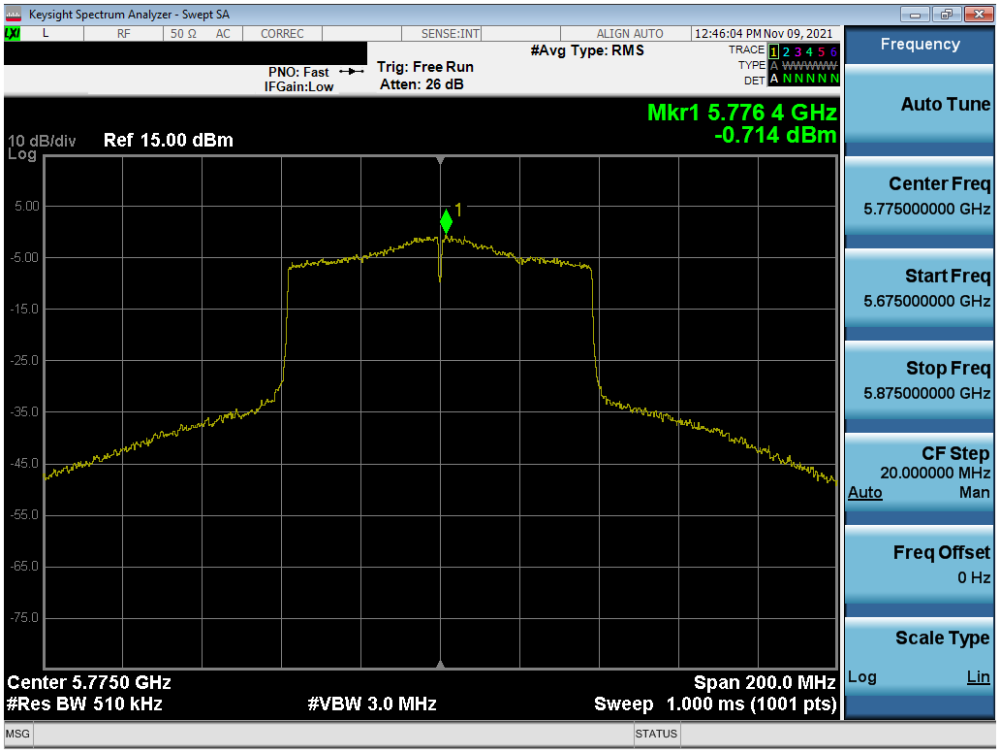

**Plot 7-222. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) – Ch. 159)**



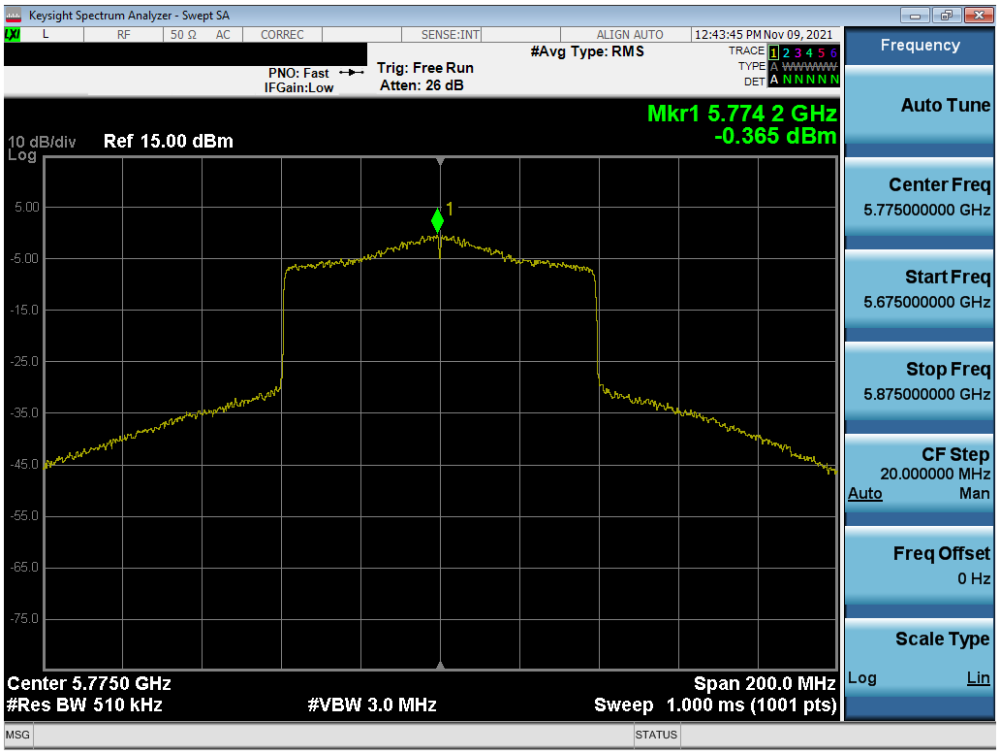

**Plot 7-223. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) – Ch. 151)**




**Plot 7-224. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3) – Ch. 159)**



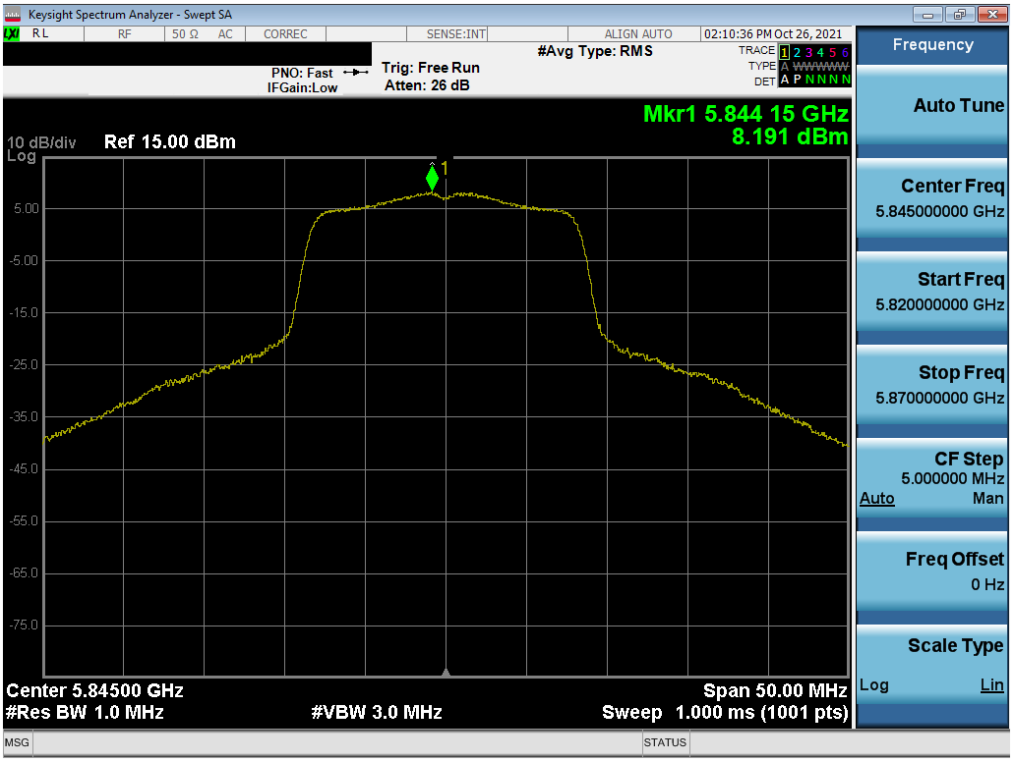

**Plot 7-225. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ac (UNII Band 3) – Ch. 155)**



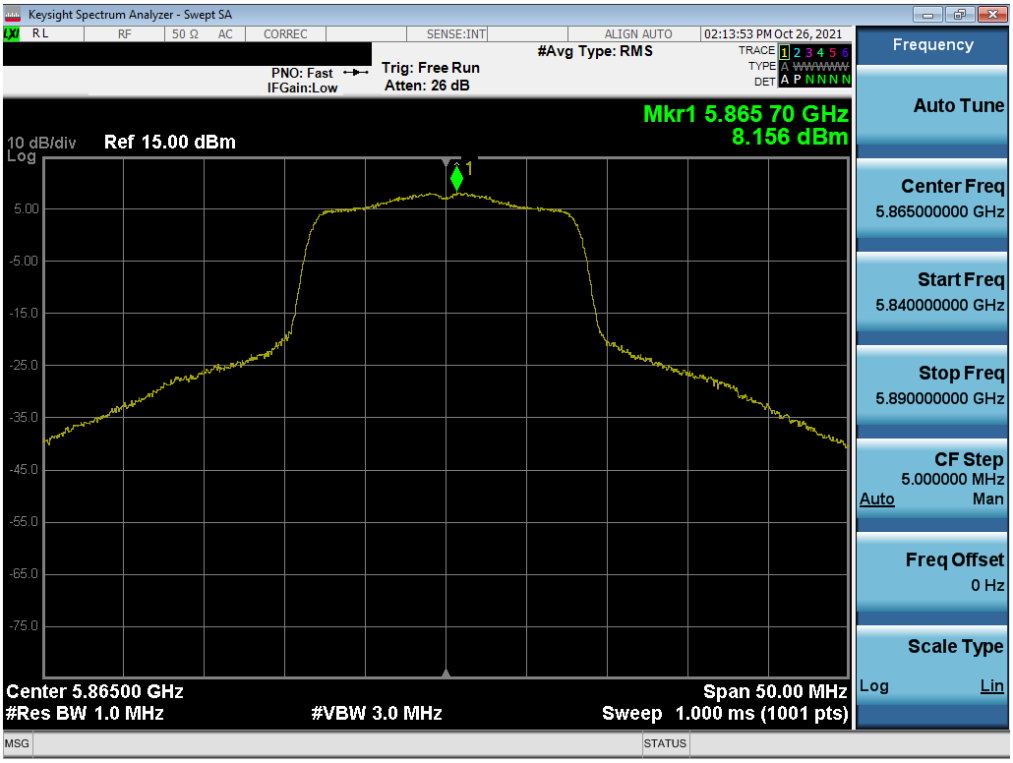

**Plot 7-226. Power Spectral Density Plot SISO ANT1 (80MHz BW 802.11ax (UNII Band 3) – Ch. 155)**

| | Frequency [MHz] | Channel No. | 802.11 Mode | Data Rate [Mbps] | Measured Power Density [dBm/MHz] | Max Permissible Power Density [dBm/500kHz] | Margin [dB] | Antenna Gain [dBi] | EIRP Power Density [dBm/MHz] | Max EIRP Power Density [dBm/MHz] | Margin [dB] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Band 3/4 | 5845 | 169 | a | 6 | 8.19 | 30.00 | -21.81 | -6.20 | 1.99 | 14.00 | -12.01 |
| Band 4 | 5865 | 173 | a | 6 | 8.16 | | | -6.20 | 1.96 | 14.00 | -12.04 |
| | 5885 | 177 | a | 6 | 8.61 | | | -6.20 | 2.41 | 14.00 | -11.59 |
| Band 3/4 | 5845 | 169 | n (20MHz) | 6.5/7.2 (MCS0) | 8.71 | 30.00 | -21.29 | -6.20 | 2.51 | 14.00 | -11.49 |
| Band 4 | 5865 | 173 | n (20MHz) | 6.5/7.2 (MCS0) | 8.92 | | | -6.20 | 2.72 | 14.00 | -11.28 |
| | 5885 | 177 | n (20MHz) | 6.5/7.2 (MCS0) | 8.56 | | | -6.20 | 2.36 | 14.00 | -11.64 |
| Band 3/4 | 5845 | 169 | ax (20MHz) | 6.5/7.2 (MCS0) | 7.85 | 30.00 | -22.15 | -6.20 | 1.65 | 14.00 | -12.35 |
| Band 4 | 5865 | 173 | ax (20MHz) | 6.5/7.2 (MCS0) | 8.00 | | | -6.20 | 1.80 | 14.00 | -12.20 |
| | 5885 | 177 | ax (20MHz) | 6.5/7.2 (MCS0) | 7.68 | | | -6.20 | 1.48 | 14.00 | -12.52 |
| Band 3/4 | 5835 | 167 | n (40MHz) | 13.5/15 (MCS0) | 4.32 | 30.00 | -25.68 | -6.20 | -1.88 | 14.00 | -15.88 |
| Band 4 | 5875 | 175 | n (40MHz) | 13.5/15 (MCS0) | 4.49 | | | -6.20 | -1.71 | 14.00 | -15.71 |
| Band 3/4 | 5835 | 167 | ax (40MHz) | 13.5/15 (MCS0) | 5.27 | 30.00 | -24.73 | -6.20 | -0.93 | 14.00 | -14.93 |
| Band 4 | 5875 | 175 | ax (40MHz) | 13.5/15 (MCS0) | 5.21 | | | -6.20 | -0.99 | 14.00 | -14.99 |
| Band 3/4 | 5855 | 171 | ax (80MHz) | 29.3/32.5 (MCS0) | 2.68 | 30.00 | -27.32 | -6.20 | -3.52 | 14.00 | -19.12 |

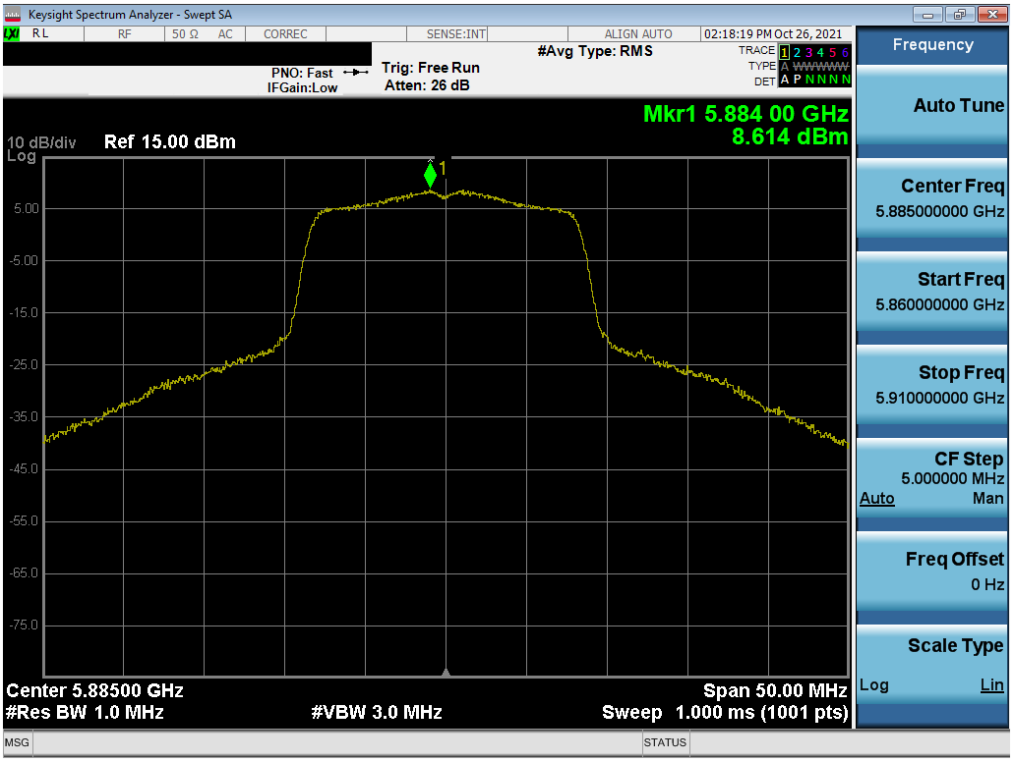
**Table 7-31. Band 4 e.i.r.p. Spectral Density Measurements UNII 4 SISO ANT1**



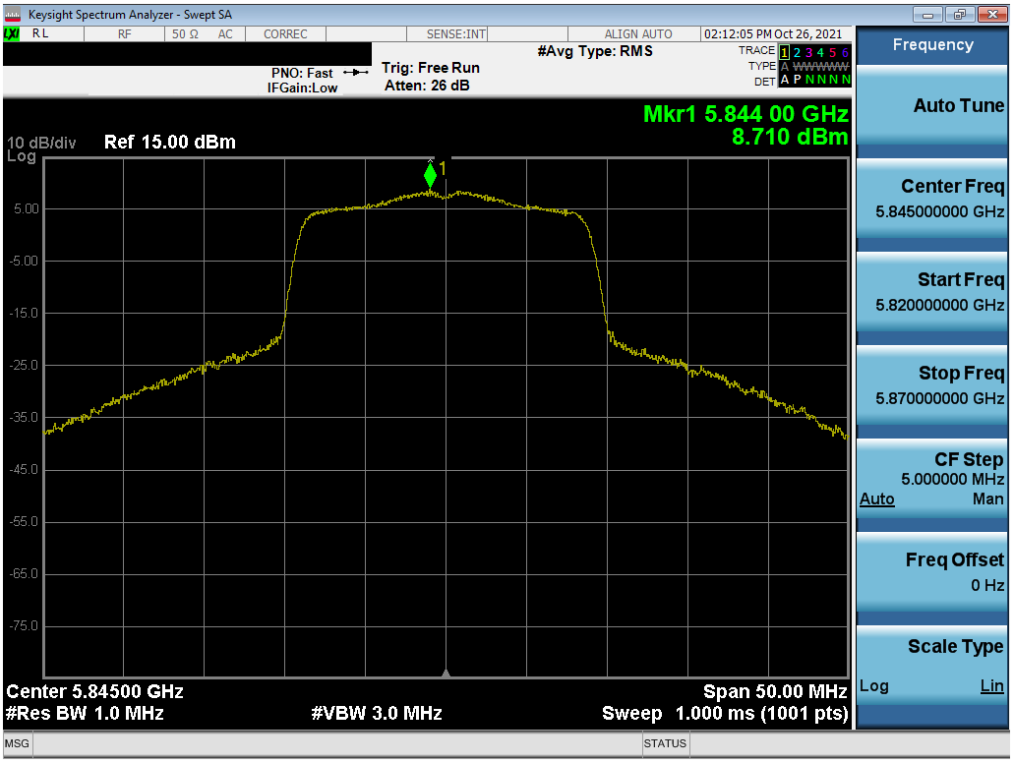

**Plot 7-227. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 3/4) – Ch. 169)**



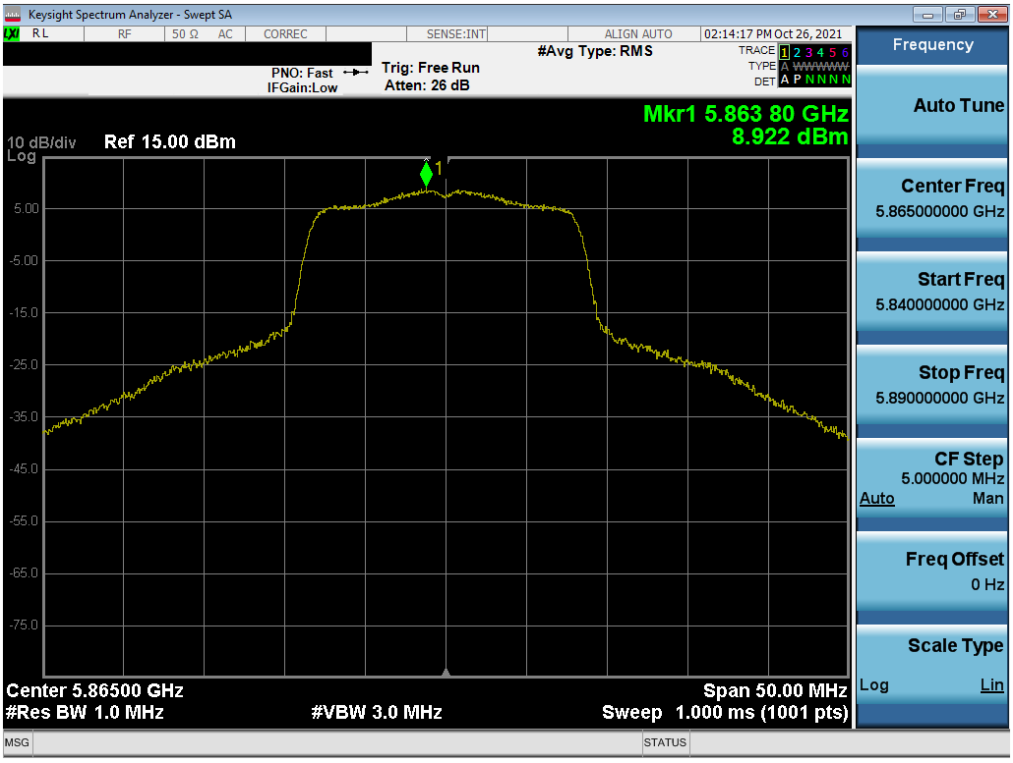

**Plot 7-228. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 4) – Ch. 173)**



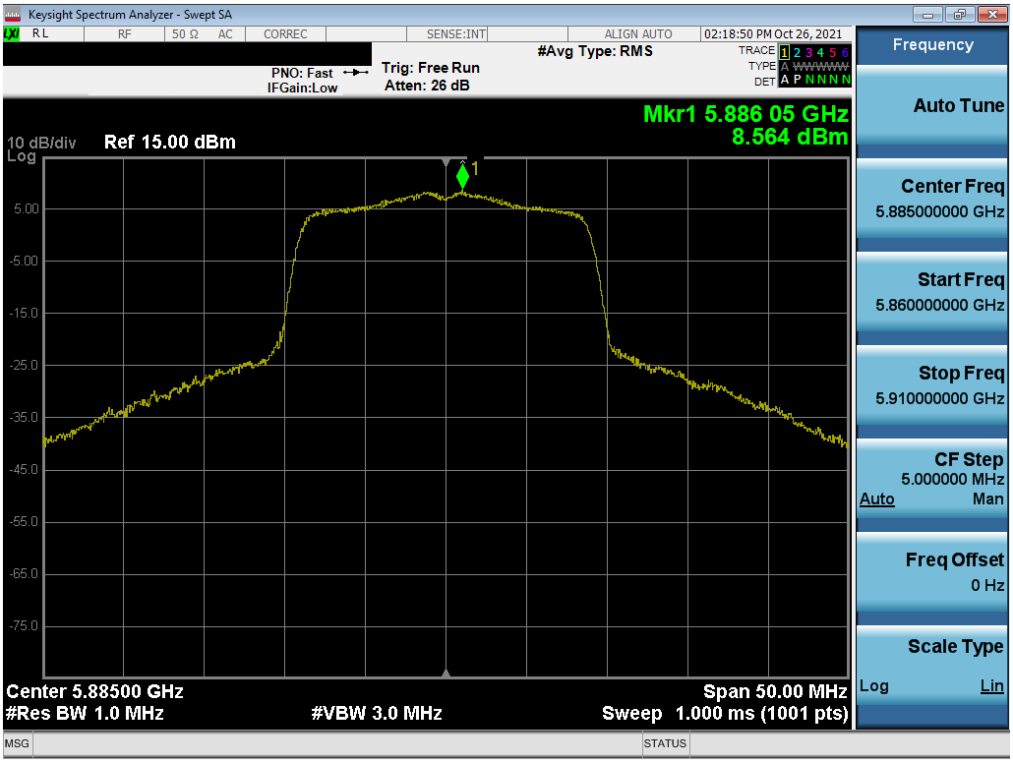

**Plot 7-229. Power Spectral Density Plot SISO ANT1 (802.11a (UNII Band 4) – Ch. 177)**



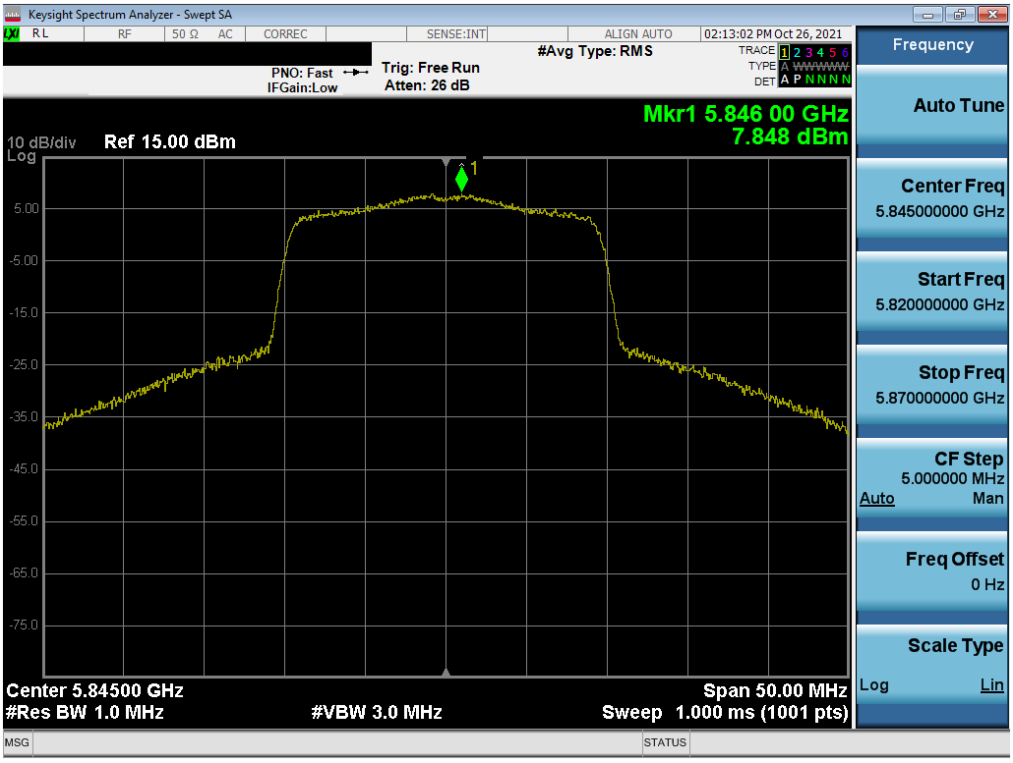

**Plot 7-230. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 3/4) – Ch. 169)**



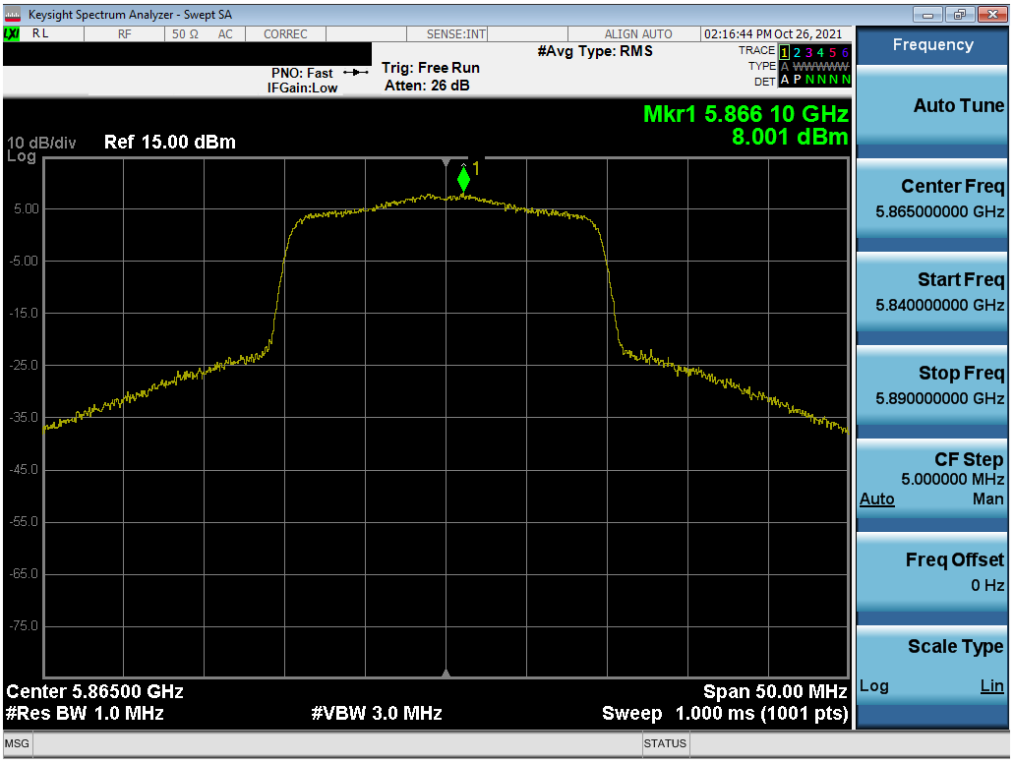

**Plot 7-231. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 4) – Ch. 173)**



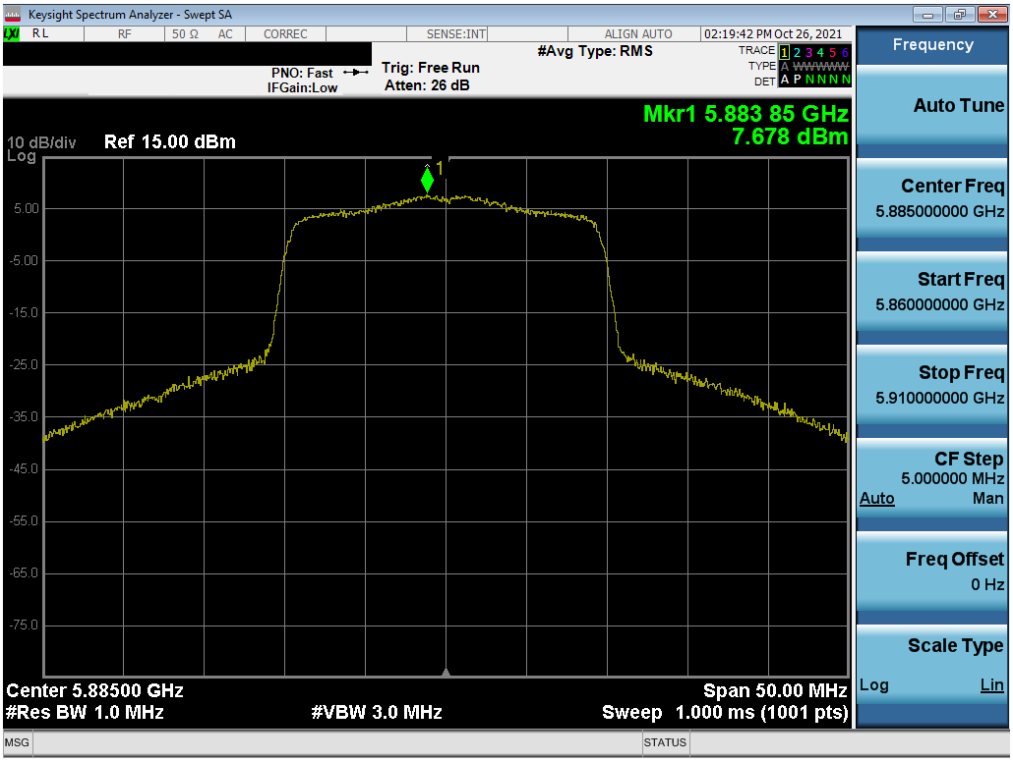

**Plot 7-232. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11n (UNII Band 4) – Ch. 177)**



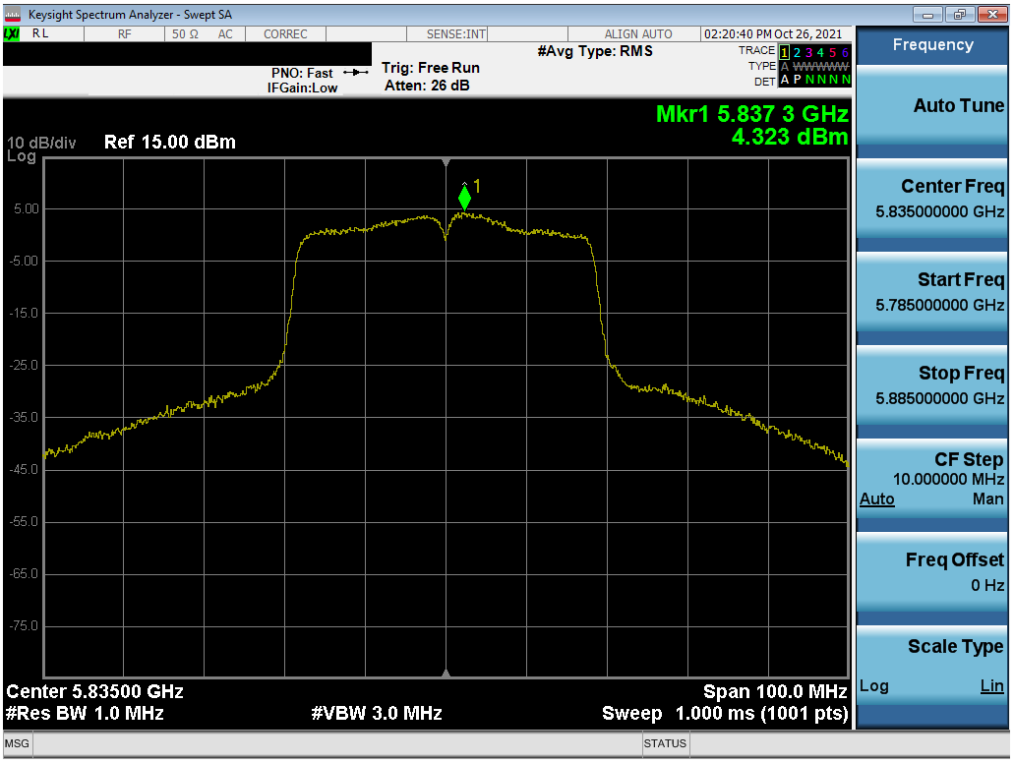

**Plot 7-233. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 3/4) – Ch. 169)**



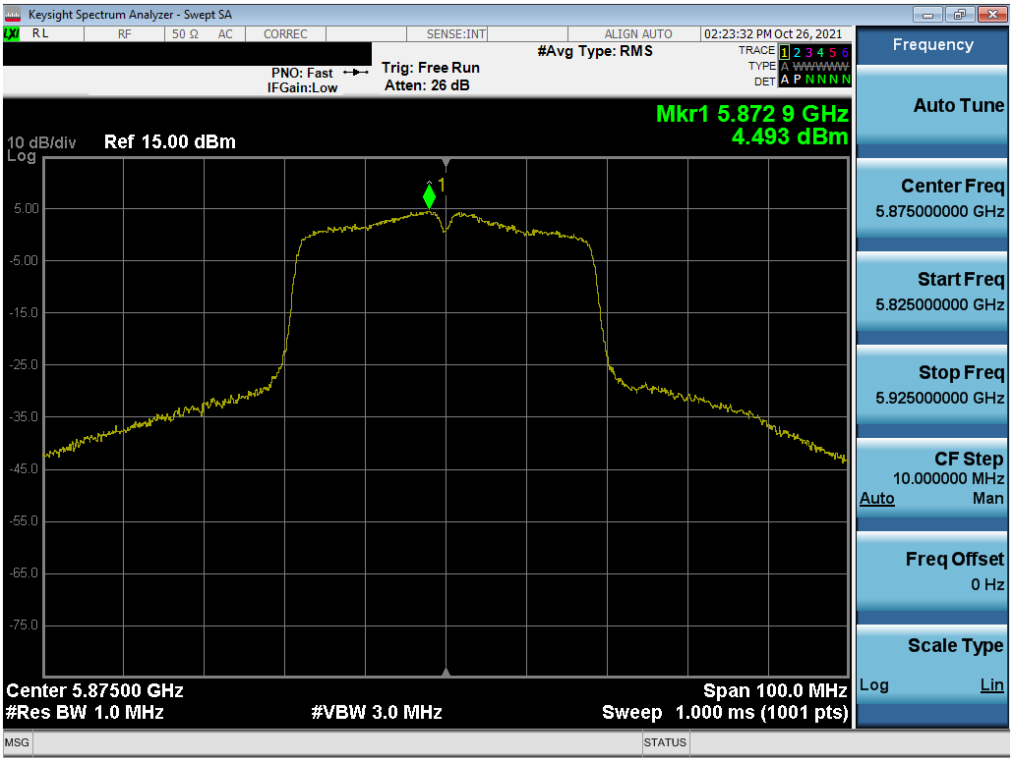

**Plot 7-234. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 4) – Ch. 173)**




**Plot 7-235. Power Spectral Density Plot SISO ANT1 (20MHz BW 802.11ax (UNII Band 4) – Ch. 177)**




**Plot 7-236. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 3/4) – Ch. 167)**




**Plot 7-237. Power Spectral Density Plot SISO ANT1 (40MHz BW 802.11n (UNII Band 4) – Ch. 175)**