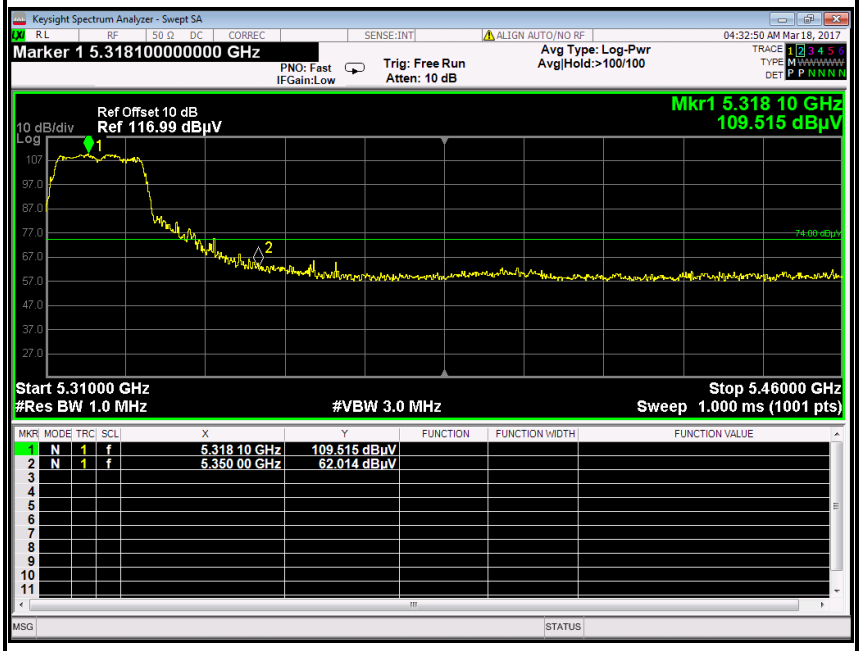
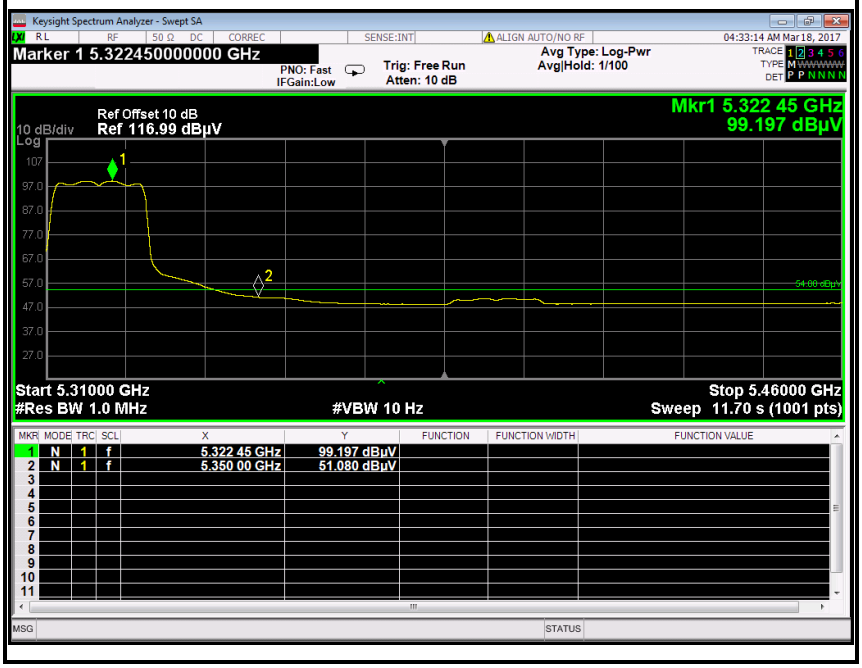
**Detector mode: Peak** **Polarity: Horizontal**



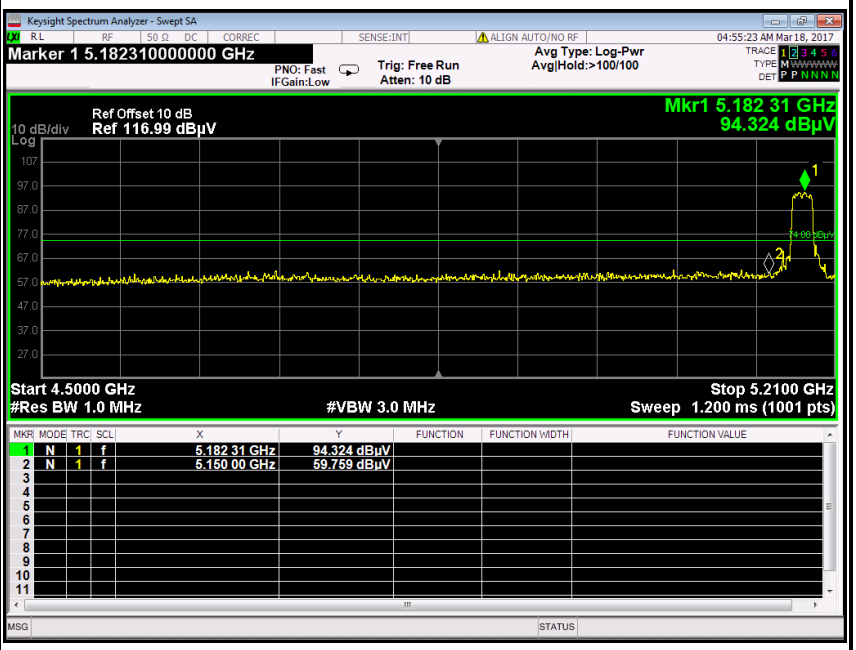

**Detector mode: Average** **Polarity: Horizontal**



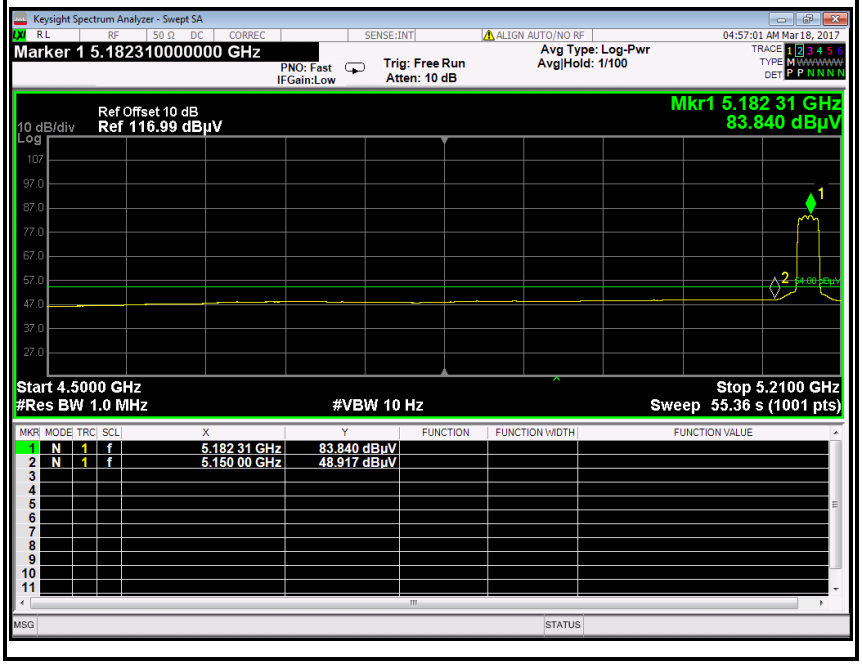

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 67.61 | 5.60 | 62.01 | 74.00 | -11.99 | Peak | Horizontal |
| 2 | 5350.0000 | 56.68 | 5.60 | 51.08 | 54.00 | -2.92 | Average | Horizontal |

**IEEE 802.11n HT 20 MHz mode / 5180 MHz**

**Detector mode: Peak** **Polarity: Vertical**

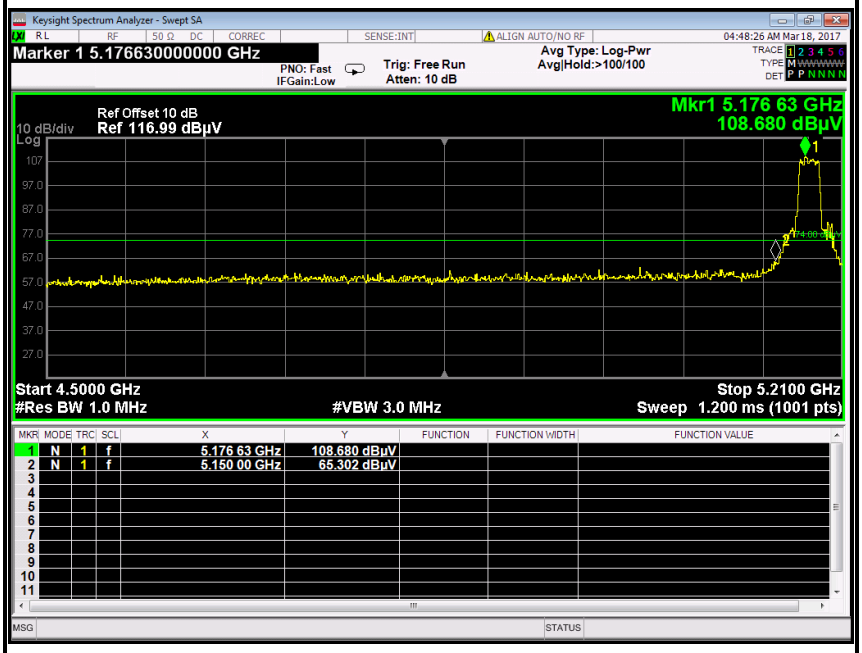



**Detector mode: Average** **Polarity: Vertical**

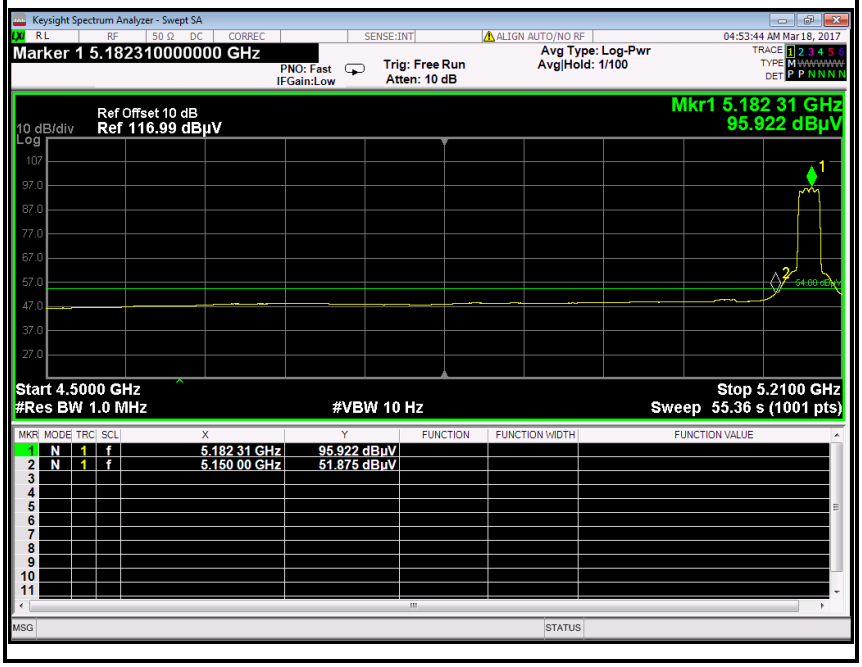



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 65.36 | 5.60 | 59.76 | 74.00 | -14.24 | Peak | Vertical |
| 2 | 5150.0000 | 54.52 | 5.60 | 48.92 | 54.00 | -5.08 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



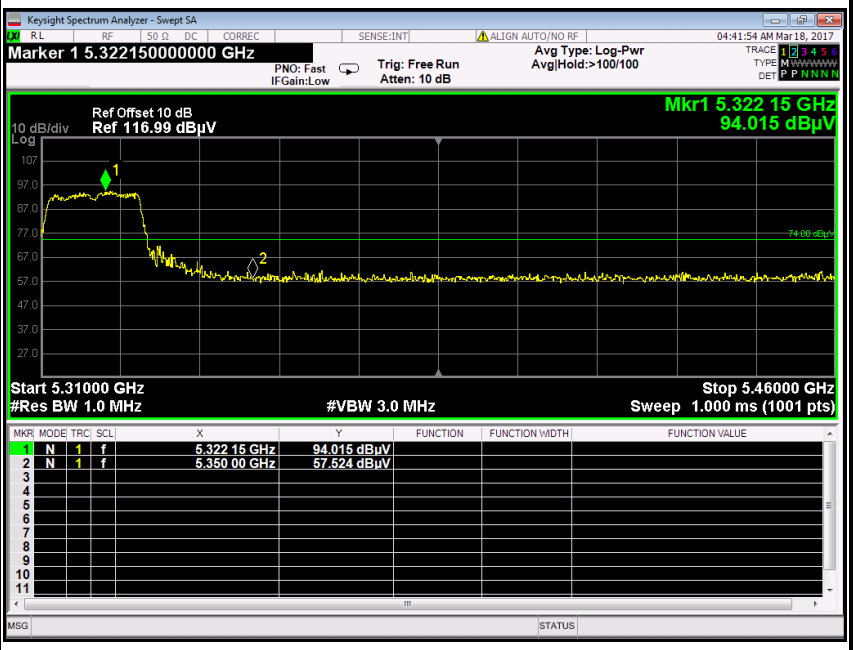

**Detector mode: Average** **Polarity: Horizontal**



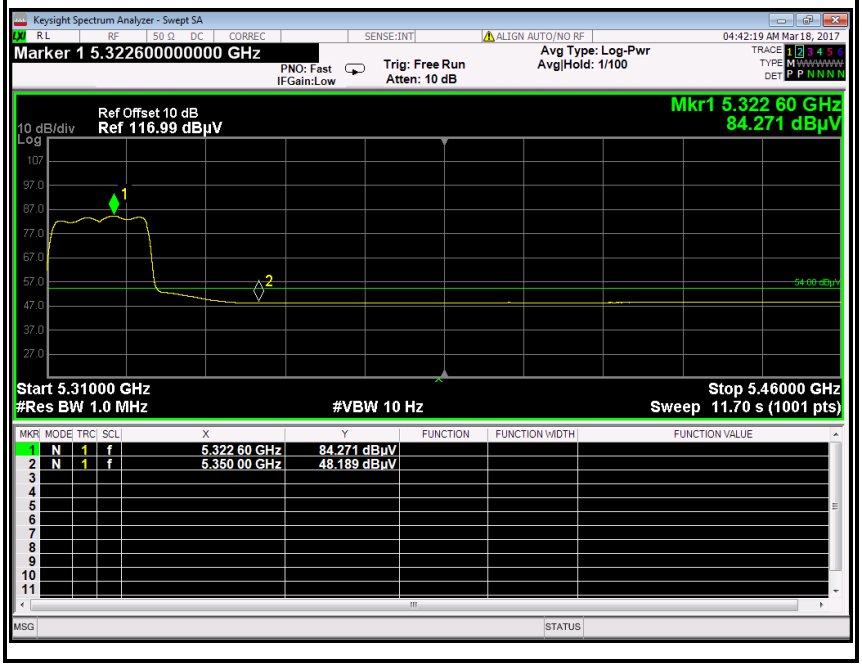

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 70.90 | 5.60 | 65.30 | 74.00 | -8.70 | Peak | Horizontal |
| 2 | 5150.0000 | 57.48 | 5.60 | 51.88 | 54.00 | -2.13 | Average | Horizontal |

**IEEE 802.11n HT 20 MHz mode / 5320 MHz**

**Detector mode: Peak** **Polarity: Vertical**

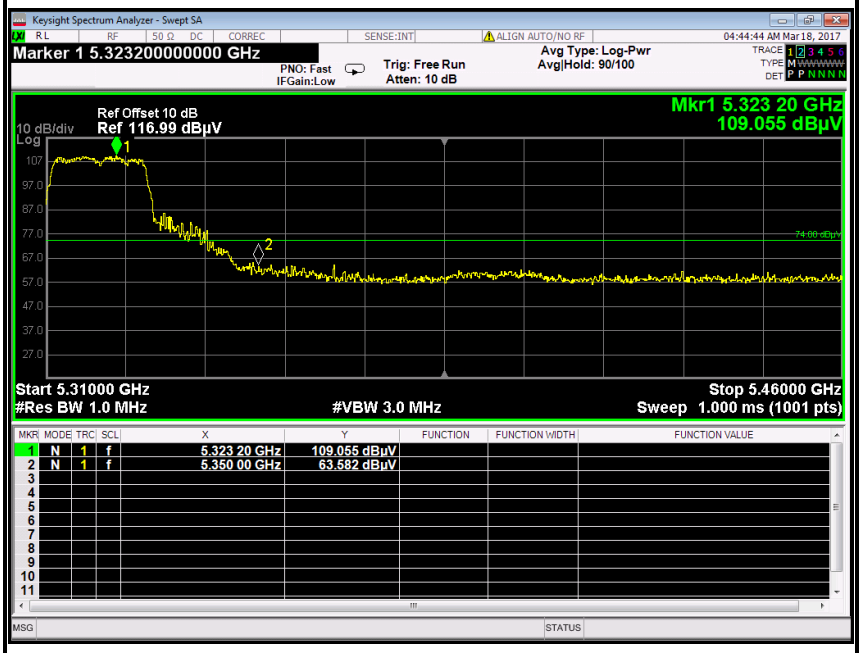



**Detector mode: Average** **Polarity: Vertical**

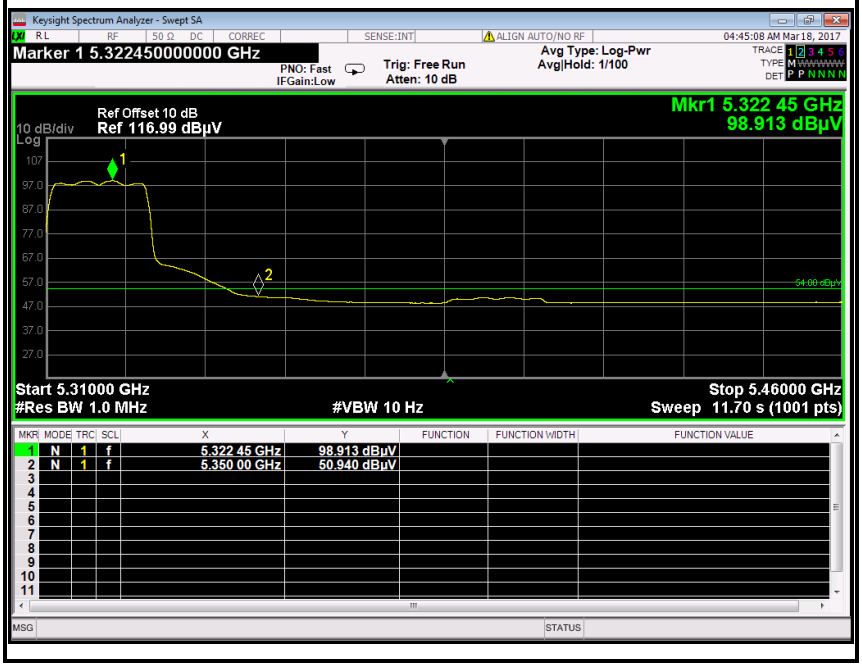



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 63.12 | 5.60 | 57.52 | 74.00 | -16.48 | Peak | Vertical |
| 2 | 5350.0000 | 53.79 | 5.60 | 48.19 | 54.00 | -5.81 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



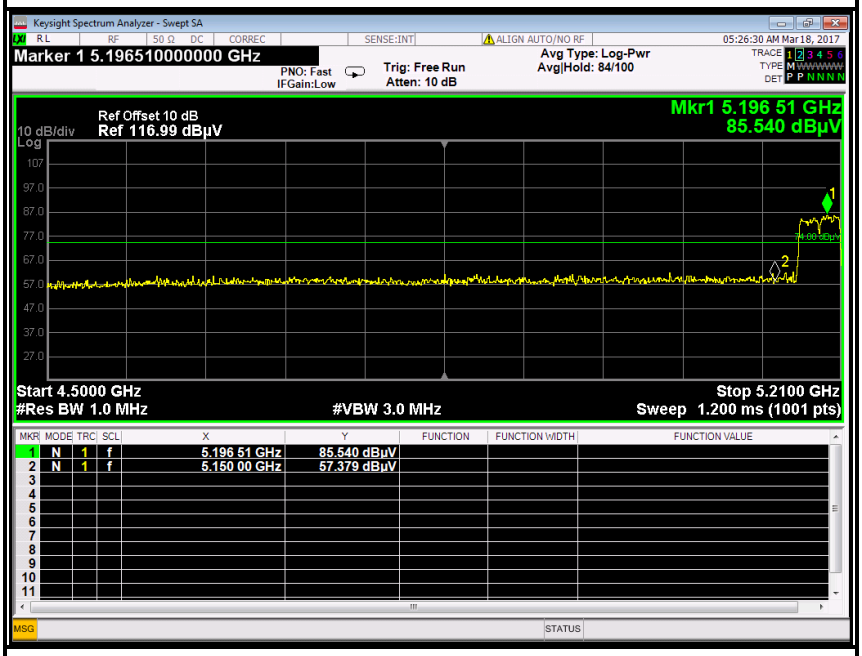

**Detector mode: Average** **Polarity: Horizontal**



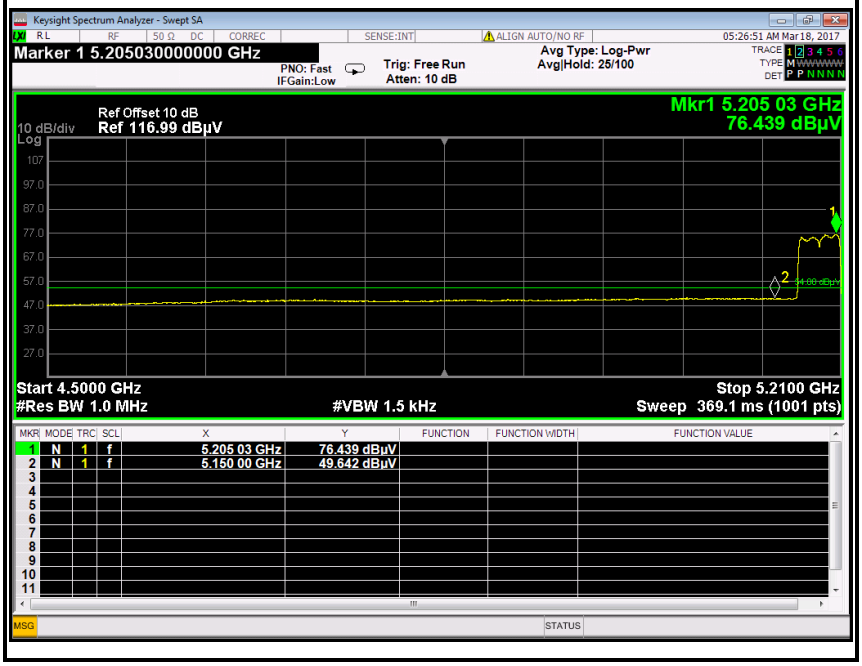

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 69.18 | 5.60 | 63.58 | 74.00 | -10.42 | Peak | Horizontal |
| 2 | 5350.0000 | 56.54 | 5.60 | 50.94 | 54.00 | -3.06 | Average | Horizontal |

**IEEE 802.11n HT 40 MHz mode / 5190 MHz**

**Detector mode: Peak** **Polarity: Vertical**

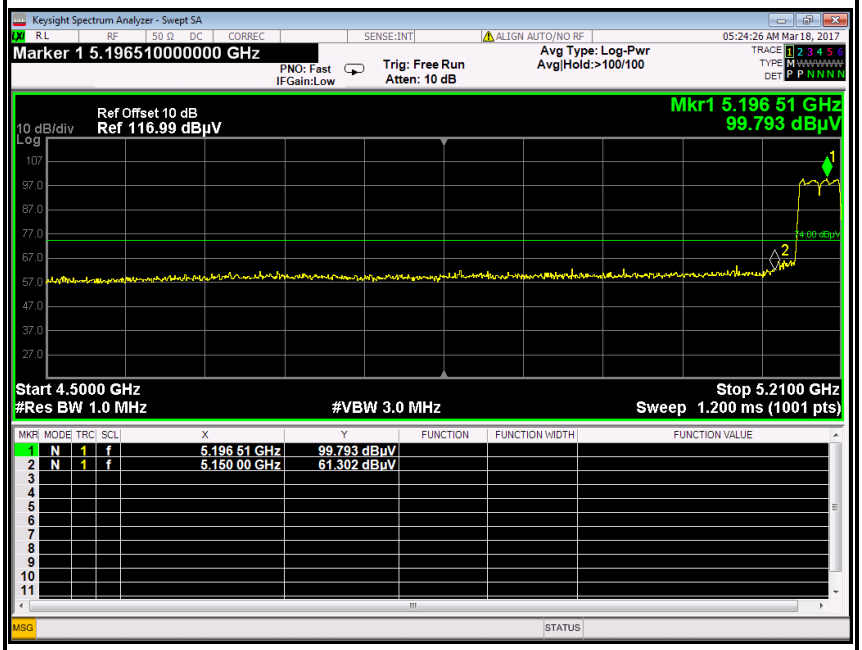



**Detector mode: Average** **Polarity: Vertical**

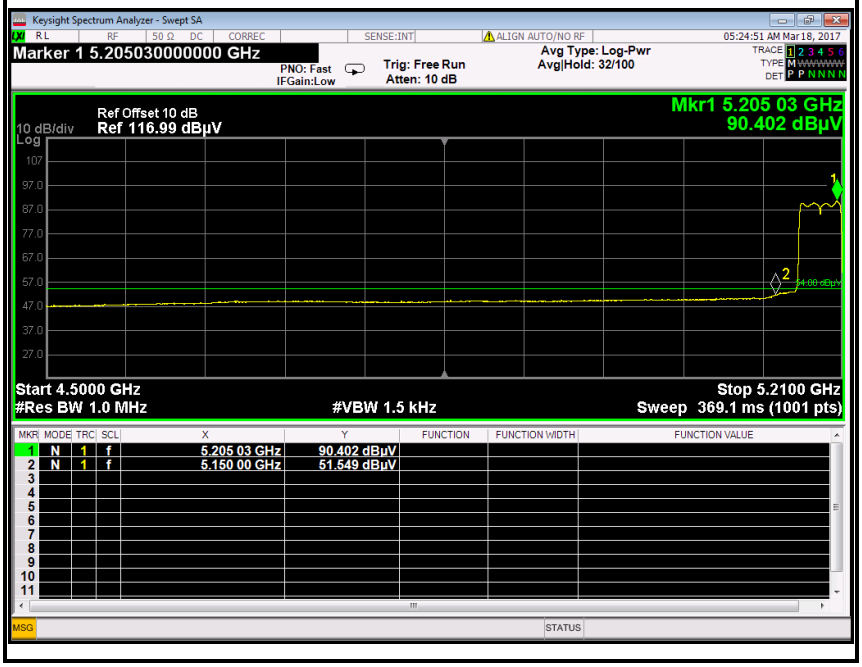



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 62.98 | 5.60 | 57.38 | 74.00 | -16.62 | Peak | Vertical |
| 2 | 5150.0000 | 55.24 | 5.60 | 49.64 | 54.00 | -4.36 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



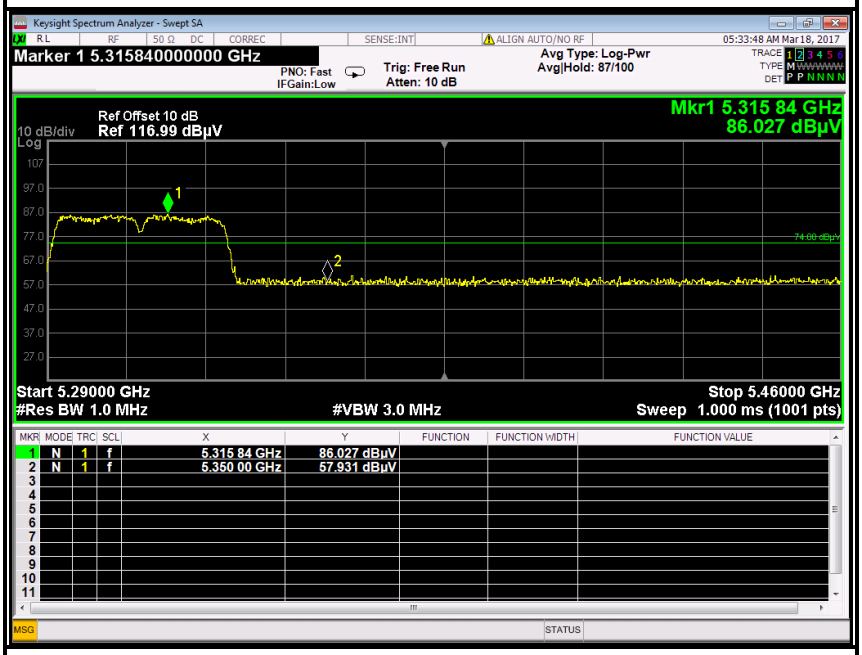

**Detector mode: Average** **Polarity: Horizontal**



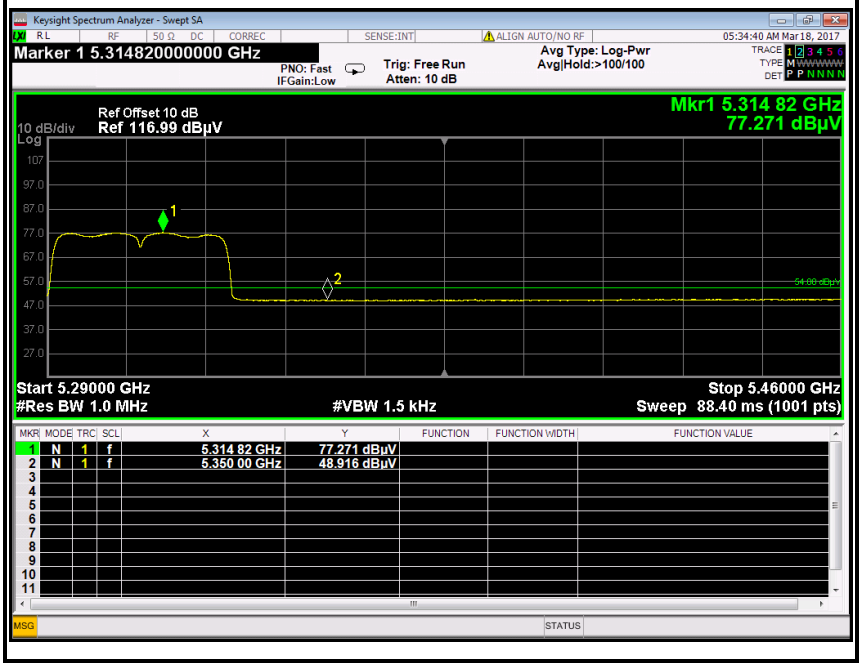

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 66.90 | 5.60 | 61.30 | 74.00 | -12.70 | Peak | Horizontal |
| 2 | 5150.0000 | 57.15 | 5.60 | 51.55 | 54.00 | -2.45 | Average | Horizontal |

**IEEE 802.11n HT 40 MHz mode / 5310 MHz**

**Detector mode: Peak** **Polarity: Vertical**

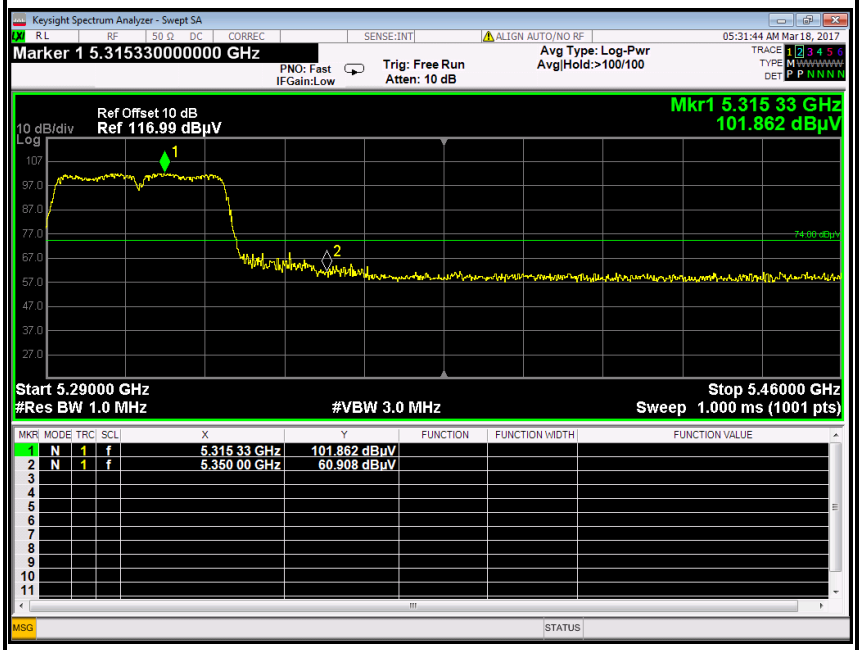



**Detector mode: Average** **Polarity: Vertical**

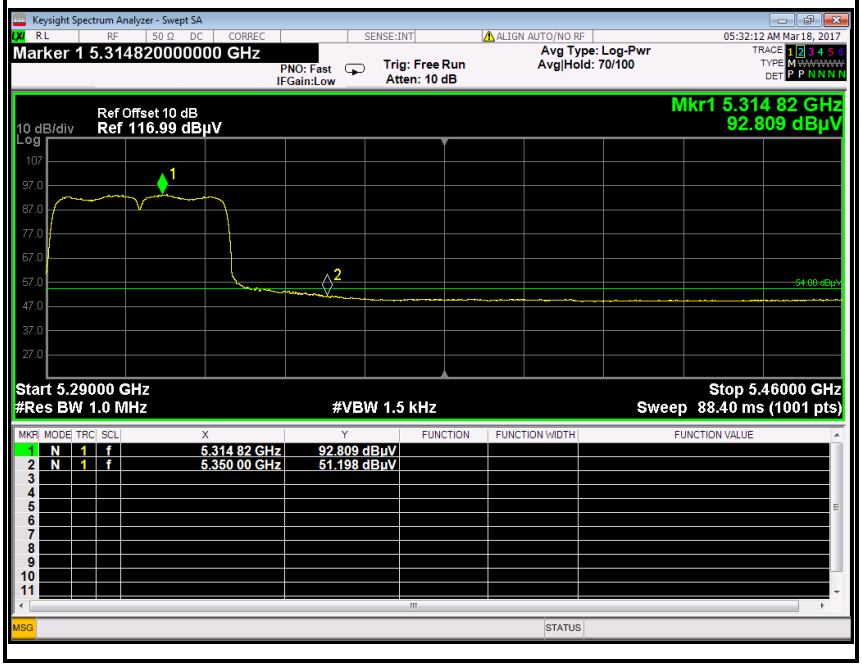



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 63.53 | 5.60 | 57.93 | 74.00 | -16.07 | Peak | Vertical |
| 2 | 5350.0000 | 54.52 | 5.60 | 48.92 | 54.00 | -5.08 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



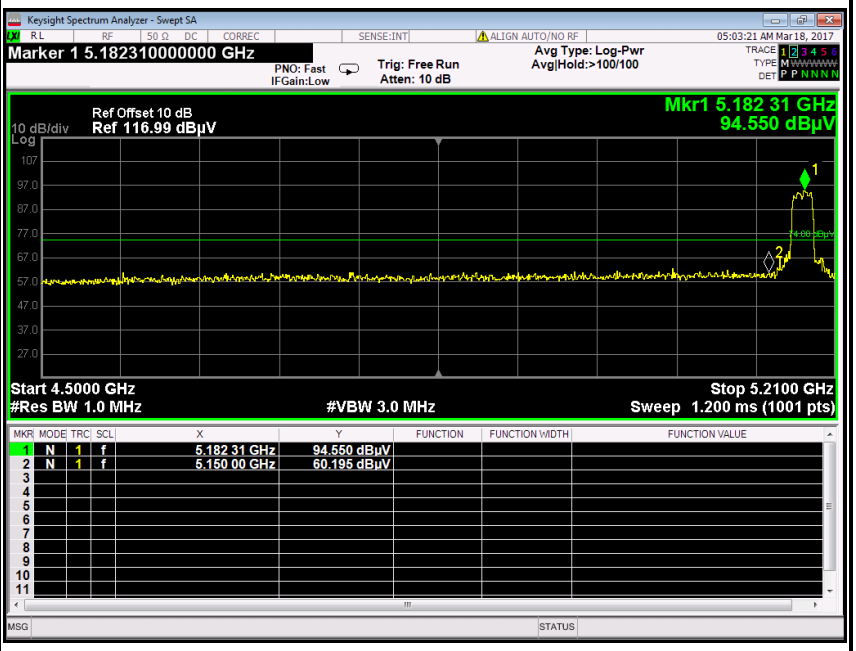

**Detector mode: Average** **Polarity: Horizontal**



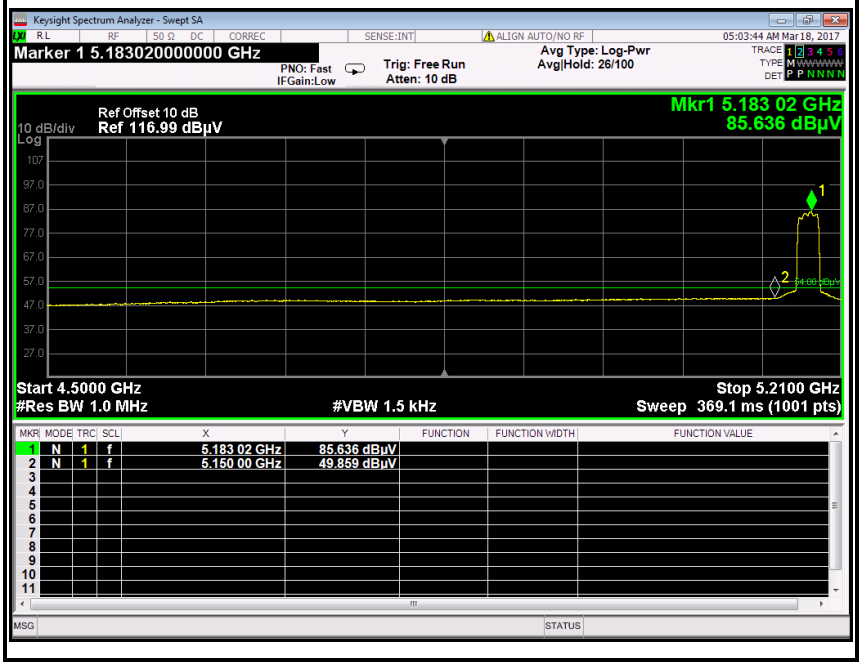

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 66.51 | 5.60 | 60.91 | 74.00 | -13.09 | Peak | Horizontal |
| 2 | 5350.0000 | 56.80 | 5.60 | 51.20 | 54.00 | -2.80 | Average | Horizontal |

**IEEE 802.11ac 20 mode / 5180 MHz**

**Detector mode: Peak** **Polarity: Vertical**

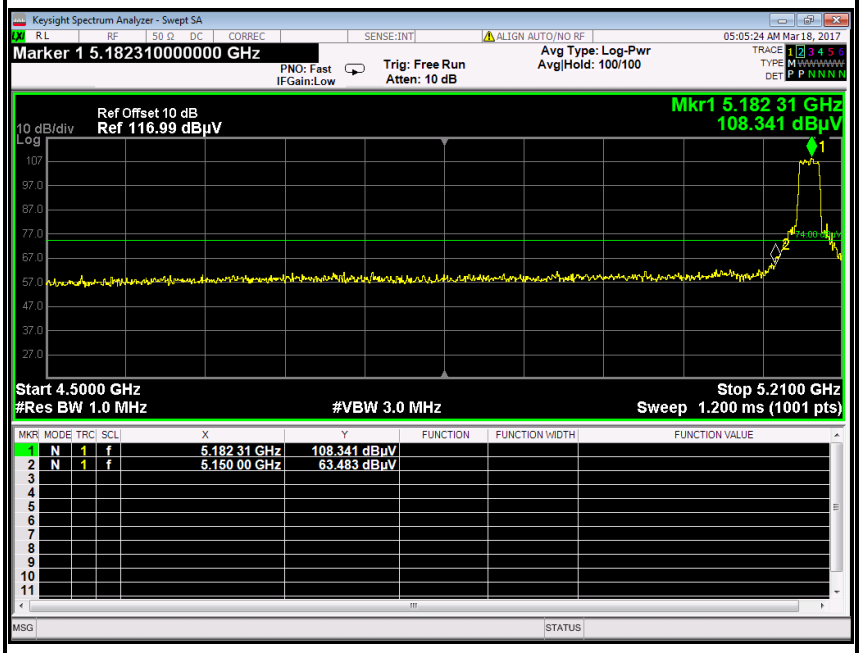



**Detector mode: Average** **Polarity: Vertical**

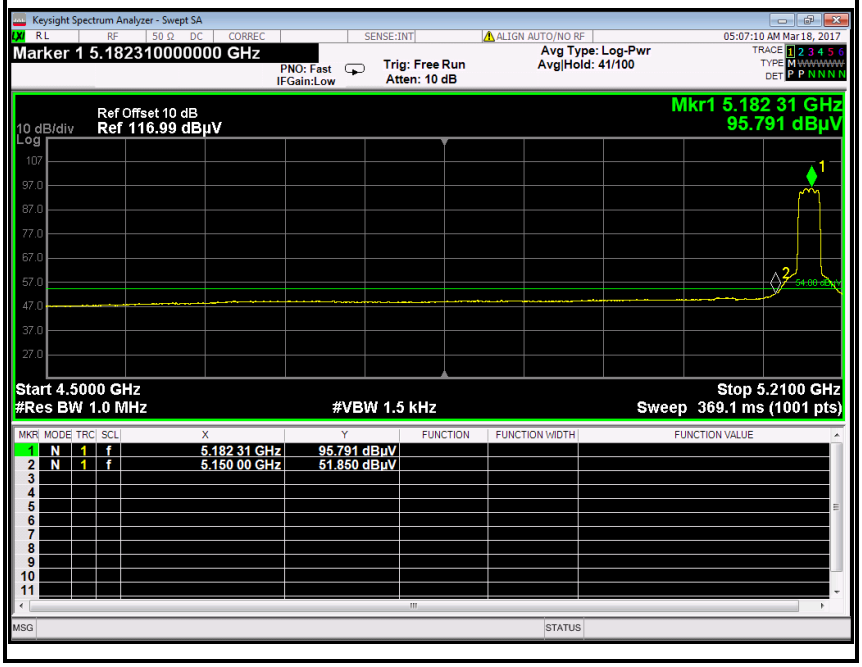



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 65.80 | 5.60 | 60.20 | 74.00 | -13.81 | Peak | Vertical |
| 2 | 5150.0000 | 55.46 | 5.60 | 49.86 | 54.00 | -4.14 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



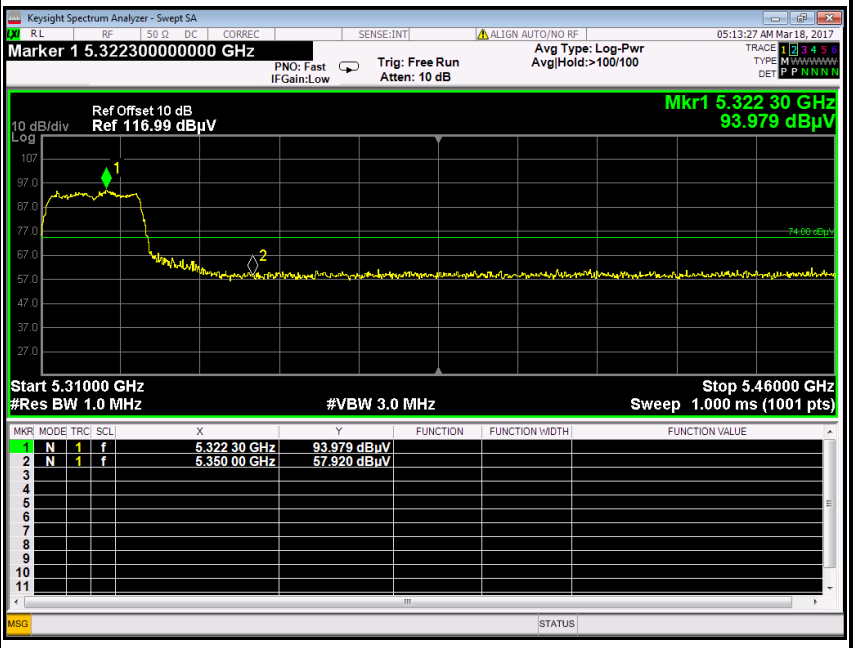

**Detector mode: Average** **Polarity: Horizontal**



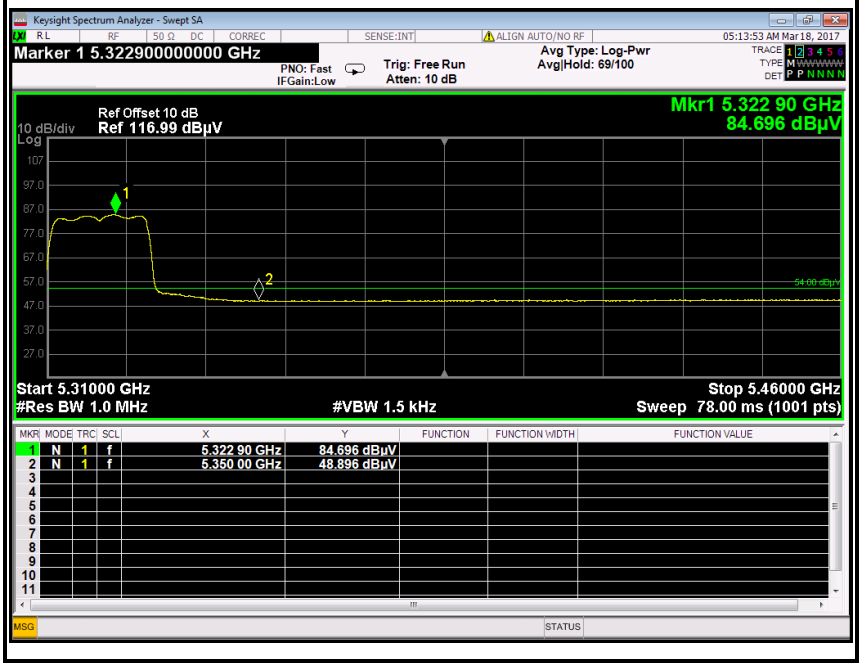

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 69.08 | 5.60 | 63.48 | 74.00 | -10.52 | Peak | Horizontal |
| 2 | 5150.0000 | 57.45 | 5.60 | 51.85 | 54.00 | -2.15 | Average | Horizontal |

**IEEE 802.11ac 20 mode / 5320 MHz**

**Detector mode: Peak** **Polarity: Vertical**

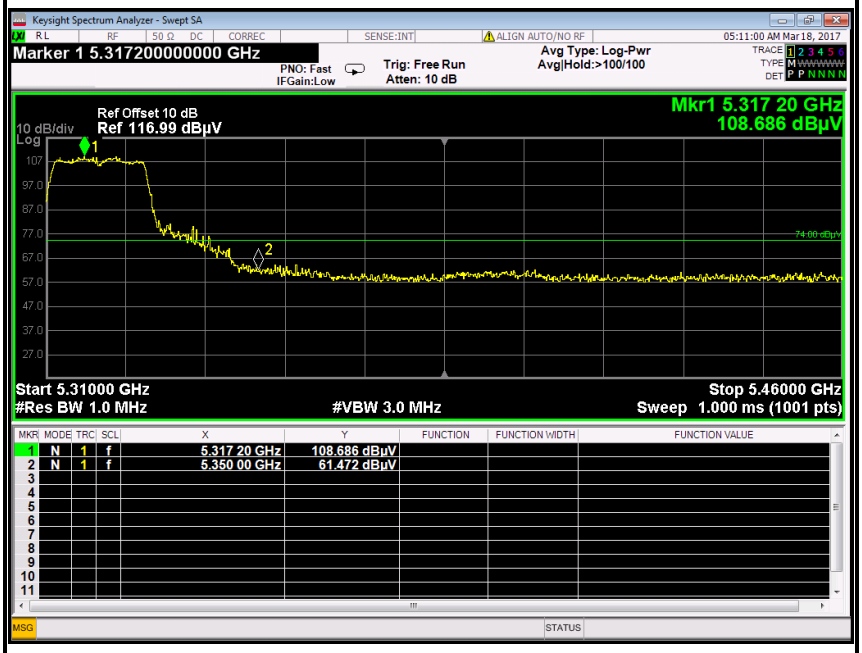



**Detector mode: Average** **Polarity: Vertical**

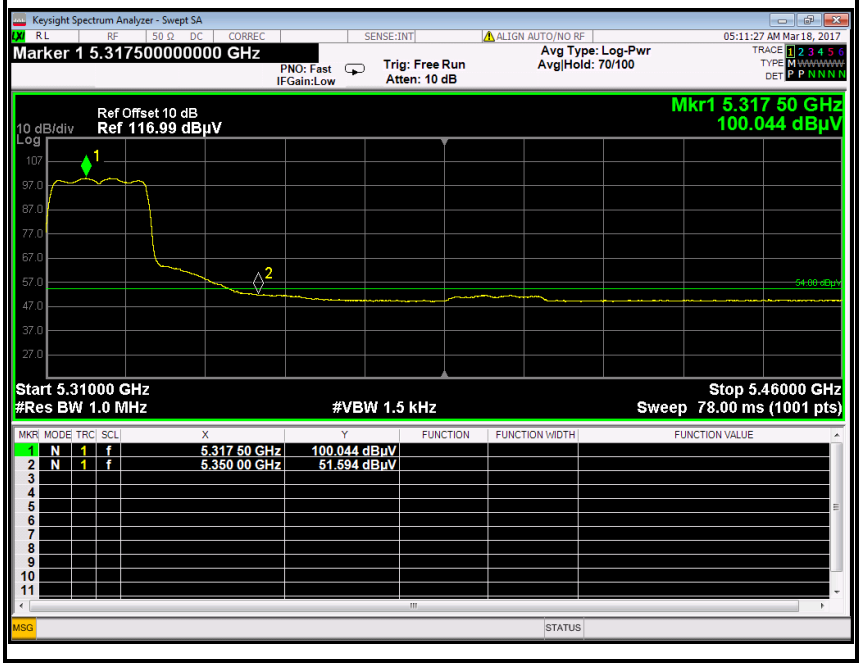



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 63.52 | 5.60 | 57.92 | 74.00 | -16.08 | Peak | Vertical |
| 2 | 5350.0000 | 54.50 | 5.60 | 48.90 | 54.00 | -5.10 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



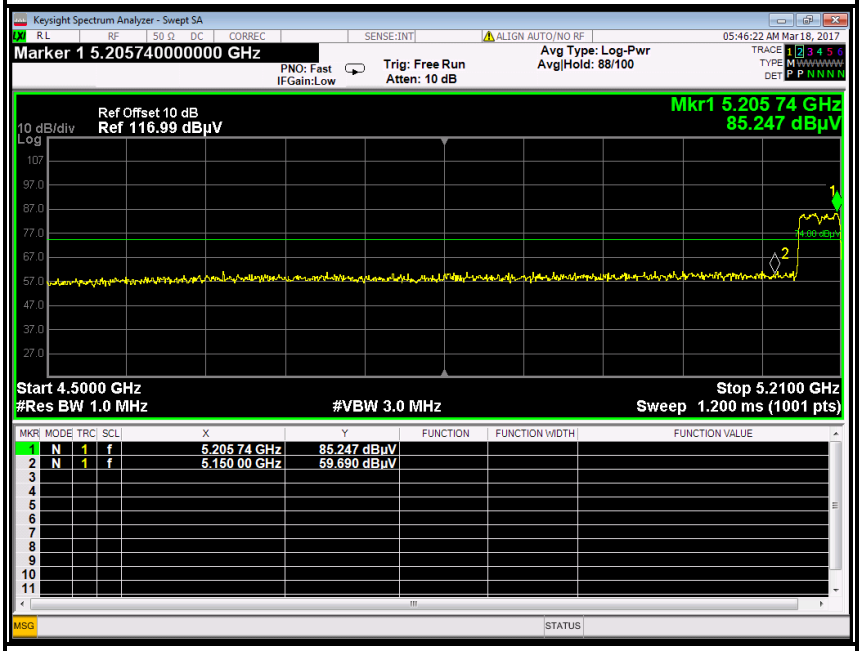

**Detector mode: Average** **Polarity: Horizontal**



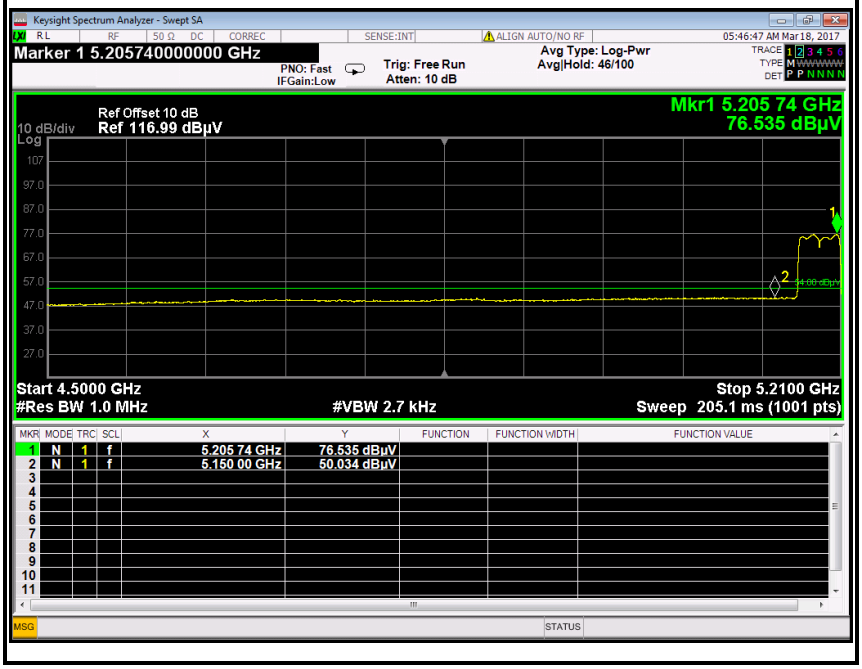

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 67.07 | 5.60 | 61.47 | 74.00 | -12.53 | Peak | Horizontal |
| 2 | 5350.0000 | 57.19 | 5.60 | 51.59 | 54.00 | -2.41 | Average | Horizontal |

**IEEE 802.11ac 40 mode / 5190 MHz**

**Detector mode: Peak** **Polarity: Vertical**

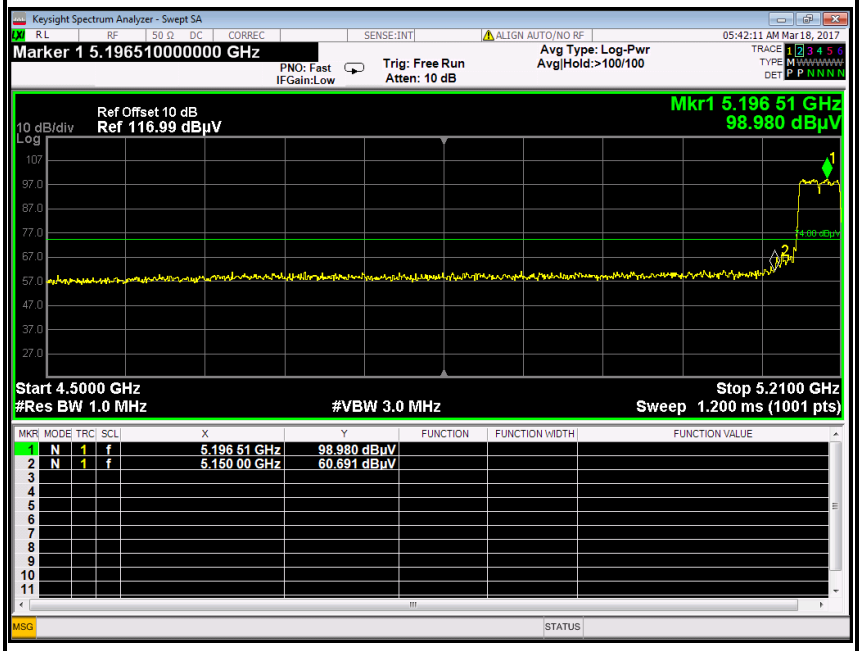



**Detector mode: Average** **Polarity: Vertical**

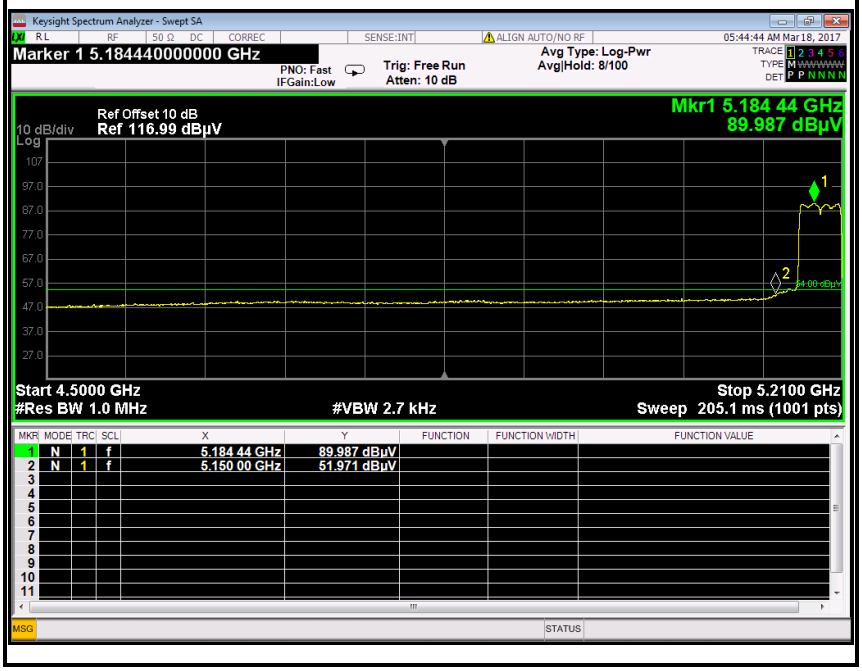



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 65.29 | 5.60 | 59.69 | 74.00 | -14.31 | Peak | Vertical |
| 2 | 5150.0000 | 55.63 | 5.60 | 50.03 | 54.00 | -3.97 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



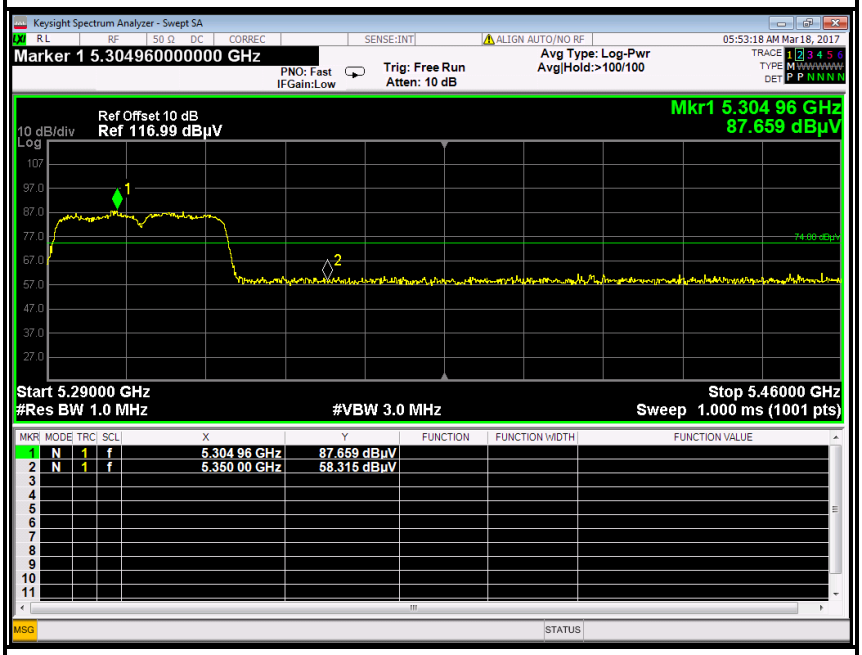

**Detector mode: Average** **Polarity: Horizontal**



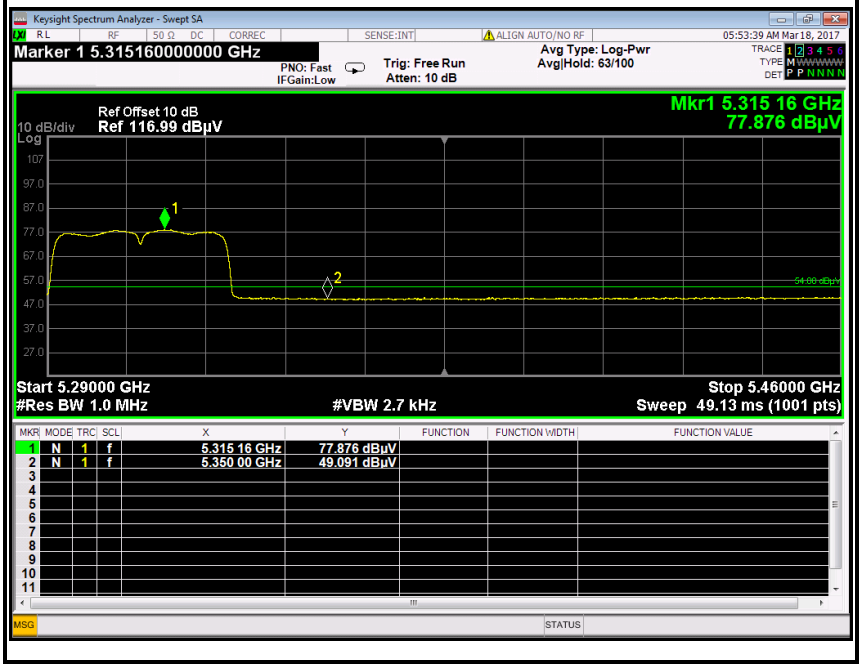

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 66.29 | 5.60 | 60.69 | 74.00 | -13.31 | Peak | Horizontal |
| 2 | 5150.0000 | 57.57 | 5.60 | 51.97 | 54.00 | -2.03 | Average | Horizontal |

**IEEE 802.11ac 40 mode / 5310 MHz**

**Detector mode: Peak** **Polarity: Vertical**

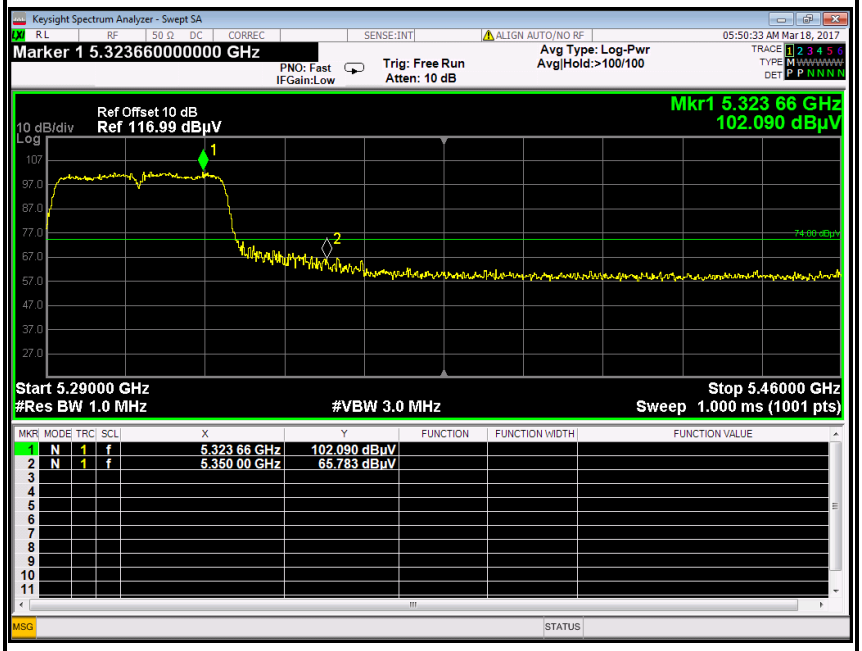



**Detector mode: Average** **Polarity: Vertical**

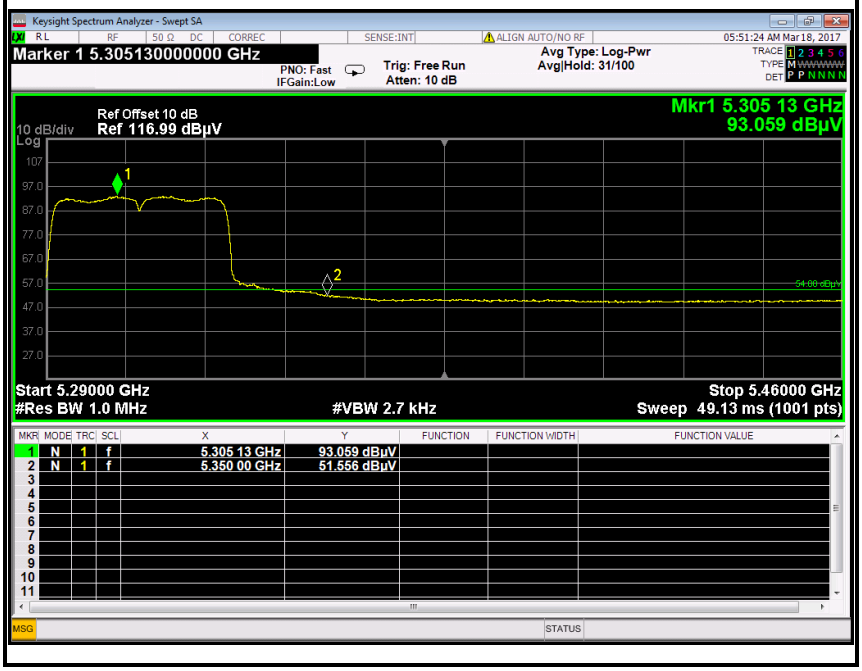



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 63.92 | 5.60 | 58.32 | 74.00 | -15.69 | Peak | Vertical |
| 2 | 5350.0000 | 54.69 | 5.60 | 49.09 | 54.00 | -4.91 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



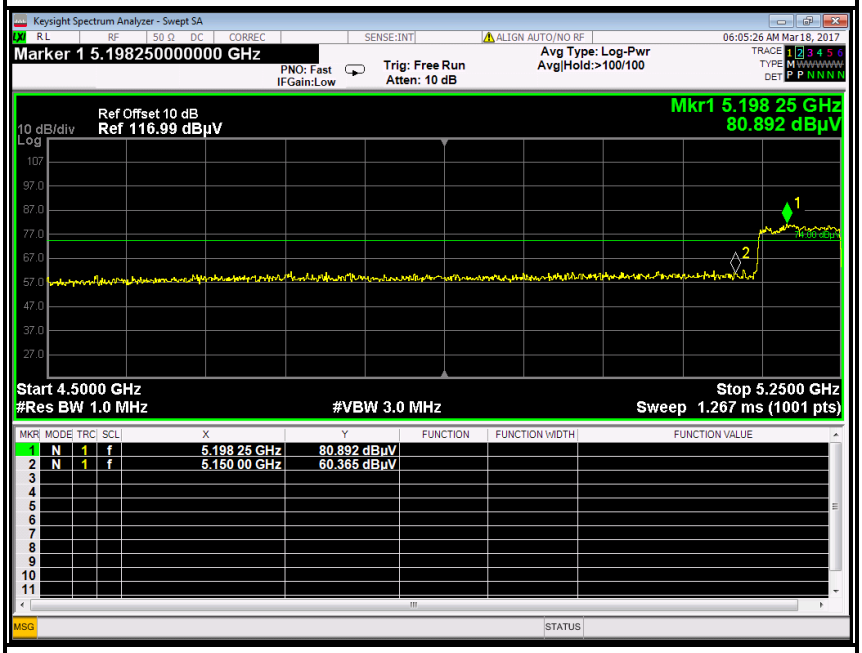

**Detector mode: Average** **Polarity: Horizontal**



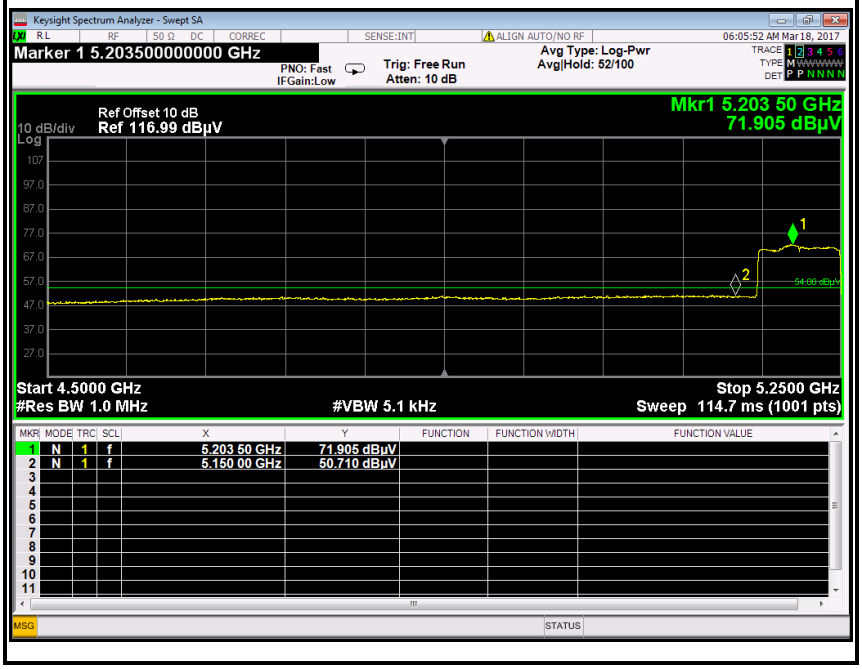

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 71.38 | 5.60 | 65.78 | 74.00 | -8.22 | Peak | Horizontal |
| 2 | 5350.0000 | 57.16 | 5.60 | 51.56 | 54.00 | -2.44 | Average | Horizontal |

**IEEE 802.11ac 80 mode / 5210 MHz**

**Detector mode: Peak** **Polarity: Vertical**

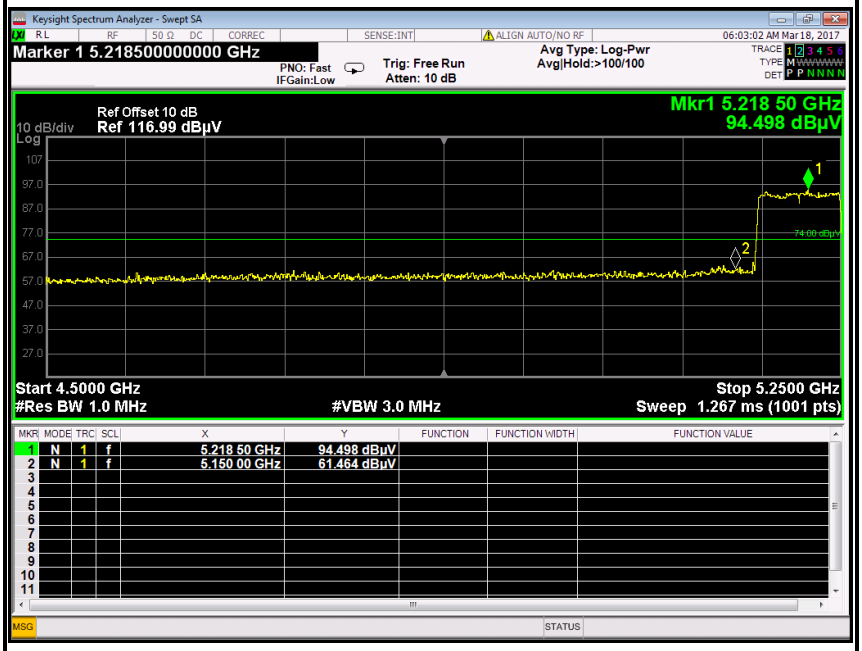



**Detector mode: Average** **Polarity: Vertical**

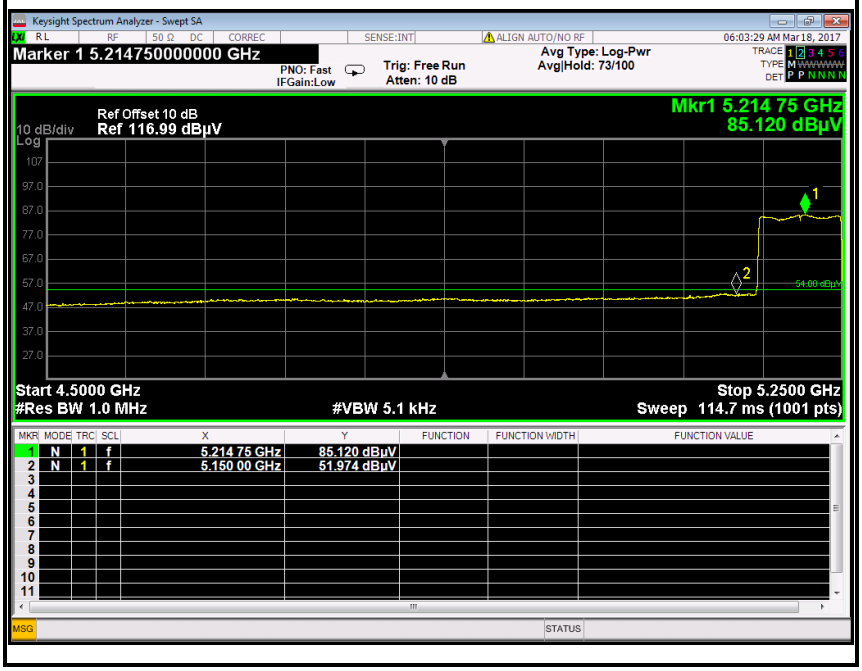



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 65.97 | 5.60 | 60.37 | 74.00 | -13.64 | Peak | Vertical |
| 2 | 5150.0000 | 56.31 | 5.60 | 50.71 | 54.00 | -3.29 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**



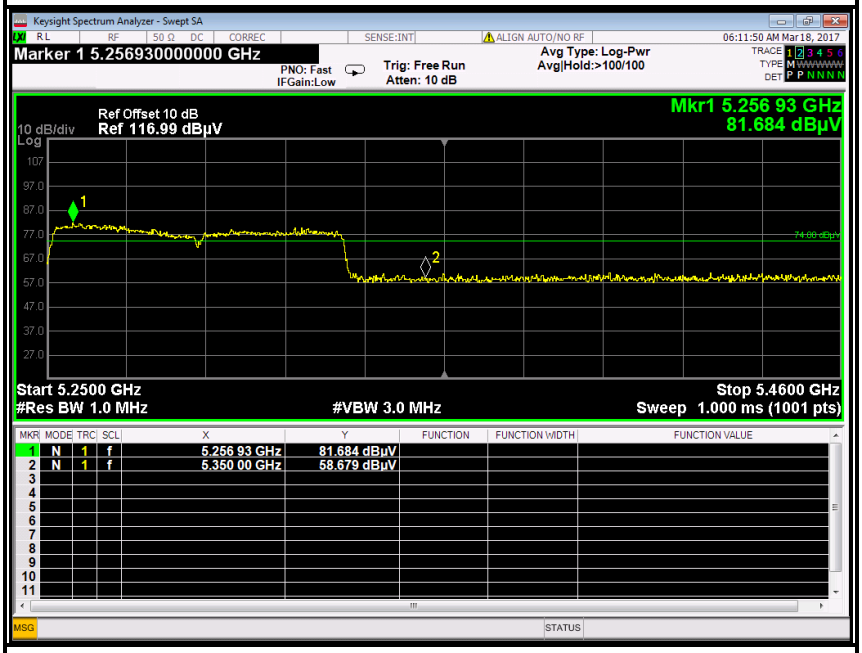

**Detector mode: Average** **Polarity: Horizontal**



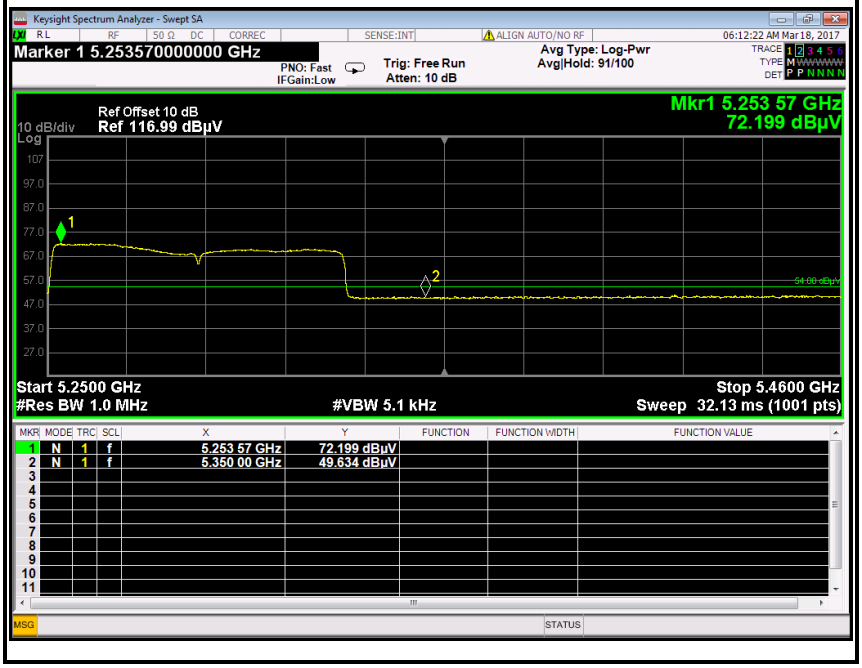

| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5150.0000 | 67.06 | 5.60 | 61.46 | 74.00 | -12.54 | Peak | Horizontal |
| 2 | 5150.0000 | 57.57 | 5.60 | 51.97 | 54.00 | -2.03 | Average | Horizontal |

**IEEE 802.11ac 80 mode / 5290 MHz**

**Detector mode: Peak** **Polarity: Vertical**

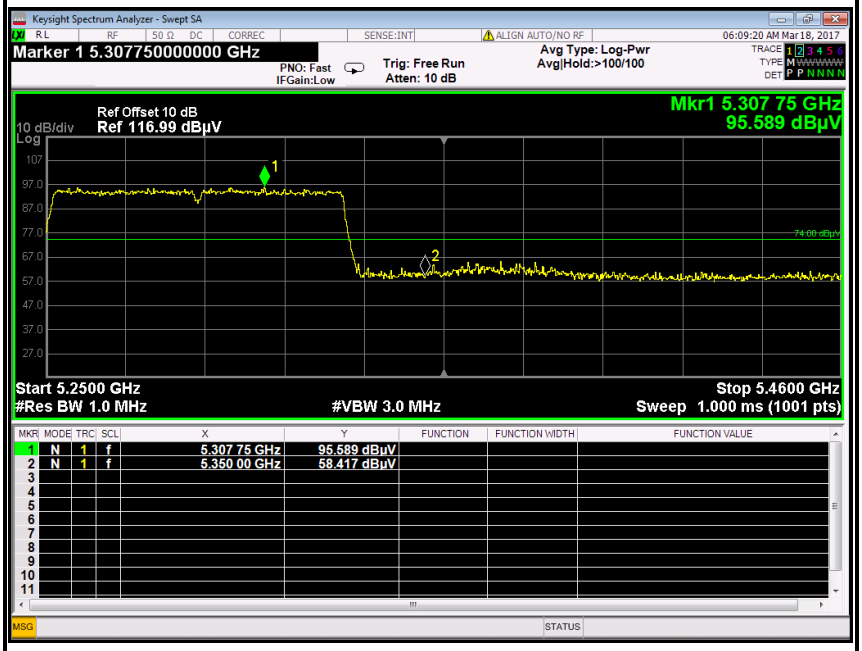



**Detector mode: Average** **Polarity: Vertical**

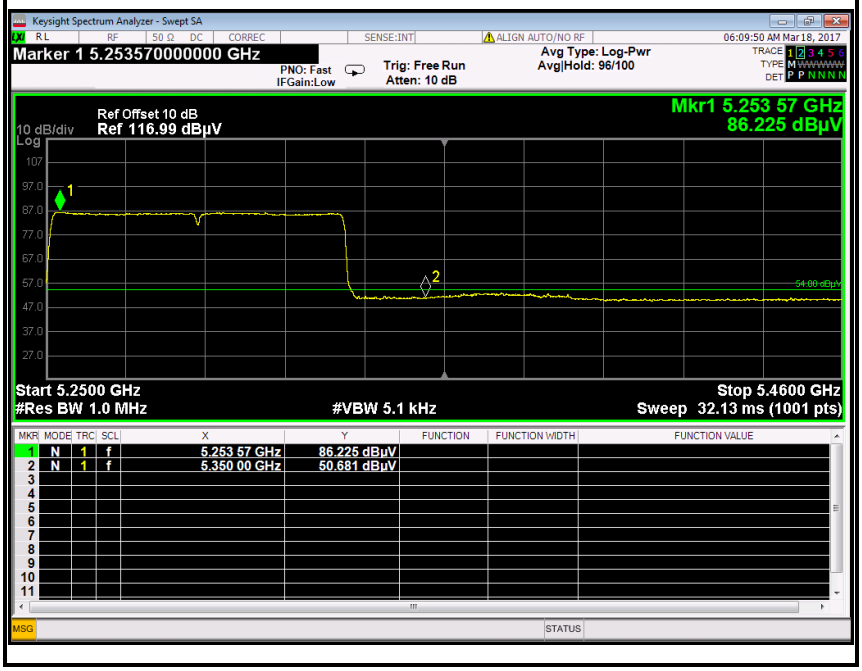



| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 64.28 | 5.60 | 58.68 | 74.00 | -15.32 | Peak | Vertical |
| 2 | 5350.0000 | 55.23 | 5.60 | 49.63 | 54.00 | -4.37 | Average | Vertical |

**Detector mode: Peak** **Polarity: Horizontal**




**Detector mode: Average** **Polarity: Horizontal**




| No. | Frequency (MHz) | Reading (dBuV) | Corrected (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Antenna Pole |
|---|---|---|---|---|---|---|---|---|
| 1 | 5350.0000 | 64.02 | 5.60 | 58.42 | 74.00 | -15.58 | Peak | Horizontal |
| 2 | 5350.0000 | 56.28 | 5.60 | 50.68 | 54.00 | -3.32 | Average | Horizontal |

# 6.6 PEAK POWER SPECTAL DENSITY

## 6.6.1 LIMIT

**According to §15.407(a) & FCC R&O FCC 14-30**

(1) For the band 5.15-5.25 GHz.

(i) For an outdoor access point operating in 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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in 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. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) 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 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

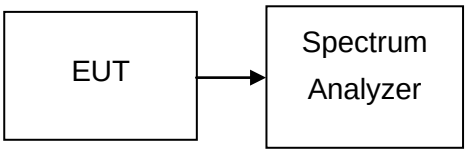
*Note to paragraph (a)(3): The Commission strongly recommends that parties employing U-NII devices to provide critical communications services should determine if there are any nearby Government radar systems that could affect their operation.*

## 6.6.2MEASUREMENT EQUIPMENT USED

| Name of Equipment | Manufacturer | Model | Serial Number | Last Calibration | Due Calibration |
|---|---|---|---|---|---|
| Spectrum Analyzer | Agilent | N9010A | MY52221469 | 02/21/2017 | 02/20/2018 |

***Remark:*** *Each piece of equipment is scheduled for calibration once a year.*

### 6.6.3 TEST CONFIGURATION




### 6.6.4 TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
   Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
2. For devices operating in the bands 5.15-5.25 GHz,Set the spectrum analyzer as RBW = 1MHz, VBW = 3MHz, Span > 26dB bandwidth, Sweep=1ms
3. For devices operating in the bands 5.725-5.85 GHz,Set the spectrum analyzer as RBW = 1MHz, VBW = 3MHz, Span > 26dB bandwidth, Sweep=1ms
4. Record the max. reading.
5. Repeat the above procedure until the measurements for all frequencies are completed

## 6.6.5 TEST RESULTS

## Test Data

**Test mode: IEEE 802.11a mode / 5180 ~ 5240MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5180 | 0.789 | 1.378 | 11 | -10.211 | -9.622 | PASS |
| Mid | 5200 | 1.380 | 1.115 | | -9.620 | -9.885 | PASS |
| High | 5240 | 1.264 | 1.808 | | -9.736 | -9.192 | PASS |

**Test mode: IEEE 802.11a mode / 5260~ 5320MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5260 | 1.447 | 2.093 | 11 | -9.553 | -8.907 | PASS |
| Mid | 5300 | 1.570 | 1.791 | | -9.430 | -9.209 | PASS |
| High | 5320 | 1.739 | 1.225 | | -9.261 | -9.775 | PASS |

**Test mode: IEEE 802.11a mode / 5500 ~ 5700MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5500 | 2.438 | 2.652 | 11 | -8.562 | -8.348 | PASS |
| Mid | 5580 | 1.813 | 1.570 | | -9.187 | -9.430 | PASS |
| High | 5700 | 1.761 | 1.617 | | -9.239 | -9.383 | PASS |

**Test mode: IEEE 802.11a mode / 5745 ~ 5825MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | factor | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | | Antenna 1 | Antenna 2 | |
| Low | 5745 | -1.336 | -1.295 | 0.27 | 30 | -31.066 | -31.025 | PASS |
| Mid | 5785 | -0.811 | -1.389 | | | -30.541 | -31.119 | PASS |
| High | 5825 | -0.582 | -1.436 | | | -30.312 | -31.166 | PASS |

**Remark: factor =10*lg(500/RBW)**

**Test mode: IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5180 | 0.276 | 0.980 | 11 | -10.724 | -10.020 | PASS |
| Mid | 5200 | 0.633 | 1.271 | | -10.367 | -9.729 | PASS |
| High | 5240 | 1.238 | 1.320 | | -9.762 | -9.680 | PASS |

**Test mode: IEEE 802.11n HT 20 MHz mode / 5260~ 5320MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5260 | 1.146 | 1.262 | 11 | -9.854 | -9.738 | PASS |
| Mid | 5300 | 1.614 | 1.491 | | -9.386 | -9.509 | PASS |
| High | 5320 | 0.915 | 1.140 | | -10.085 | -9.860 | PASS |

**Test mode: IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5500 | 1.847 | 1.834 | 11 | -9.153 | -9.166 | PASS |
| Mid | 5580 | 1.339 | 1.258 | | -9.661 | -9.742 | PASS |
| High | 5700 | 1.136 | 0.917 | | -9.864 | -10.083 | PASS |

**Test mode: IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | factor | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | | Antenna 1 | Antenna 2 | |
| Low | 5745 | -1.398 | -2.070 | 0.27 | 30 | -31.128 | -31.800 | PASS |
| Mid | 5785 | -0.987 | -1.322 | | | -30.717 | -31.052 | PASS |
| High | 5825 | -0.692 | -1.911 | | | -30.422 | -31.641 | PASS |

**Remark: factor =10*lg(500/RBW)**

**Test mode: IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5190 | -5.954 | -8.134 | 11 | -16.954 | -19.134 | PASS |
| High | 5230 | -6.086 | -8.237 | | -17.086 | -19.237 | PASS |

**Test mode: IEEE 802.11n HT 40 MHz mode / 5270 ~ 5310MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5270 | -4.660 | -5.770 | 11 | -15.660 | -16.770 | PASS |
| High | 5310 | -4.594 | -5.647 | | -15.594 | -16.647 | PASS |

**Test mode: IEEE 802.11n HT 40 MHz mode / 5510 ~ 5670MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5510 | -3.149 | -3.042 | 11 | -14.149 | -14.042 | PASS |
| Mid | 5550 | -2.703 | -2.951 | | -13.703 | -13.951 | PASS |
| High | 5670 | -3.554 | -3.943 | | -14.554 | -14.943 | PASS |

**Test mode: IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | factor | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | | Antenna 1 | Antenna 2 | |
| Low | 5755 | -4.164 | -4.640 | 0.27 | 30 | -33.894 | -34.370 | PASS |
| High | 5795 | -3.947 | -4.594 | | | -33.677 | -34.324 | PASS |

**Remark: factor =10*lg (500/RBW)**

**Test mode: IEEE 802.11ac 20 mode / 5180 ~ 5240MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5180 | 0.848 | 0.957 | 11 | -10.152 | -10.043 | PASS |
| Mid | 5200 | 0.249 | 0.910 | | -10.751 | -10.090 | PASS |
| High | 5240 | 1.110 | 1.102 | | -9.890 | -9.898 | PASS |

**Test mode: IEEE 802.11ac 20 mode / 5260~ 5320MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5260 | 1.091 | 1.518 | 11 | -9.909 | -9.482 | PASS |
| Mid | 5300 | 1.409 | 0.789 | | -9.591 | -10.211 | PASS |
| High | 5320 | 0.727 | 0.853 | | -10.273 | -10.147 | PASS |

**Test mode: IEEE 802.11ac 20 mode / 5500 ~ 5700MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5500 | 1.743 | 1.668 | 11 | -9.257 | -9.332 | PASS |
| Mid | 5580 | 1.706 | 0.930 | | -9.294 | -10.070 | PASS |
| High | 5700 | 0.588 | 0.834 | | -10.412 | -10.166 | PASS |

**Test mode: IEEE 802.11ac 20 mode / 5745 ~ 5825MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | factor | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | | Antenna 1 | Antenna 2 | |
| Low | 5745 | -1.852 | -1.298 | 0.27 | 30 | -31.582 | -31.028 | PASS |
| Mid | 5785 | -1.212 | -1.891 | | | -30.942 | -31.621 | PASS |
| High | 5825 | -1.186 | -2.067 | | | -30.916 | -31.797 | PASS |

**Remark: factor =10*lg(500/RBW)**

**Test mode: IEEE 802.11ac 40 mode / 5190 ~ 5230MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5190 | -6.221 | -7.935 | 11 | -17.221 | -18.935 | PASS |
| High | 5230 | -6.107 | -7.886 | | -17.107 | -18.886 | PASS |

**Test mode: IEEE 802.11ac 40 mode / 5270 ~ 5310MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5270 | -4.652 | -5.776 | 11 | -15.652 | -16.776 | PASS |
| High | 5310 | -4.743 | -5.794 | | -15.743 | -16.794 | PASS |

**Test mode: IEEE 802.11ac 40 mode / 5510 ~ 5670MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| Low | 5510 | -2.589 | -2.898 | 11 | -13.589 | -13.898 | PASS |
| Mid | 5550 | -2.944 | -3.469 | | -13.944 | -14.469 | PASS |
| High | 5670 | -3.792 | -4.575 | | -14.792 | -15.575 | PASS |

**Test mode: IEEE 802.11ac40 mode / 5755 ~ 5795MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | factor | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | | Antenna 1 | Antenna 2 | |
| Low | 5755 | -4.565 | -6.941 | 0.27 | 30 | -34.295 | -36.671 | PASS |
| High | 5795 | -3.496 | -6.707 | | | -33.226 | -36.437 | PASS |

**Remark: factor =10*lg (500/RBW)**

**Test mode: IEEE 802.11ac 80 mode / 5210MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| | 5190 | -12.926 | -13.820 | 11 | -23.926 | -24.820 | PASS |

**Test mode: IEEE 802.11ac 80 mode / 5290MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| | 5290 | -12.593 | -12.236 | 11 | -23.593 | -23.236 | PASS |

**Test mode: IEEE 802.11ac 80 mode / 5530MHz**

| Channel | Frequency (MHz) | PPSD (dBm) | | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | Antenna 1 | Antenna 2 | |
| | 5530 | -8.807 | -9.717 | 11 | -19.807 | -20.717 | PASS |

**Test mode: IEEE 802.11ac 80 mode / 5775MHz**

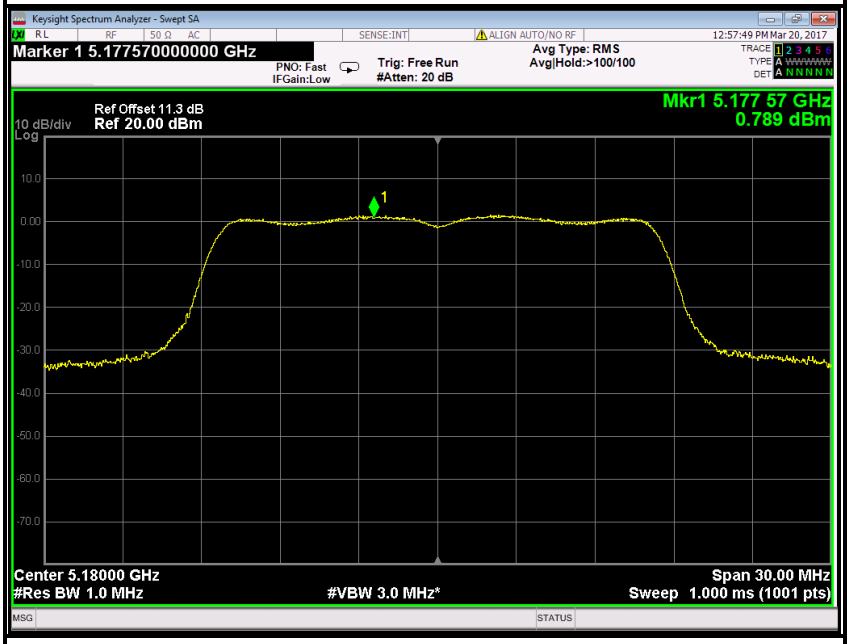
| Channel | Frequency (MHz) | PPSD (dBm) | | factor | Limit (dBm) | Margin | | Result |
|---|---|---|---|---|---|---|---|---|
| | | Antenna 1 | Antenna 2 | | | Antenna 1 | Antenna 2 | |
| | 5775 | -11.477 | -11.507 | 0.27 | 30 | -41.207 | -41.237 | PASS |

**Remark: factor =10*lg(500/RBW)**

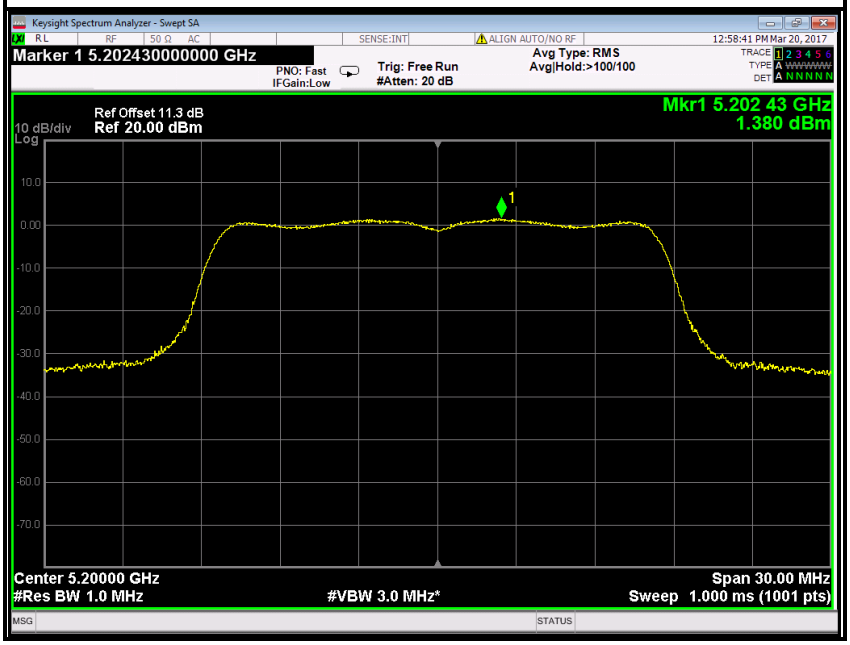
## Antenna 1 Test Plot

**IEEE 802.11a mode / 5180 ~ 5240MHz**

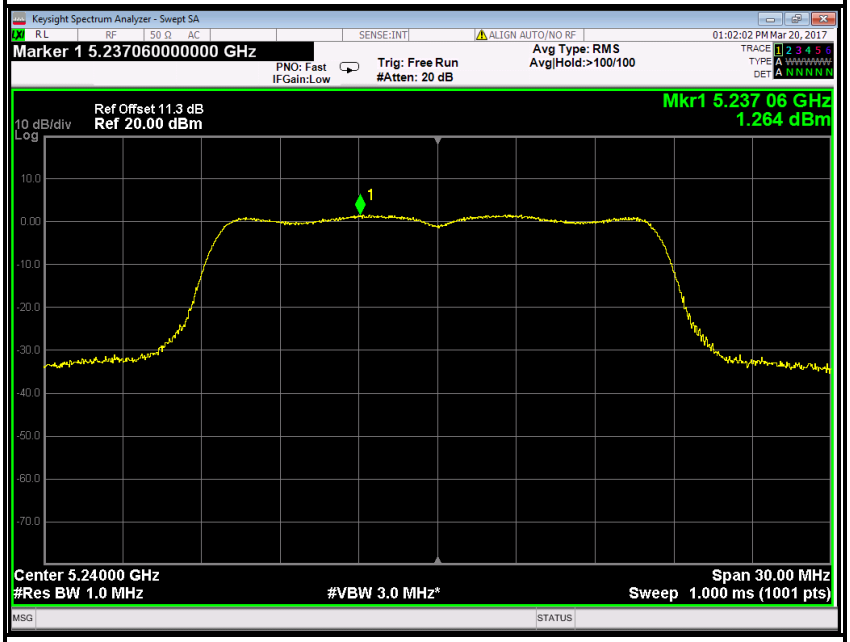
**PPSD (CH Low)**




**PPSD (CH Mid)**

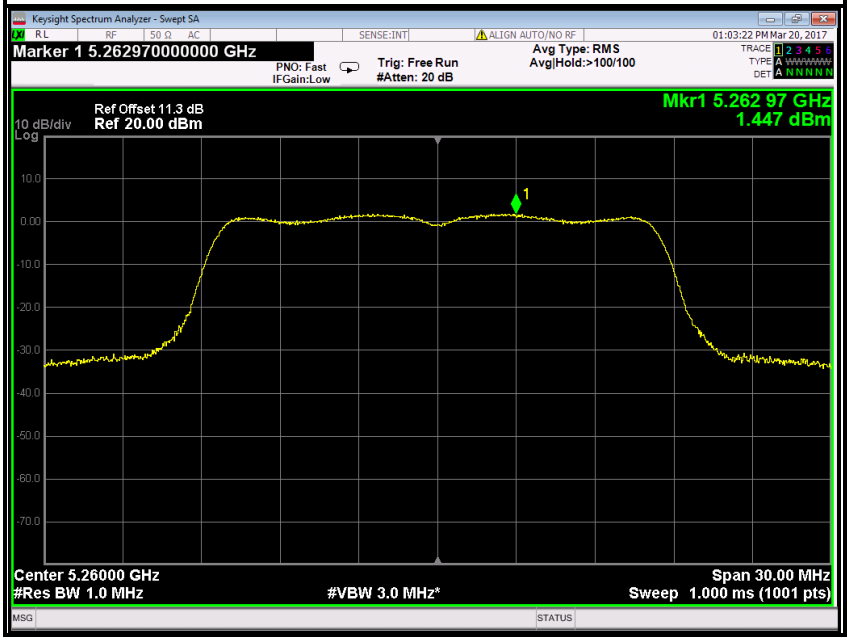


**PPSD (CH High)**

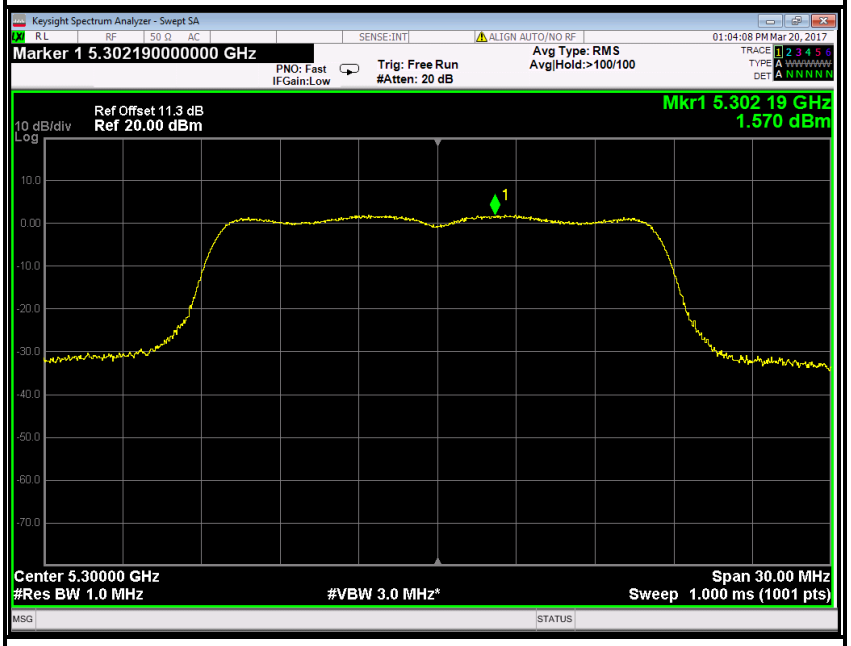



**IEEE 802.11a mode / 5260~ 5320MHz**

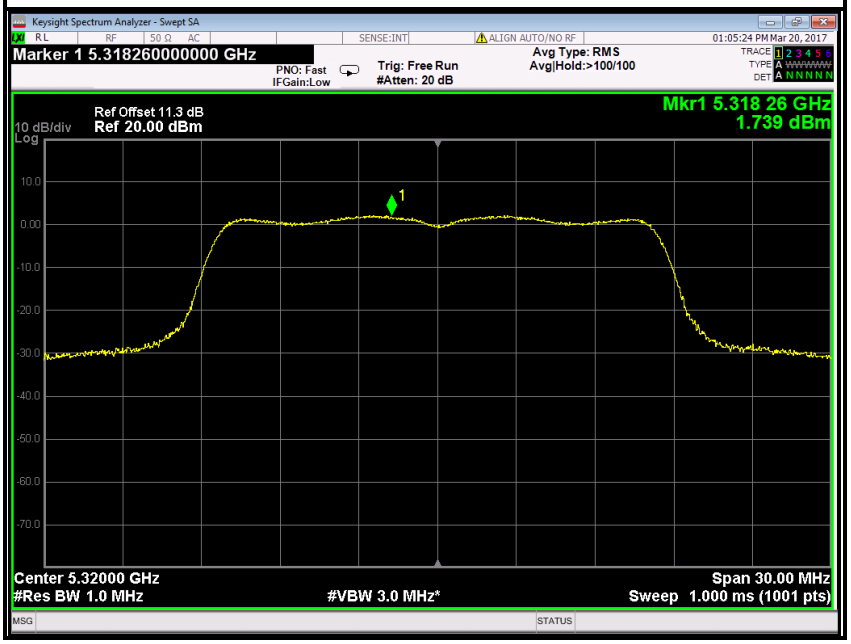
**PPSD (CH Low)**



**PPSD (CH Mid)**

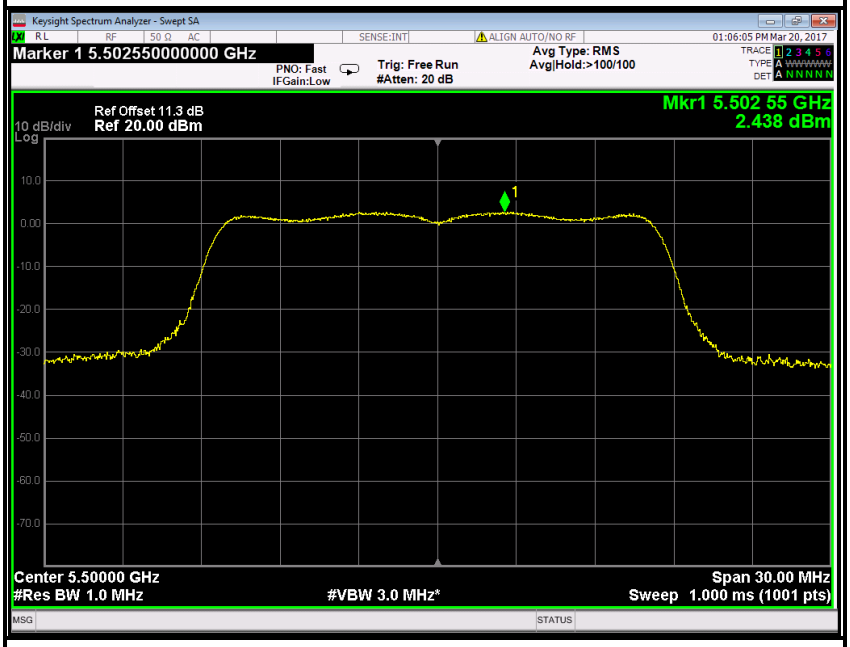



**PPSD (CH High)**

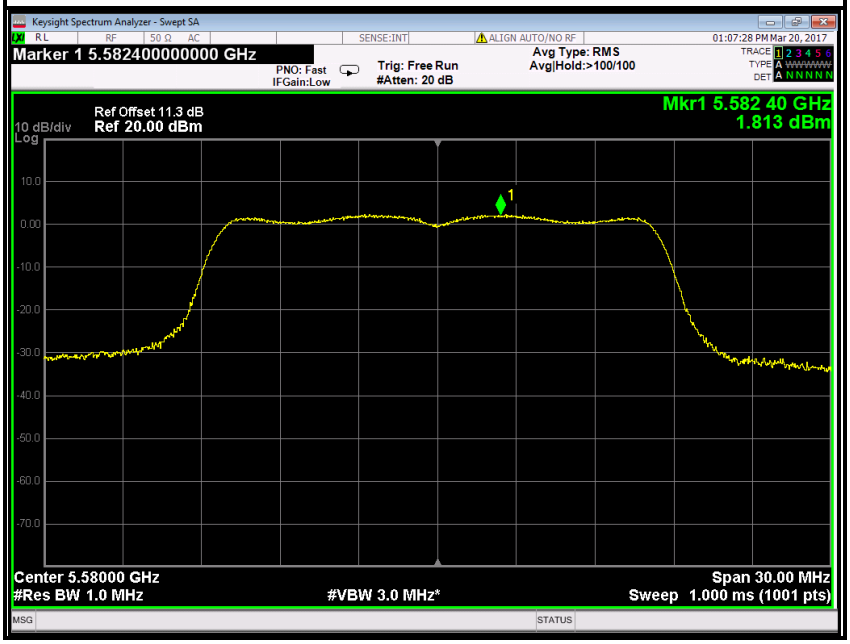


**IEEE 802.11a mode / 5500 ~ 5700MHz**

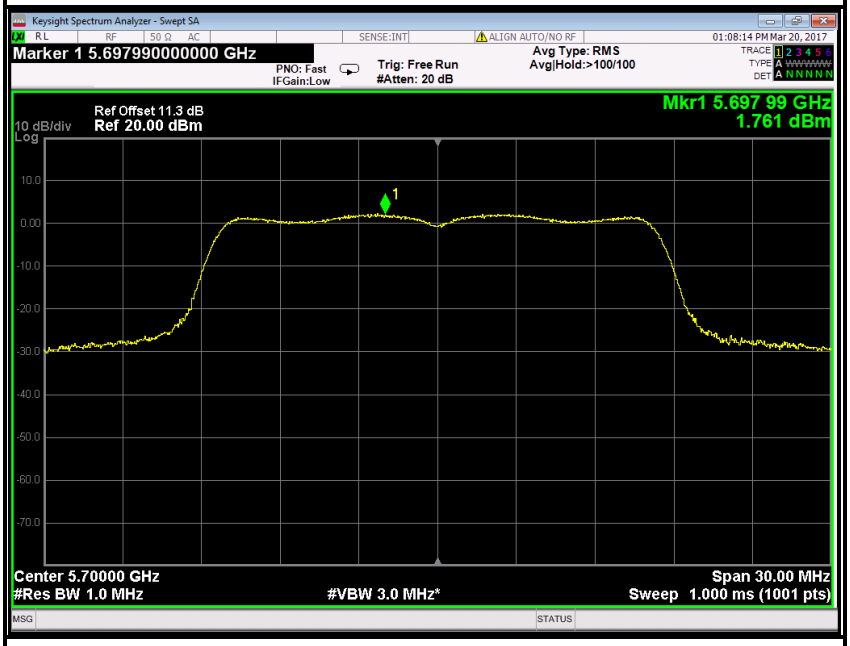
**PPSD (CH Low)**




**PPSD (CH Mid)**

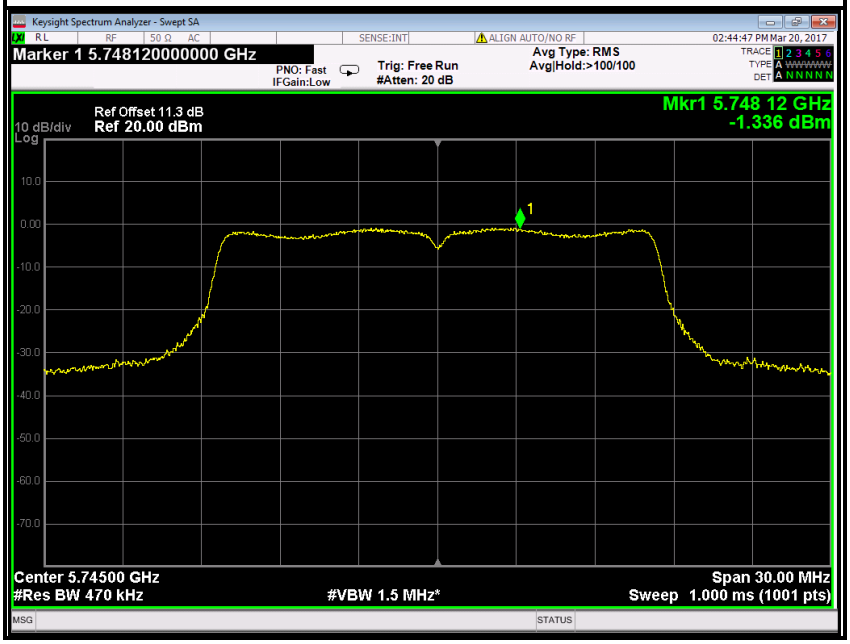


**PPSD (CH High)**

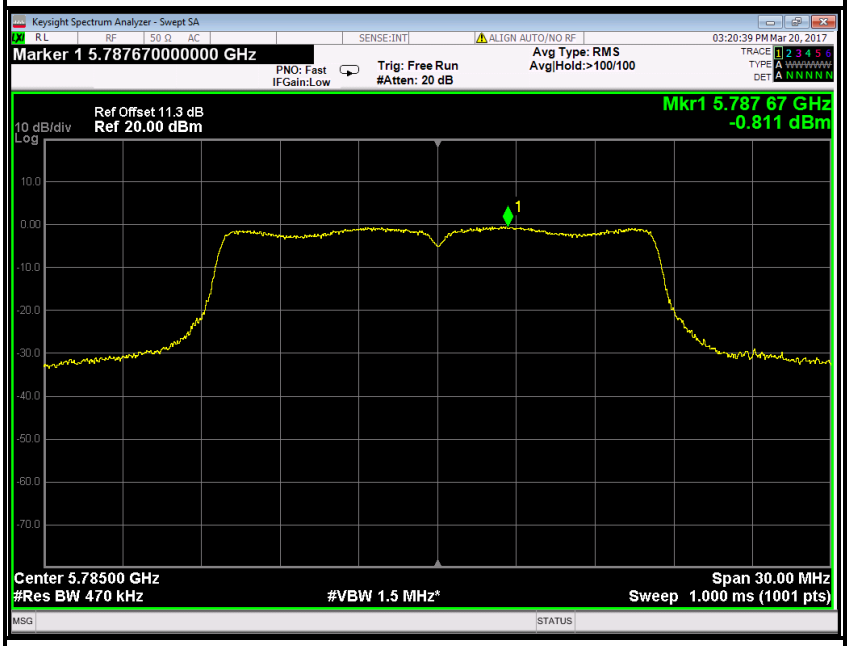



**IEEE 802.11a mode / 5745 ~ 5825MHz**

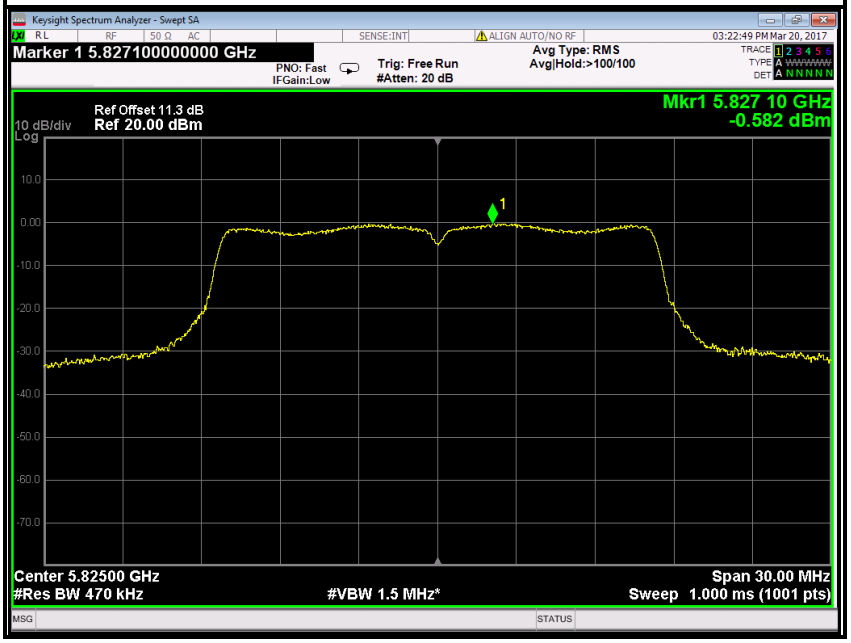
**PPSD (CH Low)**



**PPSD (CH Mid)**

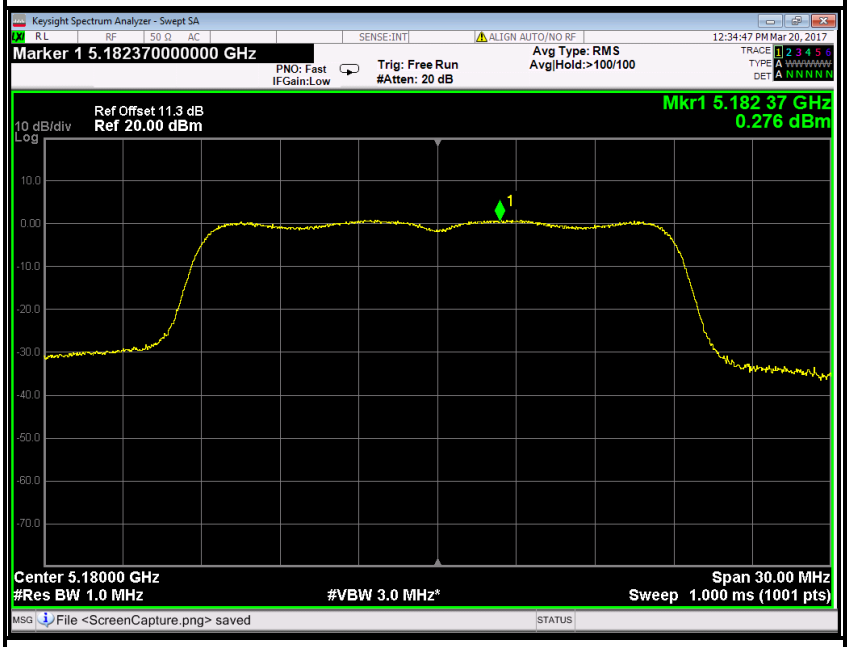



**PPSD (CH High)**

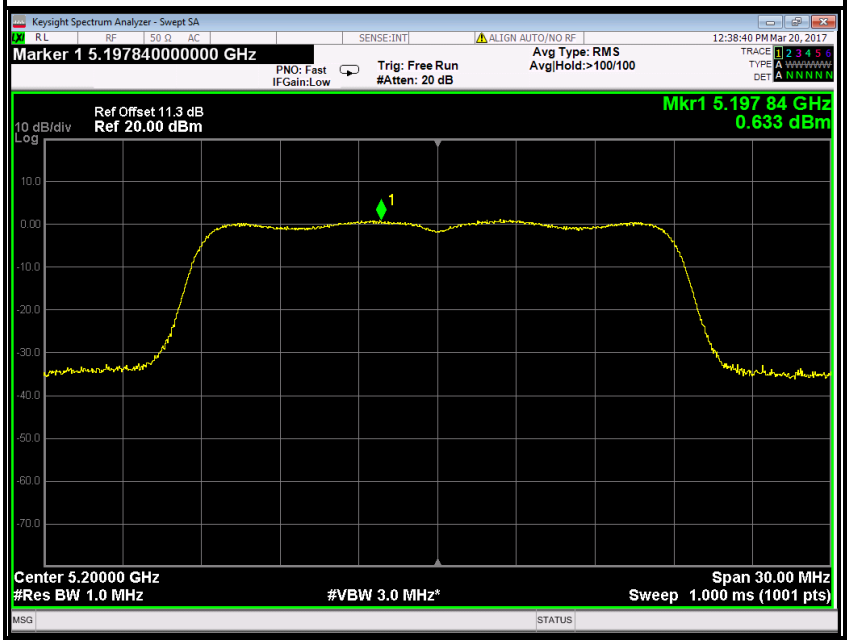


**IEEE 802.11n HT 20 MHz mode / 5180 ~ 5240MHz**

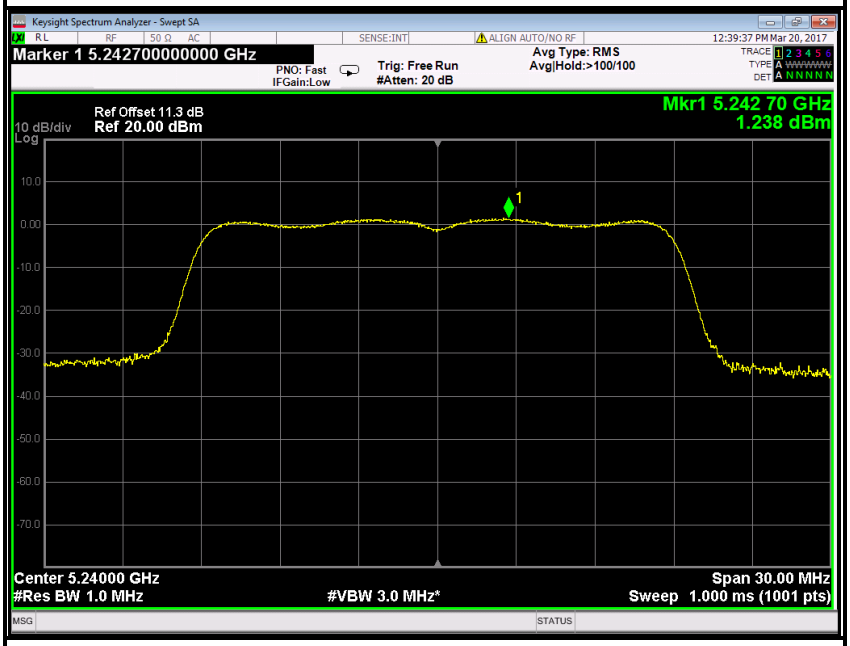
**PPSD (CH Low)**




**PPSD (CH Mid)**

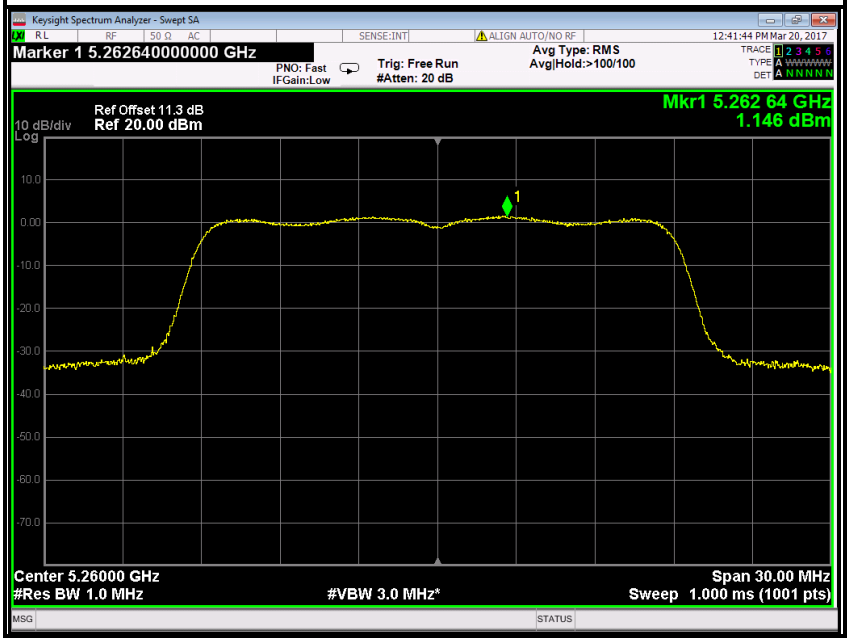


**PPSD (CH High)**

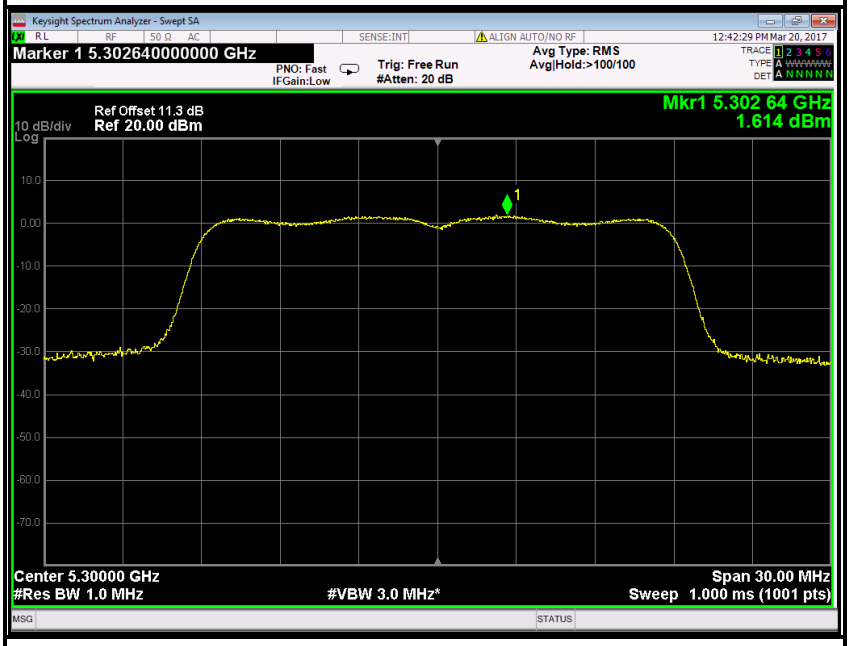



**IEEE 802.11n HT 20 MHz mode / 5260~ 5320MHz**

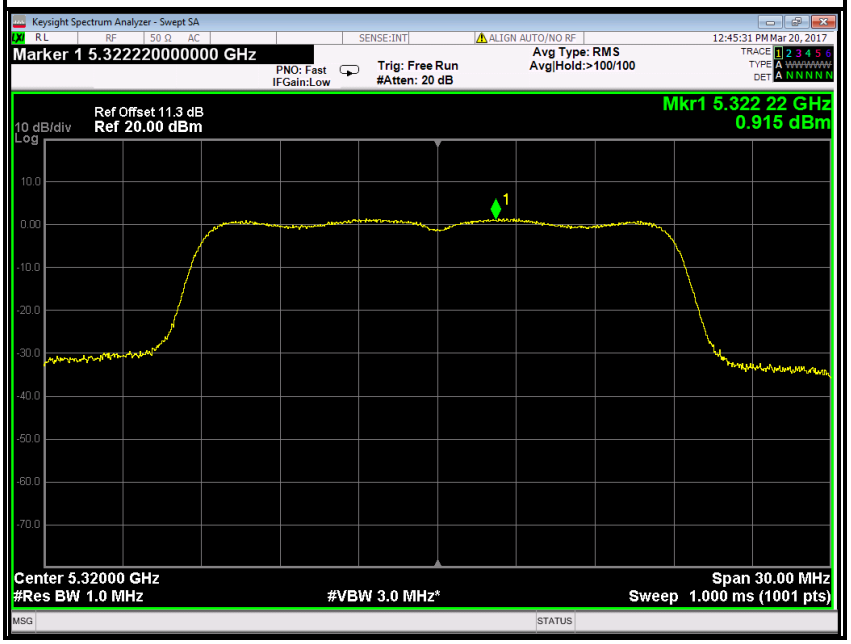
**PPSD (CH Low)**



**PPSD (CH Mid)**

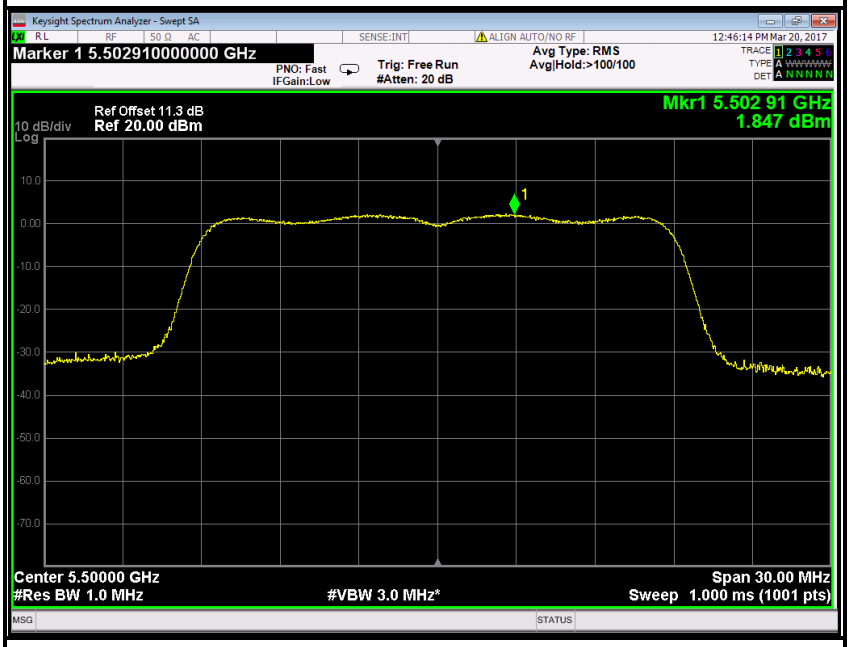



**PPSD (CH High)**

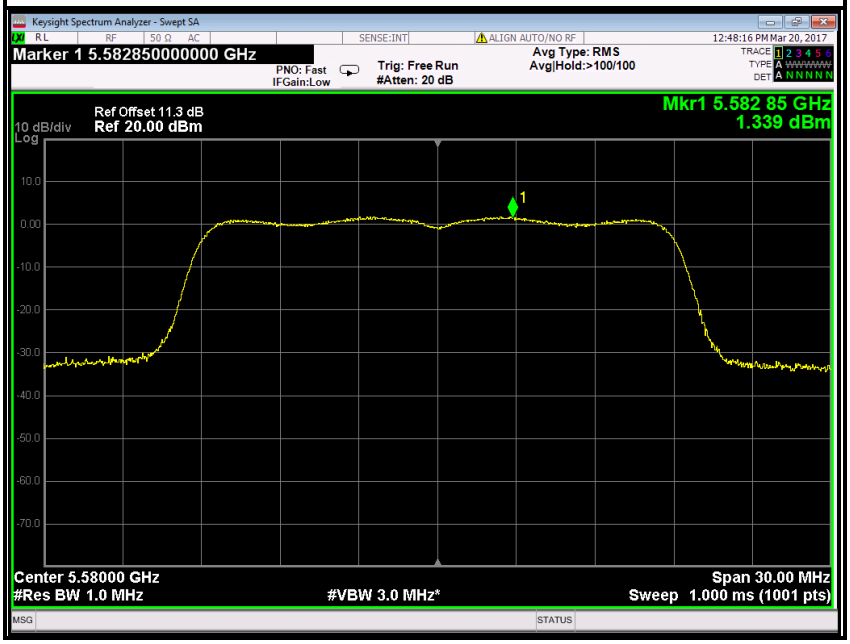


**IEEE 802.11n HT 20 MHz mode / 5500 ~ 5700MHz**

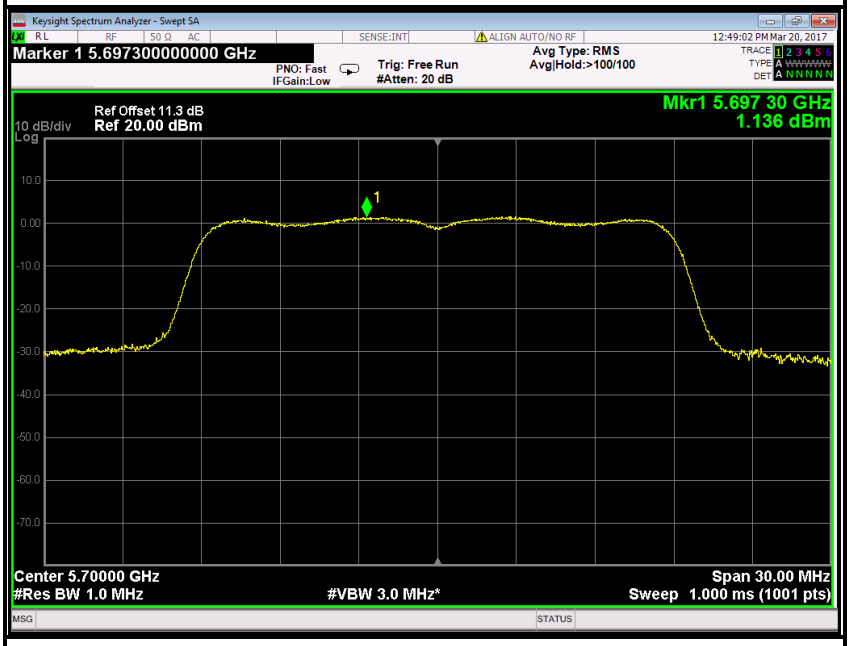
**PPSD (CH Low)**




**PPSD (CH Mid)**

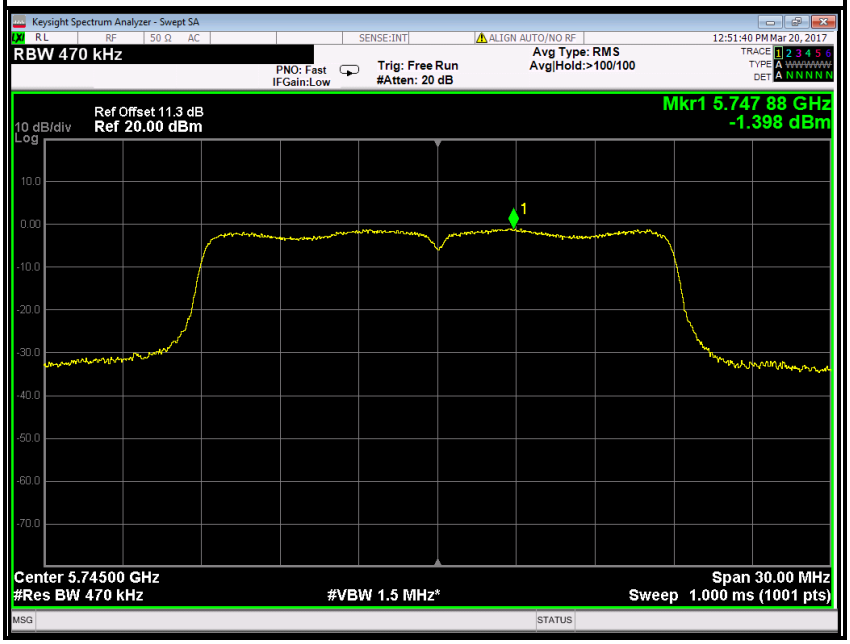


**PPSD (CH High)**

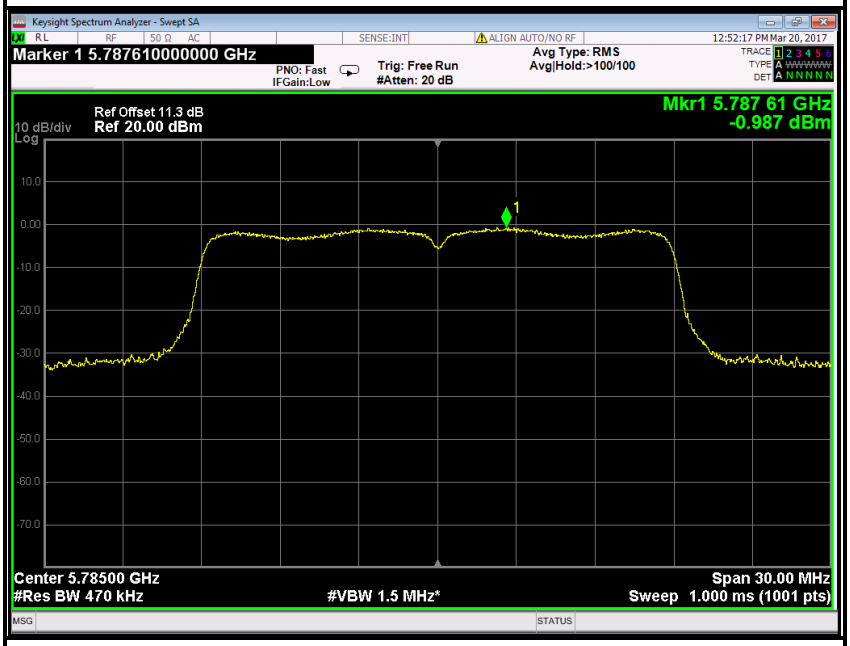



**IEEE 802.11n HT 20 MHz mode / 5745 ~ 5825MHz**

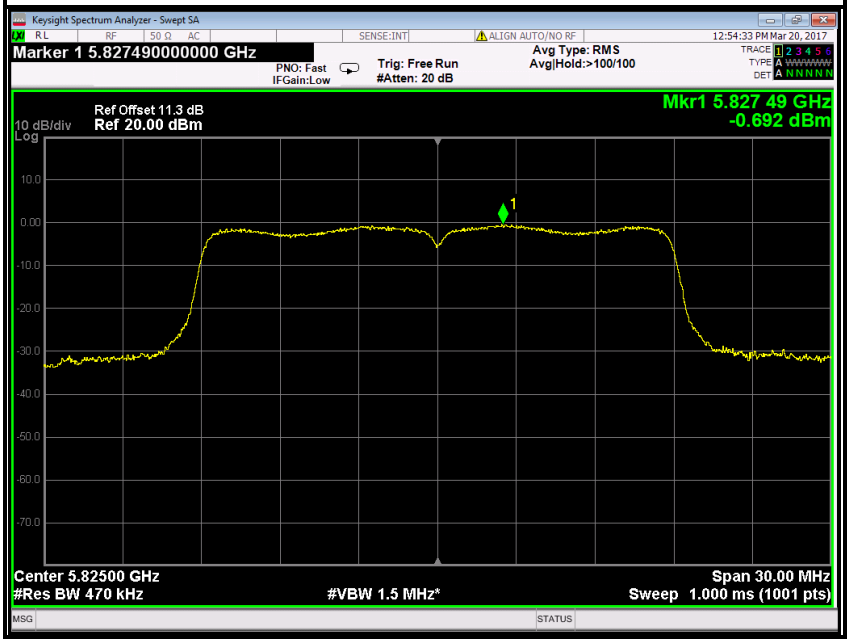
**PPSD (CH Low)**



**PPSD (CH Mid)**

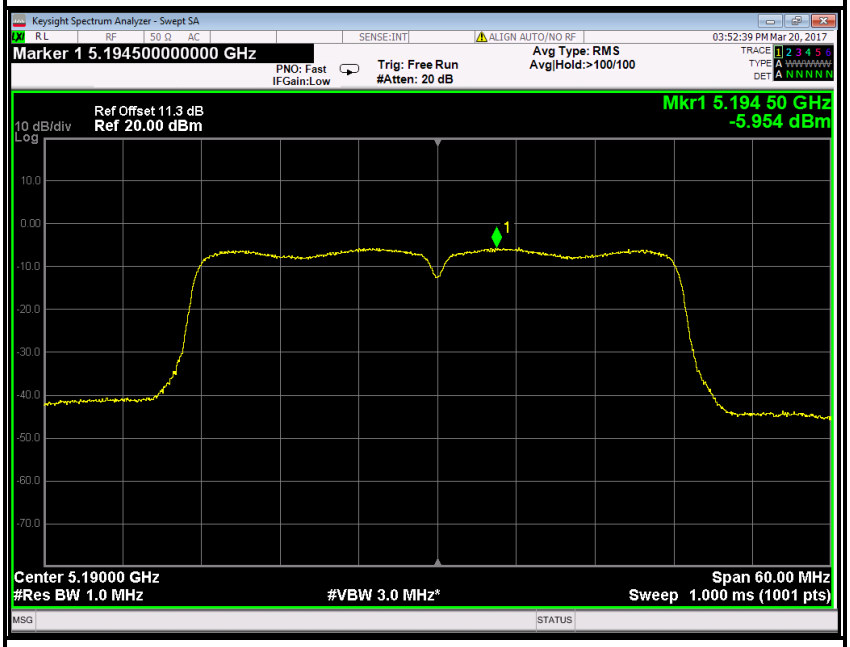



**PPSD (CH High)**

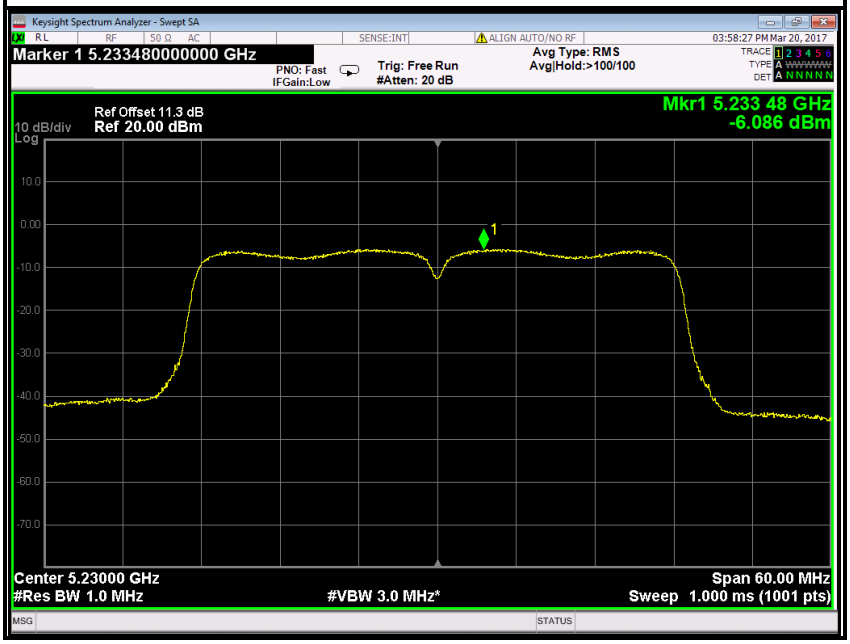


**IEEE 802.11n HT 40 MHz mode / 5190 ~ 5230MHz**

**PPSD (CH Low)**

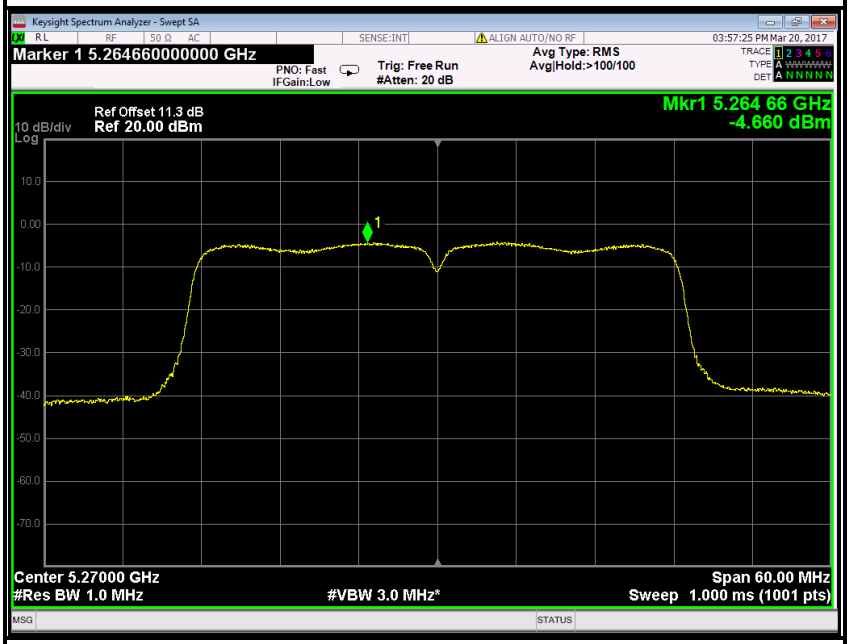



**PPSD (CH High)**

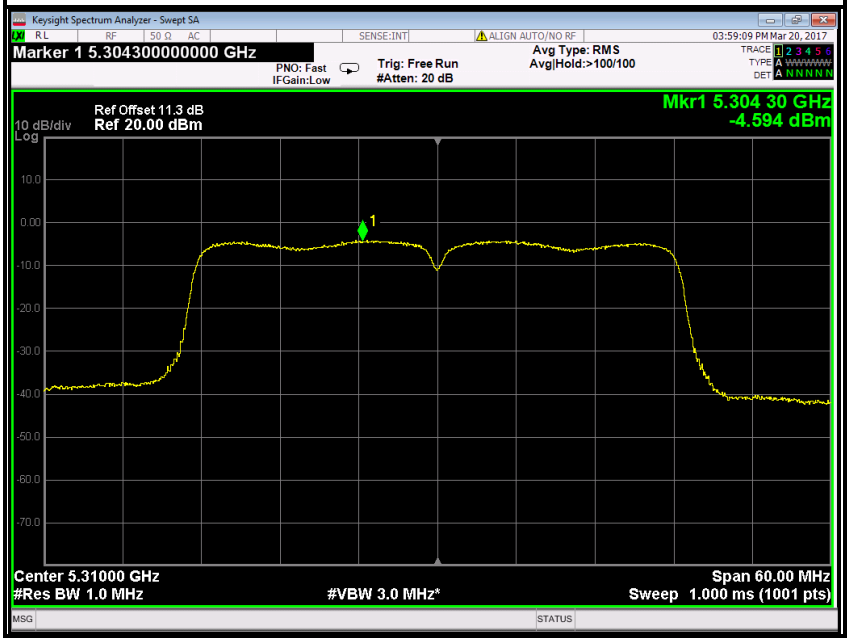


**IEEE 802.11n HT 40 MHz mode / 5270 ~ 5310MHz**

**PPSD (CH Low)**

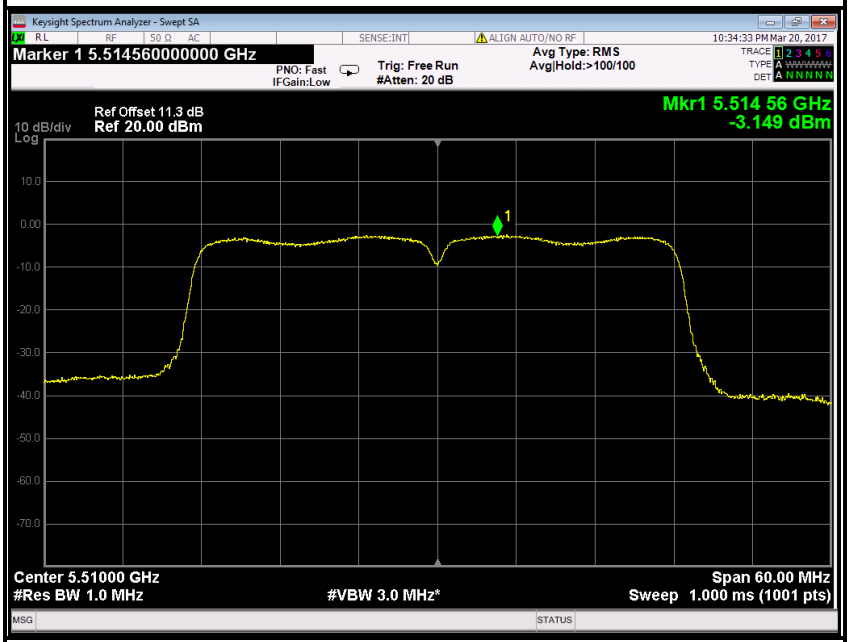



**PPSD (CH High)**

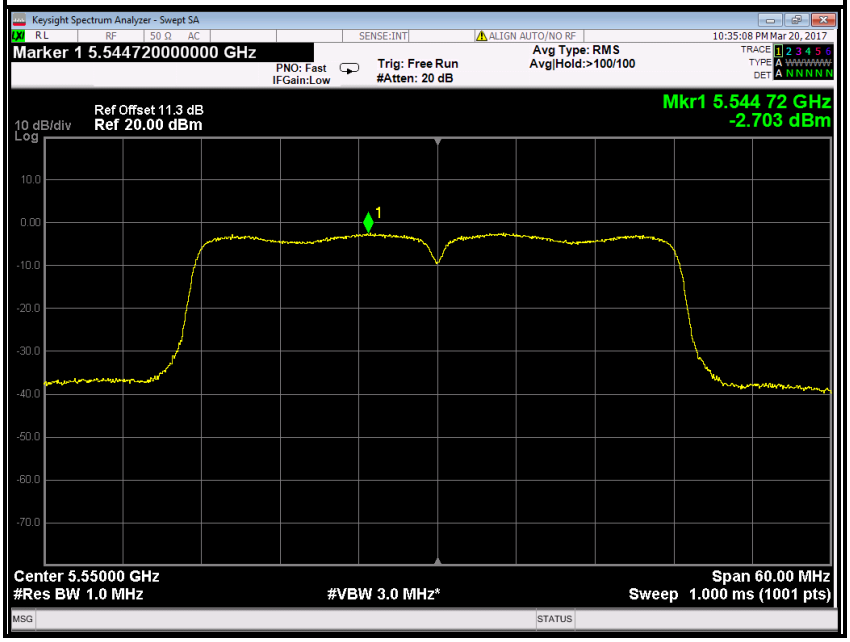


**IEEE 802.11n HT 40 MHz mode / 5510 ~ 5670MHz**

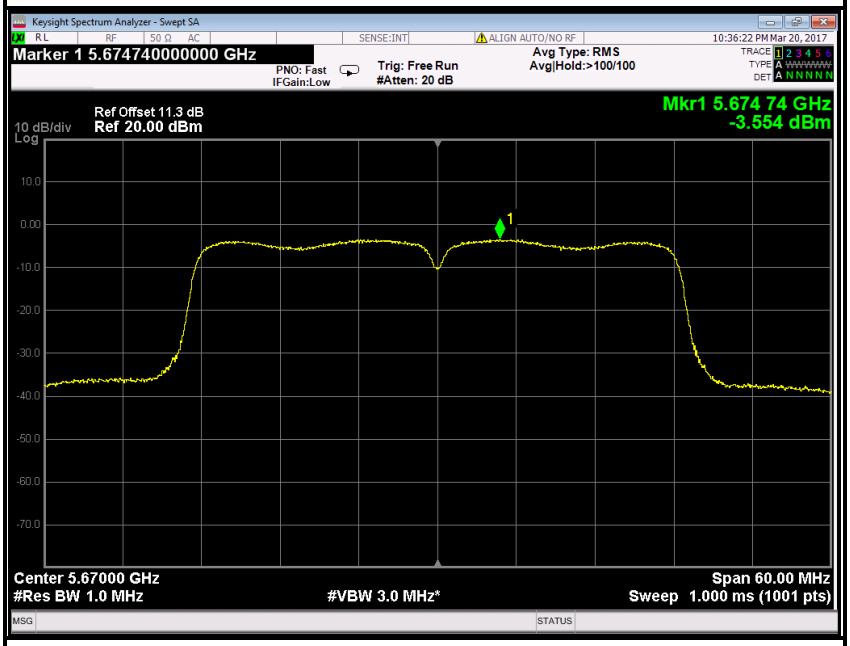
**PPSD (CH Low)**




**PPSD (CH Mid)**

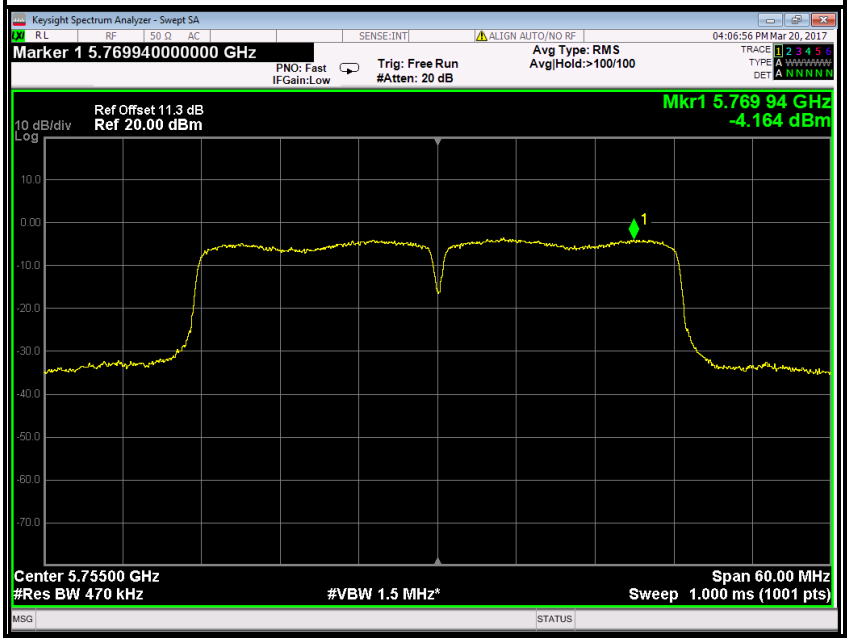


**PPSD (CH High)**

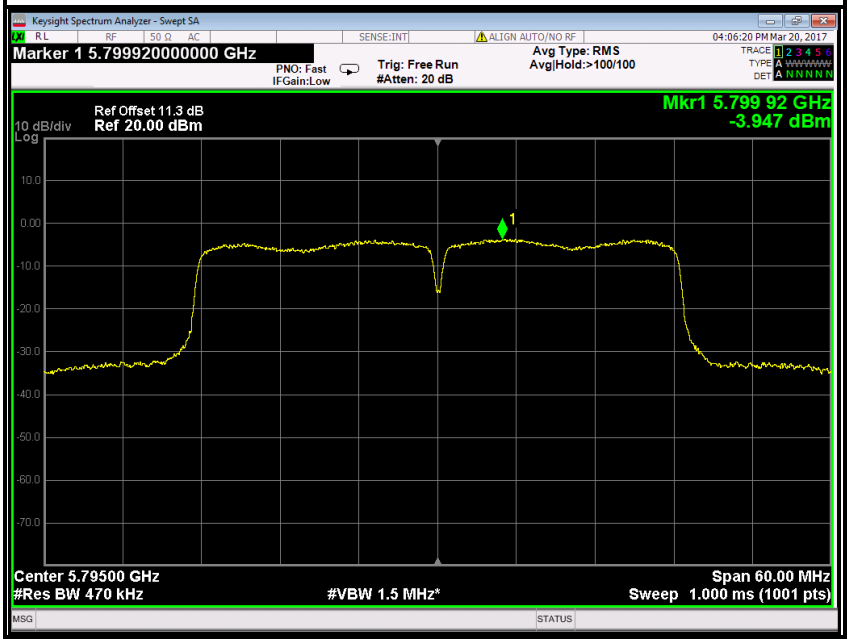



**IEEE 802.11n HT 40 MHz mode / 5755 ~ 5795MHz**

**PPSD (CH Low)**

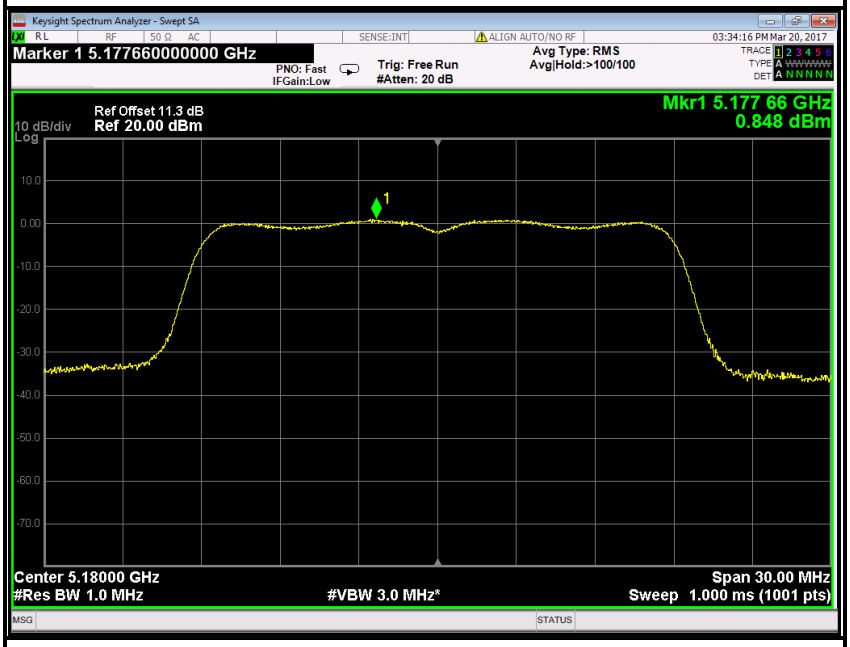


**PPSD (CH High)**

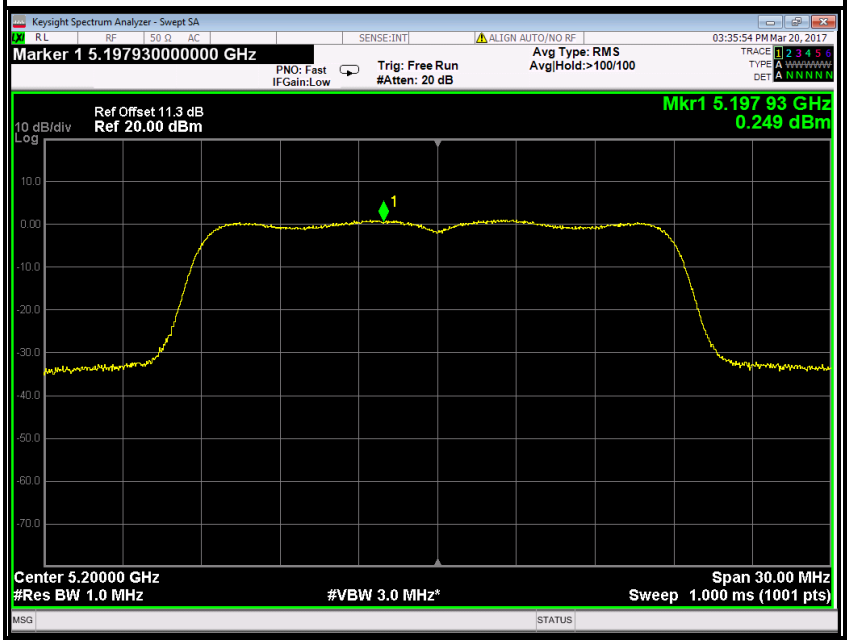


**IEEE 802.11ac 20 mode / 5180 ~ 5240MHz**

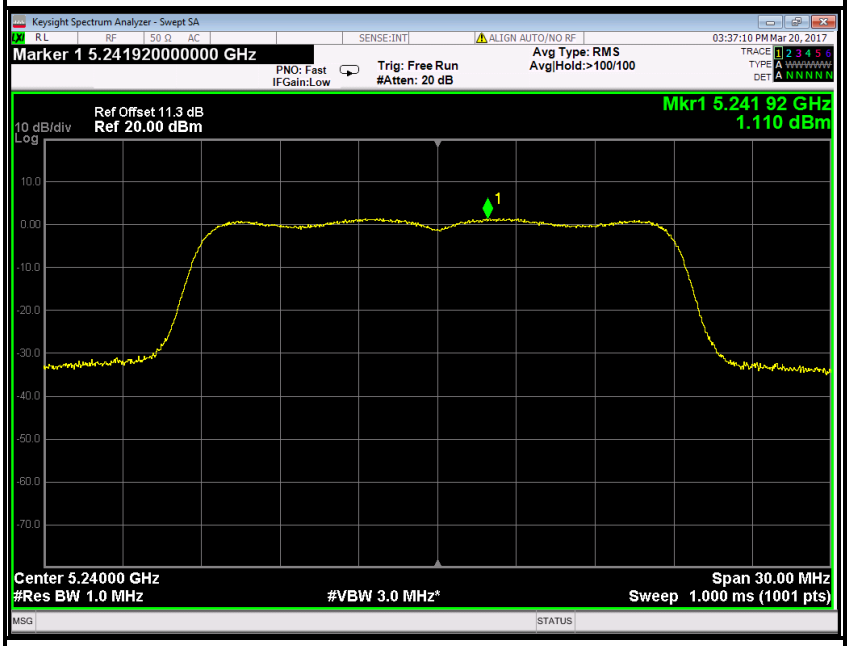
**PPSD (CH Low)**




**PPSD (CH Mid)**

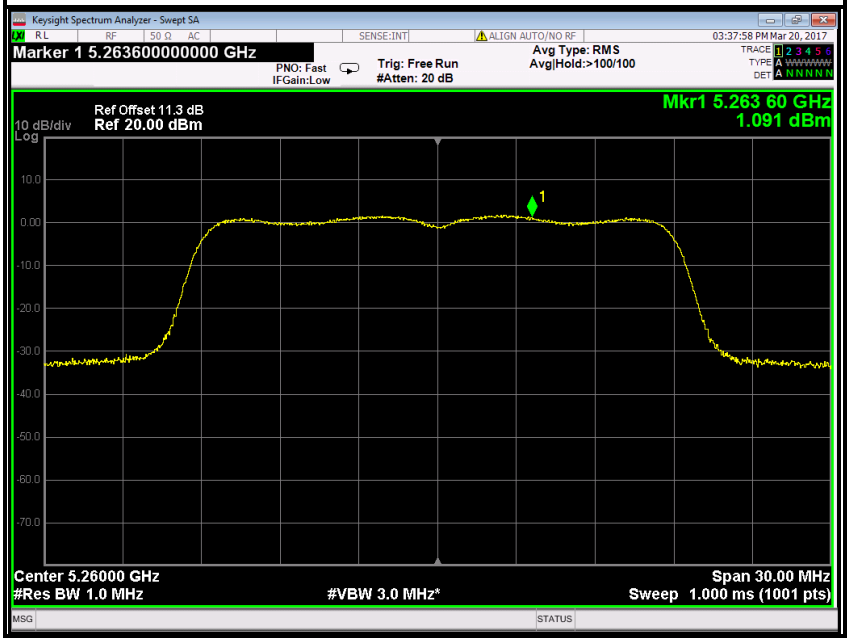


**PPSD (CH High)**

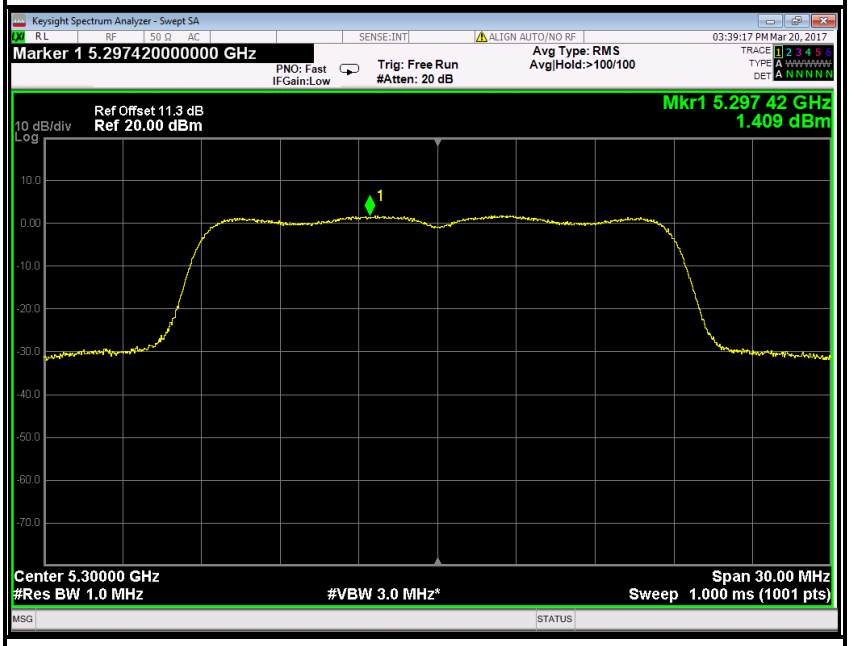



**IEEE 802.11ac 20 mode / 5260~ 5320MHz**

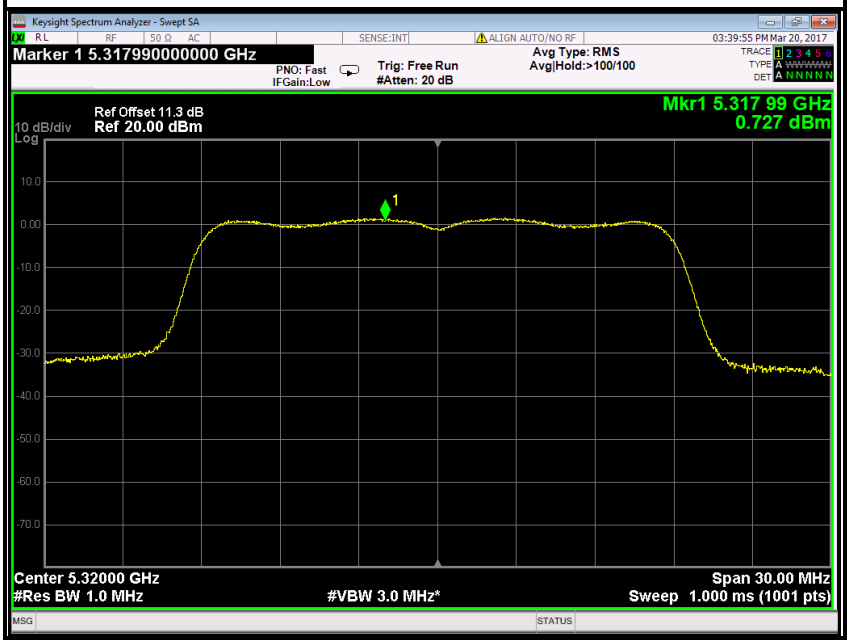
**PPSD (CH Low)**



**PPSD (CH Mid)**

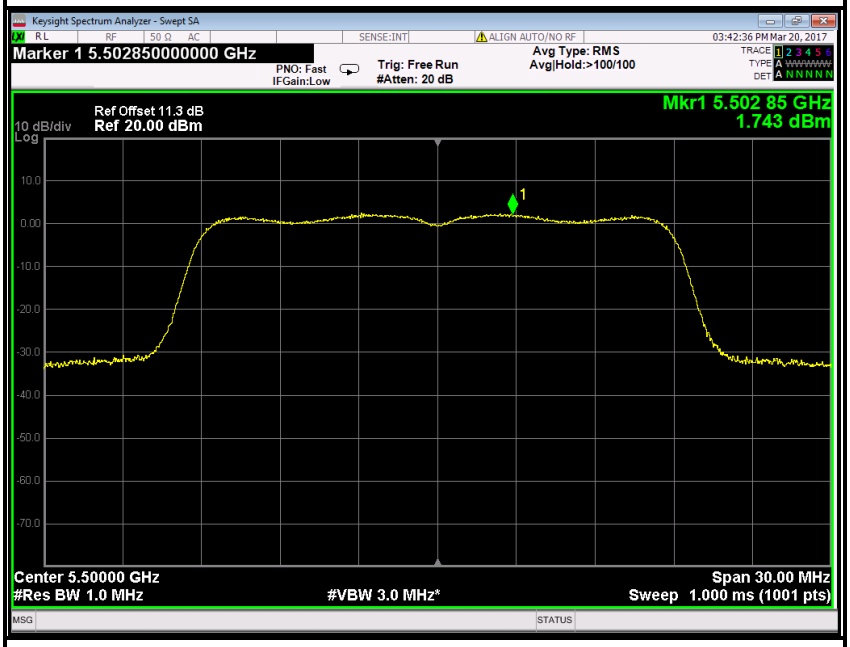



**PPSD (CH High)**

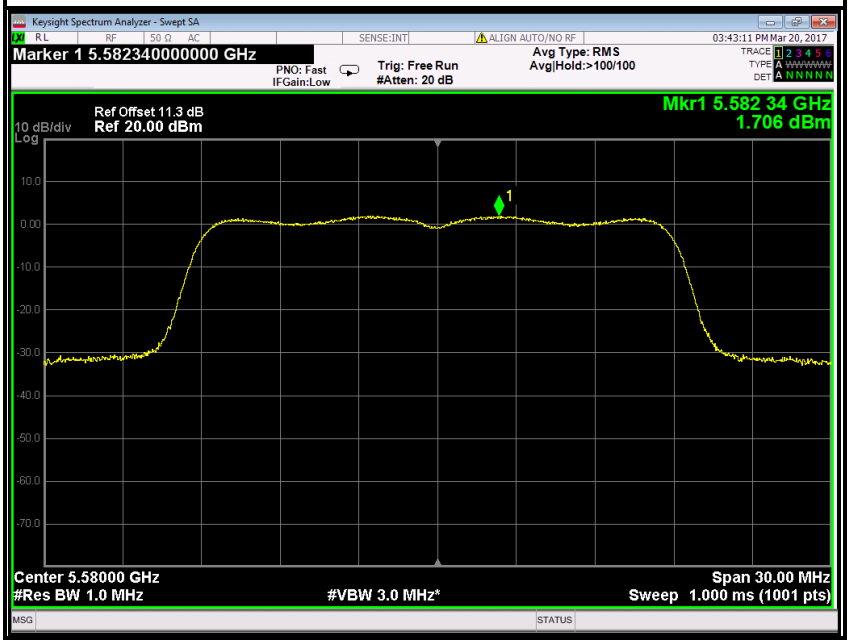


**IEEE 802.11ac 20 mode / 5500 ~ 5700MHz**

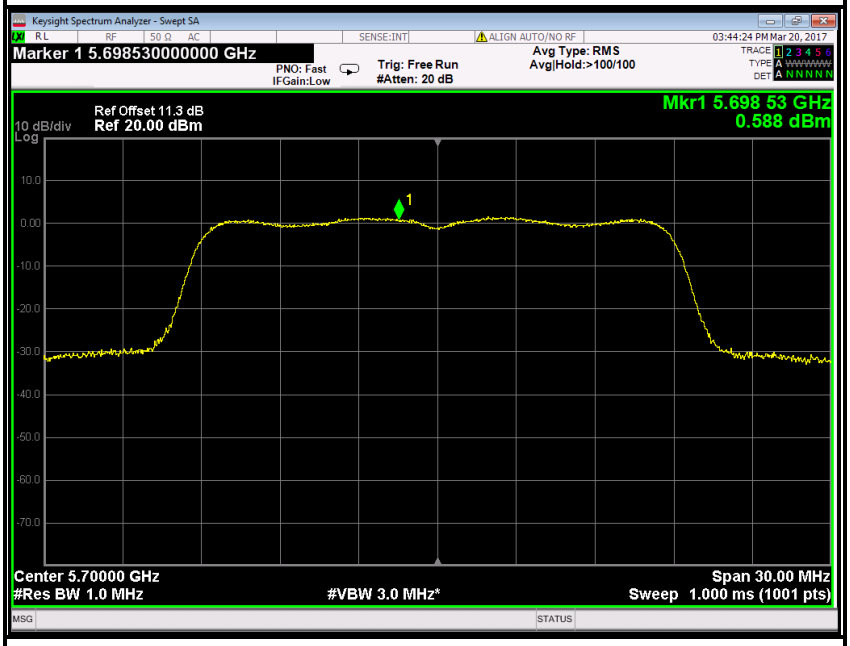
**PPSD (CH Low)**




**PPSD (CH Mid)**

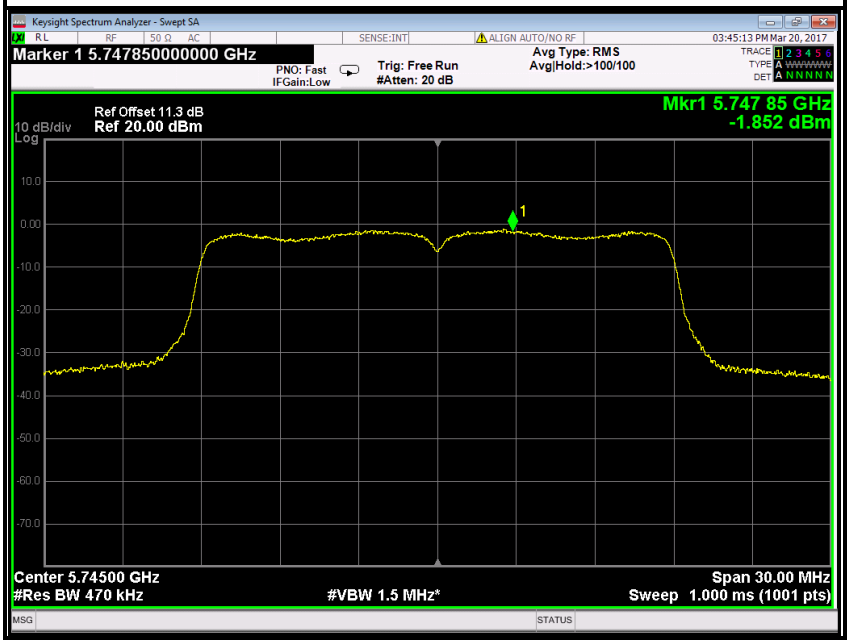


**PPSD (CH High)**

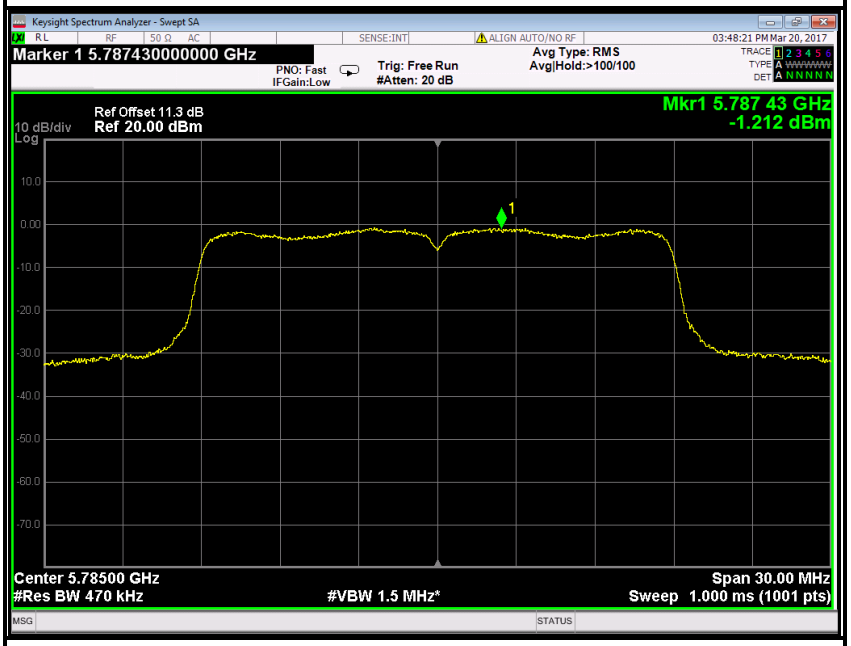



**IEEE 802.11ac 20 mode / 5745 ~ 5825MHz**

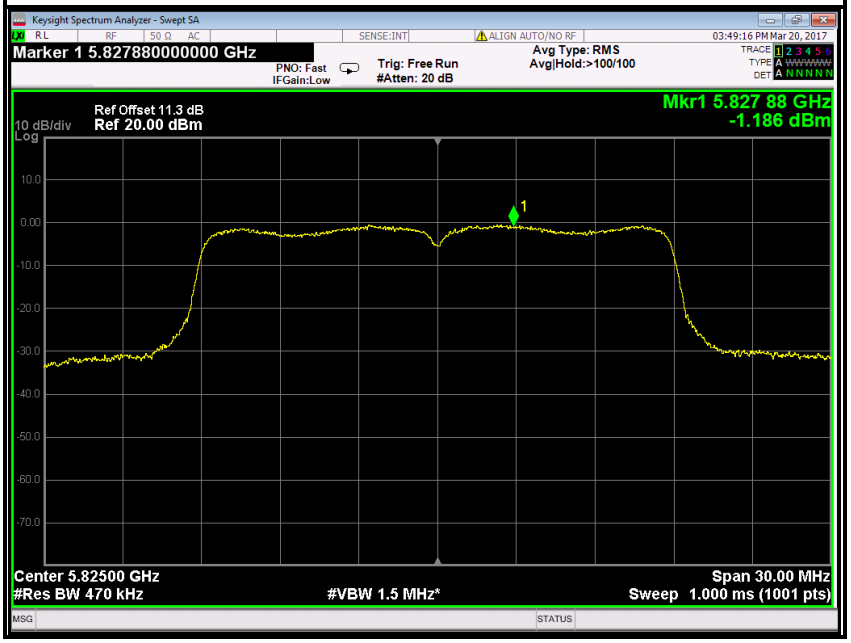
**PPSD (CH Low)**



**PPSD (CH Mid)**

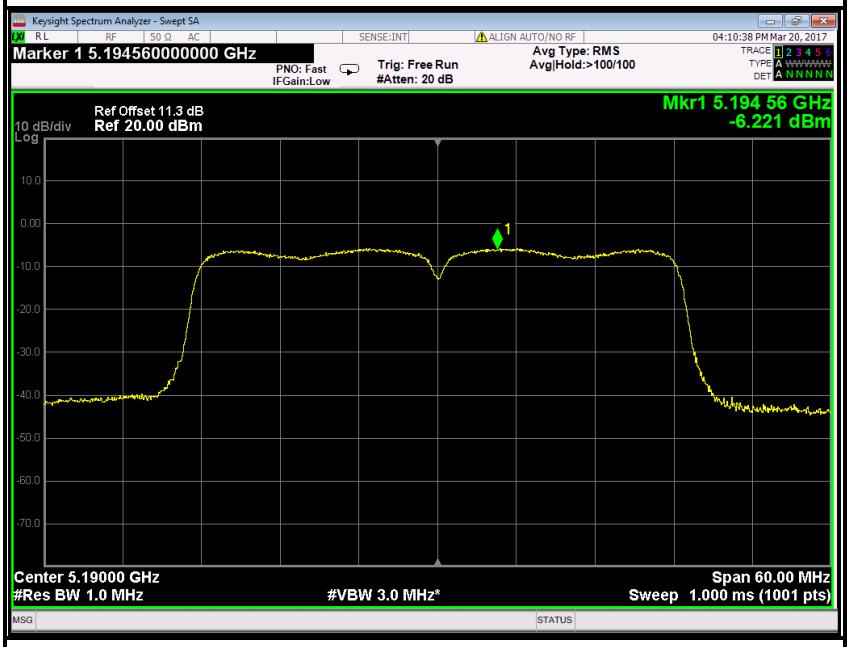



**PPSD (CH High)**

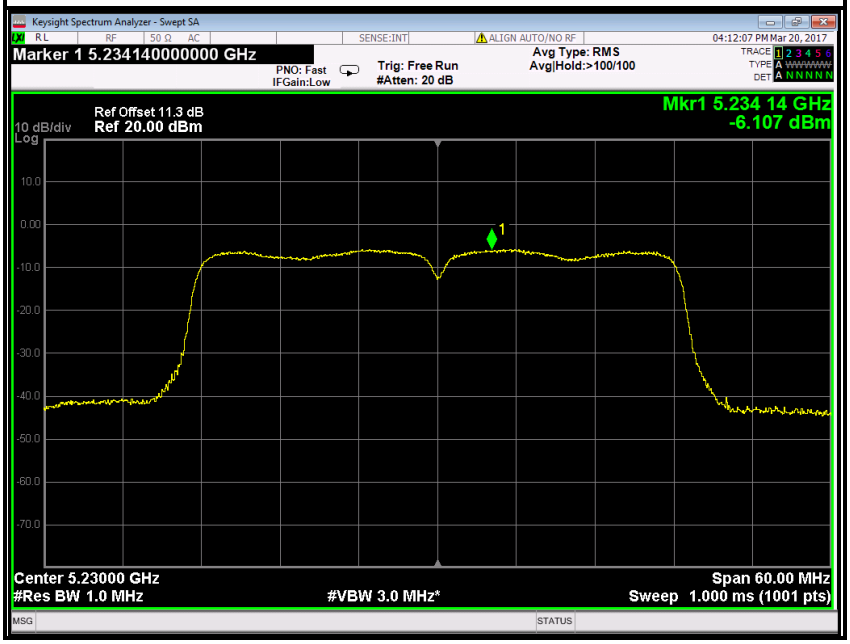


**IEEE 802.11ac 40 mode / 5190 ~ 5230MHz**

**PPSD (CH Low)**

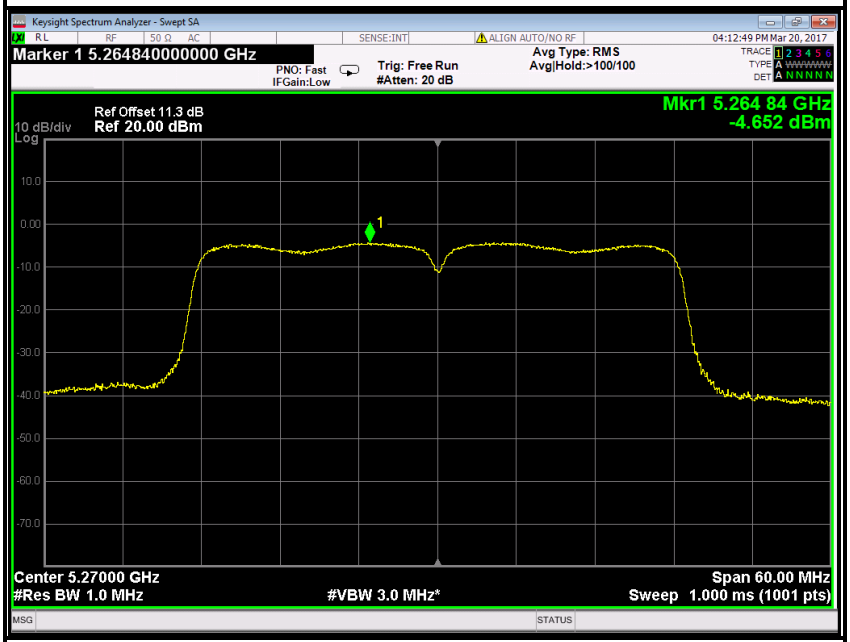



**PPSD (CH High)**

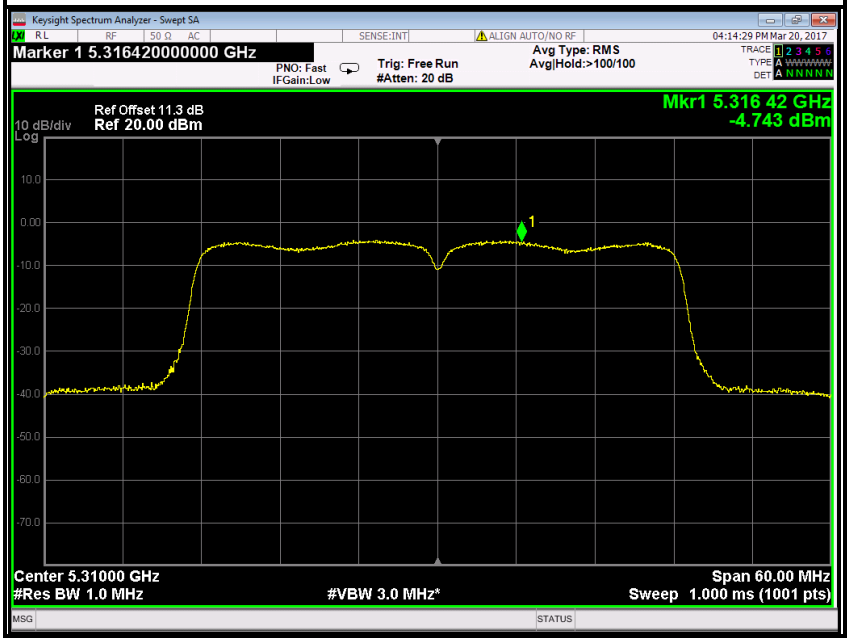


**IEEE 802.11ac 40 mode / 5270 ~ 5310MHz**

**PPSD (CH Low)**

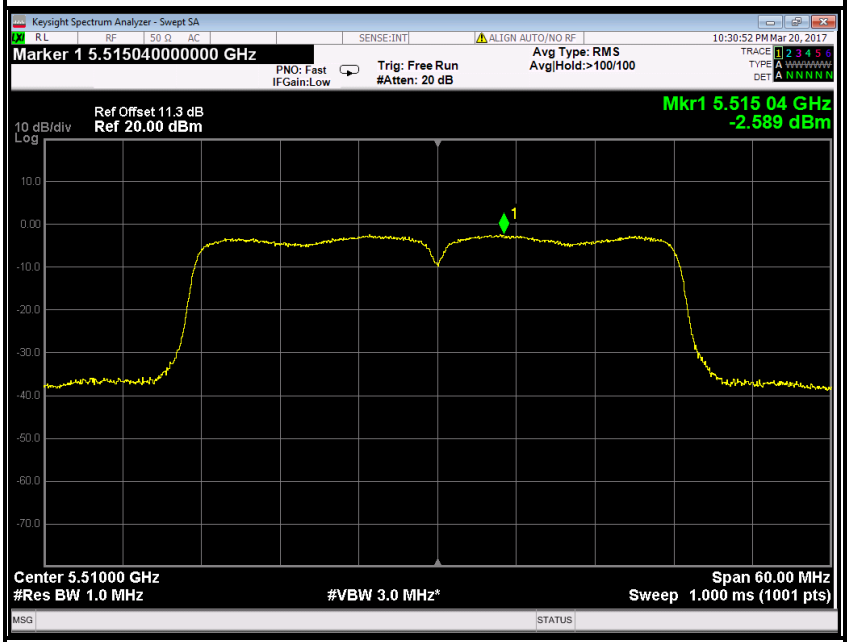



**PPSD (CH High)**

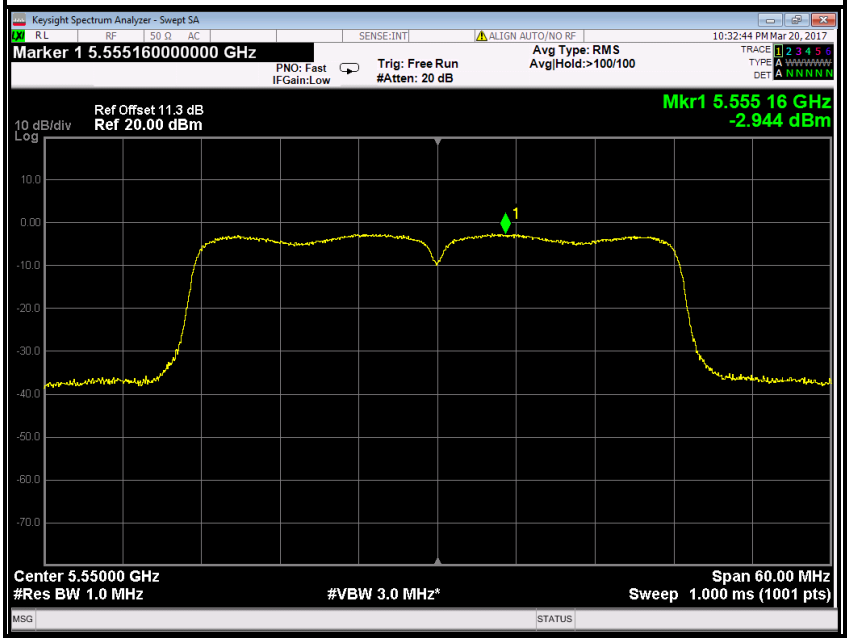


**IEEE 802.11ac 40 mode / 5510 ~ 5670MHz**

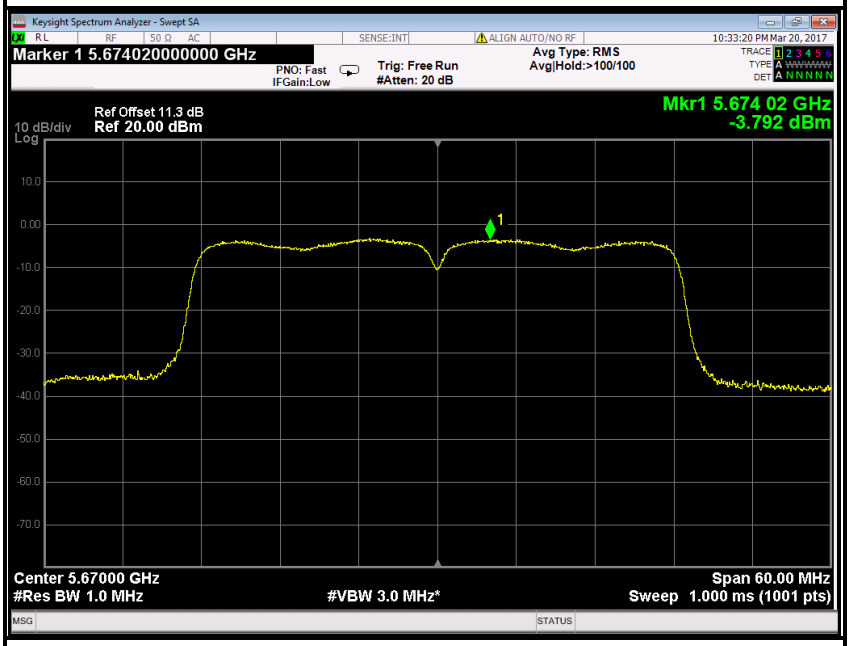
**PPSD (CH Low)**




**PPSD (CH Mid)**

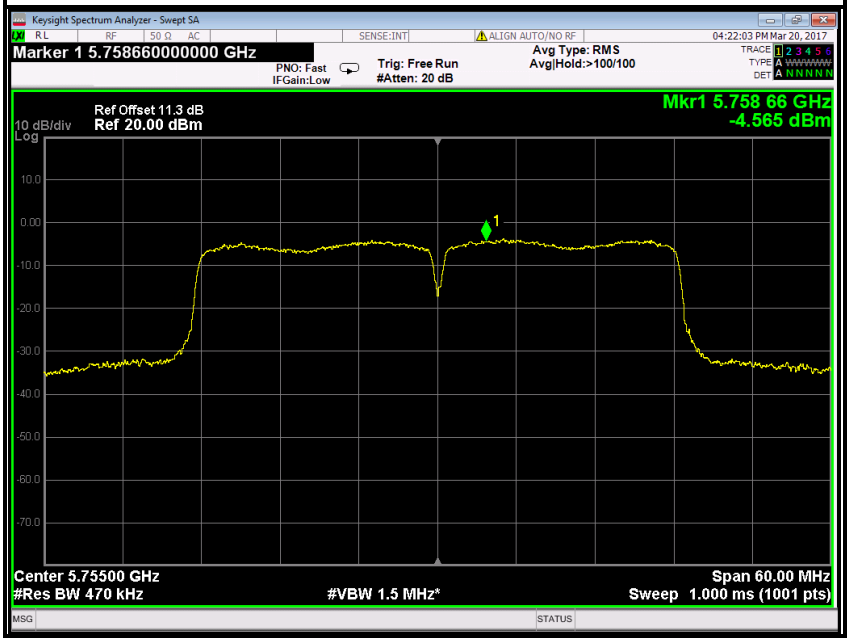


**PPSD (CH High)**

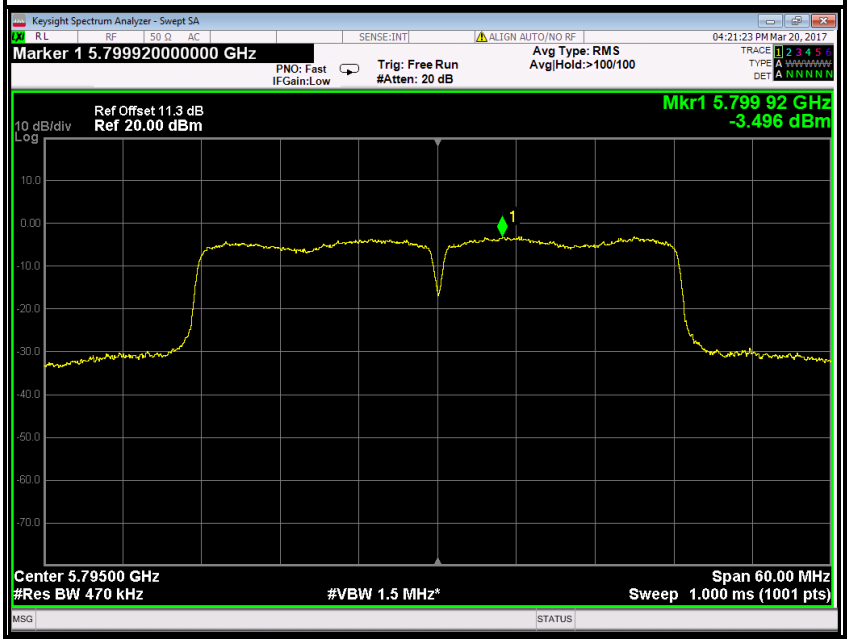



**IEEE 802.11ac 40 mode / 5755 ~ 5795MHz**

**PPSD (CH Low)**

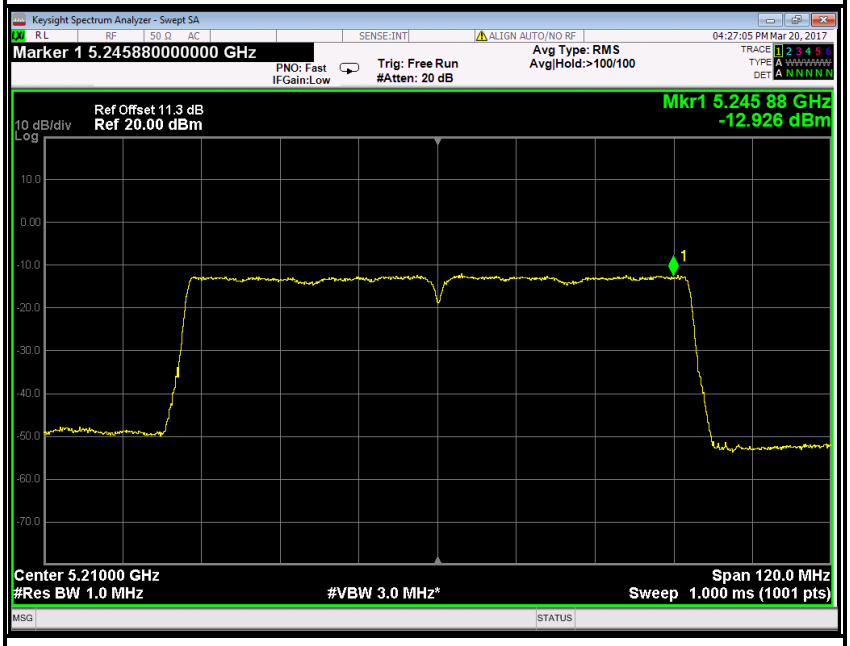


**PPSD (CH High)**



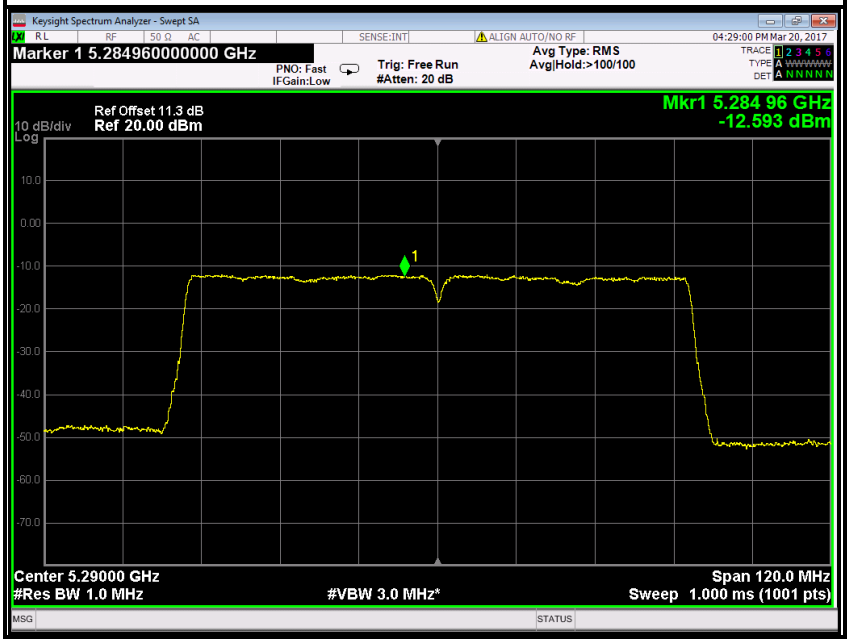
**IEEE 802.11ac 80 mode / 5210MHz**

**PPSD**



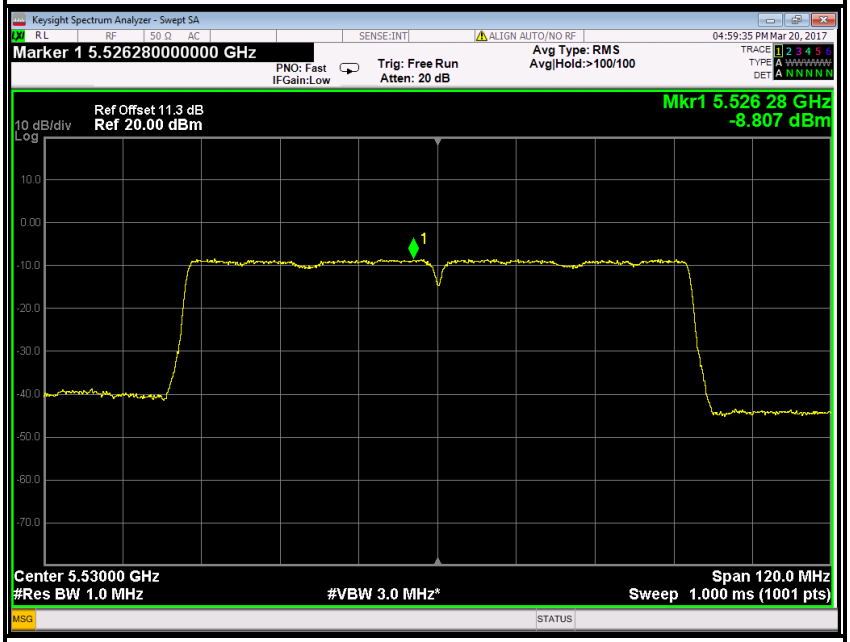

**IEEE 802.11ac 80 mode / 5290MHz**

**PPSD**



**IEEE 802.11ac 80 mode / 5530MHz**

**PPSD**




**IEEE 802.11ac 80 mode / 5775MHz**

**PPSD**